



**LYON COUNTY PLANNING COMMISSION
TUESDAY, JULY 14, 2026
9:00 AM
LYON COUNTY ADMINISTRATIVE COMPLEX
27 S. MAIN STREET
YERINGTON, NV 89447**

Join Zoom Meeting
<https://us02web.zoom.us/j/86099991604?pwd=czk2NFhtUXViZ3d3YWw4NGdNTFJLUT09>
Meeting ID: 860 9999 1604
Passcode: 520573
One tap mobile
+17193594580,,81073362959#,,,,*471259# US
Dial by your location
+1 408 638 0968 US (San Jose)

Planning Commission meetings are open to the public and members of the public may attend in person and the meetings are also virtual and the public may attend via Virtual Zoom.

Public Comment: Lyon County allows the following alternatives for public comment. If you are attending the virtual Zoom meeting, public comment may be provided by raising your hand and requesting to provide public comment. This can occur in several ways, including by dialing *9 from your phone to raise your hand and request to speak for public comment. To unmute yourself, dial *6. You can also provide public comment for this meeting by sending an email to countyclerks@lyon-county.org, the day prior to the posted meeting date. Be sure to type, PUBLIC COMMENT, in the subject line.

Written public comments may also be mailed to the Lyon County Community Development Office at 27 S. Main Street, Yerington, Nevada 89447, but all public comments must be received prior to the date of the meeting if the comments are to be included in the supplemental materials. Any written public comment received the day of the meeting will be compiled and added as supplemental materials to the County's website and distributed to the Planning Commission within 24 hours after the meeting. Members of the Public may attend the meeting in person at the Greg Hunewill Lyon County Commission Chambers, 27 S. Main Street, Yerington, Nevada.

1. Roll Call

2. Pledge of Allegiance

3. Public Participation (no action will be taken on any item until it is properly agendaized) - *Members of the public who wish to address the Planning Commission may approach the podium and speak on matters related to the Lyon County Planning Commission, but not on items appearing on the Agenda. Speakers are asked to state their name for the record and to sign and print their name on the form at the lectern. Comments are limited to three*

minutes per person or topic. The Commission reserves the right to reduce this three minute time limit, as well as limit the total time for public comment. If your item requires extended discussion, please request the Chair to calendar the matter for a future Planning Commission meeting. The Planning Commission will not restrict comments based on viewpoint. The same applies to public testimony on each Agenda item. The Chair may reopen public participation at any time during the meeting. No action may be taken upon a matter raised under this item of the Agenda until the matter itself has been specifically included on an agenda as an item upon which action may be taken.

4. Review and Adoption of Agenda (for possible action)

5. For Possible Action: Approval of Minutes

5.a For Possible Action: To approve the minutes from the June 10, 2026 meeting.

- [June 10, 2026 Minutes](#)

6. Advisory Board Reports

7. Public Hearing Items

7.a For Possible Action: To forward a recommendation to the Board of County Commissioners for the request from Copia Power Devco, LLC, for approval of a zone change to Planned Unit Development for the Monarch Data Center, a 4.6 million square feet, 1,000 Megawatt (MW) data center consisting of 8, two-story buildings up to 95 feet tall, a 500-MW battery energy storage system, a 500-MW natural gas backup system, an electrical substation, high voltage power lines and other accessory uses over two parcels subject to RR-20 (Rural Residential, 20-acre minimum) zoning totaling 505.40 acres in accordance with the Monarch Data Center Specific Plan (APNs 014-201-07 and 014-201-30); PLZ-2026-041.

- [Staff Report](#)
- [Narrative](#)
- [Site Plans](#)
- [Visual Simulations](#)
- [TIS Summary with Recommendations](#)
- [NDOT Response](#)
- [Building Elevations](#)
- [Public Comments](#)

8. Community Development Director

8.a For Discussion Only: Community Development Director comments and updates.

9. Commissioner Comments and Agenda Requests

10. Public Participation (no action will be taken on any item until it is properly agendized) - *Members of the public who wish to address the Planning Commission may approach the podium and speak on matters related to the Lyon County Planning Commission but not on items appearing on the Agenda. Comments are limited to three minutes per person or topic and will not be restricted based on viewpoint. No action may be taken upon a matter raised under this item of the Agenda until the matter itself has been specifically included on an Agenda as an item upon which action may be taken.*

11. ADJOURNMENT

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.

Lyon County recognizes the needs and civil rights of all persons regardless of age, race, color, religion, sex, handicap, family status, or national origin. In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

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 Planning Commission Agenda Summary

Meeting Date: July 14, 2026

Agenda Item Number:

5.a

Subject:

For Possible Action: To approve the minutes from the June 10, 2026 meeting.

Summary:

Financial Department Comments:

Approved As To Legal Form:

County Manager Comments:

Recommendation:

ATTACHMENTS

- [June 10, 2026 Minutes](#)

LYON COUNTY PLANNING COMMISSION MEETING MINUTES

JUNE 10, 2026

The June 10, 2026 meeting of the Lyon County Planning Commission was called to order by Commission Chairwoman Shannon Ceresola, at approximately 9:00 a.m. at the Lyon County Administrative Complex, 27 S. Main Street, Yerington, NV, 89447.

Attending staff: Community Development Director, Gavin Henderson; District Attorney, Steve Rye; Senior Planner Louis Cariola; and Administrative Assistant, Brandi Lathrop were present. Senior Planner Lisa Nash attended via Zoom.

1. **Roll Call:** Members present: Commissioners Shannon Ceresola, Audrey Allan, Mark Jones, Wendy Loomis and Andrew Merritt attended in chambers. A quorum was noted.
2. **Pledge of Allegiance**
3. **Public Participation** - None
4. **Review and Adoption of the Agenda**

Commissioner Loomis motioned to adopt the agenda as presented.

Commissioner Jones seconded and the motion passed by unanimous vote (5 Ayes, 0 Nay, 0 Abstentions)

Public Comment – Steve Rye, District Attorney discussed the applicant withdrawing item 8.b.

Robin Biggs discussed the time certain item at 10:00 am. Commissioner Ceresola reminded that this Public Comment section is for items not currently on the agenda, there will be time to make comments about that.

Leo Solari discussed the commissioners bringing up projects that are coming through our county at the same time. He would like to see a plan and schedule of when these projects are expected to start.

5. **Time Certain: 10:00 AM**
 - 5.a. **Time Certain at 10:00 AM: For Presentation Only: A presentation by Rick Nelson of Mark IV Capital regarding existing, ongoing, and proposed development projects in Lyon County, Nevada.**

Commission Chairwoman Shannon Ceresola discussed waiting for the presenter to be present at 10:00 am. This item will be brought back at a later time.

6. **For Possible Action: Approval of Minutes**
 - 6.a. **For Possible Action: To approve the minutes from the May 12, 2026 meeting.**

Commissioner Loomis motioned to approve the minutes from the May 12, 2026 meeting.

Commissioner Allan seconded and the motion passed by unanimous vote (5 Ayes, 0 Nay, 0 Abstentions)

There was no public comment.

7. **Advisory Board Reports** – None
8. **Public Hearing Items**

8.a. For Possible Action: To forward a recommendation to the Board of County Commissioners regarding a request by NV Energy for a Conditional Use Permit for three 345-kV transmission lines. The lines extend from the Walker River Substation in Mason Valley to south of U.S. Highway 50 in Dayton, spanning the General Land Use areas of North, Mason Valley, and Stagecoach, with a combined total length of approximately 103 miles. The project affects portions of twenty-six (26) parcels (APNs 014-051-02; 014-061-02; 014-091-02, -03, -20, -21, -

22, -23; 014-101-01; 015-451-12; 015-451-26, -27, -28, -29; 015-511-03; 015-521-19; 015-531-20; 015-551-04; 015-681-01; 015-691-01; 015-701-03; 015-711-04; 016-021-24, -26, -28; and 016-023-07); PLZ-2026-024.

Senior Planner Lisa Nash gave a presentation of the item via Zoom. She discussed the direction of the proposed lines, the parcel ownership, the length of the proposed lines, and access to them. The lines are mainly on BLM land through Silver Springs. Senior Planner Lisa Nash also discussed the Master Plan and Zoning Districts that the proposed lines are planned to go through. Staff recommends approval.

Commissioner Jones had questions around zoning requirements due to there being a typo in the slide.

Charles Hutchinson, the applicant's representative, discussed the Walker River Substation. He provided paper copies of his presentation to the Commissioners as well as the audience. He discussed the location of the transmission lines, where they terminate, and full operation processes. Charles further discussed the location, direction that the proposed line will follow, and how much of the lines will cross private lands. There was also discussion around the application and entitlement process, local government permitting processes as well as the State of Nevada permitting process. The project schedule has been in process for over a year and construction is planned to begin in August of 2026 with an expected 200-400 people being employed.

Commissioners, Senior Planner Lisa Nash, and Charles Hutchinson discussed the involvement with the community including the local Tribes, and the side effects. Adam Godorov, the applicant, discussed the different systems to be used and clarified there should not be side effects. Commissioners had questions around an RV Park being constructed to house employees as well as local RV Parks being a part of the process. There was also discussion around the construction timeline being from Fall of 2026-Winter of 2027.

Public Comment- Micah Triplett had a question around the impacts to the Fort Churchill State Park area. Charles Hutchinson answered to discuss the visual impacts, mitigation measures, and where the public can find additional information on the impacts.

Margorie Roden discussed the permanent changes that will be made to the community, the land, and the migrating wildlife.

Robin Biggs had comments around transparency from NV Energy. She also had comments around approvals from other counties for the Greenlink project.

Brian Taylor had questions about proposed transmission lines North of US Hwy 50 and where the reroute is planned. Senior Planner Lisa Nash clarified this proposal being for only South of US Hwy 50 and the applicant may come forward with a CUP Amendment at a later date.

Leo Solari discussed the application being incomplete.

Mandy Brinnand discussed 16 of the APNs being located within Stagecoach, she had concerns around the maps provided not being sufficient, and the flood concerns in the area.

Commissioner Allan motioned to forward a recommendation of approval to the Board of County Commissioners for the request from NV Energy for a Conditional Use Permit for three 345-kV transmission lines. The lines extend from the Walker River Substation in Mason Valley to south of U.S. Highway 50 in Dayton, spanning the General Land Use areas of North, Mason Valley, and Stagecoach, with a combined total length of approximately 103 miles. The project affects portions of twenty-six (26) parcels (APNs 014-051-02; 014-061-02; 014-091-02, -03, -20, -21, -22, -23; 014-101-01; 015-451-12; 015-451-26, -27, -28, -29; 015-511-03; 015-521-19; 015-531-20; 015-551-04; 015-681-01; 015-691-01; 015-701-03; 015-711-04; 016-021-24, -26, -28; and 016-023-07); PLZ-2026-024 based on the Conditions of Approval listed in the Staff Report.

1. No change in the terms and conditions of the Conditional Use Permit (CUP), as approved, shall be undertaken without first submitting the changes to Lyon County Community Development and having them modified in conformance with Lyon County Code.
2. The applicant shall comply with all applicable Fire, building, zoning and improvement code requirements and obtain any necessary public inspections. All construction documents and separate applications must be submitted to the Lyon County Building Department for review and approval to obtain Site Improvement Plan or Building Permits.
3. All construction documents and separate applications must be submitted to the applicable Fire Protection District prior to obtaining a Building Permit. The Fire Protection Districts generally require a separate Fire and Life Safety Plan Review.
4. All contractors doing any construction, modifications, or remodels must be licensed in Lyon County and the State of Nevada.
5. The applicant shall maintain a Lyon County business license for the use while occupying the site.
6. Applicant shall comply with all applicable environmental and health laws and regulations concerning water quality, air quality, solid waste disposal, and wastewater management.
7. Any exterior lighting shall be downward facing and shielded such that light is not shed onto adjacent properties and public rights-of-way.
8. A portion of the subject properties is located within a Floodway, Flood Zone A and Flood Zone X Shaded. Prior to any development, as defined in Lyon County code section 15.02.01, the applicant shall secure approval of a flood plain development permit through the County Engineer and/or the Floodplain Administrator.
9. If the applicant proposes to place fill in wetlands or water features under the jurisdiction of the U.S. Army Corps of Engineers, the applicant shall obtain a "No Permit Required" letter, Jurisdictional Determination, Nationwide Permit, or other applicable federal authorization prior to commencing work. The applicant shall also coordinate with the State of Nevada to determine whether wetlands or water features under state jurisdiction are present and shall obtain any required state permits or approvals. No construction, grading, or fill activities shall occur within federally or state-regulated wetlands or water features until all applicable permits or authorizations have been obtained and copies provided to the County for review and verification.
10. The Applicant shall enter into a road maintenance agreement with the County for the maintenance and dust control of any County maintained roads during the construction period of the project. Once the construction of the project is completed, the amount of traffic generated by the project is minimal and the road maintenance agreement may expire. Encroachment permits may also be required depending on any work to be completed within County Right of Ways.
11. Construction, operation, and maintenance of the proposed 345-kV transmission line shall meet or exceed National Electrical Safety Code (NESC) requirements.
12. The applicant shall comply with the Storm Drainage Guidelines for Lyon County, dated September 20, 2024 to the satisfaction of the County Engineer prior to issuance of a Site Improvement Permit, Grading Permit, and/or Building Permit. Drainage report and plans must be submitted concurrently with any Site Improvement Plans, Grading Plans, and/or Building Permit applications.
13. The Applicant shall obtain the approval of the Walker River Irrigation District for a development/improvement plan, as required by their District Regulation 15, prior to application for and approval of any site improvement permit and/or building permits from Lyon County Community Development Department.

14. The applicant shall apply for Eligible Facility Requests for any modifications of existing Wireless Communication Facilities (WCF) towers or base stations associated with this CUP. New WCF towers or substantial changes (including increase in height) of existing towers shall require compliance with LCC Chapter 15.236.04 and the required entitlement applications.
15. The substantial failure to comply with the conditions imposed on the issuance of this conditional use permit or the operation of the conditional use in a manner that endangers the health, safety or welfare of Lyon County or its residents or the violation of ordinances, regulations or laws in the conditional use may result in the institution of revocation proceedings. **Failure to initiate the conditional use permit within two (2) years from the date of approval or to complete all work within three (3) years from the date of approval will result in the expiration of the conditional use permit approval.**

Commissioner Merritt seconded and the motion passed by majority vote (3 Ayes, 2 Nay – Commissioners Loomis and Jones, 0 Abstentions).

Commissioner Ceresola called a 5 minute recess 10:16 am and resumed at 10:22 am.

5.a. Time Certain at 10:00 AM: For Presentation Only: A presentation by Rick Nelson of Mark IV Capital regarding existing, ongoing, and proposed development projects in Lyon County, Nevada.

Rick Nelson with Mark IV Capital, gave a presentation on the Victory Logistics updates. He discussed the Development Agreement with the City of Fernley, open spaces, storm water management, sewer, road work, and public lands. He discussed the progress made as well as future development. There is approximately a 20-year time line for construction of future projects. They have begun construction of a Fire Station that will be dedicated to the City of Fernley upon completion of the project in early 2027. Victory Logistics is working on grants and funding for Western Nevada College to help create a “workforce” that would begin working within the County after graduation.

Commissioners and Rick Nelson discussed housing for the Fernley area to support the growth. Once population has grown, larger box stores would be willing to come into the area. Commissioner Jones discussed the possibility of Victory Logistics preparing a pamphlet to have available for the public to avoid confusion around data centers. There was additional conversation around trains including a commuter train.

8.b. For Possible Action: To forward a recommendation to the Board of County Commissioners for the request from Mark Jones for a Conditional Use Permit for an Indoor Vertical Farm System on land zoned AG (Agriculture) located at 60 Artesia Road in Wellington on an approximately 21.60-acre parcel (APN 010-081-43); PLZ-2026-003.

Brent Lovett, the applicant discussed his decision to withdraw the application.

Steve Rye, District Attorney, clarified this application has been withdrawn.

Public Comment – Matt Swain discussed details being withheld from the application and his concerns around this project coming back to the Commission at a later time.

8.c. For Possible Action: To forward a recommendation to the Board of County Commissioners for the request from the Boys and Girls Club of Mason Valley for a Conditional Use Permit to construct and operate a 13,660 square foot teen center and child care center and a 14,130 square foot gymnasium on land subject to Rural Residential, 5-acre minimum (RR-5) zoning located in Silver Springs at 4035 W Spruce Avenue on a 3.85-acre parcel (APN 018-481-08); PLZ-2026-036.

Senior Planner Louis Cariola gave a presentation of the item. The Boys and Girls Club of Mason Valley is requesting approval for a Conditional Use Permit to construct a new teen center with an early learning center (childcare) and a gymnasium in Silver Springs, across Topaz Street from the Silver Stage High School. He discussed the phases of construction for the project, design elements, and the findings within

the Staff Report. There was also discussion around the location and the safety of children and motorists. The applicant will be required to construct cross walks.

Commissioner Jones had questions around zoning and how it is compatible with this project.

Travis Crowder, Boys and Girls Club Director, discussed the hours of operation, the number of children that would be enrolled in the program, and the protection provided for the walk from the school to the clubhouse.

Erik Anderson, Big Horn Consulting, discussed the utilities, approvals received, and approvals still in progress. He discussed the architectural design, phases, parking, access, timelines, and landscaping.

Commissioner Jones expressed concern around the safety of children. Erik Anderson clarified the safety measures being put in place.

Public Comment – None

Commissioner Loomis motioned to forward a recommendation of approval to the Board of County Commissioners for the request from the Boys and Girls Club of Mason Valley for a Conditional Use Permit to construct and operate a 13,660 square foot teen center and child care center and a 14,130 square foot gymnasium on land subject to Rural Residential, 5-acre minimum (RR-5) zoning located in Silver Springs at 4035 W Spruce Avenue on a 3.85-acre parcel (APN 018-481-08); PLZ-2026-036 based on the Conditions of Approval listed in the Staff Report.

1. The project activities shall be constructed and operated in accordance with the conceptual site plan and construction drawings as submitted and reviewed as part of this approval. Any further expansion may require, at the Community Development Director's discretion, modification of this Conditional Use Permit or an additional Conditional Use Permit and/or other approvals.
2. Any modification, expansion, intensification or material change in use or operation may require an application for, and public hearings on, an amendment to the Conditional Use Permit use pursuant to Lyon County Code.
3. The applicant shall comply with all state, federal and local government regulations to the satisfaction of the appropriate agencies for the proposed uses. The applicant shall comply with all applicable Fire, building, zoning and improvement code requirements and obtain any necessary public inspections.
4. All construction documents, to include separate applications, must be submitted to Lyon County Utilities (as applicable), Central Lyon Fire Protection District and Lyon County Building for review and approval to obtain a Building Permit.
5. 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.
6. All contractors doing any construction, modifications, or remodel must be licensed in the State of Nevada.
7. The applicant shall maintain a Lyon County business license for the use while occupying the site.
8. The project site is not currently within the service areas of the Silver Springs General Improvement District (SSGID) for sewer service. If the applicant would like to annex into the service area, the following steps will be required:
 - A. Petition the SSGID for inclusion into the SSGID as this property is currently outside of the SSGID sewer service area.
 - B. Provide a minimum 1.5 sewer EDU's (Equivalent Dwelling Units) or the minimum (over 1.5 EDU) required based on the fixture unit count for the structures.

C. Submit to LCUD/SSGID for a civil improvement review.

9. The applicant shall continue working with the Silver Springs Mutual Water Company (SSMWC) to secure approval from the Public Utilities Commission of Nevada for annexation into the SSMWC service area.
10. The applicant shall receive approval from the County Roads Department of encroachment permits for access to Topaz Street prior to initiation of construction and grading on-site.
11. The application shall comply with the landscape standards as set forth in Title 15, Chapter 15.402 to the satisfaction of the Community Development Director or their designee prior to issuance of the Certificate of Occupancy.
12. Any new exterior site and building lighting for the project shall incorporate cut-off shields or similar design features that prevent light and glare spillover onto adjacent properties and public rights-of-way to the satisfaction of the Community Development Director or their designee prior to the issuance of a Certificate of Occupancy for the individual buildings.
13. The applicant shall comply with the Lyon County drainage guidelines (2024 updated edition) to the satisfaction of the County Engineer. The property owner shall be responsible for maintenance of all roads, parking areas and drainage facilities within the parcel, as well as any storm water detention facilities.
14. The substantial failure to comply with the conditions imposed on the issuance of this conditional use permit or the operation of the conditional use in a manner that endangers the health, safety or welfare of Lyon County or its residents or the violation of ordinances, regulations or laws in the conditional use may result in the institution of revocation proceedings. **Failure to initiate the conditional use permit within two (2) years from the date of approval will result in the expiration of the conditional use permit approval.**

Commissioner Jones seconded and the motion passed by unanimous vote (5 Ayes, 0 Nays; 0 Abstentions).

9. Community Development Director

9.a For Discussion Only: Community Development Director comments and updates.

Community Development Director Gavin Henderson did not have any comments or updates.

Commissioner Allan had comments around Dayton residents having questions about data centers and what they are. Community Development Director Gavin Henderson discussed that Community Development is working on scheduling a public data center workshop.

Commissioner Merritt had questions around project timelines and if there is somewhere the public can go to get an update on specific projects.

10. Commissioner Comments and Agenda Requests

11. Public Participation – Robin Biggs discussed item 8.a being an incomplete application and still receiving a recommendation of approval. She also had concerns around the data center workshop being held within the Commissioner Chambers.

12. Adjournment at 11:24 am.

Lyon County Planning Commission Agenda Summary

Meeting Date: July 14, 2026

Agenda Item Number:

7.a

Subject:

For Possible Action: To forward a recommendation to the Board of County Commissioners for the request from Copia Power Devco, LLC, for approval of a zone change to Planned Unit Development for the Monarch Data Center, a 4.6 million square feet, 1,000 Megawatt (MW) data center consisting of 8, two-story buildings up to 95 feet tall, a 500-MW battery energy storage system, a 500-MW natural gas backup system, an electrical substation, high voltage power lines and other accessory uses over two parcels subject to RR-20 (Rural Residential, 20-acre minimum) zoning totaling 505.40 acres in accordance with the Monarch Data Center Specific Plan (APNs 014-201-07 and 014-201-30); PLZ-2026-041.

Summary:

Financial Department Comments:

Approved As To Legal Form:

County Manager Comments:

Recommendation:

ATTACHMENTS

- [Staff Report](#)
- [Narrative](#)
- [Site Plans](#)
- [Visual Simulations](#)
- [TIS Summary with Recommendations](#)
- [NDOT Response](#)
- [Building Elevations](#)
- [Public Comments](#)



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

PLANNING COMMISSION

PLZ-2026-041

Proposed Action	<u>Planned Unit Development</u>
Meeting Date	<u>July 14, 2026</u>
Property Owners	<u>L&M Family Limited Partnership and Masini Investments</u>
Applicant	<u>Copia Power DevCo, LLC</u>
Representative	<u>Environmental Resources Management / Nikki Payne</u>
Community	<u>Mason Valley</u>
Location	<u>East of US Highway 95A and south of Sierra Way, addressed from Penrose Lane</u>
Address	<u>150 and 155 Penrose Lane</u>
Parcel Numbers	<u>014-201-07 and 014-201-30</u>
Parcel Size	<u>Approximately 505 acres in total (240 and 265.4 acres respectfully)</u>
Current Master Plan	<u>Specific Plan (Monarch Data Center)</u>
Existing Zoning	<u>Title 10 district of RR-5 (Fifth Rural Residential District - 20 acre minimum)</u>
Proposed Master Plan	<u>Planned Unit Development</u>
Flood Zone(s)	<u>X-Unshaded per FIRM 32019CO710E</u>
Case Planner	<u>Louis Cariola</u>

REQUEST

The Applicant requests a Zoning Amendment from the Title 10 district of RR-5 (Fifth Rural Residential District- 20 acre minimum) to Planned Unit Development (PUD) on approximately 505 acres of two (2) parcels for the Monarch Data Center on APNs 014-201-07 and 014-201-30.

STAFF RECOMMENDATION

The proposed PUD is in compliance with the Monarch Data Center Specific Plan, approved by the Lyon

Lyon County Board of County Commissioners on December 4, 2025. As such, staff recommends approval of the Tentative PUD for the Monarch Data Center.

RECOMMENDED MOTION

If the Planning Commission determines that they will forward a recommendation of approval of the request to the Board of Commissioners, then the Planning Commission should make a motion similar to the following.

The Planning Commission finds that:

- A. The applicant has demonstrated that the amendment is in substantial compliance with and promotes the master plan goals, objectives and actions;
- B. The proposed amendment is compatible with the existing or master planned adjacent land uses, and reflects a logical change in land uses;
- C. The proposed amendment has demonstrated and responds to changed conditions or further studies that have occurred since the master plan was adopted by the Board, and the requested amendment represents a more desirable utilization of land;
- D. The proposed amendment will not adversely affect the implementation of the master plan goals, objectives and actions, and will not adversely impact the public health, safety or welfare; and
- E. The proposed amendment will promote the desired pattern for the orderly physical growth of the County, allows infrastructure to be extended in efficient increments and patterns, maintains relatively compact development patterns, and guides development of the County based on the consideration of natural resources, the physical geography and the efficient expenditure of funds for public services.

Based on the aforementioned Findings, I move that the Planning Commission forward a recommendation of approval to the Board of County Commissioners for the request from Copia Power Devco, LLC, for approval of a zone change from the Title 10 district of RR-5 (Fifth Rural Residential, 20-acre minimum) to Planned Unit Development for the Monarch Data Center, a 4.6 million square feet, 1,000 Megawatt (MW) data center consisting of 8, two-story buildings up to 95 feet tall, a 500-MW battery energy storage system, a 500-MW natural gas backup system, an electrical substation, high voltage power lines and other accessory uses over two parcels subject to RR-20 (Rural Residential, 20-acre minimum) zoning totaling 505.40 acres in accordance with the Monarch Data Center Specific Plan and the additional language recommended by staff related to roadway improvements on US Highway 95A (APNs 014-201-07 and 014-201-30); PLZ-2026-041.

Additional Language to be included as part of the forwarded motion

As part of the Monarch Data Center Project, Copia Power makes a formal commitment to the construction of a northbound passing lane extending up Wabuska Hill on US Highway 95 in Wabuska, Nevada. This improvement is recognized as a necessary mitigation measure associated with the Project's anticipated traffic impacts and shall be completed in accordance with all applicable Lyon County and Nevada Department of Transportation (NDOT) requirements.

Copia Power formally commits to the design, funding, and construction of the northbound passing lane prior to the issuance of site improvement permits associated with the Project. This sequencing is intended to ensure that the passing lane improvement is in place and fully operational before construction-related traffic volumes on US Highway 95 are realized, thereby mitigating the Project's construction phase traffic impacts on the traveling public.

The northbound passing lane shall be fully constructed and operational prior to the issuance of any site improvement permits for the Project, or upon other conditions as agreed by Lyon County. All agreements necessary to facilitate the construction of the northbound passing lane and any other required off-site roadway improvements shall be finalized and executed in a form acceptable to Lyon County and consistent with Lyon County Code and applicable State statute. However, Copia Power is not expected to assume sole responsibility for obtaining land easements needed for said passing lane. Copia Power is committed to working cooperatively with Lyon County, NDOT, and neighboring project applicants to ensure the timely and effective implementation of these improvements, with the goal of promoting safer and more efficient transportation infrastructure for the residents and community of Lyon County.

Lyon County commits to facilitating the timely implementation of the northbound passing lane improvement, including reasonable cooperation in coordinating with NDOT on design and permitting review, supporting Copia Power’s efforts to obtain necessary approvals and easements from adjacent property owners and public agencies, and coordinating scheduling with any other regional development projects whose traffic impacts affect the same corridor. This commitment to facilitation does not constitute an assumption by Lyon County of any financial responsibility or obligation for the design, funding, or construction of the passing lane.

ALTERNATIVES TO APPROVAL

Alternative Motion for Continuance

If the Planning Commissioners determine that there is insufficient information with which to make a decision on the Master Plan Amendment 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 Planning Commission should make the appropriate findings and move to continue the Public Hearing for the Master Plan Amendment application to a future date with concurrence from the applicant.

If so, then the Planning Commission may wish to consider a motion similar to the following:

The Lyon County Planning Commission finds that:

- A. Additional information, discussion, and public review are necessary for a more thorough review of the proposed Master Plan Amendment application.

Based on the aforementioned finding, and with the applicant’s concurrence, the Planning Commission continues the request from Copia Power Devco, LLC, for approval of a zone change from the Title 10 district of RR-5 (Fifth Rural Residential, 20-acre minimum) to Planned Unit Development for the Monarch Data Center, a 4.6 million square feet, 1,000 Megawatt (MW) data center consisting of 8, two-story buildings up to 95 feet tall, a 500-MW battery energy storage system, a 500-MW natural gas backup system, an electrical substation, high voltage power lines and other accessory uses over two parcels subject to RR-20 (Rural Residential, 20-acre minimum) zoning totaling 505.40 acres in accordance with the Monarch Data Center Specific Plan (APNs 014-201-07 and 014-201-30); PLZ-2026-041 for ___days.

Alternative Motion for Denial

If after review and public comment the Planning Commission determines that they should recommend denial of the Master Plan Amendment application, then the Planning Commission may wish to consider a motion similar to the following:

The Lyon County Planning Commission has considered:

15.210.03: FINDINGS:

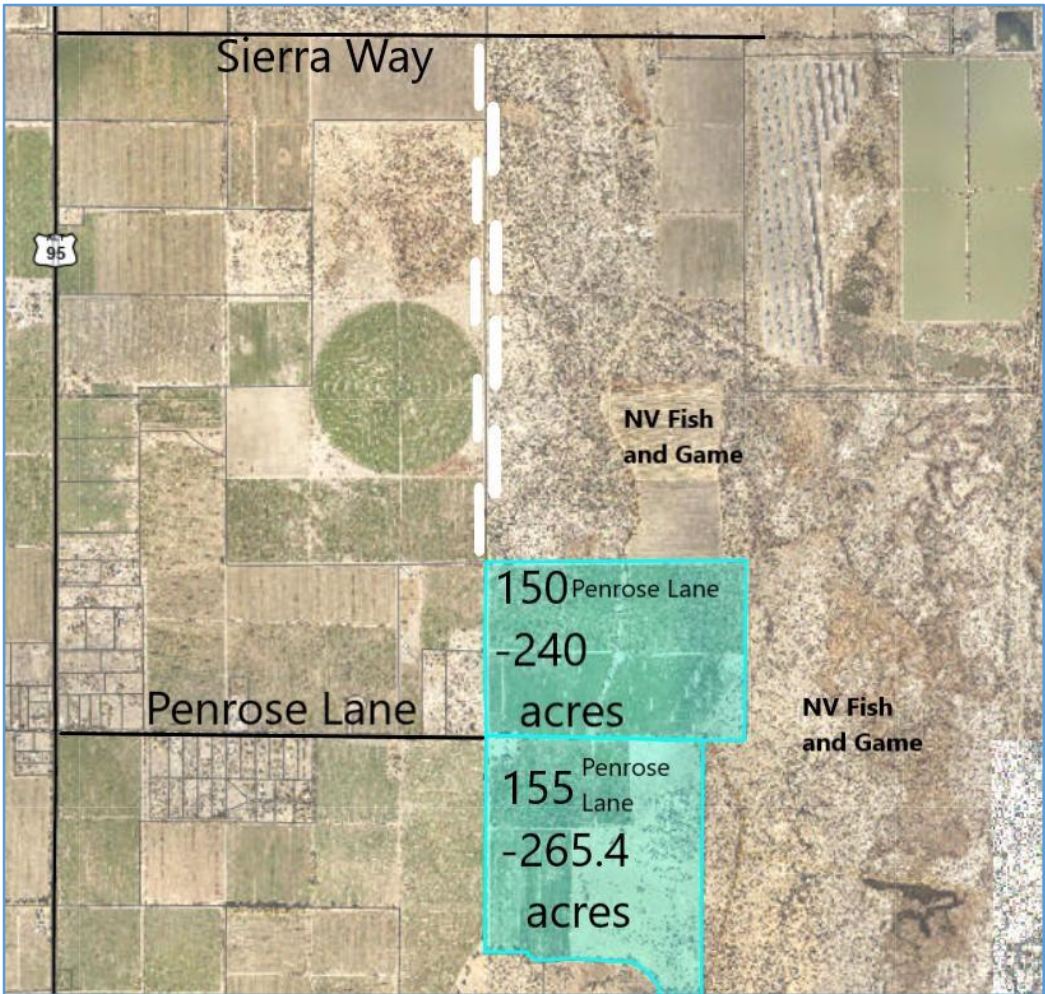
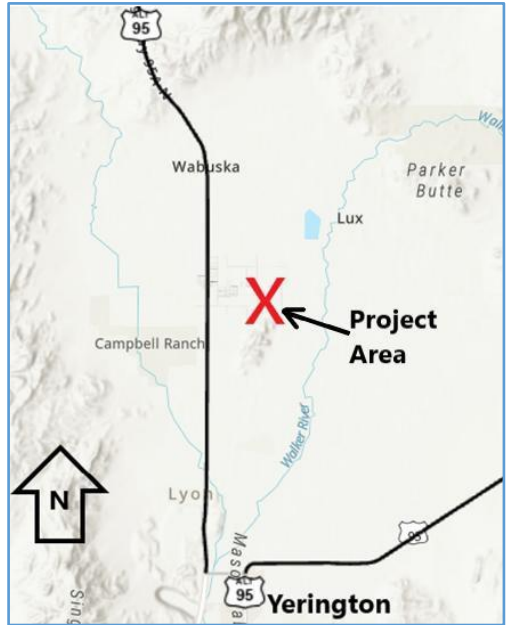
- A. The applicant has demonstrated that the amendment is in substantial compliance with and promotes the master plan goals, objectives and actions;
- B. The proposed amendment is compatible with the existing or master planned adjacent land uses, and reflects a logical change in land uses;
- C. The proposed amendment has demonstrated and responds to changed conditions or further studies that have occurred since the master plan was adopted by the Board, and the requested amendment represents a more desirable utilization of land;
- D. The proposed amendment will not adversely affect the implementation of the master plan goals, objectives and actions, and will not adversely impact the public health, safety or welfare; and
- E. The proposed amendment will promote the desired pattern for the orderly physical growth of the County, allows infrastructure to be extended in efficient increments and patterns, maintains relatively compact development patterns, and guides development of the County based on the consideration of natural resources, the physical geography and the efficient expenditure of funds for public services.

After consideration of the above-listed Findings, the Lyon County Planning Commission has determined that the Master Plan Amendment would not be in conformance with the above-listed considerations and recommends denial for the request from Copia Power Devco, LLC, for approval of a zone change from the Title 10 district of RR-5 (Fifth Rural Residential, 20-acre minimum) to Planned Unit Development for the Monarch Data Center, a 4.6 million square feet, 1,000 Megawatt (MW) data center consisting of 8, two-story buildings up to 95 feet tall, a 500-MW battery energy storage system, a 500-MW natural gas backup system, an electrical substation, high voltage power lines and other accessory uses over two parcels subject to RR-20 (Rural Residential, 20-acre minimum) zoning totaling 505.40 acres in accordance with the Monarch Data Center Specific Plan (APNs 014-201-07 and 014-201-30); PLZ-2026-041.

BACKGROUND INFORMATION

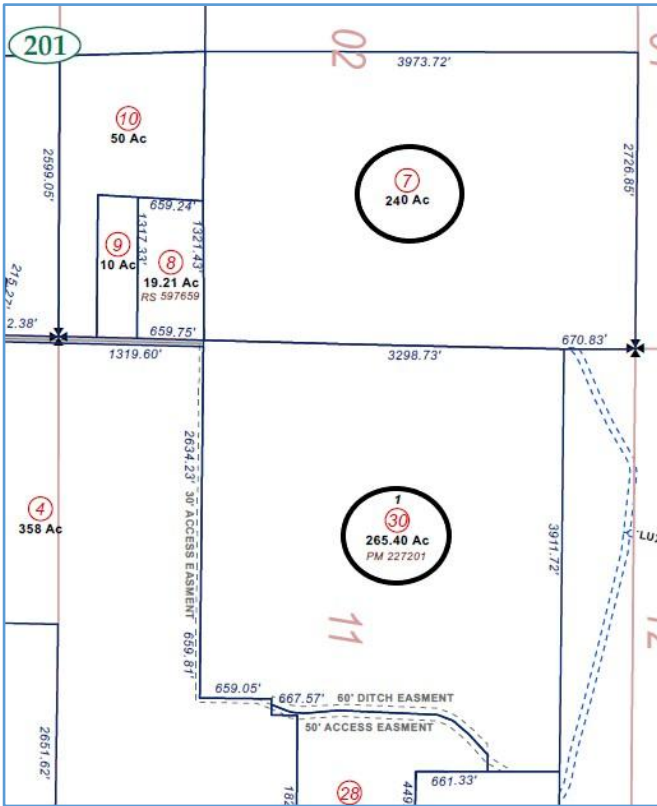
The project area is located in Mason Valley in Wabuska, east of US Highway 95A, west of the Walker River. To the east and north of the project area is a 1,921-acre parcel owned by the NV Fish and Game Commission.

The subject parcels are currently accessed by Penrose Lane with addresses of 150 and 155 Penrose Lane. The project access would be via a to-be-constructed roadway connection to Sierra Way to the north of the project. The access will require easements and will be permitted separately from this PUD request.



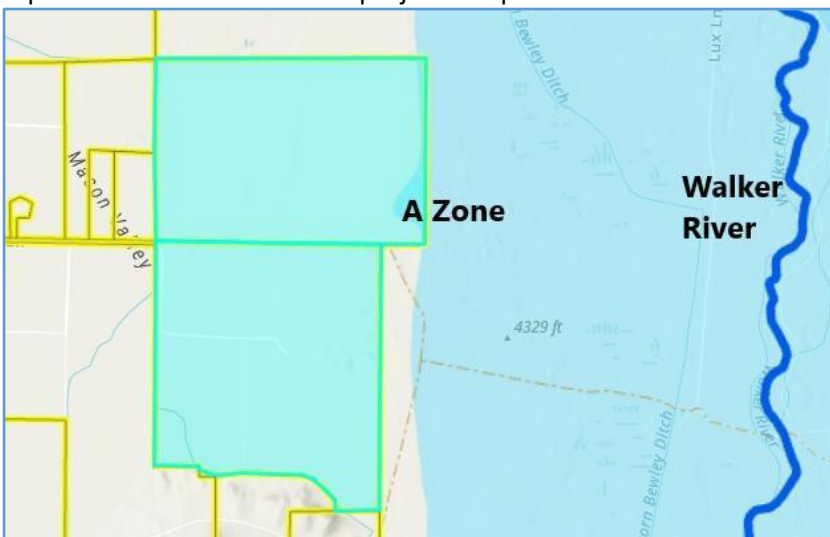
Size

Per the County Assessor's Office, the parcels are 240 and 265.40 acres in size for a total area of 505.4 acres.



Topography/Federal Emergency Management Agency (FEMA) designation

The project area is relatively flat, with a generalized slope from south to north of less than one percent. The project area includes a small area of the A Flood Zone on the east side. This could necessitate a Floodplain Development Permit in the future for construction approvals, or the applicants may consider using a boundary line adjustment to separate the A Zone from the project footprint.



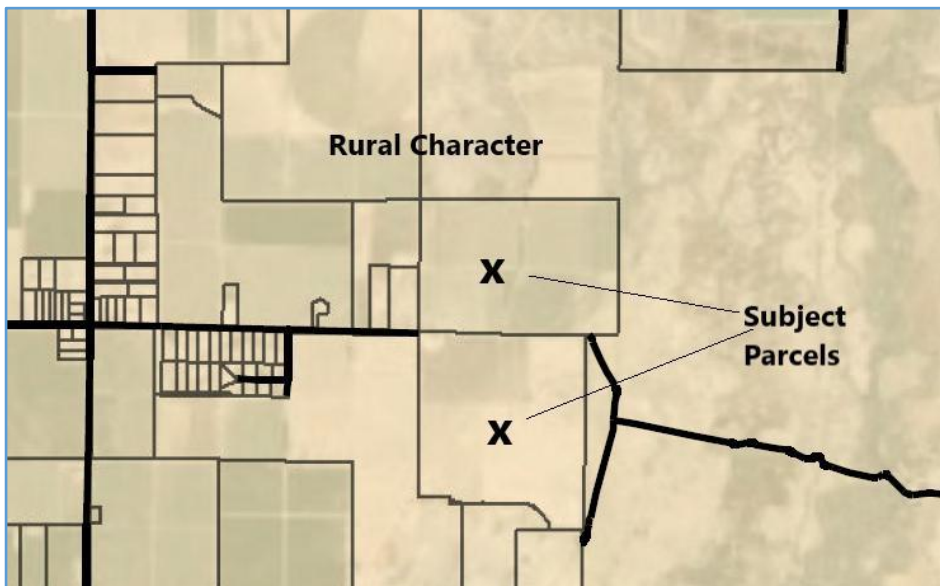
Current Development and Uses

The subject parcels are traversed by irrigation ditches that are within the management jurisdiction of the Walker River Irrigation District (WRID). The land has been historically used for field crops and cattle grazing. The WRID will maintain their authority to govern how the ditches are managed and 50’ setbacks from the centerline of the ditches are included in the development plan in accordance with WRID standards.

MASTER PLAN AND ZONING

Character District

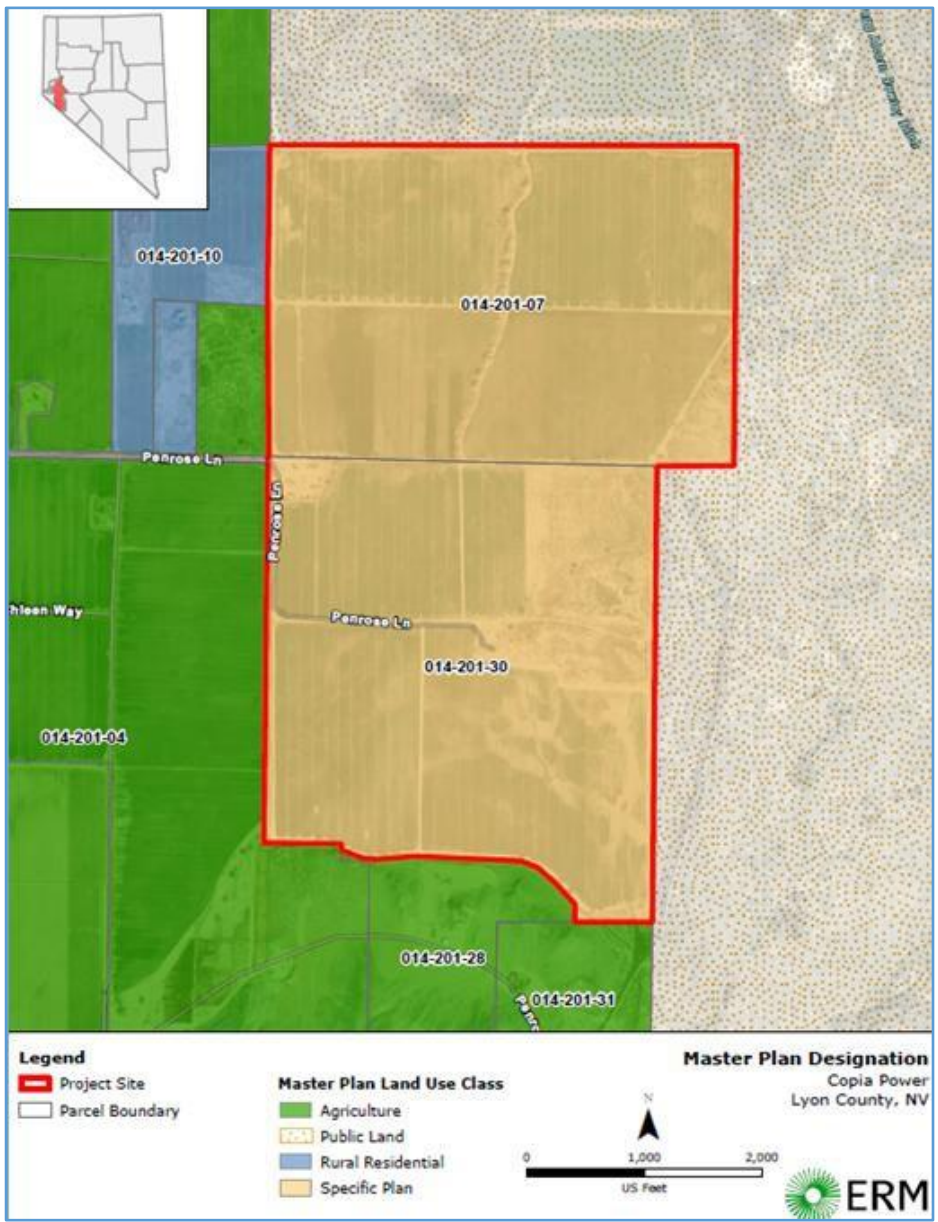
The project area is within a Rural Character District per the 2020 Master Plan. Rural Character parcels do not typically have connection or adjacency to public utilities and are often not located on publicly-maintained roadways, although this site does have existing vehicular access. No public water or sewer facilities exist in the region.



Master Plan – Specific Plan for the “Monarch Data Center”

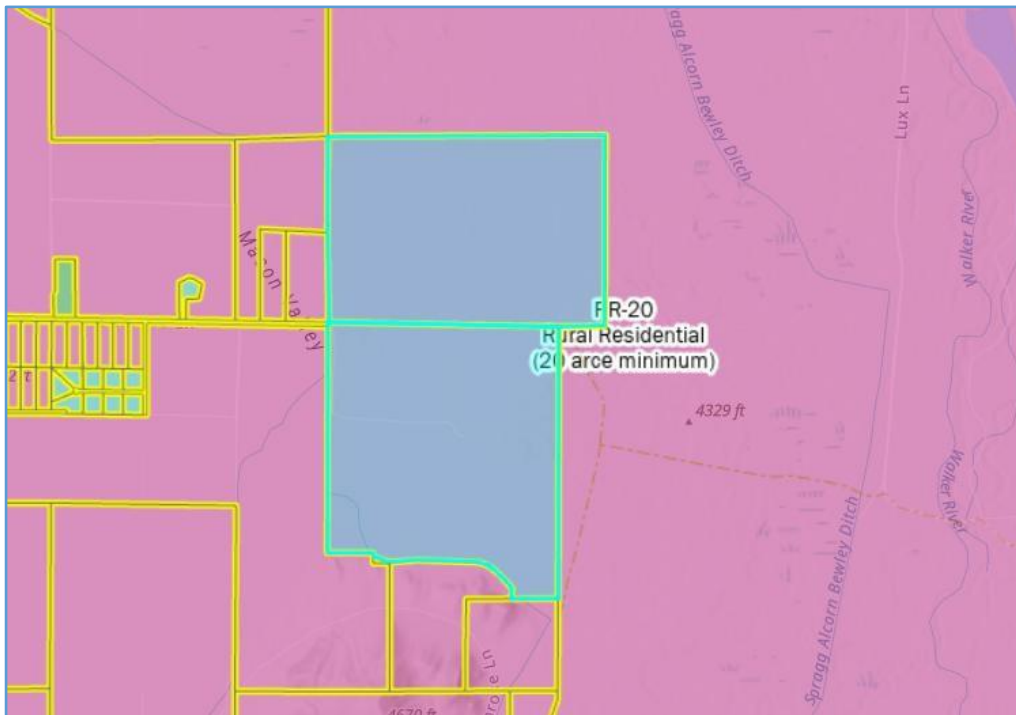
On December 5, 2025, the Lyon County Board of County Commissioners (LCBOCC) approved the Monarch Data Center Specific Plan (“Monarch SP”). This approval changed the Master Plan designation for 505.4 acres from Agriculture to Specific Plan. The Monarch SP is now the existing Master Plan for the subject parcels and this PUD request must be consistent with the uses approved in December of 2025. The plans provided at that time were conceptual in nature and the PUD includes modifications and details that were not included in the Monarch SP, but the primary project is the same. The Monarch SP language request was:

“...a Master Plan Amendment from Agriculture to Specific Plan for the Monarch Data Center, consisting of 4.6 million square feet of data centers over 14 separate buildings and to include battery energy storage systems, a potential natural gas backup system, an electrical substation, high voltage power lines and other accessory uses over two parcels totaling approximately 505 acres in Mason Valley...”



Zoning

The zoning for the entire project area is Fifth Rural Residential, 20-acre minimum, or RR-5 from the expired development code, Title 10. With the adoption of the current development code, Title 15, the Zoning Consistency Matrix was also adopted as Appendix A. The Matrix “converts” expired districts to the current and applicable districts. In this case, the conversion is to Rural Residential 20-acre minimum (RR-20). The images that follow depict zoning for the subject parcel and surrounding parcels after conversion through the Matrix. Surrounding properties are subject to the same zoning of RR-20.



PROJECT DESCRIPTION

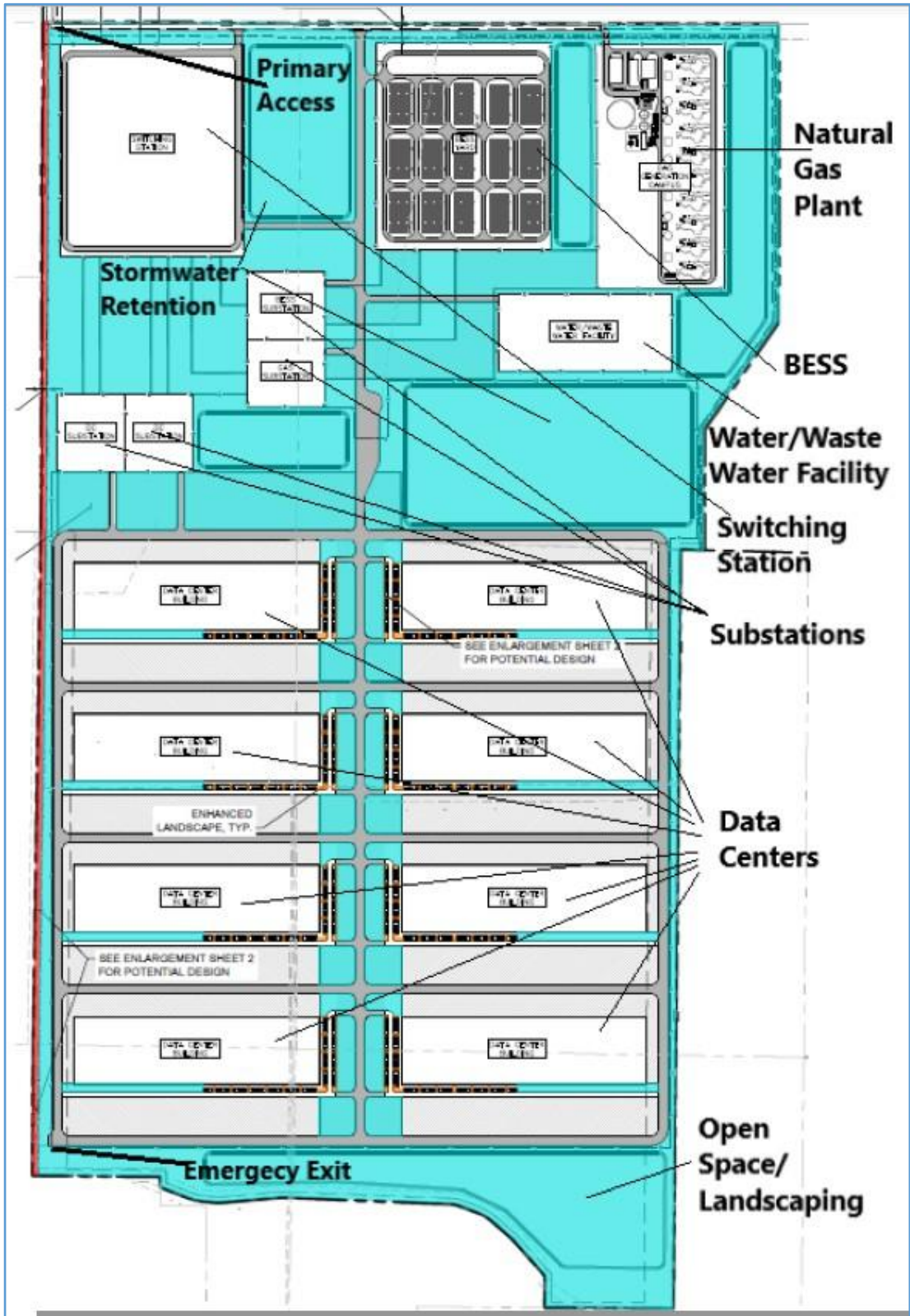
The description and images that follow were selected from Attachment 1; the PUD Narrative document submitted by the applicant, which describes the Monarch Data Center or “the Project”. In summary, the Project proposes 4.6 million square feet (sf) of data center buildings. There are 8 separate structures considered with 2-story construction of up to 95’ in height. This square footage is consistent with the Specific Plan in total, but the PUD does number of buildings from the conceptual plans submitted with the Specific Plan.

The north “campus” would include a 500-MW Battery Energy Storage System (BESS) and a 500-MW natural gas system for backup power in addition to the primary access at the north west corner. Electrical substations will modify voltage for the data center stepping down the power from the high voltage lines that will connect to the Walker River Substation (to 120 kilovolts [kV] from 545/345/230 kV).

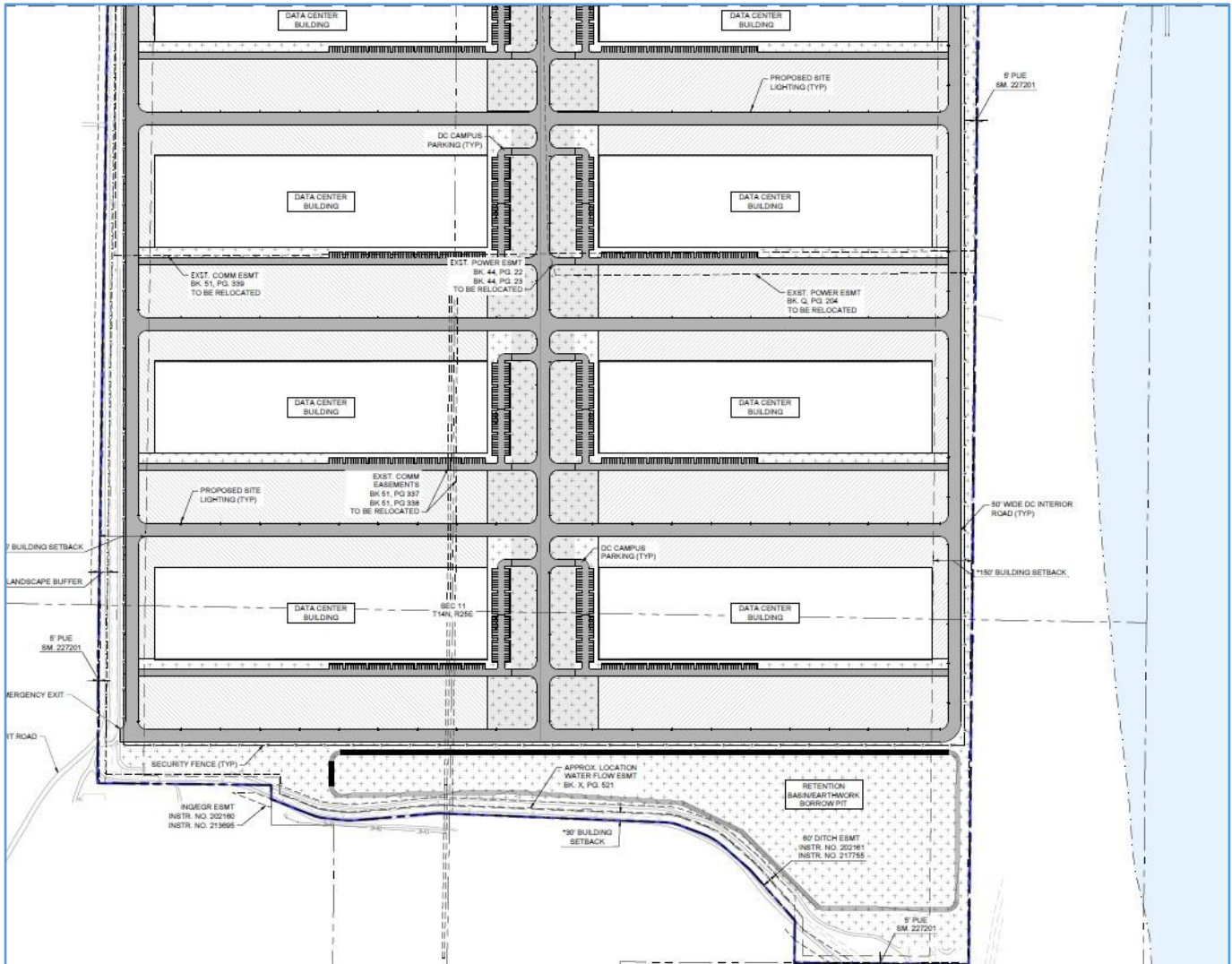
The south campus includes the 8 data center structures and emergency access at the south west corner.

The images that follow are included as Attachment 2 in this report and depict the general Landscape Plan for the Project and the north and south campuses’ details. A detail of the setbacks from the south west corner of the Project is also depicted.

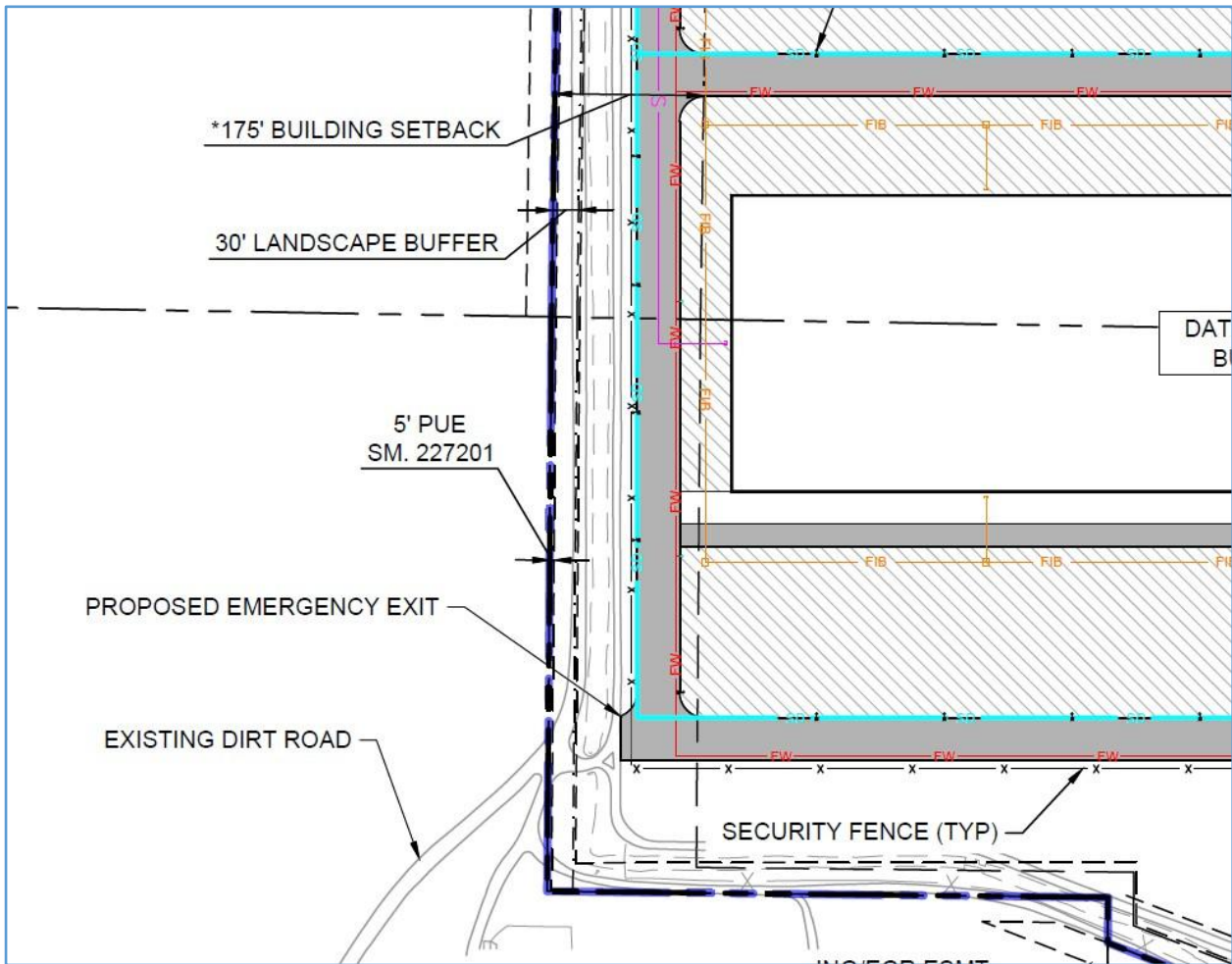
Excerpt from Attachment 2: Site Plans (with staff-added labels)



Southern Site Plan



Detail of south west corner of Project and setbacks



Setbacks

Setbacks are proposed that meet Title 15’s standards for buildings up to 95’ in height, with proposed setbacks of up to 175 feet.

Landscaping

A 30’ landscaping buffer is proposed along the entire western boundary, facing Hwy 95A.

Parking

Parking is provided at a ratio of one stall per 5,000 sf of building area, consistent with the industry standard for data centers. The total number of spaces provide is 920 stalls, including required ADA stalls.

Cooling System and Water Consumption

The cooling system for the data center is not proposed to be entirely evaporative cooling. The applicant states that they will prioritize using an air-cooled system within a closed-loop that recirculates the same water repeatedly. The applicant estimates total water consumption for the entire Project will be below 800-acre feet per year, including data center cooling, landscaping and fire suppression storage, gas plant operations, and domestic uses.

Visual Simulation excerpts- Attachment 3

The Visual Simulation images that follow were provided by the applicant and are included in Attachment 3 in their entirety. They include rendered images of the project depicted in the existing landscape. The example below is along Penrose Lane, looking east.



EXISTING CONDITIONS

Monarch Data Center
Lyon County, NV

Copia Power
A Cargill Spillco Company

KOP 104
Penrose Lane

Date: 9/17/2025
Time: 12:40 pm
Viewing Direction: East
Closest Project feature: 0.3 miles

PROPOSED CONDITIONS

KOP = Key Observation Point (Photograph Location)

Note: Project components illustrated are based on proposed preliminary design. The images contained on this page show the proposed project within a wider landscape context and are not representative of scale and distance when viewed from the actual viewpoint.

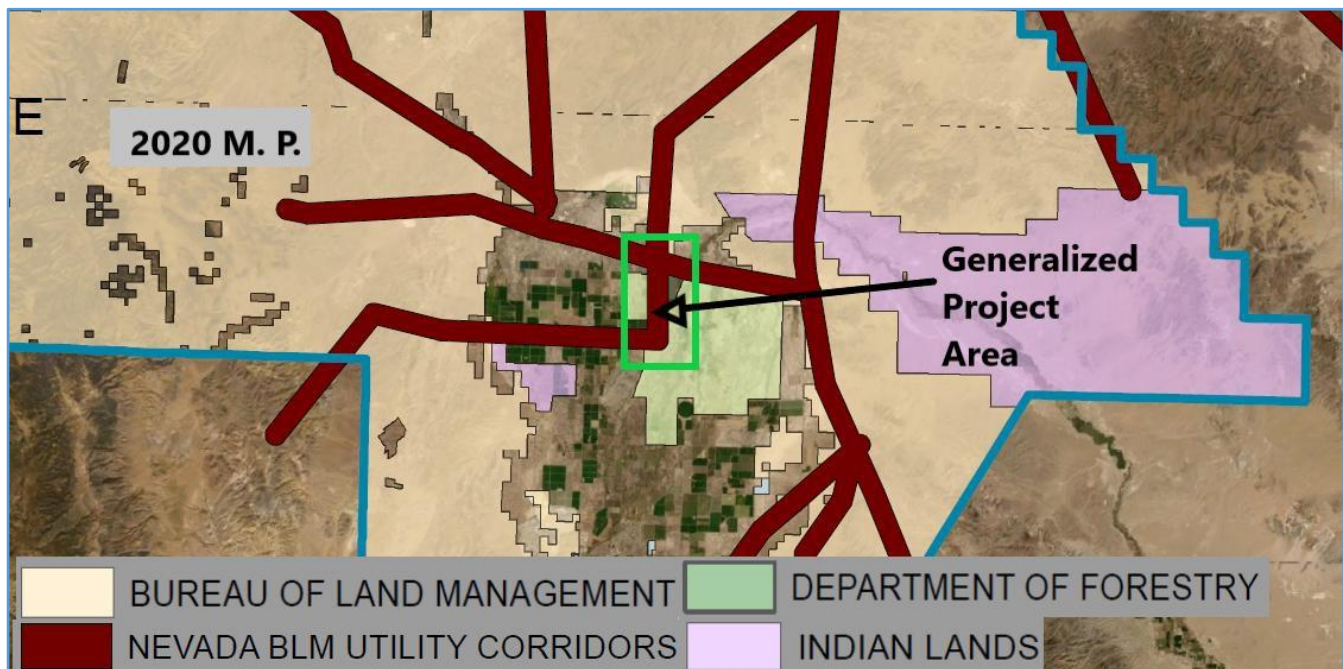
STAFF REVIEW AND COMMENTS

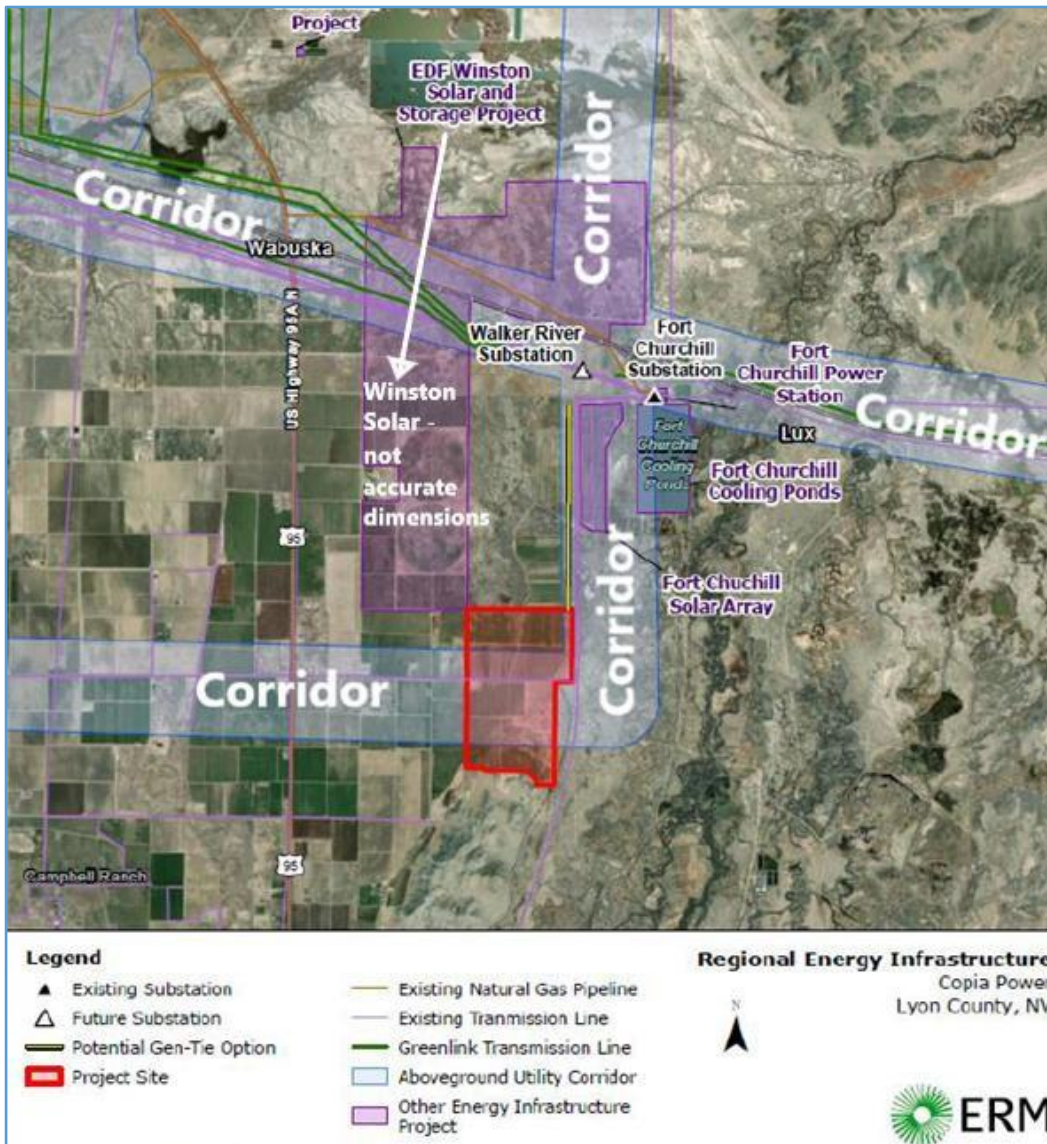
In Title 15, Planned Unit Developments are governed by Chapter 15.349 of LCC, which include the Findings as reviewed in the next section of this report.

Utility Corridors

While not part of staff's response to the Findings, the location of the Project relative to the 2020 Master Plan's Above Ground Utility Corridors was a large factor in the review of the Monarch Specific Plan. Because the Specific Plan is the Master Plan for the Project area, this topic is carried over from the Specific Plan staff report.

The location of the Project along the alignment of the Corridors indicates that the County recognized this region as appropriate for new commercial/industrial development associated with additional electrical capacity. The following images depict an excerpt from the 2020 Master Plan and an image from the applicant (with staff modifications). The Corridors are 2/3 of a mile in width and are locations where Title 15 does not require a Conditional Use Permit for high voltage power lines. The intent of these corridors is to delineate areas that may connect to the NV Energy, State-wide, Greenlink project and the Walker River Substation expansion. The applicant will be pursuing options with the NV Fish and Game Commission or with the project proponents of the Winston Solar PUD to the north of the Project area in order to attain easements for connection to the Walker River Substation complex. (Note that the dimensions for the Winston Solar project are not accurate in the second image: the solar array will extend closer to Hwy 95A than depicted.) By utilizing land that is already "connected" to the Walker River Substation complex, the proposed PUD presents more compact development patterns that if the data center was proposed miles away where more high voltage power lines lengths would be necessary to connect the systems.





Traffic Impacts and Roadways

Finding D in the next section of this report notes the Traffic Impact Study (TIS) submitted for the Project and the required roadway improvements that will be required as part of the County approvals for construction.

FINDINGS FOR REVIEWING A PLANNED UNIT DEVELOPMENT

Proposed PUDs are first reviewed by staff, who make a report to the Planning Commission (PC) in conjunction with presentation(s) by the applicant. The PC then make a recommendation to the Board. The Board hears reports from staff and the applicant and makes the final decision on whether or not to approve the request.

Staff has included the applicable Findings in bold type. Each Finding is listed with the applicant’s response in italics and then staff’s comments.

Note: The applicant’s full PUD and Project Narrative are attached to this report and include the Findings in their original formatting. Staff has copied their Findings, but some of the original formatting has been altered.

Per Section 15.349.10, “APPROVAL OR DENIAL OF APPLICATION” of Title 15:

The approval or denial of a tentative planned unit development plan shall be by minute action and shall set forth the reasons for the approval or for the denial, and in the case of approval, shall set a specific date for the filing of an application for final approval of the planned unit development, or in the case of phased development over a period of years, shall set the specific periods within which applications for final approvals of each part thereof must be filed. The minutes shall also set forth with particularity in what respects the plan would or would not be in the public interest, including but not limited to, the following findings:

Finding A: In what respects the plan is or is not consistent with the statement of objectives of this chapter;

Applicant’s Response

Finding Criteria	Demonstration of Project Compliance
<p>Finding A. In what respects the plan is or is not consistent with the statement of objectives of this chapter</p>	<p>The proposed PUD is consistent with the statement of objections and purpose for PUDs set forth in Lyon County Code Section 15.341.01, and the statement of standards and criteria set forth in Section 15.349.03. As discussed in more detail above, the Project advances the following objectives: (1) it establishes land use patterns that promote efficient, compact networks of streets and utilities that lower development and maintenance costs and conserve energy (Section 15.349.01.A.2); (2) it helps preserve valued environmental resource lands by concentrating development on previously disturbed agricultural land and maintains 20–40% of the site as natural open space (Section 15.349.01.A.3); (3) it helps maintain and enhance surface and ground water quality and quantity by utilizing air-cooled systems and limiting water consumption to below 100 ac 800 ft/year (Section 15.349.01.A.4); (4) it helps protect and maintain critical wildlife habitat by coordinating with NDOW and avoiding</p>

disruption to the adjacent Mason Valley Wildlife Management Area (Section 15.349.01.A.6); (5) it helps provide for a well-located, clean, safe, and pleasant industrial site involving a minimum of strain on transportation facilities, given the Project's remote location over one mile from Highway 95 (Section 15.349.01.A.8); (6) it encourages innovations in development so that growing demands may be met by greater variety in type, design, and layout of buildings and by conservation of open space (Section 15.349.01.A.9) ; (7) it minimizes the burden of traffic on roads and highways through site access via Sierra Way and proposed traffic mitigation measures (Section 15.349.01.A.10) ; and (8) it helps ensure the purposes, goals, objectives and policies of the Lyon County Comprehensive Master Plan are achieved, as demonstrated by the Master Plan goal-by-goal analysis in Table 2 of this narrative (Section 15.349.01.A.11). The Project is consistent with, and furthers many of, the goals of the Master Plan, supports economic development opportunities in the County, and includes site design details that will minimize impacts to surrounding properties.

Staff Comment

Recognizing the location of the Project along the Aboveground Utility Corridors approved as part of the 2020 Lyon County Master Plan confirms for staff that the use proposed is consistent with the stated objectives of the development code. The Project PUD is consistent in use with the approved Monarch Specific Plan and the standards for submittal and review per chapter 15.249 (Planned Unit Development) of Lyon County Code (LCC). The stated objectives of identifying multiple uses with a project footprint, establishing appropriate setbacks and buffers, providing adequate parking and roadway improvements, and minimizing impacts to neighboring properties (relative to the scale of the project) are satisfactorily met with the Project.

Finding 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;

Applicant's Response

-see next pages

Finding 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 primary purpose for the PUD application is to support a mix of land uses on the same parcel that would otherwise not be permissible through conventional zoning mechanisms. However, the plan only departs from the standard zoning regulations to the limited extent necessary to accommodate a use that the Lyon County Development Code does not specifically address. Because the Code does not include provisions specific to data centers, conventional zoning mechanisms cannot accommodate the mix of complimentary land uses required for the Project's operations. The specific departures are narrow, well-justified, and consistent with the public interest:

(a) Use: The Project combines a data center with ancillary natural gas generation and BESS facilities on a single site. These uses are functionally integrated and necessary to support data center operations. Notably, energy production and distribution are already conditionally permitted in the RR-20 district, and the proposed uses are consistent with the character and scale of other approved energy projects in the immediate vicinity, including the Walker River Substation complex, Winston

Solar, and the Greenlink transmission lines. The PUD mechanism is the appropriate vehicle to authorize this integrated development in a manner that ensures coordinated site planning and County oversight.

(b) BESS Setbacks: Ordinance No. 640 requires a one (1) mile setback from trails, highways, bodies of water, and existing residential uses. The Project proposes a modest reduction from this standard; however the proposed BESS location maintains a setback of 2,400 feet from the nearest residential structure (See **Appendix Q**), which is nearly half a mile and provides a substantial safety buffer well in excess of industry norms. Importantly, there are no other intermittent or perennial streams, highways or trail easements within a mile of the proposed BESS location, meaning the deviation applies only to the residential setback component and the 2,400-foot buffer far exceeds what is necessary to protect public safety.

(c) Site Coverage: The Project's 60–80% lot coverage reflects the operational requirements of a data center campus and is appropriate for the proposed industrial use. All structures maintain minimum 30-foot setbacks from property lines, ensuring that adjacent properties are not adversely affected. These limited departures serve the public interest. The Project represents an estimated \$12 billion capital investment in Lyon County, will create at least 150 permanent jobs and over 2,000 annual construction jobs, and will generate \$1.5 billion in real and personal property tax revenue along with approximately \$250 million in sales tax revenues. The Project advances the County's economic diversification goals, responds to critical nationwide demand for data center infrastructure, and leverages existing and planned energy infrastructure in the region. The departures do not establish any precedent for incompatible development; rather, they are narrowly tailored to the unique operational characteristics of this specific facility and will be governed by the PUD's recorded development standards and conditions of approval.

Staff Comment

The Lyon County Community Development Department will be presenting a draft ordinance for data centers to the LCBOCC on August 3, 2026. The ordinance will introduce standards to be incorporated into Title 15, but at the time of the approval of the Monarch Specific Plan and the application for approval of this PUD request, the County has been using the standards of chapter 15.336, *Performance Standards for Conditional Uses*, as the applicable base standards for review of the Project. The applicant appropriately states that PUDs incorporate various uses and develop customized standards. The Project does largely comply with LCC regarding setbacks and accessory uses for data centers. The benefit to the County's tax base is recognized as a public benefit provided the mitigation measures identified for roadway improvements are constructed prior to the construction phase of the Project. After the project is constructed, the roadway improvements will remain in place, providing a community benefit since the operational phase of the project would not overwhelm existing infrastructure. This PUD will establish the development standards for the Project in accordance with chapter 15.349 of LCC and does not depart from the regulations applicable to PUDS.

Finding 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;

Applicant's Response

-see next page

Finding 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 Project proposes 20-40% open space, meeting or exceeding the 20% requirement required by Section 15.349.03.I. All areas not intended for structures will be maintained as

natural open space areas, preserving the rural character of the site and providing visual screening and a natural buffer between the development and adjacent properties, particularly the Mason Valley Wildlife Management Area to the north and east and rural residential properties to the west. Proposed vegetation consists of naturally occurring, drought-tolerant plantings that will not require substantial maintenance or routine watering, consistent with the area's rural character and water conservation goals. Copie Power, or any subsequent site owner, will be responsible for ongoing maintenance of all open space areas in a manner acceptable to Lyon County and will comply with any conditions of approval regarding long-term maintenance obligations.

As the Project is not a residential development, the open space is proportional to the proposed use and surrounding character. The Project's location, absence of public access, and lack of visibility from Highway 95 further support the adequacy of the proposed open space for its intended screening and environmental conservation purposes.

Staff Comment

As stated by the applicant, there is no residential component of the Project, but a 30' wide landscape buffer is proposed along the western boundary, facing Hwy 95A. The open space within the Project area will be at least 20%, consistent with the PUD standards of chapter 15.349 of LCC.

Finding D: 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;

Applicant's Response

-see next pages

Finding 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 physical design of the Project ensures adequate provisions are made for public services, vehicular traffic, parking, and the amenities of light and air, recreation, and visual enjoyment. The Project Site is located in a rural, and largely undeveloped, area of Lyon County. The proposed land use and accessory uses serve as complimentary to existing energy infrastructure and other regionally significant energy projects in the immediate vicinity.

The Project will not require Lyon County public water or sewer hookup or extensions. Water will be sourced onsite through existing privately held water rights, with total consumption anticipated to be below 100 ac-ft/year — a fraction of what the site historically consumed for agricultural operations. Wastewater will be managed independently through either septic or an onsite treatment facility. The Project will coordinate closely with the local fire department on emergency response planning and will provide onsite emergency water

storage, including a potential 1-million-gallon water storage tank.

Because the Project is self-sufficient from a utility perspective, it places no burden on existing public services or infrastructure serving Lyon County residents. Additionally, considering the upcoming Walker River substation Complex and Greenlink transmission projects, the Project will be adequately served with enough power to maintain the facility and will not result in the loss or reduction of energy to the Lyon County community. The load-serving utility will plan for and allocate energy for the Project's needs, which will include energy generated on-site and via other energy generation projects Copia Power is developing that serve the electric grid. The price paid for power will include all upgrades and costs to serve the data center under a special contract and PUCN-approved tariff, so that costs are not shifted to residential or small business customers or subsidized by other ratepayers.

The Traffic Impact Study (**Appendix H**) demonstrates that existing roadway infrastructure is generally adequate to serve the Project. Traffic impacts will be most notable during the temporary construction phase, and the study describes proposed mitigation efforts to increased traffic during construction. The Project is accessed from Sierra Way, sited over one mile from Highway 95, which minimizes impacts to the County's primary corridor in the vicinity of the Project. Copia Power is actively coordinating with NDOT and Lyon County on traffic mitigation strategies, and the TIS is currently under NDOT review with approval anticipated prior to the PUD hearing. Post-construction, the Project's low staffing requirements will generate minimal ongoing traffic.

A dedicated Parking Study prepared by Kimley-Horn (**Appendix P**) supports the proposed 920 parking spaces as adequate for the Project's operational needs. The permanent-use of the facility will have minimal onsite staffing, no public access, and low parking demand, which are precisely the type of use contemplated by the exception criteria of Section 15.349.03.M.3 for permanent uses with low demand for off-street parking.

Proposed structures are situated within a compliant setback distance for the underlying RR-20 District, with a minimum of 30 feet from each property line. Building heights of 75-95 feet are appropriate for data center operations and, given the Project's remote location over one mile from Highway 95 and the nearest residential areas, will not impact adjacent properties. Structures will be constructed from materials in a neutral color consistent with the surrounding rural landscape. The Project Site will be adequately landscaped, as per the requirements of the Lyon County Development Code and will not result in the degradation of natural resources or wildlife habitats. There will be no changes to current outdoor activities commonly practiced on neighboring NDOW land, such as hunting, fishing, bird watching, or other similar activities. Visual simulations (**Appendix C**) confirm that the Project's visual impact from surrounding vantage points will be minimal, and the site will be landscaped with native vegetation consistent with the existing rural character.

Staff Comment

The Project is located in region of the County with few residents and developments due to its history of agricultural uses. The distance from Hwy 95A and proximity to the Walker River Substation complex makes the location appropriate for a use that necessitates power lines and expanded electrical infrastructure. While the structures themselves won't be completely screened, the distances to population centers and major roadways will minimize the visual impacts to residents and the data center use itself if not one that generates significant air pollution.

No public water or sewer service is provided in the region. The Lyon County Sheriffs and Mason Valley Fire Protection District will provide emergency services. The Fire District will require an independent review of the Project.

The applicant's TIS was discussed extensively during the public hearings for the Monarch Specific Plan. The following attachments are included in this report:

- Attachment 4 is the updated TIS summary with recommendations from the Traffic Engineer; and
- Attachment 5 is a comment letter from the Nevada Department of Transportation (NDOT) with their required improvements.

Table 1 from the TIS is/was particularly noteworthy as it notes that approximately 1,200 peak hour trips on Hwy 95 A, between 7-9 AM and again between 4-6 PM, could be added to existing traffic volumes on the Highway. These significant impacts to the existing roadway will necessitate improvements to Hwy 95A at Sierra Way (in addition to the impacts of the Winston and Lux solar array projects and the NV Energy project). Additional improvements at the Hwy 95A intersection with State Route 339 in Yerington are also required. The project applicants may coordinate with other developers in the area to share costs, but the County will not contribute financially.

The excerpts that follow are from the TIS and depict the construction and operational phase calculations for additional vehicle trips due to the Project.

Construction Phase

The Monarch Data Center trip generation for construction was calculated using data collected from previously completed studies for data centers. The construction trip generation used in those studies was scaled appropriately for the Monarch Data Center based on overall project building square footage. It is anticipated that the proposed project will generate 1,221 AM construction trips and 1,268 PM construction trips at peak levels during the construction phase, as shown in **Table 1**. It is anticipated that the Monarch Data Center will have approximately 4.6 million square feet of floor space after completion. Calculations are provided in **Appendix D**.

Table 1 – Trip Generation – Construction

ITE Code	Description	Size	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
NA	Data Center Construction	4.6 million SF	1,163	58	1,221	81	1,188	1,268
					1,221			

Source: Previously completed data center studies

Operational Phase

The proposed project is anticipated to generate 506 AM and 414 PM peak hour trips, as summarized in **Table 2**. Calculations are provided in **Appendix C**.

Table 2 – Trip Generation – Typical Operations

ITE Code	Description	Size	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
160	Data Center	4.6 million SF	278	228	506	124	290	414

Source: ITE Trip Generation Manual, 11th Edition

Staff has worked with the applicants through the Specific Plan approval and PUD submittal process to ensure it is understood that future development permit issuance will be contingent on meeting the County’s expectations of completed roadway improvements for the construction phase of the project. As a result, the applicants have included the language copied below in the PUD Narrative (Attachment 1):

Excerpt from Section 3.13.2 of the PUD Narrative (w/underline added).

3.13.2 NDOT REQUIREMENTS

The TIS mentioned above determined the following infrastructure improvements to mitigate impacts from the Monarch Data Center project:

1. US-95A and Sierra Way
 - a. Install a temporary signal during the construction period for both Construction Scenario 1 and 2. Once the construction phase of the project is completed, the signal is not expected to be warranted.
 - b. Install a northbound right turn lane per NDOT’s Access Management System and Standards (AMSS).

- c. *Install a southbound left turn lane per NDOT's AMSS.*
- d. *Install a westbound left turn lane per NDOT's AMSS.*
- 2. *US-95A and SR-339*
 - a. *Install a temporary signal during the construction period for both Construction Scenario 1 and 2. Once the construction phase of the project is completed, the signal is not expected to be warranted.*
 - b. *Install a southbound left turn lane per NDOT's AMSS.*
- 3. *US-95A and Bowman Lane*
 - a. *Install a temporary signal during the construction period for only Construction Scenario 1. Once the construction phase of the project is completed, the signal is not expected to be warranted*
- 4. *Install Signing and Striping per NDOT and MUTCD standards*

The Monarch Data Center project is committed to making the necessary improvements to mitigate any significant traffic impacts of the project.

In addition to the language already quoted in the PUD, staff is suggesting the following addition to the PUD to ensure that a new passing lane headed north on Hwy 95A, north of the project and headed up grade on "Wabuska Hill" is constructed prior to the County's issuance of construction permits for the project:

As part of the Monarch Data Center Project, Copia Power makes a formal commitment to the construction of a northbound passing lane extending up Wabuska Hill on US Highway 95 in Wabuska, Nevada. This improvement is recognized as a necessary mitigation measure associated with the Project's anticipated traffic impacts and shall be completed in accordance with all applicable Lyon County and Nevada Department of Transportation (NDOT) requirements.

Copia Power acknowledges and accepts Lyon County staff's determination that Copia Power's construction-related traffic alone would warrant the required construction of the northbound passing lane up Wabuska Hill, or other reasonable mitigation as determined by Lyon County. In recognition of this determination, Copia Power formally commits to the design, funding, and construction of the northbound passing lane prior to the commencement of any construction activities associated with the Project. This sequencing is intended to ensure that the passing lane improvement is in place and fully operational before construction-related traffic volumes on US Highway 95 are realized, thereby mitigating the Project's construction phase traffic impacts on the traveling public.

The northbound passing lane shall be fully constructed and operational prior to the issuance of any site improvement permits for the Project, or upon other conditions as agreed by Lyon County. All agreements necessary to facilitate the construction of the northbound passing lane and any other required off-site roadway improvements shall be finalized and executed in a form acceptable to Lyon County and consistent with Lyon County Code and applicable State statute. However, Copia Power is not expected to assume sole responsibility for obtaining land easements needed for said passing lane. Copia Power is committed to working cooperatively with Lyon County, NDOT, and neighboring project applicants to ensure the timely and effective implementation

of these improvements, with the goal of promoting safer and more efficient transportation infrastructure for the residents and community of Lyon County.

The staff-presentation for the request will make note of this language and request that the applicant address the suggested edits to the PUD and its inclusion in the Final PUD. The language is also added to the recommended motion section of this report.

Finding E: The relationship, beneficial or adverse, of the proposed planned unit development to the neighborhood in which it is proposed;

Applicant's Response

Finding E. The relationship, beneficial or adverse, of the proposed planned unit development to the neighborhood in which it is proposed

The proposed PUD will result in a substantial net benefit to Lyon County and the surrounding community. The Project's economic impact will be significant and sustained, and will include:

- An estimated \$12 billion in initial capital investment.
 - At least 150 permanent direct jobs and at least 100 indirect and induced jobs in the local economy.
 - Over 2,000 annual construction jobs supported.
 - Over \$100 million total payroll impact.
 - Over \$1.5 billion in real and personal property tax revenue to Lyon County (including schools and other tax jurisdictions) which can be used for community improvements and enhancements.
 - Approximately \$250 million in sales tax revenues including contribution to the local government.
 - Indirect economic activity for nearby commercial businesses, restaurants, and the supply chain.
 - Road improvements.
 - Economic diversification of Lyon County beyond agriculture, which creates resiliency for the future.
-
- Response to a nationwide need for data center facilities due to emerging computational power needs.
 - Support for local landowner and agricultural producer to collect supplemental income on nonviable agricultural land.

Potential adverse impacts are limited and well-mitigated. Construction-phase traffic is the most visible temporary impact which is addressed through the Traffic Impact Study (**Appendix H**) and ongoing coordination with NDOT and Lyon County on road improvements. Post-construction traffic will be minimal given the Project's low staffing requirements. Water consumption will be below 100 ac-ft/year using air-cooled systems, sourced entirely from privately held water rights with no draw on County municipal supplies, which is far less than the agricultural operations historically conducted on the same land. The BESS facility will incorporate 24/7 remote monitoring, battery management systems, heat, smoke, and gas detectors, and onsite emergency water storage, with a coordinated emergency response plan developed in partnership with the local fire department. The Project is located over one mile from Highway 95 and will use neutral-colored building materials and native vegetation screening, resulting in minimal visual impact as confirmed by visual simulations in Appendix C. Copia Power is coordinating with NDOW on wildlife surveys to ensure the Project coexists with the adjacent Mason Valley Wildlife Management Area without impacting public access or recreational use.

On balance, the proposed PUD will deliver transformative economic benefits to Lyon County while imposing only limited, well-mitigated impacts on the surrounding neighborhood.

Staff Comment

The development of data centers appears logical for the proposed location based on the Above Ground Utility Corridors and the proximity of the Walker River Substation. The location for future high voltage power lines, critical to the proposed use, was already designated as part of the adopted 2020 Master Plan, demonstrating orderly and compact growth patterns. The financial benefits to the County are estimated by the applicant, but even the most conservative estimations would indicate far more projected value than the current use of the property. The surrounding neighborhoods have already experienced a change in land use in the Mason Valley due to the Walker River Substation expansion and approval of thousands of acres of solar array projects and pending NV Energy high

voltage power line construction. The Project seeks to mitigate impacts with increased roadway capacity, turning lanes, acceleration/deacceleration lanes, landscape and structure buffers, and compliance with LCC.

Finding 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.

Applicant's Response

Finding 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 anticipated to be fully constructed within 3-4 years. This schedule coincides with NV Energy's planned infrastructure upgrades, including the completion of the Walker River Substation complex and Greenlink transmission infrastructure.

The terms and conditions governing this phased development are sufficient to protect

the interest of the public and the integrity of the plan throughout the development period. Copia Power will comply with all conditions of approval set forth by Lyon County, including any recorded covenants, conditions, and restrictions that incorporate long-term site development standards, maintenance obligations, and enforcement mechanisms designed to assure coherent, coordinated development, maintenance and use activity within the PUD site.

Development phasing will be coordinated with NV Energy's infrastructure upgrade schedule to ensure adequate utility capacity is in place before each phase is brought online, and all energy rates paid by the Project will include required upgrade costs so that no costs are shifted to residential or small business ratepayers.

Traffic mitigation measures identified in the Traffic Impact Study (**Appendix H**) will be implemented prior to or concurrent with construction phases that generate increased traffic. Wildlife surveys will be completed in coordination with NDOW, and the Project will maintain open space buffers and native vegetation throughout all phases. BESS facilities will incorporate 24/7 remote monitoring from the outset, and Copia Power will maintain a coordinated emergency response plan with the local fire department, including onsite emergency water storage, throughout all phases of development. Copia Power, or any subsequent site owner, will maintain the Project Site in a manner acceptable to Lyon County throughout the development period and beyond.

These commitments, together with any additional conditions the Board may impose at the time of tentative approval, provide robust protections for the public interest and ensure the integrity of the approved plan is maintained from initial construction through project completion.

Staff Comment

The development of data centers appears logical for the proposed location as discussed in Finding E. The cost of electrical infrastructure expansion will be bore by the developer as will the construction of roadway improvements. This project will likely overlap with other projects that are likewise located within the region, which is changing the overall land use in the Mason Valley. It is expected that increased tax revenues and permanent jobs will be net benefit to Lyon County and the region.

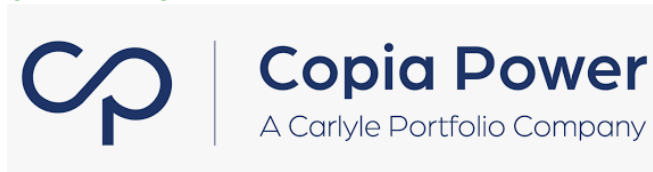
Monarch Data Center Planned Unit Development

150 Penrose Lane and 155 Penrose Lane
Lyon County, Nevada

PREPARED BY:



ON BEHALF OF:



DATE

May 18, 2026

CONTENTS

1.	APPLICATION REQUEST	4
1.1	PROJECT DESCRIPTION	4
1.1.1	Site Access overview	5
1.2	PROJECT JUSTIFICATION	5
1.3	ECONOMIC BENEFITS	6
2.	LYON COUNTY DEVELOPMENT CODE, CHAPTER 349, PLANNED UNIT DEVELOPMENT (PUD)	6
2.1	SECTION 15.349.01: PURPOSE	6
2.2	SECTION 15.349.02: APPLICABILITY	7
2.3	SECTION 15.349.03: STANDARDS AND CRITERIA	7
3.	ADDITIONAL PROJECT DETAILS	12
3.1	EXISTING LAND USE SUMMARY	12
3.2	SURROUNDING LAND USE ANALYSIS	13
3.3	ZONING ANALYSIS AND PROPOSED BUILT CONDITIONS	14
3.4	WATER	14
3.5	WASTEWATER	15
3.6	SEWER	15
3.7	POWER	15
3.8	STORM DRAINAGE	16
3.9	NATURAL GAS	16
3.10	BESS MONITORING, DETECTION, AND EMERGENCY RESPONSE	16
3.11	DEVELOPMENT PHASING	17
3.12	PUBLIC ENGAGEMENT SUMMARY	17
3.13	TRANSPORTATION	17
3.13.1	Site Access	17
3.13.2	Ndot REquirements	18
3.13.3	OTHER TRAFFIC-RELATED COMMITMENTS	19
4.	SECTION 15.349.07: APPLICATION FOR TENTATIVE APPROVAL	19
5.	SECTION 15.349.10: APPROVAL OR DENIAL OF APPLICATION	24
6.	APPENDICES	32
6.1	APPENDIX A - SITE PLANS	33
6.2	APPENDIX B – GRADING AND DRAINAGE PLAN	33
6.3	APPENDIX C – VISUAL SIMULATIONS	33
6.4	APPENDIX D – LAND USE COMPATIBILITY ANALYSIS	33
6.5	APPENDIX E - SITE ANALYSIS	33
6.6	APPENDIX F – GEOTECHNICAL REPORT	33

6.7	APPENDIX G - BUILDING ELEVATIONS	33
6.8	APPENDIX H - TRAFFIC IMPACTS STUDY	33
6.9	APPENDIX I - LAND TITLES	33
6.10	APPENDIX J - LETTERS OF INTENT TO SERVE	33
6.11	APPENDIX K - SOIL REPORT	33
6.12	APPENDIX L - HYDROLOGY & HYDRAULICS STUDY	33
6.13	APPENDIX M - VICINITY MAP	33
6.14	APPENDIX N - NOT APPLICABLE LETTER	33
6.15	APPENDIX O - SITE PHOTOGRAPHS	33
6.16	APPENDIX P - PARKING STUDY	33
6.17	APPENDIX Q - BESS SETBACK EXHIBIT	33

1. APPLICATION REQUEST

Copia Power DevCo, LLC (“Copia Power” or “Applicant”) is seeking a **rezoning from RR-20 to Planned Unit Development** (PUD) for two parcels in Lyon County – 150 Penrose Lane (014-201-07, north, 240 acres) and 155 Penrose Lane (014-201-30, south, 265 acres), totaling approximately 505 acres, also referred to herein as the “Project Site.” The Project Site is located approximately 7,000 feet east of the US-95 and Penrose Lane intersection.

The primary purpose of the PUD zoning designation is to permit the development of a proposed data center facility with ancillary uses, including a natural gas plant and battery energy storage system (BESS).

The Project Site was approved for Master Plan amendment from Agriculture to Specific Plan by the Lyon County Board of Commissioners in December 2025. While rezoning to PUD requires additional applicant due diligence and decision from Lyon County, including a number of site-specific details, a regulatory foundation for the Project has been recently supported and approved.

1.1 PROJECT DESCRIPTION

Please see **Appendix A** for a site plan indicating existing and proposed distribution, density, and intensity of land uses, including open space. Refer to **Appendix C** for a series of visual simulations to further demonstrate conceptual built conditions.

The Proposed PUD is a 1,000-megawatt (MW) data center facility (the total anticipated load across a set of buildings comprising the project campus), with ancillary energy generation and energy storage land uses (the “Project”). It is intended that the Project will interconnect with the NV Energy (NVE) electric grid at or near the Walker River Substation complex which is currently under construction and located approximately two miles north of the Project Site.

The Project will also include the following accessory components, which are land uses generally regulated by the Lyon County Land Use and Development Code (the “Code”):

- 500-MW BESS
- Natural gas energy generation system, with up to 500-MWs of capacity, including single-cycle, combined cycle-combustion turbines or reciprocating engines
- Administrative and equipment storage building(s)
- Onsite substation(s)
- Onsite switching station(s)
- Above ground electrical interconnection (to be submitted as a separate Conditional Use Permit application)

In addition to accessory uses listed above, the Project includes various infrastructure elements, which may include but are not limited to:

- Fiber infrastructure
- Backup power generation
- Load lines and communication lines

1.1.1 SITE ACCESS OVERVIEW

The Project Site will be accessed from Sierra Way, located about one mile north of the Project Site. The Project Site is not intended to be accessed from Penrose Lane, which will serve as a secondary emergency entrance/exit only. Proposed access from Sierra Way includes a north-south access road, located just west of the proposed above ground interconnection line (see **Appendix A**). The new access road from Sierra Way is proposed along the west property line of the north adjacent Nevada Department of Wildlife (NDOW) owned land. Alternatively, the new access road may be sited on privately-owned land (under the same ownership as the Project Site), parcels 014-201-32 and 014-201-18. These parcels are located just west of the aforementioned NDOW land. The proposed Sierra Way access road terminates at the northwest corner of 150 Penrose Lane. Additional information on transportation and site access is included below in **Section 3.13** and in the Traffic Impacts Study (TIS) included as **Appendix H**.

1.2 PROJECT JUSTIFICATION

The proposed land use, a data center with ancillary uses, is a compatible and complimentary land use to the planned Walker River Substation complex project. Further, existing and planned infrastructure within the immediate vicinity serves as an appropriate foundation for the Project, which includes the existing Bureau of Land Management (BLM) utility corridor, plans for the regionally significant Greenlink West and Greenlink North transmission line projects, the existing NVE 120kV electric line, and proximity to similar development projects, for example, the, Lux Solar facility, Fort Churchill Gas Plant, Winston Solar and Storage Project, and Homestretch Geothermal Project. While Homestretch Geothermal may not be currently operating, it should be noted that the use was deemed appropriately sited and compatible with its surrounding environment during the time of approval.

According to the Final Routing and Siting Study for the Greenlink West Transmission Project, "A new Fort Churchill 525/345/230/120 kV Substation will be constructed approximately 1,600 feet west of the existing Fort Churchill 230/120 kV Substation, referred to as the Walker River Substation complex. The proposed substation will also require the construction of one new 525 kV getaway transmission line and three new 345 kV transmission line getaways, and realignment of one existing 230 kV transmission line and six existing 120 kV transmission line getaways." As indicated by the Study, the Fort Churchill and Walker River Substations are key infrastructure components of the regionally significant Greenlink Transmission Project.¹

The Project is strategically sited near the planned Walker River Substation Complex. The Walker River Substation Complex, currently under construction, will serve as a key interconnection "hub" for both the Greenlink West and Greenlink North projects where both 525-kV lines will meet. The Greenlink projects are designed to bring renewable energy to the west and to meet large load growth. The Walker River Substation Complex is being constructed to accommodate these new transmission lines, increased capacities, and large load growth.

According to NV Energy, construction on Greenlink recently began. Greenlink West is expected to be in service by May 2027. Greenlink North is expected to be in service by December 2028. The project will also include three 345 kV lines from Yerington, NV, to the Reno, NV, area².

¹ Source: Final Routing and Siting Study, Greenlink West Transmission Project, June 30, 2021. Prepared by Power Engineers for NV Energy.

² Source: www.nvenergy.com/cleanenergy/greenlink-nevada.

The Greenlink development will likely serve as a significant driver for future investment into local communities. As such, while the Project Site is currently zoned RR-20, low-intensity complimentary land uses such as a data center with ancillary land uses are appropriate and compatible with the overall vision for the region. Further, the Project will also maintain the delicate balance between new development and economic growth and rural/agricultural preservation. See **Appendix D** for a Land Use Compatibility Analysis map of similar energy projects that are either existing or approved/future in the vicinity to demonstrate further compliance and land use compatibility.

1.3 ECONOMIC BENEFITS

Copia Power expects to engage with Lyon County to discuss a community benefits package commensurate with the nature and scale of the proposed Project. The details of this benefits package will be discussed with relevant stakeholders as information is finalized.

Additionally, Copia Power commissioned an independent third-party economic analysis of the proposed Monarch Data Center Project, conducted by the Northern Nevada Development Authority (NNDA). This section summarizes key findings and results from the economic analysis conducted by NNDA. Please note that these findings are estimates based on a variety of assumptions. Though, estimates derive from various credible sources, including current tax policies, available economic data, and existing economic structure of the Lyon County region.

According to the analyses, it is estimated that the Project will result in the following economic benefits to Lyon County over the anticipated 20-year life cycle:

- **Total Investment and Economic Impact**
 - \$12 billion initial capital investment
 - Over \$4 billion spent on construction labor related expenses
 - An additional \$24 billion in equipment replacement and upgrades are anticipated over the life of the Project
- **Employment Impacts**
 - At least 150 direct permanent jobs
 - At least 100 indirect and induced jobs in the local economy
 - Over 2,000 annual construction jobs supported
 - Over \$100 million total payroll impact
- **Local Government (County and School and Special Districts) Tax Revenue Impacts**
 - Over \$1.5 billion in real and personal property tax revenues
 - Approximately \$250 million in sales tax revenues

2. LYON COUNTY DEVELOPMENT CODE, CHAPTER 349, PLANNED UNIT DEVELOPMENT (PUD)

2.1 SECTION 15.349.01: PURPOSE

According to Chapter 349 of the Lyon County, Nevada Development Code, the overarching purpose and intent of a planned unit development (PUD) is to "...provide an overall planning

and design approach for a single use development or a development incorporating a mix of uses. PUD allows for deviation from a strict application of dimensional and use limitations of the zoning district or districts in order to provide flexibility for landowners to creatively plan for the overall development of their land to achieve a more desirable environment than would be possible through strict application of the standard requirements of the zoning district.”

It is understood that Chapter 349 is primarily written for residential and/or commercial mixed-use development. While the proposed land use is not residential or commercial in nature, this proposal meets the general purpose and intent for PUDs in Lyon County for the following reasons:

- The proposed use, a data center with ancillary facilities (see Section 1.1 above), will incorporate a mix of uses that cannot be simply categorized as principal and accessory through conventional zoning mechanisms as required by the RR-20 Zoning District.
- The proposal includes consolidation of land uses, notably a defined data center campus and supporting infrastructure, that reflects condensed development patterns and will not serve as a catalyst for further sprawl into the County’s agricultural areas.
- The Project will include BESS, which will require deviation from setback requirements as adopted by the Lyon County Board of Commissioners in June 2025.
- The Project will incorporate modern technology and land uses that are not specifically regulated by the Lyon County Development Code. Therefore, the Project includes special circumstances that are not addressed or provided for through conventional zoning district regulations.
- The Project directly supports flexibility in land uses and creative planning, considering the mix of onsite uses, consolidation of uses and structures, as well as supporting emerging technologies and economic diversification in Lyon County.

2.2 SECTION 15.349.02: APPLICABILITY

The Project Site is within the Rural Character District designation, as per the 2020 Master Plan. As noted above (Section 1.1), the Project Site has been approved for a Master Plan amendment from Agriculture to Specific Plan in December 2025. Both parcels that comprise the Project Site are currently zoned RR-20. The Lyon County Development Code permits PUDs in both the Suburban and Rural Character Districts (Section 15.349.02).

Chapter 349 of the Development Code requires PUDs to be designed and developed in harmony with the surrounding environment. The Project aligns with this general requirement as demonstrated throughout this narrative.

2.3 SECTION 15.349.03: STANDARDS AND CRITERIA

Table 2 below includes an analysis of Lyon County’s PUD Standards and Criteria with a corresponding explanation for how the Project complies with each of these standards.

TABLE 2: DEMONSTRATION OF COMPLIANCE WITH PUD STANDARDS AND CRITERIA

Standards and Criteria	Demonstration of Compliance
Proposed Uses: The use (or uses) proposed is (are) consistent with the goals and	<ul style="list-style-type: none"> • Goal C 2: Rural Character, Policy C 2.1 - Rural Land Uses and structure

Standards and Criteria	Demonstration of Compliance
<p>policies of the Lyon County Comprehensive Master Plan.</p>	<ul style="list-style-type: none"> ○ The proposed use does not require a land character designation change from the current Rural Character designation. Existing and surrounding rural land uses will prevail. ● Goal LU 1: Orderly Growth Patterns, Policy LU 1.4 <ul style="list-style-type: none"> ○ The Land Use and Development Code supports several compatible uses in the Rural Character designation and rural residential zoning districts, which comprises the surrounding properties and the Project Site’s underlying zoning. The PUD will result in similar uses already permitted in the RR-20 District (e.g., energy production and distribution) without setting an unnecessary or incompatible precedent. ● Goal LU 3: Diverse Economy, Policy LU 3.1 - Diverse Economic Base <ul style="list-style-type: none"> ○ The Project serves as a prime opportunity to bring jobs, both temporary and long-term, to Lyon County. The Project also responds to the needs of a growing industry, while existing (and planned) energy infrastructure sets a foundation for complimentary land uses. While the Project Site is not located within the County’s primary commercial or industrial centers, it is still a reasonable commute distance for construction and long-term staff. ● Goal NR 1: Public Access, Policy NR 1.1 <ul style="list-style-type: none"> ○ The Project is located adjacent to the Mason Valley Wildlife Management Area (north and east) but does not close off any key access points to the area or prohibit or diminish the use of any recreation amenities. ● Goal FS 5: Utility Corridors, Policy FS 5.1 <ul style="list-style-type: none"> ○ The Development Code outlines approval mechanisms and processes for power distribution lines, substations, and other energy production/distribution land uses. The PUD is reflective of a working partnership between Copia Power and Lyon County residents, staff, and decision-makers to ensure a mutually beneficial development pattern and aesthetic environment. ● Goal FS 5: Utility Corridors, Policy FS 5.2 <ul style="list-style-type: none"> ○ The Project aligns with this goal in that the PUD will not disrupt surrounding land use patterns and incorporates interconnection within proximity to the designated utility corridor. The proposed interconnection is consistent with existing land uses and regional energy infrastructure plans. ○ It is understood that the interconnection route, as proposed, will require a Conditional Use Permit from Lyon County. ● Goal FS 5: Utility Corridors, Policy FS 5.3

Standards and Criteria	Demonstration of Compliance
	<ul style="list-style-type: none"> ○ The Project enhances and is consistent with existing and planned infrastructure and utility projects. The Project compliments the Walker River Substation project, Winston Solar project, as well as the regionally significant Greenlink Transmission Project. ○ The Project is located within a rural portion of Lyon County. The Project is not sited within proximity of existing residential neighborhoods, community gathering spaces, or commercial nodes. These conditions support land use and aesthetic consistency considering little disruption to frequently visited areas of Lyon County or community hubs. Additionally, due to the sparse population within the immediate vicinity, the Project is unlikely to create incompatible conditions that could be observed from major County thoroughfares.
<p>Site Area: The minimum site area required for a proposed PUD is five (5) acres. The tract or tracts of land included in a proposed PUD must be in a single ownership or under the development control of a joint application of owners or authorized agents of the property involved.</p>	<p>The Project Site is a total of approximately 505 acres. Of that, approximately 20-40% will be undeveloped open space. Therefore, the PUD site is compliant with the 5-acre minimum requirement. Both parcels are under Copia Power’s control.</p>
<p>Design: The PUD will comply with the Lyon County Design Criteria and Improvement Standards and specifications contained in appendix B on file in the County.</p>	<p>Lyon County staff have previously stated that Lyon County has not adopted any Appendix B regulations. As such, this requirement is not applicable.</p> <p>However, the Project design and site layout complies with applicable Lyon County standards, in terms of land use consistency, aesthetic compatibility, bulk requirements for principal structures, conservation of natural features, and other elements.</p>
<p>Density: The allowable residential density shall be established for the subject property, using the net density acreage as defined in chapter 1200 of this title, appendix A.</p>	<p>Not applicable. The Project does not include residential components.</p>
<p>Bulk Requirements: Building and parking area setbacks, minimum lot area, lot coverage and building height must conform to the requirements of the equivalent zoning district or the existing underlying zoning for a majority of the PUD unless deviations from those underlying zoning</p>	<ul style="list-style-type: none"> • Project Site Bulk Conditions: <ul style="list-style-type: none"> ○ Approximately 505 total acres ○ 60-80% lot coverage • Data Center Bulk Conditions: <ul style="list-style-type: none"> ○ East setback: Minimum 30 feet with additional setback depending on building height (see below); ○ West setback: Minimum 30 feet with additional setback depending on building height (see below); ○ Minimum 30-foot rear yard setback ○ Per Section 15.314.01.F.2., an additional 2 feet of setback for every 1 foot of building height in excess

Standards and Criteria	Demonstration of Compliance
<p>development standards are proposed, considered and approved as a part of the review process. Any such deviation(s) must be justified by the applicant by addressing the allowable modifications contained in chapters 340 through 349 of this title where appropriate.</p>	<p>of 35 feet will be accommodated in final design and building permits. The enclosed Site Plan (Appendix A) includes a 150-foot and 175-foot on the east and west boundaries, respectively, to accommodate an up to 95-foot building height.</p> <ul style="list-style-type: none"> ▪ <i>Note:</i> Actual building height may vary, depending on the final building design and Issue For Construction civil designs prior to ministerial permitting. Buildings may be constructed as single-story or two-story. Regardless, data center buildings will not exceed more than 4.6M square feet, as approved by the Specific Plan. All applicable conditions of the Specific Plan will be adhered to. • Natural Gas Plant Bulk Conditions: <ul style="list-style-type: none"> ○ Minimum 30-foot rear yard setback ○ Minimum 30-foot side yard setback ○ Minimum 30-foot front yard setback • BESS Bulk Conditions: <ul style="list-style-type: none"> ○ Minimum 30-foot rear yard setback ○ Minimum 30-foot side yard setback ○ Minimum 30-foot front yard setback ○ Refer to Appendix Q, BESS Setback Exhibit, for a demonstration of the proposed setback distance between the proposed BESS area from the nearest residential land use.
<p>Commercial Design: Commercial building placement and architectural design shall conform to the intent of chapter 360 of this title, commercial design standards.</p>	<p>Not applicable. The Project is not a commercial building or land use.</p>
<p>Residential Design: Multi-family housing placement and design shall conform to the intent of chapter 348, "Multi-Family Residential Design Standards", of this title.</p>	<p>Not applicable. The Project does not include residential components.</p>
<p>Parking: Parking shall be provided as required by chapter 401 of this title, parking and loading. Further reductions in the amount of parking to be provided may be proposed by the applicant but shall be approved only if they meet the exceptions criteria of subsection M3 of this section.</p>	<p>The Lyon County Code does not include parking requirements specific to data centers. Table 15.401-2 of the Code includes parking requirements for warehousing, which is the most similar land use. The Code requires 1 space per every 1,500 square feet (Table 15.401-2). As such, the Code would require over 3,000 parking spaces, if the requirements for warehousing are enforced. Copia Power commissioned a Parking Study, developed by engineers at Kimley-Horn. Results of the Parking Study can be found in Appendix P.</p> <p>Section M.3.b.1 permits deviations for parking for uses that are "permanent in nature and has low demand for off-street parking." The proposed data center will not require robust onsite staffing and will be largely self-sustaining. Considering the Development Code does not include</p>

Standards and Criteria	Demonstration of Compliance
	<p>provisions for data centers, the Project requires minimal onsite staffing, provides no public access, and requires minimal onsite visits, minimal parking is proposed.</p> <p>Based on the results presented in Appendix P, the Project will include approximately 920 parking spaces, intended to accommodate future onsite staffing and/or maintenance personnel.</p>
<p>Open Space: The minimum amount of area to be designated and preserved as common open space in any planned unit development shall be twenty percent (20%).</p>	<p>The Project proposes 20-40% open space. This is compliant with PUD requirements of Chapter 349.</p>
<p>Connectivity: Planned unit developments shall provide vehicular, bicycle, pedestrian or equestrian connections to adjacent and nearby residential areas, transit stops, neighborhood activity centers and other neighborhood facilities</p>	<p>The proposed PUD is located within the County’s Rural Character designation and therefore absent of existing sidewalks or bicycle infrastructure. This results in a lack of need for sidewalk or bicycle connectivity. Further, while the Project is situated near a few rural residential homes, it is not located within proximity to any neighborhoods, activity centers, transit stops, or community gathering spaces.</p> <p>Moreover, the TIS (Appendix H) includes recommendations for enhanced vehicular conditions. The Project considers traffic patterns and vehicular access in both the TIS (Appendix H) and Site Plans (Appendix A). Discussion with Lyon County resulted in enhanced vehicular patterns by proposing primary site access from Sierra Way, rather than Penrose Lane. Refer to Appendix H for more traffic details.</p> <p>Considering the Project’s location, land use type, lack of public access, and surrounding rural environment, enhanced pedestrian and bicycle connectivity are not proposed as component of the proposed PUD. Existing equestrian activities and opportunities that may occur on the adjacent MVWMA will remain unchanged.</p>
<p>Employment Or Commercial Designations: Planned unit development in areas designated employment or commercial on the Lyon County Comprehensive Master Plan Map may allow mixed industrial, commercial, and residential uses.</p>	<p>Not applicable. The Project is not designated as Employment or Commercial, per the Lyon County Master Plan.</p>
<p>Buffers: Planned unit developments shall establish adequate buffer zones between dissimilar uses within the development and between</p>	<p>The Project incorporates a minimum 30-foot side yard buffer along the west property line. The buffer consists of native vegetation and includes a mixture of trees and shrubs. The remainder of the Project Site will consist of native landscape, consistent with current site conditions.</p>

Standards and Criteria	Demonstration of Compliance
<p>dissimilar uses and/or densities exterior to the planned unit development. Special design considerations such as height controls, density controls, architectural modifications, and landscaping buffers shall be incorporated in any portion of the development which adjoins a previously approved land use or division of land.</p>	<p>See Appendix A, Site Plans, for further detail on proposed landscaping and screening details.</p> <p>Considering the Project location in a rural area of Lyon County with lack of neighbors or public establishments, as well as to preserve water resources, the PUD application package includes a high-level Landscaping Plan. The high-level Landscaping Plan is intended to maintain existing open space and natural area conditions. Further, given the Project’s remote location, it is not anticipated that robust site screening measures will be necessary, as the Project is not visible from County throughfares, suburban areas, or neighborhoods.</p> <p>Further, the Project’s architectural design intentionally considers Lyon County’s unique rural landscape and surrounding aesthetic character. Proposed buildings will be comprised of a natural color, consistent with its surroundings. Refer to Appendix G, Building Elevations, for further detail.</p>
<p>The development would provide for the implementation of a master plan goal in a significant manner (e.g., provides that a quarter of the proposed residential units are to be reserved to address the County's need for affordable workforce housing).</p>	<p>See Master Plan goals and policy analysis above for demonstration of compliance.</p>

3. ADDITIONAL PROJECT DETAILS

3.1 EXISTING LAND USE SUMMARY

Both existing land uses and planned land uses consist of agriculture or farmland. However, it should be noted that the Project Site is currently unfarmed and has not been utilized for agricultural purposes for several years. The Project Site is no longer viable for farming activities due to increased costs to maintain it as farmland, poor soil quality (see **Appendix K**, Soil Report), and substantial water demand that far outweighs return.

Current use of the site includes unimproved vacant land without any structures or homes. The 2020 Master Plan designates both parcels comprising the Project Site as Specific Plan (approved December 2025) within the Rural Character Designation. As previously noted, the Lyon County Development Code does not include provisions specific to data centers or data center development.

The proposed PUD is consistent with the goals of the 2020 Master Plan, as described in **Table 2** above. Further, the Lyon County Land Use and Development Code supports some light industrial land uses (e.g., warehousing, research, light industrial, distribution, etc.) in the Rural Character designation, as noted in the District Purpose described Section 15.314.01. The

Project will result in use of land and built conditions that are supported by both the Master Plan and the Lyon County Development Code for the following reasons:

- The proposed use is complimentary to the Rural Character designation.
- The use is consistent with existing and planned energy infrastructure and other regionally significant energy projects.
- The Project supports economic growth and will result in substantial tax revenue to Lyon County and associated community programming.
- The Project Site is situated over 1 mile from major throughfares, commercial spaces, residential neighborhoods, and community gathering spaces. Thus, the Project will not create substantial visual impacts to the Lyon County community.
- Proposed bulk conditions and placement standards are compliant with Chapter 311 (Rural Residential Zoning Districts) and Chapter 349 (PUDs), as applicable.

TABLE 3: EXISTING AND PLANNED LAND USES

Parcel Address	Existing Land Use	Zoning	Planned Land Use/Character Designation (2020 Master Plan)
150 Penrose Lane	Unimproved agriculture	RR-20	Specific Plan/Rural Character
155 Penrose Lane	Unimproved agriculture	RR-20	Specific Plan/Rural Character

3.2 SURROUNDING LAND USE ANALYSIS

Historically, onsite existing land uses include agricultural operations. Though, it is important to note that adjacent land uses would likely experience limited impacts from the proposed data center and ancillary uses, considering the area’s low population and lack of surrounding structures.

Further, the data center will not significantly impact surrounding properties in terms of availability of farmland or viability of agricultural land, or require excessive water usage, more than what is typically required for regular farming operations. Additionally, the utilities required to support the Project, once operational, are right sized for the proposed land use in terms of the lack of municipal infrastructure needed, the complimentary regional Greenlink and Walker River Substation projects, and secured not-to-exceed water rights. Utility needs and usage are described further in this section below.

As previously noted, the Project is not sited within areas of the County with high population or high-density development, though visual impacts to nearby residents were analyzed. The results of a visual simulation are included in **Appendix C**. Refer to **Appendix O**, Site Photographs, for further demonstration of existing site conditions.

Regarding potential impacts on the adjacent MVWMA, Copia Power has engaged with NDOW early in the planning process for the Project. As a component of the Project and discussion with NDOW, Copia Power intends to conduct several onsite surveys including a small mammal survey, acoustic bat survey, reptile survey, burrowing owl survey, raptor nest survey, and avian point count survey. Results of these surveys will be coordinated with NDOW to determine further action. However, it should be noted that proposed data center operations will not

impact the availability or viability of hunting or other recreational activities in the MVWMA. **Table 4** below includes an existing land use analysis of properties surrounding the Project Site.

TABLE 4: SURROUNDING LAND USE ANALYSIS

Adjacent Parcel Direction	Existing Land Use	Zoning	Planned Land Use (2020 Master Plan)
North	Mason Valley Wildlife Area	RR-20	Public Land
South	Agriculture	RR-20	Agriculture
West	Rural/single-family Residential Agriculture	RR-20	Rural Residential Agriculture
East	Mason Valley Wildlife Area	RR-20	Public Land (includes transmission corridor)

Moreover, as described in Section 1.2, Project Justification, nearby surrounding land uses that serve as complimentary to the Project include the Walker River Substation Complex, Greenlink transmission line, BLM utility corridor, solar and BESS projects, and geothermal projects. Refer to **Appendix D**, Land Use Compatibility Analysis, for a spatial demonstration of the Project’s compatibility with surrounding land uses.

3.3 ZONING ANALYSIS AND PROPOSED BUILT CONDITIONS

The Applicant developed this application narrative to demonstrate compliance with applicable Lyon County standards. The proposed primary and ancillary land uses are not clearly addressed in Lyon County’s zoning policies. As such, the PUD process is intended to support creative land uses and associated site design while offering opportunities to deviate from RR-20 District zoning specifications (e.g., setbacks and onsite uses) with input from the Applicant, the County, and public stakeholders during the PUD development and review process.

Refer to Table 5 below for further information regarding proposed built conditions, including setbacks, open space calculations, parking, landscaping, lighting, and other features.

3.4 WATER

The data center will prioritize the use of an air-cooled, closed-loop cooling system that removes heat using ambient air rather than evaporating water. This approach balances water use, energy efficiency and spatial efficiency; any water required for cooling will be sourced from privately held water rights on site. Water usage for the cooling activities will be limited primarily to cleaning the condenser coils and otherwise will not be consumed daily.

Other sources of water consumption include domestic, potable and maintenance activities, gas plant operation, landscaping and firewater storage³. It is anticipated that water consumption,

³ Initial discussions with fire department suggest that a 1 million-gallon water storage tank will likely be required.

including that required for the data center cooling and other uses mentioned above, would be below 100 acre-feet/year across all use types.

Water rights acquisition and any modifications to the groundwater well sourcing water for the Project are subject to approval by the Nevada State Engineer. Any modifications to Walker River Irrigation District (WRID)-maintained drains or ditches within the Site will be coordinated closely with WRID to maintain adequate flood control and water conveyance. Based on initial conversations with the landowner, drains providing water to the Site can be decommissioned given the change in proposed use for the land. The single carrier ditch running north/south within parcel 014-201-07 will be re-routed to the east of the property as shown on the Grading and Drainage Plan (**Appendix B**). This ditch will continue to provide water to the farmed portion of parcel 014-312-01 (MVWMA).

The Project Site is comprised of previously farmed land which has been consistently unproductive due to its poor soil quality. According to the landowner, despite continued effort, crop yields have remained low, making the ground unsustainable for long-term agricultural use; resulting in the Site not being actively farmed for several years. In addition, agriculture is highly water-intensive, and the significant water demand for agricultural uses far outweighs the returns from this unproductive land. By shifting the Project Site from agricultural uses, water usage will be substantially reduced. Agricultural production has become less viable to continue operating over time as costs outweigh revenue. The Project does not diminish active farmland in Lyon County, considering that the Project Site cannot yield high value crops and farming has been increasingly difficult and unproductive.

3.5 WASTEWATER

Wastewater from operations will be disposed of via either septic or an on-site treatment facility subject to further analysis of geotechnical conditions. If treatment is provided, any byproducts (e.g., sludge) will be removed from the site in accordance with relevant regulations.

3.6 SEWER

The Project will not require extensions or hookup to the municipal sewer system. The Project Site is not within an existing utility service territory for sewer. Any sewer needs would be serviced independently via an onsite septic system or other means.

3.7 POWER

The Project will interconnect at or near the expanded Walker River Substation complex (525/345/230/120 kV), located about two miles north of the Project Site. The proposed gen-tie route to the Substation is anticipated to traverse north-south, along the western portion of NDOW owned land, west of the designated utility corridor, as noted in the Lyon County Master Plan. Anticipated energy consumption will be allocated by Nevada Energy based on a load study that considers available energy resources, potential impacts to the electric grid and upgrades that may be needed to mitigate impacts. The data center energy usage and rates paid for energy will include all required upgrade costs associated with serving its load, so that energy rates for other customers are not impacted. Copia Power is also developing energy generation on-site and elsewhere on the electric system to help power the data center directly.

3.8 STORM DRAINAGE

The Project will be designed to keep stormwater drainage onsite. Refer to **Appendix A**, Site Plans, for further information on proposed storm drainage conditions. According to the site plan, the Project proposes adequate stormwater retention/detention basins to mitigate hydrology impacts per County requirements.

3.9 NATURAL GAS

The proposed natural gas energy generation system will provide up to 500 MW of capacity using either combined-cycle, single-cycle combustion turbines or reciprocating engines. The proposed natural gas plant will require additional state level permitting, which Copia Power is in the process of obtaining. It is understood that the natural gas facility will not be constructed or operational until applicable permits, reviews, and approvals have been acquired. The natural gas supply to the project is anticipated to come from a new lateral line connecting existing natural gas pipelines in the region, either approximately three miles north or five miles west of the project site. This new lateral pipeline connecting to existing pipelines will be permitted at a future time in coordination with the pipeline company.

3.10 BESS MONITORING, DETECTION, AND EMERGENCY RESPONSE

During public comment and outreach through the Specific Plan process, as well as from Lyon County staff and decision-makers, concerns were raised regarding the safety and reliability of BESS equipment. Copia Power is committed to utilizing modern BESS technologies that result in safe, reliable, and compliant conditions.

Once operational, the BESS will be monitored 24/7 by a remote-operations control center (ROCC). The Project will be equipped with a battery management system (BMS), informing automated systems and personnel through supervisory control and data acquisition (SCADA) systems. The BMS can disconnect the battery from the grid under certain conditions, as per the control system design. The system is equipped to detect anomalies and ensure appropriate personnel are notified in response to an unlikely emergency condition. As needed, controls are designed to allow isolated modules, individual containers, or the full system to be shut down remotely. In addition, each BESS container is equipped with:

- Heat detectors
- Smoke detectors
- Combustible gas detectors

If any of the above detectors are triggered, the impacted component of the system will be shut off and the Fire Alarm Control Panel (FACP) will send signals to the central station associated with the FACP monitoring company and/or the ROCC or other appropriate entity in order to initiate the appropriate internal response. Alarms requiring dispatch of the local fire department will immediately be relayed to the local fire department dispatch station. Copia Power understands that the area is remote and that emergency response times can vary and therefore will design the facilities with appropriate onsite emergency water storage and access and will establish a coordinated emergency response plan with the local fire department.

A detailed Emergency Response Plan (ERP) will be designed and implemented prior to the receipt of building permits for the project. At this stage of project development, a specific ERP cannot be developed because the specific technology has not yet been finalized. Technology selection typically occurs approximately one year before deliveries, which follows industry

standard procurement practices. Once the specific technology and equipment vendors are selected for the project, the ERP will be designed specifically to those selections, and prepared in conjunction with local first responders, ensuring the most effective and appropriate emergency response protocols. Safety training for first responders will also be provided prior to operations.

3.11 DEVELOPMENT PHASING

The Project will consist of a data center supported by onsite natural gas energy generation and BESS ancillary facilities that will be constructed in a general phased approach. Development phases are largely dependent on factors such as utility infrastructure availability, upgrades and schedule. A significant driver of the Project includes the completion of the Walker River Substation complex and Greenlink transmission infrastructure, which serve as the primary catalysts for the Project. The Project is anticipated to be fully constructed within 3-4 years. Though, this schedule is subject to change, due to ongoing coordination with NV Energy and timeline(s) for substation improvements.

3.12 PUBLIC ENGAGEMENT SUMMARY

Copia Power has initiated early outreach to local leaders, neighboring landowners, and community members. Public engagement activities, to date, include the following:

- Local Collaboration
 - Two (2) community meetings
 - Community feedback received and incorporated into modified site access plans
 - Public education material on project water use and access
 - Delivered project overview presentation to the Northern Paiute/Yerington Paiute Tribe
 - Sponsorship of the local Boys and Girls Club
- Local Support:
 - The City of Yerington
 - The Yerington Chamber of Commerce
 - The Office of Nevada Governor Lombardo
 - The Northern Nevada Development Authority
 - The Boys and Girls Club of Mason Valley
 - South Lyon Medical Center
 - And a cohort of local community members collaborating to share project benefits and facts

3.13 TRANSPORTATION

3.13.1 SITE ACCESS

The project would require vehicular access during construction, and during operation and maintenance of the facility. An existing public road, Sierra Way, will provide access to the project site from US-95A. A proposed 2 lane access road will provide direct access to the

project site from Sierra Way. The access will be used to accommodate equipment deliveries, the construction workforce, and ultimately, the operational needs of the project. Construction traffic, which primarily consists of construction workers and truck deliveries, will necessitate traffic management at the intersections of US-95A and Sierra Way, US-95A and SR-339, and US-95A and Bowman Lane.

The project has completed a Traffic Impact Study (TIS) that has been reviewed by the Nevada Department of Transportation (NDOT). The study evaluated the following three scenarios:

- **Construction Scenario 1:** Analyzing the traffic impact generated by the construction of the Monarch Data Center with the distribution of construction traffic using Sierra Way and Bowman Lane as access to the project site.
- **Construction Scenario 2:** Analyzing the traffic impact generated by the construction of the Monarch Data Center with the distribution of construction traffic using Sierra Way as the only access to the project site.
- **Typical Operations:** Analyzing the traffic impact generated by the typical operations after construction of the Monarch Data Center is complete.

The scenarios are considered conservative, assuming that the peak project traffic will occur in the same peak hour as the surrounding road network. The TIS identified expected mitigation measures likely to be required for the intersections analyzed. The project is committed to facilitating the identified improvements for the US-95A and Sierra Way, US-95A and SR-339, and US-95A and Bowman Lane intersections, in conjunction with other projects contributing to the need for off-site traffic improvements. A Reimbursement Agreement or Cost Sharing Agreement with other projects and the County, if required, would be finalized to the satisfaction of Lyon County, consistent with applicable development code provisions and state statute, prior to issuance of construction permits for the project.

3.13.2 NDOT REQUIREMENTS

The TIS mentioned above determined the following infrastructure improvements to mitigate impacts from the Monarch Data Center project:

1. US-95A and Sierra Way
 - a. Install a temporary signal during the construction period for both Construction Scenario 1 and 2. Once the construction phase of the project is completed, the signal is not expected to be warranted.
 - b. Install a northbound right turn lane per NDOT's Access Management System and Standards (AMSS).
 - c. Install a southbound left turn lane per NDOT's AMSS.
 - d. Install a westbound left turn lane per NDOT's AMSS.
2. US-95A and SR-339
 - a. Install a temporary signal during the construction period for both Construction Scenario 1 and 2. Once the construction phase of the project is completed, the signal is not expected to be warranted.
 - b. Install a southbound left turn lane per NDOT's AMSS.
3. US-95A and Bowman Lane

- a. Install a temporary signal during the construction period for only Construction Scenario 1. Once the construction phase of the project is completed, the signal is not expected to be warranted
4. Install Signing and Striping per NDOT and MUTCD standards

The Monarch Data Center project is committed to making the necessary improvements to mitigate any significant traffic impacts of the project.

3.13.3 OTHER TRAFFIC-RELATED COMMITMENTS

Further, guidance from Lyon County Planning Department staff, the Lyon County Planning Commission, and the Lyon County Board of Commissioners, indicated that coordination with other local proposed new development projects on construction of a new passing lane up Wabuska Hill, on Highway 95, may be required for PUD approval. This is due to several proposed new development projects with similar construction timelines within the Project’s vicinity.

As part of this Project, Copia Power is committed to meaningfully participating in the planning and providing commensurate financial support of recommended improvements specifically for the US 95/Sierra Way intersection. Copia Power will execute a formal Reimbursement Agreement or a Cost Sharing Agreement, as applicable, with other development projects that have been determined to affect NDOT and local roadways, necessitating off-site improvements.

Before the issuance of construction permits for the Project, agreements facilitating all necessary improvements to mitigate traffic impacts in the area will be finalized, consistent with Lyon County Code and State statute or otherwise in a condition acceptable to Lyon County. Ultimately, the implementation of these improvements is expected to yield significant long-term benefits for the residents of Lyon County, by promoting safer and more efficient transportation options for the community as a whole. By proactively addressing these issues, Copia Power intends to foster a collaborative approach to development that prioritizes the needs of local residents while supporting sustainable growth in the region.

4. SECTION 15.349.07: APPLICATION FOR TENTATIVE APPROVAL

This Section of the Lyon County Development Code lists documentation requirements for Tentative PUD Approval. **Table 5** below includes the list of required supporting documentation and demonstration of compliance from Copia Power.

TABLE 5: DEMONSTRATION OF COMPLIANCE WITH APPLICATION REQUIREMENTS FOR TENTATIVE APPROVAL

Application Requirements	Demonstration of Project Compliance
A narrative addressing the standards and criteria established in sections 15.349.01, 15.349.02 and subsections 15.349.03A thru K of this chapter, including documentation and justification for any exceptions requested.	This document, the PUD Application Narrative, complies with this requirement. Refer to Sections 1, 2, and 3 above.
A statement of proposed density. The allowable density for a planned unit development shall be compatible with the	The proposed Project is not a residential project. Therefore, density requirements are not applicable (see Appendix N for the Not

Application Requirements	Demonstration of Project Compliance
<p>Lyon County Comprehensive Master Plan and any applicable community plan. Where an increase in the allowable density is proposed the applicant shall provide a detailed justification addressing the criteria for exception to density outlined in section 15.349.03 of this chapter.</p>	<p>Applicable Letter). However, the Project site plans, included as Appendix A, demonstrate compliance with applicable site development standards, including open space.</p>
<p>A site analysis drawn at 1:20 scale</p>	<p>The corresponding Site Analysis, Appendix E, is not drawn at a 1:20 scale, due to the total area of the Project Site. Correspondence with Lyon County Planning Department staff confirmed that the proposed scale (1:400 feet) is acceptable to achieve compliance with this requirement. Refer to Appendix E, Site Analysis, includes the following items:</p> <ul style="list-style-type: none"> • A vicinity map (see Appendix M) showing the location of the property in relation to adjacent properties, roads, pedestrian and bikeways, transit stops, utility lines and any easements on and across the property • The parcel boundaries, dimensions and gross area • Contour lines at two-foot (2') intervals • The drainage patterns and drainage courses and water courses (including ditches) on the site and on adjacent parcels • Portions of the site within any Flood Hazard Zone, including a figure giving the area and percentage of the site therein • Critical wildlife habitat or natural heritage sites • Significant site features, including areas with unique views, streams, and stream corridors, significant rock outcrops, and similar significant physical site features • The location, size, and variety of trees having a six inch (6") or greater caliper at five feet (5') above ground or, where the site is heavily vegetated, an aerial photograph at the same scale as the site analysis and a drawing showing the location, size, and variety of only the vegetation that will be affected by the proposed development. • Identification information including the name, address, and phone number of the owner, developer, and project designer • A north arrow and the scale.
<p>A geotechnical investigation report which shows the following: slope stability studies, on-site site grading, cutting and filling; structural foundation requirements; surface and subsurface drainage recommendations;</p>	<p>Refer to Appendix F, Geotechnical Report. Coordination with Lyon County Planning Department staff have confirmed that a</p>

Application Requirements	Demonstration of Project Compliance
<p>erosion vulnerability; building or grading limitations, including top of slope offsets and areas restricted for site grading; recommendations for construction of streets, utilities, and structures of the site; and identification of any portions of the site requiring further evaluation by a geotechnical or structural engineer. Unless the Director determines that a geotechnical investigation is warranted due to site-specific characteristics</p>	<p>desktop Geotechnical Report is acceptable for this submittal.</p>
<p>A site plan, drawn at the same scale as the site analysis.</p>	<p>Refer to Appendix A, Site Plans. Site Plans indicate the following required elements:</p> <ul style="list-style-type: none"> • The applicant's entire property and the surrounding property to a distance sufficient to determine the relationship between the applicant's property and proposed development and adjacent property and development • Boundary lines and dimensions for the perimeter of the property and approximate dimensions for all proposed lot lines • Section lines, corners, and monuments • Identification information, including the name, address, and phone number of the owner, developer, and project designer • The scale and north arrow • The location, dimensions and names of all: <ul style="list-style-type: none"> ○ Existing and platted streets and other public ways and easements on adjacent property and on the site, ○ Proposed streets or other public ways, easements on the site and on adjoining property • The location, dimensions, and setback distances of all: <ul style="list-style-type: none"> ○ Existing structures, improvements, utility, and drainage facilities on adjoining properties ○ Existing structures, improvements, utility and drainage facilities to remain on the site ○ Proposed structures and improvements and conceptual plans for utilities, fire suppression and drainage facilities on the site • The location and dimensions of: <ul style="list-style-type: none"> ○ The entrances and exits to the site ○ The parking and circulation areas ○ Pedestrian and bicycle circulation patterns (not applicable) ○ On-site outdoor recreation spaces and common areas (not applicable) ○ Above-ground utilities

Application Requirements	Demonstration of Project Compliance
	<ul style="list-style-type: none"> • The location of areas to be landscaped • The location and type of street lighting • The orientation of structures, except single-family detached structures and duplexes • The location of group mail boxes (not applicable)
<p>Preliminary architectural drawings including proposed building elevations, sections, and floor plans, except for detached single-family and duplex dwelling units</p>	<p>Refer to Appendix G for proposed Building Elevations.</p>
<p>A preliminary grading and drainage plan including written statements and descriptions as necessary, at the same scale as the site analysis</p>	<p>Refer to Appendix B for proposed preliminary Grading and Drainage Plan that includes the following required elements:</p> <ul style="list-style-type: none"> • The location and extent to which grading will take place indicating general contour lines, slope ratios, and slope stabilization proposals • A statement from a registered engineer supported by factual data that all drainage, both upstream and on the site, can be accommodated, and the amount and rate of run-off leaving the site is minimized • A plan, where on-site detention is not feasible, which identifies and mitigates any off-site adverse effects resulting from increased runoff; the plan shall be prepared by a registered engineer • Identification information, including the name and address of the owner, developer, project designer, and the project engineer
<p>A conceptual landscape plan, drawn at the same scale as the site plan.</p>	<p>Refer to Appendix A, Site Plans, that includes a Landscape Plan. Landscape Plan elements include:</p> <ul style="list-style-type: none"> • The conceptual location of the underground irrigation system or hose bibs (a general description of maintenance of landscaped areas may be submitted where no irrigation system is proposed) • The location and height of fences and other buffering or screening materials • The location, size, and species of the existing and proposed plant materials • The location, size, and variety of the trees to be removed.
<p>A map showing how proposed street, sidewalks, bike routes and bike ways and pedestrian connections within the proposed planned unit development may be extended onto adjoining undeveloped properties so</p>	<p>Refer to Appendix A, Site Plans, for more information on streets and proposed site access. Considering the Project is located in a remote area of Lyon County, with lack of commercial activities, sidewalks, trails,</p>

Application Requirements	Demonstration of Project Compliance
as not to preclude their efficient development	community hubs, public spaces, or other related land uses, the Project does not propose sidewalks, bike routes, pedestrian connections, bike ways, or other similar infrastructure. Further, the Project is not intended to be accessible by the general public. Therefore, public amenities are not provided.
A connectivity analysis prepared by a qualified professional describing the existing and future vehicular, bicycle and pedestrian connections between the proposed planned unit development and existing and planned land uses on adjacent properties	Refer to Appendix H , Traffic Impacts Study, that details anticipated future vehicular patterns and mitigation measures.
<p>The applicant shall submit either:</p> <ul style="list-style-type: none"> • A determination by USA that site assessment is not necessary, or • A USA Service Provider Letter 	Not applicable.
<p>An applicant for a project or phase of a multi-phase project that is forecast to generate one hundred (100) or more average daily auto trips, shall submit as a part of the PUD application a traffic impact report. The report shall analyze the impact of the project or phase of a project on the County and State road and street systems within one mile of the borders of the project or phase of a project, or to such greater distance as necessary until the traffic analysis shows that the impact of the project or phase of a project has dissipated to where it no longer results in an impact of ten percent (10%) or more over current conditions. Such report shall be prepared and certified by a registered traffic engineer licensed in the State of Nevada. The required report shall comply with the standards listed in the Lyon County Design Criteria and Improvement Standards for Traffic Analysis contained in appendix B on file in the County.</p>	<p>Refer to Appendix H, Traffic Impacts Study, prepared by Nevada state licensed traffic engineers at Kimley-Horn, dated November 2025.</p> <p>As noted in the TIS, existing traffic patterns are generally adequate to serve the Project. Refer to Appendix H for more information on TIS recommendations. However, during public discussions held for the Specific Plan application, it was determined by Lyon County that traffic improvements will be needed. The TIS is currently with the Department of Transportation for approval (as of May 12, 2026); which is planned to be issued prior to the PUD hearing associated with this application. Though, NDOT's typical approval timeline is around 3-4 weeks. Copia Power is engaged in ongoing conversations with applicable agencies regarding viable solutions for traffic mitigation.</p>
<p>The proposed covenants, conditions and restrictions to be recorded if the PUD is approved. The covenants, conditions and restrictions shall incorporate appropriate provisions for the establishment and maintenance of long-term PUD site development standards, including enforcement mechanisms designed to assure coherent, coordinated development,</p>	<p>Refer to Appendix I for copies of the land titles for both properties comprising the Project Site. Copia Power, or subsequent site owner, understands and recognizes the Project Site will require ongoing routine site maintenance and intends to maintain the Project Site in a manner acceptable to Lyon County. The Project Site is not subject to any known covenants, easements, or other similar</p>

Application Requirements	Demonstration of Project Compliance
maintenance and use activity with the PUD site.	<p>restrictions, nor does this application propose any. Any conditions of approval and PUD handbook specifications will be recorded with Lyon County, as applicable.</p> <p>Copia Power will comply with conditions set forth by Lyon County. The Project will not include restrictions regarding common areas, or general deed restrictions, that are commonly associated with residential PUDs.</p>
Letters of Intent to Serve from each utility providing service to the planned unit development	Refer to Appendix J for a copy of letters of intent to serve from applicable utilities, including NV Energy and Great Basin.
Tentative map or maps for all land included in the PUD. Tentative subdivision maps, if processed concurrently with the tentative PUD approval application, shall be prepared in accordance with the standards for tentative maps contained in the Lyon County Design Criteria and Improvement Standards, appendix B on file in the County	The Project is not a residential PUD. Therefore, subdivision maps are not applicable. Subdivision requirements do not apply.

5. SECTION 15.349.10: APPROVAL OR DENIAL OF APPLICATION

This Section of the Lyon County Development Code Discusses required findings for PUDs.

Table 6 below discusses required findings and demonstration of Project compliance.

TABLE 6: DEMONSTRATION OF COMPLIANCE WITH PUD APPROVAL FINDINGS

Finding Criteria	Demonstration of Project Compliance
<p>Finding A. In what respects the plan is or is not consistent with the statement of objectives of this chapter</p>	<p>The proposed PUD is consistent with the statement of objections and purpose for PUDs set forth in Lyon County Code Section 15.341.01, and the statement of standards and criteria set forth in Section 15.349.03. As discussed in more detail above, the Project advances the following objectives: (1) it establishes land use patterns that promote efficient, compact networks of streets and utilities that lower development and maintenance costs and conserve energy (Section 15.349.01.A.2); (2) it helps preserve valued environmental resource lands by concentrating development on previously disturbed agricultural land and maintains 20–40% of the site as natural open space (Section 15.349.01.A.3); (3) it helps maintain and enhance surface and ground water quality and quantity by utilizing air-cooled systems and limiting water consumption to below 100 ac-ft/year (Section 15.349.01.A.4); (4) it helps protect and maintain critical wildlife habitat by coordinating with NDOW and avoiding</p>

Finding Criteria	Demonstration of Project Compliance
	<p>disruption to the adjacent Mason Valley Wildlife Management Area (Section 15.349.01.A.6); (5) it helps provide for a well-located, clean, safe, and pleasant industrial site involving a minimum of strain on transportation facilities, given the Project’s remote location over one mile from Highway 95 (Section 15.349.01.A.8); (6) it encourages innovations in development so that growing demands may be met by greater variety in type, design, and layout of buildings and by conservation of open space (Section 15.349.01.A.9); (7) it minimizes the burden of traffic on roads and highways through site access via Sierra Way and proposed traffic mitigation measures (Section 15.349.01.A.10); and (8) it helps ensure the purposes, goals, objectives and policies of the Lyon County Comprehensive Master Plan are achieved, as demonstrated by the Master Plan goal-by-goal analysis in Table 2 of this narrative (Section 15.349.01.A.11). The Project is consistent with, and furthers many of, the goals of the Master Plan, supports economic development opportunities in the County, and includes site design details that will minimize impacts to surrounding properties.</p>
<p>Finding 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</p>	<p>The primary purpose for the PUD application is to support a mix of land uses on the same parcel that would otherwise not be permissible through conventional zoning mechanisms. However, the plan only departs from the standard zoning regulations to the limited extent necessary to accommodate a use that the Lyon County Development Code does not specifically address. Because the Code does not include provisions specific to data centers, conventional zoning mechanisms cannot accommodate the mix of complimentary land uses required for the Project’s operations. The specific departures are narrow, well-justified, and consistent with the public interest:</p> <p>(a) Use: The Project combines a data center with ancillary natural gas generation and BESS facilities on a single site. These uses are functionally integrated and necessary to support data center operations. Notably, energy production and distribution are already conditionally permitted in the RR-20 district, and the proposed uses are consistent with the character and scale of other approved energy projects in the immediate vicinity, including the Walker River Substation complex, Winston</p>

Finding Criteria	Demonstration of Project Compliance
	<p>Solar, and the Greenlink transmission lines. The PUD mechanism is the appropriate vehicle to authorize this integrated development in a manner that ensures coordinated site planning and County oversight.</p> <p>(b) BESS Setbacks: Ordinance No. 640 requires a one (1) mile setback from trails, highways, bodies of water, and existing residential uses. The Project proposes a modest reduction from this standard; however the proposed BESS location maintains a setback of 2,400 feet from the nearest residential structure (See Appendix Q), which is nearly half a mile and provides a substantial safety buffer well in excess of industry norms. Importantly, there are no other intermittent or perennial streams, highways or trail easements within a mile of the proposed BESS location, meaning the deviation applies only to the residential setback component and the 2,400-foot buffer far exceeds what is necessary to protect public safety.</p> <p>(c) Site Coverage: The Project’s 60–80% lot coverage reflects the operational requirements of a data center campus and is appropriate for the proposed industrial use. All structures maintain minimum 30-foot setbacks from property lines, ensuring that adjacent properties are not adversely affected. These limited departures serve the public interest. The Project represents an estimated \$12 billion capital investment in Lyon County, will create at least 150 permanent jobs and over 2,000 annual construction jobs, and will generate \$1.5 billion in real and personal property tax revenue along with approximately \$250 million in sales tax revenues. The Project advances the County’s economic diversification goals, responds to critical nationwide demand for data center infrastructure, and leverages existing and planned energy infrastructure in the region. The departures do not establish any precedent for incompatible development; rather, they are narrowly tailored to the unique operational characteristics of this specific facility and will be governed by the PUD’s recorded development standards and conditions of approval.</p>
<p>Finding C. The purpose, location and amount of the open space in the planned unit development, the reliability of the proposals for maintenance and conservation</p>	<p>The Project proposes 20-40% open space, meeting or exceeding the 20% requirement required by Section 15.349.03.I. All areas not intended for structures will be maintained as</p>

Finding Criteria	Demonstration of Project Compliance
<p>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</p>	<p>natural open space areas, preserving the rural character of the site and providing visual screening and a natural buffer between the development and adjacent properties, particularly the Mason Valley Wildlife Management Area to the north and east and rural residential properties to the west. Proposed vegetation consists of naturally occurring, drought-tolerant plantings that will not require substantial maintenance or routine watering, consistent with the area’s rural character and water conservation goals. Copia Power, or any subsequent site owner, will be responsible for ongoing maintenance of all open space areas in a manner acceptable to Lyon County and will comply with any conditions of approval regarding long-term maintenance obligations.</p> <p>As the Project is not a residential development, the open space is proportional to the proposed use and surrounding character. The Project’s location, absence of public access, and lack of visibility from Highway 95 further support the adequacy of the proposed open space for its intended screening and environmental conservation purposes.</p>
<p>Finding 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</p>	<p>The physical design of the Project ensures adequate provisions are made for public services, vehicular traffic, parking, and the amenities of light and air, recreation, and visual enjoyment. The Project Site is located in a rural, and largely undeveloped, area of Lyon County. The proposed land use and accessory uses serve as complimentary to existing energy infrastructure and other regionally significant energy projects in the immediate vicinity.</p> <p>The Project will not require Lyon County public water or sewer hookup or extensions. Water will be sourced onsite through existing privately held water rights, with total consumption anticipated to be below 100 ac-ft/year — a fraction of what the site historically consumed for agricultural operations. Wastewater will be managed independently through either septic or an onsite treatment facility. The Project will coordinate closely with the local fire department on emergency response planning and will provide onsite emergency water</p>

Finding Criteria	Demonstration of Project Compliance
	<p>storage, including a potential 1-million-gallon water storage tank.</p> <p>Because the Project is self-sufficient from a utility perspective, it places no burden on existing public services or infrastructure serving Lyon County residents. Additionally, considering the upcoming Walker River substation Complex and Greenlink transmission projects, the Project will be adequately served with enough power to maintain the facility and will not result in the loss or reduction of energy to the Lyon County community. The load-serving utility will plan for and allocate energy for the Project's needs, which will include energy generated on-site and via other energy generation projects Copia Power is developing that serve the electric grid. The price paid for power will include all upgrades and costs to serve the data center under a special contract and PUCN-approved tariff, so that costs are not shifted to residential or small business customers or subsidized by other ratepayers.</p> <p>The Traffic Impact Study (Appendix H) demonstrates that existing roadway infrastructure is generally adequate to serve the Project. Traffic impacts will be most notable during the temporary construction phase, and the study describes proposed mitigation efforts to increased traffic during construction. The Project is accessed from Sierra Way, sited over one mile from Highway 95, which minimizes impacts to the County's primary corridor in the vicinity of the Project. Copia Power is actively coordinating with NDOT and Lyon County on traffic mitigation strategies, and the TIS is currently under NDOT review with approval anticipated prior to the PUD hearing. Post-construction, the Project's low staffing requirements will generate minimal ongoing traffic.</p> <p>A dedicated Parking Study prepared by Kimley-Horn (Appendix P) supports the proposed 920 parking spaces as adequate for the Project's operational needs. The permanent-use of the facility will have minimal onsite staffing, no public access, and low parking demand, which are precisely the type of use contemplated by the exception criteria of Section 15.349.03.M.3 for permanent uses with low demand for off-street parking.</p>

Finding Criteria	Demonstration of Project Compliance
	<p>Proposed structures are situated within a compliant setback distance for the underlying RR-20 District, with a minimum of 30 feet from each property line. Building heights of 75-95 feet are appropriate for data center operations and, given the Project’s remote location over one mile from Highway 95 and the nearest residential areas, will not impact adjacent properties. Structures will be constructed from materials in a neutral color consistent with the surrounding rural landscape. The Project Site will be adequately landscaped, as per the requirements of the Lyon County Development Code and will not result in the degradation of natural resources or wildlife habitats. There will be no changes to current outdoor activities commonly practiced on neighboring NDOW land, such as hunting, fishing, bird watching, or other similar activities. Visual simulations (Appendix C) confirm that the Project’s visual impact from surrounding vantage points will be minimal, and the site will be landscaped with native vegetation consistent with the existing rural character.</p>
<p>Finding E. The relationship, beneficial or adverse, of the proposed planned unit development to the neighborhood in which it is proposed</p>	<p>The proposed PUD will result in a substantial net benefit to Lyon County and the surrounding community. The Project’s economic impact will be significant and sustained, and will include:</p> <ul style="list-style-type: none"> • An estimated \$12 billion in initial capital investment. • At least 150 permanent direct jobs and at least 100 indirect and induced jobs in the local economy. • Over 2,000 annual construction jobs supported. • Over \$100 million total payroll impact. • Over \$1.5 billion in real and personal property tax revenue to Lyon County (including schools and other tax jurisdictions) which can be used for community improvements and enhancements. • Approximately \$250 million in sales tax revenues including contribution to the local government. • Indirect economic activity for nearby commercial businesses, restaurants, and the supply chain. • Road improvements. • Economic diversification of Lyon County beyond agriculture, which creates resiliency for the future.

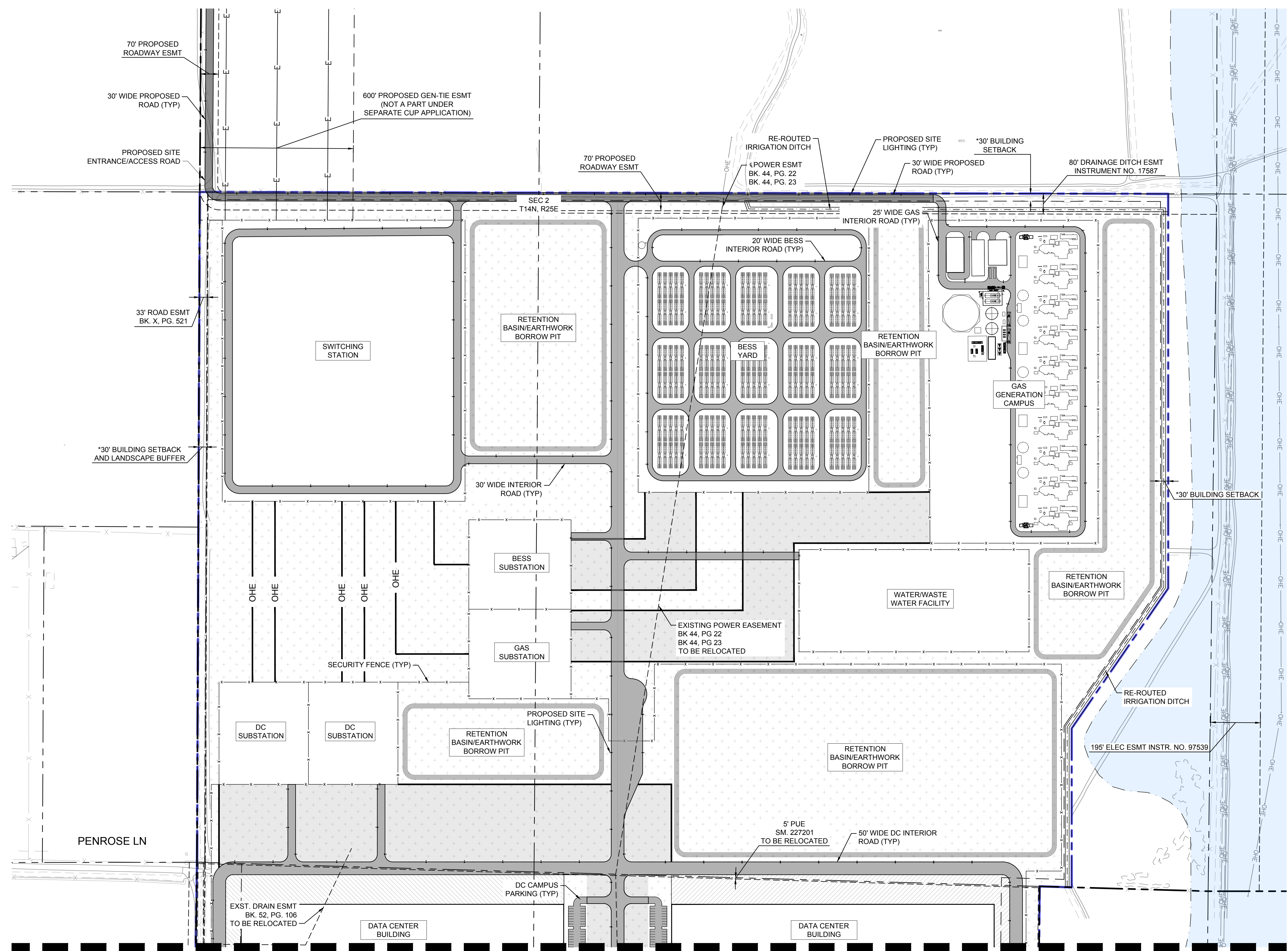
Finding Criteria	Demonstration of Project Compliance
	<ul style="list-style-type: none"> • Response to a nationwide need for data center facilities due to emerging computational power needs. • Support for local landowner and agricultural producer to collect supplemental income on nonviable agricultural land. <p>Potential adverse impacts are limited and well-mitigated. Construction-phase traffic is the most visible temporary impact which is addressed through the Traffic Impact Study (Appendix H) and ongoing coordination with NDOT and Lyon County on road improvements. Post-construction traffic will be minimal given the Project’s low staffing requirements. Water consumption will be below 100 ac-ft/year using air-cooled systems, sourced entirely from privately held water rights with no draw on County municipal supplies, which is far less than the agricultural operations historically conducted on the same land. The BESS facility will incorporate 24/7 remote monitoring, battery management systems, heat, smoke, and gas detectors, and onsite emergency water storage, with a coordinated emergency response plan developed in partnership with the local fire department. The Project is located over one mile from Highway 95 and will use neutral-colored building materials and native vegetation screening, resulting in minimal visual impact as confirmed by visual simulations in Appendix C. Copia Power is coordinating with NDOW on wildlife surveys to ensure the Project coexists with the adjacent Mason Valley Wildlife Management Area without impacting public access or recreational use.</p> <p>On balance, the proposed PUD will deliver transformative economic benefits to Lyon County while imposing only limited, well-mitigated impacts on the surrounding neighborhood.</p>
<p>Finding 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.</p>	<p>The Project is anticipated to be fully constructed within 3-4 years. This schedule coincides with NV Energy’s planned infrastructure upgrades, including the completion of the Walker River Substation complex and Greenlink transmission infrastructure.</p> <p>The terms and conditions governing this phased development are sufficient to protect</p>

Finding Criteria	Demonstration of Project Compliance
	<p>the interest of the public and the integrity of the plan throughout the development period. Copia Power will comply with all conditions of approval set forth by Lyon County, including any recorded covenants, conditions, and restrictions that incorporate long-term site development standards, maintenance obligations, and enforcement mechanisms designed to assure coherent, coordinated development, maintenance and use activity within the PUD site.</p> <p>Development phasing will be coordinated with NV Energy’s infrastructure upgrade schedule to ensure adequate utility capacity is in place before each phase is brought online, and all energy rates paid by the Project will include required upgrade costs so that no costs are shifted to residential or small business ratepayers.</p> <p>Traffic mitigation measures identified in the Traffic Impact Study (Appendix H) will be implemented prior to or concurrent with construction phases that generate increased traffic. Wildlife surveys will be completed in coordination with NDOW, and the Project will maintain open space buffers and native vegetation throughout all phases. BESS facilities will incorporate 24/7 remote monitoring from the outset, and Copia Power will maintain a coordinated emergency response plan with the local fire department, including onsite emergency water storage, throughout all phases of development. Copia Power, or any subsequent site owner, will maintain the Project Site in a manner acceptable to Lyon County throughout the development period and beyond.</p> <p>These commitments, together with any additional conditions the Board may impose at the time of tentative approval, provide robust protections for the public interest and ensure the integrity of the approved plan is maintained from initial construction through project completion.</p>

6. APPENDICES

- 6.1 APPENDIX A - SITE PLANS
- 6.2 Appendix B – GRADING AND DRAINAGE PLAN
- 6.3 APPENDIX C – VISUAL SIMULATIONS
- 6.4 APPENDIX D – LAND USE COMPATIBILITY ANALYSIS
- 6.5 APPENDIX E - SITE ANALYSIS
- 6.6 APPENDIX F – GEOTECHNICAL REPORT
- 6.7 APPENDIX G – BUILDING ELEVATIONS
- 6.8 APPENDIX H – TRAFFIC IMPACTS STUDY
- 6.9 APPENDIX I – LAND TITLES
- 6.10 APPENDIX J – LETTERS OF INTENT TO SERVE
- 6.11 APPENDIX K – SOIL REPORT
- 6.12 APPENDIX L – HYDROLOGY & HYDRAULICS STUDY
- 6.13 APPENDIX M – VICINITY MAP
- 6.14 APPENDIX N – NOT APPLICABLE LETTER
- 6.15 APPENDIX O – SITE PHOTOGRAPHS
- 6.16 APPENDIX P – PARKING STUDY
- 6.17 APPENDIX Q – BESS SETBACK EXHIBIT

Plotted By: Gomez, Etlon - Sheet - Site - KIMLEY-HORN - 12:50:50pm - K:\EAV_Civil\Solar\291565069 - Copia Monarch Hydro and Site DDA\Cadd\Design_Files\PLD_SITE_PLAN.dwg
 This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

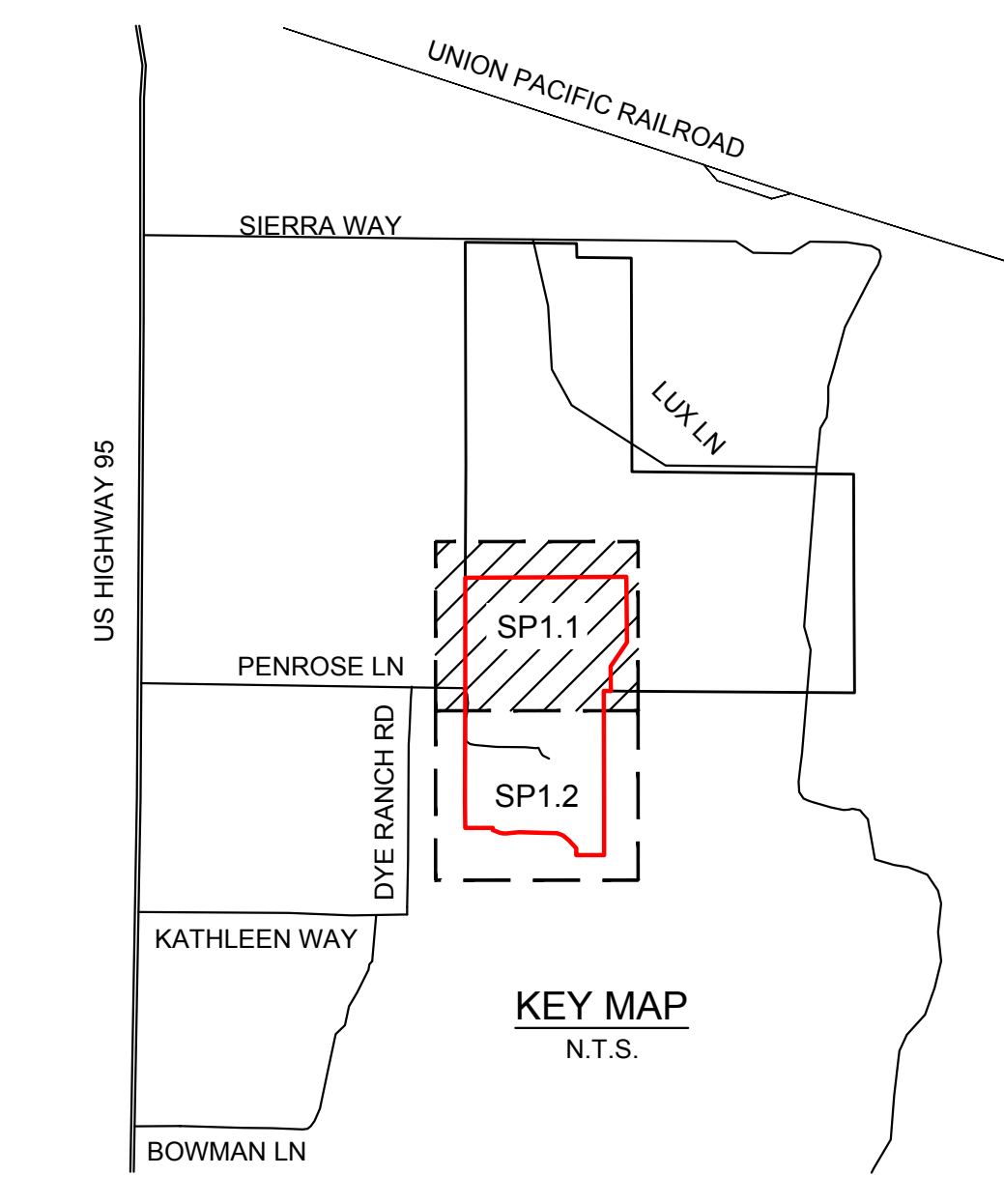


***NOTES:**

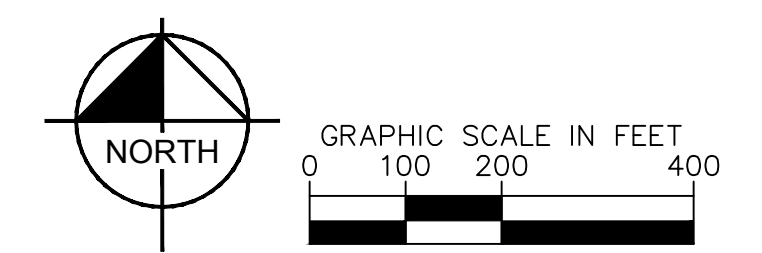
- SETBACK: MINIMUM 30 FEET WITH ADDITIONAL SETBACK DEPENDING ON BUILDING HEIGHT.
- PER SECTION 15.314.01.F.2., AN ADDITIONAL 2 FEET OF SETBACK FOR EVERY 1-FOOT OF BUILDING HEIGHT IN EXCESS OF 35 FEET WILL BE ACCOMMODATED IN FINAL DESIGN AND BUILDING PERMITS. THE ENCLOSED SITE PLAN INCLUDES A 150-FOOT AND 175-FOOT ON THE EAST AND WEST BOUNDARIES, RESPECTIVELY, TO ACCOMMODATE AN UP TO 95-FOOT BUILDING HEIGHT.

NOTE: ACTUAL BUILDING HEIGHT MAY VARY, DEPENDING ON THE FINAL BUILDING DESIGN AND ISSUE FOR CONSTRUCTION CIVIL DESIGNS PRIOR TO MINISTERIAL PERMITTING. BUILDINGS MAY BE CONSTRUCTED AS SINGLE-STORY OR TWO-STORY, REGARDLESS, DATA CENTER BUILDINGS WILL NOT EXCEED MORE THAN 4.6M SQUARE FEET, AS APPROVED BY THE SPECIFIC PLAN. ALL APPLICABLE CONDITIONS OF THE SPECIFIC PLAN WILL BE ADHERED TO.

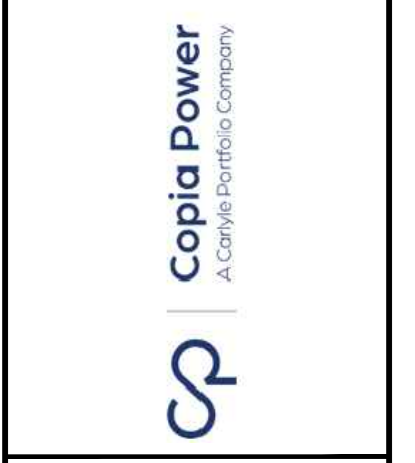
LEGEND	
	EXISTING PROPERTY BOUNDARY
	PROPOSED MONARCH PROPERTY BOUNDARY
	PARCEL LINE
	EASEMENT LINE
	SECTION LINE
	EXISTING OVERHEAD LINES
	EXISTING POWER POLE
	EXISTING FENCE
	EXISTING DITCH
	EXISTING DITCH CENTERLINE
	EXISTING ROAD
	BUILDING SETBACK
	LANDSCAPE BUFFER
	PROPOSED OVERHEAD LINE
	PROPOSED GEN-TIE LINE (NOT A PART UNDER SEPARATE CUP APPLICATION)
	PROPOSED GEN-TIE ROUTE (NOT A PART UNDER SEPARATE CUP APPLICATION)
	PROPOSED FENCE LINE
	FEMA ZONE A
	RETENTION/EARTHWORK BORROW PIT
	MV CORRIDOR
	DATA CENTER BUILDING
	DATA CENTER BUILDING UTILITY AND EQUIPMENT YARD
	ON-SITE INTERIOR ROAD
	PROPOSED ACCESS ROAD
	OPEN SPACE (REFERENCE CONCEPTUAL LANDSCAPING PLANS FOR DETAILS)
	SITE LIGHTING
	PROPOSED IRRIGATION DITCH REROUTE



THIS PRELIMINARY SITE PLAN IS FOR CONCEPTUAL PURPOSES ONLY AND REQUIRES DETAILED PLANNING, ENGINEERING, AND COUNTY APPROVALS



No.	REVISIONS	DATE	BY



Kimley-Horn
 © 2026 KIMLEY-HORN AND ASSOCIATES, INC.
 2046 RIVERVIEW AVENUE, SUITE 400
 MESA, AZ 85201
 PHONE: 480-207-2666
 WWW.KIMLEY-HORN.COM

PRELIMINARY FOR REVIEW ONLY NOT FOR CONSTRUCTION
 Kimley-Horn

KHA PROJECT	291565069
DATE	5/29/2026
SCALE	AS SHOWN
DESIGNED BY	ECG
DRAWN BY	ECG
CHECKED BY	CHS

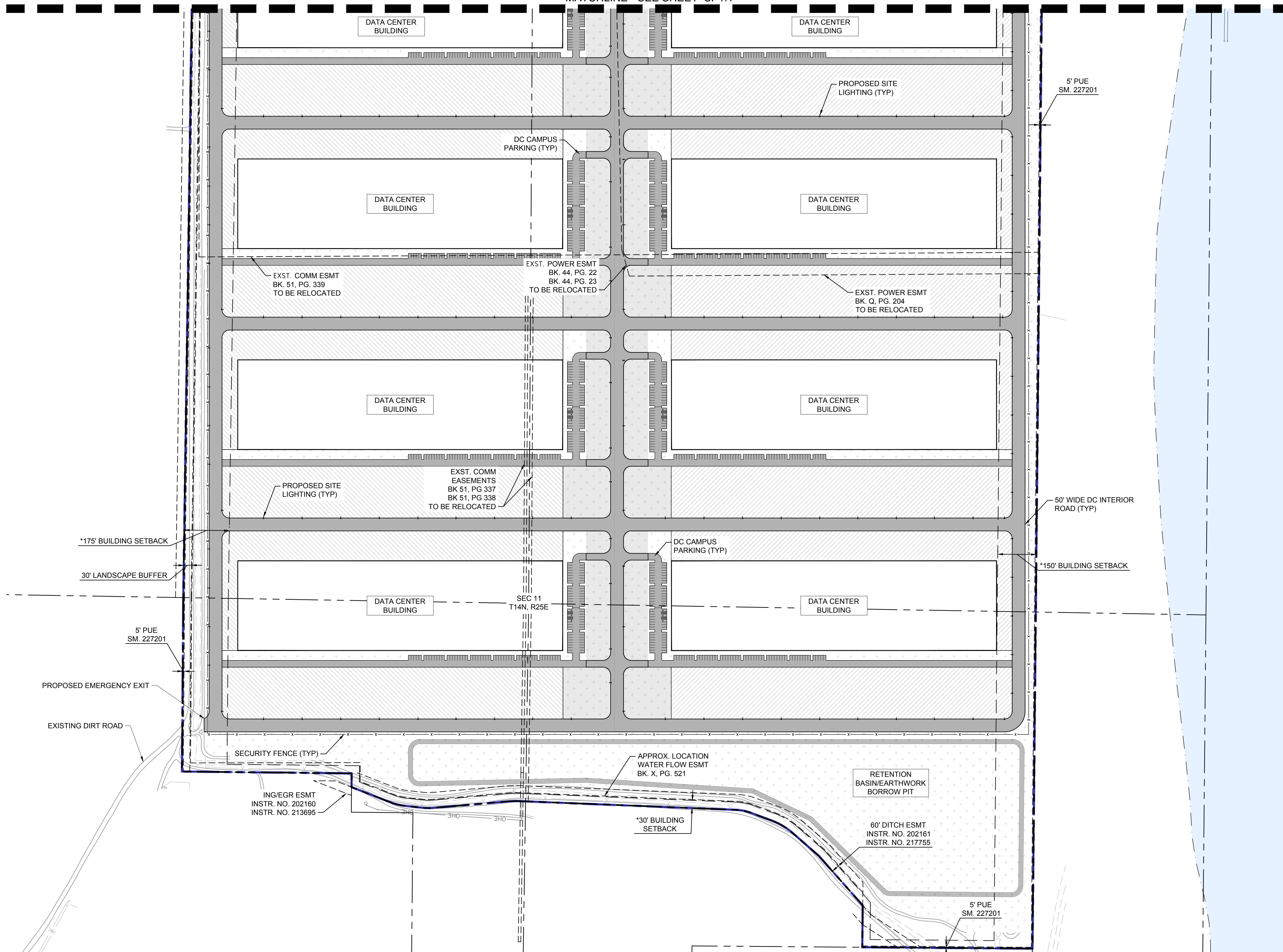
CONCEPTUAL SITE PLAN

MONARCH
 LYON COUNTY, NV

SHEET NUMBER
SP1.1

Plotted By: Gomez, Ethon. Sheet: Sct:Kha. Layout: SP1.2. May 29, 2026. 12:51:08pm. K:\EAV_Civil\Solar\291565069 - Copia Monarch Hydro and Site DD_Cadd\Design_Files\PLD_SITE_PLAN.dwg
 This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

MATCHLINE - SEE SHEET SP1.1

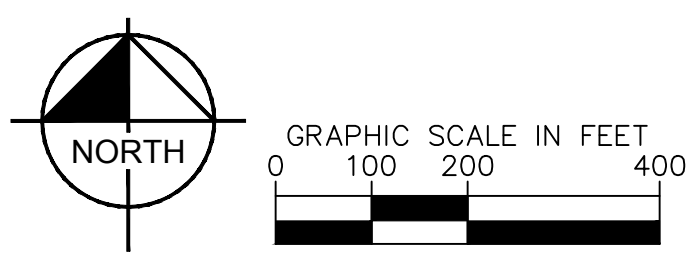
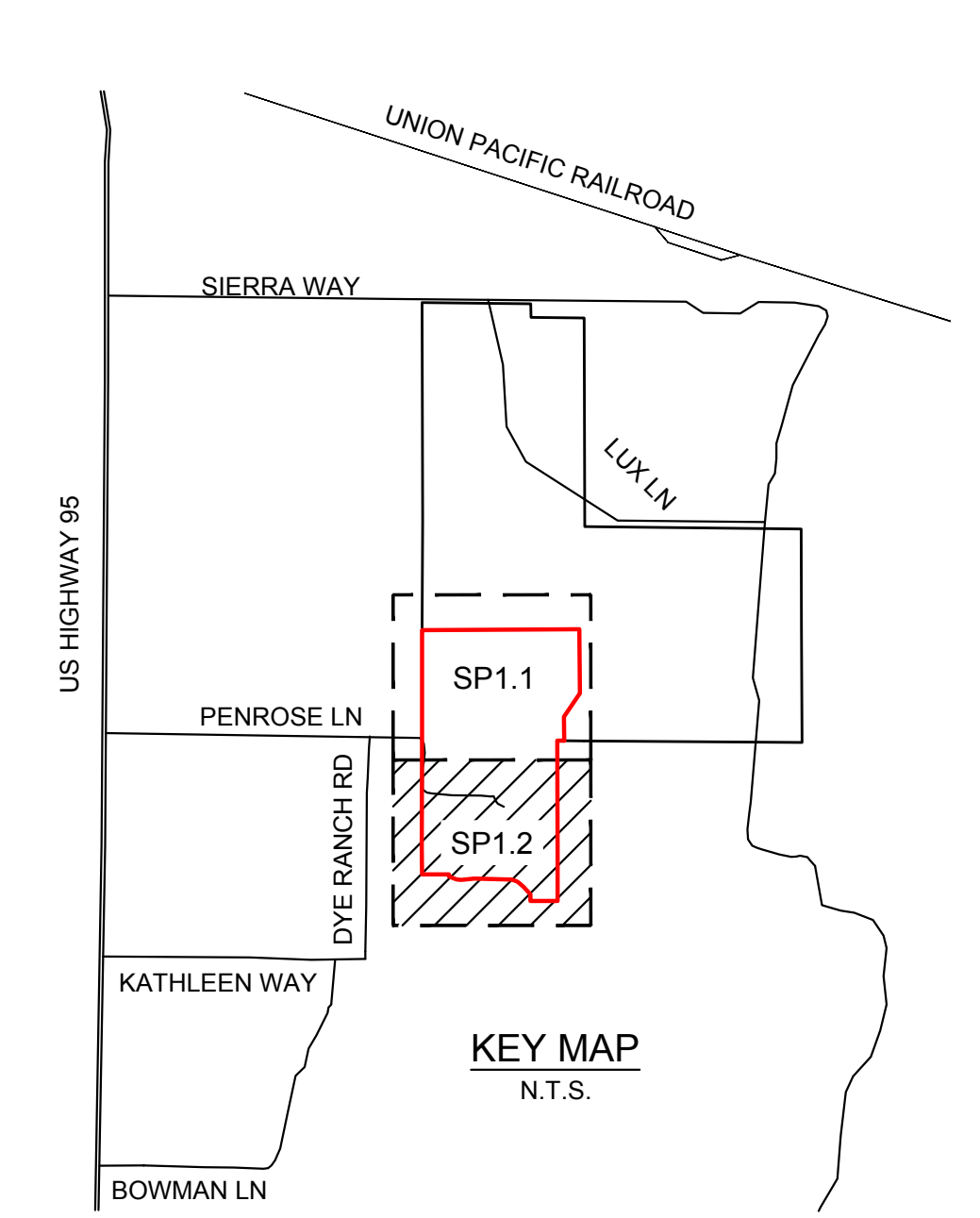


***NOTES:**

- SETBACK: MINIMUM 30 FEET WITH ADDITIONAL SETBACK DEPENDING ON BUILDING HEIGHT.
- PER SECTION 15.314.01.F.2., AN ADDITIONAL 2 FEET OF SETBACK FOR EVERY 1-FOOT OF BUILDING HEIGHT IN EXCESS OF 35 FEET WILL BE ACCOMMODATED IN FINAL DESIGN AND BUILDING PERMITS. THE ENCLOSED SITE PLAN INCLUDES A 150-FOOT AND 175-FOOT ON THE EAST AND WEST BOUNDARIES, RESPECTIVELY, TO ACCOMMODATE AN UP TO 95-FOOT BUILDING HEIGHT.

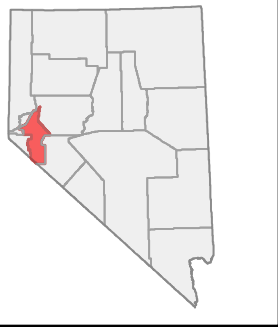
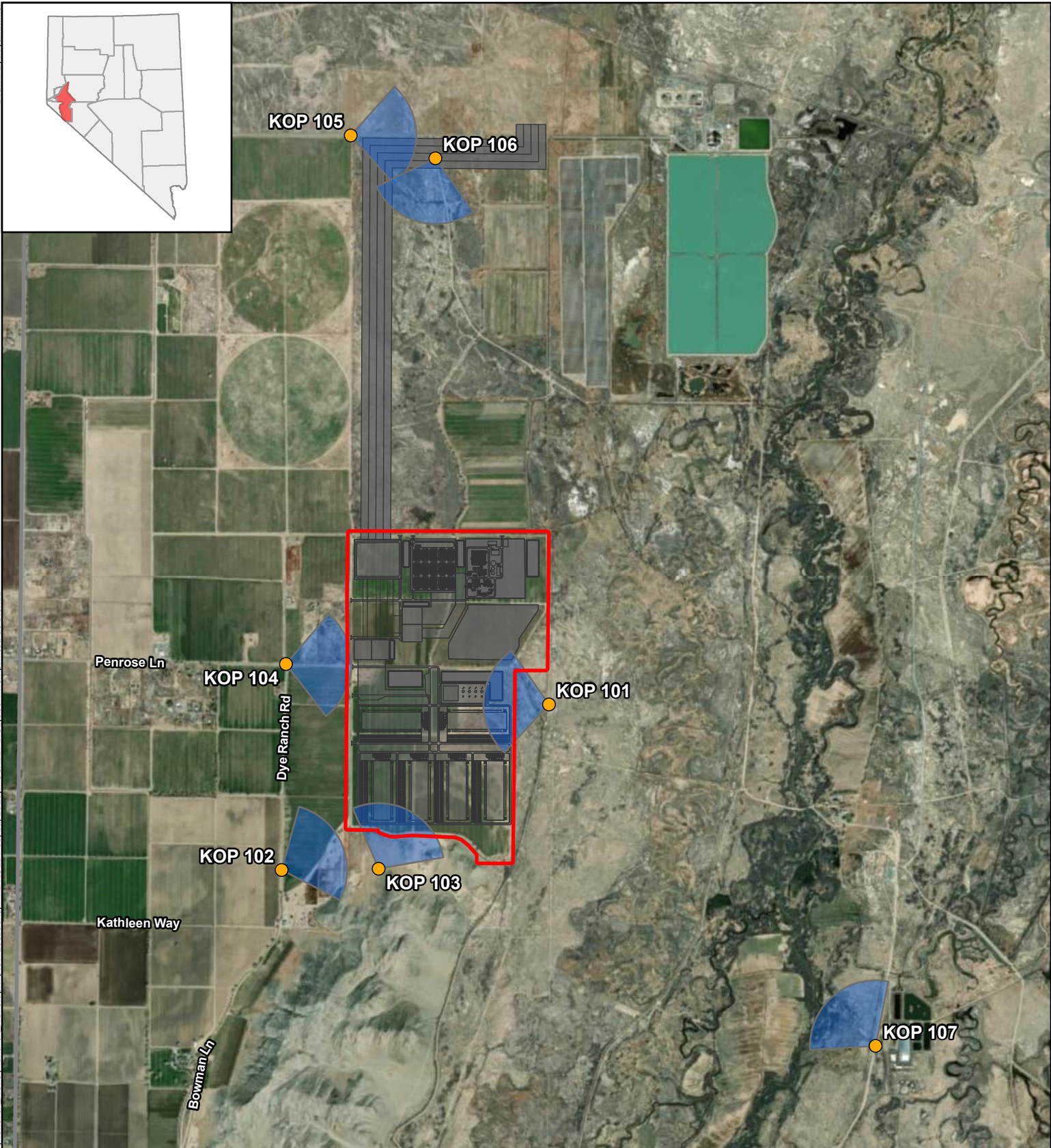
NOTE: ACTUAL BUILDING HEIGHT MAY VARY, DEPENDING ON THE FINAL BUILDING DESIGN AND ISSUE FOR CONSTRUCTION CIVIL DESIGNS PRIOR TO MINISTERIAL PERMITTING. BUILDINGS MAY BE CONSTRUCTED AS SINGLE-STORY OR TWO-STORY, REGARDLESS, DATA CENTER BUILDINGS WILL NOT EXCEED MORE THAN 4.6M SQUARE FEET, AS APPROVED BY THE SPECIFIC PLAN. ALL APPLICABLE CONDITIONS OF THE SPECIFIC PLAN WILL BE ADHERED TO.

LEGEND	
	EXISTING PROPERTY BOUNDARY
	PROPOSED MONARCH PROPERTY BOUNDARY
	PARCEL LINE
	EASEMENT LINE
	SECTION LINE
	EXISTING OVERHEAD LINES
	EXISTING POWER POLE
	EXISTING FENCE
	EXISTING DITCH
	EXISTING DITCH CENTERLINE
	EXISTING ROAD
	BUILDING SETBACK
	LANDSCAPE BUFFER
	PROPOSED OVERHEAD LINE
	PROPOSED GEN-TIE LINE (NOT A PART UNDER SEPARATE CUP APPLICATION)
	PROPOSED GEN-TIE ROUTE (NOT A PART UNDER SEPARATE CUP APPLICATION)
	PROPOSED FENCE LINE
	FEMA ZONE A
	RETENTION/EARTHWORK BORROW PIT
	MV CORRIDOR
	DATA CENTER BUILDING
	DATA CENTER BUILDING UTILITY AND EQUIPMENT YARD
	ON-SITE INTERIOR ROAD
	PROPOSED ACCESS ROAD
	OPEN SPACE (REFERENCE CONCEPTUAL LANDSCAPING PLANS FOR DETAILS)
	SITE LIGHTING
	PROPOSED IRRIGATION DITCH REROUTE







THIS PRELIMINARY SITE PLAN IS FOR CONCEPTUAL PURPOSES ONLY AND REQUIRES DETAILED PLANNING, ENGINEERING, AND COUNTY APPROVALS

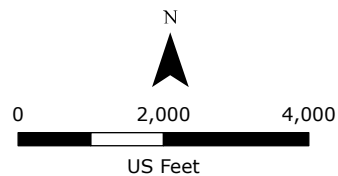
 © 2026 KIMLEY-HORN AND ASSOCIATES, INC. 2046 RIVERVIEW AVENUE, SUITE 400 MESA, AZ 85201 PHONE: 480-207-2866 WWW.KIMLEY-HORN.COM	PRELIMINARY FOR REVIEW ONLY NOT FOR CONSTRUCTION
KHA PROJECT 291565069	DATE 5/29/2026
SCALE AS SHOWN	DESIGNED BY ECG
DRAWN BY ECG	CHECKED BY CHS
CONCEPTUAL SITE PLAN	
MONARCH LYON COUNTY, NV	
SHEET NUMBER SP1.2	



Legend

-  Viewpoint
-  Viewpoint Direction
-  Project Site
-  Project Feature

KOP Locations
Copia Power
Lyon County, NV





Monarch Data Center

Lyon County, NV



KOP 101

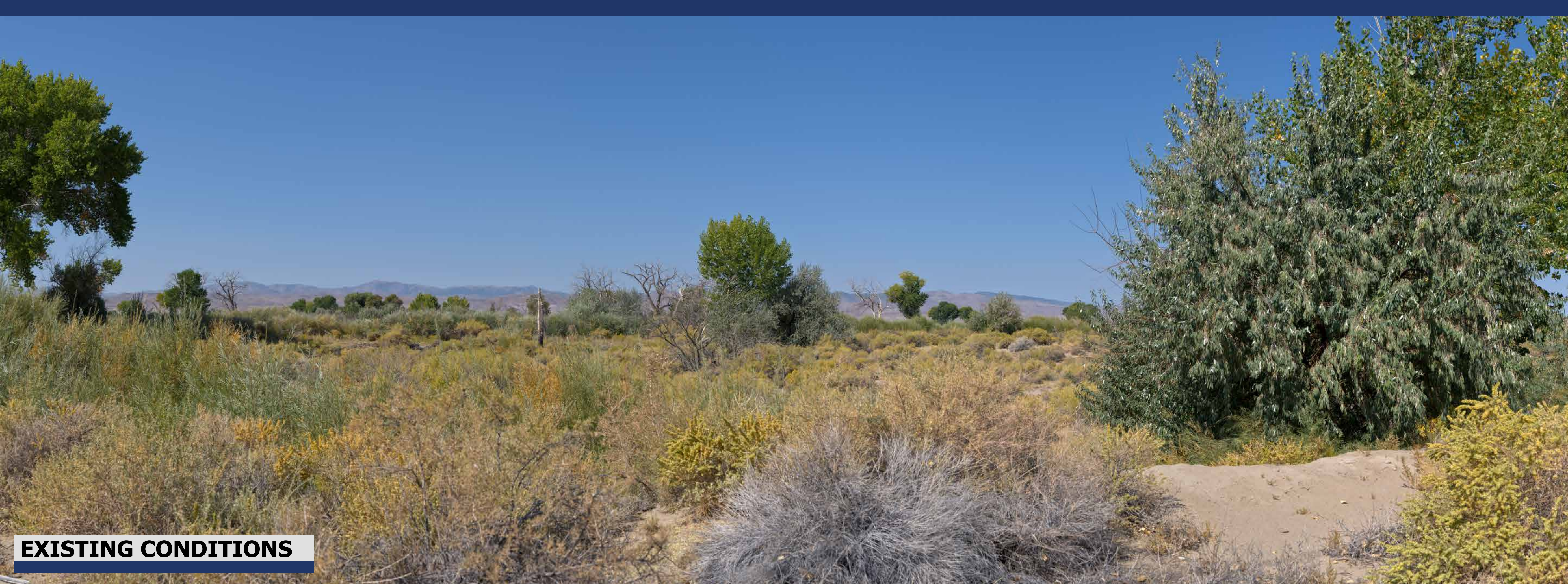
Date: 9/17/2025
Time: 11:06 am
Viewing Direction: Northwest
Closest Project feature: 0.2 miles

EXISTING CONDITIONS



PROPOSED CONDITIONS

KOP = Key Observation Point (Photograph Location)
 Note: Project components illustrated are based on proposed preliminary designs. The images contained on this page show the proposed project within a wider landscape context and are not representative of scale and distance when viewed from the actual viewpoint.



Monarch Data Center

Lyon County, NV



KOP 101

Date: 9/17/2025

Time: 11:06 am

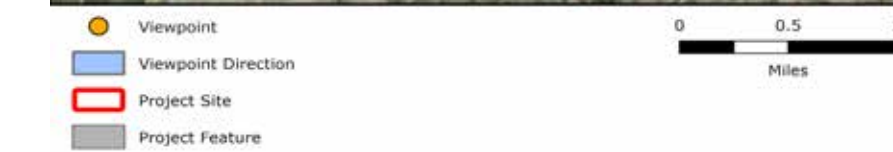
Viewing Direction: Northwest

Closest Project feature: 0.2 miles

EXISTING CONDITIONS



YELLOW: PROJECT INFRASTRUCTURE FULLY OR PARTIALLY SCREENED FROM VIEW



KOP = Key Observation Point (Photograph Location)

Note: Project components illustrated are based on proposed preliminary designs. The images contained on this page show the proposed project within a wider landscape context and are not representative of scale and distance when viewed from the actual viewpoint.

Monarch Data Center

Lyon County, NV



KOP 102

Dye Ranch Road

Date: 9/17/2025

Time: 12:06 pm

Viewing Direction: Northeast

Closest Project feature: 0.4 miles



EXISTING CONDITIONS



PROPOSED CONDITIONS



KOP = Key Observation Point (Photograph Location)

Note: Project components illustrated are based on proposed preliminary designs. The images contained on this page show the proposed project within a wider landscape context and are not representative of scale and distance when viewed from the actual viewpoint.

Monarch Data Center

Lyon County, NV



KOP 102

Dye Ranch Road

Date: 9/17/2025

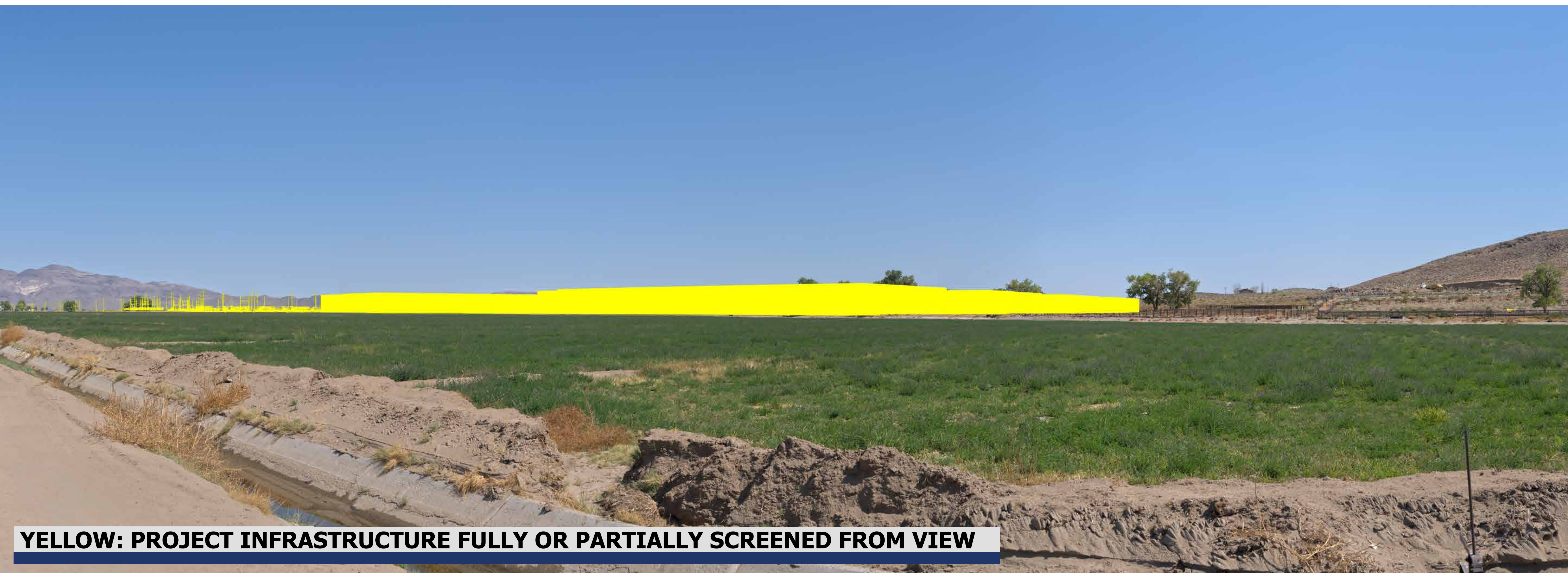
Time: 12:06 pm

Viewing Direction: Northeast

Closest Project feature: 0.4 miles



EXISTING CONDITIONS



YELLOW: PROJECT INFRASTRUCTURE FULLY OR PARTIALLY SCREENED FROM VIEW



KOP = Key Observation Point (Photograph Location)

Note: Project components illustrated are based on proposed preliminary designs. The images contained on this page show the proposed project within a wider landscape context and are not representative of scale and distance when viewed from the actual viewpoint.

Monarch Data Center

Lyon County, NV



KOP 103

Date: 9/17/2025
Time: 12:25 pm
Viewing Direction: North
Closest Project feature: 0.2 miles



EXISTING CONDITIONS



PROPOSED CONDITIONS



Legend:
● Viewpoint
▭ Viewpoint Direction
▭ Project Site
▭ Project Feature

KOP = Key Observation Point (Photograph Location)
Note: Project components illustrated are based on proposed preliminary designs. The images contained on this page show the proposed project within a wider landscape context and are not representative of scale and distance when viewed from the actual viewpoint.

Monarch Data Center

Lyon County, NV

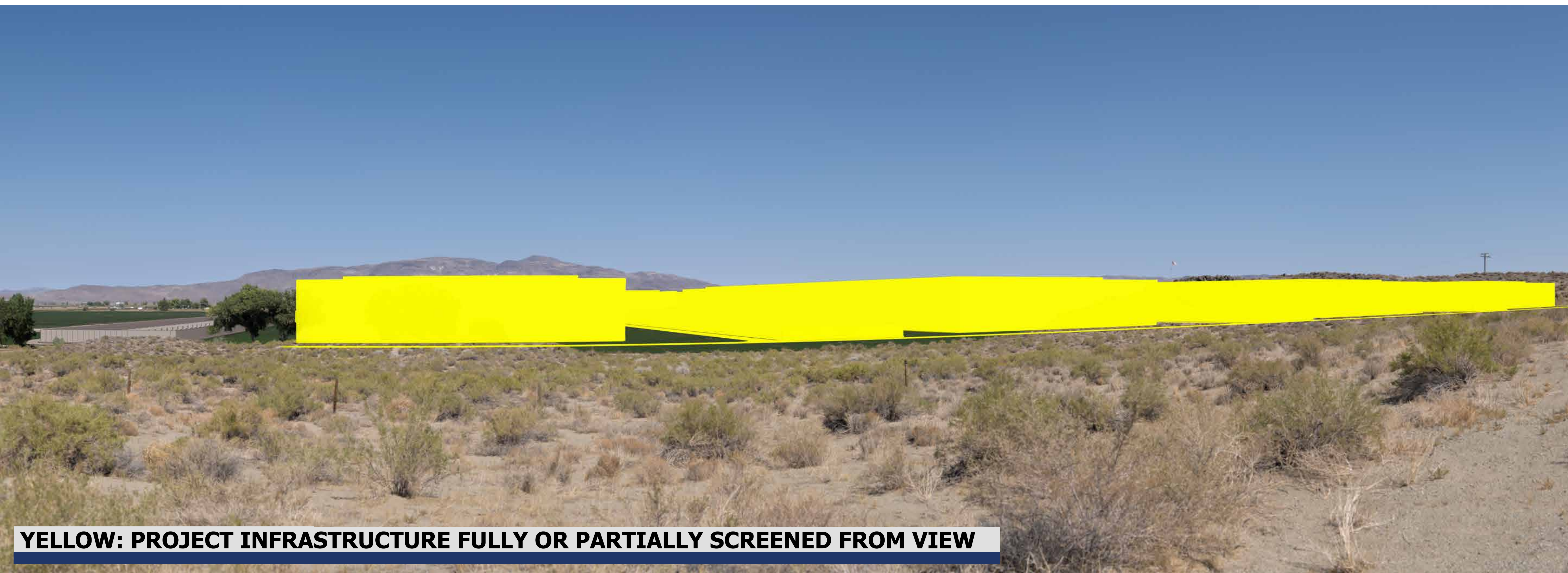


KOP 103

Date: 9/17/2025
Time: 12:25 pm
Viewing Direction: North
Closest Project feature: 0.2 miles



EXISTING CONDITIONS



YELLOW: PROJECT INFRASTRUCTURE FULLY OR PARTIALLY SCREENED FROM VIEW



KOP = Key Observation Point (Photograph Location)
Note: Project components illustrated are based on proposed preliminary designs. The images contained on this page show the proposed project within a wider landscape context and are not representative of scale and distance when viewed from the actual viewpoint.

Monarch Data Center

Lyon County, NV



KOP 104

Penrose Lane

Date: 9/17/2025

Time: 12:40 pm

Viewing Direction: East

Closest Project feature: 0.3 miles

EXISTING CONDITIONS



PROPOSED CONDITIONS



KOP = Key Observation Point (Photograph Location)

Note: Project components illustrated are based on proposed preliminary designs. The images contained on this page show the proposed project within a wider landscape context and are not representative of scale and distance when viewed from the actual viewpoint.

Monarch Data Center

Lyon County, NV



KOP 104

Penrose Lane

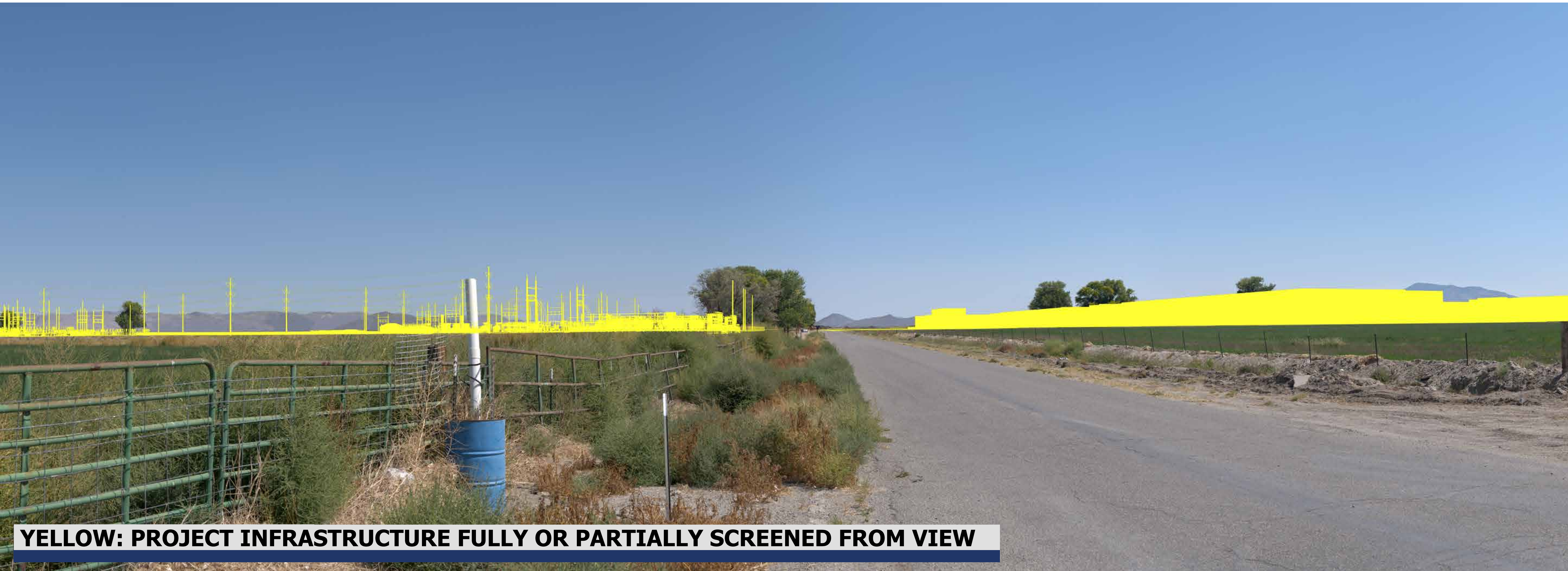
Date: 9/17/2025

Time: 12:40 pm

Viewing Direction: East

Closest Project feature: 0.3 miles

EXISTING CONDITIONS



YELLOW: PROJECT INFRASTRUCTURE FULLY OR PARTIALLY SCREENED FROM VIEW



KOP = Key Observation Point (Photograph Location)

Note: Project components illustrated are based on proposed preliminary designs. The images contained on this page show the proposed project within a wider landscape context and are not representative of scale and distance when viewed from the actual viewpoint.



Monarch Data Center

Lyon County, NV



KOP 105

Sierra Way

Date: 9/17/2025
Time: 10:17 am
Viewing Direction: East
Closest Project feature: 0.5 miles

EXISTING CONDITIONS



PROPOSED CONDITIONS



KOP = Key Observation Point (Photograph Location)

Note: Project components illustrated are based on proposed preliminary designs. The images contained on this page show the proposed project within a wider landscape context and are not representative of scale and distance when viewed from the actual viewpoint.



Monarch Data Center

Lyon County, NV



KOP 105

Sierra Way

Date: 9/17/2025
Time: 10:17 am
Viewing Direction: East
Closest Project feature: 0.5 miles

EXISTING CONDITIONS



YELLOW: PROJECT INFRASTRUCTURE FULLY OR PARTIALLY SCREENED FROM VIEW



● Viewpoint
→ Viewpoint Direction
 Project Site
 Project Feature

KOP = Key Observation Point (Photograph Location)
 Note: Project components illustrated are based on proposed preliminary designs. The images contained on this page show the proposed project within a wider landscape context and are not representative of scale and distance when viewed from the actual viewpoint.

Monarch Data Center

Lyon County, NV



KOP 106

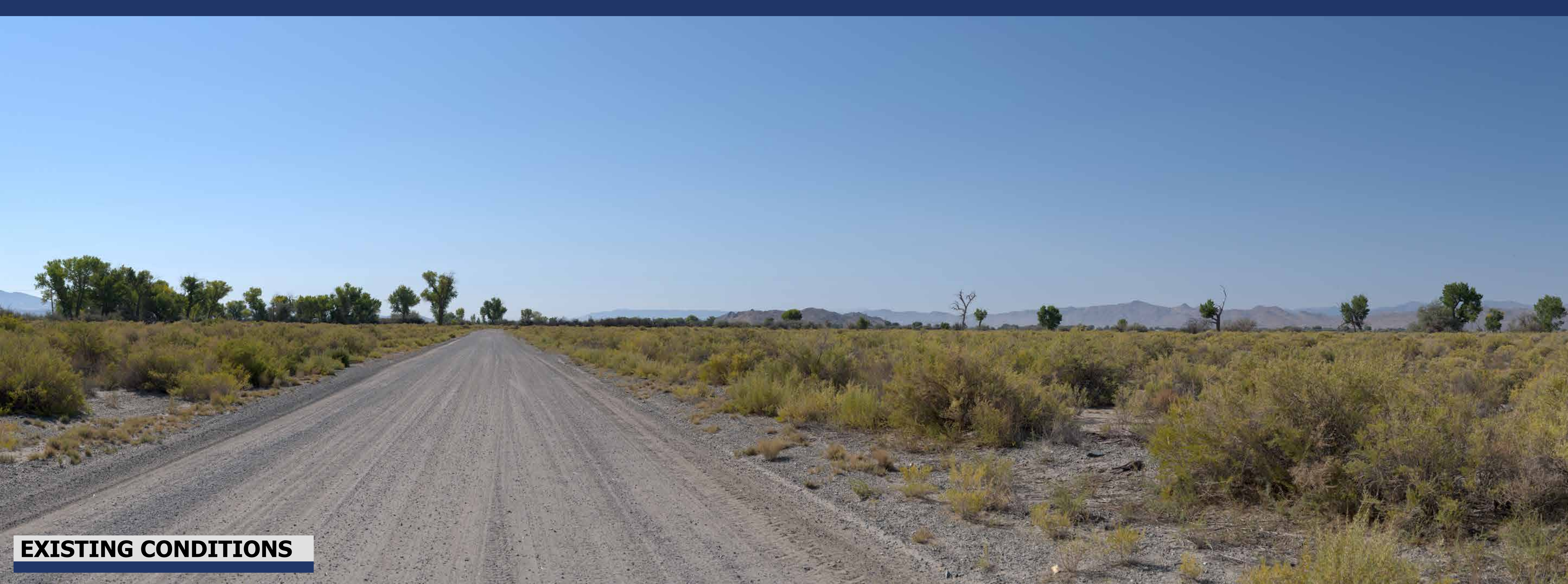
Lux Lane

Date: 9/17/2025

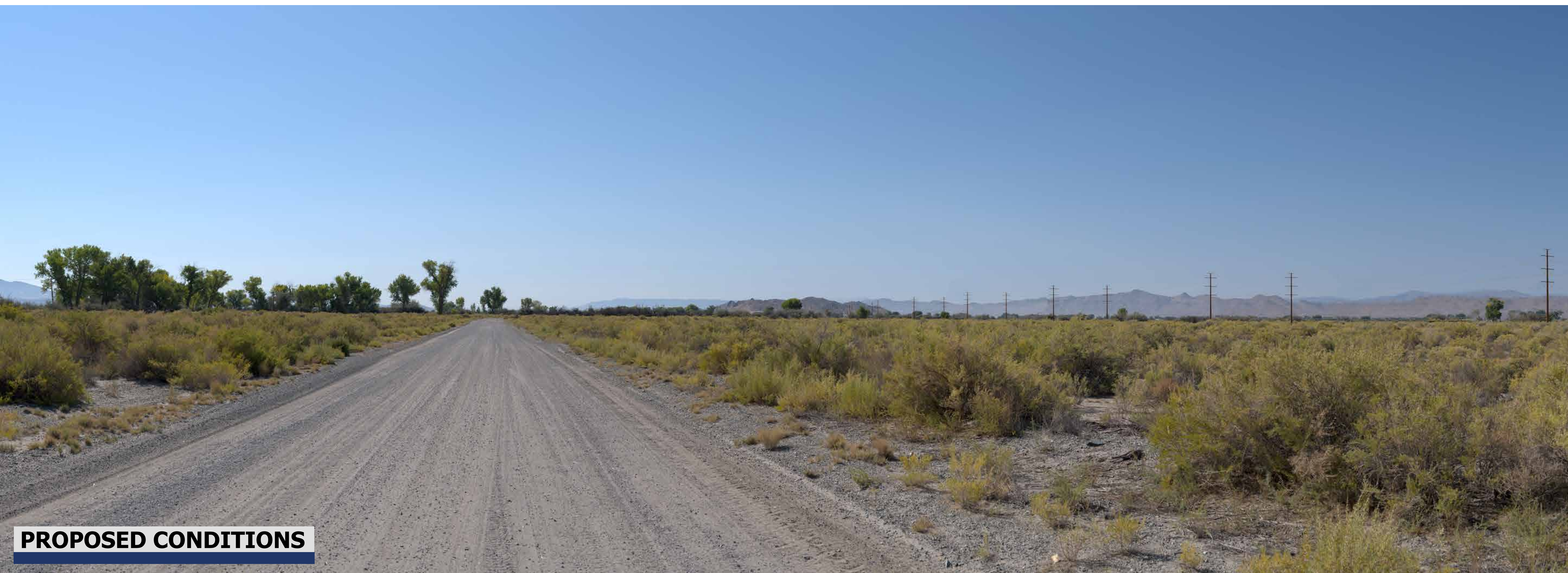
Time: 10:30 am

Viewing Direction: South

Closest Project feature: 1.4 miles



EXISTING CONDITIONS



PROPOSED CONDITIONS



KOP = Key Observation Point (Photograph Location)

Note: Project components illustrated are based on proposed preliminary designs. The images contained on this page show the proposed project within a wider landscape context and are not representative of scale and distance when viewed from the actual viewpoint.

Monarch Data Center

Lyon County, NV



KOP 106

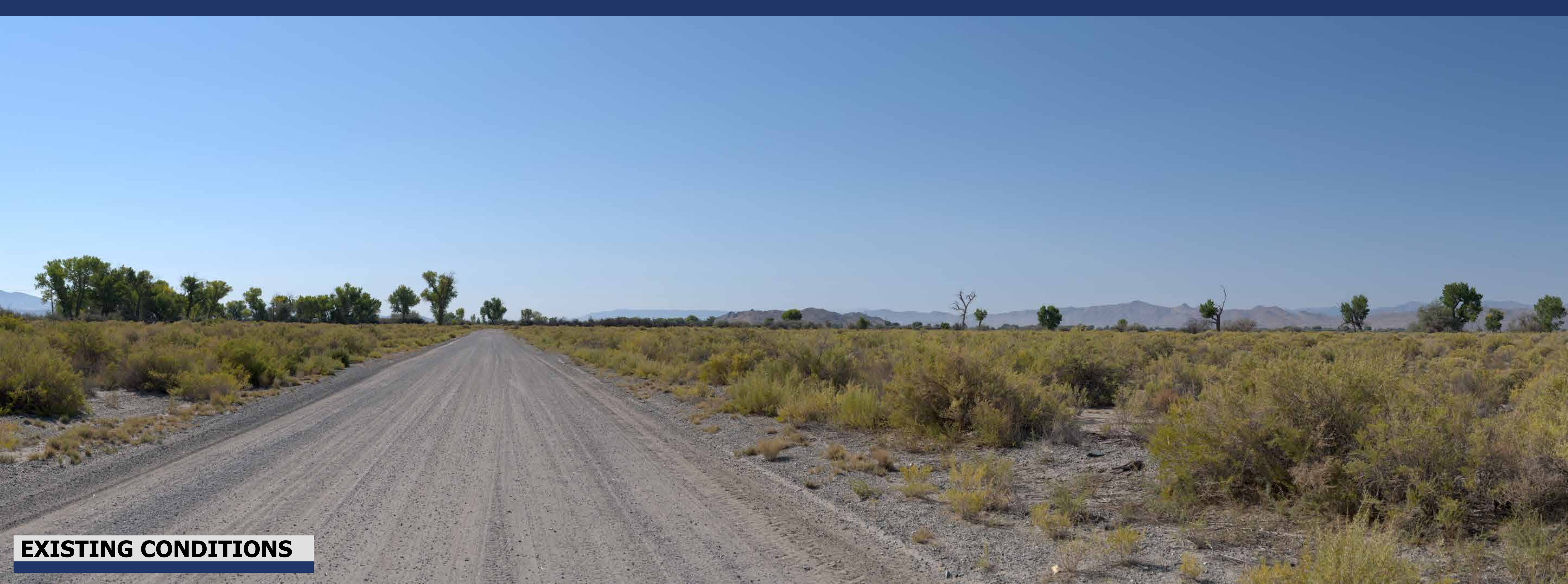
Lux Lane

Date: 9/17/2025

Time: 10:30 am

Viewing Direction: South

Closest Project feature: 1.4 miles



EXISTING CONDITIONS



YELLOW: PROJECT INFRASTRUCTURE FULLY OR PARTIALLY SCREENED FROM VIEW



KOP = Key Observation Point (Photograph Location)

Note: Project components illustrated are based on proposed preliminary designs. The images contained on this page show the proposed project within a wider landscape context and are not representative of scale and distance when viewed from the actual viewpoint.

Monarch Data Center

Lyon County, NV



KOP 107

Lux Lane

Date: 9/17/2025

Time: 11:40 am

Viewing Direction: Northwest

Closest Project feature: 1.6 miles



EXISTING CONDITIONS



PROPOSED CONDITIONS



KOP = Key Observation Point (Photograph Location)

Note: Project components illustrated are based on proposed preliminary designs. The images contained on this page show the proposed project within a wider landscape context and are not representative of scale and distance when viewed from the actual viewpoint.

Monarch Data Center

Lyon County, NV



KOP 107

Lux Lane

Date: 9/17/2025

Time: 11:40 am

Viewing Direction: Northwest

Closest Project feature: 1.6 miles



EXISTING CONDITIONS



YELLOW: PROJECT INFRASTRUCTURE FULLY OR PARTIALLY SCREENED FROM VIEW



KOP = Key Observation Point (Photograph Location)

Note: Project components illustrated are based on proposed preliminary designs. The images contained on this page show the proposed project within a wider landscape context and are not representative of scale and distance when viewed from the actual viewpoint.

TRAFFIC IMPACT STUDY

MONARCH DATA CENTER

LYON COUNTY, NEVADA

APNs: 014-201-07 and 014-201-30

Prepared for:
Birch Infrastructure, PBLLC
600 A Avenue
Lake Oswego, Oregon 97034

Prepared by:
Kimley»»Horn

April 2026
291565075
Copyright © Kimley-Horn and Associates, Inc.



TRAFFIC IMPACT STUDY

FOR

MONARCH DATA CENTER

Prepared for:

Birch Infrastructure, PBLLC

600 A Avenue

Lake Oswego, Oregon 97034

Prepared by:

Kimley-Horn and Associates, Inc.

6671 Las Vegas Boulevard South

Suite 320

Las Vegas, Nevada 89119

(702) 862-3600

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

© April 2026

291565075

TABLE OF CONTENTS

1. INTRODUCTION	1
2. EXISTING CONDITIONS	3
2.1. Study Area Intersections	3
2.2. Existing Land Uses	3
2.3. 2025 Existing Lane Configuration and Control	3
2.4. Existing Turning Movements	3
3. FUTURE CONDITIONS	7
3.1. 2027 Background Lane Configuration and Control	7
3.2. 2027 Background Traffic Volumes	7
3.3. 2027 Background plus Project Lane Configuration and Control	7
3.4. 2047 Horizon Year Lane Configuration and Control	7
3.5. 2047 Horizon Year Traffic Volumes	7
3.6. Trip Generation	11
3.7. Trip Distribution	12
3.8. Traffic Assignment	12
3.8.1. Construction Scenario 1 Traffic Assignment	12
3.8.2. Construction Scenario 2 Traffic Assignment	12
3.8.3. Typical Operations Traffic Assignment	12
3.9. 2027 Background Plus Project Traffic Volumes	19
3.9.1. 2027 Background Plus Construction Scenario 1 Traffic Volumes	19
3.9.2. 2027 Background Plus Construction Scenario 2 Traffic Volumes	19
3.9.3. 2027 Background Plus Project Traffic Volumes	19
3.10. 2047 Horizon Plus Project Traffic Volumes	19
4. TRAFFIC IMPACT ANALYSIS	24
4.1. Analysis Methodology	24
4.2. Key Intersection Operational Analysis	25
4.3. Left Turn Storage Analysis	29
4.4. Signal Warrant Analysis	31
5. NDOT ACCESS MANAGEMENT SYSTEMS AND STANDARDS	33
5.1. Deceleration Lanes	33
5.2. Acceleration Lanes	33
6. CRASH DATA SUMMARY	34
7. RECOMMENDATIONS	35

LIST OF FIGURES

Figure 1 – Vicinity Map.....	2
Figure 2 – Study Area	4
Figure 3 – 2025 Existing Lane Configuration and Control	5
Figure 4 – 2025 Existing Peak Hour Traffic Volumes	6
Figure 5 – 2027 Background Peak Hour Traffic Volumes	8
Figure 6 – 2027 Background plus Project Lane Configuration and Control.....	9
Figure 7 – 2047 Horizon Year Peak Hour Traffic Volumes	10
Figure 8 – Project Trip Distribution – Construction Scenario 1	13
Figure 9 – Project Trip Distribution – Construction Scenario 2	14
Figure 10 – Project Trip Distribution – Typical Operations.....	15
Figure 11 – Project Traffic Assignment – Construction Scenario 1	16
Figure 12– Project Traffic Assignment – Construction Scenario 2.....	17
Figure 13 – Project Traffic Assignment – Typical Operations	18
Figure 14 – 2027 Background Plus Construction Scenario 1 Peak Hour Traffic Volumes	20
Figure 15 – 2027 Background Plus Construction Scenario 2 Peak Hour Traffic Volumes	21
Figure 16 – 2027 Background Plus Project Peak Hour Traffic Volumes	22
Figure 17 – 2047 Horizon Plus Project Peak Hour Traffic Volumes	23

LIST OF TABLES

Table 1 – Trip Generation – Construction.....	11
Table 2 – Trip Generation – Typical Operations	11
Table 3 – Level of Service Criteria	24
Table 4 – Scenarios	25
Table 5 – Key Intersection Peak Hour LOS Analysis.....	27
Table 6 – Left Turn Storage Bay Analysis Results	29
Table 7 – Temporary Signal Warrant Evaluation Results – US-95A and Sierra Way (#1)	31
Table 8 – Temporary Signal Warrant Evaluation Results – US-95A and Bowman Lane/Campbell Lane (#5)	31
Table 9 – Temporary Signal Warrant Evaluation Results – US-95A and SR 339 (#7)	32

LIST OF APPENDICES

- Appendix A NDOT Comments and Comment Response Letter
- Appendix B Count Data
- Appendix C Growth Rate Calculations
- Appendix D Trip Generation Calculations
- Appendix E Level of Service Calculations
- Appendix F Signal Warrant Calculations
- Appendix G NDOT Access Management Excerpts
- Appendix H Crash Data
- Appendix I Site Plan

1. INTRODUCTION

Kimley-Horn has been retained by Birch Infrastructure, PBLLC to prepare a traffic impact study for the proposed Monarch Data Center development. The purpose of this traffic study is to identify the project's traffic generation characteristics, potential traffic-related impacts on the local street network, and develop mitigation measures recommended for the identified impacts.

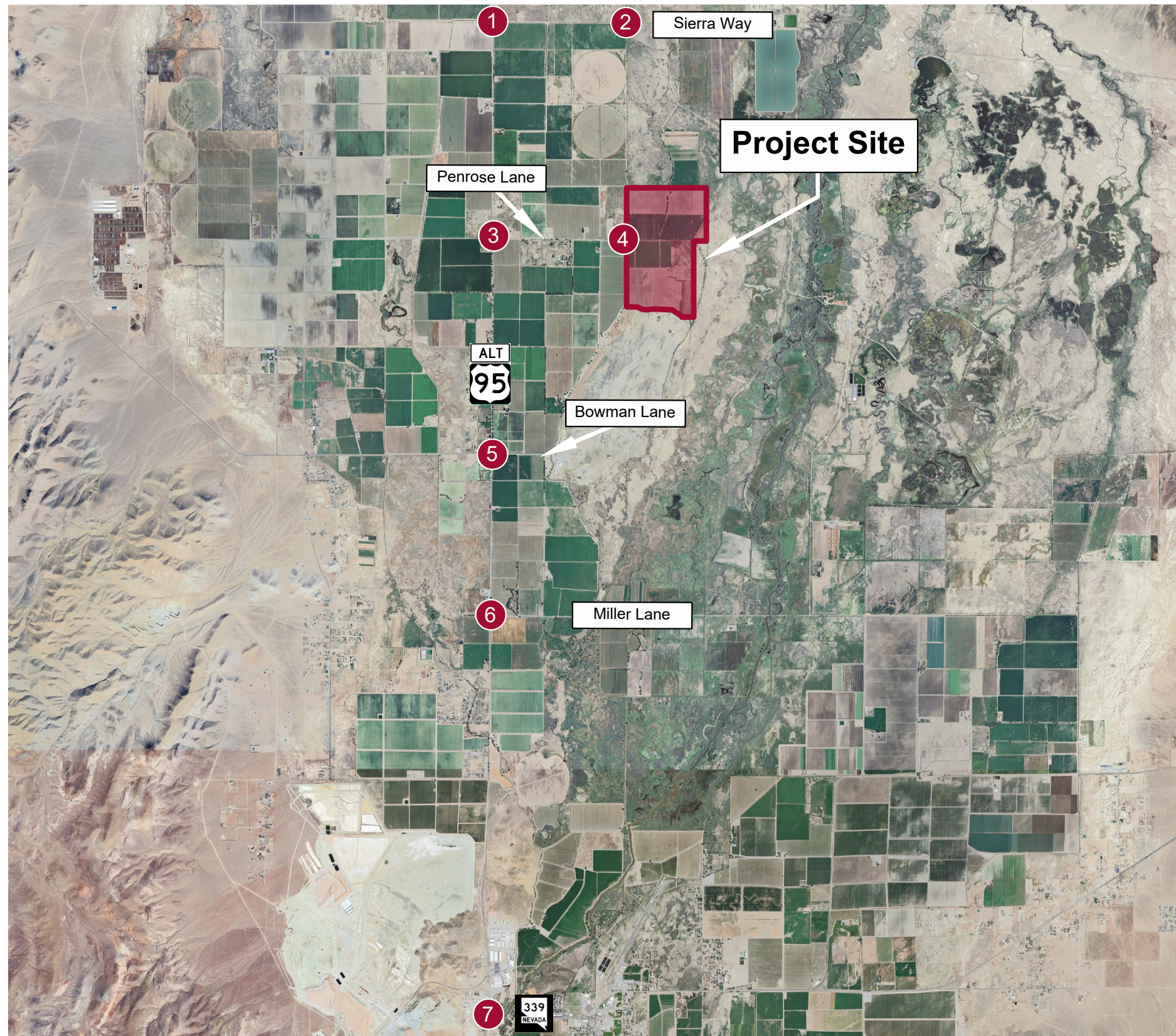
The proposed project is located on east of U.S. Route 95 Alternate (US-95A) at the end of Penrose Lane on approximately 505 acres within APN 014-201-07 and 014-201-30 in Lyon County, Nevada. Upon expected project completion, the project is anticipated to consist of a roughly 4.6 million square-foot (SF) data center campus. The project site currently consists of undeveloped and agricultural land. The location of the proposed development with respect to the City of Yerington is shown in **Figure 1**. The site plan is located in **Appendix I**.

US-95A provides regional access to the project site. Sierra Way provides primary access, while direct access to the site is provided by one full access drive at Sierra Way and Project Access Road (#2).

A scoping meeting was held with the Nevada Department of Transportation (NDOT) and Lyon County on May 12, 2025, and the agencies identified seven intersections for full analysis:

- US-95A and Sierra Way (#1)
- Sierra Way and Project Access Road (#2)
- US-95A and Penrose Lane (#3)
- Penrose Lane and Project Access Road (#4)
- US-95A and Bowman Lane/Campbell Lane (#5)
- US-95A and Miller Lane (#6)
- US-95A and SR-339 (#7)

Three revisions were made to this traffic impact study at the request of NDOT. Comments received from NDOT as well as comment response letters are located in **Appendix A**.



Source: Google Earth Image Date: July 2024

Monarch 2047 Horizon Year Peak Hour Traffic Volumes

US-95A and Sierra Way

<p>1</p> <p>4(0) ↙ ← 214(290) ↘ 11(12)</p>	<p>↖ 14(24) ← 2(15)</p>
<p>1(0) → 1(2) ↘</p>	<p>↗ 0(1) ↖ 200(249) ↘ 1(4)</p>

Sierra Way and Project Access Road

<p>2</p> <p>← 0(63)</p>
<p>80(6) →</p>

US-95A and Penrose Lane

<p>3</p> <p>5(1) ↙ ← 208(315) ↘ 1(2)</p>	<p>↖ 4(0) ← 2(2) ↘ 15(12)</p>
<p>5(4) ↘ 4(2) ↘ 17(15) ↘</p>	<p>↗ 20(12) ↖ 198(248) ↘ 10(15)</p>

Penrose Lane and Project Access Road

<p>4</p> <p>← 7(4)</p>
<p>11(6) →</p>

US-95A and Bowman Lane

<p>5</p> <p>30(17) ↙ ← 229(324) ↘ 2(0)</p>	<p>↖ 7(4) ← 4(0) ↘ 4(4)</p>
<p>15(27) ↘ 2(0) ↘ 29(85) ↘</p>	<p>↗ 41(21) ↖ 269(208) ↘ 16(9)</p>

US-95A and Miller Lane

<p>6</p> <p>← 249(329) ↘ 21(36)</p>	<p>↖ 36(57) ↘ 12(10)</p>
	<p>↗ 214(253) ↘ 5(4)</p>

US-95A and SR-339

<p>7</p> <p>← 133(199) ↘ 260(254)</p>	<p>↖ 163(217) ← 0(2) ↘ 39(91)</p>
<p>0(1) ↘ 1(0) ↘</p>	<p>↗ 162(142) ↖ 66(83)</p>

Legend

- # Study Area Key Intersection
- X Project Access Drive
- ← xx (xx) AM(PM) Peak Hour Volume

2. EXISTING CONDITIONS

This section of the report details existing conditions near the project site.

2.1. Study Area Intersections

A scoping meeting was held with the Nevada Department of Transportation (NDOT) and Lyon County on May 12, 2025, and the agencies identified seven intersections for full analysis:

- US-95A and Sierra Way (#1)
- Sierra Way and Project Access Road (#2)
- US-95A and Penrose Lane (#3)
- Penrose Lane and Project Access Road (#4)
- US-95A and Bowman Lane/Campbell Lane (#5)
- US-95A and Miller Lane (#6)
- US-95A and SR-339 (#7)

2.2. Existing Land Uses

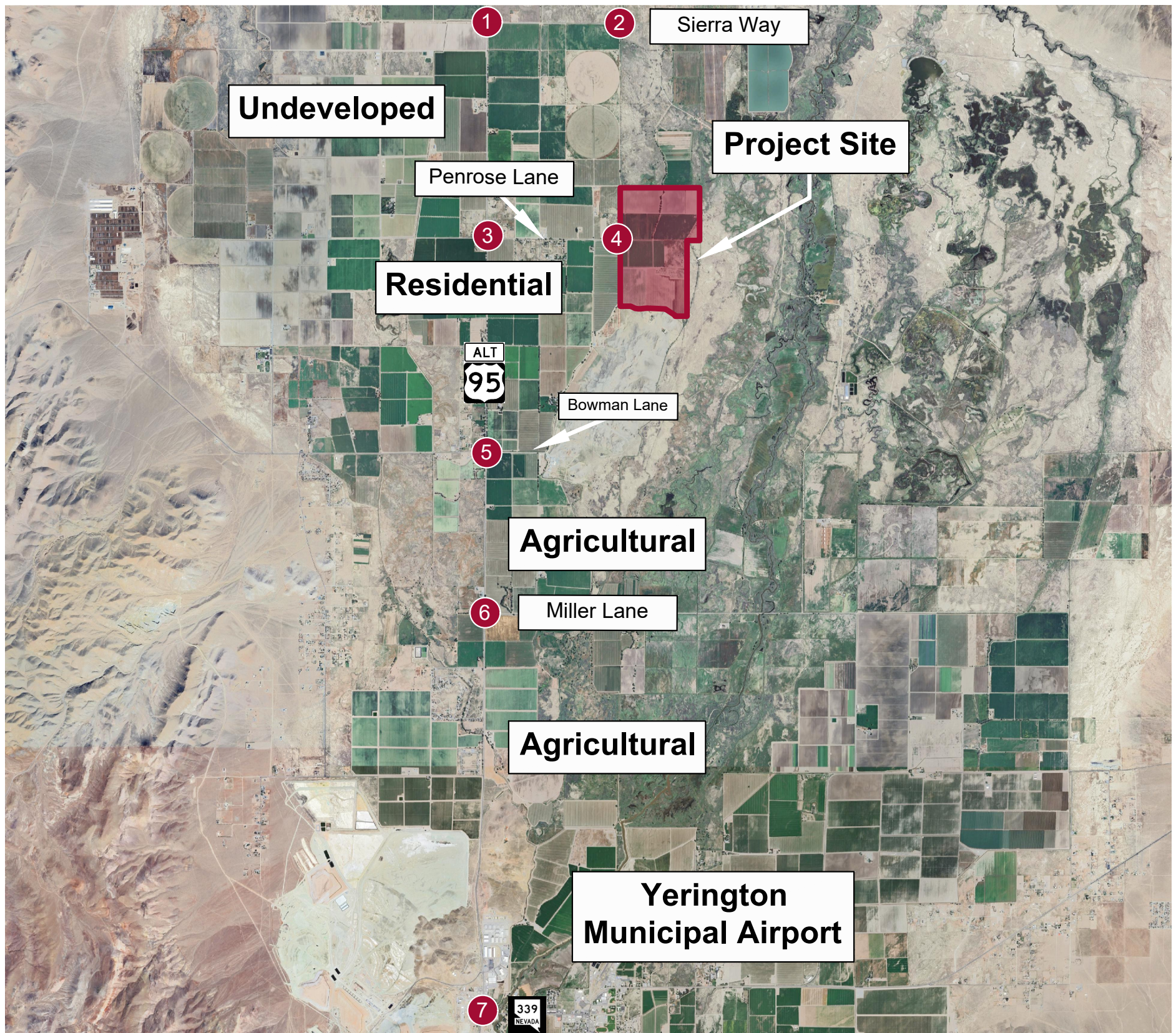
The location of the proposed project is currently undeveloped and agricultural land. The land uses surrounding the project site includes industrial, residential, agricultural, and undeveloped land uses. The location of the project site, study area intersections, and existing land uses are shown on **Figure 2**.

2.3. 2025 Existing Lane Configuration and Control

U.S. Route 95 Alternate (US-95A) provides regional access to the project site. Sierra Way provides primary access. Existing speed limits, lane configurations, and traffic control at the time of this study are illustrated in **Figure 3**.

2.4. Existing Turning Movements

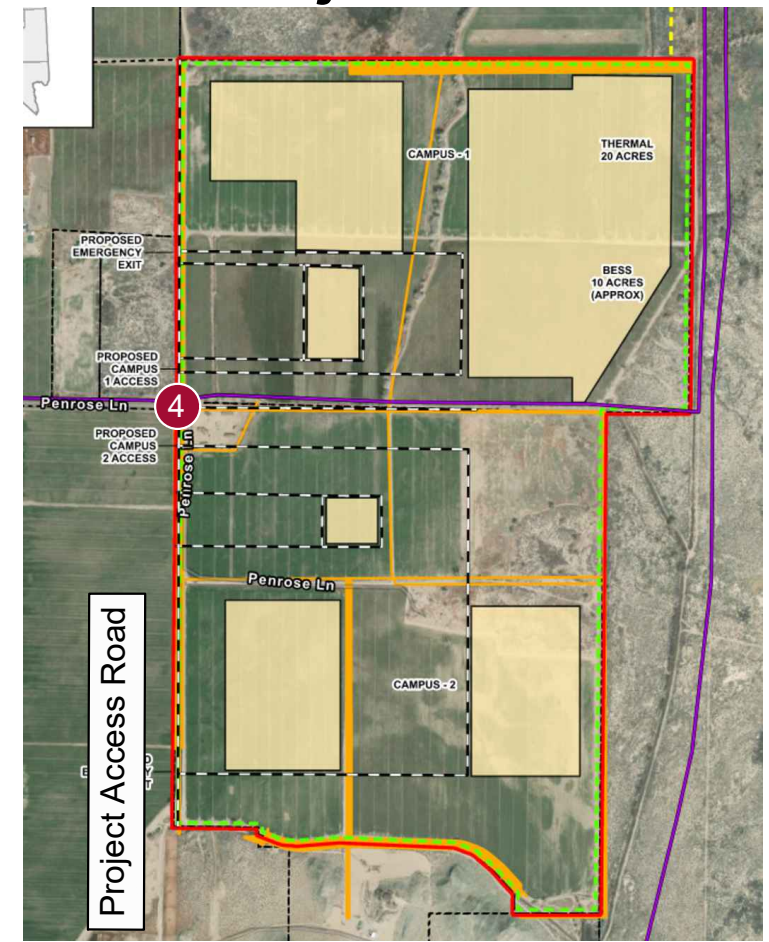
Existing AM and PM peak hour turning movement data was field counted for the study area intersections identified in **Section 2.1** on Wednesday, May 14, 2025, and for US-95A and Bowman Lane/Campbell Lane (#5) on Tuesday, August 26, 2025. Data was collected for 24-hours to obtain the actual peak hours for each intersection. For conservative analysis, the highest peak hour in the AM and PM were used to analyze the conditions at peak traffic on the street network. A summary of the peak hour count data at the study area intersections is shown in **Figure 4** and the count data sheets are provided in **Appendix B**.



Study Area Intersections

1. US-95A and Sierra Way
2. Sierra Way and Project Access Road
3. US-95A and Penrose Lane
4. Penrose Lane and Project Access Road
5. UA-95A and Bowman Lane
6. US-95A and Miller Lane
7. US-95A and SR-339

Project Site

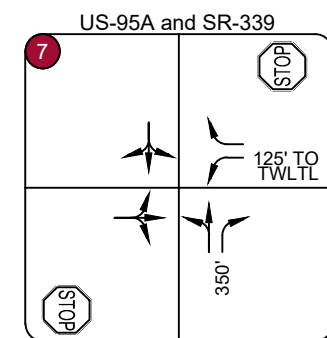
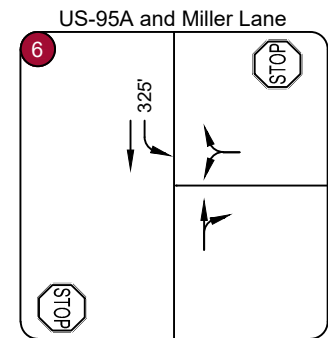
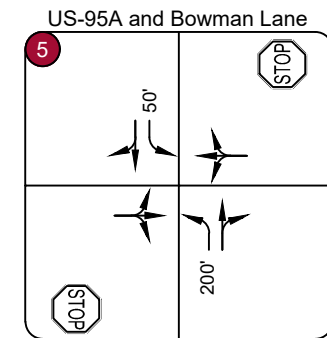
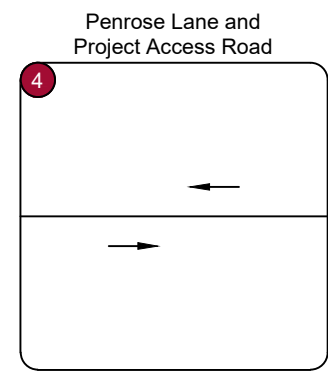
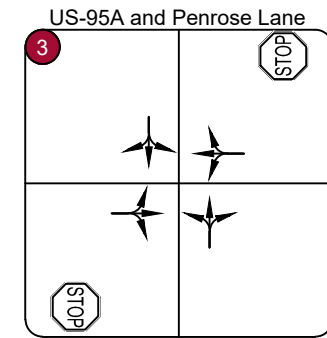
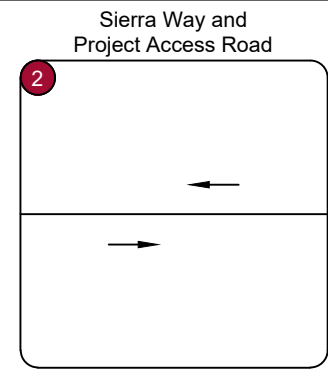
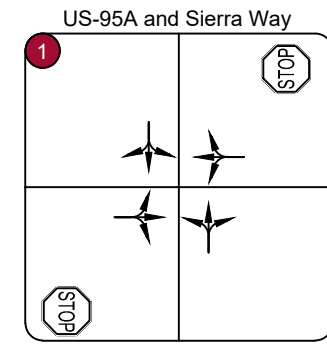
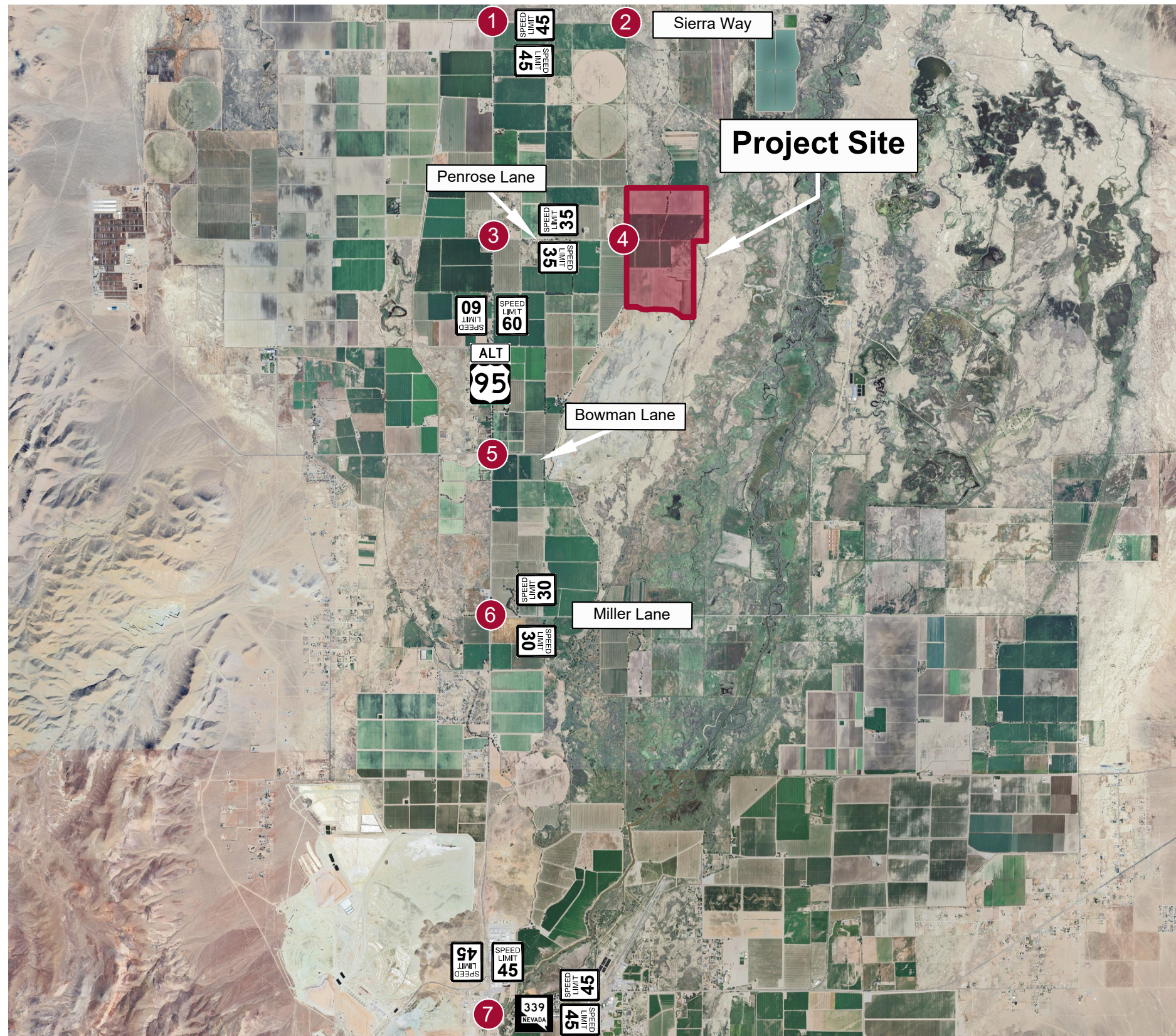


Legend

- # Study Area Key Intersection
- X Project Access Drive

Source: Google Earth Image Date: July 2024

Monarch Study Area

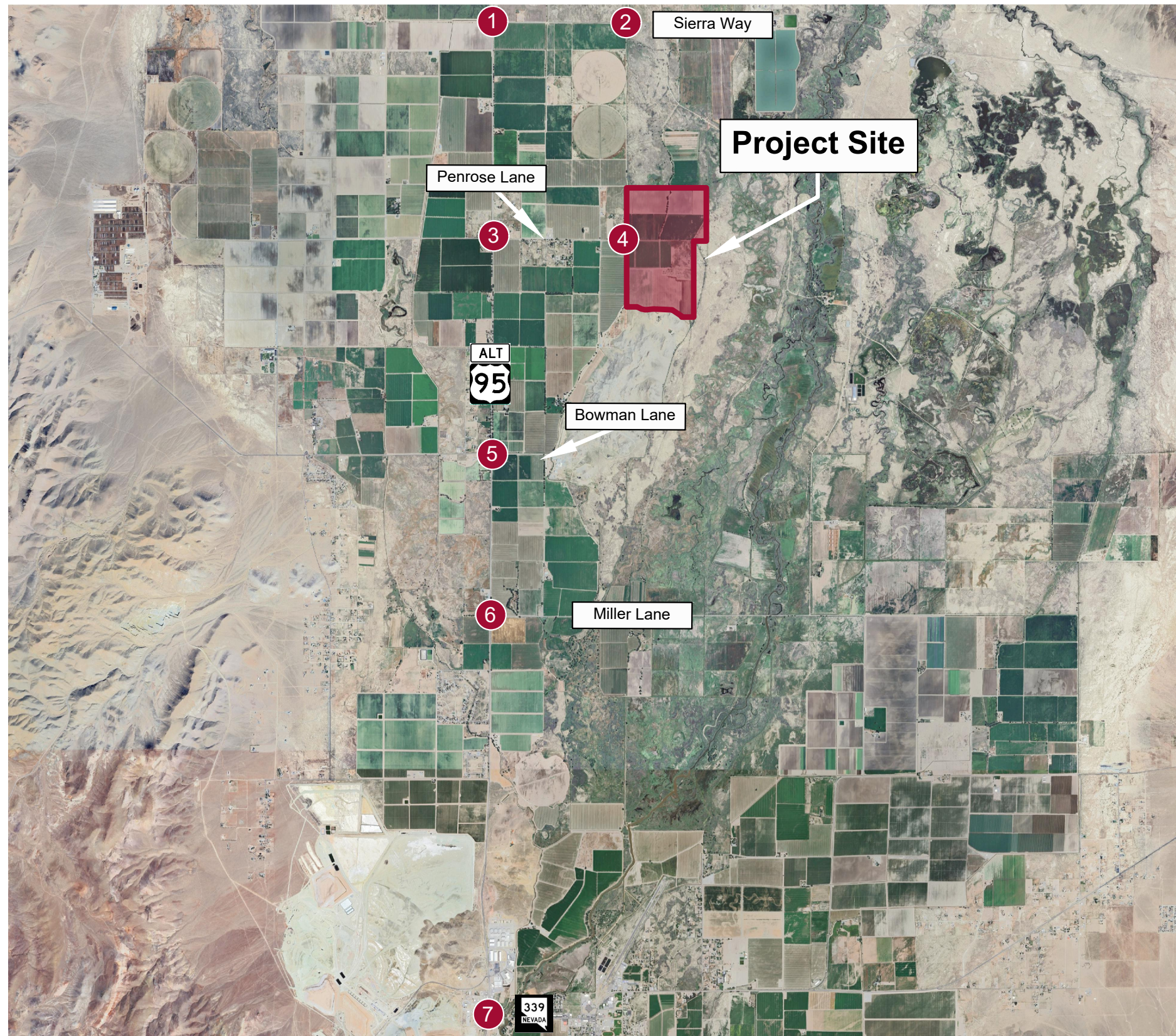


Legend

- # Study Area Key Intersection
- X Project Access Drive
- SPEED LIMIT 25 Roadway Speed Limit
- STOP Stop Controlled Approach
- ← Existing Approach

Source: Google Earth Image Date: July 2024

Monarch 2025 Existing Lane Configuration and Control



Source: Google Earth Image Date: July 2024

Monarch 2025 Existing Peak Hour Traffic Volumes

US-95A and Sierra Way

<p>1</p> <p>3(0) ↘ ← 172(233) ↙ 9(10)</p>	<p>↗ 11(19) ← 2(12)</p>
<p>1(0) → 1(2) ↘</p>	<p>↗ 0(1) ↘ ↖ 161(200) ↖ ↙ 1(3)</p>

Sierra Way and Project Access Road

<p>2</p> <p>← 0(51)</p>
<p>64(5) →</p>

US-95A and Penrose Lane

<p>3</p> <p>4(1) ↘ ← 167(253) ↙ 1(2)</p>	<p>↗ 3(0) ← 2(2) ↙ 12(10)</p>
<p>4(3) ↘ 3(2) ↘ 14(12) ↘</p>	<p>↗ 16(10) ↘ ↖ 159(199) ↖ ↙ 8(12)</p>

Penrose Lane and Project Access Road

<p>4</p> <p>← 6(3)</p>
<p>9(5) →</p>

US-95A and Bowman Lane

<p>5</p> <p>24(14) ↘ ← 184(260) ↙ 2(0)</p>	<p>↗ 6(3) ← 3(0) ↙ 3(3)</p>
<p>12(22) ↘ 2(0) ↘ 23(68) ↘</p>	<p>↗ 33(17) ↘ ↖ 216(167) ↖ ↙ 13(7)</p>

US-95A and Miller Lane

<p>6</p> <p>← 200(264) ↙ 17(29)</p>	<p>↗ 29(46) ← 10(8)</p>
	<p>↗ 172(203) ↘ ↙ 4(3)</p>

US-95A and SR-339

<p>7</p> <p>← 107(160) ← 209(204)</p>	<p>↗ 131(174) ← 0(2) ↙ 31(73)</p>
<p>0(1) ↘ 1(0) ↘</p>	<p>↗ 130(114) ↘ ↖ 53(67)</p>

Legend

- # Study Area Key Intersection
- X Project Access Drive
- ← xx (xx) AM(PM) Peak Hour Volume

Figure 4
Kimley»Horn

3. FUTURE CONDITIONS

This section of the report details conditions that are expected in the future at the time the proposed project is expected to be completed.

3.1. 2027 Background Lane Configuration and Control

Expected speed limits, lane configuration, and traffic control in 2027 are expected to remain the same as the 2025 existing speed limits, lane configuration, and traffic control as shown in **Figure 4**.

3.2. 2027 Background Traffic Volumes

To accurately determine the impact of project traffic, it is necessary to establish future baseline traffic volumes along roadways near the proposed development site. An annual growth rate of approximately 0.94% percent was obtained from the evaluation of four Nevada Department of Transportation (NDOT) count stations:

- US-95A, .45ft N of Sierra Way (0190048)
- Sierra Way, .5mi E of US-95A (0191627)
- Penrose Lane, 100ft W of US-95A (0191602)
- US-95A, 330ft N of SR 339 (0190051)

Growth rate calculations are included in **Appendix C**. The 2025 peak hour traffic volumes were grown for two years at a 1 percent annual growth rate to obtain future background traffic volumes in 2027 when the proposed project is anticipated to be completed. The 2027 background traffic volumes are illustrated in **Figure 5**.

3.3. 2027 Background plus Project Lane Configuration and Control

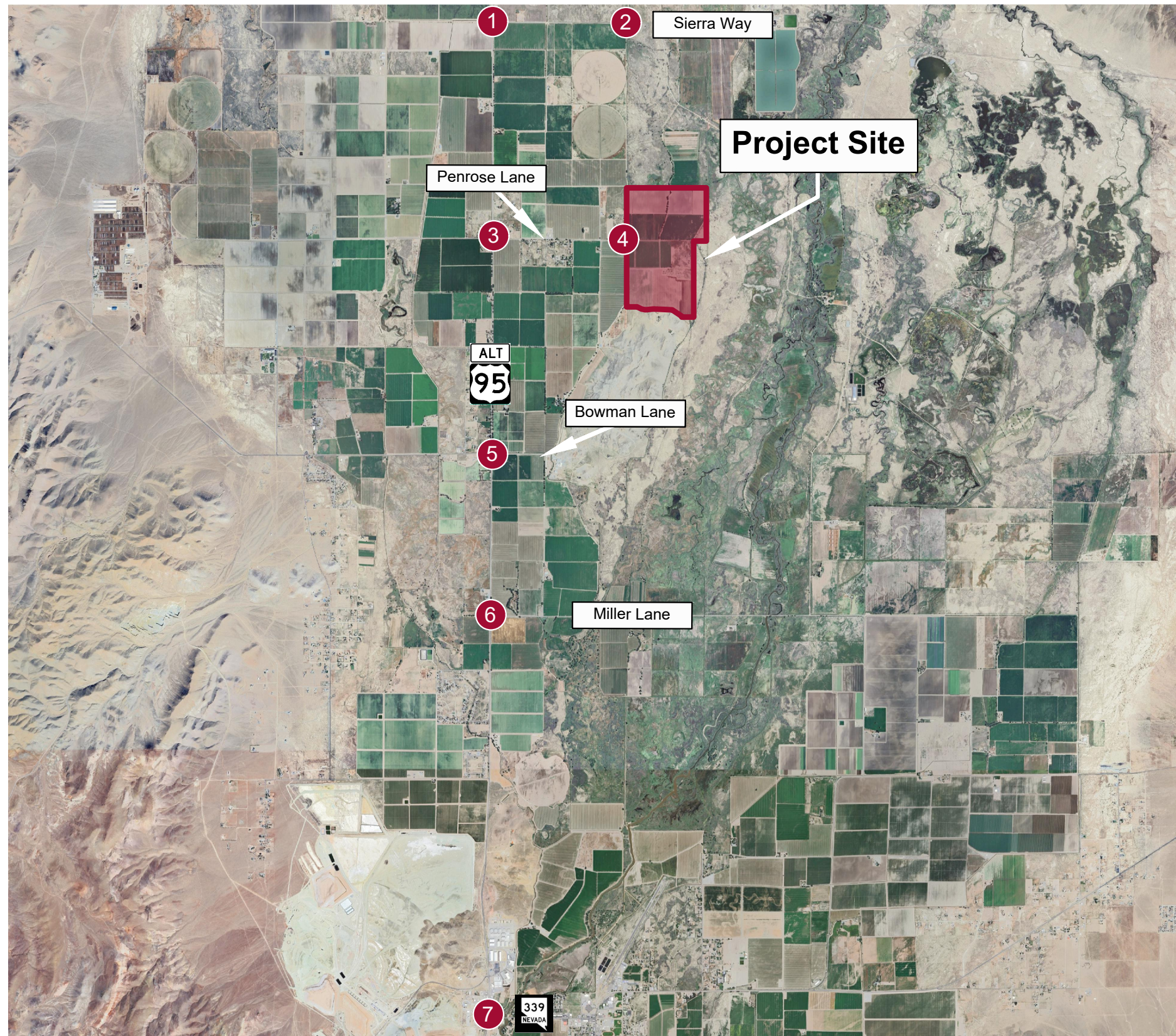
Lane configuration and control upon project completion in 2027 with the buildout of the project access road is shown in **Figure 6**. Direct access to the site is planned to be provided by one full access drive at Sierra Way and the Project Access Road (#2).

3.4. 2047 Horizon Year Lane Configuration and Control

Expected speed limits, lane configuration, and traffic control in 2047 are expected to remain the same as the 2027 background with project speed limits, lane configuration, and traffic control as shown in **Figure 4**.

3.5. 2047 Horizon Year Traffic Volumes

Following the same methodology discussed in **Section 3.2**, the 2027 background traffic volumes were grown to obtain 2047 Horizon Year traffic volumes for the project site. The 2027 peak hour traffic volumes were grown for 20 years at a 1 percent annual growth rate to obtain future horizon year traffic volumes in 2047. The 2047 background traffic volumes are illustrated in **Figure 7**.



Source: Google Earth Image Date: July 2024

Monarch 2027 Background Peak Hour Traffic Volumes

US-95A and Sierra Way

<p>1</p> <p>3(0) ↓</p> <p>175(238) ↓</p> <p>9(10) ↓</p>	<p>11(19) ↗</p> <p>2(12) ↖</p>
<p>1(0) →</p> <p>1(2) ↓</p>	<p>0(1) ↗</p> <p>164(204) ↑</p> <p>1(3) ↘</p>

Sierra Way and Project Access Road

<p>2</p> <p>← 0(52)</p>
<p>65(5) →</p>

US-95A and Penrose Lane

<p>3</p> <p>4(1) ↓</p> <p>170(258) ↓</p> <p>1(2) ↓</p>	<p>3(0) ↗</p> <p>2(2) ↖</p> <p>12(10) ↖</p>
<p>4(3) ↘</p> <p>3(2) ↓</p> <p>14(12) ↓</p>	<p>16(10) ↗</p> <p>162(203) ↑</p> <p>8(12) ↘</p>

Penrose Lane and Project Access Road

<p>4</p> <p>← 6(3)</p>
<p>9(5) →</p>

US-95A and Bowman Lane

<p>5</p> <p>24(14) ↓</p> <p>188(265) ↓</p> <p>2(0) ↓</p>	<p>6(3) ↗</p> <p>3(0) ↖</p> <p>3(3) ↖</p>
<p>12(22) ↘</p> <p>2(0) ↓</p> <p>23(69) ↓</p>	<p>34(17) ↗</p> <p>220(170) ↑</p> <p>13(7) ↘</p>

US-95A and Miller Lane

<p>6</p> <p>← 204(269)</p> <p>17(30) ↓</p>	<p>30(47) ↗</p> <p>10(8) ↖</p>
	<p>175(207) ↑</p> <p>4(3) ↘</p>

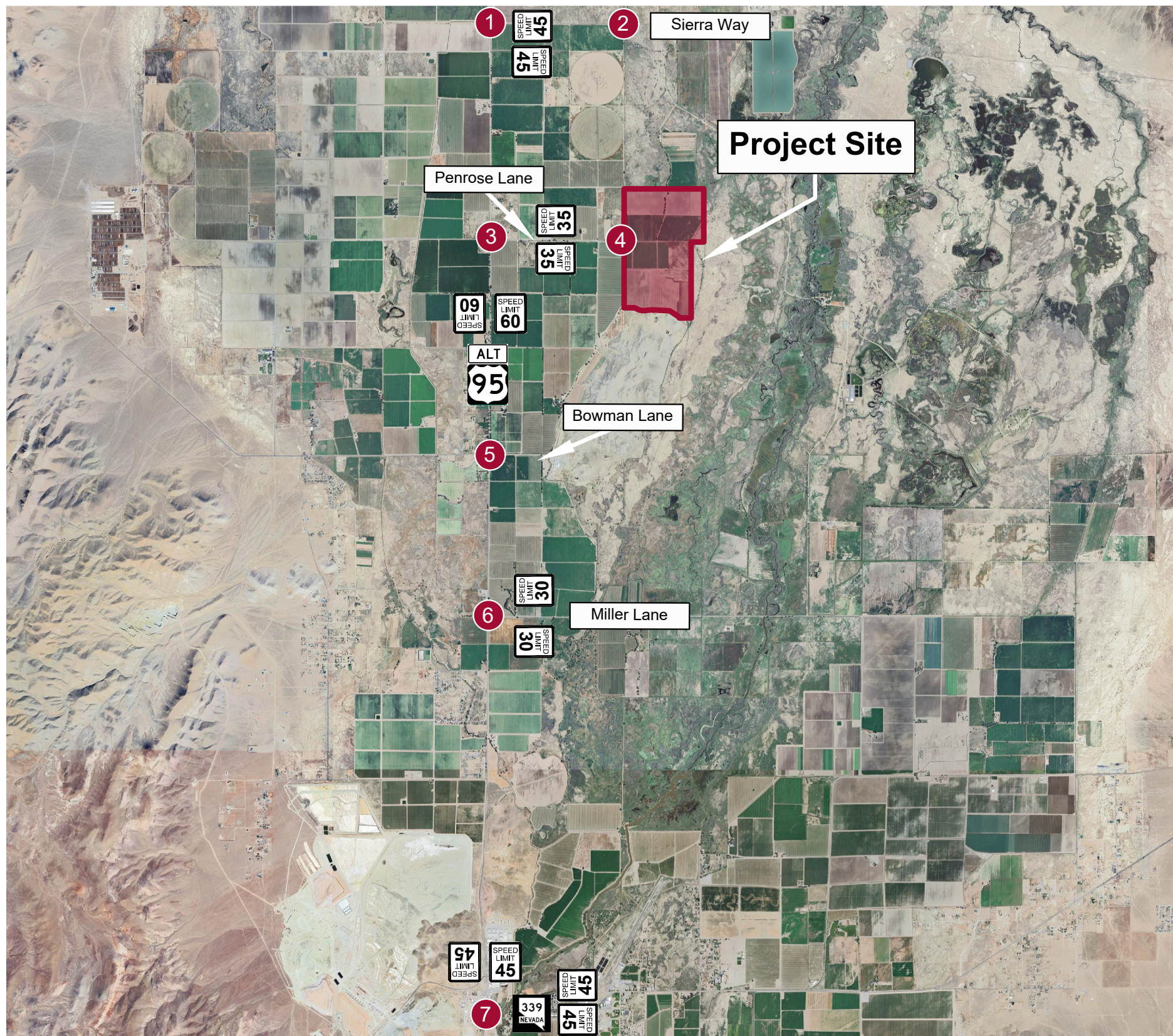
US-95A and SR-339

<p>7</p> <p>109(163) ↓</p> <p>213(208) ↓</p>	<p>134(177) ↗</p> <p>0(2) ↖</p> <p>32(74) ↖</p>
<p>0(1) ↘</p> <p>1(0) ↓</p>	<p>133(116) ↑</p> <p>54(68) ↘</p>

Legend

- # Study Area Key Intersection
- X Project Access Drive
- ← xx (xx) AM(PM) Peak Hour Volume

Figure 5
Kimley»Horn



Source: Google Earth Image Date: July 2024

Monarch 2027 Background Plus Project Lane Configuration and Control

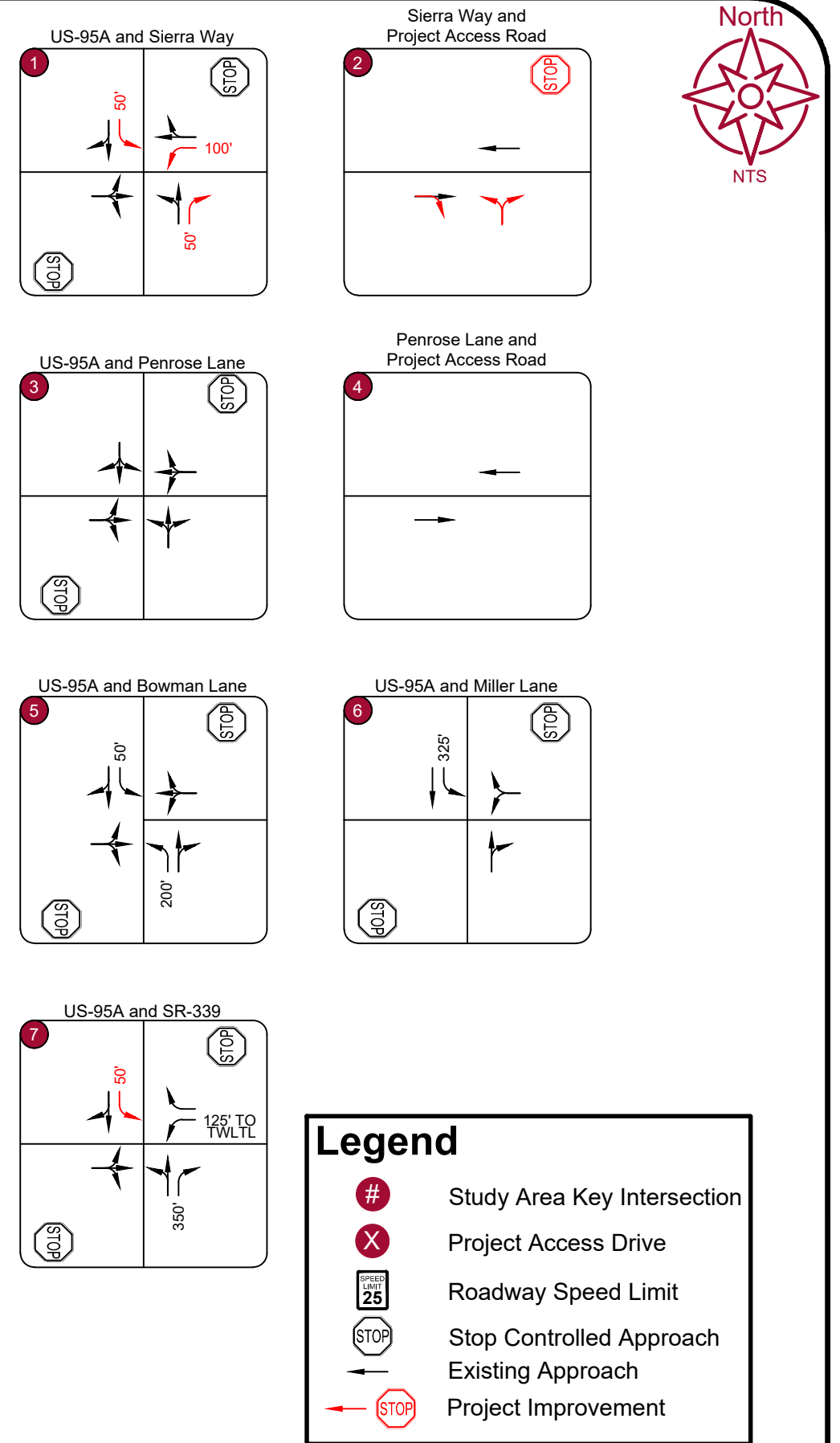
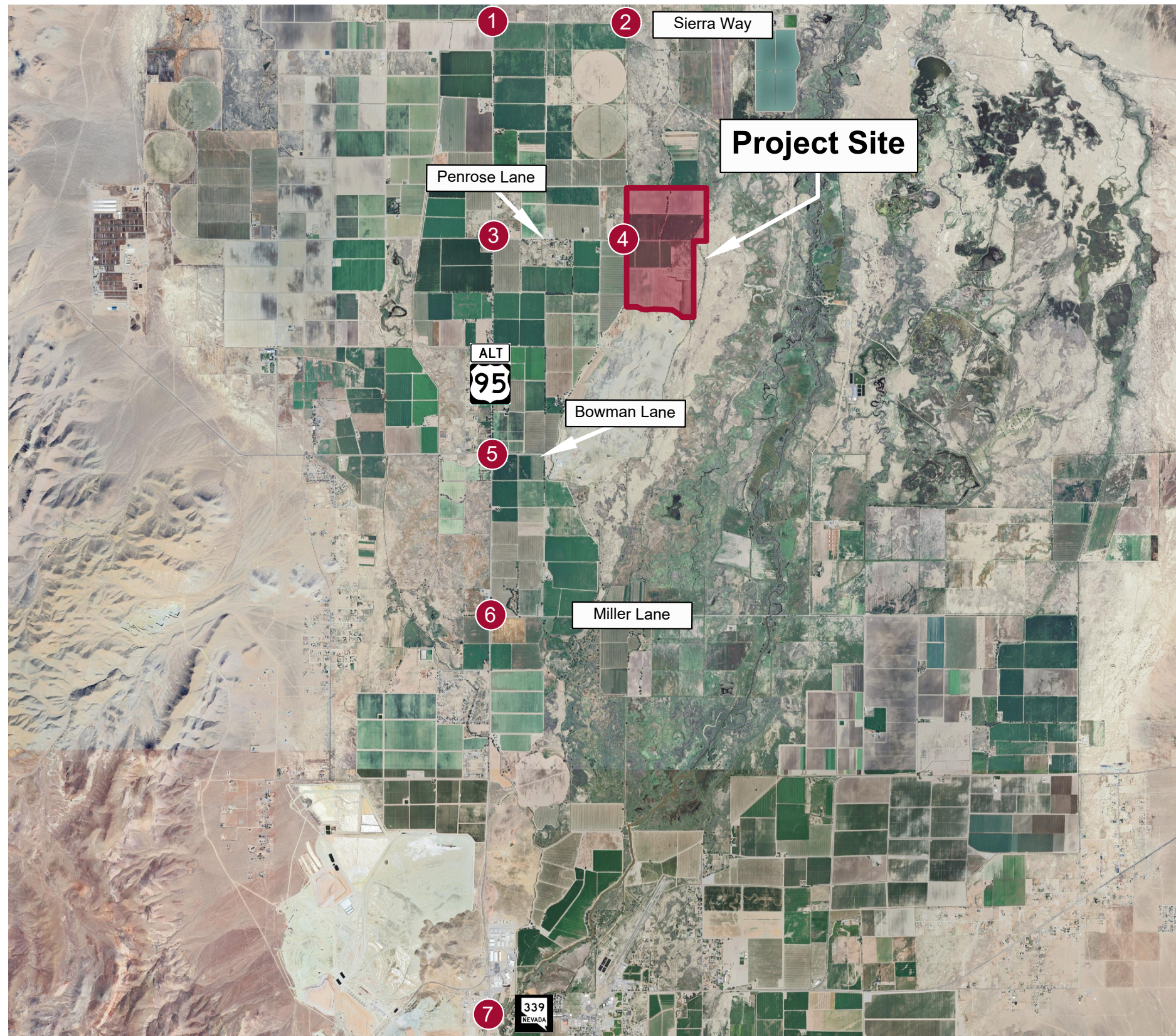


Figure 6
Kimley»Horn



Source: Google Earth Image Date: July 2024

Monarch 2047 Horizon Year Peak Hour Traffic Volumes

US-95A and Sierra Way

<p>1</p> <p>4(0) ↙ ← 214(290) ↘ 11(12)</p>	<p>↗ 14(24) ← 2(15)</p>
<p>1(0) → 1(2) ↘</p>	<p>↗ 0(1) ↖ 200(249) ↘ 1(4)</p>

Sierra Way and Project Access Road

<p>2</p> <p>← 0(63)</p>
<p>80(6) →</p>

US-95A and Penrose Lane

<p>3</p> <p>5(1) ↙ ← 208(315) ↘ 1(2)</p>	<p>↗ 4(0) ← 2(2) ↘ 15(12)</p>
<p>5(4) ↙ 4(2) ↘ 17(15) ↘</p>	<p>↗ 20(12) ↖ 198(248) ↘ 10(15)</p>

Penrose Lane and Project Access Road

<p>4</p> <p>← 7(4)</p>
<p>11(6) →</p>

US-95A and Bowman Lane

<p>5</p> <p>30(17) ↙ ← 229(324) ↘ 2(0)</p>	<p>↗ 7(4) ← 4(0) ↘ 4(4)</p>
<p>15(27) ↙ 2(0) ↘ 29(85) ↘</p>	<p>↗ 41(21) ↖ 269(208) ↘ 16(9)</p>

US-95A and Miller Lane

<p>6</p> <p>← 249(329) ↘ 21(36)</p>	<p>↗ 36(57) ← 12(10)</p>
	<p>↗ 214(253) ↘ 5(4)</p>

US-95A and SR-339

<p>7</p> <p>← 133(199) ↘ 260(254)</p>	<p>↗ 163(217) ← 0(2) ↘ 39(91)</p>
<p>0(1) ↙ 1(0) ↘</p>	<p>↗ 162(142) ↘ 66(83)</p>

Legend

- # Study Area Key Intersection
- X Project Access Drive
- ← xx (xx) AM(PM) Peak Hour Volume

3.6. Trip Generation

The proposed Monarch Data Center is expected to have more trip generation during the construction phase than after full project buildout. At the request of NDOT and Lyon County, trip generation calculations and analysis were conducted for the project in both the construction phase and project buildout.

The Monarch Data Center trip generation for construction was calculated using data collected from previously completed studies for data centers. The construction trip generation used in those studies was scaled appropriately for the Monarch Data Center based on overall project building square footage. It is anticipated that the proposed project will generate 1,221 AM construction trips and 1,268 PM construction trips at peak levels during the construction phase, as shown in **Table 1**. It is anticipated that the Monarch Data Center will have approximately 4.6 million square feet of floor space after completion. Calculations are provided in **Appendix D**.

Table 1 – Trip Generation – Construction

ITE Code	Description	Size	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
NA	Data Center Construction	4.6 million SF	1,163	58	1,121	81	1,188	1,268

Source: *Previously completed data center studies*

ITE Trip Generation Manual, 11th Edition (ITE Land Use Code 160 – Data Center) was used to estimate the trips generated by the proposed project at project buildout. The ITE Trip Generation Manual is a standard reference used by jurisdictions throughout the United States and is based on actual trip generation studies performed at numerous locations in areas of various populations.

The proposed project is anticipated to generate 506 AM and 414 PM peak hour trips, as summarized in **Table 2**. Calculations are provided in **Appendix D**.

Table 2 – Trip Generation – Typical Operations

ITE Code	Description	Size	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
160	Data Center	4.6 million SF	278	228	506	124	290	414

Source: *ITE Trip Generation Manual, 11th Edition*

While ITE has a data center land use code, the size of this proposed development is significantly larger than the sites studied and reported in the trip generation manual. The trip generation calculated in **Table 2** is expected to be a conservative estimate as the consolidation of multiple data centers onto one campus is expected to create efficiencies that result in less overall trip generation. For a conservative evaluation, the ITE rates are used for this study.

3.7. Trip Distribution

The study area street network characteristics, including existing traffic patterns, expected street network, access to the regional facility (US-95A), and engineering judgment, were used to determine the distribution of construction generated traffic. The directional distribution of traffic is a means to quantify the percentage of site-generated construction traffic that approaches the site from a given direction and departs the site in the same or different direction.

It is anticipated that the trip distribution for construction traffic and typical operations will differ. Construction traffic was evaluated for two different scenarios. Construction Scenario 1 refers to the distribution of construction traffic using Sierra Way and Bowman Lane as access to the project site. Construction Scenario 2 refers to the distribution of construction traffic using Sierra Way as the only access to the project site. **Figure 8** and **Figure 9** show the trip distribution at study area intersections and project access drive for construction traffic Scenarios 1 and 2, respectively. **Figure 10** shows the trip distribution at the study area intersections and project access drive for typical operations.

3.8. Traffic Assignment

3.8.1. Construction Scenario 1 Traffic Assignment

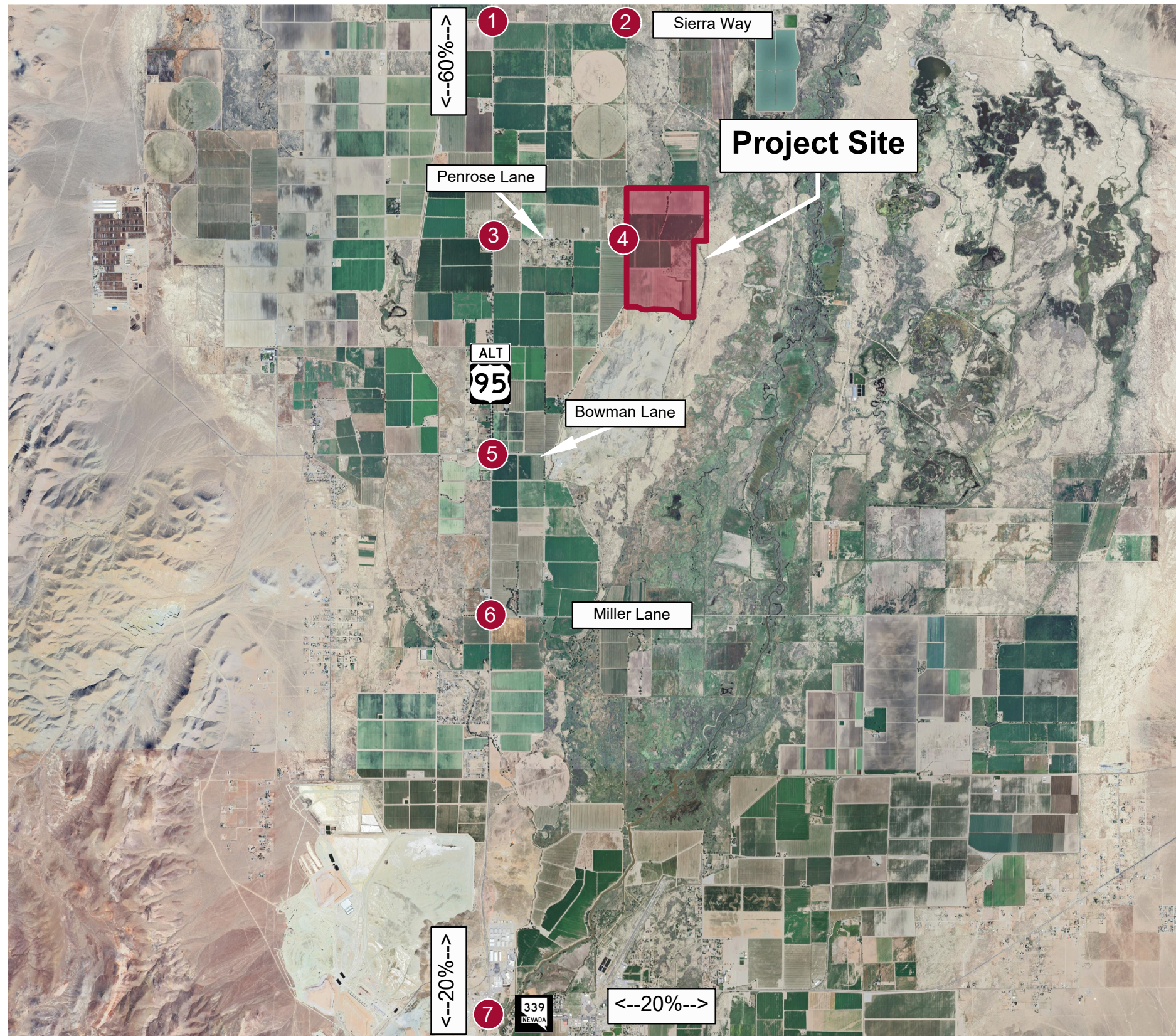
Assignment of project construction traffic was obtained by applying the developed trip distribution in **Figure 8** to the estimated construction traffic generation in **Table 1**. As previously noted, Construction Scenario 1 refers to the distribution of construction traffic using Sierra Way and Bowman Lane as access to the project site. The construction traffic assignment is illustrated in **Figure 11** for the study area intersections and project access drives. It should be noted that the entering and exiting trips at the project access drive were rounded up to the nearest whole number. Therefore, the number of trips assigned to the project driveway in **Figure 11** may differ slightly from the total trip generation.

3.8.2. Construction Scenario 2 Traffic Assignment

Assignment of project construction traffic was obtained by applying the developed trip distribution in **Figure 9** to the estimated construction traffic generation in **Table 1**. As previously noted, Construction Scenario 2 refers to the distribution of construction traffic using Sierra Way as the only access to the project site. The construction traffic assignment is illustrated in **Figure 12** for the study area intersections and project access drive. It should be noted that the entering and exiting trips at the project access drive were rounded up to the nearest whole number. Therefore, the number of trips assigned to the project driveway in **Figure 12** may differ slightly from the total trip generation.

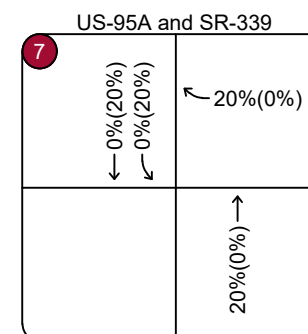
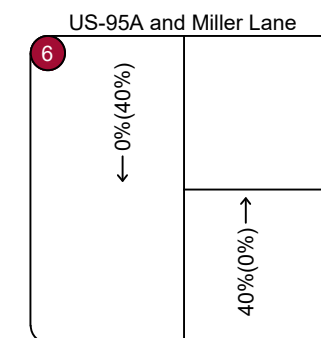
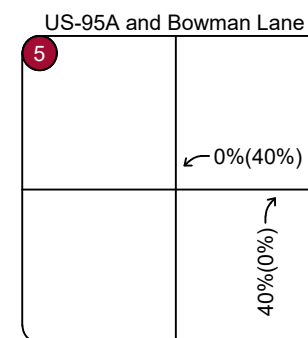
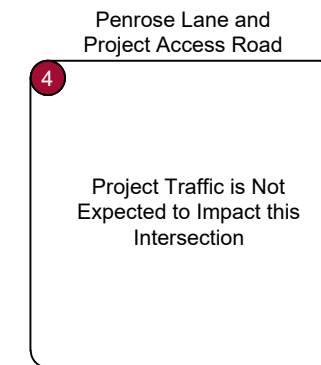
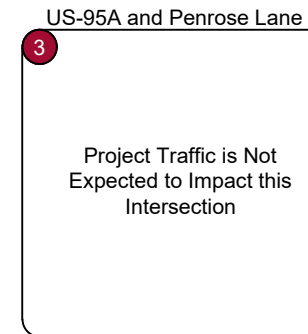
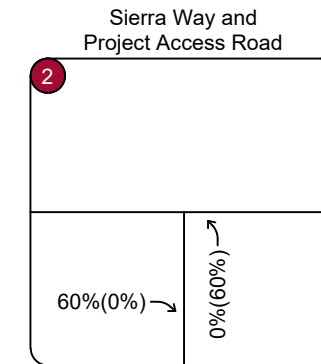
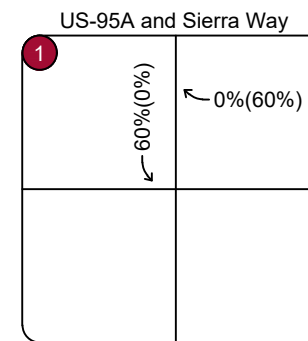
3.8.3. Typical Operations Traffic Assignment

Assignment of typical operations project traffic was obtained by applying the developed trip distribution in **Figure 10** to the estimated full buildout typical operations traffic generation in **Table 2**. The typical operation traffic assignment is illustrated in **Figure 13** for the study area intersections and project access drive. It should be noted that the entering and exiting trips at the project access drives were rounded up to the nearest whole number. Therefore, the number of trips assigned to the project driveways in **Figure 13** may differ slightly from the total trip generation.



Source: Google Earth Image Date: July 2024

Monarch Project Trip Distribution - Construction Scenario 1

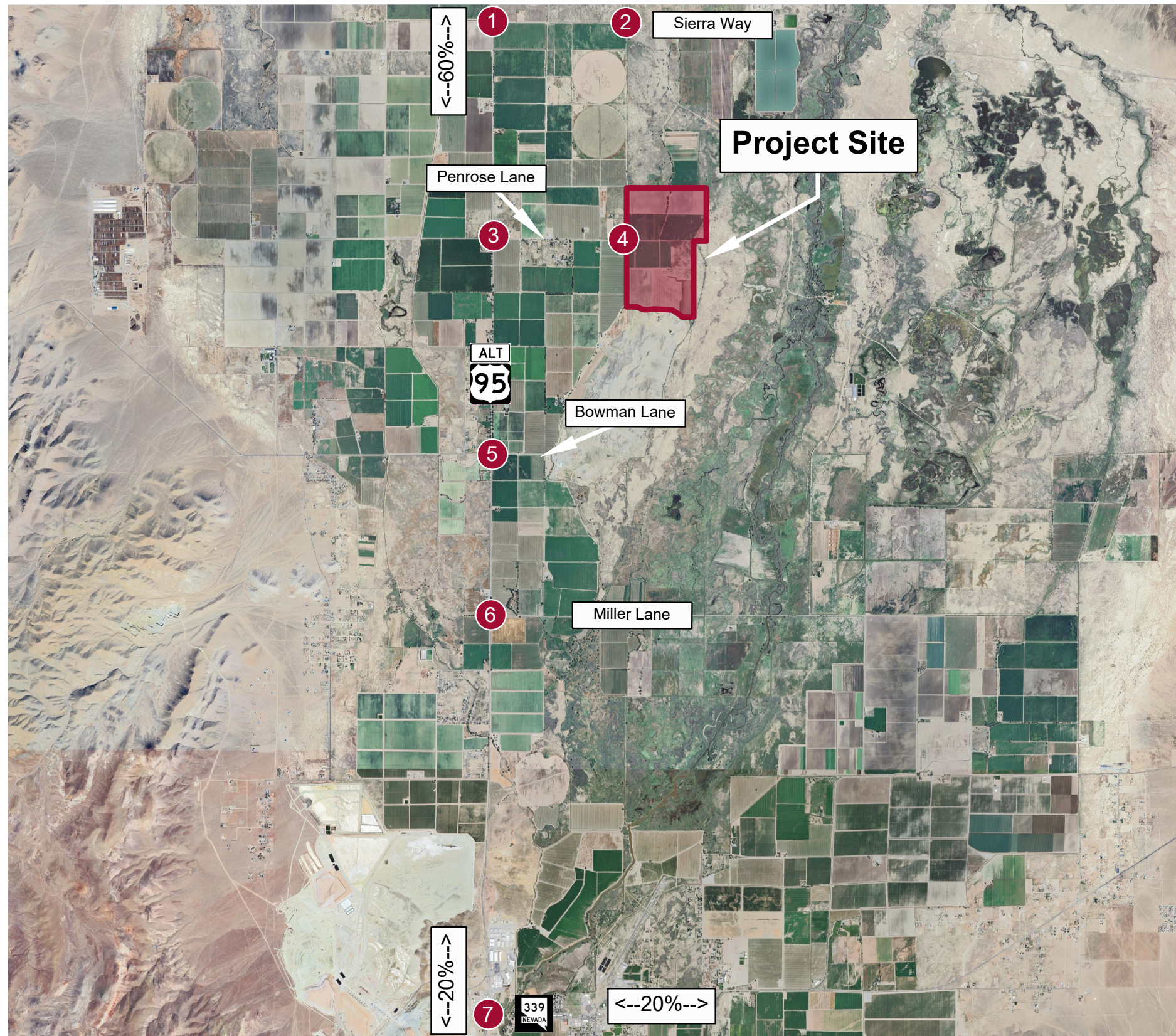


Legend

- # Study Area Key Intersection
- X Project Access Drive
- $\leftarrow\text{--}xx\%\text{--}\rightarrow$ Global Peak Hour Trip Distribution
- $\leftarrow xx\%(xx\%)$ IN(OUT) Peak Hour Trip Distribution

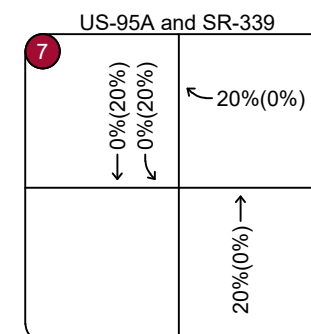
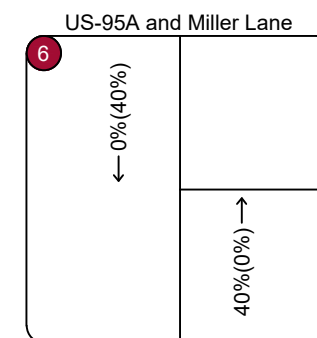
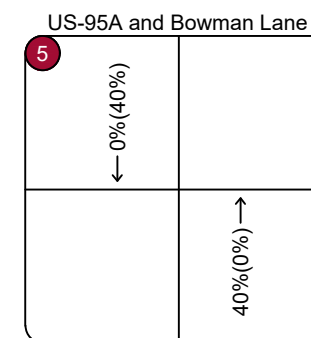
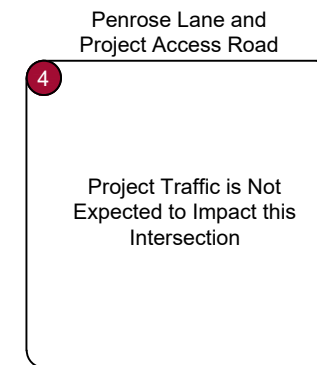
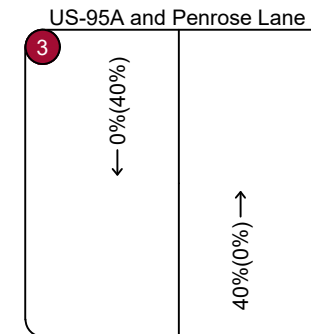
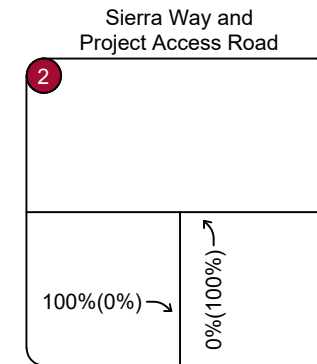
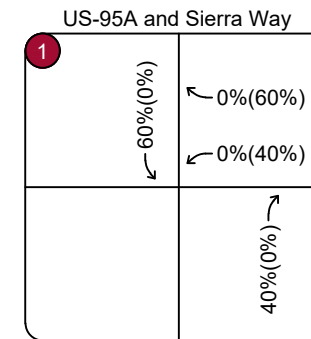


Figure 8
Kimley»Horn



Source: Google Earth Image Date: July 2024

Monarch Project Trip Distribution - Construction Scenario 2

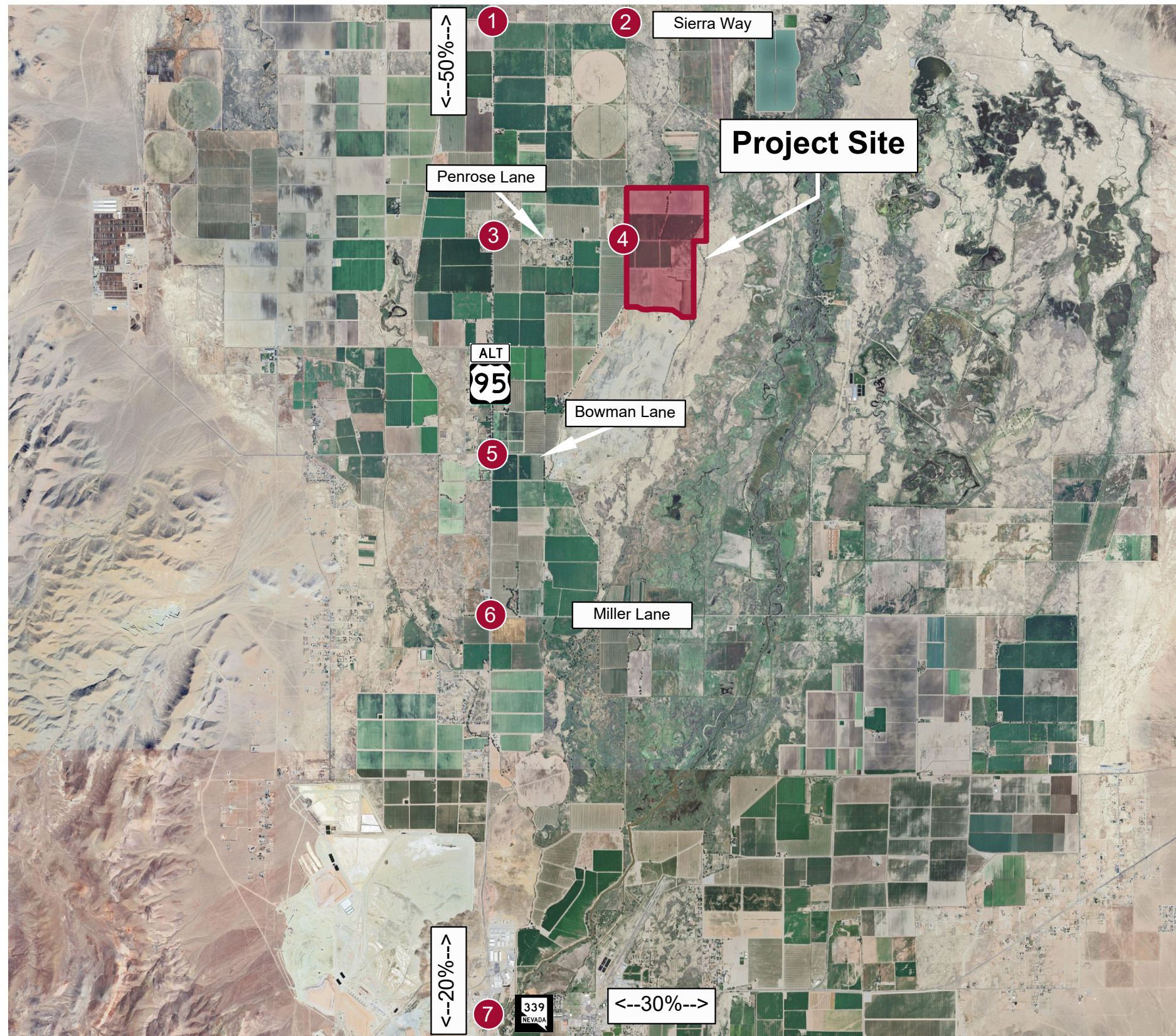


Legend

- # Study Area Key Intersection
- X Project Access Drive
- $\leftarrow\text{--}xx\%\text{--}\rightarrow$ Global Peak Hour Trip Distribution
- $\leftarrow\text{--}xx\%(xx\%)$ IN(OUT) Peak Hour Trip Distribution

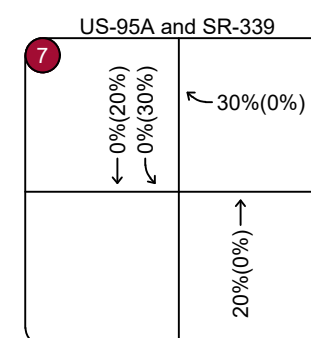
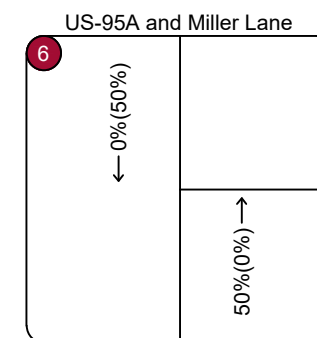
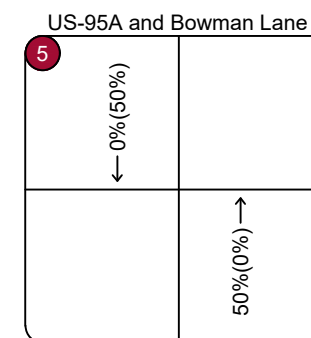
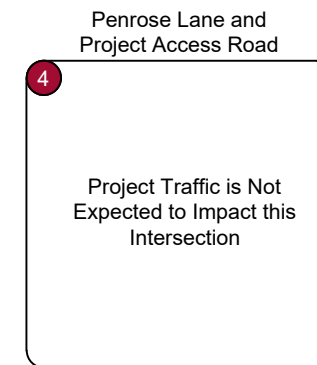
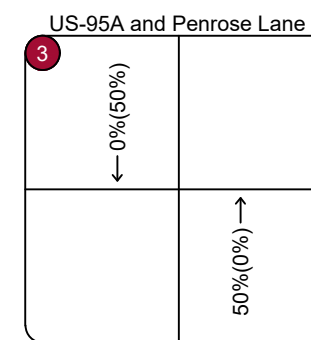
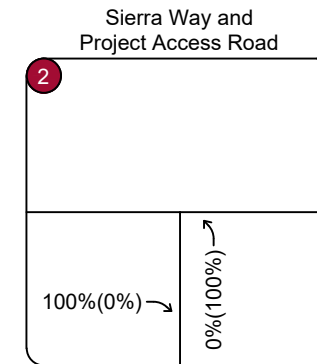
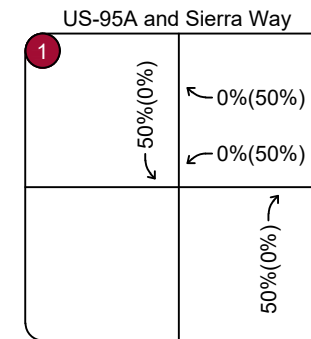


Figure 9
Kimley»Horn



Source: Google Earth Image Date: July 2024

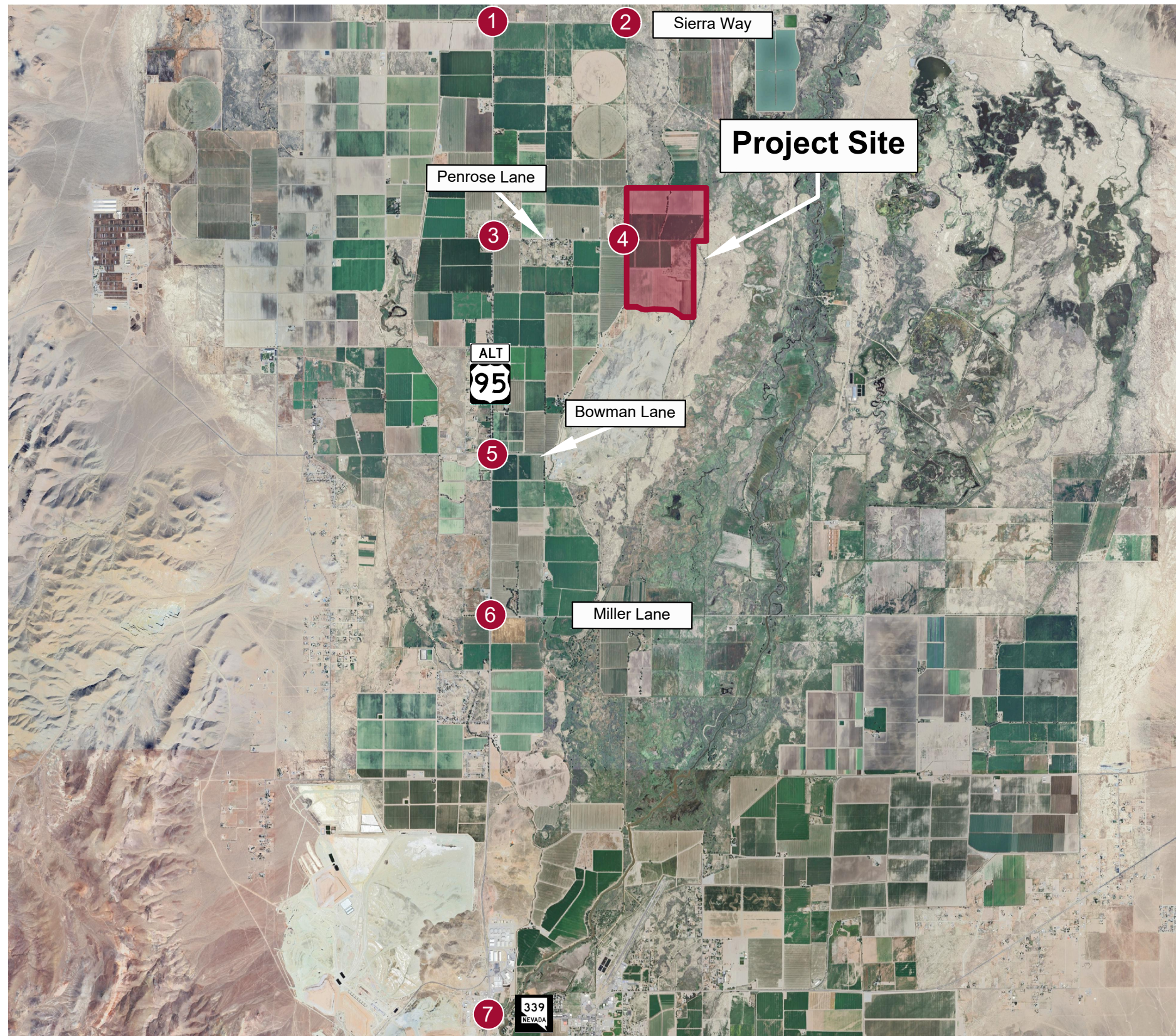
Monarch Project Trip Distribution - Typical Operations



Legend

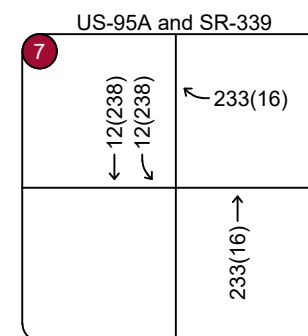
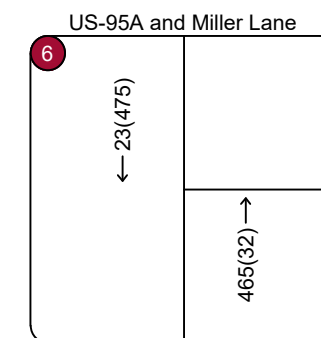
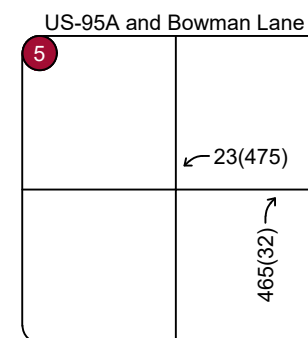
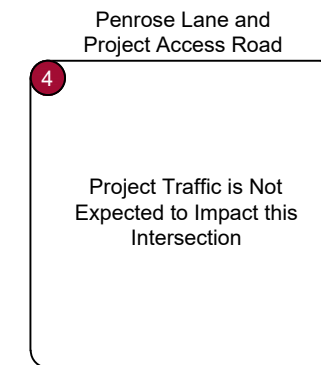
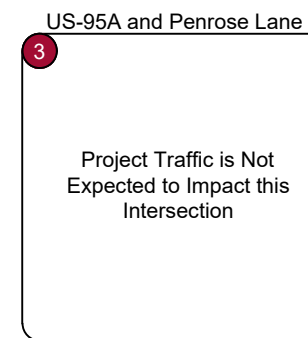
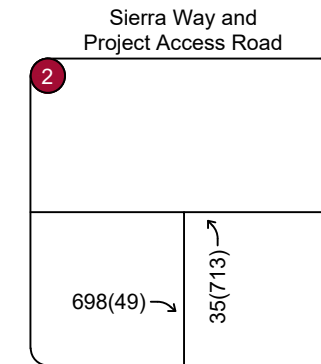
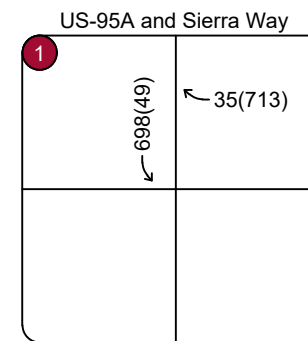
- # Study Area Key Intersection
- X Project Access Drive
- <--xx%--> Global Peak Hour Trip Distribution
- ← xx%(xx%) IN(OUT) Peak Hour Trip Distribution

Figure 10
Kimley»Horn



Source: Google Earth Image Date: July 2024

Monarch Project Traffic Assignment - Construction Scenario 1

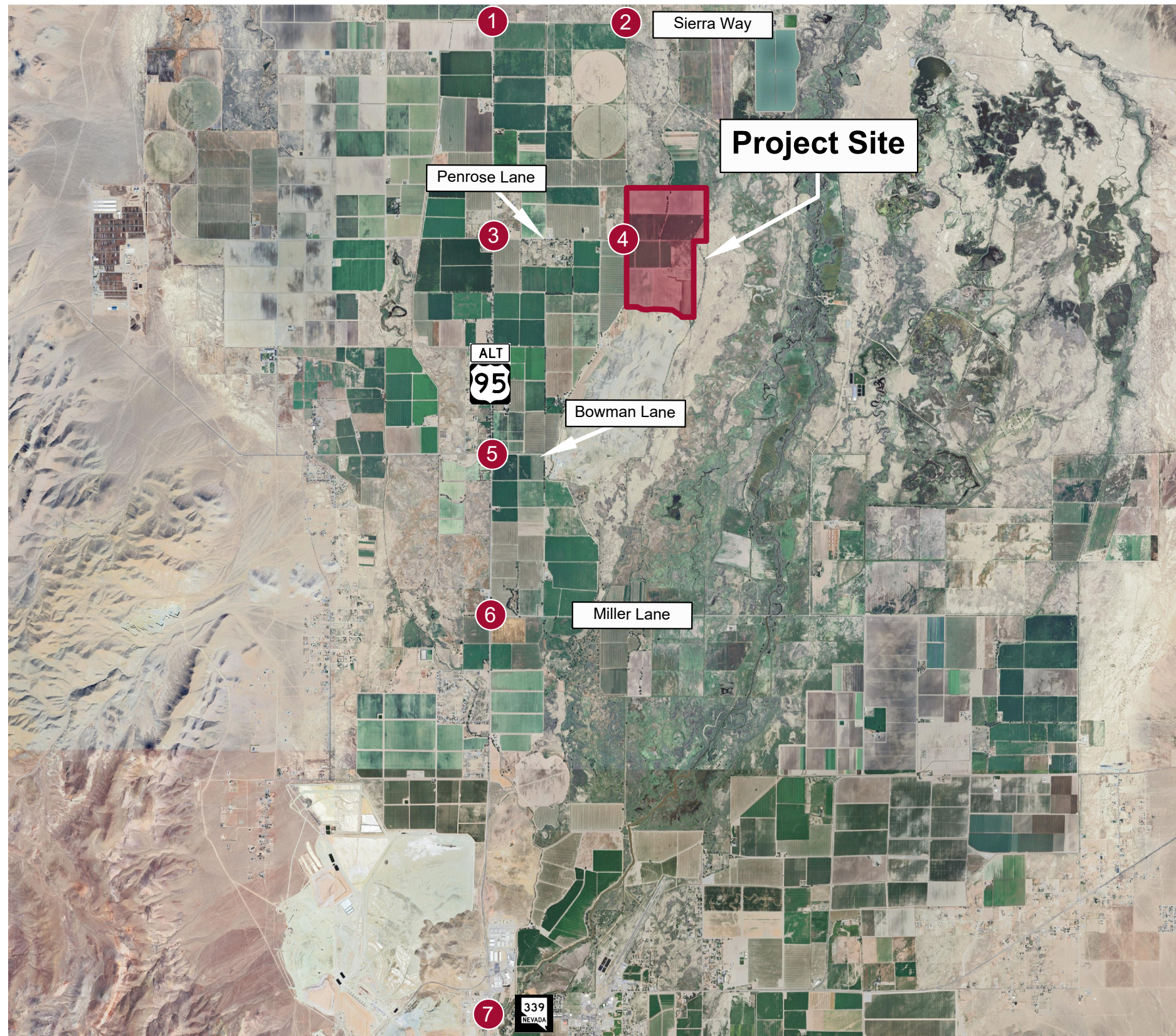


Legend

- # Study Area Key Intersection
- X Project Access Drive
- ← xx (xx) AM(PM) Peak Hour Volume

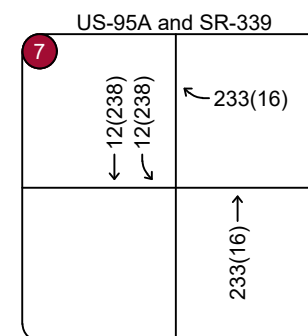
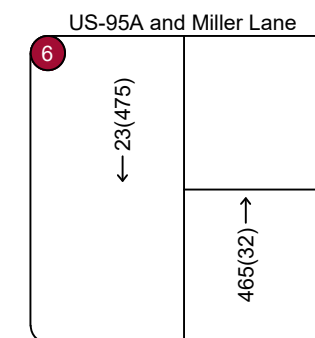
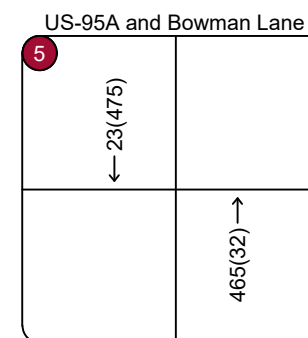
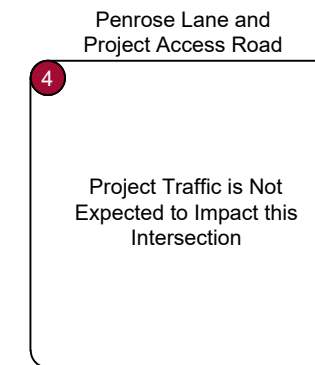
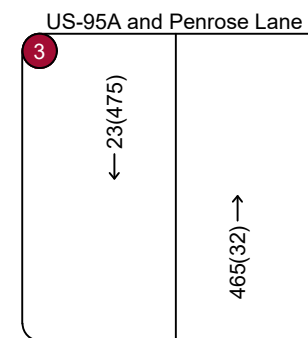
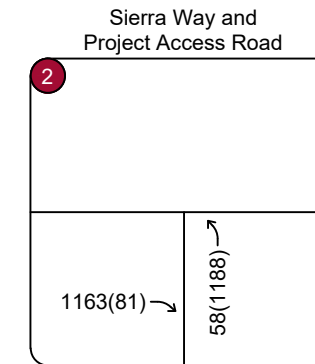
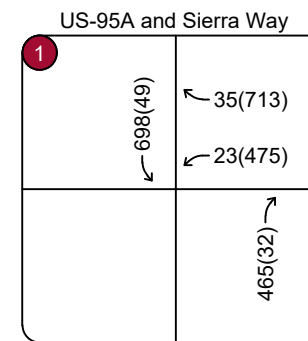


Figure 11
Kimley»Horn



Source: Google Earth Image Date: July 2024

Monarch Project Traffic Assignment - Construction Scenario 2

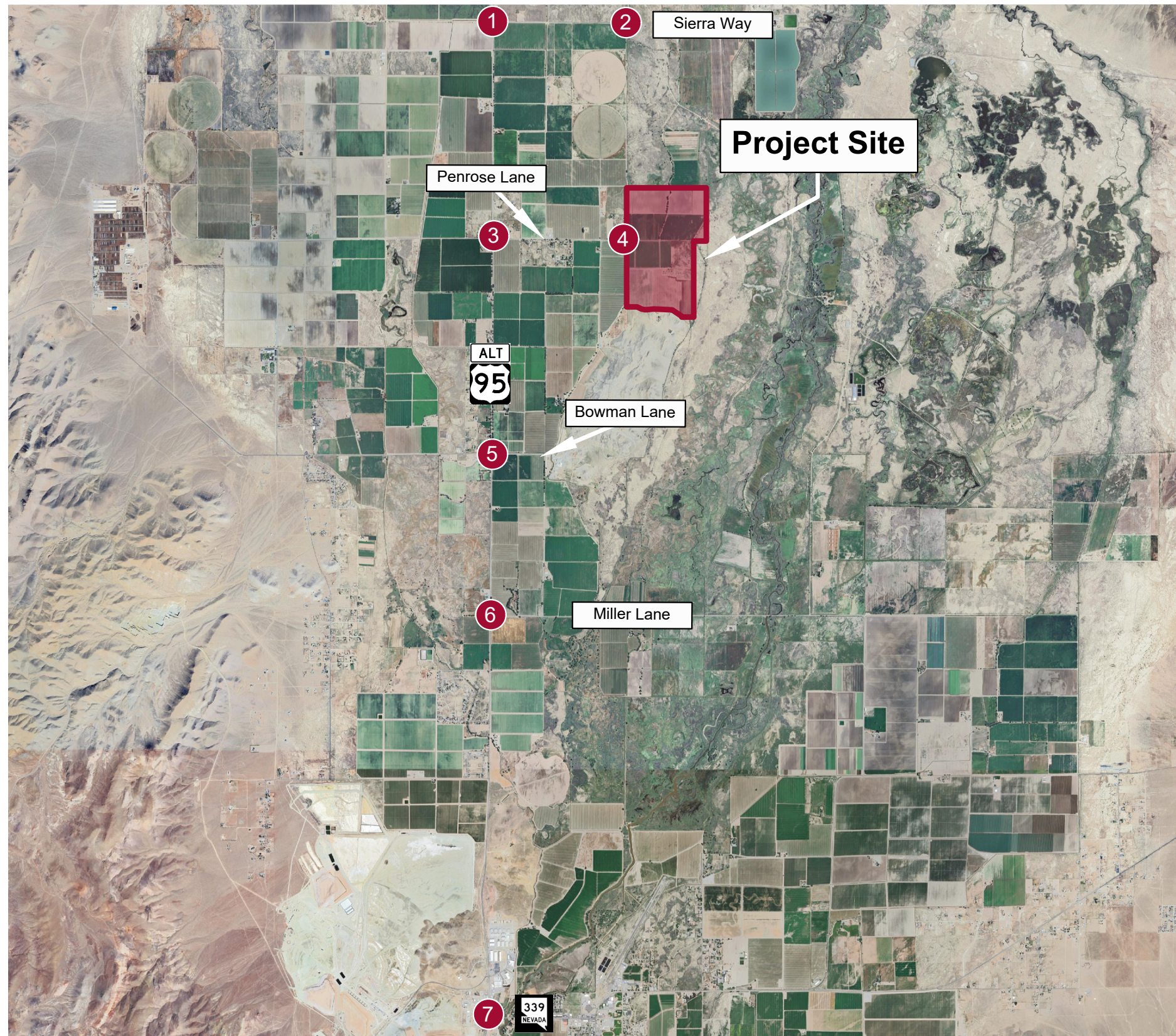


Legend

- # Study Area Key Intersection
- X Project Access Drive
- ← xx (xx) AM(PM) Peak Hour Volume

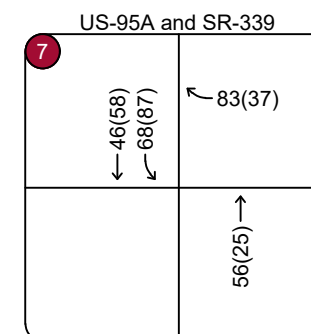
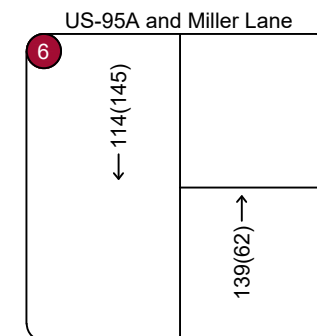
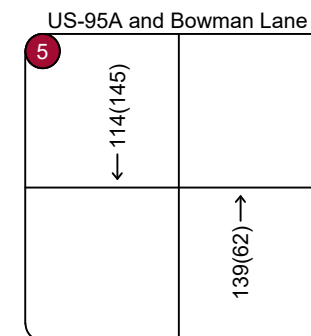
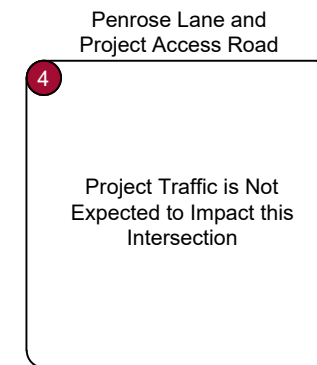
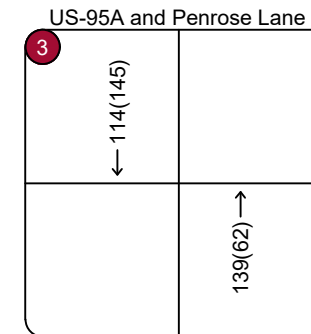
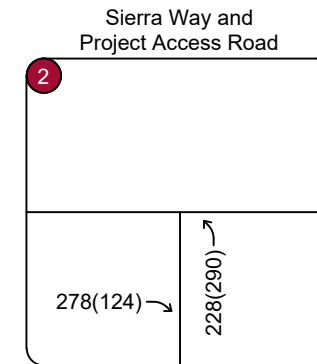
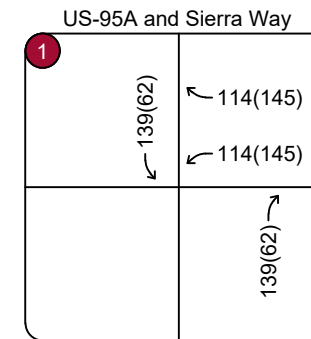


Figure 12
Kimley»Horn



Source: Google Earth Image Date: July 2024

Monarch Project Traffic Assignment - Typical Operations



Legend

- # Study Area Key Intersection
- X Project Access Drive
- ← xx (xx) AM(PM) Peak Hour Volume

Figure 13
Kimley»Horn

3.9. 2027 Background Plus Project Traffic Volumes

3.9.1. 2027 Background Plus Construction Scenario 1 Traffic Volumes

The project generated construction traffic volumes in **Figure 11** were added to the 2027 background peak hour traffic volumes in **Figure 5** to represent estimated traffic conditions during project construction for Scenario 1. The 2027 background plus construction traffic volumes for the study area intersections and project access drives are illustrated in **Figure 14**.

3.9.2. 2027 Background Plus Construction Scenario 2 Traffic Volumes

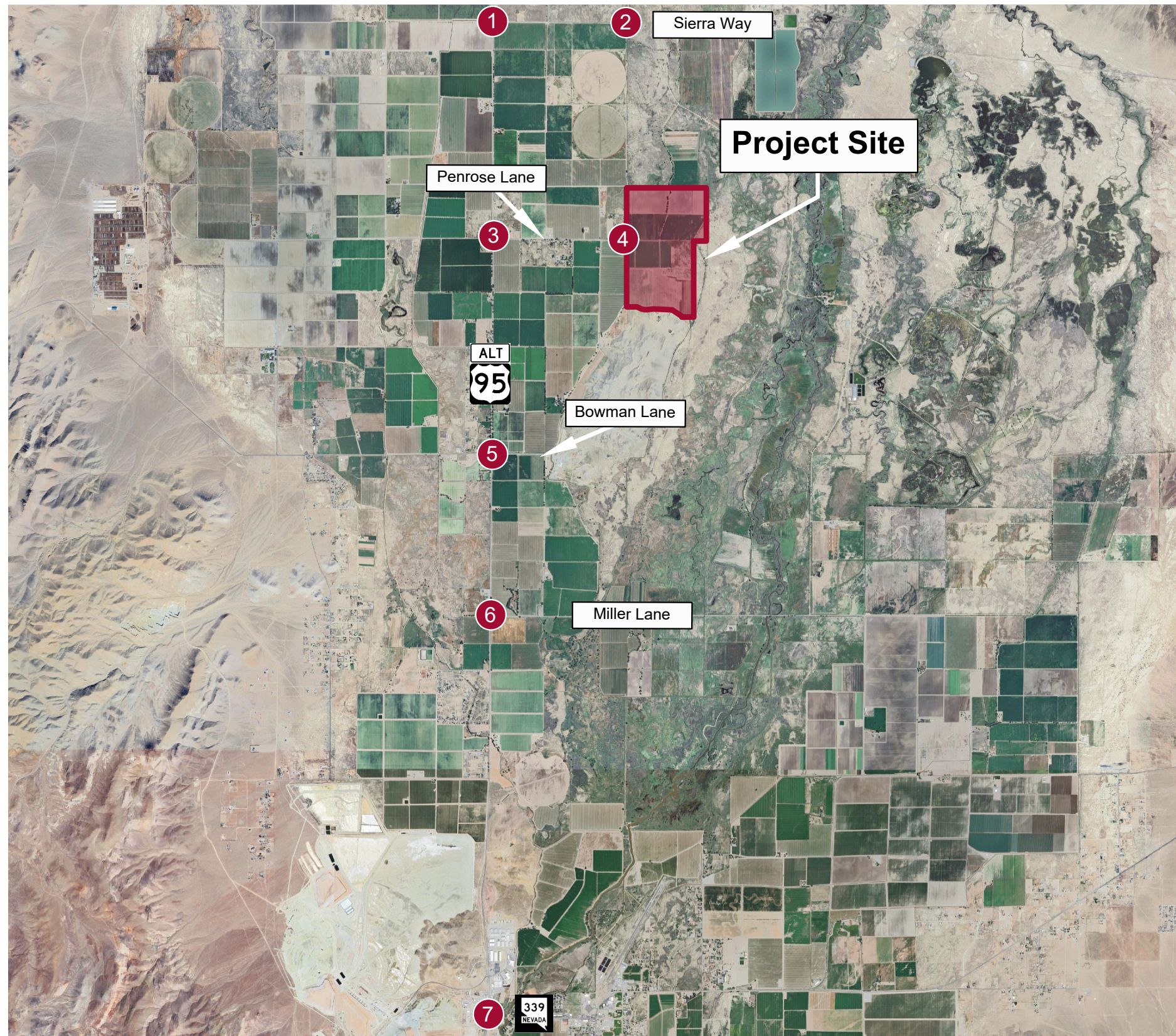
The project generated construction traffic volumes in **Figure 12** were added to the 2027 background peak hour traffic volumes in **Figure 5** to represent estimated traffic conditions during project construction for Scenario 2. The 2027 background plus construction traffic volumes for the study area intersections and project access drives are illustrated in **Figure 15**.

3.9.3. 2027 Background Plus Project Traffic Volumes

The project generated traffic volumes in **Figure 13** were added to the 2027 background traffic volumes in **Figure 5** to represent estimated traffic conditions for the project completion in 2027. The 2027 background plus project total traffic volumes for the study area intersections and project access drives are illustrated in **Figure 16**.

3.10. 2047 Horizon Plus Project Traffic Volumes

The project generated traffic volumes in **Figure 13** were added to the 2047 horizon year traffic volumes in **Figure 7** to represent estimated traffic conditions for 2047. The 2047 horizon plus project total traffic volumes for the study area intersections and project access drives are illustrated in **Figure 17**.



Source: Google Earth Image Date: July 2024

Monarch 2027 Background Plus Construction Scenario 1 Peak Hour Traffic Volumes

US-95A and Sierra Way

<p>1</p> <p>3(0) ↘ 175(238) ← 707(59) ↙</p>	<p>46(732) ↖ 2(12) ↖</p>
<p>1(0) → 1(2) ↘</p>	<p>0(1) ↖ 164(204) ↑ 1(3) ↗</p>

Sierra Way and Project Access Road

<p>2</p> <p>← 0(52)</p>	<p>35(713) ↗</p>
<p>65(5) → 698(49) ↘</p>	

US-95A and Penrose Lane

<p>3</p> <p>4(1) ↘ 170(258) ← 1(2) ↙</p>	<p>3(0) ↖ 2(2) ↖ 12(10) ↖</p>
<p>4(3) ↘ 3(2) ↘ 14(12) ↘</p>	<p>16(10) ↖ 162(203) ↑ 8(12) ↗</p>

Penrose Lane and Project Access Road

<p>4</p> <p>← 6(3)</p>	
<p>9(5) →</p>	

US-95A and Bowman Lane

<p>5</p> <p>24(14) ↘ 188(265) ← 2(0) ↙</p>	<p>6(3) ↖ 3(0) ↖ 26(478) ↖</p>
<p>12(22) ↘ 2(0) ↘ 23(69) ↘</p>	<p>34(17) ↖ 220(170) ↑ 478(39) ↗</p>

US-95A and Miller Lane

<p>6</p> <p>227(744) ↘ 17(30) ↙</p>	<p>30(47) ↖ 10(8) ↖</p>
	<p>640(239) ↑ 4(3) ↗</p>

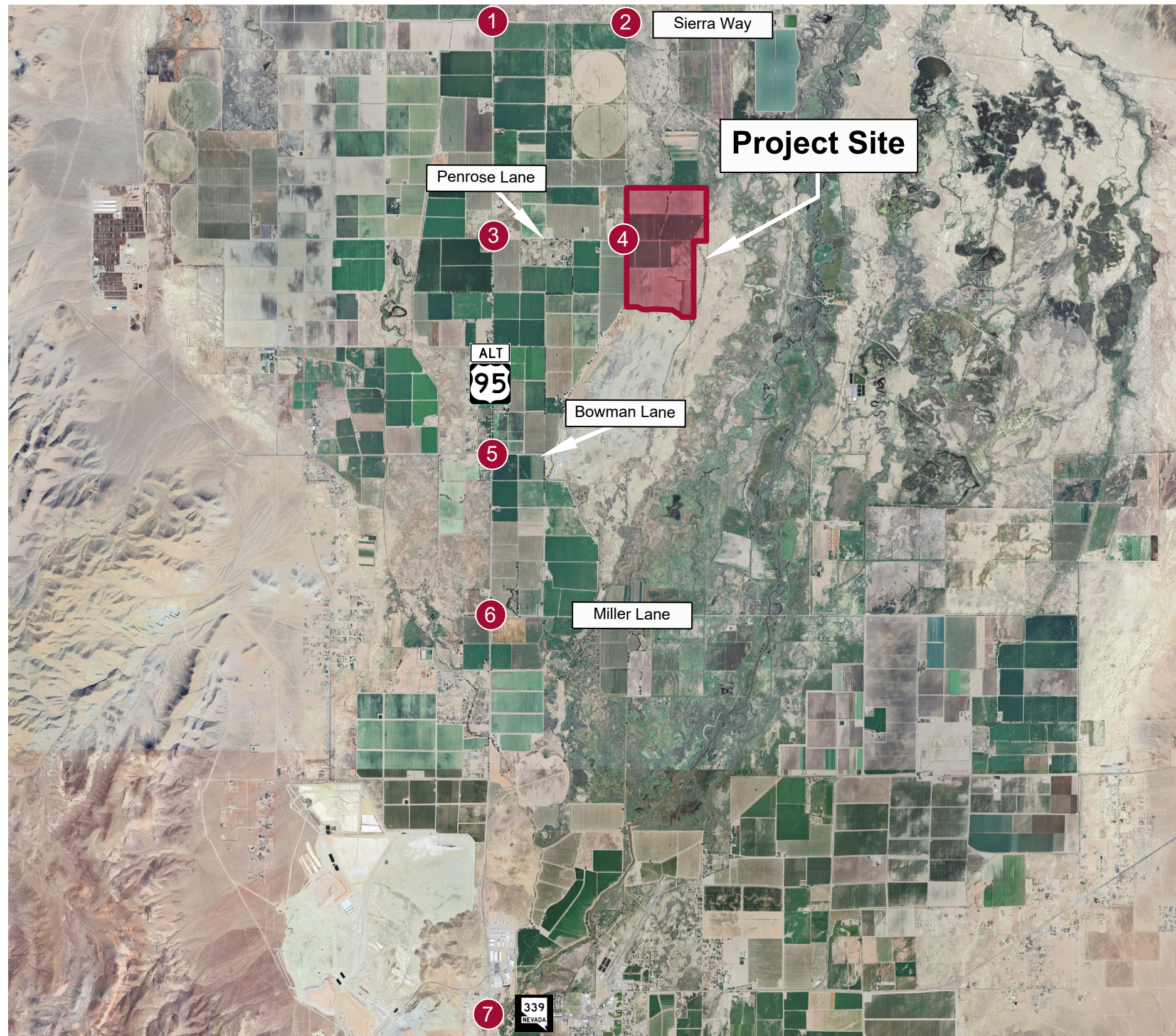
US-95A and SR-339

<p>7</p> <p>121(401) ↘ 225(446) ←</p>	<p>367(193) ↖ 0(2) ↖ 32(74) ↖</p>
<p>0(1) ↘ 1(0) ↘</p>	<p>366(132) ↑ 54(68) ↗</p>

Legend

- # Study Area Key Intersection
- X Project Access Drive
- ← xx (xx) AM(PM) Peak Hour Volume

Figure 14
Kimley»Horn



Source: Google Earth Image Date: July 2024

Monarch 2027 Background Plus Construction Scenario 2 Peak Hour Traffic Volumes

US-95A and Sierra Way

<p>1</p> <p>3(0) ↓</p> <p>175(238) ↓</p> <p>707(59) ↓</p>	<p>46(732) ↖</p> <p>25(487) ↖</p>
<p>1(0) →</p> <p>1(2) ↓</p>	<p>0(1) ↗</p> <p>164(204) ↗</p> <p>466(35) ↗</p>

Sierra Way and Project Access Road

<p>2</p> <p>← 0(52)</p>	<p>58(1188) ↗</p>
<p>65(5) →</p> <p>1163(81) ↓</p>	

US-95A and Penrose Lane

<p>3</p> <p>4(1) ↓</p> <p>193(733) ↓</p> <p>1(2) ↓</p>	<p>3(0) ↗</p> <p>2(2) ↗</p> <p>12(10) ↗</p>
<p>4(3) ↘</p> <p>3(2) ↘</p> <p>14(12) ↓</p>	<p>16(10) ↗</p> <p>627(235) ↗</p> <p>8(12) ↗</p>

Penrose Lane and Project Access Road

<p>4</p> <p>← 6(3)</p>	
<p>9(5) →</p>	

US-95A and Bowman Lane

<p>5</p> <p>24(14) ↓</p> <p>211(740) ↓</p> <p>2(0) ↓</p>	<p>6(3) ↗</p> <p>3(0) ↗</p> <p>3(3) ↗</p>
<p>12(22) ↘</p> <p>2(0) ↘</p> <p>23(69) ↓</p>	<p>34(17) ↗</p> <p>685(202) ↗</p> <p>13(7) ↗</p>

US-95A and Miller Lane

<p>6</p> <p>← 227(744)</p> <p>17(30) ↓</p>	<p>30(47) ↗</p> <p>10(8) ↗</p>
	<p>640(239) ↗</p> <p>4(3) ↗</p>

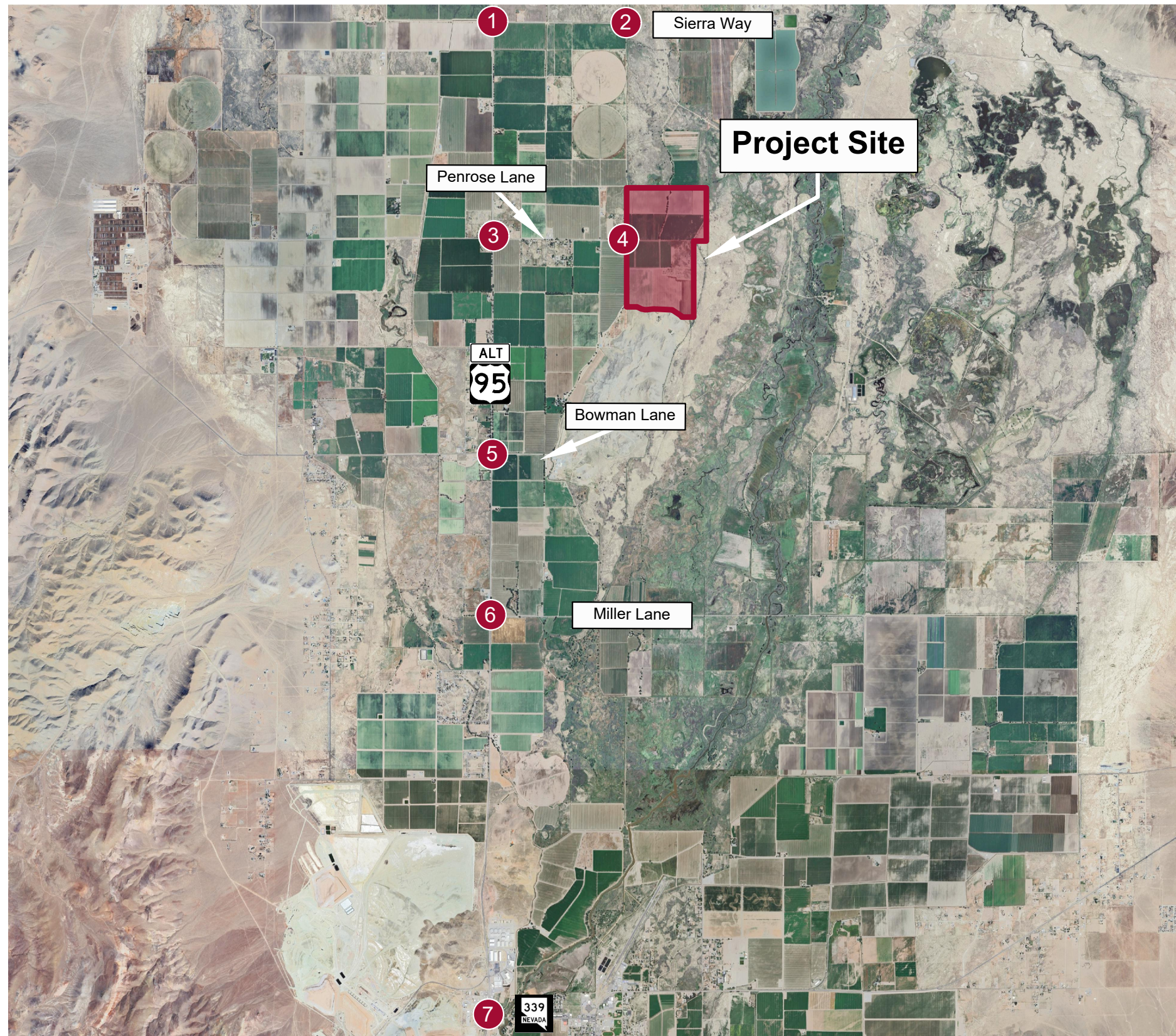
US-95A and SR-339

<p>7</p> <p>← 121(401)</p> <p>225(446) ↓</p>	<p>367(193) ↗</p> <p>0(2) ↗</p> <p>32(74) ↗</p>
<p>0(1) ↘</p> <p>1(0) ↓</p>	<p>366(132) ↗</p> <p>54(68) ↗</p>

Legend

- # Study Area Key Intersection
- X Project Access Drive
- ← xx (xx) AM(PM) Peak Hour Volume

Figure 15
Kimley»Horn



Source: Google Earth Image Date: July 2024

Monarch 2027 Background Plus Project Peak Hour Traffic Volumes

US-95A and Sierra Way

<p>1</p> <p>3(0) ← 175(238) ← 148(72) ←</p>	<p>125(164) ↗ 116(157) ↗</p>
<p>1(0) → 1(2) ↓</p>	<p>0(1) ↖ 164(204) ↖ 140(65) ↖</p>

Sierra Way and Project Access Road

<p>2</p> <p>← 0(52)</p>	<p>228(290) →</p>
<p>65(5) → 278(124) ↓</p>	

US-95A and Penrose Lane

<p>3</p> <p>4(1) ← 284(403) ← 1(2) ←</p>	<p>3(0) ↗ 2(2) ↗ 12(10) ↗</p>
<p>4(3) → 3(2) ↓ 14(12) ↓</p>	<p>16(10) ↖ 301(265) ↖ 8(12) ↖</p>

Penrose Lane and Project Access Road

<p>4</p> <p>← 6(3)</p>	
<p>9(5) →</p>	

US-95A and Bowman Lane

<p>5</p> <p>24(14) ← 302(410) ← 2(0) ←</p>	<p>6(3) ↗ 3(0) ↗ 3(3) ↗</p>
<p>12(22) → 2(0) ↓ 23(69) ↓</p>	<p>34(17) ↖ 399(232) ↖ 13(7) ↖</p>

US-95A and Miller Lane

<p>6</p> <p>318(414) ← 17(30) ←</p>	<p>30(47) ↗ 10(8) ↗</p>
	<p>314(269) ↖ 4(3) ↖</p>

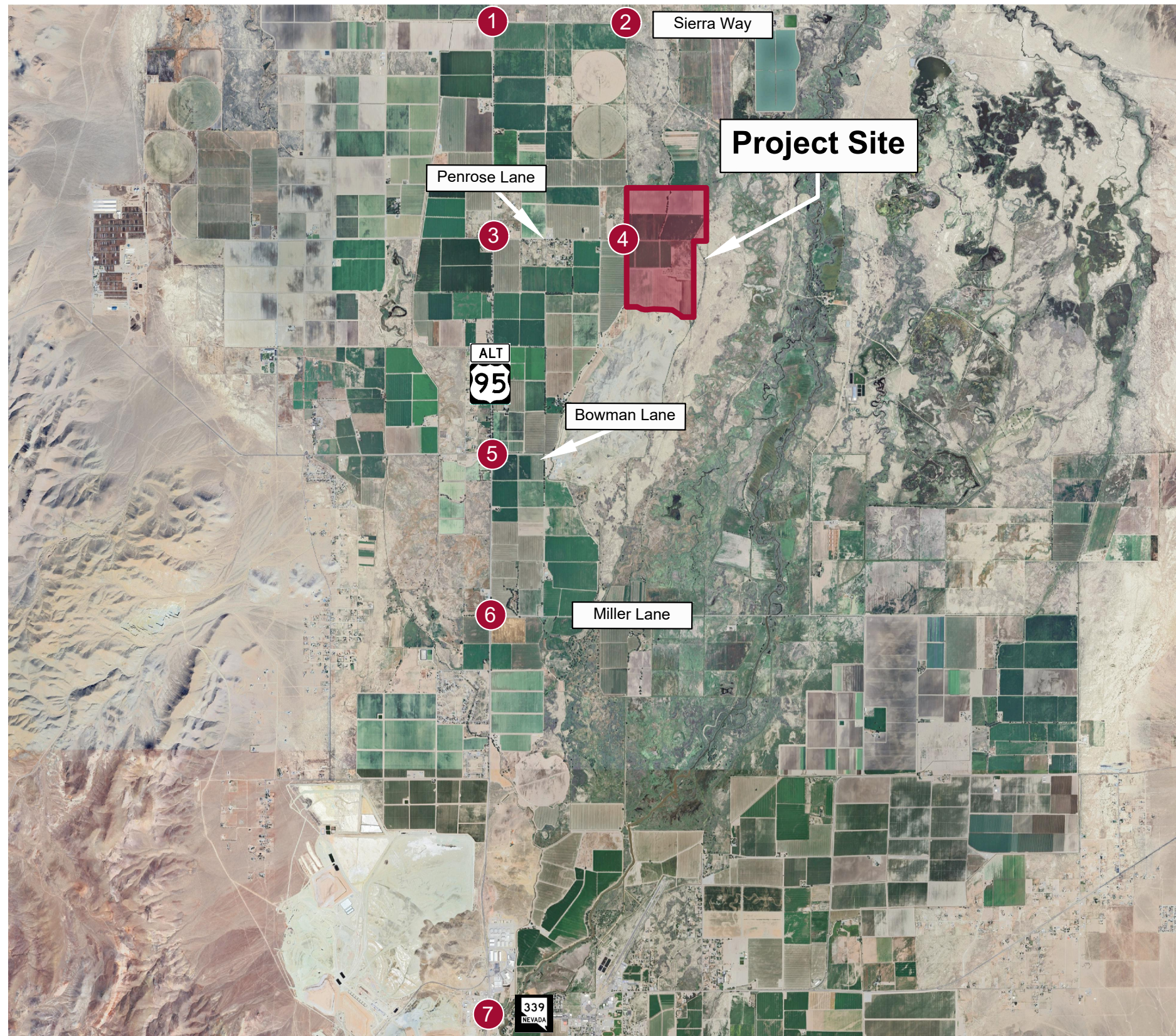
US-95A and SR-339

<p>7</p> <p>155(221) ← 281(295) ←</p>	<p>217(214) ↗ 0(2) ↗ 32(74) ↗</p>
<p>0(1) → 1(0) ↓</p>	<p>189(141) ↖ 54(68) ↖</p>

Legend

- # Study Area Key Intersection
- X Project Access Drive
- ← xx (xx) AM(PM) Peak Hour Volume

Figure 16
Kimley»Horn



Source: Google Earth Image Date: July 2024

Monarch 2047 Horizon Plus Project Peak Hour Traffic Volumes

US-95A and Sierra Way

1	$\begin{array}{l} \leftarrow 4(0) \\ \leftarrow 214(290) \\ \leftarrow 150(74) \end{array}$	$\begin{array}{l} \rightarrow 128(169) \\ \rightarrow 116(160) \end{array}$
	$\begin{array}{l} 1(0) \rightarrow \\ 1(2) \downarrow \end{array}$	$\begin{array}{l} 0(1) \rightarrow \\ 200(249) \uparrow \\ 140(66) \rightarrow \end{array}$

Sierra Way and Project Access Road

2	$\leftarrow 0(63)$	
	$\begin{array}{l} 80(6) \rightarrow \\ 278(124) \downarrow \end{array}$	$\begin{array}{l} \rightarrow 228(290) \end{array}$

US-95A and Penrose Lane

3	$\begin{array}{l} \leftarrow 5(1) \\ \leftarrow 322(460) \\ \leftarrow 1(2) \end{array}$	$\begin{array}{l} \rightarrow 4(0) \\ \leftarrow 2(2) \\ \rightarrow 15(12) \end{array}$
	$\begin{array}{l} 5(4) \rightarrow \\ 4(2) \rightarrow \\ 17(15) \downarrow \end{array}$	$\begin{array}{l} 20(12) \rightarrow \\ 337(310) \uparrow \\ 10(15) \rightarrow \end{array}$

Penrose Lane and Project Access Road

4	$\leftarrow 7(4)$	
	$11(6) \rightarrow$	

US-95A and Bowman Lane

5	$\begin{array}{l} \leftarrow 30(17) \\ \leftarrow 343(469) \\ \leftarrow 2(0) \end{array}$	$\begin{array}{l} \rightarrow 7(4) \\ \leftarrow 4(0) \\ \rightarrow 4(4) \end{array}$
	$\begin{array}{l} 15(27) \rightarrow \\ 2(0) \rightarrow \\ 29(85) \downarrow \end{array}$	$\begin{array}{l} 41(21) \rightarrow \\ 408(270) \uparrow \\ 16(9) \rightarrow \end{array}$

US-95A and Miller Lane

6	$\begin{array}{l} \leftarrow 363(474) \\ \leftarrow 21(36) \end{array}$	$\begin{array}{l} \rightarrow 36(57) \\ \leftarrow 12(10) \end{array}$
		$\begin{array}{l} \rightarrow 353(315) \\ \rightarrow 5(4) \end{array}$

US-95A and SR-339

7	$\begin{array}{l} \leftarrow 179(257) \\ \leftarrow 328(341) \end{array}$	$\begin{array}{l} \rightarrow 246(254) \\ \leftarrow 0(2) \\ \rightarrow 39(91) \end{array}$
	$\begin{array}{l} 0(1) \rightarrow \\ 1(0) \rightarrow \end{array}$	$\begin{array}{l} \rightarrow 218(167) \\ \rightarrow 66(83) \end{array}$

Legend

- # Study Area Key Intersection
- X Project Access Drive
- ← xx (xx) AM(PM) Peak Hour Volume

Figure 17
Kimley»Horn ©2024

4. TRAFFIC IMPACT ANALYSIS

Intersection analyses for the following scenarios were conducted at the identified key intersections to determine possible existing and/or future deficiencies in the street network:

- 2025 Existing
- 2027 Background
- 2027 Background Plus Construction Scenario 1
- 2027 Background Plus Construction Scenario 2
- 2027 Background Plus Project
- 2047 Horizon
- 2047 Horizon Plus Project

4.1. Analysis Methodology

The study area intersections and project access drives were analyzed using the methodologies for unsignalized intersections presented in the Transportation Research Board’s “Highway Capacity Manual” 7th Edition. For the unsignalized intersections, the level of service (LOS) for a two-way stop-controlled intersection is determined by the computed or measured control delay and is defined for each minor movement. LOS for a two-way stop-controlled intersection is not defined for the intersection as a whole. LOS for a four-way stop-controlled intersection can be defined for the intersection as a whole. **Table 3** shows the LOS criteria for intersections.

Table 3 – Level of Service Criteria

Level of Service	Four-way Stop Control Average Control Delay (sec/veh)	Unsignalized Intersection Average Control Delay (sec/veh)
A	≤10	≤10
B	>10 and ≤20	>10 and ≤15
C	>20 and ≤35	>15 and ≤25
D	>35 and ≤55	>25 and ≤35
E	>55 and ≤80	>35 and ≤50
F	>80	>50

Criteria are from the Highway Capacity Manual, 7th Edition, Transportation Research Board.

Synchro 12 was used to analyze the LOS at the study area intersection and project access drives. Synchro is an interactive computer program that enables planners and engineers to forecast the traffic impacts of new developments, conduct area-wide traffic forecasting studies, test different mitigation measures, and compare different traffic scenarios. Synchro 12 utilizes the HCM 7 methodology to analyze intersection delay and LOS.

The analysis scenarios are based on the lane configuration, intersection control, and peak-hour traffic volumes summarized in **Table 4**.

Table 4 – Scenarios

Scenario	Lane Configuration and Control	Volumes
2025 Existing	Figure 3	Figure 4
2027 Background	Figure 3	Figure 5
2027 Background Plus Construction Scenario 1	Figure 6	Figure 14
2027 Background Plus Construction Scenario 2	Figure 6	Figure 15
2027 Background Plus Project	Figure 6	Figure 16
2047 Horizon	Figure 6	Figure 7
2047 Horizon Plus Project	Figure 6	Figure 17

4.2. Key Intersection Operational Analysis

The results of the Key Intersection LOS Analysis are shown in **Table 5**. Calculations are located in **Appendix E**. The study area intersections are expected to operate at acceptable LOS except for:

- US-95A and Sierra Way (#1)
- Sierra Way and Project Access Road (#2)
- US-95A and Bowman Lane/Campbell Lane (#5)
- US-95A and SR339 (#7)

The eastbound and westbound approaches at the intersection of US-95A and Sierra Way (#1) are expected to operate at high delays under both 2027 Background Plus Construction Scenarios 1 and 2 during the AM and PM peak hours. To mitigate the anticipated delay, the intersection is expected to operate at an acceptable LOS (LOS A and LOS B in the AM and PM peak hours, respectively) with the installation of a temporary traffic signal during the construction phase as well as the construction of a northbound right turn lane, a southbound left turn lane, and a westbound left turn lane.

To facilitate operations at the intersection of Sierra Way and Project Access Road (#2), it is recommended to relocate the stop control to the westbound approach and stripe the centerline through the eastbound and northbound approaches thus creating right-of-way for both directions of travel. In this configuration, all northbound movements and the eastbound right movement would operate as free movements, while eastbound through movements would yield to all northbound movements. The westbound approach would operate under stop control. These geometric and channelization improvements are expected to lower delays on the dominant movements, decrease conflict points, and result in an acceptable LOS under all construction and plus project scenarios.

The westbound left turning movement at the intersection of US-95A and Bowman Lane/Campbell Lane (#5) is expected to operate at high delay under the 2027 Background Plus Construction Scenario 1 during the PM peak hour. To mitigate the anticipated delay, the intersection is expected to operate at an acceptable LOS (LOS A) with the installation of a temporary traffic signal during the construction phase. Note that under the 2027 Background Plus Construction Scenario 2, installation of a temporary traffic signal is not necessary.

The eastbound approach and westbound left turn movements at the intersection of US-95A and SR-339 (#7) are expected to operate at high delays under the 2027 Background Plus Construction Scenarios 1 and 2, 2027 Background Plus Project, 2047 Background, and 2047 Background Plus Project scenarios during the AM and PM peak hours. Project traffic is not expected to impact either of these movements. The eastbound approach (McGowan Lane) is a low-volume (approximately one (1) vehicle during the peak hour) minor street. Generally, high delays are expected for traffic during the PM peak hour on the minor street of a two-way stop-control intersection. It is recommended that NDOT and Lyon County monitor the traffic operations and consider signalizing the intersection in the future. If the intersection were to be signalized in the future, the intersection would be expected to operate at acceptable LOS under the 2027 Background Plus Construction Scenarios 1 and 2, 2027 Background Plus Project, and 2047 Background Plus Project scenarios, as shown in **Table 5**.

Table 5 – Key Intersection Peak Hour LOS Analysis

Int. No.	Intersection	2025 Existing		2027 Background		2027 Background Plus Construction Scenario 1*		2027 Background Plus Construction Scenario 2**		2027 Background Plus Project		2047 Background		2047 Background Plus Project	
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
		Delay (LOS)	Delay (LOS)	Delay (LOS)	Delay (LOS)	Delay (LOS)	Delay (LOS)	Delay (LOS)	Delay (LOS)	Delay (LOS)	Delay (LOS)	Delay (LOS)	Delay (LOS)	Delay (LOS)	Delay (LOS)
1	US-95A and Sierra Way														
	<i>Two-Way Stop-Control</i>														
	<i>Northbound Left</i>	0.0 (A)	7.8 (A)	0.0 (A)	7.8 (A)	0.0 (A)	7.8 (A)	0.0 (A)	7.8 (A)	0.0 (A)	7.8 (A)	0.0 (A)	8.0 (A)	0.0 (A)	8.0 (A)
	<i>Eastbound</i>	10.4 (B)	9.8 (A)	10.5 (B)	9.8 (A)	68.0 (F)	9.8 (A)	*** (F)	9.8 (A)	14.1 (B)	9.8 (B)	11.0 (B)	10.2 (B)	15.1 (B)	10.2 (A)
	<i>Westbound</i>	9.6 (A)	11.4 (B)	9.6 (A)	11.5 (B)	16.4 (C)	56.0 (F)	*** (F)	207 (F)	16.9 (C)	18.7 (C)	9.9 (A)	12.7 (B)	19.4 (B)	24.9 (C)
	<i>Westbound Left</i>	-	-	-	-	177 (F)	15.6 (C)	*** (F)	*** (F)	24.3 (C)	26.9 (D)	-	-	29.5 (D)	39.0 (E)
	<i>Westbound Through/Right</i>	-	-	-	-	9.4 (A)	56.7 (F)	9.4 (A)	95.2 (F)	9.9 (A)	10.9 (B)	-	-	10.3 (B)	11.5 (B)
<i>Southbound Left</i>	7.6 (A)	7.8 (A)	7.6 (A)	7.8 (A)	10.7 (B)	7.9 (A)	26.3 (D)	8.0 (A)	8.4 (A)	8.1 (A)	7.7 (A)	7.9 (A)	8.5 (A)	8.3 (A)	
	<i>Signalized</i>	-	-	-	-	5.6 (A)	16.7 (B)	34.1 (C)	20.3 (C)	-	-	-	-	-	-
2	Sierra Way and Project Access Road														
	<i>Two-Way Stop-Control (North)</i>														
	<i>Northbound Left</i>	-	-	-	-	19.9 (C)	*** (F)	78.8 (F)	*** (F)	35.7 (E)	199 (F)	-	-	41.5 (E)	94.7 (F)
	<i>Two-Way Stop-Control (West)</i>														
	<i>Westbound</i>	-	-	-	-	0.0 (A)	15.5 (C)	0.0 (A)	30.1 (D)	0.0 (A)	10.4 (B)	-	-	0.0 (A)	10.5 (B)
3	US-95A and Penrose Lane														
	<i>Two-Way Stop-Control</i>														
	<i>Northbound Left</i>	7.6 (A)	7.9 (A)	7.6 (A)	8.0 (A)	7.6 (A)	8.0 (A)	7.7 (A)	10.0 (A)	7.9 (A)	8.5 (A)	7.7 (A)	8.1 (A)	8.0 (A)	8.7 (A)
	<i>Eastbound Left</i>	10.1 (B)	11.4 (B)	10.2 (B)	11.5 (B)	10.2 (B)	11.5 (B)	13.0 (B)	21.3 (C)	11.8 (B)	13.9 (B)	10.7 (B)	12.6 (B)	12.7 (B)	15.5 (C)
	<i>Westbound Left</i>	11.3 (B)	14.6 (B)	11.4 (B)	14.8 (B)	11.4 (B)	14.8 (B)	19.5 (C)	34.2 (D)	14.6 (B)	20.0 (C)	12.4 (B)	17.4 (C)	16.2 (C)	24.3 (C)
	<i>Southbound Left</i>	7.6 (A)	7.8 (A)	7.6 (A)	7.8 (A)	7.6 (A)	7.8 (A)	8.9 (A)	7.9 (A)	7.9 (A)	8.0 (A)	7.7(A)	7.9 (A)	8.0 (A)	8.1 (A)
4	Penrose Lane and Project Access Road														
	<i>Two-Way Stop-Control</i>														
	<i>Northbound Left</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	<i>Eastbound Left</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	<i>Westbound Left</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	<i>Southbound Left</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	US-95A and Bowman Lane/Campbell Lane														
	<i>Two-Way Stop-Control</i>														
	<i>Northbound Left</i>	7.8 (A)	7.9 (A)	7.8 (A)	8.0 (A)	7.8 (A)	8.0 (A)	7.9 (A)	9.8 (A)	8.1 (A)	8.4 (A)	8.0 (A)	8.2 (A)	8.3 (A)	8.6 (A)
	<i>Eastbound Left</i>	11.4 (B)	11.8 (B)	11.5 (B)	11.9 (B)	12.1 (B)	11.9 (B)	17.3 (C)	24.7 (C)	14.4 (B)	14.6 (B)	12.7 (B)	13.5 (B)	16.4 (C)	17.4 (C)
	<i>Westbound Left</i>	11.8 (B)	11.7 (B)	11.9 (B)	11.8 (B)	19.0 (C)	237 (F)	20.5 (C)	20.8 (C)	15.0 (B)	14.3 (B)	13.3 (B)	13.2 (B)	17.3 (C)	16.5 (C)
	<i>Southbound Left</i>	7.8 (A)	0.0 (A)	7.8 (A)	0.0 (A)	9.4 (A)	0.0 (A)	9.4 (A)	0.0(A)	8.2 (A)	0.0 (A)	7.9 (A)	0.0 (A)	8.4 (A)	0.0 (A)
	<i>Signalized</i>	-	-	-	-	5.4 (A)	10.4 (B)	4.6 (A)	5.9 (A)	-	-	-	-	-	-
6	US-95A and Miller Lane														
	<i>Two-Way Stop-Control</i>														
	<i>Westbound</i>	10.3 (B)	10.8 (B)	10.3 (B)	10.9 (B)	17.2 (C)	13.5 (B)	17.2 (C)	13.5 (B)	12.2 (B)	12.1 (B)	10.7 (B)	11.9 (B)	13.2 (B)	13.5 (B)
	<i>Southbound Left</i>	7.7 (A)	7.8 (A)	7.7 (A)	7.9 (A)	9.4 (A)	8.0 (A)	9.4 (A)	8.0 (A)	8.1(A)	8.1 (A)	7.8 (A)	8.0 (A)	8.2 (A)	8.2(A)

Int. No.	Intersection	2025 Existing		2027 Background		2027 Background Plus Construction Scenario 1*		2027 Background Plus Construction Scenario 2**		2027 Background Plus Project		2047 Background		2047 Background Plus Project	
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
		Delay (LOS)	Delay (LOS)	Delay (LOS)	Delay (LOS)	Delay (LOS)	Delay (LOS)	Delay (LOS)	Delay (LOS)	Delay (LOS)	Delay (LOS)	Delay (LOS)	Delay (LOS)	Delay (LOS)	Delay (LOS)
7	US-95A and SR-339														
	<i>Two-Way Stop-Control</i>														
	<i>Northbound Left</i>	0.0 (A)	0.0 (A)	0.0 (A)	0.0 (A)	0.0 (A)	0.0 (A)	0.0 (A)	0.0 (A)	0.0 (A)	0.0 (A)	0.0 (A)	0.0 (A)	0.0 (A)	0.0 (A)
	<i>Eastbound</i>	22.2 (C)	21.2 (C)	22.7 (C)	21.7 (C)	36.0 (E)	81.2 (F)	36.0 (E)	81.2 (F)	34.7 (D)	34.5 (D)	30.8 (D)	29.8 (D)	48.7 (E)	49.4 (E)
	<i>Westbound Left</i>	25.3 (D)	22.6 (C)	26.4 (C)	23.4 (C)	55.2 (F)	*** (F)	55.2 (F)	*** (F)	51.4 (F)	44.5 (E)	43.9 (E)	39.2 (E)	110.6 (F)	102.5 (F)
	<i>Westbound Right</i>	10.1 (B)	9.8 (A)	10.2 (B)	9.9 (A)	31.9 (C)	10.1 (B)	31.9 (C)	10.1 (B)	12.0 (B)	10.4 (B)	10.8 (B)	10.4 (B)	13.2 (B)	11.0 (B)
	<i>Southbound Left</i>	8.4 (A)	8.1 (A)	8.4 (A)	8.1 (A)	9.9 (A)	9.1 (A)	9.9 (A)	9.1 (A)	9.1 (A)	8.5 (A)	8.9 (A)	8.4 (A)	9.7 (A)	8.8 (A)
<i>Southbound Through</i>	0.0 (A)	0.0 (A)	0.0 (A)	0.0 (A)	0.0 (A)	0.0 (A)	0.0 (A)	0.0 (A)	0.0 (A)	0.0 (A)	0.0 (A)	0.0 (A)	0.0 (A)	0.0 (A)	
	<i>Signalized</i>	-	-	-	-	14.8 (B)	15.1 (B)	14.8 (B)	15.1 (B)	13.1 (B)	14.6 (B)	-	-	14.2 (B)	15.9 (B)

* Construction Scenario 1 refers to the distribution of construction traffic using Sierra Way and Bowman Lane as access to the project site.

** Construction Scenario 2 refers to the distribution of construction traffic using Sierra Way as the only access to the project site.

*** Indicates that delay exceeds 300 seconds.

4.3. Left Turn Storage Analysis

Left-turn storage analysis was conducted for left-turn storage bays. The analysis was performed using the HCM 7 95% queue reported in the LOS reports located in **Appendix E**. The left turn storage bay calculations include AM and PM peak volumes. The length of the desired storage per lane was taken to be the maximum of the two peak hours. The results of the analysis are provided in **Table 6**.

Table 6 – Left Turn Storage Bay Analysis Results

Intersection Left Turn Movement	Desired Storage Per Lane						
	2025 Existing	2027 Background	2027 Background Plus Construction Scenario 1*	2027 Background Plus Construction Scenario 2**	2027 Background Plus Project	2047 Background	2047 Background Plus Project
US-95A and Sierra Way (#1)							
<i>Two-Way Stop-Control</i>							
Northbound Left	-	-	-	-	-	-	-
Eastbound Left	-	-	<25'	<25'	-	-	-
Westbound Left	<25'	<25'	<25'	943'	70'	<25'	100'
Southbound Left	-	-	88'	258'	<25'	-	<25'
<i>Signalized</i>							
Northbound Left	-	-	78'	98'	-	-	-
Eastbound Left	-	-	-	-	-	-	-
Westbound Left	-	-	-	-	-	-	-
Southbound Left	-	-	<25'	470'	-	-	-
Sierra Way and Project Access Road (#2)							
<i>Two-Way Stop-Control</i>							
Northbound Left	-	-	<25'	28'	965'	-	248'
Eastbound Left	-	-	-	-	-	-	-
Westbound Left	-	-	-	-	-	-	-
Southbound Left	-	-	-	-	-	-	-
US-95A and Penrose Lane (#3)							
<i>Two-Way Stop-Control</i>							
Northbound Left	-	-	-	-	-	-	<25'
Eastbound Left	<25'	<25'	<25'	<25'	<25'	<25'	<25'
Westbound Left	<25'	<25''	<25'	<25'	<25'	<25'	<25'
Southbound Left	-	-	-	-	-	-	-
Penrose Lane and Project Access Road (#4)							
<i>Two-Way Stop-Control</i>							
Northbound Left	-	-	-	-	-	-	-
Eastbound Left	-	-	-	-	-	-	-
Westbound Left	-	-	-	-	-	-	-
Southbound Left	-	-	-	-	-	-	-

Intersection Left Turn Movement	Desired Storage Per Lane						
	2025 Existing	2027 Background	2027 Background Plus Construction Scenario 1*	2027 Background Plus Construction Scenario 2**	2027 Background Plus Project	2047 Background	2047 Background Plus Project
US-95A and Bowman Lane (#5)							
<i>Two-Way Stop-Control</i>							
Northbound Left	<25'	<25'	<25'	<25'	<25'	<25'	<25'
Eastbound Left	<25'	<25'	<25'	40'	<25'	<25'	<33'
Westbound Left	<25'	<25'	708'	<25'	<25'	<25'	<25'
Southbound Left	-	-	-	-	-	-	-
<i>Signalized</i>							
Northbound Left	-	-	<25'	<25'	-	-	-
Eastbound Left	-	-	<25'	<25'	-	-	-
Westbound Left	-	-	95'	<25'	-	-	-
Southbound Left	-	-	-	-	-	-	-
US-95A and Miller Lane (#6)							
<i>Two-Way Stop-Control</i>							
Northbound Left	-	-	-	-	-	-	-
Eastbound Left	-	-	-	-	-	-	-
Westbound Left	<25'	<25'	<25'	<25'	<25'	<25'	<25'
Southbound Left	<25'	<25'	<25'	<25'	<25'	<25'	<25'
US-95A and SR-339 (#7)							
<i>Two-Way Stop-Control</i>							
Northbound Left	-	-	-	-	-	-	-
Eastbound Left	-	-	-	-	-	-	-
Westbound Left	28'	30'	163'	163'	55'	25'	118'
Southbound Left	<25'	<25'	40'	40'	30'	28'	40'
<i>Signalized</i>							
Northbound Left	-	-	-	-	-	-	-
Eastbound Left	-	-	-	-	-	-	-
Westbound Left	-	-	43'	43'	35'	-	48'
Southbound Left	-	-	165'	165'	98'	-	125'

* Construction Scenario 1 refers to the distribution of construction traffic using Sierra Way and Bowman Lane as access to the project site.

** Construction Scenario 2 refers to the distribution of construction traffic using Sierra Way as the only access to the project site.

Impacted left turn storage bays were calculated to have adequate storage to accommodate 2025 existing, 2027 background, 2027 background plus project, and 2047 background scenarios. The 2027 Background plus Construction Scenarios 1 and 2 storage lengths are anticipated to be mitigated with use of a temporary signal at the intersection of US-95A and Sierra Way (#1) and at US-95A and Bowman Lane/Campbell Lane (#5) during construction. The 2027 and 2047 background plus project scenarios are anticipated to be mitigated with the recommended stop control changes at the intersection of Sierra Way and Project Access Drive (#2) and exclusive left and right turn lanes at US-95A and Sierra Way (#1).

4.4. Signal Warrant Analysis

Traffic control signals are used to assign the right-of-way to each direction of travel at an intersection. The determination to install a traffic control signal should be based on an engineering study of existing traffic conditions, pedestrian characteristics, and the geometry of the intersection in question.

The Manual on Uniform Traffic Control Devices for Street and Highways (MUTCD), provides a series of signal warrants that define the minimum conditions under which the installation of a traffic control signal should be considered. The installation of a traffic control signal, even when justified by existing conditions, can be improperly designed, placed, and operated, causing excessive delay, driver disregard and increases in collision frequency. The MUTCD states; “The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.” As such, consideration should be given, when possible, to providing alternative, less restrictive, forms of traffic control, including the installation of multi-way STOP sign control, roundabouts, and turning movement restrictions.

According to the MUTCD, a traffic signal is warranted at a given intersection if the conditions at the intersection meet at least one of the MUTCD signal warrants. For this signal warrant analysis, only the peak hour traffic was used to evaluate these intersections.

A traffic signal warrant analysis was conducted based on the two expected construction scenarios and buildout traffic at the intersection of US-95A and Sierra Way (#1), US-95A and Bowman Lane/Campbell Lane (#5), and at the intersection of US-95A and SR 339 (#7). The results of the signal warrant analysis are summarized in **Table 7**, **Table 8**, and **Table 9** respectively. Detailed signal warrant evaluation results are included in **Appendix F**.

Table 7 – Temporary Signal Warrant Evaluation Results – US-95A and Sierra Way (#1)

Condition	Name	Satisfied
Background plus Construction Scenario 1	Peak Hour Warrant	Yes
Background plus Construction Scenario 2	Peak Hour Warrant	Yes
Background plus Project	Peak Hour Warrant	No

Table 8 – Temporary Signal Warrant Evaluation Results – US-95A and Bowman Lane/Campbell Lane (#5)

Condition	Name	Satisfied
Background plus Construction Scenario 1	Peak Hour Warrant	Yes
Background plus Construction Scenario 2	Peak Hour Warrant	No
Background plus Project	Peak Hour Warrant	No

It is noted that there is a possibility that construction traffic may ultimately ingress and egress via US-95A and Kathleen Way. The effects of this traffic distribution are not analyzed in this report, however it is highly likely that the mitigations at Kathleen Way would be comparable to that of the Bowman Lane (Intersection #5) should traffic ingress and egress via that location along US-95A. As such, as the project progresses into construction, if the developer chooses to designate Kathleen Way as a primary route for construction ingress and egress, the developer should submit an addendum to this study documenting signal warrant justification for any temporary signal mitigation at that intersection.

Table 9 – Temporary Signal Warrant Evaluation Results – US-95A and SR 339 (#7)

Condition	Name	Satisfied
Background plus Construction Scenario 1	Peak Hour Warrant	Yes
Background plus Construction Scenario 2	Peak Hour Warrant	Yes
Background plus Project	Peak Hour Warrant	No

This finding supports the installation of a temporary traffic signal at US-95A and Sierra Way (#1) and US-95A and SR 339 (#7) for both Construction Scenario 1 and 2. The findings support the installation of a temporary traffic signal at US-95A and Bowman Lane/Campbell Lane (#5) only for Construction Scenario 1. Considerations for alternative operation of a temporary traffic signal outside the expected peak hours during construction or during non-construction periods include turning the signal away from the roadway such that the intersection operates as a two-way stop-control (TWSC) intersection, or adjusting the signal such that the major roadway has a flashing yellow indication, while the minor roadway has a flashing red indication, again operating the intersection as a TWSC intersection. The temporary traffic signal is recommended to increase safety and improve traffic operations during high volume construction periods due to the high speed on US-95A.

Although the signal at US-95A and SR 339 (#7) is not expected to be warranted once the construction phase of the project is completed, it is recommended that NDOT and Lyon County monitor traffic volumes at this intersection in the future as a signal would allow the intersection to operate at acceptable LOS in the 2027 Background Plus Project and 2047 Background Plus Project scenarios.

5. NDOT ACCESS MANAGEMENT SYSTEMS AND STANDARDS

This section evaluates deceleration and acceleration lane warrants along US-95A per NDOT requirements stipulated by the Traffic Engineering Division of NDOT in the 2017 policy entitled “Access Management System and Standards” (AMSS).

5.1. Deceleration Lanes

Deceleration lane warrants were evaluated where project traffic is expected to impact the road network. Left turn deceleration lane warrants were evaluated using Table 4-13 in the AMSS and right turn deceleration warrants were evaluated using Table 4-17 in the AMSS (included in **Appendix G**).

Based on Table 4-13 in the AMSS, as the speed limit on US-95A is 60 mph, there are greater than 26 vehicles expected to make a southbound to eastbound left turn from US-95A to Sierra Way (#1), **a left turn lane is warranted**. Design shall comply with standards outlined in the NDOT AMSS.

Based on Table 4-17 in the AMSS, as the speed limit on US-95A is 60 mph, there are greater than 31 turning vehicles expected to make a northbound to eastbound right turn from US-95A to Sierra Way (#1), **a right turn lane is warranted**. Design shall comply with standards outlined in the NDOT AMSS.

Based on Table 4-13 in the AMSS, as the speed limit on US-95A is 60 mph, there are greater than 26 vehicles expected to make a southbound to eastbound left turn from US-95A to SR-339 (#7), **a left turn lane is warranted**. Design shall comply with standards outlined in the NDOT AMSS. Because project traffic is not expected to make a northbound to eastbound right turn from US-95A to SR-339 (#7) and from US-95A to Bowman Lane/Campbell Lane (#5), **a right turn lane is not warranted** based on project traffic. It should be noted that while construction traffic will make the northbound to eastbound right turn from US-95A to Bowman Lane/Campbell Lane (#5), the addition of a left turn lane to serve construction traffic is not recommended.

Based on Table 4-20 in the AMSS and the speed limit, **a deceleration lane is required** to be constructed for vehicles making the southbound to eastbound left turn from US-95A to SR-339 (#7). The deceleration lane length includes the taper. It is recommended that the southbound to eastbound left turn lane (deceleration plus storage) be constructed at US 95A and SR-339 to meet NDOT AMSS standards.

5.2. Acceleration Lanes

Acceleration lane warrants were evaluated in the study area where project traffic is expected to impact the road network. Acceleration lanes are warranted on high speed (greater than 45 mph) and high volume (greater than 10,000 vehicles per day) roadways.

As US-95A has an AADT lower than 10,000 vehicles per day (5,550 vehicles per day per NDOT TRINA), **acceleration lanes are not warranted for this project**.

6. CRASH DATA SUMMARY

Crash data was obtained using NDOTs publicly available serious injury and fatality data for years 2019-2023. A more extensive request was submitted to NDOT, but no response was received at the time this study was submitted. Only one serious injury crash recently occurred at the intersection of US-95A and Penrose Lane (#3) during the analysis period. The crash data is included in **Appendix H**. The intersection crashes include those on both the major and minor streets of the key intersection during the most recent five-year period.

7. RECOMMENDATIONS

The proposed Monarch Data Center traffic is anticipated to be accommodated on the surrounding street network expected to exist in the background year of 2027 and results in the following recommendations:

- All on-site and off-site signing and striping improvements should be incorporated into the Civil Drawings and conform to the Lyon County and NDOT Standards as well as the current MUTCD, as applicable.
- It is recommended that a temporary traffic signal be deployed at US-95A and Sierra Way (#1) during the construction period for both Construction Scenario 1 and 2. Once the construction phase of the project is completed, the signal is not expected to be warranted.
- It is recommended that a temporary traffic signal be deployed at US-95A and Bowman Lane/Campbell Lane (#5) during the construction period only for Construction Scenario 1. Once the construction phase of the project is completed, the signal is not expected to be warranted.
- It is recommended that a temporary traffic signal be deployed at US-95A and SR 339 (#7) during the construction period for both Construction Scenario 1 and 2. Once the construction phase of the project is completed, the signal is not expected to be warranted, but it is recommended that NDOT and Lyon County monitor traffic volumes at this intersection in the future.
- It is recommended that the westbound approach to Sierra Way and Project Access Drive (#2) be stop-controlled, and that the northbound and westbound approaches operate free with centerline striping and realignment through the intersection to facilitate such travel.
- No mitigation is recommended for the eastbound approach at the intersection of US-95A and SR 339 (#7) because the approach serves less than five vehicles in the peak hour.

In order to comply with NDOT AMSS, the following deceleration and acceleration lanes are required:

- The developer is recommended to install a northbound right turn lane at the intersection of US-95A and Sierra Way (#1)
- The developer is recommended to install a southbound left turn lane at the intersection of US-95A and Sierra Way (#1)
- The developer is recommended to install a westbound exclusive left-turn lane at the intersection of US-95A and Sierra Way (#1)
- The developer is recommended to install a southbound left turn lane at the intersection of US-95A and SR 339 (#7)



Joe Lombardo
Governor

STATE OF NEVADA
DEPARTMENT OF TRANSPORTATION
310 Galletti Way
Sparks, Nevada 89431

Tracy Larkin-Thomason, P.E., Director

June 8, 2026

Kimley-Horn and Associates, Inc.
6671 Las Vegas Boulevard South
Las Vegas, NV 89119
Attention: Emily K. Roberts, P.E.

SENT VIA ELECTRONIC MAIL

RE: Monarch Data Center – Traffic Impact Study (05/12/26)

Ms. Roberts,

The Nevada Department of Transportation (NDOT) has reviewed the traffic analysis prepared by Kimley-Horn, dated May 12th, 2026, 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.

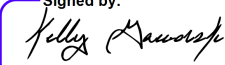
1. NDOT acceptance of a traffic study is typically valid for one year following the date on the acceptance letter, provided the nature of the development does not significantly change. Permit applications made after one (1) year may require an amendment or a new traffic study. Permit applications made after five (5) years will require a new traffic impact study.
2. The following improvements will be required as mitigations based on the traffic impact study:
 - a) US 95A and Sierra Way – Intersection 1
 1. Install a northbound right-turn deceleration lane per NDOT's Access Management System and Standards (AMSS).
 2. Install a southbound left-turn deceleration lane per NDOT's AMSS. Include 100 feet of storage.
 3. Install a right-turn pocket for the westbound Sierra Way approach.
 4. Install a temporary traffic signal to mitigate construction traffic impacts.
 - b) US 95A and Bowman Lane– Intersection 5
 1. Install a northbound right-turn deceleration lane per NDOT's AMSS.
 2. Install a temporary traffic signal to mitigate construction traffic impacts.
 - c) US 95A and SR 339 – Intersection 7
 1. Install a southbound left-turn deceleration lane per NDOT's AMSS. Include 50 feet of storage.
 2. Install a temporary traffic signal to mitigate construction traffic impacts.
 - d) Include WB-67 turning templates for turning movements at project intersections.
 - e) Install signing and striping per NDOT and MUTCD standards.

- f) Provide intersection safety lighting per NDOT Standards.
3. Permit for Lyon County maintained infrastructure, such as street lighting, storm drains, county road approaches, etc., shall be on a separate encroachment permit application with the county as the main applicant.
4. Given the multiple developments responsible for the mitigation of the cumulative impacts of multiple developments in the project vicinity, 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.
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.

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.

We look forward to working with your design team and helping you to achieve the successful completion of your project.

Sincerely,

Signed by:

0B63A74DA2BE4A8...
Kelly Gaworski, PE
Engineering Services Manager
NDOT District II

KG:jg

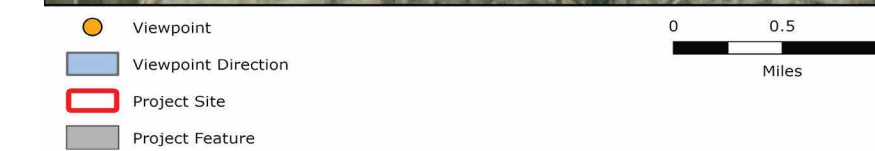
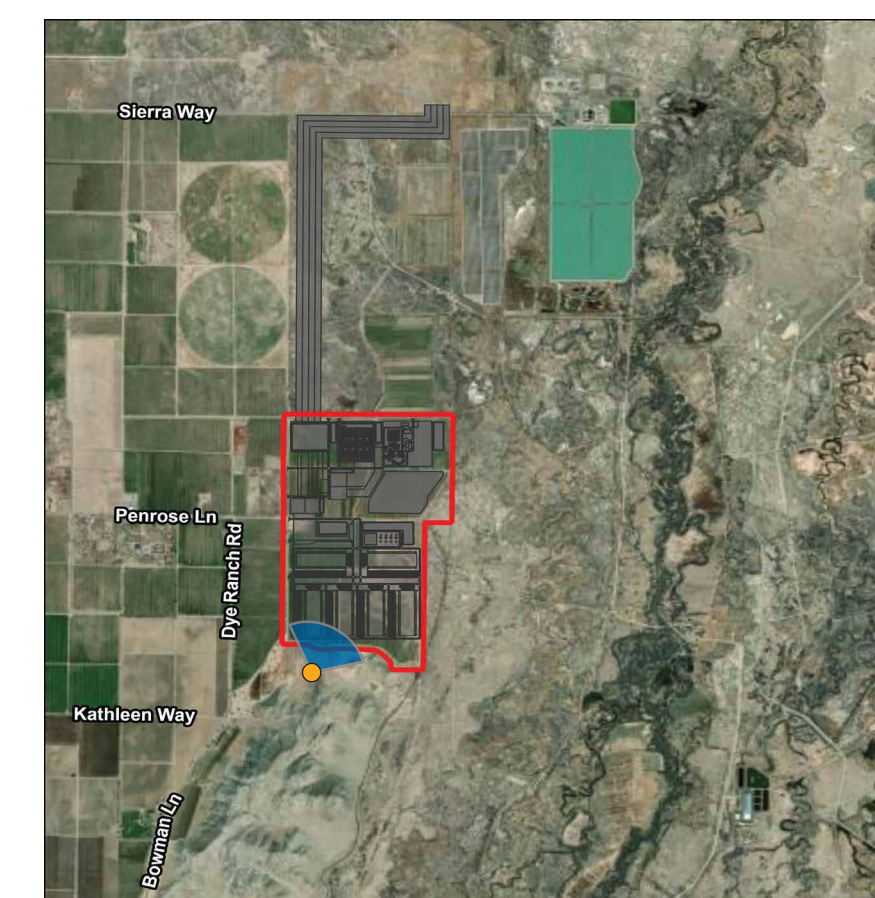
Enclosures: Monarch Data Center – Traffic Impact Study (05/12/26)

Cc: Bhupinder Sandhu – NDOT District Engineer
Andrew Lawrence – NDOT Assistant District Engineer
Laura Wise – NDOT Planning
Chris Bell – NDOT Traffic Operations
David Giacomini - Kimley-Horn and Associates, Inc.
Gavin Henderson – Lyon County
NDOT District II Traffic Engineering
NDOT District II Permits Office

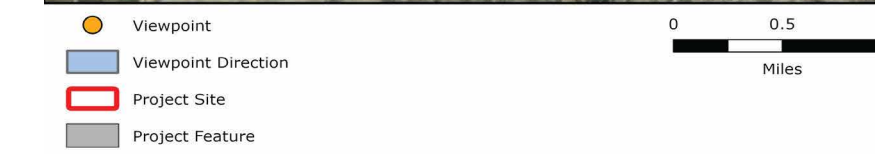
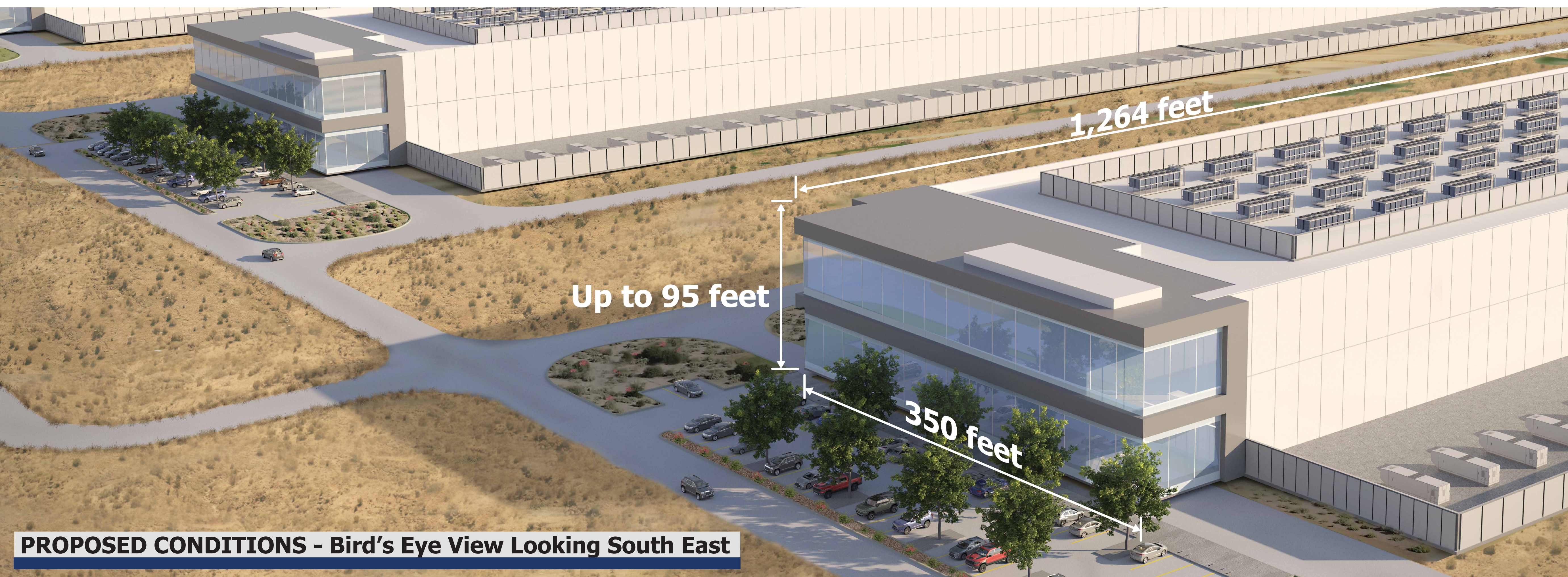
Monarch Data Center

Lyon County, NV

Conceptual Two-Story Building Dimensions



PROPOSED CONDITIONS - Looking North East



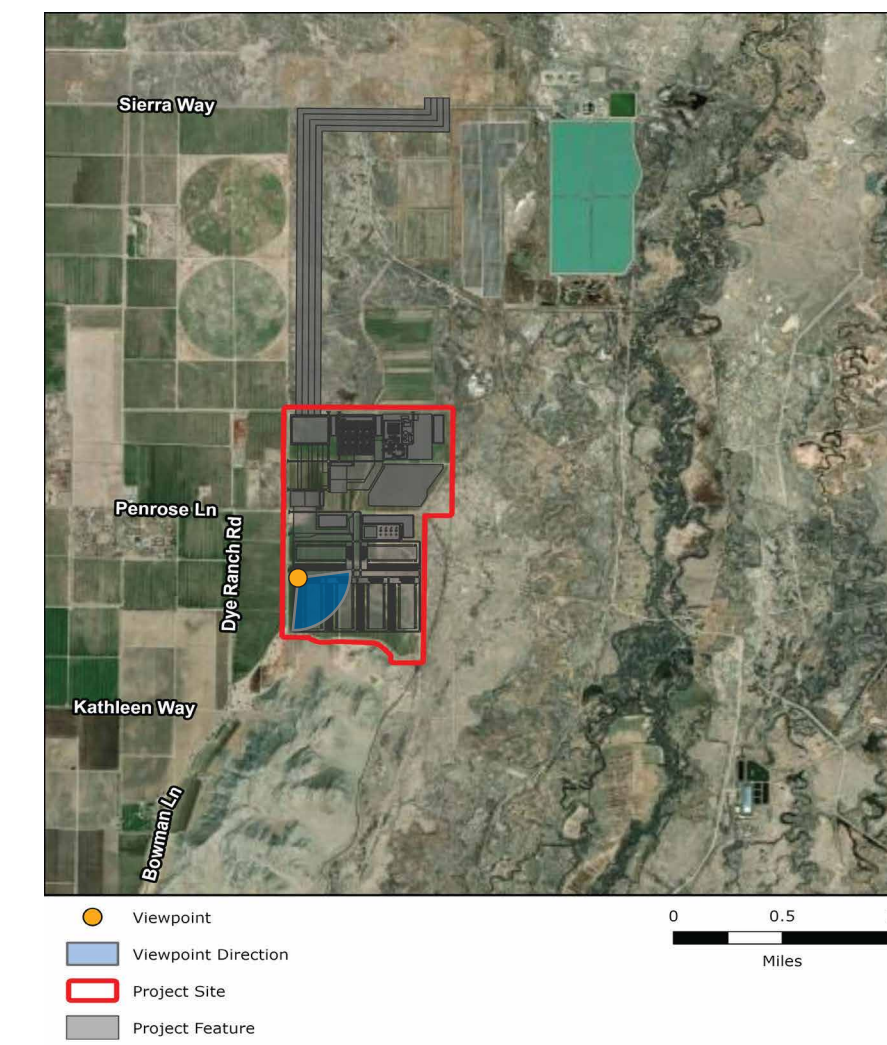
Note: Project components illustrated are based on proposed preliminary designs. The images contained on this page show the proposed project within a wider landscape context and are not representative of scale and distance when viewed from the actual viewpoint.

PROPOSED CONDITIONS - Bird's Eye View Looking South East

Monarch Data Center

Lyon County, NV

Conceptual Two-Story Building Dimensions



Note: Project components illustrated are based on proposed preliminary designs. The images contained on this page show the proposed project within a wider landscape context and are not representative of scale and distance when viewed from the actual viewpoint.



Brandi Lathrop <blathrop@lyon-county.org>

Re:

Martha Tapia <mtapia@lyon-county.org>
To: Alicia norris <aknorris1972@gmail.com>
Cc: Countyclerks@lyon-county.org

Wed, Jul 1, 2026 at 9:46 AM

Good morning,

Your comment has been received and will be available for the meeting tomorrow.

Thank you.

Martha Tapia

Administrative Assistant
Lyon County Manager's Office
27 S. Main Street
Yerington, NV 89447
775-463-6531, option 6

On Wed, Jul 1, 2026 at 6:07 AM Alicia norris <aknorris1972@gmail.com> wrote:

No new data centers I have lived in Lyon County for over 30 years and I do not want to Data Center we do not need more people coming into our rural communities to live when we do not have current housing for them nor do we need to use what little resources we have for a building that does not help our community

Thank you
Alicia Norris



Brandi Lathrop <blathrop@lyon-county.org>

Public comment

'Becky Masters' via County Clerks <countyclerks@lyon-county.org>

Wed, Jul 1, 2026 at 11:29 AM

Reply-To: Becky Masters <bmasters86@yahoo.com>

To: "countyclerks@lyon-county.org" <countyclerks@lyon-county.org>

To home may concern , we as the residents of Lyon county and your employers do not need data centers or large industries coming to our community. They will not benefit us at all.They will just hinder us by using our resources for surveilling us , we do not need any more surveillance or data gathering on the citizens, we do however, need it on our politicians and the people that are supposed to be taking care of our needs. Do not approve these.

[Sent from Yahoo Mail on Android](#)



Brandi Lathrop <blathrop@lyon-county.org>

Planning commission public comment July meeting

'Bonnie' via County Clerks <countyclerks@lyon-county.org>

Tue, Jun 30, 2026 at 2:24 PM

Reply-To: Bonnie <bonniebobo@yahoo.com>

To: countyclerks@lyon-county.org

Dear planning committee,

Please do not have a data center in Lyon county. The water needed for this is much better used to grow food and agriculture that feeds animals. How many data centers are needed? We certainly do not need another one. In an area that already sees that water is precious. The water needed for this would be a huge detriment to the area. And the electricity usage would put a strain on already strained infrastructure. Please do not put in a data center here..Please. Please.

Think about the people. We do not want it.

Bonnie Swain

Lyon county resident

Get [BlueMail for Mobile](#)



Brandi Lathrop <blathrop@lyon-county.org>

Upcoming 7/14 Planning Commission

cb cummins <cumminsranch819@gmail.com>
To: countyclerks@lyon-county.org

Tue, Jun 30, 2026 at 4:36 PM

Hello,

I am writing to express my concern on the push for data centers in our beautiful desert.

Il would like to know:

How will water resources be protected?

What enforceable protections exist for residents?

How are cumulative impacts being evaluated alongside other industrial development?

As elected officials I shouldn't have to remind you who you represent

Thank you for your time.

Regards,

Christine Cummins

PUBLIC COMMENTS

JohnCJ Ainsworth <95johncj@gmail.com>
To: countyclerks@lyon-county.org

Tue, Jun 30, 2026 at 6:59 PM

I am requesting a temporary moratorium on all new data centers, zoning, permits and development. Lyon County needs to pause and draft strict land use regulations that protect Lyon County residents.

These massive facilities threaten local resources, strain the power grid, and disrupt neighborhoods, creating a need for a pause to update zoning and development codes and I respectfully request the commission evaluate the impact these data centers will have on Lyon County residents.

Water consumption: Depending on the cooling system, massive amounts of water is required for cooling. This could have an impact on local aquifers and water supplies.

Electric Rates: These facilities strain the local power grid. If Data Centers hook up to GreenLink, it could potentially drive up residential utility bills.

It is your duty, as commissioners, to protect the health, safety, and general welfare of the communities you serve.

Noise pollution: Data center cooling fans and generators create constant industrial level noise that disrupts quiet neighborhoods and rural areas including the humming alone can effect nervous system disruptions.

Emissions and climate: The reliance on back up generators and fossil fuel heavy energy supplies contribute to pollution and work

against Nevada's climate goals.

Light pollution: These massive buildings put out excessive lighting therefore ruining our dark sky policy.

Jobs: Despite taking up hundreds of acres of land and using vast amounts of resources, data centers create very few long term, local jobs once construction is completed.

Data center facilities disrupt rural land, ecosystems and displace wildlife. Thus, I request a temporary halt on accepting new data centers applications so Lyon County can carefully review and update its land use code to implement sound assessment, setback requirements, impact studies of water usage and impact on local domestic and agricultural wells and water supplies.

The rapid, largely unregulated rise of data centers is disrupting to our community, threatening our environmental climate and water security. Therefore, there must be an immediate halt on new data centers until adequate regulations can be enacted to fully protect our communities, our families, our environment and our health from any damage this industry may impose on the population.

Thank you. CJ Ainsworth
Resident of Silver Springs, Nevada. 89429

PUBLIC COMMENT

Katie Calhoun <CalhounKatie@outlook.com>

Tue, Jun 30, 2026 at 8:13 AM

To: "countyclerks@lyon-county.org" <countyclerks@lyon-county.org>

Opposition to Monarch Data Center Campus (PLZ-2026-041) – July 14 Meeting

Date: June 30, 2026

Reference No: PLZ-2026-041

Lyon County Board of commisioners,

My name is Katlynn Calhoun. I am a lifelong resident of Lyon County, Nevada. I am submitting this public comment on behalf of myself and over 2,000 fellow Lyon County residents who have signed a petition opposing the proposed Monarch Data Center Campus. We are not against responsible economic growth. However, we fiercely oppose a massive 4.6-million-square-foot industrial development that directly threatens our water supply, local wildlife, power grid, and the safety of our community members. First, this 1,000-megawatt project places an unprecedented strain on our finite local resources. Data center opposition is sweeping the country due to severe resource depletion. Lawmakers in states like Texas and California are actively sounding alarms because these facilities consume millions of gallons of water daily without transparent oversight. We cannot afford to risk the Mason Valley aquifer. Furthermore, data center cooling systems and water treatments are notorious for introducing hazardous chemicals—including PFAS, or "forever chemicals"—into local environments. Our community sits adjacent to crucial natural habitats like the Mason Valley Wildlife Management Area, our local fish hatchery, and a nearby game ranch. Contaminated runoff or a chemical breach would cause irreversible ecological destruction to our water systems and the wildlife that depend on them. Second, we must address our infrastructure and public safety. Yerington is a small, rural town. Our roads are not built to absorb the heavy industrial traffic required to build and maintain 14 massive tech buildings. We are already in the midst of a local safety crisis. In just the past six months, Mason Valley has suffered multiple horrific traffic fatalities, including a double-fatal collision at SR-827 and SR-208 in April, and another fatal crash near 95A and Sierra Way. Our local emergency services are already stretched thin. Adding thousands of construction vehicles and commuter trips to our two-lane highways will undoubtedly lead to more tragedy on our roads. Finally, the impact on our power supply cannot be ignored. The 1,000-megawatt footprint of this project requires massive high-voltage systems and onsite natural gas backup generation. Across the U.S., data centers are causing skyrocketing utility expenses for local residents and strain on the grid. For these reasons, we urge the Board to protect the citizens, resources, and future of Mason Valley by denying the Monarch Data Center proposal. Thank you for your time and your consideration of our community's safety. Sincerely,

Katlynn Calhoun Lyon County Resident

Sent from my Verizon, Samsung Galaxy smartphone
Get [Outlook for Android](#)



Brandi Lathrop <blathrop@lyon-county.org>

Data center

lisacgamet52@gmail.com <lisacgamet52@gmail.com>
To: countyclerks@lyon-county.org

Tue, Jun 30, 2026 at 11:46 PM

These giant data centers need more studies as to how much water and power they use. What kind of environmental impact they will have on surrounding communities and the noise they produce! I have read plenty of articles of how disruptive and harmful they are. Slow down on the application with the approval on this project until more research has been done.

Respectfully Lisa Gamet Dayton

Public Comment PLZ-2026-041(Monarch Data Center)

Matthew Winterhawk <winterhawk@w4nevada.com>
To: County Clerks <countyclerks@lyon-county.org>

Tue, Jun 30, 2026 at 1:55 PM

Commissioners and Planning Commissioners,

My name is Matthew Winterhawk, I am a Nevadan who regularly travels all throughout Lyon County and enjoy its beauty.

I respectfully ask that you continue this item and postpone any recommendation or approval until the public has been given a genuine opportunity to understand and participate in this decision.

This is not a routine zoning request.

This proposal includes approximately **505 acres**, a **1,000-megawatt data center**, **eight 8-story buildings**, a **500-megawatt battery energy storage system**, a **500-megawatt natural gas backup generation system**, a new electrical substation, high-voltage transmission infrastructure, and related industrial development.

Those are decisions that could shape Lyon County for generations.

Nevada law establishes minimum notice requirements, but minimum legal notice does not necessarily mean meaningful public participation for a project of this magnitude.

Most residents are not professional planners, engineers, attorneys, or developers.

We are parents.

We are ranchers.

We are small business owners.

We are teachers, veterans, retirees, and working families.

We do not spend our days monitoring every advisory board, planning meeting, engineering report, utility filing, or 500-page agenda.

The government knows that.

That is why transparency matters.

Many residents are only now beginning to understand how these projects connect together, power districts, transmission lines, substations, utility infrastructure, engineering contracts, and now a proposed 1,000-megawatt data center.

Residents should not have to assemble the future of their county one meeting at a time.

Before any recommendation or approval, I ask this Board to require the applicant and staff to publicly answer, in plain English:

- What is the complete buildout being planned?
- What is the total electrical demand?
- What is the total water demand?
- How will cooling be accomplished?
- What are the expected impacts on emergency services, roads, wastewater systems, and county infrastructure?
- What cumulative environmental and land-use impacts have been evaluated?
- What long-term responsibilities or costs could fall on Lyon County or its residents?
- What protections exist if the project changes ownership, fails, or expands beyond what is currently proposed?

If this project is truly beneficial to Lyon County, then it should withstand additional public review.

Transparency should never be viewed as an obstacle.

Public participation should never be treated as an inconvenience.

I respectfully ask that this matter be continued until broader public outreach has occurred, additional public hearings are held if necessary, and residents have had a meaningful opportunity to review and understand the full scope of this proposal before irreversible decisions are made.

The future of Lyon County deserves more than minimum notice.

It deserves maximum transparency.

Thank you.

Matthew Winterhawk

Re: Temporary moratorium

Martha Tapia <mtapia@lyon-county.org>
To: max wray <maxwray57@hotmail.com>
Cc: "countyclerks@lyon-county.org" <countyclerks@lyon-county.org>

Wed, Jul 1, 2026 at 9:34 AM

Good morning,

Your comment has been received and will be available for the meeting tomorrow.

Thank you.

Martha Tapia

Administrative Assistant
Lyon County Manager's Office
27 S. Main Street
Yerington, NV 89447
775-463-6531, option 6

On Tue, Jun 30, 2026 at 11:13 PM max wray <maxwray57@hotmail.com> wrote:

y **logging in.**

To: Countyclerks@lyon-county.org. I am requesting a temporary moratorium on all new data centers, zoning, permits and development. The county needs to pause and draft strict land use regulations that protect residents. These massive facilities threaten local resources, strain the power grid, and disrupt neighborhoods, creating a need for a pause to update zoning and development codes. I am requesting the commission evaluate the impact these data centers will have on Lyon county residents. Water consumption: Depending on the cooling system, massive amounts of water is required for cooling. What is and will be the impact on local aquifers and water supplies? Electric Rates: These facilities strain the local power grid. Are Data Centers going to hook up to GreenLink, potentially driving up residential utility bills? It is your duty as commissioners to protect the health, safety, and general welfare of the communities you serve. Noise pollution: Data center cooling fans and generators generate constant industrial level noise the disrupts quiet neighborhoods and rural areas. Not to mention the humming you can't hear causing nervous system disruptions. Emissions and climate: The reliance on back up generators and fossil fuel heavy energy supplies contribute to our pollution and work against Nevada's climate goals. Light pollution: Will these massive buildings put out excessive lighting therefore ruining our dark sky policy? Jobs: Despite taking up hundreds of acres of land and using vast amounts of resources, data centers create very few long term, local jobs once construction is completed. Data center facilities disrupt rural land, ecosystems and displace wildlife. I request a temporary halt on accepting

new data centers applications so the county can carefully review and update its land use code to implement sound assessment, setback requirements, impact studies of water usage and impact on local domestic and agricultural wells and water supplies. The rapid, largely unregulated rise of data centers is disrupting to our community, threatening our environmental climate and water security. There must be an immediate halt on new data centers until adequate regulations can be enacted to fully protect our communities, our families, our environment and our health from any damage this industry may impose on the population. Thank you,
Meloney Wray
Stagecoach

Get [Outlook for Android](#)



Brandi Lathrop <blathrop@lyon-county.org>

PUBLIC COMMENT

Meredyth Keast <mwkeast@gmail.com>
To: countyclerks@lyon-county.org

Wed, Jul 1, 2026 at 2:33 PM

Dear Lyon-county Board,

Please do not pass or continue with any ordinances or permits that continue data centers or geenlink projects. These projects need more time to be vetted and waiting to see how this relatively new technology works out in other areas would be to our community's benefit. . The Walker River area should have another environmental impact done. I have heard that data centers in other states that have been near rivers have in some cases dried up the rivers. If this has any possibility of being true this must be looked into. It is particularly sad that our agricultural area in Mason valley might be impacted. I do not see the human need for data centers. I don't care about the tax revenue and I don't think the money to our schools is significant even though I have family in school here. I have heard the jobs created are temporary if they even use our locals. What is the 10 or 20 year job maintenance record for locals with either the greenlink or data centers? I don't see any benefit. Only harm. Please represent the people not corporations. Ecotourism is where I believe we could capitalize as a county as well as maintain an emotionally and physically healthy county for our upcoming generations.

Sincerely,

Meredyth Keast
Lyon-County Resident



Brandi Lathrop <blathrop@lyon-county.org>

Data centers

'Nancy Calvert' via County Clerks <countyclerks@lyon-county.org>
Reply-To: Nancy Calvert <nvdesertdreamer@aol.com>
To: countyclerks@lyon-county.org

Wed, Jul 1, 2026 at 2:48 PM

To whom it may concern, please do not allow data centers without a comprehensive background and understanding of the environmental impact these centers bring. They rely on very few people to get the vote passed on them being allowed without the years of documentation, water usage, electricity usage and what demands that electricity will be for who gets to run their ac in the summer or do we have to sacrifice for them. We need to ensure our county for the future. Our farmers and our local people deserve our water long before a data center. Thank you Nancy Calvert



Brandi Lathrop <blathrop@lyon-county.org>

Planned Unit Development— Tenative PUBLIC COMMENT

Nellie Davis <sawabemuhano@gmail.com>
To: Countyclerks@lyon-county.org

Wed, Jul 1, 2026 at 11:27 AM

Hello, my name is Nellie Davis, I am an enrolled member of Walker River Paiute Tribe and Nevada Native. I'm writing this public comment to strongly OPPOSE the development of any data centers in the state, rural county or urban city. These developments severely compromise the wellbeing of our communities and the natural world. Living in a desert, water is the most precious resource we have and it's have been shown time and time the impact data centers have on water quality and quantity is negative. Water is life. I'm calling on leadership to consider investments not in haste current technological or financial opportunities, but the future of our children and grandchildren. What land and quality of life are we leaving them with the decisions we make today? Please do not move forward with the development of data centers in our state. Protect what's most important- the land and people we love!

Nellie Davis
775-354-5667



No data centers

'Phyllis Hiskett' via County Clerks <countyclerks@lyon-county.org>

Tue, Jun 30, 2026 at 8:51 AM

Reply-To: Phyllis Hiskett <phyllee@aol.com>

To: countyclerks@lyon-county.org

My name is Phyllis Hiskett. I too am voicing my opinion regarding the proposed Monarch Data Center. I cannot word it any better than Katie Calhoun did. So to repeat many of her comments.

We are over 2,000 Lyon County residents who have signed a petition opposing the proposed Monarch Data Center Campus. We are not against responsible economic growth. However, we fiercely oppose a massive 4.6-million-square-foot industrial development that directly threatens our water supply, local wildlife, power grid, and the safety of our community members. First, this 1,000-megawatt project places an unprecedented strain on our finite local resources. Data center opposition is sweeping the country due to severe resource depletion. Lawmakers in states like Texas and California are actively sounding alarms because these facilities consume millions of gallons of water daily without transparent oversight. We cannot afford to risk the Mason Valley aquifer. Furthermore, data center cooling systems and water treatments are notorious for introducing hazardous chemicals—including PFAS, or "forever chemicals"—into local environments. Our community sits adjacent to crucial natural habitats like the Mason Valley Wildlife Management Area, our local fish hatchery, and a nearby game ranch. Contaminated runoff or a chemical breach would cause irreversible ecological destruction to our water systems and the wildlife that depend on them. Second, we must address our infrastructure and public safety. Yerington is a small, rural town. Our roads are not built to absorb the heavy industrial traffic required to build and maintain 14 massive tech buildings. We are already in the midst of a local safety crisis. In just the past six months, Mason Valley has suffered multiple horrific traffic fatalities, including a double-fatal collision at SR-827 and SR-208 in April, and another fatal crash near 95A and Sierra Way. Our local emergency services are already stretched thin. Adding thousands of construction vehicles and commuter trips to our two-lane highways will undoubtedly lead to more tragedy on our roads. Finally, the impact on our power supply cannot be ignored. The 1,000-megawatt footprint of this project requires massive high-voltage systems and onsite natural gas backup generation. Across the U.S., data centers are causing skyrocketing utility expenses for local residents and strain on the grid. For these reasons, we urge the Board to protect the citizens, resources, and future of Mason Valley by denying the Monarch Data Center proposal.

I live in the north end of Mason Valley and have fear of our well being affected by this project. We don't want to live in fear everyday waiting for something to happen then to sue for reparations. That is not why we live in our beautiful little valley. In addition, does anyone remember why we were called Greenfield before Yerington. Let's not lose that reason for living here.

Thank you for your time and your consideration of our community's safety.

Sincerely,

Phyllis Hiskett - Lyon County Resident

[Sent from the all new AOL app for iOS](#)

URGENT: Deep Concerns Regarding Tribal Water Impacts of the Monarch Data Center

Stacy Hicks <stacyhicks000@gmail.com>

Thu, Jul 2, 2026 at 6:10 AM

To: countyclerks@lyon-county.org

Dear Lyon County Board of Commissioners,

I am writing to express my strong opposition to the proposed 1,000 MW Monarch Data Center project in the Mason Valley. As a concerned stakeholder, I am deeply troubled by the lack of downstream tribal consultation and the irreversible, compounding ecological risks this project poses to regional water systems—specifically the Walker River, Walker Lake, and the Lahontan watershed.

The desert hydrology of northern Nevada links Yerington directly to the sovereign lands and water rights of local Indigenous nations. This project threatens these critical resources in several ways:

- 1. Undermining Walker River Recovery:** The Walker River Paiute Tribe has worked tirelessly for decades to restore flows to the Walker River and halt the ecological collapse of Walker Lake. Securing water rights and infrastructure for a data center of this magnitude directly locks up water resources that are desperately needed to restore natural flows, protect tribal fisheries, and honor regional conservation efforts.
- 2. Downstream Risks to the Lahontan Basin:** Industrial developments that threaten local groundwater tables create cascading risks across connected aquifers. Depleting or risking contamination of regional groundwater directly threatens the subsurface and surface flows that feed downstream systems, which the Fallon Paiute Shoshone Tribe relies upon.
- 3. The Power-Water Nexus:** A 1,000 MW demand will drastically strain our energy grid. Meeting this load forces regional utilities to ramp up power generation, which draws heavily on water-cooled energy systems and regional river infrastructure. This indirect water footprint further reduces the water available to flow naturally into tribal lands.

Decisions made in Lyon County do not stop at county lines. Proceeding with this project without robust, government-to-government consultation with the Walker River Paiute Tribe, Yerington Paiute Tribe, the Fallon Paiute Shoshone Tribe, and other downstream tribal communities is a failure of local governance and environmental justice.

I urge the Board to halt further permitting for the Monarch Data Center until a comprehensive, independent environmental and hydrologic impact assessment is conducted—one that fully evaluates the direct and indirect impacts on tribal water rights and sacred regional ecosystems.

Thank you for your time and serious consideration of this urgent matter.

Sincerely,

Stacy Hicks

Lyon County Planning Commission Agenda Summary

Meeting Date: July 14, 2026

Agenda Item Number:

8.a

Subject:

For Discussion Only: Community Development Director comments and updates.

Summary:

Financial Department Comments:

Approved As To Legal Form:

County Manager Comments:

Recommendation: