LYON COUNTY BOARD OF COUNTY COMMISSIONERS
THURSDAY, APRIL 16, 2026
9:00 AM
LYON COUNTY ADMINISTRATIVE COMPLEX
27 S. MAIN STREET
YERINGTON, NV 89447

Join Zoom Meeting:
https://us02web.zoom.us/j/83368686463?pwd=ZlVGaWFOT3pGUjJPWWV0VmZRQ0N5dz09
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County Commission meetings are open to the public and may be attended in person or via virtual Zoom, if available. Virtual public comment may be given if you are attending the virtual Zoom meeting by raising your hand. This can occur in several ways, including by dialing *9 from your phone to raise your hand and request to speak for public comment. Then to unmute yourself, dial *6.

Written public comments may be mailed to the Lyon County Manager's Office at 27 S. Main Street, Yerington, Nevada 89447, or emailed to countyclerks@lyon-county.org, be sure to type, PUBLIC COMMENT in the subject line. Comments must be received the day prior to the date of the meeting by 4:00 P.M. for the comments to be included in the meeting. Any written public comments received after the aforementioned time will be compiled and added as supplemental materials to the County's website and distributed to the Board of Commissioners within 24 hours after the meeting.

BOARD OF COMMISSIONERS CONVENING AS OTHER BOARDS - *Members of the Board of County Commissioners also serve as the Liquor Board, Central Lyon Vector Control District Board, Mason Valley Mosquito Abatement District Board, Walker River Weed Control District Board, Willowcreek General Improvement District Board, the Silver Springs General Improvement District Board, and during this meeting may convene as any of those boards as indicated on this or a separately posted agenda.*

NOTE: THIS MEETING MAY BREAK BETWEEN 11:30 - 1:30 FOR LUNCH

1. Roll Call

2. Invocation - *given by Mitch Forster of New Hope Bible Fellowship*

3. Pledge of Allegiance

4. Public Participation (no action will be taken on any item until it is properly agendized) - *It is anticipated that public participation will be held at this time, though it may be returned to at any time during the agenda. Citizens wishing to speak during public participation are asked to state their name for the record and will be*

limited to 3 minutes. The Board will conduct public comment after discussion of each agenda action item, but before the Board takes any action.

5. For Possible Action: Review and adoption of agenda

6. Time Certain

6.a Time Certain at 9:00 AM: For Possible Action: Presentation by Chris Molina of McDonald Carano LLP regarding impact fees and provide direction to staff on the pursuance of the establishment of impact fees within Lyon County.

- Impact Fees Overview

6.b Time Certain at 9:00 AM: For Presentation Only: Presentation by Dan Stucky and Ian Mahaffey of Lumos, Inc. on the final North Dayton Benefit-Cost Analysis, including evaluation and prioritization of North Dayton Area Drainage Master Plan projects based on economic feasibility.

- North Dayton Valley Project Scoping Report
- North Dayton Valley Scoping Project - Presentation

7. Commissioners/County Manager reports

8. Elected Official's reports

9. Appointed Official's reports

10. Advisory Board reports

11. CONSENT AGENDA (Action Will be Taken on All Items) - *All matters listed under the consent agenda are considered routine, and may be acted upon by the Board of County Commissioners with one action, and without an extensive hearing. Any member of the Board or any citizen may request that an item be taken from the consent agenda, discussed, and acted upon separately during this meeting.*

11.a For Possible Action: Review and accept claims and financial reports.

- Claims Report 3-16-26 to 3-31-26
- Cash Report 3-31-26
- Lyon County Financials 3-31-26

11.b For Possible Action: Review and accept travel claims.

- Travel Report 3-16-26 to 3-31-26

11.c For Possible Action: Approve the changes on Assessor's tax roll due to correction in assessments and review of tax roll changes.

- Secured Factual Corrections
- Unsecured Factual Corrections

11.d For Possible Action: Approve the April 2, 2026 minutes.

- 04.02.2026 BOCC Minutes

11.e For Possible Action: Approve the April 3, 2026 minutes.

- 04.03.2026 BOCC Minutes

11.f For Possible Action: Accept a grant award amendment #2 to redirect funds from contractual to personnel and travel from the State of Nevada Department of Health and Human Services, Division of Public and Behavioral Health, for FY26 Mobile Outreach Safety Team (MOST) program.

- FY26 Mobile Outreach Safety Team Notice of SubGrant Amendment #2

11.g For Possible Action: Approve a contract between Lyon County and JC Cleaning Solutions LLC for $8,680 to provide homemaker services to individuals within the Senior Services Case Management program.
- JC Cleaning Solutions LLC Contract FY26

11.h For Possible Action: Review and approve the updated Interlocal Contract Between Public Agencies between the Secretary of State and the Lyon County Clerk in the annual amount of $25,000. The agreement will become effective upon approval and will expire on June 30, 2028. The term of service is from July 1, 2026, through June 30, 2028. This amount represents Lyon County's share of the annual software and maintenance costs for Nevada's statewide voter registration database.
- Lyon VREMS Interlocal - Poll Pads - v3
- 2026 County Interlocal Agreement Notification

11.i For Possible Action: Approve the Lyon County Plan for the Provision of Indigent Defense Services for Fiscal Year 2026-2027.
- Lyon County Plan for the Provision of Indigent Defense Services - 2026-2027

REGULAR AGENDA - *(Action will be taken on all items unless otherwise noted)*

12. Public Hearing on Planning Items

12.a For Possible Action: To approve the request from Traditions North LLC for a Tentative Subdivision Map. The request is for 358 detached single-family residential units, including 116-acres of common area, open space, parks, and trails, generally located north of the intersection of Nevada Station and Rock Creek Parkways in Dayton on an approximately 230.76-acre parcel (APN 016-406-07), PLZ-2025-095 (Senior Planner Lisa Nash).
- Staff Report
- Project Narrative
- Plan Set
- Traffic, Drainage, H&H Studies
- Geotechnical Report
- Preliminary Sewer Report
- Landscape, Streets
- Trails, Parks
- Draft PUD Handbook
- Street Name Request Form

13. Community Development

13.a For Possible Action: To propose an ordinance amending Lyon County Development Code Title 15, Chapter 239, Section 1 and Section 5 thereby adopting the 2024 IFC Building Codes and 2024 Northern Nevada Amendments to the 2024 IFC. (Community Development Director, Gavin Henderson and Elizabeth Mink, CLFPD).
- 2024 IFC Ordinance
- STAFF REPORT
- 2024 NNIC IFC Amendments
- NAC 477.740
- State Fire Marshall - Proposed Code Adoption
- 2024 Fire Code Adoption Presentation

14. Human Resources

14.a For Possible Action: Approve plans for employee health, dental, vision, and life insurance coverage effective July 1, 2026, and authorize the Human Resources Director to sign associated contracts.

(Human Resources Director, Ben Evans)

- Lyon County 26-27 BOCC Renewal Packet

15. County Manager

15.a For Possible Action: Set a date and time for a special meeting of the Board of County Commissioners fo a public hearing on the service plan for the proposed North Lyon Power General Improvement District. Possible dates include May 13th, 14th, and 15th. (County Manager Andrew Haskin)

- North Lyon Power GID Service Plan
- NLPGID Service Plan Exhibits

15.b For Possible Action: Approve an additional $7,000 for additional engineering and testing for a change in scope for the Sheriff's Office/District Court Secured Parking Addition Project with funds from the Public Safety Sales Tax account. This is to add an ADA sidewalk from the Yerington Library parking lot up to the Sheriff's Office/District Court public parking lot. (County Manager Andrew Haskin)

16. Agenda Requests - *Administrative Policies and Procedures 1.05, A Commission Member or elected/appointed department head may request an item be considered on a future agenda either by making an oral request at a County Commission meeting or submitting the request in writing to the County Manager at least 30 days prior to the meeting for which the item is requested to be placed on the agenda.*

17. Commissioner Comments

18. Public Participation (no action will be taken on any item until it is properly agendized) - *It is anticipated that public participation will be held at this time, though it may be returned to at any time during the agenda. Citizens wishing to speak during public participation are asked to state their name for the record and will be limited to 3 minutes. The Board will conduct public comment after discussion of each agenda action item, but before the Board takes any action.*

19. Closed Session pursuant to NRS 241.015(3)(b)(2) - *To receive information from the District Attorney or counsel regarding potential or existing litigation involving a matter over which the Board has supervision, control, jurisdiction or advisory power, and to deliberate toward a decision on the matter, and pursuant to NRS 288.220, to receive a report on the status of ongoing labor negotiations; and direct staff accordingly.*

20. Adjourn

Pursuant to NRS 241.020, the agenda has been posted at the following locations: Lyon County Administrative Complex (27 S. Main Street, Yerington, NV), the Lyon County Website: https://www.lyon-county.org, and the State Website: https://notice.nv.gov. Supporting documentation for the items on the agenda is available to members of the public at the County Manager's Office (27 S. Main Street, Yerington, NV), by phone (775)463-6531, or by email requests to countyclerks@lyon-county.org.

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Persons with disabilities who require alternate means of communication for program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible agency or

USDA's TARGET Center at (202) 720-2600 (voice and T) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found on-line at http://www.ascr.usda.gov/complaint_filing_cust.html and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) Mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, DC 20250-9410; Fax: (202) 690-7442; or Email: program.intake@usda.gov

T.D.D. services available through 463-2301 or 463-6620 or 911 (emergency services) notice to persons with disabilities: members of the public who are disabled and require special assistance or accommodations at the meeting are requested to notify the Commissioners'/Manager's office in writing at 27 S. Main Street, Yerington, NV 89447, or by calling (775) 463-6531 at least 24 hours in advance.

Lyon County is an equal opportunity provider.

Agenda and Backup Material is Available at www.lyon-county.org

Lyon County Board of County Commissioners Agenda Summary

Meeting Date: April 16, 2026

Agenda Item Number:
6.a

Subject:
Time Certain at 9:00 AM: For Possible Action: Presentation by Chris Molina of McDonald Carano LLP regarding impact fees and provide direction to staff on the pursuance of the establishment of impact fees within Lyon County.

Summary:

Financial Department Comments:

Approved As To Legal Form:

County Manager Comments:

Recommendation:

ATTACHMENTS
- Impact Fees Overview

McDONALD CARANO

MEMORANDUM

To: Lyon County

From: J. Christopher Molina, Esq.

Date: April 8, 2026

Re: Impact Fees - A Primer for Lyon County

INTRODUCTION

As Lyon County grows—particularly in areas experiencing residential and industrial development like Dayton, Mound House, Fernley, and Silver Springs—new homes, businesses, and residents place real demands on roads, water systems, utilities, parks, and other public infrastructure. The question facing Lyon County is not whether growth brings new needs, but who pays for them.

Impact fees are one proven, legally sound tool that places the cost of new infrastructure on the development that creates the need—not on the existing residents who already paid for what they have. The purpose of this memorandum is to provide a general primer on impact fees and the potential benefits to the County.

1. WHAT IS AN IMPACT FEE?

An impact fee is a one-time charge collected from a developer or property owner at the time a building permit is issued. The fee is calculated to reflect the proportionate share of the cost of capital infrastructure needed to serve the new development.

✓ Key Legal Principle (NRS 278B)

Nevada law (Nevada Revised Statutes Chapter 278B) expressly authorizes local governments to adopt impact fee ordinances. Impact fees must be: (1) based on actual cost data in a Capital Improvements Plan (CIP); (2) proportional to the demand the new development creates; and (3) used only for capital projects that benefit new growth—not to fix existing deficiencies or fund operations.

2. HOW ARE IMPACT FEES CALCULATED?

Fee calculations follow a structured, defensible methodology established in Nevada law. The process has three core steps:

Step 1 Capital Improvements Plan (CIP)	The County identifies specific capital projects needed to serve future growth—for example, a road widening, a water line extension, or a new fire station. Each project is costed out in detail. The CIP is the legal and financial foundation of any impact fee program.
Step 2 Level-of-Service Standard	The County establishes the minimum acceptable level of service (LOS) for each type of infrastructure—such as lane-miles of road per 1,000 residents. The LOS standard ensures that fees are calculated to maintain existing service quality, not gold-plate new facilities.
Step 3 Proportionate Share	Each new unit of development (a home, a commercial building) is assigned a proportionate share of the project costs based on the demand it generates. A single-family home and a 200-unit apartment complex would pay fees scaled to their actual impact.

The result is a fee schedule—typically expressed in dollars per residential unit or per square foot of commercial space—that is published, predictable, and legally defensible.

3. WHAT CAN IMPACT FEES PAY FOR?

Nevada law limits impact fees to capital improvements in designated service areas. Eligible project categories include:

- Roads and transportation infrastructure (lane additions, new roads, traffic signals, turn lanes)
- Water supply and storage facilities (wells, tanks, transmission lines)
- Wastewater collection and treatment capacity
- Drainage and flood control facilities
- Fire and emergency services facilities (stations, major equipment)
- Law enforcement facilities
- Parks, open space, and recreation facilities
- Libraries and public buildings

⚠ What Impact Fees Cannot Pay For

Impact fees cannot fund operations or maintenance (e.g., salaries, fuel, routine repairs), fix existing deficiencies unrelated to new growth, or be spent outside the designated service area where the fee was collected. These restrictions protect both the County and the development community from legal challenge.

4. HOW ARE IMPACT FEES IMPLEMENTED?

Adopting and administering an impact fee program is a multi-step process. Lyon County would work through the following stages:

Phase 1 – Establish a Capital Improvements Advisory Committee	Before imposing an impact fee, the BOCC must adopt a resolution establishing an advisory committee of at least five members.
Phase 2 – Capital Improvements Plan	County staff or a consultant prepares a CIP identifying growth-driven infrastructure needs, project costs, and timelines. The CIP is adopted by the BOCC after public review.
Phase 3 – Fee Study	A fee study translates the CIP into a legally defensible fee schedule. The study documents the methodology, LOS standards, demand units, and proportionate share calculations.
Phase 4 – Public Notice & Hearing	Nevada law requires a 60-day public notice period and at least one public hearing before adoption. This gives developers, property owners, and residents an opportunity to comment.
Phase 5 – Ordinance Adoption	The BOCC adopts an impact fee ordinance by majority vote. The ordinance sets the fee schedule, defines service areas, and establishes the program's administrative rules.
Phase 6 – Collection	Fees are assessed at building permit issuance, collected by the County, deposited into restricted accounts by service category and service area, and spent only on CIP projects within that area.
Phase 7 – Periodic Review & Recalculation	Staff periodically reviews the CIP, updates project cost estimates, and recalculates the fee schedule to reflect changed conditions.

5. HOW ARE IMPACT FEES COLLECTED AND MANAGED?

Once the program is in place, collection and management is straightforward:

- Fees are assessed when a building permit application is submitted and are due before the permit is issued.
- Funds are deposited into separate, restricted accounts for each infrastructure category (e.g., a "Roads Impact Fee Fund").
- Nevada law requires that impact fees be expended within ten (10) years of collection. Unspent fees must be refunded with interest.
- The County must prepare an annual report accounting for all impact fee revenues, expenditures, and fund balances.
- Developers who do not benefit from a planned project, or who construct infrastructure themselves, may be eligible for credits or reimbursements.

Why This Matters for Existing Lyon County Residents

Without impact fees, the County must fund growth-driven infrastructure through property taxes, increased utility rates, or bonded debt paid by everyone. Impact fees shift that burden to the new development causing the need—ensuring that existing residents and businesses are not forced to subsidize growth they did not choose.

NEXT STEPS FOR LYON COUNTY

The Board of County Commissioners is being asked to direct staff to take the first step: developing a Capital Improvements Plan focused on infrastructure needs where growth pressures are most immediate. A completed CIP will give the County the factual foundation needed to adopt a legally defensible impact fee program.

Adopting impact fees does not accelerate growth. It ensures that when growth occurs, Lyon County's infrastructure keeps pace—and that the bill goes to the right party.

Lyon County Board of County Commissioners Agenda Summary

Meeting Date: April 16, 2026

Agenda Item Number:
6.b

Subject:
Time Certain at 9:00 AM: For Presentation Only: Presentation by Dan Stucky and Ian Mahaffey of Lumos, Inc. on the final North Dayton Benefit-Cost Analysis, including evaluation and prioritization of North Dayton Area Drainage Master Plan projects based on economic feasibility.

Summary:

Financial Department Comments:

Approved As To Legal Form:

County Manager Comments:

Recommendation:

ATTACHMENTS
- North Dayton Valley Project Scoping Report
- North Dayton Valley Scoping Project - Presentation

Carson Water Subconservancy District
North Dayton Valley Storm Drain

Mitigation Project Scoping Report

PREPARED FOR:

PREPARED BY:

Lumos & Associates, Inc.
308 N. Curry Street, Suite 200
Carson City, NV 89703

IN PARTNERSHIP WITH:

Carson Water
Subconservancy District
777 E William St,
Carson City, NV 89701

JE Fuller
8400 S Kyrene Rd #201
Tempe, AZ 85284

Submitted: December 2025 Revision: FINAL JN: 11530.000

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Appendix C 60% Design Civil Improvement Plans and Cost Estimate

Appendix D Flow Status Assessment Report

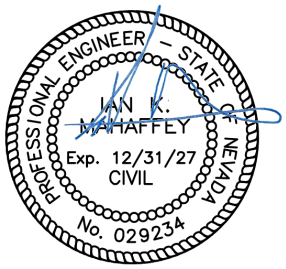
Appendix E Biological Resources Evaluation Report

Appendix F Benefit Cost Analysis Report

Certification

The technical material and data contained in the document were prepared under the supervision and direction of the undersigned professional engineer. The opinions contained in this document reflect Lumos & Associates' professional judgment in context with the scope of work and contract. The presented opinions are based on the conditions, information, and data provided to Lumos & Associates at the time the document was published and may be subject to change based on changing conditions, information, and data. Lumos & Associates did not verify independent information, conditions, and opinions supplied by others. There is no written or implied warranty or guarantee for any damages that occur from third-party use of this document.

Prepared under the Responsible Charge of



12/30/25

Caroline Elliott, P.E.

Ian Mahaffey, P.E.

List of Abbreviations

American Advancement of Cost Engineering ..... *AACE*
Area Drainage Master Plan ..... ADMP
Area Reduction Factor ..... *ARF*
asphalt concrete ..... AC
Benefit Cost Analysis ..... *BCA*
Best Management Practices ..... *BMPs*
Carson Water Subconservancy District ..... CWSD
Engineer's Opinion of Probable Construction Cost ..... *EOPCC*
Federal Emergency Management Agency ..... *FEMA*
Fish and Wildlife Service ..... *FWS*
hydraulic and hydrology ..... *H&H*
JE Fuller ..... *JEF*
Net Present Value ..... *NPV*
Nevada Department of Environmental Protection ..... *NDEP*
Nevada Department of Transportation ..... *NDOT*
North Dayton Valley ..... *NDV*
Operation and Maintenance ..... *O&M*
Waters of the U.S ..... *WOTUS*

EXECUTIVE SUMMARY

This Mitigation Project Scoping Report summarizes the preliminary selection, design, and funding eligibility of a recommended flood mitigation project for North Dayton Valley (NDV). This report was prepared by Lumos & Associates, Inc. (Lumos) in partnership with JE Fuller (JEF) for the Carson Water Subconservancy District (CWSD), who served the interest of the NDV Counties; Lyon County and Storey County. The purpose of this report was to identify and advance a viable flood mitigation project to a level that supports federal funding eligibility, and development of future construction documents.

The 2019 Dayton Valley Area Drainage Master Plan (ADMP) identified approximately 40 potential flood mitigation projects for NDV. In Phase 1 of this scoping effort, these projects were screened for cost, feasibility, environmental triggers, and overall effectiveness. Six projects were shortlisted for further consideration. Through collaborative evaluation with CWSD and the Counties, the Grosh and Rose Peak Culverts project emerged as the preferred project.

The Grosh and Rose Peak Culverts project would reduce localized flooding within developed neighborhoods, minimizes downstream risk, and require only minimal easements while maintaining independence from other ADMP drainage systems and aligning with the NDV Counties' construction cost constraints. The Grosh and Rose Peak Culverts project includes the following scope of work:

1. Site demolition and channel grading
2. Replacement of affected curb, gutter, sidewalk, and asphalt
3. 558 LF of 42-inch diameter reinforced concrete pipe
4. Portland Cement Concrete inlet and outlet headwalls (approximately 6-feet tall)
5. Portland Cement Concrete inlet aprons
6. Approximately 18,906 square feet of optional Class 150 riprap

Hydrology and hydraulic (H&H) modeling was updated in this report from the 2019 ADMP to reflect current hydraulic conditions and advancements in software technology. Results indicated that the proposed project would reduce overtopping and improve drainage conveyance during both the 25-year and 100-year storm events.

Environmental and cultural assessments were performed to address compliance requirements for the project. An Engineer's Opinion of Probable Construction Cost (EOPCC) and project schedule were also prepared, accounting for final design, permitting, construction, easement acquisition, and contingencies. The EOPCC was used as an input to a Benefit Cost Analysis (BCA) that was performed for the project.

A BCA was performed per FEMA guidelines to quantify the project's potential for qualifying for federal funding. A BCA higher than 1.0 is required for qualifying projects. The proposed project was calculated to be 0.544 and was therefore not deemed eligible for federal funding. A key factor influencing the project's BCA score was the value of land and homes that would be alleviated from flooding.

The Grosh and Rosepeak culverts project is an effective project that provides relief from flooding to multiple homes within the community. Despite not meeting the required BCA of 1.0 for grant funding, the project could still be coupled with surrounding improvements, such as utility

improvements and upgrades and roadway rehabilitations when the County has identified the necessity with appropriate funding sources. In addition to the Grosh and Rosepeak Culverts, additional recommendations have been provided for actionable stormwater improvements or work to improve flooding conditions and/or possibilities for achieving the required BCA threshold.

1.0 INTRODUCTION

1.1 Background

In August 2019, JE Fuller (JEF) partnered with Lumos and Associates, Inc. (Lumos) to complete the Dayton Valley Area Drainage Master Plan (ADMP) for the Carson Water Subconservancy District (CWSD). The ADMP identified and evaluated flooding and sedimentation hazards within North Dayton Valley (NDV). The NDV is located on the southeastern slopes of the Virginia and Flowery Ranges, near the intersection of Six Mile Canyon and Lincoln Highway (US-50), spanning both Storey County and Lyon County. The ADMP also provided several flooding and sedimentation hazard mitigation alternatives at a high level.

In the context of the ADMP project and this project, the CWSD served in the interests of Lyon County and Storey County to source funding programs for the design and construction of a recommended flooding mitigation project. This study was funded by the Nevada Department of Emergency Management (NDEM), with CWSD serving as the local project sponsor and administrator. CWSD engaged JEF and Lumos in January, 2025, to further this process and provide an assessment of viable ADMP projects for prioritization and federal funding eligibility.

Selection and scoping of the recommended mitigation project was divided into two phases; In Phase 1, the ADMP project list was screened for economic feasibility and prioritized based on various performance criteria. A memorandum summarizing Phase 1 is provided in Appendix A. In Phase 2, the top recommended project from Phase 1 was scoped to form budgetary project costs and a Benefit Cost Analysis (BCA) prior to further developing the design to 60 percent completion. Included in Phase 2 was a hydraulic and hydrology (H&H) analysis, conceptual project design, development of an Engineer's Opinion of Probable Construction Cost (EOPCC), and environmental reporting. This mitigation project scoping report summarizes the recommended mitigation project selection, scope, costing, BCA, and the project outcome.

1.2 North Dayton Valley Drainage Characteristics

Runoff from the Ranges adjacent to NDV collects in various watersheds and discharges southeast towards communities within the NDV area. Discharge is characteristic of alluvial fanning, flowing overland via a mixture of open channel flow, shallow concentrated flow, and distributing flows. Impacted areas in the NDV include existing residential properties, roadways, undeveloped spaces, and the US-50 highway (owned by the Nevada Department of Transportation (NDOT)). A flood map representative of the 100-year (average recurrence interval) storm from the ADMP is provided in Figure 1, along with the various ADMP project locations.

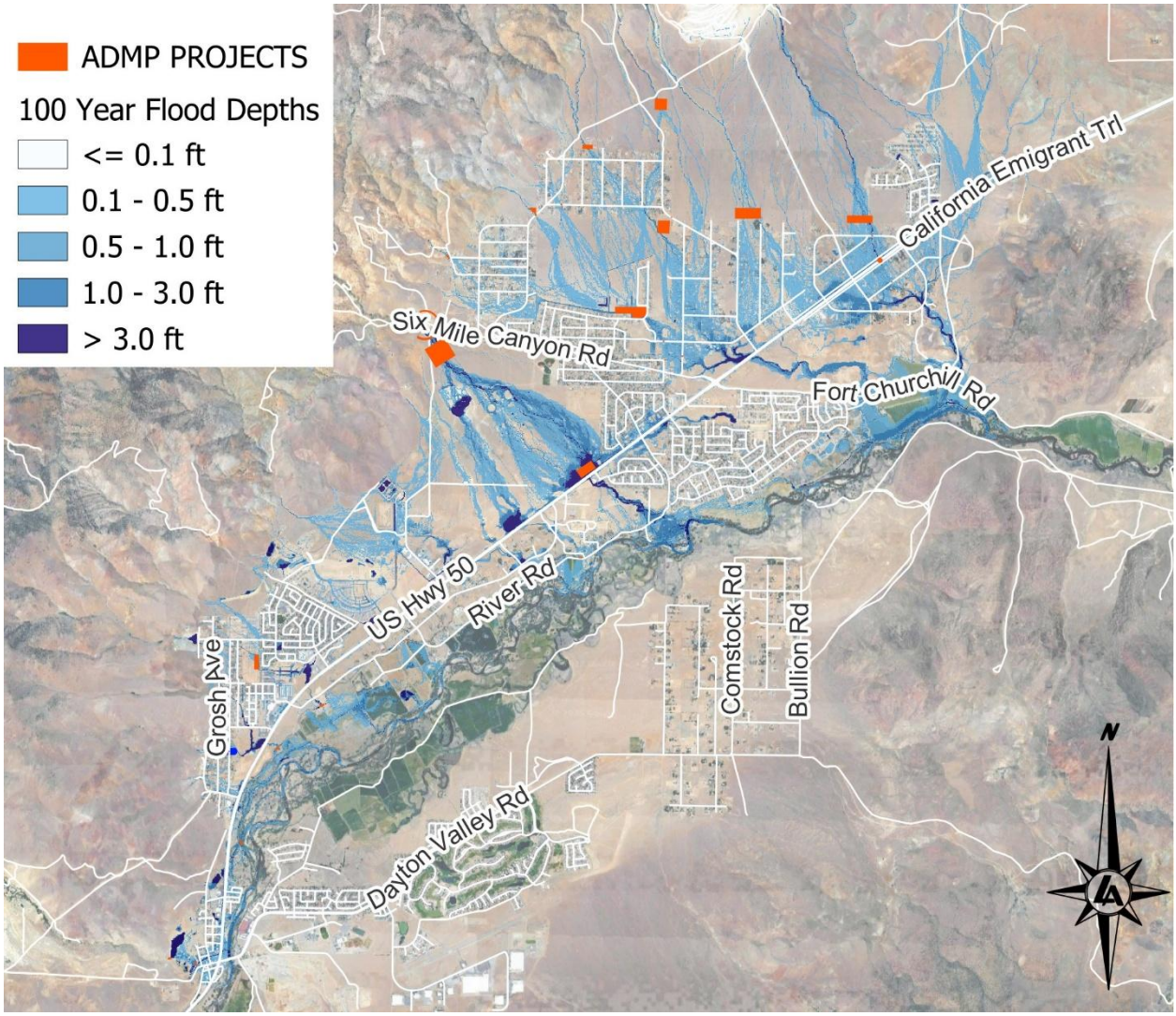


Figure 1: North Dayton Valley Study Area, ADMP Flood Map, and ADMP Projects.

2.0 PROJECT SCOPING

2.1 Evaluation of Project Alternatives

A total of approximately 40 ADMP projects (JEF & Lumos, 2019) were initially screened to determine eligibility for further evaluation. This screening resulted in six potential flood mitigation projects being identified for further evaluation. The six projects were assessed against varying weighted performance criteria, resulting in a prioritized list of recommended projects, as summarized below. This was referred to as 'Phase 1' in the selection of a recommended flood mitigation project for NDV.

2.1.1 Phase 1 ADMP Project Evaluation

The complete list of approximately 40 ADMP projects (JEF & Lumos, 2019), broken down within each proposed ADMP drainage system, was screened to identify which were viable for further evaluation. Initial screening excluded projects based on the following:

- Total Project Cost < $2.5 million ± 20% additional contingency
- ADMP project costs were escalated from 2019 to 2025 dollars. This was based on a 7% escalation per year, averaged from inflationary and construction industry data. An additional allowance was provided of 20% (i.e. up to $3 million) to account for potential scope reduction as design is further developed.
- Projects recommended for exclusion under the ADMP report
- Projects that require the construction of other projects upstream or downstream (ie. hydraulic independence)
- Projects that almost solely benefit undeveloped/developed areas

Of the 40 screened ADMP projects, six (6) were eligible for further evaluation. Several weighted criteria were then workshopped with CWSD and the Counties to evaluate the screened projects for prioritization, as follows:

- Total Project Cost
- Risk of Adverse Flooding Impacts
- Buildings Benefitted
- Weighted Flooding Reduction
- Existing Developments vs Undeveloped Areas
- Environmental Documentation Triggers
- Land Acquisition Requirements
- Road Flooding Hazards
- County-Specific Impacts
- Potential Grant Matches Available
- Operation and Maintenance (O&M) Costs

A memorandum provided in Appendix A discusses the Phase 1 projects' evaluation in detail, along with specific results and recommendations.

2.1.2 Preferred Project Selection

The Phase 1 evaluation ranked two projects for prioritization: The Grosh and Rose Peak Culverts, and the Prospector Basin. The Prospector Basin project was initially favored due to the following evaluation findings:

1. Potential for significant downstream flood reduction.
2. The project's ability to function independently.
3. The project's future scalability.
4. The opportunity for regional cooperation in flood management across the neighboring counties.

However, as the team refined the design, construction cost estimates, property acquisition needs, and anticipated benefits, it became clear that the project's necessary elements could not be scaled down sufficiently to meet the construction budget threshold without significant property or easement acquisitions. Given these restraints, the design team moved forward with the next highest-ranked project, the Grosh and Rose Peak Culverts project. The Grosh and Rose Peak Culverts project was selected due to the following evaluation findings:

1. The project has a relatively low cost for reduced flooding within surrounding, existing developments.
2. The project is independent of any other drainage systems throughout the ADMP.
3. The project is not expected to trigger any additional environmental documentation.
4. Minimal land acquisition is required.
5. There is minimal risk of adverse impacts associated with the project.

It should be noted that the Grosh and Rosepeak Culverts do not benefit Storey County. Despite cross county benefits being one of the selection criteria, the subject project scored very highly in the other categories.

2.2 Proposed Mitigation Project

The existing conditions for the Grosh and Rose Peak area has an offsite drainage that is conveyed through a drainage channel with culverts crossing Grosh Avenue and Rose Peak Road. The flows currently overtop the channel and inundate adjacent properties and the roads. The original project in the ADMP was only proposing culverts and did not properly mitigate the flows. As such, channel improvements have been included in this iteration in order to prevent overtopping of the existing channel section.

2.2.1 Hydraulics & Hydrology

Existing Conditions Updates

The 2019 ADMP was developed to meet three primary objectives; First, evaluate and identify flooding and sedimentation hazards within the study area. Second, develop a series of alternatives to either partially or wholly mitigate the hazards identified in the first objective. Third, provide stakeholder coordination and public outreach to inform stakeholders of existing flooding hazards and to present the mitigation alternatives.

This current, subsequent Scoping Project builds upon the 2019 ADMP by updating the ADMP FLO-2D models to a current (estimated as early 2025) existing conditions to better assess the effectiveness of selected flood mitigation projects that were proposed in the 2019 ADMP.

To update the model to better represent existing conditions, the following modifications were made to the final ADMP FLO-2D Lower Watershed model. The modifications are:

1) A later build of FLO-2D Pro (version 19.07.21) was used to run the models. This version allows for a significant reduction in model run time, while maintaining the correct calculations for curve number (CN) infiltration. Later builds had errors in the CN infiltration calculations.
2) Block obstructions or area reduction factors (ARFs) used the totally blocked "T" record on cells that had blocked percentages greater 85%. This record sets the cell blocked percentage to 100% to avoid small area instabilities on these cells.
3) The estimated geometry for the channel improvements that cross Rainbow Road on the east side of the study area was added to the FLO-2D surface by adjusting cell elevations.
4) Cell elevations were adjusted to model the V&T Way at-grade crossing near the center of the study area.

These updates formed the basis of the conversion of the 2019 ADMP model to the updated 2025 existing conditions model. The locations of the elevation updates (i.e., numbers 3 and 4) are shown in Figure 1, Appendix B. Both the 100-year and 25-year, 24-hour storms were run for the updated existing conditions.

Grosh Avenue and Rose Peak Road Culverts Model

Through the alternative refinement process described in Section 2.1, the Grosh Avenue and Rose Peak Road culvert and channel improvements project was selected to proceed to a 60 percent design. Preliminary hydraulic and HY-8 calculations were done to estimate a channel geometry and culvert size/design to contain the flows within the flow corridor around these two road crossings.

The refined channel surface was patched into the updated existing conditions model by adjusting cell elevations to represent the new channel (see location map in Appendix B). The existing culverts at Grosh Avenue and Rose Peak Road were removed from the model and replaced with the proposed culverts using a rating table from the HY-8 results.

The results from the updated existing conditions and the "with culverts" model were used to assess flooding for the BCA. Both the 100-year and 25-year 24-hour storms were run for the "with culvert" model.

The changes in depths of flow are shown in Figure 2 spatially. Green areas represent reductions in flow depth, whereas yellow and red areas, which are primarily seen within the channel section, represent increases in depth. This demonstrates the design intent of the culverts, by channelizing flood flows away from adjacent properties.

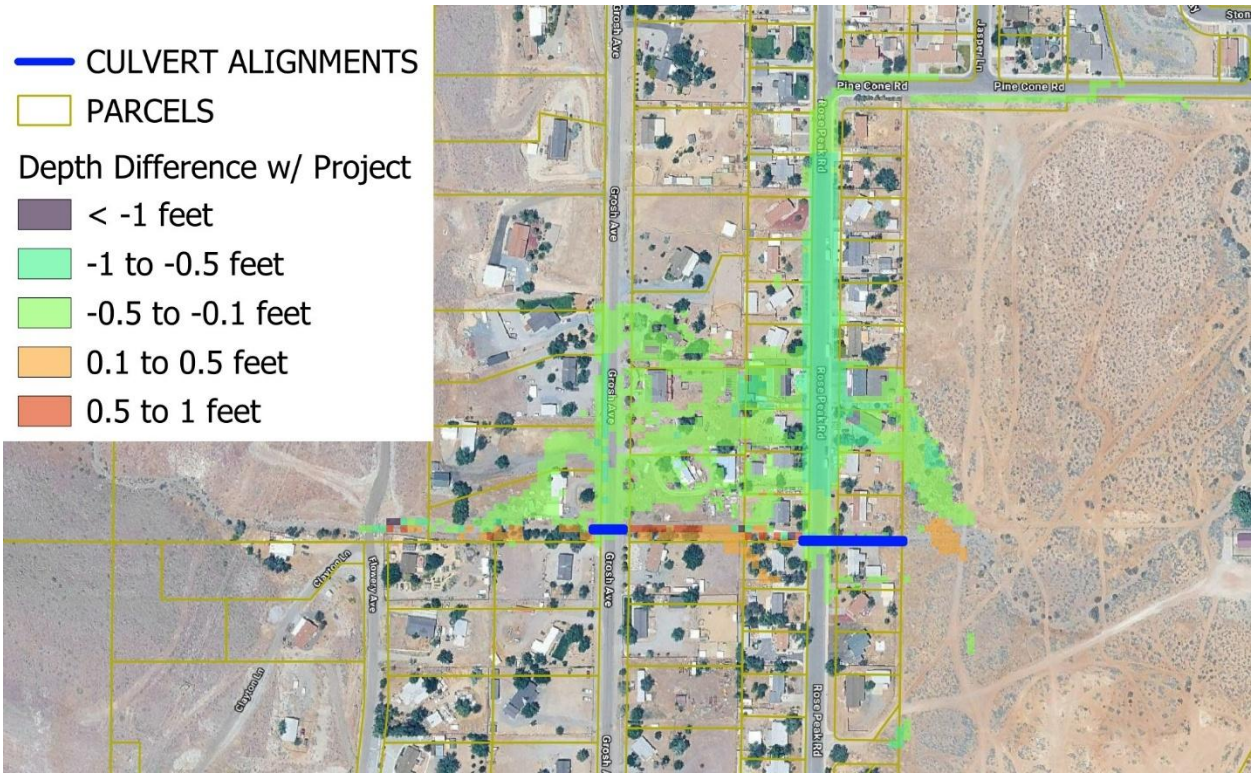


Figure 2: Grosh & Rose Peak Culverts Depth Change Results.

2.2.2 Civil Design

The Grosh and Rose Peak Culverts project proposes two sets of dual 42-inch RCP culverts, and approximately 870 LF of channel improvements. Each culvert includes a reinforced concrete headwall at the entrance and exit. Improvements are also proposed within the open channel that conveys flood flows between each set of culverts. Channel improvements currently formalize the existing flowline alignment, however during final design this may be revised to reduce the need for additional drainage easements. A 60 percent design plan set for the proposed improvements is provided in Appendix C.

The project runs through or is adjacent to APNs: 016-091-16, 019-042-16, 019-032-21, 019-032-01, 019-041-12, 019-031-09, 019-563-11, 019-563-12, 019-562-04, 019-562-03, 016-404-10. All properties are privately owned but have established drainage easements. Determination of additional drainage easement acquisition limits will be required at final design when boundary and topographic surveys have been conducted.

Erosion control and Best Management Practices (BMP's) have been proposed to prevent unnecessary water quality issues or dust during construction activities. The project will be required to meet Nevada Department of Environmental Protection (NDEP) requirements for water quality mitigation and dust control activities.

With the construction of the culverts, several utility crossings are expected. The costs of the utility crossings are estimated in the EOPCC. Additionally, pavement patches will be required to return the road sections to the original conditions.

2.2.3 Provisional Project Schedule

A provisional schedule for full project implementation is provided in Table 1. The schedule assumes acceptance of the recommended mitigation project by CWSD and the Counties as it is presented in this report. It also assumes that all contracted design and survey services would commence directly following funding acquisition. Dates are provisional and should be redefined if funding allocations are secured and the project proceeds. The schedule provisionally estimates a project duration of 24 months from the commencement of preparing the BCA (i.e. Phase 2 of this project, or April 2025).

Table 1: Provisional Project Schedule – Design and Construction

Project Phase	Timeline
Funding Acquisition	12 Months
100 Percent Design and Survey	4 Months
Permitting and Bidding	3 Months
Construction	5 Months
Total Project	24 Months

3.0 PROJECT IMPLEMENTATION

3.1 Project Costs

3.1.1 Project Design and Construction Costs

An EOPCC was prepared to inform federal funding budget targets for the full implementation of the recommended mitigation project; the Grosh and Rose Peak Culverts. The budgetary estimate included civil design and H&H to progress the project from the current 60 percent design level to a 100 percent design level. It also included a topographic survey / photogrammetry and a geotechnical investigation that are necessary for a detailed design. Additionally included in the EOPCC were permitting costs, easement acquisition, engineering services during construction, and construction costs. The EOPCC subtotals are provided in Table 2 and a breakdown is provided in Appendix C.

Included in the cost estimating process was a value engineering exercise to identify alternative solutions that could reduce the overall project cost due to low BCA results. One significant opportunity was reducing the amount of riprap along the conveyance channel. Based on field visits and review of site photography, the existing channel appears to be in relatively stable condition. These field observations combined with proposed velocity and channel-stability hydraulic analyses, the design team determined that reducing riprap may be a feasible alternative without creating a meaningful risk of erosion along the channel. Additional analysis should be completed during final design to further evaluate this option. The value-engineering cost savings are reflected in Table 2 as the "Secondary Project Total."

All budgetary costs presented are for budgetary planning purposes only. These costs reflect the Engineer's impression of materials, equipment, labor, etc. at the time of this report's distribution, based application of presently available data. Listed costs may differ significantly from actual construction costs. A cost contingency of ±10% was provided in accordance with the definition of an American Advancement of Cost Engineering (AACE) definition of a Class 3 Estimate, i.e. for design-development level projects. The engineer has no control over the cost of labor, materials, equipment, competitive bidding practices, market conditions, tariffs, costs associated with funding packages, inflation, etc. Thus, the engineer cannot guarantee that the actual project costs will not vary from the EOPCC.

Table 2: EOPCC for Mitigation Project Implementation

Key Budgetary Cost Component	Budgetary Cost*
Construction Subtotal	$738,300
Budgetary Contingency (10%)	$73,900
Engineering Final Design (Including Survey and Geotechnical Investigations)	$72,000
Project Total	**$884,200**
Secondary Project Total[2]	**$731,100**

[1] Rounded to nearest hundred
[2] Note that a secondary option was discussed between CWSD, Lyon County, and Lumos that excluded riprap from the design and increased the contingency to 20%. The secondary project total was provided by CWSD within Appendix F.

3.1.2 Project O&M Costs

O&M that would result from implementing the Grosh and Rose Peak Culverts project includes, but is not limited to, the following:

1. Riprap Lined Channels
    a. Vegetation management
    b. Sediment and debris removal
    c. Erosion control measures
    d. Routine inspection and record keeping
2. Inlet and Outlet Headwalls
    a. Sediment and debris removal
    b. Structural maintenance measures
    c. Routine inspection and record keeping
3. Reinforced Concrete Storm Drain
    a. Sediment and debris removal
    b. Structural maintenance measures
    c. Hydraulic performance checks
    d. Routine inspection and record keeping

Total O&M costs were estimated as $3,200 per year, as shown in Appendix C.

3.2 Environmental and Cultural Assessments

CWSD assessed the Grosh and Rose Peak Culverts project for environmental and cultural impacts. The Federal Emergency Management Agency (FEMA) environmental and historic preservation checklist was utilized for these assessments. Two technical memorandums were produced in this effort, which are summarized as follows:

- **2025 Flow Status Assessment Report** (CWSD, 2025)**:**
  This report was prepared to determine the extent of the potential Waters of the U.S. (WOTUS) within the project area. A desktop assessment of the U.S. Fish and Wildlife

Service (FWS) National Wetland Inventory, National Resources Conservation Service Soil Survey, aerial imagery, and SEINet Data Portal (2025) was performed to determine the project WOTUS status. The assessment found that the project area is within the alignment of an unnamed ephemeral dry-wash, and is therefore excluded from the Clean Water Act Section 404 jurisdiction. The full report is provided in Appendix D.

- **2025 Biological Screening Memo** (CWSD, 2025)**:**
  This report was prepared to assess potential impacts to biological resources and special status species identified within the project area. Various state and federal agencies were consulted and publicly available resources utilized to perform the assessment. The assessment found that no threated or endangered plans, wildlife, or their habitats are within the project area and no impacts to the identified species are anticipated. This is due to the pre-disturbed condition of the existing area. As a result, no further consultation with the U.S. FWS or State agencies is anticipated. The full report is provided in Appendix E.

3.3 Funding Assessment with a Benefit Cost Analysis

To determine the Grosh and Rose Peak Culverts project's eligibility for federal funding, a BCA was performed by CWSD. The BCA weighs standard project benefits, quantified as a dollar amount saved due to reduced flood impacts, against anticipated project costs (i.e. the EOPCC). The BCA utilized FEMA's BCA Toolkit and HAZUDS Flood Technical Manual. Project benefits included, but were not limited to, reducing the following as a result of the project:

- Building damages
- Replacement of structures
- Replacement of contents
- Human displacement
- Ecosystem services

A BCA ratio of 1.0 or greater must be achieved for the project to be deemed eligible for federal funding. The full BCA report is provided in Appendix F.

The BCA assumed that the useful life of the project would be 50 years and that the net present value (NPV) discount rate would be 7%, per the BCA Toolkit. Resultant lifecycle costs and benefits for the project were estimated in the BCA as follows:

Project Costs NPV	$775,286 (including O&M NPV)
Project Benefits NPV	$421,447
BCA Ratio	0.544 : 1.0

Given that the BCA ratio was estimated to be less than 1.0, the project is not considered eligible for federal funding. However, a notable influence over the resultant BCA ratio was the relatively low value of the existing flood-affected properties. The project benefits, such as reduced displacement costs and damages to structures and contents, were lower than anticipated, in turn lowering the overall BCA ratio. It is important to note that despite the project's ineligibility for

federal funding, the region would still benefit from projects that promote community safety such as this.

3.4 Interim Actionable Flooding Mitigation

Despite the selected project not meeting the BCA requirements, each county can still implement improvements and projects without federal funding to improve drainage conditions. Actionable flood mitigation strategies are outlined below for each county, drawing from the ADMP and the latest project scoping analysis. The goal is to identify practical improvements that can be implemented independently or in conjunction with broader regional efforts, while also considering ways to enhance the BCA for future funding eligibility.

3.4.1 Lyon County Flooding Mitigation

- **Channel Stabilization**

  Channel stabilization is a critical measure for reducing erosion, maintaining conveyance capacity, and protecting adjacent infrastructure. In Lyon County, targeted stabilization of drainage channels, especially those serving developed neighborhoods and roadways, can help prevent bank failure, sedimentation, and property damage during storm events. Recommended approaches include:

  - Installing armoring materials in high-velocity sections, such as geotextiles or riprap
  - Vegetation management to promote root stabilization and minimize bare soil.
  - Routine inspection and maintenance to address emerging erosion issues.

- **Culvert Upsizing**

  Many existing culverts in Lyon County are undersized or prone to blockage by sediment and debris, which can lead to overtopping and localized flooding. Strategic upsizing and regular maintenance of culverts at key crossing, such as those identified in the ADMP, will improve hydraulic performance and reduce flood risk. Specific recommendations include:

  - Replacing older or undersized culverts with larger, smooth-walled pipes.
  - Installing riprap-lined inlets and outlets to minimize sediment accumulation.
  - Prioritizing upgrades at locations with frequent flooding or high traffic volumes.

- **Low Water Crossings at High-Frequency Flood Locations**

  Adding low water crossings at sites with recurrent flooding can enhance safety and maintain access during storm events. These crossings are designed to allow water to flow over the roadway in a controlled manner, reducing the risk of washouts and improving resilience. Low water crossings have been identified by Lyon County staff to make significant improvements to previous flooding issues. Implementation should focus on:

  - High-frequency flood locations identified in the ADMP and recent hydraulic modeling.
  - Use of reinforced concrete or asphalt aprons to protect road surfaces.

- Integration with channel stabilization and culvert improvements for comprehensive flood management.

- **Standalone ADMP Projects**

  Lyon County should continue to evaluate and implement standalone ADMP projects that offer hydraulic independence and immediate benefits. These projects are not contingent on upstream or downstream improvements and can be advanced as funding and resources allow.

- **Strategies to Increase BCA**

  Securing federal or state funding for flood mitigation projects often requires a BCA greater than 1.0. Several strategies can be considered to improve the BCA for Lyon County projects:

  - Include Higher Value Homes in Study Area: Higher property values in the project area can raise the calculated benefits of flood protection, improving the BCA score. For example, single family homes on slab or stem wall foundations typically have a higher home value than a mobile home, and are also designated differently according to FEMA.
  - Impact More Homes: Expanding the project scope to protect additional residences increases the aggregate benefit, making the project more competitive for funding.
  - Impact More Roads: Including critical roadways in the benefit analysis—especially those with high traffic or strategic importance—can further enhance the BCA.
  - Refine Project Scope: Focus on areas with the greatest risk and potential benefit, and document all direct and indirect impacts in the BCA calculation.

3.4.2 Storey County Flooding Mitigation

- **Minor Improvements from the Virginia City ADMP**

  The Virginia City/Six Mile Canyon ADMP identified several "minor" but impactful improvements that Storey County can implement to address localized flooding and reduce maintenance burdens. These improvements can also be implemented down in the North Dayton Valley region. Key recommendations include:

  - Asphalt Swales and Valley Gutters: Many streets in Storey County lack formal roadside conveyances, resulting in high-velocity surface flows that erode shoulders and deposit sediment. The ADMP recommends constructing shallow, paved asphalt concrete (AC) swales along east-west streets and broad AC or concrete valley gutters at intersections. These features help convey runoff efficiently, reduce erosion, and are compatible with snow plowing operations.
  - Culvert Improvements: Regular maintenance and strategic upsizing of culverts is advised. Many existing culverts are blocked by sediment and debris, reducing their effectiveness. The plan calls for installing new culverts at low points in roadside channels, using smooth-walled pipes with riprap-lined inlets and outlets to improve hydraulic performance and reduce overtopping.

- Slope and Shoulder Protection: In areas where the main drainage channel is eroding toward the roadway, the ADMP recommends constructing stabilized road shoulders and riprap-lined slopes to prevent undercutting and protect infrastructure.

- **Construction of Sutro Springs System and Wagon Wheel Culvert**

  Beyond the minor improvements, two larger-scale projects are recommended for Storey County:

  - Sutro Springs System: This system is proposed to intercept and manage runoff from the Sutro Springs area, which contributes to flooding in downstream neighborhoods. The system would likely include a combination of detention, conveyance, and erosion control features. Its implementation would reduce peak flows and sediment transport into developed and undeveloped areas.
  - Wagon Wheel Culvert: The construction of a new culvert at the Wagon Wheel location is recommended to address a known bottleneck where flows currently overtop the roadway. This improvement would enhance connectivity and safety during storm events, reducing the frequency and severity of road closures, while also reducing sediment loading on roadways and private properties.

- **Projects Not Recommended for Construction**

  While the ADMP considered a range of potential projects, not all were deemed practical or cost-effective for near-term implementation. Projects were excluded from recommendation for reasons such as:

  - High-Cost Relative to Benefit: Some alternatives, particularly large detention basins or extensive channelization, were found to exceed feasible budget thresholds or offered limited benefit for the investment required.
  - Connectivity and Dependency: Projects that required the prior construction of other upstream or downstream improvements (i.e., lacked hydraulic independence) were deprioritized due to funding limitations. The County's focus is on projects that can function effectively as stand-alone solutions.
  - Land Acquisition and Environmental Constraints: Alternatives that would necessitate significant private or public property acquisition or trigger complex environmental permitting were also set aside in favor of more readily implementable options.

- **Prospector Basin System**

  A major regional project currently under design is the Prospector Basin system, with DOWL leading the engineering effort. According to recent updates, the design is between 60% and 90% complete. The Prospector Basin is envisioned as a large-scale detention and conveyance system that would provide substantial flood mitigation benefits for Storey County and neighboring jurisdictions. The basin was originally chosen as a viable alternative to move forward during Phase I of this project. However, as the team refined the design, construction cost estimates, property acquisition needs, and anticipated

benefits, it became clear that the project's necessary elements could not be scaled down sufficiently to meet the construction budget threshold without significant property or easement acquisitions. It is recommended that Storey County continues to pursue design and funding for the development of this more significant project.

4.0 CONCLUSION

The analyses and design described in this report have built on the 2019 ADMP for NDV by evaluating project alternatives, updating existing conditions, and refining mitigation strategies to address localized flooding hazards. Through the Phase 1 screening process and subsequent H&H and civil analyses, the Grosh and Rose Peak Culverts project was selected as the preferred mitigation project. The project includes two new sets of culverts at Grosh Avenue and Rose Peak Road, along with open channel improvements, to reduce property and roadway flooding.

A BCA was performed in accordance with FEMA guidance, which indicated that the project is not eligible for federal funding. Despite the BCA result, this project, along with other interim stormwater management efforts, would still provide meaningful benefits to the community by improving public safety, maintaining roadway access, and protecting property from flood damages. Other existing regional projects, such as the Prospector Basin system, remain a priority for future phased implementation, offering broad flood reduction benefits once design and funding are secured. In the interim, both counties can feasibly pursue regional flood resilience by implementing erosion control and channel maintenance, upsizing culverts, and adding low water crossings.

5.0 REFERENCES

CWSD. (2025). *Biological Screening Memo .*

CWSD. (2025). *Flow Status Assessment Report - Grosh / Rose Peak Culvert.*

JEF & Lumos. (2019). *Dayton Valley Area Drainage Master Plan.* JE Fuller & Lumos and Associates, Inc.

APPENDICES

Appendix A North Dayton Valley ADMP Projects Evaluation Memo

Appendix B Hydrology and Hydraulic Modeling Update Map

Appendix C 60% Design Civil Improvement Plans and Cost Estimate

Appendix D Flow Status Assessment Report

Appendix E Biological Resources Evaluation Report

Appendix F Benefit Cost Analysis Report

Appendix A North Dayton Valley ADMP Projects Evaluation Memo

LUMOS & ASSOCIATES

MEMORANDUM

DATE:	April 4, 2025
TO:	Ed James Carson Water Subconservancy District
FROM:	Dan Stucky, P.E., Group Manager Lumos & Associates, Inc.
CC:	Lindsay Marsh (CSWD), Debbie Neddenriep (CWSD), Michael Northan (Storey County), Kathy Canfield (Storey County), Jason Wiezerbicki (Storey County), Gavin Henderson (Lyon County), Louis Cariola (Lyon County), Ian Mahaffey (Lumos), Caroline Elliott (Lumos)
SUBJECT:	Projects Evaluation (Phase 1) - North Dayton Valley Storm Drain Benefit Cost Analysis

1. INTRODUCTION

Background

In August 2019, JE Fuller (JEF) partnered with Lumos and Associates, Inc. (Lumos) to complete the Dayton Valley Area Drainage Master Plan (ADMP) for the Carson Water Subconservancy District (CWSD). The ADMP provided several drainage project alternatives designed to mitigate historic flooding within North Dayton Valley (NDV). NDV is located on the southeastern slopes of the Virginia and Flowery Ranges, near the intersection of Six Mile Canyon and Lincoln Highway (US-50), spanning both Storey County and Lyon County. In December 2024, JEF and Lumos were re-engaged to provide CWSD and the Counties with an assessment of the ADMP projects for viability of implementation and eligibility for federal funding under a benefit cost analysis (BCA). This project is divided into two phases; Phase 1 will screen the ADMP project list for economic feasibility and evaluate potential mitigation projects for prioritization. Phase 2 will progress the top selected projects from Phase 1 to a 60% design level and develop a BCA to verify federal funding eligibility. This memorandum summarizes Phase 1 of the project.

North Dayton Valley Drainage Characteristics

Runoff from the Ranges adjacent to NDV collects in various watersheds and discharges southeast towards communities within the NDV area. Discharge is characteristic of alluvial fanning, flowing overland via a mixture of open channel flow and shallow concentrated flow. Impacted areas in the NDV include existing residential properties, roadways, undeveloped spaces, and the US-50 highway. US-50, owned by the Nevada Department of Transportation (NDOT), is a critical transportation corridor that is prone to closures when flash floods sweep through the area, impacting the wider Dayton Valley region and neighboring communities. A flood map representative of the 100-year (average recurrence interval) storm from the ADMP is provided in Figure 1, along with the various ADMP project locations.

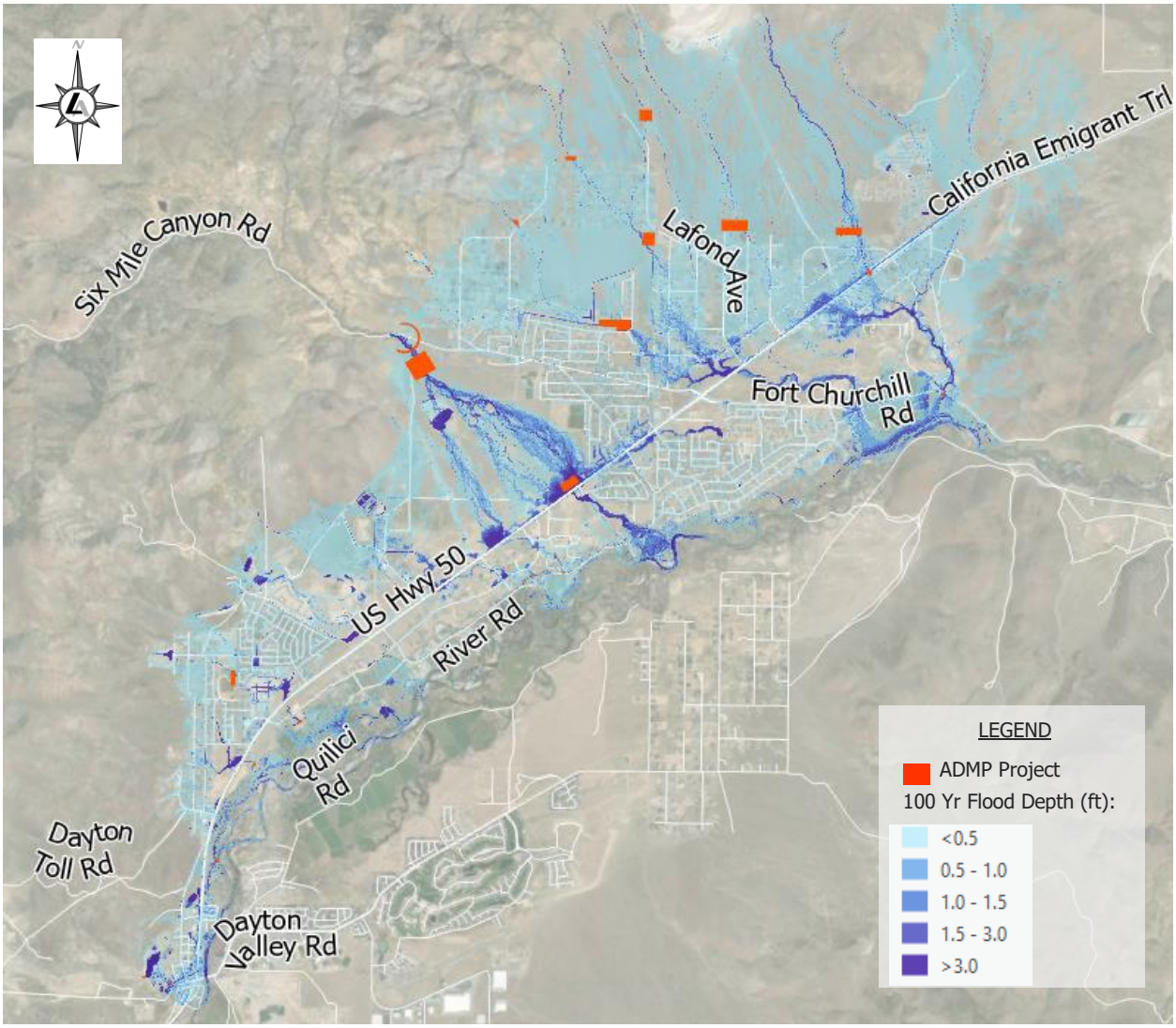


Figure 1: North Dayton Valley Study Area, ADMP Flood Map, and ADMP Projects.

2. PROJECTS EVALUATION

ADMP Project Screening

The complete list of approximately 40 ADMP projects, broken down within each proposed ADMP drainage system, was screened to identify which were viable for further evaluation. Initial screening excluded projects based on the following:

- Total Project Cost > $2.5 million ± 20% additional contingency
  ADMP project costs were escalated from 2019 to 2025 dollars. This was based on a 7% escalation per year, averaged from inflationary and construction industry data. An additional allowance was provided of 20% (i.e. up to $3 million) to account for potential scope reduction as design is further developed.

- Projects recommended for exclusion under the ADMP report
- Projects that require the construction of other projects upstream or downstream
- Projects that almost solely benefit undeveloped areas

This resulted in the below potential projects for further evaluation under Phase 1:

- Sutro Springs System – 25 Year Storm
- Wagon Wheel Culvert – 100 Year Storm
- Lonnie Basin – 25 Year Storm
- Grosh and Rosepeak Culverts – 100 Year Storm
- Gold Canyon Spillway – 100 Year Storm
- Prospector Basin – 100 Year Storm

Evaluation Criteria and Analysis

Several criteria were used to evaluate and prioritize the list of screened projects above. The criteria were workshopped with CWSD and the Counties based on stakeholder needs, target outcomes, and funding considerations. Each was allocated a weighting to reflect the importance of certain criteria over others. The evaluation projects were then scored against each criterion on a scale of 0 (poor performance) to 10 (excellent performance). The evaluation criteria and their respective weighting are summarized in Table 1.

The projects were each modeled by JEF under pre and post project implementation conditions. Modeling was conducted in FLO-2D for both the 25 year and 100 year storms, based on best-available topographic data. A Digital Elevation Model (DEM) was developed for the model to incorporate field conditions into a LiDAR surface to produce the DEM. Field conditions were reported by the Counties (based on a site visit on October 9, 2024, and on mapped mark-ups from County operations staff), reflecting open channel grading and storm drain improvements not otherwise captured in the LiDAR.

Projects Evaluation Matrix and Results

Lumos conducted a site visit with CWSD and the Counties on October 9, 2024 to document field conditions for the various prospective drainage improvement sites. This data was used in updated modeling for the evaluation projects by JEF. The model results, along with other project metrics, were used to evaluate and score projects against the criteria in Table 1. A table of evaluation rationale for each project and criteria is provided in Appendix A. The results are provided in Table 2.

Table 1: Projects Evaluation Criteria and Weighting.

Criteria	Evaluation Description	Importance Weighting
Total Project Cost	Total project costs extracted from the ADMP (2019 dollars) and escalated by 7% per annum to estimate costs in 2025 dollars. A breakdown of costs items will be updated during Phase 2 of this project, where selected projects are developed to a 60% design level. High cost = 0, Low cost = 10	100%
Risk of Adverse Flooding Impacts	Assesses whether the project is prone to causing potential adverse flooding impacts (e.g. built for the 25 year storm but may adversely impact flood risk for the 100 year storm, based on model results). High risk of adverse impacts = 0, Low risk of adverse impacts = 10	90%
Buildings Benefitted	Buildings alleviated from flooding due to the project. Intersection of building footprints (with 10 ft buffer) over the modeled area for net-reduction in flooding compared to existing conditions. No buildings benefitted = 0, High number of buildings benefitted = 10	70%
Weighted Flooding Reduction	Weighted analysis of flood depth model results pre and post project implementation. Evaluates the percentage net flooding reduction for impacted parcels. No reduction in flooded area = 0, Large reduction in flooded area = 10	60%
Existing Developments vs Undeveloped Areas	Prioritizes projects that will impact existing developments and communities compared to undeveloped areas. Promotes community engagement. Undeveloped areas impacted = 0, Existing developments impacted = 10.	60%
Environmental Documentation Triggers	Environmental considerations for project implementation (within a 100 ft buffer) that might trigger environmental documentation. Includes underlying land status, federally protected species, hazardous waste sites, and watercourses. Assessment memo provided by CWSD and JEF provided in Appendix B. Significant environmental trigger = 0, No environment triggers = 10.	50%
Land Acquisition Requirements	Quantifies the area of land that needs to be required to construct a project. Assumed land not owned by either Lyon or Storey County required acquisition. Large land acquisition = 0, No land acquisition = 10.	40%
Road Flooding Hazards	Total severity of roadway flooding reduced by a project. Based on peak depth x velocity model results along roadways (assumed width of 20 ft). Weighted based on Passenger Vehicle Flood Hazard Classifications (United States Bureau of Reclamation, 1988). No roadway hierarchy data (i.e. highway vs local roads, etc.) was available to include in this analysis. No reduction in flooding = 0, High reduction in flooding = 10.	20%
County-Specific Impacts	Assesses whether a project unequally benefits and/or negatively impacts each of the Counties based on the weighted flood depth analysis above. Skewed impacts or benefits = 0, Impacts contained or equally distributed = 10.	25%
Potential Grant Matches Available	Past spending by the Counties in the evaluation projects areas that could potentially count towards a grant fund match. Based on location and description of work, materials, equipment and labor. Insufficient data available for all projects, thus this will be evaluated further under Phase 2.	N/A
Operation and Maintenance Costs	Long term operation and maintenance (O&M) costs were initially considered as potential evaluation criteria, though were excluded from the Phase 1 analysis. This is due to several unknown project characteristics at the ADMP's 15% design level, and their negligibly low expected impact to cost based on the ADMP. O&M costs will be evaluated under Phase 2.	N/A

Table 2: Phase 1 Projects Evaluation Matrix Results (see Appendix A for scoring rationale).

EVALUATION CRITERIA	Total Project Costs (Construction and Non-Construction	Buildings Benefitted	Weighted Reduction of Flooding	Existing Developments vs Undeveloped Areas	Road Flooding Hazards	Land Acquisition Requirements	Risk of Adverse Flooding Impacts	County-Specific Impacts	Environmental Documentation Triggers	TOTAL WEIGHTED SCORE	PROJECT OVERALL RANKING
CRITERIA WEIGHTING	**100%**	**70%**	**60%**	**60%**	**20%**	**40%**	**90%**	**25%**	**50%**	**/100**	
PROJECTS	**Project Score / 10**										
Sutro Springs System (Alt 1 - 25 Year)	1.2	0.3	10.0	5.0	0.9	0.0	10.0	3.0	6.0	44	5
Wagon Wheel Culvert (Alt 2 - 100 Year)	9.8	0.0	1.3	10.0	0.1	9.9	3.4	1.0	10.0	54	4
Lonnie Basin (Alt 1 - 25 Year)	0.0	1.3	6.1	6.0	2.2	4.7	6.2	10.0	8.0	42	6
Grosh & Rosepeak Culverts (Alt 2 - 100 Year)	8.5	1.0	8.5	9.0	0.8	9.8	8.0	10.0	10.0	72	1
Gold Canyon Spillway (100 Year)	5.2	10.0	7.0	9.5	10.0	7.6	2.0	10.0	0.5	59	3
Prospector Basin (Alt 2 - 100 Year)	5.0	3.5	7.6	7.5	0.1	7.8	8.6	5.0	8.0	61	2

Evaluation Results Summary

Project priorities resulting from the evaluation matrix in Appendix A and Table 2 are ranked below:

1. **Grosh and Rosepeak Culverts (100 Yr Storm) - $ 452,000**
   - New (4) x 42" RCP culverts crossing under Grosh Ave and Rose Peak Rd, connected hydraulically upstream/downstream of each other. These culverts do not relate to any other drainage systems in the ADMP. The project has a relatively low cost for greatly reduced flooding within existing developments. No environmental documentation triggers are expected and there is minimal risk of adverse impacts. Minimal land acquisition is required, though if open channels tying into the culverts require grading modification and are included in Phase 2 scope of work, this could change along with overall project costs.
2. **Prospector Basin (100 Yr Storm) - $ 1,484,000**
   - A new 15 ft deep, 4.7 ac-ft detention basin at the intersection of Martin Ln and Prospector Rd. Tied to a downstream storm drain proposed in the ADMP, though can function independently of the SD being built. The project has moderate escalated ADMP cost and balances flooding improvements for the downstream existing developments. The project is proposed within Storey County, though the downstream benefits are largely within Lyon County. Some adverse flooding may occur as a result of this project, though the benefits are far greater. Minimal environmental documentation triggers are expected. Some land acquisition is required.
3. **Gold Canyon Spillway (100 Yr Storm) - $ 1,441,000**
   - Hydraulic improvements (specifically a 240 ft wide weir) and formalization of storage within an existing channel next to the Dayton Sand and Gravel Pit. The project has a moderate escalated ADMP cost and improves flooding for downstream existing developments, particularly for flood-impacted buildings and roadways. Some land acquisition is required. There is a greater risk of inducing adverse flooding impacts and this project has the highest risk of triggering environmental documentation.
4. **Wagon Wheel Culvert (100 Yr Storm) - $ 74,000**
   - New (1) x 36" culvert crossing under Wagon Wheel Way, independent of other projects and not included within other drainage systems. The project has significantly lower costs compared to the other evaluated projects, though provides little flooding reduction and benefits no existing structures downstream.
5. **Sutro Springs System (25 Yr Storm) - $ 2,606,000**
   - A new 16 ft, 28 ac-ft deep detention basin west of Sutro Springs Rd with two inlet channels and a 24" RCP outlet culvert under the Road. The project has a high escalated ADMP cost and, though it improves flooding downstream significantly, the effects are largely within undeveloped areas. Significant land acquisition is required to build this project. There is a high risk of inducing adverse flooding impacts, a moderate risk of triggering environmental documentation, and the Counties will be disproportionately affected.
6. **Lonnie Basin (25 Yr Storm) - $ 2,975,000**
   - Expansion of the existing detention basin at the Kadden Way and Lonnie Ln intersection into a 12 ft deep, 69 ac-ft basin. Includes a new inlet channel and improved outletting. Tied to a downstream storm drain proposed in the ADMP, though can function independently of the SD being built. The project cost is estimated at the limit of $2.5million + 20% budget threshold. Flooding is improved moderately within both developed and undeveloped areas. Land acquisition is required. There is a moderate risk of inducing adverse flooding impacts, and a high of triggering environmental documentation.

3. RECOMMENDATIONS

Grosh and Rose Peak Culverts

It is recommended that the Counties consider progressing the Grosh and Rose Peak Culverts. These culverts comprise the primary recommended project. Total project costs are estimated at approximately $452,000. Note that this project could look to include or exchange the implementation of culverts with improved open channel drainage in the surrounding area. This was a recommendation of the ADMP and can be evaluated as the design progresses to 60% in Phase 2. Incidental escalation of costs are expected to result from any changes in the design scope, though are expected to still be well below the $2.5 million budgetary threshold.

Prospector Basin

The Prospector Basin appears to provide a well-balanced and impactful reduction in flooding to existing communities. The estimated budgetary cost is $1.48 million based on escalation from the ADMP estimate. This is based on the ADMP's proposed Basin siting. Any changes to the Basin's location under Phase 2 may increase project costs. It is also imperative to note that this project excludes the associated storm drain downstream of the Basin that was originally proposed in the ADMP. The storm drain could add approximately $1.8 million to the total project costs, resulting in the system's exclusion entirely. Given that the Basin still provides significant community benefits independently from the storm drain, it was analyzed independently of the storm drain. The effects of constructing the basin as a standalone project would result in some localized negative flooding impacts to areas directly south of the project. These effects are largely only seen below the 0.25 ft flood-depth threshold and can likely be mitigated through further basin design optimization.

Gold Canyon Spillway

While the Gold Canyon Spillway appears to provide similar benefits to its downstream environment as the Prospector Basin, careful consideration should be given to its proposed location next to an existing mine. Construction within decommissioned mining areas characteristically escalates costs for extensive geotechnical work, stabilization, environmental documentation, permitting, and can raise public concern. There are many hidden cost factors during construction that could also be revealed throughout the pursuit of this project. In light of this, additional project costs are expected to be significant during the Phase 2 design and BCA. Lumos anticipates that the cost for the Gold Canyon Spillway could exceed the budgetary threshold of $2.5 million.

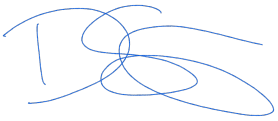
4. CONCLUSION

Following discussions with Lyon and Storey County on April 1, 2025, the Prospector Basin (100-Year) has been selected as the recommended project to advance to Phase 2— despite being ranked second based on the established evaluation criteria. This selection is due to the project's significant bi-county benefits, strong potential for attracting future grant funding, and recent drainage improvements made by Storey County in the area, which may serve as a potential match for future grant contributions.

The Lumos and JEF teams will begin Phase 2 by advancing the Prospector Basin design, plans, and cost estimates to the 60% completion level. In parallel, the team will conduct a BCA, environmental assessment, and public outreach. The deliverables from Phase 2 will ultimately support future grant applications to help fund the project's final design and construction.

If you have any questions, please do not hesitate to contact Lumos at (775) 827-6111.

Sincerely,



Dan Stucky, P.E.

Engineering Director

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APPENDIX A

PHASE 1 PROJECTS EVALUATION RATIONALE

PHASE 1 PROJECTS - CRTIERIA EVALUATION RATIONALE
NORTH DAYTON VALLEY STORM DRAIN BENEFIT COST ANALYSIS
Carson Water Subconservancy District, Storey County, Lyon Cuonty

11530.000
7-Mar-25

LUMOS & ASSOCIATES

Evaluation Criteria	Total Project Costs (Construction and Non-Construction)	Buildings Benefitted	Weighted Reduction of Flooding	Existing Developments vs Undeveloped Areas	Road Flooding Hazards	Land Acquisition Requirements	Risk of Adverse Flooding Impacts	County-Specific Impacts	Environmental Documentation Triggers
Sutro Springs System (Alt 1 - 25 Year)	The original ADMP (2019) estimate for this project was $1,737,000. Compounded at a 7%increase/year to 2025, the estimate was escalated to $2,607,000.	The average number of structures that this project mitigates flood risks for (when flow depths exceed 0.25') is 1.	The implementation of this project displays significant improvements with the reduction of flooding.	This project provides alleviation to both existing and future developments.	The implementation of this project displays negligible improvements in the severity of flooding at roadway crossings.	There is one private landowner across the project limits totaling an acquisition of approximately 278,490 SF.	The implementation of this project displays negligible risks of adverse impacts relative to the benefits observed.	This project resides within Storey County; however, the downstream effects majorly impact Lyon County in comparison to Storey County.	The potential triggers for environmental documentation are moderate with this project.
Wagon Wheel Culvert (Alt 2 - 100 Year)	The original ADMP (2019) estimate for this project was $49,000. Compounded at a 7%increase/year to 2025, the estimate was escalated to $74,000.	The average number of structures that this project mitigates flood risks for (when flow depths exceed 0.25') is 0.	The implementation of this project displays negligible improvements with the reduction of flooding.	This project provides alleviation to existing developments.	The implementation of this project displays negligible improvements in the severity of flooding at roadway crossings.	There are two private landowners across the project limits totaling an acquisition of approximately 1,405 SF.	The implementation of this project displays major risks of adverse impacts.	This project resides within Storey County; however, the downstream effects significantly impact Lyon County in comparison to Storey County.	The potential triggers for environmental documentation are negligible with this project.
Lonnie Basin (Alt 1 - 25 Year)	The original ADMP (2019) estimate for this project was $1,982,000. Compounded at a 7%increase/year to 2025, the estimate was escalated to $2,975,000.	The average number of structures that this project mitigates flood risks for (when flow depths exceed 0.25') is 5.	The implementation of this project displays moderate improvements with the reduction of flooding.	This project provides alleviation to both existing and future developments.	The implementation of this project displays minor improvements in the severity of flooding at roadway crossings.	There is one private landowner across the project limits totaling an acquisition of approximately 146,910 SF.	The implementation of this project shows moderate risks of adverse impacts.	This project and its downstream effects are within Lyon County.	The potential triggers for environmental documentation are minor with this project.
Grosh & Rosepeak Culverts (Alt 2 - 100 Year)	The original ADMP (2019) estimate for this project was $301,000. Compounded at a 7%increase/year to 2025, the estimate was escalated to $452,000	The average number of structures that this project mitigates flood risks for (when flow depths exceed 0.25') is 4.	The implementation of this project displays major improvements with the reduction of flooding.	This project provides alleviation to existing developments with a small portion of alleviation to future developments.	The implementation of this project displays negligible improvements in the severity of flooding at roadway crossings.	There are six private landowners across the project limits totaling an acquisition of approximately 5,573 SF.	The implementation of this project displays minor risks of adverse impacts.	This project and its downstream effects are within Lyon County.	The potential triggers for environmental documentation are negligible with this project.
Gold Canyon Spillway (100 Year)	The original ADMP (2019) estimate for this project was $960,000. Compounded at a 7%increase/year to 2025, the estimate was escalated to $1,441,000.	The average number of structures that this project mitigates flood risks for (when flow depths exceed 0.25') is 38.5.	The implementation of this project shows considerable improvements with the reduction of flooding.	This project provides alleviation to existing developments with a small portion of alleviation to future developments.	The implementation of this project shows significant improvements in the severity of flooding at roadway crossings.	There is one private landowner across the project limits totaling an acquisition of approximately 65,963 SF.	The implementation of this project displays major risks of adverse impacts.	This project and its downstream effects are within Lyon County.	The potential triggers for environmental documentation are significant with this project.
Prospector Basin (Alt 2 - 100 Year)	The original ADMP (2019) estimate for this project was $989,000. Compounded at a 7%increase/year to 2025, the estimate was escalated to $1,484,000.	The average number of structures that this project mitigates flood risks for (when flow depths exceed 0.25') is 13.5.	The implementation of this project shows considerable improvements with the reduction of flooding.	This project provides alleviation to existing developments with a moderate portion of alleviation to future developments.	The implementation of this project displays negligible improvements in the severity of flooding at roadway crossings.	There are two private landowners across the project limits totaling an acquisition of approximately 60,533 SF.	The implementation of this project displays negligible risks of adverse impacts.	This project resides within Storey County; however, the downstream effects moderately impact Lyon County in comparison to Storey County.	The potential triggers for environmental documentation are minor with this project.

APPENDIX B

PHASE 1 ENVIRONMENTAL REVIEW MEMO (JE Fuller, March 2025)

February 27, 2025

Caroline Elliott, P.E.
Senior Engineer
Engineering Division
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Zephyr Cove, NV 89448
Phone: 775.588.6490
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RE: North Dayton ADMP – Preliminary Environmental Screening

Dear Caroline,

JE Fuller Hydrology and Geomorphology, Inc (JE Fuller) and Carson Water Subconservancy District (CWSD) provided a preliminary environmental screening for the current seven conceptual alternatives:

- Sutro Springs System Alt 1 (25 Year)
- Wagon Wheel Culvert Alt 2 (100 Year)
- Lonnie Basin Alt 1 (25 Year)
- Grosh and Rosepeak Culverts Alt 2 (100 Year)
- Grosh Culvert Alt 2 (100 Year)
- Gold Canyon Spillway
- Prospector Basin Alt 2 (100 Year) (No Downstream SD)

JE Fuller and CWSD reviewed relevant data sources and conducted a preliminary desktop evaluation of the potential environmental concerns or effects that could result from each alternative. The screening included an assessment of 1) underlying land status, 2) intersection of each conceptual alternative with range of federally-protected species, 3) whether federally-protected species have been documented nearby, 4) whether there are any hazardous waste sites nearby, and 5) types of watercourses intersecting each conceptual alternative.

Data requests were obtained from U.S. Fish and Wildlife Service (USFWS 2025b), Nevada Department of Wildlife (NDOW 2025a, 2025b), and Nevada Natural Heritage Program (NNHP 2025) for locational information about state, Bureau of Land Management (BLM 2025), and federally-protected sensitive species and their critical habitats (USFWS 2025a). Online data sets queried include EPA Superfund Sites (EPA 2025), U.S. Geological Survey (USGS) Nevada National Hydrography Dataset (NHD; Lyon County 2025), and the USFWS National Wetlands Inventory (NWI; USFWS 2025c). The sections on the following pages contain the screening evaluation results for each conceptual alternative.

SUTRO SPRINGS SYSTEM ALT 1. (25 YEAR)

1. **Underlying Land Status**
    a. This conceptual alternative is located entirely on private property
    b. No further concerns with underlying land status

2. **Range of Federally-Protected Species**
    a. Nevada State Wildlife Action Plan Key Habitats
        i. Intermountain Cold Desert Shrub
        ii. Sagebrush
        iii. Developed Areas
    b. Game/Management Species Habitats (NDOW)
        i. No management areas in or immediately around alternative
        ii. Mule deer occupied habitat nearby
    c. Federally-Protected Species Ranges (USFWS)
        i. Monarch butterfly potential habitat
        ii. Golden eagle potential habitat
        iii. Migratory Bird habitat in alternative area

3. **Federally-Protected Species Documented Nearby**
    a. Species Documented Nearby by NNHP
        i. Golden eagle habitat approximately 2.75 miles to southwest
        ii. Altered andesite buckwheat, altered andesite popcorn flower, and Townsend's big-eared bat more than 0.7 mile to southwest (non-federally listed)
    b. Species Documented Nearby by NDOW
        i. Conceptual alternative is 3.4 miles from various raptor nests up near Butter's Mil and this is far enough away to not be a concern
    c. Federally-Protected Species Critical Habitats
        i. No Designated Critical Habitats
        ii. Sagegrouse Proposed Critical Habitat 7.5 miles to south
    d. Future Action Items
        i. Migratory Birds could be in area nesting so pre-construction nest search is recommended to comply with Migratory Bird Treaty Act (MBTA)
        ii. Consider mitigation measures for non-federally listed species such as pre-construction surveys for the plants and ensure that no roosting habitat for the bat.

4. **Hazardous Waste**
    a. No hazardous waste sites identified nearby

5. **Type of Watercourses Intersecting**
    a. NHD

i. Two washes intersect and collect within the conceptual alternative basin and could result in more than 0.5-acre of loss of a Water of the U.S. (WOTUS)
ii. The wash coming in from the west could be intermittent

b. NWI
i. R4SBJ
1. Riverine, Intermittent, Streambed, Intermittently Flooded

c. Future Action Items
i. Need to conduct a survey for WOTUS
ii. May be able to use Nationwide Permit (NWP) 43 (Stormwater Management Facilities; USACE 2021) to comply with Clean Water Act (CWA) Section 404/401
1. Pre-Construction Notification (PCN) required with USACE; 401 Certification required with NDEP

WAGON WHEEL CULVERT ALT 2. (100 YEAR)

1. Underlying Land Status
a. This conceptual alternative is located entirely on private property
b. No further concerns with underlying land status

2. Range of Federally-Protected Species
a. Nevada State Wildlife Action Plan Key Habitats
i. Intermountain Cold Desert Shrub
ii. Developed Areas
b. Game/Management Species Habitats (NDOW)
i. No management areas in or immediately around alternative
ii. Mule deer occupied habitat nearby
c. Federally-Protected Species Ranges (USFWS)
i. No federally-protected species concerns
ii. Migratory Birds in Area

3. Federally-Protected Species Documented Nearby
a. Species Documented Nearby by NNHP
i. Golden eagle habitat 2.8 miles to southwest (far enough away for no concern)
b. Species Documented Nearby by NDOW
i. No federally-protected species concerns
c. Federally-Protected Species Critical Habitats
i. No Designated Critical Habitats
ii. Sagegrouse Proposed Critical Habitat 7.5 miles to south
d. Future Action Items
i. None identified

4. **Hazardous Waste**
    d. No hazardous waste sites identified nearby

5. **Type of Watercourses Intersecting**
    a. NHD
        i. Ephemeral Wash which does not have an obvious Ordinary High Water Mark
    b. NWI
        i. None
    c. Future Action Items
        i. Need to conduct a survey for WOTUS
        ii. CWA Section 404/401 permitting not likely required because wash is ephemeral

LONNIE BASIN ALT 1 (25 YEAR)

1. **Underlying Land Status**
    a. This conceptual alternative is located entirely on private property
    b. No further concerns with underlying land status

2. **Range of Federally-Protected Species**
    a. Nevada State Wildlife Action Plan Key Habitats
        i. Intermountain Cold Desert Shrub
        ii. Developed Areas
    b. Game/Management Species Habitats (NDOW)
        i. No management areas in or immediately around alternative.
        ii. Mule deer occupied habitat nearby
    c. Federally-Protected Species Ranges (USFWS)
        i. Monarch butterfly potential habitat
        ii. Golden eagle potential habitat
        iii. Migratory Bird habitat in alternative area

3. **Federally-Protected Species Documented Nearby**
    a. Species Documented Nearby by NNHP
        i. Golden eagle habitat approximately 2.75 miles to southwest which is far enough away to not be a concern
        ii. Migratory Bird habitat in alternative area
    b. Species Documented Nearby by NDOW
        i. Unknown raptor nest 2.5 miles to the east which is far enough away to not be a concern
    c. Federally-Protected Species Critical Habitats
        i. No Designated Critical Habitats
        ii. Sagegrouse Proposed Critical Habitat 6.5 miles to south

d. Future Action Items

i. Migratory Birds could be in area nesting so pre-construction nest search is recommended to comply with MBTA

4. Hazardous Waste

e. No hazardous waste sites identified nearby

5. Type of Watercourses Intersecting

a. NHD

i. Likely ephemeral wash which may or may not have an Ordinary High Water Mark

b. NWI

i. R4SBJ

1. Riverine, Intermittent, Streambed, Intermittently Flooded

c. Future Action Items

i. Need to conduct a survey for WOTUS

ii. CWA Section 404/401 permitting may not be required because wash is ephemeral

GROSH AND ROSEPEAK CULVERTS ALT 2 (100 YEAR)

1. Underlying Land Status

a. This conceptual alternative is located entirely on private property

b. No further concerns with underlying land status

2. Range of Federally-Protected Species

a. Nevada State Wildlife Action Plan Key Habitats

i. Intermountain Cold Desert Shrub

ii. Developed Areas

b. Game/Management Species Habitats (NDOW)

i. No management areas in or immediately around alternative.

ii. Mule deer occupied habitat nearby

c. Federally-Protected Species Ranges (USFWS)

i. Yellow-billed cuckoo habitat along Carson River (0.5 mile to riparian)

ii. Monarch butterfly potential habitat

iii. Golden eagle potential habitat

iv. Migratory Birds in Area

3. Federally-Protected Species Documented Nearby

d. Species Documented Nearby by NNHP

i. Northwestern Pond turtle documented along Carson River 0.55 mile to northeast

ii. Golden eagle habitat 2.25 miles to north

iii. Sagebrush pygmyleaf across highway to east (non-federally listed)

e. Species Documented Nearby by NDOW
    i. Golden eagle nest approximately 1.9 mile to northwest
    ii. Golden eagle nest 2.0 mile to south
f. Federally-Protected Species Critical Habitats
    i. No Designated Critical Habitats
    ii. Sagegrouse Proposed Critical Habitat nearby (1.5 miles to south)
g. Future Action Items
    i. Given type of work and existing development in area, no further attention required.

4. Hazardous Waste

h. Carson River Mercury Site (Morgan Mill Park down to Carson Sink)
i. This is an old/historic EPA Superfund Site and there would be no action necessary

5. Type of Watercourses Intersecting

a. NHD
    i. Ephemeral Wash = 0.1 acre potential WOTUS
b. NWI
    i. R4SBJ
        1. Riverine, Intermittent, Streambed, Intermittently Flooded
c. <u>Future Action Items</u>
    i. Need to conduct a survey for WOTUS
    ii. CWA Section 404/401 permitting may not be required because wash is ephemeral
    iii. May use NWP 43 or Letter of No Jurisdiction since wash is ephemeral

GOLD CANYON SPILLWAY

1. Underlying Land Status

a. This conceptual alternative is located entirely on private property
b. No further concerns with underlying land status

2. Range of Federally-Protected Species

a. Nevada State Wildlife Action Plan Key Habitats
    i. Intermountain Cold Desert Shrub
    ii. Cliffs and Canyons
    iii. Lakes and Reservoirs
    iv. Developed Areas
b. Game/Management Species Habitats (NDOW)
    i. No management areas in or immediately around alternative.
    ii. Mule deer occupied habitat nearby
c. Federally-Protected Species Ranges (USFWS)
    i. Yellow-billed cuckoo habitat along Carson River (0.3 mile to riparian)
    ii. Northwestern pond turtle (potential habitat in pond)

iii. Monarch butterfly potential habitat
iv. Bald and golden eagle potential habitat
v. Migratory Bird habitat in alternative area

3. Federally-Protected Species Documented Nearby

a. Species Documented Nearby by NNHP
   i. Northwestern pond turtle (federally-protected) documented along Carson River approximately 1.0 mile to northeast
   ii. Mexican free-tailed bat habitat across river (non-federally listed)
   iii. Migratory Birds could be in area nesting
b. Species Documented Nearby by NDOW
   i. Golden eagle nest approximately 2.5 miles to north on Mt. Grosh
   ii. Golden eagle nest approximately 0.35 mile to south
c. Federally-Protected Species Critical Habitats
   i. No Designated Critical Habitats
   ii. Sagegrouse Proposed Critical Habitat nearby (1.5 miles to south)
d. Future Action Items
   i. Pre-construction surveys for nesting migratory birds to comply with MBTA
   ii. Survey for northwestern pond turtle (coordination with NNHP and USFWS may be required) to comply with Endangered Species Act
   iii. Survey for golden eagle nests (coordination with NDOW and NNHP may be required) to comply with the Bald and Golden Eagle Protection Act
   iv. Habitat survey for yellow-billed cuckoo, monarch butterfly, Mexican free-tailed bat

4. Hazardous Waste

a. Carson River Mercury Site (Morgan Mill Park down to Carson Sink)
b. This is an old/historic EPA Superfund Site and there would be no action necessary

5. Type of Watercourses Intersecting

a. NHD
   i. Gold Creek (Intermittent) = 0.25 acre disturbance to potential WOTUS
b. NWI
   i. PUBHx = Palustrine, Unconsolidated Bottom, Permanently Flooded, Excavated
   ii. PSS1Ax = Palustrine, Scrub-Shrub, Broad-Leaved Deciduous, Temporarily Flooded, Excavated
   iii. R4SBC = Riverine, Intermittent, Streambed, Seasonally Flooded
c. Future Action Items
   i. Need to conduct a survey for WOTUS (and wetlands)
   ii. May be able to use NWP 43 to comply with CWA Section 404/401
      1. PCN Required with USACE; 401 Certification required with NDEP

iii. *If project cannot meet terms and conditions of NWP 43, then individual permit from USACE may be needed as well as 401 Certification from NDEP*

PROSPECTOR BASIN ALT 2 (100 YEAR) (NO DOWNSTREAM SD)

1. **Underlying Land Status**
   a. This conceptual alternative is located entirely on private property
   b. No further concerns with underlying land status

2. **Range of Federally-Protected Species**
   a. Nevada State Wildlife Action Plan Key Habitats
      i. Intermountain Cold Desert Shrub
   b. Game/Management Species Habitats (NDOW)
      i. No management areas in or immediately around alternative.
      ii. Mule deer occupied habitat nearby
   c. Federally-Protected Species Ranges (USFWS)
      i. Monarch butterfly potential habitat
      ii. Bald and golden eagle potential habitat
      iii. Migratory Bird habitat in alternative area

3. **Federally-Protected Species Documented Nearby**
   d. Species Documented Nearby by NNHP
      i. Golden eagle habitat approximately 2.0 miles to southwest
      ii. Altered andesite buckwheat, altered andesite popcorn flower, and Townsend's big-eared bat close nearby (non-federally listed)
      iii. Golden eagle nesting habitat is far enough away to not be a concern for this basin
   e. Species Documented Nearby by NDOW
      i. Conceptual alternative is 2.25 miles to various raptor nests which is far enough away to not be a concern
   f. Federally-Protected Species Critical Habitats
      i. No Designated Critical Habitats
      ii. Sagegrouse Proposed Critical Habitat 7 miles to south
   g. <u>Future Action Items</u>
      i. Migratory Birds could be in area nesting so pre-construction nest search is recommended to comply with MBTA
      ii. Consider mitigation measures for non-federally listed species such as pre-construction surveys for the plants and ensure that no roosting habitat for the bat.

6. **Hazardous Waste**
   f. No hazardous waste sites identified nearby

1. **Type of Watercourses Intersecting**
    a. NHD
        i. Two ephemeral washes intersect and collect within the conceptual alternative basin and could result in approximately 0.1 acre
    b. NWI
        i. R4SBJ
            1. Riverine, Intermittent, Streambed, Intermittently Flooded
    c. Future Action Items
        i. Need to conduct a survey for WOTUS
        ii. CWA Section 404/401 permitting may be required because the wash is ephemeral
        iii. May use NWP 43 or Letter of No Jurisdiction since wash is ephemeral

SUMMARY

The conceptual alternatives are ranked below according to ease of implementation (easiest to most difficult) according to environmental concerns and permitting requirements:

- **Wagon Wheel Culvert Alt 2 (100 Year)** – little-to-no environmental concerns
- **Grosh and Rosepeak Culverts Alt 2 (100 Year)** – little-to-no environmental concerns
- **Lonnie Basin Alt 1 (25 Year)** – recommend pre-construction surveys for migratory birds; survey for WOTUS and obtain NWP (if necessary)
- **Prospector Basin Alt 2 (100 Year)** – recommend pre-construction surveys for migratory birds and non-federally listed plant species; survey for WOTUS and obtain NWP (if necessary)
- **Sutro Springs System Alt 1 (25 Year)** – recommend pre-construction surveys for migratory birds; survey for WOTUS and obtain CWA Section 404/401 permitting (definitely necessary)
- **Gold Canyon Spillway** – recommend pre-construction surveys for migratory birds; survey for northwestern pond turtle and golden eagle nests; survey for yellow-billed cuckoo and monarch butterfly habitat; survey for WOTUS (and wetlands) and obtain CWA Section 404/401 permitting (may be NWP or individual permit and is absolutely necessary).

Due to the small size of the culvert alternatives and their locations within developed areas, few environmental concerns were identified and would be the simplest and most efficient to implement. Lonnie and Prospector Basins also have few environmental concerns but would still likely require on-the-ground surveys to identify potential WOTUS as well as pre-construction surveys for migratory birds. Due to the intermittent status of the washes and streams that enter Sutro and Gold Canyon, more complex surveys and CWA Section 404/401 permitting will be required. Gold Canyon Spillway represents the most environmentally complex alternative and could also require a wetland delineation, species-specific surveys for northwestern pond turtle, golden eagle nest surveys, and habitat suitability surveys for yellow-billed cuckoo and monarch butterfly.

Feel free to reach out with questions via phone (928-853-8386) or email (jeanmarie@jefuller.com).

Sincerely,

Jean Marie Rieck
Senior Biologist / Environmental Planner
JE Fuller / Hydrology and Geomorphology, Inc.

ONLINE REFERENCES AND DATABASES

Bureau of Land Management (BLM). 2025. Land Surface Management Agency. Website: https://gbp-blm-egis.hub.arcgis.com/datasets/b977d306a6c8447ea19b8b74379a7af2_0/explore. Accessed February 19, 2025.

Environmental Protection Agency (EPA). 2025. EPA Superfund Sites. Website: https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=33cebcdfdd1b4c3a8b51d416956c41f1. Accessed February 19, 2025.

Lyon County. 2025. USGS NV NHD Rivers and Streams; Aerial Desktop Review of Watercourses https://gisportal.lyon-county.org/portal/apps/webappviewer/index.html?id=a95497fb2dfe475287c7074843255627. Accessed February 19, 2025.

Nevada Natural Heritage Program (NNHP). 2025. Data Request Received 20 February 2025. Website: https://heritage.nv.gov/request_data. Accessed February 20, 2025.

Nevada Department of Wildlife (NDOW). 2025a. Standard Data Request. Website: https://www.ndow.org/blog/gis-data/. Accessed February 20, 2025.

NDOW. 2025b. Wildlife Datasets. Website: https://gis-ndow.opendata.arcgis.com/search?tags=wildlife. Accessed February 19, 2025.

U.S. Army Corps of Engineers (USACE). 2021. Nationwide Permit 43. Website: https://www.swt.usace.army.mil/Portals/41/docs/missions/regulatory/2021%20NWP/2021%20nwp-43.pdf?ver=vPcP2zJOz8yHDVfx_9L3Gw%3D%3D. Accessed February 25, 2025.

U.S. Fish and Wildlife Service (USFWS). 2025a. Federally-Protected Species Critical Habitats. Website: https://fws.maps.arcgis.com/home/webmap/viewer.html?webmap=9d8de5e265ad4fe09893cf75b8dbfb77. Accessed February 19, 2025.

USFWS. 2025b. Information for Planning and Consultation – Official Species List. Website: https://ipac.ecosphere.fws.gov/user/login. Accessed February 19, 2025.

USFWS. 2025c. National Wetlands Inventory. Website: https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/. Accessed February 19, 2025.

Appendix B Hydrology and Hydraulic Modeling Update Map

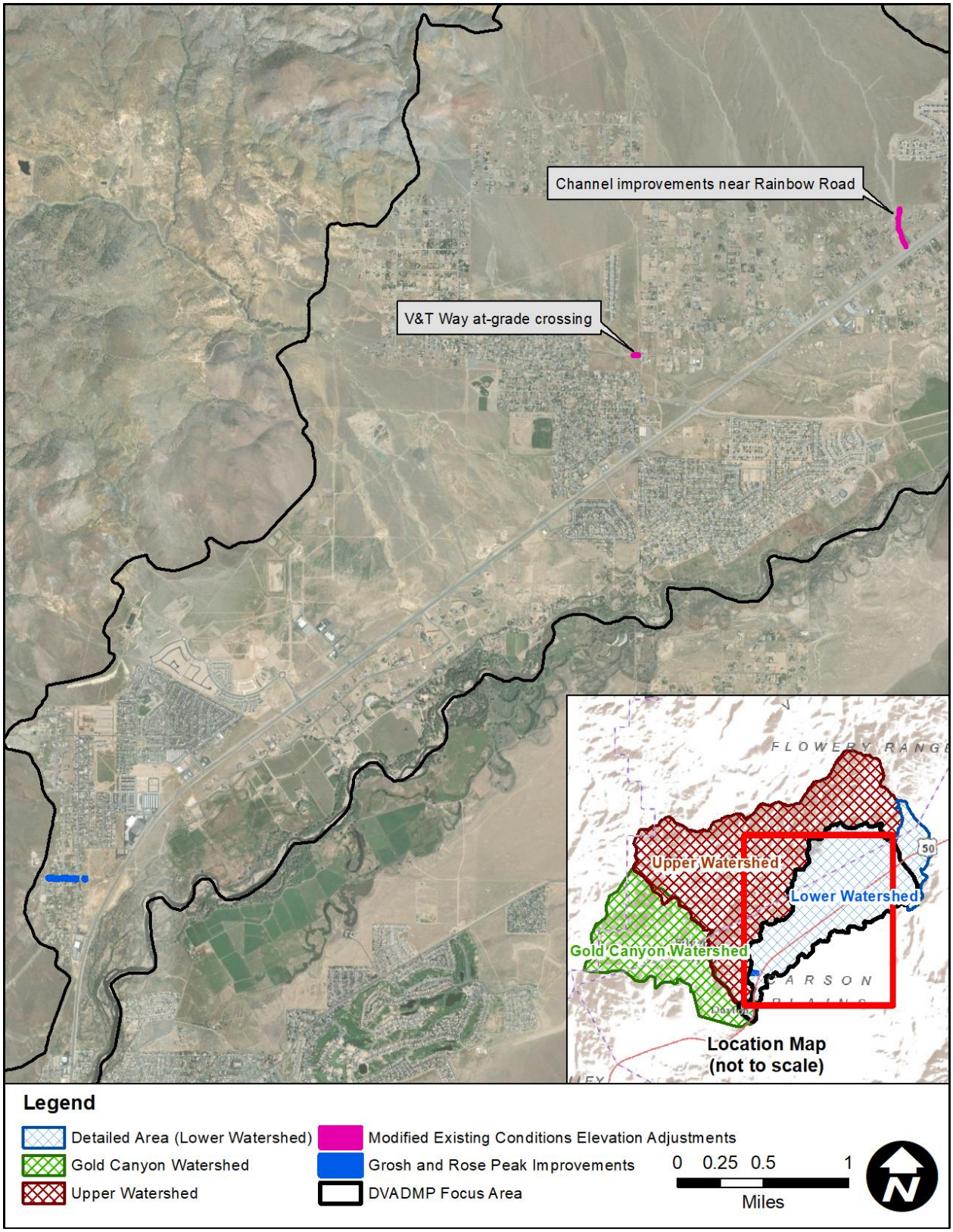


Figure 1. Existing Conditions Model Updates and Project Improvements

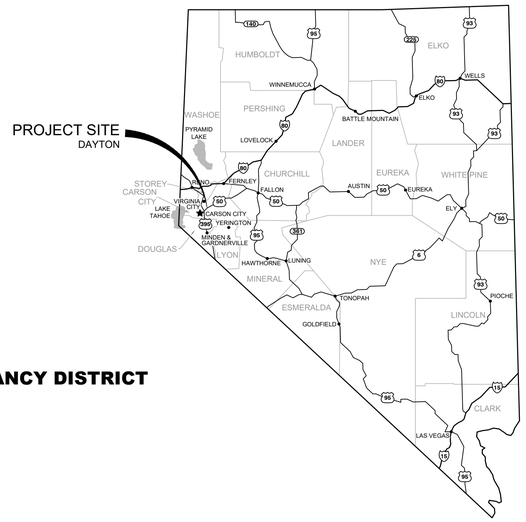
Appendix C 60% Design Civil Improvement Plans and Cost Estimate

Engineer's OPCC					
Item No.	Description	Unit	Quantity	Unit Price	Total Price
Construction Costs					
1	Mobilization, Construction Water, Erosion Control, Traffic Control	LS	1	$ 53,000.00	$ 53,000.00
2	Remove Existing Culverts	LS	1	$ 20,000.00	$ 20,000.00
3	Earthwork (Net Cut)	CY	430	$ 10.00	$ 4,300.00
4	AC Trench Patch	SF	1,201	$ 14.00	$ 16,810.92
5	Remove & Replace Type I Curb & Gutter	LF	26	$ 90.00	$ 2,361.60
6	Remove & Replace PCC Sidewalk	LF	26	$ 24.00	$ 629.76
7	Class-150 Rip Rap	SF	18,906	$ 10.00	$ 189,060.00
8	PCC Cast in Place Headwall	EA	4	$ 30,000.00	$ 120,000.00
9	42" RCP Storm Drain Pipe	LF	558	$ 525.00	$ 292,908.00
10	Waterline Relocation	EA	2	$ 10,000.00	$ 20,000.00
11	Headwall Inlet PCC Apron	SF	642	$ 30.00	$ 19,260.00
				Sub Total Construction Costs=	**$ 738,330**
				Contingency (10%) =	**$ 73,833**
Non-Construction Costs					
12	Engineering, Survey, Geotechnical, Permitting	EA	1.00	$ 72,000.00	$ 72,000
				Sub Total Non-Construction Costs =	**$ 72,000**
				Total Project Costs	**$ 884,163**
Expected Annual Maintenance Costs (2025 Pricing)					
13	Cleaning Channels, Flushing Culverts, Patching Concrete Cracking	LS	1	$ 3,200.00	**$ 3,200.00**

L:\LAProj\11530.000 - N. Dayton Valley Storm Drain & Basin\3-Design\Estimates\[11530000 Estimate.xlsx]Cost Estimate

CARSON WATER SUBCONSERVANCY DISTRICT

NORTH VALLEY STORM DRAIN & BASIN SCOPING PROJECT



LOCATION MAP

VICINITY MAP

SHEET INDEX:

TITLE SHEET	C1.0
NOTES & ABBREVIATIONS	C1.1
HORIZONTAL CONTROL	C1.2
DEMOLITION PLAN	C1.3
PLAN & PROFILE	C2.0 - C2.1
GRADING PLAN	C3.0 - C3.1
EROSION CONTROL	C4.0
DETAILS	C5.0 - C5.1

OWNER/DEVELOPER

CARSON WATER SUBCONSERVANCY DISTRICT
ATTN: EDWIN JAMES
777 E. WILLIAMS ST, STE 209e
CARSON CITY, NV 89701
TEL.: 775.887.7456

ENGINEER

950 SANDHILL ROAD, SUITE 100
RENO, NEVADA 89521
TEL: 775.827.6111
INFO@LUMOSINC.COM

Know what's below.
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BASIS OF BEARING

THE BASIS OF BEARINGS FOR THIS SURVEY IS NEVADA STATE PLANE COORDINATE SYSTEM, WEST ZONE NAD83(94) BASED UPON REAL TIME KINEMATIC GPS OBSERVATIONS, OBSERVED DATE USING A SURVEY GRADE DUAL FREQUENCY GPS RECEIVER FROM NEVADA DEPARTMENT CONTROL MONUMENT 720002, MODIFIED BY A COMBINED FACTOR OF COMBINED SCALE FACTOR OF 1.000222, SCALED FROM 0.00N ,0.00E AND CONVERTED TO U.S. SURVEY FEET. ALL DIMENSIONS ON THIS MAP ARE GROUND DISTANCES.

BASIS OF ELEVATION

THE BASIS OF ELEVATION ON THIS PROJECT WAS DERIVED FROM THE USGS 3DEP PROGRAM.

LUMOS & ASSOCIATES
950 SANDHILL ROAD, SUITE 100
RENO, NV 89521
TEL: 775.827.6111

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CARSON WATER SUBCONSERVANCY DISTRICT
NORTH VALLEY STORM DRAIN & BASIN SCOPING PROJECT
TITLE SHEET
DAYTON — LYON COUNTY — NEVADA

REV	DATE	DESCRIPTION	BY
		60% SUBMITTAL NOT FOR CONSTRUCTION AUGUST 2025	

BAR IS 1 INCH ON ORIGINAL DRAWING
0 — 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

C1.0

DRAWN BY:	GEW
DESIGNED BY:	IKM
CHECKED BY:	RSP
JOB NO.:	11530.000

L:\LAProj\11530.000 - N. Dayton Valley Storm Drain & Basin\3-Design\DWG\Civil\Sheets\60% Sheets\11530000TITLE.dwg,C1.0 TITLE SHEET, 07/30/2025 08:25 am gwallace

LEGEND

EXISTING		PROPOSED
4174	CONTOUR LINE	4174
+ 4163.1	GROUND ELEVATION	+ 4163.1
	TREE	
	ROCK	
	EDGE OF PAVEMENT	
	AC PAVING TO BE REMOVED	
	CURB & GUTTER	
	CONCRETE	
	UTILITY POLE	
	LIGHT	
	GUY WIRE	
ET	ELECTRIC TRANSFORMER	ET
EV	ELECTRIC VAULT	EV
EP	ELECTRIC PANEL	EP
EC	ELECTRIC CABINET	EC
EB	ELECTRIC BOX	EB
EM	ELECTRIC METER	EM
EG	ELECTRIC GENERATOR	EG
E	ELECTRIC MANHOLE	E
AC	AIR CONDITIONER	AC
	ELECTRIC OUTLET	
	BOLLARD	
SD	STORM DRAIN MANHOLE / DROP INLET	SD
	CATCH BASIN	
WV	WATER VALVE	WV
ICV	IRRIGATION CONTROL VALVE WATER	ICV
WM	METER	WM
WS	WATER SPIGOT / HOSE BIB WATER	WS
W	MANHOLE	W
WV	WATER VAULT	WV
	FIRE HYDRANT	
GV	GAS VALVE	GV
GM	GAS METER	GM
T	TELEPHONE MANHOLE	T
TB	TELEPHONE BOX	TB
TV	TELEPHONE VAULT	TV
S	SEWER MANHOLE	S
SSCO	SEWER CLEANOUT	SSCO
	SURVEY MONUMENT	
	CONTROL POINT	
	BARRICADE	
	SIGN	
	RETAINING WALL	
	FENCE	X
	GRADE BREAK	
	FLOW LINE	
	SOIL TEST PIT	
	DETAIL CALLOUT	X / CX.X
EX COM	COMM LINE	COM
EX GAS	GAS LINE	GAS
EX OH ELEC / EX ELEC	ELECTRIC LINE	ELEC
EX SS	SEWER LINE	SS
EX WL	WATER LINE	WL
EX AIR	AIR LINE	AIR
EX SD	STORM DRAIN	SD
EX REC WL	RECLAIMED WATER LINE	REC WL
	SAWCUT	

ABBREVIATIONS

AC	ASPHALT CONCRETE
ACP	ASBESTOS CEMENT PIPE
AGG	AGGREGATE
BC	BEGIN CURVE (HORIZONTAL)
BCR	BEGIN CURB RETURN
BOW	BOTTOM OF WALL
BF, BOF	BOTTOM OF FOOTING
BV	BUTTERFLY VALVE
BVC	BEGIN VERTICAL CURVE
BW	BACK OF WALK
CB	CATCH BASIN
cfs	CUBIC FEET PER SECOND
CF	CUBIC FEET
C&G	CURB AND GUTTER
℄	CENTER LINE
CL	CLASS / CENTER LINE
CMP	CORRUGATED METAL PIPE
COMP	COMPACTION
CONC	CONCRETE
CONTR	CONTRACTOR
CP	CONCRETE PAD
CTV	CABLE TELEVISION
DI	DROP INLET
DIA, Ø	DIAMETER
DWY	DRIVEWAY
E	EAST
EA	EACH
EC	END CURVE (HORIZONTAL)
ECR	END CURB RETURN
ELL	ELBOW
ELEC	ELECTRICAL
ELEV	ELEVATION
EVC	END VERTICAL CURVE
EX, (E)	EXISTING
EXT	EXTERIOR
FCA	FLANGE COUPLING ADAPTER
FE	FINISH ELEVATION
FES	FLARED END SECTION
FF	FINISH FLOOR
FFC	FRONT FACE OF CURB
FG	FINISH GRADE
FH	FIRE HYDRANT
FL	FLOW LINE
FLG	FLANGE
fps	FEET PER SECOND
FTG	FOOTING
G	GAS
GALV	GALVANIZED
GB	GRADE BREAK
GDW	GRAVEL DRIVEWAY
GD	GROUND
GV	GATE VALVE
H	HANDICAPPED
HGL	HYDRAULIC GRADE LINE
HORIZ	HORIZONTAL
HP	HIGH POINT
ID	INSIDE DIAMETER
IE	INVERT ELEVATION
INT	INTERSECTION
IRR	IRRIGATION
LAT	LATERAL
LF	LINEAR FEET
LP	LOW POINT
LT	LEFT
LVC	LENGTH OF VERTICAL CURVE
MAX	MAXIMUM
MDD	MAXIMUM DRY DENSITY
MH	MANHOLE
MIN	MINIMUM
MJ	MECHANICAL JOINT
MMD	MAXIMUM MARSHALL DENSITY
MUTCD	MANUAL FOR TRAFFIC CONTROL DEVICES
N	NORTH
NAP	NOT A PART
NIP	NOT IN PROJECT
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OH	OVERHEAD
(P)	PROPOSED
PCC	PORTLAND CEMENT CONCRETE, POINT OF COMPOUND CURVATURE
PG	PAD GRADE
PI	POINT OF INTERSECTION
PIVC	POINT OF INTERSECTION VERTICAL CURVE
PL	PROPERTY LINE
PP	POWER POLE
PRC	POINT OF REVERSE CURVE
PRVC	POINT OF REVERSE VERTICAL CURVE
PVC	POLYVINYL CHLORIDE
PVMT	PAVEMENT
Q 5	5 YEAR PEAK FLOW
Q 100	100 YEAR PEAK FLOW
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
REF	REFERENCE
RET	CURB RETURN
RP	RADIUS POINT
RT	RIGHT
R/W, ROW	RIGHT-OF-WAY
S=	SLOPE
S	SOUTH
SD	STORM DRAIN
SDMH	STORM DRAIN MANHOLE
SL	STREET LIGHT
SS	SANITARY SEWER
SSCO	SANITARY SEWER CLEAN OUT
SSMH	SANITARY SEWER MANHOLE
SSPWC	STANDARD SPEC. FOR PUBLIC WORKS CONSTRUCTION
STA	STATION
SW	SIDEWALK
TELE	TELEPHONE
TBO	TEMPORARY BLOW OFF VALVE
TC	TOP OF CURB, TOP OF CONC
TCSB	TRAFFIC CONTROL SIGNAL BOX
TG	TO GRADE
TOB	TOP OF BERM
TF, TOF	TOP OF FOOTING
TOW	TOP OF WALL
TS	TRAFFIC SIGNAL
TR	TOP OF RAIL
TRANS	TRANSITION
TYP	TYPICAL
UG/P	UNDER GROUND POWER
UNO	UNLESS NOTED OTHERWISE
V 5	VELOCITY AT 5 YEAR PEAK
VC	VERTICAL CURVE
VEL	VELOCITY
VERT	VERTICAL
VG	VALLEY GUTTER
W	WEST
W/G	WATER AND GAS
WL	WATER LINE
WM	WATER METER
WS	WATER SURFACE
WV	WATER VALVE
WWF	WELDED WIRE FABRIC
YR	YEAR

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NOTES:

GENERAL

1. ALL WORK SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, AS ADOPTED BY THE GOVERNING AGENCY
2. THE CONTRACTOR SHALL REFER TO THE STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION, AS ADOPTED BY THE PERMITTING ENTITY, FOR ALL DETAILING NOT SHOWN ON THESE PLANS.
3. CONSTRUCTION SHALL COMPLY WITH THESE PLANS AND CURRENT NDOT SPECIFICATIONS (STANDARD SPECIFICATIONS) AND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ARRANGING A PRE-CONSTRUCTION JOB SITE CONFERENCE WITH GOVERNING AGENCIES, ALL UTILITY COMPANIES, OWNER'S REPRESENTATIVES, AND THE PROJECT ENGINEER PRIOR TO COMMENCING WORK. THIS MEETING SHALL BE HELD AT LEAST FORTY-EIGHT (48) HOURS, OR TWO (2) BUSINESS DAYS, PRIOR TO THE START OF CONSTRUCTION AND SHALL COMMUNICATE SCHEDULES, CONTRACTORS MEAN AND METHODS, MATERIALS TO BE USED, AND OTHER RELEVANT MATTERS ASSOCIATED WITH THE CONSTRUCTION OF THE PROJECT.
5. ALL WORK EITHER DIRECTLY OR INDIRECTLY RELATED TO THE PROJECT SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY SYSTEM MANAGER.
6. THE CONTRACTOR SHALL MAINTAIN AN ONSITE RECORD COPY OF ALL DRAWINGS, SPECIFICATIONS, ADDENDA, CHANGE ORDERS, WORK CHANGE DIRECTIVES, FIELD ORDERS, FIELD CHANGES, AND WRITTEN INTERPRETATIONS AND CLARIFICATIONS. RECORDS SHALL BE IN GOOD ORDER AND ANNOTATED TO SHOW CHANGES MADE DURING CONSTRUCTION.
7. CONTRACTOR SHALL PROVIDE MATERIALS AND EQUIPMENT SUBMITTALS AND/OR SHOP DRAWINGS TO THE PROJECT ENGINEER FOR REVIEW PRIOR TO ORDERING OR INSTALLATION. A SIGNED SET OF REVIEWED SUBMITTALS MUST ALWAYS BE AVAILABLE ONSITE DURING CONSTRUCTION.
8. THE CONTRACTOR SHALL CALL UNDERGROUND SERVICE ALERT AT 1-800-642-2444 TO PROVIDE FIELD LOCATIONS OF UNDERGROUND UTILITIES PRIOR TO THE START OF CONSTRUCTION.
9. THE LOCATION OF EXISTING UTILITIES SHOWN ON THESE PLANS ARE BASED ON THE BEST INFORMATION AVAILABLE TO THE ENGINEER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY PROPOSED POINTS OF CONNECTION AND IN AREAS OF POSSIBLE CONFLICT WITH NEW UTILITY INSTALLATION PRIOR TO BEGINNING CONSTRUCTION. SHOULD THE CONTRACTOR FIND ANY DISCREPANCIES BETWEEN THE CONDITIONS EXISTING IN THE FIELD AND THE INFORMATION SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER BEFORE PROCEEDING WITH CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROTECT AND MAINTAIN ALL EXISTING UTILITIES WHETHER OR NOT SHOWN ON THE PLAN.
10. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROCURE ALL NECESSARY PERMITS, LICENSES, INSURANCE POLICIES, ETC. AS MAY BE NECESSARY TO COMPLY WITH LOCAL, COUNTY, STATE, AND FEDERAL LAWS ASSOCIATED WITH THE PERFORMANCE OF THE WORK; UNLESS OTHERWISE OBTAINED BY THE OWNER.
11. THE CONTRACTOR SHALL PREPARE A TRAFFIC CONTROL PLAN AND PROVIDE, PLACE, AND MAINTAIN ALL LIGHTS, SIGNS, BARRICADES, FLAG PERSONS, PILOT CAR, OR OTHER DEVICES NECESSARY TO CONTROL TRAFFIC THROUGH THE CONSTRUCTION AREA AND FOR PUBLIC SAFETY. ALL TRAFFIC CONTROL OPERATIONS SHALL COMPLY WITH THE LATEST MUTCD. AT NO TIME WILL OBSTRUCTIONS BE LEFT IN THE ROADWAY DURING NIGHT HOURS. ALL TRAFFIC CONTROL PLANS SHALL BE PREPARED BY A REGISTERED CIVIL ENGINEER OR ATTSA CERTIFIED PERSONNEL.
12. THE CONTRACTOR AGREES TO ASSUME SOLE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, AND FURTHER AGREES THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS IN ACCORDANCE WITH THE PROVISIONS OUTLINED BY THE PROJECT CONTROL AND THE STANDARD SPECIFICATIONS.
13. THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE PROVISIONS OF OSHA AND NRS CHAPTER 618.
14. THE CONTRACTOR SHALL PURSUE THE WORK IN A CONTINUOUS AND DILIGENT MANNER, CONFORMING TO ALL THE PERTINENT SAFETY REGULATIONS TO ENSURE A TIMELY COMPLETION OF THE PROJECT.
15. THE CONTRACTOR SHALL MAINTAIN A CLEAN PROJECT SITE, REMOVING CONSTRUCTION DEBRIS AT THE END OF EACH ACTIVITY DAY. THE CONTRACTOR SHALL MAINTAIN DEBRIS FREE CONSTRUCTION ROUTES, ADJACENT STREETS AND STORM DRAIN SYSTEMS.
16. TEMPORARY CONSTRUCTION FENCING SHALL BE PROVIDED AND MAINTAINED BY THE CONTRACTOR THROUGHOUT THE DURATION OF THE PROJECT IN AREAS AS DELINEATED ON THE PLANS OR AS DIRECTED BY THE PROJECT ENGINEER. THE TEMPORARY FENCING SHALL PREVENT CHILDREN AND PETS FROM ENTERING THE CONSTRUCTION AREA, CREATE A VISUAL BARRIER OF THE CONSTRUCTION ACTIVITIES FROM THE ADJACENT RESIDENCE AND YARDS, AND PROTECT VEGETATION FROM CONSTRUCTION EQUIPMENT.
17. THE CONTRACTOR SHALL USE ONLY AUTHORIZED SITES FOR STORAGE OF EQUIPMENT AND MATERIALS AND OBTAIN PROPER APPROVALS FROM THE LAND OWNER AND LOCAL GOVERNING AUTHORITY TO DO SO. CONTRACTOR SHALL BE RESPONSIBLE FOR THE SECURITY OF ALL EQUIPMENT AND MATERIALS.
18. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING SURVEY MONUMENTS AND OTHER SURVEY MARKERS DURING CONSTRUCTION. IN THE EVENT A MONUMENT IS DISTURBED, THE CONTRACTOR SHALL HAVE THE MONUMENT REPLACED, AT HIS OWN EXPENSE, BY A LICENSED SURVEYOR IN THE STATE OF THE PROJECT SITE.
19. CONSTRUCTION HOURS SHALL BE WEEKDAYS BETWEEN 7:00 AM AND 6:00 PM UNLESS OTHERWISE DICTATED BY LOCAL ORDINANCE. CONTRACTOR SHALL OBTAIN APPROVAL FROM THE PROJECT ENGINEER TO MODIFY WORK HOURS.
20. ALL FIELD CHANGES MUST BE PRE-APPROVED BY THE PROJECT ENGINEER.
21. SHOULD IT APPEAR THAT THE WORK TO BE DONE, OR ANY MATTER RELATIVE THERETO, IS NOT SUFFICIENTLY DETAILED OR EXPLAINED ON THESE PLANS, THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER FOR SUCH FURTHER EXPLANATIONS AS MAY BE NECESSARY.
22. ALL SALVAGED MATERIALS ARE THE PROPERTY OF THE OWNER AND SHALL BE PALLETIZED ONSITE UNLESS OTHERWISE ARRANGED WITH THE OWNER AND/OR PROJECT ENGINEER.
23. THE OWNER IS RESPONSIBLE FOR FURNISHING QUALIFIED SITE INSPECTIONS AS REQUIRED TO COMPLY WITH LOCAL ORDINANCES.

UNDERGROUND UTILITIES

24. THE CONTRACTOR SHALL FIELD VERIFY UTILITY LOCATIONS NEAR OR WITHIN THE CONSTRUCTION LIMITS WITH THE RESPECTIVE UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ARRANGE FOR THE NECESSARY RELOCATION OF ANY UTILITY. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES INVOLVED AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO BEGINNING WORK.
25. NO OTHER UTILITIES MAY BE PLACED IN A WATER OR SEWER TRENCH.
26. ALL VALVE BOXES, MANHOLE STRUCTURES, AND CLEAN OUTS SHALL BE MARKED AND ACCESSIBLE AT ALL TIMES.
27. CONTRACTOR SHALL SUPPORT TRENCH SIDEWALLS IN ACCORDANCE WITH ALL APPLICABLE LAWS AND GOVERNING SAFETY REGULATIONS. SHEETING OR SHORING SHALL CONFORM TO LOCAL REGULATIONS AND OSHA STANDARDS.
28. ENDS OF UNFINISHED PIPE SHALL BE SEALED AT THE END OF EACH DAY.
29. PIPE SHALL BE LAID IN THE UPHILL DIRECTION, WITH BELL ENDS UPHILL.
30. THE CONTRACTOR SHALL COORDINATE ALL WATER MAIN SHUT DOWNS AND TIE-INS WITH THE WATER UTILITY A MINIMUM OF FORTY-EIGHT (48) HOURS OR TWO (2) BUSINESS DAYS IN ADVANCE.
31. ALL UNDERGROUND VALVES, TEES, FITTINGS, ETC. LARGER THAN 2" SHALL BE COATED TO PROTECT AGAINST CORROSION.
32. ALL WATER PROJECT MATERIAL (PIPES, VALVES, LATERALS AND APPURTENANCES) SHALL BE LEAD FREE AND MEET THE MINIMUM REQUIREMENTS OF THE NEVADA ADMINISTRATIVE CODE AND NSF/ANSI 61.
33. ALL THRUST BLOCKS SHALL BE INSPECTED PRIOR TO BACK-FILL.
34. ALL BOLTS AT THRUST BLOCKS AND VALVE SADDLES SHALL BE COVERED WITH VISQUEEN AND TAPED PRIOR TO CONCRETE PLACEMENT.
35. THE WATER MAINS SHALL NOT BE PLACED INTO SERVICE UNTIL:
    a. THE WATER MAIN HAS BEEN DISINFECTED IN ACCORDANCE WITH AWWA C651, NEVADA DEPARTMENT OF ENVIRONMENTAL PROTECTION (NDEP), THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTIONS STANDARDS.
    b. THE DISPOSAL OF ANY SPENT CHLORINE SOLUTIONS MUST BE COORDINATED WITH NDEP'S BUREAU OF WATER POLLUTION CONTROL.
    c. ANALYSIS OF THE WATER MAIN WHICH INDICATE THAT THE WATER MEETS PRIMARY DRINKING WATER STANDARDS FOR COLIFORM BACTERIA (ABSENT FOR COLIFORM BACTERIA) HAVE BEEN OBTAINED AND REPORTED TO NDEP'S BUREAU OF SAFE DRINKING WATER. SAMPLING SHALL BE IN ACCORDANCE WITH NDEP REGULATIONS.
36. PVC PIPE SHALL BE TESTED PER AWWA C605 AND DUCTILE IRON PIPE SHALL BE TESTED FOR AWWA C600. OTHER MATERIALS SHALL BE TESTED PER REQUIREMENTS IN THE STANDARD SPECIFICATION FOR PUBLIC WORKS CONSTRUCTION SECTION 336.
37. CONTRACTOR SHALL CONDUCT PIPING TESTS BEFORE JOINTS ARE COVERED AND AFTER THRUST BLOCKS HAVE HARDENED SUFFICIENTLY. FILL PIPELINE 24 HOURS BEFORE TESTING AND APPLY TEST PRESSURE TO STABILIZE SYSTEM. USE ONLY POTABLE WATER.
38. CONTRACTOR SHALL PERFORM PLASTIC PIPE BALL AND MANDREL TEST ON NEWLY INSTALLED SEWER PIPE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
39. CONTRACTOR SHALL PERFORM AIR PRESSURE TESTING ON NEWLY INSTALLED SEWER PIPE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTIONS.

GRADING, EXCAVATION & SURFACE IMPROVEMENTS

40. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING THEIR OWN QUANTITY TAKE-OFF AND SHALL BUDGET THE PROJECT ACCORDINGLY. ALL EXCESS GRADING MATERIALS SHALL BE DISPOSED OF OFFSITE.
41. THE SOILS ENGINEER SHALL APPROVE ALL EARTHWORK AND GRADING TO CONFIRM COMPACTION REQUIREMENTS ARE MET.
42. CONTRACTOR SHALL PROTECT EXISTING PAVING, CONCRETE, LANDSCAPING, FENCING, MAILBOXES, SIGNS AND ANY OTHER IMPROVEMENTS NOT SPECIFICALLY CALLED OUT FOR REPLACEMENT. CONTRACTOR SHALL REPAIR/REPLACE ANYTHING DAMAGED BY FORCES UNDER THEIR EMPLOY OR CONTRACT.
43. ALL ASPHALT CONCRETE SURFACES SHALL BE SAWCUT THREE FEET MINIMUM INSIDE THE EDGE OF PAVEMENT TO A NEAT, STRAIGHT LINE AND REMOVED. THE EXPOSED PAVEMENT TIE-IN EDGES SHALL BE METICULOUSLY CLEANED OF ALL LOOSE MATERIAL AND THEN TREATED WITH BITUMINOUS EMULSION PRIOR TO PAVING. THE EXPOSED BASE MATERIALS SHALL BE GRADED AND RECOMPACTED PRIOR TO PAVING.

ENVIRONMENTAL

44. ALL CONSTRUCTION SHALL BE PERFORMED IN COMPLIANCE WITH THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES). CONTRACTOR IS RESPONSIBLE FOR ACQUIRING AND MAINTAINING A SWPPP.
45. INSTALLATION AND MAINTENANCE OF EROSION CONTROL MEASURES ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PREVENTION OF EROSION AND SILTATION FROM ENTERING THE STORM DRAIN SYSTEM, NATURAL DRAINAGE COURSES, AND/OR INTRUDING UPON ADJACENT ROADWAYS AND PROPERTIES. EROSION CONTROL MEASURES SHOWN ON THESE PLANS ARE INTENDED AS A GUIDE. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED AS DETERMINED IN THE FIELD. THIS RESPONSIBILITY SHALL APPLY THROUGHOUT THE COURSE OF CONSTRUCTION AND UNTIL ALL DISTURBED AREAS HAVE BECOME STABILIZED AND SHALL NOT BE LIMITED TO WET WEATHER PERIODS. THE CONTRACTOR IS RESPONSIBLE FOR SWPPP UPDATES.
46. THE CONTRACTOR SHALL MAINTAIN AN ON-GOING DUST CONTROL PROGRAM INCLUDING WATERING OF OPEN AREAS, TO CONFORM WITH THE LATEST FEDERAL, STATE, AND COUNTY AIR POLLUTION REGULATIONS. CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND UPDATING DUST CONTROL PERMITS FOR THE PROJECT.
47. ALL AREAS DISTURBED AND LEFT UNDEVELOPED FOR A PERIOD OF MORE THAN 30 DAYS SHALL BE STABILIZED BY THE APPLICATION OF AN APPROVED DUST PALLIATIVE OR HYDROMULCH.
48. THE CONTRACTOR SHALL IDENTIFY A STANDBY CREW FOR EMERGENCY WORK AND THEY SHALL BE AVAILABLE AT ALL TIMES. MATERIAL NECESSARY TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES OR TO REPAIR DAMAGED EROSION CONTROL MEASURES SHALL BE AVAILABLE ON-SITE AND STOCKPILED AT APPROVED LOCATIONS.
49. PROTECTIVE MEASURES AND TEMPORARY DRAINAGE PROVISIONS SHALL BE USED TO PROTECT ADJOINING PROPERTIES DURING CONSTRUCTION OF IMPROVEMENTS.
50. AFTER A RAINSTORM, ALL SILT AND DEBRIS SHALL BE REMOVED FROM CHECK BERMS AND DESILTING FACILITIES. GRADED SLOPE SURFACE PROTECTION MEASURES DAMAGED DURING THE RAINSTORM SHALL ALSO BE REPAIRED.
51. FILL SLOPES AT THE PROJECT PERIMETER MUST DRAIN AWAY FROM THE TOP OF THE SLOPE AT THE END OF EACH WORKING DAY.
52. ALL DISTURBED AREAS ARE REQUIRED TO HAVE A PALLIATIVE APPLIED FOR DUST CONTROL. ALL GRADING SHALL COMPLY WITH STATE AND COUNTY REGULATIONS.
53. A SIX-FOOT HIGH PERIMETER FENCE OR A 24-HOUR GUARD SHALL BE POSTED ON THE SITE WHENEVER THE DEPTH OF WATER IN A FACILITY EXCEEDS 18".
54. ALL AREAS DISTURBED BECAUSE OF THE WORK SHALL BE REVEGETATED IN ACCORDANCE WITH INDUSTRY BEST MANAGEMENT PRACTICES.
55. NO CONSTRUCTION MATERIALS SHALL BE STORED IN A STREAM ENVIRONMENT ZONES (SEZ) AT ANY TIME.
56. IF GROUNDWATER IS ENCOUNTERED, THE CONTRACTOR SHALL STOP WORK IMMEDIATELY, PREPARE A DEWATERING PLAN, AND OBTAIN APPROVAL FROM THE PROJECT ENGINEER BEFORE PROCEEDING WITH WORK. DEWATERING ACTIVITIES MAY REQUIRE THE CONTRACTOR TO OBTAIN A DISCHARGE/PUMPING PERMIT FROM THE STATE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN SUCH PERMITS.
57. ALL STREETS SHALL BE MAINTAINED FREE OF DUST AND MUD CAUSED BY GRADING OPERATIONS.

LUMOS & ASSOCIATES
950 SANDHILL ROAD, SUITE 100
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INFO@LUMOSINC.COM

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CARSON WATER SUBCONSERVANCY DISTRICT

NORTH VALLEY STORM DRAIN
& BASIN SCOPING PROJECT
NOTES & ABBREVIATIONS

DAYTON LYON COUNTY NEVADA

REV	DATE	DESCRIPTION	BY

60% SUBMITTAL
NOT FOR CONSTRUCTION
AUGUST 2025

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C1.1

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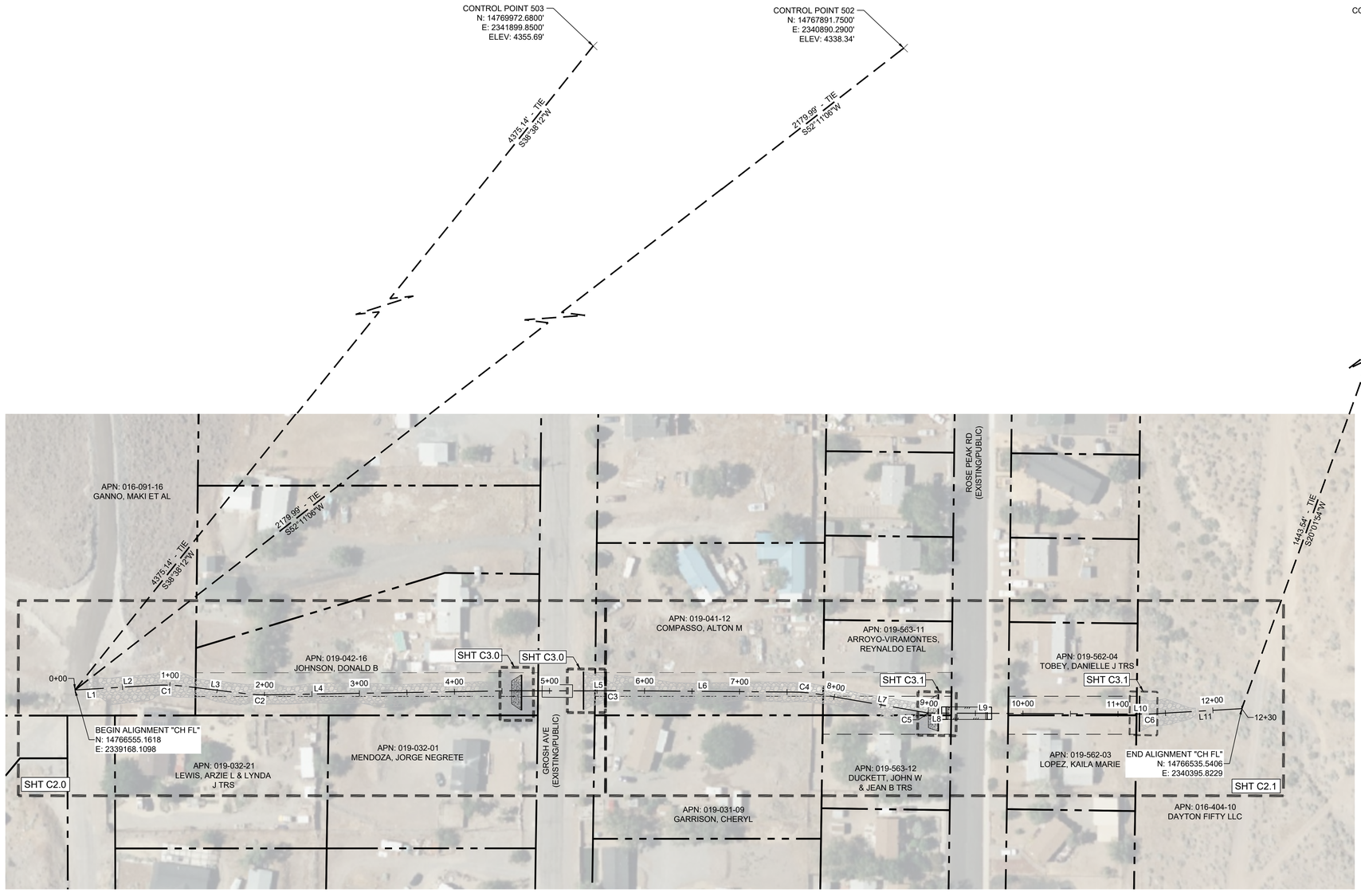
DESIGNED BY:	IKM
CHECKED BY:	IKM
JOB NO.:	11530.000

L:\LAProj\11530.000 - N. Dayton Valley Storm Drain & Basin\3-Design\DWG\Civil\Sheets\60% Sheets\11530000TITLE.dwg,C1.1 NOTES & ABBREVIATIONS, 07/30/2025 08:25 sm gweilnoe



BASIS OF BEARING

THE BASIS OF BEARINGS FOR THIS SURVEY IS NEVADA STATE PLANE COORDINATE SYSTEM, WEST ZONE NAD83(94) BASED UPON REAL TIME KINEMATIC GPS OBSERVATIONS, OBSERVED DATE USING A SURVEY GRADE DUAL FREQUENCY GPS RECEIVER FROM NEVADA DEPARTMENT CONTROL MONUMENT 720002, MODIFIED BY A COMBINED FACTOR OF COMBINED SCALE FACTOR OF 1.000222, SCALED FROM 0.00N ,0.00E AND CONVERTED TO U.S. SURVEY FEET. ALL DIMENSIONS ON THIS MAP ARE GROUND DISTANCES.

BASIS OF ELEVATION

THE BASIS OF ELEVATION ON THIS PROJECT WAS DERIVED FROM THE USGS 3DEP PROGRAM.

LINE TABLE

LINE #	LENGTH	DIRECTION
L1	27.02'	N86°35'23"E
L2	54.03'	N86°35'23"E
L3	60.93'	S83°04'13"E
L4	254.46'	N89°02'25"E
L5	18.42'	N89°18'23"E
L6	185.91'	S89°33'41"E
L7	111.64'	S80°13'06"E
L8	8.34'	S89°43'48"E
L9	212.63'	S89°43'48"E
L10	9.52'	S89°43'48"E
L11	96.83'	N86°37'00"E

CURVE TABLE

CURVE #	RADIUS	LENGTH	DELTA
C1	200.00'	36.09'	10°20'24"
C2	200.00'	27.54'	7°53'22"
C3	200.00'	3.95'	1°07'56"
C4	200.00'	32.61'	9°20'35"
C5	20.00'	3.32'	9°30'42"
C6	15.00'	0.96'	3°39'12"

N

0 60' 120'

22x34 SHEETS: 1" = 60'
11x17 SHEETS: 1" = 120'

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CARSON WATER SUBCONSERVANCY DISTRICT

NORTH VALLEY STORM DRAIN & BASIN SCOPING PROJECT HORIZONTAL CONTROL

LYON COUNTY NEVADA

DAYTON

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C1.2

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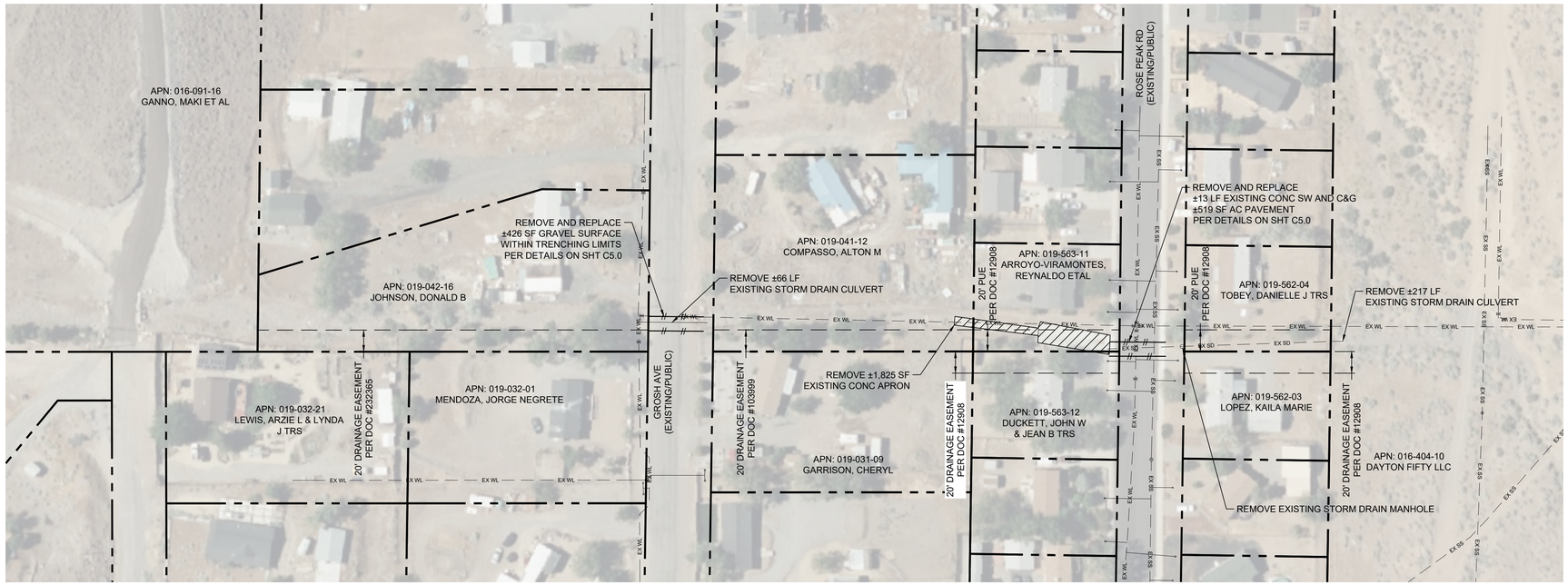
07/30/2025 08:25 em gwallace



SHEET NOTES:

1. EASEMENTS MAY EXIST THAT ARE NOT SHOWN HEREIN.
2. CONTRACTOR SHALL VERIFY ITEMS DESIGNATED FOR REMOVAL ARE REMOVED COMPLETELY ACCORDING TO THE INDUSTRY STANDARDS.

0 60' 120'

22x34 SHEETS: 1" = 60'
11x17 SHEETS: 1" = 120'

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CARSON WATER SUBCONSERVANCY DISTRICT

NORTH VALLEY STORM DRAIN & BASIN SCOPING PROJECT
DEMOLITION PLAN

DAYTON — LYON COUNTY — NEVADA

REV	DATE	DESCRIPTION	BY

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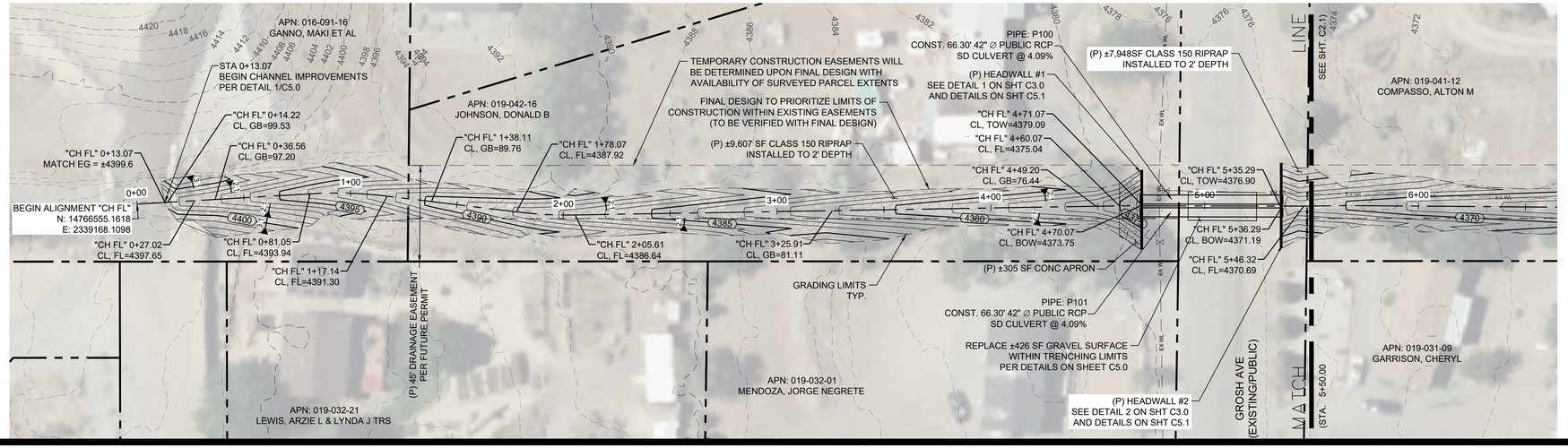
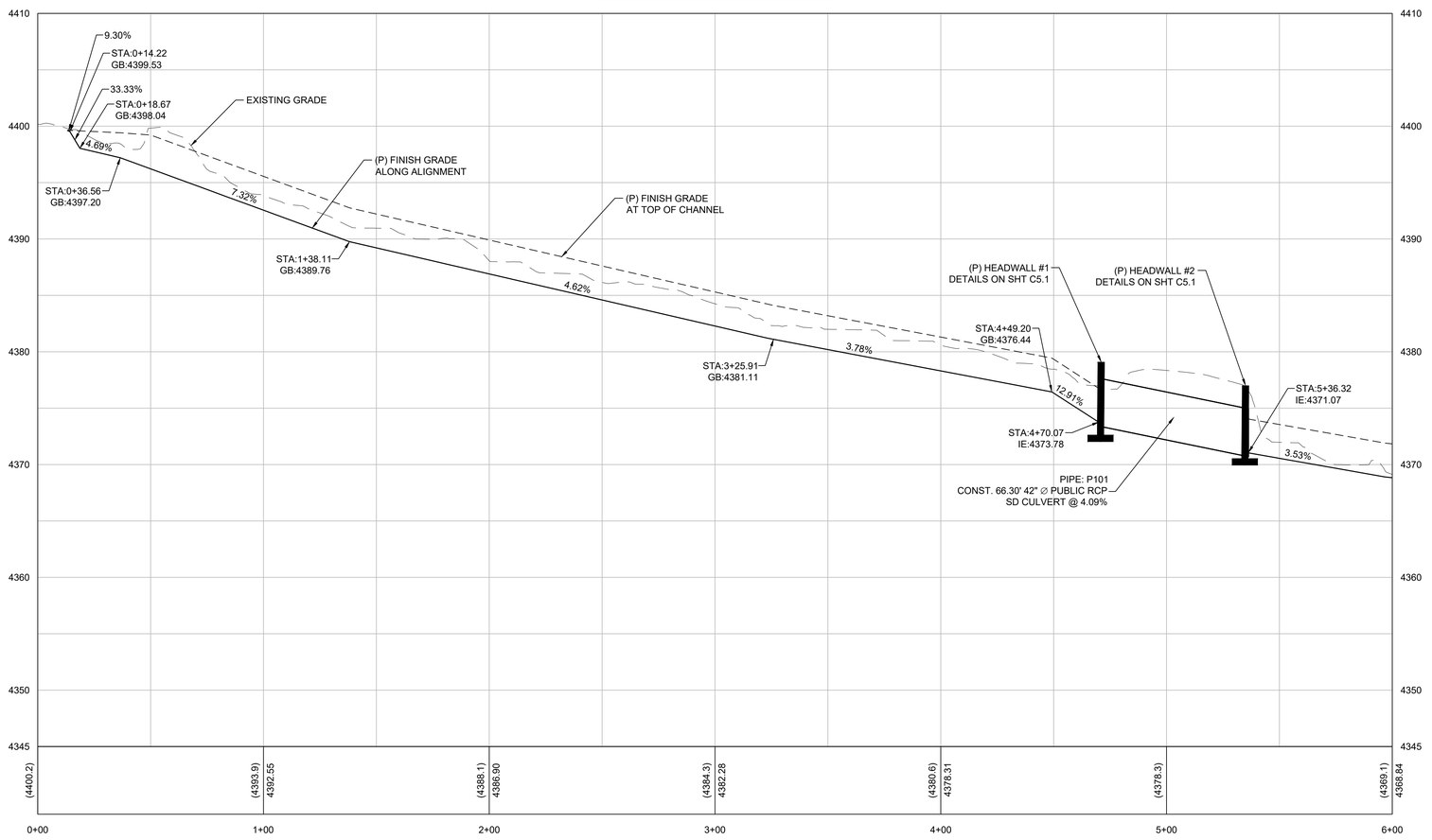


22x34 SHEETS: 1" = 30'
11x17 SHEETS: 1" = 60'

CH FL - STA:0+00 TO STA:6+00



SHEET NOTES

1. PROPERTY BOUNDARIES SHALL BE VERIFIED UPON FINAL DESIGN. HEADWALLS TO BE LOCATED WITHIN PUBLIC RIGHT-OF-WAY.

HORIZONTAL SCALE

0 30' 60'

22x34 SHEETS: 1" = 30'
11x17 SHEETS: 1" = 60'

VERTICAL SCALE

0 6' 12'

22x34 SHEETS: 1" = 6'
11x17 SHEETS: 1" = 12'

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CARSON WATER SUBCONSERVANCY DISTRICT

NORTH VALLEY STORM DRAIN & BASIN SCOPING PROJECT

PLAN & PROFILE "CH FL" - STA 0+00 TO 6+50

DAYTON — LYON COUNTY — NEVADA

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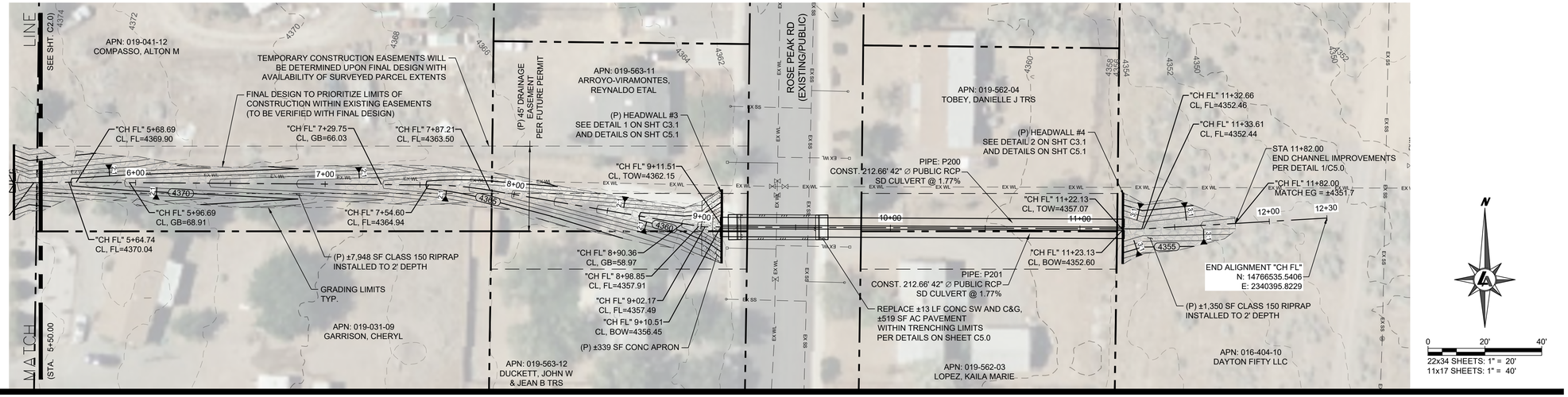
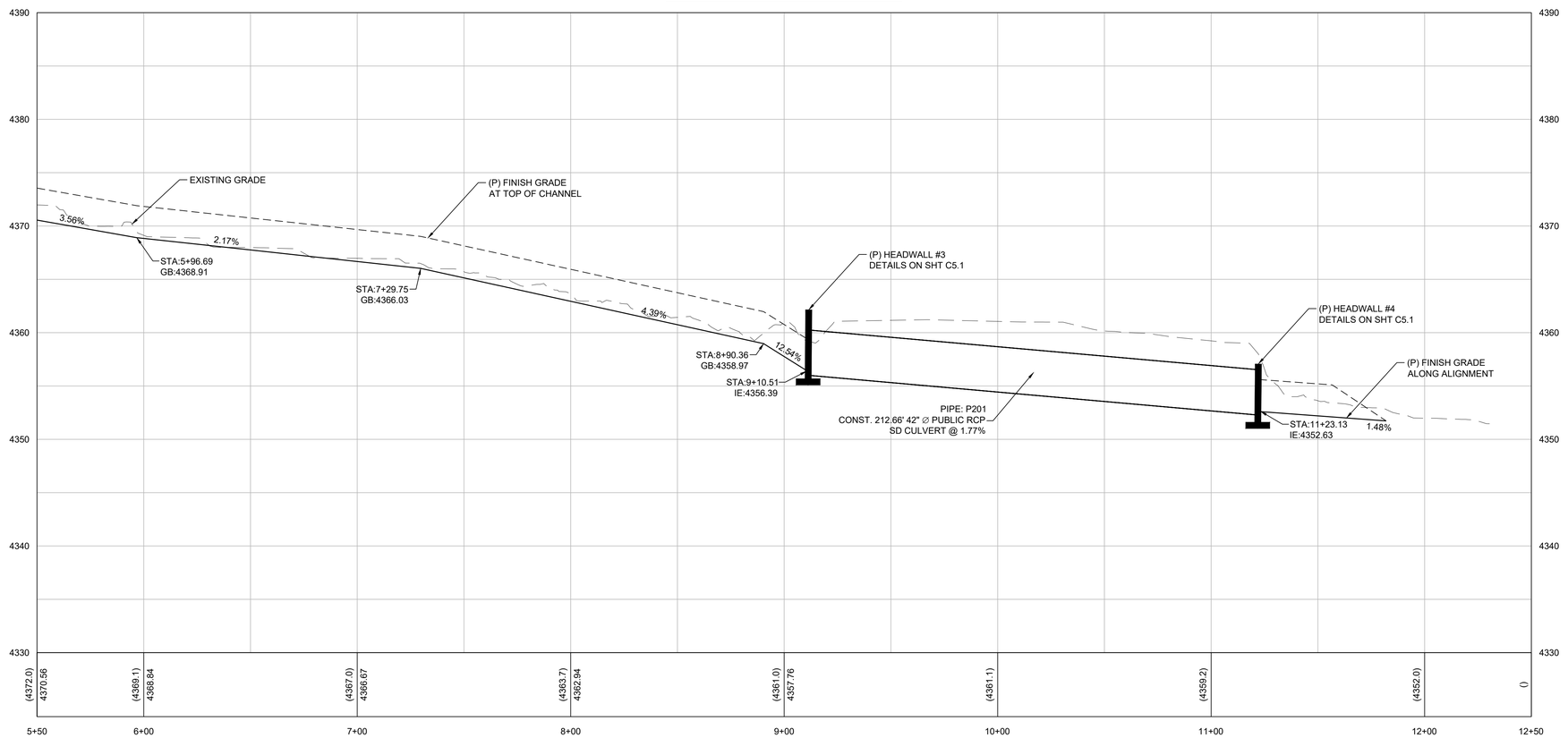


CH FL - STA:5+50 TO STA:12+50



HORIZONTAL SCALE
0 20' 40'
22x34 SHEETS: 1" = 20'
11x17 SHEETS: 1" = 40'

VERTICAL SCALE
0 6' 12'
22x34 SHEETS: 1" = 6'
11x17 SHEETS: 1" = 12'

SHEET NOTES

1. PROPERTY BOUNDARIES SHALL BE VERIFIED UPON FINAL DESIGN. HEADWALLS TO BE LOCATED WITHIN PUBLIC RIGHT-OF-WAY.

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NORTH VALLEY STORM DRAIN & BASIN SCOPING PROJECT

PLAN & PROFILE "CH FL" - STA 5+50 TO 12+50

DAYTON — LYON COUNTY — NEVADA

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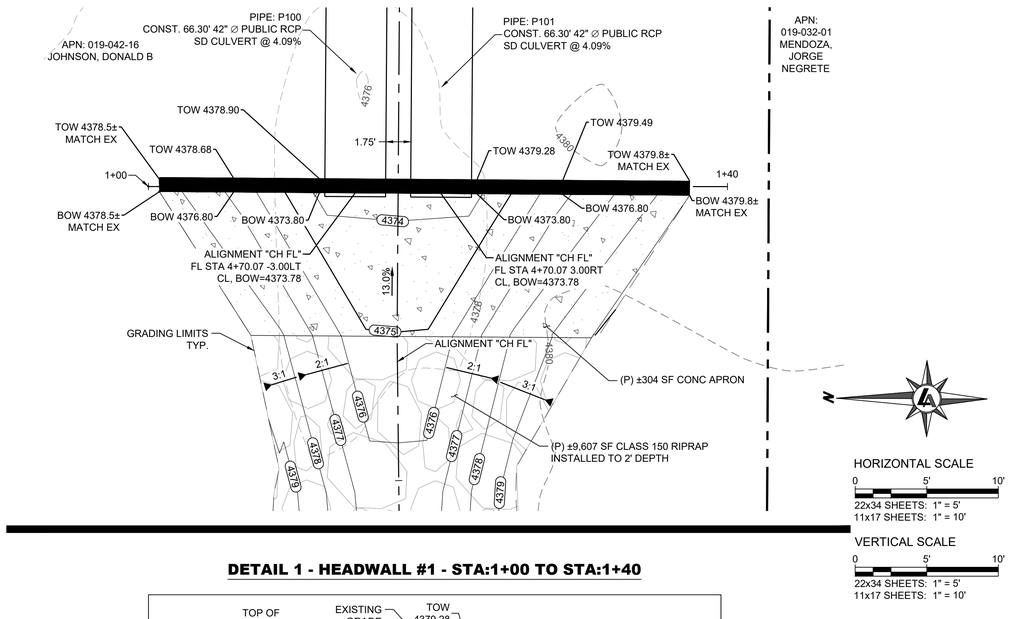
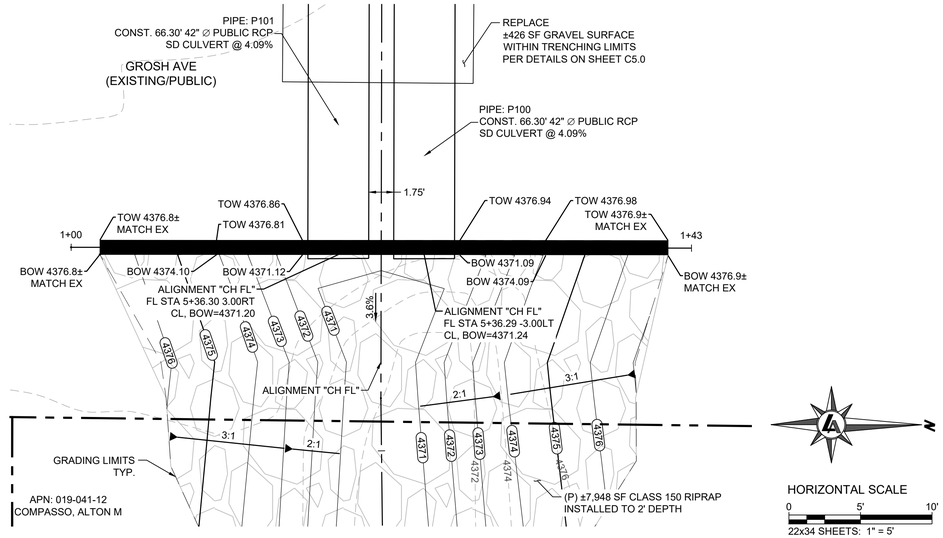


HORIZONTAL SCALE
0 5' 10'
22x34 SHEETS: 1" = 5'
11x17 SHEETS: 1" = 10'

VERTICAL SCALE
0 5' 10'
22x34 SHEETS: 1" = 5'
11x17 SHEETS: 1" = 10'

DETAIL 1 - HEADWALL #1 - STA:1+00 TO STA:1+40



HORIZONTAL SCALE
0 5' 10'
22x34 SHEETS: 1" = 5'
11x17 SHEETS: 1" = 10'

VERTICAL SCALE
0 5' 10'
22x34 SHEETS: 1" = 5'
11x17 SHEETS: 1" = 10'

DETAIL 2 - HEADWALL #2 - STA:1+00 TO STA:1+50

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CARSON WATER SUBCONSERVANCY DISTRICT

NORTH VALLEY STORM DRAIN & BASIN SCOPING PROJECT
GRADING PLAN

DAYTON — LYON COUNTY — NEVADA

REV	DATE	DESCRIPTION	BY

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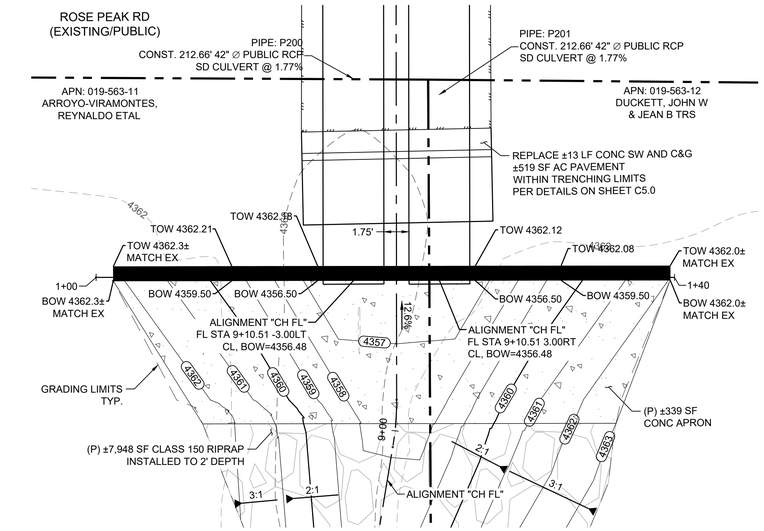
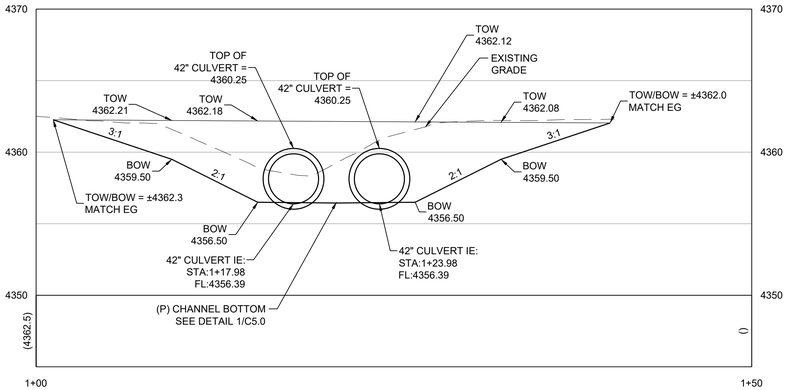
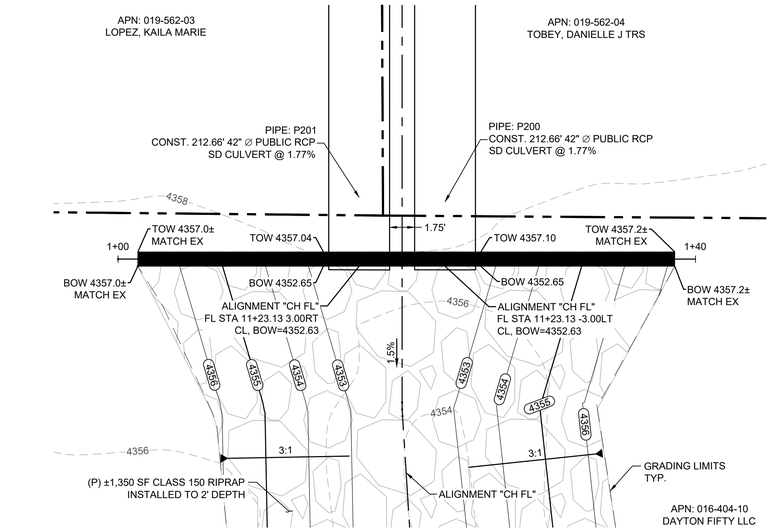


HORIZONTAL SCALE
0 5' 10'
22x34 SHEETS: 1" = 5'
11x17 SHEETS: 1" = 10'

VERTICAL SCALE
0 5' 10'
22x34 SHEETS: 1" = 5'
11x17 SHEETS: 1" = 10'

DETAIL 1 - HEADWALL #3 - STA:1+00 TO STA:1+50

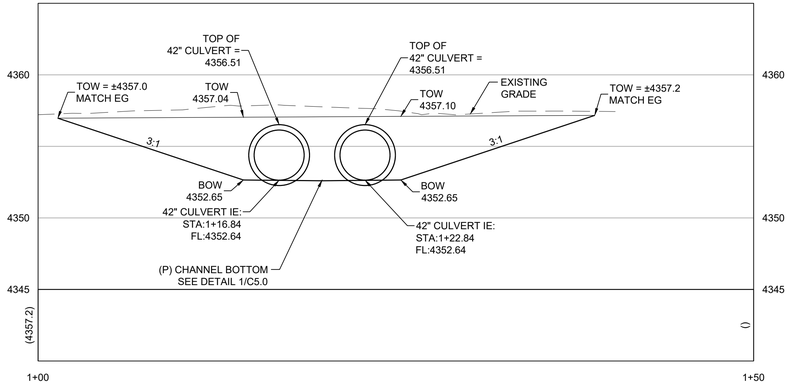




HORIZONTAL SCALE
0 5' 10'
22x34 SHEETS: 1" = 5'
11x17 SHEETS: 1" = 10'

VERTICAL SCALE
0 5' 10'
22x34 SHEETS: 1" = 5'
11x17 SHEETS: 1" = 10'

DETAIL 2 - HEADWALL #4 - STA:1+00 TO STA:1+50



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CARSON WATER SUBCONSERVANCY DISTRICT

NORTH VALLEY STORM DRAIN & BASIN SCOPING PROJECT

GRADING PLAN

DAYTON — LYON COUNTY — NEVADA

REV	DATE	DESCRIPTION	BY

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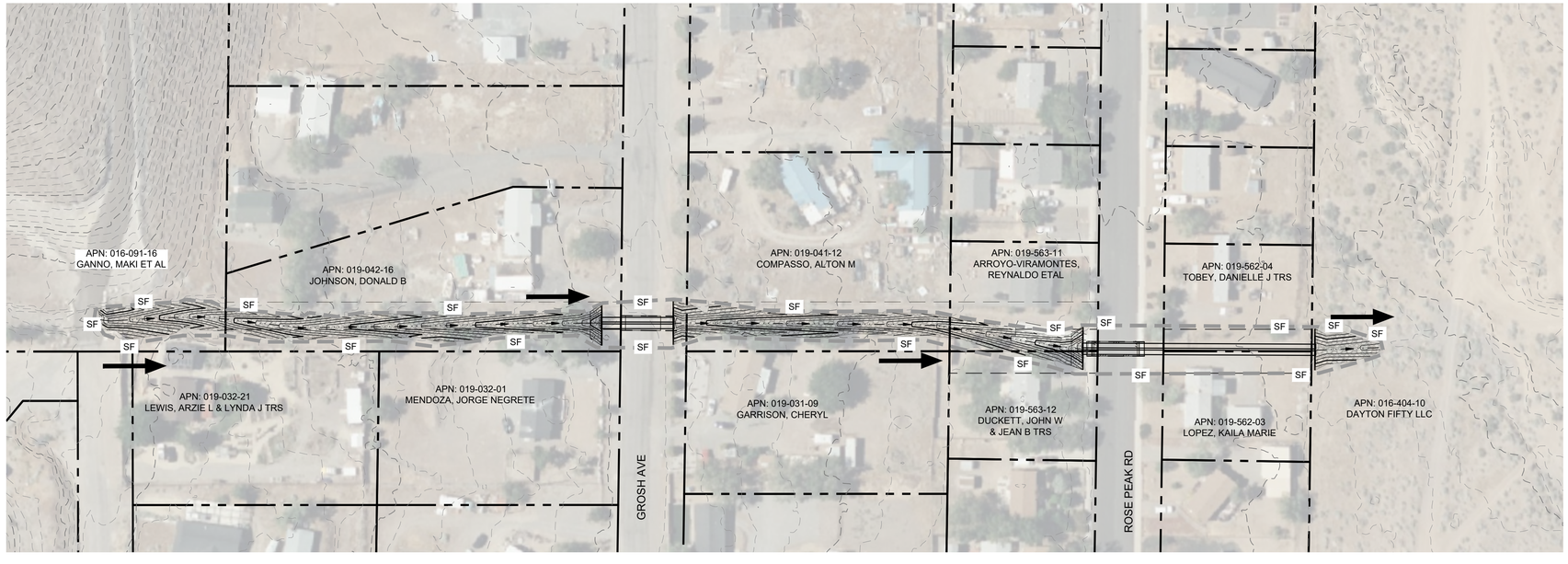
SWPPP GENERAL NOTES

1. STANDARD NOTE NO. 1: THE OWNER, SITE DEVELOPER, CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL EACH DAY REMOVE ALL SEDIMENT, MUD, CONSTRUCTION DEBRIS, OR OTHER POTENTIAL POLLUTANTS THAT MAY HAVE BEEN DISCHARGED TO, OR ACCUMULATE IN, THE PUBLIC RIGHTS OF WAYS IN LYON COUNTY AS A RESULT OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS SITE DEVELOPMENT OR CONSTRUCTION PROJECT. SUCH MATERIALS SHALL BE PREVENTED FROM ENTERING THE STORM SEWER SYSTEM.
2. STANDARD NOTE NO. 2: ADDITIONAL CONSTRUCTION SITE DISCHARGE BEST MANAGEMENT PRACTICES MAY BE REQUIRED OF THE OWNER AND HIS OR HER AGENTS DUE TO UNFORESEEN EROSION PROBLEMS OR IF THE SUBMITTED PLAN DOES NOT MEET THE PERFORMANCE STANDARDS SPECIFIED FOR LYON COUNTY AND THE TRUCKEE MEADOWS CONSTRUCTION SITE BEST MANAGEMENT PRACTICES HANDBOOK.
3. STANDARD NOTE NO. 3: TEMPORARY OR PERMANENT STABILIZATION PRACTICES WILL BE INSTALLED ON DISTURBED AREAS AS SOON AS PRACTICABLE AND NO LATER THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORALLY OR PERMANENTLY CEASED. SOME EXCEPTIONS MAY APPLY; REFER TO STORMWATER GENERAL PERMIT NVR100000.
4. STANDARD NOTE NO. 4: AT A MINIMUM, THE CONTRACTOR OR HIS AGENT SHALL INSPECT ALL DISTURBED AREAS, AREAS USED FOR STORAGE OF MATERIALS AND EQUIPMENT THAT ARE EXPOSED TO PRECIPITATION, VEHICLE ENTRANCE AND EXIT LOCATIONS AND ALL BMP'S WEEKLY, PRIOR TO A FORECASTED RAIN EVENT AND WITHIN 24 HOURS AFTER ANY ACTUAL RAIN EVENT. THE CONTRACTOR OR HIS/HER AGENT SHALL UPDATE OR MODIFY THE STORMWATER POLLUTION PREVENTION PLAN AS NECESSARY. SOME EXCEPTIONS MAY APPLY, SUCH AS FROZEN GROUND CONDITIONS OR SUSPENSION OF LAND DISTURBANCE ACTIVITIES. REFER TO STORMWATER GENERAL PERMIT NVR100000.
5. STANDARD NOTE NO. 5: ACCUMULATED SEDIMENT IN BMP'S SHALL BE REMOVED WITHIN SEVEN DAYS AFTER A STORMWATER RUNOFF EVENT OR PRIOR TO THE NEXT ANTICIPATED STORM EVENT; WHICHEVER IS EARLIER. SEDIMENT MUST BE REMOVED WHEN BMP DESIGN CAPACITY HAS BEEN REDUCED BY 50 PERCENT OR MORE.
6. APPLY WIND EROSION AND DUST CONTROL PRACTICES AS NECESSARY TO ALLEVIATE DUST NUISANCE. SPRAY DOWN AREAS AND COVER STOCKPILES WHERE NECESSARY (BMP DETAIL EC-05)
7. REFER TO "THE TRUCKEE MEADOWS CONSTRUCTION SITE BMP HANDBOOK" FOR BMP IMPLEMENTATION AND CONSTRUCTION DETAILS.



LEGEND

- FLOW LINE
- GRADING LIMITS
- SF — BMP SC-5: SILT FENCE
- FR — BMP SC-1: FIBER ROLLS
- DRAINAGE DIRECTION ARROW

N

0 60' 120'

22x34 SHEETS: 1" = 60'
11x17 SHEETS: 1" = 120'

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CARSON WATER SUBCONSERVANCY DISTRICT

NORTH VALLEY STORM DRAIN & BASIN SCOPING PROJECT
EROSION CONTROL

DAYTON — LYON COUNTY — NEVADA

REV	DATE	DESCRIPTION	BY

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AUGUST 2025

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C4.0

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CHECKED BY:	RSP
JOB NO.:	11530.000

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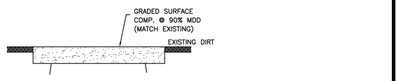
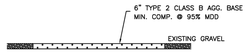
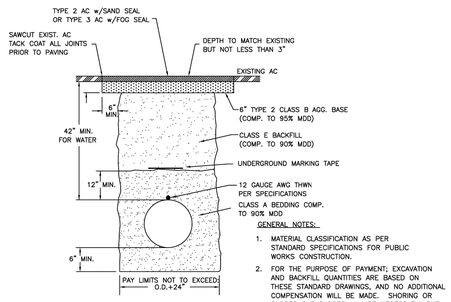
07/30/2025 08:34 am gwallace



DIRT SURFACE REPLACEMENT



GRAVEL SURFACE REPLACEMENT

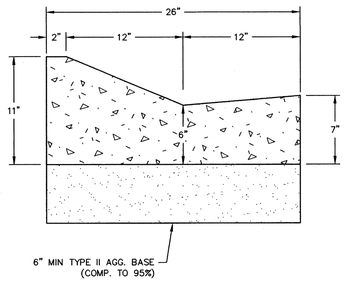


ASPHALT SURFACE REPLACEMENT

GENERAL NOTES:

1. MATERIAL CLASSIFICATION AS PER STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
2. FOR THE PURPOSE OF PAYMENT; EXCAVATION AND BACKFILL QUANTITIES ARE BASED ON THESE STANDARD DRAWINGS, AND NO ADDITIONAL COMPENSATION WILL BE MADE. SHORING OR SLOPED CUT SLOPES MAY BE NECESSARY, BUT THERE WILL BE NO ADDITIONAL PAYMENT. ALL EXCAVATIONS SHALL CONFORM TO THE LATEST O.S.H.A. REQUIREMENTS.
3. COMPACTION VALUES CAN BE MODIFIED BY LYON COUNTY ENGINEER.

NO.	REVISION	DATE	STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION	SECTION LYON COUNTY	
1	REDRAW	1/05vp	TRENCH EXCAVATION AND BACKFILL (TRAVELWAYS)	DRAWING NO. LC-W2	
2	REDRAW	1/10ss		DATE 1/2010	PAGE W2

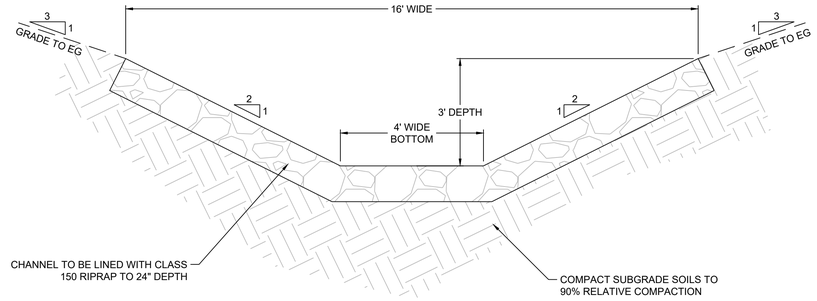


NOTE:

1. ALL P.C.C. CURB, GUTTER AND SIDEWALK SHALL BE MIN 6sack OF CEMENT PER CU.YD. OF CONC UNLESS OTHERWISE SPECIFIED (4000psi) W/4.5–7.5% AIR. MAX SLUMP SHALL BE 4." MAX WATER/CEMENT RATIO SHALL BE .45.
2. (a) ALL CONC CURB, GUTTER, AND SIDEWALK SHALL HAVE WEAKENED PLANE JOINTS EVERY 10 FEET.
   (b) EXPANSION JOINTS 1/2" WIDE SHALL BE LOCATED IN CURBS & GUTTERS @ EA. SIDE OF STRUCTURES @ ENDS OF ALL CURB RETURNS, & ABUTTING HARDENED IN-PLACE CURB & GUTTER, EXCEPT THAT EXPANSION JTS. SHALL NOT BE INSTALLED WITHIN 20' OF AN ISLAND NOSE. EXPANSION JOINTS SHALL BE 1/2" THICK, SHAPED TO THE CROSS-SECTION OF THE CURB & GUTTER, & SHALL BE CONSTRUCTED @ RIGHT ANGLES TO THE CURB & GUTTER. JOINT FILLER MATERIAL SHALL CONFORM TO SECTION 202.10.
3. THIS TYPE OF CURB AND GUTTER IS ALLOWED ONLY IN RESIDENTIAL AREAS AND ONLY ON LOCAL AND COLLECTOR SECTIONS.

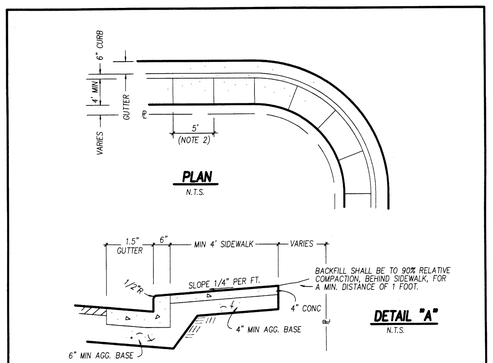
NO.	REVISION	DATE	STANDARD DETAIL FOR PUBLIC WORKS CONSTRUCTION	SECTION LYON Co.	
			TYPE 2 P.C.C. CURB & GUTTER	DRAWING NO. L-17	
				DATE 8/97	PAGE 17

339658LG



1 C5.0 CHANNEL SECTION

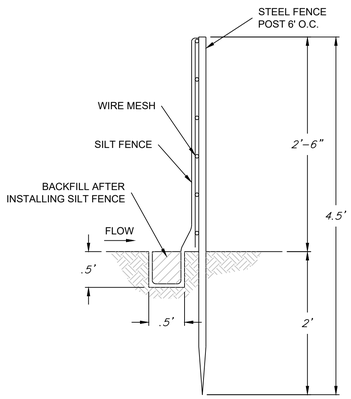
SCALE: NTS



NOTES

1. MIN CURB RETURN RADIUS SHALL BE 20 FEET UNLESS OTHERWISE SPECIFIED (15' IN FALLON & RENO)
2. (a) WEAKENED PLANE JOINTS SHALL BE CONSTRUCTED IN ACCORDANCE W/DETAIL "A". IN WASHOE COUNTY, REFER TO DWG. W-16.2
   (B) TRANSVERSE EXPANSION JOINTS 1/2" WIDE SHALL BE CONSTRUCTED AT ALL SIDEWALK RETURNS, OPPOSITE EXPANSION JOINTS IN ADJACENT CURB, & @ REGULAR INTERVALS NOT EXCEEDING 30'. ISOLATION JOINTS SHALL BE INSTALLED AROUND ALL STRUCTURES. EXPANSION & ISOLATION JOINTS SHALL BE FILLED W/JOINT FILLER STRIPS 1/2" THICK. JOINT MATERIAL SHALL CONFORM TO SEC.202.10.
3. ALL AGG. BASE SHALL BE TYPE 2 CLASS B.
4. RENO: COLORED CONC NOT ALLOWED.
5. ON SIDEWALKS WIDER THAN 5', JOINTING PATTERN SHALL BE .8 – 1.2 TIMES THE WIDTH OF THE SIDEWALK.
6. PORTLAND CEMENT CONC (P.C.C.) SHALL HAVE THE FOLLOWING CHARACTERISTICS: 4000psi MIN COMP STRENGTH @ 28 DAYS, MIN 6 SACKS OF CEMENT PER CU.YD. W/MAX WATER-CEMENT RATIO OF 0.45, AIR ENTRAINMENT 6% ± 1.5%, SLUMP 1 TO 4 INCHES. ALL MATEIALS SHALL CONFORM TO SSPWC SEC. 202.

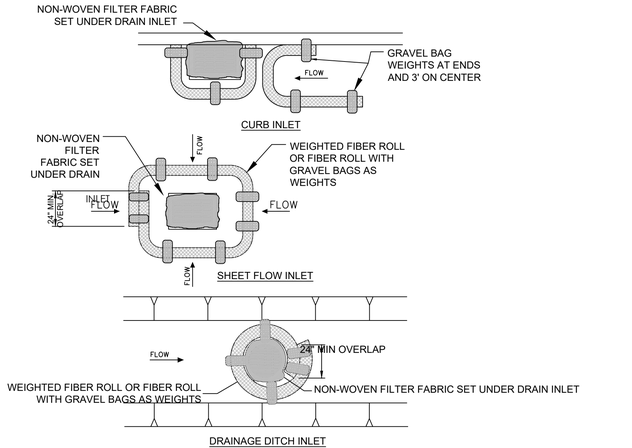
NO.	REVISION	DATE	STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION	SECTIONS	1
1	REDRAWN	1/95vp	TYPICAL SIDEWALK	DRAWING NO.	1–7 (312)
2	Corr Note 6	4/95vp		DATE 1/95vp	PAGE 9
3	Corr 1/4"PerFt	3/96vp			
4	Note 2	5/96 vp			



NOTE
THE CONTRACTOR MAY USE MANUFACTURED SILT FENCING IN LIEU OF THE ABOVE, SUBJECT TO SUBMITTAL OF THE MANUFACTURE'S DATA SHEETS TO THE ENGINEER FOR APPROVAL.

2 C5.0 SILT FENCE

SCALE: NTS



NOTES

1. FIBER ROLL DRAIN INLET PROTECTION SHALL USE A MIN 12" DIAMETER ROLL AND BE INSTALLED BEFORE CONSTRUCTION BEGINS.
2. GRAVEL BAGS SHALL BE WOVEN FILTER FABRIC. SAND BAGS ARE NOT AN ACCEPTABLE SUBSTITUTE.
3. ON PAVED SURFACES, SUBSTITUTE STAKES WITH GRAVEL BAGS (USE PROPER STAKING METHODS).
4. CONSTRUCT ON GENTLY SLOPING STREETS WHERE WATER CAN POND AND ALLOW SEDIMENT TO SEPARATE OUT OF SUSPENSION.
5. INSPECT AND REPAIR FIBER ROLLS EACH DAY AND AFTER EACH STORM EVENT. REMOVE SEDIMENT WHEN ONE THIRD OF THE FILTER DEPTH HAS BEEN FILLED. REMOVED SEDIMENT SHALL BE DISPOSED OF PROPERLY.
6. SEDIMENT AND GRAVEL DEPOSITED ON ROADWAYS SHALL BE IMMEDIATELY REMOVED.
7. IN HIGH TRAFFIC AREAS, MARK DRAIN INLET PROTECTION WITH VISIBLE BARRIERS SUCH AS SAFETY CONES.
8. REMOVE DRAIN INLET PROTECTION AFTER THE SURROUNDING AREA IS STABILIZED.

3 C5.0 INLET PROTECTION

SCALE: NTS

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TEL: 775.827.6111

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INFO@LUMOSINC.COM

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CARSON WATER SUBCONSERVANCY DISTRICT

NORTH VALLEY STORM DRAIN & BASIN SCOPING PROJECT

DETAILS SHEET

LYON COUNTY NEVADA

DAYTON

REV	DATE	DESCRIPTION	BY

60% SUBMITTAL
NOT FOR CONSTRUCTION
AUGUST 2025

BAR IS 1 INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

C5.0

DRAWN BY:	IKM
DESIGNED BY:	IKM
CHECKED BY:	IKM
JOB NO.:	11530.000

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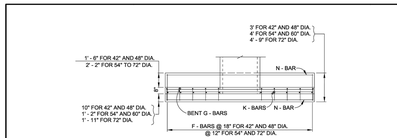
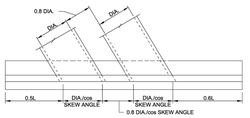
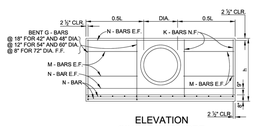


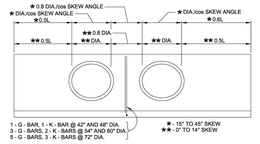
PLAN



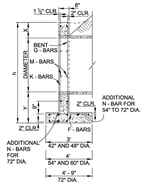
PLAN



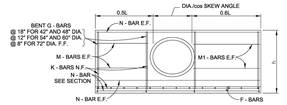
ELEVATION
SINGLE RCP/HDPE
0° SKEW



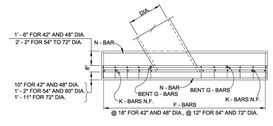
ELEVATION
DOUBLE RCP/HDPE
0° TO 45° SKEW



SECTION



ELEVATION
SINGLE RCP/HDPE
15° TO 45° SKEW



PLAN

CULVERT HEADWALLS
42" TO 72" RCP AND 42" TO 60" HDPE

SPEC. # 502

DETAIL NUMBER DS-19A

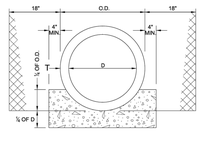
REVISED 5/2009

ADOPTED 8/1969

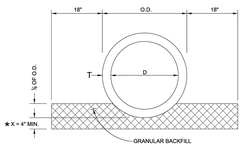
CHIEF HYDRAULICS ENGR. SIGNED ORIGINAL ON FILE

NEVADA DEPARTMENT OF TRANSPORTATION

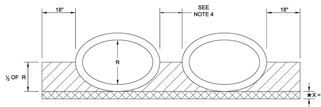
69



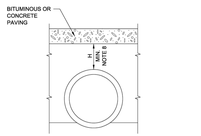
CLASS A BEDDING (RCP)



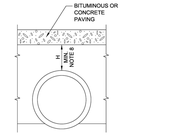
CLASS C BEDDING
RCP, CMP, AND HDPE
STANDARD BEDDING



BEDDING FOR MULTIPLE HE RCP CULVERTS



MINIMUM COVER DETAIL
FOR RCP AND HE RCP



MINIMUM COVER DETAIL
FOR CMP AND HDPE

LEGEND:

- GRANULAR BACKFILL
- CLASS A SLURRY BACKFILL
- CONCRETE BACKFILL
- BITUMINOUS OR CONCRETE PAVING

NOTES:

1. Minimum depths as specified on detail ES-1, notes 6 and 8 will prevail when these conditions are encountered.
2. Concrete shall be class A or AA. Additional excavation for class A bedding to be included in the unit bid price per cubic yard of concrete.
3. All concrete pipe shall be Class III or better.
4. Class C bedding is the standard pipe bedding unless specified otherwise. Class C bedding shall be carefully shaped to fit pipe prior to installation.
5. See detail DS-4 or headwall details for appropriate pipe separation.
6. For round RCP with fill height 2-feet or less:
   - Use bedding Class C only.
   - For pipe sizes 30" and smaller use Class IV pipe (or better).
7. For elliptical RCP with fill height of 2-feet or less:
   - Use bedding Class C or Class A slurry only.
   - For 30" x 19" pipe and smaller use Class IV pipe (or better).
8. A special design is required if the top of pipe projects into the roadway structural section or violates minimum and maximum cover requirements.

RCP
★ NORMAL FOUNDATION, X= $\frac{O.D.}{12}$ MIN. NO LESS THAN 4"
IF ROCK FOUNDATION, X= $\frac{O.D.}{12}$ MIN. NO LESS THAN 6"
CMP
★ IF ROCK FOUNDATION, X= ½" PER FOOT OF AVERAGE FILL OVER PIPE, 12" MIN. - 24" MAX.
HDPE
★ X= 4" FOR D ≤ 24", X= 6" FOR D ≥ 30".

ALLOWABLE FILL HEIGHT
FOR REINFORCED CONCRETE PIPE

PIPE SIZE I.D.	FILL HEIGHT IN FEET: ≯ A	≯ C	≯ A	≯ C	PIPE CLASS: BEDDING CLASS
15"	23	17	34	26	52	39
18"	23	17	35	26	52	40
24"	23	17	35	26	53	40
30"	23	17	35	26	53	40
36"	23	17	34	26	52	40
42"	23	17	34	26	52	40
48"	23	17	34	26	52	40
54"	22	17	34	26	52	40
60"	22	17	34	26	51	40
66"	22	17	33	26	51	39
72"	22	17	33	25	51	39
84"	21	16	33	25	50	39
90"	21	16	33	25	50	39
96"	21	16	32	25	50	39
102"	21	16	32	25	49	39
108"	21	16	32	25	49	39
114"	20	16	32	25	49	39
120"	20	16	31	25	49	39
126"	20	16	31	25	48	39
132"	20	16	31	25	48	39
138"	20	16	31	25	48	39
144"	19	15	30	25	47	39

PIPE SIZE HE RCP	FILL HEIGHT IN FEET: ≯ C	≯ C	PIPE CLASS: BEDDING CLASS
23" x 14"	14	22
30" x 19"	14	22
38" x 24"	14	22
45" x 29"	14	22
53" x 34"	14	22
60" x 38"	14	22
68" x 43"	14	22
76" x 48"	14	22
83" x 53"	14	22
91" x 58"	14	22
106" x 68"	14	22
113" x 72"	14	22
121" x 77"	14	22

MAXIMUM HEIGHT OF COVER FOR TYPE S HDPE PIPE

PIPE DIAMETER	MAXIMUM COVER ★★★
12" - 18"	19'
24" - 42"	15'
48"	14'

★★★ BASED ON CLASS 2 BACKFILL MATERIAL AT 90% COMPACTION IN ACCORDANCE WITH ASTM D2321, CONSULT HYDRAULIC ENGINEER FOR LARGER FILL HEIGHT REQUIREMENTS

CULVERT BEDDING AND ALLOWABLE FILL HEIGHT
FOR RCP, HE RCP, CMP AND HDPE

SPEC. # 603.604

DETAIL NUMBER DS-1

REVISED 9/2022

ADOPTED 8/1996

CHIEF HYDRAULICS ENGR. SIGNED ORIGINAL ON FILE

NEVADA DEPARTMENT OF TRANSPORTATION

70

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CARSON WATER SUBCONSERVANCY DISTRICT

NORTH VALLEY STORM DRAIN & BASIN SCOPING PROJECT

DETAILS SHEET

LYON COUNTY NEVADA

DAYTON

REV	DATE	DESCRIPTION	BY

60% SUBMITTAL
NOT FOR CONSTRUCTION
AUGUST 2025

BAR IS 1 INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

C5.1

DRAWN BY:	IKM
DESIGNED BY:	IKM
CHECKED BY:	IKM
JOB NO.:	11530.000

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Appendix D Flow Status Assessment Report

Carson Water Subconservancy District

North Dayton Valley Scoping Project

Lyon County, Nevada

Flow Status Assessment Report

October 2025

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METHODS 2
DELINEATION RESULTS 2
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GOOGLE EARTH SATELLITE IMAGERY 4
GOOGLE STREETS GROUND IMAGERY 5
CONCLUSION 5
LITERATURE CITED 6

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APPENDIX B – Google Earth Aerial Imagery
APPENDIX C – APT Outputs

INTRODUCTION

The purpose of this technical memorandum (memo) is to document the effects of proposed activities on any potential Waters of the U.S. (WOTUS) within the North Dayton Scoping Project in Dayton, Nevada.

Recent rule changes by the Environmental Protection Agency (EPA) and US Army Corps of Engineers (USACE) defining what qualifies as a WOTUS and under the jurisdiction of Section 404 of the Clean Water Act (CWA), have eliminated ephemeral WOTUS from jurisdiction since they do not meet the "relatively permanent water" standard. Full compliance usually still requires that an Approved Jurisdictional Determination (AJD) be obtained to receive a decision from USACE, but recent guidance from the USACE has allowed for projects and owners to perform the necessary delineations and prepare a memo to file documenting due diligence without a formal AJD submittal to USACE if only ephemeral waters are involved in the project. Although no fieldwork was performed, the project team documented the ephemeral conditions using the standard AJD framework and prepare a memo for the project file noting its non-jurisdictional status due to lack of "relatively permanent water" conditions.

Documentation and additional material covered this memo can be found in the Appendixes outlined in the Table of Contents.

CURRENT STATUS/DEFINITION OF WATERS OF THE UNITED STATES

On August 29, 2023, the EPA and Department of the Army (the agencies) issued a final rule to amend the final "Revised Definition of 'Waters of the United States'" rule, published in the *Federal Register* on January 18, 2023. This final rule conforms the definition of "waters of the United States" to the U.S. Supreme Court's May 25, 2023, decision in the case of *Sackett v. Environmental Protection Agency*. Parts of the January 2023 Rule are invalid under the Supreme Court's interpretation of the CWA in the *Sackett* decision. Therefore, the agencies have amended key aspects of the regulatory text to conform it to the Court's decision. The conforming rule, "Revised Definition of 'Waters of the United States'; Conforming," published in the *Federal Register* and became effective on September 8, 2023.

As of the date of this report (September 2025), USACE is implementing the conforming rule and continuing to revise requirements for CWA Section 404 permitting as it awaits policy guidance. Therefore, this report adheres to the requirements of the conforming rule, "Revised Definition of 'Waters of the United States'; Conforming," until further guidance is received from USACE.

PURPOSE AND PROJECT DESCRIPTION

Carson Water Subconservancy District (CWSD) in 2019 hired JE Fuller and Lumos and Associates to perform an Area Drainage Master Plan (ADMP) for the area of North Dayton Valley. In this ADMP several projects were suggested to decrease the amount of flood damage caused by alluvial fan drainages. After this project was completed, it became apparent that there was need for analysis to determine what projects could be eligible for FEMA funding.

For a construction project to be considered eligible for federal funding the design must receive a benefit cost analysis (BCA) greater than one. This project, The North Dayton Valley Scoping Project, has been

created to rank and determine the most beneficial project in the ADMP that would also most likely pass the BCA threshold.

It was determined as part of phase one that the Grosh and Rose Peak Culvert improvements were the path forward. This culvert improvement project intends to reduce the amount of storm water flow that will affect private property owners in Dayton, Nevada. The proposed culvert enhancements would more adequately convey water discharged from the ephemeral stream, documented as such in this memo, to the point of outlet. Thus, reducing the amount of flood related damages to the residents of Lyon County. The culvert runs through the neighborhood perpendicular to Grosh avenue and Rose Peak Road.

Phase two moves the design forward to the 60% design phase completed with a preliminary environmental assessment and BCA.

METHODS

The project team reviewed the Antecedent Precipitation Tool, U.S. Geological Service topographic maps, the USFWS' National Wetland Inventory (USFWS 2025), NRCS' Soil Survey (NRCS 2025), and the SEINet Data Portal (SEINet 2025), historical Google Earth aerial imagery, and historical Google Streets ground imagery, among other site-specific data sources to determine the flow status of the watercourse affected by the project improvements. Based on the information gathered during the desktop review, it was determined that a field visit would not be necessary at this time.

DELINEATION RESULTS

The results of the review indicate that the project area contains a single small ephemeral drainage originating on the hillslopes to the west of the project area.

Indicators of flow are obvious in this drainage, with the presence of debris, scour marks, sediment deposits, sediment sorting, water erosion/debris, and destruction of terrestrial vegetation. Historical ground photographs are provided in Appendix A within the project area. No potential wetlands or non- wetland WOTUS were identified onsite.

Figure 1. Project Overview

ANTECEDENT PRECIPITATION TOOL

TheAntecedent Precipitation Tool (APT) provides an assessment of dry season/wet season conditions, regional drought conditions, and a weighted evaluation of the recorded precipitation conditions (Antecedent Precipitation Score) for three 30-day periods (i.e., 90 days) preceding a date of interest.

Antecedent Precipitation Score **< 10** = Drier than Normal Conditions
10 < Antecedent Precipitation Score **< 15** = Normal Conditions
Antecedent Precipitation Score **> 15** = Wetter than NormalConditions

Additional information about the APT methodology can be found on the USACE website.

Additional information about the APT methodology can be found on the USACE website. The APT was used for this project to analyze the dates of the historical aerial and ground photos from Google Earth and Google Streets ground imagery to help understand the flow status of the drainage within the project area under various conditions and during various periods of wetness or dryness.

GOOGLE EARTH SATELLITE IMAGERY

A view of the last 10 years of Google Earth satellite imagery (2015-2025) did not show regular indications of flowing or standing water within project area and the relevant reach of the unnamed wash. The APT was used to analyze the date of each Google Earth image available for the area to determine whether normal conditions were present in the project area. All photos showed a dry streambed with little evidence of recent flow even during seasonal wet period. No surface flow was present in satellite imagery (Appendix A). As shown in Table 1 below, the unnamed wash did not contain ponded or flowing water during any period.

Table 1. Google Earth Imagery APT Results Summary

Date	Description	PDSI Class	Season	Antecedent Precip Score	Antecedent Precip Condition	Flow or Standing Water
6/13/2015	Google Earth Pro aerial imagery	-4.99	Extreme drought	14	Dry Season	None
6/23/2016	Google Earth Pro aerial imagery	-0.88	Incipient drought	12	Dry Season	None
8/11/2017	Google Earth Pro aerial imagery	-0.08	Normal	9	Dry Season	None
6/7/2018	Google Earth Pro aerial imagery	-1.48	Mild drought	16	Dry Season	None
6/7/2019	Google Earth Pro aerial imagery	3.74	Severe wetness	11	Dry Season	None
10/14/2019	Google Earth Pro aerial imagery	-0.27	Normal	12	Dry Season	None
10/23/2020	Google Earth Pro aerial imagery	-4.33	Extreme drought	10	Dry Season	None
7/3/2023	Google Earth Pro aerial imagery	4.88	Extreme wetness	18	Dry Season	None
6/17/2025	Google Earth Pro aerial imagery	-3.05	Severe drought	15	Dry Season	None

Theaverage Antecedent Precipitation Score from all these dates is 13. Due to the lack of ponding or flow inthe dates provided in Table 1, it is likely that under average "normal conditions," there is no inundation inthe project area and, therefore, the unnamed wash is not "relatively permanent." There is a possibility thatmonsoonal flows occur for brief periods of heavy precipitation, which may not have been captured byaerial imagery or Google Maps. However, washes that only flow in direct response to precipitation are ephemeral and do not meet the criteria for potential WOTUS in its current definition.

GOOGLE STREETS GROUND IMAGERY

A view of the last 10 years of Google Streets ground imagery (2015-2025) did not show regular indications of flowing or standing water within project area and the relevant reach of the unnamed wash. There were only four historical photos available for the project area in the 10-year period outlined above. All photos only showed a dry streambed with little evidence of recent flow during typically wet seasons.

Table 2. Google Maps Street View Imagery APT Results Summary

Date	Description	PDSI Class	Season	Antecedent Precip Score	Antecedent Precip Condition	Flow or Standing Water
Apr-15*	Google Maps Street View Imagery	Extreme drought	Dry Season	8	Drier than Normal	None
Mar-22*	Google Maps Street View Imagery	Moderate drought	Wet Season	11	Normal Conditions	None
Sep-23*	Google Maps Street View Imagery	Extreme wetness	Dry Season	15	Wetter than Normal	None
Jul-24*	Google Maps Street View Imagery	Mild drought	Dry Season	9	Drier than Normal	None

** Dates are only provided in month format on Google Maps Street View. The 15th day of the month was used for consistency in data from the APT Tool.*

There is a possibility that monsoonal flows occur for brief periods of heavy precipitation, which may not have been captured by aerial imagery or Google Maps. However, washes that only flow in direct response to precipitation are ephemeral and do not meet the criteria for potential WOTUS in its current definition.

CONCLUSION

The project team prepared this flow status assessment to determine the extent of potential WOTUS within the North Dayton Valley Project. The project area is within the alignment of an unnamed wash, which generally can be described as a low flow channel, and is a typical ephemeral wash with an OHWM.

Based on this report and the agency guidance cited herein, the drainage feature within the project area (unnamed wash) should be excluded from CWA Section 404 jurisdiction because it is ephemeral (not a relatively permanent water [RPW)]). A review of Google Earth and Google Street View imagery focused on the project area confirmed that during normal (and even wetter than normal) conditions, there is typically no inundation present in the project area. Therefore, this drainage is considered a non-RPW.

As mentioned in the introduction of this report, this document is considered to be in compliance with the current regulatory regime defining WOTUS as of September 8, 2023. Should the regulatory regime change prior to implementation of this project, this delineation should be re-evaluated and updated as necessary to comply with the current definition of a WOTUS.

LITERATURE CITED

Curtis, K.E. and R.W. Lichvar. 2010. Updated datasheet for the identification of the Ordinary High Water Mark (OHWM) in the arid west region of the Western United States. Wetlands Regulatory Assistance Program, Cold Regions Research and Engineering Laboratory, U.S. Army Engineer Research and Development Center, Hanover, New Hampshire.

Lichvar, R.W. and S.M. McColley. 2008. *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States: A Delineation Manual.* Wetlands Regulatory Assistance Program, Cold Regions Research and Engineering Laboratory, U.S. Army Engineer Research and Development Center, Hanover, New Hampshire.

Mercel, K.M. and R.W. Lichvar. 2014. A Guide to Ordinary High Water Mark (OHWM) Delineation for Non-Perennial Streams in the Western Mountains, Valleys, and Coast Region of the United States. US Army Corps of Engineers, Hanover, NH.

Natural Resources Conservation Service (NRCS). 2025. Web Soil Survey. Website: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx. Accessed May 8, 2025.

SEINet Data Portal (SEINet). 2025. Dynamic Checklist. Website: https://swbiodiversity.org/seinet/checklists/dynamicmap.php?interface=checklist. Accessed May 8, 2025.

U.S. Fish and Wildlife Service (USFWS). 2025. National Wetlands Inventory Wetlands Mapper. Website: https://www.fws.gov/wetlands/data/mapper.html. Accessed May 8, 2025.

APPENDIX A

Google Streets Ground Photographs

Photo 1. April 2015 Facing upgradient.

Photo 2. April 2015 Facing downgradient.

Photo 3. March 2022 Facing upgradient.

Photo 4. March 2022Facing downgradient.

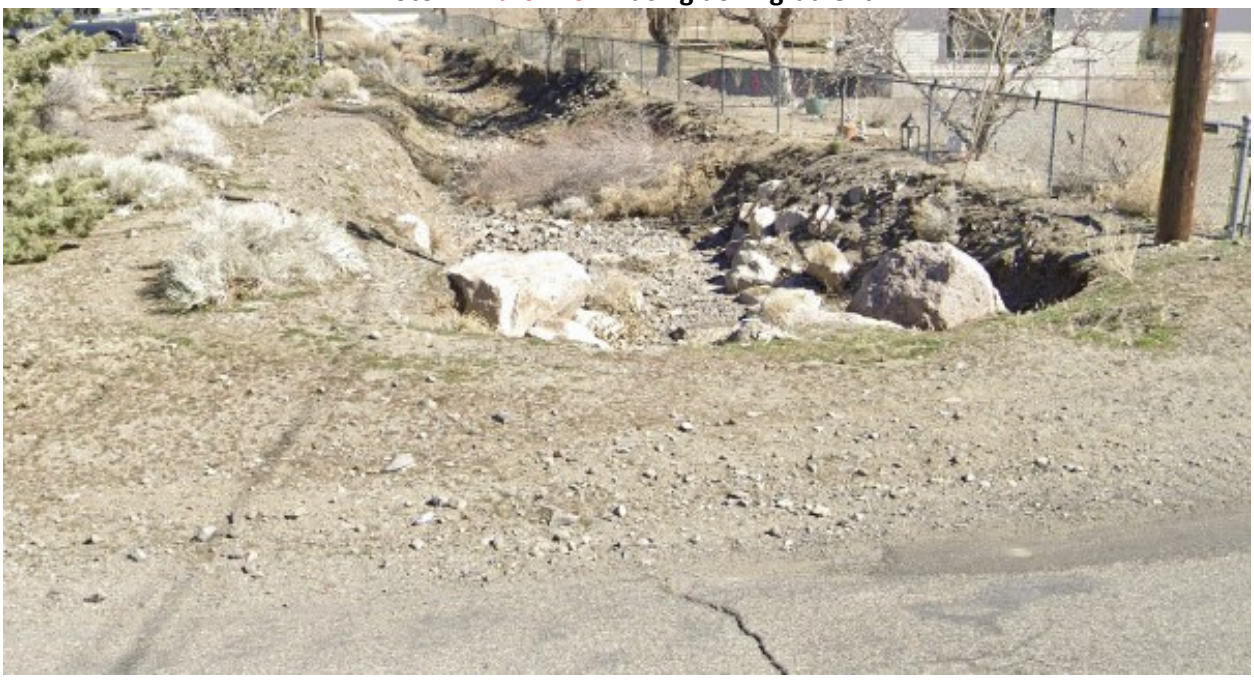


Photo 5. September 2023 Facing upgradient.

Photo 6. September 2023Facing downgradient.

Photo 7. July 2024 Facing upgradient.

Photo 8. July 2024 Facing downgradient.

APPENDIX B

Google Earth Aerial Imagery

Photo 1. 6/13/2015

Photo 2. 6/23/2016

Photo 3. 8/11/2017

Photo 4. 6/7/2018

Photo 5. 6/7/2019

Photo 6. 10/14/2019

Photo 7. 10/23/2020

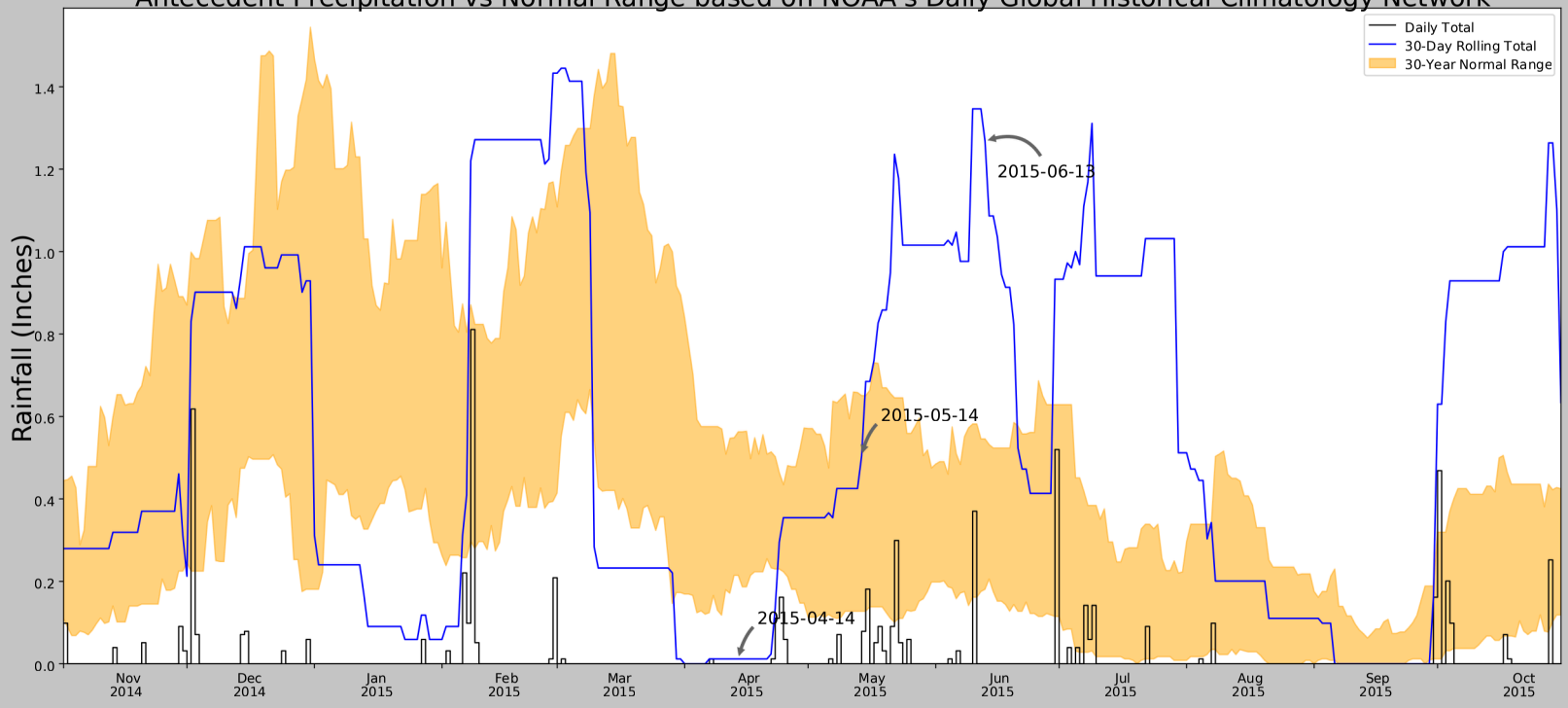
Photo 8. 07/03/2023

Photo 9. 06/17/2025

APPENDIX C

APT Outputs

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	39.26, -119.589
Observation Date	2015-06-13
Elevation (ft)	4364.273
Drought Index (PDSI)	Extreme drought
WebWIMP H2O Balance	Dry Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2015-06-13	0.180709	0.545669	1.267717	Wet	3	3	9
2015-05-14	0.127559	0.650787	0.503937	Normal	2	2	4
2015-04-14	0.214567	0.562992	0.011811	Dry	1	1	1
Result							Normal Conditions - 14

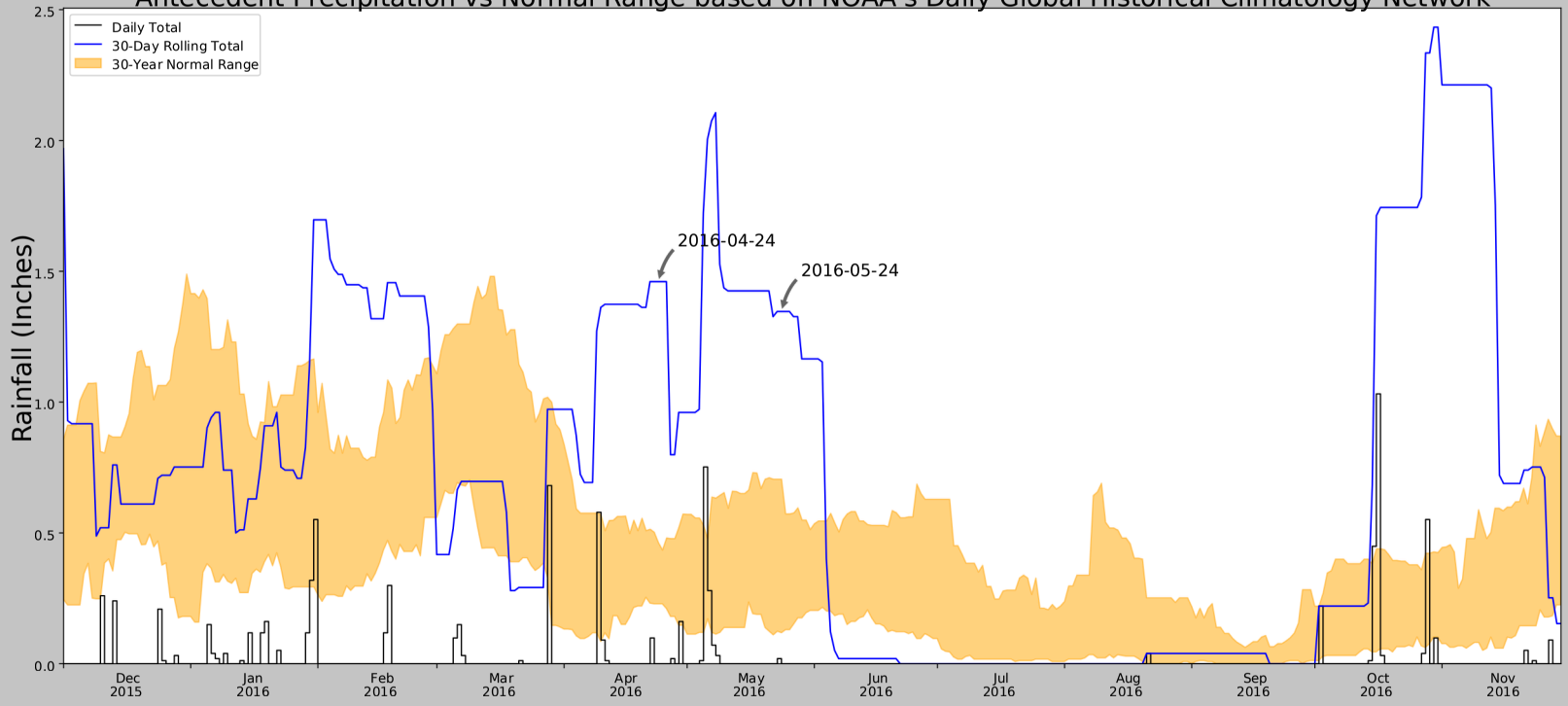
Figures and tables made by the Antecedent Precipitation Tool Version 3.0

US Army Corps of Engineers.
ERDC

Developed by:
U.S. Army Corps of Engineers and
U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
RENO AP	39.5078, -119.7683	4404.856	19.617	40.583	9.624	11352	90
SPARKS	39.5558, -119.7333	4356.956	3.805	47.9	1.895	1	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	39.26, -119.589
Observation Date	2016-06-23
Elevation (ft)	4364.273
Drought Index (PDSI)	Incipient drought
WebWIMP H2O Balance	Dry Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2016-06-23	0.122047	0.557874	0.0	Dry	1	3	3
2016-05-24	0.118504	0.705512	1.346457	Wet	3	2	6
2016-04-24	0.22874	0.462992	1.46063	Wet	3	1	3
Result							Normal Conditions - 12

Figures and tables made by the Antecedent Precipitation Tool Version 3.0

US Army Corps of Engineers.
ERDC

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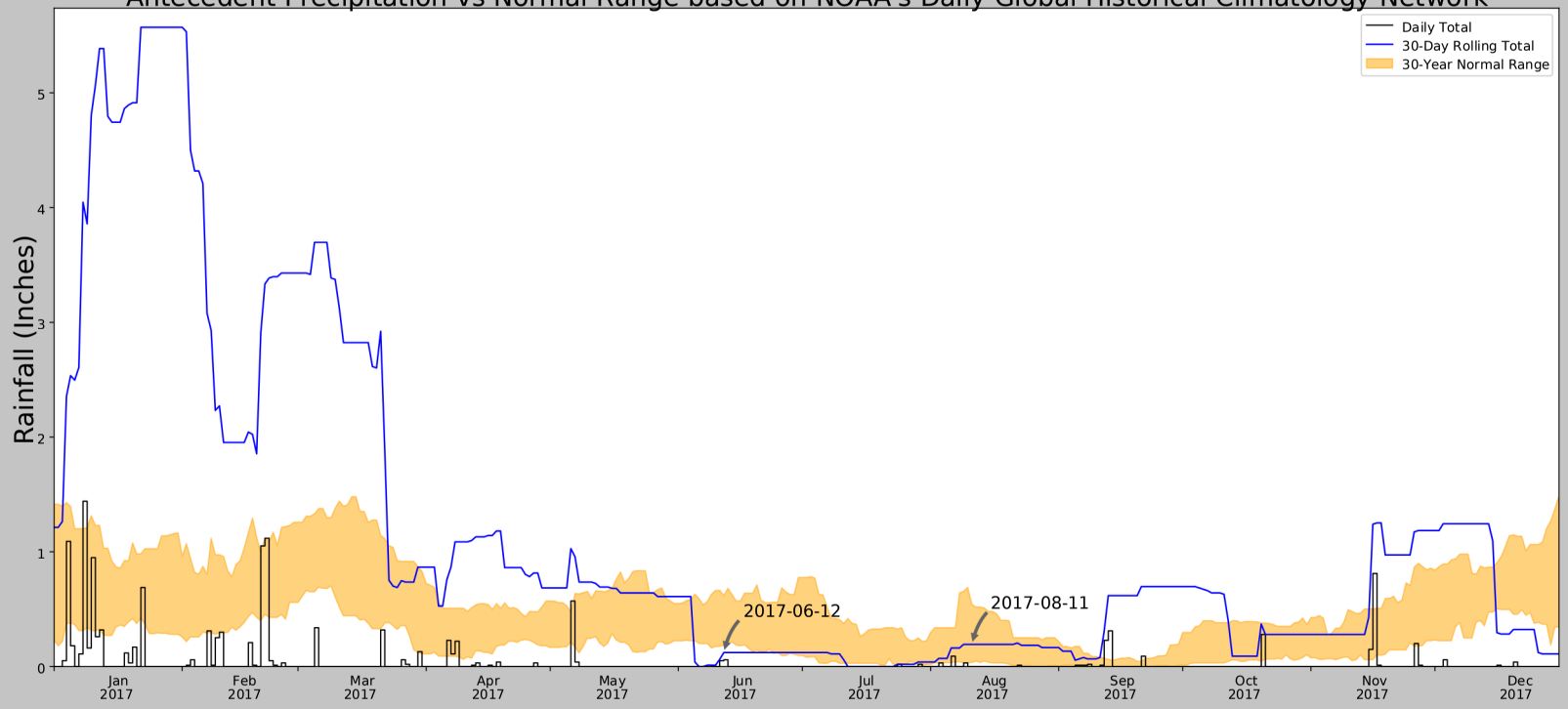
U.S. Army Corps of Engineers and
U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
RENO AP	39.5078, -119.7683	4404.856	19.617	40.583	9.624	11351	90
SPARKS	39.5558, -119.7333	4356.956	3.805	47.9	1.895	1	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	39.26, -119.589
Observation Date	2017-08-11
Elevation (ft)	4364.273
Drought Index (PDSI)	Normal
WebWIMP H2O Balance	Dry Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2017-08-11	0.034646	0.540945	0.192913	Normal	2	3	6
2017-07-12	0.027953	0.419291	0.0	Dry	1	2	2
2017-06-12	0.186614	0.619685	0.122047	Dry	1	1	1
Result							Drier than Normal - 9

Figures and tables made by the Antecedent Precipitation Tool Version 3.0

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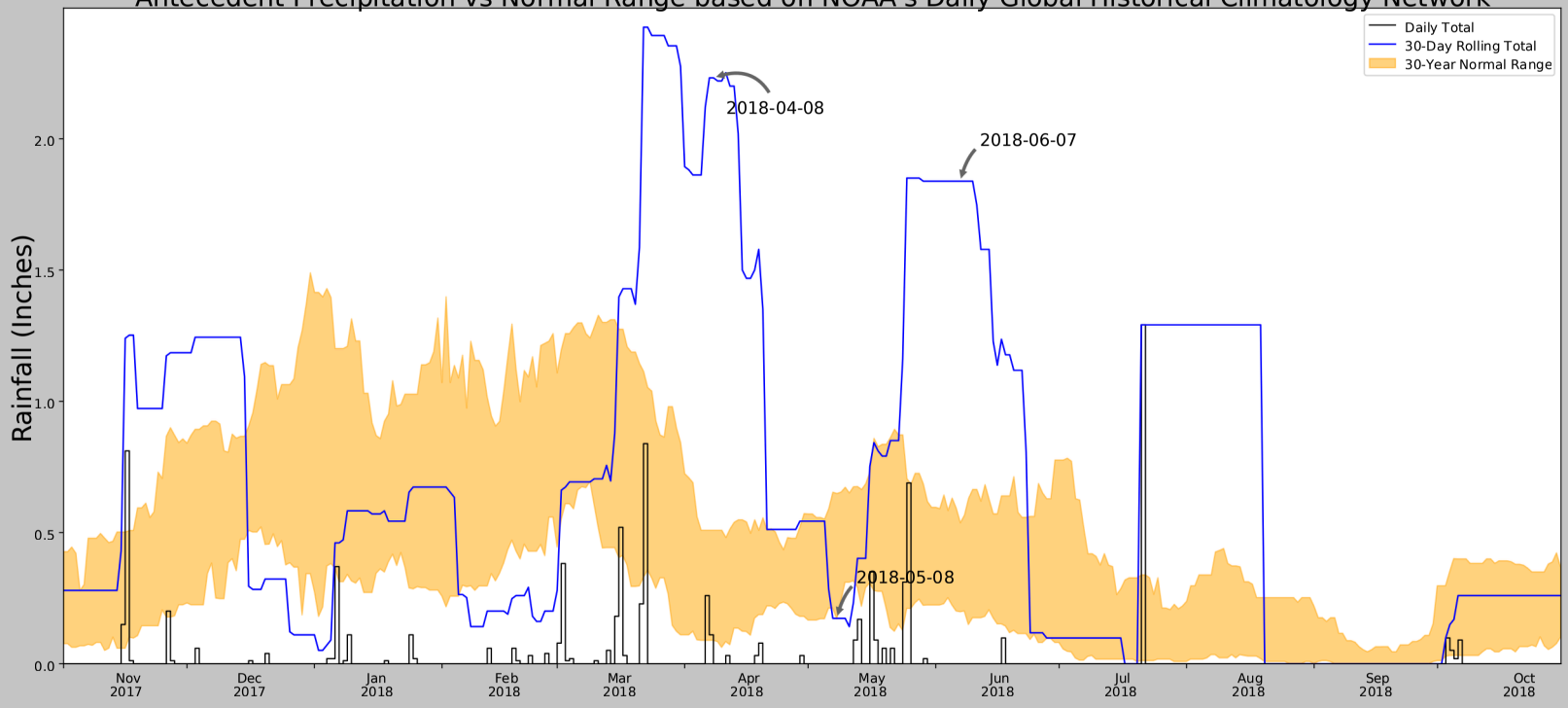
Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
RENO AP	39.5078, -119.7683	4404.856	19.617	40.583	9.624	11352	90
SPARKS	39.5558, -119.7333	4356.956	3.805	47.9	1.895	1	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	39.26, -119.589
Observation Date	2018-06-07
Elevation (ft)	4364.273
Drought Index (PDSI)	Mild drought
WebWIMP H2O Balance	Dry Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2018-06-07	0.198425	0.537402	1.838583	Wet	3	3	9
2018-05-08	0.171654	0.648819	0.173228	Normal	2	2	4
2018-04-08	0.08937	0.508661	2.232284	Wet	3	1	3
Result							Wetter than Normal - 16

Figures and tables made by the Antecedent Precipitation Tool Version 3.0

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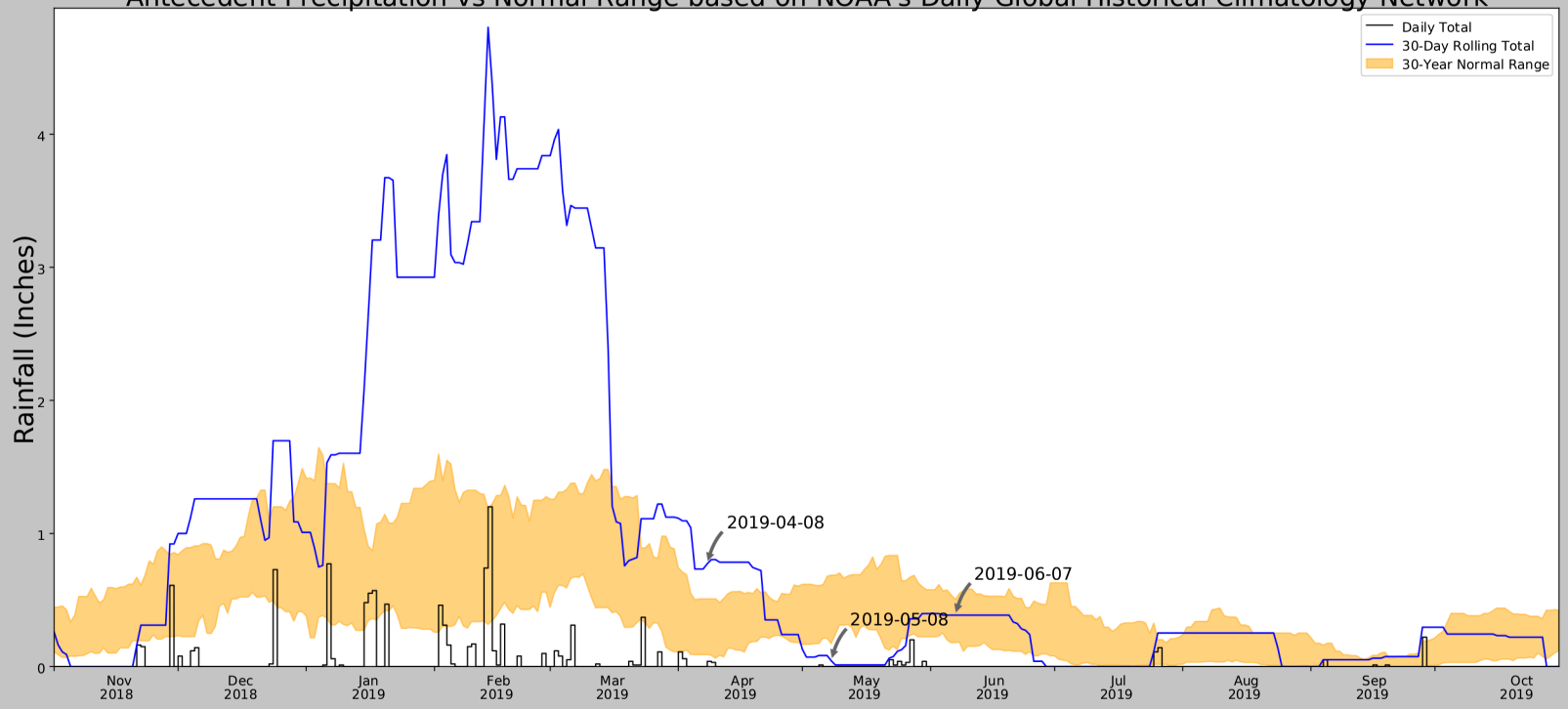
Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
RENO AP	39.5078, -119.7683	4404.856	19.617	40.583	9.624	11352	90
SPARKS	39.5558, -119.7333	4356.956	3.805	47.9	1.895	1	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	39.26, -119.589
Observation Date	2019-06-07
Elevation (ft)	4364.273
Drought Index (PDSI)	Severe wetness
WebWIMP H2O Balance	Dry Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2019-06-07	0.179921	0.503937	0.385827	Normal	2	3	6
2019-05-08	0.171654	0.686614	0.043307	Dry	1	2	2
2019-04-08	0.08937	0.508661	0.771654	Wet	3	1	3
Result							Normal Conditions - 11

Figures and tables made by the Antecedent Precipitation Tool Version 3.0

US Army Corps of Engineers.
ERDC

Developed by:
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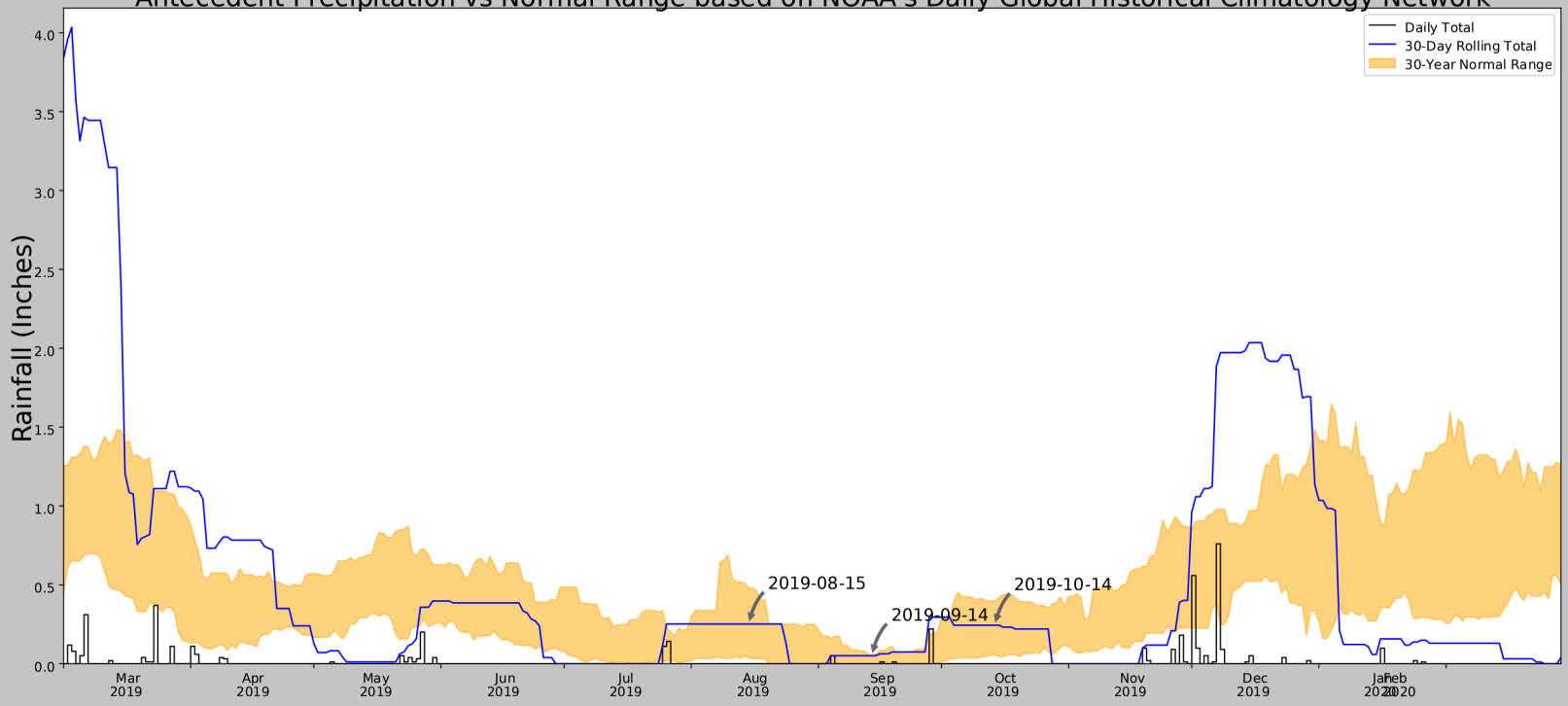
U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
RENO AP	39.5078, -119.7683	4404.856	19.617	40.583	9.624	11352	90
SPARKS	39.5558, -119.7333	4356.956	3.805	47.9	1.895	1	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	39.26, -119.589
Observation Date	2019-10-14
Elevation (ft)	4364.273
Drought Index (PDSI)	Normal
WebWIMP H2O Balance	Dry Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2019-10-14	0.056693	0.399606	0.244094	Normal	2	3	6
2019-09-14	0.0	0.053543	0.051181	Normal	2	2	4
2019-08-15	0.037008	0.480709	0.251969	Normal	2	1	2
Result							Normal Conditions - 12

Figures and tables made by the Antecedent Precipitation Tool Version 3.0

US Army Corps of Engineers.
ERDC

Developed by:
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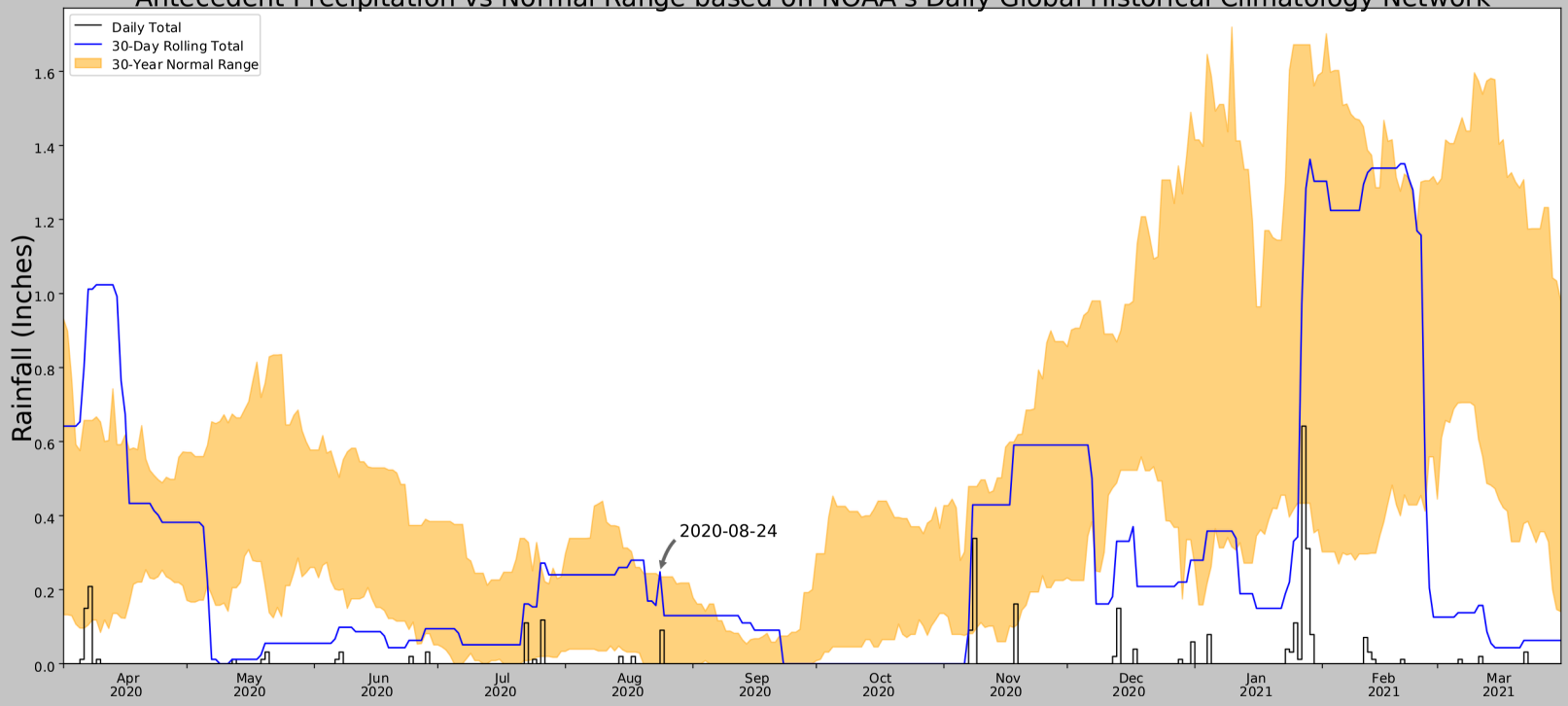
U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
RENO AP	39.5078, -119.7683	4404.856	19.617	40.583	9.624	11351	90
SPARKS	39.5558, -119.7333	4356.956	3.805	47.9	1.895	1	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	39.26, -119.589
Observation Date	2020-10-23
Elevation (ft)	4364.273
Drought Index (PDSI)	Extreme drought
WebWIMP H2O Balance	Dry Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2020-10-23	0.070866	0.392126	0.0	Dry	1	3	3
2020-09-23	0.0	0.074803	0.0	Normal	2	2	4
2020-08-24	0.0	0.234646	0.248032	Wet	3	1	3
Result							Normal Conditions - 10

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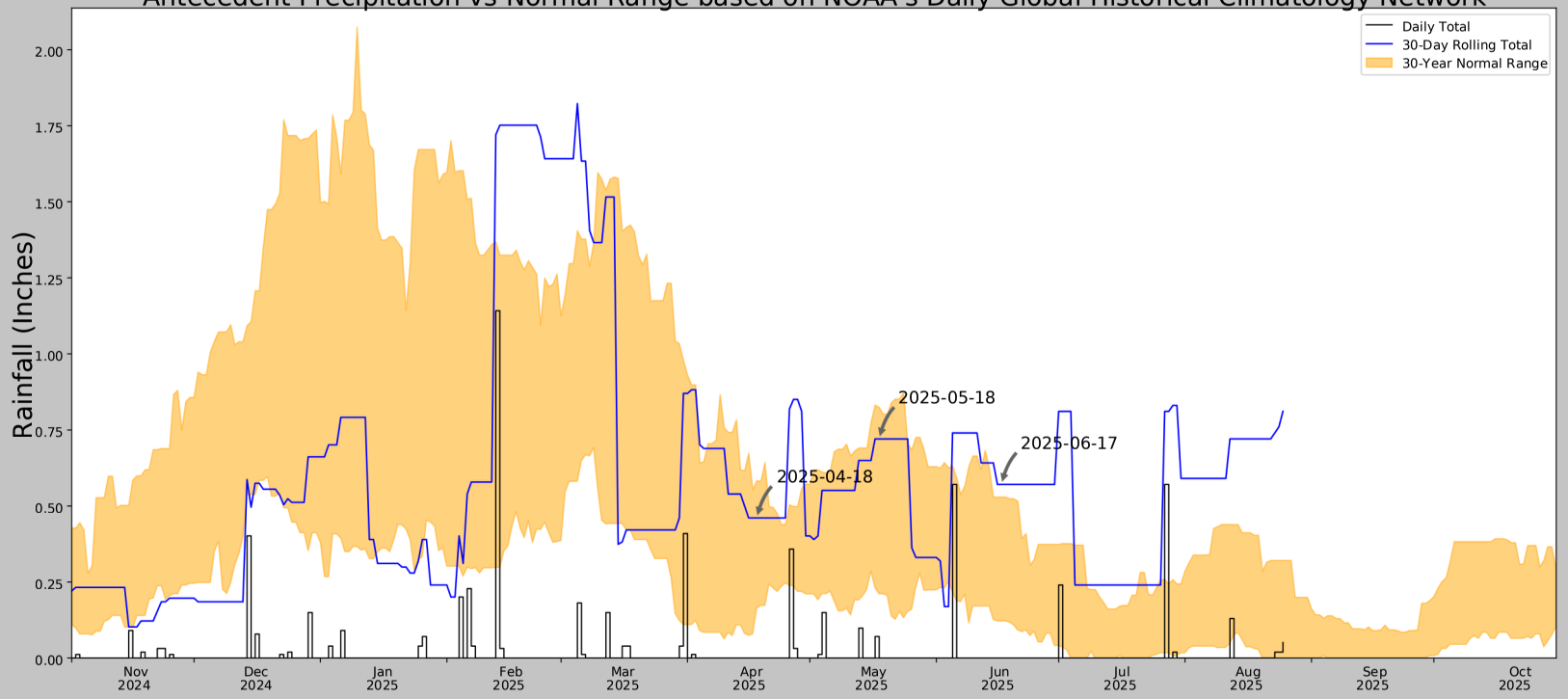
Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
RENO AP	39.5078, -119.7683	4404.856	19.617	40.583	9.624	11352	90
SPARKS	39.5558, -119.7333	4356.956	3.805	47.9	1.895	1	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	39.26, -119.589
Observation Date	2025-06-17
Elevation (ft)	4364.273
Drought Index (PDSI)	Severe drought
WebWIMP H2O Balance	Dry Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-06-17	0.122047	0.529134	0.570866	Wet	3	3	9
2025-05-18	0.211417	0.824016	0.720472	Normal	2	2	4
2025-04-18	0.164173	0.582677	0.46063	Normal	2	1	2
Result							Wetter than Normal - 15

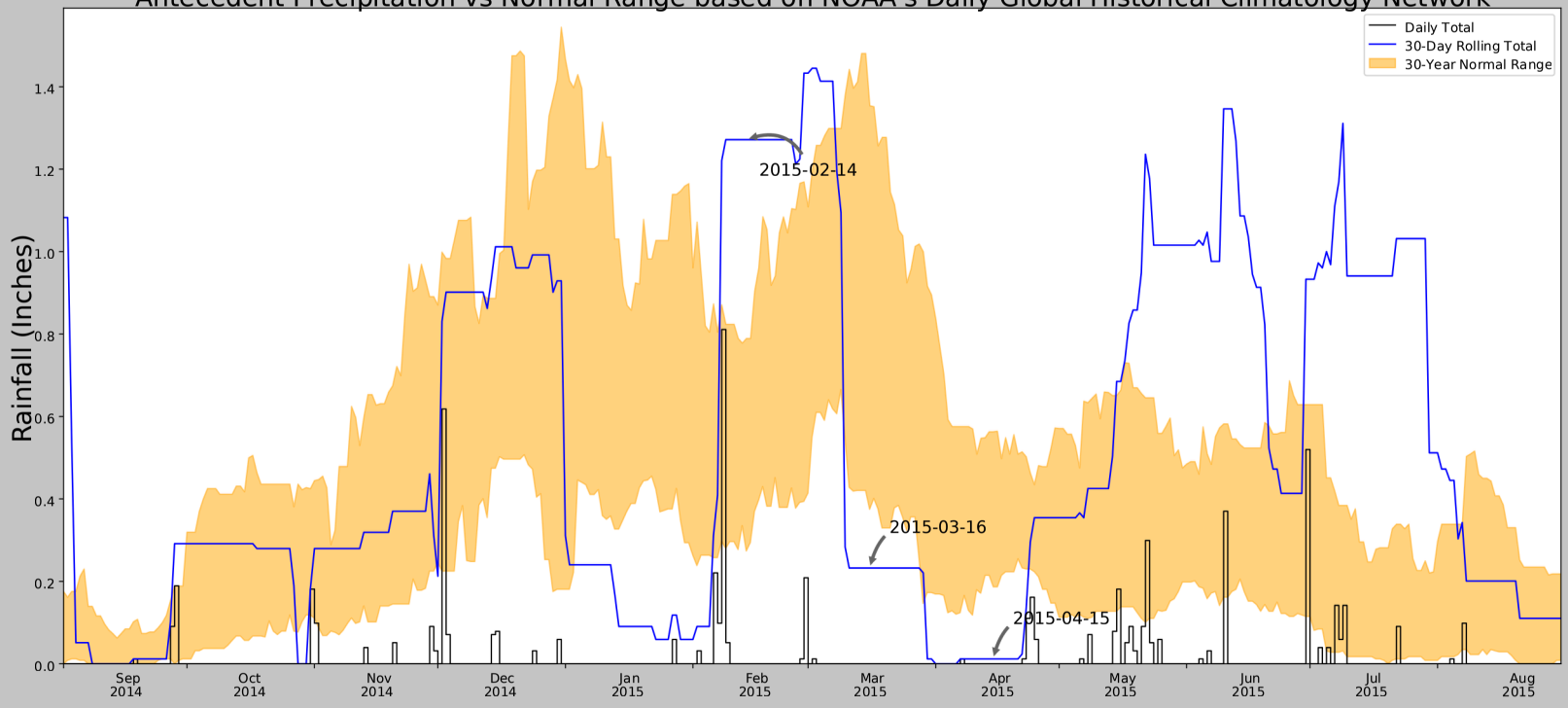
Figures and tables made by the Antecedent Precipitation Tool Version 3.0

US Army Corps of Engineers.
ERDC

Developed by:
U.S. Army Corps of Engineers and
U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
RENO AP	39.5078, -119.7683	4404.856	19.617	40.583	9.624	11352	90
SPARKS	39.5558, -119.7333	4356.956	3.805	47.9	1.895	1	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	39.25921, -119.58991
Observation Date	2015-04-15
Elevation (ft)	4378.74
Drought Index (PDSI)	Extreme drought
WebWIMP H2O Balance	Dry Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2015-04-15	0.186614	0.562992	0.011811	Dry	1	3	3
2015-03-16	0.374803	1.353937	0.232283	Dry	1	2	2
2015-02-14	0.273622	0.78937	1.271654	Wet	3	1	3
Result							Drier than Normal - 8

Figures and tables made by the Antecedent Precipitation Tool Version 3.0

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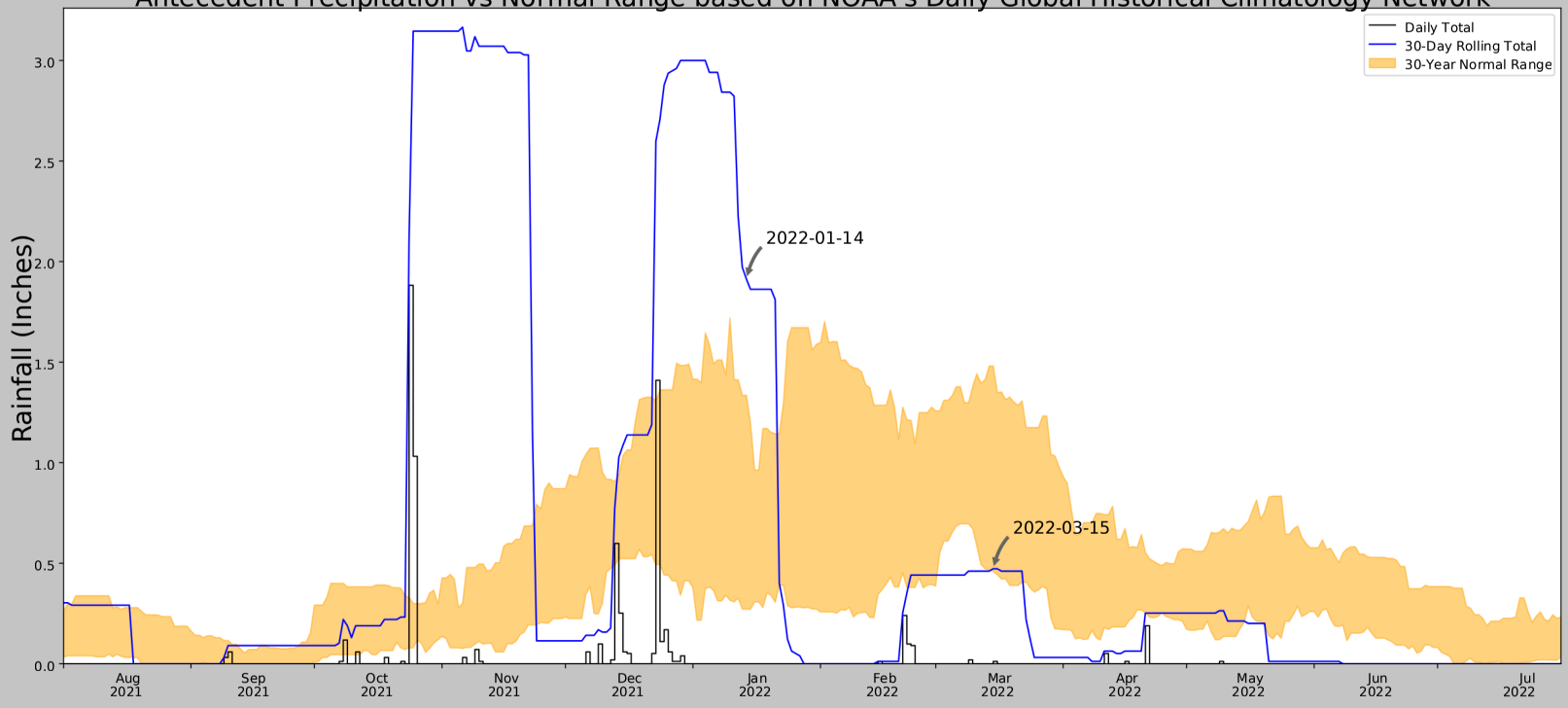
U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
RENO AP	39.5078, -119.7683	4404.856	19.641	26.116	9.351	11352	90
SPARKS	39.5558, -119.7333	4356.956	3.805	47.9	1.895	1	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	39.25921, -119.58991
Observation Date	2022-03-15
Elevation (ft)	4378.74
Drought Index (PDSI)	Moderate drought
WebWIMP H2O Balance	Wet Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2022-03-15	0.458661	1.480709	0.472441	Normal	2	3	6
2022-02-13	0.229921	1.373622	0.0	Dry	1	2	2
2022-01-14	0.271654	1.335039	1.913386	Wet	3	1	3
Result							Normal Conditions - 11

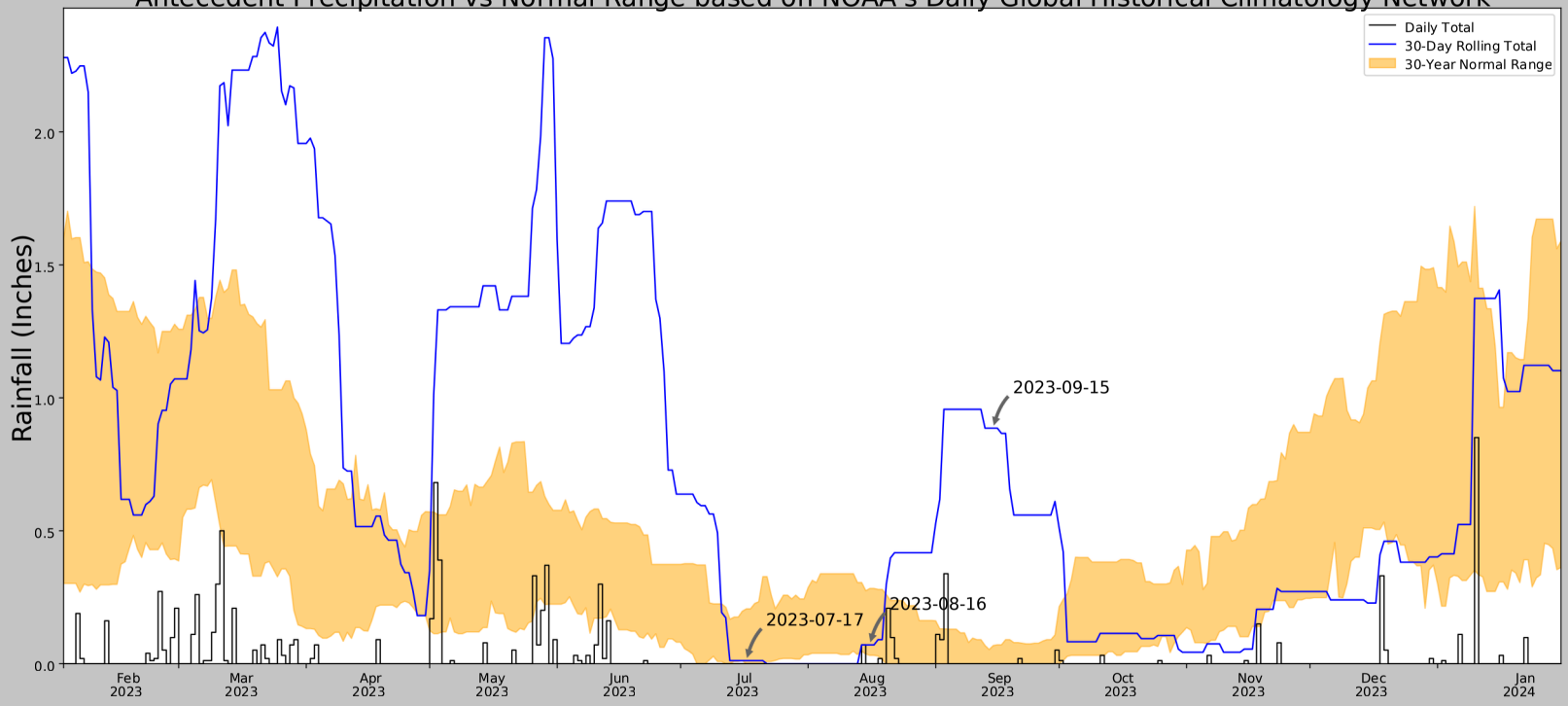
Figures and tables made by the Antecedent Precipitation Tool Version 3.0

US Army Corps of Engineers.
ERDC

Developed by:
U.S. Army Corps of Engineers and
U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
RENO AP	39.5078, -119.7683	4404.856	19.641	26.116	9.351	11352	90
SPARKS	39.5558, -119.7333	4356.956	3.805	47.9	1.895	1	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	39.25921, -119.58991
Observation Date	2023-09-15
Elevation (ft)	4378.74
Drought Index (PDSI)	Extreme wetness
WebWIMP H2O Balance	Dry Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2023-09-15	0.0	0.068504	0.885827	Wet	3	3	9
2023-08-16	0.031496	0.283071	0.070866	Normal	2	2	4
2023-07-17	0.0	0.206693	0.011811	Normal	2	1	2
Result							Wetter than Normal - 15

Figures and tables made by the Antecedent Precipitation Tool Version 3.0

US Army Corps of Engineers.
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Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
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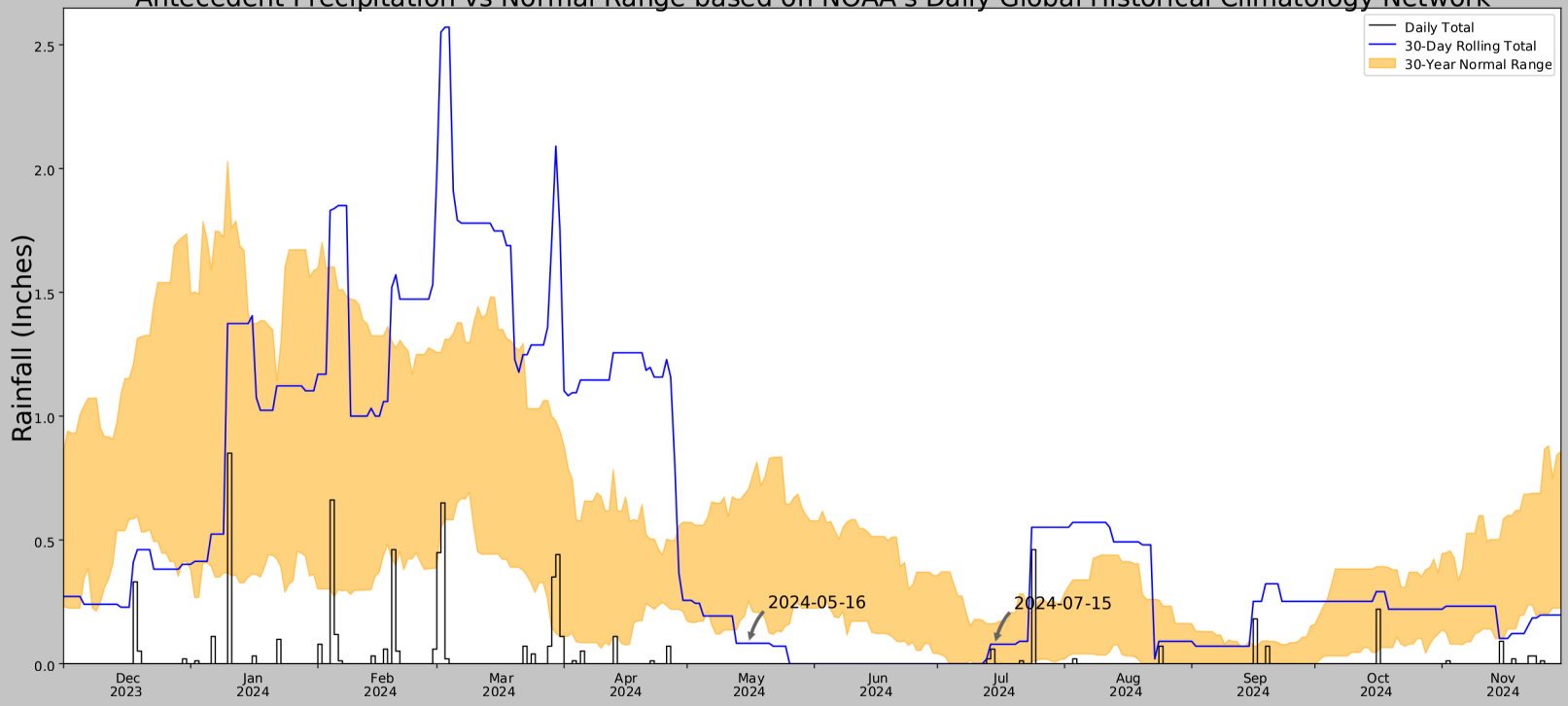
SPARKS	39.5558, -119.7333	4356.956	3.805	47.9	1.895	1	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	39.25921, -119.58991
Observation Date	2024-07-15
Elevation (ft)	4378.74
Drought Index (PDSI)	Mild drought
WebWIMP H2O Balance	Dry Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-07-15	0.0	0.161417	0.07874	Normal	2	3	6
2024-06-15	0.127559	0.514173	0.0	Dry	1	2	2
2024-05-16	0.25315	0.707874	0.082677	Dry	1	1	1
Result							Drier than Normal - 9

Figures and tables made by the Antecedent Precipitation Tool Version 3.0

US Army Corps of Engineers. ERDC

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
RENO AP	39.5078, -119.7683	4404.856	19.641	26.116	9.351	11351	90
SPARKS	39.5558, -119.7333	4356.956	3.805	47.9	1.895	1	0

Appendix E Biological Resources Evaluation Report

Carson Water Subconservancy District

North Dayton Valley Scoping Project

Lyon County, Nevada

2025 Biological Screening Memo

October 2025

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INTRODUCTION

Carson Water Subconservancy District (CWSD) in 2019 hired JE Fuller and Lumos and Associates to perform an Area Drainage Master Plan (ADMP) for the area of North Dayton Valley. In this ADMP several projects were suggested to decrease the amount of flood damage caused by alluvial fan drainages. After this project was completed, it became apparent that there was need for analysis to determine what projects could be eligible for FEMA funding.

For a construction project to be considered eligible for federal funding the design must receive a benefit cost analysis (BCA) greater than one. This project, The North Dayton Valley Scoping Project, has been created to rank and determine the most beneficial project in the ADMP that would also most likely pass the BCA threshold.
It was determined as part of phase one that the Grosh and Rose Peak Culvert improvements were the path forward. Phase two moves the design forward to the 60% design phase completed with a preliminary environmental assessment and BCA.

This biological screening memo is intended to overview the baseline biological conditions in the area associated with the project scope.

1.1 Purpose and Need

The purpose of this proposed action is to alleviate flooding issues in the North Dayton Rose Peak community. A culvert improvement project, as outlined above, has been selected as the alternative to design further with the intention that it can pass a BCA and qualify for federal funding.

1.2 Project Description

The project consists of drainage and culvert improvements located in Section 14, Township 16, North, Range 21 East, Mount Diablo Base and Meridian. The project area consists of approximately 1 acre of private land. The project can be viewed on the Dayton United States Geological Survey (USGS) 7.5-minute quadrangle. The project can be accessed from Highway 50 by turning west on to Flowery Avenue in Dayton, Nevada.

The proposed drainage enhancements would include four new RCP culverts crossing underneath Grosh Avenue and Rose Peak Road. The culverts run through the project area, perpendicular to Grosh avenue and Rose Peak Road. Regrading any existing channel will be necessary to achieve the correct slope and conveyance operation. The storm drainage improvements will run approximately 650 feet and require rip rap lining to decrease velocity of storm water. The trapezoidal channel is proposed to have a total width of 16 feet with a 2:1 grade.

1.3 Environmental Setting

The average elevation of the project area is 4,485 feet above mean sea level (amsl). The Western Regional Climate Center (WRCC) does not have local Cooperative NOAA stations in Dayton Nevada. The average maximum temperature closest to the project site is provided from Carson City and is approximately 89

degrees (°) Fahrenheit (F) in July, and the average minimum temperature is approximately 21°F in January. The average annual precipitation is approximately 10.30 inches in Carson City and is assumed to be less in Dayton due to the increased distance from the Sierra Nevada Range. Precipitation tends to peak in the winter months (between December and February) (WRCC 2025). Existing and previous land uses within the project area include residential development, minimal stormwater development, and open space.

BIOLOGICAL SCREENING

The project team conducted a literature review and corresponded with state and federal biological agencies to identify biological resources and special status species that have the potential to occur within the project area. The following resources were referenced to characterize potential habitat for special status species and identify water resources:

- Reviewed and evaluated supplemental sources of information including the USGS National Southwest Gap Analysis Program (SWReGAP), the USGS NHD, aerial imagery (Google Earth), USGS topographic maps, and species accounts in the project area.
- Utilized the United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation tool (IPaC tool) powered by the USFWS Environmental Conservation Online System to perform a search for a site-specific list of federally endangered, threatened, or candidate species that have the potential to occur in the project area (*Appendix A*);
- Requested a list of endangered or threatened candidates, or at-risk taxa from the Nevada Natural Heritage Program (NNHP) recorded within or near the project area (*Appendix B*);
- Requested site-specific species information from the Nevada Department of Wildlife (NDOW), including general wildlife and special status species information that has the potential to occur within the project area (*Appendix C*); and
- Reviewed the Nevada Department of Agriculture Noxious Weed List (*Appendix D*)

2.1 Biological Resources Researched

2.1.1 United States Fish and Wildlife Service (USFWS)

The USFWS reported that the yellow-billed cuckoo (*Coccyzus americanus*), northwestern pond turtle (*Axtinemys marmorata*), and monarch butterfly (*Danaus plexippus*) have the potential to occur in the vicinity of the project area (*Appendix A*).

2.1.2 Nevada Natural Heritage Program

According to NNHP, six special status species including three BLM sensitive species (Mexican free-tailed bat [*Tadarida brasiliensis*], golden eagle [Aquila chrysaetos], and Townsend's big-eared bat [*Corynorhinus townsendii*]), three state sensitive species (sagebrush pygmy leaf [*Loeflingia squarrosa* ssp. *Artemisiarum*], altered andesite popcorn flower [*Sonnea glomerata*], and altered andesite buckwheat [*Eriogonum robustum*]), and two federally listed species (northwestern pond turtle [*Axtinemys marmorata*], and monarch butterfly [*Danaus plexippus*]) have been documented in the vicinity of the project area. However, none of these species have been specifically documented within the footprint of the project (NNHP 2025).

2.1.3 Nevada Department of Wildlife

NDOW identified the project area and most of a 4.0-mile buffer as occupied mule deer (*Odocoileus hemionus*) habitat. No other big game species have known occupied habitat within the project area or 4.0-mile buffer.

NDOW also reported a total of 16 known raptor nest sites within ten miles of the project area (*Appendix C*;). These nests were occupied by the following species: barn owl (*Tyto alba*); Cooper's hawk (*Accipiter cooperi*); golden eagle (*Aquila chrysaetos*); peregrine falcon (*Falco peregrinus*); prairie falcon (*Falco mexicanus):* Swainsons hawk (*Buteo swainsoni*); and red-tailed hawk (*Buteo jamaicensis*).

Abandoned mine workings could provide habitat for state and federally protected bat species, many of which are protected under State of Nevada Protection and Designations**,** NAC 503.030*.*

2.1.4 United States Geological Survey National Southwest Regional Gap Analysis Program

The USGS National SWReGAP program identified two major vegetation communities within the project area – Inter-Mountain Basins Mixed Salt Desert Scrub and Developed Open Space – Low Intensity.

2.1.5 United States Geological Survey National Hydrography Dataset

The project lies entirely within Carson Plains-Carson River 12-digit Hydrological Unit Code, 160502020105 (USGS 2025). One ephemeral drainage passes through the project area according to the USGS National Hydrography Dataset (NHD) (USGS 2025).

2.1.6 United States Fish and Wildlife Service National Wetland Inventory

The USFWS Wetland Inventory reported "Riverine, Intermittent Streambed, Seasonally Flooded, with no visible riparian vegetation" within the project area (USFWS Riverine Code R4SBJ). These features all fall into the broader category of ephemeral water courses since they only hold water during larger storm events (USFWS NWI, 2025). Surface water runoff from the project areas generally flows east and then northeast towards the Carson River.

2.2 Biological Resources Evaluated

2.2.1 Vegetation Communities

The following paragraphs are descriptions of the vegetation communities identified during the vegetation community assessment.

INTER-MOUNTAIN BASINS MIXED SALT DESERT SCRUB

This extensive ecological system includes open-canopied shrublands of typically saline basins, alluvial slopes, and plains across the Intermountain western U.S and extends in limited distribution into the southern Great Plains. Substrates are often saline and calcareous, medium- to fine-textured, alkaline soils, but include some coarser-textured soils. The vegetation is characterized by a typically open to moderately dense shrubland composed of one or more *Atriplex* species. Other shrubs present to co-dominate may include Wyoming big sagebrush*,* yellow rabbitbrush*,* Rubber rabbitbrush, and others. The herbaceous layer varies from sparse to moderately dense and is dominated by perennial graminoids such as Indian ricegrass*,* blue gramma*,* thickspike wheatgrass*,* western wheatgrass*,* James' galleta*,* dropseed grasses and others. Various forbs are also present (Lowry et al. 2005).

DEVELOPED, OPEN SPACE – LOW INTENSITY

Open Space: This land cover sub-unit includes areas with a mixture of some constructed materials, but mostly vegetation in the form of manicured grasses. Impervious surfaces account for less than 20 percent of total cover. These areas most commonly include large single-family housing units, parks, golf courses, and vegetation planted in developed settings for recreation, erosion control, or aesthetic purposes.

Developed, Low intensity: This land cover sub-unit includes areas with a mixture of constructed materials and vegetation. Impervious surfaces account for 20-49 percent of total cover. These areas most commonly include single-family housing units (Lowry et al. 2005).

2.2.2 Federally-Listed and Sensitive PlantSpecies

The biological screening identified the following three sensitive plant species that potentially occur near in the project area:

- sagebrush pygmy leaf (*Loeflingia squarrosa* ssp. *artemisiarum*)
- altered andesite popcorn flower (*Sonnea glomerata*)
- altered andesite buckwheat (*Eriogonum robustum*)

SAGEBRUSH PYGMYLEAF

Sagebrush pygmy leaf is an annual herb that tends to branch at the base with green flowers and grows to about 5 inches tall. It has been documented in Washoe County, Nevada though it is not well-documented. Suitable habitat consists of sandy soils and gravel of exposed areas on dunes, flats, and disturbed areas, in sagebrush scrub and Mojave Desert scrub at 2,300 to 7,000 feet in elevation (Kartesz 1994, UT 2020b, and NatureServe 2021). Suitable habitat may be present in the project area, but due to the smaller footprint of the project itself and the location of the project within an already developed and disturbed area, a short biological survey would likely confirm the lack of presence of the sagebrush pygmy leaf.

ALTERED ANDESITE POPCORN FLOWER

Altered andesite popcorn flower grows approximately 3-5 inches tall and includes a thick stem with branching leaves. Flowers of this plant are small and white with yellow towards its center. It has been known to grow in southern Washoe County as well as Storey County. This popcorn flower is found in the Virginia Range and Carson Range of the Seirra Nevada Foothills. Habitat for this species include open spaces with hydrothermally altered soil that has low nutrients (NatureServe 2025). The project area lacks suitable habitat for this species.

ALTERED ANDESITE BUCKWHEAT

Altered andesite buckwheat has also been known to grow in southern Washoe County and Storey County. This buckwheat has been found in the Virginia/Carson Ranges of the Seirra Nevada Foothills and is generally located between 4,540 and 7,325 feet in elevation. The perennial plant species spreads into silvery gray mounds made of egg-shaped leaves and blooms with pale yellow flowers (NNHP 2000). Altered andesite buckwheat has been located in barren locations on hilltops and ridges with highly acidic soils. There is no suitable habitat for this species within the project area (Morefield, J. D. 2000).

Potential Impacts

Due to the disturbed and developed nature of the project area, no impacts to sensitive or special status plant species are anticipated.

Project-related construction could introduce or spread invasive species within the project area if not mitigated. During construction, it is recommended that the construction contractor adhere to the noxious weed BMPs identified in this document to avoid introducing or spreading invasive plants during construction and management activities. Nevada's list of Noxious Weeds can be found in *Appendix D*.

2.2.3 Federally-Listed and Sensitive Wildlife Species

Biological screening identified the following sensitive wildlife species with a likelihood and/or history of having habitat near the project area:

Birds

- golden eagle (Aquila chrysaetos)
- yellow-billed cuckoo (Coccyzus americanus)

Mammals

- Mexican free-tailed bat (Tadarida brasiliensis)
- Townsend's big-eared bat (Corynorhinus townsendii),

Amphibians

- northwestern pond turtle (*Axtinemys marmorata)*

Insects

- monarch butterfly (Danaus plexippus plexippus)

MEXICAN FREE-TAILED BAT

The Mexican free-tailed bat has a wide habitat range extending North to South America. It roosts in dark areas including mines, caves, bridges, and other infrastructures. They tend to roost in larger numbers near water or riparian zones that provide more food availability. Their diet includes a non-discriminatory "all you can eat" insect buffet (NDOW 2021). Suitable roosting habitat for the Mexican free-tailed bat is not present within 0.25 mile of the project area, but foraging habitat may be present in the vicinity. The project occurs within a developed area, and construction would only occur during the daylight when the bat is roosting. No effects to this species are anticipated.

TOWNSEND'S BIG-EARED BAT

Townsend's big-eared bat has a wide habitat range extending North to South America. Habitat known to host this bat includes primarily pinyon juniper-mahogany, white fir, blackbrush, sagebrush, salt desert scrub, agricultural, and occasionally in urban habitats (U.S.DOI 2020). They can be located in old buildings, mines, or caves. Their primary food sources are small moths, flies, beetles, and lacewings (Government of British Columbia n.d.; Bradley et al. 2006). Suitable roosting habitat of rock crevices or mines are not present within 0.25 miles of the project area; however, foraging habitat may be present. The project occurs within a developed area, and construction would only occur during the daylight when the bat is roosting. No effects to this species are anticipated.

YELLOW BILLED CUCKOO

The nearest suitable riparian habitat with dense cover, preferred by the cuckoo, is located approximately 0.3 miles away from the project area. The yellow billed cuckoo diet consists mostly of caterpillars and larvae; however, these birds tend to supplement with other insects and few fruits. The

location of the proposed project does not overlap with any critical habitat designated for the yellow billed cuckoo. It would be highly unlikely that the cuckoo would occur inside the project area due to lack of consistent water source, scarce tree coverage, and low forage potential for main diet components (USFWS 2023). Additionally, the project is in a developed area with extensive disturbance. Therefore, there would be no effect on this species.

NORTHWESTERN POND TURTLE

Northwestern pond turtles require bodies of water or consistent wetlands for their habitat. This project is meant to improve the conveyance of stormwater from the ephemeral stream coming down the Flowery Range and is not a constant water source which this aquatic species requires. The diet of this turtle consists of water-based invertebrates (frogs, tadpoles, fish) that they are unable to eat unless they are underwater (Daw 2025). Therefore, northwestern pond turtles would most likely prefer the vicinity of the Carson River or wetlands outside of the project boundary. Therefore, there would be no effect on this species.

MONARCH BUTTERFLY

The species has multiple key habitats which require the presence of larval host plants. It has been documented within several miles from the project area (NNHP 2025). Larval host plants may be present in the project area; however, due to the abundance of available habitat in the vicinity, the proposed project is not anticipated to impact this species.

Potential Impacts

Due to the disturbed and developed nature of the project area and lack of suitable habitats for the species analyzed above, no effects to federally listed or sensitive wildlife species are anticipated.

Mitigation Recommendations

If any populations of federally listed or sensitive wildlife species are encountered during preconstruction or construction activities, USFWS and/or NDOW biologists would be contacted immediately, and avoidance and/or mitigation protocols would be established and followed for the remainder of the project.

2.2.4 MigratoryBirds

Only one migratory bird species was identified by the IPaC tool that could potentially occur in the project.

GOLDEN EAGLE

This species has potential foraging habitat in the project area. The highest probability of presence is early April and mid-August (USFWS 2020).

Potential Impacts

It is unlikely that nesting migratory birds would be disturbed and/or displaced during ground clearing activities and noise from construction activities due to the existing disturbed nature of the project in a developed area. Raptor nesting locations in the vicinity of 10 miles of this project location are outlined in the NDOW data request and none of these would be impacted by the project.

Mitigation Recommendations

Caution should be taken during the migratory bird breeding season from March 1st to August 31st to ensure nesting birds are not forced to abandon their nests if they happen to be breeding in the project vicinity.

2.2.5 Bald and Golden Eagles

Per the Interim Golden Eagle Technical Guidance: Inventory and Monitoring Protocols; and Other Recommendations in Support of Golden Eagle Management and Permit Issuance (Pagel et al. 2010), golden eagles receive protection in the United States and have established inventory and monitoring protocols. Bald and Gold Eagles are also strictly prohibited from "take" and explicitly protected under Bald and Golden Eagle Protection Act of 1940.

GOLDEN EAGLE

Golden eagles nest on rock outcrops, cliffs, mountains, and in canyons. They forage in areas surrounding nest sites and can be found in nearly any habitat of western Nevada. The most common habitats used for foraging in Nevada are sagebrush scrub and sagebrush steppe (GBBO 2010). Suitable cliff nesting habitat is present within ten miles of the project area, and golden eagles have been documented as nesting within ten miles of the project area (NDOW 2025). Due to the abundance of foraging habitat in the vicinity of the project area and because the project features are located near a developed community, it is unlikely that this project would affect foraging golden eagles.

Potential Impacts

The project would not impact habitat for bald or golden eagle, and no impacts are anticipated. Therefore, the proposed project would not result in "take" of bald or golden eagle as defined by the Bald and Golden Eagle Protection Act.

2.2.6 Raptors

Various species of raptors, which use diverse habitat types, may have suitable foraging habitat in the vicinity of the project area. Barn owl, Cooper's hawk, peregrine falcon, prairie hawk, red-tailed hawk, Swainson's hawk, all have documented nests within 10 miles of the project area (NDOW 2025).

Raptor species are protected by State and Federal laws. In addition, bald eagle, burrowing owl, California spotted owl, ferruginous hawk, flammulated owl, golden eagle, northern goshawk, peregrine falcon, prairie falcon, and short-eared owl are NDOW species of special concern and are target species for conservation as outlined by the Nevada Wildlife Action Plan.

Potential Impacts

Foraging raptors may temporarily avoid the project area during construction but would likely return shortly after construction is complete. In addition, there is little to no raptor roosting or nesting habitat availability in the project area. No measurable effects to raptors nesting, roosting, foraging in the vicinity of the project area anticipated.

SUMMARY OF FINDINGS AND CONCLUSIONS

No threatened or endangered plants, wildlife, or their habitats are within the project area and no impacts to the species discussed in this document are anticipated due to the previously disturbed nature of the project area and existing infrastructure. No further consultation with USFWS or state agencies would be necessary at this time unless substantial changes to the project occur in the future.

REFERENCES

Bradley, P. V., M.J. O'Farrell, J.A. Williams, and J.E. Newmark. Editors. 2006. The Revised Nevada Bat Conservation Plan. Nevada Bat Working Group. Reno, Nevada.

Bureau of Land Management (BLM). 2023. Final BLM Nevada Sensitive and Status Species List.

Daw, S. 2025. Northwestern Pond Turtle. National Parks Service. https://www.nps.gov/articles/000/northwestern-pond-turtle.htm. April 2025.

Government of British Columbia. (n.d.). Habitat Atlas for Wildlife at Risk Townsend's Big-eared Bat Corynorhinus townsendii. Ministry of Environment - Okanagan Region - Townsend's big-eared bat. https://www.env.gov.bc.ca/okanagan/esd/atlas/species/townsends.html. Accessed August 25, 2025.

Great Basin Bird Observatory (GBBO). 2010. Nevada Comprehensive Bird Conservation Plan, Ver. 1.0. Reno, NV. Accessed June 20, 2021. Website: http://www.gbboinfo.org/secure/Whole%20Document%20PDF/NV_Bird_Conservation_Plan_ver1.0_Dec2010.pdf. Accessed August 25, 2025.

Kartesz, J.T. 1994. A synonymized checklist of the vascular flora of the United States, Canada, and Greenland. 2nd edition. 2 vols. Timber Press, Portland, OR.

Lowry, J. H, Jr., R. D. Ramsey, K. Boykin, D. Bradford, P. Comer, S. Falzarano, W. Kepner, J. Kirby, L. Langs, J. Prior-Magee, G. Manis, L. O'Brien, T. Sajwaj, K. A. Thomas, W. Rieth, S. Schrader, D. Schrupp, K. Schulz, B. Thompson, C. Velasquez, C. Wallace, E. Waller, and B. Wolk. 2005. Southwest Regional Gap Analysis Project: Final Report on Land Cover Mapping Methods, RS/GIS Laboratory, Utah State University, Logan, UT.

Morefield, J. D. 2000. Current Knowledge and Conservation Status of *Eriogonum robustum* E. Greene (Polygonaceae), the altered andesite buckwheat. Carson City; Nevada Natural Heritage Program, Department of Conservation and Natural Resources. December 2000.

NatureServe. 2025. NatureServe Explorer: An online encyclopedia of life [web application]. NatureServe, Arlington, Virginia. Last published February 2, 2021. Website: http://explorer.natureserve.org. Accessed August 22, 2025.

Nevada Department of Wildlife (NDOW). 2025. Data/Letter Response to Rosepeak Culvert Project Standard Data Request. February 24, 2025.

NDOW. 2021. Mexican free-tailed bat. https://www.ndow.org/species/mexican-free-tailed-bat/. October 23, 2021.

Nevada Natural Heritage Program (NNHP). 2025. Letter and GIS Data Response to North Dayton BCA Scoping Project from Carson Water Subconservancy District. February 20, 2025.

Pagel, J., D. Whittington, and G. Allen. 2010. Interim Golden Eagle Technical Guidance: Inventory and Monitoring Protocols; and Other Recommendations in Support of Golden Eagle Management and Permit Issuance. Report by U.S. Fish and Wildlife Service (USFWS).

U.S. Department of the Interior (U.S.DOI). 2020. Townsend's big-eared bat. National Parks Service. https://www.nps.gov/chis/learn/nature/townsends-bats.htm#:~:text=Big%2Deared%20bats%20have%20been,areas%2C%20and%20coastal%20habitat%20types. May 6, 2020.

USFWS. 2020. Migratory Bird Treaty Act Protected Species (10.13 List), MBTA as of March 2020. Website: https://www.fws.gov/birds/management/managed-species/migratory-bird-treaty-act-protected-species.php. Accessed August 26, 2025.

USFWS. 2023. Yellow-billed cuckoo *(Coccyzus americanus): U.S. Fish & Wildlife Service*. FWS.gov. https://www.fws.gov/species/yellow-billed-cuckoo-coccyzus-americanus. Accessed August 26, 2025.

USFWS. 2025. List of Threatened and Endangered Species that May Occur in Your Proposed Project Location, and/or May be Affected by Your Proposed Project. United States Department of the Interior, Fish and Wildlife Service, Nevada Fish and Wildlife Office. Reno, NV. Project Code: 2025-0059075, February 20, 2025.

U.S. Government or the Fish and Wildlife Service (USFWS NWI). (2025). National Wetlands Inventory. https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/. Accessed August 26, 2025.

USGS. 2025. National Hydrography Dataset. Partners include U.S. Environmental Protection Agency, the U.S. Department of Agriculture Forest Service, the U.S. Department of Interior's National Park Service and Bureau of Land Management. Website: https://apps.nationalmap.gov/viewer/. Accessed August 25, 2025.

Western Regional Climate Center (WRCC). 2025. Carson City, Nevada (261485): Period of Record Monthly Climate Summary. from 01/01/1893 to 06/09/2016. Desert Research Institute. Reno, NV. Website: https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?nv1485. Accessed August 25, 2025.

APPENDIX A

U.S. Fish and Wildlife Information for Planning and Consultation Report

United States Department of the Interior

FISH AND WILDLIFE SERVICE
RenoFish And Wildlife Office
1340 Financial Boulevard, Suite 234
Reno, NV 89502-7147
Phone: (775) 861-6300 Fax: (775) 861-6301

In Reply Refer To: 02/20/2025 17:25:31 UTC
Project Code: 2025-0059075
Project Name: North Dayton ADMP - Projects

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through IPaC by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at: https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see Migratory Bird Permit | What We Do | U.S. Fish & Wildlife Service (fws.gov).

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see https://www.fws.gov/library/collections/threats-birds.

In addition to MBTA and BGEPA, Executive Order 13186: Responsibilities of Federal Agencies to Protect Migratory Birds, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

- ▪USFWS National Wildlife Refuges and Fish Hatcheries
- ▪Bald & Golden Eagles
- ▪Migratory Birds
- ▪ Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Reno Fish And Wildlife Office
1340 Financial Boulevard, Suite 234
Reno, NV 89502-7147
(775) 861-6300

PROJECT SUMMARY

Project Code: 2025-0059075
Project Name: North Dayton ADMP - Projects
Project Type: Drainage Project
Project Description:Conceptual projects for ADMP
Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@39.307083199999994,-119.53434048258426,14z

Counties:Lyon and Storey counties, Nevada

ENDANGERED SPECIES ACT SPECIES

There is a total of 3 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

BIRDS

NAME	STATUS
Yellow-billed Cuckoo Coccyzus americanus Population:Western U.S.DPS There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3911	Threatened

REPTILES

NAME	STATUS
Northwestern Pond Turtle Actinemys marmorata No criticalhabitathasbeendesignatedforthisspecies. Species profile: https://ecos.fws.gov/ecp/species/1111	Proposed Threatened

INSECTS

NAME	STATUS
Monarch Butterfly Danaus plexippus Thereis proposedcriticalhabitatforthisspecies. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

BALD & GOLDEN EAGLES

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act [2] and the Migratory Bird Treaty Act (MBTA) [1]. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow

appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

1.The Bald and Golden Eagle Protection Act of 1940.

2.The Migratory Birds Treaty Act of 1918.

3.50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

There are Bald Eagles and/or Golden Eagles in your project area.

Measures for Proactively Minimizing Eagle Impacts
For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the National Bald Eagle Management Guidelines. You may employ the timing and activity-specific distance recommendations in this document when designing your project/ activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to Bald Eagle Nesting and Sensitivity to Human Activity.

The FWS does not currently have guidelines for avoiding and minimizing disturbance to nesting Golden Eagles. For site-specific recommendations regarding nesting Golden Eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

If disturbance or take of eagles cannot be avoided, an incidental take permit may be available to authorize any take that results from, but is not the purpose of, an otherwise lawful activity. For assistance making this determination for Bald Eagles, visit the Do I Need A Permit Tool. For assistance making this determination for golden eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

Ensure Your Eagle List is Accurate and Complete
If your project area is in a poorly surveyed area in IPaC, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the Supplemental Information on Migratory Birds and Eagles, to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to bald or golden eagles on your list, see the "Probability of Presence Summary" below to see when these bald or golden eagles are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle Haliaeetus leucocephalus Thisis not aBird of ConservationConcern(BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Dec 1 to Aug 31

NAME	BREEDING SEASON
Golden Eagle Aquila chrysaetos Thisis not aBird of ConservationConcern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence ()

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season ()

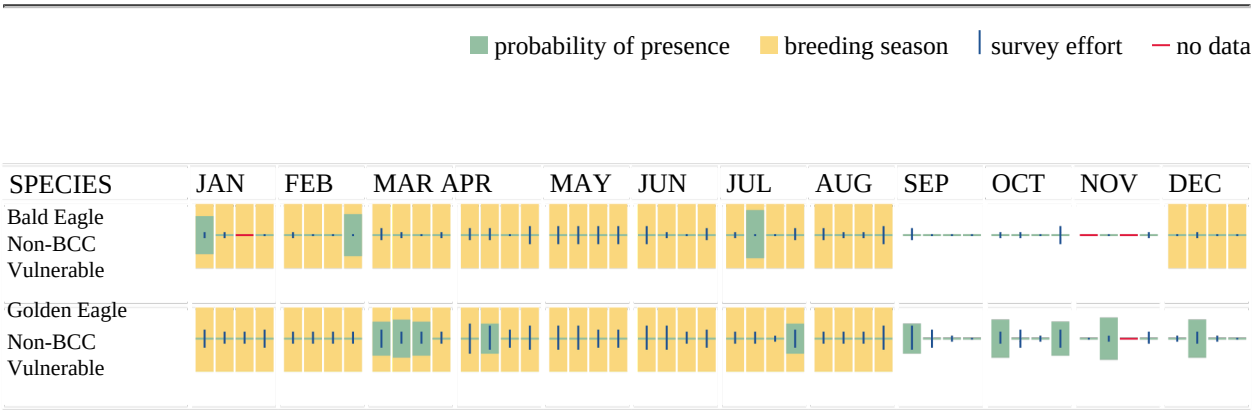
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort ()

Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data ()

A week is marked as having no data if there were no survey events for that week.



Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management

- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

MIGRATORY BIRDS

The Migratory Bird Treaty Act (MBTA)[1] prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service). The incidental take of migratory birds is the injury or death of birds that results from, but is not the purpose, of an activity. The Service interprets the MBTA to prohibit incidental take.

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1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
American White Pelican pelecanus erythrorhynchos Thisis a Bird ofConservationConcern(BCC)onlyinparticular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/6886	Breeds Apr 1 to Aug 31
Bald Eagle Haliaeetus leucocephalus Thisis not aBird of ConservationConcern(BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Dec 1 to Aug 31
California Gull Larus californicus This isaBirdofConservationConcern(BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10955	Breeds Mar 1 to Jul 31

NAME	BREEDING SEASON
Calliope Hummingbird Selasphorus calliope This isaBirdofConservationConcern(BCC)throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9526	Breeds May 1 to Aug 15
Cassin's Finch Haemorhous cassinii This isaBirdofConservationConcern(BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9462	Breeds May 15 to Jul 15
Evening Grosbeak Coccothraustes vespertinus This isaBirdofConservationConcern(BCC)throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9465	Breeds May 15 to Aug 10
Golden Eagle Aquila chrysaetos Thisis not aBird of ConservationConcern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31
Lewis's Woodpecker Melanerpes lewis This isaBirdofConservationConcern(BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9408	Breeds Apr 20 to Sep 30
Long-eared Owl asio otus This isaBirdofConservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3631	Breeds Mar 1 to Jul 15
Northern Harrier Circus hudsonius Thisis a Bird ofConservationConcern(BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8350	Breeds Apr 1 to Sep 15
Olive-sided Flycatcher Contopus cooperi This isaBirdofConservationConcern(BCC)throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3914	Breeds May 20 to Aug 31
Pinyon Jay Gymnorhinus cyanocephalus This isaBirdofConservationConcern(BCC)throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9420	Breeds Feb 15 to Jul 15
Rufous Hummingbird Selasphorus rufus This isaBirdofConservationConcern(BCC)throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8002	Breeds Apr 15 to Jul 15

NAME	BREEDING SEASON
Sage Thrasher Oreoscoptes montanus This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9433	Breeds Apr 15 to Aug 10

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence ()

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season ()

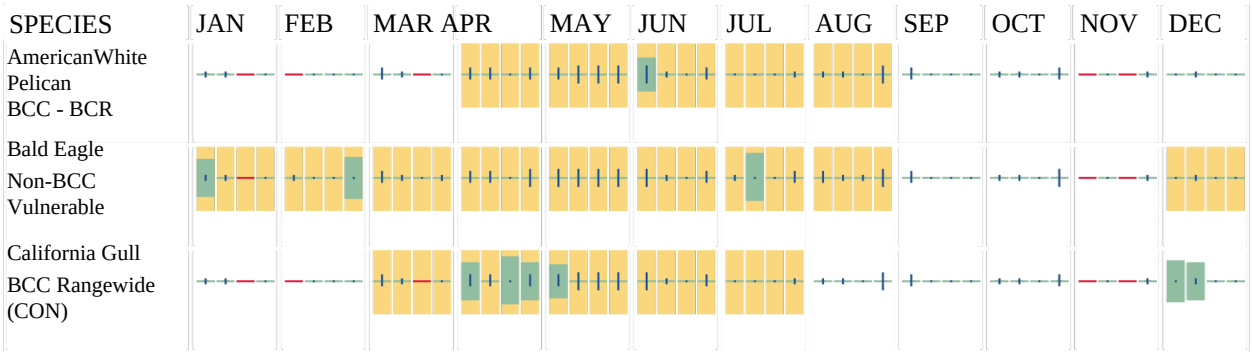
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

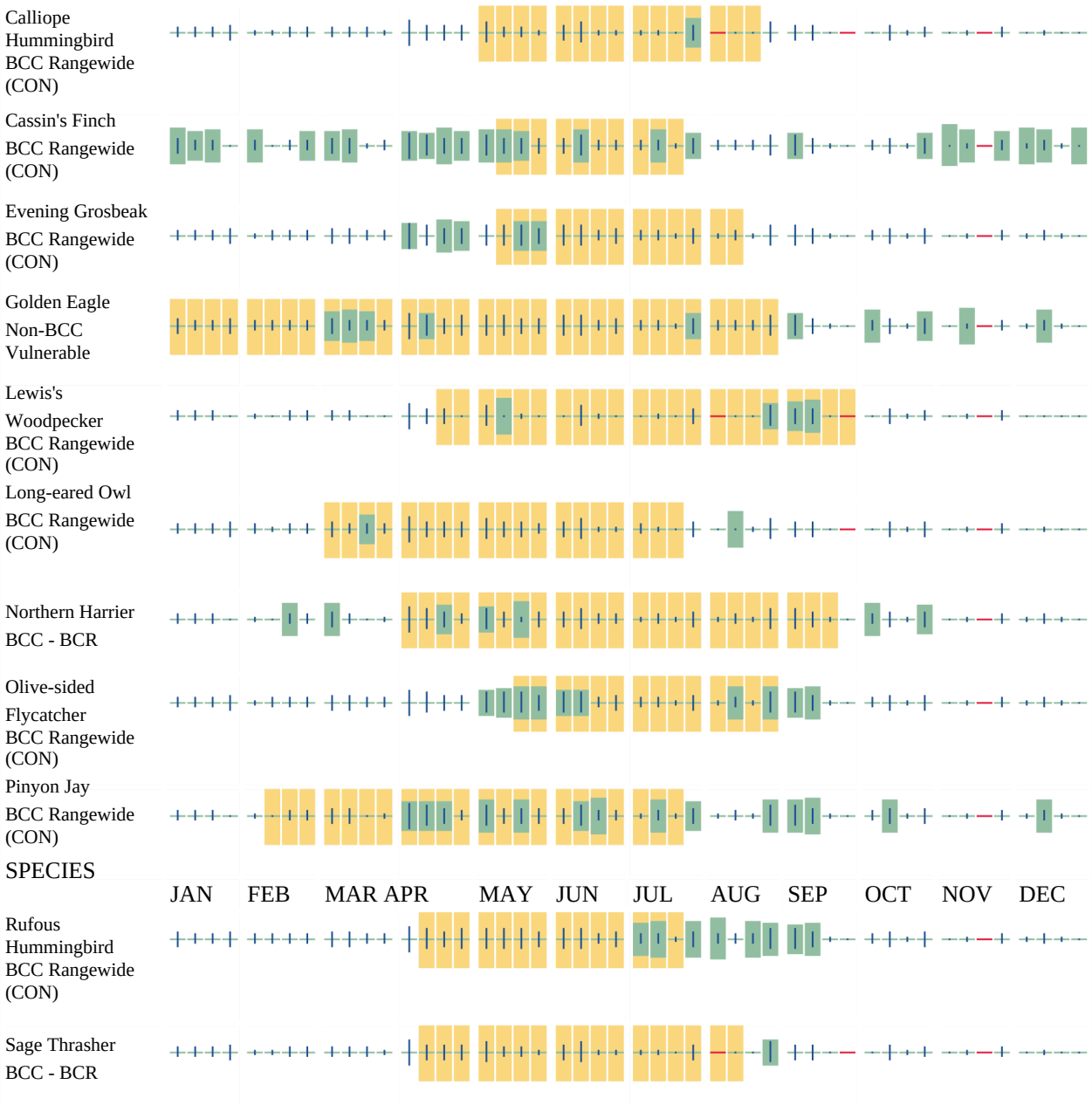
Survey Effort ()

Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data ()

A week is marked as having no data if there were no survey events for that week.





Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

WETLANDS

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

RIVERINE

- R4SBCx
- R4SBJ
- R4SBC

FRESHWATERPOND

- PUBHx

FRESHWATERFORESTED/SHRUB WETLAND

- PSS1Ax

IPAC USER CONTACT INFORMATION

Agency: JEFuller Hydrology&Geomorphology,Inc.
Name: Jean Marie Rieck
Address: 3111 N. Caden Court
Address Line 2: Suite 120
City: Flagstaff
State: AZ
Zip: 86004
Email jeanmarie@jefuller.com
Phone: 9282140887

APPENDIX B

Nevada Natural Heritage Program Response

NEVADA
DIVISION OF
NATURAL HERITAGE

STATE OF NEVADA
Department of Conservation & Natural Resources
Joe Lombardo, *Governor*
James A. Settelmeyer, *Director*
Jamey McClinton, *Administrator*

24 February 2025

Lindsay Marsh
Carson Water Subconservancy District
777 East William St., Suite 209
Carson City, NV 89701

RE: Data request received 20 February 2025

Dear Ms. Marsh:

Please find a shapefile set containing the recorded endangered, threatened, candidate, and At-Risk plant and animal elements (taxa) for the North Dayton BCA Scoping Project recorded (assumed to be extant, unless mentioned otherwise) within Nevada. This data set is packaged in GIS ArcGIS PRO Format (projected, UTM Zone 11, NAD 1983). The files contain a data set which represents the recorded element source feature occurrence records within Nevada and their associated attributes. Please refer to the Biotics Metadata (in the xml files included) for explanations and interpretations of each data set along with its respective attributes.

The file set with the "DS" in the file name contains Data Sensitive record occurrences with general locational data in the form of 10 km tessellation cells. This represents Data Sensitive occurrences, for which precise locations are considered sensitive. Precise data may be supplied upon request if sufficient need can be demonstrated, and confidentiality can be guaranteed.

The Nevada Department of Wildlife (NDOW) manages, protects, and restores Nevada's wildlife resources and associated habitat. Please contact NDOW at (775) 688-1500, or NDOWdata@ndow.org to obtain further information regarding wildlife resources within and near your area of interest. Removal or destruction of state protected flora species (NAC 527.010) requires a special permit from Nevada Division of Forestry (NRS 527.270).

Please note that your use of these data is contingent upon your acknowledgment of the enclosed DATA LIMITATIONS AND RESTRICTIONS (revised 20 August 2020).

Please be aware that we furnish data with the understanding that
these data are privileged and are not to be provided to a third party without our consent. Products derived from our data should cite the Nevada Division of Natural Heritage as a source, along with the month and year in which we provided the data.

Many of our documents, including species lists and keys to our symbols, can be found on our website https://heritage.nv.gov/ Please visit our website to learn more about our program and the sensitive species of Nevada.

Sincerely,

Eric S. Miskow
Aquatic Biologist/DataManager

APPENDIX C

Nevada Department of Wildlife Response

JOE LOMBARDO
Governor

STATE OF NEVADA
DEPARTMENT OF WILDLIFE
6980 Sierra Center Parkway, Suite 120
Reno, Nevada 89511
Phone (775) 688-1500 • Fax (775) 688-1595

ALAN JENNE
Director
JORDANGOSHERT
DeputyDirector
CALEBMCADOO
DeputyDirector
MIKE SCOTT
DeputyDirector

February 24, 2025

Lindsay Marsh Water Resource Specialist 1 Carson Water Subconservancy District 777 East William Street Suite 209 Carson City, Nevada 89701

Re: Grosh Culvert Project Standard Data Request

Dear Lindsay Marsh,

We are responding to your request for information from the Nevada Department of Wildlife (NDOW) on the known or potential occurrence of wildlife resources in the vicinity of the Grosh Culvert Project located in Lyon County. In order to fulfill your request, NDOW queried the best available data from NDOW's wildlife occurrences, raptor nest sites and ranges, greater sage-grouse leks and habitat, and big game distributions databases. These data should be considered sensitive and may contain information regarding the location of sensitive wildlife species or resources. All appropriate measures should be taken to ensure that the use of this data is strictly limited to serve the needs of the project described on your GIS Data Request Form. Abuse of this information has the potential to adversely affect the existing ecological status of Nevada's wildlife resources and could be cause for the denial of future data requests.

Wildlife resource data were queried from NDOW databases based on an area of interested which included either a four-mile buffer or a ten-mile buffer (as specified below) around the project area you provided on February 20, 2025. The results of this analysis are summarized below. Please note that the absence of recorded or observed wildlife resource data should not be interpreted to mean the wildlife resource is does not occur within the area of interest.

Big Game – Occupied mule deer distribution exists within the project area and surrounding 4-mile buffer area. No known occupied elk, pronghorn antelope, or bighorn sheep distributions exist within the project area or surrounding 4-mile buffer area. Please refer to the attached maps for details regarding big game distributions relative to the proposed project area.

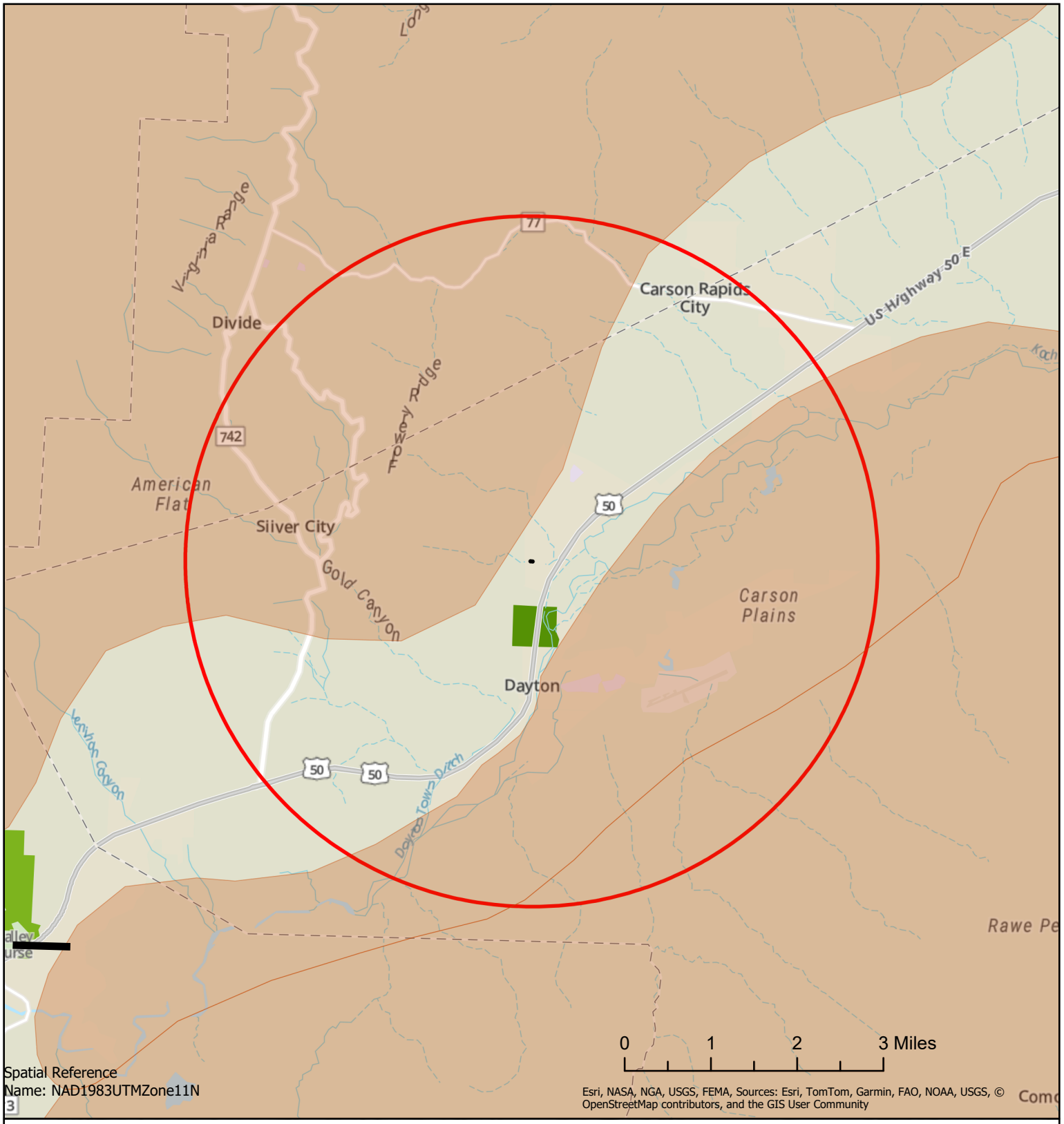
Greater Sage-Grouse – There is no known greater sage-grouse habitat within the project area or surrounding 4-mile buffer as classified by the Nevada Sagebrush Ecosystem Program (https://sagebrusheco.nv.gov/). There are no recorded tracking locations generated by radio-marked birds within the project area or surrounding 4-mile buffer. There are no recorded sage-grouse leks within the project area or surrounding 4-mile buffer.

Raptors – Various species of raptors, which use diverse habitat types, may reside in the vicinity of the project area. American kestrel, Cooper's hawk, Swainson's hawk, bald eagle, barn owl, burrowing owl, ferruginous hawk, flammulated owl, golden eagle, great horned owl, long-eared

owl, merlin, northern goshawk, northern harrier, northern saw whet owl, osprey, peregrine falcon, red-tailed hawk, rough-legged hawk, sharp-shinned hawk, short-eared owl, turkey vulture, and western screech owl have distribution ranges that include the project area and/or surrounding 10-mile buffer. There are no recorded raptor sightings within the project area. Raptor species are protected by State and Federal laws. In addition, bald eagle, burrowing owl, California spotted owl, ferruginous hawk, flammulated owl, golden eagle, northern goshawk, peregrine falcon, prairie falcon, and short-eared owl are NDOW species of special concern and are target species for conservation as outlined by the Nevada Wildlife Action Plan. Per the *Interim Golden Eagle Technical Guidance: Inventory and Monitoring Protocols; and Other Recommendations in Support of Golden Eagle Management and Permit Issuance* (United States Fish and Wildlife Service 2010). We have queried our raptor nest database to include raptor nest sites within ten miles of the proposed project area. There are 16 known raptor nests within the project area and/or surrounding 10-mile buffer. Information regarding each of these nests is provided within the raptor nest table. This table displays the type of nest observed (Nest Type), species/genus/family which constructed the nest based on professional judgement (Probable Origin), species which have been observed in the nest (Occupied Species), the location of the nest (Township, Range, and Section), the date of the most recent survey (Last Visit), and the status during the most recent survey (Status).

Type	Probable Origin	Occupied Species	Township, Range, and Section	Last Visit	Status
stick nest	owl buteo	barn owl red-	21 0150N 0210E 004	2011	Occupied
stick nest	eagle	tailed hawk golden eagle	21 0150N 0210E 004	2011	Occupied
stick nest	eagle	golden eagle	21 0150N 0210E 018	2011	Occupied
stick nest	eagle	golden eagle	21 0160N 0210E 003	2011	Occupied
stick nest	eagle	golden eagle	21 0170N 0210E 030	2011	Occupied
stick nest	unknown	raptor	21 0180N 0220E 033	2011	Occupied
None	accipiter/buteo	(unknown) None	21 0170N 0220E 026	2011	Occupied
stick nest	eagle	golden eagle	21 0170N 0210E 027	1980	Unoccupied
stick nest	accipiter/buteo	Coopers	21 0170N 0220E 026	1977	Occupied
stick nest	falcon	hawk prairie falcon	21 0170N 0210E 027	1976	Occupied
scrape	buteo	Swainsons	21 0170N 0210E 027	1976	Occupied
stick nest	eagle	hawk None	21 0160N 0210E 012	1975	Occupied
stick nest	eagle	golden eagle	21 0160N 0210E 026	1975	Unoccupied
stick nest	eagle	None	21 0170N 0230E 031	1975	Unoccupied
stick nest	eagle	None	21 0170N 0230E 032	1975	Unoccupied
stick nest			21 0150N 0210E 004	1974	Unoccupied

Other Wildlife Resources – No recorded water developments are present within the project area. No known Lahontan cutthroat trout (LCT) wastershed(s) are present within the project area. The proposed project area may also be in the vicinity of abandoned mine workings, which often provide habitat for state and federally protected wildlife, especially bat species, many of which are protected under NAC 503.030. To request data regarding known abandoned mine workings in the vicinity of the project area please contact the Nevada Division of Minerals (http://minerals.state.nv.us/). The information provided is based on data stored at our Reno Headquarters Office and does not necessarily incorporate the most up to date wildlife resource information collected in the field. Please contact the Habitat Division Supervising Biologist at our regional offices to discuss the current environmental conditions for your project area and the interpretation of our analysis. Furthermore, it should be noted that the information detailed above is preliminary in nature and not necessarily an identification of every wildlife resource concern associated with the proposed project. Consultation with the Supervising Habitat biologist will facilitate the development of appropriate survey protocols and avoidance or mitigation measures that may be required to address potential impacts to wildlife resources. Federally listed Threatened and Endangered species are under the jurisdiction of the United States Fish and Wildlife Service. Please contact them for more information regarding these species. If you have any questions regarding the results or methodology of this analysis, please do not hesitate to contact us as (775) 688-1500 or via email at NDOWdata@ndow.org.



Legend

- Mule Deer Distribution
- Project Area4-mile Buffer
- Project Area

Mule Deer Distribution near the Grosh Culvert Project

February 24, 2025

NEVADA DEPARTMENT OF WILDLIFE

No warranty is made bythe Nevada Departmentof Wildlife as totheaccuracy, reliability, or completeness ofthe data for individual use or aggregate use withother data.

JOE LOMBARDO
Governor

STATE OF NEVADA
DEPARTMENT OF WILDLIFE
6980 Sierra Center Parkway, Suite 120
Reno, Nevada 89511
Phone (775) 688-1500 • Fax (775) 688-1595

ALAN JENNE
Director
JORDANGOSHERT
DeputyDirector
CALEBMCADOO
DeputyDirector
MIKE SCOTT
DeputyDirector

February 24, 2025

Lindsay Marsh Water Resource Specialist 1 Carson Water Subconservancy District 777 East William Street Suite 209 Carson City, Nevada 89701

Re: Rosepeak Culvert Project Standard Data Request

Dear Lindsay Marsh,

We are responding to your request for information from the Nevada Department of Wildlife (NDOW) on the known or potential occurrence of wildlife resources in the vicinity of the Rosepeak Culvert Project located in Lyon County. In order to fulfill your request, NDOW queried the best available data from NDOW's wildlife occurrences, raptor nest sites and ranges, greater sage-grouse leks and habitat, and big game distributions databases. These data should be considered sensitive and may contain information regarding the location of sensitive wildlife species or resources. All appropriate measures should be taken to ensure that the use of this data is strictly limited to serve the needs of the project described on your GIS Data Request Form. Abuse of this information has the potential to adversely affect the existing ecological status of Nevada's wildlife resources and could be cause for the denial of future data requests.

Wildlife resource data were queried from NDOW databases based on an area of interested which included either a four-mile buffer or a ten-mile buffer (as specified below) around the project area you provided on February 20, 2025. The results of this analysis are summarized below. Please note that the absence of recorded or observed wildlife resource data should not be interpreted to mean the wildlife resource is does not occur within the area of interest.

Big Game – Occupied mule deer distribution exists within the project area and surrounding 4-mile buffer area. No known occupied elk, pronghorn antelope, or bighorn sheep distributions exist within the project area or surrounding 4-mile buffer area. Please refer to the attached maps for details regarding big game distributions relative to the proposed project area.

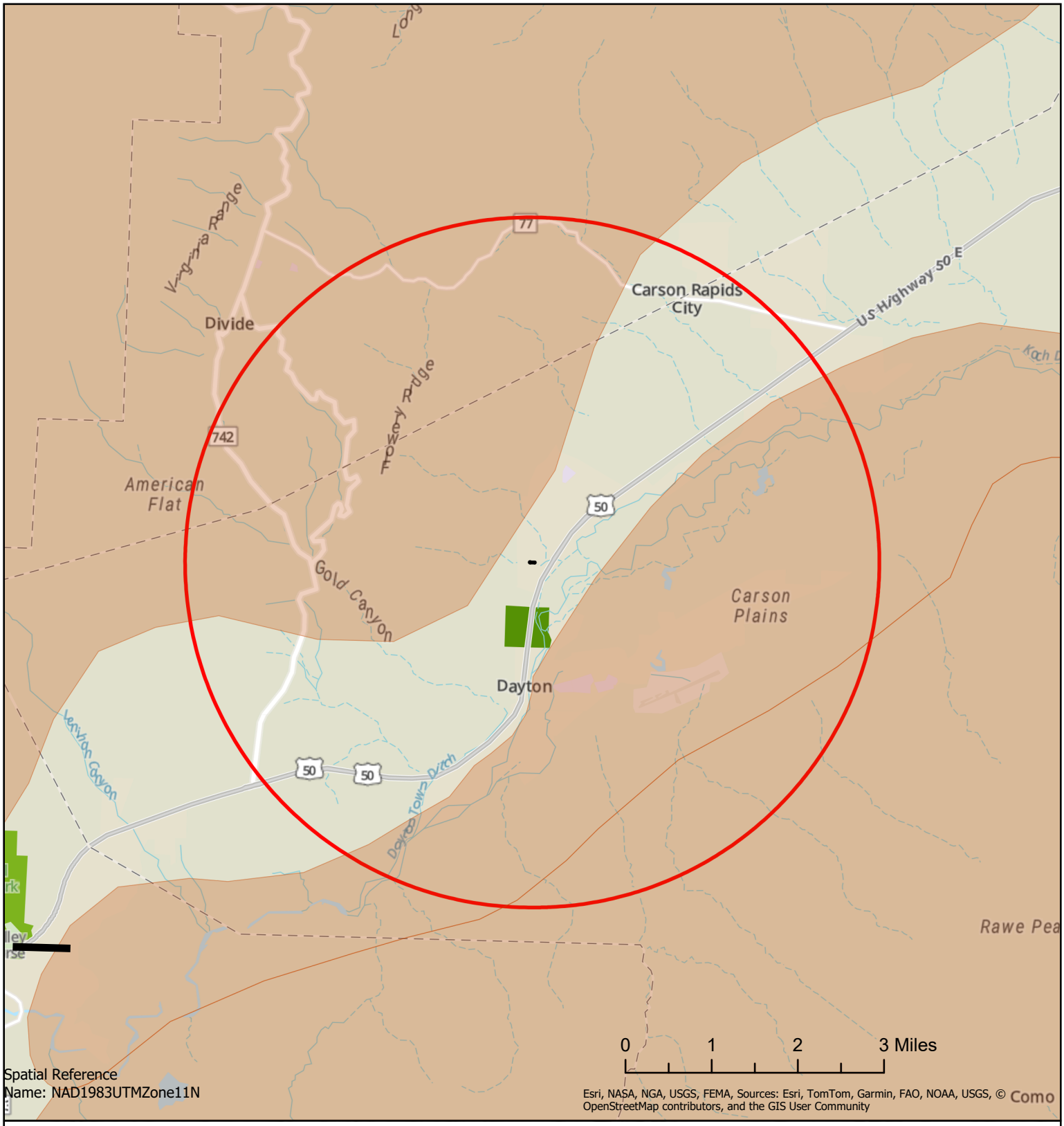
Greater Sage-Grouse – There is no known greater sage-grouse habitat within the project area or surrounding 4-mile buffer as classified by the Nevada Sagebrush Ecosystem Program (https://sagebrusheco.nv.gov/). There are no recorded tracking locations generated by radio-marked birds within the project area or surrounding 4-mile buffer. There are no recorded sage-grouse leks within the project area or surrounding 4-mile buffer.

Raptors – Various species of raptors, which use diverse habitat types, may reside in the vicinity of the project area. American kestrel, Cooper's hawk, Swainson's hawk, bald eagle, barn owl, burrowing owl, ferruginous hawk, flammulated owl, golden eagle, great horned owl, long-eared

owl, merlin, northern goshawk, northern harrier, northern saw whet owl, osprey, peregrine falcon, red-tailed hawk, rough-legged hawk, sharp-shinned hawk, short-eared owl, turkey vulture, and western screech owl have distribution ranges that include the project area and/or surrounding 10-mile buffer. There are no recorded raptor sightings within the project area. Raptor species are protected by State and Federal laws. In addition, bald eagle, burrowing owl, California spotted owl, ferruginous hawk, flammulated owl, golden eagle, northern goshawk, peregrine falcon, prairie falcon, and short-eared owl are NDOW species of special concern and are target species for conservation as outlined by the Nevada Wildlife Action Plan. Per the *Interim Golden Eagle Technical Guidance: Inventory and Monitoring Protocols; and Other Recommendations in Support of Golden Eagle Management and Permit Issuance* (United States Fish and Wildlife Service 2010). We have queried our raptor nest database to include raptor nest sites within ten miles of the proposed project area. There are 16 known raptor nests within the project area and/or surrounding 10-mile buffer. Information regarding each of these nests is provided within the raptor nest table. This table displays the type of nest observed (Nest Type), species/genus/family which constructed the nest based on professional judgement (Probable Origin), species which have been observed in the nest (Occupied Species), the location of the nest (Township, Range, and Section), the date of the most recent survey (Last Visit), and the status during the most recent survey (Status).

Type	Probable Origin	Occupied Species	Township, Range, and Section	Last Visit	Status
stick nest	owl buteo	barn owl red-	21 0150N 0210E 004	2011	Occupied
stick nest	eagle	tailed hawk golden eagle	21 0150N 0210E 004	2011	Occupied
stick nest	eagle	golden eagle	21 0150N 0210E 018	2011	Occupied
stick nest	eagle	golden eagle	21 0160N 0210E 003	2011	Occupied
stick nest	eagle	golden eagle	21 0170N 0210E 030	2011	Occupied
stick nest	unknown	raptor	21 0180N 0220E 033	2011	Occupied
None	accipiter/buteo	(unknown) None	21 0170N 0220E 026	2011	Occupied
stick nest	eagle	golden eagle	21 0170N 0210E 027	1980	Unoccupied
stick nest	accipiter/buteo	Coopers	21 0170N 0220E 026	1977	Occupied
stick nest	falcon	hawk prairie falcon	21 0170N 0210E 027	1976	Occupied
scrape	buteo	Swainsons	21 0170N 0210E 027	1976	Occupied
stick nest	eagle	hawk None	21 0160N 0210E 012	1975	Occupied
stick nest	eagle	golden eagle	21 0160N 0210E 026	1975	Unoccupied
stick nest	eagle	None	21 0170N 0230E 031	1975	Unoccupied
stick nest	eagle	None	21 0170N 0230E 032	1975	Unoccupied
stick nest			21 0150N 0210E 004	1974	Unoccupied

Other Wildlife Resources – No recorded water developments are present within the project area. No known Lahontan cutthroat trout (LCT) wastershed(s) are present within the project area. The proposed project area may also be in the vicinity of abandoned mine workings, which often provide habitat for state and federally protected wildlife, especially bat species, many of which are protected under NAC 503.030. To request data regarding known abandoned mine workings in the vicinity of the project area please contact the Nevada Division of Minerals (http://minerals.state.nv.us/). The information provided is based on data stored at our Reno Headquarters Office and does not necessarily incorporate the most up to date wildlife resource information collected in the field. Please contact the Habitat Division Supervising Biologist at our regional offices to discuss the current environmental conditions for your project area and the interpretation of our analysis. Furthermore, it should be noted that the information detailed above is preliminary in nature and not necessarily an identification of every wildlife resource concern associated with the proposed project. Consultation with the Supervising Habitat biologist will facilitate the development of appropriate survey protocols and avoidance or mitigation measures that may be required to address potential impacts to wildlife resources. Federally listed Threatened and Endangered species are under the jurisdiction of the United States Fish and Wildlife Service. Please contact them for more information regarding these species. If you have any questions regarding the results or methodology of this analysis, please do not hesitate to contact us as (775) 688-1500 or via email at NDOWdata@ndow.org.



Legend

- Mule Deer Distribution
- Project Area4-mile Buffer
- Project Area

Mule Deer Distribution near the Rosepeak Culvert Project

February 24, 2025

No warranty is made bythe Nevada Departmentof Wildlife as totheaccuracy, reliability, or completeness ofthe data for individual use or aggregate use withother data.

APPENDIX D

Nevada Department of Agriculture Nevada Noxious Weed List

NEVADA NOXIOUS WEED LIST BY CATEGORY

Category A Weeds:
(NAC 555.010)
CategoryA noxious weeds are weeds that are generally not found or that are limited in distribution throughout the State.

African rue	(*Peganum harmala*)
Austrian fieldcress	(*Rorippa austriaca*)
Swainsonpea	(*Sphaerophysa salsula*)
Black henbane	(*Hyoscyamus niger*)
Camelthorn	(*Alhagi maurorum*)
Common crupina	(*Crupina vulgaris*)
Dalmatian toadflax	(*Linaria dalmatica*)
Dyer's woad	(*Isatis tinctoria*)
Eurasian water-milfoil	(*Myriophyllum spicatum*)
Giant reed	(*Arundo donax*)
Giant salvinia	(*Salvinia molesta*)
Goatsrue	(*Galega officinalis*)
Crimson fountain grass	(*Pennisetum setaceum*)
Houndstongue	(*Cynoglossum officinale*)
Hydrilla	(*Hydrilla verticillata*)
Iberian starthistle	(*Centaurea iberica*)
Common St. Johnswort	(*Hypericum perforatum*)
Malta starthistle	(*Centaurea melitensis*)
Mayweed chamomile	(*Anthemis cotula*)
Mediterranean sage	(*Salvia aethiopis*)
Purple loosestrife	(*Lythrum salicaria, L. virgatum* & cultivars)
Purple starthistle	(*Centaurea calcitrapa*)
Rush skeletonweed	(*Chondrilla juncea*)
Sow thistle	(*Sonchus arvensis*)
Spotted knapweed	(*Centaurea maculosa*)
Squarrose knapweed	(*Centaurea virgata*)
Sulfur cinquefoil	(*Potentilla recta*)
Syrian bean caper	(*Zygophyllum fabago*)
Yellow starthistle	(*Centaurea solstitialis*)
Yellow toadflax	(*Linaria vulgaris*)

Category B Weeds:
CategoryBlisted noxious weeds are weeds that are generally established in scattered populations in some counties of the State.

Horsenettle	(*Solanum carolinense*)
Diffuse knapweed	(*Centaurea diffusa*)
Leafy spurge	(*Euphorbia esula*)

Appendix F Benefit Cost Analysis Report

North Dayton Benefit Cost Analysis (BCA) Scoping Project

Grosh and Rose Peak Culvert Improvement Project Benefit Cost Analysis

Technical Report

October 2025

Acknowledgements:

This document was completed in preparation for the North Dayton Scoping Project report. It was outlined and prepared using resources from JE Fuller that were provided in previous projects done in association with CWSD.

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1.0 Introduction

Carson water Subconservancy district (CWSD), in 2019 hired JE fuller and Lumos and Associates to perform an Area Drainage Master Plan (DVADMP) for the area of North Dayton Valley. In this ADMP several projects were suggested to decrease the amount of flood damage caused by alluvial fan drainages. Once the ADMP was complete it became apparent that there was a need for an analysis to determine what projects could be eligible for FEMA funding.

For a construction project to be considered eligible for federal funding the design must receive a benefit cost analysis BCA greater than one. The project referenced in this report, the North Dayton Valley Scoping Project, was created to rank and determine the most beneficial project from the ADMP with the input of county stakeholders.
The contractor chosen for this project provided a matrix that included stakeholder values, environmental considerations, estimated cost, and other considerations. It was determined from the matrix and after deliberation with county staff that the Grosh and Rose Peak culvert improvements were the likeliest project via rank to perform well under a BCA.

This report included as a product of the overall project will review the BCA determination process and results.

1.1 Project Purpose

The Grosh Avenue and Rose Peak culvert improvement project intends to reduce the amount of stormwater flow that will affect private property owners in Dayton, Nevada. The proposed culvert enhancements would more adequately convey water discharge from the ephemeral stream to the point of outlet thus reducing the amount of flood related damage to the residents of Lyon County.

1.2 Project Location

The culvert improvements recommended run perpendicular to Grosh Avenue and Rose Peak Road.

Figure 1.Purple hatched project area running through the neighborhood of Grosh Avenue and Rose Peak Road.

The located in Section 14, Township 16, North, Range 21 East, Mount Diablo Base and Meridian. The project area consists of approximately 1 acre of private land. The area can be viewed on the Dayton United States Geological Survey (USGS) 7.5-minute quadrangle and accessed from Highway 50 by turning west on to Flowery Avenue in Dayton, Nevada.

2. Benefit Cost Methodology and Analysis

2.1 Method Description

This BCA used procedures outlined in the latest Federal Emergency Management Agency (FEMA) BCA Toolkit and the FEMA HAZUS Flood Technical Manual. The Toolkit was used primarily to verify assumptions and other criteria, but since it is a Microsoft Excel Add-in and structure losses are calculated individually, a separate spreadsheet and GIS analyses were used to calculate structure losses more efficiently. The standard benefits outlined in the Toolkit are the reduction in these categories:

• Building Damages – the amount of damage expected at a building due to flooding based on a depth damage curve and the building replacement value. These damages were calculated in a separate spreadsheet to consolidate the analyses.

•Building Replacement Costs – Cost to replace infrastructure in the event of totalizing damage occurred. This analysis assumed that at 50% damage on the DFF curve the building would be totaled and needing to be replaced.

• Damages to Contents of Buildings – damages to the contents (e.g., furniture and appliances) of the building. This analysis assumed the standard 50% of the building replacement value for this analysis.

• Displacement Costs – the costs associated with residents being displaced from their homes during the repair/reconstruction of their home and loss of income due to the inability to operate a business due to damage from a flood. In this analysis, these losses were calculated using the assumption that if the building experience flooding greater than half a foot then the residents would be displaced for a minimum of 6 months.

• Volunteer Costs – the costs associated with volunteers aiding in cleanup up debris and other effects of the flood, not calculated as a part of this analysis.

• Ecosystem Services – the benefits associated with changing or enhancing the current land use to another type with a higher level of natural benefits, not calculated as a part of this analysis since the land use is not substantially changing. These standard benefits are then compared with project costs over the project's useful life to develop a benefit cost ratio (BCR).

The details of the benefit calculations, project costs, and other assumptions applied in this analysis are described in the subsequent sections. Since the costs associated with the construction and ongoing maintenance of the culvert improvement project are straightforward, those costs will be discussed first.

2.2 Project Costs

The costs associated with the Grosh and Rose Peak culvert improvement project were calculated by engineers at Lumos and Associates in conjunction with dialogue on maintenance with Lyon County staff. The two main categories of costs are the initial construction and design costs, and the annual operations and maintenance (O&M) costs.

2.2.1 Initial Costs

The initial costs reported for the improvements of this channel and culvert are estimated to be $884,163.00. This cost includes 10% contingency as well as a portion of funds dedicated to non-construction overhead. The calculations for this design can be viewed in Appendix A.

However, a secondary option for design was discussed between CWSD, Lyon County, and Lumos. This option included the removal of the riprap lining from the overall design. To incorporate the benefit to using a reduced cost without updated design, CWSD staff subtracted the cost of riprap from the calculation and increased the contingency to 20%. This secondary option is estimated to be $731,124.00.

2.2.2 Operations and Maintenance

Expected Operation and Maintenance cost were estimated using 2025 pricing. To ensure the functionality these improvements, including the clearing, flushing, and patching concrete, overall annual maintenance cost is expected to be $3,200.00.

Table 1. Annual operation and maintenance costs for the culvert improvements.

Annual Operations and Maintenance Costs		
Expense Type	Maintenance/Riprap Repairs	Total
Grosh Culvert	$ 3,200.00	$3,200.00

2.2.3 Useful Life and Net Present Value

The project costs (i.e., both initial and ongoing O&M costs) need to be distributed into a single number to obtain a useful comparison to the estimated benefits. This is done by converting the annual O&M costs over the project's useful life to a net present value (NPV) and adding to the project's initial cost. A useful life of 50 years was selected per guidance in the FEMA BCA Toolkit. The NPV was calculated using the 7.0% discount rate as recommended in the Toolkit. The final NPV calculated for the Grosh and Rose Peak Culvert improvement over its useful life is shown in Table 2. The NPV will be compared with the potential benefits over the same 50 years to calculate the benefit cost ratio for the project.

Table 2. Life cycle costs for both proposed project variations.

Life Cycle Costs		
Total Project Cost	O&M	NPV
$ 884,163.00	**$ 44,162.00**	**$ 928,325**

Life Cycle Costs		
Total Project Cost	O&M	NPV
$ 731,124.00	**$ 44,162.00**	**$ 775,286**

2.3 Project Benefits

2.3.1Reduction in Structure Losses

For the building replacement values (BRV) used in the benefit/cost calculations in the BCA Toolkit, the standard methodology estimates this value by multiplying the square footage of the structure by the value per square foot. Additionally, a BRV distributional weight multiplier (based on the relevant census tract median income) is applied to the BRV to obtain the final BRV used in the analysis. This BRV multiplier has been added to the Toolkit to address equity concerns in the FEMA Hazard Mitigation Assistance grant program.

Since most of the Dayton area was within a census tract that was "considered disadvantaged because it meets more than 1 burden threshold AND the associated socioeconomic threshold," a BRV multiplier of 1.3 was used. However, the federal government's Climate and Economic Justice Online Screening Tool has been removed from official government channels and so it is difficult to determine if the area still meets this threshold and should be re-evaluated in the future.

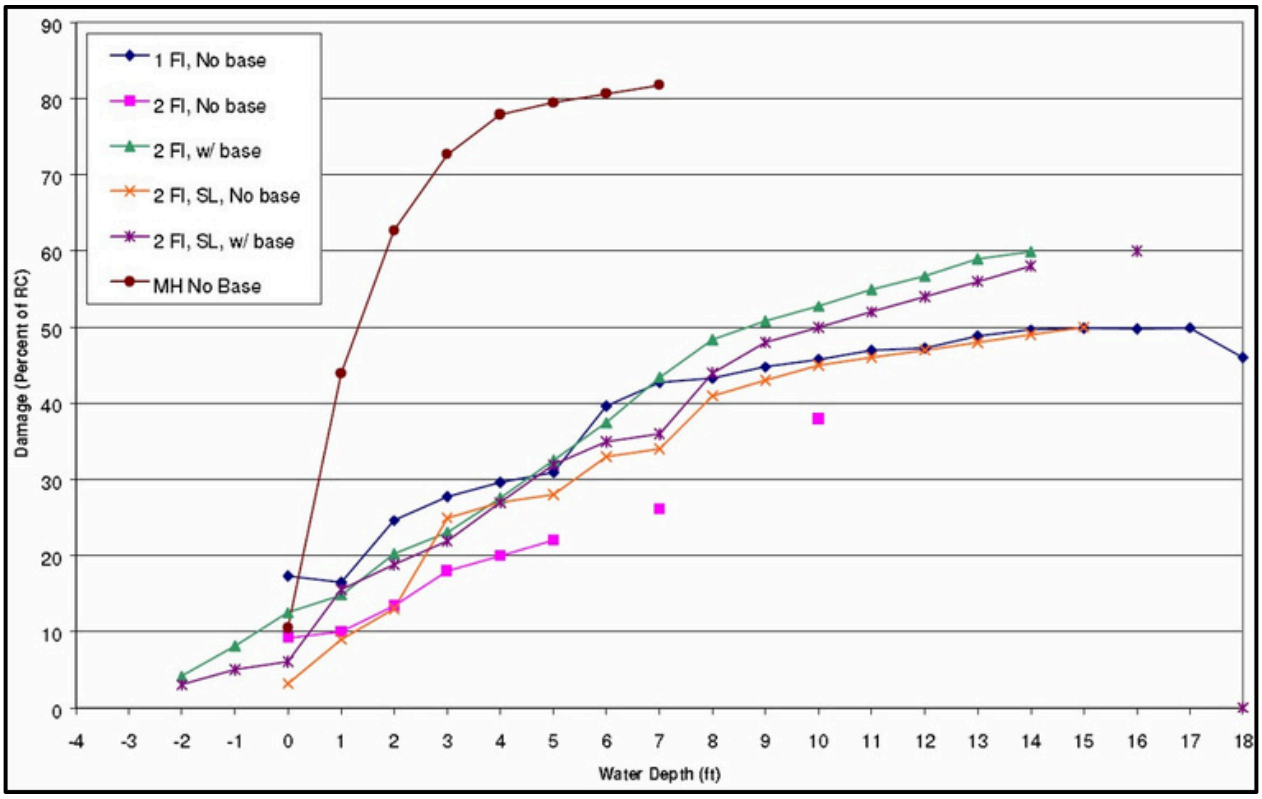
For this analysis, more accurate site-specific data on the BRV for the main structure on each parcel is reported on the Lyon County Assessor's website and was used in the analysis rather than the general assumption referenced in the Toolkit. The website also reports the current building value after depreciation, but the full BRV (without depreciation) was used in this analysis to remain consistent with the Toolkit.

The standard approach for estimating the content value for each structure is to assume that it is equal to 50% of the BRV, and this assumption was used in this analysis.

Thus, the total BRV used in building loss calculations is derived from the sum of each structure's BRV, the value of each structure's content value, the depreciated value of extra features on the parcel (see Section 2.3.3.1), and, if depths impacting the structure were greater than 1-ft, the full replacement cost of wells, solar panels, or septic systems (see Section 2.3.3.2).

The damage to each structure has been calculated by using the default FIA Curves (see Figure 2-1) for manufactured housing (curve MH No Base) and one-story residences (1Fl, No base) to estimate the percent damaged (of the structure) based on the DVADMP FLO 2D model depth that impacts the main structure and multiplying that percent damaged by the total BRV. Note that the default "1Fl, No base" curve shows a percent damaged of 18% at a depth of 0-ft and 16% damaged at a depth of 1-ft. For this analysis, the percentage damaged at 0-ft was set to 0 to avoid the potential calculation of decreased depth causing more damage.

Figure 2. DDF curve graph displaying damage curves for different residential structures.



2.3.2 Reduction in Displacement Costs

Displacement costs were calculated by the using the information in the "Benefit-Cost Analysis Sustainment and Enhancements - Draft Standard Economic Value Methodology Report" (FEMA 2022). Calculations were completed for both existing and with project conditions. The difference in costs between the two conditions is the benefit associated with the project. It was assumed that displacement would happen when the building was inundated by greater than or equal to 6 inches. This displacement period would last 6 months from the time of flood event.

Figure 3. Displacement cost formula outlined in the FEMA 2022 methodology report.

$$Displacement\ Cost = (Disruption\ Cost\ x\ ft^2) + (Rental\ Cost\ x\ ft^2 x\ Displacement\ Time\ in\ Months) \quad (2)$$

default displacement time in the BCA Toolkit is based on the combination of physical restoration
e and recovery time estimates for structures affected by flooding.

le 3: Rental Costs and Disruption Costs by Occupancy Class[1]

	Label	Occupancy Class	Rental Cost ($/sq.ft./mo.)	Disruption Costs ($/sq.ft.)
	RES1	Single Family Dwelling (Residential)	0.68	0.82
	RES2	Mobile Home (Residential)	0.48	0.82

2.3.3 Other Beneficial Reductions

2.3.3.1 Other Features

There are other potential benefits from the project that are not included in the standard calculations. For example, the assessor's website gives information about other improvements made to the parcel outside of the main structure. Some examples of these extra features include detached garages, bunkhouses, or fences. To be slightly conservative, the depreciated value (rather than the full replacement cost) of these features was added to the BRV. These depreciated extra features were estimated to be less than 10% of the total replacement cost for the area.

Figure 4. Example from the Lyon County Assessors website on extra building features.

Extra Features

Code	Description	Length	Width	Units	Unit Price	AYB	Repl Cost	% Good Condition	Dpr Value*	Final Value
HU RP	HOOKUP IN ROSE PEAK WATER ELEC SEPTIC GAS 1/25			1.00	$13,869.00	1971	$13,869	25%	$3,467	$3,467
AWN AL	ALUMINUM TYPE AWNING, DIRT FLOOR 1/25			400.00	$11.64	1977	$4,656	27%	$1,234	$1,234
GAR HB2	DETACHED GARAGE HARDBOARD 1/25	20	30	600.00	$38.84	1977	$23,305	27%	$6,176	$6,176
DECK2	DECK 1=SOFT 2=REDWOOD 3=TREX 1/25			328.00	$23.59	1991	$7,738	48%	$3,675	$3,675
FNC L	FENCE "LOW" 100' 1/25			1.00	$4,151.00	1998	$4,151	58%	$2,408	$2,408

2.3.3.2 Well, Septic, and Solar Panels

Similarly, the assessor provides information on drinking well systems, septic systems, and solar panels. These types of features were included in the calculations separately from the main building damage and content losses. These features were assumed to be fully damaged and replaced at the full replacement value (from the assessor's information) for

structures impacted by depths greater than 1 foot. If depths were less than 1 foot, these structures were assumed to have no damage. This procedure allowed for these potential benefits to be included but was implemented with a conservative assumption to avoid distorting the benefit calculations.

These losses did not have a significant effect on the calculations.

2.3.3.3 Existing O&M Costs

Since the project costs include an annual O&M cost, CWSD reached out to Lyon County Public Works to assess their current maintenance on the project area. It was confirmed that as such, in the past 10 years, the area has only undergone maintenance twice due to wet years (2017 and 2023) that brought down debris over the road top. To get annualized maintenance cost the total cost of both events were summed up and then formulated to account for the 10, 25, 50, 100, 500-year storms. The estimated annualized O&M costs in the existing conditions are shown in Table 3.

Table 3. Annual O&M costs for current conditions of the Grosh and Rose Peak Culvert.

Annual Operations and Maintenance Costs		
Expense Type	Debris Removal/Disposal	Total
Existing Conditions	$ 2,400.00	$ 2,400.00

The difference between the project and existing O&M costs would be the estimated benefit. However, all existing maintenance costs would not be eliminated and are greater than existing. An effectiveness ratio of 0.6 was used for this analysis. The estimated O&M costs prove to be at a deficit and are shown in Table 4.

Table4. O&M costs for the culvert pre- and post-project.

Project O&M	Existing O&M	Unadjusted Benefit	Final Benefit
$ 3,200.00	$ 2,400.00	$ - (800.00)	$ - (480.00)

2.4 Total Losses, Annualized Estimates, and Net Present Value

2.4.1 Total Losses and Annualized Estimates

Structure, displacement, and replacement losses were calculated for five different storm recurrence intervals to obtain average annual loss estimates. The five recurrence intervals were the 10-, 25-, 50-, 100-, and 500-year storm events. As mentioned previously, the FLO-

2D model depths from these recurrence intervals were intersected with the building footprints, the percent damaged obtained from FIA damage curves based on thesedepths, the percent damaged multiplied by the total BRV to obtain an estimate of structurelosses for each storm event. Similarly, the displacement calculations were done to obtain estimates of displacement losses. These two analyses were run for both existing andpost-project conditions, and the difference between the two is the benefit from the project.

Table 5. Summary of both the loss and benefit estimates by storm event and average annual value.

	10 -Year Storm	25 -Year Storm	50 -Year Storm	100 -Year Storm	500-year Storm	Annual
StructureLosses (Existing)	$941,414	$1,291,987	$1,361,447	$1,495,666	$2,040,794	$126,049
StructureLosses (Post-Project)	$879,529	$962,802	$1,074,011	$1,043,099	$1,857,266	$101,540
StructureLoss Benefit	$61,886	$329,185	$287,436	$452,567	$183,527	$24,510
Displacement (Existing)	-	$22,211.10	$36,863.10	$31,801.50	$66,156.10	$2,125
Displacement (Post-Project)	-	$9,571.90	$4,243.90	$9,571.90	$60,828.10	$898
Displacement Benefit	-	$12,639.20	$32,619.20	$22,229.60	$5,328.00	$1,227
Replacement (Existing)			$220,067.00	$220,067.00	$934,377.05	$10,888
Replacement (Post-Project)	-	-	-	-	$934,377.05	$5,606
Replacement Benefit	-	-	$220,067.00	$220,067.00	-	$5,282
Total Benefit	$61,886	$341,824	$540,123	$694,864	$188,855	$31,018

2.4.2 Net Present Value (NPV)

The total benefits (i.e., reduction in losses from Table 5 and maintenance costs from Table 4) were converted to a single NPV using the useful structure life of 50 years and the recommended discount rate of 7%. The final NPV for the benefits is shown in Table 6. This value is compared to the project NPV to obtain the benefit cost ratio (BCR).

Table 6. Annual benefits of the project and the corresponding net present value.

Annual Benefits	NPV
$ 30,538	$ 421,447

3. Summary and Results

3.1 Summary

A benefit cost analysis was performed on the Grosh and Rose Peak Culvert Improvement project outlined in the North DVADMP and identified for the North Dayton Valley Scoping project. This BCA used the standard assumptions and procedures outlined in the FEMA BCA Toolkit and applied some assumptions for other criteria that were not clearly defined. The benefits were annualized and calculated to a net present value for a 50-year structure life. These benefits were compared with the net present value of the initial construction cost and annual operations and maintenance over 50 years. The ratio of these two numbers is the benefit cost ratio (BCR), and the goal is to have the benefits outweigh the cost – resulting in a BCR that is greater than 1.

3.2 Results

The final benefit cost ratio is shown for both variations described in Section:__ are shown in Table 7. This ratio for both the options are significantly less than one and do not meet the criteria of a project in which the benefits outweigh the project cost.

Table 7. Final benefit cost a ratio for both project scenarios.

	BCR Value
Rip-Rap Lined	0.454
Earthen Lined	0.544

Although this project did not achieve 1.0 or higher, and therefore, did not meet the criteria for federal funding, it is not to say that a project like this would not be beneficial to the region. Any project that prioritizes the safety and well-being of the community will always have merit. Correspondence

Appendix A

Lumos and Associates (Engineers OPCC)

Engineer's OPCC					
Item No.	Description	Unit	Quantity	Unit Price	Total Price
Construction Costs					
1	Mobilization, Construction Water, Erosion Control, Traffic Control	LS	1	$ 53,000.00	$ 53,000.00
2	Remove Existing Culverts	LS	1	$ 20,000.00	$ 20,000.00
3	Earthwork (Net Cut)	CY	430	$ 10.00	$ 4,300.00
4	AC Trench Patch	SF	1,201	$ 14.00	$ 16,810.92
5	Remove & Replace Type I Curb & Gutter	LF	26	$ 90.00	$ 2,361.60
6	Remove & Replace PCC Sidewalk	LF	26	$ 24.00	$ 629.76
7	Class-150 Rip Rap	SF	18,906	$ 10.00	$ 189,060.00
8	PCC Cast in Place Headwall	EA	4	$ 30,000.00	$ 120,000.00
9	42" RCP Storm Drain Pipe	LF	558	$ 525.00	$ 292,908.00
10	Waterline Relocation	EA	2	$ 10,000.00	$ 20,000.00
11	Headwall Inlet PCC Apron	SF	642	$ 30.00	$ 19,260.00
				Sub Total Construction Costs=	$ 738,330
				Contingency (10%)	=$ 73,833
Non-Construction Costs					
12	Engineering, Survey, Geotechnical, Permitting	EA	1.00	$ 72,000.00	$ 72,000
				Sub Total Non-Construction Costs =	$ 72,000
				Total Project Costs	$ 884,163
Expected Annual Maintenance Costs (2025 Pricing)					
13	Cleaning Channels, Flushing Culverts, Patching Concrete Cracking	LS	1	$ 3,200.00	$ 3,200.00

L:\LAProj\11530.000 - N. Dayton Valley Storm Drain & Basin\3-Design\Estimates\[11530000 Estimate.xlsx]Cost Estimate

Appendix B

Supporting Data: Digital File Submittal

N. Dayton Valley Storm Drain & Basin Scoping Project

Lyon County | March 19th, 2026

CARSON WATER SUBCONSERVANCY DISTRICT

1861 LYON COUNTY

U.S. DEPARTMENT OF HOMELAND SECURITY

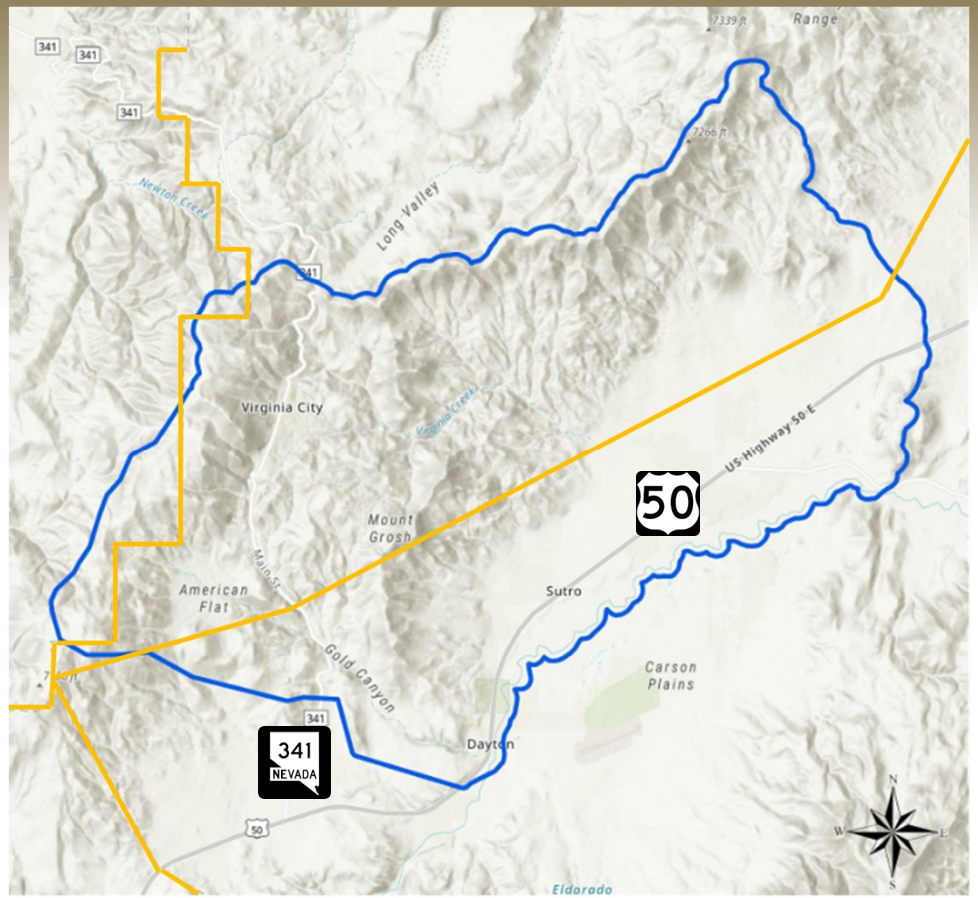
FEMA

LUMOS & ASSOCIATES

JE FULLER

Project Background

- Builds upon the 2019 Dayton Valley Area Drainage Master Plan (ADMP)
- Multi-jurisdictional study area and effort: Storey + Lyon Counties
- Flooding impacts include:
  - Risk to homes and infrastructure
  - Frequent closures of local roads and U.S. Highway 50 (critical regional corridor)
  - Sediment and debris accumulation impacting maintenance operations

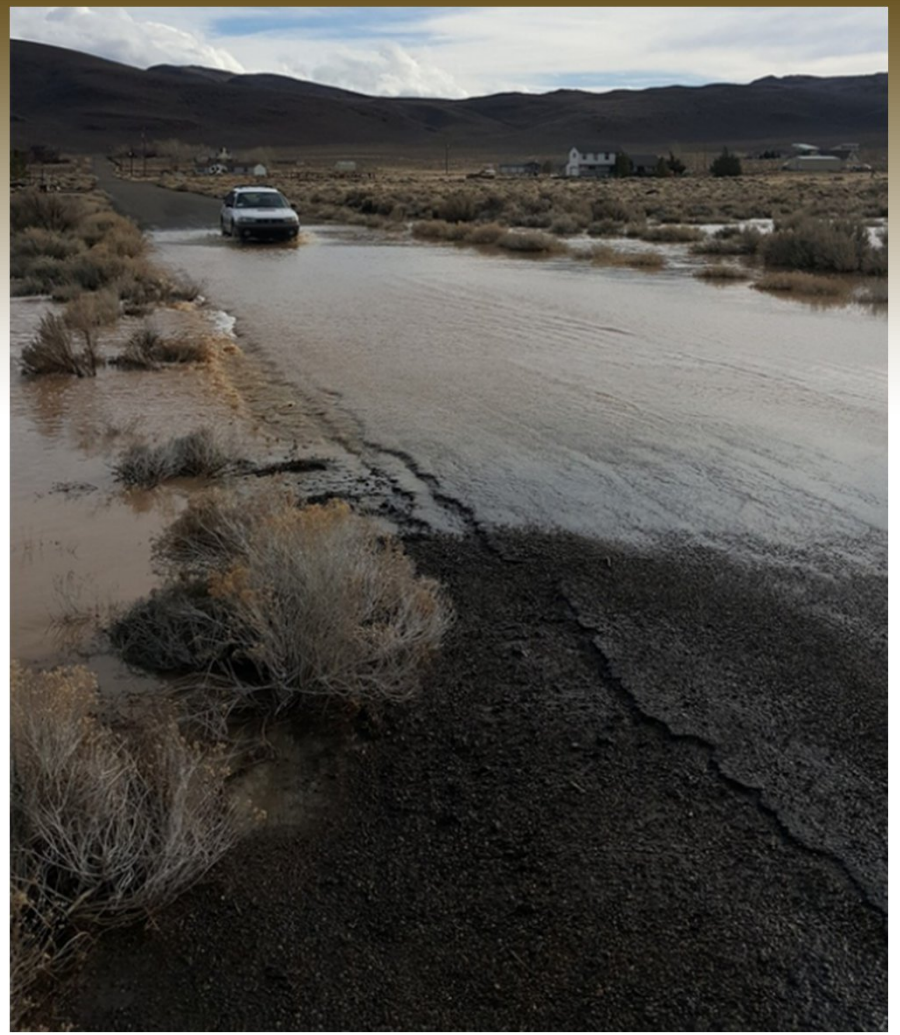


Project Study Area

LUMOS & ASSOCIATES

Purpose & Objectives

- Advance best concepts from 2019 ADMP to fundable, implementable projects
- Identify projects that consider:
  - Cultural and environmental impacts
  - FEMA Benefit-Cost Analysis (BCA) requirements
  - Multitude of other screening factors
- Develop selected projects to a 60% design level to support future grant funding



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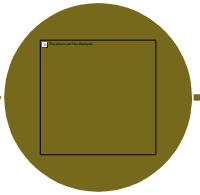
N. Dayton Valley Storm Drain & Basin Scoping Project
Project Funding

FEMA

Nevada Department of Emergency Management ->FEMA BRIC Program

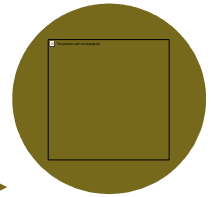
Lyon County – Storey County



CARSON WATER SUBCONSERVANCY DISTRICT

LUMOS & ASSOCIATES

JE FULLER



Scoping Project

Two-Phase Project Approach

- Phase 1 – Feasibility & Project Screening
- Phase 2 – Project Advancement
- Deliverables:
  - Phase 1 Memorandum
  - Scoping Design Report (SDR)
  - Cultural and environmental assessments
  - Opinion of probable cost (OPCC)
  - 60% design plans
  - Public and stakeholder presentations

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Initial Selection Criteria

- Project Cost < $2,000,000
- Account for Projects Recommended for Exclusion in ADMP
- Project Independence.
- Projects that Benefit Developed vs. Undeveloped

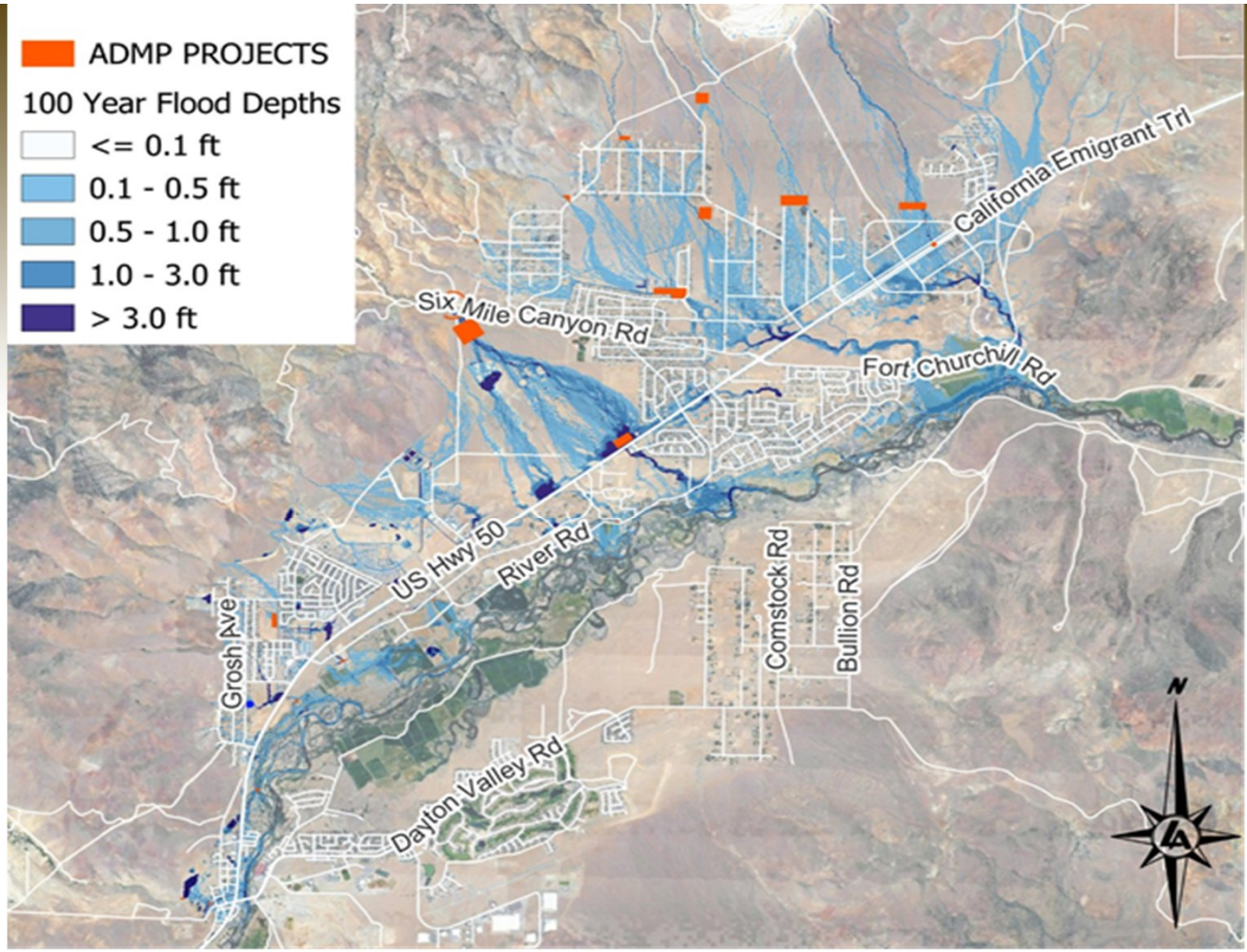

Figure 1: North Dayton Valley Study Area, ADMP Flood Map, and ADMP Projects.

Project Rating Criteria

- Total Project Cost
- Risk of Adverse Flooding Impacts
- Buildings Benefitted
- Weighted Flooding Reduction
- Existing Developments vs Undeveloped Areas
- Environmental Documentation Triggers
- Land Acquisition Requirements
- Road Flooding Hazards
- County-Specific Impacts
- Potential Grant Matches Available
- Operation and Maintenance (O&M) Costs

Table 2: Phase 1 Projects Evaluation Matrix Results (see Appendix A for scoring rationale).

EVALUATION CRITERIA	Total Project Costs (Construction and Non-Construction	Buildings Benefitted	Weighted Reduction of Flooding	Existing Developments vs Undeveloped Areas	Road Flooding Hazards	Land Acquisition Requirements	Risk of Adverse Flooding Impacts	County-Specific Impacts	Environmental Documentation Triggers	TOTAL WEIGHTED SCORE	PROJECT OVERALL RANKING
CRITERIA WEIGHTING	100%	70%	60%	60%	20%	40%	90%	25%	50%	/100	
PROJECTS	Project Score / 10										
Sutro Springs System (Alt 1 - 25 Year)	1.2	0.3	10.0	5.0	0.9	0.0	10.0	3.0	6.0	44	5
Wagon Wheel Culvert (Alt 2 - 100 Year)	9.8	0.0	1.3	10.0	0.1	9.9	3.4	1.0	10.0	54	4
Lonnie Basin (Alt 1 - 25 Year)	0.0	1.3	6.1	6.0	2.2	4.7	6.2	10.0	8.0	42	6
Grosh & Rosepeak Culverts (Alt 2 - 100 Year)	8.5	1.0	8.5	9.0	0.8	9.8	8.0	10.0	10.0	72	1
Gold Canyon Spillway (100 Year)	5.2	10.0	7.0	9.5	10.0	7.6	2.0	10.0	0.5	59	3
Prospector Basin (Alt 2 - 100 Year)	5.0	3.5	7.6	7.5	0.1	7.8	8.6	5.0	8.0	61	2

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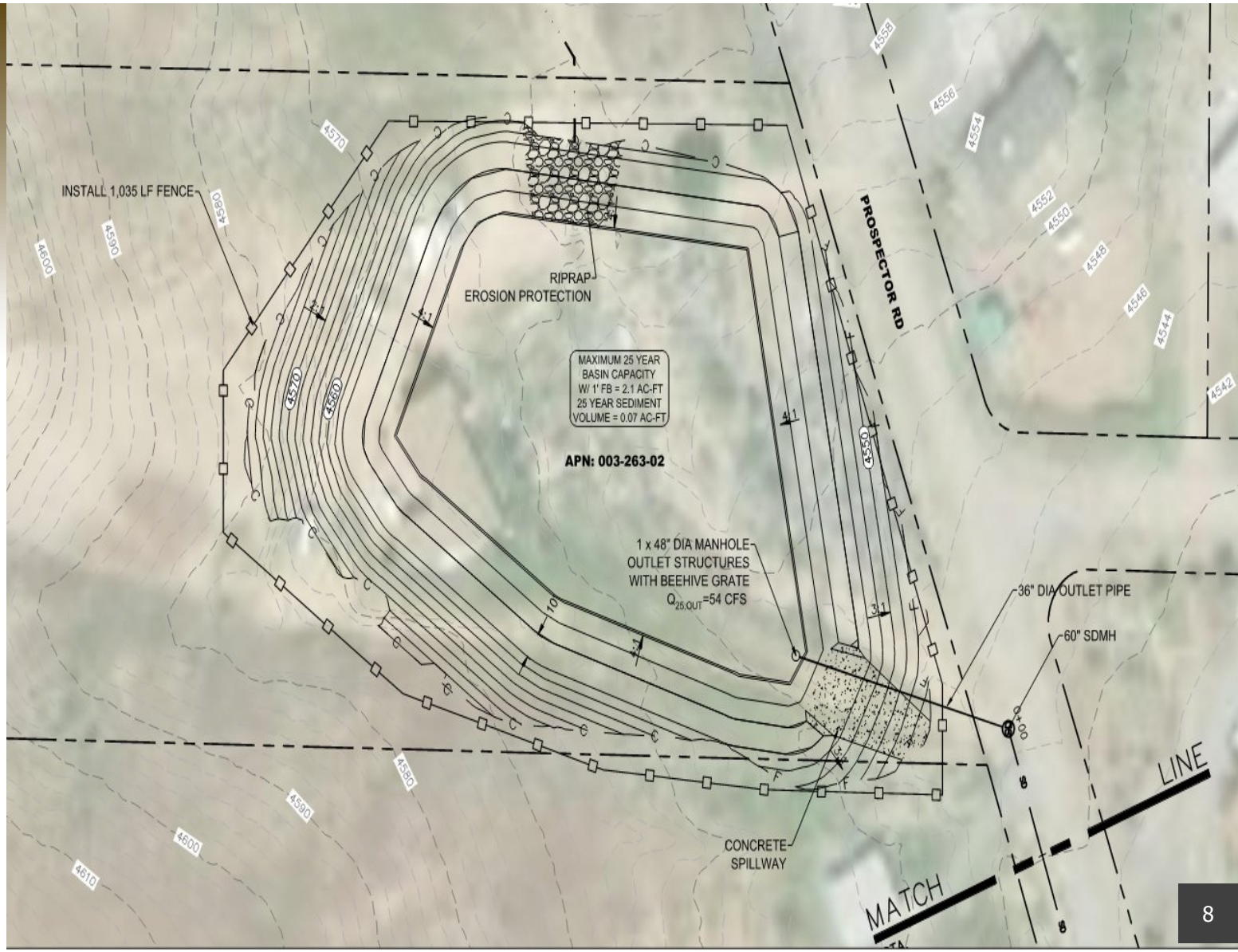
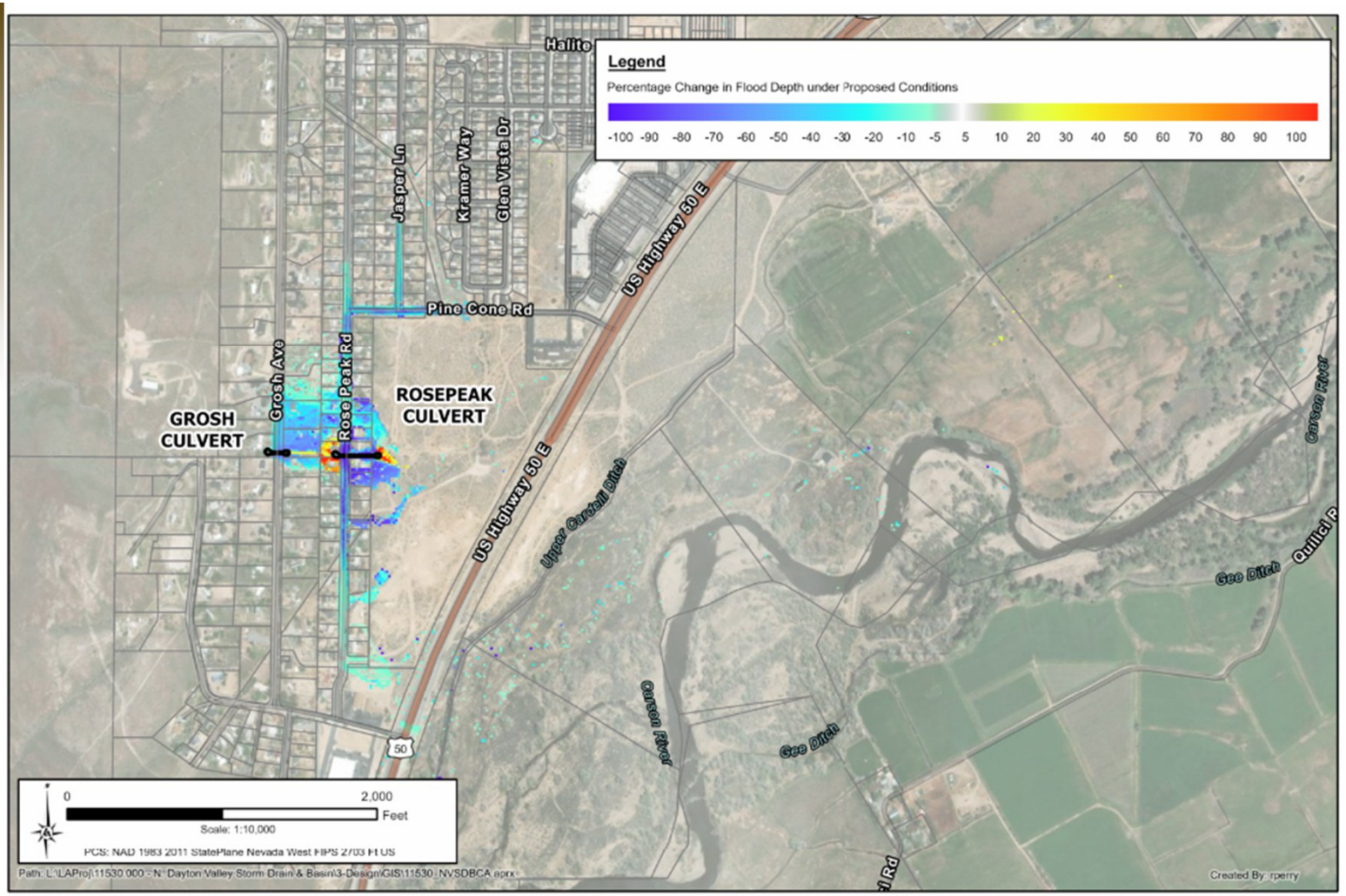
Prospector Basin

- Benefits
- Challenges



Grosh & Rosepeak Culverts

- Benefits
- Challenges
- Progressed to 60% Design



PLEASE NOTE: Data is not survey grade. Data used in map was sourced from open data sources or from GPS grade devices. Please use at your own discretion.

PHASE 1 PROJECT EVALUATION
GROSH AND ROSEPEAK CULVERTS
(ALT 2 - 100 YEAR)

CARSON WATER SUBCONSERVANCY DISTRICT

NORTH DAYTON VALLEY STORM DRAIN BENEFIT COST ANALYSIS

Date: 3/7/2025
Project #: 11530.000
Revision:

LUMOS & ASSOCIATES
950 SANDHILL ROAD., STE 100 RENO, NV 89521
TEL: 775.883.7077
WWW.LUMOSINC.COM

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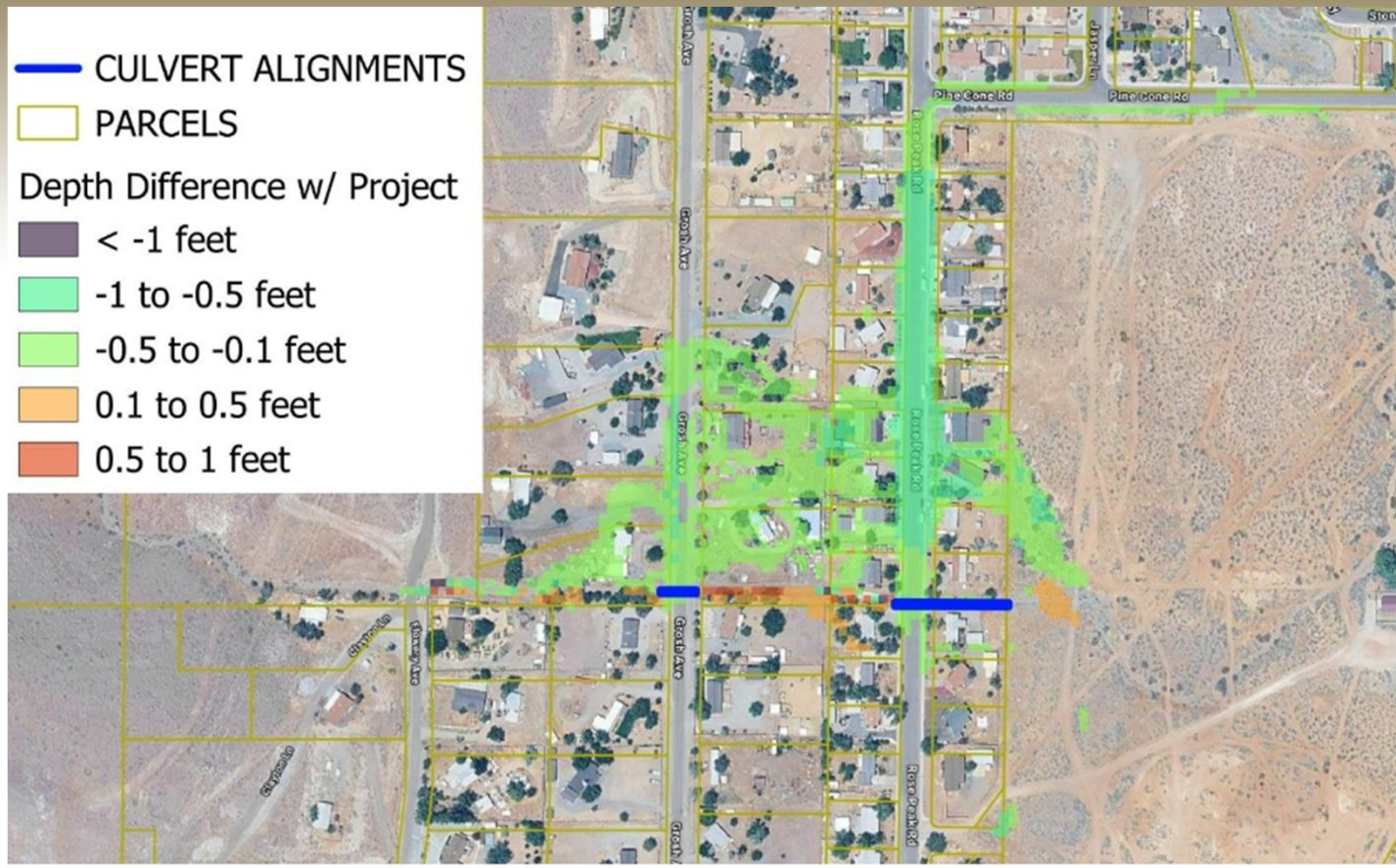
Updated Hydraulic Modeling

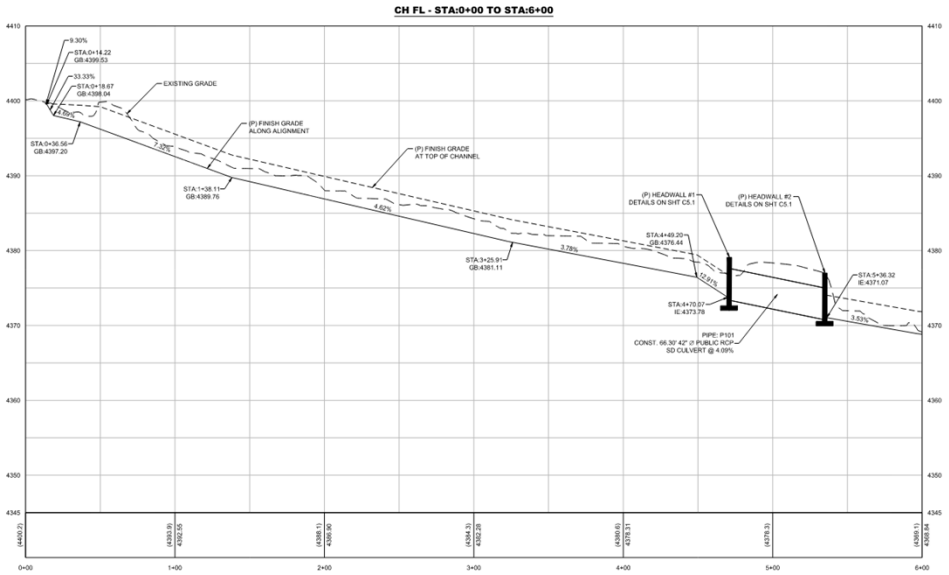
- Newer Model Build (FLO-2D Pro Version 19.07.21)
- Block Obstructions or Area Reduction Factors updated to reduce instabilities
- Rainbow Road Channel Improvements Incorporated
- V&T Way At-Grade Crossing near center of study area Updated
- Proposed Grosh & Rosepeak design incorporated.



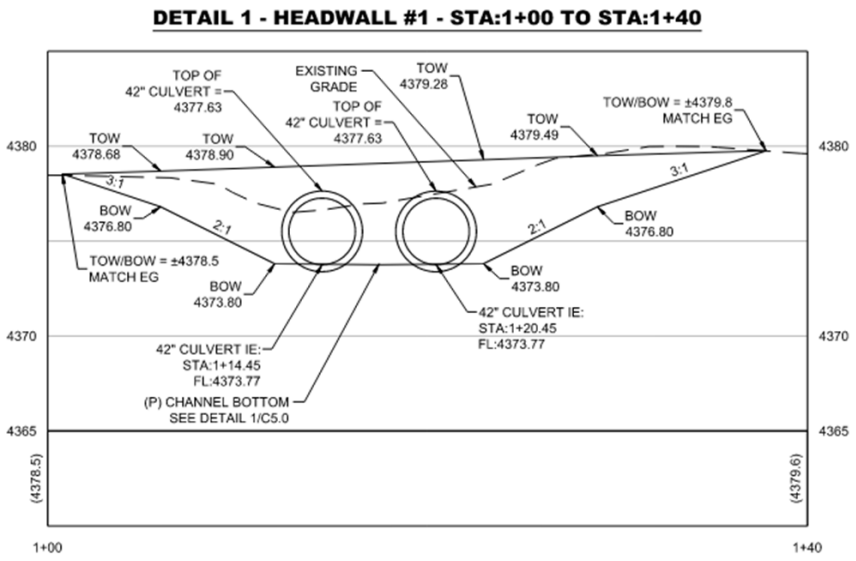
Civil Design

60% Design – Grosh & Rosepeak

Channel Improvements



Culvert Improvements



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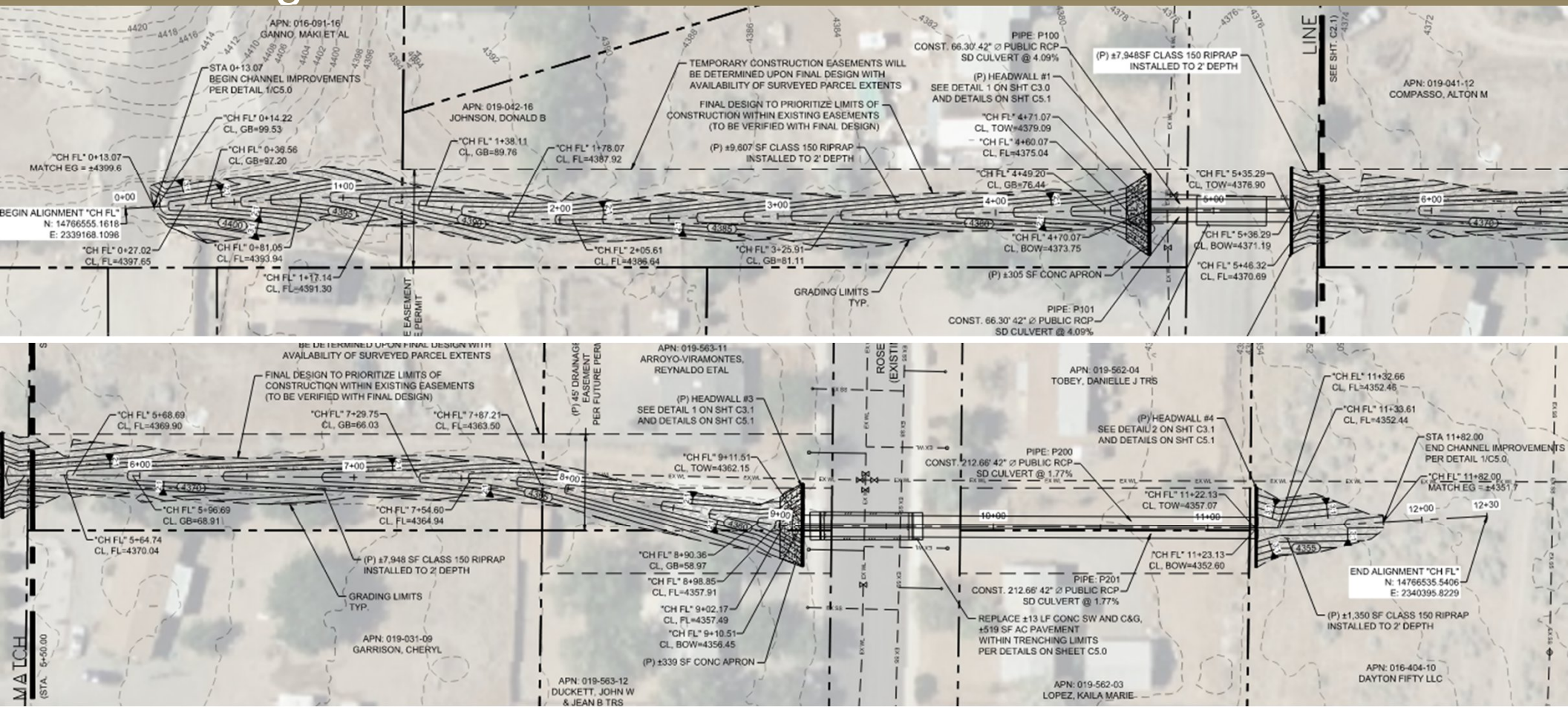
Civil Design



Environmental Assessment

2025 Flow Status Assessment Report (CWSD, 2025)

- Findings: Area Determined to be Ephemeral and therefore not WOTUS
- Sources Utilized:
  - U.S. Fish & Wildlife Service National Weland Inventory
  - NRCS Soil Survey
  - SEINet Data Portal (2025)

Carson Water Subconservancy District

North Dayton Valley Scoping Project

Lyon County, Nevada

Flow Status Assessment Report

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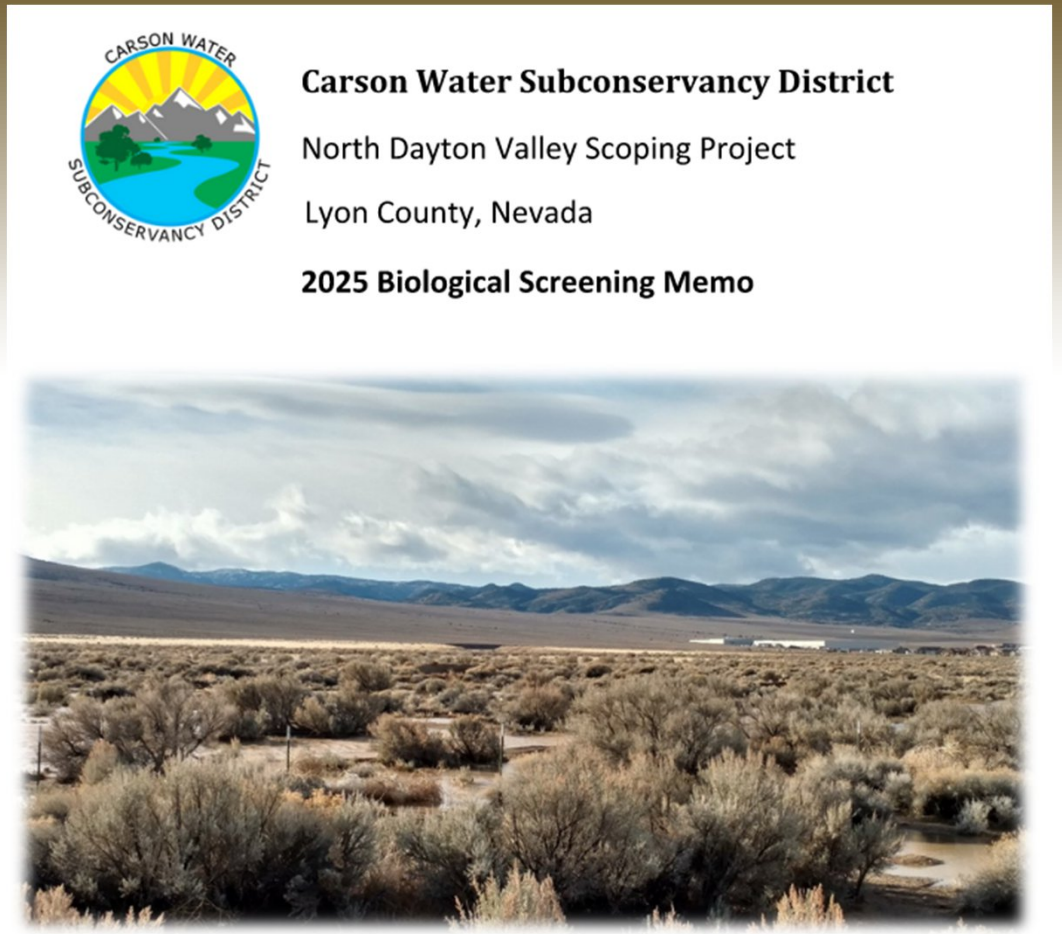
Cultural Assessment

2025 Biological Screening Memo (CWSD, 2025)

- Findings: No threatened or endangered plants, wildlife, or their habitats are negatively affected by this project



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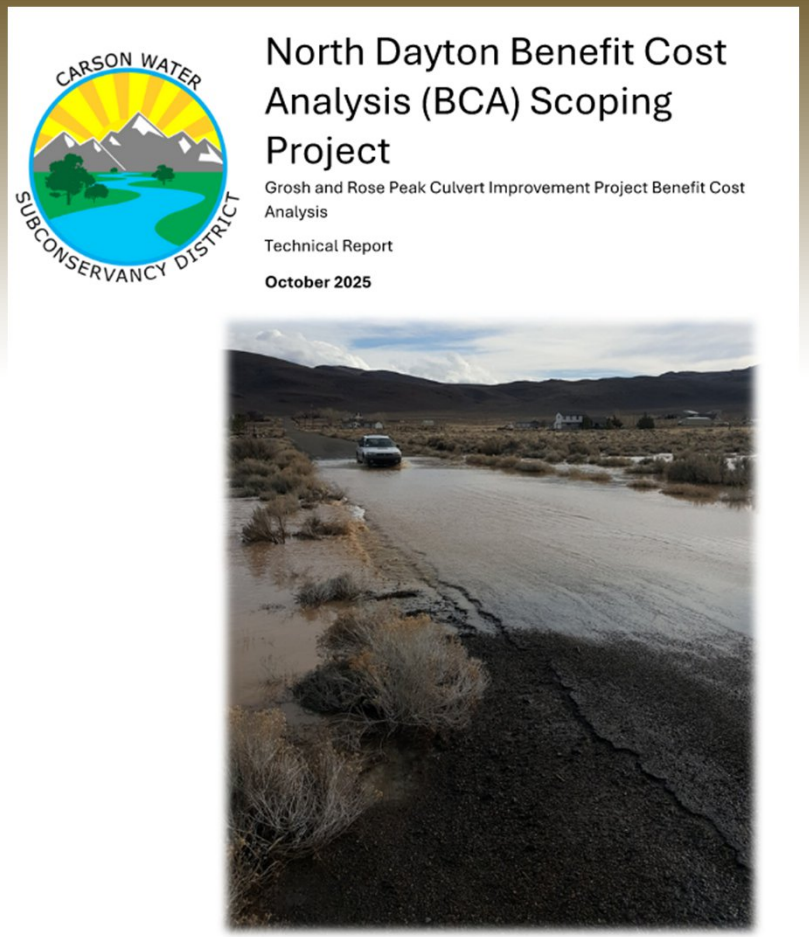
Benefit – Cost Analysis (BCA)

- Required BCA for Federal Funding: 1.0

Construction Cost	$731,124
50 Year O&M	$44,162
Annual Benefit	$421,447
BCA	0.544



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Interim Actionable Flooding Mitigation

- Channel Stabilization
- Culvert Upsizing
- Low Water Crossings at High-Frequency Flood Locations
- Standalone ADMP Projects

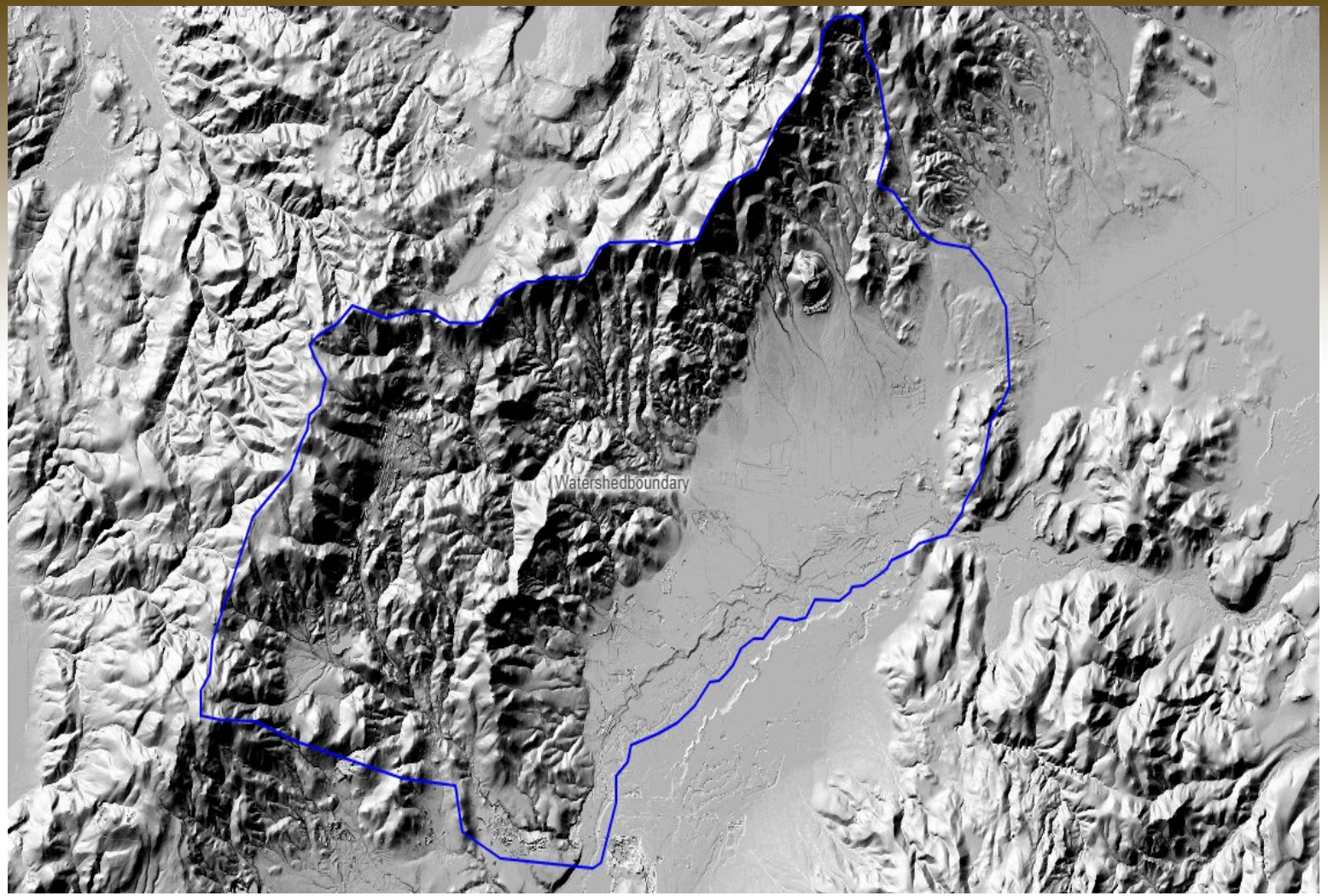
LUMOS & ASSOCIATES

Questions

Contact:
Dan Stucky, PE
Engineering Director
dstucky@lumosinc.com

Ian Mahaffey, PE, CFM
Senior Engineer
imahaffey@lumosinc.com

950 Sandhill Road, STE 100
Reno, NV 89521



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Lyon County Board of County Commissioners Agenda Summary

Meeting Date: April 16, 2026

Agenda Item Number:
11.a

Subject:
For Possible Action: Review and accept claims and financial reports.

Summary:
Under NRS 244, the Comptroller approves bills for payment and the Board reviews the claims report.

Financial Department Comments:

Approved As To Legal Form:

County Manager Comments:

Recommendation:

ATTACHMENTS
- Claims Report 3-16-26 to 3-31-26
- Cash Report 3-31-26
- Lyon County Financials 3-31-26

CLAIMS REPORT
MARCH 16 THROUGH MARCH 31, 2026

LYON COUNTY	BILLS	PAYROLL
Governmental Funds		
General	718,121.54	1,149,426.09
Employee Benefits		
Park Construction Tax		
Co-Op Extension	946.20	
Unemployment		
Room Tax	5,352.05	
Aid to Domestic Violence		
Vehicle Acquisition		
Fair and Rodeo	582.93	
Capital Improvements	202,832.37	
Justice Court Special Assessment	4,140.00	886.68
District Court Restricted Fees		
Juvenile Probation Special Assessment		1,319.18
County Library Gift		
911 Surcharge	17,430.14	
Mining Claim Map		
Road	13,885.27	57,883.46
R T C	285.75	
Road Improvement	8,725.15	
Opioid Settlement	3,414.50	3,192.04
General Indigent	7,867.72	71,812.43
Medical Indigent	191,461.16	6,335.66
Senior Services	44,120.10	57,437.34
Senior Services Donations	1,924.26	
Animal Control Donations		
Enterprise Funds		
Dayton Water Utility	114,759.28	59,097.52
Dayton Sewer Utility	72,771.77	53,438.51
Component Unit Funds		
Mason Valley Mosquito Control District	142.97	4,399.35
Central Lyon Vector Control District	21,895.00	
Walker River Weed Control District	4,793.95	
Silver Springs General Improvement District	741.02	
Willowcreek General Improvement District		
Subtotal	**1,436,193.13**	**1,465,228.26**

TRUST AND AGENCY	BILLS	PAYROLL
DNA Testing		
Western Regional Youth Facility	6,809.69	52,942.81
Mason Valley Swimming Pool District	14,612.50	152.32
Silver Springs/Stagecoach Hospital	3,730.09	3,087.02
Fernley Swimming Pool	81,690.76	22,960.62
City of Fernley		
Mason Valley Fire Protection District	8,678.65	40,666.96
North Lyon County Fire Protection District		
Smith Valley Fire Protection District	5,105.49	7,562.32
Stagecoach General Improvement District		
South Lyon Hospital District	9,479.39	
State of Nevada	78,961.05	
City of Yerington		
Fish and Game		
Walker River Irrigation District		
Range Improvement		
Lyon County Bond		
Coroner Estate Proceeds		
County Trust Property		
Social Security Payee Program	16,365.99	
Central Lyon County Fire Protection District		
Carson Water Sub-Conservancy District		
Dayton Valley Ground Water		
Smith Valley Artesia		
Mason Valley Artesia		
Churchill Valley Ground Water		
Truckee Carson Irrigation District		
Fernley Ground Water		
Brady Hot Springs Ground Water		
Lyon County School District		
Subtotal	**225,433.61**	**127,372.05**

SUMMARY		
Lyon County	1,436,193.13	1,465,228.26
Trust & Agency	225,433.61	127,372.05
TOTAL	**1,661,626.74**	**1,592,600.31**

CASH REPORT
March 31, 2026

LYON COUNTY	BALANCE
Governmental Funds	
General	14,524,046.42
Park Construction Tax	1,258,722.45
Cooperative Extension	705,268.61
Unemployment	392,289.73
Room Tax	48,949.81
County Stabilization	3,450,000.00
Aid to Domestic Violence	-
Vehicle Acquisition	327,064.40
Fair and Rodeo	337,079.00
Justice Court Special Assessment	1,091,701.46
District Court Restricted Fees	936,758.04
Juvenile Probation Special Assessment	167,505.77
Library Gift	10,033.86
Mining Claim Map	32,369.07
911 Surcharge	762,294.82
Animal Control Donations	189,782.15
Road	1,246,463.16
R T C	18,799,508.87
Road Improvement	876,489.30
Opioid Settlement	1,272,877.01
General Indigent	1,297,356.79
Medical Indigent	4,126,846.41
Senior Services	1,254,664.25
Senior Services Donations	230,825.70
Capital Improvements	26,098,725.94
Subtotal Governmental Funds	**79,437,623.02**
Enterprise Funds	
Dayton Water Utility	19,675,679.46
Dayton Sewer Utility	23,187,351.62
Subtotal Enterprise Funds	**42,863,031.08**
Component Unit Funds	
Mason Valley Mosquito Control District	1,191,681.01
Central Lyon County Vector Control District	857,707.37
Walker River Weed Control District	389,022.39
Silver Springs General Improvement District	5,411,286.35
Willowcreek General Improvement District	1,139,819.09
Subtotal Component Unit Funds	**8,989,516.21**
Total Lyon County	**131,290,170.31**

CUSTODIAL FUNDS	BALANCE
DNA Testing	1,663.64
Western Nevada Regional Youth Center	1,943,858.43
Mason Valley Swimming Pool District	4,082,119.17
Silver Springs/Stagecoach Hospital	2,389,251.66
Fernley Swimming Pool District	3,351,826.27
City of Fernley	904,653.92
Mason Valley Fire Protection District	.
General Fund	2,154,959.25
Ambulance Fund	2,122,480.14
Acquisition Fund	472,796.13
Emergency Fund	18,352.66
North Lyon County Fire Protection District	512,579.68
Smith Valley Fire Protection District	
General Fund	590,675.25
Emergency Fund	430,243.81
Acquisition Fund	1,712,822.29
Stagecoach General Improvement District	32,456.36
South Lyon Hospital District	1,722,120.27
State of Nevada	1,618,173.30
City of Yerington	61,879.71
Fish and Game	7,062.26
Walker River Irrigation District	181,313.83
Range Improvement	446.45
Lyon County Bond	637,442.83
Coroner Estate Proceeds	60,351.08
County Trust Property & Inmate Trust	1,022,773.36
Social Security Payees/Public Guardianships	522,329.29
Central Lyon County Fire Protection District	
General Fund	1,314,276.26
Ambulance Fund	100,503.23
Carson Water Sub-Conservancy District	96,108.04
Dayton Valley Ground Water	7,445.85
Smith Valley Artesia	14,987.92
Mason Valley Artesia	37,172.19
Churchill Valley Ground Water	2,402.99
Truckee Carson Irrigation District	72,126.40
Brady Hot Springs Ground Water	-
Fernley Ground Water	3,096.62
Lyon County School District	
General Fund	2,589,887.67
Debt Service Fund	1,951,872.30
Total Custodial Funds	**32,744,510.51**

SUMMARY	
Lyon County	131,290,170.31
Custodial Funds	32,744,510.51
Unallocated Cash	
Unapportioned Purchase Cards	-
Unapportioned Interest	-
TOTAL	**164,034,680.82**

BANK ACCOUNTS AND PETTY CASH	
Wells Fargo Bank Checking	20,123,759.98
US Bank Investment	85,376,696.01
Local Government Investment Pool	58,509,917.98
Inmate Trust	15,706.85
Fernley Swimming Pool Imprest	300.00
Dayton Utilities Imprest	500.00
Silver Springs GID Imprest	500.00
Petty Cash	7,300.00
TOTAL	**164,034,680.82**

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
000 General								
3a Taxes								
100 30000	Real Property Taxes	-18,264,270	0	-18,264,270	-15,205,807.91	.00	-3,058,462.09	83.3%*
100 30030	Deferred Ag Taxes	0	0	0	-2,009.04	.00	2,009.04	100.0%
100 30040	Trust Reconveyances	0	0	0	-6,859.19	.00	6,859.19	100.0%
100 30110	Geothermal Proceeds	0	0	0	-5,458.16	.00	5,458.16	100.0%
100 30200	Unsecured Property Ta	0	0	0	-1,427,153.06	.00	1,427,153.06	100.0%
100 30210	Prior Year Unsecured	0	0	0	-776.87	.00	776.87	100.0%
100 30220	Other Years Unsecured	0	0	0	-85.79	.00	85.79	100.0%
100 30240	Prpty Tax Over/Short	0	0	0	534.26	.00	-534.26	100.0%*
100 30300	Centrally Assessed Ta	0	0	0	-466,739.21	.00	466,739.21	100.0%
TOTAL Taxes		-18,264,270	0	-18,264,270	-17,114,354.97	.00	-1,149,915.03	93.7%
3c Licenses								
100 31000	Business License	-340,000	0	-340,000	-349,394.14	.00	9,394.14	102.8%
100 31050	Liquor License	-90,000	0	-90,000	-86,935.75	.00	-3,064.25	96.6%*
100 31060	Marijuana Fees	-120,000	0	-120,000	-68,783.15	.00	-51,216.85	57.3%*
100 31070	Local Gaming License	-185,000	0	-185,000	-173,557.50	.00	-11,442.50	93.8%*
100 31200	Franchise Fees	-550,000	0	-550,000	-196,523.93	.00	-353,476.07	35.7%*
100 31260	Utility License Fees	-3,000,000	0	-3,000,000	-875,402.33	.00	-2,124,597.67	29.2%*
100 31550	Animal Licenses	-7,000	0	-7,000	-5,117.48	.00	-1,882.52	73.1%*
100 31600	Building Permits	-1,100,000	0	-1,100,000	-912,105.02	.00	-187,894.98	82.9%*
100 31620	Mobile Home Trip Perm	0	0	0	-10.00	.00	10.00	100.0%
100 31640	Miscellaneous Buildin	-26,000	0	-26,000	-19,860.12	.00	-6,139.88	76.4%*
100 31700	Prostitution Work Per	-21,000	0	-21,000	-13,120.00	.00	-7,880.00	62.5%*
TOTAL Licenses		-5,439,000	0	-5,439,000	-2,700,809.42	.00	-2,738,190.58	49.7%
3e Intergovernmental								
100 32200 13080	Bulletproof Vest	0	-613	-613	-4,359.02	.00	3,746.02	711.1%
100 32255 13055	Title II Formula	0	0	0	-27,632.25	.00	27,632.25	100.0%
100 32440 80004	ARPA Grant	0	-150,000	-150,000	-150,000.00	.00	.00	100.0%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
100 32500 13100 OTS Seat Belt	0	0	0	-3,799.05	.00	3,799.05	100.0%
100 32510 13110 OTS Join Forces	0	-3,092	-3,092	-9,182.13	.00	6,090.13	297.0%
100 32520 13120 OTS Join Forces	0	-3,887	-3,887	-10,465.56	.00	6,578.56	269.2%
100 32521 13121 OTS Distracted D	0	-608	-608	-608.16	.00	.16	100.0%
100 32596 13176 JAG NIGHT VISION	0	0	0	-20,327.64	.00	20,327.64	100.0%
100 32600 18002 LSTA Library	0	-24	-24	-24.10	.00	.10	100.4%
100 32600 18003 LSTA Library	0	-5,000	-5,000	-5,000.00	.00	.00	100.0%
100 32600 18005 LSTA Library	0	-3,277	-3,277	-3,277.00	.00	.00	100.0%
100 32810 12000 Child Support	-349,020	0	-349,020	-203,786.42	.00	-145,233.58	58.4%*
100 32830 12010 Child Support In	0	-8,826	-8,826	-11,129.75	.00	2,303.75	126.1%
100 32835 Court Master	-22,000	0	-22,000	-11,712.55	.00	-10,287.45	53.2%*
100 32975 13915 Emergency Perfor	-54,323	0	-54,323	.00	.00	-54,323.00	.0%*
100 32975 13916 Emergency Perfor	0	0	0	983.88	.00	-983.88	100.0%*
100 32980 13910 Homeland Securit	0	0	0	1,243.80	.00	-1,243.80	100.0%*
100 33000 Consolidated Taxes	-21,767,467	0	-21,767,467	-16,531,568.66	.00	-5,235,898.34	75.9%*
100 33100 State Gaming Tax	-120,000	0	-120,000	-108,318.63	.00	-11,681.37	90.3%*
100 33300 Animal Control Plates	-1,300	0	-1,300	-771.66	.00	-528.34	59.4%*
100 33404 Indigent Defense Gran	-1,185,000	0	-1,185,000	.00	.00	-1,185,000.00	.0%*
100 33410 12200 Foster Room & Bo	0	-23,271	-23,271	-23,270.83	.00	-.17	100.0%*
100 33510 13700 LEPC Train & Equ	0	-31,950	-31,950	-31,950.25	.00	.25	100.0%
100 33510 13701 LEPC Train & Equ	0	-28,017	-28,017	-28,017.02	.00	.02	100.0%
100 33555 11125 AB518 - Weekend	-140,950	0	-140,950	.00	.00	-140,950.00	.0%*
100 33900 18010 State Collection	0	-978	-978	-5,458.00	.00	4,480.00	558.1%
100 34040 Public Defender - Fer	-120,000	0	-120,000	-90,000.00	.00	-30,000.00	75.0%*
100 34050 Public Defender - Yer	-24,000	0	-24,000	-19,500.00	.00	-4,500.00	81.3%*
100 34310 13240 School Resource	-460,000	0	-460,000	-351,385.12	.00	-108,614.88	76.4%*
10000226 32320 Narcotic Seizure	-15,000	0	-15,000	.00	.00	-15,000.00	.0%*
TOTAL Intergovernmental	-24,259,060	-259,543	-24,518,603	-17,649,316.12	.00	-6,869,286.88	72.0%
3g Charges for Service							
100 35000 Clerk Fees	-210,000	0	-210,000	-156,861.61	.00	-53,138.39	74.7%*
100 35030 Candidate Fees	-1,650	0	-1,650	-2,020.00	.00	370.00	122.4%
100 35050 Administrative Fees	-269,650	0	-269,650	-265,750.00	.00	-3,900.00	98.6%*
100 35060 School Constr. Tax Ad	-3,500	0	-3,500	-2,175.52	.00	-1,324.48	62.2%*
100 35100 Recorder Fees	-340,000	0	-340,000	-256,696.10	.00	-83,303.90	75.5%*
100 35130 Recorder Marriage Lic	-750	0	-750	-720.00	.00	-30.00	96.0%*
100 35140 Recorder Copies Fee	-13,500	0	-13,500	-9,916.96	.00	-3,583.04	73.5%*
100 35190 Recorder RPTT Fee	-18,000	0	-18,000	-16,021.68	.00	-1,978.32	89.0%*
100 35300 Assessor Commission F	-475,000	0	-475,000	-490,837.29	.00	15,837.29	103.3%
100 35310 90001 Assessor Tech Fe	-158,300	0	-158,300	-163,608.73	.00	5,308.73	103.4%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
100 35350	GIS Fees	-4,000	0	-4,000	-165.10	.00	-3,834.90	4.1%*
100 35400	Planning and Zoning F	-70,000	0	-70,000	-235,942.00	.00	165,942.00	337.1%
100 35410	Site Plan Review Fee	-5,500	0	-5,500	.00	.00	-5,500.00	.0%*
100 35420	Subdivision Inspect F	-175,000	0	-175,000	.00	.00	-175,000.00	.0%*
100 35430	Improvement Drawing F	-50,000	0	-50,000	-94,293.40	.00	44,293.40	188.6%
100 35500	Sheriff's Fees	-150,000	0	-150,000	-107,288.59	.00	-42,711.41	71.5%*
100 35510	Prisoner's Board	-250,000	0	-250,000	-34,846.26	.00	-215,153.74	13.9%*
100 35515	False Alarm Fees	-9,000	0	-9,000	-2,539.19	.00	-6,460.81	28.2%*
100 35525	Sheriffs Civil Fees	-24,000	0	-24,000	-21,431.00	.00	-2,569.00	89.3%*
100 35545	Dispatch Fees	-13,800	0	-13,800	-24,150.00	.00	10,350.00	175.0%
100 35590	Emergency Mgmt Fee -	-4,000	0	-4,000	-4,000.00	.00	.00	100.0%
100 35600	Animal Services Fees	-75,000	0	-75,000	-39,749.42	.00	-35,250.58	53.0%*
100 35900	Cemetery Fee - Dayton	-5,000	0	-5,000	-12,250.00	.00	7,250.00	245.0%
100 35910	Cemetery Fee - Silver	-1,500	0	-1,500	-250.00	.00	-1,250.00	16.7%*
100 35920	Cemetery Fee - SS	-1,500	0	-1,500	.00	.00	-1,500.00	.0%*
100 35930	Cemetery Fee - Smith	-1,500	0	-1,500	-3,000.00	.00	1,500.00	200.0%
100 35940	Cemetery Fee - Yering	-5,000	0	-5,000	-5,400.00	.00	400.00	108.0%
100 36070	Child Support Withhol	0	0	0	-1,023.51	.00	1,023.51	100.0%
100 36090	Public Guardian Fees	-1,400	0	-1,400	.00	.00	-1,400.00	.0%*
100 36210	Dayton Fairground Rev	-1,300	0	-1,300	-2,540.00	.00	1,240.00	195.4%
100 36360	Medicaid Charges	0	0	0	-3,215.32	.00	3,215.32	100.0%
10000200 35110	Recorder Tech Fe	-60,000	0	-60,000	-47,780.00	.00	-12,220.00	79.6%*
10000215 35010	Clerk Tech Fee	-2,600	0	-2,600	-3,046.04	.00	446.04	117.2%
10000230 35530	Jail Phones	-53,000	0	-53,000	-39,590.82	.00	-13,409.18	74.7%*
10000235 35540	Jail Commissary	-27,000	0	-27,000	-20,807.68	.00	-6,192.32	77.1%*
10000290 35150	Recorder Indigen	-500	0	-500	-398.52	.00	-101.48	79.7%*
10000295 35505	Sheriff's Corone	-6,000	0	-6,000	-2,708.00	.00	-3,292.00	45.1%*
TOTAL	Charges for Service	-2,486,950	0	-2,486,950	-2,071,022.74	.00	-415,927.26	83.3%
3i	Fines and Forfeits							
100 37000	Library Fines	-6,000	0	-6,000	-3,744.27	.00	-2,255.73	62.4%*
100 37140	District Court Admin	-500	0	-500	-500.20	.00	.20	100.0%
100 37170	Drug Court Fees	-6,600	0	-6,600	-4,790.00	.00	-1,810.00	72.6%*
100 37200	General Juvenile Fees	-9,000	0	-9,000	-1,925.00	.00	-7,075.00	21.4%*
100 37220	Juvenile Probation Fe	-500	0	-500	-575.00	.00	75.00	115.0%
100 37300	Justice Court Fees	-650,000	0	-650,000	-426,541.35	.00	-223,458.65	65.6%*
100 37305	Justice Court Filing	-20,000	0	-20,000	-12,739.00	.00	-7,261.00	63.7%*
100 37310	Local Ordinance Fines	-120,000	0	-120,000	-76,195.79	.00	-43,804.21	63.5%*
100 37320	Fines & Forfeited Bai	-45,000	0	-45,000	-48,130.00	.00	3,130.00	107.0%
100 37340	Bailiff Service Fees	-30,000	0	-30,000	-13,727.74	.00	-16,272.26	45.8%*

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
100 37350 Public Defender Fees	-25,000	0	-25,000	-18,449.03	.00	-6,550.97	73.8%*
100 37510 Chemical Analysis	-9,000	0	-9,000	-6,712.82	.00	-2,287.18	74.6%*
100 37520 Victims of Crime	-50	0	-50	.00	.00	-50.00	.0%*
100 37600 DNA Testing - Distric	-5,000	0	-5,000	-6,946.99	.00	1,946.99	138.9%
10000225 38210 Narcotics Seizur	-15,000	0	-15,000	.00	.00	-15,000.00	.0%*
10000290 37150 Indigent Legal S	-10,000	0	-10,000	-6,707.00	.00	-3,293.00	67.1%*
10000290 37160 Elderly Legal Se	-5,500	0	-5,500	-3,752.00	.00	-1,748.00	68.2%*
TOTAL Fines and Forfeits	-957,150	0	-957,150	-631,436.19	.00	-325,713.81	66.0%
3k Other Revenues							
100 38000 Investment Income	-1,350,000	0	-1,350,000	-1,006,009.71	.00	-343,990.29	74.5%*
100 38020 Delinquent Tax Penalt	-650,000	0	-650,000	-362,434.12	.00	-287,565.88	55.8%*
100 38100 Sales & Rental	-100,000	0	-100,000	-49,991.25	.00	-50,008.75	50.0%*
100 38230 Miscellaneous Revenue	-60,000	0	-60,000	-52,164.55	.00	-7,835.45	86.9%*
100 38240 Miscellaneous Restitu	-1,000	0	-1,000	-4,515.00	.00	3,515.00	451.5%
100 38300 Donations	0	-58,177	-58,177	-58,327.25	.00	150.25	100.3%
100 38300 18022 Donations	0	0	0	-25,700.00	.00	25,700.00	100.0%
100 38300 18490 Donations	0	0	0	-4,000.00	.00	4,000.00	100.0%
100 38300 90004 Donations	0	0	0	-20,000.00	.00	20,000.00	100.0%
100 38490 18020 Smith Valley Fri	0	-1,883	-1,883	-3,252.61	.00	1,369.61	172.7%
100 38491 18021 Dollar General L	0	0	0	-1,283.27	.00	1,283.27	100.0%
100 38530 13945 William Penningt	0	0	0	-185,434.00	.00	185,434.00	100.0%
10000240 38410 VIP Donations	0	0	0	-3,844.75	.00	3,844.75	100.0%
10000241 38300 Donations	0	0	0	-13,134.17	.00	13,134.17	100.0%
10000246 38421 JR Deputy Explro	0	0	0	-200.00	.00	200.00	100.0%
10000247 38300 Donations	0	0	0	-35,185.53	.00	35,185.53	100.0%
10000295 38000 Investment Incom	-750	0	-750	-469.39	.00	-280.61	62.6%*
TOTAL Other Revenues	-2,161,750	-60,060	-2,221,810	-1,825,945.60	.00	-395,864.40	82.2%
3z Beginning Fund Bal							
100 39999 Opening Fund Balance	-9,988,099	0	-9,988,099	.00	.00	-9,988,099.00	.0%*
10000200 39999 Opening Fund Bal	-172,714	0	-172,714	.00	.00	-172,714.00	.0%*
10000210 39999 Opening Fund Bal	-1,300	0	-1,300	.00	.00	-1,300.00	.0%*
10000215 39999 Opening Fund Bal	-9,545	0	-9,545	.00	.00	-9,545.00	.0%*
10000225 39999 Opening Fund Bal	-1,838	0	-1,838	.00	.00	-1,838.00	.0%*
10000226 39999 Opening Fund Bal	-2,716	0	-2,716	.00	.00	-2,716.00	.0%*

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund			ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
10000230	39999	Opening Fund Bal	-65,165	0	-65,165	.00	.00	-65,165.00	.0%*
10000235	39999	Opening Fund Bal	-51,246	0	-51,246	.00	.00	-51,246.00	.0%*
10000240	39999	Opening Fund Bal	-4,257	0	-4,257	.00	.00	-4,257.00	.0%*
10000241	39999	Opening Fund Bal	-6,803	0	-6,803	.00	.00	-6,803.00	.0%*
10000245	39999	Opening Fund Bal	-333	0	-333	.00	.00	-333.00	.0%*
10000247	39999	Opening Fund Bal	-5,957	0	-5,957	.00	.00	-5,957.00	.0%*
10000250	39999	Opening Fund Bal	-11,981	0	-11,981	.00	.00	-11,981.00	.0%*
10000255	39999	Opening Fund Bal	-2,437	0	-2,437	.00	.00	-2,437.00	.0%*
10000295	39999	Opening Fund Bal	-15,428	0	-15,428	.00	.00	-15,428.00	.0%*
TOTAL Beginning Fund Bal			-10,339,819	0	-10,339,819	.00	.00	-10,339,819.00	.0%
TOTAL General			-63,907,999	-319,603	-64,227,602	-41,992,885.04	.00	-22,234,716.96	65.4%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
110 General Support								
4c Benefits								
100110 41400	PEBS	180,000	0	180,000	119,183.69	.00	60,816.31	66.2%
TOTAL Benefits		180,000	0	180,000	119,183.69	.00	60,816.31	66.2%
4e Services & Supplies								
100110 50100	Public Administrat	40,000	0	40,000	20,000.00	.00	20,000.00	50.0%
100110 50130	Special Projects	200	0	200	108.88	.00	91.12	54.4%
100110 52100	Postage	66,000	0	66,000	39,727.31	.00	26,272.69	60.2%
100110 52200	Insurance	1,100,000	0	1,100,000	966,366.47	.00	133,633.53	87.9%
100110 52500	Ethics Commission	12,000	0	12,000	14,791.94	.00	-2,791.94	123.3%*
100110 53400	Ordinance Codifica	3,000	0	3,000	1,748.00	.00	1,252.00	58.3%
100110 54010	Attorney - Labor	100,000	0	100,000	15,047.50	.00	84,952.50	15.0%
100110 54020	Attorney	5,000	0	5,000	.00	.00	5,000.00	.0%
100110 54030	Attorney - WR Medi	7,200	0	7,200	.00	.00	7,200.00	.0%
100110 54300	NACO	99,000	0	99,000	62,093.00	.00	36,907.00	62.7%
100110 54500	Trust Rec - Record	0	0	0	129.00	.00	-129.00	100.0%*
100110 56210	Travel - Equalizat	400	0	400	.00	.00	400.00	.0%
100110 61000	Rural NV Counselin	75,000	0	75,000	75,000.00	.00	.00	100.0%
100110 61010	Conservation Distr	40,000	0	40,000	40,000.00	.00	.00	100.0%
100110 61010 80004	Conservation	0	150,000	150,000	150,000.00	.00	.00	100.0%
100110 61020	Economic Dev Autho	50,000	-50,000	0	.00	.00	.00	.0%
100110 61120	Yerington Airport	4,000	0	4,000	4,000.00	.00	.00	100.0%
TOTAL Services & Supplies		1,601,800	100,000	1,701,800	1,389,012.10	.00	312,787.90	81.6%
TOTAL General Support		1,781,800	100,000	1,881,800	1,508,195.79	.00	373,604.21	80.1%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
111 Commissioner/Cnty Mgr								
4a Salaries								
100111 40000	Salaries	500,359	0	500,359	355,901.18	.00	144,457.82	71.1%
100111 40500	Overtime	0	0	0	43.05	.00	-43.05	100.0%*
TOTAL Salaries		500,359	0	500,359	355,944.23	.00	144,414.77	71.1%
4c Benefits								
100111 41000	Retirement	116,099	0	116,099	81,924.35	.00	34,174.65	70.6%
100111 41005	Retirement - VOYA	14,619	0	14,619	10,880.73	.00	3,738.27	74.4%
100111 41100	Workers' Comp	18,585	0	18,585	13,190.47	.00	5,394.53	71.0%
100111 41110	Workers' Comp - Ad	5,150	0	5,150	1,881.29	.00	3,268.71	36.5%
100111 41200	Medicare	7,257	0	7,257	4,957.46	.00	2,299.54	68.3%
100111 41300	Health Insurance	83,686	0	83,686	55,603.53	.00	28,082.47	66.4%
100111 41302	Vision Insurance	426	0	426	317.52	.00	108.48	74.5%
100111 41303	Dental Insurance	2,904	0	2,904	2,179.44	.00	724.56	75.0%
100111 41310	Life Insurance	217	0	217	163.80	.00	53.20	75.5%
TOTAL Benefits		248,943	0	248,943	171,098.59	.00	77,844.41	68.7%
4e Services & Supplies								
100111 50000	Supplies	2,500	0	2,500	697.75	.00	1,802.25	27.9%
100111 50130	Special Projects	10,000	0	10,000	.00	.00	10,000.00	.0%
100111 51000	Fuel	1,500	0	1,500	469.52	.00	1,030.48	31.3%
100111 52000	Copier Maintenance	1,680	0	1,680	799.70	.00	880.30	47.6%
100111 52030	Printer Services	120	0	120	105.75	.00	14.25	88.1%
100111 52300	Advertising	2,700	0	2,700	1,181.94	.00	1,518.06	43.8%
100111 53530	Software Support	14,500	0	14,500	11,424.00	.00	3,076.00	78.8%
100111 56000	Training	5,000	0	5,000	4,040.00	.00	960.00	80.8%
100111 56200	Travel	4,000	0	4,000	4,737.85	.00	-737.85	118.4%*
100111 56205	Travel - Commissio	21,000	1,000	22,000	17,156.63	.00	4,843.37	78.0%
100111 60700	Telephone	4,200	0	4,200	2,801.88	.00	1,398.12	66.7%
TOTAL Services & Supplies		67,200	1,000	68,200	43,415.02	.00	24,784.98	63.7%
TOTAL Commissioner/Cnty Mgr		816,502	1,000	817,502	570,457.84	.00	247,044.16	69.8%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
112 Clerk-Treasurer								
4a Salaries								
100112 40000	Salaries	440,691	0	440,691	302,202.25	.00	138,488.75	68.6%
100112 40010	Temporary Salaries	16,094	0	16,094	.00	.00	16,094.00	.0%
100112 40500	Overtime	13,635	0	13,635	4,747.99	.00	8,887.01	34.8%
TOTAL Salaries		470,420	0	470,420	306,950.24	.00	163,469.76	65.3%
4c Benefits								
100112 41000	Retirement	110,782	0	110,782	71,084.88	.00	39,697.12	64.2%
100112 41010	Social Security	998	0	998	.00	.00	998.00	.0%
100112 41100	Workers' Comp	19,550	0	19,550	11,273.00	.00	8,277.00	57.7%
100112 41200	Medicare	6,821	0	6,821	4,368.30	.00	2,452.70	64.0%
100112 41300	Health Insurance	104,688	0	104,688	71,354.43	.00	33,333.57	68.2%
100112 41302	Vision Insurance	497	0	497	370.44	.00	126.56	74.5%
100112 41303	Dental Insurance	3,388	0	3,388	2,542.68	.00	845.32	75.0%
100112 41310	Life Insurance	217	0	217	163.80	.00	53.20	75.5%
TOTAL Benefits		246,941	0	246,941	161,157.53	.00	85,783.47	65.3%
4e Services & Supplies								
100112 50000	Supplies	8,000	0	8,000	1,575.34	.00	6,424.66	19.7%
100112 50075	Tax Bills	20,000	0	20,000	8,197.57	.00	11,802.43	41.0%
100112 51000	Fuel	250	0	250	.00	.00	250.00	.0%
100112 52020	Equipment Maintena	4,200	0	4,200	.00	.00	4,200.00	.0%
100112 52030	Printer Services	800	0	800	951.75	.00	-151.75	119.0%*
100112 52100	Postage	350	0	350	22,860.90	.00	-22,510.90	6531.7%*
100112 52115	Bank Charges	42,000	0	42,000	.00	.00	42,000.00	.0%
100112 52300	Advertising	1,000	0	1,000	205.04	.00	794.96	20.5%
100112 53300	Election	104,000	0	104,000	108,794.54	.00	-4,794.54	104.6%*
100112 53530	Software Support	247,721	0	247,721	116,748.84	.00	130,972.16	47.1%
100112 56000	Training	2,000	0	2,000	655.00	.00	1,345.00	32.8%
100112 56200	Travel	2,000	0	2,000	655.35	.00	1,344.65	32.8%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
10011221 50000	Supplies	12,145	0	12,145	3,518.04	.00	8,626.96	29.0%
TOTAL	Services & Supplies	444,466	0	444,466	264,162.37	.00	180,303.63	59.4%
TOTAL	Clerk-Treasurer	1,161,827	0	1,161,827	732,270.14	.00	429,556.86	63.0%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
113 Recorder								
4a Salaries								
100113 40000	Salaries	306,673	0	306,673	184,630.88	.00	122,042.12	60.2%
TOTAL Salaries		306,673	0	306,673	184,630.88	.00	122,042.12	60.2%
4c Benefits								
100113 41000	Retirement	93,618	0	93,618	49,514.95	.00	44,103.05	52.9%
100113 41001	Early Retirement I	12,939	0	12,939	12,893.50	.00	45.50	99.6%
100113 41100	Workers' Comp	9,148	0	9,148	4,737.91	.00	4,410.09	51.8%
100113 41200	Medicare	4,447	0	4,447	2,606.83	.00	1,840.17	58.6%
100113 41300	Health Insurance	52,494	0	52,494	36,383.05	.00	16,110.95	69.3%
100113 41302	Vision Insurance	259	0	259	170.52	.00	88.48	65.8%
100113 41303	Dental Insurance	1,767	0	1,767	1,170.44	.00	596.56	66.2%
100113 41310	Life Insurance	113	0	113	75.40	.00	37.60	66.7%
TOTAL Benefits		174,785	0	174,785	107,552.60	.00	67,232.40	61.5%
4e Services & Supplies								
100113 50000	Supplies	1,500	0	1,500	666.90	.00	833.10	44.5%
100113 50050	Microfiche	3,000	0	3,000	4,199.55	.00	-1,199.55	140.0%*
100113 50060	Records Management	4,500	0	4,500	1,991.27	.00	2,508.73	44.3%
100113 52000	Copier Maintenance	500	0	500	81.37	.00	418.63	16.3%
100113 52030	Printer Services	175	0	175	317.25	.00	-142.25	181.3%*
10011320 50000	Supplies	201,814	0	201,814	7,610.33	.00	194,203.67	3.8%
10011320 53530	Software Support	30,000	0	30,000	25,634.66	.00	4,365.34	85.4%
10011320 56000	Training	500	0	500	440.00	.00	60.00	88.0%
10011320 56200	Travel	400	0	400	475.43	.00	-75.43	118.9%*
10011321 50080	Foreclosure Medi	1,300	0	1,300	.00	.00	1,300.00	.0%
TOTAL Services & Supplies		243,689	0	243,689	41,416.76	.00	202,272.24	17.0%
TOTAL Recorder		725,147	0	725,147	333,600.24	.00	391,546.76	46.0%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
114 Assessor								
4a Salaries								
100114 40000	Salaries	747,091	0	747,091	523,885.62	.00	223,205.38	70.1%
100114 40520	Comp Payout	0	0	0	428.98	.00	-428.98	100.0%*
TOTAL Salaries		747,091	0	747,091	524,314.60	.00	222,776.40	70.2%
4c Benefits								
100114 41000	Retirement	210,327	0	210,327	146,418.27	.00	63,908.73	69.6%
100114 41100	Workers' Comp	24,558	0	24,558	13,126.10	.00	11,431.90	53.4%
100114 41200	Medicare	10,833	0	10,833	7,484.40	.00	3,348.60	69.1%
100114 41300	Health Insurance	124,319	0	124,319	93,238.11	.00	31,080.89	75.0%
100114 41302	Vision Insurance	639	0	639	476.28	.00	162.72	74.5%
100114 41303	Dental Insurance	4,356	0	4,356	3,269.16	.00	1,086.84	75.0%
100114 41310	Life Insurance	279	0	279	210.60	.00	68.40	75.5%
TOTAL Benefits		375,311	0	375,311	264,222.92	.00	111,088.08	70.4%
4e Services & Supplies								
100114 50000	Supplies	1,500	0	1,500	381.49	.00	1,118.51	25.4%
100114 50000 90001	Supplies	48,300	0	48,300	43,340.64	.00	4,959.36	89.7%
100114 50070	Tax Roll Printing	32,500	0	32,500	28,622.94	.00	3,877.06	88.1%
100114 51000	Fuel	1,700	0	1,700	353.78	.00	1,346.22	20.8%
100114 52000	Copier Maintenance	400	0	400	60.76	.00	339.24	15.2%
100114 52030	Printer Services	1,350	0	1,350	1,163.25	.00	186.75	86.2%
100114 53530 90001	Software Supp	110,000	0	110,000	83,640.07	.00	26,359.93	76.0%
100114 56000	Training	3,000	0	3,000	1,760.00	.00	1,240.00	58.7%
100114 56200	Travel	3,000	0	3,000	328.00	.00	2,672.00	10.9%
TOTAL Services & Supplies		201,750	0	201,750	159,650.93	.00	42,099.07	79.1%
TOTAL Assessor		1,324,152	0	1,324,152	948,188.45	.00	375,963.55	71.6%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
116 Facilities								
4a Salaries								
100116 40000	Salaries	877,526	0	877,526	618,751.46	.00	258,774.54	70.5%
100116 40320	Shift Differential	4,065	0	4,065	2,131.32	.00	1,933.68	52.4%
100116 40500	Overtime	22,725	0	22,725	1,517.91	.00	21,207.09	6.7%
100116 40520	Comp Payout	0	0	0	24.81	.00	-24.81	100.0%*
TOTAL Salaries		904,316	0	904,316	622,425.50	.00	281,890.50	68.8%
4c Benefits								
100116 41000	Retirement	225,529	0	225,529	154,770.03	.00	70,758.97	68.6%
100116 41100	Workers' Comp	35,196	0	35,196	18,289.45	.00	16,906.55	52.0%
100116 41200	Medicare	13,114	0	13,114	8,675.16	.00	4,438.84	66.2%
100116 41300	Health Insurance	203,845	0	203,845	149,045.62	.00	54,799.38	73.1%
100116 41302	Vision Insurance	932	0	932	623.99	.00	308.01	67.0%
100116 41303	Dental Insurance	6,353	0	6,353	4,646.42	.00	1,706.58	73.1%
100116 41310	Life Insurance	407	0	407	299.30	.00	107.70	73.5%
TOTAL Benefits		485,376	0	485,376	336,349.97	.00	149,026.03	69.3%
4e Services & Supplies								
10001020 53900	Contract Service	43,000	0	43,000	22,305.80	.00	20,694.20	51.9%
10001020 56500	Building Mainten	120,000	0	120,000	68,258.43	.00	51,741.57	56.9%
10001020 60100	Electric Service	140,000	0	140,000	85,485.10	.00	54,514.90	61.1%
10001020 60200	Gas Service	65,000	0	65,000	14,622.08	.00	50,377.92	22.5%
10001020 60700	Telephone	3,400	0	3,400	2,521.41	.00	878.59	74.2%
10001030 60300	Water Service	950	0	950	703.96	.00	246.04	74.1%
10001040 60100	Electric Service	2,800	0	2,800	1,810.61	.00	989.39	64.7%
10001040 60200	Gas Service	6,800	0	6,800	1,987.49	.00	4,812.51	29.2%
10001040 60250	Water & Sewer Se	1,850	0	1,850	1,386.67	.00	463.33	75.0%
10001210 60100	Electric Service	12,500	0	12,500	7,066.40	.00	5,433.60	56.5%
10001210 60200	Gas Service	2,500	0	2,500	531.12	.00	1,968.88	21.2%
10001210 60600	Garbage Service	2,800	0	2,800	1,840.34	.00	959.66	65.7%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
10001430 60100	Electric Service	1,400	0	1,400	613.98	.00	786.02	43.9%
10001430 60300	Water Service	2,400	0	2,400	2,628.53	.00	-228.53	109.5%*
10002000 60100	Electric Service	2,800	0	2,800	1,825.11	.00	974.89	65.2%
10002000 60200	Gas Service	4,300	0	4,300	1,234.45	.00	3,065.55	28.7%
10002000 60250	Water & Sewer Se	1,150	0	1,150	809.09	.00	340.91	70.4%
10002010 57020	Office Rent	83,844	0	83,844	72,445.00	.00	11,399.00	86.4%
10002010 60100	Electric Service	7,600	0	7,600	4,201.97	.00	3,398.03	55.3%
10002010 60200	Gas Service	5,100	0	5,100	1,895.44	.00	3,204.56	37.2%
10002020 60100	Electric Service	1,200	0	1,200	852.62	.00	347.38	71.1%
10002020 60200	Gas Service	2,200	0	2,200	776.63	.00	1,423.37	35.3%
10002020 60250	Water & Sewer Se	1,100	0	1,100	1,201.18	.00	-101.18	109.2%*
10002020 60700	Telephone	620	0	620	412.83	.00	207.17	66.6%
10002090 60110	Electric - Stree	150,000	0	150,000	72,227.80	.00	77,772.20	48.2%
10002300 60250	Water & Sewer Se	700	0	700	246.67	.00	453.33	35.2%
10002310 60100	Electric Service	3,900	0	3,900	2,438.19	.00	1,461.81	62.5%
10002310 60200	Gas Service	5,500	0	5,500	1,459.64	.00	4,040.36	26.5%
10002750 60100	Electric Service	1,200	0	1,200	497.63	.00	702.37	41.5%
10002750 60200	Gas Service	3,200	0	3,200	119.07	.00	3,080.93	3.7%
10002750 60300	Water Service	775	0	775	467.70	.00	307.30	60.3%
10004000 60100	Electric Service	17,000	0	17,000	8,590.07	.00	8,409.93	50.5%
10004000 60200	Gas Service	20,000	0	20,000	4,121.83	.00	15,878.17	20.6%
10004000 60250	Water & Sewer Se	23,000	0	23,000	11,609.94	.00	11,390.06	50.5%
10004000 60600	Garbage Service	7,000	0	7,000	5,145.03	.00	1,854.97	73.5%
10005200 60100	Electric Service	1,900	0	1,900	1,062.36	.00	837.64	55.9%
10007000 60200	Gas Service	1,100	0	1,100	.00	.00	1,100.00	.0%
10008000 60100	Electric Service	1,600	0	1,600	910.48	.00	689.52	56.9%
10008000 60200	Gas Service	4,500	0	4,500	1,028.50	.00	3,471.50	22.9%
100116 50000	Supplies	7,500	0	7,500	6,617.56	.00	882.44	88.2%
100116 50000 11145	Supplies	0	0	0	68,892.00	.00	-68,892.00	100.0%*
100116 50130	Special Projects	15,000	0	15,000	17,300.00	.00	-2,300.00	115.3%*
100116 50230	Equipment	3,000	0	3,000	2,602.49	.00	397.51	86.7%
100116 50430	Tools	5,000	0	5,000	6,712.82	.00	-1,712.82	134.3%*
100116 50440	Safety Supplies	9,000	0	9,000	6,246.83	.00	2,753.17	69.4%
100116 50450	Building Supplies	40,000	0	40,000	32,163.58	.00	7,836.42	80.4%
100116 50460	Janitorial Supplie	57,000	0	57,000	49,058.45	.00	7,941.55	86.1%
100116 50990	Building Signs	2,500	0	2,500	134.90	.00	2,365.10	5.4%
100116 51000	Fuel	42,000	0	42,000	22,280.35	.00	19,719.65	53.0%
100116 52030	Printer Services	200	0	200	306.39	.00	-106.39	153.2%*
100116 52300	Advertising	0	0	0	110.36	.00	-110.36	100.0%*
100116 52640	Facility Upgrade	5,000	0	5,000	2,908.16	.00	2,091.84	58.2%
100116 53530	Software Support	9,500	0	9,500	9,927.62	.00	-427.62	104.5%*
100116 53900	Contract Services	117,000	0	117,000	115,961.37	.00	1,038.63	99.1%
100116 56000	Training	2,500	0	2,500	.00	.00	2,500.00	.0%
100116 56200	Travel	1,500	0	1,500	71.40	.00	1,428.60	4.8%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
100116 56410	Equipment Repairs	2,000	0	2,000	1,339.82	.00	660.18	67.0%
100116 56500	Building Maintenan	150,000	0	150,000	97,690.34	.00	52,309.66	65.1%
100116 56505	Building Painting	20,000	0	20,000	.00	.00	20,000.00	.0%
100116 56800	Grounds Maintenanc	12,000	0	12,000	2,464.81	.00	9,535.19	20.5%
100116 56900	Parking Lot Stripi	1,000	0	1,000	189.18	.00	810.82	18.9%
100116 56910	Asphalt & Concrete	30,000	0	30,000	10,730.30	.00	19,269.70	35.8%
100116 60100	Electric Service	43,000	0	43,000	22,380.62	.00	20,619.38	52.0%
100116 60200	Gas Service	36,000	0	36,000	8,727.95	.00	27,272.05	24.2%
100116 60250	Water & Sewer Serv	8,300	0	8,300	5,567.95	.00	2,732.05	67.1%
100116 60300	Water Service	4,750	0	4,750	2,490.24	.00	2,259.76	52.4%
100116 60600	Garbage Service	6,200	0	6,200	3,940.02	.00	2,259.98	63.5%
100116 60700	Telephone	17,000	0	17,000	12,730.39	.00	4,269.61	74.9%
1002030 60300	Water Service	340	0	340	251.04	.00	88.96	73.8%
1003090 60110	Electric - Street	17,000	0	17,000	10,239.65	.00	6,760.35	60.2%
TOTAL Services & Supplies		1,420,979	0	1,420,979	927,377.74	.00	493,601.26	65.3%
4g Capital Outlay								
100116 70000	Capital Outlay	55,000	0	55,000	81,500.00	.00	-26,500.00	148.2%*
100116 70700	Capital Outlay - V	207,000	0	207,000	181,057.20	.00	25,942.80	87.5%
TOTAL Capital Outlay		262,000	0	262,000	262,557.20	.00	-557.20	100.2%
TOTAL Facilities		3,072,671	0	3,072,671	2,148,710.41	.00	923,960.59	69.9%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
121 Human Resources								
4a Salaries								
100121 40000	Salaries	217,698	0	217,698	129,159.05	.00	88,538.95	59.3%
100121 40150	Acting Pay	0	0	0	640.03	.00	-640.03	100.0%*
TOTAL Salaries		217,698	0	217,698	129,799.08	.00	87,898.92	59.6%
4c Benefits								
100121 41000	Retirement	80,004	0	80,004	46,701.26	.00	33,302.74	58.4%
100121 41100	Workers' Comp	5,310	0	5,310	4,261.29	.00	1,048.71	80.3%
100121 41200	Medicare	3,157	0	3,157	1,867.77	.00	1,289.23	59.2%
100121 41300	Health Insurance	24,686	0	24,686	15,991.22	.00	8,694.78	64.8%
100121 41302	Vision Insurance	142	0	142	82.32	.00	59.68	58.0%
100121 41303	Dental Insurance	968	0	968	565.04	.00	402.96	58.4%
100121 41310	Life Insurance	62	0	62	36.40	.00	25.60	58.7%
TOTAL Benefits		114,329	0	114,329	69,505.30	.00	44,823.70	60.8%
4e Services & Supplies								
100121 50000	Supplies	2,000	0	2,000	270.18	.00	1,729.82	13.5%
100121 52030	Printer Services	100	0	100	112.53	.00	-12.53	112.5%*
100121 52300	Advertising	2,500	0	2,500	.00	.00	2,500.00	.0%
100121 52400	Background Checks	3,800	0	3,800	1,634.00	.00	2,166.00	43.0%
100121 52430	Drug Testing	15,125	0	15,125	10,582.14	.00	4,542.86	70.0%
100121 53530	Software Support	3,200	0	3,200	3,278.42	.00	-78.42	102.5%*
100121 53900	Contract Services	11,000	0	11,000	10,731.60	.00	268.40	97.6%
100121 56000	Training	1,500	0	1,500	.00	.00	1,500.00	.0%
100121 56200	Travel	1,000	0	1,000	.00	.00	1,000.00	.0%
100121 60700	Telephone	650	0	650	363.02	.00	286.98	55.8%
TOTAL Services & Supplies		40,875	0	40,875	26,971.89	.00	13,903.11	66.0%
TOTAL Human Resources		372,902	0	372,902	226,276.27	.00	146,625.73	60.7%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
122 Comptroller								
4a Salaries								
100122 40000	Salaries	460,309	0	460,309	324,619.50	.00	135,689.50	70.5%
TOTAL Salaries		460,309	0	460,309	324,619.50	.00	135,689.50	70.5%
4c Benefits								
100122 41000	Retirement	146,045	0	146,045	101,630.15	.00	44,414.85	69.6%
100122 41100	Workers' Comp	13,275	0	13,275	7,587.90	.00	5,687.10	57.2%
100122 41200	Medicare	6,295	0	6,295	4,478.44	.00	1,816.56	71.1%
100122 41300	Health Insurance	93,234	0	93,234	62,367.67	.00	30,866.33	66.9%
100122 41302	Vision Insurance	355	0	355	252.84	.00	102.16	71.2%
100122 41303	Dental Insurance	2,420	0	2,420	1,735.48	.00	684.52	71.7%
100122 41310	Life Insurance	155	0	155	111.80	.00	43.20	72.1%
TOTAL Benefits		261,779	0	261,779	178,164.28	.00	83,614.72	68.1%
4e Services & Supplies								
100122 50000	Supplies	3,500	0	3,500	3,101.08	.00	398.92	88.6%
100122 51000	Fuel	600	0	600	114.31	.00	485.69	19.1%
100122 52030	Printer Services	850	0	850	819.00	.00	31.00	96.4%
100122 52300	Advertising	2,800	0	2,800	49.30	.00	2,750.70	1.8%
100122 53530	Software Support	23,000	0	23,000	23,250.55	.00	-250.55	101.1%*
100122 53950	Audit	71,000	0	71,000	72,000.00	.00	-1,000.00	101.4%*
100122 53960	Audit - Special Wo	12,530	0	12,530	.00	.00	12,530.00	.0%
100122 56000	Training	250	0	250	340.00	.00	-90.00	136.0%*
100122 56200	Travel	400	0	400	255.46	.00	144.54	63.9%
100122 60700	Telephone	1,300	0	1,300	1,069.00	.00	231.00	82.2%
TOTAL Services & Supplies		116,230	0	116,230	100,998.70	.00	15,231.30	86.9%
TOTAL Comptroller		838,318	0	838,318	603,782.48	.00	234,535.52	72.0%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
123 Information Technology								
4a Salaries								
100123 40000	Salaries	388,480	0	388,480	273,698.95	.00	114,781.05	70.5%
100123 40500	Overtime	568	0	568	.00	.00	568.00	.0%
TOTAL Salaries		389,048	0	389,048	273,698.95	.00	115,349.05	70.4%
4c Benefits								
100123 41000	Retirement	118,089	0	118,089	82,587.67	.00	35,501.33	69.9%
100123 41100	Workers' Comp	10,620	0	10,620	6,115.05	.00	4,504.95	57.6%
100123 41200	Medicare	5,641	0	5,641	3,797.02	.00	1,843.98	67.3%
100123 41300	Health Insurance	53,056	0	53,056	47,374.20	.00	5,681.80	89.3%
100123 41302	Vision Insurance	284	0	284	211.68	.00	72.32	74.5%
100123 41303	Dental Insurance	1,936	0	1,936	1,452.96	.00	483.04	75.0%
100123 41310	Life Insurance	124	0	124	93.60	.00	30.40	75.5%
TOTAL Benefits		189,750	0	189,750	141,632.18	.00	48,117.82	74.6%
4e Services & Supplies								
100123 50000	Supplies	50,000	0	50,000	14,983.00	.00	35,017.00	30.0%
100123 50200	Computers	60,000	0	60,000	56,579.26	.00	3,420.74	94.3%
100123 51000	Fuel	2,500	0	2,500	491.30	.00	2,008.70	19.7%
100123 51020	Licenses	14,000	0	14,000	13,238.45	.00	761.55	94.6%
100123 52000	Copier Maintenance	45,000	0	45,000	379.81	.00	44,620.19	.8%
100123 52030	Printer Services	120	0	120	105.75	.00	14.25	88.1%
100123 53500	Web Page	23,000	0	23,000	22,664.56	.00	335.44	98.5%
100123 53520	Email Services	80,000	0	80,000	72,174.00	.00	7,826.00	90.2%
100123 53530	Software Support	220,600	0	220,600	198,632.61	.00	21,967.39	90.0%
100123 53900	Contract Services	46,000	0	46,000	33,003.25	.00	12,996.75	71.7%
100123 56000	Training	3,000	0	3,000	.00	.00	3,000.00	.0%
100123 56200	Travel	500	0	500	28.00	.00	472.00	5.6%
100123 56410	Equipment Repairs	15,000	0	15,000	521.37	.00	14,478.63	3.5%
100123 60100	Electric Service	17,000	0	17,000	9,314.41	.00	7,685.59	54.8%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
100123 60200	Gas Service	10,000	0	10,000	95.00	.00	9,905.00	1.0%
100123 60700	Telephone	40,000	0	40,000	30,953.20	.00	9,046.80	77.4%
100123 60810	Data Circuits	28,488	0	28,488	19,896.77	.00	8,591.23	69.8%
TOTAL Services & Supplies		655,208	0	655,208	473,060.74	.00	182,147.26	72.2%
4g Capital Outlay								
100123 70000	Capital Outlay	140,000	0	140,000	111,771.42	.00	28,228.58	79.8%
100123 70600	Capital Outlay - E	160,000	0	160,000	119,773.02	.00	40,226.98	74.9%
100123 70700	Capital Outlay - V	57,000	0	57,000	47,802.26	.00	9,197.74	83.9%
TOTAL Capital Outlay		357,000	0	357,000	279,346.70	.00	77,653.30	78.2%
TOTAL Information Technology		1,591,006	0	1,591,006	1,167,738.57	.00	423,267.43	73.4%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
127 Government Affairs								
4a Salaries								
100127 40000	Salaries	58,186	0	58,186	40,098.37	.00	18,087.63	68.9%
TOTAL Salaries		58,186	0	58,186	40,098.37	.00	18,087.63	68.9%
4c Benefits								
100127 41000	Retirement - PERS	11,201	0	11,201	8,350.39	.00	2,850.61	74.6%
100127 41100	Workers' Comp	2,920	0	2,920	934.25	.00	1,985.75	32.0%
100127 41200	Medicare	844	0	844	580.83	.00	263.17	68.8%
100127 41300	Health Insurance	13,577	0	13,577	4,628.61	.00	8,948.39	34.1%
100127 41302	Vision Insurance	78	0	78	26.46	.00	51.54	33.9%
100127 41303	Dental Insurance	532	0	532	181.62	.00	350.38	34.1%
100127 41310	Life Insurance	34	0	34	11.70	.00	22.30	34.4%
TOTAL Benefits		29,186	0	29,186	14,713.86	.00	14,472.14	50.4%
4e Services & Supplies								
100127 50000	Supplies	1,500	0	1,500	.00	.00	1,500.00	.0%
100127 51000	Fuel	600	0	600	.00	.00	600.00	.0%
100127 54100	Lobbyist	40,000	0	40,000	30,000.33	.00	9,999.67	75.0%
100127 56000	Training	830	0	830	.00	.00	830.00	.0%
100127 56100	Dues and Subscript	0	0	0	50.00	.00	-50.00	100.0%*
100127 56200	Travel	3,500	0	3,500	.00	.00	3,500.00	.0%
100127 60700	Telephone	400	0	400	136.56	.00	263.44	34.1%
TOTAL Services & Supplies		46,830	0	46,830	30,186.89	.00	16,643.11	64.5%
TOTAL Government Affairs		134,202	0	134,202	84,999.12	.00	49,202.88	63.3%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
150 Building								
4a Salaries								
100150 40000	Salaries	497,131	0	497,131	365,271.15	.00	131,859.85	73.5%
100150 40520	Comp Payout	0	0	0	145.30	.00	-145.30	100.0%*
100150 40610	Callback	0	0	0	290.60	.00	-290.60	100.0%*
TOTAL Salaries		497,131	0	497,131	365,707.05	.00	131,423.95	73.6%
4c Benefits								
100150 41000	Retirement	110,489	0	110,489	79,326.35	.00	31,162.65	71.8%
100150 41100	Workers' Comp	14,602	0	14,602	9,673.21	.00	4,928.79	66.2%
100150 41200	Medicare	7,208	0	7,208	5,159.84	.00	2,048.16	71.6%
100150 41300	Health Insurance	84,331	0	84,331	67,875.93	.00	16,455.07	80.5%
100150 41302	Vision Insurance	390	0	390	317.52	.00	72.48	81.4%
100150 41303	Dental Insurance	2,662	0	2,662	2,179.44	.00	482.56	81.9%
100150 41310	Life Insurance	171	0	171	140.40	.00	30.60	82.1%
TOTAL Benefits		219,853	0	219,853	164,672.69	.00	55,180.31	74.9%
4e Services & Supplies								
100150 50000	Supplies	3,000	0	3,000	1,646.47	.00	1,353.53	54.9%
100150 50230	Equipment	1,000	0	1,000	.00	.00	1,000.00	.0%
100150 50480	Books & Publicatio	2,500	0	2,500	2,037.82	.00	462.18	81.5%
100150 51000	Fuel	13,000	0	13,000	8,229.67	.00	4,770.33	63.3%
100150 52000	Copier Maintenance	200	0	200	93.66	.00	106.34	46.8%
100150 52020	Equipment Maintena	500	0	500	.00	.00	500.00	.0%
100150 52030	Printer Services	500	0	500	462.60	.00	37.40	92.5%
100150 53530	Software Support	34,224	0	34,224	25,668.00	.00	8,556.00	75.0%
100150 53660	Consulting Service	12,500	0	12,500	36,230.11	.00	-23,730.11	289.8%*
100150 53900	Contract Services	3,600	0	3,600	.00	.00	3,600.00	.0%
100150 53920	Professional Fees	1,000	0	1,000	.00	.00	1,000.00	.0%
100150 56000	Training	8,700	0	8,700	1,239.00	.00	7,461.00	14.2%
100150 56200	Travel	1,000	0	1,000	.00	.00	1,000.00	.0%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
100150 57020	Office Rent	1,383	0	1,383	1,383.00	.00	.00	100.0%
100150 60700	Telephone	5,000	0	5,000	2,104.05	.00	2,895.95	42.1%
TOTAL Services & Supplies		88,107	0	88,107	79,094.38	.00	9,012.62	89.8%
4g Capital Outlay								
100150 70700	Capital Outlay - V	0	0	0	33,004.25	.00	-33,004.25	100.0%*
TOTAL Capital Outlay		0	0	0	33,004.25	.00	-33,004.25	100.0%
TOTAL Building		805,091	0	805,091	642,478.37	.00	162,612.63	79.8%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
153 Planning								
4a Salaries								
100153 40000	Salaries	412,285	0	412,285	287,038.77	.00	125,246.23	69.6%
100153 40010	Temporary Salaries	6,829	0	6,829	1,792.00	.00	5,037.00	26.2%
TOTAL Salaries		419,114	0	419,114	288,830.77	.00	130,283.23	68.9%
4c Benefits								
100153 41000	Retirement	102,181	0	102,181	70,915.36	.00	31,265.64	69.4%
100153 41010	Social Security	423	0	423	111.10	.00	311.90	26.3%
100153 41100	Workers' Comp	11,294	0	11,294	7,270.05	.00	4,023.95	64.4%
100153 41200	Medicare	6,078	0	6,078	4,075.18	.00	2,002.82	67.0%
100153 41300	Health Insurance	61,187	0	61,187	41,173.83	.00	20,013.17	67.3%
100153 41302	Vision Insurance	290	0	290	211.68	.00	78.32	73.0%
100153 41303	Dental Insurance	1,985	0	1,985	1,452.96	.00	532.04	73.2%
100153 41310	Life Insurance	128	0	128	93.60	.00	34.40	73.1%
TOTAL Benefits		183,566	0	183,566	125,303.76	.00	58,262.24	68.3%
4e Services & Supplies								
100153 50000	Supplies	1,000	0	1,000	272.22	.00	727.78	27.2%
100153 51000	Fuel	300	0	300	.00	.00	300.00	.0%
100153 52000	Copier Maintenance	600	0	600	93.71	.00	506.29	15.6%
100153 52030	Printer Services	2,000	0	2,000	277.65	.00	1,722.35	13.9%
100153 52300	Advertising	3,500	0	3,500	3,080.18	.00	419.82	88.0%
100153 53530	Software Support	32,898	0	32,898	24,675.00	.00	8,223.00	75.0%
100153 53640	Improvement Drawin	150,000	0	150,000	71,372.00	.00	78,628.00	47.6%
100153 53650	Subdivision Inspec	175,000	0	175,000	381,747.32	.00	-206,747.32	218.1%*
100153 53660	Consulting Service	57,500	0	57,500	13,318.72	.00	44,181.28	23.2%
100153 53670	Engineering Servic	17,000	0	17,000	194.00	.00	16,806.00	1.1%
100153 53920	Professional Fees	0	0	0	2,149.00	.00	-2,149.00	100.0%*
100153 56000	Training	1,000	0	1,000	626.63	.00	373.37	62.7%
100153 56200	Travel	1,000	0	1,000	.00	.00	1,000.00	.0%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
100153 56230	Travel - Planning	4,000	0	4,000	2,276.19	.00	1,723.81	56.9%
100153 60700	Telephone	650	0	650	363.20	.00	286.80	55.9%
TOTAL Services & Supplies		446,448	0	446,448	500,445.82	.00	-53,997.82	112.1%
TOTAL Planning		1,049,128	0	1,049,128	914,580.35	.00	134,547.65	87.2%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
167 Vehicle Maintenance								
4a Salaries								
100167 40000	Salaries	282,867	0	282,867	198,010.50	.00	84,856.50	70.0%
100167 40320	Shift Differential	0	0	0	81.12	.00	-81.12	100.0%*
100167 40500	Overtime	2,273	0	2,273	1,286.70	.00	986.30	56.6%
100167 40520	Comp Payout	0	0	0	21.54	.00	-21.54	100.0%*
TOTAL Salaries		285,140	0	285,140	199,399.86	.00	85,740.14	69.9%
4c Benefits								
100167 41000	Retirement	89,908	0	89,908	63,229.48	.00	26,678.52	70.3%
100167 41100	Workers' Comp	10,952	0	10,952	4,741.98	.00	6,210.02	43.3%
100167 41200	Medicare	4,135	0	4,135	2,837.20	.00	1,297.80	68.6%
100167 41300	Health Insurance	54,599	0	54,599	39,618.57	.00	14,980.43	72.6%
100167 41302	Vision Insurance	293	0	293	212.48	.00	80.52	72.5%
100167 41303	Dental Insurance	1,997	0	1,997	1,458.24	.00	538.76	73.0%
100167 41310	Life Insurance	128	0	128	93.97	.00	34.03	73.4%
TOTAL Benefits		162,012	0	162,012	112,191.92	.00	49,820.08	69.2%
4e Services & Supplies								
100167 50000	Supplies	3,500	0	3,500	2,525.53	.00	974.47	72.2%
100167 50230	Equipment	15,500	0	15,500	14,979.86	.00	520.14	96.6%
100167 50420	Laundry	2,000	0	2,000	1,446.00	.00	554.00	72.3%
100167 50430	Tools	7,000	0	7,000	3,485.15	.00	3,514.85	49.8%
100167 50440	Safety Supplies	3,000	0	3,000	1,512.18	.00	1,487.82	50.4%
100167 51000	Fuel	5,500	0	5,500	2,959.51	.00	2,540.49	53.8%
100167 51010	Oil & Grease	16,000	0	16,000	11,879.35	.00	4,120.65	74.2%
100167 52410	Physicals	150	0	150	.00	.00	150.00	.0%
100167 52600	Vehicle Registrati	550	0	550	276.00	.00	274.00	50.2%
100167 53530	Software Support	8,200	0	8,200	8,739.05	.00	-539.05	106.6%*
100167 56000	Training	3,000	0	3,000	1,087.00	.00	1,913.00	36.2%
100167 56200	Travel	400	0	400	264.00	.00	136.00	66.0%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
100167 56400	Repairs and Mainte	285,000	0	285,000	194,028.86	.00	90,971.14	68.1%
100167 56500	Building Maintenan	5,500	0	5,500	2,843.61	.00	2,656.39	51.7%
100167 60100	Electric Service	6,000	0	6,000	4,148.47	.00	1,851.53	69.1%
100167 60200	Gas Service	5,500	0	5,500	1,666.09	.00	3,833.91	30.3%
100167 60700	Telephone	1,700	0	1,700	333.79	.00	1,366.21	19.6%
TOTAL Services & Supplies		368,500	0	368,500	252,174.45	.00	116,325.55	68.4%
TOTAL Vehicle Maintenance		815,652	0	815,652	563,766.23	.00	251,885.77	69.1%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
215 District Attorney							
4a Salaries							
100215 40000 Salaries	1,574,584	0	1,574,584	928,809.42	.00	645,774.58	59.0%
100215 40005 11125 Stipend	47,950	0	47,950	33,570.00	.00	14,380.00	70.0%
100215 40010 Temporary Salaries	0	0	0	2,782.82	.00	-2,782.82	100.0%*
100215 40500 Overtime	5,681	0	5,681	1,162.55	.00	4,518.45	20.5%
100215 40510 Overtime Holiday	0	0	0	338.86	.00	-338.86	100.0%*
TOTAL Salaries	1,628,215	0	1,628,215	966,663.65	.00	661,551.35	59.4%
4c Benefits							
100215 41000 Retirement	477,762	0	477,762	283,464.40	.00	194,297.60	59.3%
100215 41000 11125 Retirement -	0	0	0	.00	.00	.00	.0%
100215 41001 Early Retirement I	11,752	0	11,752	.00	.00	11,752.00	.0%
100215 41010 Social Security	0	0	0	206.15	.00	-206.15	100.0%*
100215 41100 Workers' Comp	39,825	0	39,825	20,772.76	.00	19,052.24	52.2%
100215 41100 11125 Workers' Comp	0	0	0	.00	.00	.00	.0%
100215 41200 Medicare	23,607	0	23,607	13,435.86	.00	10,171.14	56.9%
100215 41200 11125 Medicare	0	0	0	.00	.00	.00	.0%
100215 41300 Health Insurance	224,841	0	224,841	139,453.73	.00	85,387.27	62.0%
100215 41300 11125 Health Insura	0	0	0	.00	.00	.00	.0%
100215 41302 Vision Insurance	1,065	0	1,065	664.44	.00	400.56	62.4%
100215 41302 11125 Vision Insura	0	0	0	.00	.00	.00	.0%
100215 41303 Dental Insurance	7,260	0	7,260	4,560.68	.00	2,699.32	62.8%
100215 41303 11125 Dental Insura	0	0	0	.00	.00	.00	.0%
100215 41310 Life Insurance	465	0	465	293.80	.00	171.20	63.2%
100215 41310 11125 Life Insuranc	0	0	0	.00	.00	.00	.0%
TOTAL Benefits	786,577	0	786,577	462,851.82	.00	323,725.18	58.8%
4e Services & Supplies							
100215 50000 Supplies	12,000	0	12,000	7,556.10	.00	4,443.90	63.0%
100215 51000 Fuel	5,500	0	5,500	1,671.47	.00	3,828.53	30.4%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
100215 52000 Copier Maintenance	750	0	750	72.71	.00	677.29	9.7%
100215 52030 Printer Services	5,400	0	5,400	2,089.73	.00	3,310.27	38.7%
100215 52750 Expert Witness	30,000	0	30,000	13,543.57	.00	16,456.43	45.1%
100215 52920 Law Library	25,661	0	25,661	14,411.52	.00	11,249.48	56.2%
100215 52930 Victims of Sexual	3,000	0	3,000	725.00	.00	2,275.00	24.2%
100215 53530 Software Support	60,000	0	60,000	68,317.15	.00	-8,317.15	113.9%*
100215 53900 Contract Services	93,500	0	93,500	61,175.00	.00	32,325.00	65.4%
100215 54020 Attorney	0	0	0	34,738.81	.00	-34,738.81	100.0%*
100215 54020 90004 Attorney	0	0	0	16,060.00	.00	-16,060.00	100.0%*
100215 56000 Training	6,000	0	6,000	1,270.00	.00	4,730.00	21.2%
100215 56200 Travel	12,000	0	12,000	1,493.01	.00	10,506.99	12.4%
100215 60700 Telephone	1,965	0	1,965	1,523.39	.00	441.61	77.5%
10021510 50000 Supplies	2,437	0	2,437	.00	.00	2,437.00	.0%
TOTAL Services & Supplies	258,213	0	258,213	224,647.46	.00	33,565.54	87.0%
4g Capital Outlay							
100215 70700 Capital Outlay - V	60,000	0	60,000	46,694.50	.00	13,305.50	77.8%
TOTAL Capital Outlay	60,000	0	60,000	46,694.50	.00	13,305.50	77.8%
TOTAL District Attorney	2,733,005	0	2,733,005	1,700,857.43	.00	1,032,147.57	62.2%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
217 Child Support								
4a Salaries								
100217 40000	Salaries	307,067	0	307,067	214,658.77	.00	92,408.23	69.9%
100217 40320	Shift Differential	0	0	0	10.00	.00	-10.00	100.0%*
100217 40500	Overtime	852	0	852	602.72	.00	249.28	70.7%
TOTAL Salaries		307,919	0	307,919	215,271.49	.00	92,647.51	69.9%
4c Benefits								
100217 41000	Retirement	89,567	0	89,567	62,071.98	.00	27,495.02	69.3%
100217 41100	Workers' Comp	13,275	0	13,275	6,622.42	.00	6,652.58	49.9%
100217 41200	Medicare	4,464	0	4,464	2,830.47	.00	1,633.53	63.4%
100217 41300	Health Insurance	84,495	0	84,495	63,370.17	.00	21,124.83	75.0%
100217 41302	Vision Insurance	355	0	355	264.60	.00	90.40	74.5%
100217 41303	Dental Insurance	2,420	0	2,420	1,816.20	.00	603.80	75.0%
100217 41310	Life Insurance	155	0	155	117.00	.00	38.00	75.5%
TOTAL Benefits		194,731	0	194,731	137,092.84	.00	57,638.16	70.4%
4e Services & Supplies								
100217 50000	Supplies	3,500	0	3,500	1,396.83	.00	2,103.17	39.9%
100217 50000 12010	Supplies	0	129	129	128.94	.00	.06	100.0%
100217 52000	Copier Maintenance	2,500	0	2,500	2,159.74	.00	340.26	86.4%
100217 52030	Printer Services	420	0	420	740.25	.00	-320.25	176.3%*
100217 52100	Postage	6,500	0	6,500	4,130.30	.00	2,369.70	63.5%
100217 52780	Paternity Testing	600	0	600	421.00	.00	179.00	70.2%
100217 52920 12010	Law Library	0	4,308	4,308	8,915.04	.00	-4,607.04	206.9%*
100217 56200	Travel	0	0	0	36.54	.00	-36.54	100.0%*
100217 56200 12010	Travel	0	4,389	4,389	4,389.41	.00	-.41	100.0%*
100217 60100	Electric Service	2,300	0	2,300	815.17	.00	1,484.83	35.4%
100217 60200	Gas Service	2,200	0	2,200	56.89	.00	2,143.11	2.6%
100217 60250	Water & Sewer Serv	560	0	560	285.58	.00	274.42	51.0%
100217 60700	Telephone	700	0	700	520.52	.00	179.48	74.4%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
TOTAL Services & Supplies	19,280	8,826	28,106	23,996.21	.00	4,109.79	85.4%
TOTAL Child Support	521,930	8,826	530,756	376,360.54	.00	154,395.46	70.9%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
220 Public Guardian								
4a Salaries								
100220 40000	Salaries	112,498	0	112,498	79,121.34	.00	33,376.66	70.3%
TOTAL Salaries		112,498	0	112,498	79,121.34	.00	33,376.66	70.3%
4c Benefits								
100220 41000	Retirement	24,625	0	24,625	17,200.56	.00	7,424.44	69.8%
100220 41100	Workers' Comp	2,987	0	2,987	1,671.45	.00	1,315.55	56.0%
100220 41200	Medicare	1,631	0	1,631	1,139.87	.00	491.13	69.9%
100220 41300	Health Insurance	2,004	0	2,004	1,502.55	.00	501.45	75.0%
100220 41302	Vision Insurance	80	0	80	59.49	.00	20.51	74.4%
100220 41303	Dental Insurance	545	0	545	408.60	.00	136.40	75.0%
100220 41310	Life Insurance	35	0	35	26.34	.00	8.66	75.3%
TOTAL Benefits		31,907	0	31,907	22,008.86	.00	9,898.14	69.0%
4e Services & Supplies								
100220 50000	Supplies	500	0	500	111.99	.00	388.01	22.4%
100220 51000	Fuel	2,500	0	2,500	1,424.35	.00	1,075.65	57.0%
100220 52030	Printer Services	60	0	60	193.26	.00	-133.26	322.1%*
100220 56000	Training	2,500	0	2,500	1,250.00	.00	1,250.00	50.0%
100220 56200	Travel	3,500	0	3,500	2,296.90	.00	1,203.10	65.6%
100220 60100	Electric Service	1,146	0	1,146	359.14	.00	786.86	31.3%
100220 60200	Gas Service	772	0	772	145.02	.00	626.98	18.8%
100220 60250	Water & Sewer Serv	428	0	428	119.66	.00	308.34	28.0%
100220 60700	Telephone	622	0	622	466.98	.00	155.02	75.1%
TOTAL Services & Supplies		12,028	0	12,028	6,367.30	.00	5,660.70	52.9%
TOTAL Public Guardian		156,433	0	156,433	107,497.50	.00	48,935.50	68.7%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
231 PreTrial Services								
4a Salaries								
100231 40000	Salaries	196,983	0	196,983	104,087.12	.00	92,895.88	52.8%
100231 40150	Acting Pay	0	0	0	194.03	.00	-194.03	100.0%*
100231 40320	Shift Differential	0	0	0	2.00	.00	-2.00	100.0%*
100231 40500	Overtime	22,725	0	22,725	8,699.62	.00	14,025.38	38.3%
100231 40510	Overtime Holiday	0	0	0	1,142.79	.00	-1,142.79	100.0%*
TOTAL Salaries		219,708	0	219,708	114,125.56	.00	105,582.44	51.9%
4c Benefits								
100231 41000	Retirement	37,919	0	37,919	19,111.46	.00	18,807.54	50.4%
100231 41100	Workers' Comp	7,965	0	7,965	4,704.58	.00	3,260.42	59.1%
100231 41200	Medicare	3,186	0	3,186	1,628.71	.00	1,557.29	51.1%
100231 41300	Health Insurance	56,125	0	56,125	19,581.55	.00	36,543.45	34.9%
100231 41302	Vision Insurance	213	0	213	105.12	.00	107.88	49.4%
100231 41303	Dental Insurance	1,452	0	1,452	721.62	.00	730.38	49.7%
100231 41310	Life Insurance	93	0	93	50.52	.00	42.48	54.3%
TOTAL Benefits		106,953	0	106,953	45,903.56	.00	61,049.44	42.9%
4e Services & Supplies								
100231 50000	Supplies	7,600	0	7,600	543.84	.00	7,056.16	7.2%
100231 51000	Fuel	6,000	0	6,000	153.06	.00	5,846.94	2.6%
100231 52020	Equipment Maintena	250	0	250	.00	.00	250.00	.0%
100231 52030	Printer Services	150	0	150	443.00	.00	-293.00	295.3%*
100231 52430	Drug Testing	15,000	0	15,000	7,246.19	.00	7,753.81	48.3%
100231 53530	Software Support	8,500	0	8,500	7,689.68	.00	810.32	90.5%
100231 53900	11125 Contract Serv	12,000	0	12,000	.00	.00	12,000.00	.0%
100231 53940	Electronic Surveil	12,000	0	12,000	17,196.80	.00	-5,196.80	143.3%*
100231 56000	Training	5,000	0	5,000	.00	.00	5,000.00	.0%
100231 56200	Travel	1,000	0	1,000	.00	.00	1,000.00	.0%
100231 60700	Telephone	3,500	0	3,500	1,092.33	.00	2,407.67	31.2%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
TOTAL Services & Supplies	71,000	0	71,000	34,364.90	.00	36,635.10	48.4%
TOTAL PreTrial Services	397,661	0	397,661	194,394.02	.00	203,266.98	48.9%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
232 District Court Clerks								
4a Salaries								
100232 40000	Salaries	472,093	0	472,093	320,951.31	.00	151,141.69	68.0%
TOTAL Salaries		472,093	0	472,093	320,951.31	.00	151,141.69	68.0%
4c Benefits								
100232 41000	Retirement	107,827	0	107,827	73,121.22	.00	34,705.78	67.8%
100232 41100	Workers' Comp	18,585	0	18,585	9,723.64	.00	8,861.36	52.3%
100232 41200	Medicare	6,846	0	6,846	4,487.42	.00	2,358.58	65.5%
100232 41300	Health Insurance	102,508	0	102,508	77,495.23	.00	25,012.77	75.6%
100232 41302	Vision Insurance	497	0	497	370.44	.00	126.56	74.5%
100232 41303	Dental Insurance	3,388	0	3,388	2,542.68	.00	845.32	75.0%
100232 41310	Life Insurance	217	0	217	163.80	.00	53.20	75.5%
TOTAL Benefits		239,868	0	239,868	167,904.43	.00	71,963.57	70.0%
4e Services & Supplies								
100232 50000	Supplies	3,000	0	3,000	1,731.52	.00	1,268.48	57.7%
100232 52000	Copier Maintenance	1,000	0	1,000	496.98	.00	503.02	49.7%
100232 52020	Equipment Maintena	35,000	0	35,000	32,064.00	.00	2,936.00	91.6%
100232 52030	Printer Services	1,000	0	1,000	94.00	.00	906.00	9.4%
100232 53530	Software Support	57,000	0	57,000	55,541.46	.00	1,458.54	97.4%
100232 56000	Training	3,500	0	3,500	2,130.00	.00	1,370.00	60.9%
100232 56200	Travel	2,750	0	2,750	2,085.48	.00	664.52	75.8%
100232 60700	Telephone	800	0	800	461.86	.00	338.14	57.7%
TOTAL Services & Supplies		104,050	0	104,050	94,605.30	.00	9,444.70	90.9%
TOTAL District Court Clerks		816,011	0	816,011	583,461.04	.00	232,549.96	71.5%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
233 District Court								
4a Salaries								
100233 40000	Salaries	587,110	0	587,110	355,913.23	.00	231,196.77	60.6%
100233 40010	Temporary Salaries	43,880	0	43,880	29,450.92	.00	14,429.08	67.1%
100233 40500	Overtime	1,704	0	1,704	74.54	.00	1,629.46	4.4%
100233 40510	Overtime Holiday	0	0	0	927.08	.00	-927.08	100.0%*
TOTAL Salaries		632,694	0	632,694	386,365.77	.00	246,328.23	61.1%
4c Benefits								
100233 41000	Retirement	146,724	0	146,724	98,573.92	.00	48,150.08	67.2%
100233 41010	Social Security	2,721	0	2,721	1,829.04	.00	891.96	67.2%
100233 41100	Workers' Comp	40,053	0	40,053	25,085.31	.00	14,967.69	62.6%
100233 41200	Medicare	9,174	0	9,174	5,567.82	.00	3,606.18	60.7%
100233 41300	Health Insurance	90,085	0	90,085	57,277.57	.00	32,807.43	63.6%
100233 41302	Vision Insurance	497	0	497	311.64	.00	185.36	62.7%
100233 41303	Dental Insurance	3,388	0	3,388	2,139.08	.00	1,248.92	63.1%
100233 41310	Life Insurance	217	0	217	231.40	.00	-14.40	106.6%*
TOTAL Benefits		292,859	0	292,859	191,015.78	.00	101,843.22	65.2%
4e Services & Supplies								
100233 50000	Supplies	6,500	0	6,500	3,420.40	.00	3,079.60	52.6%
100233 52000	Copier Maintenance	650	0	650	73.98	.00	576.02	11.4%
100233 52020	Equipment Maintena	0	0	0	505.00	.00	-505.00	100.0%*
100233 52030	Printer Services	1,100	0	1,100	681.50	.00	418.50	62.0%
100233 52700	Witness Fees	5,000	0	5,000	2,267.18	.00	2,732.82	45.3%
100233 52710	Court Reporting	150,000	0	150,000	110,352.96	.00	39,647.04	73.6%
100233 52720	Transcript	70,000	0	70,000	55,640.40	.00	14,359.60	79.5%
100233 52730	Interpreter	20,000	0	20,000	10,130.00	.00	9,870.00	50.7%
100233 52740	Jury Costs	30,000	0	30,000	29,827.35	.00	172.65	99.4%
100233 52900	Pre Sentencing Inv	135,000	0	135,000	154,916.25	.00	-19,916.25	114.8%*
100233 52920	Law Library	25,000	0	25,000	15,170.44	.00	9,829.56	60.7%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
100233 53920 Professional Fees	90,000	0	90,000	127,811.08	.00	-37,811.08	142.0%*
100233 54020 Attorney	80,000	0	80,000	52,737.28	.00	27,262.72	65.9%
100233 56000 Training	5,000	0	5,000	1,065.00	.00	3,935.00	21.3%
100233 56100 Dues	3,000	0	3,000	1,833.20	.00	1,166.80	61.1%
100233 56200 Travel	5,000	0	5,000	1,642.55	.00	3,357.45	32.9%
100233 60700 Telephone	600	0	600	405.90	.00	194.10	67.7%
10023329 52910 Indigent/Elderly	16,000	0	16,000	7,520.92	.00	8,479.08	47.0%
TOTAL Services & Supplies	642,850	0	642,850	576,001.39	.00	66,848.61	89.6%
TOTAL District Court	1,568,403	0	1,568,403	1,153,382.94	.00	415,020.06	73.5%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
234 Walker River JC							
4a Salaries							
100234 40000 Salaries	402,197	0	402,197	285,279.60	.00	116,917.40	70.9%
100234 40005 11125 Stipend	9,000	0	9,000	12,960.00	.00	-3,960.00	144.0%*
100234 40500 Overtime	10,226	0	10,226	3,168.75	.00	7,057.25	31.0%
100234 40510 Overtime Holiday	0	0	0	500.81	.00	-500.81	100.0%*
TOTAL Salaries	421,423	0	421,423	301,909.16	.00	119,513.84	71.6%
4c Benefits							
100234 41000 Retirement	116,129	0	116,129	45,366.40	.00	70,762.60	39.1%
100234 41000 11125 Retirement -	0	0	0	.00	.00	.00	.0%
100234 41100 Workers' Comp	25,391	0	25,391	15,614.08	.00	9,776.92	61.5%
100234 41100 11125 Workers' Comp	0	0	0	.00	.00	.00	.0%
100234 41200 Medicare	6,401	0	6,401	4,413.26	.00	1,987.74	68.9%
100234 41200 11125 Medicare	0	0	0	.00	.00	.00	.0%
100234 41300 Health Insurance	84,168	0	84,168	59,305.04	.00	24,862.96	70.5%
100234 41300 11125 Health Insura	0	0	0	.00	.00	.00	.0%
100234 41302 Vision Insurance	426	0	426	302.87	.00	123.13	71.1%
100234 41302 11125 Vision Insura	0	0	0	.00	.00	.00	.0%
100234 41303 Dental Insurance	2,904	0	2,904	2,078.88	.00	825.12	71.6%
100234 41303 11125 Dental Insura	0	0	0	.00	.00	.00	.0%
100234 41310 Life Insurance	311	0	311	227.52	.00	83.48	73.2%
100234 41310 11125 Life Insuranc	0	0	0	.00	.00	.00	.0%
TOTAL Benefits	235,730	0	235,730	127,308.05	.00	108,421.95	54.0%
4e Services & Supplies							
100234 50000 Supplies	6,000	0	6,000	4,350.69	.00	1,649.31	72.5%
100234 50400 Uniforms	500	0	500	.00	.00	500.00	.0%
100234 51000 Fuel	4,000	0	4,000	984.41	.00	3,015.59	24.6%
100234 52000 Copier Maintenance	2,000	0	2,000	678.20	.00	1,321.80	33.9%
100234 52030 Printer Services	1,500	0	1,500	554.73	.00	945.27	37.0%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
100234 52700	Witness Fees	2,000	0	2,000	25.00	.00	1,975.00	1.3%
100234 52720	Transcript	5,000	0	5,000	2,398.10	.00	2,601.90	48.0%
100234 52730	Interpreter	15,000	0	15,000	4,627.50	.00	10,372.50	30.9%
100234 52740	Jury Costs	6,000	0	6,000	.00	.00	6,000.00	.0%
100234 53530	Software Support	2,500	0	2,500	2,426.00	.00	74.00	97.0%
100234 53920	Professional Fees	5,000	0	5,000	1,300.00	.00	3,700.00	26.0%
100234 53925	Judge Pro Tem	8,000	0	8,000	3,917.42	.00	4,082.58	49.0%
100234 56000	Training	700	0	700	225.00	.00	475.00	32.1%
100234 56100	Dues	500	0	500	.00	.00	500.00	.0%
100234 56200	Travel	750	0	750	362.00	.00	388.00	48.3%
100234 60700	Telephone	2,000	0	2,000	849.90	.00	1,150.10	42.5%
TOTAL Services & Supplies		61,450	0	61,450	22,698.95	.00	38,751.05	36.9%
TOTAL Walker River JC		718,603	0	718,603	451,916.16	.00	266,686.84	62.9%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
236 Fernley JC							
4a Salaries							
100236 40000 Salaries	376,822	0	376,822	232,208.79	.00	144,613.21	61.6%
100236 40005 11125 Stipend	12,600	0	12,600	11,250.00	.00	1,350.00	89.3%
100236 40500 Overtime	15,908	0	15,908	3,438.65	.00	12,469.35	21.6%
TOTAL Salaries	405,330	0	405,330	246,897.44	.00	158,432.56	60.9%
4c Benefits							
100236 41000 Retirement	109,133	0	109,133	66,982.48	.00	42,150.52	61.4%
100236 41000 11125 Retirement -	0	0	0	.00	.00	.00	.0%
100236 41100 Workers' Comp	22,736	0	22,736	8,178.18	.00	14,557.82	36.0%
100236 41100 11125 Workers' Comp	0	0	0	.00	.00	.00	.0%
100236 41200 Medicare	5,878	0	5,878	3,356.51	.00	2,521.49	57.1%
100236 41200 11125 Medicare	0	0	0	.00	.00	.00	.0%
100236 41300 Health Insurance	88,179	0	88,179	52,800.35	.00	35,378.65	59.9%
100236 41302 Vision Insurance	355	0	355	227.05	.00	127.95	64.0%
100236 41303 Dental Insurance	2,420	0	2,420	1,558.38	.00	861.62	64.4%
100236 41310 Life Insurance	280	0	280	179.56	.00	100.44	64.1%
TOTAL Benefits	228,981	0	228,981	133,282.51	.00	95,698.49	58.2%
4e Services & Supplies							
100236 50000 Supplies	8,000	0	8,000	1,837.87	.00	6,162.13	23.0%
100236 51000 Fuel	2,500	0	2,500	899.20	.00	1,600.80	36.0%
100236 52000 Copier Maintenance	600	0	600	332.40	.00	267.60	55.4%
100236 52030 Printer Services	2,100	0	2,100	730.77	.00	1,369.23	34.8%
100236 52700 Witness Fees	3,000	0	3,000	800.73	.00	2,199.27	26.7%
100236 52720 Transcript	12,000	0	12,000	15,389.40	.00	-3,389.40	128.2%*
100236 52730 Interpreter	12,000	0	12,000	8,960.35	.00	3,039.65	74.7%
100236 52740 Jury Costs	2,000	0	2,000	.00	.00	2,000.00	.0%
100236 53900 Contract Services	0	0	0	8,340.00	.00	-8,340.00	100.0%*
100236 53920 Professional Fees	4,000	0	4,000	711.61	.00	3,288.39	17.8%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
100236 53925	Judge Pro Tem	8,500	0	8,500	3,318.00	.00	5,182.00	39.0%
100236 56200	Travel	350	0	350	.00	.00	350.00	.0%
100236 60000	Utilities	3,000	0	3,000	2,500.00	.00	500.00	83.3%
100236 60700	Telephone	1,500	0	1,500	849.14	.00	650.86	56.6%
TOTAL Services & Supplies		59,550	0	59,550	44,669.47	.00	14,880.53	75.0%
TOTAL Fernley JC		693,861	0	693,861	424,849.42	.00	269,011.58	61.2%

YEAR-TO-DATE BUDGET REPORT

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ACCOUNTS FOR: 100 General Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
237 Dayton JC							
4a Salaries							
100237 40000 Salaries	401,689	0	401,689	285,401.00	.00	116,288.00	71.1%
100237 40005 11125 Stipend	12,600	0	12,600	12,510.00	.00	90.00	99.3%
100237 40010 Temporary Salaries	1,931	0	1,931	627.24	.00	1,303.76	32.5%
100237 40500 Overtime	5,681	0	5,681	871.97	.00	4,809.03	15.3%
100237 40510 Overtime Holiday	0	0	0	169.74	.00	-169.74	100.0%*
100237 40520 Comp Payout	0	0	0	56.66	.00	-56.66	100.0%*
TOTAL Salaries	421,901	0	421,901	299,636.61	.00	122,264.39	71.0%
4c Benefits							
100237 41000 Retirement	129,075	0	129,075	87,853.13	.00	41,221.87	68.1%
100237 41000 11125 Retirement -	0	0	0	.00	.00	.00	.0%
100237 41010 Social Security	120	0	120	38.90	.00	81.10	32.4%
100237 41100 Workers' Comp	25,507	0	25,507	13,849.72	.00	11,657.28	54.3%
100237 41100 11125 Workers' Comp	0	0	0	.00	.00	.00	.0%
100237 41200 Medicare	6,306	0	6,306	4,249.42	.00	2,056.58	67.4%
100237 41200 11125 Medicare	0	0	0	.00	.00	.00	.0%
100237 41300 Health Insurance	95,220	0	95,220	68,651.82	.00	26,568.18	72.1%
100237 41300 11125 Health Insura	0	0	0	.00	.00	.00	.0%
100237 41302 Vision Insurance	426	0	426	317.52	.00	108.48	74.5%
100237 41302 11125 Vision Insura	0	0	0	.00	.00	.00	.0%
100237 41303 Dental Insurance	2,904	0	2,904	2,179.44	.00	724.56	75.0%
100237 41303 11125 Dental Insura	0	0	0	.00	.00	.00	.0%
100237 41310 Life Insurance	311	0	311	234.00	.00	77.00	75.2%
100237 41310 11125 Life Insuranc	0	0	0	.00	.00	.00	.0%
TOTAL Benefits	259,869	0	259,869	177,373.95	.00	82,495.05	68.3%
4e Services & Supplies							
100237 50000 Supplies	12,000	0	12,000	8,516.40	.00	3,483.60	71.0%
100237 51000 Fuel	1,700	0	1,700	875.61	.00	824.39	51.5%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
100237 52000	Copier Maintenance	700	0	700	397.24	.00	302.76	56.7%
100237 52030	Printer Services	1,550	0	1,550	423.00	.00	1,127.00	27.3%
100237 52100	Postage	4,000	0	4,000	2,547.40	.00	1,452.60	63.7%
100237 52700	Witness Fees	1,500	0	1,500	32.25	.00	1,467.75	2.2%
100237 52720	Transcript	12,000	0	12,000	12,410.60	.00	-410.60	103.4%*
100237 52730	Interpreter	7,500	0	7,500	5,334.05	.00	2,165.95	71.1%
100237 52740	Jury Costs	2,000	0	2,000	.00	.00	2,000.00	.0%
100237 53920	Professional Fees	4,000	0	4,000	3,000.00	.00	1,000.00	75.0%
100237 53925	Judge Pro Tem	8,850	0	8,850	4,441.70	.00	4,408.30	50.2%
100237 60100	Electric Service	5,200	0	5,200	2,417.01	.00	2,782.99	46.5%
100237 60200	Gas Service	2,850	0	2,850	962.47	.00	1,887.53	33.8%
100237 60700	Telephone	1,700	0	1,700	887.64	.00	812.36	52.2%
TOTAL Services & Supplies		65,550	0	65,550	42,245.37	.00	23,304.63	64.4%
TOTAL Dayton JC		747,320	0	747,320	519,255.93	.00	228,064.07	69.5%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
238 Juvenile Probation								
4a Salaries								
100238 40000	Salaries	963,903	0	963,903	612,727.70	.00	351,175.30	63.6%
100238 40010	Temporary Salaries	23,604	0	23,604	25,262.22	.00	-1,658.22	107.0%*
100238 40320	Shift Differential	508	0	508	322.90	.00	185.10	63.6%
100238 40350	Standby	24,282	0	24,282	20,363.35	.00	3,918.65	83.9%
100238 40360	Standby Holiday	0	0	0	1,787.20	.00	-1,787.20	100.0%*
100238 40500	Overtime	31,815	0	31,815	21,587.37	.00	10,227.63	67.9%
100238 40520	Comp Payout	0	0	0	1,122.87	.00	-1,122.87	100.0%*
100238 40610	Callback	23,923	0	23,923	10,257.45	.00	13,665.55	42.9%
100238 40620	Callback Holiday	0	0	0	2,131.92	.00	-2,131.92	100.0%*
TOTAL Salaries		1,068,035	0	1,068,035	695,562.98	.00	372,472.02	65.1%
4c Benefits								
100238 41000	Retirement	463,582	0	463,582	291,103.67	.00	172,478.33	62.8%
100238 41010	Social Security	1,463	0	1,463	1,666.34	.00	-203.34	113.9%*
100238 41100	Workers' Comp	124,234	0	124,234	67,851.00	.00	56,383.00	54.6%
100238 41200	Medicare	15,487	0	15,487	9,674.51	.00	5,812.49	62.5%
100238 41300	Health Insurance	204,454	0	204,454	127,179.34	.00	77,274.66	62.2%
100238 41302	Vision Insurance	994	0	994	623.28	.00	370.72	62.7%
100238 41303	Dental Insurance	6,776	0	6,776	4,278.16	.00	2,497.84	63.1%
100238 41310	Life Insurance	1,559	0	1,559	1,029.60	.00	529.40	66.0%
TOTAL Benefits		818,549	0	818,549	503,405.90	.00	315,143.10	61.5%
4e Services & Supplies								
100238 50000	Supplies	2,500	0	2,500	14.05	.00	2,485.95	.6%
100238 50010	Office Supplies	10,800	0	10,800	16,376.12	.00	-5,576.12	151.6%*
100238 50120	Range	9,375	0	9,375	1,707.78	.00	7,667.22	18.2%
100238 50400	Uniforms	9,600	0	9,600	3,157.49	.00	6,442.51	32.9%
100238 50510	Juvenile Recreatio	2,662	0	2,662	2,160.74	.00	501.26	81.2%
100238 51000	Fuel	37,000	0	37,000	23,597.14	.00	13,402.86	63.8%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
100238 52000	Copier Maintenance	1,000	0	1,000	226.74	.00	773.26	22.7%
100238 52030	Printer Services	500	0	500	423.00	.00	77.00	84.6%
100238 52410	Physicals	600	0	600	37.00	.00	563.00	6.2%
100238 52430	Drug Testing	15,000	0	15,000	2,802.84	.00	12,197.16	18.7%
100238 52800	Juvenile Transport	100	0	100	76.10	.00	23.90	76.1%
100238 52810	Youth Parole	88,561	0	88,561	86,617.00	.00	1,944.00	97.8%
100238 52820	Detention	600,000	0	600,000	622,463.20	.00	-22,463.20	103.7%*
100238 52825	WNRYC Assessment	722,151	0	722,151	530,949.00	.00	191,202.00	73.5%
100238 52830	China Spring	235,068	0	235,068	245,839.57	.00	-10,771.57	104.6%*
100238 53530	Software Support	22,250	0	22,250	19,761.61	.00	2,488.39	88.8%
100238 53820	Cognitive Behavior	4,500	0	4,500	1,025.00	.00	3,475.00	22.8%
100238 53920	Professional Fees	17,500	0	17,500	8,972.60	.00	8,527.40	51.3%
100238 53920 12200	Professional	0	23,271	23,271	39,004.33	.00	-15,733.33	167.6%*
100238 53940	Electronic Surveil	17,000	0	17,000	7,009.00	.00	9,991.00	41.2%
100238 56000	Training	14,700	0	14,700	8,634.00	.00	6,066.00	58.7%
100238 56200	Travel	13,050	0	13,050	7,319.81	.00	5,730.19	56.1%
100238 60100	Electric Service	2,650	0	2,650	992.89	.00	1,657.11	37.5%
100238 60200	Gas Service	2,050	0	2,050	669.19	.00	1,380.81	32.6%
100238 60300	Water Service	800	0	800	512.00	.00	288.00	64.0%
100238 60400	Sewer Service	400	0	400	270.00	.00	130.00	67.5%
100238 60700	Telephone	12,000	0	12,000	7,458.81	.00	4,541.19	62.2%
10023850 50000	Supplies	11,981	0	11,981	.00	.00	11,981.00	.0%
TOTAL Services & Supplies		1,853,798	23,271	1,877,069	1,638,077.01	.00	238,991.99	87.3%
TOTAL Juvenile Probation		3,740,382	23,271	3,763,653	2,837,045.89	.00	926,607.11	75.4%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
239 Public Defender								
4e Services & Supplies								
100239 52710	Court Reporting	2,000	0	2,000	928.00	.00	1,072.00	46.4%
100239 52750	Expert Witness	60,000	0	60,000	15,837.50	.00	44,162.50	26.4%
100239 53020	Special Investigat	130,000	0	130,000	83,324.74	.00	46,675.26	64.1%
100239 53900	Contract Services	0	0	0	822.35	.00	-822.35	100.0%*
100239 54000	Public Defender	1,731,000	0	1,731,000	1,738,458.30	.00	-7,458.30	100.4%*
100239 54000 11125	Public Defend	46,800	0	46,800	32,400.00	.00	14,400.00	69.2%
100239 54020	Attorney	375,000	0	375,000	199,498.44	.00	175,501.56	53.2%
100239 54025	Public Defender -	120,000	0	120,000	100,000.00	.00	20,000.00	83.3%
100239 54026	Public Defender -	24,000	0	24,000	22,000.00	.00	2,000.00	91.7%
TOTAL Services & Supplies		2,488,800	0	2,488,800	2,193,269.33	.00	295,530.67	88.1%
TOTAL Public Defender		2,488,800	0	2,488,800	2,193,269.33	.00	295,530.67	88.1%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
324 Dispatch								
4a Salaries								
100324 40000	Salaries	1,088,533	0	1,088,533	571,686.31	.00	516,846.69	52.5%
100324 40120	Special Training	0	0	0	9,935.02	.00	-9,935.02	100.0%*
100324 40320	Shift Differential	30,000	0	30,000	16,124.30	.00	13,875.70	53.7%
100324 40500	Overtime	215,888	0	215,888	199,712.67	.00	16,175.33	92.5%
100324 40510	Overtime Holiday	0	0	0	24,676.81	.00	-24,676.81	100.0%*
100324 40520	Comp Payout	0	0	0	8,486.82	.00	-8,486.82	100.0%*
100324 40610	Callback	11,363	0	11,363	5,717.97	.00	5,645.03	50.3%
100324 40620	Callback Holiday	0	0	0	700.22	.00	-700.22	100.0%*
TOTAL Salaries		1,345,784	0	1,345,784	837,040.12	.00	508,743.88	62.2%
4c Benefits								
100324 41000	Retirement	287,955	0	287,955	151,762.78	.00	136,192.22	52.7%
100324 41100	Workers' Comp	51,941	0	51,941	27,517.72	.00	24,423.28	53.0%
100324 41200	Medicare	19,514	0	19,514	11,713.46	.00	7,800.54	60.0%
100324 41300	Health Insurance	272,387	0	272,387	131,264.99	.00	141,122.01	48.2%
100324 41302	Vision Insurance	1,136	0	1,136	613.23	.00	522.77	54.0%
100324 41303	Dental Insurance	7,744	0	7,744	4,209.16	.00	3,534.84	54.4%
100324 41310	Life Insurance	621	0	621	354.76	.00	266.24	57.1%
TOTAL Benefits		641,298	0	641,298	327,436.10	.00	313,861.90	51.1%
4e Services & Supplies								
100324 50000	Supplies	6,000	0	6,000	3,982.37	.00	2,017.63	66.4%
100324 50240	Communications Equ	3,500	0	3,500	823.88	.00	2,676.12	23.5%
100324 52000	Copier Maintenance	800	0	800	331.29	.00	468.71	41.4%
100324 52020	Equipment Maintena	29,850	0	29,850	25,466.32	.00	4,383.68	85.3%
100324 52030	Printer Services	70	0	70	100.21	.00	-30.21	143.2%*
100324 52400	Background Checks	1,200	0	1,200	.00	.00	1,200.00	.0%
100324 53530	Software Support	30,300	0	30,300	30,883.43	.00	-583.43	101.9%*
100324 56000	Training	3,500	0	3,500	3,197.34	.00	302.66	91.4%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
100324 56200	Travel	2,500	0	2,500	2,603.18	.00	-103.18	104.1%*
100324 57040	Bald Mountain Rent	12,000	0	12,000	.00	.00	12,000.00	.0%
TOTAL Services & Supplies		89,720	0	89,720	67,388.02	.00	22,331.98	75.1%
TOTAL Dispatch		2,076,802	0	2,076,802	1,231,864.24	.00	844,937.76	59.3%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
325 Animal Services								
4a Salaries								
100325 40000	Salaries	390,868	-390,868	0	.00	.00	.00	.0%
100325 40320	Shift Differential	0	0	0	.00	.00	.00	.0%
100325 40350	Standby	0	0	0	.00	.00	.00	.0%
100325 40360	Standby Holiday	0	0	0	.00	.00	.00	.0%
100325 40500	Overtime	20,453	-20,453	0	-3,801.80	.00	3,801.80	100.0%
100325 40510	Overtime Holiday	0	0	0	.00	.00	.00	.0%
100325 40610	Callback	0	0	0	.00	.00	.00	.0%
100325 40620	Callback Holiday	0	0	0	.00	.00	.00	.0%
TOTAL Salaries		411,321	-411,321	0	-3,801.80	.00	3,801.80	100.0%
4c Benefits								
100325 41000	Retirement	75,242	-75,242	0	.00	.00	.00	.0%
100325 41100	Workers' Comp	15,930	-15,930	0	.00	.00	.00	.0%
100325 41110	Workers' Comp - Ad	1,100	-1,100	0	.00	.00	.00	.0%
100325 41200	Medicare	5,964	-5,964	0	.00	.00	.00	.0%
100325 41300	Health Insurance	77,742	-77,742	0	.00	.00	.00	.0%
100325 41302	Vision Insurance	426	-426	0	.00	.00	.00	.0%
100325 41303	Dental Insurance	2,904	-2,904	0	.00	.00	.00	.0%
100325 41310	Life Insurance	186	-186	0	.00	.00	.00	.0%
TOTAL Benefits		179,494	-179,494	0	.00	.00	.00	.0%
4e Services & Supplies								
100325 50000	Supplies	21,000	-21,000	0	.00	.00	.00	.0%
100325 50400	Uniforms	3,000	-3,000	0	.00	.00	.00	.0%
100325 51000	Fuel	9,500	-9,500	0	.00	.00	.00	.0%
100325 52000	Copier Maintenance	500	-500	0	.00	.00	.00	.0%
100325 52030	Printer Services	60	-60	0	.00	.00	.00	.0%
100325 53530	Software Support	1,300	-1,300	0	.00	.00	.00	.0%
100325 53800	Vet Services	20,000	-20,000	0	.00	.00	.00	.0%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
100325 53810	Spay and Neuter	28,000	-28,000	0	.00	.00	.00	.0%
100325 60100	Electric Service	11,000	-11,000	0	.00	.00	.00	.0%
100325 60200	Gas Service	23,000	-23,000	0	.00	.00	.00	.0%
100325 60300	Water Service	5,000	-5,000	0	.00	.00	.00	.0%
100325 60400	Sewer Service	850	-850	0	.00	.00	.00	.0%
100325 60700	Telephone	2,600	-2,600	0	.00	.00	.00	.0%
TOTAL Services & Supplies		125,810	-125,810	0	.00	.00	.00	.0%
TOTAL Animal Services		716,625	-716,625	0	-3,801.80	.00	3,801.80	100.0%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
326 Sheriff								
4a Salaries								
100326 40000	Salaries	5,478,389	0	5,478,389	3,737,312.19	.00	1,741,076.81	68.2%
100326 40000 13240	Salaries	260,163	0	260,163	210,750.32	.00	49,412.68	81.0%
100326 40010	Temporary Salaries	20,785	0	20,785	19,586.14	.00	1,198.86	94.2%
100326 40030	Military Leave	0	0	0	5,006.99	.00	-5,006.99	100.0%*
100326 40040	Canine Handler	42,230	0	42,230	19,007.40	.00	23,222.60	45.0%
100326 40110	Field Training	0	0	0	15,049.71	.00	-15,049.71	100.0%*
100326 40130	Range	0	0	0	1,180.29	.00	-1,180.29	100.0%*
100326 40135	POST Cert Training	0	0	0	1,753.50	.00	-1,753.50	100.0%*
100326 40210	Post Incentives	22,500	0	22,500	19,050.00	.00	3,450.00	84.7%
100326 40220	Physical Incentive	3,500	0	3,500	5,750.00	.00	-2,250.00	164.3%*
100326 40320	Shift Differential	92,000	0	92,000	58,151.58	.00	33,848.42	63.2%
100326 40350	Standby	0	0	0	21,037.04	.00	-21,037.04	100.0%*
100326 40360	Standby Holiday	0	0	0	1,232.83	.00	-1,232.83	100.0%*
100326 40410	Uniform Allowance	132,000	0	132,000	83,900.00	.00	48,100.00	63.6%
100326 40410 13240	Uniform Allow	0	0	0	4,500.00	.00	-4,500.00	100.0%*
100326 40500	Overtime	893,557	0	893,557	934,404.78	.00	-40,847.78	104.6%*
100326 40500 13100	Overtime	0	0	0	3,799.05	.00	-3,799.05	100.0%*
100326 40500 13110	Overtime	0	1,274	1,274	7,364.19	.00	-6,090.19	578.0%*
100326 40500 13120	Overtime	0	3,887	3,887	10,465.56	.00	-6,578.56	269.2%*
100326 40500 13121	Overtime	0	608	608	608.16	.00	-.16	100.0%*
100326 40510	Overtime Holiday	0	0	0	59,488.01	.00	-59,488.01	100.0%*
100326 40520	Comp Payout	0	0	0	14,742.30	.00	-14,742.30	100.0%*
100326 40610	Callback	29,785	0	29,785	11,370.04	.00	18,414.96	38.2%
TOTAL Salaries		6,974,909	5,769	6,980,678	5,245,510.08	.00	1,735,167.92	75.1%
4c Benefits								
100326 41000	Retirement	3,105,531	0	3,105,531	2,169,906.65	.00	935,624.35	69.9%
100326 41000 13240	Retirement -	130,292	0	130,292	120,450.90	.00	9,841.10	92.4%
100326 41010	Social Security	1,289	0	1,289	1,266.91	.00	22.09	98.3%
100326 41100	Workers' Comp	800,972	0	800,972	482,985.79	.00	317,986.21	60.3%
100326 41100 13240	Workers' Comp	29,135	0	29,135	27,112.53	.00	2,022.47	93.1%
100326 41200	Medicare	97,320	0	97,320	70,207.93	.00	27,112.07	72.1%
100326 41200 13240	Medicare	3,812	0	3,812	3,052.51	.00	759.49	80.1%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
100326 41300 Health Insurance	1,177,797	0	1,177,797	849,787.11	.00	328,009.89	72.2%
100326 41300 13240 Health Insura	34,641	0	34,641	27,198.39	.00	7,442.61	78.5%
100326 41302 Vision Insurance	5,202	0	5,202	3,609.99	.00	1,592.01	69.4%
100326 41302 13240 Vision Insura	194	0	194	140.17	.00	53.83	72.3%
100326 41303 Dental Insurance	35,450	0	35,450	25,384.10	.00	10,065.90	71.6%
100326 41303 13240 Dental Insura	1,334	0	1,334	962.19	.00	371.81	72.1%
100326 41310 Life Insurance	10,208	0	10,208	7,373.60	.00	2,834.40	72.2%
100326 41310 13240 Life Insuranc	429	0	429	309.94	.00	119.06	72.2%
TOTAL Benefits	5,433,606	0	5,433,606	3,789,748.71	.00	1,643,857.29	69.7%
4e Services & Supplies							
100326 50000 Supplies	60,500	0	60,500	33,828.32	.00	26,671.68	55.9%
100326 50000 13176 Supplies	0	0	0	20,327.64	.00	-20,327.64	100.0%*
100326 50000 13860 Supplies	0	0	0	3,500.00	.00	-3,500.00	100.0%*
100326 50120 Range	45,000	0	45,000	16,818.76	.00	28,181.24	37.4%
100326 50150 K-9 Supplies	20,000	0	20,000	21,363.40	.00	-1,363.40	106.8%*
100326 50170 Drone Expense	15,000	0	15,000	10,093.05	.00	4,906.95	67.3%
100326 50240 Communications Equ	10,000	0	10,000	3,551.25	.00	6,448.75	35.5%
100326 50400 Uniforms	21,800	0	21,800	5,514.63	.00	16,285.37	25.3%
100326 50400 13080 Uniforms	0	613	613	1,297.32	.00	-684.32	211.6%*
100326 51000 Fuel	390,000	0	390,000	263,527.49	.00	126,472.51	67.6%
100326 52000 Copier Maintenance	2,000	0	2,000	1,255.11	.00	744.89	62.8%
100326 52020 Equipment Maintena	5,400	0	5,400	3,350.00	.00	2,050.00	62.0%
100326 52030 Printer Services	5,000	0	5,000	6,713.99	.00	-1,713.99	134.3%*
100326 52400 Background Checks	21,400	0	21,400	3,316.00	.00	18,084.00	15.5%
100326 52410 Physicals	54,600	0	54,600	25,227.00	.00	29,373.00	46.2%
100326 52440 Fingerprinting	137,480	0	137,480	126,324.00	.00	11,156.00	91.9%
100326 52620 Emergency Towing	15,000	0	15,000	2,097.00	.00	12,903.00	14.0%
100326 52660 Seized Vehicle Tow	5,000	0	5,000	4,527.77	.00	472.23	90.6%
100326 53020 Special Investigat	26,550	0	26,550	5,470.99	.00	21,079.01	20.6%
100326 53030 DUI Processing	25,000	0	25,000	19,611.91	.00	5,388.09	78.4%
100326 53040 Forensic Lab	157,107	0	157,107	157,107.00	.00	.00	100.0%
100326 53050 Coroner Fees	275,000	0	275,000	126,669.86	.00	148,330.14	46.1%
100326 53530 Software Support	163,398	0	163,398	152,539.22	.00	10,858.78	93.4%
100326 53900 Contract Services	83,000	0	83,000	64,952.56	.00	18,047.44	78.3%
100326 53900 13008 Contract Serv	0	0	0	1,050.00	.00	-1,050.00	100.0%*
100326 56000 Training	68,178	0	68,178	30,657.18	.00	37,520.82	45.0%
100326 56000 13240 Training	0	0	0	3,900.00	.00	-3,900.00	100.0%*
100326 56200 Travel	60,875	0	60,875	35,502.41	.00	25,372.59	58.3%
100326 56200 13110 Travel	0	1,818	1,818	1,817.94	.00	.06	100.0%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
100326 56200 13240 Travel	0	0	0	14,446.36	.00	-14,446.36	100.0%*
100326 56460 Vehicle Repairs &	500	0	500	145.20	.00	354.80	29.0%
100326 57000 Rental	600	0	600	500.00	.00	100.00	83.3%
100326 57010 Equipment Rental	198,030	0	198,030	191,390.99	.00	6,639.01	96.6%
100326 60100 Electric Service	7,500	0	7,500	4,265.48	.00	3,234.52	56.9%
100326 60200 Gas Service	5,300	0	5,300	1,755.45	.00	3,544.55	33.1%
100326 60300 Water Service	600	0	600	926.16	.00	-326.16	154.4%*
100326 60400 Sewer Service	620	0	620	405.04	.00	214.96	65.3%
100326 60600 Garbage Service	28,968	0	28,968	18,637.78	.00	10,330.22	64.3%
100326 60700 Telephone	33,500	0	33,500	23,676.93	.00	9,823.07	70.7%
10032625 50000 Supplies	16,838	0	16,838	1,300.00	.00	15,538.00	7.7%
10032626 50000 Supplies	17,716	0	17,716	.00	.00	17,716.00	.0%
10032640 50000 Supplies	4,257	0	4,257	4,983.32	.00	-726.32	117.1%*
10032641 50000 Supplies	0	0	0	7,811.22	.00	-7,811.22	100.0%*
10032641 50150 K-9 Supplies	6,803	0	6,803	.00	.00	6,803.00	.0%
10032641 56200 Travel	0	0	0	9,203.30	.00	-9,203.30	100.0%*
10032645 50720 Youth Services	333	0	333	.00	.00	333.00	.0%
10032646 50000 Supplies	0	0	0	164.48	.00	-164.48	100.0%*
10032647 50000 Supplies	5,957	0	5,957	22,872.76	.00	-16,915.76	384.0%*
10032695 50000 Supplies	22,178	0	22,178	10,703.36	.00	11,474.64	48.3%
TOTAL Services & Supplies	2,016,988	2,431	2,019,419	1,465,099.63	.00	554,319.37	72.6%
4g Capital Outlay							
100326 70700 Capital Outlay - V	240,000	57,177	297,177	698,354.87	.00	-401,177.87	235.0%*
TOTAL Capital Outlay	240,000	57,177	297,177	698,354.87	.00	-401,177.87	235.0%
TOTAL Sheriff	14,665,503	65,377	14,730,880	11,198,713.29	.00	3,532,166.71	76.0%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
327 Emergency Management							
4a Salaries							
100327 40000 Salaries	83,562	0	83,562	54,265.94	.00	29,296.06	64.9%
100327 40000 13915 Salaries	54,323	0	54,323	35,289.10	.00	19,033.90	65.0%
TOTAL Salaries	137,885	0	137,885	89,555.04	.00	48,329.96	64.9%
4c Benefits							
100327 41000 Retirement	26,543	0	26,543	10,376.57	.00	16,166.43	39.1%
100327 41000 13915 Retirement -	0	0	0	12,894.30	.00	-12,894.30	100.0%*
100327 41100 Workers' Comp	5,044	0	5,044	1,155.96	.00	3,888.04	22.9%
100327 41100 13915 Workers' Comp	0	0	0	1,472.82	.00	-1,472.82	100.0%*
100327 41200 Medicare	2,000	0	2,000	786.75	.00	1,213.25	39.3%
100327 41200 13915 Medicare	0	0	0	506.84	.00	-506.84	100.0%*
100327 41300 Health Insurance	23,452	0	23,452	5,554.26	.00	17,897.74	23.7%
100327 41300 13915 Health Insura	0	0	0	8,331.39	.00	-8,331.39	100.0%*
100327 41302 Vision Insurance	135	0	135	31.77	.00	103.23	23.5%
100327 41302 13915 Vision Insura	0	0	0	47.61	.00	-47.61	100.0%*
100327 41303 Dental Insurance	920	0	920	217.98	.00	702.02	23.7%
100327 41303 13915 Dental Insura	0	0	0	326.88	.00	-326.88	100.0%*
100327 41310 Life Insurance	59	0	59	14.04	.00	44.96	23.8%
100327 41310 13915 Life Insuranc	0	0	0	21.06	.00	-21.06	100.0%*
TOTAL Benefits	58,153	0	58,153	41,738.23	.00	16,414.77	71.8%
4e Services & Supplies							
100327 50000 Supplies	6,000	0	6,000	3,943.10	.00	2,056.90	65.7%
100327 50000 13700 Supplies	0	31,950	31,950	31,950.25	.00	-.25	100.0%*
100327 50000 13701 Supplies	0	28,017	28,017	28,114.34	.00	-97.34	100.3%*
100327 50230 13910 Equipment	0	0	0	2,087.67	.00	-2,087.67	100.0%*
100327 51000 Fuel	6,000	0	6,000	2,203.98	.00	3,796.02	36.7%
100327 53530 Software Support	12,000	0	12,000	.00	.00	12,000.00	.0%
100327 56000 Training	2,100	0	2,100	1,979.00	.00	121.00	94.2%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
100327 56200	Travel	7,000	0	7,000	4,438.09	.00	2,561.91	63.4%
100327 60700	Telephone	2,000	0	2,000	748.02	.00	1,251.98	37.4%
100327 60810	Data Charges	0	0	0	76.96	.00	-76.96	100.0%*
TOTAL Services & Supplies		35,100	59,967	95,067	75,541.41	.00	19,525.59	79.5%
TOTAL Emergency Management		231,138	59,967	291,105	206,834.68	.00	84,270.32	71.1%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
328 Jail								
4a Salaries								
100328 40000	Salaries	2,064,305	0	2,064,305	1,467,636.34	.00	596,668.66	71.1%
100328 40030	Military Leave	0	0	0	447.13	.00	-447.13	100.0%*
100328 40110	Field Training	0	0	0	9,774.54	.00	-9,774.54	100.0%*
100328 40120	Special Training	0	0	0	687.50	.00	-687.50	100.0%*
100328 40125	Bilingual	0	0	0	149.57	.00	-149.57	100.0%*
100328 40130	Range	0	0	0	228.00	.00	-228.00	100.0%*
100328 40135	POST Cert Training	0	0	0	1,478.25	.00	-1,478.25	100.0%*
100328 40150	Acting Pay	0	0	0	138.04	.00	-138.04	100.0%*
100328 40210	Post Incentives	5,500	0	5,500	4,350.00	.00	1,150.00	79.1%
100328 40220	Physical Incentive	2,000	0	2,000	1,000.00	.00	1,000.00	50.0%
100328 40320	Shift Differential	65,000	0	65,000	30,981.07	.00	34,018.93	47.7%
100328 40410	Uniform Allowance	52,000	0	52,000	32,100.00	.00	19,900.00	61.7%
100328 40500	Overtime	353,010	0	353,010	387,174.82	.00	-34,164.82	109.7%*
100328 40510	Overtime Holiday	0	0	0	31,992.33	.00	-31,992.33	100.0%*
100328 40520	Comp Payout	0	0	0	10,000.04	.00	-10,000.04	100.0%*
100328 40610	Callback	0	0	0	3,189.39	.00	-3,189.39	100.0%*
100328 40620	Callback Holiday	0	0	0	721.61	.00	-721.61	100.0%*
TOTAL Salaries		2,541,815	0	2,541,815	1,982,048.63	.00	559,766.37	78.0%
4c Benefits								
100328 41000	Retirement	1,002,193	0	1,002,193	739,781.40	.00	262,411.60	73.8%
100328 41100	Workers' Comp	262,064	0	262,064	183,984.94	.00	78,079.06	70.2%
100328 41120	Workers' Comp - Wo	9,500	0	9,500	7,225.57	.00	2,274.43	76.1%
100328 41200	Medicare	36,856	0	36,856	28,269.38	.00	8,586.62	76.7%
100328 41300	Health Insurance	478,132	0	478,132	339,926.46	.00	138,205.54	71.1%
100328 41302	Vision Insurance	2,201	0	2,201	1,622.45	.00	578.55	73.7%
100328 41303	Dental Insurance	15,004	0	15,004	11,136.43	.00	3,867.57	74.2%
100328 41310	Life Insurance	3,336	0	3,336	2,699.70	.00	636.30	80.9%
TOTAL Benefits		1,809,286	0	1,809,286	1,314,646.33	.00	494,639.67	72.7%
4e Services & Supplies								
100328 50000	Supplies	6,000	0	6,000	3,224.20	.00	2,775.80	53.7%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
100328 50120	Range	10,000	0	10,000	3,729.20	.00	6,270.80	37.3%
100328 50240	Communications Equ	2,000	0	2,000	.00	.00	2,000.00	.0%
100328 50400	Uniforms	29,725	0	29,725	13,727.69	.00	15,997.31	46.2%
100328 50400 13080	Uniforms	0	0	0	4,244.00	.00	-4,244.00	100.0%*
100328 50700	Jail Supplies	27,000	0	27,000	16,782.38	.00	10,217.62	62.2%
100328 50710	Board of Prisoners	420,000	0	420,000	316,910.54	.00	103,089.46	75.5%
100328 51000	Fuel	20,000	0	20,000	9,344.16	.00	10,655.84	46.7%
100328 52000	Copier Maintenance	900	0	900	771.21	.00	128.79	85.7%
100328 52020	Equipment Maintena	5,000	0	5,000	2,640.00	.00	2,360.00	52.8%
100328 52030	Printer Services	225	0	225	317.25	.00	-92.25	141.0%*
100328 52400	Background Checks	12,175	0	12,175	5,176.50	.00	6,998.50	42.5%
100328 52410	Physicals	18,225	0	18,225	10,304.00	.00	7,921.00	56.5%
100328 53010	Medical Care	910,000	0	910,000	668,072.27	.00	241,927.73	73.4%
100328 53060	Extradition	6,000	0	6,000	2,025.00	.00	3,975.00	33.8%
100328 53530	Software Support	32,000	0	32,000	26,507.96	.00	5,492.04	82.8%
100328 56000	Training	31,500	0	31,500	26,569.72	.00	4,930.28	84.3%
100328 56200	Travel	19,800	0	19,800	4,825.90	.00	14,974.10	24.4%
10032830 50000	Supplies	118,165	0	118,165	3,245.64	.00	114,919.36	2.7%
10032830 53530	Software Support	0	0	0	6,064.00	.00	-6,064.00	100.0%*
10032835 50000	Supplies	78,246	0	78,246	13,722.34	.00	64,523.66	17.5%
TOTAL Services & Supplies		1,746,961	0	1,746,961	1,138,203.96	.00	608,757.04	65.2%
TOTAL Jail		6,098,062	0	6,098,062	4,434,898.92	.00	1,663,163.08	72.7%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
329 Search & Rescue								
4c Benefits								
100329 41100	Workers' Comp	27,000	0	27,000	15,857.65	.00	11,142.35	58.7%
TOTAL Benefits		27,000	0	27,000	15,857.65	.00	11,142.35	58.7%
4e Services & Supplies								
100329 50000	Supplies	16,000	0	16,000	15,726.61	.00	273.39	98.3%
100329 50170	Drone Expense	10,960	0	10,960	12,620.00	.00	-1,660.00	115.1%*
100329 50240	Communications Equ	5,200	0	5,200	2,979.53	.00	2,220.47	57.3%
100329 51000	Fuel	17,000	0	17,000	6,115.47	.00	10,884.53	36.0%
100329 52020	Equipment Maintena	10,000	0	10,000	7,676.43	.00	2,323.57	76.8%
100329 56000	Training	4,000	0	4,000	838.00	.00	3,162.00	21.0%
100329 60700	Telephone	3,589	0	3,589	1,419.85	.00	2,169.15	39.6%
TOTAL Services & Supplies		66,749	0	66,749	47,375.89	.00	19,373.11	71.0%
TOTAL Search & Rescue		93,749	0	93,749	63,233.54	.00	30,515.46	67.4%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
510 Economic Development							
4e Services & Supplies							
100510 61020 Economic Dev Autho	0	50,000	50,000	50,000.00	.00	.00	100.0%
TOTAL Services & Supplies	0	50,000	50,000	50,000.00	.00	.00	100.0%
TOTAL Economic Development	0	50,000	50,000	50,000.00	.00	.00	100.0%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
625 Animal Services								
4a Salaries								
100625 40000	Salaries	0	390,868	390,868	273,456.22	.00	117,411.78	70.0%
100625 40320	Shift Differential	0	0	0	35.00	.00	-35.00	100.0%*
100625 40350	Standby	0	0	0	17,951.27	.00	-17,951.27	100.0%*
100625 40360	Standby Holiday	0	0	0	1,622.57	.00	-1,622.57	100.0%*
100625 40500	Overtime	0	20,453	20,453	8,471.93	.00	11,981.07	41.4%
100625 40510	Overtime Holiday	0	0	0	1,327.59	.00	-1,327.59	100.0%*
100625 40610	Callback	0	0	0	3,053.10	.00	-3,053.10	100.0%*
100625 40620	Callback Holiday	0	0	0	401.87	.00	-401.87	100.0%*
TOTAL Salaries		0	411,321	411,321	306,319.55	.00	105,001.45	74.5%
4c Benefits								
100625 41000	Retirement - PERS	0	75,242	75,242	56,423.77	.00	18,818.23	75.0%
100625 41100	Workers' Comp	0	15,930	15,930	9,363.28	.00	6,566.72	58.8%
100625 41110	Workers' Comp - Ad	0	1,100	1,100	229.03	.00	870.97	20.8%
100625 41200	Medicare	0	5,964	5,964	4,410.13	.00	1,553.87	73.9%
100625 41300	Health Insurance	0	77,742	77,742	58,306.14	.00	19,435.86	75.0%
100625 41302	Vision Insurance	0	426	426	317.52	.00	108.48	74.5%
100625 41303	Dental Insurance	0	2,904	2,904	2,179.44	.00	724.56	75.0%
100625 41310	Life Insurance	0	186	186	140.40	.00	45.60	75.5%
TOTAL Benefits		0	179,494	179,494	131,369.71	.00	48,124.29	73.2%
4e Services & Supplies								
100625 50000	Supplies	0	21,000	21,000	11,735.69	.00	9,264.31	55.9%
100625 50400	Uniforms	0	3,000	3,000	.00	.00	3,000.00	.0%
100625 51000	Fuel	0	9,500	9,500	5,954.33	.00	3,545.67	62.7%
100625 52000	Copier Maintenance	0	500	500	198.51	.00	301.49	39.7%
100625 52030	Printer Services	0	60	60	.00	.00	60.00	.0%
100625 53530	Software Support	0	1,300	1,300	1,234.03	.00	65.97	94.9%
100625 53800	Vet Services	0	20,000	20,000	17,156.98	.00	2,843.02	85.8%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
100625 53810	Spay and Neuter	0	28,000	28,000	13,913.13	.00	14,086.87	49.7%
100625 60100	Electric Service	0	11,000	11,000	5,549.20	.00	5,450.80	50.4%
100625 60200	Gas Service	0	23,000	23,000	5,071.22	.00	17,928.78	22.0%
100625 60300	Water Service	0	5,000	5,000	3,181.32	.00	1,818.68	63.6%
100625 60400	Sewer Service	0	850	850	540.00	.00	310.00	63.5%
100625 60700	Telephone	0	2,600	2,600	1,820.17	.00	779.83	70.0%
TOTAL Services & Supplies		0	125,810	125,810	66,354.58	.00	59,455.42	52.7%
TOTAL Animal Services		0	716,625	716,625	504,043.84	.00	212,581.16	70.3%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
660 Cemeteries							
4c Benefits							
100660 41100 Workers' Comp	650	0	650	308.18	.00	341.82	47.4%
TOTAL Benefits	650	0	650	308.18	.00	341.82	47.4%
4e Services & Supplies							
100660 50980 Cemetery	2,500	0	2,500	39.58	.00	2,460.42	1.6%
100660 60100 Electric Service	6,200	0	6,200	3,022.47	.00	3,177.53	48.7%
100660 60300 Water Service	1,000	0	1,000	452.20	.00	547.80	45.2%
10066150 50980 Cemetery	7,000	0	7,000	1,294.73	.00	5,705.27	18.5%
10066151 50980 Cemetery	5,200	0	5,200	2,685.09	.00	2,514.91	51.6%
10066250 50980 Cemetery	4,000	0	4,000	2,775.00	.00	1,225.00	69.4%
10066350 50980 Cemetery	6,000	0	6,000	1,922.26	.00	4,077.74	32.0%
10066550 50980 Cemetery	6,000	0	6,000	4,377.80	.00	1,622.20	73.0%
10066550 50980 18470 Cemetery	0	0	0	91.17	.00	-91.17	100.0%*
10066850 50980 Cemetery	4,000	0	4,000	750.00	.00	3,250.00	18.8%
TOTAL Services & Supplies	41,900	0	41,900	17,410.30	.00	24,489.70	41.6%
TOTAL Cemeteries	42,550	0	42,550	17,718.48	.00	24,831.52	41.6%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
673 Consumer Health							
4e Services & Supplies							
100673 53900 Contract Services	91,069	0	91,069	81,593.96	.00	9,475.04	89.6%
TOTAL Services & Supplies	91,069	0	91,069	81,593.96	.00	9,475.04	89.6%
TOTAL Consumer Health	91,069	0	91,069	81,593.96	.00	9,475.04	89.6%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
674 Public Health							
4e Services & Supplies							
100674 53900 Contract Services	12,000	0	12,000	10,000.00	.00	2,000.00	83.3%
TOTAL Services & Supplies	12,000	0	12,000	10,000.00	.00	2,000.00	83.3%
TOTAL Public Health	12,000	0	12,000	10,000.00	.00	2,000.00	83.3%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
719 Child Protective Services							
4e Services & Supplies							
100719 53900 Contract Services	975,138	0	975,138	243,784.50	.00	731,353.50	25.0%
TOTAL Services & Supplies	975,138	0	975,138	243,784.50	.00	731,353.50	25.0%
TOTAL Child Protective Services	975,138	0	975,138	243,784.50	.00	731,353.50	25.0%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
818 Library							
4a Salaries							
100818 40000 Salaries	614,364	0	614,364	418,847.31	.00	195,516.69	68.2%
100818 40010 Temporary Salaries	2,310	0	2,310	1,400.00	.00	910.00	60.6%
100818 40010 18020 Temporary Sal	0	1,644	1,644	1,824.00	.00	-180.00	110.9%*
100818 40500 Overtime	3,125	0	3,125	842.08	.00	2,282.92	26.9%
100818 40520 Comp Payout	0	0	0	1,566.35	.00	-1,566.35	100.0%*
TOTAL Salaries	619,799	1,644	621,443	424,479.74	.00	196,963.26	68.3%
4c Benefits							
100818 41000 Retirement	122,159	0	122,159	88,932.36	.00	33,226.64	72.8%
100818 41010 Social Security	910	0	910	691.30	.00	218.70	76.0%
100818 41010 18020 Social Securi	0	102	102	113.09	.00	-11.09	110.9%*
100818 41100 Workers' Comp	27,331	0	27,331	16,630.58	.00	10,700.42	60.8%
100818 41100 18020 Workers' Comp	0	113	113	124.42	.00	-11.42	110.1%*
100818 41110 Workers' Comp - Ad	740	0	740	392.62	.00	347.38	53.1%
100818 41200 Medicare	8,986	0	8,986	6,046.73	.00	2,939.27	67.3%
100818 41200 18020 Medicare	0	24	24	26.45	.00	-2.45	110.2%*
100818 41300 Health Insurance	113,347	0	113,347	73,319.43	.00	40,027.57	64.7%
100818 41302 Vision Insurance	568	0	568	393.96	.00	174.04	69.4%
100818 41303 Dental Insurance	3,872	0	3,872	2,704.12	.00	1,167.88	69.8%
100818 41310 Life Insurance	248	0	248	174.20	.00	73.80	70.2%
TOTAL Benefits	278,161	239	278,400	189,549.26	.00	88,850.74	68.1%
4e Services & Supplies							
100818 50000 Supplies	18,000	0	18,000	5,645.30	.00	12,354.70	31.4%
100818 50000 18002 Supplies	0	24	24	24.10	.00	-.10	100.4%*
100818 50000 18003 Supplies	0	5,000	5,000	5,000.00	.00	.00	100.0%
100818 50000 18010 Supplies	0	978	978	978.01	.00	-.01	100.0%*
100818 50000 18021 Supplies	0	0	0	849.37	.00	-849.37	100.0%*
100818 50480 Books & Publicatio	80,000	0	80,000	44,280.51	.00	35,719.49	55.4%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
100818 50490	Periodicals	100	0	100	151.62	.00	-51.62	151.6%*
100818 51000	Fuel	3,000	0	3,000	1,617.69	.00	1,382.31	53.9%
100818 52000	Copier Maintenance	5,000	0	5,000	3,198.66	.00	1,801.34	64.0%
100818 52030	Printer Services	200	0	200	188.00	.00	12.00	94.0%
100818 52100	Postage	4,000	0	4,000	2,682.50	.00	1,317.50	67.1%
100818 53530	Software Support	48,000	0	48,000	43,158.29	.00	4,841.71	89.9%
100818 56000	Training	1,000	0	1,000	1,340.95	.00	-340.95	134.1%*
100818 56100	Dues	500	0	500	100.00	.00	400.00	20.0%
100818 56200	Travel	3,000	0	3,000	2,263.96	.00	736.04	75.5%
100818 56200 18005	Travel	0	3,277	3,277	3,277.00	.00	.00	100.0%
100818 56220	Travel - Trustee	1,500	0	1,500	1,679.20	.00	-179.20	111.9%*
100818 60700	Telephone	3,000	0	3,000	2,414.37	.00	585.63	80.5%
10081811 60100	Electric Service	8,500	0	8,500	3,839.25	.00	4,660.75	45.2%
10081811 60200	Gas Service	12,000	0	12,000	1,933.36	.00	10,066.64	16.1%
10081811 60250	Water & Sewer Se	7,200	0	7,200	7,047.91	.00	152.09	97.9%
10081821 60100	Electric Service	4,200	0	4,200	2,178.16	.00	2,021.84	51.9%
10081821 60200	Gas Service	2,800	0	2,800	917.89	.00	1,882.11	32.8%
10081821 60250	Water & Sewer Se	1,900	0	1,900	1,128.25	.00	771.75	59.4%
10081831 60100	Electric Service	2,000	0	2,000	965.31	.00	1,034.69	48.3%
10081831 60300	Water Service	2,450	0	2,450	881.68	.00	1,568.32	36.0%
10081831 60400	Sewer Service	270	0	270	180.00	.00	90.00	66.7%
10081841 60100	Electric Service	3,800	0	3,800	1,947.66	.00	1,852.34	51.3%
10081841 60200	Gas Service	2,200	0	2,200	821.79	.00	1,378.21	37.4%
10081841 60250	Water & Sewer Se	5,500	0	5,500	3,055.53	.00	2,444.47	55.6%
10081841 60600	Garbage Service	3,450	0	3,450	2,537.28	.00	912.72	73.5%
10081851 60000	Utilities	6,000	0	6,000	.00	.00	6,000.00	.0%
TOTAL Services & Supplies		229,570	9,279	238,849	146,283.60	.00	92,565.40	61.2%
TOTAL Library		1,127,530	11,162	1,138,692	760,312.60	.00	378,379.40	66.8%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
842 Fairgrounds								
4c Benefits								
100842 41100	Workers' Comp	1,800	0	1,800	621.64	.00	1,178.36	34.5%
TOTAL Benefits		1,800	0	1,800	621.64	.00	1,178.36	34.5%
4e Services & Supplies								
100842 50000	Supplies	10,000	0	10,000	4,021.62	.00	5,978.38	40.2%
100842 56400	Repairs and Mainte	5,000	0	5,000	7,688.19	.00	-2,688.19	153.8%*
TOTAL Services & Supplies		15,000	0	15,000	11,709.81	.00	3,290.19	78.1%
TOTAL Fairgrounds		16,800	0	16,800	12,331.45	.00	4,468.55	73.4%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
849 Parks								
4a Salaries								
100849 40000	Salaries	315,371	0	315,371	231,282.64	.00	84,088.36	73.3%
100849 40320	Shift Differential	0	0	0	.88	.00	-.88	100.0%*
100849 40500	Overtime	3,977	0	3,977	1,294.62	.00	2,682.38	32.6%
100849 40520	Comp Payout	0	0	0	173.72	.00	-173.72	100.0%*
TOTAL Salaries		319,348	0	319,348	232,751.86	.00	86,596.14	72.9%
4c Benefits								
100849 41000	Retirement	72,879	0	72,879	49,002.96	.00	23,876.04	67.2%
100849 41100	Workers' Comp	14,631	0	14,631	7,908.69	.00	6,722.31	54.1%
100849 41200	Medicare	4,631	0	4,631	3,288.55	.00	1,342.45	71.0%
100849 41300	Health Insurance	54,737	0	54,737	38,995.62	.00	15,741.38	71.2%
100849 41302	Vision Insurance	275	0	275	140.41	.00	134.59	51.1%
100849 41303	Dental Insurance	1,876	0	1,876	963.62	.00	912.38	51.4%
100849 41310	Life Insurance	120	0	120	85.50	.00	34.50	71.3%
TOTAL Benefits		149,149	0	149,149	100,385.35	.00	48,763.65	67.3%
4e Services & Supplies								
100849 50000	Supplies	3,000	0	3,000	567.28	.00	2,432.72	18.9%
100849 50230	Equipment	10,000	0	10,000	2,630.77	.00	7,369.23	26.3%
100849 50400	Uniforms	0	0	0	419.10	.00	-419.10	100.0%*
100849 50440	Safety Supplies	3,500	0	3,500	432.85	.00	3,067.15	12.4%
100849 51000	Fuel	14,000	0	14,000	10,044.60	.00	3,955.40	71.7%
100849 52030	Printer Services	150	0	150	.00	.00	150.00	.0%
100849 52410	Physicals	600	0	600	.00	.00	600.00	.0%
100849 53600	Master Plan	0	0	0	16,618.20	.00	-16,618.20	100.0%*
100849 53900	Contract Services	26,000	0	26,000	30,037.50	.00	-4,037.50	115.5%*
100849 56000	Training	2,000	0	2,000	.00	.00	2,000.00	.0%
100849 56200	Travel	500	0	500	.00	.00	500.00	.0%
100849 56410	Equipment Repairs	5,000	0	5,000	4,597.97	.00	402.03	92.0%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
100849 56810	Park Maintenance	35,000	0	35,000	23,359.40	.00	11,640.60	66.7%
100849 56820	Open Space Mainten	30,000	0	30,000	4,364.96	.00	25,635.04	14.5%
100849 60100	Electric Service	15,000	0	15,000	7,078.06	.00	7,921.94	47.2%
100849 60300	Water Service	62,000	0	62,000	34,466.48	.00	27,533.52	55.6%
100849 60400	Sewer Service	700	0	700	501.86	.00	198.14	71.7%
100849 60600	Garbage Service	200	0	200	.00	.00	200.00	.0%
100849 60700	Telephone	4,500	0	4,500	1,565.26	.00	2,934.74	34.8%
100849 61130	Yerington Park Agm	40,000	0	40,000	40,000.00	.00	.00	100.0%
100849 61200	Fernley Park Agmt	60,000	0	60,000	60,000.00	.00	.00	100.0%
10084954 50000	Supplies	15,000	0	15,000	21,103.98	.00	-6,103.98	140.7%*
TOTAL Services & Supplies		327,150	0	327,150	257,788.27	.00	69,361.73	78.8%
TOTAL Parks		795,647	0	795,647	590,925.48	.00	204,721.52	74.3%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 100 General Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
999 Transfers and Fund Balance								
4q Contingency								
100999 89000	Contingency	1,680,403	0	1,680,403	.00	.00	1,680,403.00	.0%
TOTAL Contingency		1,680,403	0	1,680,403	.00	.00	1,680,403.00	.0%
4z Ending Fund Balance								
100999 99999	Ending Fund Balanc	6,214,176	0	6,214,176	.00	.00	6,214,176.00	.0%
TOTAL Ending Fund Balance		6,214,176	0	6,214,176	.00	.00	6,214,176.00	.0%
TOTAL Transfers and Fund Balance		7,894,579	0	7,894,579	.00	.00	7,894,579.00	.0%
TOTAL General Fund		0	0	0	-1,603,097.40	.00	1,603,097.40	100.0%
	TOTAL REVENUES	-63,907,999	-319,603	-64,227,602	-41,992,885.04	.00	-22,234,716.96	
	TOTAL EXPENSES	63,907,999	319,603	64,227,602	40,389,787.64	.00	23,837,814.36	

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 102 Park Construction Tax Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
000 General								
3a Taxes								
10200010 30500	Park Constr Tax	-225,000	0	-225,000	-159,570.00	.00	-65,430.00	70.9%*
10200030 30530	Park Constr Tax	-14,000	0	-14,000	-9,686.40	.00	-4,313.60	69.2%*
10200040 30540	Park Constr Tax	-15,000	0	-15,000	-6,552.92	.00	-8,447.08	43.7%*
TOTAL Taxes		-254,000	0	-254,000	-175,809.32	.00	-78,190.68	69.2%
3k Other Revenues								
10200010 38000	Investment Incom	-45,000	0	-45,000	-35,331.14	.00	-9,668.86	78.5%*
10200030 38000	Investment Incom	-3,000	0	-3,000	-2,652.73	.00	-347.27	88.4%*
10200040 38000	Investment Incom	-1,300	0	-1,300	-713.56	.00	-586.44	54.9%*
TOTAL Other Revenues		-49,300	0	-49,300	-38,697.43	.00	-10,602.57	78.5%
3z Beginning Fund Bal								
10200010 39999	Opening Fund Bal	-1,149,790	0	-1,149,790	.00	.00	-1,149,790.00	.0%*
10200030 39999	Opening Fund Bal	-85,578	0	-85,578	.00	.00	-85,578.00	.0%*
10200040 39999	Opening Fund Bal	-36,661	0	-36,661	.00	.00	-36,661.00	.0%*
TOTAL Beginning Fund Bal		-1,272,029	0	-1,272,029	.00	.00	-1,272,029.00	.0%
TOTAL General		-1,575,329	0	-1,575,329	-214,506.75	.00	-1,360,822.25	13.6%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 102 Park Construction Tax Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
849 Parks							
4e Services & Supplies							
10284940 50000 Supplies	0	0	0	504.50	.00	-504.50	100.0%*
TOTAL Services & Supplies	0	0	0	504.50	.00	-504.50	100.0%
4g Capital Outlay							
10284910 70000 Capital Outlay	1,419,790	0	1,419,790	194,865.70	.00	1,224,924.30	13.7%
10284930 70000 Capital Outlay	102,578	0	102,578	.00	.00	102,578.00	.0%
10284940 70000 Capital Outlay	52,961	0	52,961	.00	.00	52,961.00	.0%
TOTAL Capital Outlay	1,575,329	0	1,575,329	194,865.70	.00	1,380,463.30	12.4%
TOTAL Parks	1,575,329	0	1,575,329	195,370.20	.00	1,379,958.80	12.4%
TOTAL Park Construction Tax Fund	0	0	0	-19,136.55	.00	19,136.55	100.0%
TOTAL REVENUES	-1,575,329	0	-1,575,329	-214,506.75	.00	-1,360,822.25	
TOTAL EXPENSES	1,575,329	0	1,575,329	195,370.20	.00	1,379,958.80	

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 107 Cooperative Extension Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
000 General								
3a Taxes								
107 30000	Real Property Taxes	-242,328	0	-242,328	-202,390.40	.00	-39,937.60	83.5%*
107 30030	Deferred Ag Taxes	0	0	0	-27.03	.00	27.03	100.0%
107 30040	Trust Reconveyances	0	0	0	-100.38	.00	100.38	100.0%
107 30110	Geothermal Proceeds	0	0	0	-69.66	.00	69.66	100.0%
107 30200	Unsecured Property Ta	0	0	0	-18,942.86	.00	18,942.86	100.0%
107 30210	Prior Year Unsecured	0	0	0	-10.06	.00	10.06	100.0%
107 30220	Other Years Unsecured	0	0	0	-1.16	.00	1.16	100.0%
107 30300	Centrally Assessed Ta	0	0	0	-6,192.64	.00	6,192.64	100.0%
TOTAL	Taxes	-242,328	0	-242,328	-227,734.19	.00	-14,593.81	94.0%
3k Other Revenues								
107 38000	Investment Income	-20,500	0	-20,500	-19,314.96	.00	-1,185.04	94.2%*
TOTAL	Other Revenues	-20,500	0	-20,500	-19,314.96	.00	-1,185.04	94.2%
3z Beginning Fund Bal								
107 39999	Opening Fund Balance	-516,733	0	-516,733	.00	.00	-516,733.00	.0%*
TOTAL	Beginning Fund Bal	-516,733	0	-516,733	.00	.00	-516,733.00	.0%
TOTAL	General	-779,561	0	-779,561	-247,049.15	.00	-532,511.85	31.7%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 107 Cooperative Extension Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
811 Cooperative Extension								
4e Services & Supplies								
107811 50000	Supplies	2,500	0	2,500	1,107.03	.00	1,392.97	44.3%
107811 51000	Fuel	3,500	0	3,500	983.73	.00	2,516.27	28.1%
107811 53900	Contract Services	228,925	0	228,925	81,388.61	.00	147,536.39	35.6%
107811 56500	Building Maintenan	2,000	0	2,000	3,036.18	.00	-1,036.18	151.8%*
107811 60100	Electric Service	1,500	0	1,500	844.18	.00	655.82	56.3%
107811 60200	Gas Service	1,700	0	1,700	691.21	.00	1,008.79	40.7%
107811 60250	Water & Sewer Serv	1,250	0	1,250	923.81	.00	326.19	73.9%
107811 60300	Water Service	500	0	500	565.41	.00	-65.41	113.1%*
107811 60600	Garbage Service	500	0	500	407.28	.00	92.72	81.5%
107811 60700	Telephone	3,795	0	3,795	5,773.22	.00	-1,978.22	152.1%*
TOTAL Services & Supplies		246,170	0	246,170	95,720.66	.00	150,449.34	38.9%
4q Contingency								
107811 89000	Contingency	7,385	0	7,385	.00	.00	7,385.00	.0%
TOTAL Contingency		7,385	0	7,385	.00	.00	7,385.00	.0%
TOTAL Cooperative Extension		253,555	0	253,555	95,720.66	.00	157,834.34	37.8%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 107 Cooperative Extension Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
999 Transfers and Fund Balance							
4z Ending Fund Balance							
107999 99999 Ending Fund Balanc	526,006	0	526,006	.00	.00	526,006.00	.0%
TOTAL Ending Fund Balance	526,006	0	526,006	.00	.00	526,006.00	.0%
TOTAL Transfers and Fund Balance	526,006	0	526,006	.00	.00	526,006.00	.0%
TOTAL Cooperative Extension Fund	0	0	0	-151,328.49	.00	151,328.49	100.0%
TOTAL REVENUES	-779,561	0	-779,561	-247,049.15	.00	-532,511.85	
TOTAL EXPENSES	779,561	0	779,561	95,720.66	.00	683,840.34	

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 108 Unemployment Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
000 General							
3z Beginning Fund Bal							
108 39999 Opening Fund Balance	-390,917	0	-390,917	.00	.00	-390,917.00	.0%*
TOTAL Beginning Fund Bal	-390,917	0	-390,917	.00	.00	-390,917.00	.0%
TOTAL General	-390,917	0	-390,917	.00	.00	-390,917.00	.0%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 108 Unemployment Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
110 General Support							
4c Benefits							
108110 41500 Unemployment	390,917	0	390,917	9,683.90	.00	381,233.10	2.5%
TOTAL Benefits	390,917	0	390,917	9,683.90	.00	381,233.10	2.5%
TOTAL General Support	390,917	0	390,917	9,683.90	.00	381,233.10	2.5%
TOTAL Unemployment Fund	0	0	0	9,683.90	.00	-9,683.90	100.0%
TOTAL REVENUES	-390,917	0	-390,917	.00	.00	-390,917.00	
TOTAL EXPENSES	390,917	0	390,917	9,683.90	.00	381,233.10	

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 109 Room Tax Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
000 General								
3a Taxes								
109 30810	3/8 Cent Room Tax	-3,000	0	-3,000	-1,389.12	.00	-1,610.88	46.3%*
109 30820	5/8 Cent Room Tax	-8,000	0	-8,000	-2,315.16	.00	-5,684.84	28.9%*
109 30830	5 Cent Room Tax	-40,000	0	-40,000	-18,521.32	.00	-21,478.68	46.3%*
TOTAL	Taxes	-51,000	0	-51,000	-22,225.60	.00	-28,774.40	43.6%
3e Intergovernmental								
109 34000	Room Tax Grant - Fern	-32,000	0	-32,000	-29,164.16	.00	-2,835.84	91.1%*
109 34010	Room Tax Grant - Yeri	-12,000	0	-12,000	-10,935.26	.00	-1,064.74	91.1%*
TOTAL	Intergovernmental	-44,000	0	-44,000	-40,099.42	.00	-3,900.58	91.1%
3k Other Revenues								
109 38000	Investment Income	-2,500	0	-2,500	-1,253.12	.00	-1,246.88	50.1%*
109 38030	Penalties	0	0	0	-74.79	.00	74.79	100.0%
TOTAL	Other Revenues	-2,500	0	-2,500	-1,327.91	.00	-1,172.09	53.1%
3z Beginning Fund Bal								
109 39999	Opening Fund Balance	-17,955	0	-17,955	.00	.00	-17,955.00	.0%*
TOTAL	Beginning Fund Bal	-17,955	0	-17,955	.00	.00	-17,955.00	.0%
TOTAL	General	-115,455	0	-115,455	-63,652.93	.00	-51,802.07	55.1%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 109 Room Tax Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
840 Room Tax								
4c Benefits								
109840 41100	Workers' Comp	200	0	200	65.44	.00	134.56	32.7%
TOTAL Benefits		200	0	200	65.44	.00	134.56	32.7%
4e Services & Supplies								
109840 54600	Room Tax Grants	52,000	0	52,000	29,182.12	.00	22,817.88	56.1%
109840 61500	Room Tax - State S	3,000	0	3,000	1,389.11	.00	1,610.89	46.3%
TOTAL Services & Supplies		55,000	0	55,000	30,571.23	.00	24,428.77	55.6%
TOTAL Room Tax		55,200	0	55,200	30,636.67	.00	24,563.33	55.5%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 109 Room Tax Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
842 Fairgrounds							
4e Services & Supplies							
109842 50000 Supplies	0	0	0	4,676.88	.00	-4,676.88	100.0%*
109842 56400 Repairs and Mainte	20,000	0	20,000	5,654.62	.00	14,345.38	28.3%
109842 60100 Electric Service	10,000	0	10,000	6,381.12	.00	3,618.88	63.8%
109842 60200 Gas Service	500	0	500	.00	.00	500.00	.0%
109842 60600 Garbage Service	400	0	400	.00	.00	400.00	.0%
10984224 50000 Supplies	5,000	0	5,000	1,479.84	.00	3,520.16	29.6%
TOTAL Services & Supplies	35,900	0	35,900	18,192.46	.00	17,707.54	50.7%
TOTAL Fairgrounds	35,900	0	35,900	18,192.46	.00	17,707.54	50.7%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 109 Room Tax Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
999 Transfers and Fund Balance							
4z Ending Fund Balance							
109999 99999 Ending Fund Balanc	24,355	0	24,355	.00	.00	24,355.00	.0%
TOTAL Ending Fund Balance	24,355	0	24,355	.00	.00	24,355.00	.0%
TOTAL Transfers and Fund Balance	24,355	0	24,355	.00	.00	24,355.00	.0%
TOTAL Room Tax Fund	0	0	0	-14,823.80	.00	14,823.80	100.0%
TOTAL REVENUES	-115,455	0	-115,455	-63,652.93	.00	-51,802.07	
TOTAL EXPENSES	115,455	0	115,455	48,829.13	.00	66,625.87	

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 110 Stabilization Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
000 General								
3z Beginning Fund Bal								
110 39999	Opening Fund Balance	-3,450,000	0	-3,450,000	.00	.00	-3,450,000.00	.0%*
TOTAL	Beginning Fund Bal	-3,450,000	0	-3,450,000	.00	.00	-3,450,000.00	.0%
TOTAL	General	-3,450,000	0	-3,450,000	.00	.00	-3,450,000.00	.0%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 110 Stabilization Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
110 General Support							
4e Services & Supplies							
110110 50000 Supplies	3,450,000	0	3,450,000	.00	.00	3,450,000.00	.0%
TOTAL Services & Supplies	3,450,000	0	3,450,000	.00	.00	3,450,000.00	.0%
TOTAL General Support	3,450,000	0	3,450,000	.00	.00	3,450,000.00	.0%
TOTAL Stabilization Fund	0	0	0	.00	.00	.00	.0%
TOTAL REVENUES	-3,450,000	0	-3,450,000	.00	.00	-3,450,000.00	
TOTAL EXPENSES	3,450,000	0	3,450,000	.00	.00	3,450,000.00	

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 114 Vehicle Acquisition Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
000 General								
3c Licenses								
114 31300	Prostitution Licenses	-250,800	0	-250,800	-188,100.00	.00	-62,700.00	75.0%*
TOTAL	Licenses	-250,800	0	-250,800	-188,100.00	.00	-62,700.00	75.0%
3k Other Revenues								
114 38000	Investment Income	-12,000	0	-12,000	-11,276.10	.00	-723.90	94.0%*
TOTAL	Other Revenues	-12,000	0	-12,000	-11,276.10	.00	-723.90	94.0%
3z Beginning Fund Bal								
114 39999	Opening Fund Balance	-287,601	0	-287,601	.00	.00	-287,601.00	.0%*
TOTAL	Beginning Fund Bal	-287,601	0	-287,601	.00	.00	-287,601.00	.0%
TOTAL	General	-550,401	0	-550,401	-199,376.10	.00	-351,024.90	36.2%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 114 Vehicle Acquisition Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
326 Sheriff							
4g Capital Outlay							
114326 70700 Capital Outlay - V	280,000	0	280,000	209,158.88	.00	70,841.12	74.7%
TOTAL Capital Outlay	280,000	0	280,000	209,158.88	.00	70,841.12	74.7%
TOTAL Sheriff	280,000	0	280,000	209,158.88	.00	70,841.12	74.7%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 114 Vehicle Acquisition Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
999 Transfers and Fund Balance							
4z Ending Fund Balance							
114999 99999 Ending Fund Balanc	270,401	0	270,401	.00	.00	270,401.00	.0%
TOTAL Ending Fund Balance	270,401	0	270,401	.00	.00	270,401.00	.0%
TOTAL Transfers and Fund Balance	270,401	0	270,401	.00	.00	270,401.00	.0%
TOTAL Vehicle Acquisition Fund	0	0	0	9,782.78	.00	-9,782.78	100.0%
TOTAL REVENUES	-550,401	0	-550,401	-199,376.10	.00	-351,024.90	
TOTAL EXPENSES	550,401	0	550,401	209,158.88	.00	341,242.12	

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 115 Fair & Rodeo Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
000 General							
3e Intergovernmental							
115 34020 18500 Room Tax Grant	0	-1,507	-1,507	-1,507.12	.00	.12	100.0%
115 34020 18505 Room Tax Grant	0	-6,500	-6,500	-6,500.00	.00	.00	100.0%
TOTAL Intergovernmental	0	-8,007	-8,007	-8,007.12	.00	.12	100.0%
3g Charges for Service							
115 36600 81030 Entry Fees	-4,844	0	-4,844	-5,765.00	.00	921.00	119.0%
115 36600 81035 Entry Fees	-550	0	-550	-680.00	.00	130.00	123.6%
115 36600 81045 Entry Fees	-940	0	-940	-1,061.00	.00	121.00	112.9%
115 36600 81050 Entry Fees	-290	0	-290	-220.00	.00	-70.00	75.9%*
115 36600 81060 Entry Fees	-412	0	-412	-356.00	.00	-56.00	86.4%*
115 36600 81075 Entry Fees	-300	0	-300	-375.00	.00	75.00	125.0%
115 36610 81010 Box Seats	-4,460	0	-4,460	-4,420.00	.00	-40.00	99.1%*
115 36610 81015 Box Seats	-4,280	0	-4,280	-4,300.00	.00	20.00	100.5%
115 36610 81020 Box Seats	-4,940	0	-4,940	-5,000.00	.00	60.00	101.2%
115 36620 81010 Gen. Admission A	-10,769	0	-10,769	-9,086.00	.00	-1,683.00	84.4%*
115 36620 81015 Gen. Admission A	-6,952	0	-6,952	-6,160.00	.00	-792.00	88.6%*
115 36620 81020 Gen. Admission A	-22,725	0	-22,725	-21,765.00	.00	-960.00	95.8%*
115 36630 81010 Gen. Admission C	-736	0	-736	-504.00	.00	-232.00	68.5%*
115 36630 81015 Gen. Admission C	-536	0	-536	-496.00	.00	-40.00	92.5%*
115 36630 81020 Gen. Admission C	-3,290	0	-3,290	-3,350.00	.00	60.00	101.8%
115 36640 81030 Sponsors	-14,725	0	-14,725	-18,210.00	.00	3,485.00	123.7%
115 36640 81055 Sponsors	-48,175	0	-48,175	-58,325.00	.00	10,150.00	121.1%
115 36650 81065 Ice Sales	-1,715	0	-1,715	-1,949.00	.00	234.00	113.6%
115 36655 81030 Shavings Income	-257	0	-257	-426.50	.00	169.50	166.0%
115 36660 81005 Vendor Revenue	-18,440	0	-18,440	-18,135.00	.00	-305.00	98.3%*
115 36670 81070 Thursday Wristba	-7,345	0	-7,345	-7,318.00	.00	-27.00	99.6%*
115 36680 81070 Friday Wristband	-11,125	0	-11,125	-9,915.00	.00	-1,210.00	89.1%*
115 36690 81070 Saturday Wristba	-21,177	0	-21,177	-21,549.79	.00	372.79	101.8%
115 36705 81070 Weekend Wristban	-645	0	-645	-555.00	.00	-90.00	86.0%*
115 36710 81005 Carnival	-5,598	0	-5,598	-6,806.60	.00	1,208.60	121.6%
115 36715 81005 Parade	-820	0	-820	-500.00	.00	-320.00	61.0%*
115 36720 81005 Beer Sales	-7,938	0	-7,938	-8,369.25	.00	431.25	105.4%
TOTAL Charges for Service	-203,984	0	-203,984	-215,597.14	.00	11,613.14	105.7%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 115 Fair & Rodeo Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
3k Other Revenues							
115 38000 Investment Income	-8,000	0	-8,000	-9,541.09	.00	1,541.09	119.3%
115 38100 Sales & Rental	-10,000	0	-10,000	-7,610.00	.00	-2,390.00	76.1%*
115 38300 81075 Donations	0	0	0	-300.00	.00	300.00	100.0%
TOTAL Other Revenues	-18,000	0	-18,000	-17,451.09	.00	-548.91	97.0%
3z Beginning Fund Bal							
115 39999 Opening Fund Balance	-263,412	0	-263,412	.00	.00	-263,412.00	.0%*
TOTAL Beginning Fund Bal	-263,412	0	-263,412	.00	.00	-263,412.00	.0%
TOTAL General	-485,396	-8,007	-493,403	-241,055.35	.00	-252,347.65	48.9%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 115 Fair & Rodeo Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
842 Fairgrounds							
4a Salaries							
115842 40000 Salaries	0	0	0	108.42	.00	-108.42	100.0%*
115842 40320 Shift Differential	0	0	0	33.50	.00	-33.50	100.0%*
115842 40500 Overtime	1,000	0	1,000	350.71	.00	649.29	35.1%
115842 40610 Callback	0	0	0	131.07	.00	-131.07	100.0%*
TOTAL Salaries	1,000	0	1,000	623.70	.00	376.30	62.4%
4c Benefits							
115842 41000 Retirement	0	0	0	69.04	.00	-69.04	100.0%*
115842 41100 Workers' Comp	20	0	20	.14	.00	19.86	.7%
115842 41200 Medicare	5	0	5	3.74	.00	1.26	74.8%
TOTAL Benefits	25	0	25	72.92	.00	-47.92	291.7%
4e Services & Supplies							
115842 50000 Supplies	2,000	0	2,000	2,001.74	.00	-1.74	100.1%*
115842 50000 81005 Supplies	6,350	0	6,350	3,700.05	.00	2,649.95	58.3%
115842 50000 81030 Supplies	3,017	0	3,017	3,699.12	.00	-682.12	122.6%*
115842 50000 81035 Supplies	600	0	600	600.00	.00	.00	100.0%
115842 50000 81045 Supplies	3,700	0	3,700	4,185.00	.00	-485.00	113.1%*
115842 50000 81060 Supplies	200	0	200	2,513.20	.00	-2,313.20	1256.6%*
115842 50000 81065 Supplies	150	0	150	258.00	.00	-108.00	172.0%*
115842 50000 81070 Supplies	700	0	700	.00	.00	700.00	.0%
115842 50800 81005 Food	250	0	250	1,082.64	.00	-832.64	433.1%*
115842 51000 81005 Fuel	600	0	600	423.17	.00	176.83	70.5%
115842 52300 18500 Advertising	0	1,507	1,507	1,507.12	.00	-.12	100.0%*
115842 52300 18505 Advertising	0	6,500	6,500	7,082.93	.00	-582.93	109.0%*
115842 53900 81005 Contract Serv	800	0	800	1,221.59	.00	-421.59	152.7%*
115842 53900 81070 Contract Serv	1,500	0	1,500	1,377.50	.00	122.50	91.8%
115842 53901 81005 Entertainment	34,725	0	34,725	32,275.00	.00	2,450.00	92.9%
115842 54700 Fair & Rodeo Costs	30,000	0	30,000	950.00	.00	29,050.00	3.2%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 115 Fair & Rodeo Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
115842 60100 Electric Service	1,300	0	1,300	659.32	.00	640.68	50.7%
115842 60600 81005 Garbage Servi	5,500	0	5,500	5,500.00	.00	.00	100.0%
115842 62000 81010 Event Contrac	16,800	0	16,800	16,800.00	.00	.00	100.0%
115842 62000 81015 Event Contrac	29,000	0	29,000	29,000.00	.00	.00	100.0%
115842 62020 81010 Ticket Sales	567	0	567	600.00	.00	-33.00	105.8%*
115842 62020 81015 Ticket Sales	567	0	567	600.00	.00	-33.00	105.8%*
115842 62020 81020 Ticket Sales	567	0	567	600.00	.00	-33.00	105.8%*
115842 62030 81010 Security Cont	1,064	0	1,064	983.34	.00	80.66	92.4%
115842 62030 81015 Security Cont	1,064	0	1,064	983.32	.00	80.68	92.4%
115842 62030 81020 Security Cont	1,064	0	1,064	983.34	.00	80.66	92.4%
115842 62030 81060 Security Cont	400	0	400	400.00	.00	.00	100.0%
115842 62050 81010 Ambulance Sta	400	0	400	350.00	.00	50.00	87.5%
115842 62050 81015 Ambulance Sta	400	0	400	350.00	.00	50.00	87.5%
115842 62050 81025 Ambulance Sta	0	0	0	500.00	.00	-500.00	100.0%*
115842 62060 81005 Sanihuts	7,315	0	7,315	7,315.00	.00	.00	100.0%
115842 62070 81005 Lodging	3,700	0	3,700	4,339.60	.00	-639.60	117.3%*
115842 62070 81015 Lodging	400	0	400	466.40	.00	-66.40	116.6%*
115842 62070 81030 Lodging	900	0	900	1,085.70	.00	-185.70	120.6%*
115842 62080 81020 YFD Profit	18,000	0	18,000	16,973.83	.00	1,026.17	94.3%
115842 62090 81005 Awards	700	0	700	.00	.00	700.00	.0%
115842 62090 81025 Awards	1,200	0	1,200	.00	.00	1,200.00	.0%
115842 62090 81030 Awards	7,000	0	7,000	3,448.60	.00	3,551.40	49.3%
115842 62090 81035 Awards	300	0	300	275.00	.00	25.00	91.7%
115842 62090 81040 Awards	300	0	300	.00	.00	300.00	.0%
115842 62090 81050 Awards	400	0	400	400.00	.00	.00	100.0%
115842 62090 81075 Awards	300	0	300	675.00	.00	-375.00	225.0%*
115842 62100 81020 Event Winners	5,500	0	5,500	6,000.00	.00	-500.00	109.1%*
115842 62110 81030 Equip & Awnin	16,985	0	16,985	14,530.50	.00	2,454.50	85.5%
115842 62120 81030 Show Premiums	2,600	0	2,600	2,422.05	.00	177.95	93.2%
115842 62130 81030 Judges/Other	3,500	0	3,500	2,726.40	.00	773.60	77.9%
115842 62130 81060 Judges/Other	200	0	200	.00	.00	200.00	.0%
115842 62150 81005 Appreciation	1,500	0	1,500	933.34	.00	566.66	62.2%
115842 62170 81030 Sponsor Signs	2,000	0	2,000	1,006.00	.00	994.00	50.3%
115842 62170 81055 Sponsor Signs	6,000	0	6,000	4,900.00	.00	1,100.00	81.7%
TOTAL Services & Supplies	222,085	8,007	230,092	188,683.80	.00	41,408.20	82.0%
4q Contingency							
115842 89000 Contingency	6,693	0	6,693	.00	.00	6,693.00	.0%
TOTAL Contingency	6,693	0	6,693	.00	.00	6,693.00	.0%
TOTAL Fairgrounds	229,803	8,007	237,810	189,380.42	.00	48,429.58	79.6%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 115 Fair & Rodeo Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
999 Transfers and Fund Balance							
4z Ending Fund Balance							
115999 99999 Ending Fund Balanc	255,593	0	255,593	.00	.00	255,593.00	.0%
TOTAL Ending Fund Balance	255,593	0	255,593	.00	.00	255,593.00	.0%
TOTAL Transfers and Fund Balance	255,593	0	255,593	.00	.00	255,593.00	.0%
TOTAL Fair & Rodeo Fund	0	0	0	-51,674.93	.00	51,674.93	100.0%
TOTAL REVENUES	-485,396	-8,007	-493,403	-241,055.35	.00	-252,347.65	
TOTAL EXPENSES	485,396	8,007	493,403	189,380.42	.00	304,022.58	

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 116 Justice Court Assessment Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
000 General								
3i Fines and Forfeits								
11600300 37410	Dayton JC 25% Fe	-18,000	0	-18,000	-10,254.82	.00	-7,745.18	57.0%*
11600310 37440	Dayton JC Admin	-13,700	0	-13,700	-12,012.00	.00	-1,688.00	87.7%*
11600312 37860	Demerit Reductio	-5,400	0	-5,400	-3,641.25	.00	-1,758.75	67.4%*
11600320 37470	Dayton JC Facili	-20,000	0	-20,000	-17,000.00	.00	-3,000.00	85.0%*
11600330 37420	Fernley JC 25% F	-24,000	0	-24,000	-14,527.39	.00	-9,472.61	60.5%*
11600340 37450	Fernley JC Admin	-6,000	0	-6,000	-3,311.00	.00	-2,689.00	55.2%*
11600350 37480	Fernley JC Facil	-16,000	0	-16,000	-4,669.76	.00	-11,330.24	29.2%*
11600360 37430	Walker River JC	-45,000	0	-45,000	-22,435.97	.00	-22,564.03	49.9%*
11600370 37460	WR JC Admin Asse	-11,700	0	-11,700	-6,927.00	.00	-4,773.00	59.2%*
11600380 37490	WR JC Facility A	-16,200	0	-16,200	-9,865.00	.00	-6,335.00	60.9%*
TOTAL Fines and Forfeits		-176,000	0	-176,000	-104,644.19	.00	-71,355.81	59.5%
3z Beginning Fund Bal								
11600300 39999	Opening Fund Bal	-20,481	0	-20,481	.00	.00	-20,481.00	.0%*
11600310 39999	Opening Fund Bal	-7,689	0	-7,689	.00	.00	-7,689.00	.0%*
11600312 39999	Opening Fund Bal	-5,475	0	-5,475	.00	.00	-5,475.00	.0%*
11600320 39999	Opening Fund Bal	-427,776	0	-427,776	.00	.00	-427,776.00	.0%*
11600330 39999	Opening Fund Bal	-77,911	0	-77,911	.00	.00	-77,911.00	.0%*
11600340 39999	Opening Fund Bal	-5,418	0	-5,418	.00	.00	-5,418.00	.0%*
11600350 39999	Opening Fund Bal	-190,243	0	-190,243	.00	.00	-190,243.00	.0%*
11600360 39999	Opening Fund Bal	-199,196	0	-199,196	.00	.00	-199,196.00	.0%*
11600370 39999	Opening Fund Bal	-14,978	0	-14,978	.00	.00	-14,978.00	.0%*
11600380 39999	Opening Fund Bal	-188,244	0	-188,244	.00	.00	-188,244.00	.0%*
TOTAL Beginning Fund Bal		-1,137,411	0	-1,137,411	.00	.00	-1,137,411.00	.0%
TOTAL General		-1,313,411	0	-1,313,411	-104,644.19	.00	-1,208,766.81	8.0%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 116 Justice Court Assessment Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
234 Walker River JC							
4a Salaries							
11634360 40000 Salaries	20,000	0	20,000	9,642.86	.00	10,357.14	48.2%
TOTAL Salaries	20,000	0	20,000	9,642.86	.00	10,357.14	48.2%
4e Services & Supplies							
11634360 50000 Supplies	224,196	0	224,196	12,697.11	.00	211,498.89	5.7%
11634370 50000 Supplies	26,678	0	26,678	869.62	.00	25,808.38	3.3%
TOTAL Services & Supplies	250,874	0	250,874	13,566.73	.00	237,307.27	5.4%
4g Capital Outlay							
11634380 70000 Capital Outlay	204,444	0	204,444	.00	.00	204,444.00	.0%
TOTAL Capital Outlay	204,444	0	204,444	.00	.00	204,444.00	.0%
TOTAL Walker River JC	475,318	0	475,318	23,209.59	.00	452,108.41	4.9%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 116 Justice Court Assessment Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
236 Fernley JC							
4a Salaries							
11636330 40010 Temporary Salari	0	0	0	2,962.50	.00	-2,962.50	100.0%*
TOTAL Salaries	0	0	0	2,962.50	.00	-2,962.50	100.0%
4c Benefits							
11636330 41010 Social Security	0	0	0	183.68	.00	-183.68	100.0%*
11636330 41100 Workers' Comp	0	0	0	190.68	.00	-190.68	100.0%*
11636330 41200 Medicare	0	0	0	42.95	.00	-42.95	100.0%*
TOTAL Benefits	0	0	0	417.31	.00	-417.31	100.0%
4e Services & Supplies							
11636330 50000 Supplies	101,911	0	101,911	12,243.00	.00	89,668.00	12.0%
11636340 50000 Supplies	11,418	0	11,418	.00	.00	11,418.00	.0%
11636350 50000 Supplies	0	0	0	40,064.66	.00	-40,064.66	100.0%*
TOTAL Services & Supplies	113,329	0	113,329	52,307.66	.00	61,021.34	46.2%
4g Capital Outlay							
11636350 70000 Capital Outlay	206,243	0	206,243	28,996.95	.00	177,246.05	14.1%
TOTAL Capital Outlay	206,243	0	206,243	28,996.95	.00	177,246.05	14.1%
TOTAL Fernley JC	319,572	0	319,572	84,684.42	.00	234,887.58	26.5%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 116 Justice Court Assessment Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
237 Dayton JC							
4a Salaries							
11637300 40000 Salaries	13,000	0	13,000	6,500.00	.00	6,500.00	50.0%
TOTAL Salaries	13,000	0	13,000	6,500.00	.00	6,500.00	50.0%
4e Services & Supplies							
11637300 50000 Supplies	25,481	0	25,481	4,300.00	.00	21,181.00	16.9%
11637310 50000 Supplies	21,389	0	21,389	11,724.11	.00	9,664.89	54.8%
11637312 50000 Supplies	10,875	0	10,875	.00	.00	10,875.00	.0%
TOTAL Services & Supplies	57,745	0	57,745	16,024.11	.00	41,720.89	27.7%
4g Capital Outlay							
11637320 70000 Capital Outlay	447,776	0	447,776	.00	.00	447,776.00	.0%
TOTAL Capital Outlay	447,776	0	447,776	.00	.00	447,776.00	.0%
TOTAL Dayton JC	518,521	0	518,521	22,524.11	.00	495,996.89	4.3%
TOTAL Justice Court Assessment Fund	0	0	0	25,773.93	.00	-25,773.93	100.0%
TOTAL REVENUES	-1,313,411	0	-1,313,411	-104,644.19	.00	-1,208,766.81	
TOTAL EXPENSES	1,313,411	0	1,313,411	130,418.12	.00	1,182,992.88	

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 117 District Ct Restricted Fees Fd		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
000 General								
3g Charges for Service								
11700285 35220	Recorder Childre	-70,000	0	-70,000	-57,336.00	.00	-12,664.00	81.9%*
11700286 35220	Recorder Legal F	-11,650	0	-11,650	-9,556.00	.00	-2,094.00	82.0%*
11700287 35220	Recorder Legal F	-58,000	0	-58,000	-47,780.00	.00	-10,220.00	82.4%*
TOTAL Charges for Service		-139,650	0	-139,650	-114,672.00	.00	-24,978.00	82.1%
3i Fines and Forfeits								
11700260 37110	District Court F	-70,000	0	-70,000	-47,978.00	.00	-22,022.00	68.5%*
11700261 37110	District Court F	-1,700	0	-1,700	-702.00	.00	-998.00	41.3%*
11700270 37120	District Court T	-300	0	-300	-216.00	.00	-84.00	72.0%*
11700280 37130	District Court S	-12,500	0	-12,500	-9,580.00	.00	-2,920.00	76.6%*
TOTAL Fines and Forfeits		-84,500	0	-84,500	-58,476.00	.00	-26,024.00	69.2%
3z Beginning Fund Bal								
11700260 39999	Opening Fund Bal	-355,659	0	-355,659	.00	.00	-355,659.00	.0%*
11700261 39999	Opening Fund Bal	-10,282	0	-10,282	.00	.00	-10,282.00	.0%*
11700265 39999	Opening Fund Bal	-1,700	0	-1,700	.00	.00	-1,700.00	.0%*
11700270 39999	Opening Fund Bal	-1,307	0	-1,307	.00	.00	-1,307.00	.0%*
11700280 39999	Opening Fund Bal	-68,500	0	-68,500	.00	.00	-68,500.00	.0%*
11700285 39999	Opening Fund Bal	-20,224	0	-20,224	.00	.00	-20,224.00	.0%*
11700286 39999	Opening Fund Bal	-88,712	0	-88,712	.00	.00	-88,712.00	.0%*
11700287 39999	Opening Fund Bal	-333,984	0	-333,984	.00	.00	-333,984.00	.0%*
TOTAL Beginning Fund Bal		-880,368	0	-880,368	.00	.00	-880,368.00	.0%
TOTAL General		-1,104,518	0	-1,104,518	-173,148.00	.00	-931,370.00	15.7%

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FOR 2026 09

ACCOUNTS FOR: 117 District Ct Restricted Fees Fd		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
233 District Court								
4e Services & Supplies								
11723325 50000	Supplies	0	0	0	1,078.19	.00	-1,078.19	100.0%*
11723325 53920	Professional Fee	11,982	0	11,982	.00	.00	11,982.00	.0%
11723326 50000	Supplies	425,659	0	425,659	21,062.19	.00	404,596.81	4.9%
11723327 50000	Supplies	1,607	0	1,607	.00	.00	1,607.00	.0%
11723328 50000	Supplies	81,000	0	81,000	16,308.65	.00	64,691.35	20.1%
11723329 50000	Supplies	90,224	0	90,224	34,000.00	.00	56,224.00	37.7%
11723330 54040	Attorney Guardia	100,362	0	100,362	7,500.00	.00	92,862.00	7.5%
11723331 54040	Attorney Guardia	391,984	0	391,984	25,000.00	.00	366,984.00	6.4%
11723365 50000	Supplies	1,700	0	1,700	.00	.00	1,700.00	.0%
TOTAL Services & Supplies		1,104,518	0	1,104,518	104,949.03	.00	999,568.97	9.5%
TOTAL District Court		1,104,518	0	1,104,518	104,949.03	.00	999,568.97	9.5%
TOTAL District Ct Restricted Fees Fd		0	0	0	-68,198.97	.00	68,198.97	100.0%
	TOTAL REVENUES	-1,104,518	0	-1,104,518	-173,148.00	.00	-931,370.00	
	TOTAL EXPENSES	1,104,518	0	1,104,518	104,949.03	.00	999,568.97	

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 118 JPO Assessment Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
000 General								
3i Fines and Forfeits								
118 37230	Juvenile Admin Assess	-8,900	0	-8,900	-6,360.00	.00	-2,540.00	71.5%*
118 37240	City Juvenile Admin A	-3,900	0	-3,900	-2,852.00	.00	-1,048.00	73.1%*
TOTAL	Fines and Forfeits	-12,800	0	-12,800	-9,212.00	.00	-3,588.00	72.0%
3z Beginning Fund Bal								
118 39999	Opening Fund Balance	-189,752	0	-189,752	.00	.00	-189,752.00	.0%*
TOTAL	Beginning Fund Bal	-189,752	0	-189,752	.00	.00	-189,752.00	.0%
TOTAL	General	-202,552	0	-202,552	-9,212.00	.00	-193,340.00	4.5%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 118 JPO Assessment Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
238 Juvenile Probation								
4a Salaries								
118238 40010	Temporary Salaries	42,916	0	42,916	21,919.96	.00	20,996.04	51.1%
TOTAL Salaries		42,916	0	42,916	21,919.96	.00	20,996.04	51.1%
4c Benefits								
118238 41010	Social Security	2,661	0	2,661	1,359.03	.00	1,301.97	51.1%
118238 41100	Workers' Comp	2,573	0	2,573	1,495.93	.00	1,077.07	58.1%
118238 41200	Medicare	622	0	622	317.85	.00	304.15	51.1%
TOTAL Benefits		5,856	0	5,856	3,172.81	.00	2,683.19	54.2%
4e Services & Supplies								
118238 50000	Supplies	2,500	0	2,500	468.22	.00	2,031.78	18.7%
TOTAL Services & Supplies		2,500	0	2,500	468.22	.00	2,031.78	18.7%
TOTAL Juvenile Probation		51,272	0	51,272	25,560.99	.00	25,711.01	49.9%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 118 JPO Assessment Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
999 Transfers and Fund Balance							
4z Ending Fund Balance							
118999 99999 Ending Fund Balanc	151,280	0	151,280	.00	.00	151,280.00	.0%
TOTAL Ending Fund Balance	151,280	0	151,280	.00	.00	151,280.00	.0%
TOTAL Transfers and Fund Balance	151,280	0	151,280	.00	.00	151,280.00	.0%
TOTAL JPO Assessment Fund	0	0	0	16,348.99	.00	-16,348.99	100.0%
TOTAL REVENUES	-202,552	0	-202,552	-9,212.00	.00	-193,340.00	
TOTAL EXPENSES	202,552	0	202,552	25,560.99	.00	176,991.01	

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 120 Library Gift Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
000 General								
3z Beginning Fund Bal								
120 39999	Opening Fund Balance	-10,034	0	-10,034	.00	.00	-10,034.00	.0%*
TOTAL	Beginning Fund Bal	-10,034	0	-10,034	.00	.00	-10,034.00	.0%
TOTAL	General	-10,034	0	-10,034	.00	.00	-10,034.00	.0%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 120 Library Gift Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
818 Library							
4e Services & Supplies							
120818 50000 Supplies	10,034	0	10,034	.00	.00	10,034.00	.0%
TOTAL Services & Supplies	10,034	0	10,034	.00	.00	10,034.00	.0%
TOTAL Library	10,034	0	10,034	.00	.00	10,034.00	.0%
TOTAL Library Gift Fund	0	0	0	.00	.00	.00	.0%
TOTAL REVENUES	-10,034	0	-10,034	.00	.00	-10,034.00	
TOTAL EXPENSES	10,034	0	10,034	.00	.00	10,034.00	

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 129 Mining Claim Map Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
000 General								
3g Charges for Service								
129 35200	Map Fees	-2,000	0	-2,000	-6,870.00	.00	4,870.00	343.5%
TOTAL	Charges for Service	-2,000	0	-2,000	-6,870.00	.00	4,870.00	343.5%
3z Beginning Fund Bal								
129 39999	Opening Fund Balance	-24,989	0	-24,989	.00	.00	-24,989.00	.0%*
TOTAL	Beginning Fund Bal	-24,989	0	-24,989	.00	.00	-24,989.00	.0%
TOTAL	General	-26,989	0	-26,989	-6,870.00	.00	-20,119.00	25.5%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 129 Mining Claim Map Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
113 Recorder							
4e Services & Supplies							
129113 53920 Professional Fees	26,989	0	26,989	.00	.00	26,989.00	.0%
TOTAL Services & Supplies	26,989	0	26,989	.00	.00	26,989.00	.0%
TOTAL Recorder	26,989	0	26,989	.00	.00	26,989.00	.0%
TOTAL Mining Claim Map Fund	0	0	0	-6,870.00	.00	6,870.00	100.0%
TOTAL REVENUES	-26,989	0	-26,989	-6,870.00	.00	-20,119.00	
TOTAL EXPENSES	26,989	0	26,989	.00	.00	26,989.00	

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 130 911 Surcharge Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
000 General							
3g Charges for Service							
130 35560 911 Surcharge	-780,000	0	-780,000	-510,103.65	.00	-269,896.35	65.4%*
TOTAL Charges for Service	-780,000	0	-780,000	-510,103.65	.00	-269,896.35	65.4%
3z Beginning Fund Bal							
130 39999 Opening Fund Balance	-545,296	0	-545,296	.00	.00	-545,296.00	.0%*
TOTAL Beginning Fund Bal	-545,296	0	-545,296	.00	.00	-545,296.00	.0%
TOTAL General	-1,325,296	0	-1,325,296	-510,103.65	.00	-815,192.35	38.5%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 130 911 Surcharge Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
324 Dispatch								
4e Services & Supplies								
130234 50240	Communications Equ	983,296	0	983,296	248,384.76	.00	734,911.24	25.3%
130234 53530	Software Support	32,000	0	32,000	47,858.00	.00	-15,858.00	149.6%*
130234 60700	Telephone	75,000	0	75,000	41,879.54	.00	33,120.46	55.8%
130234 60710	Telephone - 911	235,000	0	235,000	136,187.33	.00	98,812.67	58.0%
TOTAL Services & Supplies		1,325,296	0	1,325,296	474,309.63	.00	850,986.37	35.8%
TOTAL Dispatch		1,325,296	0	1,325,296	474,309.63	.00	850,986.37	35.8%
TOTAL 911 Surcharge Fund		0	0	0	-35,794.02	.00	35,794.02	100.0%
	TOTAL REVENUES	-1,325,296	0	-1,325,296	-510,103.65	.00	-815,192.35	
	TOTAL EXPENSES	1,325,296	0	1,325,296	474,309.63	.00	850,986.37	

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 131 Animal Control Donation Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
000 General								
3k Other Revenues								
131 38310	Animal Control Donati	0	0	0	-9,252.51	.00	9,252.51	100.0%
TOTAL	Other Revenues	0	0	0	-9,252.51	.00	9,252.51	100.0%
3z Beginning Fund Bal								
131 39999	Opening Fund Balance	-116,943	0	-116,943	.00	.00	-116,943.00	.0%*
TOTAL	Beginning Fund Bal	-116,943	0	-116,943	.00	.00	-116,943.00	.0%
TOTAL	General	-116,943	0	-116,943	-9,252.51	.00	-107,690.49	7.9%

YEAR-TO-DATE BUDGET REPORT

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ACCOUNTS FOR: 131 Animal Control Donation Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
325 Animal Services							
4e Services & Supplies							
131325 50000 Supplies	0	0	0	.00	.00	.00	.0%
131325 53800 Vet Services	35,000	-35,000	0	.00	.00	.00	.0%
131325 53810 Spay and Neuter	81,943	-81,943	0	.00	.00	.00	.0%
131325 56000 Training	0	0	0	.00	.00	.00	.0%
TOTAL Services & Supplies	116,943	-116,943	0	.00	.00	.00	.0%
TOTAL Animal Services	116,943	-116,943	0	.00	.00	.00	.0%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 131 Animal Control Donation Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
625 Animal Services							
4e Services & Supplies							
131625 50000 Supplies	0	0	0	1,423.00	.00	-1,423.00	100.0%*
131625 53800 Vet Services	0	35,000	35,000	3,396.46	.00	31,603.54	9.7%
131625 53810 Spay and Neuter	0	81,943	81,943	.00	.00	81,943.00	.0%
131625 56000 Training	0	0	0	306.00	.00	-306.00	100.0%*
TOTAL Services & Supplies	0	116,943	116,943	5,125.46	.00	111,817.54	4.4%
TOTAL Animal Services	0	116,943	116,943	5,125.46	.00	111,817.54	4.4%
TOTAL Animal Control Donation Fund	0	0	0	-4,127.05	.00	4,127.05	100.0%
TOTAL REVENUES	-116,943	0	-116,943	-9,252.51	.00	-107,690.49	
TOTAL EXPENSES	116,943	0	116,943	5,125.46	.00	111,817.54	

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 202 Road Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
000 General								
3c Licenses								
202 31260	Utility License Fees	-1,100,000	0	-1,100,000	-550,000.00	.00	-550,000.00	50.0%*
202 31650	Excavation Permits	-20,000	0	-20,000	-341,724.37	.00	321,724.37	1708.6%
TOTAL	Licenses	-1,120,000	0	-1,120,000	-891,724.37	.00	-228,275.63	79.6%
3e Intergovernmental								
202 33210	Gas Tax - 1.75 Cent	-301,168	0	-301,168	-186,177.34	.00	-114,990.66	61.8%*
202 33220	Gas Tax - 1.25 Cent	-303,882	0	-303,882	-170,623.11	.00	-133,258.89	56.1%*
202 33230	Gas Tax - 2.35 Cent	-444,648	0	-444,648	-250,075.83	.00	-194,572.17	56.2%*
202 33240	Gas Tax - 1 Cent Opt	-174,296	0	-174,296	-107,620.99	.00	-66,675.01	61.7%*
TOTAL	Intergovernmental	-1,223,994	0	-1,223,994	-714,497.27	.00	-509,496.73	58.4%
3k Other Revenues								
202 38000	Investment Income	-17,000	0	-17,000	-28,957.48	.00	11,957.48	170.3%
202 38100	Sales & Rental	0	0	0	-11,825.90	.00	11,825.90	100.0%
202 38230	Miscellaneous Revenue	0	0	0	-8,766.00	.00	8,766.00	100.0%
TOTAL	Other Revenues	-17,000	0	-17,000	-49,549.38	.00	32,549.38	291.5%
3z Beginning Fund Bal								
202 39999	Opening Fund Balance	-901,503	0	-901,503	.00	.00	-901,503.00	.0%*
TOTAL	Beginning Fund Bal	-901,503	0	-901,503	.00	.00	-901,503.00	.0%
TOTAL	General	-3,262,497	0	-3,262,497	-1,655,771.02	.00	-1,606,725.98	50.8%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 202 Road Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
411 Road								
4a Salaries								
202411 40000	Salaries	1,044,698	0	1,044,698	698,919.68	.00	345,778.32	66.9%
202411 40010	Temporary Salaries	14,964	0	14,964	.00	.00	14,964.00	.0%
202411 40320	Shift Differential	0	0	0	175.10	.00	-175.10	100.0%*
202411 40500	Overtime	28,406	0	28,406	9,071.82	.00	19,334.18	31.9%
202411 40520	Comp Payout	0	0	0	507.71	.00	-507.71	100.0%*
202411 40610	Callback	0	0	0	321.19	.00	-321.19	100.0%*
202411 40620	Callback Holiday	0	0	0	923.34	.00	-923.34	100.0%*
TOTAL Salaries		1,088,068	0	1,088,068	709,918.84	.00	378,149.16	65.2%
4c Benefits								
202411 41000	Retirement	270,371	0	270,371	181,815.97	.00	88,555.03	67.2%
202411 41010	Social Security	928	0	928	.00	.00	928.00	.0%
202411 41100	Workers' Comp	38,067	0	38,067	18,892.85	.00	19,174.15	49.6%
202411 41200	Medicare	15,778	0	15,778	10,001.82	.00	5,776.18	63.4%
202411 41300	Health Insurance	201,659	0	201,659	137,259.56	.00	64,399.44	68.1%
202411 41302	Vision Insurance	994	0	994	688.90	.00	305.10	69.3%
202411 41303	Dental Insurance	6,776	0	6,776	4,365.33	.00	2,410.67	64.4%
202411 41310	Life Insurance	434	0	434	304.61	.00	129.39	70.2%
TOTAL Benefits		535,007	0	535,007	353,329.04	.00	181,677.96	66.0%
4e Services & Supplies								
202411 50000	Supplies	5,500	0	5,500	2,296.19	.00	3,203.81	41.7%
202411 50430	Tools	4,500	0	4,500	1,701.62	.00	2,798.38	37.8%
202411 50440	Safety Supplies	6,000	0	6,000	4,005.01	.00	1,994.99	66.8%
202411 50960	Traffic Supplies	35,000	0	35,000	6,805.51	.00	28,194.49	19.4%
202411 50970	Road and Bridge Co	0	0	0	278.20	.00	-278.20	100.0%*
202411 51000	Fuel	130,000	0	130,000	62,789.57	.00	67,210.43	48.3%
202411 52000	Copier Maintenance	50	0	50	.00	.00	50.00	.0%
202411 52030	Printer Services	500	0	500	634.50	.00	-134.50	126.9%*

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 202 Road Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
202411 52410	Physicals	950	0	950	201.50	.00	748.50	21.2%
202411 52630	Snow Removal	10,000	0	10,000	.00	.00	10,000.00	.0%
202411 53920	Professional Fees	15,000	0	15,000	.00	.00	15,000.00	.0%
202411 56000	Training	2,000	0	2,000	1,450.00	.00	550.00	72.5%
202411 56200	Travel	250	0	250	.00	.00	250.00	.0%
202411 56430	Traffic Signal Mai	11,000	0	11,000	3,104.10	.00	7,895.90	28.2%
202411 56500	Building Maintenan	5,000	0	5,000	5,625.41	.00	-625.41	112.5%*
202411 57000	Rental	11,000	0	11,000	395.90	.00	10,604.10	3.6%
202411 60100	Electric Service	13,000	0	13,000	6,826.34	.00	6,173.66	52.5%
202411 60200	Gas Service	10,000	0	10,000	4,474.71	.00	5,525.29	44.7%
202411 60300	Water Service	1,900	0	1,900	1,578.06	.00	321.94	83.1%
202411 60400	Sewer Service	450	0	450	303.75	.00	146.25	67.5%
202411 60700	Telephone	8,500	0	8,500	5,075.76	.00	3,424.24	59.7%
TOTAL Services & Supplies		270,600	0	270,600	107,546.13	.00	163,053.87	39.7%
TOTAL Road		1,893,675	0	1,893,675	1,170,794.01	.00	722,880.99	61.8%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 202 Road Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
414 Heavy Equipment								
4a Salaries								
202414 40000	Salaries	155,880	0	155,880	107,564.10	.00	48,315.90	69.0%
202414 40320	Shift Differential	0	0	0	40.26	.00	-40.26	100.0%*
202414 40500	Overtime	2,273	0	2,273	535.49	.00	1,737.51	23.6%
TOTAL Salaries		158,153	0	158,153	108,139.85	.00	50,013.15	68.4%
4c Benefits								
202414 41000	Retirement	44,570	0	44,570	32,817.44	.00	11,752.56	73.6%
202414 41100	Workers' Comp	5,475	0	5,475	2,439.58	.00	3,035.42	44.6%
202414 41200	Medicare	2,293	0	2,293	1,558.65	.00	734.35	68.0%
202414 41300	Health Insurance	25,457	0	25,457	19,087.70	.00	6,369.30	75.0%
202414 41302	Vision Insurance	145	0	145	109.14	.00	35.86	75.3%
202414 41303	Dental Insurance	999	0	999	748.96	.00	250.04	75.0%
202414 41310	Life Insurance	64	0	64	48.23	.00	15.77	75.4%
TOTAL Benefits		79,003	0	79,003	56,809.70	.00	22,193.30	71.9%
4e Services & Supplies								
202414 50000	Supplies	3,500	0	3,500	1,174.15	.00	2,325.85	33.5%
202414 50420	Laundry	2,500	0	2,500	1,434.20	.00	1,065.80	57.4%
202414 50430	Tools	13,000	0	13,000	6,760.61	.00	6,239.39	52.0%
202414 50440	Safety Supplies	4,500	0	4,500	1,260.54	.00	3,239.46	28.0%
202414 51000	Fuel	6,000	0	6,000	2,736.45	.00	3,263.55	45.6%
202414 51010	Oil & Grease	10,000	0	10,000	4,502.19	.00	5,497.81	45.0%
202414 52030	Printer Services	720	0	720	317.25	.00	402.75	44.1%
202414 52410	Physicals	350	0	350	210.00	.00	140.00	60.0%
202414 53530	Software Support	3,300	0	3,300	3,207.96	.00	92.04	97.2%
202414 56000	Training	2,000	0	2,000	726.00	.00	1,274.00	36.3%
202414 56200	Travel	250	0	250	198.00	.00	52.00	79.2%
202414 56400	Repairs and Mainte	250,000	0	250,000	106,754.27	.00	143,245.73	42.7%
202414 56500	Building Maintenan	6,000	0	6,000	2,832.84	.00	3,167.16	47.2%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 202 Road Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
202414 60200	Gas Service	5,000	0	5,000	783.90	.00	4,216.10	15.7%
202414 60700	Telephone	2,500	0	2,500	1,540.26	.00	959.74	61.6%
TOTAL Services & Supplies		309,620	0	309,620	134,438.62	.00	175,181.38	43.4%
TOTAL Heavy Equipment		546,776	0	546,776	299,388.17	.00	247,387.83	54.8%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 202 Road Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
999 Transfers and Fund Balance							
4q Contingency							
202999 89000 Contingency	73,214	0	73,214	.00	.00	73,214.00	.0%
TOTAL Contingency	73,214	0	73,214	.00	.00	73,214.00	.0%
4z Ending Fund Balance							
202999 99999 Ending Fund Balanc	748,832	0	748,832	.00	.00	748,832.00	.0%
TOTAL Ending Fund Balance	748,832	0	748,832	.00	.00	748,832.00	.0%
TOTAL Transfers and Fund Balance	822,046	0	822,046	.00	.00	822,046.00	.0%
TOTAL Road Fund	0	0	0	-185,588.84	.00	185,588.84	100.0%
TOTAL REVENUES	-3,262,497	0	-3,262,497	-1,655,771.02	.00	-1,606,725.98	
TOTAL EXPENSES	3,262,497	0	3,262,497	1,470,182.18	.00	1,792,314.82	

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 217 Regional Transportation Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
000 General								
3a Taxes								
21700120 30710	Road Constr Tax	-250,000	0	-250,000	-62,300.00	.00	-187,700.00	24.9%*
21700140 30720	Road Constr Tax	-30,000	0	-30,000	-288.60	.00	-29,711.40	1.0%*
TOTAL Taxes		-280,000	0	-280,000	-62,588.60	.00	-217,411.40	22.4%
3e Intergovernmental								
21700100 33200	Gasoline Taxes	-1,554,378	0	-1,554,378	-960,760.87	.00	-593,617.13	61.8%*
21700100 33270	Diesel Tax-.05 C	-1,274,159	0	-1,274,159	-681,212.50	.00	-592,946.50	53.5%*
21700110 33200	Gasoline Taxes	-1,110,425	0	-1,110,425	-686,353.92	.00	-424,071.08	61.8%*
21700110 33270	Diesel Tax-.05 C	-910,240	0	-910,240	-486,648.53	.00	-423,591.47	53.5%*
21700130 33200	Gasoline Taxes	-141,025	0	-141,025	-87,167.62	.00	-53,857.38	61.8%*
21700130 33270	Diesel Tax-.05 C	-115,601	0	-115,601	-61,804.83	.00	-53,796.17	53.5%*
TOTAL Intergovernmental		-5,105,828	0	-5,105,828	-2,963,948.27	.00	-2,141,879.73	58.1%
3k Other Revenues								
21700100 38000	Investment Incom	-210,000	0	-210,000	-192,401.01	.00	-17,598.99	91.6%*
21700110 38000	Investment Incom	-400,000	0	-400,000	-301,424.21	.00	-98,575.79	75.4%*
21700130 38000	Investment Incom	-20,000	0	-20,000	-23,517.00	.00	3,517.00	117.6%
TOTAL Other Revenues		-630,000	0	-630,000	-517,342.22	.00	-112,657.78	82.1%
3z Beginning Fund Bal								
21700100 39999	Opening Fund Bal	-6,141,385	0	-6,141,385	.00	.00	-6,141,385.00	.0%*
21700110 39999	Opening Fund Bal	-8,541,435	0	-8,541,435	.00	.00	-8,541,435.00	.0%*
21700120 39999	Opening Fund Bal	-504,531	0	-504,531	.00	.00	-504,531.00	.0%*
21700130 39999	Opening Fund Bal	-543,079	0	-543,079	.00	.00	-543,079.00	.0%*
21700140 39999	Opening Fund Bal	-142,489	0	-142,489	.00	.00	-142,489.00	.0%*

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 217 Regional Transportation Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
TOTAL Beginning Fund Bal	-15,872,919	0	-15,872,919	.00	.00	-15,872,919.00	.0%
TOTAL General	-21,888,747	0	-21,888,747	-3,543,879.09	.00	-18,344,867.91	16.2%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 217 Regional Transportation Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
411 Road							
4c Benefits							
21741100 41100 Workers' Comp	500	0	500	130.88	.00	369.12	26.2%
TOTAL Benefits	500	0	500	130.88	.00	369.12	26.2%
4e Services & Supplies							
21741100 50970 Road and Bridge	9,179,422	0	9,179,422	2,073,823.67	.00	7,105,598.33	22.6%
21741110 50970 Road and Bridge	10,962,100	0	10,962,100	236,118.06	.00	10,725,981.94	2.2%
21741120 50970 Road and Bridge	754,531	0	754,531	100,791.61	.00	653,739.39	13.4%
21741130 50970 Road and Bridge	819,705	0	819,705	.00	.00	819,705.00	.0%
21741140 50970 Road and Bridge	172,489	0	172,489	.00	.00	172,489.00	.0%
TOTAL Services & Supplies	21,888,247	0	21,888,247	2,410,733.34	.00	19,477,513.66	11.0%
TOTAL Road	21,888,747	0	21,888,747	2,410,864.22	.00	19,477,882.78	11.0%
TOTAL Regional Transportation Fund	0	0	0	-1,133,014.87	.00	1,133,014.87	100.0%
TOTAL REVENUES	-21,888,747	0	-21,888,747	-3,543,879.09	.00	-18,344,867.91	
TOTAL EXPENSES	21,888,747	0	21,888,747	2,410,864.22	.00	19,477,882.78	

YEAR-TO-DATE BUDGET REPORT

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ACCOUNTS FOR: 276 Road Improvement Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
000 General								
3a Taxes								
276 30700	Road Constr Tax - Cou	-250,000	0	-250,000	-193,035.50	.00	-56,964.50	77.2%*
TOTAL	Taxes	-250,000	0	-250,000	-193,035.50	.00	-56,964.50	77.2%
3z Beginning Fund Bal								
276 39999	Opening Fund Balance	-1,126,193	0	-1,126,193	.00	.00	-1,126,193.00	.0%*
TOTAL	Beginning Fund Bal	-1,126,193	0	-1,126,193	.00	.00	-1,126,193.00	.0%
TOTAL	General	-1,376,193	0	-1,376,193	-193,035.50	.00	-1,183,157.50	14.0%

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ACCOUNTS FOR: 276 Road Improvement Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
411 Road							
4e Services & Supplies							
276411 50970 Road and Bridge Co	981,193	0	981,193	82,286.64	.00	898,906.36	8.4%
TOTAL Services & Supplies	981,193	0	981,193	82,286.64	.00	898,906.36	8.4%
4g Capital Outlay							
276411 70700 Capital Outlay - V	395,000	0	395,000	372,816.21	.00	22,183.79	94.4%
TOTAL Capital Outlay	395,000	0	395,000	372,816.21	.00	22,183.79	94.4%
TOTAL Road	1,376,193	0	1,376,193	455,102.85	.00	921,090.15	33.1%
TOTAL Road Improvement Fund	0	0	0	262,067.35	.00	-262,067.35	100.0%
TOTAL REVENUES	-1,376,193	0	-1,376,193	-193,035.50	.00	-1,183,157.50	
TOTAL EXPENSES	1,376,193	0	1,376,193	455,102.85	.00	921,090.15	

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ACCOUNTS FOR: 301 Opioid Settlement Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
000 General								
3e Intergovernmental								
301 33290	Opioid Settlement	-235,669	0	-235,669	-344,025.56	.00	108,356.56	146.0%
TOTAL	Intergovernmental	-235,669	0	-235,669	-344,025.56	.00	108,356.56	146.0%
3k Other Revenues								
301 38000	Investment Income	-124,542	0	-124,542	.00	.00	-124,542.00	.0%*
TOTAL	Other Revenues	-124,542	0	-124,542	.00	.00	-124,542.00	.0%
3z Beginning Fund Bal								
301 39999	Opening Fund Balance	-913,356	0	-913,356	.00	.00	-913,356.00	.0%*
TOTAL	Beginning Fund Bal	-913,356	0	-913,356	.00	.00	-913,356.00	.0%
TOTAL	General	-1,273,567	0	-1,273,567	-344,025.56	.00	-929,541.44	27.0%

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ACCOUNTS FOR: 301 Opioid Settlement Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
700 Indigent and Senior								
4a Salaries								
301700 40000	Salaries	194,124	0	194,124	34,017.75	.00	160,106.25	17.5%
TOTAL Salaries		194,124	0	194,124	34,017.75	.00	160,106.25	17.5%
4c Benefits								
301700 41000	Retirement - PERS	49,011	0	49,011	7,041.42	.00	41,969.58	14.4%
301700 41100	Workers' Comp	7,649	0	7,649	2,087.55	.00	5,561.45	27.3%
301700 41200	Medicare	2,814	0	2,814	481.54	.00	2,332.46	17.1%
301700 41300	Health Insurance	41,571	0	41,571	5,951.60	.00	35,619.40	14.3%
301700 41302	Vision Insurance	204	0	204	29.55	.00	174.45	14.5%
301700 41303	Dental Insurance	1,395	0	1,395	202.50	.00	1,192.50	14.5%
301700 41310	Life Insurance	90	0	90	13.08	.00	76.92	14.5%
TOTAL Benefits		102,734	0	102,734	15,807.24	.00	86,926.76	15.4%
4e Services & Supplies								
301700 50000	Supplies	1,000	0	1,000	456.58	.00	543.42	45.7%
301700 50720	Youth Services	10,000	0	10,000	.00	.00	10,000.00	.0%
301700 53530	Software Support	32,962	0	32,962	27,481.57	.00	5,480.43	83.4%
301700 56000	Training	5,000	0	5,000	530.25	.00	4,469.75	10.6%
301700 56200	Travel	10,000	0	10,000	.00	.00	10,000.00	.0%
TOTAL Services & Supplies		58,962	0	58,962	28,468.40	.00	30,493.60	48.3%
TOTAL Indigent and Senior		355,820	0	355,820	78,293.39	.00	277,526.61	22.0%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 301 Opioid Settlement Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
999 Transfers and Fund Balance							
4z Ending Fund Balance							
301999 99999 Ending Fund Balanc	917,747	0	917,747	.00	.00	917,747.00	.0%
TOTAL Ending Fund Balance	917,747	0	917,747	.00	.00	917,747.00	.0%
TOTAL Transfers and Fund Balance	917,747	0	917,747	.00	.00	917,747.00	.0%
TOTAL Opioid Settlement Fund	0	0	0	-265,732.17	.00	265,732.17	100.0%
TOTAL REVENUES	-1,273,567	0	-1,273,567	-344,025.56	.00	-929,541.44	
TOTAL EXPENSES	1,273,567	0	1,273,567	78,293.39	.00	1,195,273.61	

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 303 Indigent Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
000 General								
3a Taxes								
303 30000	Real Property Taxes	-726,984	0	-726,984	-605,134.60	.00	-121,849.40	83.2%*
303 30040	Trust Reconveyances	0	0	0	-264.92	.00	264.92	100.0%
303 30200	Unsecured Property Ta	0	0	0	-56,808.04	.00	56,808.04	100.0%
303 30210	Prior Year Unsecured	0	0	0	-30.60	.00	30.60	100.0%
303 30220	Other Years Unsecured	0	0	0	-3.56	.00	3.56	100.0%
303 30300	Centrally Assessed Ta	0	0	0	-18,577.92	.00	18,577.92	100.0%
TOTAL Taxes		-726,984	0	-726,984	-680,819.64	.00	-46,164.36	93.6%
3c Licenses								
303 31200	Franchise Fees	-4,000	0	-4,000	-4,000.00	.00	.00	100.0%
TOTAL Licenses		-4,000	0	-4,000	-4,000.00	.00	.00	100.0%
3e Intergovernmental								
303 32010 17000	WIC Grant	0	0	0	-118,832.45	.00	118,832.45	100.0%
303 32010 17001	WIC Grant	0	-48,313	-48,313	-85,502.49	.00	37,189.49	177.0%
303 32060 17070	Nevada Home Visi	0	0	0	-116,779.03	.00	116,779.03	100.0%
303 32060 17071	Nevada Home Visi	0	-21,361	-21,361	-97,768.07	.00	76,407.07	457.7%
303 32120 17020	Emergency Soluti	0	0	0	-1,793.06	.00	1,793.06	100.0%
303 32755 17270	HRSA GRANT	0	-3,054	-3,054	-35,613.08	.00	32,559.08	1166.1%
303 32755 17271	HRSA GRANT	0	-11,362	-11,362	-11,361.71	.00	-.29	100.0%*
303 32768 17242	IVB-2 Family Sup	0	0	0	-22,633.71	.00	22,633.71	100.0%
303 32776 17261	Title XX SSBG	0	-13,819	-13,819	-44,989.67	.00	31,170.67	325.6%
303 32780 17010	CSBG - Indigent	0	-19,967	-19,967	-28,698.92	.00	8,731.92	143.7%
303 32780 17011	CSBG - Indigent	0	0	0	-26,517.19	.00	26,517.19	100.0%
303 32865 17650	COSSAP	0	0	0	-14,848.40	.00	14,848.40	100.0%
303 32865 17651	COSSAP	0	0	0	-69,556.83	.00	69,556.83	100.0%
303 32885 17005	ACF	0	-61,173	-61,173	-61,172.66	.00	-.34	100.0%*
303 32887 17003	Youth Mobile Cri	0	-39,369	-39,369	-270,920.99	.00	231,551.99	688.2%
303 32990 13850	OTS Grant	0	0	0	-1,722.81	.00	1,722.81	100.0%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 303 Indigent Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
303 32990 13851 OTS Grant	0	-594	-594	-4,809.54	.00	4,215.54	809.7%
303 33260 Marijuana Shared Rev	-131,447	0	-131,447	-132,088.85	.00	641.85	100.5%
303 33600 17100 Family Resource	0	-10,111	-10,111	-33,454.00	.00	23,343.00	330.9%
303 33605 17230 Family Planning	0	0	0	-14,647.80	.00	14,647.80	100.0%
303 33610 17120 Welfare Set Asid	0	-3,766	-3,766	-3,765.95	.00	-.05	100.0%*
303 33620 17130 FRC Differential	0	-5,226	-5,226	-93,099.44	.00	87,873.44	1781.5%
303 33625 17251 CTF Grant	0	-19,152	-19,152	-81,444.69	.00	62,292.69	425.3%
303 33650 17110 LIHTF Family Enh	0	-1,883	-1,883	-1,883.42	.00	.42	100.0%
303 33665 17310 FASTT Grant	0	-5,766	-5,766	-32,060.37	.00	26,294.37	556.0%
303 33675 17290 MOST Grant	0	0	0	-42,407.51	.00	42,407.51	100.0%
303 33683 17248 Public Health In	0	0	0	-139,086.01	.00	139,086.01	100.0%
303 33684 17249 SB118 Public Hea	0	-20,740	-20,740	-73,762.01	.00	53,022.01	355.7%
303 33840 17655 Resilient Famili	0	-26,656	-26,656	-160,054.03	.00	133,398.03	600.4%
TOTAL Intergovernmental	-131,447	-312,312	-443,759	-1,821,274.69	.00	1,377,515.69	410.4%
3k Other Revenues							
303 38000 Investment Income	-29,500	0	-29,500	-28,916.55	.00	-583.45	98.0%*
303 38330 Human Services Donati	0	0	0	-6,245.45	.00	6,245.45	100.0%
TOTAL Other Revenues	-29,500	0	-29,500	-35,162.00	.00	5,662.00	119.2%
3z Beginning Fund Bal							
303 39999 Opening Fund Balance	-951,499	0	-951,499	.00	.00	-951,499.00	.0%*
TOTAL Beginning Fund Bal	-951,499	0	-951,499	.00	.00	-951,499.00	.0%
TOTAL General	-1,843,430	-312,312	-2,155,742	-2,541,256.33	.00	385,514.33	117.9%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 303 Indigent Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
700 Indigent and Senior							
4a Salaries							
303700 40000 Salaries	455,615	4,188	459,803	242,404.74	.00	217,398.26	52.7%
303700 40000 17000 Salaries	0	0	0	90,163.61	.00	-90,163.61	100.0%*
303700 40000 17001 Salaries	0	29,513	29,513	54,946.71	.00	-25,433.71	186.2%*
303700 40000 17003 Salaries	0	18,671	18,671	100,310.26	.00	-81,639.26	537.3%*
303700 40000 17010 Salaries	0	14,096	14,096	20,365.89	.00	-6,269.89	144.5%*
303700 40000 17011 Salaries	0	0	0	35,472.94	.00	-35,472.94	100.0%*
303700 40000 17020 Salaries	0	0	0	1,200.49	.00	-1,200.49	100.0%*
303700 40000 17070 Salaries	0	0	0	90,515.86	.00	-90,515.86	100.0%*
303700 40000 17071 Salaries	0	12,667	12,667	76,228.22	.00	-63,561.22	601.8%*
303700 40000 17100 Salaries	0	6,377	6,377	22,159.45	.00	-15,782.45	347.5%*
303700 40000 17130 Salaries	0	4,121	4,121	81,346.75	.00	-77,225.75	1974.0%*
303700 40000 17242 Salaries	0	0	0	20,386.87	.00	-20,386.87	100.0%*
303700 40000 17251 Salaries	0	13,727	13,727	69,450.58	.00	-55,723.58	505.9%*
303700 40000 17261 Salaries	0	9,846	9,846	33,060.10	.00	-23,214.10	335.8%*
303700 40000 17270 Salaries	0	2,196	2,196	27,693.60	.00	-25,497.60	1261.1%*
303700 40000 17271 Salaries	0	6,157	6,157	6,157.36	.00	-.36	100.0%*
303700 40000 17290 Salaries	0	0	0	43,096.32	.00	-43,096.32	100.0%*
303700 40000 17310 Salaries	0	3,390	3,390	36,111.14	.00	-32,721.14	1065.2%*
303700 40000 17650 Salaries	0	0	0	7,555.10	.00	-7,555.10	100.0%*
303700 40000 17651 Salaries	0	0	0	28,269.16	.00	-28,269.16	100.0%*
303700 40000 17655 Salaries	0	6,597	6,597	24,128.41	.00	-17,531.41	365.7%*
303700 40010 Temporary Salaries	2,887	0	2,887	.00	.00	2,887.00	.0%
303700 40320 17071 Shift Differe	0	2	2	1.50	.00	.50	75.0%
303700 40500 Overtime	6,818	0	6,818	.00	.00	6,818.00	.0%
303700 40500 17003 Overtime	0	0	0	20.45	.00	-20.45	100.0%*
303700 40500 17070 Overtime	0	0	0	73.55	.00	-73.55	100.0%*
303700 40500 17071 Overtime	0	35	35	35.32	.00	-.32	100.9%*
303700 40500 17655 Overtime	0	0	0	26.02	.00	-26.02	100.0%*
303700 40520 17000 Comp Payout	0	0	0	4.13	.00	-4.13	100.0%*
303700 40520 17001 Comp Payout	0	0	0	44.13	.00	-44.13	100.0%*
303700 40520 17070 Comp Payout	0	0	0	4.12	.00	-4.12	100.0%*
303700 40520 17071 Comp Payout	0	0	0	29.42	.00	-29.42	100.0%*
TOTAL Salaries	465,320	131,583	596,903	1,111,262.20	.00	-514,359.20	186.2%
4c Benefits							
303700 41000 Retirement	141,718	0	141,718	76,272.15	.00	65,445.85	53.8%

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ACCOUNTS FOR: 303 Indigent Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
303700 41000 17000 Retirement	0	0	0	27,414.62	.00	-27,414.62	100.0%*
303700 41000 17001 Retirement	0	8,876	8,876	16,768.55	.00	-7,892.55	188.9%*
303700 41000 17003 Retirement -	0	3,750	3,750	24,260.12	.00	-20,510.12	646.9%*
303700 41000 17010 Retirement	0	2,839	2,839	4,241.62	.00	-1,402.62	149.4%*
303700 41000 17011 Retirement -	0	0	0	8,382.30	.00	-8,382.30	100.0%*
303700 41000 17020 Retirement	0	0	0	214.72	.00	-214.72	100.0%*
303700 41000 17070 Retirement -	0	0	0	28,601.14	.00	-28,601.14	100.0%*
303700 41000 17071 Retirement -	0	2,707	2,707	21,870.76	.00	-19,163.76	807.9%*
303700 41000 17100 Retirement	0	1,980	1,980	6,771.78	.00	-4,791.78	342.0%*
303700 41000 17130 Retirement	0	797	797	18,105.54	.00	-17,308.54	2271.7%*
303700 41000 17242 Retirement -	0	0	0	4,587.02	.00	-4,587.02	100.0%*
303700 41000 17251 Retirement -	0	2,604	2,604	13,999.40	.00	-11,395.40	537.6%*
303700 41000 17261 Retirement -	0	2,119	2,119	7,527.20	.00	-5,408.20	355.2%*
303700 41000 17270 Retirement -	0	603	603	7,932.24	.00	-7,329.24	1315.5%*
303700 41000 17271 Retirement -	0	1,701	1,701	1,701.08	.00	-.08	100.0%*
303700 41000 17290 Retirement -	0	0	0	14,202.95	.00	-14,202.95	100.0%*
303700 41000 17310 Retirement -	0	1,124	1,124	11,926.56	.00	-10,802.56	1061.1%*
303700 41000 17650 Retirement -	0	0	0	1,454.36	.00	-1,454.36	100.0%*
303700 41000 17651 Retirement -	0	0	0	7,721.23	.00	-7,721.23	100.0%*
303700 41000 17655 Retirement -	0	1,240	1,240	4,614.53	.00	-3,374.53	372.1%*
303700 41010 Social Security	179	0	179	.00	.00	179.00	.0%
303700 41100 Workers' Comp	17,828	0	17,828	8,377.23	.00	9,450.77	47.0%
303700 41100 17000 Workers' Comp	0	0	0	3,430.58	.00	-3,430.58	100.0%*
303700 41100 17001 Workers' Comp	0	1,309	1,309	1,710.90	.00	-401.90	130.7%*
303700 41100 17003 Workers' Comp	0	1,140	1,140	4,438.63	.00	-3,298.63	389.4%*
303700 41100 17010 Workers' Comp	0	650	650	788.74	.00	-138.74	121.3%*
303700 41100 17011 Workers' Comp	0	0	0	1,343.69	.00	-1,343.69	100.0%*
303700 41100 17020 Workers' Comp	0	0	0	84.31	.00	-84.31	100.0%*
303700 41100 17070 Workers' Comp	0	0	0	3,898.23	.00	-3,898.23	100.0%*
303700 41100 17071 Workers' Comp	0	779	779	1,591.62	.00	-812.62	204.3%*
303700 41100 17100 Workers' Comp	0	421	421	1,251.28	.00	-830.28	297.2%*
303700 41100 17130 Workers' Comp	0	249	249	1,929.38	.00	-1,680.38	774.9%*
303700 41100 17242 Workers' Comp	0	0	0	527.59	.00	-527.59	100.0%*
303700 41100 17251 Workers' Comp	0	348	348	1,107.75	.00	-759.75	318.3%*
303700 41100 17261 Workers' Comp	0	432	432	1,187.84	.00	-755.84	275.0%*
303700 41100 17270 Workers' Comp	0	21	21	762.31	.00	-741.31	3630.0%*
303700 41100 17271 Workers' Comp	0	228	228	227.88	.00	.12	99.9%
303700 41100 17290 Workers' Comp	0	0	0	1,709.13	.00	-1,709.13	100.0%*
303700 41100 17310 Workers' Comp	0	203	203	1,310.80	.00	-1,107.80	645.7%*
303700 41100 17650 Workers' Comp	0	0	0	475.32	.00	-475.32	100.0%*
303700 41100 17651 Workers' Comp	0	0	0	1,141.63	.00	-1,141.63	100.0%*
303700 41100 17655 Workers' Comp	0	158	158	694.90	.00	-536.90	439.8%*
303700 41200 Medicare	6,748	0	6,748	3,391.64	.00	3,356.36	50.3%
303700 41200 17000 Medicare	0	0	0	1,271.10	.00	-1,271.10	100.0%*

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ACCOUNTS FOR: 303 Indigent Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
303700 41200 17001 Medicare	0	417	417	775.98	.00	-358.98	186.1%*
303700 41200 17003 Medicare	0	254	254	1,388.90	.00	-1,134.90	546.8%*
303700 41200 17010 Medicare	0	200	200	288.60	.00	-88.60	144.3%*
303700 41200 17011 Medicare	0	0	0	500.45	.00	-500.45	100.0%*
303700 41200 17020 Medicare	0	0	0	16.89	.00	-16.89	100.0%*
303700 41200 17070 Medicare	0	0	0	1,269.13	.00	-1,269.13	100.0%*
303700 41200 17071 Medicare	0	178	178	1,067.01	.00	-889.01	599.4%*
303700 41200 17100 Medicare	0	92	92	317.17	.00	-225.17	344.8%*
303700 41200 17130 Medicare	0	59	59	1,174.53	.00	-1,115.53	1990.7%*
303700 41200 17242 Medicare	0	0	0	294.09	.00	-294.09	100.0%*
303700 41200 17251 Medicare	0	198	198	1,001.87	.00	-803.87	506.0%*
303700 41200 17261 Medicare	0	139	139	467.01	.00	-328.01	336.0%*
303700 41200 17270 Medicare	0	30	30	383.42	.00	-353.42	1278.1%*
303700 41200 17271 Medicare	0	85	85	84.79	.00	.21	99.8%
303700 41200 17290 Medicare	0	0	0	572.63	.00	-572.63	100.0%*
303700 41200 17310 Medicare	0	43	43	488.46	.00	-445.46	1136.0%*
303700 41200 17650 Medicare	0	0	0	104.72	.00	-104.72	100.0%*
303700 41200 17651 Medicare	0	0	0	386.55	.00	-386.55	100.0%*
303700 41200 17655 Medicare	0	95	95	348.12	.00	-253.12	366.4%*
303700 41300 Health Insurance	105,524	0	105,524	55,447.61	.00	50,076.39	52.5%
303700 41300 17000 Health Insura	0	0	0	21,440.84	.00	-21,440.84	100.0%*
303700 41300 17001 Health Insura	0	7,871	7,871	12,374.43	.00	-4,503.43	157.2%*
303700 41300 17003 Health Insura	0	4,429	4,429	18,754.01	.00	-14,325.01	423.4%*
303700 41300 17010 Health Insura	0	2,087	2,087	2,883.42	.00	-796.42	138.2%*
303700 41300 17011 Health Insura	0	0	0	6,296.93	.00	-6,296.93	100.0%*
303700 41300 17020 Health Insura	0	0	0	263.44	.00	-263.44	100.0%*
303700 41300 17070 Health Insura	0	0	0	25,974.97	.00	-25,974.97	100.0%*
303700 41300 17071 Health Insura	0	4,519	4,519	19,646.13	.00	-15,127.13	434.7%*
303700 41300 17100 Health Insura	0	1,185	1,185	6,345.37	.00	-5,160.37	535.5%*
303700 41300 17130 Health Insura	0	0	0	15,357.55	.00	-15,357.55	100.0%*
303700 41300 17242 Health Insura	0	0	0	3,895.34	.00	-3,895.34	100.0%*
303700 41300 17251 Health Insura	0	2,179	2,179	13,834.09	.00	-11,655.09	634.9%*
303700 41300 17261 Health Insura	0	1,223	1,223	5,007.20	.00	-3,784.20	409.4%*
303700 41300 17270 Health Insura	0	0	0	6,086.97	.00	-6,086.97	100.0%*
303700 41300 17271 Health Insura	0	2,352	2,352	2,351.51	.00	.49	100.0%
303700 41300 17290 Health Insura	0	0	0	11,352.66	.00	-11,352.66	100.0%*
303700 41300 17310 Health Insura	0	979	979	10,936.65	.00	-9,957.65	1117.1%*
303700 41300 17650 Health Insura	0	0	0	1,709.58	.00	-1,709.58	100.0%*
303700 41300 17651 Health Insura	0	0	0	5,083.58	.00	-5,083.58	100.0%*
303700 41300 17655 Health Insura	0	1,545	1,545	4,925.86	.00	-3,380.86	318.8%*
303700 41302 Vision Insurance	455	0	455	269.84	.00	185.16	59.3%
303700 41302 17000 Vision Insura	0	0	0	105.72	.00	-105.72	100.0%*
303700 41302 17001 Vision Insura	0	39	39	62.33	.00	-23.33	159.8%*
303700 41302 17003 Vision Insura	0	20	20	87.11	.00	-67.11	435.6%*

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ACCOUNTS FOR: 303 Indigent Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
303700 41302 17010 Vision Insura	0	11	11	15.39	.00	-4.39	139.9%*
303700 41302 17011 Vision Insura	0	0	0	32.74	.00	-32.74	100.0%*
303700 41302 17020 Vision Insura	0	0	0	1.51	.00	-1.51	100.0%*
303700 41302 17070 Vision Insura	0	0	0	118.08	.00	-118.08	100.0%*
303700 41302 17071 Vision Insura	0	20	20	89.02	.00	-69.02	445.1%*
303700 41302 17100 Vision Insura	0	7	7	36.27	.00	-29.27	518.1%*
303700 41302 17130 Vision Insura	0	0	0	82.59	.00	-82.59	100.0%*
303700 41302 17242 Vision Insura	0	0	0	20.65	.00	-20.65	100.0%*
303700 41302 17251 Vision Insura	0	12	12	73.04	.00	-61.04	608.7%*
303700 41302 17261 Vision Insura	0	7	7	27.06	.00	-20.06	386.6%*
303700 41302 17270 Vision Insura	0	0	0	26.19	.00	-26.19	100.0%*
303700 41302 17271 Vision Insura	0	10	10	9.75	.00	.25	97.5%
303700 41302 17290 Vision Insura	0	0	0	49.98	.00	-49.98	100.0%*
303700 41302 17310 Vision Insura	0	3	3	42.90	.00	-39.90	1430.0%*
303700 41302 17650 Vision Insura	0	0	0	7.52	.00	-7.52	100.0%*
303700 41302 17651 Vision Insura	0	0	0	18.82	.00	-18.82	100.0%*
303700 41302 17655 Vision Insura	0	9	9	28.15	.00	-19.15	312.8%*
303700 41303 Dental Insurance	3,116	0	3,116	1,852.67	.00	1,263.33	59.5%
303700 41303 17000 Dental Insura	0	0	0	725.65	.00	-725.65	100.0%*
303700 41303 17001 Dental Insura	0	270	270	427.76	.00	-157.76	158.4%*
303700 41303 17003 Dental Insura	0	137	137	597.76	.00	-460.76	436.3%*
303700 41303 17010 Dental Insura	0	76	76	105.46	.00	-29.46	138.8%*
303700 41303 17011 Dental Insura	0	0	0	224.61	.00	-224.61	100.0%*
303700 41303 17020 Dental Insura	0	0	0	10.34	.00	-10.34	100.0%*
303700 41303 17070 Dental Insura	0	0	0	810.41	.00	-810.41	100.0%*
303700 41303 17071 Dental Insura	0	137	137	611.03	.00	-474.03	446.0%*
303700 41303 17100 Dental Insura	0	46	46	248.98	.00	-202.98	541.3%*
303700 41303 17130 Dental Insura	0	0	0	567.16	.00	-567.16	100.0%*
303700 41303 17242 Dental Insura	0	0	0	142.11	.00	-142.11	100.0%*
303700 41303 17251 Dental Insura	0	79	79	500.97	.00	-421.97	634.1%*
303700 41303 17261 Dental Insura	0	48	48	185.85	.00	-137.85	387.2%*
303700 41303 17270 Dental Insura	0	0	0	179.86	.00	-179.86	100.0%*
303700 41303 17271 Dental Insura	0	67	67	67.08	.00	-.08	100.1%*
303700 41303 17290 Dental Insura	0	0	0	343.04	.00	-343.04	100.0%*
303700 41303 17310 Dental Insura	0	22	22	294.64	.00	-272.64	1339.3%*
303700 41303 17650 Dental Insura	0	0	0	51.67	.00	-51.67	100.0%*
303700 41303 17651 Dental Insura	0	0	0	129.23	.00	-129.23	100.0%*
303700 41303 17655 Dental Insura	0	61	61	193.29	.00	-132.29	316.9%*
303700 41310 Life Insurance	209	0	209	124.11	.00	84.89	59.4%
303700 41310 17000 Life Insuranc	0	0	0	46.75	.00	-46.75	100.0%*
303700 41310 17001 Life Insuranc	0	18	18	27.56	.00	-9.56	153.1%*
303700 41310 17003 Life Insuranc	0	9	9	38.52	.00	-29.52	428.0%*
303700 41310 17010 Life Insuranc	0	8	8	9.80	.00	-1.80	122.5%*
303700 41310 17011 Life Insuranc	0	0	0	19.73	.00	-19.73	100.0%*

YEAR-TO-DATE BUDGET REPORT

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ACCOUNTS FOR: 303 Indigent Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
303700 41310 17020 Life Insuranc	0	0	0	1.36	.00	-1.36	100.0%*
303700 41310 17070 Life Insuranc	0	0	0	52.18	.00	-52.18	100.0%*
303700 41310 17071 Life Insuranc	0	9	9	39.36	.00	-30.36	437.3%*
303700 41310 17100 Life Insuranc	0	3	3	16.05	.00	-13.05	535.0%*
303700 41310 17130 Life Insuranc	0	0	0	36.51	.00	-36.51	100.0%*
303700 41310 17242 Life Insuranc	0	0	0	9.13	.00	-9.13	100.0%*
303700 41310 17251 Life Insuranc	0	5	5	32.30	.00	-27.30	646.0%*
303700 41310 17261 Life Insuranc	0	5	5	17.51	.00	-12.51	350.2%*
303700 41310 17270 Life Insuranc	0	0	0	13.13	.00	-13.13	100.0%*
303700 41310 17271 Life Insuranc	0	5	5	4.81	.00	.19	96.2%
303700 41310 17290 Life Insuranc	0	0	0	22.08	.00	-22.08	100.0%*
303700 41310 17310 Life Insuranc	0	2	2	18.98	.00	-16.98	949.0%*
303700 41310 17650 Life Insuranc	0	0	0	3.33	.00	-3.33	100.0%*
303700 41310 17651 Life Insuranc	0	0	0	8.32	.00	-8.32	100.0%*
303700 41310 17655 Life Insuranc	0	4	4	12.44	.00	-8.44	311.0%*
TOTAL Benefits	275,777	67,586	343,363	622,149.00	.00	-278,786.00	181.2%
4e Services & Supplies							
303700 50000 Supplies	20,000	0	20,000	9,603.85	.00	10,396.15	48.0%
303700 50000 13850 Supplies	0	0	0	2,512.71	.00	-2,512.71	100.0%*
303700 50000 13851 Supplies	0	270	270	873.87	.00	-603.87	323.7%*
303700 50000 17003 Supplies	0	323	323	929.10	.00	-606.10	287.6%*
303700 50000 17070 Supplies	0	0	0	1,987.18	.00	-1,987.18	100.0%*
303700 50000 17071 Supplies	0	0	0	2,099.19	.00	-2,099.19	100.0%*
303700 50000 17110 Supplies	0	1,883	1,883	1,883.42	.00	-.42	100.0%*
303700 50000 17120 Supplies	0	3,766	3,766	3,765.95	.00	.05	100.0%
303700 50000 17230 Supplies	0	0	0	3,772.65	.00	-3,772.65	100.0%*
303700 50000 17248 Supplies	0	0	0	10.13	.00	-10.13	100.0%*
303700 50000 17650 Supplies	0	0	0	239.88	.00	-239.88	100.0%*
303700 50000 17651 Supplies	0	0	0	849.62	.00	-849.62	100.0%*
303700 50310 Miscellaneous	3,000	0	3,000	904.00	.00	2,096.00	30.1%
303700 50310 17071 Miscellaneous	0	0	0	2,200.00	.00	-2,200.00	100.0%*
303700 51130 Vehicle Operations	12,000	0	12,000	7,769.58	.00	4,230.42	64.7%
303700 52000 Copier Maintenance	3,000	0	3,000	1,513.63	.00	1,486.37	50.5%
303700 52030 Printer Services	240	0	240	1,256.19	.00	-1,016.19	523.4%*
303700 53900 Contract Services	0	0	0	34.44	.00	-34.44	100.0%*
303700 53900 17003 Contract Serv	0	8,678	8,678	124,469.96	.00	-115,791.96	1434.3%*
303700 53900 17005 Contract Serv	0	61,173	61,173	61,172.66	.00	.34	100.0%
303700 53900 17230 Contract Serv	0	0	0	11,250.00	.00	-11,250.00	100.0%*
303700 53900 17248 Contract Serv	0	0	0	31,927.18	.00	-31,927.18	100.0%*

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ACCOUNTS FOR: 303 Indigent Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
303700 53900 17249 Contract Serv	0	20,740	20,740	72,348.00	.00	-51,608.00	348.8%*
303700 53900 17290 Contract Serv	0	0	0	4,468.75	.00	-4,468.75	100.0%*
303700 53900 17651 Contract Serv	0	0	0	11,498.74	.00	-11,498.74	100.0%*
303700 53900 17655 Contract Serv	0	15,678	15,678	128,994.39	.00	-113,316.39	822.8%*
303700 56000 Training	0	0	0	4,330.26	.00	-4,330.26	100.0%*
303700 56000 13851 Training	0	0	0	55.00	.00	-55.00	100.0%*
303700 56000 17070 Training	0	0	0	3,350.00	.00	-3,350.00	100.0%*
303700 56000 17650 Training	0	0	0	21,175.00	.00	-21,175.00	100.0%*
303700 56000 17651 Training	0	0	0	4,402.00	.00	-4,402.00	100.0%*
303700 56200 Travel	15,000	0	15,000	4,192.03	.00	10,807.97	27.9%
303700 56200 13851 Travel	0	324	324	3,880.67	.00	-3,556.67	1197.7%*
303700 56200 17071 Travel	0	308	308	3,730.47	.00	-3,422.47	1211.2%*
303700 56200 17651 Travel	0	0	0	10,047.95	.00	-10,047.95	100.0%*
303700 57000 Rental	36,930	0	36,930	31,292.47	.00	5,637.53	84.7%
303700 57110 Direct Assistance	164,951	0	164,951	6,532.48	.00	158,418.52	4.0%
303700 60100 Electric Service	15,188	0	15,188	8,432.08	.00	6,755.92	55.5%
303700 60200 Gas Service	7,376	0	7,376	2,438.07	.00	4,937.93	33.1%
303700 60250 Water & Sewer Serv	1,888	0	1,888	1,227.10	.00	660.90	65.0%
303700 60300 Water Service	1,514	0	1,514	857.14	.00	656.86	56.6%
303700 60400 Sewer Service	204	0	204	134.96	.00	69.04	66.2%
303700 60600 Garbage Service	500	0	500	274.84	.00	225.16	55.0%
303700 60700 Telephone	13,781	0	13,781	11,108.43	.00	2,672.57	80.6%
TOTAL Services & Supplies	295,572	113,143	408,715	605,796.02	.00	-197,081.02	148.2%
4q Contingency							
303700 89000 Contingency	31,100	0	31,100	.00	.00	31,100.00	.0%
TOTAL Contingency	31,100	0	31,100	.00	.00	31,100.00	.0%
TOTAL Indigent and Senior	1,067,769	312,312	1,380,081	2,339,207.22	.00	-959,126.22	169.5%

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ACCOUNTS FOR: 303 Indigent Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
999 Transfers and Fund Balance							
4z Ending Fund Balance							
303999 99999 Ending Fund Balanc	775,661	0	775,661	.00	.00	775,661.00	.0%
TOTAL Ending Fund Balance	775,661	0	775,661	.00	.00	775,661.00	.0%
TOTAL Transfers and Fund Balance	775,661	0	775,661	.00	.00	775,661.00	.0%
TOTAL Indigent Fund	0	0	0	-202,049.11	.00	202,049.11	100.0%
TOTAL REVENUES	-1,843,430	-312,312	-2,155,742	-2,541,256.33	.00	385,514.33	
TOTAL EXPENSES	1,843,430	312,312	2,155,742	2,339,207.22	.00	-183,465.22	

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ACCOUNTS FOR: 304 Medical Indigent Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
000 General								
3a Taxes								
304 30000	Real Property Taxes	-1,817,461	0	-1,817,461	-1,517,625.56	.00	-299,835.44	83.5%*
304 30030	Deferred Ag Taxes	0	0	0	-292.37	.00	292.37	100.0%
304 30040	Trust Reconveyances	0	0	0	-1,098.24	.00	1,098.24	100.0%
304 30110	Geothermal Proceeds	0	0	0	-522.35	.00	522.35	100.0%
304 30200	Unsecured Property Ta	0	0	0	-142,108.38	.00	142,108.38	100.0%
304 30210	Prior Year Unsecured	0	0	0	-76.96	.00	76.96	100.0%
304 30220	Other Years Unsecured	0	0	0	-12.49	.00	12.49	100.0%
304 30300	Centrally Assessed Ta	0	0	0	-46,444.79	.00	46,444.79	100.0%
TOTAL	Taxes	-1,817,461	0	-1,817,461	-1,708,181.14	.00	-109,279.86	94.0%
3e Intergovernmental								
304 33895	IAF Credit	0	0	0	-225,345.46	.00	225,345.46	100.0%
TOTAL	Intergovernmental	0	0	0	-225,345.46	.00	225,345.46	100.0%
3k Other Revenues								
304 38000	Investment Income	-216,000	0	-216,000	-160,992.07	.00	-55,007.93	74.5%*
TOTAL	Other Revenues	-216,000	0	-216,000	-160,992.07	.00	-55,007.93	74.5%
3z Beginning Fund Bal								
304 39999	Opening Fund Balance	-5,326,692	0	-5,326,692	.00	.00	-5,326,692.00	.0%*
TOTAL	Beginning Fund Bal	-5,326,692	0	-5,326,692	.00	.00	-5,326,692.00	.0%
TOTAL	General	-7,360,153	0	-7,360,153	-2,094,518.67	.00	-5,265,634.33	28.5%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 304 Medical Indigent Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
674 Public Health							
4e Services & Supplies							
304674 53900 Contract Services	165,000	0	165,000	119,970.90	.00	45,029.10	72.7%
TOTAL Services & Supplies	165,000	0	165,000	119,970.90	.00	45,029.10	72.7%
TOTAL Public Health	165,000	0	165,000	119,970.90	.00	45,029.10	72.7%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 304 Medical Indigent Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
700 Indigent and Senior								
4a Salaries								
304700 40000	Salaries	182,633	0	182,633	80,234.93	.00	102,398.07	43.9%
TOTAL Salaries		182,633	0	182,633	80,234.93	.00	102,398.07	43.9%
4c Benefits								
304700 41000	Retirement	51,686	0	51,686	27,546.45	.00	24,139.55	53.3%
304700 41100	Workers' Comp	4,896	0	4,896	2,035.73	.00	2,860.27	41.6%
304700 41200	Medicare	3,255	0	3,255	1,134.57	.00	2,120.43	34.9%
304700 41300	Health Insurance	27,497	0	27,497	13,618.41	.00	13,878.59	49.5%
304700 41302	Vision Insurance	195	0	195	60.32	.00	134.68	30.9%
304700 41303	Dental Insurance	1,346	0	1,346	413.31	.00	932.69	30.7%
304700 41310	Life Insurance	87	0	87	26.53	.00	60.47	30.5%
TOTAL Benefits		88,962	0	88,962	44,835.32	.00	44,126.68	50.4%
4e Services & Supplies								
304700 53210	Medical Assistance	300,000	0	300,000	19,310.00	.00	280,690.00	6.4%
304700 53220	300% Match	1,938,624	0	1,938,624	1,501,179.93	.00	437,444.07	77.4%
304700 53230	Supplemental	242,328	0	242,328	107,006.90	.00	135,321.10	44.2%
304700 53240	Developmental Serv	100,000	0	100,000	30,372.12	.00	69,627.88	30.4%
304700 61400	Indigent Care Acci	363,492	0	363,492	160,510.36	.00	202,981.64	44.2%
TOTAL Services & Supplies		2,944,444	0	2,944,444	1,818,379.31	.00	1,126,064.69	61.8%
4g Capital Outlay								
304700 70200	Capital Outlay - B	3,500,000	0	3,500,000	1,307,010.43	.00	2,192,989.57	37.3%
TOTAL Capital Outlay		3,500,000	0	3,500,000	1,307,010.43	.00	2,192,989.57	37.3%
TOTAL Indigent and Senior		6,716,039	0	6,716,039	3,250,459.99	.00	3,465,579.01	48.4%

YEAR-TO-DATE BUDGET REPORT

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ACCOUNTS FOR: 304 Medical Indigent Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
999 Transfers and Fund Balance							
4z Ending Fund Balance							
304999 99999 Ending Fund Balanc	479,114	0	479,114	.00	.00	479,114.00	.0%
TOTAL Ending Fund Balance	479,114	0	479,114	.00	.00	479,114.00	.0%
TOTAL Transfers and Fund Balance	479,114	0	479,114	.00	.00	479,114.00	.0%
TOTAL Medical Indigent Fund	0	0	0	1,275,912.22	.00	-1,275,912.22	100.0%
TOTAL REVENUES	-7,360,153	0	-7,360,153	-2,094,518.67	.00	-5,265,634.33	
TOTAL EXPENSES	7,360,153	0	7,360,153	3,370,430.89	.00	3,989,722.11	

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ACCOUNTS FOR: 380 Senior Services Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
000 General								
3a Taxes								
380 30000	Real Property Taxes	-1,453,969	0	-1,453,969	-1,155,941.56	.00	-298,027.44	79.5%*
380 30030	Deferred Ag Taxes	0	0	0	-75.60	.00	75.60	100.0%
380 30040	Trust Reconveyances	0	0	0	-120.09	.00	120.09	100.0%
380 30110	Geothermal Proceeds	0	0	0	-417.87	.00	417.87	100.0%
380 30200	Unsecured Property Ta	0	0	0	-113,114.87	.00	113,114.87	100.0%
380 30210	Prior Year Unsecured	0	0	0	-61.04	.00	61.04	100.0%
380 30220	Other Years Unsecured	0	0	0	-6.87	.00	6.87	100.0%
380 30300	Centrally Assessed Ta	0	0	0	-37,155.84	.00	37,155.84	100.0%
TOTAL Taxes		-1,453,969	0	-1,453,969	-1,306,893.74	.00	-147,075.26	89.9%
3e Intergovernmental								
380 32410 17570	NDOT	0	0	0	-72,609.53	.00	72,609.53	100.0%
380 32410 17571	NDOT	0	-10,344	-10,344	-32,150.69	.00	21,806.69	310.8%
380 32700 17510	IIIC-1	-92,677	0	-92,677	.00	.00	-92,677.00	.0%*
380 32700 17511	IIIC-1	0	0	0	-39,409.40	.00	39,409.40	100.0%
380 32710 17520	IIIC-2	-249,871	0	-249,871	.00	.00	-249,871.00	.0%*
380 32710 17521	IIIC-2	0	0	0	-59,096.70	.00	59,096.70	100.0%
380 32724 17385	NVCC Capacity Bu	0	-1,868	-1,868	-7,797.19	.00	5,929.19	417.4%
380 32731 17528	Title III-C2 Nut	0	0	0	-9,278.03	.00	9,278.03	100.0%
380 32743 17569	Title III-B Soci	0	-525	-525	-11,737.36	.00	11,212.36	2235.7%
380 32760	Nutrition Services	-60,000	0	-60,000	.00	.00	-60,000.00	.0%*
380 32845 17565	NVCC NV Care Con	0	-4,773	-4,773	-6,000.00	.00	1,227.00	125.7%
380 32846 17565	NVCC NV Care Con	0	0	0	-25,986.82	.00	25,986.82	100.0%
380 32886 17007	Senior Respite	0	-24,668	-24,668	-76,667.73	.00	51,999.73	310.8%
380 33601 17740	ADSD IN HOME SUP	0	-640	-640	-1,805.00	.00	1,165.00	282.0%
380 33645 17565	NVCC Nevada Care	0	-13,134	-13,134	-13,134.29	.00	.29	100.0%
380 33680 17720	Homemaker	0	-18,172	-18,172	-60,544.00	.00	42,372.00	333.2%
380 33690 17700	Independent Livi	0	0	0	-103,223.74	.00	103,223.74	100.0%
380 33820 17520	C2 Grant	0	0	0	-81,170.70	.00	81,170.70	100.0%
380 33820 17521	C2 Grant	-14,698	0	-14,698	.00	.00	-14,698.00	.0%*
380 33830 17510	C1 Grant	0	0	0	-48,232.40	.00	48,232.40	100.0%
380 33830 17511	C1 Grant	-59,452	0	-59,452	.00	.00	-59,452.00	.0%*
380 33965 13275	Energy Assistanc	0	-260	-260	-520.00	.00	260.00	200.0%

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ACCOUNTS FOR: 380 Senior Services Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
TOTAL Intergovernmental		-476,698	-74,384	-551,082	-649,363.58	.00	98,281.58	117.8%
3g Charges for Service								
380 36500	Project Income IIIC-1	-65,901	0	-65,901	-48,465.38	.00	-17,435.62	73.5%*
380 36510	Project Income IIIC-2	-32,161	0	-32,161	-24,104.48	.00	-8,056.52	74.9%*
380 36520	Project Income IIIB	-4,000	0	-4,000	-2,685.00	.00	-1,315.00	67.1%*
TOTAL Charges for Service		-102,062	0	-102,062	-75,254.86	.00	-26,807.14	73.7%
3k Other Revenues								
380 38550 17355	MEALS ON WHEELS	0	-1,719	-1,719	-2,169.59	.00	450.59	126.2%
380 38555 17705	FHN ILG Grant	0	-23,283	-23,283	-72,232.07	.00	48,949.07	310.2%
380 38558 17708	FHN Respite NCS	0	-9,992	-9,992	-29,692.73	.00	19,700.73	297.2%
TOTAL Other Revenues		0	-34,994	-34,994	-104,094.39	.00	69,100.39	297.5%
3z Beginning Fund Bal								
380 39999	Opening Fund Balance	-891,505	0	-891,505	.00	.00	-891,505.00	.0%*
TOTAL Beginning Fund Bal		-891,505	0	-891,505	.00	.00	-891,505.00	.0%
TOTAL General		-2,924,234	-109,378	-3,033,612	-2,135,606.57	.00	-898,005.43	70.4%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 380 Senior Services Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
700 Indigent and Senior							
4a Salaries							
380700 40000 Salaries	895,802	1,695	897,497	585,843.45	.00	311,653.55	65.3%
380700 40000 17007 Salaries	0	12,400	12,400	38,647.98	.00	-26,247.98	311.7%*
380700 40000 17385 Salaries	0	1,132	1,132	6,190.44	.00	-5,058.44	546.9%*
380700 40000 17565 Salaries	0	10,529	10,529	35,139.63	.00	-24,610.63	333.7%*
380700 40000 17570 Salaries	0	0	0	52,782.67	.00	-52,782.67	100.0%*
380700 40000 17571 Salaries	0	5,887	5,887	23,259.47	.00	-17,372.47	395.1%*
380700 40000 17705 Salaries	0	12,839	12,839	47,231.68	.00	-34,392.68	367.9%*
380700 40000 17708 Salaries	0	5,937	5,937	20,287.50	.00	-14,350.50	341.7%*
380700 40010 Temporary Salaries	16,167	0	16,167	.00	.00	16,167.00	.0%
380700 40010 17007 Temporary Sal	0	6,655	6,655	28,729.10	.00	-22,074.10	431.7%*
380700 40500 Overtime	2,273	0	2,273	166.73	.00	2,106.27	7.3%
TOTAL Salaries	914,242	57,074	971,316	838,278.65	.00	133,037.35	86.3%
4c Benefits							
380700 41000 Retirement	214,978	0	214,978	143,926.17	.00	71,051.83	66.9%
380700 41000 17007 Retirement -	0	1,651	1,651	5,732.95	.00	-4,081.95	347.2%*
380700 41000 17385 Retirement -	0	346	346	1,956.24	.00	-1,610.24	565.4%*
380700 41000 17565 Retirement -	0	3,324	3,324	11,273.37	.00	-7,949.37	339.2%*
380700 41000 17570 Retirement	0	0	0	11,585.65	.00	-11,585.65	100.0%*
380700 41000 17571 Retirement -	0	1,304	1,304	5,519.02	.00	-4,215.02	423.2%*
380700 41000 17705 Retirement -	0	3,621	3,621	13,177.90	.00	-9,556.90	363.9%*
380700 41000 17708 Retirement -	0	1,750	1,750	6,110.26	.00	-4,360.26	349.2%*
380700 41010 Social Security	1,002	0	1,002	.00	.00	1,002.00	.0%
380700 41010 17007 Social Securi	0	765	765	2,759.03	.00	-1,994.03	360.7%*
380700 41100 Workers' Comp	49,435	0	49,435	27,764.33	.00	21,670.67	56.2%
380700 41100 17007 Workers' Comp	0	1,006	1,006	3,648.94	.00	-2,642.94	362.7%*
380700 41100 17385 Workers' Comp	0	33	33	165.82	.00	-132.82	502.5%*
380700 41100 17565 Workers' Comp	0	381	381	1,111.35	.00	-730.35	291.7%*
380700 41100 17570 Workers' Comp	0	0	0	2,507.35	.00	-2,507.35	100.0%*
380700 41100 17571 Workers' Comp	0	414	414	1,553.77	.00	-1,139.77	375.3%*
380700 41100 17705 Workers' Comp	0	634	634	1,874.28	.00	-1,240.28	295.6%*
380700 41100 17708 Workers' Comp	0	167	167	586.08	.00	-419.08	350.9%*
380700 41200 Medicare	13,254	0	13,254	8,404.27	.00	4,849.73	63.4%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 380 Senior Services Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
380700 41200 17007 Medicare	0	275	275	972.33	.00	-697.33	353.6%*
380700 41200 17385 Medicare	0	16	16	86.24	.00	-70.24	539.0%*
380700 41200 17565 Medicare	0	148	148	493.33	.00	-345.33	333.3%*
380700 41200 17570 Medicare	0	0	0	745.87	.00	-745.87	100.0%*
380700 41200 17571 Medicare	0	83	83	326.69	.00	-243.69	393.6%*
380700 41200 17705 Medicare	0	178	178	656.01	.00	-478.01	368.5%*
380700 41200 17708 Medicare	0	84	84	286.01	.00	-202.01	340.5%*
380700 41300 Health Insurance	172,546	0	172,546	121,115.06	.00	51,430.94	70.2%
380700 41300 17007 Health Insura	0	1,677	1,677	5,079.72	.00	-3,402.72	302.9%*
380700 41300 17385 Health Insura	0	327	327	1,435.76	.00	-1,108.76	439.1%*
380700 41300 17565 Health Insura	0	3,382	3,382	9,325.03	.00	-5,943.03	275.7%*
380700 41300 17570 Health Insura	0	0	0	19,420.48	.00	-19,420.48	100.0%*
380700 41300 17571 Health Insura	0	2,589	2,589	7,603.54	.00	-5,014.54	293.7%*
380700 41300 17705 Health Insura	0	4,135	4,135	12,520.23	.00	-8,385.23	302.8%*
380700 41300 17708 Health Insura	0	1,513	1,513	4,818.09	.00	-3,305.09	318.4%*
380700 41302 Vision Insurance	491	0	491	313.44	.00	177.56	63.8%
380700 41302 17007 Vision Insura	0	9	9	27.34	.00	-18.34	303.8%*
380700 41302 17385 Vision Insura	0	2	2	6.99	.00	-4.99	349.5%*
380700 41302 17565 Vision Insura	0	17	17	47.45	.00	-30.45	279.1%*
380700 41302 17570 Vision Insura	0	0	0	753.59	.00	-753.59	100.0%*
380700 41302 17571 Vision Insura	0	8	8	22.05	.00	-14.05	275.6%*
380700 41302 17705 Vision Insura	0	21	21	62.55	.00	-41.55	297.9%*
380700 41302 17708 Vision Insura	0	8	8	24.73	.00	-16.73	309.1%*
380700 41303 Dental Insurance	3,346	0	3,346	2,152.13	.00	1,193.87	64.3%
380700 41303 17007 Dental Insura	0	62	62	187.81	.00	-125.81	302.9%*
380700 41303 17385 Dental Insura	0	11	11	47.77	.00	-36.77	434.3%*
380700 41303 17565 Dental Insura	0	118	118	325.47	.00	-207.47	275.8%*
380700 41303 17570 Dental Insura	0	0	0	458.54	.00	-458.54	100.0%*
380700 41303 17571 Dental Insura	0	55	55	151.35	.00	-96.35	275.2%*
380700 41303 17705 Dental Insura	0	142	142	429.17	.00	-287.17	302.2%*
380700 41303 17708 Dental Insura	0	54	54	169.48	.00	-115.48	313.9%*
380700 41310 Life Insurance	262	0	262	138.60	.00	123.40	52.9%
380700 41310 17007 Life Insuranc	0	4	4	12.03	.00	-8.03	300.8%*
380700 41310 17385 Life Insuranc	0	1	1	3.13	.00	-2.13	313.0%*
380700 41310 17565 Life Insuranc	0	8	8	20.94	.00	-12.94	261.8%*
380700 41310 17570 Life Insuranc	0	0	0	60.80	.00	-60.80	100.0%*
380700 41310 17571 Life Insuranc	0	4	4	9.76	.00	-5.76	244.0%*
380700 41310 17705 Life Insuranc	0	10	10	29.86	.00	-19.86	298.6%*
380700 41310 17708 Life Insuranc	0	3	3	10.98	.00	-7.98	366.0%*
TOTAL Benefits	455,314	30,340	485,654	440,007.13	.00	45,646.87	90.6%
4e Services & Supplies							
380700 50000 Supplies	65,000	0	65,000	49,562.01	.00	15,437.99	76.2%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 380 Senior Services Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
380700 50000 17355 Supplies	0	1,719	1,719	2,147.18	.00	-428.18	124.9%*
380700 50000 17385 Supplies	0	0	0	176.78	.00	-176.78	100.0%*
380700 50000 17528 Supplies	0	0	0	8,380.75	.00	-8,380.75	100.0%*
380700 50000 17569 Supplies	0	525	525	11,737.36	.00	-11,212.36	2235.7%*
380700 50000 17708 Supplies	0	0	0	6,682.52	.00	-6,682.52	100.0%*
380700 50310 Miscellaneous	16,000	0	16,000	11,163.13	.00	4,836.87	69.8%
380700 50800 Food	360,000	0	360,000	258,664.53	.00	101,335.47	71.9%
380700 51130 Vehicle Operations	60,000	0	60,000	35,773.32	.00	24,226.68	59.6%
380700 52000 Copier Maintenance	1,100	0	1,100	738.36	.00	361.64	67.1%
380700 52030 Printer Services	150	0	150	211.50	.00	-61.50	141.0%*
380700 53900 Contract Services	500	0	500	.00	.00	500.00	.0%
380700 53900 17007 Contract Serv	0	164	164	381.98	.00	-217.98	232.9%*
380700 53900 17720 Contract Serv	0	18,172	18,172	78,072.00	.00	-59,900.00	429.6%*
380700 53900 17740 Contract Serv	0	640	640	3,525.80	.00	-2,885.80	550.9%*
380700 56200 Travel	500	0	500	55.60	.00	444.40	11.1%
380700 60100 Electric Service	45,762	0	45,762	23,178.58	.00	22,583.42	50.7%
380700 60200 Gas Service	30,964	0	30,964	10,020.55	.00	20,943.45	32.4%
380700 60250 Water & Sewer Serv	16,995	0	16,995	8,295.96	.00	8,699.04	48.8%
380700 60300 Water Service	3,654	0	3,654	2,553.95	.00	1,100.05	69.9%
380700 60400 Sewer Service	408	0	408	307.13	.00	100.87	75.3%
380700 60600 Garbage Service	3,209	0	3,209	2,372.55	.00	836.45	73.9%
380700 60700 Telephone	8,700	0	8,700	7,417.23	.00	1,282.77	85.3%
380700 60700 17705 Telephone	0	744	744	2,233.93	.00	-1,489.93	300.3%*
TOTAL Services & Supplies	612,942	21,964	634,906	523,652.70	.00	111,253.30	82.5%
4g Capital Outlay							
380700 70700 Capital Outlay - V	21,463	0	21,463	.00	.00	21,463.00	.0%
TOTAL Capital Outlay	21,463	0	21,463	.00	.00	21,463.00	.0%
4q Contingency							
380700 89000 Contingency	60,119	0	60,119	.00	.00	60,119.00	.0%
TOTAL Contingency	60,119	0	60,119	.00	.00	60,119.00	.0%
TOTAL Indigent and Senior	2,064,080	109,378	2,173,458	1,801,938.48	.00	371,519.52	82.9%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 380 Senior Services Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
999 Transfers and Fund Balance							
4z Ending Fund Balance							
380999 99999 Ending Fund Balanc	860,154	0	860,154	.00	.00	860,154.00	.0%
TOTAL Ending Fund Balance	860,154	0	860,154	.00	.00	860,154.00	.0%
TOTAL Transfers and Fund Balance	860,154	0	860,154	.00	.00	860,154.00	.0%
TOTAL Senior Services Fund	0	0	0	-333,668.09	.00	333,668.09	100.0%
TOTAL REVENUES	-2,924,234	-109,378	-3,033,612	-2,135,606.57	.00	-898,005.43	
TOTAL EXPENSES	2,924,234	109,378	3,033,612	1,801,938.48	.00	1,231,673.52	

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 382 Senior Services Donation Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
000 General								
3k Other Revenues								
382 38350	Senior Center Donatio	0	0	0	-7,070.01	.00	7,070.01	100.0%
382 38370	Dayton Sen Center Don	0	0	0	-10,352.95	.00	10,352.95	100.0%
382 38380	Fernley Sen Center Do	0	0	0	-6,936.00	.00	6,936.00	100.0%
382 38390	SS Sen Center Donatio	0	0	0	-13,049.36	.00	13,049.36	100.0%
382 38395	Yerington Sen Cntr Do	0	0	0	-7,322.24	.00	7,322.24	100.0%
TOTAL	Other Revenues	0	0	0	-44,730.56	.00	44,730.56	100.0%
3z Beginning Fund Bal								
382 39999	Opening Fund Balance	-196,007	0	-196,007	.00	.00	-196,007.00	.0%*
TOTAL	Beginning Fund Bal	-196,007	0	-196,007	.00	.00	-196,007.00	.0%
TOTAL	General	-196,007	0	-196,007	-44,730.56	.00	-151,276.44	22.8%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 382 Senior Services Donation Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
700 Indigent and Senior							
4e Services & Supplies							
382700 50000 Supplies	196,007	0	196,007	2,861.28	.00	193,145.72	1.5%
382700 50830 Dayton Senior Cent	0	0	0	3,568.43	.00	-3,568.43	100.0%*
382700 50840 Fernley Senior Cen	0	0	0	3,774.69	.00	-3,774.69	100.0%*
382700 50850 SS Senior Center	0	0	0	4,565.28	.00	-4,565.28	100.0%*
382700 50860 Yerington Senior C	0	0	0	6,078.82	.00	-6,078.82	100.0%*
TOTAL Services & Supplies	196,007	0	196,007	20,848.50	.00	175,158.50	10.6%
TOTAL Indigent and Senior	196,007	0	196,007	20,848.50	.00	175,158.50	10.6%
TOTAL Senior Services Donation Fund	0	0	0	-23,882.06	.00	23,882.06	100.0%
TOTAL REVENUES	-196,007	0	-196,007	-44,730.56	.00	-151,276.44	
TOTAL EXPENSES	196,007	0	196,007	20,848.50	.00	175,158.50	

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 427 MV Mosquito Control District		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
000 General								
3a Taxes								
427 30000	Real Property Taxes	-261,817	0	-261,817	-180,725.88	.00	-81,091.12	69.0%*
427 30040	Trust Reconveyances	0	0	0	-70.47	.00	70.47	100.0%
427 30110	Geothermal Proceeds	0	0	0	-193.77	.00	193.77	100.0%
427 30200	Unsecured Property Ta	0	0	0	-45,794.50	.00	45,794.50	100.0%
427 30210	Prior Year Unsecured	0	0	0	-11.20	.00	11.20	100.0%
427 30300	Centrally Assessed Ta	0	0	0	-12,480.72	.00	12,480.72	100.0%
TOTAL	Taxes	-261,817	0	-261,817	-239,276.54	.00	-22,540.46	91.4%
3e Intergovernmental								
427 33000	Consolidated Taxes	-106,235	0	-106,235	-81,267.59	.00	-24,967.41	76.5%*
TOTAL	Intergovernmental	-106,235	0	-106,235	-81,267.59	.00	-24,967.41	76.5%
3g Charges for Service								
427 35050	Administrative Fees	-35,000	0	-35,000	-35,000.00	.00	.00	100.0%
TOTAL	Charges for Service	-35,000	0	-35,000	-35,000.00	.00	.00	100.0%
3k Other Revenues								
427 38000	Investment Income	-30,000	0	-30,000	-31,615.62	.00	1,615.62	105.4%
TOTAL	Other Revenues	-30,000	0	-30,000	-31,615.62	.00	1,615.62	105.4%
3z Beginning Fund Bal								
427 39999	Opening Fund Balance	-904,469	0	-904,469	.00	.00	-904,469.00	.0%*

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 427 MV Mosquito Control District	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
TOTAL Beginning Fund Bal	-904,469	0	-904,469	.00	.00	-904,469.00	.0%
TOTAL General	-1,337,521	0	-1,337,521	-387,159.75	.00	-950,361.25	28.9%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 427 MV Mosquito Control District	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
600 Health							
4a Salaries							
427600 40000 Salaries	86,073	0	86,073	60,605.16	.00	25,467.84	70.4%
427600 40010 Temporary Salaries	25,620	0	25,620	9,268.80	.00	16,351.20	36.2%
TOTAL Salaries	111,693	0	111,693	69,873.96	.00	41,819.04	62.6%
4c Benefits							
427600 41000 Retirement	31,632	0	31,632	22,128.76	.00	9,503.24	70.0%
427600 41010 Social Security	1,588	0	1,588	574.67	.00	1,013.33	36.2%
427600 41100 Workers' Comp	5,153	0	5,153	2,194.19	.00	2,958.81	42.6%
427600 41200 Medicare	1,619	0	1,619	1,013.17	.00	605.83	62.6%
427600 41300 Health Insurance	12,343	0	12,343	9,257.13	.00	3,085.87	75.0%
427600 41302 Vision Insurance	71	0	71	52.92	.00	18.08	74.5%
427600 41303 Dental Insurance	484	0	484	363.24	.00	120.76	75.0%
427600 41310 Life Insurance	31	0	31	23.40	.00	7.60	75.5%
427600 41500 Unemployment	2,000	0	2,000	.00	.00	2,000.00	.0%
TOTAL Benefits	54,921	0	54,921	35,607.48	.00	19,313.52	64.8%
4e Services & Supplies							
427600 50000 Supplies	5,000	0	5,000	3,621.51	.00	1,378.49	72.4%
427600 50950 Chemicals	150,000	0	150,000	11,294.40	.00	138,705.60	7.5%
427600 51000 Fuel	3,500	0	3,500	2,051.36	.00	1,448.64	58.6%
427600 51100 Public Health Thre	50,000	0	50,000	.00	.00	50,000.00	.0%
427600 51110 Flood Reserve	50,000	0	50,000	.00	.00	50,000.00	.0%
427600 52200 Insurance	20,000	0	20,000	21,116.00	.00	-1,116.00	105.6%*
427600 56000 Training	2,500	0	2,500	.00	.00	2,500.00	.0%
427600 56200 Travel	2,500	0	2,500	.00	.00	2,500.00	.0%
427600 56400 Repairs and Mainte	5,000	0	5,000	189.99	.00	4,810.01	3.8%
427600 57010 Equipment Rental	60,000	0	60,000	4,000.00	.00	56,000.00	6.7%
427600 60300 Water Service	500	0	500	339.98	.00	160.02	68.0%
427600 60700 Telephone	500	0	500	414.59	.00	85.41	82.9%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 427 MV Mosquito Control District	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
TOTAL Services & Supplies	349,500	0	349,500	43,027.83	.00	306,472.17	12.3%
4g Capital Outlay							
427600 70700 Capital Outlay - V	30,000	0	30,000	29,375.25	.00	624.75	97.9%
TOTAL Capital Outlay	30,000	0	30,000	29,375.25	.00	624.75	97.9%
4q Contingency							
427600 89000 Contingency	16,383	0	16,383	.00	.00	16,383.00	.0%
TOTAL Contingency	16,383	0	16,383	.00	.00	16,383.00	.0%
TOTAL Health	562,497	0	562,497	177,884.52	.00	384,612.48	31.6%

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ACCOUNTS FOR: 427 MV Mosquito Control District	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
999 Transfers and Fund Balance							
4z Ending Fund Balance							
427999 99999 Ending Fund Balanc	775,024	0	775,024	.00	.00	775,024.00	.0%
TOTAL Ending Fund Balance	775,024	0	775,024	.00	.00	775,024.00	.0%
TOTAL Transfers and Fund Balance	775,024	0	775,024	.00	.00	775,024.00	.0%
TOTAL MV Mosquito Control District	0	0	0	-209,275.23	.00	209,275.23	100.0%
TOTAL REVENUES	-1,337,521	0	-1,337,521	-387,159.75	.00	-950,361.25	
TOTAL EXPENSES	1,337,521	0	1,337,521	177,884.52	.00	1,159,636.48	

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FOR 2026 09

ACCOUNTS FOR: 454 CLC Vector Control District		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
000 General								
3a Taxes								
454 30000	Real Property Taxes	-377,165	0	-377,165	-326,871.51	.00	-50,293.49	86.7%*
454 30040	Trust Reconveyances	0	0	0	-51.95	.00	51.95	100.0%
454 30110	Geothermal Proceeds	0	0	0	-59.61	.00	59.61	100.0%
454 30200	Unsecured Property Ta	0	0	0	-26,874.86	.00	26,874.86	100.0%
454 30210	Prior Year Unsecured	0	0	0	-31.00	.00	31.00	100.0%
454 30220	Other Years Unsecured	0	0	0	-3.20	.00	3.20	100.0%
454 30300	Centrally Assessed Ta	0	0	0	-10,116.24	.00	10,116.24	100.0%
TOTAL	Taxes	-377,165	0	-377,165	-364,008.37	.00	-13,156.63	96.5%
3k Other Revenues								
454 38000	Investment Income	-21,000	0	-21,000	-22,447.49	.00	1,447.49	106.9%
TOTAL	Other Revenues	-21,000	0	-21,000	-22,447.49	.00	1,447.49	106.9%
3z Beginning Fund Bal								
454 39999	Opening Fund Balance	-559,512	0	-559,512	.00	.00	-559,512.00	.0%*
TOTAL	Beginning Fund Bal	-559,512	0	-559,512	.00	.00	-559,512.00	.0%
TOTAL	General	-957,677	0	-957,677	-386,455.86	.00	-571,221.14	40.4%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 454 CLC Vector Control District	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
600 Health							
4c Benefits							
454600 41100 Workers' Comp	800	0	800	147.23	.00	652.77	18.4%
TOTAL Benefits	800	0	800	147.23	.00	652.77	18.4%
4e Services & Supplies							
454600 50000 Supplies	1,000	0	1,000	.00	.00	1,000.00	.0%
454600 51100 Public Health Thre	150,000	0	150,000	.00	.00	150,000.00	.0%
454600 53900 Contract Services	320,000	0	320,000	148,265.00	.00	171,735.00	46.3%
TOTAL Services & Supplies	471,000	0	471,000	148,265.00	.00	322,735.00	31.5%
4q Contingency							
454600 89000 Contingency	14,154	0	14,154	.00	.00	14,154.00	.0%
TOTAL Contingency	14,154	0	14,154	.00	.00	14,154.00	.0%
TOTAL Health	485,954	0	485,954	148,412.23	.00	337,541.77	30.5%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 454 CLC Vector Control District	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
999 Transfers and Fund Balance							
4z Ending Fund Balance							
454999 99999 Ending Fund Balanc	471,723	0	471,723	.00	.00	471,723.00	.0%
TOTAL Ending Fund Balance	471,723	0	471,723	.00	.00	471,723.00	.0%
TOTAL Transfers and Fund Balance	471,723	0	471,723	.00	.00	471,723.00	.0%
TOTAL CLC Vector Control District	0	0	0	-238,043.63	.00	238,043.63	100.0%
TOTAL REVENUES	-957,677	0	-957,677	-386,455.86	.00	-571,221.14	
TOTAL EXPENSES	957,677	0	957,677	148,412.23	.00	809,264.77	

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 455 WR Weed Control District		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
000 General								
3a Taxes								
455 30900	Weed Assessment	-88,675	0	-88,675	-87,388.18	.00	-1,286.82	98.5%*
TOTAL	Taxes	-88,675	0	-88,675	-87,388.18	.00	-1,286.82	98.5%
3k Other Revenues								
455 38000	Investment Income	-11,000	0	-11,000	-11,401.94	.00	401.94	103.7%
TOTAL	Other Revenues	-11,000	0	-11,000	-11,401.94	.00	401.94	103.7%
3z Beginning Fund Bal								
455 39999	Opening Fund Balance	-328,277	0	-328,277	.00	.00	-328,277.00	.0%*
TOTAL	Beginning Fund Bal	-328,277	0	-328,277	.00	.00	-328,277.00	.0%
TOTAL	General	-427,952	0	-427,952	-98,790.12	.00	-329,161.88	23.1%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 455 WR Weed Control District		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
600 Health								
4a Salaries								
455600 40010	Temporary Salaries	24,145	0	24,145	9,826.69	.00	14,318.31	40.7%
TOTAL Salaries		24,145	0	24,145	9,826.69	.00	14,318.31	40.7%
4c Benefits								
455600 41010	Social Security	1,497	0	1,497	609.25	.00	887.75	40.7%
455600 41100	Workers' Comp	2,142	0	2,142	690.16	.00	1,451.84	32.2%
455600 41200	Medicare	350	0	350	142.49	.00	207.51	40.7%
455600 41500	Unemployment	8,400	0	8,400	2,340.00	.00	6,060.00	27.9%
TOTAL Benefits		12,389	0	12,389	3,781.90	.00	8,607.10	30.5%
4e Services & Supplies								
455600 50000	Supplies	1,500	0	1,500	241.70	.00	1,258.30	16.1%
455600 50300	Weed Control	1,000	0	1,000	.00	.00	1,000.00	.0%
455600 50950	Chemicals	10,000	0	10,000	5,720.50	.00	4,279.50	57.2%
455600 51000	Fuel	2,500	0	2,500	804.46	.00	1,695.54	32.2%
455600 53900	Contract Services	2,500	0	2,500	.00	.00	2,500.00	.0%
455600 53970	Administrative Cha	35,000	0	35,000	35,000.00	.00	.00	100.0%
455600 56000	Training	200	0	200	.00	.00	200.00	.0%
455600 56400	Repairs and Mainte	1,000	0	1,000	16.10	.00	983.90	1.6%
455600 60700	Telephone	800	0	800	430.07	.00	369.93	53.8%
TOTAL Services & Supplies		54,500	0	54,500	42,212.83	.00	12,287.17	77.5%
4q Contingency								
455600 89000	Contingency	2,731	0	2,731	.00	.00	2,731.00	.0%
TOTAL Contingency		2,731	0	2,731	.00	.00	2,731.00	.0%
TOTAL Health		93,765	0	93,765	55,821.42	.00	37,943.58	59.5%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 455 WR Weed Control District	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
999 Transfers and Fund Balance							
4z Ending Fund Balance							
455999 99999 Ending Fund Balanc	334,187	0	334,187	.00	.00	334,187.00	.0%
TOTAL Ending Fund Balance	334,187	0	334,187	.00	.00	334,187.00	.0%
TOTAL Transfers and Fund Balance	334,187	0	334,187	.00	.00	334,187.00	.0%
TOTAL WR Weed Control District	0	0	0	-42,968.70	.00	42,968.70	100.0%
TOTAL REVENUES	-427,952	0	-427,952	-98,790.12	.00	-329,161.88	
TOTAL EXPENSES	427,952	0	427,952	55,821.42	.00	372,130.58	

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 500 Capital Improvements Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
000 General							
3a Taxes							
50000410 30400 Public Safety Sa	-2,100,000	0	-2,100,000	-1,885,824.99	.00	-214,175.01	89.8%*
TOTAL Taxes	-2,100,000	0	-2,100,000	-1,885,824.99	.00	-214,175.01	89.8%
3e Intergovernmental							
500 32000 Payment in Lieu of Ta	-2,775,000	0	-2,775,000	.00	.00	-2,775,000.00	.0%*
500 32400 14501 FAA - SS Airport	0	-1,678	-1,678	-1,678.00	.00	.00	100.0%
500 32400 14502 FAA - SS Airport	0	-128,735	-128,735	-128,735.00	.00	.00	100.0%
500 32440 80004 ARPA Grant	-5,260,000	-501,301	-5,761,301	-3,025,204.96	.00	-2,736,095.86	52.5%*
TOTAL Intergovernmental	-8,035,000	-631,714	-8,666,714	-3,155,617.96	.00	-5,511,095.86	36.4%
3k Other Revenues							
500 38000 Investment Income	-900,000	0	-900,000	-792,194.53	.00	-107,805.47	88.0%*
50000400 38140 Airport Lease In	-2,200	0	-2,200	.00	.00	-2,200.00	.0%*
TOTAL Other Revenues	-902,200	0	-902,200	-792,194.53	.00	-110,005.47	87.8%
3z Beginning Fund Bal							
500 39999 Opening Fund Balance	-24,654,883	0	-24,654,883	.00	.00	-24,654,883.00	.0%*
50000400 39999 Opening Fund Bal	-2,200	0	-2,200	.00	.00	-2,200.00	.0%*
50000410 39999 Opening Fund Bal	-1,778,309	0	-1,778,309	.00	.00	-1,778,309.00	.0%*
TOTAL Beginning Fund Bal	-26,435,392	0	-26,435,392	.00	.00	-26,435,392.00	.0%
TOTAL General	-37,472,592	-631,714	-38,104,306	-5,833,637.48	.00	-32,270,668.34	15.3%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 500 Capital Improvements Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
110 General Support							
4e Services & Supplies							
500110 61100 Yerington Ad Valor	20,000	0	20,000	15,000.00	.00	5,000.00	75.0%
500110 61220 Fernley Ad Valorem	180,000	0	180,000	135,000.00	.00	45,000.00	75.0%
TOTAL Services & Supplies	200,000	0	200,000	150,000.00	.00	50,000.00	75.0%
4g Capital Outlay							
500110 70000 Capital Outlay	2,775,000	0	2,775,000	.00	.00	2,775,000.00	.0%
500110 70200 Capital Outlay - B	25,319,883	0	25,319,883	2,900,700.69	.00	22,419,182.31	11.5%
TOTAL Capital Outlay	28,094,883	0	28,094,883	2,900,700.69	.00	25,194,182.31	10.3%
TOTAL General Support	28,294,883	0	28,294,883	3,050,700.69	.00	25,244,182.31	10.8%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 500 Capital Improvements Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
233 District Court							
4g Capital Outlay							
50023341 70200 Capital Outlay -	0	0	0	15,680.58	.00	-15,680.58	100.0%*
TOTAL Capital Outlay	0	0	0	15,680.58	.00	-15,680.58	100.0%
TOTAL District Court	0	0	0	15,680.58	.00	-15,680.58	100.0%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 500 Capital Improvements Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
236 Fernley JC							
4g Capital Outlay							
500236 70200 Capital Outlay - B	0	0	0	8,787.50	.00	-8,787.50	100.0%*
500236 70200 80004 Capital Outla	5,260,000	501,301	5,761,301	3,025,204.96	.00	2,736,095.86	52.5%
TOTAL Capital Outlay	5,260,000	501,301	5,761,301	3,033,992.46	.00	2,727,308.36	52.7%
TOTAL Fernley JC	5,260,000	501,301	5,761,301	3,033,992.46	.00	2,727,308.36	52.7%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 500 Capital Improvements Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
300 Public Safety							
4g Capital Outlay							
50030041 70000 Capital Outlay	3,878,309	0	3,878,309	28,850.00	.00	3,849,459.00	.7%
TOTAL Capital Outlay	3,878,309	0	3,878,309	28,850.00	.00	3,849,459.00	.7%
TOTAL Public Safety	3,878,309	0	3,878,309	28,850.00	.00	3,849,459.00	.7%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 500 Capital Improvements Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
454 Public Works							
4e Services & Supplies							
500454 50000 Supplies	35,000	0	35,000	1,217.89	.00	33,782.11	3.5%
500454 50000 14502 Supplies	0	23,134	23,134	23,133.95	.00	.05	100.0%
500454 53920 Professional Fees	0	0	0	5,557.95	.00	-5,557.95	100.0%*
500454 53920 14502 Professional	0	105,601	105,601	105,601.05	.00	-.05	100.0%*
50045400 50000 Supplies	4,400	0	4,400	.00	.00	4,400.00	.0%
TOTAL Services & Supplies	39,400	128,735	168,135	135,510.84	.00	32,624.16	80.6%
4g Capital Outlay							
500454 70500 Capital Outlay - A	0	0	0	112.00	.00	-112.00	100.0%*
500454 70500 14501 Capital Outla	0	1,678	1,678	1,678.00	.00	.00	100.0%
TOTAL Capital Outlay	0	1,678	1,678	1,790.00	.00	-112.00	106.7%
TOTAL Public Works	39,400	130,413	169,813	137,300.84	.00	32,512.16	80.9%
TOTAL Capital Improvements Fund	0	0	0	432,887.09	.00	-432,887.09	100.0%
TOTAL REVENUES	-37,472,592	-631,714	-38,104,306	-5,833,637.48	.00	-32,270,668.34	
TOTAL EXPENSES	37,472,592	631,714	38,104,306	6,266,524.57	.00	31,837,781.25	

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 623 Dayton Water Utility Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
000 General							
3g Charges for Service							
623 35700 Water Use Fees	-5,250,000	0	-5,250,000	-3,210,559.88	.00	-2,039,440.12	61.2%*
623 35730 MXU Fees	-25,000	0	-25,000	-21,595.96	.00	-3,404.04	86.4%*
623 35735 Engineering Fees	-40,000	0	-40,000	-85,552.46	.00	45,552.46	213.9%
623 35740 Inspection Fees	-40,000	0	-40,000	-119,818.18	.00	79,818.18	299.5%
623 35750 Backflow Testing	-8,000	0	-8,000	-6,600.00	.00	-1,400.00	82.5%*
623 35770 Water Rights	0	0	0	-150.00	.00	150.00	100.0%
623 35810 Material Fees	-50,000	0	-50,000	-44,442.21	.00	-5,557.79	88.9%*
623 35820 Service Charge Fees	-90,000	0	-90,000	-68,820.89	.00	-21,179.11	76.5%*
62300500 35720 Source Water Fee	-86,500	0	-86,500	-57,890.13	.00	-28,609.87	66.9%*
TOTAL Charges for Service	-5,589,500	0	-5,589,500	-3,615,429.71	.00	-1,974,070.29	64.7%
3k Other Revenues							
623 38000 Investment Income	-540,000	0	-540,000	-552,572.07	.00	12,572.07	102.3%
623 38030 Penalties	-65,000	0	-65,000	-47,625.89	.00	-17,374.11	73.3%*
623 38100 Sales & Rental	0	0	0	-4,825.00	.00	4,825.00	100.0%
623 38130 Rental Income	-857	0	-857	-857.00	.00	.00	100.0%
623 38230 Miscellaneous Revenue	0	0	0	-9,396.00	.00	9,396.00	100.0%
TOTAL Other Revenues	-605,857	0	-605,857	-615,275.96	.00	9,418.96	101.6%
3m Connection Fees							
623 82000 Connection Charge	0	0	0	-577,919.00	.00	577,919.00	100.0%
TOTAL Connection Fees	0	0	0	-577,919.00	.00	577,919.00	100.0%
3z Beginning Fund Bal							
62300500 39999 Opening Fund Bal	-504,254	0	-504,254	.00	.00	-504,254.00	.0%*

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 623 Dayton Water Utility Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
TOTAL Beginning Fund Bal		-504,254	0	-504,254	.00	.00	-504,254.00	.0%
4a Salaries								
623 40000	Salaries	1,334,392	0	1,334,392	840,622.96	.00	493,769.04	63.0%
623 40010	Temporary Salaries	18,614	0	18,614	.00	.00	18,614.00	.0%
623 40320	Shift Differential	0	0	0	278.83	.00	-278.83	100.0%*
623 40350	Standby	25,338	0	25,338	13,454.28	.00	11,883.72	53.1%
623 40360	Standby Holiday	0	0	0	993.39	.00	-993.39	100.0%*
623 40500	Overtime	40,905	0	40,905	3,093.44	.00	37,811.56	7.6%
623 40520	Comp Payout	0	0	0	635.90	.00	-635.90	100.0%*
623 40610	Callback	24,998	0	24,998	11,352.37	.00	13,645.63	45.4%
623 40620	Callback Holiday	0	0	0	354.36	.00	-354.36	100.0%*
TOTAL Salaries		1,444,247	0	1,444,247	870,785.53	.00	573,461.47	60.3%
4c Benefits								
623 41000	Retirement	401,622	0	401,622	230,266.28	.00	171,355.72	57.3%
623 41002	PERS GASB 68 Adj	115,000	0	115,000	.00	.00	115,000.00	.0%
623 41010	Social Security	1,154	0	1,154	.00	.00	1,154.00	.0%
623 41100	Workers' Comp	49,698	0	49,698	23,886.39	.00	25,811.61	48.1%
623 41200	Medicare	20,943	0	20,943	12,507.61	.00	8,435.39	59.7%
623 41300	Health Insurance	259,478	0	259,478	162,255.47	.00	97,222.53	62.5%
623 41301	Health Insurance - OP	20,000	0	20,000	.00	.00	20,000.00	.0%
623 41302	Vision Insurance	1,293	0	1,293	841.24	.00	451.76	65.1%
623 41303	Dental Insurance	8,858	0	8,858	5,641.72	.00	3,216.28	63.7%
623 41310	Life Insurance	570	0	570	380.86	.00	189.14	66.8%
TOTAL Benefits		878,616	0	878,616	435,779.57	.00	442,836.43	49.6%
4e Services & Supplies								
623 50000	Supplies	200,000	0	200,000	31,609.56	.00	168,390.44	15.8%
623 50400	Uniforms	7,000	0	7,000	7,863.66	.00	-863.66	112.3%*
623 51020	Licenses	14,000	0	14,000	13,447.95	.00	552.05	96.1%
623 52000	Copier Maintenance	3,000	0	3,000	648.90	.00	2,351.10	21.6%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 623 Dayton Water Utility Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
623 52030	Printer Services	400	0	400	628.20	.00	-228.20	157.1%*
623 52100	Postage	24,000	0	24,000	31,856.30	.00	-7,856.30	132.7%*
623 52200	Insurance	75,000	0	75,000	67,763.00	.00	7,237.00	90.4%
623 52300	Advertising	500	0	500	.00	.00	500.00	.0%
623 53530	Software Support	45,000	0	45,000	9,275.11	.00	35,724.89	20.6%
623 53620	Plan Review	75,000	0	75,000	34,093.51	.00	40,906.49	45.5%
623 53680	Water Rights Services	65,000	0	65,000	23,676.11	.00	41,323.89	36.4%
623 53920	Professional Fees	400,000	0	400,000	38,074.00	.00	361,926.00	9.5%
623 53970	Administrative Charge	63,500	0	63,500	63,500.00	.00	.00	100.0%
623 56000	Training	13,000	0	13,000	12,064.47	.00	935.53	92.8%
623 56200	Travel	3,700	0	3,700	2,815.07	.00	884.93	76.1%
623 56500	Building Maintenance	30,000	0	30,000	5,559.54	.00	24,440.46	18.5%
623 57000	Rental	4,000	0	4,000	1,266.99	.00	2,733.01	31.7%
623 60100	Electric Service	10,000	0	10,000	3,192.33	.00	6,807.67	31.9%
623 60200	Gas Service	3,500	0	3,500	929.75	.00	2,570.25	26.6%
623 60700	Telephone	16,000	0	16,000	10,281.74	.00	5,718.26	64.3%
62300500 53920	Professional Fee	590,754	0	590,754	3,970.25	.00	586,783.75	.7%
TOTAL	Services & Supplies	1,643,354	0	1,643,354	362,516.44	.00	1,280,837.56	22.1%
4m Depreciation								
623 81000	Depreciation	1,475,000	0	1,475,000	.00	.00	1,475,000.00	.0%
TOTAL	Depreciation	1,475,000	0	1,475,000	.00	.00	1,475,000.00	.0%
TOTAL	General	-1,258,394	0	-1,258,394	-3,139,543.13	.00	1,881,149.13	249.5%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 623 Dayton Water Utility Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
070 Distribution								
4e Services & Supplies								
623070 50040	System Supplies	8,000	0	8,000	1,675.44	.00	6,324.56	20.9%
623070 50430	Tools	5,000	0	5,000	6,204.84	.00	-1,204.84	124.1%*
623070 50440	Safety Supplies	3,500	0	3,500	3,692.51	.00	-192.51	105.5%*
623070 50900	MXU	50,000	0	50,000	17,073.67	.00	32,926.33	34.1%
623070 53900	Contract Services	24,000	0	24,000	3,510.00	.00	20,490.00	14.6%
623070 53910	Spraying	5,000	0	5,000	4,235.00	.00	765.00	84.7%
623070 56400	Repairs and Mainte	120,000	0	120,000	133,446.59	.00	-13,446.59	111.2%*
623070 56410	Equipment Repairs	1,500	0	1,500	214.31	.00	1,285.69	14.3%
623070 56420	Telemetry Maintena	8,000	0	8,000	1,468.57	.00	6,531.43	18.4%
623070 56440	Meter Repair & Mai	20,000	0	20,000	19,989.67	.00	10.33	99.9%
623070 56450	Fire Hydrant Repai	20,000	0	20,000	6,300.83	.00	13,699.17	31.5%
623070 56600	Water Tank Mainten	10,000	0	10,000	833.64	.00	9,166.36	8.3%
TOTAL Services & Supplies		275,000	0	275,000	198,645.07	.00	76,354.93	72.2%
TOTAL Distribution		275,000	0	275,000	198,645.07	.00	76,354.93	72.2%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 623 Dayton Water Utility Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
071 Pumping							
4e Services & Supplies							
623071 50910 Wellhead Protectio	3,000	0	3,000	.00	.00	3,000.00	.0%
623071 56400 Repairs and Mainte	75,000	0	75,000	106,094.52	.00	-31,094.52	141.5%*
623071 56420 Telemetry Maintena	10,000	0	10,000	1,468.57	.00	8,531.43	14.7%
623071 60100 Electric Service	300,000	0	300,000	210,500.72	.00	89,499.28	70.2%
623071 60310 Carson City Intert	30,000	0	30,000	18,281.28	.00	11,718.72	60.9%
TOTAL Services & Supplies	418,000	0	418,000	336,345.09	.00	81,654.91	80.5%
TOTAL Pumping	418,000	0	418,000	336,345.09	.00	81,654.91	80.5%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 623 Dayton Water Utility Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
072 Treatment							
4e Services & Supplies							
623072 50920 Laboratory	10,000	0	10,000	5,429.20	.00	4,570.80	54.3%
623072 50950 Chemicals	16,000	0	16,000	19,697.44	.00	-3,697.44	123.1%*
623072 55000 Contract Laborator	30,000	0	30,000	14,713.28	.00	15,286.72	49.0%
623072 56400 Repairs and Mainte	20,000	0	20,000	7,583.64	.00	12,416.36	37.9%
TOTAL Services & Supplies	76,000	0	76,000	47,423.56	.00	28,576.44	62.4%
TOTAL Treatment	76,000	0	76,000	47,423.56	.00	28,576.44	62.4%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 623 Dayton Water Utility Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
075 Fleet								
4e Services & Supplies								
623075 50000	Supplies	2,000	0	2,000	645.78	.00	1,354.22	32.3%
623075 50410	Uniform Rental	1,500	0	1,500	576.89	.00	923.11	38.5%
623075 50430	Tools	1,500	0	1,500	101.44	.00	1,398.56	6.8%
623075 50440	Safety Supplies	300	0	300	28.20	.00	271.80	9.4%
623075 51000	Fuel	45,000	0	45,000	26,688.14	.00	18,311.86	59.3%
623075 53900	Contract Services	1,000	0	1,000	.00	.00	1,000.00	.0%
623075 56410	Equipment Repairs	18,000	0	18,000	11,028.93	.00	6,971.07	61.3%
623075 56460	Vehicle Repairs &	18,000	0	18,000	14,408.27	.00	3,591.73	80.0%
623075 56500	Building Maintenan	3,000	0	3,000	370.17	.00	2,629.83	12.3%
623075 60200	Gas Service	1,500	0	1,500	469.44	.00	1,030.56	31.3%
TOTAL Services & Supplies		91,800	0	91,800	54,317.26	.00	37,482.74	59.2%
TOTAL Fleet		91,800	0	91,800	54,317.26	.00	37,482.74	59.2%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 623 Dayton Water Utility Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
999 Transfers and Fund Balance							
4z Ending Fund Balance							
623999 99999 Ending Fund Balanc	397,594	0	397,594	.00	.00	397,594.00	.0%
TOTAL Ending Fund Balance	397,594	0	397,594	.00	.00	397,594.00	.0%
TOTAL Transfers and Fund Balance	397,594	0	397,594	.00	.00	397,594.00	.0%
TOTAL Dayton Water Utility Fund	0	0	0	-2,502,812.15	.00	2,502,812.15	100.0%
TOTAL REVENUES	-6,699,611	0	-6,699,611	-4,808,624.67	.00	-1,890,986.33	
TOTAL EXPENSES	6,699,611	0	6,699,611	2,305,812.52	.00	4,393,798.48	

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 624 Dayton Sewer Utility Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
000 General							
3g Charges for Service							
624 35050 Administrative Fees	-113,000	0	-113,000	-76,030.45	.00	-36,969.55	67.3%*
624 35735 Engineering Fees	-17,000	0	-17,000	74,974.04	.00	-91,974.04	-441.0%*
624 35740 Inspection Fees	-25,000	0	-25,000	-35,489.00	.00	10,489.00	142.0%
624 35800 Sewer Use Fees	-7,900,000	0	-7,900,000	-5,167,067.35	.00	-2,732,932.65	65.4%*
TOTAL Charges for Service	-8,055,000	0	-8,055,000	-5,203,612.76	.00	-2,851,387.24	64.6%
3k Other Revenues							
624 38000 Investment Income	-400,000	0	-400,000	-667,910.86	.00	267,910.86	167.0%
624 38030 Penalties	-105,000	0	-105,000	-75,356.50	.00	-29,643.50	71.8%*
624 38130 Rental Income	-526	0	-526	-526.00	.00	.00	100.0%
624 38230 Miscellaneous Revenue	0	0	0	-7,577.75	.00	7,577.75	100.0%
624 82051 62406 Devleoper Contri	0	0	0	-11,928.00	.00	11,928.00	100.0%
TOTAL Other Revenues	-505,526	0	-505,526	-763,299.11	.00	257,773.11	151.0%
3m Connection Fees							
624 82000 Connection Charge	0	0	0	-1,251,788.88	.00	1,251,788.88	100.0%
TOTAL Connection Fees	0	0	0	-1,251,788.88	.00	1,251,788.88	100.0%
4a Salaries							
624 40000 Salaries	1,099,413	0	1,099,413	715,525.69	.00	383,887.31	65.1%
624 40150 Acting Pay	0	0	0	170.25	.00	-170.25	100.0%*
624 40320 Shift Differential	0	0	0	193.09	.00	-193.09	100.0%*
624 40350 Standby	24,282	0	24,282	15,944.20	.00	8,337.80	65.7%
624 40360 Standby Holiday	0	0	0	1,151.48	.00	-1,151.48	100.0%*
624 40500 Overtime	34,088	0	34,088	24,349.76	.00	9,738.24	71.4%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 624 Dayton Sewer Utility Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
624 40510	Overtime Holiday	0	0	0	1,033.00	.00	-1,033.00	100.0%*
624 40520	Comp Payout	0	0	0	123.96	.00	-123.96	100.0%*
624 40610	Callback	11,363	0	11,363	30,756.19	.00	-19,393.19	270.7%*
624 40620	Callback Holiday	0	0	0	3,951.01	.00	-3,951.01	100.0%*
TOTAL	Salaries	1,169,146	0	1,169,146	793,198.63	.00	375,947.37	67.8%
4c Benefits								
624 41000	Retirement	273,959	0	273,959	174,619.16	.00	99,339.84	63.7%
624 41002	PERS GASB 68 Adj	50,000	0	50,000	.00	.00	50,000.00	.0%
624 41100	Workers' Comp	38,530	0	38,530	20,796.33	.00	17,733.67	54.0%
624 41200	Medicare	16,954	0	16,954	11,303.46	.00	5,650.54	66.7%
624 41300	Health Insurance	199,092	0	199,092	131,488.25	.00	67,603.75	66.0%
624 41301	Health Insurance - OP	20,000	0	20,000	.00	.00	20,000.00	.0%
624 41302	Vision Insurance	1,030	0	1,030	682.52	.00	347.48	66.3%
624 41303	Dental Insurance	7,026	0	7,026	4,615.87	.00	2,410.13	65.7%
624 41310	Life Insurance	455	0	455	316.33	.00	138.67	69.5%
TOTAL	Benefits	607,046	0	607,046	343,821.92	.00	263,224.08	56.6%
4e Services & Supplies								
624 50000	Supplies	200,000	0	200,000	34,394.74	.00	165,605.26	17.2%
624 51020	Licenses	13,000	0	13,000	15,535.50	.00	-2,535.50	119.5%*
624 52000	Copier Maintenance	1,500	0	1,500	552.75	.00	947.25	36.9%
624 52030	Printer Services	400	0	400	535.13	.00	-135.13	133.8%*
624 52100	Postage	15,000	0	15,000	23,433.36	.00	-8,433.36	156.2%*
624 52200	Insurance	67,000	0	67,000	72,991.00	.00	-5,991.00	108.9%*
624 52300	Advertising	300	0	300	.00	.00	300.00	.0%
624 53530	Software Support	15,000	0	15,000	8,592.41	.00	6,407.59	57.3%
624 53620	Plan Review	25,000	0	25,000	24,044.74	.00	955.26	96.2%
624 53920	Professional Fees	400,000	0	400,000	101,439.29	.00	298,560.71	25.4%
624 53970	Administrative Charge	53,550	0	53,550	53,550.00	.00	.00	100.0%
624 56000	Training	15,000	0	15,000	8,884.87	.00	6,115.13	59.2%
624 56200	Travel	3,500	0	3,500	833.04	.00	2,666.96	23.8%
624 56500	Building Maintenance	26,500	0	26,500	17,671.89	.00	8,828.11	66.7%
624 57000	Rental	2,500	0	2,500	1,690.02	.00	809.98	67.6%
624 60100	Electric Service	8,000	0	8,000	3,261.33	.00	4,738.67	40.8%
624 60200	Gas Service	2,700	0	2,700	792.02	.00	1,907.98	29.3%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 624 Dayton Sewer Utility Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
624 60700	Telephone	12,000	0	12,000	8,489.18	.00	3,510.82	70.7%
TOTAL	Services & Supplies	860,950	0	860,950	376,691.27	.00	484,258.73	43.8%
4m Depreciation								
624 81000	Depreciation	2,550,000	0	2,550,000	.00	.00	2,550,000.00	.0%
TOTAL	Depreciation	2,550,000	0	2,550,000	.00	.00	2,550,000.00	.0%
4o Debt Service								
624 83130	Interest - Bonds	547,555	0	547,555	511,308.07	.00	36,246.93	93.4%
TOTAL	Debt Service	547,555	0	547,555	511,308.07	.00	36,246.93	93.4%
TOTAL	General	-2,825,829	0	-2,825,829	-5,193,680.86	.00	2,367,851.86	183.8%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 624 Dayton Sewer Utility Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
062 Rolling A								
4e Services & Supplies								
624062 50400	Uniforms	4,000	0	4,000	2,707.19	.00	1,292.81	67.7%
624062 50430	Tools	9,500	0	9,500	7,760.97	.00	1,739.03	81.7%
624062 50440	Safety Supplies	6,000	0	6,000	14,313.20	.00	-8,313.20	238.6%*
624062 50920	Laboratory	20,000	0	20,000	13,983.72	.00	6,016.28	69.9%
624062 50940	Chlorine	240,000	0	240,000	142,454.77	.00	97,545.23	59.4%
624062 50950	Chemicals	60,000	0	60,000	19,136.11	.00	40,863.89	31.9%
624062 53910	Spraying	21,000	0	21,000	23,905.00	.00	-2,905.00	113.8%*
624062 55000	Contract Laborator	35,000	0	35,000	57,860.60	.00	-22,860.60	165.3%*
624062 55020	Sludge Disposal	225,000	0	225,000	96,861.36	.00	128,138.64	43.0%
624062 56400	Repairs and Mainte	200,000	0	200,000	81,000.50	.00	118,999.50	40.5%
624062 56420	Telemetry Maintena	11,000	0	11,000	1,468.57	.00	9,531.43	13.4%
624062 56500	Building Maintenan	0	0	0	108.55	.00	-108.55	100.0%*
624062 57010	Equipment Rental	4,000	0	4,000	3,124.17	.00	875.83	78.1%
624062 60100	Electric Service	240,000	0	240,000	130,141.90	.00	109,858.10	54.2%
624062 60200	Gas Service	19,000	0	19,000	7,504.07	.00	11,495.93	39.5%
TOTAL Services & Supplies		1,094,500	0	1,094,500	602,330.68	.00	492,169.32	55.0%
TOTAL Rolling A		1,094,500	0	1,094,500	602,330.68	.00	492,169.32	55.0%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 624 Dayton Sewer Utility Fund		ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
063 South Plant								
4e Services & Supplies								
624063 55000	Contract Laborator	20,000	0	20,000	13,500.64	.00	6,499.36	67.5%
624063 56400	Repairs and Mainte	10,000	0	10,000	806.90	.00	9,193.10	8.1%
624063 56500	Building Maintenan	0	0	0	73.77	.00	-73.77	100.0%*
624063 60100	Electric Service	12,000	0	12,000	4,175.65	.00	7,824.35	34.8%
TOTAL Services & Supplies		42,000	0	42,000	18,556.96	.00	23,443.04	44.2%
TOTAL South Plant		42,000	0	42,000	18,556.96	.00	23,443.04	44.2%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 624 Dayton Sewer Utility Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
071 Pumping							
4e Services & Supplies							
624071 50950 Chemicals	35,000	0	35,000	15,811.80	.00	19,188.20	45.2%
624071 56400 Repairs and Mainte	100,000	0	100,000	47,614.61	.00	52,385.39	47.6%
624071 56420 Telemetry Maintena	4,000	0	4,000	1,468.51	.00	2,531.49	36.7%
624071 60100 Electric Service	60,000	0	60,000	32,104.26	.00	27,895.74	53.5%
TOTAL Services & Supplies	199,000	0	199,000	96,999.18	.00	102,000.82	48.7%
TOTAL Pumping	199,000	0	199,000	96,999.18	.00	102,000.82	48.7%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 624 Dayton Sewer Utility Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
074 Collection							
4e Services & Supplies							
624074 56400 Repairs and Mainte	40,000	0	40,000	12,506.58	.00	27,493.42	31.3%
TOTAL Services & Supplies	40,000	0	40,000	12,506.58	.00	27,493.42	31.3%
TOTAL Collection	40,000	0	40,000	12,506.58	.00	27,493.42	31.3%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 624 Dayton Sewer Utility Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
075 Fleet							
4e Services & Supplies							
624075 50000 Supplies	600	0	600	898.24	.00	-298.24	149.7%*
624075 50410 Uniform Rental	1,000	0	1,000	374.56	.00	625.44	37.5%
624075 50430 Tools	2,500	0	2,500	126.86	.00	2,373.14	5.1%
624075 50440 Safety Supplies	100	0	100	60.67	.00	39.33	60.7%
624075 51000 Fuel	45,000	0	45,000	22,734.34	.00	22,265.66	50.5%
624075 53530 Software Support	900	0	900	.00	.00	900.00	.0%
624075 56410 Equipment Repairs	15,000	0	15,000	16,905.50	.00	-1,905.50	112.7%*
624075 56460 Vehicle Repairs &	12,000	0	12,000	5,838.50	.00	6,161.50	48.7%
624075 56500 Building Maintenan	1,500	0	1,500	146.95	.00	1,353.05	9.8%
624075 60200 Gas Service	1,500	0	1,500	469.44	.00	1,030.56	31.3%
TOTAL Services & Supplies	80,100	0	80,100	47,555.06	.00	32,544.94	59.4%
TOTAL Fleet	80,100	0	80,100	47,555.06	.00	32,544.94	59.4%

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

ACCOUNTS FOR: 624 Dayton Sewer Utility Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
999 Transfers and Fund Balance							
4z Ending Fund Balance							
624999 99999 Ending Fund Balanc	1,370,229	0	1,370,229	.00	.00	1,370,229.00	.0%
TOTAL Ending Fund Balance	1,370,229	0	1,370,229	.00	.00	1,370,229.00	.0%
TOTAL Transfers and Fund Balance	1,370,229	0	1,370,229	.00	.00	1,370,229.00	.0%
TOTAL Dayton Sewer Utility Fund	0	0	0	-4,415,732.40	.00	4,415,732.40	100.0%
TOTAL REVENUES	-8,560,526	0	-8,560,526	-7,218,700.75	.00	-1,341,825.25	
TOTAL EXPENSES	8,560,526	0	8,560,526	2,802,968.35	.00	5,757,557.65	

YEAR-TO-DATE BUDGET REPORT

FOR 2026 09

	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	YTD ACTUAL	ENCUMBRANCES	AVAILABLE BUDGET	PCT USE/COL
GRAND TOTAL	0	0	0	-9,475,362.20	.00	9,475,362.20	100.0%

** END OF REPORT - Generated by Josh Foli **

Lyon County Board of County Commissioners Agenda Summary

Meeting Date: April 16, 2026

Agenda Item Number:
11.b

Subject:
For Possible Action: Review and accept travel claims.

Summary:
The Board of Commissioners has requested to have the travel report presented to them. It is not required by statute.

Financial Department Comments:

Approved As To Legal Form:

County Manager Comments:

Recommendation:

ATTACHMENTS
- Travel Report 3-16-26 to 3-31-26

LYON COUNTY TRAVEL REPORT
March 16-31, 2026

Department / Name	Description	Amount
Sheriff		
Nicole Cisneros	TAC Training Elko, NV 03/30-04/03/2026 - Per Diem, Mileage	650.70
Kathleen Clanton	Axon Training Nashville, TN 04/05-04/11/2026 - Per Diem, Mileage	542.30
Kathleen Clanton	Background Pick up Reno, NV 03/18/2026 - Mileage	101.93
Travis Bennett	Handgun Instructor Carson City, NV 03/23-03/25/2026 - Per Diem	57.00
Levi Bell	Arrest & Control Instructor Gardnerville, NV 03/02-03/06/2026 - Per Diem	95.00
Joshua Lynch	Basic Criminal Investigations Las Vegas, NV 04/12-04/16/2026 - Per Diem	347.00
Sean Colosi	Basic Criminal Investigations Las Vegas, NV 04/12-04/16/2026 - Per Diem	347.00
Cori Norman	Death Investigations Phoenix, AZ 04/12-04/18/2026 - Per Diem	377.00
County Manager		
Andrew Haskin	2026 NACO Conference Washington D.C. 02/20-02/25/2026 - Lodging, Airport Parking	1,584.85
Commissioners		
Tammy Hendrix	2026 NACO Conference Washington D.C. 02/20-02/25/2026 - Lodging	1,452.85
Scott Keller	2026 NACO Conference Washington D.C. 02/20-02/25/2026 - Lodging	1,452.85
Roads		
Eugenio Galaz	Pesticides Applicator Training Yerington, NV 03/31-04/01/2026 - Registration	50.00
Trevor Pipkin	Pesticides Applicator Training Yerington, NV 03/31-04/01/2026 - Registration	50.00
Rick Aiazzi	Pesticides Applicator Training Yerington, NV 03/31-04/01/2026 - Registration	50.00
Emergency Management		
Taylor Allison	2026 NEPA Summit Conference Las Vegas, NV 03/009-02/11/2026 - Airport Parking, Lodging	205.91
Celeste McFarlane	2027 NEPA Summit Conference Las Vegas, NV 03/009-02/11/2026 - Lodging	151.91
Dayton Justice Court		
Camille Vecchiarelli	NJLJ Conference Las Vegas, NV 01/27-02/01/2026 - Rental Car, Baggage Fee, Lodging	530.10
Assessor		
Eric Ow-wing	2026 Assessor's Conference Pahrump, NV 04/14-04/17/2026 - Per Diem, Registration	148.00
Troy Villines	2026 Assessor's Conference Pahrump, NV 04/14-04/17/2026 - Per Diem, Registration	148.00
Utilities		
Michael Crabb	160 Driving Academy Carson City, NV 03/09-03/27/2026 - Registration	4,232.50
District Court		
Andrea Andersen	ICM Course Las Vegas, NV 05/10-05/13/2026 - Airfare, Registration	963.80
Juvenile Probation		
Abram Minnitte	Transport Minor Churchill, NV 03/17/2026 - Per Diem	28.00
Selena Ramirez	Transport Minor Churchill, NV 03/17/2026 - Per Diem	28.00
Human Services		
Jenna Dykes	CBI Cohort Training Las Vegas, NV 04/08-04/10/2026 - Per Diem	58.00

Library

JenNifer Stockwell	Clean out Storage Silver Stage, NV 03/23/2026 - Mileage	46.40
Krystal Kenner	Covered Branch Silver Stage, NV 03/21/2026 - Mileage	46.40
Janet Schardt	Trustee Meeting Yerington, NV 03/24/2026 - Mileage	31.90
Patti Palmer	Trustee Meeting Yerington, NV 03/24/2026 - Mileage	68.16
Sara Ross	Trustee Meeting Yerington, NV 03/24/2026 - Mileage	76.86
		13,922.42

Lyon County Board of County Commissioners Agenda Summary

Meeting Date: April 16, 2026

Agenda Item Number:
11.c

Subject:
For Possible Action: Approve the changes on Assessor's tax roll due to correction in assessments and review of tax roll changes.

Summary:

Financial Department Comments:

Approved As To Legal Form:

County Manager Comments:

Recommendation:

ATTACHMENTS
- Secured Factual Corrections
- Unsecured Factual Corrections

LYON COUNTY

Meeting: 4/16/2026

The Assessor's Office deems the following Secured Property accounts to be factual corrections:

Acct #	Name/Owner	Reason for Deletion	Tax Dist.	Tax. Year.	Tax Amount
015-062-02	THOMPSON, ELIZABETH	APPLY DV EXEMPT	6.0	2025-2026	$195.39
019-131-09	LYNCH, SUSAN & MICHAEL	HOME DESTROYED BY FIRE	6.0	2025-2026	467.28
TOTAL:					**$662.67**

LYON COUNTY

Meeting:
4/16/2026

The Assessor's Office deems the following Unsecured Property accounts to be factual corrections:

Acct #	Name/Owner	Reason for Deletion	Dist.	Year.	Amount
FE010119	TAYLOR MADE HANDYMAN SERVICES	BUSINESS NEVER OPENED	6.0	2025-2026	$232.75
TOTAL:					**$232.75**

Lyon County Board of County Commissioners Agenda Summary

Meeting Date: April 16, 2026

Agenda Item Number:
11.d

Subject:
For Possible Action: Approve the April 2, 2026 minutes.

Summary:

Financial Department Comments:

Approved As To Legal Form:

County Manager Comments:

Recommendation:

ATTACHMENTS
- 04.02.2026 BOCC Minutes

Board of County Commissioners
Lyon County, Nevada

The Honorable Board of Lyon County Commissioners met this day, Thursday, April 2, 2026, at 9:00 A.M. in the LYON COUNTY ADMINISTRATIVE COMPLEX, 27 S. MAIN STREET, YERINGTON, NV 89447.

1. Roll Call

Present: Chairman Scott Keller, Vice-Chair Tammy Hendrix, Commissioner Robert Jacobson, Commissioner John Cassinelli, and Commissioner David Hockaday

Staff Present: County Manager Andrew Haskin, District Attorney Steve Rye, Deputy Clerk Melissa Colocho

2. Invocation given by John Poundstone of Joy Church

3. Pledge of Allegiance

4. Public Participation

Chair Keller asked for public comment, and there was none at this time.

5. For Possible Action: Review and Adoption of Agenda

Chair Keller asked for public comment, and there was none at this time.

Comm. Hendrix moved to approve the agenda as presented; Comm. Cassinelli seconded, and the motion passed 5-0.

6. Presentation of awards and/or recognition of accomplishment

6.a For Presentation Only: Present Deputy Benjamin Beck with the Lyon County Sheriff's Office "Life Saving Award".

Sheriff Brad Pope presented Deputy Benjamin Beck with the Lyon County Sheriff's Office "Life Saving Award" for his life-saving actions on March 16, 2026 when he performed CPR on an unresponsive motorist involved in a motor vehicle accident.

The Board thanked first responders and the Sheriff's Department.

7. Time Certain

7.a Time Certain at 9:00 AM.: For Presentation Only: Presentation on Child Abuse Prevention month. (Human Services Director, Shayla Holmes)

Human Services Director, Dr. Shayla Holmes, gave a presentation on Child Abuse Prevention Month, which is nationally recognized in April, as well as CPS report trend statistics, ACEs (Adverse Childhood Experiences) and impacts, and Positive Childhood Experiences.

Children's Services Division Manager for Lyon and Mineral Counties, Jenna Dykes, presented services available through Lyon County Human Services, (Children's Services, and Behavioral Health Services).

Social Worker Supervisor, Kandee Mortensen, presented services available through Nevada Department of Health and Human Services – Division of Child and Family Services (Child Protective Services (CPS), Foster Care).

Sheriff Brad Pope gave a presentation on statistics, responsibilities, and outcomes from the Lyon County Sheriff's Office (Investigations Division).

District Attorney Steve Rye gave a presentation on responsibilities, and outcomes from working with other agencies to protect children and remove them from abusive environments in Lyon County.

Mary Smith, Director of Lyon County CASA Inc. (Court Appointed Special Advocates for Children), gave a presentation explaining services available through their program.

Jenna Dykes presented Community Efforts and informed the Board of the Pinwheel Planting events on the first Friday of April throughout the County.

Presenters were available for questions and clarification for the Board, and the Board thanked the presenters.

7.b Time Certain at 9:00 A.M.: For Presentation Only: Presentation from Travis Crowder, Chief Executive Officer and Nick Beaton, Director of Development of the Boys & Girls Club of Mason Valley providing project updates for the Silver Springs area and the Dayton Early Learning Center.

Travis Crowder, Chief Executive Officer and Nick Beaton, Director of Development of the Boys & Girls Club of Mason Valley, gave a presentation providing project updates for the Silver Springs area and the Dayton Early Learning Center.

Presenters were available for questions and clarification for the Board, and the Board thanked the presenters.

7.c Time Certain at 9:05 A.M.: For Presentation Only: A presentation from Lowell Patton, President of the Fernley Main Street Committee, with information about the organization, current projects and future goals of the organization.

Lowell Patton, President of the Fernley Main Street Committee, gave a presentation including Main Street AMERICA's Vision and History, the 2024 Reinvestment Impact of Nationally Designated Main Street Programs, and Main Street FERNLEY and its Projects / Programs, Funding, and the 2025 Reinvestment Impact of Main Street FERNLEY.

7.d Time Certain at 9:10 A.M.: For Presentation Only: A presentation from Reed Cozens, General Manager of Carson Water Subconservancy District, on the Carson River Watershed 30-Year Drought and Water Sustainability Plan.

Reed Cozens, General Manager of Carson Water Sub-conservancy District, gave a presentation on the Carson River Watershed 30-Year Drought and Water Sustainability Plan. The presentation included an Overview, Partners and Background, Regional Systems and water sustainability, Historic Carson River Flows, Groundwater Pumping, Runoff Changes, USGS Models, Wet and Dry Years - Alpine Decree, Conjunctive Management,

Potential Mitigation Strategies, and Key Takeaways. He had discussion with and answered questions from the Board.

8. Commissioners/County Manager Reports

Comm. Hockaday thanked the County Manager and Code Enforcement for working on an issue in Mason Valley with him, and thanked the Sheriff for speed enforcement in Smith Valley. He also apologized for missing the Smith Valley Citizen Advisory Board meeting.

Comm. Cassinelli attended the Coffee and Conversation with the Dayton Chamber of Commerce, a training for Central Lyon, North Lyon, and Storey County Fire Districts, the Carson City Lincoln Day Dinner and the Dayton Valley Conservation District Board meeting. He reported a new conservation tech was hired, and grant funding is coming up this summer for woody debris removal once the high water levels go down. Comm. Cassinelli also recently signed up as an assistant coach for a t-ball team with the Silverado Little League and had about four hours of mandatory training on child abuse prevention and awareness, among other topics. He also participated in an interview with a reporter from Dayton Ohio who is doing a story on the different Daytons around the country. Comm. Cassinelli, for the record, wished a happy birthday to his wife and happy Easter to everyone.

Comm. Hendrix attended the joint fire training exercise, the NACO Public Lands and Natural Resources Board meeting, two more sessions of the Rural Energy Academy Cohort, the NACO Board of Directors meeting, and the Stagecoach Advisory Board meeting.

Comm. Jacobson attended two City of Fernley 25th anniversary meetings, and a Boys & Girls Club meeting; he also visited City Hall to check out how court is running, and visited the new and remodeled Fernley Courthouse. Comm. Jacobson attended the Fernley Chamber of Commerce Gala, and the NACO Board of Directors meeting by Zoom, and the Fernley City Council meeting.

Chair Keller attended the Fernley City Council meeting, a joint meeting with the joint interim standing committee on natural resources and joint interim standing committee on growth and infrastructure in Carson City, the Nevada Association of Counties Public Lands and Natural Resources Committee, the Nevada Association of Counties general board meeting, and Fernley Candidates Night. He also gave a shout out to the Rocky Mountain Elk Foundation in Fernley.

County Manager, Andrew Haskin, reported he has been working on the service plan for North Lyon Power General Improvement District, and had a meeting with NNIC, which Mr. Foli has an updated draft of, and hopes to have that back to the Board soon. He attended a few meetings regarding the Lands Bill, and hopes to have an updated map to the Board shortly. Mr. Haskin also had his monthly meeting with the Mayor of Fernley, and answered questions for clarification to the Board.

9. Elected Officials' Reports

There were none at this time.

10. Appointed Officials Reports

Facilities Director, Doug Homestead, reported he had nine employees and three Roads Department employees attend the City of Yerington's Pesticide Applicators Class, and those employees will take the State test to be certified. He also provided updates on the Dayton Government Complex and the Fernley Justice Court.

Comptroller, Josh Foli, provided an update on the Dayton Depot and advised the building permit was issued. He also reported the Historical Society of Dayton Valley is having a meeting on April 8, 2026 to authorize additional funding of $58,392.46 and write a check to the insurance to change the roof from metal to cedar shake composite.

He reported the IT department finished implementing E-fax Solution, which will save money. He also reported District Court was able to fill the law clerk position that has been posted over a year, and the other District Court judge requested their law clerk make the same as the new one, so that will be on a future agenda.

11. Advisory Board Reports

There were none at this time.

12. CONSENT AGENDA

Chair Keller asked for public comment, and there was none at this time.

Comm. Hockaday moved to approve the consent agenda items 12.a. through 12.l.; Comm. Cassinelli seconded, and the motion passed 5-0.

12.a. For Possible Action: Review and accept claims and financial reports.

County claims totaled $1,047,528.64 and payroll totaled $1,945,282.42. The cash balance was $128,345,877.95.

12.b. For Possible Action: Review and accept travel claims.

Travel claims total was $12,749.01.

12.c. For Possible Action: Approve the changes on Assessor's tax roll due to correction in assessments and review of tax roll changes.

The unsecured factual corrections totaled $40.30.

12.d. For Possible Action: Approve the March 16, 2026 minutes.

12.e. For Possible Action: Approve the March 19, 2026 minutes.

12.f. For Possible Action: Accept a grant award from the Nevada State Library, Archives and Public Records in the amount of $2,130 for Nevada Library Association 2026 - Library Service and Technology Act Continuing Education Grant for Libraries.

12.g. For Possible Action: Accept a grant award amendment to adjust the funding amount to the FY26 Community Services Block Grant (CSBG) award from the State of Nevada Department of Health and Human Services, increasing the total award amount by $27,105, from $32,527 to $59,632.

12.h. For Possible Action: Approve the Clerk Treasurer's Affidavit to the Board of County Commissioners that the Clerk/Treasurer's Office mailed the property tax delinquency notices/tax notices as required by Nevada Law.

12.i. For Possible Action: Approve the State Engineer's budget for the supervision of Lyon County's Groundwater Basins for the Fiscal Year July 1, 2026 to June 30, 2027.

12.j. For Possible Action: Approve a contract with Ledezma-Aguilar Garden Services for the amount of $1500 per month for the maintenance of the medians on Dayton Valley Road from April 1, 2026 to November 30, 2026.

12.k. For Possible Action: Approve a contract with Ledezma-Aguilar Garden Services for the amount of $1,500 per month for the maintenance of the north sidewalk on Dayton Valley Road from April 1, 2026 to November 30, 2026.

12.l. For Possible Action: Approve "Remnant Defendants Settlement" in the Opioid Litigation with (1) Associated Pharmacies, Inc. and American Associated Pharmacies, (2) JM Smith Co., (3) Louisiana Wholesale Drug Company, Inc., (4) Morris and Dickson, (5) N. Carolina Wholesale Drug Company, Inc., and (6) UNFI/SuperValu. On a national level the value of the settlement is $97,625,000.00, with Nevada's share being $1,134,430.04 and Lyon County's net share is $7,509.35.

****END OF CONSENT AGENDA****

REGULAR AGENDA

13. Public Hearing on Planning Items

13.a. For Possible Action: To approve the request from Nevada Cement Company LLC for Master Plan Amendments to change the designations from Employment and Resource to Industrial on three parcels that total approximately 462.27 acres in Fernley at 1290 W. Main Street and two unaddressed locations (APNs 021-042-01, 021-571-08 and 021-581-01); PLZ-2025-106. (Senior Planner, Louis Cariola)

Senior Planner, Louis Cariola, gave a presentation including the NV Cement Parcel Locations – Fernley, north of Hwy 80, Background and reason for amendments, Site Plan, Pictures, Master Plan – Cooperative Planning Area, Zoning – per Lyon County GIS and Assessors, Chapter 3 of Master Plan – Land Use, Request Details, Findings, Findings Highlights – summaries from Staff Report, and Recommendations: Planning Commission and Motion.

Mr. Cariola had discussion with and answered questions for the Board.

Chair Keller asked for public comment.

Robin Biggs expressed concern about dust suppression and where the water is coming from.

Comm. Jacobson moved to approve the request from Nevada Cement Company LLC for Master Plan Amendments to change the designations from Employment and Resource to Industrial on three parcels that total approximately 462.27 acres in Fernley at 1290 W. Main Street and two unaddressed locations (APNs 021-042-01, 021-571-08 and 021-581-01); PLZ-2025-106; Comm. Hockaday seconded, and the motion passed 5-0.

13.b. For Possible Action: To approve the request from Nevada Cement Company LLC for Zoning Map Amendments to change the zoning from the Title 10 district name of RR-5 (Fifth Rural Residential, 20-acre minimum) for three unaddressed parcels that total approximately 208.10 acres to the Title 15 district of HI-S (Heavy Industrial-Suburban), and to update the Title 10 district name

of M1 (General Industrial) to HI-S for one parcel of approximately 267.40 acres at 1290 W. Main Street in Fernley (APNs 021-581-01, 021-571-08, 021-571-05 and 021-042-01); PLZ-2026-002. (Senior Planner, Louis Cariola)

Senior Planner, Louis Cariola, gave a presentation including the NV Cement Parcel Locations – Fernley, north of Hwy 80, Background and reason for amendments, Site Plan, Pictures, Master Plan – Cooperative Planning Area, Zoning – per Lyon County GIS and Assessors, Proposed Zoning, Chapter 3 of Master Plan – Land Use, Allowed Uses per Title 15 for the HI-S district, Findings, Findings Highlights – summaries from Staff Report, and Recommendations: Planning Commission and Motion.

Chair Keller asked for public comment.

Robin Biggs stated she saw 100k gallon water tank on this item, and wondered if 100k gallons of water will be used monthly, and where wastewater and sewage will be managed.

Comm. Jacobson moved to approve the request from Nevada Cement Company LLC for Zoning Map Amendments to change the zoning from the Title 10 district name of RR-5 (Fifth Rural Residential, 20-acre minimum) for three unaddressed parcels that total approximately 208.10 acres to the Title 15 district of HI-S (Heavy Industrial-Suburban), and to update the Title 10 district name of M1 (General Industrial) to HI-S for one parcel of approximately 267.40 acres at 1290 W. Main Street in Fernley (APNs 021-581-01, 021-571-08, 021-571-05 and 021-042-01); PLZ-2026-002; Comm. Cassinelli seconded, and the motion passed 5-0.

14. Utilities

14.a For Possible Action: Approve Change Order No. 2, for the Rolling A Wastewater Treatment Plant - Phase 4 Expansion Project with Resource Development Company (RDC) to extend the Contract Time by 31 days for Substantial Completion and 46 days for Final Completion due to scope modifications and the need to complete certain weather-dependent work. (Utilities Director, Sean Sinclair)

Utilities Director, Sean Sinclair, explained the item as work change directives due to additional time needed to complete items requiring warm weather.

Chair Keller asked for public comment, and there was none at this time.

Comm. Hockaday moved to approve Change Order No. 2, for the Rolling A Wastewater Treatment Plant - Phase 4 Expansion Project with Resource Development Company (RDC) to extend the Contract Time by 31 days for Substantial Completion and 46 days for Final Completion due to scope modifications and the need to complete certain weather-dependent work; Comm. Cassinelli seconded, and the motion passed 5-0.

14.b For Possible Action: Approve Amendment No. 2 to Task Order 116, Rolling 'A' Wastewater Treatment Facility (WWTF) Phase 4 Expansion Project - Construction Administration, with DOWL in an amount to not exceed $112,000 to extend additional construction administration and engineering services required to complete the project. The cost will be funded from the Dayton Sewer Fund. (Utilities Director, Sean Sinclair)

Utilities Director, Sean Sinclair, reported $90,400 of the $112,000 is able to be reimbursed.

Chair Keller asked for public comment, and there was none at this time.

Comm. Cassinelli moved to approve Amendment No. 2 to Task Order 116, Rolling 'A' Wastewater Treatment Facility (WWTF) Phase 4 Expansion Project - Construction Administration, with DOWL in an amount to not exceed $112,000 to extend additional construction administration and engineering services required to complete the project. The cost will be funded from the Dayton Sewer Fund; Comm. Hockaday seconded, and the motion passed 5-0.

15. Facilities

15.a For Possible Action: Approve the Master Plan for Mark Twain Park, which includes reconfiguring the design, adding additional parking, baseball fields, soccer and football fields, pickle ball courts, and other amenities. The Central Lyon County Park Board recommended adoption of Option #2 layout, as shown in the Mark Twain Masterplan Document which is attached as backup, at their March 11, 2026 meeting. (Facilities Director, Doug Homestead)

Facilities Director, Doug Homestead, explained Option 2 was selected, confirmed two developers are involved with this, and stated new boundary line adjustments will be brought back to the Board. He had discussion with and answered questions from the Board.

Chair Keller asked for public comment, and there was none at this time.

Comm. Cassinelli moved to approve the Master Plan for Mark Twain Park, which includes reconfiguring the design, adding additional parking, baseball fields, soccer and football fields, pickle ball courts, and other amenities. The Central Lyon County Park Board recommended adoption of Option #2 layout, as shown in the Mark Twain Masterplan Document which is attached as backup, at their March 11, 2026 meeting; Chair Keller seconded, and the motion passed 5-0.

15.b For Possible Action: Approve the addition to the vehicle fleet of an enclosed trailer for the Facilities Department with the funding of approximately $12,000 to come from the existing budget.

Facilities Director, Doug Homestead, stated the money is available in his budget, and is coming before the Board to change the number of fleet vehicles the county owns. He also stated this vehicle is necessary for hauling boat equipment.

Chair Keller asked for public comment, and there was none at this time.

Comm. Jacobson moved to approve the addition to the vehicle fleet of an enclosed trailer for the Facilities Department with the funding of approximately $12,000 to come from the existing budget; Comm. Hockaday seconded, and the motion passed 5-0.

15.c For Possible Action: Approve the purchase of three robotic mowers totaling $32,000 with funding to come from a budget transfer from the General Fund contingency.

Facilities Director, Doug Homestead, reported previously purchased mowers have worked well at other parks. He had discussion with and answered questions from the Board.

Chair Keller asked for public comment, and there was none at this time.

Comm. Cassinelli moved to approve the purchase of three robotic mowers totaling $32,000 with funding to come from a budget transfer from the General Fund contingency; Comm. Hockaday seconded, and the motion passed 5-0.

16. Advisory Board

16.a For Possible Action: Appoint up to 1 member to the Central Lyon County Vector Control District Advisory Board. (Citizen Advisory Board Liaison, Martha Tapia)

Citizen Advisory Board Liaison, Martha Tapia, confirmed this Board currently has no term limits. Ms. Tapia and County Manager, Andrew Haskin, had discussion with and answered questions from the Board.

Chair Keller asked for public comment, and there was none at this time.

Comm. Jacobson moved to appoint Devon Ardesco to the Central Lyon County Vector Control District Advisory Board; Comm. Cassinelli seconded, and the motion passed 5-0.

17. County Manager

17.a For Possible Action: Approve lease agreement between Lyon County and Smith Valley Fire Protection District for Smith Valley Fire to lease the property located at 2 Day Ln., Smith, NV 89430 for a term of ten years with an option for ten year renewable terms with Smith Valley Fire to pay utilities and repairs and maintenance for the term of the lease. (County Manager, Andrew Haskin)

County Manager, Andrew Haskin, explained the old courthouse is currently not in use because there was previously an issue with the number of users on the water system, and the Fire District is interested in using the building as office space. He had discussion with and answered questions from the Board.

Chair Keller asked for public comment, and there was none at this time.

Comm. Hockaday moved to approve lease agreement between Lyon County and Smith Valley Fire Protection District for Smith Valley Fire to lease the property located at 2 Day Ln., Smith, NV 89430 for a term of ten years with an option for ten year renewable terms with Smith Valley Fire to pay utilities and repairs and maintenance for the term of the lease; Comm. Cassinelli seconded, and the motion passed 5-0.

18. Agenda Requests

Comm. Jacobson had none.

Comm. Hendrix had none.

Comm. Cassinelli had none.

Comm. Hockaday had none.

Chair Keller had none.

19. Commissioner Comments

Comm. Jacobson wished everyone Happy Easter.

Comm. Hendrix had none.

Comm. Cassinelli wished all a Happy Easter.

Comm. Hockaday had none.

Chair Keller commented the 7-Eleven in Silver Springs will have their grand opening on Friday, May 8th.

20. Public Participation

Chair Keller asked for public comment.

Robin Biggs stated there is no handicap button on the front door of the building, and reported the handicap button was not working on the side door. She also requested for consideration that funds from item 12.l. be used toward collaborating with rural Nevada clinics and the jail for research-based non-Christian addiction programs.

Meeting recessed at 12:32 P.M.

21. Closed Session pursuant to NRS 241.015(3)(b)(2)

The meeting reconvened and there was a closed session beginning at 12:03 P.M.

22. Adjourn

Meeting adjourned at 1:11 P.M.

LYON COUNTY BOARD OF COMMISSIONERS

_____

SCOTT KELLER, Chairman

ATTEST

_____

STACI LINDBERG, Lyon County Clerk/Treasurer

Lyon County Board of County Commissioners Agenda Summary

Meeting Date: April 16, 2026

Agenda Item Number:
11.e

Subject:
For Possible Action: Approve the April 3, 2026 minutes.

Summary:

Financial Department Comments:

Approved As To Legal Form:

County Manager Comments:

Recommendation:

ATTACHMENTS
- 04.03.2026 BOCC Minutes

Board of County Commissioners
Lyon County, Nevada

The Honorable Board of Lyon County Commissioners met this day, Friday, April 3, 2026, at 9:00 A.M. in the LYON COUNTY ADMINISTRATIVE COMPLEX, 27 S. MAIN STREET, YERINGTON, NV 89447.

1. Roll Call

Present: Chairman Scott Keller, Vice-Chair Tammy Hendrix, Commissioner Robert Jacobson, Commissioner John Cassinelli, and Commissioner David Hockaday

Staff Present: County Manager Andrew Haskin, Comptroller Josh Foli, District Attorney Steve Rye, Deputy Clerk Melissa Colocho

2. Pledge of Allegiance

3. Public Participation

Chair Keller asked for public comment, and there was none at this time.

4. For Possible Action: Review and Adoption of Agenda

Chair Keller asked for public comment, and there was none at this time.

Comm. Cassinelli moved to approve the agenda as presented; Comm. Jacobson seconded, and the motion passed 5-0.

Comm. Cassinelli read the following statement into record: "Per NRS 281A.420, to maintain public trust and due to my affiliation and working relationship with the Northern Nevada Development Authority NNDA, I hereby abstain from voting on any budgeted or proposed apportionments to and for NNDA that may come before this board. Thank you."

5. Comptroller

5.a For Possible Action: Approve the Lyon County tentative budget for fiscal year 2026-2027.

Comptroller Josh Foli gave an overview of the tentative budget, and a presentation summarizing the budget from the General Fund for each Department, as well as tentative budgets for each fund. Discussion was held between the Board and Staff as needed for clarification.

Meeting recessed at 10:12 A.M. and reconvened at 10:20 A.M.

Chair Keller asked for public comment, and there was none at this time.

Comm. Hendrix moved to approve the tentative budget, increasing the budget for District Court by $26,840, and separating out the Economic Development Department; Comm. Jacobson seconded, and the motion passed 5-0.

Chair Keller asked for public comment, and there was none at this time.

Comm. Hendrix moved to approve the tentative budget for the Economic Development Department; Comm. Cassinelli seconded, and the motion passed 4-0-1 with Comm. Cassinelli abstaining.

ADJOURN TO CONVENE AS MASON VALLEY MOSQUITO ABATEMENT DISTRICT BOARD

6. Public Participation

Chair Keller asked for public comment, and there was none at this time.

7. Tentative Budget for Fiscal Year 2026-2027

7.a For Possible Action: Approve the Mason Valley Mosquito Abatement District tentative budget for fiscal year 2026-2027.

Comptroller Josh Foli gave a brief overview of the Mason Valley Mosquito Abatement District tentative budget.

Chair Keller asked for public comment, and there was none at this time.

Comm. Jacobson moved to approve the Mason Valley Mosquito Abatement District tentative budget for fiscal year 2026-2027 as presented; Comm. Hockaday seconded, and the motion passed 5-0.

8. Public Participation

Chair Keller asked for public comment, and there was none at this time.

ADJOURN TO CONVENE AS CENTRAL LYON COUNTY VECTOR CONTROL DISTRICT BOARD

9. Public Participation

Chair Keller asked for public comment, and there was none at this time.

10. Tentative Budget for Fiscal Year 2026-2027

10.a. For Possible Action: Approve the Central Lyon County Vector Control District tentative budget for fiscal year 2026-2027.

Comptroller Josh Foli gave a brief overview of the tentative budget for Central Lyon County Vector Control District. He had discussion with and answered questions from the Board.

Chair Keller asked for public comment, and there was none at this time.

Comm. Hendrix moved to approve the Central Lyon County Vector Control District tentative budget for fiscal year 2026-2027; Comm. Cassinelli seconded, and the motion passed 5-0.

11. Public Participation

Chair Keller asked for public comment, and there was none at this time.

ADJOURN TO CONVENE AS WALKER RIVER WEED CONTROL DISTRICT BOARD

12. Public Participation

Chair Keller asked for public comment, and there was none at this time.

13. Tentative Budget for Fiscal Year 2026-2027

13.a. For Possible Action: Approve the Walker River Weed Control District tentative budget for fiscal year 2026-2027.

Comptroller Josh Foli gave a brief overview of the tentative budget for the Walker River Weed Control District. He had discussion with and answered questions from the Board.

Chair Keller asked for public comment, and there was none at this time.

Comm. Hockaday moved to approve the Walker River Weed Control District tentative budget for fiscal year 2026-2027; Comm. Cassinelli seconded, and the motion passed 5-0.

14. Public Participation

Chair Keller asked for public comment, and there was none at this time.

ADJOURN TO CONVENE AS SILVER SPRINGS GENERAL IMPROVEMENT DISTRICT BOARD

15. Public Participation

Chair Keller asked for public comment, and there was none at this time.

16. Tentative Budget for Fiscal Year 2026-2027

16.a. For Possible Action: Approve the Silver Springs General Improvement District tentative budget for fiscal year 2026-2027.

Comptroller Josh Foli gave a brief overview of the tentative budget for the Silver Springs General Improvement District. He had discussion with and answered questions from the Board.

Chair Keller asked for public comment, and there was none at this time.

Comm. Hendrix moved to approve the Silver Springs General Improvement District tentative budget for fiscal year 2026-2027; Comm. Cassinelli seconded, and the motion passed 5-0.

17. Public Participation

Chair Keller asked for public comment, and there was none at this time.

ADJOURN TO CONVENE AS WILLOWCREEK GENERAL IMPROVEMENT DISTRICT BOARD

18. Public Participation

Chair Keller asked for public comment, and there was none at this time.

19. Tentative Budget for Fiscal Year 2026-2027

19.a. For Possible Action: Approve the Willowcreek General Improvement District tentative budget for fiscal year 2026-2027.

Comptroller Josh Foli gave a brief overview of the tentative budget for Willowcreek General Improvement District tentative budget. He had discussion with and answered questions from the Board.

Chair Keller asked for public comment, and there was none at this time.

Comm. Cassinelli moved to approve the Willowcreek General Improvement District tentative budget for fiscal year 2026-2027; Comm. Hockaday seconded, and the motion passed 5-0.

20. Public Participation

Chair Keller asked for public comment, and there was none at this time.

ADJOURN TO RECONVENE AS THE LYON COUNTY BOARD OF COMMISSIONERS

21. Commissioner Comments

Comm. Hockaday had none.

Comm. Cassinelli had none.

Comm. Hendrix thanked Mr. Foli.

Comm. Jacobson and County Manager, Andrew Haskin, will meet offline to discuss the possibility of inviting the two District Attorney candidates to present to the Board. Comm. Jacobson thanked Mr. Foli and staff.

Chair Keller thanked Mr. Foli for being clear and for his support throughout the year.

22. Public Participation

Chair Keller asked for public comment.

Robin Biggs commented on prospective candidates for Lyon County.

23. Adjourn

Meeting recessed at 12:37 P.M.

24. Closed Session pursuant to NRS 241.015(3)(b)(2)

There was none.

LYON COUNTY BOARD OF COMMISSIONERS

SCOTT KELLER, Chairman

ATTEST

STACI LINDBERG, Lyon County Clerk/Treasurer

Lyon County Board of County Commissioners Agenda Summary

Meeting Date: April 16, 2026

Agenda Item Number:
11.f

Subject:
For Possible Action: Accept a grant award amendment #2 to redirect funds from contractual to personnel and travel from the State of Nevada Department of Health and Human Services, Division of Public and Behavioral Health, for FY26 Mobile Outreach Safety Team (MOST) program.

Summary:
There is no change to the FY26 Notice of Subaward total amount to provide for MOST staffing and travel/training, but an update to redirect contractual funds to support personnel and travel. All other previous agreements outlined in the original NOSA remain in place.

Financial Department Comments:

Approved As To Legal Form:

County Manager Comments:

Recommendation:

ATTACHMENTS
- FY26 Mobile Outreach Safety Team Notice of SubGrant Amendment #2

State of Nevada
Department of Health and Human Services
Division of Public & Behavioral Health
(Hereinafter referred to as the Department)

Agency Ref, #: SG-2026-00046-2
Budget Account: 3170, 3255

SUBAWARD AMENDMENT # 2

Program Name: Alcohol Tax Program Bureau of Behavioral Health Wellness and Prevention Sabrina Peck / speck@health.nv.gov	**Subrecipient Name:** Lyon County Human Services, FASTT/MOST Program Shayla Holmes / sholmes@lyon-county.org
Address: 4150 Technology Way Carson City, Nevada 89706	**Address:** 27 S Main St Yerington, Nevada, 89447
Subaward Period: 07/01/2025 through 06/30/2026	**Amendment Effective Date:** Upon approval by all parties.

This amendment reflects a change to: ☐ Scope of Work ☐ Term ☑ Budget ☑ Funding Source

Reason for Amendment: Amending budget to transfer funds from contractual to personnel and travel.

Required Changes

Current Language: See Section B, C and D of the original subaward and amendment #1.

Amended Language: See attached Section C **revised on Nov 13, 2025.**

Approved Budget Categories	Current Budget	Amended Adjustments	Revised Budget
1. Personnel	$0.00	$118,297.00	$118,297.00
2. Travel	$0.00	$8,519.00	$8,519.00
3. Operating	$0.00	$0.00	$0.00
4. Equipment	$0.00	$0.00	$0.00
5. Contractual/Consultant	$0.00	$61,458.00	$61,458.00
6. Training	$0.00	$3,625.00	$3,625.00
7. Other	$0.00	$0.00	$0.00
TOTAL DIRECT COSTS	$0.00	$191,899.00	$191,899.00
8. Indirect Costs	$0.00	$0.00	$0.00
TOTAL APPROVED BUDGET	$191,899.00	$0.00	$191,899.00

Incorporated Documents:

Section B: Description of Services, Scope of Work and Deliverables revised on Nov 13, 2025

Section C: Budget and Financial Reporting Requirements revised on Nov 13, 2025

Section D: Request for Reimbursement revised on Nov 13, 2025

Section E: Audit Information Request revised on Nov 13, 2025

Section F: Current or Former State Employee Disclaimer revised on Nov 13, 2025

Section G: Business Associate Addendum revised on Nov 13, 2025

Section H: Matching Funds Agreement revised on Nov 13, 2025

Exhibit A: Original Notice of Subaward and all previous amendments

By signing this Amendment, the Authorized Subrecipient Official or their designee, Bureau Chief and DPBH Administrator acknowledge the above as the new standard of practice for the above referenced subaward. Further, the undersigned understand this amendment does not alter, in any substantial way, the non-referenced contents of the original subaward and all of its attachments.

Name	Signature	Date
Shalya Holmes, Director of Human Services		
Shannon Bennett, Bureau Chief		
for Dena Schmidt, Administrator, DPBH		

STATE OF NEVADA
DEPARTMENT OF HEALTH AND HUMAN SERVICES
DIVISION OF PUBLIC & BEHAVIORAL HEALTH
NOTICE OF SUBAWARD

Non-Federal Source Of Funds	% Funds	Amount	Budget Account	Category	GL	Function	Sub-Org
Other	100.00	$191,899.00	3255	14	8786	N/A	N/A
Job Number: Liquor	**Description:** State Liquor Source						

STATE OF NEVADA
DEPARTMENT OF HEALTH AND HUMAN SERVICES
DIVISION OF PUBLIC & BEHAVIORAL HEALTH
NOTICE OF SUBAWARD

SECTION B

Description of Services, Scope of Work and Deliverables
revised on Nov 13, 2025

*In some instances, it may be helpful / useful to provide a brief summary of the project or its intent. This is at the discretion of the author of the subaward. This section should be written in complete sentences.

Lyon County Human Services, FASTT/MOST Program, hereinafter referred to as Subrecipient, agrees to provide the following services and reports according to the identified timeframes:

Scope of Work for Lyon County Human Services, FASTT/MOST Program

Primary Goal: See attached SOW

Objective	Activities	Due Date	Documentation Needed
1. See attached SOW	See attached SOW	06/30/2026	See attached SOW

NEVADA DIVISION of PUBLIC and BEHAVIORAL HEALTH

LYON COUNTY HEALTH AND HUMAN SERVICES AND LYON COUNTY MOST SCOPE OF WORK PARTNER SCOPE OF WORK

BUREAU OF BEHAVIORAL HEALTH WELLNESS AND PREVENTION (BBHWP) AND LYON COUNTY HEALTH AND HUMAN SERVICES AND LYON COUNTY MOST

FROM JULY 01, 2025, TO JUNE 30, 2026

Template Date: 05/17/2024 Version: 0.2

Funding Amount:	**$ 191,899**

Baseline Narrative: To prioritize early and voluntary interventions to divert individuals from the criminal justice system, reduce emergency room utilization, and de-escalate crises safely and effectively.
Expected Outcomes: Expected outcomes include increase in protective factors, reduction of risk factors, and linkage to necessary services for long term success, diversion and deflection from future systemic involvement, reduced recidivism rates and decreased systemic and community cost.
Goal 1: To determine the level of risk present and determine the most appropriate response to include linkage to the appropriate level of care. ***Responsible person(s)*** Licensed Clinician, BHPO, and APRN as needed

Objective	*Activities*	*Outputs*	*Timeline Begin / Completion*	*Target Population*	*Evaluation Measure (indicator)*	*Evaluation Tool*
1.1 At least 85% of the new MOST referrals received will be de-escalated, stabilized, or diverted from unnecessary admissions to the criminal justice system, emergency room, and inpatient psychiatric facilities.	**1. 1.1.** MOST (Licensed Clinical Social Worker, Psych APRN, & Behavioral Health Peace Officer) will triage, assess, and connect clients to the most appropriate community level of care and service needs to eradicate or reduce behavioral health crisis or other issues.	**1.1.1.** MOST will collaborate with the local FEP, ACT, CCBHC, CARE team, and community mental health and substance use providers, to assist with ensuring the clients are connected to the provider of choice and level of need.	**1.1.1.** Quarterly Reports July 1, 2025, to June 30, 2026	**1.1.1.** Lyon County Residents age 18+ experiencing behavioral health issues and other crises	**1.1.1.** Level of Care along with assessment of need is determined after initial contact. In cases that involve further involvement, such as hospitalizations, referral to MOST case management, or medication intervention through APRN, Level of care is reassessed continually to support de-escalation, stabilization, and discharge from MOST.	**1.1**. Monthly tracking that reflects the number of referrals received, initial contacts, intakes/ engagements, interventions, and dispositions aligned with best practices for co-responder models.

Baseline Narrative: To prioritize early and voluntary interventions to divert individuals from the criminal justice system, reduce emergency room utilization, and de-escalate crises safely and effectively.

Expected Outcomes: Expected outcomes include increase in protective factors, reduction of risk factors, and linkage to necessary services for long term success, diversion and deflection from future systemic involvement, reduced recidivism rates and decreased systemic and community cost.

Goal 2: Coordinate community resources and facilitate follow-up care and linkage to long-term supports.

Responsible person(s) Licensed Clinician, BHPO, and APRN as needed

Objective	*Activities*	*Outputs*	*Timeline Begin / Completion*	*Target Population*	*Evaluation Measure (indicator)*	*Evaluation Tool*
2. 1.A. minimum of 90% of individuals referred to the MOST Case Manager by the MOST LCSW will be connected to additional services to support individual living in the community.	**2.1.1.** MOST LCSW will refer MOST clients who have barriers preventing the client from independently connecting to community services and supports. **2.1.2**. MOST Case Manager will connect with client in person with the BHPO, independently with the prior review and approval by the BHPO, or with the BHPO and LCSW, depending on client acuity, to offer assistance with helping increase access to services.	**2.1.1**. Referral to include Assessment of need and Level of Care **2.1.2**. Case Management Intake Form **2.1.3**. Signed Service Plan and	**2.1.1.** Quarterly Reports July 1, 2025, to June 30, 2026	**2.1.1.** Lyon County Residents age 18+ experiencing behavioral health issues and other crises	**2.1.1.** Clinicians will document assessment of need and clinical recommendations and submit a referral for case management services. **2.1.2**. After meeting with the client, The Senior Case Manager will develop a person-centered service plan with intent to remove barriers and link to services. **2.1.3**. The MOST Senior Case	**2.1.1.** Intake and Assessment: MOST members will complete the MOST intake form on all MOST contacts and assess individuals for level of care. **2.1.2**. ICM Strategies a. Using assessments to identify risks and needs **b**. Focuses on effective interventions to reduce risk **c.** Uses methods to enhance consumers' motivation and to equip them with basic needs to increase health and well-being

	2.1.3. MOST Case Manager will coordinate services with MOST clients, community service providers, hospital discharge planners, and approved family members to ensure successful connections and follow ups are conducted. **2.1.4**. MOST Case Manager will promote, provide support, and refer clients to contract Psychiatric APRN for evaluation, medication assessment, and to initiate or adjust psychotropic medications as appropriate and provided as a bridge to long term supports. The APRN collaborates with the team to ensure medically necessary psychiatric care is incorporated into the crisis intervention model.	documentation of progress. **2.1.4**. Psychiatric Assessment and documentation of medical intervention			Manager will work with the client to support achievement of goals outlined in the plan. The case manager will document all efforts and achievements as progress notes in the electronic health record. **2.1.4.** The MOST Senior Case Manager will utilize contracted psychiatric assistance with our provider for immediate need and bridge care until long term supports are in place. The Senior Case Manager and Contract Psych APRN will document all efforts and service provision in the electronic record.	**d**. Uses strategies to target resources **e.** Acknowledges that consumers need are unique to the individuals

Baseline Narrative: To prioritize early and voluntary interventions to divert individuals from the criminal justice system, reduce emergency room utilization, and de-escalate crises safely and effectively

Expected Outcomes: Expected outcomes include increase in protective factors, reduction of risk factors, and linkage to necessary services for long term success, diversion and deflection from future systemic involvement, reduced recidivism rates and decreased systemic and community cost.

Goal 3: *Increase community awareness and engagement with the Mobile Outreach Safety Team (MOST) by educating community members and service providers about the program's purpose and role*

Responsible person(s): Licensed Clinician, BHPO, and Clinical Supervisor, and APRN as needed

.

Objective	*Activities*	**Outputs**	*Timeline Begin / Completion*	*Target Population*	*Evaluation Measure (indicator)*	*Evaluation Tool*
3.1. Community members and service providers will be aware of MOST purpose and role in the community and will increase referrals to the program.	**3.1.1.** MOST will participate in and promote at least four scheduled community events. **3.1.2**. MOST will provide program material to at least 10 community and service providers. **3.1.3.** MOST will promote the program, team, and behavioral health educational topics at least quarterly on social media. **3.1.4**. MOST to provide support	**3.1.1**. Training sessions or briefings provided to referring partners about MOST's purpose and referral process.	***3.1.1.*** Quarterly Reports 7/1/2025-6/30/2026	**31.1.** Lyon County Residents age 18+ experiencing behavioral health issues and other crises	**3.1.1**. Number of new referral sources (e.g., schools, clinics, law enforcement agencies) added within the evaluation period	**3.1.1**. Date, title, time of event detail logged on Google Calendar. **a**. Noted on agency MOST quarterly report **b.** View of Lyon County Human Services Facebook page **c.** Calendared events

	with Mental Health Awareness month by providing community awareness trainings and by participating in in other planned activities/outreach					

Baseline Narrative: To prioritize early and voluntary interventions to divert individuals from the criminal justice system, reduce emergency room utilization, and de-escalate crises safely and effectively.

Expected Outcomes: Expected outcomes include increase in protective factors, reduction of risk factors, and linkage to necessary services for long term success, diversion and deflection from future systemic involvement, reduced recidivism rates and decreased systemic and community cost.

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Goal 4: Enhance the MOST team's capacity to support individuals experiencing behavioral health crises by increasing knowledge and application of best practices in Crisis Intervention Team (CIT) approaches.

Responsible person(s): *Clinical Supervisor,* Licensed Clinician, BHPO, and APRN as needed

Objective	*Activities*	*Outputs*	*Timeline Begin / Completion*	*Target Population*	*Evaluation Measure (indicator)*	*Evaluation Tool*
4.1.1. MOST will increase knowledge of best CIT practices in supporting	**4.1.1**. MOST Program Supervisor, Senior Case Manager, to	**4.1.1**. Participation in external CIT conferences, seminars, or		**4.1.1**. Lyon County Residents age 18+ experiencing behavioral health	**4.1.1**. Supervisor observation reports	**4.1.1**. Training Completion

individuals with behavioral health crisis in the community.	attend in person CIT International Training. Review learned objectives and innovative approaches with MOST team to determine if there are new tools and practices to implement to strengthen the program in the community.	webinars, with tracking of attendance	**4.1.1.** Quarterly Reports 7/1/2025-6/30/2026	issues and other crises	noting increased use of CIT best practices during field responses (measured through quarterly field audits or case reviews)	Records and Case Review Audits

Baseline Narrative: The Mobile Outreach Safety Team (MOST) is a jail and hospitalization diversion program where public safety personnel, a behavioral health clinician, and a Lyon County Social Services case manager work in collaboration to assist individuals experiencing subacute crisis. HEART for Youth is a branch of MOST created to better serve youth and parents in the community. The goals remain the same for HEART as MOST. In keeping with national standards for crisis intervention, both MOST and HEART for Youth will begin efforts to integrate the 988 Lifeline into their mobile crisis response framework.

Expected Outcomes: Improved consistency and quality in crisis intervention and strengthened collaboration and seamless transitions between MOST and the 988 Lifeline.

Goal 5: Integrate 988 Lifeline best practices into the MOST protocols to enhance crisis response, ensure alignment with national standards, and improve coordination with behavioral health resources. This will include staff training, updated response procedures, and strengthened referral pathways to 988 services.

Responsible person(s): Lyon County public safety personnel, behavioral health clinician, and Lyon County Social Services case manager.

Objective	***Activities***	***Outputs***	***Timeline Begin / Completion***	***Target Population***	***Evaluation Measure (indicator)***	***Evaluation Tool***
5.1 Enable MOST to provide crisis response services	**5.1.1** Expand MOST staff: Hire and/or reassign personnel to ensure adequate	**5.1.1** 24/7 coverage with designated on-call and active response teams.	7/1/25-6/30/26	Nevada residents experiencing mental health and	Monthly tracking of number of referrals, initial contact, intakes,	Quarterly Reports

24/7/365 to the extent possible.	coverage across all shifts. Develop and implement rotating schedules to provide 24/7 availability. **5.1.2** Train team members on crisis intervention, triage, and response protocols aligned with 988 best practices. **5.1.3** Develop protocols for after-hours triage or escalation as needed.	**5.1.2** Increased number of staff trained in 988-aligned crisis response protocols. **5.1.3** Increased crisis response		substance use crises	interventions, and outcomes, aligned with c-responder model best practices	
5.2 Participate in the 988-dispatch pilot program to evaluate and refine coordination protocols and subsequently integrate 988 call center dispatch capabilities into MOST operations to enhance real-time response to behavioral health crises.	**5.2.1** Collaborate with DPBH and 988 call center leadership to define roles, workflows, and communication protocols. Participate in planning meetings and contribute to pilot design and readiness assessments. **5.2.2** Train MOST staff on 988	**5.2.1** Formal participation agreement with 988 dispatch pilot team.				

	dispatch protocols and integrate 988 dispatch capabilities into MOST's response systems. **5.2.3** Actively respond to calls dispatched via 988 during the pilot period. Collect and analyze response data to assess effectiveness, timeliness, and service coordination. **5.2.4** Once dispatch goes live, integrate 988 dispatch capabilities into operations.	**5.2.2** MOST staff trained in 988 dispatch protocols. **5.2.3** Operational integration of 988 dispatch into MOST response systems. Data reports on call volume, response time, and outcomes during the pilot. **5.2.4** 988 dispatch capabilities fully integrated into MOST response				
5.3 MOST will complete the enrollment process to become enrolled in Provider Type for mobile crisis teams once PT has been established, enabling reimbursement for eligible crisis services and	5.3.1 Review Nevada Medicaid policies, eligibility criteria, and documentation requirements for Mobile Crisis Response. Consult with Medicaid representatives for		6/30/2026	Nevada residents experiencing mental health and substance use crises	Monthly tracking of number of referrals, initial contact, intakes, interventions, and outcomes, aligned with c-responder model best practices	Quarterly reports

expanding access to sustainable funding.	technical assistance as needed. 5.3.2 Prepare and submit enrollment application. 5.3.3 Activate billing systems and begin submitting claims for eligible crisis response services once enrollment is finalized.	5.3.2 Completed and submitted Nevada Provider Enrollment application. 5.3.3 Live Medicaid billing system with successful claims submissions.				
5.4 MOST will complete all Nevada Division of Public and Behavioral Health certification requirements for Mobile Crisis Teams once regulations have been finalized, ensuring compliance with state standards and eligibility for state-recognized service delivery.	5.4.1 Obtain and review the finalized certification requirements. Attend any DPBH hosted trainings, webinars, or information sessions on the certification process. 5.4.2 Update policies, procedures and infrastructure to meet certification requirements. 5.4.3 Complete and submit certification application.	5.4.1 Summary of DPBH certification requirements and MOSTs internal compliance review. 5.4.2 Updated MOST policies and procedures reflecting certification standards. 5.4.3 Completed certification application	6/30/2026	Nevada residents experiencing mental health and substance use crises	Summary of revised policies and procedures to meet certification standards.	Quarterly reports

		submitted to Nevada DPBH.				

Quarterly Progress Report /Technical Assistance Due Dates:

Quarterly Report Q1 (July 1, 2025 – September 30, 2025): October 15, 2025
Quarterly Report Q2 (October 1, 2025, December 31, 2025): January 15, 2026
Quarterly Report Q3 (January 1, 2026 – March 31, 2026): April 15, 2026
Quarterly Report Q4 (April 1, 2026 – June 30, 2026): July 15, 2026

STATE OF NEVADA
DEPARTMENT OF HEALTH AND HUMAN SERVICES
DIVISION OF PUBLIC & BEHAVIORAL HEALTH
NOTICE OF SUBAWARD

SECTION C
Budget and Financial Reporting Requirements
revised on Nov 13, 2025

Identify the source of funding on all printed documents purchased or produced within the scope of this subaward, using a statement similar to: "This publication (journal, article, etc.) was supported by the Nevada State Department of Health and Human Services through Grant # from . Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Department nor ."

Any activities performed under this subaward shall acknowledge the funding was provided through the Department by Grant Number from .

Subrecipient agrees to adhere to the following budget:

Total Personnel Costs	Including Fringe					**Total:**	$118,297
Employee	Annual Salary	Fringe Rate	% of Time	Months	Annual % of Months worked	Amount Requested	Subject to Indirect? Fringe Salary
Lucrecia Carrillo Case Manager Position Control Number 60202	$59,648.00	71.00%	70.00%	12.00	100.00%	$71,398.66	☐ ☐
Process referrals, conduct intakes and evidence-based screenings, eradicate initial crisis, provide information and referrals, develop, implement and maintain service plans, coordinate and monitor service delivery with client and service providers, facilitate case follow-ups post closure, participate in MOST meetings, complete data entry and reporting.							
Angelica Alexander Behavioral Health Coordinator, Position Control # 60002"	$99,501.00	54.00%	30.61%	12.00	100.00%	$46,897.89	☐ ☐
Additionally, LCHS has been struggling to attract and retain a qualified contract candidate and has been and will continue to use our Behavioral Health Coordinator (a salaried position) for crisis response. Due to this pivot LCHS is requesting a portion of the allocated budget in contract to be shifted to salaries' is retaining some funds in contract with the hopes to still fulfill the scope of work goal to have an afterhours on-call response. Salaries: $99,501.00 salaries + 54% fringe for Lyon County Behavioral Health Coordinator x 34 hours = $21,873 amount moved.							

In-State Travel	**Total:**	$0

Out of State Travel	OSMot Days	**Total:**	$8,519
Destination of Trip: Co-Responder Conference Dallas TX			

	Cost	# of Trips	# of Days	# of Staff	Total
Airfare: cost per trip (origin & designation) x # of trips x # of staff	$662.00	1		5	$3,310.00
Baggage fee: $ amount per person x # of trips x # of staff	$70.00	1		5	$350.00
Per Diem: $ per day per GSA rate for area x # of trips x # of staff	$80.00	1	3.5	5	$1,400.00
Lodging: $ per day + $ tax = total $ x # of trips x # of nights x # of staff	$201.21	1	3	5	$3,019.00
Ground Transportation: $ per r/trip x # of trips x # of staff	$0.00				$0.00

Mileage: (rate per mile x # of miles per r/trip) x # of trips x # of staff	$0.00				$0.00
Parking: $ per day x # of trips x # of days x # of staff	$22.00	1	4	5	$440.00
The International Co-Responder Alliance is proud to announce the theme for its 7th Annual National Co-Responder Conference (CoRCon) in Dallas, Texas, June 7-10, 2026 – Boots on the Ground, Eyes on the Stars. 5 staff to attend CoRCon. Airfare: $662 Reno to Dallas Roundtrip $662 x 5 staff = $3,310 Baggage Fee: $70 ($35 each way) x 5 staff = $350 Per Diem: $80 per day x 3.5 days (account for 1st/last day travel) x 5 staff = $1,400 Lodging: $170 + $31.21 taxes/fees x 3 nights x 5 staff = $3,019 Parking: $22 per day x 4 days x 5 staff = $440					$8,519.00

Operating	**Total:**	$0

Equipment	**Total:**	$0

STATE OF NEVADA
DEPARTMENT OF HEALTH AND HUMAN SERVICES
DIVISION OF PUBLIC & BEHAVIORAL HEALTH
NOTICE OF SUBAWARD

Contractual/Contractual and all Pass-thru Subawards				**Total:**	$61,458
Type:	Name: TBD-LCSW				
Method of Selection: Sole Source					
Period of Performance: 7/1/2025 - 6/30/2026					
Scope of Work: Lyon County to contract for Clinician @ $55.00 per hour x 765.47 hours (up to 35 hours/week). Contractor will conduct behavioral health and suicide risk assessments for individuals referred into MOST. Contractor will also conduct mental health holds, apply for emergency admissions and provide consultations on requirements of mental health holds in accordance to NRS 433 A. Contractor will collect, record, and report data identified within the MOST operational procedures, and participate in committee efforts whenever possible. This position meets the goals and objects of the program by ensuring individuals experiencing a mental health crisis are being diverted from the jails and/or being connected to the highest level of care such as an inpatient setting when they could be deescalated and connected to services within their community.					
*Sole Source Justification: * Sole Source Justification: Existing contractor, only applicant originally that expressed interest with required credentials.					
Budget					
Clinician $55/hour x 765.47 hours	$42,101.00				
Method of Accountability: LCHS Behavioral Health Coordinator will provide oversight of clinician's field work as well as documentation and provide feedback weekly via regular reoccuring team meeetings and one on one as necessary.					Total: $42,101.00

Type:	Name: TBD				
Method of Selection: Sole Source					
Period of Performance: 3/1/2026 - 6/30/2026					
Scope of Work: Lyon County to contract for an on call Clinician @ $65.00 per hour x 240 hours (up to 15 hours/week for 4 months + $100 premium pay for each Friday-Sunday on-call availability 12 days x 4 months x 100). Contractor will conduct behavioral health and suicide risk assessments for individuals referred into MOST. Contractor will also conduct mental health holds, apply for emergency admissions and provide consultations on requirements of mental health holds in accordance to NRS 433 A. Contractor will collect, record, and report data identified within the MOST operational procedures, and participate in committee efforts whenever possible. This position meets the goals and objects of the program by ensuring individuals experiencing a mental health crisis are being diverted from the jails and/or being connected to the highest level of care such as an inpatient setting when they could be deescalated and connected to services within their community.					
*Sole Source Justification: Existing contract with county when clinical services are needed within Lyon County					
Budget					
Lyon County Clinician $65/hour x 240 hours (15 hours/week x 4 weeks x 4 months) =	$15,227.00				
On-call Friday-Sunday Premium Pay $100 x 12 days x 4 months =	$4,130.00				
Method of Accountability: LCHS Behavioral Health Coordinator will provide oversight of clinician's field work as well as documentation and provide feedback weekly via regular reoccuring team meeetings and one on one as necessary.					Total: $19,357.00

Training			**Total:**	$3,625
	Amount	# of FTE or Units	# of Months or Occurrences	Cost
National Co-Responder Conference, Dallas, TX	$725.00	5	1	$3,625.00
National Co-Responder Conference, Dallas, TX, Attending Behavioral Health Coordinator, Angelica Alexander, MOST Case Manager, Lucrecia Carrillo, Clinician, Ashley Delgado, Director, Shayla Holmes, MOST Safety Office, Lyon County Sheriff. LCHS to attend CoRCon: $725 conference registration x 5 staff = $3,625.				

Other				Total:	$0
				$0.00	☐

TOTAL DIRECT CHARGES	$191,899

Indirect Charges	Indirect Rate:	0.0%	$0
Indirect Methodology: No indirect charged			

TOTAL BUDGET	$191,899

STATE OF NEVADA
DEPARTMENT OF HEALTH AND HUMAN SERVICES
DIVISION OF PUBLIC & BEHAVIORAL HEALTH
NOTICE OF SUBAWARD

Applicant Name: Lyon County Human Services, FASTT/MOST Program **Form 2**

PROPOSED BUDGET SUMMARY

A. **PATTERN BOXES ARE FORMULA DRIVEN - DO NOT OVERRIDE - SEE INSTRUCTIONS**

FUNDING SOURCES	Alcohol Tax Program	Other Funding	Other Funding	Other Funding	Other Funding	Other Funding	Other Funding	Program Income	TOTAL
SECURED	$191,899.00								
ENTER TOTAL REQUEST	$191,899.00								$191,899.00
EXPENSE CATEGORY									
Personnel	$118,297.00								$118,297.00
Travel	$8,519.00								$8,519.00
Operating	$0.00								$0.00
Equipment	$0.00								$0.00
Contractual/Consultant	$61,458.00								$61,458.00
Training	$3,625.00								$3,625.00
Other Expenses	$0.00								$0.00
Indirect	$0.00								$0.00
TOTAL EXPENSE	$191,899.00	$0.00	$0.00	$0.00	$0.00	$0.00		$0.00	$191,899.00
These boxes should equal 0	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00		$0.00	$80.00
Total Indirect Cost	$0.00							Total Agency Budget	$191,899.00
								Percent of Subrecipient Budget	100.00%

B. Explain any items noted as pending:

C. Program Income Calculation:

- Department of Health and Human Services policy allows no more than 10% flexibility of the total not to exceed amount of the subaward, within the approved Scope of Work/Budget. Subrecipient will obtain written permission to redistribute funds within categories. **Note: the redistribution cannot alter the total not to exceed amount of the subaward. Modifications in excess of 10% require a formal amendment.**
- Equipment purchased with these funds belongs to the federal program from which this funding was appropriated and shall be returned to the program upon termination of this agreement.
- Travel expenses, per diem, and other related expenses must conform to the procedures and rates allowed for State officers and employees. It is the Policy of the Board of Examiners to restrict contractors/ Subrecipients to the same rates and procedures allowed State Employees. The State of Nevada reimburses at rates comparable to the rates established by the US General Services Administration, with some exceptions (State Administrative Manual 0200.0 and 0320.0).

Note: If match funds are required, Section H: Matching Funds Agreement must accompany the subaward packet.

The Subrecipient agrees:
To request reimbursement according to the schedule specified below for the actual expenses incurred related to the Scope of Work during the subaward period.

- Total reimbursement through this subaward will not exceed $191,899.00;
- Requests for Reimbursement will be accompanied by supporting documentation, including a line item description of expenses incurred;
- Indicate what additional supporting documentation is needed in order to request reimbursement;
  - -The Subrecipient agrees:
    To request reimbursement according to the schedule specified for the actual expenses incurred related to the Scope of Work during
    the subaward period. Requests for reimbursement shall be submitted by the 15th of every month.
    -Total reimbursement through this subaward will not exceed $191,899.00;
    -Requests for Reimbursement will be accompanied by supporting documentation, including a line-item description of expenses
    incurred; and Additional expenditure detail will be provided upon request from the Department.
    Additionally, the Subrecipient agrees to provide:
    -A complete financial accounting of all expenditures to the Department within 30 days of the CLOSE OF THE SUBAWARD PERIOD.
    Any un-obligated funds shall be returned to the Department at that time, or if not already requested, shall be deducted from the final
    award.
    -Any work performed after the BUDGET PERIOD will not be reimbursed.
    -If a Request for Reimbursement (RFR) is received after the 45-day closing period, the Department may not be able to provide
    reimbursement.
    -If a credit is owed to the Department after the 45-day closing period, the funds must be returned to the Department within 30 days of identification.; and
    -Additional expenditure detail will be provided upon request from the Department.
    Additionally, the Subrecipient agrees to provide:
    -A complete financial accounting of all expenditures to the Department within 30 days of the CLOSE OF THE SUBAWARD PERIOD. Any un-obligated funds shall be returned to the Department at that time, or if not already requested, shall be deducted from the final
    award.
    -Any work performed after the BUDGET PERIOD will not be reimbursed.
    -If a Request for Reimbursement (RFR) is received after the 45-day closing period, the Department may not be able to provide reimbursement.
    -If a credit is owed to the Department after the 45-day closing period, the funds must be returned to the Department within 30 days of identification.
    ; and
- Additional expenditure detail will be provided upon request from the Department.

Additionally, the Subrecipient agrees to provide:

- A complete financial accounting of all expenditures to the Department within 30 days of the CLOSE OF THE SUBAWARD PERIOD. Any un-obligated funds shall be returned to the Department at that time, or if not already requested, shall be deducted from the final award.
- Any work performed after the BUDGET PERIOD will not be reimbursed.
- If a Request for Reimbursement (RFR) is received after the 45-day closing period, the Department may not be able to provide reimbursement.
- If a credit is owed to the Department after the 45-day closing period, the funds must be returned to the Department within 30 days of identification.

The Department agrees:

- Identify specific items the program or Bureau must provide or accomplish to ensure successful completion of this project, such as:
  - Providing technical assistance, upon request from the Subrecipient;
  - Providing prior approval of reports or documents to be developed;
  - Forwarding a report to another party, i.e. CDC.
  - -The Department agrees:
    -To identify specific items the program or Bureau must provide or accomplish to ensure successful completion of this project, such

as:
o Providing technical assistance, upon request from the Subrecipient.
-The Department reserves the right to hold reimbursement under this subaward until any delinquent forms, reports, and expenditure documentation are submitted to and accepted by the Department.
-The Department reserves the right to hold reimbursement under this subaward until any delinquent forms, reports, and expenditure documentation are submitted to and accepted by the Department.

- The Department reserves the right to hold reimbursement under this subaward until any delinquent forms, reports, and expenditure documentation are submitted to and accepted by the Department.

Both parties agree:

- The site visit/monitoring schedule may be clarified here. Both parties agree:
The site visit/monitoring schedule may be clarified here. Both parties agree:
-The site visit/monitoring schedule will consist of a date and time agreed upon in advance ---The Subrecipient will, in the performance of the Scope of Work specified in this subaward, perform functions and/or activities that could involve confidential information; therefore, the Subrecipient is requested to fill out Section G, which is specific to this subaward, and will be in effect for the term of this subaward.
-All reports of expenditures and requests for reimbursement processed by the Department are SUBJECT TO AUDIT.
-This subaward agreement may be TERMINATED by either party prior to the date set forth on the Notice of Subaward, provided the termination shall not be effective until 30 days after a party has served written notice upon the other party. This agreement may be terminated by mutual consent of both parties and unilaterally by either party without cause. The parties expressly agree that this Agreement shall be terminated immediately if for any reason the Department, state, and/or federal funding ability to satisfy this Agreement is withdrawn, limited, or impaired.
-The Subrecipient will, in the performance of the Scope of Work specified in this subaward, perform functions and/or activities that could involve confidential information; therefore, the Subrecipient is requested to fill out Section G, which is specific to this subaward, and will be in effect for the term of this subaward.
-All reports of expenditures and requests for reimbursement processed by the Department are SUBJECT TO AUDIT.
-This subaward agreement may be TERMINATED by either party prior to the date set forth on the Notice of Subaward, provided the termination shall not be effective until 30 days.
Agreement shall be terminated immediately if for any reason the Department, state, and/or federal funding ability to satisfy this Agreement is withdrawn, limited, or impaired.
Financial Reporting Requirements:
-A Request for Reimbursement is due on a Monthly basis, based on the terms of the subaward agreement, no later than the 15th of the month.
-Reimbursement is based on actual expenditures incurred during the period being reported.
-Payment will not be processed without all reporting being current.
-Reimbursement may only be claimed for expenditures approved within the Notice of Subaward.
- The Subrecipient will, in the performance of the Scope of Work specified in this subaward, perform functions and/or activities that could involve confidential information; therefore, the Subrecipient is requested to fill out Section G, which is specific to this subaward, and will be in effect for the term of this subaward.
- All reports of expenditures and requests for reimbursement processed by the Department are SUBJECT TO AUDIT.
- This subaward agreement may be TERMINATED by either party prior to the date set forth on the Notice of Subaward, provided the termination shall not be effective until 30 days after a party has served written notice upon the other party. This agreement may be terminated by mutual consent of both parties or unilaterally by either party without cause. The parties expressly agree that this Agreement shall be terminated immediately if for any reason the Department, state, and/or federal funding ability to satisfy this Agreement is withdrawn, limited, or impaired.

Financial Reporting Requirements

- A Request for Reimbursement is due on a Monthly basis, based on the terms of the subaward agreement, no later than the 15th of the month.
- Reimbursement is based on actual expenditures incurred during the period being reported.
- Payment will not be processed without all reporting being current.
- Reimbursement may only be claimed for expenditures approved within the Notice of Subaward.

STATE OF NEVADA
DEPARTMENT OF HEALTH AND HUMAN SERVICES
DIVISION OF PUBLIC & BEHAVIORAL HEALTH
NOTICE OF SUBAWARD

SECTION D
Request for Reimbursement
revised on Nov 13, 2025

Program Name: Alcohol Tax Program	Subrecipient Name: Lyon County Human Services, FASTT/MOST Program
Address: 4150 Technology Way, Carson City, Nevada 89706	Address: 27 S Main St, Yerington, Nevada 89447
Subaward Period: 07/01/2025 - 06/30/2026	Subrecipient's: EIN: 88-6000097 Vendor #: T40156600A

FINANCIAL REPORT AND REQUEST FOR REIMBURSEMENT

(must be accompanied by expenditure report/back-up)

Month(s)	Calendar Year

Approved Budget Category	A Approved Budget	B Total Prior Requests	C Current Request	D Year to Date Total	E Budget Balance	F Percent Expended
1. Personnel	$118,297.00	$0.00	$0.00	$0.00	$118,297.00	0.00%
2. Travel	$8,519.00	$0.00	$0.00	0.0000	$8,519.00	0.00%
3. Operating	$0.00	$0.00	$0.00	$0.00	$0.00	0.00%
4. Equipment	$0.00	$0.00	$0.00	$0.00	$0.00	0.00%
5. Contractual/Consultant	$61,458.00	$0.00	$0.00	$0.00	$61,458.00	0.00%
6. Training	$3,625.00	$0.00	$0.00	$0.00	$3,625.00	0.00%
7. Other	$0.00	$0.00	$0.00	$0.00	$0.00	0.00%
8. Indirect	$0.00	$0.00	$0.00	$0.00	$0.00	0.00%
Total	**$191,899.00**	**$0.00**	**$0.00**	**$0.00**	**$191,899.00**	**0.00%**

MATCH REPORTING	Approved Match Budget	Total Prior Reported Match	Current Match Reported	Year to Date Total	Match Balance	Percent Complete
						0.00%

I, a duly authorized signatory for the applicant, certify to the best of my knowledge and belief that this report is true, complete and accurate; that the expenditures, disbursements and cash receipts are for the purposes and objectives set forth in the terms and conditions of the grant award; and that the amount of this request is not in excess of current needs or, cumulatively for the grant term, in excess of the total approved grant award. I am aware that any false, fictitious or fraudulent information, or the omission of any material fact, may subject me to criminal, civil or administrative penalties for fraud, false statements, false claims, or otherwise. I verify that the cost allocation and backup documentation attached is correct.

Authorized Signature | Title | Date

FOR DEPARTMENT USE ONLY

Is program contact required? ☐ Yes ☐ No

Contact Person

Reason for contact:

Fiscal review/approval date:

Scope of Work review/approval date:

ASO or Bureau Chief (as required):

STATE OF NEVADA
DEPARTMENT OF HEALTH AND HUMAN SERVICES
DIVISION OF PUBLIC & BEHAVIORAL HEALTH
NOTICE OF SUBAWARD

SECTION E

Audit Information Request

1. Non-Federal entities that **expend** $1,000,000.00 or more in total federal awards are required to have a single or program-specific audit conducted for that year, in accordance with 2 CFR § 200.501(a).

2. Did your organization expend $1,000,000 or more in all federal awards during your organization's most recent fiscal year?	☑ Yes ☐ No
3. When does your organization's fiscal year end?	6/30/2025
4. What is the official name of your organization?	Lyon, County of
5. How often is your organization audited?	Annually
6. When was your last audit performed?	11/1/2024
7. What time-period did your last audit cover?	7/1/2023 - 6/30/2024
8. Which accounting firm conducted your last audit?	Sciarani & Co.

Compliance with this section is acknowledged by signing the subaward cover page of this packet.

STATE OF NEVADA
DEPARTMENT OF HEALTH AND HUMAN SERVICES
DIVISION OF PUBLIC & BEHAVIORAL HEALTH
NOTICE OF SUBAWARD

SECTION F

Current or Former State Employee Disclaimer

For the purpose of State compliance with NRS 333.705, subrecipient represents and warrants that if subrecipient, or any employee of subrecipient who will be performing services under this subaward, is a current employee of the State or was employed by the State within the preceding 24 months, subrecipient has disclosed the identity of such persons, and the services that each such person will perform, to the issuing Agency. Subrecipient agrees they will not utilize any of its employees who are Current State Employees or Former State Employees to perform services under this subaward without first notifying the Agency and receiving from the Agency approval for the use of such persons. This prohibition applies equally to any subcontractors that may be used to perform the requirements of the subaward.

The provisions of this section do not apply to the employment of a former employee of an agency of this State who is not receiving retirement benefits under the Public Employees' Retirement System (PERS) during the duration of the subaward.

Are any current or former employees of the State of Nevada assigned to perform work on this subaward?

YES	☐	If "YES", list the names of any current or former employees of the State and the services that each person will perform.
NO	☑	Subrecipient agrees that if a current or former state employee is assigned to perform work on this subaward at any point after execution of this agreement, they must receive prior approval from the Department.

Name Services

Subrecipient agrees that any employees listed cannot perform work until approval has been given from the Department.

Compliance with this section is acknowledged by signing the subaward cover page of this packet.

STATE OF NEVADA
DEPARTMENT OF HEALTH AND HUMAN SERVICES
DIVISION OF PUBLIC & BEHAVIORAL HEALTH
NOTICE OF SUBAWARD

SECTION G

Business Associate Addendum

BETWEEN

Nevada Department of Health and Human Services

Hereinafter referred to as the "Covered Entity"

And

Lyon County Human Services, FASTT/MOST Program

Hereinafter referred to as the "Business Associate"

PURPOSE. In order to comply with the requirements of HIPAA and the HITECH Act, this Addendum is hereby added and made part of the agreement between the Covered Entity and the Business Associate. This Addendum establishes the obligations of the Business Associate and the Covered Entity as well as the permitted uses and disclosures by the Business Associate of protected health information it may possess by reason of the agreement. The Covered Entity and the Business Associate shall protect the privacy and provide for the security of protected health information disclosed to the Business Associate pursuant to the agreement and in compliance with the Health Insurance Portability and Accountability Act of 1996, Public Law 104-191 ("HIPAA"), the Health Information Technology for Economic and Clinical Health Act, Public Law 111-5 ("the HITECH Act"), and regulation promulgated there under by the U.S. Department of Health and Human Services (the "HIPAA Regulations") and other applicable laws.

WHEREAS, the Business Associate will provide certain services to the Covered Entity, and, pursuant to such arrangement, the Business Associate is considered a business associate of the Covered Entity as defined in HIPAA, the HITECH Act, the Privacy Rule and Security Rule; and

WHEREAS, Business Associate may have access to and/or receive from the Covered Entity certain protected health information, in fulfilling its responsibilities under such arrangement; and

WHEREAS, the HIPAA Regulations, the HITECH Act, the Privacy Rule and the Security Rule require the Covered Entity to enter into an agreement containing specific requirements of the Business Associate prior to the disclosure of protected health information, as set forth in, but not limited to, 45 CFR Parts 160 & 164 and Public Law 111-5.

THEREFORE, in consideration of the mutual obligations below and the exchange of information pursuant to this Addendum, and to protect the interests of both Parties, the Parties agree to all provisions of this Addendum.

I. DEFINITIONS. The following terms shall have the meaning ascribed to them in this Section. Other capitalized terms shall have the meaning ascribed to them in the context in which they first appear.

1. **Breach** means the unauthorized acquisition, access, use, or disclosure of protected health information which compromises the security or privacy of the protected health information. The full definition of breach can be found in 42 USC 17921 and 45 CFR 164.402.
2. **Business Associate** shall mean the name of the organization or entity listed above and shall have the meaning given to the term under the Privacy and Security Rule and the HITECH Act. For full definition refer to 45 CFR 160.103.
3. **CFR** stands for the Code of Federal Regulations.
4. **Agreement** shall refer to this Addendum and that particular agreement to which this Addendum is made a part.
5. **Covered Entity** shall mean the name of the Department listed above and shall have the meaning given to such term under the Privacy Rule and the Security Rule, including, but not limited to 45 CFR 160.103.
6. **Designated Record Set** means a group of records that includes protected health information and is maintained by or for a covered entity or the Business Associate that includes, but is not limited to, medical, billing, enrollment, payment, claims adjudication, and case or medical management records. Refer to 45 CFR 164.501 for the complete definition.
7. **Disclosure** means the release, transfer, provision of, access to, or divulging in any other manner of information outside the entity holding the information as defined in 45 CFR 160.103.
8. **Electronic Protected Health Information** means individually identifiable health information transmitted by electronic media or maintained in electronic media as set forth under 45 CFR 160.103.
9. **Electronic Health Record** means an electronic record of health-related information on an individual that is created, gathered, managed, and consulted by authorized health care clinicians and staff. Refer to 42 USC 17921.
10. **Health Care Operations** shall have the meaning given to the term under the Privacy Rule at 45 CFR 164.501.
11. **Individual** means the person who is the subject of protected health information and is defined in 45 CFR 160.103.
12. **Individually Identifiable Health Information** means health information, in any form or medium, including demographic information collected from an individual, that is created or received by a covered entity or a business associate of the covered entity and relates to the past, present, or future care of the individual. Individually identifiable health information is information that identifies the individual directly or there is a reasonable basis to believe the information can be used to identify the

individual. Refer to 45 CFR 160.103.

13. **Parties** shall mean the Business Associate and the Covered Entity.
14. **Privacy Rule** shall mean the HIPAA Regulation that is codified at 45 CFR Parts 160 and 164, Subparts A, D and E.
15. **Protected Health Information** means individually identifiable health information transmitted by electronic media, maintained in electronic media, or transmitted or maintained in any other form or medium. Refer to 45 CFR 160.103 for the complete definition.
16. **Required by Law** means a mandate contained in law that compels an entity to make a use or disclosure of protected health information and that is enforceable in a court of law. This includes but is not limited to: court orders and court-ordered warrants; subpoenas, or summons issued by a court; and statues or regulations that require the provision of information if payment is sought under a government program providing public benefits. For the complete definition refer to 45 CFR 164.103.
17. **Secretary** shall mean the Secretary of the federal Department of Health and Human Services (HHS) or the Secretary's designee.
18. **Security Rule** shall mean the HIPAA regulation that is codified at 45 CFR Parts 160 and 164 Subparts A and C.
19. **Unsecured Protected Health Information** means protected health information that is not rendered unusable, unreadable, or indecipherable to unauthorized individuals through the use of a technology or methodology specified by the Secretary in the guidance issued in Public Law 111-5. Refer to 42 USC 17932 and 45 CFR 164.402.
20. **USC** stands for the United States Code.

II. OBLIGATIONS OF THE BUSINESS ASSOCIATE.

1. **Access to Protected Health Information.** The Business Associate will provide, as directed by the Covered Entity, an individual or the Covered Entity access to inspect or obtain a copy of protected health information about the Individual that is maintained in a designated record set by the Business Associate or, its agents or subcontractors, in order to meet the requirements of the Privacy Rule, including, but not limited to 45 CFR 164.524 and 164.504(e) (2) (ii) (E). If the Business Associate maintains an electronic health record, the Business Associate or, its agents or subcontractors shall provide such information in electronic format to enable the Covered Entity to fulfill its obligations under the HITECH Act, including, but not limited to 42 USC 17935.
2. **Access to Records.** The Business Associate shall make its internal practices, books and records relating to the use and disclosure of protected health information available to the Covered Entity and to the Secretary for purposes of determining Business Associate's compliance with the Privacy and Security Rule in accordance with 45 CFR 164.504(e)(2)(ii)(H).
3. **Accounting of Disclosures.** Promptly, upon request by the Covered Entity or individual for an accounting of disclosures, the Business Associate and its agents or subcontractors shall make available to the Covered Entity or the individual information required to provide an accounting of disclosures in accordance with 45 CFR 164.528, and the HITECH Act, including, but not limited to 42 USC 17935. The accounting of disclosures, whether electronic or other media, must include the requirements as outlined under 45 CFR 164.528(b).
4. **Agents and Subcontractors.** The Business Associate must ensure all agents and subcontractors to whom it provides protected health information agree in writing to the same restrictions and conditions that apply to the Business Associate with respect to all protected health information accessed, maintained, created, retained, modified, recorded, stored, destroyed, or otherwise held, transmitted, used or disclosed by the agent or subcontractor. The Business Associate must implement and maintain sanctions against agents and subcontractors that violate such restrictions and conditions and shall mitigate the effects of any such violation as outlined under 45 CFR 164.530(f) and 164.530(e)(1).
5. **Amendment of Protected Health Information.** The Business Associate will make available protected health information for amendment and incorporate any amendments in the designated record set maintained by the Business Associate or, its agents or subcontractors, as directed by the Covered Entity or an individual, in order to meet the requirements of the Privacy Rule, including, but not limited to, 45 CFR 164.526.
6. **Audits, Investigations, and Enforcement.** The Business Associate must notify the Covered Entity immediately upon learning the Business Associate has become the subject of an audit, compliance review, or complaint investigation by the Office of Civil Rights or any other federal or state oversight agency. The Business Associate shall provide the Covered Entity with a copy of any protected health information that the Business Associate provides to the Secretary or other federal or state oversight agency concurrently with providing such information to the Secretary or other federal or state oversight agency. The Business Associate and individuals associated with the Business Associate are solely responsible for all civil and criminal penalties assessed as a result of an audit, breach, or violation of HIPAA or HITECH laws or regulations. Reference 42 USC 17937.
7. **Breach or Other Improper Access, Use or Disclosure Reporting.** The Business Associate must report to the Covered Entity, in writing, any access, use or disclosure of protected health information not permitted by the agreement, Addendum or the Privacy and Security Rules. The Covered Entity must be notified immediately upon discovery or the first day such breach or suspected breach is known to the Business Associate or by exercising reasonable diligence would have been known by the Business Associate in accordance with 45 CFR 164.410, 164.504(e)(2)(ii)(C) and 164.308(b) and 42 USC 17921. The Business Associate must report any improper access, use or disclosure of protected health information by: The Business Associate or its agents or subcontractors. In the event of a breach or suspected breach of protected health information, the report to the Covered Entity must be in writing and include the following: a brief description of the incident; the date of the incident; the date the incident was discovered by the Business Associate; a thorough description of the unsecured protected health information that was involved in the incident; the number of individuals whose protected health information was involved in the incident; and the steps the Business Associate is taking to investigate the incident and to protect against further incidents. The Covered Entity will determine if a breach of unsecured protected health information has occurred and will notify the Business Associate of the determination. If a breach of unsecured protected health information is determined, the Business Associate must take prompt corrective action to cure any such deficiencies and mitigate any significant harm that may have occurred to individual(s) whose information was disclosed inappropriately.
8. **Breach Notification Requirements.** If the Covered Entity determines a breach of unsecured protected health information by the Business Associate has occurred, the Business Associate will be responsible for notifying the individuals whose unsecured protected health information was breached in accordance with 42 USC 17932 and 45 CFR 164.404 through 164.406. The Business Associate must provide evidence to the Covered Entity that appropriate notifications to individuals and/or media,

when necessary, as specified in 45 CFR 164.404 and 45 CFR 164.406 has occurred. The Business Associate is responsible for all costs associated with notification to individuals, the media or others as well as costs associated with mitigating future breaches. The Business Associate must notify the Secretary of all breaches in accordance with 45 CFR 164.408 and must provide the Covered Entity with a copy of all notifications made to the Secretary.

9. **Breach Pattern or Practice by Covered Entity.** Pursuant to 42 USC 17934, if the Business Associate knows of a pattern of activity or practice of the Covered Entity that constitutes a material breach or violation of the Covered Entity's obligations under the Contract or Addendum, the Business Associate must immediately report the problem to the Secretary.
10. **Data Ownership.** The Business Associate acknowledges that the Business Associate or its agents or subcontractors have no ownership rights with respect to the protected health information it accesses, maintains, creates, retains, modifies, records, stores, destroys, or otherwise holds, transmits, uses or discloses.
11. **Litigation or Administrative Proceedings.** The Business Associate shall make itself, any subcontractors, employees, or agents assisting the Business Associate in the performance of its obligations under the agreement or Addendum, available to the Covered Entity, at no cost to the Covered Entity, to testify as witnesses, or otherwise, in the event litigation or administrative proceedings are commenced against the Covered Entity, its administrators or workforce members upon a claimed violation of HIPAA, the Privacy and Security Rule, the HITECH Act, or other laws relating to security and privacy.
12. **Minimum Necessary.** The Business Associate and its agents and subcontractors shall request, use and disclose only the minimum amount of protected health information necessary to accomplish the purpose of the request, use or disclosure in accordance with 42 USC 17935 and 45 CFR 164.514(d)(3).
13. **Policies and Procedures.** The Business Associate must adopt written privacy and security policies and procedures and documentation standards to meet the requirements of HIPAA and the HITECH Act as described in 45 CFR 164.316 and 42 USC 17931.
14. **Privacy and Security Officer(s).** The Business Associate must appoint Privacy and Security Officer(s) whose responsibilities shall include: monitoring the Privacy and Security compliance of the Business Associate; development and implementation of the Business Associate's HIPAA Privacy and Security policies and procedures; establishment of Privacy and Security training programs; and development and implementation of an incident risk assessment and response plan in the event the Business Associate sustains a breach or suspected breach of protected health information.
15. **Safeguards.** The Business Associate must implement safeguards as necessary to protect the confidentiality, integrity, and availability of the protected health information the Business Associate accesses, maintains, creates, retains, modifies, records, stores, destroys, or otherwise holds, transmits, uses or discloses on behalf of the Covered Entity. Safeguards must include administrative safeguards (e.g., risk analysis and designation of security official), physical safeguards (e.g., facility access controls and workstation security), and technical safeguards (e.g., access controls and audit controls) to the confidentiality, integrity and availability of the protected health information, in accordance with 45 CFR 164.308, 164.310, 164.312, 164.316 and 164.504(e)(2)(ii)(B). Sections 164.308, 164.310 and 164.312 of the CFR apply to the Business Associate of the Covered Entity in the same manner that such sections apply to the Covered Entity. Technical safeguards must meet the standards set forth by the guidelines of the National Institute of Standards and Technology (NIST). The Business Associate agrees to only use or disclose protected health information as provided for by the agreement and Addendum and to mitigate, to the extent practicable, any harmful effect that is known to the Business Associate, of a use or disclosure, in violation of the requirements of this Addendum as outlined under 45 CFR 164.530(e)(2)(f).
16. **Training.** The Business Associate must train all members of its workforce on the policies and procedures associated with safeguarding protected health information. This includes, at a minimum, training that covers the technical, physical and administrative safeguards needed to prevent inappropriate uses or disclosures of protected health information; training to prevent any intentional or unintentional use or disclosure that is a violation of HIPAA regulations at 45 CFR 160 and 164 and Public Law 111-5; and training that emphasizes the criminal and civil penalties related to HIPAA breaches or inappropriate uses or disclosures of protected health information. Workforce training of new employees must be completed within 30 days of the date of hire and all employees must be trained at least annually. The Business Associate must maintain written records for a period of six years. These records must document each employee that received training and the date the training was provided or received.
17. **Use and Disclosure of Protected Health Information.** The Business Associate must not use or further disclose protected health information other than as permitted or required by the agreement or as required by law. The Business Associate must not use or further disclose protected health information in a manner that would violate the requirements of the HIPAA Privacy and Security Rule and the HITECH Act.

III. PERMITTED AND PROHIBITED USES AND DISCLOSURES BY THE BUSINESS ASSOCIATE. The Business Associate agrees to these general use and disclosure provisions:

1. **Permitted Uses and Disclosures:**
   a. Except as otherwise limited in this Addendum, the Business Associate may use or disclose protected health information to perform functions, activities, or services for, or on behalf of, the Covered Entity as specified in the agreement, provided that such use or disclosure would not violate the HIPAA Privacy and Security Rule or the HITECH Act, if done by the Covered Entity in accordance with 45 CFR 164.504(e) (2) (i) and 42 USC 17935 and 17936.
   b. Except as otherwise limited by this Addendum, the Business Associate may use or disclose protected health information received by the Business Associate in its capacity as a Business Associate of the Covered Entity, as necessary, for the proper management and administration of the Business Associate, to carry out the legal responsibilities of the Business Associate, as required by law or for data aggregation purposes in accordance with 45 CFR 164.504(e)(2)(A), 164.504(e)(4)(i)(A), and 164.504(e)(2)(i)(B).
   c. Except as otherwise limited in this Addendum, if the Business Associate discloses protected health information to a third party, the Business Associate must obtain, prior to making any such disclosure, reasonable written assurances from the third party that such protected health information will be held confidential pursuant to this Addendum and only disclosed as required by law or for the purposes for which it was disclosed to the third party. The written agreement from the third party must include requirements to immediately notify the Business Associate of any

breaches of confidentiality of protected health information to the extent it has obtained knowledge of such breach. Refer to 45 CFR 164.502 and 164.504 and 42 USC 17934.

d. The Business Associate may use or disclose protected health information to report violations of law to appropriate federal and state authorities, consistent with 45 CFR 164.502(j)(1).

2. **Prohibited Uses and Disclosures:**
   a. Except as otherwise limited in this Addendum, the Business Associate shall not disclose protected health information to a health plan for payment or health care operations purposes if the patient has required this special restriction and has paid out of pocket in full for the health care item or service to which the protected health information relates in accordance with 42 USC 17935.
   b. The Business Associate shall not directly or indirectly receive remuneration in exchange for any protected health information, as specified by 42 USC 17935, unless the Covered Entity obtained a valid authorization, in accordance with 45 CFR 164.508 that includes a specification that protected health information can be exchanged for remuneration.

IV. OBLIGATIONS OF COVERED ENTITY

1. The Covered Entity will inform the Business Associate of any limitations in the Covered Entity's Notice of Privacy Practices in accordance with 45 CFR 164.520, to the extent that such limitation may affect the Business Associate's use or disclosure of protected health information.
2. The Covered Entity will inform the Business Associate of any changes in, or revocation of, permission by an individual to use or disclose protected health information, to the extent that such changes may affect the Business Associate's use or disclosure of protected health information.
3. The Covered Entity will inform the Business Associate of any restriction to the use or disclosure of protected health information that the Covered Entity has agreed to in accordance with 45 CFR 164.522 and 42 USC 17935, to the extent that such restriction may affect the Business Associate's use or disclosure of protected health information.
4. Except in the event of lawful data aggregation or management and administrative activities, the Covered Entity shall not request the Business Associate to use or disclose protected health information in any manner that would not be permissible under the HIPAA Privacy and Security Rule and the HITECH Act, if done by the Covered Entity.

V. TERM AND TERMINATION

1. **Effect of Termination:**
   a. Except as provided in paragraph (b) of this section, upon termination of this Addendum, for any reason, the Business Associate will return or destroy all protected health information received from the Covered Entity or created, maintained, or received by the Business Associate on behalf of the Covered Entity that the Business Associate still maintains in any form and the Business Associate will retain no copies of such information.
   b. If the Business Associate determines that returning or destroying the protected health information is not feasible, the Business Associate will provide to the Covered Entity notification of the conditions that make return or destruction infeasible. Upon a mutual determination that return, or destruction of protected health information is infeasible, the Business Associate shall extend the protections of this Addendum to such protected health information and limit further uses and disclosures of such protected health information to those purposes that make return or destruction infeasible, for so long as the Business Associate maintains such protected health information.
   c. These termination provisions will apply to protected health information that is in the possession of subcontractors, agents, or employees of the Business Associate.
2. **Term.** The Term of this Addendum shall commence as of the effective date of this Addendum herein and shall extend beyond the termination of the contract and shall terminate when all the protected health information provided by the Covered Entity to the Business Associate, or accessed, maintained, created, retained, modified, recorded, stored, or otherwise held, transmitted, used or disclosed by the Business Associate on behalf of the Covered Entity, is destroyed or returned to the Covered Entity, or, if it not feasible to return or destroy the protected health information, protections are extended to such information, in accordance with the termination.
3. **Termination for Breach of Agreement.** The Business Associate agrees that the Covered Entity may immediately terminate the agreement if the Covered Entity determines that the Business Associate has violated a material part of this Addendum.

VI. MISCELLANEOUS

1. **Amendment.** The parties agree to take such action as is necessary to amend this Addendum from time to time for the Covered Entity to comply with all the requirements of the Health Insurance Portability and Accountability Act (HIPAA) of 1996, Public Law No. 104-191 and the Health Information Technology for Economic and Clinical Health Act (HITECH) of 2009, Public Law No. 111-5.
2. **Clarification.** This Addendum references the requirements of HIPAA, the HITECH Act, the Privacy Rule and the Security Rule, as well as amendments and/or provisions that are currently in place and any that may be forthcoming.
3. **Indemnification.** Each party will indemnify and hold harmless the other party to this Addendum from and against all claims, losses, liabilities, costs and other expenses incurred as a result of, or arising directly or indirectly out of or in conjunction with:
   a. Any misrepresentation, breach of warranty or non-fulfillment of any undertaking on the part of the party under this Addendum; and
   b. Any claims, demands, awards, judgments, actions, and proceedings made by any person or organization arising out of or in any way connected with the party's performance under this Addendum.
4. **Interpretation.** The provisions of the Addendum shall prevail over any provisions in the agreement that may conflict or appear inconsistent with any provision in this Addendum. This Addendum and the agreement shall be interpreted as broadly as necessary to implement and comply with HIPAA, the HITECH Act, the Privacy Rule and the Security Rule. The parties agree that any ambiguity in this Addendum shall be resolved to permit the Covered Entity and the Business Associate to comply with HIPAA, the HITECH Act, the Privacy Rule and the Security Rule.

5. **Regulatory Reference.** A reference in this Addendum to a section of the HITECH Act, HIPAA, the Privacy Rule and Security Rule means the sections as in effect or as amended.
6. **Survival.** The respective rights and obligations of Business Associate under Effect of Termination of this Addendum shall survive the termination of this Addendum.

Compliance with this section is acknowledged by signing the subaward cover page of this packet.

STATE OF NEVADA
DEPARTMENT OF HEALTH AND HUMAN SERVICES
DIVISION OF PUBLIC & BEHAVIORAL HEALTH
NOTICE OF SUBAWARD

Section H is not applicable for this Subaward

Lyon County Board of County Commissioners Agenda Summary

Meeting Date: April 16, 2026

Agenda Item Number:
11.g

Subject:
For Possible Action: Approve a contract between Lyon County and JC Cleaning Solutions LLC for $8,680 to provide homemaker services to individuals within the Senior Services Case Management program.

Summary:
This contract is in place of the J&S Cleaning Solutions LLC contract approved prior this fiscal year. The company had two owners and now has one and is updated with the new title.

Financial Department Comments:

Approved As To Legal Form:

County Manager Comments:

Recommendation:

ATTACHMENTS
- JC Cleaning Solutions LLC Contract FY26

CONTRACT FOR SERVICES OF INDEPENDENT CONTRACTOR

A Contract between Lyon County, a political subdivision of the State of Nevada,
Acting By and Through Its

Board of County Commissioners
27 South Main Street, Yerington, Nevada 89447
Phone: (775) 463-6531 • Fax: (775) 463-6533

And

JC Cleaning Solutions LLC
Janice Comely (owner)
janice.jccleaningsolutions@gmail.com
(775) 301-0322
#NV202663551343

WHEREAS, NRS 244.1505 and NRS 244.320 authorizes counties to contract, subject to the approval of the board of county commissioners, for services of persons as independent contractors; and

WHEREAS, it is deemed that the service of Contractor are both necessary and in the best interests of Lyon County, a political subdivision of the State of Nevada;

NOW, THEREFORE, in consideration of the aforesaid premises, the parties mutually agree as follows:

1. REQUIRED APPROVAL. This Contract shall not become effective until and unless approved by the Lyon County Board of County Commissioners.

2. DEFINITIONS. "County" means Lyon County, a political subdivision of the State of Nevada, and its Board of County Commissioners, county manager, any county department or board identified herein, its officers, employees and immune contractors as defined in NRS §41.0307. "Independent Contractor" means a person or entity that performs services and/or provides goods for the County under the terms and conditions set forth in this Contract. "Fiscal Year" is defined as the period beginning July 1 and ending June 30 of the following year. The County and the Independent Contractor are also referred to as "parties" in this Contract.

3. CONTRACT TERM. This Contract shall be effective from March 30, 2026, subject to approval by the Lyon County Board of County Commission and expire on June 30, 2026, unless sooner terminated by either party as specified in paragraph (10).

4. NOTICE. Unless otherwise specified, termination shall not be effective until 15 calendar days after a party has served written notice of default, or without cause upon the other party. All notices or other communications required or permitted to be given under this Contract shall be in writing and shall be deemed to have been duly given if delivered personally in hand, by telephonic facsimile with simultaneous regular mail, or mailed certified mail, return receipt requested, postage prepaid on the date posted, and addressed to the other party at the corresponding address specified above.

5. INCORPORATED DOCUMENTS. The parties agree that the scope of work shall be specifically described; this Contract incorporates the following attachments in descending order of constructive precedence; a Contractor's Attachment shall not contradict or supersede any County specifications, terms, or conditions without written evidence of mutual assent to such change appearing in this Contract:

ATTACHMENT A: SPECIFICATIONS REQUESTED BY THE COUNTY;
SCOPE OF WORK

6. CONSIDERATION. The parties agree that Contractor will provide the services specified in paragraph (5) at a cost of $28.00 an hour not to exceed $8,680.00. The County does not agree to

reimburse Contractor for expenses unless otherwise specified in the incorporated attachments. Any intervening end to a fiscal year appropriation period shall be deemed an automatic renewal (not changing the overall Contract term) or a termination as the results of Board of County Commission appropriation may require.

7. ASSENT. The parties agree that the terms and conditions listed on incorporated attachments of this Contract are also specifically a part of this Contract and are limited only by their respective order of precedence and any limitations specified.

8. TIMELINESS OF BILLING SUBMISSION. The parties agree that timeliness of billing is of the essence to the Contract and recognize that the County is on a fiscal year. All billings for dates of service prior to July 1 must be submitted to the County no later than the first Friday in August of the same year.

9. INSPECTION & AUDIT.

a. Books and Records. Contractor agrees to keep and maintain under general accepted accounting principles (GAAP) full, true and complete records, contracts, books, and documents as are necessary to fully disclose to the County, State or United States Government, or their authorized representatives, upon audits or reviews, sufficient information to determine compliance with all state and federal regulations and statutes as well as Lyon County ordinances.

b. Inspection & Audit. Contractor agrees that the relevant books, records (written, electronic, computer related or otherwise), including, without limitation, relevant accounting procedures and practices of Contractor or its subcontractors, financial statements and supporting documentation, and documentation related to the work product shall be subject, at any reasonable time, to inspection, examination, review, audit, and copying at any office or location of Contractor where such records may be found, with or without notice by the County Auditor, the relevant County agency or its contracted examiners, the Lyon County Comptroller, County Manager, the Lyon County District Attorney, the State Legislative Auditor, and with regard to any federal funding, the relevant federal agency, the Comptroller General, the General Accounting Office, the Office of the Inspector General, or any of their authorized representatives. All subcontracts shall reflect requirements of this paragraph.

c. Period of Retention. All books, records, reports, and statements relevant to this Contract must be retained a minimum three years and for five years if any federal funds are used in the Contract. The retention period runs from the date of payment for the relevant goods or services by the County, or from the date of termination of the Contract, whichever is later. Retention time shall be extended when an audit is scheduled or in progress for a period reasonably necessary to complete an audit and/or to complete any administrative and judicial litigation which may ensue.

10. CONTRACT TERMINATION.

a. Termination Without Cause. Any discretionary or vested right of renewal notwithstanding, this Contract may be terminated upon written notice by mutual consent of both parties or unilaterally by either party without cause.

b. State Termination for Non-appropriation. The continuation of this Contract beyond the current fiscal year is subject to and contingent upon sufficient funds being appropriated, budgeted, and otherwise made available by the Lyon County Board of County Commissioners and/or federal sources. The County may terminate this Contract, and Contractor waives any and all claim(s) for damages, effective immediately upon receipt of written notice (or any date specified therein) of termination if for any reason the County or its departments or boards funding from the Lyon County Board of County Commissioners and/or federal sources is not appropriated or is withdrawn, limited, or impaired.

c. Cause Termination for Default or Breach. A default or breach may be declared with or without termination. This Contract may be terminated by either party upon written notice of default or breach to the other party as follows:

i. If Contractor fails to provide or satisfactorily perform any of the conditions, work, deliverables, goods, or services called for by this Contract within the time requirements specified in this Contract or within any granted extension of those time requirements; or

ii. If any state, county, city or federal license, authorization, waiver, permit, qualification or certification required by statute, ordinance, law, or regulation to be held by Contractor to provide the goods or services required by this Contract is for any reason denied, revoked, debarred, excluded, terminated, suspended, lapsed, or not renewed; or

iii. If Contractor becomes insolvent, subject to receivership, or becomes voluntarily or involuntarily subject to the jurisdiction of the bankruptcy court; or

iv. If the County materially breaches any material duty under this Contract and any such breach impairs Contractor's ability to perform; or

v. If it is found by the County that any quid pro quo or gratuities in the form of money, services, entertainment, gifts, or otherwise were offered or given by Contractor, or any agent or representative of Contractor, to any elected official, department head, officer or employee of the County with a view toward securing a contract or securing favorable treatment with respect to awarding, extending, amending, or making any determination with respect to the performing of such contract; or

vi. If it is found by the County that Contractor has failed to disclose any material conflict of interest relative to the performance of this Contract.

d. Time to Correct. Termination upon a declared default or breach may be exercised only after service of formal written notice as specified in paragraph (4), and the subsequent failure of the defaulting party within 15 calendar days of receipt of that notice to provide evidence, satisfactory to the aggrieved party, showing that the declared default or breach has been corrected.

e. Winding Up Affairs Upon Termination. In the event of termination of this Contract for any reason, the parties agree that the provisions of this paragraph survive termination:

i. The parties shall account for and properly present to each other all claims for fees and expenses and pay those which are undisputed and otherwise not subject to set off under this Contract. Neither party may withhold performance of winding up provisions solely based on nonpayment of fees or expenses accrued up to the time of termination;

ii. Contractor shall satisfactorily complete work in progress at the agreed rate (or a pro rata basis if necessary) if so requested by the County;

iii. Contractor shall execute any documents and take any actions necessary to effectuate an assignment of this Contract if so requested by the County;

iv. Contractor shall preserve, protect and promptly deliver into County possession all proprietary information in accordance with paragraph (21).

11. REMEDIES. Except as otherwise provided for by law or this Contract, the rights and remedies of the parties shall not be exclusive and are in addition to any other rights and remedies provided by law or equity, including, without limitation, actual damages, and to a prevailing party reasonable attorneys' fees and costs.

12. LIMITED LIABILITY. The County will not waive and intends to assert available NRS chapter 41 liability limitations in all cases. Contract liability of both parties shall not be subject to punitive damages. Liquidated damages shall not apply unless otherwise specified in the incorporated attachments. Damages for any County breach shall never exceed the amount of funds appropriated for payment under this Contract, but not yet paid to Contractor, for the fiscal year budget in existence at the time of the breach. Damages for any Contractor breach shall not exceed 150% of the contract maximum “not to exceed” value. Contractor’s tort liability shall not be limited.

13. FORCE MAJEURE. Neither party shall be deemed to be in violation of this Contract if it is prevented from performing any of its obligations hereunder due to strikes, failure of public transportation, civil or military authority, act of public enemy, accidents, fires, explosions, or acts of God, including, without limitation, earthquakes, floods, winds, or storms. In such an event the intervening cause must not be through the fault of the party asserting such an excuse, and the excused party is obligated to promptly perform in accordance with the terms of the Contract after the intervening cause ceases.

14. INDEMNIFICATION. To the fullest extent permitted by law, Contractor shall indemnify, hold harmless and defend, not excluding the County's right to participate, the County from and against all

liability, claims, actions, damages, losses, and expenses, including, without limitation, reasonable attorneys' fees and costs, arising out of any alleged negligent or willful acts or omissions of Contractor, its officers, employees and agents.

15. INDEPENDENT CONTRACTOR. Contractor is associated with the County only for the purposes and to the extent specified in this Contract, and in respect to performance of the contracted services pursuant to this Contract, Contractor is and shall be an independent contractor and, subject only to the terms of this Contract, shall have the sole right to supervise, manage, operate, control, and direct performance of the details incident to its duties under this Contract. Nothing contained in this Contract shall be deemed or construed to create a partnership or joint venture, to create relationships of an employer-employee or principal-agent, or to otherwise create any liability for the County whatsoever with respect to the indebtedness, liabilities, and obligations of Contractor or any other party. Contractor shall be solely responsible for, and the County shall have no obligation with respect to: (1) withholding of income taxes, FICA or any other taxes or fees; (2) industrial insurance coverage; (3) participation in any group insurance plans available to employees of the County; (4) participation or contributions by either Contractor or the County to the Public Employees Retirement System; (5) accumulation of vacation leave or sick leave; or (6) unemployment compensation coverage provided by the County. Contractor shall indemnify and hold County harmless from, and defend County against, any and all losses, damages, claims, costs, penalties, liabilities, and expenses arising or incurred because of, incident to, or otherwise with respect to any such taxes or fees. Neither Contractor nor its employees, agents, or representatives shall be considered employees, agents, or representatives of the County. The County and Contractor shall evaluate the nature of services and term negotiated in order to determine "independent contractor" status and shall monitor the work relationship throughout the term of the Contract to ensure that the independent contractor relationship remains as such.

16. INSURANCE SCHEDULE. Unless expressly waived in writing by the County, Contractor, as an independent contractor and not an employee of the County, must carry policies of insurance in amounts specified in this Insurance Schedule and pay all taxes and fees incident hereunto. The County shall have no liability except as specifically provided in the Contract. The Contractor shall not commence work before: (1) Contractor has provided the required evidence of insurance to the Contracting Agency of the County, and (2) The County has approved the insurance policies provided by the Contractor. Prior approval of the insurance policies by the County shall be a condition precedent to any payment of consideration under this Contract. County's approval of any changes to insurance coverage during the course of performance shall constitute an ongoing condition subsequent this Contract. Any failure of the County to timely approve shall not constitute a waiver of the condition.

a. ***Insurance Coverage*** The Contractor shall, at the Contractor's sole expense, procure, maintain and keep in force for the duration of the Contract the following insurance conforming to the minimum requirements specified below. Unless specifically specified herein or otherwise agreed to by the County, the required insurance shall be in effect prior to the commencement of work by the Contractor and shall continue in force as appropriate until the latter of:

i. Final acceptance by the County of the completion of this Contract; or

ii. Such time as the insurance is no longer required by the County under the terms of this Contract.

Any insurance or self-insurance available to the County shall be in excess of and non-contributing with any insurance required from Contractor by the County. Contractor's insurance policies shall apply on a primary basis. Until such time as the insurance is no longer required by the County, Contractor shall provide the County with renewal or replacement evidence of insurance no less than thirty (30) days before the expiration or replacement of the required insurance. If at any time during the period when insurance is required by the Contract, an insurer or surety shall fail to comply with the requirements of this Contract, as soon as Contractor has knowledge of any such failure, Contractor shall immediately notify the County in writing and immediately replace such insurance or bond with an insurer meeting the requirements.

b. ***Workers' Compensation and Employer's Liability Insurance***

i. Contractor shall provide proof of worker's compensation insurance as required of Nevada Revised Statutes Chapters 616A through 616D inclusive.

ii. Employer's Liability insurance with a minimum limit of $500,000 each employee per accident for bodily injury by accident or disease.

iii. If this contract is for temporary or leased employees, an "Alternate Employer" endorsement must be attached to the Contractor's workers' compensation insurance policy.

iv. If the Contractor qualifies as a sole proprietor as defined in NRS Chapter 616A.310, and has elected to not purchase industrial insurance for himself/herself, the sole proprietor must submit to the contracting County agency a fully executed "Affidavit of Rejection of Coverage Under NRS 616B.627 and NRS 617.210" form.

c. ***Commercial General Liability Insurance***

i. Minimum Limits required:

$2,000,000.00 General Aggregate
$1,000,000.00 Products & Completed Operations Aggregate
$1,000,000.00 Personal and Advertising Injury
$1,000,000.00 Each Occurrence

ii. Coverage shall be on an occurrence basis and shall cover liability arising from premises, operations, independent contractors, completed operations, personal injury, products, civil rights lawsuits, Title VII actions and liability assumed under an insured contract (including the tort liability of another assumed in a business contract).

d. ***Business Automobile Liability Insurance***

i. Minimum Limit required**:** **$1,000,000.00** Each Occurrence for bodily injury and property damage.

ii. Coverage shall be for "any auto" (including owned, non-owned and hired vehicles).

iii. If necessary, the policy shall be endorsed to provide contractual liability coverage.

e. ***Professional Liability Insurance***

i. Minimum Limit required: **$ 0.00** Each Claim.
ii. Retroactive date: Prior to commencement of the performance of the contract.
iii. Discovery period: Three (3) years after termination date of contract.
iv. A certified copy of this policy may be required.

f. ***Umbrella or Excess Liability Insurance***

i. May be used to achieve the above minimum liability limits.
ii. Shall be endorsed to state it is "As Broad as Primary Policy"

g. ***Commercial Crime Insurance***

i. Minimum Limit required: **$ 0.00** Loss for Employee Dishonesty.

ii. This insurance shall be underwritten on a blanket form amending the definition of "employee" to include all employees of the Vendor regardless of position or category.

h. ***Performance Security***

i. Amount required: **$ 0.00**

ii. Security may be in the form of surety bond, Certificate of Deposit or Treasury Note made payable to "Lyon County" only.

iii. The security shall be deposited with the contracting State agency no later than ten (10) working days following award of the Contract to Contractor.

iv. Upon successful Contract completion, the security and all interest earned, if any, shall be returned to the Contractor.

i. ***General Requirements***

i. Amount required: **$ 0.00**

ii. Additional Insured: By endorsement to the general liability insurance policy evidenced by Contractor, Lyon County, its departments and boards, officers, employees and immune contractors as defined in NRS41.0307 shall be named as additional insureds for all liability arising from the Contract.

iii. Waiver of Subrogation: Each liability insurance policy shall provide for a waiver of subrogation as to additional insureds.

iv. Cross-Liability: All required liability policies shall provide cross-liability coverage as would be achieve under the standard ISO separation of insureds clause.

v. Deductibles and Self-Insured Retentions: Insurance maintained by Contractor shall apply on a first dollar basis without application of a deductible or self-insured retention unless otherwise specifically agreed to by the County. Such County approval shall not relieve Contractor from the obligation to pay any deductible or self-insured retention. Any deductible or self-insured retention shall not exceed $5,000 per occurrence, unless otherwise approved by the Lyon County Risk Manager and/or County Manager.

vi. Policy Cancellation: Except for ten days notice for non-payment of premium, each insurance policy shall be endorsed to state that; without thirty (30) days prior written notice to the County, c/o Contracting Agency, the policy shall not be canceled, non-renewed or coverage and /or limits reduced or materially altered, and shall provide that notices required by this paragraph shall be sent by certified mailed to the address shown below.

vii. Approved Insurer: Each insurance policy shall be:

1. Issued by insurance companies authorized to do business in the State of Nevada or eligible surplus lines insurers acceptable to the State and having agents in Nevada upon whom service of process may be made, and

2. Currently rated by A.M. Best as "A-VII" or better.

j. ***Evidence of Insurance***

Prior to the start of any Work, Contractor must provide the following documents to the contracting State agency:

i. Certificate of Insurance: The Acord 25 Certificate of Insurance form or a form substantially similar must be submitted to the State to evidence the insurance policies and coverages required of Contractor.

ii. Additional Insured Endorsement: An Additional Insured Endorsement (CG20 10 or C20 26) , signed by an authorized insurance company representative, **must** be submitted to the County to evidence the endorsement of the County as an additional insured per General Requirements, Subsection a above.

iii. Schedule of Underlying Insurance Policies: If Umbrella or Excess policy is evidenced to comply with minimum limits, a copy of the Underlyer Schedule from the Umbrella or Excess insurance policy may be required.

iv. Review and Approval: Documents specified above must be submitted for review and approval by the State prior to the commencement of work by Contractor. Neither approval by the State nor failure to disapprove the insurance furnished by Contractor shall relieve Contractor of Contractor's full responsibility to provide the insurance required by this Contract. Compliance with the insurance requirements of this Contract shall not limit the liability of Contractor or its sub-contractors, employees or agents to the State or others, and shall be in addition to and not in lieu of any other remedy available to the State under this Contract or otherwise. The State reserves the right to request and review a copy of any required insurance policy or endorsement to assure compliance with these requirements.

Mail all required insurance documents to the Contracting Agency identified on page one of the contract.

17. COMPLIANCE WITH LEGAL OBLIGATIONS. Contractor shall procure and maintain for the duration of this Contract any state, county, city or federal license, authorization, waiver, permit, qualification or certification required by statute, ordinance, law, or regulation to be held by Contractor to provide the goods or services required by this Contract. Contractor will be responsible to pay all taxes, assessments, fees, premiums, permits, and licenses required by law. Real property and personal property taxes are the responsibility of Contractor in accordance with NRS 361.157 and 361.159. Contractor agrees to be responsible for payment of any such government obligations not paid by its subcontractors during performance of this Contract. The State may set-off against consideration due any delinquent government obligation in accordance with NRS 353C.190.

18. WAIVER OF BREACH. Failure to declare a breach or the actual waiver of any particular breach of the Contract or its material or nonmaterial terms by either party shall not operate as a waiver by such party of any of its rights or remedies as to any other breach.

19. SEVERABILITY. If any provision contained in this Contract is held to be unenforceable by a court of law or equity, this Contract shall be construed as if such provision did not exist and the nonenforceability

of such provision shall not be held to render any other provision or provisions of this Contract unenforceable.

20. ASSIGNMENT/DELEGATION. To the extent that any assignment of any right under this Contract changes the duty of either party, increases the burden or risk involved, impairs the chances of obtaining the performance of this Contract, attempts to operate as a novation, or includes a waiver or abrogation of any defense to payment by State, such offending portion of the assignment shall be void, and shall be a breach of this Contract. Contractor shall neither assign, transfer nor delegate any rights, obligations or duties under this Contract without the prior written consent of the State.

21. STATE OWNERSHIP OF PROPRIETARY INFORMATION. Any reports, histories, studies, tests, manuals, instructions, photographs, negatives, blue prints, plans, maps, data, system designs, computer code (which is intended to be consideration under the Contract), or any other documents or drawings, prepared or in the course of preparation by Contractor (or its subcontractors) in performance of its obligations under this Contract shall be the exclusive property of the State and all such materials shall be delivered into State possession by Contractor upon completion, termination, or cancellation of this Contract. Contractor shall not use, willingly allow, or cause to have such materials used for any purpose other than performance of Contractor's obligations under this Contract without the prior written consent of the State. Notwithstanding the foregoing, the State shall have no proprietary interest in any materials licensed for use by the State that are subject to patent, trademark or copyright protection.

22. PUBLIC RECORDS. Pursuant to NRS 239.010, information or documents received from Contractor may be open to public inspection and copying. The State will have the duty to disclose unless a particular record is made confidential by law or a common law balancing of interests. Contractor may label specific parts of an individual document as a "trade secret" or "confidential" in accordance with NRS 333.333, provided that Contractor thereby agrees to indemnify and defend the State for honoring such a designation. The failure to so label any document that is released by the State shall constitute a complete waiver of any and all claims for damages caused by any release of the records.

23. CONFIDENTIALITY. Contractor shall keep confidential all information, in whatever form, produced, prepared, observed or received by Contractor to the extent that such information is confidential by law or otherwise required by this Contract.

24. FEDERAL FUNDING. In the event federal funds are used for payment of all or part of this Contract:

a. Contractor certifies, by signing this Contract, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal department or agency. This certification is made pursuant to the regulations implementing Executive Order 12549, Debarment and Suspension, 28 C.F.R. pt. 67, § 67.510, as published as pt. VII of the May 26, 1988, Federal Register (pp. 19160-19211), and any relevant program-specific regulations. This provision shall be required of every subcontractor receiving any payment in whole or in part from federal funds.

b. Contractor and its subcontractors shall comply with all terms, conditions, and requirements of the Americans with Disabilities Act of 1990 (P.L. 101-136), 42 U.S.C. 12101, as amended, and regulations adopted thereunder contained in 28 C.F.R. 26.101-36.999, inclusive, and any relevant program-specific regulations.

c. Contractor and its subcontractors shall comply with the requirements of the Civil Rights Act of 1964, as amended, the Rehabilitation Act of 1973, P.L. 93-112, as amended , and any relevant program-specific regulations, and shall not discriminate against any employee or offeror for employment because of race, national origin, creed, color, sex, religion, age, disability or handicap condition (including AIDS and AIDS-related conditions.)

25. LOBBYING The parties agree, whether expressly prohibited by federal, State or local law, or otherwise, that no funding associated with this contract will be used for any purpose associated with or related to lobbying or influencing or attempting to lobby or influence for any purpose the following:

a. Any federal, state, county or local agency, legislature, commission, counsel or board;

b. Any federal, state, county or local legislator, commission member, counsel member, board member, or other elected official; or

c. Any officer or employee of any federal, state, county or local agency; legislature, commission, counsel or board.

26. WARRANTIES.

a. General Warranty. Contractor warrants that all services, deliverables, and/or work product under this Contract shall be completed in a workmanlike manner consistent with standards in the trade, profession, or industry; shall conform to or exceed the specifications set forth in the incorporated attachments; and shall be fit for ordinary use, of good quality, with no material defects.

b. System Compliance. Contractor warrants that any information system application(s) shall not experience abnormally ending and/or invalid and/or incorrect results from the application(s) in the operating and testing of the business of the State. This warranty includes, without limitation, century recognition, calculations that accommodate same century and multicentury formulas and data values and date data

interface values that reflect the century. Pursuant to NRS 41.0321, the State is immune from liability due to any failure of any incorrect date being produced, calculated or generated by a computer or other information system.

27. PROPER AUTHORITY. The parties hereto represent and warrant that the person executing this Contract on behalf of each party has full power and authority to enter into this Contract. Contractor acknowledges that as required by statute or regulation this Contract is effective only after approval by the State Board of Examiners and only for the period of time specified in the Contract. Any services performed by Contractor before this Contract is effective or after it ceases to be effective are performed at the sole risk of Contractor.

28. GOVERNING LAW; JURISDICTION. This Contract and the rights and obligations of the parties hereto shall be governed by, and construed according to, the laws of the State of Nevada, without giving effect to any principle of conflict-of-interest that would require the application of the law of any other jurisdiction. Contractor consents to the jurisdiction of the Nevada district courts for enforcement of this Contract.

29. ENTIRE CONTRACT AND MODIFICATION. This Contract and its integrated attachment(s) constitute the entire agreement of the parties and such are intended as a complete and exclusive statement of the promises, representations, negotiations, discussions, and other agreements that may have been made in connection with the subject matter hereof. Unless an integrated attachment to this Contract specifically displays a mutual intent to amend a particular part of this Contract, general conflicts in language between any such attachment and this Contract shall be construed consistent with the terms of this Contract. Unless otherwise expressly authorized by the terms of this Contract, no modification or amendment to this Contract shall be binding upon the parties unless the same is in writing and signed by the respective parties hereto and approved by the Board of County Commissioners.

IN WITNESS WHEREOF, the parties hereto have caused this Contract to be signed and intend to be legally bound thereby.

Lorie J Comely — 03/31/2026

Independent Contractor's Signature — Date

JC Cleaning Solution LLC - owner

Independent Contractor's Title

[signature] — 4/7/26

Shayla Holmes, Director — Date
Lyon County Human Services

APPROVED BY LYON COUNTY BOARD OF COUNTY COMMISSIONERS

By: Scott Keller — Date
Board of County Commissioners
Lyon County

REVIEWED AS TO FORM ONLY

Stephen B. Rye, District Attorney — Date

Legal Counsel for Independent Contractor — Date

REVIEWED AS TO INSURANCE REQUIREMENTS

Josh Foli, Lyon County Risk Manager	Date

ATTACHMENT A

SCOPE OF WORK

1. PURPOSE

To provide homemaker service to frail individuals, age 60 and older, who are unable to perform some or all of the necessary homemaker activities based on an assessment of their functional abilities. Homemaker services are designed to, in a dignified manner, sustain older individuals in their communities and homes.

2. UNDERSTANDINGS

Lyon County Human Services (LCHS) does not promise or guarantee the number of homemaker clients referred or the number of homemaker service units authorized.

3. LYON COUNTY HUMAN SERVICES (LCHS) WILL

3.1. Be responsible for scheduling assessments, reassessments, and eligibility determinations.

3.2. Approve homemaker service plans. Service plans function as prior authorization for homemaker services.

3.3. Conduct quality reviews with clients at the 1 month, 3 month, and 9 month of service marks. Provide **JC Cleaning Solutions LLC** written summaries, to include findings, of reviews. Work with **JC Cleaning Solutions to** address and resolve discrepancies through the predetermined communications process outlined below.

3.4. Reimburse **JC Cleaning Solutions for** services provided in accordance with service plans. Holiday pay, over-time, or other instances of time and a half pay will not be reimbursed by **LCHS.**

3.5. Provide **JC Cleaning Solutions a** copy of LCHS's homemaker services policy and procedure, and Aging and Disability Services Division (ADSD) Service Specifications.

CONTRACTOR WILL

3.6. Provide homemaker services in accordance with LCHS services plans.

3.7. Schedule directly with the clients based on staff and client availability. Placing courtesy reminder calls to clients prior to the appointment.

3.8. Provide the additional documentation required per the ADSD Homemaker service specifications.

3.8.1. **Homemaker Activity Record**: A homemaker activity record and timecard is required to be completed after each service visit and must contain the following documentation:

3.8.1.1. Name of client and date of service;

3.8.1.2. Housekeeping and chore tasks provided to the client, including any services provided in addition to those specified in the service plan.

3.8.1.3. Homemaker's time of arrival and departure.

3.8.1.4. Signatures of client (or client's representative) and homemaker.

3.8.1.5. A list of authorized services from the service plan not provided to the client and a brief explanation why they were not provided.

3.9. **Client signatures**: Client signatures are to be obtained only after services have been provided.

3.10. Within 30 days of notice, create corrective action plans to address and resolve program discrepancies identified by **LCHS**. Work with **LCHS** to resolve discrepancies.

3.11. Maintain supervisory coverage during the hours of which homemaker services are provided.

3.11.1. Conduct and document background checks from a valid fingerprint-based entity for all employees who provide homemaker services to **LCHS** clients. Professionals are exempt from this requirement if they are licensed and bonded. License and bond must be provided annually to **LCHS**.

3.11.2. Signed ADSD Self-Declarations must be provided annually to **LCHS** for all employees providing Homemaker services.

3.11.3. If the background check returns a record of criminal history and the employee indicates that record is incorrect, 30 days are allowed to correct the record however, these individuals must be directly supervised during the 30-day period of review.

3.11.4. Conviction of the crimes found in NRS 449.174, 1(a) (1-15), will disqualify persons from working for programs funded by the Aging and Disability Services Division (ADSD) and therefore will not be permitted to work with **LCHS** clients.

3.11.5. Individuals for whom the background check results are pending may not have unsupervised access to clients until satisfactory results are received.

3.12. Take full responsibility and liability for property and/or physical injury involving **LCHS** homemaker clients.

3.13. Abuse, Neglect, Exploitation, Isolation, or abandonment Older Persons and Vulnerable Persons: Comply with mandatory reporting requirements set forth in NRS Chapters 200 (Crimes against the Person) and 427A (Services to Aging Persons and Persons with Disabilities).

3.14. Older Americans Act (OAA): Comply with applicable OAA laws and regulations.

3.15. HIPAA: Comply with Health Insurance Portability and Accountability Act (HIPAA) laws and regulations.

4. SPECIFICATIONS

4.1. **Unit of Measure**: One unit equals one hour.

4.2. **Required Services**

4.2.1. General Cleaning: General cleaning to include vacuuming, mopping, sweeping, cleaning bathroom(s), cleaning kitchen, emptying trash, dusting, changing linens and/or washing laundry based on the client's desires determined through person centered planning.

4.2.2. Mail: Pick-up on-site mail.

5. COMPLAINT AND COMMUNICATION PROCESS

For all consumer complaints reported to either party, an incident report will be completed and subsequent actions will be followed in accordance with **JC Cleaning Solutions** policies and procedures.

5.1. **LCHS** will be responsible for resolving:

5.1.1. "No shows" **LCHS** will place services on hold until client is contacted.

5.1.2. Early dismissals **LCHS** will contact client and provide a written summary of solution to **JC Cleaning Solutions.**

5.1.3. Environments that are out of the scope of **JC Cleaning Solutions abilities** and will provide a written summary of the solution to the **JC Cleaning Solutions.**

5.2. **Contractor** will be responsible for:

5.2.1. Notify **LCHS** of any **JC Cleaning Solutions** or client requested scheduling changes that will impact service completion. This includes "no shows" and early dismissals.

5.2.2. Notifying **LCHS** of any elder protective service reports made regarding **LCHS** clients in accordance with Eden Home Care's policies and procedures.

5.2.3. Notifying **LCHS** of any environmental or life changes that have be noted or disclosed to **JC Cleaning Solutions. LCHS** will provide additional services, information, and referrals to address the needs of the client.

5.2.4. Resolving any complaints regarding **JC Cleaning Solutions** staff and services and provide subsequent actions in accordance with **JC Cleaning Solution's** policies and procedures.

5.3. Appeal Process

5.3.1. In the event that a solution is not acceptable by **JC Cleaning Solutions** or **LCHS** a written request to appeal will be submitted to **LCHS** Director.

5.3.2. Within 30 days of the receipt of the appeal the **LCHS** Director will schedule a conference with **JC Cleaning Solutions** and Director where a final outcome will be identified.

Lyon County Board of County Commissioners Agenda Summary

Meeting Date: April 16, 2026

Agenda Item Number:
11.h

Subject:
For Possible Action: Review and approve the updated Interlocal Contract Between Public Agencies between the Secretary of State and the Lyon County Clerk in the annual amount of $25,000. The agreement will become effective upon approval and will expire on June 30, 2028. The term of service is from July 1, 2026, through June 30, 2028. This amount represents Lyon County's share of the annual software and maintenance costs for Nevada's statewide voter registration database.

Summary:

Financial Department Comments:

Approved As To Legal Form:

County Manager Comments:

Recommendation:

ATTACHMENTS
- Lyon VREMS Interlocal - Poll Pads - v3
- 2026 County Interlocal Agreement Notification

CETS #:	
Agency Reference #:	

INTERLOCAL CONTRACT BETWEEN PUBLIC AGENCIES

A Contract Between the State of Nevada
Acting by and through its

Public Entity #1:	**Secretary of State**
Address:	**101 N Carson Street, Suite 3**
City, State, Zip Code:	**Carson City, NV 89701**
Contact:	**Mark Wlaschin, Deputy Secretary of State for Elections**
Phone:	**(775) 684-5720**
Fax:	**(775) 684-5718**
Email:	**mwlaschin@sos.nv.gov**

Public Entity #2:	**Lyon County Clerk**
Address:	**27 South Main Street**
City, State, Zip Code:	**Yerington, NV 89447-2571**
Contact:	**Staci Lindberg**
Phone:	**(775) 463-6301**
Fax:	**(775) 463-5305**
Email:	**slindberg@lyon-county.org**

WHEREAS, NRS 277.180 authorizes any one or more public agencies to contract with any one or more other public agencies to perform any governmental service, activity or undertaking which any of the public agencies entering into the contract is authorized by law to perform; and

WHEREAS, it is deemed that the services hereinafter set forth are both necessary and in the best interests of the State of Nevada.

WHEREAS, the passage of Assembly Bill 422 during the 2021 Legislative Session directed the Secretary of State to establish and maintain a centralized, top-down database that collects and stores information relating to voter preregistration and registration from all counties and the Office of the Nevada Secretary of State ("SOS") has determined that such services support the integrity of elections in this State and has thus procured such a Voter Registration database, Election Management System, and associated equipment from KNOWiNK to be deployed at Lyon County ("County"), subject to the terms and conditions set forth in a written contract between SOS and KNOWiNK, and

WHEREAS, the SOS and County wish to enter into this contract to further set forth the duties and obligations of the parties.

NOW, THEREFORE, in consideration of the aforesaid premises, the parties mutually agree as follows:

1. **REQUIRED APPROVAL**. This Contract shall not become effective until and unless approved by appropriate official action of the governing body of each party.

CETS #:	
Agency Reference #:	

2. **DEFINITIONS.**

TERM	DEFINITION
State	The State of Nevada and any State agency identified herein, its officers, employees and immune contractors.
Contracting Entity	The public entities identified above.
Fiscal Year	The period beginning July 1st and ending June 30th of the following year.
Contract	Unless the context otherwise requires, 'Contract' means this document titled Interlocal Contract Between Public Agencies and all Attachments or Incorporated Documents.
Voter Registration Database	An electronic storage system developed and administered by the SOS that contains the official voter registration record for every voter in the state.
Election Management System	Software application used to configure, program, and report election results from voting system components, including the ballot definition and the election reporting subsystem. The election management system will provide utilities for election administration tasks.
Electronic Rosters	Electronic voter check-in and verification equipment.
Statewide Voter Registration list	A computerized statewide voter registration list is a single, uniform, centralized, interactive computerized voter registration list that is technically and functionally able to perform task within a state for all.
Change Order	A form of agreement or transaction document amending services and/or system.
Enhancements	Improvements to or additional components of the services or that add functionality.

3. **COUNTY RESPONSIBILITIES.**

The County hereby agrees that it will undertake the following:

A. The County shall be responsible beginning in fiscal year 2027 for the cost to maintain the KNOWiNK ePulse, ABM (Apple Business Management) and Poll Pads.

B. The SOS shall purchase initial poll pads, which will also include cradle points, charging carts, and thermal paper required to provide the services. The County shall be responsible for payment of damaged poll pads, flip stands, printers, and transport cases. They will also be responsible for replacement stylus', replacement accessories, and replacement paper.

C. The County shall be responsible for any cellular and/or wireless data usage provided by the State, utilized outside of an election. An amendment to this interlocal will be executed to increase the total contract amount to cover the data used.

D. The Counties shall be responsible for paying their respective rate based upon a tiered rate cost structure (Attachment A) to maintain KNOWiNK Total Vote EM system beginning in fiscal year 2027.

E. The County shall purchase scanners that are compatible with the KNOWiNK TotalVote EM system to scan paper applications for processing, if applicable.

CETS #:	
Agency Reference #:	

F. During the period that the County is receiving Services, the County agrees to provide the following:

1. County will be responsible for voter registration and voter list maintenance.

2. Required staff who have access to the centralized voter registration database to use and maintain MFA (Multi-Factor Authentication) when accessing the States centralized voter registration database.

3. Provide adequate security to prevent unauthorized access from altering the State Voter Registration List.

4. Access protocols to identify appropriate classes of authorized users. This will be based on the definition of roles in the application structure provided by the State.

5. Written notification to State of any requested enhancements or change orders to the KNOWiNK Total Vote and ePulse-Poll Pad system so they may be reviewed for approval by the Secretary of State and prioritized as necessary.

6. The County shall provide active involvement with the State and KNOWiNK to resolve any tickets requiring County input or action; and

7. Reasonable assistance in remotely installing and troubleshooting devices including hardware and communications.

4. **STATE RESPONSIBILITIES.**

As consideration for the services provided to the County, the SOS agrees to the following:

A. The SOS shall pay to KNOWiNK the costs for such services as set forth in the contract between KNOWiNK and the SOS. The parties acknowledge that the SOS will be solely responsible for payment of the costs of all services provided to the County under this Contract.

B. The SOS shall purchase initial poll pads, which will also include cradle points, charging carts, and thermal paper required to provide the services. After the initial purchase it will be the responsibility of the County to pay for additional hardware.

C. The SOS will cover the initial costs of the contract which will not exceed the end of fiscal year 2026. Beginning in fiscal year 2027 of the Contract, County will be responsible for their respective rate, payable each fiscal year, of the contract for continued maintenance and licensing fees, hosting fees, and data usage of the voter registration database. This respective rate is based upon a tiered rate cost structure.

D. The SOS will review county requests for additional modules, enhancements, and modifications to the system. If the additional modules will be used by 2 or more counties then the SOS will pay the costs of the implementation of the modules and associated training.

E. The SOS will pay the cost to provide technical support and training of the KNOWiNK EM system as needed .

5. **INFORMATION SHARING**

As a condition to receiving the services specified in this Contract, the County acknowledges and agrees that KNOWiNK:

A. Shall timely share all incident notification reports developed involving the County as part of the service with the SOS during the term of this Contract; and

B. Shall have the right to disclose relevant aspects of information identified as part of the services to its officers and employees and to KNOWiNK's federal partners if they agree to maintain the confidentiality of the information.

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6. **CONTRACT TERM.** This Contract shall be effective as noted below, unless sooner terminated by either party as specified in ***Section 7, Termination***.

Effective From:	Upon Approval	To:	June 30, 2028

7. **TERMINATION**. This Contract may be terminated by either party prior to the date set forth in ***Section 6, Contract Term***, provided that a termination shall not be effective until **30** days after a party has served written notice upon the other party. This Contract may be terminated by mutual consent of both parties or unilaterally by either party without cause. The parties expressly agree that this Contract shall be terminated immediately if for any reason State and/or federal funding ability to satisfy this Contract is withdrawn, limited, or impaired.

8. **NOTICE**. All communications, including notices, required or permitted to be given under this Contract shall be in writing and directed to the parties at the addresses stated above. Notices may be given: (a) by delivery in person; (b) by a nationally recognized next day courier service, return receipt requested; or (c) by certified mail, return receipt requested. If specifically requested by the party to be notified, valid notice may be given by facsimile transmission or email to the address(es) such party has specified in writing.

9. **INCORPORATED DOCUMENTS**. The parties agree that this Contract is inclusive of the following Attachments. This Contract incorporates the following Attachments in descending order of constructive precedence:

ATTACHMENT A:	County and Party Active Voters Tiered Cost Structure

Any provision, term or condition of an Attachment that contradicts the terms of this Contract, or that would change the obligations of the State under this Contract, shall be void and unenforceable.

10. **CONSIDERATION**. The parties agree that the services specified in ***Section 9, Incorporated Documents*** at a cost as noted below:

$25,000.00	per	fiscal year. Payable upon receipt of the invoice as invoiced by the Secretary of State.

Total Contract Not to Exceed:	$50,000.00

Any intervening end to a biennial appropriation period shall be deemed an automatic renewal (not changing the overall Contract term) or a termination as the result of legislative appropriation may require.

11. **ASSENT**. The parties agree that the terms and conditions listed in the incorporated Attachments of this Contract are also specifically a part of this Contract and are limited only by their respective order of precedence and any limitations expressly provided.

12. **INSPECTION & AUDIT**

A. Books and Records. Each party agrees to keep and maintain under general accepted accounting principles full, true and complete records, agreements, books, and document as are necessary to fully disclose to the State or United States Government, or their authorized representatives, upon audits or reviews, sufficient information to determine compliance with all State and federal regulations and statutes.

B. Inspection & Audit. Each party agrees that the relevant books, records (written, electronic, computer related or otherwise), including but not limited to relevant accounting procedures and practices of the party, financial statements and supporting documentation, and documentation related to the work product shall be subject, at any reasonable time, to inspection, examination, review, audit, and copying at any office or location where such records may be found, with or without notice by the State Auditor, Employment Security, the Department of Administration, Budget Division, the Nevada State Attorney General's Office or its Fraud Control Units, the State Legislative Auditor, and with regard to any federal funding, the relevant federal agency, the Comptroller General, the General Accounting Office, the Office of the Inspector General, or any of their authorized representatives.

C. Period of Retention. All books, records, reports, and statements relevant to this Contract must be retained a minimum three years and for five years if any federal funds are used in this Contract. The retention period runs from the date of termination of this Contract. Retention time shall be extended when an audit is scheduled or in progress for a period reasonably necessary to complete an audit and/or to complete any administrative and judicial litigation which may ensue.

13. **BREACH - REMEDIES**. Failure of either party to perform any obligation of this Contract shall be deemed a breach. Except as otherwise provided for by law or this Contract, the rights and remedies of the parties shall not be exclusive and are in addition to any other rights and remedies provided by law or equity, including but not limited to actual damages, and to a prevailing party reasonable attorneys' fees and costs. It is specifically agreed that reasonable attorneys' fees shall not exceed $150.00 per hour.

14. **LIMITED LIABILITY**. The parties will not waive and intend to assert available NRS Chapter 41 liability limitations in all cases. Contract liability of both parties shall not be subject to punitive damages. Actual damages for any State or County breach shall never exceed the amount of funds which have been appropriated for payment under this Contract, but not yet paid, for the fiscal year budget in existence at the time of the breach.

15. **FORCE MAJEURE**. Neither party shall be deemed to be in violation of this Contract if it is prevented from performing any of its obligations hereunder due to strikes, failure of public transportation, civil or military authority, acts of public enemy, acts of terrorism, accidents, fires, explosions, or acts of God, including, without limitation, earthquakes, floods, winds, or storms. In such an event the intervening cause must not be through the fault of the party asserting such an excuse, and the excused party is obligated to promptly perform in accordance with the terms of the Contract after the intervening cause ceases.

16. **INDEMNIFICATION**. Neither party waives any right or defense to indemnification that may exist in law or equity.

17. **INDEPENDENT PUBLIC AGENCIES**. The parties are associated with each other only for the purposes and to the extent set forth in this Contract, and in respect to performance of services pursuant to this Contract, each party is and shall be a public agency separate and distinct from the other party and, subject only to the terms of this Contract, shall have the sole right to supervise, manage, operate, control, and direct performance of the details incident to its duties under this Contract. Nothing contained in this Contract shall be deemed or constructed to create a partnership or joint venture, to create relationships of an employer-employee or principal-agent, or to otherwise create any liability for one agency whatsoever with respect to the indebtedness, liabilities, and obligations of the other agency or any other party.

18. **WAIVER OF BREACH**. Failure to declare a breach or the actual waiver of any particular breach of the Contract or its material or nonmaterial terms by either party shall not operate as a waiver by such party of any of its rights or remedies as to any other breach.

19. **SEVERABILITY**. If any provision contained in this Contract is held to be unenforceable by a court of law or equity, this Contract shall be construed as if such provision did not exist and the non-enforceability of such provision shall not be held to render any other provision or provisions of this Contract unenforceable.

20. **ASSIGNMENT**. Neither party shall assign, transfer or delegate any rights, obligations or duties under this Contract without the prior written consent of the other party.

21. **OWNERSHIP OF PROPRIETARY INFORMATION**. Unless otherwise provided by law any reports, histories, studies, tests, manuals, instructions, photographs, negatives, blue prints, plans, maps, data, system designs, computer code (which is intended to be consideration under this Contract), or any other documents or drawings, prepared or in the course of preparation by either party in performance of its obligations under this Contract shall be the joint property of both parties.

22. **PUBLIC RECORDS**. Pursuant to NRS 239.010, information or documents may be open to public inspection and copying. The parties will have the duty to disclose unless a particular record is made confidential by law or a common law balancing of interests.

23. **CONFIDENTIALITY**. Each party shall keep confidential all information, in whatever form, produced, prepared, observed or received by that party to the extent that such information is confidential by law or otherwise required by this Contract.

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24. **FEDERAL FUNDING**. In the event, federal funds are used for payment of all or part of this Contract, the parties agree to comply with all applicable federal laws, regulations and executive orders, including, without limitation the following:

A. The parties certify, by signing this Contract, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from participation in this transaction by any federal department or agency. This certification is made pursuant to Executive Orders 12549 and 12689 and Federal Acquisition Regulation Subpart 9.4, and any relevant program-specific regulations. This provision shall be required of every subcontractor receiving any payment in whole or in part from federal funds.

B. The parties and its subcontractors shall comply with all terms, conditions, and requirements of the Americans with Disabilities Act of 1990 (P.L. 101-136), 42 U.S.C. 12101, as amended, and regulations adopted thereunder, including 28 C.F.R. Section 35, inclusive, and any relevant program-specific regulations.

C. The parties and its subcontractors shall comply with the requirements of the Civil Rights Act of 1964 (P.L. 88-352), as amended, the Rehabilitation Act of 1973 (P.L. 93-112), as amended, and any relevant program-specific regulations, and shall not discriminate against any employee or offeror for employment because of race, national origin, creed, color, sex, religion, age, disability or handicap condition (including AIDS and AIDS-related conditions.)

D. Clean Air Act (42 U.S.C. 7401–7671q.) and the Federal Water Pollution Control Act (33 U.S.C. 1251–1387), as amended. Contracts and subgrants of amounts in excess of $150,000 must contain a provision that requires the non-Federal award to agree to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401–7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251–1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

25. **PROPER AUTHORITY**. The parties hereto represent and warrant that the person executing this Contract on behalf of each party has full power and authority to enter into this Contract and that the parties are authorized by law to perform the services set forth in ***Section 9, Incorporated Documents***.

26. **GOVERNING LAW – JURISDICTION**. This Contract and the rights and obligations of the parties hereto shall be governed by, and construed according to, the laws of the State of Nevada. The parties consent to the exclusive jurisdiction of and venue in the First Judicial District Court, Carson City, Nevada for enforcement of this Contract.

27. **ENTIRE AGREEMENT AND MODIFICATION**. This Contract and its integrated Attachment(s) constitute the entire agreement of the parties and as such are intended as a complete and exclusive statement of the promises, representations, negotiations, discussions, and other agreements that may have been made in connection with the subject matter hereof. Unless an integrated Attachment to this Contract specifically displays a mutual intent to amend a particular part of this Contract, general conflicts in language between any such Attachment and this Contract shall be construed consistent with the terms of this Contract. Unless otherwise expressly authorized by the terms of this Contract, no modification or amendment to this Contract shall be binding upon the parties unless the same is in writing and signed by the respective parties hereto, approved by the Office of the Attorney General.

CETS #:	
Agency Reference #:	

IN WITNESS WHEREOF, the parties hereto have caused this Contract to be signed and intend to be legally bound thereby.

Nevada Secretary of State Authorized Signature — Date — Title

Public Entity #2 Authorized Signature — Date — Title

APPROVED BY BOARD OF EXAMINERS

Signature – Board of Examiners

On: _____
Date

Approved as to form by:

Deputy Attorney General for Attorney General

On: _____
Date

ATTACHMENT A

Office of Nevada Secretary of State
Voter Registration Statistics
10/01/2025
All Voters by County & Party

County Name	Democratic	Republican	Independent American Party	Libertarian	Non-partisan	Other	Total	THIS IS WHAT WE ASKED PRIOR	THIS IS THE NEWLY PROPOSED TIERED AMOUNT
Carson City	10,670	16,823	2,296	518	15,896	561	**46,764**	**$ 50,999.24**	**$ 25,000.00**
Churchill	2,424	10,158	950	207	7,255	243	**21,237**	**$ 22,784.25**	**$ 10,000.00**
Clark	513,742	413,039	71,705	11,587	673,591	31,523	**1,715,187**		**$ 525,000.00**
Douglas	8,050	22,842	2,121	442	12,601	498	**46,554**	**$ 51,270.33**	**$ 25,000.00**
Elko	3,854	17,374	1,602	369	12,105	321	**35,625**	**$ 39,914.98**	**$ 25,000.00**
Esmeralda	56	363	40	11	190	9	**669**	**$ 710.12**	**$ 1,000.00**
Eureka	74	850	68	10	361	13	**1,376**	**$ 1,550.85**	**$ 1,000.00**
Humboldt	1,416	6,231	507	107	3,886	103	**12,250**	**$ 13,092.80**	**$ 10,000.00**
Lander	418	2,314	155	38	1,156	27	**4,108**	**$ 4,363.90**	**$ 2,500.00**
Lincoln	349	2,146	182	25	784	40	**3,526**	**$ 3,778.90**	**$ 1,000.00**
Lyon	7,592	23,259	2,773	603	19,734	599	**54,560**	**$ 58,531.79**	**$ 25,000.00**
Mineral	616	1,214	161	21	1,155	10	**3,177**	**$ 4,102.68**	**$ 1,000.00**
Nye	7,064	18,780	2,598	415	18,375	918	**48,150**	**$ 49,638.26**	**$ 25,000.00**
Pershing	521	1,845	166	20	1,189	32	**3,773**	**$ 4,086.22**	**$ 1,000.00**
Storey	678	2,006	219	57	1,381	39	**4,380**	**$ 4,692.07**	**$ 2,500.00**
Washoe	105,481	114,460	17,677	3,853	129,615	7,206	**378,292**	**$ 432,871.20**	**$ 119,000.00**
White Pine	703	3,035	331	40	1,875	52	**6,036**	**$ 6,473.41**	**$ 2,500.00**
Total	**663,708**	**656,739**	**103,551**	**18,323**	**901,149**	**42,194**	**2,385,664**	**$ 748,861.00**	**$ 801,500.00**

Tiers Reflecting Interlocal Costs by Number of Registered Voters

>500k: $525,000
Clark

>100k: $119,000
Washoe

<100k - >25k: $25,000
Lyon
Douglas
Carson City
Nye
Elko

<25k - >8k: $10,000
Churchill
Humboldt

<8k - >4k: $2,500
White Pine
Lander
Storey

>4k: $1,000
Mineral
Pershing
Lincoln
Eureka

This report has been generated from Nevada's statewide voter registration database. The transmission of registration information between the counties and the statewide database does not take place in real time.

Due to this turnaround time, the numbers reflected in this report may not exactly duplicate the registration numbers reflected in the county database at the precise moment such reports are generated.

"Active registration" status means a current registration of a voter in the official register, entitling such voter to voter in the manner provided pursuant to NRS 293.017.

"Inactive voter" means a voter designated as inactive pursuant to NRS 293.530 whose registration has not been cancelled.

FRANCISCO V. AGUILAR
NEVADA
SECRETARY of STATE

101 N Carson Street, Suite 3
Carson City, NV, 89701
775.687.8683

March 31, 2026

To: Staci Lindberg, Lyon County Clerk
From: Mark Wlaschin, Deputy Secretary for Elections

Re: Memo 2026-010 County Interlocal Agreement Notification

Greetings Clerk Lindberg,

The previous interlocal agreement between Lyon County and the Office of the Secretary of State signed in calendar year 2025 specific to FY2026 are null and void due to requested changes in the agreement. Those changes have been applied to the Interlocal Agreement for FY2027 and FY2028 which the Office requests be submitted for approval.

If you have any questions regarding this guidance, please contact Ann Standley with the Office of the Secretary of State at astandley@sos.nv.gov.

Respectfully,

Francisco V. Aguilar
Secretary of State

By: Mark Wlaschin
Mark Wlaschin
Deputy Secretary for Elections

Lyon County Board of County Commissioners Agenda Summary

Meeting Date: April 16, 2026

Agenda Item Number:
11.i

Subject:
For Possible Action: Approve the Lyon County Plan for the Provision of Indigent Defense Services for Fiscal Year 2026-2027.

Summary:
Each year, Lyon County is required to adopt a plan for the provision of indigent defense services. There is no change from the existing plan.

Financial Department Comments:

Approved As To Legal Form:

County Manager Comments:

Recommendation:

ATTACHMENTS
- Lyon County Plan for the Provision of Indigent Defense Services - 2026-2027

PLAN FOR THE PROVISION OF INDIGENT DEFENSE SERVICES

Fiscal Year 2026-2027

I. PLAN OBJECTIVE

The objective of this plan is to ensure competent, zealous legal representation for indigent persons eligible for the services of court-appointed counsel. To that end, this plan establishes guidelines and procedures for, among other things, the appointment, duties, compensation, and oversight of the attorneys with whom Lyon County contracts to serve as its public defenders.

II. DEFINITIONS

A. Appointing Authority: The Judge, Justice, or Master presiding over a case arising in a court of law within Lyon County.

B. Case-Related Expenses: Expenses, other than attorneys' fees, reasonably necessary to provide an appropriate defense. Such expenses may include, without limitation, fees for investigators, expert witnesses, forensic services, photocopying, and transcription.

C. Department: The Nevada Department of Indigent Defense Services.

D. Eligible Client: An indigent person whom an Appointing Authority has determined to be eligible for the services of a public defender.

E. Fiscal Year: July 1st through June 30th.

F. Qualified Attorney: An attorney approved by the Department to provide indigent defense services within certain categories of cases as set forth in the Regulations.

G. Regulations: The Permanent Regulations of the Board of Indigent Defense Services.

III. APPOINTMENT OF PUBLIC DEFENDERS

Lyon County shall appoint only Qualified Attorneys as public defenders. Lyon County may contract with as many Qualified Attorneys as necessary to ensure adequate representation for all Eligible Clients. All contracts with Qualified Attorneys shall be consistent with this plan and the Regulations, and shall be approved by the Lyon County Board of Commissioners.

A. Selection Process

In seeking out Qualified Attorneys to serve as public defenders, Lyon County shall use a selection committee composed of the County Manager and the Comptroller. The selection committee may, through a formal request for proposals or through other means, request information from Qualified Attorneys regarding their experience, workload capacity, fee structure,

and any other material information. The selection committee shall weigh these and other relevant factors (including those set forth under Sec. 22(3) of the Regulations) in identifying the Qualified Attorneys with whom it would be in Lyon County's best interest to contract, and the terms of such contracts. The selection committee may utilize outside counsel for assistance during any portion of the selection process, and during the drafting and negotiation of contracts with Qualified Attorneys. In addition, the selection committee may seek input from the Department. The selection committee shall present all proposed contracts to the Board of County Commissioners for approval. No contract shall be effective unless and until it is approved by the Board of County Commissioners.

Any Qualified Attorneys interested in consideration by the selection committee are encouraged to contact the Lyon County Manager.

B. Compensation

The terms of compensation shall be set forth in each Qualified Attorney's approved contract. The compensation shall reflect the Qualified Attorneys' experience, competency, credentials, and amount of work performed. Compensation may be in the form of flat fees, piece rates, hourly rates, or any combination thereof, provided that the compensation is ultimately reasonable and consistent with the Regulations.

C. Independent Contractors; Private Practice of Law

All Qualified Attorneys providing services to Eligible Clients within Lyon County shall be independent contractors, not employees of Lyon County. Qualified Attorneys may engage in the private practice of law outside the scope of their approved contracts provided that: (i) such practice does not conflict with obligations to Lyon County under the Qualified Attorney's approved contract; (ii) such practice does not conflict with the Qualified Attorney's ability to provide zealous, competent representation to Eligible Clients; and (iii) the Qualified Attorney agrees not to represent clients in any lawsuits against Lyon County, its officers, employees, or agents, or entities in which the Board of County Commissioners act as a governing body.

IV. ELIGIBLE CLIENTS

Consistent with the Regulations and applicable law, the Appointing Authority shall be responsible for determining whether a person is indigent and is eligible for the services of a public defender in the following categories of cases:

1. Misdemeanor Cases: A case in which the highest charge is a misdemeanor.

2. Category B, C, D, or E Felony or Gross Misdemeanor Cases: A case in which the highest charge is a gross misdemeanor or a Category B, C, D, or E felony for which the maximum penalty is ten (10) or fewer years imprisonment.

3. Category B Felony Cases (10+ year maximum): A case in which the highest charge is a Category B felony for which the maximum penalty is greater than ten (10) years imprisonment.

4. Non-Capital Category A Cases: A case in which the highest charge is a non-capital Category A felony.

5. Capital Cases: A case in which the highest charge is a capital Category A felony.

6. Juvenile Proceedings: A case in which a juvenile is alleged to be delinquent or need of supervision.

7. Appeals: Any appeal of an interlocutory adjudication or Final Adjudication in a Case to the Third Judicial District or the Nevada Supreme Court.

8. Other Cases: Any other case in which the assignment of court-appointed counsel is required or permitted by law.

The Appointing Authority shall make indigence determinations in the above categories of cases in accordance with applicable law. A Pretrial Services Officer may be utilized to assist with screening for indigence. The Pretrial Services Officer shall use the approved screening form. Such screening shall occur within forty eight (48) hours of arrest. Indigence determinations are ultimately the responsibility of the Appointing Authority.

V. ASSIGNMENT OF QUALIFIED ATTORNEYS TO ELIGIBLE CLIENTS

Lyon County plans on contracting with three primary public defender firms that shall serve as Lyon County's primary public defenders and conflict public defenders for adult cases. They will also serve as conflict counsel in juvenile cases. One firm will be assigned to the Fernley Justice Court and the Fernley Municipal Court as the primary public defender. Another firm will be assigned to the Dayton Justice Court and the Walker River Justice Court as their primary public defender. A third firm will serve as the primary public defender for Drug Court, juvenile cases, and the Yerington Municipal Court. All firms will be responsible for inputting applicable information into the Department's case management system, including hours and conflicts.

These three contracts will handle all eligible clients arising in all municipal, justice, and district courts within Lyon County except:

1. In the event that a firm has a conflict of interest or otherwise cannot represent all parties in a matter in accordance with the Nevada Rules of Professional Conduct;

2. As lead counsel in a capital case.

In the event that a firm has a conflict of interest or otherwise cannot represent all parties in a matter, a separate Qualified Attorney with whom Lyon County has an approved contract shall be assigned. The procedure for assignment is set forth below:

The firm primarily representing the Dayton Justice Court jurisdiction will be the primary conflict counsel for the Canal Township Justice Court and conflict Juvenile cases in the Dayton Justice Court jurisdiction. The firm primarily representing the Canal Township Justice Court jurisdiction will be the primary conflict counsel for the Dayton Justice Court jurisdiction and Juvenile cases in the Canal Township Justice Court jurisdiction. The firm primarily representing the Walker River Justice Court jurisdiction will be the primary conflict counsel for jurisdiction for Juvenile cases in the Walker River Township Justice Court jurisdiction. The firm primarily representing Drug Court, juvenile cases, and the Yerington Municipal Court will serve as primary conflict counsel for the Walker River Justice Court. Lyon County may change primary and secondary conflicts for certain cases based on complexity so that the workloads between the primary public defender firms are more equitable. The primary and secondary conflicts may be assigned by the courts administratively without notification to the Department.

For all other conflicts, the assignment will be as follows:

1. A firm shall provide immediate notice of its inability to represent Eligible Client(s) to the Department by email at didscontact@dids.nv.gov. the firm shall make this notification as soon as it determines that it intends to file a notice of conflict or a motion to withdraw, as applicable. The notification shall include the following information (if available): charging document, probable cause sheet or declaration, and the date and location of the next scheduled court appearance.

2. Upon receipt of the above notification, the Department shall select other Qualified Attorney(s) for assignment, starting with the three primary defender firms and then proceeding to the panel of Qualified Attorneys with whom Lyon County has an approved contract. The Department shall otherwise have discretion to make assignments on any legitimate basis, including, without limitation, qualifications, interest, track record of responsiveness and dependability in accepting assignments, feedback from Eligible Clients, feedback from Lyon County officials, and capacity to take on work.

3. A Qualified Attorney contacted by the Department for an assignment may accept or reject the assignment. If the Qualified Attorney (or staff duly authorized to accept assignments on the Qualified Attorney's behalf) is not available during normal business hours when contacted by the Department, the assignment shall be deemed rejected. The Department shall contact other Qualified Attorneys until it obtains acceptance from a sufficient number of Qualified Attorneys to represent all Eligible Clients.[1]

[1] Nothing herein shall preclude Lyon County from entering into additional contracts to add more Qualified Attorneys to the panel after the effective date of this plan. In addition, nothing herein shall preclude the Department from exercising its authority to appoint counsel outside the panel pursuant to NRS 7.115 et seq. in the event there are not a sufficient number of Qualified Attorneys on the panel to accept assignments to represent all Eligible Clients.

4. Upon confirmation of acceptance of assignment by Qualified Attorney(s), the Department shall provide prompt notice and a proposed order confirming selection of counsel to the Appointing Authority—i.e., the Judge, Justice, or Master presiding over the court in which the Eligible Client's charges are pending.

In the event of a capital case, Lyon County shall retain a Qualified Attorney authorized to serve as lead counsel under Supreme Court Rule 250 and shall pay reasonable compensation for such services. The primary public defender firms and/or other Qualified Attorneys may be assigned as co-counsel consistent with the terms of their approved contracts.

VI. DUTIES OF QUALIFIED ATTORNEYS

A. Standards of Performance

Qualified Attorneys providing services to Eligible Clients within Lyon County shall be responsible for providing such services in a professional, skilled manner. They shall comply with all applicable laws, regulations, Rules of Professional Conduct, and the Nevada Indigent Defense Standards of Performance adopted by the October 16, 2008 Nevada Supreme Court Order in Administrative Docket 411, or the same as may be amended.

B. Continuity in Representation

Qualified Attorneys providing services to Eligible Clients within Lyon County shall ensure, to the extent practicable, consistency in representation such that the same attorney represents a defendant through every stage of the case; provided, however, that attorneys may delegate appropriate administrative tasks to support staff, or may assign more than one (1) attorney to represent an Eligible Client as necessary provided it would not prejudice the rights or defense of the Eligible Client. Courts may also group all of a defendant's cases with a single attorney to enable continuity in representation.

C. Workload Standard

The workload of each Qualified Attorney providing services to Eligible Clients within Lyon County must allow the attorney to give each client the time and effort necessary to ensure effective representation. Any attorney who provides indigent defense services shall not accept a workload that, by reason of its excessive size, interferes with the attorney's competence, diligence, and/or representation of clients. The maximum workload guidelines as determined by the Department are incorporated herein by reference and shall be followed to the greatest extent practicable. To the extent required by the Department's Board, Qualified Attorneys providing indigent defense services under this plan shall maintain caseload data and track time spent providing indigent defense services in accordance with Sections 44 and 45 of the Regulations. The County will require the four primary public defender firms to employ enough attorneys and support staff to meet caseload standards based on the workload standards. If the four primary public defenders are unable to hire enough attorneys due to a lack of qualified applicants, then the County will work with the Department on any other viable options for meeting the workload standards.

Lyon County plans to meet the workload standards as follows: Each of the three primary public defender firms for adults will be required to have three attorneys and two support staff. The primary public defender firm for juveniles will be required to have one attorney. Additional conflict contracts are expected to supply two attorneys towards the workload standards. Investigations will continue to be contracted outside the attorney contracts in sufficient numbers to meet the DIDS requirements as well. Caseloads by firm will continue to be evaluated and contracts adjusted to meet proper staffing numbers based on the caseload analysis.

D. Conflicts of Interest

All Qualified Attorneys providing services to Eligible Clients within Lyon County shall be required to timely screen all case assignments for conflicts of interest. In the event of a conflict of interest, the Qualified Attorney shall file an appropriate motion or, as applicable, a notice of conflict with the Appointing Authority. Unless leave to withdraw is withheld by the Appointing Authority, the Qualified Attorney shall ensure prompt transfer of the Eligible Client's file to the Eligible Client's new attorney.

E. Training

All Qualified Attorneys providing services to Eligible Clients within Lyon County shall be required to comply with the training and continuing education requirements of the Department.

F. Other Responsibilities

All Qualified Attorneys providing services to Eligible Clients within Lyon County shall be responsible for ensuring:

1. Clients do not waive any substantive rights or plead guilty at the initial appearance, unless doing so is the client's best interest.

2. Clients receive adequate and frequent communication from their attorney. As a guideline, Qualified Attorneys shall, where practicable, communicate with clients seven (7) days following the assignment of the case and every thirty (30) days thereafter unless there are no significant updates in the client's matter.

3. Clients are notified of and encouraged to participate in client surveys authorized by the Department.

4. Clients are appropriately notified of their right to utilize the Department's Complaint and Recommendation process.

5. Attorney-client privilege and client confidentiality are maintained.

G. Initial In-Custody Appearances

The County will establish a rotating coverage schedule for the three primary public defender firms so that Representational Services are provided for all eligible adult clients who are in custody and require a bail hearing. Insofar as any firm has a conflict of interest precluding the firm from continuing to provide Representational Services in connection with a substantive defense of the charges, that firm shall limit the scope of its representation. It shall only advocate for the Eligible Client's best interests at the bail hearing and shall advise the Eligible Client of the limited scope of such representation.

Notwithstanding any other provision herein, nothing shall preclude any firm from declining to represent an Eligible Client, even for the limited purpose described in the preceding paragraph, if it determines it cannot do so in a manner consistent with the Nevada Rules of Professional Conduct. In the event this occurs, the firm shall immediately notify the Department so the Department can assign alternative counsel from among the panel of Qualified Attorneys with whom Lyon County has an approved contract.

In accordance with NRS 178, all bail hearings shall occur within forty eight (48) hours after the Eligible Client has been taken into custody, unless continued for good cause.

VII. ACCOMMODATIONS FOR CONFIDENTIAL ATTORNEY/CLIENT COMMUNICATIONS

The Lyon County Sheriff's Office offers the opportunity for Qualified Attorneys to meet confidentially with Eligible Clients in person or via video conference. Qualified Attorneys seeking a confidential meeting are encouraged to contact Lyon County Sheriff's Office staff at 775-463-6600 at least twenty four (24) hours in advance. The Lyon County Sheriff's Office will make every reasonable effort to ensure a Qualified Attorney is able to meet with an Eligible Client at the desired time. Absent twenty four (24) hours' notice, the Lyon County Sheriff's Office will still make every reasonable effort to arrange a meeting as requested by the Qualified Attorney, but Qualified Attorneys shall, for their part, demonstrate reasonable flexibility and mutual cooperation in such instances. Qualified Attorneys shall be responsible for compliance with all safety protocols and all reasonable instructions of jail personnel.

Questions or concerns with respect to accommodations for confidential meetings with Eligible Clients may, if not satisfactorily addressed by staff, be directed to the Lieutenant in charge of the jail.

VIII. INVOICING AND PAYMENT

A. Attorneys' Fees

Qualified Attorneys providing services to Eligible Clients within Lyon County in exchange for an hourly rate shall submit monthly invoices to the Department. Such invoices shall be submitted via LegalServer (or any other platform the Department may subsequently choose to utilize) no later than ten (10) days after the end of the month in which the services were rendered.

Time entries shall be rounded to the nearest one-tenth ($1/10^{th}$) of an hour, describing with specificity the work performed and identifying the attorney who performed it.

The Department shall approve for payment all reasonable attorney's fees. In reviewing for reasonableness, the Department may consider factors such as: (i) average case times as determined by workload analysis; (ii) time and skill required; (iii) complexity of the case; and (iv) experience and ability of the Qualified Attorney(s). The Department may request additional information or explanation where necessary. In the event the Department denies or modifies a request for attorneys' fees, it shall provide an explanation to the Qualified Attorney, with a copy to the Lyon County Manager, as to why the denied portion was not reasonable. Such denials shall be subject judicial review pursuant to NRS 7.135.

Payment for all approved attorneys' fees shall be issued by the Lyon County Comptroller's Office. The Department shall notify the Comptroller's Office of all approved requests for attorneys' fees, attaching a copy of the invoice and any backup. The Comptroller's Office shall issue payment within ten (10) days of receipt.

B. Case-Related Expenses

Insofar as Case-Related Expenses are incurred in providing services to Eligible Clients, the following procedures shall apply:

1. Pre-Authorization: Case-Related Expenses expected to exceed two thousand five hundred dollars ($2,500) shall be submitted to the Department for pre-authorization before they are incurred. The Qualified Attorney shall submit the request for pre-authorization to the Department by email at didscontact@dids.nv.gov. The request shall include an explanation of why the expense is reasonably necessary to provide Representational Services.

2. Reasonableness Review: All Case-Related Expenses, whether or not they are subject to pre-authorization, are subject to the Department's review for reasonableness. Invoices for Case-Related Expenses shall be submitted to the Department no later than sixty (60) days following the termination of the representation. Any requests not timely submitted shall be waived. The Department shall approve all reasonable and necessary Requests for Case-Related Expenses, and shall notify the Lyon County Comptroller's Office of all approved expenses and provide a copy of the invoice.

3. Payment: The Lyon County Comptroller's Office shall issue payment for all approved Case-Related Expenses within ten (10) days of receipt of notice of the Department's approval and a copy of the invoice.

IX. REIMBURSEMENT FOR PAYMENTS EXCEEDING THE MAXIMUM COUNTY CONTRIBUTION

Pursuant to NRS 180.320(3), the Department's Board has promulgated under Section 16 of its Regulations a formula for establishing the maximum amount a county is required to pay for the provision of indigent defense services in a Fiscal Year. Lyon County shall not pay any amount in excess of that formula in any Fiscal Year.

Pursuant to Sections 16 - 19 of the Regulations, Lyon County shall be permitted to obtain reimbursement for costs associated with the provision of indigent defense services under this plan to the extent they exceed the maximum contribution in the preceding paragraph. Lyon County shall file financial status reports with the Department in a manner consistent with the Regulations, using the forms prescribed by the Department. The Lyon County Board of Commissioners hereby designates the Lyon County Comptroller as its designee to submit such reports to the Department. To the extent the financial status reports reflect costs in excess of the maximum contribution. In the event reimbursable costs exceed this amount, nothing herein shall be construed to preclude Lyon County from seeking additional reimbursement pursuant to NRS 353.266, NRS 180.450, or as otherwise permitted by law.

X. EFFECTIVE DATE; MODIFICATION

This plan is effective July 1, 2026 and shall remain in effect until June 30, 2027. This plan may be modified by formal action of the Board of County Commissioners.

XI. PLAN ADMINISTRATOR AND CONTACTS

The County Manager shall be the administrator of this plan and the contracts for the provision of indigent defense services. The County Manager shall report material breaches or other significant matters to the Board of County Commissioners. The Board of County Commissioners may take any lawful, situationally-appropriate action with respect to any contract.

Questions about the administration of this plan may be directed to the Lyon County Manager.

Lyon County Board of County Commissioners Agenda Summary

Meeting Date: April 16, 2026

Agenda Item Number:
12.a

Subject:
For Possible Action: To approve the request from Traditions North LLC for a Tentative Subdivision Map. The request is for 358 detached single-family residential units, including 116-acres of common area, open space, parks, and trails, generally located north of the intersection of Nevada Station and Rock Creek Parkways in Dayton on an approximately 230.76-acre parcel (APN 016-406-07), PLZ-2025-095 (Senior Planner Lisa Nash).

Summary:

Financial Department Comments:

Approved As To Legal Form:

County Manager Comments:

Recommendation:

ATTACHMENTS
- Staff Report
- Project Narrative
- Plan Set
- Traffic, Drainage, H&H Studies
- Geotechnical Report
- Preliminary Sewer Report
- Landscape, Streets
- Trails, Parks
- Draft PUD Handbook
- Street Name Request Form

LYON COUNTY
COMMUNITY DEVELOPMENT DEPARTMENT
BUILDING * DEVELOPMENT ENGINEERING * PLANNING
CODE ENFORCEMENT * ECONOMIC DEVELOPMENT
27 SOUTH MAIN STREET, YERINGTON, NV 89447
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BOARD OF COUNTY COMMISSIONERS

PLZ-2025-095

Proposed Action	Tentative Subdivision Map (TSM) to create a 358-lot single-family residential development
Meeting Date	April 16, 2026
Property Owners	Sutro Residential Group LLC
Applicant	Traditions North LLC
Representative	Manhard Consulting LLC
Community	Dayton
Location	North of the intersection of Nevada Station and Rock Creek Parkways
Parcel Number	016-406-07
Parcel Size	220.75 acres of a 230.76-acre parcel
Master Plan	Low Density Residential, Suburban Residential, Commercial, Parks, and Open Space
Current Zoning	RR-1, E-1, NR-1, and C-2
Proposed Zoning	Planned Unit Development (PUD)
Flood Zone(s)	Zone X Shaded and Unshaded per FIRMs 32019C0290E (effective 1/16/2009) and 32019C0289F (effective 10/20/2016)
Case Planner	Lisa Nash

REQUEST

The Applicant is seeking approval of a Tentative Subdivision Map (TSM) for Traditions North LLC. The TSM consists of a 358 single-family residential subdivision with associated common areas, parks, trails and open areas on an approximate 220.75-acre portion of a 230.76-acre parcel in Dayton.

PLANNING COMMISSION

The Planning Commission heard the item on February 10, 2026. The Commission forwarded a recommendation of approval, voting 7-0 (7 Ayes; 0 Nays; 0 Abstentions). The recommendation was based on the findings and amended Conditions of Approval listed in the staff report.

At the Planning Commission Hearing, the Applicant requested changes to the proposed Conditions of Approval in the Staff Report and, with Staff's support, the recommended changes to Conditions 8, 22, 26 (now 25) and 28 (now 27) were approved. Further discussions were held regarding Conditions 23 and 24 (now removed). The Planning Commission motioned to forward a recommendation with Condition 23 as brought forth by staff at the meeting.

Since the Planning Commission meeting, Staff and the Applicant's representatives have met, and with additional consultation with experts for both the County and the Applicant, and were unable to come to an agreement on the language for Condition 23.

At the March 5, 2026 Board of County Commissioners meeting, a continuance was requested and approved. The Applicant and Staff have since met and came to an agreement on the language for Condition 23.

The Conditions of Approval included in this report are the conditions recommended by Staff.

RECOMMENDED MOTION

The Board of County Commissioners has considered:

15.349.10: FINDINGS:

If the Board of County Commissioners, basing its decision on the requirements of Nevada Revised Statutes and making affirmative findings on the following factors, and taking into account the recommendations of reviewing agencies, wishes to approve the Tentative Subdivision Map, then the Board should make a motion similar to the following:

The Board of County Commissioners finds that:

1. The property to be subdivided is zoned for the intended uses and the density and design of the subdivision conforms to the requirements of the zoning regulations contained in this title;
2. If located within a planned unit development, the tentative subdivision map conforms to the density requirements, lot dimension standards and other design standards regulations approved for the planned unit development;
3. The tentative subdivision map conforms to public facilities and improvement standards contained in this title;
4. The tentative subdivision map conforms to the improvement and design standards contained in this title and adopted design criteria and improvement standards;
5. If applicable, that a phasing plan has been submitted and is deemed acceptable;
6. There are no delinquent taxes or assessments on the land to be subdivided, as certified by the County Treasurer;
7. The project complies with all environmental and health laws and regulations concerning water and air pollution, the disposal of solid waste, facilities to supply water, community or public sewage disposal and, where applicable, individual systems for sewage disposal;
8. The availability of water which meets applicable health standards and is sufficient in quantity for the reasonably foreseeable needs of the subdivision;
9. There is adequate access and availability to public services such as schools, police protection, transportation, recreation and parks;
10. The project is in general conformity with the Lyon County Comprehensive Master Plan, the local community plan, if adopted, and the master plan of streets and highways;

11. The project will have no adverse impacts, or provides adequate mitigation of adverse impacts, to existing public streets;
12. The physical characteristics of the land such as floodplain, slope and soil have been considered and provisions to adequately mitigate adverse impacts of development on the environment have been incorporated;
13. The project demonstrates availability and accessibility of fire protection services, including, but not limited to, the availability and accessibility of water and services for the prevention and containment of fires, including fires in wild lands.

Based on the aforementioned Findings, I move that the Board of County Commissioners approve the request from Traditions North LLC for a Tentative Subdivision Map for 358 single-family residential units, including 90-acres of common area open space, parks, and trails, and is generally located north of the intersection of Nevada Station and Rock Creek Parkways in Dayton on an approximately 220.75-acre portion of a 230.76-acre parcel (APN 016-406-07) PLZ-2025-095, subject to the 34 Conditions of Approval.

RECOMMENDED CONDITIONS OF APPROVAL

1. Approval of the tentative map shall not constitute acceptance of the final map. **Approval of the tentative map shall lapse unless a final map based thereon is recorded within four (4) years from the date of such approval**, unless a provision for an extension of time has been granted. The Board of County Commissioners, with the recommendation of the Community Development Department, may grant to the developer a single extension of not more than two (2) years within which to record a final map after receiving approval of the tentative map.
2. The applicant shall comply with all Federal, State, County and special purpose district regulations.
3. The developer shall provide the proposed Covenants, Conditions and Restrictions ("CC&Rs"), landscape maintenance association/homeowners association agreements, easements and/or other legal instruments containing sufficient detail to constitute enforceable provisions necessary for operation and maintenance by the developer and his successors, and assignees as well as the individual subdivision lot property owners as the project is subdivided and the individual lots sold for all common areas and storm drainage facilities (easements, channels and basins) as well as any other provisions necessary for the subdivision as approved, for review by the Community Development Director, the Utilities Director, the County Engineer and District Attorney's Office. The approved legal instrument shall be signed and recorded prior to recordation of a final map or first in a series of final maps for the project.
4. Prior to issuance of any Final Map, the applicant shall submit for the County's approval a landscape/treatment development plan for all common areas on the site, for that phase.
5. The applicant shall provide the approved street-naming application (PLZ-2025-098) with all submittals of an application for a final map or first in a series of final maps.
6. A phasing plan must be submitted prior to the recordation of the first final map if the development is to be phased.
7. Before requesting a Will-Serve Letter for the final subdivision map, the developer must submit an LCUD application for water and sewer service and meet the requirements outlined in County Code, Title 9. The applicant shall provide written evidence (i.e. 'will-serve' letters) demonstrating that the

proposed parcels are able to be served by municipal water and sewer systems prior to recordation of a final subdivision map or first in a series of final maps for this project.

8. The proposed project will consist of a gravity sewer collection system. If a lift station is proposed, the developer is required to meet the requirements of NAC445A.285 and WTS-21. Odor control mitigation for a lift station is required when there are any homes within 1000' of a lift station.
9. All property taxes must be paid in full through the end of the fiscal year (June 30) and any applicable agricultural deferred taxes shall be paid in full prior to recordation of any final map.
10. The applicant shall comply with the final subdivision map requirements as prescribed by NRS 278 and Title 15 of the Lyon County Code.
11. Required recording fees to be paid at time of recording map.
12. No lot shall be offered for sale or sold until the final subdivision map has been approved and recorded.
13. No building permits shall be accepted for processing until a final subdivision map has been approved and recorded.
14. The applicant shall make corrections of any engineering or drafting errors and other technical map corrections to the satisfaction of the County Engineer and Community Development Director prior to submitting the final subdivision map for recordation.
15. The applicant shall pay the actual costs for County Engineer plan and map checking in accordance with the adopted County fee resolution in effect at the time, and provide proof of payment of any Tentative Subdivision Map review fees to the Community Development Department prior to submission of the final subdivision map. The applicant shall pay the actual costs for County Engineer plan and map checking and County Inspector site improvement inspection fees in accordance with the adopted County fee resolution in effect at the time, and provide proof of payment of any Final Subdivision Map review fees to the Community Development Department prior to recordation of the final subdivision map.
16. The applicant shall provide the final subdivision map to the Lyon County GIS Coordinator in form and format compatible with the County geographical information system (GIS) pursuant to 15.607.08(B) of the Lyon County Code. The scale of the site plan, improvements, monuments and other items shall be in model space correctly oriented to coordinate system as established by the GIS Coordinator. Cover sheet and standard details need not be included.
17. The applicant shall comply with County requirements, in accordance with Chapter 15.234 of the Lyon County Code, mandating that a site improvement permit(s) be obtained for any disturbance occurring on the subject site. The site improvement permit applications shall also include documentation of approval of a Stormwater Pollution Prevention Plan (“SWPPP”) permit and a Surface Area Disturbance (“SAD”) permit with the Nevada Department of Environmental Protection (NDEP).
18. Prior to issuance of any site improvement permit, the applicant shall pay all applicable inspection and plan-check fees and execute a site improvement agreement establishing the responsibilities for construction, inspection, and completion of all required improvements.
19. Prior to any construction of improvements, a preconstruction conference shall be held between the contractor/developer and the appropriate County inspection personnel and departments.

20. All retaining walls within the subdivision, whether located on individual lots or within common areas, shall be designed by a Nevada-licensed civil or structural engineer and constructed in accordance with the approved plans. Retaining walls exceeding four (4) feet in height, measured from the lowest finished grade, shall require a building permit and engineered design. Retaining walls shall be located entirely outside of public rights-of-way and public utility easements unless otherwise approved by the County. Responsibility for long-term maintenance of retaining walls shall be clearly identified on the final map, in the subdivision's recorded covenants, conditions, and restrictions (CC&Rs), or HOA Stormwater Facilities Operation and Maintenance (O&M) Provisions, as applicable.

    a. All building permits related to retaining walls shall be accompanied by a special inspection agreement.

21. The applicant shall comply with Lyon County requirements as set forth in Title 15 of the Lyon County Code including, but not limited to:

    a. The developer shall obtain all necessary encroachment permits and approvals as well as coordinate and comply with the requirements of the Roads Department;
    b. The developer shall design the street alignments in compliance with AASHTO standards to the approval of the director of the Roads Department;
    c. The developer shall install all required signage, striping and traffic control improvements in compliance with Nevada Department of Transportation and Lyon County requirements;
    d. The developer shall install street lighting in compliance with the requirements of the Roads Department;
    e. The developer shall submit a detailed geotechnical report with the final map(s) for the project that includes roadway structural sections and the structural section calculations demonstrating that the proposed structural section is adequate to support the weight of the anticipated traffic;

22. A Traffic Impact Study (TIS) is required for the project and has been submitted as part of the tentative subdivision map application.

    a. NDOT provided a Traffic Impact Study Acceptance Letter on January 30, 2026 for the *Traffic Impact Study for Traditions North* (GCW, November 12, 2025).
    b. The following improvements are recommended as mitigations based on the traffic impact study:

       1) Prior to reaching LOS E, construct an additional right-turn lane for the southbound Fortune Drive to US 50 movement to mitigate the cumulative developmental impacts of Traditions North and other projects north of US 50.

    c. The project applicant shall contribute a pro rata share to the US 50/Fortune Drive southbound right-turn lane improvement cost. Based on Future Year traffic volumes identified in the Traffic Impact Study, when LOS F conditions are identified, the Traditions North project trips are anticipated to be 5 percent of the total southbound right-turn volume during the highest peak hour.

23. The applicant shall provide a final drainage design and modeling compliant with the North Dayton Valley Area Drainage Master Plan and Lyon County Drainage Guidelines (dated September 20, 2024) to the satisfaction of the County Engineer and Community Development Director prior to the issuance of a site improvement permit. Major drainage facilities for off-site and post development flows shall

be constructed with the first phase of development, and subsequent phases shall include improvements that connect to and function independently of future facilities.

a. Prior to recordation of the final subdivision map, or the first map in a series, the applicant shall demonstrate that all easements necessary for the conveyance, detention, retention, attenuation, and discharge of stormwater have been identified and incorporated into the final map. Such easements shall be sufficient to ensure that stormwater is managed and conveyed to appropriate locations in accordance with the approved drainage plans and applicable County standards.

b. Prior to issuance of a site improvement permit for residential home construction within Traditions North, the applicant shall pay their proportionate share for the regional stormwater facilities per condition 20.g of the Traditions Village 2 tentative subdivision map.

c. The applicant shall demonstrate, through final drainage design and supporting hydrologic and hydraulic analyses, that stormwater discharge at the project boundary for the applicable design storm is at or below pre-development flow rates. All stormwater discharges shall be conveyed to a major drainage facility as defined in the County Drainage Guidelines, a natural watercourse, or within an approved drainage system. Sheet flow discharges beyond the project boundary shall not be permitted.

d. The final drainage design shall include a drainage facility that conveys runoff from the proposed northern cutoff channel to the existing cutoff channel located east of the Traditions North project area. The design shall demonstrate, through supporting hydrologic and hydraulic analyses, that the post-development peak discharge conveyed to the cutoff channel does not exceed pre-development peak discharge rates for the applicable design storm.

e. The final drainage design shall direct runoff from the eastern portion of the project toward the existing Traditions Village 2 drainage facilities. The applicant shall demonstrate, through supporting hydrologic and hydraulic analyses, that post-development peak discharge directed toward the Traditions Village 2 drainage facilities does not exceed pre-development peak discharge rates for the applicable design storm.

f. Prior to issuance of a Site Improvement Permit, the applicant shall obtain and record drainage easements as needed where concentrated flows are diverted to private properties outside the subdivision. Such drainage easements must be shown on the final map.

24. For lots where rear yard slopes are designed at 3:1 slope or greater, the applicant shall submit a rear lot drainage channel and/or swale detail with the site improvement plans, subject to review and approval by the County Engineer. The approved drainage design shall be reflected on individual lot plot plans submitted with each single-family residential building permit. The drainage facilities shall be designed to intercept, convey, and attenuate stormwater runoff prior to discharge to the public right-of-way or approved drainage facilities, prevent slope erosion, and ensure that stormwater runoff does not adversely affect adjacent or downstream lots.

25. Prior to issuance of site improvement permit, all graded slopes constructed at 2:1 or steeper shall be designed to be stabilized with Class 150 riprap, or an engineered equivalent approved by the County Engineer, to protect against erosion, slope failure, and sediment transport. Installation shall be in accordance with the approved grading and drainage plans and applicable County standards.

26. Prior to the issuance of a Certificate of Occupancy for any single-family residence, or for any phase of the project if constructed in phases, all required public and private improvements, infrastructure, and facilities serving a subdivision phase shall be fully constructed, installed, tested as applicable, and accepted to the satisfaction of the Community Development Director, County Engineer, County Road Superintendent, Utilities Director, Building Official, Central Lyon County Fire Protection District, and any other applicable County department or agency, or their authorized designees.
27. All residential driveways shall be designed and constructed to ensure safe vehicular access under all weather conditions. The maximum driveway slope shall not exceed 14 percent.
28. The applicant shall comply with all applicable building and fire code requirements.
29. The applicant is required to submit for a separate and independent Fire Plan review and will be required to comply with the 2024 Northern Nevada Code Amendments package and all applicable NFPA standards. Contact the CLCFPD Fire Prevention Division at (775) 246-6209 for more information and direction.
30. The water system must meet the requirements of the Lyon County Utilities Department and Central Lyon County Fire Protection District and be constructed in accordance with the following:
    a. The location of fire hydrants shall be determined by the Central Lyon County Fire Protection District.
    b. A minimum required fire flow is required for each fire hydrant as directed by the Central Lyon County Fire Protection District.
    c. Prior to any combustible materials being brought on site, all required fire hydrants are to be installed and fully operating.
31. Distinct and legible “temporary” addresses are required of any structures under construction until such time as permanent address numbers are installed and posted.
32. The applicant will maintain the property until the development is complete. This maintenance will include the semi-annual mowing of all weeds within the development boundaries and the removal of noxious weeds when they are identified.
33. The applicant shall post and maintain a rules and regulations sign at the entryways to the property until it is fully developed. The signs shall be intended for the subcontractors performing work and shall include:
    a. No loud music;
    b. No alcohol or drugs;
    c. Dispose of personal trash and site debris;
    d. Clean up any mud and or dirt that is deposited from the construction parcels onto the streets; and
    e. No burning of construction or other debris on the property.
34. All debris on construction sites must be contained and removed periodically as required for safety and cleanliness to the satisfaction of the Lyon County Community Development Department.

ALTERNATIVES TO RECOMMENDATION OF APPROVAL

Alternative Motion for Continuance

If the Board of County Commissioners determine that there is insufficient information with which to make a decision on the Tentative Subdivision Map (TSM) application before them and that additional information, discussion and public comment are necessary to have a more complete and thorough review of the proposed project, then the Board should make the appropriate findings and move to continue the Public Hearing for the TSM application to a future date with concurrence from the applicant.

If so, then the Board may wish to consider a motion similar to the following:

The Board of County Commissioners finds that:

A. Additional information, discussion, and public review are necessary for a more thorough review of the proposed Tentative Subdivision Map application.

Based on the aforementioned finding, and with the applicant's concurrence, the Board of County Commissioners continues the request from Traditions North LLC for a Tentative Subdivision Map for 358 single-family residential units, including 90-acres of common area open space, parks, and trails, and is generally located north of the intersection of Nevada Station and Rock Creek Parkways in Dayton on an approximately 220.75-acre portion of a 230.76-acre parcel (APN 016-406-07), PLZ-2025-095 for ___ days.

Alternative Motion for Denial

If the Board of County Commissioners, basing its decision on the requirements of Nevada Revised Statutes, cannot making affirmative findings on the following factors, and taking into account the recommendations of reviewing agencies, wishes to deny the Tentative Subdivision Map, then the Board should make a motion similar to the following.

The Board of County Commissioners finds that the following cannot be met:

1. The property to be subdivided is zoned for the intended uses and the density and design of the subdivision conforms to the requirements of the zoning regulations contained in this title;
2. If located within a planned unit development, the tentative subdivision map conforms to the density requirements, lot dimension standards and other design standards regulations approved for the planned unit development;
3. The tentative subdivision map conforms to public facilities and improvement standards contained in this title;
4. The tentative subdivision map conforms to the improvement and design standards contained in this title and adopted design criteria and improvement standards;
5. If applicable, that a phasing plan has been submitted and is deemed acceptable;
6. There are no delinquent taxes or assessments on the land to be subdivided, as certified by the County Treasurer;
7. The project complies with all environmental and health laws and regulations concerning water and air pollution, the disposal of solid waste, facilities to supply water, community or public sewage disposal and, where applicable, individual systems for sewage disposal;
8. The availability of water which meets applicable health standards and is sufficient in quantity for the reasonably foreseeable needs of the subdivision;
9. There is adequate access and availability to public services such as schools, police protection, transportation, recreation and parks;

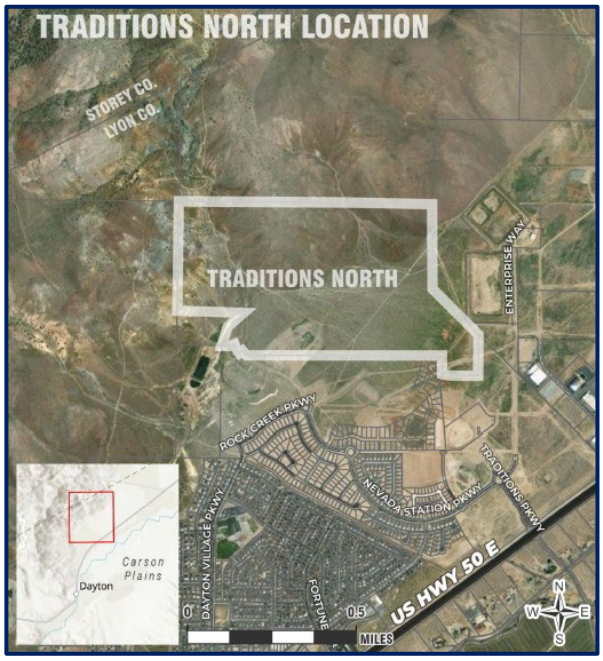
10. The project is in general conformity with the Lyon County Comprehensive Master Plan, the local community plan, if adopted, and the master plan of streets and highways;
11. The project will have no adverse impacts, or provides adequate mitigation of adverse impacts, to existing public streets;
12. The physical characteristics of the land such as floodplain, slope and soil have been considered and provisions to adequately mitigate adverse impacts of development on the environment have been incorporated;
13. The project demonstrates availability and accessibility of fire protection services, including, but not limited to, the availability and accessibility of water and services for the prevention and containment of fires, including fires in wild lands.

Based on the aforementioned considerations, I move that the Board of County Commissioners <u>deny</u> the request from Traditions North LLC for a Tentative Planned Unit Development generally located north of the intersection of Nevada Station and Rock Creek Parkways in Dayton on an approximately 220.75-acre portion of a 230.76-acre parcel (APN 016-406-07), PLZ-2025-095.

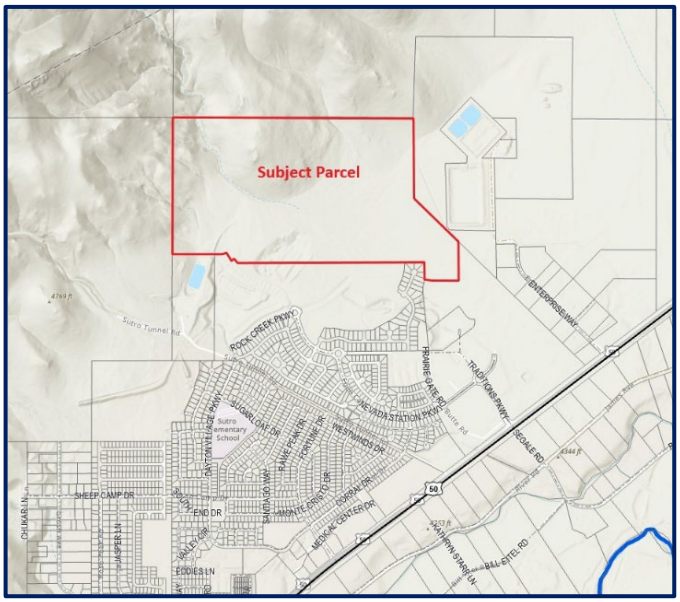
BACKGROUND INFORMATION

<u>Location, Access, and Topography</u>

The subject property is located in the Dayton Suburban Character District north of the existing Traditions Residential Development, generally located north of the intersection of Nevada Station and Rock Creek Parkways (APN 016-406-07). The property has a total acreage of 230.76-acres. The maps below show the location of the parcels.



Vicinity Map



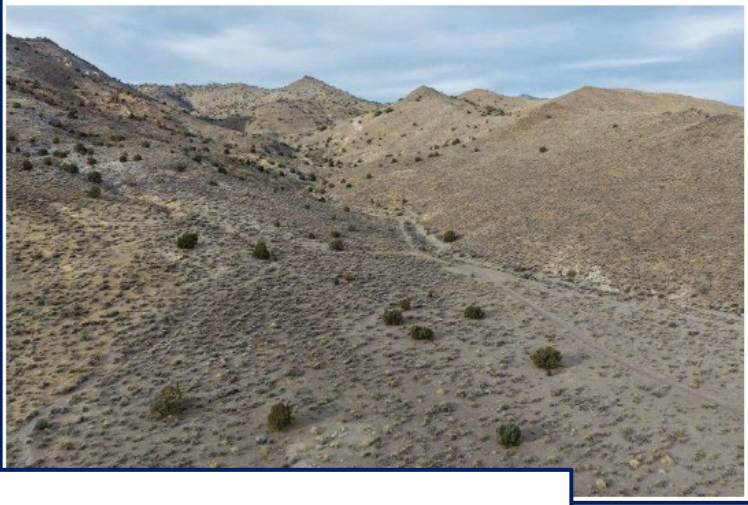
Assessor's Map (provided by applicant)

In regard to topography, the parcel has a fairly large canyon along the northwest boundary that feeds into the site. The slopes range from approximately 5 to 8 percent on the steeper portions of the parcel and relatively flat towards the southeast. The applicant is proposing to leave the drainage channel on the western half of the parcel largely undisturbed except for a future roadway for Phase 4. The steeper portions of the site are generally intended to remain as open space, to the extent possible. The images on the following pages were provided by the applicant.

Figure 1: Site Photo Facing Southeast

View of the southeast corner of the project site. Pictured in the image is the residential development to the south undergoing mass grading. Enterprise Way is off in the distance.

Figure 2: Site Photo Facing Northwest



View of the canyon to the Northwest of the site. The drainage channel pictured here will remain largely undisturbed except for a future roadway crossing for Phase 4.

Figure 3: Site Photo Facing Southwest

View of the southwest corner of the site. Pictured is the Historic Sutro Tunnel site and mass grading for the residential development to the south.

Figure 4: Site Photo Facing Northeast

View of the northeast corner of the site. The Waste Management Transfer Station is in the distance.

Public Facilities

- Water and Sewer Service - The project is located within the Lyon County Utilities Department (LCUD) service area and there are existing water and sewer services on adjacent properties. Future development will require LCUD permits and approvals prior to construction. LCUD has provided an intent to serve letter however, that is not a guarantee that service will be provided. Before receiving any building permits, LCUD reserves the right to deny or limit connections to the sewer system to ensure the system resources remain permit compliant and do not exceed the available resource capabilities.
- Law Enforcement – The Lyon County Sheriff Department provides police protection services to the area. The closest police station is the Dayton Substation and is approximately 2.5 miles away, northeast along US Highway 50.
- Fire Protection - The Central Lyon County Fire Protection District (CLCFPD) provides paramedic, advanced life support, and fire prevention and suppression services to the Dayton Area and will serve this project area. The nearest fire station is approximately 0.75 miles away.

Concurrent Applications

The applicant previously submitted concurrent applications for a Zone Change (PLZ-2025-093), Planned Unit Development (PLZ-2025-094), and Street Name Reservations (PLZ-2025-098). These items were heard by the Planning Commission on February 10, 2026 and approved by the Board of County Commissioners on March 5, 2026.

Existing and Surrounding Development

The surrounding zoning from the County's expired Title 10 Development Code includes First Rural Residential District (1 Acre) (RR-1), First Estates Residential District (E-1), Single-Family Nonrural Residential District (NR-1), General Commercial District (C-2), and Fifth Rural Residential District (20 Acres) (RR-5) zoned properties. The parcel is bordered to the south by undeveloped land within the Traditions Residential and Commercial Subdivisions. Land to the north and west is owned by the U.S. Bureau of Land Management near the Storey–Lyon County border, with the Sutro Tunnel historic site located to the southwest. Properties within the Traditions Commercial Subdivision are zoned General Commercial (C-2).

The parcel itself is currently undeveloped and will be primarily accessed via Fortune Drive and Traditions Parkway from U.S. Highway 50.

Flood Zone Designation

The subject site is not located in a Special Flood Hazard Area. It is an area designated as X-Unshaded by the current FEMA FIRM 32019C0950E (eff. 1/16/2009). The X-Unshaded flood zone areas are areas of minimal flood hazard.

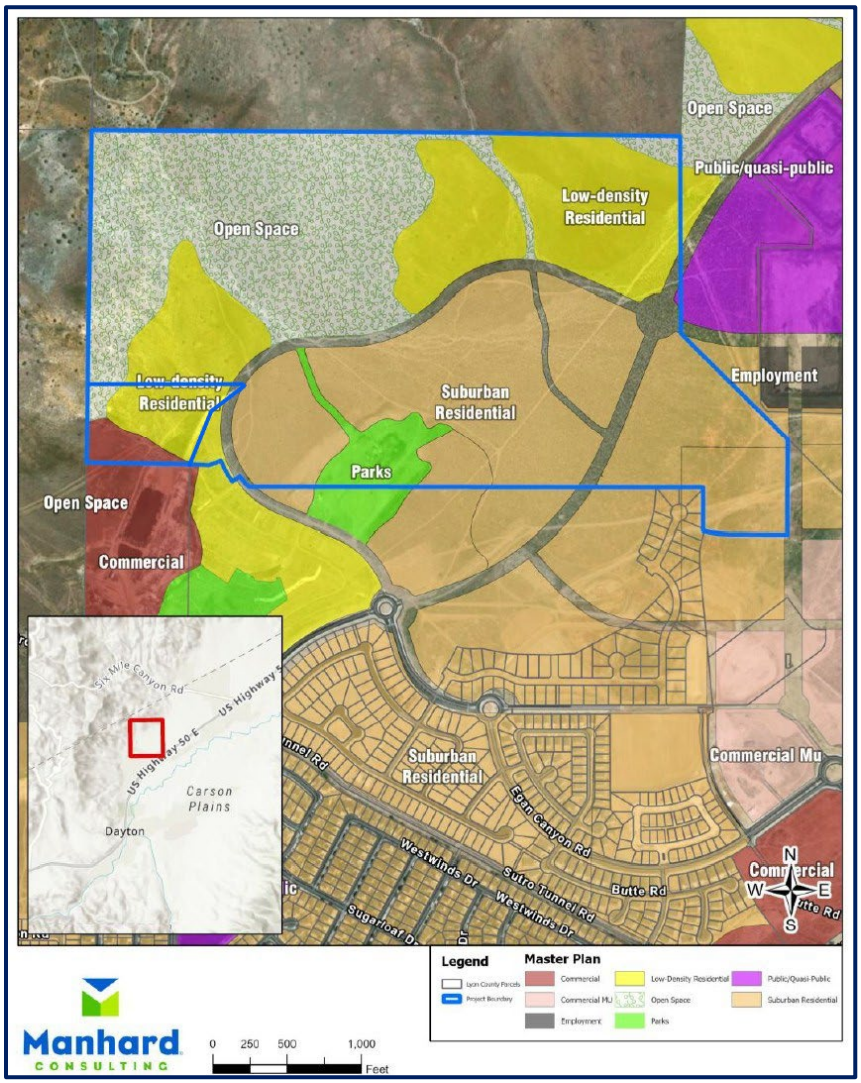
Project History

From the applicant's submittal: "*The site was originally part of the Traditions Community Master Plan. On May 6, 2004, a PUD was approved through a special use permit to establish the current Title 10 zoning designations: RR-1, E-1, C-2, and NR-1. A Tentative Subdivision Map was recorded in 2007 and extended in 2008 following the Nevada Legislature's adoption of AB74, with an additional extension granted in 2010. Although the PUD has since been dissolved, the property was hard zoned to match the approved subdivision configuration.*"

Based on the prior approvals and entitlements for the site, the applicant is correct about the current zoning designations and that there are no current entitlements for the property.

Master Plan

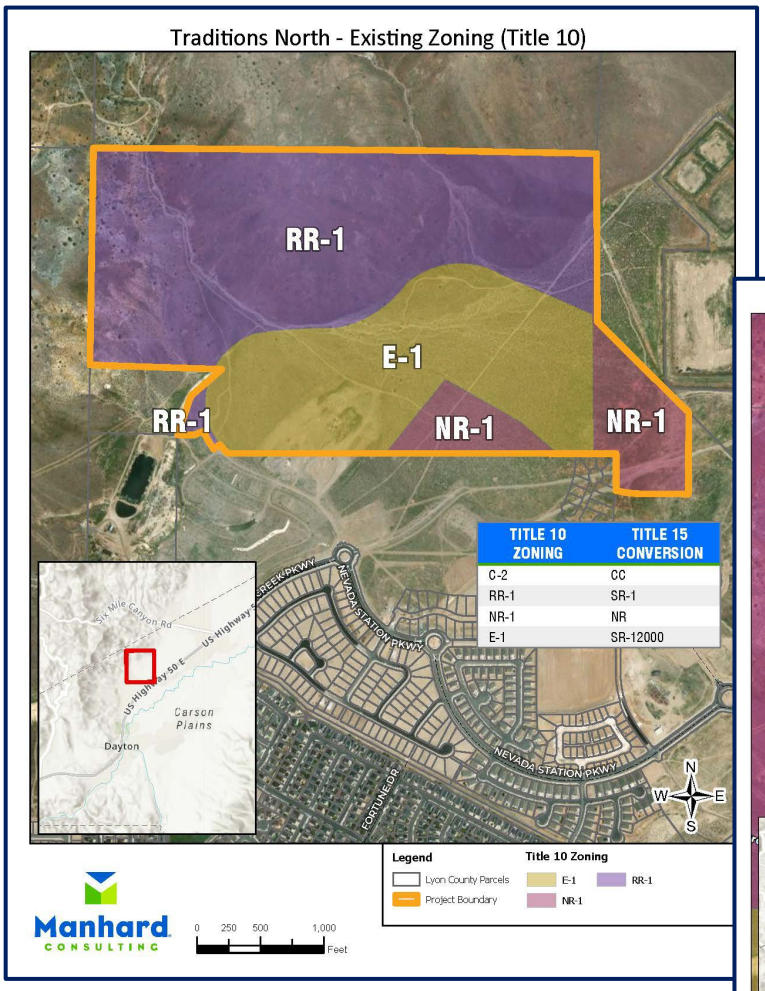
The Master Plan designations for the site are Low Density Residential, Suburban Residential, Commercial, Parks, and Open Space. The Master Plan Land Use Map is shown below.

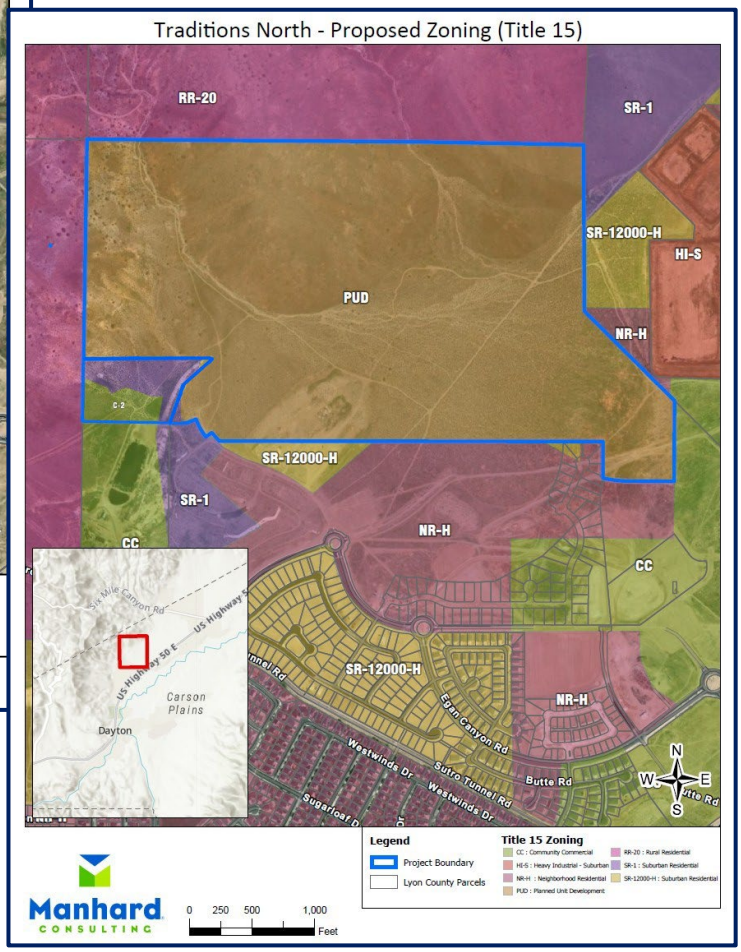


Master Plan Land Use Map

Zoning

The underlying zoning designations include Title 10 districts of First Rural Residential District (1 Acre) (RR-1), First Estates Residential District (E-1), Single-Family Nonrural Residential District (NR-1), and General Commercial District (C-2). The proposed zoning for the site is Planned Unit Development (PUD). The current and proposed zoning are shown below.





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Based on the prior approvals and entitlements for the site, the applicant is correct about the current zoning designations and that there are no current entitlements for the property.

PROJECT DESCRIPTION

As provided by the Applicant:

> *"This application also includes the first tentative map to implement the PUD which includes Phases 1, 2 & 3. The tentative map proposal includes 358 single-family residential units along with necessary backbone infrastructure, stormwater infrastructure, utilities, improved open space, pedestrian improvements, and trail connections."*

PROPOSED TENTATIVE SUBDIVISION MAP

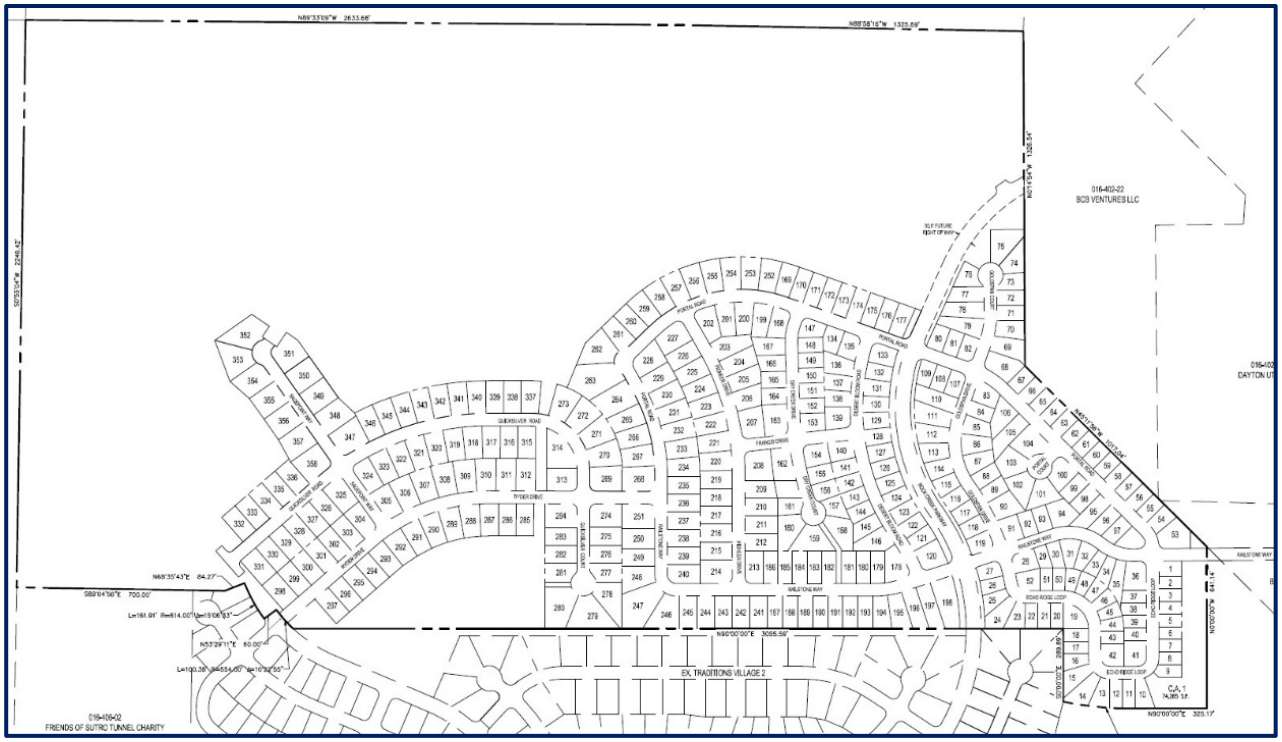
The proposed Tentative Subdivision Map would allow for 358 single-family residential units. There are 415 lots that are being proposed with a Tentative Planned Unit Development (PLZ-2025-094). The proposed lots would range in size from 4,500 sq. ft. to 12,000 sq. ft., with a proposed project density of 1.80 units per acre. The following Table shows the designated planning areas, acreages, allowed residential units and density.

Table 1: Land Use Units

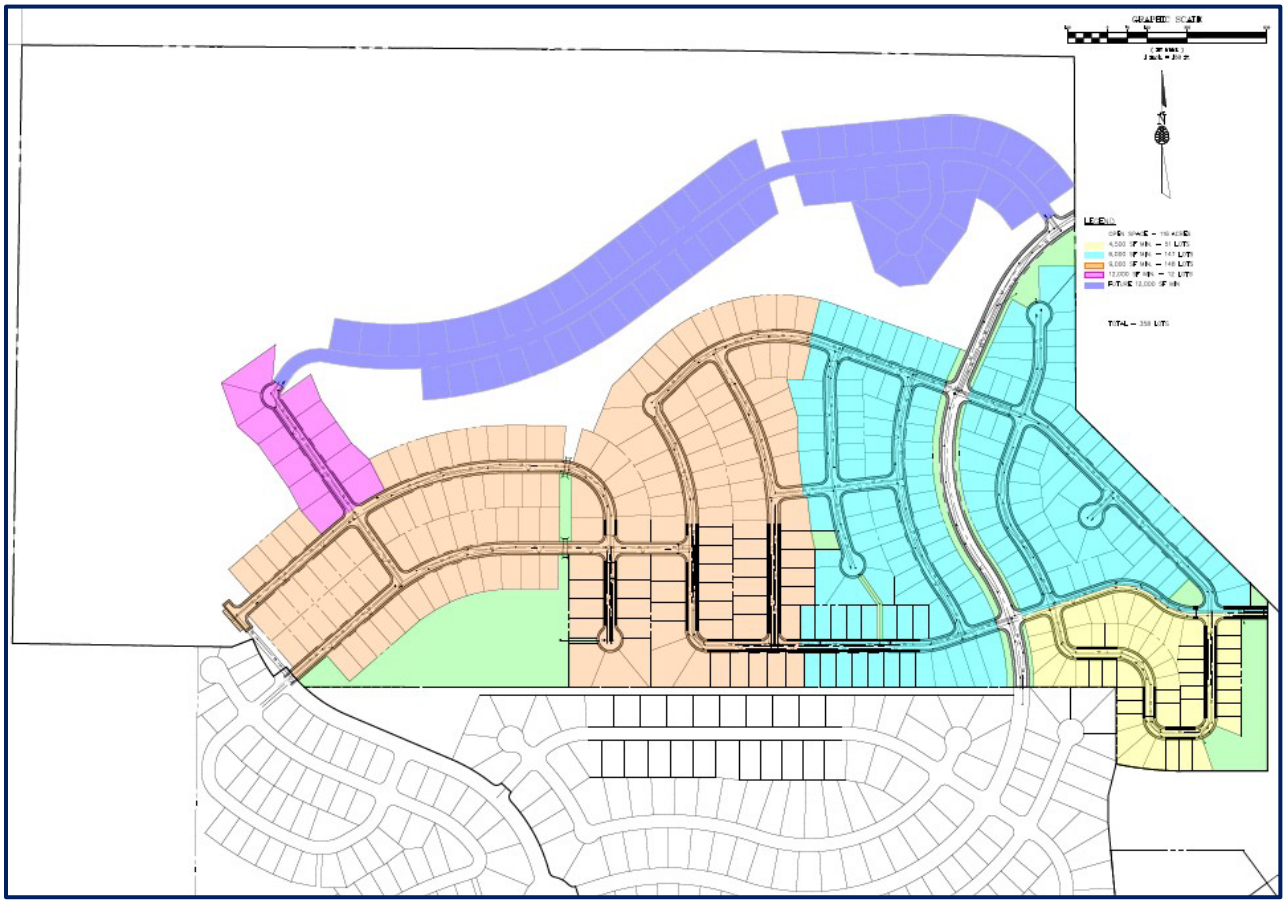
Planning Area	Land Area	Allowed Units per PUD	Effective Density
Single-Family Residential 4,500 SF	±6.9 acres	52	7.53 units/acre
Single-Family Residential 6,000 SF	±26.1 acres	147	5.63 units/acre
Single-Family Residential 9,000 SF	±34.5 acres	147	4.26 units/acre
Single-Family Residential 12,000 SF	±20.5 acres	69	3.37 units/acre
Trails and Open Space	90 acres minimum		
Backbone Roads/ROW	Varies with final design		
TOTAL	**±220.75**	**415**	**1.88 units/acre (average)**

The proposed Tentative Subdivision Map (TSM), shown below, depicts the proposed lot count and the street layout. Conceptual drainage studies and plans, traffic impact analysis, soils reports, grading plans, hydrology and hydraulic studies were included with the TSM application.

The proposed Tentative Subdivision Map, shown on the following page, is shaded to show the proposed lots and the lot size, based on the planning areas from the PUD.



Tentative Subdivision Map



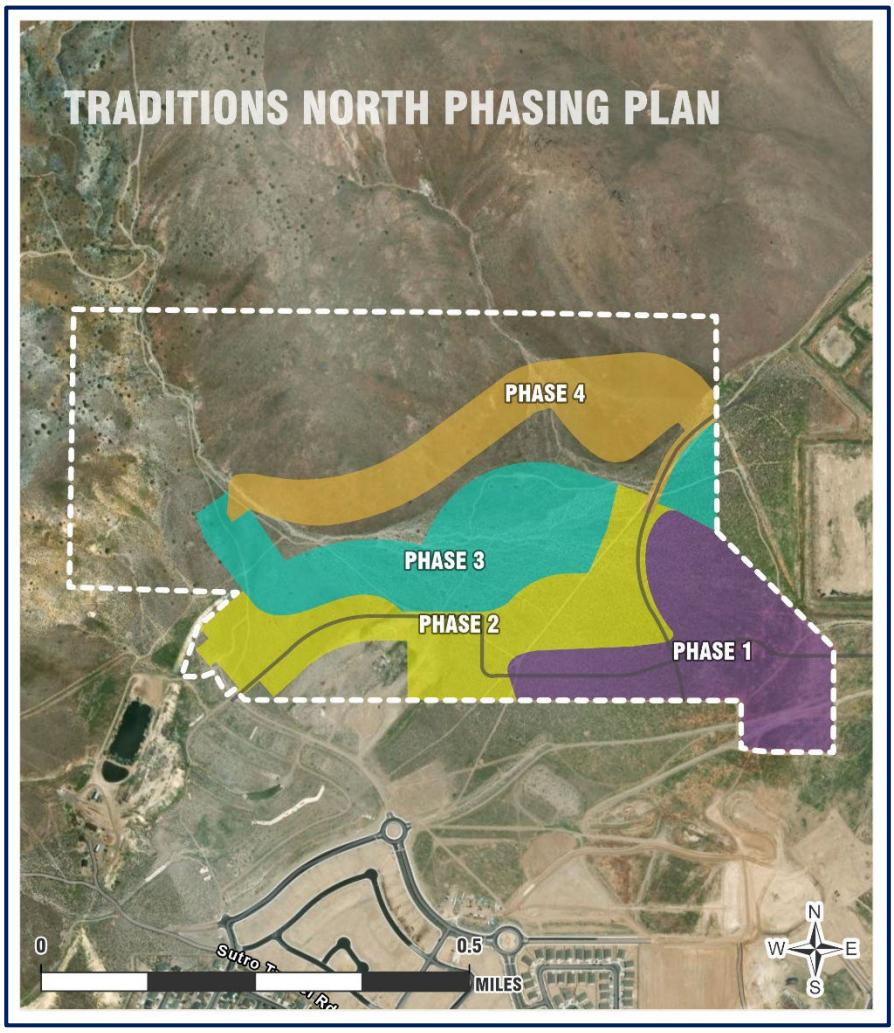
Tentative Subdivision Map by Lot Size

Phasing

The project would be constructed in phases. This TSM application includes Phases 1, 2 and 3, totaling 358 single-family residential units, as shown on the map on the following page.

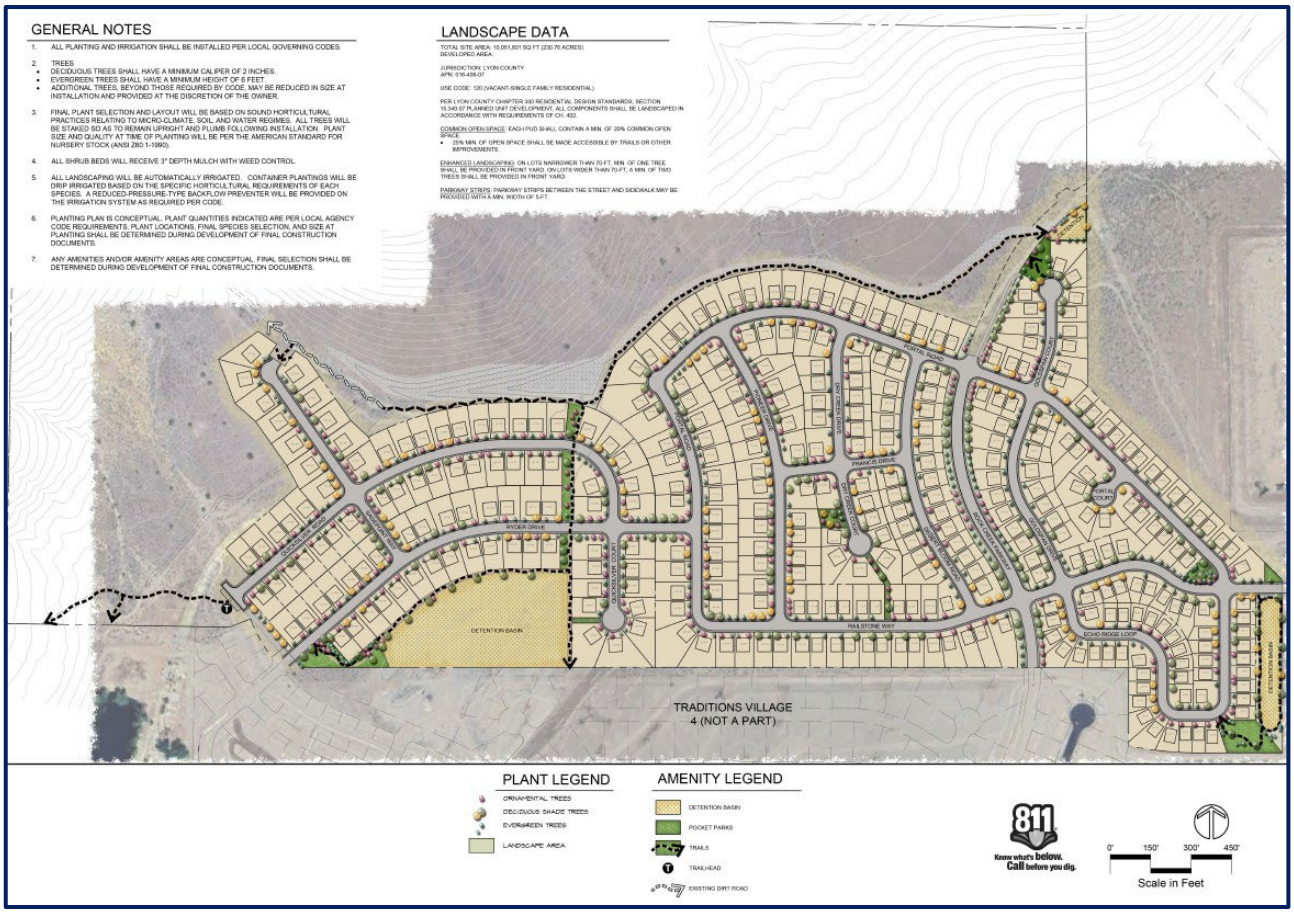
Per the applicant *"Residential development is anticipated to begin with the SR-4.5, SR-6, and SR-9 Planning Areas (±131 lots) as soon as Spring of 2027. Each phase will be developed with the required common area improvements; drainage, utility and local road infrastructure; utility connections from previous phases; and utility stubs for future buildout of development. Associated parks, open space, and trails facilities will be constructed with each phase as required to meet PUD requirements."*

Common areas are proposed to be maintained by a Homeowners Association or a similar entity. Additional project details are provided in the Applicant's Project Description.



Landscape Plan

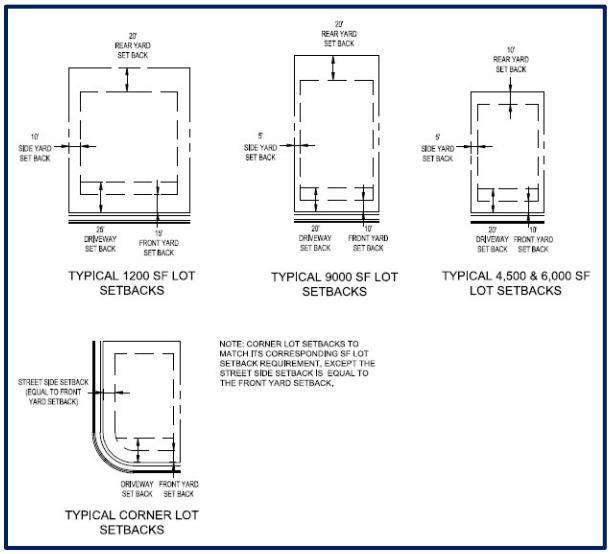
The proposed Tentative Subdivision Map includes an Overall Landscape Plan that meets the PUD landscaping requirements as shown on the following page. Typical lot landscaping plans are an attachment to this report.



Conceptual Landscape Plan

Typical Lot Configurations

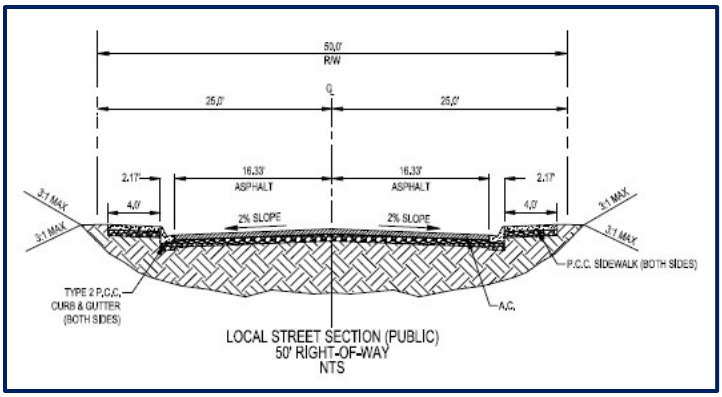
The Tentative Subdivision Map submitted includes typical lot building footprint configurations that meet or exceed the setbacks for the SR-4,500, SR-9,000, and SR-12,000 zoning standards as defined in the PUD. The diagram below depicts the typical setbacks for the various lot sizes.



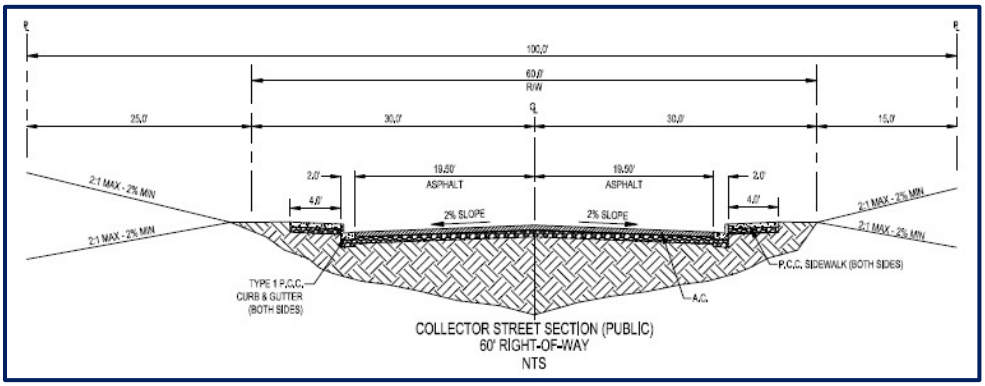
Typical Street Layouts

Street layouts in the Tentative Subdivision Map meet County standards as depicted below.

Residential Road



Collector Street



Future Development Requirements

If the Zoning Map Amendment, Planned Unit Development (PUD) and the Tentative Subdivision Maps are approved by the Board of County Commissioner, the Applicant will be required to submit a Final PUD and Final Subdivision Map(s) for administrative approvals before they can proceed to grading, site improvement and building permits.

STAFF REVIEW AND COMMENTS

Proposed Tentative Subdivision Maps (TSM) are first reviewed by staff and the Planning Commission, who then make recommendations to the Board of County Commissioners. The Board makes the final vote on whether or not to approve the request.

FINDINGS

Chapter 15.607.03 lists the Findings that the Planning Commission, in making its recommendation, and the Board, in rendering a decision, have to consider when reviewing tentative subdivision map applications. These Findings are listed below in the staff report i**n bold** type below. Each Finding is listed with the Applicant's response in *italics* and then staff's review of the Findings in normal type.

Finding 1: The property to be subdivided is zoned for the intended uses and the density and design of the subdivision conforms to the requirements of the zoning regulations contained in this title;

Applicant's Response

The tentative map is consistent with the land use plan proposed by the PUD that provides for a mix of densities.

Staff Comment

The proposed zoning for the property is currently being processed (PLZ-2025-094) to change from the Title 10 zoning districts of First Rural Residential District (1 Acre) (RR-1), First Estates Residential District (E-1), and Single-Family Nonrural Residential District (NR-1) to the Title 15 district of PUD (Planned Unit Development). As stated by the applicant above, the TSM is consistent with the PUD zoning proposed for the site. This finding is met.

Finding 2: If located within a planned unit development, the tentative subdivision map conforms to the density requirements, lot dimension standards and other design standards regulations approved for the planned unit development;

Applicant's Response

The tentative map conforms with the lot dimension standards and other design standards to be established with the adoption of the PUD.

Staff Comment

The proposed PUD Handbook zoning designations include Suburban Residential (SR) 4,500 sf minimum, SR 6,000 sf minimum, SR 9,000 sf minimum, and SR 12,000 sf minimum. The TSM conforms to the setbacks and design standards included within the PUD. The density requirements are met as shown in Table 2 below.

Table 2: Land Use Densities

Planning Area	Land Area	Gross Density	Effective Density per PUD
Single-Family Residential 4,500 SF	±6.9 acres	9.68 units/acre	7.53 units/acre
Single-Family Residential 6,000 SF	±26.1 acres	7.26 units/acre	5.63 units/acre
Single-Family Residential 9,000 SF	±34.5 acres	4.84 units/acre	4.26 units/acre
Single-Family Residential 12,000 SF	±20.5 acres	3.63 units/acre	3.37 units/acre
TOTAL	**±220.75**	**2.73 units/acre (avg.)**	**1.88 units/acre (avg.)**

Finding 3: The tentative subdivision map conforms to public facilities and improvement standards contained in this title;

Applicant's Response

Facilities to be offered for public dedication will comply with all requirements pursuant to LCC, Lyon County Utilities, Lyon County Public Works, and other applicable entities.

Staff Comment

The subject parcel's location adjacent to existing residential and future commercial developments and location within Lyon County Utilities District service boundaries ensures compliance with the County's adequate public facilities provisions. Will-serve letters from the Lyon County Utilities Department were also submitted. This Finding is made in the affirmative.

Finding 4: The tentative subdivision map conforms to the improvement and design standards contained in this title and adopted design criteria and improvement standards;

Applicant's Response

Roadway improvements have been designed in accordance with LCC, Lyon County standard road section details, and the submitted PUD handbook for Traditions North.

Staff Comment

The tentative map configuration is consistent with Title 15, County Development Standards, and the proposed PUD Handbook. The PUD Handbook application has been submitted and applies some stricter standards for allowed land use and development, and all items not addressed in the PUD Handbook will be required to be consistent with the current Lyon County Development Code in effect at the time of application. Based on the Conditions of Approval, Staff believes this Finding is met.

Finding 5: If applicable, that a phasing plan has been submitted and is deemed acceptable;

Applicant's Response

The tentative map application is proposed to be implemented in three phases. The first phase is located to the south and east of the property and includes access from Enterprise way and the connections to the subdivisions to the south. The next phase is located to the southwest and will include stormwater management infrastructure that will support the remainder of the development. The final phase for this map fills in between the initial phases.

Staff Comment

The proposed phasing plan, as shown on page 16, is acceptable per Nevada Revised Statutes and Lyon County Code. This Finding is made in the affirmative.

Finding 6: There are no delinquent taxes or assessments on the land to be subdivided, as certified by the County Treasurer;

Applicant's Response

Proof of tax payments has been provided with the application materials.

Staff Comment

The applicant is correct. The Finding is made in the affirmative.

Finding 7: The project complies with all environmental and health laws and regulations concerning water and air pollution, the disposal of solid waste, facilities to supply water, community or public sewage disposal and, where applicable, individual systems for sewage disposal;

Applicant's Response

The project will be served by Waste Management through their standard residential garbage collection services.

Staff Comment

Future development on the site will require approvals from State entities, including the Division of Environmental Protection (NDEP) for grading and the Division of Water Resources for water rights. As conditioned, the applicant will be required to submit Final Subdivision Maps within statutory deadlines for development. With those requirements, and as outlined in the Staff Comment to Finding 8, this finding can be met.

Finding 8: The availability of water which meets applicable health standards and is sufficient in quantity for the reasonably foreseeable needs of the subdivision;

Applicant's Response

Water service is provided by the Lyon County Utilities Department. Conveyance systems will be designed in accordance with Lyon County Utilities requirements.

Staff Comment

The Intent-to-Serve letter from Lyon County's Utilities Department (LCUD) notes that sufficient water rights will need to be attained to record final maps, with connection to the LCUD water system required. LCUD reserves the right to deny or limit the water or sewer connections provided to ensure that growth within the service area does not exceed the available resource capabilities. As conditioned and processed through the pending Final Map process, staff feels this Finding may be made in the affirmative.

Finding 9: There is adequate access and availability to public services such as schools, police protection, transportation, recreation and parks;

Applicant's Response

Based on discussions with Lyon County School District, schools that serve this property are adequate. Police services are provided by the Lyon County Sheriff's Department. The Dayton Substation is located within 2.5 miles of the project. The project proposes a large park and trailhead that will supplement the project and the broader community. Transportation facilities are adequate according to the provided traffic impact statement.

Staff Comment

The availability of public services is described in the **BACKGROUND INFORMATION** – Public Facilities section of this report. The Finding is made in the affirmative.

Finding 10: The project is in general conformity with the Lyon County Comprehensive Master Plan, the local community plan, if adopted, and the master plan of streets and highways;

Applicant's Response

The project supports the following Master Plan policies:

- *Policy LU 1.1: Follow Development Patterns as Established in the Land Use Plan*
- *Policy LU 1.2 Residential Development Patterns in Neighborhoods*
- *Policy LU 2.1 Residential Development in Areas with Services*
- *Policy LU 3.1: Diverse Economic Base*
- *Policy FS 1.1: Location of New Development*
- *Policy C 1.2: Pedestrian Friendly Communities*
- *Policy C 1.3: Design Tailored to Communities*
- *Policy C 1.5: Design Complementary Neighborhoods in Suburban Districts*

Staff Comment

The applicant's statement above is correct. The **PROPOSED TENTATIVE SUBDIVISION MAP** – Typical Street Layouts section of this report includes cross sections of the proposed roadways, demonstrating compliance with the County's Development Standards and Master Plan. This Finding is made in the affirmative.

Finding 11: The project will have no adverse impacts, or provides adequate mitigation of adverse impacts, to existing public streets;

Applicant's Response

Negligible impacts are anticipated to the existing public street system and coordination will occur between the development of this project and the proposed improvements to US Highway 50.

Staff Comment

The Traffic Impact Study for this map compliments others submitted that address the US 50 and Traditions Parkway intersection. The project is anticipated to generate approximately 3,433 new Daily trips, 255 new AM peak hour trips, and 342 new PM peak hour trips to the external roadway network. The following sections are excerpts from the Traffic Impact Study, Conclusions & Recommendations section, dated November 12, 2025.

"Conclusions & Recommendations

- *The project will access US 50 via Fortune Drive and Traditions Parkway. The project originally contemplated a connection to Enterprise Way as well, however due to circumstances separate from the traffic study, a vehicle connection to Enterprise Way is no longer being considered and was not included in this traffic analysis and report. If the project wishes to puruse a vehicle connection to Enterprise Way in the future, a separate traffic analysis will need to be conducted at that time.*
- *Under Opening Year and Opening Year Plus Project conditions, the study intersections are expected to operate within policy level of service thresholds.*
- *Under Future Year conditions, the US 50/Fortune Drive intersection is anticipated to operate at level of service E during the AM peak hour. The poor level of service is primarily due to the high southbound right-turn volume on Fortune Drive. The southbound Fortune Drive approach currently contains a hatched-out lane which can be converted to a second right-turn lane. With dual southbound right-turn lanes and protected plus overlap phasing, the overall US 50/Fortune Drive intersection is anticipated to operate within policy level of service thresholds. Capacity improvements for the Future Year condition should be undertaken by NDOT as regional improvements since the poor future operating conditions will occur unrelated to this project.*
- *Under Future Year Plus Project conditions, the analysis includes the needed regional capacity improvements (dual southbound right-turn lanes) at the US 50/Fortune Drive intersection. The study intersections are expected to operate at overall LOS D or better (within policy level of service thresholds).*

The applicant has provided a more detailed circulation plan as shown below.

The report also makes the following comments/recommendations.

"The project is not expected to result in levels of service below policy thresholds and therefore no project related mitigations are recommended. The following regional improvements by NDOT are included in the US 50 Corridor Study or as part of the corridor safety improvements that are currently at the 90% design stage, and were included in the Future Year analysis as a background condition:

- *Lower the speed limit on US 50 from 60 mph to 55 mph from east of Fortune Drive to James Avenue to provide a more gradual transition in speed limits through the expanding urbanized area*
- *Widen US 50 to six lanes for the Future Year per the US 50 Corridor Study. With the widening project:*
    - *Construct/restripe a second southbound right-turn lane on Fortune Drive at US 50*
    - *Construct a westbound right-turn lane on US 50 at Fortune Drive (not shown in the US 50 Corridor Study) as exists today*
    - *Construct a westbound right-turn lane on US 50 at Traditions Parkway (not shown in the US 50 Corridor Study) as exists today*
    - *Improve the south leg of the US 50/Traditions Parkway/Segale Road intersection"*

The County recognizes that NDOT has jurisdiction over access and improvements impacting US 50 and supports their determinations. NDOT has accepted the traffic study for this project, subject to conditions that have been added to Condition 22. As conditioned, this Finding is made in the affirmative.

Finding 12: The physical characteristics of the land such as floodplain, slope and soil have been considered and provisions to adequately mitigate adverse impacts of development on the environment have been incorporated;

Applicant's Response
Physical characteristics such as slope, drainageways, [others] have been considered in the design of the project and adequate mitigation is proposed to protect the public health, safety, and welfare.

Staff Comment
The common areas of the proposed Tentative Subdivision Map will include drainage swales, curb and gutter, underground storm drain pipes, open space drainage corridors, four (4) regional flow detention basins and three project outfall locations. Prior to recording of a Final Map, the technical studies will be reviewed for compliance with Storm Drainage Guidelines for Lyon County, dated September 20, 2024 and the Dayton Valley Drainage Master Plan, per Recommended Condition 23 of this report. Conditions 24, 25, and 27 address slopes and soils. As conditioned and processed, this Finding is affirmed.

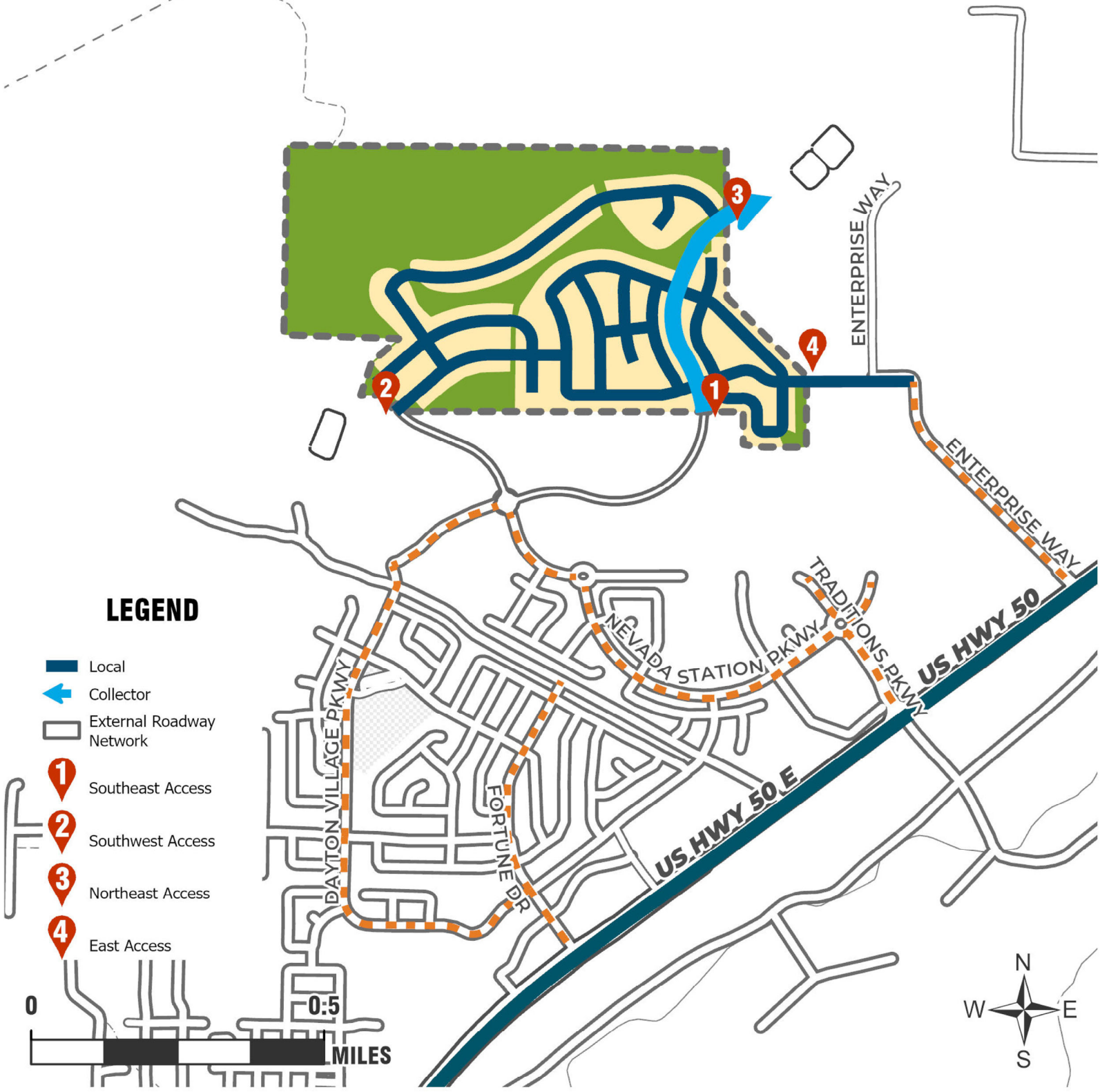
Finding 13: The project demonstrates availability and accessibility of fire protection services, including, but not limited to, the availability and accessibility of water and services for the prevention and containment of fires, including fires in wild lands.

Applicant's Response
The project is to be served by Central Lyon Fire. The nearest fire station is located three-quarters of a mile from the site, or an estimated response time of five minutes. This property is located within the Wildland Urban Interface zone for Central Lyon County. All residential building permits are required to have fire and life safety code plan reviews and be reviewed in accordance with the IWUIC code adopted at the time of permit submittal.

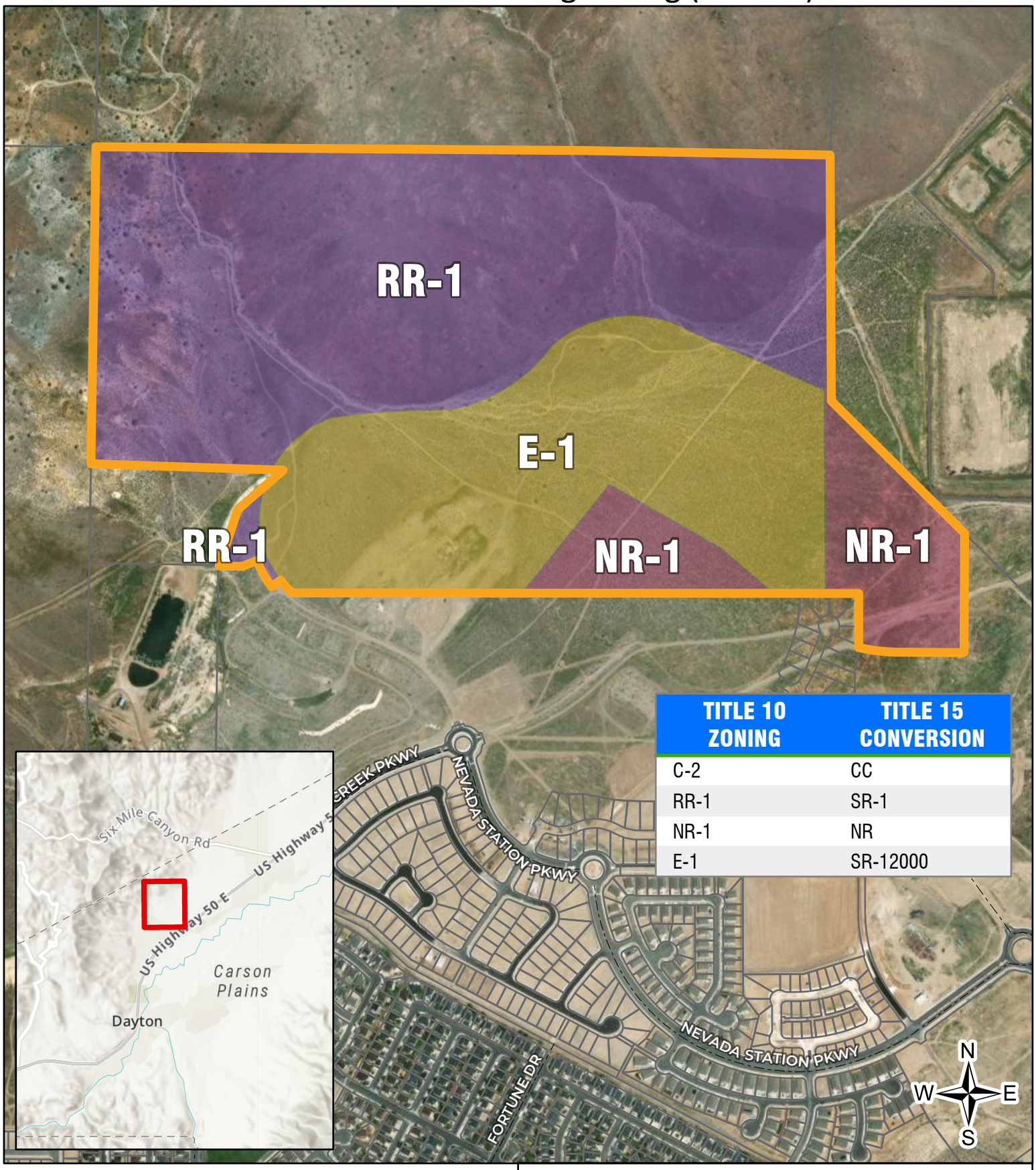
Staff Comment
Per Recommended Conditions 26, 28, 29, and 30 of this report, the applicant must demonstrate compliance with all Central Lyon County Fire Protection District standards. As conditioned and processed, this Finding is made in the affirmative.

UPDATED PLANS TO REFLECT SUTRO TUNNEL 10.01 ACRE DONATION

TRADITIONS NORTH CIRCULATION PLAN



Traditions North - Existing Zoning (Title 10)



TITLE 10 ZONING	TITLE 15 CONVERSION
C-2	CC
RR-1	SR-1
NR-1	NR
E-1	SR-12000

Legend

- Lyon County Parcels
- Project Boundary

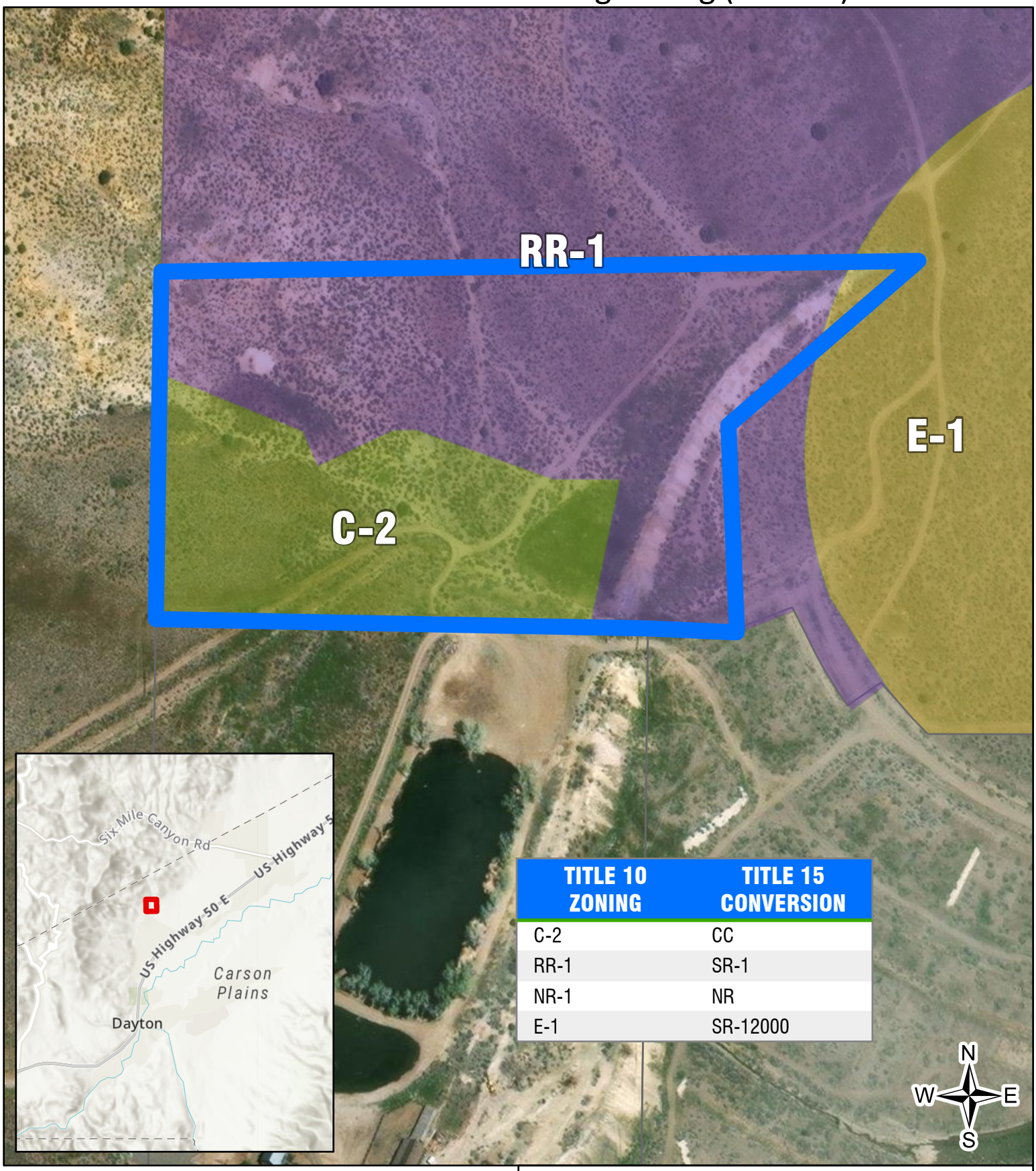
Title 10 Zoning

- E-1
- RR-1
- NR-1

Manhard CONSULTING

0 250 500 1,000 Feet

Sutro Tunnel Donation Existing Zoning (Title 10)



TITLE 10 ZONING	TITLE 15 CONVERSION
C-2	CC
RR-1	SR-1
NR-1	NR
E-1	SR-12000

Legend

Lyon County Parcels

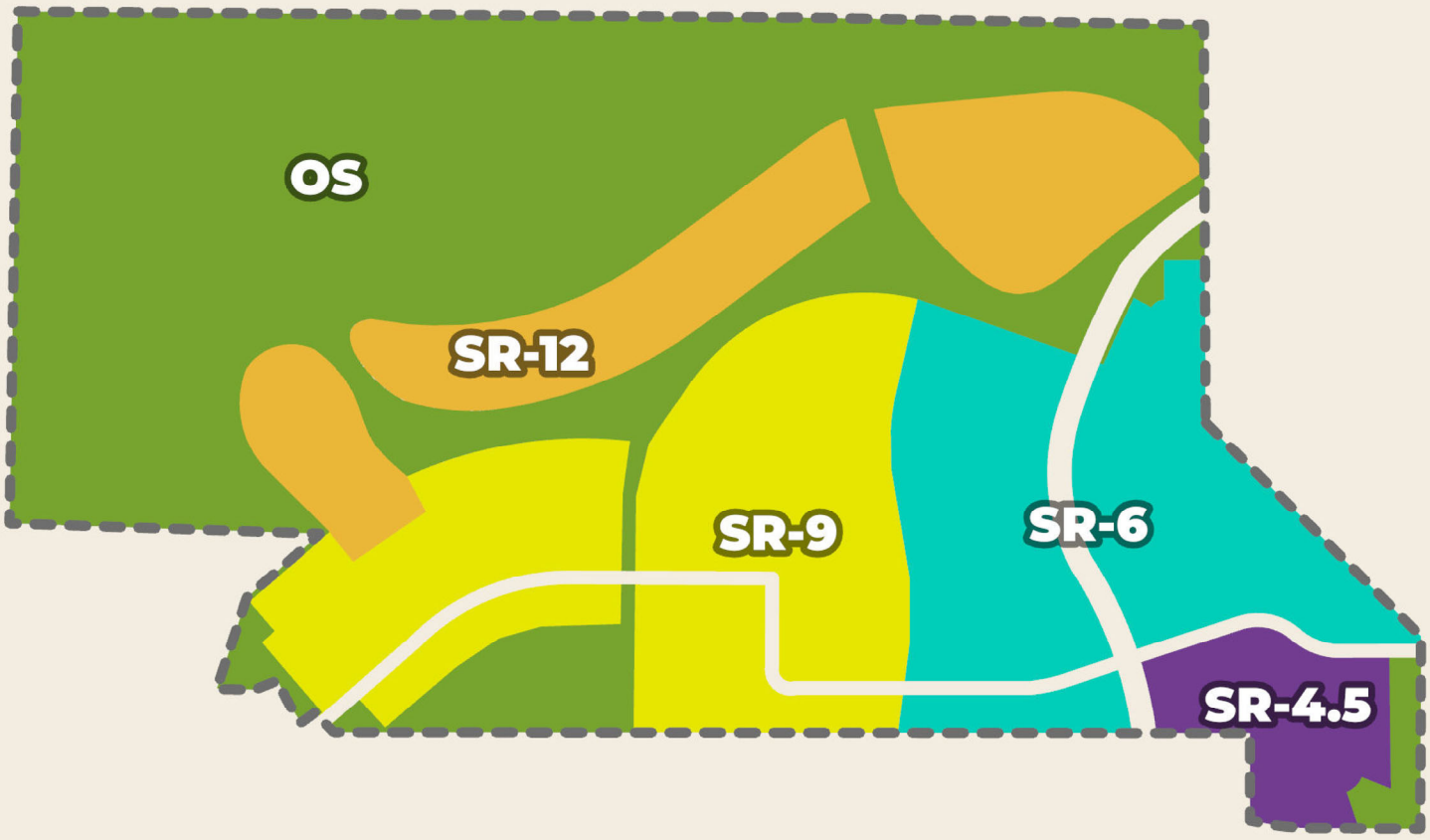
Title 10 Zoning

C-2 RR-1 E-1

Manhard CONSULTING

0 250 500 Feet

TRADITIONS NORTH LAND USE PLAN



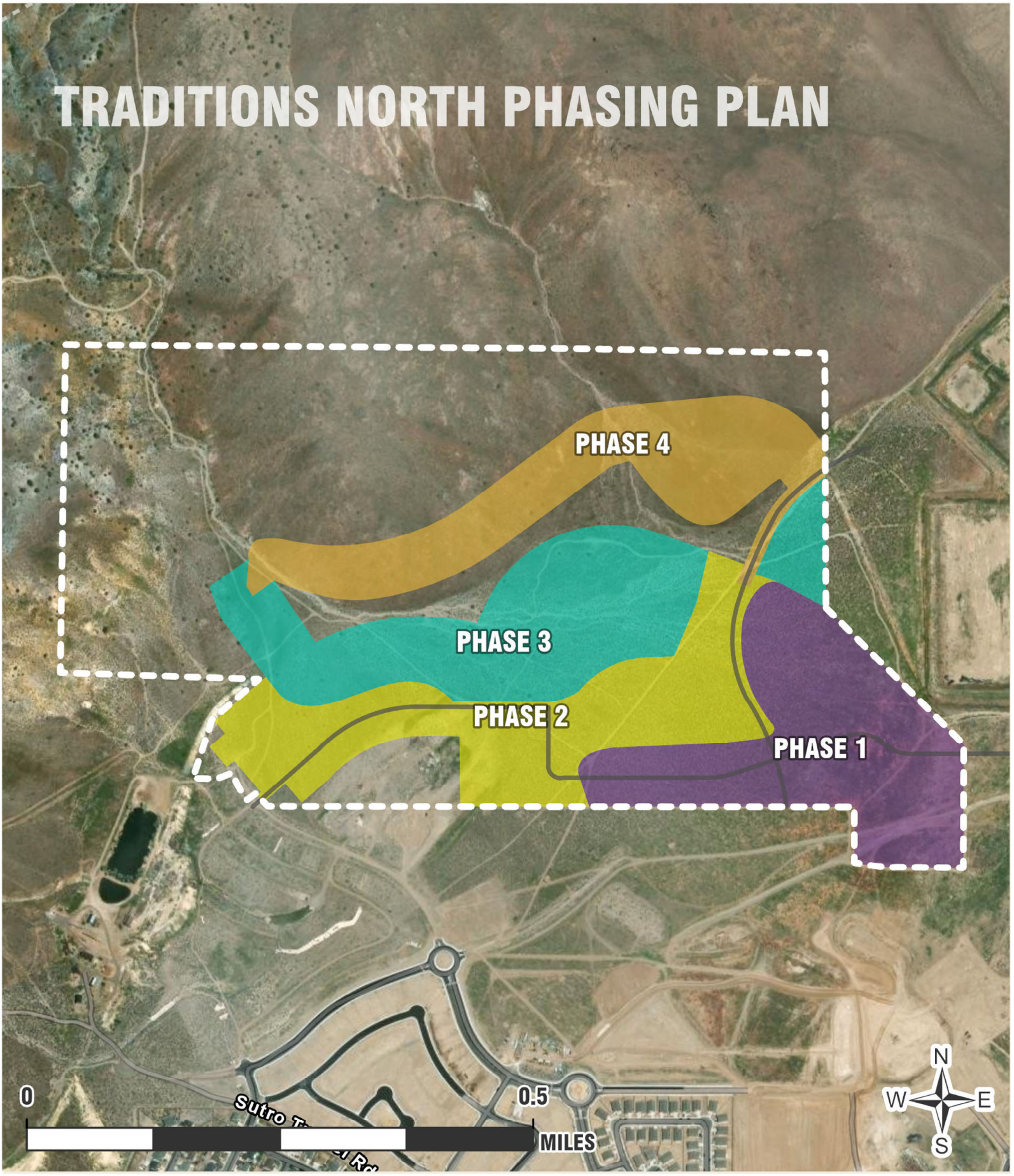
LEGEND

- Open Space (OS)
- Single-Family - 12,000 sf (SR-12)
- Single-Family - 4,500 sf (SR-4.5)
- Single-Family - 6,000 sf (SR-6)
- Single-Family - 9,000 sf (SR-9)

0 0.5 MILES

N W E S

TRADITIONS NORTH
MASTER PARKS AND TRAILS PLAN
LEGEND
Improved Trails
Developed Greenspace
0
0.5
MILES
N
W
E
S


TRADITIONS NORTH PHASING PLAN
PHASE 4
PHASE 3
PHASE 2
PHASE 1
0
0.5
MILES
N
W
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TRADITIONS NORTH LOCATION
STOREY CO.
LYON CO.
TRADITIONS NORTH
ENTERPRISE WAY
ROCK CREEK PKWY
NEVADA STATION PKWY
TRADITIONS PKWY
DAYTON VILLAGE PKWY
FORTUNE
US HWY 50 E
Carson Plains
Dayton
0
0.5
MILES
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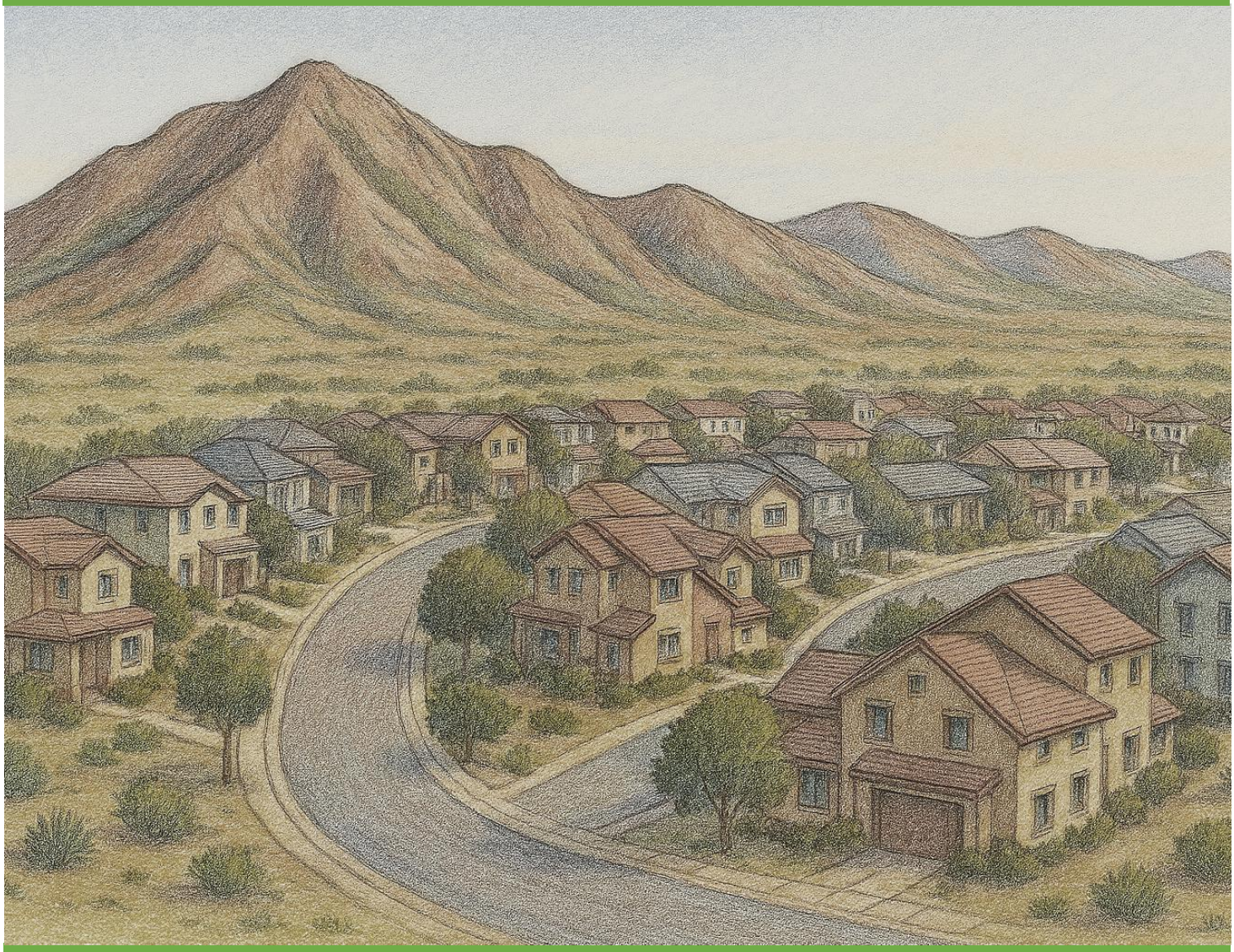
TRADITIONS NORTH

ZONING MAP AMENDMENT
PLANNED UNIT DEVELOPMENT
TENTATIVE MAP

NOVEMBER 2025



Prepared For:

Traditions North LLC

5275 West 7th Street Reno, NV 89523

Prepared By:

Manhard CONSULTING

241 Ridge Street, Suite 400, Reno, NV 89501

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- Development and Land Division Application & Checklist
- Owner & Applicant Affidavits
- PUD Handbook
- Site Plan (full sized)
- Map (full sized)
- Reduced-sized Map/Plan Set
- Vicinity Map
- Title Report
- Zoning Map Amendment Legal Description
- Plan Set (includes Preliminary Grading, Preliminary Drainage, Preliminary Utility Plans) & Checklists
- Drainage Report
- Hydrology & Hydraulics (H&H) Study
- Traffic Study
- Area Study
- Preliminary Soils Report
- Preliminary Sewer Report
- Intent to Serve Letters/Utility Statements

EXECUTIVE SUMMARY

The application proposes a planned unit development (PUD) consisting of 415 single-family residential units, which is well below the maximum density of 607 units permitted under the existing zoning. The PUD includes a mix of lot sizes to create a variety of housing options in conformance with the Lyon County Master Plan. A comprehensive PUD Handbook is included with this application drafted in accordance with Title 15 and is substantially consistent with the goals and policies of the Lyon County Master Plan.

Open space is planned to be integrated throughout the site and is designed to be sensitive to adjacent public land, topography, and recreation opportunities. The provided open space exceeds the 20% minimum open space requirement and will provide active and passive recreational amenities that will promote physical activity and interaction among residents. Additionally, a trailhead is located to the west of the site which integrates the project's trail system with existing historic resources and regional trails, enhancing connectivity and access to outdoor recreation opportunities.

A Tentative Subdivision Map for 358 units is submitted concurrently with the PUD to define lot configuration, infrastructure improvements, and preliminary site design for the first phases of development.

Table 1: Project Summary

Total Area	±230.76 acres
Maximum Number of Units	415
Tentative Map Units	358
Maximum Density	1.80 dwelling units per acre
Parking Required	728 (2 per dwelling unit)
Parking Provided	738 (10 for Sutro Trailhead)
Minimum Common Area/Open Space	100 acres (43.3%)

PROJECT LOCATION

The subject property is a ±230.76-acre site located north of the intersection of Nevada Station and Rock Creek Parkways. To the north and west of the site is land owned by the United States Bureau of Land Management and is located near the Storey County and Lyon County border. The site is primarily accessed via Fortune Drive and Traditions Parkway from U.S. Highway 50.

Figure 1: Project Location

EXISTING CONDITIONS

The project site is currently undeveloped and is a continuation of the Traditions residential development directly to the south. Otherwise, the property is generally surrounded by undeveloped land. To the southwest of the site is the Sutro Tunnel historical site which is actively undergoing historic conservation work.

Table 2: Surrounding Property Designations

	Current Zoning (Title10)	Master Plan	Current Land Use
North	• RR-5: Fifth Rural Residential District (20 Acres)	• Open Space	• Undeveloped (BLM)
East	• E-1: First Estates Residential District • M-1: General Industrial District • NR-1: Single-family Nonrural Residential District • C-2: General Commercial District	• Open Space • Low-Density Residential • Public/Quasi-Public	• Reclamation Ponds • Solid Waste Transfer Station
South	• C-2: General Commercial District • E-1: First Estates Residential District • NR-1: Single-family Nonrural Residential District • RR-1: Fifth Rural Residential District (20 Acres)	• Suburban Residential • Low-Density Residential • Commercial • Parks	• Future Traditions Village 4
West	• RR-5: Fifth Rural Residential District (20 Acres)	• Open Space	• Undeveloped (BLM)

Figure 2: Site Photo Facing Southeast

View of the southeast corner of the project site. Pictured in the image is the residential development to the south undergoing mass grading. Enterprise Way is off in the distance.

Figure 3: Site Photo Facing Northwest

View of the canyon to the Northwest of the site. The drainage channel pictured here will remain largely undisturbed except for a future roadway crossing for Phase 4.

Figure 4: Site Photo Facing Southwest

View of the southwest corner of the site. Pictured is the Historic Sutro Tunnel site and mass grading for the residential development to the south.

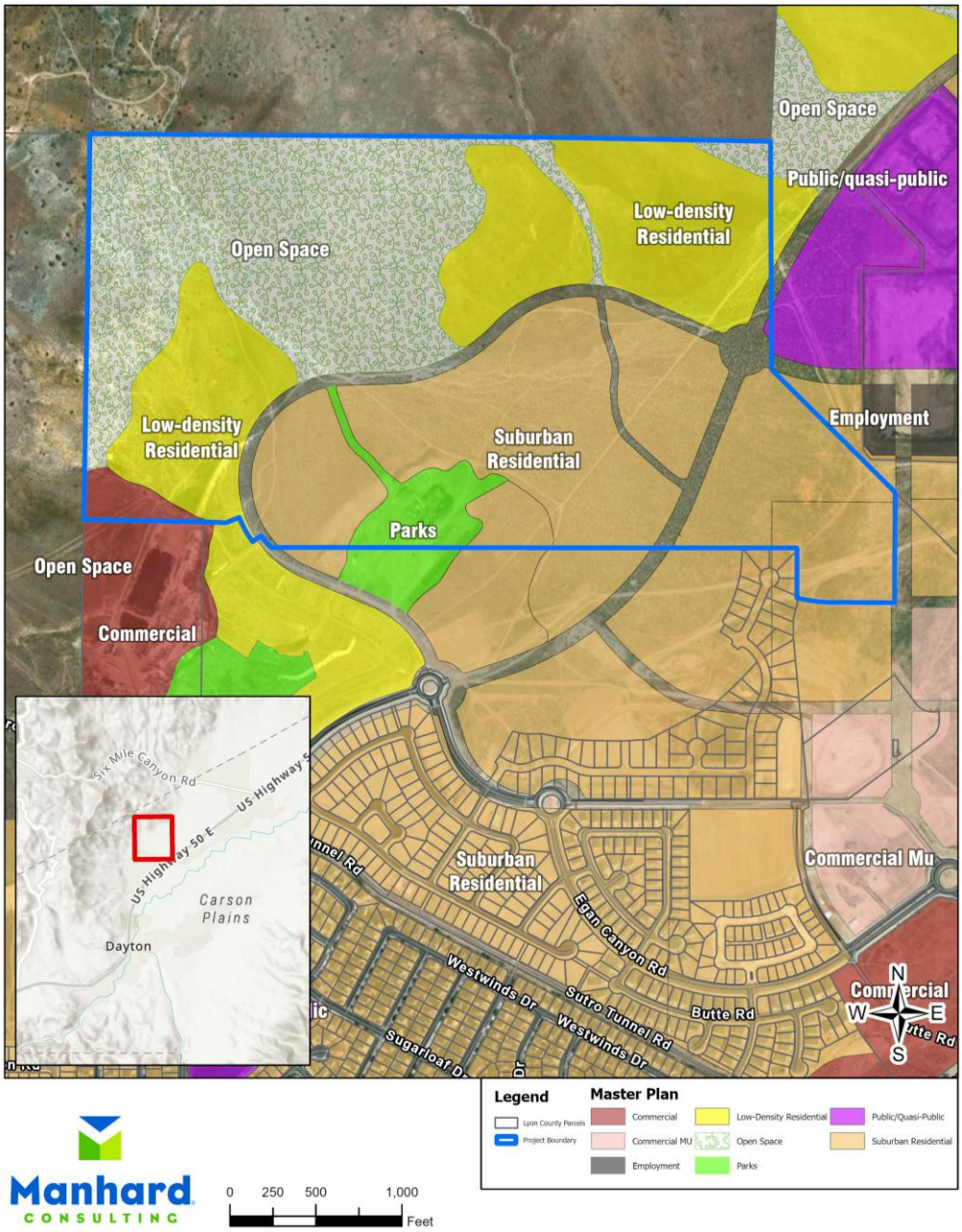
Figure 5: Site Photo Facing Northeast

View of the northeast corner of the site. The Waste Management Transfer Station is in the distance.

MASTER PLAN AND ZONING DESIGNATIONS

The property is located within the Suburban Character District and has the Master Plan designations of Suburban Residential, Low-Density Residential, Commercial, Open Space, and Parks (Figure 6). The existing Master Plan land use mix has 38% of the site as Open Space. The proposed development plan exceeds that by maintaining the site as 43% open space.

Figure 6: Lyon County Master Plan Designation



The property is subject to the existing Title 10 zoning including Rural Residential—First Rural Residential, 1 acre (RR-1), First Estates Residential (E-1), General Commercial (C-2), and Single-family Nonrural Residential (NR-1) (Figure 7). This request proposes replacing the existing zoning with the Planned Unit Development (PUD) zoning designation (Figure 8).

Figure 7: Existing Lyon County Zoning Designation

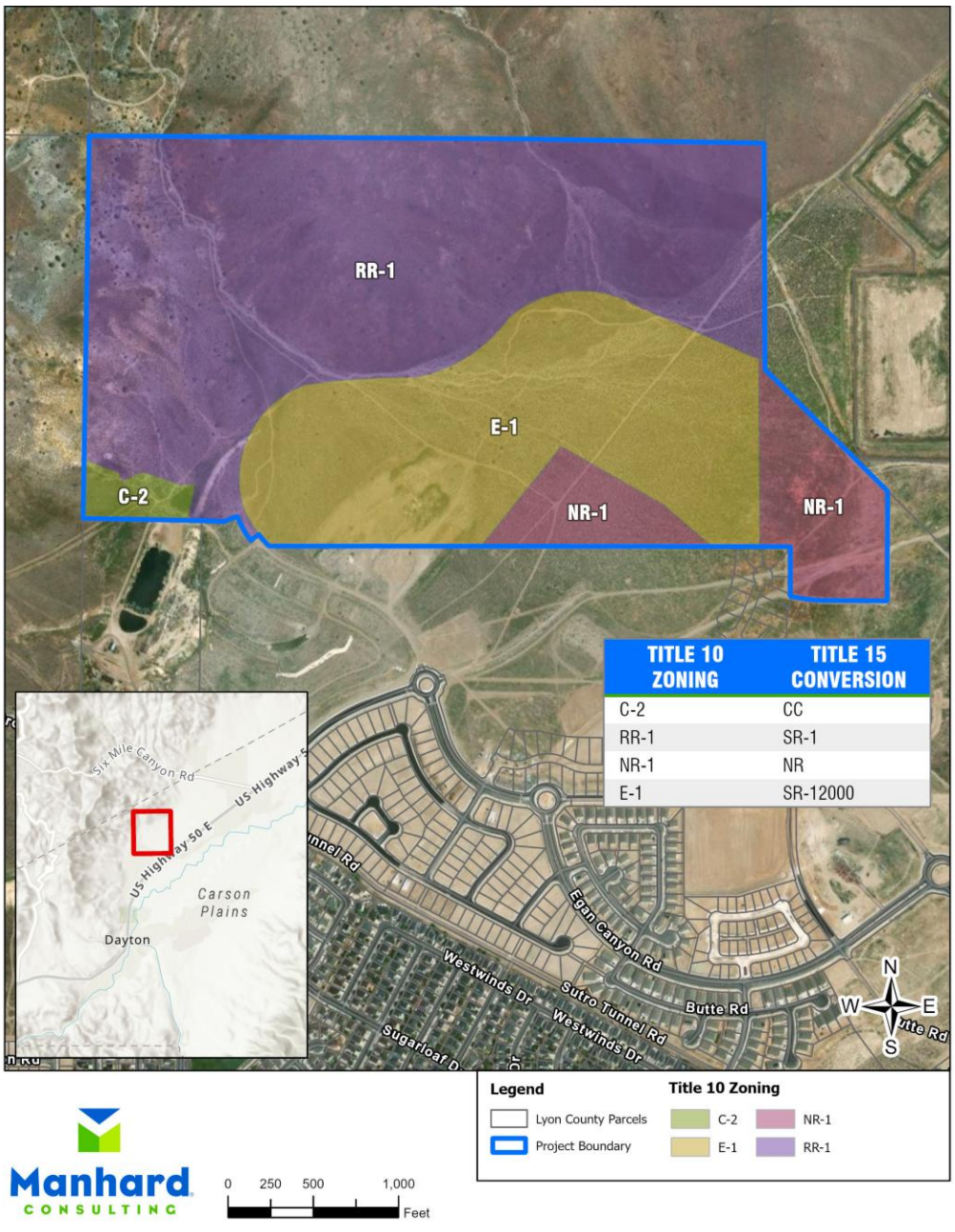
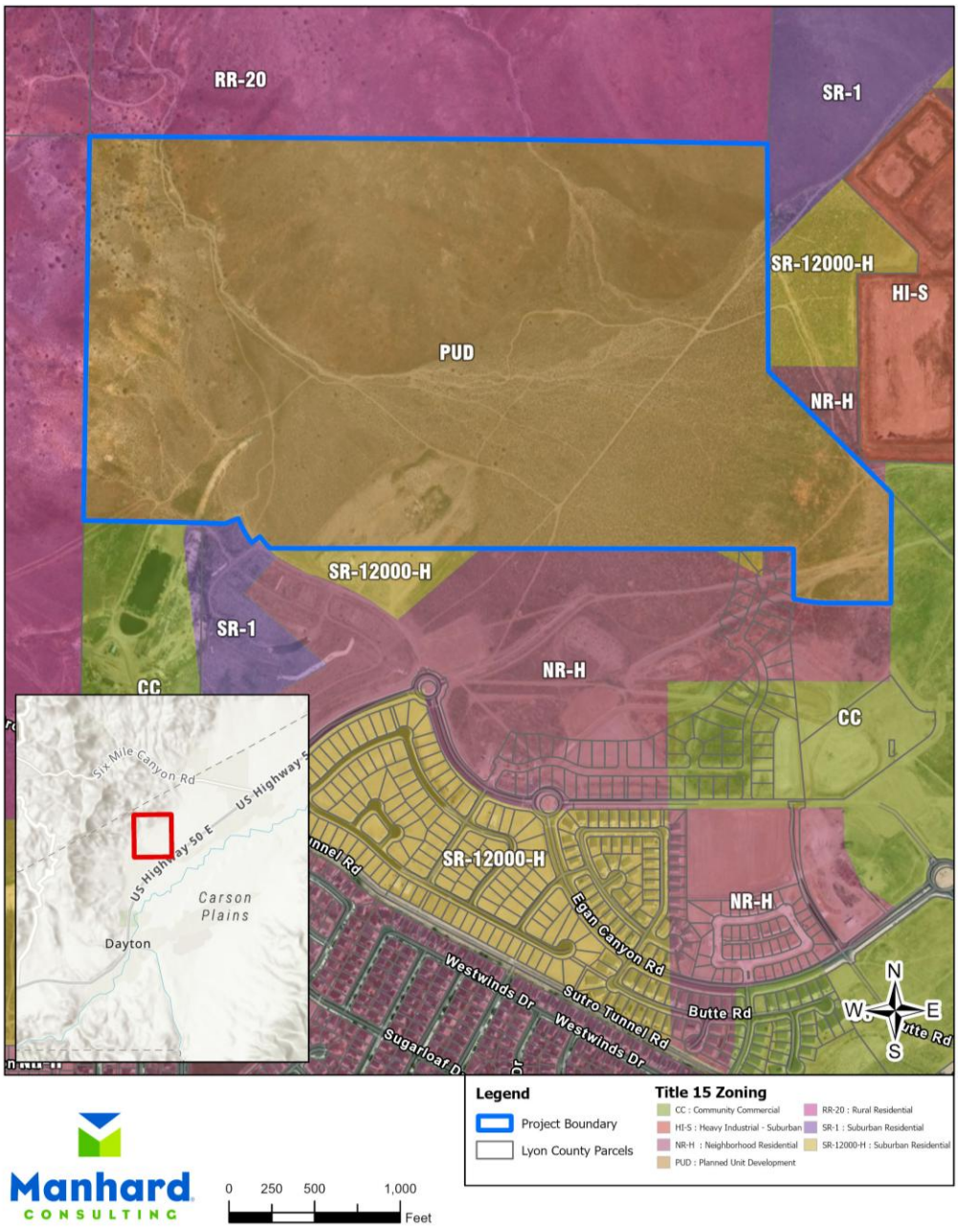


Figure 8: Proposed Lyon County Zoning Designation



PRIOR PROJECT APPROVALS

The site was originally part of the Traditions Community Master Plan. On May 6, 2004, a PUD was approved through a special use permit to establish the current Title 10 zoning designations: RR-1, E-1, C-2, and NR-1. A Tentative Subdivision Map was recorded in 2007 and extended in 2008 following the Nevada Legislature's adoption of AB74, with an additional extension granted in 2010. Although the PUD has since been dissolved, the property was hard zoned to match the approved subdivision configuration.

APPLICATION REQUEST

The enclosed application is a request for:

1) A **Zoning Map Amendment** for one parcel from ±137 acres of RR-1, ±67 acres of E-1, ±24 acres of NR-1, and ±3 acres of C-2, a total of ±230.76 acres to Planned Unit Development (PUD).
2) A **Tentative Planned Unit Development**, including the review and approval of the development standards handbook.
3) A **Tentative Map** to create a subdivision consisting of 358 detached single-family residential units on a ±230.76-acre project site, including 116 acres of common area open space, parks, and trails.

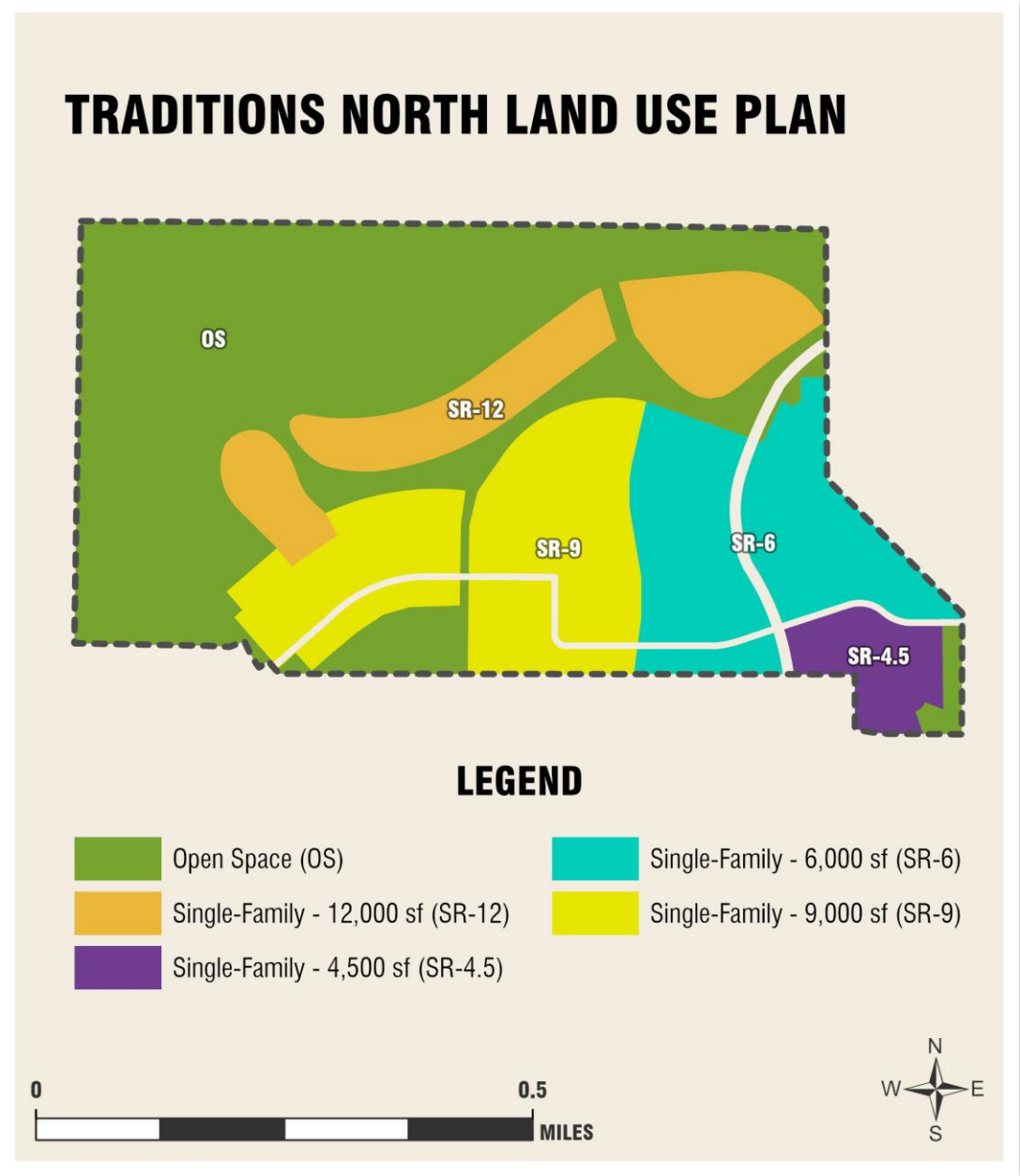
ZONING MAP AMENDMENT AND PUD DESCRIPTION

This application submittal includes a request for a zoning map amendment to establish a Planned Unit Development (PUD). Included for consideration is the tentative planned unit development plan and development handbook. The completed project includes a maximum of 415 dwelling units and it is proposed to be constructed in four phases. The PUD provides necessary flexibility to implement the project, while maintaining consistent standards across a mix of residential intensities.

The land use plan includes planning areas that are generally consistent with existing Lyon County residential zones, with the addition of a 6,000 sq. ft. minimum lot size type.

The Traditions North PUD Development Standards Handbook provides a framework to ensure the quality of the development that occurs with the PUD and that each project meets the intent of the approved project. The proposed project meets the development standards set forth in the Handbook, including land use, density, setbacks, open space, and other development standards.

Figure 9: Traditions North Land Use Plan



Title 15 Zoning	Traditions North Planning Area
Neighborhood Residential, 4,500 sf min. (NR)	SR-4.5
Neighborhood Residential, 4,500 sf min. (NR)	SR-6
Suburban Residential, 9,000 sf min. (SR-9,000)	SR-9
Suburban Residential, 12,000 sf min. (SR-12,000)	SR-12

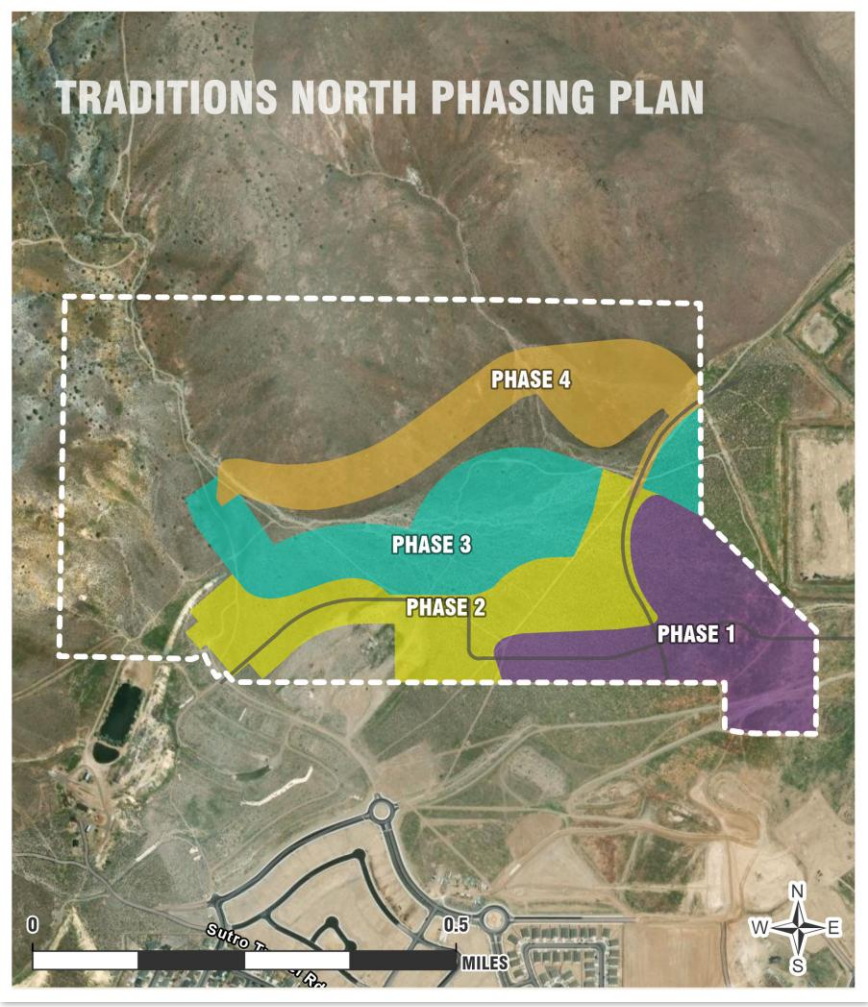
TENTATIVE MAP DESCRIPTION

This application also includes the first tentative map to implement the PUD which includes Phases 1, 2 & 3. The tentative map proposal includes 358 single-family residential units along with necessary backbone infrastructure, stormwater infrastructure, utilities, improved open space, pedestrian improvements, and trail connections.

PROJECT PHASING

The project phasing for the PUD is indicated in Figure 10 below. The tentative map application included with this submittal considers the development of Phases 1, 2, and 3. The tentative map for Phase 4 will be submitted for consideration in the future.

Figure 10: Phasing Plan



DENSITY

The density for the parcel based on the existing Title 10 zoning would allow for a maximum of 607 units. The proposed standards for the PUD establish a maximum residential unit count of 415 units for a gross density of 1.80 units per acre.

Table 3: Density Analysis

Density Analysis	Land Use Acreage	Units
Existing RR-1 (1 unit per acre)	± 137.34	137
Existing EE-1 (3.63 units per acre)	± 66.91	242
Existing NR-1 (9.68 units per acre)	± 23.57	228
Existing Maximum Units		**607**
Proposed Maximum Units		**415**

DEVELOPMENT STANDARDS

The proposed development is consistent with the development standards of LCC with minimal amendments to property setbacks to promote consistency among different land use classifications proposed within the PUD. The following setbacks are proposed.

Table 4: Traditions North Setbacks

SR-4.5	Setback
- Front & Side-street	10 ft.
- Side	5 ft.
- Rear	10 ft.
SR-6	**Setback**
- Front & Side-street	10 ft.
- Side	5 ft.
- Rear	10 ft.
SR-9	**Setback**
- Front & Side-street	10 ft.
- Side	5 ft.
- Rear	20 ft.

SR-12	Setback
- Front & Side-street	15 ft.
- Side	10 ft.
- Rear	20 ft.

PARKING

Off-street parking is provided in accordance with the LCC standard requirement of two per unit. Additional public parking will be provided to support the Sutro trailhead at the southwest corner of the project.

Table 5: Parking Calculations

	No. of Units	Spaces Required per Unit	Total Required Spaces	Total Spaces Provided
Single-Family	364	2	728	728
Sutro Trailhead	-	-	-	10
TOTAL			728	738

ARCHITECTURAL STANDARDS

Architectural requirements for the PUD are proposed to comply with the standard design and street image standards required for residential development and single-family detached residential development in Suburban Character districts pursuant to LCC Chapter 340 and LCC Chapter 341, as amended. Drawings will be provided demonstrating compliance at the time of building permits for individual homes.

FENCING

Walls and fencing will be provided in accordance with LCC. Fencing is anticipated to be six feet tall of a solid material, where appropriate. The land use plan has been designed with open space buffers where commercial zoned property is near residential land uses within the project boundary. As the adjacent property is undeveloped, it would be incumbent upon the future land development to determine appropriate mitigation of noise, light, and visual impacts of service areas.

Split rail fence treatment will be incorporated into parks and the trailhead to promote a sense of Nevada's frontier heritage. Incorporating natural materials and native plantings strengthens the relationship between the Traditions North subdivision and its interface with public land recreational opportunities.

PROJECT SIGNAGE

Although signage is not currently proposed with the first tentative map, the PUD establishes standards to ensure that signage and entry monuments for Traditions North are compatible with the residential character of the project.

Figure 11: Conceptual Entry Monument

LANDSCAPING

The PUD requires that front yards of each home site be entirely landscaped with a minimum of one tree per 50 feet of linear frontage. In addition to front yard landscaping, the primary collector includes tree-lined parkways to enhance the entry corridor.

Figure 12: Preliminary Landscape Plan

Figure 13: Typical Corner Lot Landscaping

PARKS, TRAILS AND OPEN SPACE

The proposed development plan reserves at least 100 acres of open space. Open space will be preserved using acceptable legal instruments pursuant to LCC as amended, including conservation easements or dedication to a 501(c)(3) organization. Open space areas will be maintained by a homeowner's association, landscape maintenance association, or similar entity. Additional open space above and beyond the requirement is anticipated and will be considered at each tentative map.

The project includes trails and pedestrian connections that provide residents with access to at least five pocket parks including a large five-acre neighborhood park (Figure 15: Master Park and Trails Plan). These trails also provide access to the existing trail network on public lands located to the north and west of the site.

Figure 14: Typical Trail Cross Section

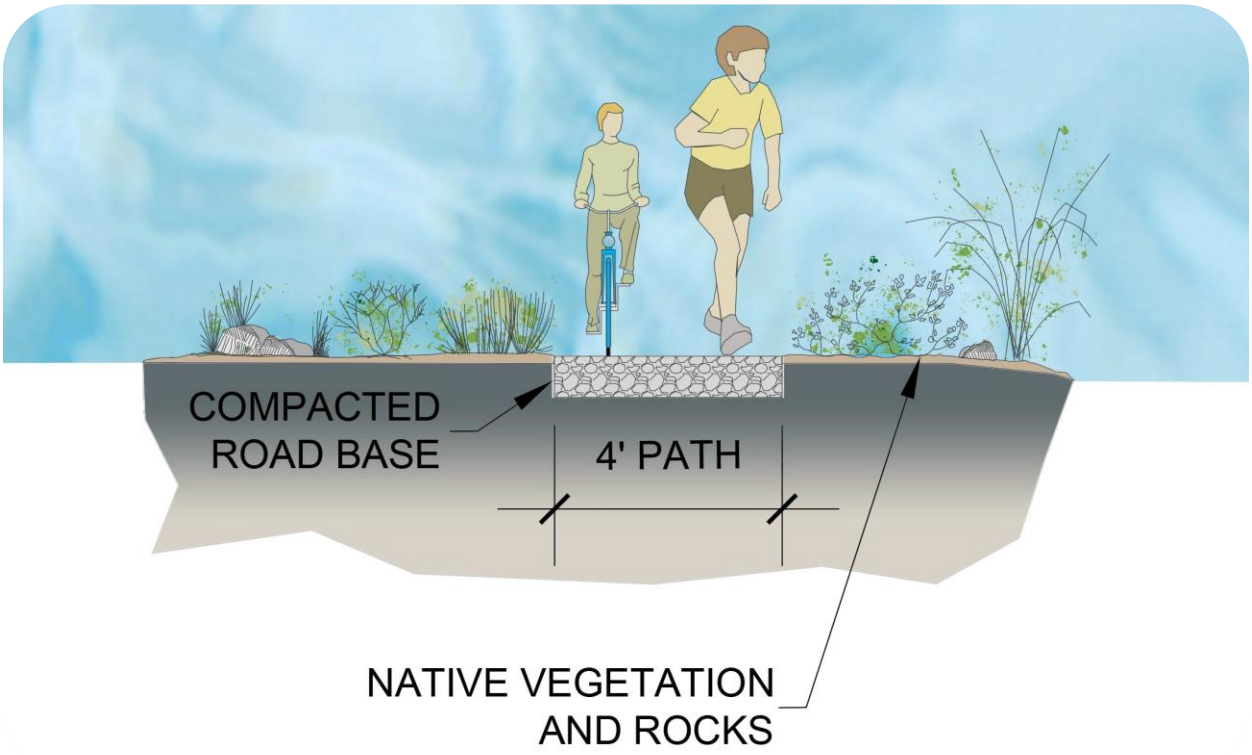


Figure 15: Master Park and Trails Plan

ACCESS AND CIRCULATION

VEHICULAR ACCESS

Vehicular access to the site is provided through the existing Traditions subdivisions to the south which take access from US Highway 50. There are two access points to the south and two access points proposed for connections to property to the east. One of the eastern access points may connect to the existing Enterprise Way contingent upon securing easements from adjacent property owners.

Figure 16: Circulation Plan

Roadways proposed within the project boundary are to be dedicated to Lyon County. Streets will be constructed pursuant to the Traditions North PUD Handbook and Lyon County standard details (Figure 17 & Figure 18).

Figure 17: Collector Street Cross Section

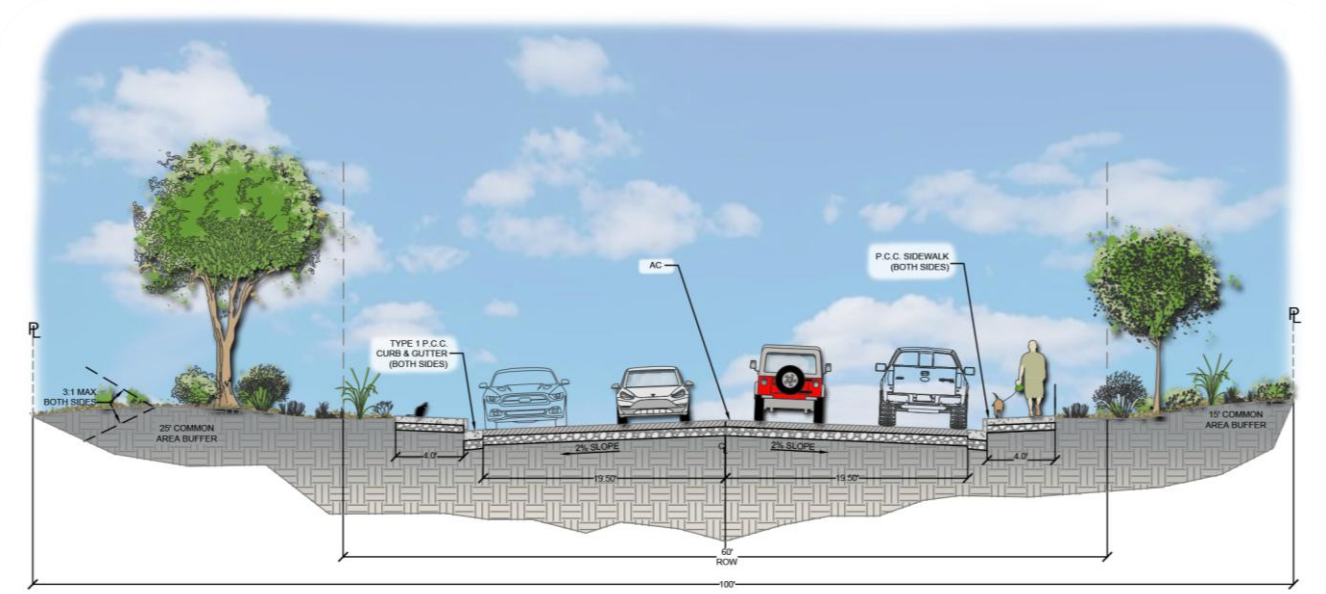
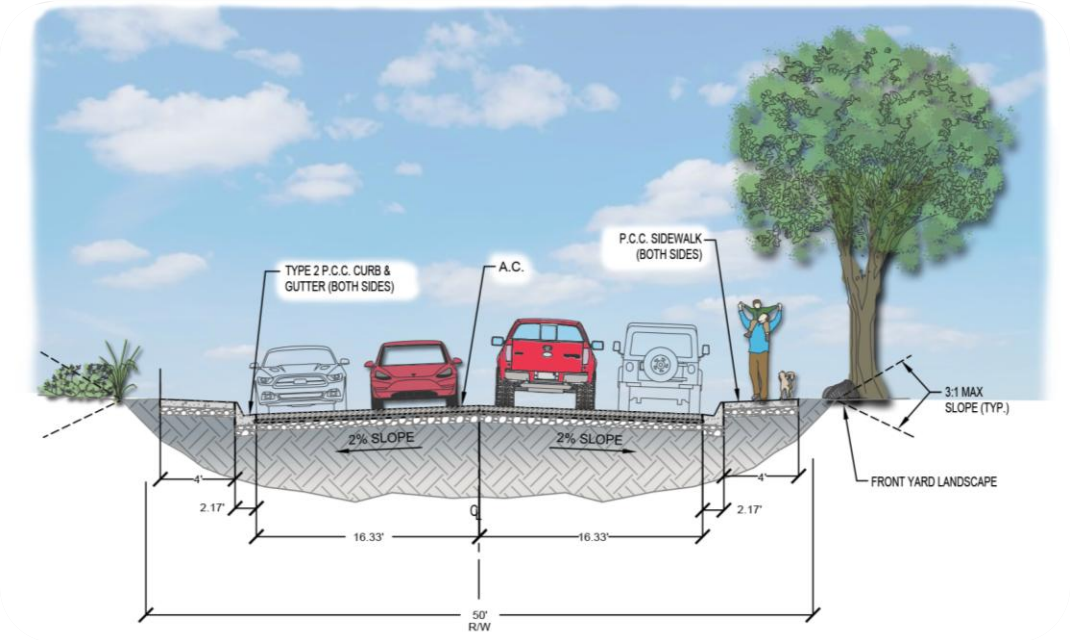


Figure 18: Typical Local Street Cross Section



PEDESTRIAN ACCESS

Pedestrian access will be provided throughout the project site through sidewalks and trails. Sidewalks are proposed to be a minimum width of four feet and are located on both sides of the street throughout the development. The collector road includes enhanced pedestrian facilities with landscape areas on each side of the street.

TRAFFIC

A traffic study has been submitted with this application that analyzes the impacts of primary access through Fortune Drive and Traditions Parkway for Phases 1-3. The project will access US 50 via Fortune Drive and Traditions Parkway. The project originally contemplated a connection to Enterprise Way; however, due to circumstances separate from the traffic study, a vehicle connection to Enterprise Way is no longer being considered and is not included in this traffic analysis and report. If individual project developers wish to pursue a vehicle connection to Enterprise Way in the future, a separate traffic analysis will need to be conducted at that time.

Updated trip generation has been provided with this application and is summarized in the table below (Table 6: Trip Generation for Proposed):

Table 6: Trip Generation for Proposed Residential

	Units	ADT	AM Peak Hour	PM Peak Hour
Single-Family Detached Housing	364 (358 proposed)	3,433 trips	255 trips	342 trips

The project is not expected to result in levels of service below policy thresholds and therefore no project related mitigations are recommended.

UTILITIES AND PUBLIC SERVICES

WATER

The project is served by the Lyon County Utilities Department (LCUD) for water by an existing 8-inch water main stubbed at the property line to the south. Future water infrastructure necessary to support this development will be constructed in accordance with Lyon County Utilities Department standard details and design requirements.

SEWER

A preliminary sewer report is included with the application materials. Sewer conveyance will be provided by the Lyon County Utilities Department (LCUD) by an existing 8-inch sewer main stubbed at

the property line the south. Future sanitary sewer infrastructure to support the development will be constructed in accordance with Lyon County Utilities Department standard details and design requirements.

POLICE AND FIRE

The property is currently served by Central Lyon Fire and the Lyon County Sheriff's Department. The closest sheriff substation is located 2.5 miles northeast along US Highway 50. The nearest fire station is located three-quarters of a mile away with an estimated five-minute response time to the boundary of the project.

SCHOOLS

Compulsory education services are provided by Lyon County School District. The project is currently zoned for Sutro Elementary School, Dayton Intermediate School, and Dayton High School. There are existing bus routes serving the neighborhood to the south that would be reasonably extended to serve this development.

HYDROLOGY

The existing terrain of this property is characterized by alluvial fan slopes that include shallow, unconfined, and moderately confined drainage flows. These flow ultimately tributary to the Carson River watershed. The proposed drainage system is designed to manage existing and proposed stormwater generation and is analyzed based on a 100-year flood event.

The tentative map and conceptual drainage report includes a mix of solutions to manage stormwater flows through drainage swales, underground pipes, open space drainage corridors, four regional detention basins, and three project outfalls. The proposed drainage design complies with Lyon County Drainage Guidelines and post-development stormwater discharge from the property remain below the pre-development peak. No adverse impacts from a hydrological perspective are anticipated.

ZONING MAP AMENDMENT FINDINGS

A. That the proposed amendment is consistent with the policies embodied in the adopted Master Plan and the underlying land use designation contained in the land use plan;

The underlying Master Plan land use designations are a mix of residential, open space, and commercial designations. The residential share of the master plan is about 61% of the property while open space is about 33%. The commercial area occupies about 1% with the remainder of the property having no designation.

The proposed land plan within the PUD designation serves to promote and protect open space and recreation opportunities by prioritizing the Open Space land designation in the upper half of

the project. Although the Low-Density Residential Master Plan land use designation contemplates larger one-acre lots, providing smaller lot sizes grants the opportunity to increase the share of protected open space land to 40-50% of the total project area.

This project further supports policies that promote complementary neighborhoods in Suburban Character Districts by incorporating a variety of lot sizes (Policy C 1.5). The plan also provides multiple focal points for the neighborhood that will serve the broader community including the proposed large park and trailhead.

That the proposed amendment will not be inconsistent with the adequate public facilities policies contained in this title;

The proposed amendment would support the establishment of a residential neighborhood that is a logical extension of the existing Traditions development. This supports Master Plan Policy LU 1.2 which seeks orderly growth patterns with neighborhood units as the primary building blocks of the County's residential areas. The subject property has utilities immediately adjacent to the site and should not require significant extensions to serve the proposed project (Policy LU 2.1 & FS 1.1). School facilities that serve the area are adequate to support the project for the based on discussions with the Lyon County School District.

B. That the proposed amendment is compatible with the actual or master planned adjacent uses.

To the north and west are Federal public lands that are anticipated to remain as open space. The proposed land use plan establishes an Open Space designation and provides trail access points to promote this resource. The trails and open space proposed within PUD should also support the operations of the Historic Sutro Tunnel and Site located immediately to the southwest. The proposed residential development is a logical extension of the existing and master planned residential development to the south and east. The site is not directly adjacent to Employment master planned properties that exist to the east and Lyon County Code is adequate to address possible general environmental conflicts such as noise, glare, and odor as those properties are developed.

PLANNED UNIT DEVELOPMENT FINDINGS

A. In what respects the plan is or is not consistent with the statement of objectives of this chapter;

The objectives of this PUD include:

- Improving and enhancing the County's trail and park system by providing trails and open space that provide continuity and access to Federal public lands adjacent to the project.
- Encouraging innovations in residential development by introducing a greater variety of lot sizes to encourage variation in building typology.

B. **The extent to which the plan departs from zoning and planned unit development regulations otherwise applicable to the property, including but not limited to density, size and use, and the reasons such departures are or are not deemed to be in the public interest;**

The proposed development plan remains closely aligned with the density, lot size, and uses allowed under the existing zoning, but provides greater flexibility in the implementation of the plan to accommodate market-based considerations through the development process. Greater flexibility does not come at the cost of the preservation of open space, access to Federal public lands, and the opportunity for a mix of lot sizes and densities.

The plan proposes a deviation from standard LCC setbacks to promote a mix of intensities with a consistent street image program. The setbacks consistently promote a house forward design while maintaining minimum driveway lengths.

C. The purpose, location and amount of the open space in the planned unit development, the reliability of the proposals for maintenance and conservation of the open space and the adequacy or inadequacy of the amount and purpose of the open space as related to the proposed density and type of residential development;

The purpose, location, and amount of open space is indicated within the handbook and is provided at a greater degree than what is contemplated in the Master Plan. The handbook promotes access through an integrated trail system.

D. A physical design of the plan and in the manner in which such design does or does not make adequate provision for public services, provide adequate control over vehicular traffic, parking requirements, and further the amenities of light and air, recreation and visual enjoyment;

The development is a logical extension of utility infrastructure and is developed in accordance with the provided traffic impact assessment. Additional street connections are proposed to improve broader circulation through the site. Parking requirements are consistent with Lyon County Code and parking demand has been contemplated with respect to larger recreation and park amenities. The development provides a variety of recreation opportunities that are well integrated into the design of the project including a trailhead for the Sutro Trail, interface with the Historic Sutro Trail and Site, access to public lands, a large park, and multiple pocket parks.

E. The relationship, beneficial or adverse, of the proposed planned unit development to the neighborhood in which it is proposed;

The proposed project extends the existing Traditions neighborhood and provides new park and recreation amenities that reinforce the relationship between the existing neighborhood and the public lands and open space to the north and west.

F. In the case of a plan which proposes a development over a period of years, the sufficiency of the terms and conditions intended to protect the interest of the public and the residents of

the planned unit development in the integrity of the plan.

The project is proposed to be developed in four phases with the backbone roadway and stormwater infrastructure frontloaded to ensure adequate access is provided for responsible growth. Neighborhood and pocket parks intended to serve the development and nearby neighborhoods are in different phases and are required to be constructed before occupancy of a certain number of units indicated in the PUD Handbook. All construction will be coordinated with the Nevada Department of Transportation with the future improvements to US Highway 50. The tentative map application submitted with this application considers three of the four phases contemplated within the PUD. A subsequent tentative map application will be submitted in the future for the final phase.

TENTATIVE MAP FINDINGS**

A. The property to be subdivided is zoned for the intended uses and the density and design of the subdivision conforms to the requirements of the zoning regulations contained in this title;

The tentative map is consistent with the land use plan proposed by the PUD that provides for a mix of densities.

B. If located within a planned unit development, the tentative subdivision map conforms to the density requirements, lot dimension standards and other design standards regulations approved for the planned unit development;

The tentative map conforms with the lot dimension standards and other design standards to be established with the adoption of the PUD.

C. The tentative subdivision map conforms to public facilities and improvement standards contained in this title;

Facilities to be offered for public dedication will comply with all requirements pursuant to LCC, Lyon County Utilities, Lyon County Public Works, and other applicable entities.

D. The tentative subdivision map conforms to the improvement and design standards contained in this title and adopted design criteria and improvement standards;

Roadway improvements have been designed in accordance with LCC, Lyon County standard road section details, and the submitted PUD handbook for Traditions North.

E. If applicable, that a phasing plan has been submitted and is deemed acceptable;

The tentative map application is proposed to be implemented in three phases. The first phase is located to the south and east of the property and includes access from Enterprise way and the

connections to the subdivisions to the south. The next phase is located to the southwest and will include stormwater management infrastructure that will support the remainder of the development. The final phase for this map fills in between the initial phases.

F. There are no delinquent taxes or assessments on the land to be subdivided, as certified by the County Treasurer;

Proof of tax payments has been provided with the application materials.

G. The project complies with all environmental and health laws and regulations concerning water and air pollution, the disposal of solid waste, facilities to supply water, community or public sewage disposal and, where applicable, individual systems for sewage disposal;

The project will be served by Waste Management through their standard residential garbage collection services.

H. The availability of water which meets applicable health standards and is sufficient in quantity for the reasonably foreseeable needs of the subdivision;

Water service is provided by the Lyon County Utilities Department. Conveyance systems will be designed in accordance with Lyon County Utilities requirements.

I. There is adequate access and availability to public services such as schools, police protection, transportation, recreation and parks;

Based on discussions with Lyon County School District, schools that serve this property are adequate. Police services are provided by the Lyon County Sheriff's Department. The Dayton Substation is located within 2.5 miles of the project. The project proposes a large park and trailhead that will supplement the project and the broader community. Transportation facilities are adequate according to the provided traffic impact statement.

J. The project is in general conformity with the Lyon County Comprehensive Master Plan, the local community plan, if adopted, and the master plan of streets and highways;

The project supports the following Master Plan policies:

- Policy LU 1.1: Follow Development Patterns as Established in the Land Use Plan
- Policy LU 1.2 Residential Development Patterns in Neighborhoods
- Policy LU 2.1 Residential Development in Areas with Services
- Policy LU 3.1: Diverse Economic Base
- Policy FS 1.1: Location of New Development

- Policy C 1.2: Pedestrian Friendly Communities
- Policy C 1.3: Design Tailored to Communities
- Policy C 1.5: Design Complementary Neighborhoods in Suburban Districts

K. The project will have no adverse impacts, or provides adequate mitigation of adverse impacts, to existing public streets;

Negligible impacts are anticipated to the existing public street system and coordination will occur between the development of this project and the proposed improvements to US Highway 50.

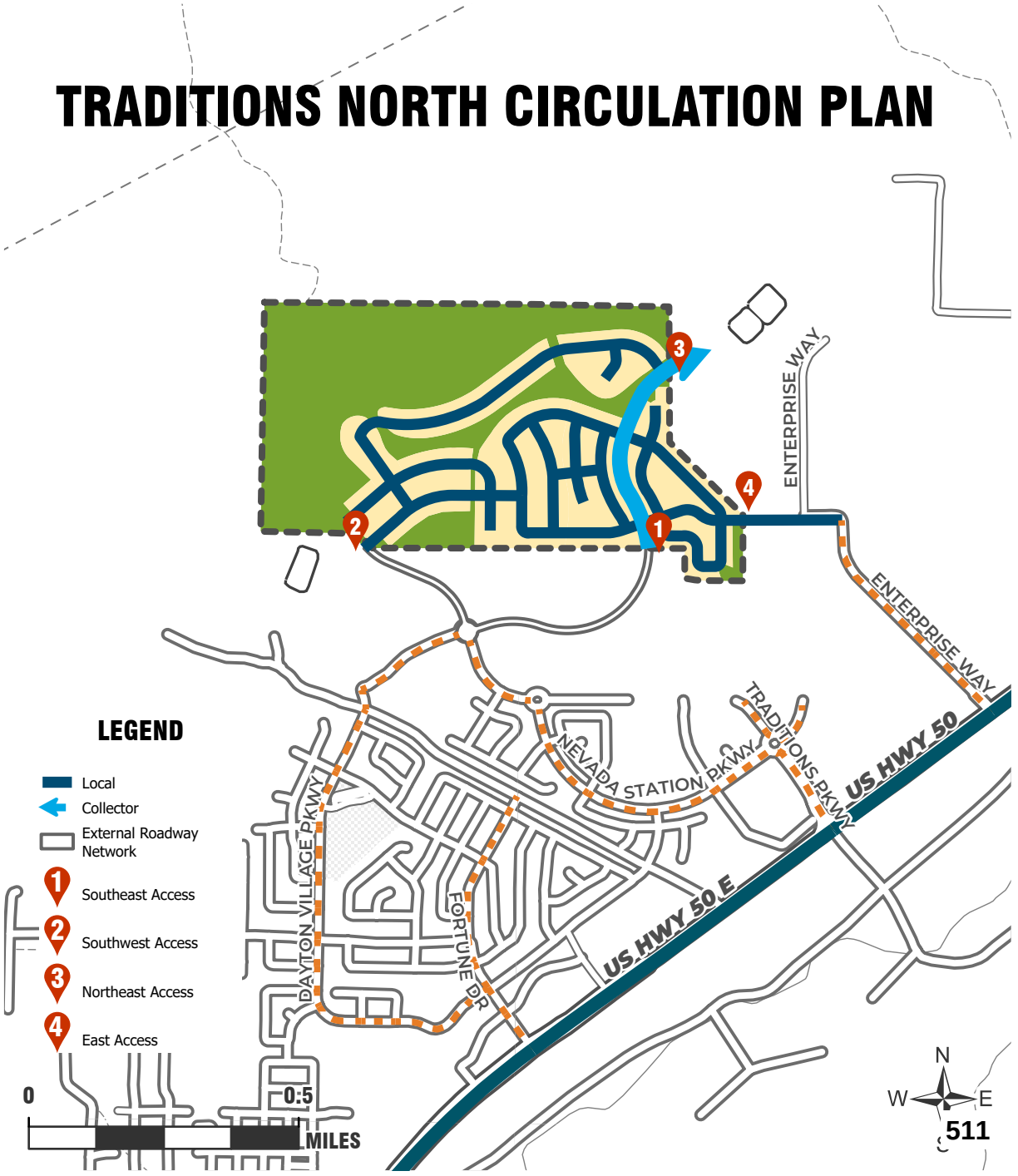
L. The physical characteristics of the land such as floodplain, slope and soil have been considered and provisions to adequately mitigate adverse impacts of development on the environment have been incorporated;

Physical characteristics such as slope, drainageways, [others] have been considered in the design of the project and adequate mitigation is proposed to protect the public health, safety, and welfare.

M. **The project demonstrates availability and accessibility of fire protection services, including, but not limited to, the availability and accessibility of water and services for the prevention and containment of fires, including fires in wild lands.**

The project is to be served by Central Lyon Fire. The nearest fire station is located three-quarters of a mile from the site, or an estimated response time of five minutes. This property is located within the Wildland Urban Interface zone for Central Lyon County. All residential building permits are required to have fire and life safety code plan reviews and be reviewed in accordance with the IWUIC code adopted at the time of permit submittal.

TRADITIONS NORTH CIRCULATION PLAN



LYON COUNTY UTILITIES DEPARTMENT
34 Lakes Blvd. Suite 103
P.O. Box 1699
Dayton NV 89403
Phone (775) 246-6220 Fax: (775) 246-6223
www.lyon-county.org

Sent via email to: cdwilliams@manhard.com

December 15, 2025

Manhard Consulting
c/o Carter Williams
241 Ridge Street, Ste 400
Reno, NV 89501

RE: Intent to Serve letter – Water and Sewer
Project: Traditions North – 364 Single Family Residential Lots APN #016-106-07

Dear Mr. Williams:

The project is located within LCUD's service area. This letter shall not be construed as a guarantee that the service will be provided. A will-serve commitment must be obtained as a result of an application for service prior to approval of a Final Map.

LCUD reserves the right to deny or limit the water or sewer connections provided to ensure that growth within the service area does not exceed the available resource capabilities. This letter is not complete unless signed by the Utilities Director and the Owner, with the Owner Acknowledgement statement signed and dated.

Requirements for approval of an application for service shall include, but are not limited to, the following:

1. Dedication of water rights that have met the requirements of the State Engineer and LCUD.
2. Construction and dedication of infrastructure and site improvements necessary to serve the Project. This includes costs for any system improvements, off-site improvements, and engineering reviews necessary to serve the Project. The Developer may apply for developer or reimbursement agreements if the required improvements may serve other projects. Any developer agreements or reimbursement agreements shall be approved by the Planning Commission and BOCC, as applicable.
3. Recorded Final Map.
4. Satisfaction of all conditions of development set forth in the Lyon County Code, and identified in the Planning Commission and BOCC approval conditions for the Project.

The terms and conditions associated with this letter are valid for one year from the date of issuance, and it is incumbent upon the developer to request a renewal before expiration. If a

will-serve letter is not issued or a renewal is not approved within a period of one year, this Intent to Serve notification is to be considered null and void.

If you have additional questions, please don't hesitate to contact me at (775) 246-6220.

Sincerely,

Sean Sinclair
Interim Utilities Director

cc: Melissa Strobel and – Lyon County

OWNER ACKNOWLEDGEMENT

Owner acknowledges receipt of this letter. **Owner acknowledges that it has read and completely understands that County may be unable to provide sewer service to any new construction or fixtures in the Dayton Utilities Service Area due to limitations on effluent disposal capacity. Owner, therefore, assumes all risk of undertaking any improvements, with full knowledge and understanding that the County may be unable to issue any certificate of occupancy until such time as sewer service can be safely provided.** Owner further understands that Lyon County may not be able to provide sewer service to this property at this time, and the Owner and County do not know when or if the County will be able to provide sewer service. Owner accepts and assumes all risks of moving forward with the project.

Dated: 12/18/2025

By: Jarred Corbell

Developer: Jarred Corbell Digitally signed by Jarred Corbell DN: C=US, E=jarred.corbell@gmail.com, O="JC Development Consulting, LLC", CN=Jarred Corbell Date: 2025.12.18 12:37:45-07'00'

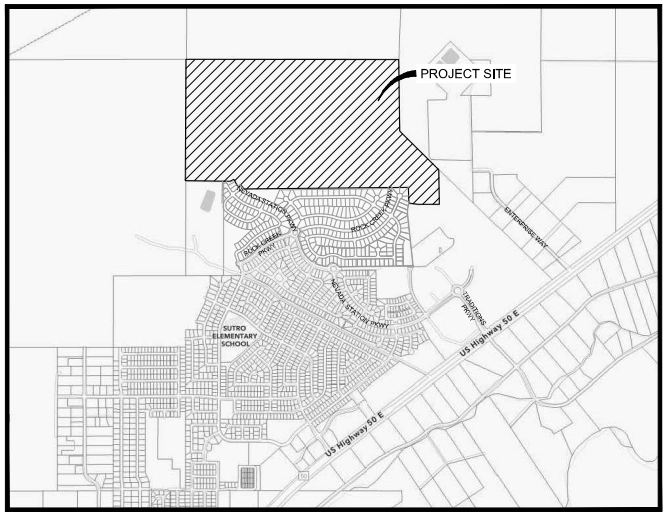
TENTATIVE MAP

TRADITIONS NORTH

APN: 016-406-07
DAYTON, NEVADA

ABBREVIATIONS

AB	AGGREGATE BASE	INV	INVERT
ARV	AIR RELEASE VALVE	IP	IRON PIPE
BC	BEGINNING OF CURVE	EXFG	EXTERIOR FINISHED GRADE
BFC	BACK FACE OF CURB	LP	LOW POINT
BM	BENCHMARK	MAX	MAXIMUM
BOP	BOTTOM OF PIPE	MB	MAILBOX
BVC	BEGINNING OF VERTICAL CURVE	MIN	MINIMUM
BW	FG @ BOTTOM OF WALL	NWL	NORMAL WATER LEVEL
CB	CATCH BASIN	P	PAVEMENT
CL	CENTERLINE	PC	POINT OF CURVE
CMP	CORRUGATED METAL PIPE	PCC	POINT OF COMPOUND CURVE
CNTRL	CONTROL	PI	POINT OF INTERSECTION
AGG.	CONCRETE	PL	PROPERTY LINE
CONST.	CONSTRUCT	PP	POWER POLE
CY	CUBIC YARD	PROP	PROPOSED
DIA	DIAMETER	PT	POINT OF TANGENCY
DIP	DUCTILE IRON PIPE	PVC	POLYVINYL CHLORIDE PIPE
DI	DUCTILE IRON	P.V.C.	POINT OF VERTICAL CURVE
(e)	EXISTING	PVI	POINT OF VERTICAL INTERSECTION
EX	EXISTING	PVT	POINT OF VERTICAL TANGENCY
E	ELECTRIC	R	RADIUS
EC	END OF CURVE	RCP	REINFORCED CONCRETE PIPE
EG	EXISTING GRADE	ROW	RIGHT-OF-WAY
ELEV.	ELEVATION	RR	RAILROAD
EP	EDGE OF PAVEMENT	SD	STORM DRAIN
EVC	END OF VERTICAL CURVE	SDMH	STORM DRAIN MANHOLE
FES	FLARED END SECTION	SF	SQUARE FOOT
FF	FINISHED FLOOR	SL	STREET LIGHT
FL	FLOW LINE	SS	SANITARY SEWER
FM	FORCE MAIN	SSMH	SANITARY SEWER MANHOLE
FG	FINISHED GRADE	STA.	STATION
FVA	FLUSH VALVE ASSEMBLY	SY	SQUARE YARDS
GAS	GAS	T	TELEPHONE
GW	GUY WIRE	TBR	TO BE REMOVED
GV	GATE VALVE	TC	TOP OF CURB
HW	HEADWALL	TEMP	TEMPORARY
HH	HANDHOLE	TOS	TO OF SLAB
HP	HIGH POINT	T/P	TOP OF PIPE
HWL	HIGH WATER LEVEL	TRANS	TRANSFORMER
HYD	HYDRANT	TW	FG @ TOP OF WALL
I.E.	INVERT ELEVATION	VB	VALVE BOX
INL	INLET	VV	VALVE VAULT
		WL	WATER LEVEL
		WM	WATER MAIN



VICINITY MAP
NTS

SHEET INDEX

SHEET NUMBER	SHEET TITLE
1	TITLE SHEET
2	OVERALL SITE PLAN
3	SITE PLAN
4	SITE PLAN
5	SITE PLAN
6	SITE PLAN
7	UTILITY PLAN
8	UTILITY PLAN
9	UTILITY PLAN
10	UTILITY PLAN
11	UTILITY PLAN
12	GRADING PLAN
13	GRADING PLAN
14	GRADING PLAN
15	GRADING PLAN
16	GRADING PLAN
L1	OVERALL LANDSCAPE PLAN

OWNER
SUTRO RESIDENTIAL GROUP LLC
860 GS RICHARDS BLVD
CARSON CITY, NV 89703

DEVELOPER
TRADITIONS NORTH, LLC
3527 S. FEDERAL WAY, SUITE 103 #1020
BOISE, ID 83705

CIVIL
PIÑON DESIGN GROUP
2850 TOBIANO DRIVE
RENO, NV 89521
(775) 843-0466

GEOTECHNICAL ENGINEER
WOOD RODGERS
1361 CORPORATE BLVD
RENO, NV 89502
(775) 823-4068

PLANNER
MANHARD CONSULTING, LTD
241 RIDGE STREET, SUITE 400
RENO, NV 89501
(775) 746-3500

LANDSCAPE ARCHITECT
LA STUDIO NEVADA
1552 C STREET
SPARK, NV 89431
(775) 323-2223

BASIS OF BEARING

MODIFIED NEVADA STATE PLANE COORDINATE SYSTEM, WEST ZONE, NORTH AMERICAN DATUM OF 1983/1994 (NAD 83/94) USING THE PUBLISHED VALUES FOR NGS CONTROL POINTS "D 200 RESET 1978" AND "DAYTON", BEARING TAKEN AS N38°58'21"E, COMBINED GRID TO GROUND FACTOR = 1.000222. ALL COORDINATES SHOWN HEREON ARE MODIFIED COORDINATES. ALL DISTANCES SHWON HEREIN ARE GROUND VALUES.

BASIS OF ELEVATION

NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) . AS TAKEN FROM NEVADA DEPARTMENT OF TRANSPORTATION CONTROL MONUMENT "D 200 RESET", HAVING A PUBLISHED ELEVATION OF 4349.73 FEET, "D 200 RESET" IS DESCRIBED AS: A FOUND STANDARD DISK IN A CONCRETE POST; STAMED "D200 1978". POINT IS 3.9 MILES NORTHEAST ALONG U.S. HIGHWAY 50 FROM DAYTON AND 23.87 FEET NORTHEAST OF "D200 1954"

SPECIFICATIONS

ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REVISION OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (2012 EDITION AND ANY APPURTENANT SUPPLEMENTS) .

ENGINEER'S STATEMENT

THESE PLANS HAVE BEEN PREPARED IN ACCORDANCE WITH LYON COUNTY SITE PLAN REVIEW REQUIREMENTS WITH ACCEPTED ENGINEERING PROCEDURES AND GUIDELINES, AND ARE IN SUBSTANTIAL COMPLIANCE WITH APPLICABLE STATUTES, ORDINANCES, AND CODES. IN THE EVENT OF A CONFLICT BETWEEN ANY PORTION OF THESE PLANS AND THE CODES, THE CODES SHALL PREVAIL.

DANIEL C. BIRCHFIELD, Exp 12-31-25 CIVIL, No. 20844, STATE OF NEVADA, PROFESSIONAL ENGINEER

11/14/25

DANIEL C. BIRCHFIELD, P.E. P.E.#20844

Call 811 Call before you Dig
Avoid cutting underground utility lines. It's easy.

November 13, 2025 - 11:59 Dwg. Name: G:\Users\Jared\OneDrive - pinondg.com\Pinon - Projects\Traditions North\Civil\Plat_Plat\Title Sheet.dwg Updated By: Jared

PIÑON DESIGN GROUP
(775) 843-0466
2850 TOBIANO DR.
RENO, NV 89521

TRADITIONS NORTH
DAYTON, NEVADA
TITLE SHEET

PROJ. MGR.	DCB
DRAWN BY:	AST
DATE:	NOV 2025
SCALE:	AS SHOWN
SHEET	1
	1 OF 17

PIÑON
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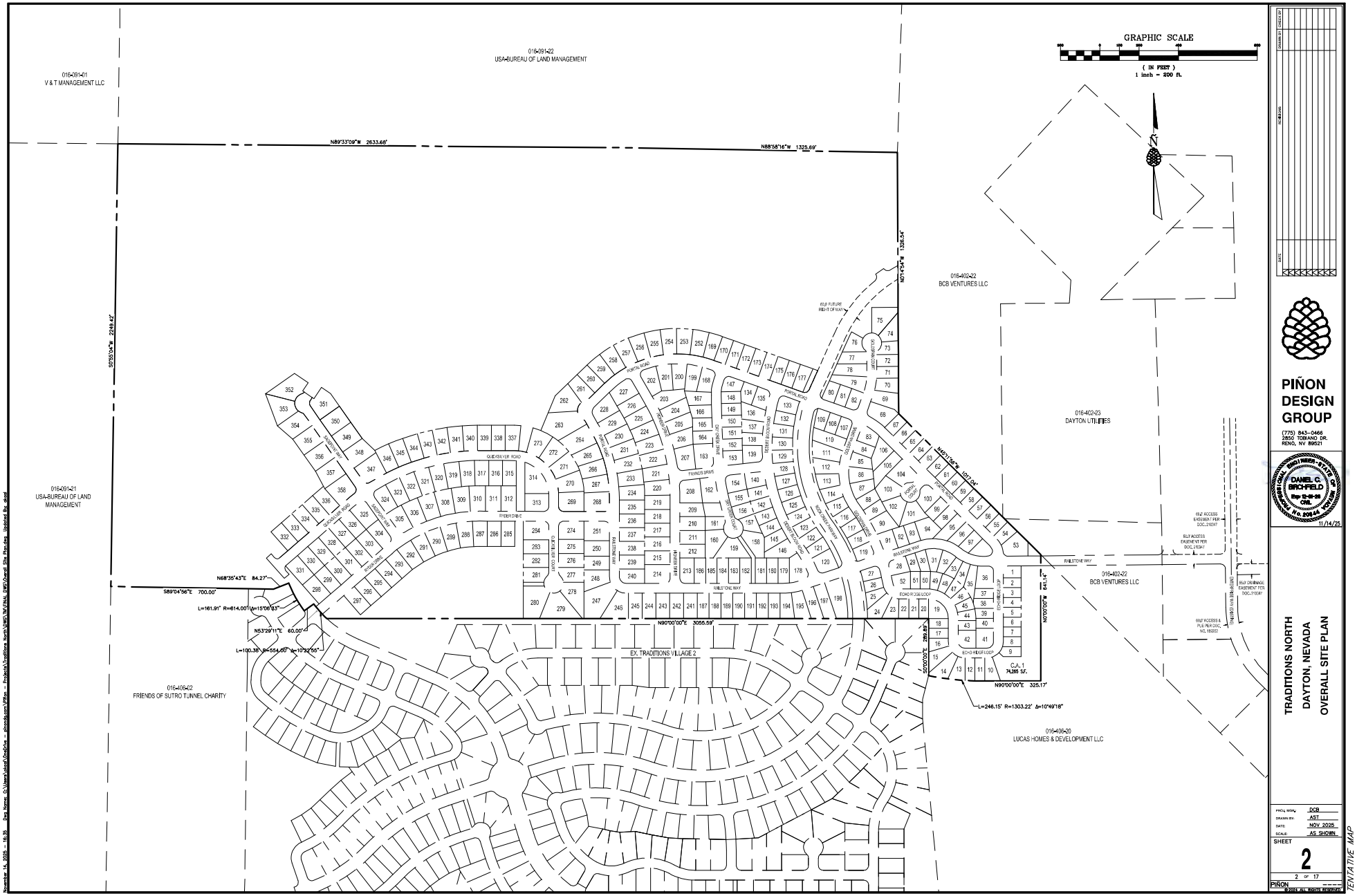
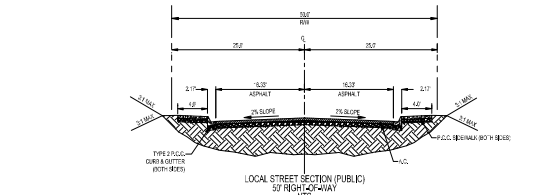
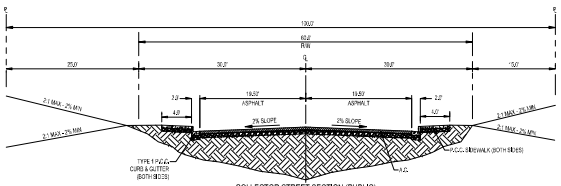
TENTATIVE MAP

514

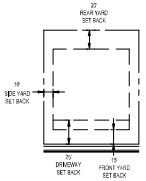

GRAPHIC SCALE
(IN FEET)
1 inch = 200 ft.
016-091-01
V & T MANAGEMENT LLC
016-091-22
USA-BUREAU OF LAND MANAGEMENT
016-091-21
USA-BUREAU OF LAND MANAGEMENT
016-402-22
BCB VENTURES LLC
016-402-23
DAYTON UTILITIES
016-406-22
FRIENDS OF SUTRO TUNNEL CHARITY
016-406-20
LUCAS HOMES & DEVELOPMENT LLC
N89°33'09"W 2633.66'
N88°58'16"W 1325.69'
S0°50'04"W 2249.42'
N01°04'47"W 1326.54'
N68°35'43"E 84.27'
S89°04'56"E 700.00'
L=161.91' R=614.00' Δ=15°06'33"
N53°29'11"E 60.00'
L=100.38' R=554.00' Δ=10°22'55"
N90°00'00"E 3055.59'
S0°00'00"E 289.80'
N0°00'00"W 841.4'
N90°00'00"E 325.17'
L=246.15' R=1303.22' Δ=10°49'18"
C.A. 1
74,285 S.F.
EX. TRADITIONS VILLAGE 2
RAILSTONE WAY
QUEENSBYER ROAD
RIDGER DRIVE
PORTAL ROAD
ECHO RIDGE LOOP
FRANCIS DRIVE
SHARLEEN DRIVE
SUNRISE PARK
SUNSET PARK
SUNSHINE PARK
SUNDOWN PARK
SUNLIGHT PARK
SUNBEAM PARK
SUNRAY PARK
SUNSPOT PARK
SUNSHADE PARK
SUNBURST PARK
SUNSTONE PARK
SUNSTREAM PARK
SUNSTRIKE PARK
SUNSTRUCK PARK
SUNSTRUCK PARK
SUNSTRUCK



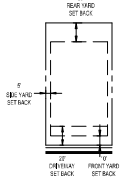
LOCAL STREET SECTION (PUBLIC)
50' RIGHT-OF-WAY
NTS



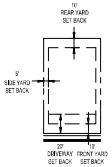
COLLECTOR STREET SECTION (PUBLIC)
60' RIGHT-OF-WAY
NTS



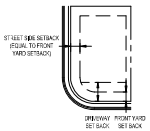
TYPICAL 1200 SF LOT SETBACKS



TYPICAL 9000 SF LOT SETBACKS



TYPICAL 4,500 & 6,000 SF LOT SETBACKS

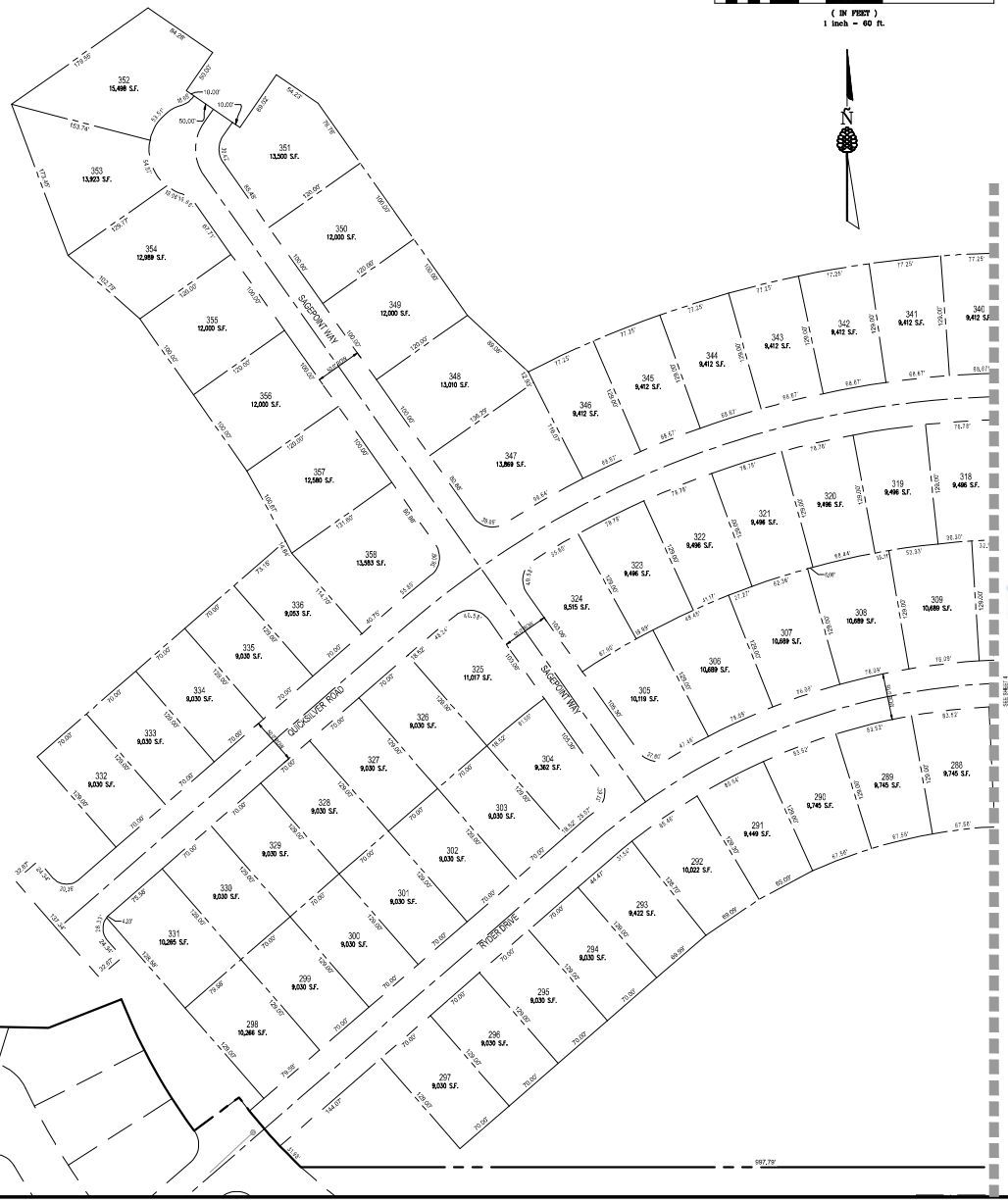


TYPICAL CORNER LOT SETBACKS

NOTE: CORNER LOT SETBACKS TO MATCH ITS CORRESPONDING SF LOT SETBACK REQUIREMENT, EXCEPT THE STREET SIDE SETBACK IS EQUAL TO THE FRONT YARD SETBACK.

GRAPHIC SCALE

(IN FEET)
1 inch = 60 ft.



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RENO, NV 89521

DANIEL C. BIRCHFIELD
Exp. 12-31-26
CIVIL
No. 20044
STATE OF NEVADA
PROFESSIONAL ENGINEER

11/14/25

TRADITIONS NORTH
DAYTON, NEVADA
SITE PLAN

PROJ. MGR.: DCB
DRAWN BY: AST
DATE: NOV 2025
SCALE: AS SHOWN

SHEET
3
3 OF 17

PIÑON
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TENTATIVE MAP

November 13, 2025 - 13:19 Dwg Name: G:\Users\Ward\OneDrive - pinondg.com\Pino - Projects\Traditions North\DWG\W.Ward_Dayville Reader_Updated By .dwg

DATE	REVISIONS	DRAWN BY	CHECKED BY

PIÑON DESIGN GROUP
(775) 843-0466
2850 TOBIANO DR.
RENO, NEVADA 89521

DANIEL C. BIRKFIELD
No. 9888
STATE OF NEVADA
REGISTERED PROFESSIONAL ENGINEER
11/14/25

TRADITIONS NORTH
DAYTON, NEVADA
SITE PLAN

JOB
DRAWN BY: AST
DATE: NOV. 2025
SCALE: AS SHOWN
SHEET 4 OF 17
PIÑON DESIGN GROUP

GRAPHIC SCALE
(IN FEET)
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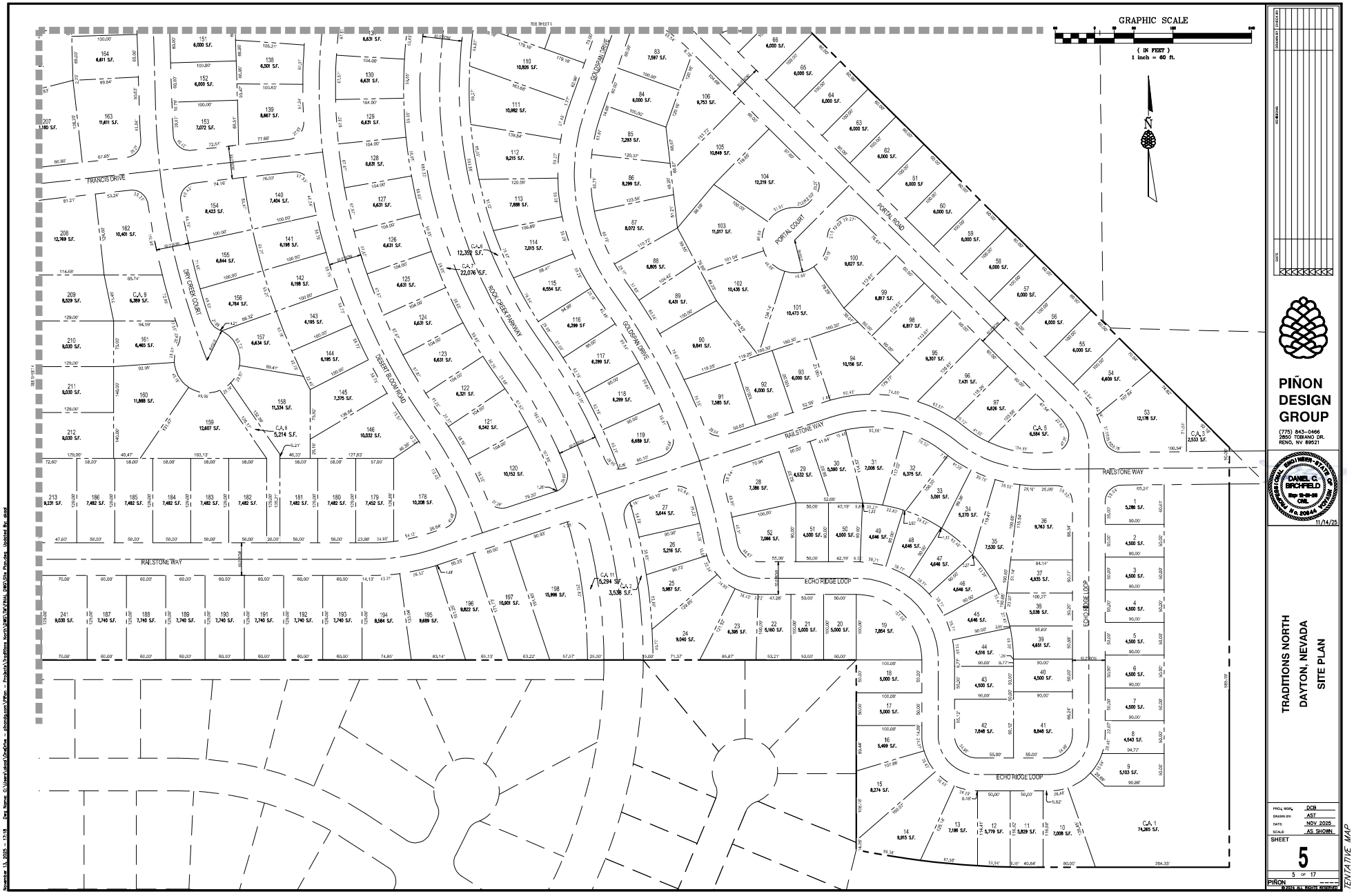

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DAYTON, NEVADA
SITE PLAN

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5 OF 17

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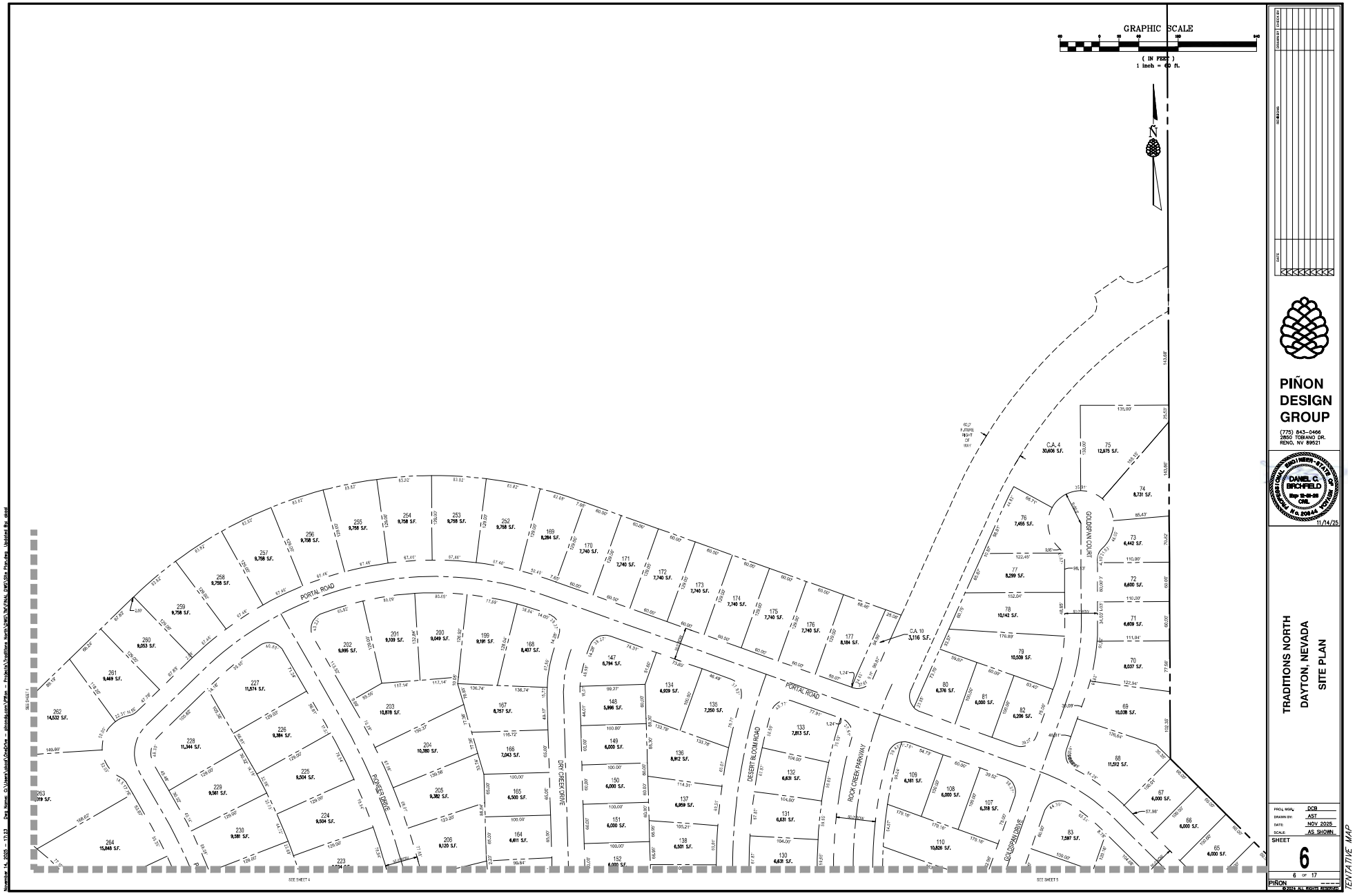

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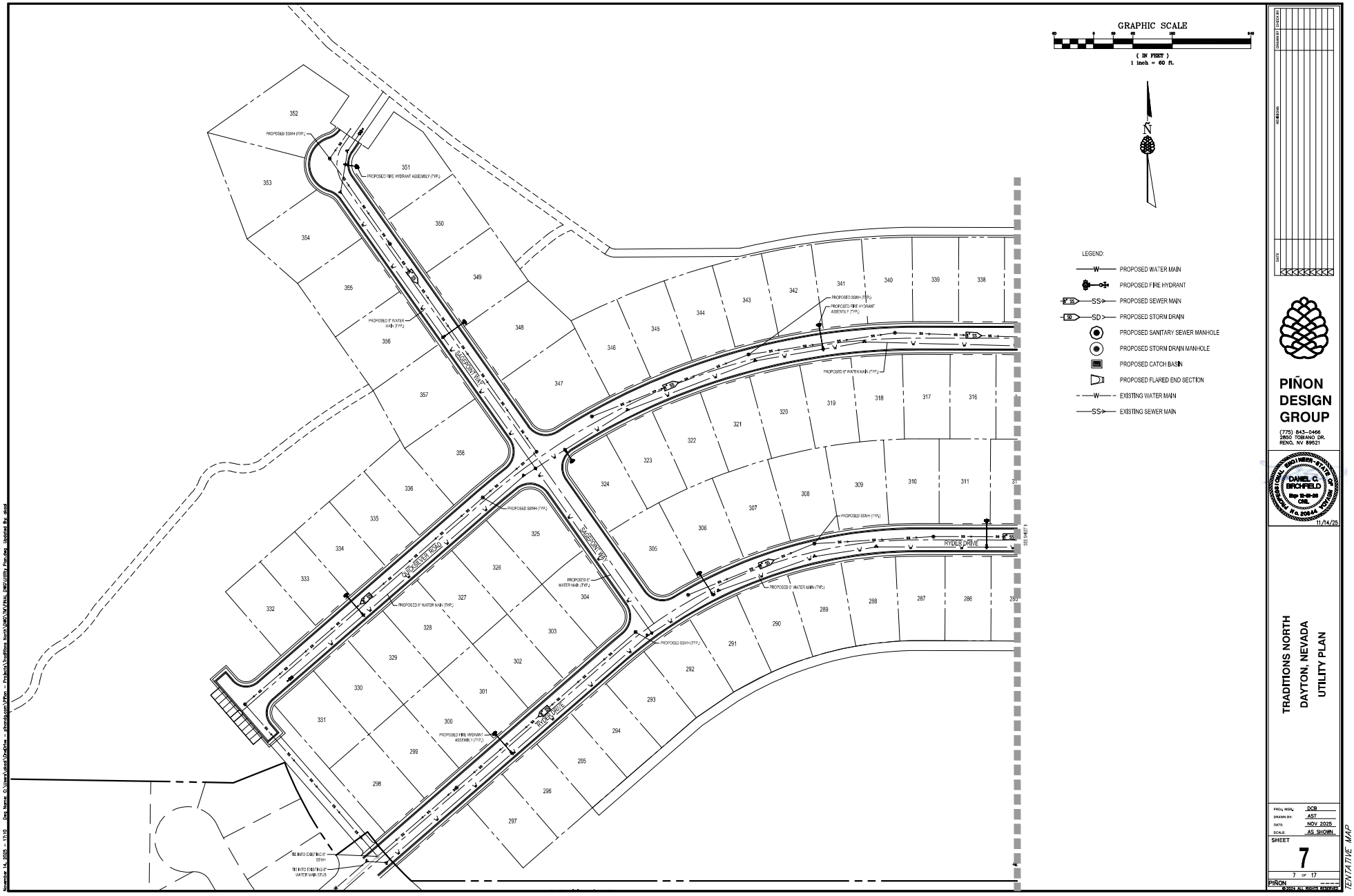

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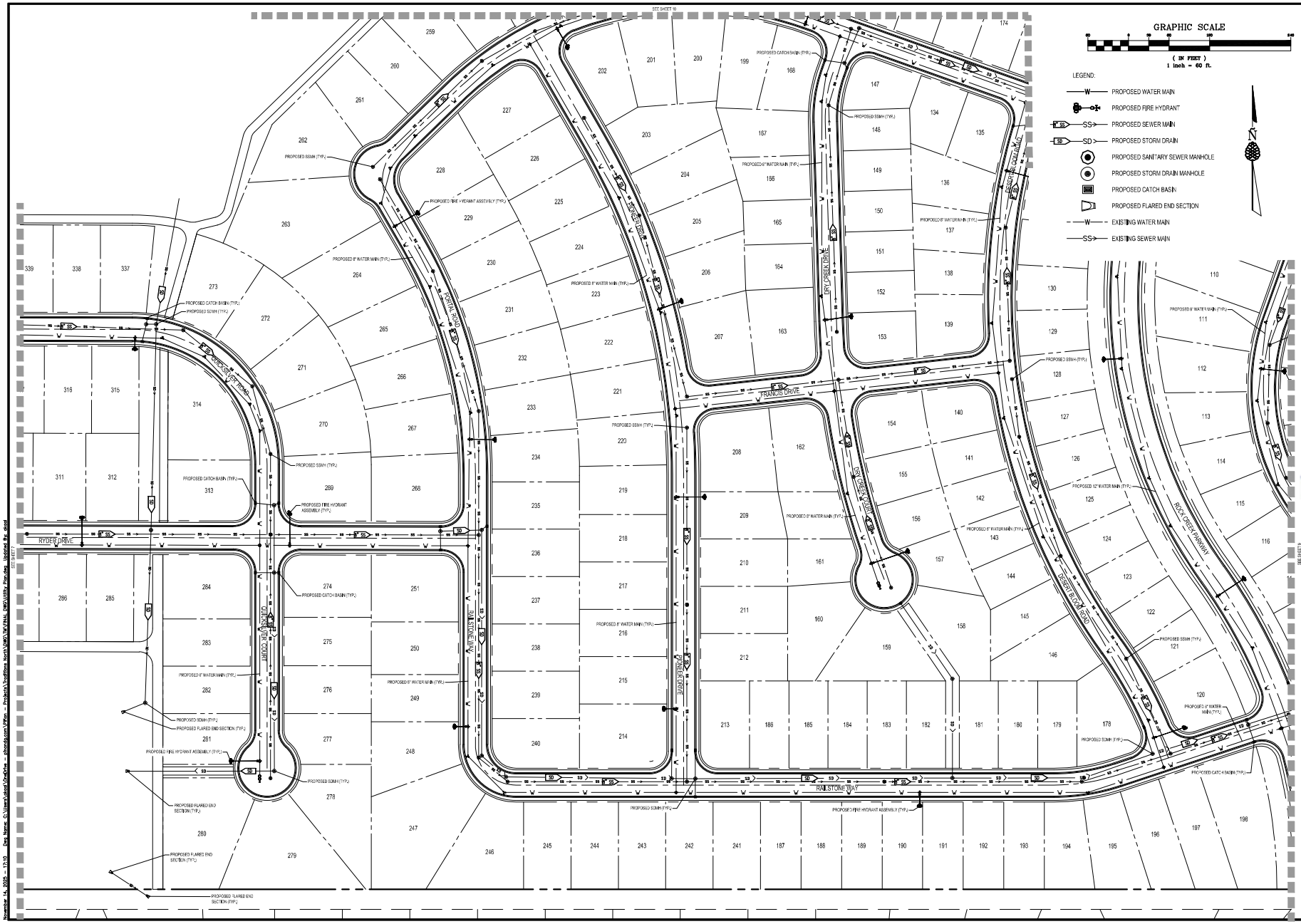
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1 inch = 60 ft.
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PROPOSED FIRE HYDRANT
PROPOSED SEWER MAIN
PROPOSED STORM DRAIN
PROPOSED SANITARY SEWER MANHOLE
PROPOSED STORM DRAIN MANHOLE
PROPOSED CATCH BASIN
PROPOSED FLARED END SECTION
EXISTING WATER MAIN
EXISTING SEWER MAIN
N
SEE SHEET 10
RYDER DRIVE
FRANCIS DRIVE
RAILSTONE WAY
ROCK CREEK PARKWAY
DRY CREEK PARKWAY
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8 OF 17
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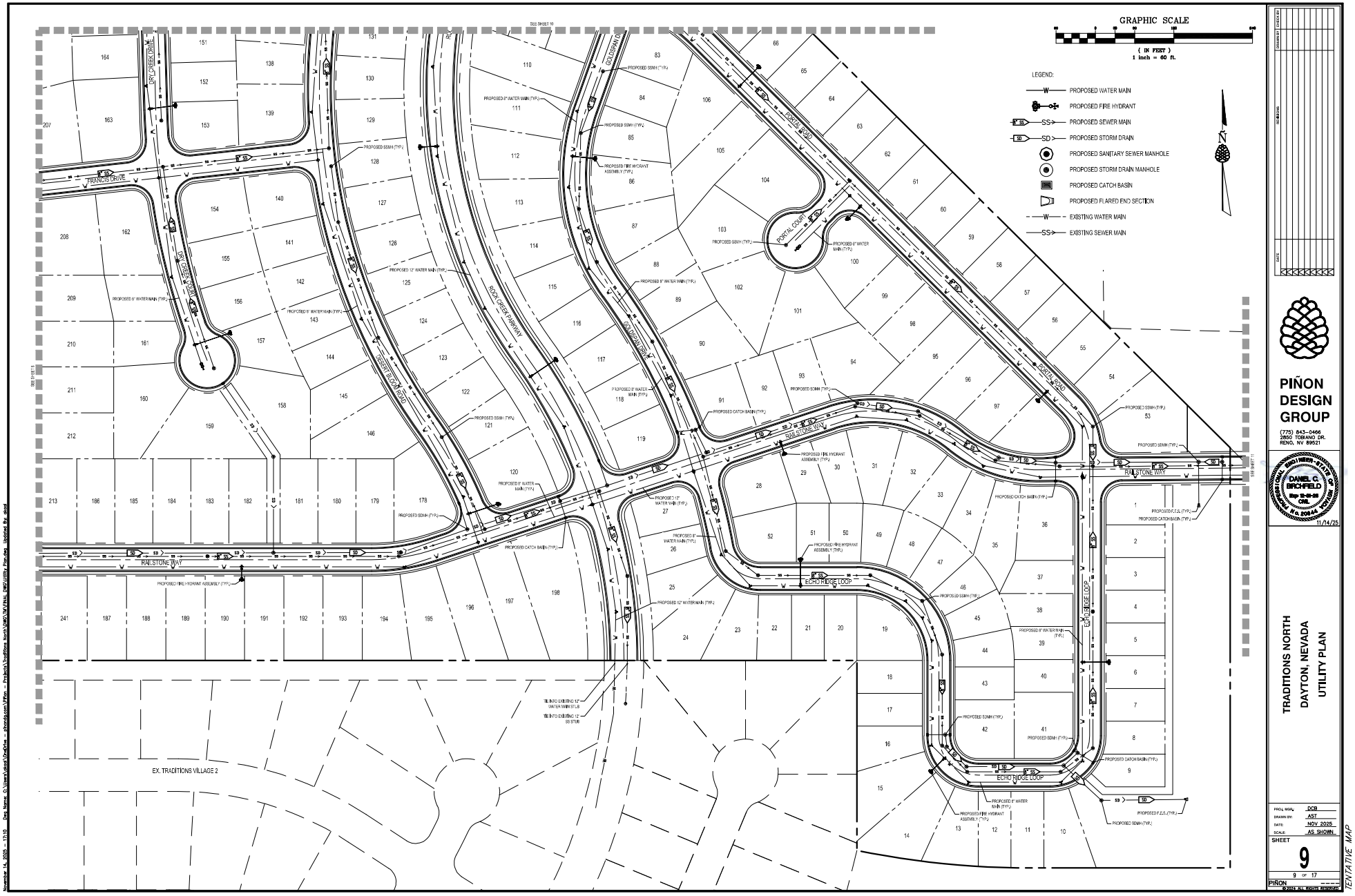

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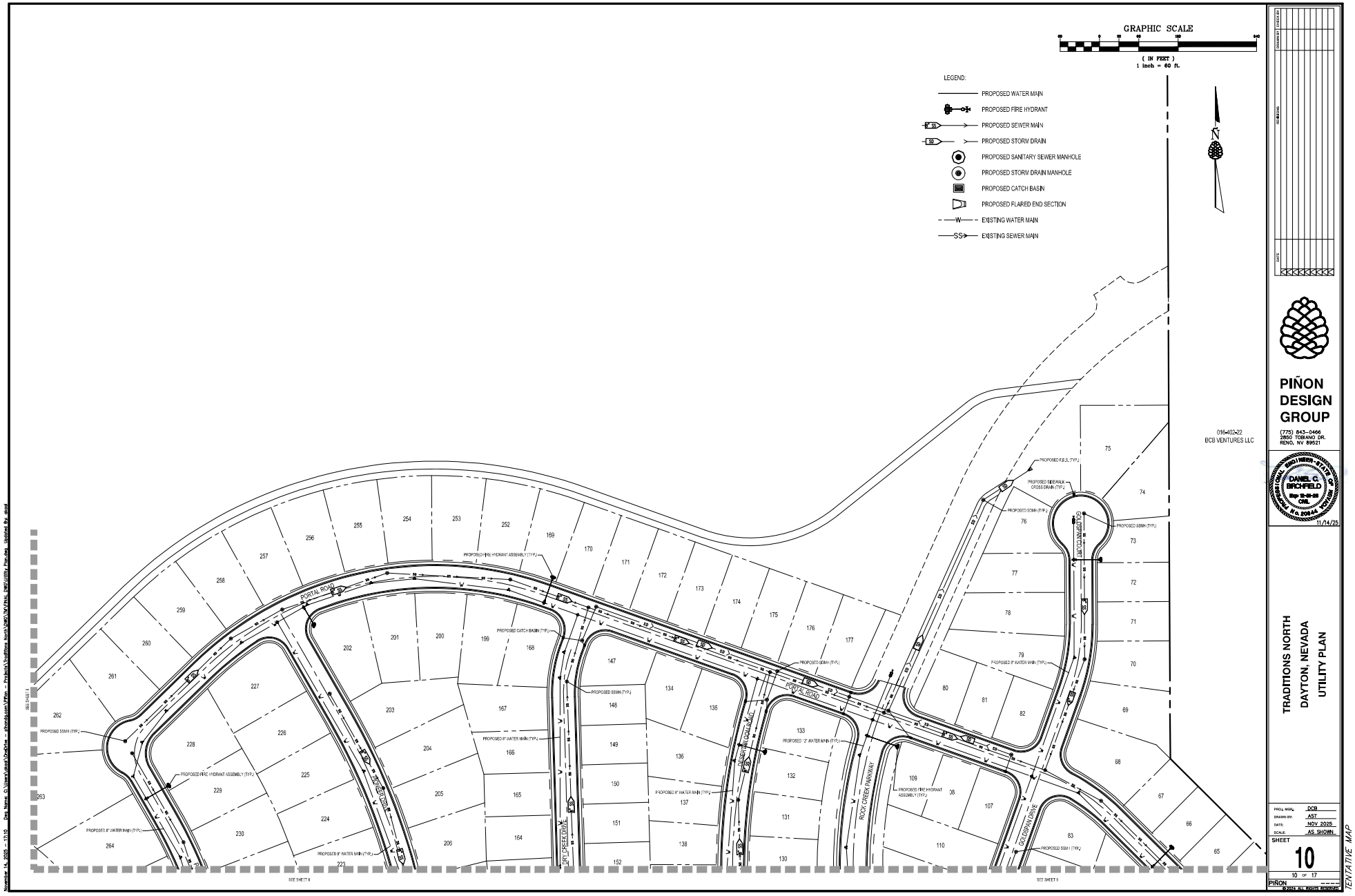

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PROFESSIONAL ENGINEER
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10 OF 17

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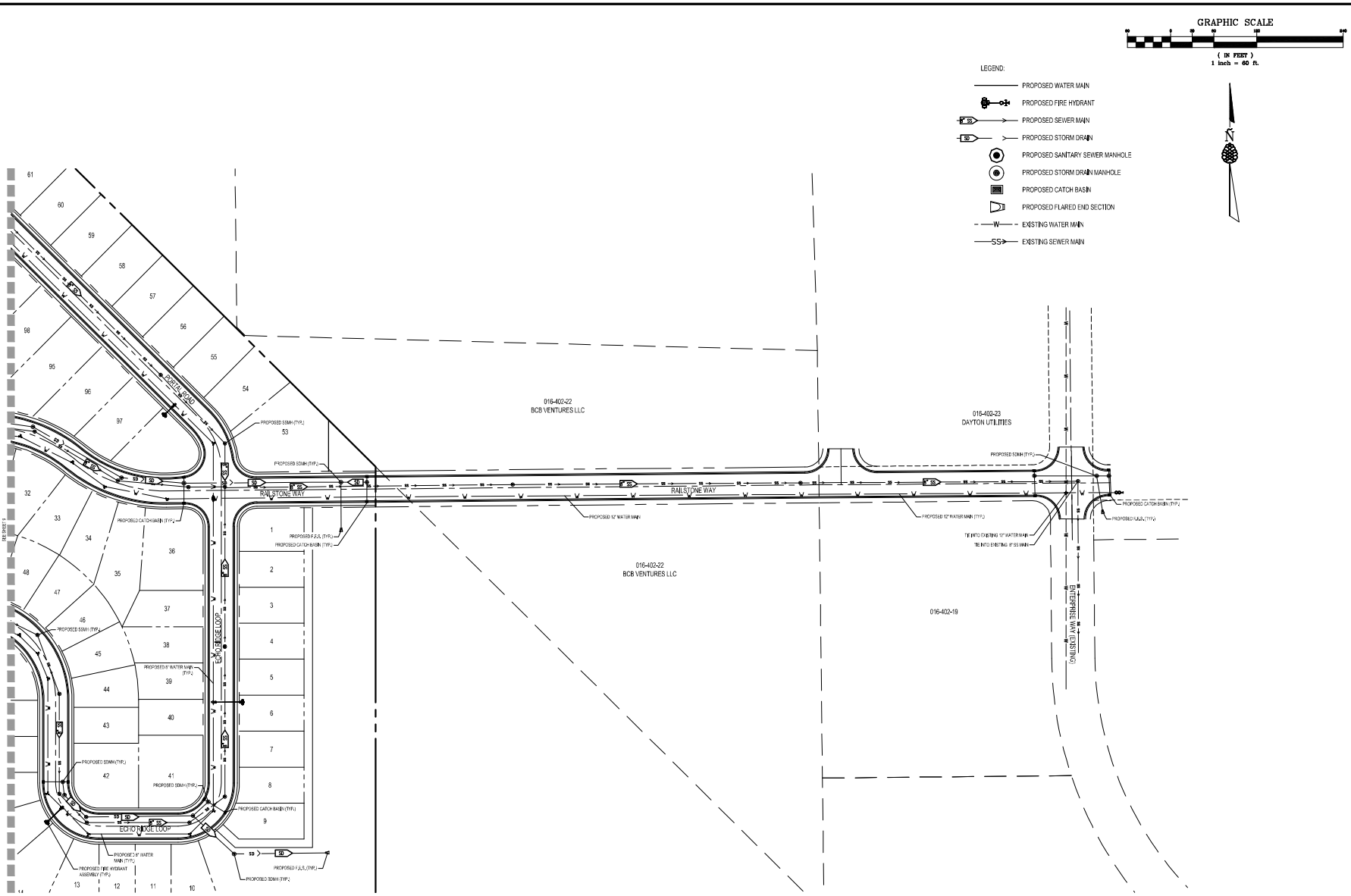

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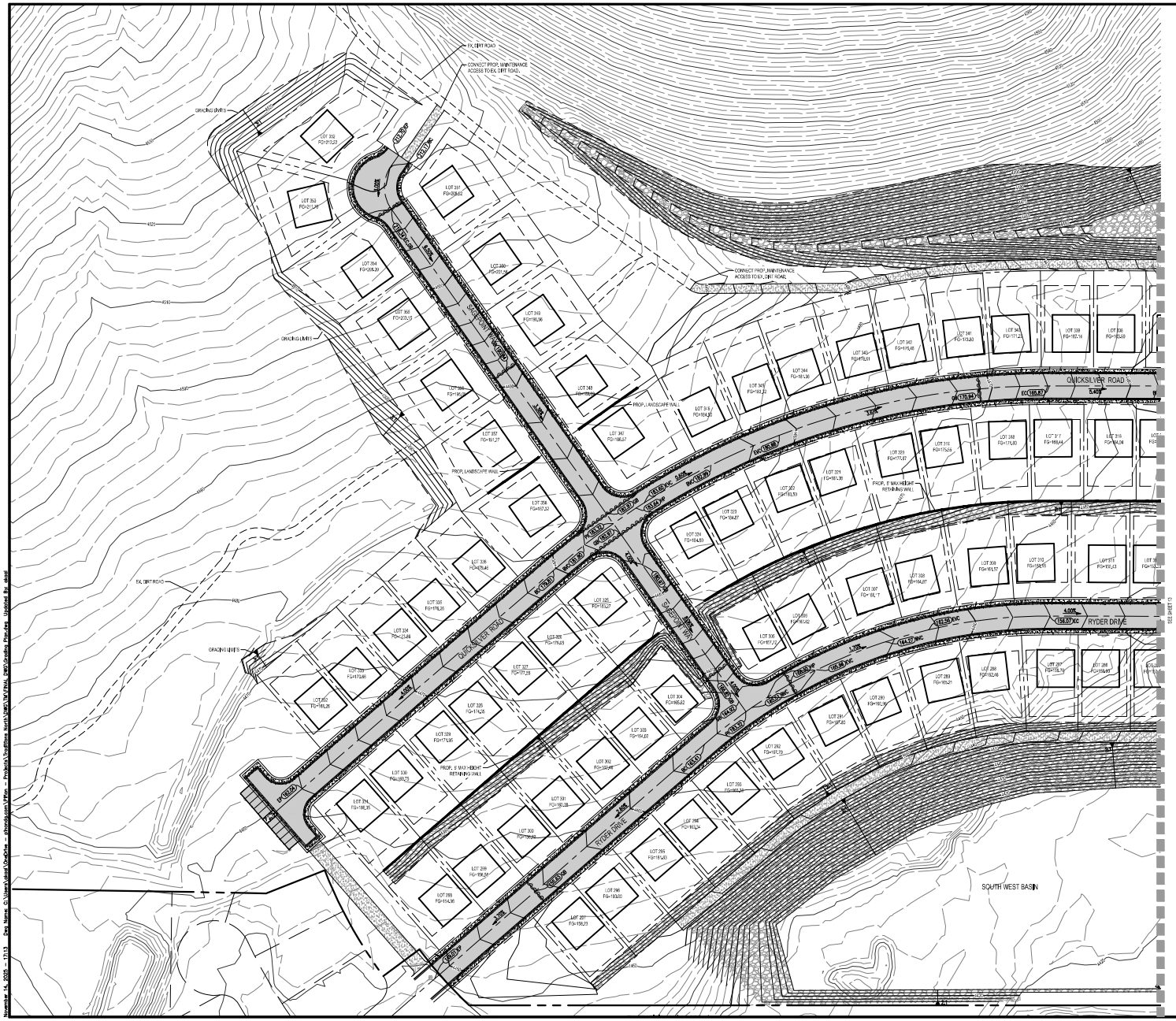

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TRADITIONS NORTH
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GRADING PLAN

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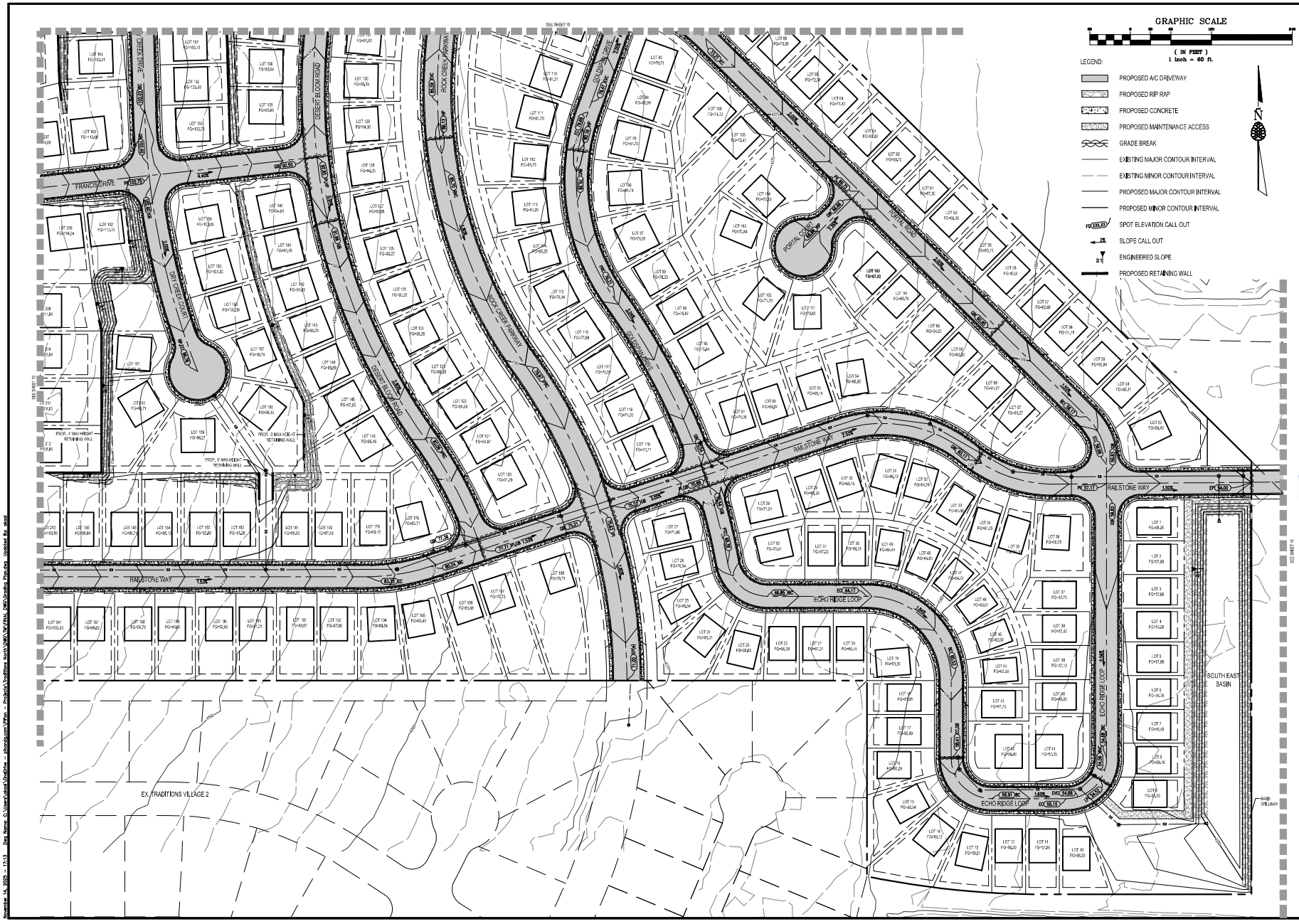

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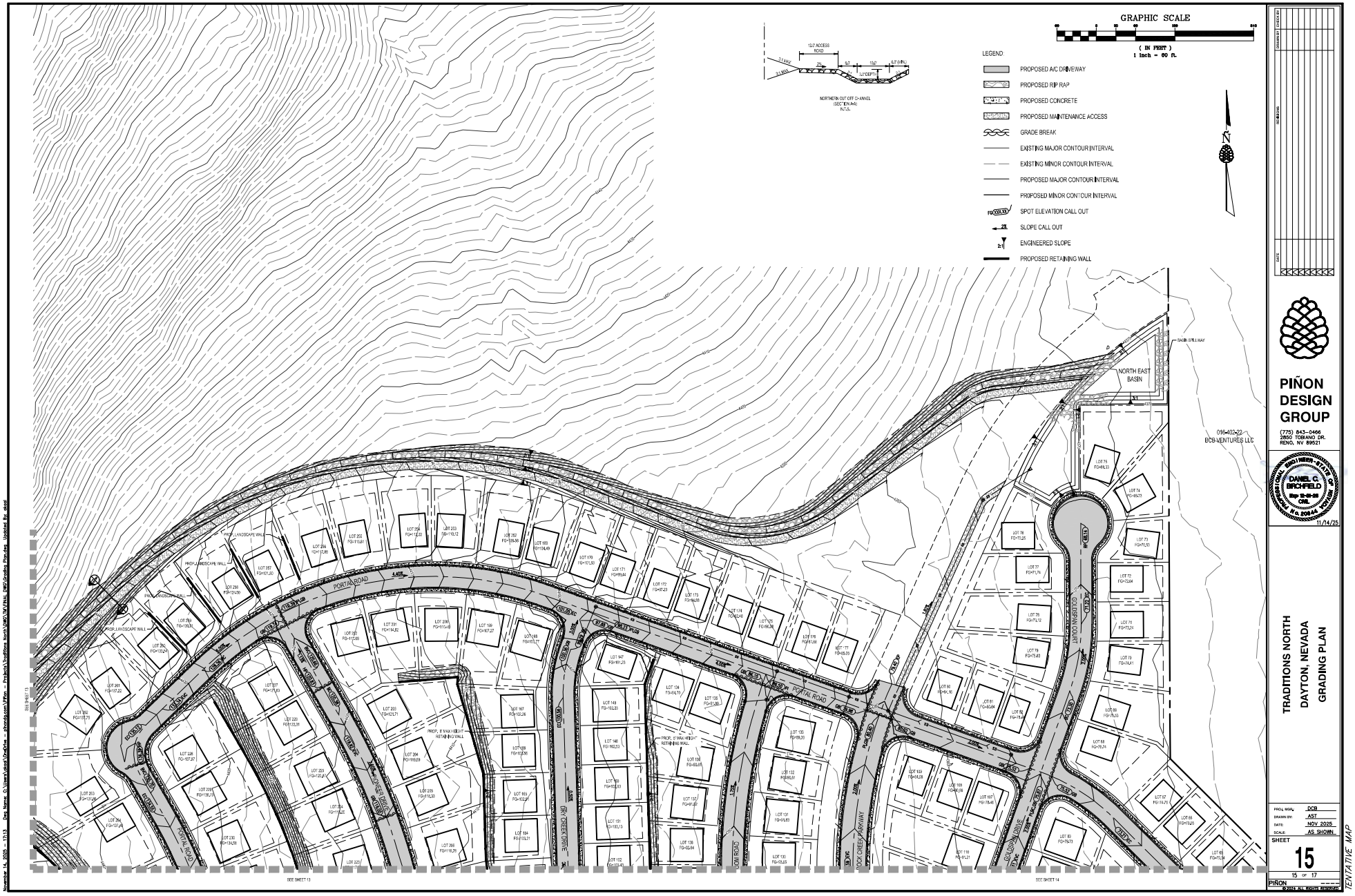

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15 OF 17

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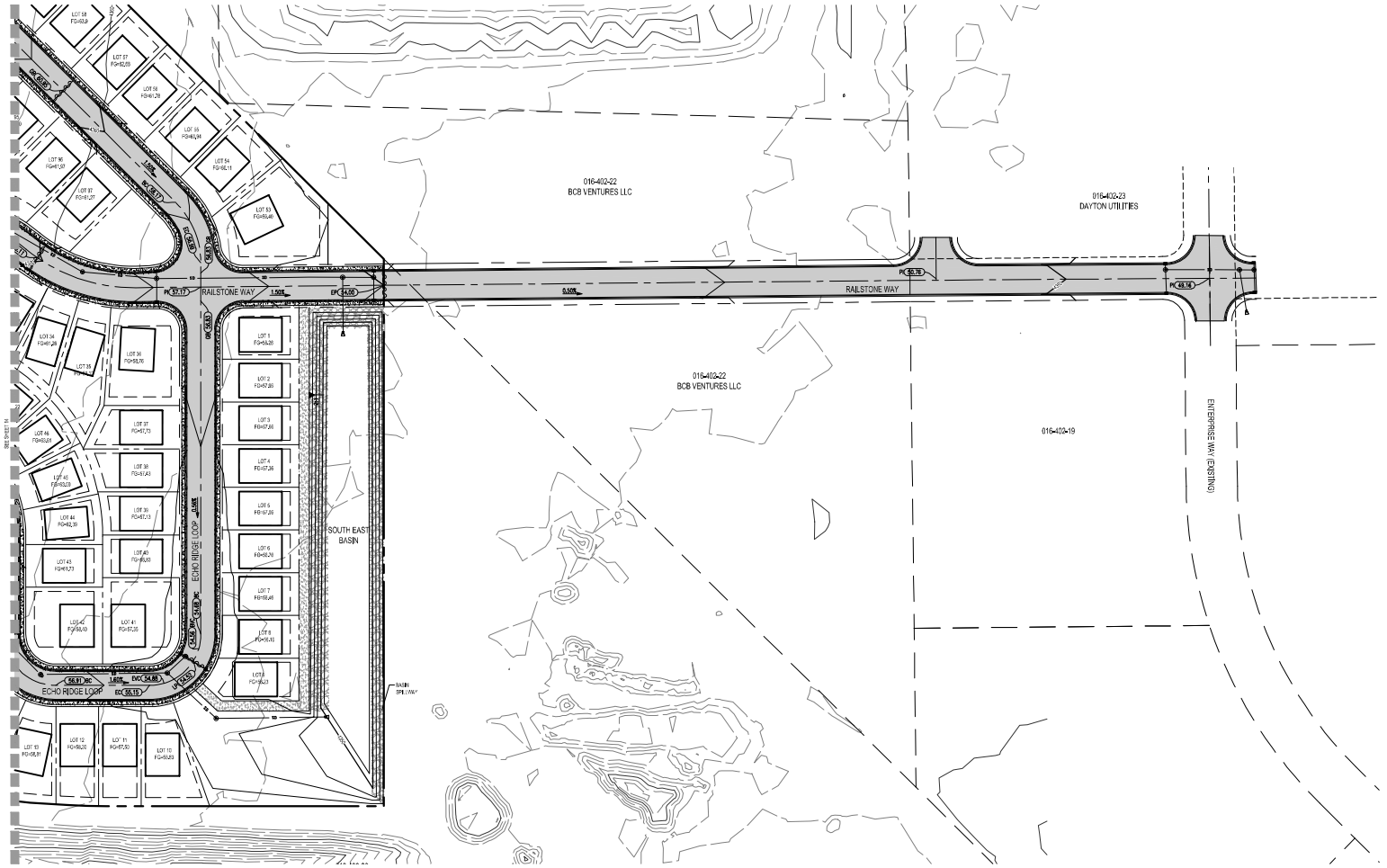

GRAPHIC SCALE

(IN FEET)
1 inch = 60 ft.

LEGEND:

- PROPOSED A/C DRIVEWAY
- PROPOSED RIP RAP
- PROPOSED CONCRETE
- PROPOSED MAINTENANCE ACCESS
- GRADE BREAK
- EXISTING MAJOR CONTOUR INTERVAL
- EXISTING MINOR CONTOUR INTERVAL
- PROPOSED MAJOR CONTOUR INTERVAL
- PROPOSED MINOR CONTOUR INTERVAL
- SPOT ELEVATION CALL OUT
- SLOPE CALL OUT
- ENGINEERED SLOPE
- PROPOSED RETAINING WALL

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DAYTON, NEVADA
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16 OF 17

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GENERAL NOTES

1. ALL PLANTING AND IRRIGATION SHALL BE INSTALLED PER LOCAL GOVERNING CODES.
2. TREES
   - DECIDUOUS TREES SHALL HAVE A MINIMUM CALIPER OF 2 INCHES.
   - EVERGREEN TREES SHALL HAVE A MINIMUM HEIGHT OF 6 FEET.
   - ADDITIONAL TREES, BEYONC THOSE REQUIRED BY CODE, MAY BE REDUCED IN SIZE AT INSTALLATION AND PROVIDED AT THE DISCRETION OF THE OWNER.
3. FINAL PLANT SELECTION AND LAYOUT WILL BE BASED ON SOUND HORTICULTURAL PRACTICES RELATING TO MICRO-CLIMATE, SOIL, AND WATER REGIMES. ALL TREES WILL BE STAKED SO AS TO REMAIN UPRIGHT AND PLUMB FOLLOWING INSTALLATION. PLANT SIZE AND QUALITY AT TIME OF PLANTING WILL BE PER THE AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1-1990).
4. ALL SHRUB BEDS WILL RECEIVE 3" DEPTH MULCH WITH WEED CONTROL.
5. ALL LANDSCAPING WILL BE AUTOMATICALLY IRRIGATED. CONTAINER PLANTINGS WILL BE DRIP IRRIGATED BASED ON THE SPECIFIC HORTICULTURAL REQUIREMENTS OF EACH SPECIES. A REDUCED-PRESSURE-TYPE BACKFLOW PREVENTER WILL BE PROVIDED ON THE IRRIGATION SYSTEM AS REQUIRED PER CODE.
6. PLANTING PLAN IS CONCEPTUAL. PLANT QUANTITIES INDICATED ARE PER LOCAL AGENCY CODE REQUIREMENTS. PLANT LOCATIONS, FINAL SPECIES SELECTION, AND SIZE AT PLANTING SHALL BE DETERMINED DURING DEVELOPMENT OF FINAL CONSTRUCTION DOCUMENTS.
7. ANY AMENITIES AND/OR AMENITY AREAS ARE CONCEPTUAL. FINAL SELECTION SHALL BE DETERMINED DURING DEVELOPMENT OF FINAL CONSTRUCTION DOCUMENTS.

LANDSCAPE DATA

TOTAL SITE AREA: 10,051,801 SQ FT (230.76 ACRES)
DEVELOPED AREA:

JURISDICTION: LYON COUNTY
APN: 015-406-07

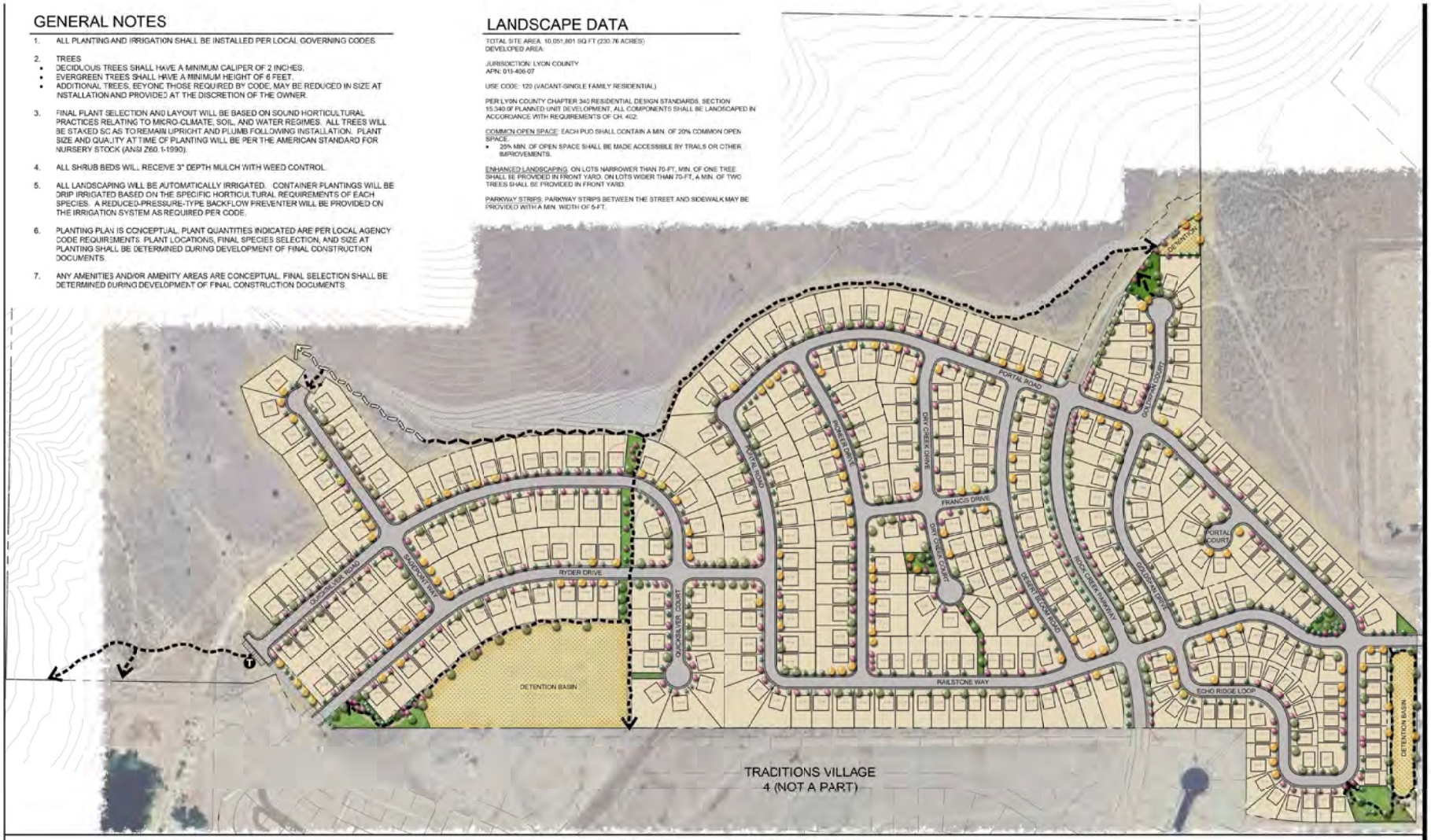
USE CODE: 120 (VACANT-SINGLE FAMILY RESIDENTIAL)

PER LYON COUNTY CHAPTER 340 RESIDENTIAL DESIGN STANDARDS, SECTION 15.340.07 PLANNED UNIT DEVELOPMENT, ALL COMPONENTS SHALL BE LANDSCAPED IN ACCORDANCE WITH REQUIREMENTS OF CH. 402.

COMMON OPEN SPACE: EACH PUD SHALL CONTAIN A MIN. OF 20% COMMON OPEN SPACE.
- 25% MIN. OF OPEN SPACE SHALL BE MADE ACCESSIBLE BY TRAILS OR OTHER IMPROVEMENTS.

ENHANCED LANDSCAPING: ON LOTS NARROWER THAN 70-FT, MIN. OF ONE TREE SHALL BE PROVIDED IN FRONT YARD. ON LOTS WIDER THAN 70-FT, A MIN. OF TWO TREES SHALL BE PROVIDED IN FRONT YARD.

PARKWAY STRIPS: PARKWAY STRIPS BETWEEN THE STREET AND SIDEWALK MAY BE PROVIDED WITH A MIN. WIDTH OF 5-FT.



PLANT LEGEND

- ORNAMENTAL TREES
- DECIDUOUS SHADE TREES
- EVERGREEN TREES
- LANDSCAPE AREA

AMENITY LEGEND

- DETENTION BASIN
- POCKET PARKS
- TRAILS
- TRAILHEAD
- EXISTING DIRT ROAD

811 Know what's below. Call before you dig.

0' 150' 300' 450'
Scale in Feet

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the landscape architecture studio
1502 C Street Sparks, NV 89431 (775) 323-2223 NV RLA #440
www.lastudionevada.com

Tentative Map
TRADITIONS NORTH
Traditions North, LLC
Lyon Co. Nevada

No.	Revision Date

LA No: 1048-501-06-25
Designed: AR
Drawn: KHK
Checked: RPH
Date: 1/13/2025

PROGRESS SET
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Sheet L1 of 1

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STATE OF NEVADA
DEPARTMENT OF TRANSPORTATION
310 Galletti Way
Sparks, Nevada 89431

Joe Lombardo
Governor

Tracy Larkin-Thomason, P.E., *Director*

January 30, 2026

GCW Engineering
5482 Longley Lane, Suite B
Reno, NV, 89511
Attention: Marissa Harned, PE

SENT VIA ELECTRONIC MAIL

RE: Traditions North – Traffic Impact Study (11/12/2025)

Ms. Harned,

The Nevada Department of Transportation (NDOT) has reviewed the updated traffic analysis prepared by GCW Engineering, dated November 12th, 2025, for the above-referenced project. Based on the above information, this traffic study is accepted for this project, and it can move forward with the NDOT occupancy permit process. Please be aware of the following comments as the project progresses through the permit process.

1. NDOT acceptance of a traffic study is typically valid for one year following the date on the acceptance letter, provided the nature of the development does not significantly change. Permit applications made after one (1) year may require an amendment or a new traffic study. Permit applications made after five (5) years will require a new traffic impact study.

2. The following improvements are recommended as mitigations based on the traffic impact study:
    a) Prior to reaching LOS E, construct an additional right-turn lane for the southbound Fortune Drive to US 50 movement to mitigate the cumulative developmental impacts of Traditions North and other projects north of US 50.

3. Given the multiple developments responsible for the mitigation of the cumulative impact, Lyon County may require the construction of transportation improvements it deems necessary to mitigate project-specific or cumulative impacts within NDOT right-of-way. Where such improvements are required and are not constructed by the County, Lyon County may participate in the review, approval, and administration of a reimbursement agreement among affected developers to allocate the cost of the required improvements on a pro rata basis. All required improvements shall be reviewed and permitted through NDOT and constructed in accordance with applicable NDOT standards and requirements.

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4. Permit for Lyon County-maintained infrastructure, such as traffic signals, street lighting, County road approaches, etc., shall be on an encroachment permit application with the County as the main applicant.

5. All design features will be required to comply with NDOT Standards. Any deviation will require approval by the District Engineer. The Permit Office will provide details required for the deviation requests if needed during the permit application review.

6. This acceptance letter and the accepted traffic impact study will need to be included as part of the NDOT encroachment permit submittal. To obtain additional details about the NDOT encroachment permitting process, the NDOT District II Permits Office can be contacted at (775) 834-8330 or D2Permits@dot.nv.gov.

We look forward to working with your design team and helping you to achieve the successful completion of your project.

NDOT may require additional changes and/or comments as the permit process progresses. If you have any questions, please feel free to contact Jeff Graham at (775) 834-8382.

Sincerely,

Signed by:
Kelly Gaworski
0B63A74DA2BE4A8...

Kelly Gaworski, PE
Engineering Services Manager
NDOT District II

KG:jg

Enclosures: Traditions North – Traffic Impact Study (11/12/2025)

Cc: Gavin Henderson - Lyon County Community Development Director
Louis Cariola – Lyon County Senior Planner
Loren Chilson – Headway Transportation
Bhupinder Sandhu – District Engineer
Andrew Lawerence – Assistant District Engineer
Chris Bell – NDOT Traffic Operations
NDOT District II Traffic Engineering
NDOT District II Permits Office
File

TRAFFIC IMPACT STUDY

FOR

TRADITIONS NORTH

November 12, 2025

PREPARED FOR:

GF Development, LLC

PREPARED BY:

GCW, Inc.
5482 Longley Lane, Suite B, Reno, Nevada 89511
775.322.4300
www. gcwengineering.com

YOUR QUESTIONS ANSWERED QUICKLY

Why did you perform this study?

This Traffic Impact Study evaluates the potential traffic impacts associated with the proposed Traditions North project in Dayton, Nevada. This study of potential transportation impacts was undertaken for planning purposes and to assist in determining what traffic controls or mitigations may be needed to reduce potential impacts, if any are found.

What does the project consist of?

The project consists of approximately 364 single family residential housing units located north of US Highway 50 (US 50), Nevada Station Parkway, and the Traditions Village 1 and Village 2 developments.

The project will access US 50 via Fortune Drive and Traditions Parkway. The project originally contemplated a connection to Enterprise Way as well, however due to circumstances separate from the traffic study, a vehicle connection to Enterprise Way is no longer being considered and was not included in this traffic analysis and report. If the project wishes to pursue a vehicle connection to Enterprise Way in the future, a separate traffic analysis will need to be conducted at that time.

How much traffic will the project generate?

The project is anticipated to generate approximately 3,433 Daily, 255 AM peak hour, and 342 PM peak hour trips to the external roadway network.

How will project traffic affect the roadway network?

Under Opening Year Plus Project conditions, the study intersections are expected to operate within policy level of service thresholds.

Under Future Year conditions, the US 50/Fortune Drive intersection is anticipated to operate at level of service E during the AM peak hour. The poor level of service is primarily due to the high southbound right-turn volume on Fortune Drive. The southbound Fortune Drive approach currently contains a hatched-out lane which can be converted to a second right-turn lane. With dual southbound right-turn lanes and protected plus overlap phasing, the overall US 50/Fortune Drive intersection is anticipated to operate within policy level of service thresholds. Capacity improvements for the Future Year condition should be undertaken by NDOT as regional improvements since the poor future operating conditions will occur unrelated to this project

Under Future Year Plus Project conditions, the analysis includes the needed regional capacity improvements (dual southbound right-turn lanes) at the US 50/Fortune Drive intersection. The study intersections are expected to operate at overall LOS D or better (within policy level of service thresholds).

What are the recommended improvements?

The project is not expected to result in levels of service below policy thresholds and therefore no project related mitigations are recommended. The following regional improvements by NDOT are included in the *US 50 Corridor Study* or as part of the corridor safety improvements that are currently at the 90% design stage, and were included in the Future Year analysis as a background condition:

- Lower the speed limit on US 50 from 60 mph to 55 mph from east of Fortune Drive to James Avenue to provide a more gradual transition in speed limits through the expanding urbanized area
- Widen US 50 to six lanes for the Future Year per the *US 50 Corridor Study*. With the widening project:
    - Construct/restripe a second southbound right-turn lane on Fortune Drive at US 50
    - Construct a westbound right-turn lane on US 50 at Fortune Drive (not shown in the *US 50 Corridor Study*) as exists today
    - Construct a westbound right-turn lane on US 50 at Traditions Parkway (not shown in the *US 50 Corridor Study*) as exists today
    - Improve the south leg of the US 50/Traditions Parkway/Segale Road intersection

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6. Future Year Traffic Volumes, Lane Configurations, and Controls
7. Project Trips – Opening Year
8. Project Trips – Future Year
9. Opening Year Plus Project Traffic Volumes, Lane Configurations, and Controls
10. Future Year Plus Project Traffic Volumes, Lane Configurations, and Controls

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E. Opening Year LOS Calculations
F. Future Year LOS Calculations
G. Opening Year Plus Project LOS Calculations
H. Future Year Plus Project LOS Calculations

INTRODUCTION

This report presents the findings of a Traffic Impact Study completed to assess the potential traffic impacts on local intersections associated with the Traditions North project in Dayton, Nevada. This traffic impact study has been prepared to document existing traffic conditions, quantify traffic volumes generated by the proposed project, identify potential impacts, document findings, and make recommendations to mitigate impacts, if any are found. The location of the project is shown on **Figure 1** and **Figure 2**, and the project site plan is shown on **Figure 3**.

Study Area and Evaluated Scenarios

The project consists of approximately 364 single family residential housing units. The project is located north of US Highway 50 (US 50), Nevada Station Parkway, and the Traditions Village 1 and Village 2 developments. The study intersections were identified as those most likely to be impacted by project traffic and are shown on **Figure 2**. The following intersections are included in this study:

1. Fortune Drive/Sugarloaf Drive
2. US 50/Fortune Drive
3. US 50/Traditions Parkway

This study includes analysis of both the weekday AM and PM peak hours as these are the periods of time in which peak traffic is anticipated to occur. The evaluated development scenarios are:

- Existing Conditions
- Opening Year Conditions – this scenario analyzes a 4-year horizon (Year 2029)
- Opening Year Plus Project Conditions
- Future Year Conditions (20-year horizon) – this scenario analyzes the 20-year horizon beyond the Opening Year (Year 2049)
- Future Year Plus Project Conditions

GCW ENGINEERS \ SURVEYORS

NO SCALE

- Project Site

Figure 1

Traditio 539 th

Traffic Impact Study

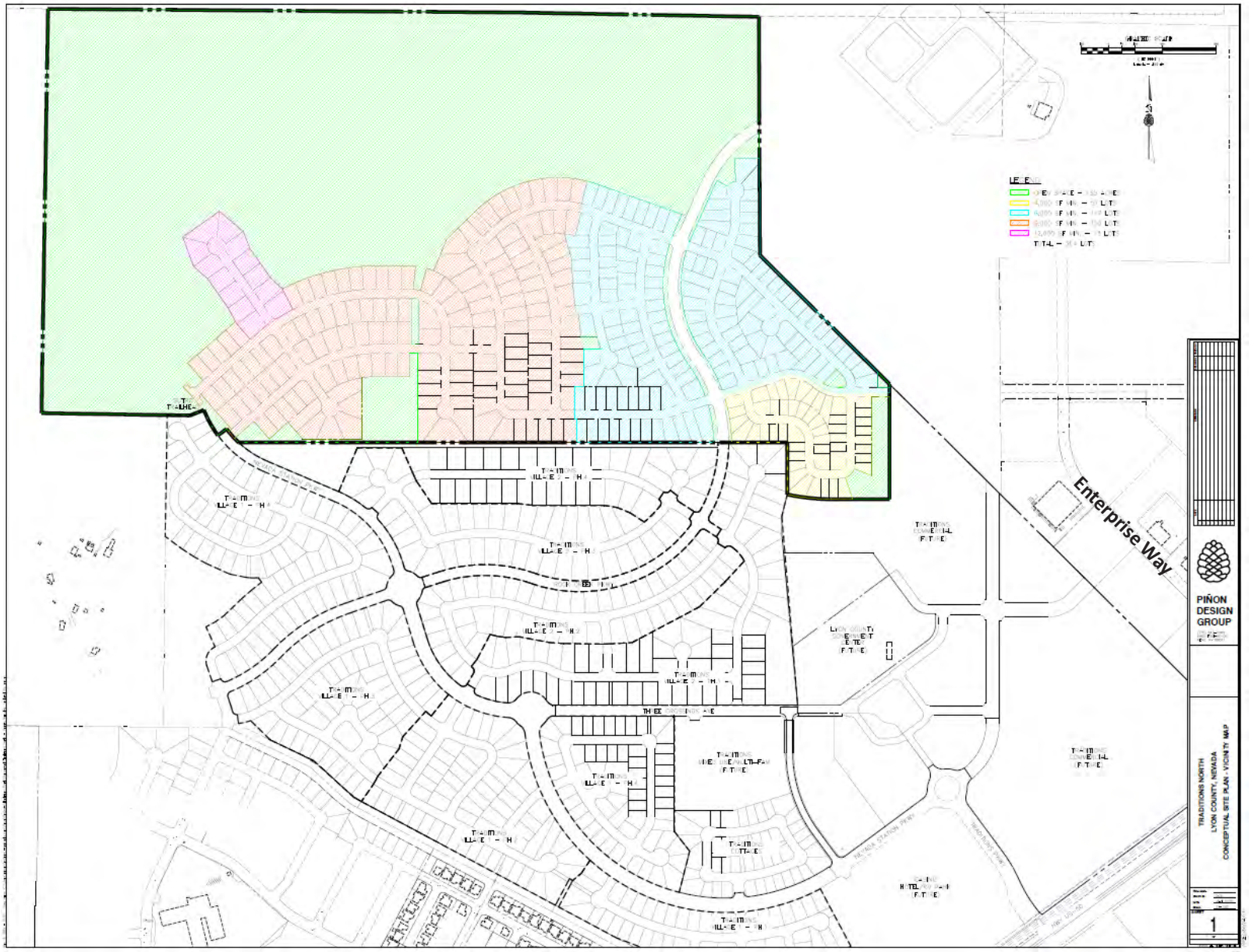
Regional Project Location

GCW ENGINEERS \ SURVEYORS

NO SCALE

- Project Site
(#) - Study Intersection

Figure 2
Traditio 540 th
Traffic Impact Study
Study Intersections



GCW ENGINEERS \ SURVEYORS

NO SCALE

Figure **3**

Traditio **541** th

Traffic Impact Study

Preliminary Site Plan

ANALYSIS METHODOLOGY

Level of service (LOS) is a term commonly used by transportation practitioners to measure and describe the operational characteristics of intersections, roadway segments, and other facilities. This term equates seconds of delay per vehicle at intersections to letter grades "A" through "F" with "A" representing optimum conditions and "F" representing breakdown or over capacity flows.

Intersections

The complete methodology for intersection level of service analysis is established in *the Highway Capacity Manual (HCM), 7th Edition* published by the Transportation Research Board (TRB). **Table 1** presents the delay thresholds for each level of service grade at signalized and unsignalized intersections.

Table 1: Level of Service Definition for Intersections

Level of Service	Brief Description	Average Delay (seconds per vehicle)	
		Signalized Intersections	Unsignalized Intersections
A	Free flow conditions.	< 10	< 10
B	Stable conditions with some affect from other vehicles.	10 to 20	10 to 15
C	Stable conditions with significant affect from other vehicles.	20 to 35	15 to 25
D	High density traffic conditions still with stable flow.	35 to 55	25 to 35
E	At or near capacity flows.	55 to 80	35 to 50
F	Over capacity conditions.	> 80	> 50

Source: *Highway Capacity Manual, 7th Edition*

Level of service calculations were performed for the study intersections using the Synchro 12 software package with analysis and results reported in accordance with *HCM* methodology.

Level of Service Policy

Lyon County

Chapter 4 – Transportation of the *2020 Lyon County Master Plan* (adopted December 16, 2021) includes the following level of service policies:

> *Signalized Intersections*
> *Level of Service at signalized intersections should be calculated using the Highway Capacity Manual, 2016 methodology. Delay at signalized intersections will be calculated on a peak hour basis and reported for the intersection overall. The overall intersections should operate at LOS D or better for the peak hour condition.*

Unsignalized Intersections

Level of Service at unsignalized intersections should be calculated using the Highway Capacity Manual, 2016 methodology. Delay at unsignalized intersections will be calculated on a peak hour basis and reported for both the approach with the highest delay and the intersection overall. The intersection approaches should operate at LOS D or better for the peak hour condition.

Nevada Department of Transportation

The Nevada Department of Transportation (NDOT) *Traffic Impact Study Requirements* publication states:

Level of service "C" will be the design objective for capacity and under no circumstances will less than level of service "D" be accepted for site and non-site traffic

Hence, LOS "D" was used as the threshold criteria for this analysis.

EXISTING CONDITIONS

Roadway Facilities

A brief description of the key roadways in the study area is provided below.

US Highway 50 is a highway with four-lane (two lanes in each direction and left-turn pockets at intersections) and five-lane (two lanes in each direction and two-way left-turn lane) sections within the study area. The roadway runs in a northeast-southwest direction and is considered an east-west roadway in this analysis. US 50 is classified as a Principal Arterial per NDOT roadway classification. The posted speed limit on US 50 at Fortune Drive is 45 mph and transitions to 60 mph just east of Fortune Drive.

Fortune Drive is a four-lane roadway with two lanes in each direction and turn pockets at intersections between US 50 and Dayton Village Parkway/Corral Drive. North of Dayton Village Parkway/Corral Drive, Fortune Drive is a two-lane residential roadway. The posted speed limit on Fortune Drive is 25 mph.

Traditions Parkway is a four-lane roadway north of US 50 that intersects Nevada Station Parkway at a roundabout intersection. The south leg of the US 50/Traditions Parkway intersection is a two-lane roadway called Segale Road that serves rural residential properties. The posted speed limit on Traditions Parkway north of US 50 is 35 mph.

Sugarloaf Drive is a two-lane residential roadway. The posted speed limit on Sugarloaf Drive is 25 mph.

Alternative Modes of Travel

Bicycle and pedestrian facilities do not exist on US 50 in the project area. Sidewalk exists on both sides of Fortune Drive and Sugarloaf Drive for the entire length of each roadway. Sidewalk also exists on both sides of Traditions Parkway from approximately 450 feet north of US 50 to Nevada Station Parkway. The US

50/Fortune Drive intersection has a marked crosswalk on the north leg of the intersection. Bicycle lanes do not exist on the study roadways.

Lyon County does not provide fixed route bus service.

Crash History

Vehicle crash data was obtained from NDOT and includes information from the 2019 to 2023 five-year period (the most current data available). The data shows the following:

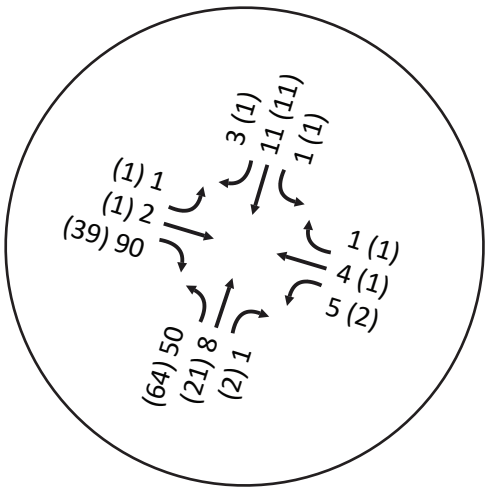
- Fortune Drive/Sugarloaf Drive – Zero crashes were reported at the intersection during the five year period
- US 50/Fortune Drive – Fourteen (14) crashes were reported at or within approximately 300 feet of the intersection during the five year period, including:
    - One (1) fatal crash – single vehicle run-off-the-road type crash involving alcohol
    - Six (6) injury crashes – 5 rear-end type crashes and 1 head-on type crash
    - Seven (7) property damage only (PDO) crashes – 5 single vehicle run-off-the-road type crashes and 2 rear-end type crashes
- US 50/Traditions Parkway – Four (4) crashes were reported at or within approximately 300 feet of the intersection during the five year period, including:
    - Two (2) injury crashes – 2 angle type crashes
    - Two (2) PDO crashes – 1 single vehicle run-off-the-road type crash and 1 rear-end type crash

There do not appear to be any trends or recurring crash types that require mitigations. The crash data sheets are provided in **Appendix A**.

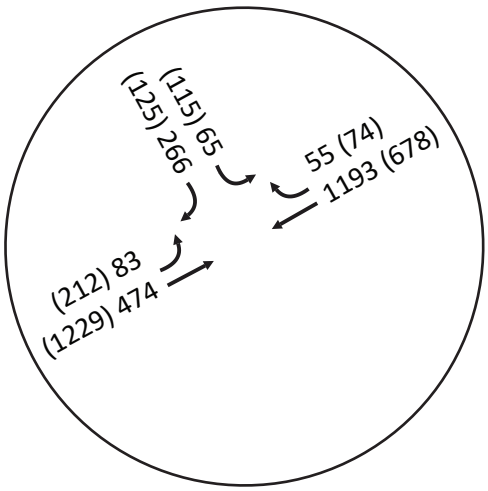
Traffic Volumes

AM (7:00 AM to 9:00 AM) and PM (4:00 PM to 6:00 PM) peak hour traffic volumes were collected at the study intersections on Tuesday, June 3, 2025. A review of NDOT's Annual Traffic Reports including the *2024 Seasonal Growth Factors* report (the most recent available) shows that traffic volumes in June are typically higher than the annual average, therefore, a seasonal factor was not applied to the existing traffic count data. The traffic count data sheets are provided in **Appendix B**. **Figure 4** shows the existing traffic volumes at the study intersections.

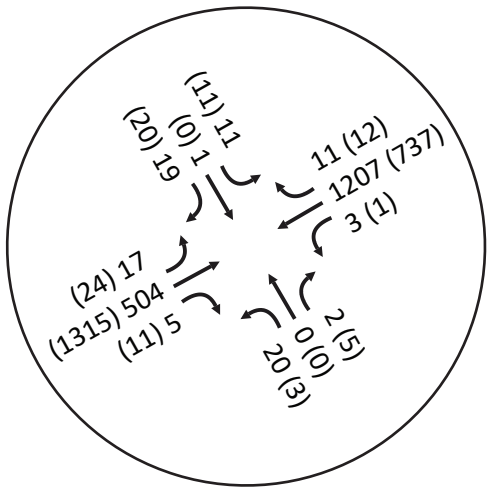
1 *Fortune Dr / Sugarloaf Dr*



2 *US 50 / Fortune Dr*



3 *US 50 / Traditions Pkwy*



GCW ENGINEERS \ SURVEYORS

NO SCALE

AM Peak Hour Volume (PM Peak Hour Volume)

(#) - Study Intersection STOP - Stop - Signal YIELD - Yield

Figure 4

Traditio **545** th

Traffic Impact Study

Existing Traffic Volumes, Lane Configurations, and Controls

Intersection Level of Service Analysis

Existing weekday AM and PM peak hour intersection level of service analysis was performed for the study intersections using Synchro 12 and HCS 2025 analysis software programs. The existing intersection lane configurations and controls are shown on **Figure 4. Table 2** shows the existing conditions level of service results and the technical calculations are provided in **Appendix C**.

Table 2: Existing Intersection Level of Service

Int. ID	Intersection	Control	AM		PM	
			Delay[1] Density[2]	LOS	Delay[1] Density[2]	LOS
1	Fortune Dr/Sugarloaf Dr	Side Street Stop				
	Overall		7	A	6	A
	EB Approach (Sugarloaf Dr)		9	A	9	A
	WB Approach (Sugarloaf Dr)		11	B	10	A
	NB Left (Fortune Dr)		7	A	7	A
	SB Left (Fortune Dr)		7	A	7	A
2	US 50/Fortune Dr	Signalized High-T				
	Overall		23	C	18	B
	EB Left (US 50)		45	D	24	C
	WB Approach (US 50)		18	B	15	B
	SB Approach (Fortune Dr)		36	D	23	C
	EB Merge (Fortune Dr to US 50)[3]		6	A	13	B
3	US 50/Traditions Pkwy	Side Street Stop				
	Overall		1	A	1	A
	NB Approach (Segale Rd)		39	E	47	E
	SB Approach (Traditions Pkwy)		36	E	30	D
	EB Left (US 50)		12	B	10	A
	WB Left (US 50)		9	A	13	B

Notes: 1. Delay is reported in seconds per vehicle for the overall intersection for signalized intersections and for the worst approach/movement for side street stop controlled intersections.
2. Average Density is reported for the EB Merge from the Fortune Dr SB left-turn to US 50 EB through movement.
3. Merge analysis was performed using HCS 2025 software.
Source: GCW, 2025

As shown in the table, the northbound and southbound approaches of the US 50/Traditions Parkway intersection are expected to operate at LOS E with minor street stop control. While the overall intersection is expected to operate at LOS A during the AM and PM peak hours, Lyon County standards state that unsignalized intersection "approaches should operate at LOS D or better for the peak hour condition." A traffic signal at the US 50/Traditions Parkway intersection is currently under construction. The other study intersections are expected to operate within policy level of service thresholds.

OPENING YEAR CONDITIONS

The Opening Year of the project is anticipated to be 2029.

Traffic Volumes

Opening Year traffic volumes were developed by applying a regional growth rate to the existing traffic volumes at the study intersections for 4 years. An annual growth rate of 0.5 percent per year was used, since trip generation estimates from other significant planned/approved projects in the area were also added. The 0.5 percent annual growth rate is consistent with the methodology used on other projects approved by NDOT and accounts for regional background growth that is not included in the trip generation of other projects. Trips generated by the following planned/approved, but not yet built, projects in the area were added to the study intersections:

- Traditions Town Center Phases 1-3
- Dayton Six

The resulting annual growth for the Opening Year volumes is generally higher than the traffic volume growth outlined in the *US 50 Corridor Study* (approximately 8-9 percent vs. 4-5 percent) due to the planned/approved project trips. The Opening Year (2029) AM and PM peak hour intersection turning movement volumes are shown on **Figure 5**. The growth rate and traffic volume development calculations are provided in **Appendix D**.

Intersection Level of Service Analysis

Opening Year weekday AM and PM peak hour intersection level of service analysis was performed for the study intersections based on the Opening Year traffic volumes, the existing peak hour factors from the counts, and the lane configurations and controls shown on **Figure 5**. A traffic signal at the US 50/Traditions Parkway intersection is currently under construction and will be completed prior to the Opening Year (2029) of the project. The Opening Year analysis was conducted with a traffic signal at the intersection. **Table 3** shows the Opening Year level of service results and the technical calculations are provided in **Appendix E**.

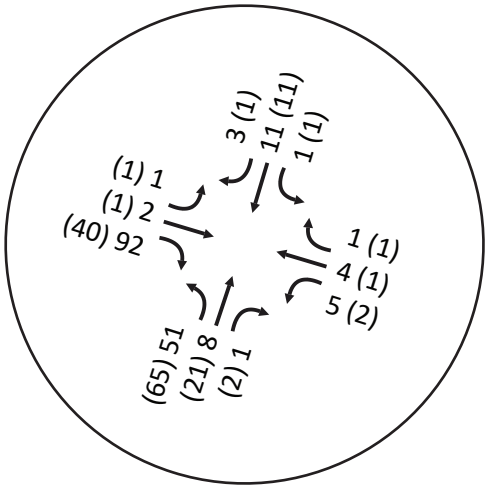
Table 3: Opening Year Intersection Level of Service

Int. ID	Intersection	Control	AM		PM	
			Delay[1] Density[2]	LOS	Delay[1] Density[2]	LOS
1	Fortune Dr/Sugarloaf Dr	Side Street Stop				
	Overall		7	A	6	A
	EB Approach (Sugarloaf Dr)		9	A	9	A
	WB Approach (Sugarloaf Dr)		11	B	10	A
	NB Left (Fortune Dr)		7	A	7	A
	SB Left (Fortune Dr)		7	A	7	A
2	US 50/Fortune Dr	Signalized High-T				
	Overall		25	C	20	B
	EB Left (US 50)		49	D	34	C
	WB Approach (US 50)		21	C	16	B
	SB Approach (Fortune Dr)		39	D	36	D
	EB Merge (Fortune Dr to US 50)[3]		12	B	17	B
3	US 50/Traditions Pkwy	Signal				
	Overall		20	B	20	C
	EB Approach (US 50)		14	B	17	B
	WB Approach (US 50)		21	C	21	C
	NB Approach (Segale Rd)		42	D	49	D
	SB Approach (Traditions Pkwy)		36	D	33	C

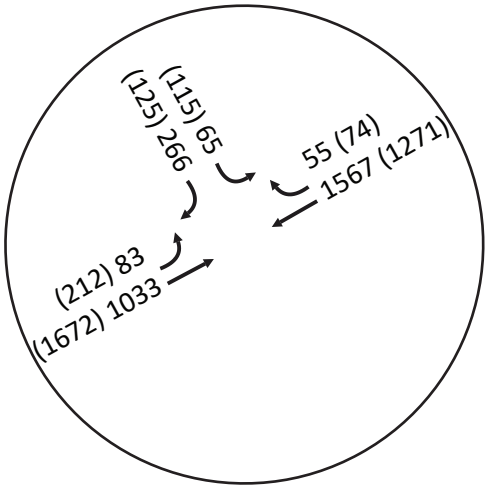
Notes: 1. Delay is reported in seconds per vehicle for the overall intersection for signalized intersections and for the worst approach/movement for side street stop controlled intersections.
2. Average Density is reported for the EB Merge from the Fortune Dr SB left-turn to US 50 EB through movement.
3. Merge analysis was performed using HCS 2025 software.
Source: GCW, 2025

As shown in the table, the study intersections are expected to operate within policy level of service thresholds during the AM and PM peak hours under Opening Year conditions.

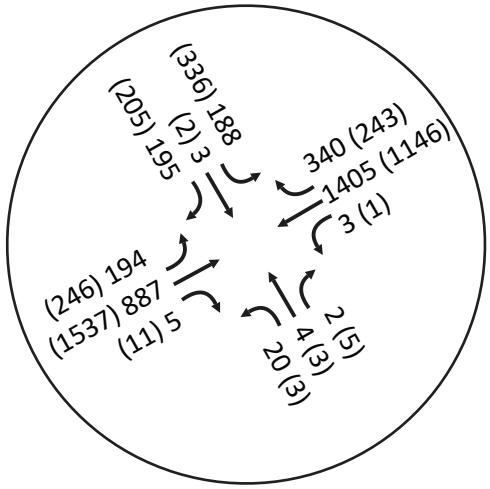
1 *Fortune Dr / Sugarloaf Dr*



2 *US 50 / Fortune Dr*



3 *US 50 / Traditions Pkwy*



GCW ENGINEERS \ SURVEYORS

NO SCALE

AM Peak Hour Volume (PM Peak Hour Volume)

(#) - Study Intersection STOP - Stop - Signal YIELD - Yield

Figure 5

Traditio 549 th

Traffic Impact Study

Opening Year Traffic Volumes, Lane Configurations, and Controls

FUTURE YEAR CONDITIONS

The Future Year analysis estimates operating conditions for the 20-year horizon after Opening Year (Year 2049).

Planned Roadway Improvements

The *US 50 Corridor Study - Pine Cone Road to Neigh Road Traffic Report* (CA Group, Inc.) documents planned roadway improvements in the study area. The corridor study includes three build alternatives with improvements for the overall corridor – the Arterial Alternative, Parkway Alternative, and Controlled Access Alternative. Based on input from NDOT staff, the Arterial Alternative is understood to be the NDOT preferred alternative and was used as the basis for this study. Improvements at the US 50 intersections with Fortune Drive and Traditions Parkway are included in the Arterial Alternative. The Arterial Alternative improvements for the study intersections include:

- Six through lanes (three lanes in each direction) on US 50
- US 50/Fortune Drive – signalized High-T intersection with dual eastbound left-turn lanes
- US 50/Traditions Parkway – signalized intersection with full access (all movement allowed) for all approaches of the intersection

It is important to note that the improvements identified in the corridor study do not include westbound right-turn deceleration lanes at the US 50/Fortune Drive and US 50/Traditions Parkway intersections, however these lanes exist today. NDOT's access management standards include warrants for right-turn lanes, which are clearly met based on Future Year (no project) traffic volumes. It is anticipated, and the analysis assumes, that these existing right-turn lanes will continue to be provided for the Future Year condition (without the project) by NDOT as part of the US 50 widening project.

The Future Year lane configurations and controls used in the analysis are shown on **Figure 6**.

Planned/Anticipated Developments & Traffic Volume Forecasts

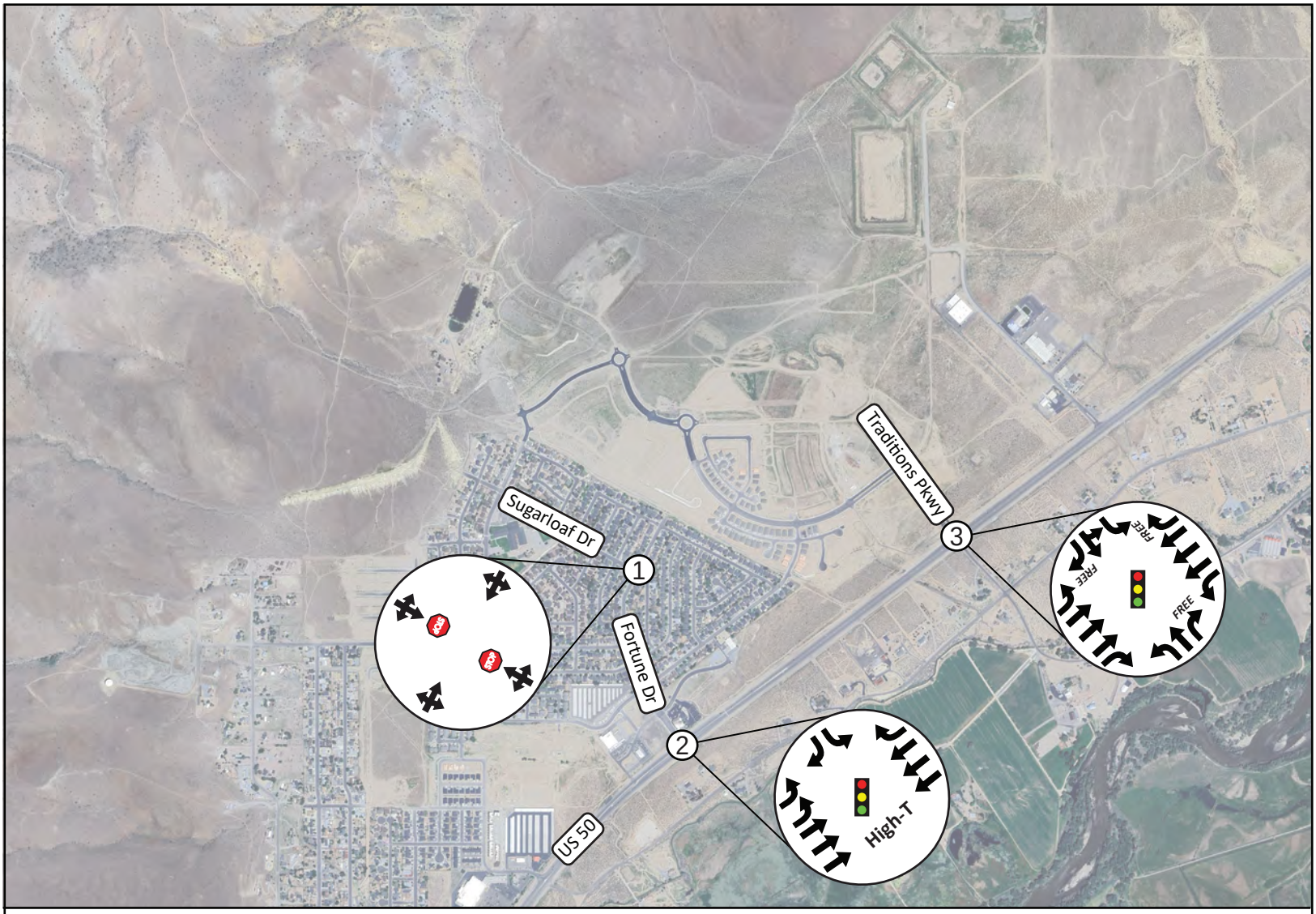
The *US 50 Corridor Study Traffic Report* includes analysis of multiple intersections on US 50 including the US 50/Fortune Drive and the US 50/Traditions Parkway intersections. The corridor study analyzes Future Year (2040) traffic volume forecasts that were developed using a regional growth rate and trip generation estimates from planned projects in the area. "Appendix 3 – 2040 Traffic Forecasting and Assumptions" of the *US 50 Corridor Study Traffic Report* (provided in **Appendix D**) includes a detailed description of how the forecasts were developed. The Future Year (2040) traffic volumes from the *US 50 Corridor Study Traffic Report* and from the *Traffic Impact Study for Traditions Town Center Phases 1-3* (Headway Transportation, September 27, 2023) were used as a starting point to develop Future Year (2049) forecasts for this analysis. The following steps were taken to develop Future Year (2049) traffic volumes at the study intersections:

1. Since the traffic volume forecasts in the *US 50 Corridor Study* represent the year 2040, background regional growth for an additional 9 years was calculated and added to the 2040 forecasts. An annual growth rate of 0.5 percent per year was used, since trip generation estimates from other planned/approved projects that were not included in the *US 50 Corridor Study* were also added and the 2040 volumes already account for known developments. The 0.5 percent annual growth rate is consistent with the methodology used on other projects approved by NDOT and accounts for regional background growth that is not included in the trip generation of other projects.

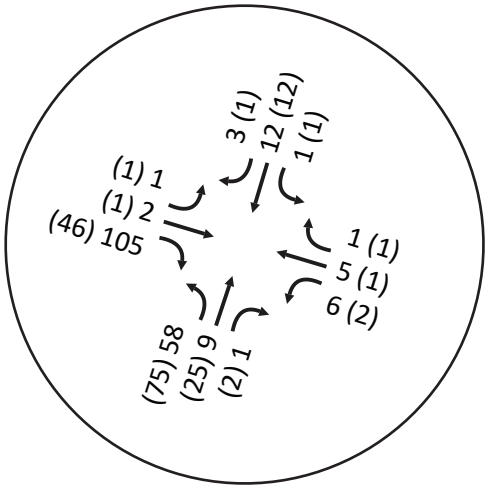
2. The *US 50 Corridor Study* traffic volume forecasts (2040) appear to already include a portion of the trips generated by the proposed Traditions project located north of US 50 between Fortune Drive and Traditions Parkway, but not the entire project. Trip generation estimates from the proposed Traditions Village 2 and Estates at Sutro (included in the Future Year forecasts for Traditions Town Center shown in Appendix D), Traditions Town Center Phases 1-3, and Dayton Six projects were added to the Future Year forecasts.

The Future Year (2049) traffic volumes are shown on **Figure 6** and represent the known long-term development in the study area.

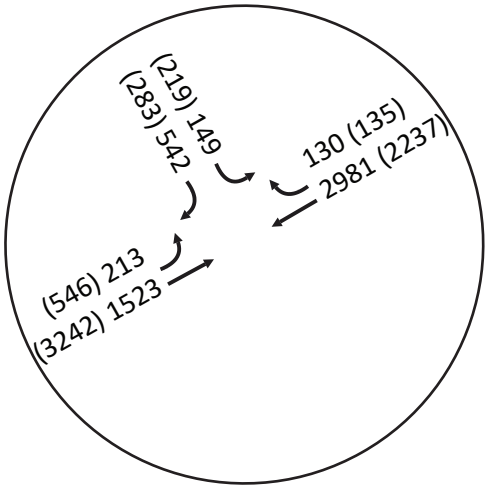
The overall Future Year forecasts presented in the *US 50 Corridor Study* result in an average annual growth rate of approximately 4-5 percent when compared to the existing volumes presented in that study. Consistent with the *US 50 Corridor Study*, the Future Year (2049) volumes used in this analysis also result in an average annual growth rate of approximately 4-5 percent when compared to the existing (2025) traffic volumes shown on **Figure 4**. The growth rate and traffic volume development calculations are provided in **Appendix D**.



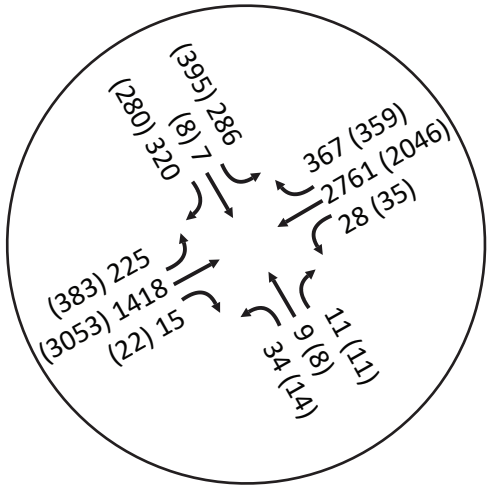
1 *Fortune Dr / Sugarloaf Dr*



2 *US 50 / Fortune Dr*



3 *US 50 / Traditions Pkwy*



GCW ENGINEERS \ SURVEYORS

NO SCALE

AM Peak Hour Volume (PM Peak Hour Volume)

(#) - Study Intersection STOP - Stop - Signal YIELD - Yield

Figure 6

Traditio 552 th

Traffic Impact Study

Future Year Traffic Volumes, Lane Configurations, and Controls

Intersection Level of Service

AM and PM peak hour intersection level of service analysis was performed for the study intersections based on the Future Year traffic volumes, lane configurations, and controls shown on **Figure 6**. **Table 4** shows the Future Year conditions level of service results and the technical calculations are provided in **Appendix F**.

Table 4: Future Year Intersection Level of Service

Int. ID	Intersection	Control	AM		PM	
			Delay[1] Density[2]	LOS	Delay[1] Density[2]	LOS
1	Fortune Dr/Sugarloaf Dr	Side Street Stop				
	Overall		8	A	6	A
	EB Approach (Sugarloaf Dr)		9	A	9	A
	WB Approach (Sugarloaf Dr)		11	B	11	B
	NB Left (Fortune Dr)		7	A	7	A
	SB Left (Fortune Dr)		7	A	7	A
2	US 50/Fortune Dr	Signalized High-T				
	Overall		**74**	**E**	41	D
	EB Left (US 50)		**83**	**F**	67	E
	WB Approach (US 50)		53	D	33	C
	SB Approach (Fortune Dr)		**>120**	**F**	57	E
	EB Merge (Fortune Dr to US 50)[3]		18	B	35	D
3	US 50/Traditions Pkwy	Signal				
	Overall		36	D	38	D
	EB Approach (US 50)		21	C	31	C
	WB Approach (US 50)		38	D	43	D
	NB Approach (Segale Rd)		101	F	75	E
	SB Approach (Traditions Pkwy)		93	F	79	E

Notes: 1. Delay is reported in seconds per vehicle for the overall intersection for signalized intersections and for the worst approach/movement for side street stop controlled intersections.
2. Average Density is reported for the EB Merge from the Fortune Dr SB left-turn to US 50 EB through movement.
3. Merge analysis was performed using HCS 2025 software.
Source: GCW, 2025

As shown in **Table 4**, the overall US 50/Fortune Drive intersection and some movements are anticipated to operate at level of service E/F during the AM peak hour. The poor level of service is primarily due to the high southbound right-turn volume on Fortune Drive. The southbound Fortune Drive approach currently contains a hatched-out lane which can be converted to a second right-turn lane. With dual southbound right-turn lanes and protected plus overlap phasing, the overall US 50/Fortune Drive intersection is anticipated to operate within policy level of service thresholds. Capacity improvements for the Future Year condition should be undertaken by NDOT as regional improvements since the poor future operating conditions will occur unrelated to this project.

PROJECT CONDITIONS

The project consists of up to 364 single family residential units.

Trip Generation

Trip generation rates from *Trip Generation Manual, 11th Edition* published by the Institute of Transportation Engineers (ITE) were used to develop trip generation estimates for the proposed project based on the Single Family Detached Housing rates. **Table 5** shows the Daily, AM peak hour, and PM peak hour trip generation estimates.

Table 5: Trip Generation Estimates

Land Use (ITE Code)	Size[1]	Trips[2]				
		Daily	AM	AM In/Out	PM	PM In/Out
Single Family Detached Housing (210)	364 du	3,433	255	64 / 191	342	216 / 127

Notes: 1. du = dwelling units
2. Trips were calculated based on the following rates per du: Daily – 9.43; AM – 0.70 (25% in / 75% out); PM – 0.94 (63% in / 37% out)
Source: GCW, 2025

As shown in the table, the project is expected to generate 3,433 Daily, 255 AM peak hour, and 342 PM peak hour trips.

Trip Distribution

Project trips were distributed to the adjacent roadway network based on existing traffic volumes, the locations of complimentary land uses, and anticipated travel patterns. Under Future Year Plus Project conditions, it was assumed that some traffic would travel between the proposed project and the planned Traditions Town Center and Dayton Six projects without accessing US 50. Project trips were distributed based on the following:

<u>Opening Year</u>

- 70% to/from the west via US 50
- 30% to/from the east via US 50

<u>Future Year</u>

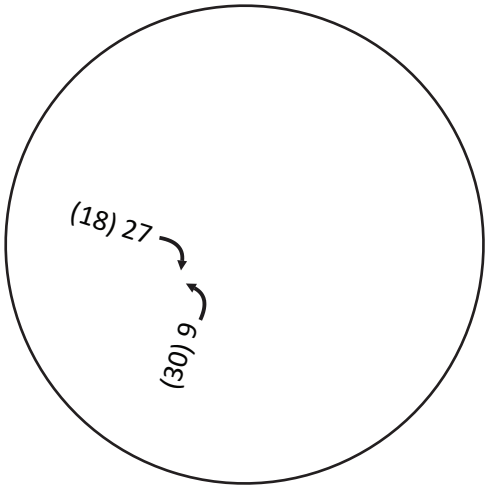
- 10% to/from Dayton Six
- 8% to from Traditions Town Center
- 82% to/from US 50
    - 70% to/from the west via US 50
    - 30% to/from the east via US 50

Figure 7 shows the project trip distribution and assignment for the Opening Year scenario. **Figure 8** shows the project trip distribution and assignment for the Future Year scenario.

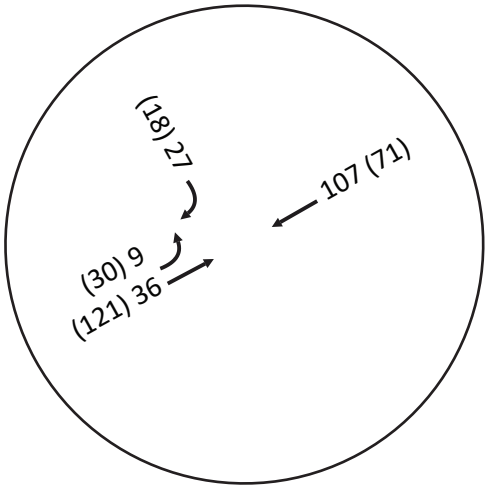
Project Access

The project is located north of the Traditions Village 1 and Village 2 projects and will connect to US 50 via Fortune Drive and Traditions Parkway.

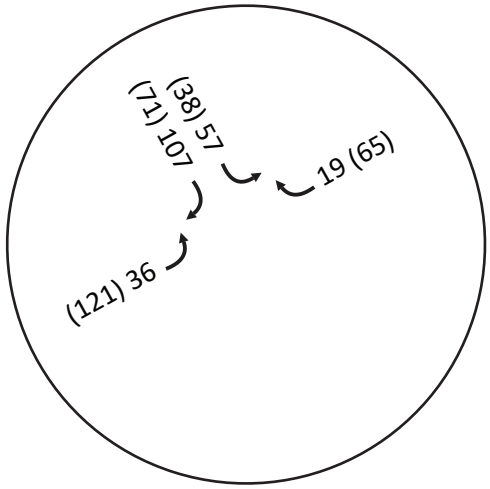
1 *Fortune Dr / Sugarloaf Dr*



2 *US 50 / Fortune Dr*



3 *US 50 / Traditions Pkwy*



GCW ENGINEERS \ SURVEYORS

NO SCALE

AM Peak Hour Volume (PM Peak Hour Volume)

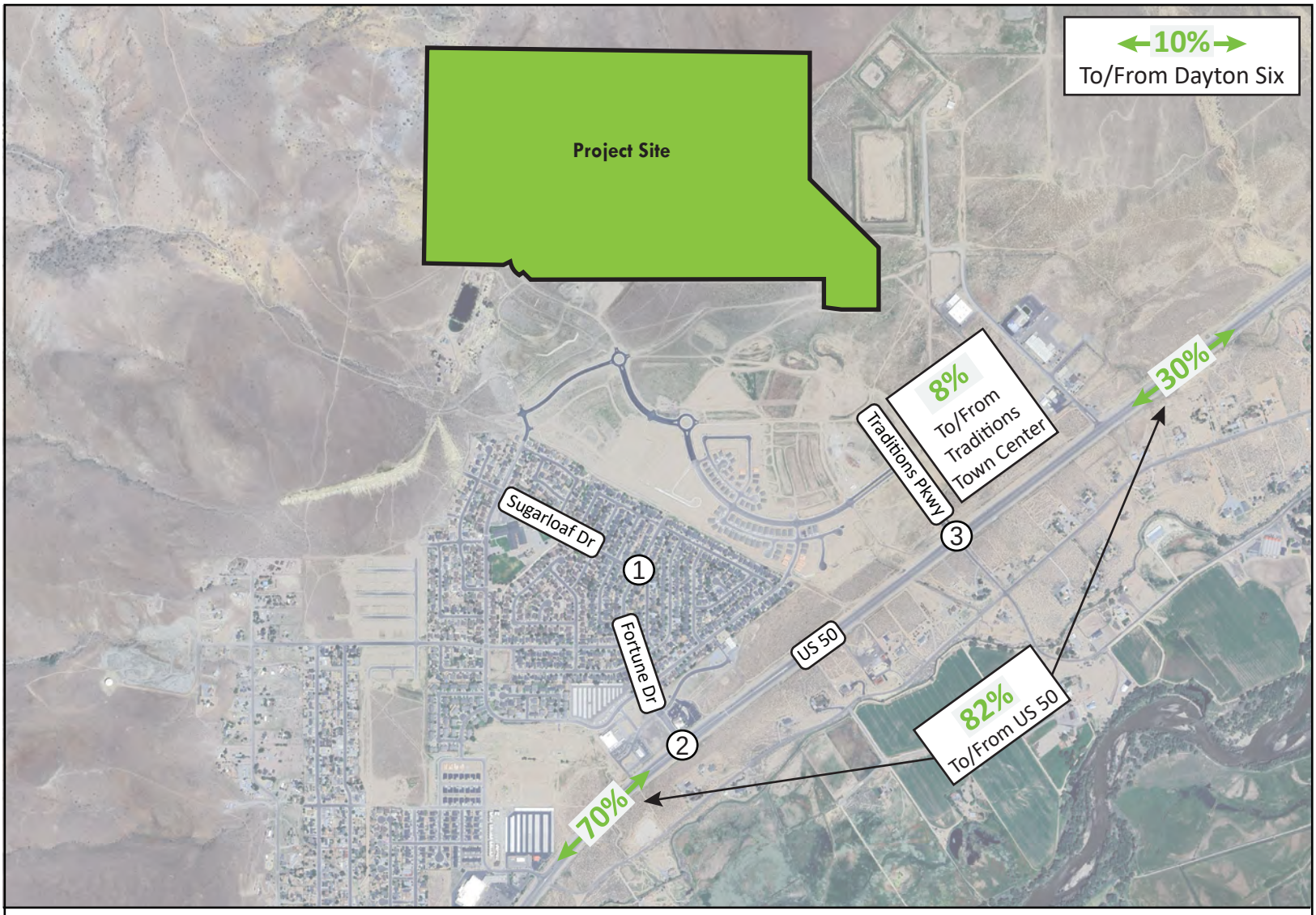
- Project Site
(#) - Study Intersection
←XX%→ - Trip Distribution

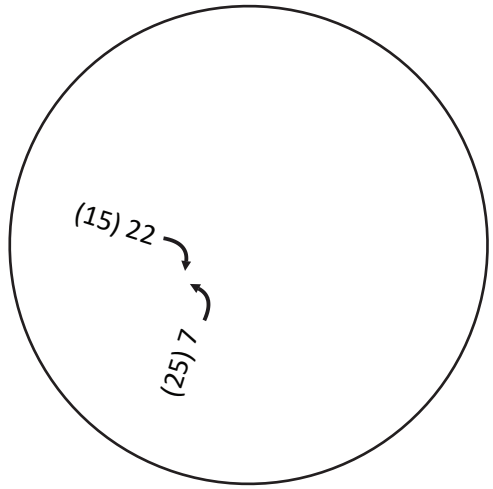
Figure 7

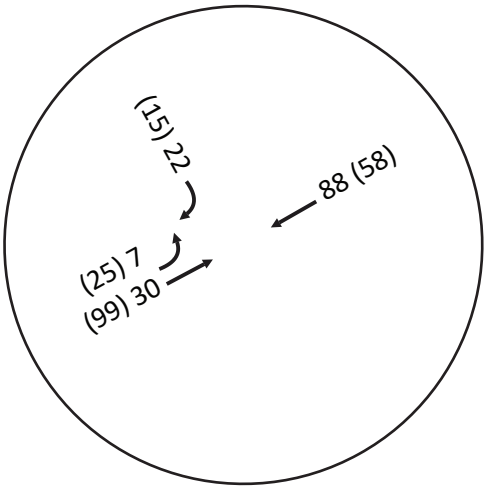
Traditio **556** th

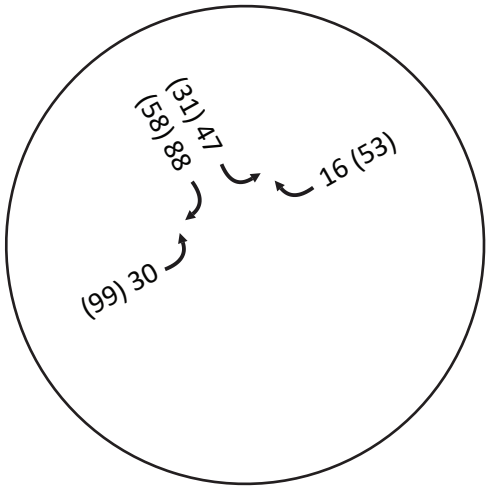
Traffic Impact Study

Project Trips - Opening Year









GCW ENGINEERS \ SURVEYORS

NO SCALE

AM Peak Hour Volume (PM Peak Hour Volume)

- Project Site
(#) - Study Intersection
←XX%→ - Trip Distribution

Figure 8

Traditio 557 th

Traffic Impact Study

Project Trips - Future Year

OPENING YEAR PLUS PROJECT CONDITIONS

Traffic Volumes

Project trips (**Figure 7**) were added to the Opening Year traffic volumes (**Figure 5**) to develop the Opening Year Plus Project conditions traffic volumes, shown on **Figure 9**.

Intersection Level of Service

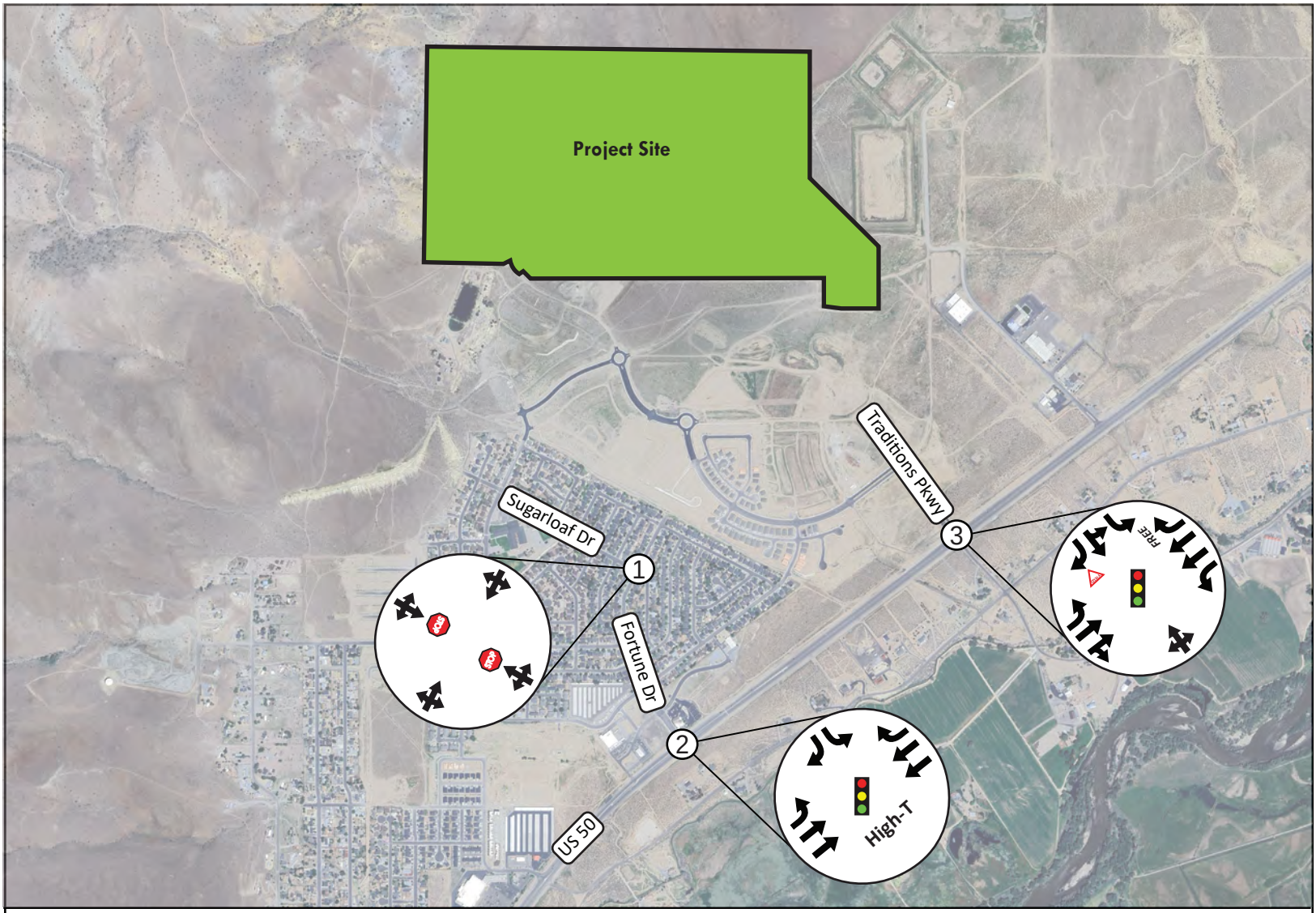
AM and PM peak hour intersection level of service analysis was performed for the study intersections based on the Opening Year Plus Project traffic volumes, the existing peak hour factors from the counts, and the lane configurations and controls shown on **Figure 9**. **Table 6** shows the level of service results and the technical calculations are provided in **Appendix G**.

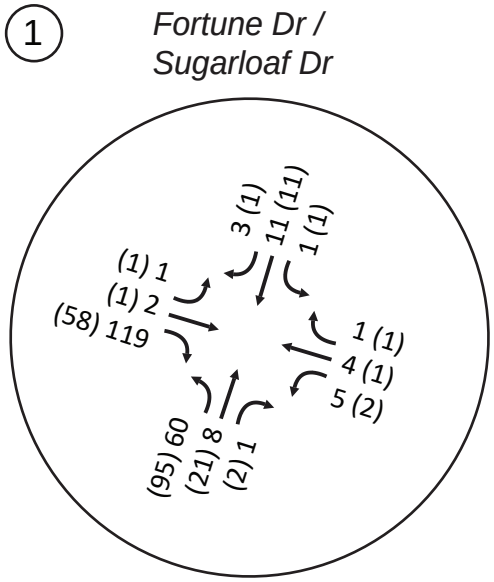
Table 6: Opening Year Plus Project Intersection Level of Service

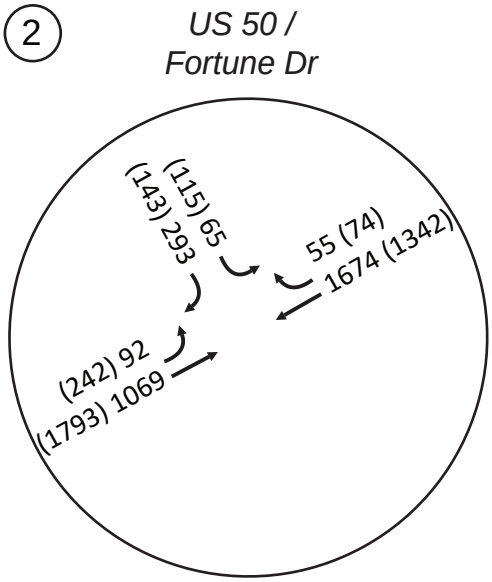
Int. ID	Intersection	Control	Opening Year				Opening Year Plus Project			
			AM		PM		AM		PM	
			Delay[1] Density[2]	LOS	Delay[1] Density[2]	LOS	Delay[1] Density[2]	LOS	Delay[1] Density[2]	LOS
1	Fortune Dr/Sugarloaf Dr	Side Street Stop								
	Overall		7	A	6	A	8	A	7	A
	EB Approach (Sugarloaf Dr)		9	A	9	A	9	A	9	A
	WB Approach (Sugarloaf Dr)		11	B	10	A	11	B	11	B
	NB Left (Fortune Dr)		7	A	7	A	7	A	7	A
	SB Left (Fortune Dr)		7	A	7	A	7	A	7	A
2	US 50/Fortune Dr	Signalized High-T								
	Overall		25	C	20	B	32	C	25	C
	EB Left (US 50)		49	D	34	C	52	D	40	D
	WB Approach (US 50)		21	C	16	B	29	C	20	B
	SB Approach (Fortune Dr)		39	D	36	D	44	D	39	D
	EB Merge (Fortune Dr to US 50)[3]		12	B	17	B	12	B	18	B
3	US 50/Traditions Pkwy	Signal								
	Overall		20	B	20	C	26	C	28	C
	EB Approach (US 50)		14	B	17	B	18	B	23	C
	WB Approach (US 50)		21	C	21	C	25	C	34	C
	NB Approach (Segale Rd)		42	D	49	D	44	D	54	D
	SB App. (Traditions Pkwy)		36	D	33	C	48	D	35	C

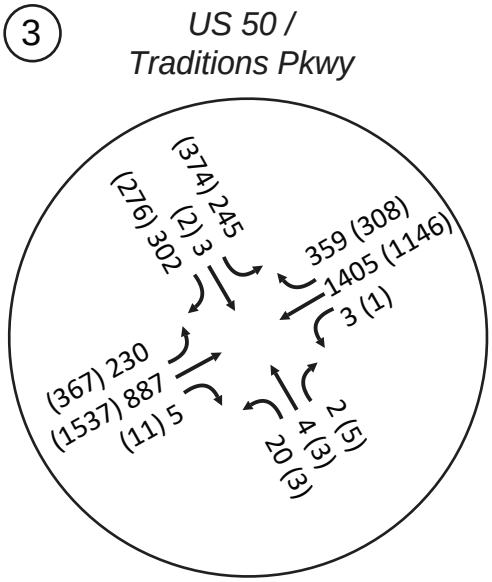
Notes: 1. Delay is reported in seconds per vehicle for the overall intersection for signalized intersections and for the worst approach/movement for side street stop controlled intersections.
2. Average Density is reported for the EB Merge from the Fortune Dr SB left-turn to US 50 EB through movement.
3. Merge analysis was performed using HCS 2025 software.
Source: GCW, 2025

As shown in the table, the study intersections are expected to operate at LOS C or better with project traffic.









GCW ENGINEERS \ SURVEYORS

NO SCALE

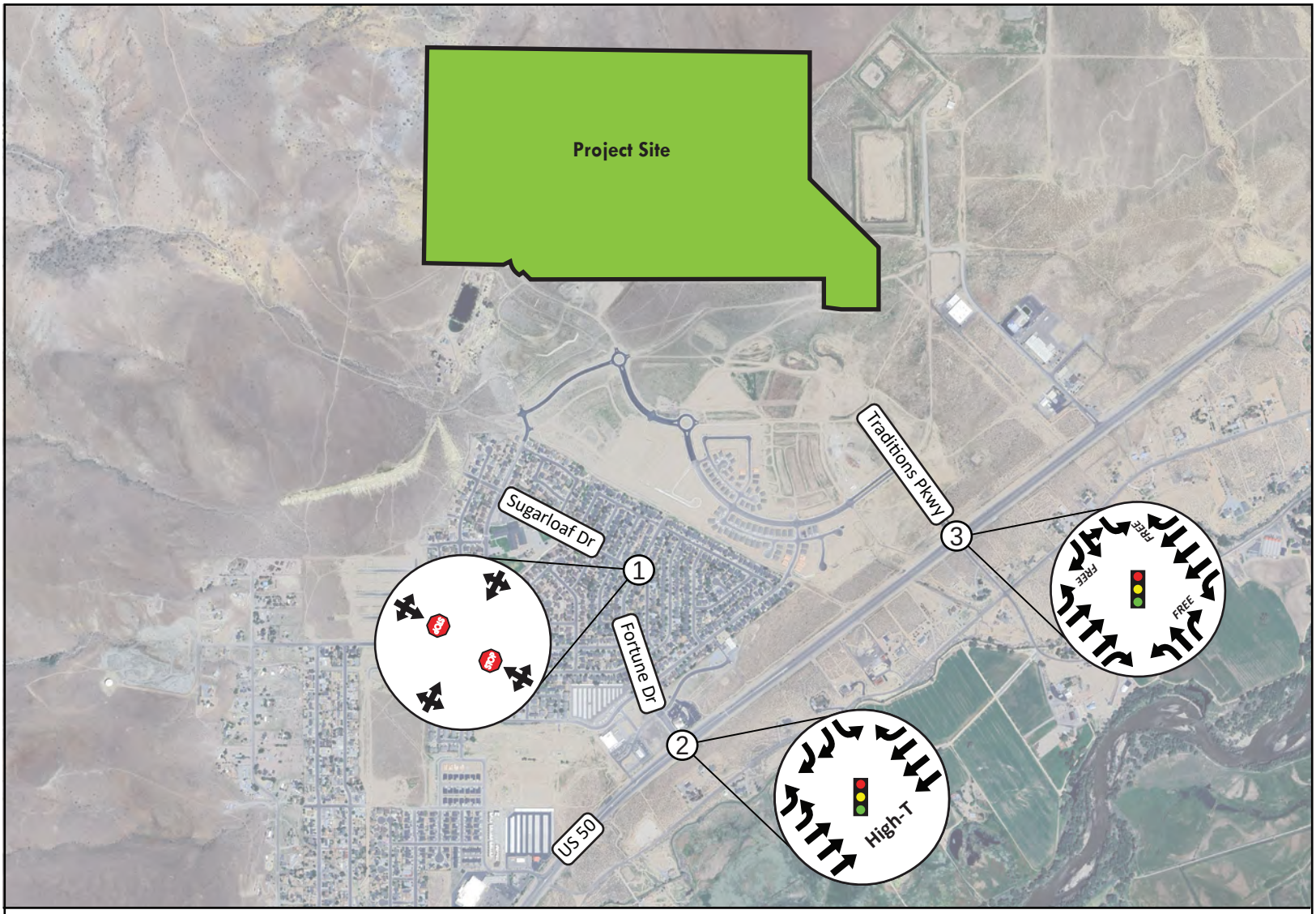
AM Peak Hour Volume (PM Peak Hour Volume)

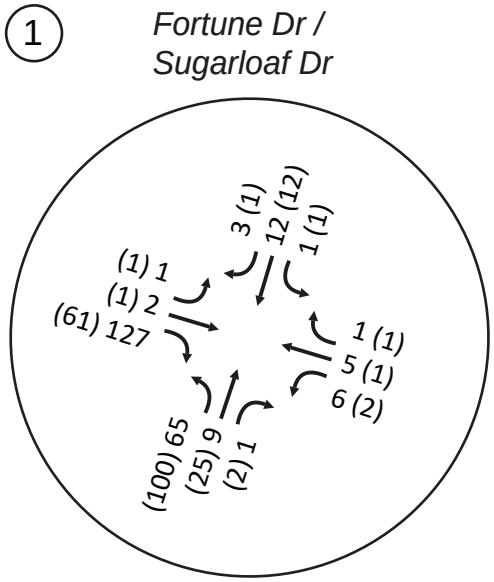
- Project Site
- Stop
- Signal
- Yield
- (#) - Study Intersection

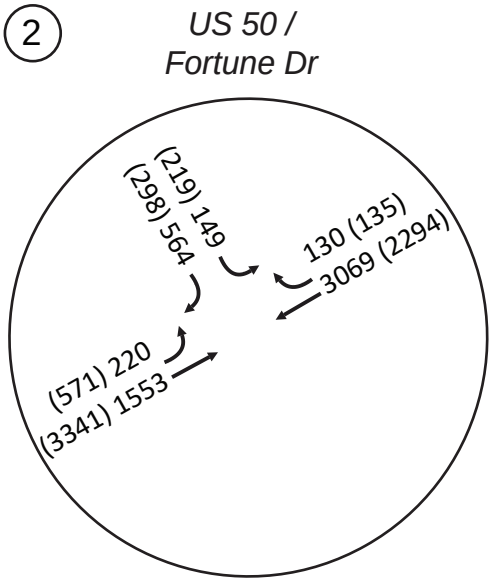
Figure 9

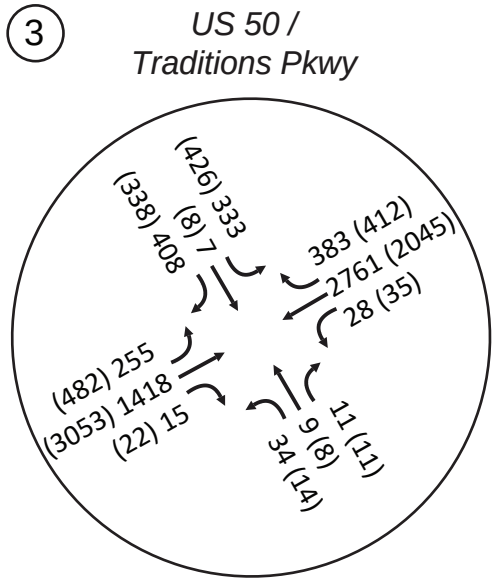
Traditio 559 th
Traffic Impact Study

Opening Year Plus Project Traffic Volumes, Lane Configurations, and Controls









GCW ENGINEERS \ SURVEYORS

NO SCALE

AM Peak Hour Volume (PM Peak Hour Volume)

- Project Site
- Stop
- Signal
- Yield
- (#) - Study Intersection

Figure 10

Traditio 560 th

Traffic Impact Study

Future Year Plus Project Traffic Volumes, Lane Configurations, and Controls

FUTURE YEAR PLUS PROJECT CONDITIONS

Traffic Volumes

Project trips (**Figure 8**) were added to the Future Year traffic volumes (**Figure 6**) to develop the Future Year Plus Project conditions traffic volumes, shown on **Figure 10**.

Intersection Level of Service

AM and PM peak hour intersection level of service analysis was performed for the study intersections based on the Future Year Plus Project traffic volumes and the lane configurations and controls shown on **Figure 10**. The analysis includes the planned roadway improvements from the *US 50 Corridor Study*, including six lanes on US 50 (see the "Future Year Conditions" section of this report for more detail). Additionally, as discussed in the "Future Year Conditions" section of this report, a second southbound right-turn lane is needed at the US 50/Fortune Drive intersection to provide operations within policy thresholds and should be undertaken by NDOT as a regional improvement since the poor future operating conditions will occur unrelated to this project. The Future Year Plus Project conditions analysis assumes this capacity improvement is in place. **Table 7** shows the level of service results and the technical calculations are provided in **Appendix H**.

Table 7: Future Year Plus Project Intersection Level of Service

Int. ID	Intersection	Control	Future Year				Future Year Plus Project			
			AM		PM		AM		PM	
			Delay[1] Density[2]	LOS	Delay[1] Density[2]	LOS	Delay[1] Density[2]	LOS	Delay[1] Density[2]	LOS
1	Fortune Dr/Sugarloaf Dr	Side Street Stop								
	Overall		8	A	6	A	8	A	7	A
	EB Approach (Sugarloaf Dr)		9	A	9	A	9	A	9	A
	WB Approach (Sugarloaf Dr)		11	B	11	B	11	B	11	B
	NB Left (Fortune Dr)		7	A	7	A	7	A	7	A
	SB Left (Fortune Dr)		7	A	7	A	7	A	7	A
2	US 50/Fortune Dr	Signalized High-T with dual SB right-turn lanes[4]								
	Overall		49	D	37	D	55	D	40	D
	EB Left (US 50)		94	F	58	E	91	F	61	E
	WB Approach (US 50)		35	C	30	C	43	D	34	C
	SB Approach (Fortune Dr)		93	F	45	D	94	F	45	D
	EB Merge (Fortune Dr to US 50)[3]		18	B	35	D	18	B	36	D
3	US 50/Traditions Pkwy	Signal								
	Overall		36	D	38	D	44	D	50	D
	EB Approach (US 50)		21	C	31	C	25	C	35	C
	WB Approach (US 50)		38	D	43	D	49	D	67	E
	NB Approach (Segale Rd)		101	F	75	E	112	F	87	F
	SB App. (Traditions Pkwy)		93	F	79	E	95	F	94	F

Notes: 1. Delay is reported in seconds per vehicle for the overall intersection for signalized intersections and for the worst approach/movement for side street stop controlled intersections.
2. Average Density is reported for the EB Merge from the Fortune Dr SB left-turn to US 50 EB through movement.
3. Merge analysis was performed using HCS 2025 software.
4. The analysis assumes capacity improvements including dual southbound right-turn lanes are in place at this intersection.
Source: GCW, 2025

As shown in the table, the study intersections are expected to operate at overall LOS D or better (within policy thresholds) under Future Year Plus Project conditions.

CONCLUSIONS & RECOMMENDATIONS

The following is a list of our key findings and recommendations:

- The proposed project consists of approximately 364 single family housing units and is anticipated to generate approximately 3,433 Daily, 255 AM peak hour, and 342 PM peak hour trips to the external roadway network.
- The project is located north of US 50, Nevada Station Parkway, and the Traditions Village 1 and Village 2 projects.
- The project will access US 50 via Fortune Drive and Traditions Parkway. The project originally contemplated a connection to Enterprise Way as well, however due to circumstances separate from the traffic study, a vehicle connection to Enterprise Way is no longer being considered and was not included in this traffic analysis and report. If the project wishes to puruse a vehicle connection to Enterprise Way in the future, a separate traffic analysis will need to be conducted at that time.
- Under Existing conditions, the northbound and southbound approaches of the US 50/Traditions Parkway intersection are expected to operate at LOS E with minor street stop control. While the overall intersection is expected to operate at LOS A during the AM and PM peak hours, Lyon County standards state that unsignalized intersection “approaches should operate at LOS D or better for the peak hour condition.” A traffic signal at the US 50/Traditions Parkway intersection is currently under construction and will be completed prior to the Opening Year (2029) of the project. The other study intersections are expected to operate within policy level of service thresholds.
- Under Opening Year and Opening Year Plus Project conditions, the study intersections are expected to operate within policy level of service thresholds.
- Under Future Year conditions, the US 50/Fortune Drive intersection is anticipated to operate at level of service E during the AM peak hour. The poor level of service is primarily due to the high southbound right-turn volume on Fortune Drive. The southbound Fortune Drive approach currently contains a hatched-out lane which can be converted to a second right-turn lane. With dual southbound right-turn lanes and protected plus overlap phasing, the overall US 50/Fortune Drive intersection is anticipated to operate within policy level of service thresholds. Capacity improvements for the Future Year condition should be undertaken by NDOT as regional improvements since the poor future operating conditions will occur unrelated to this project
- Under Future Year Plus Project conditions, the analysis includes the needed regional capacity improvements (dual southbound right-turn lanes) at the US 50/Fortune Drive intersection. The study intersections are expected to operate at overall LOS D or better (within policy level of service thresholds).
- The project is not expected to result in levels of service below policy thresholds and therefore no project related mitigations are recommended. The following regional improvements by NDOT are

included in the *US 50 Corridor Study* or as part of the corridor safety improvements that are currently at the 90% design stage, and were included in the Future Year analysis as a background condition:

- Lower the speed limit on US 50 from 60 mph to 55 mph from east of Fortune Drive to James Avenue to provide a more gradual transition in speed limits through the expanding urbanized area
- Widen US 50 to six lanes for the Future Year per the US 50 Corridor Study. With the widening project:
  - Construct/restripe a second southbound right-turn lane on Fortune Drive at US 50
  - Construct a westbound right-turn lane on US 50 at Fortune Drive (not shown in the *US 50 Corridor Study*) as exists today
  - Construct a westbound right-turn lane on US 50 at Traditions Parkway (not shown in the *US 50 Corridor Study*) as exists today
  - Improve the south leg of the US 50/Traditions Parkway/Segale Road intersection

PIÑON
DESIGN GROUP

To: **Lyon County Community Development**
From: **Piñon Design Group**
Date: **11/12/2025**
Subject: **Hydrology and Hydraulic Study per Lyon County Code Section 15.800.07**

This memo is prepared in accordance with Lyon County Code Section 15.800.07(E) Hydrology and Hydraulic Study Requirements. A Conceptual Drainage Study for the Traditions North project (Tentative Map) has been prepared in accordance with Lyon County requirements and demonstrates that the project is not located within a Special Flood Hazard area. According to the FEMA FIRM Community-Panel Number 32019C0290E. The site is in Zone X which is defined by FEMA as areas of minimal flood hazard. Reference Appendix A for the FEMA FIRMette flood zone maps on the proposed site and adjacent properties to the site. Neither a Conditional Letter of Map Revision (CLOMR) or Letter of Map Revision (LOMR) is required for this project.

The offsite hydrology and hydraulic output data referenced in the Conceptual Drainage Study was analyzed as part of the North Dayton Valley Area Drainage Master Plan and provided by JE Fuller to Piñon Design Group under the direction of Lyon County Community Development. Please reference the Conceptual Drainage Study for more information.

Sincerely,

Piñon Design Group

Dan Birchfield, PE
President

TRADITIONS NORTH

Conceptual Drainage Report

November 2025

Traditions North

APN: 016-406-07 • 230.76 acres
Dayton, Nevada

By: Piñon Design Group

PROFESSIONAL ENGINEER - STATE OF NEVADA
DANIEL C. BIRCHFIELD
Exp: 12-31-26
CIVIL
No. 20844

PIÑON DESIGN GROUP

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II. INTRODUCTION

This Conceptual Drainage Study has been prepared for the Traditions North subdivision in Dayton, Nevada. The report evaluates existing drainage conditions, proposed improvements, hydrologic calculations, detention design requirements, and compliance with Lyon County Drainage Guidelines (Revised September 2024).

A. Site Location

1) **Street Location & APN**
The proposed Traditions North subdivision is located in Dayton, Nevada, northeast of Highway 50 and north of existing Traditions development areas. The property is identified as **APN 016-406-07** and comprises **230.76 acres**.

2) **Section, Township, Range & Coordinates**
Approximate location:
- S1, T16N, R21E
- Latitude: 39.2836°, Longitude: -119.5778°

3) **Adjacent Developments**
- North: Undeveloped land (BLM)
- South: Traditions Subdivisions (existing/planned)
- East: Undeveloped land and drainage corridors (BLM)
- West: Mixed undeveloped private property and Lyon County land

Figure 1A: Project Location

B. Site Description

1) Topography, Ground Cover, Soils

The 230.76-acre site consists of gently sloping alluvial fan terrain, generally draining from northeast to southwest toward the Carson River watershed. Elevations vary by approximately 170 feet across area of proposed development. Ground cover consists primarily of native desert vegetation and disturbed soils. On-site NRCS soils consist of Hydrologic Soil Groups A and C typical of Dayton area alluvium.

2) Existing Drainage Facilities & Conditions

The project area currently conveys stormwater as **shallow overland sheet flow** across the site toward existing drainage paths trending southwest. No manmade drainage systems currently exist onsite. Off-site drainage entering the parcel comes from minor upstream watershed areas north and east of the property.

3) **FEMA Zone**
The site is located within FEMA Zone X. No areas of special flood hazard (Zone A, AE, or AO) exist within the project boundary.

C. Proposed Project Description

1) Traditions North proposes a **residential subdivision** across the 230.76-acre parcel, including new internal streets, drainage conveyance improvements, and potential open space/trail corridors. Phasing is anticipated to include multi-phase development (approximately 4 subdivisions), generally progressing from south to north.

D. Previous Studies

1) North Dayton Valley Area Drainage Master Plan (ADMP) dated August 1, 2019.

III. HISTORIC DRAINAGE SYSTEM

A. Area Drainage Master Plan (ADMP) Applicability

1) Historic drainage conditions are based on the North Dayton Valley Area Drainage Master Plan (NDVADMP) dated August 1, 2019. The ADMP identifies major flow paths and regional inflow cross sections relevant to this project.

B. Basins

1) **Relationship to Major Drainage Facilities**
The site drains toward regional off-site flow paths ultimately tributary to the Carson River watershed.

2) **Basin Characteristics**
- Terrain: alluvial fan slopes
- Runoff behavior: shallow, unconfined and moderately confined flows
- Vegetation: sparse desert vegetation with moderate infiltration
- Erosion potential: moderate due to sandy soils and slope gradients

3) **Existing Drainage Patterns**
Runoff flows in shallow concentrated flow patterns toward the east and south, exiting the site along the southern and eastern boundaries.

4) **Historic Data**

NDVADMP Cross Section	100YR-24HR (cfs)	100YR-6H (cfs)	25YR-24HR (cfs)
12	18.7	38.5	11.1
162	4.0	11.0	2.8
165.8	313.1	8.41	106.0

5) **Effects on Adjacent Properties**
Historically, runoff disperses widely across the alluvial surface. Concentrated discharge is not present under existing conditions. Development must avoid increasing flow concentration onto undeveloped neighboring properties.

IV. PROPOSED DRAINAGE SYSTEM

The project proposes a residential subdivision using engineered conveyance, storm drain infrastructure, open space corridors, and four regional detention basins (NE-BASIN, NW-BASIN, SE-BASIN, SW-BASIN).

A. Design Storm Criteria

1) **Design Storm**
The 100-year – 6-hour design storm was analyzed because this event was nearly double the peak runoff of the 100-year –24-hour event, according to the NDVADMP.

2) **Hydrologic Method**
Hydrologic modeling was completed using Autodesk Storm and Sanitary Analysis (SSA) with the HEC-1 Unit Hydrograph method and the SCS Curve Number (CN) loss method.

3) **Rainfall Information Used** (NOAA Atlas 14, Lyon County)
- 5-yr, 24-hr: ~ 1.36 inches
- 25-yr, 24-hr: ~ 1.89 inches
- 100-yr, 24-hr: ~ 2.77 inches
- **100-yr, 6-hr: ~ 1.66 inches**

B. Runoff

1) **Historic (Pre-Development) Flow Rates and Paths**

For this study, the **baseline (pre-development) peak flows** at these cross sections are taken from the ADMP and incorporated into the post-development model as upstream boundary inflows. Conceptually, this ensures that **existing watershed inflows are preserved** and only the incremental contribution from the project is modified by development.

2) **Developed (Post-Development) Flow Rates and Paths**
For post-development conditions, the project watershed has been divided into **seven local subbasins (Sub-01 through Sub-07)** representing the Traditions North site, plus imported ADMP inflows represented as **X-SEC-12, X-SEC-162, and X-SEC-170** within the SSA model.

Total modeled area of local subbasins is approximately **93.26 acres**, which reflects the portion of the 230.76-acre site included in the hydrologic model at this conceptual stage (remaining area to remain undeveloped or be incorporated in future refinement or represented via additional subbasins as design advances).

Regional inflows from the ADMP are carried into the model as **X-SEC-12, X-SEC-162, and X-SEC-170**. These are summarized above and represent the **external pre-development inflows** to which project runoff is added.

All local and regional flows are routed through the proposed conveyance and detention system to the **NE-OUTFALL** node, which represents the primary discharge point from the Traditions North site to the downstream system. The SE-OUTFALL and SW-OUTFALL were modeled to have zero discharge in the design storm event; however, the final design report may indicate flow. In any case, the basins will have constructed outlets/spillways in the event of storm in excess of the design storm.

C. Proposed Improvements

1) Flows will be conveyed using a combination of:
   - Drainage swales
   - Curb and gutter
   - Underground storm drain pipes
   - Open space drainage corridors
   - Four regional flow storage basins (Detention/Water Quality)
   - Three project outfalls

2) A detailed pipe by pipe analysis of the proposed storm drain systems is not appropriate for this conceptual drainage study but will be analyzed at final design to ensure they meet Lyon County Drainage Guidelines. The storm drain systems were analyzed as conceptual system with water catchment subbasin areas delineated for each system. The design storm was applied to each of these systems to properly route the proposed drainage distribution and ensure the overall system and storage basins are adequately sized.

Local Project Subbasins (From SSA): **Table 1:**

Subbasin	**Area (ac)**	**Peak Flow (cfs)**
Sub-01	10.14	8.57
Sub-02	7.01	5.93
Sub-03	10.01	8.41
Sub-04	14.83	12.51
Sub-05	4.21	3.56
Sub-06	39.87	33.59
Sub-07	7.18	6.04

D. Detention Basins

Four flow storage basins are planned for Traditions North:

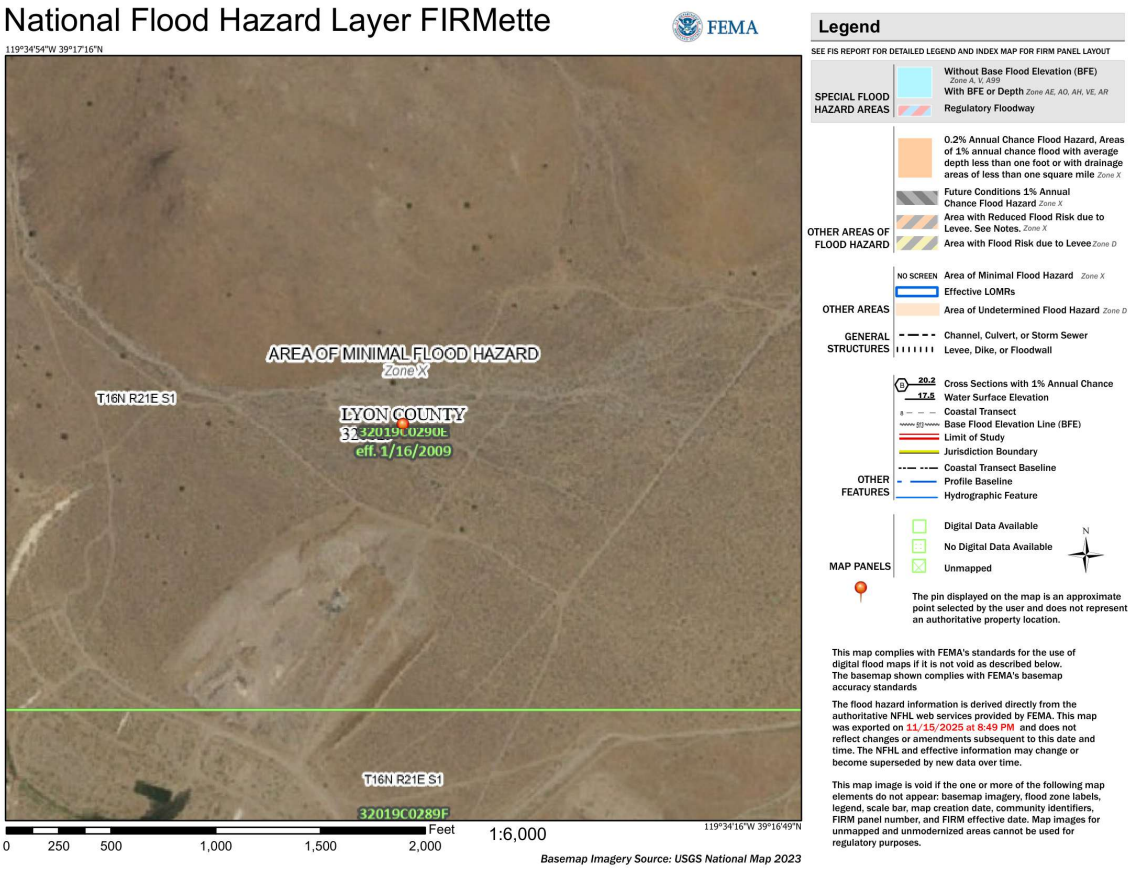
1) NW Basin – Acts primarily as a water quality basin to settle out sediment from offsite flows prior to conveying them through the site. This basin also act to divert a portion of the flow to the SW Basin while the majority of the flow will continue within the cutoff channel to the east.
2) SW Basin – Existing Retention Basin and material borrow pit that was constructed as part of the original Traditions Master Plan mass grading in the early 2000s. This basin will be graded to suit the development and installation of a neighborhood park. It will be retrofitted with an outlet pipe to discharge to the Traditions Village 2 cutoff channel. The existing basin bottom lies several feet below the downstream discharge and will also provide sediment transport mitigation.
3) SE Basin – Located at the lowest point of the site, this basin will collect flow from the on-site southeastern areas. The discharge will need to be a wide weir to distribute outflow back to sheet flow condition. This basin will also serve as a neighborhood park.
4) NE Basin – This basin collects a majority of the offsite runoff and sends it eastward along the predevelopment drainage pattern. The outlet structure will need detailed analysis and design at the final design stage.

Detention basin performance (From SSA): **Table 2:**

Basin	**Invert (ft)**	**Rim (ft)**	**Peak Inflow (cfs)**	**Max HGL (ft)**
NE-BASIN	4364.0	4372.0	253.66	4368.75
NW-BASIN	4446.1	4452.0	291.49	4452.49
SE-BASIN	4347.8	4453.5	39.15	4351.48
SW-BASIN	4415.8	4426.0	78.84	4420.19

V. FLOOD HAZARD COMPLIANCE

The site is located within FEMA Zone X. No areas of special flood hazard (Zone A, AE, or AO) exist within the project boundary.



VII. CONCLUSIONS

A. Benefits

The proposed drainage design complies with Lyon County Drainage Guidelines. Post-development discharges at the NE-OUTFALL (215.62 cfs) remain below the ADMP pre-development peak at Cross Section 170 (313.14 cfs), satisfying the County's no-adverse-impact requirement. Organized drainage system replaces the uncontrolled sheet flow. Water quality basins will improve sediment transport.

B. Adverse Effects & Mitigation

No adverse impacts are anticipated. All flows will be detained and released at or below pre-development peak rates. Overland flow paths and open space drainage corridors further reduce downstream impacts.

C. Compliance Statement

The conceptual drainage design for **Traditions North** complies with **Lyon County Drainage Guidelines (2024)** and satisfies stormwater conveyance, flood protection, and downstream impact requirements for Tentative Map review.

VIII. APPENDICES

Appendix A – Runoff Area Exhibit

Appendix B – SSA Subbasin Output

Appendix C – Detention Basin Stage–Storage

Appendix D – Background Data

PRELIMINARY
GEOTECHNICAL DESIGN REPORT
Traditions North

Dayton, Lyon County, Nevada

Submitted To:

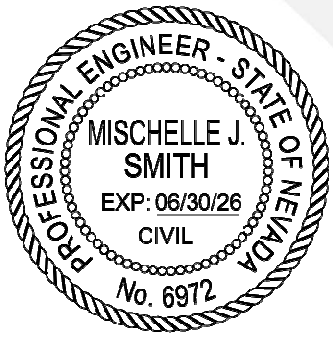
Jarred Corbell
GF DEVELOPMENT, LLC.
3527 S. Federal Way, Suite 103 #1020
Boise, ID 83705

Project Number

4627001

Date

July 2025
Revised: August 2025



Mischelle J. Smith, PE
RE Number 6972

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www.woodrodgers.com

August 28, 2025
Project No. 4627001

Jarred Corbell
GF DEVELOPMENT, LLC.
3527 S. Federal Way, Suite 103 #1020
Boise, ID 83705

Re: Traditions North – Amendment # 01
Alternative Pavement Section
Dayton, Lyon County, Nevada

Ref: 2024 International Residential Code
and 2024 Northern Nevada Amendments

Preliminary Geotechnical Design Report
Traditions North
Dayton, Lyon County, Nevada
Wood Rodgers' Project No. 4627001
Submitted: July, 2025

Dear Jarred:

Per our discussions, this letter provides updated recommendations to the pavement sections for the referenced project. Unless specifically modified herein, the recommendations presented in the referenced report are considered valid as written.

STRUCTURAL PAVEMENT SECTIONS

Materials and workmanship shall be consistent with the requirements of the agency having jurisdiction and the Standard Specifications for Public Works Construction. These sections have been developed with the expectation that the separation requirements presented in Section 5.2.4 of the referenced report have been met. Table 5 provides updates to the structural pavement sections for the project.

Table 5 (Amendment #01) - Structural Pavement Sections[1]

Road Type	Pavement Thickness (In.)	Pavement Type	Type II Class B Base Course Thickness (In.)[2]
Local Residential	3	Type 3	6
Collector Residential	4	Type 2	8

[1] Per Drawing No. L-1, Roadway Sections, Lyon County.
[2] Base Course thickness is in addition to structural fill separation requirements presented in Section 5.2.4.

Oil for all mixes should consist of PG-64-28NV. If fine-grained soils greater than one foot in thickness are encountered at roadbed grade, over-excavation in accordance with Section 5.2.4 of the referenced report is required. If granular soils, or fine grained soils less than one foot in thickness, are encountered at roadbed grade meeting the requirements of Table 2 of the referenced report, the need for over-excavation and replacement with 12" of import structural fill should be assessed.

Please let us know if you have any questions or need further clarification regarding these updates.

Sincerely,
WOOD RODGERS, INC.

Andrew Mayse, E.I.
Geotechnical Professional

Mischelle J. Smith, P.E.
Principal Engineer
RE Number: 6972
Expires: 06/30/2026

Enclosures:
July 2025 Wood Rodgers Preliminary Geotechnical Design Report

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EXECUTIVE SUMMARY

This report presents preliminary grading and design recommendations for the project. Given the project area, anticipated cuts, and depths of proposed fills, it is our opinion the final grading plan should be reviewed and the need for additional exploration and analysis be considered and appropriately proposed.

The project consists of constructing approximately 364 one-to-two-story single family residences with associated public streets. The residences are anticipated to be wood framed and supported by standard spread foundations with slab-on-grade flooring. Foundation loads are anticipated to be light. Street improvements, underground services, and project access will be designed to Lyon County standards and in accordance with the Standard Specifications for Public Works Construction (SSPWC). Based on preliminary grading plans (Piñon Design Group, 2025), cuts and fills are anticipated to approach ± 10-feet and ± 30-feet, respectively.

The project is in Dayton, Lyon County, Nevada and encompasses an area of approximately 231-acres and is located at a central latitude and longitude of 39.2846°N and -119.5772°E, respectively. The site is bordered by the Traditions Village 2 project to the south and undeveloped land to the north, east, and west. Vegetation across the site is moderate consisting of small and large brush, weeds, and grasses. The site is predominantly undeveloped with the exceptions of excavation and stockpiling operations near the south boundary of the site, a constructed berm on the western boundary of the site and dirt trails that transect the property. Per Google Earth imagery, the area near the south boundary of the site has been subject to excavation and stockpiling operations since at least June 2003.

Based on the Geologic Map of the Flowery Peak Quadrangle, Storey and Lyon counties, Nevada, the site is mapped in an area of Holocene Piedmont alluvial deposits consisting of alluvium of varying age (Qay), Miocene biotite-hornblende andesite flows (Tvba), and extensively disturbed areas (Qx) observed as the excavation and stockpiling operations on the southern boundary of the project site.

The soils encountered in our explorations typically consisted of complex interbedded sands, silts, and clays, as well as poorly graded sandy gravels with varying degrees of fines. Additionally, cobbles and boulders are present in the subsurface profile, typically at depths below 3 feet. Undocumented fill soils were observed from excavation and stockpiling operations near the southern boundary of the site were observed during our investigation. Stockpiles must be processed and qualified before receiving structural improvements.

Groundwater was not encountered in our exploration locations and is anticipated to be at a depth that will not affect the proposed improvements. Depth to groundwater may vary based on seasonal changes in precipitation and near-surface seepage.

Standard spread foundations with slab-on-grade flooring have been recommended for the support of structures.

Sands present at the site may allow excavations and utility trenches to slough or cave and must be adequately considered and planned for by the contractor. Oversize material to 18-inches in diameter may be encountered at depths greater than 3-feet below the ground surface during trenching and excavations. Therefore, excavatability will probably be more difficult in utility trenches where removal of larger sized particles can be difficult within the confines of a trench, and which will likely result in irregular trench profiles where cobbles and boulders must be removed.

Structural pavement sections have been presented for local and collector roads. These sections have been developed based on understanding that materials and workmanship shall be consistent with the provisions of the Standard Specifications of Public Works Construction (SSPWC).

1. INTRODUCTION

Presented herein are the results of Wood Rodgers' geotechnical exploration, laboratory testing, and associated geotechnical design recommendations for the proposed Traditions North development in Dayton, Lyon County, Nevada. The assessments and recommendations presented in this geotechnical report have been determined, in part, around the surface and subsurface conditions identified by our exploration program which was developed to be consistent with locally accepted industry practices regarding exploratory means and methods for geotechnical investigations of similar projects. The proposed structural elements, topography, grading design, soils, and geology are all unique; therefore, the engineering judgment employed by those in responsible charge of geotechnical design is in general conformance with the accepted standards of care for engineering analyses as defined by the Nevada State Board of Engineers and Land Surveyors.

This report has been prepared in consideration of the applicable provisions of the International Residential Code (IRC, 2024), ASCE 7, and the amendments and modifications adopted by Lyon County. These documents establish the minimum requirements to safeguard the public health, safety and general welfare of the occupants as well as the minimum level of structural integrity, life safety, and fire safety for inhabitants of new and existing structures. Geotechnical considerations for public improvements have been formulated around the requirements of Lyon County and the Standard Specifications for Public Works Construction. Performance standards around which our primary recommendations have been framed are based upon the requirements of the referenced documents. Any expectations of performance inconsistent with, outside the purview of, or exceeding the requirements of the referenced documents are subjective and, therefore, a function of materials, design, workmanship, and ownership. Unless these expectations of performance are specifically stipulated or quantified herein, they are considered in excess to the scope and design standards of this report.

The objectives of this study were to:

1. Explore, test, and assess general soil, geology, and ground water conditions pertaining to design and construction for the proposed development as required by the IRC and the Homebuilders' Guide to Earthquake Resistant Design and Construction (FEMA 232, 2024).
2. Provide recommendations associated with the design and construction of the project, as related to the identified geotechnical conditions and the stipulated design levels and performance standards established herein, and the requirements of the IRC and guidelines presented in FEMA 232.

Because of the preliminary status of site layout and project development and design, this geotechnical design report is preliminary.

2. SCOPE OF SERVICES

As indicated in our proposal, upon completion of our field and office studies, a geotechnical investigation report consistent with the requirements of the 2024 International Residential Code (IRC) will be completed for the project and will present the following:

- Description of the project site with the approximate locations of our explorations, shown on a Site Plan.
- Descriptive logs of the explorations performed for this study.
- General summary of the site soils and geology.
- Summary of noted surface drainage features and ground water conditions encountered.
- Seismic design considerations consistent with FEMA 232.
- Site preparation and grading recommendations developed for standard spread foundations.
- Types of suitable foundations including appropriate footing depths and widths, and anticipated settlement.
- Concrete and concrete slab-on-grade support options.
- Drainage considerations that may affect foundation and concrete slab-on-grade performance.
- Structural pavement sections for local and collector streets.
- Recommendations for additional exploration as appropriate.

Our study included field exploration, laboratory testing, and engineering analyses to identify the physical and mechanical properties of the various on-site materials. Results of our field exploration and testing programs are included in this report; in consideration of the stated design levels and performance standards, these results form the basis for our conclusions and recommendations.

3. PROJECT CHARACTERIZATION

3.1. Project Description

The project is located in Dayton, Lyon County, Nevada (Figure 1 – *Vicinity Map*, Appendix A) and consists of constructing approximately 364 one-to-two-story single family residences with associated public streets. The residences are anticipated to be wood framed and supported by standard spread foundations with slab-on-grade flooring. Foundation loads are anticipated to be light.

Street improvements, underground services, and project access for the residential development are to be dedicated and consistent with Lyon County's design standards and in accordance with the materials and workmanship requirements of the Standard Specifications for Public Works Construction (SSPWC). The overall project layout is presented on Figure 2 – *Improvement Plan & Approximate Exploration Locations* (Appendix A).

3.2. Site Conditions

The overall site encompasses an area of approximately 231-acres and is located at a central latitude and longitude of 39.2846°N and -119.5772°E, respectively. The site is bordered by the Traditions Village 2 project to the south and undeveloped land to the north, east, and west. Vegetation across the site is moderate consisting of small and large brush, weeds, and grasses. Cuts and fills are anticipated to approach ± 10-feet and ± 30-feet, respectively. The site is predominantly undeveloped with the exception of excavation and stockpiling operations near the south boundary of the site, a constructed berm on the western boundary of the site, and dirt trails that transect the property. Per Google Earth imagery, the area near the south boundary of the site has been subject to excavation and stockpiling operations since at least June 2003.

3.3. Exploration

3.3.1. Excavating and Sampling

The project was explored in June 2025 by advancing a series of eleven test pits with a track mounted excavator, utilizing a 48-inch bucket. Approximate exploration locations are presented on Figure 2 - *Improvement Plan & Approximate Exploration Locations* and Figure 3 - *Site Map & Approximate Exploration Locations* in Appendix A of this report. Maximum depths of exploration advance extended to 15 feet. Refusal was not encountered. Wood Rodgers' personnel examined and classified soils in the field in general accordance with ASTM D2488 (Description and Identification of Soils). Representative bulk samples were sampled from select layers in the soil profile and placed in sealed plastic bags or buckets and returned to our Reno, Nevada laboratory for testing.

3.3.2. Geophysical Methods

Seismic refraction methods (ReMi ™) were performed to measure shear wave velocity and to establish $V_{S_{100}}$. Shear wave velocity measurements have been relied upon to aid in the determination of an

appropriate Site Class (ASCE 7). Figure B-3 (Appendix B) presents the measured shear wave geophysical profile.

3.4. Sampling, Classification and Reporting

Wood Rodgers' personnel examined and classified soils in the field in general accordance with ASTM D2488 (Description and Identification of Soils). During exploration, representative bulk samples were placed in sealed plastic bags and returned to our Reno, Nevada laboratory for testing. Additional soil classifications, as well as verification of the field classifications, were performed in accordance with ASTM D2487 (Unified Soil Classification System [USCS]) upon completion of laboratory testing as described in the Laboratory Testing section. Logs of the explorations are presented as B-1a through B-1k in Appendix B. The USCS explanatory chart of soil unit symbols and related descriptions has been included as B-2 - Unified Soil Classification and Key to Soil Descriptions.

3.5. Laboratory Testing

Soil testing performed in the Wood Rodgers' laboratory was conducted in general accordance with the standards and methods described in Volume 4.08 (Soil and Rock; Dimension Stone; Geosynthetics) of the ASTM Standards. Samples of significant soil types were analyzed to determine in-situ moisture contents (ASTM D2216), grain size distributions (ASTM D6913), plasticity indices (ASTM D4318), and resistance value (R-Value) (ASTM D2844). Test results were used to classify the soils according to the USCS (ASTM D2487) and to verify the field logs which were then updated.

Test results are presented in Appendix C on C-1a through C-1c. Table 1 also presents a summary of the test data.

Table 1 - Summary of Test Data

Test Hole	Depth (Ft.)	Moisture (%)	%Gravel (+ #4)[1]	% Sand (#4-#200)	%Fines (-#200)	Liquid Limit	Plastic Index	R-Value	USCS
ASTM Standard		D2216	D6913			D4318		D2844	D2487
TP-2	2-5	7.4	49.0	41.1	9.9	30	11	---	GP-GC
TP-5	0-2	4.4	---	---	20.7	---	---	32	SM[2]
TP-6	2-3	4.3	25.9	63.5	10.6	NP	NP	---	SP-SM
TP-9	4-6	4.6	22.6	70.9	6.5	NP	NP	---	SW-SM

Table 1 - Summary of Test Data

Test Hole	Depth (Ft.)	Moisture (%)	%Gravel (+ #4)[1]	% Sand (#4-#200)	%Fines (-#200)	Liquid Limit	Plastic Index	R-Value	USCS
ASTM Standard		D2216	D6913			D4318		D2844	D2487
TP-11	1-4	15.5	1.4	36.2	62.4	30	14	---	CL

[1] Since ASTM D2487 is limited by a maximum particle size of 3", the gradation test data presented is based on a maximum particle size of 3". Larger particles (i.e., 8 to 12" in diameter) if observed in our test holes would be documented on the logs and should be anticipated as part of grading.
[2] Visually classified in accordance with ASTM D2488.

As a courtesy, resistivity, pH, chlorides, oxidation-reduction potential, sulfides and moisture were also tested to aid others in the assessment of potential corrosivity to ductile iron pipe and/or steel reinforcement; refer to Appendix C, C-2 for test methods and results.

Wood Rodgers, Inc. is not a corrosion engineering firm. Therefore, a corrosion engineer or structural engineer knowledgeable in the project steel specifications should be consulted for final assessments of corrosion potential at the site.

3.6. Geologic and General Soil and Groundwater Conditions

Based on the National Geologic Map Database (NGMDB, 2013), shown in Figure 4, the site is mapped in an area by Castor et. al. as Holocene Piedmont alluvial deposits consisting of alluvium of varying age (Qay), Miocene biotite-hornblende andesite flows (Tvba), and extensively disturbed areas (Qx) observed as the excavation and stockpiling operations on the southern boundary of the project site.

The soils encountered in our explorations typically consisted of complex interbedded sands, silts, and clays, as well as poorly graded sandy gravels with varying degrees of fines. Additionally, cobbles and boulders are present in the subsurface profile, typically at depths below 3 feet. Undocumented fill soils were observed from excavation and stockpiling operations near the southern boundary of the site were observed during our investigation. Stockpiles must be processed and qualified before receiving structural improvements.

Groundwater was not encountered in our exploration locations and is anticipated to exist at a depth not expected to affect the proposed improvements. Depth to groundwater may vary based on seasonal changes in precipitation and near-surface seepage.

4. SEISMIC HAZARDS

The International Building Code (IBC) requires that structures assigned to Seismic Design Category D, E, or F be evaluated for the following potential geologic and seismic hazards: surface rupture or displacement due to faulting, slope instability, liquefaction including the potential for seismically induced spreading or lateral flow, and slope instability. The following sections present our discussion and assessments of the stipulated hazards. Discussions regarding total and differential settlement are incorporated with the foundation design considerations.

4.1. Surface Rupture

4.1.1. Evaluation Guidelines

In 1998, the Nevada Earthquake Safety Council formulated guidelines for evaluating potential surface rupture due to faulting. The intent of the guidelines is to provide *a standardized minimum level of investigation for fault rupture in Nevada*; these guidelines have been adopted with the 2018 Northern Nevada Amendments of the IBC. Specifically, the guidelines state that investigation of sites for potential surface rupture or hazards shall be included in all geotechnical investigations. Further, if any Quaternary age surface rupture is mapped or otherwise interpreted to be present on the site, the feature is to be investigated further.

In addition to establishing the minimum level of investigation for fault rupture, the guidelines also offer recommendations for dealing with or mitigating identified hazards, including:

- Holocene active faults (evidence of movement within the past 10,000 years) shall be set-back a minimum distance of 50-feet for occupied structures.
- Late Quaternary (evidence of movement within the past 130,000 years) faults shall not be spanned by any critical facilities (hospitals, schools, fire stations, etc.). The facility under investigation does not meet the requisite requirements to be considered critical.

These guidelines allow for set-back distances to be adjusted by the competent professional. No additional constraints regarding fault-structure location are presented in the guidelines.

4.1.2. Investigation

MyHazards NV interactive fault map was accessed to determine the presence of any mapped features transecting the property. A trace of the Carson Lineament fault is mapped intersecting the northeastern corner and extending approximately 0.4 mi into the property. The fault is described to be of Quaternary age (< 1.8 million years regarding recency of movement) and is not considered to be Holocene nor Late Quaternary active. Therefore, this structure is sufficiently distant and of an age that offsets or additional considerations are not recommended nor presented by the Guidelines for the planned improvements; surface rupture due to the identified structure is considered unlikely. Should the final development plan

place a critical facility, such as a fire station, within this portion of the development, deeper examination of the structure may be required.

4.2. Soil Profile Type Amplification Factors

Seismic design values were determined based on a representative latitude and longitude of 39.2846°N and -119.5772°E, respectively. In accordance with ASCE 7-22 (Table 20.2-1) and the Northern Nevada Amendments of the 2024 IRC, Site Class CD and Seismic Design Category D_1 have been assigned to the project. Per ASCE 7-22, the site's modified Peak Ground Acceleration (PGA_M) to be used for engineering analyses is equal to 0.61g.

4.3. Liquefaction

Liquefaction is a loss of soil shear strength that can occur during a seismic event as excessive pore water pressure between the soil grains is induced by cyclic shear stresses. This phenomenon is limited to poorly consolidated (Standard Penetration Test less than 30, overburden stress corrected shear wave velocity less than 700 fps) clean to silty sand/sandy silt lying below the ground water table (typically less than 50 feet deep). In addition, we are using AASHTO's recommendation of Bray and Sancio (2006) criteria for assessing liquefaction susceptibility in clays and silts which suggests that a soil with a plasticity index less than 12 and a water content to liquid limit ratio greater than 0.85 will be susceptible to liquefaction. Neither of which are evidenced in our site data. Therefore, due to the stiffness of the underlying soil profile and anticipated depth to groundwater, a potential for liquefaction (and therefore lateral spread) does not exist at the project site.

4.4. Seismic Compression

Seismic compression is an accrual of volumetric strains during seismic events in unsaturated soil and is typically confined to poorly compacted engineered fills and Holocene soils. Significant deposits of Holocene soils are not indicated on the geologic map and deep, loose engineered fills are not anticipated, therefore, the settlement potential due to seismic compression is considered negligible.

5. DISCUSSION AND RECOMMENDATIONS

5.1. General Information

- *Conformance with the Geotechnical Report:* The recommendations provided herein, particularly under Earthwork, Structures, Concrete, and Public Improvements are intended to reduce risks of structural distress related to consolidation or expansion of native soils and/or structural fills. These recommendations, along with proper design and construction of the planned structure(s) and associated improvements, work together as a system to improve overall performance. If any aspect of this system is ignored or poorly implemented, the performance of the project will suffer.

- *Clarification of Structural Areas:* Structural areas referred to in this report include all areas of buildings, concrete slabs, asphalt pavements, as well as pads for any minor structures or retaining walls. Areas which extend behind or under rockery or other retaining structures are considered structural zones. In addition, the structural zone shall be considered to extend at a 1:1 (H:V) slope out from the edge of the structural footprint. All compaction requirements presented in this report are relative to ASTM D 1557 (ASTM D Volume 4, 2022).

- *Hazardous Materials:* Any evaluation of the site for the presence of surface or subsurface hazardous substances is beyond the scope of this study. When suspected hazardous substances are encountered during routine geotechnical investigations, they are noted in the exploration logs and reported to the client. No such substances were identified during our exploration.

- *Backfill of Exploration Locations:* Explorations were advanced at the approximate locations shown on the Site Map and Approximate Exploration Locations (Figure 3). Each exploration was backfilled upon completion of the field portion of our study, and the backfill was compacted to the extent possible with the equipment on hand. However, the backfill was not compacted to the requirements presented herein under Grading and Filling. If structures, concrete flatwork, pavement, utilities or other improvements are to be located in the vicinity of any of the test pits, the backfill should be removed and re-compacted in accordance with the requirements contained in the soils report. Failure to properly compact backfill could result in excessive settlement of improvements located over test pits.

- *SWPPP Requirements:* The site-specific Stormwater Pollution Prevention Plan (SWPPP), as required by the State of Nevada, will be the responsibility of the general contractor and/or owner. Recommendations presented herein regarding moisture conditioning are for the benefit of creating a targeted fill behavior. Moisture conditioning recommendations are not intended to direct the contractor in their means and methods for dust and SWPPP control.

- *Public Improvements:* Recommendations for paved improvements in right-of-way areas will be consistent with Standard Specifications for Public Works Construction (SSPWC) and the agency having jurisdiction (AHJ) standards. Driveway recommendations are in general conformance with

AASHTO's Low Volume Road design protocols, the Portland Cement Association (PCA) and American Concrete Institute (ACI) recommendations. Underground utilities will be provided by a variety of public and private companies; trenching and backfill recommendations presented herein are generally consistent with OSHA and the AHJ requirements, respectively.

5.2. Earthwork

5.2.1. Clarification of Geomaterials

Based on materials encountered in our investigation, the following definitions characterize terms utilized in this report:

- Rock fill possesses more than 30-percent retained on the 3/4-inch sieve and may present particles up to 12-inches.
- Fine grained soil possesses more than 40 percent passing the number 200 sieve and exhibits a plasticity index greater than 15.
- Granular soil possesses less than 40 percent passing the number 200 sieve, exhibits a plasticity index less than or equal to 15, and has a maximum particle size less than 6-inches.

It should be noted these definitions have been formulated around anticipated soil behavior and may not coincide with classifications provided by the Unified Soil Classification System.

5.2.2. Clearing and Grubbing

- All vegetation and topsoil are to be cleared and grubbed from structural areas. A minimum stripping depth of 0.3 to 0.5 feet is anticipated.
- Localized deeper areas of clearing may be required in areas of large brush and trees or where large root balls are encountered.
- Vegetation and organic debris should be disposed of offsite or placed in designated non-structural areas.
- If on-site disposal is approved, vegetation could be blended with soil (at a maximum ratio of 1:10 vegetation to soil, by mass) prior to placement in nonstructural fill or landscape areas.
- Organic material should be broken up using a large sheep's foot roller or chipper prior to blending with soil and moisture conditioning.

5.2.3. Undocumented Fill

- Excavation and stockpiling operations near the southern boundary of the site were observed during our investigation. Existing stockpiles must be processed and qualified as granular soil or rock fill before being placed as structural fills.

- Refer to Section 5.2.4 for subgrade preparation requirements for structures to be located in the footprint of the existing excavation and stockpiling operations.

5.2.4. Subgrade Preparation

- To allow for the preparation of subgrade soils, any undocumented fill encountered within the development area should be removed or stockpiled for qualification and later use.

- Any fine-grained soils encountered at structural grade (bottom of footing, roadbed grade, slab subgrade) shall be verified to be greater than 1-foot in thickness prior to removal and replacement with structural fill. If the fine-grained layer is less than 1-foot in thickness, no additional action is required.

- A maximum fill differential of 8-feet below foundation grade shall be observed. To meet this requirement, cut depths may need to be extended within a structure footprint to increase the net fill differential. Based on existing topography, this requirement is anticipated to be localized if present.

- Grade preparation for any fill to be placed adjacent to a slope steeper than 4:1 (H:V) shall include a keyway and excavation of horizontal benches as fill is placed.
    - The keyway should be at least 6-feet wide and extend at least 2-feet in depth below lowest adjacent grade.
    - Benches shall maintain a minimum bench width of 4-feet.
    - Vertical height of bench cuts shall be consistent with what is necessary for the benches to step uniformly up the slope.
    - Benches should be scarified, moisture conditioned and capped with a thin fill lift prior to compaction to facilitate the development of a uniform meld between the in-situ soils and fills.
- Where oversized material (i.e. > 6 in) is present, subgrade shall be moisture conditioned and proof-rolled with a fully loaded water truck prior to placing fill or constructing improvements.

- In-situ granular or fine-grained soils should be scarified for a minimum depth of 12-inches, moisture conditioned to within 3-percent of optimum and compacted to not less than 90-percent of the soil's maximum dry density (ASTM D1557) prior to placing fill or constructing improvements.

- Any resulting void created by removal of oversize during subgrade preparation may be filled with structural fill placed and compacted to 90 percent of the soil's maximum dry density in accordance with ASTM D1557 or lean concrete.

- In all cases, the final subgrade shall be smooth, firm, and relatively unyielding as determined by the testing agencies' qualified representative.

5.2.5. Subgrade Stabilization

- The fine-grained soils encountered within the project limits may tend to pump and or destabilize when moisture content exceeds optimum.
- Care should be taken during grading to ensure precipitation, or construction activities do not lead to an increase in or ponding of water on exposed grade.
- Pumping soils may be scarified and allowed to dry or removed and replaced with a layer of clean, angular, 12-inch minus rock fill or stabilized with a geogrid.
- Subgrade stabilization is a trial-and-error process, and it is recommended that a test section of suitable depth and length be conducted.
- The contractor should propose a stabilization protocol that is consistent with their readily available means and methods, and this proposal presented for review, by the owner, the general contractor, and grading inspector.
- Subgrade stabilization is considered adequate if the subgrade is firm and relatively unyielding (as approved by the engineer) when proof-rolled with a fully loaded water truck.
- Subgrade stabilization may not be required for walkways or private improvements subject solely to foot traffic providing the required compaction levels are achieved.

5.2.6. Mass Grading

- Verification testing of onsite soils to be qualified as structural fill shall be in accordance with ASTM D75, ASTM D6913, and ASTM D4318 and shall meet the requirements of Table 2.
- Based on our explorations, undocumented fill may be used as structural fill tested and verified to meet the granular soil definition.
- Undocumented fill has not been verified for degree of compaction and shall therefore be reworked in accordance with this section.
- Existing fill and native soils generated from cut and meeting the definition of granular soil (Section 5.2.1) may be placed as structural fill within the 1-foot separation zone.
- The site is anticipated to be designed for a cut-fill balance. However, should import be required it should meet the requirements of Table 2.
- Prior to importing material to the site, a submittal verifying import quality shall be received and approved by Wood Rodgers.

Table 2 - Guideline Specification for Import Structural Fill

Sieve Size (ASTM D6913)	Percent by Weight Passing Sieve
6 Inch[1]	100
4 Inch	90 - 100
¾ Inch[2]	50 - 100
No. 200	5 - 40
Maximum Liquid Limit (ASTM D4318)[3]	50
Maximum Plasticity Index (ASTM D4318)[3]	15
Soluble Sulfate Level (ACI 318, Table 4.3.1)	Negligible
R-Value (ASTM D2844)[4]	30 Min.

[1] Pending approval of the means and methods of the contractor, maximum particle size may be increased to 12-inches.

[2] Material presenting more than 30-percent material retained on the ¾" sieve shall be referred to as rockfill. (Section 5.2.1)

[3] Dry Method

[4] Within right-of-way only.

- With the approval of the geotechnical engineer, maximum particle size for the materials presented in Table 2 may be increased to 12-inches. Refer to Section 5.2.7 for rockfill placement requirements.
- An increased maximum particle size to 12-inches will impact the uniformity of trench profiles and trench spoils may need to be screened prior to reuse as trench backfill.
- A nominal maximum particle size of 6-inches is recommended for the final 24-inches of pad fills, to facilitate fine grading and advancing utility and footing trenches.
- Generation of oversized rock, i.e., greater than 6-inches, should be anticipated during mass grading of cut zones and trenching.
- For granular fill generated on-site, material should be excavated, dozed and processed into a uniform stockpile prior to being sampled and tested for material quality prior to acceptance.
- If the site is mass graded cut to fill, without the benefit of selective grading and processing, it is likely some of the soils placed as fill may present clay pockets or zones and regrading could be required.

- Granular or fine-grained soil placed as fill shall be moisture conditioned to within 3-percent of optimum, placed in 12-inch maximum loose lifts, and compacted to not less than 90-percent of the soil's maximum dry density.

- Minimum compaction requirements shall be increased to 95-percent in areas where total fill thickness exceeds 10-feet.

5.2.7. Rockfill Placement and Verification

Soils that are classified as rockfill should be placed and verified in conformance with the following placement procedures.

- Oversize (i.e., rock > 6-inches in least dimension) must be blended and placed in such a manner that: nesting of the rock does not occur, rock is uniformly distributed throughout the fill lift, and voids are uniformly filled with the soil matrix.

- A maximum lift thickness of 12-inches should be observed for 6-inch minus rock fill. A maximum lift thickness of 18-inches should be observed for 12-inch minus rock fill.

5.2.7.a. Rockfill Verification Protocols

- Determine a moisture-density relationship (ASTM D1557 Method C) on the portion of the sample passing the ¾-inch sieve.

- Rockfill shall be placed and compacted with the ¾-inch minus fraction moisture conditioned to at least optimum as determined in accordance with ASTM D1557, Method C.

- Where standard density testing cannot be performed due to oversize material, performance criteria for acceptance of the compacted fill shall be established; otherwise rockfill shall be compacted to not less than 90-percent of the soil's maximum dry density.

- For acceptance based on performance criteria, an initial rolling pattering consisting of at least five single passes with a minimum 20-ton roller (815 Caterpillar "Sheepsfoot" compactor, or equivalent) for mass grading, or five complete passes with hand compactors or pneumatic trench roller in footing trenches is recommended.

- Increase the number of passes as necessary until no notable increase in density can be measured (ASTM D6938, Standard Test Methods for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods) or notable deflection is reduced to negligible.

- Modifications to the rolling pattern will be required with change in percentage of + ¾-inch rock and/or changes in moisture content of the ¾-inch minus portion of the rockfill.

- The established rolling patterns, and estimated percentage of + ¾-inch material, shall be

recorded.

5.2.8. Trenching and Excavations

- OSHA - Regulations amended in Part 1926, Volume 54, Number 209 of the Federal Register (Table B-1, October 31, 1989) require that the temporary sidewall slopes be limited to maintain trench stability. Minimum sidewall slopes and acceptable trench configurations are also presented in the referenced register.
- In some areas of the parcel, oversize material (> 6-inches) will be encountered during trenching and excavations. Excavatability will probably be more difficult in utility trenches where removal of larger sized particles can be difficult within the confines of a trench, and which will likely result in irregular trench widths where boulders or fractured bedrock must be removed.
- Oversize material which may be generated during excavating and trenching may require off-hauling or placement in non-structural areas.
- Open excavations should be protected from flooding.
- Based on the results of our exploration program, it is our opinion that the bulk of the native site soils appear to be predominately Type C, although variations exist.
- All fills should conservatively be considered Type C unless directed otherwise by the contractor's competent individual trained in trench safety.
- Some of the sands present at the site may allow excavations and utility trenches to slough or cave and therefore, must be adequately considered and planned for by the contractor.
- All trenching should be performed and stabilized in accordance with local, state, and OSHA standards. Bank stability is the responsibility of the contractor or contractor's qualified representative who is present at the site, able to observe changes in ground conditions, and has control over personnel and equipment.
- Pipe bedding, initial backfill, and trench backfill shall be consistent with the approved civil and/or utility plans.

5.2.9. Earthwork Testing and Observation

- Verification of subgrade and fills should be performed by a firm that is AMRL accredited in ASTM E329.
- Special inspection of fill soils is required during mass grading of the development; the Special Inspector should be ICC certified in soils or NAQTC certified in Sampling and Density disciplines.
- The special inspector shall verify and document that placement of fill and rockfill are consistent with the Mass Grading (5.2.6) and Rockfill Placement and Verification Requirements (5.2.7).

- Density testing of fills should be in accordance with ASTM D6938 (Standard Test Methods for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods) or ASTM D1556 (Standard Test Method for Density and Unit Weight of Soil in Place by Sand-Cone Method).
- Subgrade should be density tested approximately every 500 square yards.
- Fill should be density tested once for every 1,000 square yards per lift of material placed during mass grading and one test per 300 feet of footing trenches or over-excavation of footings.
- One density test should be performed for each 500 square yards or per each lift for smaller, localized fill zones.
- Full time construction observation is required for mass graded fills and for any rock fill placement.
- The testing frequency should be increased if the contractor is having difficulty achieving and maintaining the required moisture levels.
- Utility bedding and trench backfill should be density tested per the requirements of the governing agency. Typically, agencies prescribe density testing per foot of bedding/backfill thickness, at a frequency of one test between manholes or valves, or one test every 500 lineal feet, including laterals.
- Nonstructural fills should be density tested for every 2,000 yards or for every 2-feet of fill for smaller, localized fill zones.

5.2.10. Embankments

- The surface of any embankment should be compacted to the same percentage compaction as the body of the fill. This may be accomplished by compacting the surface of the embankment as it is constructed or by overbuilding the fill and cutting back to its compacted core.
- The exterior face of embankments should be constructed with an inclination no steeper than 2H:1V.
- Minor variations in slope gradient due to sculpting or landscaping of the slope face should not be considered inconsistent with the recommendations of this report or adverse to the ultimate performance of the global stability of the overall slope.
- Refer to Section 5.6.1 Slopes and Drainage for erosion protection considerations.

5.3. Structures

The following sections have been developed based on the understanding and expectation that the requirements specified in Section 5.2 Earthwork of this report have been met.

5.3.1. Standard Spread Foundations

The following table and supporting statements present design values and considerations for use in the development of standard spread foundation design.

Table 3 - Allowable Foundation Bearing Pressures for Standard Spread Foundations

Loading Condition	Maximum Net Allowable Bearing Pressure (PSF)[1]
Dead Load Plus Full Time Live Load	2,500
Dead Load Plus Live Loads, Plus Transient Wind or Seismic Loads	3,300

[1] Net allowable bearing pressure is that pressure at the base of the footing is in addition to the adjacent overburden pressure.

- For frost protection, footings should be founded at least 1 ½ feet below adjacent outside or unheated interior finish grades.
- Interior footings not located within frost prone areas should be founded at least 12 inches below surrounding ground or 16 inches below slab level for confinement.
- Regardless of loading, individual pad foundations and continuous spread foundations should be at least 18 and 12 inches wide, respectively, or as required by code.
- The minimum footing sizes recommended are based on the ability to develop bearing capacity. Footing dimensions should be determined by the engineer responsible for structural design.
- Lateral loads, such as wind or seismic, may be resisted by passive soil pressure and friction on the bottom of the footing. A coefficient of base friction of 0.45 is typical to the structural fills.
- Design values for active and passive equivalent fluid pressures of 35 and 350 pounds per square foot per foot of depth, respectively, can be utilized.
- When designing for passive pressure, the upper one foot of the soil profile should not be included unless confined by a concrete slab, or pavement.
- The integrity of the foundation support soils shall be maintained until concrete is placed.
- Total post-construction settlement for the structures is anticipated to be on the order of ½-inch, or less.
- Differential settlement between foundations with similar loads and sizes is anticipated to be half of the total settlement across 40-feet.

5.3.2. Retaining Structures

- Recommended lateral earth pressures for consideration in the design of retaining walls and landscaping walls are presented in Table 4.

Table 4 - Lateral Earth Pressures[1]

Condition	Active (psf/f)		Passive (psf/f)		At Rest
	Static	Pseudo-Static	Static	Pseudo-Static	
Level	35	65	350	250	55

[1] Walls retaining sloping backfill or are greater than six feet in exposed height, require specific analyses and design values should be evaluated and presented by the geotechnical engineer.

- Changes in earth pressures due to seismic influences were assessed via the AASHTO LRFD protocol that considers some component of cohesion will be maintained within the backfill.
- In addition, it has been assumed that some displacement is allowable during the design event, and our recommended values have therefore been based on 50% of the USGS' predicted PGA.
- The values presented in Table 4 do not consider hydrostatic pressures or surcharge loading.
- Excessive wall pressures can be developed due to heavy compaction equipment proximate to the wall during backfill placement. Therefore, due care during placement and compaction of backfill is required.
- Backfill behind retaining structures should be granular and compacted to not less than 90 percent of the soils' maximum dry density.
- French drains, a drainage gravel backfill layer wrapped in geotextile such as Mirafi 140 N, or a prefabricated drainage composite should be utilized if buildup of hydrostatic pressure is possible.
- Moisture proofing must be considered for retaining walls facing interior living spaces or where the development of efflorescence is undesirable.
- Site preparation and foundations for retaining structures shall be consistent with Section 5.2 Earthwork and Section 5.3.1 Standard Spread Foundations.
- Walls retaining sloping backfill or are greater than six feet in exposed height, require specific analyses and design values should be evaluated and presented by the Geotechnical Engineer.

5.3.3. Site Drainage

- Adequate surface drainage must be constructed and maintained away from the structures. The permanent finish slopes away from the structure should be constructed to allow water to drain away quickly from and prevent any ponding of water adjacent to the structure per code

requirements. Runoff should be collected within permanent drainage paths that can convey water off the property or to designated collection facilities.

- Foundation and stem wall backfill should be densified to at least 90 percent relative compaction in accordance with the requirements given in the Mass Grading section (5.2.6). Compacting the backfill material decreases permeability and reduces the amount of irrigation and storm water available to enter under floor areas.

5.4. Concrete

The American Concrete Institute (ACI) considers three different exposure classes to address the degree of severity for environmental conditions: freezing and thawing (Exposure Category F), concrete in contact with soil that contains water soluble sulfate ions (Exposure Category S), and Exposure Class W for concrete in contact with water. Exposure categories F and S, and potential mitigation, are discussed in Section 5.4.1.

5.4.1. Materials

The concrete material recommendations vary between Exposure Class F and Exposure Class S. Therefore, those specifying concrete subject to both freezing and thawing and water-soluble sulfate ions should consider the potential exposure conditions for Class F and Class S and select the most appropriate.

5.4.1.a. Exposure Class F (Exterior Slabs-on-Grade)

- The potential exists for some portions of concrete to absorb sufficient water to be saturated prior to freezing (Exposure Class F2).
- Where deicing chemicals are anticipated to be used (civil improvements), exposure Class F3 would be assigned.
- Therefore, as presented in the Standard Specifications for Public Works Construction concrete requirements for Portland cement concrete exposed to freeze-thaw cycles, should include air entrainment (4 – 7%), maximum water: binder ratio of 0.45, and a minimum 28-day compressive strength of 4,000 psi.

5.4.1.b. Exposure Class S

The summary below presents excerpts from ACI and SSPWC. Refer to the referenced standards in their entirety when specifying sulfate resistance exceeding the presented geotechnical or civil considerations.

- Sulfate test results on the native soils yielded results in the S0 negligible range (ACI 318, < 0.10 percent SO_4^{2-} by mass).
- Per the SSPWC, no special concrete provisions are required to address sulfate resistance. Type II cement is recommended for use.

5.4.1.c. Chlorides

- Chemical test results on the native soils presented non-detected chloride ion concentrations (mg/kg).

5.4.2. Construction

- Slabs-on-grade should be supported on a 6-inch, minimum, layer of Type 2, Class B aggregate base layer compacted to not less than 95-percent of the soil's maximum dry density unless subject solely to foot traffic. Concrete slabs-on-grade subject solely to foot traffic should be supported on a 4-inch, minimum, layer of Type 2, Class B aggregate based compacted to not less than 95-percent of the soil's maximum dry density.

- A moisture vapor retarder (Stego Wrap 15 mil) should be considered for slab areas covered by moisture sensitive floor coverings or equipment. Moisture vapor layers should be placed in accordance with the manufacturer's instructions and below the base layer on a properly prepared subgrade.

- All concrete placement and curing should be performed in accordance with procedures outlined by the American Concrete Institute. Special considerations should be given to concrete placed and cured during hot or cold weather conditions.

- The occurrence of concrete shrinkage cracking may be reduced and/or controlled by limiting the amount of water within the mix (water cement ratio of 0.45 or less), the incorporation of crack control joints and proper concrete placing and curing practices including ACI 318 provisions for areas subject to freeze thaw conditions.

- Proper curing, finishing, control joints and reinforcing should be provided to minimize any damage resulting from shrinkage including cracks and slab curling. Joint spacing, locally, is typically on 10-to-12-foot centers for large slabs and no more than five feet for sidewalks.

- Western Nevada is a region with absorptive aggregates and exceptionally low relative humidity. Therefore, concrete flatwork will shrink and curl in a manner which is not typical of many other US regions.

- Proper site preparation and placement of reinforcement are imperative to the performance of slab-on-grade improvements.

- Cracking that occurs within the slab-on-grade floors will often reflect through overlying improvements even if adequate substrate preparation has occurred.

- Control of the rate of moisture loss in concrete slab-on-grade improvements by using curing compounds, fogging, or other suitable means is imperative to protecting the slab from excessive curling.

- Slabs-on-grade will still exhibit some cracking and curling. The occurrence of concrete shrinkage cracks is independent of the soil supporting characteristics.

5.5. Public Improvements

Unless noted otherwise, dedicated improvements shall be designed and constructed in accordance with the approved civil plans, the Standard Specifications for Public Works Construction, and the jurisdiction's standard details.

5.5.1. Slopes and Drainage

- Surface drainage shall be per the approved project Civil design drawings.
- Stability of cut and filled surfaces involves two separate aspects. The first concerns slope stability related to mass wasting, landslides, or the surficial downward movement (or slumping) of soil or rock.
- Cut and fill slopes, with gradients of 2H:1V (horizontal to vertical) or flatter, are suitable for the project soils.
- The specified slope is based on an overall slope average. Localized sculpting of the slope face, resulting in limited minor increases to slope gradient at isolated locations, is considered consistent with the global stability considerations of this report.
- The second aspect of slope stability involves erosion potential which is dependent on numerous factors involving grain size distribution, cohesion, moisture content, slope angle and the velocity of the water or wind across the ground surface.
- Erosion protection should be as indicated on the approved Civil drawings and/or per the jurisdiction's design standards.
- Typically, 2:1 (H:V) slopes require armoring. Slopes steeper than 3:1 (H:V) are typically addressed with a combination of revegetation and localize armoring or landscape retaining walls.
- Temporary (during construction) and permanent (after construction) erosion control will be required for all disturbed areas.
- Brow ditches are recommended above any slopes greater than 10-feet in height and should be incorporated into the overall drainage considerations presented on the civil drawings.
- Provisions for drainage from behind common retaining walls should be considered and presented in the approved civil plans.
- In compliance with all applicable city, county, state and federal regulations the contractor shall prevent dust from being generated during construction, and the contractor shall submit an acceptable dust control plan prior to starting site preparation or earthwork.

5.5.2. Structural Pavement Sections

- Materials and workmanship shall be consistent with the requirements of the jurisdiction and the Standard Specifications for Public Works Construction.
- Table 5 presents the recommended minimum structural pavement sections for the development based on planned use. Minimum sections required by the jurisdictions shall govern if more than specified in Table 6.
- These sections have been developed with the expectation that the requirements of Section 5.2.4 – Subgrade Preparation have been satisfied.
- Depending on final site grading, structural pavement sections may be re-evaluated by the Geotechnical Engineer in consideration of the subgrade R-Value (ASTM D2844 – Standard Test Method for Resistance R-Value and Expansion Pressure of Compacted Soils).

Table 5 - Structural Pavement Sections[1]

Road Type	Pavement Thickness (In.)	Pavement Type[2]	Type II Class B Base Course Thickness (In.)[3]
Local	4	2" Type 3 + Lime / 2" Type 2	6
Collector	5	Type 2 + Lime	8

[1] Per the Standard Specifications for Public Works Construction
[2] Base Course thickness is in addition to structural fill separation requirements presented in Table 2.

- The Contractor should submit a pavement mix design to the Owner or Engineer, for approval, at least five working days prior to paving. When pavement is placed directly adjacent to concrete flatwork, the finish compacted grade of the pavement should be at least ½ of an inch higher than the edge of adjacent concrete surface to allow adequate compaction of the pavement without damaging the concrete.

5.5.3. Pavement Design Life

- Maintenance is mandatory to ensure long-term pavement performance and to meet or exceed the assumed 20-year design life.
- Maintenance refers to any activity performed on the pavement that is intended to preserve its original service life or load-carrying capacity. Examples of maintenance activities include patching, crack or joint sealing, and seal coats. If these maintenance activities are ignored or deferred, premature failure of the pavement will occur.

- Premature failure of asphaltic concrete frequently occurs adjacent to poorly graded ponding areas and/or landscape areas. Failures may occur due to excessive precipitation, irrigation and landscaping water infiltrating into the subgrade soils causing subgrade failure.

- In areas where saturation of the subgrade soils beneath asphaltic pavement may occur, it is strongly recommended the owner/project manager include provisions by design for a subdrain system to eliminate the potential for saturation of subgrade soils. The subdrain system should discharge into a permanent drainage area that will not impede drainage flow to cause the system to back-up and/or clog. Appropriate maintenance procedures should be implemented to ensure the subdrain system does not plug and allow for proper drainage of surface and subsurface water beneath paved areas. Subdrain location and configuration should be evaluated once final grading and landscaping plans have been prepared.

- If the ultimate traffic exceeds the anticipated levels, it may be necessary to reevaluate and overlay the pavement at some time in the future.

- The cost associated with proper maintenance is generally much less than the cost for reconstruction due to the premature failure of the pavement. Therefore, it is strongly recommended the owner/project manager implement a pavement management program.

6. SUPPLEMENTARY SERVICES

- A design level geotechnical report should be prepared once final design grades have been established and reviewed.
- Verification of existing fills may be required.
- Additional exploration (test pits with material testing and/or geophysical surveys) may be warranted where final grade extends beyond the depth of the exploratory test pits.
- An additional investigation of the mapped fault structure may be required if any critical facilities are planned along the lineament.

7. CONSTRUCTION OBSERVATION AND TESTING SERVICES

- The recommendations presented in this report assume that the contractors perform their work as required by the project documents and that owner/project manager provides for sufficient field-testing and construction review during each phase of construction.
- Prior to construction, the owner/project manager should schedule a pre-construction conference including, but not limited to representatives of the owner, architect, civil engineer, the general contractor, earthwork and materials subcontractors, building official, and geotechnical engineer.
- It is the owner's/project manager responsibility to set-up this meeting and contact all responsible parties. The conference will allow parties to review the project plans, specifications, scheduling and recommendations presented in this report, and discuss applicable material quality and mix design requirements.
- Quality control reports should be submitted to the owner/project manager for review and distributed to the appropriate parties. It is essential that any changes or revisions to project plans be provided to Wood Rodgers in a timely fashion to ensure contractor compliance and avoid construction delays or the need to remove completed work.
- During construction, Wood Rodgers Incorporated should have the opportunity to provide sufficient on-site observation of site preparation and grading, over-excavation, fill placement, foundation installation, and paving.

These observations would allow us to document the geotechnical conditions are as anticipated and that the contractor's work meets with the criteria in the approved plans and specifications. Verification of horizontal and vertical control must be provided by whoever was responsible for establishing those boundaries and constructing associated improvements.

8. EXPECTATION OF PERFORMANCE

- The planned residences will incorporate either a standard slab-on-grade foundation with perimeter footings extending to a minimum depth of 18 inches below finished exterior grade.
- In lieu of solely off-hauling and importing, the developer/owner has selected to grade the site using cut to fill practices and selective grading.
- Therefore, the potential exists that soils within various building pads may fall outside the specified limits of Structural Fill.
- This deviation should not be considered a failure to adhere to recommendations presented within this report but should be considered a limitation to mass-grading when a natural, virgin material is used for a fill source.
- These inherent variations should not be considered to comprise a non-conformity with the project specifications unless the Weighted Plasticity (% of material passing the #200 sieve x Plasticity Index) of the weighted structural fill separation layer exceeds 7.5.
- Single family residential construction results in a complex composite of steel, concrete, lumber, and earth. Each element responds differently to loading and consequently cracking and distortion occur.
- Occurrence of cracking or distortion is not in and of itself evidence of the structure failing to meet a reasonable standard or level of performance.
- Repair of unsightly, non-structural, cracks should be considered part of the homeowner maintenance program.
- Cracks that continue to reappear or widen or propagate may be indicative of extenuating issues that require redress.
- Our design protocols and recommended construction testing procedures rely upon ASTM Standards and Guidelines; therefore, any subsequent studies to evaluate completed product or construction practices shall be in accordance with ASTM E 141 AND shall employ the same testing means and methods available at the time of construction.
- Where access or testing limits do not allow continuity in testing methods, a correlation program must be performed that establishes that the testing and evaluation methods employed by the reviewing agency present results consistent with and comparable to the test methods prescribed by this report and employed during construction.
- Failure to follow these prescribed protocols would result in test data being compromised when compared to ASTM standards and requirements.

- In addition, failure to follow the referenced statistical and sampling ASTM assessment protocols would result in a forensic assessment program rife with inconsistencies and variations which would result in the forensic investigation failing to meet the level of precision necessary to accurately evaluate the site conditions.

9. STANDARD LIMITATION CLAUSE

- This report has been prepared in accordance with generally accepted local geotechnical practices.
- The analyses and recommendations submitted are based upon field exploration performed at the specific locations identified and the conditions encountered, as discussed in our report.
- No guarantee or warranty as to the continuity of soil conditions between exploration points is implied or intended.
- Therefore, this report does not reflect soil or water variations that may become evident during the construction period, at which time re-evaluation of the recommendations may be necessary.
- Final plans and specifications should be reviewed by the design engineer responsible for this geotechnical report to determine if they have been prepared in accordance with the recommendations contained in this report prior to submitting to the building department for review.
- It is the owner's/project manager responsibility to provide the plans and specifications to the engineer.
- This report is issued with the understanding that it is the responsibility of the owner or their representative to ensure that the information and recommendations contained herein are brought to the attention of the design team for the project and incorporated into the plans and specifications, and that the necessary steps are taken to see that the contractor and subcontractors carry out such recommendations in the field.
- We recommend our firm be retained to perform construction observation in all phases of the project related to geotechnical factors to document compliance with our recommendations.
- The owner/project manager is responsible for distribution of this geotechnical report to all designers and contractors whose work is related to geotechnical factors.
- It is the contractor’s responsibility for the grading and construction of the designed improvements. This responsibility includes the means, methods, techniques, sequence, and procedures of construction and safety of construction at the site.
- All construction shall conform to the requirements of the most recently adopted version of the Standard Specifications for Public Works Construction and the requirements of the agency having jurisdiction (AHJ).
- Failure to inspect the work shall not relieve the contractor from their obligation to perform sound and reliable work as described herein and as described in the Standard Specifications for Public Works Construction.

- In the event of changes in the design, location, or ownership of the project after presentation of this report, our recommendations should be reviewed and possibly modified by the Geotechnical Engineer.
- If the Geotechnical Engineer is not afforded the privilege of making this recommended review, we can assume no responsibility for misinterpretation or misapplication of our recommendations or their validity in the event changes have been made in the original design concept without our prior review. The engineer makes no other warranties, either expressed or implied, as to the professional advice provided under the terms of this agreement and included in this report.
- This report was prepared by Wood Rodgers, Inc. for the benefit of GF Development, LLC and their duly assigned agents or other responsible parties.
- The material in this report reflects Wood Rodgers' best judgment considering the information available to it at the time of preparation. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties.
- Wood Rodgers accepts no responsibility for damages, if any, suffered by any third party because of decisions made by third parties or actions based on this report without consultation with Wood Rodgers and written approval for such actions.

10. REFERENCES

American Association of State Highway and Transportation Officials (AASHTO), Guide for Design of Pavement Structures, 1993

American Concrete Institute. "318-11: Building Code Requirements for Structural Concrete and Commentary." N.p., n.d. Web. 06 Apr. 2017.

American Society for Testing and Materials (ASTM), 2022, Soil and Rock; Dimension Stone; Geosynthetics, Volume 4.08.

American Society of Civil Engineers (ASCE), "Minimum Design Loads for Buildings and Other Structures (7-22)." 2022

Bowles, J. E., 1996, Foundation Analysis and Design, McGraw Hill. 5th Edition

Castor, S.B., House, P.K., Hudson, D.M., and Henry, C.D., 2013, Geologic Map of the Flowery Peak Quadrangle, Storey and Lyon Counties, Nevada, Nevada Bureau of Mines and Geology (NBMG), Map 180, 1:24,000

International Residential Code 2022 (including Northern Nevada Amendments); International Conference of Building Officials

Koerner, Robert M., 1984, Construction and Geotechnical Methods in Foundation Engineering, McGraw-Hill Book Company

NEHRP (National Earthquake Hazards Reduction Program): Recommended Seismic Provisions for New Buildings and Other Structures. Building Seismic Safety Council, 2009.

Sowers, George, F., 1979, Introductory Soil Mechanics and Foundations: Geotechnical Engineering

Standard Specifications for Public Works Construction, 2016 (Washoe County, Sparks-Reno, Carson City, Yerington, Nevada).

The Asphalt Institute, 1991, Thickness Design - Asphalt Pavements for Highways and Streets, Manual Series No. 1 (MS-1).

U.S. Quaternary Faults, United States Geological Survey, maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps.

TRADITIONS NORTH

Conceptual Sanitary Sewer Report

November 2025

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TRADITIONS NORTH – CONCEPTUAL SANITARY SEWER REPORT

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PROJECT LOCATION AND DESCRIPTION

Traditions North is located adjacent to the current Traditions Project on Traditions Parkway and Highway 50 in Dayton, Lyon County, Nevada (Figure 1A – *Project Location*). The property is located north of Highway 50, west of Enterprise Way, and east of the Sutro Tunnel. The site APN is: 016-406-07 and consists of 368 single-family lots. This site is situated in Section 01, Township 16 North, and Range 21 East of the Mount Diablo Meridian.

Figure 1A: Project Location

EXISTING WASTEWATER SYSTEM

The existing area contains public gravity sanitary sewer mains owned and maintained by Lyon County Utilities Department (LCUD). There are 8" gravity sewer connections in Rock Creek Parkway and Nevada Station Parkway that convey wastewater to the Industrial Lift Station (LCUD). There is also an existing 8" gravity main connection in Enterprise way that conveys wastewater to the Industrial Lift Station (LCUD). The lift station pumps the wastewater to the Rolling A Waste Water Treatment Plant.

A utility discovery application was submitted in July, 2025 and is still pending issuance of the final assessment document as of writing of this report. More information on the existing system will be available once the discovery report is completed.

PROPOSED WASTEWATER SYSTEM

The proposed system will consist of a gravity sewer collection system (Reference Figure 2: Sewer-shed Exhibit). The westernmost 37 dwelling units (Figure 2: orange hatch) are planned to connect to the existing 8" connection in Nevada Station Parkway along the southwest project boundary. Then, the middle portion of the site (Figure 2: green hatch), with 130 dwelling units, will connect to the existing 8" connection in Rock Creek Parkway along the southeast project boundary. Finally, the eastern portion of the site (Figure 2: cyan hatch), with 191 dwelling units, connect into the existing 8" stub in Enterprise Way. Design details, flow/pressure modeling, and telemetry will be determined at final design stage.

The proposed wastewater collection system and lift station will be designed to LCUD standards and dedicated to LCUD.

ESTIMATED PEAK SEWAGE FLOWS

For this analysis, the flow factors used in the calculations are the Lyon County standard of average daily flow of 175 gpd/DU for a single-family residential and multi-family. The average daily flow is utilized for approximating the contribution to the Wastewater Treatment Plant. A conservative peaking factor of 3.8 is then applied to

the average daily flow to compute the peak flow used in the design of the sanitary sewer mains. The following table summarizes the results of the calculations of the average and peak daily flows for the proposed residential subdivisions:

Subdivision	Dwelling Units (DU)	Flow per DU (gpd/DU)	Avg Daily Flow (gpd)	Peaking Factor	Peak Flow (gpd)
Traditions North	358	175	62,650	3.8	238,070

PROPOSED SEWER MAINS

The proposed waster collection system consists of individual laterals to each dwelling unit and public gravity sewer mains. The project will be constructed in phases and each phase will provide a detailed analysis demonstrating it will function properly at the time of construction and throughout the duration of the project.

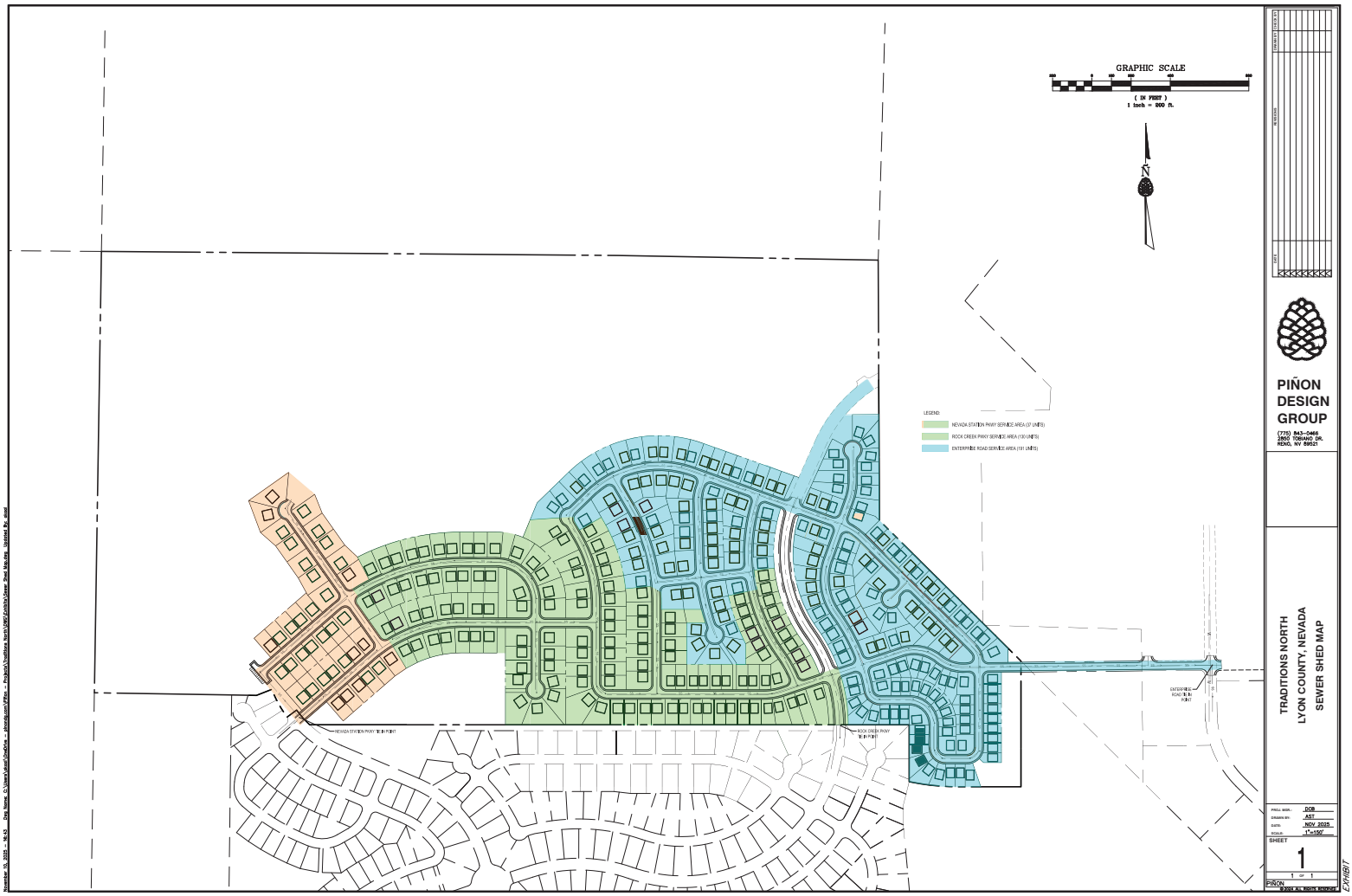
The following minimum standards will be met with the final design:

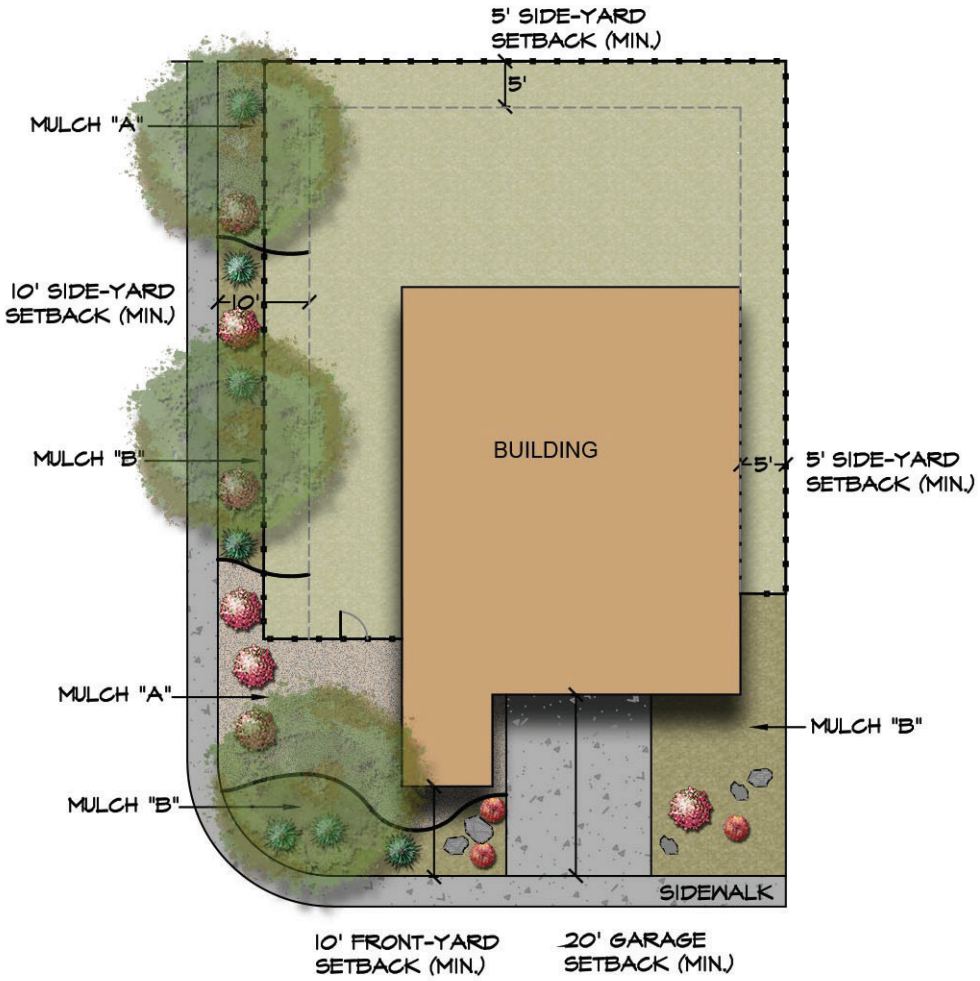
- The minimum size for sewer mains is 8 inches, and mains are sized based on flow calculations. Individual sewer laterals will be 4” minimum.
- Sewer mains are considered at capacity when peak flow reaches a ratio (d/D) of 0.75.
- Minimum slopes and spacing for sewer mains are specified (e.g., 8-inch mains require a minimum slope of 0.4 percent).
- Sewer lines are generally PVC SDR-35 unless otherwise approved.
- Manhole spacing is limited to 400 feet for lines smaller than 15 inches, with greater spacing allowed for larger mains.
- Sewer mains will provide capacity for the ultimate tributary population, and flow and peaking factors follow the previously described standards and Nevada Administrative Code (NAC).

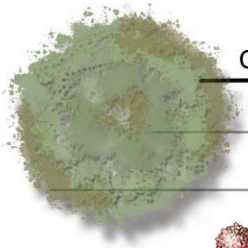
CONCLUSION

In conclusion, the conceptual sanitary sewer report has been performed to ensure that the proposed sewer system will meet design criteria required by LCUD and NAC. The study shows that proposed sanitary sewer system will be installed in such a way that each phase will function properly at the time of construction and throughout the duration of the project.

Figure 2: Sewer-shed Exhibit
(see attached 36”x48” sheet)


GRAPHIC SCALE
(IN FEET)
1 inch = 800 ft.
N
LEGEND:
NEVADA STATION PKWY SERVICE AREA (37 UNITS)
ROCK CREEK PKWY SERVICE AREA (130 UNITS)
ENTERPRISE ROAD SERVICE AREA (181 UNITS)
NEVADA STATION PKWY TIE-IN POINT
ROCK CREEK PKWY TIE-IN POINT
ENTERPRISE ROAD TIE-IN POINT
PIÑON DESIGN GROUP
(775) 843-0468
2850 TODAIRO DR.
RENO, NV 89521
TRADITIONS NORTH
LYON COUNTY, NEVADA
SEWER SHED MAP
PROJ. MGR.: DOB
DRAWN BY: AST
DATE: NOV 2025
SCALE: 1"=100'
SHEET
1
1 OF 1
PIÑON
EXHIBIT





CORNER LOT 4,500 SF LEGEND

- FRONT YARD TREES
- SIDE STRIP TREES
- DECIDUOUS SHRUBS
- EVERGREEN SHRUBS
- GROUNDCOVER/PERENNIALS
- LANDSCAPE BOULDERS
- LANDSCAPE MULCH
- BACKYARD (TO BE LANDSCAPED BY HOMEOWNER)
- FENCE LINE
- PROPERTY LINE

CORNER LOT FRONT YARD LANDSCAPE

- (1) SIDE STRIP TREES @ 30' O.C.
- (1) FRONT YARD TREE
- (6) SHRUBS PER (1) TREE - PROVIDE A MIX OF THE FOLLOWING:
  - 5-GAL. DECIDUOUS SHRUBS
  - 5-GAL. EVERGREEN SHRUBS
  - 1-GAL. PERENNIAL OR GROUNDCOVER
- TURF - 50% MAX. COVERAGE (OPTIONAL)
- LANDSCAPE BOULDERS
- A MINIMUM OF TWO MULCH TYPES (LAVA ROCK, RIVER ROCK, D.G., BARK MULCH)

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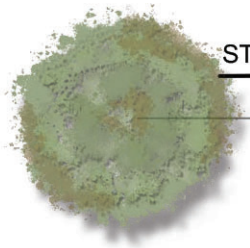
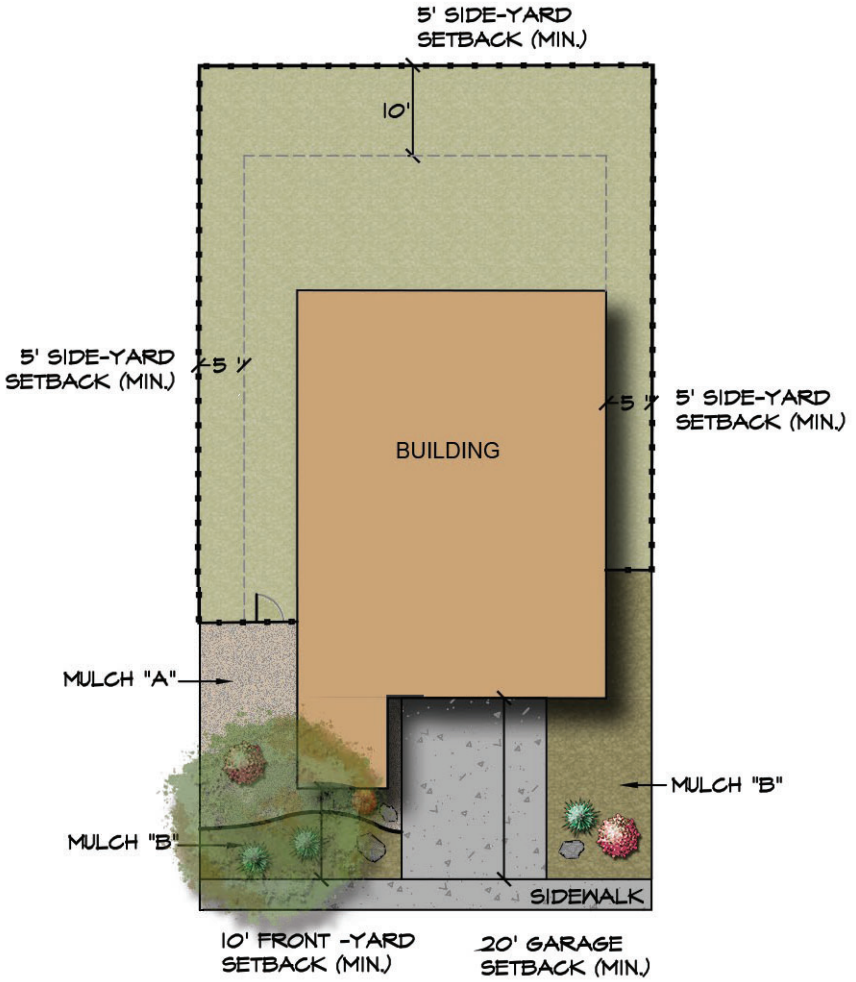


STANDARD LOT 4,500 SF LEGEND

- FRONT YARD TREES
- DECIDUOUS SHRUBS
- EVERGREEN SHRUBS
- GROUNDCOVER/PERENNIALS
- LANDSCAPE BOULDERS
- LANDSCAPE MULCH
- BACKYARD (TO BE LANDSCAPED BY HOMEOWNER)
- FENCE LINE
- PROPERTY LINE

STANDARD LOT FRONT YARD LANDSCAPE

- (1) FRONT YARD TREE
- (6) SHRUBS PER (1) TREE - PROVIDE A MIX OF THE FOLLOWING:
  - 5-GAL. DECIDUOUS SHRUBS
  - 5-GAL. EVERGREEN SHRUBS
  - 1-GAL. PERENNIAL OR GROUNDCOVER
- TURF - 50% MAX. COVERAGE (OPTIONAL)
- LANDSCAPE BOULDERS
- A MINIMUM OF TWO MULCH TYPES (LAVA ROCK, RIVER ROCK, D.G., BARK MULCH)



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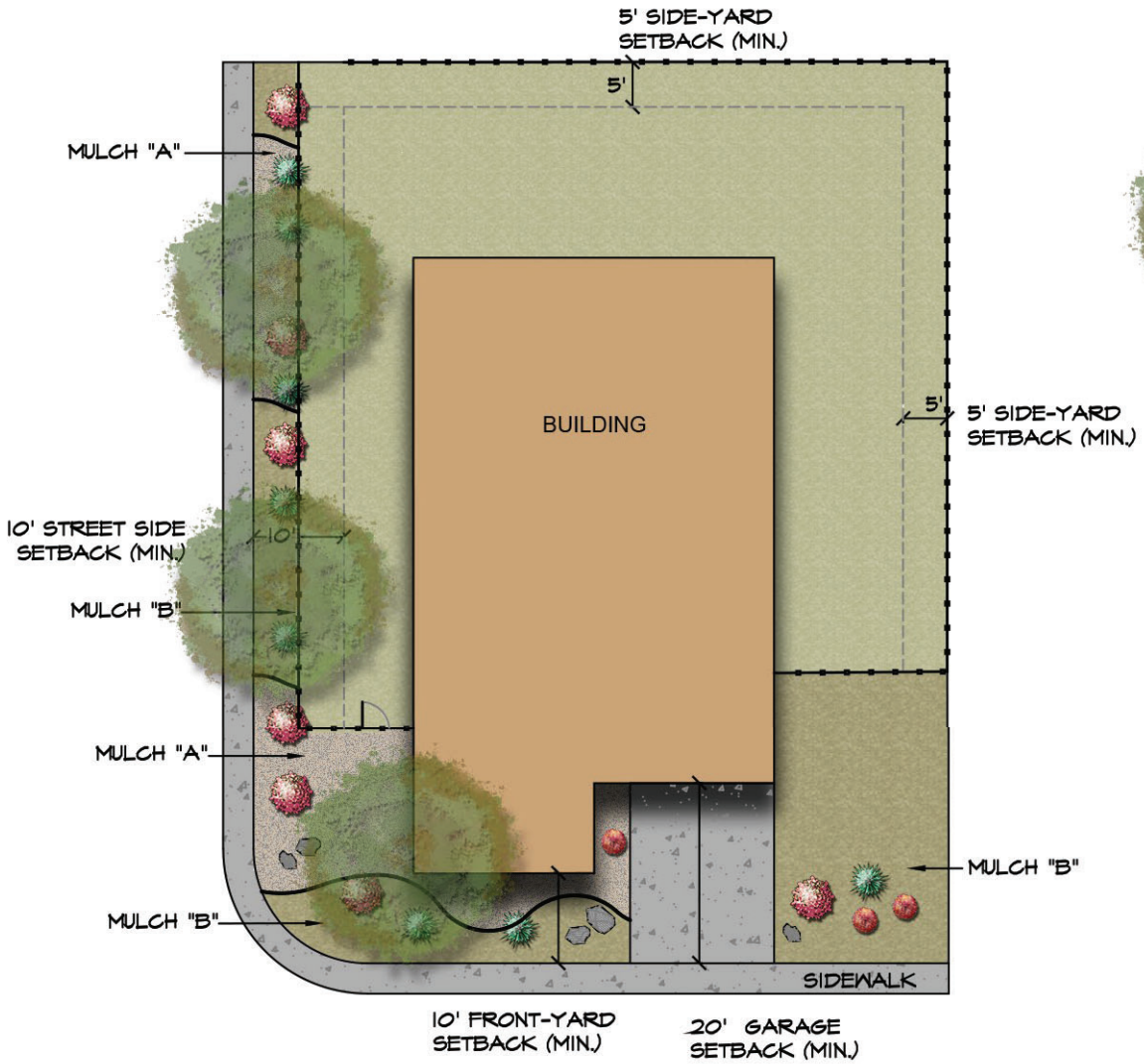

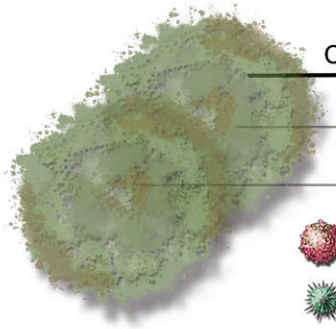

CORNER LOT 6,000 SF LEGEND

- FRONT YARD TREES
- SIDE STRIP TREES
- DECIDUOUS SHRUBS
- EVERGREEN SHRUBS
- GROUNDCOVER/PERENNIALS
- LANDSCAPE BOULDERS
- LANDSCAPE MULCH
- BACKYARD (TO BE LANDSCAPED BY HOMEOWNER)
- FENCE LINE
- PROPERTY LINE

CORNER LOT FRONT YARD LANDSCAPE

- (1) SIDE STRIP TREES @ 30' O.C.
- (1) FRONT YARD TREE
- (6) SHRUBS PER (1) TREE - PROVIDE A MIX OF THE FOLLOWING:
  - 5-GAL. DECIDUOUS SHRUBS
  - 5-GAL. EVERGREEN SHRUBS
  - 1-GAL. PERENNIAL OR GROUNDCOVER
- TURF - 50% MAX. COVERAGE (OPTIONAL)
- LANDSCAPE BOULDERS
- A MINIMUM OF TWO MULCH TYPES (LAVA ROCK, RIVER ROCK, D.G., BARK MULCH)

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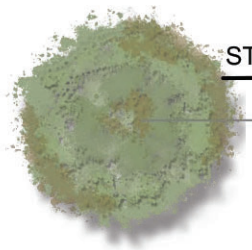
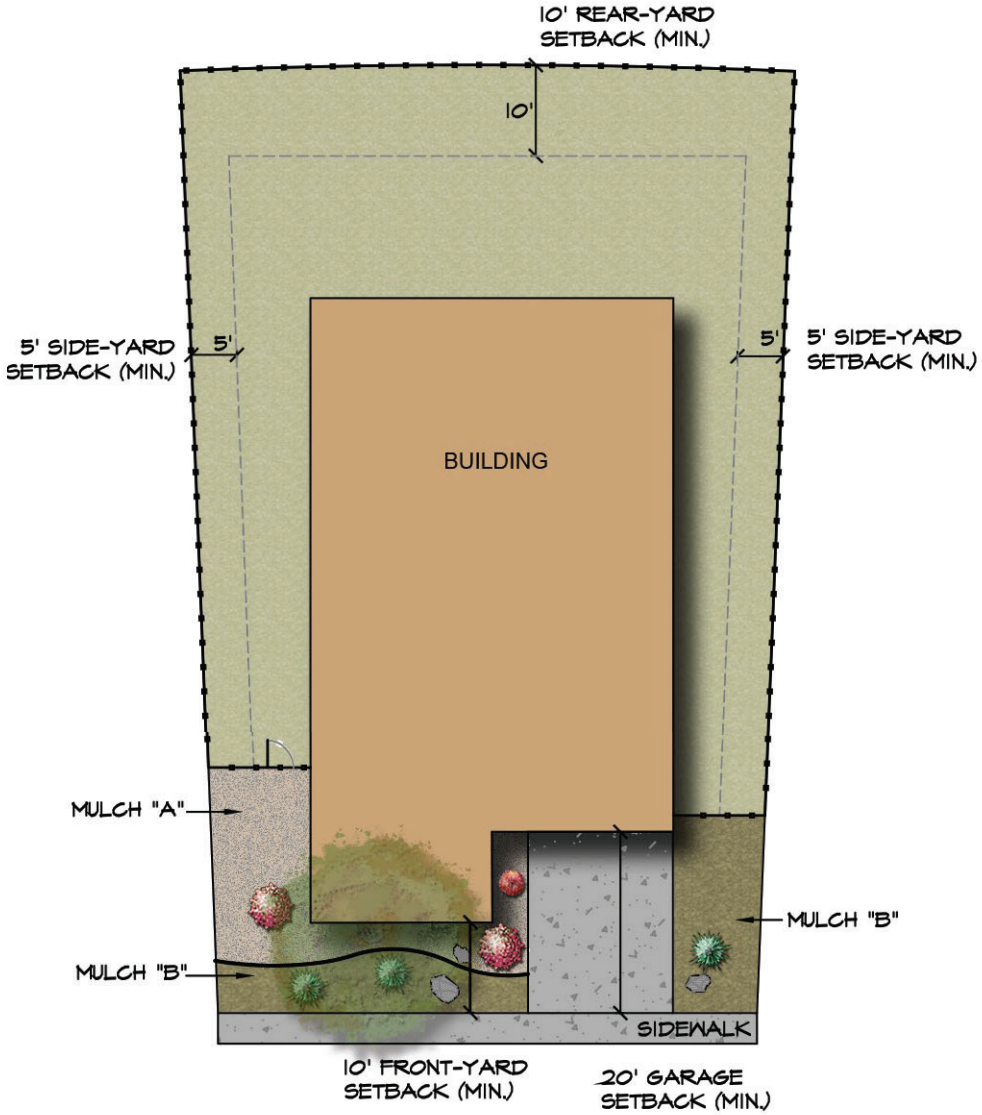


STANDARD LOT 6,000 SF LEGEND

- FRONT YARD TREES
- DECIDUOUS SHRUBS
- EVERGREEN SHRUBS
- GROUNDCOVER/PERENNIALS
- LANDSCAPE BOULDERS
- LANDSCAPE MULCH
- BACKYARD (TO BE LANDSCAPED BY HOMEOWNER)
- FENCE LINE
- PROPERTY LINE

STANDARD LOT FRONT YARD LANDSCAPE

- (1) FRONT YARD TREE
- (6) SHRUBS PER (1) TREE - PROVIDE A MIX OF THE FOLLOWING:
  - 5-GAL. DECIDUOUS SHRUBS
  - 5-GAL. EVERGREEN SHRUBS
  - 1-GAL. PERENNIAL OR GROUNDCOVER
- TURF - 50% MAX. COVERAGE (OPTIONAL)
- LANDSCAPE BOULDERS
- A MINIMUM OF TWO MULCH TYPES (LAVA ROCK, RIVER ROCK, D.G., BARK MULCH)



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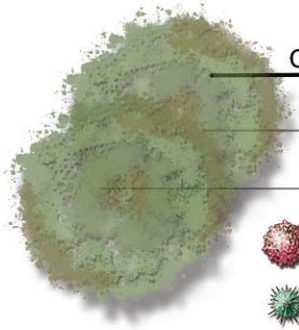

CORNER LOT 9,000 SF LEGEND

- FRONT YARD TREES
- SIDE STRIP TREES
- DECIDUOUS SHRUBS
- EVERGREEN SHRUBS
- GROUNDCOVER/PERENNIALS
- LANDSCAPE BOULDERS
- LANDSCAPE MULCH
- BACKYARD (TO BE LANDSCAPED BY HOMEOWNER)
- FENCE LINE
- PROPERTY LINE

CORNER LOT FRONT YARD LANDSCAPE

- (1) SIDE STRIP TREES @ 30' O.C.
- (1) FRONT YARD TREE PER 50' FRONTAGE
- (6) SHRUBS PER (1) TREE - PROVIDE A MIX OF THE FOLLOWING:
  - 5-GAL. DECIDUOUS SHRUBS
  - 5-GAL. EVERGREEN SHRUBS
  - 1-GAL. PERENNIAL OR GROUNDCOVER
- TURF - 50% MAX. COVERAGE (OPTIONAL)
- LANDSCAPE BOULDERS
- A MINIMUM OF TWO MULCH TYPES (LAVA ROCK, RIVER ROCK, D.G., BARK MULCH)

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STANDARD LOT 9,000 SF LEGEND

- FRONT YARD TREES
- DECIDUOUS SHRUBS
- EVERGREEN SHRUBS
- GROUNDCOVER/PERENNIALS
- LANDSCAPE BOULDERS
- LANDSCAPE MULCH
- BACKYARD (TO BE LANDSCAPED BY HOMEOWNER)
- FENCE LINE
- PROPERTY LINE

STANDARD LOT FRONT YARD LANDSCAPE

- (1) FRONT YARD TREE PER 50' FRONTAGE
- (6) SHRUBS PER (1) TREE - PROVIDE A MIX OF THE FOLLOWING:
  - 5-GAL. DECIDUOUS SHRUBS
  - 5-GAL. EVERGREEN SHRUBS
  - 1-GAL. PERENNIAL OR GROUNDCOVER
- TURF - 50% MAX. COVERAGE (OPTIONAL)
- LANDSCAPE BOULDERS
- A MINIMUM OF TWO MULCH TYPES (LAVA ROCK, RIVER ROCK, D.G., BARK MULCH)

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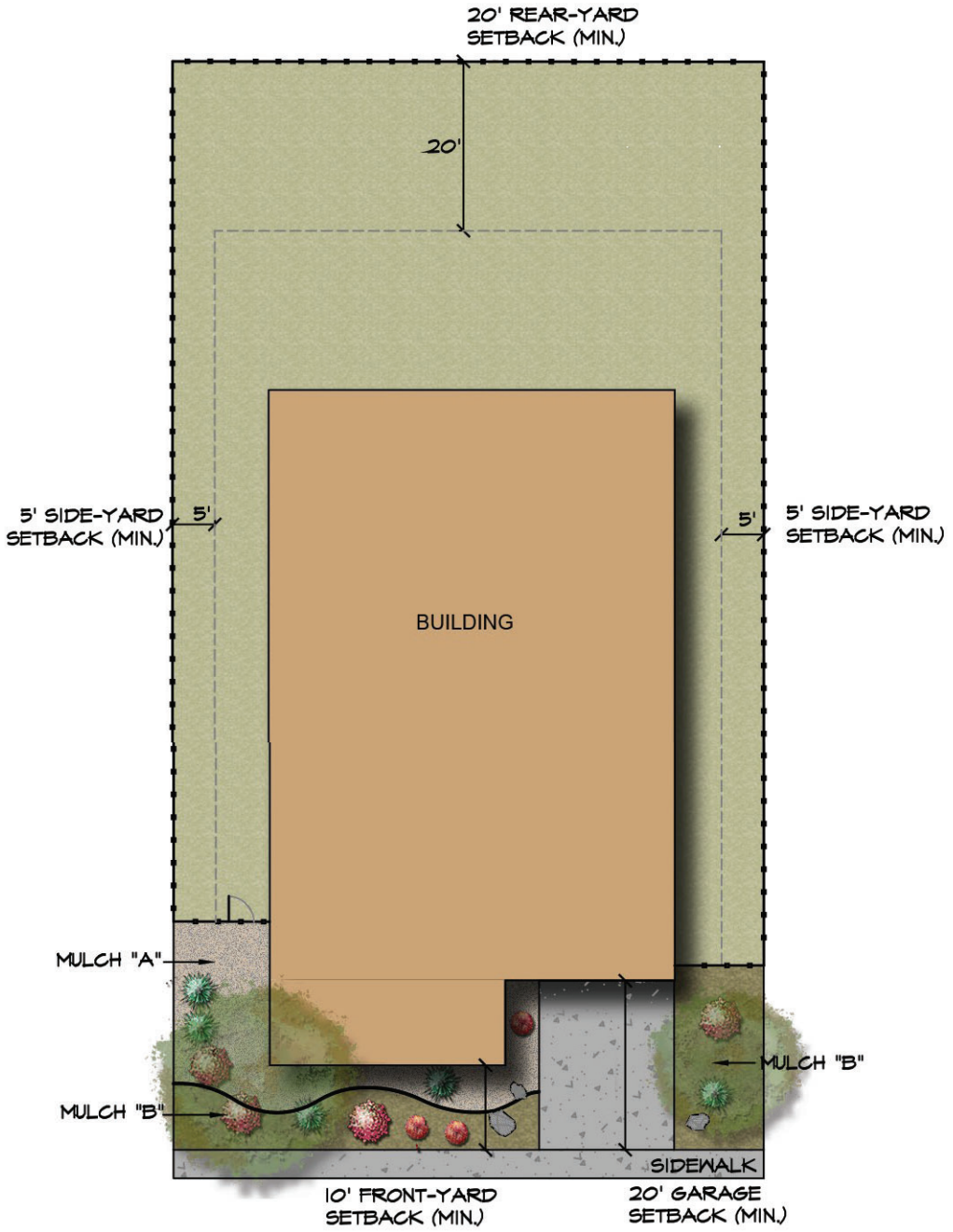

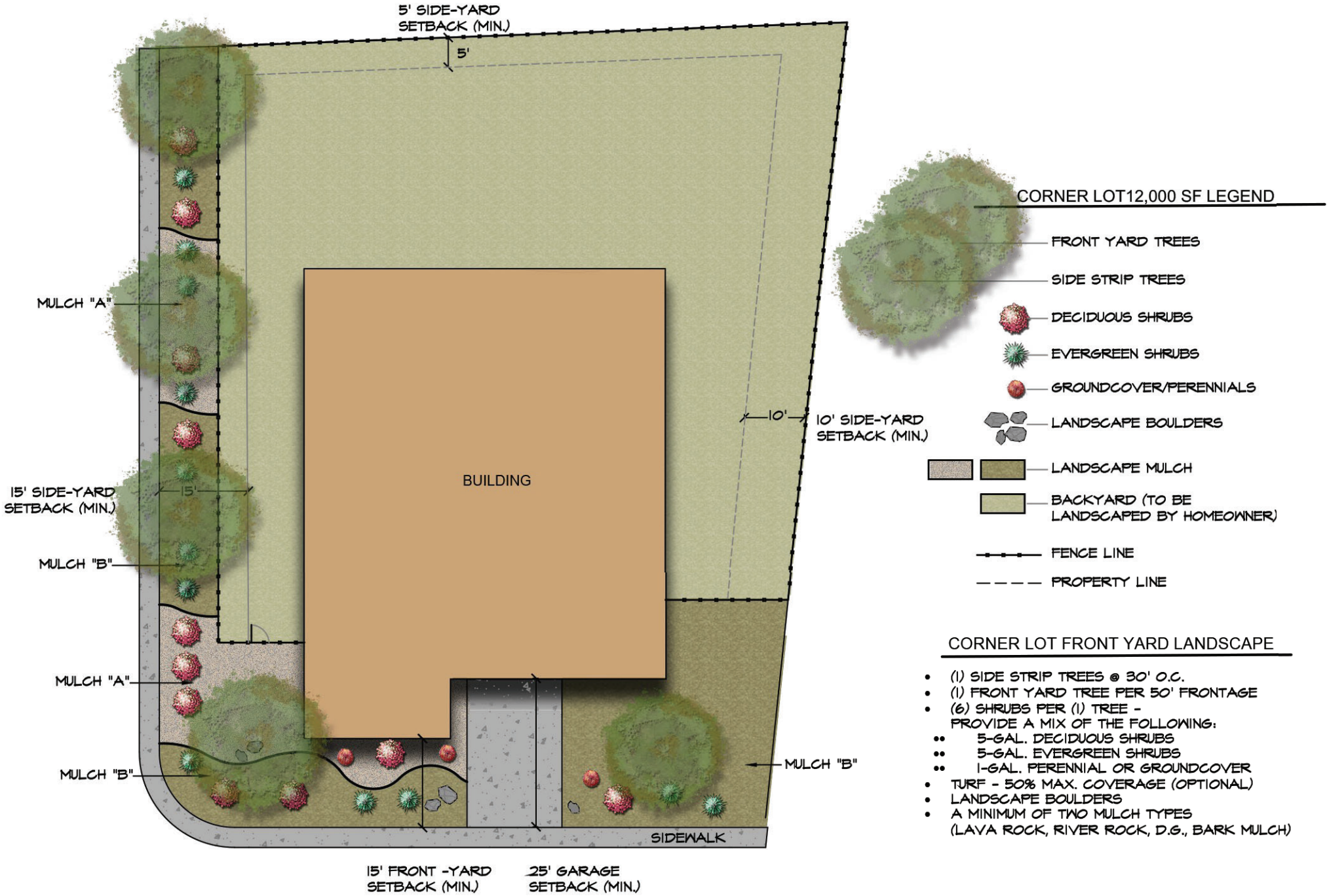

CORNER LOT FRONT YARD LANDSCAPE

- (1) SIDE STRIP TREES @ 30' O.C.
- (1) FRONT YARD TREE PER 50' FRONTAGE
- (6) SHRUBS PER (1) TREE -
  PROVIDE A MIX OF THE FOLLOWING:
  - 5-GAL. DECIDUOUS SHRUBS
  - 5-GAL. EVERGREEN SHRUBS
  - 1-GAL. PERENNIAL OR GROUNDCOVER
- TURF - 50% MAX. COVERAGE (OPTIONAL)
- LANDSCAPE BOULDERS
- A MINIMUM OF TWO MULCH TYPES
  (LAVA ROCK, RIVER ROCK, D.G., BARK MULCH)

THIS EXHIBIT IS PROVIDED FOR
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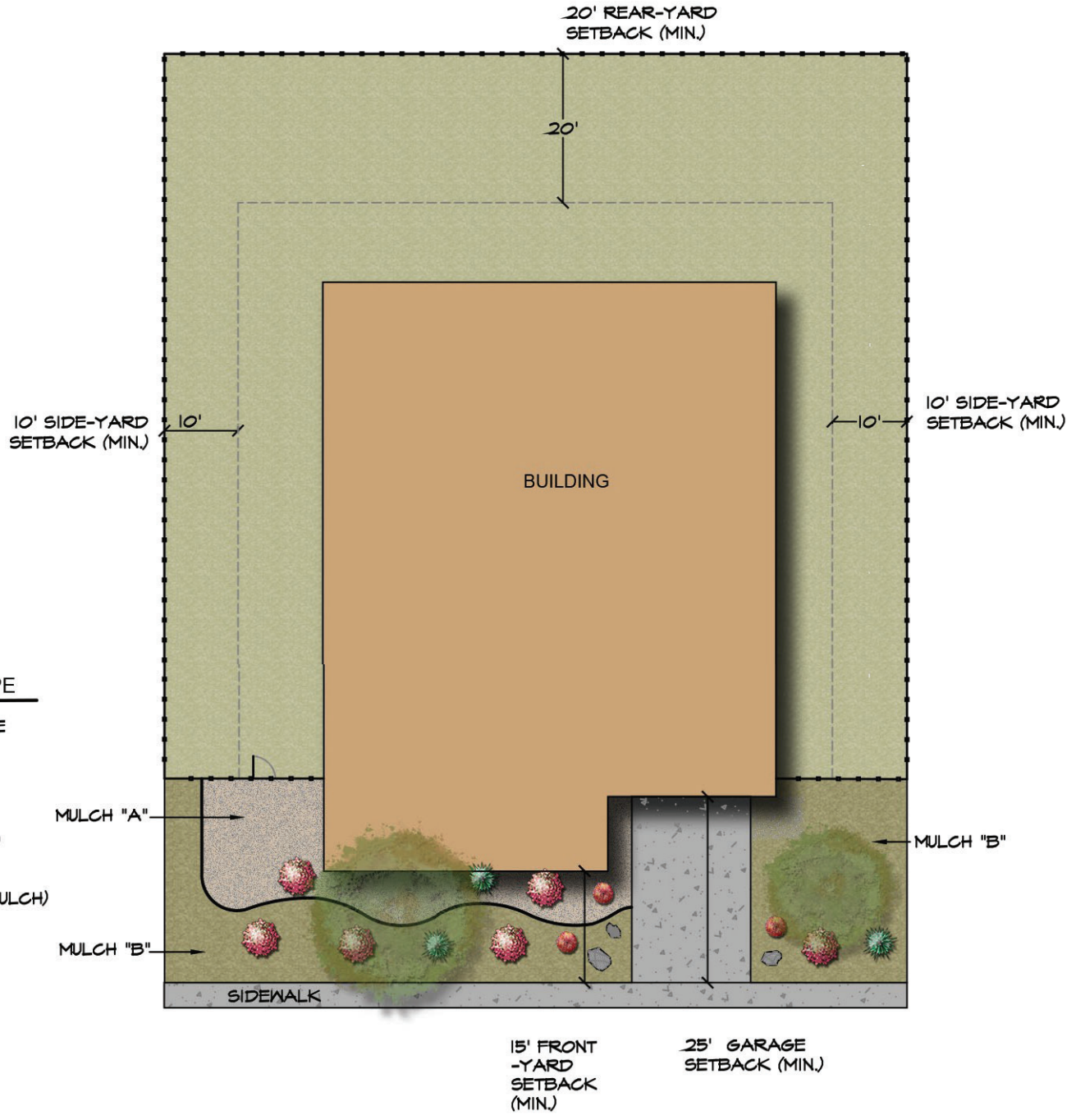
STANDARD LOT 12,000 SF LEGEND

- FRONT YARD TREES
- DECIDUOUS SHRUBS
- EVERGREEN SHRUBS
- GROUNDCOVER/PERENNIALS
- LANDSCAPE BOULDERS
- LANDSCAPE MULCH
- BACKYARD (TO BE LANDSCAPED BY HOMEOWNER)
- FENCE LINE
- PROPERTY LINE

STANDARD LOT FRONT YARD LANDSCAPE

- (1) FRONT YARD TREE PER 50' FRONTAGE
- (6) SHRUBS PER (1) TREE - PROVIDE A MIX OF THE FOLLOWING:
  - 5-GAL. DECIDUOUS SHRUBS
  - 5-GAL. EVERGREEN SHRUBS
  - 1-GAL. PERENNIAL OR GROUNDCOVER
- TURF - 50% MAX. COVERAGE (OPTIONAL)
- LANDSCAPE BOULDERS
- A MINIMUM OF TWO MULCH TYPES (LAVA ROCK, RIVER ROCK, D.G., BARK MULCH)



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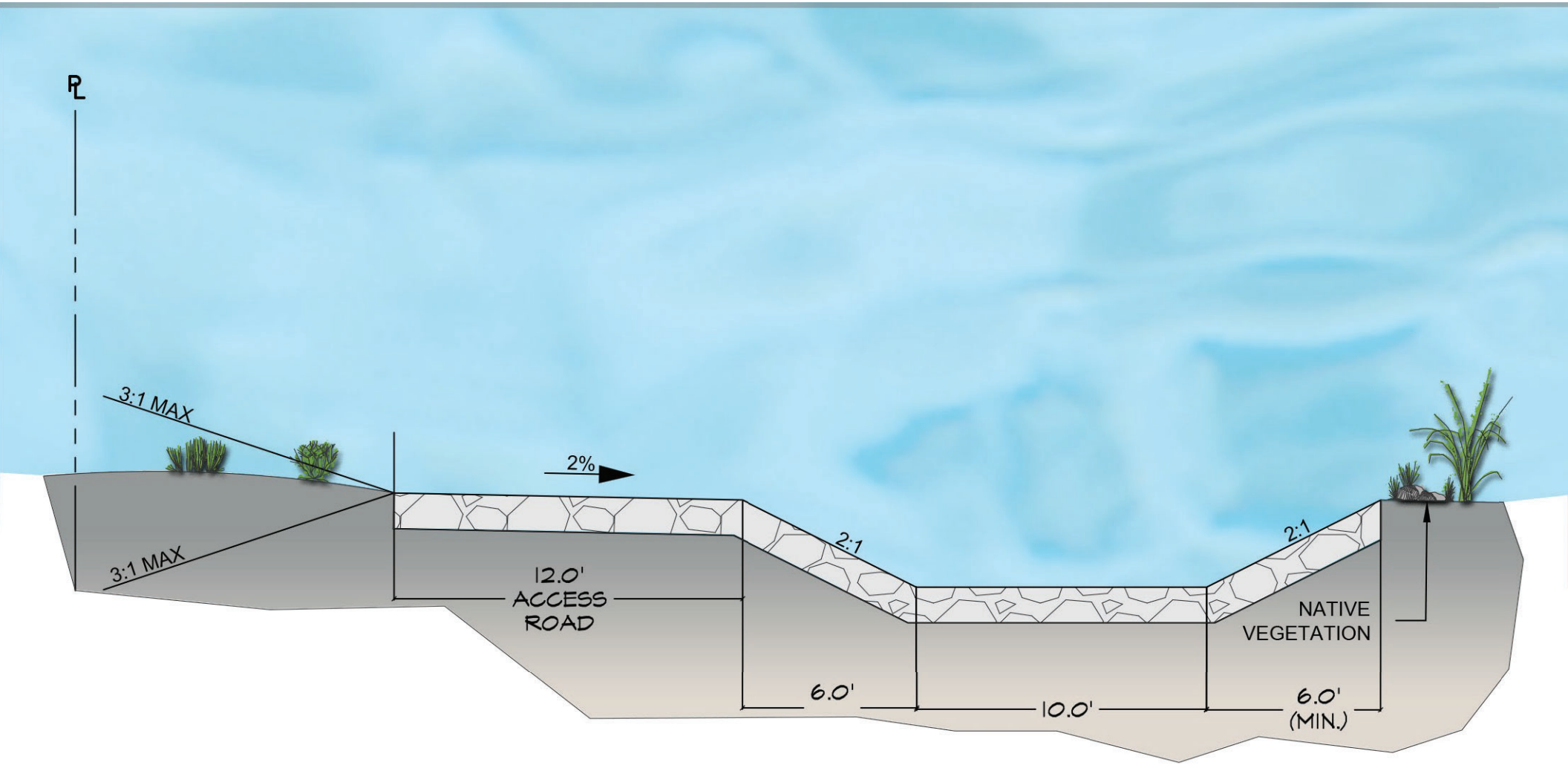

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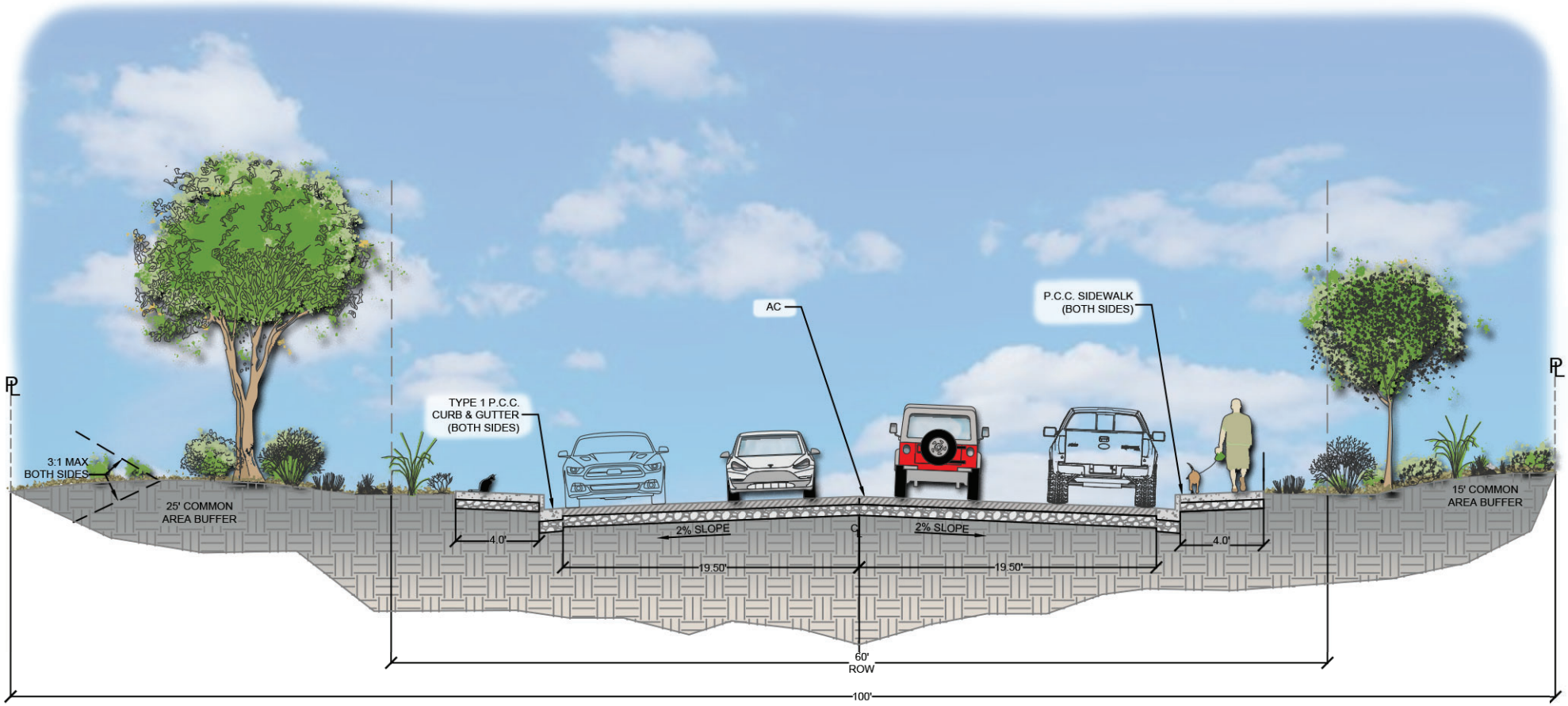
N.T.S.



COLLECTOR STREET SECTION
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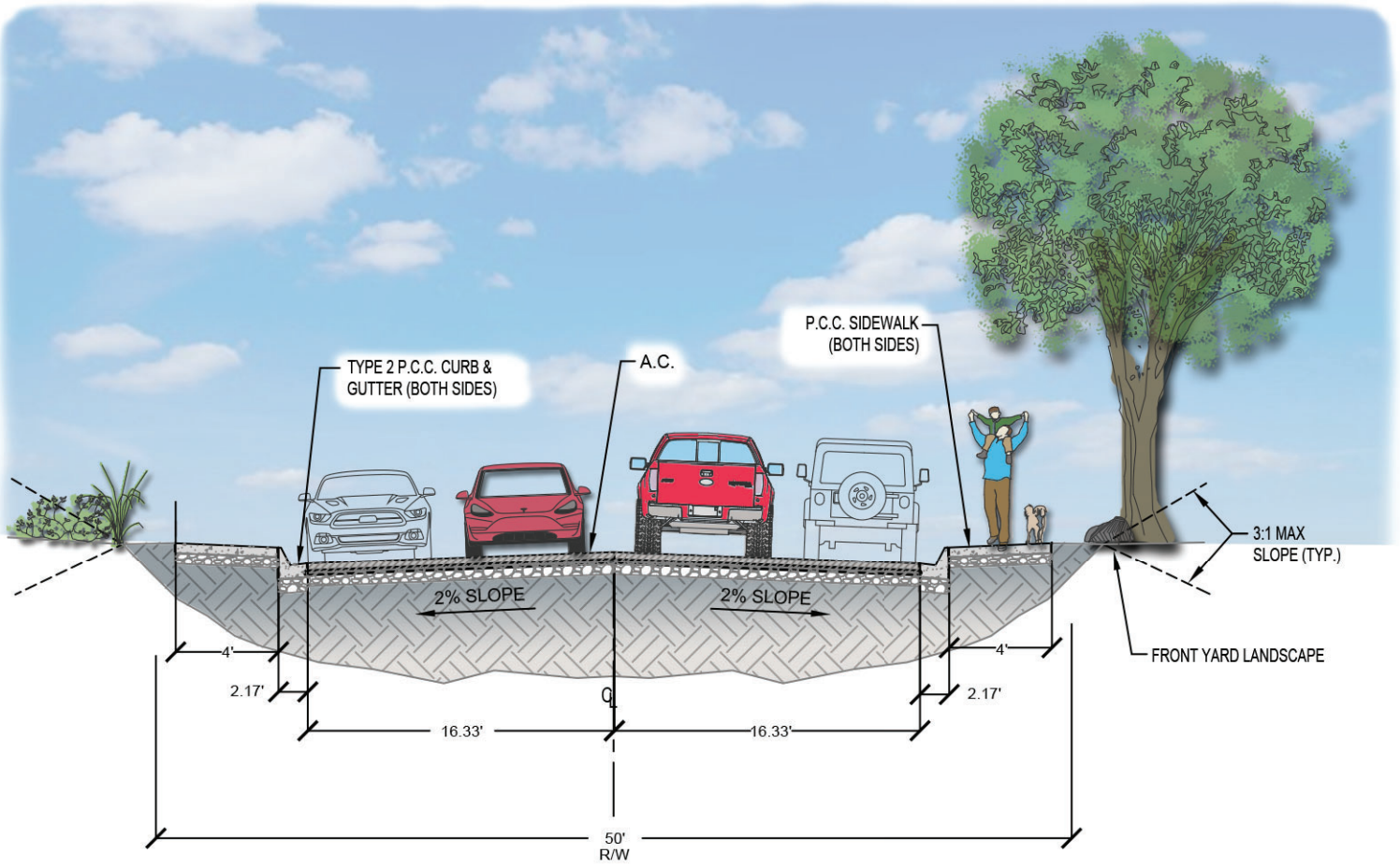
60' RIGHT-OF-WAY
NTS



LOCAL STREET SECTION
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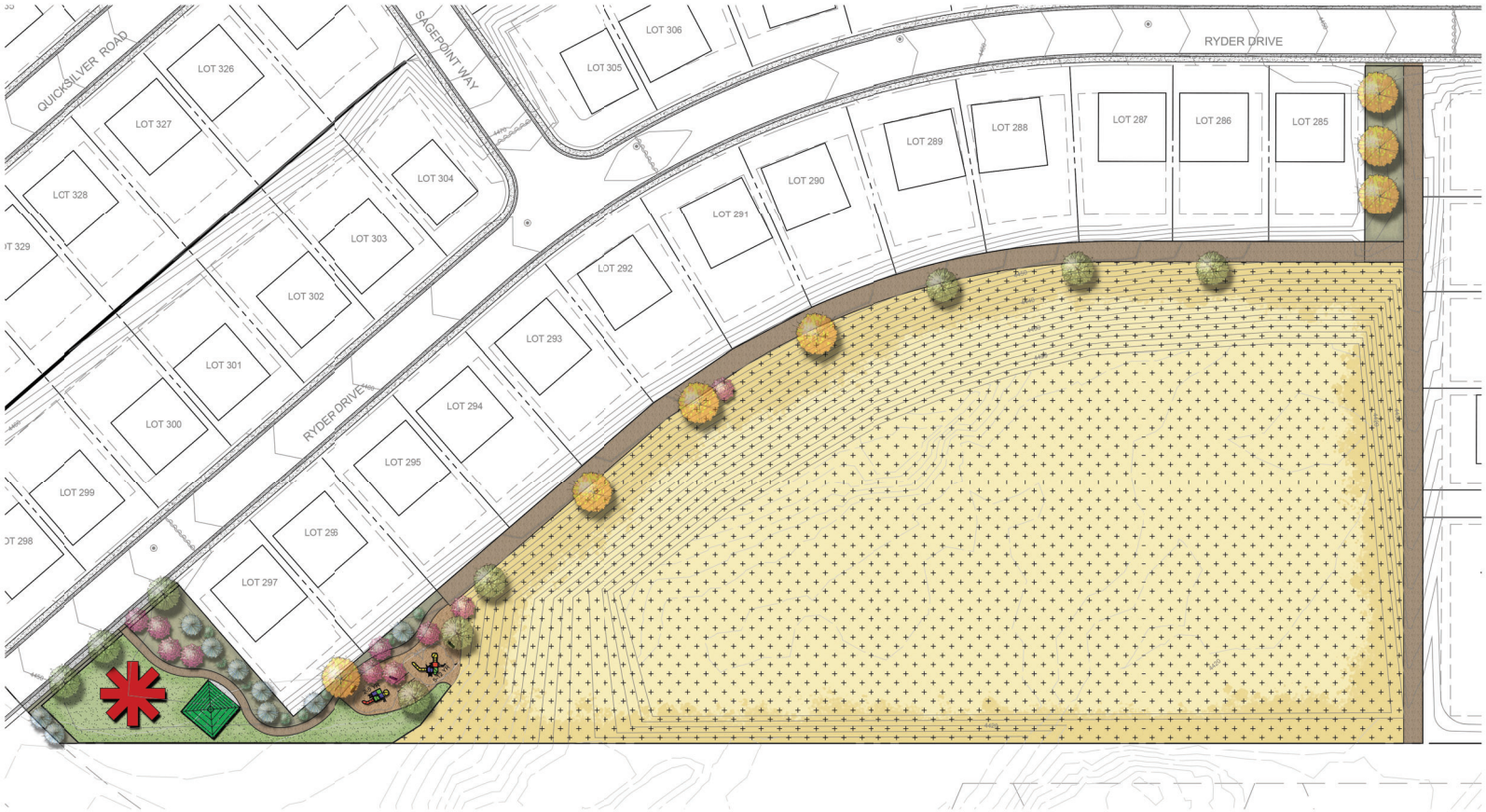
(NTS)



PLANT LEGEND

SYMBOL	DESCRIPTION
	ACCENT TREES
	DECIDUOUS SHADE TREES
	EVERGREEN TREES
	LANDSCAPE AREA
	PLAYGROUND AREA
	LAWN AREA
	TRAILS
+ +	DETENTION BASIN

CONCEPTUAL AMENITY LIST

DEVELOPER TO CHOOSE THE NUMBER OF AMENITIES IN CORRELATION WITH PARK SIZE PER TRADITIONS NORTH PUD STANDARDS.

- BENCH SEATING AREA
- BIKE PARKING/REPAIR STATION
- DOG PARK
  - DOG STATION
- FITNESS CENTER/STATIONS
- LAWN PLAY AREA
- PLAYGROUNDS
  - AGES 2-5, 5-12, & 13+
- PICNIC SHELTER
- REGIONAL TRAIL CONNECTOR
- RESTROOM
- WALKING PATH

NEIGHBORHOOD PARK #1

Know what's below. Call before you dig.

0' 40' 80' 120'

Scale in Feet

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L.A. Studio Nevada
the landscape architecture studio
1552 C Street Sparks, NV 89431 (775) 323-2223 NV RLA #440
www.lastudionevada.com

Neighborhood Park #1
TRADITIONS NORTH
Traditions North, LLC
Lyon Co. Nevada

Dayton

No.	Revision Date

LA No. 104-501-08-25
Designed: AM
Drawn: KRE
Checked: MAC
Date: 11/7/2025

PROGRESS SET
Not for Construction

Sheet L1 of 5

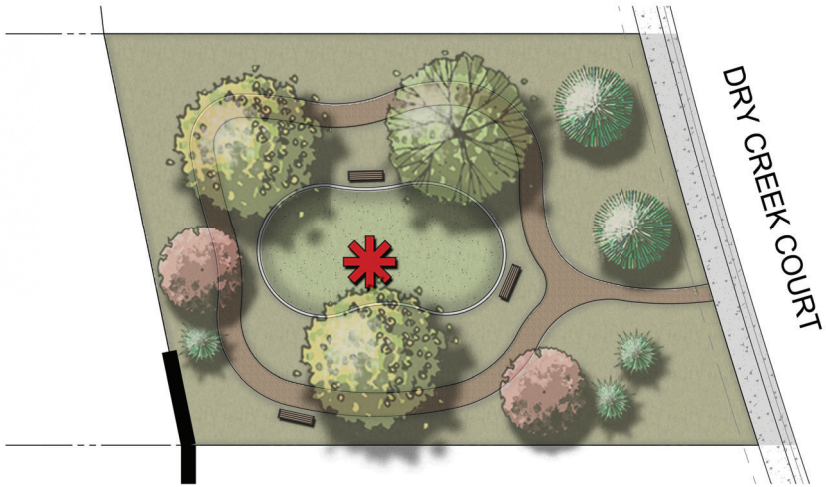
PLANT LEGEND

SYMBOL	DESCRIPTION
	ACCENT TREES
	DECIDUOUS SHADE TREES
	EVERGREEN TREES
	D.G. AREA
	LANDSCAPE AREA
	LAWN AREA

CONCEPTUAL AMENITY LIST

DEVELOPER TO CHOOSE THE NUMBER OF AMENITIES IN CORRELATION WITH PARK SIZE PER TRADITIONS NORTH.

- BENCH SEATING AREA
- BIKE PARKING/REPAIR STATION
- DOG PARK
  - DOG STATION
- FITNESS CENTER/STATIONS
- LAWN PLAY AREA
- PICNIC SHELTER
- RESTROOM
- WALKING PATH



POCKET PARK #2

811 Know what's below. Call before you dig.

0' 10' 20' 30'

Scale in Feet

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Nevada

Neighborhood Park #2
TRADITIONS NORTH
Traditions North, LLC
Lyon Co.

Dayton

No.	Revision Date

LA No. 104-501-08-25
Designed: AR
Drawn: KHK
Checked: RPH
Date: 11/7/2025

PROGRESS SET
Not for Construction

Sheet L2 of 5

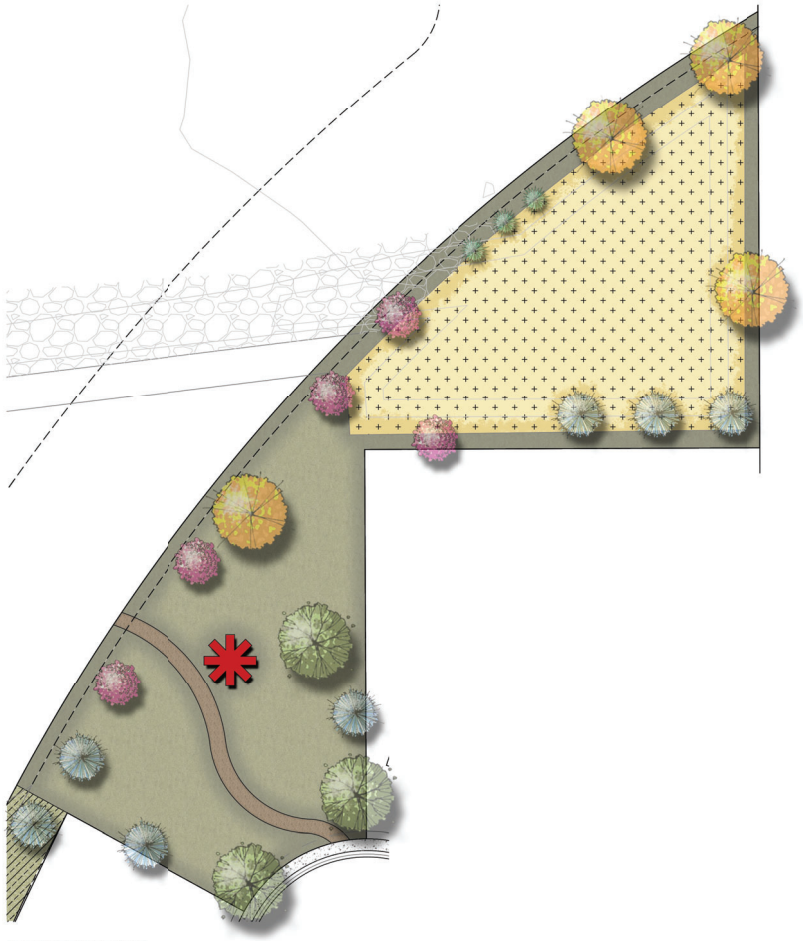
PLANT LEGEND

SYMBOL	DESCRIPTION
	ACCENT TREES
	DECIDUOUS SHADE TREES
	EVERGREEN TREES
	PARKWAY STRIP LANDSCAPE
	LANDSCAPE AREA
	DETENTION AREA

CONCEPTUAL AMENITY LIST

DEVELOPER TO CHOOSE THE NUMBER OF AMENITIES IN CORRELATION WITH PARK SIZE PER TRADITIONS NORTH.

- BENCH SEATING AREA
- BIKE PARKING/REPAIR STATION
- DOG PARK
  - DOG STATION
- FITNESS CENTER/STATIONS
- LAWN PLAY AREA
- PICNIC SHELTER
- RESTROOM
- WALKING PATH



POCKET PARK #3

811 Know what's below. Call before you dig.

0' 20' 40' 60'

Scale in Feet

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Neighborhood Park #3
TRADITIONS NORTH
Traditions North, LLC
Lyon Co. Nevada
Dayton

No.	Revision Date

LA No. 104-501-08-25
Designed: AR
Drawn: KHK
Checked: RPH
Date: 11/7/2025

PROGRESS SET
Not for Construction

Sheet L3 of 5

PLANT LEGEND

SYMBOL	DESCRIPTION
	ACCENT TREES
	DECIDUOUS SHADE TREES
	EVERGREEN TREES
	D.G. AREA
	LANDSCAPE AREA
	LAWN AREA

CONCEPTUAL AMENITY LIST

DEVELOPER TO CHOOSE THE NUMBER OF AMENITIES IN CORRELATION WITH PARK SIZE PER TRADITIONS NORTH.

- BENCH SEATING AREA
- BIKE PARKING/REPAIR STATION
- DOG PARK
  - DOG STATION
- FITNESS CENTER/STATIONS
- LAWN PLAY AREA
- PICNIC SHELTER
- RESTROOM
- WALKING PATH

811 Know what's below. Call before you dig.

0' 10' 20' 30'

Scale in Feet

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Neighborhood Park #4
TRADITIONS NORTH
Traditions North, LLC
Lyon Co. Nevada
Dayton

No.	Revision Date

LA No. 104-501-08-25
Designed: AR
Drawn: KHK
Checked: RPH
Date: 11/7/2025

PROGRESS SET
Not for Construction

Sheet L4 of 5

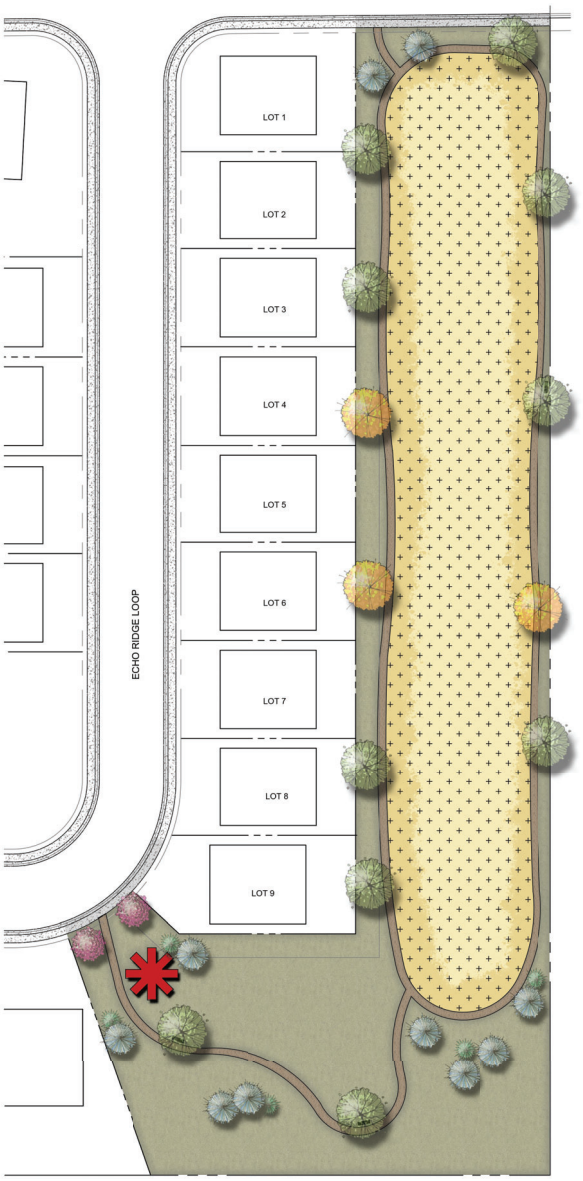
PLANT LEGEND

SYMBOL	DESCRIPTION
	ACCENT TREES
	DECIDUOUS SHADE TREES
	EVERGREEN TREES
	LANDSCAPE AREA
	DETENTION AREA

CONCEPTUAL AMENITY LIST

DEVELOPER TO CHOOSE THE NUMBER OF AMENITIES IN CORRELATION WITH PARK SIZE PER TRADITIONS NORTH.

- BENCH SEATING AREA
- BIKE PARKING/REPAIR STATION
- DOG PARK
  - DOG STATION
- FITNESS CENTER/STATIONS
- LAWN PLAY AREA
- PICNIC SHELTER
- RESTROOM
- WALKING PATH



POCKET PARK #5

811 Know what's below. Call before you dig.

0' 30' 60' 90'

Scale in Feet

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Neighborhood Park #5
TRADITIONS NORTH
Traditions North, LLC
Lyon Co. Nevada
Dayton

No.	Revision Date

LA No. 104-501-08-25
Designed: AR
Drawn: KHK
Checked: RPH
Date: 11/7/2025

PROGRESS SET
Not for Construction

Sheet L5 of 5

TRADITIONS NORTH

PLANNED UNIT DEVELOPMENT

Adopted March 5, 2026

Prepared for Traditions North, LLC

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1.0 Executive Summary

1.1 Project Area

The Traditions North Planned Unit Development (PUD) encompasses a ±220.75-acre area in Dayton, Nevada, consisting of assessor's parcel number (APN) 016-406-07. This parcel is currently undeveloped and may be developed in the future in accordance with the PUD development standards outlined in this handbook. The Traditions North PUD is generally located north of Nevada Station Parkway and west of Enterprise Way. The project is located northeast of the Historic Sutro Tunnel.

1.2 Purpose

The purpose of this handbook is to:

1) Encourage innovations in residential development by introducing a greater variety of lot sizes to encourage variation in building typology.
2) Improve and enhance Lyon County's trail and park system by providing trails and open space that provide continuity and access to Federal public lands adjacent to the project.
3) Provide clear, consistent development standards through a design handbook that is easy for Lyon County staff and interested parties to interpret and manage.
4) Draw inspiration from Nevada's frontier heritage by incorporating authentic, natural textures into fencing and monumentation, creating a distinctive neighborhood identity that reflects the region's rugged character and historic mining and farming roots.

1.3 Land Use Changes

Land use changes in this PUD include a reconfiguration of the existing residential land uses, along with increasing the amount of open space. These changes are designed to be a logical extension of the adjacent land use, including:

- Reconfiguration of the residential uses into a more logical land use pattern.
- A trailhead on the west side of the development to enhance connectivity and access to outdoor recreation opportunities.

Figure 1: Property Location

2.0 Administration

The Traditions North PUD describes in general terms when, where, and how development will occur. It establishes base quantitative standards and design parameters for each individual project built within the PUD and is intended to offer design flexibility while maintaining minimum standards, integrating with existing Lyon County land development regulations.

2.1 Open Space Maintenance

Prior to the recordation of the first final map, a homeowner's association, landscape maintenance district or association, or similar entity shall be established.

2.2 Individual Project Approvals

Individual projects within The PUD shall be subject to review and approval as outlined in the Lyon County Land Use and Development Code (LCC), including tentative subdivision maps and administrative design reviews, etc., unless otherwise provided in this PUD handbook.

New development shall be reviewed in context with the standards and requirements of this PUD. All statutory public review requirements set forth in NRS and LCC shall remain in full effect and shall be applied to new development requests within Traditions North where applicable.

2.3 Flexibility

Sufficient flexibility shall be allowed to permit detailed planning and design at the time of actual development.

Modifications to the PUD

The standards and requirements outlined within this PUD handbook shall be used to review the planning entitlements necessary to implement the PUD. However, it is recognized that unusual or unique circumstances may arise from time to time. Any modification to these standards, land uses, densities, etc. that exceed 10% shall require the review by the Lyon County Planning Commission and approval by Lyon County Board of County Commissioners. Modifications that do not exceed 10% may be granted with the approval of the Community Development Director or his or her designee. Modifications to the PUD boundary shall be subject to the review of a PUD Amendment and the associated requirements and public review defined within LCC.

Modifications that require alterations to the internal street network can be approved administratively through the final map without an amendment to the PUD or tentative map approvals. For instance, if lot sizes of one planning area increased based on market conditions and the street network is to be reconfigured, an update to the PUD or tentative map approval would not be required.

Planning Area Modification

Planning areas may be modified/reconfigured by up to 10% (acreage) as long as the required amount of open space does not decrease and the total number of residential units does not exceed the maximum number of residential units permitted pursuant to Table 1: Land Use Table.

Maximum Number of Residential Units

The maximum number of residential units within the Traditions North PUD may not exceed 415. The Developer shall be responsible for providing a running total of units to be provided with each individual tentative map or residential project to demonstrate compliance with this standard.

2.4 Amendments

Amendments to this PUD Handbook may be initiated by the property owner, developer, or their authorized representative.

2.5 Conflicts

In the event of a conflict between this PUD Handbook and LCC, these standards shall govern development of the Traditions North PUD. When a specific standard or development requirement is not addressed by the PUD, the development will be reviewed subject to state statutes and Lyon County codes and regulations in effect at the time of application, as amended.

2.6 Appeals

The applicant and developer shall have all rights to appeal decisions pursuant to state statutes and Lyon County codes and regulations, as amended.

3.0 Land Use Plan

Traditions North PUD aims to enhance community design and compatibility by offering a more desirable, balanced, and well-integrated mix of residential uses and open space. The open space area will provide active and passive recreation opportunities and provide access to the Sutro Trail.

The planning areas are shown on Figure 2: Land Use Plan. This plan reflects the overall goals and intent of the Traditions North PUD, emphasizing connectivity, compatibility, and better quality of life.

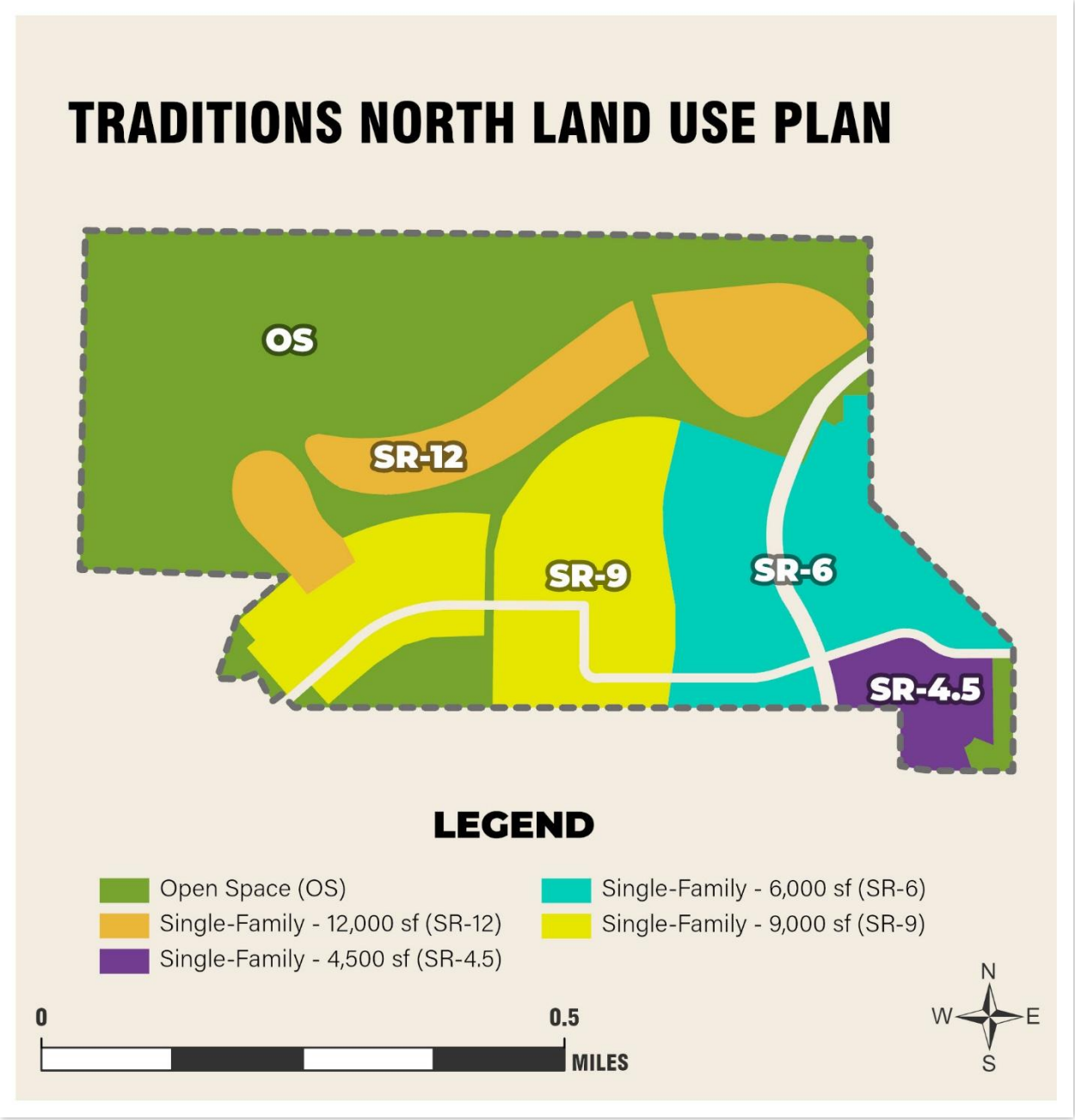
3.1 Planning Areas

Individual projects within each planning area will be reviewed as part of separate entitlement applications as needed, i.e. Tentative Subdivision Maps, allowing for flexibility in addressing market conditions while providing for consistency with this PUD. Planning areas may be modified/reconfigured by up to 10% (based on acreage and number of units) so long as the minimum amount of open space does not change, and the number of residential units does not exceed the maximum number of residential units permitted within the PUD.

Table 1: Land Use Table

PLANNING AREA	LAND AREA	ALLOWED UNITS
Single-Family Residential 4,500 SF	±6.9 acres	52
Single-Family Residential 6,000 SF	±26.1 acres	147
Single-Family Residential 9,000 SF	±34.5 acres	147
Single-Family Residential 12,000 SF	±20.5 acres	69
Trails and Open Space	90 acres minimum	-
Backbone Roads/ROW	Varies with final design	-
TOTAL	**±220.75**	**415**

Figure 2: Land Use Plan



Single-Family Residential – 4,500 SF (SR-4.5)

The Single-Family Residential 4,500 sf planning area supports smaller single-family lots with a minimum size of 4,500 square feet, at an effective gross density of 7.53 units per acre. This medium-density neighborhood adds to the overall density mix of the development. Within the PUD, the 4,500 sf lots are thoughtfully located along the southeast corner of the property boundary to provide a gradual transition to larger residential lots to the northwest.

The SR-4.5 planning area is intended to be consistent with the Neighborhood Residential, 4,500 sf min. (NR) zone, with respect to land use and design standards. Uses allowed within the SR-4.5 planning area include single-family, detached and attached residential, duplexes, and cottage housing.

Table 2: SR-4.5 Development Standards

Lot Requirements

Lot Size	4,500 sq ft
Lot Street Frontage Width	30 ft
Minimum Lot Width	40 ft/ 50 ft for corner lots

Primary Building Setbacks

Front & Side Street	10 ft
Front-facing Garage Setback	20 ft
Rear	10 ft
Side	5 ft

Site and Building Requirements

Building Height	35 ft
Parking Requirements	Residential: 2 per dwelling unit (tandem allowed)
Miscellaneous Requirements	Other than the development standards listed above, development shall comply with the regulations of LCC 15.312.06 – Neighborhood Residential, 4,500 sf min, or in compliance with standards in place at the time of application.

Single-Family Residential – 6,000 SF (SR-6)

The Single-Family Residential 6,000 sf planning area accommodates single-family homes on lots with a minimum size of 6,000 square feet, at an effective gross density of 5.63 units per acre. Within the PUD, the 6,000 sf lots are situated between the larger 9,000 sf lots and the smaller 4,500 sf lots, serving as a transitional land use that provides a gradual shift in residential density. This placement supports the Master Plan's Suburban Character District goals by ensuring a compatible and well-integrated neighborhood layout.

The SR-6 planning area allows for detached single-family residential uses.

Table 3: SR-6 Development Standards

Lot Requirements

Lot Size	6,000 sq ft
Lot Street Frontage Width	30 ft
Minimum Lot Width	50 ft/ 60 ft for corner lots

Primary Building Setbacks

Front & Side Street	10 ft
Front-facing Garage Setback	20 ft
Rear	10 ft
Side	5 ft

Site and Building Requirements

Building Height	35 ft
Parking Requirements	Residential: 2 per dwelling unit (tandem allowed)
Miscellaneous Requirements	Other than the development standards listed above, development shall comply with the regulations of LCC 15.312.06 – Neighborhood Residential, 4,500 sf min, or in compliance with standards in place at the time of application.

Single-Family Residential – 9,000 SF (SR-9)

The Single-Family Residential 9,000 sf planning area accommodates single-family homes on lots with a minimum size of 9,000 square feet, at an effective gross density of 4.26 units per acre. This planning area has multiple points of access to trails and parks integrated into the development.

Within the PUD, the 9,000 sf lots are situated between the larger 12,000 sf lots and the smaller 6,000 sf lots, serving as a transitional land use that provides a gradual shift in residential density. This placement supports the Master Plan's Suburban Character District goals by ensuring a compatible and well-integrated neighborhood layout.

The SR-9 planning area allows for detached single-family residential uses.

Table 4: SR-9 Development Standards

Lot Requirements

Lot Size	9,000 square feet
Lot Street Frontage Width	40 ft

Primary Building Setbacks

Front & Side Street	10 ft
Front-facing Garage Setback	20 ft
Rear	20 ft to primary building (12 ft to attached shade structure)
Side	5 ft

Site and Building Requirements

Building Height	35 ft
Parking Requirements	Residential: 2 per dwelling unit (tandem allowed)
Miscellaneous Requirements	Other than the development standards listed above, development shall comply with the regulations of LCC 15.312.05 – Suburban Residential, 9,000 sf min, or in compliance with standards in place at the time of application.

Single-Family Residential – 12,000 SF (SR-12)

The Single-Family Residential 12,000 sf planning area accommodates single-family homes on lots with a minimum size of 12,000 square feet, at an effective gross density of 3.37 units per acre. Within the PUD, the 12,000 sf lots are located adjacent to the 9,000 sf lots and serve as the lowest density single-family housing within the boundary of the PUD. This placement supports the Master Plan's Suburban Character District goals by ensuring a compatible and well-integrated neighborhood layout.

The SR-12 planning area allows for detached single-family residential uses.

Table 5: SR-12 Development Standards

Lot Requirements

Lot Size	12,000 sq ft
Lot Street Frontage Width	60 ft (30 ft if located on a cul-de-sac bulb)

Primary Building Setbacks

Front & Side Street	15 ft
Front-facing Garage Setback	25 ft
Rear	20 ft to primary building (12 ft to attached shade structure)
Side	10 ft

Site and Building Requirements

Building Height	35 ft
Parking Requirements	Residential: 2 per dwelling unit (tandem allowed)
Miscellaneous Requirements	Other than the development standards listed above, development shall comply with the regulations of LCC 15.312.04 – Suburban Residential, 12,000 sf min, or in compliance with standards in place at the time of application.

Open Space (OS)

The Open Space planning area is a minimum of 90 acres and will be integrated throughout the site, exceeding the 20% minimum open space requirement. The open space will provide active and passive recreational amenities that will promote physical activity and interaction among residents within the development. Additionally, a trailhead will be incorporated along the western property boundary, enhancing connectivity and access to outdoor recreation opportunities. Amenities will improve the comfort and use of open space and encourage a sense of community and socialization.

The OS planning area is to remain largely undisturbed but acceptable uses and development include trails, passive and active recreation, equestrian facilities, community gardens, hydraulic features, roadways, and other improvements in support of such uses.

Although a minimum of 90 acres is designated as Open Space land area, additional common/open space will be provided throughout the PUD in other land use designations that will count towards the total common area/open space acreage. In addition to this, 10 acres of the property will be donated to the benefit of the Friends of Sutro Tunnel Charity in support of their preservation work for the Sutro Tunnel historical site.

Open Space areas will be developed in accordance with the following standards:

- Minimum of one amenity for each 1,500 linear feet of trail. Amenities may be grouped together if the total number of amenities is based on the length of the associated trail.
- Split-rail fencing may serve as a decorative or functional boundary of open space areas

4.0 Parks and Trails

The PUD envisions a cohesive community with active and passive recreation amenities that contain a trail system for pedestrians.

Figure 3: Master Parks and Trails Plan

4.1 Neighborhood Park

The neighborhood park is proposed on the southern portion of the development. To provide for a variety of active and passive recreational opportunities, the neighborhood park will include a mix of amenities. Amenities may include but are not limited to:

- Benches/seating areas
- Bike parking/Repair Station
- Dog park
- Fitness equipment
- Picnic shelter
- Lawn play area
- Playground/Tot lot
- Litter receptacles

The neighborhood park will include walking paths to significant amenities and connectivity to neighborhoods. The park will also include a connection to the regional trail system.

The Neighborhood park will be fully improved by the developer of each residential development, with grading, landscaping, installation of irrigation systems, utilities, and park amenities where applicable. Maintenance will be provided by the Homeowners Association, Landscape Maintenance Association, or similar entity as approved by Lyon County.

Neighborhood Park Standards

The park is to be constructed prior to obtaining the Certificate of Occupancy for the 150th unit within the project area. The Neighborhood Park shall meet the following standards:

- Minimum of 5 acres in size (including drainage facilities)
- Provide a bike rack with a minimum of five bicycle parking spaces at each entrance to the park
- Minimum of three amenities
- A minimum 4-foot walking path with access to the regional trail system
- Split-rail fencing can serve as a decorative or functional boundary within park spaces

Figure 4: Conceptual Neighborhood Park Design

4.2 Pocket Parks

Several pocket parks are proposed throughout the development and will have amenities to provide for the needs of immediate residences. Typical amenities may include but are not limited to:

- Bench/seating areas
- Fitness stations
- Lawn play area
- Playground/Tot lot
- Picnic areas
- Walking paths

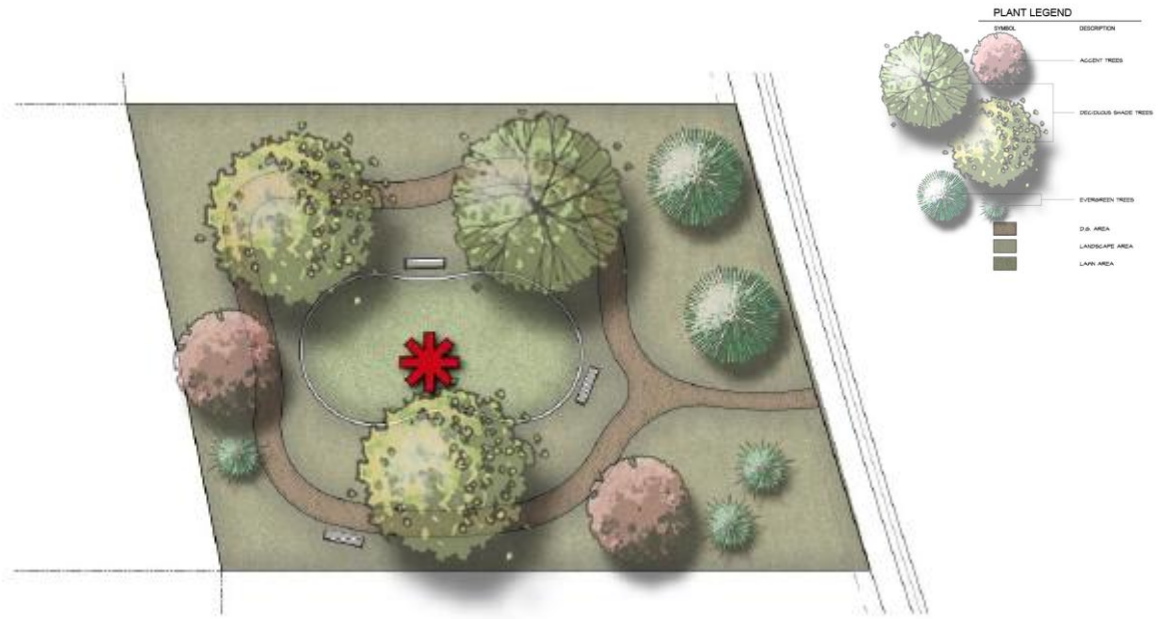
Pocket Park Standards

Pocket parks shall be constructed in accordance with the schedule in Section 4.3 of this handbook. Pocket parks shall meet the following standards:

- A minimum of four pocket parks shall be provided
- Minimum of 300 sq. ft. in size

- Minimum of two amenities
- Split-rail fencing can serve as a decorative or functional boundary within park spaces

Figure 5: Conceptual Pocket Park



4.3 Park Construction Phasing

All parks shall be constructed in accordance with the following milestones. Milestones will be considered reached based on the issuance of certificates of occupancy for the following units:

- **Pocket Park 1:** 90th unit
- **Neighborhood Park:** 150th unit
- **Pocket Park 2:** 180th unit
- **Pocket Park 3:** 270th unit
- **Pocket Park 4:** 300th unit

4.4 Trails

The trail system will link the neighborhood park, open space area, the regional trail system, and Federal public land to the multi-use paths and sidewalks throughout the PUD.

Trailhead Standards

The Sutro Trailhead shall meet the following standards:

- Provide a minimum of two amenities
- Provide a parking area with a minimum of 10 parking spaces
- Split-rail fencing may serve as a decorative or functional boundary within the trailhead area

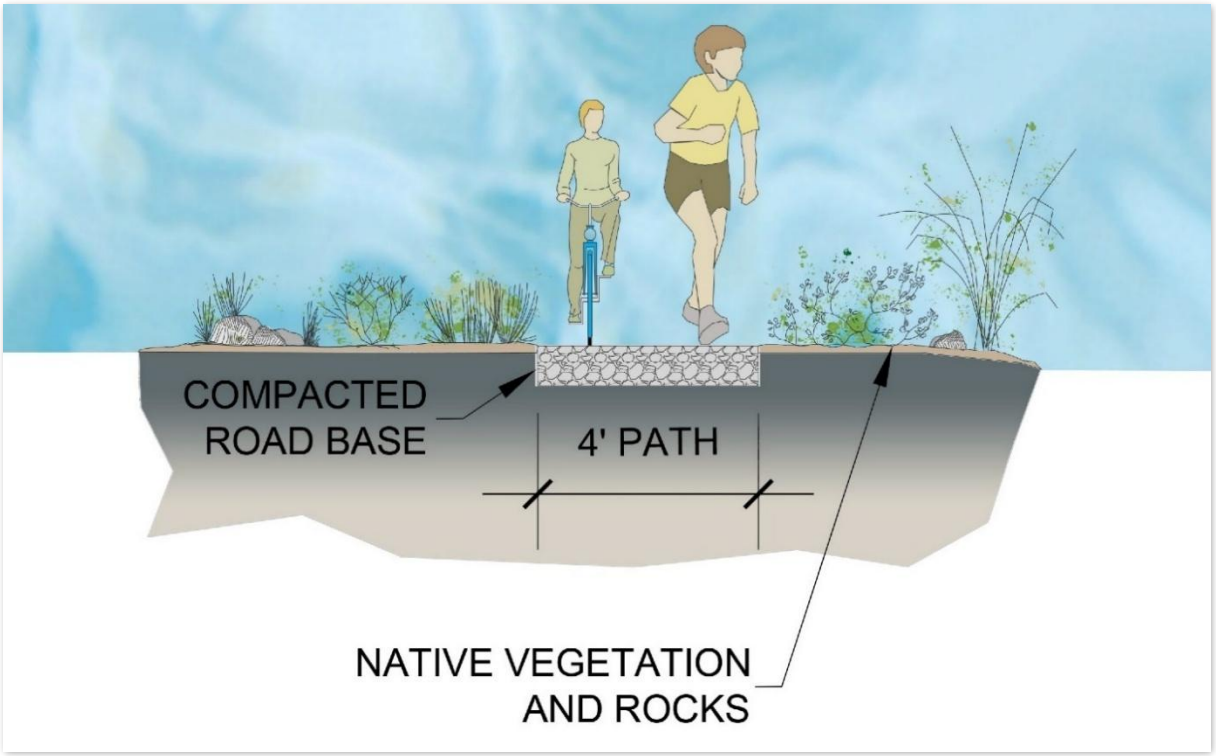
Trail Standards

Trails constructed within the boundaries of the PUD shall meet the following standards:

- Minimum width of four feet
- Developed trails constructed of compacted base
- Split-rail fencing may serve as a decorative or functional boundary within park spaces

Figure 6: Split-Rail Fence Example

Figure 7: Conceptual Trail Design



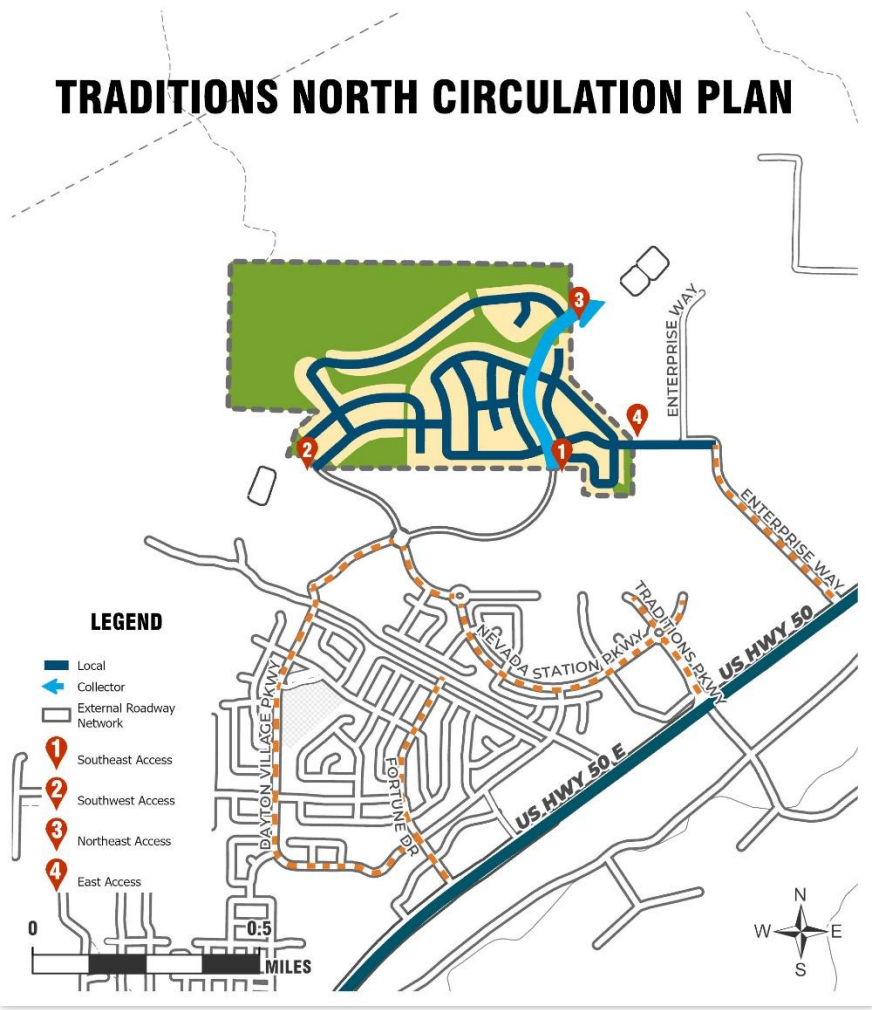
5.0 Access and Circulation

Traditions North includes a hierarchy of streets intended to provide access between neighborhoods and to facilitate pedestrian connections to trails, open space and recreational facilities.

5.1 Access

The overall vehicle circulation plan for the Traditions North PUD is outlined below in Figure 15: Circulation Plan. Primary access to the subject site is anticipated from the southeast and southwest access points.

Figure 8: Circulation Plan



Cross sections have been provided for each street type: Collector (60 ft. ROW) and Local (50 ft. ROW). All roads are proposed to be public and will comply with relevant Lyon County standards and requirements. The northeast access point and upper portion of the collector not necessary to support phases 1, 2 and 3 of the development is contemplated to be constructed with phase 4 of development.

Figure 9: Street Sections—Collector

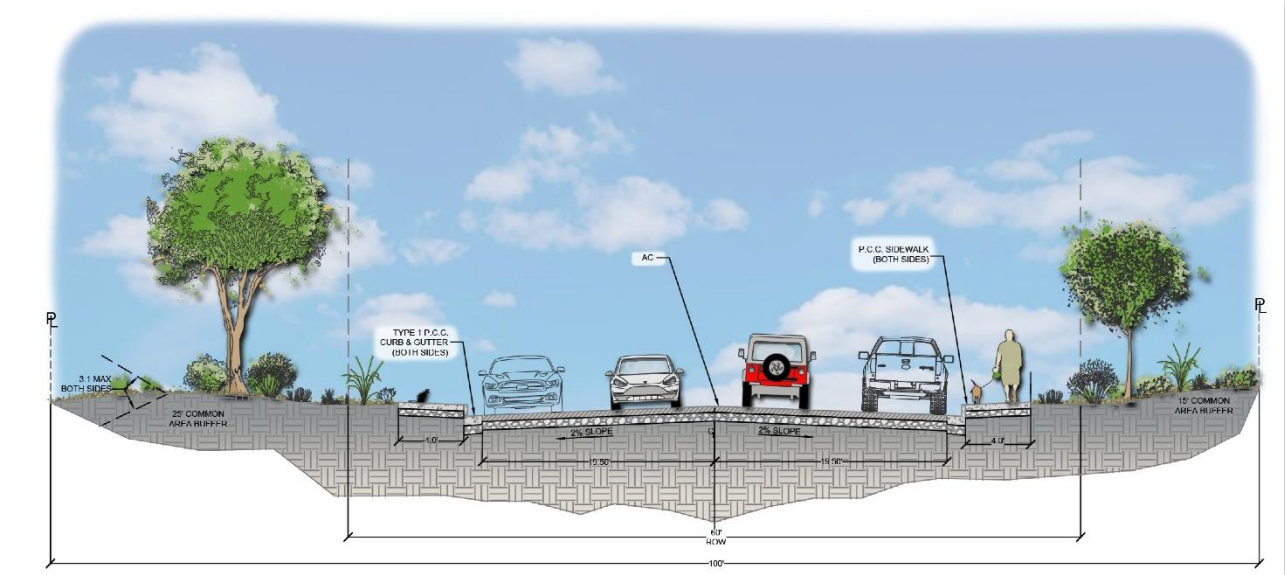
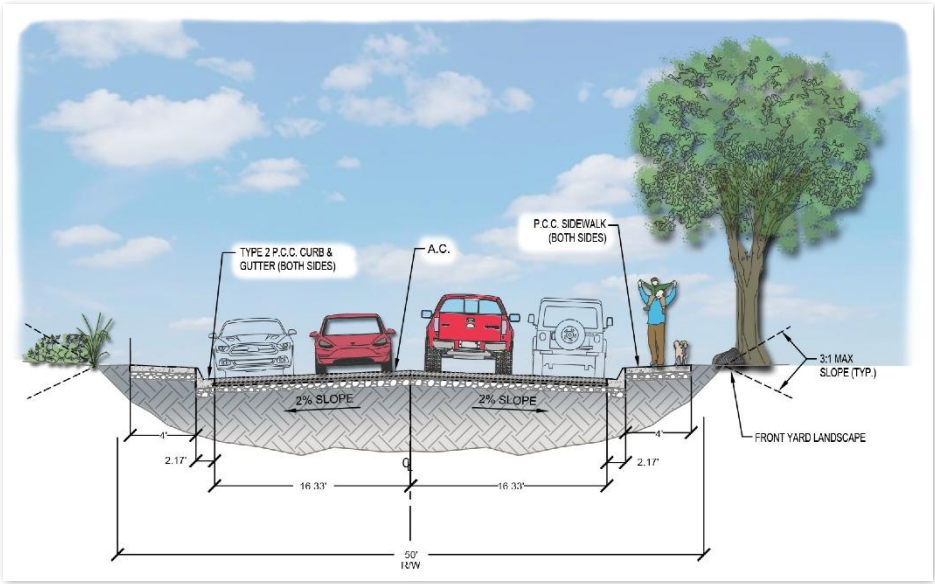


Figure 10: Street Sections—Local



Sidewalks are required on both sides of the street to provide connectivity throughout the development, with pedestrian access to residential areas, parks, open space, and trails. Sidewalks shall comply with Lyon County standard details.

The project originally contemplated a connection to Enterprise Way; however, due to circumstances separate from the traffic study, a vehicle connection to Enterprise Way is no longer being considered and was not included in this traffic analysis and report. If individual project developers wish to pursue a vehicle connection to Enterprise Way in the future, a traffic analysis shall be conducted at that time.

5.2 Traffic Impacts

A traffic study was performed to evaluate the anticipated impacts of the proposed development on the existing and proposed street network. The project is not expected to result in significant traffic impacts that would require project related mitigation. Development of the project will be performed in coordination with the Nevada Department of Transportation as they implement corridor safety improvements to US Highway 50.

6.0 Design Standards

6.1 General

Each individual project or improvement plan submittal shall include a signage and fencing plan that shows the specific location of proposed signage and fencing, that complies with the requirements in this section.

6.2 Landscaping

Residential Lots

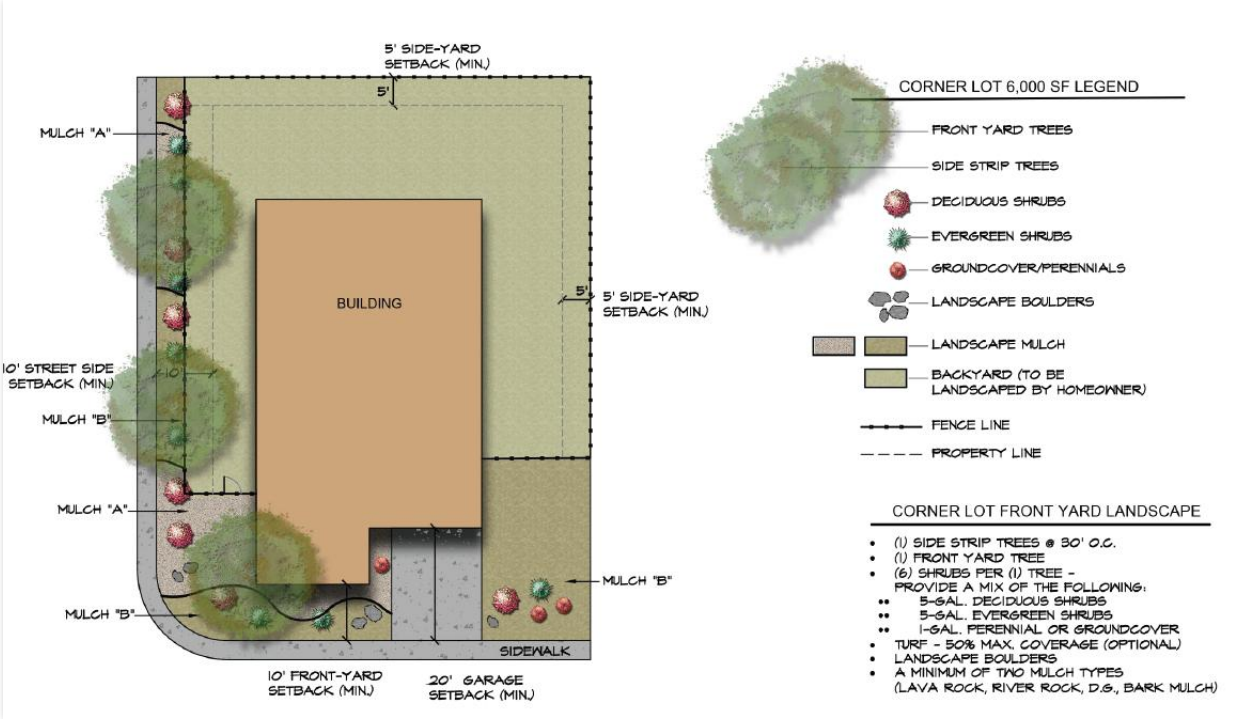
Front yards shall be entirely landscaped and shall include:

- One tree per lot plus additional tree per each 50 linear feet of frontage
- Six shrubs per tree
- Optional Turf – 50% maximum coverage
- Landscape boulders
- A minimum of two mulch types

Each street-side yard shall include:

- One tree plus additional tree per each 50 linear feet of frontage
- Six shrubs per tree

Figure 11: Typical Lot Landscaping



6.3 Signage

Entry Monument Standards

Monument signage may be installed at entrances to the Traditions North development, and shall be subject to the following standards:

- Maximum height of eight feet
- Indirect illumination only (no internal or direct illumination allowed)
- Constructed from natural-looking materials such as dry-stacked stone, weathered timber, or brick, with options for textured and earth-toned alternatives that complement the surrounding landscape

Figure 12: Conceptual Entry Monument

6.4 Fencing

Fencing shall be consistent throughout the PUD area in design and color to ensure uniformity in the overall appearance of the PUD.

Privacy fencing will be used internally between all single-family detached residential lots and may be made of a variety of typical fencing materials, including wood, composite, or vinyl (Figure 13: Privacy Fencing Example). This fencing will allow adequate privacy for rear and side yards in the single-family residential areas.

Figure 13: Privacy Fencing Example

7.0 Phasing Plan

Each phase will be entitled through a separate, project-specific application process, as applicable (i.e. Tentative Subdivision Map). It is anticipated, although not required, that the phasing will follow the numbered sequence as shown in the Phasing Plan.

Individual projects are required to meet all access and utility standards independently pursuant to this PUD and Lyon County Code.

The project phasing plan includes up to four phases, as detailed below in the Phasing Plan. It is anticipated that certain phases will be constructed concurrently.

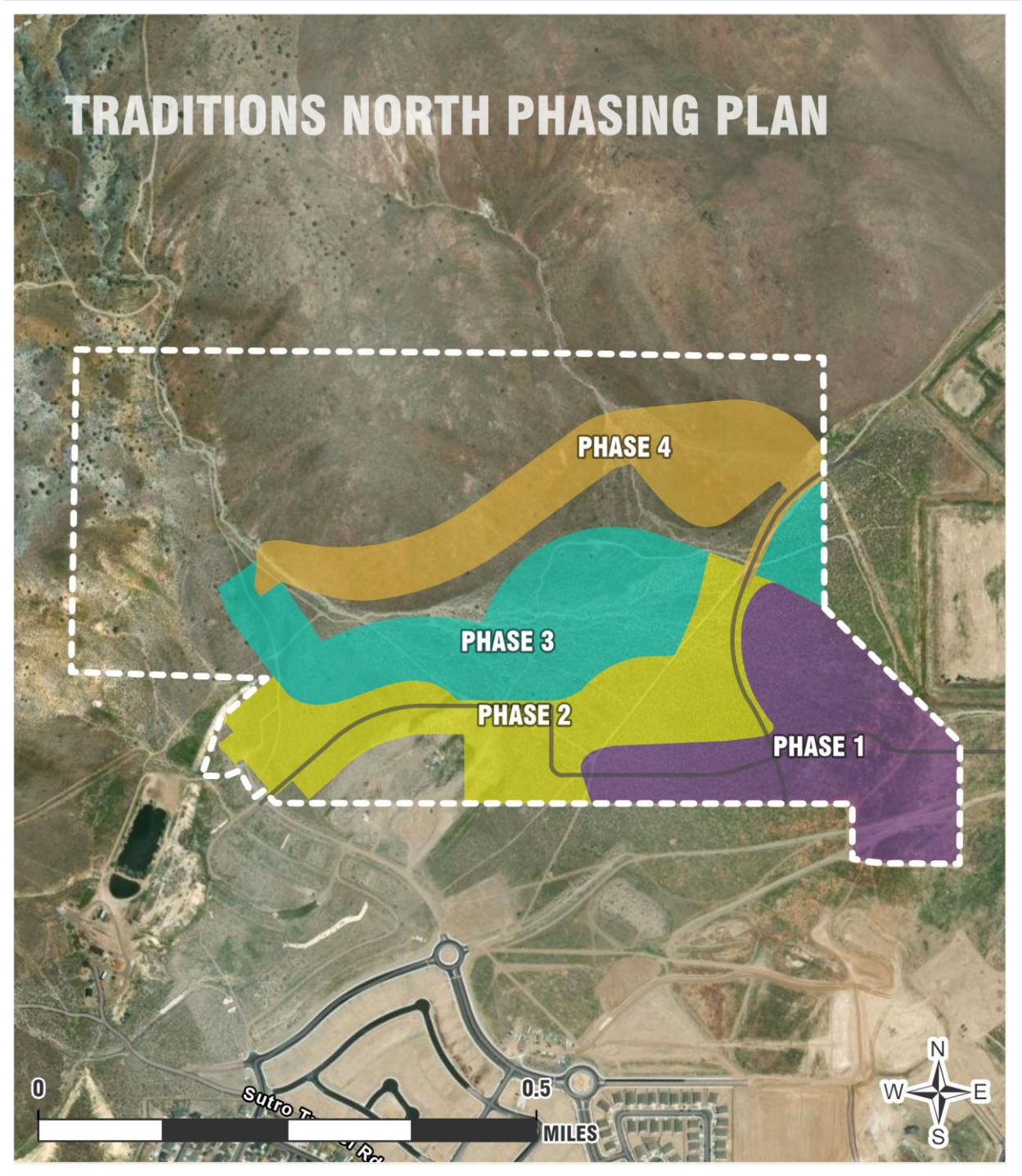
Initial phases will include required infrastructure improvements, including:

- The southern portion of the collector (as delineated by the phasing plan) and access roadways from the south.
- Stormwater detention facilities

Residential development is anticipated to begin with the SR-4.5, SR-6, and SR-9 Planning Areas (±131 lots) as soon as Spring of 2027. Each phase will be developed with the required common area improvements; drainage, utility and local road infrastructure; utility connections from previous phases; and utility stubs for future buildout of development. Associated parks, open space, and trails facilities will be constructed with each phase as required to meet PUD requirements.

The phasing plan meets the requirements for Title 15 and NRS 278.360 regarding presentation of final maps.

Figure 14: Phasing Plan



APPENDIX A: Legal Description

APPENDIX B: Preliminary Geotechnical Study

PRELIMINARY
GEOTECHNICAL DESIGN REPORT
Traditions North

Dayton, Lyon County, Nevada

Submitted To:

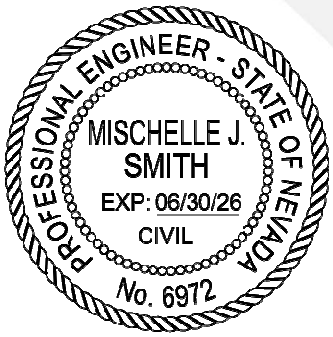
Jarred Corbell
GF DEVELOPMENT, LLC.
3527 S. Federal Way, Suite 103 #1020
Boise, ID 83705

Project Number

4627001

Date

July 2025
Revised: August 2025



Mischelle J. Smith, PE
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August 28, 2025
Project No. 4627001

Jarred Corbell
GF DEVELOPMENT, LLC.
3527 S. Federal Way, Suite 103 #1020
Boise, ID 83705

Re: Traditions North – Amendment # 01
Alternative Pavement Section
Dayton, Lyon County, Nevada

Ref: 2024 International Residential Code
and 2024 Northern Nevada Amendments

Preliminary Geotechnical Design Report
Traditions North
Dayton, Lyon County, Nevada
Wood Rodgers' Project No. 4627001
Submitted: July, 2025

Dear Jarred:

Per our discussions, this letter provides updated recommendations to the pavement sections for the referenced project. Unless specifically modified herein, the recommendations presented in the referenced report are considered valid as written.

STRUCTURAL PAVEMENT SECTIONS

Materials and workmanship shall be consistent with the requirements of the agency having jurisdiction and the Standard Specifications for Public Works Construction. These sections have been developed with the expectation that the separation requirements presented in Section 5.2.4 of the referenced report have been met. Table 5 provides updates to the structural pavement sections for the project.

Table 5 (Amendment #01) - Structural Pavement Sections[1]

Road Type	Pavement Thickness (In.)	Pavement Type	Type II Class B Base Course Thickness (In.)[2]
Local Residential	3	Type 3	6
Collector Residential	4	Type 2	8

[1] Per Drawing No. L-1, Roadway Sections, Lyon County.
[2] Base Course thickness is in addition to structural fill separation requirements presented in Section 5.2.4.

Oil for all mixes should consist of PG-64-28NV. If fine-grained soils greater than one foot in thickness are encountered at roadbed grade, over-excavation in accordance with Section 5.2.4 of the referenced report is required. If granular soils, or fine grained soils less than one foot in thickness, are encountered at roadbed grade meeting the requirements of Table 2 of the referenced report, the need for over-excavation and replacement with 12" of import structural fill should be assessed.

Please let us know if you have any questions or need further clarification regarding these updates.

Sincerely,
WOOD RODGERS, INC.

Andrew Mayse, E.I.
Geotechnical Professional

Mischelle J. Smith, P.E.
Principal Engineer
RE Number: 6972
Expires: 06/30/2026

Enclosures:
July 2025 Wood Rodgers Preliminary Geotechnical Design Report

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EXECUTIVE SUMMARY

This report presents preliminary grading and design recommendations for the project. Given the project area, anticipated cuts, and depths of proposed fills, it is our opinion the final grading plan should be reviewed and the need for additional exploration and analysis be considered and appropriately proposed.

The project consists of constructing approximately 364 one-to-two-story single family residences with associated public streets. The residences are anticipated to be wood framed and supported by standard spread foundations with slab-on-grade flooring. Foundation loads are anticipated to be light. Street improvements, underground services, and project access will be designed to Lyon County standards and in accordance with the Standard Specifications for Public Works Construction (SSPWC). Based on preliminary grading plans (Piñon Design Group, 2025), cuts and fills are anticipated to approach ± 10-feet and ± 30-feet, respectively.

The project is in Dayton, Lyon County, Nevada and encompasses an area of approximately 231-acres and is located at a central latitude and longitude of 39.2846°N and -119.5772°E, respectively. The site is bordered by the Traditions Village 2 project to the south and undeveloped land to the north, east, and west. Vegetation across the site is moderate consisting of small and large brush, weeds, and grasses. The site is predominantly undeveloped with the exceptions of excavation and stockpiling operations near the south boundary of the site, a constructed berm on the western boundary of the site and dirt trails that transect the property. Per Google Earth imagery, the area near the south boundary of the site has been subject to excavation and stockpiling operations since at least June 2003.

Based on the Geologic Map of the Flowery Peak Quadrangle, Storey and Lyon counties, Nevada, the site is mapped in an area of Holocene Piedmont alluvial deposits consisting of alluvium of varying age (Qay), Miocene biotite-hornblende andesite flows (Tvba), and extensively disturbed areas (Qx) observed as the excavation and stockpiling operations on the southern boundary of the project site.

The soils encountered in our explorations typically consisted of complex interbedded sands, silts, and clays, as well as poorly graded sandy gravels with varying degrees of fines. Additionally, cobbles and boulders are present in the subsurface profile, typically at depths below 3 feet. Undocumented fill soils were observed from excavation and stockpiling operations near the southern boundary of the site were observed during our investigation. Stockpiles must be processed and qualified before receiving structural improvements.

Groundwater was not encountered in our exploration locations and is anticipated to be at a depth that will not affect the proposed improvements. Depth to groundwater may vary based on seasonal changes in precipitation and near-surface seepage.

Standard spread foundations with slab-on-grade flooring have been recommended for the support of structures.

Sands present at the site may allow excavations and utility trenches to slough or cave and must be adequately considered and planned for by the contractor. Oversize material to 18-inches in diameter may be encountered at depths greater than 3-feet below the ground surface during trenching and excavations. Therefore, excavatability will probably be more difficult in utility trenches where removal of larger sized particles can be difficult within the confines of a trench, and which will likely result in irregular trench profiles where cobbles and boulders must be removed.

Structural pavement sections have been presented for local and collector roads. These sections have been developed based on understanding that materials and workmanship shall be consistent with the provisions of the Standard Specifications of Public Works Construction (SSPWC).

1. INTRODUCTION

Presented herein are the results of Wood Rodgers' geotechnical exploration, laboratory testing, and associated geotechnical design recommendations for the proposed Traditions North development in Dayton, Lyon County, Nevada. The assessments and recommendations presented in this geotechnical report have been determined, in part, around the surface and subsurface conditions identified by our exploration program which was developed to be consistent with locally accepted industry practices regarding exploratory means and methods for geotechnical investigations of similar projects. The proposed structural elements, topography, grading design, soils, and geology are all unique; therefore, the engineering judgment employed by those in responsible charge of geotechnical design is in general conformance with the accepted standards of care for engineering analyses as defined by the Nevada State Board of Engineers and Land Surveyors.

This report has been prepared in consideration of the applicable provisions of the International Residential Code (IRC, 2024), ASCE 7, and the amendments and modifications adopted by Lyon County. These documents establish the minimum requirements to safeguard the public health, safety and general welfare of the occupants as well as the minimum level of structural integrity, life safety, and fire safety for inhabitants of new and existing structures. Geotechnical considerations for public improvements have been formulated around the requirements of Lyon County and the Standard Specifications for Public Works Construction. Performance standards around which our primary recommendations have been framed are based upon the requirements of the referenced documents. Any expectations of performance inconsistent with, outside the purview of, or exceeding the requirements of the referenced documents are subjective and, therefore, a function of materials, design, workmanship, and ownership. Unless these expectations of performance are specifically stipulated or quantified herein, they are considered in excess to the scope and design standards of this report.

The objectives of this study were to:

1. Explore, test, and assess general soil, geology, and ground water conditions pertaining to design and construction for the proposed development as required by the IRC and the Homebuilders' Guide to Earthquake Resistant Design and Construction (FEMA 232, 2024).
2. Provide recommendations associated with the design and construction of the project, as related to the identified geotechnical conditions and the stipulated design levels and performance standards established herein, and the requirements of the IRC and guidelines presented in FEMA 232.

Because of the preliminary status of site layout and project development and design, this geotechnical design report is preliminary.

2. SCOPE OF SERVICES

As indicated in our proposal, upon completion of our field and office studies, a geotechnical investigation report consistent with the requirements of the 2024 International Residential Code (IRC) will be completed for the project and will present the following:

- Description of the project site with the approximate locations of our explorations, shown on a Site Plan.
- Descriptive logs of the explorations performed for this study.
- General summary of the site soils and geology.
- Summary of noted surface drainage features and ground water conditions encountered.
- Seismic design considerations consistent with FEMA 232.
- Site preparation and grading recommendations developed for standard spread foundations.
- Types of suitable foundations including appropriate footing depths and widths, and anticipated settlement.
- Concrete and concrete slab-on-grade support options.
- Drainage considerations that may affect foundation and concrete slab-on-grade performance.
- Structural pavement sections for local and collector streets.
- Recommendations for additional exploration as appropriate.

Our study included field exploration, laboratory testing, and engineering analyses to identify the physical and mechanical properties of the various on-site materials. Results of our field exploration and testing programs are included in this report; in consideration of the stated design levels and performance standards, these results form the basis for our conclusions and recommendations.

3. PROJECT CHARACTERIZATION

3.1. Project Description

The project is located in Dayton, Lyon County, Nevada (Figure 1 – *Vicinity Map*, Appendix A) and consists of constructing approximately 364 one-to-two-story single family residences with associated public streets. The residences are anticipated to be wood framed and supported by standard spread foundations with slab-on-grade flooring. Foundation loads are anticipated to be light.

Street improvements, underground services, and project access for the residential development are to be dedicated and consistent with Lyon County's design standards and in accordance with the materials and workmanship requirements of the Standard Specifications for Public Works Construction (SSPWC). The overall project layout is presented on Figure 2 – *Improvement Plan & Approximate Exploration Locations* (Appendix A).

3.2. Site Conditions

The overall site encompasses an area of approximately 231-acres and is located at a central latitude and longitude of 39.2846°N and -119.5772°E, respectively. The site is bordered by the Traditions Village 2 project to the south and undeveloped land to the north, east, and west. Vegetation across the site is moderate consisting of small and large brush, weeds, and grasses. Cuts and fills are anticipated to approach ± 10-feet and ± 30-feet, respectively. The site is predominantly undeveloped with the exception of excavation and stockpiling operations near the south boundary of the site, a constructed berm on the western boundary of the site, and dirt trails that transect the property. Per Google Earth imagery, the area near the south boundary of the site has been subject to excavation and stockpiling operations since at least June 2003.

3.3. Exploration

3.3.1. Excavating and Sampling

The project was explored in June 2025 by advancing a series of eleven test pits with a track mounted excavator, utilizing a 48-inch bucket. Approximate exploration locations are presented on Figure 2 - *Improvement Plan & Approximate Exploration Locations* and Figure 3 - *Site Map & Approximate Exploration Locations* in Appendix A of this report. Maximum depths of exploration advance extended to 15 feet. Refusal was not encountered. Wood Rodgers' personnel examined and classified soils in the field in general accordance with ASTM D2488 (Description and Identification of Soils). Representative bulk samples were sampled from select layers in the soil profile and placed in sealed plastic bags or buckets and returned to our Reno, Nevada laboratory for testing.

3.3.2. Geophysical Methods

Seismic refraction methods (ReMi ™) were performed to measure shear wave velocity and to establish $V_{S_{100}}$. Shear wave velocity measurements have been relied upon to aid in the determination of an

appropriate Site Class (ASCE 7). Figure B-3 (Appendix B) presents the measured shear wave geophysical profile.

3.4. Sampling, Classification and Reporting

Wood Rodgers' personnel examined and classified soils in the field in general accordance with ASTM D2488 (Description and Identification of Soils). During exploration, representative bulk samples were placed in sealed plastic bags and returned to our Reno, Nevada laboratory for testing. Additional soil classifications, as well as verification of the field classifications, were performed in accordance with ASTM D2487 (Unified Soil Classification System [USCS]) upon completion of laboratory testing as described in the Laboratory Testing section. Logs of the explorations are presented as B-1a through B-1k in Appendix B. The USCS explanatory chart of soil unit symbols and related descriptions has been included as B-2 - Unified Soil Classification and Key to Soil Descriptions.

3.5. Laboratory Testing

Soil testing performed in the Wood Rodgers' laboratory was conducted in general accordance with the standards and methods described in Volume 4.08 (Soil and Rock; Dimension Stone; Geosynthetics) of the ASTM Standards. Samples of significant soil types were analyzed to determine in-situ moisture contents (ASTM D2216), grain size distributions (ASTM D6913), plasticity indices (ASTM D4318), and resistance value (R-Value) (ASTM D2844). Test results were used to classify the soils according to the USCS (ASTM D2487) and to verify the field logs which were then updated.

Test results are presented in Appendix C on C-1a through C-1c. Table 1 also presents a summary of the test data.

Table 1 - Summary of Test Data

Test Hole	Depth (Ft.)	Moisture (%)	%Gravel (+ #4)[1]	% Sand (#4-#200)	%Fines (-#200)	Liquid Limit	Plastic Index	R-Value	USCS
ASTM Standard		D2216	D6913			D4318		D2844	D2487
TP-2	2-5	7.4	49.0	41.1	9.9	30	11	---	GP-GC
TP-5	0-2	4.4	---	---	20.7	---	---	32	SM[2]
TP-6	2-3	4.3	25.9	63.5	10.6	NP	NP	---	SP-SM
TP-9	4-6	4.6	22.6	70.9	6.5	NP	NP	---	SW-SM

Table 1 - Summary of Test Data

Test Hole	Depth (Ft.)	Moisture (%)	%Gravel (+ #4)[1]	% Sand (#4-#200)	%Fines (-#200)	Liquid Limit	Plastic Index	R-Value	USCS
ASTM Standard		D2216	D6913			D4318		D2844	D2487
TP-11	1-4	15.5	1.4	36.2	62.4	30	14	---	CL

[1] Since ASTM D2487 is limited by a maximum particle size of 3", the gradation test data presented is based on a maximum particle size of 3". Larger particles (i.e., 8 to 12" in diameter) if observed in our test holes would be documented on the logs and should be anticipated as part of grading.
[2] Visually classified in accordance with ASTM D2488.

As a courtesy, resistivity, pH, chlorides, oxidation-reduction potential, sulfides and moisture were also tested to aid others in the assessment of potential corrosivity to ductile iron pipe and/or steel reinforcement; refer to Appendix C, C-2 for test methods and results.

Wood Rodgers, Inc. is not a corrosion engineering firm. Therefore, a corrosion engineer or structural engineer knowledgeable in the project steel specifications should be consulted for final assessments of corrosion potential at the site.

3.6. Geologic and General Soil and Groundwater Conditions

Based on the National Geologic Map Database (NGMDB, 2013), shown in Figure 4, the site is mapped in an area by Castor et. al. as Holocene Piedmont alluvial deposits consisting of alluvium of varying age (Qay), Miocene biotite-hornblende andesite flows (Tvba), and extensively disturbed areas (Qx) observed as the excavation and stockpiling operations on the southern boundary of the project site.

The soils encountered in our explorations typically consisted of complex interbedded sands, silts, and clays, as well as poorly graded sandy gravels with varying degrees of fines. Additionally, cobbles and boulders are present in the subsurface profile, typically at depths below 3 feet. Undocumented fill soils were observed from excavation and stockpiling operations near the southern boundary of the site were observed during our investigation. Stockpiles must be processed and qualified before receiving structural improvements.

Groundwater was not encountered in our exploration locations and is anticipated to exist at a depth not expected to affect the proposed improvements. Depth to groundwater may vary based on seasonal changes in precipitation and near-surface seepage.

4. SEISMIC HAZARDS

The International Building Code (IBC) requires that structures assigned to Seismic Design Category D, E, or F be evaluated for the following potential geologic and seismic hazards: surface rupture or displacement due to faulting, slope instability, liquefaction including the potential for seismically induced spreading or lateral flow, and slope instability. The following sections present our discussion and assessments of the stipulated hazards. Discussions regarding total and differential settlement are incorporated with the foundation design considerations.

4.1. Surface Rupture

4.1.1. Evaluation Guidelines

In 1998, the Nevada Earthquake Safety Council formulated guidelines for evaluating potential surface rupture due to faulting. The intent of the guidelines is to provide *a standardized minimum level of investigation for fault rupture in Nevada*; these guidelines have been adopted with the 2018 Northern Nevada Amendments of the IBC. Specifically, the guidelines state that investigation of sites for potential surface rupture or hazards shall be included in all geotechnical investigations. Further, if any Quaternary age surface rupture is mapped or otherwise interpreted to be present on the site, the feature is to be investigated further.

In addition to establishing the minimum level of investigation for fault rupture, the guidelines also offer recommendations for dealing with or mitigating identified hazards, including:

- Holocene active faults (evidence of movement within the past 10,000 years) shall be set-back a minimum distance of 50-feet for occupied structures.
- Late Quaternary (evidence of movement within the past 130,000 years) faults shall not be spanned by any critical facilities (hospitals, schools, fire stations, etc.). The facility under investigation does not meet the requisite requirements to be considered critical.

These guidelines allow for set-back distances to be adjusted by the competent professional. No additional constraints regarding fault-structure location are presented in the guidelines.

4.1.2. Investigation

MyHazards NV interactive fault map was accessed to determine the presence of any mapped features transecting the property. A trace of the Carson Lineament fault is mapped intersecting the northeastern corner and extending approximately 0.4 mi into the property. The fault is described to be of Quaternary age (< 1.8 million years regarding recency of movement) and is not considered to be Holocene nor Late Quaternary active. Therefore, this structure is sufficiently distant and of an age that offsets or additional considerations are not recommended nor presented by the Guidelines for the planned improvements; surface rupture due to the identified structure is considered unlikely. Should the final development plan

place a critical facility, such as a fire station, within this portion of the development, deeper examination of the structure may be required.

4.2. Soil Profile Type Amplification Factors

Seismic design values were determined based on a representative latitude and longitude of 39.2846°N and -119.5772°E, respectively. In accordance with ASCE 7-22 (Table 20.2-1) and the Northern Nevada Amendments of the 2024 IRC, Site Class CD and Seismic Design Category D_1 have been assigned to the project. Per ASCE 7-22, the site's modified Peak Ground Acceleration (PGA_M) to be used for engineering analyses is equal to 0.61g.

4.3. Liquefaction

Liquefaction is a loss of soil shear strength that can occur during a seismic event as excessive pore water pressure between the soil grains is induced by cyclic shear stresses. This phenomenon is limited to poorly consolidated (Standard Penetration Test less than 30, overburden stress corrected shear wave velocity less than 700 fps) clean to silty sand/sandy silt lying below the ground water table (typically less than 50 feet deep). In addition, we are using AASHTO's recommendation of Bray and Sancio (2006) criteria for assessing liquefaction susceptibility in clays and silts which suggests that a soil with a plasticity index less than 12 and a water content to liquid limit ratio greater than 0.85 will be susceptible to liquefaction. Neither of which are evidenced in our site data. Therefore, due to the stiffness of the underlying soil profile and anticipated depth to groundwater, a potential for liquefaction (and therefore lateral spread) does not exist at the project site.

4.4. Seismic Compression

Seismic compression is an accrual of volumetric strains during seismic events in unsaturated soil and is typically confined to poorly compacted engineered fills and Holocene soils. Significant deposits of Holocene soils are not indicated on the geologic map and deep, loose engineered fills are not anticipated, therefore, the settlement potential due to seismic compression is considered negligible.

5. DISCUSSION AND RECOMMENDATIONS

5.1. General Information

- *Conformance with the Geotechnical Report:* The recommendations provided herein, particularly under Earthwork, Structures, Concrete, and Public Improvements are intended to reduce risks of structural distress related to consolidation or expansion of native soils and/or structural fills. These recommendations, along with proper design and construction of the planned structure(s) and associated improvements, work together as a system to improve overall performance. If any aspect of this system is ignored or poorly implemented, the performance of the project will suffer.

- *Clarification of Structural Areas:* Structural areas referred to in this report include all areas of buildings, concrete slabs, asphalt pavements, as well as pads for any minor structures or retaining walls. Areas which extend behind or under rockery or other retaining structures are considered structural zones. In addition, the structural zone shall be considered to extend at a 1:1 (H:V) slope out from the edge of the structural footprint. All compaction requirements presented in this report are relative to ASTM D 1557 (ASTM D Volume 4, 2022).

- *Hazardous Materials:* Any evaluation of the site for the presence of surface or subsurface hazardous substances is beyond the scope of this study. When suspected hazardous substances are encountered during routine geotechnical investigations, they are noted in the exploration logs and reported to the client. No such substances were identified during our exploration.

- *Backfill of Exploration Locations:* Explorations were advanced at the approximate locations shown on the Site Map and Approximate Exploration Locations (Figure 3). Each exploration was backfilled upon completion of the field portion of our study, and the backfill was compacted to the extent possible with the equipment on hand. However, the backfill was not compacted to the requirements presented herein under Grading and Filling. If structures, concrete flatwork, pavement, utilities or other improvements are to be located in the vicinity of any of the test pits, the backfill should be removed and re-compacted in accordance with the requirements contained in the soils report. Failure to properly compact backfill could result in excessive settlement of improvements located over test pits.

- *SWPPP Requirements:* The site-specific Stormwater Pollution Prevention Plan (SWPPP), as required by the State of Nevada, will be the responsibility of the general contractor and/or owner. Recommendations presented herein regarding moisture conditioning are for the benefit of creating a targeted fill behavior. Moisture conditioning recommendations are not intended to direct the contractor in their means and methods for dust and SWPPP control.

- *Public Improvements:* Recommendations for paved improvements in right-of-way areas will be consistent with Standard Specifications for Public Works Construction (SSPWC) and the agency having jurisdiction (AHJ) standards. Driveway recommendations are in general conformance with

AASHTO's Low Volume Road design protocols, the Portland Cement Association (PCA) and American Concrete Institute (ACI) recommendations. Underground utilities will be provided by a variety of public and private companies; trenching and backfill recommendations presented herein are generally consistent with OSHA and the AHJ requirements, respectively.

5.2. Earthwork

5.2.1. Clarification of Geomaterials

Based on materials encountered in our investigation, the following definitions characterize terms utilized in this report:

- Rock fill possesses more than 30-percent retained on the 3/4-inch sieve and may present particles up to 12-inches.
- Fine grained soil possesses more than 40 percent passing the number 200 sieve and exhibits a plasticity index greater than 15.
- Granular soil possesses less than 40 percent passing the number 200 sieve, exhibits a plasticity index less than or equal to 15, and has a maximum particle size less than 6-inches.

It should be noted these definitions have been formulated around anticipated soil behavior and may not coincide with classifications provided by the Unified Soil Classification System.

5.2.2. Clearing and Grubbing

- All vegetation and topsoil are to be cleared and grubbed from structural areas. A minimum stripping depth of 0.3 to 0.5 feet is anticipated.
- Localized deeper areas of clearing may be required in areas of large brush and trees or where large root balls are encountered.
- Vegetation and organic debris should be disposed of offsite or placed in designated non-structural areas.
- If on-site disposal is approved, vegetation could be blended with soil (at a maximum ratio of 1:10 vegetation to soil, by mass) prior to placement in nonstructural fill or landscape areas.
- Organic material should be broken up using a large sheep's foot roller or chipper prior to blending with soil and moisture conditioning.

5.2.3. Undocumented Fill

- Excavation and stockpiling operations near the southern boundary of the site were observed during our investigation. Existing stockpiles must be processed and qualified as granular soil or rock fill before being placed as structural fills.

- Refer to Section 5.2.4 for subgrade preparation requirements for structures to be located in the footprint of the existing excavation and stockpiling operations.

5.2.4. Subgrade Preparation

- To allow for the preparation of subgrade soils, any undocumented fill encountered within the development area should be removed or stockpiled for qualification and later use.

- Any fine-grained soils encountered at structural grade (bottom of footing, roadbed grade, slab subgrade) shall be verified to be greater than 1-foot in thickness prior to removal and replacement with structural fill. If the fine-grained layer is less than 1-foot in thickness, no additional action is required.

- A maximum fill differential of 8-feet below foundation grade shall be observed. To meet this requirement, cut depths may need to be extended within a structure footprint to increase the net fill differential. Based on existing topography, this requirement is anticipated to be localized if present.

- Grade preparation for any fill to be placed adjacent to a slope steeper than 4:1 (H:V) shall include a keyway and excavation of horizontal benches as fill is placed.
    - The keyway should be at least 6-feet wide and extend at least 2-feet in depth below lowest adjacent grade.
    - Benches shall maintain a minimum bench width of 4-feet.
    - Vertical height of bench cuts shall be consistent with what is necessary for the benches to step uniformly up the slope.
    - Benches should be scarified, moisture conditioned and capped with a thin fill lift prior to compaction to facilitate the development of a uniform meld between the in-situ soils and fills.
- Where oversized material (i.e. > 6 in) is present, subgrade shall be moisture conditioned and proof-rolled with a fully loaded water truck prior to placing fill or constructing improvements.

- In-situ granular or fine-grained soils should be scarified for a minimum depth of 12-inches, moisture conditioned to within 3-percent of optimum and compacted to not less than 90-percent of the soil's maximum dry density (ASTM D1557) prior to placing fill or constructing improvements.

- Any resulting void created by removal of oversize during subgrade preparation may be filled with structural fill placed and compacted to 90 percent of the soil's maximum dry density in accordance with ASTM D1557 or lean concrete.

- In all cases, the final subgrade shall be smooth, firm, and relatively unyielding as determined by the testing agencies' qualified representative.

5.2.5. Subgrade Stabilization

- The fine-grained soils encountered within the project limits may tend to pump and or destabilize when moisture content exceeds optimum.
- Care should be taken during grading to ensure precipitation, or construction activities do not lead to an increase in or ponding of water on exposed grade.
- Pumping soils may be scarified and allowed to dry or removed and replaced with a layer of clean, angular, 12-inch minus rock fill or stabilized with a geogrid.
- Subgrade stabilization is a trial-and-error process, and it is recommended that a test section of suitable depth and length be conducted.
- The contractor should propose a stabilization protocol that is consistent with their readily available means and methods, and this proposal presented for review, by the owner, the general contractor, and grading inspector.
- Subgrade stabilization is considered adequate if the subgrade is firm and relatively unyielding (as approved by the engineer) when proof-rolled with a fully loaded water truck.
- Subgrade stabilization may not be required for walkways or private improvements subject solely to foot traffic providing the required compaction levels are achieved.

5.2.6. Mass Grading

- Verification testing of onsite soils to be qualified as structural fill shall be in accordance with ASTM D75, ASTM D6913, and ASTM D4318 and shall meet the requirements of Table 2.
- Based on our explorations, undocumented fill may be used as structural fill tested and verified to meet the granular soil definition.
- Undocumented fill has not been verified for degree of compaction and shall therefore be reworked in accordance with this section.
- Existing fill and native soils generated from cut and meeting the definition of granular soil (Section 5.2.1) may be placed as structural fill within the 1-foot separation zone.
- The site is anticipated to be designed for a cut-fill balance. However, should import be required it should meet the requirements of Table 2.
- Prior to importing material to the site, a submittal verifying import quality shall be received and approved by Wood Rodgers.

Table 2 - Guideline Specification for Import Structural Fill

Sieve Size (ASTM D6913)	Percent by Weight Passing Sieve
6 Inch[1]	100
4 Inch	90 - 100
¾ Inch[2]	50 - 100
No. 200	5 - 40
Maximum Liquid Limit (ASTM D4318)[3]	50
Maximum Plasticity Index (ASTM D4318)[3]	15
Soluble Sulfate Level (ACI 318, Table 4.3.1)	Negligible
R-Value (ASTM D2844)[4]	30 Min.

[1] Pending approval of the means and methods of the contractor, maximum particle size may be increased to 12-inches.

[2] Material presenting more than 30-percent material retained on the ¾" sieve shall be referred to as rockfill. (Section 5.2.1)

[3] Dry Method

[4] Within right-of-way only.

- With the approval of the geotechnical engineer, maximum particle size for the materials presented in Table 2 may be increased to 12-inches. Refer to Section 5.2.7 for rockfill placement requirements.
- An increased maximum particle size to 12-inches will impact the uniformity of trench profiles and trench spoils may need to be screened prior to reuse as trench backfill.
- A nominal maximum particle size of 6-inches is recommended for the final 24-inches of pad fills, to facilitate fine grading and advancing utility and footing trenches.
- Generation of oversized rock, i.e., greater than 6-inches, should be anticipated during mass grading of cut zones and trenching.
- For granular fill generated on-site, material should be excavated, dozed and processed into a uniform stockpile prior to being sampled and tested for material quality prior to acceptance.
- If the site is mass graded cut to fill, without the benefit of selective grading and processing, it is likely some of the soils placed as fill may present clay pockets or zones and regrading could be required.

- Granular or fine-grained soil placed as fill shall be moisture conditioned to within 3-percent of optimum, placed in 12-inch maximum loose lifts, and compacted to not less than 90-percent of the soil's maximum dry density.

- Minimum compaction requirements shall be increased to 95-percent in areas where total fill thickness exceeds 10-feet.

5.2.7. Rockfill Placement and Verification

Soils that are classified as rockfill should be placed and verified in conformance with the following placement procedures.

- Oversize (i.e., rock > 6-inches in least dimension) must be blended and placed in such a manner that: nesting of the rock does not occur, rock is uniformly distributed throughout the fill lift, and voids are uniformly filled with the soil matrix.

- A maximum lift thickness of 12-inches should be observed for 6-inch minus rock fill. A maximum lift thickness of 18-inches should be observed for 12-inch minus rock fill.

5.2.7.a. Rockfill Verification Protocols

- Determine a moisture-density relationship (ASTM D1557 Method C) on the portion of the sample passing the ¾-inch sieve.

- Rockfill shall be placed and compacted with the ¾-inch minus fraction moisture conditioned to at least optimum as determined in accordance with ASTM D1557, Method C.

- Where standard density testing cannot be performed due to oversize material, performance criteria for acceptance of the compacted fill shall be established; otherwise rockfill shall be compacted to not less than 90-percent of the soil's maximum dry density.

- For acceptance based on performance criteria, an initial rolling pattering consisting of at least five single passes with a minimum 20-ton roller (815 Caterpillar "Sheepsfoot" compactor, or equivalent) for mass grading, or five complete passes with hand compactors or pneumatic trench roller in footing trenches is recommended.

- Increase the number of passes as necessary until no notable increase in density can be measured (ASTM D6938, Standard Test Methods for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods) or notable deflection is reduced to negligible.

- Modifications to the rolling pattern will be required with change in percentage of + ¾-inch rock and/or changes in moisture content of the ¾-inch minus portion of the rockfill.

- The established rolling patterns, and estimated percentage of + ¾-inch material, shall be

recorded.

5.2.8. Trenching and Excavations

- OSHA - Regulations amended in Part 1926, Volume 54, Number 209 of the Federal Register (Table B-1, October 31, 1989) require that the temporary sidewall slopes be limited to maintain trench stability. Minimum sidewall slopes and acceptable trench configurations are also presented in the referenced register.
- In some areas of the parcel, oversize material (> 6-inches) will be encountered during trenching and excavations. Excavatability will probably be more difficult in utility trenches where removal of larger sized particles can be difficult within the confines of a trench, and which will likely result in irregular trench widths where boulders or fractured bedrock must be removed.
- Oversize material which may be generated during excavating and trenching may require off-hauling or placement in non-structural areas.
- Open excavations should be protected from flooding.
- Based on the results of our exploration program, it is our opinion that the bulk of the native site soils appear to be predominately Type C, although variations exist.
- All fills should conservatively be considered Type C unless directed otherwise by the contractor's competent individual trained in trench safety.
- Some of the sands present at the site may allow excavations and utility trenches to slough or cave and therefore, must be adequately considered and planned for by the contractor.
- All trenching should be performed and stabilized in accordance with local, state, and OSHA standards. Bank stability is the responsibility of the contractor or contractor's qualified representative who is present at the site, able to observe changes in ground conditions, and has control over personnel and equipment.
- Pipe bedding, initial backfill, and trench backfill shall be consistent with the approved civil and/or utility plans.

5.2.9. Earthwork Testing and Observation

- Verification of subgrade and fills should be performed by a firm that is AMRL accredited in ASTM E329.
- Special inspection of fill soils is required during mass grading of the development; the Special Inspector should be ICC certified in soils or NAQTC certified in Sampling and Density disciplines.
- The special inspector shall verify and document that placement of fill and rockfill are consistent with the Mass Grading (5.2.6) and Rockfill Placement and Verification Requirements (5.2.7).

- Density testing of fills should be in accordance with ASTM D6938 (Standard Test Methods for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods) or ASTM D1556 (Standard Test Method for Density and Unit Weight of Soil in Place by Sand-Cone Method).
- Subgrade should be density tested approximately every 500 square yards.
- Fill should be density tested once for every 1,000 square yards per lift of material placed during mass grading and one test per 300 feet of footing trenches or over-excavation of footings.
- One density test should be performed for each 500 square yards or per each lift for smaller, localized fill zones.
- Full time construction observation is required for mass graded fills and for any rock fill placement.
- The testing frequency should be increased if the contractor is having difficulty achieving and maintaining the required moisture levels.
- Utility bedding and trench backfill should be density tested per the requirements of the governing agency. Typically, agencies prescribe density testing per foot of bedding/backfill thickness, at a frequency of one test between manholes or valves, or one test every 500 lineal feet, including laterals.
- Nonstructural fills should be density tested for every 2,000 yards or for every 2-feet of fill for smaller, localized fill zones.

5.2.10. Embankments

- The surface of any embankment should be compacted to the same percentage compaction as the body of the fill. This may be accomplished by compacting the surface of the embankment as it is constructed or by overbuilding the fill and cutting back to its compacted core.
- The exterior face of embankments should be constructed with an inclination no steeper than 2H:1V.
- Minor variations in slope gradient due to sculpting or landscaping of the slope face should not be considered inconsistent with the recommendations of this report or adverse to the ultimate performance of the global stability of the overall slope.
- Refer to Section 5.6.1 Slopes and Drainage for erosion protection considerations.

5.3. Structures

The following sections have been developed based on the understanding and expectation that the requirements specified in Section 5.2 Earthwork of this report have been met.

5.3.1. Standard Spread Foundations

The following table and supporting statements present design values and considerations for use in the development of standard spread foundation design.

Table 3 - Allowable Foundation Bearing Pressures for Standard Spread Foundations

Loading Condition	Maximum Net Allowable Bearing Pressure (PSF)[1]
Dead Load Plus Full Time Live Load	2,500
Dead Load Plus Live Loads, Plus Transient Wind or Seismic Loads	3,300

[1] Net allowable bearing pressure is that pressure at the base of the footing is in addition to the adjacent overburden pressure.

- For frost protection, footings should be founded at least 1 ½ feet below adjacent outside or unheated interior finish grades.
- Interior footings not located within frost prone areas should be founded at least 12 inches below surrounding ground or 16 inches below slab level for confinement.
- Regardless of loading, individual pad foundations and continuous spread foundations should be at least 18 and 12 inches wide, respectively, or as required by code.
- The minimum footing sizes recommended are based on the ability to develop bearing capacity. Footing dimensions should be determined by the engineer responsible for structural design.
- Lateral loads, such as wind or seismic, may be resisted by passive soil pressure and friction on the bottom of the footing. A coefficient of base friction of 0.45 is typical to the structural fills.
- Design values for active and passive equivalent fluid pressures of 35 and 350 pounds per square foot per foot of depth, respectively, can be utilized.
- When designing for passive pressure, the upper one foot of the soil profile should not be included unless confined by a concrete slab, or pavement.
- The integrity of the foundation support soils shall be maintained until concrete is placed.
- Total post-construction settlement for the structures is anticipated to be on the order of ½-inch, or less.
- Differential settlement between foundations with similar loads and sizes is anticipated to be half of the total settlement across 40-feet.

5.3.2. Retaining Structures

- Recommended lateral earth pressures for consideration in the design of retaining walls and landscaping walls are presented in Table 4.

Table 4 - Lateral Earth Pressures[1]

Condition	Active (psf/f)		Passive (psf/f)		At Rest
	Static	Pseudo-Static	Static	Pseudo-Static	
Level	35	65	350	250	55

[1] Walls retaining sloping backfill or are greater than six feet in exposed height, require specific analyses and design values should be evaluated and presented by the geotechnical engineer.

- Changes in earth pressures due to seismic influences were assessed via the AASHTO LRFD protocol that considers some component of cohesion will be maintained within the backfill.
- In addition, it has been assumed that some displacement is allowable during the design event, and our recommended values have therefore been based on 50% of the USGS' predicted PGA.
- The values presented in Table 4 do not consider hydrostatic pressures or surcharge loading.
- Excessive wall pressures can be developed due to heavy compaction equipment proximate to the wall during backfill placement. Therefore, due care during placement and compaction of backfill is required.
- Backfill behind retaining structures should be granular and compacted to not less than 90 percent of the soils' maximum dry density.
- French drains, a drainage gravel backfill layer wrapped in geotextile such as Mirafi 140 N, or a prefabricated drainage composite should be utilized if buildup of hydrostatic pressure is possible.
- Moisture proofing must be considered for retaining walls facing interior living spaces or where the development of efflorescence is undesirable.
- Site preparation and foundations for retaining structures shall be consistent with Section 5.2 Earthwork and Section 5.3.1 Standard Spread Foundations.
- Walls retaining sloping backfill or are greater than six feet in exposed height, require specific analyses and design values should be evaluated and presented by the Geotechnical Engineer.

5.3.3. Site Drainage

- Adequate surface drainage must be constructed and maintained away from the structures. The permanent finish slopes away from the structure should be constructed to allow water to drain away quickly from and prevent any ponding of water adjacent to the structure per code

requirements. Runoff should be collected within permanent drainage paths that can convey water off the property or to designated collection facilities.

- Foundation and stem wall backfill should be densified to at least 90 percent relative compaction in accordance with the requirements given in the Mass Grading section (5.2.6). Compacting the backfill material decreases permeability and reduces the amount of irrigation and storm water available to enter under floor areas.

5.4. Concrete

The American Concrete Institute (ACI) considers three different exposure classes to address the degree of severity for environmental conditions: freezing and thawing (Exposure Category F), concrete in contact with soil that contains water soluble sulfate ions (Exposure Category S), and Exposure Class W for concrete in contact with water. Exposure categories F and S, and potential mitigation, are discussed in Section 5.4.1.

5.4.1. Materials

The concrete material recommendations vary between Exposure Class F and Exposure Class S. Therefore, those specifying concrete subject to both freezing and thawing and water-soluble sulfate ions should consider the potential exposure conditions for Class F and Class S and select the most appropriate.

5.4.1.a. Exposure Class F (Exterior Slabs-on-Grade)

- The potential exists for some portions of concrete to absorb sufficient water to be saturated prior to freezing (Exposure Class F2).
- Where deicing chemicals are anticipated to be used (civil improvements), exposure Class F3 would be assigned.
- Therefore, as presented in the Standard Specifications for Public Works Construction concrete requirements for Portland cement concrete exposed to freeze-thaw cycles, should include air entrainment (4 – 7%), maximum water: binder ratio of 0.45, and a minimum 28-day compressive strength of 4,000 psi.

5.4.1.b. Exposure Class S

The summary below presents excerpts from ACI and SSPWC. Refer to the referenced standards in their entirety when specifying sulfate resistance exceeding the presented geotechnical or civil considerations.

- Sulfate test results on the native soils yielded results in the S0 negligible range (ACI 318, < 0.10 percent SO_4^{2-} by mass).
- Per the SSPWC, no special concrete provisions are required to address sulfate resistance. Type II cement is recommended for use.

5.4.1.c. Chlorides

- Chemical test results on the native soils presented non-detected chloride ion concentrations (mg/kg).

5.4.2. Construction

- Slabs-on-grade should be supported on a 6-inch, minimum, layer of Type 2, Class B aggregate base layer compacted to not less than 95-percent of the soil's maximum dry density unless subject solely to foot traffic. Concrete slabs-on-grade subject solely to foot traffic should be supported on a 4-inch, minimum, layer of Type 2, Class B aggregate based compacted to not less than 95-percent of the soil's maximum dry density.

- A moisture vapor retarder (Stego Wrap 15 mil) should be considered for slab areas covered by moisture sensitive floor coverings or equipment. Moisture vapor layers should be placed in accordance with the manufacturer's instructions and below the base layer on a properly prepared subgrade.

- All concrete placement and curing should be performed in accordance with procedures outlined by the American Concrete Institute. Special considerations should be given to concrete placed and cured during hot or cold weather conditions.

- The occurrence of concrete shrinkage cracking may be reduced and/or controlled by limiting the amount of water within the mix (water cement ratio of 0.45 or less), the incorporation of crack control joints and proper concrete placing and curing practices including ACI 318 provisions for areas subject to freeze thaw conditions.

- Proper curing, finishing, control joints and reinforcing should be provided to minimize any damage resulting from shrinkage including cracks and slab curling. Joint spacing, locally, is typically on 10-to-12-foot centers for large slabs and no more than five feet for sidewalks.

- Western Nevada is a region with absorptive aggregates and exceptionally low relative humidity. Therefore, concrete flatwork will shrink and curl in a manner which is not typical of many other US regions.

- Proper site preparation and placement of reinforcement are imperative to the performance of slab-on-grade improvements.

- Cracking that occurs within the slab-on-grade floors will often reflect through overlying improvements even if adequate substrate preparation has occurred.

- Control of the rate of moisture loss in concrete slab-on-grade improvements by using curing compounds, fogging, or other suitable means is imperative to protecting the slab from excessive curling.

- Slabs-on-grade will still exhibit some cracking and curling. The occurrence of concrete shrinkage cracks is independent of the soil supporting characteristics.

5.5. Public Improvements

Unless noted otherwise, dedicated improvements shall be designed and constructed in accordance with the approved civil plans, the Standard Specifications for Public Works Construction, and the jurisdiction's standard details.

5.5.1. Slopes and Drainage

- Surface drainage shall be per the approved project Civil design drawings.
- Stability of cut and filled surfaces involves two separate aspects. The first concerns slope stability related to mass wasting, landslides, or the surficial downward movement (or slumping) of soil or rock.
- Cut and fill slopes, with gradients of 2H:1V (horizontal to vertical) or flatter, are suitable for the project soils.
- The specified slope is based on an overall slope average. Localized sculpting of the slope face, resulting in limited minor increases to slope gradient at isolated locations, is considered consistent with the global stability considerations of this report.
- The second aspect of slope stability involves erosion potential which is dependent on numerous factors involving grain size distribution, cohesion, moisture content, slope angle and the velocity of the water or wind across the ground surface.
- Erosion protection should be as indicated on the approved Civil drawings and/or per the jurisdiction's design standards.
- Typically, 2:1 (H:V) slopes require armoring. Slopes steeper than 3:1 (H:V) are typically addressed with a combination of revegetation and localize armoring or landscape retaining walls.
- Temporary (during construction) and permanent (after construction) erosion control will be required for all disturbed areas.
- Brow ditches are recommended above any slopes greater than 10-feet in height and should be incorporated into the overall drainage considerations presented on the civil drawings.
- Provisions for drainage from behind common retaining walls should be considered and presented in the approved civil plans.
- In compliance with all applicable city, county, state and federal regulations the contractor shall prevent dust from being generated during construction, and the contractor shall submit an acceptable dust control plan prior to starting site preparation or earthwork.

5.5.2. Structural Pavement Sections

- Materials and workmanship shall be consistent with the requirements of the jurisdiction and the Standard Specifications for Public Works Construction.
- Table 5 presents the recommended minimum structural pavement sections for the development based on planned use. Minimum sections required by the jurisdictions shall govern if more than specified in Table 6.
- These sections have been developed with the expectation that the requirements of Section 5.2.4 – Subgrade Preparation have been satisfied.
- Depending on final site grading, structural pavement sections may be re-evaluated by the Geotechnical Engineer in consideration of the subgrade R-Value (ASTM D2844 – Standard Test Method for Resistance R-Value and Expansion Pressure of Compacted Soils).

Table 5 - Structural Pavement Sections[1]

Road Type	Pavement Thickness (In.)	Pavement Type[2]	Type II Class B Base Course Thickness (In.)[3]
Local	4	2" Type 3 + Lime / 2" Type 2	6
Collector	5	Type 2 + Lime	8

[1] Per the Standard Specifications for Public Works Construction
[2] Base Course thickness is in addition to structural fill separation requirements presented in Table 2.

- The Contractor should submit a pavement mix design to the Owner or Engineer, for approval, at least five working days prior to paving. When pavement is placed directly adjacent to concrete flatwork, the finish compacted grade of the pavement should be at least ½ of an inch higher than the edge of adjacent concrete surface to allow adequate compaction of the pavement without damaging the concrete.

5.5.3. Pavement Design Life

- Maintenance is mandatory to ensure long-term pavement performance and to meet or exceed the assumed 20-year design life.
- Maintenance refers to any activity performed on the pavement that is intended to preserve its original service life or load-carrying capacity. Examples of maintenance activities include patching, crack or joint sealing, and seal coats. If these maintenance activities are ignored or deferred, premature failure of the pavement will occur.

- Premature failure of asphaltic concrete frequently occurs adjacent to poorly graded ponding areas and/or landscape areas. Failures may occur due to excessive precipitation, irrigation and landscaping water infiltrating into the subgrade soils causing subgrade failure.

- In areas where saturation of the subgrade soils beneath asphaltic pavement may occur, it is strongly recommended the owner/project manager include provisions by design for a subdrain system to eliminate the potential for saturation of subgrade soils. The subdrain system should discharge into a permanent drainage area that will not impede drainage flow to cause the system to back-up and/or clog. Appropriate maintenance procedures should be implemented to ensure the subdrain system does not plug and allow for proper drainage of surface and subsurface water beneath paved areas. Subdrain location and configuration should be evaluated once final grading and landscaping plans have been prepared.

- If the ultimate traffic exceeds the anticipated levels, it may be necessary to reevaluate and overlay the pavement at some time in the future.

- The cost associated with proper maintenance is generally much less than the cost for reconstruction due to the premature failure of the pavement. Therefore, it is strongly recommended the owner/project manager implement a pavement management program.

6. SUPPLEMENTARY SERVICES

- A design level geotechnical report should be prepared once final design grades have been established and reviewed.
- Verification of existing fills may be required.
- Additional exploration (test pits with material testing and/or geophysical surveys) may be warranted where final grade extends beyond the depth of the exploratory test pits.
- An additional investigation of the mapped fault structure may be required if any critical facilities are planned along the lineament.

7. CONSTRUCTION OBSERVATION AND TESTING SERVICES

- The recommendations presented in this report assume that the contractors perform their work as required by the project documents and that owner/project manager provides for sufficient field-testing and construction review during each phase of construction.
- Prior to construction, the owner/project manager should schedule a pre-construction conference including, but not limited to representatives of the owner, architect, civil engineer, the general contractor, earthwork and materials subcontractors, building official, and geotechnical engineer.
- It is the owner's/project manager responsibility to set-up this meeting and contact all responsible parties. The conference will allow parties to review the project plans, specifications, scheduling and recommendations presented in this report, and discuss applicable material quality and mix design requirements.
- Quality control reports should be submitted to the owner/project manager for review and distributed to the appropriate parties. It is essential that any changes or revisions to project plans be provided to Wood Rodgers in a timely fashion to ensure contractor compliance and avoid construction delays or the need to remove completed work.
- During construction, Wood Rodgers Incorporated should have the opportunity to provide sufficient on-site observation of site preparation and grading, over-excavation, fill placement, foundation installation, and paving.

These observations would allow us to document the geotechnical conditions are as anticipated and that the contractor's work meets with the criteria in the approved plans and specifications. Verification of horizontal and vertical control must be provided by whoever was responsible for establishing those boundaries and constructing associated improvements.

8. EXPECTATION OF PERFORMANCE

- The planned residences will incorporate either a standard slab-on-grade foundation with perimeter footings extending to a minimum depth of 18 inches below finished exterior grade.
- In lieu of solely off-hauling and importing, the developer/owner has selected to grade the site using cut to fill practices and selective grading.
- Therefore, the potential exists that soils within various building pads may fall outside the specified limits of Structural Fill.
- This deviation should not be considered a failure to adhere to recommendations presented within this report but should be considered a limitation to mass-grading when a natural, virgin material is used for a fill source.
- These inherent variations should not be considered to comprise a non-conformity with the project specifications unless the Weighted Plasticity (% of material passing the #200 sieve x Plasticity Index) of the weighted structural fill separation layer exceeds 7.5.
- Single family residential construction results in a complex composite of steel, concrete, lumber, and earth. Each element responds differently to loading and consequently cracking and distortion occur.
- Occurrence of cracking or distortion is not in and of itself evidence of the structure failing to meet a reasonable standard or level of performance.
- Repair of unsightly, non-structural, cracks should be considered part of the homeowner maintenance program.
- Cracks that continue to reappear or widen or propagate may be indicative of extenuating issues that require redress.
- Our design protocols and recommended construction testing procedures rely upon ASTM Standards and Guidelines; therefore, any subsequent studies to evaluate completed product or construction practices shall be in accordance with ASTM E 141 AND shall employ the same testing means and methods available at the time of construction.
- Where access or testing limits do not allow continuity in testing methods, a correlation program must be performed that establishes that the testing and evaluation methods employed by the reviewing agency present results consistent with and comparable to the test methods prescribed by this report and employed during construction.
- Failure to follow these prescribed protocols would result in test data being compromised when compared to ASTM standards and requirements.

- In addition, failure to follow the referenced statistical and sampling ASTM assessment protocols would result in a forensic assessment program rife with inconsistencies and variations which would result in the forensic investigation failing to meet the level of precision necessary to accurately evaluate the site conditions.

9. STANDARD LIMITATION CLAUSE

- This report has been prepared in accordance with generally accepted local geotechnical practices.
- The analyses and recommendations submitted are based upon field exploration performed at the specific locations identified and the conditions encountered, as discussed in our report.
- No guarantee or warranty as to the continuity of soil conditions between exploration points is implied or intended.
- Therefore, this report does not reflect soil or water variations that may become evident during the construction period, at which time re-evaluation of the recommendations may be necessary.
- Final plans and specifications should be reviewed by the design engineer responsible for this geotechnical report to determine if they have been prepared in accordance with the recommendations contained in this report prior to submitting to the building department for review.
- It is the owner's/project manager responsibility to provide the plans and specifications to the engineer.
- This report is issued with the understanding that it is the responsibility of the owner or their representative to ensure that the information and recommendations contained herein are brought to the attention of the design team for the project and incorporated into the plans and specifications, and that the necessary steps are taken to see that the contractor and subcontractors carry out such recommendations in the field.
- We recommend our firm be retained to perform construction observation in all phases of the project related to geotechnical factors to document compliance with our recommendations.
- The owner/project manager is responsible for distribution of this geotechnical report to all designers and contractors whose work is related to geotechnical factors.
- It is the contractor’s responsibility for the grading and construction of the designed improvements. This responsibility includes the means, methods, techniques, sequence, and procedures of construction and safety of construction at the site.
- All construction shall conform to the requirements of the most recently adopted version of the Standard Specifications for Public Works Construction and the requirements of the agency having jurisdiction (AHJ).
- Failure to inspect the work shall not relieve the contractor from their obligation to perform sound and reliable work as described herein and as described in the Standard Specifications for Public Works Construction.

- In the event of changes in the design, location, or ownership of the project after presentation of this report, our recommendations should be reviewed and possibly modified by the Geotechnical Engineer.
- If the Geotechnical Engineer is not afforded the privilege of making this recommended review, we can assume no responsibility for misinterpretation or misapplication of our recommendations or their validity in the event changes have been made in the original design concept without our prior review. The engineer makes no other warranties, either expressed or implied, as to the professional advice provided under the terms of this agreement and included in this report.
- This report was prepared by Wood Rodgers, Inc. for the benefit of GF Development, LLC and their duly assigned agents or other responsible parties.
- The material in this report reflects Wood Rodgers' best judgment considering the information available to it at the time of preparation. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties.
- Wood Rodgers accepts no responsibility for damages, if any, suffered by any third party because of decisions made by third parties or actions based on this report without consultation with Wood Rodgers and written approval for such actions.

10. REFERENCES

American Association of State Highway and Transportation Officials (AASHTO), Guide for Design of Pavement Structures, 1993

American Concrete Institute. "318-11: Building Code Requirements for Structural Concrete and Commentary." N.p., n.d. Web. 06 Apr. 2017.

American Society for Testing and Materials (ASTM), 2022, Soil and Rock; Dimension Stone; Geosynthetics, Volume 4.08.

American Society of Civil Engineers (ASCE), "Minimum Design Loads for Buildings and Other Structures (7-22)." 2022

Bowles, J. E., 1996, Foundation Analysis and Design, McGraw Hill. 5th Edition

Castor, S.B., House, P.K., Hudson, D.M., and Henry, C.D., 2013, Geologic Map of the Flowery Peak Quadrangle, Storey and Lyon Counties, Nevada, Nevada Bureau of Mines and Geology (NBMG), Map 180, 1:24,000

International Residential Code 2022 (including Northern Nevada Amendments); International Conference of Building Officials

Koerner, Robert M., 1984, Construction and Geotechnical Methods in Foundation Engineering, McGraw-Hill Book Company

NEHRP (National Earthquake Hazards Reduction Program): Recommended Seismic Provisions for New Buildings and Other Structures. Building Seismic Safety Council, 2009.

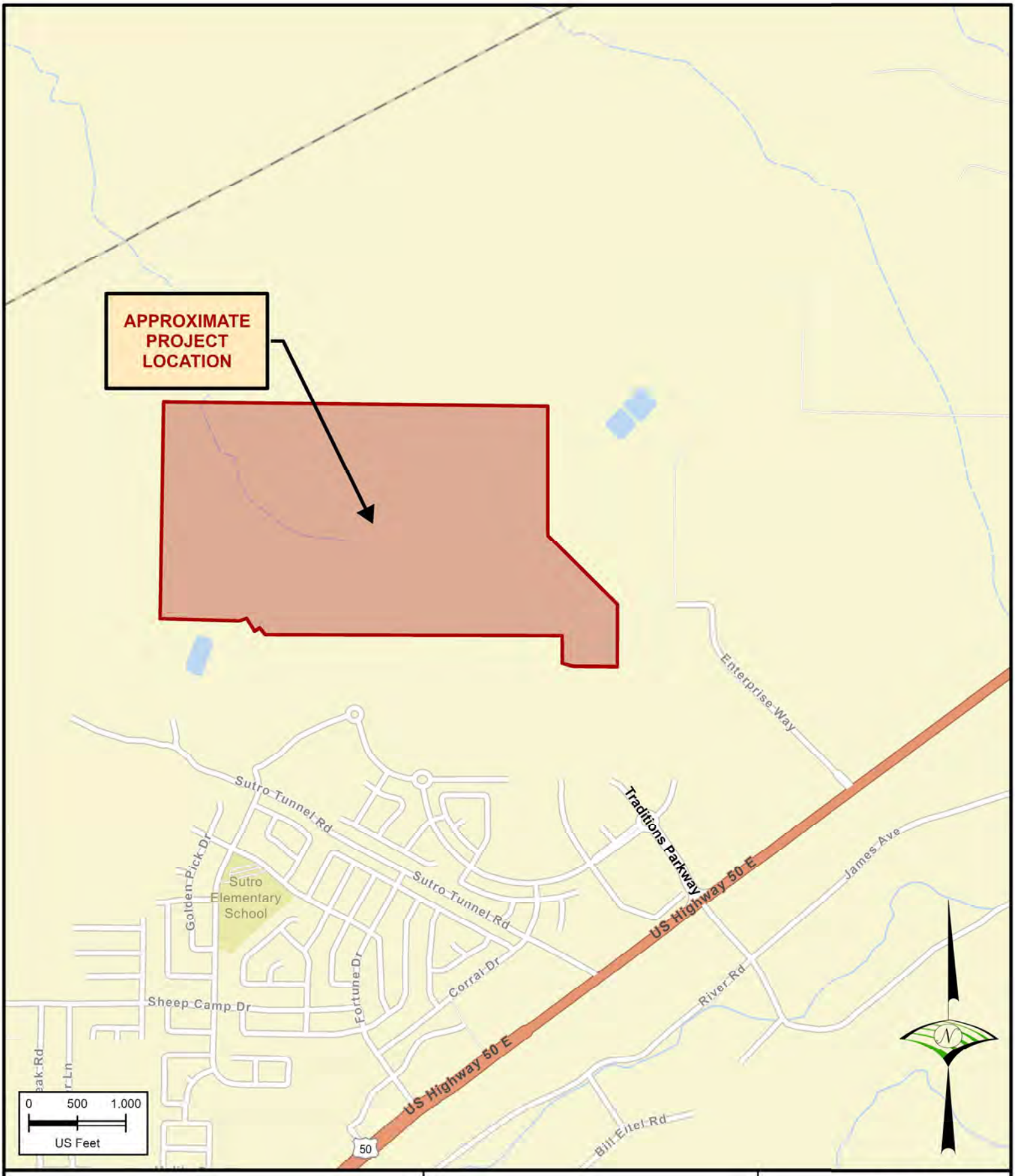
Sowers, George, F., 1979, Introductory Soil Mechanics and Foundations: Geotechnical Engineering

Standard Specifications for Public Works Construction, 2016 (Washoe County, Sparks-Reno, Carson City, Yerington, Nevada).

The Asphalt Institute, 1991, Thickness Design - Asphalt Pavements for Highways and Streets, Manual Series No. 1 (MS-1).

U.S. Quaternary Faults, United States Geological Survey, maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps.

APPENDIX A
FIGURES

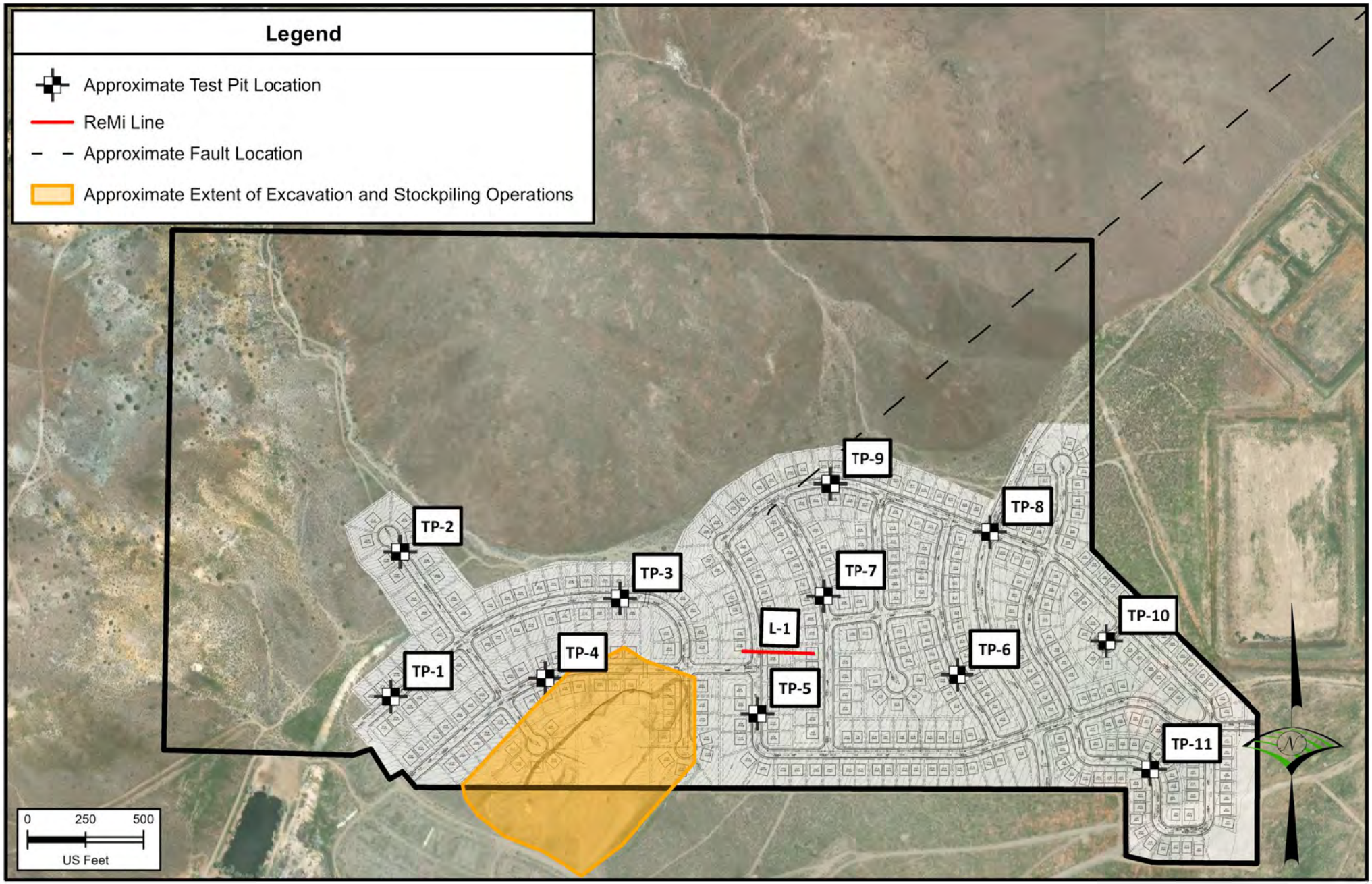


TRADITIONS NORTH
PROJECT NO. 4627001

VICINITY MAP

FIGURE 1

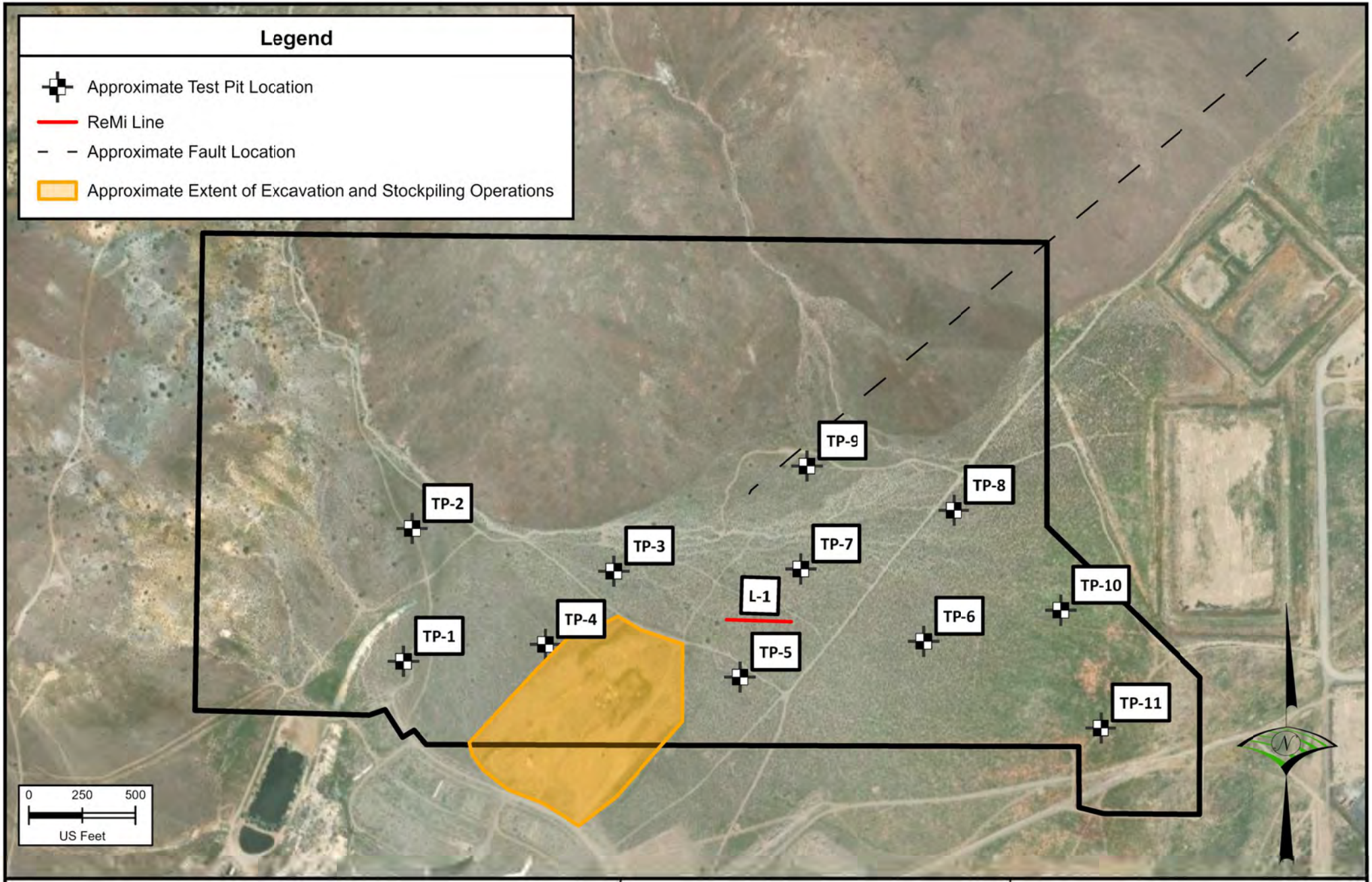
WOOD RODGERS
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME
1361 Corporate Blvd
Reno, NV 89502
Tel: 775.823
Fax: 775.823



TRADITIONS NORTH PROJECT NO. 4627001	IMPROVEMENT PLAN AND APPROXIMATE EXPLORATION LOCATIONS	FIGURE 2

WOOD RODGERS
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME
1361 Corporate Blvd
Reno, NV 89502
Tel: 775.823.4068
Fax: 775.823.4066

709

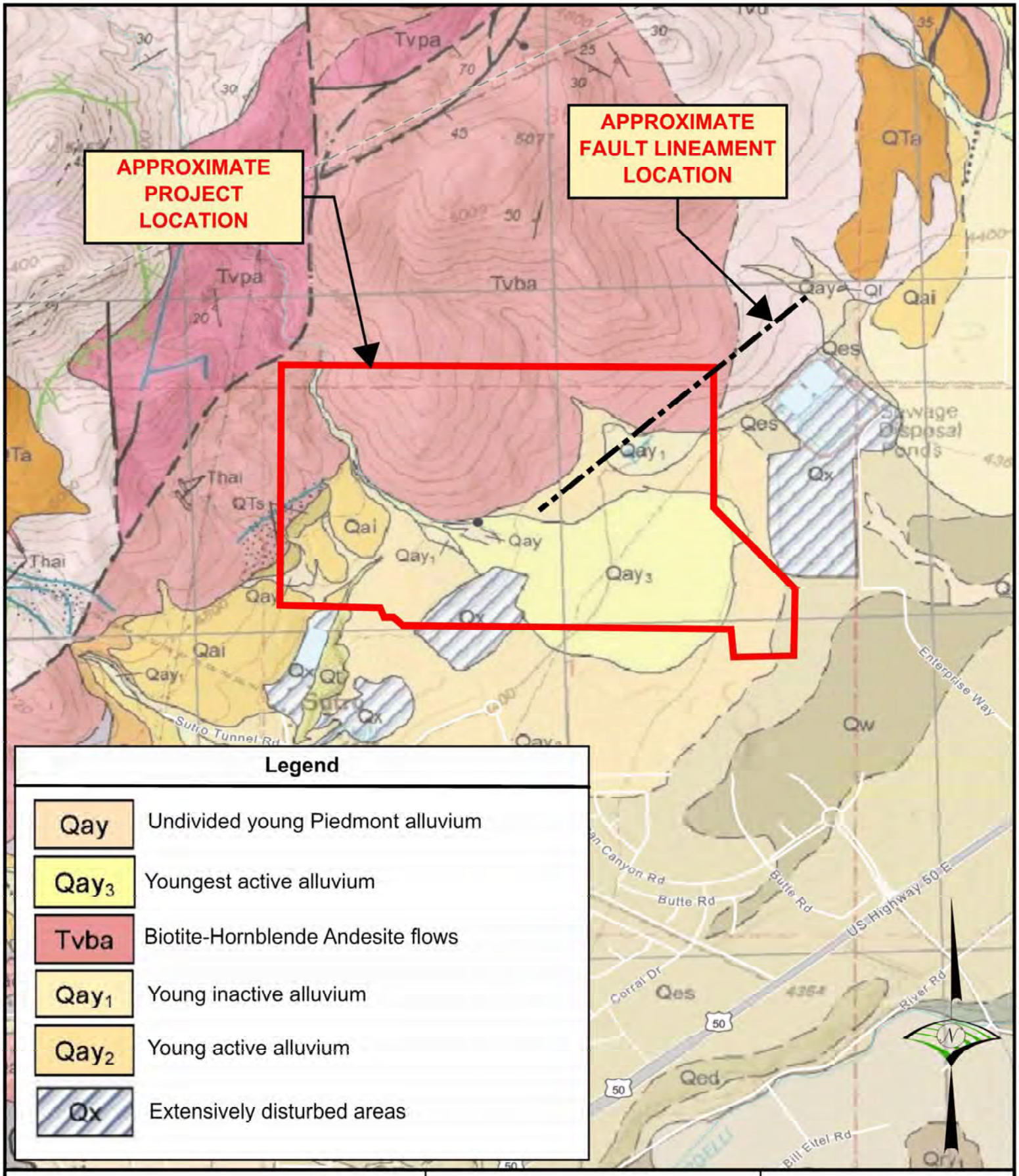


TRADITIONS NORTH
PROJECT NO. 4627001

SITE MAP & APPROXIMATE
EXPLORATION LOCATIONS

FIGURE 3

WOOD RODGERS
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME
1361 Corporate Blvd
Reno, NV 89502
Tel: 775.823.4068
Fax: 775.823.4066



TRADITIONS NORTH PROJECT NO. 4627001	GEOLOGIC MAP	FIGURE 4

WOOD RODGERS
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME
1361 Corporate Blvd
Reno, NV 89502
Tel: 775.823
Fax: 775.823

APPENDIX B
FIELD EXPLORATION

Wood Rodgers Inc.
1361 Corporate Blvd
Reno NV 89521
Telephone: 775-823-4068
Fax: 775-823-4066

TEST PIT NUMBER TP-1

CLIENT GF Development, LLC
PROJECT NAME Traditions North
PROJECT NUMBER 4627001
PROJECT LOCATION Dayton, Lyon County, Nevada
DATE STARTED 6/24/25 **COMPLETED** 6/24/25
GROUND ELEVATION 4,468 feet **TEST PIT SIZE** 48 inches
EXCAVATION CONTRACTOR Sierra View Equipment
GROUND WATER LEVELS:
EXCAVATION METHOD Komatsu PC 228 Excavator
AT TIME OF EXCAVATION --- NO FREE WATER ENCOUNTERED
LOGGED BY Jackson Beadell **CHECKED BY** Joseph Toth
AT END OF EXCAVATION --- NO FREE WATER ENCOUNTERED
NOTES: Elevations: Traditions North Conceptual Grading Plan (PDG, 2025)
AFTER EXCAVATION --- NO FREE WATER ENCOUNTERED

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	R-VALUE	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)
0.0		CLAYEY SAND WITH GRAVEL (SC), medium dense, dry, dark brown, low to medium plasticity	GB 1A									
2.5		SILTY, CLAYEY GRAVEL WITH SAND AND COBBLES (GC-GM), dense, slightly moist, tan, low plasticity Visually Estimated From Stockpile: ~20% cobbles to 6" diameter	GB 1B									
5.0												
7.5		CLAYEY SAND WITH GRAVEL (SC), dense, slightly moist, light brown, low plasticity	GB 1C									
10.0												
12.5		POORLY GRADED GRAVEL WITH SAND AND COBBLES (GP), very dense, dry, tan, nonplastic										

Bottom of Test Pit at 13.0 Feet.

GEOTECH BH COLUMNS - GINT STD US LAB.GDT - 7/16/25 08:11 - \\WOODRODGERS.LOC\PRODUCTIONDATA\JOBS-RENO\JOBS\4627_TRADITIONS_GF_DEV\TRADITIONS_GF_DEV_OA\GEOTECH\GEOTECH\04 GINT\TRADITIONS NORTH.GPJ

Wood Rodgers Inc.
1361 Corporate Blvd
Reno NV 89521
Telephone: 775-823-4068
Fax: 775-823-4066

TEST PIT NUMBER TP-2

CLIENT GF Development, LLC
PROJECT NAME Traditions North
PROJECT NUMBER 4627001
PROJECT LOCATION Dayton, Lyon County, Nevada
DATE STARTED 6/24/25 **COMPLETED** 6/24/25
GROUND ELEVATION 4,504 feet **TEST PIT SIZE** 48 inches
EXCAVATION CONTRACTOR Sierra View Equipment
GROUND WATER LEVELS:
EXCAVATION METHOD Komatsu PC 228 Excavator
AT TIME OF EXCAVATION --- NO FREE WATER ENCOUNTERED
LOGGED BY Jackson Beadell **CHECKED BY** Joseph Toth
AT END OF EXCAVATION --- NO FREE WATER ENCOUNTERED
NOTES: Elevations: Traditions North Conceptual Grading Plan (PDG, 2025)
AFTER EXCAVATION --- NO FREE WATER ENCOUNTERED

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	R-VALUE	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)
0.0		FAT CLAY (CH), stiff, dry, dark brown, high plasticity	GB 2A									
2.5		POORLY GRADED GRAVEL WITH CLAY, SAND, AND COBBLES (GP-GC), very dense, dry, white tan, low to medium plasticity, moderately to strongly cemented	GB 2B					7.4	30	19	11	9.9
5.0		POORLY GRADED GRAVEL WITH SILT, SAND, AND COBBLES (GP-GM), very dense, dry to slightly moist, light tan brown, nonplastic										
7.5			GB 2C									
10.0		Visually Estimated From Stockpile: ~30% cobbles to 6" diameter ~10% oversize to 18" diameter										
12.5												
15.0		Bottom of Test Pit at 15.0 Feet.										

GEOTECH BH COLUMNS - GINT STD US LAB.GDT - 7/16/25 08:11 - \\WOODRODGERS.LOC\PRODUCTIONDATA\JOBS-RENO\JOBS\4627_TRADITIONS_GF_DEV\TRADITIONS_GF_DEV_OA\GEOTECH\GEOTECH\04 GINT\TRADITIONS NORTH.GPJ

Wood Rodgers Inc.
1361 Corporate Blvd
Reno NV 89521
Telephone: 775-823-4068
Fax: 775-823-4066

TEST PIT NUMBER TP-3

CLIENT GF Development, LLC
PROJECT NAME Traditions North
PROJECT NUMBER 4627001
PROJECT LOCATION Dayton, Lyon County, Nevada
DATE STARTED 6/24/25 **COMPLETED** 6/24/25
GROUND ELEVATION 4,459 feet **TEST PIT SIZE** 48 inches
EXCAVATION CONTRACTOR Sierra View Equipment
GROUND WATER LEVELS:
EXCAVATION METHOD Komatsu PC 228 Excavator
AT TIME OF EXCAVATION --- NO FREE WATER ENCOUNTERED
LOGGED BY Jackson Beadell **CHECKED BY** Joseph Toth
AT END OF EXCAVATION --- NO FREE WATER ENCOUNTERED
NOTES: Elevations: Traditions North Conceptual Grading Plan (PDG, 2025)
AFTER EXCAVATION --- NO FREE WATER ENCOUNTERED

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	R-VALUE	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)
0.0		CLAYEY SAND WITH GRAVEL (SC), medium dense, dry, dark brown, low to medium plasticity	GB 3A									
2.5		POORLY GRADED SAND WITH SILT AND GRAVEL (SP-SM), very dense, dry to slightly moist, light tan brown, nonplastic										
5.0												
7.5			GB 3B									
10.0												
12.5												

Bottom of Test Pit at 13.5 Feet.

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Wood Rodgers Inc.
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Fax: 775-823-4066

TEST PIT NUMBER TP-4

CLIENT GF Development, LLC
PROJECT NAME Traditions North
PROJECT NUMBER 4627001
PROJECT LOCATION Dayton, Lyon County, Nevada
DATE STARTED 6/24/25 **COMPLETED** 6/24/25
GROUND ELEVATION 4,464 feet **TEST PIT SIZE** 48 inches
EXCAVATION CONTRACTOR Sierra View Equipment
GROUND WATER LEVELS:
EXCAVATION METHOD Komatsu PC 228 Excavator
AT TIME OF EXCAVATION --- NO FREE WATER ENCOUNTERED
LOGGED BY Jackson Beadell **CHECKED BY** Joseph Toth
AT END OF EXCAVATION --- NO FREE WATER ENCOUNTERED
NOTES: Elevations: Traditions North Conceptual Grading Plan (PDG, 2025)
AFTER EXCAVATION --- NO FREE WATER ENCOUNTERED

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	R-VALUE	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)
0.0		CLAYEY SAND (SC), medium dense, dry, medium brown, low plasticity	GB 4A									
2.5		POORLY GRADED SAND WITH SILT AND GRAVEL (SP-SM), dense, dry to slightly moist, tan, nonplastic										
		Sloughing from 2' - 7'										
5.0												
7.5			GB 4B									
10.0												
12.5												
15.0		Bottom of Test Pit at 15.0 Feet.										

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Wood Rodgers Inc.
1361 Corporate Blvd
Reno NV 89521
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Fax: 775-823-4066

TEST PIT NUMBER TP-5

CLIENT GF Development, LLC
PROJECT NAME Traditions North
PROJECT NUMBER 4627001
PROJECT LOCATION Dayton, Lyon County, Nevada
DATE STARTED 6/24/25 **COMPLETED** 6/24/25
GROUND ELEVATION 4,421 feet **TEST PIT SIZE** 48 inches
EXCAVATION CONTRACTOR Sierra View Equipment
GROUND WATER LEVELS:
EXCAVATION METHOD Komatsu PC 228 Excavator
AT TIME OF EXCAVATION --- NO FREE WATER ENCOUNTERED
LOGGED BY Jackson Beadell **CHECKED BY** Joseph Toth
AT END OF EXCAVATION --- NO FREE WATER ENCOUNTERED
NOTES: Elevations: Traditions North Conceptual Grading Plan (PDG, 2025)
AFTER EXCAVATION --- NO FREE WATER ENCOUNTERED

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	R-VALUE	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)
0.0		CLAYEY SAND (SC), medium dense, dry, medium brown, low plasticity	GB 5A									
2.5		SILTY SAND WITH GRAVEL AND COBBLES (SM), dense, dry, light brown, nonplastic										
5.0			GB 5B									20.7
7.5		Visually Estimated From Stockpile: ~5% cobbles to 6" diameter <5% oversize to 18" diameter										
10.0												
12.5												
15.0		Bottom of Test Pit at 15.0 Feet.										

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Wood Rodgers Inc.
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TEST PIT NUMBER TP-6

CLIENT GF Development, LLC
PROJECT NAME Traditions North
PROJECT NUMBER 4627001
PROJECT LOCATION Dayton, Lyon County, Nevada
DATE STARTED 6/24/25 **COMPLETED** 6/24/25
GROUND ELEVATION 4,384 feet **TEST PIT SIZE** 48 inches
EXCAVATION CONTRACTOR Sierra View Equipment
GROUND WATER LEVELS:
EXCAVATION METHOD Komatsu PC 228 Excavator
AT TIME OF EXCAVATION --- NO FREE WATER ENCOUNTERED
LOGGED BY Jackson Beadell **CHECKED BY** Joseph Toth
AT END OF EXCAVATION --- NO FREE WATER ENCOUNTERED
NOTES: Elevations: Traditions North Conceptual Grading Plan (PDG, 2025)
AFTER EXCAVATION --- NO FREE WATER ENCOUNTERED

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	R-VALUE	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)
0.0		POORLY GRADED SAND WITH SILT AND GRAVEL (SP-SM), medium dense to dense, dry, light brown, nonplastic, gravel/sand interbeds										
2.5			GB 6A					4.3	NP	NP	NP	10.6
5.0			GB 6B									
7.5												
10.0												
12.5												
15.0		Bottom of Test Pit at 15.0 Feet.										

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Wood Rodgers Inc.
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Reno NV 89521
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Fax: 775-823-4066

TEST PIT NUMBER TP-7

CLIENT GF Development, LLC
PROJECT NAME Traditions North
PROJECT NUMBER 4627001
PROJECT LOCATION Dayton, Lyon County, Nevada
DATE STARTED 6/24/25 **COMPLETED** 6/24/25
GROUND ELEVATION 4,414 feet **TEST PIT SIZE** 48 inches
EXCAVATION CONTRACTOR Sierra View Equipment
GROUND WATER LEVELS:
EXCAVATION METHOD Komatsu PC 228 Excavator
AT TIME OF EXCAVATION --- NO FREE WATER ENCOUNTERED
LOGGED BY Jackson Beadell **CHECKED BY** Joseph Toth
AT END OF EXCAVATION --- NO FREE WATER ENCOUNTERED
NOTES: Elevations: Traditions North Conceptual Grading Plan (PDG, 2025)
AFTER EXCAVATION --- NO FREE WATER ENCOUNTERED

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	R-VALUE	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)
0.0		POORLY GRADED SAND WITH SILT AND GRAVEL (SP-SM), dense, dry, gray tan, nonplastic	GB 7A									
2.5												
5.0												
7.5		SILTY, CLAYEY GRAVEL WITH SAND (GC-GM), dense, slightly moist, light brown, low plasticity										
10.0			GB 7B									

Bottom of Test Pit at 11.5 Feet.

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Wood Rodgers Inc.
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Telephone: 775-823-4068
Fax: 775-823-4066

TEST PIT NUMBER TP-8

CLIENT GF Development, LLC
PROJECT NAME Traditions North
PROJECT NUMBER 4627001
PROJECT LOCATION Dayton, Lyon County, Nevada
DATE STARTED 6/24/25 **COMPLETED** 6/24/25
GROUND ELEVATION 4,384 feet **TEST PIT SIZE** 48 inches
EXCAVATION CONTRACTOR Sierra View Equipment
GROUND WATER LEVELS:
EXCAVATION METHOD Komatsu PC 228 Excavator
AT TIME OF EXCAVATION --- NO FREE WATER ENCOUNTERED
LOGGED BY Jackson Beadell **CHECKED BY** Joseph Toth
AT END OF EXCAVATION --- NO FREE WATER ENCOUNTERED
NOTES: Elevations: Traditions North Conceptual Grading Plan (PDG, 2025)
AFTER EXCAVATION --- NO FREE WATER ENCOUNTERED

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	R-VALUE	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)
0.0		POORLY GRADED SAND WITH SILT (SP-SM), medium dense, dry, brown, nonplastic										
2.5			GB 8A									
5.0												
		SILTY, CLAYEY SAND (SC-SM), medium dense, dry, light tan, low plasticity										
7.5			GB 8B									
		POORLY GRADED SAND WITH SILT (SP-SM), medium dense to dense, dry, light brown, nonplastic										
10.0			GB 8C									
12.5												

Bottom of Test Pit at 13.0 Feet.

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Wood Rodgers Inc.
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Reno NV 89521
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Fax: 775-823-4066

TEST PIT NUMBER TP-9

CLIENT GF Development, LLC
PROJECT NAME Traditions North
PROJECT NUMBER 4627001
PROJECT LOCATION Dayton, Lyon County, Nevada
DATE STARTED 6/24/25 **COMPLETED** 6/24/25
GROUND ELEVATION 4,407 feet **TEST PIT SIZE** 48 inches
EXCAVATION CONTRACTOR Sierra View Equipment
GROUND WATER LEVELS:
EXCAVATION METHOD Komatsu PC 228 Excavator
AT TIME OF EXCAVATION --- NO FREE WATER ENCOUNTERED
LOGGED BY Jackson Beadell **CHECKED BY** Joseph Toth
AT END OF EXCAVATION --- NO FREE WATER ENCOUNTERED
NOTES: Elevations: Traditions North Conceptual Grading Plan (PDG, 2025)
AFTER EXCAVATION --- NO FREE WATER ENCOUNTERED

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	R-VALUE	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)
0.0		SILTY SAND (SM), medium dense, dry, medium brown, nonplastic	GB 9A									
2.5		WELL GRADED SAND WITH SILT AND GRAVEL (SW-SM), dense, dry, light brown, nonplastic										
5.0			GB 9B					4.6	NP	NP	NP	6.5
7.5		CLAYEY SAND WITH GRAVEL (SC), dense, dry, light brown, medium plasticity	GB 9C									
10.0		POORLY GRADED GRAVEL WITH SAND (GP), very dense, dry, light brown, nonplastic										

Bottom of Test Pit at 11.5 Feet.

GEOTECH BH COLUMNS - GINT STD US LAB.GDT - 7/16/25 08:11 - \\WOODRODGERS.LOC\PRODUCTIONDATA\JOBS-RENO\JOBS\4627_TRADITIONS_GF_DEV\TRADITIONS_GF_DEV_OA\GEOTECH\GEOTECH\04 GINT\TRADITIONS NORTH.GPJ

Wood Rodgers Inc.
1361 Corporate Blvd
Reno NV 89521
Telephone: 775-823-4068
Fax: 775-823-4066

TEST PIT NUMBER TP-10

CLIENT GF Development, LLC
PROJECT NAME Traditions North
PROJECT NUMBER 4627001
PROJECT LOCATION Dayton, Lyon County, Nevada
DATE STARTED 6/24/25 **COMPLETED** 6/24/25
GROUND ELEVATION 4,368 feet **TEST PIT SIZE** 48 inches
EXCAVATION CONTRACTOR Sierra View Equipment
GROUND WATER LEVELS:
EXCAVATION METHOD Komatsu PC 228 Excavator
AT TIME OF EXCAVATION --- NO FREE WATER ENCOUNTERED
LOGGED BY Jackson Beadell **CHECKED BY** Joseph Toth
AT END OF EXCAVATION --- NO FREE WATER ENCOUNTERED
NOTES: Elevations: Traditions North Conceptual Grading Plan (PDG, 2025)
AFTER EXCAVATION --- NO FREE WATER ENCOUNTERED

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	R-VALUE	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)
0.0		SILTY SAND (SM), medium dense, dry to slightly moist, medium brown, nonplastic										
2.5			GB 10A									
5.0		CLAYEY SAND (SC), medium dense, slightly moist, medium brown, low plasticity										
7.5			GB 10B									
10.0		Bottom of Test Pit at 11.8 Feet.										

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Wood Rodgers Inc.
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Fax: 775-823-4066

TEST PIT NUMBER TP-11

CLIENT GF Development, LLC
PROJECT NAME Traditions North
PROJECT NUMBER 4627001
PROJECT LOCATION Dayton, Lyon County, Nevada
DATE STARTED 6/24/25 **COMPLETED** 6/24/25
GROUND ELEVATION 4,360 feet **TEST PIT SIZE** 48 inches
EXCAVATION CONTRACTOR Sierra View Equipment
GROUND WATER LEVELS:
EXCAVATION METHOD Komatsu PC 228 Excavator
AT TIME OF EXCAVATION --- NO FREE WATER ENCOUNTERED
LOGGED BY Jackson Beadell **CHECKED BY** Joseph Toth
AT END OF EXCAVATION --- NO FREE WATER ENCOUNTERED
NOTES: Elevations: Traditions North Conceptual Grading Plan (PDG, 2025)
AFTER EXCAVATION --- NO FREE WATER ENCOUNTERED

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	R-VALUE	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)
0.0		SANDY LEAN CLAY (CL), stiff, dry, gray tan, medium plasticity										
2.5			GB 11A					15.5	30	16	14	62.4
5.0		LEAN CLAY TO FAT CLAY (CL-CH), very stiff, dry, medium brown, medium to high plasticity	GB 11B									
7.5		POORLY GRADED SAND (SP), medium dense, dry, light gray, nonplastic										
10.0		Sloughing from 7' - 12'										

Bottom of Test Pit at 12.0 Feet.

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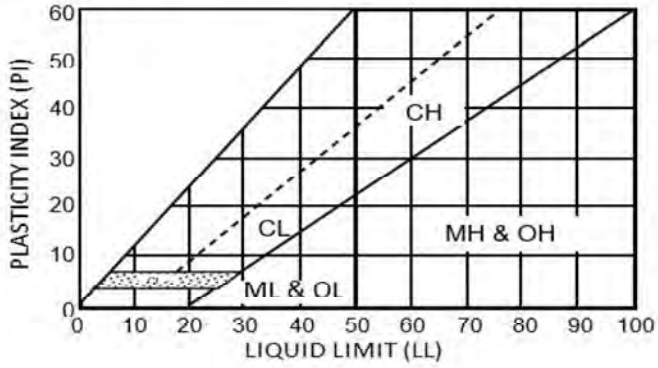
MAJOR DIVISION				TYPICAL NAMES	
COARSE-GRAINED SOILS MORE THAN HALF IS COARSER THAN NO. 200 SIEVE	GRAVEL MORE THAN HALF COARSE FRACTION IS LARGER THAN NO. 4 SIEVE	CLEAN SANDS WITH LITTLE OR NO FINES		GW	WELL GRADED GRAVELS WITH OR WITHOUT SAND, LITTLE OR NO FINES
				GP	POORLY GRADED GRAVELS WITH OR WITHOUT SAND, LITTLE OR NO FINES
		GRAVELS WITH OVER 12% FINES		GM	SILTY GRAVELS, SILTY GRAVELS WITH SAND
				GC	CLAYEY GRAVELS, CLAYEY GRAVELS WITH SAND
	SAND MORE THAN HALF COARSE FRACTION IS SMALLER THAN NO. 4 SIEVE	CLEAN SANDS WITH LITTLE OR NO FINES		SW	WELL GRADED SANDS WITH OR WITHOUT GRAVEL, LITTLE OR NO FINES
				SP	POORLY GRADED SAND WITH OR WITHOUT GRAVEL, LITTLE OR NO FINES
		SANDS WITH OVER 12% FINES		SM	SILTY SANDS WITH OR WITHOUT GRAVEL
				SC	CLAYEY SANDS WITH OR WITHOUT GRAVEL
FINE-GRAINED SOILS MORE THAN HALF IS FINER THAN NO. 200 SIEVE	SILT AND CLAY LIQUID LIMIT 50% OR LESS			ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTS WITH SANDS AND GRAVELS
				CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY CLAYS WITH SANDS AND GRAVELS, LEAN CLAYS
				OL	ORGANIC SILTS OR CLAYS OF LOW PLASTICITY
	SILT AND CLAY LIQUID LIMIT GREATER THAN 50%			MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SANDY OR SILTY SOLID, ELASTIC SILTS
				CH	INORGANIC CLAYS OR HIGH PLASTICITY, FAT CLAYS
				OH	ORGANIC SILTS OR CLAYS MEDIUM TO HIGH PLASTICITY
HIGHLY ORGANIC SOILS				PT	PEAT AND OTHER HIGHLY ORGANIC SOILS



CONSISTENCY		RELATIVE DENSITY	
SILTS & CLAYS	SPT BLOW* COUNTS (N)	SANDS & GRAVELS	SPT BLOW* COUNTS (N)
VERY SOFT	0 - 2	VERY LOOSE	0 - 4
SOFT	3 - 4	LOOSE	5 - 10
MEDIUM STIFF	5 - 8	MD DENSE	11 - 30
STIFF	9 - 15	DENSE	31 - 50
VERY STIFF	16 - 30	VERY DENSE	50 +
HARD	30 +		

* The Standard Penetration Resistance (N) In blows per foot is obtained by the ASTM D1586 procedure using 2" O.D., 1 3/8" I.D. samplers.

PLASTICITY DESCRIPTIONS			
DESCRIPTION	RANGE	DESCRIPTION	RANGE
NONPLASTIC	<5	MEDIUM	10-20
LOW	< 10	MEDIUM-HIGH	15 - 25
LOW-MEDIUM	5 - 15	HIGH	>25

DESCRIPTION OF ESTIMATED PERCENTAGES OF GRAVEL, SAND, AND FINES	
TRACE	Particles are present but est. < 5%
FEW	5% - 10%
LITTLE	15% - 20%
SOME	30% - 45%
MOSTLY	50% - 100%

DEFINITIONS OF SOIL FRACTIONS	
SOIL COMPONENT	PARTICLE SIZE RANGE
BOULDERS	> 12 INCHES
COBBLES	3 to 12 Inches
GRAVEL	3 IN. TO NO. 4 SIEVE
COARSE GRAVEL	3 IN. TO 3/4 IN.
FINE GRAVEL	3/4 IN. TO NO. 4 SIEVE
SAND	NO. 4 TO NO. 200
COARSE SAND	NO. 4 TO NO. 10
MEDIUM SAND	NO. 10 TO NO. 40
FINE SAND	NO. 40 TO NO. 200
FINES (SILT OR CLAY)	MINUS NO. 200 SIEVE

NOTE: Percentages are presented within soil description for soil horizon with laboratory tested soil samples.

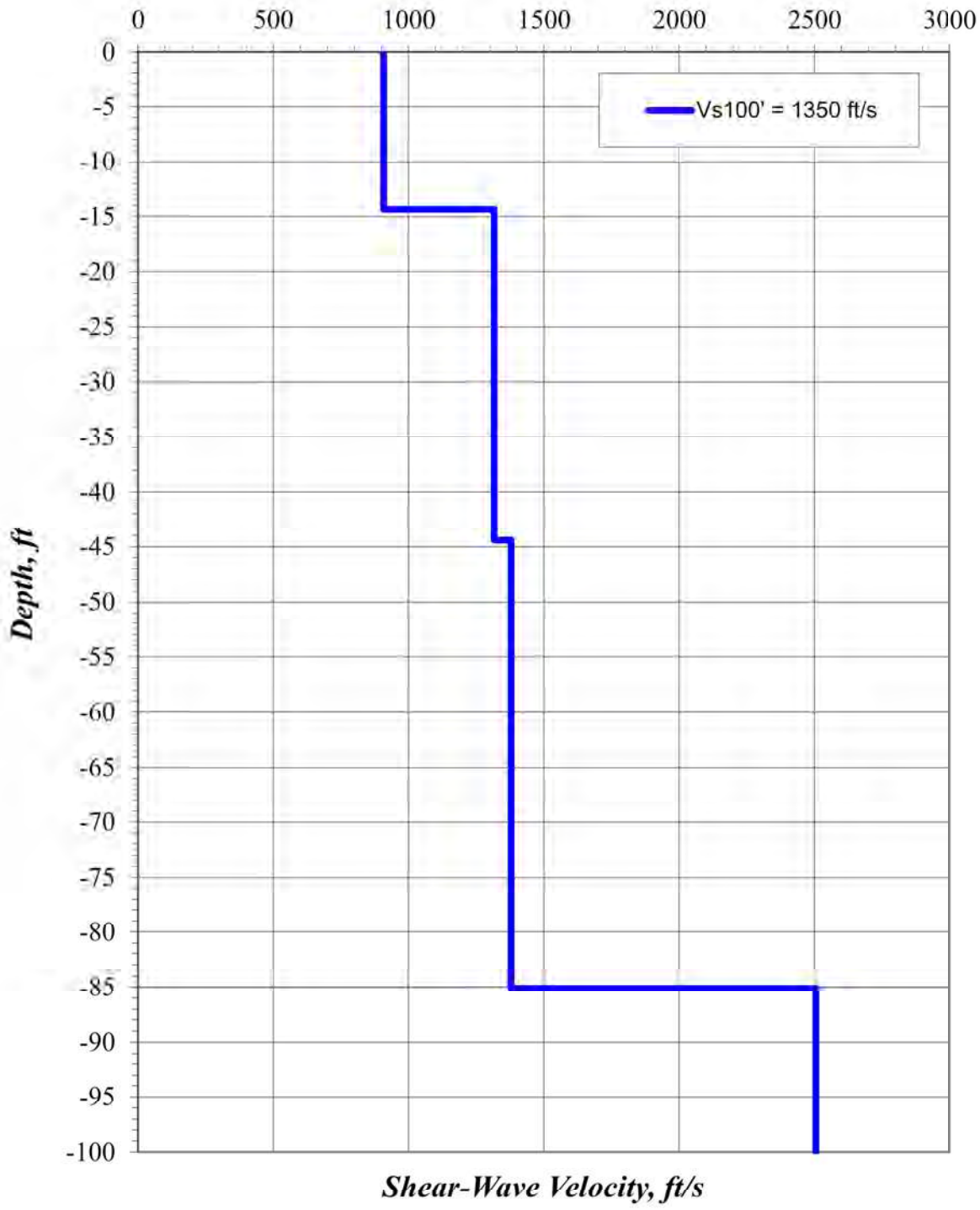
TRADITIONS NORTH
PROJECT NO. 4627001

UNIFIED SOIL CLASSIFICATION AND KEY TO SOIL DESCRIPTIONS

B-2

WOOD RODGERS
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME
1361 Corporate Blvd
Reno, NV 89502
Tel: 775.823
Fax: 775.823

Traditions North, 300': Vs Model



TRADITIONS NORTH PROJECT NO. 4627001	S-WAVE REMI RESULTS	B-3

WOOD RODGERS
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME
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Reno, NV 89502
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APPENDIX C
LABORATORY TEST RESULTS

Wood Rodgers Inc.
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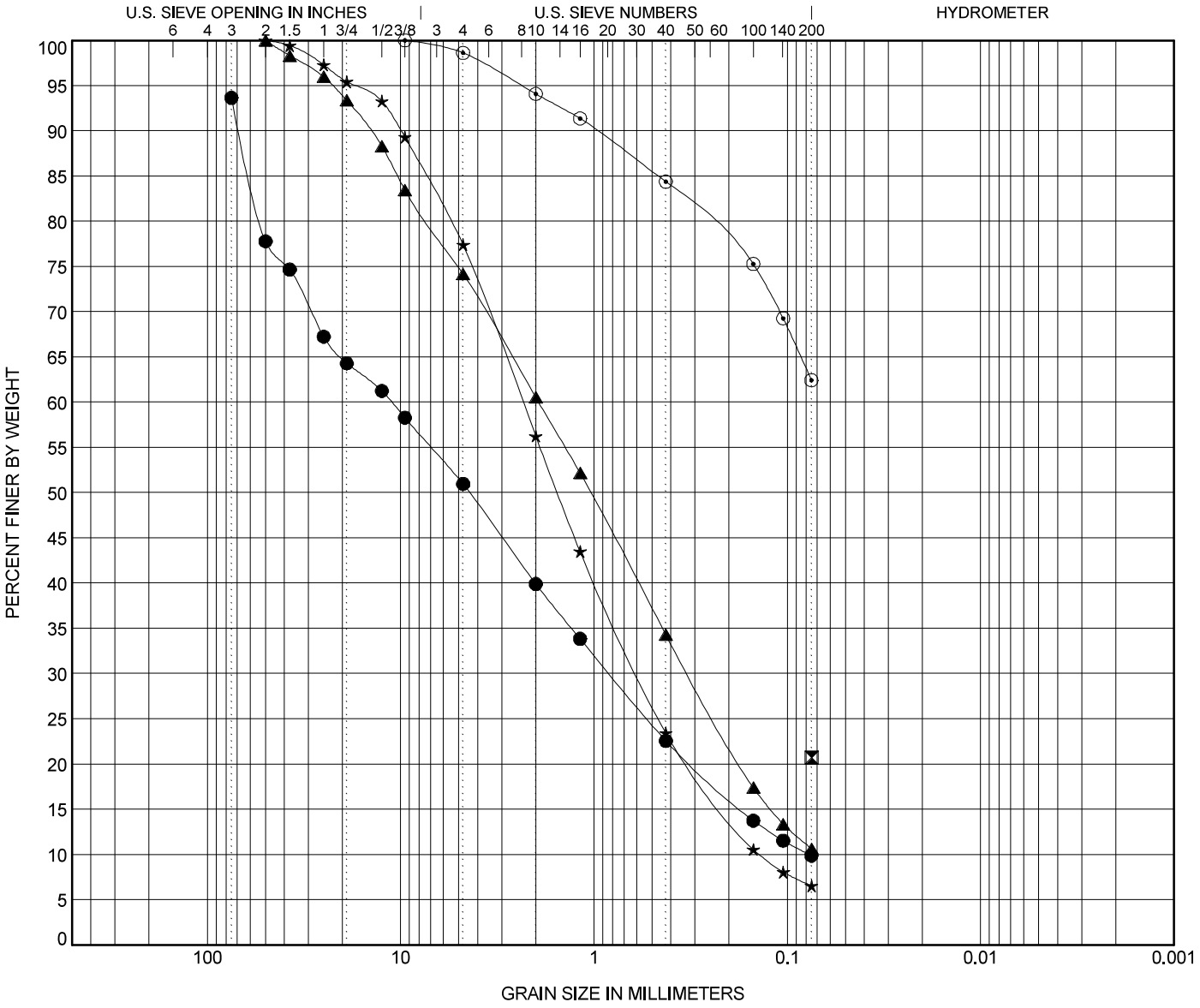
Telephone: 775-823-4068
Fax: 775-823-4066

GRAIN SIZE DISTRIBUTION

CLIENT GF Development, LLC **PROJECT NAME** Traditions North

PROJECT NUMBER 4627001 **PROJECT LOCATION** Dayton, Lyon County, Nevada



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	TEST PIT	DEPTH	Classification	LL	PL	PI	Cc	Cu
●	TP-2	2.0	POORLY GRADED GRAVEL with CLAY and SAND(GP-GC)	30	19	11	0.81	144.48
⊠	TP-5	5.0	SILTY SAND with GRAVELS and COBBLES (SM) (ASTM D2488)					
▲	TP-6	2.0	POORLY GRADED SAND with SILT and GRAVEL(SP-SM)	NP	NP	NP	0.79	27.93
★	TP-9	4.0	WELL-GRADED SAND with SILT and GRAVEL(SW-SM)	NP	NP	NP	1.09	16.79
⊙	TP-11	1.0	SANDY LEAN CLAY(CL)	30	16	14		

	TEST PIT	DEPTH	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	TP-2	2.0	75	11.142	0.834	0.077	42.7	41.1	9.9	
⊠	TP-5	5.0	0.075						20.7	
▲	TP-6	2.0	50	1.935	0.326		25.8	63.5	10.6	
★	TP-9	4.0	50	2.331	0.594	0.139	22.6	70.9	6.5	
⊙	TP-11	1.0	9.5				1.4	36.2	62.4	

GRAIN SIZE DEPTH - GINT STD US LAB.GDT - 7/16/25 08:06 - \\WOODRODGERS.LOC\PRODUCTIONDATA\JOBS-RENO\JOBS\4627_TRADITIONS_GF_DEV\TRADITIONS_GF_DEV_OA\GEOTECH\GEOTECH\04 GINT\TRADITIONS NORTH.GPJ

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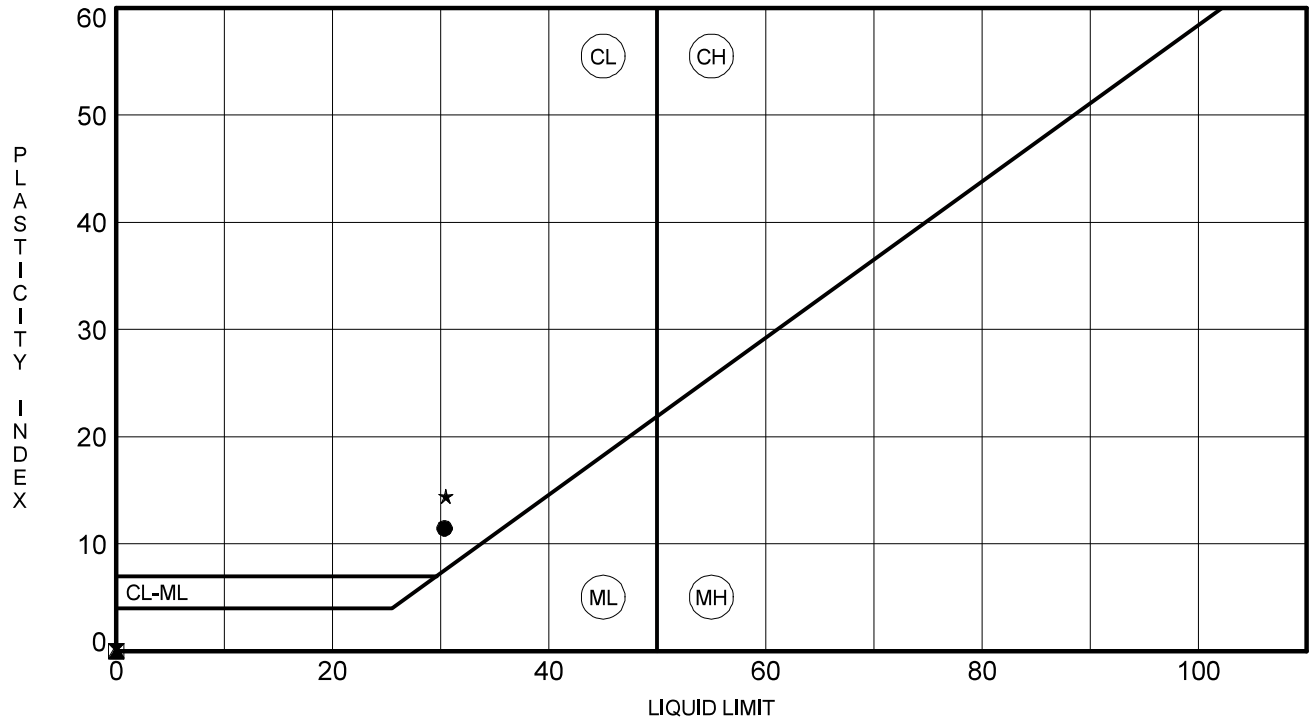
Telephone: 775-823-4068
Fax: 775-823-4066

ATTERBERG LIMITS' RESULTS

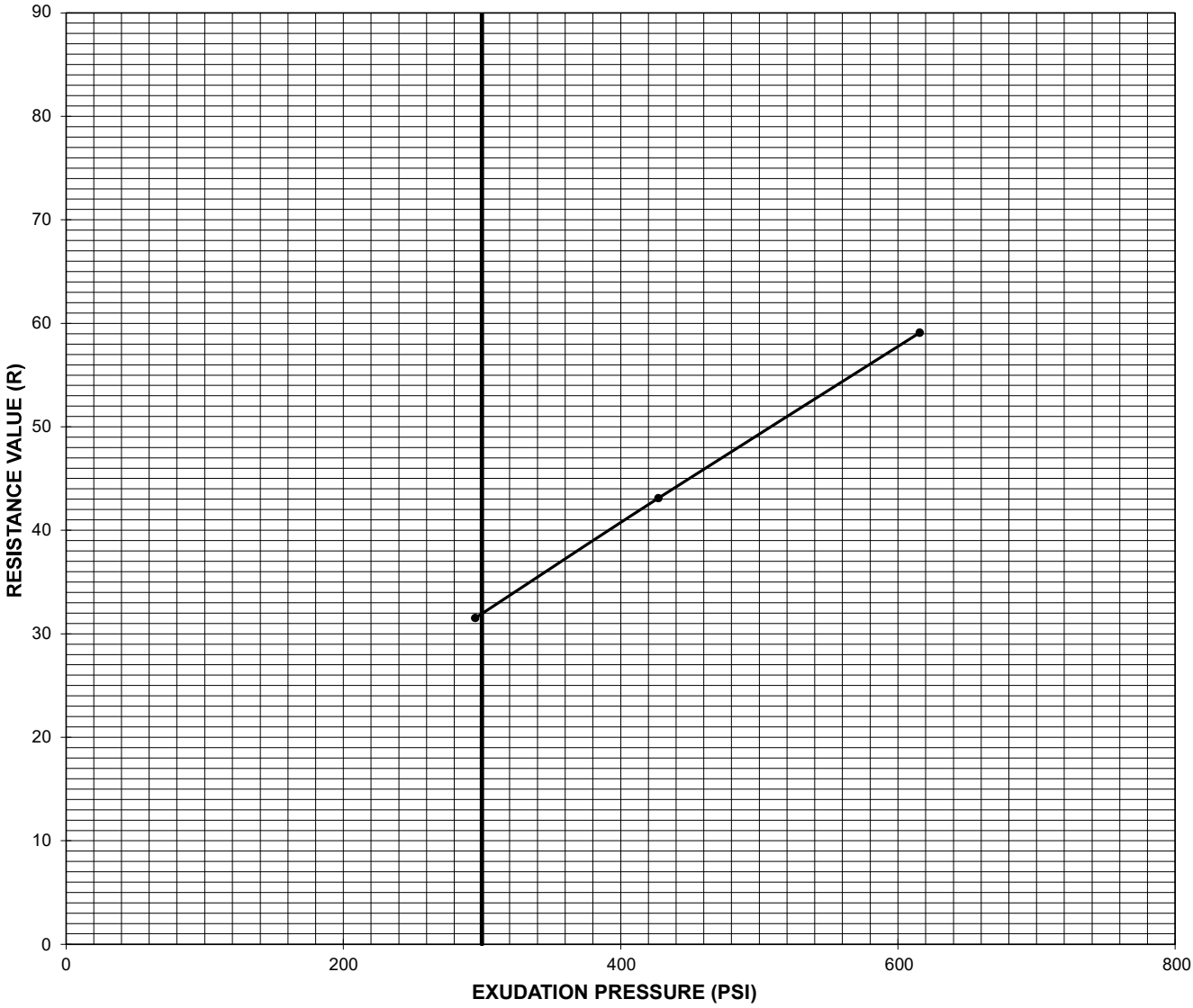
CLIENT GF Development, LLC **PROJECT NAME** Traditions North

PROJECT NUMBER 4627001 **PROJECT LOCATION** Dayton, Lyon County, Nevada



	TEST PIT	DEPTH	LL	PL	PI	Fines	Classification
●	**TP-2**	**2.0**	**30**	**19**	**11**	**9.9**	**POORLY GRADED GRAVEL with CLAY and SAND(GP-GC)**
⊠	**TP-6**	**2.0**	**NP**	**NP**	**NP**	**10.6**	**POORLY GRADED SAND with SILT and GRAVEL(SP-SM)**
▲	**TP-9**	**4.0**	**NP**	**NP**	**NP**	**6.5**	**WELL-GRADED SAND with SILT and GRAVEL(SW-SM)**
★	**TP-11**	**1.0**	**30**	**16**	**14**	**62.4**	**SANDY LEAN CLAY(CL)**

ATTERBERG LIMITS DEPTH - GINT STD US LAB.GDT - 7/16/25 08:07 - \\WOODRODGERS.LOC\PRODUCTIONDATA\JOBS-RENO\JOBS\4627_TRADITIONS_GF_DEV\TRADITIONS_GF_DEV_OA\GEOTECH\GEOTECH\04 GINT\TRADITIONS NORTH.GPJ



C-1aD 2844 Symbol	Sample Source	Classification	Expansion Pressure (psf)	R-value
o	Traditions North - Project #4627001 - Test Pit 5 @ 0' - 2'	Native	0.0	32

POINT #	WATER CONTENT (%)	DRY DENSITY (PCF)	EXUDATION PRESS. (PSI)	EXPANSION PRESS. (PSF)	RESISTANCE VALUE (R)
1	11.9	123.4	616	0.0	59
2	13.0	119.8	427	0.0	43
3	13.6	120.1	295	0.0	32
4					
5					
6					

EASTERN SIERRA ENGINEERING
CIVIL ENGINEERING & CONSTRUCTION SERVICES

RESISTANCE VALUE TEST DATA
Wood Rodgers
2025 General Lab Services

FIGURE
C-1c

DRAWN	ESE BULK #	JOB NUMBER	APPROVED	DATE	REVISED	DATE
CM	9163	25-043-01	BF	7/23/2025		

SGS Silver State Analytical Laboratories
3626 E. Sunset Road, Suite 100
Las Vegas, NV 89120
(702) 873-4478
www.ssalabs.com

Analytical Report

Workorder#: **25070484**
Date Reported: **7/23/2025**

Client: Wood Rodgers
Project Name: 4627001
PO #:

Sampled By: Client

Laboratory Accreditation Number: NV930/CA3029

Laboratory ID	Client Sample ID	Date/Time Sampled	Date Received
25070484-01	TP-3 @ 0'-2'	07/07/2025 7:28	7/10/2025

Parameter	Method	Result	Units	PQL	Analyst	Date/Time Analyzed	Data Flag
Chloride	SM 4500CL B	ND	mg/Kg	10	LJ	07/16/2025 10:46	
Oxidation-Reduction Potential	SM 2580 B	169	mV	1	KR	07/16/2025 13:54	
Resistivity, Minimum #	AASHTO T288	3490	Ohms-cm	0.1	DT	07/17/2025 10:51	
Sulfate #	ASTM C1580	0.020	%	0.02	LJ	07/17/2025 12:12	
Sulfide	SM 4500S2 F	ND	mg/Kg	1	LJ	07/17/2025 13:23	

Laboratory Accreditation Number: NV930/CA3029

Laboratory ID	Client Sample ID	Date/Time Sampled	Date Received
25070484-02	TP-10 @ 1'-5'	07/07/2025 7:28	7/10/2025

Parameter	Method	Result	Units	PQL	Analyst	Date/Time Analyzed	Data Flag
Chloride	SM 4500CL B	ND	mg/Kg	10	LJ	07/16/2025 10:46	
Oxidation-Reduction Potential	SM 2580 B	117	mV	1	KR	07/16/2025 13:54	
Resistivity, Minimum #	AASHTO T288	3400	Ohms-cm	0.1	DT	07/17/2025 10:51	
Sulfate #	ASTM C1580	ND	%	0.02	LJ	07/17/2025 12:12	
Sulfide	SM 4500S2 F	ND	mg/Kg	1	LJ	07/17/2025 13:23	

Laboratory Accreditation Number: NV015/CA2990

Laboratory ID	Client Sample ID	Date/Time Sampled	Date Received
25070484-03	TP-3 @ 0'-2'	07/07/2025 7:28	7/10/2025

Parameter	Method	Result	Units	PQL	Analyst	Date/Time Analyzed	Data Flag
pH	SW-846 9045D	7.96	pH Units		HG	07/21/2025 10:58	
pH Temperature	SW-846 9045D	23.0	°C		HG	07/21/2025 10:58	

Laboratory Accreditation Number: NV015/CA2990

Laboratory ID	Client Sample ID	Date/Time Sampled	Date Received
25070484-04	TP-10 @ 1'-5'	07/07/2025 7:28	7/10/2025

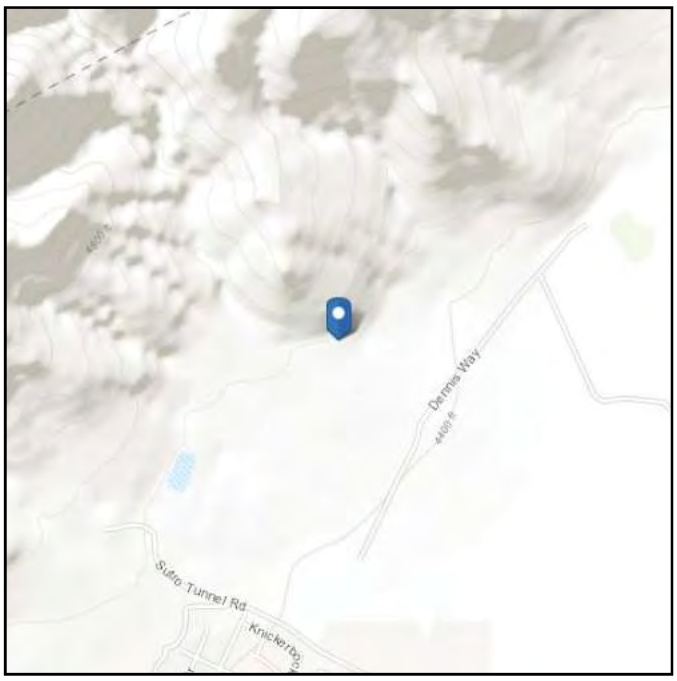
Parameter	Method	Result	Units	PQL	Analyst	Date/Time Analyzed	Data Flag
pH	SW-846 9045D	7.93	pH Units		HG	07/21/2025 10:58	
pH Temperature	SW-846 9045D	23.0	°C		HG	07/21/2025 10:58	

APPENDIX D
ASCE 7 HAZARDS REPORT

ASCE Hazards Report

Address:
No Address at This Location

Standard:	ASCE/SEI 7-22	**Latitude:**	39.284699
Risk Category:	II	**Longitude:**	-119.577258
Soil Class:	CD	**Elevation:**	4468.601399839073 ft (NAVD 88)



Seismic

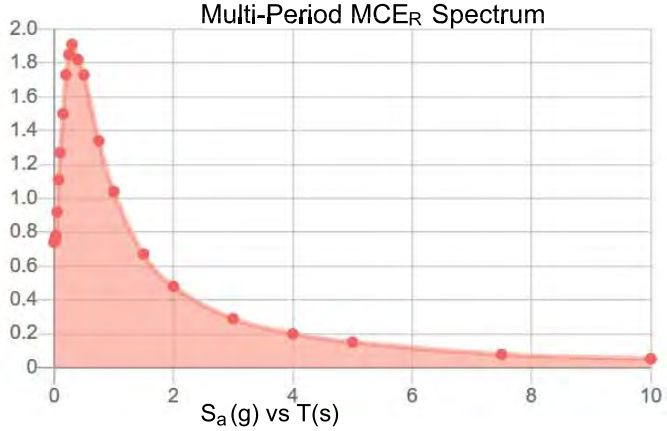
Site Soil Class: CD

Results:

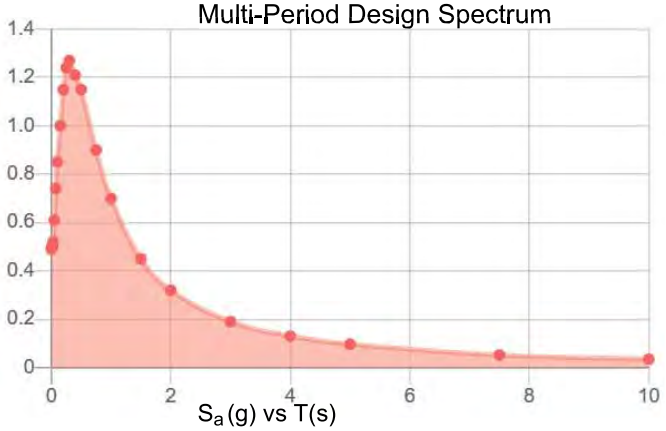
PGA_M :	0.61	T_L :	6
S_{MS} :	1.72	S_S :	1.61
S_{M1} :	1.04	S_1 :	0.52
S_{DS} :	1.14	V_{S30} :	365
S_{D1} :	0.7		

Seismic Design Category: D

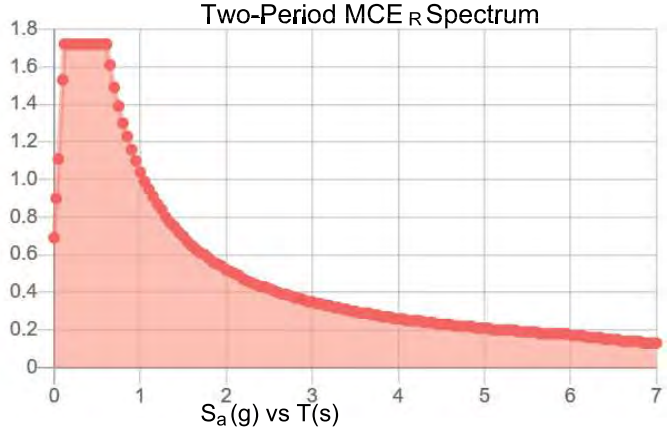
Multi-Period MCE_R Spectrum



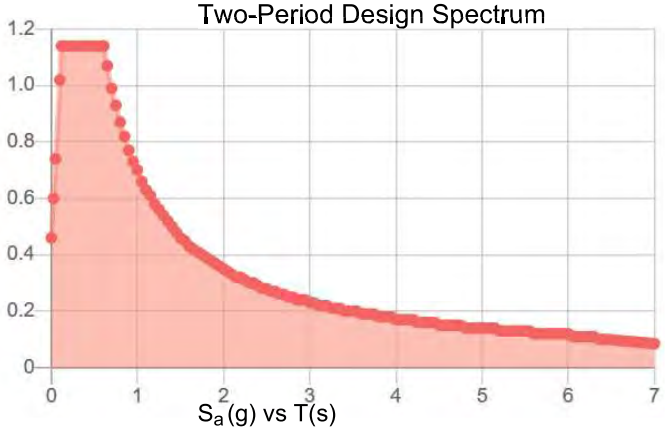
Multi-Period Design Spectrum



Two-Period MCE_R Spectrum



Two-Period Design Spectrum



MCE_R Vertical Response Spectrum

Vertical ground motion data has not yet been made available by USGS.

Design Vertical Response Spectrum

Vertical ground motion data has not yet been made available by USGS.

Data Accessed: Mon Jul 14 2025

Date Source:
USGS Seismic Design Maps based on ASCE/SEI 7-22 and ASCE/SEI 7-22 Table 1.5-2. Additional data for site-specific ground motion procedures in accordance with ASCE/SEI 7-22 Ch. 21 are available from USGS.

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APPENDIX C: Preliminary Drainage Report

TRADITIONS NORTH

Conceptual Drainage Report

November 2025

Traditions North

APN: 016-406-07 • 230.76 acres
Dayton, Nevada

By: Piñon Design Group

PROFESSIONAL ENGINEER-STATE OF NEVADA
DANIEL C. BIRCHFIELD
Exp: 12-31-26
CIVIL
No. 20844

Digitally signed by Daniel Birchfield
DN: C=US, E=dan@pinondg.com, O=Pinon Design Group, CN=Daniel Birchfield
Location: Reno, NV
Reason: I am approving this document
Date: 2025.11.16 17:59:43-08'00'

PIÑON DESIGN GROUP

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IV. PROPOSED DRAINAGE SYSTEM 6

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II. INTRODUCTION

This Conceptual Drainage Study has been prepared for the Traditions North subdivision in Dayton, Nevada. The report evaluates existing drainage conditions, proposed improvements, hydrologic calculations, detention design requirements, and compliance with Lyon County Drainage Guidelines (Revised September 2024).

A. Site Location

1) **Street Location & APN**
The proposed Traditions North subdivision is located in Dayton, Nevada, northeast of Highway 50 and north of existing Traditions development areas. The property is identified as **APN 016-406-07** and comprises **230.76 acres.**

2) **Section, Township, Range & Coordinates**
Approximate location:
- S1, T16N, R21E
- Latitude: 39.2836°, Longitude: -119.5778°

3) **Adjacent Developments**
- North: Undeveloped land (BLM)
- South: Traditions Subdivisions (existing/planned)
- East: Undeveloped land and drainage corridors (BLM)
- West: Mixed undeveloped private property and Lyon County land

Figure 1A: Project Location

ROCK CREEK PKWY
PRAIRIE GATE DR
TRADITIONS PKWY
NEVADA STATION PKWY
SUGAR LOAF DR
PAINTED PONY DR
FORTUNE DR
WESTWIND DR
DAYTON VILLAGE PKWY
SHEEP CAMP DR
SADDLE VIEW DR
CHUKAR RUN
SPIRIT WAY
SPIRIT RUN
SPIRIT RIDGE DR
SPIRIT RIDGE CT
SPIRIT RIDGE PL
SPIRIT RIDGE WAY
SPIRIT RIDGE RD
SPIRIT RIDGE LN
SPIRIT RIDGE CIR
SPIRIT RIDGE TER
SPIRIT RIDGE PKWY
SPIRIT RIDGE AVE
SPIRIT RIDGE BLVD
SPIRIT RIDGE ST
SPIRIT RIDGE PLZ
SPIRIT RIDGE SQ
SPIRIT RIDGE HWY
SPIRIT RIDGE FWY
SPIRIT RIDGE EXPY
SPIRIT RIDGE TPKE
SPIRIT RIDGE ALY
SPIRIT RIDGE TRL
SPIRIT RIDGE WALK
SPIRIT RIDGE PATH
SPIRIT RIDGE MALL
SPIRIT RIDGE PLAZA
SPIRIT RIDGE SQUARE
SPIRIT RIDGE CENTER
SPIRIT RIDGE VILLAGE
SPIRIT RIDGE TOWN
SPIRIT RIDGE CITY
SPIRIT RIDGE METRO
SPIRIT RIDGE AREA
SPIRIT RIDGE ZONE
SPIRIT RIDGE DISTRICT
SPIRIT RIDGE REGION
SPIRIT RIDGE TERRITORY
SPIRIT RIDGE PROVINCE
SPIRIT RIDGE COUNTY
SPIRIT RIDGE STATE
SPIRIT RIDGE NATION
SPIRIT RIDGE WORLD
SPIRIT RIDGE UNIVERSE
SPIRIT RIDGE GALAXY
SPIRIT RIDGE SYSTEM
SPIRIT RIDGE NETWORK
SPIRIT RIDGE GRID
SPIRIT RIDGE MATRIX
SPIRIT RIDGE FRAMEWORK
SPIRIT RIDGE STRUCTURE
SPIRIT RIDGE ORGANIZATION
SPIRIT RIDGE INSTITUTION
SPIRIT RIDGE ENTERPRISE
SPIRIT RIDGE CORPORATION
SPIRIT RIDGE COMPANY
SPIRIT RIDGE FIRM
SPIRIT RIDGE AGENCY
SPIRIT RIDGE BUREAU
SPIRIT RIDGE OFFICE
SPIRIT RIDGE DEPARTMENT
SPIRIT RIDGE DIVISION
SPIRIT RIDGE UNIT
SPIRIT RIDGE GROUP
SPIRIT RIDGE TEAM
SPIRIT RIDGE CREW
SPIRIT RIDGE STAFF
SPIRIT RIDGE PERSONNEL
SPIRIT RIDGE WORKFORCE
SPIRIT RIDGE LABOR
SPIRIT RIDGE EMPLOYMENT
SPIRIT RIDGE JOB
SPIRIT RIDGE CAREER
SPIRIT RIDGE PROFESSION
SPIRIT RIDGE OCCUPATION
SPIRIT RIDGE TRADE
SPIRIT RIDGE SKILL
SPIRIT RIDGE ABILITY
SPIRIT RIDGE TALENT
SPIRIT RIDGE GIFT
SPIRIT RIDGE APTITUDE
SPIRIT RIDGE CAPACITY
SPIRIT RIDGE POTENTIAL
SPIRIT RIDGE POWER
SPIRIT RIDGE ENERGY
SPIRIT RIDGE FORCE
SPIRIT RIDGE STRENGTH
SPIRIT RIDGE VIGOR
SPIRIT RIDGE VITALITY
SPIRIT RIDGE LIFE
SPIRIT RIDGE EXISTENCE
SPIRIT RIDGE BEING
SPIRIT RIDGE ENTITY
SPIRIT RIDGE THING
SPIRIT RIDGE OBJECT
SPIRIT RIDGE ITEM
SPIRIT RIDGE ARTICLE
SPIRIT RIDGE PIECE
SPIRIT RIDGE PART
SPIRIT RIDGE COMPONENT
SPIRIT RIDGE ELEMENT
SPIRIT RIDGE FACTOR
SPIRIT RIDGE INGREDIENT
SPIRIT RIDGE CONSTITUENT
SPIRIT RIDGE MEMBER
SPIRIT RIDGE UNIT
SPIRIT RIDGE SECTION
SPIRIT RIDGE PORTION
SPIRIT RIDGE PARCEL
SPIRIT RIDGE LOT
SPIRIT RIDGE TRACT

3) **FEMA Zone**
The site is located within FEMA Zone X. No areas of special flood hazard (Zone A, AE, or AO) exist within the project boundary.

C. Proposed Project Description

1) Traditions North proposes a **residential subdivision** across the 230.76-acre parcel, including new internal streets, drainage conveyance improvements, and potential open space/trail corridors. Phasing is anticipated to include multi-phase development (approximately 4 subdivisions), generally progressing from south to north.

D. Previous Studies

1) North Dayton Valley Area Drainage Master Plan (ADMP) dated August 1, 2019.

III. HISTORIC DRAINAGE SYSTEM

A. Area Drainage Master Plan (ADMP) Applicability

1) Historic drainage conditions are based on the North Dayton Valley Area Drainage Master Plan (NDVADMP) dated August 1, 2019. The ADMP identifies major flow paths and regional inflow cross sections relevant to this project.

B. Basins

1) **Relationship to Major Drainage Facilities**
The site drains toward regional off-site flow paths ultimately tributary to the Carson River watershed.

2) **Basin Characteristics**
- Terrain: alluvial fan slopes
- Runoff behavior: shallow, unconfined and moderately confined flows
- Vegetation: sparse desert vegetation with moderate infiltration
- Erosion potential: moderate due to sandy soils and slope gradients

3) **Existing Drainage Patterns**
Runoff flows in shallow concentrated flow patterns toward the east and south, exiting the site along the southern and eastern boundaries.

4) **Historic Data**

NDVADMP Cross Section	100YR-24HR (cfs)	100YR-6H (cfs)	25YR-24HR (cfs)
12	18.7	38.5	11.1
162	4.0	11.0	2.8
165.8	313.1	8.41	106.0

5) **Effects on Adjacent Properties**
Historically, runoff disperses widely across the alluvial surface. Concentrated discharge is not present under existing conditions. Development must avoid increasing flow concentration onto undeveloped neighboring properties.

IV. PROPOSED DRAINAGE SYSTEM

The project proposes a residential subdivision using engineered conveyance, storm drain infrastructure, open space corridors, and four regional detention basins (NE-BASIN, NW-BASIN, SE-BASIN, SW-BASIN).

A. Design Storm Criteria

1) **Design Storm**
The 100-year – 6-hour design storm was analyzed because this event was nearly double the peak runoff of the 100-year –24-hour event, according to the NDVADMP.

2) **Hydrologic Method**
Hydrologic modeling was completed using Autodesk Storm and Sanitary Analysis (SSA) with the HEC-1 Unit Hydrograph method and the SCS Curve Number (CN) loss method.

3) **Rainfall Information Used** (NOAA Atlas 14, Lyon County)
- 5-yr, 24-hr: ~ 1.36 inches
- 25-yr, 24-hr: ~ 1.89 inches
- 100-yr, 24-hr: ~ 2.77 inches
- **100-yr, 6-hr: ~ 1.66 inches**

B. Runoff

1) **Historic (Pre-Development) Flow Rates and Paths**

For this study, the **baseline (pre-development) peak flows** at these cross sections are taken from the ADMP and incorporated into the post-development model as upstream boundary inflows. Conceptually, this ensures that **existing watershed inflows are preserved** and only the incremental contribution from the project is modified by development.

2) **Developed (Post-Development) Flow Rates and Paths**
For post-development conditions, the project watershed has been divided into **seven local subbasins (Sub-01 through Sub-07)** representing the Traditions North site, plus imported ADMP inflows represented as **X-SEC-12, X-SEC-162, and X-SEC-170** within the SSA model.

Total modeled area of local subbasins is approximately **93.26 acres**, which reflects the portion of the 230.76-acre site included in the hydrologic model at this conceptual stage (remaining area to remain undeveloped or be incorporated in future refinement or represented via additional subbasins as design advances).

Regional inflows from the ADMP are carried into the model as **X-SEC-12, X-SEC-162, and X-SEC-170.** These are summarized above and represent the **external pre-development inflows** to which project runoff is added.

All local and regional flows are routed through the proposed conveyance and detention system to the **NE-OUTFALL** node, which represents the primary discharge point from the Traditions North site to the downstream system. The SE-OUTFALL and SW-OUTFALL were modeled to have zero discharge in the design storm event; however, the final design report may indicate flow. In any case, the basins will have constructed outlets/spillways in the event of storm in excess of the design storm.

C. Proposed Improvements

1) Flows will be conveyed using a combination of:
   - Drainage swales
   - Curb and gutter
   - Underground storm drain pipes
   - Open space drainage corridors
   - Four regional flow storage basins (Detention/Water Quality)
   - Three project outfalls

2) A detailed pipe by pipe analysis of the proposed storm drain systems is not appropriate for this conceptual drainage study but will be analyzed at final design to ensure they meet Lyon County Drainage Guidelines. The storm drain systems were analyzed as conceptual system with water catchment subbasin areas delineated for each system. The design storm was applied to each of these systems to properly route the proposed drainage distribution and ensure the overall system and storage basins are adequately sized.

Local Project Subbasins (From SSA): **Table 1:**

Subbasin	**Area (ac)**	**Peak Flow (cfs)**
Sub-01	10.14	8.57
Sub-02	7.01	5.93
Sub-03	10.01	8.41
Sub-04	14.83	12.51
Sub-05	4.21	3.56
Sub-06	39.87	33.59
Sub-07	7.18	6.04

D. Detention Basins

Four flow storage basins are planned for Traditions North:

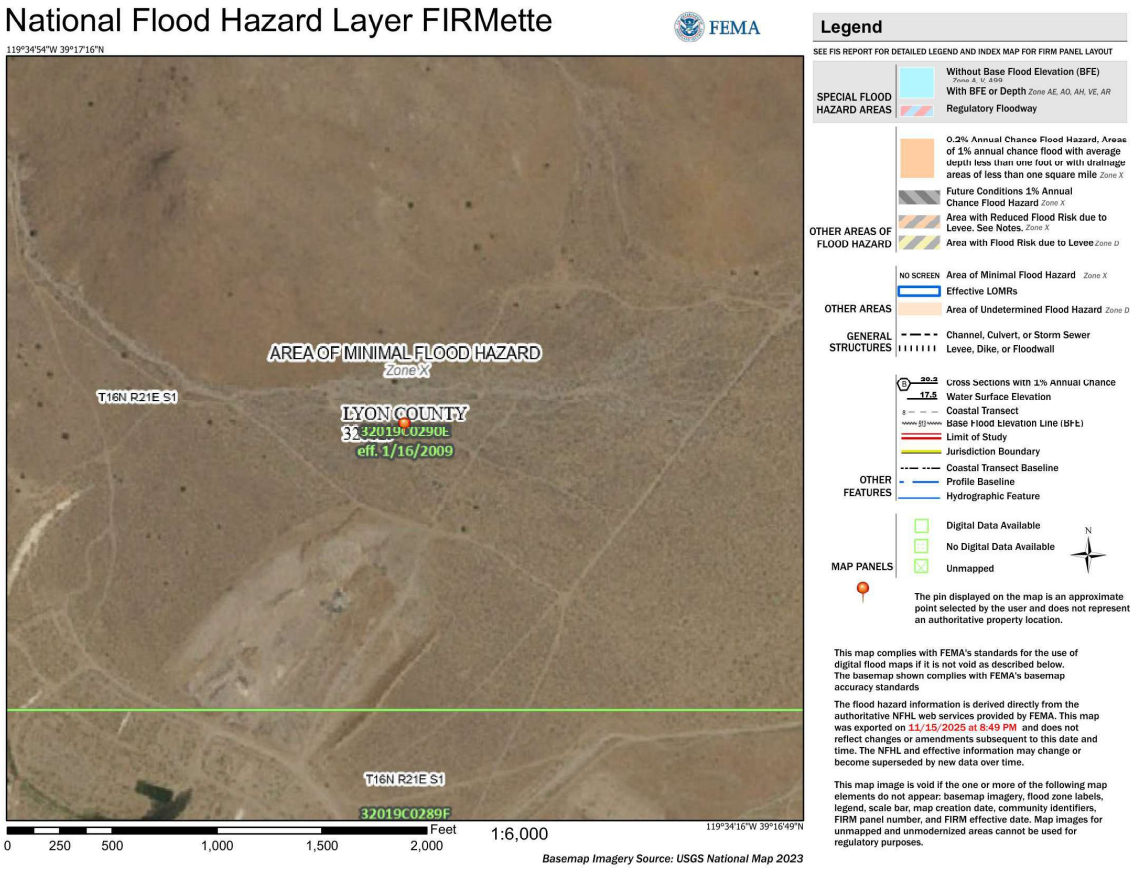
1) NW Basin – Acts primarily as a water quality basin to settle out sediment from offsite flows prior to conveying them through the site. This basin also act to divert a portion of the flow to the SW Basin while the majority of the flow will continue within the cutoff channel to the east.
2) SW Basin – Existing Retention Basin and material borrow pit that was constructed as part of the original Traditions Master Plan mass grading in the early 2000s. This basin will be graded to suit the development and installation of a neighborhood park. It will be retrofitted with an outlet pipe to discharge to the Traditions Village 2 cutoff channel. The existing basin bottom lies several feet below the downstream discharge and will also provide sediment transport mitigation.
3) SE Basin – Located at the lowest point of the site, this basin will collect flow from the on-site southeastern areas. The discharge will need to be a wide weir to distribute outflow back to sheet flow condition. This basin will also serve as a neighborhood park.
4) NE Basin – This basin collects a majority of the offsite runoff and sends it eastward along the predevelopment drainage pattern. The outlet structure will need detailed analysis and design at the final design stage.

Detention basin performance (From SSA): **Table 2:**

Basin	**Invert (ft)**	**Rim (ft)**	**Peak Inflow (cfs)**	**Max HGL (ft)**
NE-BASIN	4364.0	4372.0	253.66	4368.75
NW-BASIN	4446.1	4452.0	291.49	4452.49
SE-BASIN	4347.8	4453.5	39.15	4351.48
SW-BASIN	4415.8	4426.0	78.84	4420.19

V. FLOOD HAZARD COMPLIANCE

The site is located within FEMA Zone X**.** No areas of special flood hazard (Zone A, AE, or AO) exist within the project boundary**.**



VII. CONCLUSIONS

A. Benefits

The proposed drainage design complies with Lyon County Drainage Guidelines. Post-development discharges at the NE-OUTFALL (215.62 cfs) remain below the ADMP pre-development peak at Cross Section 170 (313.14 cfs), satisfying the County's no-adverse-impact requirement. Organized drainage system replaces the uncontrolled sheet flow. Water quality basins will improve sediment transport.

B. Adverse Effects & Mitigation

No adverse impacts are anticipated. All flows will be detained and released at or below pre-development peak rates. Overland flow paths and open space drainage corridors further reduce downstream impacts.

C. Compliance Statement

The conceptual drainage design for **Traditions North** complies with **Lyon County Drainage Guidelines (2024)** and satisfies stormwater conveyance, flood protection, and downstream impact requirements for Tentative Map review.

VIII. APPENDICES

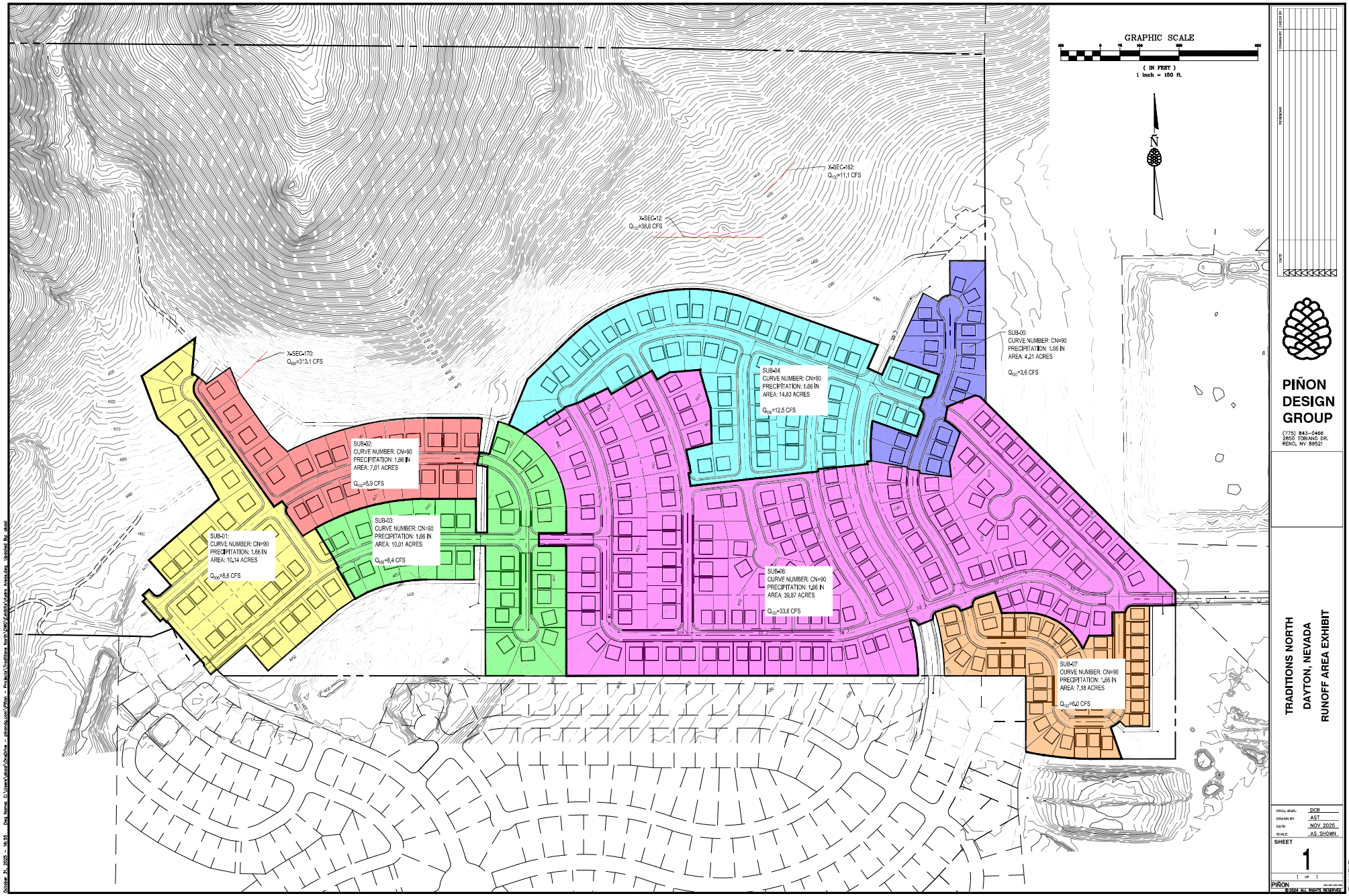
Appendix A – Runoff Area Exhibit

Appendix B – SSA Subbasin Output

Appendix C – Detention Basin Stage–Storage

Appendix D – Background Data

Appendix A – Runoff Area Exhibit



PIÑON DESIGN GROUP
(775) 843-0466
2850 TOBIANO DR.
RENO, NV 89521

TRADITIONS NORTH
DAYTON, NEVADA
RUNOFF AREA EXHIBIT

PROJ. MGR.:	DCB
DRAWN BY:	AST
DATE:	NOV 2025
SCALE:	AS SHOWN

SHEET 1 OF 1

PIÑON
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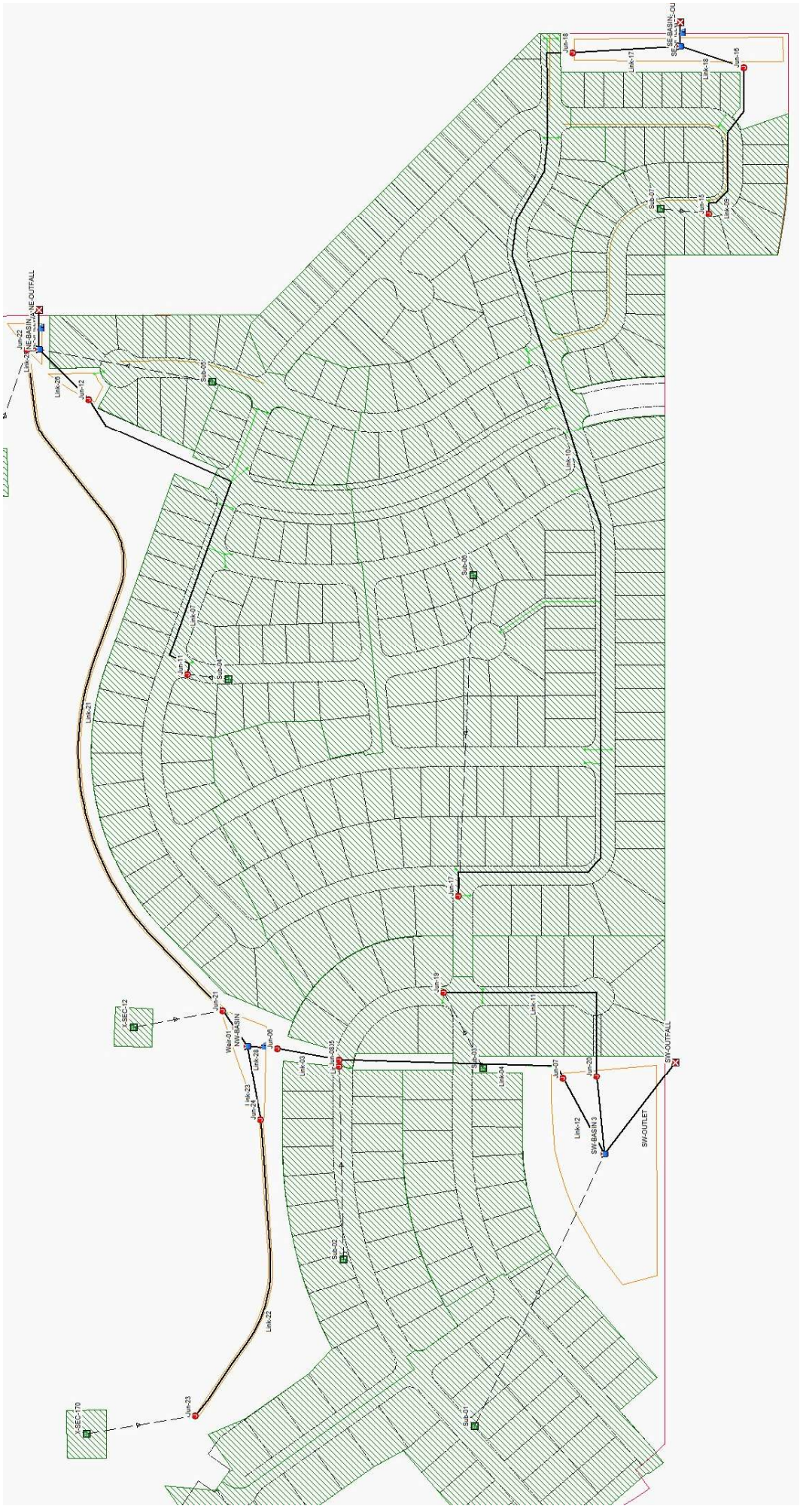
EXHIBIT

October 31, 2025 – 16:55 File Name: C:\Users\Alex\Dropbox – Projects\Traditions North\Civil\Exhibits\Hydro Areas.dwg Updated By: Alex


SE-BASIN_OU
Jun-18
Link-17
Link-18
Jun-16
Sub-31
Jun-15
Jun-14
NE-OUTFALL
Jun-22
Link-27
NE-BASIN
Link-28
Jun-12
Sub-25
Link-10
Sub-29
Link-07
Jun-11
Sub-34
Link-21
Jun-17
Jun-19
Link-11
X-SEC-12
Jun-21
Wet-01
NW-BASIN
Jun-06
Link-23
Link-03
Jun-2835
Sub-01
Link-04
Jun-07
Jun-20
SW-OUTFALL
Link-12
SW-BASIN 3
SW-OUTLET
Jun-24
Link-22
Sub-02
X-SEC-170
Jun-23
Sub-01

Appendix B – SSA Subbasin Output

Project Options

Flow Units	CFS
Elevation Type	Elevation
Hydrology Method	HEC-1
Time of Concentration (TOC) Method	User-Defined
HEC-1 unit hydrograph method	Clark
HEC-1 loss method	SCS Curve Number
Link Routing Method	Hydrodynamic
Enable Overflow Ponding at Nodes	YES
Skip Steady State Analysis Time Periods	YES

Rainfall Details

SN	Rain Gage ID	Data Source	Data Source ID	Rainfall Type	Rain Units	State	County	Return Period (years)	Rainfall Depth (inches)	Rainfall Distribution
1	Rain Gage-01	Time Series	TS-01	Cumulative	inches	Nevada	Lyon	100.00	1.66	SCS 6-hr

Subbasin Summary

Subbasin ID	Area	Total Rainfall	Peak Runoff
	(ac)	(in)	(cfs)
Sub-01	10.14	1.66	8.6
Sub-02	7.01	1.66	5.9
Sub-03	10.01	1.66	8.4
Sub-04	14.83	1.66	12.5
Sub-05	4.21	1.66	3.6
Sub-06	39.87	1.66	33.6
Sub-07	7.18	1.66	6.0
X-SEC-12	45.73	1.66	38.6
X-SEC-162	28.50	1.66	11.1
X-SEC-170	371.70	1.66	313.1

Node Summary

Element ID	Element Type	Invert Elevation (ft)	Ground/Rim (Max) Elevation (ft)	Peak Inflow (cfs)	Max HGL Elevation Attained (ft)	Min Freeboard Attained (ft)
5-Jun	Junction	4444.0	4456.0	63.2	4447.4	8.6
6-Jun	Junction	4446.0	4452.0	58.5	4449.7	2.3
7-Jun	Junction	4416.0	4426.0	63.2	4420.9	5.2
8-Jun	Junction	4449.5	4456.0	5.9	4449.9	6.1
11-Jun	Junction	4394.0	4400.0	12.5	4395.1	4.9
12-Jun	Junction	4367.0	4372.0	12.8	4368.8	3.2
15-Jun	Junction	4352.0	4357.0	6.0	4352.8	4.2
16-Jun	Junction	4348.0	4353.0	6.0	4351.5	1.5
17-Jun	Junction	4416.0	4422.0	33.6	4417.5	4.5
18-Jun	Junction	4348.0	4353.0	33.4	4351.8	1.2
19-Jun	Junction	4434.0	4440.0	8.4	4434.6	5.4
20-Jun	Junction	4416.0	4426.0	8.4	4420.2	5.8
21-Jun	Junction	4448.5	4454.0	225.0	4450.1	4.0
22-Jun	Junction	4364.5	4370.0	231.0	4369.1	0.9
23-Jun	Junction	4500.0	4505.0	313.1	4501.7	3.3
24-Jun	Junction	4446.5	4452.5	312.8	4452.5	0.0
NE-OUTFALL	Outfall	4367.0		215.6	4367.0	
SE-OUTFALL	Outfall	4351.5		0.0	4351.5	
SW-OUTFALL	Outfall	4420.0		0.0	4420.0	
NE-BASIN	Storage Node	4364.0	4372.0	253.7	4368.8	
NW-BASIN	Storage Node	4446.1	4452.0	291.5	4452.5	
SE-BASIN	Storage Node	4347.8	4453.5	39.2	4351.5	
SW-BASIN	Storage Node	4415.8	4426.0	78.8	4420.2	

Subbasin Hydrology

Subbasin : Sub-01

Input Data

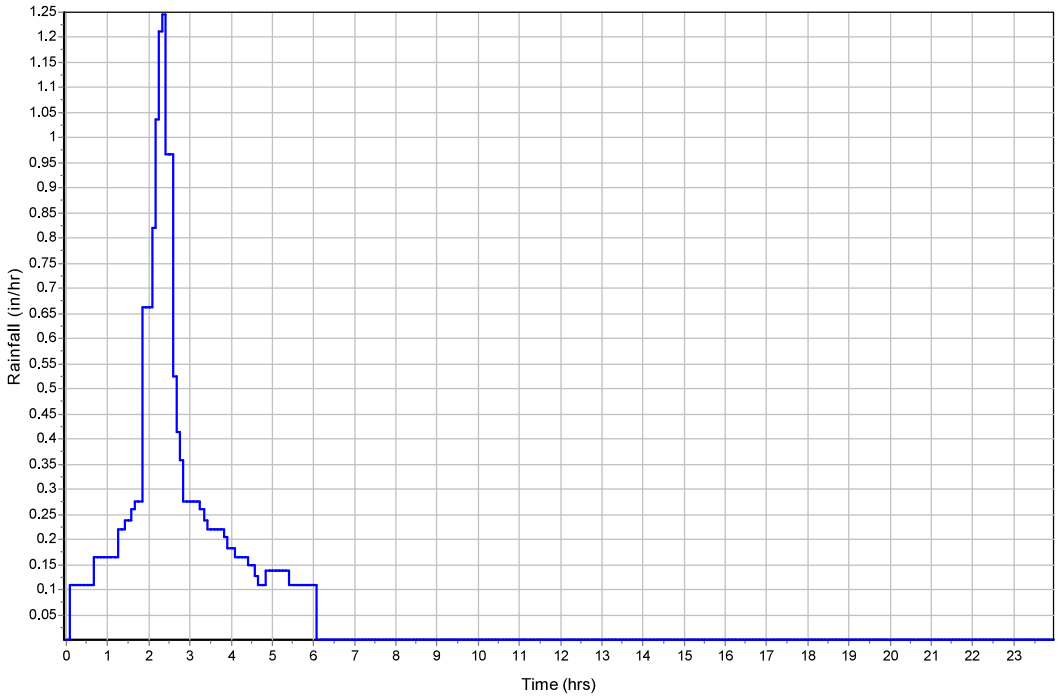
Area (ac)	10.14

Subbasin Runoff Results

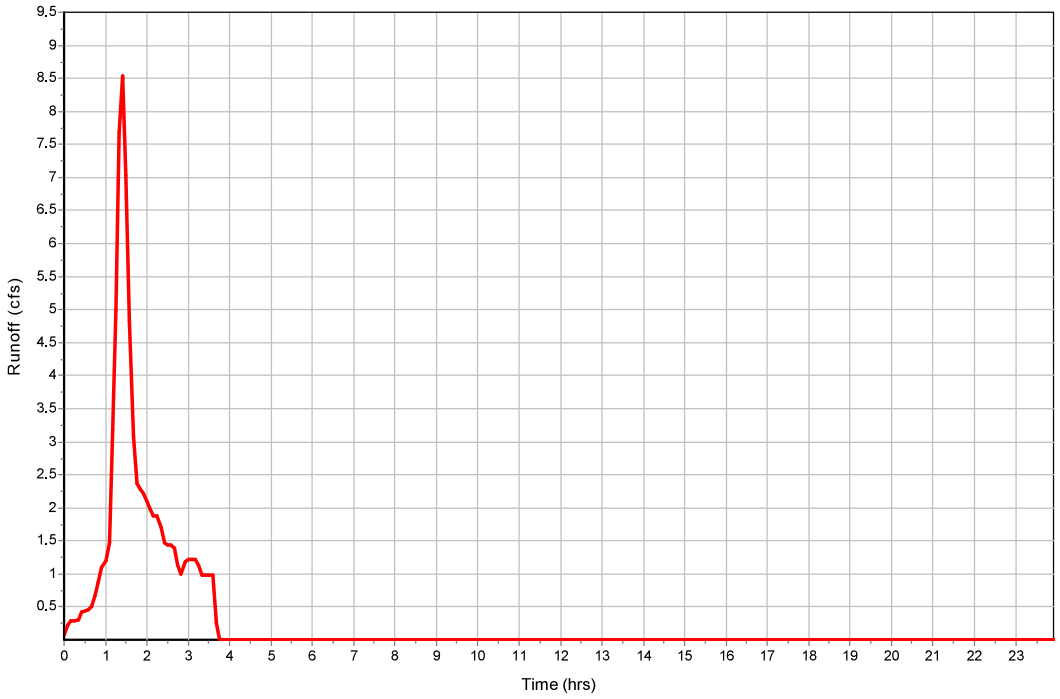
Total Rainfall (in)	1.66
Total Runoff (in)	0.66
Peak Runoff (cfs)	8.57
Time of Concentration (days hh:mm:ss)	0 00:10:00

Subbasin : Sub-01

Rainfall Intensity Graph



Runoff Hydrograph



Subbasin : Sub-02

Input Data

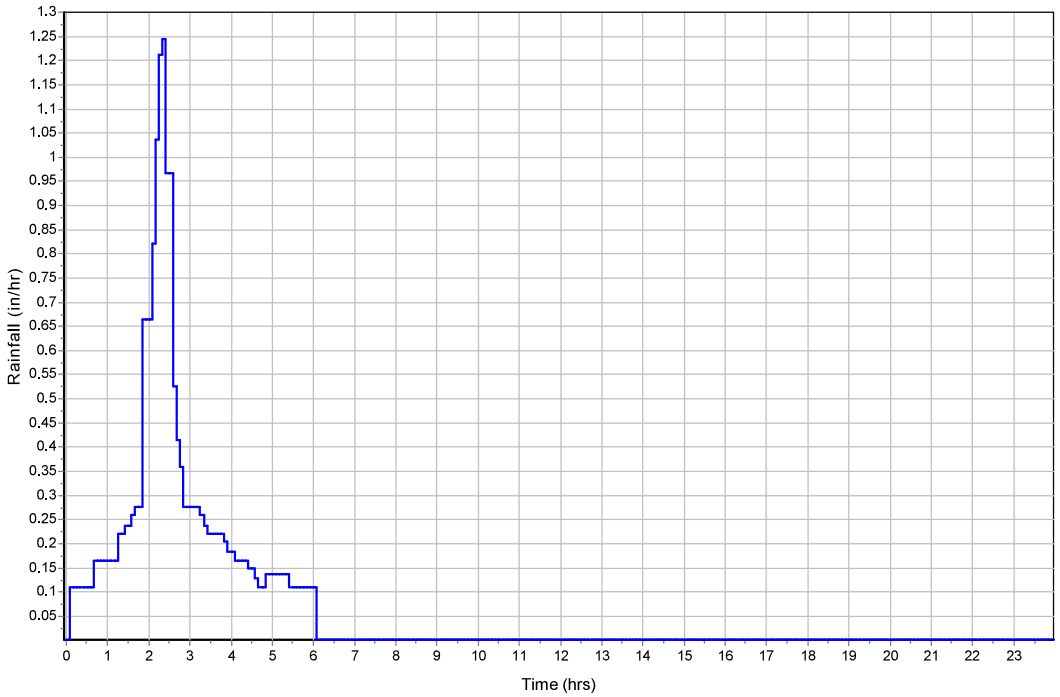
Area (ac)	7.01

Subbasin Runoff Results

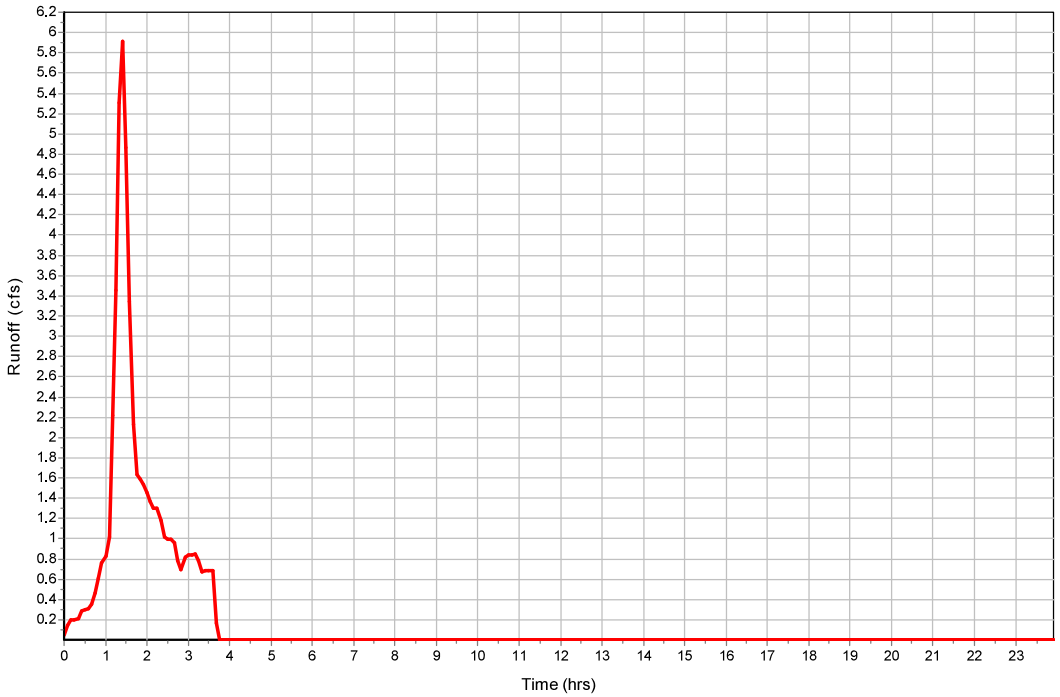
Total Rainfall (in)	1.66
Total Runoff (in)	0.66
Peak Runoff (cfs)	5.93
Time of Concentration (days hh:mm:ss)	0 00:10:00

Subbasin : Sub-02

Rainfall Intensity Graph



Runoff Hydrograph



Subbasin : Sub-03

Input Data

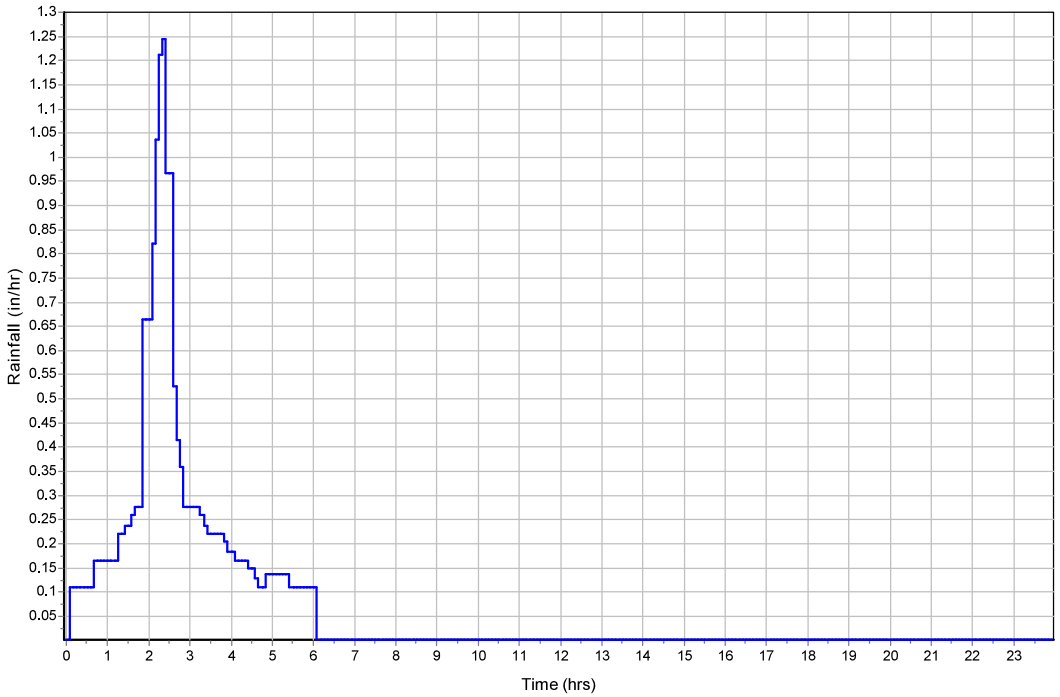
Area (ac)	10.01

Subbasin Runoff Results

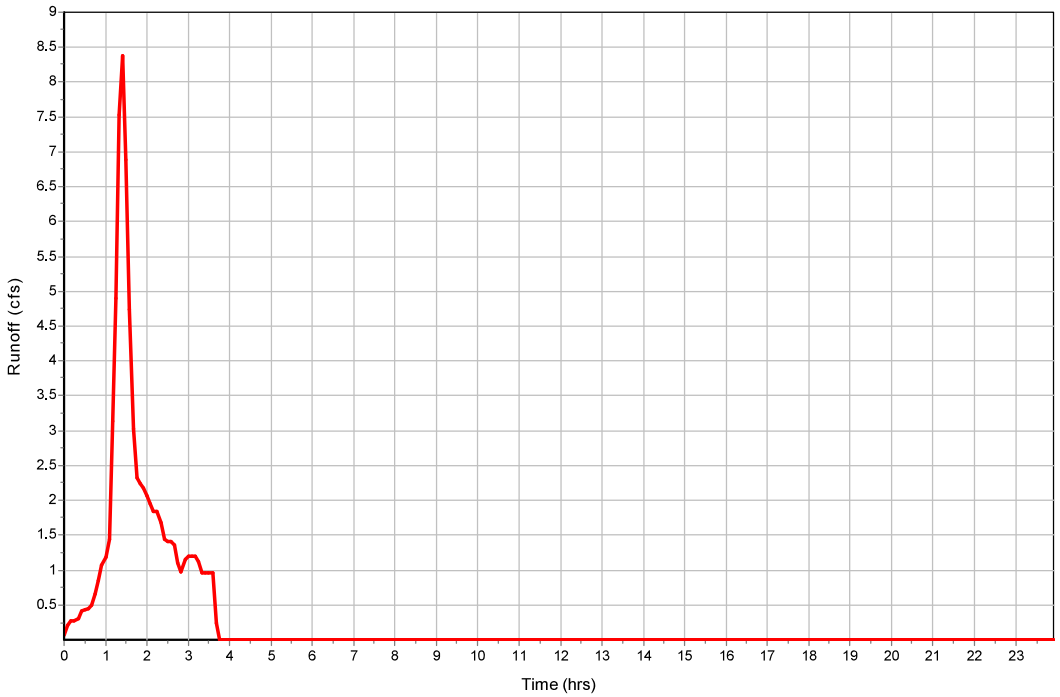
Total Rainfall (in)	1.66
Total Runoff (in)	0.66
Peak Runoff (cfs)	8.41
Time of Concentration (days hh:mm:ss)	0 00:10:00

Subbasin : Sub-03

Rainfall Intensity Graph



Runoff Hydrograph



Subbasin : Sub-04

Input Data

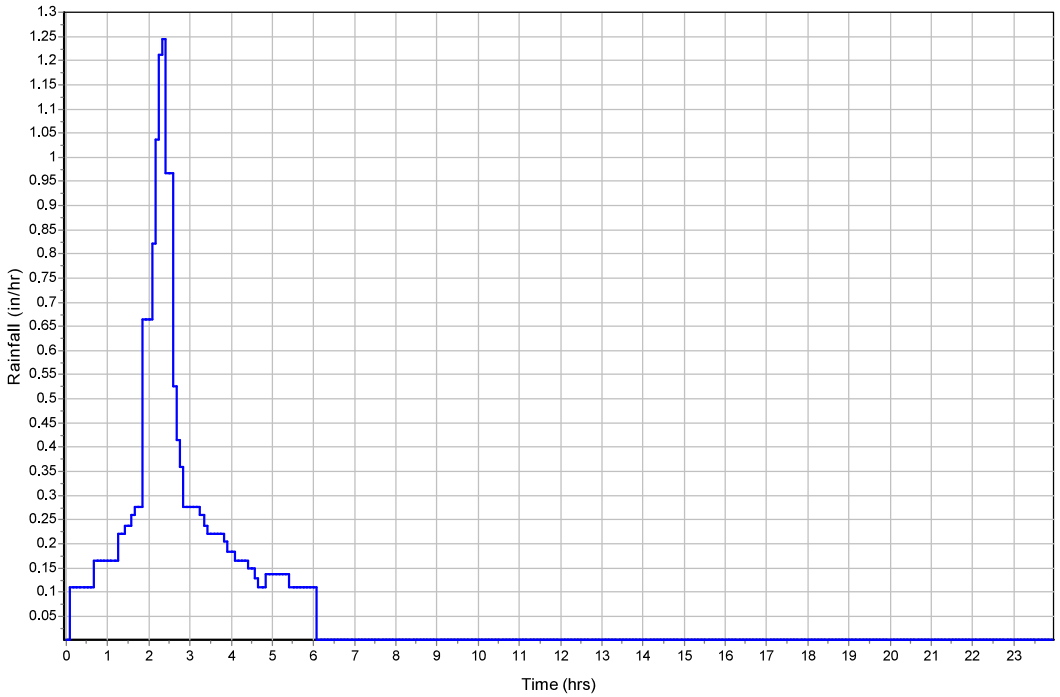
Area (ac)	14.83

Subbasin Runoff Results

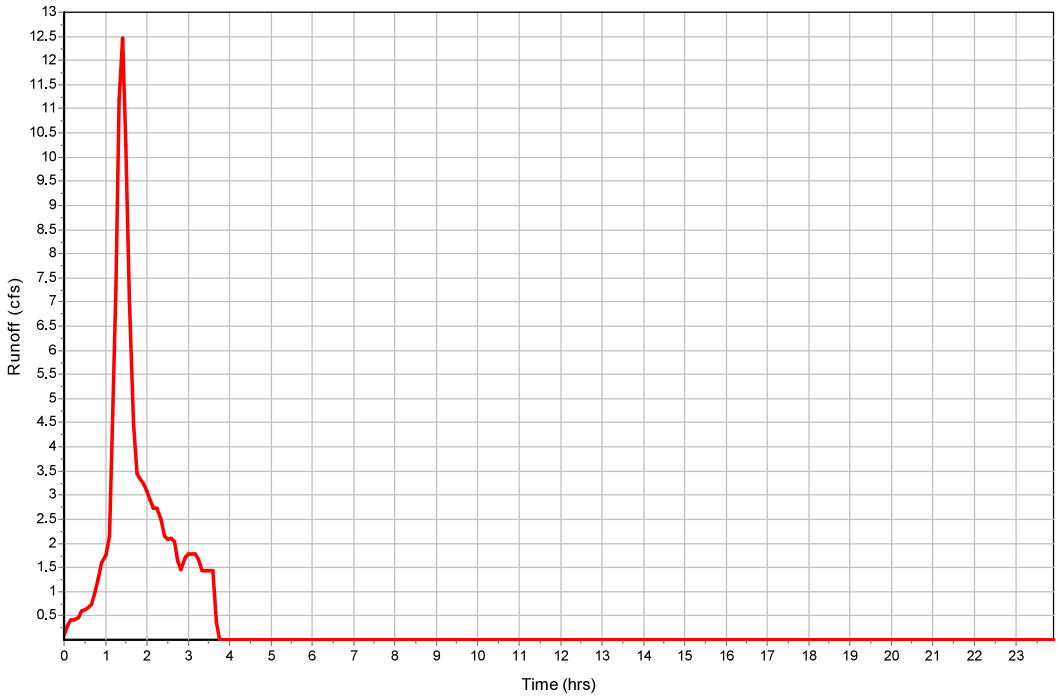
Total Rainfall (in)	1.66
Total Runoff (in)	0.66
Peak Runoff (cfs)	12.51
Time of Concentration (days hh:mm:ss)	0 00:10:00

Subbasin : Sub-04

Rainfall Intensity Graph



Runoff Hydrograph



Subbasin : Sub-05

Input Data

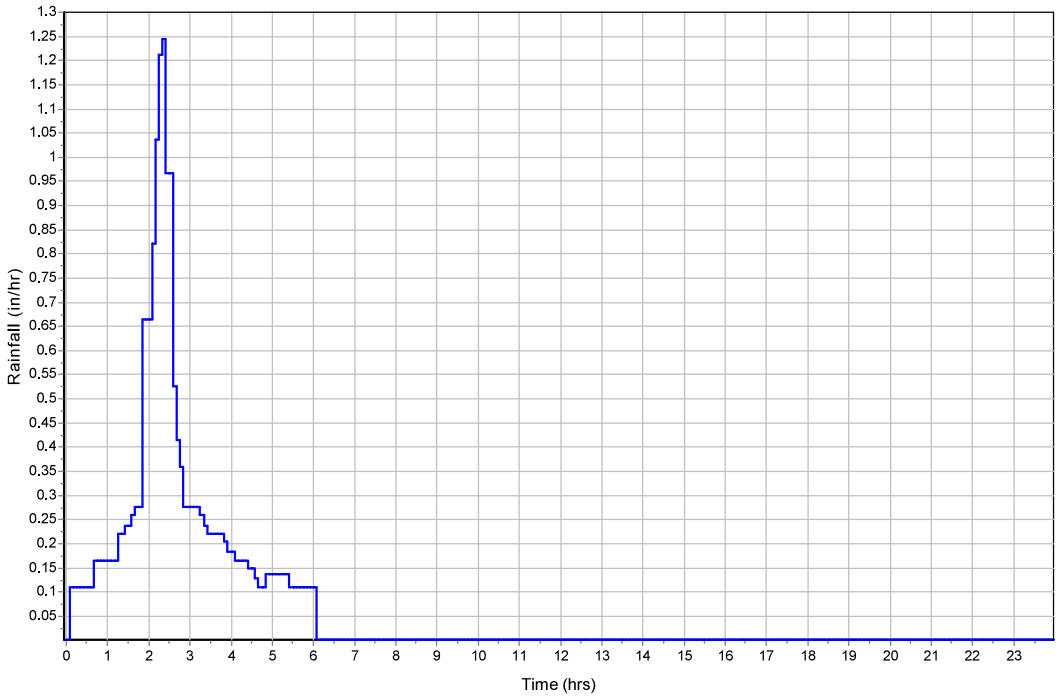
Area (ac)	4.21

Subbasin Runoff Results

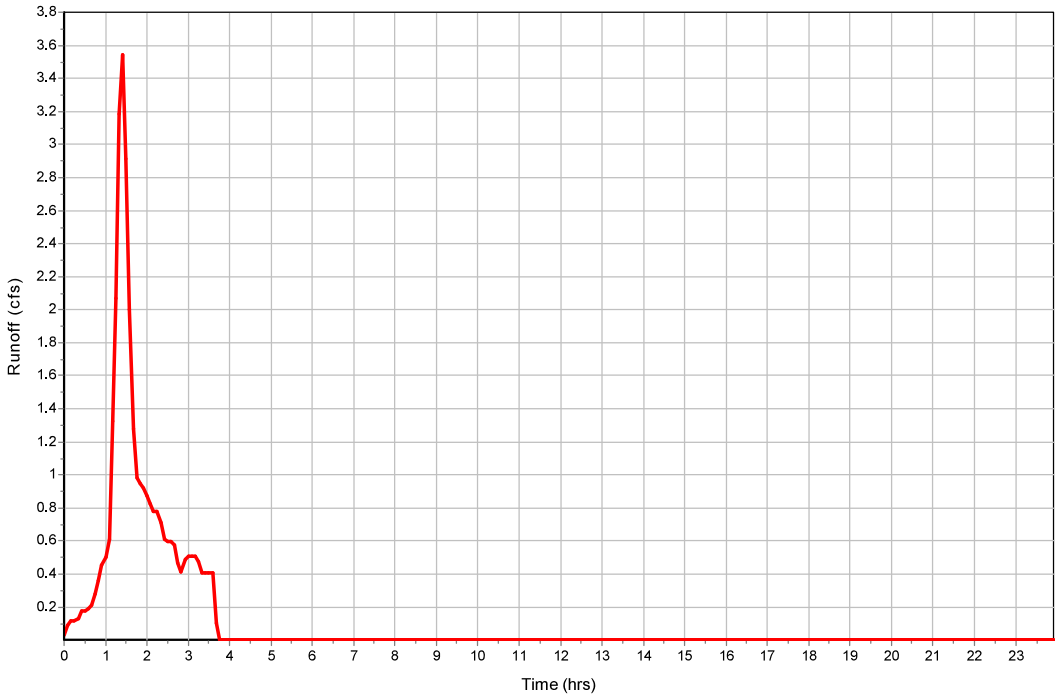
Total Rainfall (in)	1.66
Total Runoff (in)	0.66
Peak Runoff (cfs)	3.56
Time of Concentration (days hh:mm:ss)	0 00:10:00

Subbasin : Sub-05

Rainfall Intensity Graph



Runoff Hydrograph



Subbasin : Sub-06

Input Data

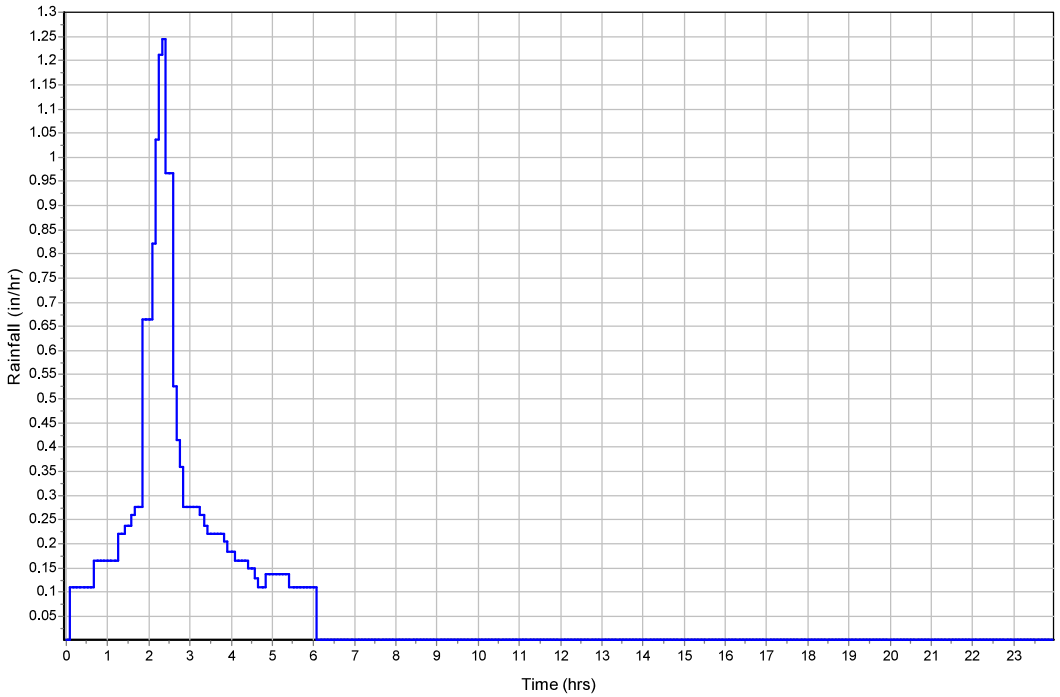
Area (ac)	39.87

Subbasin Runoff Results

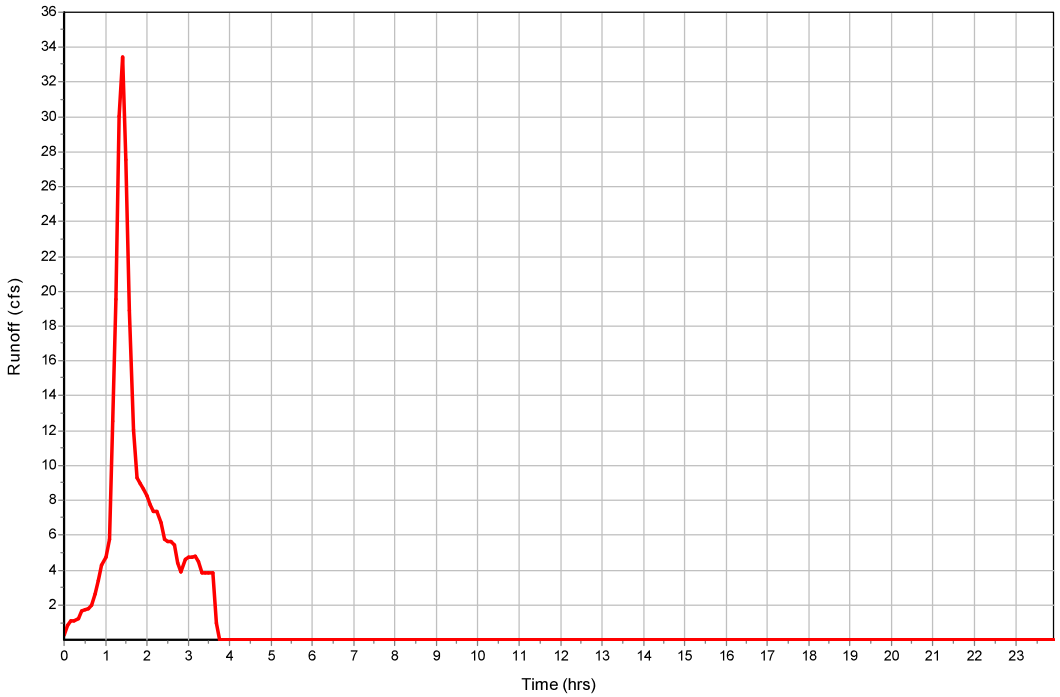
Total Rainfall (in)	1.66
Total Runoff (in)	0.66
Peak Runoff (cfs)	33.59
Time of Concentration (days hh:mm:ss)	0 00:10:00

Subbasin : Sub-06

Rainfall Intensity Graph



Runoff Hydrograph



Subbasin : Sub-07

Input Data

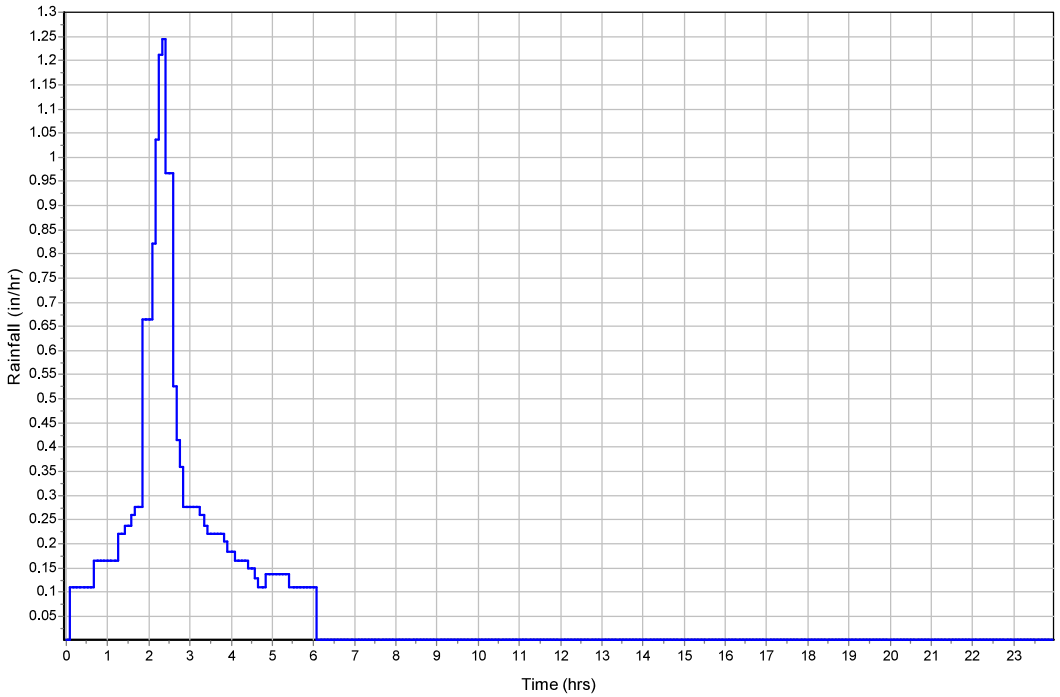
Area (ac)	7.18

Subbasin Runoff Results

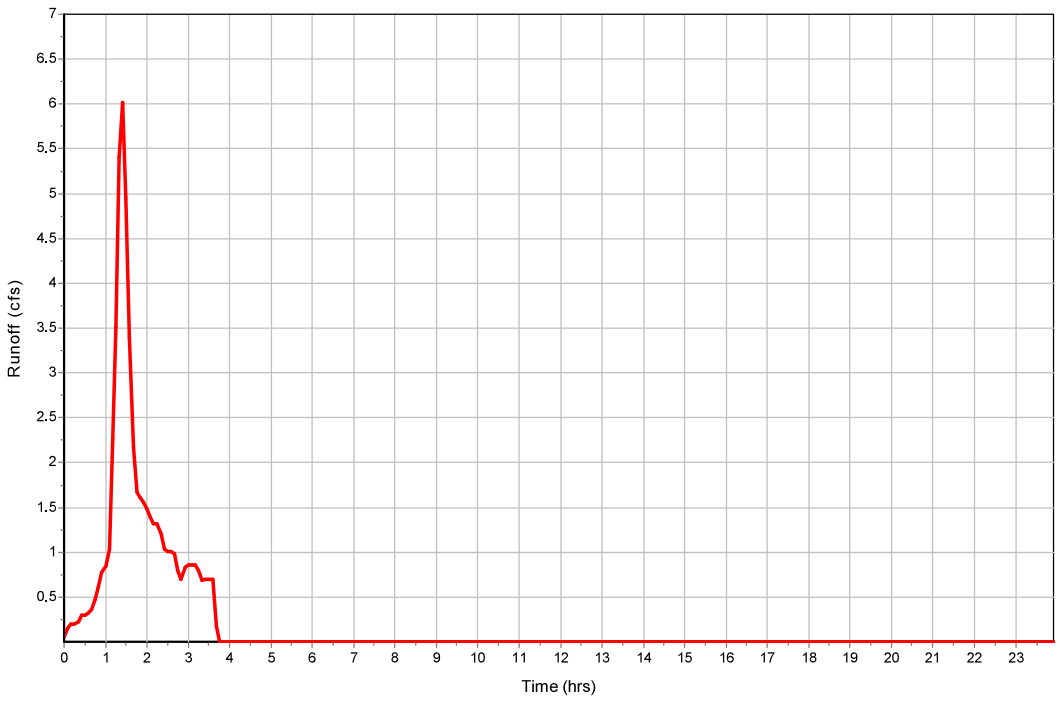
Total Rainfall (in)	1.66
Total Runoff (in)	0.66
Peak Runoff (cfs)	6.04
Time of Concentration (days hh:mm:ss)	0 00:10:00

Subbasin : Sub-07

Rainfall Intensity Graph



Runoff Hydrograph



Subbasin : X-SEC-12

Input Data

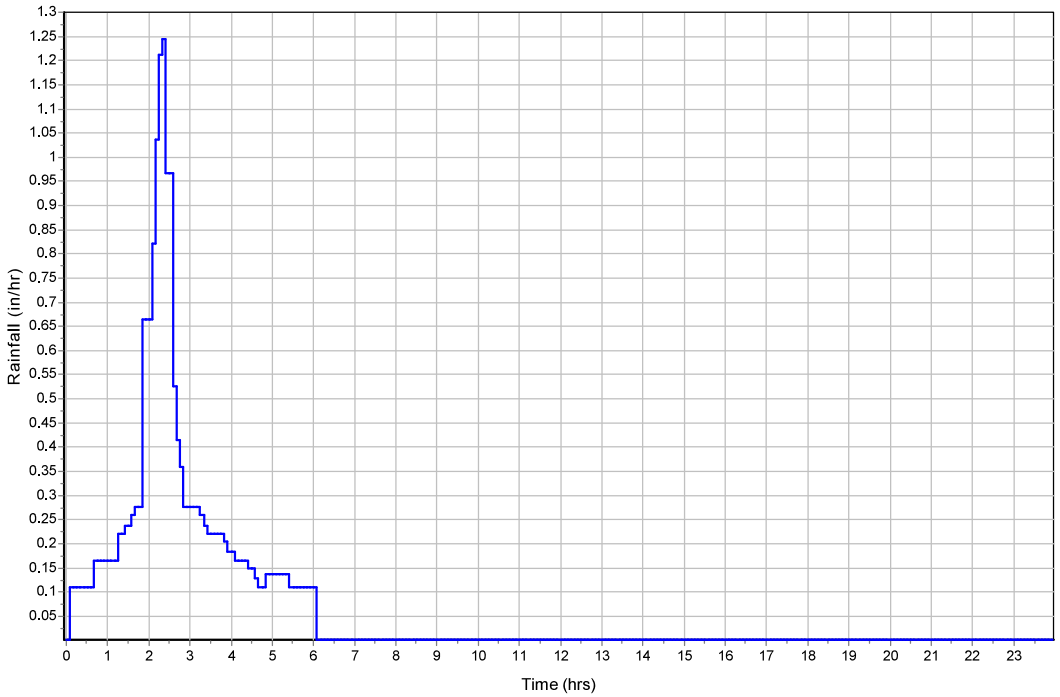
Area (ac)	45.73

Subbasin Runoff Results

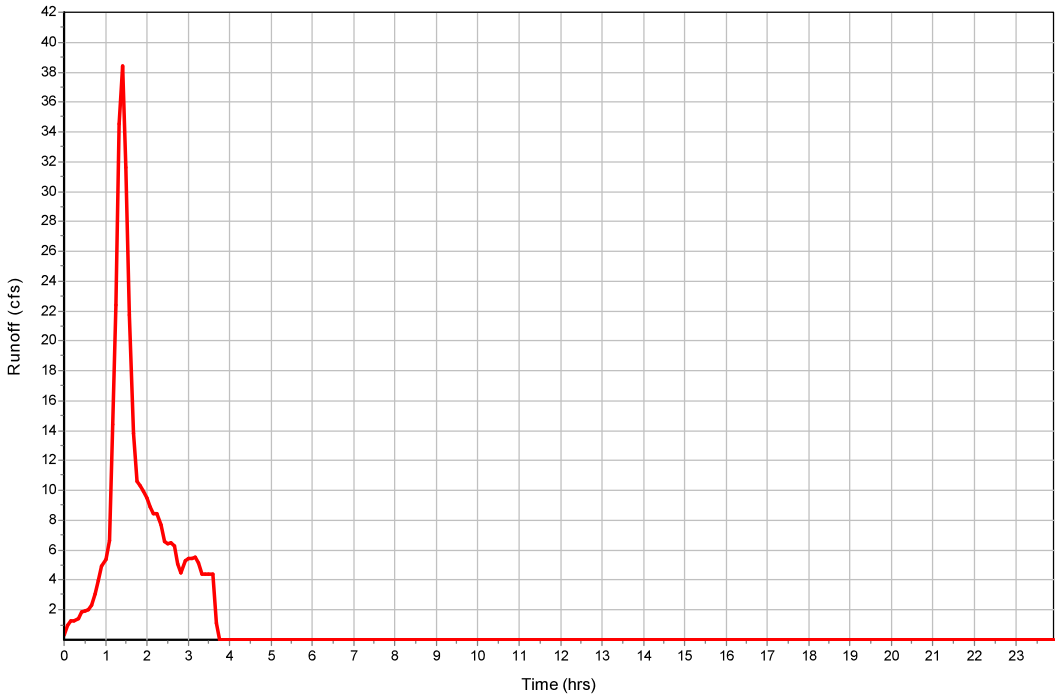
Total Rainfall (in)	1.66
Total Runoff (in)	0.66
Peak Runoff (cfs)	38.55
Time of Concentration (days hh:mm:ss)	0 00:10:00

Subbasin : X-SEC-12

Rainfall Intensity Graph



Runoff Hydrograph



Subbasin : X-SEC-162

Input Data

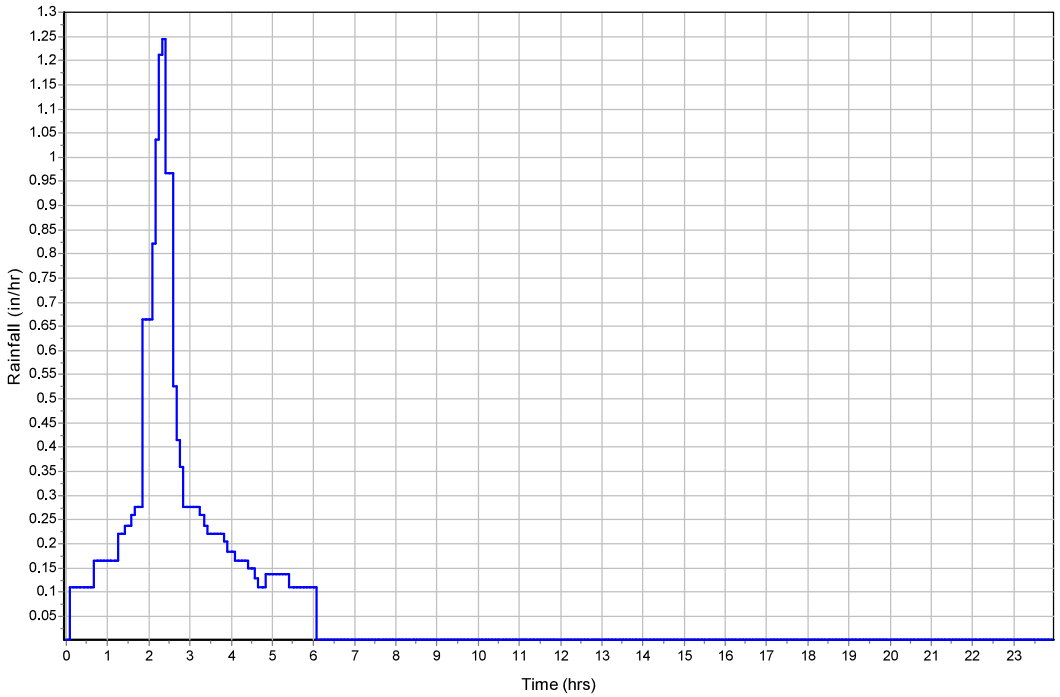
Area (ac)	28.5

Subbasin Runoff Results

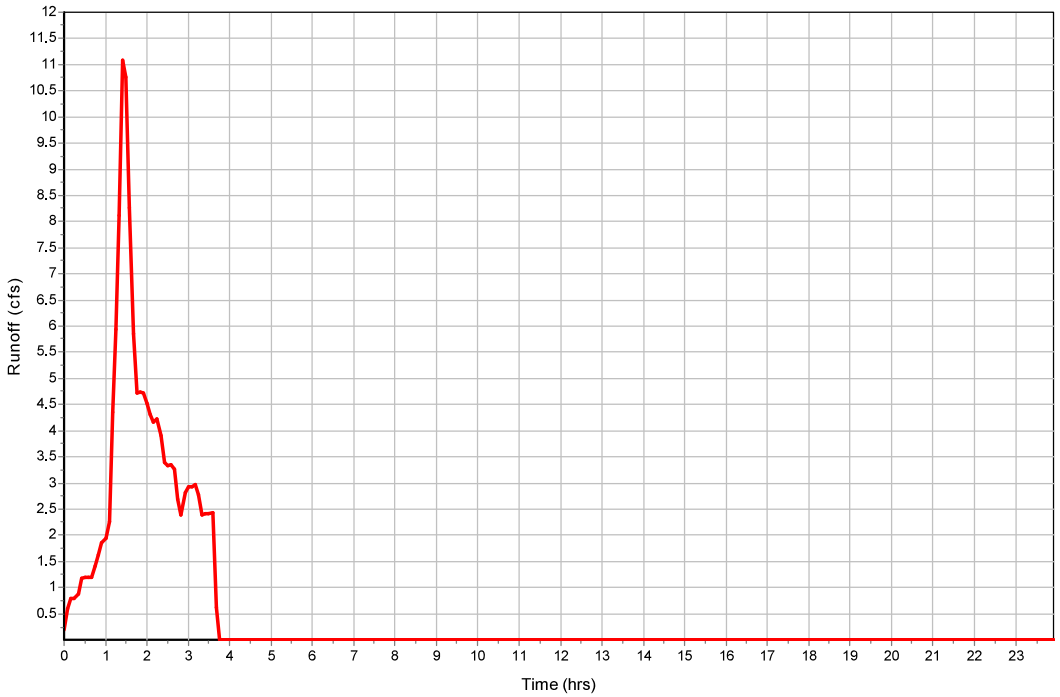
Total Rainfall (in)	1.66
Total Runoff (in)	0.43
Peak Runoff (cfs)	11.09
Time of Concentration (days hh:mm:ss)	0 00:10:00

Subbasin : X-SEC-162

Rainfall Intensity Graph



Runoff Hydrograph



Subbasin : X-SEC-170

Input Data

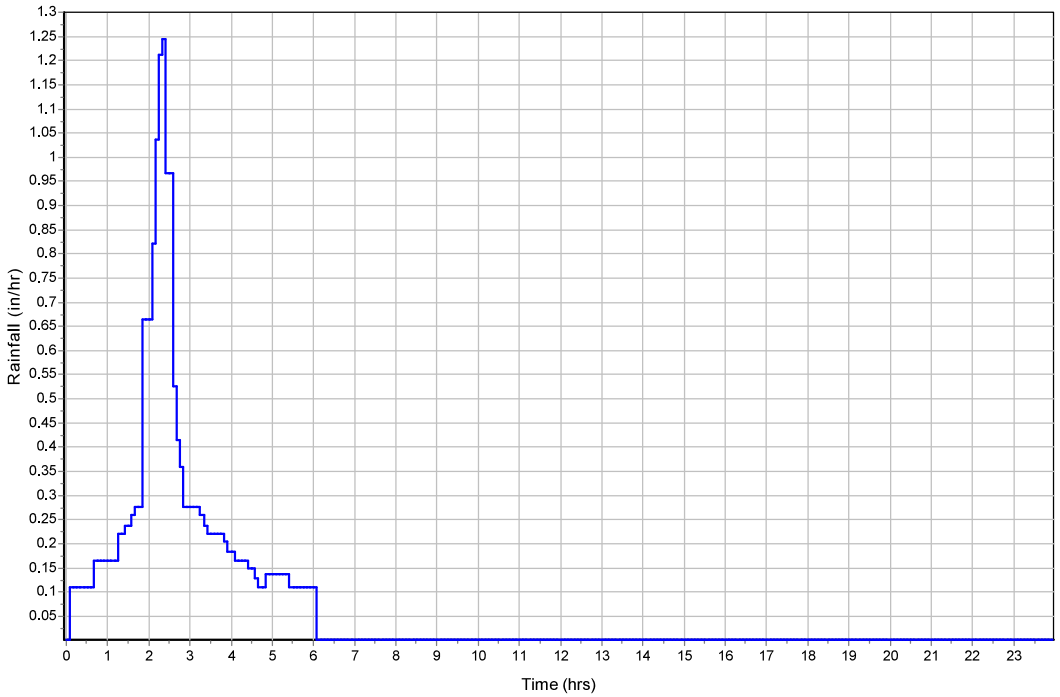
Area (ac)	371.7

Subbasin Runoff Results

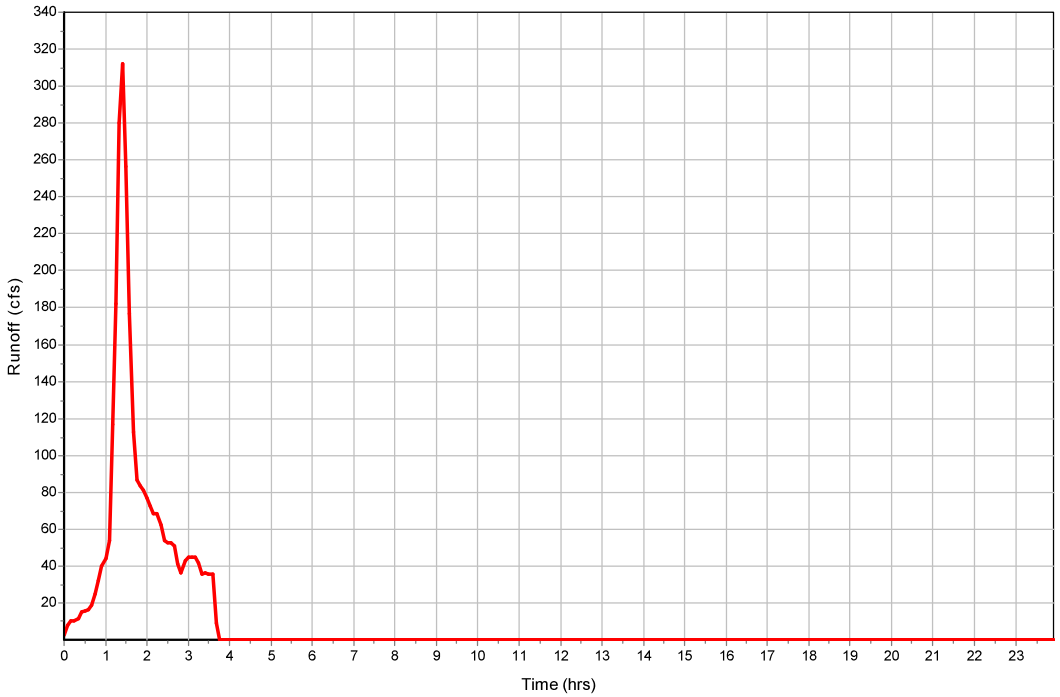
Total Rainfall (in)	1.66
Total Runoff (in)	0.66
Peak Runoff (cfs)	313.15
Time of Concentration (days hh:mm:ss)	0 00:10:00

Subbasin : X-SEC-170

Rainfall Intensity Graph



Runoff Hydrograph



Channel Results

Element ID	Peak Flow (cfs)	Design Flow Capacity (cfs)	Peak Flow/ Design Flow Ratio	Peak Flow Velocity (ft/sec)	Peak Flow Depth (ft)	Peak Flow Depth/ Total Depth Ratio	Reported Condition
Link-21	221.0	747.7	0.30	9.99	2.26	0.76	
Link-22	312.8	923.0	0.34	9.13	2.33	0.78	
Link-23	291.5	2871.0	0.10	4.60	5.86	1.00	
Link-25	244.3	1137.4	0.21	5.09	3.00	1.00	

Appendix C – Detention Basin Stage–Storage

Storage Nodes

Storage Node : NE-BASIN

Input Data

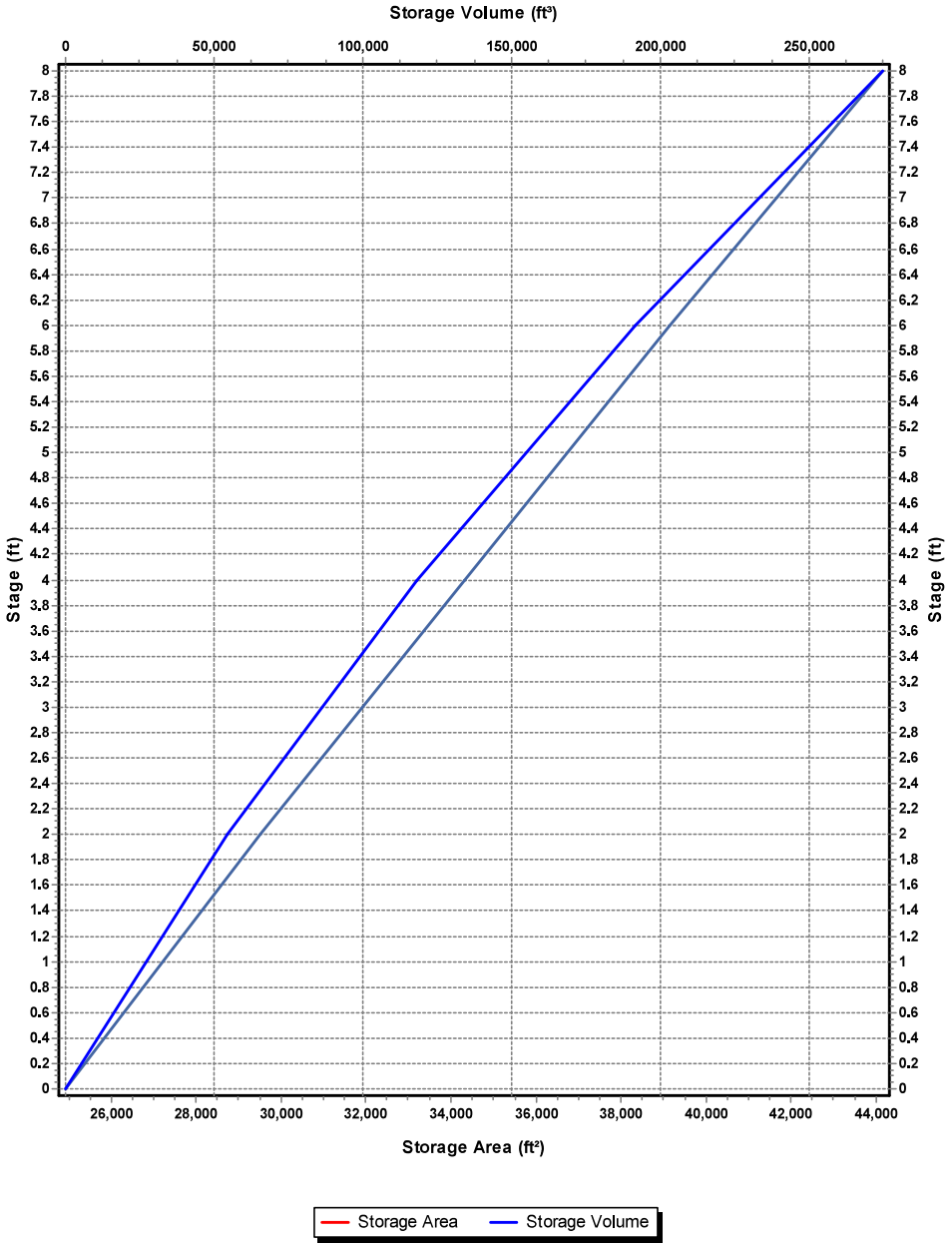
Invert Elevation (ft)	4364.00
Max (Rim) Elevation (ft)	4372.00
Max (Rim) Offset (ft)	8.00
Initial Water Elevation (ft)	0.00
Initial Water Depth (ft)	-4364.00
Ponded Area (ft^2)	100.00
Evaporation Loss	0.00

Storage Area Volume Curves

Storage Curve : SE-stage storage

Stage (ft)	Storage Area (ft^2)	Storage Volume (ft^3)
0	24929	0
2	29506	54435
4	34300	118241
6	39148	191689
8	44158	274995

Storage Area Volume Curves



Storage Node : NE-BASIN (continued)

Output Summary Results

Peak Inflow (cfs)	253.66
Peak Lateral Inflow (cfs)	3.56
Peak Outflow (cfs)	215.62
Peak Exfiltration Flow Rate (cfm)	0
Max HGL Elevation Attained (ft)	4368.75
Max HGL Depth Attained (ft)	4.75
Average HGL Elevation Attained (ft)	4367.69
Average HGL Depth Attained (ft)	3.69
Time of Max HGL Occurrence (days hh:mm)	0 01:41
Total Exfiltration Volume (1000-ft^3)	0
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0

Storage Node : NW-BASIN

Input Data

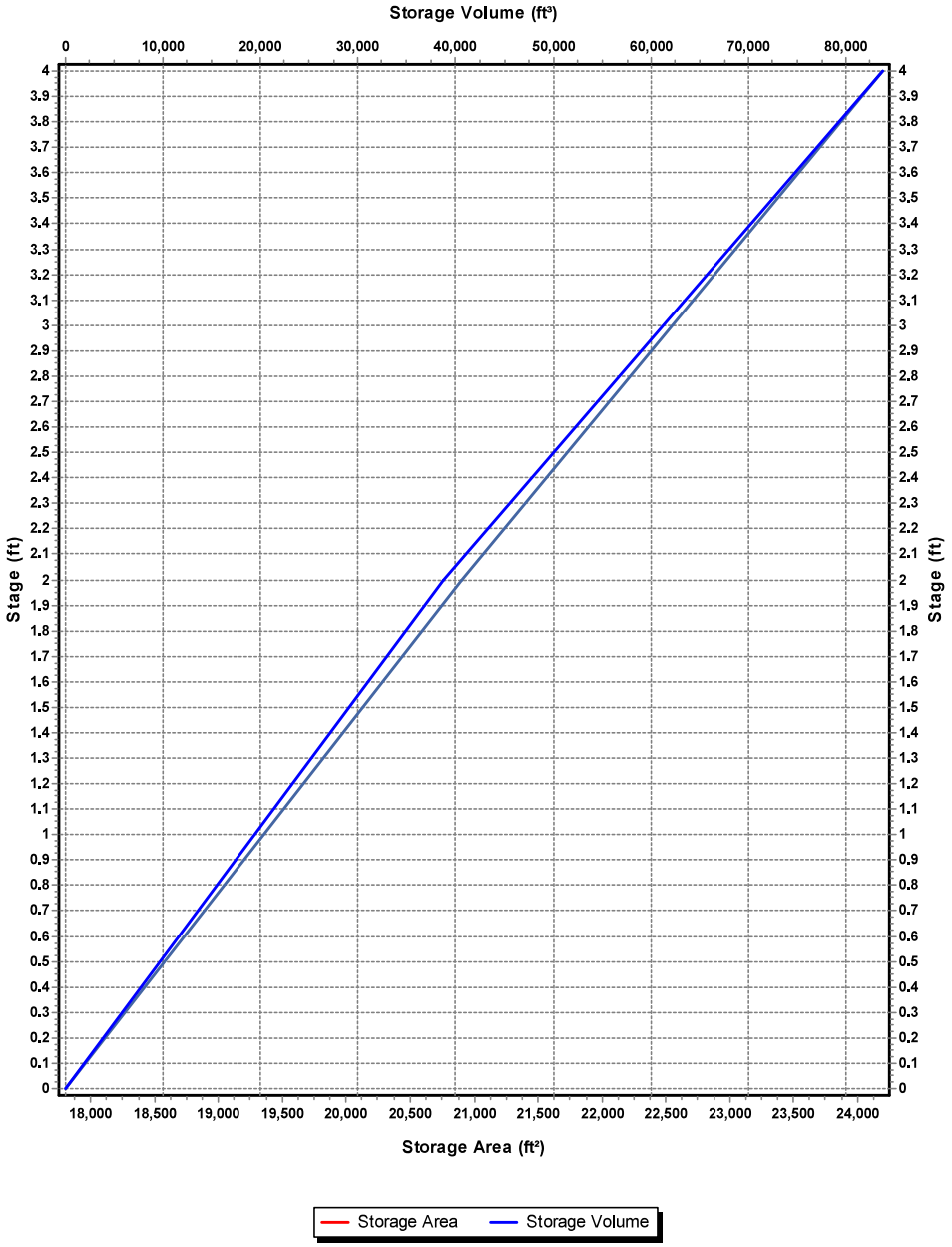
Invert Elevation (ft)	4446.10
Max (Rim) Elevation (ft)	4452.00
Max (Rim) Offset (ft)	5.90
Initial Water Elevation (ft)	0.00
Initial Water Depth (ft)	-4446.10
Ponded Area (ft^2)	100.00
Evaporation Loss	0.00

Storage Area Volume Curves

Storage Curve : NW-stage storage

Stage (ft)	Storage Area (ft^2)	Storage Volume (ft^3)
0	17800	0
2	20900	38700
4	24200	83800

Storage Area Volume Curves



Storage Node : NW-BASIN (continued)

Output Summary Results

Peak Inflow (cfs)	291.49
Peak Lateral Inflow (cfs)	0
Peak Outflow (cfs)	251.67
Peak Exfiltration Flow Rate (cfm)	0
Max HGL Elevation Attained (ft)	4452.49
Max HGL Depth Attained (ft)	6.39
Average HGL Elevation Attained (ft)	4448.07
Average HGL Depth Attained (ft)	1.97
Time of Max HGL Occurrence (days hh:mm)	0 01:36
Total Exfiltration Volume (1000-ft^3)	0
Total Flooded Volume (ac-in)	0.34
Total Time Flooded (min)	6
Total Retention Time (sec)	0

Storage Node : SE-BASIN

Input Data

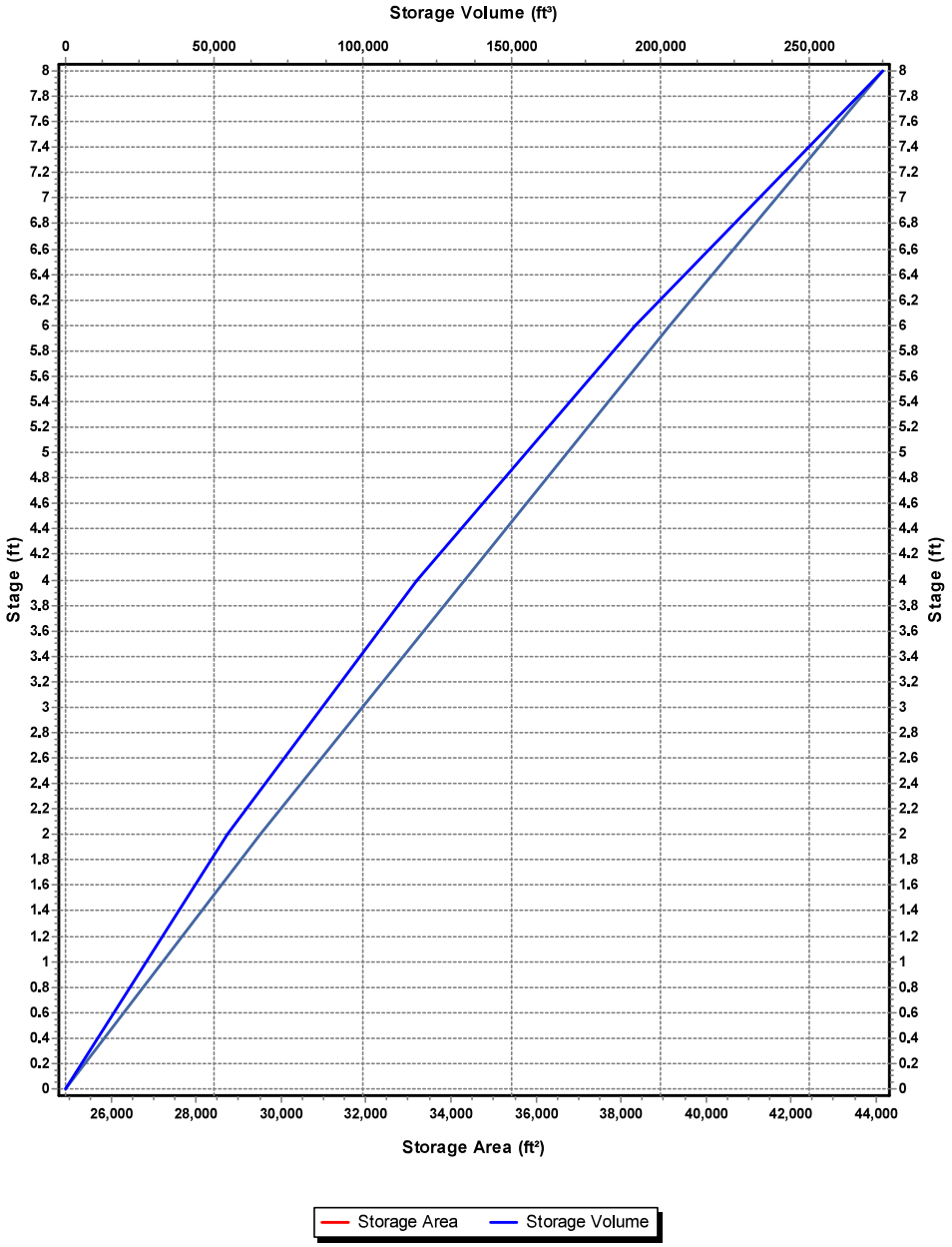
Invert Elevation (ft)	4347.80
Max (Rim) Elevation (ft)	4453.50
Max (Rim) Offset (ft)	105.70
Initial Water Elevation (ft)	0.00
Initial Water Depth (ft)	-4347.80
Ponded Area (ft^2)	100.00
Evaporation Loss	0.00

Storage Area Volume Curves

Storage Curve : SE-stage storage

Stage (ft)	Storage Area (ft^2)	Storage Volume (ft^3)
0	24929	0
2	29506	54435
4	34300	118241
6	39148	191689
8	44158	274995

Storage Area Volume Curves



Storage Node : SE-BASIN (continued)

Output Summary Results

Peak Inflow (cfs)	39.15
Peak Lateral Inflow (cfs)	0
Peak Outflow (cfs)	0
Peak Exfiltration Flow Rate (cfm)	0
Max HGL Elevation Attained (ft)	4351.48
Max HGL Depth Attained (ft)	3.68
Average HGL Elevation Attained (ft)	4350.72
Average HGL Depth Attained (ft)	2.92
Time of Max HGL Occurrence (days hh:mm)	0 22:41
Total Exfiltration Volume (1000-ft^3)	0
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0

Storage Node : SW-BASIN

Input Data

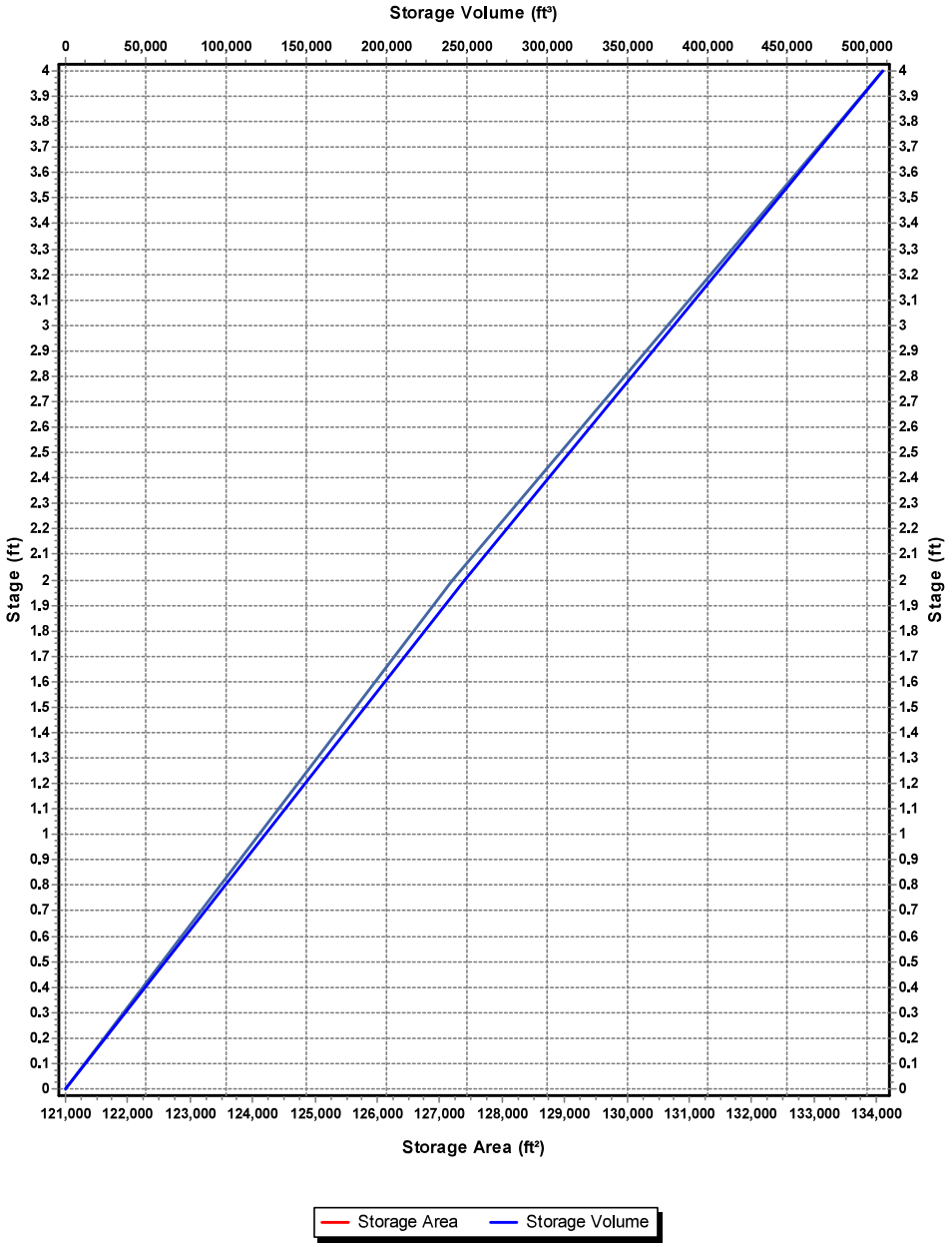
Invert Elevation (ft)	4415.80
Max (Rim) Elevation (ft)	4426.00
Max (Rim) Offset (ft)	10.20
Initial Water Elevation (ft)	0.00
Initial Water Depth (ft)	-4415.80
Ponded Area (ft^2)	100.00
Evaporation Loss	0.00

Storage Area Volume Curves

Storage Curve : SW-stage storage

Stage (ft)	Storage Area (ft^2)	Storage Volume (ft^3)
0	121000	0
2	127200	248200
4	134100	509500

Storage Area Volume Curves



Storage Node : SW-BASIN (continued)

Output Summary Results

Peak Inflow (cfs)	78.84
Peak Lateral Inflow (cfs)	8.57
Peak Outflow (cfs)	0.05
Peak Exfiltration Flow Rate (cfm)	0
Max HGL Elevation Attained (ft)	4420.19
Max HGL Depth Attained (ft)	4.39
Average HGL Elevation Attained (ft)	4418.86
Average HGL Depth Attained (ft)	3.06
Time of Max HGL Occurrence (days hh:mm)	1 00:00
Total Exfiltration Volume (1000-ft^3)	0
Total Flooded Volume (ac-in)	0
Total Time Flooded (min)	0
Total Retention Time (sec)	0

Appendix D – Background Data

NOAA Atlas 14, Volume 1, Version 5
Location name: Dayton, Nevada, USA*
Latitude: 39.2836°, Longitude: -119.5778°
Elevation: 4466 ft**
* source: ESRI Maps
** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.096 (0.082-0.115)	0.120 (0.103-0.144)	0.162 (0.137-0.194)	0.200 (0.168-0.240)	0.263 (0.214-0.315)	0.321 (0.253-0.387)	0.388 (0.296-0.473)	0.469 (0.344-0.582)	0.597 (0.413-0.760)	0.713 (0.470-0.923)
10-min	0.146 (0.125-0.175)	0.183 (0.157-0.219)	0.246 (0.209-0.295)	0.305 (0.255-0.365)	0.400 (0.326-0.480)	0.488 (0.385-0.589)	0.591 (0.451-0.721)	0.714 (0.523-0.886)	0.909 (0.628-1.16)	1.08 (0.715-1.41)
15-min	0.182 (0.155-0.217)	0.227 (0.194-0.272)	0.305 (0.259-0.365)	0.378 (0.317-0.452)	0.496 (0.404-0.596)	0.605 (0.477-0.730)	0.733 (0.559-0.893)	0.885 (0.649-1.10)	1.13 (0.779-1.43)	1.34 (0.886-1.74)
30-min	0.244 (0.209-0.292)	0.305 (0.262-0.366)	0.411 (0.348-0.492)	0.508 (0.427-0.609)	0.668 (0.544-0.802)	0.814 (0.642-0.984)	0.987 (0.753-1.20)	1.19 (0.874-1.48)	1.52 (1.05-1.93)	1.81 (1.19-2.35)
60-min	0.303 (0.258-0.362)	0.378 (0.324-0.453)	0.509 (0.431-0.609)	0.629 (0.528-0.753)	0.827 (0.673-0.993)	1.01 (0.795-1.22)	1.22 (0.932-1.49)	1.48 (1.08-1.83)	1.88 (1.30-2.39)	2.24 (1.48-2.90)
2-hr	0.394 (0.344-0.460)	0.490 (0.429-0.573)	0.630 (0.546-0.735)	0.752 (0.644-0.877)	0.937 (0.780-1.10)	1.10 (0.896-1.30)	1.29 (1.02-1.54)	1.52 (1.16-1.84)	1.90 (1.39-2.41)	2.26 (1.60-2.93)
3-hr	0.463 (0.407-0.532)	0.578 (0.512-0.667)	0.731 (0.641-0.841)	0.854 (0.742-0.984)	1.03 (0.881-1.19)	1.18 (0.992-1.38)	1.36 (1.12-1.60)	1.58 (1.27-1.89)	1.94 (1.51-2.44)	2.28 (1.73-2.96)
6-hr	0.615 (0.543-0.700)	0.770 (0.681-0.881)	0.965 (0.848-1.10)	1.12 (0.977-1.28)	1.33 (1.14-1.52)	1.49 (1.27-1.72)	1.66 (1.38-1.94)	1.86 (1.52-2.20)	2.17 (1.72-2.61)	2.44 (1.90-2.99)
12-hr	0.780 (0.687-0.886)	0.984 (0.867-1.12)	1.25 (1.10-1.42)	1.45 (1.27-1.65)	1.73 (1.49-1.98)	1.94 (1.65-2.24)	2.16 (1.81-2.52)	2.39 (1.96-2.82)	2.69 (2.15-3.24)	2.95 (2.30-3.61)
24-hr	0.859 (0.784-0.946)	1.07 (0.981-1.18)	1.36 (1.24-1.49)	1.58 (1.44-1.73)	1.89 (1.71-2.08)	2.14 (1.92-2.34)	2.39 (2.13-2.64)	2.64 (2.34-2.95)	3.00 (2.61-3.38)	3.28 (2.82-3.72)
2-day	1.01 (0.920-1.12)	1.27 (1.15-1.40)	1.60 (1.45-1.76)	1.85 (1.68-2.04)	2.21 (1.98-2.44)	2.48 (2.22-2.76)	2.77 (2.45-3.10)	3.06 (2.68-3.45)	3.45 (2.97-3.94)	3.75 (3.18-4.34)
3-day	1.10 (1.00-1.22)	1.38 (1.25-1.53)	1.74 (1.59-1.93)	2.03 (1.84-2.24)	2.43 (2.19-2.69)	2.75 (2.45-3.05)	3.08 (2.72-3.44)	3.42 (2.98-3.84)	3.88 (3.33-4.42)	4.25 (3.59-4.90)
4-day	1.19 (1.08-1.32)	1.50 (1.36-1.66)	1.89 (1.72-2.09)	2.21 (2.01-2.44)	2.66 (2.40-2.94)	3.01 (2.69-3.34)	3.39 (2.99-3.77)	3.78 (3.29-4.23)	4.32 (3.69-4.91)	4.74 (3.99-5.46)
7-day	1.38 (1.25-1.54)	1.73 (1.56-1.93)	2.20 (1.99-2.45)	2.57 (2.32-2.86)	3.08 (2.76-3.43)	3.48 (3.09-3.89)	3.89 (3.43-4.36)	4.32 (3.76-4.87)	4.89 (4.19-5.60)	5.33 (4.52-6.16)
10-day	1.52 (1.36-1.70)	1.91 (1.71-2.14)	2.45 (2.20-2.74)	2.86 (2.56-3.20)	3.43 (3.04-3.84)	3.86 (3.41-4.34)	4.30 (3.77-4.85)	4.74 (4.12-5.38)	5.33 (4.57-6.12)	5.78 (4.90-6.70)
20-day	1.77 (1.60-1.98)	2.24 (2.02-2.50)	2.87 (2.59-3.19)	3.34 (3.01-3.71)	3.97 (3.55-4.41)	4.43 (3.95-4.95)	4.90 (4.33-5.49)	5.36 (4.70-6.03)	5.95 (5.16-6.76)	6.38 (5.48-7.33)
30-day	1.96 (1.77-2.18)	2.47 (2.23-2.75)	3.14 (2.83-3.48)	3.63 (3.27-4.03)	4.28 (3.84-4.75)	4.76 (4.24-5.30)	5.23 (4.64-5.86)	5.69 (5.01-6.41)	6.28 (5.46-7.15)	6.70 (5.77-7.70)
45-day	2.29 (2.07-2.54)	2.89 (2.60-3.20)	3.67 (3.31-4.04)	4.22 (3.81-4.64)	4.92 (4.43-5.39)	5.40 (4.86-5.92)	5.84 (5.25-6.42)	6.22 (5.59-6.86)	6.64 (5.95-7.37)	6.87 (6.15-7.78)
60-day	2.62 (2.37-2.90)	3.31 (2.99-3.66)	4.19 (3.79-4.61)	4.81 (4.35-5.27)	5.57 (5.04-6.10)	6.09 (5.50-6.69)	6.56 (5.91-7.20)	6.96 (6.26-7.66)	7.38 (6.64-8.15)	7.59 (6.85-8.42)

[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

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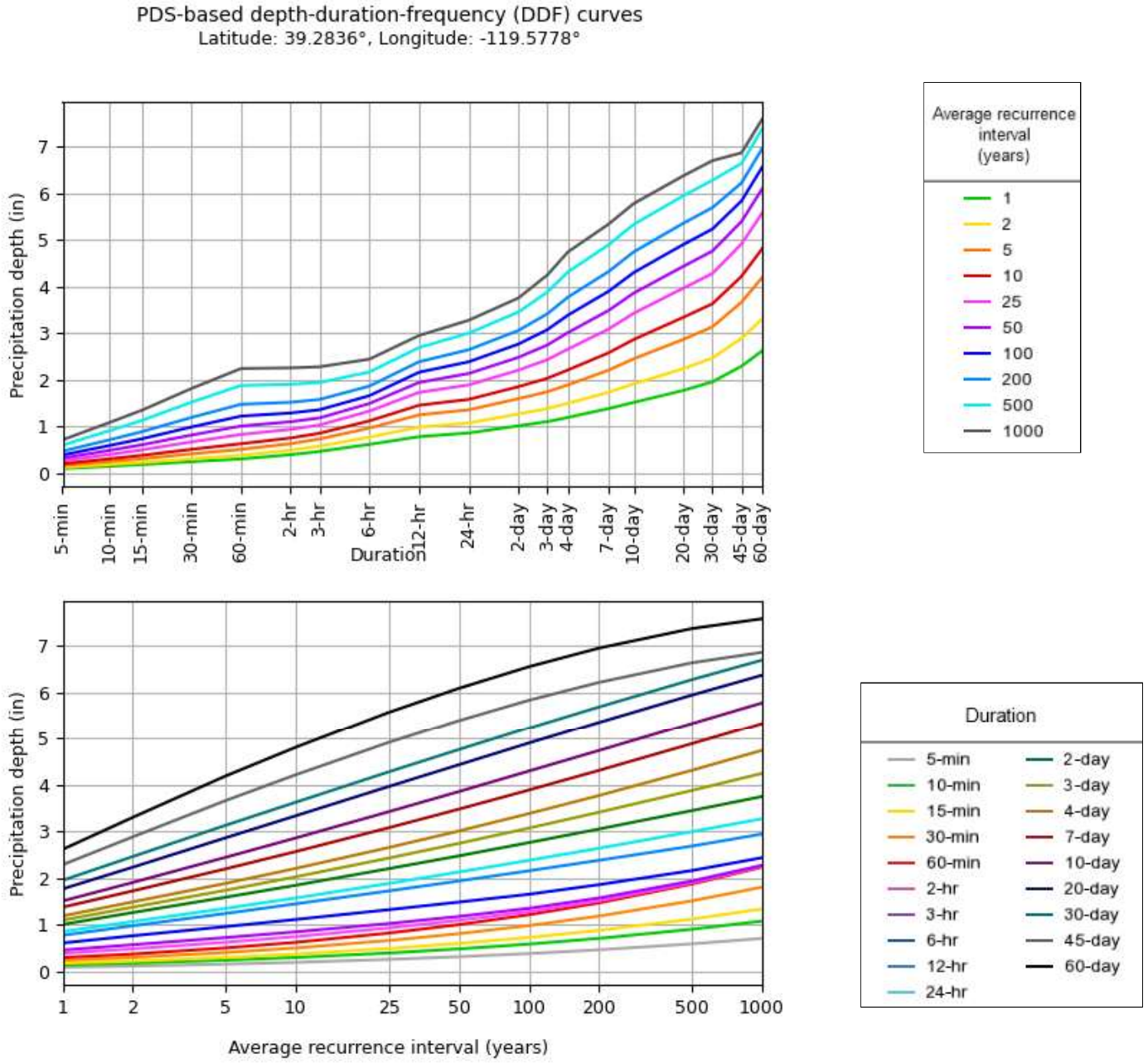
PF graphical



NOAA Atlas 14, Volume 1, Version 5

Created (GMT): Fri Nov 14 01:44:12 2025

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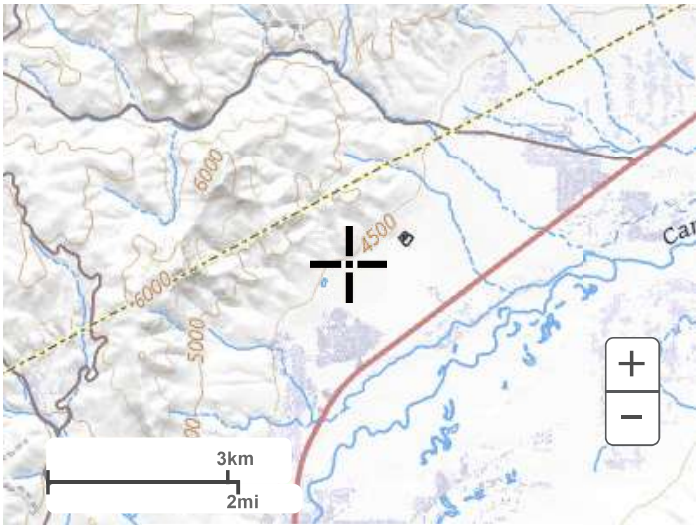
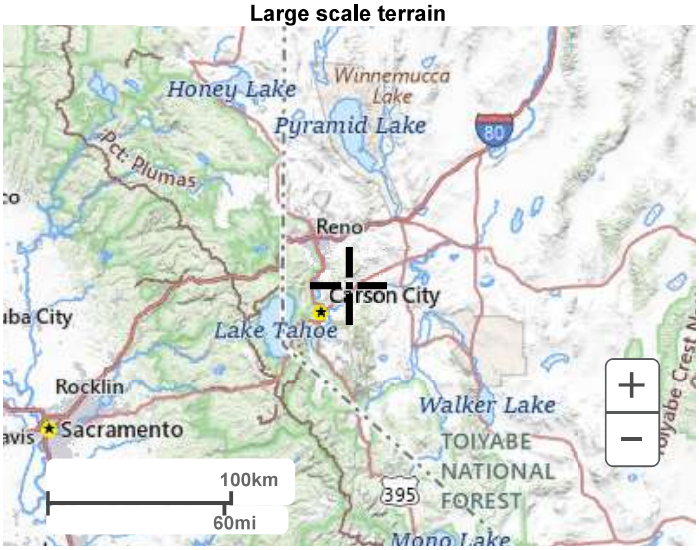
Maps & aerials

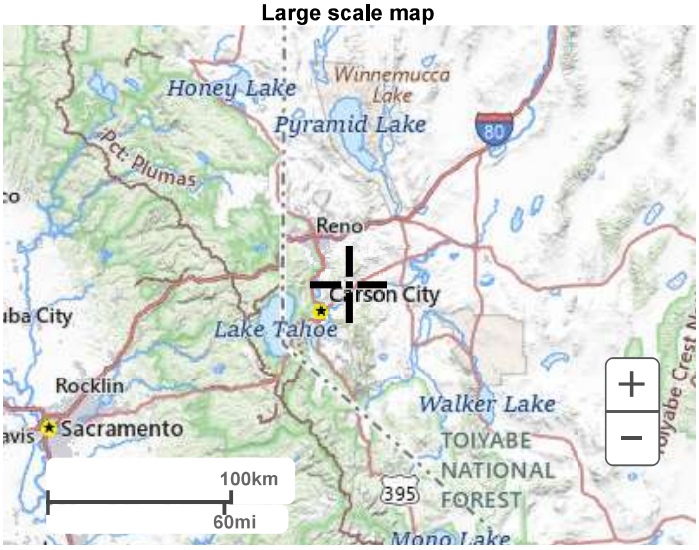
Small scale terrain



Large scale terrain



Large scale map



Large scale aerial

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US Department of Commerce
National Oceanic and Atmospheric Administration
National Weather Service
National Water Center
1325 East West Highway
Silver Spring, MD 20910
Questions?: HDSC.Questions@noaa.gov

Disclaimer

National Flood Hazard Layer FIRMette

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

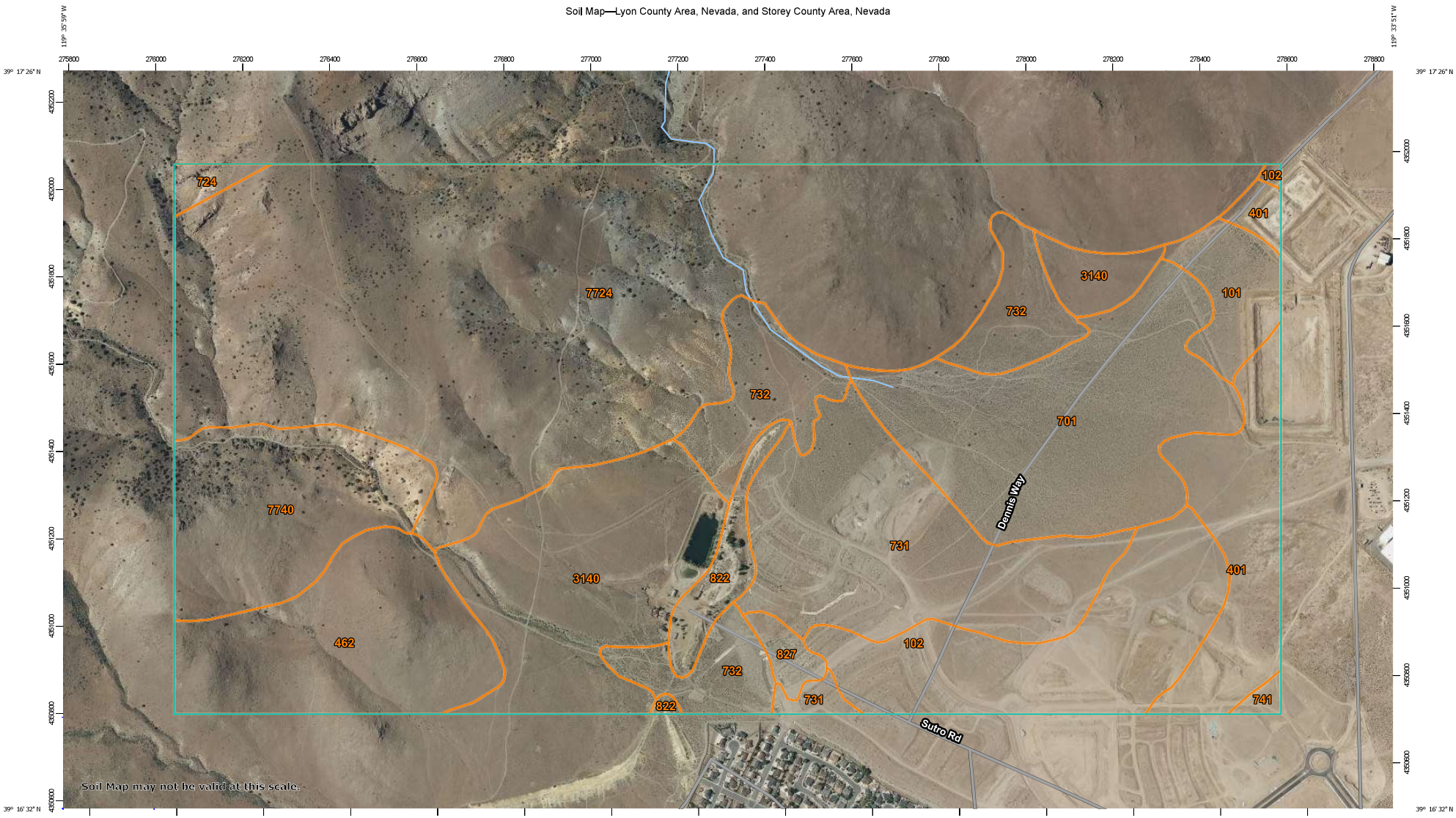
The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 11/15/2025 at 8:49 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Soil Map—Lyon County Area, Nevada, and Storey County Area, Nevada



Map Scale: 1:8,230 if printed on B landscape (17" x 11") sheet.

Meters: 0 100 200 400 600

Feet: 0 400 800 1600 2400

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Lyon County Area, Nevada
Survey Area Data: Version 24, Aug 29, 2025

Soil Survey Area: Storey County Area, Nevada
Survey Area Data: Version 25, Sep 2, 2025

Your area of interest (AOI) includes more than one soil survey area. These survey areas may have been mapped at different scales, with a different land use in mind, at different times, or at different levels of detail. This may result in map unit symbols, soil properties, and interpretations that do not completely agree across soil survey area boundaries.

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 10, 2022—Jun 14, 2022

MAP LEGEND

MAP INFORMATION

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
101	Ackley sandy loam, 0 to 2 percent slopes	14.7	1.8%
102	Ackley gravelly sandy loam, 2 to 4 percent slopes	54.3	6.8%
401	Lahontan silty clay loam, strongly saline-alkali	37.6	4.7%
462	Olac-Rock outcrop complex, 8 to 15 percent slopes	54.7	6.9%
701	Veta association	77.1	9.7%
731	Hunewill sandy loam, 4 to 8 percent slopes	73.1	9.2%
732	Hunewill stony loam, 8 to 15 percent slopes	47.0	5.9%
741	Wedertz-Wellington-Saralegui complex, 0 to 2 percent slopes	1.6	0.2%
822	Dumps, mine	11.0	1.4%
827	Slickens	4.4	0.6%
3140	Fulstone-Reno complex, 2 to 30 percent slopes	73.5	9.3%
7724	Ceejay-Doorkiss-Skeddadle association	293.8	37.0%
7740	Reywat-Ister-Rock outcrop association	48.3	6.1%
Subtotals for Soil Survey Area		**790.9**	**99.6%**
Totals for Area of Interest		**794.3**	**100.0%**

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
724	Ceejay-Doorkiss-Skeddadle	3.4	0.4%
Subtotals for Soil Survey Area		**3.4**	**0.4%**
Totals for Area of Interest		**794.3**	**100.0%**

Hydrologic Soil Group and Surface Runoff

This table gives estimates of various soil water features. The estimates are used in land use planning that involves engineering considerations.

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The four hydrologic soil groups are:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas.

Surface runoff refers to the loss of water from an area by flow over the land surface. Surface runoff classes are based on slope, climate, and vegetative cover. The concept indicates relative runoff for very specific conditions. It is assumed that the surface of the soil is bare and that the retention of surface water resulting from irregularities in the ground surface is minimal. The classes are negligible, very low, low, medium, high, and very high.

Report—Hydrologic Soil Group and Surface Runoff

Absence of an entry indicates that the data were not estimated. The dash indicates no documented presence.

Hydrologic Soil Group and Surface Runoff–Lyon County Area, Nevada			
Map symbol and soil name	**Pct. of map unit**	**Surface Runoff**	**Hydrologic Soil Group**
101—Ackley sandy loam, 0 to 2 percent slopes			
Ackley	85	Low	B

Hydrologic Soil Group and Surface Runoff–Lyon County Area, Nevada			
Map symbol and soil name	**Pct. of map unit**	**Surface Runoff**	**Hydrologic Soil Group**
102—Ackley gravelly sandy loam, 2 to 4 percent slopes			
Ackley	85	Very low	B
401—Lahontan silty clay loam, strongly saline-alkali			
Lahontan	90	High	C
462—Olac-Rock outcrop complex, 8 to 15 percent slopes			
Olac	70	Very high	D
Rock outcrop	20	—	D
701—Veta association			
Veta	65	Very low	A
Veta	20	Low	A
731—Hunewill sandy loam, 4 to 8 percent slopes			
Hunewill	85	High	C
732—Hunewill stony loam, 8 to 15 percent slopes			
Hunewill	85	High	C
741—Wedertz-Wellington-Saralegui complex, 0 to 2 percent slopes			
Wedertz	40	Medium	C
Wellington	30	Very high	D
Saralegui	20	Very low	A
822—Dumps, mine			
Dumps	100	—	—
827—Slickens			
Slickens	100	—	—
3140—Fulstone-Reno complex, 2 to 30 percent slopes			
Fulstone	45	High	D
Reno	40	High	D
7724—Ceejay-Doorkiss-Skeddadle association			
Ceejay	40	Very high	D
Doorkiss	20	Very high	D
Skedaddle	20	Very high	D
7740—Reywat-Ister-Rock outcrop association			
Reywat	45	Very high	D
Ister	30	High	C
Rock outcrop	10	—	D

Hydrologic Soil Group and Surface Runoff–Storey County Area, Nevada			
Map symbol and soil name	**Pct. of map unit**	**Surface Runoff**	**Hydrologic Soil Group**

Hydrologic Soil Group and Surface Runoff–Storey County Area, Nevada			
Map symbol and soil name	Pct. of map unit	Surface Runoff	Hydrologic Soil Group
724—Ceejay-Doorkiss-Skeddadle			
Ceejay	40	Very high	D
Doorkiss	20	Very high	D
Skedaddle	20	Very high	D

Data Source Information

Soil Survey Area: Lyon County Area, Nevada
Survey Area Data: Version 24, Aug 29, 2025

Soil Survey Area: Storey County Area, Nevada
Survey Area Data: Version 25, Sep 2, 2025

APPENDIX D: Traffic Impact Study

TRAFFIC IMPACT STUDY

FOR

TRADITIONS NORTH

November 12, 2025

PREPARED FOR:

GF Development, LLC

PREPARED BY:

GCW
ENGINEERS \ SURVEYORS

GCW, Inc.
5482 Longley Lane, Suite B, Reno, Nevada 89511
775.322.4300
www. gcwengineering.com

YOUR QUESTIONS ANSWERED QUICKLY

Why did you perform this study?

This Traffic Impact Study evaluates the potential traffic impacts associated with the proposed Traditions North project in Dayton, Nevada. This study of potential transportation impacts was undertaken for planning purposes and to assist in determining what traffic controls or mitigations may be needed to reduce potential impacts, if any are found.

What does the project consist of?

The project consists of approximately 364 single family residential housing units located north of US Highway 50 (US 50), Nevada Station Parkway, and the Traditions Village 1 and Village 2 developments.

The project will access US 50 via Fortune Drive and Traditions Parkway. The project originally contemplated a connection to Enterprise Way as well, however due to circumstances separate from the traffic study, a vehicle connection to Enterprise Way is no longer being considered and was not included in this traffic analysis and report. If the project wishes to pursue a vehicle connection to Enterprise Way in the future, a separate traffic analysis will need to be conducted at that time.

How much traffic will the project generate?

The project is anticipated to generate approximately 3,433 Daily, 255 AM peak hour, and 342 PM peak hour trips to the external roadway network.

How will project traffic affect the roadway network?

Under Opening Year Plus Project conditions, the study intersections are expected to operate within policy level of service thresholds.

Under Future Year conditions, the US 50/Fortune Drive intersection is anticipated to operate at level of service E during the AM peak hour. The poor level of service is primarily due to the high southbound right-turn volume on Fortune Drive. The southbound Fortune Drive approach currently contains a hatched-out lane which can be converted to a second right-turn lane. With dual southbound right-turn lanes and protected plus overlap phasing, the overall US 50/Fortune Drive intersection is anticipated to operate within policy level of service thresholds. Capacity improvements for the Future Year condition should be undertaken by NDOT as regional improvements since the poor future operating conditions will occur unrelated to this project

Under Future Year Plus Project conditions, the analysis includes the needed regional capacity improvements (dual southbound right-turn lanes) at the US 50/Fortune Drive intersection. The study intersections are expected to operate at overall LOS D or better (within policy level of service thresholds).

What are the recommended improvements?

The project is not expected to result in levels of service below policy thresholds and therefore no project related mitigations are recommended. The following regional improvements by NDOT are included in the *US 50 Corridor Study* or as part of the corridor safety improvements that are currently at the 90% design stage, and were included in the Future Year analysis as a background condition:

- Lower the speed limit on US 50 from 60 mph to 55 mph from east of Fortune Drive to James Avenue to provide a more gradual transition in speed limits through the expanding urbanized area
- Widen US 50 to six lanes for the Future Year per the *US 50 Corridor Study*. With the widening project:
    - Construct/restripe a second southbound right-turn lane on Fortune Drive at US 50
    - Construct a westbound right-turn lane on US 50 at Fortune Drive (not shown in the *US 50 Corridor Study*) as exists today
    - Construct a westbound right-turn lane on US 50 at Traditions Parkway (not shown in the *US 50 Corridor Study*) as exists today
    - Improve the south leg of the US 50/Traditions Parkway/Segale Road intersection

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5. Opening Year Traffic Volumes, Lane Configurations, and Controls
6. Future Year Traffic Volumes, Lane Configurations, and Controls
7. Project Trips – Opening Year
8. Project Trips – Future Year
9. Opening Year Plus Project Traffic Volumes, Lane Configurations, and Controls
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D. Growth Rate Calculations
E. Opening Year LOS Calculations
F. Future Year LOS Calculations
G. Opening Year Plus Project LOS Calculations
H. Future Year Plus Project LOS Calculations

INTRODUCTION

This report presents the findings of a Traffic Impact Study completed to assess the potential traffic impacts on local intersections associated with the Traditions North project in Dayton, Nevada. This traffic impact study has been prepared to document existing traffic conditions, quantify traffic volumes generated by the proposed project, identify potential impacts, document findings, and make recommendations to mitigate impacts, if any are found. The location of the project is shown on **Figure 1** and **Figure 2**, and the project site plan is shown on **Figure 3**.

Study Area and Evaluated Scenarios

The project consists of approximately 364 single family residential housing units. The project is located north of US Highway 50 (US 50), Nevada Station Parkway, and the Traditions Village 1 and Village 2 developments. The study intersections were identified as those most likely to be impacted by project traffic and are shown on **Figure 2**. The following intersections are included in this study:

1. Fortune Drive/Sugarloaf Drive
2. US 50/Fortune Drive
3. US 50/Traditions Parkway

This study includes analysis of both the weekday AM and PM peak hours as these are the periods of time in which peak traffic is anticipated to occur. The evaluated development scenarios are:

- Existing Conditions
- Opening Year Conditions – this scenario analyzes a 4-year horizon (Year 2029)
- Opening Year Plus Project Conditions
- Future Year Conditions (20-year horizon) – this scenario analyzes the 20-year horizon beyond the Opening Year (Year 2049)
- Future Year Plus Project Conditions

GCW ENGINEERS \ SURVEYORS

NO SCALE

- Project Site

Figure 1

Traditio 810 th

Traffic Impact Study

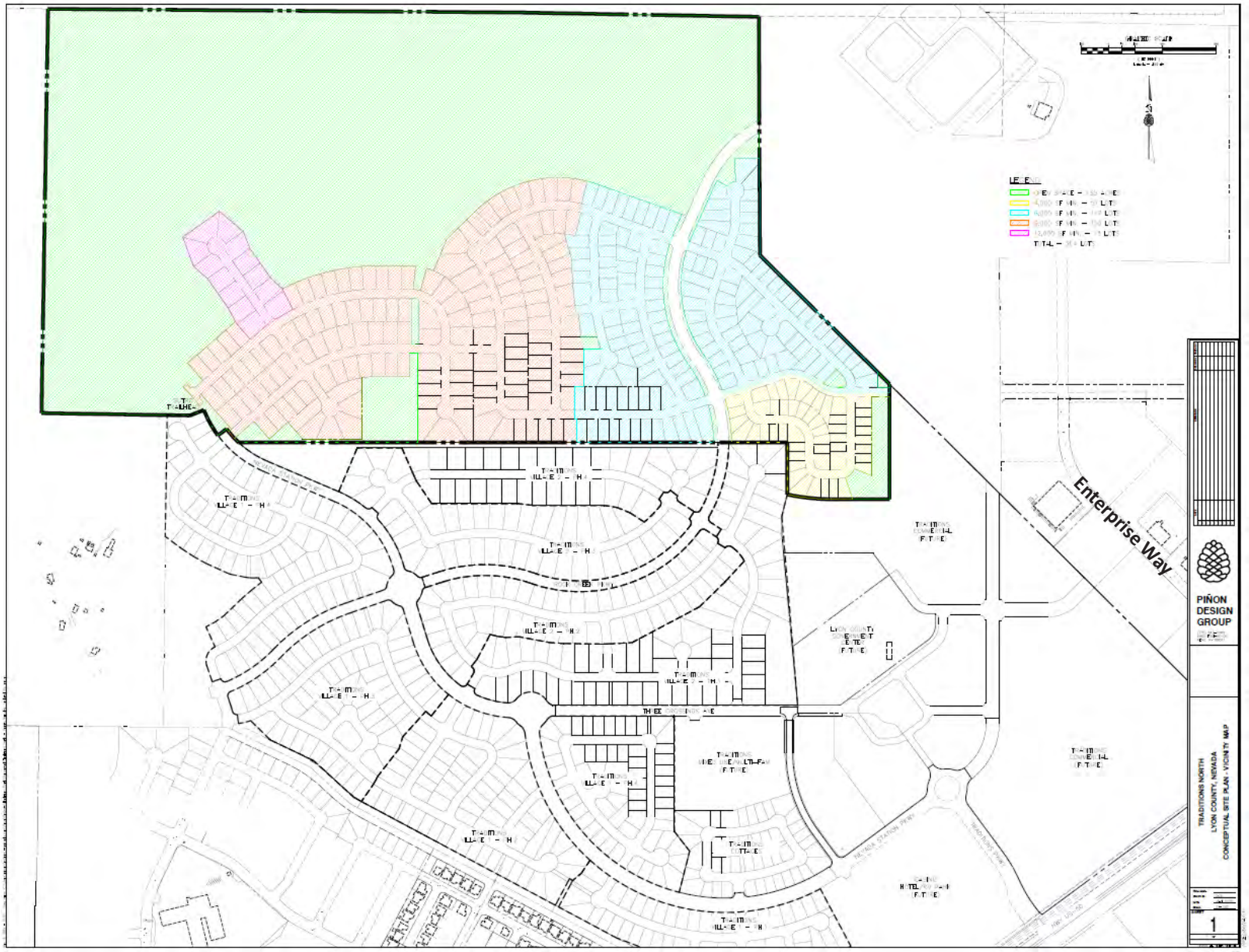
Regional Project Location

ENGINEERS \ SURVEYORS

NO SCALE

- Project Site
(#) - Study Intersection

Figure 2
Traditio 811 th
Traffic Impact Study
Study Intersections



GCW ENGINEERS \ SURVEYORS

NO SCALE

Figure 3

Traditio 812 th

Traffic Impact Study

Preliminary Site Plan

ANALYSIS METHODOLOGY

Level of service (LOS) is a term commonly used by transportation practitioners to measure and describe the operational characteristics of intersections, roadway segments, and other facilities. This term equates seconds of delay per vehicle at intersections to letter grades "A" through "F" with "A" representing optimum conditions and "F" representing breakdown or over capacity flows.

Intersections

The complete methodology for intersection level of service analysis is established in *the Highway Capacity Manual (HCM), 7th Edition* published by the Transportation Research Board (TRB). **Table 1** presents the delay thresholds for each level of service grade at signalized and unsignalized intersections.

Table 1: Level of Service Definition for Intersections

Level of Service	Brief Description	Average Delay (seconds per vehicle)	
		Signalized Intersections	Unsignalized Intersections
A	Free flow conditions.	< 10	< 10
B	Stable conditions with some affect from other vehicles.	10 to 20	10 to 15
C	Stable conditions with significant affect from other vehicles.	20 to 35	15 to 25
D	High density traffic conditions still with stable flow.	35 to 55	25 to 35
E	At or near capacity flows.	55 to 80	35 to 50
F	Over capacity conditions.	> 80	> 50

Source: *Highway Capacity Manual, 7th Edition*

Level of service calculations were performed for the study intersections using the Synchro 12 software package with analysis and results reported in accordance with *HCM* methodology.

Level of Service Policy

Lyon County

Chapter 4 – Transportation of the *2020 Lyon County Master Plan* (adopted December 16, 2021) includes the following level of service policies:

> *Signalized Intersections*
> *Level of Service at signalized intersections should be calculated using the Highway Capacity Manual, 2016 methodology. Delay at signalized intersections will be calculated on a peak hour basis and reported for the intersection overall. The overall intersections should operate at LOS D or better for the peak hour condition.*

Unsignalized Intersections

Level of Service at unsignalized intersections should be calculated using the Highway Capacity Manual, 2016 methodology. Delay at unsignalized intersections will be calculated on a peak hour basis and reported for both the approach with the highest delay and the intersection overall. The intersection approaches should operate at LOS D or better for the peak hour condition.

Nevada Department of Transportation

The Nevada Department of Transportation (NDOT) *Traffic Impact Study Requirements* publication states:

Level of service "C" will be the design objective for capacity and under no circumstances will less than level of service "D" be accepted for site and non-site traffic

Hence, LOS "D" was used as the threshold criteria for this analysis.

EXISTING CONDITIONS

Roadway Facilities

A brief description of the key roadways in the study area is provided below.

US Highway 50 is a highway with four-lane (two lanes in each direction and left-turn pockets at intersections) and five-lane (two lanes in each direction and two-way left-turn lane) sections within the study area. The roadway runs in a northeast-southwest direction and is considered an east-west roadway in this analysis. US 50 is classified as a Principal Arterial per NDOT roadway classification. The posted speed limit on US 50 at Fortune Drive is 45 mph and transitions to 60 mph just east of Fortune Drive.

Fortune Drive is a four-lane roadway with two lanes in each direction and turn pockets at intersections between US 50 and Dayton Village Parkway/Corral Drive. North of Dayton Village Parkway/Corral Drive, Fortune Drive is a two-lane residential roadway. The posted speed limit on Fortune Drive is 25 mph.

Traditions Parkway is a four-lane roadway north of US 50 that intersects Nevada Station Parkway at a roundabout intersection. The south leg of the US 50/Traditions Parkway intersection is a two-lane roadway called Segale Road that serves rural residential properties. The posted speed limit on Traditions Parkway north of US 50 is 35 mph.

Sugarloaf Drive is a two-lane residential roadway. The posted speed limit on Sugarloaf Drive is 25 mph.

Alternative Modes of Travel

Bicycle and pedestrian facilities do not exist on US 50 in the project area. Sidewalk exists on both sides of Fortune Drive and Sugarloaf Drive for the entire length of each roadway. Sidewalk also exists on both sides of Traditions Parkway from approximately 450 feet north of US 50 to Nevada Station Parkway. The US

50/Fortune Drive intersection has a marked crosswalk on the north leg of the intersection. Bicycle lanes do not exist on the study roadways.

Lyon County does not provide fixed route bus service.

Crash History

Vehicle crash data was obtained from NDOT and includes information from the 2019 to 2023 five-year period (the most current data available). The data shows the following:

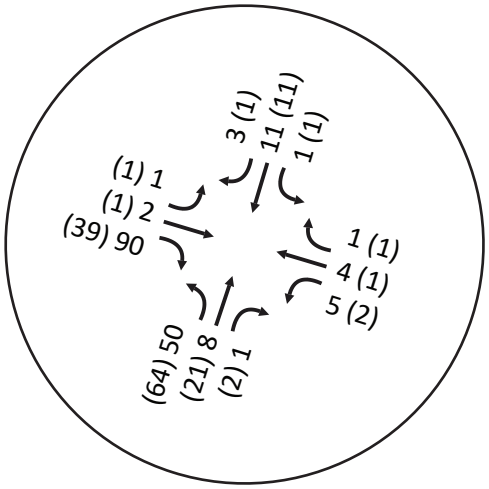
- Fortune Drive/Sugarloaf Drive – Zero crashes were reported at the intersection during the five year period
- US 50/Fortune Drive – Fourteen (14) crashes were reported at or within approximately 300 feet of the intersection during the five year period, including:
    - One (1) fatal crash – single vehicle run-off-the-road type crash involving alcohol
    - Six (6) injury crashes – 5 rear-end type crashes and 1 head-on type crash
    - Seven (7) property damage only (PDO) crashes – 5 single vehicle run-off-the-road type crashes and 2 rear-end type crashes
- US 50/Traditions Parkway – Four (4) crashes were reported at or within approximately 300 feet of the intersection during the five year period, including:
    - Two (2) injury crashes – 2 angle type crashes
    - Two (2) PDO crashes – 1 single vehicle run-off-the-road type crash and 1 rear-end type crash

There do not appear to be any trends or recurring crash types that require mitigations. The crash data sheets are provided in **Appendix A**.

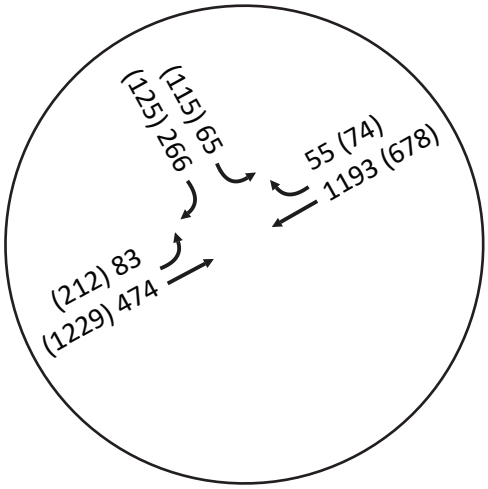
Traffic Volumes

AM (7:00 AM to 9:00 AM) and PM (4:00 PM to 6:00 PM) peak hour traffic volumes were collected at the study intersections on Tuesday, June 3, 2025. A review of NDOT's Annual Traffic Reports including the *2024 Seasonal Growth Factors* report (the most recent available) shows that traffic volumes in June are typically higher than the annual average, therefore, a seasonal factor was not applied to the existing traffic count data. The traffic count data sheets are provided in **Appendix B**. **Figure 4** shows the existing traffic volumes at the study intersections.

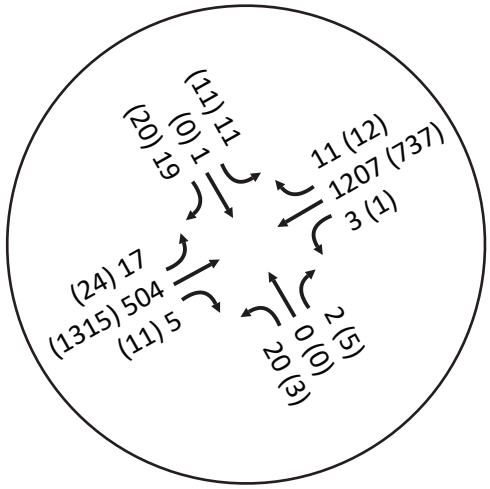
1 *Fortune Dr / Sugarloaf Dr*



2 *US 50 / Fortune Dr*



3 *US 50 / Traditions Pkwy*



GCW ENGINEERS \ SURVEYORS

NO SCALE

AM Peak Hour Volume (PM Peak Hour Volume)

(#) - Study Intersection STOP - Stop - Signal YIELD - Yield

Figure 4

Traditio 816 th

Traffic Impact Study

Existing Traffic Volumes, Lane Configurations, and Controls

Intersection Level of Service Analysis

Existing weekday AM and PM peak hour intersection level of service analysis was performed for the study intersections using Synchro 12 and HCS 2025 analysis software programs. The existing intersection lane configurations and controls are shown on **Figure 4. Table 2** shows the existing conditions level of service results and the technical calculations are provided in **Appendix C**.

Table 2: Existing Intersection Level of Service

Int. ID	Intersection	Control	AM		PM	
			Delay[1] Density[2]	LOS	Delay[1] Density[2]	LOS
1	Fortune Dr/Sugarloaf Dr	Side Street Stop				
	Overall		7	A	6	A
	EB Approach (Sugarloaf Dr)		9	A	9	A
	WB Approach (Sugarloaf Dr)		11	B	10	A
	NB Left (Fortune Dr)		7	A	7	A
	SB Left (Fortune Dr)		7	A	7	A
2	US 50/Fortune Dr	Signalized High-T				
	Overall		23	C	18	B
	EB Left (US 50)		45	D	24	C
	WB Approach (US 50)		18	B	15	B
	SB Approach (Fortune Dr)		36	D	23	C
	EB Merge (Fortune Dr to US 50)[3]		6	A	13	B
3	US 50/Traditions Pkwy	Side Street Stop				
	Overall		1	A	1	A
	NB Approach (Segale Rd)		39	E	47	E
	SB Approach (Traditions Pkwy)		36	E	30	D
	EB Left (US 50)		12	B	10	A
	WB Left (US 50)		9	A	13	B

Notes: 1. Delay is reported in seconds per vehicle for the overall intersection for signalized intersections and for the worst approach/movement for side street stop controlled intersections.
2. Average Density is reported for the EB Merge from the Fortune Dr SB left-turn to US 50 EB through movement.
3. Merge analysis was performed using HCS 2025 software.
Source: GCW, 2025

As shown in the table, the northbound and southbound approaches of the US 50/Traditions Parkway intersection are expected to operate at LOS E with minor street stop control. While the overall intersection is expected to operate at LOS A during the AM and PM peak hours, Lyon County standards state that unsignalized intersection "approaches should operate at LOS D or better for the peak hour condition." A traffic signal at the US 50/Traditions Parkway intersection is currently under construction. The other study intersections are expected to operate within policy level of service thresholds.

OPENING YEAR CONDITIONS

The Opening Year of the project is anticipated to be 2029.

Traffic Volumes

Opening Year traffic volumes were developed by applying a regional growth rate to the existing traffic volumes at the study intersections for 4 years. An annual growth rate of 0.5 percent per year was used, since trip generation estimates from other significant planned/approved projects in the area were also added. The 0.5 percent annual growth rate is consistent with the methodology used on other projects approved by NDOT and accounts for regional background growth that is not included in the trip generation of other projects. Trips generated by the following planned/approved, but not yet built, projects in the area were added to the study intersections:

- Traditions Town Center Phases 1-3
- Dayton Six

The resulting annual growth for the Opening Year volumes is generally higher than the traffic volume growth outlined in the *US 50 Corridor Study* (approximately 8-9 percent vs. 4-5 percent) due to the planned/approved project trips. The Opening Year (2029) AM and PM peak hour intersection turning movement volumes are shown on **Figure 5**. The growth rate and traffic volume development calculations are provided in **Appendix D**.

Intersection Level of Service Analysis

Opening Year weekday AM and PM peak hour intersection level of service analysis was performed for the study intersections based on the Opening Year traffic volumes, the existing peak hour factors from the counts, and the lane configurations and controls shown on **Figure 5**. A traffic signal at the US 50/Traditions Parkway intersection is currently under construction and will be completed prior to the Opening Year (2029) of the project. The Opening Year analysis was conducted with a traffic signal at the intersection. **Table 3** shows the Opening Year level of service results and the technical calculations are provided in **Appendix E**.

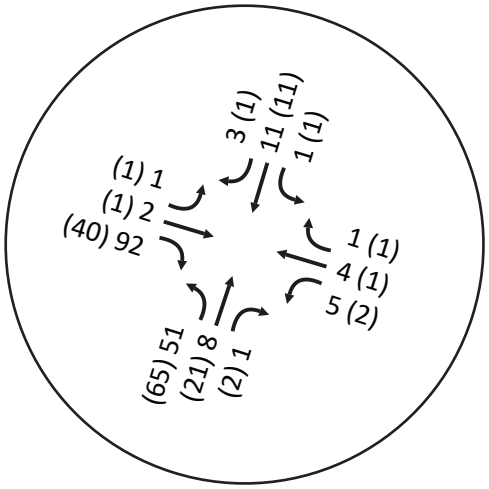
Table 3: Opening Year Intersection Level of Service

Int. ID	Intersection	Control	AM		PM	
			Delay[1] Density[2]	LOS	Delay[1] Density[2]	LOS
1	Fortune Dr/Sugarloaf Dr	Side Street Stop				
	Overall		7	A	6	A
	EB Approach (Sugarloaf Dr)		9	A	9	A
	WB Approach (Sugarloaf Dr)		11	B	10	A
	NB Left (Fortune Dr)		7	A	7	A
	SB Left (Fortune Dr)		7	A	7	A
2	US 50/Fortune Dr	Signalized High-T				
	Overall		25	C	20	B
	EB Left (US 50)		49	D	34	C
	WB Approach (US 50)		21	C	16	B
	SB Approach (Fortune Dr)		39	D	36	D
	EB Merge (Fortune Dr to US 50)[3]		12	B	17	B
3	US 50/Traditions Pkwy	Signal				
	Overall		20	B	20	C
	EB Approach (US 50)		14	B	17	B
	WB Approach (US 50)		21	C	21	C
	NB Approach (Segale Rd)		42	D	49	D
	SB Approach (Traditions Pkwy)		36	D	33	C

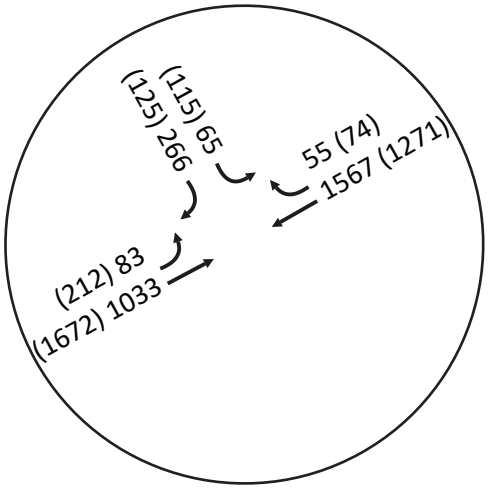
Notes: 1. Delay is reported in seconds per vehicle for the overall intersection for signalized intersections and for the worst approach/movement for side street stop controlled intersections.
2. Average Density is reported for the EB Merge from the Fortune Dr SB left-turn to US 50 EB through movement.
3. Merge analysis was performed using HCS 2025 software.
Source: GCW, 2025

As shown in the table, the study intersections are expected to operate within policy level of service thresholds during the AM and PM peak hours under Opening Year conditions.

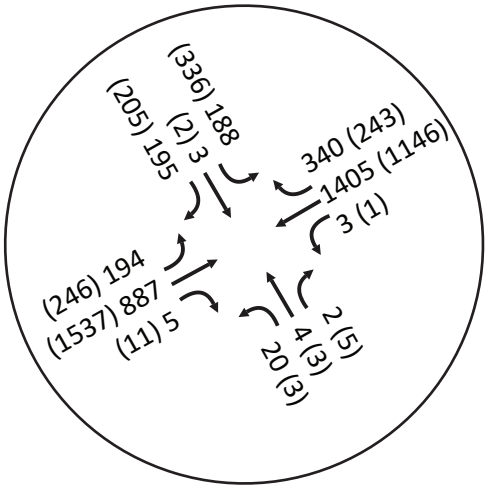
1 *Fortune Dr / Sugarloaf Dr*



2 *US 50 / Fortune Dr*



3 *US 50 / Traditions Pkwy*



GCW ENGINEERS \ SURVEYORS

NO SCALE

AM Peak Hour Volume (PM Peak Hour Volume)

(#) - Study Intersection STOP - Stop - Signal YIELD - Yield

Figure 5

Traditio 820 th

Traffic Impact Study

Opening Year Traffic Volumes, Lane Configurations, and Controls

FUTURE YEAR CONDITIONS

The Future Year analysis estimates operating conditions for the 20-year horizon after Opening Year (Year 2049).

Planned Roadway Improvements

The *US 50 Corridor Study - Pine Cone Road to Neigh Road Traffic Report* (CA Group, Inc.) documents planned roadway improvements in the study area. The corridor study includes three build alternatives with improvements for the overall corridor – the Arterial Alternative, Parkway Alternative, and Controlled Access Alternative. Based on input from NDOT staff, the Arterial Alternative is understood to be the NDOT preferred alternative and was used as the basis for this study. Improvements at the US 50 intersections with Fortune Drive and Traditions Parkway are included in the Arterial Alternative. The Arterial Alternative improvements for the study intersections include:

- Six through lanes (three lanes in each direction) on US 50
- US 50/Fortune Drive – signalized High-T intersection with dual eastbound left-turn lanes
- US 50/Traditions Parkway – signalized intersection with full access (all movement allowed) for all approaches of the intersection

It is important to note that the improvements identified in the corridor study do not include westbound right-turn deceleration lanes at the US 50/Fortune Drive and US 50/Traditions Parkway intersections, however these lanes exist today. NDOT's access management standards include warrants for right-turn lanes, which are clearly met based on Future Year (no project) traffic volumes. It is anticipated, and the analysis assumes, that these existing right-turn lanes will continue to be provided for the Future Year condition (without the project) by NDOT as part of the US 50 widening project.

The Future Year lane configurations and controls used in the analysis are shown on **Figure 6**.

Planned/Anticipated Developments & Traffic Volume Forecasts

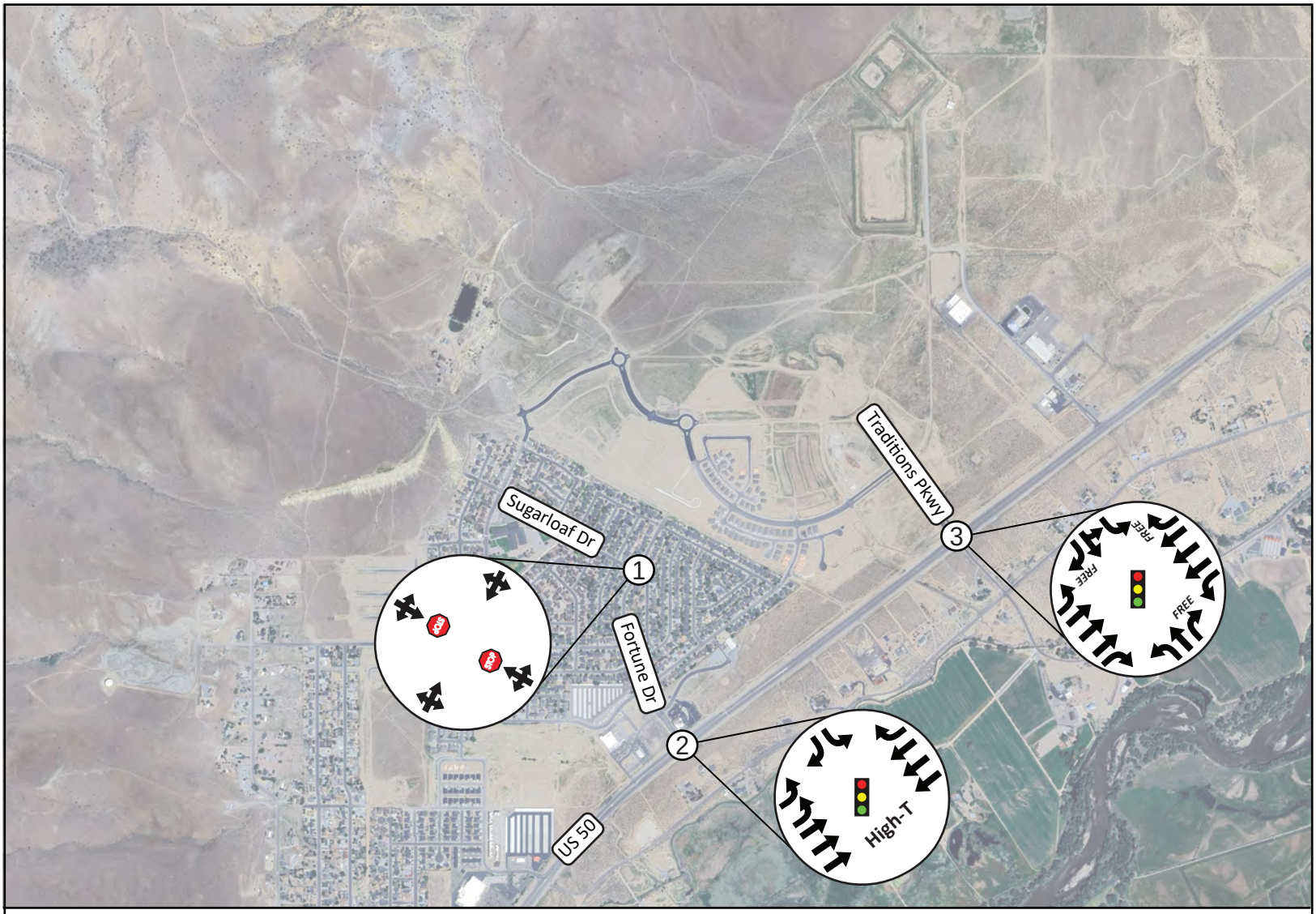
The *US 50 Corridor Study Traffic Report* includes analysis of multiple intersections on US 50 including the US 50/Fortune Drive and the US 50/Traditions Parkway intersections. The corridor study analyzes Future Year (2040) traffic volume forecasts that were developed using a regional growth rate and trip generation estimates from planned projects in the area. "Appendix 3 – 2040 Traffic Forecasting and Assumptions" of the *US 50 Corridor Study Traffic Report* (provided in **Appendix D**) includes a detailed description of how the forecasts were developed. The Future Year (2040) traffic volumes from the *US 50 Corridor Study Traffic Report* and from the *Traffic Impact Study for Traditions Town Center Phases 1-3* (Headway Transportation, September 27, 2023) were used as a starting point to develop Future Year (2049) forecasts for this analysis. The following steps were taken to develop Future Year (2049) traffic volumes at the study intersections:

1. Since the traffic volume forecasts in the *US 50 Corridor Study* represent the year 2040, background regional growth for an additional 9 years was calculated and added to the 2040 forecasts. An annual growth rate of 0.5 percent per year was used, since trip generation estimates from other planned/approved projects that were not included in the *US 50 Corridor Study* were also added and the 2040 volumes already account for known developments. The 0.5 percent annual growth rate is consistent with the methodology used on other projects approved by NDOT and accounts for regional background growth that is not included in the trip generation of other projects.

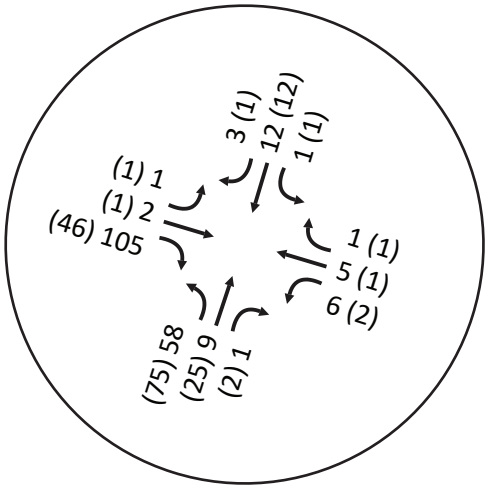
2. The *US 50 Corridor Study* traffic volume forecasts (2040) appear to already include a portion of the trips generated by the proposed Traditions project located north of US 50 between Fortune Drive and Traditions Parkway, but not the entire project. Trip generation estimates from the proposed Traditions Village 2 and Estates at Sutro (included in the Future Year forecasts for Traditions Town Center shown in Appendix D), Traditions Town Center Phases 1-3, and Dayton Six projects were added to the Future Year forecasts.

The Future Year (2049) traffic volumes are shown on **Figure 6** and represent the known long-term development in the study area.

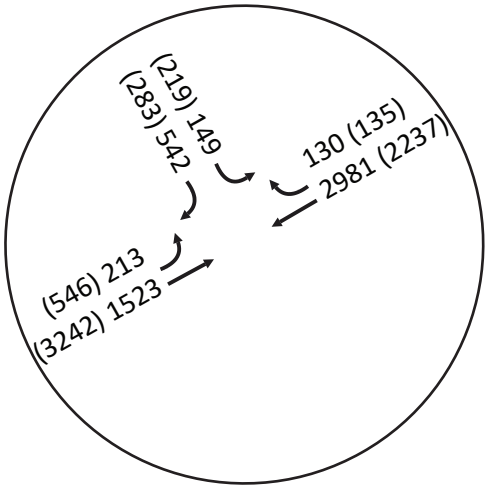
The overall Future Year forecasts presented in the *US 50 Corridor Study* result in an average annual growth rate of approximately 4-5 percent when compared to the existing volumes presented in that study. Consistent with the *US 50 Corridor Study*, the Future Year (2049) volumes used in this analysis also result in an average annual growth rate of approximately 4-5 percent when compared to the existing (2025) traffic volumes shown on **Figure 4**. The growth rate and traffic volume development calculations are provided in **Appendix D**.



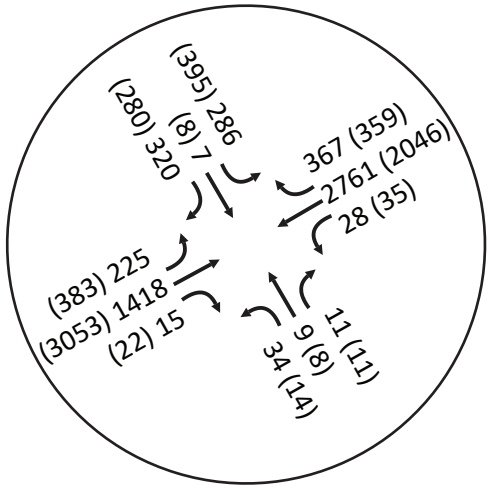
1 *Fortune Dr / Sugarloaf Dr*



2 *US 50 / Fortune Dr*



3 *US 50 / Traditions Pkwy*



GCW ENGINEERS \ SURVEYORS

NO SCALE

AM Peak Hour Volume (PM Peak Hour Volume)

(#) - Study Intersection STOP - Stop - Signal YIELD - Yield

Figure 6

Traditio 823 th

Traffic Impact Study

Future Year Traffic Volumes, Lane Configurations, and Controls

Intersection Level of Service

AM and PM peak hour intersection level of service analysis was performed for the study intersections based on the Future Year traffic volumes, lane configurations, and controls shown on **Figure 6**. **Table 4** shows the Future Year conditions level of service results and the technical calculations are provided in **Appendix F**.

Table 4: Future Year Intersection Level of Service

Int. ID	Intersection	Control	AM		PM	
			Delay[1] Density[2]	LOS	Delay[1] Density[2]	LOS
1	Fortune Dr/Sugarloaf Dr	Side Street Stop				
	Overall		8	A	6	A
	EB Approach (Sugarloaf Dr)		9	A	9	A
	WB Approach (Sugarloaf Dr)		11	B	11	B
	NB Left (Fortune Dr)		7	A	7	A
	SB Left (Fortune Dr)		7	A	7	A
2	US 50/Fortune Dr	Signalized High-T				
	Overall		**74**	**E**	41	D
	EB Left (US 50)		**83**	**F**	67	E
	WB Approach (US 50)		53	D	33	C
	SB Approach (Fortune Dr)		**>120**	**F**	57	E
	EB Merge (Fortune Dr to US 50)[3]		18	B	35	D
3	US 50/Traditions Pkwy	Signal				
	Overall		36	D	38	D
	EB Approach (US 50)		21	C	31	C
	WB Approach (US 50)		38	D	43	D
	NB Approach (Segale Rd)		101	F	75	E
	SB Approach (Traditions Pkwy)		93	F	79	E

Notes: 1. Delay is reported in seconds per vehicle for the overall intersection for signalized intersections and for the worst approach/movement for side street stop controlled intersections.
2. Average Density is reported for the EB Merge from the Fortune Dr SB left-turn to US 50 EB through movement.
3. Merge analysis was performed using HCS 2025 software.
Source: GCW, 2025

As shown in **Table 4**, the overall US 50/Fortune Drive intersection and some movements are anticipated to operate at level of service E/F during the AM peak hour. The poor level of service is primarily due to the high southbound right-turn volume on Fortune Drive. The southbound Fortune Drive approach currently contains a hatched-out lane which can be converted to a second right-turn lane. With dual southbound right-turn lanes and protected plus overlap phasing, the overall US 50/Fortune Drive intersection is anticipated to operate within policy level of service thresholds. Capacity improvements for the Future Year condition should be undertaken by NDOT as regional improvements since the poor future operating conditions will occur unrelated to this project.

PROJECT CONDITIONS

The project consists of up to 364 single family residential units.

Trip Generation

Trip generation rates from *Trip Generation Manual, 11th Edition* published by the Institute of Transportation Engineers (ITE) were used to develop trip generation estimates for the proposed project based on the Single Family Detached Housing rates. **Table 5** shows the Daily, AM peak hour, and PM peak hour trip generation estimates.

Table 5: Trip Generation Estimates

Land Use (ITE Code)	Size[1]	Trips[2]				
		Daily	AM	AM In/Out	PM	PM In/Out
Single Family Detached Housing (210)	364 du	3,433	255	64 / 191	342	216 / 127

Notes: 1. du = dwelling units
2. Trips were calculated based on the following rates per du: Daily – 9.43; AM – 0.70 (25% in / 75% out); PM – 0.94 (63% in / 37% out)
Source: GCW, 2025

As shown in the table, the project is expected to generate 3,433 Daily, 255 AM peak hour, and 342 PM peak hour trips.

Trip Distribution

Project trips were distributed to the adjacent roadway network based on existing traffic volumes, the locations of complimentary land uses, and anticipated travel patterns. Under Future Year Plus Project conditions, it was assumed that some traffic would travel between the proposed project and the planned Traditions Town Center and Dayton Six projects without accessing US 50. Project trips were distributed based on the following:

<u>Opening Year</u>

- 70% to/from the west via US 50
- 30% to/from the east via US 50

<u>Future Year</u>

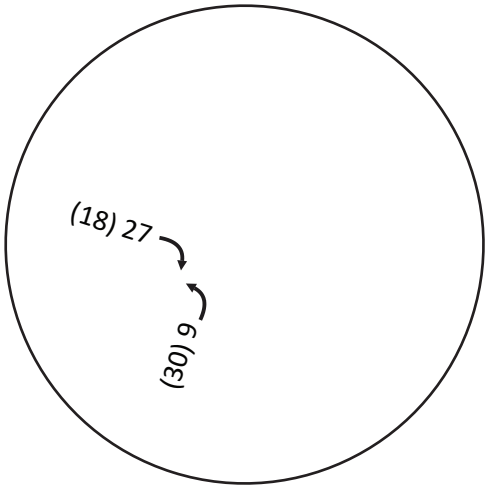
- 10% to/from Dayton Six
- 8% to from Traditions Town Center
- 82% to/from US 50
    - 70% to/from the west via US 50
    - 30% to/from the east via US 50

Figure 7 shows the project trip distribution and assignment for the Opening Year scenario. **Figure 8** shows the project trip distribution and assignment for the Future Year scenario.

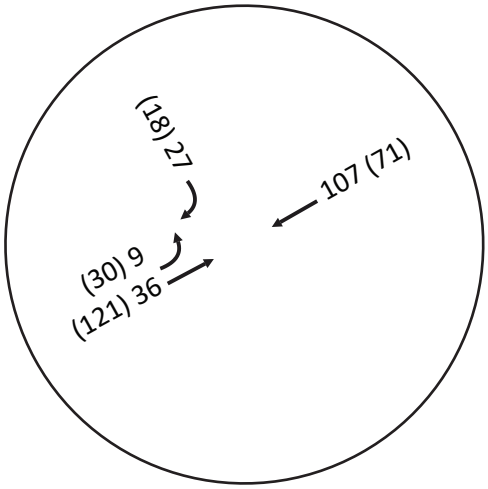
Project Access

The project is located north of the Traditions Village 1 and Village 2 projects and will connect to US 50 via Fortune Drive and Traditions Parkway.

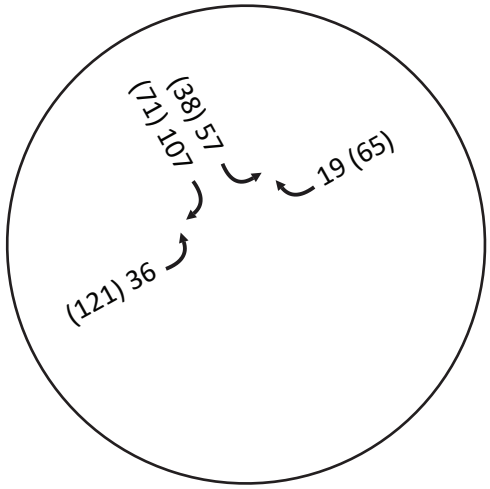
1 *Fortune Dr / Sugarloaf Dr*



2 *US 50 / Fortune Dr*



3 *US 50 / Traditions Pkwy*



GCW ENGINEERS \ SURVEYORS

NO SCALE

AM Peak Hour Volume (PM Peak Hour Volume)

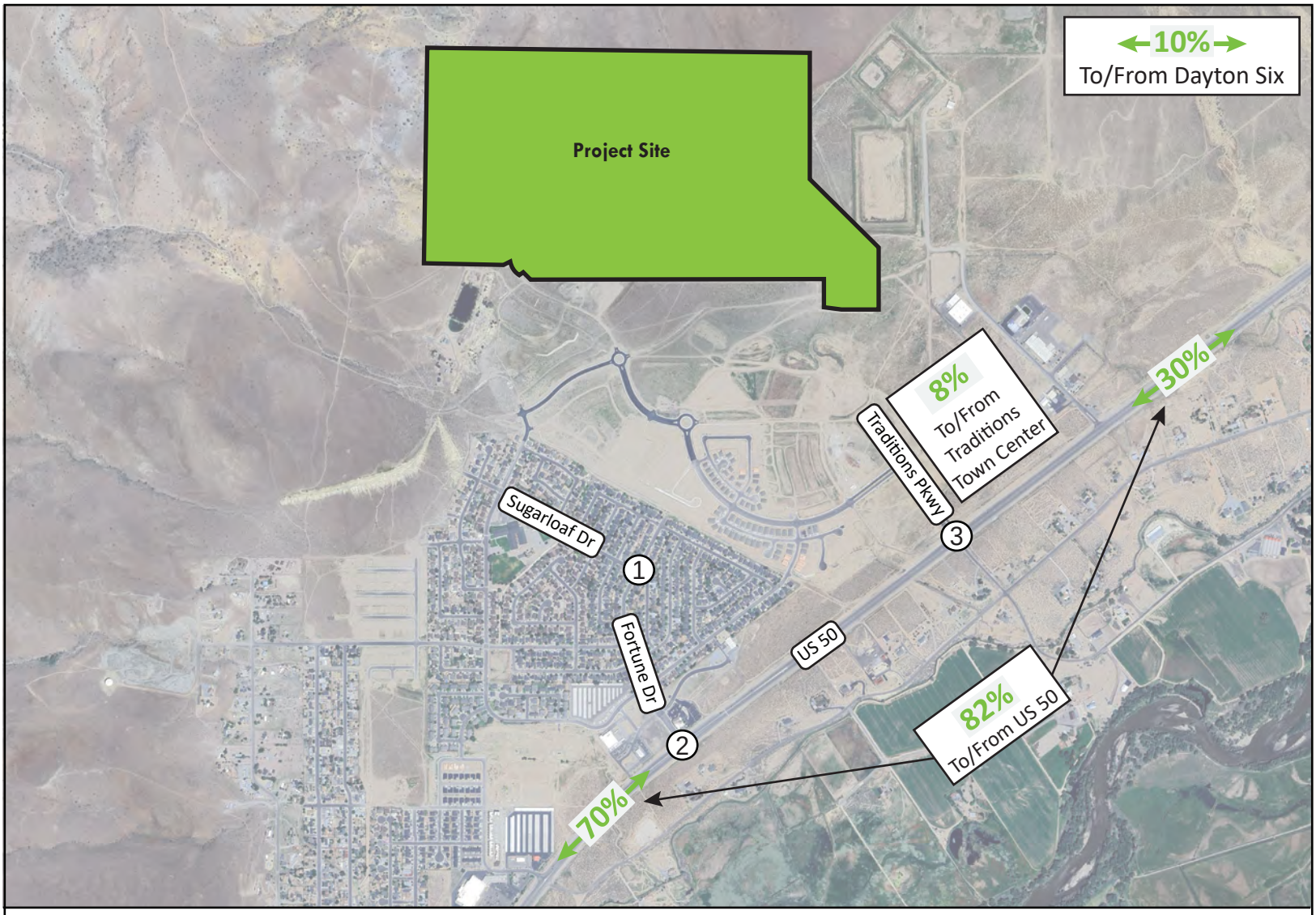
- Project Site
- (#) - Study Intersection
- ←XX%→ - Trip Distribution

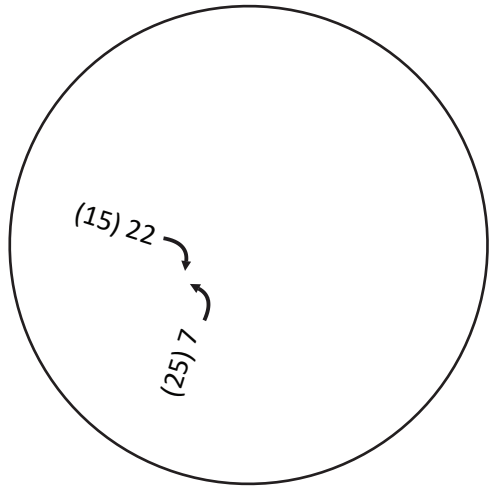
Figure 7

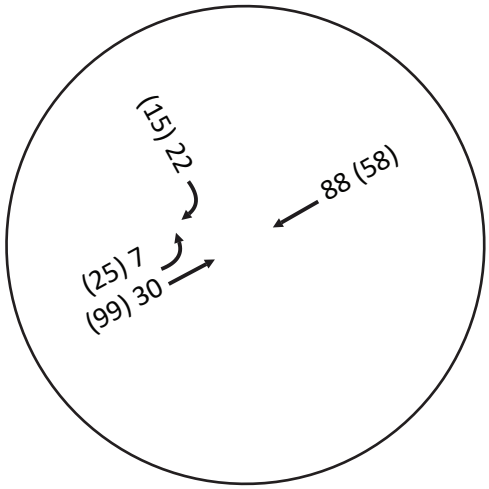
Traditio 827 th

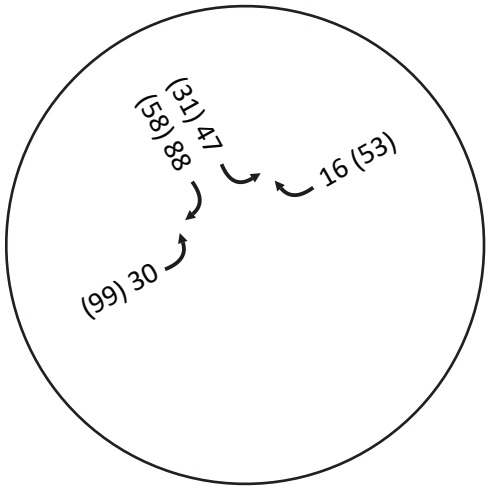
Traffic Impact Study

Project Trips - Opening Year









GCW ENGINEERS \ SURVEYORS

NO SCALE

AM Peak Hour Volume (PM Peak Hour Volume)

- Project Site
(#) - Study Intersection
←XX%→ - Trip Distribution

Figure 8

Traditio 828 th

Traffic Impact Study

Project Trips - Future Year

OPENING YEAR PLUS PROJECT CONDITIONS

Traffic Volumes

Project trips (**Figure 7**) were added to the Opening Year traffic volumes (**Figure 5**) to develop the Opening Year Plus Project conditions traffic volumes, shown on **Figure 9**.

Intersection Level of Service

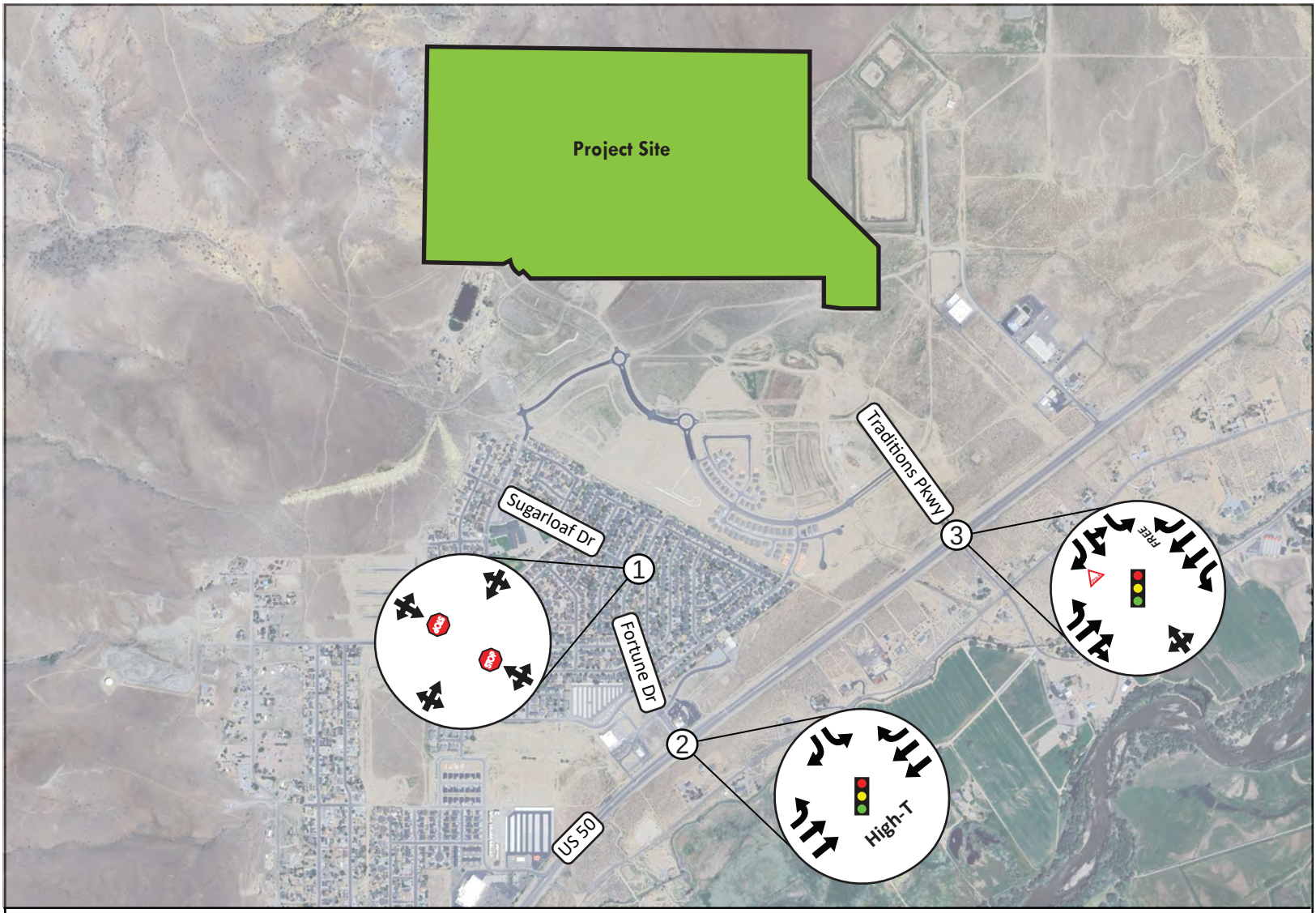
AM and PM peak hour intersection level of service analysis was performed for the study intersections based on the Opening Year Plus Project traffic volumes, the existing peak hour factors from the counts, and the lane configurations and controls shown on **Figure 9**. **Table 6** shows the level of service results and the technical calculations are provided in **Appendix G**.

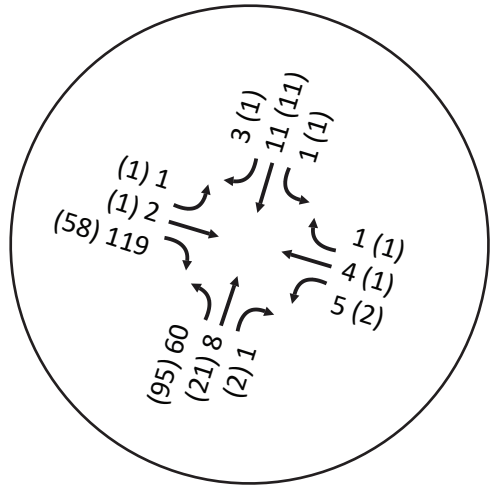
Table 6: Opening Year Plus Project Intersection Level of Service

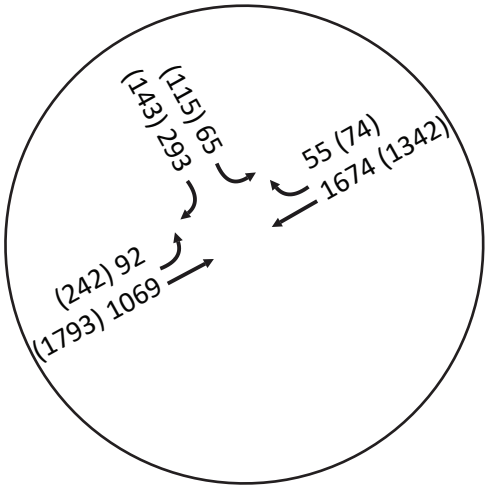
Int. ID	Intersection	Control	Opening Year				Opening Year Plus Project			
			AM		PM		AM		PM	
			Delay[1] Density[2]	LOS	Delay[1] Density[2]	LOS	Delay[1] Density[2]	LOS	Delay[1] Density[2]	LOS
1	Fortune Dr/Sugarloaf Dr	Side Street Stop								
	Overall		7	A	6	A	8	A	7	A
	EB Approach (Sugarloaf Dr)		9	A	9	A	9	A	9	A
	WB Approach (Sugarloaf Dr)		11	B	10	A	11	B	11	B
	NB Left (Fortune Dr)		7	A	7	A	7	A	7	A
	SB Left (Fortune Dr)		7	A	7	A	7	A	7	A
2	US 50/Fortune Dr	Signalized High-T								
	Overall		25	C	20	B	32	C	25	C
	EB Left (US 50)		49	D	34	C	52	D	40	D
	WB Approach (US 50)		21	C	16	B	29	C	20	B
	SB Approach (Fortune Dr)		39	D	36	D	44	D	39	D
	EB Merge (Fortune Dr to US 50)[3]		12	B	17	B	12	B	18	B
3	US 50/Traditions Pkwy	Signal								
	Overall		20	B	20	C	26	C	28	C
	EB Approach (US 50)		14	B	17	B	18	B	23	C
	WB Approach (US 50)		21	C	21	C	25	C	34	C
	NB Approach (Segale Rd)		42	D	49	D	44	D	54	D
	SB App. (Traditions Pkwy)		36	D	33	C	48	D	35	C

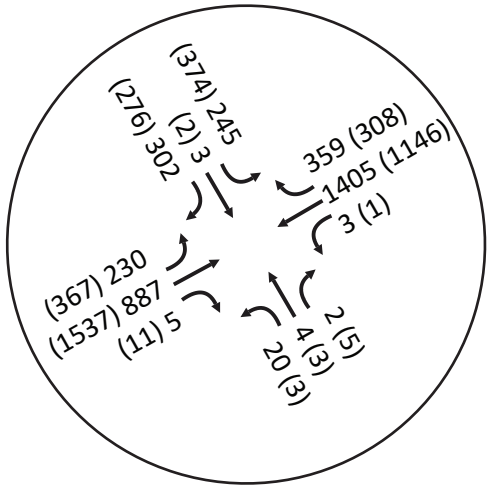
Notes: 1. Delay is reported in seconds per vehicle for the overall intersection for signalized intersections and for the worst approach/movement for side street stop controlled intersections.
2. Average Density is reported for the EB Merge from the Fortune Dr SB left-turn to US 50 EB through movement.
3. Merge analysis was performed using HCS 2025 software.
Source: GCW, 2025

As shown in the table, the study intersections are expected to operate at LOS C or better with project traffic.









GCW ENGINEERS \ SURVEYORS

NO SCALE

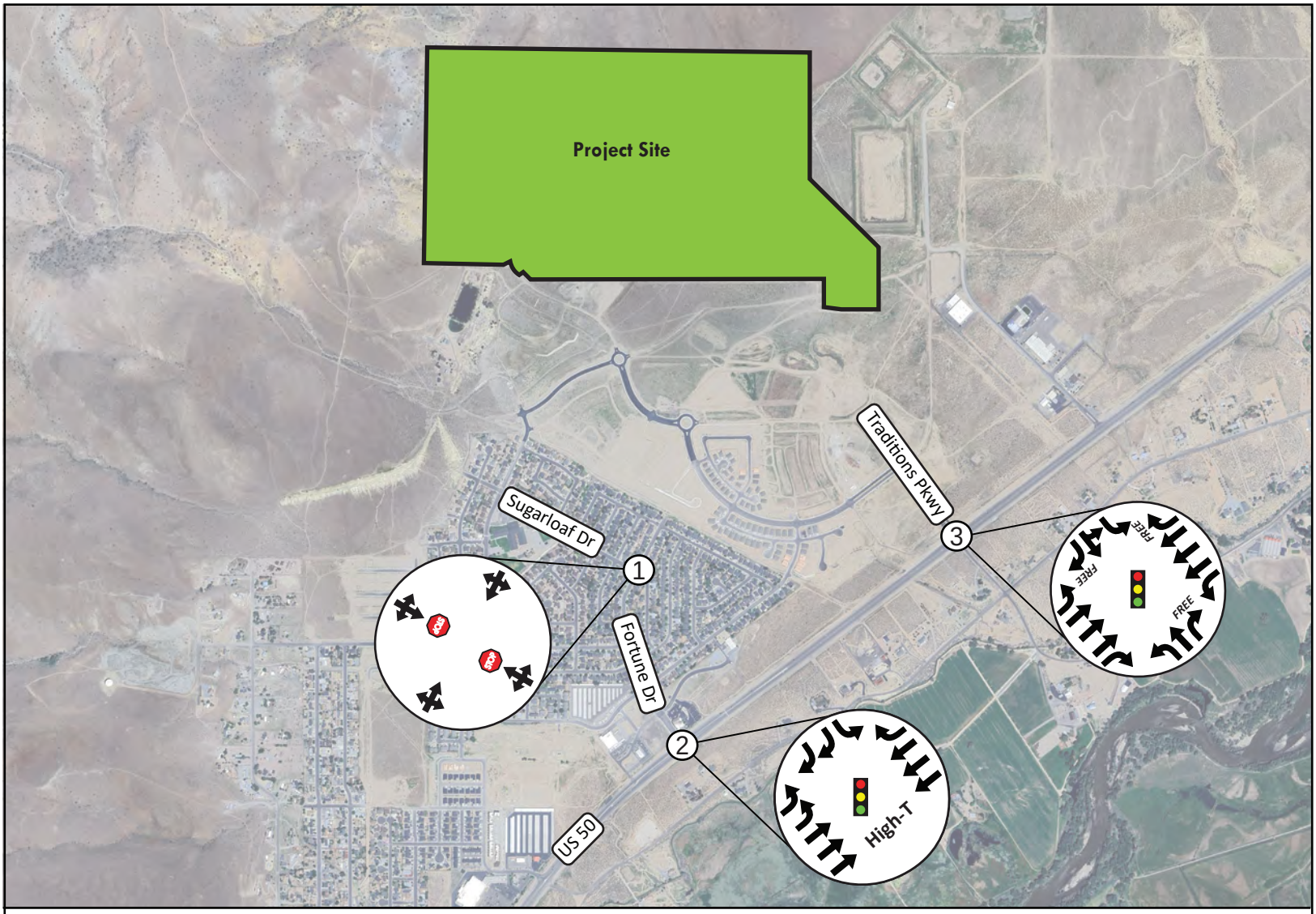
AM Peak Hour Volume (PM Peak Hour Volume)

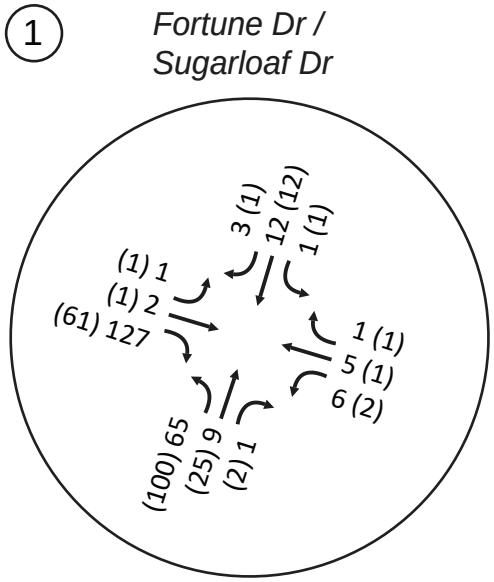
- Project Site
- Stop
- Signal
- Yield
- (#) - Study Intersection

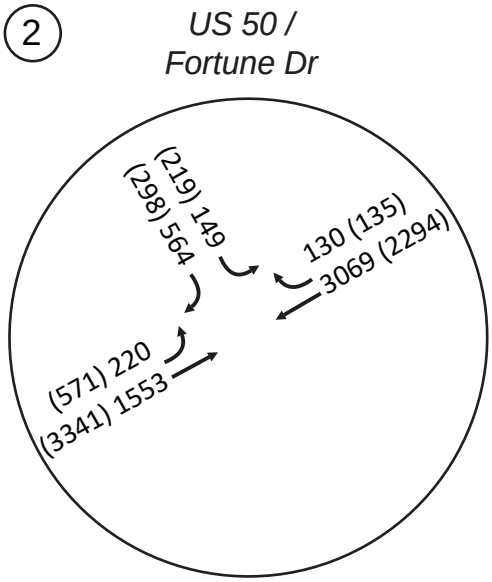
Figure 9

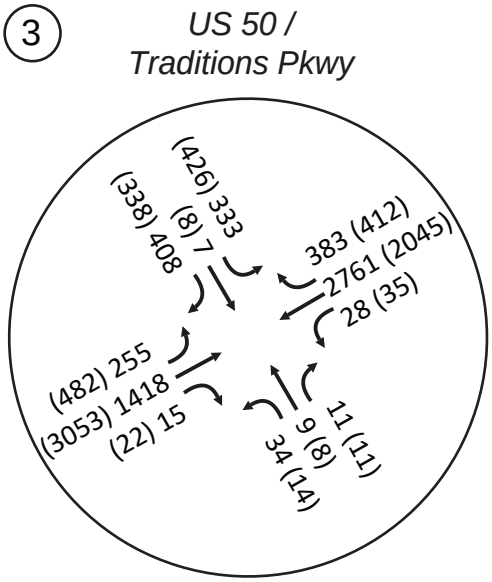
Traditio 830 th
Traffic Impact Study

Opening Year Plus Project Traffic Volumes, Lane Configurations, and Controls









GCW ENGINEERS \ SURVEYORS

NO SCALE

AM Peak Hour Volume (PM Peak Hour Volume)

- Project Site
- Stop
- Signal
- Yield
- (#) - Study Intersection

Figure 10

Traditio 831 th

Traffic Impact Study

Future Year Plus Project Traffic Volumes, Lane Configurations, and Controls

FUTURE YEAR PLUS PROJECT CONDITIONS

Traffic Volumes

Project trips (**Figure 8**) were added to the Future Year traffic volumes (**Figure 6**) to develop the Future Year Plus Project conditions traffic volumes, shown on **Figure 10**.

Intersection Level of Service

AM and PM peak hour intersection level of service analysis was performed for the study intersections based on the Future Year Plus Project traffic volumes and the lane configurations and controls shown on **Figure 10**. The analysis includes the planned roadway improvements from the *US 50 Corridor Study*, including six lanes on US 50 (see the "Future Year Conditions" section of this report for more detail). Additionally, as discussed in the "Future Year Conditions" section of this report, a second southbound right-turn lane is needed at the US 50/Fortune Drive intersection to provide operations within policy thresholds and should be undertaken by NDOT as a regional improvement since the poor future operating conditions will occur unrelated to this project. The Future Year Plus Project conditions analysis assumes this capacity improvement is in place. **Table 7** shows the level of service results and the technical calculations are provided in **Appendix H**.

Table 7: Future Year Plus Project Intersection Level of Service

Int. ID	Intersection	Control	Future Year				Future Year Plus Project			
			AM		PM		AM		PM	
			Delay[1] Density[2]	LOS	Delay[1] Density[2]	LOS	Delay[1] Density[2]	LOS	Delay[1] Density[2]	LOS
1	Fortune Dr/Sugarloaf Dr	Side Street Stop								
	Overall		8	A	6	A	8	A	7	A
	EB Approach (Sugarloaf Dr)		9	A	9	A	9	A	9	A
	WB Approach (Sugarloaf Dr)		11	B	11	B	11	B	11	B
	NB Left (Fortune Dr)		7	A	7	A	7	A	7	A
	SB Left (Fortune Dr)		7	A	7	A	7	A	7	A
2	US 50/Fortune Dr	Signalized High-T with dual SB right-turn lanes[4]								
	Overall		49	D	37	D	55	D	40	D
	EB Left (US 50)		94	F	58	E	91	F	61	E
	WB Approach (US 50)		35	C	30	C	43	D	34	C
	SB Approach (Fortune Dr)		93	F	45	D	94	F	45	D
	EB Merge (Fortune Dr to US 50)[3]		18	B	35	D	18	B	36	D
3	US 50/Traditions Pkwy	Signal								
	Overall		36	D	38	D	44	D	50	D
	EB Approach (US 50)		21	C	31	C	25	C	35	C
	WB Approach (US 50)		38	D	43	D	49	D	67	E
	NB Approach (Segale Rd)		101	F	75	E	112	F	87	F
	SB App. (Traditions Pkwy)		93	F	79	E	95	F	94	F

Notes: 1. Delay is reported in seconds per vehicle for the overall intersection for signalized intersections and for the worst approach/movement for side street stop controlled intersections.
2. Average Density is reported for the EB Merge from the Fortune Dr SB left-turn to US 50 EB through movement.
3. Merge analysis was performed using HCS 2025 software.
4. The analysis assumes capacity improvements including dual southbound right-turn lanes are in place at this intersection.
Source: GCW, 2025

As shown in the table, the study intersections are expected to operate at overall LOS D or better (within policy thresholds) under Future Year Plus Project conditions.

CONCLUSIONS & RECOMMENDATIONS

The following is a list of our key findings and recommendations:

- The proposed project consists of approximately 364 single family housing units and is anticipated to generate approximately 3,433 Daily, 255 AM peak hour, and 342 PM peak hour trips to the external roadway network.
- The project is located north of US 50, Nevada Station Parkway, and the Traditions Village 1 and Village 2 projects.
- The project will access US 50 via Fortune Drive and Traditions Parkway. The project originally contemplated a connection to Enterprise Way as well, however due to circumstances separate from the traffic study, a vehicle connection to Enterprise Way is no longer being considered and was not included in this traffic analysis and report. If the project wishes to puruse a vehicle connection to Enterprise Way in the future, a separate traffic analysis will need to be conducted at that time.
- Under Existing conditions, the northbound and southbound approaches of the US 50/Traditions Parkway intersection are expected to operate at LOS E with minor street stop control. While the overall intersection is expected to operate at LOS A during the AM and PM peak hours, Lyon County standards state that unsignalized intersection "approaches should operate at LOS D or better for the peak hour condition." A traffic signal at the US 50/Traditions Parkway intersection is currently under construction and will be completed prior to the Opening Year (2029) of the project. The other study intersections are expected to operate within policy level of service thresholds.
- Under Opening Year and Opening Year Plus Project conditions, the study intersections are expected to operate within policy level of service thresholds.
- Under Future Year conditions, the US 50/Fortune Drive intersection is anticipated to operate at level of service E during the AM peak hour. The poor level of service is primarily due to the high southbound right-turn volume on Fortune Drive. The southbound Fortune Drive approach currently contains a hatched-out lane which can be converted to a second right-turn lane. With dual southbound right-turn lanes and protected plus overlap phasing, the overall US 50/Fortune Drive intersection is anticipated to operate within policy level of service thresholds. Capacity improvements for the Future Year condition should be undertaken by NDOT as regional improvements since the poor future operating conditions will occur unrelated to this project
- Under Future Year Plus Project conditions, the analysis includes the needed regional capacity improvements (dual southbound right-turn lanes) at the US 50/Fortune Drive intersection. The study intersections are expected to operate at overall LOS D or better (within policy level of service thresholds).
- The project is not expected to result in levels of service below policy thresholds and therefore no project related mitigations are recommended. The following regional improvements by NDOT are

included in the *US 50 Corridor Study* or as part of the corridor safety improvements that are currently at the 90% design stage, and were included in the Future Year analysis as a background condition:

- Lower the speed limit on US 50 from 60 mph to 55 mph from east of Fortune Drive to James Avenue to provide a more gradual transition in speed limits through the expanding urbanized area
- Widen US 50 to six lanes for the Future Year per the US 50 Corridor Study. With the widening project:
  - Construct/restripe a second southbound right-turn lane on Fortune Drive at US 50
  - Construct a westbound right-turn lane on US 50 at Fortune Drive (not shown in the *US 50 Corridor Study*) as exists today
  - Construct a westbound right-turn lane on US 50 at Traditions Parkway (not shown in the *US 50 Corridor Study*) as exists today
  - Improve the south leg of the US 50/Traditions Parkway/Segale Road intersection

Appendix A
Crash Data

GCW
ENGINEERS \ SURVEYORS

Appendix A
Crash Data

US 50/Fortune Drive

OBJECT ID	Crash Date	Crash Year	Crash Time	Crash Severity	County	Primary Street	Distance	Direction	Secondary Street	Weather	Fatalities	Injured	Property Damage Only	Injury Type	Crash Type	Total Vehicles	V1 Type	V1 Dir	V1 Action	V1 Driver Factors	V1 Vehicle Factors
2936325	2/1/2019	2019	4:20:00 AM	FATAL CRASH	LYON	US50E	300	EAST	FORTUNE DR	CLEAR	1	1		K	NON-COLLISION	1	COUPE	WEST	GOING STRAIGHT	HAD BEEN DRINKING	
2939889	3/1/2019	2019	7:08:00 PM	PROPERTY DAMAGE ONLY	LYON	US50E	100	WEST	FORTUNE DR	CLOUDY	0	0	PDO		NON-COLLISION	1	UTILITY		GOING STRAIGHT	APPARENTLY NORMAL	
2968742	10/2/2019	2019	7:07:00 PM	INJURY CRASH	LYON	US50E	10	EAST	FORTUNE DR	CLEAR	0	1		C	REAR END	2	COUPE	WEST	GOING STRAIGHT	APPARENTLY NORMAL	DRIVING TOO FAST FOR CONDITIONS
2975120	11/6/2019	2019	9:05:00 PM	PROPERTY DAMAGE ONLY	LYON	US50E	200	WEST	FORTUNE DR	CLEAR	0	0	PDO		NON-COLLISION	1	SEDAN, 4 DOOR	EAST	GOING STRAIGHT	APPARENTLY NORMAL	
2995392	5/15/2020	2020	7:21:00 AM	PROPERTY DAMAGE ONLY	LYON	US50E	30	NORTH	FORTUNE DR	CLOUDY	0	0	PDO		REAR END	2	SEDAN, 2 DOOR	WEST	GOING STRAIGHT	ILLNESS	DRIVING TOO FAST FOR CONDITIONS
3011775	10/24/2020	2020	3:31:00 PM	PROPERTY DAMAGE ONLY	LYON	US50E	70	EAST	FORTUNE DR	CLEAR	0	0	PDO		REAR END	3	PICKUP	WEST	GOING STRAIGHT	APPARENTLY NORMAL	DRIVING TOO FAST FOR CONDITIONS
3207239	2/24/2021	2021	1608	PROPERTY DAMAGE ONLY	LYON	US50		WEST	FORTUNE DR	CLEAR	0	0	PDO	O	NON-COLLISION	2	PICKUP	EAST	STRAIGHT	APPARENTLY NORMAL	MECHANICAL DEFECTS|
3225908	10/15/2021	2021	1822	INJURY CRASH	LYON	US50E		EAST	FORTUNE DR	CLEAR	0	1		B	REAR END	2	PICKUP	WEST	STRAIGHT	APPARENTLY NORMAL;	OTHER|
3225711	11/29/2021	2021	1647	INJURY CRASH	LYON	US50E		EAST	Mile Post 8	CLEAR	0	2		B	HEAD ON	2	PICKUP	EAST	LEFT TURN	OTHER IMPROPER DRIVING;	FAILED TO YIELD ROW|
3226961	2/2/2022	2022	857	INJURY CRASH	LYON	US50E		WEST	Mile Post 8	CLEAR	0	4		C	REAR END	3	SEDAN	WEST	STRAIGHT	APPARENTLY NORMAL;	OTHER|
3230741	4/7/2022	2022	1904	PROPERTY DAMAGE ONLY	LYON	US50E		EAST	Mile Post 8	CLEAR	0	0	PDO	N	NON-COLLISION	1	SEDAN	EAST	STRAIGHT	APPARENTLY NORMAL;	RAN OFF ROAD|
3165626	9/19/2022	2022	840	PROPERTY DAMAGE ONLY	LYON	US50E		EAST	FORTUNE DR	<Null>	0	0	PDO	O	NON-COLLISION	1	UTILITY	EAST	ENTERING LANE	APPARENTLY NORMAL	<Null>
3171429	11/16/2022	2022	1735	INJURY CRASH	LYON	US50E		EAST	Mile Post 8	CLEAR	0	1		C	REAR END	2	UTILITY	WEST	STRAIGHT	OTHER IMPROPER DRIVING	OTH IMPROPER DRIVING|
3211721	4/29/2023	2023	757	INJURY CRASH	LYON	US50E			FORTUNE DR	CLEAR	0	1		C	REAR END	2	SUV/CARRY-ALL	SOUTH	RIGHT TURN	HAD BEEN DRINKING	FAILED TO YIELD ROW| DISREGARD CONTROL DEVICE| FOLLOWING TOO CLOSE|

US 50/Traditions Parkway

OBJECTID *	Crash Date	Crash Year	Crash Time	Crash Severity	County	Primary Street	Distance	Dir	Secondary Street	Weather	Fatalities	Injured	Property Damage Only	Injury Type	Crash Type	Total Vehicles	V1 Type	V1 Dir	V1 Action	V1 Driver Factors	V1 Vehicle Factors
2981655	12/24/2019	2019	1:23:00 PM	INJURY CRASH	LYON	US50E	20	WEST	SEGALE RD	CLEAR	0	2		B	ANGLE	2	SEDAN, 4 DOOR	NORTH	TURNING LEFT	HAD BEEN DRINKING	FAILED TO YIELD RIGHT OF WAY
2984109	1/15/2020	2020	6:15:00 PM	PROPERTY DAMAGE ONLY	LYON	US50E	100	EAST	SEGALE RD	CLOUDY	0	0	PDO		REAR END	2	PICKUP	EAST	GOING STRAIGHT	INATTENTION/DISTRACTED	OTHER IMPROPER DRIVING
3000737	7/15/2020	2020	10:19:00 PM	PROPERTY DAMAGE ONLY	LYON	US50E		AT INT	SEGALE RD	CLEAR	0	0	PDO		NON-COLLISION	1	UTILITY	EAST	GOING STRAIGHT	APPARENTLY NORMAL	FAILURE TO KEEP IN PROPER LANE OR RUNNING OFF ROAD
3199902	6/23/2021	2021	846	INJURY CRASH	LYON	US50E		WEST	SEGALE RD	CLEAR	0	1		C	ANGLE	2	PICKUP	WEST	U-TURN	APPARENTLY NORMAL	MADE IMPROPER TURN|

US 50/Fortune Drive

FATAL CRASH	1
INJURY CRASH	6
PROPERTY DAMAGE ONLY	7

US 50/Traditions Parkway

FATAL CRASH	0
INJURY CRASH	2
PROPERTY DAMAGE ONLY	2

V1 Most Harmful Event	V1 All Events	V2 Type	V2 Dir	V2 Action	V2 Driver Factors	V2 Most Harmful Event	V2 All Events	Factors Roadway	Lighting	HWY Factors
	NOT REPORTED: HIGHWAY TRAFFIC SIGN POST: RAN OFF ROAD RIGHT: GUARDRAIL END: OTHER POST, POLE OR SUPPORT							DRY	DARK - NO LIGHTING	NONE
HORSE	HORSE							DRY	DARK - NO LIGHTING	ANIMAL IN ROADWAY
SLOW/STOPPED VEHICLE	SLOW/STOPPED VEHICLE	COUPE	W	STOPPED	APPARENTLY NORMAL	MOTOR VEHICLE IN TRANSPORT		DRY	DARK - CONTINUOUS LIGHTING	OTHER HIGHWAY
HORSE	HORSE							DRY	DARK - SPOT LIGHTING	ANIMAL IN ROADWAY
SLOW/STOPPED VEHICLE	SLOW/STOPPED VEHICLE	HATCHBACK, 2 DOOR	W	STOPPED	APPARENTLY NORMAL	MOTOR VEHICLE IN TRANSPORT		DRY	DAYLIGHT	NONE
SLOW/STOPPED VEHICLE	SLOW/STOPPED VEHICLE	VAN	W	GOING STRAIGHT	APPARENTLY NORMAL	MOTOR VEHICLE IN TRANSPORT		DRY	DAYLIGHT	NONE
OTHER NON-COLLISION		HATCHBACK 4-DOOR	EAST	STOPPED		OTHER NON-COLLISION		NONE	DAYLIGHT	NONE
SLOW/STOPPED VEHICLE		PICKUP	WEST	STOPPED	APPARENTLY NORMAL;	MOTOR VEHICLE IN TRANSPORT		NONE	DUSK	NONE
MOTOR VEHICLE IN TRANSPORT		SEDAN	WEST	STRAIGHT	APPARENTLY NORMAL;	MOTOR VEHICLE IN TRANSPORT		NONE	DUSK	NONE
SLOW/STOPPED VEHICLE		SEDAN	WEST	STOPPED	APPARENTLY NORMAL;	MOTOR VEHICLE IN TRANSPORT	SLOW/STOPPED VEHICLE	NONE	DAYLIGHT	NONE
FENCE/WALL		<Null>		<Null>				NONE	DAYLIGHT	NONE
CROSS MEDIAN	RAN OFF ROAD RIGHT	<Null>		<Null>				WEATHER	DAYLIGHT	WEATHER
SLOW/STOPPED VEHICLE		UTILITY	WEST	STRAIGHT		MOTOR VEHICLE IN TRANSPORT		BACKUP DUE TO REGULAR CONGESTIONWORK ZONE (CONST. MAINT. UTILITY)	DARK - SPOT ROADWAY LIGHTING	BACKUP DUE TO REGULAR CONGESTIONWORK ZONE (CONST. MAINT. UTILITY)
MOTOR VEHICLE IN TRANSPORT		LUNCH WAGON	WEST	STRAIGHT	APPARENTLY NORMAL	MOTOR VEHICLE IN TRANSPORT		NONE	DAYLIGHT	NONE

V1 Most Harmful Event	V1 All Events	V2 Type	V2 Dir	V2 Action	V2 Driver Factors	V2 Most Harmful Event	V2 All Events	Factors Roadway	Lighting	HWY Factors
MOTOR VEHICLE IN TRANSPORT		CARRY-ALL	E	GOING STRAIGHT	APPARENTLY NORMAL	MOTOR VEHICLE IN TRANSPORT	OVERTURN/ROLLOVER	DRY	DAYLIGHT	NONE
SLOW/STOPPED VEHICLE	SLOW/STOPPED VEHICLE	UTILITY	E	GOING STRAIGHT	APPARENTLY NORMAL	MOTOR VEHICLE IN TRANSPORT		DRY	DARK - SPOT LIGHTING	NONE
RAN OFF ROAD LEFT	CROSS MEDIAN/CENTERLINE: RAN OFF ROAD LEFT							DRY	DARK - NO LIGHTING	NONE
MOTOR VEHICLE IN TRANSPORT		SEDAN 4-DOOR	WEST	STRAIGHT	APPARENTLY NORMAL	MOTOR VEHICLE IN TRANSPORT		NONE	DAYLIGHT	NONE

Appendix B
Traffic Count Data Sheets

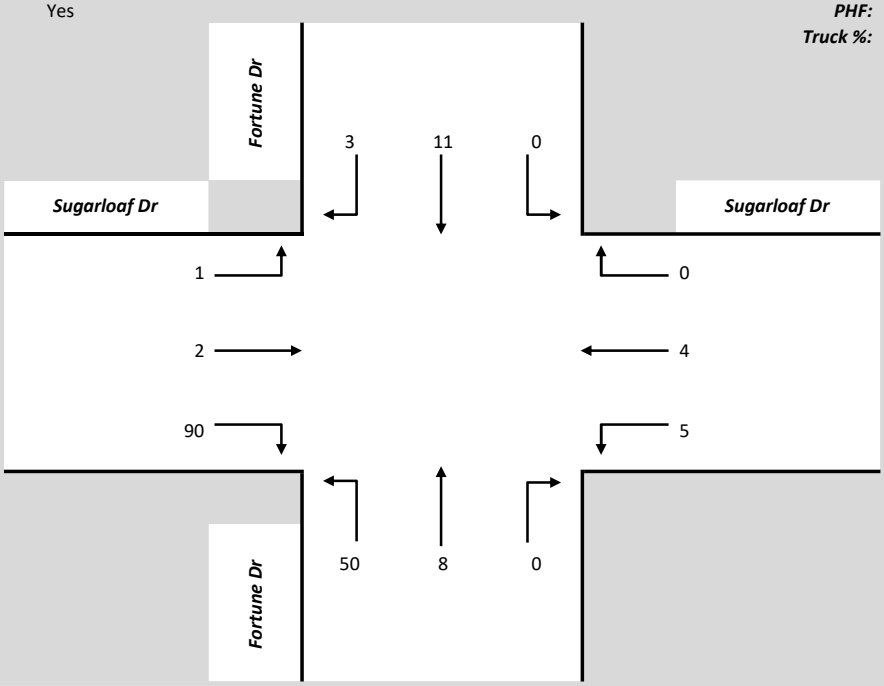
GCW
ENGINEERS \ SURVEYORS

Intersection: Fortune Dr & Sugarloaf Dr

AM PEAK HOUR TURNING MOVEMENT VOLUME

Date Collected: 6/3/2025
School in Session: Yes

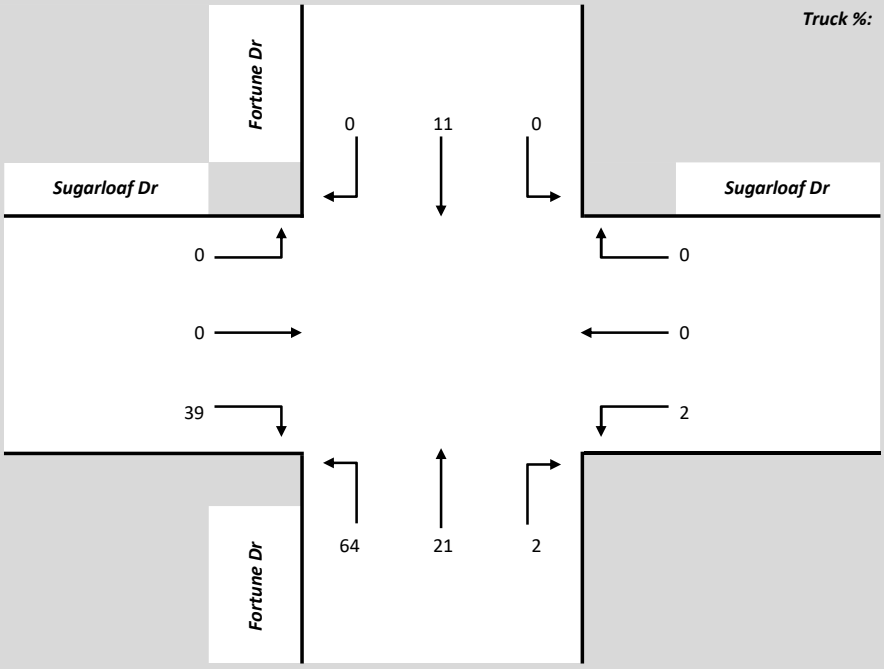
Peak Hour: 8:00 - 9:00
PHF: 0.58
Truck %: 4%



PM PEAK HOUR TURNING MOVEMENT VOLUME

Date Collected: 6/3/2025
School in Session: Yes

Peak Hour: 4:45 - 5:45
PHF: 0.85
Truck %: 0%

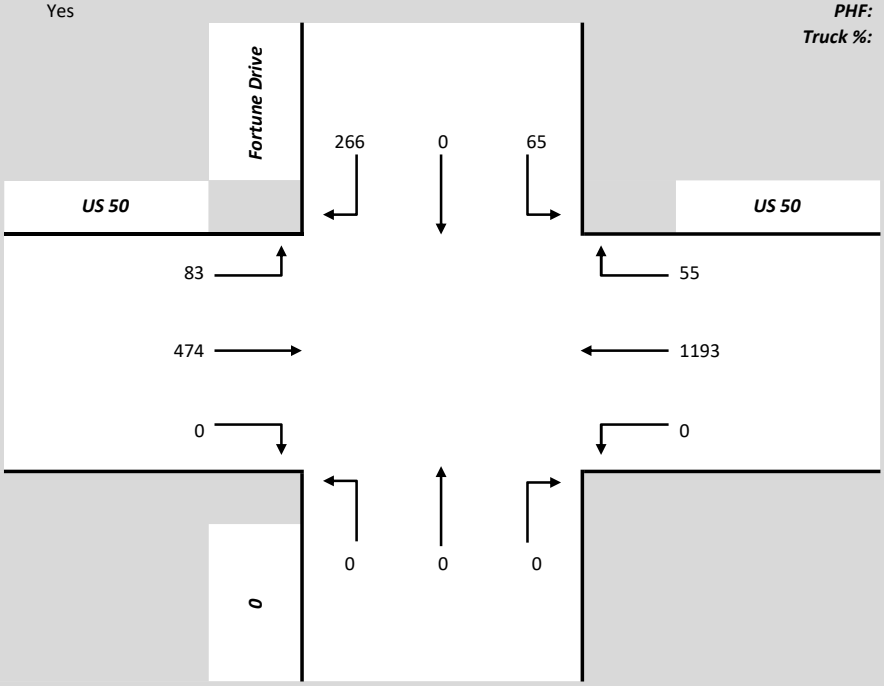


Intersection: US 50 & Fortune Dr

AM PEAK HOUR TURNING MOVEMENT VOLUME

Date Collected: 6/3/2025
School in Session: Yes

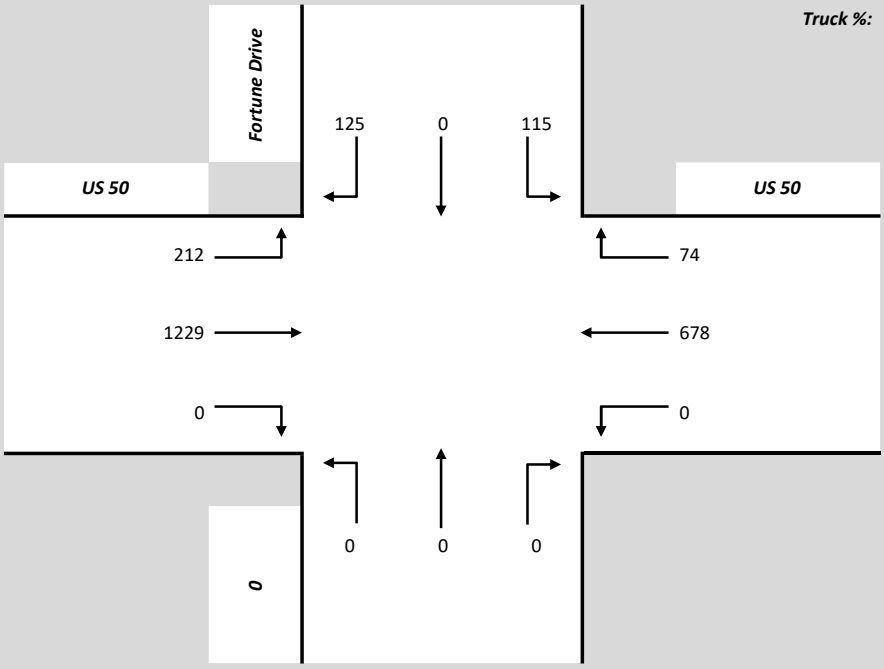
Peak Hour: 7:00 - 8:00
PHF: 0.92
Truck %: 4%



PM PEAK HOUR TURNING MOVEMENT VOLUME

Date Collected: 6/3/2025
School in Session: Yes

Peak Hour: 4:30 - 5:30
PHF: 0.97
Truck %: 1%

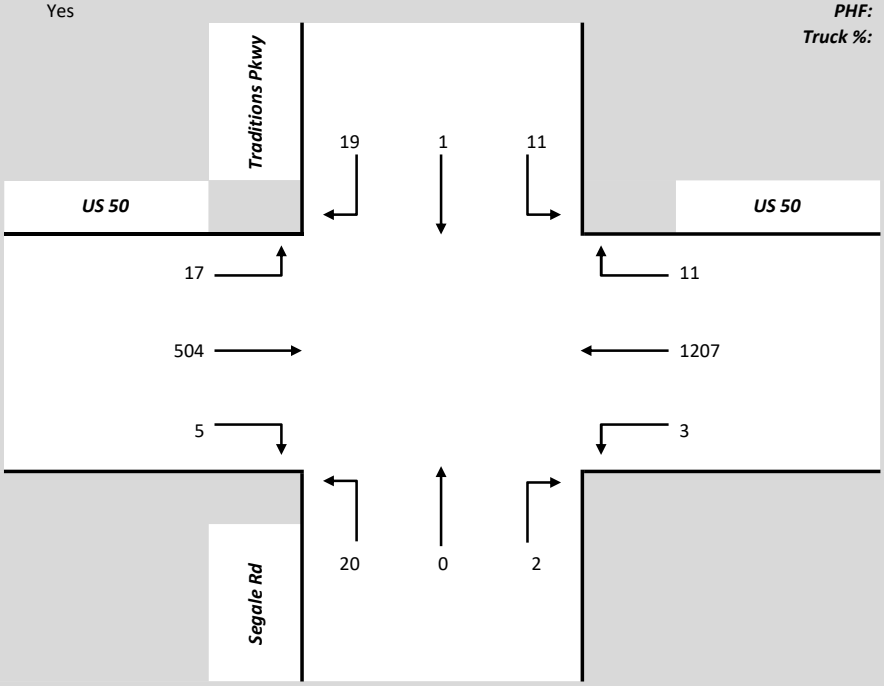


Intersection: US 50 & Traditions Pkwy

AM PEAK HOUR TURNING MOVEMENT VOLUME

Date Collected: 6/3/2025
School in Session: Yes

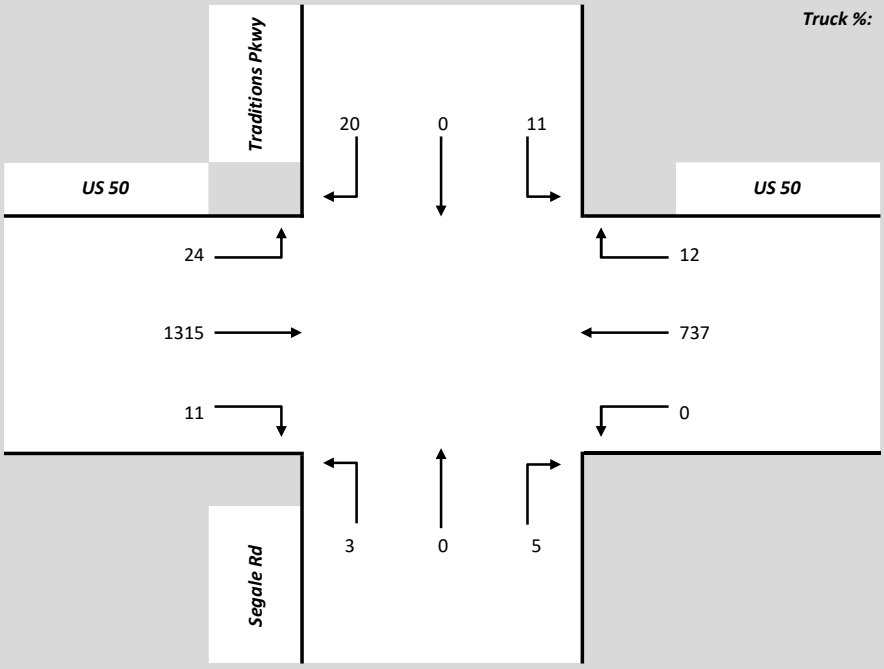
Peak Hour: 7:00 - 8:00
PHF: 0.94
Truck %: 4%



PM PEAK HOUR TURNING MOVEMENT VOLUME

Date Collected: 6/3/2025
School in Session: Yes

Peak Hour: 4:30 - 5:30
PHF: 0.97
Truck %: 1%



Appendix C
Existing LOS Calculations

GCW
ENGINEERS \ SURVEYORS

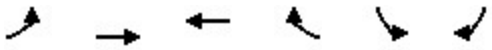
Intersection	
Int Delay, s/veh	7.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	2	90	5	4	1	50	8	1	1	11	3
Future Vol, veh/h	1	2	90	5	4	1	50	8	1	1	11	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	4	4	4	4	4	4	4	4	4	4	4	4
Mvmt Flow	1	3	120	7	5	1	67	11	1	1	15	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	166	165	17	163	166	11	19	0	0	12	0	0
Stage 1	19	19	-	145	145	-	-	-	-	-	-	-
Stage 2	147	145	-	19	21	-	-	-	-	-	-	-
Critical Hdwy	7.14	6.54	6.24	7.14	6.54	6.24	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.14	5.54	-	6.14	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.14	5.54	-	6.14	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.536	4.036	3.336	3.536	4.036	3.336	2.236	-	-	2.236	-	-
Pot Cap-1 Maneuver	794	724	1057	797	723	1064	1585	-	-	1594	-	-
Stage 1	994	875	-	853	773	-	-	-	-	-	-	-
Stage 2	851	773	-	995	874	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	753	693	1057	674	692	1064	1585	-	-	1594	-	-
Mov Cap-2 Maneuver	753	693	-	674	692	-	-	-	-	-	-	-
Stage 1	994	875	-	817	741	-	-	-	-	-	-	-
Stage 2	808	740	-	879	873	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	8.93	10.19	6.25	0.48
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1492	-	-	1040	707	115	-	-
HCM Lane V/C Ratio	0.042	-	-	0.119	0.019	0.001	-	-
HCM Control Delay (s/veh)	7.4	0	-	8.9	10.2	7.3	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	0.1	0	-	-



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	83	0	1193	55	65	266
Future Volume (veh/h)	83	0	1193	55	65	266
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	90	0	1297	60	71	289
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	4	4	4	4	4
Cap, veh/h	118	2237	1638	731	378	336
Arrive On Green	0.07	0.00	0.47	0.47	0.22	0.22
Sat Flow, veh/h	1753	3589	3589	1560	1753	1560
Grp Volume(v), veh/h	90	0	1297	60	71	289
Grp Sat Flow(s),veh/h/ln	1753	1749	1749	1560	1753	1560
Q Serve(g_s), s	3.9	0.0	24.2	1.6	2.6	13.8
Cycle Q Clear(g_c), s	3.9	0.0	24.2	1.6	2.6	13.8
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	118	2237	1638	731	378	336
V/C Ratio(X)	0.76	0.00	0.79	0.08	0.19	0.86
Avail Cap(c_a), veh/h	681	4113	2265	1010	568	505
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.4	0.0	17.3	11.3	24.8	29.2
Incr Delay (d2), s/veh	9.6	0.0	1.4	0.0	0.2	9.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	8.4	0.5	1.1	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	45.0	0.0	18.7	11.4	25.0	38.6
LnGrp LOS	D		B	B	C	D
Approach Vol, veh/h		90	1357		360	
Approach Delay, s/veh		45.0	18.4		35.9	
Approach LOS		D	B		D	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	55.2	22.0	13.2	42.0
Change Period (Y+Rc), s	* 5.8	5.4	8.0	5.8
Max Green Setting (Gmax), s	* 91	25.0	30.0	50.0
Max Q Clear Time (g_c+I1), s	0.0	15.8	5.9	26.2
Green Ext Time (p_c), s	0.0	0.9	0.2	10.0

Intersection Summary	
HCM 7th Control Delay, s/veh	23.2
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

FREEWAY MERGE ANALYSIS

File Name:	US50_Fortune-Merge-AM.xuf
Analyst:	GCW
Agency:	NDOT
Jurisdiction:	NDOT
Date:	
Analysis Year:	Existing (2025)
Time Analyzed:	AM Peak Hour
Project Description:	Traditions North
Units:	U.S. Customary

LOS and Performance Measures

Ramp Type	Left-Sided One-Lane		
Density in On-Ramp (Merge) Influence Area, DR	5.4	pc/mi/ln	
Level of Service, LOS	A		
Average Flow in Outer Lanes, vOA	-	pc/h/ln	
Average Speed in Ramp Influence Area, SR	55.1	mi/h	
Average Speed in Outer Lanes of Freeway, SO	60.0	mi/h	
Average Speed for On-Ramp (Merge) Junction, S	55.1	mi/h	
Density Across All Lanes, D	5.7	pc/mi/ln	

Step 1: Specify Inputs and Convert Demand Volumes to Demand Flow Rates

Freeway Data			
Number of Freeway Lanes	2		ln
Measured or Base FFS	Measured		
Base Free-Flow Speed, BFFS	-		mi/h
Lane Width	-		ft
Lane Width Adjustment, fLW	-		mi/h
Right-Side Lateral Clearance	-		ft
Right-Side Lateral Clearance Adj., fRLC	-		mi/h
Total Ramp Density, TRD	-		ramps/mi
TRD Adjustment	-		mi/h
Free-Flow Speed, FFS	60.0		mi/h
Speed Adjustments			
Driver Population	All Familiar		
Driver Population SAF	1.000		
Weather Type	Non-Severe Weather		
Weather Type SAF	1.000		
Final Speed Adjustment Factor, SAF	1.000		
Adjusted Free-Flow Speed, FFSadj	60.0		mi/h
Segment Length	1500		ft
C-D Roadway?	Freeway		
Demand Volume, V	474		veh/h
Peak Hour Factor, PHF	0.92		
Ramp Data			
Number of Ramp Lanes	1		ln
Ramp Free-Flow Speed, SFR	35.0		mi/h
Ramp Side	Left		
Length of First Acceleration Lane, LA or LA1	800		ft
Length of Second Acceleration Lane, LA2	-		ft
Junction Components	Freeway	Ramp	
Demand Volume, V	474	65	veh/h
Peak Hour Factor, PHF	0.92	0.92	
Percent Total Trucks	8.00	2.00	%
Percent SUTs	-	-	%
Percent TTs	-	-	%
Prop. Total Trucks, PT	0.0800	0.0200	
Heavy Vehicle PCE, ET	2.00	2.00	
Heavy Vehicle Adj., fHV	0.926	0.980	
Terrain Type	Level	Level	

Percent Grade	-	-	%
Grade Length	-	-	mi
Demand Adj. Factor, DAF	1.000	1.000	
Demand Flow Rate, v	556	72	pc/h

Step 2: Estimate the Approaching Flow Rate in Lanes 1 and 2

Estimating Flow in Lanes 1 and 2 for On-Ramps			
Adjacent Upstream Off-Ramp Equilibrium Distance, LEQ	-	ft	
Adjacent Downstream Off-Ramp Equilibrium Distance, LEQ	-	ft	
Prop. Freeway Veh. in Lanes 1 and 2, PFM	1.000		
Flow Rate on Freeway, vF	556	pc/h	
Flow Rate in Lanes 1 and 2, v12	556	pc/h	

Step 3: Estimate Capacity of Ramp-Freeway Junction and Compare Flow Rates

Capacity Checks

	Actual	Maximum	Violation?
vFO	628	4600	No
vR	72	2000	No
vR12	628	4600	No

	Freeway	Ramp	
Unadjusted Capacity, cmd	4600	2000	pc/h
Driver Population	All Familiar	All Familiar	
Driver Population CAF	1.000	1.000	
Weather Type	Non-Severe Weather	Non-Severe Weather	
Weather Type CAF	1.000	1.000	
Incident Type	No Incident	-	
Incident Type CAF	1.000	-	
Proportion of CAVs in Traffic Stream	0	-	
Capacity Adjustment Factor for CAVs, CAFCAV	1.000	-	
Final Capacity Adj. Factor, CAF	1.000	1.000	
Final Adjusted Capacity, cmda	4600	2000	pc/h

Step 4: Estimate Density in Ramp Influence Area and Determine LOS

Demand Flow Rate on Ramp, vR	72	pc/h
Flow Rate in Lanes 1 and 2, v12	556	pc/h
Length of Acceleration Lane, LA	800	ft
Density in On-Ramp Influence Area, DR	5.4	pc/mi/ln
Density in On-Ramp Influence Area, DR	5.3	veh/mi/ln
Level of Service, LOS	A	

Step 5: Estimate Speeds in the Vicinity of Ramp-Freeway Junctions

Freeway Free-Flow Speed, FFS	60.0	mi/h
Ramp Free-Flow Speed, SFR	35.0	mi/h
Length of Acceleration Lane, LA	800	ft
Driver Population	All Familiar	
Driver Population SAF	1.000	
Weather Type	Non-Severe Weather	
Weather Type SAF	1.000	
Final Speed Adjustment Factor, SAF	1.000	
Flow Rate on Freeway, vF	556	pc/h
Flow Rate in Lanes 1 and 2, v12	556	pc/h
Total Flow Entering On-Ramp Infl. Area, vR12	628	pc/h
Number of Outer Lanes on Freeway, NO	0	ln
Speed Index for On-Ramp, MS	0.272	
Average Speed in Ramp Influence Area, SR	55.1	mi/h
Average Flow in Outer Lanes, vOA	-	pc/h/ln
Average Speed in Outer Lanes of Freeway, SO	60.0	mi/h
Average Speed for On-Ramp Junction, S	55.1	mi/h
Density Across All Lanes, D	5.7	pc/mi/ln

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	504	5	3	1207	11	20	0	2	11	1	19
Future Vol, veh/h	17	504	5	3	1207	11	20	0	2	11	1	19
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	Free	-	-	None	-	-	Yield
Storage Length	580	-	-	560	-	465	-	-	-	0	-	225
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	4	4	4	4	4	4	4	4	4	4	4	4
Mvmt Flow	18	536	5	3	1284	12	21	0	2	12	1	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1284	0	0	541	0	0	1224	1865	271	1595	1868	642
Stage 1	-	-	-	-	-	-	575	575	-	1290	1290	-
Stage 2	-	-	-	-	-	-	649	1290	-	304	578	-
Critical Hdwy	4.18	-	-	4.18	-	-	7.58	6.58	6.98	7.58	6.58	6.98
Critical Hdwy Stg 1	-	-	-	-	-	-	6.58	5.58	-	6.58	5.58	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.58	5.58	-	6.58	5.58	-
Follow-up Hdwy	2.24	-	-	2.24	-	-	3.54	4.04	3.34	3.54	4.04	3.34
Pot Cap-1 Maneuver	525	-	-	1010	-	0	133	70	721	70	70	412
Stage 1	-	-	-	-	-	0	465	496	-	170	228	-
Stage 2	-	-	-	-	-	0	420	228	-	675	495	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	525	-	-	1010	-	-	120	68	721	67	67	412
Mov Cap-2 Maneuver	-	-	-	-	-	-	120	68	-	67	67	-
Stage 1	-	-	-	-	-	-	449	479	-	169	228	-
Stage 2	-	-	-	-	-	-	396	228	-	650	478	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.39	0.02	38.79	35.24
HCM LOS			E	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	130	525	-	-	1010	-	67	67	412
HCM Lane V/C Ratio	0.181	0.034	-	-	0.003	-	0.174	0.016	0.049
HCM Control Delay (s/veh)	38.8	12.1	-	-	8.6	-	69.4	59.2	14.2
HCM Lane LOS	E	B	-	-	A	-	F	F	B
HCM 95th %tile Q(veh)	0.6	0.1	-	-	0	-	0.6	0	0.2

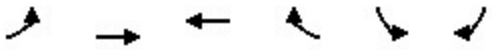
Intersection	
Int Delay, s/veh	6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	1	39	2	1	1	64	21	2	1	11	1
Future Vol, veh/h	1	1	39	2	1	1	64	21	2	1	11	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	1	46	2	1	1	75	25	2	1	13	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	192	194	14	192	193	26	14	0	0	27	0	0
Stage 1	16	16	-	176	176	-	-	-	-	-	-	-
Stage 2	176	178	-	16	16	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	768	702	1067	767	702	1050	1604	-	-	1587	-	-
Stage 1	1004	882	-	825	753	-	-	-	-	-	-	-
Stage 2	826	752	-	1004	882	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	729	668	1067	698	668	1050	1604	-	-	1587	-	-
Mov Cap-2 Maneuver	729	668	-	698	668	-	-	-	-	-	-	-
Stage 1	1003	882	-	786	717	-	-	-	-	-	-	-
Stage 2	784	716	-	959	881	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	8.63	9.81	5.41	0.56
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1302	-	-	1040	752	136	-	-
HCM Lane V/C Ratio	0.047	-	-	0.046	0.006	0.001	-	-
HCM Control Delay (s/veh)	7.4	0	-	8.6	9.8	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0	0	-	-



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	212	0	678	74	115	125
Future Volume (veh/h)	212	0	678	74	115	125
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	219	0	699	76	119	129
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	288	2279	1120	500	229	203
Arrive On Green	0.16	0.00	0.32	0.32	0.13	0.13
Sat Flow, veh/h	1781	3647	3647	1585	1781	1585
Grp Volume(v), veh/h	219	0	699	76	119	129
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1585	1781	1585
Q Serve(g_s), s	5.7	0.0	8.2	1.7	3.0	3.8
Cycle Q Clear(g_c), s	5.7	0.0	8.2	1.7	3.0	3.8
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	288	2279	1120	500	229	203
V/C Ratio(X)	0.76	0.00	0.62	0.15	0.52	0.63
Avail Cap(c_a), veh/h	1099	6638	3655	1630	916	815
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.5	0.0	14.2	12.0	19.8	20.1
Incr Delay (d2), s/veh	4.2	0.0	0.6	0.1	1.8	3.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.0	2.6	0.5	1.3	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	23.6	0.0	14.8	12.1	21.6	23.3
LnGrp LOS	C		B	B	C	C
Approach Vol, veh/h		219	775		248	
Approach Delay, s/veh		23.6	14.5		22.5	
Approach LOS		C	B		C	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	37.0	11.6	15.8	21.1
Change Period (Y+Rc), s	* 5.8	5.4	8.0	5.8
Max Green Setting (Gmax), s	* 91	25.0	30.0	50.0
Max Q Clear Time (g_c+I1), s	0.0	5.8	7.7	10.2
Green Ext Time (p_c), s	0.0	0.7	0.6	5.2

Intersection Summary	
HCM 7th Control Delay, s/veh	17.7
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

FREEWAY MERGE ANALYSIS

File Name:	US50_Fortune-Merge-PM.xuf
Analyst:	GCW
Agency:	NDOT
Jurisdiction:	NDOT
Date:	
Analysis Year:	Existing (2025)
Time Analyzed:	PM Peak Hour
Project Description:	Traditions North
Units:	U.S. Customary

LOS and Performance Measures

Ramp Type	Left-Sided One-Lane		
Density in On-Ramp (Merge) Influence Area, DR	11.5	pc/mi/ln	
Level of Service, LOS	B		
Average Flow in Outer Lanes, vOA	-	pc/h/ln	
Average Speed in Ramp Influence Area, SR	54.9	mi/h	
Average Speed in Outer Lanes of Freeway, SO	60.0	mi/h	
Average Speed for On-Ramp (Merge) Junction, S	54.9	mi/h	
Density Across All Lanes, D	12.9	pc/mi/ln	

Step 1: Specify Inputs and Convert Demand Volumes to Demand Flow Rates

Freeway Data			
Number of Freeway Lanes	2		ln
Measured or Base FFS	Measured		
Base Free-Flow Speed, BFFS	-		mi/h
Lane Width	-		ft
Lane Width Adjustment, fLW	-		mi/h
Right-Side Lateral Clearance	-		ft
Right-Side Lateral Clearance Adj., fRLC	-		mi/h
Total Ramp Density, TRD	-		ramps/mi
TRD Adjustment	-		mi/h
Free-Flow Speed, FFS	60.0		mi/h
Speed Adjustments			
Driver Population	All Familiar		
Driver Population SAF	1.000		
Weather Type	Non-Severe Weather		
Weather Type SAF	1.000		
Final Speed Adjustment Factor, SAF	1.000		
Adjusted Free-Flow Speed, FFSadj	60.0		mi/h
Segment Length	1500		ft
C-D Roadway?	Freeway		
Demand Volume, V	1229		veh/h
Peak Hour Factor, PHF	0.97		
Ramp Data			
Number of Ramp Lanes	1		ln
Ramp Free-Flow Speed, SFR	35.0		mi/h
Ramp Side	Left		
Length of First Acceleration Lane, LA or LA1	800		ft
Length of Second Acceleration Lane, LA2	-		ft

Junction Components	Freeway	Ramp	
Demand Volume, V	1229	115	veh/h
Peak Hour Factor, PHF	0.97	0.97	
Percent Total Trucks	2.00	2.00	%
Percent SUTs	-	-	%
Percent TTs	-	-	%
Prop. Total Trucks, PT	0.0200	0.0200	
Heavy Vehicle PCE, ET	2.00	2.00	
Heavy Vehicle Adj., fHV	0.980	0.980	
Terrain Type	Level	Level	

Percent Grade	-	-	%
Grade Length	-	-	mi
Demand Adj. Factor, DAF	1.000	1.000	
Demand Flow Rate, v	1293	121	pc/h

Step 2: Estimate the Approaching Flow Rate in Lanes 1 and 2

Estimating Flow in Lanes 1 and 2 for On-Ramps			
Adjacent Upstream Off-Ramp Equilibrium Distance, LEQ	-	ft	
Adjacent Downstream Off-Ramp Equilibrium Distance, LEQ	-	ft	
Prop. Freeway Veh. in Lanes 1 and 2, PFM	1.000		
Flow Rate on Freeway, vF	1293	pc/h	
Flow Rate in Lanes 1 and 2, v12	1293	pc/h	

Step 3: Estimate Capacity of Ramp-Freeway Junction and Compare Flow Rates

Capacity Checks

	Actual	Maximum	Violation?
vFO	1414	4600	No
vR	121	2000	No
vR12	1414	4600	No

	Freeway	Ramp	
Unadjusted Capacity, cmd	4600	2000	pc/h
Driver Population	All Familiar	All Familiar	
Driver Population CAF	1.000	1.000	
Weather Type	Non-Severe Weather	Non-Severe Weather	
Weather Type CAF	1.000	1.000	
Incident Type	No Incident	-	
Incident Type CAF	1.000	-	
Proportion of CAVs in Traffic Stream	0	-	
Capacity Adjustment Factor for CAVs, CAFCAV	1.000	-	
Final Capacity Adj. Factor, CAF	1.000	1.000	
Final Adjusted Capacity, cmda	4600	2000	pc/h

Step 4: Estimate Density in Ramp Influence Area and Determine LOS

Demand Flow Rate on Ramp, vR	121	pc/h	
Flow Rate in Lanes 1 and 2, v12	1293	pc/h	
Length of Acceleration Lane, LA	800	ft	
Density in On-Ramp Influence Area, DR	11.5	pc/mi/ln	
Density in On-Ramp Influence Area, DR	11.3	veh/mi/ln	
Level of Service, LOS	B		

Step 5: Estimate Speeds in the Vicinity of Ramp-Freeway Junctions

Freeway Free-Flow Speed, FFS	60.0	mi/h	
Ramp Free-Flow Speed, SFR	35.0	mi/h	
Length of Acceleration Lane, LA	800	ft	
Driver Population	All Familiar		
Driver Population SAF	1.000		
Weather Type	Non-Severe Weather		
Weather Type SAF	1.000		
Final Speed Adjustment Factor, SAF	1.000		
Flow Rate on Freeway, vF	1293	pc/h	
Flow Rate in Lanes 1 and 2, v12	1293	pc/h	
Total Flow Entering On-Ramp Infl. Area, vR12	1414	pc/h	
Number of Outer Lanes on Freeway, NO	0	ln	
Speed Index for On-Ramp, MS	0.281		
Average Speed in Ramp Influence Area, SR	54.9	mi/h	
Average Flow in Outer Lanes, vOA	-	pc/h/ln	
Average Speed in Outer Lanes of Freeway, SO	60.0	mi/h	
Average Speed for On-Ramp Junction, S	54.9	mi/h	
Density Across All Lanes, D	12.9	pc/mi/ln	

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	24	1315	11	1	737	12	3	0	5	11	0	20
Future Vol, veh/h	24	1315	11	1	737	12	3	0	5	11	0	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	Free	-	-	None	-	-	Yield
Storage Length	580	-	-	560	-	465	-	-	-	0	-	225
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	4	4	4	4	4	4	4	4	4	4	4	4
Mvmt Flow	26	1399	12	1	784	13	3	0	5	12	0	21

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	784	0	0	1411	0	0	1850	2242	705	1537	2248	392
Stage 1	-	-	-	-	-	-	1456	1456	-	786	786	-
Stage 2	-	-	-	-	-	-	394	786	-	751	1462	-
Critical Hdwy	4.18	-	-	4.18	-	-	7.58	6.58	6.98	7.58	6.58	6.98
Critical Hdwy Stg 1	-	-	-	-	-	-	6.58	5.58	-	6.58	5.58	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.58	5.58	-	6.58	5.58	-
Follow-up Hdwy	2.24	-	-	2.24	-	-	3.54	4.04	3.34	3.54	4.04	3.34
Pot Cap-1 Maneuver	817	-	-	469	-	0	45	41	374	78	40	601
Stage 1	-	-	-	-	-	0	134	189	-	347	397	-
Stage 2	-	-	-	-	-	0	597	397	-	365	188	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	817	-	-	469	-	-	42	39	374	74	39	601
Mov Cap-2 Maneuver	-	-	-	-	-	-	42	39	-	74	39	-
Stage 1	-	-	-	-	-	-	129	183	-	346	396	-
Stage 2	-	-	-	-	-	-	574	396	-	348	182	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.17	0.02	47.03	29.47
HCM LOS			E	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	94	817	-	-	469	-	74	-	601
HCM Lane V/C Ratio	0.09	0.031	-	-	0.002	-	0.158	-	0.035
HCM Control Delay (s/veh)	47	9.5	-	-	12.7	-	62.7	0	11.2
HCM Lane LOS	E	A	-	-	B	-	F	A	B
HCM 95th %tile Q(veh)	0.3	0.1	-	-	0	-	0.5	-	0.1

Appendix D
Growth Rate Calculations

GCW
ENGINEERS \ SURVEYORS

Opening Year & Opening Year Plus Project Volumes
AM Peak Hour

Existing - June 2025 Counts

INTERSECTION	INTID	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Fortune/Sugarloaf	1	50	8	1	1	11	3	1	2	90	5	4	1
US 50/Fortune	2				65		266	83	474			1193	55
US 50/Traditions	3	20	0	2	11	1	19	17	504	5	3	1207	11

Opening Year Growth 2029 0.5% 4

INTERSECTION	INTID	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Fortune/Sugarloaf	1	1	0	0	0	0	0	0	0	2	0	0	0
US 50/Fortune	2								9			24	
US 50/Traditions	3								10			24	

Project Trips - Traditions Town Center Phases 1-3

INTERSECTION	INTID	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Fortune/Sugarloaf	1												
US 50/Fortune	2								136			79	
US 50/Traditions	3		4		177	2	176	177	-41			-97	329

Project Trips - Dayton Six Opening Year (Residential and Industrial)

INTERSECTION	INTID	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Fortune/Sugarloaf	1												
US 50/Fortune	2								414			271	
US 50/Traditions	3								414			271	

Opening Year

INTERSECTION	INTID	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Fortune/Sugarloaf	1	51	8	1	1	11	3	1	2	92	5	4	1
US 50/Fortune	2	0	0	0	65	0	266	83	1033	0	0	1567	55
US 50/Traditions	3	20	4	2	188	3	195	194	887	5	3	1405	340

Project Trips - Traditions North

INTERSECTION	INTID	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Fortune/Sugarloaf	1	9								27			
US 50/Fortune	2						27	9	36			107	
US 50/Traditions	3				57		107	36					19

Opening Year Plus Project

INTERSECTION	INTID	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Fortune/Sugarloaf	1	60	8	1	1	11	3	1	2	119	5	4	1
US 50/Fortune	2	0	0	0	65	0	293	92	1069	0	0	1674	55
US 50/Traditions	3	20	4	2	245	3	302	230	887	5	3	1405	359

Opening Year & Opening Year Plus Project Volumes
PM Peak Hour

Existing - June 2025 Counts

INTERSECTION	INTID	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Fortune/Sugarloaf	1	64	21	2	1	11	1	1	1	39	2	1	1
US 50/Fortune	2				115		125	212	1229			678	74
US 50/Traditions	3	3	0	5	11	0	20	24	1315	11	1	737	12

Opening Year Growth 2029 0.5% 4

INTERSECTION	INTID	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Fortune/Sugarloaf	1	1	0	0	0	0	0	0	0	1	0	0	0
US 50/Fortune	2								25			14	
US 50/Traditions	3								26			15	

Project Trips - Traditions Town Center Phases 1-3

INTERSECTION	INTID	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Fortune/Sugarloaf	1												
US 50/Fortune	2								95			116	
US 50/Traditions	3		3		325	2	185	222	-127			-69	231

Project Trips - Dayton Six Opening Year (Residential and Industrial)

INTERSECTION	INTID	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Fortune/Sugarloaf	1												
US 50/Fortune	2								323			463	
US 50/Traditions	3								323			463	

Opening Year

INTERSECTION	INTID	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Fortune/Sugarloaf	1	65	21	2	1	11	1	1	1	40	2	1	1
US 50/Fortune	2	0	0	0	115	0	125	212	1672	0	0	1271	74
US 50/Traditions	3	3	3	5	336	2	205	246	1537	11	1	1146	243

Project Trips - Traditions North

INTERSECTION	INTID	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Fortune/Sugarloaf	1	30								18			
US 50/Fortune	2						18	30	121			71	
US 50/Traditions	3				38		71	121					65

Opening Year Plus Project

INTERSECTION	INTID	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Fortune/Sugarloaf	1	95	21	2	1	11	1	1	1	58	2	1	1
US 50/Fortune	2	0	0	0	115	0	143	242	1793	0	0	1342	74
US 50/Traditions	3	3	3	5	374	2	276	367	1537	11	1	1146	308

Future Year & Future Year Plus Project Volumes
AM Peak Hour

Existing - June 2025 Counts

INTERSECTION	INTID	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Fortune/Sugarloaf	1	50	8	1	1	11	3	1	2	90	5	4	1
US 50/Fortune	2				65		266	83	474			1193	55
US 50/Traditions	3	20	0	2	11	1	19	17	504	5	3	1207	11

Future Volumes from US 50 Corridor Study (Arterial Alternative) & Traditions Town Center Phases 1-3 TIS (includes Traditions Village 2 and Estates at Sutro)

INTERSECTION	INTID	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Fortune/Sugarloaf	1												
US 50/Fortune	2				149		542	213	900			2500	130
US 50/Traditions	3	34	5	11	109	5	144	48	970	15	28	2456	38

Future Year Growth (2040 to 2049) 2049 0.5% 9

INTERSECTION	INTID	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Fortune/Sugarloaf	1	56	9	1	1	12	3	1	2	101	6	5	1
US 50/Fortune	2								21			54	
US 50/Traditions	3								23			54	

Project Trips - Traditions Town Center Phases 1-3

INTERSECTION	INTID	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Fortune/Sugarloaf	1												
US 50/Fortune	2								136			79	
US 50/Traditions	3	0	4	0	177	2	176	177	-41	0	0	-97	329

Project Trips - Dayton Six

INTERSECTION	INTID	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Fortune/Sugarloaf	1												
US 50/Fortune	2								466			348	
US 50/Traditions	3								466			348	

Future Year

INTERSECTION	INTID	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Fortune/Sugarloaf	1	56	9	1	1	12	3	1	2	101	6	5	1
US 50/Fortune	2	0	0	0	149	0	542	213	1523	0	0	2981	130
US 50/Traditions	3	34	9	11	286	7	320	225	1418	15	28	2761	367

Project Trips - Traditions North

INTERSECTION	INTID	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Fortune/Sugarloaf	1	7								22			
US 50/Fortune	2						22	7	30			88	
US 50/Traditions	3				47		88	30					16

Future Year Plus Project

INTERSECTION	INTID	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Fortune/Sugarloaf	1	63	9	1	1	12	3	1	2	123	6	5	1
US 50/Fortune	2	0	0	0	149	0	564	220	1553	0	0	3069	130
US 50/Traditions	3	34	9	11	333	7	408	255	1418	15	28	2761	383

Future Year & Future Year Plus Project Volumes
PM Peak Hour

Existing - June 2025 Counts

INTERSECTION	INTID	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Fortune/Sugarloaf	1	64	21	2	1	11	1	1	1	39	2	1	1
US 50/Fortune	2				115		125	212	1229			678	74
US 50/Traditions	3	3	0	5	11	0	20	24	1315	11	1	737	12

Future Volumes from US 50 Corridor Study (Arterial Alternative) & Traditions Town Center Phases 1-3 TIS (includes Traditions Village 2 and Estates at Sutro)

INTERSECTION	INTID	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Fortune/Sugarloaf	1												
US 50/Fortune	2				219		283	546	2616			1488	135
US 50/Traditions	3	14	5	11	70	5	95	161	2645	22	35	1480	128

Future Year Growth (2040 to 2049) 2049 0.5% 9

INTERSECTION	INTID	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Fortune/Sugarloaf	1	72	24	2	1	12	1	1	1	44	2	1	1
US 50/Fortune	2								55			31	
US 50/Traditions	3								59			33	

Project Trips - Traditions Town Center Phases 1-3

INTERSECTION	INTID	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Fortune/Sugarloaf	1												
US 50/Fortune	2								95			116	
US 50/Traditions	3		3		325	2	185	222	-127			-69	231

Project Trips - Dayton Six

INTERSECTION	INTID	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Fortune/Sugarloaf	1												
US 50/Fortune	2								476			601	
US 50/Traditions	3								476			601	

Future Year

INTERSECTION	INTID	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Fortune/Sugarloaf	1	72	24	2	1	12	1	1	1	44	2	1	1
US 50/Fortune	2	0	0	0	219	0	283	546	3242	0	0	2236	135
US 50/Traditions	3	14	8	11	395	7	280	383	3053	22	35	2045	359

Project Trips - Traditions North

INTERSECTION	INTID	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Fortune/Sugarloaf	1	25								15			
US 50/Fortune	2						15	25	99			58	
US 50/Traditions	3				31		58	99					53

Future Year Plus Project

INTERSECTION	INTID	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Fortune/Sugarloaf	1	97	24	2	1	12	1	1	1	59	2	1	1
US 50/Fortune	2	0	0	0	219	0	298	571	3341	0	0	2294	135
US 50/Traditions	3	14	8	11	426	7	338	482	3053	22	35	2045	412

Appendix 3
2040 Traffic Forecasting and Assumptions

US 50 (Name TBD) Study
Pine Cone Road to Neigh Road

Summary of Traffic Forecasting Assumptions and
Potential Developments along US 50 Corridor

This report documents the traffic forecasting assumptions and review of potential future developments along the US 50, including:

A. Proposed Growth Rate
B. 2040 Forecast Traffic
C. Minimum Forecast Year 2040 Turning Movement Volumes
D. Speed Limits
E. Truck Percentages
F. Approved/Proposed Projects

A. Proposed Growth Rate: Ten-year count data was reviewed at three count stations in the study area from 2009 to 2018. This data revealed the following growth rates for 5-year 2018-2013, and 10-year 2018-2009:

   a. Five-year Growth Rate 2018-2013: Yearly growth rates of 4.65% (S/O Pinecone Rd), 4.86% (W/O Cardelli Rd), and 7.14% (E/O Bryce Rd). Average: 5.55%, weighted average 5.13%

   b. Ten-year Growth Rate 2018-2009: Yearly growth rates of 1.4% (S/O Pinecone Rd), 2.43% (W/O Cardelli Rd), and 2.04% (E/O Bryce Rd). Average: 1.96%, weighted average 1.86%

Recommendation: Use a linear growth rate of **2 percent per year** for 20 years, representing be a 40 percent increase in traffic from 2020 to 2040. This growth rate would be applied to the existing traffic at each intersection.

B. The 2040 forecast traffic will be the sum of:

   a. 2020 Existing Traffic

   b. Growth of Existing Traffic using the recommended growth rate

   c. Traffic generated by Approved/Proposed Projects

C. Minimum Forecast Year 2020 Turning Movement Volumes: Some of the existing intersections had zero or minimal turning traffic. Applying a growth rate to these specific low volumes turning movements will result in a 2040 forecast of zero or minimal traffic. The following volumes are recommended to be used for minimum 2040 forecast volumes at the study area intersections for the AM and PM peak hours:

   a. 10 vph for right and left turns from a side street onto US 50

   b. 10 vph for right and left turns from US 50 onto a side street

   c. 5 vph for side street thru traffic across US 50

D. Speed Limits: The existing speed limit on US 50 is 45 mph from Pinecone Rd to Fortune Dr, east of Fortune Dr the speed limit increases to 60 mph. Existing speed limits on US 50 and side streets

will be used for the analysis of 2020 existing and 2040 traffic conditions with the following exceptions:

a. Due to future development and new site access points along US 50, the speed limit on US 50 from Fortune Dr to Neigh Rd will be assumed to 45 mph for the 2040 analysis.

E. Truck Percentages: CA Group reviewed the Department's 2018 Vehicle Classification Distribution Report by Route and determined that in 2017 a count of 318 trucks travelled on US 50 from Dayton Valley Road to US 95 Alt, this segment of US 50 includes the study area. This truck volume was divided by the 2017 AADT to determine the truck percentage on US 50. These truck percentages will be used for the analysis of 2020 existing and 2040 forecast traffic volumes.

a. US 50, Pinecone Rd to 6-Mile Canyon Road, 2017 = 16,00 vpd, 1.99% Trucks. Use 2.0%

b. US 50, 6-Mile Canyon Road to Neigh Rd, 2017 ADT = 7,700 vpd, 4.13% Trucks. Use 4.1%

F. Approved/Proposed Projects

A number of developments are proposed along the US 50 corridor within the limits of the project study area. NDOT provided background information on these proposed developments, CA Group conducted a review of this information to determine the impact these developments may have on the corridor, specifically on the potential traffic these developments may add to the corridor and the design year traffic forecasts. The developments are grouped based on the year the development was submitted for review.

The traffic studies for the Approved Projects generally show the traffic at one or two intersections on US 50. The site traffic generated by the Approved Projects needs to be added to the adjacent intersections in one of two methods:

a. Add the traffic as EB and WB thru traffic to the adjacent study area intersections, continuing the thru traffic to the study area east and west boundaries.

b. Add the traffic as EB and WB thru traffic to the adjacent intersections, but diminish the volume the further away from the Approved Project by decreasing the thru EB and WB thru volumes and adding turning traffic to the side street, based on the existing turn percentages at each intersection.

Recommendation: Option b, to diminish the site traffic generated by the Approved Projects as the distance from the Approved Project increases by assigning the traffic to right and left turn movements at the study intersections based on the existing percentage of traffic turning at each intersection.

The developments reviewed based on data provided by NDOT and Lyon County are:

2020 Developments

1. Sage Vista Master Plan (PLZ-19-0081)
   - Development: 894 single-family DUs, 600 multi-family DUs
   - US 50 Access: Chaves Rd/Bryce St
   - Trip Generation: 20,110 ADT, 1,469 AM, 1,747 PM
   - Traffic Study: Provided
   - **Recommendation**: Add site traffic as shown in figure 3B of the traffic study

2. Gold Country Estates, Phase 1 (APN 016-405-20)
   - Development: 33 single-family DUs
   - US 50 Access: Retail Rd, Pinecone Rd
   - Trip Generation: 316 ADT, 25 AM, 33 PM
   - Traffic Study: Provided
   - **Recommendation**: Add site traffic as shown in figure 4 of the traffic study

3. NNIC, Northern Nevada Industrial Center PUD Update (PLZ-19-0079, PLZ-19-0075(PUD)), also called Tahoe Regional Industrial Center (TRIC)
   - Development: 12,127 Ac in Lyon County, plus 8,123 Ac in City of Fenerly Planning Area. 23.5M square feet of industrial in Lyon County.
   - US 50 Access: USA Parkway (Primary), 12 miles east of Neigh Rd
   - Trip Generation: 32,106 ADT, 3,296 AM, 3,296 PM (Not including portion in Fenerly PA)
   - Traffic Study: Provided
   - 20-30 year build-out
   - **Recommendation**: Use site traffic as shown in figure 5 of the traffic study. This project at buildout will add 7,527 vpd, AM volume of 773 vph (528 EB, 245 WB) and PM volume of 773 vph (216 EB, 557 WB) to US 50 west of USA Parkway, which is 12 miles east of Neigh Rd. It is expected that not all of this project traffic will reach the study area, the project may not develop to the intensity analyzed in the NNIC traffic study or reach buildout by 2040. Based on the potential for future development on US 50 between USA Parkway and Neigh Rd, it will be assumed that only **50 percent** of the NNIC site traffic will reach the study area. This equates to an impact of 3,760 vpd, AM volume of 380 vph (260 EB, 120 WB) and PM volume of 390 vph (110 EB, 280 WB) reaching the study area.

2019 Developments

4. Best Properties US 50 Fortune Dr (APN 16-403-40)
   - Development: hospital, medical office, commercial
   - US 50 Access: Fortune Dr
   - Trip Generation: 5,239 ADT, 243 AM, 202 PM
   - Traffic Study: Provided
   - The site is under construction and partially open
   - **Recommendation**: Add site traffic per figure 3 of the traffic study. The site was approximately 10 percent complete when the traffic counts were conducted, site traffic will be reduced by **10 percent**.

5. Dayton Pioneer MPA (PLZ-19-0005, PLZ-19-0006)
   - Development: 104 single-family DUs
   - US 50 Access: Pinecone Rd
   - Trip Generation: 692 ADT, no peak hour estimate provided
   - Traffic Study: Not Provided
   - **Recommendation**: Traffic study not provided. Traffic generated by this project will be considered as part of the background traffic growth resulting from a growth factor applied to existing traffic volumes.

6. Desert Wells (PLZ-18-0020-MPA, PLZ-18-0021 SPEC PLAN)
   - Development: 989 single-family DUs, 200 apartments, 300 condos, 60,000 sq ft office, 140,000 sq ft commercial
   - US 50 Access: Caroline Way, 1.3 miles east of Neigh Rd
   - Trip Generation: 25,959 ADT, 1,766 AM, 2,138 PM
   - Traffic Study: Provided
   - **Recommendation**: Add site traffic per figure 3 of the traffic study

7. Gold Country Estates Unit 3 (APN 16-403-15)
   - Development: 192 DUs, various types
   - US 50 Access: Retail Rd, Fortune Rd
   - Trip Generation: 1,400 ADT, 94 AM, 119 PM
   - Traffic Study: Provided
   - **Recommendation**: Add site traffic as shown in figure 5 of the traffic study

2018 Developments

8. Heritage Ranch (PLZ-18-0056)
   - Development: Change in project phasing, SEE 2017 Project #10
   - US 50 Access: Dayton Valley Pkwy, Fortune Dr, Retail Rd
   - Trip Generation: Not updated from 2017
   - Traffic Study: Not updated from 2017
   - **Recommendation**: Add site traffic as shown in figure 3 of 2017 traffic study

9. Traditions Village 1 (Phase 1) (No PLZ or APN provided)
   - Development: 312 single-family DUs, 348 multi-family DUs
   - US 50 Access: Pinecone Rd, Retail Rd, Fortune Dr, Seagle Rd (Primary)
   - Trip Generation: 5,284 ADT, 411 AM, 528 PM
   - Traffic Study: Provided
   - **Recommendation**: Add site traffic as shown in figure 3 of the traffic study

2017 Developments

10. Heritage Ranch (PLZ-17-0017)
    - Development: 287 single-family DUs
    - US 50 Access: Fortune Dr, New DWY
    - Trip Generation: 2,32 ADT, 215 AM, 287 PM
    - Traffic Study: Provided
    - **Recommendation**: Add site traffic as shown in figure 3 of the traffic study

11. Copper Canyon Estates (PLZ-17-0029)
    - Development: 687 single-family DUs (102 constructed, 585 approved but not previously constructed)
    - US 50 Access: Chaves Rd, Pinenut Dr, Rainbow Ave
    - Trip Generation (Not Built): 5,569 ADT, 439 AM, 585 PM
    - Traffic Study: Provided
    - **Recommendation**: Add site traffic as shown in Figure 3 of the traffic study

12. Q&D Construction, Chase Property Group (PLZ-17-0001)
    - Development: Request to re-establish sand and gravel operation.
    - US 50 Access: Site DWY MP 10.2
    - Trip Generation: Not provided
    - Traffic Study: Not provided
    - **Recommendation**: Need to obtain traffic study. Need to verify if the sand and gravel operation was operating when the traffic counts were conducted.

13. Northern Nevada Industrial Center (PLZ-17-0055)
    - Updated in 2020, SEE 2020 Project #3

14. Woodbridge (PLZ-16-0038)
    - Development: 216 single-family DUs, 45,000 square feet shopping center, 197 multi-family DUs
    - US 50 Access: Lafond Ave, Mark Twain Ave, Rainbow Dr, Pinenut Dr
    - Trip Generation: 5,857 ADT, 348 AM, 556 PM
    - Traffic Study: provided
    - **Recommendation**: Add site traffic as shown in Figure 5 in the traffic study

2016 Developments

15. Traditions Phase 1 (PLZ-15-0049)
    - Updated in 2020, SEE 2020 Project #9

16. Blackstone (PLZ-15-0048, PLZ-15-0049)
    - Development: Application expired, part of Traditions development plan, SEE Project #9
    - US 50 Access: Traditions Pkwy, Nevada Station Pkwy, Prairie Gate Rd
    - Trip Generation: Not included
    - Traffic Study: Not included
    - **Recommendation**: No further action

17. Riverpark Dunes (PLZ-16-0027)
    - Development: 58 single-family DUs
    - US 50 Access: Fort Churchill Rd
    - Trip Generation: Not provided
    - Traffic Study: Not provided
    - **Recommendation**: This project is under construction. Traffic generated by this project will be considered as part of the background traffic growth resulting from a growth factor applied to existing traffic volumes.

18. Canyon Estates (PLZ-16-0029)
    - Development: 402 Single-Family DUs
    - US 50 Access: River Boat Rd/Cardelli Rd, Ft Churchill Rd/Six Mile Canyon Rd, LaFond Ave
    - Trip Generation: 6,224 ADT, 507 AM, 626 PM
    - Traffic Study: Provided
    - **Recommendation**: Add site traffic per figure 3 in the traffic study

19. Copper Canyon Estates (PLZ-16-0031)
    - Updated in 2017, SEE 2017 Project #11

2015 Developments

20. Traditions Phase 1 (APN 16-401-06)
    - Updated in 2020, SEE 2020 Project #9

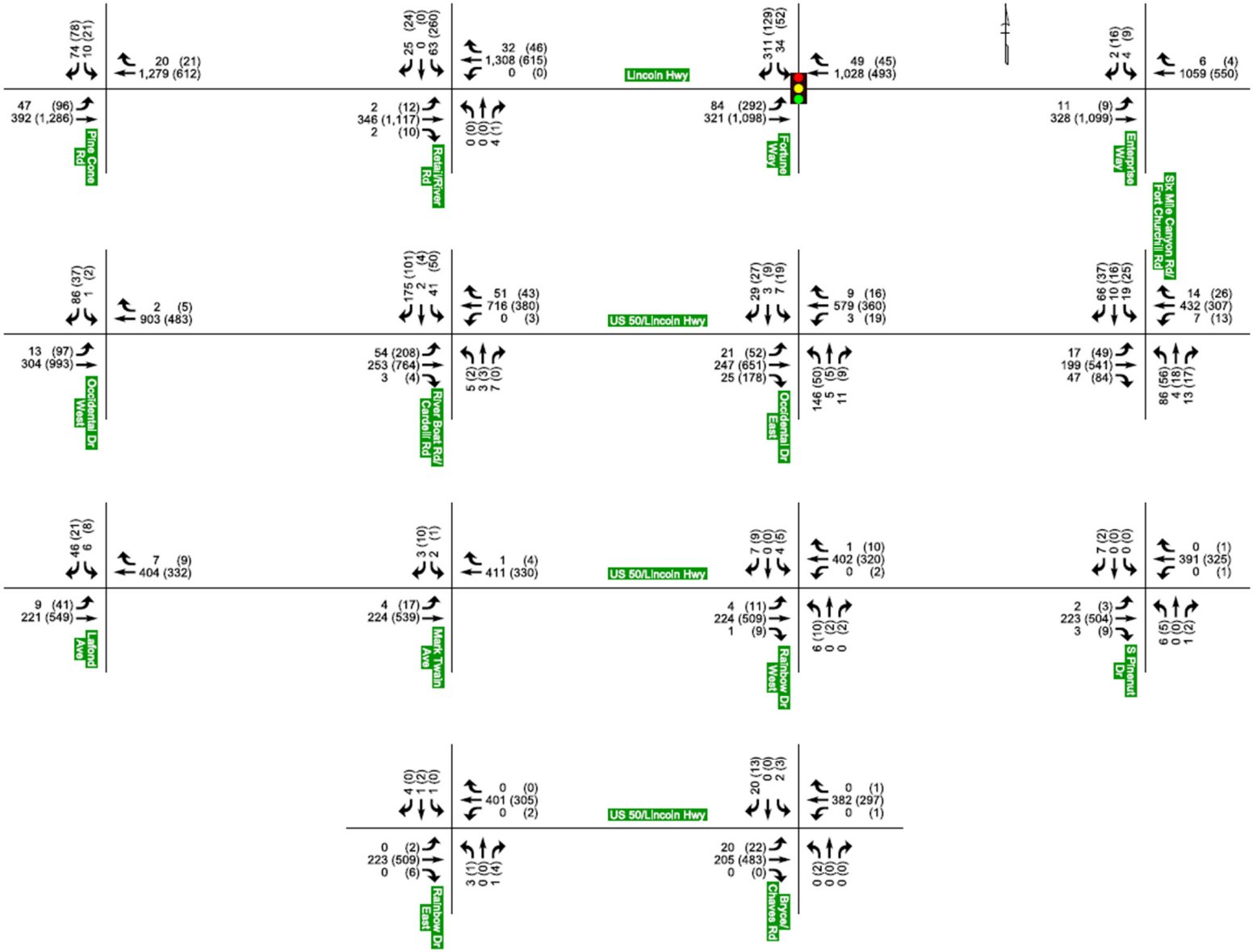


Figure 1. 2020 AM (PM) Peak-Hour Turning Movement Counts

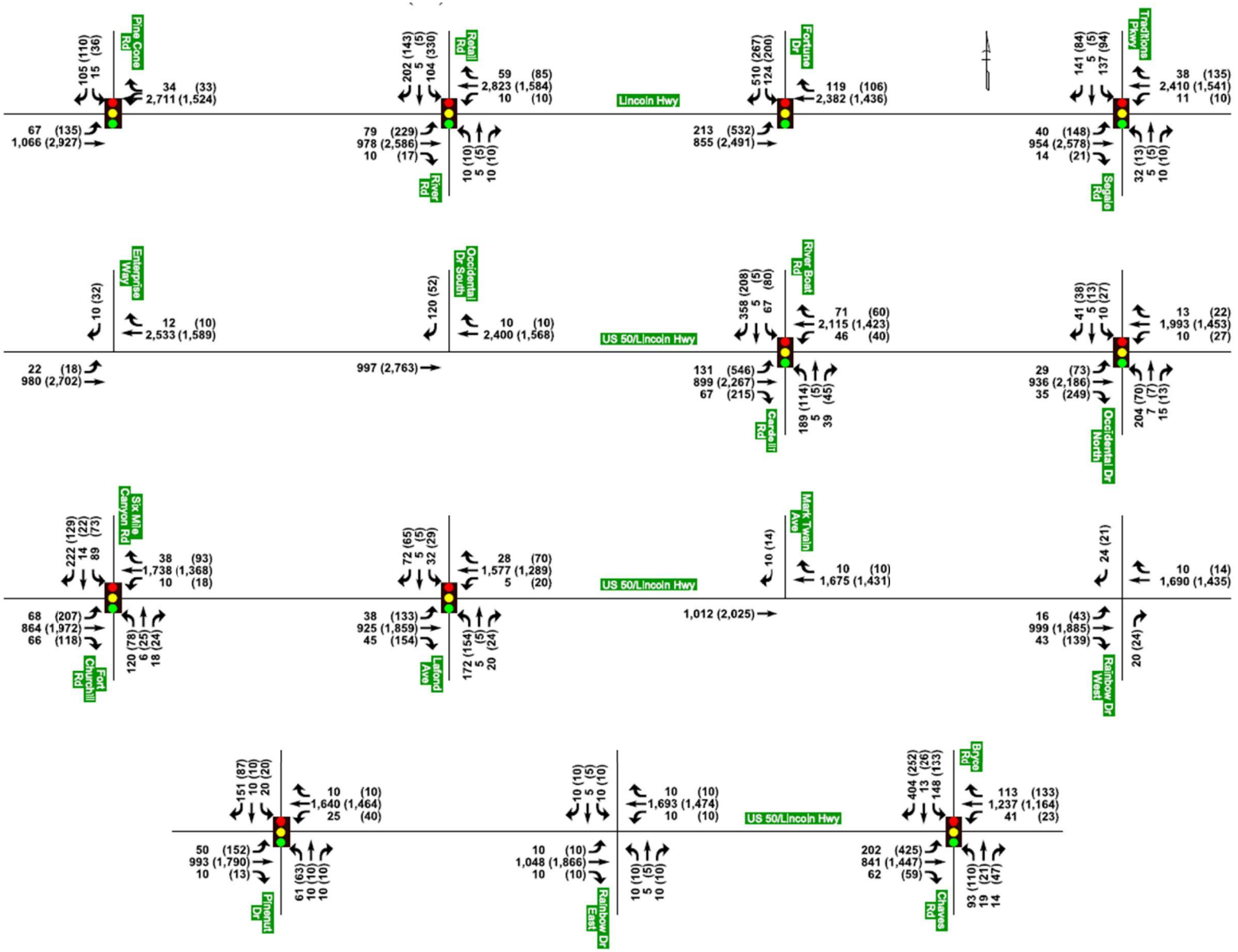
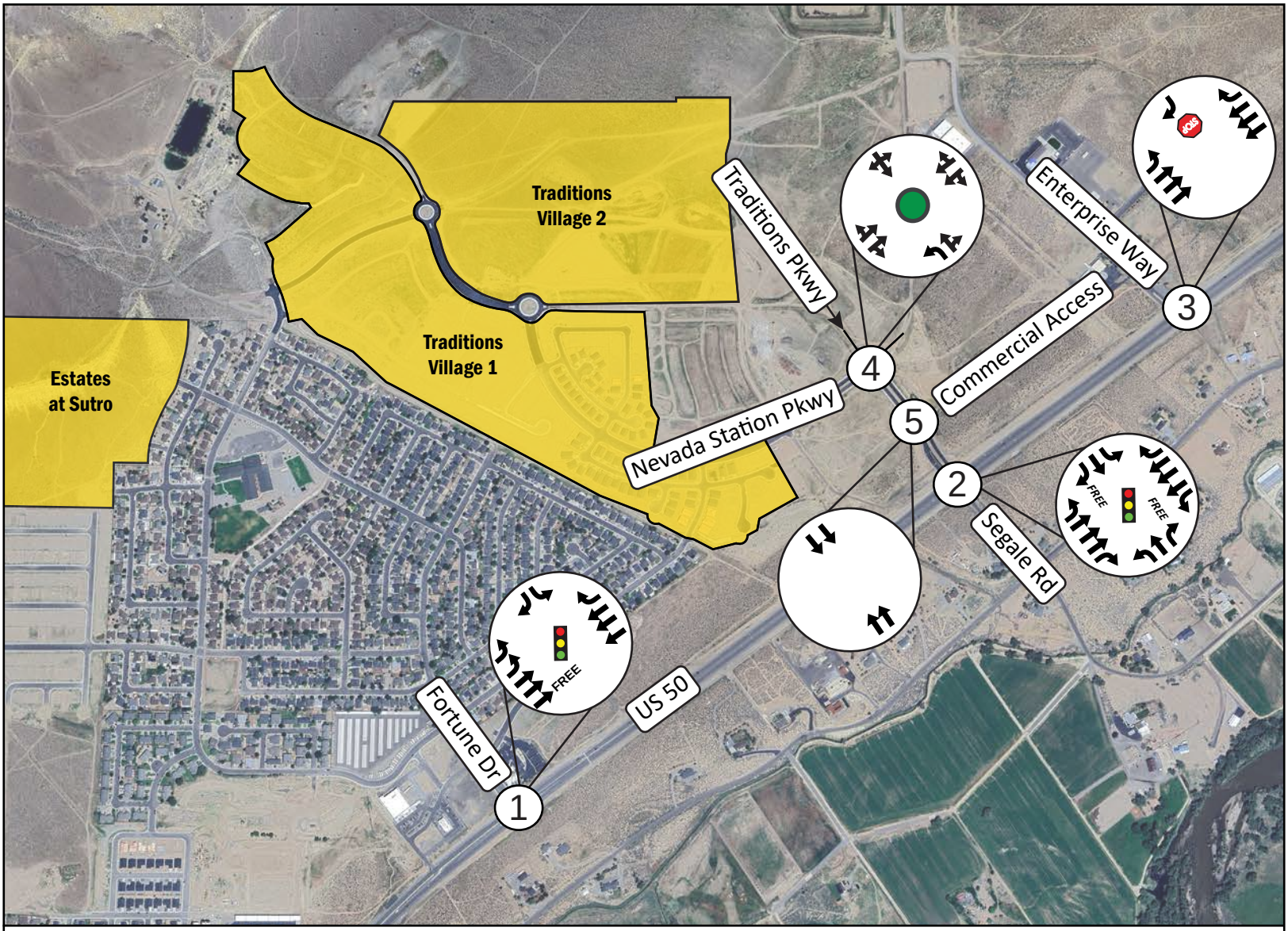
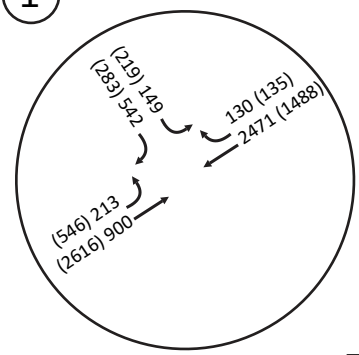


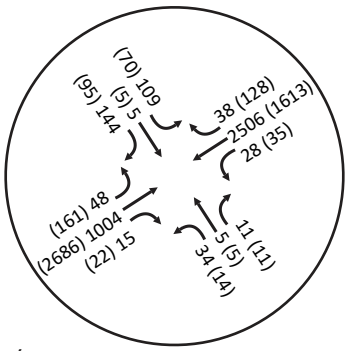
Figure 3: 2040 AM (PM) Arterial Alternative Peak-Hour Traffic Volumes



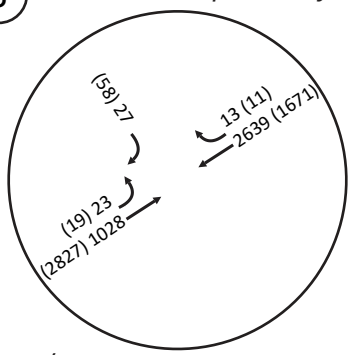
1 *US 50 / Fortune Dr*



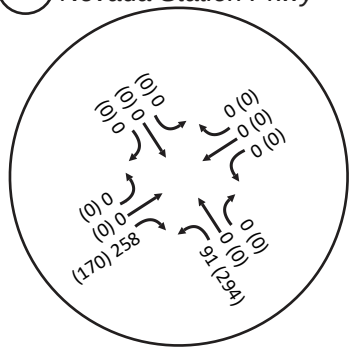
2 *US 50 / Traditions Pkwy / Segale Rd*



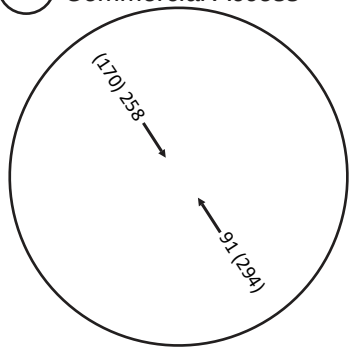
3 *US 50 / Enterprise Way*



4 *Traditions Pkwy / Nevada Station Pkwy*



5 *Traditions Pkwy / Commercial Access*



HEADWAY TRANSPORTATION

NO SCALE

AM Peak Hour Volume (PM Peak Hour Volume)

(#) - Study Intersection | - Signal | STOP - Stop | - Roundabout

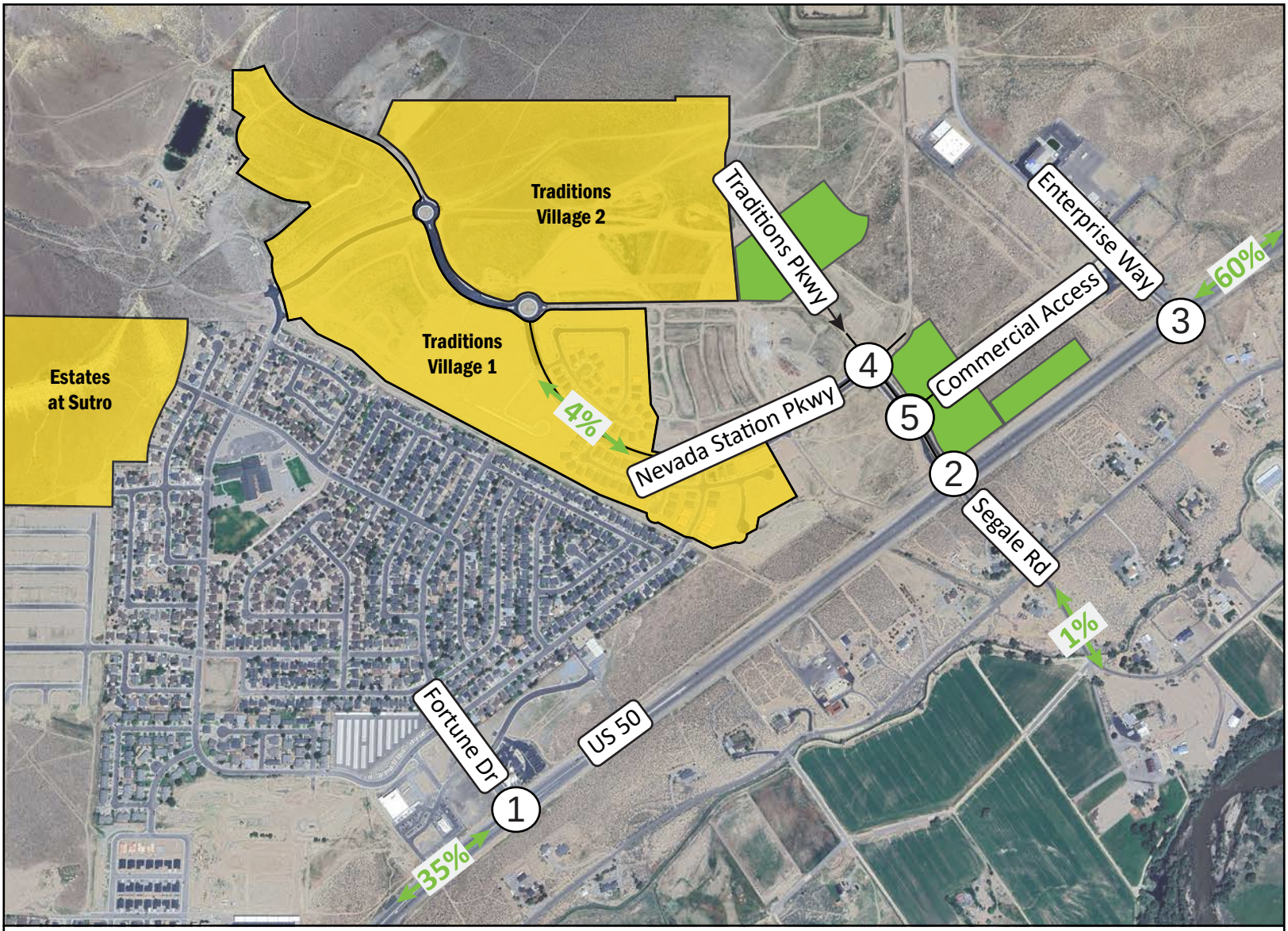
- Other Approved/Planned Projects

Figure 7

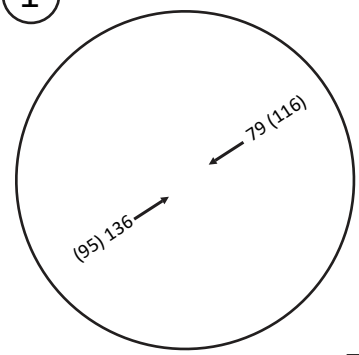
Traditions Town Center Pha 868 -3

Traffic Impact Study

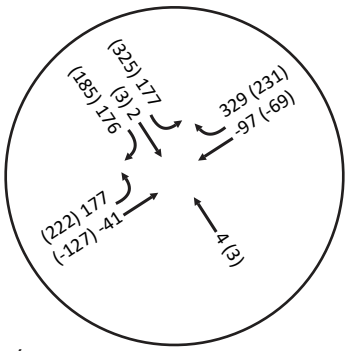
Future Year Traffic Volumes, Lane Configurations, and Controls



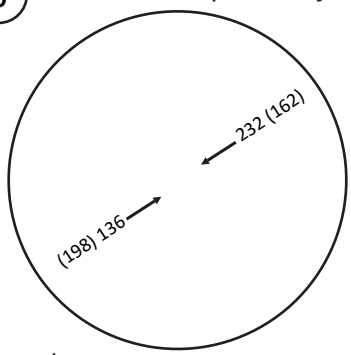
1 *US 50 / Fortune Dr*



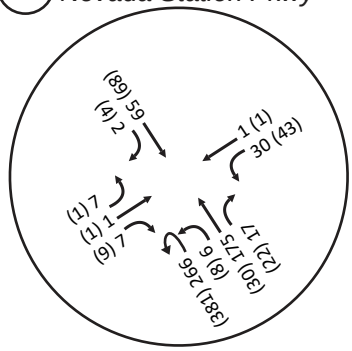
2 *US 50 / Traditions Pkwy / Segale Rd*



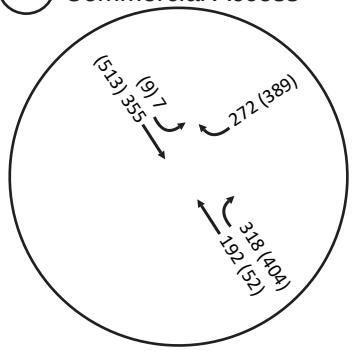
3 *US 50 / Enterprise Way*



4 *Traditions Pkwy / Nevada Station Pkwy*



5 *Traditions Pkwy / Commercial Access*



HEADWAY TRANSPORTATION

NO SCALE

AM Peak Hour Volume (PM Peak Hour Volume)
- Project Site (#) - Study Intersection XX% - Trip Distribution
- Other Approved/Planned Projects

Figure 5
Traditions Town Center Ph 869 -3
Traffic Impact Study
Project Trip Distribution and Assignment

Appendix E
Opening Year LOS Calculations

GCW
ENGINEERS \ SURVEYORS

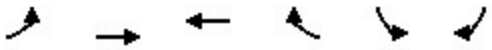
Intersection	
Int Delay, s/veh	7.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	2	92	5	4	1	51	8	1	1	11	3
Future Vol, veh/h	1	2	92	5	4	1	51	8	1	1	11	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	4	4	4	4	4	4	4	4	4	4	4	4
Mvmt Flow	1	3	123	7	5	1	68	11	1	1	15	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	169	167	17	166	169	11	19	0	0	12	0	0
Stage 1	19	19	-	147	147	-	-	-	-	-	-	-
Stage 2	149	148	-	19	21	-	-	-	-	-	-	-
Critical Hdwy	7.14	6.54	6.24	7.14	6.54	6.24	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.14	5.54	-	6.14	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.14	5.54	-	6.14	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.536	4.036	3.336	3.536	4.036	3.336	2.236	-	-	2.236	-	-
Pot Cap-1 Maneuver	791	722	1057	794	721	1064	1585	-	-	1594	-	-
Stage 1	994	875	-	851	771	-	-	-	-	-	-	-
Stage 2	848	771	-	995	874	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	749	690	1057	668	689	1064	1585	-	-	1594	-	-
Mov Cap-2 Maneuver	749	690	-	668	689	-	-	-	-	-	-	-
Stage 1	994	875	-	814	738	-	-	-	-	-	-	-
Stage 2	805	738	-	876	873	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	8.94	10.22	6.27	0.48
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1497	-	-	1040	703	115	-	-
HCM Lane V/C Ratio	0.043	-	-	0.122	0.019	0.001	-	-
HCM Control Delay (s/veh)	7.4	0	-	8.9	10.2	7.3	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	0.1	0	-	-



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	83	0	1567	55	65	266
Future Volume (veh/h)	83	0	1567	55	65	266
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	90	0	1703	60	71	202
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	4	4	4	4	4
Cap, veh/h	118	2487	1923	858	275	245
Arrive On Green	0.07	0.00	0.55	0.55	0.16	0.16
Sat Flow, veh/h	1753	3589	3589	1560	1753	1560
Grp Volume(v), veh/h	90	0	1703	60	71	202
Grp Sat Flow(s),veh/h/ln	1753	1749	1749	1560	1753	1560
Q Serve(g_s), s	4.3	0.0	36.3	1.5	3.0	10.7
Cycle Q Clear(g_c), s	4.3	0.0	36.3	1.5	3.0	10.7
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	118	2487	1923	858	275	245
V/C Ratio(X)	0.76	0.00	0.89	0.07	0.26	0.82
Avail Cap(c_a), veh/h	619	3737	2058	918	516	459
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.0	0.0	16.8	9.0	31.5	34.7
Incr Delay (d2), s/veh	9.8	0.0	4.8	0.0	0.5	6.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	13.0	0.4	1.3	9.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	48.8	0.0	21.6	9.0	32.0	41.6
LnGrp LOS	D		C	A	C	D
Approach Vol, veh/h		90	1763		273	
Approach Delay, s/veh		48.8	21.2		39.1	
Approach LOS		D	C		D	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	66.2	18.7	13.7	52.5
Change Period (Y+Rc), s	* 5.8	5.4	8.0	5.8
Max Green Setting (Gmax), s	* 91	25.0	30.0	50.0
Max Q Clear Time (g_c+I1), s	0.0	12.7	6.3	38.3
Green Ext Time (p_c), s	0.0	0.7	0.2	8.4

Intersection Summary	
HCM 7th Control Delay, s/veh	24.6
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

FREEWAY MERGE ANALYSIS

File Name:	Merge-OY-AM.xuf
Analyst:	GCW
Agency:	NDOT
Jurisdiction:	NDOT
Date:	
Analysis Year:	Opening Year (2029)
Time Analyzed:	AM Peak Hour
Project Description:	Traditions North
Units:	U.S. Customary

LOS and Performance Measures

Ramp Type	Left-Sided One-Lane	
Density in On-Ramp (Merge) Influence Area, DR	10.5	pc/mi/ln
Level of Service, LOS	B	
Average Flow in Outer Lanes, vOA	-	pc/h/ln
Average Speed in Ramp Influence Area, SR	55.0	mi/h
Average Speed in Outer Lanes of Freeway, SO	60.0	mi/h
Average Speed for On-Ramp (Merge) Junction, S	55.0	mi/h
Density Across All Lanes, D	11.7	pc/mi/ln

Step 1: Specify Inputs and Convert Demand Volumes to Demand Flow Rates

Freeway Data			
Number of Freeway Lanes	2		ln
Measured or Base FFS	Measured		
Base Free-Flow Speed, BFFS	-		mi/h
Lane Width	-		ft
Lane Width Adjustment, fLW	-		mi/h
Right-Side Lateral Clearance	-		ft
Right-Side Lateral Clearance Adj., fRLC	-		mi/h
Total Ramp Density, TRD	-		ramps/mi
TRD Adjustment	-		mi/h
Free-Flow Speed, FFS	60.0		mi/h
Speed Adjustments			
Driver Population	All Familiar		
Driver Population SAF	1.000		
Weather Type	Non-Severe Weather		
Weather Type SAF	1.000		
Final Speed Adjustment Factor, SAF	1.000		
Adjusted Free-Flow Speed, FFSadj	60.0		mi/h
Segment Length	1500		ft
C-D Roadway?	Freeway		
Demand Volume, V	1033		veh/h
Peak Hour Factor, PHF	0.92		
Ramp Data			
Number of Ramp Lanes	1		ln
Ramp Free-Flow Speed, SFR	35.0		mi/h
Ramp Side	Left		
Length of First Acceleration Lane, LA or LA1	800		ft
Length of Second Acceleration Lane, LA2	-		ft
Junction Components	Freeway	Ramp	
Demand Volume, V	1033	65	veh/h
Peak Hour Factor, PHF	0.92	0.92	
Percent Total Trucks	8.00	2.00	%
Percent SUTs	-	-	%
Percent TTs	-	-	%
Prop. Total Trucks, PT	0.0800	0.0200	
Heavy Vehicle PCE, ET	2.00	2.00	
Heavy Vehicle Adj., fHV	0.926	0.980	
Terrain Type	Level	Level	

Percent Grade	-	-	%
Grade Length	-	-	mi
Demand Adj. Factor, DAF	1.000	1.000	
Demand Flow Rate, v	1213	72	pc/h

Step 2: Estimate the Approaching Flow Rate in Lanes 1 and 2

Estimating Flow in Lanes 1 and 2 for On-Ramps			
Adjacent Upstream Off-Ramp Equilibrium Distance, LEQ	-	ft	
Adjacent Downstream Off-Ramp Equilibrium Distance, LEQ	-	ft	
Prop. Freeway Veh. in Lanes 1 and 2, PFM	1.000		
Flow Rate on Freeway, vF	1213	pc/h	
Flow Rate in Lanes 1 and 2, v12	1213	pc/h	

Step 3: Estimate Capacity of Ramp-Freeway Junction and Compare Flow Rates

Capacity Checks

	Actual	Maximum	Violation?
vFO	1285	4600	No
vR	72	2000	No
vR12	1285	4600	No

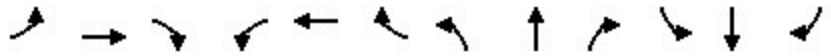
	Freeway	Ramp	
Unadjusted Capacity, cmd	4600	2000	pc/h
Driver Population	All Familiar	All Familiar	
Driver Population CAF	1.000	1.000	
Weather Type	Non-Severe Weather	Non-Severe Weather	
Weather Type CAF	1.000	1.000	
Incident Type	No Incident	-	
Incident Type CAF	1.000	-	
Proportion of CAVs in Traffic Stream	0	-	
Capacity Adjustment Factor for CAVs, CAFCAV	1.000	-	
Final Capacity Adj. Factor, CAF	1.000	1.000	
Final Adjusted Capacity, cmda	4600	2000	pc/h

Step 4: Estimate Density in Ramp Influence Area and Determine LOS

Demand Flow Rate on Ramp, vR	72	pc/h	
Flow Rate in Lanes 1 and 2, v12	1213	pc/h	
Length of Acceleration Lane, LA	800	ft	
Density in On-Ramp Influence Area, DR	10.5	pc/mi/ln	
Density in On-Ramp Influence Area, DR	10.3	veh/mi/ln	
Level of Service, LOS	B		

Step 5: Estimate Speeds in the Vicinity of Ramp-Freeway Junctions

Freeway Free-Flow Speed, FFS	60.0	mi/h	
Ramp Free-Flow Speed, SFR	35.0	mi/h	
Length of Acceleration Lane, LA	800	ft	
Driver Population	All Familiar		
Driver Population SAF	1.000		
Weather Type	Non-Severe Weather		
Weather Type SAF	1.000		
Final Speed Adjustment Factor, SAF	1.000		
Flow Rate on Freeway, vF	1213	pc/h	
Flow Rate in Lanes 1 and 2, v12	1213	pc/h	
Total Flow Entering On-Ramp Infl. Area, vR12	1285	pc/h	
Number of Outer Lanes on Freeway, NO	0	ln	
Speed Index for On-Ramp, MS	0.279		
Average Speed in Ramp Influence Area, SR	55.0	mi/h	
Average Flow in Outer Lanes, vOA	-	pc/h/ln	
Average Speed in Outer Lanes of Freeway, SO	60.0	mi/h	
Average Speed for On-Ramp Junction, S	55.0	mi/h	
Density Across All Lanes, D	11.7	pc/mi/ln	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	194	887	5	3	1405	340	20	4	2	188	3	195
Future Volume (veh/h)	194	887	5	3	1405	340	20	4	2	188	3	195
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	206	944	5	3	1495	0	21	4	2	202	0	47
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	248	2237	12	7	1713		40	8	4	296	0	132
Arrive On Green	0.14	0.63	0.63	0.00	0.49	0.00	0.03	0.03	0.03	0.08	0.00	0.08
Sat Flow, veh/h	1753	3567	19	1753	3497	1560	1361	259	130	3506	0	1560
Grp Volume(v), veh/h	206	463	486	3	1495	0	27	0	0	202	0	47
Grp Sat Flow(s),veh/h/ln	1753	1749	1837	1753	1749	1560	1749	0	0	1753	0	1560
Q Serve(g_s), s	8.1	9.5	9.5	0.1	26.9	0.0	1.1	0.0	0.0	3.9	0.0	2.0
Cycle Q Clear(g_c), s	8.1	9.5	9.5	0.1	26.9	0.0	1.1	0.0	0.0	3.9	0.0	2.0
Prop In Lane	1.00		0.01	1.00		1.00	0.78		0.07	1.00		1.00
Lane Grp Cap(c), veh/h	248	1097	1152	7	1713		51	0	0	296	0	132
V/C Ratio(X)	0.83	0.42	0.42	0.42	0.87		0.53	0.00	0.00	0.68	0.00	0.36
Avail Cap(c_a), veh/h	286	1097	1152	124	1860		161	0	0	323	0	144
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.5	6.7	6.7	35.0	16.0	0.0	33.7	0.0	0.0	31.4	0.0	30.5
Incr Delay (d2), s/veh	16.6	0.3	0.2	35.4	4.6	0.0	8.3	0.0	0.0	5.2	0.0	1.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	2.1	2.3	0.1	8.9	0.0	0.6	0.0	0.0	1.8	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	46.0	6.9	6.9	70.4	20.6	0.0	42.0	0.0	0.0	36.5	0.0	32.1
LnGrp LOS	D	A	A	E	C		D			D		C
Approach Vol, veh/h		1155			1498			27			249	
Approach Delay, s/veh		13.9			20.7			42.0			35.7	
Approach LOS		B			C			D			D	

Timer - Assigned Phs	2	3	4		6	7	8
Phs Duration (G+Y+Rc), s	6.6	4.8	48.7		10.5	14.5	39.0
Change Period (Y+Rc), s	4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s	6.5	5.0	44.0		6.5	11.5	37.5
Max Q Clear Time (g_c+I1), s	3.1	2.1	11.5		5.9	10.1	28.9
Green Ext Time (p_c), s	0.0	0.0	5.7		0.1	0.1	5.7

Intersection Summary	
HCM 7th Control Delay, s/veh	19.5
HCM 7th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Traditions North

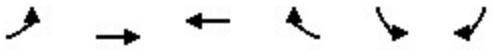
Intersection	
Int Delay, s/veh	6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	1	40	2	1	1	65	21	2	1	11	1
Future Vol, veh/h	1	1	40	2	1	1	65	21	2	1	11	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	1	47	2	1	1	76	25	2	1	13	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	194	196	14	195	195	26	14	0	0	27	0	0
Stage 1	16	16	-	179	179	-	-	-	-	-	-	-
Stage 2	178	180	-	16	16	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	765	700	1067	765	700	1050	1604	-	-	1587	-	-
Stage 1	1004	882	-	823	751	-	-	-	-	-	-	-
Stage 2	824	750	-	1004	882	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	726	665	1067	694	666	1050	1604	-	-	1587	-	-
Mov Cap-2 Maneuver	726	665	-	694	666	-	-	-	-	-	-	-
Stage 1	1003	882	-	783	715	-	-	-	-	-	-	-
Stage 2	782	714	-	958	881	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	8.63	9.83	5.43	0.56
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1307	-	-	1040	749	136	-	-
HCM Lane V/C Ratio	0.048	-	-	0.048	0.006	0.001	-	-
HCM Control Delay (s/veh)	7.4	0	-	8.6	9.8	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.1	0	0	-	-



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	212	0	1271	74	115	125
Future Volume (veh/h)	212	0	1271	74	115	125
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	219	0	1310	76	119	26
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	272	2660	1713	764	165	147
Arrive On Green	0.15	0.00	0.48	0.48	0.09	0.09
Sat Flow, veh/h	1781	3647	3647	1585	1781	1585
Grp Volume(v), veh/h	219	0	1310	76	119	26
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1585	1781	1585
Q Serve(g_s), s	8.4	0.0	21.3	1.8	4.6	1.1
Cycle Q Clear(g_c), s	8.4	0.0	21.3	1.8	4.6	1.1
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	272	2660	1713	764	165	147
V/C Ratio(X)	0.80	0.00	0.76	0.10	0.72	0.18
Avail Cap(c_a), veh/h	759	4580	2522	1125	632	563
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.8	0.0	15.0	9.9	31.1	29.5
Incr Delay (d2), s/veh	5.5	0.0	0.8	0.1	5.8	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	0.0	7.0	0.5	2.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	34.4	0.0	15.8	10.0	36.9	30.1
LnGrp LOS	C		B	A	D	C
Approach Vol, veh/h		219	1386		145	
Approach Delay, s/veh		34.4	15.5		35.7	
Approach LOS		C	B		D	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	58.5	11.9	18.8	39.8
Change Period (Y+Rc), s	* 5.8	5.4	8.0	5.8
Max Green Setting (Gmax), s	* 91	25.0	30.0	50.0
Max Q Clear Time (g_c+I1), s	0.0	6.6	10.4	23.3
Green Ext Time (p_c), s	0.0	0.4	0.5	10.7

Intersection Summary	
HCM 7th Control Delay, s/veh	19.5
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

FREEWAY MERGE ANALYSIS

File Name:	Merge-OY-PM.xuf
Analyst:	GCW
Agency:	NDOT
Jurisdiction:	NDOT
Date:	
Analysis Year:	Opening Year (2029)
Time Analyzed:	PM Peak Hour
Project Description:	Traditions North
Units:	U.S. Customary

LOS and Performance Measures

Ramp Type	Left-Sided One-Lane	
Density in On-Ramp (Merge) Influence Area, DR	15.1	pc/mi/ln
Level of Service, LOS	B	
Average Flow in Outer Lanes, vOA	-	pc/h/ln
Average Speed in Ramp Influence Area, SR	54.8	mi/h
Average Speed in Outer Lanes of Freeway, SO	60.0	mi/h
Average Speed for On-Ramp (Merge) Junction, S	54.8	mi/h
Density Across All Lanes, D	17.2	pc/mi/ln

Step 1: Specify Inputs and Convert Demand Volumes to Demand Flow Rates

Freeway Data		
Number of Freeway Lanes	2	ln
Measured or Base FFS	Measured	
Base Free-Flow Speed, BFFS	-	mi/h
Lane Width	-	ft
Lane Width Adjustment, fLW	-	mi/h
Right-Side Lateral Clearance	-	ft
Right-Side Lateral Clearance Adj., fRLC	-	mi/h
Total Ramp Density, TRD	-	ramps/mi
TRD Adjustment	-	mi/h
Free-Flow Speed, FFS	60.0	mi/h
Speed Adjustments		
Driver Population	All Familiar	
Driver Population SAF	1.000	
Weather Type	Non-Severe Weather	
Weather Type SAF	1.000	
Final Speed Adjustment Factor, SAF	1.000	
Adjusted Free-Flow Speed, FFSadj	60.0	mi/h
Segment Length	1500	ft
C-D Roadway?	Freeway	
Demand Volume, V	1672	veh/h
Peak Hour Factor, PHF	0.97	
Ramp Data		
Number of Ramp Lanes	1	ln
Ramp Free-Flow Speed, SFR	35.0	mi/h
Ramp Side	Left	
Length of First Acceleration Lane, LA or LA1	800	ft
Length of Second Acceleration Lane, LA2	-	ft

Junction Components	Freeway	Ramp	
Demand Volume, V	1672	115	veh/h
Peak Hour Factor, PHF	0.97	0.97	
Percent Total Trucks	2.00	2.00	%
Percent SUTs	-	-	%
Percent TTs	-	-	%
Prop. Total Trucks, PT	0.0200	0.0200	
Heavy Vehicle PCE, ET	2.00	2.00	
Heavy Vehicle Adj., fHV	0.980	0.980	
Terrain Type	Level	Level	

Percent Grade	-	-	%
Grade Length	-	-	mi
Demand Adj. Factor, DAF	1.000	1.000	
Demand Flow Rate, v	1759	121	pc/h

Step 2: Estimate the Approaching Flow Rate in Lanes 1 and 2

Estimating Flow in Lanes 1 and 2 for On-Ramps			
Adjacent Upstream Off-Ramp Equilibrium Distance, LEQ	-	ft	
Adjacent Downstream Off-Ramp Equilibrium Distance, LEQ	-	ft	
Prop. Freeway Veh. in Lanes 1 and 2, PFM	1.000		
Flow Rate on Freeway, vF	1759	pc/h	
Flow Rate in Lanes 1 and 2, v12	1759	pc/h	

Step 3: Estimate Capacity of Ramp-Freeway Junction and Compare Flow Rates

Capacity Checks			
	Actual	Maximum	Violation?
vFO	1880	4600	No
vR	121	2000	No
vR12	1880	4600	No

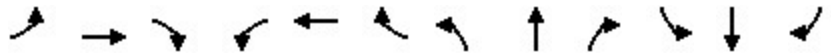
	Freeway	Ramp	
Unadjusted Capacity, cmd	4600	2000	pc/h
Driver Population	All Familiar	All Familiar	
Driver Population CAF	1.000	1.000	
Weather Type	Non-Severe Weather	Non-Severe Weather	
Weather Type CAF	1.000	1.000	
Incident Type	No Incident	-	
Incident Type CAF	1.000	-	
Proportion of CAVs in Traffic Stream	0	-	
Capacity Adjustment Factor for CAVs, CAFCAV	1.000	-	
Final Capacity Adj. Factor, CAF	1.000	1.000	
Final Adjusted Capacity, cmda	4600	2000	pc/h

Step 4: Estimate Density in Ramp Influence Area and Determine LOS

Demand Flow Rate on Ramp, vR	121	pc/h	
Flow Rate in Lanes 1 and 2, v12	1759	pc/h	
Length of Acceleration Lane, LA	800	ft	
Density in On-Ramp Influence Area, DR	15.1	pc/mi/ln	
Density in On-Ramp Influence Area, DR	14.8	veh/mi/ln	
Level of Service, LOS	B		

Step 5: Estimate Speeds in the Vicinity of Ramp-Freeway Junctions

Freeway Free-Flow Speed, FFS	60.0	mi/h	
Ramp Free-Flow Speed, SFR	35.0	mi/h	
Length of Acceleration Lane, LA	800	ft	
Driver Population	All Familiar		
Driver Population SAF	1.000		
Weather Type	Non-Severe Weather		
Weather Type SAF	1.000		
Final Speed Adjustment Factor, SAF	1.000		
Flow Rate on Freeway, vF	1759	pc/h	
Flow Rate in Lanes 1 and 2, v12	1759	pc/h	
Total Flow Entering On-Ramp Infl. Area, vR12	1880	pc/h	
Number of Outer Lanes on Freeway, NO	0	ln	
Speed Index for On-Ramp, MS	0.291		
Average Speed in Ramp Influence Area, SR	54.8	mi/h	
Average Flow in Outer Lanes, vOA	-	pc/h/ln	
Average Speed in Outer Lanes of Freeway, SO	60.0	mi/h	
Average Speed for On-Ramp Junction, S	54.8	mi/h	
Density Across All Lanes, D	17.2	pc/mi/ln	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	246	1537	11	1	1146	243	3	3	5	336	2	205
Future Volume (veh/h)	246	1537	11	1	1146	243	3	3	5	336	2	205
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	262	1635	12	1	1219	0	3	3	5	358	0	27
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	310	2120	16	2	1471		6	6	10	469	0	209
Arrive On Green	0.18	0.60	0.60	0.00	0.42	0.00	0.01	0.01	0.01	0.13	0.00	0.13
Sat Flow, veh/h	1753	3559	26	1753	3497	1560	458	458	764	3506	0	1560
Grp Volume(v), veh/h	262	803	844	1	1219	0	11	0	0	358	0	27
Grp Sat Flow(s),veh/h/ln	1753	1749	1836	1753	1749	1560	1680	0	0	1753	0	1560
Q Serve(g_s), s	10.2	24.2	24.3	0.0	21.9	0.0	0.5	0.0	0.0	6.9	0.0	1.1
Cycle Q Clear(g_c), s	10.2	24.2	24.3	0.0	21.9	0.0	0.5	0.0	0.0	6.9	0.0	1.1
Prop In Lane	1.00		0.01	1.00		1.00	0.27		0.45	1.00		1.00
Lane Grp Cap(c), veh/h	310	1042	1094	2	1471		23	0	0	469	0	209
V/C Ratio(X)	0.85	0.77	0.77	0.40	0.83		0.48	0.00	0.00	0.76	0.00	0.13
Avail Cap(c_a), veh/h	435	1190	1249	124	1760		155	0	0	621	0	276
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	28.1	10.7	10.7	35.2	18.2	0.0	34.5	0.0	0.0	29.5	0.0	26.9
Incr Delay (d2), s/veh	10.4	2.8	2.7	81.0	3.0	0.0	14.4	0.0	0.0	4.0	0.0	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	6.6	6.9	0.1	7.5	0.0	0.3	0.0	0.0	3.1	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	38.5	13.4	13.3	116.2	21.1	0.0	49.0	0.0	0.0	33.5	0.0	27.2
LnGrp LOS	D	B	B	F	C		D			C		C
Approach Vol, veh/h		1909			1220			11			385	
Approach Delay, s/veh		16.8			21.2			49.0			33.0	
Approach LOS		B			C			D			C	

Timer - Assigned Phs	2	3	4		6	7	8
Phs Duration (G+Y+Rc), s	5.5	4.6	46.5		13.9	17.0	34.2
Change Period (Y+Rc), s	4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s	6.5	5.0	48.0		12.5	17.5	35.5
Max Q Clear Time (g_c+I1), s	2.5	2.0	26.3		8.9	12.2	23.9
Green Ext Time (p_c), s	0.0	0.0	11.1		0.5	0.3	5.8

Intersection Summary	
HCM 7th Control Delay, s/veh	20.2
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Traditions North

Appendix F
Future Year LOS Calculations

GCW
ENGINEERS \ SURVEYORS

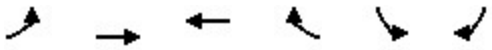
Intersection	
Int Delay, s/veh	7.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	2	105	6	5	1	58	9	1	1	12	3
Future Vol, veh/h	1	2	105	6	5	1	58	9	1	1	12	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	4	4	4	4	4	4	4	4	4	4	4	4
Mvmt Flow	1	3	140	8	7	1	77	12	1	1	16	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	191	189	18	187	190	13	20	0	0	13	0	0
Stage 1	21	21	-	167	167	-	-	-	-	-	-	-
Stage 2	170	168	-	20	23	-	-	-	-	-	-	-
Critical Hdwy	7.14	6.54	6.24	7.14	6.54	6.24	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.14	5.54	-	6.14	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.14	5.54	-	6.14	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.536	4.036	3.336	3.536	4.036	3.336	2.236	-	-	2.236	-	-
Pot Cap-1 Maneuver	765	702	1055	769	701	1062	1583	-	-	1592	-	-
Stage 1	993	874	-	830	756	-	-	-	-	-	-	-
Stage 2	827	756	-	994	872	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	719	667	1055	631	666	1062	1583	-	-	1592	-	-
Mov Cap-2 Maneuver	719	667	-	631	666	-	-	-	-	-	-	-
Stage 1	992	873	-	789	719	-	-	-	-	-	-	-
Stage 2	778	718	-	858	872	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.02	10.52	6.3	0.45
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1505	-	-	1039	668	108	-	-
HCM Lane V/C Ratio	0.049	-	-	0.139	0.024	0.001	-	-
HCM Control Delay (s/veh)	7.4	0	-	9	10.5	7.3	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.5	0.1	0	-	-



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	213	0	2981	130	149	542
Future Volume (veh/h)	213	0	2981	130	149	542
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	232	0	3240	32	162	372
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	4	4	4	4	4
Cap, veh/h	279	3819	3170	984	305	272
Arrive On Green	0.08	0.00	0.63	0.63	0.17	0.17
Sat Flow, veh/h	3401	5191	5191	1560	1753	1560
Grp Volume(v), veh/h	232	0	3240	32	162	372
Grp Sat Flow(s),veh/h/ln	1700	1675	1675	1560	1753	1560
Q Serve(g_s), s	11.4	0.0	107.2	1.3	14.3	29.6
Cycle Q Clear(g_c), s	11.4	0.0	107.2	1.3	14.3	29.6
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	279	3819	3170	984	305	272
V/C Ratio(X)	0.83	0.00	1.02	0.03	0.53	1.37
Avail Cap(c_a), veh/h	480	4199	3170	984	305	272
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	76.8	0.0	31.4	11.8	63.9	70.2
Incr Delay (d2), s/veh	6.3	0.0	21.9	0.0	1.7	187.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.2	0.0	46.1	0.5	6.6	14.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	83.2	0.0	53.3	11.8	65.6	258.0
LnGrp LOS	F		F	B	E	F
Approach Vol, veh/h		232	3272		534	
Approach Delay, s/veh		83.2	52.9		199.7	
Approach LOS		F	D		F	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	134.9	35.0	21.9	113.0
Change Period (Y+Rc), s	* 5.8	5.4	8.0	5.8
Max Green Setting (Gmax), s	* 1.4E+02	29.6	24.0	107.2
Max Q Clear Time (g_c+I1), s	0.0	31.6	13.4	109.2
Green Ext Time (p_c), s	0.0	0.0	0.5	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	74.0
HCM 7th LOS	E

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

FREEWAY MERGE ANALYSIS

File Name:	Merge-Future-AM.xuf
Analyst:	GCW
Agency:	NDOT
Jurisdiction:	NDOT
Date:	
Analysis Year:	Future Year (2049)
Time Analyzed:	AM Peak Hour
Project Description:	Traditions North
Units:	U.S. Customary

LOS and Performance Measures

Ramp Type	Left-Sided One-Lane	
Density in On-Ramp (Merge) Influence Area, DR	15.7	pc/mi/ln
Level of Service, LOS	B	
Average Flow in Outer Lanes, vOA	-	pc/h/ln
Average Speed in Ramp Influence Area, SR	54.7	mi/h
Average Speed in Outer Lanes of Freeway, SO	60.0	mi/h
Average Speed for On-Ramp (Merge) Junction, S	54.7	mi/h
Density Across All Lanes, D	17.9	pc/mi/ln

Step 1: Specify Inputs and Convert Demand Volumes to Demand Flow Rates

Freeway Data		
Number of Freeway Lanes	2	ln
Measured or Base FFS	Measured	
Base Free-Flow Speed, BFFS	-	mi/h
Lane Width	-	ft
Lane Width Adjustment, fLW	-	mi/h
Right-Side Lateral Clearance	-	ft
Right-Side Lateral Clearance Adj., fRLC	-	mi/h
Total Ramp Density, TRD	-	ramps/mi
TRD Adjustment	-	mi/h
Free-Flow Speed, FFS	60.0	mi/h
Speed Adjustments		
Driver Population	All Familiar	
Driver Population SAF	1.000	
Weather Type	Non-Severe Weather	
Weather Type SAF	1.000	
Final Speed Adjustment Factor, SAF	1.000	
Adjusted Free-Flow Speed, FFSadj	60.0	mi/h
Segment Length	1500	ft
C-D Roadway?	Freeway	
Demand Volume, V	1523	veh/h
Peak Hour Factor, PHF	0.92	
Ramp Data		
Number of Ramp Lanes	1	ln
Ramp Free-Flow Speed, SFR	35.0	mi/h
Ramp Side	Left	
Length of First Acceleration Lane, LA or LA1	800	ft
Length of Second Acceleration Lane, LA2	-	ft

Junction Components	Freeway	Ramp	
Demand Volume, V	1523	149	veh/h
Peak Hour Factor, PHF	0.92	0.92	
Percent Total Trucks	8.00	2.00	%
Percent SUTs	-	-	%
Percent TTs	-	-	%
Prop. Total Trucks, PT	0.0800	0.0200	
Heavy Vehicle PCE, ET	2.00	2.00	
Heavy Vehicle Adj., fHV	0.926	0.980	
Terrain Type	Level	Level	

Percent Grade	-	-	%
Grade Length	-	-	mi
Demand Adj. Factor, DAF	1.000	1.000	
Demand Flow Rate, v	1788	165	pc/h

Step 2: Estimate the Approaching Flow Rate in Lanes 1 and 2

Estimating Flow in Lanes 1 and 2 for On-Ramps			
Adjacent Upstream Off-Ramp Equilibrium Distance, LEQ	-	ft	
Adjacent Downstream Off-Ramp Equilibrium Distance, LEQ	-	ft	
Prop. Freeway Veh. in Lanes 1 and 2, PFM	1.000		
Flow Rate on Freeway, vF	1788	pc/h	
Flow Rate in Lanes 1 and 2, v12	1788	pc/h	

Step 3: Estimate Capacity of Ramp-Freeway Junction and Compare Flow Rates

Capacity Checks

	Actual	Maximum	Violation?
vFO	1953	4600	No
vR	165	2000	No
vR12	1953	4600	No

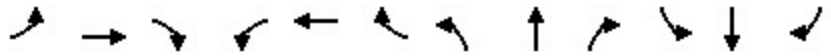
	Freeway	Ramp	
Unadjusted Capacity, cmd	4600	2000	pc/h
Driver Population	All Familiar	All Familiar	
Driver Population CAF	1.000	1.000	
Weather Type	Non-Severe Weather	Non-Severe Weather	
Weather Type CAF	1.000	1.000	
Incident Type	No Incident	-	
Incident Type CAF	1.000	-	
Proportion of CAVs in Traffic Stream	0	-	
Capacity Adjustment Factor for CAVs, CAFCAV	1.000	-	
Final Capacity Adj. Factor, CAF	1.000	1.000	
Final Adjusted Capacity, cmda	4600	2000	pc/h

Step 4: Estimate Density in Ramp Influence Area and Determine LOS

Demand Flow Rate on Ramp, vR	165	pc/h	
Flow Rate in Lanes 1 and 2, v12	1788	pc/h	
Length of Acceleration Lane, LA	800	ft	
Density in On-Ramp Influence Area, DR	15.7	pc/mi/ln	
Density in On-Ramp Influence Area, DR	15.4	veh/mi/ln	
Level of Service, LOS	B		

Step 5: Estimate Speeds in the Vicinity of Ramp-Freeway Junctions

Freeway Free-Flow Speed, FFS	60.0	mi/h	
Ramp Free-Flow Speed, SFR	35.0	mi/h	
Length of Acceleration Lane, LA	800	ft	
Driver Population	All Familiar		
Driver Population SAF	1.000		
Weather Type	Non-Severe Weather		
Weather Type SAF	1.000		
Final Speed Adjustment Factor, SAF	1.000		
Flow Rate on Freeway, vF	1788	pc/h	
Flow Rate in Lanes 1 and 2, v12	1788	pc/h	
Total Flow Entering On-Ramp Infl. Area, vR12	1953	pc/h	
Number of Outer Lanes on Freeway, NO	0	ln	
Speed Index for On-Ramp, MS	0.292		
Average Speed in Ramp Influence Area, SR	54.7	mi/h	
Average Flow in Outer Lanes, vOA	-	pc/h/ln	
Average Speed in Outer Lanes of Freeway, SO	60.0	mi/h	
Average Speed for On-Ramp Junction, S	54.7	mi/h	
Density Across All Lanes, D	17.9	pc/mi/ln	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	225	1418	15	28	2761	367	34	9	11	286	7	320
Future Volume (veh/h)	225	1418	15	28	2761	367	34	9	11	286	7	320
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	239	1509	16	30	2937	0	36	10	0	309	0	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	258	3739	1161	39	3111		50	52		353	0	
Arrive On Green	0.15	0.74	0.74	0.02	0.62	0.00	0.03	0.03	0.00	0.10	0.00	0.00
Sat Flow, veh/h	1753	5025	1560	1753	5025	1560	1753	1841	1560	3506	0	1560
Grp Volume(v), veh/h	239	1509	16	30	2937	0	36	10	0	309	0	0
Grp Sat Flow(s),veh/h/ln	1753	1675	1560	1753	1675	1560	1753	1841	1560	1753	0	1560
Q Serve(g_s), s	23.2	18.9	0.5	2.9	92.2	0.0	3.5	0.9	0.0	15.0	0.0	0.0
Cycle Q Clear(g_c), s	23.2	18.9	0.5	2.9	92.2	0.0	3.5	0.9	0.0	15.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	258	3739	1161	39	3111		50	52		353	0	
V/C Ratio(X)	0.93	0.40	0.01	0.77	0.94		0.72	0.19		0.87	0.00	
Avail Cap(c_a), veh/h	280	3739	1161	90	3139		66	70		418	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	72.5	8.1	5.7	83.7	30.0	0.0	82.9	81.7	0.0	76.3	0.0	0.0
Incr Delay (d2), s/veh	33.6	0.1	0.0	27.0	6.9	0.0	22.5	1.7	0.0	16.4	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.6	5.9	0.1	1.6	35.5	0.0	1.9	0.5	0.0	7.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	106.1	8.1	5.7	110.8	36.9	0.0	105.4	83.4	0.0	92.7	0.0	0.0
LnGrp LOS	F	A	A	F	D		F	F		F		
Approach Vol, veh/h		1764			2967			46			309	
Approach Delay, s/veh		21.4			37.7			100.7			92.7	
Approach LOS		C			D			F			F	

Timer - Assigned Phs	2	3	4		6	7	8
Phs Duration (G+Y+Rc), s	9.4	8.3	132.6		21.8	29.8	111.1
Change Period (Y+Rc), s	4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s	6.5	8.8	126.2		20.5	27.5	107.5
Max Q Clear Time (g_c+I1), s	5.5	4.9	20.9		17.0	25.2	94.2
Green Ext Time (p_c), s	0.0	0.0	14.5		0.4	0.2	12.3

Intersection Summary	
HCM 7th Control Delay, s/veh	35.9
HCM 7th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Traditions North

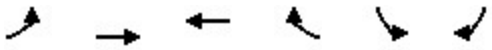
Intersection	
Int Delay, s/veh	6.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	1	46	2	1	1	75	25	2	1	12	1
Future Vol, veh/h	1	1	46	2	1	1	75	25	2	1	12	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	1	54	2	1	1	88	29	2	1	14	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	224	225	15	224	225	31	15	0	0	32	0	0
Stage 1	17	17	-	207	207	-	-	-	-	-	-	-
Stage 2	206	208	-	17	18	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	732	674	1065	731	674	1044	1602	-	-	1581	-	-
Stage 1	1002	881	-	795	731	-	-	-	-	-	-	-
Stage 2	796	730	-	1002	881	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	689	636	1065	654	636	1044	1602	-	-	1581	-	-
Mov Cap-2 Maneuver	689	636	-	654	636	-	-	-	-	-	-	-
Stage 1	1002	881	-	750	690	-	-	-	-	-	-	-
Stage 2	749	689	-	949	880	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	8.67	10.06	5.42	0.52
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1304	-	-	1039	716	127	-	-
HCM Lane V/C Ratio	0.055	-	-	0.054	0.007	0.001	-	-
HCM Control Delay (s/veh)	7.4	0	-	8.7	10.1	7.3	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.2	0	0	-	-



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	546	0	2237	135	219	283
Future Volume (veh/h)	546	0	2237	135	219	283
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	563	0	2306	36	226	34
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	580	3718	2405	747	261	232
Arrive On Green	0.17	0.00	0.47	0.47	0.15	0.15
Sat Flow, veh/h	3456	5274	5274	1585	1781	1585
Grp Volume(v), veh/h	563	0	2306	36	226	34
Grp Sat Flow(s),veh/h/ln	1728	1702	1702	1585	1781	1585
Q Serve(g_s), s	14.5	0.0	39.0	1.1	11.1	1.7
Cycle Q Clear(g_c), s	14.5	0.0	39.0	1.1	11.1	1.7
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	580	3718	2405	747	261	232
V/C Ratio(X)	0.97	0.00	0.96	0.05	0.87	0.15
Avail Cap(c_a), veh/h	580	3882	2409	748	271	241
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.0	0.0	22.8	12.8	37.3	33.3
Incr Delay (d2), s/veh	30.2	0.0	10.4	0.0	23.6	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.2	0.0	15.7	0.4	6.5	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	67.2	0.0	33.2	12.8	60.9	33.6
LnGrp LOS	E		C	B	E	C
Approach Vol, veh/h		563	2342		260	
Approach Delay, s/veh		67.2	32.9		57.3	
Approach LOS		E	C		E	

Timer - Assigned Phs			4		6	7	8
Phs Duration (G+Y+Rc), s			70.9		18.5	23.0	47.9
Change Period (Y+Rc), s			* 5.8		5.4	8.0	5.8
Max Green Setting (Gmax), s			* 68		13.6	15.0	42.2
Max Q Clear Time (g_c+I1), s			0.0		13.1	16.5	41.0
Green Ext Time (p_c), s			0.0		0.0	0.0	1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	41.0
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

FREEWAY MERGE ANALYSIS

File Name:	Merge-Future-PM.xuf
Analyst:	GCW
Agency:	NDOT
Jurisdiction:	NDOT
Date:	
Analysis Year:	Future Year (2049)
Time Analyzed:	PM Peak Hour
Project Description:	Traditions North
Units:	U.S. Customary

LOS and Performance Measures

Ramp Type	Left-Sided One-Lane	
Density in On-Ramp (Merge) Influence Area, DR	28.8	pc/mi/ln
Level of Service, LOS	D	
Average Flow in Outer Lanes, vOA	-	pc/h/ln
Average Speed in Ramp Influence Area, SR	52.5	mi/h
Average Speed in Outer Lanes of Freeway, SO	60.0	mi/h
Average Speed for On-Ramp (Merge) Junction, S	52.5	mi/h
Density Across All Lanes, D	34.7	pc/mi/ln

Step 1: Specify Inputs and Convert Demand Volumes to Demand Flow Rates

Freeway Data		
Number of Freeway Lanes	2	ln
Measured or Base FFS	Measured	
Base Free-Flow Speed, BFFS	-	mi/h
Lane Width	-	ft
Lane Width Adjustment, fLW	-	mi/h
Right-Side Lateral Clearance	-	ft
Right-Side Lateral Clearance Adj., fRLC	-	mi/h
Total Ramp Density, TRD	-	ramps/mi
TRD Adjustment	-	mi/h
Free-Flow Speed, FFS	60.0	mi/h
Speed Adjustments		
Driver Population	All Familiar	
Driver Population SAF	1.000	
Weather Type	Non-Severe Weather	
Weather Type SAF	1.000	
Final Speed Adjustment Factor, SAF	1.000	
Adjusted Free-Flow Speed, FFSadj	60.0	mi/h
Segment Length	1500	ft
C-D Roadway?	Freeway	
Demand Volume, V	3242	veh/h
Peak Hour Factor, PHF	0.97	
Ramp Data		
Number of Ramp Lanes	1	ln
Ramp Free-Flow Speed, SFR	35.0	mi/h
Ramp Side	Left	
Length of First Acceleration Lane, LA or LA1	800	ft
Length of Second Acceleration Lane, LA2	-	ft

Junction Components	Freeway	Ramp	
Demand Volume, V	3242	219	veh/h
Peak Hour Factor, PHF	0.97	0.97	
Percent Total Trucks	2.00	2.00	%
Percent SUTs	-	-	%
Percent TTs	-	-	%
Prop. Total Trucks, PT	0.0200	0.0200	
Heavy Vehicle PCE, ET	2.00	2.00	
Heavy Vehicle Adj., fHV	0.980	0.980	
Terrain Type	Level	Level	

Percent Grade	-	-	%
Grade Length	-	-	mi
Demand Adj. Factor, DAF	1.000	1.000	
Demand Flow Rate, v	3410	230	pc/h

Step 2: Estimate the Approaching Flow Rate in Lanes 1 and 2

Estimating Flow in Lanes 1 and 2 for On-Ramps			
Adjacent Upstream Off-Ramp Equilibrium Distance, LEQ	-	ft	
Adjacent Downstream Off-Ramp Equilibrium Distance, LEQ	-	ft	
Prop. Freeway Veh. in Lanes 1 and 2, PFM	1.000		
Flow Rate on Freeway, vF	3410	pc/h	
Flow Rate in Lanes 1 and 2, v12	3410	pc/h	

Step 3: Estimate Capacity of Ramp-Freeway Junction and Compare Flow Rates

Capacity Checks			
	Actual	Maximum	Violation?
vFO	3640	4600	No
vR	230	2000	No
vR12	3640	4600	No

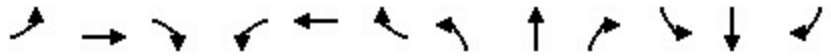
	Freeway	Ramp	
Unadjusted Capacity, cmd	4600	2000	pc/h
Driver Population	All Familiar	All Familiar	
Driver Population CAF	1.000	1.000	
Weather Type	Non-Severe Weather	Non-Severe Weather	
Weather Type CAF	1.000	1.000	
Incident Type	No Incident	-	
Incident Type CAF	1.000	-	
Proportion of CAVs in Traffic Stream	0	-	
Capacity Adjustment Factor for CAVs, CAFCAV	1.000	-	
Final Capacity Adj. Factor, CAF	1.000	1.000	
Final Adjusted Capacity, cmda	4600	2000	pc/h

Step 4: Estimate Density in Ramp Influence Area and Determine LOS

Demand Flow Rate on Ramp, vR	230	pc/h	
Flow Rate in Lanes 1 and 2, v12	3410	pc/h	
Length of Acceleration Lane, LA	800	ft	
Density in On-Ramp Influence Area, DR	28.8	pc/mi/ln	
Density in On-Ramp Influence Area, DR	28.2	veh/mi/ln	
Level of Service, LOS	D		

Step 5: Estimate Speeds in the Vicinity of Ramp-Freeway Junctions

Freeway Free-Flow Speed, FFS	60.0	mi/h	
Ramp Free-Flow Speed, SFR	35.0	mi/h	
Length of Acceleration Lane, LA	800	ft	
Driver Population	All Familiar		
Driver Population SAF	1.000		
Weather Type	Non-Severe Weather		
Weather Type SAF	1.000		
Final Speed Adjustment Factor, SAF	1.000		
Flow Rate on Freeway, vF	3410	pc/h	
Flow Rate in Lanes 1 and 2, v12	3410	pc/h	
Total Flow Entering On-Ramp Infl. Area, vR12	3640	pc/h	
Number of Outer Lanes on Freeway, NO	0	ln	
Speed Index for On-Ramp, MS	0.414		
Average Speed in Ramp Influence Area, SR	52.5	mi/h	
Average Flow in Outer Lanes, vOA	-	pc/h/ln	
Average Speed in Outer Lanes of Freeway, SO	60.0	mi/h	
Average Speed for On-Ramp Junction, S	52.5	mi/h	
Density Across All Lanes, D	34.7	pc/mi/ln	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	383	3053	22	35	2046	359	14	8	11	395	8	280
Future Volume (veh/h)	383	3053	22	35	2046	359	14	8	11	395	8	280
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	407	3248	23	37	2177	0	15	9	0	426	0	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	432	3472	1078	47	2368		38	39		474	0	
Arrive On Green	0.25	0.69	0.69	0.03	0.47	0.00	0.02	0.02	0.00	0.14	0.00	0.00
Sat Flow, veh/h	1753	5025	1560	1753	5025	1560	1753	1841	1560	3506	0	1560
Grp Volume(v), veh/h	407	3248	23	37	2177	0	15	9	0	426	0	0
Grp Sat Flow(s),veh/h/ln	1753	1675	1560	1753	1675	1560	1753	1841	1560	1753	0	1560
Q Serve(g_s), s	32.7	81.1	0.7	3.0	58.0	0.0	1.2	0.7	0.0	17.2	0.0	0.0
Cycle Q Clear(g_c), s	32.7	81.1	0.7	3.0	58.0	0.0	1.2	0.7	0.0	17.2	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	432	3472	1078	47	2368		38	39		474	0	
V/C Ratio(X)	0.94	0.94	0.02	0.78	0.92		0.40	0.23		0.90	0.00	
Avail Cap(c_a), veh/h	507	3501	1087	61	2368		79	83		501	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	53.0	19.4	7.0	69.4	35.4	0.0	69.3	69.1	0.0	61.1	0.0	0.0
Incr Delay (d2), s/veh	24.1	5.6	0.0	38.0	6.4	0.0	6.7	2.9	0.0	18.3	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.7	27.3	0.2	1.8	23.3	0.0	0.6	0.4	0.0	8.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	77.1	25.0	7.0	107.4	41.8	0.0	76.0	72.0	0.0	79.4	0.0	0.0
LnGrp LOS	E	C	A	F	D		E	E		E		
Approach Vol, veh/h		3678			2214			24			426	
Approach Delay, s/veh		30.6			42.9			74.5			79.4	
Approach LOS		C			D			E			E	

Timer - Assigned Phs	2	3	4		6	7	8
Phs Duration (G+Y+Rc), s	7.6	8.4	103.7		23.9	39.9	72.1
Change Period (Y+Rc), s	4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s	6.5	5.0	100.0		20.5	41.5	63.5
Max Q Clear Time (g_c+I1), s	3.2	5.0	83.1		19.2	34.7	60.0
Green Ext Time (p_c), s	0.0	0.0	16.1		0.2	0.7	3.1

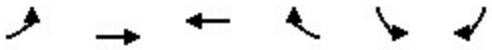
Intersection Summary	
HCM 7th Control Delay, s/veh	38.4
HCM 7th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Traditions North



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	213	0	2980	130	149	542
Future Volume (veh/h)	213	0	2980	130	149	542
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	232	0	3239	32	162	588
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	4	4	4	4	4
Cap, veh/h	273	4002	3370	1046	245	605
Arrive On Green	0.08	0.00	0.67	0.67	0.14	0.14
Sat Flow, veh/h	3401	5191	5191	1560	1753	2745
Grp Volume(v), veh/h	232	0	3239	32	162	588
Grp Sat Flow(s),veh/h/ln	1700	1675	1675	1560	1753	1373
Q Serve(g_s), s	11.8	0.0	105.0	1.2	15.4	24.6
Cycle Q Clear(g_c), s	11.8	0.0	105.0	1.2	15.4	24.6
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	273	4002	3370	1046	245	605
V/C Ratio(X)	0.85	0.00	0.96	0.03	0.66	0.97
Avail Cap(c_a), veh/h	348	4202	3379	1049	245	605
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	79.8	0.0	26.8	9.7	71.6	68.0
Incr Delay (d2), s/veh	14.6	0.0	8.4	0.0	6.4	29.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	0.0	40.7	0.4	7.5	28.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	94.4	0.0	35.2	9.8	78.0	97.7
LnGrp LOS	F		D	A	E	F
Approach Vol, veh/h		232	3271		750	
Approach Delay, s/veh		94.4	35.0		93.4	
Approach LOS		F	C		F	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	145.8	30.0	22.1	123.7
Change Period (Y+Rc), s	* 5.8	5.4	8.0	5.8
Max Green Setting (Gmax), s	* 1.5E+02	24.6	18.0	118.2
Max Q Clear Time (g_c+I1), s	0.0	26.6	13.8	107.0
Green Ext Time (p_c), s	0.0	0.0	0.3	10.9

Intersection Summary	
HCM 7th Control Delay, s/veh	48.5
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Traditions North
With dual right-turn lanes

FREEWAY MERGE ANALYSIS

File Name:	Merge-Future-AM.xuf
Analyst:	GCW
Agency:	NDOT
Jurisdiction:	NDOT
Date:	
Analysis Year:	Future Year (2049)
Time Analyzed:	AM Peak Hour
Project Description:	Traditions North
Units:	U.S. Customary

LOS and Performance Measures

Ramp Type	Left-Sided One-Lane	
Density in On-Ramp (Merge) Influence Area, DR	15.7	pc/mi/ln
Level of Service, LOS	B	
Average Flow in Outer Lanes, vOA	-	pc/h/ln
Average Speed in Ramp Influence Area, SR	54.7	mi/h
Average Speed in Outer Lanes of Freeway, SO	60.0	mi/h
Average Speed for On-Ramp (Merge) Junction, S	54.7	mi/h
Density Across All Lanes, D	17.9	pc/mi/ln

Step 1: Specify Inputs and Convert Demand Volumes to Demand Flow Rates

Freeway Data		
Number of Freeway Lanes	2	ln
Measured or Base FFS	Measured	
Base Free-Flow Speed, BFFS	-	mi/h
Lane Width	-	ft
Lane Width Adjustment, fLW	-	mi/h
Right-Side Lateral Clearance	-	ft
Right-Side Lateral Clearance Adj., fRLC	-	mi/h
Total Ramp Density, TRD	-	ramps/mi
TRD Adjustment	-	mi/h
Free-Flow Speed, FFS	60.0	mi/h
Speed Adjustments		
Driver Population	All Familiar	
Driver Population SAF	1.000	
Weather Type	Non-Severe Weather	
Weather Type SAF	1.000	
Final Speed Adjustment Factor, SAF	1.000	
Adjusted Free-Flow Speed, FFSadj	60.0	mi/h
Segment Length	1500	ft
C-D Roadway?	Freeway	
Demand Volume, V	1523	veh/h
Peak Hour Factor, PHF	0.92	
Ramp Data		
Number of Ramp Lanes	1	ln
Ramp Free-Flow Speed, SFR	35.0	mi/h
Ramp Side	Left	
Length of First Acceleration Lane, LA or LA1	800	ft
Length of Second Acceleration Lane, LA2	-	ft

Junction Components	Freeway	Ramp	
Demand Volume, V	1523	149	veh/h
Peak Hour Factor, PHF	0.92	0.92	
Percent Total Trucks	8.00	2.00	%
Percent SUTs	-	-	%
Percent TTs	-	-	%
Prop. Total Trucks, PT	0.0800	0.0200	
Heavy Vehicle PCE, ET	2.00	2.00	
Heavy Vehicle Adj., fHV	0.926	0.980	
Terrain Type	Level	Level	

Percent Grade	-	-	%
Grade Length	-	-	mi
Demand Adj. Factor, DAF	1.000	1.000	
Demand Flow Rate, v	1788	165	pc/h

Step 2: Estimate the Approaching Flow Rate in Lanes 1 and 2

Estimating Flow in Lanes 1 and 2 for On-Ramps			
Adjacent Upstream Off-Ramp Equilibrium Distance, LEQ	-	ft	
Adjacent Downstream Off-Ramp Equilibrium Distance, LEQ	-	ft	
Prop. Freeway Veh. in Lanes 1 and 2, PFM	1.000		
Flow Rate on Freeway, vF	1788	pc/h	
Flow Rate in Lanes 1 and 2, v12	1788	pc/h	

Step 3: Estimate Capacity of Ramp-Freeway Junction and Compare Flow Rates

Capacity Checks

	Actual	Maximum	Violation?
vFO	1953	4600	No
vR	165	2000	No
vR12	1953	4600	No

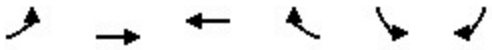
	Freeway	Ramp	
Unadjusted Capacity, cmd	4600	2000	pc/h
Driver Population	All Familiar	All Familiar	
Driver Population CAF	1.000	1.000	
Weather Type	Non-Severe Weather	Non-Severe Weather	
Weather Type CAF	1.000	1.000	
Incident Type	No Incident	-	
Incident Type CAF	1.000	-	
Proportion of CAVs in Traffic Stream	0	-	
Capacity Adjustment Factor for CAVs, CAFCAV	1.000	-	
Final Capacity Adj. Factor, CAF	1.000	1.000	
Final Adjusted Capacity, cmda	4600	2000	pc/h

Step 4: Estimate Density in Ramp Influence Area and Determine LOS

Demand Flow Rate on Ramp, vR	165	pc/h	
Flow Rate in Lanes 1 and 2, v12	1788	pc/h	
Length of Acceleration Lane, LA	800	ft	
Density in On-Ramp Influence Area, DR	15.7	pc/mi/ln	
Density in On-Ramp Influence Area, DR	15.4	veh/mi/ln	
Level of Service, LOS	B		

Step 5: Estimate Speeds in the Vicinity of Ramp-Freeway Junctions

Freeway Free-Flow Speed, FFS	60.0	mi/h	
Ramp Free-Flow Speed, SFR	35.0	mi/h	
Length of Acceleration Lane, LA	800	ft	
Driver Population	All Familiar		
Driver Population SAF	1.000		
Weather Type	Non-Severe Weather		
Weather Type SAF	1.000		
Final Speed Adjustment Factor, SAF	1.000		
Flow Rate on Freeway, vF	1788	pc/h	
Flow Rate in Lanes 1 and 2, v12	1788	pc/h	
Total Flow Entering On-Ramp Infl. Area, vR12	1953	pc/h	
Number of Outer Lanes on Freeway, NO	0	ln	
Speed Index for On-Ramp, MS	0.292		
Average Speed in Ramp Influence Area, SR	54.7	mi/h	
Average Flow in Outer Lanes, vOA	-	pc/h/ln	
Average Speed in Outer Lanes of Freeway, SO	60.0	mi/h	
Average Speed for On-Ramp Junction, S	54.7	mi/h	
Density Across All Lanes, D	17.9	pc/mi/ln	



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	546	0	2206	135	219	283
Future Volume (veh/h)	546	0	2206	135	219	283
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	563	0	2274	36	226	291
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	631	3846	2553	792	263	922
Arrive On Green	0.18	0.00	0.50	0.50	0.15	0.15
Sat Flow, veh/h	3456	5274	5274	1585	1781	2790
Grp Volume(v), veh/h	563	0	2274	36	226	291
Grp Sat Flow(s),veh/h/ln	1728	1702	1702	1585	1781	1395
Q Serve(g_s), s	18.0	0.0	45.5	1.3	14.0	8.8
Cycle Q Clear(g_c), s	18.0	0.0	45.5	1.3	14.0	8.8
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	631	3846	2553	792	263	922
V/C Ratio(X)	0.89	0.00	0.89	0.05	0.86	0.32
Avail Cap(c_a), veh/h	702	4147	2623	814	308	992
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.2	0.0	25.5	14.5	47.1	28.3
Incr Delay (d2), s/veh	12.8	0.0	4.2	0.0	18.6	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.6	0.0	17.6	0.5	7.6	7.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	58.0	0.0	29.7	14.5	65.7	28.5
LnGrp LOS	E		C	B	E	C
Approach Vol, veh/h		563	2310		517	
Approach Delay, s/veh		58.0	29.5		44.8	
Approach LOS		E	C		D	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	91.1	22.2	28.7	62.4
Change Period (Y+Rc), s	* 5.8	5.4	8.0	5.8
Max Green Setting (Gmax), s	* 92	19.6	23.0	58.2
Max Q Clear Time (g_c+I1), s	0.0	16.0	20.0	47.5
Green Ext Time (p_c), s	0.0	0.7	0.7	9.1

Intersection Summary	
HCM 7th Control Delay, s/veh	36.6
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Traditions North
With dual right-turn lanes

FREEWAY MERGE ANALYSIS

File Name:	Merge-Future-PM.xuf
Analyst:	GCW
Agency:	NDOT
Jurisdiction:	NDOT
Date:	
Analysis Year:	Future Year (2049)
Time Analyzed:	PM Peak Hour
Project Description:	Traditions North
Units:	U.S. Customary

LOS and Performance Measures

Ramp Type	Left-Sided One-Lane		
Density in On-Ramp (Merge) Influence Area, DR	28.8	pc/mi/ln	
Level of Service, LOS	D		
Average Flow in Outer Lanes, vOA	-	pc/h/ln	
Average Speed in Ramp Influence Area, SR	52.5	mi/h	
Average Speed in Outer Lanes of Freeway, SO	60.0	mi/h	
Average Speed for On-Ramp (Merge) Junction, S	52.5	mi/h	
Density Across All Lanes, D	34.7	pc/mi/ln	

Step 1: Specify Inputs and Convert Demand Volumes to Demand Flow Rates

Freeway Data			
Number of Freeway Lanes	2		ln
Measured or Base FFS	Measured		
Base Free-Flow Speed, BFFS	-		mi/h
Lane Width	-		ft
Lane Width Adjustment, fLW	-		mi/h
Right-Side Lateral Clearance	-		ft
Right-Side Lateral Clearance Adj., fRLC	-		mi/h
Total Ramp Density, TRD	-		ramps/mi
TRD Adjustment	-		mi/h
Free-Flow Speed, FFS	60.0		mi/h
Speed Adjustments			
Driver Population	All Familiar		
Driver Population SAF	1.000		
Weather Type	Non-Severe Weather		
Weather Type SAF	1.000		
Final Speed Adjustment Factor, SAF	1.000		
Adjusted Free-Flow Speed, FFSadj	60.0		mi/h
Segment Length	1500		ft
C-D Roadway?	Freeway		
Demand Volume, V	3242		veh/h
Peak Hour Factor, PHF	0.97		
Ramp Data			
Number of Ramp Lanes	1		ln
Ramp Free-Flow Speed, SFR	35.0		mi/h
Ramp Side	Left		
Length of First Acceleration Lane, LA or LA1	800		ft
Length of Second Acceleration Lane, LA2	-		ft
Junction Components	Freeway	Ramp	
Demand Volume, V	3242	219	veh/h
Peak Hour Factor, PHF	0.97	0.97	
Percent Total Trucks	2.00	2.00	%
Percent SUTs	-	-	%
Percent TTs	-	-	%
Prop. Total Trucks, PT	0.0200	0.0200	
Heavy Vehicle PCE, ET	2.00	2.00	
Heavy Vehicle Adj., fHV	0.980	0.980	
Terrain Type	Level	Level	

Percent Grade	-	-	%
Grade Length	-	-	mi
Demand Adj. Factor, DAF	1.000	1.000	
Demand Flow Rate, v	3410	230	pc/h

Step 2: Estimate the Approaching Flow Rate in Lanes 1 and 2

Estimating Flow in Lanes 1 and 2 for On-Ramps			
Adjacent Upstream Off-Ramp Equilibrium Distance, LEQ	-	ft	
Adjacent Downstream Off-Ramp Equilibrium Distance, LEQ	-	ft	
Prop. Freeway Veh. in Lanes 1 and 2, PFM	1.000		
Flow Rate on Freeway, vF	3410	pc/h	
Flow Rate in Lanes 1 and 2, v12	3410	pc/h	

Step 3: Estimate Capacity of Ramp-Freeway Junction and Compare Flow Rates

Capacity Checks			
	Actual	Maximum	Violation?
vFO	3640	4600	No
vR	230	2000	No
vR12	3640	4600	No

	Freeway	Ramp	
Unadjusted Capacity, cmd	4600	2000	pc/h
Driver Population	All Familiar	All Familiar	
Driver Population CAF	1.000	1.000	
Weather Type	Non-Severe Weather	Non-Severe Weather	
Weather Type CAF	1.000	1.000	
Incident Type	No Incident	-	
Incident Type CAF	1.000	-	
Proportion of CAVs in Traffic Stream	0	-	
Capacity Adjustment Factor for CAVs, CAFCAV	1.000	-	
Final Capacity Adj. Factor, CAF	1.000	1.000	
Final Adjusted Capacity, cmda	4600	2000	pc/h

Step 4: Estimate Density in Ramp Influence Area and Determine LOS

Demand Flow Rate on Ramp, vR	230	pc/h	
Flow Rate in Lanes 1 and 2, v12	3410	pc/h	
Length of Acceleration Lane, LA	800	ft	
Density in On-Ramp Influence Area, DR	28.8	pc/mi/ln	
Density in On-Ramp Influence Area, DR	28.2	veh/mi/ln	
Level of Service, LOS	D		

Step 5: Estimate Speeds in the Vicinity of Ramp-Freeway Junctions

Freeway Free-Flow Speed, FFS	60.0	mi/h	
Ramp Free-Flow Speed, SFR	35.0	mi/h	
Length of Acceleration Lane, LA	800	ft	
Driver Population	All Familiar		
Driver Population SAF	1.000		
Weather Type	Non-Severe Weather		
Weather Type SAF	1.000		
Final Speed Adjustment Factor, SAF	1.000		
Flow Rate on Freeway, vF	3410	pc/h	
Flow Rate in Lanes 1 and 2, v12	3410	pc/h	
Total Flow Entering On-Ramp Infl. Area, vR12	3640	pc/h	
Number of Outer Lanes on Freeway, NO	0	ln	
Speed Index for On-Ramp, MS	0.414		
Average Speed in Ramp Influence Area, SR	52.5	mi/h	
Average Flow in Outer Lanes, vOA	-	pc/h/ln	
Average Speed in Outer Lanes of Freeway, SO	60.0	mi/h	
Average Speed for On-Ramp Junction, S	52.5	mi/h	
Density Across All Lanes, D	34.7	pc/mi/ln	

Appendix G

Opening Year Plus Project LOS Calculations

GCW

ENGINEERS \ SURVEYORS

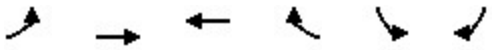
Intersection	
Int Delay, s/veh	7.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	2	105	5	4	1	55	8	1	1	11	3
Future Vol, veh/h	1	2	105	5	4	1	55	8	1	1	11	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	4	4	4	4	4	4	4	4	4	4	4	4
Mvmt Flow	1	3	140	7	5	1	73	11	1	1	15	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	179	178	17	177	179	11	19	0	0	12	0	0
Stage 1	19	19	-	158	158	-	-	-	-	-	-	-
Stage 2	160	159	-	19	21	-	-	-	-	-	-	-
Critical Hdwy	7.14	6.54	6.24	7.14	6.54	6.24	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.14	5.54	-	6.14	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.14	5.54	-	6.14	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.536	4.036	3.336	3.536	4.036	3.336	2.236	-	-	2.236	-	-
Pot Cap-1 Maneuver	778	712	1057	781	711	1064	1585	-	-	1594	-	-
Stage 1	994	875	-	840	763	-	-	-	-	-	-	-
Stage 2	837	763	-	995	874	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	735	678	1057	643	677	1064	1585	-	-	1594	-	-
Mov Cap-2 Maneuver	735	678	-	643	677	-	-	-	-	-	-	-
Stage 1	994	875	-	800	728	-	-	-	-	-	-	-
Stage 2	792	727	-	860	873	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.01	10.37	6.34	0.48
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1513	-	-	1042	684	115	-	-
HCM Lane V/C Ratio	0.046	-	-	0.138	0.019	0.001	-	-
HCM Control Delay (s/veh)	7.4	0	-	9	10.4	7.3	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	0.1	0	-	-



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	87	0	1688	55	65	279
Future Volume (veh/h)	87	0	1688	55	65	279
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	95	0	1835	60	71	211
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	4	4	4	4	4
Cap, veh/h	123	2507	1955	872	282	251
Arrive On Green	0.07	0.00	0.56	0.56	0.16	0.16
Sat Flow, veh/h	1753	3589	3589	1560	1753	1560
Grp Volume(v), veh/h	95	0	1835	60	71	211
Grp Sat Flow(s),veh/h/ln	1753	1749	1749	1560	1753	1560
Q Serve(g_s), s	4.9	0.0	44.5	1.6	3.2	12.0
Cycle Q Clear(g_c), s	4.9	0.0	44.5	1.6	3.2	12.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	123	2507	1955	872	282	251
V/C Ratio(X)	0.77	0.00	0.94	0.07	0.25	0.84
Avail Cap(c_a), veh/h	537	3473	1989	887	479	427
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.8	0.0	18.7	9.2	33.6	37.2
Incr Delay (d2), s/veh	9.7	0.0	9.3	0.0	0.5	7.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.0	17.3	0.5	1.4	0.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	51.4	0.0	28.0	9.3	34.0	44.7
LnGrp LOS	D		C	A	C	D
Approach Vol, veh/h		95	1895		282	
Approach Delay, s/veh		51.4	27.4		42.0	
Approach LOS		D	C		D	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		71.3		20.1	14.4	56.9
Change Period (Y+Rc), s		* 5.8		5.4	8.0	5.8
Max Green Setting (Gmax), s		* 91		25.0	28.0	52.0
Max Q Clear Time (g_c+I1), s		0.0		14.0	6.9	46.5
Green Ext Time (p_c), s		0.0		0.7	0.2	4.6

Intersection Summary	
HCM 7th Control Delay, s/veh	30.2
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

FREEWAY MERGE ANALYSIS

File Name:	Merge-OYPP-AM.xuf
Analyst:	GCW
Agency:	NDOT
Jurisdiction:	NDOT
Date:	
Analysis Year:	Opening Year Plus Project (2029)
Time Analyzed:	AM Peak Hour
Project Description:	Traditions North
Units:	U.S. Customary

LOS and Performance Measures

Ramp Type	Left-Sided One-Lane	
Density in On-Ramp (Merge) Influence Area, DR	10.8	pc/mi/ln
Level of Service, LOS	B	
Average Flow in Outer Lanes, vOA	-	pc/h/ln
Average Speed in Ramp Influence Area, SR	55.0	mi/h
Average Speed in Outer Lanes of Freeway, SO	60.0	mi/h
Average Speed for On-Ramp (Merge) Junction, S	55.0	mi/h
Density Across All Lanes, D	12.1	pc/mi/ln

Step 1: Specify Inputs and Convert Demand Volumes to Demand Flow Rates

Freeway Data			
Number of Freeway Lanes	2		ln
Measured or Base FFS	Measured		
Base Free-Flow Speed, BFFS	-		mi/h
Lane Width	-		ft
Lane Width Adjustment, fLW	-		mi/h
Right-Side Lateral Clearance	-		ft
Right-Side Lateral Clearance Adj., fRLC	-		mi/h
Total Ramp Density, TRD	-		ramps/mi
TRD Adjustment	-		mi/h
Free-Flow Speed, FFS	60.0		mi/h
Speed Adjustments			
Driver Population	All Familiar		
Driver Population SAF	1.000		
Weather Type	Non-Severe Weather		
Weather Type SAF	1.000		
Final Speed Adjustment Factor, SAF	1.000		
Adjusted Free-Flow Speed, FFSadj	60.0		mi/h
Segment Length	1500		ft
C-D Roadway?	Freeway		
Demand Volume, V	1069		veh/h
Peak Hour Factor, PHF	0.92		
Ramp Data			
Number of Ramp Lanes	1		ln
Ramp Free-Flow Speed, SFR	35.0		mi/h
Ramp Side	Left		
Length of First Acceleration Lane, LA or LA1	800		ft
Length of Second Acceleration Lane, LA2	-		ft
Junction Components	Freeway	Ramp	
Demand Volume, V	1069	65	veh/h
Peak Hour Factor, PHF	0.92	0.92	
Percent Total Trucks	8.00	2.00	%
Percent SUTs	-	-	%
Percent TTs	-	-	%
Prop. Total Trucks, PT	0.0800	0.0200	
Heavy Vehicle PCE, ET	2.00	2.00	
Heavy Vehicle Adj., fHV	0.926	0.980	
Terrain Type	Level	Level	

Percent Grade	-	-	%
Grade Length	-	-	mi
Demand Adj. Factor, DAF	1.000	1.000	
Demand Flow Rate, v	1255	72	pc/h

Step 2: Estimate the Approaching Flow Rate in Lanes 1 and 2

Estimating Flow in Lanes 1 and 2 for On-Ramps			
Adjacent Upstream Off-Ramp Equilibrium Distance, LEQ	-	ft	
Adjacent Downstream Off-Ramp Equilibrium Distance, LEQ	-	ft	
Prop. Freeway Veh. in Lanes 1 and 2, PFM	1.000		
Flow Rate on Freeway, vF	1255	pc/h	
Flow Rate in Lanes 1 and 2, v12	1255	pc/h	

Step 3: Estimate Capacity of Ramp-Freeway Junction and Compare Flow Rates

Capacity Checks			
	Actual	Maximum	Violation?
vFO	1327	4600	No
vR	72	2000	No
vR12	1327	4600	No

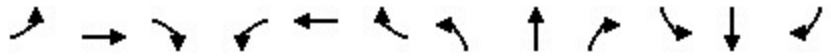
	Freeway	Ramp	
Unadjusted Capacity, cmd	4600	2000	pc/h
Driver Population	All Familiar	All Familiar	
Driver Population CAF	1.000	1.000	
Weather Type	Non-Severe Weather	Non-Severe Weather	
Weather Type CAF	1.000	1.000	
Incident Type	No Incident	-	
Incident Type CAF	1.000	-	
Proportion of CAVs in Traffic Stream	0	-	
Capacity Adjustment Factor for CAVs, CAFCAV	1.000	-	
Final Capacity Adj. Factor, CAF	1.000	1.000	
Final Adjusted Capacity, cmda	4600	2000	pc/h

Step 4: Estimate Density in Ramp Influence Area and Determine LOS

Demand Flow Rate on Ramp, vR	72	pc/h	
Flow Rate in Lanes 1 and 2, v12	1255	pc/h	
Length of Acceleration Lane, LA	800	ft	
Density in On-Ramp Influence Area, DR	10.8	pc/mi/ln	
Density in On-Ramp Influence Area, DR	10.6	veh/mi/ln	
Level of Service, LOS	B		

Step 5: Estimate Speeds in the Vicinity of Ramp-Freeway Junctions

Freeway Free-Flow Speed, FFS	60.0	mi/h	
Ramp Free-Flow Speed, SFR	35.0	mi/h	
Length of Acceleration Lane, LA	800	ft	
Driver Population	All Familiar		
Driver Population SAF	1.000		
Weather Type	Non-Severe Weather		
Weather Type SAF	1.000		
Final Speed Adjustment Factor, SAF	1.000		
Flow Rate on Freeway, vF	1255	pc/h	
Flow Rate in Lanes 1 and 2, v12	1255	pc/h	
Total Flow Entering On-Ramp Infl. Area, vR12	1327	pc/h	
Number of Outer Lanes on Freeway, NO	0	ln	
Speed Index for On-Ramp, MS	0.280		
Average Speed in Ramp Influence Area, SR	55.0	mi/h	
Average Flow in Outer Lanes, vOA	-	pc/h/ln	
Average Speed in Outer Lanes of Freeway, SO	60.0	mi/h	
Average Speed for On-Ramp Junction, S	55.0	mi/h	
Density Across All Lanes, D	12.1	pc/mi/ln	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	219	903	5	3	1452	352	20	4	2	245	3	269
Future Volume (veh/h)	219	903	5	3	1452	352	20	4	2	245	3	269
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	233	961	5	3	1545	0	21	4	2	263	0	95
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	272	2239	12	7	1667		39	7	4	349	0	155
Arrive On Green	0.15	0.63	0.63	0.00	0.48	0.00	0.03	0.03	0.03	0.10	0.00	0.10
Sat Flow, veh/h	1753	3568	19	1753	3497	1560	1361	259	130	3506	0	1560
Grp Volume(v), veh/h	233	471	495	3	1545	0	27	0	0	263	0	95
Grp Sat Flow(s),veh/h/ln	1753	1749	1837	1753	1749	1560	1749	0	0	1753	0	1560
Q Serve(g_s), s	9.7	10.3	10.3	0.1	31.1	0.0	1.1	0.0	0.0	5.5	0.0	4.4
Cycle Q Clear(g_c), s	9.7	10.3	10.3	0.1	31.1	0.0	1.1	0.0	0.0	5.5	0.0	4.4
Prop In Lane	1.00		0.01	1.00		1.00	0.78		0.07	1.00		1.00
Lane Grp Cap(c), veh/h	272	1098	1153	7	1667		50	0	0	349	0	155
V/C Ratio(X)	0.86	0.43	0.43	0.42	0.93		0.54	0.00	0.00	0.75	0.00	0.61
Avail Cap(c_a), veh/h	273	1098	1153	117	1706		145	0	0	351	0	156
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	30.9	7.1	7.1	37.3	18.4	0.0	35.9	0.0	0.0	32.9	0.0	32.4
Incr Delay (d2), s/veh	22.7	0.3	0.3	35.5	9.1	0.0	8.7	0.0	0.0	8.8	0.0	6.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	2.5	2.6	0.1	11.7	0.0	0.6	0.0	0.0	2.7	0.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	53.5	7.4	7.4	72.8	27.5	0.0	44.6	0.0	0.0	41.7	0.0	39.2
LnGrp LOS	D	A	A	E	C		D			D		D
Approach Vol, veh/h		1199			1548			27			358	
Approach Delay, s/veh		16.3			27.6			44.6			41.0	
Approach LOS		B			C			D			D	

Timer - Assigned Phs	2	3	4		6	7	8
Phs Duration (G+Y+Rc), s	6.7	4.8	51.6		12.0	16.1	40.3
Change Period (Y+Rc), s	4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s	6.2	5.0	43.3		7.5	11.7	36.6
Max Q Clear Time (g_c+I1), s	3.1	2.1	12.3		7.5	11.7	33.1
Green Ext Time (p_c), s	0.0	0.0	5.8		0.0	0.0	2.7

Intersection Summary	
HCM 7th Control Delay, s/veh	25.0
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

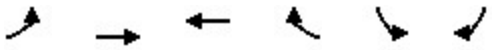
Intersection	
Int Delay, s/veh	6.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	1	49	2	1	1	80	21	2	1	11	1
Future Vol, veh/h	1	1	49	2	1	1	80	21	2	1	11	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	1	58	2	1	1	94	25	2	1	13	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	229	231	14	230	231	26	14	0	0	27	0	0
Stage 1	16	16	-	214	214	-	-	-	-	-	-	-
Stage 2	214	215	-	16	16	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	726	669	1067	725	669	1050	1604	-	-	1587	-	-
Stage 1	1004	882	-	788	725	-	-	-	-	-	-	-
Stage 2	789	725	-	1004	882	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	680	628	1067	643	629	1050	1604	-	-	1587	-	-
Mov Cap-2 Maneuver	680	628	-	643	629	-	-	-	-	-	-	-
Stage 1	1003	882	-	741	682	-	-	-	-	-	-	-
Stage 2	740	681	-	948	881	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	8.67	10.12	5.74	0.56
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1374	-	-	1041	708	136	-	-
HCM Lane V/C Ratio	0.059	-	-	0.058	0.007	0.001	-	-
HCM Control Delay (s/veh)	7.4	0	-	8.7	10.1	7.3	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.2	0	0	-	-



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	227	0	1351	74	115	134
Future Volume (veh/h)	227	0	1351	74	115	134
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	234	0	1393	76	119	138
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	282	2641	1725	769	209	186
Arrive On Green	0.16	0.00	0.49	0.49	0.12	0.12
Sat Flow, veh/h	1781	3647	3647	1585	1781	1585
Grp Volume(v), veh/h	234	0	1393	76	119	138
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1585	1781	1585
Q Serve(g_s), s	10.2	0.0	26.7	2.1	5.1	6.8
Cycle Q Clear(g_c), s	10.2	0.0	26.7	2.1	5.1	6.8
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	282	2641	1725	769	209	186
V/C Ratio(X)	0.83	0.00	0.81	0.10	0.57	0.74
Avail Cap(c_a), veh/h	665	4012	2210	986	554	493
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.8	0.0	17.5	11.2	33.6	34.3
Incr Delay (d2), s/veh	6.2	0.0	1.8	0.1	2.4	5.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	0.0	9.5	0.6	2.3	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	39.0	0.0	19.3	11.2	36.0	40.0
LnGrp LOS	D		B	B	D	D
Approach Vol, veh/h		234	1469		257	
Approach Delay, s/veh		39.0	18.9		38.2	
Approach LOS		D	B		D	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	65.6	14.8	20.7	44.8
Change Period (Y+Rc), s	* 5.8	5.4	8.0	5.8
Max Green Setting (Gmax), s	* 91	25.0	30.0	50.0
Max Q Clear Time (g_c+I1), s	0.0	8.8	12.2	28.7
Green Ext Time (p_c), s	0.0	0.7	0.6	10.4

Intersection Summary	
HCM 7th Control Delay, s/veh	23.8
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

FREEWAY MERGE ANALYSIS

File Name:	Merge-OYPP-PM.xuf
Analyst:	GCW
Agency:	NDOT
Jurisdiction:	NDOT
Date:	
Analysis Year:	Opening Year Plus Project (2029)
Time Analyzed:	PM Peak Hour
Project Description:	Traditions North
Units:	U.S. Customary

LOS and Performance Measures

Ramp Type	Left-Sided One-Lane	
Density in On-Ramp (Merge) Influence Area, DR	16.1	pc/mi/ln
Level of Service, LOS	B	
Average Flow in Outer Lanes, vOA	-	pc/h/ln
Average Speed in Ramp Influence Area, SR	54.7	mi/h
Average Speed in Outer Lanes of Freeway, SO	60.0	mi/h
Average Speed for On-Ramp (Merge) Junction, S	54.7	mi/h
Density Across All Lanes, D	18.3	pc/mi/ln

Step 1: Specify Inputs and Convert Demand Volumes to Demand Flow Rates

Freeway Data		
Number of Freeway Lanes	2	ln
Measured or Base FFS	Measured	
Base Free-Flow Speed, BFFS	-	mi/h
Lane Width	-	ft
Lane Width Adjustment, fLW	-	mi/h
Right-Side Lateral Clearance	-	ft
Right-Side Lateral Clearance Adj., fRLC	-	mi/h
Total Ramp Density, TRD	-	ramps/mi
TRD Adjustment	-	mi/h
Free-Flow Speed, FFS	60.0	mi/h
Speed Adjustments		
Driver Population	All Familiar	
Driver Population SAF	1.000	
Weather Type	Non-Severe Weather	
Weather Type SAF	1.000	
Final Speed Adjustment Factor, SAF	1.000	
Adjusted Free-Flow Speed, FFSadj	60.0	mi/h
Segment Length	1500	ft
C-D Roadway?	Freeway	
Demand Volume, V	1793	veh/h
Peak Hour Factor, PHF	0.97	
Ramp Data		
Number of Ramp Lanes	1	ln
Ramp Free-Flow Speed, SFR	35.0	mi/h
Ramp Side	Left	
Length of First Acceleration Lane, LA or LA1	800	ft
Length of Second Acceleration Lane, LA2	-	ft

Junction Components	Freeway	Ramp	
Demand Volume, V	1793	115	veh/h
Peak Hour Factor, PHF	0.97	0.97	
Percent Total Trucks	2.00	2.00	%
Percent SUTs	-	-	%
Percent TTs	-	-	%
Prop. Total Trucks, PT	0.0200	0.0200	
Heavy Vehicle PCE, ET	2.00	2.00	
Heavy Vehicle Adj., fHV	0.980	0.980	
Terrain Type	Level	Level	

Percent Grade	-	-	%
Grade Length	-	-	mi
Demand Adj. Factor, DAF	1.000	1.000	
Demand Flow Rate, v	1886	121	pc/h

Step 2: Estimate the Approaching Flow Rate in Lanes 1 and 2

Estimating Flow in Lanes 1 and 2 for On-Ramps			
Adjacent Upstream Off-Ramp Equilibrium Distance, LEQ	-	ft	
Adjacent Downstream Off-Ramp Equilibrium Distance, LEQ	-	ft	
Prop. Freeway Veh. in Lanes 1 and 2, PFM	1.000		
Flow Rate on Freeway, vF	1886	pc/h	
Flow Rate in Lanes 1 and 2, v12	1886	pc/h	

Step 3: Estimate Capacity of Ramp-Freeway Junction and Compare Flow Rates

Capacity Checks

	Actual	Maximum	Violation?
vFO	2007	4600	No
vR	121	2000	No
vR12	2007	4600	No

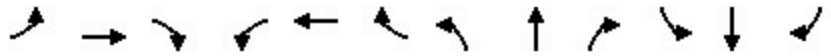
	Freeway	Ramp	
Unadjusted Capacity, cmd	4600	2000	pc/h
Driver Population	All Familiar	All Familiar	
Driver Population CAF	1.000	1.000	
Weather Type	Non-Severe Weather	Non-Severe Weather	
Weather Type CAF	1.000	1.000	
Incident Type	No Incident	-	
Incident Type CAF	1.000	-	
Proportion of CAVs in Traffic Stream	0	-	
Capacity Adjustment Factor for CAVs, CAFCAV	1.000	-	
Final Capacity Adj. Factor, CAF	1.000	1.000	
Final Adjusted Capacity, cmda	4600	2000	pc/h

Step 4: Estimate Density in Ramp Influence Area and Determine LOS

Demand Flow Rate on Ramp, vR	121	pc/h
Flow Rate in Lanes 1 and 2, v12	1886	pc/h
Length of Acceleration Lane, LA	800	ft
Density in On-Ramp Influence Area, DR	16.1	pc/mi/ln
Density in On-Ramp Influence Area, DR	15.8	veh/mi/ln
Level of Service, LOS	B	

Step 5: Estimate Speeds in the Vicinity of Ramp-Freeway Junctions

Freeway Free-Flow Speed, FFS	60.0	mi/h
Ramp Free-Flow Speed, SFR	35.0	mi/h
Length of Acceleration Lane, LA	800	ft
Driver Population	All Familiar	
Driver Population SAF	1.000	
Weather Type	Non-Severe Weather	
Weather Type SAF	1.000	
Final Speed Adjustment Factor, SAF	1.000	
Flow Rate on Freeway, vF	1886	pc/h
Flow Rate in Lanes 1 and 2, v12	1886	pc/h
Total Flow Entering On-Ramp Infl. Area, vR12	2007	pc/h
Number of Outer Lanes on Freeway, NO	0	ln
Speed Index for On-Ramp, MS	0.294	
Average Speed in Ramp Influence Area, SR	54.7	mi/h
Average Flow in Outer Lanes, vOA	-	pc/h/ln
Average Speed in Outer Lanes of Freeway, SO	60.0	mi/h
Average Speed for On-Ramp Junction, S	54.7	mi/h
Density Across All Lanes, D	18.3	pc/mi/ln



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	329	1590	11	1	1177	283	3	3	5	374	2	254
Future Volume (veh/h)	329	1590	11	1	1177	283	3	3	5	374	2	254
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	350	1691	12	1	1252	0	3	3	5	399	0	57
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	389	2157	15	2	1348		6	6	10	515	0	229
Arrive On Green	0.22	0.61	0.61	0.00	0.39	0.00	0.01	0.01	0.01	0.15	0.00	0.15
Sat Flow, veh/h	1753	3560	25	1753	3497	1560	458	458	764	3506	0	1560
Grp Volume(v), veh/h	350	830	873	1	1252	0	11	0	0	399	0	57
Grp Sat Flow(s),veh/h/ln	1753	1749	1836	1753	1749	1560	1680	0	0	1753	0	1560
Q Serve(g_s), s	15.1	27.6	27.7	0.0	26.6	0.0	0.5	0.0	0.0	8.5	0.0	2.5
Cycle Q Clear(g_c), s	15.1	27.6	27.7	0.0	26.6	0.0	0.5	0.0	0.0	8.5	0.0	2.5
Prop In Lane	1.00		0.01	1.00		1.00	0.27		0.45	1.00		1.00
Lane Grp Cap(c), veh/h	389	1060	1113	2	1348		23	0	0	515	0	229
V/C Ratio(X)	0.90	0.78	0.78	0.42	0.93		0.48	0.00	0.00	0.77	0.00	0.25
Avail Cap(c_a), veh/h	418	1060	1113	124	1374		141	0	0	745	0	332
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.4	11.5	11.5	38.7	22.8	0.0	38.0	0.0	0.0	31.9	0.0	29.3
Incr Delay (d2), s/veh	21.1	3.9	3.7	86.3	11.1	0.0	14.8	0.0	0.0	3.2	0.0	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.8	8.2	8.6	0.1	11.1	0.0	0.3	0.0	0.0	3.7	0.0	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	50.4	15.4	15.2	125.0	33.9	0.0	52.8	0.0	0.0	35.0	0.0	29.9
LnGrp LOS	D	B	B	F	C		D			D		C
Approach Vol, veh/h		2053			1253			11			456	
Approach Delay, s/veh		21.3			34.0			52.8			34.4	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	2	3	4		6	7	8
Phs Duration (G+Y+Rc), s	5.6	4.6	51.5		15.9	21.7	34.4
Change Period (Y+Rc), s	4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s	6.5	5.5	43.5		16.5	18.5	30.5
Max Q Clear Time (g_c+I1), s	2.5	2.0	29.7		10.5	17.1	28.6
Green Ext Time (p_c), s	0.0	0.0	8.7		0.9	0.2	1.3

Intersection Summary	
HCM 7th Control Delay, s/veh	27.2
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Traditions North

Appendix H

Future Year Plus Project LOS Calculations

ENGINEERS \ SURVEYORS

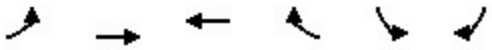
Intersection	
Int Delay, s/veh	7.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	2	116	6	5	1	62	9	1	1	12	3
Future Vol, veh/h	1	2	116	6	5	1	62	9	1	1	12	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	4	4	4	4	4	4	4	4	4	4	4	4
Mvmt Flow	1	3	155	8	7	1	83	12	1	1	16	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	201	199	18	198	201	13	20	0	0	13	0	0
Stage 1	21	21	-	178	178	-	-	-	-	-	-	-
Stage 2	181	179	-	20	23	-	-	-	-	-	-	-
Critical Hdwy	7.14	6.54	6.24	7.14	6.54	6.24	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.14	5.54	-	6.14	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.14	5.54	-	6.14	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.536	4.036	3.336	3.536	4.036	3.336	2.236	-	-	2.236	-	-
Pot Cap-1 Maneuver	753	693	1055	756	692	1062	1583	-	-	1592	-	-
Stage 1	993	874	-	819	748	-	-	-	-	-	-	-
Stage 2	816	748	-	994	872	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	705	656	1055	609	655	1062	1583	-	-	1592	-	-
Mov Cap-2 Maneuver	705	656	-	609	655	-	-	-	-	-	-	-
Stage 1	992	873	-	776	709	-	-	-	-	-	-	-
Stage 2	765	708	-	845	872	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.08	10.67	6.37	0.45
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1520	-	-	1040	651	108	-	-
HCM Lane V/C Ratio	0.052	-	-	0.153	0.025	0.001	-	-
HCM Control Delay (s/veh)	7.4	0	-	9.1	10.7	7.3	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.5	0.1	0	-	-



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	217	0	3080	130	149	553
Future Volume (veh/h)	217	0	3080	130	149	553
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	236	0	3348	32	162	600
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	4	4	4	4	4
Cap, veh/h	277	4005	3368	1046	245	606
Arrive On Green	0.08	0.00	0.67	0.67	0.14	0.14
Sat Flow, veh/h	3401	5191	5191	1560	1753	2745
Grp Volume(v), veh/h	236	0	3348	32	162	600
Grp Sat Flow(s),veh/h/ln	1700	1675	1675	1560	1753	1373
Q Serve(g_s), s	12.1	0.0	116.1	1.2	15.5	24.6
Cycle Q Clear(g_c), s	12.1	0.0	116.1	1.2	15.5	24.6
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	277	4005	3368	1046	245	606
V/C Ratio(X)	0.85	0.00	0.99	0.03	0.66	0.99
Avail Cap(c_a), veh/h	347	4160	3368	1046	245	606
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	80.0	0.0	28.7	9.8	71.9	68.5
Incr Delay (d2), s/veh	15.2	0.0	14.1	0.0	6.5	33.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	0.0	46.5	0.4	7.5	29.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	95.2	0.0	42.8	9.8	78.5	102.3
LnGrp LOS	F		D	A	E	F
Approach Vol, veh/h		236	3380		762	
Approach Delay, s/veh		95.2	42.5		97.2	
Approach LOS		F	D		F	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	146.4	30.0	22.4	124.0
Change Period (Y+Rc), s	* 5.8	5.4	8.0	5.8
Max Green Setting (Gmax), s	* 1.5E+02	24.6	18.0	118.2
Max Q Clear Time (g_c+I1), s	0.0	26.6	14.1	118.1
Green Ext Time (p_c), s	0.0	0.0	0.3	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	54.9
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

FREEWAY MERGE ANALYSIS

File Name:	Merge-FuturePP-AM.xuf
Analyst:	GCW
Agency:	NDOT
Jurisdiction:	NDOT
Date:	
Analysis Year:	Future Year Plus Project (2049)
Time Analyzed:	AM Peak Hour
Project Description:	Traditions North
Units:	U.S. Customary

LOS and Performance Measures

Ramp Type	Left-Sided One-Lane	
Density in On-Ramp (Merge) Influence Area, DR	16.0	pc/mi/ln
Level of Service, LOS	B	
Average Flow in Outer Lanes, vOA	-	pc/h/ln
Average Speed in Ramp Influence Area, SR	54.7	mi/h
Average Speed in Outer Lanes of Freeway, SO	60.0	mi/h
Average Speed for On-Ramp (Merge) Junction, S	54.7	mi/h
Density Across All Lanes, D	18.2	pc/mi/ln

Step 1: Specify Inputs and Convert Demand Volumes to Demand Flow Rates

Freeway Data			
Number of Freeway Lanes	2		ln
Measured or Base FFS	Measured		
Base Free-Flow Speed, BFFS	-		mi/h
Lane Width	-		ft
Lane Width Adjustment, fLW	-		mi/h
Right-Side Lateral Clearance	-		ft
Right-Side Lateral Clearance Adj., fRLC	-		mi/h
Total Ramp Density, TRD	-		ramps/mi
TRD Adjustment	-		mi/h
Free-Flow Speed, FFS	60.0		mi/h
Speed Adjustments			
Driver Population	All Familiar		
Driver Population SAF	1.000		
Weather Type	Non-Severe Weather		
Weather Type SAF	1.000		
Final Speed Adjustment Factor, SAF	1.000		
Adjusted Free-Flow Speed, FFSadj	60.0		mi/h
Segment Length	1500		ft
C-D Roadway?	Freeway		
Demand Volume, V	1553		veh/h
Peak Hour Factor, PHF	0.92		
Ramp Data			
Number of Ramp Lanes	1		ln
Ramp Free-Flow Speed, SFR	35.0		mi/h
Ramp Side	Left		
Length of First Acceleration Lane, LA or LA1	800		ft
Length of Second Acceleration Lane, LA2	-		ft
Junction Components	Freeway	Ramp	
Demand Volume, V	1553	149	veh/h
Peak Hour Factor, PHF	0.92	0.92	
Percent Total Trucks	8.00	2.00	%
Percent SUTs	-	-	%
Percent TTs	-	-	%
Prop. Total Trucks, PT	0.0800	0.0200	
Heavy Vehicle PCE, ET	2.00	2.00	
Heavy Vehicle Adj., fHV	0.926	0.980	
Terrain Type	Level	Level	

Percent Grade	-	-	%
Grade Length	-	-	mi
Demand Adj. Factor, DAF	1.000	1.000	
Demand Flow Rate, v	1823	165	pc/h

Step 2: Estimate the Approaching Flow Rate in Lanes 1 and 2

Estimating Flow in Lanes 1 and 2 for On-Ramps			
Adjacent Upstream Off-Ramp Equilibrium Distance, LEQ	-	ft	
Adjacent Downstream Off-Ramp Equilibrium Distance, LEQ	-	ft	
Prop. Freeway Veh. in Lanes 1 and 2, PFM	1.000		
Flow Rate on Freeway, vF	1823	pc/h	
Flow Rate in Lanes 1 and 2, v12	1823	pc/h	

Step 3: Estimate Capacity of Ramp-Freeway Junction and Compare Flow Rates

Capacity Checks			
	Actual	Maximum	Violation?
vFO	1988	4600	No
vR	165	2000	No
vR12	1988	4600	No

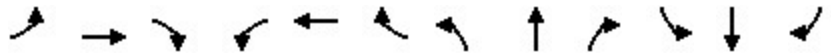
	Freeway	Ramp	
Unadjusted Capacity, cmd	4600	2000	pc/h
Driver Population	All Familiar	All Familiar	
Driver Population CAF	1.000	1.000	
Weather Type	Non-Severe Weather	Non-Severe Weather	
Weather Type CAF	1.000	1.000	
Incident Type	No Incident	-	
Incident Type CAF	1.000	-	
Proportion of CAVs in Traffic Stream	0	-	
Capacity Adjustment Factor for CAVs, CAFCAV	1.000	-	
Final Capacity Adj. Factor, CAF	1.000	1.000	
Final Adjusted Capacity, cmda	4600	2000	pc/h

Step 4: Estimate Density in Ramp Influence Area and Determine LOS

Demand Flow Rate on Ramp, vR	165	pc/h	
Flow Rate in Lanes 1 and 2, v12	1823	pc/h	
Length of Acceleration Lane, LA	800	ft	
Density in On-Ramp Influence Area, DR	16.0	pc/mi/ln	
Density in On-Ramp Influence Area, DR	15.7	veh/mi/ln	
Level of Service, LOS	B		

Step 5: Estimate Speeds in the Vicinity of Ramp-Freeway Junctions

Freeway Free-Flow Speed, FFS	60.0	mi/h	
Ramp Free-Flow Speed, SFR	35.0	mi/h	
Length of Acceleration Lane, LA	800	ft	
Driver Population	All Familiar		
Driver Population SAF	1.000		
Weather Type	Non-Severe Weather		
Weather Type SAF	1.000		
Final Speed Adjustment Factor, SAF	1.000		
Flow Rate on Freeway, vF	1823	pc/h	
Flow Rate in Lanes 1 and 2, v12	1823	pc/h	
Total Flow Entering On-Ramp Infl. Area, vR12	1988	pc/h	
Number of Outer Lanes on Freeway, NO	0	ln	
Speed Index for On-Ramp, MS	0.293		
Average Speed in Ramp Influence Area, SR	54.7	mi/h	
Average Flow in Outer Lanes, vOA	-	pc/h/ln	
Average Speed in Outer Lanes of Freeway, SO	60.0	mi/h	
Average Speed for On-Ramp Junction, S	54.7	mi/h	
Density Across All Lanes, D	18.2	pc/mi/ln	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	245	1431	15	28	2799	377	34	9	11	333	7	380
Future Volume (veh/h)	245	1431	15	28	2799	377	34	9	11	333	7	380
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	261	1522	16	30	2978	0	36	10	0	359	0	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	271	3698	1148	38	3032		50	52		396	0	
Arrive On Green	0.15	0.74	0.74	0.02	0.60	0.00	0.03	0.03	0.00	0.11	0.00	0.00
Sat Flow, veh/h	1753	5025	1560	1753	5025	1560	1753	1841	1560	3506	0	1560
Grp Volume(v), veh/h	261	1522	16	30	2978	0	36	10	0	359	0	0
Grp Sat Flow(s),veh/h/ln	1753	1675	1560	1753	1675	1560	1753	1841	1560	1753	0	1560
Q Serve(g_s), s	26.3	20.4	0.5	3.0	102.8	0.0	3.6	0.9	0.0	18.0	0.0	0.0
Cycle Q Clear(g_c), s	26.3	20.4	0.5	3.0	102.8	0.0	3.6	0.9	0.0	18.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	271	3698	1148	38	3032		50	52		396	0	
V/C Ratio(X)	0.96	0.41	0.01	0.78	0.98		0.72	0.19		0.91	0.00	
Avail Cap(c_a), veh/h	271	3698	1148	87	3033		64	67		404	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	74.8	8.9	6.3	86.7	34.4	0.0	85.8	84.5	0.0	78.1	0.0	0.0
Incr Delay (d2), s/veh	44.7	0.1	0.0	28.2	12.5	0.0	24.8	1.8	0.0	23.5	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.0	6.6	0.1	1.7	41.6	0.0	2.0	0.5	0.0	9.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	119.5	9.0	6.3	114.9	46.9	0.0	110.6	86.3	0.0	101.6	0.0	0.0
LnGrp LOS	F	A	A	F	D		F	F		F		
Approach Vol, veh/h		1799			3008			46			359	
Approach Delay, s/veh		25.0			47.6			105.3			101.6	
Approach LOS		C			D			F			F	

Timer - Assigned Phs	2	3	4		6	7	8
Phs Duration (G+Y+Rc), s	9.6	8.4	135.5		24.6	32.0	111.9
Change Period (Y+Rc), s	4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s	6.5	8.8	126.2		20.5	27.5	107.5
Max Q Clear Time (g_c+I1), s	5.6	5.0	22.4		20.0	28.3	104.8
Green Ext Time (p_c), s	0.0	0.0	14.7		0.1	0.0	2.7

Intersection Summary	
HCM 7th Control Delay, s/veh	44.0
HCM 7th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Traditions North

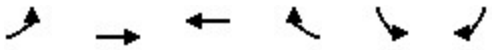
Intersection	
Int Delay, s/veh	6.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	1	61	2	1	1	100	25	2	1	12	1
Future Vol, veh/h	1	1	61	2	1	1	100	25	2	1	12	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	1	72	2	1	1	118	29	2	1	14	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	282	284	15	283	284	31	15	0	0	32	0	0
Stage 1	17	17	-	266	266	-	-	-	-	-	-	-
Stage 2	265	267	-	17	18	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	670	625	1065	669	625	1044	1602	-	-	1581	-	-
Stage 1	1002	881	-	739	689	-	-	-	-	-	-	-
Stage 2	740	688	-	1002	881	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	618	578	1065	576	578	1044	1602	-	-	1581	-	-
Mov Cap-2 Maneuver	618	578	-	576	578	-	-	-	-	-	-	-
Stage 1	1002	881	-	684	637	-	-	-	-	-	-	-
Stage 2	683	637	-	933	880	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	8.73	10.58	5.85	0.52
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1397	-	-	1039	649	127	-	-
HCM Lane V/C Ratio	0.073	-	-	0.071	0.007	0.001	-	-
HCM Control Delay (s/veh)	7.4	0	-	8.7	10.6	7.3	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.2	0	0	-	-



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	571	0	2294	135	219	298
Future Volume (veh/h)	571	0	2294	135	219	298
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	589	0	2365	36	226	306
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	650	3859	2546	790	262	935
Arrive On Green	0.19	0.00	0.50	0.50	0.15	0.15
Sat Flow, veh/h	3456	5274	5274	1585	1781	2790
Grp Volume(v), veh/h	589	0	2365	36	226	306
Grp Sat Flow(s),veh/h/ln	1728	1702	1702	1585	1781	1395
Q Serve(g_s), s	19.3	0.0	50.0	1.3	14.3	9.5
Cycle Q Clear(g_c), s	19.3	0.0	50.0	1.3	14.3	9.5
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	650	3859	2546	790	262	935
V/C Ratio(X)	0.91	0.00	0.93	0.05	0.86	0.33
Avail Cap(c_a), veh/h	688	4064	2571	798	302	997
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.9	0.0	27.1	14.9	48.1	28.7
Incr Delay (d2), s/veh	15.3	0.0	6.7	0.0	19.6	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.4	0.0	20.0	0.5	7.8	8.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	61.2	0.0	33.8	14.9	67.7	28.9
LnGrp LOS	E		C	B	E	C
Approach Vol, veh/h		589	2401		532	
Approach Delay, s/veh		61.2	33.5		45.4	
Approach LOS		E	C		D	

Timer - Assigned Phs			4		6	7	8
Phs Duration (G+Y+Rc), s			93.2		22.4	29.7	63.4
Change Period (Y+Rc), s			* 5.8		5.4	8.0	5.8
Max Green Setting (Gmax), s			* 92		19.6	23.0	58.2
Max Q Clear Time (g_c+I1), s			0.0		16.3	21.3	52.0
Green Ext Time (p_c), s			0.0		0.7	0.4	5.6

Intersection Summary	
HCM 7th Control Delay, s/veh	39.9
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

FREEWAY MERGE ANALYSIS

File Name:	Merge-FuturePP-PM.xuf
Analyst:	GCW
Agency:	NDOT
Jurisdiction:	NDOT
Date:	
Analysis Year:	Future Year Plus Project (2049)
Time Analyzed:	PM Peak Hour
Project Description:	Traditions North
Units:	U.S. Customary

LOS and Performance Measures

Ramp Type	Left-Sided One-Lane	
Density in On-Ramp (Merge) Influence Area, DR	29.6	pc/mi/ln
Level of Service, LOS	D	
Average Flow in Outer Lanes, vOA	-	pc/h/ln
Average Speed in Ramp Influence Area, SR	52.3	mi/h
Average Speed in Outer Lanes of Freeway, SO	60.0	mi/h
Average Speed for On-Ramp (Merge) Junction, S	52.3	mi/h
Density Across All Lanes, D	35.8	pc/mi/ln

Step 1: Specify Inputs and Convert Demand Volumes to Demand Flow Rates

Freeway Data		
Number of Freeway Lanes	2	ln
Measured or Base FFS	Measured	
Base Free-Flow Speed, BFFS	-	mi/h
Lane Width	-	ft
Lane Width Adjustment, fLW	-	mi/h
Right-Side Lateral Clearance	-	ft
Right-Side Lateral Clearance Adj., fRLC	-	mi/h
Total Ramp Density, TRD	-	ramps/mi
TRD Adjustment	-	mi/h
Free-Flow Speed, FFS	60.0	mi/h
Speed Adjustments		
Driver Population	All Familiar	
Driver Population SAF	1.000	
Weather Type	Non-Severe Weather	
Weather Type SAF	1.000	
Final Speed Adjustment Factor, SAF	1.000	
Adjusted Free-Flow Speed, FFSadj	60.0	mi/h
Segment Length	1500	ft
C-D Roadway?	Freeway	
Demand Volume, V	3341	veh/h
Peak Hour Factor, PHF	0.97	
Ramp Data		
Number of Ramp Lanes	1	ln
Ramp Free-Flow Speed, SFR	35.0	mi/h
Ramp Side	Left	
Length of First Acceleration Lane, LA or LA1	800	ft
Length of Second Acceleration Lane, LA2	-	ft

Junction Components	Freeway	Ramp	
Demand Volume, V	3341	219	veh/h
Peak Hour Factor, PHF	0.97	0.97	
Percent Total Trucks	2.00	2.00	%
Percent SUTs	-	-	%
Percent TTs	-	-	%
Prop. Total Trucks, PT	0.0200	0.0200	
Heavy Vehicle PCE, ET	2.00	2.00	
Heavy Vehicle Adj., fHV	0.980	0.980	
Terrain Type	Level	Level	

Percent Grade	-	-	%
Grade Length	-	-	mi
Demand Adj. Factor, DAF	1.000	1.000	
Demand Flow Rate, v	3515	230	pc/h

Step 2: Estimate the Approaching Flow Rate in Lanes 1 and 2

Estimating Flow in Lanes 1 and 2 for On-Ramps			
Adjacent Upstream Off-Ramp Equilibrium Distance, LEQ	-	ft	
Adjacent Downstream Off-Ramp Equilibrium Distance, LEQ	-	ft	
Prop. Freeway Veh. in Lanes 1 and 2, PFM	1.000		
Flow Rate on Freeway, vF	3515	pc/h	
Flow Rate in Lanes 1 and 2, v12	3515	pc/h	

Step 3: Estimate Capacity of Ramp-Freeway Junction and Compare Flow Rates

Capacity Checks			
	Actual	Maximum	Violation?
vFO	3745	4600	No
vR	230	2000	No
vR12	3745	4600	No

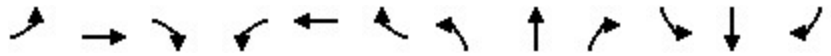
	Freeway	Ramp	
Unadjusted Capacity, cmd	4600	2000	pc/h
Driver Population	All Familiar	All Familiar	
Driver Population CAF	1.000	1.000	
Weather Type	Non-Severe Weather	Non-Severe Weather	
Weather Type CAF	1.000	1.000	
Incident Type	No Incident	-	
Incident Type CAF	1.000	-	
Proportion of CAVs in Traffic Stream	0	-	
Capacity Adjustment Factor for CAVs, CAFCAV	1.000	-	
Final Capacity Adj. Factor, CAF	1.000	1.000	
Final Adjusted Capacity, cmda	4600	2000	pc/h

Step 4: Estimate Density in Ramp Influence Area and Determine LOS

Demand Flow Rate on Ramp, vR	230	pc/h	
Flow Rate in Lanes 1 and 2, v12	3515	pc/h	
Length of Acceleration Lane, LA	800	ft	
Density in On-Ramp Influence Area, DR	29.6	pc/mi/ln	
Density in On-Ramp Influence Area, DR	29.0	veh/mi/ln	
Level of Service, LOS	D		

Step 5: Estimate Speeds in the Vicinity of Ramp-Freeway Junctions

Freeway Free-Flow Speed, FFS	60.0	mi/h	
Ramp Free-Flow Speed, SFR	35.0	mi/h	
Length of Acceleration Lane, LA	800	ft	
Driver Population	All Familiar		
Driver Population SAF	1.000		
Weather Type	Non-Severe Weather		
Weather Type SAF	1.000		
Final Speed Adjustment Factor, SAF	1.000		
Flow Rate on Freeway, vF	3515	pc/h	
Flow Rate in Lanes 1 and 2, v12	3515	pc/h	
Total Flow Entering On-Ramp Infl. Area, vR12	3745	pc/h	
Number of Outer Lanes on Freeway, NO	0	ln	
Speed Index for On-Ramp, MS	0.430		
Average Speed in Ramp Influence Area, SR	52.3	mi/h	
Average Flow in Outer Lanes, vOA	-	pc/h/ln	
Average Speed in Outer Lanes of Freeway, SO	60.0	mi/h	
Average Speed for On-Ramp Junction, S	52.3	mi/h	
Density Across All Lanes, D	35.8	pc/mi/ln	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	482	3053	22	35	2045	412	14	8	11	426	8	338
Future Volume (veh/h)	482	3053	22	35	2045	412	14	8	11	426	8	338
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	513	3248	23	37	2176	0	15	9	0	459	0	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	520	3536	1098	47	2182		35	37		496	0	
Arrive On Green	0.30	0.70	0.70	0.03	0.43	0.00	0.02	0.02	0.00	0.14	0.00	0.00
Sat Flow, veh/h	1753	5025	1560	1753	5025	1560	1753	1841	1560	3506	0	1560
Grp Volume(v), veh/h	513	3248	23	37	2176	0	15	9	0	459	0	0
Grp Sat Flow(s),veh/h/ln	1753	1675	1560	1753	1675	1560	1753	1841	1560	1753	0	1560
Q Serve(g_s), s	48.6	90.4	0.7	3.5	72.1	0.0	1.4	0.8	0.0	21.6	0.0	0.0
Cycle Q Clear(g_c), s	48.6	90.4	0.7	3.5	72.1	0.0	1.4	0.8	0.0	21.6	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	520	3536	1098	47	2182		35	37		496	0	
V/C Ratio(X)	0.99	0.92	0.02	0.78	1.00		0.43	0.24		0.93	0.00	
Avail Cap(c_a), veh/h	520	3536	1098	53	2182		67	71		496	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	58.4	20.7	7.4	80.7	47.1	0.0	80.8	80.5	0.0	70.8	0.0	0.0
Incr Delay (d2), s/veh	36.0	4.5	0.0	48.7	18.6	0.0	7.9	3.3	0.0	23.6	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	25.9	31.3	0.2	2.2	32.2	0.0	0.7	0.4	0.0	11.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	94.4	25.2	7.4	129.4	65.7	0.0	88.8	83.9	0.0	94.4	0.0	0.0
LnGrp LOS	F	C	A	F	E		F	F		F		
Approach Vol, veh/h		3784			2213			24			459	
Approach Delay, s/veh		34.5			66.8			86.9			94.4	
Approach LOS		C			E			F			F	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	7.9	9.0	122.0	28.1	54.0	77.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	6.4	5.0	117.0	23.6	49.5	72.5
Max Q Clear Time (g_c+I1), s	3.4	5.5	92.4	23.6	50.6	74.1
Green Ext Time (p_c), s	0.0	0.0	23.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	49.9
HCM 7th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Traditions North

Request to Reserve/Change Street Name(s)

Project Information

Project Name: TRADITIONS NORTH

Project Street Address: 0 TRADITIONS PKWY

Community: Section(s)/Township/Range: 01/16N/21E

Assessor's Parcel number(s)	Assessor's Parcel number(s)	Assessor's Parcel number(s)
016-406-07		

Street Name Requests

☒ Request to Reserve New Street Name(s) ☐ Request to Change a Street Name(s)

Present Street/Road Name(s):

Requested Street/Road Name(s) *(List in alphabetical order and attach additional sheets if needed)*

Desert Bloom Drive	
Dry Creek Drive	Dry Creek Court
Echo Ridge Loop	
Francis Drive	
Goldspan Drive	Goldspan Court
Ore Trail Drive	
Pioneer Drive	
Portal Road	Portal Court
Quicksilver Road	Quicksilver Court
Railstone Way	
Red Bluff Way	
Ryder Drive	
Sagepoint Way	
Trail Dust Drive	
Tunnel Drive	

If final recordation has not occurred within two (2) years, it is necessary to submit a written request for extension of the street name reservation(s) prior to the expiration date of the original approval request.

Applicant Information

Applicant/Developer	**Professional Consultant/Representative**
Name: Traditions North, LLC	Name: Piñon Design Group
Address: 3527 S Federal Way, Suite 103 #1020	Address: 2850 Tobiano Drive
City: Boise State:ID Zip:83705	City: Reno State:NV Zip:89521
Phone: Fax:	Phone: 775-843-0466 Fax:
Cell: Contact:	Cell: Contact:
Email:	Email: Dan@pinondg.com

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County Agency Review

				Initials	Date
☐ Approved	☐ Approved except where noted	☐ Denied	Lyon County Building Dept.		
☐ Approved	☐ Approved except where noted	☐ Denied	Lyon County Planning Dept.		
☐ Approved	☐ Approved except where noted	☐ Denied	Lyon County Road Department		
☐ Approved	☐ Approved except where noted	☐ Denied	Lyon County Sheriff's Dispatch		
☐ Approved	☐ Approved except where noted	☐ Denied	Central Lyon County Fire Dist.		
☐ Approved	☐ Approved except where noted	☐ Denied	Mason Valley Fire Dist.		
☐ Approved	☐ Approved except where noted	☐ Denied	North Lyon County Fire Dist.		
☐ Approved	☐ Approved except where noted	☐ Denied	Smith Valley Fire Dist.		

Please refer to Street Naming Criteria pursuant to 11.07.14(A)(11) of the Lyon County Code (See next page).

Street Name Requirements

11.07.14(A)(11) of the Lyon County Code

Street names and suffixes shall be designated by the developer, subject to the approval of the Planning Commission and, in accordance with the following general policy and shall:

a. Be short (under 12 letters, if possible) and preferably in one word.

b. Have a simple spelling and easy pronunciation.

c. Avoid prefixes such as north and south, east and west and upper and lower, etc.

d. Be related to the type and importance of the street. (The suffix boulevard should not be attached to the name of a minor residential street.)

e. Avoid the use of numbers or letters as street names.

f. Not be incongruous, offensive or geographically misleading.

g. Not be repetitive or similar in sound and character to streets already in existence in Lyon County.

h. Have a single name for a street having a continuous alignment.

i. When to be connected in the future into a continuous alignment or extended, bear the same name as the existing street.

j. Have a metal street sign to be erected as specified in the "Standard Details For Public Works Construction" on at least one corner of every intersection and shall identify each street name.

Lyon County Board of County Commissioners Agenda Summary

Meeting Date: April 16, 2026

Agenda Item Number:
13.a

Subject:
For Possible Action: To propose an ordinance amending Lyon County Development Code Title 15, Chapter 239, Section 1 and Section 5 thereby adopting the 2024 IFC Building Codes and 2024 Northern Nevada Amendments to the 2024 IFC. (Community Development Director, Gavin Henderson and Elizabeth Mink, CLFPD).

Summary:

Financial Department Comments:

Approved As To Legal Form:

County Manager Comments:

Recommendation:

ATTACHMENTS
- 2024 IFC Ordinance
- STAFF REPORT
- 2024 NNIC IFC Amendments
- NAC 477.740
- State Fire Marshall - Proposed Code Adoption
- 2024 Fire Code Adoption Presentation

BILL NO._____ ORDINANCE NO. _____

SUMMARY: AN ORDINANCE AMENDING LYON COUNTY CODE TITLE 15, CHAPTER 239, SECTION 1 AND SECTION 5, THEREBY ADOPTING THE 2024 IFC BUILDING CODES AND 2024 NOTHERN NEVADA AMENDMENTS TO THE IFC.

TITLE: AN ORDINANCE AMENDING LYON COUNTY CODE TITLE 15, CHAPTER 239, SECTION 1 AND SECTION 5, THEREBY ADOPTING THE 2024 IFC BUILDING CODES AND 2024 NOTHERN NEVADA AMENDMENTS TO THE IFC. .

Explanation: Matters underlined and in blue are new or added language; matters ~~struck out and in red~~ are deletions or removed language.

THE BOARD OF COUNTY COMMISIONERS OF LYON COUNTY, NEVADA DOES HEREBY ORDAIN:

Section 1. The Lyon County Land Use and Development Code, Title 15, Chapter 239, Section 1 is hereby amended as follows:

CHAPTER 239
BUILDING PERMITS

15.239.01: CODES ADOPTED; GENERAL ADMINISTRATION:

A. Pursuant to Nevada Revised Statutes 244.105, 278.580, 278.583 and 444.350, Lyon County does hereby adopt the following uniform and specialized codes, as amended herein, which will be collectively known as the Building Codes of Lyon County:

1. International Building Code, 2024 edition, published by International Code Council (ICC).
2. International Residential Code, 2024 edition, published by ICC.
3. International Existing Building Code, 2024 edition, published by ICC.
4. International Swimming Pool and Spa Code, 2024 edition, published by ICC.
5. International Energy Conservation Code, 2024 edition, published by ICC.
6. International Fuel Gas Code, 2024 edition, published by ICC.
7. International Mechanical Code, 2024 edition, published by ICC.

8. Uniform Mechanical Code, 2024 edition, published by International Association of Plumbing and Mechanical Officials (IAPMO).

9. Uniform Plumbing Code, 2024 edition, published by IAPMO.

10. National Electrical Code, 2023 edition, National Fire Protection Association (NFPA) 70.

11. International Fire Code, ~~2018~~ 2024 edition, published by ICC.

All contents of the above codes are adopted as amended herein.

B. Where the word "City" appears in the codes, the word "County" shall be substituted and wherever the words "City Council" appear, the words "Board of County Commissioners" shall be substituted.

C. The Board is empowered to hear and decide appeals of order, decisions or determinations made by an official relative to the application and interpretation of this chapter. The Board is further empowered to adopt rules and regulations governing the procedures for such appeals. The Board may delegate this authority to the appropriate Fire District Board for appeals concerning interpretation and enforcement of the International Fire Code. Any reference to a "Board of Appeals" and the authority or procedure of said "Board of Appeals" is hereby deleted from the "Building Codes of Lyon County".

D. The Board will establish fees for County permits, services and inspections provided pursuant to the several codes. Related fee tables contained in the codes are not adopted for that purpose.

E. Any section or provision set forth in the several codes which may be in conflict with the Nevada State Constitution or Nevada Revised Statutes is not adopted.

F. Where differences occur between the provisions of the published codes and the requirements of the State or local authority regarding water distribution or sewage disposal systems, the requirements of the State or local authority shall apply.

G. Where differences occur between the provisions of the published codes and the requirements of the Nevada Division of Manufactured Housing, Division of Health, Division of Environmental Protection or the Comstock Historic District, the more stringent requirements shall apply as determined by the County building official.

H. Where differences occur between the provisions of the published codes and the requirements of the Nevada State Fire Marshal and appropriate Fire Protection District, the codes and amendments adopted by the Nevada State Fire Marshal and the appropriate Fire Protection District shall apply.

I. Where differences or code discrepancies occur between the provisions of the published codes or between the published codes and the titled Lyon County codes, the more stringent shall apply as determined by the County building official. (Ord. 604, 4-4-2019)

J. The provisions of this code, including all codes adopted by reference and any local amendments thereto, shall take effect and be enforced beginning January 1, 2026. All permit applications submitted on or after this date shall be subject to the requirements of the codes in effect on the effective date.

Section 2. The Lyon County Land Use and Development Code, Title 15, Chapter 239, Section 5 is hereby amended as follows:

15.239.05: NORTHERN NEVADA AMENDMENTS:

A. Lyon County adopts the 2024 Northern Nevada amendments dated February 20, 2025, as published by the Northern Nevada Chapter of the International Code Council.

B. Lyon County adopts the Northern Nevada amendments to ~~2018~~ 2024 International Fire Code dated August 8, 2018. (Ord. 604, 4-4-2019)

Section 3. If any section of this ordinance or portion thereof is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such holding shall not invalidate the remaining parts of this ordinance

Section 4. All ordinances, parts of ordinances, chapters, sections, subsections, clauses, phrases or sentences contained in the Lyon County Code in conflict herewith are hereby repealed.

Section 5. This ordinance shall be in full force and effect from and after its passage, approval and publication as required by law.

Proposed on the _____day of _____, 2025.

Proposed by Commissioner: _____

THIS Ordinance has been PASSED, ADOPTED and APPROVED this _____day of _____, 2025 by the following vote of the Board of Commissioners, Lyon County:

Ayes: _____
Nays: _____
Absent: _____

Attest:

_____ _____
County Clerk Chair of the Board

This ordinance shall be in force and effect from and after the _____ day of the month of _____of the year 2025.

LYON COUNTY
COMMUNITY DEVELOPMENT DEPARTMENT
BUILDING * DEVELOPMENT ENGINEERING * PLANNING
CODE ENFORCEMENT * ECONOMIC DEVELOPMENT
27 SOUTH MAIN STREET, YERINGTON, NV 89447
PHONE: 775-463-6592 FAX: 775-463-5305
WEBSITE: www.lyon-county.org

BOARD OF COUNTY COMMISSIONERS

Proposed Action To propose an ordinance amending Lyon County Development Code Title 15, Chapter 239, Section 1 and Section 5 thereby adopting the 2024 IFC Building Codes and 2024 Northern Nevada Amendments to the 2024 IFC.

Meeting Date April 16th, 2025

Prepared By Gavin Henderson – Director

Department Lyon County Community Development Department

RECOMMENDATION

Staff recommends the Board of County Commissioners propose an ordinance amending Lyon County Code Title 15, Chapter 239, Sections 1 and 5 to adopt the 2024 IFC Building Codes and 2024 Northern Nevada Amendments to the 2024 IFC.

BACKGROUND

Lyon County is proposing to adopt the 2024 International Fire Code (IFC) together with the 2024 Northern Nevada Amendments to the IFC in order to align County code with the most current fire safety regulations and ensure consistency with the standards adopted by local fire protection districts and NAC 477. This update is part of the County's ongoing effort to maintain modern, regionally consistent safety standards, even though Lyon County does not review development plans for fire code compliance, which remains the responsibility of the applicable fire protection district.

Every six years, jurisdictions across Northern Nevada participate in a coordinated regional process to review and adopt updated fire and building codes published by the International Code Council (ICC). The 2024 IFC is the most recent edition available, and the Northern Nevada Chapter of the ICC has developed the 2024 Northern Nevada Amendments, which tailor the model code to local conditions and promote uniform fire safety practices across the region. The 2024 IFC and regional amendments include important updates that address:

- Modernized fire protection and life-safety requirements
- Improved alignment with current firefighting practices and equipment
- Updated standards that reflect advances in building and development patterns
- Clearer guidance for fire prevention, emergency access, and hazard mitigation

Adopting the 2024 IFC and the corresponding Northern Nevada Amendments ensures that Lyon County's code remains consistent with evolving regional and national standards, supports the local fire protection districts in their plan review and enforcement responsibilities, aligns the County with NAC 477, and promotes uniform expectations for developers, contractors, and design professionals working throughout Northern Nevada.

Lyon County has historically participated in this regional approach to code adoption, including prior cycles such as the 2006, 2012, and 2018 editions, and will continue this practice as part of its commitment to public safety, consistency, and responsible development.

JUSTIFICATION

Adopting the 2024 International Fire Code (IFC) together with the 2024 Northern Nevada Amendments to the IFC is essential for Lyon County to remain aligned with current fire-safety regulations, support the enforcement practices of local fire protection districts, and maintain consistency with state and regional standards. Although Lyon County does not conduct fire code compliance reviews, those responsibilities lie with the respective fire protection districts, updating County code to reflect the 2024 IFC ensures that local development standards remain compatible with the codes used by the districts that serve Lyon County's communities.

1. Alignment with State Requirements and National Fire-Safety Standards

The State of Nevada encourages local jurisdictions to stay current with nationally recognized fire-safety codes. Updating to the 2024 IFC ensures that Lyon County's ordinances remain in alignment with modern life-safety practices, current fire protection technologies, and evolving state guidance. This adoption better supports the fire protection districts that rely on the latest IFC standards when conducting plan reviews, inspections, and enforcement. The adoption also promotes alignment with NAC 477.

2. Insurance and Risk-Reduction Benefits

Fire protection and life-safety standards influence community risk profiles considered by insurers. Adoption of the 2024 IFC and the corresponding Northern Nevada Amendments supports the fire protection districts in meeting current best practices, which can indirectly contribute to favorable Insurance Services Office (ISO) evaluations. Improved ISO ratings benefit residents and businesses through potential reductions in insurance premiums and reinforce the County's commitment to public safety.

3. Regional Consistency and Alignment with Fire Protection Districts and State Fire Marshall

Northern Nevada jurisdictions collaborate through the regional amendment process led by the Northern Nevada Chapter of the ICC. Local fire protection districts, including those serving Lyon County, are adopting or operating under the 2024 IFC and its regional amendments. Updating County code ensures that:

- Local standards are aligned with fire protection districts and NAC 477 which governs the State Fire Marshall.
- Developers, designers, and contractors receive clear, predictable guidance regarding fire-safety requirements when reviewing county compared to local fire protection districts.
- This consistency reduces confusion, eliminates conflicting standards, and supports efficient project review and approval processes across the region.

5. Response to Modern Fire-Safety Trends and Community Needs

The 2024 IFC includes updated requirements related to fire protection systems, emergency access, wildfire-urban interface considerations, hazardous materials, and advances in building and fire-suppression technology. Adoption of these provisions allows Lyon County to:

- Support modern development patterns
- Reflect evolving fire and life-safety strategies
- Ensure compatibility with fire district enforcement practices
- Improve community resilience to emerging fire-risk conditions

Even though the County does not review fire plans, updating its adopted code provides clarity for developers and reinforces alignment with the fire protection districts responsible for fire oversight.

6. Local Adaptation Through Regional and Local Amendments

While the 2024 IFC provides a nationally recognized baseline, the 2024 Northern Nevada Amendments adapt the code to regional climate, geography, and public-safety needs.

This layered approach which includes model code and regional amendments ensures that the County maintains clear, consistent, and locally relevant fire-safety regulations without duplicating or confusing the plan-review responsibilities of the fire protection districts.

7. NAC 477 – State Fire Marshall

Under NAC 477.740, the Nevada State Fire Marshal Division is required to review fire-safety plans for certain building and construction projects to ensure compliance with the State's adopted fire codes. This includes any building, construction project, or fire-protection system involving public occupancy in a county with a population under 100,000 when no interlocal agreement exists between the State Fire Marshal and the authority having jurisdiction (AHJ).

Because Lyon County remains under 100,000 population, the regulation directly applies. If a project is submitted in an area outside the jurisdiction of a local fire-protection district, and the County does not have an interlocal agreement that delegates review authority, then the County must forward those plans to the State Fire Marshal for review and issuance of the required certificate of compliance. A structure cannot be occupied until the State Fire Marshal has issued this certificate.

Furthermore, Lyon County's adoption of the 2024 IFC and Northern Nevada Amendments to the IFC would align county code with the State Fire Marshall standards.

FISCAL IMPACT

Based on the information available, the fiscal impact associated with Lyon County's adoption of the 2024 International Fire Code (IFC) and the 2024 Northern Nevada Amendments to the IFC is generally expected to be minimal to none. Lyon County does not typically conduct plan reviews or inspections for fire code compliance, except in limited circumstances involving development located outside the jurisdictional boundaries of local fire protection districts. As a result, the adoption of the updated fire code provisions does not appear likely to create additional staffing requirements, operational burdens, or ongoing fiscal obligations for the County.

The primary anticipated cost to the County is the acquisition of the updated IFC code books and related reference materials necessary to satisfy statutory requirements for public inspection. These expenses are limited in scope and appear to be one-time in nature.

Further, it is noted that the Central Lyon Fire Protection District undertook a code adoption process consistent with the procedures outlined in NRS 237, including notification to industry stakeholders, publication of a Business Impact Statement on its website, and conducting two readings of the amendments at its board meetings in October and November. According to the District, no written correspondence was received in response to its notices, and only a small number of comments were offered during the proceedings. While not determinative for Lyon County's fiscal analysis, this information generally suggests that the adoption of the 2024 IFC is not anticipated to result in substantial business impacts within the affected region.

Based on these factors, the proposed adoption of the 2024 IFC and associated regional amendments does not appear likely to result in a significant fiscal impact on Lyon County or the business community.

RECOMMENDED MOTION

If the Board of County Commissioners determines that they approve of use of funds transferred from the General Fund Contingency, then the board shall make a motion similar to following:

Motion to propose an ordinance amending Lyon County Code Title 15, Chapter 239, Sections 1 and 5 to adopt the 2024 IFC Building Codes and 2024 Northern Nevada Amendments to the 2024 IFC.

2024 NORTHERN NEVADA AMENDMENTS TO THE 2024 INTERNATIONAL FIRE CODE

April 22, 2025

Published by the Authorities Having Jurisdiction listed below Participating Agencies

Carson City Fire Department
777 South Stewart Street
Carson City, NV 89701

Central Lyon County Fire ProtectionDistrict
246 Dayton Valley Road, Suite 106
Dayton, NV 89403

East Fork Fire Protection District
1694 County Road
Minden, NV 89423

Elko City Fire Department
911 West Idaho Street
Elko, NV 89801

North Lake Tahoe Fire Protection District
866 Oriole Way
Incline Village, NV 89451

North Lyon County Fire Protect
195 East Main Street
Fernley, NV 89408

Reno Fire Department
One East First Street, 4th Floor
Reno, NV 89501

Smith Valley Fire Protection District
1 Hardie Lane
Smith, NV 89430

Truckee Meadows Fire Protection District
3663 Barron Way
Reno, NV 89511

Storey County Fire Protection District
145 North C Street
Virginia City, NV 89440

Tahoe Douglas Fire Protection District
193 Elks Point Road
Zephyr Cove, NV 89448

Fallon/Churchill Fire Department
20 N Carson Street
Fallon, NV 89406

Preface

This document comprises proposed amendments to the 2024 Edition of the *International Fire Code* as published by the International Code Council, Inc, amended by the Participating Agencies listed above, with the support of the Northern Nevada Chapter of the International Code Council. This document is hereafter referenced as the 2024 Northern Nevada Fire Code Amendments and is prepared to be adopted by reference by the local authority having jurisdiction. These provisions are not considered to be or enacted as the code unless the provisions are adopted and codified by the local Authority Having Jurisdiction.

The purpose of the document is to provide a consistent area-wide application to the enforcement of the fire and life safety code sections noted in the International Fire Code, while still acknowledging necessary modifications to the nationally recognized fire and life safety document based upon the local needs of the community.

Notes:

Deleted language in the base code has been ~~stricken through.~~

Added language to the code section has been <u>underlined.</u>

The entire section amended has been shown for context.

The following participating agencies have reviewed the attached document referenced as the 2024 Northern Nevada Fire Code Amendments and agree with the amendments to the *2024 International Fire Code* as stated therein. It is noted that the code amendments must be approved and adopted and codified by the local Authority Having Jurisdiction to become code. It is the responsibility of the applicant of any permit or their duly authorized agent to contact the local authority with regards to any additional amendments and/or ordinance.

Mike Wilkinson	**Elizabeth Mink**
Carson City Fire Department	**Central Lyon County Fire Protection District**
Amy Ray	**Jamie Winrod**
East Fork Fire Protection District	**Elko City Fire Department**
John James	**Tim Myers**
North Lake Tahoe Fire Protection District	**North Lyon County Fire Protection District**
John Beck	**Matt Nightingale**
Reno Fire Department	**Smith Valley Fire Protection District**
Dale Way	**Scott Snelling**
TruckeeMeadows Fire Protection District	**Storey County Fire Protection District**
Bryce Cranch	**Fire Marshal**
Tahoe Douglas Fire Protection District	**Fallon/Churchill Fire Department**

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2024 Northern Nevada Fire Code Amendments

Section 101.2.1 Appendices

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Appendix C In its entirety
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Appendix L In its entirety
Appendix N In its entirety

Section 102.7.3 Local Codes

"International Fuel Gas Code" is deleted and replaced with "NFPA Standard 54/ANSI Z223.1 National Fuel Gas Code, 2024 edition, or the most current version adopted by the Board for the Regulation of Liquified Petroleum Gas in NAC 590.610."

"International Plumbing Code" is deleted and replaced with "*2024 Uniform Plumbing Code.*"

"International Mechanical Code" is deleted and replaced with "*2024 Uniform Mechanical Code.*"

Section 105.5.22

Section 102 is amended to read as follows:

Section 105.5.22 Hazardous materials. An operational permit is required to store, transport on site, dispense, use or handle, hazardous materials in excess of the amounts listed in Table 105.5.22. When a permit is required to be obtained for hazardous materials, the Nevada Combined Agency Hazardous Material Facility Report must be completed and the appropriate fees paid.

Section 105.5.58 Fire-fighter Air Replenishment Systems:

Section 105.5.58 is added to Section 105.5 to read as follows:

Section 105.5.58 Fire-fighter Air Replenishment System. An operational permit is required to maintain a Fire-fighter-Replenishment System.

Section 105.5.59 Emergency responder radio coverage system

Section 105.5.59 is added to section 105.5 to read as follows:

Section 105.5.59 Emergency responder radio coverage system. An operational permit is required for the operation and maintenance of an emergency ratio coverage system and related equipment, as specified in Section 510.

Section 112: Means of Appeals

Section 112 is deleted in its entirety

~~**112.1 General.** In order to hear and decide appeals of orders, decisions or determinations made by the *fire code official* relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The board of appeals shall be appointed by the applicable governing authority and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business and shall render all decisions and findings in writing to the appellant with a duplicate copy to the *fire code official*.~~

~~**112.2 Limitations on authority.** An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equivalent or better form of construction is proposed. The board shall not have authority to waive requirements of this code.~~

~~**112.3 Qualifications.** The board of appeals shall consist of members who are qualified by experience and training on matters pertaining to the provisions of this code and are not employees of the jurisdiction.~~

~~**112.4 Administration.** The *fire code official* shall take action without delay in accordance with the decision of the board.~~

Section 202 General Definitions:
The following definitions are amended or added in Section 202 General definitions to read:

HIGH-RISE BUILDING. A building with an occupied floor located more than ~~75~~ 55 feet (~~22,806~~ 16,764 mm) above the lowest level of fire department vehicle access.

SPECIAL FIRE PROTECTION PROBLEM FACILITIES. Special Fire Protection Problem Facilities are those facilities that consist of uses similar to the which may result in large size fires or fires with high heat release such as bulk flammable liquid storage, bulk flammable gas storage, large varnish and paint factories, some plastics manufacturing and storage, aircraft hangers, distilleries, refineries, lumberyards, and lumber treatment facilities, grain elevators, chemical plants, coal mines, tunnels, subterranean structures, storage facilities, and warehouses using high rack/piled storage for flammable or pressurized aerosols.

UNWANTED ALARM. Any alarm that occurs that is not the result of a potentially hazardous condition.

Section 203 – Occupancy Classification and Use

Section 203.7 Institutional Group I
Section 203.7 Institutional Group I, is amended to read:
203.7.2 Institutional Group I-2. Institutional Group I-2 occupancy shall include buildings and structures used for medical care on a 24-hour basis for more than ~~five~~ six persons who are incapable of self-preservation. *All portions of a care facility which houses patients or residents which are classified by the State Board of Health as a 'Category 2 resident' and which has an occupant load of more than 10 residents, is classified as an 'I-2' occupancy classification.* This group shall include, but not limited to, the following:

Foster care facilities
Detoxification facilities
Hospitals
Nursing homes
Psychiatric hospitals

Section 203.7.4 Occupational Classification Group I-4, day care facilities. Institutional Group I-4 shall include buildings and structures occupied by more than ~~five~~ six persons of any age who receive custodial care for less than 24 hours by persons other than parents or guardians, relatives by blood, marriage, or adoption, and in a place other than the home of the person cared for. This group shall include, but not be limited to, the following: [NAC 477.283]

Adult day care
Child day care

Section 203.7 Institutional Group I, is amended to read:

Classification as Group E. A child day care facility that provides care for more than ~~five~~ six but no more than 100 children 2 ½ years or less of age, where the rooms in which the children cared for are located on a *level of exit discharge* serving such rooms and each of these child care rooms has an *exit* door directly to the exterior, shall be classified as Group E.

Within a place of religious worship. Rooms and spaces within places of religious worship providing such care during religious functions shall be classified as part of the primary occupancy.

~~Five~~ Six or fewer occupants receiving care. A facility having ~~five~~ six or fewer persons receiving custodial care shall be classified as part of the primary occupancy.

~~Five~~ Six or fewer occupants receiving care in a dwelling unit. A facility such as the above within a dwelling unit and having ~~five~~ six or fewer persons receiving custodial care shall be classified as a Group R-3 occupancy or shall comply with the *International Residential Code.*

Section 203.9 Residential Group R, is amended to read:

203.9.1 Occupancy Classification Residential Group R-1. Residential Group R-1 occupancies containing *sleeping units* where the occupants are primarily transient in nature, including:

Boarding houses (transient) with more than 10 occupants
Brothels
Congregate living facilities (transient) with more than 10 occupants
Hotels (transient)
Motels (transient)

203.9.4 Residential Group R-4. Residential Group R-4 shall include buildings, structures and portions thereof for more than five but not more than 16 persons, excluding staff, who reside on a *24-hour basis* in a supervised residential environment and receive *custodial care*. Buildings of Group R-4 shall be classified as one of the occupancy conditions specified in Section 203.9.4.1 or 203.9.4.2. Group R-4 occupancies shall meet the requirements for construction as defined in Group R-3, except as otherwise provided for in the *International Building Code*. This group shall include, but not be limited to, the following:

Alcohol and drug centers
Assisted living facilities
Congregate care facilities
Group homes
Halfway houses
Residential board and care facilities
Social rehabilitation facilities
Transitional facilities

Section 307.6 is added to Section 307 to read:

307.6 Outdoor fireplaces, fire pits and decorative appliances. Outdoor fireplaces, fire pits and decorative appliances fueled by LP-gas or natural gas, used in assembly occupancies for the public display shall be equipped with an automatic timer shut off valve with a maximum time limit of 3 hours. The timing valve shall be installed a minimum of 2' from the appliance or as approved by the fire code official.

Section 308.1.6.3, is amended to read:

308.1.6.3 Sky lanterns. ~~A person shall not release or cause to be released an untethered sky lantern.~~ Sky lanterns are prohibited.

Section 325 is added to Chapter 3 to read:

Section 325 Battery Recycling and Battery Recycling Storage Facilities

325.1 General. Battery Recycling and Battery Recycling Storage Facilities shall be operated and maintained in accordance with this section and Section 320 where applicable.

325.1.1 Technical Opinion & Report. A technical opinion and report complying with 104.8.2, shall be prepared to evaluate the fire risks associated with all new battery recycling facilities and battery recycling storage facilities. The report shall be provided to the fire code official for review and approval.

325.1.1.1 Items required, to be addressed in the Technical Report:

1. Battery sorting specifications and procedures.
2. Protection from hazards involving flying debris during fire incidents igniting adjacent storage areas, buildings, or other exposures, where applicable.
3. Protection of areas and equipment where battery recycling occurs, including fire detection and suppression, and protection.
4. An evaluation of the suitability of the processing equipment used.
5. Combustible dust hazards, including cathode and anode powders; and processes that involve or generate dust or powders, as applicable.
6. Firefighting access and water supply.
7. Separation distances between materials, incompatible materials, and water reactive materials, as

applicable.

8. Intake and inspection procedures and segregation of high-risk batteries.
9. Storage configuration of batteries or cells, including high piled storage requirements where storage exceeded 6 feet (1.82 m) in height.
10. Ventilation requirements
11. Other items as required by the *fire code official.*
12. Description of method by which the state of charge will be verified and maintained at or below 30%.

325.1.2 Emergency Procedures & Response Plan. Battery Recycling and Battery Recycling Storage Facilities shall develop and maintain emergency procedures and a written safety and emergency response plan for each facility. The plan shall include any emergency conditions unique to that facility including the batteries that it may process or store. The plan shall be submitted to the *fire code official* for review and shall be *approved*.

The safety and emergency response plan shall include (but is not limited to) the following:

1. Procedures for employee training related to anticipated emergency scenarios, including fire events, battery off-gassing, thermal runaway, and post-event mitigation.
2. Spill prevention and control measures
3. Procedures for coordination with emergency responders, including access to hazard communication information, including Safety Data Sheets.
4. A facility map detailing the locations of emergency equipment and access routes.
5. Isolation procedures for batteries exhibiting signs of thermal runaway

325.1.2.1 Abatement. The emergency response plan shall include procedures for the abatement of hazardous conditions following fire events or battery damage. The abatement plan shall be *approved* by the *fire code official.*

325.2 Battery Recycling Facilities

325.2.1 Fire Protection

325.2.1.1 Fire Suppression Systems. Battery recycling facilities shall be protected by an automatic sprinkler system in accordance with Section 903.3

325.2.1.2 Fire Alarm and Detection Systems. A listed or *approved* automatic aspirated smoke detection system, radiant energy fire detection system complying with Section 907.2 shall be installed to protect battery recycling and battery recycling storage areas. Alarm signals from detection systems shall be transmitted to a central station and shall be in accordance with NFPA 72.

325.2.2 Explosion Control

325.2.2.1 Explosion control requirements. Where required by the technical report, explosion control shall be in accordance with Section 911.

325.2.3 Ventilation. Indoor recycling areas shall be provided with a mechanical exhaust ventilation system.

325.2.3.1 Containment Control. The mechanical exhaust ventilation system shall be designed by a registered design professional in accordance with the *International Mechanical Code*, unless an alternative design is *approved*.

325.2.3.1.1 Flammable liquid or gas producing operations. Where a flammable liquid and, or gas is generated as a part of the battery recycling process, the mechanical exhaust system shall be designed in accordance with Section 502.9.5.4 of the *International Mechanical Code*, unless an alternative design is *approved* by the *fire code official.*

325.2.4 Sorting. Sorting of batteries shall be in accordance with the technical opinion report, and is subject to AHJ approval.

325.2.5 Weather Protection. Where outdoor battery recycling areas, and such areas that are enclosed, such areas shall be considered indoor recycling facilities. A technical opinion report, complying with 325.1.1 shall be provided to address the fire resistance rating of the structure, fire detection, fire suppression, and explosion control within the weather protected area.

325.3 Battery Recycling Storage Facitlies

325.3.1 Storage Arrangement Plan. A storage plan, which illustrates the storage arrangement, including the location and dimensions of aisleways, storage piles, storage racks, and any fire protection and detection equipment, and its proximity to the storage, shall be provided to and *approved* be the *fire code official.*

325.3.2 Fire Extinguishers. Fire extinguishing equipment suitable for all types of batteries present shall be provided throughout battery recycling loading and unloading areas in accordance with NFPA 10, travel distance to reach fire-extinguishing equipment shall not exceed 75 feet (22.9m).

325.3.3 Indoor Recycling Storage:

325.3.3.1 Construction Requirements. Where indoor storage areas are located in a building with other uses, battery storage areas shall be separated from the remainder of the building by 2-hour rated fire barriers or horizontal assemblies. Fire barriers shall be constructed in accordance with Section 707 of the *International Building Code,* and horizontal assemblies shall be constructed in accordance with Section 711 of the *International Building Code.*

325.3.4 Outdoor Recycling Storage:

325.3.4.1 Separation. Outdoor storage and outdoor storage areas used to store batteries, including storage beneath weather protection shall comply with Section 320.4.3

325.3.4.2 Storage area size limits and separation. Multiple battery storage areas shall be separated from each other by not less than 20 feet (4572 mm) of open space. No storage area shall encroach upon a fire access lane.

325.3.4.3 Aisles. Aisles used for separation of piles shall be configured to allow for firefighting access.

325.3.4.5.2 Water Supply. Outdoor storage areas shall be equipped throughout the with an adequate water supply in accordance with section 507. The water supply shall be arranged such that no point on the outdoor storage area exceeds 150 feet from a water supply connection.

325.3.5 Packaging. Batteries for recycling are to be stored in weather appropriate noncombustible containers, or containers packaged in accordance with DOTn shipping regulations, and shall be deemed acceptable by the *fire code official*. Under no circumstances will cardboard packaging be used for outdoor storage areas.

325.3.5.1 Damaged Packaging. Batteries shall not be stored in damaged packaging, where the damage compromises the container. If packaging is visibly damaged the batteries shall be promptly repackaged in containers complying with 325.3.5.

Section 403.11.3.2, is amended to read as follows:
403.11.3 Crowd managers. Where facilities or events involve a gathering of greater than 500 people, or 100 people in Group A-2 Occupancies operating as a night club, tavern, or bar, crowd managers shall be provided in accordance with sections 403.11.3.1 through 403.11.3.3.

Section 503.3 is amended to read as follows:
503.3 Marking. Where required by the *fire code official*, curbs shall be painted red and approved signs or other approved notices or markings that include the words "NO PARKING – FIRE LANE" shall be provided every 100 feet or as required by the

fire code official for fire apparatus access roads to identify such roads or prohibit the obstruction thereof. The means by which fire lanes are designed shall be maintained in a clean and legible condition at all times and be replaced or repaired when necessary to provide adequate visibility.

Section 505.1 is amended to read as follows:
505.1 Address identification. New and existing buildings shall be provided with approved maintained all-weather address identification. The address identification shall be legible and placed in a position that is visible from the street or road fronting the property. Address identification characters shall contrast with their background. Address numbers shall be Arabic numbers or alphabetic letters. Numbers shall not be spelled out. Each character shall be not less ~~than 4 inches (102 mm) high with a minimum stroke width of ½ inch (12.7 mm)~~ than a nominal height of 6 inches with a minimum ½ inch stroke form residential occupancies and 12 inches with a 1 inch stroke in commercial occupancies, unless otherwise approved by the *fire code official.* Where required by the *fire code official,* address identification shall be provided in additional approved locations to facilitate emergency response. Where access is by means of a private road and the building cannot be viewed from the public way, a monument, pole, or other sign or means shall be used to identify the structure. Address identification shall be maintained.

Section 507.3 is amended to read as follows:
507.3 Fire Flow. Fire flow requirements for buildings or portions of buildings and facilities shall be determined by an *approved* method. Subject to the approval of the fire authority, if the required fire flow is not available for adequate fire protection, an automatic fire sprinkler system shall be installed throughout the building or buildings. The sprinkler system must meet the requirements of the appropriate NFPA standard. The provisions of this paragraph do not apply if a fire sprinkler system is otherwise required by this chapter or the adopted codes.

Section 507.5.5 is amended to read as follows:
507.5.5 Clear space around hydrants. A 3 foot (914 mm) clear space shall be maintained around the circumference of fire hydrants, except as otherwise required or *approved*. In addition, a minimum clear space of seven and one-half feet (2286 mm) shall be maintained to both sides directly in front of the front pumper connection. A minimum of three feet (914 mm) shall also be maintained clear to the rear of any fire hydrant. These clearance requirements shall apply to any public or private property.

Section 508.1.6 is amended to read as follows:
508.1.6 Required features. The fire command center shall comply with NFPA 72 and shall contain the following features: 1-18 adopted as written with the addition of:

1. HVAC. The central control station shall be provided with heating, cooling, and ventilation (HVAC) systems that are independent of any other building system or area. HVAC for the central control station shall be connected to the emergency power system.
2. Lighting. Lighting shall provide adequate illumination and shall be on emergency service with additional battery backup emergency lighting.
3. Inside Telephone Line. A telephone connected to the premises telephone exchange shall be provided. A current premises telephone directory shall be placed next to this telephone.
4. Disconnect. The main switch for disconnecting the utility power and any alternate power sources shall be in the fire command center. Switches shall be covered to prevent utility power deeds and any alternate power sources before entering the building. After the switch is operated, no live electrical panels, conductors, or feeds within the premises shall remain energized excluding the emergency electrical circuits.

509.1.2 is added to read as follows:
509.1.2 General. A protective cover shall be provided over natural gas meter assemblies serving buildings, or portions thereof, located at an elevation of 5,800 feet (1,767.48 m) or higher. The protective cover shall be designed to be equal to or greater than the Building Design Load (as determined by the Building Department have jurisdiction). The cover shall be approved by the natural gas supplier, shall be installed over the meter assembly, and securely supported to the ground or diagonally to the building wall. When supported to the ground, the footing of the supports shall extend a minimum of 6-inches (152.4 mm) below finished grade. Pre-case concrete piers may be used in lieu of poured footings, provided they are placed on stable soil.

Section 510.1 is deleted and replaced with:

~~**510.1 Emergency responder communications enhancement systems in new buildings.** Approved in building emergency responder communications enhancement systems (ERCES) for emergency responders shall be provided in all new buildings. In building ERCES within the building shall be based on the existing coverage levels of the public safety communications systems utilized by the jurisdiction, measured at the exterior of the building. The ERCES, where required, shall be of a type determined by the *fire code official* and the *frequency license holder(s)*. This section shall not require improvements of the existing public safety communications systems.~~

~~**Exceptions:**~~

1. ~~Where *approved* by the building official and the *fire code official*, a wired communication system in accordance with Section 907.2.13.2 shall be permitted to be installed or maintained instead of an *approved* communication coverage system.~~
2. ~~Where it is determined by the *fire code official* that the communications coverage system is not needed.~~
3. ~~In facilities where emergency responder communications coverage is required and such systems, components or equipment required could have a negative impact on the normal operations of that facility, the *fire code official* shall have the authority to accept an automatically activated emergency responder communication coverage system.~~
4. ~~One story building nor exceeding 12,000 square feet (1115 m^2) with no below ground area (s).~~

510.1 Emergency responder communications enhancement systems in new buildings. Emergency responder radio coverage systems must be provided throughout any building that meets one of the following standards:

1. High-rise buildings: Buildings with a floor used for human occupancy that is located more than 55 feet above that lowest level above fire department vehicle access.
2. Underground and below-grade buildings: Buildings with a floor level that is below the finished floor of the lowest level of the exit discharge of any level.
3. Other buildings: The fire code official is authorized to require a technical opinion and report, in accordance with Section 104.7.2, for buildings whose design, due to location, size, construction type or other factors, could impede radio coverage as required by Section 510.4.1. The report shall make recommendations regarding the need for an emergency responder radio coverage system.

Section 510.2 is deleted and replaced with:

~~**510.2 Emergency responder communications enhancement system in existing buildings.** Existing buildings shall be provided with *approved* in building emergency responder communications enhancement system for emergency responders as required in Chapter 11.~~

510.2 Emergency responder communications enhancement system in existing buildings. Existing buildings, other than buildings with an occupational classification of Residential Group R-3 which do not have approved radio coverage for emergency responders in the building based on existing coverage levels of the public safety communication systems, must be equipped with such coverage according to one of the following conditions.

1. Existing buildings that do not have approved radio coverage, as determined by the Fire Chief, in accordance with Section 510.4.1.
2. Where an existing wired communication system cannot be repaired or is being replaced.
3. Within a time frame established by the adopting authority.

   Exception: An existing building is not required to be equipped with such coverage where the *fire code official* determines that the radio coverage for emergency responders is not needed.

Section 510.4.2 is amended to read as follows:

510.4.2 System design. The in-building emergency responder communications enhancement system shall be designed in accordance with Section 510.4.2.1 through 510.4.2.8 and NFPA 1225 except 18.12.3.3.

Section 511 is added to read as follows:

511.1 Firefighter Equipment Rooms. In all new high-rise buildings of ten (10) or more stories in height, The Reno Fire Department will evaluate the need for firefighter equipment rooms. If required by the Fire Chief, the owner/operator shall provide and equip firefighter equipment rooms intended for the sole use of the fire department during emergency operations. The number, location, type, size, inventory, and access of the firefighter equipment rooms shall be approved by the fire department.

Section 901.11 is added to read as follows:

901.11 Unwanted fire alarms. Unwanted fire alarms are a violation of this code. Then a fire alarm system is required by this code, it shall be the responsibility of the property owner or owner's authorized agent to maintain the system and properly educate occupants, tenants, and/or employees in accepted behavioral practices that will minimize or eliminate false and/or nuisance alarms. This includes nuisance activations in response to predictable environmental stimuli such as but not limited to cooking fumes, smoking, and construction activities. Where unwanted alarms become repetitive, the fire code official is authorized to charge fees or issue administrative citations to the property owner in accordance with the fee schedule or administrative code as established by the applicable governing authority.

Section 903.2 is amended to read as follows:

Section 903.2 Where required. *Approved automatic sprinkler systems* in new buildings and structures shall be provided in locations described in Section 903.2.1 through 903.2.12. In all occupancies except Group R-3 and U occupancies, a building that is more than two stories in height shall, including any height added by useable floor space, have an automatic fire sprinkler system throughout. Any open parking garage and any airport control tower is exempt from this requirement to install an automatic sprinkler system.

Tables 903.2.1 and 903.2.2

Exception: Spaces or areas in telecommunications buildings used exclusively for telecommunications equipment, associated electrical power distribution equipment, batteries and standby engines, provided those spaces or areas are equipped throughout with an automatic smoke detection system in accordance with Section 907.2 and are separated from the remainder of the building by not less than 1-hour *fire barriers* constructed in accordance with Section 707 of the *International Building Code* or not less than 2-hour *horizontal assemblies* constructed in accordance with Section 711 of the *International Building Code,* or both.

Section 903.2.1.2 is amended to read as follows:

903.2.1.2 Group A-2. An *automatic sprinkler system* shall be provided for Group A-2 occupancies and throughout all stories from the A-2 occupancy to and including the levels of exit discharge serving that occupancy where one of the follow conditions exists:

1. The *fire area* exceeds 5,000 square feet (464 m^2)
2. The *fire area* has an *occupant load* of 100 or more.
3. The *fire area* is located on the floor other than a *level of exit discharge* serving such occupancies.

Occupancies containing a casino, regardless of occupancy classification, must be designed and built with a sprinkler system classified as an Ordinary Hazard Group 2.

Add Table 903.2.1 to Section 903.2, to read as follows:

Table 903.2.1[a] Required Automatic Sprinklers by Fire Area, Response Time and Height for Buildings Designed and Constructed with the International Building Code Including A, B, E, F, H, I, M, S, and U Occupancies. Sprinklers are required when any one of the listed conditions are met, or when otherwise required by this Code.

Fire Authority	Fire Area [b,c] In square feet (sf)	Height In stories	Response Time In minutes (min)
Carson City Fire Department	≥ 5,000 [e]	>2	NA
Central Lyon County Fire Protection District	≥5000	> 2	-
East Fork Fire Protection District	≥5,000	>2	NA

Elko City Fire Department	≥5,000	> 2	-
North Lake Tahoe Fire Protection District	≥5,000	2 with basement or >2	NA
North Lyon Fire Protection District	≥5,000	>2	NA
Reno Fire Department	>5,000	>2	NA
Smith Valley Fire Protection District	≥5,000	>2	NA
Sparks Fire Department	≥5,000	>2	>6
Storey County Fire Protection District	≥5,000	2 with basement or >2	NA
Tahoe Douglas Fire Protection District	All	NA	NA
Truckee Meadows Fire Protection District[d]	≥5,000	>2	NA

This table is in addition to any other automatic sprinkler requirements in this code.

a. Fire areas may be separated according to IBC 707.3.10.
b. Any addition or remodel that increases the fire area will be included in the calculation for the total square footage.
c. Airport towers and open parking garages complying with IBC 406.5 are exempt from this table.
d. All S-1 occupancies within the Truckee Meadows Fire Protection District shall have a fire sprinkler system installed, regardless of square footage.

Add Table 903.2.2 to read as follows:

Table 903.2.2[a] Required Automatic Sprinklers by Fire Area, Response Time and Height For Structures Designed and Constructed with the International Residential Code Sprinklers are required when any one of the listed conditions are met, or when otherwise required by this Code.

Fire Authority	Fire Area [b] In square feet (sf)	Height In stories	Response Time In minutes (min)
Carson City Fire Department	≥ 5,000 [c]	-	-
Central Lyon County Fire Protection District	≥5000	>2	-

East Fork Fire Protection District	≥5000	>2	-
Elko City Fire Department	≥5000	>2	-
North Lake Tahoe Fire Protection District	≥5,000	2 with basement or ≥3	-
North Lyon Fire Protection District	≥5,000	-	-
Reno Fire Department	>5,000	-	>6
Smith Valley Fire Protection District	≥5,000	>2	-
Sparks Fire Department	≥5000	-	>6
Storey County Fire Protection District	≥5000	-	-
Tahoe Douglas Fire Protection District	>3,600	2 with basement or ≥2	-
Truckee Meadows Fire Protection District	New: ≥ 5,000 sf Existing: > 7,000 sf	-	-

a. This table is in addition to any other automatic sprinkler requirements in this code.
b. Any addition or *remodel* that increases the fire area will be included in the calculation for the total square footage. The use of fire walls and fire barriers shall not be allowed to be used to reduce the size of the fire areas.
c. A one-time increase in the fire area is permitted provided said increase is <50% of the structure's existing permitted fire area square footage.

Section 903.2.3 is amended to read as follows:

903.2.3 Group E. An *automatic sprinkler system* shall be provided for Group E occupancies ~~as follows~~ where one of the following exists:

1. Throughout all Group E *fire areas* greater than ~~12,000~~ 5,000 square feet (~~1,115~~ 464 m^2) in area.
2. The Group E fire area is located on a floor other than a level of exit discharge serving such occupancies.

   Exception: In buildings where every classroom has not fewer than one exterior exit door at ground level, an automatic sprinkler system is not required in any area below the lowest level of exit discharge serving that area.
3. Group E fire area has an occupant load of 300 or more.
4. Daycare facilities where there is occupancy from 12:00 am – 6:00 am and care for 7 or more children.
5. In high schools where *automatic fire sprinkler systems* are provided, the automatic fire sprinkler systems for automotive and woodworking shops must be *designed* to Ordinary Hazard, Group 1 automatic fire sprinkler systems *criteria, or as required by the Authority Having Jurisdiction.*

Section 903.2.11.7 is added to read as follows:

903.2.11.7. Protection of available storage height. In Group S-1 and all other storage areas the fire sprinkler system shall be designed to protect storage up to the maximum available storage height. The minimum sprinkler density shall be equivalent to that required for a Class IV commodity pursuant to NFPA 13.

Section *903.3.1.1 is amended to read as follows:*

903.3.1.1 NFPA 13 Sprinkler Systems. Where the provisions of this code require that a building or portion thereof be equipped throughout with an *automatic sprinkler system* in accordance with this section, sprinklers shall be installed throughout in accordance with NFPA 13 except as provided in Section 903.3.1.1.1 and 903.1.1.2.

All Group R-3 occupancies larger than ten thousand (10,000) square feet (3,048 m^2) in area or exceeding four (4) stories in height are required to have automatic sprinklers installed throughout in accordance with NFPA 13.

903.4 is amended to read as follows:

903.4.1 Sprinkler system supervision and alarms. Valves controlling the water supply for *automatic sprinkler systems,* pumps, tanks, water levels and temperatures, critical are pressures and water-flow switches on all sprinkler systems shall be electrically supervised by a *listed* fire alarm control unit.

Exceptions:

1. *Automatic sprinkler systems* protecting one- and two- family *dwellings* that have not been converted to an R-4 as defined by 203.9.4.
2. Limited area systems in accordance with Section 903.3.8
3. *Automatic sprinkler systems* installed in accordance with NFPA 13R where a common supply main is used to supply both domestic water and the *automatic sprinkler system,* and a separate shutoff valve for the *automatic sprinkler system* is not supervised.
4. Jocky pump control valves that are sealed or locked in open position.
5. Control valves to commercial kitchen hoods, painted spray booths or dip tanks that are sealed or locked in the open position. This exception will not apply to any of the above-mentioned control valves if they are located in a building equipped with any fire alarm or protection system that is required to be monitored by a central station fire alarm company.
6. Valves controlling the fuel supply to fire pump engines that are sealed or locked in the open position.
7. Trim valves to pressure switches in dry, pre-action, and deluge sprinkler systems that are sealed or locked in the open position.

903.4.3 Alarms. An *approved* audible and visual sprinkler waterflow alarm device, located on the exterior of the building in an *approved* location, shall be connected to each *automatic sprinkler system.* Such sprinkler waterflow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Where a waterflow switch is required by Section 903.4.1 to be electrically supervised, such sprinkler waterflow alarm devices shall be actuation of the *automatic sprinkler system* shall actuate the building *fire alarm system.* One interior audible and visual notification appliance shall be provided near the main entrance or in a normally occupied location. In multiple-tenant facilities, one interior audible and visual notification appliance shall be provided near the main entrance or in a normally occupied location for each tenant space.

Exception: *Automatic sprinkler systems* protecting one- and two-family *dwellings.*

Section 903.4.4 is added to read as follows:

903.4.4 Floor control valves. Approved supervised indicating control valves shall be provided at the point of connection to the riser and/or standpipe on each floor ~~in high rise buildings~~ in multi-story buildings.

Section 906.2 is amended to read as follows:

906.2 General requirements. Portable fire extinguishers shall be selected, installed, and maintained in accordance with this section and NFPA 10. The internal components of carbon, dioxide, wet chemical, halogenated agent, aqueous film-forming foam (AFFF) and film-forming fluoroprotein (FFFP) portable fire extinguishers shall be examined in accordance with ~~N.F.P.A.~~ NFPA Standard 10, 2022 edition, Table 7.3.3.1. The internal components of all other portable fire extinguishers shall be examined annually.

Exceptions:

1. Travel distance to reach an extinguisher shall not apply to the spectator seating portions of Group A-5 Occupancies.
2. Thirty-day inspections shall not be required, and maintenance shall be allowed to be ~~once every three years~~ annually for dry-chemical or halogenated agent portable fire extinguishers that are supervised by a listed and approved electronic monitoring device, provided that all of the following conditions are met:

   2.1. Electronic monitoring shall confirm that extinguishers are properly positioned, properly charged and unobstructed.

   2.2 Loss of power or circuit continuity to the electronic monitoring device shall initiate a trouble signal.

   2.3 The extinguishers shall be installed inside of a building or cabinet in a noncorrosive environment.

   2.4 Electronic monitoring devices and supervisory circuits shall be tested ~~every three years~~ annually when extinguisher maintenance is performed.

   2.5 A written log of required hydrostatic test dates for extinguishers shall be maintained by the owner to verify that hydrostatic tests are conducted at the frequency required by NFPA 10.
3. In Group I-3, portable fire extinguishers shall be permitted to be located at staff locations.

Section 907.2.9.4 is added to read as follows:

907.2.9.4 Automatic smoke detection system in Group R-4. An automatic smoke detection system that activates the occupant notification system in accordance with Section 907.5 shall be installed in *corridors*, waiting areas open to *corridors* and *habitable spaces* other than *sleeping units* and kitchens.

Exceptions:

1. Smoke detection in *habitable spaces* is not required where the facility is equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1.
2. An automatic smoke detection system is not required in buildings that do not have interior *corridors* serving *sleeping units* and where each *sleeping unit* has a *means of egress* door opening directly to an exit or to an exterior *exit access* that leads directly to an exit.

Section 907.2.11.8 is added to read as follows:

907.2.11.8 Alternative to single- and multiple-station smoke alarms. Fire alarm in place of single and multiple-station smoke alarms may be replaced by an NFPA 72 Household compliant fire alarm system. Plans shall be submitted to the local fire authority and permit obtained prior to installation. All fire alarm installation contractors shall be required to be licensed by both the Nevada State Contractors Board and Nevada State Fire Marshal (F License).

Section 907.5.2.1.1 is amended to read as follows:

907.5.2.1.1 Average sound pressure. The audible alarm notification appliances shall provide a sound pressure level of 15 decibels (dBA) above the average ambient sound level or 5 dBA above the maximum sound level having a duration of at lease 60 seconds, whichever is greater, in every occupiable space within the building. The minimum sound pressure level shall be 90 dBA in mechanical equipment rooms and 80 dBA in all other occupancies.

Section 907.5.2.3 is amended to read as follows:

907.5.2.3 Visible Alarms. Visible alarm notification appliances shall be provided in accordance with Sections 907.5.2.3.1 through 907.5.2.3.3.

Exceptions:

1. Visible alarm notification appliances are not required in *alterations*, except where an existing fire alarm system is upgraded or replaced, or a new fire alarm system is installed.
2. Visible alarm notification appliances shall not be required in *exits* as defined in Chapter 2.
3. Visible alarm notification appliances shall not be required in elevator cars.
4. Visual alarm notification appliances are not required in critical care areas of Group I-2, Condition 2 occupancies that are in compliance with Section 907.2.6, Exception 2.
5. Visible alarm notification appliances are not required in storage rooms, electrical rooms and mechanical

rooms that are not normally occupied and are less than 400 square feet.

6. Visible alarm notification appliances are not required in janitor closets.
7. A visible alarm notification appliance installed in a nurses' control station or other continuously attended staff location in a Group I-2, Condition 2 suite shall be an acceptable alternative to the installation of visible alarm notification appliances throughout the suite or unit in Group I-2, Condition 2 occupancies that are in compliance with Section 907.2.63, Exception 2.

Section 907.10 is amended to read as follows:

Section 907.10 Smoke alarm maintenance. Smoke alarms shall be tested and maintained in accordance with the manufacturer's instructions. Smoke alarms shall be replaced when they fail to respond to operability tests, or when they exceed 10 years from the date of manufacture, unless an earlier replacement is specified in the manufacturer's published instructions. The provisions of this section apply when any work that requires a permit is conducted on a new or existing building or structure.

Section 913.4 is amended to read as follows:

913.4 Valve Supervision. Where provided, the fire pump suction, discharge and bypass valves, and isolation valves on the backflow prevention device or assembly shall be supervised open by one of the following methods.

1. Central-station, proprietary or remote-station signaling service.
2. Local signaling service that will cause the sounding of an audible signal at a constant attended location.
3. ~~Locking valves open.~~
4. ~~Sealing of valves and *approved* weekly recorded inspection where valves are located within fenced enclosures under the control of the *owner*.~~

Section 915.1.1 is amended to read as follows:

915.1.1 Where Required. Carbon monoxide detection shall be provided in Group I-1, I-2, I-4, and R, including, without limitation, Residential Group R-3 occupancies used for transient occupancy of less than 30 days, and in classrooms in Group E occupancies in the locations specified in Section 915.2 where any of the conditions in Sections 915.1.2 through 915.1.6 exist.

1. In buildings that contain a *CO source*.
2. In buildings that contain or are supplied by a CO-producing forced-air furnace.
3. In buildings with attached private garages.
4. In buildings that have a CO-producing vehicle that is used within the building.

Section 1023.9.1 is amended to read as follows:

1023.9.1 Signage requirements. Stairway identification signs shall comply with all of the following requirements:

1. The signs shall be a minimum size of 18 inches (457mm) by 12 inches (305 mm).
2. The letters designating the identification of the interior exit stairway and ramp shall be not less than 1 ½ inches (38mm) in height.
3. The number designating the floor level shall be not less than 5 inches (127mm) in height and located in the center of the sign.
4. Other lettering and numbers shall be not less than 1 inch (25mm) in height.
5. Characters and their background shall have a non-glare finish. Characters shall contrast with their background, with either light characters on a dark background or dark characters on a light background.
6. Where signs required by Section 1023.9 are installed in the interior exit stairways and ramps of buildings subject to Section 1025, the signs shall be made of the same materials as required by Section 1025.4.
7. The background color of the sign shall be green if roof access is available from the signed stairway. The background color of the sign shall be red if roof access is not available from the signed stairway.

Chapter 11 is deleted

Section 4104.2 is deleted

Section 5601.1.3 is amended to read as follows:

5601.1.3 Fireworks. Except as otherwise provided in this section, the possession, manufacture, storage, sale, use, and handling of Class 1.3 and Class 1.4 pyrotechnics are only allowed in jurisdictions where specifically approved by local ordinance.

Exceptions:

1. Storage and handling of fireworks is allowed in Section 5604.
2. Manufacture, assembly and testing of fireworks as allowed in Section 5605.
3. The use of fireworks for firework displays as allowed in Section 5608.
4. Except as otherwise provided in this section, the possession, manufacture, storage, sale, use and handling of Class 1.3 and Class 1.4 pyrotechnics are only allowed in jurisdictions where specifically approved by local ordinance.
5. The possession, storage, sale, handling and use of specific types of Division 1.4G fireworks where allowed by applicable laws, ordinances, and regulations, provided such fireworks comply with CPSC 16 CFR Parts 1500 and 1507, and DOTn 49 CFR Parts 100-185, as applicable for consumer fireworks.

Section 5601.1.6 is amended to read as follows:

5601.1.6 Exploding targets. The possession, manufacture, sale, and use of exploding targets, including binary exploding targets, are prohibited.

Section 6101.1 is amended to read as follows:

6101.1 Scope. Storage, handling and transportation of liquified petroleum gas (LP-gas) and the installation of LP-gas equipment pertinent to systems for such uses shall comply with this chapter and NFPA 58. Properties of LP-gases shall be determined in accordance with Appendix B of NFPA 58. In the event of a conflict between any provision in this chapter and the regulations of the Board for the Regulation of Liquified Petroleum Gas, the regulations of the Board take precedence.

Appendix B is adopted in whole in accordance with 2024 Edition of the International Fire Code Section 101.2.

The following definition is added in Section B102 Definitions to read as follows:

Special Fire Protection Problem Facilities. Special Fire Protection Problem Facilities are those facilities that consist of uses similar to that which may result in large size fires or fires with high heat release such as bulk flammable liquid storage, bulk flammable gas storage, large varnish and paint factories, some plastics manufacturing and storage, aircraft hangers, distilleries, refineries, lumberyards and lumber treatment facilities, grain elevators, chemical plants, coal mines, tunnels, subterranean structures, storage facilities, and warehouses using high rack/piled storage for flammables or pressurized aerosols.

Section B103.3 is amended to read as follows:

B103.3 Areas without water supply systems. For information regarding water supplies for fire-fighting purposes in rural and suburban areas in which adequate and reliable water supply systems do not exist, the fire code official is authorized to utilize the International Wildland-urban Interface Code or NFPA 1142 where the site is not considered as a "special fire protection problem" as defined in Section B102.

Table B105.2 of Appendix B Fire-Flow Requirements for Buildings is amended to read as follows:

TABLE B105.2

REQUIRED FIRE FLOW FOR BUILDINGS OTHER THAN ONE-AND TWO-FAMILY DWELLINGS, GROUP R-3 AND R-4 BUILDINGS AND TOWNHOUSES

AUTOMATIC SPRINKLER SYSTEM (DESIGN STANDARD)	MINIMUM FIRE FLOW (gallons per minute)	FLOW DURATION (hours)
No auto sprinkler system	Value in Table B105.1(2)	Duration in Table B105.1(2)
Section 903.3.1.1 of the International Fire Code	~~25~~ 50 % of the value in Table B105.1(2)[a]	Duration in Table B105.1(2) at the reduced flow rate
Section 903.3.1.2 of the International Fire Code	~~25~~ 50 % of the value in Table B105.1(2)[a]	Duration in Table B105.1(2) at the reduced flow rate

For SI: 1 gallon per minute = 3.785 L/m

a. The reduced flow rate shall be not less than ~~1,000~~ 1,500 gallons per minute.

Adopt Appendix C in its entirety.

Adopt Appendix D in its entirety.

Adopt Appendix E in its entirety.

Adopt Appendix H in its entirety.

Adopt Appendix L in its entirety.

Adopt Appendix N in its entirety.

REVIEW OF PLANS

NAC 477.740 Plans subject to review; certificate of compliance required; general requirements. (NRS 477.030)

1. The State Fire Marshal Division shall review any plans concerning the construction, the site and any system for protection from fire to determine if there is compliance with the provisions of this chapter and any adopted codes relating to safety from fire and the protection of life of any:

(a) Building owned or leased by the State;

(b) Facility for public education in a county whose population is 400,000 or more, or when requested by the local building official or administrator of the facility;

(c) Health and care facility or child care facility licensed by the State; and

(d) Building, project for construction or system for protection from fire involving public occupancy, excluding single-family detached dwellings, in any county whose population is less than 100,000, if there is no interlocal agreement between the State Fire Marshal Division and the authority having jurisdiction or for which a request for review is received from the owner or the authority having jurisdiction.

2. All projects requiring review must receive a certificate of compliance with the provisions of this chapter and any adopted codes relating to safety from fire and the protection of life from the State Fire Marshal before the building or structure is occupied. If requested by the local building official, the State Fire Marshal will provide input regarding possible temporary occupancy of the building or structure. A certificate of compliance from the State Fire Marshal may be suspended or revoked by the State Fire Marshal if his or her approval was granted in error or because incorrect information was supplied, or if the State Fire Marshal determines that the project is in violation of any code adopted under this chapter, this regulation or other law.

3. The plans and specifications of the project must be drawn to scale upon substantial paper or cloth and must be of sufficient clarity to indicate the location, nature and extent of the work proposed and to show in detail that it conforms to this chapter and the codes adopted under this chapter. Plans must be drawn, signed and stamped by those persons who are authorized by specific statute and the State Contractors' Board to draw plans and specifications.

4. A plan which provides for fire stopping must provide details on the technical specifications for the materials used and the testing and listing for those materials.

(Added to NAC by St. Fire Marshal, 7-16-85, eff. 8-1-85; A 2-17-94; R220-99, 9-25-2000; R102-08, 9-18-2008)

PROPOSED REGULATION OF THE

STATE FIRE MARSHAL

LCB File No. R205-24

September 16, 2025

EXPLANATION – Matter in ***italics*** is new; matter in brackets **[**~~omitted material~~**]** is material to be omitted.

AUTHORITY: §§ 1-10, 12, 13, 16, 20-30, 32-37 and 39-46, NRS 477.030; § 11, NRS 459.773 and 477.030; § 14, NRS 477.030, 477.031 and 477.045; § 15, NRS 477.030, 477.031 and 477.033; §§ 17-19, 31 and 38, NRS 477.030 and 477.033.

A REGULATION relating to fire protection; revising certain definitions; updating information relating to certain publications adopted by reference; revising the deadline for an application for renewal of a license or certificate of registration; revising provisions relating to inspections of certain systems relating to fire protection; and providing other matters properly relating thereto.

Legislative Counsel's Digest:

Existing law requires the State Fire Marshal to adopt regulations relating to the prevention of fire. (NRS 477.030) Existing regulations adopt by reference certain nationally recognized codes, subject to certain additions and deletions. (NAC 477.281, 477.283) **Section 9** of this regulation updates certain publications adopted by reference to include the 2024 editions of the *International Fire Code*, the *International Building Code*, the *International Existing Building Code*, the *International Wildland-Urban Interface Code*, the *Uniform Mechanical Code* and the *Uniform Plumbing Code* and certain editions of various codes and standards of the National Fire Protection Association. **Section 10** of this regulation sets forth various changes to those publications adopted by reference. **Sections 12, 14, 15 and 17-45** of this regulation make conforming changes to references to these publications.

Existing regulations adopt by reference the 2016 *Emergency Response Guidebook* and any subsequent revision of the publication that has been approved by the State Fire Marshal for use in this State as a reference guide for responding to accidents and incidents involving hazardous materials. (NAC 477.2833) **Section 11** of this regulation instead adopts by reference the 2024 *Emergency Response Guidebook* and any subsequent revision of the publication that has been approved by the State Fire Marshal for use in this State.

Subject to certain exceptions, existing regulations provide that all original licenses and certificates of registration expire on December 31 of the year in which they are issued and require that an application and the appropriate fee for the renewal of a license or certificate of registration be received by the State Fire Marshal on or before the date specified for renewal, or the firm or registrant holding the license or certificate of registration is required to cease performing those services authorized by the license or certificate of registration. (NAC 477.310)

Section 13 of this regulation revises this deadline to instead require the application and appropriate fee to be received on or before 5 p.m. on the date specified for renewal.

Existing regulations require that certain systems relating to fire protection be inspected by a licensed or certified person or firm, as applicable, and as required by the appropriate adopted standards published by the National Fire Protection Association. (NAC 477.335, 477.460) **Sections 16 and 25** of this regulation also require that the person or firm, as applicable, conducting the inspection be capable of making any necessary repairs.

Sections 1-8 of this regulation revise the definitions of various terms applicable to provisions of the Nevada Administrative Code relating to fire protection.

Section 46 of this regulation repeals an obsolete definition no longer applicable in the chapter of the Nevada Administrative Code relating to fire protection.

Section 1. NAC 477.025 is hereby amended to read as follows:

477.025 "Alarm signal" means a signal indicating an emergency requiring immediate action such as ~~[an alarm of]~~ ***a signal indicating a*** fire ***.*** ~~[from a manual box, a water flow alarm, an alarm from an automatic fire alarm system or other emergency signal.]~~

Sec. 2. NAC 477.030 is hereby amended to read as follows:

477.030 "Alter" and "alteration" mean any change, modification or deviation in construction ~~[or occupancy.]~~ ***, including, without limitation, any renovation to an existing structure. The term does not include a repair or addition to an existing structure.***

Sec. 3. NAC 477.055 is hereby amended to read as follows:

477.055 "Building" means any structure ~~[erected for the support, shelter or enclosure of persons, animals or property.]~~ ***used or intended to be used to support or shelter any occupancy.***

Sec. 4. NAC 477.060 is hereby amended to read as follows:

477.060 "Building official" means the official of the State ***,*** ~~[or]~~ a political subdivision ***or other designated authority or a designee thereof*** charged with the administration ***and enforcement*** of ~~[a building code.]~~ ***the International Building Code.***

Sec. 5. NAC 477.095 is hereby amended to read as follows:

477.095 "Dwelling" means ~~[any structure]~~ ***a building*** which contains one or two dwelling units ~~[intended to be]~~ used ~~[for human occupancy.]~~ ***or designed or intended to be used, rented or leased for occupancy.***

Sec. 6. NAC 477.100 is hereby amended to read as follows:

477.100 "Dwelling unit" means a single unit which has provisions for ***complete and independent*** living ~~[and]~~ ***facilities for one or more persons, including, without limitation, permanent provisions for living,*** sleeping ~~[and which may provide for]~~ ***, eating,*** cooking and sanitation.

Sec. 7. NAC 477.230 is hereby amended to read as follows:

477.230 "Supervisory signal" means a signal indicating the need of action in connection with the supervision of ~~[watchmen or of sprinkler and other extinguishing]~~ ***security guards, protective*** systems or equipment or with the maintenance features of ~~[other protective]~~ ***related*** systems.

Sec. 8. NAC 477.240 is hereby amended to read as follows:

477.240 "Trouble signal" means a signal ~~[indicating trouble of any nature, such as a]~~ ***initiated by a fire system or device indicating a fault in a monitored*** circuit ~~[break]~~ or ~~[ground, occurring in the devices or wiring associated with a protective signaling system.]~~ ***component of the fire system or device.***

Sec. 9. NAC 477.281 is hereby amended to read as follows:

477.281 1. The State Fire Marshal hereby adopts by reference the following nationally recognized codes with additions and deletions as noted in NAC 477.283:

(a) *International Fire Code,* ~~[2018]~~ ***2024*** edition, including appendices B, C, D, F and H. A copy is available from the International Code Council by mail at 25442 Network Place, Chicago,

Illinois 60673-1254, or at the Internet address ~~[http://]~~***https://*****www.iccsafe.org**, at the price of ~~[$119]~~ ***$123*** for members and ~~[$159]~~ ***$164*** for nonmembers.

(b) *International Building Code*, ~~[2018]~~ ***2024*** edition. A copy is available from the International Code Council by mail at 25442 Network Place, Chicago, Illinois 60673-1254, or at the Internet address ~~[http://]~~***https://*****www.iccsafe.org**, at the price of ~~[$148]~~ ***$152*** for members and ~~[$197]~~ ***$203*** for nonmembers.

(c) *International Existing Building Code*, ~~[2018]~~ ***2024*** edition. A copy is available from the International Code Council by mail at 25442 Network Place, Chicago, Illinois 60673-1254, or at the Internet address ~~[http://]~~***https://*****www.iccsafe.org**, at the price of ~~[$95]~~ ***$84*** for members and ~~[$126]~~ ***$112*** for nonmembers.

(d) *International Wildland-Urban Interface Code*, ~~[2018]~~ ***2024*** edition, including Appendices A and B. A copy is available from the International Code Council by mail at 25442 Network Place, Chicago, Illinois 60673-1254, or at the Internet address ~~[http://]~~***https://*****www.iccsafe.org**, at the price of ~~[$59]~~ ***$61*** for members and ~~[$79]~~ ***$81*** for nonmembers.

(e) *Uniform Mechanical Code*, ~~[2018]~~ ***2024*** edition. A copy is available from the International Association of Plumbing and Mechanical Officials by mail at 4755 E. Philadelphia Street, Ontario, California 91761, or at the Internet address **https://iapmostore.org**, at the price of ~~[$128.]~~ ***$144.***

(f) *Uniform Plumbing Code*, ~~[2018]~~ ***2024*** edition. A copy is available from the International Association of Plumbing and Mechanical Officials, by mail at 4755 E. Philadelphia Street, Ontario, California 91761, or at the Internet address **https://iapmostore.org**, at the price of ~~[$128.]~~ ***$144.***

2. In addition to the codes adopted pursuant to subsection 1, the State Fire Marshal hereby adopts by reference the following codes and standards of the *National Fire Codes* to supplement other codes adopted in this chapter:

(a) NFPA 10, ~~[2018]~~ ***2022*** edition;

(b) NFPA 11, ~~[2016]~~ ***2021*** edition;

(c) NFPA 12, ~~[2015]~~ ***2022*** edition;

(d) NFPA 12A, ~~[2015]~~ ***2022*** edition;

(e) NFPA 13, ~~[2016]~~ ***2022*** edition;

(f) NFPA 13D, ~~[2016]~~ ***2022*** edition;

(g) NFPA 13R, ~~[2016]~~ ***2022*** edition;

(h) NFPA 14, ~~[2016]~~ ***2024*** edition;

(i) NFPA 15, ~~[2017]~~ ***2022*** edition;

(j) NFPA 16, ~~[2015]~~ ***2019*** edition;

(k) NFPA 17, ~~[2017]~~ ***2021*** edition;

(l) NFPA 17A, ~~[2017]~~ ***2021*** edition;

(m) NFPA 18, ~~[2017]~~ ***2021*** edition;

(n) NFPA 20, ~~[2016]~~ ***2022*** edition;

(o) NFPA 22, ~~[2018]~~ ***2023*** edition;

(p) NFPA 24, ~~[2016]~~ ***2022*** edition;

(q) NFPA 25, ~~[2017]~~ ***2023*** edition;

(r) NFPA 30, ~~[2018]~~ ***2024*** edition;

(s) NFPA 30B, ~~[2015]~~ ***2023*** edition;

(t) NFPA 45, ~~[2015]~~ ***2024*** edition;

(u) NFPA 52, ~~[2016]~~ ***2026*** edition;

(v) NFPA 54/ANSI Z223.1, National Fuel Gas Code, ~~[2018]~~ ***2024*** edition, or the most current version adopted by reference by the Board for the Regulation of Liquefied Petroleum Gas in NAC 590.610;

(w) NFPA 55, ~~[2016]~~ ***2023*** edition;

(x) NFPA 58, ~~[2017]~~ ***2024*** edition, or the most current version adopted by reference by the Board for the Regulation of Liquefied Petroleum Gas in NAC 590.600;

(y) NFPA 72, ~~[2016]~~ ***2022*** edition;

(z) NFPA 80, ~~[2016]~~ ***2022*** edition;

(aa) NFPA 85, ~~[2015]~~ ***2023*** edition;

(bb) NFPA 86, ~~[2015]~~ ***2023*** edition;

(cc) NFPA 90A, ~~[2018]~~ ***2024*** edition;

(dd) NFPA 90B, ~~[2018]~~ ***2024*** edition;

(ee) NFPA 92, ~~[2018]~~ ***2021*** edition;

(ff) NFPA 96, ~~[2017]~~ ***2024*** edition;

(gg) NFPA 99, ~~[2018]~~ ***2024*** edition;

(hh) NFPA 99B, ~~[2018]~~ ***2024*** edition;

(ii) Section 18.3.4.5 of NFPA 101, ~~[2018]~~ ***2024*** edition;

(jj) NFPA 102, ~~[2016]~~ ***2021*** edition;

(kk) NFPA 110, ~~[2016]~~ ***2022*** edition;

(ll) NFPA 111, ~~[2013]~~ ***2022*** edition;

(mm) NFPA 122, ~~[2015]~~ ***2023*** edition;

(nn) NFPA 130, ~~[2017]~~ ***2023*** edition;

(oo) NFPA 140, ~~[2018]~~ ***2024*** edition;

(pp) NFPA 150, ~~[2019]~~ ***2022*** edition;

(qq) NFPA 160, ~~[2016]~~ ***2021*** edition, or the most current version adopted by reference by the Board for the Regulation of Liquefied Petroleum Gas in NAC 590.615;

(rr) NFPA 385, ~~[2017]~~ ***2022*** edition;

(ss) NFPA 400, ~~[2016]~~ ***2022*** edition;

(tt) NFPA 403, 2018 edition;

(uu) NFPA 407, ~~[2017]~~ ***2022*** edition;

(vv) NFPA 409, ~~[2016]~~ ***2022*** edition;

(ww) NFPA 410, ~~[2015]~~ ***2020*** edition;

(xx) NFPA 415, ~~[2016]~~ ***2022*** edition;

(yy) NFPA 418, ~~[2016]~~ ***2024*** edition;

(zz) NFPA 472, 2018 edition;

(aaa) NFPA 495, ~~[2018]~~ ***2023*** edition;

(bbb) NFPA 501A, ~~[2017]~~ ***2025*** edition, or the most current version adopted by reference by the Board for the Regulation of Liquefied Petroleum Gas in NAC 590.620;

(ccc) NFPA 600, ~~[2015]~~ ***2025*** edition;

(ddd) NFPA 704, ~~[2017]~~ ***2022*** edition;

(eee) NFPA 730, ~~[2018]~~ ***2023*** edition;

(fff) NFPA 731, ~~[2017]~~ ***2023*** edition;

(ggg) NFPA 750, ~~[2015]~~ ***2023*** edition;

(hhh) NFPA 853, ~~[2015]~~ ***2020*** edition;

(iii) NFPA 901, ~~[2016]~~ ***2024*** edition;

(jjj) NFPA 909, ~~[2017]~~ ***2025*** edition;

(kkk) NFPA 914, ~~[2015]~~ ***2023*** edition;

(lll) NFPA 1001, 2019 edition;

(mmm) NFPA 1003, 2019 edition;

(nnn) NFPA 1051, ~~[2016]~~ ***2020*** edition;

(ooo) NFPA 1072, ~~[2017]~~ ***2022*** edition;

(ppp) NFPA 1081, ~~[2018]~~ ***2024*** edition;

(qqq) NFPA 1122, ~~[2018]~~ ***2026*** edition;

(rrr) NFPA 1123, ~~[2018]~~ ***2022*** edition;

(sss) NFPA 1124, ~~[2017]~~ ***2022*** edition;

(ttt) NFPA 1126, ~~[2016]~~ ***2021*** edition;

(uuu) NFPA 1127, ~~[2018]~~ ***2026*** edition;

(vvv) NFPA 1141, 2017 edition;

(www) NFPA 1142, ~~[2017]~~ ***2022*** edition;

(xxx) NFPA 1143, ~~[2018]~~ ***2018*** edition;

(yyy) NFPA 1144, 2018 edition;

(zzz) NFPA 1192, ~~[2018]~~ ***2026*** edition, or the most current version adopted by reference by the Board for the Regulation of Liquefied Petroleum Gas in NAC 590.640;

(aaaa) NFPA 1194, ~~[2018]~~ ***2026*** edition;

(bbbb) NFPA 1221, ~~[2016]~~ ***2019*** edition;

(cccc) NFPA 1402, 2019 edition;

(dddd) NFPA 1403, 2018 edition;

(eeee) NFPA 1452, ~~[2015]~~ ***2020*** edition;

(ffff) NFPA 1600, 2019 edition;

(gggg) NFPA 1616, ~~[2017]~~ ***2020*** edition;

(hhhh) ~~[NFPA 1710, 2016 edition;~~

~~(iiii) NFPA 1720, 2014 edition;~~

~~(jjjj)]~~ NFPA 1851, ~~[2014]~~ ***2020*** edition;

~~[(kkkk)]~~ ***(iiii)*** NFPA 1852, 2019 edition;

~~[(llll)]~~ ***(jjjj)*** NFPA 1855, 2018 edition;

~~[(mmmm)]~~ ***(kkkk)*** NFPA 1858, 2018 edition;

~~[(nnnn)]~~ ***(llll)*** NFPA 1961, ~~[2013]~~ ***2020*** edition;

~~[(oooo)]~~ ***(mmmm)*** NFPA 1962, 2018 edition;

~~[(pppp)]~~ ***(nnnn)*** NFPA 1963, 2019 edition;

~~[(qqqq)]~~ ***(oooo)*** NFPA 1965, 2014 edition;

~~[(rrrr)]~~ ***(pppp)*** NFPA 1971, 2018 edition;

~~[(ssss)]~~ ***(qqqq)*** NFPA 1977, ~~[2016]~~ ***2022*** edition;

~~[(tttt)]~~ ***(rrrr)*** NFPA 2001, ~~[2015]~~ ***2022*** edition;

~~[(uuuu)]~~ ***(ssss)*** NFPA 2010, ~~[2015]~~ ***2020*** edition;

~~[(vvvv)]~~ ***(tttt)*** NFPA 2400, ~~[2019]~~ ***2024*** edition; and

~~[(wwww)]~~ ***(uuuu)*** NFPA 3000, ~~[2018]~~ ***2024*** edition.

➥ A copy of each of the codes and standards is available ***to view*** free of charge at the Internet address ~~[http://]~~***https://***www.nfpa.org ~~[.]~~ ***or, to purchase, at the price of $141.30 for members or $157 for nonmembers.***

3. Where no specific codes or standards are specified in the *International Fire Code*, ~~[2018]~~ ***2024*** edition, the applicable standards of the NFPA may be used.

Sec. 10. NAC 477.283 is hereby amended to read as follows:

477.283 1. The following changes are made to the ~~[2018]~~ ***2024*** edition of the *International Fire Code* as adopted by reference in NAC 477.281:

(a) "International Fuel Gas Code" is deleted and replaced with "NFPA 54/ANSI Z223.1, National Fuel Gas Code, ~~[2018]~~ ***2024*** edition, or the most current version adopted by the Board for the Regulation of the Liquefied Petroleum Gas in NAC 590.610."

(b) "International Mechanical Code" is deleted and replaced with ~~["2018]~~ ***"2024*** Uniform Mechanical Code."

(c) "International Plumbing Code" is deleted and replaced with ~~["2018]~~ ***"2024*** Uniform Plumbing Code."

(d) Section ~~[105.6.20]~~ ***105.5.22*** is revised by adding a new paragraph to read as follows: "When a permit is required to be obtained for hazardous material, the Nevada Combined Agency Hazardous Material Facility Report must be completed and the appropriate fees paid."

(e) Section ~~[109]~~ ***112*** is deleted.

(f) In section 202, in the definition of "High-Rise Building," "75 feet (22 860 mm)" is deleted and replaced with "55 feet (16 764 mm)."

(g) In section ~~[202, under "Occupancy Classification":~~

~~(1) The]~~ ***203.7.2, the*** definition of "Institutional Group I-2" is revised by adding: "All portions of a care facility which houses patients or residents which are classified by the State Board of Health as a 'Category 2 resident' and which has an occupant load of more than 10 residents, is classified as an 'I-2' occupancy classification."

~~[(2)]~~ ***(h)*** In ***section 203.7.4,*** the definition of "Institutional Group I-4, day care facilities," "five" is deleted and replaced with "six."

~~[(3) The]~~ ***(i) In section 203.9.1, the*** definition of "Residential Group R-1" is revised by adding "Brothel" to the list.

~~[(4)]~~ ***(j)*** In compliance with NRS 449.1865, in ***section 203.9.3,*** the definition of "Residential Group R-3," "for five or fewer persons receiving care" is deleted and replaced with "for three or more persons receiving care."

~~[(5) The]~~ ***(k) In section 203.9.4, the*** definition of "Residential Group R-4" is revised by adding:

~~[(I)]~~ ***(1)*** "Reintegration facilities"; and

~~[(II)]~~ ***(2)*** "Transitional living facilities."

~~[(h) Section 308.1.4 is deleted.]~~

(i) ***(l)*** In section ~~[308.1.6.3,]~~ ***308.1.7,*** "an untethered sky lantern" is deleted and replaced with "a sky lantern or similar device with an open flame fuel source."

~~[(j)]~~ ***(m)*** In section 503.2.3, "surfaced so as to provide all-weather driving capabilities" is deleted and replaced with "surfaced and paved so as to provide all-weather driving capabilities that are acceptable to and approved by the authority having jurisdiction.

Exception: Temporary access roads serving only buildings under construction are not required to be paved."

~~[(k)]~~ ***(n)*** Section 505.1 is deleted and replaced with: "New and existing buildings must be provided with approved address numbers, building numbers or address identification. The address numbers, building numbers or address identification must be legible and placed in a position that is visible from the street or road fronting the property. The characters in address numbers, building numbers or address identification must contrast with their background. Address numbers, building numbers or address identification must be Arabic numbers or

alphabetical letters. Each number, character and letter must be a minimum of 6 inches (152.4 mm) high for buildings that are within 50 feet of the street, 12 inches high for buildings that are within 51 to 100 feet of the street and 18 inches high for buildings that are over 100 feet from the street. Each number, character and letter must be a minimum stroke width of 0.5 inch (12.7 mm). Where access is by means of a private road or driveway and the building cannot be viewed from the public way, a monument, pole or other sign or means must be used to identify the structure. The requirements of this paragraph can be adjusted to allow large Arabic numbers or alphabetical letters as required by the fire code official for the needs of campuses and complexes for planning and coordination as listed under NFPA 3000, ~~[2018]~~ ***2024*** edition."

~~[(l)]~~ ***(o)*** Section 507.3 is revised by adding a new paragraph to read as follows: "Subject to the approval of the fire authority, if the required fire flow is not available for adequate fire protection, an approved automatic fire sprinkler system must be installed throughout the building or buildings. The sprinkler system must meet the requirements of the appropriate NFPA standard. The provisions of this paragraph do not apply if a fire sprinkler system is otherwise required by this chapter or the adopted codes."

~~[(m)]~~ ***(p)*** Section 510.1 is deleted and replaced with: "Emergency responder radio coverage systems must be provided throughout any building that meets one of the following standards:

1. *High-rise buildings:* Buildings with a floor used for human occupancy that is located more than 55 feet above the lowest level of fire department vehicle access.

2. *Underground and below-grade buildings:* Buildings with a floor level that is below the finished floor of the lowest level of the exit discharge of any level.

3. *Other buildings:* The fire code official is authorized to require a technical opinion and report, in accordance with section ~~[104.7.2,]~~ ***104.2.2,*** for buildings whose design, due to location,

size, construction type or other factors, could impede radio coverage as required by section 510.4.1. The report shall make a recommendation regarding the need for an emergency responder radio coverage system."

~~[(n)]~~ ***(q)*** Section 510.2 is deleted and replaced with: "Existing buildings, other than buildings with an occupational classification of Residential Group R-3, which do not have approved radio coverage for emergency responders in the building based on existing coverage levels of the public safety communications systems, must be equipped with such coverage according to one of the following conditions:

1. Existing buildings that do not have approved radio coverage, as determined by the Fire Chief, in accordance with section 510.4.1.

2. Where an existing wired communication system cannot be repaired or is being replaced.

3. Within a time frame established by the adopting authority.

Exception: An existing building is not required to be equipped with such coverage where the fire code official determines that the radio coverage for emergency responders is not needed."

~~[(o)]~~ ***(r)*** Section 903.2.1.2 is revised by adding a new paragraph to read as follows: "Occupancies containing a casino, regardless of occupancy classification, must be designed and built with a sprinkler system classified as an ordinary Hazard Group 2."

~~[(p) Section 903.2.3 is revised by adding a new paragraph to read as follows: "In high schools where automatic sprinkler systems are provided, the automatic sprinkler systems for the automotive and woodworking shops must be designed to meet ordinary hazard group 1 criteria."~~

~~(q)]~~ ***(s)*** Section 903.2 is revised by adding a new paragraph to read as follows: "In all occupancies except group R-3 and U occupancies, a building that is more than two stories in height, including any height added by usable floor space, must have an automatic sprinkler

system throughout. Any open parking garage and any airport control tower is exempt from this requirement to install an automatic sprinkler system."

~~[(r)]~~ ***(t)*** Section 906.2 is revised by adding new sentences following the first sentence to read as follows: "The internal components of carbon dioxide, wet chemical, halogenated agent, aqueous film-forming foam (AFFF) and film-forming fluoroprotein (FFFP) portable fire extinguishers shall be examined in accordance with NFPA 10, ~~[2018]~~ ***2022*** edition, table 7.3.3.1. The internal components of all other portable fire extinguishers shall be examined annually."

~~[(s)]~~ ***(u)*** Section 907.5.2.1.1 is revised by adding a new paragraph to read as follows: "The minimum sound pressure levels of audible alarm notification appliances shall be 90 dBA in mechanical equipment rooms and 80 dBA in all other occupancies."

~~[(t)]~~ ***(v)*** Section 907.5.2.3 is revised by adding the following exceptions following exception ~~[4:]~~ ***5:***

~~["5.]~~ ***"6.*** Visible alarm notification appliances are not required in storage rooms, electrical rooms and mechanical rooms that are not normally occupied and are less than 400 square feet.

~~[6.]~~ ***7.*** Visible alarm notification appliances are not required in janitor closets."

~~[(u)]~~ ***(w)*** Section 907.10 is revised by adding: "The provisions of this section apply when any work that requires a permit is conducted on a new or existing building or structure."

~~[(v)]~~ ***(x)*** In section ~~[915.1.1,]~~ ***915.2,*** "occupancies and" is deleted and replaced with "occupancies, including, without limitation, Residential Group R-3 occupancies ~~[used]~~ for transient occupancy of less than 30 days**.** ~~[, and.]~~"

~~[(w)]~~ ***(y)*** Chapter 11 is deleted.

~~[(x)]~~ ***(z) Section 4104.2 is deleted.***

(aa) Section 5601.1.3 is revised by deleting the first sentence and adding a new sentence to read as follows: "Except as otherwise provided in this section, the possession, manufacture, storage, sale, use and handling of Class 1.3 and Class 1.4 pyrotechnics are only allowed in jurisdictions where specifically approved by local ordinance."

~~[(y)]~~ ***(bb)*** Section 6101.1 is revised by adding a new paragraph to read as follows: "In the event of a conflict between any provision in this chapter and the regulations of the Board for the Regulation of Liquefied Petroleum Gas, the regulations of the Board take precedence."

~~[(z)]~~ ***(cc)*** In table B105.2 of Appendix B, "25 percent" is deleted and replaced with "50 percent."

2. The following changes are made to the ~~[2018]~~ ***2024*** edition of the *International Building Code* as adopted by reference in NAC 477.281:

(a) "International Fuel Gas Code" is deleted and replaced with "NFPA 54/ANSI Z223.1, National Fuel Gas Code, ~~[2018]~~ ***2024*** edition, or the most current version adopted by the Board for the Regulation of Liquefied Petroleum Gas in NAC 590.610."

(b) "International Mechanical Code" is deleted and replaced with ~~[~~"2018~~]~~ ***"2024*** Uniform Mechanical Code."

(c) "International Plumbing Code" is deleted and replaced with ~~[~~"2018~~]~~ ***"2024*** Uniform Plumbing Code."

(d) Section 113 is deleted.

(e) In section 202, in the definition of "High-Rise Building," "75 feet (22 860 mm)" is replaced with "55 feet (16 764 mm)."

(f) Section 308.3 is revised by adding a new paragraph to read as follows: "All portions of a care facility which houses patients or residents which are classified by the State Board of Health as a 'Category 2 resident' and which has an occupant load of more than 10 residents, is classified as an 'I-2' occupancy classification."

(g) In section 308.5, "five" is deleted and replaced with "three."

(h) Section 310.2 is revised by adding "Brothel" to the list.

(i) In compliance with NRS 449.1865, in section 310.4, "for five or fewer persons receiving care" is deleted and replaced with "for three or more persons receiving care."

(j) In section 310.5, the following are added:

(1) "Reintegration facilities"; and

(2) "Transitional living facilities."

(k) To section 403.5.3 at the end of the last sentence, is added: "or an activation of any fire alarm initiating device within the building or a failure of both the primary and backup power supplies."

(l) In section 403.5.4, "75 feet (22 860 mm)" is deleted and replaced with "55 feet (16 764 mm)."

(m) Section 903.2.1.2 is revised by adding a new paragraph to read as follows: "Occupancies containing a casino, regardless of occupancy classification, must be designed and built with a sprinkler system classified as an ordinary Hazard Group 2."

(n) Section 903.2.3 is revised by adding a new paragraph to read as follows: "In high schools where automatic sprinkler systems are provided, the automatic sprinkler systems for the automotive and woodworking shops must be designed to meet ordinary hazard group 1 criteria."

(o) Section 903.2 is revised by adding a new paragraph to read as follows: "In all occupancies except group R-3 and U occupancies, a building that is more than two stories in height, including any height added by usable floor space, must have an automatic sprinkler system throughout. Any open parking garage and any airport control tower is exempt from this requirement to install an automatic sprinkler system."

(p) Section 907.5.2.1.1 is revised by adding a new paragraph to read as follows: "The minimum sound pressure level of audible alarm notification appliances shall be 90 dBA in mechanical equipment rooms and 80 dBA in all other occupancies."

(q) Section 907.5.2.3 is revised by adding the following exceptions following exception ~~[4.]~~ ***5:***

~~[~~"5.~~]~~ ***"6.*** Visible alarm notification appliances are not required in storage rooms, electrical rooms and mechanical rooms that are not normally occupied and are less than 400 square feet.

~~[~~6.~~]~~ ***7.*** Visible alarm notification appliances are not required in janitor closets."

(r) In section ~~[~~1010.1.9.12,~~]~~ ***1010.2.6,*** exception 3 is revised to read as follows: "In stairways serving buildings other than high-rise buildings, doors are permitted to be locked on the side opposite the egress side, provided that the doors can be opened from the egress side. Doors must automatically unlock upon the activation of a fire alarm system or a fire sprinkler waterflow alarm, or for a power failure. Exit discharge doors must remain unlocked."

3. The following changes are made to the ~~[~~2018~~]~~ ***2024*** edition of the *International Existing Building Code* as adopted by reference in NAC 477.281:

(a) "International Fuel Gas Code" is deleted and replaced with "NFPA 54/ANSI Z223.1, National Fuel Gas Code, ~~[2018]~~ ***2024*** edition, or the most current version adopted by the Board for the Regulation of Liquefied Petroleum Gas in NAC 590.610."

(b) "International Mechanical Code" is deleted and replaced with ~~["2018]~~ ***"2024*** Uniform Mechanical Code."

(c) "International Plumbing Code" is deleted and replaced with ~~["2018]~~ ***"2024*** Uniform Plumbing Code."

4. The following changes are made to the ~~[2018]~~ ***2024*** edition of the *International Wildland-Urban Interface Code* as adopted by reference in NAC 477.281:

(a) ~~[Section 106 is deleted.~~

~~(b)]~~ In section ~~[108.4,]~~ ***106.4,*** "pursuant to Section 502" is deleted.

(b) Section 112 is deleted.

(c) In section 302.3, "on a three-year basis or more frequently as deemed necessary by the legislative body" is deleted and replaced with "as deemed necessary by the code official."

(d) Section 404.1 is revised by deleting "provided in order to qualify as a conforming water supply for the purpose of Table 503.1 or as."

(e) Chapter 5 is deleted.

(f) Section 602.1 is deleted.

(g) Section 603.2 is revised by deleting "Building or structures, constructed in compliance with the conforming defensible space category of table 503.1, shall comply with the fuel modification distance contained in table 603.2."

(h) Section B101.1 is revised to read as follows: "Where required, vegetation management plans must be submitted to the code official and the State Forester Firewarden for review and approval as part of the plans required for a permit."

5. The following changes are made to the ~~[2018]~~ ***2024*** edition of the *Uniform Mechanical Code* as adopted by reference in NAC 477.281:

(a) "International Fuel Gas Code" is deleted and replaced with "NFPA 54/ANSI Z223.1, National Fuel Gas Code, ~~[2018]~~ ***2024*** edition, or the most current version adopted by the Board for the Regulation of Liquefied Petroleum Gas in NAC 590.610."

(b) "International Plumbing Code" is deleted and replaced with ~~["2018]~~ ***"2024*** Uniform Plumbing Code."

6. As used in this section, "casino" means any room in which gaming is conducted, including, without limitation, any bar, cocktail lounge or other facility housed therein as well as the area occupied by the games. The term does not include any establishment that is operated pursuant to a restricted license as defined in NRS 463.0189.

Sec. 11. NAC 477.2833 is hereby amended to read as follows:

477.2833 1. The State Fire Marshal hereby adopts by reference the ~~[2016]~~ ***2024*** *Emergency Response Guidebook* published by the Pipeline and Hazardous Materials Safety Administration of the United States Department of Transportation and any subsequent revision of the publication that has been approved by the State Fire Marshal for use in this State. Each revision of the publication shall be deemed approved by the State Fire Marshal unless the State Fire Marshal disapproves of the revision within 180 days after the date of publication of the revision.

2. The most recent publication of the *Emergency Response Guidebook* that has been approved by the State Fire Marshal will be available for inspection at the ~~[office of the Division]~~ ***Office*** of Emergency Management ~~[of]~~ ***within*** the ~~[Department of Public Safety,]~~ ***Office of the Governor,*** 2478 Fairview Drive, Carson City, Nevada 89701, or may be obtained, free of charge, from the United States Department of Transportation at the Internet address **https://www.phmsa.dot.gov**.

3. The State Fire Marshal will:

(a) Review each revision of the publication described in subsection 1 to ensure its suitability for this State; and

(b) File a copy of each revision of the publication described in subsection 1 that the State Fire Marshal approves with the Secretary of State and the State Library, Archives and Public Records Administrator.

Sec. 12. NAC 477.2835 is hereby amended to read as follows:

477.2835 1. Fire departments that provide training to firefighters using techniques or exercises which involve the use of fire or any device that produces or may be used to produce fire must follow the requirements set forth in NFPA 1403, as adopted by reference in NAC 477.281, on live fire-training evolutions.

2. Each person directly supervising a live fire-training evolution and each person managing a training program involving live fire-training evolutions must hold a certification from the State Fire Marshal as a Fire Service Instructor II or higher, as described in NFPA 1041, as adopted by reference in subsection 5.

3. The construction of each structure used for a live fire-training evolution must comply with the requirements set forth in NFPA 1403, as adopted by reference in NAC 477.281,

including, without limitation, design oversight and periodic inspection conducted by a person licensed in accordance with the provisions of chapter 625 of NRS who is working within his or her area of expertise.

4. Any evaluation, inspection or modification of an acquired structure that is to be used for a live fire-training evolution must comply with the requirements set forth in NFPA 1403, as adopted by reference in NAC 477.281.

5. The State Fire Marshal hereby adopts by reference NFPA 1041, 2019 edition, of the *National Fire Code* and any subsequent revision of the publication that has been approved by the State Fire Marshal for use in this State. Each revision of the publication shall be deemed approved by the State Fire Marshal unless the State Fire Marshal disapproves of the revision within 180 days after the date of publication of the revision. A copy of the most recent publication of the standard will be available for inspection at the main office of the State Fire Marshal and ~~[may be obtained, free of charge,]~~ at the Internet address ~~[http://]~~***https://*****www.nfpa.org** ~~[.]~~ ***to view free of charge or to purchase at the price of $141.30 for members or $157 for nonmembers.***

6. The State Fire Marshal will:

(a) Review each revision of the publication described in subsection 5 to ensure its suitability for this State; and

(b) File a copy of each revision of the publication described in subsection 5 that the State Fire Marshal approves with the Secretary of State and the State Library, Archives and Public Records Administrator.

7. A local government, city, town, county or district which establishes a paid full-time or part-time fire department that has been given the responsibility of organizing and deploying fire

suppression operations, emergency medical operations and special operations to the public shall follow the minimum training requirements of personnel as set forth in NFPA 1001, as adopted by reference in NAC 477.281.

8. ~~[A local government, city, town, county or district which establishes a volunteer fire department that has been given the responsibility of organizing and deploying fire suppression operations, emergency medical operations and special operations to the public shall follow the minimum training requirements of personnel as set forth in NFPA 1720, as adopted by reference in NAC 477.281.~~

~~9.]~~ The owner or operator of an industrial, commercial, institutional or similar property which establishes a facility fire brigade shall follow the minimum training requirements of personnel as set forth in NFPA 600, as adopted by reference in NAC 477.281, and the minimum job performance requirements for industrial fire brigade personnel as set forth in NFPA 1081, as adopted by reference in NAC 477.281.

~~[10.]~~ ***9.*** A state or local government, city, town, county or district which establishes a fire protection organization on the management of wildland fire suppression or which, through an agreement, responds to wildland fires shall follow the minimum training requirements of personnel as set forth in NFPA 1051 and 1143, as adopted by reference in NAC 477.281, or as set forth by the National Wildfire Coordinating Group.

Sec. 13. NAC 477.310 is hereby amended to read as follows:

477.310 1. Except as otherwise provided in this chapter and chapter 477 of NRS, all original licenses and certificates of registration expire on December 31 of the year in which they are issued.

2. Application for renewal must be made annually. The application must be accompanied by the appropriate fee. The State Fire Marshal will accept applications for renewal from October 1 through December 31.

3. If an application and the appropriate fee for renewal of a license or certificate of registration is not received by the State Fire Marshal on or before ***5 p.m. on*** the date specified for renewal, then the firm or registrant holding the license or certificate of registration shall cease to perform those services authorized by the license or certificate of registration.

4. If a certificate of registration has expired and the registrant desires to continue to perform the acts requiring a certificate of registration, the registrant must apply to the State Fire Marshal for an original certificate of registration and pay the full fee for certification. The State Fire Marshal may require the applicant to be retested.

5. Any change of information on the license or certificate of registration must be reported to the State Fire Marshal in writing within 7 days after the change. A new license or certificate of registration will be issued upon notification and payment of the prescribed fee.

6. Initial fees for a new license must be paid in full unless the fees are paid in the final quarter of the licensing year. Initial fees which are paid in the final quarter will be reduced by 50 percent.

7. If a fee for a licensed firm is not paid by the time it is due, a late charge of 12 percent per month will be assessed as an administrative fee for processing. The charge will be assessed beginning at the end of the first business day after the fee is due. A licensed firm may not engage in any work authorized by this chapter or chapter 477 of NRS until the fee is paid.

8. Within 7 calendar days after employing a registrant or a new employee, a licensed firm shall report that fact and the name of the registrant or new employee to the State Fire Marshal. A

licensed firm shall report any termination by a registrant within 7 calendar days after the termination.

Sec. 14. NAC 477.323 is hereby amended to read as follows:

477.323 1. A person shall not store a hazardous material in excess of the amount set forth in the *International Fire Code*, ~~[2018]~~ ***2024*** edition, as adopted by reference pursuant to NAC 477.281, unless he or she has been issued an operational permit by the State Fire Marshal to store that material. A permit must be renewed annually.

2. Permits may be revoked or suspended when, after investigation, the State Fire Marshal determines that:

(a) The permit is being used by a person other than the person to whom it was issued.

(b) The permit is being used for a location other than that for which it was issued.

(c) Any of the conditions or limitations set forth in the permit have been violated.

(d) The holder of the permit has failed, refused or neglected to comply with any order or notice served upon him or her under the provisions of this chapter within the time provided therein.

(e) A false statement or misrepresentation as to a material fact was made in the application for the permit or the plans on which the permit was based.

3. The State Fire Marshal may suspend or revoke any permit if an inspection or investigation reveals a hazardous condition that endangers the safety of any person, or if the holder of the permit is not in compliance with this section. The State Fire Marshal may reinstate a suspended permit after the holder of the permit has paid the annual fee and corrected all deficiencies identified. A permit that has been revoked will not be reissued. A suspension will not exceed 24 months, after which the permit will be reissued or revoked.

4. A permit may be issued to store, transport on-site, dispense, use or handle hazardous materials in excess of the amount listed in the *International Fire Code*, ~~[~~2018~~]~~ ***2024*** edition, section ~~[~~105.6.20,~~]~~ ***105.5.22,*** for a fee of $150.

5. The State Fire Marshal will issue an operational permit for the manufacture, storage, sale and handling of explosives, blasting agents or fireworks for a fee of $1,100 and, in addition thereto, may charge a fee of $110 for each building or structure at the facility and an amount equal to the actual expenses incurred for travel, salaries and administrative expenses.

6. The $60 surcharge required by NRS 477.045 will be collected on all permits to store hazardous materials, in addition to any other fees.

7. A permit expires on March 1 of each year and must be renewed annually on or before March 1 by paying the appropriate fee. If a fee for a permit is not paid by the time it is due, a late charge of 12 percent per month will be assessed as an administrative fee for processing. The charge will be assessed beginning at the end of the first business day after the fee is due. A holder of a permit may not engage in any work authorized by this chapter or chapter 477 of NRS until the fee is paid.

8. Revocation or suspension of a permit does not preclude the State Fire Marshal from proceeding with a criminal investigation. Evidence from a criminal investigation may be used as evidence in an administrative hearing for the revocation or suspension of a permit.

9. If a holder of a permit or an applicant for a permit intends to terminate the storage, dispensing, handling or use of hazardous materials at a facility, the holder or applicant must submit a plan to the State Fire Marshal outlining the proposed termination of the storage, dispensing, handling or use of the hazardous materials at least 30 days before the date on which the facility is to be closed. The plan must demonstrate that the reported quantities of materials

have been or will be transported, disposed of or removed in a manner that presents no hazardous conditions to any person or property.

10. If a person is required to report hazardous materials to the State Emergency Response Commission, the person must obtain a permit from the State Fire Marshal for such hazardous materials.

Sec. 15. NAC 477.325 is hereby amended to read as follows:

477.325 1. Except as otherwise provided in this chapter, the schedule of fees for:

(a) A license to install or maintain portable fire extinguishers and fixed systems and a blaster's certificate of registration is as follows:

(1) Type A for full service of portable fire extinguishers $528

(2) Type B for portable fire extinguishers without hydrostatic service 429

(3) Type B-C or B-D for Type B with hydrostatic service (C is low pressure, D is high pressure hydro) 450

(4) Type E for fixed fire extinguishing systems:

(I) E-1 for pre-engineered systems 165

(II) E-2 for all other engineered systems 165

(III) Both E-1 and E-2 330

(5) Type F for fire alarm 528

(6) Type G for automatic sprinkler systems, except those covered by NFPA 13D and 13R, ~~[2016]~~ ***2022*** editions 528

(7) Type G-U for all underground private fire service mains and their appurtenances 297

(8) Type G-U for private hydrant repair, installation and maintenance 297

(9) Type G-U for the testing of backflow devices 297

(10) Type H for hood and duct cleaning 528

(11) Type I for standpipe systems 528

(12) Type J for systems classified pursuant to NFPA 13D and 13R, ~~[2016]~~ ***2022*** editions 528

(13) A new blaster's certificate of registration 66

(14) Annual renewal of a blaster's certificate 66

(15) Type MG license to install medical gas systems 297

(16) Type EWD (Early Warning Device) license to sell or install heat detectors 132

(b) A new certificate of registration (each class) 85

(c) Renewal of a certificate of registration 40

(d) Issuance of a duplicate license or certificate 14

(e) Change of information on a certificate or license 14

(f) An annual license for the sale at retail of all types of fire extinguishers 31

(g) Retaking an examination or any part of an examination 25

(h) A certificate of registration and license for codes and regulations in interior design 120

(i) Renewal of a certificate of registration and license for codes and regulations in interior design 56

2. The fees for a license do not apply to this State or its political subdivisions. The fees for certificates of registration apply in all cases. A certificate of registration operates as a license for

a person to perform a specific job for a company licensed pursuant to this chapter and chapter 477 of NRS.

3. The State Fire Marshal will refund the fee for a license, less an administrative fee of $38.50, if a written request for a refund, stating that the licensee has not, after being licensed, engaged in any of the activities for which the license is issued, is received by the State Fire Marshal within 30 days after the date of the issuance of the license.

4. The following fees are established for the administrative and regulatory services of the State Fire Marshal Division:

(a) All copy service will be at the rate of 50 cents for each page.

(b) Fees for investigative services are as follows:

(1) For expert testimony rendered by the Division in a civil proceeding, the fee of $110 for each hour of testimony or research will be charged.

(2) The actual costs for an investigation must be paid by the person investigated if the person is found guilty.

(3) Investigative and hearing costs must be paid by the person investigated, if the hearing officer finds in favor of the State Fire Marshal.

(c) The State Fire Marshal may charge a fee for the following services based on an hourly cost sufficient to cover the salaries and administrative expenses for:

(1) Requests for an immediate review of plans to expedite a project. The State Fire Marshal will calculate the hourly costs based on the average amount the State Fire Marshal pays for the position of employment which is applicable to the service being provided, including, without limitation, inspectors and plan checkers.

(2) Additional reviews of plans or specifications required by changes, additions or alterations to the plans or specifications.

(3) Reviews of requests to use alternate materials, designs, methods of construction or equipment.

(d) The fee for witnessing any test for acceptance is $27 for each test requiring a separate fee for certification.

(e) A fee may be charged for the costs associated with providing training programs. The State Fire Marshal may waive this fee if a reasonable justification for doing so is provided.

(f) Instructional supplies and materials will be supplied at the approximate cost of providing them.

(g) Fees for instructors are $55.30 per hour, or as set by contract for specific classes, plus per diem and travel expenses.

(h) Any additional costs for service will be added, as well as an administrative fee of 5.5 percent of the total cost of each program.

(i) Costs of certification are based upon hours of training, but will not exceed $50. Fees will be charged for any certification other than:

(1) Initial firefighter certification I and II for a member of a volunteer fire department; or

(2) Certification for hazardous materials awareness and operations for all first responders for a governmental agency.

(j) Additional fees equal to those charged for initial testing will be charged for retesting those who fail.

(k) The State Fire Marshal will not collect fees pursuant to this section from a person if a third party, such as the employer of the person, pays that fee.

(l) Any service provided by the State Fire Marshal Division may be billed at the rate of $38.50 per hour or the actual cost of providing the service, whichever is greater.

(m) Any service performed by a special deputy on behalf of the State Fire Marshal may be billed, pursuant to an interagency agreement, at the rate of $38.50 per hour, the actual cost of providing the service or any other rate specified by this chapter. The State Fire Marshal may allow such fees or any part thereof to be collected and used by the agency supporting the special deputy.

(n) Approval for equipment or materials which are not on a list published by a nationally recognized testing laboratory, inspection agency or other organization concerned with product evaluation will be issued annually for a fee of $610 per product, $38.50 per hour of research and actual expenses incurred in evaluating the product. If a product or material is not approved, there will be charged a fee of $38.50 per hour of research and actual expenses incurred in evaluating the product, except that the minimum fee is $184. Approval of a product lapses if the:

(1) Product is modified;

(2) Name of the product or person manufacturing the product is changed;

(3) Ownership of the company is changed;

(4) Use of the product is changed; or

(5) Annual fee is not paid.

(o) Requests for statistical information received before the publication of the annual report will be supplied as available. The administrative cost to receive such statistical information will be calculated and assessed in accordance with this section.

5. The State Fire Marshal may establish a fee for supplying copies of the annual report to persons and agencies other than fire, legislative and state agencies. The fee will be limited to the actual cost of the publication and distribution of the report, plus an administrative fee of $38.50.

6. The State Fire Marshal may refund all or part of any fee if he or she deems it appropriate. To be eligible for a training refund, a registrant must give not less than 72 hours' notice before removing his or her name from the registration list. The State Fire Marshal may require the registrant to provide written documentation of the notice.

7. For a plan review, the State Fire Marshal will collect a fee in accordance with section 109 of the *International Building Code*, ~~[2018]~~ ***2024*** edition.

Sec. 16. NAC 477.335 is hereby amended to read as follows:

477.335 1. All pre-engineered or engineered fixed fire extinguishing systems, fire alarm systems, standpipe systems, sprinkler systems, fire extinguishers, fixed hood systems, fire hydrants and underground fire sprinkler systems, and any appurtenance thereof, must be:

(a) Inspected as required by the appropriate adopted standards as published by the NFPA, including, without limitation, in accordance with the schedules required by those adopted standards. The inspections must be conducted by a person ***who is*** licensed or certified by the State Fire Marshal to conduct such inspections ~~[.]~~ ***and capable of making any necessary repairs.***

(b) Visually inspected on a quarterly basis. The visual inspections may be conducted by any person, including an employee of a firm, who, in the opinion of the authority having jurisdiction, has sufficient knowledge of the system to conduct a visual inspection and who will maintain an accurate record of such inspections of the system in the designated place for each system.

2. The authority having jurisdiction may visually inspect a fire protection system at any time. All work must comply with the standards adopted for the system being installed. The

methods or equipment used in the installation must not vary from those required by the plans pursuant to which the fire protection system is being installed and the applicable standard for that fire protection system.

Sec. 17. NAC 477.345 is hereby amended to read as follows:

477.345 1. Any firm that holds a license to service or install any fire alarm system, standpipe system, residential sprinkler system, automatic sprinkler system or any other type of extinguishing system must be properly equipped and shall employ personnel who are qualified to install and perform service on fire alarm systems, standpipe systems, assemblies for the prevention of backflow, residential sprinkler systems, automatic sprinkler systems, fire hydrants and underground fire sprinkler systems, and any appurtenance thereof, and must possess a state contractor's license which is pertinent to the work being performed. Licenses will be issued in five basic classifications:

(a) Type E: Authorizes the holder to design the placement of, install, maintain and service engineered or pre-engineered fixed fire extinguishing systems.

(b) Type F: Authorizes the holder to design the placement of, install, maintain and service fire alarm systems.

(c) Type G: Authorizes the holder to design the placement of, install, maintain and service automatic sprinkler systems.

(d) Type I: Authorizes the holder to design the placement of, install, maintain and service fire standpipe systems.

(e) Type J: Authorizes the holder to design the placement of, install, maintain and service residential sprinkler systems which are classified as systems pursuant to NFPA 13D or 13R, ~~[2016]~~ ***2022*** editions.

2. Each application must be accompanied by the required fee and contain the following information:

(a) The name, address and telephone number of the firm.

(b) Fictitious name used, if any.

(c) The type of work performed.

(d) The business identification number or other unique identification number assigned to the firm by the Secretary of State.

(e) Other pertinent information required by the State Fire Marshal.

3. Any firm that holds a license shall report, in writing, to the State Fire Marshal on or before December 31 of each year the name and certificate number of each registrant employed by the firm.

Sec. 18. NAC 477.385 is hereby amended to read as follows:

477.385 1. A firm that is licensed to install or maintain a portable fire extinguisher or fixed fire extinguishing system or sell at retail or provide as a part of other sales at retail a portable fire extinguisher or fixed fire extinguishing system for use within this State:

(a) Must be properly equipped and qualified to perform the service authorized by the type of license issued;

(b) Must provide a shop or a vehicle as a place of business, properly equipped and subject to inspection by the authority having jurisdiction; and

(c) If the firm is engaged in the installation or maintenance of fixed fire extinguishing systems, must possess a state contractor's license appropriate to the work performed as issued by the State Contractors' Board.

2. Any advertisement that the services of selling, installing, charging or testing or other maintenance of portable fire extinguishers or fixed fire extinguishing systems are available constitutes prima facie evidence that the premises, business, building, room or establishment in or upon which the advertisement appears or to which it refers is a separate location for business.

3. Licenses are classified and defined as follows:

(a) License for a public agency - Any type of license which is issued to the State or any of its agencies or political subdivisions for work to be performed by the State or that agency or political subdivision upon its own properties and for its own use. All requirements set forth in NAC 477.300 to 477.435, inclusive, except the requirement for a license issued by the State Contractors' Board, must be met.

(b) Restricted license - A license which authorizes the holder to perform work covered by the license only upon his or her own properties and for his or her own use. All fees must be paid. Unless otherwise exempted, a valid license issued by the State Contractors' Board is required.

(c) License - A license which is required by NRS 477.033 but is issued to a business and is not restricted.

4. Licenses for the sale at retail of portable fire extinguishers must conform to NFPA 10, ~~[2018]~~ ***2022*** edition, and meet the requirements for testing and listing of a nationally recognized testing laboratory.

Sec. 19. NAC 477.395 is hereby amended to read as follows:

477.395 1. Application for a license or a certificate of registration must be made on forms prescribed by the State Fire Marshal.

2. Each application must be accompanied by the required fee and contain the following information:

(a) The name, address and telephone number of the applicant.

(b) Fictitious names used, if any.

(c) Proof of insurance.

(d) The type of work performed.

(e) The business identification number or other unique identification number assigned to the applicant by the Secretary of State, if any.

(f) Other pertinent information required by the State Fire Marshal.

3. Upon passage of the written examination and any required practical tests or demonstrations, a certificate of registration endorsed with the type of qualification will be issued to each qualified person.

4. Information needed to pass the examination on portable fire extinguishers is found in:

(a) NFPA 10, ~~[2018]~~ ***2022*** edition, "Standard for Portable Fire Extinguishers"; and

(b) NAC 477.380 to 477.435, inclusive.

5. Information needed to pass the examination on fixed fire extinguishing systems is found in:

(a) NFPA 12, ~~[2015]~~ ***2022*** edition, "Standard on Carbon Dioxide Extinguishing Systems";

(b) NFPA 12A, ~~[2015]~~ ***2022*** edition, "Standard on Halon 1301 Fire Extinguishing Systems";

(c) NFPA 17, ~~[2017]~~ ***2021*** edition, "Standard for Dry Chemical Extinguishing Systems";

(d) NFPA 17A, ~~[2017]~~ ***2021*** edition, "Standard for Wet Chemical Extinguishing Systems";

(e) NFPA 96, ~~[2017]~~ ***2024*** edition, "Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations"; and

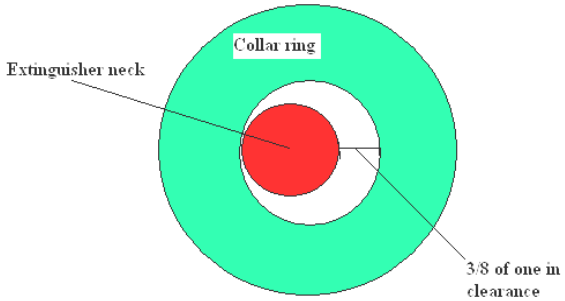
(f) NFPA 2001, ~~[2015]~~ ***2022*** edition, "Standard on Clean Agent Fire Extinguishing Systems."

Sec. 20. NAC 477.410 is hereby amended to read as follows:

477.410 1. All installation, inspection, maintenance and repair of portable fire extinguishers and fixed fire extinguishing systems must be performed in accordance with NFPA 10, ~~[2018]~~ ***2022*** edition, NFPA 17 and 17A, ~~[2017]~~ ***2021*** editions, and the regulations of and statutes enforced by the State Fire Marshal.

2. Regardless of exceptions contained in the NFPA's applicable standards, the internal components of all portable fire extinguishers except carbon dioxide, wet chemical, halogenated agent, aqueous film forming foams (AFFF) and film forming fluroroprotein foam (FFFP) portable fire extinguishers must be examined at least annually and whenever the service seal has been broken or an inspection indicates that the extinguisher might fail to function.

3. For the recharging of any dry chemical type of extinguishment cylinder to be valid, the serviceperson must date and initial with a permanent marking pen on the topmost exposed portion of the pick-up tube before reassembly and recharging. The date on the pick-up tube must correspond to the date on the exterior service tag. Failure to date and initial the pick-up tube is grounds for the immediate suspension or revocation of a certificate of registration. If possible, a collar tag ring as required by NFPA 10, ~~[2018]~~ ***2022*** edition, or an alternate collar tag ring that is approved by the State Fire Marshal must be installed at the time the extinguisher is recharged or serviced in the following manner:



4. Nitrogen or approved dry air must be used as expellant when recharging dry chemical type extinguishers unless the manufacturer recommends otherwise.

5. Before a fire extinguishing system using a clean agent is accepted, a test as referenced in NFPA 12A, ~~[2015]~~ ***2022*** edition, must be performed and recorded.

6. Within 30 days before the date on which an extinguisher must be serviced, the owner of a portable fire extinguisher may enter into a verbal service agreement for the service of that extinguisher.

7. When servicing portable fire extinguishers, the practice of swapping out a portable fire extinguisher is prohibited. This subsection does not prohibit a serviceperson from removing a portable fire extinguisher to make an off-site repair or to perform hydrostatic testing if the original portable fire extinguisher is returned within 3 business days after the date of removal.

8. Failure to comply with the provisions of this section by a person who holds a certificate of registration is a ground for the immediate suspension or revocation of the certificate of registration, and the person who holds the certificate of registration may be criminally or civilly liable for fraud.

9. As used in this section, "practice of swapping out" means the practice of:

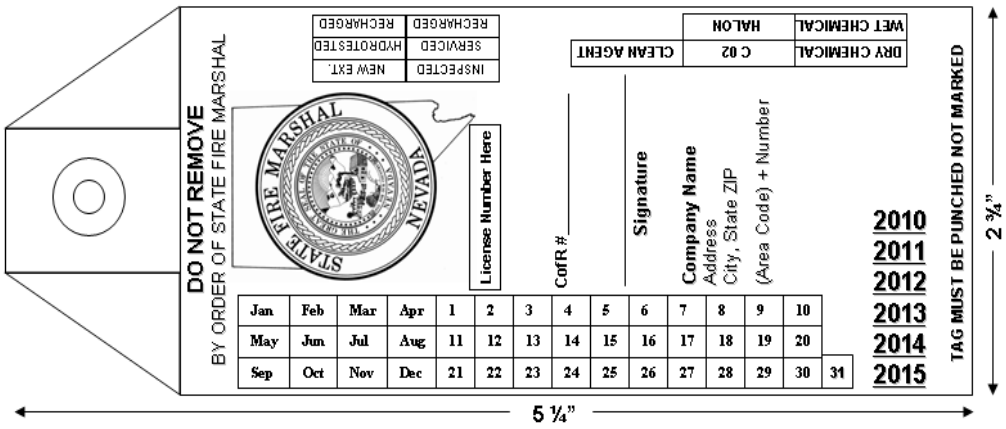
(a) Replacing a new portable fire extinguisher with an older or used portable fire extinguisher; and

(b) Representing that the older or used portable fire extinguisher is a new portable fire extinguisher.

Sec. 21. NAC 477.425 is hereby amended to read as follows:

477.425 1. The tags used as records of service performed on portable fire extinguishers or fixed fire extinguishing systems must be at least 4 inches long and 2 inches wide and must be in the following form:

Extinguishing Systems / Extinguisher Tag



2. The tag must be punched to indicate the type of service which was performed on the extinguisher or system and the date on which the service was performed. Each tag must be signed with a legible signature by the holder of a certificate of registration and must be:

(a) Attached to the extinguisher or system by wire, string or a plastic tie; or

(b) A self-adhesive tag approved by the State Fire Marshal which is so attached as to be readily visible for inspection,

➥ and such information must remain permanently on the tag. A number stamp or date stamp must not be used on the tag.

3. A label of suitable Mylar or equally durable material must be affixed by a heatless method to each shell of an extinguisher which is not listed by the United States Department of Transportation and which has passed a hydrostatic test. The label must show:

(a) The date on which the hydrostatic test was performed;

(b) The test pressure used; and

(c) The name of the person licensed or certified by the State Fire Marshal which performed the test.

4. Only those labels described in NFPA 10, ~~[2018]~~ ***2022*** edition, and in the regulations of and statutes enforced by the State Fire Marshal may be affixed to a portable fire extinguisher.

5. A sample of the tag and the label must be on file with the State Fire Marshal before they are used in the field.

6. The tag must be printed by a printing company and include the following information:

(a) The date when the system was last serviced.

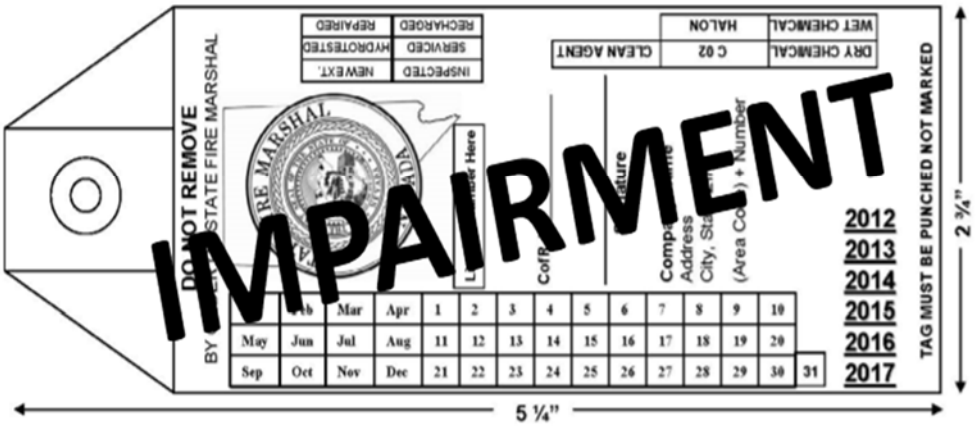
(b) The name, address and telephone number of the company;

(c) The number of the license issued by the State Fire Marshal; and

(d) The name and certificate number of the person who last serviced the system.

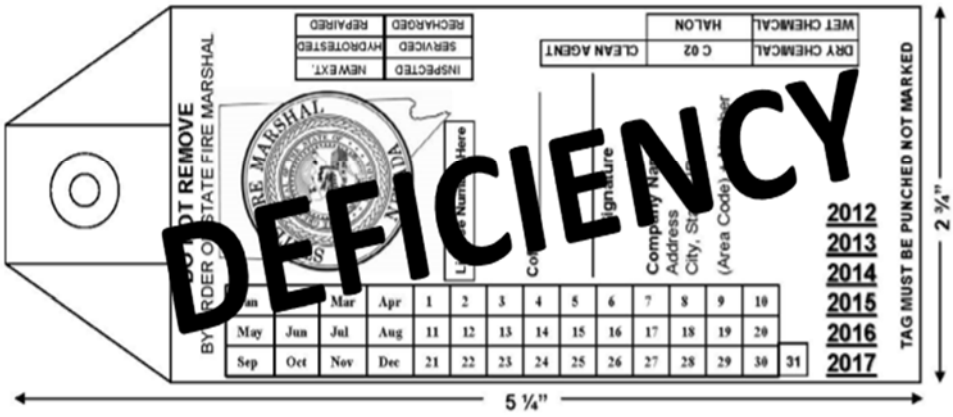
7. If a fixed fire extinguishing system remains impaired and the licensee does not have the authority to correct the impairment, the word "impairment" must be written across the tag in black letters that are bold. The licensee shall notify the property owner and the authority having jurisdiction of the impairment in writing not later than the next business day after completing the work. The tag with the word "impairment" must be at least 4 inches long and 2 inches wide and must be in the following form:

Extinguishing Systems / Extinguisher Tag



8. If a deficiency is discovered in the fixed fire extinguishing system, the licensee shall notify the property owner of the deficiency in writing. The word "deficiency" must be written across the tag in black letters that are bold. Upon receiving a notice of deficiency, the property owner shall correct the deficiency within 30 calendar days of such receipt. If the property owner fails to correct the deficiency within 30 calendar days after receiving the notice of deficiency, the licensee shall submit the notice of deficiency to a fire code official within 2 business days after the 30 calendar days expire. The tag with the word "deficiency" must be at least 4 inches long and 2 inches wide and must be in the following form:

Extinguishing Systems / Extinguisher Tag



Sec. 22. NAC 477.441 is hereby amended to read as follows:

477.441 1. A new or relocated portable building must:

(a) Be placed on a surface which is:

(1) Paved or composed of dirt or any other material which is noncombustible; and

(2) Free of combustible material.

(b) Have a skirt that is noncombustible or fire-resistant and which extends from the bottom of the portable building to ground level.

(c) Have a zone of at least 5 feet that extends outward from the bottom of the skirt and which is free of trash, debris, plants or any other combustible material in accordance with section 304 of the *International Fire Code*, ~~[2018]~~ ***2024*** edition.

(d) Be in compliance with section 503.1.2 of the *International Building Code*, ~~[2018]~~ ***2024*** edition.

(e) Have at least two means of egress, as that term is defined by the *International Building Code*, ~~[2018]~~ ***2024*** edition.

(f) Provide illumination for each egress.

(g) Be equipped with a fire extinguisher which has a minimum rating of 2A-10BC.

(h) Be provided with a fire alarm system, as required by the *International Fire Code*, ~~[2018]~~ ***2024*** edition. If the portable building is designated for occupancy as a "Group B occupancy used for educational purposes" or as a "Group E occupancy," the portable building must have an automatic and a manual fire alarm system, which is integrated with the fire alarm system in the primary building.

2. Except as otherwise provided in this subsection, if two or more portable buildings are placed next to each other, there must be no empty spaces between the buildings. If it is physically impossible to place portable buildings next to each other so that there are no spaces between the portable buildings, the space between the portable buildings must have a barrier to prevent combustible materials or debris from entering that space.

3. Flammable or combustible material may not be stored beneath a portable building.

4. Portable buildings may not be joined if there are windows or other openings on the joined wall other than doors that are designed and used as access between the buildings.

5. Portable buildings which abut or are grouped together must not exceed the total area allowed by the *International Building Code*, ~~[2018]~~ ***2024*** edition, for occupancies which are designated as "Type V-B."

Sec. 23. NAC 477.442 is hereby amended to read as follows:

477.442 1. An existing portable building which has only one door to the exterior must be equipped with:

(a) A system for emergency lighting.

(b) An automatic fire sprinkler system as required by NFPA 13, ~~[2016]~~ ***2022*** edition, if:

(1) The maximum legal occupancy of the building exceeds 50 persons; or

(2) More than two portable buildings are joined together to be used for classrooms or assembly.

2. All other portable buildings must:

(a) Be in compliance with the codes for building, fire and life safety as adopted by this chapter or by the authority having jurisdiction, whichever are more restrictive.

(b) Be equipped with a fire extinguisher which has a minimum rating of 2A-10BC.

(c) Have an automatic and a manual fire alarm system if:

(1) The maximum legal occupancy of the joined portable buildings exceeds 50 persons; or

(2) Three or more portable buildings are joined together.

(d) Have all alarm signals installed and connected to a main alarm system as required by NFPA 72, ~~[2016]~~ ***2022*** edition.

(e) If the portable building is part of a campus or complex for which the main alarm system is equipped with a voice evacuation system, have each alarm signal described in paragraph (d) equipped with a voice evacuation system.

(f) If smoke detectors are required, have those detectors interconnected with the fire alarm system.

(g) If the portable building is used as a classroom or for any other purpose relating to education, have and maintain plans for fire drills and evacuation, which must be posted as prescribed by NRS 392.450 or 394.170, as applicable.

3. Portable buildings discussed in subsection 2 may have an optional key controlled manual fire alarm to reduce the risk of a person operating the manual fire alarm in a manner that the State Fire Marshal determines to be illicit.

4. No change in the use of a portable building described in subsection 2 may be made until the proposed change is reviewed and approved by the authority having jurisdiction for compliance with the adopted codes or this section.

5. A system for heating, ventilating or air-conditioning which:

(a) Is in a portable building described in subsection 2;

(b) Can circulate more than 2,000 cubic feet of air per minute; and

(c) Shuts down automatically,

➥ must be serviced quarterly. Records of the service must be maintained for 2 years for review by the authority having jurisdiction.

Sec. 24. NAC 477.455 is hereby amended to read as follows:

477.455 1. No component or device of an automatic sprinkler system may be sold, leased or installed in this State unless it has been approved, labeled or listed by Underwriters Laboratories Inc., Underwriters' Laboratories of Canada, FM Global or any other testing laboratory approved by the State Fire Marshal as qualified to test such a component or device.

2. Automatic sprinkler systems must comply with the *International Fire Code*, ~~[2018]~~ ***2024*** edition, and the following standards of the NFPA:

(a) "Standard for the Installation of Sprinkler Systems," Standard 13, ~~[2016]~~ ***2022*** edition.

(b) "Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes," Standard 13D, ~~[2016]~~ ***2022*** edition.

(c) "Standard for the Installation of Sprinkler Systems in Low-Rise Residential Occupancies," Standard 13R, ~~[2016]~~ ***2022*** edition.

(d) "Standard for the Installation of Standpipe and Hose Systems," Standard 14, ~~[2016]~~ ***2024*** edition.

(e) "Standard for Water Spray Fixed Systems for Fire Protection," Standard 15, ~~[2017]~~ ***2022*** edition.

(f) "Standard for the Installation of Foam-Water Sprinkler and Foam-Water Spray Systems," Standard 16, ~~[2015]~~ ***2019*** edition.

(g) "Standard for the Installation of Stationary Pumps for Fire Protection," Standard 20, ~~[2016]~~ ***2022*** edition.

(h) "Standard for Water Tanks for Private Fire Protection," Standard 22, ~~[2018]~~ ***2023*** edition.

(i) "Standard for the Installation of Private Fire Service Mains and Their Appurtenances," Standard 24, ~~[2016]~~ ***2022*** edition.

(j) "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems," Standard 25, ~~[2017]~~ ***2023*** edition.

(k) "Standard on Water Mist Fire Protection Systems" Standard 750, ~~[2015]~~ ***2023*** edition.

Sec. 25. NAC 477.460 is hereby amended to read as follows:

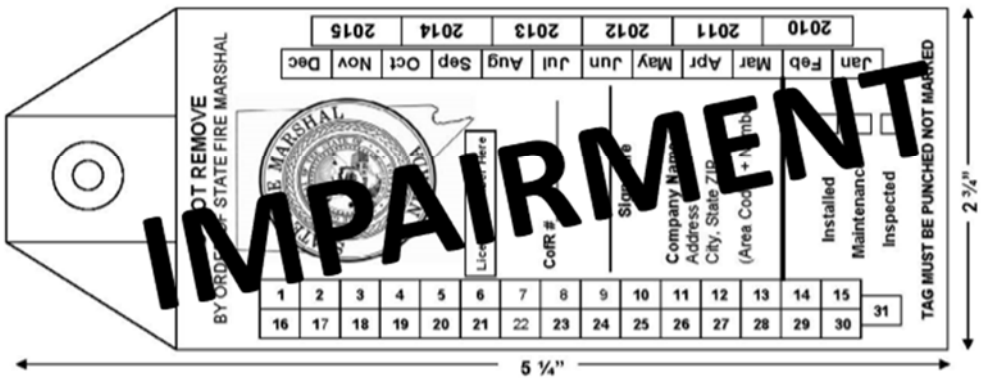
477.460 1. Each automatic fire sprinkler system must be inspected quarterly. One of the quarterly inspections must be termed an annual inspection and be conducted in accordance with the provisions of subsection 2. The other quarterly visual inspections may be conducted by any responsible person, including an employee of a licensed firm, who, in the opinion of the authority having jurisdiction, has sufficient knowledge of the system to conduct such inspections. The quarterly inspections must conform to the requirements of NFPA 13, ~~[2016]~~ ***2022*** edition, and NFPA 25, ~~[2017]~~ ***2023*** edition. Records of inspection must be kept on-site for review by the State Fire Marshal and the authority having jurisdiction.

2. The annual inspection must be made by a qualified registrant who is an employee of a licensed firm for automatic fire sprinkler systems ~~[.]~~ ***and who is capable of making any***

necessary repairs. The annual inspection must comply with the standards and publications described in subsection 1.

3. If a fire sprinkler system remains impaired and the licensed firm does not have the authority to correct the impairment, the word "impairment" must be written across the tag in black letters that are bold. The licensed firm must notify the property owner and the authority having jurisdiction of the impairment in writing not later than the next business day after completing the work. A tag with the word "impairment" must be at least 4 inches long and 2 inches wide and must be in the following form:

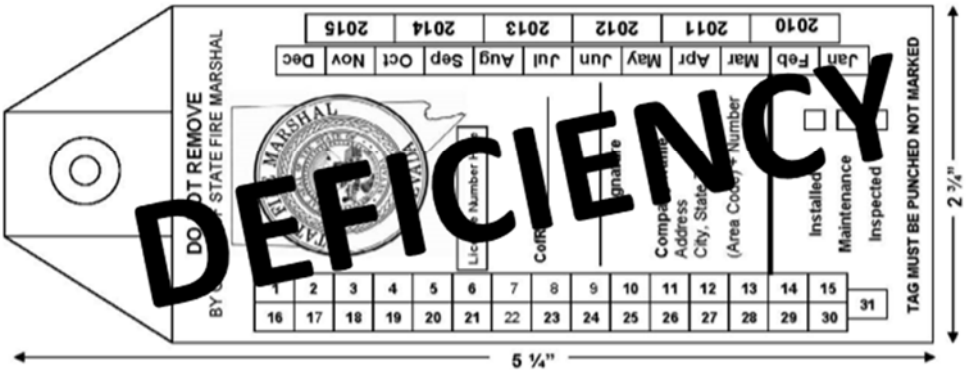
F, G, I, J - Alarm / Sprinkler Tag



4. If a deficiency is discovered in the fire sprinkler system, the licensed firm must notify the property owner of the deficiency in writing. The word "deficiency" must be written across the tag in black letters that are bold. Upon receiving a notice of deficiency, the property owner shall correct the deficiency within 30 calendar days of such receipt. If the property owner fails to correct the deficiency within 30 calendar days after receiving notice of the deficiency, the licensed firm must submit the notice of deficiency to the authority having jurisdiction within 2

business days after the 30 calendar days expire. The tag with the word "deficiency" must be at least 4 inches long and 2 inches wide and must be in the following form:

F, G, I, J - Alarm / Sprinkler Tag



5. A licensed firm must give 30 calendar days' written notice to the owner, the occupant and the authority having jurisdiction before it may discontinue service to the owner or the occupant, or both.

Sec. 26. NAC 477.465 is hereby amended to read as follows:

477.465 1. The distributor, installer or agency to provide service to customers must submit evidence of its capability to repair and restore an automatic sprinkler system within 24 hours after notification of a fire or fault in the system and must repair a system within 24 hours after being notified by the owner that a system requires service. The evidence of that capability is subject to approval by the State Fire Marshal or the authority having jurisdiction. The evidence must demonstrate that the licensee has:

(a) The necessary equipment and personnel appropriately certified by the State Fire Marshal;

(b) The necessary stock of parts and devices;

(c) A valid license issued by the State Contractors' Board;

(d) If applicable, a valid state business license issued by the Secretary of State; and

(e) A certification and approval by the manufacturer from whom the equipment is purchased.

2. Where automatic sprinkler systems are installed for any reason, a satisfactory written agreement for the maintenance of the system must be provided. All systems must be under the supervision of qualified persons. No work may be performed on an automatic sprinkler system unless a holder of a certificate of registration is present to supervise the work. Proper tests and inspections must be made at prescribed intervals, and qualified persons must have general charge of all alterations and additions to the systems under their supervision. A copy of the agreement for maintenance, along with proof that the firm or company which will provide the maintenance is adequately covered by liability insurance, must be submitted by the firm or company to the State Fire Marshal or the authority having jurisdiction.

3. Detailed plans, with the appropriate fees, must be submitted to the State Fire Marshal or the authority having jurisdiction for approval. The specifications must state that the installation will conform to the applicable standards and be approved by the State Fire Marshal or the authority having jurisdiction before the sprinkler system is installed. The specifications must include the specific tests required by the NFPA's standards and the standards required for the approval of the State Fire Marshal or the authority having jurisdiction. Plans must be drawn to an indicated scale or be suitably dimensioned and must be made so that they can be easily reproduced. Plans must contain sufficient detail to enable the State Fire Marshal or the authority having jurisdiction to evaluate the effectiveness of the system. Plans must be submitted to the State Fire Marshal or the authority having jurisdiction before work starts. Where field conditions necessitate any substantial change from the approved plan, the corrected plan showing the system as installed, with the appropriate fees, must be submitted to the State Fire Marshal or the

authority having jurisdiction for approval. The State Fire Marshal or the authority having jurisdiction must inspect and approve any substantial changes before the job is completed. Plans must be on the job site when work is being done pursuant to the plan at that site.

4. Calculations must be established from the applicable design curve for sprinkler systems as shown in NFPA 13 and 13R, ~~[2016]~~ ***2022*** editions. There must be not less than 10 psi additional water pressure above the system demand.

5. All hydrostatic tests of systems and flushing of underground systems must be witnessed by a representative of the State Fire Marshal or the authority having jurisdiction. All portions of the automatic fire sprinkler system, including the underground service from the gate valve, road box or check valve to the riser, must be installed, tested and flushed by a company licensed by the State Fire Marshal to perform this work. A company which holds a current Type G-U license for:

(a) Underground private fire service mains and their appurtenances may provide only the underground private fire service mains and their appurtenances from the gate valve, road box or check valve to the base of the riser or stubbed 5 feet from the base of a building. The company shall provide certification of the contractors' materials and testing to the State Fire Marshal or the authority having jurisdiction upon the completion of the work. The underground services provided and the certification to be provided to the State Fire Marshal or the authority having jurisdiction must meet the requirements of NAC 477.340 to 477.350, inclusive, and the standards of the NFPA for automatic fire sprinkler systems or private fire service mains and their appurtenances, as applicable.

(b) Privately owned fire hydrants may provide only the installation, maintenance, repair and servicing of privately owned fire hydrants. The licensee must also hold a valid license

appropriate to the work performed, as issued by the State Contractors' Board, if the licensee installs any new privately owned fire hydrants or performs any maintenance or repair below the first 90-degree flange of a privately owned fire hydrant.

(c) Backflow may provide only the testing on backflow assemblies. The licensee must also hold a certification from the American Water Works Association or another nationally recognized certificate recognized by the State Fire Marshal.

6. Upon completing the installation of an automatic sprinkler system, the licensee shall issue a letter of certification to the authority having jurisdiction. The letter must certify that the system has been installed in accordance with the approved plans and all applicable national, state and local codes. The installer shall properly identify all hydraulically designed automatic sprinkler systems with a permanently attached placard. The placard must show the location and number of sprinkler heads and the density of discharge over the designed area.

Sec. 27. NAC 477.560 is hereby amended to read as follows:

477.560 In all medical facilities, custodial care facilities and restrained care facilities, a device for detection of the products of combustion, other than by detecting heat, must be installed pursuant to section 18.3.4.5 of NFPA 101, ~~[2018]~~ ***2024*** edition.

Sec. 28. NAC 477.562 is hereby amended to read as follows:

477.562 1. The following requirements apply to child care facilities that require inspection and a certificate of compliance to be issued by the State Fire Marshal:

(a) Plans for the construction of new facilities or the remodeling of existing facilities, including, without limitation, plans to construct or remodel fire systems, must be submitted to the authority having jurisdiction for approval before the construction or remodeling begins.

(b) Each facility must be inspected for compliance with applicable fire and safety regulations by the State Fire Marshal before a license to operate the facility is issued. The facility must be inspected annually thereafter and have a current certificate of compliance issued by the State Fire Marshal.

(c) Smoke alarms, or if they are part of a fire alarm system, smoke detectors, approved by the State Fire Marshal must be installed pursuant to the manufacturer's instructions. In newly constructed buildings, smoke alarms or smoke detectors, as applicable, must receive their primary power from the building's wiring, with provision made for the detection of smoke during a power failure. If a smoke alarm or smoke detector powered by a battery is currently installed and it fails, the smoke alarm or smoke detector must be replaced by a smoke alarm or smoke detector which receives its primary power from the wiring of the building and has a battery as a backup source of power.

(d) The State Fire Marshal will calculate the maximum number of occupants permitted in:

(1) A child care center based on an occupancy classification of I-4 or E.

(2) A child care facility based on an occupancy classification of I-4 for children less than 2 1/2 years of age and R-4 for children 2 1/2 years of age or older.

(3) A child care institution based on an occupancy classification of I-4 or E.

(4) A family home based on an occupancy classification of R-3.

(5) A group home based on an occupancy classification of I-4 for children less than 2 1/2 years of age and R-4 for children 2 1/2 years of age or older.

(e) Smoking is prohibited in any area designated as an "E" occupancy area unless the area has specifically been designated as a smoking area by the authority having jurisdiction. Where smoking is allowed, ashtrays must be provided.

(f) All stairs must be free of obstacles and stored combustible materials. Handrails with turn-ins must be provided if there are two or more steps in any stairway.

(g) Bathroom and closet doors must open from the inside without the need for a key or any special knowledge or effort and must be able to be immediately opened from the outside with the use of an appropriate device hung or placed above or near the door.

(h) Basements in R-3 occupancies used for child care must have at least two unobstructed exits which lead directly to the outside, one of which must open directly at ground level.

(i) Portable fire extinguishers must have a minimum rating of 2A-10BC and must be mounted pursuant to the requirements of:

(1) NFPA 10, ~~[2018]~~ ***2022*** edition, and the requirements of the *International Fire Code*, ~~[2018]~~ ***2024*** edition; or

(2) The authority having jurisdiction.

(j) Heaters, fireplaces or other similar devices in rooms used for child care must be protected from contact with children by a sturdy, noncombustible partition, wire screen or protective metal guard. No portable heating devices are allowed.

(k) All heating equipment and hot water heaters must be:

(1) Enclosed in a manner which prevents children from coming into contact with them; and

(2) Secured as required by the codes and standards adopted by the State Fire Marshal.

(l) Child-resistant covers must be installed on all electrical outlets accessible to children.

(m) Wastebaskets, garbage cans and other containers used to store garbage, waste, rubbish and other combustible materials must be constructed of noncombustible materials and have a tight-fitting lid of the same material. Wastebaskets or other trash containers placed in the

designated smoking areas must be constructed of noncombustible materials with a tight-fitting lid of the same material.

(n) No more than 10 gallons of flammable liquid may be stored in any area designated as an "E" area. This flammable liquid must be stored in an approved metal container and out of the reach of children.

(o) Rooms in which equipment is used or where flammable liquids, combustible dust or similar hazardous materials are handled must be separated from other portions of the building by a material which has a rating of at least 1-hour fire barrier and must conform to the requirements of the *International Building Code*, ~~[2018]~~ ***2024*** edition.

2. As used in this section:

(a) "Child care center" has the meaning ascribed to it in NAC 432A.050.

(b) "Child care facility" has the meaning ascribed to it in NAC 432A.060.

(c) "Child care institution" has the meaning ascribed to it in NAC 432A.070.

(d) "Family home" has the meaning ascribed to it in NAC 432A.100.

(e) "Group home" has the meaning ascribed to it in NAC 432A.110.

Sec. 29. NAC 477.566 is hereby amended to read as follows:

477.566 Devices for the detection of the products of combustion, other than heat, must be installed in every building which is used for the care of children. The devices must be installed in accordance with section ~~[907.2.10]~~ ***907.2.11*** of the *International Building Code*, ~~[2018]~~ ***2024*** edition, and NFPA 72, ~~[2016]~~ ***2022*** edition, if so required by the authority having jurisdiction.

Sec. 30. NAC 477.568 is hereby amended to read as follows:

477.568 Child care facilities which are used for child care between the hours of 12 a.m. and 6 a.m. and care for seven or more children must have an automatic sprinkler system installed

which conforms to NFPA 13, 13D or 13R, ~~[2016]~~ ***2022*** editions, as applicable, and the requirements of the *International Building Code*, ~~[2018]~~ ***2024*** edition. The automatic sprinkler system must be connected to the fire alarm system so that activation of any portion of the automatic sprinkler system will activate the fire alarm system.

Sec. 31. NAC 477.616 is hereby amended to read as follows:

477.616 1. Licenses will be issued to companies in one or more of the following categories:

(a) A general license permits the licensee to produce commercial displays of fireworks in one or more of the following categories:

(1) Alcohol;

(2) Indoor stage;

(3) Liquid, other than alcohol;

(4) Gel;

(5) Natural gas;

(6) Outdoor aerial;

(7) Propane;

(8) Solid fuels;

(9) Special effects; or

(10) Show specific.

➥ A general license is valid on May 1 or the date on which it is issued, whichever is later. If a licensee does not submit the renewal application and pay the renewal fee on or before April 30 of the following year, the license expires and the licensee must apply to the State Fire Marshal for an original license. If a fee for a license is not paid by the time it is due, a late charge of 12

percent per month will be assessed as an administrative fee for processing. The charge will be assessed beginning at the end of the first business day after the fee is due. A licensee may not engage in any work authorized by this chapter or chapter 477 of NRS until the fee is paid.

(b) A limited event license permits a nonprofit organization to produce a specific display of fireworks or series of displays at the time or times and location specified by the license subject to local requirements for a permit. A limited license is valid for the single event or series of events which it specifies.

(c) A nonprofit organization must obtain a limited event license (exempt) from the State Fire Marshal Division before producing a display of fireworks. The limited event license (exempt) must include a description of the event to be held which specifies the location and date of the event. The license will be issued without payment of a fee. The nonprofit organization must:

(1) Show evidence of valid insurance which covers the event or series of events;

(2) Require that all persons who participate in producing the display or series of displays complete a written test approved by the State Fire Marshal or work under the direct supervision of a certified pyrotechnic operator; and

(3) Obtain a certificate of registration for the person who will be responsible for the show and the safety of the participants and spectators.

2. A license issued in one of these categories does not permit the licensee to engage in activities permitted by another, more general, category.

3. In producing a commercial display of fireworks or flame effects, a licensee must:

(a) Obtain any permit or permits required by local authority;

(b) Employ only pyrotechnic operators who are registered with the State Fire Marshal to conduct the display or discharge of the fireworks or flame effects; and

(c) Wear proper safety attire at all times pursuant to NFPA 1123, ~~[2018]~~ ***2022*** edition.

Sec. 32. NAC 477.622 is hereby amended to read as follows:

477.622 1. Before a person may act as an assistant pyrotechnic operator, the person must obtain a certificate of registration as an assistant pyrotechnic operator from the State Fire Marshal. To receive a certificate of registration as an assistant pyrotechnic operator, an applicant must:

(a) Be a natural person who is at least 21 years of age;

(b) Make an application for such a certificate of registration to the State Fire Marshal on a form provided by the State Fire Marshal;

(c) Pass a written test based on the content of this chapter and NFPA 1123, ~~[2018]~~ ***2022*** edition, NFPA 1124, ~~[2017]~~ ***2022*** edition, NFPA 1126, ~~[2016]~~ ***2021*** edition;

(d) Submit to the State Fire Marshal:

(1) Letters of endorsement from two persons who hold certificates of registration as a pyrotechnic operator issued by the State Fire Marshal; and

(2) A letter from the company which employs the applicant stating that the applicant has worked for the company for at least 90 days or is licensed or certified as an assistant pyrotechnic operator in good standing by another state recognized by the State Fire Marshal; and

(e) Pay an initial fee of $31.

2. A person who holds a certificate of registration as an assistant pyrotechnic operator may load, build and pack any product used in pyrotechnic effects only under the direct supervision of a holder of a certificate of registration as a pyrotechnic operator.

3. A certificate of registration is valid on May 1 or the date on which it is issued, whichever is later. If the holder of a certificate of registration does not submit the renewal application and

pay the renewal fee on or before April 30 of the following year, the certificate of registration expires and the person must apply to the State Fire Marshal for an original certificate of registration.

Sec. 33. NAC 477.624 is hereby amended to read as follows:

477.624 1. Before a person may act as a pyrotechnic operator, the person must obtain a certificate of registration as a pyrotechnic operator from the State Fire Marshal. To receive a certificate of registration as a pyrotechnic operator, an applicant must:

(a) Be a natural person who is at least 21 years of age;

(b) Make an application for such a certificate of registration to the State Fire Marshal on a form provided by the State Fire Marshal and pay a fee of $55;

(c) Hold a certificate of registration as an assistant pyrotechnic operator issued by the State Fire Marshal, or be licensed or certified in good standing as a pyrotechnic operator by another state, as approved by the State Fire Marshal;

(d) Pass, with a score of at least 75 percent, a written examination that is based on the content of this chapter, NFPA 1123, ~~[2018]~~ ***2022*** edition, NFPA 1124, ~~[2017]~~ ***2022*** edition, and NFPA 1126, ~~[2016]~~ ***2021*** edition; and

(e) Submit to the State Fire Marshal:

(1) A log which demonstrates that the applicant has worked on at least 15 different shows during the 3 years immediately preceding the date on which he or she applies for the certificate of registration as a pyrotechnic operator;

(2) Letters of endorsement from two persons who hold certificates of registration as a pyrotechnic operator issued by the State Fire Marshal; and

(3) A letter from the company which employs the applicant stating that the applicant has worked for the company for at least 90 days or is licensed or certified as a pyrotechnic operator in good standing by another state recognized by the State Fire Marshal.

2. A certificate of registration is valid on May 1 or the date on which it is issued, whichever is later. If the holder of a certificate of registration does not submit the renewal application and pay the renewal fee on or before April 30 of the following year, the certificate of registration expires and the person must apply to the State Fire Marshal for an original certificate of registration.

Sec. 34. NAC 477.631 is hereby amended to read as follows:

477.631 1. Before a person may act as a flame effects assistant to provide flame effects before an audience, the person must obtain a certificate of registration as a flame effects assistant from the State Fire Marshal.

2. An applicant for a certificate of registration as a flame effects assistant must:

(a) Be a natural person who is at least 21 years of age;

(b) Make an application on the form provided, including the application fee of $31;

(c) Indicate on the application which category of certificate the applicant wishes to obtain, such as natural gas, propane, alcohol, liquid other than alcohol, solids or gel, and include the appropriate fee for that category;

(d) Successfully pass, with a score of at least 75 percent, a preliminary written examination which includes questions concerning basic safety from NFPA 160, ~~[2016]~~ ***2021*** edition, and this chapter;

(e) Include with the application letters of endorsement from two persons who hold a certificate of registration as a flame effects operator issued by the State Fire Marshal; and

(f) Include with the application a letter from the company which employs the applicant stating that the applicant has worked for the company for at least 90 days or is licensed or certified as a flame effects assistant in good standing by another state recognized by the State Fire Marshal.

3. A certificate of registration is valid on May 1 or the date on which it is issued, whichever is later. If the holder of a certificate of registration does not submit the renewal application and pay the renewal fee on or before April 30 of the following year, the certificate of registration expires and the person must apply to the State Fire Marshal for an original certificate of registration.

Sec. 35. NAC 477.661 is hereby amended to read as follows:

477.661 1. No person may:

(a) Use or discharge:

(1) A special effect or firework unless the person is a pyrotechnic operator certified by the State Fire Marshal.

(2) A firework of any class or type within 100 feet of stored gasoline or other flammable liquid which is listed as Class I in NFPA 30, ~~[2018]~~ ***2024*** edition, or any other combustible material.

(b) Display or discharge a firework or display flame effects at a commercial display of fireworks or flame effects in such a manner as to endanger any person or in a county where such commercial displays are prohibited.

(c) Discharge fireworks of any class in a county where the discharge of the fireworks is prohibited.

2. If the authority having jurisdiction believes that fireworks or flame effects which create an imminent danger to life or property will be discharged or displayed in violation of this section, the authority having jurisdiction may, without notice, seize the fireworks or materials, devices, equipment and systems used with the flame effects.

3. The authority having jurisdiction will take and retain possession of fireworks seized in accordance with this section and materials, devices, equipment and systems used with the flame effects seized in accordance with this section during any judicial or administrative proceedings involving the fireworks, materials, devices, equipment or systems and will, upon conclusion of the proceedings, destroy them or return them to the person from whom they were seized as directed in such proceedings.

4. Any person whose fireworks or materials, devices, equipment and systems used with the flame effects are adjudged in any judicial or administrative proceeding to be hazardous will be charged with the expenses incurred in the seizure, transportation, storage and disposal of those fireworks, materials, devices, equipment or systems. This charge constitutes a debt and is collectible by any agency of the State or any of its political subdivisions incurring any such expense in the same manner as if it is an obligation under an express or implied contract.

Sec. 36. NAC 477.663 is hereby amended to read as follows:

477.663 1. No person may maintain or permit the existence of a fire hazard at any location under the person's control where fireworks, flame effects or pyrotechnic compositions are displayed, discharged or stored.

2. A permit issued by the State Fire Marshal is required for the storage of fireworks classified as Division 1.3G, Division 1.4G or Division 1.4S by 18 U.S.C. §§ 841 et seq. and NFPA 1124, ~~[2017]~~ ***2022*** edition, except for:

(a) Fireworks classified as consumer fireworks that are stored at a retail outlet building for sale as approved by the State Fire Marshal or pursuant to a permit issued by the State Fire Marshal after an inspection of the site is made. As used in this paragraph, "building" means any structure utilized or intended for supporting or sheltering any occupancy.

(b) Fireworks for public display or special effects stored at the site of firing for immediate use.

(c) Storage of material for special effects which weighs less than 10 pounds.

3. Fees for permits for storage that are required pursuant to subsection 2 are as follows:

(a) A building for permanent or temporary storage $250

(b) Type 1 magazine..... 250

(c) Type 2, 3 or 4 magazine 132

4. Fireworks must be stored in compliance with the requirements of the *International Building Code*, ~~[2018]~~ ***2024*** edition, the *International Fire Code*, ~~[2018]~~ ***2024*** edition, NFPA 1124, ~~[2017]~~ ***2022*** edition. Material for special effects which weighs less than 750 pounds may be stored in a single-story structure which is fully equipped with fire sprinklers and which otherwise conforms to the requirements for a Type V-A rated building as described in the *International Building Code*, ~~[2018]~~ ***2024*** edition. Material for special effects which weighs 750 pounds or more must be stored in a magazine approved for that purpose.

5. The State Fire Marshal will, as he or she determines necessary, inspect each site used for storage of fireworks to determine if the fireworks are stored properly according to their class or type.

Sec. 37. NAC 477.680 is hereby amended to read as follows:

477.680 No person may sell or offer for sale any portable container for use in the storage or transportation of Class I or Class II flammable or combustible liquids unless the container complies with NFPA 30, ~~[2018]~~ ***2024*** edition.

Sec. 38. NAC 477.710 is hereby amended to read as follows:

477.710 1. Except as otherwise provided in subsection 3, no person may use explosives in blasting operations for commercial construction unless he or she has a certificate of registration for blasting issued by the State Fire Marshal or is under the direct supervision of a person holding such a certificate. An applicant for a certificate of registration for blasting must:

(a) Meet the criteria outlined in section 5601.4 of the *International Fire Code*, ~~[2018]~~ ***2024*** edition;

(b) Pass a written examination, with a score of at least 75 percent, as determined by the State Fire Marshal;

(c) Pay the applicable fee at the time the applicant submits his or her application;

(d) Submit the following information with the application:

(1) A letter from his or her employer which:

(I) States that the applicant is employed by the employer;

(II) States that the applicant has knowledge of blasting and the safety requirements relating to blasting; and

(III) Requests that the State Fire Marshal issue a certificate of registration for blasting to the applicant;

(2) A current resume;

(3) A copy of each license that is issued by another state and approved by the State Fire Marshal; and

(4) Any other information required by the State Fire Marshal; and

(e) Possess a letter of clearance as a responsible person or possessor of explosives from the United States Bureau of Alcohol, Tobacco, Firearms and Explosives.

2. The certificate of registration for blasting must be in the possession of the registrant while he or she is performing blasting operations. A registrant must pay the same fee as for an address change for a duplicate of a certificate that has been lost or destroyed.

3. This section does not apply to the use of pyrotechnics governed by other provisions of this chapter or the use of explosives:

(a) By a person engaged in agriculture or ranching for occasional use on his or her property;

(b) By an employee of the State, a local government or the Federal Government who uses explosives for construction in the proper performance of his or her duties; or

(c) In flammable or combustible liquid, in fertilizer and in tools or other devices which are actuated by a propellant.

4. A certificate of registration for blasting must be renewed annually. An applicant for renewal must pay a fee of $66 before the certificate of registration for blasting may be renewed.

Sec. 39. NAC 477.770 is hereby amended to read as follows:

477.770 1. A license must be obtained from the State Fire Marshal to service and clean Type 1 exhaust system grease ducts. A Type 1 exhaust system grease duct has the meaning ascribed to it in the National Fire Codes.

2. To obtain a license to service and clean a Type 1 exhaust system grease duct, an applicant must:

(a) Submit an application;

(b) Provide a sample stick-on label to be approved by the State Fire Marshal Division pursuant to NAC 477.790; and

(c) Pay the applicable fee.

3. To obtain a certificate of registration to service and clean a Type 1 exhaust system grease duct an applicant must:

(a) Pass an examination administered by the State Fire Marshal, with a score of at least 75 percent;

(b) Submit an application;

(c) Pay the applicable fee;

(d) Submit a letter from the company which employs the applicant stating that the applicant works for the company and has knowledge of cleaning a hood and duct system; and

(e) Establish that the applicant has read and understands NFPA 96, ~~[2017]~~ ***2024*** edition, section 11.4, and the applicable provisions of this chapter, and is properly equipped to service and clean Type 1 exhaust system grease ducts.

4. A licensed firm that has obtained a license from the State Fire Marshal to service and clean Type 1 exhaust system grease ducts must also be licensed to do business in the city or county in which it is providing this service.

5. Employees of the licensed firm who are not certified may be allowed to assist in the servicing and cleaning of Type 1 exhaust systems if a person certified by the State Fire Marshal is on the premises and directly supervises such work at all times and the certificate of inspection and maintenance is filled out by that certified person who will accept responsibility for the work.

Sec. 40. NAC 477.780 is hereby amended to read as follows:

477.780 1. A copy of the cleaning contract and cleaning reports for a Type 1 exhaust system must be maintained at the site where the exhaust system is located and made available to the authority having jurisdiction upon request.

2. After inspecting or cleaning a Type 1 exhaust system, a copy of a report describing any deficiencies found in the system or a notice that service was refused or was extended beyond the limitations of the contract must be sent to the authority having jurisdiction by the close of business the next business day. A report describing any deficiencies must specify all deficiencies that were not corrected during the servicing of the system, including, but not limited to:

(a) Excessive grease;

(b) Inaccessible areas;

(c) Access panels which do not comply with code specifications;

(d) Fans that are not commercial or cleanable; and

(e) Missing filters.

➥ The report must be signed by a person representing the owner of the system.

3. When grease or other residues are present within the hood, ducts or devices for the removal of grease, the system must be cleaned in accordance with NFPA 96, ~~[2017]~~ ***2024*** edition, section 11.4.

4. If a cleaning contract expires or if a company chooses not to extend a cleaning contract, the licensee must provide written notice to the authority having jurisdiction not later than the close of business the next business day after the contract expires or is not extended.

Sec. 41. NAC 477.810 is hereby amended to read as follows:

477.810 1. Fire standpipe systems must be inspected annually by a person certified by the State Fire Marshal for fire standpipe systems who works for a firm licensed by the State Fire

Marshal to service fire standpipe systems. The annual inspection must conform to the requirements of NFPA 25, ~~[2017]~~ ***2023*** edition.

2. A copy of the annual inspection report must be maintained on-site or electronically and sent to the owner.

3. If an inspection indicates that additional work is required on a fire standpipe system in order to have the system conform to code requirements, the licensed firm must notify the owner and the authority having jurisdiction of the impairment in writing not later than the next business day after the day of the inspection. A tag must be properly signed, punched and attached. The word "impairment" must be written across the bottom of the tag in black letters that are bold.

4. If an inspection discovers a deficiency in the fire standpipe system, the licensed firm must notify the owner of the deficiency in writing. Upon receiving a notice of deficiency, the owner shall correct the deficiency within 30 calendar days of such receipt. If the owner fails to correct the deficiency within 30 calendar days after receiving notice of the deficiency, the licensed firm must notify the owner and the authority having jurisdiction in writing not later than the next business day after the day the person conducting the inspection determines that the deficiency was not corrected as required.

5. Before hydrostatic tests may be conducted on a fire standpipe system, the installer of the fire standpipe system must notify the authority having jurisdiction in such a manner as to provide the authority having jurisdiction with sufficient time to schedule an appointment so that the authority having jurisdiction can be present when the hydrostatic tests are conducted on the fire standpipe system. Tests must be certified by the licensee as meeting code requirements and a copy of that certification must be maintained on-site. A copy of a report describing any

deficiencies in the systems found during the testing must be sent to the authority having jurisdiction.

6. The installer of a fire standpipe system shall place a metal tag on the control valve for the system which states the name of the installing company and the date of the installation.

7. Any work done on the system must be done under the supervision of a person who has a certificate of registration for that work. At the conclusion of the service, test, inspection or installation, the person holding a certificate of registration shall sign and place an approved tag on the system control riser. The tag must be punched in an approved manner to indicate the type of service performed on the system and the date it was performed.

Sec. 42. NAC 477.910 is hereby amended to read as follows:

477.910 1. Every new building constructed by or for the State of Nevada must meet or exceed the minimum requirements of this chapter and the codes adopted by the State Fire Marshal.

2. Except as otherwise provided in subsection 3, a new building owned by the State must be equipped with an automatic fire suppression system if the building is:

(a) More than 5,000 square feet in size;

(b) Used for sleeping purposes; or

(c) Otherwise required to be equipped with an automatic fire suppression system pursuant to the *International Fire Code*, ~~[2018]~~ ***2024*** edition.

➥ Rooms in such a new building which are to be used for sleeping purposes must be equipped with smoke detectors. The smoke detectors must receive their primary power from the building's wiring, with provision made for the detection of smoke during a power failure.

3. The provisions of subsection 2 do not apply to:

(a) A noncombustible open parking garage as defined in the building and fire codes and standards adopted by reference in NAC 477.281;

(b) A detached noncombustible shade structure; or

(c) Any structure upon which solar power panels are placed if the structure is erected over a parking lot.

Sec. 43. NAC 477.915 is hereby amended to read as follows:

477.915 1. Every existing state-owned building must:

(a) Comply with the provisions of NRS 477.100 to 477.170, inclusive;

(b) Meet the requirements of the building code in effect when the building was constructed;

(c) If the building:

(1) Regardless of occupancy designation, has a floor area which exceeds 12,000 square feet on any floor or 24,000 square feet on all floors, including any mezzanines; or

(2) Is designated as an R occupancy,

➥ be scheduled for installation of an automatic fire suppression system during the next remodeling of or addition to the building unless the existing building is included in a designated group of buildings, a compound or a campus which has a long-term fire protection improvement plan that has been approved by the State Fire Marshal for the installation of automatic fire suppression systems over an agreed period of time;

(d) Meet the requirements for fire flows contained in this chapter and the *International Fire Code*, ~~[~~2018~~]~~ ***2024*** edition; and

(e) Be equipped with noncombustible containers for the disposal of smoking materials in designated smoking areas.

2. Every fire in a state-owned or state-occupied building or area of such a building must be reported immediately to the local fire department, which shall notify the State Fire Marshal of the fire as soon as practicable. A written report of the incident must be filed with the State Fire Marshal Division within 24 hours after the fire. The report must be filed by the state agency affected with the State Fire Marshal, 107 Jacobsen Way, Carson City, Nevada 89711.

3. Upon the failure of a smoke detector which is powered by a battery and installed in a state-owned or state-occupied building, the smoke detector must be replaced by a smoke detector which is connected to the wiring of the building and has a battery as a backup source of power.

4. A person who knowingly violates the provisions of this section is subject to prosecution for a misdemeanor in accordance with NRS 477.250.

Sec. 44. NAC 477.917 is hereby amended to read as follows:

477.917 1. The *International Existing Building Code*, ~~[~~2018~~]~~ ***2024*** edition, will be used to determine whether an alteration, repair, addition or change of occupancy of an existing building or structure must comply with the requirements for a new building or structure.

2. Structures existing before November 1, 1994, must comply with the requirements set forth in section ~~[~~1301.2~~]~~ ***1302.1*** of the *International Existing Building Code*, ~~[~~2018~~]~~ ***2024*** edition.

Sec. 45. NAC 477.920 is hereby amended to read as follows:

477.920 1. Unless otherwise required by state statute or regulation or local ordinance, a new commercial building that has more than 5,000 square feet of floor space must be equipped with an automatic fire suppression system if:

(a) The community or area where the building is located is not served by a water system or utility or cannot produce the required fire flow;

(b) The community or area is not served by an organized fire department that is capable of responding to the report of an alarm at the building within 10 minutes;

(c) The building is not served by a fire apparatus access road; or

(d) The community or area does not meet the requirements of chapter 445A of NAC.

2. An increase in floor space area that is allowed by section 503 of the *International Building Code*, ~~[2018]~~ ***2024*** edition, must be approved by the authority having jurisdiction when a system is installed in compliance with this section.

3. As used in this section:

(a) "Fire apparatus access road" has the meaning ascribed to it in section 503.1 of the *International Fire Code*, ~~[2018]~~ ***2024*** edition.

(b) "Organized fire department" means a fire department that is capable of producing a fire flow of not less than 500 gallons per minute for 30 minutes using pumper tanker operations.

Sec. 46. NAC 477.045 is hereby repealed.

TEXT OF REPEALED SECTION

477.045 "Approved" defined. (NRS 477.030) "Approved" means that the State Fire Marshal has approved a practice or piece of equipment as the result of investigation and tests conducted under his or her supervision or by reason of accepted principles or tests by national authorities or technical or scientific organizations recognized by the State Fire Marshal.

Community Development Department

2024 Fire Code Adoption

Board of County Commissioners

April 16, 2026

Why Update?

- The purpose of adopting the updated fire code is to ensure compliance with NAC 477 and to maintain consistency and compatibility with the fire codes adopted by the local fire protection districts. Regular updates to the fire code incorporate advancements in construction methods, building materials, and fire and life-safety standards, thereby promoting the health, safety, and general welfare of residents, visitors, and businesses throughout the County.

Purpose of Fire Codes

- **Purpose and Importance of Fire Codes**
  - Fire codes establish minimum standards intended to protect life, property, and public welfare by regulating fire prevention, hazardous materials, emergency access, fire protection systems, and conditions that may contribute to fire or explosion hazards.
  - Fire code standards are designed to support effective fire prevention, emergency response, and life-safety practices, and to provide a uniform framework for fire-safety regulation.

What is Being Adopted?

- **Adoption Includes:**
  - 2024 International Fire Code
  - 2024 Northern Nevada Amendments to the 2024 International Fire Code
- **2024 NNICC Amendment Development Process**
  - Participating fire agencies have worked collaboratively to achieve uniformity in code adoption and enforcement.
  - This effort improves clarity for builders, design professionals, and inspectors working across fire agency jurisdictional lines.
  - The 2024 amendment cycle reflects the fire agencies commitment to protecting the communities from hazards associated with fire.
  - The Northern Nevada Chapter of the International Code Council (NNICC) and fire agencies developed amendments to the 2024 International Fire Codes in order to tailor them to regional needs
  - Amendments focused on occupancy classifications, battery recycling facilities, required automatic fire sprinklers, and more.
- **Fire Agency Collaboration**
  - 12 fire agencies from the Northern Nevada Region participated in the amendment process.

Participating Fire Districts and Departments

- Central Lyon Fire Protection District
- Smith Valley Fire Protection District
- North Lyon Fire Protection District
- Carson City Fire Department
- East Fork Fire Protection District
- Elko City Fire Department
- North Lake Tahoe Fire Protection District
- Reno Fire Department
- Truckee Meadows Fire Protection District
- Storey County Fire Protection District
- Tahoe Douglas Fire Protection District
- Fallon/Churchill Fire Department

Why County Adoption is Necessary?

Compliance with State Requirements (NAC 477)

- Aligns County code with State Fire Marshal standards applicable to counties under 100,000 population.

Consistency with Local Fire Protection Districts

- Ensures County code matches the 2024 IFC and Northern Nevada Amendments adopted and enforced by local fire protection districts.

Regional Uniformity and Predictability

- Supports a coordinated Northern Nevada approach, providing clear and consistent fire-safety expectations for developers, designers, and contractors.

Community Development Department

Key Updates in the 2024 IFC

Energy Storage Systems & Lithium Batteries (Section 320) - NEW

- Dedicated requirements for lithium-ion and lithium metal battery storage.
- Expands fire protection, sprinkler, and separation rules for modern battery hazards.

Carbon Monoxide Detection Expansion

- CO alarms/detection now required in **all occupancy types**, not just residential or schools.
- Strengthens life-safety across commercial, industrial, and residential buildings.

Emergency Responder Communication Systems (ERCES) Updates (Section 510)

- Aligns with modern technologies and clarifies owner/occupant responsibilities.
- Critical for ensuring effective emergency response in all new construction.

Powered Micromobility Devices & Temporary Operations (Sections 322 & 41)

- Fire safety requirements for e-scooters, e-bikes, temporary heating, and cooking operations.
- Addresses emerging hazards in commercial and residential developments.

Permit & Enforcement Clarifications (Sections 104 & 105)

- Expanded operational permit triggers for new hazards (e.g., battery accumulations).
- Strengthens the authority and clarity of the fire code official in life-safety enforcement.

Emergency Access Road Requirements

- Changes allow developers to improve fire access roads with a compacted Type II Base material. Previous code mandated the access roads be paved.

2024 IFC Northern Nevada Amendments

Section 203.7 – Daycare Facilities

- Amended to increase the number of children in a daycare facility form 5 to 6 to comply with the 2024 IBC and Sate regulations.

Section 325 – Battery Recycling Facilities (NEW)

- Required Technical Opinion and Report
- Emergency Procedures and Response Plan
- Fire Suppression Systems
- Fire Alarm and Detection Systems
- Explosion Control Requirements
- Ventilation
- Containment Control

2024 IFC Northern Nevada Amendments

Section 505.1 Address Identification

- Update address number requirements to all-weather materials
- Update dimensions 6 inches for residential and 12 inches for commercial

Section 903.2.1 and 903.2.2 – Automatic Fire Sprinkler Requirements

- Update provisions to state that any addition or remodel that increases the fire area will be included in the calculation for the total square footage.
- The use of fire walls and fire barriers shall not be allowed to reduce the size of the fire area.

Table B105.2 – Required Fire Flow for One and Two-Story Dwellings, Group R-3 and R-4 Buildings

- Increase from 25% to 50% of the Value in Table B105.1(2) in Appendix B of the 2024 IFC

Community Development Department

NAC 477.740 – State Fire Marshall

REVIEW OF PLANS

NAC 477.740 Plans subject to review; certificate of compliance required; general requirements. (NRS 477.030)

1. The State Fire Marshal Division shall review any plans concerning the construction, the site and any system for protection from fire to determine if there is compliance with the provisions of this chapter and any adopted codes relating to safety from fire and the protection of life of any:

(a) Building owned or leased by the State;

(b) Facility for public education in a county whose population is 400,000 or more, or when requested by the local building official or administrator of the facility;

(c) Health and care facility or child care facility licensed by the State; and

(d) Building, project for construction or system for protection from fire involving public occupancy, excluding single-family detached dwellings, in any county whose population is less than 100,000, if there is no interlocal agreement between the State Fire Marshal Division and the authority having jurisdiction or for which a request for review is received from the owner or the authority having jurisdiction.

2. All projects requiring review must receive a certificate of compliance with the provisions of this chapter and any adopted codes relating to safety from fire and the protection of life from the State Fire Marshal before the building or structure is occupied. If requested by the local building official, the State Fire Marshal will provide input regarding possible temporary occupancy of the building or structure. A certificate of compliance from the State Fire Marshal may be suspended or revoked by the State Fire Marshal if his or her approval was granted in error or because incorrect information was supplied, or if the State Fire Marshal determines that the project is in violation of any code adopted under this chapter, this regulation or other law.

3. The plans and specifications of the project must be drawn to scale upon substantial paper or cloth and must be of sufficient clarity to indicate the location, nature and extent of the work proposed and to show in detail that it conforms to this chapter and the codes adopted under this chapter. Plans must be drawn, signed and stamped by those persons who are authorized by specific statute and the State Contractors' Board to draw plans and specifications.

4. A plan which provides for fire stopping must provide details on the technical specifications for the materials used and the testing and listing for those materials.

(Added to NAC by St. Fire Marshal, 7-16-85, eff. 8-1-85; A 2-17-94; R220-99, 9-25-2000; R102-08, 9-18-2008)

Summary:

- Applies to publicly accessible buildings **excluding single-family detached homes**.
- Review occurs **only if**:
  - No agreement exists with the local fire authority, **or**
  - Review is specifically requested by the building owner or local authority.

What the Adoption Does Not Do

- Does **NOT** expand County's Plan Review Authority
- Does **NOT** change fire district jurisdictions
- Doe **NOT** impose new County enforcement responsibilities
- Does **NOT** create new fee or inspection program by the County

Proposed Ordinance

15.239.01.A.11: CODES ADOPTED; GENERAL ADMINISTRATION

"11. International Fire Code, ~~2018~~ 2024 edition, published by ICC."

15.239.05.B: NORTHERN NEVADA AMENDMENTS

"Lyon County adopts the Northern Nevada amendments to ~~2018~~ 2024 International Fire 11 Code dated August 8, 2018. (Ord. 604, 4-4-2019)"

Recommended Motion

Motion to propose an ordinance amending Lyon County Code Title 15, Chapter 239, Sections 1 and 5 to adopt the 2024 IFC Building Codes and 2024 Northern Nevada Amendments to the 2024 IFC.

Questions??

Lyon County Board of County Commissioners Agenda Summary

Meeting Date: April 16, 2026

Agenda Item Number:
14.a

Subject:
For Possible Action: Approve plans for employee health, dental, vision, and life insurance coverage effective July 1, 2026, and authorize the Human Resources Director to sign associated contracts. (Human Resources Director, Ben Evans)

Summary:
The proposed premiums for health, dental, vision, and life insurance coverage are attached. Health insurance premiums reflect an increase of 9.37%. Dental, vision, and life insurance rates will have no increase in premiums.

Financial Department Comments:
This has been included in the tentative budget for fiscal year 2026-2027.

Approved As To Legal Form:

County Manager Comments:

Recommendation:

ATTACHMENTS
- Lyon County 26-27 BOCC Renewal Packet

Renewals

2026 – 2027

Insurance Carrier	Coverage
Cigna	Medical
Guardian	Dental, Life, Short Term Disability (STD), Critical Illness, Cancer, Accident
Vision Service Plan (VSP)	Vision

MEDICAL

CIGNA

Plan / Tier	Enrollment	Current Plan 7/1/25 - 6/30/26	Final (with plan adjustments) 7/1/26 - 6/30/27
PPO $750 Plan			
Employee Only	202	1,028.57	1,130.40
Employee + Spouse	19	1,871.03	2,056.26
Employee + Child(ren)	60	1,642.63	1,805.26
Employee + Family	16	2,619.81	2,879.17
Monthly by plan	**297**	**383,795.47**	**421,792.06**
Annual by plan		**4,605,545.64**	**5,061,504.72**
			9.90%
PPO $2,500 Plan			
Employee Only	2	872.21	939.81
Employee + Spouse	12	1,586.51	1,709.46
Employee + Child(ren)	39	1,392.89	1,500.84
Employee + Family	23	2,221.45	2,393.61
Monthly by plan	**76**	**126,198.60**	**135,978.93**
Annual by plan		**1,514,383.20**	**1,631,747.16**
			7.75%
Monthly total		**509,994.07**	**557,770.99**
Annual total		**6,119,928.84**	**6,693,251.88**
$ Difference from current			**573,323.04**
% Difference from current			**9.37%**

Summary
Initial Renewal +23.94%
Negotiated Renewal +14.75%
Final (w plan adj.) +9.37%
County Impact +9.90%

Note: This exhibit is for illustrative purposes only and summarizes rates. Final rates are subject to carrier approval, total premiums will vary based on final enrollment, and benefit details are governed by the carrier's plan documents.

DENTAL - Guardian

Plan / Tier	Enrollment	Current Plan 7/1/25 - 6/30/26	Negotiated Renewal 7/1/26 - 6/30/27
Employee Only	204	$40.36	$40.36
Employee + Spouse	31	$81.46	$81.46
Employee + Child(ren)	99	$75.88	$75.88
Employee + Family	39	$123.56	$123.56
Total	**373**	**$23,089.66**	**$23,089.66**
Total Monthly Premium		**$23,090**	**$23,090**
Total Annual Premium	**373**	**$277,075.92**	**$277,075.92**
$ Difference From current			**$0**
% Difference From current			**0.00%**

Summary
Final Renewal 0.00%
Plan Changes - None

Note: This exhibit is for illustrative purposes only and summarizes rates. Final rates are subject to carrier approval, total premiums will vary based on final enrollment, and benefit details are governed by the carrier's plan documents.

VISION - VSP

Plan / Tier	Enrollment	Current Plan 7/1/25 - 6/30/26	Negotiated Renewal 7/1/26 - 6/30/27
Employee Only	204	$5.88	$5.88
Employee + Spouse	31	$9.42	$9.42
Employee + Child(ren)	99	$9.62	$9.62
Employee + Family	39	$15.50	$15.50
Total	**373**	**$3,048.42**	**$3,048.42**
Total Monthly Premium		**$3,048**	**$3,048**
Total Annual Premiun	**373**	**$36,581.04**	**$36,581.04**
$ Difference from current			**$0**
% Difference from current			**0%**

Summary
Final Renewal 0.00%
Plan Changes - None

Note: This exhibit is for illustrative purposes only and summarizes rates. Final rates are subject to carrier approval, total premiums will vary based on final enrollment, and benefit details are governed by the carrier's plan documents.

BASIC LIFE - Guardian

Category	Current Plan 7/1/25 - 6/30/26	Negotiated Renewal 7/1/26 - 6/30/27
BENEFIT		
Non Law Enforcement	$10,000	$10,000
Law Enforcement	$50,000	$50,000
AD&D	Yes	Yes
Spouse and Child	$10,000.00	$10,000.00
MONTHLY RATES		
Dep. Life	$1.75	$1.75
- LIFE (PER $1,000)	$0.24	$0.24
- AD&D (PER $1,000)	$0.02	$0.02
- TOTAL EE RATE (PER $1,000)	$0.26	$0.26
Approx. EE - Non Law Enforcement	$258	$258
Approx. EE - Law Enforcement	$63	$63
VOLUME		
- LIFE/AD&D - Number of EEs	$6,840,000	$6,840,000
Estimate Monthly Premium	**$1,778.40**	**$1,778.40**
Estimate Annual Premium	**$21,340.80**	**$21,340.80**
$ change from current estimate		
% change from current estimate		

Note: This exhibit is for illustrative purposes only and summarizes rates. Final rates are subject to carrier approval, total premiums will vary based on final enrollment, and benefit details are governed by the carrier's plan documents.

Medical Plan Changes Summary (2026–2027)

Overview:

- Renewal reduced to 9.37% through targeted plan adjustments
- Changes focus on higher-cost services; routine care largely unchanged
- Several enhancements included
- Lyon County plans remain highly competitive compared to surrounding counties and municipalities

No Change Highlights
- Deductibles: No change
- Pharmacy Copays: No change
  - Generic (30-day): $15
  - Preferred Brand (30-day): $40 / $45
  - Non-Preferred Brand (30-day): $60 / $75

Enhancements
- $0 telemedicine (MDLive) across all visit types
- Specialty Rx: Copay capped at $250 (previously uncapped)

Minimal Copay Adjustments
- PCP visits: +$5
- Specialist visits: +$5–$10
- Urgent care: increased to $75

Targeted Cost-Sharing Changes
- Facility-based services (inpatient/outpatient) now include coinsurance
- Advanced imaging (MRI, CT, etc.): now subject to coinsurance
- Skilled nursing: adjusted to coinsurance

Out-of-Pocket Maximum Adjustments
- $750 Plan: Increased from $6,000 / $12,000 to $9,350 / $18,700
- $2,500 Plan: Increased from $6,350 / $12,700 to $9,350 / $18,700
- Changes implemented to reduce premium and manage overall plan cost
- Remains below 2026 ACA limits ($10,600 individual / $21,200 family)

Pharmacy Program Changes
- Mandatory 90-day maintenance program (limited impact to chronic medications)
- Retail access remains for non-maintenance and preventive medications

Key Takeaway
- Changes are targeted and moderate, designed to control costs while minimizing impact to employees

Note: This summary highlights key plan changes and is not a complete listing. In all cases, the carrier's plan documents and certificates of coverage govern.

Renewal Summary

(Medical, Dental, Vision, Basic Life / Voluntary and Voluntary Disability)
2026 – 2027

Renewals

Medical: 9.37% (with plan adjustments)

Dental: 0% (no plan adjustments)

Basic Life: 0% (no plan adjustments)

Vision: 0%

Voluntary: Benefit enhancements to Life, Short Term Disability (STD), Critical illness, and Accident

Maintained from Prior Year

County Contribution:

Medical: 100% of the employee-only premium and 50% of dependent premiums based on the $750 plan. Same dollar contributions applied to the $2,500 plan.

Dental/Vision: 100% of employee-only premium

Basic Life: 100% employer-paid; voluntary benefits–employee paid

Prior Enhancement: Sworn Law Enforcement, Juvenile Probation Officers, and Bailiffs included for Short-Term Disability voluntary benefits

7/1/2026 - 6/30/2027 Benefit Rates
Lyon County

	CIGNA					
	ER Cost Month	PPO $750 EE/PP*	PPO $750 EE/Month	ER Cost Month	PPO $2,500 EE/PP*	PPO $2,500 EE/Month
Employee Only	$ 1,130.40	$ -	$ -	$ 939.81	$ -	$ -
Employee + Spouse	$ 1,593.34	$ 231.46	$ 462.92	$ 1,593.34	$ 58.06	$ 116.12
Employee + Child(ren)	$ 1,467.84	$ 168.71	$ 337.42	$ 1,467.84	$ 16.50	$ 33.00
Employee + Family	$ 2,004.79	$ 437.19	$ 874.38	$ 2,004.79	$ 194.41	$ 388.82

	Dental (Guardian)			Vision (VSP)		
	ER/Month	EE/PP*	EE/Month	ER/Month	EE/PP*	EE/Month
Employee Only	$ 40.36	$ -	$ -	$ 5.88	$ -	$ -
Employee + Spouse		$ 20.55	$ 41.10		$ 1.77	$ 3.54
Employee + Child(ren)		$ 17.76	$ 35.52		$ 1.87	$ 3.74
Employee + Family		$ 41.60	$ 83.20		$ 5.01	$ 10.02

	Basic Life Insurance Non-Sworn (EE benefit $10,000)		Basic Life Insurance Sworn (EE benefit $50,000)	
	ER/Month	EE/Month	ER/Month	EE/Month
Employee Only	$ 2.60	$ -	$ 13.00	$ -
Voluntary Employee		banded		banded
Family (10,000/vol)		$ 1.75		$ 1.75

*First and second paydays each month.

For Medical County pays 100% employee coverage plus 50% spouse/dependent.

For Dental, Vision County pays 100% of employee only and 0% for spouse/dependent coverage.

*Employee deductions are taken the first two pay periods (PP) of each month.

Employee deductions are pretax.

FY26/27 OPEN ENROLLMENT

Benefits Effective July 1, 2026

MANDATORY! Starting May 4th – May 15th:
ALL employees are required to complete electronic Benefit Enrollment through Munis ESS.

YOUR ACTION REQUIRED

INSTRUCTIONS:

1. Log on to **Munis ESS**. Select "**Benefits**" and then "**Open Enrollment**" to select your new plans for FY26/27. Refer to instructions "Open Enrollment Munis ESS Instructions."
2. To sign up for other *voluntary* benefits such as 457 Deferred Compensation, Flex Spending, additional Life insurance and third-party insurance, please contact HR via email HRManager@lyon-county.org (775) 463-6510.
3. Open Enrollment Support:
   By phone: (775) 827-5550
   By Email: MyBenHelp@benefit-intelligence.com
4. PPO Plan Summary and other benefit resources are available within Munis ESS under "Resources" (top right hand of webpage)

OPEN ENROLLMENT DATES:
BEGINS - May 4
ENDS - May 15

PROVIDERS	BENEFIT
CIGNA	Health and Medical Coverage
Guardian	Dental, & Life insurance
Vision Service Plan	Vision Services
Pool/Pact	EAP—Employee Assistant Program
Infinisource	Flex Spending
Voya	Nevada Deferred Compensation 457

Open Enrollment
May 4th -
May 15th

Open Enrollment
Dedicated Support

myBenHelp

Complete Benefits Assistance

Call, click or fax for confidential service

Open Enrollment Support

Dedicated phone (775) 827-5550

Email: MyBenHelp@benefit-intelligence.com

Lyon County Board of County Commissioners Agenda Summary

Meeting Date: April 16, 2026

Agenda Item Number:
15.a

Subject:
For Possible Action: Set a date and time for a special meeting of the Board of County Commissioners for a public hearing on the service plan for the proposed North Lyon Power General Improvement District. Possible dates include May 13th, 14th, and 15th. (County Manager Andrew Haskin)

Summary:
A service plan has been filed for the proposed North Lyon Power General Improvement District. NRS 308.070 requires the Board of County Commissioners, at their next regular meeting, to set a hearing date and time for a public hearing on the service plan. The hearing date must be within 30 days of the meeting to set the hearing date but after legal notice has been published once a week for three successive weeks by three publications, the first of which shall be at least 20 days prior to the hearing.

Financial Department Comments:

Approved As To Legal Form:

County Manager Comments:

Recommendation:

ATTACHMENTS
- North Lyon Power GID Service Plan
- NLPGID Service Plan Exhibits

ELECTRIC SERVICE PLAN FOR
NORTH LYON COUNTY POWER DISTRICT ("DISTRICT")

(Effective __/__, 2026)

I. INTRODUCTION AND GENERAL INFORMATION

a. ***Summary of Project***:

Northern Nevada Industrial Center ("NNIC") is a commercial and industrial development in Lyon County, planned as a modern, multi-use industrial park designed to accommodate manufacturing facilities, logistics hubs, data centers, and advanced technology enterprises, all of which have large and growing electric power requirements. The North Lyon County Power District ("District") is proposed to meet the significant electricity needs of the NNIC.

For the benefit of the reader and ease of understanding the following definitions for certain frequently used terms within this Service Plan:

District Energy Manager: District Energy Manager will be responsible for coordinating with and providing services to the District and Primary Generation Partner to help Primary Generation Partner manage its electric power operations and regulatory compliance obligations associated with the District, and to perform such other functions as required by the District and agreed upon by District Energy Manager.

District Governing Board: The District Governing Board provides public oversight of District operations. This Board may be comprised of the Board of County Commissioners ("BOCC") for Lyon County.

Development Partners: Development Partners may include: NNIC; Primary Generation Partner; and Generation Partners. For the avoidance of doubt, neither the District, End-Use Customers, District Energy Manager, nor Lyon County are considered "Development Partners."

District Participants: Development Partners, contractors, interconnecting facility owners, End-Use Customers, and other commercial enterprises operating within the District. A catch-all term intended to reflect any private commercial operation within the District.

District Service Rules: Standard terms and conditions generally applicable to all District Participants, approved by the District Governing Board that govern how electric power services in the District are generated, connected, used, billed, and disconnected.

End-Use Customer: A customer within the District who purchases electric power from the District to develop and operate commercial, industrial, data center, and functionally similar facilities, in addition to other uses approved by the District. End-Use Customers will share, or financially secure costs, performance obligations, and operational duties assumed by Development Partners.

Energy Supply Agreement ("ESA"): The agreement governing the provision of electric power and related services to an End-Use Customer, negotiated between Primary Generation Partner and a specific End-Use Customer, and approved by the District. Such agreements establish the rates, terms, and conditions of service, including credit and security requirements, consistent with the District Service Rules.

Generation Partners: Developers, other than Primary Generation Partner, who construct electric power generation facilities within the District and operate them for the purpose of providing power to End-Use Customers.

Interconnection: When capitalized, the term refers to interconnection with the primary electric power supply grid in the State of Nevada, which is managed and operated by NV Energy. When the term is not capitalized, it refers to interconnecting generation facilities to end-use customer facilities and other intra-NNIC electric service infrastructure for the purpose of providing electric energy within the District.

Primary Generation Partner: The District's primary generation facility developer and provider of electric power for the District's electric power operations. Primary Generation Partner (or its affiliates) will construct and operate the electric power facilities, and work with NNIC and District Energy Manager to commence operations of the District, in compliance with the District Governing Board's direction. NNIC proposes General Catalyst as Primary Generation Partner.

Prudent Utility Practice: Any of the practices, methods, and acts engaged in or approved by a significant portion of the electrical utility industry prior to practice or approval, or any of the practices, methods, or acts, which, in the exercise of reasonable judgment in the light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at the lowest reasonable cost consistent with reliability, safety, and expediency.

b. ***Statutory Authority:*** The District is being established under Nevada Revised Statutes ("NRS") 308 and 318.

c. ***District Boundaries (NRS 308.030(1)(b))***: The District's initial service territory shall be the area depicted in Exhibit A to this Service Plan, including APNs 021-411-03; 021-411-04; 015-011-05; 015-011-07; 015-011-08; 015-011-09; and 015-011-10.

d. ***Financial Survey (NRS 308.030(1)(a)) and Indebtedness and Financing Methods (NRS 308.030(1)(c))***: All infrastructure build-out and construction activities will be fully funded and securitized through private development commitments. These

commitments may utilize mechanisms such as performance bonds, cash or cash equivalents, letters of credit, and other secured financial instruments. Upon request, Primary Generation Partner and District Energy Manager will provide regular financial reports and projection updates, subject to audit, to the District Governing Board, as appropriate, throughout the development phase, as well as during ongoing electric power operations, ensuring ongoing financial transparency and regulatory oversight. The District will not finance any development activity within the District Boundaries.

e. ***Preliminary Engineering/Architectural Survey (NRS 308.030(1)(a))***: Please see Preliminary Engineering Survey provided in Exhibit B to this Service Plan.

f. ***Population and Assessed Valuation Estimates (NRS 308.030(1)(b))***: The District projects no residential population, as it is a purely commercial and industrial service project. As of the submission of this Service Plan, the assessed valuation of the District is $1.6 million, which is projected to reach approximately $279 million by 2031.

g. ***Facility Descriptions and Construction Standards (NRS 308.030(1)(c))***: Please see Exhibit C to this Service Plan.

h. ***Expense Estimates (NRS 308.030(1)(c))***: Please see Exhibit D to this Service Plan. At this time, it is envisioned that all NNIC and electric power expenses will be financed by NNIC, Primary Generation Partner, and other Development Partners, requiring no investment or indebtedness by the District.

i. ***Economic Soundness and Feasibility (NRS 318.055(4)(c)(2))***: The proposed District is economically sound and financially feasible based upon demonstrated demand for electric service, the proposed privately financed service model, secured and executed through enforceable contractual arrangements sufficient to support the development, operation, and maintenance of the proposed facilities.

Demonstration of Demand and Need

Electric service within the District boundaries. Substantial unmet demand for high-capacity electric service in Northern Nevada has been identified, particularly from data center, advanced manufacturing, and industrial users requiring large and reliable electric loads.

Existing electric service providers, including NV Energy, are unable to provide such service within commercially reasonable timeframes for the anticipated load requirements of prospective End-Use Customers. As a result, without formation of the District, such demand cannot be timely or feasibly served.

The District is therefore necessary to provide electric service that is otherwise unavailable within the required timeframe.

Service Availability and Phased Delivery

Electric service within the District will be advanced through a phased development approach, whereby infrastructure is planned, constructed, and placed into service in alignment with executed service agreements.

Initial service capability is anticipated at approximately 250 megawatts, with incremental expansion up to approximately 3 gigawatts, contingent upon executed agreements with End-Use Customers. This phased approach ensures that service availability is directly tied to verified demand and contractual commitments. Electric Infrastructure will be constructed only when required and financed by the beneficial user of that infrastructure, pursuant to industry-established ESAs, Line Extension Agreements, or similar contractual arrangements. Beneficial users of infrastructure will be evaluated for creditworthiness prior to execution of any such agreement, and may be required to post financial security instruments to cover all costs up to and including "construction complete" or commercial operation dates. Such security will be stepped down proportionally as cash values are advanced and deployed during the construction process, ensuring full cost coverage from project planning through completion.

Financial Structure and Cost Recovery

The District's facilities and operations will be financed entirely through private capital provided by the Primary Generation Partner and other Development Partners. No ad valorem taxes, general obligation debt, or financial support from Lyon County or any other governmental entity will be required.

All capital costs, operating expenses, and administrative costs of the District will be recovered through:

- charges for electric service to End-Use Customers;
- contractual payments under Energy Supply Agreements; and
- fees assessed in accordance with District Service Rules.

The foregoing costs will be based on industry-standard Cost of Service Studies, incorporated into relevant contractual terms. The District will operate on a self-supporting basis, and all obligations of the District shall be payable solely from District revenues, Development Partner investments, or any such legally available funds.

Contractual Revenue Sufficiency

Economic feasibility is supported by long-term Energy Supply Agreements ("ESAs") between the Primary Generation Partner and End-Use Customers.

Such agreements are expected to include:

- binding take-or-pay obligations, ensuring payment for contracted capacity;
- minimum payment provisions sufficient to cover fixed and variable costs;
- long-term contract durations providing predictable revenue streams (typically 20 years); and
- security and credit support requirements to ensure performance.

These contractual arrangements are similar to those long-utilized by major utilities (like NV Energy) and ensure application of Good Utility Standard practices, providing reliable and enforceable revenue streams sufficient to support the construction, operation, and maintenance of the District's electric service infrastructure.

Economic Feasibility Determination

The District's service model is economically feasible because:

- infrastructure development is contingent upon executed customer agreements, thereby limiting exposure to uncontracted capacity and mitigating risk of stranded assets;
- revenues under executed ESAs are structured to recover all capital and operating costs;
- financial risk is allocated to private Development Partners and End-Use Customers, and not to the District or the County; and
- the District retains the ability to defer, phase, or discontinue development if sufficient contractual commitments are not obtained.

Pursuant to NRS 308.060(1)(g), the District does not propose to finance private development through public indebtedness, and no such indebtedness is contemplated.

Rate Competitiveness and Market Acceptance

Although the rates for electric service within the District may exceed existing utility tariff rates, the District provides a service that is not otherwise available within the required timeframe. The ability to obtain reliable, large-scale electric service on an accelerated schedule constitutes a material economic benefit to End-Use Customers.

Demand and interest in the District are abundant. Prospective customers have demonstrated a willingness to enter into long-term contractual arrangements at such rates in order to secure timely access to electric service.

Conclusion and Findings

Based upon the foregoing:

- The District satisfies the requirement of NRS 318.055(4)(c)(2) that the creation of the District is economically sound and feasible;

j. ***Economic Sustainability (NRS 308.060(1)(d))***: The District, Development Partners, and District Energy Manager will utilize Prudent Utility Practices[1] and responsible financial practices that are in place today in other master-planned developments. Moreover, NNIC, through its existing Lyon County Development Agreement and Covenants, Conditions, and Restrictions ("CC&Rs") maintains the ability, working with Lyon County, to enforce such terms against District Participants.

k. ***Compatibility with Adjacent Areas (NRS 308.060(1)(f))***: There are currently no special districts or municipalities in close proximity that have incompatible facilities or service standards.

l. ***District Need and Operations Summarized***: The District will plan for, acquire, and furnish electric service and electric power infrastructure within the District boundaries in order to meet the electric power needs of End-User Customers within the NNIC. The District will contract with District Energy Manager, Development Partners, and others, for services related to carrying out the District's provision of electric services.

NNIC has identified the Primary Generation Partner which will serve as the principal developer and operator of facilities and a wholesale supply counterparty to the District. In addition to generating the electric power needed to serve requested electric loads within the District, Primary Generation Partner may purchase, aggregate, and manage power produced by Generation Partners on behalf of the District under District-approved Energy Supply Agreements or similar arrangements.

NNIC has also identified and proposed a District Energy Manager to provide services to Primary Generation Partner and the District for management of such entities' electric power operations, regulatory compliance, and billing for electric services provided within the District.

Development Partners may, at their own expense and risk, apply to the District for authorization to develop, interconnect, operate and provide electric power resources within the District. All Development Partners and End-Use Customers shall be subject to District Service Rules.

The District shall provide and bill for electric power services to End-Use Customers. Electric Supply Agreements ("ESAs") entered into by the Development Partners to provide electric power to the District for the benefit of End-Use Customers shall be utilized by the District.

The District may contract with Development Partners, their affiliates, or other qualified firms to construct, operate, and maintain electric power facilities for the District. The District also may enter into agreements with District Energy Manager and Development Partners, their affiliates, and others, to support day-to-day

operations, scheduling, billing administration, compliance, and other necessary functions, as well as electric power generation, storage, and scheduling.

Commercial, operational, financial, and supply-related obligations under ESAs and similar agreements shall include terms related to resource procurement, fuel management, performance risk, scheduling, delivery operations, billing administration, credit support, and default exposure. District Energy Manager, Development Partners, End-Use Customers, their affiliates, and District Participants, as set forth in District-approved agreements, shall be solely responsible for performance under the terms of such agreements. The District may require reasonable security and indemnification from Development Partners for their respective obligations. The District plans to be fully indemnified by District Participants against any obligations arising from any such agreements.

II. DISTRICT FORMATION AND GOVERNANCE

a. The District's creation is authorized pursuant to NRS Chapter 318, by action of the Lyon County Board of County Commissioners ("BOCC") and, upon formation, initially governed by the BOCC acting as the District's ex-officio board of trustees.

III. COMPLIANCE WITH NRS 308 and 318

a. The formation, approval, and any material amendment of this District and Service Plan shall comply with the applicable provisions of NRS Chapters 308 and 318, including, where required, filing with the County Clerk, referral to the Lyon County Planning Commission, publication of notices, conduct of public hearings, and adoption of findings by the BOCC, regardless of whether the District is initiated by petition or by Board resolution.

b. The District's creation meets the public convenience and necessity requirements of NRS 318.055(4)(c)(1). Currently, there is no current electric service in NNIC, and the District would provide an avenue for such electric service. Because creation of the District is anticipated to allow for electric energy service on a timeline years ahead of any commercially reasonable alternative, creation of the District would serve the public convenience and necessity.

c. The preceding factual predicates similarly satisfy the requirements of NRS 308.060(1)(a) – Demonstration of Need, and NRS 308.060(1)(b)- Service Availability. At this time no existing Electric Utility provides either the electric transmission or the electric power needed to meet End-Use Customer and broader market demand within the District for the foreseeable future (until at least the 2030s), while the District will be able to provide access to electric energy otherwise entirely unavailable.

Finally, the District conforms to the statutory provisions of NRS 318.055(4)(c)(3), and does not contravene NRS 308.060 and 318.055(4)(c)(4).

IV. FINANCIAL RESPONSIBILITY

a. All infrastructure and operating costs for the District will be fully funded and secured by Development Partners and will not require funding from Lyon County or the District.

b. To minimize cost exposure and financial risk to the District, Primary Generation Partner shall be responsible for developing, owning, financing, and operating the electric power distribution and delivery system. Accordingly, the District generally does not intend to own, finance, or operate any electric energy generation, storage, or delivery assets.

c. Notwithstanding Section IV(b) of this Service Plan, the District reserves the right to consider, evaluate, and adopt methods related to the ownership or control of distribution-level facilities where the District Governing Board determines such action is: (i) necessary or prudent for the advancement or continued operation of the District; (ii) economically feasible; and (iii) secured by adequate financial commitments from End-Use Customers to cover all associated costs and liabilities.

d. All Generation Partners, including Primary Generation Partner, are responsible for securing all required permits, complying with all applicable regulatory requirements, and bearing full financial and operational risk.

e. The District shall operate as an independent legal entity pursuant to NRS Chapter 318. All contractual, operational, and financial obligations shall be satisfied solely through District revenues and private contractual arrangements.

V. OPERATION OF THE DISTRICT: ROLES AND RESPONSIBILITIES

a. The District Governing Board, upon creation of the District, shall be the Lyon County Board of County Commissioners ("BOCC") as required by NRS 318.083.

b. The District shall approve and implement Service Rules governing the generation and provision of electric services within its boundaries, recognizing the unique needs of the District and the unique roles of the Development Partners.

c. The District may adopt District Service Rules governing contract terms between and among Development Partners on a prospective basis, including but not limited to electric power performance obligations, pricing, indemnification, decommissioning, removal and restoration, cooperation with Interconnection efforts and regarding emergencies and supply arrangements. Any such terms shall also address minimum

levels of indemnification, insurance, remedies and suspension and termination of service.

d. The following types of contracts, agreements, and compliance filings shall be submitted to the District for approval, to ensure that such documents do not contain provisions that are fiscally irresponsible or unreasonably discriminatory:

    i. Contracts for provision of services to the District, such as the services to be provided by District Energy Manager, Development Partners and NNIC, as well as other entities;

    ii. Power Purchase Agreements, Energy Supply Agreements, or substantially similar arrangements for services to be provided within the District;

    iii. Agreements that ensure legal compliance and adequate financial security and indemnification of the District from Development Partners' planned projects;

    iv. Regulatory and administrative filings of the District, prepared by Primary Generation Partner on behalf of the District, in consultation with District Energy Manager and the District, in connection with the District's compliance obligations;

    v. RPS compliance reporting to the PUCN;

    vi. Audited District financial reports; and,

    vii. Such other agreements and reports as the District determines are required.

e. District shall serve as the authorized entity that furnishes electricity to End-Use Customers and formally complies with state regulatory requirements.

f. The District may contract with District Energy Manager and Development Partners, affiliates thereof, and others, for performance of certain District functions, including but not limited to:

    i. Generation of electric power;

    ii. Conducting electric power operations within the District;

    iii. Provision of power to End-Use Customers;

    iv. Billing and collections; and

    v. Preparation of state regulatory compliance reports, including for RPS, as applicable

g. Except as required to ensure compliance with State law and District Service Rules, as approved, or amended from time to time, the District has no responsibility to:

    i. Submit State, local or regulatory filings of the Development Partners;

    ii. Financially secure or assume any legal or formal responsibility for the electric power assets within the District, except to the extent necessary to ensure adequate indemnification of the District; or

    iii. To generate and distribute energy to End-User.

i. The District may contract for professional services needed to carry out its functions and may obtain reimbursement from the Development Partners, for the costs of these services.

j. The District may establish a technical advisory committee comprised of individuals with experience in electric service operations, engineering, or finance, to provide non-binding recommendations on electric power functions to District Participants and the District Governing Board.

k. During the District's formation period, the District will collaborate with Lyon County staff, the Development Partners, and District Energy Manager, engaged in ongoing development within District boundaries, to adopt a standard framework of contract terms for subsequent Development Partners and End-Use Customers, that meet the standards set forth in the District's Service Rules. Such terms will be a starting point, and will incorporate financial security mechanisms, such as performance bonds, cash or cash equivalents, or letters of credit, to safeguard the District from financial liability resulting from performance defaults and to ensure that developers fully fund District Interconnection. At all such times relevant under this section, the Primary Generation, District Energy Manager, NNIC, and the District shall coordinate to develop and execute financial indemnification agreements so that risk of non-performance in any respect is borne by Development Partners, and not by the County or the District.

l. The District must approve in advance any change of control of assets utilized to provide electric power, which approval shall not be unreasonably withheld, conditioned, or delayed. A failure to obtain prior District approval of a proposed transfer shall nullify that transaction.

m. Northern Nevada Industrial Center ("NNIC"), the primary landowner within the District, is initially responsible for developing, selecting, and managing the entities that will construct and operate the electric power facilities serving the District, subject to all applicable permitting, other legal approvals, and District approval.

n. Primary Generation Partner will develop, own, operate, and maintain to utility standard, all, or substantially all, of the electric power infrastructure in the District. Primary Generation Partner shall contract for provision of electric service directly with End-Use Customers, pursuant to contract terms approved by the District. Primary Generation Partner will bear the initial costs of the District's regulatory and administrative expenditures essential for legal/regulatory compliance and audit.

    i. Primary Generation Partner will be the electric power generation partner for the District and may integrate generation resources owned by other parties into the District's generation resource supply, in compliance with District Service Rules, and subject to the agreement of District Energy Manager, and approval of the District Governing Board.

    ii. Primary Generation Partner will also finance, construct, own and operate electric-delivery infrastructure (such as wires, substations, and other infrastructure delivering electric power from generation resources to End-Use Customer facilities, as well as sub-transmission lines, switching yards, and necessary metering and ancillary equipment to provide electric service) to End-Use Customers. Primary Generation Partner will work with the District to ensure that this arrangement satisfies all applicable legal requirements, including by entering a lease arrangement if required.

    iii. To help ensure availability of funding, investment and other capital needs, Primary Generation Partner may perform its duties through an affiliate and may structure its business in ways necessary to allow for the attraction of debt and equity capital.

    iv. To ensure both reliability and safety for high-demand industrial operations, Primary Generation Partner and its engineering and operations partners will incorporate advanced utility planning approaches, innovative design, modern operational controls, protective systems, and communications infrastructure into the District's power distribution system.

    v. With respect to planning and project design, Primary Generation Partner will utilize utility planning approaches similar to utilities in Nevada and other States and follow Prudent Utility Practice and applicable state law when determining the mix of generation resources required to serve End-Use Customers within the District.

    vi. Primary Generation Partner, District Energy Manager, and NNIC shall work jointly to ensure redundancy in the provision of power and that such redundancy is adequately and reasonably contemplated in the design of the system, i.e., utilizing modular generators rather than one large, centralized plant.

vii. Generation Partners may connect additional generation facilities to Primary Generation Partner's facilities only after obtaining all required local and state permits and entering into District-approved agreements for service between and among Development Partners.

viii. Primary Generation Partner may:

a. Negotiate Energy Supply Agreements ("ESAs") directly with District End-Use Customers, and propose such agreements for approval by the District;

b. Perform resource planning for the District utilizing standard utility planning models;

c. Draft and prepare required regulatory filings in collaboration with District Energy Manager and the District for review and approval by the District Governing Board and submission of the same to the appropriate state/federal authority; or

d. As necessary in the future, coordinate and make all relevant filings before FERC and/or state/local regulatory bodies for interconnection of the District with available infrastructure to ensure an integrated, reliable, redundant power supply options for future development.

ix. The District may enter a contract with Primary Generation Partner, District Energy Manager, or another District Participant, to bill End-Use Customers and collect revenues and fees, and to remit fees and payments on behalf of the District to the appropriate recipients, in compliance with District Service Rules.

x. Primary Generation Partner will work with District Energy Manager and NNIC to ensure accurate revenue collection and remittance, to recover the District's operating costs as well as all other amounts owed to appropriate recipients.

o. District Energy Manager will perform electric power management services in connection with the day-to-day operations of the District, including 24/7 scheduling, load balancing, generation, gas management, assisting Primary Generation Partner with End-Use Customer billing, collection and settlement obligations, and other essential services, and assisting with the District's reporting to the District's Governing Board.

i. District Energy Manager will assist the District with its regulatory and administrative filings, including filings that relate to RPS compliance, in addition to other regular or required reporting on District performance.

ii. District Energy Manager's fees will be recovered from End-Use Customers. Such fees will be noticed to prospective End-Use Customers and included in specific provisions within customer ESAs.

iii. District Energy Manager may agree with Primary Generation Partner to provide certain functions outlined in Section V(n)(viii) above.

p. NNIC, Primary Generation Partner, and District Energy Manager may provide services by themselves or through affiliates and may also pursue additional third-party partnerships for District infrastructure and operation in the future. Selection of a partner or change of control of any entity providing service to or within the District shall be subject to approval by the District.

q. Interconnection, easement, and service agreements shall clearly identify the owner and operator of each facility and allocate construction, operation, maintenance, safety, and decommissioning responsibilities among the District, the Development Partners, and NV Energy, together with appropriate indemnity and insurance provisions, and compliance with District Service Rules and any other applicable contracting requirements.

VI. INDEBTEDNESS, FINANCING, AND NON-RECOURSE OBLIGATIONS

a. The District may incur indebtedness only to the extent authorized by NRS Chapter 318 and consistent with this Service Plan. Any such indebtedness shall be payable solely from revenues of the District or other lawfully pledged funds of the District. At this time, the Service Plan does not contemplate debt or liabilities being incurred by the District.

b. The District shall not incur indebtedness for the primary purpose of financing private development infrastructure within the meaning of NRS 308.060 (1)(g).

The District shall not be deemed a guarantor, surety, backstop, or credit enhancer of any private electric facility.

VIII. DISTRICT OPERATIONAL AND BUSINESS PLAN

a. End-Use Customers shall negotiate for available District electric service with Primary Generation Partner. The price of electric energy provided to each End-Use Customer will be negotiated between Primary Generation Partner and End-Use Customer and approved by the District through an ESA. Energy prices negotiated within an ESA will be exclusive of additional franchise fees, cost allocation assessments, or other fees imposed by the District

c. Electric service within the District will be supported by robust resource planning practices and financial projections, including base-case and downside scenarios, demonstrating that under reasonable assumptions the District's projected revenues are sufficient to cover its projected costs. These projected costs shall include all operational expenditures necessary for the District's self-sufficiency, specifically including the costs associated with employing administrative and operational staff, as well as fees for legal counsel and third-party technical consultants. The District may update such projections from time to time in light of changed circumstances and present these updates to the District Governing Board.

d. The District will have the authority to hire, employ, and manage professional and administrative staff, as necessary to comply with the requirements of this Service Plan and with any other obligations the District may assume in any future Service plan or under any adopted District Service Rules.

X. COMPLIANCE WITH NEVADA RENEWABLE PORTFOLIO STANDARD

a. Compliance with Nevada's Renewable Portfolio Standard ("RPS"), as set forth in NRS 704.7801 through 704.7828, as may be amended from time to time, shall be addressed on a project-specific and contractual basis through Energy Supply Agreements ("ESAs") and related agreements approved by the District.

b. Each ESA submitted for District approval shall identify the proposed approach for satisfying applicable RPS requirements, including, as applicable:

   i. procurement or development of renewable energy resources;

   ii. acquisition, allocation, and retirement of renewable energy credits or portfolio energy credits; and

   iii. confirmation that RPS compliance and obligations are clearly assigned through commercially reasonable contractual provisions.

c. Development Partners and each End-User shall be responsible for satisfying all RPS compliance and obligations associated with electric service provided within the District, as provided in the applicable ESA or related agreements.

d. The applicable ESA or related agreements with the applicable Development Partner shall include language to indemnify, defend, and hold harmless the District from and

against any and all claims, liabilities, penalties, regulatory actions, damages, costs, and expenses (including attorneys' fees) arising out of or related to:

i. any failure to comply with applicable RPS requirements under Nevada law;

ii. failure to procure or properly retire renewable energy credits or attributes; or

iii. any investigation, enforcement action, or proceeding by the Public Utilities Commission of Nevada or any other regulatory authority relating to RPS compliance.

e. The District may adopt general guidelines regarding RPS compliance for ESAs.

f. Primary Generation Partner and District Energy Manager will maintain and may periodically update, on behalf and as approved by the District, an RPS compliance strategy that considers projected load, resource mix, and cost impacts, and may adjust its approach over time in response to changes in law.

XI. CREDIT AND SECURITY REQUIREMENTS

a. The District may establish creditworthiness standards for entities providing services to, or in collaboration with, the District, such as District Energy Manager and Development Partners. In applying such standards, the District may consider reasonable factors such as existing indemnification agreements if any, the entity's financial condition, credit rating or equivalent metrics, capital partner(s), corporate structure, and the magnitude and term of the services.

b. Creditworthiness requirements for End-Use Customers contracting with Primary Generation Partner for electric energy will be provided for in ESAs. ESAs may include risk mitigation provisions such as "take-or-pay" obligations for a term of years; minimum monthly or annual billing requirements; and other prudent and commercially reasonable mechanisms. ESAs shall also include customary default and remedy provisions, including the right to accelerate contracts, draw upon security or terminate service upon non-payment.

c. Subject to any creditworthiness requirements and security that Development Partners require, the District may elect to prospectively establish creditworthiness standards for End-Use Customers purchasing electric power from District-procured resources, with particular attention to End-Use Customers whose loads and contractual obligations represent a significant share of District revenues.

i. In applying such standards, the District may consider reasonable factors such as the End-Use Customer's financial condition, credit rating or

equivalent metrics, corporate structure, and the magnitude and term of the proposed service commitment.

ii. Where the District determines that an End-Use Customer's credit profile or structure presents a material risk to District indemnification, the District may require one or more forms of security, which may include a parent or affiliate guaranty, an irrevocable letter of credit, a cash deposit or prepayment, or other commercially reasonable security.

iii. In the event that a District End-Use Customer fails to pay timely any obligation to the District under this Service Plan or any agreement with the District, the District may impose additional forms of security to be provided a reasonable time frame, terminate service on no less than thirty (30) days' notice, or take other commercially reasonable action, with the approval of the District Governing Board.

d. Non-payment by End-Use Customers to the District, or appropriately assigned District entity, for electric services furnished shall not create any financial, administrative, or operational obligation for Lyon County by virtue of the District's separate legal status under NRS Chapter 318.

e. All Generation Partners and End-Use Customers shall fully indemnify, defend, and hold harmless the District from and against any and all claims, damages, liabilities, penalties, regulatory fines, environmental claims, construction defects, interconnection disputes, outages, performance failures, credit defaults, non-payment, or third-party claims arising from their activities.

Indemnification obligations shall survive termination of agreements and be supported by insurance and/or posted financial security.

XII. INSURANCE

a. The District shall maintain, and shall require Development Partners, contractors, interconnecting facility owners, End-Use Customers, and others operating within the District (generally referred to here and in Section XII(b) as "District Participants"), to maintain commercially reasonable insurance coverage appropriate to their activities, including general liability, property, and, where available and appropriate, wildfire or catastrophic event coverage. The District shall require that such policies name the District as an additional insured.

b. To the extent permitted by law, District Service Rules and contracts may include provisions that ensure that District Participants are subject to a Prudent Utility Practice standard of care. Where a District Participant fails to meet, or materially deviates from, a Prudent Utility Practice standard of care, in all cases the District Participant shall be liable for any direct damages arising from interruptions or fluctuations in service. In no case shall the District be obligated to financially secure,

cover, or remedy any District Participant failure as contemplated by this provision. District Participants shall indemnify the District (subject to any sovereign immunity defenses and damage caps applicable under Nevada Law) and allocate risk among various Development Partners and End-Use Customers in a manner consistent with industry practice.

c. The District will require all providers of electric power to design and operate any such system in accordance with District Service Rules, once adopted. District Service Rules shall, to the extent practicable, be consistent with generally accepted utility standards to promote safety and reliability. The District may rely on the National Electric Safety Code, guidelines on Prudent Utility Practice, and similar resources in formulating and adopted District Service Rules.

XIII. PRELIMINARY ARCHITECTURAL AND ENGINEERING SURVEY

a. The Preliminary Architectural and Engineering Survey for the District was conducted by Reno Engineering, a multidisciplinary firm of professional engineers with over 25 years of experience in utility and infrastructure projects.[2]

b. Exhibit B contains the following key attachments, reflective of initial conceptual design:

1. Preliminary site plan showing:

- substation footprints;
- control building locations;
- solar and gas generation site options;
- fenced-perimeter details; and
- potential delivery infrastructure locations sited within the District boundary, both for use in NNIC and existing and potential future NV Energy infrastructure;

2. Conceptual drawings that depict substation and switchyards[3] with step-up and step-down transformer requirements, illustrating how main transformers will step voltage down to appropriate levels and interface with generation and load control points.

c. Although the District does not intend to fund, own, or operate generation and delivery assets, Exhibit B presents the preliminary scope of electric power infrastructure to be deployed by Primary Generation Partner, to exemplify a site layout that accommodates initial land, rights-of-way, and interconnection for End-Use Customers and Generation Partners may require. Additional engineering and design

[2] Exhibit B.

[3] Substations/Switchyards in this context are facilities for reducing the high voltage from the generation facility to a level suitable for End-Use Customer electric service. The use of the word "substation" does not implicate interregional transmission or Federal Energy Regulatory Commission (FERC) oversight. See also Fn 17.

work will proceed as End-Use Customer(s) are identified and specific electric load and engineering requirements are defined. Designs included in Exhibit B meet the statutory requirements of NRS 308.030(1) but are highly preliminary and subject to review and revision by NNIC, NNIC's engineer, and Primary Generation Partner, as End-Use Customer needs are identified. District Energy Manager and Primary Generation Partner may update County Staff and District Governing Board periodically on progress and significant changes, as necessary, or upon request of the District Governing Board.

XIV. COORDINATION WITH ELECTRIC UTILITIES AND OTHER PROVIDERS OF ELECTRIC POWER AND ASSETS

a. The District, or Primary Generation Partner and other Development Partners in close coordination with the District and District Energy Manager, will pursue redundancy via interconnection to the networked Transmission System , consistent with applicable laws and regulations.

b. Parties within the District will collaborate with NV Energy, or other power and transmission providers in developing and implementing a proposed approach to grid Interconnection.

c. Development Partners will plan, design, and construct facilities for interconnection with or acquisition by an Electric Utility operating in Nevada. Development Partners will consider such utility's applicable technical and equipment standards, as well as Prudent Utility Practice, with the objective of promoting interoperability and facilitating potential future transactions where beneficial to District End-Use Customers.

d. Nothing in this Service Plan shall be construed to obligate any Electric Utility operating in Nevada to acquire any facilities or to provide transmission or distribution service, and the District's financial viability shall not depend on any assumption that any Electric Utility operating in Nevada will purchase District-related assets.

XV. PERIODIC REVIEW AND POTENTIAL DISSOLUTION

a. The District Governing Board may establish development milestones and performance indicators for planning and reporting purposes, including but not limited to execution of key contracts, progress toward construction, and commencement of service.

b. If the District's progress or circumstances differ materially from assumptions underlying this Service Plan, the District Governing Board shall review the status of the District and consider adjustments to its plans or, if warranted, dissolution of the

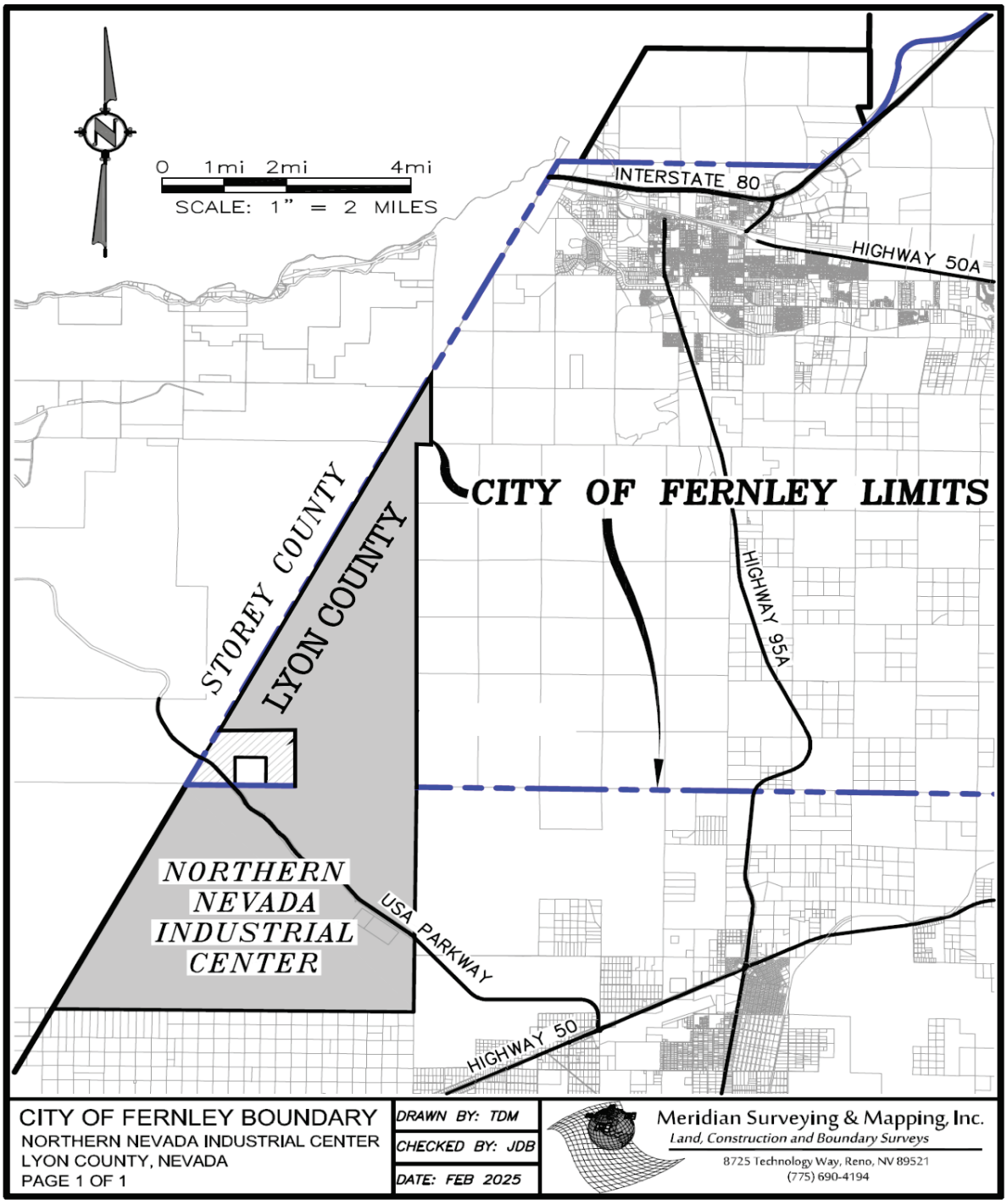
District in accordance with NRS 318.490–318.510 so long as the dissolution does not materially impact existing ESAs or other customer agreements within the district.

c. The District will seek to include in all relevant agreements for electric service within the District, commercially reasonable provisions addressing the possibility of dissolution or transfer of District functions, including assignment, novation, or orderly termination mechanisms, and the possibility of dissolution of or abandonment by a Development Partner. The District shall not be dissolved unless the District Governing Board determines, after appropriate process, that an orderly disposition of the District's material contractual obligations is reasonably achievable in compliance with applicable law and outstanding contracts with Development Partners.

EXHIBIT A

MAP OF GENERAL IMPROVEMENT DISTRICT SERVICE TERRITORY

District Boundary Map[6]



[6] Exhibit is provided in compliance with NRS 308.030(1)(b).

EXHIBIT B

Preliminary Engineering/Architectural Survey

NORTHERN NEVADA
INDUSTRIAL CENTER

NNIC — Weston Adams, Developer, 702.204.9800, wadams@wscllv.com

LDA REALTY — Keith Oesterling, Listing Agent, 702.416.0104, koesterling@ldarealty.com

Dave Brown, Consultant, 702.917.0377, dbrown@ldallv.com

TO COMSTOCK SUBSTATION

N

NTS

DISTRICT BOUNDARY REFER TO BOUNDARY MAP FOR FULL LIMITS AND DESCRIPTION

TO COMSTOCK SUBSTATION

E.MADRID

E.PARIS

W.MADRID

W.PARIS

SOLAR OPTION C

BASIN NO. 102

NVE GREEN LINK PHASE 2 (P) 160' AND 22' H-FRAME WOOD POLES DEVELOPER PROPOSED ROUTE

NVE 60 KV (E)

ZONE 1 PHASE A 1100 AC

DISTRICT BOUNDARY

SOLAR OPTION B

W4

W6

RIO

SOLNA

N.BERN

MUNICH

PARIS

USA

S.BERN

E.ROME

GID MUNICH GAS GENERATION 500 MW

W.MUNICH

PROPOSED DEVELOPMENT PHASE A

SOLAR OPTION A2

S.SOLNA

TO SILVER SPRINGS

NNIC SUBSTATION #1

W.ROME

DAKAR

GAS

GID ROME GAS GENERATION 400 MW

HYPERSCALER (B)

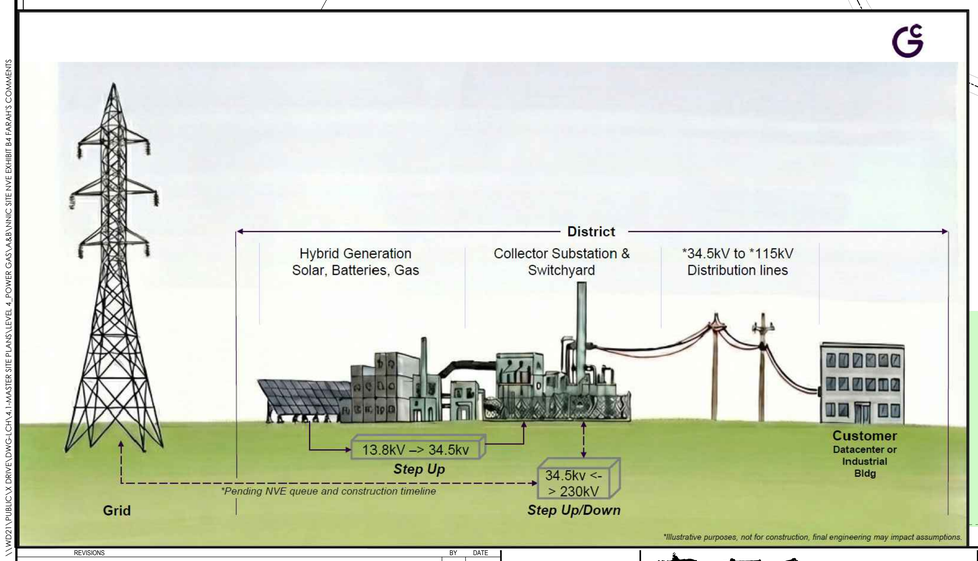
HYPERSCALER (A)

W.ROME FUTURE

SOLAR OPTION A1

DISTRICT BOUNDARY

NOTE: MAP SUBJECT TO CHANGE DURING DEVELOPMENT



REVISIONS	BY	DATE

1 EAST FIRST ST. #1400,
RENO NEVADA 89501.
775-852-5700
WWW.RECNV.COM

REC
Reno Engineering A Development Services Company

NORTHERN NEVADA INDUSTRIAL CENTER

SERVICE PLAN EXHIBIT - 2025

B

2015/05/11 \\WD21\PUBLIC\X DRIVE\DWG\LCH\4.1-MASTER SITE PLANS\LEVEL 4_POWER GAS\A&B\NNIC SITE NVE EXHIBIT B4 FARAH'S COMMENTS

Exhibit C

Facility Descriptions and Construction Standards

Exhibit C: Facilities Description

This Exhibit provides a description of the proposed facilities to be built within the North Lyon County Power District for the service of electricity to prospective customers. Specific equipment and configuration of that equipment is subject to change as the Development Partners obtain customer commitments and begin detailed design of the power generation and delivery infrastructure. The below list also does not explicitly include customer-sided infrastructure components such as data center buildings and/or other commercial and industrial facilities, given the preliminary nature of customer conversations.

Power generation

The Primary Generation Partner plans to build a system of power generation resources to provide electricity to End Use Customers. This system will serve several hundred megawatts ("MW") of customer demand and will include:

- **Natural gas generators:** Relatively small capacity (<20 MW each) internal combustion engines or small turbine generators that burn or compress natural gas to drive internal mechanisms in order to generate electricity.
- **Solar photovoltaic (PV) panels**: Panels made of crystalline silicon cells that convert sunlight directly into electricity.
- **Battery energy storage**: Batteries that utilize lithium as a medium for storing generated electricity (typically from solar photovoltaic panels) as chemical energy and re-converting it to electricity for use at a different time. Batteries can be used for short term energy balancing and stability or longer-term shifting electricity from the time of day it is generated to a different time of day when the electricity is needed to serve customer demand.
- **Inverters:** Power electronics equipment that converts direct current from a solar PV or battery resource into alternating current for delivery and use in customer facilities.
- **Balance of systems:** This may include concrete pads, racking, engine houses, exhaust system, and other facilities required to house power generation equipment.

In addition to the above resources, additional forms of power generation and energy storage may be constructed on the site, including geothermal, subject to feasibility tests and economic assessment.

Power delivery

Power delivery infrastructure facilitates transporting electricity from the generation resources to the End Use Customer(s). It also includes equipment that tracks how much electricity is delivered from point to point.

- **Switchgear:** Electrical devices, including circuit breakers and switches, used to control, protect, and isolate electrical equipment during normal operation and fault conditions.
- **Transformers:** Equipment that increases or decreases voltage levels to enable efficient transmission and distribution of electrical power.
- **Substations:** Facilities that house electrical equipment used to transform, control, and route electricity between generation, transmission, and distribution systems.
- **Power Delivery Wires:** Conductors that carry electrical power between equipment, substations, and end users, installed either overhead or underground.
- **Metering:** Equipment used to measure the amount of electricity generated, delivered, or consumed for operational and reporting purposes.

Fuel delivery and storage

Equipment that facilitates delivery of natural gas or other fuels to the site, and storage of those fuels for future use, include:

- **Underground Natural Gas Pipeline:** Subsurface pipeline that delivers natural gas from an external supply source to on-site equipment.
- **Metering, Regulation, and Controls Equipment:** Systems that measure fuel flow and regulate pressure to ensure safe and reliable fuel delivery.
- **On-Site Fuel Storage Tanks:** Tanks used to store liquid fuel for backup or supplemental power generation.
- **Vapor Recovery Equipment:** Equipment designed to capture and control fuel vapors generated during storage or fuel transfer activities.
- **Fuel Pumps:** Mechanical devices that move fuel from storage tanks to power generation equipment at controlled rates.
- **Fire Detection & Suppression Systems:** Equipment designed to detect and suppress fires in generation, battery, or fuel areas.

Exhibit C: Engineering Standards Service Plan for the North Lyon County Power District

Purpose and Basis

This document outlines a structured, standards-based approach, consistent with applicable codes, consensus-based engineering standards, and recognized industry best practices, for the planning, design, construction, operation, and maintenance of a utility-grade islanded energy system serving a large industrial center.

This overview provides a high-level description of applicable technical and operational considerations and does not constitute a complete or final specification. The applicability of specific standards, codes, and requirements will depend on the final system configuration, infrastructure design, equipment selection, and operating characteristics, and will be refined as the project advances through detailed engineering, procurement, and permitting. However, the District will comply with relevant safety and reliability standards, including those issued by the Institute of Electrical and Electronics Engineers (IEEE), the National Electrical Safety Code (NESC), the National Fire Protection Association (NFPA), Underwriters Laboratories, the North American Electric Reliability Corporation (NERC), publicly available U.S. Department of Energy and national laboratory technical guidance and others. The District will be designed to a standard similar to – and compatible with – that of a utility

Applicability and Regulatory Context

The energy system will be developed and operated in compliance with all applicable local, county, state, and federal laws, permits, and regulations, including environmental, building, electrical, and occupational safety requirements.

Lifecycle-Based Standards Framework

Planning and Design
Planning and design activities are conducted using engineering practices commonly applied by electric utilities for generation and power delivery systems. Generation resources constructed and operated to serve customer demand will be planned utilizing similar tools and requirements as a utility, including incorporating requirements for grid-standard reliability and resource adequacy, grid stability to ensure power quality, black start capabilities and other requirements. Generation and power delivery systems will be designed to stringent electrical safety and engineering standards[1],. Standards bodies informing this phase include, but are not limited to, IEEE, NESC, (NERC), the NFPA, and publicly available U.S. Department of Energy and national laboratory technical guidance.

Engineering, Procurement, and Construction
Engineering, procurement, construction (EPC), testing, and commissioning are executed consistent with electric utility infrastructure practices. The Primary Generation Partner for the

[1] For example: IEEE 1547, C37, 242, NFPA 70, 850, 101 and UL 1741, 845,17803, 9540.

District will work with qualified EPC and other technical firms to help ensure construction meets applicable reliability and safety requirements. Guiding standards and codes would include the National Electrical Safety Code (NESC); NFPA codes, including the National Electrical Code; Underwriters Laboratories (UL) and other nationally recognized testing laboratories; National Electrical Manufacturers Association (NEMA) standards; IEEE standards; American Society of Mechanical Engineers (ASME) standards for mechanical systems where applicable; and relevant occupational safety regulations.

Operations, Maintenance & Asset Management

The system would be operated using to be developed procedures and designed to provide safe, reliable, and continuous service. Operational practices will be informed by NESC work-practice principles, NFPA safety standards, IEEE operating and protection guidance, and applicable occupational safety requirements, consistent with practices used by established electric utilities. Maintenance and asset management programs will be implemented to support safety, and performance. These programs are guided by manufacturer requirements and standards that include, but are not limited to, the National Electrical Safety Code (NESC), IEEE, NFPA, and International Organization for Standardization (ISO) standards. Energy management services will be performed using documented procedures, trained personnel, and control systems designed to support continuous, reliable service and effective integration of electric power generation facilities with the interconnected Transmission System. Operating procedures will be implemented to support the safe, reliable, and efficient operation of electric power generation facilities in the District, consistent with Prudent Utility Practice and applicable reliability requirements (including, but not limited to, NERC reliability standards, interconnection requirements, and communications protocols governing Bulk Electric System (BES) operations).

Professional Oversight

System planning, engineering, and construction activities will be performed under the oversight of qualified professionals, including licensed professional engineers, consistent with applicable regulatory and professional requirements.

Integration into the Bulk Electric System (Transmission System)

It is the intention of the District and its partners to interconnect the District to the Transmission System at transmission-level voltage in the future, when feasible. In order to safely and efficiently interconnect and interoperate with the Transmission System, the District will comply with all necessary engineering and operational requirements as mandated by any applicable utility to which the District is interconnected, the National Electric Reliability Corporation (NERC), any applicable NERC Regional Entity (RE) and the Federal Energy Regulatory Commission (FERC). FERC market rules and applicable tariffs will govern the District's wholesale activities. The District Energy Manager will maintain all applicable registrations required to provide energy management services to the District, including FERC market-base rate authority, and will comply with applicable NERC regulations to ensure safety/reliability and business practice requirements are met.

Exhibit D

Expense Estimates

Expense estimates are provided to the extent feasible.

It should be noted that NNIC, or other partner developers, will self-finance the District, thereby mitigating concerns that would otherwise exist related to the municipal assumption of capital developments and operations of a General Improvement District.

Such estimates and proposals are sufficient under the Service Plan, given NNIC's open position related to final project contracts.

North Lyon County Power District Expense and Revenue Pro Forma

This document presents illustrative scenarios for potential revenues and costs to Lyon County associated with North Lyon County Power District (District) establishment and operations, within the Northern Nevada Industrial Complex (NNIC).

High and low scenarios utilize average sales in $/MWh for Sierra Pacific Power's commercial and industrial customers as representative price benchmarks, alongside different illustrative customer demand ramping schedules. Representative benchmarks were taken from Sierra Pacific Power's submissions to the Energy Information Administration's Form 861. It is likely that all-in energy prices within the District will be somewhat higher than these benchmarks, although exact all-in prices are highly contingent on various aspects of development that are currently in progress. These include but are not limited to: natural gas supply and costs, power equipment prices, customer load expectations, financing costs, and ultimately customer price negotiations. These aspects cannot be fully determined prior to District approval, but per the Service Plan, NNIC commits to providing regular updates to the County as the District progresses.

Notes

- Due to timelines expected for power equipment delivery and gas supply, it is likely that the District will begin serving customer demand in the second half of 2028. This partial year operation is shown in the form of a pro-rated load factor for customer demand in that year.

- These estimates pertain specifically to District operation and do not include County revenue associated with the District prior to operation start, including property and sales taxes. Because the exact mix of equipment and customer demand is to be determined, we have not included these estimates at this time, but expect they will begin accruing to the county in late 2026 through 2027.

- Consulting costs for District formation in Year 0 (2026) are estimated based on 500 hours of support work, at $250-500, but not to exceed $250,000. These one-time costs will cover a comprehensive suite of professional services and administrative activities, as well as the advisory board's operations. There is ongoing staff support for the District reflected in future operating years of $85,000/year.

- Consulting costs are contemplated to be reimbursed from District franchise fee revenue once the District begins operations. This is reflected in the expense and revenue pro forma as the District reimbursing the prior year's consulting and staff support costs in a given year. Upfront consulting support costs are contemplated to be recovered over the first three years of full District operations (here, 2029-2031).

North Lyon County Power District 5-Year Operational Revenue and Expense Scenarios
Note: Revenue estimates below only include franchise fees; sales and other tax estimates to be determined but additive to revenue in late 2026 through 2027
All figures preliminary and subject to change

High Revenue Scenario	**Notes**	2026	2027	2028	2029	2030	2031
Energy Sales							
Estimated customer peak demand (MW)		0	0	400	400	1000	1000
Estimated load factor (%)	*Assumes partial year operation in 2028*	0	0	25%	92%	92%	92%
Estimated electricity sold (MWh)		0	0	876,000	3,223,680	8,059,200	8,059,200
Electricity price ($/MWh)	*Based on high cost estimate to construct and operate generation and delivery infrastructure within the District; exclusive of franchise fee*			$145	$148	$151	$154
Generation and delivery infrastructure capital				*$99*	*$101*	*$103*	*$105*
Non-fuel operational expenses				*$12*	*$12*	*$12*	*$12*
Fuel expenses				*$19*	*$19*	*$20*	*$20*
Other administrative and taxes				*$16*	*$16*	*$17*	*$17*
Associated Franchise Fee Revenue to County ($)		$0	$0	$6,351,000	$23,839,114	$60,789,740	$62,005,534
Franchise fee (implied $/MWh)				*$7*	*$7*	*$8*	*$8*
Consulting and ongoing staff support							
Initial Estimated Hours		500					
Initial Estimated Consultant Rate ($)		500					
Total consulting costs ($)		-$250,000	-$85,000	-$85,000	-$85,000	-$85,000	-$85,000
Consulting and staff support budget from NNIC Developer ($)		$250,000	$85,000	$85,000	$85,000	$85,000	$85,000

Low Revenue Scenario	**Notes**	2026	2027	2028	2029	2030	2031
Energy Sales							
Estimated customer peak demand (MW)		0	0	200	400	600	800
Estimated load factor (%)	*Assumes partial year operation in 2028*	0	0	25%	92%	92%	92%
Estimated electricity sold (MWh)		0	0	438,000	3,223,680	4,835,520	6,447,360
Electricity price ($/MWh)	*Based on low cost estimate to construct and operate generation and delivery infrastructure within the District; exclusive of franchise fee*			$130	$133	$135	$138
Generation and delivery infrastructure capital				*$88*	*$90*	*$92*	*$94*
Non-fuel operational expenses				*$10*	*$11*	*$11*	*$11*
Fuel expenses				*$17*	*$17*	*$18*	*$18*
Other administrative and taxes				*$14*	*$15*	*$15*	*$15*
Associated Franchise Fee Revenue to County ($)		$0	$0	$2,847,000	$21,372,998	$32,700,688	$44,472,935
Franchise fee (implied $/MWh)				*$7*	*$7*	*$7*	*$7*
Consulting and ongoing staff support							
Initial Estimated Hours		500					
Initial Estimated Consultant Rate ($)		500					
Total consulting costs ($)		-$250,000	-$85,000	-$85,000	-$85,000	-$85,000	-$85,000
Consulting and staff support budget from NNIC Developer ($)		$250,000	$85,000	$85,000	$85,000	$85,000	$85,000

Core assumptions

Estimated customer load factor - full year	92%
Estimated customer load factor - partial year	25%
Franchise Fee	5%
High price scenario - year 1 ($/MWh)	$145
Low price scenario - year 1 ($/MWh)	$130
Price escalator (per year)	2%

Estimated Key Input Assumptions

Input	Assumption - Low Case	Assumption - High Case
Capacity - Phase 1	400 MW	
Capacity - Total Reflected in Pro Forma	1,000 MW	
Customer Load Factor	92%	
Generation Mix - (400MW)*	834 MW(dc) Solar, 303 MW Battery Energy Storage System (BESS), 383 MW Load-following Reciprocating Engines (RICE), 27 MW Peaking RICE	
Generation Mix - (1,000MW)*	2,085 MW(dc) Solar, 758 MW BESS, 958 MW Load-following RICE, 66 MW Peaking RICE	
End-Use Customer Contract Price Escalation	2% per year	
Substation and Distribution Capex ($/kW)	760	835
Renewables (Solar + Storage) Capex ($/kW)	1,100	1,215
RICE Capex ($/kW)	1,640	1,780
Substation and Distribution O&M ($/kW-yr)	4	
Renewables (Solar + Storage) O&M ($/kW-yr)	15	
RICE O&M ($/MWh)	11	
Commodity Prices	In line with market as of February 2026	
Other Expenses**	In line with market as of February 2026	
Debt Financing Assumptions	In line with market as of February 2026	
Equity Cost of Capital	In line with market as of February 2026	

Methodology

1) Use utility industry standard technoeconomic model to optimize total solar, storage, and gas resources needed to meet reliability standards and 50% clean generation for the magnitude of customer demand indicated
2) Project cash flows for 20 years including capex, O&M, fuel prices, and other expenses as noted
3) Model financial structure for 20 years including debt and equity at different stages of development and construction, in line with current market
4) Determine estimated contract price ($/MWh) for a 20 year project life, assuming a 2% per year price escalator (standard to many power contracts)

**50% Renewable Portfolio Standard (RPS) requirement drives the magnitude of solar + BESS; future RPS-qualified resources (geothermal or other generation technologies) may change the generation mix and cost of energy if integrated*

***Includes set up costs, system integration, lease and property taxes, energy management fees, and other general administrative costs*

NORTH LYON COUNTY POWER DISTRICT
PROFORMA STATEMENTS OF NET POSITION

	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Current Assets						
Cash and investments	$ 250,000	$ 300,070	$ 364,581	$ 433,390	$ 494,448	$ 577,881
Accounts receivables, net of allowance for doubtful accounts	-	564,489	572,834	866,601	1,177,478	2,024,836
Total Current Assets	250,000	864,559	937,415	1,299,991	1,671,926	2,602,717
Total Assets	250,000	864,559	937,415	1,299,991	1,671,926	2,602,717
Liabilities						
Accounts payable	-	584,475	566,970	860,346	1,171,927	2,017,251
Total Liabilities	-	584,475	566,970	860,346	1,171,927	2,017,251
Net Position						
Unrestricted	250,000	280,084	370,445	439,645	499,999	585,466
Total Net Position	$ 250,000	$ 280,084	$ 370,445	$ 439,645	$ 499,999	$ 585,466

NORTH LYON COUNTY POWER DISTRICT
PROFORMA STATEMENTS OF REVENUES, EXPENSES
AND CHANGES IN FUND NET POSITION

	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Operating Revenues						
User fees	$ -	$ 59,787,000	$ 125,552,700	$ 193,978,922	$ 266,397,719	$ 466,462,406
Less: Power Generation Purchase	-	(56,400,066)	(118,678,690)	(183,579,712)	(252,267,984)	(442,164,380)
Total Operating Revenues	-	3,386,934	6,874,010	10,399,210	14,129,735	24,298,026
Operating Expenses						
Services and Supplies						
Franchise Fees	-	2,989,350	6,277,635	9,698,946	13,319,886	23,323,120
Contract Billing	-	30,000	36,000	43,200	51,840	62,208
Outside Consultants	-	60,000	72,000	86,400	103,680	124,416
Administrative Costs	-	40,000	48,000	57,600	69,120	82,944
Engineering	-	250,000	300,000	360,000	432,000	518,400
Legal	-	100,000	25,000	25,000	25,000	25,000
Advertising	-	5,000	5,000	5,000	5,000	5,000
Supplies	-	5,000	5,000	5,000	5,000	5,000
Insurance	-	15,000	20,000	25,000	30,000	35,000
Accounting	-	5,000	6,000	7,200	8,640	10,368
Audit	-	7,500	9,000	10,800	12,960	15,552
Total Operating Expenses	-	3,506,850	6,803,635	10,324,146	14,063,126	24,207,008
Operating Income (Loss)	-	(119,916)	70,375	75,064	66,609	91,018
Nonoperating Revenues						
Developer - Cash Contributions	250,000	150,000	-	-	-	-
Total Nonoperating Revenues	250,000	150,000	-	-	-	-
Change In Net Position	250,000	30,084	70,375	75,064	66,609	91,018
Net Position, July 1	-	250,000	280,084	350,459	425,523	492,132
Net Position, June 30	$ 250,000	$ 280,084	$ 350,459	$ 425,523	$ 492,132	$ 583,150

NORTH LYON COUNTY POWER DISTRICT
PROFORMA STATEMENTS OF CASH FLOWS

	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Cash Flows From Operating Activities						
Receipts from customers	$ -	$ 2,822,445	$ 6,301,176	$ 9,532,609	$ 12,952,257	$ 22,273,190
Payments for services and supplies	-	(2,922,375)	(6,236,665)	(9,463,800)	(12,891,199)	(22,189,757)
Net Cash Provided by Operating Activities	-	(99,930)	64,511	68,809	61,058	83,433
Cash Flows From Noncapital Financing Activities						
Developer - Cash Contributions	250,000	150,000	-	-	-	-
Net Cash Provided by Noncapital Financing Activities	250,000	150,000	-	-	-	-
Net Increase (Decrease) in Cash and Cash Equivalents	250,000	50,070	64,511	68,809	61,058	83,433
Cash And Cash Equivalents, July 1	-	250,000	300,070	364,581	433,390	494,448
Cash And Cash Equivalents, June 30	$ 250,000	$ 300,070	$ 364,581	$ 433,390	$ 494,448	$ 577,881

Lyon County Board of County Commissioners Agenda Summary

Meeting Date: April 16, 2026

Agenda Item Number:
15.b

Subject:
For Possible Action: Approve an additional $7,000 for additional engineering and testing for a change in scope for the Sheriff's Office/District Court Secured Parking Addition Project with funds from the Public Safety Sales Tax account. This is to add an ADA sidewalk from the Yerington Library parking lot up to the Sheriff's Office/District Court public parking lot. (County Manager Andrew Haskin)

Summary:
This is to add an ADA sidewalk from the Yerington Library parking lot up to the Sheriff's Office/District Court public parking lot.

Financial Department Comments:
This will be paid from the public safety sales tax within the Capital Improvements Fund,

Approved As To Legal Form:

County Manager Comments:

Recommendation: