COUNTY OF IMPERIAL

LITHIUM VALLEY

SPECIFIC PLAN

DECEMBER 2025 DRAFT

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1. Introduction and Intent

The Lithium Valley Specific Plan was prepared by the County of Imperial to proactively establish a clear path forward towards an environmentally-conscious employment hub, which will assist in meeting the nation's increasing demands for lithium and other minerals present in the Salton Sea Known Geothermal Resource Area (KGRA). Having a domestic source of lithium is crucial for reducing reliance on foreign imports, which minimizes transportation emissions and supports the nation's energy security. It also enables the United States to sustainably support its growing electric vehicle and renewable energy sectors with reduced environmental impacts compared to traditional lithium extraction methods. The preparation of the Lithium Valley Specific Plan provides a regulatory document that establishes a guidebook for streamlined development in the area, crafted from community and stakeholder input.

This chapter includes the purpose of the Specific Plan, a description of the Specific Plan Area location ("Plan Area"), a summary of the planning and public outreach processes, an executive summary of the contents of the Specific Plan, and a glossary of terms and acronyms. The intent of this chapter is to preface the reader with the background information needed to use, understand, and navigate this document. This chapter explains the steps taken to prepare this Specific Plan and the authority the document has over current and future development.

1.1 Intent

Spanning approximately 51,622 acres adjacent to the Salton Sea, the Lithium Valley Specific Plan (LVSP or the Plan) addresses the transformation of primarily undeveloped land. The Plan Area requires extensive development in terms of infrastructure, roadways, and utilities to achieve the vision for this part of Imperial County because it currently contains the Salton Sea, agriculture, open space, and conservation areas. The Plan guides the implementation of land use regulations, design guidelines, transportation networks, and infrastructure policies tailored to support the unique community-based needs of the Lithium Valley region.

The Plan serves as the primary guide for future development through changes to the existing land use and zoning regulations. The identified land use and zoning changes contained in this Plan facilitate the economic transition to renewable energy and low-impact mineral recovery industries and provide for sustainable development for healthy communities. The Plan provides a roadmap for the trajectory of development, regulatory frameworks, the provision of amenities, and strategies to reduce environmental effects, ensuring alignment with adjacent land uses and sustainable growth.

The Plan integrates a policy framework and regulatory mechanisms into one comprehensive document, guiding development within its designated area, while remaining consistent with the Imperial County General Plan. Due to this, a concurrent General Plan Amendment was prepared to ensure the Plan is consistent with the General Plan.

1.2 How to Use and Interpret This Plan

The Lithium Valley Specific Plan serves as a regulatory framework and guidance document for properties within its boundaries in Imperial County. Projects within the Plan Area must be consistent with this Plan, ensuring compatibility with its overall vision, guiding principles, development standards, and design guidelines. Considering the desired development and design criteria, projects shall undergo evaluation and analysis through a review process conducted by the County. The Specific Plan is designed to promote development that harmonizes with the broader community while ensuring compatibility with surrounding land uses. This Specific Plan shall constitute the applicable zoning for parcels within the Plan Area. In cases of conflict between the Lithium Valley Specific Plan and the Imperial County Municipal Code, or its Land Use Ordinance, the provisions of the Specific Plan take precedence and control.

Any references the Plan makes to the County Code, are assumed to include any Code amendments or recodifications thereto. Any references

to existing or future laws, plans, ordinances, or regulations are not a part of the Specific Plan, and therefore amendments to those shall not constitute amendments to the Specific Plan.

This Plan outlines land use regulations, development standards, an implementation program, and financing mechanisms for future development. While the Plan includes summaries of exiting conditions, analyses (e.g. Chapter 6), and issues at the time the plan was prepared, changes to those conditions/analyses do not require amendments to the LVSP. None of the Plan's provisions will be interpreted by the County in a manner that violates State or Federal law. In reading every provision of the Plan, one should infer that it is limited by the principle, "to the extent legally permitted."

Chapter 1, Introduction and Intent, and Chapter 2, Vision and Guiding Principles are not intended to provide new goals or policies. Rather, these sections provide the general context, and in some cases the general rationale, for the goals and policies mentioned in the other chapters.

Specific plans attempt to balance a range of competing interests. The County, therefore, has the discretion to approve a project even though the project is not perfectly consistent with all of a specific plan's policies. (Sierra Club v. County of Napa (2004) 121 Cal.App.4th 1490.)

This Specific Plan includes terms like:

1. "Standards" are established rules for objective measures to which development must substantially conform, subject to deviations as provided in Chapter 6, Implementation. "Standards" are identified in this Specific Plan by use of the terms "will" or "shall."
2. "Guidelines" are recommended practices that allow greater discretion in their interpretation, implementation, or use. Development in the Plan Area should not be materially inconsistent with Specific Plan Guidelines. "Guidelines" are identified in this Specific Plan by use of the terms "should" or "may."
3. "Conceptual" examples depict one possible design that would substantially conform to the Standards and would be materially consistent with the Guidelines, but are not determinative. The Conceptual examples included in this Specific Plan, including graphic depictions and renderings are Conceptual, including without limitation the location, configuration, and massing buildings, the location and configuration of Streets other than Designated Thoroughfares, the placement and size of open space areas, and configuration of public facilities. Features depicted in grey scale on exhibits and renderings within the Specific Plan are Conceptual.
4. "Illustrative" examples illustrate one possible design that would substantially conform to the Standards and would be materially consistent with the Guidelines, but are not determinative. The illustrative examples included in this Specific Plan, including photos, are illustrative with respect to all elements depicted therein, including buildings, building location, alignment of streets, placement of Open Space areas and configuration of public facilities.

The following section outlines the ways in which this Specific Plan may be used:

For decision-makers, County officials, and agencies:

- Decision-makers can reference this document to ensure that development applications align with the values, goals, and policies outlined in the planning framework.
- County officials and responsible agencies shall carry out the goals, policies, and programs included at the end of the following chapters land use, development standards and design, circulation and transportation, infrastructure, and community health and prosperity. Together the goals, policies, and programs are intended to fulfill the Specific Plan's Vision and garner support for the Plan's implementation. An implementing organization, or "Responsible Party," is identified for every implementation

program to ensure continued commitment, enforceability, and accountability.

For developers and property owners:

- Developers can utilize the Plan to prepare their project designs, referencing the Vision and Guiding Principles and the Community Health and Prosperity sections to ensure alignment with community goals.
- Developers can reference Chapter 3, Land Use and Zoning, which includes detailed descriptions of land use designations, examples of allowed uses, and development standards, to prepare their project designs and ensure compliance with the Plan.
- The Design Standards and Guidelines establish reasonable development standards for commercial, industrial, manufacturing, logistics, infrastructure and other similar uses to ensure that developments subject to this Plan include the appropriate public improvements and are compatible with surrounding land uses.
- Chapter 8, Implementation, provides a checklist to ensure project consistency with the Plan. It also details the proposed implementation of the Plan, covering proposed financing, phasing, and development processes, along with administrative procedures for amendments, permits, substantial conformance and modifications.

For the general public:

- The Plan serves as a comprehensive resource, providing the public with detailed information about land uses, development standards, design guidelines, infrastructure requirements and financing strategies for proposed developments.
- The Plan includes information on public services, community amenities, and other public benefits from development within the Plan Area, helping the public stay informed about forthcoming changes and potential enhancements.

1.3 Plan History

The development of the Lithium Valley Specific Plan traces back to Imperial County's significant role in renewable energy production and aligns with California's ambitious clean energy goals and increasing demand for lithium, a critical resource in battery development essential for powering the state's shift towards zero-emission transportation. Assembly Bill (AB) 2514 [2010] recognized that expanding the use of energy/battery storage systems can assist electric service providers in integrating increased amounts of renewable energy resources by evening out variable and intermittent off-peak electric generation from wind and solar energy. With the signing of Senate Bill (SB) 100 in 2018, there was a push for increased renewable energy, including geothermal energy production, to achieve 100 percent clean energy production statewide by 2045. Leveraging the lithium resources of the Salton Sea region, the state embarked on positioning itself as a leading source of lithium, introducing the concept of "Lithium Valley."

In September 2020, Assembly Bill 1657 created the Blue Ribbon Commission on Lithium Extraction, known as the Lithium Valley Commission, charged with investigating and analyzing a range of related issues in collaboration with other government agencies and members of the public. Subsequently, in 2022, SB 125 allocated funding for the development of a Lithium Valley Specific Plan and Programmatic Environmental Impact Report (PEIR) and the distribution of grants to local community-based organizations (CBOs) to conduct public engagement as part of this planning process.

The Imperial County Board of Supervisors directed County staff on December 21, 2021 to develop land use and environmental policy documents to streamline renewable energy and mineral resource extraction projects in the region, leading to the release of a Request For Proposals (RFP) for the Specific Plan and PEIR, supplemented with a Baseline Report, Infrastructure Assessment and other related General Plan and Zoning Amendments.

Prior to the development of the Lithium Valley Specific Plan, the project team performed an in-depth Existing Conditions Analysis, which included the preparation of the Baseline Report and Infrastructure Assessment documents. The analysis conducted for these reports was supplemented by a series of detailed technical studies that encompassed a wide range of factors, including transportation studies, biological surveys, cultural surveys, analysis of noise impacts, airport analysis, and rail studies. These reports provided insights into regulatory, physical, demographic, and industry-related trends within the Plan Area, informing future development recommendations.

Concurrently, extensive community engagement efforts were performed, including workshops, meetings with technical advisory groups, Native American consultation, and meetings with an Environmental Justice Working Group. The feedback gathered during these sessions, along with the findings from the existing conditions reports, guided the formulation of three distinct land use map alternatives. This collaborative process led to the preparation of the Land Use Alternatives Memorandum, which proposed several different land use schemes. The Baseline Report and the Land Use Alternatives Memorandum served as the starting point for the preparation of the Lithium Valley Specific Plan.

Lithium Recovery Explained

Geothermal plants near the Salton Sea lift super-hot, mineral-rich brine to the surface to spin a steam turbine as a source of renewable energy. Before reinjecting the brine back into the geothermal reservoir, companies plan to use Direct Lithium Extraction (DLE) systems to selectively capture lithium ions from the brine and further process the lithium to produce battery-grade lithium carbonate or hydroxide, ready for battery manufacturing. This closed-loop system offers critical minerals with reduced carbon, water and environmental footprints when compared to lithium hard rock mining and massive evaporation operations.

Lithium is a critical mineral needed for technology and electric vehicles, and having a domestic supply may bolster national security as well the local economy.

1.4 Specific Plan Area Location (Plan Area)

Imperial County, situated in Southern California, lies to the east of San Diego County, west of the Arizona border, and north of the US-Mexico border, which forms its southern boundary (See Figure 1-1 Vicinity Map). Historically, the County has been characterized by extensive agricultural activities, playing a significant role in crop production and employment within the agricultural sector. Serving as a center for international trade and regional commerce, Imperial County boasts a population of around 180,000 residents (US Census 2020). The Plan Area, located in the northern portion of the County, overlaps the southeastern portion of Salton Sea, which is renowned for its ecological significance and unique geological features which serve as a focal point for environmental conservation efforts and recreational activities in the region.

The Salton Sea is maintained by agricultural runoff from the Imperial and Coachella valleys and supports an ecosystem that attracts hundreds of migratory bird species and other wildlife. The Salton Sea is a vital piece of the Pacific Flyway, a major north-south flyway for migratory birds in North and South America. However, elevated salinity levels and environmental toxins caused by lack of inflow and an increase of pollutants from the New River and Alamo River have significantly harmed fish and bird populations, leading to a decline in their numbers. However, shorebirds and waterfowl are thriving in large numbers. These birds have adapted by feeding on abundant invertebrates such as water boatman, which have flourished in the changing ecosystem. The Salton Sea is a terminal lake and with no outflow and the effect of evaporation, salinity levels will continue to increase regardless of other factors (State Water Resources Control Board, 2025).

The Specific Plan boundary was designed to encompass a significant portion of the Salton Sea Known Geothermal Resource Area (KGRA), excluding the unincorporated town of Niland, the City of Calipatria, and State and Federally owned land within the Salton Sea. This location holds strategic significance due to its proximity to the KGRA, making it ideal for the exploration and development of geothermal energy generation with lithium recovery development. Its northern boundary extends to

incorporate the railroad, while the eastern boundary includes major transportation corridors such as State Route 111 (SR-111) and Gentry/Forrester Road, with proximity to the North-South railroad line parallel to SR-111. The southern boundary extends to reach the New River.

The City of Calipatria owns a 160-acre area of land within the Plan Area where the City operates the Calipatria Wastewater Treatment Plant. The regulations in this Plan are generally not applicable to the 160-acre area unless the land is transferred to a private individual or used by a private lessee solely for private purposes (Gov. Code § 53090 et seq.; 68 Ops.Cal.Atty.Gen. 114, 118 (1985).). The treatment plant itself covers 25 acres in the southwest corner of the 160-acre area. The remaining 135 acres of the city's land consists of vacant native fields. Similarly, IID owns multiple parcels within the Plan Area for which the land uses proposed would not affect IID rights and control.

Salton Sea Shoreline
Image Source: QSA Joint Powers Authority

Shoreline at Bombay Beach
Image source: RICK (2023)

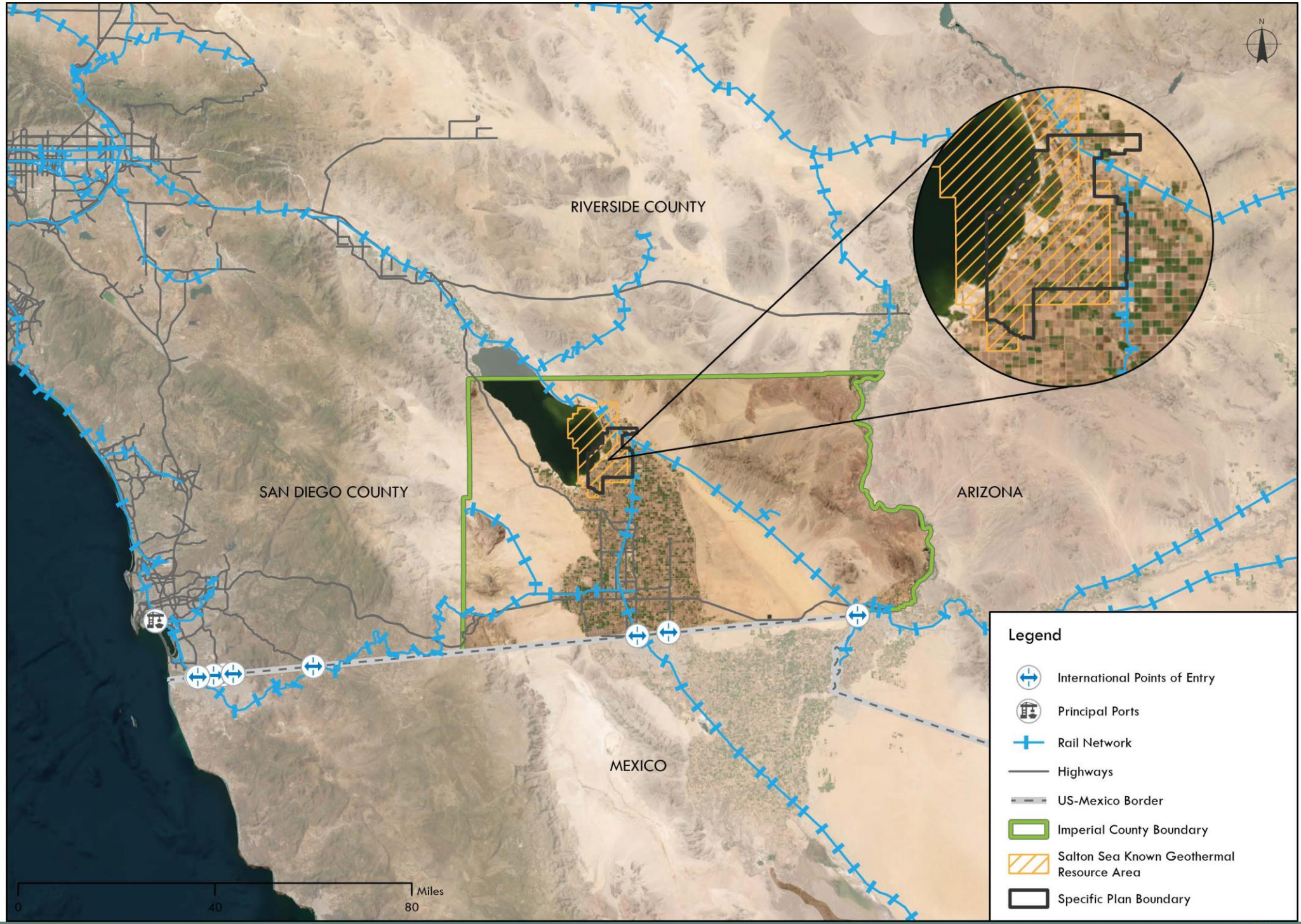


Figure 1-1, Vicinity Map

1.5 Relationship to the General Plan and Other Planning Documents

The Lithium Valley Specific Plan, authorized under California Government Code Section 65450 et seq., is structured to comprehensively address key aspects of land use distribution, infrastructure planning, and implementation of development standards. This includes detailed provisions for essential facilities such as transportation, wastewater, water, drainage, solid waste disposal, and energy infrastructure, all of which are crucial for supporting planned land uses while conserving natural resources. Implementation measures outlined in the Plan include regulatory frameworks and financing strategies aimed at effectively executing and integrating its objectives into the broader County General Plan.

As a tool for guiding development, the Specific Plan strategically implements the County General Plan by focusing on site-specific planning tailored to expedite industries like renewable energy, mineral recovery, and lithium battery manufacturing within the Salton Sea adjacent area. Directly in support of Renewable Energy and Transmission Element, Goals 3 and 5, this initiative aims to attract significant investment in renewable energy sectors, stimulate local job creation, and foster economic growth while emphasizing sustainable practices to mitigate environmental impacts and ensure public health protection.

Moreover, the Plan directly aligns with Imperial County's Strategic Plan and Economic Development Strategy, reinforcing local objectives for geothermal energy development and economic diversification.

Environmental considerations are guided by Imperial County's Environmental Justice Element which provides objectives and policies to reduce the unique or compounded health risks in Disadvantaged Impacted Communities, promote civil engagement in the public decision-making process, and prioritize improvements and programs that address the needs of Disadvantaged Impacted Communities. The Environmental Justice Element is being worked on concurrently with the Lithium Valley Specific Plan, and thus collaboration efforts were held to ensure consistency between documents. As discussed in Section 1.9, Community Engagement, the Specific Plan process has conducted a comprehensive and intentional community engagement strategy that engaged with the harder to reach communities of Imperial County. The Specific Plan was then drafted based on community feedback to foster healthy communities through initiatives that promote access to high-quality healthcare, recreational opportunities, and essential services. This chapter lays the groundwork for long-term public health improvements.

Collaboration with tribal governments ensures responsible resource management and community engagement, further supporting the Plan's implementation and alignment with broader County goals.

Throughout its development and approval process, the Specific Plan underwent careful scrutiny to maintain consistency with its objectives and align harmoniously with the overarching policies of the County General Plan. This adherence ensures synergy and coherence between the Lithium Valley Specific Plan and Imperial County's strategic planning documents, enhancing the Plan's effectiveness in guiding sustainable development and economic prosperity in the region. Nevertheless, to ensure precise consistency, amendments to the General Plan will be adopted with this Specific Plan (e.g. land use designations, Circulation & Scenic Highways Element).

Concurrent amendments to the County's Zoning Code and Zoning Map were also adopted to identify this Plan as containing the controlling zoning for parcels within the Plan Area. In cases of conflict between the Lithium Valley Specific Plan and the Imperial County Code (and the Imperial County Land Use Ordinance included therein), the provisions of this Specific Plan take precedence and control. Where the Specific Plan is silent, the County Code shall control.

In addition to the Imperial County General Plan, Regional Water Quality Control Board Basin Plan, Imperial Air Pollution Control District Regulation, other plans and policy documents that were reviewed and referenced to better understand existing conditions, planned improvements, and policy synergies include:

- Imperial County Land Use Ordinance (As Amended 2025)
- Imperial County Active Transportation Plan (2019)
- Imperial County Community Health Improvement Plan (2024)
- Imperial County Good Neighbor Community Benefit Agreement (CBA) Program (2024)
- Imperial County Strategic Plan (2023)
- Integrated Regional Water Management Plan (2008)
- IID Interim Water Supply Policy for Non-Agricultural Projects (2009)
- IID Interim Temporary Land Conversion Fallowing Policy (2016)
- IID Equitable Distribution Plan (2023)
- IID Water Conservation Plan (2021)
- IID Equitable Distribution Plan (2025)
- Imperial County Transportation Commission Long Range Transportation Plan (2024)
- ICTC Regional Climate Action Plan (2021)
- Southern California Association of Governments (SCAG) Connect SoCal (2024)
- Desert Renewable Energy Conservation Plan (2016)
- California Energy Commission (CEC) Report of the Blue Ribbon Commission on Lithium Extraction in California (2022)
- Airport Land Use Compatibility Plan Update for Imperial County (2025)
- Salton Sea Management Program Phase 1: 10 year plan (2018)
- Caltrans California Transportation Plan (2050)
- CalSTA Climate Action plan for Transportation Infrastrucrure (CAPTII) (2021)
- Caltrans Smart Mobility (2010)
- Caltrans California Freight Mobility Plan (2023)
- Caltrans California State Rail Plan (2024)
- Imperial County Transportation Commission Long Range Transportation Plan (2024)

1.6 CEQA Compliance

The County of Imperial, as the lead agency under CEQA, prepared a Programmatic Environmental Impact Report (PEIR) for the Lithium Valley Specific Plan pursuant to current CEQA Guidelines. According to Section 15168 of the CEQA Guidelines, a PEIR may be prepared when the scope of the environmental review encompasses a series of actions constituting a unified project, which are interconnected either geographically, as logical components in a sequence of proposed actions, or in conjunction with the development of governing rules or plans. These actions may also be categorized as individual activities conducted under the same statutory or regulatory authority, sharing comparable environmental impacts that can be mitigated through similar measures.

PEIRs enable a comprehensive evaluation of environmental impacts and alternative courses of action, surpassing the typical limitations within a single project EIR. The PEIR evaluated the full range of environmental issues contemplated under CEQA and the CEQA Guidelines for the entire Specific Plan. Moreover, PEIRs prevent redundant reassessment of policy considerations, allowing the lead agency to focus on overarching policy alternatives and mitigation strategies. The PEIR can streamline administrative processes, resulting in reduced delays and enhanced efficiencies in environmental review procedures for projects meeting program criteria, as outlined in the Implementation Chapter 8 Section 1, Application and Review Process.

The PEIR was prepared to be consistent with the requirements established under Section 15168 of the CEQA Guidelines. Issue areas addressed in the PEIR include:

- Aesthetics
- Agriculture and Forest Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geologic Conditions

- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildlife

The PEIR also includes other CEQA analyses including growth inducement, cumulative impacts, significant irreversible environmental changes, unavoidable significant environmental changes, areas of no significant environmental impact, and alternatives.

On XXX XX, XXXX, the Imperial County Board of Supervisors certified that Final PEIR (State Clearinghouse Number: XXXX-XXX):

- It was completed in compliance with CEQA.
- It was presented to the Board of Supervisors and the Board reviewed and considered the information contained in the final PEIR prior to approving the project; and
- Reflects the County's independent judgment and analysis.

1.7 Legal Authority

The scope of the Lithium Valley Specific Plan is authorized and described by California Government Code (Title 7, Chapter 3, Article 8, Section 65450, et seq.) which grants counties and cities the authority to prepare Specific Plans for land use and development within a designated area. Specific Plans are developed to provide a comprehensive framework for the systematic implementation of the General Plan. To conform with the requirements outlined in California Government Code Section 65451 et seq., Specific Plans address the distribution, location, and extent of land uses, including open space, along with proposing essential facilities like transportation, sewage, water, and energy infrastructure needed to support these land uses. The document establishes standards and criteria for development while considering the conservation and utilization of natural resources, where applicable. To ensure effective implementation, the Plan includes a program of measures and financing mechanisms to achieve the objectives outlined in the Plan.

1.8 Executive Summary

The Executive Summary provides a high-level overview of each chapter of the Lithium Valley Specific Plan, highlighting key components like the land use designations and the infrastructure components.

Chapter 1 Introduction and Process

The Lithium Valley Specific Plan (the Plan), developed by the County of Imperial, outlines a comprehensive framework to transform the Imperial Valley into a hub for renewable energy, mineral recovery, manufacturing, and logistics across 51,662 acres adjacent to the Salton Sea. It creates new land use and zoning regulations to support the mineral recovery and geothermal energy industries, replacing the Imperial County's existing land use and zoning within the Plan Area. The Plan necessitates extensive infrastructure development, including roadways and utilities, to support the workforce and economic growth. The Plan provides land use regulations, development standards, design standards, policies and programs, all informed by feedback from community engagement efforts. Collaboration with stakeholders, educational institutions, and community organizations was key in the development of the Plan, aligning the initiative with California's clean energy goals and the rising demand for lithium. The Programmatic Environmental Impact Report (PEIR), prepared under California Environmental Quality Act (CEQA) guidelines should assist in expediting development within the Plan Area, consistent with CEQA Guidelines Section 15168(c).

Chapter 2 Vision and Guiding Principles

The Vision and Guiding Principles chapter states the overall vision for the Lithium Valley Specific Plan, as well as the foundational guiding principles that support the vision. The vision and guiding principles were created organically through themes that surfaced from various community engagement efforts.

> Vision Statement: **Lithium Valley is a dynamic and prosperous region that prioritizes public health and local jobs in innovative clean energy industries. Lithium Valley aims to lead the way toward energy independence, a domestic supply of critical minerals, and a reduction in global emissions, by harnessing Imperial County's geothermal and other natural resources. Through collaboration, Lithium Valley increases economic opportunity, enhances infrastructure, and creates lasting benefits for the community.**

The Guiding Principles utilized in the development of this Plan include:

- Leadership in Renewable Energy
- Environmental Justice
- Advancing Opportunity
- Job Creation and Local Economy
- Environmental Stewardship and Responsible Growth
- Acknowledge and Respect to California Indian Tribal Lands
- Community Engagement
- Transformative and Innovative Planning
- Proactive Infrastructure and Services
- Distinctive Community Identity

Chapter 3 Land Use

This chapter outlines the land use plan designations and what exact uses are permitted within each land use designation. The Land Use Map identifies which parcels are subject to the various land use designations. Table 3-2, Use Table, specifies what uses are permitted by right, permitted with a Special Use Permit, or ancillary within each land use designation. Permitted uses typically do not require additional discretionary actions, while provisionally permitted uses require a Special Use Permit with additional analysis and requirements (See Section 8.1.3A Special Use Permit Process). Ancillary uses are secondary to a primary use and are intended to be supportive.

Land Use Designations

- Green Industrial: Promotes industrial operations that decarbonize the energy and mineral recovery industries, with a focus on geothermal energy production and environmentally responsible mineral recovery operations.
- Manufacturing: Supports the assembly of clean energy products and accommodates industrial, office, and warehouse space for manufacturers, including geothermal energy and mineral recovery operations.
- Logistics: Facilitates the efficient movement of goods, accommodating warehousing, management, distribution activities, geothermal energy and mineral recovery operations.
- Playas Renewables: Promotes uses similar to Green Industrial, with restrictions to ensure compatibility with the environmental conditions of the Salton Sea and the exposed playas, including dust suppression measures.
- Community Opportunity Area: Addresses community needs of nearby residential areas, allowing for commercial hubs, social gathering areas, housing, recreational uses, healthcare services, and

childcare services, planned in collaboration with neighboring communities.

- Interim Agriculture: Retains large agricultural areas until they are needed for industry-driven uses, including existing agricultural lands and other agriculture-related uses, transitioning to industrial uses in later phases.
- Solar: Supports the development of large-scale solar power generation facilities. The solar designations may transition to other uses like Logistics or Manufacturing after their project lifespans end.
- Playas Restoration: Supports Salton Sea restoration, habitat creation, and dust suppression while allowing very limited geothermal wells and passive recreation, focusing on environmental restoration and mitigation activities.
- River Corridor: Enhances the Alamo River and New River drainage basins, including a buffer zone to improve water quality and environmental health while reducing flooding impacts.
- Conservation: Protects areas of environmental, cultural, and tribal significance, retaining areas for restoration and mitigation projects, including those under contract for restoration efforts and new areas for Salton Sea rehabilitation projects.

Phasing

To maintain flexibility and responsiveness, the Plan establishes proposed phasing of development with the Plan Area, as well as mechanisms for transferring and expanding development within different phase areas.

- Phase 1 is intended for initial development stemming from existing infrastructure and geothermal plants. Phase 1 is reflective of foreseeable development projects that can aid the installation of essential infrastructure. Phase 1 is anticipated to occur over the first 20 years with 2026 as the inaugural year.
- Phase 2 extends outward from the first phase into areas with less established infrastructure. Phase 2 is anticipated to occur ten years after Phase 1.
- Phase 3 includes areas within the Playas Restoration and Interim Agriculture land use designations. The Interim Agriculture designation is intended to remain as useable agriculture until there is a need to transition these lands to industry-driven uses that have expanded outside of their initial land use designated areas. Phase 3 is anticipated to occur ten years after Phase 2.

Chapter 4 Development and Design Standards

The Development and Design Standards includes requirements for future development within the Plan Area, including regulations related to different development use types, intensities, and locations. Development standards and design standards both guide the form and function of projects but serve different purposes. Development standards focus on measurable requirements related to the physical form of development, such as height limits and lot coverage, ensuring projects meet regulatory and functional needs. Design standards, address the aesthetic and functional aspects of a development, such as building materials, landscaping, and signage. This chapter also establishes development standards that apply to unique locations.

Development Standards are provided for:

- Minimum Lot Size
- Setbacks
- Maximum Building Height
- Maximum Utility Structure Height
- Maximum Lot Coverage
- Minimum Area for Landscaping and Dust Suppression
- Parking

Design Standards are included for:

- Site Design Standards
- Campus Design Standards
- Building Design
- Landscape
- Lighting
- Perimeter Walls and Fences
- Off-Street Loading Facilities
- Waste, Compost, and Recycling Storage
- Mechanical Screening
- Signage

Chapter 5 Circulation & Transportation

Chapter 5, Circulation & Transportation, describes the transportation networks for automobiles, trucks, bikes, pedestrians, and rail traffic. There are three roadway classifications proposed in the Plan Area: State Highways, Major Industrial Collectors, and Industrial Local Streets. The Circulation & Transportation chapter includes proposed truck routes, designed to optimize regional connectivity and enhance community safety. Locations of bridge improvements are identified as well as design standards for bridge improvements. Bicycle and pedestrian improvements are identified with a focus on existing communities.

The proposed rail alignment is designed to serve foreseeable users over the next five to ten years. The rail alignment will enter the Plan Area from the Union Pacific Railroad (UPRR) Calexico Subdivision and will serve as the backbone of the railroad network. Additional tracks may be constructed to connect individual developments to the rail spur.

Public transit improvements and will be completed in phases, based upon rates of employment growth and trends in transit ridership.

Chapter 6 Infrastructure

The Infrastructure chapter addresses the foundational systems and services important for the growth and operational efficiency of Lithium Valley. This chapter provides recommended infrastructure improvements for future consideration to meet the anticipated needs of development as it occurs within the Plan Area. Infrastructure topics addressed in this section include water, wastewater (sewage), stormwater and drainage, electrical transmission, solid waste disposal, telecommunications and broadband, and essential services. The essential services included are police services, fire services, and healthcare and hospital facilities. The County of Imperial plans on establishing a new Infrastructure Special District (Special District) to provide and maintain services to development within the Plan Area.

Water

The Special District will purchase water from the Imperial Irrigation District (IID) to serve projects within the Plan Area, with the option for the City of Calipatria and the town of Niland to join as municipal water users. Phase 1 water supply, estimated at approximately 48,023 acre-feet per year, will be secured through negotiations with IID. Water supply may be provided by surface water, groundwater, and reclaimed water. Future water supply for subsequent phases are intended to be guided by a comprehensive Water Master Plan (WMP).

Wastewater

Initial developments will utilize engineered septic systems to manage non-process and sanitary wastewater, transitioning to centralized treatment as development progresses.

Two new wastewater treatment plants (WWTPs) are proposed for Phase 1, strategically located within the Green Industrial Area on both sides of the Alamo River, as shown in Figure 6-2 Proposed Wastewater System.

These locations are designed to efficiently manage projected wastewater demand, minimizing long-distance conveyance and addressing topographical challenges. Both WWTPs will incorporate advanced tertiary treatment to meet National Pollutant Discharge Elimination System (NPDES) requirements, enabling treated effluent to be safely returned to the Alamo River and Salton Sea. The Special District will be responsible for the WWTP facilities, however should the formation of a Special District not occur, the County will look to use various funding mechanisms to construct and maintain WWTP facilities.

Upgrades to existing WWTPs in Niland and Calipatria, as well as the construction of new facilities, will align with regulatory compliance and may enhance overall water quality. Tertiary treatment offers significant benefits, including reduced nutrient pollution, improved aquatic ecosystem health, and opportunities for water reuse in irrigation and industrial processes.

Floodplain, Drainage, and Stormwater Quality

Floodplain strategies focus on long-term resilience and include creating wide river corridors for the Alamo and New Rivers to accommodate 100-year peak flows or raising buildings above flood levels. The proposed Alamo River corridor would require a width of 950 feet, while the New River corridor would necessitate 1,275 feet. No buildings shall be constructed within river corridors. Applicable setbacks are established in Section 4.1.1.E. These corridors would reduce floodplain constraints, eliminate the need for individual FEMA approvals for future developments, and enable stream restoration, habitat creation, and mitigation credit generation (Figure 6-4 Drainage Infrastructure Opportunities). Establishing these corridors would involve coordination, including obtaining permits from resource agencies such as the California State Water Resources Control Board and the U.S. Army Corps of Engineers.

For drainage, projects must typically prepare drainage studies, and public facilities must manage stormwater up to a 100-year frequency. Converting IID drains to stormwater channels is also proposed, potentially under the management of a newly formed Flood Control District funded by development impact fees.

Development within the 100-year floodplain will require FEMA approvals, including Conditional Letters of Map Revision (CLOMR) and Letters of Map Revision (LOMR), and associated studies to address increases in base flood water surface elevations (BFE). Local entities such as the Imperial Irrigation District (IID) and Imperial County oversee compliance, maintenance, and flood control objectives, including hydrologic data collection, flood warnings, and ensuring private development compliance with FEMA policies.

Electrical Transmission

Due to the high investment costs to construct transmission lines, the existing process constructs transmission lines only when there is shovel-ready development to support. To accommodate future energy demand, the recommended electrical transmission network provides the voltage and locations of what transmission lines may need upgrades and/or extensions into the Plan Area as development is proposed.

Solid Waste Disposal

New development within the Plan Area will be required to establish waste collection services that transport solid waste to permitted landfills with adequate capacity. As the Plan Area develops, the newly formed Special District is expected to coordinate solid waste collection in accordance with the requirements of Senate Bill (SB) 1383, which mandates organic waste diversion and reductions in landfill disposal.

For specialized waste types like hazardous materials or large-scale commercial waste, including any hazardous materials from mineral extraction activities, specialized companies and facilities are equipped to manage these safely and in compliance with environmental regulations. While it is expected that some mineral extractions processes will not generate any hazardous waste, any hazardous waste produced shall be legally and properly disposed of.

To address municipal solid waste disposal needs, the new Special District will oversee waste management services, establish contracts with specialized companies, and enforce compliance through reporting and inspections. The Special District will focus on minimizing waste, maximizing recycling, and ensuring safe disposal practices while protecting environmental quality.

Telecommunications and Broadband

Reliable telecommunications and broadband infrastructure are important for the success of Lithium Valley. It is recommended that broadband fiber cables be installed along the major ingress/egress routes of English Road, Pound Road, Sinclair Road, and Brandt Road connecting the Phase 1 users to the Statewide broadband network. Furthermore, a high-level design summary for the Plan Area is recommended to better refine the broadband network map included in this Specific Plan as development occurs.

Essential Services

Law enforcement in the Plan Area is managed by the Imperial County Sheriff's Office (ICSO), with the nearest station located in Niland. Given the anticipated workforce growth from industrial development, ICSO will need to expand its facilities, staffing, and equipment to maintain service efficiency and response times. A joint fire/police substation is proposed during Phase 1 to enhance emergency response capabilities, accommodating personnel, training facilities, and operational needs. The location of this facility should consider response times to any planned facilities manufacturing lithium batteries or containing large-scale Battery Energy Storage Systems (BESS)'s.

Fire protection services are provided by the City of Calipatria Fire Department and the Imperial County Fire Department (ICFD). Workforce increases will necessitate the construction of a larger fire station and additional infrastructure to improve emergency response times and inter-agency consultation. ICFD will expand personnel, apparatus, and water supply systems, leveraging mutual aid agreements and aligning with national response standards.

Healthcare services will be overseen by the Imperial Valley Healthcare District (IVHD), established to consolidate and improve healthcare access in underserved communities. IVHD will collaborate with hospitals and clinics to address gaps in emergency care, specialty services, and preventive care, particularly in rural areas like Calipatria and Niland. Strategies may include expanding telehealth services, deploying mobile clinics, and implementing workforce training and recruitment programs to meet healthcare demands.

Chapter 7 Community Health and Prosperity

The Community Health and Prosperity chapter outlines new and existing tools for fostering community health and prosperity within the Plan Area. The importance of community health and prosperity spans beyond the authority of this document, a land use regulatory document, which is why the County has undertaken multiple supplemental initiatives to provide economic and quality of life improvements to the local community.

The goals, policies, and programs included in this chapter serve as critical tools toward economic empowerment, public health, and workforce development.

Chapter 8 Implementation

The Implementation Chapter details the development application review process, maintenance responsibilities for infrastructure, and development incentives to attract investment. Additionally, it outlines potential financing and funding mechanisms to support program initiatives.

1.9 Community Engagement

1.9.1 Community Engagement Process

Various types of community engagement occurred throughout the planning process illustrated in Figure 1-2 Project Process. The first major

project deliverable was the Draft Baseline Report which received input and feedback by the Technical Advisory Groups, Environmental Justice Working Group, Academic Task Force, County staff, and community workshops hosted by the project team and the contracted CBOs. The Baseline Report also included an Infrastructure Assessment that included an inventory of the existing infrastructure and utilities in the area to understand the capacities and future development constraints. The project team incorporated input received regarding the draft report into the Final Baseline Report.

Following deliberation with stakeholders, internal County staff reviews and obtaining technical feedback, the team prepared a Land Use Alternatives Memorandum to explain three possible land use plan schemes that were reflective of the opportunities and constraints documented in the Baseline Report. The land use schemes were presented to the Technical Advisory Groups, the Environmental Justice Working Group, Academic Task Force, and various community workshops hosted by the project team and the contracted CBOs. The team drew from feedback from these engagement efforts.

Following the Board's consideration of the Land Use Alternatives Memorandum, the County prepared the Draft Specific Plan based on a revised version of Alternative 2 identified in the Land Use Alternatives Memorandum, and based upon input from the Board's November 7, 2023 meeting. The Draft Specific Plan was released and referred to agencies and interested parties prior to the release of the Draft PEIR.

Subsequently, the County released the Notice of Preparation (NOP) and Initial Study (IS) for the Programmatic Environmental Impact Report (PEIR). The project team received responses to the NOP which were considered in the preparation of the Draft EIR. The Draft PEIR was prepared and distributed for a public comment period. Various community engagements were held during the public review period. The feedback received during the public review period which addressed significant environmental issues was considered and responded to in the Final PEIR and where appropriate, reflected in revisions to the Draft Specific Plan.

Figure 1-2 Project Process

1.9.2 Types of Engagement

The following types of community and stakeholder engagement were used throughout the planning process. It was important to use a wide variety of techniques to reach a wide audience and inform the broader community of this important project and empower community members to get involved. Appendix A, Community Engagement Tracking, provides a detailed list of all community engagement events held for the Lithium Valley Specific Plan. Appendix A, List of Community Engagement Events, provides a comprehensive list of the community engagement events conducted by Imperial County, the County's consultants, and the contracted community-based organizations (CBOs). Figure 1-3 Community Engagement Highlights, provides a few key highlights of the Project's engagement program.

A. Community Workshops and Community Meetings

These official workshops were organized by the County to inform and engage the public on specific topics related to the project. The County hosted one workshop entirely in Spanish to ensure that Spanish-speaking community members could participate and understand the project details. These workshops provided a platform for community members to learn about the project, ask questions, and provide feedback. County-contracted Community-Based Organizations (CBOs) held approximately 53 of the total 59 workshops or community meetings during the process to leverage their trusted relationships within the community and access hard-to-reach populations within Imperial County. These workshops provided opportunities for more personalized and accessible engagement for community members.

B. Community-Based Organization Outreach

The County-contracted CBOs conducted a myriad of engagements with the goal of ensuring the local community is engaged and informed. CBOs were tasked with engaging with the communities directly and indirectly affected by the incoming industry in Lithium Valley. Types of engagement

conducted by the CBOs included community meetings, social media posts, event booths, canvassing, newsletters, and being a guest speaker. Regularly scheduled meetings were held with the County to discuss progress, gather feedback, and ensure that community concerns were brought to the attention of the Project Team. As shown in Figure 1-3 Community Engagement Highlights, the CBOs led approximately 70% of the engagement efforts held.

C. Environmental Justice Working Group

This dedicated group focused on addressing and integrating environmental justice concerns into the project. It met seven times over the course of the project to discuss the needs of marginalized communities to find ways to highlight and address these needs in the planning process.

D. Land Use and Development Technical Advisory Group

The project team formed and continued to convene this group of technical experts and stakeholders related to land use and development throughout the duration of the Lithium Valley Specific Plan process. This Technical Advisory Group (TAG) convened three times during the process to review deliverables and provide input on major land use topics and issues.

E. Infrastructure Technical Advisory Group

Similar to the Land Use and Development TAG, the project team formed and convened a separate group of infrastructure-related technical experts and stakeholders related to land use and development throughout the duration of the Lithium Valley Specific Plan process. The Infrastructure TAG met three times throughout the process to review deliverables and provide input on infrastructure needs and recommendations.

F. Stakeholder Meetings

The project team held various impromptu meetings with stakeholders, applicants, agencies, geothermal providers, and educators, to work through land use, transportation, and infrastructure obstacles. Follow-up discussions on topics such as water supply and stormwater conveyance may warrant additional consultation with stakeholders and agencies to continue to refine the path forward, as part of the Plan's implementation.

G. "Pop-Up" Events or Booths

The Project Team conducted additional engagement throughout the North End of the County by hosting outreach tables, or booths, at community events and conducting an informal presentation at a local high school. These were held at events or locations such as wellness or resource fairs, the Brawley Cattle Call, and college campuses. These efforts aimed to reach a broader audience in a casual setting, providing information and gathering feedback regarding the Plan's progress.

H. Academic Task Force

This task force included a group of academics with expertise in relevant topics such as geology and mineral extraction, environmental justice, air quality, and public policy. The Academic Task Force met four times during the planning process to review deliverables and provide insights on key project issues.

I. Status Updates to the Imperial County Board of Supervisors

The project team provided regular updates to the Board of Supervisors to keep the supervisors informed about project progress, key milestones, and community feedback, thus ensuring transparency and accountability in the development of the Plan and its various components.

J. Noticing Mailers to Property Owners

The County sent official mail notifications to property owners within the Plan Area, and to property owners within the Plan Area, to inform them about the project, upcoming meetings, and opportunities for engagement. These mailings ensured that property owners were aware and could participate in the planning process.

K. Tribal Consultation and Outreach

The project team conducted informal and formal consultations with local tribes and tribes with historical areas of significance to ensure that their perspectives, cultural heritage, tribal cultural resources, places, features, and objects, and concerns were considered in the development of the Plan and its implementation.

Lithium Valley Community Engagement Highlights

Engagement In

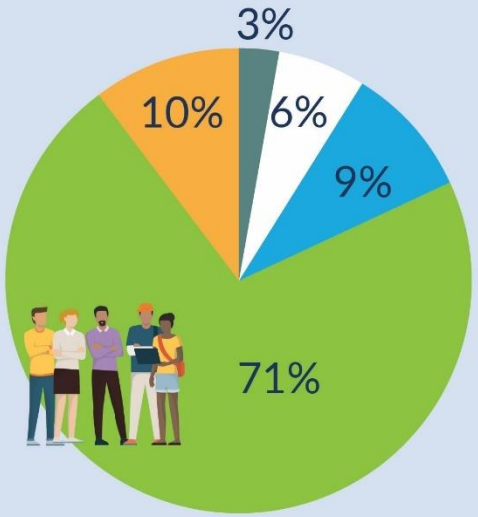
41

Different Cities

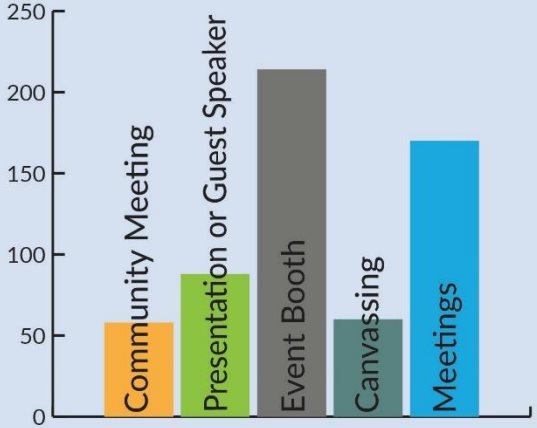
170

Stakeholder Meetings

Primary Audience



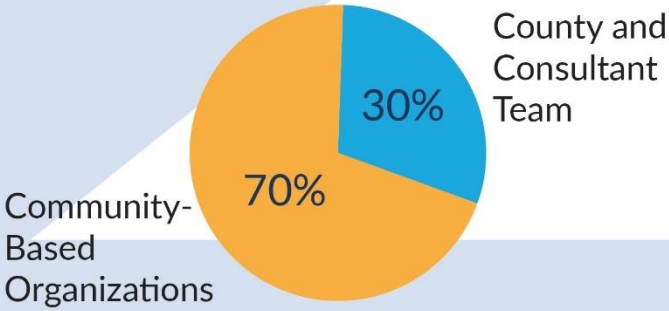
Type of Engagement



59

Community Meetings and Workshops

Lead Organization



600+ Total Engagements

Figure 1-3, Community Engagement Highlights

1.10 Acronym Glossary

Acronym	Definition
AB	Assembly Bill
AED	Automated External Defibrillator
AFY	Acre-Feet Per Year
AHSC	Affordable Housing and Sustainable Communities Program
APCD	Air Pollution Control District
AQI	Air Quality Index
ATP	Active Transportation Plan
BESS	Battery Energy Storage System
BFE	Base Flood Elevation
BLM	Bureau of Land Management
BMPs	Best Management Practices
CalARP	California Accidental Release Prevention Program
CalRecycle	California Department of Resources Recycling and Recovery
CALGreen	California Green Building Standards Code
CalVans	California's Vanpool Program
CBO	Community-Based Organization
CDBG	Community Development Block Grant
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CHIPS	Creating Helpful Incentives to Produce Semiconductors
CGP	Construction General Permit
CLOMR	Conditional Letter of Map Revision
CMAQ	Congestion Mitigation and Air Quality Improvement Program
CNRA	California Natural Resource Agency
CPUC	California Public Utilities Commission
CUP	Conditional Use Permit
CUPA	Certified Unified Program Agency
DLE	Direct Lithium Extraction
DDS	Development & Design Standards
DD	Development & Design
DU/Acre	Dwelling Units Per Acre
DTSC	California Department of Toxic Substances Control
DU	Dwelling Unit
EHS	Environmental, Health, and Safety
EIFD	Enhanced Infrastructure Financing District
EIR	Environmental Impact Report
EMS	Emergency Medical Services
EPA	Environmental Protection Agency
ETAP	Environmental Technical Assistance Program
EV	Electric Vehicle
FFA	Federal Funding Account
FEMA	Federal Emergency Management Agency
FQHC	Federally Qualified Health Center
GSI	Green Stormwater Infrastructure
HUTA	Highway Users Tax Account
HVAC	Heating, Ventilation, and Air Conditioning
ICPDS	Imperial County Planning & Development Services
ICDPW	Imperial County Department of Public Works
ICSO	Imperial County Sheriff's Office
ICTC	Imperial County Transportation Commission
IID	Imperial Irrigation District
INFRA	Infrastructure for Rebuilding America Grant Program
ISO	Independent System Operator
IT	Information Technology
IVFCMG	Imperial Valley Family Care Medical Group
IVHD	Imperial Valley Healthcare District
IVRMA	Imperial Valley Resource Management Agency
IVTA	Imperial Valley Telecommunications Authority
IVT	Imperial Valley Transit
KGRA	Known Geothermal Resource Area

LAFCO	Imperial County Local Agency Formation Commission
LEA	Local Enforcement Agency
LEED	Leadership in Energy and Environmental Design
LGBT	Lesbian, Gay, Bisexual, Transgender, Queer or Questioning
LID	Low Impact Development
LOMR	Letter of Map Revision
LOS	Level of Service
LRTP	Long Range Transportation Plan
LPP	Local Partnership Program
LSR	Local Streets and Roads Program
LTA	Local Transportation Authority
LU	Land Use
LVIP	Lithium Valley Economic Opportunity Investment Plan
LVSP	Lithium Valley Specific Plan
MOA	Military Operations Area
MGD	Million Gallons Per Day
MS4	Municipal Separate Storm Sewer System
MSR	Municipal Services Review
MW	Megawatt
NCSD	Niland County Sanitation District
NGO	Non-Government Organization
NOP	Notice of Preparation
NPDES	National Pollutant Discharge Elimination System
NRCS	National Resources Conservation Service
OES	Office of Emergency Services
PEIR	Programmatic Environmental Impact Report
PHFS	Primary Highway Freight System
PDS	Planning and Development Services Department
RAIS	Rebuilding American Infrastructure with Sustainability and Equity Grant Program
RCRC	Rural County Representatives of California
RFP	Request for Proposals
RMRA	Road Maintenance and Rehabilitation Account
ROW	Right-of-Way
R&D	Research and Development
SAP	Service Area Plan
SCCP	Solutions for Congested Corridors Program
SCAG	Southern California Association of Governments
SCR	Substantial Conformance Review
SF	Square Feet
SHOPP	State Highway Operations and Protection Program
SBTAP	Small Business Technical Assistance Program
SB	Senate Bill
SDSU	San Diego State University
SF	Square Feet
SR	State Route
SUP	Special Use Permit
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAG	Technical Advisory Group
TCC	Transformative Climate Communities
TMDL	Total Maximum Daily Load
US	United States
USDA	United States Department of Agriculture
UPRR	Union Pacific Railroad
VMT	Vehicle Miles Traveled
WMP	Water Master Plan
WSEL	Water Surface Elevation
WTP	Water Treatment Plant
WWTP	Wastewater Treatment Plant

2. Vision and Guiding Principles

2.1 Planning and Legal Background

The California Legislature has declared that "Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California." (H&S Code § 38501.) Time is of the essence in reducing atmospheric concentrations of carbon dioxide (CO2) (CARB 2022).[1] Therefore, "It is the policy of the state to…achieve net zero greenhouse gas emissions as soon as possible." (H&S Code § 38562.2(c).) To achieve the State's ambitious goals, an "unprecedented rate of transition will require the identification and removal of market and implementation barriers to the production and deployment of clean technology and energy." (CARB 2022.)

Decarbonization of the electricity sector is a crucial pillar of the California's Plans to address climate change, which includes development of renewable energy sources, electrification of vehicles, and energy storage. (CARB 2022) Lithium plays a crucial role in these decarbonization efforts. Lithium batteries can directly offset carbon emissions by aiding in the replacement of fossil fuel-powered vehicles with battery electric vehicles. Lithium battery storage systems can also assist electric service providers by (1) integrating increased amounts of renewable energy resources by evening out variable and intermittent off-peak electric generation and (2) reducing the use of electricity generated by high carbon-emitting electrical facilities during high electricity demand periods. (Assembly Bill 2514 [2010], § 1.) Consequently, to achieve the State's climate goals, it is imperative to extract new sources of lithium as soon as possible.

The urgency to locate new lithium sources is not solely related to decarbonization goals. Developing local sources of lithium is necessary to minimize national security threats. (Assembly Bill 1657, § 1(c) [2019].) "Our national and economic security are now acutely threated by our reliance upon hostile foreign powers' mineral production. It is imperative for our national security that the United States take immediate action to facilitate domestic mineral production." (White House 2025).[2] Lithium is categorized as an "Applicable Critical Material", which emphasizes reducing reliance on foreign controlled sources of lithium; (U.S. Department of Energy 2023;[3] Pub. Law 117-169; 26 USC § 45X(a)(6)(P).) California's Blue Ribbon Commission Report under AB 1657 further acknowledges "Suppliers coming into the marketplace quickly … have a competitive advantage."

A failure to act quickly may result in the development of other lithium sources which are more impactful. Lithium sourced from geothermal brine has a relatively smaller footprint on the surface of the Earth, and has substantially lower environmental impacts when compared to more traditional forms of lithium extraction, such as open pit hard rock mines and evaporative ponds (i.e. salars). (Humphreys et.al. 2023.)[4] Governor Newsom has similarly acknowledged that "California aims to produce lithium in a more sustainable and environmentally safe way than nearly anywhere else in the world, by relying on modern extraction techniques

[1] California Air Resource Board (CARB) 2022. 2022 Scoping Plan for Achieving Carbon Neutrality. https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents.
[2] White House. 2025. Executive Order: Immediate measures to increase American mineral production. https://www.whitehouse.gov/presidential-actions/2025/03/immediate-measures-to-increase-american-mineral-production/.
[3] U.S. Department of Energy. 2023. Notice of Final Determination on 2023 DOE Critical Materials List. (88 FR 51798). https://www.federalregister.gov/documents/2023/08/04/2023-16611/notice-of-final-determination-on-2023-doe-critical-materials-list#page-51798.
[4] J. Humphreys et. al; 2023. Stanford University. Distribution, isotopic composition, and origin of Li in the Salton Sea Geothermal Field. https://pangea.stanford.edu/ERE/db/GeoConf/papers/SGW/2023/Humphreys.pdf

rather than harmful hard rock mining or other traditional tools of extraction."[5]

In Lithium Valley, brine can be extracted from the geothermal reservoir and serve as two beneficial resources: (1) a heat and pressure source for geothermal electricity production, and (2) a source of lithium. Lithium is dissolved in the brine, which is estimated to contain 4.1 to 18 million metric tons of lithium carbonate equivalent. (Dobson et.al. 2023.)[6] Lithium Valley is considered a "known geothermal resource area," which is generally defined as an area in which higher-than-normal temperatures are likely to occur, and in which there is a reasonable possibility of finding accessible reservoir rocks that will yield steam or heated fluids for energy production. (23 USC § 1001; Dobson et.al. 2023.) In 2025, Lithium Valley contains ~400 megawatts (MW) of electricity production, however the geothermal capacity of the region is estimated to be over 2,500 MW. (Dobson et.al. 2023.) Such energy sources qualify as low carbon energy under the State's renewable portfolio requirements, which mandate 90% of electricity be sourced from renewables by 2035 and 100% by 2045. (Pub. Util. Code § 454.53.) Furthermore, geothermal power facilities also improve electric grid stability, grid reliability, and grid resiliency because such facilities "provides a sustainable and stable source of electricity and are characterized as a baseload renewable resource" and such power facilities "help to restart the grid." (AB1657 Blue Ribbon Commission Report, December 2022.)

In 2022, the California Legislature allocated funding for the development of plans, environmental analysis, and public outreach related to geothermal energy development and lithium extraction, processing, production, and related manufacturing activities within Imperial County. (Senate Bill 125, §8(c)(1).) This Bill also adopted the Lithium Extraction Tax Law (Excise Tax), which is designed to create a revenue source for historically underinvested communities and would be used to fund local programs, including but not limited to resident support/health services, childcare services, transportation services, education, scholarships, recreation/green spaces, entertainment, infrastructure, and restoration activities. (Revenue and Taxation Code §§ 47000 et seq.)

This planning and background information should be used to understand and interpret the purpose and objectives below.

2.2 Vision Statement

Lithium Valley is a dynamic and prosperous region that prioritizes public health and local jobs in innovative clean energy industries. Lithium Valley aims to lead the way toward energy independence, a domestic supply of critical minerals, and a reduction in global emissions, by harnessing Imperial County's geothermal and other natural resources. Through collaboration, Lithium Valley increases economic opportunity, enhances infrastructure, and creates lasting benefits for the community.

2.3 Guiding Principles

Described below and shown in Figure 2-1, Guiding Principles, the guiding principles served as the foundation for a comprehensive and high-quality plan. These principles outline the commitment to leadership and sustainable development in the transition to a thriving and clean energy-based economy. The applicable guiding principle(s) are referenced with each proposed program included throughout this Specific Plan and assisted in the development of the purpose and objectives described in greater detail below.

2.3.1 Leadership in Renewable Energy

Develop a world-class center for innovation and research related to achieving net-zero emissions and environmentally restorative renewable

[5] Governor of California. 2023. New Report Highlights the Promise of Lithium Valley. https://www.gov.ca.gov/2023/11/28/new-report-highlights-the-promise-of-lithium-valley/#:~:text=Before%20this%20report%2C%20experts%20believed,greenest%20process%20in%20the%20world.

[6] P. Dobson et al. 2023 Lawrence Livermore National Laboratory. Characterizing the Geothermal Lithium Resource at the Salton Sea. https://escholarship.org/uc/item/4x8868mf

energy production, through attracting investment, promoting technology transfer, fostering collaboration among industry, labor, government, tribes and community members, and serving as a hub for clean energy jobs, knowledge and expertise.

2.3.2 Environmental Justice

Leverage opportunities within Lithium Valley to prioritize the needs, interests, and health of the nearby affected communities, using thoughtful engagement and monitoring tools that provide resources, opportunities, and improvements for these community members near the Plan Area.

2.3.3 Advancing Opportunities

Foster a vibrant and inclusive region that supports offering diverse training and employment options, quality education, and accessible amenities to enhance the quality of life for residents and workers in surrounding cities and unincorporated communities in Imperial County.

2.3.4 Job Creation and Local Economy

Focus on strategic actions within the Plan Area to strengthen the region's renewable energy cluster by attracting long-term renewable energy industries, manufacturing companies, and cluster-related supply chain firms, and support new and existing businesses that provide thousands of high-quality local jobs, while proactively enabling and empowering the local workforce to take advantage of these job opportunities.

2.3.5 Environmental Stewardship and Responsible Growth

Protect and preserve natural resources and support the recovery of sensitive habitats in the planning process. Conduct thorough environmental assessments to minimize, mitigate, and monitor the impact of all foreseeable projects and other designated developments on local ecosystems and natural resources. Encourage ways to enhance natural resources through development. Serve as a catalyst for revitalizing the Salton Sea ecosystem, incorporating innovative strategies that enhance its biological viability and restore its ecological balance. Aspire to be a model for responsible development, integrating sustainable practices and promoting environmental stewardship to minimize the environmental and ecological footprint while driving economic prosperity. Enhance Conservation lands and utilize Conservation area for project mitigation.

2.3.6 Acknowledge and Respect California Indian Tribal Lands

Respect the past and enduring presence of California Indian Tribes on this land. Recognize the historical and contemporary significance of these Native lands and its history and strive to build a future of mutual respect and understanding for future generations.

2.3.7 Community Engagement

Actively and transparently involve the community throughout the planning process. Ensure that community concerns and preferences are considered when making decisions throughout the project's lifetime.

2.3.8 Transformative and Innovative Planning

Develop a long-term vision for the Specific Plan Area that considers the evolving renewable energy landscape and emerging technologies. Anticipate future trends and potential challenges and incorporate flexibility into the Plan to adapt to changing circumstances. New mineral recovery processes are being created and refined, and therefore, the Plan should be sufficiently flexible to allow for new technological changes and processes. As the AB 1657 Blue Ribbon Commission Report explained Direct lithium extraction technology "this is a new enterprise that will require adjustment as facilities reach for commercial scale and present opportunities for innovation and improvement over time."

2.3.9 Proactive Infrastructure and Services

Identify and recommend public improvements to infrastructure such as transportation, water, wastewater, stormwater and drainage in the Specific Plan Area that would enhance the quality of life for workers and residents in the surrounding communities, in anticipation of future needs. Remediate deficiencies in the area and creatively find efficiencies to consolidate and fund the regional infrastructure systems.

2.3.10 Distinctive Community Identity

Develop a plan that incorporates physical features, such as green spaces and building design standards, to prevent the area from developing as a stark, industrialized complex of nondescript buildings.

Figure 2-1 Guiding Principles

2.4 Fundamental Purpose and Objectives

The fundamental purpose of the Project is to approve and implement land use regulations that provides a streamlined permitting and approval process for geothermal energy production and lithium extraction, processing, production, and manufacturing within Imperial County that will assist in the Country's need to quickly transition to renewable energy and improve domestic supply of critical materials and create new economic opportunities for historically underinvested and disadvantaged communities. To further this fundamental purpose, the following project objectives have been identified:

1. Develop geothermal energy facilities and lithium extraction facilities to support the country's transition to renewable energy and minimize national security threats.
2. Support local manufacturing of clean energy products by allowing the development of industrial, office, and warehouse space in proximity to sources of extracted raw materials.
3. Facilitate the efficient movement of goods by accommodating warehousing, management, and distribution activities.
4. Expand critical infrastructure and public services such as roads, bridges, drains, transmission lines, and fiber optics to support development planned in Lithium Valley.
5. Create a streamlined permitting and approval process which allows for the expeditious development of renewable energy, mineral recovery and other supporting uses/infrastructure, that is flexible enough to allow for implementation of new technologies (e.g. new Direct Lithium Extraction (DLE) extraction processes).
6. Create local economic benefits from abundant natural resources, particularly lithium, that levy excise and property taxes that support community benefits and business development. Community benefits include career training, local employment, opportunities for disadvantaged communities, Native Americans, and restoration activities.
7. Allow for conservation and restoration activities, minimizing environmental impacts to disadvantaged communities and California Indian Tribes in Imperial County from renewable energy, lithium, and supporting uses/infrastructure developments.

Figure 2-2 Lithium Valley Vision, provides a conceptual rendering of what the Lithium Valley Specific Plan Area could look like as development occurs and the Specific Plan is implemented.

Figure 2-3 Lithium Valley Concept Map, illustrates how the land use network, transportation and circulation network, and rail network may all interact.

Conservation Area

Geothermal

Solar

SBSSNWR Complex HQ - Visitor Center

Wildlife Observation Platform and Trail

Tribal Cultural Resources

Rail Track

Intermodal Rail Hub

Commercial Node

Public Transportation Hub

Note: This graphic is conceptual and for illustrative purposes only. It is intended to depict potential development scenarios and does not represent actual building footprints, final site designs, or specific project proposals. Existing features and resources are approximate.

Figure 2-2, Lithium Valley Vision

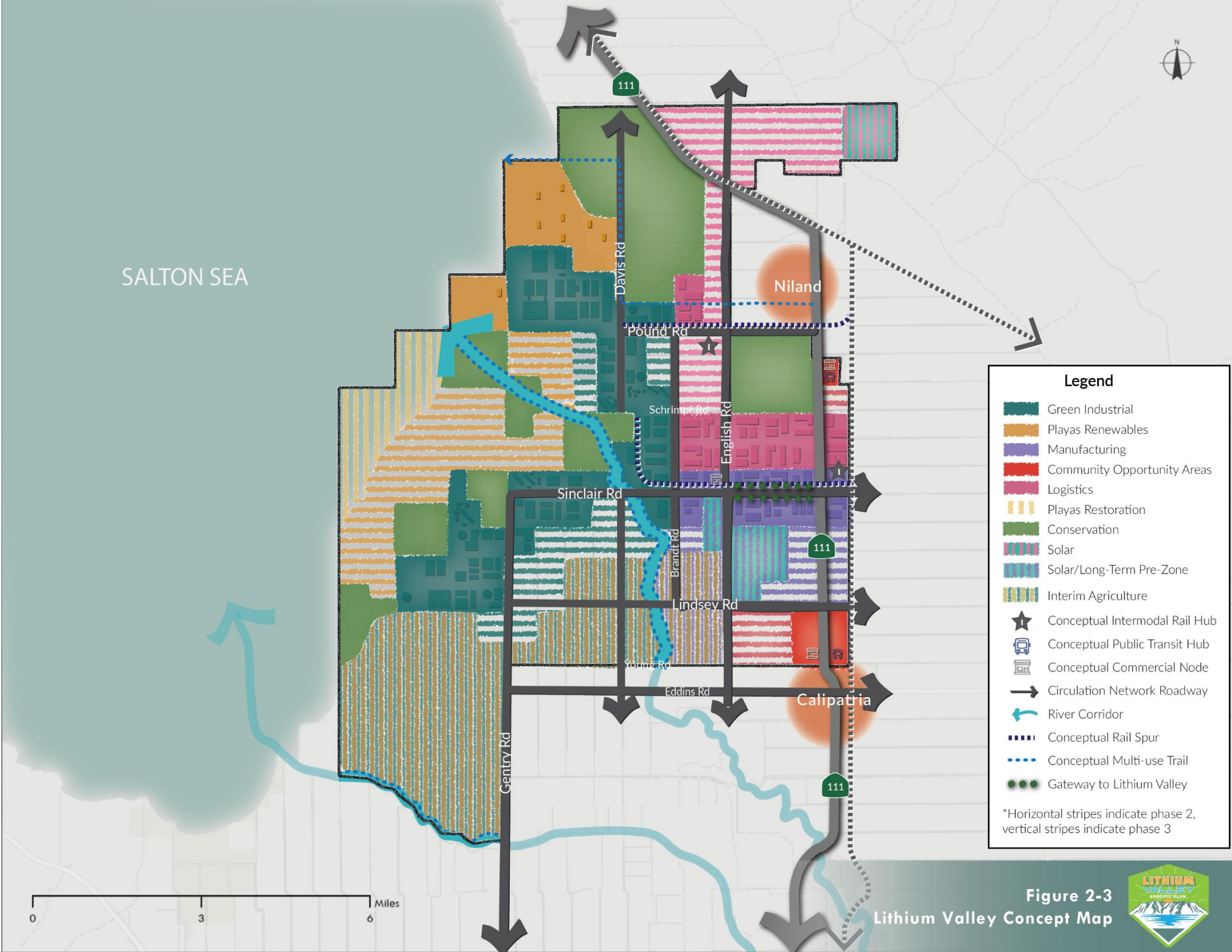


Figure 2-3
Lithium Valley Concept Map

3. Land Use

This chapter establishes the land use designations and use regulations which will govern all future development in the Specific Plan Area.

This Specific Plan shall constitute the applicable zoning and land use regulations for parcels within the Plan Area. In some cases, the Plan will regulate land uses in conjunction with other regulations (e.g. see "Interim Agriculture"). In cases of conflict between the Lithium Valley Specific Plan and the County Code, the provisions of the Specific Plan take precedence and control. The Special Use Permit (SUP) procedures identified in Section 8.1.4 of this Plan control in lieu of the Conditional Use Permit (CUP) procedures contained in the County Code. Where the Specific Plan is silent and does not conflict with the County Code, the County Code shall control.

3.1 Land Use Map

The Land Use Designations identified in Figure 3-1 Land Use Map, below correspond with the Land Use Designations in Section 3.2, which generally define the scope of potential uses contemplated within each area. The horizontal striped areas shown in Figure 3-1, represent the second phase areas and the vertical striped areas represent the third phase areas as discussed in Section 3.3, Phasing. In addition to the land use designations shown in solid or striped colors, the Land Use Map shows conceptual areas for commercial nodes and public transportation hubs. Federal, State or Regional agencies that own land within the Plan Area may continue to operate their land under their own policy and jurisdiction. The land uses shown on Figure 3-1 may act as "pre-zones" should that land ever be sold to a non-Federal, State, or Regional agency. Table 3-1, Land Use Acreages, provides the approximate area of each land use designation in acres, by phase.

Federal, State or Regional agencies that own land within the Plan Area may continue to operate their land under their own policy and jurisdiction. The land uses shown on Figure 3-1 may act as "pre-zones" should that land ever be sold to a non-Federal, State, or Regional agency.

Table 3-1 Land Use Acreages

Land Use Designation	Phase 1 Acres	Phase 2 Acres	Phase 3 Acres	Total Acres
Solar	1,768	-	-	1,768
Floodway	1,042	-	-	1,042
Community Opportunity Areas	815	828	-	1,643
Conservation	8,140	-	-	8,140
Playas Renewables	2,313	4,344	-	6,657
Green Industrial	7,290	2,712	8,949	18,950
Manufacturing	1,834	1,375	2,608	5,817
Logistics	2,319	4,404	633	7,355
Playas Restoration	-	-	2,017	2,017
Interim Agriculture	See Phase 3 Green Industrial and Manufacturing			-
Grand Total	25,521	13,662	12,439[1]	51,622

[1] Calculated to subtract the Solar acreage already accounted for in Phase 1.

The land use map also shows conceptual locations for commercial nodes, public transportation hubs, and a recreation easement to the Salton Sea. These are not land use designations, but rather recommended areas for applicant and agency consideration, subject to further refinement when specific projects are proposed. These conceptual locations are defined below:

Conceptual Commercial Node: A developed area, generally 5-20 acres, that serves as a hub for retail, office, dining, and service-oriented businesses. Located near local communities and employment hubs, commercial nodes could cater to both nearby residents and Lithium Valley employees.

Conceptual Public Transportation Hub: A central place where multiple modes of transportation converge, designed to facilitate seamless transfers, improve accessibility, and reduce travel time for commuters. The locations of the public transportation hubs on the Land Use Map are intended to connect the communities of Niland and Calipatria with the employment hub in the heart of the Specific Plan Area.

Conceptual Intermodal Rail Yard: A specialized facility where freight is transferred between different modes of transportation, such as trains and trucks. These yards streamline the movement of goods by integrating rail and truck transport, improving efficiency in supply chains. Key features include container storage, loading docks and equipment, connections to major transportation networks, rail switching yards, and staging areas for trucks.

Conceptual Pedestrian Trails: The conceptual pedestrian multi-use trails would by bounded by a recreation easement that legally designates an area to be preserved for public recreational use, such a trails, parks, or open spaces. The intent of the conceptual pedestrian pathways on the Land Use Map is to ensure long-term access to the Salton Sea and the river corridors for the nearby community members.

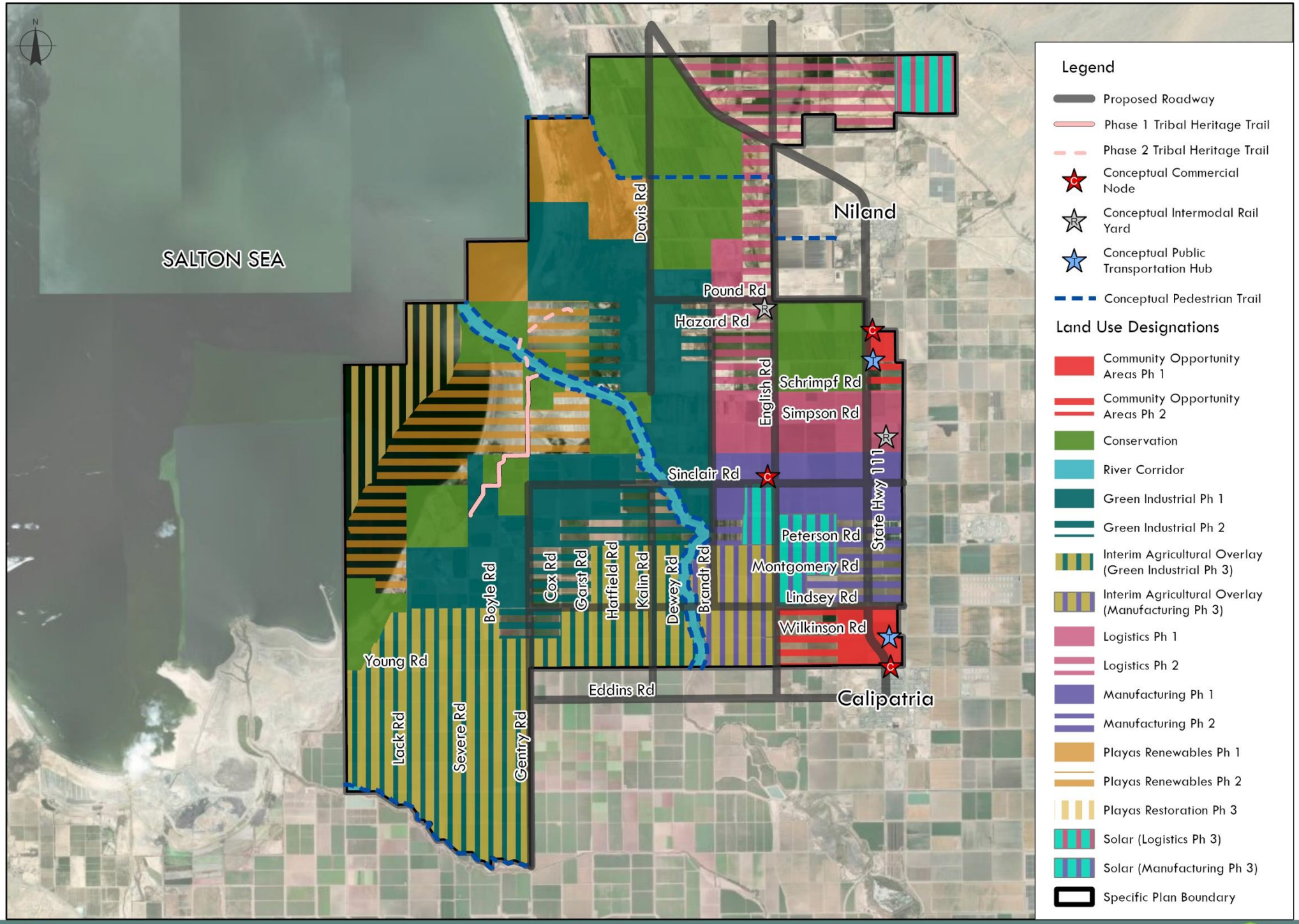


Figure 3-1, Land Use Map

3.2 Land Use Designations

The following discussion summarizes the general purpose behind each land use designation, with specific uses identified in Section 3.4 below. This section may assist County Staff in assessing whether additional unspecified uses or accessory uses are permissible.

3.2.1 Green Industrial

This designation promotes industrial operations focused on decarbonizing the energy and mineral recovery industries. This designation has a focus on geothermal energy production plants with mineral recovery operations. However, it also allows for additional industrial uses that support the goal of decarbonizing the energy industry or can demonstrate an ability to utilize renewable energy and contribute to climate change solutions. This designation is intended to be the most inclusive of the industrial type uses, offering the greatest degree of flexibility with regard to allowed uses.

Examples of Green Industrial Uses

Colocation Campus: Geothermal Mineral Recovery, Manufacturing
Image Source: Great Ecology

Geothermal Plant
Image Source: Energy Source Minerals

Green Hydrogen Plant
Photo by: Angel Garcia/Bloomberg News

3.2.2 Manufacturing

The primary intent of this designation is to support downstream assembly of clean energy products. The Manufacturing designation will provide suitable industrial, office, and warehouse space for manufacturers of goods. This designation offers flexible allowed uses and standards to accommodate industrial uses such as the compounding, processing, assembling, packaging, treatment or fabrication of materials and products such as Lithium batteries and renewable energy plant equipment. Due to its location within the Salton Sea Known Geothermal Resource Area, geothermal energy and mineral recovery operations are still anticipated uses within the Manufacturing designation. As such, colocation of manufacturing, renewable energy production, and supportive uses such as warehousing and commercial are allowed to collocate as a campus within the Manufacturing designation (see Section 4.2.2 Campus Design Standards). The Manufacturing designation is located close to the existing rail line east of SR-111 and therefore leverages available rail transport options for product delivery. The Manufacturing designation promotes inclusive and collaborative uses that provide a competitive and trained workforce. Supportive uses such as training facilities, research and development, rail facilities, and commercial/retail uses will aid in efforts to strengthen the local workforce and overall economic development.

Examples of Manufacturing Uses

Research and Academic Campus
Image Source: Flad Architects

Lithium Battery Gigafactory
Image: Tesla Gigafactory 1

Renewable Energy-Powered Data Center
Image Source: CalEthos

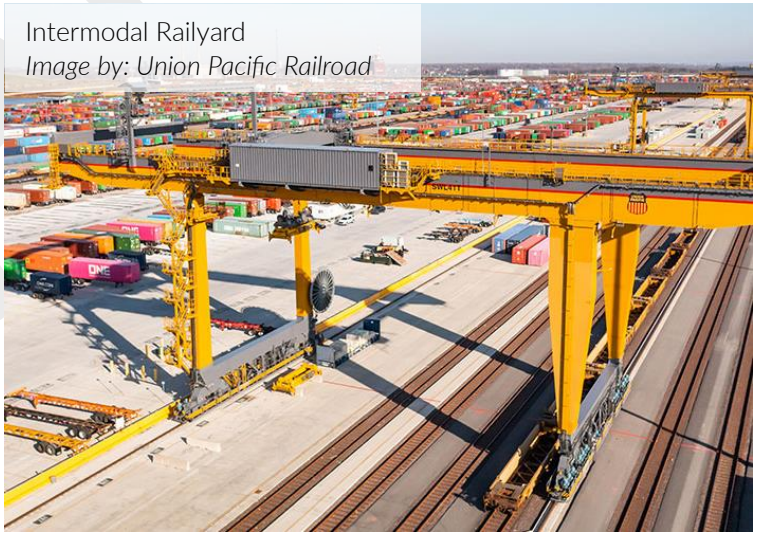
3.2.3 Logistics

The intent of this designation is to facilitate the efficient movement of goods across regional, national, and international markets, while supporting the downstream supply chain of manufactured products created within the Specific Plan Area. The Logistics designation is specifically designed to accommodate warehousing, management, and distribution for a variety of suppliers and services. Logistics activities may include outdoor storage of trucks, trailers, and shipping containers, as well as ancillary office, employee amenities and property management facilities. Due to the location of the Logistics category within the KGRA, this designation lists geothermal energy and mineral recovery operations as allowed and preferred. The Logistics land use designation is located adjacent to major transportation corridors and rail lines and thus provides for efficient truck and rail distribution.

Examples of Logistics Uses

Logistics Center
Image by: Piper Ranch/Cushman & Wakefield

Truckload Freight
Image source: Freepik.com



Intermodal Railyard
Image by: Union Pacific Railroad

3.2.4 Playas Renewables

The purpose of this designation is to promote similar uses to Green Industrial while restricting these uses to be compatible with environmental factors of the Salton Sea and the exposed lakebed (playas), such as soil stability and fugitive dust. As the Salton Sea continues to recede, areas of previously submerged lakebeds, known as playas, become a significant source of harmful fugitive dust. Since the Salton Sea has no natural outlet, decades of agricultural and wastewater contaminants are embedded into these exposed playas, and when inhaled over time, the airborne pollutants can lead to severe respiratory issues for nearby communities (State Water Resources Control Board, 2025). Dust suppression is a necessary mechanism to protect the on-site employees and the vulnerable communities surrounding the Salton Sea. See Section 4.1.1, Standard Design Conditions For Unique Locations, A. Adjacent to the Salton Sea for relevant dust suppression standards.

Due to the unique soils and geologic conditions of the Salton Sea playas, geologic testing may be required for proposed significant structures, while well pads, pipelines, transmission/distribution lines, and access roads would be exempt from testing, within the Playas Renewables designation to determine the viability of development on the proposed site. Unmanned structures including geothermal well pads and pipelines, transmission and distribution lines, and access roads may be exempt from geologic testing.

Development within the Playas Renewables designation shall be consistent with and consider California's Salton Sea Management Program, and IID's Salton Sea Air Quality Mitigation Program (AQMP), where applicable. See applicable special-species avoidance and relocation mitigation measures in the PEIR for projects on the Playas.

Examples of Playas Renewables Uses

Geothermal Plant
Image source: Energy Source Minerals

Dust Suppression Mechanisms
Image by: Jay Calderon/The Desert Sun

Transmission Substation
Image source: Blymer Engineers

3.2.5 Community Opportunity Area

The intent of the Community Opportunity Area designation is to address community needs of nearby residential areas while providing supportive uses for the development of the local workforce and incoming industries. As illustrated in Figure 3-2, Community Opportunity Area Rendering, the Community Opportunity Area designation allows for a variety of uses that may act as commercial hubs for Lithium Valley employees as well as social gathering areas for nearby residents, and operational workforce housing catering to workers within the Plan Area. The Community Opportunity Areas may offer recreational uses such as parks, campgrounds, hunting grounds, and nature areas, as well as indoor recreation options such as recreation centers and indoor sports facilities. The Community Opportunity Areas also offer supportive services such as healthcare services and childcare services. Should any emergency or public services facility be proposed in a Community Opportunity Area, the precise timing and location for the construction of necessary public services will be determined by several factors, including the phasing of development and the location and size of existing facilities. Section 3.4 Allowed Uses lists allowed uses included in this land use designation.

Once development has occurred among the Green Industrial and Manufacturing areas, additional planning may be warranted to refine the land use and development regulations of the Community Opportunity Areas. This would occur in consultation with the neighboring communities of Niland and Calipatria through a supplemental planning and community engagement process to ensure these areas properly meet the community's needs.

Examples of Community Opportunity Area Uses

Commercial Shopping Center
Image by: showcase.com

Workforce Training Facility
Image by: Fred Rollison/BMW Manufacturing

Figure 3-2 Community Opportunity Area Rendering

3.2.6 Interim Agriculture

The intent of the Interim Agriculture designation is to retain agriculture land until there is a need to transition to industry-driven uses outside their primary designated areas. This designation includes existing agricultural lands that are actively producing agricultural crops, as well as other agriculture-related uses including, but not limited to: animal keeping, aquaculture, agrivoltaics, dairies, feed lots, and animal sales yards. This area allows the underlying agricultural zones to remain in effect, however will allow for the area to transition to industry-driven uses as needed in Phase 3. As shown in Figure 3-3, Interim Agriculture, the underlying agricultural zones include A-2, A-2-R-G, A-3, A-3-G, as regulated by County Code Land Use Ordinance Title 9 Division 5, Chapter 8 and Section 9. Upon implementation of Phase 3, the Phase 3 Zones (shown in Figure 3-3, Interim Agriculture) will be activated, however the underlying agricultural uses will remain allowed uses.

Examples of Interim Agriculture

Agriculture and Solar Farm
Image source: Abengoa

Agriculture Farm
Image source: Vegetable Growers News

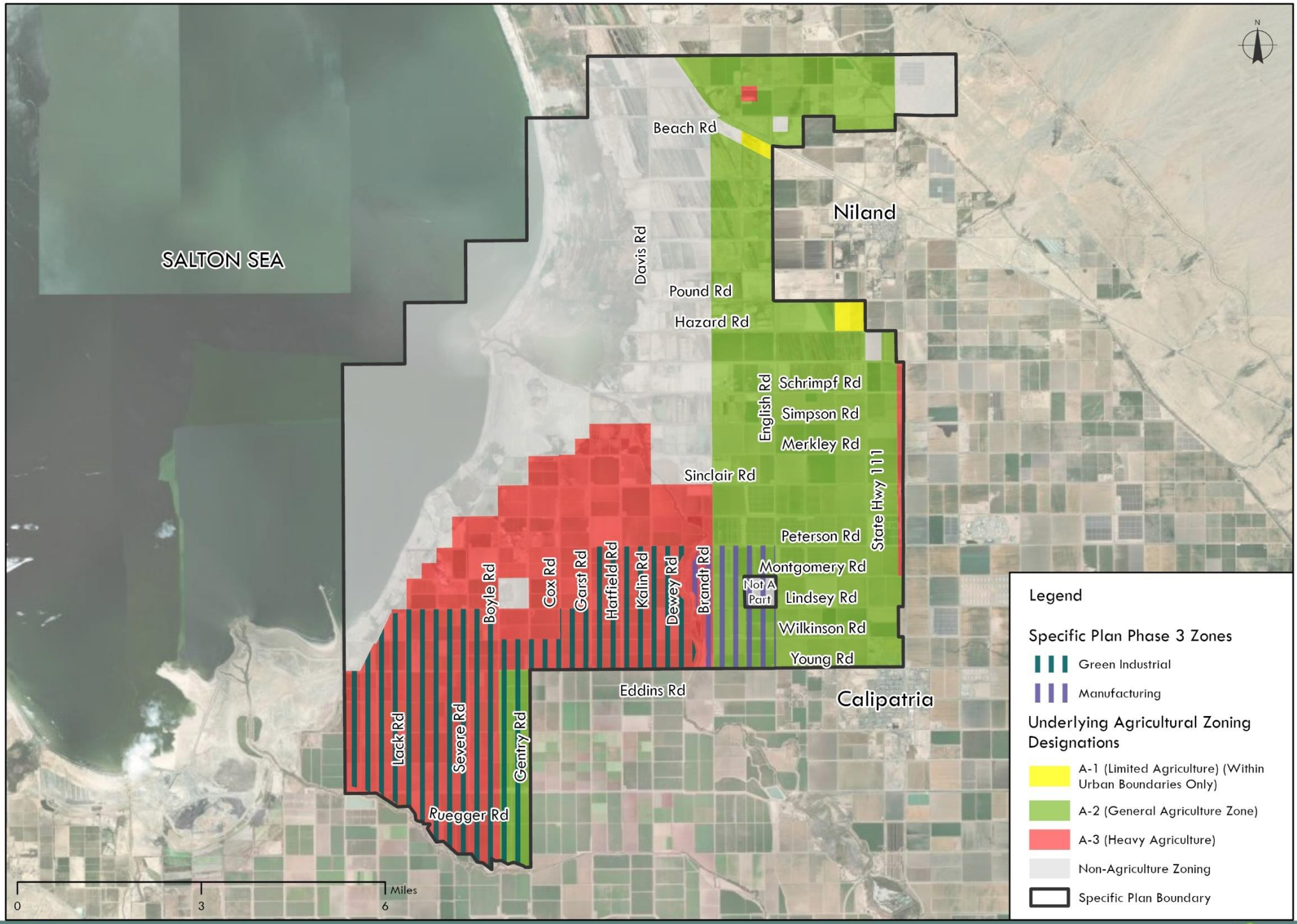


Figure 3-3, Interim Agriculture

3.2.7 Solar

The Solar designation is intended to support the development of solar power generation facilities, including battery storage facilities. This land use category is designed to accommodate large-scale solar farms in locations with existing or planned solar farm developments. The Solar designation is intended to remain in place on solar farm parcels until the end of the lifespans of these operations. Following the end of a solar project's lifespan, the land use designations of the pertinent parcels will convert to the surrounding Specific Plan land use designations present on the Land Use Map (as amended) (i.e., Logistics or Manufacturing). Solar projects in this designation shall implement avian-solar conflict avoidance design features given the significance of migratory birds in the area.

This designation does not preclude solar or energy storage in the other land use designations where it is ancillary to the permissible uses. Energy Storage has been required by the California Energy Code since 2022, and solar has been required by the Energy Code since 2020 for numerous categories of projects, including but not limited to rooftop solar/parking lot solar installations.

Examples of Solar Uses

Solar Farm
Image source: Solar Frontier

3.2.8 Playas Restoration

The intent of this designation is to support and develop creative programs for resource preservation, habitat restoration, Salton Sea restoration, and dust suppression while allowing subsurface access to geothermal resources. Due to the presence of sensitive resources, valuable habitat, and public health needs to limit dust, this land use is restrictive in the allowed uses. Subsurface geothermal activities and above-surface environmental restoration and mitigation activities will be permitted, while geothermal energy and operation, and mineral recovery, processing, and production activities, including pipeline and transmission corridors, within this designation would be subject to a Special Use Permit. Development in this designation will likely be subject to Special Condition, A identified in Section 4.1.1. because it is adjacent to the Salton Sea (See Section 4.1A. Adjacent to the Salton Sea). Dust suppression mechanisms may include but are not limited to: water diversion from other uses; revegetation with salt-tolerant trees, shrubs, and groundcover; mulching; and the use of non-toxic chemical soil stabilizers.

Examples of Playas Restoration Uses

Revegetation Project
Image by: Nick Parisse/DAWNING

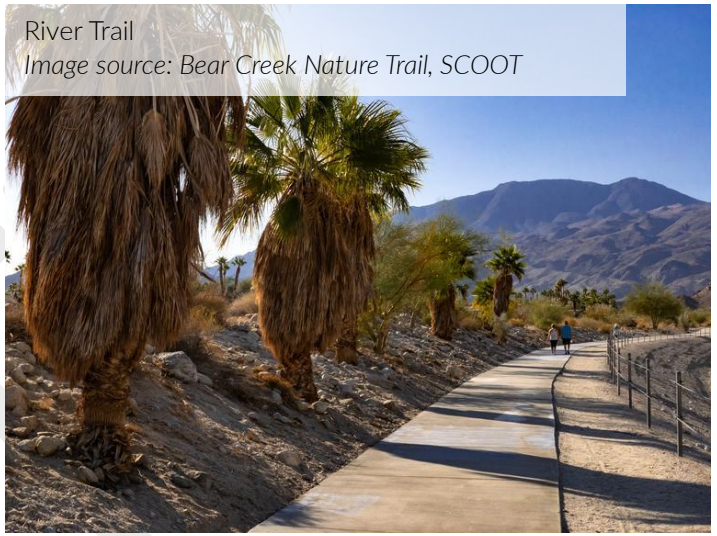
Habitat Restoration
Image source: Water Authority

3.2.9 River Corridor

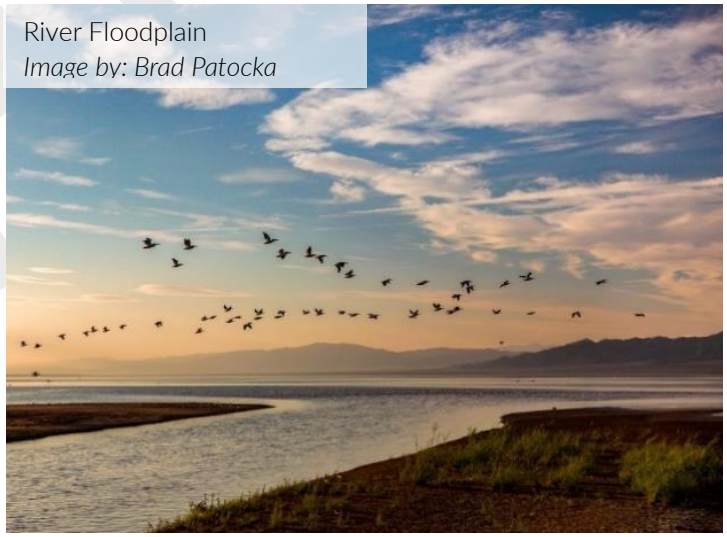
The intent of the River Corridor designation is to maintain and enhance the Alamo River and New River drainage basins. This designation is designed to provide sufficient setbacks of development from these rivers to improve the water quality and environmental health of the rivers, while reducing flooding from hydrologic events on future development within the Specific Plan Area.

The River Corridor designation covers an approximately 950-foot buffer (475 feet on each side) on the Alamo River and a 1,275-foot buffer (637.5 feet on each side) on the New River. This designation also allows for a multi-use river trail (including pedestrian and bicycle facilities) within the buffer area to serve as permanent open space and provides for recreation within the Specific Plan area. Restoration efforts within the River Corridors shall consult with the United States Fish and Wildlife (USFW) regarding the Sonny Bono Salton Sea National Wildlife Refuge, as well as the California Natural Resources Agency (CNRA) regarding the SSMP's Salton Sea Conservation Habitat (SCH) project. See Section 4.1.1E Adjacent to Conservation Areas, River Corridor Areas for applicable restrictions for development adjacent to specific natural resources.

Examples of River Corridor Uses



River Trail
Image source: Bear Creek Nature Trail, SCOOT



River Floodplain
Image by: Brad Patocka

3.2.10 Conservation

The purpose of the Conservation designation is to strategically protect areas of environmental importance, and to retain significant areas for restoration and mitigation projects. This designation reserves areas along the Salton Sea for a variety of environmentally beneficial purposes that may require further consultation with Federal, State, California Native Tribes, trustee agencies, and responsible agencies.

The Conservation designation contains areas under existing contracts managed by the Imperial Irrigation District (IID) for restoration and mitigation efforts, as well as Federal and State land management areas. The Conservation land use designation may also include areas to be utilized for Salton Sea rehabilitation projects, mitigation lands, and restorative initiatives. For example, should a project within the Specific Plan Area need to find additional mitigation land that's offsite, there is land designated as Conservation that may be purchased and used for such mitigation. Mitigation lands for future development must be sited on areas not already operating as mitigation land, wildlife refuge, Salton Sea AQMP projects, Salton Sea Management Program projects, or other areas already preserved in perpetuity. Directional drilling could be allowed by right with the permission of the landowner (if mineral rights are not severed) of affected parcels and/or the holder of the mineral rights for those parcel(s) with severed mineral rights.

See Section 4.1.1E Adjacent to Conservation Areas, River Corridor Areas for applicable restrictions for development adjacent to specific natural and tribal cultural resources. Specific setbacks are required to maintain the function and value of the existing tribal cultural resources, biological resources, and species within these wetland communities. The PEIR also includes mitigation measures to minimize impacts to special-status species and to minimize the spread of invasive plant species.

Examples of Conservation Uses

Salton Sea Restoration
Image source: California Department of Water Resources

Mitigation Projects
Image source: Imperial Irrigation District

3.3 Phasing

Given the scale of the Lithium Valley Specific Plan Area and unpredictable market demands, employing a phased approach for development is important for the project's successful implementation. Phasing involves dividing the Plan Area into manageable stages for select land use designations, ensuring that subsequent phases are contingent upon the completion of specific milestones, such as achieving development milestones of the preliminary phase of development.

As shown in Figure 3-4 Phasing Map, the Plan includes three Specific Plan phases:

1. Phase 1 is intended for initial development stemming from existing infrastructure and geothermal plants. Shown in green in Figure 3-4, Phasing Map, Phase 1 is reflective of foreseeable development projects that can aid the installation of essential infrastructure. Phase 1 land use designations include Conservation, River Corridor, Solar; and parts of Green Industrial, Playas Renewables, Manufacturing, Logistics, and Community Opportunity Areas. Phase 1 is anticipated to occur over the first 20 years with 2026 as the inaugural year.

2. Phase 2 extends outward from the first phase into areas with less established infrastructure. Phase 2 land use designations include parts of Green Industrial, Playas Renewables, Manufacturing, Logistics, and Community Opportunity Areas. Shown in yellow in Figure 3-4, Phasing Map, Phase 2 is anticipated to occur 10 years after Phase 1.

3. Phase 3 includes areas within the Playas Restoration and Interim Agriculture land use designations. The Interim Agriculture designation is intended to remain as useable agriculture until there is a need to transition these lands to industry-driven uses that have expanded outside of their initial land use designated areas. Shown in red in Figure 3-4, Phasing Map, Phase 3 is anticipated to occur 10 years after Phase 2. The Phase 3 zoning designation will be activated in Phase 3 of Specific Plan implementation. Phase 3 uses are added to the pre-existing uses contained in the underlying agricultural zoning which remain permissible.

Phasing development allows for the strategic concentration of infrastructure improvements , reducing initial costs for developers and encouraging construction in these targeted locations. Infrastructure improvements, including roadway and intersection improvements are recommended both within and outside the Plan Area. Publicly financed (i.e., grants, public utility-backed, or government funding) infrastructure will prioritize infrastructure in Phase 1, therefore private investment in Phase 1 will have a lower barrier to entry. Public-Private Partnerships will be incentivized in Phase 1 to further attract early investment, establishing a foundation for further development and economic activity. This strategy reduces the financial burden on future projects and directs funds to areas with the highest growth potential, enhancing the viability of the Lithium Valley Specific Plan.

3.3.1 Phase Exchange or Expansion Process

To provide flexibility and encourage efficient use of resources, the Lithium Valley Specific Plan allows for the exchange or expansion of land areas within Phase 1, Phase 2, and Phase 3. The following steps govern the transition between phasing areas:

1. **Eligibility:** To be eligible, a proposed exchange must be between Phase 1 and Phase 2, or Phase 2 and Phase 3 areas, not between Phase 1 and Phase 3. A proposed expansion must be of Phase 1 or Phase 2, not Phase 3. A proposed exchange or expansion application must also be considered an allowed use within its land use designation.

2. **Submittal Process:** Development applicants seeking a Phase Exchange or Expansion shall submit a written request to the Imperial County Planning and Development Services Department. The request shall include a project description,

conceptual development plan, and a written description or memo that demonstrates:

a. The development is prepared to connect to existing infrastructure or construct new infrastructure to support the proposed development.

b. The development footprint would not cause the built area of the requested phase to exceed the building envelope assumed in the PEIR.

3. **Review and Approval:** The County may impose an reasonable application fee for the cost of review and administration of the application. The Imperial County Planning and Development Services Department will review Phase Exchange or Expansion applications, with final approval by the PDS director. The review process may consider and condition infrastructure costs, capacities and efficiencies, environmental impacts, community benefits or improvements, and consistency with the overall goals of this Specific Plan as a whole. Consideration for approval will be given to the project's ability to not compromise infrastructure capacities of the lending Phase area by more than 10 percent, with consideration to proposed infrastructure as part of the Phase Exchange or Expansion Application. Any such decision may be appealed to the Planning Commission should they meet the requirements included in County Code Section 90102.04.

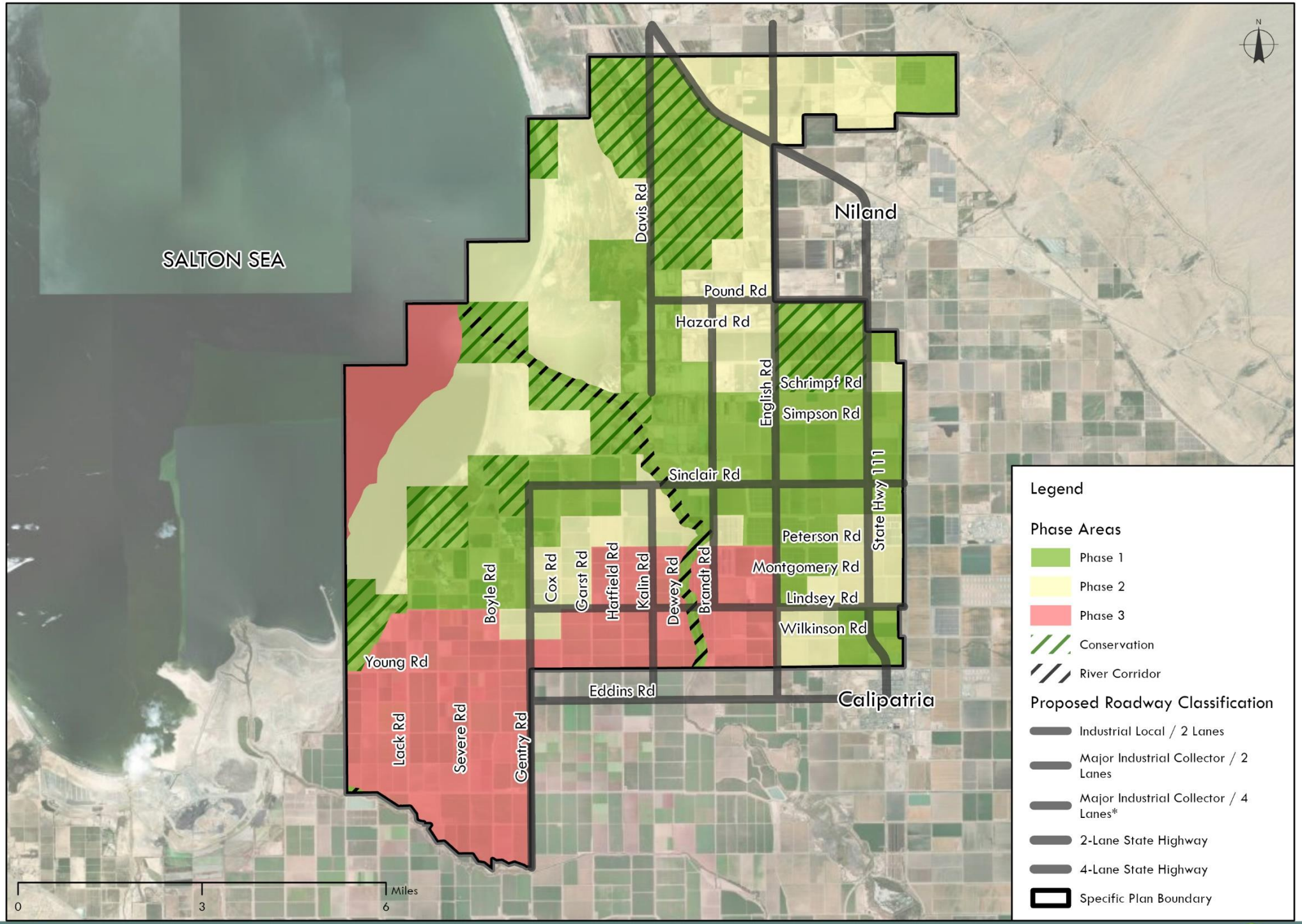


Figure 3-4, Phasing Map

3.4 Allowed Uses

3.4.1 Use Definitions

This section provides definitions of specific land use types referenced throughout the Lithium Valley Specific Plan to provide a clear and common understanding of terminology, allowed uses, concepts, and standards. The intent of this section is to offer precise meanings for terms that may have technical, legal, or contextual significance within the scope of this plan, ensuring that all stakeholders can accurately interpret and apply the provisions outlined in subsequent chapters.

Agriculture, Light (A-1): This allowed use shall be equivalent to Imperial County's Limited Agriculture zone, established the Imperial County Municipal Code (County Code), which are currently codified in Sections 90507.01-90507.02. This use is limited primarily to agricultural related uses and agricultural activities that are compatible with agricultural uses.

Agriculture, Heavy (A-3): This allowed use shall be equivalent to Imperial County's Heavy Agriculture zone, established in the County Code, which are currently codified in Sections 90509.01-90509.02. This use is limited primarily to agricultural related uses and agricultural activities that are compatible with agricultural uses.

Agrivoltaics: The dual use of land for both solar energy production and agriculture, where solar panels are installed above or between crops or livestock to optimize both energy and agricultural output.

Anaerobic Digesting Facility (Dry System): A facility intended for the processing of organic dry waste materials such as organic solid food waste, mixed solid waste, and agricultural byproducts, through anaerobic digestion, a process that breaks down material in an oxygen-free, in-vessel, environment. A dry system has a water content of 80% or lower. Dry anaerobic digestion systems use enclosed, plug-flow or batch reactors that do not rely on pumping or continuous mixing, leading to much lower water usage overall. This process converts waste into biogas, which can be used as renewable energy, and produces nutrient-rich digestate for soil enhancement. Anaerobic digesting facilities support sustainable waste management by reducing landfill waste, lowering greenhouse gas emissions from existing sources, and generating renewable energy resources.

Anaerobic Digesting Facility (Wet System): A facility intended for the processing of organic waste materials including dairy manure and biosolids from wastewater treatment plants, through anaerobic digestion, a process that breaks down material in an oxygen-free, enclosed environment. A wet system has a water content greater than 80%. Wet systems will need to recirculate as much digestate liquid as feasible, so net fresh water is reduced.

Battery Energy Storage System: A facility or system of one or more rechargeable batteries, inverters, transformers, and associated infrastructure designed to store and discharge electrical energy for later use. BESS may be configured as a standalone facility or co-located with other land uses to support renewable energy generation (e.g., solar, geothermal), manufacturing, data centers, and other industrial or utility-scale operations. These systems provide helpful services including load shifting, peak shaving, frequency regulation, backup power, and grid resilience, enabling more efficient and reliable energy use. See 3.5.3 Battery Energy Storage Systems for standards applicable to Battery Energy Storage Systems.

Commercial/Retail: A general category of land uses intended for businesses that provide goods and services to the workforce and nearby residential areas, including but not limited to artist studios, barber shops, beauty salons, childcare facilities, grocery stores, markets, restaurants, retail, health club, public swimming pool, gymnasium, and other uses permitted in the C-1 Zone, per the County Code, which are currently codified in Sections 90512.01-90512.02.

Cultural Resource Preservation: Areas identified by the County in collaboration with California Indian Tribes to have sites of historical, cultural, or archaeological significance. This land use supports activities that safeguard heritage resources, including indigenous, historic, and culturally significant assets, to ensure they are preserved for future

generations. Cultural Resource Preservation districts or overlays would require a Specific Plan Amendment and approval by the County Board of Supervisors.

Data Center: A facility used primarily for storing, managing, and processing digital data, typically housing servers, telecommunications equipment, and IT infrastructure. Data centers support large-scale computing needs, such as cloud services and internet operations, and often include on-site backup power generation, HVAC cooling, substations, switchyards, on-site water/wastewater treatment, perimeter security fencing which may include anti-intrusion wire on top, and security systems to ensure reliability. See Section 3.5.4, Data Centers for applicable standard conditions.

Entertainment: Uses dedicated to venues and activities that offer recreational, cultural, and leisure experiences. These spaces can include theaters, amusement parks, sports arenas, music venues, barber/beauty shops, bookstores, museums, movie theaters, bowling alleys, card rooms, golf driving range, indoor rollerblading rink, video game arcade.

Emergency Services: Public facilities including police, fire, cooling centers and emergency shelters, that respond to and manage emergencies to ensure public safety and security.

Floatovolatics: Floating photovoltaics (floatovoltaic) systems installed over eligible water bodies within the Plan Area. All floatovoltaic installations must obtain necessary approvals from all applicable Federal, State, and regional environmental regulatory bodies and utility operators where grid interconnection is required. Flatovoltaic installations may be permitted over the following bodies of water where allowed by governing authorities:

- Irrigation and utility canals and drains
- Industrial or municipal evaporation ponds
- Water reservoirs and storage basins

Excluded water bodies include:

- Designated recreational water areas
- Protected habitats and wetlands
- Navigational channels, unless otherwise authorized

Geothermal Energy and Operations: A facility or system that utilizes heat derived from the earth's internal geothermal resources to generate energy. This includes the exploration, drilling (vertical and directional), and operation of geothermal wells, power plants or other facilities designed to convert geothermal energy into electricity or other usable forms of power, and the necessary infrastructure support such as transmission lines, pipelines, and cooling systems. Geothermal energy production may also involve ancillary activities such as resource monitoring, reinjection of geothermal fluids, and energy storage.

Geothermal Pipelines and Wells: Above and sub-surface infrastructure designed to support geothermal energy production. This includes geothermal and water pipelines, wells that are either vertically or directionally, including horizontally drilled to access geothermal resources, provide monitoring functions, or support geothermal well functions. This also includes the associated utilities and facilities such as access roads and operational equipment for the functionality and maintenance of geothermal pipelines, control systems, and wells.

Green Hydrogen: A facility dedicated to the production of green hydrogen, comprised of electrolyzers, powered by renewable energy sources like solar or geothermal, along with hydrogen storage units, fuel cells, and distribution infrastructure. A green hydrogen facility shall also include control and monitoring systems to ensure efficient and safe operations.

Housing: Intended to provide workforce housing for employees working within the Plan Area and adjacent communities. There is a maximum of 18 permanent dwelling units per acre, comprising up to 80% of the given

community opportunity area. Housing development applications are subject to applicable housing law.

Manufacturing and Assembly: Industrial operations focused on the production, assembly, and processing of goods. These zones often include factories, warehouses, and distribution centers where raw materials are transformed into finished products or parts are assembled including the manufacturing of electric vehicles, cathodes, batteries, pharmaceuticals, building materials, and industrial equipment that directly supports the Green Industrial uses.

Mineral Recovery, Conversion, Processing, and Production: The extraction, separation, processing, and production of minerals, metals, or other valuable materials derived from geothermal fluids or brine. This includes the recovery of lithium, zinc, silica, and other minerals through methods, such as Direct Lithium Extraction (DLE) where lithium is extracted from geothermal brines using chemical or physical processes. Facilities may include processing plants, pipelines, and reinjection wells. The operational boundary between geothermal energy production and lithium production shall be when the brine enters the lithium production facility.

On-Site Solar: the installation and operation of solar energy production systems that provide renewable energy to other on-site industrial or commercial uses. On-site solar may be roof-mounted, installed over parking lots or carports, or an ancillary solar farm, and may include an energy storage system in compliance with the current IID policy.

Rail: transportation easements intended for rail transportation inclusive of railroad, rail spurs, rail yards and associated facilities to support the movement of goods.

Recycling Centers: Facilities designated for the collection, sorting, and processing of recyclable materials, promoting waste reduction, resource recovery, and environmental sustainability. Permitted recycled materials include organic waste, battery recycling, construction waste, metal recycling, and material recovery facilities. Byproducts from recycled materials such as biogas may be considered under the "Anaerobic Digesting Facility" use. Excludes the recycling, storing, or dismantling of vehicles or other modes of transportation.

Subsurface Geothermal Directional Drilling: The underground drilling of geothermal wells using advanced directional drilling techniques to access geothermal resources from off-site or remote locations, without causing surface disturbance at the target site (except for the entry location). Drilling activities are conducted in a manner that minimizes or eliminates surface disturbance and designed to be compatible with areas where surface activities are limited, such as conservation areas, heritage trails, or in areas that are inaccessible by heavy equipment. Geothermal drilling and well operation remains regulated by California Department of Conservation – Geologic Energy Management Division, while access to the geothermal resources is solely constrained by agreements between the mineral right owner and mineral rights lessee and their agents.

Temporary Construction Housing: Temporary construction housing provides short-term residential facilities specifically for construction workers on project-based assignments. Structures in these accommodations are designed to be temporary, with necessary amenities to support workers during their limited stay near employment sites. On-site facilities and services may include but are not limited to shared kitchens, sanitation facilities, and common areas, all subject to applicable California health and safety standards.

3.4.2 Use Table

The following tables establish what is "permitted" by-right within each land use designation, what is "conditionally permitted" and what is permitted as an "ancillary use".

- P = Permitted: A use allowed by-right and ministerial, meaning there is no additional discretionary action required, whether that use may occur within the given land use designation.
- S = Special Use Permit: A use that requires additional discretionary action to decide if and how the use may be allowed within the given land use designation. The development application will be required to process a Special Use Permit (SUP), which may provide for additional requirements or analyses prior to approval or denial. The SUP procedures are defined in Section 8.1.3A, Special Use Permit Process.
- A = Ancillary Use: A use that is accessory to another on-site use. Ancillary uses are intended to be supportive towards a primary use intended for that land use designation. The following tables designate a certain percentage of a project's developable area on which the ancillary use is allowed.
- * = See Applicable Standard Conditions in Section 3.5

The tables are divided by development phase. Additional definitions of these terms are provided in Section 3.4.1 Use Definitions:

As discussed above, in Chapter 2, this plan is designed to be flexible to cater to advancements in technology and new mineral extraction processes, thereby allowing the County to quickly pivot to other compatible uses which are currently unknown. As the AB 1657 Blue Ribbon Commission Report explained "clean energy technologies are an area of constant innovation...As end uses advance and change over time, additional technological improvements may be needed to meet evolving needs." Therefore, uses that are not listed but are determined by the County to be similar to the uses in Table 3-2, may be treated in the same manner as the permitted or special uses, pursuant to the County's "Similarity in Use(s)" procedures, currently codified in County Code Section 90203.10.

See Policy LU-12 through LU-14 for utility allowances. The land use regulations of Chapter 3 do not apply to transportation, circulation, or utility infrastructure, including but not limited to: (a) transportation facilities; (b) parking facilities; (c) public or private streets or roadways; (d) pedestrian, bicycle, or multi-use pathways; (e) bridges; (f) rail or transit infrastructure; (g) water, stormwater, drainage, or wastewater systems or facilities; (h) dry utility infrastructure; (i) telecommunications facilities; or (j) comparable public or private infrastructure improvements. Such facilities shall be allowed as required to ensure adequate provision of infrastructure and public services.

Table 3-2 Use Table

Use	Land Use Designation									
	Green Industrial	Playas Renewables	Manufacturing	Logistics	Playas Restoration	Interim Agriculture	Community Opportunity Areas	Solar	Conservation	River Corridor
Renewables and Industrial-Type Uses										
Agrivoltaics[1]	S		S	S		P		P		
Anaerobic Digesting Facility (Dry System[1])	P	P	P	P						
Anaerobic Digesting Facility (Wet System[1])	S		S							
Battery Energy Storage Systems (Collocated)[1]	A (30)%	A (30)%	A (30)%	A (30)%			A (50%)	A (50%)		
Battery Energy Storage Systems (Standalone Facility)[1]	P		P	P						
Business Industrial Parks	P		P	P						
Commercial-Scale Solar[2]	A (30%)	A (10%)	A (30%)	A (30%)				P		
Data Centers 1.3M SF and under [1]	P		P	P						
Data Center over 1.3M SF[1]	S		S	S						
Electrical Vehicles Charging Stations as a Primary Use (Passenger and Heavy Duty Vehicles)	P		P	P			S			
Electrical Vehicles Charging Stations (Passenger Vehicles)	A (20%)		A (20%)	A (20%)			P			
Floatovolatics or Waterway-Covering Solar	P	S	P	P	S	P				S
Geothermal Energy and Operations[1]	P	P	P / A (40%)[3]	P / A (40%)[3]	S			P		

Use	Land Use Designation									
	Green Industrial	Playas Renewables	Manufacturing	Logistics	Playas Restoration	Interim Agriculture	Community Opportunity Areas	Solar	Conservation	River Corridor
Geothermal Pipelines and Wells[1]	P	P	P	P	P	P		P	S[4]	
Green Hydrogen[1]	P		P	P						
Helipads	P		P	P						
Hydrogen Fuel Station (Passenger and Heavy Duty Vehicles)	P		P	P			S			
Intermodal Rail Hub[1]	S		S	P						
Logistics and Wholesale Distribution	A (30%)	A (20%)	A (40%)	P						
Manufacturing and Assembly[1]	P	A (30%)	P	A (50%)						
Mineral Recovery, Conversion, Processing, and Production[1]	P	P	P	P	S					
On-Site Solar[1]	P	P	P	P	P	P	P	P		
Outdoor Storage of Trucks, Trailers, Shipping Containers	A (20%)		A (50%)	P						
Rail[1]	P	S	P	P			S	P		
Recycling Centers[1]	P		S	S						
Subsurface Geothermal Directional Drilling[1]	P	P	P	P	P			P	P	
Temporary Contractors Equipment and Storage Yard[1]	A (20%)	A (10%)	A (20%)	P						
Wastewater Treatment Plant	P		P	P				P		

Use	Land Use Designation									
	Green Industrial	Playas Renewables	Manufacturing	Logistics	Playas Restoration	Interim Agriculture	Community Opportunity Areas	Solar	Conservation	River Corridor
Water Storage Facility Regional Scale	P	S	P	P		P				
Office-Type Uses										
Office and Government Buildings	A (30%)		P	P						
Research and Development	P	P	P	P			S			
Workforce Training and Employment Services	P		P	P			P			
Agriculture Uses										
Agriculture, Limited (A-1)[1]	S		S	S		P	S	P		
Agriculture, Heavy (A-3)[1]						P		P		
Community-Oriented Uses										
Churches							P			
Civic Uses							P			
Commercial/Retail[1, 5]	A (10%)		A (20%)	A (10%)			P			
Community Center							P			
Convention Center[5]							S			
Cooling Centers	P	P	P	P			P	P		
Educational Institutions, Colleges, and Universities	S		S	S			S			
Emergency Services[1]	P		P	P		P	P			
Entertainment[5]							S			

Use	Land Use Designation									
	Green Industrial	Playas Renewables	Manufacturing	Logistics	Playas Restoration	Interim Agriculture	Community Opportunity Areas	Solar	Conservation	River Corridor
Farmers Market						P	P			
Gas Station and Auto Services within an Enclosed Facility	S		P	P			S			
Health Care Facilities							P			
Hotels							S			
Housing[1]							P			
Library							P			
Public Transportation Hub							P			
Restaurants and Catering[5]	A (10%)		A (10%)	A (10%)			P			
Temporary Construction Housing	P		P	P			P	P		
Trade Schools	P		P	P			P			
Parks	P		P	P			P			
Passive Recreation	P	P	P	P	P		P		P	P
Public Art Installations	P	P	P	P			P			
Air Quality Monitoring	P	P	P	P	P	P	P	P	P	P
Cultural Resource Preservation[1]	P	P	P	P	P	P	P		P	
Dust Suppression[6]	P	P	P	P	P	P		P	P	
Habitat Restoration	P	P	P	P	P	P	P	P	P	P
Mitigation Projects	A (60%)	P	A (60%)	A (60%)	P	P			P	P
Native Riparian Restoration	A (60%)	P	A (60%)	A (60%)	P	P			P	P

[1] See Section 3.4.1 Use Definitions, for the exact definition of this use.

[2] It is highly encouraged that ancillary commercial-scale solar facilities distribute its power to local Lithium Valley operations, however, power may be sold to load serving entities or electrical utilities.

[3] Geothermal energy and operations may be permitted as an ancillary use, or collocated with an energy-consuming use, subject to IID policy.

[4] In areas where subsurface geothermal directional drilling will be infeasible without supplemental surface geothermal well pads to connect to geothermal pipeline corridors, well pads must be confined to the following sizes: 300 x 300 feet for one well, 300 x 450 feet for two wells, or 300 x 600 feet for three wells.

[5] Individual retail buildings shall be under 50,000 square feet. Approval of retail applications with buildings greater than 50,000 square feet shall be accompanied with a market study that supports that the retail is locally-serving, not regionally-serving. Such applications will be subject to the approval of the Planning and Development Services Director.

[6] Dust suppression mechanisms typically subject to the approval of the Imperial County Air Pollution Control District may include but are not limited to: water diversion from other uses; revegetation with salt-tolerant trees, shrubs, and groundcover; mulching; and the use of non-toxic chemical soil stabilizers.

3.5 Standard Use Conditions

The following standard conditions apply to specific permitted or ancillary uses within the Specific Plan Area. Development applications must demonstrate their conformance with these standard conditions. If development applications cannot demonstrate conformance with these standard conditions, the applicant must apply for a variance per Title 9, Division 15, Chapter 6, Variance Procedure, of the County Code, or process a Specific Plan Amendment as described in Section 8.1.3B, Specific Plan Amendment.

3.5.1 Renewable and Industrial-Type Uses

All uses listed under "Renewables and Industrial-Type Uses" in Table 3-2 Use Table, are required to prepare a Decommissioning Plan as defined in Section 8.1.2B Facility Decommissioning Plans.

3.5.2 Anaerobic Digesting Facility

1. Anaerobic Digestor facilities shall implement control technologies to minimize greenhouse gas (GHG) emissions, odor, and particulate matter from exiting the facility. Routine air quality testing must be conducted to ensure compliance with all Federal, State, and local emission standards.
2. Continuous monitoring systems for methane leaks, water contamination, and other potential hazards must be implemented, with regular reporting submitted to Imperial County Air Pollution Control District and/or the Public Health Department. The County Environmental Health Department would oversee in-vessel digestion, depending on the type and volume of feedstock used in the digester, as well as the management of the digestate. Compliance with Federal, State, Regional water quality and soil contamination regulations is also required to ensure proper containment of biogas and other byproducts.
3. A third-party compliance audit should be conducted every five years to verify adherence to all conditions and suggest improvements.
4. Advanced odor management systems (e.g. biofilters or carbon scrubbers) shall be required to control and minimize offsite odor impacts.
5. Only organic waste sources (e.g., food waste, agricultural by-products) that align with local waste management goals are to be used. Hazardous waste materials or non-organic contaminants are strictly prohibited.

3.5.3 Battery Energy Storage Systems

In addition to compliance with applicable and current Federal, State, and local fire and safety laws, such as National Fire Protection Association (NFPA) 1, 70, 855, 110, and 111; CCR Title 22; and current applicable Imperial County standards, Battery Energy Storage System (BESS) projects shall:

1. Implement regular safety drills, including coordination with local emergency services, and offer community workshops on BESS safety to increase awareness and preparedness.
2. Prioritize BESS's designed with modular units over singular warehouse designs. Modular units shall meet a minimum distance between buildings and safety setbacks approved by the County to allow adequate fire truck access.
3. BESS projects shall prepare a pre incident plan, including disconnect locations, verification of building and installation codes, specifically the NFPA 1 Fire Code and NFPA 855, use of personal protective equipment, including a self-contained breathing apparatus (SCBA) with face piece, avoiding potential vapor clouds, evacuation of the area, and defense nearby structures.
4. BESS projects shall include an automatic suppression system sized and designed for the BESS type.

3.5.4 Data Centers

In addition to compliance with applicable Federal and State building, energy, environmental, and security regulations, data center projects shall:

1. For by-right data center projects, data centers must be powered on average by 30% or more from renewable energy sources, and carbon neutrality by 2045.
2. Data centers must maintain an energy efficiency rating of 1.5 or lower through techniques such as advanced cooling systems, server virtualization, and energy-efficient hardware.
3. Data centers must adopt water-free cooling technology such as air cooling, or cooling technologies or systems that minimize water consumption such as closed-loop, zero-water evaporation cooling systems.

3.5.5 Green Hydrogen Facilities

1. Water supply to green hydrogen facilities shall be sourced from non-municipal water supplies, including but not limited to brackish groundwater, treated industrial process water, or recycled wastewater.
2. Green hydrogen facilities must be designed and operated in accordance with applicable Federal, State, and local regulations related to fire protection and safety standards.
3. A fire access road shall be maintained around all critical systems.
4. An Emergency Response and Hazard Mitigation Plan shall be prepared with the development application, including but not limited to, spill and leak control measures, shutoff protocols, onsite personnel training schedule, and safety drills with local fire/emergency services.

3.5.6 Hydrogen Fueling Stations

Hydrogen fueling stations shall:

1. Meet the applicable requirements of local, State, and Federal fire and safety regulations, including but not limited to the following California Fire Code, California Health and Safety Code.
2. Meet the standards included in National Fire Protection Association (NFPA) 2: Hydrogen Technologies Code, most recent edition.
3. Demonstrate that dispensed hydrogen is generated by at least 30% eligible renewable resources including: biomass, digester gas, municipal solid waste gas, fuel cells using renewable fuels, geothermal, photovoltaic, and wind. By 2045, the hydrogen fuel station shall demonstrate dispensed hydrogen is generated by 100% eligible renewable resources.

3.5.7 Temporary Construction Housing

Temporary construction housing is permitted as a temporary ancillary use to a proposed development. It must be directly connected to proposed development and not an independent use. The issuance of a building permit for a temporary construction housing project will be issued concurrently with the issuance of the proposed development's building permit. At the time of building permit, temporary construction housing projects shall demonstrate the following:

1. Provides adequate water supply, ensuring minimal disruptions to local water resources.
2. Wastewater discharge shall not impact adjacent agricultural operations or nearby water bodies; runoff must be contained and managed to prevent pollution.
3. Provides a density of no greater than 40 dwelling units per acre.
4. Provides on-site health and safety training for all residents to ensure workers are aware of risks, emergency procedures, and healthy living conditions.

5. Implements water conservation measures such as graywater recycling systems
6. Installs security mechanisms and adequate lighting throughout the housing area to improve safety.
7. Installs indoor air quality systems in each unit to ensure safe living conditions.
8. Provide a Facility Decommissioning Plan and surety in accordance with Section 8.1.2B Facility Decommissioning Plans. Said plan will require the abatement of the Temporary Construction Housing facility within 90 days from the issuance of the Certificate of Compliance or Final to the development project that the Temporary Construction housing is ancillary to.

3.6 Land Use Goal, Policies, and Programs

Table 3-3 Land Use Goal, Policies, and Programs below presents the land use policies, and programs that provide actionable directives to support the overarching land use goal, Specific Plan guiding principles and vision statement. For every program, a responsible agency, timeframe, possible funding source, and applicable guiding principles.

Table 3-3 Land Use Goal, Policies, and Programs

Goal 1: Land Use (LU)	
A world-class employment hub of collaborative and innovative uses that drive a thriving economy and define Lithium Valley as leader in renewable technology.	
Policy LU-1: Land Use Designations	Develop projects consistent with the Land Use Designations as outlined in Section 3.2 of this Specific Plan.
Policy LU-2: ICAPCD Compliance	Ensure that developments of renewable energy facilities and transmission lines comply with the Imperial County Air Pollution Control District's regulations and mitigation measures. This includes dust suppression methods.
Policy LU-3: Phasing Flexibility	Allow for transfers of Phase 1, Phase 2, and Phase 3 areas through a streamlined process that ensures infrastructure availability, while providing flexibility for development.
Policy LU-4: Transit Supportive Development	Cluster employment around shared parking and major transit corridors and transfer nodes.
Policy LU-5: Reduce Airborne Pollutants through Land Use	Encourage the development of renewable energy facilities that will contribute to the reduction or elimination of airborne pollutants created by exposure of the seabed of the Salton Sea as it recedes.
Policy LU-6: Support Pilot Projects	Support pilot projects intended to test or demonstrate new and innovative renewable energy production technologies through temporary variances. Pilot projects may receive supportive treatments for the first year of operation, with the option to extend.
Policy LU-7: Military Compatibility	Ensure that developments located adjacent to military installations and training areas will be compatible with these uses by: 1) Facilitating the early exchange of project-related information with the military for proposed development located within a military operations area (MOA) or within 1,000 feet of a military installation, and 2) Ensuring that developments proposed within MOAs will not jeopardize the safety of existing residents or impact military operations.

Policy LU-8: Commercial Activity Nodes	Support the creation of commercial activity nodes that combine services and amenities for multiple landowners or campuses.
Policy LU-9: Habitat Clusters	Create a network of habitat clusters of approximately two acres minimum to support wildlife and bird migration. Include connective corridors between habitats wherever feasible.
Policy LU-10: Renewable Energy Leader	Install solar photovoltaic (PV) systems with a generation capacity at least 25% greater than the minimum requirements established by the 2022 California Building Standards Code (Title 24, Part 6). This would no longer apply if the most current California Building Code were to exceed 25% the 2022 requirement. Where feasible, implement alternative renewable energy sources (e.g., geothermal) to supplement on-site solar energy production.
Policy LU-11: Water Quality Compliance	Ensure development applications comply with the applicable California Regional Water Quality Control Board regulations.
Policy LU-12: Permitted Utilities	Utility infrastructure permitted within any land use designation includes but is not limited to water conveyance and distribution systems, on-site water treatment, on-site wastewater treatment, stormwater infrastructure, electrical transmission infrastructure, natural gas, substations, switching stations, generation tie lines, microgrids, telecommunications equipment such as communication towers and broadband fiber, railroads and rail spurs. Utilities shall be subject to review and approval by regulatory agencies including IID, Imperial County, wildlife agencies, California Energy Commission, Rural County Representatives of California, RWQCB, Caltrans, and Union Pacific Railroad.
Policy LU-13: Utilities in Conservation	Transmission corridors within the Conservation designation may not exceed 120 feet in width. Geothermal pipeline corridors may not exceed 50 feet in width. Upon agreement with IID, proposed utility corridors should overlap with or run adjacent and parallel with existing utility corridor easements to share access roads and minimize environmental footprint. Transmission, pipeline and utility crossings within Conservation will need approval from the applicable wildlife agencies, power authority, and the County Planning and Development Services director and Public Works director. When linear utilities are needed along public roadway right-of-way (ROW), (e.g., pipelines, cables, conduit, and overhead or underground transmission lines), such utilities shall be consolidated and co-located along one side of the ROW, wherever feasible, to minimize surface disturbance and avoid unnecessary duplication of ground disturbance.
Policy LU-14: Utilities in River Corridor	Transmission, pipelines and utility crossings may be authorized as necessary at specific locations, subject to approval from applicable wildlife agencies, RWQCB, power authority, and the County Planning and Development Services director and Public Works director.
Policy LU-15: Geothermal subsidence	Geothermal energy development shall be consistent with the requirements of Bureau of Land Management (BLM), California Geologic Energy Management Division (CalGEM), and the California Division of Oil, Gas, and Geothermal Resources, and may be required to prepare a subsidence review. Geothermal energy development shall prepare a surveying plan to monitor and minimize any subsidence that is directly caused by the project's

	geothermal operations. As part of the surveying plan, annual monitoring to determine whether proposed geothermal activities are resulting in undesired subsidence.
Policy LU-16: Payment of Agricultural and Other Benefit Fees	One of the following options included below is to be implemented prior to the issuance of a grading permit or building permit for the project: *Mitigation for Non-Prime Farmland* • Option 1: Provide Agricultural Conservation Easement(s). The Permittee shall procure Agricultural Conservation Easements on a "one-to-one" basis on land of equal size, of equal quality farmland, outside the development footprint. The Conservation Easement shall meet Department of Conservation (DOC) regulations and shall be recorded prior to issuance of any grading or building permits; or • Option 2: Pay Agricultural In-Lieu Mitigation Fee. The Permittee shall pay an "Agricultural In-Lieu Mitigation Fee" in the amount of 20 percent of the fair market value per acre for the total acres of the proposed site based on five comparable sales of land used for agricultural purposes as of the effective date of the permit, including program costs on a cost recovery/time and material basis. The Agricultural In-Lieu Mitigation Fee, will be placed in a trust account administered by the Imperial County Agricultural Commissioner's office and will be used for such purposes as the acquisition, stewardship, preservation, and enhancement of agricultural lands within Imperial County; or, • Option 3: Public Benefit Agreement. The Permittee and County voluntarily enter into an enforceable Public Benefit Agreement or Development Agreement that includes an Agricultural Benefit Fee payment that is 1) consistent with Board Resolution 2012-005; 2) the Agricultural Benefit Fee must be held by the County in a restricted account to be used by the County only for such purposes as the stewardship, preservation and enhancement of agricultural lands within Imperial County and to implement the goals and objectives of the Agricultural Benefit program, as specified in the Development Agreement, including addressing the mitigation of agricultural job loss on the local economy. *Mitigation for Prime Farmland* • Option 1: Provide Agricultural Conservation Easement(s). The Permittee shall procure Agricultural Conservation Easements on a "2 on 1" basis on land of equal size, of equal quality farmland, outside the path of development. The conservation easement shall meet DOC regulations and shall be recorded prior to issuance of any grading or building permits; or • Option 2: Pay Agricultural In-Lieu Mitigation Fee. The Permittee shall pay an "Agricultural In-Lieu Mitigation Fee" in the amount of 30 percent of the fair market value per acre for the total acres of the proposed site based on five comparable sales of land used for agricultural purposes as of the effective date of the permit, including program costs on a cost recovery/time and material basis. The Agricultural In-Lieu Mitigation Fee, will be placed in a trust account administered by the Imperial County Agricultural Commissioner's office and will be used for such purposes as acquisition, stewardship, preservation, and enhancement of agricultural lands within Imperial County; or, • Option 3: Public Benefit Agreement. The Permittee and County voluntarily enter into an enforceable Public Benefit Agreement or Development Agreement that includes an Agricultural Benefit Fee payment that is 1) consistent with Board Resolution 2012-005; 2) the Agricultural Benefit Fee must be held by the County in a

	restricted account to be used by the County only for such purposes as the stewardship, preservation and enhancement of agricultural lands within Imperial County and to implement the goals and objectives of the Agricultural Benefit program, as specified in the Development Agreement, including addressing the mitigation of agricultural job loss on the local economy; the project and other recipients of the project's Agricultural Benefit Fee funds; or emphasis on creation of jobs in the agricultural sector of the local economy for the purpose of off-setting jobs displaced by this project.

Program		Responsible Party	Timeframe	Possible Funding Source	Applicable Guiding Principle
Program LU-1	The County shall review and process decommissioning plans consistent with Section 8.1.2B, Facility Decommissioning Plans.	Planning and Development Services	Ongoing	General Fund	Environmental Stewardship and Responsible Growth; Transformative and Innovative Planning
Program LU-2	As needed, the County Planning Staff shall revisit the tables in Section 3.4 Allowed Uses, for inclusion of new unforeseen uses that would be appropriate that would be of similar impact and magnitude of the allowed uses in the Specific Plan.	Planning and Development Services	Ongoing	General Fund	Environmental Stewardship and Responsible Growth; Transformative and Innovative Planning
Program LU-3	Target restoration programs and riparian restoration strategies for carbon sequestration, natural heat relief, water quality improvements, and/or wildlife habitat mitigation.	Department of Natural Resources	Ongoing	Senate Bill 125 Lithium Excise Tax	Environmental Stewardship and Responsible Growth; Environmental Justice

4. Development and Design Standards

The Development and Design Standards chapter describes the general development standards for each land use designation established in Chapter 3 Land Use, along with additional development standards that apply to unique locations. Development standards and design standards both guide the form and function of projects but serve different purposes. Development standards focus on measurable requirements, such as height limits, setbacks, and lot coverage, ensuring projects meet regulatory and functional needs. Design standards, address the aesthetic and functional aspects of a development, such as building materials, landscaping, and signage. This chapter also establishes development standards that apply unique locations. These standards go above and beyond what is required by the State of California; the County established these standards to ensure future development reflects climate-resilient design, while prioritizing the comfort and safety of its workers and visitors.

4.1 Development Standards

The development standards outlined in this section are designed to guide the transformation of the Specific Plan Area into a thriving and innovative employment hub. These standards ensure that all development aligns with the overarching vision and guiding principles. Adherence to these development standards will create a harmonious balance between development and the unique environmental conditions and the existing agricultural landscape. The following steps are provided to instruct development applicants on how to understand the Development Standards section:

1. Step One: From Chapter 3, determine the land use designation that applies to the site.

2. Step Two: Use Table 4-1 General Development Standards to identify those that apply to the pertinent land use and designation.

3. Step Three: If any of the unique locations described in Section 4.1.1 Standard Design Conditions For Unique Locations, apply to the site/use, these will supersede the conflicting standards identified in the General Development Standards.

The development standards included in Table 4-1, General Development Standards, articulate minimum setbacks and maximum building or infrastructure heights. Table 4-2 Special Off-Street Parking Minimum Standards, includes parking standards for specific uses. These development standards are further refined in the sections below.

A. Minimum Lot Size

Each new lot/parcel created shall meet the minimum size established in Table 4-1, General Development Standards. In all cases the lot size shall be the computation of the total lot area exclusive of public rights-of-way, easements and other restricted areas.

B. Setbacks

Setbacks are regulations that determine the minimum distance a building or structure must be set back from property lines, streets, or other structures. They serve as a buffer zone to ensure safety, privacy, and proper planning.

Table 4-1, General Development Standards, includes different types of setbacks:

- Minimum Building Setback from Roadway specifies the minimum distance a building must be placed from the edge of a roadway. Certain objects or structures are permitted within the building setback as long as they meet sight distance requirements, including: perimeter security fencing, entry kiosks, landscaping, pedestrian and/or bicycle amenities, utilities, and stormwater management elements.

- Minimum Distance Between Buildings specifies the minimum distance that must be maintained between two or more buildings on the same property or adjacent properties. This regulation is aimed at ensuring safety, privacy, access to light and air, and overall functionality.

Circulation and transportation elements, such as drive aisles, driveways, parking areas, paths and trails may encroach into the buffer area up to a maximum of 35 percent of the gross buffer lot area. Parking is not permitted within the first 30 feet of the 50-foot buffer, as measured from the street property line.

C. Maximum Building Height

Building height regulations specify the maximum allowed vertical dimensions of a building structure. Building height restrictions help ensure safety, maintain access to natural light and ventilation, and preserve the character of an area. Building height is exclusive of roof-mounted utility equipment, such as HVAC systems, rooftop solar panels, condensers, boilers, pumps, electrical transformers, utility boxes and laboratory/exhaust vents, and other necessary mechanical equipment, provided that:

1. Screening: All roof-mounted equipment shall be fully screened from public view by parapet walls or other architectural elements that are integral to the building's design.
2. Height of Equipment: The height of any roof-mounted equipment, including the screening structures, shall not exceed four (4) feet above the maximum allowable building height. An increase in height allowance may be granted by County staff during review of the building permit, subject to the equipment being essential to the facility's mechanical systems to function, such as a laboratory fume hood.
3. Setbacks: Roof-mounted equipment must be set back from the edge of the building by a distance that is not visible from any public rights-of-way or adjacent properties.

D. Maximum Utility Structure Height

The infrastructure maximum height refers to the maximum allowed vertical extent of essential facilities and installations vital to the function of a renewables and industrial-type facility. These regulations do not apply to utility structures such as electrical transmission towers or power plant vent stacks. Variances to utility structure height limits can be approved by the PDS.

E. Maximum Lot Coverage

To ensure development provides a proper balance for built structures, transportation, open space, and landscaping, a maximum lot coverage is established for each land use designation. Maximum lot coverage is defined as the maximum percentage of a lot's total area that may be covered by roofed buildings and permanent structures, excluding solar and/or covered parking facilities. Lot coverage is calculated as the total ground area covered by the roofed portion of buildings, measured from the exterior faces of walls or supporting columns, and expressed as a percentage of the total lot area.

F. Minimum Area for Landscaping and Dust Suppression

A percentage of the total lot area that must be dedicated to landscaping and dust suppression. Landscaped area shall comply with Section 4.2.4, Landscape. Permitted dust suppression mechanisms are described in Section 4.1.1, A. Adjacent to the Salton Sea.

G. Parking

Unless otherwise specified in Table 4-2, Special Off-Street Parking Standards, the parking standards included in the County Code Section 90402.01 shall apply. Where a proposed use is not listed within Table 4-2 Special Off-Street Parking Minimum Standards, or in Section 90402.01 of the Imperial County Municipal Code, the planning and development services department shall determine the parking needs based on the list of uses, which most nearly resemble the proposed use. The department may use national or state standards or guidelines for determining parking needs, if any.

Table 4-1 General Development Standards

	Green Industrial	Playas Renewables	Manufacturing	Logistics	Community Opportunity Areas	Solar	Playas Restoration	Conservation	Floodway
Minimum Lot Size	2 acres	2 acres	1 acre	1 acre	8,000 SF	-	-	-	-
Minimum Building Setback from Roadway	50 ft	50 ft	50 ft	50 ft	10 ft	-	-	-	-
Minimum Distance Between Buildings	30 ft	30 ft	30 ft	40 ft	-	-	-	-	-
Maximum Building Height	80 ft	80 ft	80 ft	80 ft	40 ft	20 ft	-	-	-
Maximum Utility Structure Height	110 ft	110 ft	110 ft	110 ft	-	20 ft	-	-	-
Maximum Building Lot Coverage	70%	50%	75%	80%	80%	10%	10%	-	-
Minimum Area for Landscaping and Dust Suppression	15%	20%	10%	10%	10%	-	30%	-	-

Table 4-2 Special Off-Street Parking Minimum Standards

Use	Parking Standard
Anaerobic Digesting Facility	1 space per 2 employees
Automobile Wrecking and Recycling Yard	1 space per 2 employees
Battery Energy Storage Systems (On-site)	1 space per 2,000 sq. ft. of storage area
Battery Energy Storage Systems (Commercial Scale)	1 space per 10,000 sq. ft. of storage area
Data Center	1 space per 1,000 sf of gross floor area of office space associated with the Data Center use
Desalinization Facility	1 space per 1.5 employees
Geothermal Production and Operations	1 parking space per every 2 employees during peak shift hours
Green Hydrogen	1 parking space per every 2 employees during peak shift hours
Intermodal Rail Hub	1 space per 2 employees, and 1 truck space per acre of site area
Mineral Recovery, Processing, and Production	1 space per 1,500 sq. ft. of office area and 1 space per 2 employees
Office and Government Buildings	1 space per 300 sf of building area
Recycling Centers	1 parking space per every 1.5 employees during peak shift hours
Temporary Construction Housing	1 space per unit
Bowling Alleys and Indoor Roller Skating Rinks	1 space per 700 sf of building area
Golf Driving Range	1 space for every 2 tees
Miniature Golf Course	2 spaces per hole
Movie Theater	1 space per 4 seats

4.1.1 Standard Design Conditions For Unique Locations

The following unique locations occur throughout the Specific Plan Area and apply to specific uses that require additional design considerations and regulations. Where these unique locations apply to proposed development, the standards contained in this section shall supersede any less stringent standards identified in the General Development Standards contained in Table 4-1 General Development Standards.

A. Adjacent to the Salton Sea

1. Proposed development within 100 feet of the Salton Sea shoreline, at the time of a building permit issuance, shall prepare a Dust Control Plan that describes the fugitive dust control measures that will be used and monitored during construction and operation, consistent with Imperial County Air Pollution Control District roles and Policy HP-18 of this Specific Plan.
2. Dust suppression mechanisms permitted on-site may include:
    a. Planting self-sufficient, native vegetation with sturdy root systems such as native cacti or grasses.
    b. Natural ground covers including rocks, gravel, wood chips, or mulch.
    c. Non-toxic synthetic ground covers that stabilize soil including geotextile fabric, or soil stabilizers.

d. Surface roughening methods, non-erodible elements, or methods vetted in the Salton Sea Air Quality Mitigation Program.

e. Installing physical barriers that reduce wind speeds and prevent dust from being carried away, such as rows of native vegetation, hay bales, picket-style board fences with gaps, and berms.

f. Shallow flooding.

g. Other scientifically proven techniques not included herein as approved by the Imperial County Planning and Development Services (PDS) director.

B. Adjacent to State Route 111 (SR-111)

1. The minimum building setback from SR-111 edge of right-of-way (ROW) shall be 100 feet.
2. A minimum development setback of 250 feet is required when either a truck loading bay fronts SR-111, or if the longest façade of the warehouse building fronts SR-111 to minimize visibility of large warehouse buildings.
3. Projects adjacent to SR-111 shall site truck yards to be shielded from view of sight along SR-111.
4. See Specific Plan Section 4.2.3 Building Design, B. Building Form, Massing & Articulation, Standard 1 for building design features required for building facades adjacent to SR-111.
5. Berms may be up to eight (8) feet tall to visually screen and separate development from SR-111. Variances to berm height may be approved by the PDS director, so long as it doesn't conflict with traffic safety regulations.

C. Adjacent to Major Industrial Corridor

1. The minimum setback from a Major Industrial Corridor shall be 80 feet.
2. See Specific Plan Section 4.2.3 Building Design, B. Building Form, Massing & Articulation, Standard 1 for building design features required for building facades adjacent to SR-111.
3. Additional landscape enhancements are to be implemented at gateways located at prominent intersections.

D. Adjacent to Gateway Segment (1st mile of Sinclair west of SR-111)

1. The minimum setback along the primary gateway segment along Sinclair is 40 feet.
2. For buildings exceeding 40 feet in height, two additional building façade treatments from Specific Plan Section 4.2.3 Building Design. B Building Form, Massing & Articulation, shall be applied to the facades facing the gateway segment.
3. Additional streetscape landscape enhancements shall be implemented at street intersections located along the first mile of Sinclair west of SR-111. In addition to meeting the criteria for native vegetation of the Sonoran Desert of Imperial County which will be irrigated strategically to provide natural shade and improve microclimate.

- Lithium Valley Branding: Wayfinding signs and entry features at key intersections, particularly at the corner of Highway 111 and Sinclair Road, shall incorporate “Lithium Valley” branded elements, including logos, color accents, and design motifs. These elements should be designed in collaboration with the County and be consistent with the overall identity of the Specific Plan Area.
- Vegetation: Streetscape landscape enhancements shall be implemented at key intersections along the first mile of Sinclair west of SR-111. The landscaping shall utilize native vegetation.
- Trees and Groundcover: In landscaped medians and parkways, trees shall be planted at a minimum ratio of one tree per 400 feet, spaced at least 30 feet on center. The corner of each intersection

shall provide at least four trees of varying heights to promote shade and aesthetic interest without obstructing views to drivers. Vegetation groundcover and plant selections will complement adjacent landscape designs.

- Pedestrian, Transit and Bicycle Infrastructure: Pedestrian walkways, transit corridors and bicycle lanes should be integrated into the streetscape, with materials that blend seamlessly with the landscaping. These pathways should be shaded, accessible, and offer safety features like proper lighting and clear delineation from vehicle lanes.
- Community Identifying Features: Streetscape and entry treatments shall include placemaking features such as signage, wayfinding attributes, and local cultural or historical references. These features should be designed with durable, low-maintenance materials that are cost-effective and contribute to the identity of the area.
- Lighting: Solar-powered lights or LED fixtures are encouraged to reduce long-term maintenance costs and energy use.

4. Driveway entry treatments, such as unique paving, accent, landscaping and signage that inform visitors will highlight site entrances and enhance the quality of overall project design.

E. Adjacent to Conservation Areas, River Corridor Areas, and Tribal Cultural Resources

1. A 200-foot development setback shall be measured from the edge of a wetland, edge of riparian habitat or top of a riverbank, designated wildlife refuge or wildlife area, operating agency-owned mitigation or restoration lands.
2. A 200-foot development setback shall be given to State-recognized tribal cultural resources. Additionally, context-sensitive screening techniques shall be used, where feasible, for infrastructure constructed adjacent to these resources.
3. No buildings, truck courts, loading areas, employee/visitor parking, truck transportation areas, or truck or trailer storage uses are permitted within this setback area.
4. Rooftop equipment, such as mechanical equipment and solar panels, shall use screens to block views from the Conservation areas (unless this significantly reduces the efficiency of the solar system).
5. The following is permitted within the 200-foot setbacks:
    a. Fencing made with porous materials (e.g. vertical blade fencing) that allow wildlife to move freely across fencing areas. Temporary fencing is also permissible during construction.
    b. Noise attenuation walls up to eight feet tall from at-grade, made with materials that allow for the cross-movement of wildlife. Temporary noise barriers are also permissible during construction activities.
    c. Habitat restoration.
    d. Pedestrian trails or multi-use paths.
    e. Native planting indigenous to Imperial County with a mix of trees, shrubs, and grasses to mimic the natural or riparian ecosystem.
    f. Berms up to eight feet tall in height, as measured from the base elevation.
    g. Subsurface geothermal operations.
    h. Utilities and drainage facilities.
    i. Emergency access.
    j. Property maintenance access.
    k. Invasive species management.

F. Adjacent to Community Opportunity Area Designation

1. The minimum setback from Community Opportunity areas shall be 200-feet from the property line. This 200-foot setback shall act as a buffer between industrial-type uses and community-oriented uses.
2. No truck courts, loading areas, employee/visitor parking, truck transportation areas, or truck or trailer storage are permitted within the 200-foot setback area.
3. Industrial development shall be visually screened from the Community Opportunity Areas using context-sensitive screening techniques such as landscaped berms, landscaped noise attenuation walls, or grade changes.
4. The following is permitted within the 200-foot setback:
    a. Air quality monitoring systems
    b. Noise attenuation walls
    c. Berms up to eight feet tall in height, as measured from the base elevation
    d. Subsurface geothermal operations
    e. Utilities and drainage facilities
    f. Emergency access
    g. Property maintenance access
5. Within the 200-foot setback, a mix of native and adaptive plant species with consideration to plants that are able to create visual screening, absorb sound, and improve air quality. Landscaping shall have a mix of trees, shrubs, and groundcover. Landscaping shall cover at least 50 percent of the 200-foot buffer and cover the length of the buffer for visual screening.

4.2 Design Standards

4.2.1 Site Design Standards

A. Building Orientation

1. As demonstrated in letter "A" in Figure 4-1 Campus Design Concepts, maximize passive solar heating in the winter and minimize heat gain in the summer by the orienting longest facades of buildings east-west to mitigate heat gain and break up long warehouse buildings along main north-south vehicular corridors.
2. As demonstrated in letter "B" in Figure 4-1, Campus Design Concepts, loading bays shall be oriented internally between warehouse buildings to provide passive shading for loading facilities and trucks.
3. Place buildings to take advantage of shade and prevailing winds for natural ventilation and cooling.
4. Buildings shall be oriented so that loading and service areas are screened from view from streets and public areas. This may be accomplished by locating service areas off of underutilized streets, providing landscape screening, locating parking bays and access as a buffer to the loading areas, and/or orienting the loading to internal areas of the site.
5. Pedestrian entrances and windows of buildings should face and be visible from streets, paseos, and internal drives to allow for "eyes on the street" and natural surveillance.
6. Informal outdoor gathering areas and pedestrian nodes that can function as worker gathering spaces should be created and incorporated into the overall site design. These areas should relate to the development's common facilities, such as parking areas, entrances, plazas and terraces.

B. Indoor and Outdoor Break Areas

1. Informal outdoor gathering areas, also referred to as outdoor break area, should have a minimum width of 20 feet.
2. Break areas shall incorporate shade, seating areas, and landscaping (outdoor only). See Section C. Shade, below.
3. Break areas shall be directly connected to interior spaces with dedicated pedestrian paths.
4. Where possible, break areas shall be located inside buildings, adjacent to the building, at building corners, between buildings, or near building entrances.
5. Site designs should avoid the use of blank walls that face common areas.
6. For industrial and office-type buildings, designate indoor 'clean zones' with HEPA air filtration for high-occupancy areas, such as control rooms and employee lounges. Include airlocks at entry points to reduce particulate tracking into the building, where feasible.

C. Shade

1. All developments shall provide shade for at least 40 percent of all outside common or break areas within the development. Shade may be provided through the following design elements:
    a. Verandas
    b. Covered porches
    c. Fixed canopies, awnings, trellises, or other shade structures
    d. Shade trees
2. All development shall provide shade for at least 35 percent of all pedestrian routes within the development, including sidewalks, paseos, and pedestrian pathways. Shade may be provided through the following design elements:
    a. Arcades
    b. Colonnades
    c. Verandas
    d. Covered porches
    e. Fixed canopies, awnings, trellises, or other shade structures
    f. Native, low water consumption shade and palm trees

D. Access

1. Vehicular entrances to industrial areas shall be identified with a gateway sign providing a sense of place.
2. Truck access and transportation shall be separated from automobile access and transportation through the use of dedicated transportation driveways, drive aisles, and parking areas or with planted medians separating two-way traffic on both sides.
3. As demonstrated in letter "D" in Figure 4-1 Campus Design Concepts, the use of roundabouts is encouraged to allow for ease of access and transportation along main corridors to commercial nodes and logistics, manufacturing, or other industrial-use areas to encourage a campus-like concept for development.

E. Parking Area Design

1. Where feasible, the Specific Plan encourages the "breaking up" of exterior parking areas through the use of landscaping or other screening materials.
2. Where provided, carports and accessory structures shall be designed as an integral part of the development's architecture. These structures should be compatible with the overall development. If prefabricated metal carports are used, architectural detailing consistent with the main building should be incorporated, where feasible.
3. The main entry to each building shall be clearly visible from the nearest circulation walkway. The use of a portico, overhang, lobby or recessed area or similar entry feature is highly encouraged.

4. Photovoltaic arrays are encouraged to be roof-mounted on buildings and carports. Battery storage areas shall be screened with landscape screening or by an enclosure built with solid walls.

5. Parking lots/spaces for street legal vehicles (including but not limited to passenger vehicles, motorcycles, trucks, tactor trailer/semi-trucks and trailers) to be paved with either:

    a. Three inches (3") of asphaltic concrete, or

    b. Three and one-half inches (3 1/2") of Portland cement concrete.

6. Recommend incorporating a minimum of one (1) of the following design features in surface parking areas within the development:

    a. Carports/ shade structures for 50 percent of all parking areas, common amenity areas, and pedestrian walkways. This requirement does not apply to tractor/trailer/semi-trucks and trailers and other vehicles used for industrial activities.

    b. Increased paving with a high albedo, such as permeable pavers, porous asphalt, reinforced grass pavement (turf-crete), stone pavers, light-colored concrete, pervious concrete, high albedo asphalt, water-permeable asphalt, recycled class and rubber, photocatalytic concrete, reflective coatings.

See also Section 4.2.4 Landscape D. Parking Areas for applicable standards.

F. Pedestrian Circulation

Cross circulation between vehicles and pedestrians shall be minimized. A continuous, clearly marked walkway shall be provided from the parking areas to the main entrances of buildings. The use of enhanced paving for crosswalks and entries is encouraged (such as concrete surface treatments, bricks, or terra-cotta or stone pavers).

Walkways and/or corridors shall be provided between buildings, parking areas, and all site facilities to provide safe access. Pedestrian walkways in parking areas should be provided, clearly identified, and made safe and attractive through the use of hardscape design, landscaping and lighting.

Proposed developments are encouraged to provide a system of paths, sidewalks, corridors, and walkways that create safe and pleasant pedestrian environments, connect buildings and common areas, and provide multiple pedestrian access points.

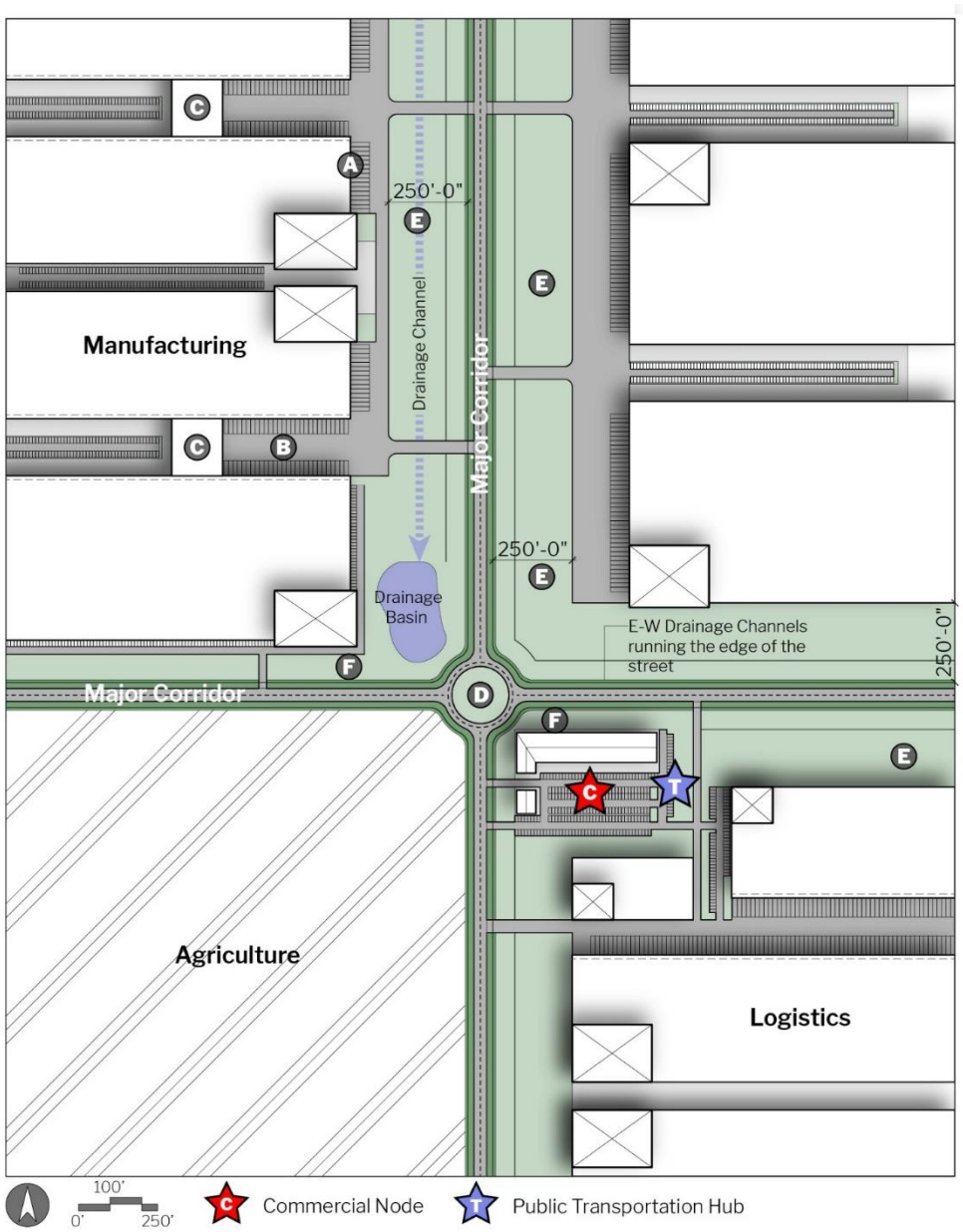
See Section C. Shade for applicable shade standards.

4.2.2 Campus Design Standards

It is anticipated that some development will occur in the form of a campus, meaning a series of buildings, across two or more adjacent parcels, under the same ownership. Multiple independently operated and sited facilities may not be considered a campus. Campus development may offer a variety of uses within the project boundary, consistent with the land use map and allowed uses described in Chapter 3. Campus design concepts are graphically represented in Figure 4-1 Campus Design Concepts, and conceptually illustrated in Figure 4-2, Campus Rendering shall comply with the following standards:

1. As demonstrated in letter "A" in Figure 4-1, the longest facades of buildings shall be oriented north-south to mitigate heat gain and break up warehouse buildings along main north-south vehicular corridors.
2. As demonstrated in letter "B" in Figure 4-1, loading bays shall be oriented internally between north-south warehouse buildings to provide passive shading for loading facilities and trucks.
3. As demonstrated in letter "C" in Figure 4-1, worker amenities, gathering spaces, and offices shall be centrally located between employment buildings to connect structures, create social hubs and provide passive shading.
4. As demonstrated in letter "D" in Figure 4-1, the use of roundabouts are encouraged to allow for ease of access and transportation through main corridors and to encourage a campus-like concept for design.
5. As demonstrated in letter "E" in Figure 4-1, a minimum setback of 250 feet is required when a truck loading bay is fronting a major vehicular corridor to mediate visual impacts of large warehouse buildings.

Figure 4-1 Campus Design Concepts



6. As demonstrated in letter “F” in Figure 4-1, a maximum setback of 60 feet is required when commercial or visitor-serving uses are fronting a major vehicular corridor.

7. Landscape buffers are intended to soften views to architecture as well as support the local environment through shade and dust suppression and add aesthetic value.

8. Highlight site entrances through driveway entry treatments such as unique paving treatments, accent landscaping, and signage that informs visitors of entry locations and enhances overall project design.

9. Campuses shall use internal wayfinding signage at points of high employee pedestrian traffic. Internal wayfinding signage may integrate company logos, or alternatively themed aesthetics as established in the Signage Program discussed in Section 4.2.10, Signage. Color-coded wayfinding signage is encouraged to differentiate various zones, such as research, production, and office areas.

10. If campuses adopt the use of micro-mobility transport options, internal travel lanes should be marked where micro-mobility transport is allowed, ideally separate from pedestrian pathways and vehicular traffic lanes. Internal wayfinding signage shall be legible for micro-mobility users to direct users safely and effectively.

11. Campuses of 200 employees or more, shall provide at least one on-site recreation facility including but not limited to: fitness center, sport court, shaded walking or jogging trails, or game room. Recreation facilities shall include lockers and showers (as referenced in State Vehicle Miles Traveled guidance).

Figure 4-2 Campus Rendering

4.2.3 Building Design

A. Building Materials, Colors, and Finishes

1. Use locally inspired architectural motifs or materials to reflect the character of the region and create a sense of place.
2. All buildings within a singular planning area should be unified by complementary building materials, textures, and colors. Exterior columns or supports for site elements, such as trellises and porches, should utilize materials and colors that are compatible with the rest of the development in the planning area.
3. Allowable exterior building wall materials include concrete, stucco, masonry, fiber cement (and other similar composites), glass metal, and solid wood. Plywood, plastic, vinyl, and fiberglass are not allowed, except as accent materials.
4. Building materials should be durable, require low maintenance, and be of high quality.
5. Use light-colored roofing materials to minimize heat absorption.
6. Use visual cues to prevent bird collisions with the built environment. Finishes should be non-reflective and incorporate visual barriers for birds, such as fritted glass and vertical fins. The use of reflective glass shall be restricted. Mirrored glass is prohibited.
7. Color should be used as an important design element in the development's appearance. The predominant colors for main buildings and accessory structures should be limited to earth tones (light brown, tan, beige, mustard, cocoa, taupe, and wheat) that are well suited to a monochromatic look. Colors should match and should be generally consistent with an overall color theme for the development. Compatible accent colors should be used sparingly and limited to select areas of the development, such as entrances, corners, and decorative elements.

B. Building Form, Massing and Articulation

1. Building walls over 100 feet in length shall contain a system of articulated architectural elements creating visually distinct sub-volumes through the incorporation of changes in two or more architectural elements, such as changes in surface planes (projections/recesses), rooflines, colors, materials, textures, and/or fenestration.
2. Building facades facing a 2-Lane Major Industrial Collector or SR-111 shall incorporate a minimum of three of the following detailed elements:
    a. Recessed/ framed windows/ window panels (see "A" in Figure 4-3, Building Façade A)
    b. Changes in color/ material at ground level (see "C" in Figure 4-3, Building Façade A)
    c. Decorative panels (see "D" in Figure 4-3, Building Façade A)
    d. Facade treatments (e.g. awnings, overhangs, trim, sunshades) (see "C" in Figure 4-4, Building Façade B).
3. Integrate outdoor gathering spaces, courtyards, or atriums to provide relief from the desert heat and promote social interaction among building occupants.
4. Incorporate shading devices such as overhangs, awnings, or canopies to reduce solar heat gain on building facades and outdoor spaces.
5. The corners of buildings should be enhanced with architectural treatments which may be accomplished by pronounced building forms, extensions of building heights, enhanced window treatments or projections (such as awnings, trellises, parapets, roof overhangs, etc.) (see Figure 4-4, Building Façade B).

Figure 4-3 Building Façade A

A Framed Openings
B Break in Facade Plane
C Change in Color/Material at Ground Level
D Repetitive Pattern of Smaller Forms
E Facade Treatments (e.g. awnings, overhangs, trim, sunshades)

Figure 4-4 Building Façade B

A Expressing Corner with Transparency and Building Form
B Defined Roofline
C Facade Treatments (e.g. awnings, overhangs, trim, sunshades)

C. Building Bulk Control

1. All building elevations fronting a public ROW shall be composed of offsetting planes that provide relief in the building facade by insetting or projecting surfaces (planes) of the building.

2. A minimum of one offset with a minimum horizontal separation of two feet between planes is required for every 50 feet in length of new building façade.

D. Rooflines

1. A minimum of one break in the building's parapet for every 50 linear feet of building roofline along the front elevation.

E. Corners

1. As shown in Figure 4-5, Corner Treatments A, building designs should emphasize the corners of warehouse buildings with architectural features or materials to create visual interest and break up the massing.

2. As shown in Figure 4-6 Corner Treatments B, developments should consider using landscaping at corners to define pedestrian pathways and enhance the sense of arrival.

F. Energy Efficiency

1. Enclosed buildings over 25,000 square feet intended to have workers inside for more than 45 minutes a day shall:

    a. Install air-cooling systems or closed-loop water cooling systems in lieu of conventional air conditioning systems.

    b. Achieve 20 percent or better insulation performance than the current California Building Code through high R-value insulation, low U-value windows, and/or advanced window glazing systems. This would no longer apply if the most current California Building Code were to reach the maximum performance level.

2. Buildings with loading docks shall provide electric outlets to power truck refrigeration units rather than allow trucks to idle while unloading. Electric outlets within truck loading docks shall also be built to be compatible with EV truck charging.

Figure 4-5 Corner Treatments A

Figure 4-6 Corner Treatments B

A Locally inspired architectural motifs/materials

B Integrate outdoor gathering spaces to provide relief from desert heat

C Incorporate shading devices such as overhangs, awnings, or canopies

D Plant drought-tolerant vegetation

E Defined entrance

F Repetitive pattern of smaller forms

G. Entrances

1. As shown in Figure 4-6 Corner Treatments B, enhance the building pedestrian entrance with any of the following features:
    a. Locally inspired architectural motifs/ materials
    b. Outdoor gathering spaces to provide relief from desert heat
    c. Shading devices such as overhangs, awnings, and canopies
    d. Native landscapes
    e. Defined entrances with changes in materials and colors
    f. Repetitive patterns of small, simple designs, exemplified in "F" in Figure 4-6 Corner Treatments B.

4.2.4 Landscape

As established in Section 4.1, Development Standards, depending on the land use designation, a certain percentage of the total lot area that must be dedicated to landscaping and dust suppression. The following landscape standards establish how the landscaping and dust suppression area may be designed to be consistent with this Specific Plan.

A. General Landscaping

1. Vegetation coverage shall comprise a minimum of 30 percent of the total landscape and dust suppression area, established at the time of occupancy or within two (2) years from the time of planting, whichever is sooner. The vegetation coverage shall be prioritized along improved circulation network roadways and pedestrian routes to offer shade for pedestrians. The other 70 percent of the total landscape and dust suppression area shall be comprised of non-vegetative groundcover and dust suppression methods. Non-vegetative groundcover may include rocks, decomposed granite, wood chips, pavers and other artificial cover. Permitted dust suppression methods are described in Section 4.1.1 A. Adjacent to the Salton Sea.
2. As conceptually illustrated in Figure 4-7, Landscape at Installation, and Figure 4-8, Landscape at Maturity, a minimum of 25 percent of the required trees shall be a minimum of 24-inch box size when planted. Other trees shall be a minimum of 15-gallons or equal in size when planted.
3. Appendix A, Recommended Landscape Plant Palette, shall be considered as the foundation of future plant palettes for development within the Specific Plan Area to provide native landscaping, and to reinforce a sense of neighborhood cohesion. Landscape design should not, however, result in monotony or a lack of variety or biological diversity. Landscaping shall include a balanced mix of trees, scrubs, and groundcovers.

Figure 4-7 Landscape at Installation

Figure 4-8 Landscape at Maturity

4. Landscape designs shall prioritize the use of native vegetation of the Sonoran Desert region of Imperial County (except in areas which collect irrigation water). Exceptions to native vegetation may only be made in areas of low basin type landscape areas or along the toes of large slope areas, due to the collection of irrigation water at the bases of slopes. Native vegetation shall be used strategically to provide natural shade and improve microclimate.
5. Landscape designs shall prioritize the planting of trees in groupings to benefit from shared shading and increase the efficiency of water delivery.
6. Group plant material based on their water demand and watering frequency.
7. To minimize fire risk, manage flammable vegetation through regular maintenance and controlled removal.
8. All manufactured slopes or berms over ten feet (10') in height shall be planted with erosion control in mind, including fire resistant and self-sufficient plantings.
9. As part of a development application, the landscape plan submittals shall include/address the following:
    a. Site Plan: Indicate type, size, and location of all landscaping materials.
    b. Sight Distance: Trees and large shrubs shall be placed at appropriate distances from intersections and driveways to not visually obstruct vehicular sightlines to the satisfaction of the Department of Public Works.. Shrubs and groundcovers shall not exceed 36 inches in height within vehicular sight lines.
    c. Irrigation Plan: Shall be separate from the planting plan and shall include low-flow, matched precipitation rate heads, drip irrigation, check valves to prevent low head drainage, appropriate pressure regulation, an automatic controller suitable to both spray and drip irrigation, and a rain sensing automatic shut-off device. All spray heads should be adjusted to prevent overspray on to paved surfaces and walls. Overspray adjustments should be made during regular maintenance inspections. A post installation water audit will be required to determine actual precipitation rates and the distribution uniformity of the irrigation system.
    d. Water Management Plan: Details including specifications, notes, legends, and the water requirements schedule are necessary for a complete landscape plan review.
    e. Elevation Plan: Shall include a building elevation with proposed plant material(s). Detention basins are to be incorporated as a landscape feature. Where possible, efforts should be made to combine adjacent parcel basins through coordination with adjacent property owner or applicant. Combining basins will conserve usable areas and enhance the overall street appearance.
    f. Planting Plan: Shall include, but not be limited to, all existing plant materials to be retained (called out by caliper size) and a legend listing the common and botanical plant names and total quantities by container size and species. Plantings will be required to be grouped into hydro zones. Bark mulch with a minimum depth of 3 inches will be required to reduce evaporation and discourage weed growth. Bubblers and drip irrigation will be recommended where appropriate and modern equipment such as low precipitation heads, automatic controllers and rain sensing devices will be required. See Appendix A, Recommended Landscape Plant Palette.

B. Water Quality Retention and Infiltration Basins

1. Water quality retention basins, per local and regional standards, are to be designed to fit into the local, adjacent landscape forms located within the setbacks of individuals parcels. The design of detention/infiltration basins shall incorporate natural integrating landforms paired with water quality engineered functions. Plant materials used shall be climatically appropriate, adapted to seasonal

water inundation and periods of heat and drought. Where natural slopes occur, plant materials shall be arranged in appropriate densities to stabilize side slopes, and reviewed by County staff.

2. Concrete lined facilities are not allowed. Rock-lined facilities that allow for infiltration of water (for groundwater recharge) and habitat benefits are preferred. Water quality basins, along with adjacent and integrated landscape areas, are to be maintained in accordance with local and regional standards.

C. Irrigation Systems

1. The standard approach for irrigation shall incorporate permanent automatic systems, programmed to deliver water through high efficiency methods (i.e. drip, micro-emitter, or multi stream rotator).

2. Within irrigation systems, water shall be delivered to each hydrozone (plants grouped by water need) at a rate appropriate for sustainable growth. Employ irrigation water conservation mechanisms such as below grade water distribution tubing with internally built-in drip emitters, point source emitters, deep root bubblers, and low precipitation rate, high efficiency, multi-stream nozzles.

3. Irrigation systems installed for the purpose of rehabilitation of disturbed habitat shall be temporary and may be removed after re-vegetation has occurred.

4. Development projects above certain impervious surface thresholds shall manage stormwater runoff on-site using Low Impact Development (LID) measures or Green Stormwater Infrastructure (GSI).

D. Parking Areas

1. For all off-street parking areas of five or more spaces, at least 5 percent of the total parking area shall be landscaped. A minimum 25-foot landscape area (trees, shrubs, groundcover) at the exterior perimeter of all parking lots. The 25-foot landscape area may consist of existing and established native and naturalized vegetation and new container plant material consisting of 48-inch box trees and 1- and 5-gallon shrubs and groundcover. New planting should consist of a combination of small, medium, and large-scale trees, shrubs, and groundcover.

2. In parking lot landscaped strips, trees shall be planted at a minimum ratio of one tree per 600 SF and shall be spaced one tree at least every 40 feet on center.

E. Streetscape Landscaping

1. Streetscapes and entry treatments should be designed to promote community character and should consist of trees and groundcovers selected to establish a district character or theme for the project.

2. Street scale and vehicular travel speed shall inform the scale of plant selection and inert landscape materials. In landscaped medians and parkways, trees shall be planted at a minimum ratio of one tree per 600 square feet and shall be spaced one tree at least every 40 feet on center.

3. Plantings should grow to a minimal height within street view triangles to provide safe view lines for both pedestrian and vehicular traffic.

4. Locate berms with natural forms on approximately 3:1 side slope along street rights-of-way. The berms should be planted at an appropriate density to stabilize and maintain the angle of repose with a mix of low spreading deeply rooted and vertical planting to provide for building screening and dust mitigation.

5. Locate water quality infrastructure and water conveyance measures within streetscape ROWs. Stormwater and regular runoff collection are valued resources to be utilized and integrated into landscape forms or to help prove for recharging of water supply into the soil.

6. Maintenance of roadway landscape will be the responsibility of the Special District, or other entity as may be acceptable to and approved by the County.

7. Where applicable medians shall include a minimum width of six feet of landscape area. Maintenance walks[7] along curbs shall have a minimum width of one foot.

8. Planted medians shall be designed with water quality in mind, where applicable curb cuts and infiltration opportunities for water absorption shall be implemented. Where water quality features cannot be implemented, excess site storm drainage infrastructure located adjacent to water quality features shall be implemented.

9. Plant material shall be irrigated both temporarily until established (e.g. xeriscaping) or permanently with automatic systems, programmed to deliver water through high efficiency methods (i.e. drip, micro-emitter, or multi-stream rotator).

10. Landscape improvements shall first be reviewed and approved by the County Department of Public Works for potential roadway maintenance and traffic safety concerns such as sight distance and clearance widths for maintenance vehicles.

11. Landscape plants and inert material heights shall be designed to prevent the obstruction of prominent signs and architectural features.

F. Landscape Maintenance

1. Irrigation systems shall be maintained in good working order, and adjustments to the system should be part of regular maintenance activities.

2. All landscaping on a given property shall be maintained by the owner of each property according to the best standards practices in the industry for high-quality landscaping. Mowing, pruning, trimming, and feeding of plants must be completed periodically according to the season.[8] Special care must be given to all plant materials during the first year of growth. Should any tree, shrub, or portion of groundcover suffer from improper irrigation, improper fertilization, damage due to insects or fungus resulting in weak or stunted growth, or from climate extremes, the plants must be replaced in a timely manner. Repairs necessary to keep the irrigation system operating efficiently must be done by the property owner in an expeditious manner.

3. All walks, drives, parking areas, and service entries shall be kept free from litter and soil by the property owner or their designee.

4. All areas of the property shall be kept clean and attractive. Unsightly accumulation of trash, weeds, or rubbish is prohibited.

5. All landscaping debris shall be properly disposed.

6. All landscaped areas shall be maintained in a clean, neat, and healthy condition. Maintenance shall include proper watering, fertilizing, weeding, litter removal, and replacement of plants when necessary.

[7] Maintenance walks are narrow, designated pathways situated immediately adjacent to curbs, allowing maintenance personnel to access landscaped areas or stormwater infrastructure without disturbing nearby vegetation or other features.

[8] To avoid disturbance of nesting and special-status bird species protected by the MBTA and California Fish and Game Code, activities related to the project, including but not limited to, vegetation removal, ground disturbance, and construction and demolition shall occur outside of the bird breeding season (February 15 through August 31). If construction must be initiated during the peak nesting season, vegetation removal and/or tree removal should be planned to occur outside the nesting season (September 1 to February 14) and a preconstruction nesting bird survey shall be conducted no more than 3 days prior to initiation of construction activities. The nesting bird preconstruction survey shall be conducted on foot inside the project site disturbance areas. For listed and raptor species, this buffer shall be expanded to 500 feet or as determined by a biologist.

4.2.5 Lighting

A. Streetlights and outdoor pedestrian lighting fixtures shall use achieve full cutoff luminaries, meaning that fixtures have no direct uplight (no light emitted above horizontal) and limit intensity of light from the luminaire in the region between 80° and 90°. This may incorporate shields or visors on light fixtures to block light from spilling into unnecessary directions.

B. Outdoor pedestrian lighting shall use dark sky-compliant fixtures by fully shielded or directed downward to minimize skyglow and reduce unnecessary light spill.

C. Lighting fixtures within 50-feet of conservation and river corridors areas should be dark sky-compliant fixtures, or shield light downward to avoid wildlife area.

D. Development shall be compliant with the Illuminating Engineering Society Standards for outdoor spaces. These metrics will ensure sufficient lighting for visibility without causing excessive glare or light trespass.

E. Security and safe operation specific lighting types such as floodlights, spotlights, motion-sensor lights, or infrared lights are permitted on sites.

4.2.6 Perimeter Walls and Fences

A. Incorporate fencing or decorative walls along the perimeters of industrial properties to provide security screening and visual continuity. All perimeter fencing shall be made of durable, yet porous materials (e.g. vertical blade fencing) that allow wildlife to move freely across fencing areas.

B. Perimeter security fencing shall not exceed 12 feet in height. Anti-climb features at the top of security fencing such as angled tops are permitted. Examples of allowable perimeter security fencing materials include, but are not limited to, solid steel, iron, and aluminum. Examples of prohibited materials on perimeter security fencing include, but are not limited to, wood, plastic, vinyl, and wire.

C. Vehicle entry gates, checkpoints, kiosks, guard shacks, and other similar secured entry points shall be set back from the street at least 20 feet, except that secured entries on sites accessed by trucks shall be set back at least 60 feet, to allow adequate queuing space. Such checkpoints, kiosks, guard shacks may be within the building setback.

D. Noise attenuation walls are to be used in proximity to noise sensitive receptors when a sound level standard (decibels) is exceeded at a sensitive receptor due to project generated noise. Noise attenuation walls should be manufactured to reduce noise by at least 10 dBA at ground level or meet ASTM E90 & E413 standards/ASTM C423 (or similar standards with equivalent 10 dBA noise reduction).

E. Masonry walls may be permitted along the lot frontage, with a building permit, for perimeter security and to define a site's entrance. The following policies apply to masonry walls.

   i. Acceptable materials for masonry walls consist of concrete block, brick, or stone.

   ii. Wall finishes shall include natural finish and/or stucco finish.

   iii. Finish colors shall be earth tone colors. Gray masonry is prohibited.

   iv. Locate masonry walls where needed to screen from heavy traffic volumes; industrial uses and attendant truck traffic; or where individual development projects require separate identification from each other.

   v. The maximum wall and fence height shall be eight feet unless approved by PDS. Variances to maximum wall or fence height may be approved by the PDS director.

4.2.7 Off-Street Loading Facilities

A. Provide a break in truck-loading bays every 100 feet in length with an architectural element for a break in the loading bay building façade.

B. Buildings shall be designed with the loading areas primarily located to the side and rear of the buildings.

C. Loading areas shall be designed to provide for backing and maneuvering on-site and not from a public street.

D. Loading docks shall not encroach into building setbacks.

E. All loading areas fronting a public street shall be screened from view by any one or combination of the following:

   i. Screen walls (similar in design and materials to those of the main building)

   ii. Building / wall extensions

   iii. Ornamental landscaping adequate to obstruct a minimum of 50 percent of the view into the loading area.

   iv. Trees, with the requirement of planting one 48-inch box tree every 20 feet on center.

F. Truck loading bays should be screened from road frontage. Where this is not possible, a minimum 20-40 foot landscape buffer must screen the bays from the street.

4.2.8 Waste, Compost, and Recycling Storage

In addition to CalRecycle requirements for waste collection, storage, and recycling:

A. On-site waste, compost, and recycling storage should be located in a separated enclosed area (Enclosure). Enclosures shall be located in convenient but not prominent areas, such as inside parking garages or at the ends of parking bays. They should be located in a separate room, surrounded by walled enclosure and well screened with landscaping to protect adjacent uses from noise and odors. Trailers are required for solid waste management at geothermal facilities. A clear and safe pedestrian route shall be established to each trash area. Workers should not have to wind their way through parked cars or truck bays to access the trash area.

B. Enclosures located in exterior areas should be a minimum of six (6) feet high and constructed from solid materials.

C. Enclosures should be accessible for collection but should not block transportation drives near loading areas or conflict with parking. For security reasons, trash enclosure locations should not create blind spots or hiding areas.

D. Enclosures shall be naturally ventilated.

E. The architectural style of trash enclosures should match the rest of campus.

4.2.9 Mechanical Screening

A. Mechanical and electrical equipment on the ground should be screened from view. Transformers, utility meters and other electrical equipment should be placed in locations that are not exposed to view from the street and should be suitably enclosed and screened, including the use of landscape materials. Screening devices should be compatible with the architecture and color of the adjacent buildings. Renewable energy production facilities and mineral recovery and processing facilities are exempt from Section 4.2.9.

B. Rooftop mechanical equipment, such as condensers, boilers, pumps, electrical transformers, utility boxes and vents, shall be screened from public view, per Section 4.1C. Maximum Building Height.

C. Roof flashing and vents exposed to public view should be painted to match adjacent surfaces or concealed in a manner consistent with the building's appearance.

D. Any exterior components of plumbing, processing, heating, cooling and ventilating systems and their screening devices that will be visible from upper floors of adjacent buildings shall be kept to a visible minimum, shall be installed in a neat and compact fashion, and shall be painted a color that allows the equipment to blend with its visual background.

E. Architectural screening elements should be constructed of similar materials and finishes as adjacent buildings, and the color should also be compatible with adjacent buildings.

F. Gates should be of a solid material and painted to match architectural screening elements or nearby fences and walls.

G. All outdoor storage areas must be screened from the surrounding ROW with walls conforming to Section 4.2.6 Perimeter Walls and Fences.

4.2.10 Signage

A Signage Program shall be prepared for the Lithium Valley Specific Plan, which may be vetted by the community through meaningful engagement, and approved by the County Board of Supervisors, to create an easy-to-use design guide for the development of gateway signage and wayfinding signage in Lithium Valley to encourage exploration of Lithium Valley and the Salton Sea. The Signage Program may focus on legibility, translations, sign dimensions, fonts, materials, colors, and overall aesthetics that creates a sense of place and identity.

The signage standards included in this section are included to promote orderly and safe display of signs for identification and public information. Where this section is silent, the County Code shall prevail.

A. Gateway Signage

1. Gateway signage shall be located at major intersections that lead into the core of the Lithium Valley Development. Exact locations shall be determined as part of the County-led Signage Program, however consideration shall be given to the gateway locations discussed in Section 4.1.1, Standard Design Conditions For Unique Location, Item D. Adjacent to Gateway Segments (1st mile of Sinclair west of SR-111).

2. Gateway signs shall be arranged as not to produce glare on adjacent properties in the vicinity and the source of light shall not be visible from adjacent property or public street or highway.

B. Wayfinding Signage

1. Wayfinding signage shall follow a consistent and recognizable identity established in the County-led Signage Program.

2. Wayfinding signage shall be arranged as not to produce glare on adjacent properties in the vicinity and the source of light shall not be visible from adjacent property or public street or highway.

C. Building and Monument Signage

1. Building or wall signs must be attached flat against the building or wall and shall not extend more than 18 inches from the surface of the building or wall.

2. Building or wall signs within the Community Opportunity Areas shall have a maximum area of 50 square feet of building frontage and be limited to one sign per building.

3. Building or wall signs outside the Community Opportunity Areas shall have a maximum area of 100 square feet of the building frontage and limited to one sign per building.

4. Off-site advertising signs, or billboards, are prohibited in the Specific Plan Area.

5. Freestanding pole signs are prohibited outside the Community Opportunity Areas, with exception to:

    a. Special signing is required for drive-in windows, drive through restaurants, drive through banks or similar permitted businesses.

b. Electronic time and temperature sign as regulated by the County Code.

6. Monument signs shall be limited to not more than 100 square feet of total copy area per vehicular site entrance and shall not exceed six (6) feet in height above the ground and may be installed between five (5) and 20 feet from the public ROW.

7. All building or monument signage shall be arranged as not to produce glare on adjacent development sites in the vicinity and the source of light shall not be visible from adjacent property or public street or highway. External light sources shall be shielded from view and directed to illuminate only the sign face.

4.3 Development and Design Standards Goal, Policies, and Programs

Table 4-3, Development and Design Goal, Policies, and Programs, below presents the development and design policies, and programs that provide actionable directives to support the overarching development and design goal, Specific Plan guiding principles and vision statement. For every program, a responsible agency, timeframe, possible funding source, and applicable guiding principle is identified to make implementation of this Specific Plan clear and enforceable.

Table 4-3 Development and Design Goal, Policies, and Programs

Goal 2: Development & Design (DD)					
Create a cohesive and innovative built-environment that promotes environmental stewardship and economic feasibility.					
Policy DD-1:	Ensure consistency with the development and design standards through the steps laid out in Section 8.1.2A, Substantial Conformance Review.				
Program		Responsible Party	Timeframe	Possible Funding Source	Guiding Principle
Program DD-1	Adopt a Lithium Valley Signage Program consisting of gateway, wayfinding, and landmark signage requirements and concepts by which to evaluate incoming development applications.	Planning and Development Services	1 - 3 Years	General Fund	Environmental Stewardship & Responsible Growth

5. Circulation & Transportation

The Circulation & Transportation chapter of the Lithium Valley Specific Plan provides a comprehensive framework for enhancing the movement of people and goods throughout the region. This chapter outlines strategic recommendations for a multi-modal transportation network that includes vehicles, trucks, bicycles, rail, and transit transportation, as well consideration of the locations for bridges. By addressing the unique needs of Lithium Valley's industrial landscape, this circulation & transportation plan aims to improve connectivity, reduce bottlenecks, and promote safety. The Plan emphasizes sustainable and innovative transportation solutions to ensure efficient and seamless integration of all modes of travel. This holistic approach supports the region's economic vitality, environmental sustainability, and quality of life.

5.1 Vehicles and Trucks

The proposed roadway network for the Lithium Valley Specific Plan is shown in Figure 5-1 Roadway Network. The proposed roadway system integrates direct auto, bus, and truck access to employment, services, and goods while leveraging the existing infrastructure comprising SR-111 and Highway 78/86. SR-111, running generally north-south as a mainly undivided two-lane state highway, with segments widening to four lanes in Calipatria, serves as a critical goods movement route in Imperial County. It provides primary regional access to and from the Specific Plan Area, complemented by Highway 78/86, which spans east-west as a divided four-lane state highway/expressway with a significant center median and represents a crucial link for regional connectivity and highway freight transportation.

Highway 78/86, designated as a Primary Highway Freight System (PHFS) corridor, links the Specific Plan Area with western and southern regions, enhancing economic connectivity and cross-border goods movement. SR-111 connects the US-Mexico East Port of Entry to Highway 78/86 and Interstate 8, which provides east-west connections to San Diego and Arizona.

Roadway and intersection improvements are recommended per the traffic analysis conducted in the Lithium Valley Local Mobility Analysis (Appendix C). Improvements are proposed for each phase of the Specific Plan to improve operations at specified intersections and roadway segments. The roadway and intersection improvements by phase are included in Appendix C of this Specific Plan and is proposed for implementation as Conditions of Approval for the phased development.

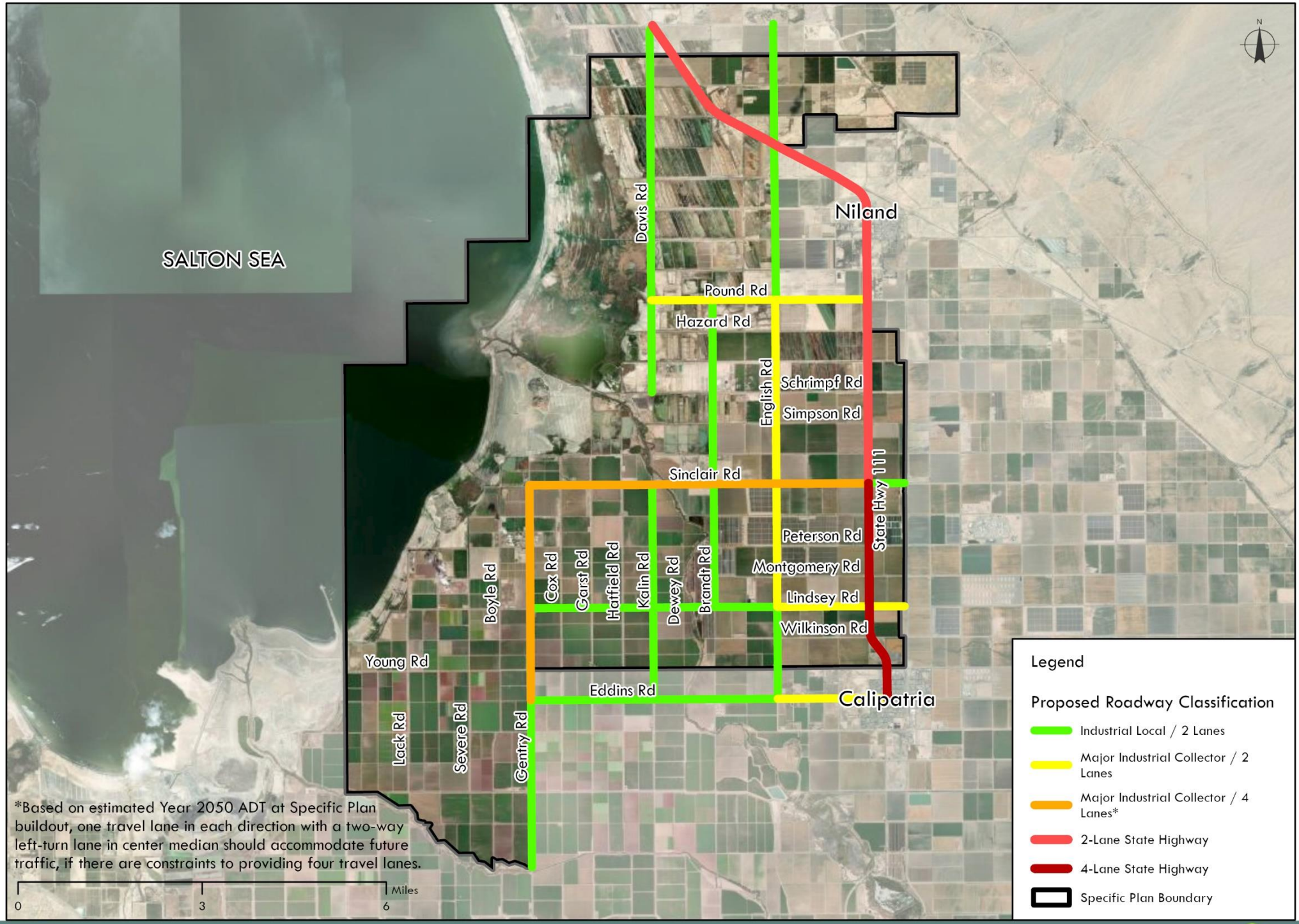


Figure 5-1, Roadway Network

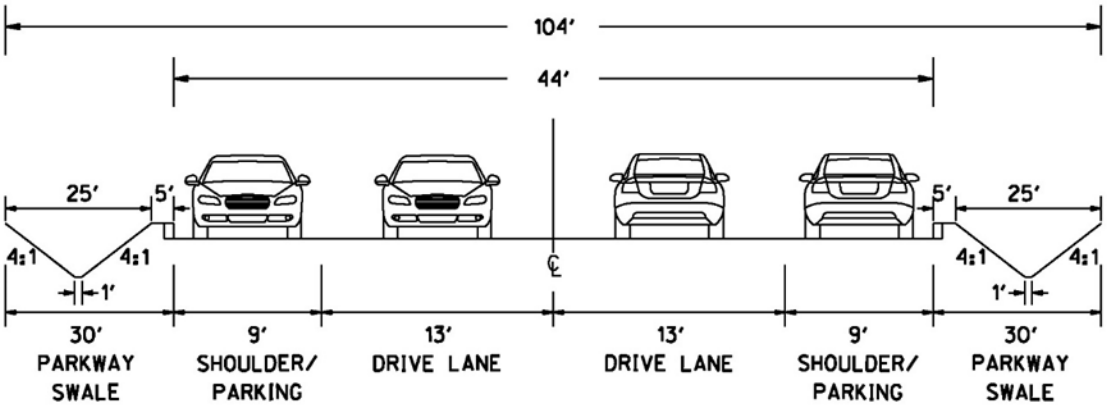
5.1.1 Roadway Classifications

As shown in Figure 5-1 Roadway Network, the Lithium Valley Specific Plan includes three proposed road classifications. The roadway classifications included herein are based on the Imperial County General Plan Circulation & Scenic Highways Element roadway classifications, however, the classifications are modified to reflect the conditions and demands anticipated within and around the Plan Area. The typical cross-section for each roadway classification type as described above is illustrated in Figure 5-2 through Figure 5-5, Typical Cross-Sections By Roadway Classification.

A. Industrial Local Street

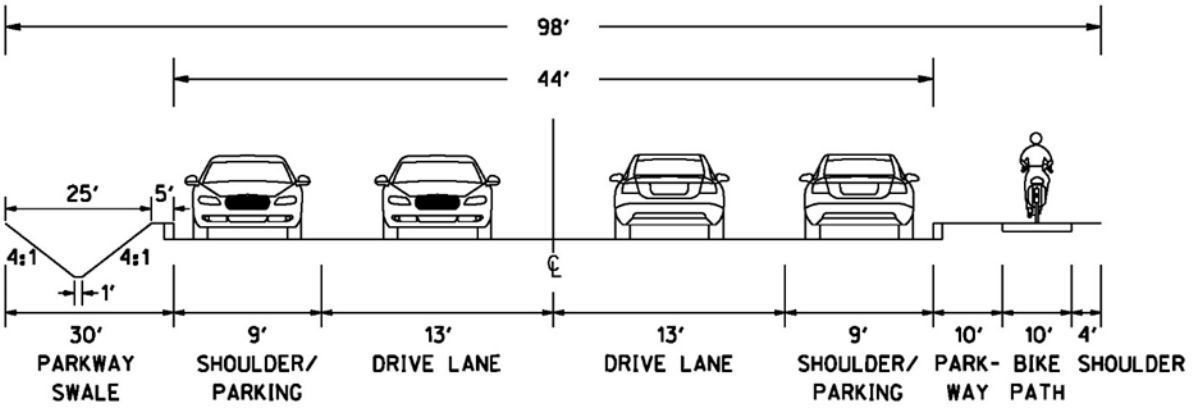
This classification is designed to connect industrial properties and areas with an adjacent Major Industrial Collector or State Highway. Design standards for these streets include provisions for two travel lanes of a minimum of 13 feet width each, and parking. Industrial streets typically provide direct access to abutting industrial sites and room for the parking of industrial-sized vehicles. The minimum ROW of Industrial Local Streets is 104 feet, and parkways with swales are provided on both sides of the roadway. Options for this classification include a modified industrial local street section with a dedicated 10-foot wide bike path on one side of the parkway, which would have a minimum ROW of 98 feet. See Figure 5-2 Typical Cross-Sections By Roadway Classification.

2-LANE INDUSTRIAL LOCAL (104' ROW)*



*WHERE APPLICABLE, 100' ROW MAY BE ADDED FOR NEW ELECTRIC TRANSMISSION CORRIDORS.

2-LANE INDUSTRIAL LOCAL WITH BIKE PATH (98' ROW)*



*WHERE APPLICABLE, 100' ROW MAY BE ADDED FOR NEW ELECTRIC TRANSMISSION CORRIDORS.

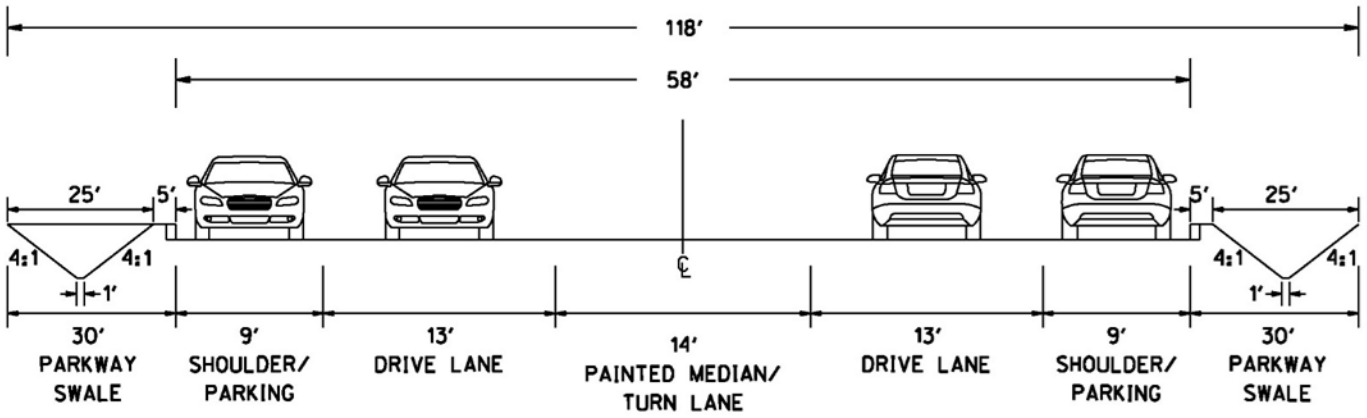
NOT TO SCALE

B. Major Industrial Collector

The main function of this classification is to provide for efficient movement of goods for regional, subregional, and intra- county travel services. Access and parking may be allowed, but closely restricted, to ensure the safe and proper function of industrial traffic on this type of roadway. Typical design standards include provisions for two travel lanes with a painted center median and parking on both sides, or up to four travel lanes with a painted center median and no parking. The two-lane minimum ROW is 118 feet in situations where parkway swales are provided on both sides of the roadway, and 112 feet with a dedicated bike path along one side of the parkway in lieu of a parkway swale.

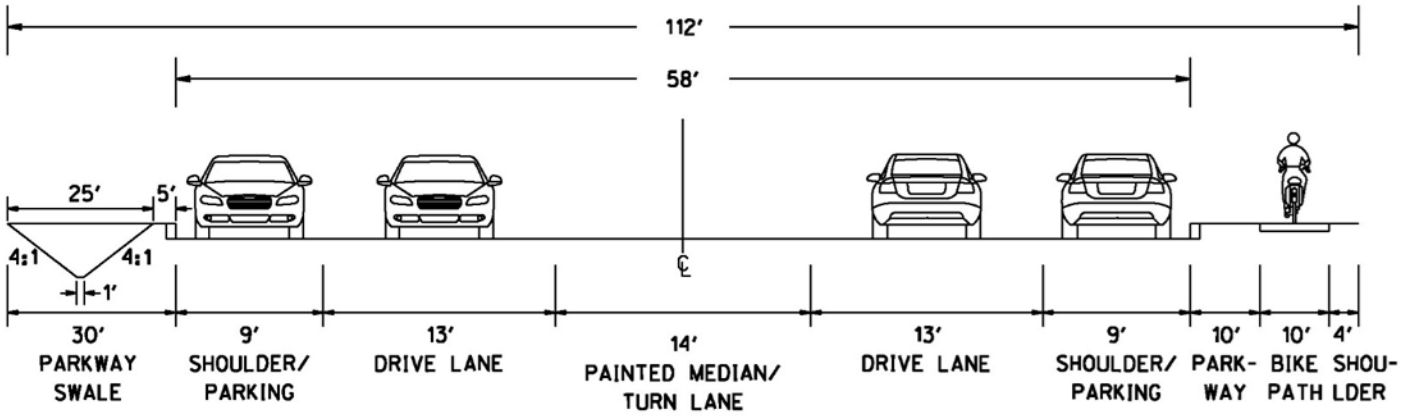
A modified version can include up to four travel lanes with either parkway swales on both sides for a minimum ROW of 130 feet, or with a dedicated bike path along one side of the parkway in lieu of a parkway swale, encompassing a minimum ROW of 124 feet. See Figure 5-3, and 5-4, Typical Cross-Sections By Roadway Classification.

MODIFIED 2-LANE MAJOR INDUSTRIAL COLLECTOR (118' ROW)*



*WHERE APPLICABLE, 100' ROW MAY BE ADDED FOR A NEW RAILROAD LINE.

MODIFIED 2-LANE MAJOR INDUSTRIAL COLLECTOR WITH BIKE PATH (112' ROW)*

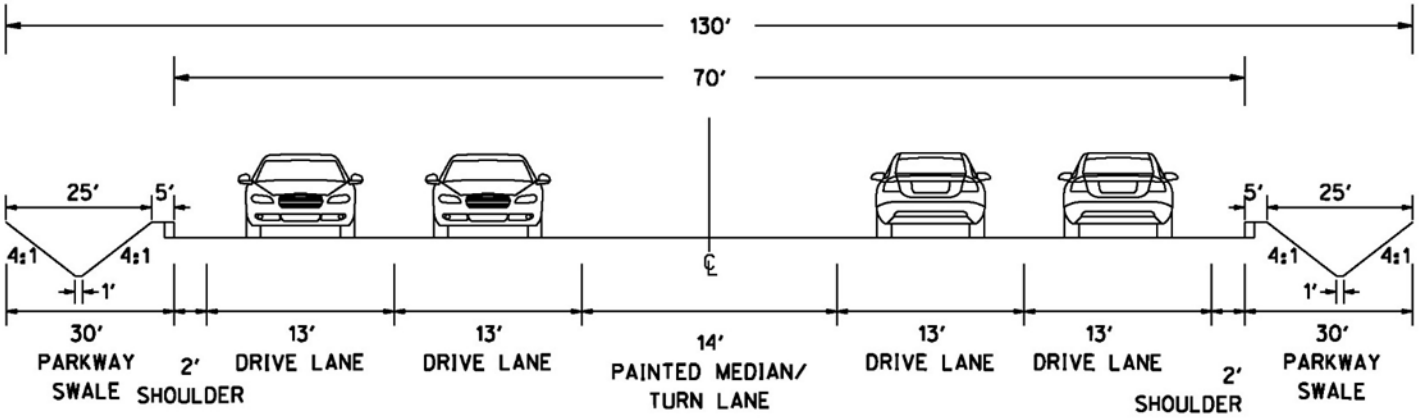


*WHERE APPLICABLE, 100' ROW MAY BE ADDED FOR A NEW RAILROAD LINE.

NOT TO SCALE

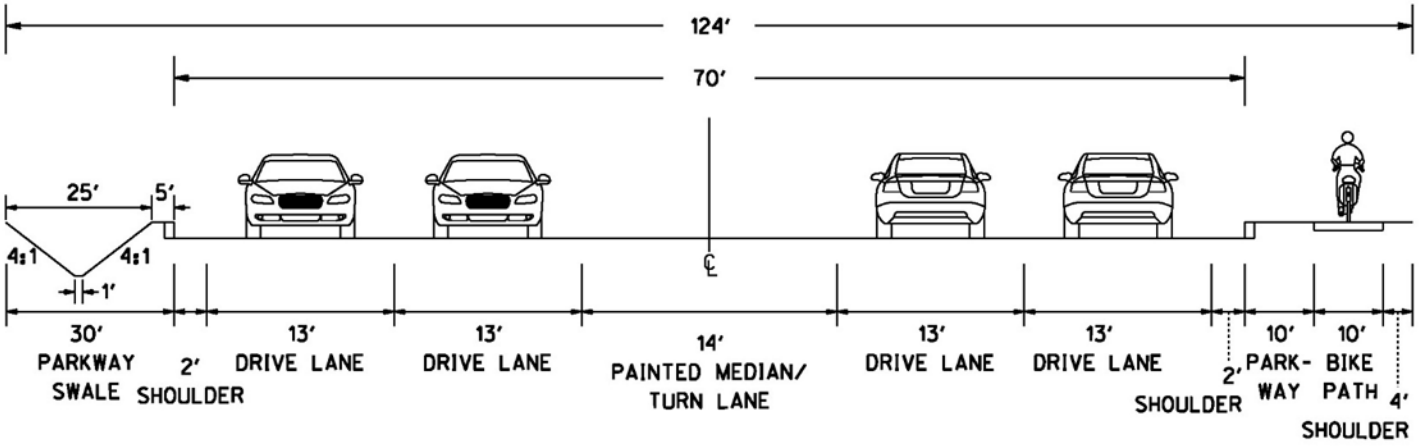
Figure 5-3, Typical Cross-Sections by Roadway Classification

MODIFIED 4-LANE MAJOR INDUSTRIAL COLLECTOR (130' ROW)*



*WHERE APPLICABLE, 100' ROW MAY BE ADDED FOR A NEW RAILROAD LINE.

MODIFIED 4-LANE MAJOR INDUSTRIAL COLLECTOR WITH BIKE PATH (124' ROW)*



*WHERE APPLICABLE, 100' ROW MAY BE ADDED FOR A NEW RAILROAD LINE.

C. State Highway

The state highway system includes both urban and rural highways as well as roads of varying design standards–from high-speed, multi-lane freeways to two-lane rural roads and some urban streets. Traffic levels on state highways vary widely depending on location and applicable roadway design standards (Imperial County Engineering Design Guideline Manual 2019). State Route 111 (SR-111) begins at the International Border between Mexico and the United States traveling north with two travel lanes in each direction. SR-111 serves as the "backbone" route of Imperial County as it connects the three largest cities and acts as a major goods movement route, particularly for agricultural products and cross-border goods and services.

Typical design features include the provision for two 12-foot travel lanes without a raised median for a curb-to-curb ROW of 32 feet. The ROW width varies, but a 100-foot ROW may be added for new electric transmission corridors. Parking would not be permitted along this corridor.

A four-lane option would allow for 12-foot travel lanes, a 14-foot wide center median and 4-foot shoulder, for a curb-to-curb ROW of 70 feet. See Figure 5-5 Typical Cross-Section By Roadway Classification.

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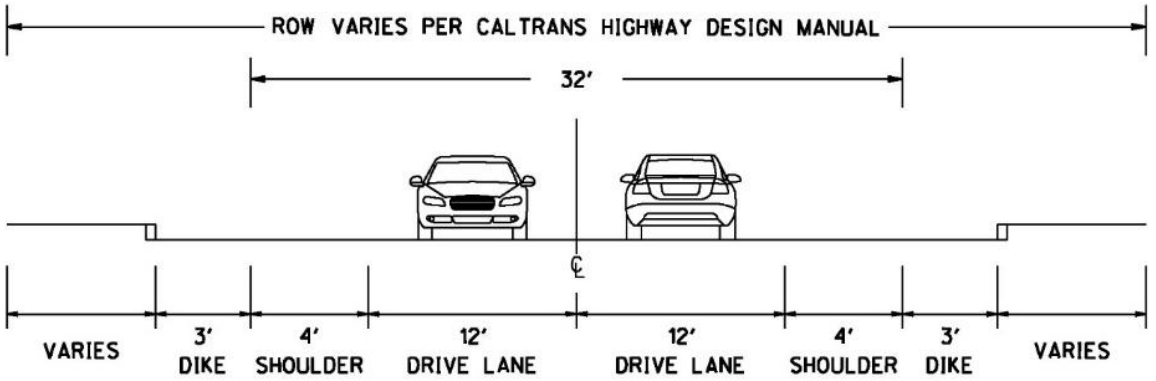
2-LANE STATE HIGHWAY*



*WHERE APPLICABLE, 100' ROW MAY BE ADDED FOR NEW ELECTRIC TRANSMISSION CORRIDORS.

4-LANE STATE HIGHWAY

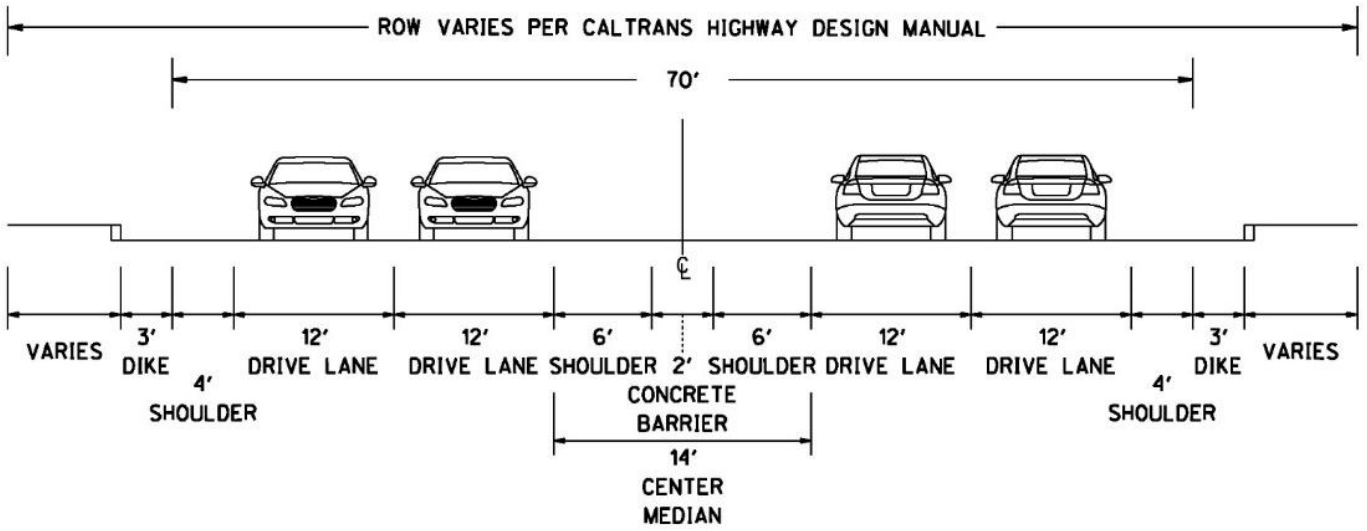


Figure 5-5, Typical Cross-Sections by Roadway Classification

5.1.2 Truck Routes

The proposed truck routes for the Lithium Valley Specific Plan are shown in Figure 5-6 Truck Routes, outlining a strategic network designed to optimize regional connectivity, support economic growth, avoid populated areas of Niland and Calipatria, and utilize targeted road and bridge improvements. The proposed goods movement network includes designated truck and distribution-oriented routes along 2-Lane Industrial Local streets within the Specific Plan Area, featuring wider pavement widths to accommodate increased truck volumes. The designated truck routes may also be used by agricultural operators to transport farm products and equipment. Signage shall be installed to warn drivers that these routes are frequently used for the movement of agricultural goods and oversized farm equipment.

To minimize new truck traffic through Calipatria and Niland on Highway 111, effective roadway design and wayfinding strategies should guide and/or require trucks to utilize designated routes, reducing highway congestion and enhancing public safety. Prioritizing truck access to the Industrial Transportation Hub at Pound and English Road facilitates efficient intermodal movement of materials between facilities, trucks, and rail connections.

The following strategies are provided to optimize truck routes, facilitate goods movement and enhance traffic efficiency and safety across Imperial County.

A. Truck Route Strategies

1. Develop a refined detailed truck route management plan considering traffic volume, safety considerations, and efficiency.
2. Engage stakeholders to ensure alignment with local needs, resulting in a cohesive plan that optimizes traffic flow, enhances safety measures, and minimizes populated areas along the routes.
3. Ensure that truck routes are adequately fortified and improved prior to construction to accommodate truck trips throughout the duration of the project.
4. Establish primary and secondary truck routes by analyzing traffic volume data to designate roads with sufficient capacity for heavy truck traffic, integrating considerations such as road infrastructure durability and minimal community impact along Highway 111 and Highway 78/86.
5. Implement intelligent transportation systems (ITS) and signalized intersections to optimize traffic flow and reduce congestion.
6. Upgrade/construct roadway infrastructure along designated truck routes, including loading/unloading zones and rest areas.
7. Expand road surfaces to accommodate WB-50 trucks and ensure safe turning radii at intersections.
8. Integrate traffic calming mechanisms such as roundabouts and speed humps to enhance safety without compromising traffic flow. If roundabouts are implemented, include a local workforce and community campaign to educate drivers on use of roundabouts.
9. Require the use of designated truck routes by companies and stakeholders to bypass Calipatria and Niland, aiming to reduce congestion, bottlenecks on Highway 111, air pollution, and improve public safety.
10. Construct bridges along designated truck routes to support the heavy-duty truck route system, ensuring broad load capacities and robust structural integrity to facilitate seamless passage and efficient flow of heavy truck traffic.
11. Establish and enforce designated truck routes for the transportation of hazardous and non-hazardous waste to ensure safety and compliance with transportation regulations.

12. Enhance visibility and safety at intersections along truck routes through improved traffic signage and lighting.
13. Minimize truck traffic on roads with adjacent sensitive receptors, conservation areas, within the Specific Plan Area to protect community amenities and infrastructure.
14. Avoid, to the greatest extent feasible, light directed into biological mitigation or restoration areas where roadway improvements are proposed within 450 feet of active mitigation lands.
15. Consult with Caltrans on any truck route management and implementation strategies to ensure alignment with broader regional and State transportation goals.

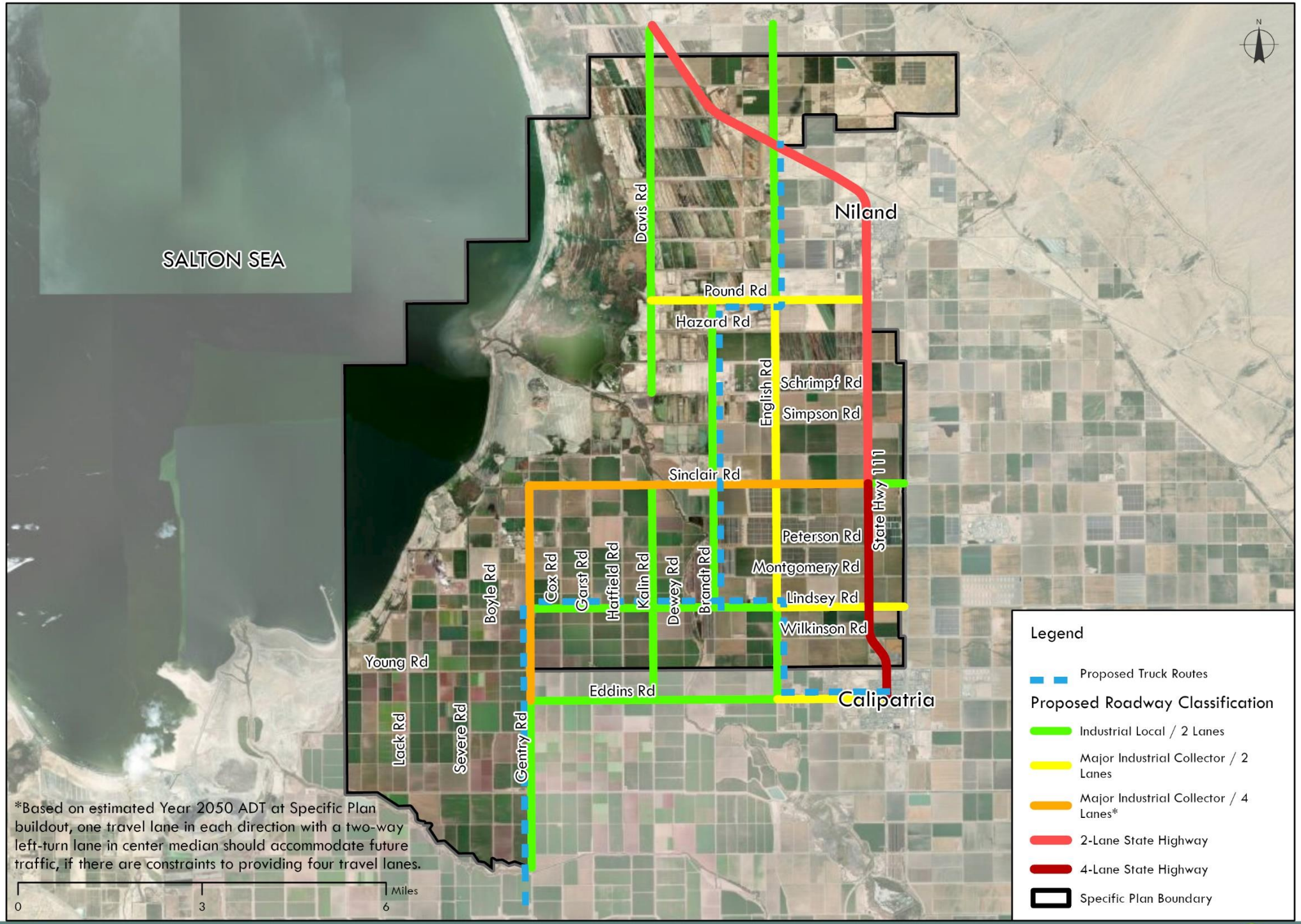


Figure 5-6, Truck Routes

5.2 Bridges

As shown in Figure 5-7 Bridges, the Plan Area contains existing bridges that are recommended for improvements, and proposed bridge locations to support future development. The one proposed new bridge location aims to connect Lindsey Road across the Alamo River, facilitating the proposed 2-Lane Industrial Collector corridor. To optimize cost efficiency and minimize the bridge span, the bridge must be constructed perpendicular to the river, dictating its orientation and span. This design choice reduces infrastructure costs and construction complexity while ensuring structural integrity.

The existing bridges located at Schrimpf Road and Garst Road (Alamo River), Sinclair Road and Kalin Road (Alamo River), Ruegger Road and Lack Road (New River), and Gentry Road extending south across the New River are considered for improvements based on their current conditions and expected load increases. Gentry Road has been designated as part of the truck route network, subjecting the bridge over the Vail Main Canal to extra-legal weight transports exceeding 80,000 pounds. As a result, this bridge has been identified as a critical infrastructure improvement to support transportation needs. The final decisions on proposed bridge locations and the improvements needed for existing bridges will depend on forecasted traffic demands, ensuring that infrastructure meets future transportation needs efficiently.

5.2.1 Bridge Design Strategies

Design of bridge crossings shall consider the following:

a. Identify upper end bridge capacity requirements as part of bridge engineering design studies based on a Final Transportation Study and estimate of truck traffic.

b. Determine the optimal alignment and geometry of the bridge to minimize impacts on the existing river crossings (New River and Alamo River) and surrounding environment.

c. Choose appropriate materials for the bridge structure based on factors like span length, load requirements, durability, and maintenance considerations. Common bridge materials include steel, concrete, and composite materials.

d. Select construction methods that minimize disruption to the river and surrounding environment. Consider factors like construction access, staging areas, and environmental protection measures.

e. Consider culverts at canal crossings to size bridges appropriately.

f. Design the bridge to meet safety standards. Consider accessibility for pedestrians and bicycles, as needed, with safety features like guardrails, lighting, and sidewalks or bike lanes as needed.

g. Consider single spans to limit placing foundational supports in river channels, drains and canals, and limit impacts on biological resources and wetlands.

h. In lieu of utility bridge crossings over drains or canals, consider siphon or conduit utility crossings for faster design and construction if Desert Pupfish are not present in the drain. Otherwise, if a drain has Desert Pupfish, plan to use single spans to avoid disturbing of the canal and Desert Pupfish.

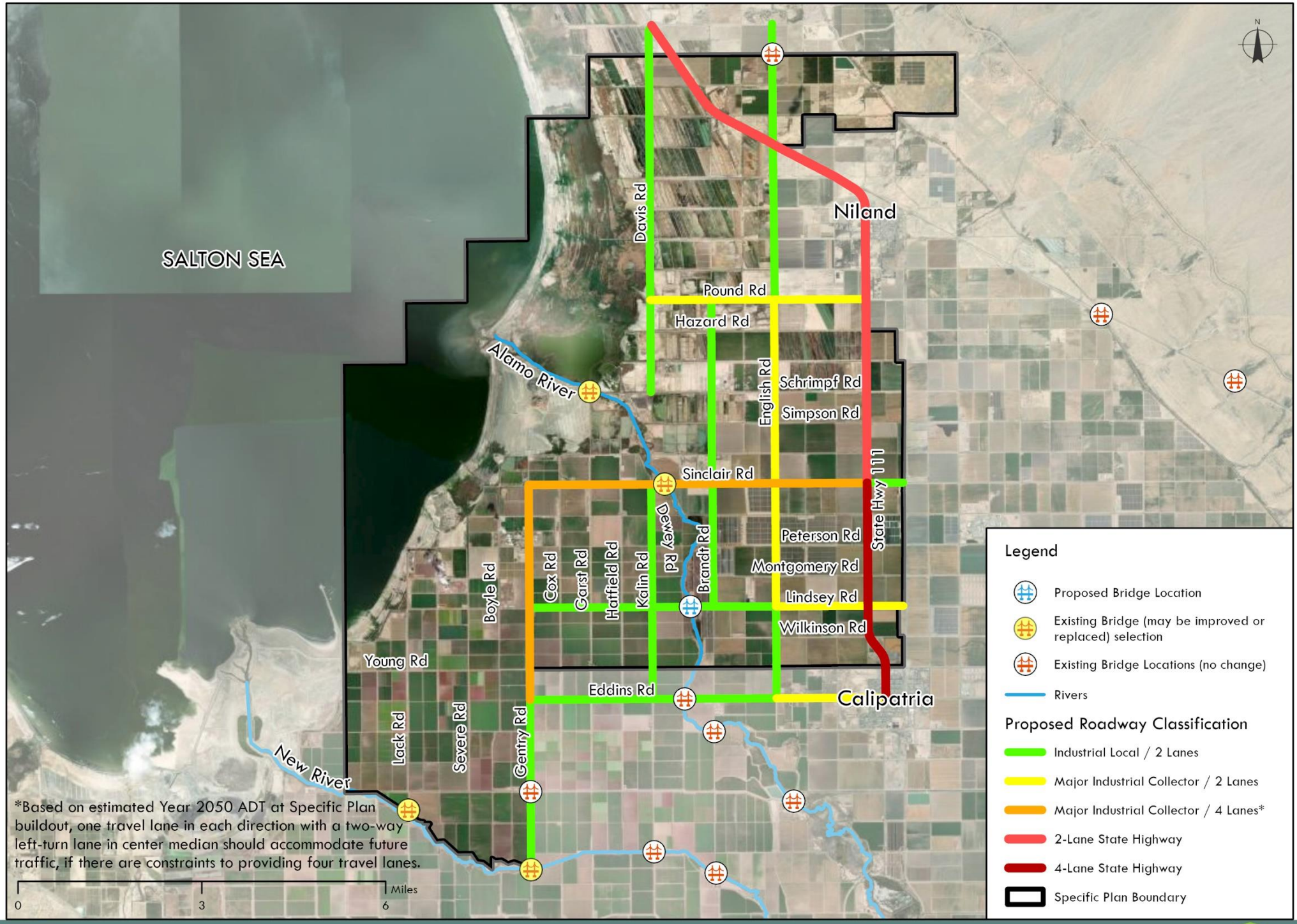


Figure 5-7, Bridges

5.3 Bicycle and Pedestrian Access

The proposed bicycle circulation & transportation network, shown in Figure 5-8, Bicycle Network Map, shall be further refined and planned in consultation with the neighboring communities of Niland and Calipatria. Figure 5-8 includes routes that take into consideration bicyclist safety. The proposed bicycle network was developed to:

- Minimize truck traffic conflicts;
- Provide safe bicycle routes to and from the communities of Calipatria and Niland;
- Provide connections to the planned routes in the Imperial County's Active Transportation Plan;
- Provide a connection from Niland to the Salton Sea via a Recreational Access Easement;
- Improve the health and well-being of local residents and employees, encouraging active living and sustainable communities.

The proposed multi-use path connecting Niland to the Salton Sea is included in the bicycle network as result of community members voicing their desire to access the Salton Sea. Further consultation with adjacent property owners and Federal and State agencies managing wildlife and restoration efforts shall occur. The 2022 Imperial County Transportation Commission (ICTC) Regional Active Transportation Plan (ATP) reported that the City of Calipatria currently lacks designated bicycle facilities within its boundaries. To enhance active transportation, the ATP proposed the implementation of Class I Multi-Use Paths and Class II Bike Lanes. Additionally, the ATP outlined the development of Class II Bike Lanes extending westward from Calipatria, then north along English Road, creating a connection between the communities of Niland and Calipatria. The ATP Class II facilities would also intersect at Sinclair Road and English Road, providing an east-west route into the Green Industrial areas.

These proposed routes aim to strengthen connectivity between communities, employment centers, conceptual commercial nodes, and transit hubs, supporting integrated and accessible active transportation networks. By encouraging active living and reducing greenhouse gas emissions, the plan supports public health and fosters the development of sustainable communities.

Pedestrian access will be limited to areas within developments to offer internal transportation between buildings and parking areas. Due to the extreme climate and long distances between residential communities and planned employment areas, pedestrian travel as a main form of transportation across and throughout the Specific Plan area is not anticipated. There are however, pedestrian pathways proposed along at least one side of the Alamo and New Rivers, and a conceptual pedestrian trail connecting Niland to the Salton Sea, as depicted on Figure 2-3. See Section 4.2.1 Site Design Standards and 4.2.2 Campus Design Standards for pedestrian site requirements. Pedestrian amenities within the Community Opportunity Areas shall be further refined and planned in consultation with the neighboring communities of Niland and Calipatria.

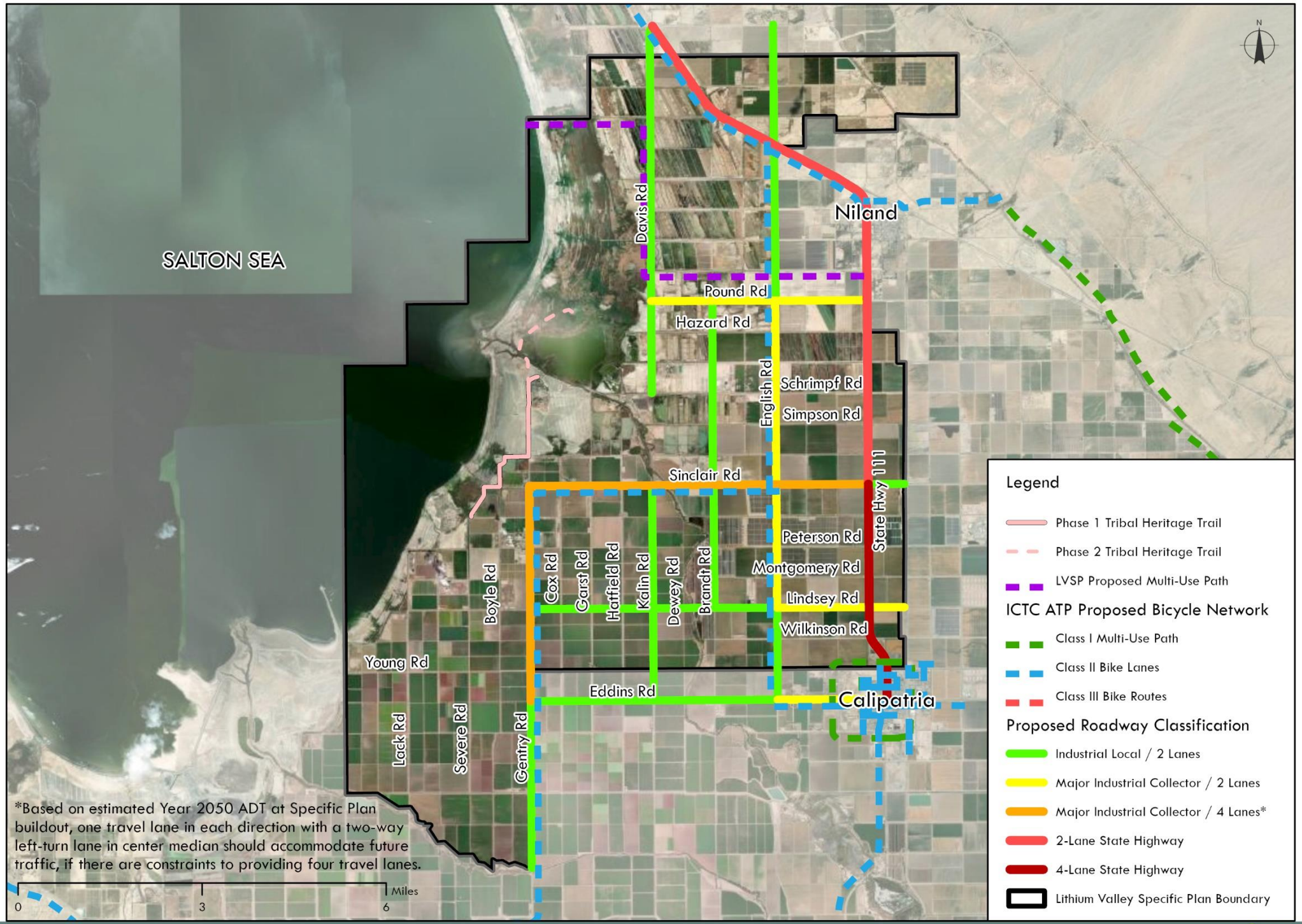


Figure 5-8, Bicycle Network Map

5.4 Rail

As shown in Figure 5-9 Rail Network Alternatives Map, there are various options and extents of rail service within the Plan Area. These options and extents are offered by project phase, however it is only anticipated one Phase 1 rail spur option will be implemented. This rail spur will serve as the backbone of the railroad network, with all necessary tracks—including yards, industrial tracks, and runaround tracks—connecting to and branching off this industrial lead to service individual producers. There are two options offered in Phase 1, Option 1 is the preferred option because the rail spur would cross SR-111 at Sinclair Road, which will provide a controlled traffic signal. The controlled traffic signal would allow an at-grade rail crossing at the Sinclair Road and SR-111 intersection. If a grade-separated crossing is warranted, an economic analysis should be prepared to show economic feasibility to support the construction and maintenance of a grade-separated crossing. Option 1 would also offer optimal proximity to the greatest number of foreseeable rail users. The Phase 1 Option 2 rail spur would offer the shortest distance on the Calexico Subdivision.

As shown in Figure 5-9, Phase 2 Private Rail Lines may be constructed to provide immediate rail connections to industry rail users. These industry tracks will be designed to accommodate the maximum number of railcars each producer expects to load or unload at any given time, and if necessary, multiple connected industry tracks can be constructed for additional capacity.

The proximity to the existing rail line will ensure efficient freight transport, strengthening connectivity with regional and national transportation networks. This proposed intermodal facility aims to optimize cargo transfers between different transportation modes, promoting sustainable logistics solutions and positioning the area as a key player in regional trade and transportation initiatives. The rail facilities would also support the exchange of goods being held in the Logistics land use designations, while alleviating transportation corridors leading to the Port of Los Angeles, the Port of Long Beach, Yuma, Arizona and the US-Mexico border.

Two intermodal rail yard locations are offered, one for each Phase 1 rail spur option. An intermodal rail yard is a specialized facility where freight may be transferred between different modes of transportation, such as trains, trucks, and ships. Key features include container storage, loading docks and equipment, connections to major transportation networks, rail switching yards, and staging areas for trucks. It is anticipated an intermodal rail yard would be composed of approximately three yard tracks with a minimum length of 1,500 feet each and should be connected to the industrial lead at both ends. Union Pacific Railroad (UPRR) will decide how frequently their trains stop at the interchange yard to interchange railcars with a short line operator.

5.4.1 Rail Design and Operations

1. Imperial County shall continue consultation with rail operators to commit to transporting goods and materials along a newly integrated rail system and to consider and refine the following recommendations:
    a. The County would first submit a schematic or conceptual design to UPRR to receive initial feedback and conditional approval.
    b. Identify a responsible entity to construct and own the rail infrastructure withing the LVSP. The industrial lead, yards, runarounds, and other shared rail infrastructure should be owned by a singular entity. The newly established Special District may own the lease of rail facilities and may lease the facilities to a railroad switching operator.
    c. Once the end users are established and a responsible entity is identified, engineering plans showing the proposed industrial lead connection to the Union Pacific Railroad, proposed locations for interchange yard tracks, and a proposed operating plan shall receive approval from UPRR.

d. The construction, maintenance, and operation of the rail network shall be done in accordance with state and federal railroad regulations. California Public Utilities Commission (CPUC) approval is required for all new railroad crossings over existing roads and highways.

e. A railroad switching operator should be contracted to begin providing rail service once construction is complete. Identify a switching operator to run train operations inside the Lithium Valley Specific Plan area. A switching operator operates over a comparatively short distance with the primary function to directly deliver railcars to and pick them up from individual industry customers and to interchange those railcars (LI) with other larger railroads (UPRR). Within the Lithium Valley rail network, the switching operator would operate on an as-needed basis.

f. The switching operator would become responsible for operating and maintaining the rail network past UP rail interchange. The end rail users may be individually responsible for constructing, owning, and maintaining their industry tracks.

The proposed rail spur, proposed interchange yard tracks, and a proposed operating plan shall be in accordance with UPRR Industrial Track standards, and consider the following:

a. A runaround should be located at the far end of the industrial lead from the interchange yard. Other runarounds at intermediate locations should be considered depending on the exact locations and orientations of industry tracks.

b. An interchange yard would be needed to transfer railcars from the short line to UPRR. Locate the interchange yard in the Lithium Valley Specific Plan adjacent to where the industrial lead connects to the Calexico Subdivision. The interchange yard should be composed of three-yard tracks with a minimum length of 1500 feet each and will be connected to the industrial lead at both ends. UPRR will decide how frequently their trains stop at the interchange yard to interchange railcars with the short line. These interchanges may happen weekly, a few times a week, or daily, and will likely be performed by existing trains already running in the UPRR system.

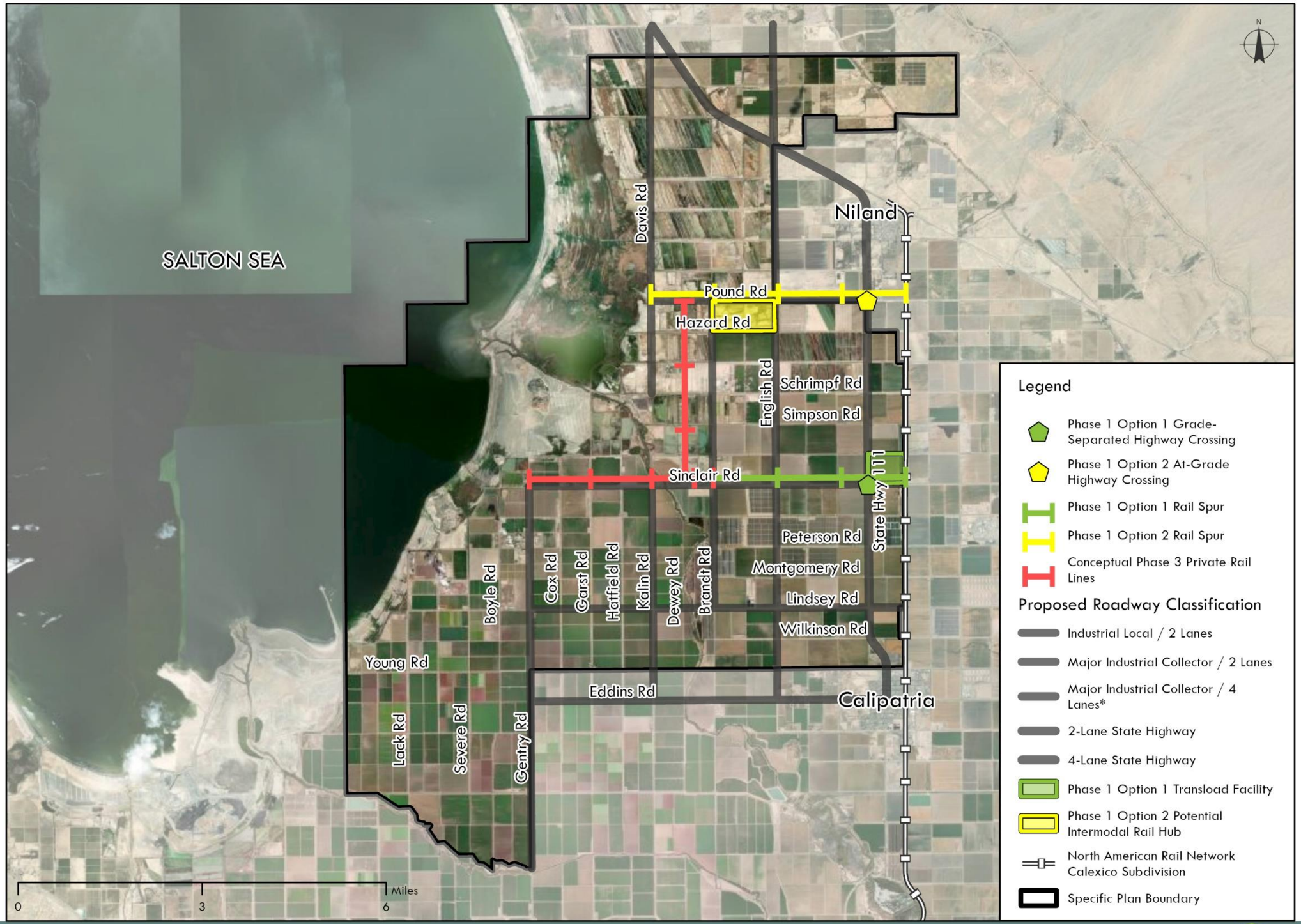


Figure 5-9, Rail Network Alternatives Map

5.5 Transit

To enhance public transportation accessibility and efficiency within the Lithium Valley region, consultation will continue between Imperial County, the Imperial County Transit Commission (ICTC), and the Southern California Association of Governments (SCAG). This partnership aims to identify transportation improvements to be integrated into the next Long Range Transportation Plan (LRTP) update or amendment. Imperial County shall continue to consult with ICTC and SCAG to identify public transportation improvements to be included in the next Long Range Transportation Plan (LRTP) update or amendment. Through this consultation and LRTP update or amendment process, triggers may be established for improvements based on operational needs and employment metrics within the Specific Plan Area and phased according to current and projected demand to align with community needs. Once there is sufficient demand, it is anticipated that either an employee shuttle or an express bus route will connect the nearby communities to the employment centers.

Employee Shuttle: An employee shuttle is expected once there are three (3) employers with over 200 on-site employees, for a total of over 600 employees in the Plan Area. The employee shuttle would connect the transit hubs at Niland and Calipatria to the employment centers of over 200 on-site employees. This service would link workers to their jobs, promote rideshare opportunities and reduce greenhouse gas emissions.

Figure 5-10, Transit Network Map

5.6 Circulation and Transportation Goal, Policies, and Program

Table 5-1, Circulation and Transportation Goal, Policies, and Programs, below presents the circulation and transportation policies, and programs that provide actionable directives to support the overarching circulation and transportation goal, Specific Plan guiding principles and vision statement. For every program, a responsible agency, timeframe, possible funding source, and applicable guiding principle are identified to make implementation of this Specific Plan clear and enforceable.

Table 5-1 Circulation and Transportation Goal, Policies, and Programs

Goal 1: Circulation & Transportation (CT)	
To optimize circulation and transportation within Lithium Valley by ensuring efficient, safe, sustainable, and adaptable transportation systems that integrate with surrounding areas.	
Policy CT-1: Land Use Clustering	Cluster employment around shared parking and major transit corridors and transfer nodes.
Policy CT-2: Accessibility	Provide convenient access to industrial facilities for employees, suppliers, and customers while considering the needs of neighboring communities.
Policy CT-3: Phased Transit Development	Consult with Imperial County Transportation Commission (ICTC) and Imperial Valley Transit (IVT) to establish triggers for transit recommendations should be based on demonstrated needs and specific triggers, such as the number of employees or the square footage of buildings included in nearby developments. The County will prioritize transit recommendations based upon the foreseeable first phase of development.
Policy CT-4: Roadway Network	Develop a roadway network based on functional and urban design considerations, emphasizing connectivity and linkages, increasing transit movement and reducing total person delay, and compatibility with adjacent land uses.
Policy CT-5: User Safety	Prioritize safety for all users, including pedestrians, cyclists, and drivers, through well-designed roadways, signage, and traffic management measures.
Policy CT-6: Infrastructure Maintenance	Maintain roads, bridges, and other transportation infrastructure to ensure they can support the demands of industrial activity and heavy vehicle traffic.
Policy CT-7: Integration with Surrounding Areas	Continue consultation with stake holding agencies such as but not limited to the California Department of Transportation (Caltrans), the City of Calipatria, City of Westmoreland, City of Brawley, Imperial County Transit Commission (ICTC), and Southern California Association of Governments (SCAG) to minimize conflicts with regional transportation and mobility efforts and the surrounding communities.
Policy CT-8: Flexibility	Design circulation and transportation systems that can adapt to changing traffic patterns, technological advancements, and future development needs.

Policy CT-9: Emergency Response	Ensure efficient access for emergency vehicles and develop contingency plans for managing traffic during emergencies or industrial incidents.
Policy CT-10: Acceptable Levels of Transportation	Maintain acceptable levels of local circulation and transportation in the Lithium Valley Specific Plan area and adjacent communities and good connections with the regional transportation network for both transit and personal/commercial vehicles.
Policy CT-11: Street Grid	Maintain, re-establish, and enhance the street grid, to promote flexibility of movement through greater street connectivity, capture natural views, and retain the historic relationships between various streets.
Policy CT-12: Transportation Choices	Increase transportation choices within the Specific Plan area by providing viable alternatives to the exclusive reliance on vehicular travel by Lithium Valley employees and visitors.
Policy CT-13: Diverse Modes of Transportation	The County will support the diversification of travel modes used in Lithium Valley to increase employee trips made by bicycle, or public transit, including new mobility types like electric shuttles, electric vanpool/carpool, electric carsharing service, docked bikeshare, and e-scooter share.
Policy CT-14: Sustainable Freight	Promote sustainable freight transport modes and enhance regional economic competitiveness through efficient cross-border trade operations, realizing benefits such as reduced emissions, improved air quality, and long-term cost savings in logistics and transportation.
Policy CT-15: Zero Emission Vehicles	In support of California's Climate Action Plan for Transportation Infrastructure, (CAPTI) 2.0, the County will support the innovation in and development of the zero-emission vehicle (ZEV) infrastructure.
Policy CT-16: VMT Mitigation Bank	In support of California's Climate Action Plan for Transportation Infrastructure, (CAPTI) 2.0, the County will support Caltrans' statewide VMT mitigation bank or exchange program at the local and regional level.
Policy CT-17: Agency Consultation	Public transportation hubs and their integration with existing transportation network shall include consultation with Caltrans. Consultation with Caltrans, IVTA, and ICTC should occur to further determine access to the transportation hub and effects to SR-111.
Policy CT-18: Increased Bus Frequencies	The Project tenants or individual employers should consult with IVT on bus service routes and service times to which would serve their Project. The goal is to reduce service intervals on weekdays from the current 60-180 minutes to 15-30 minutes, and on weekends to 30-60 minutes.
Policy CT-19: Dedicated Bus Lane on SR-111	The County, IVT, and Project tenants should consult with Caltrans for construction of a new outside lane, exclusive to buses, defined as a dedicated bus lane. This lane would improve the reliability and timeliness of transit services, making public transportation a more attractive option for residents and employees.
Policy CT-20: Transit Hubs	As illustrated in Figure 5-10, Transit Network Map, strategically located transit hubs are proposed to facilitate seamless connectivity. These hubs will serve as nodes within the transit system. Transit or Mobility hub is a central place where multiple modes of transportation converge, designed to facilitate seamless transfers, improve accessibility, and reduce travel time for commuters.

	• The locations of the hubs are intended to connect the communities of Niland and Calipatria with the employment hub in the heart of the Plan Area. Implementation of Transit Hub would include consultation with IVT, Imperial County and communities of Niland and Calipatria. • Each transit hub is proposed to include designated spaces for park and ride lots, shared vehicles, and shuttles to employment centers, providing for efficient transfers and accessibility for commuters. Transit Hubs should be supplemented with additional strategies or programs that provide increased public transit, bicycle, and pedestrian access and improvements. The Transit Hub is anticipated to strengthen the effectiveness of other proposed TDM strategies.
Policy CT-21: Express Bus Routes	The County, IVT, and Project tenants should identify additional express bus routes that may be implemented based on the region's needs and demand and connect to the Plan Area. The express bus route should consider stops at various locations within the northern communities inclusive of transit hubs and employment centers. This service will link workers to their jobs, promote rideshare opportunities, provide further travel opportunities to the general public. Express routes should also connect Calipatria to SDSU Brawley Campus and Imperial Valley College, facilitating access to educational institutions and expanding opportunities for residents.
Policy CT-22: Employee Shuttle	An employee shuttle should be implemented once there are three (3) employers with over 200 on-site employees, for a total of over 600 employees in the Plan Area. The employee shuttle would connect the transit hubs at Niland and Calipatria to the employment centers of over 200 on-site employees. This service would link workers to their jobs, promote rideshare opportunities. The employee shuttle or express bus route may be funded and operated by one or more of the following: the newly established Lithium Valley Infrastructure Special District, the participating private employers, or ICTC. In consultation with ICTC and SCAG, Imperial County would also enhance transit safety and convenience by upgrading transit stops with shelters and real-time trip information systems. Improvements would be triggered based on operational needs and employment metrics, with a shuttle system introduced to connect employees to transit hubs and commercial destinations.
Policy CT-23: Construction Traffic Management Plan	The Project Applicant/Developers shall prepare a Construction Traffic Management Plan (CTMP), which shall be implemented by the construction contractor to address short-term traffic circulation, safety and access effects during Project construction. The CTMP shall be reviewed and approved by the County prior to the issuance of the first building permit. The CTMP and its requirements shall also be provided to all construction contractors as one component of building plan/contract document packages. The CTMP shall include, but not be limited to, the elements described below: • Where applicable, maintain existing access for operational land uses in proximity of the Project throughout construction. • Where applicable, coordinate with adjacent or affected businesses and/or properties and emergency service providers to ensure adequate access exists to the Project and neighboring sites. • Where applicable, provide notification to transit providers, emergency service personnel, and local businesses and residents in advance of construction activities. • Use measures to encourage and facilitate carpooling among construction workers to reduce use of single occupancy vehicles for commuting to the project site.

	• Identify designated transport routes for heavy trucks to be used throughout Project construction. • Identification and description of Material Storage Locations (if any). • Location and description of Construction Trailer (if any). • Identification and Description of Parking - Estimate the number of workers and identify parking areas for their vehicles. • Identification and Description of Maintenance Measures - Identify and describe measures taken to ensure that the work site and public right-of-way would be maintained (including dust control). • Schedule deliveries and pick-ups of construction materials to non-peak travel periods along major travel corridors such as SR-111. • Construction traffic shall be routed to avoid travel through, or proximate to, sensitive land uses. • All temporary signage, temporary traffic control measures such as lane closures; the use of warning signs, cones, crossing structures, lights, and barricades will conform to the CA MUTCD. • Flaggers that serve to alert motorists and pedestrians to slow moving trucks and to guide trucks to maneuver turn movement and prioritize movement of traffic at intersections to access highway and reduce queuing at major intersections and to facilitate truck turn maneuvers in and out of the project driveways. • Coordination with Caltrans and Imperial County in order to secure the necessary encroachment and trip permits necessary for any oversized haul trucks. • All construction contractors shall be provided with written information on the CTMP along with clear consequences to violators for failure to follow the plan.

Program		Responsible Party	Timeframe	Possible Funding Source	Guiding Principle
Program CT-1	Establish standards for the design of bridge crossings within the Specific Plan area, incorporating the technical considerations outlined in Section 5.2.1, Bridge Design Strategies.	Public Works	1 - 3 years	County Road Funding (HUTA, LTA, RMRA)	Proactive Infrastructure and Services
Program CT-2	Designate specific bicycle routes within Lithium Valley with lane markings and signage, directing bicyclists to major employer destinations and other prominent destinations in and near the Specific Plan Area. The designated bike routes should connect to commercial nodes and transportation hubs in the local area.	Public Works	1 - 3 years	County Road Funding (HUTA, LTA, RMRA); SCAG Grants; Safe Streets and Roads for All (SS4A) Grant Program	Proactive Infrastructure and Services
Program CT-3	Continue to consult with rail operators to follow the technical guidance provided in Section 5.4.1, Rail Design and Operations.	Public Works	1 - 3 years	General Fund; Trade Corridor Enhancement Program	Proactive Infrastructure and Services

Program CT-4	Consult with the Imperial County Transit Commission (ICTC) and the Southern California Association of Governments (SCAG) to identify public transportation improvements recommendations offered in LVSP Section 5.5, Transit, to be included in the next Long Range Transportation Plan (LRTP) update or amendment.	Public Works	Ongoing	SCAG Grants; Caltrans Sustainable Transportation Planning Grants; Solutions for Congested Corridors Program (SCCP)	Proactive Infrastructure and Services
Program CT-5	Imperial County will consult with ICTC and SCAG to establish the appropriate timing of transit improvements based on operational needs or operational or other relevant metrics pertaining to the Specific Plan Area.	Public Works	1 - 3 years	General Fund; Caltrans Sustainable Transportation Planning Grants	Proactive Infrastructure and Services
Program CT-6	Prior to pursuing long-term investments from regional transit authorities, Imperial County will consult with employers in or near the Specific Plan Area to create a shuttle system connecting to and from employment centers, nearby transit hubs, and commercial destinations.	Public Works	1 - 3 years	Transportation Impact Fees; Enhanced Infrastructure Financing District (EIFD)	Proactive Infrastructure and Services
Program CT-7	Implement comprehensive truck route management and traffic efficiency strategies identified in Section 5.1.2 A. Truck Route Strategies.	Public Works	1 - 3 years	Local Streets and Roads (LSR) Program; Solutions or Congested Corridors Program (SCCP)	Proactive Infrastructure and Services

6. Infrastructure

The Infrastructure Chapter addresses the foundational systems and services essential for the growth and operational efficiency of Lithium Valley. This section provides recommended infrastructure improvements for future consideration as development occurs within the Specific Plan Area to meet the anticipated demands. Infrastructure topics addressed in this section include water, wastewater, stormwater and drainage, electrical transmission, solid waste disposal, telecommunications and broadband, and essential services. By addressing these critical infrastructure components comprehensively, the Specific Plan provides a clear path forward to meet infrastructure demands as development occurs.

Many of the following infrastructure components are intended to be funded and managed by a newly formed Infrastructure Special District (Special District). The Special District will be required to develop a Service Area Plan that outlines the required services, infrastructure and methods to financially support delivery and maintenance of a new infrastructure system. The Special District will establish a new fee structure to fund the infrastructure services provided. Initial funding of the Special District may come from the Enhanced Infrastructure Financing District (EIFD) or development impact fees. Until a Special District is formed, any references to a Special District shall be undertaken by the County or its designee. Participation will depend on how the Special District is structured. Existing operations with existing utility agreements may be exempt from Special District.

Should the formation of the Special District be delayed or voted down, existing infrastructure districts or utility providers will be prompted to expand their services to Lithium Valley. Incoming development projects would expected to proceed with utility providers existing process per the current policy.

6.1 Water

6.1.1 Water Supply and Demand

Given the variability in land uses, market trends, and hydrologic and climate conditions impacting water supplies, there are significant challenges to accurately estimating water supply and demand for a project of this immense scale. For the purposes of environmental assessment and agency consultation, the following conservative estimates were used. Table 6-1 Anticipated Water Supply Demand provides the assumed water supply demand estimates listed in Acre-Feet per Year (AFY). The quantities included in Table 6-1 are based on a combination of multiple sources: water demand estimates from approved environmental impact reports, case studies of permitted uses, and Southern California Association of Governments (SCAG) water demand data. An assumed water demand metric was then applied to the quantity of development assumed for each phase. Anticipated water supply demand includes both treated water for human consumption, and non-potable water for industrial use. Water supply may be provided by surface water, groundwater, and reclaimed water. Water for human consumption would be provided through on-site water treatment systems (e.g. water for restrooms, temporary and operational workforce housing), unless a potable water supplier is available.

Table 6-1 Anticipated Water Supply Demand (Acre Feet/Year)

Phase 1 Water Demand	Phase 2 Water Demand	Phase 3 Water Demand	Total
48,023 AFY	15,220 AFY	14,533 AFY	77,776 AFY

Sources: SCAG Modeling Data, RICK/Dudek 2025

As shown in Table 6-1 Anticipated Water Supply Demand, Phase 1 of the Lithium Valley Specific Plan may require up to 48,023 AFY, and a total of 77,776 AFY at full buildout. However, it is conservatively assumed that an additional 19,720 AFY would be needed for biological

mitigation, bringing the total water demand at buildout to 97,496 AFY (Dudek 2025[9]). This water demand exceeds the current IID Interim Water Supply Policy for non-agriculture projects. See Section 6.1.3 Applicable Water Policy.

6.1.2 Water Infrastructure

On May 21, 2024, the Imperial Irrigation District (IID) Board adopted Resolution 15-2024: Reinforcing IID's Colorado River Resources and Local Water Management Commitments to Serve Community Water Demands Including Lithium Valley. Among other statements, this resolution states IID's commitment to provide reliable and cost-effective water and power services to all of its customers and develop the necessary water management policies, programs and tools to support Lithium Valley's development.

To meet water demands indicated in Section 6.1.1, Water Supply and Demand, water will be purchased from the IID by the Special District. Water purchased from the IID for industrial use would not impede on municipal water supplies. A preliminary assessment of water demands and water storage requirements, recommended water infrastructure is shown in Figure 6-1 Proposed Water System. It was conservatively assumed that IID cannot provide water to all of Phase 1 projects within the existing infrastructure, as such water would be provided via onsite or regional water storage facilities. To meet the water demand and storage requirements for Phase 1, twelve water storage facilities containing raw water are recommended throughout the Plan Area. As shown in Figure 6-1 Proposed Water System, water conveyance facilities would integrate throughout the plan area and include a backbone pipeline system and storage facilities. The quantity, capacity, and locations of water storage facilities were based on high-level water demand estimates and are intended as conceptual locations to show how demands may be met. Actual water storage facility designs will be further refined as individual projects are submitted and create a more precise demand.

The County will prepare Water Master Plan (WMP) after the approval of the PEIR. The WMP shall be prepared in collaboration with IID. Implementation of the WMP shall commence after approval of the WMP. The WMP will identify specific infrastructure and policy mechanisms are required to provide long-term water supply to the Special District. The WMP and the water systems proposed therein, may be limited by the remaining allocations of IIDs Interim Water Supply Policy (IWSP). No development shall occur beyond the water allocated under the IWSP, until a new water supply policy is established that allocates additional water supply to non-agriculture projects. It is assumed that the WMP will include the following strategies to meet water demands, and will be supported by hydrologic analysis and requisite environmental analysis and mitigation:

a. Construct regional storage water facilities to supply water during IID outages.
b. Enforce water recycling requirements for industrial users.
c. Explore alternative water sources for industrial cooling and processing, such as air or recycled groundwater.
d. Construct new water supply projects.

Projects that began their development applications prior to the approval of the LVSP and WMP are expected to proceed with IID's existing process per the current policy.

[9] Dudek. October 2025. Water Supply Assessment Lithium Valley Specific Plan.

6.1.3 Applicable Water Policy

A. IID Interim Water Supply Policy

Agriculture within the Plan Area receives water supply from IID, through water apportionments based on historical water use and other variables established in IID's Equitable Distribution Plan of 2006. Non-agricultural development (e.g., industrial, commercial, or municipal uses) may receive water from IID through an application process governed by the Interim Water Supply Policy of 2009. The Interim Water Supply Policy (IWSP, 2009), IID set aside up to 25,000 AFY for conservation for the benefit of new non-agricultural projects. Agricultural apportionment many not be transferred to other water user categories, under the current IID Equitable Distribution Plan. As shown in Table 6-1 Anticipated Water Supply Demand, Phase 1 of the LVSP exceeds the water set aside for new non-agricultural projects.

Until a new process is established through a Special District, all future industrial projects within the Plan Area seeking water service from the IID must submit a formal application detailing their projected demand, project location, and timeline. IID reviews each request through its internal process to ensure water availability under its Equitable Distribution Plan. Should IID approve the application with the ability to service the project, the applicant will enter a Water Service Agreement with IID.

If IID determines that it cannot service the proposed demand—due to insufficient supply, infrastructure constraints, or policy limitations—the applicant may be denied service or required to explore alternatives including but not limited to water conservation offsets, on-site reuse systems, or phased development.

B. Water Supply Assessments

Projects requiring Water Supply Assessments (WSAs) include but are not limited to residential development of 500 dwelling units or more, or projects with equivalent water consumption, commercial/office projects employing 1,000 or more, 250,000 sq. ft. or more of office space, 500,000 sq. ft. of commercial retail, hotels of 500 rooms or more, and other criteria including manufacturing facilities. Cal. Water Code § 10912(a). A WSA was prepared for the LVSP, and is included as part of the PEIR. However, as discussed in Section 6.1.3A, project applicants will still need to comply with the Water Code and the water supplier's application process and analytical requirements.

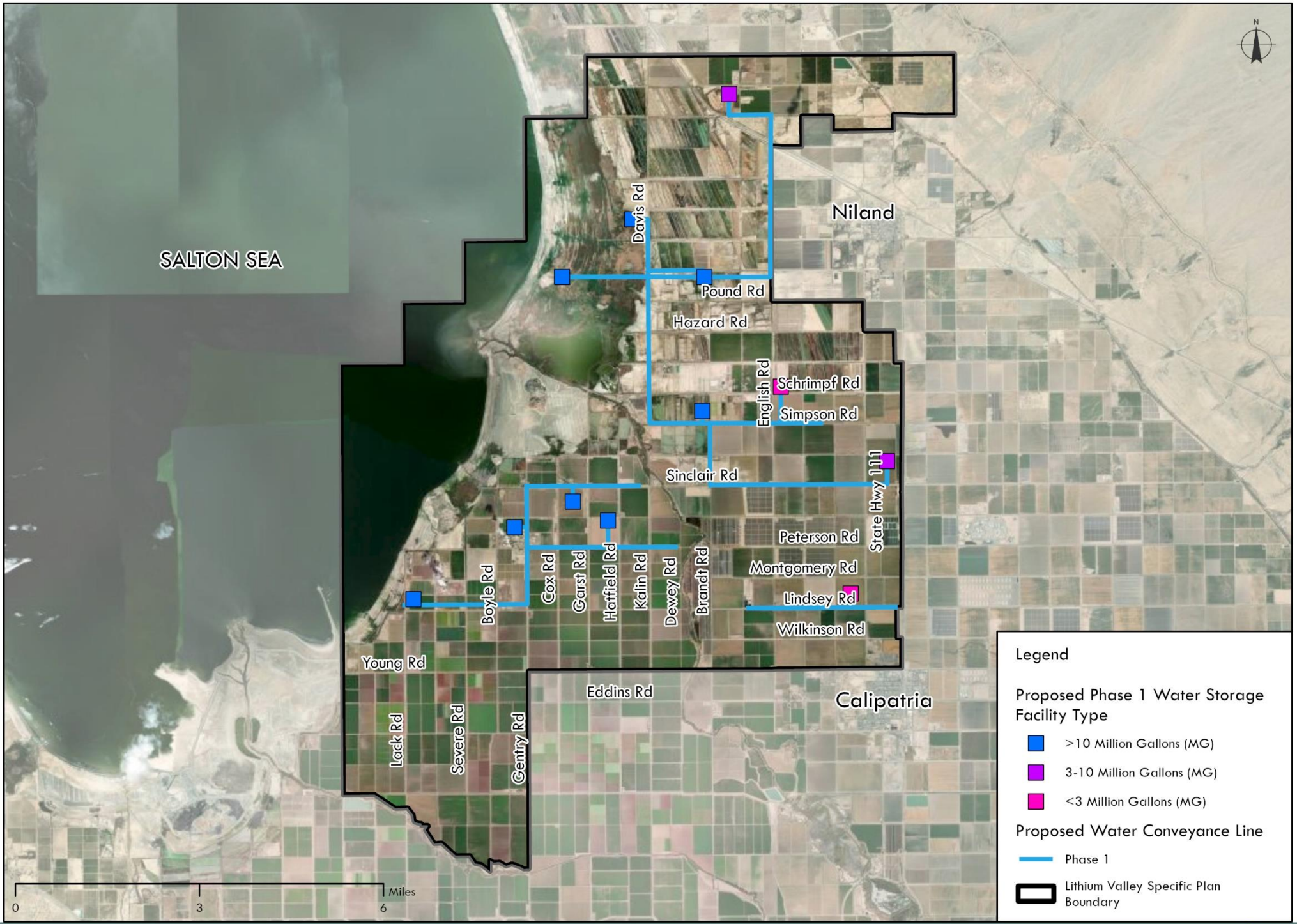


Figure 6-1, Proposed Water System

6.2 Wastewater

6.2.1 Existing Conditions

A. Niland Wastewater Treatment Plant

The Niland County Sanitation District (NCSD) serves 1,290 acres with over 700 sewer connections, managing six miles of sewer lines, a lift station, and a primary-level wastewater treatment plant (WWTP) with a 0.5 MGD capacity. Currently, flow to the WWTP is estimated at 63,300 gallons/day, equivalent to 13 percent of the approved capacity.[10]

Effluent, the treated water that flows from the WWTP, was previously discharged into an IID agricultural drain, flowing to the Salton Sea. However, due to historical exceedances of heavy metal limits in the effluent discharge, the Regional Water Quality Control Board (RWQCB) required a transition to a non-discharge system. Following NCSD's acquisition of the Niland WWTP site through LAFCO's dissolution of the prior sanitary district, the County secured $11.5 million to address compliance issues and implement critical infrastructure upgrades. These improvements include new evaporation ponds and a pump station, which support the transition to a non-discharge system regulated under a Water Discharge Requirement (WDR) permit. Additionally, the County contracted with a private company to operate and maintain the WWTP, ensuring ongoing regulatory compliance and facility management.

While these upgrades are essential for addressing past violations and enhancing treatment processes, they will also result in a reduction of the WWTP's total capacity from 0.5 MGD to 0.15 MGD. This reduction in capacity means that, following the upgrades, the NCSD WWTP will operate at 42 percent of its new capacity. While this may seem like a significant decrease, it is important to note that the pervious flow was only at 13 percent of the existing capacity.

Importantly, the County is preserving the existing discharge infrastructure, ensuring flexibility to accommodate future growth. Should demand warrant an expansion beyond 0.15 MGD, capacity could be increased back to 0.5 MGD through additional land acquisition and/or reactivating the existing NPDES infrastructure. This approach allows the County to balance near-term compliance with long-term adaptability, maintaining essential wastewater treatment services while positioning the facility for potential future expansion based on future demand.

B. Calipatria Wastewater Treatment Plant

The City of Calipatria operates a publicly owned WWTP on Lindsey Road which primarily handles residential water uses. This is a secondary treatment facility with a capacity of 1.7 MGD that discharges into the "G" Drain/ Alamo River which drains to the Salton Sea.

According to the City's 2018 Service Area Plan, the Calipatria Wastewater Treatment Facility receives an average daily flow of 471,000 gallons from the Calipatria State Prison. However, there is no recorded data for the flow from the City of Calipatria's Delta Street Pump Station. According to Public Works records from July 2015 to April 2016, the plant's monthly effluent averages range from 0.61 million gallons per day (MGD) to 0.75 MGD, with peaks reaching 1.1 MGD. The average daily influent flow is estimated at 0.85 MGD.

Capacity improvements will be necessary when the average daily demand exceeds 80 percent of the peak permitted capacity of 1.73 MGD. Currently, the facility operates at less than 50 percent of its capacity. The Calipatria WWTP has already been recommended for upgrades by 2035, independent of the Lithium Valley Specific Plan.

[10] Niland County Sanitation District Wastewater Treatment Plant Improvements - Environmental Assessment Determinations and Compliance Findings for HUD-assisted Projects 24 CFR Part 58, County of Imperial

6.2.2 Wastewater Recommendations

Preliminary estimates were calculated to understand potential wastewater demands and what degree of new infrastructure would be needed to meet this demand. Table 6-2, Wastewater Demand, provides the assumed wastewater demand in million gallons per day (MGD). The following estimates were calculated based on standard practice sewer generation factors applied to the assumed amount of development. These estimates were used to guide the quantity and placement of the wastewater infrastructure facilities shown in Figure 6-2, Proposed Wastewater System.

Table 6-2 Wastewater Demand

Phase 1 (MGD)	Phase 2 (MGD)	Phase 3 (MGD)	Total (MGD)
18	5	9	32

Source: Dudek 2024

Niland and Calipatria's existing facilities will not suffice to handle the increased demand from Phase 1. Wastewater demand projections for Phase 2 and Phase 3 demonstrate the need for comprehensive wastewater infrastructure planning, as they anticipate an additional 14 MGD, necessitating expansions and upgrades to the existing wastewater treatment systems to ensure they can accommodate the Plan's 32 MGD demand effectively. As shown in Figure 6-2 Proposed Wastewater System, wastewater facilities must be constructed within the Specific Plan Area to accommodate capacity demands from development. To meet the demand of full buildout, the two new wastewater treatment plants (WWTPs) are assumed to handle 8-10 MGD each of industrial and domestic wastewater, and may be retrofitted to increase the capacity for additional demand if necessary. However, exact capacity designs will be based on future studies. The quantity, capacity, and locations of the proposed WWTPs were based on high-level demand estimates and are intended as conceptual locations to show how demands may be met. Actual WWTP designs will be further refined as individual projects are submitted and create a more precise demand. If the WWTPs are not able to accommodate all industrial wastewater types, pretreatment programs shall be provided at the industrial source.

In the short term, it is recommended that initial projects include the construction of a septic system designed to handle wastewater generated during the project's early phases. This system will manage both non-process wash water and sanitary waste, with sanitary drains collecting these wastes and directing them to the septic system. The septic system will be engineered and operated to meet Imperial County Environmental Health requirements, ensuring safe and effective wastewater disposal in compliance with local regulations. Septic tanks, while useful in early development stages, are not suitable as a long-term solution.

The County will prepare Sewer Master Plan (SMP) after the approval of the PEIR. Implementation of the SMP is anticipated to begin before the total building square footage of the Plan Area reaches approximately four million square feet. The Sewer Master Plan shall define the detailed wastewater infrastructure improvements needed to meet the needs of Lithium Valley. Imperial County Public Works Department will define measurable benchmarks for infrastructure upgrades and specify phased transitions from septic systems to centralized treatment options, integrating water reclamation technologies. This transition will involve integrating into existing upgraded facilities or constructing new advanced treatment plants to handle the increased wastewater load, ensuring that the infrastructure evolves in tandem with the development's growth. Right-of-way shall be provided within the improved roadways.

Once it is deemed necessary, one option is to upgrade the existing wastewater treatment plants (WWTPs) in Niland and Calipatria and expand their service areas to accommodate projected increases in wastewater volume, emphasizing water conservation and pre-treatment before entry into centralized treatment facilities. These upgrades could enhance the capacity and efficiency of the existing facilities, ensuring they can handle the growing wastewater volume. Any upgrades to these existing WWTPs that would transition facilities from primary to tertiary

treatment may require additional administrative actions. These could include obtaining new permits and approvals from state and local regulatory bodies, ensuring compliance with stricter environmental standards. Further consultation with the California Regional Water Quality Control Board (RWQCB) and other relevant agencies will be essential to secure the necessary authorizations and funding. Furthermore, these upgrades might necessitate increased investment in infrastructure, staff training, and ongoing maintenance to manage the advanced treatment processes effectively. The transition to tertiary treatment would not only enhance the quality of treated effluent, supporting water reclamation efforts, but also contribute to the sustainability and environmental resilience of the Specific Plan Area.

Alternatively, as Phase 1 is developed, two central WWTP with advanced tertiary treatment capabilities are recommended. Phase 1 WWTP #1 is situated within the Phase 1 Green Industrial Area, north of the Alamo River, while Phase 1 WWTP #2 is located within the same industrial area but south of the Alamo River, adjacent to the Salton Sea. These two strategically placed WWTPs are intended to divide the wastewater buildout demand efficiently, mitigating the need to convey wastewater over long distances and across challenging topographic areas. Centrally located within the Phase 1 designations, these plants are well-positioned to support connecting infrastructure to various facilities. The two proposed WWTPs would meet additional demand from Lithium Valley that the existing WWTPs cannot meet. Should additional WWTPs be needed, additional CEQA analysis may be needed. Tertiary treatment is recommended for both WWTPs to ensure that the treated wastewater meets NPDES requirements, enabling it to be safely returned to the Alamo River and eventually to the Salton Sea.

Facilities are encouraged to implement on-site treatment mechanisms prior to connecting to regional WWTPs, enhancing the overall efficiency and sustainability of the wastewater management system. See Figure 6-2 Proposed Wastewater System, for the locations of the proposed and existing wastewater system.

Tertiary treatment, compared to primary wastewater treatment options, could significantly contribute to Salton Sea mitigation efforts and improve long-term environmental health issues. Tertiary treatment processes remove a higher percentage of contaminants, including nutrients like nitrogen and phosphorus, which can contribute to eutrophication and harmful algal blooms in the Salton Sea. By producing higher-quality effluent, tertiary treatment helps to reduce the existing environmental damage on the sea, promoting healthier aquatic ecosystems and improving overall water quality. Additionally, reclaimed water from tertiary treatment can be reused for irrigation and industrial purposes, decreasing the demand on freshwater resources.

Wastewater infrastructure development and operations shall be effectively managed and funded through collaborations between private investors and public entities through incentivized tax credits, streamlined permitting processes, and proactive community engagement to promote water conservation and sustainable practices. Monitoring and reporting protocols shall be implemented to maintain regulatory compliance, focusing on effluent quality and sustainable water reclamation practices, and secure ongoing funding for continuous wastewater treatment improvements.

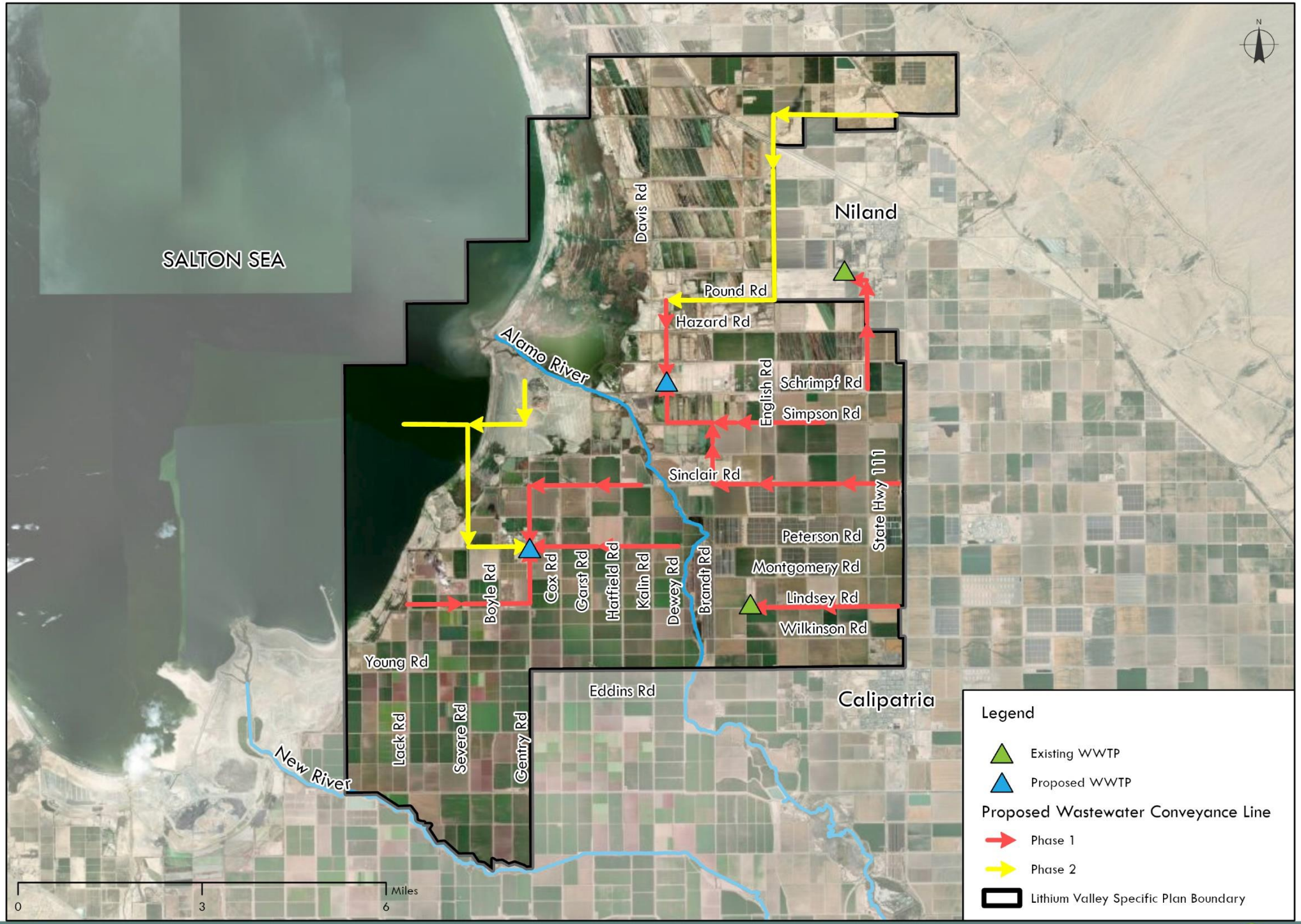


Figure 6-2: Proposed Wastewater System

6.3 Stormwater and Drainage

Achieving the vision for Lithium Valley to serve as a multifarious hub that is both safe and resilient requires the consideration of stormwater infrastructure in a three-pronged approach that includes floodplain, drainage, and stormwater quality.

6.3.1 Existing Floodplain Conditions & Existing Regulations

Under existing condition, the 100-year floodplains of the Alamo River and New River collectively cover around 50 percent of the Specific Plan Area. Projects located in such floodplains resulting in the increase of base flood water surface elevation (BFEs) greater than 1 foot for streams with Base Flood Elevations (BFEs) specified but no regulatory floodway designated, or any base flood WSEL increase from proposed construction within a regulatory floodway will typically require FEMA's approval of a Conditional Letter Of Map Revision (CLOMR) and a subsequent Letter Of Map Revision (LOMR). Imperial Irrigation District (IID) is the local governing entity with varying responsibilities as it relates to ownership, operation and maintenance of the drains and canals. Imperial County is the entity that maintains the existing stormwater drainage facilities, construction of new drainage facilities, flood warnings, hydrologic data collection, and ensuring that private development projects meet floodplain management objectives and compliance with FEMA guidelines and policy.

6.3.2 Floodplain Recommendations

Considering the long-term growth and overall future of Lithium Valley it may be preferrable to develop a floodplain strategy that addresses the flooding issue holistically and benefits the ease of future developments. The following describes several options for addressing issues and constraints related to the existing FEMA mapped 100-year floodplain.

One option would involve the creation of river corridors for the Alamo River and New River that are wide enough to contain and convey the 100-year peak flow. The intent of this strategy is to reserve a corridor along the river that would allow for a variety of options to be implemented when and if desired (and with available funding or based on regional need). This would effectively narrow the wide floodplain that currently encompasses a large portion of the Specific Plan Area. It would also eliminate the need for FEMA CLOMR and LOMR approvals for future developments, thereby eliminating the floodplain regulatory requirements for individual projects.

Based on preliminary calculations, the Alamo River corridor would have to be 950 feet wide (475 feet on each side) whereas the New River corridor would have to be 1,275 feet wide (637.5 feet on each side). Typical cross-sections of the river corridors have been included in Figure 6-3, Proposed Cross-Sections of River Corridors.[11] The proposed land use plan identifies this corridor as "River Corridor" and has set aside this area specifically to allow for the ability to implement this strategy. It is important to note that the southern half of the river corridor for the New River as illustrated on Figure 6-4, Drainage Infrastructure Opportunities, extends beyond the specific plan boundary. This river corridor extends beyond the specific plan boundary to connect the New River effectively to the Salton Sea.

The establishment of the river corridor should be planned to minimize impacts while enhancing existing hydrologic flow patterns and improving habitats occupied by sensitive species, including those that are candidate, threatened, or endangered. Establishing a wide river corridor can provide additional benefits, including stream restoration for new habitat and wetland creation and/or offsets, promoting and increasing vital aquatic and riparian habitats. It allows for stream and habitat restoration while at

[11] The cross-section has been designed assuming a bank full condition during a 100-year storm with 1 foot of freeboard and a mature channel roughness of n = 0.10 that is typical of a dense fully vegetated riparian growth such that no channel clearing would be needed to preserve the intended flow carrying capacity of the river corridors.

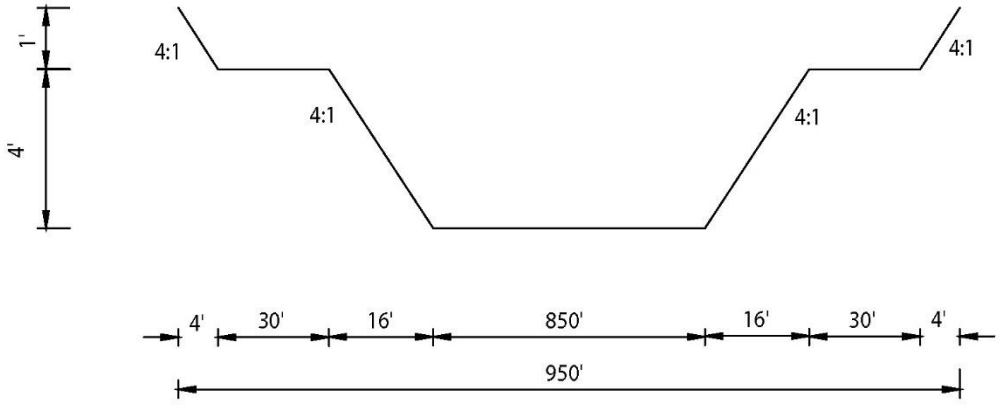
the same time enabling safe and stable conveyance of flood flows that protects the adjacent developments and infrastructure from flooding.

It also eliminates the need for future developments to go through FEMA floodplain regulatory requirements and/or eliminating requirements to carry flood insurance, thus significantly increasing the ease of development. Mitigation credits could also be generated from the stream and habitat restoration which can be used for other future projects/developments. It is important to note that establishing a river corridor of this scale would require resource agency permits through the California State Water Resources Control Board (401 permit), US Army Corps of Engineers (404 permit), and California Department of Fish and Wildlife (1600 series permit).

Extensive thought and care need to be put towards the implementation and phasing of this strategy with respect to other developments that are slated to construct insurable buildings in the existing floodplain. It may not be realistic to establish the entire river corridor prior to any of the developments taking place depending on numerous factors. Therefore, initial developments located within the existing floodplain would have to go through the conventional FEMA CLOMR and LOMR process. If and when the river corridor has been established, subsequent developments would not be subject to the FEMA floodplain requirements.

The other more conventional flood control strategy would be to raise the buildings and any insurable structures within the existing floodplain above the BFE and let the flood waters go around the buildings (or under if constructed on pillars). This strategy would require developments to go through the FEMA CLOMR process (typically prior to issuance of a grading permit) and LOMR process (typically following substantial completion of the constructed improvements). Alternative strategies may also be considered, subject to County review and approval (and FEMA review and approval when applicable), so long as they are consistent with all local, state, and federal regulations including those for FEMA-mapped floodplains.

The County will prepare Drainage Master Plan (DMP) after the approval of the PEIR. Implementation of the DMP is anticipated to begin before the total building square footage of the Plan Area reaches approximately four million square feet. The DMP shall define the detailed drainage and stormwater infrastructure improvements needed to meet the generation rates of Lithium Valley. This may include hydraulic and hydrology studies and drainage plans.



ALAMO RIVER

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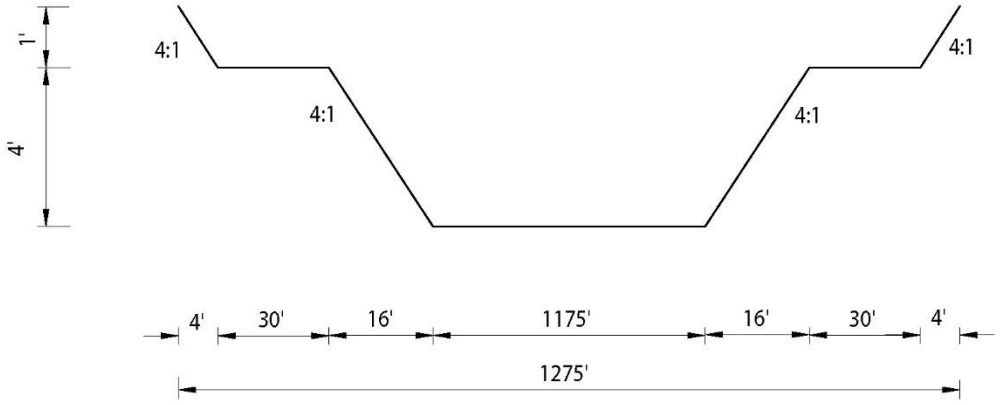

NEW RIVER

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Figure 6-3, Proposed Cross-Sections of River Corridors

6.3.3 Drainage Recommendations

A. On-site Drainage

Developments within the Specific Plan Area would have to prepare a drainage study pursuant to the drainage standards set by the Imperial County Hydrology Manual[12] and design guidelines set by the Imperial County Engineering Design Guidelines Manual, and any subsequent amendments thereto. Small developments shall prepare an on-site drainage study (Manual Chapter 3), while large master developments shall prepare master drainage studies (Manual Chapter 4) that address the pre-project, interim/post-project, and fully built-out conditions. In general, the rational method shall be used to estimate runoff from small drainage areas less than or equal to one square mile (640 acres). When there are junctions of independent drainage systems, the modified rational method shall be used. Any project with a drainage area of over one square mile (640 acres) shall use the National Resources Conservation Service (NRCS) Hydrologic Method.

B. Stormwater Channels

Public drainage facilities shall be designed to carry the 10-year 6-hour storm underground, the 25-year storm between the top of curbs provided two (2) 12-foot minimum width dry lanes exist, and the 100-year frequency storm between the ROW lines with at least one (1) 12-foot minimum dry lane open to traffic. All culverts shall be designed to accommodate a 100-year frequency storm. Sufficient storage volume must be available on a portion of the proposed project to accommodate a minimum 3-inch precipitation covering the entire site with no runoff coefficient "C" reduction factors. The resulting storage volume should be accommodated in retention/detention basin(s) or a combination of retention/detention basin(s) and on-lot storage. Volume can be considered by a combination of basin size and volume considered within parking and/or landscape areas. Detention may also be considered for the 100-year frequency storm event in lieu of retention to mitigate the post-project peak flow below the pre-project peak flow. The minimum finish floor elevation shall be 12 inches above the top of fronting street curbs unless the subject property is below street level and/or six inches above the 100-year frequency storm event or storm track. Minimum pipe slopes shall be 0.1 percent unless otherwise approved by the County Engineer. Adequate emergency overflow conveyance should also be provided at sump locations.

Currently, many of the IID drains serve as conveyance systems for stormwater within the Specific Plan Area, primarily in an east to west direction for land east of the Alamo River and in a south to north direction for land west of the Alamo River. However, several of these drains show signs of sediment accumulation or habitat encroachment and lack positive drainage to the Salton Sea, Alamo River, or New River. These conditions are often the result of maintenance restrictions in areas where wetlands or sensitive species (candidate, threatened, or endangered) may be present. Restoring positive drainage may be possible by strategically clearing and extending select drains to the Salton Sea, but such efforts would require permitting from multiple regulatory agencies. Preliminary locations of these drain extensions to the Salton Sea can be found in Figure 6-4 Drainage Infrastructure Opportunities. Adjacent drains can also be connected to the drains that are extended to the Salton Sea to improve drainage and reduce the number of outfalls to the Salton Sea that need to be improved.

The Plan Area is a part of three (3) major drainage basins. These basins include two (2) watersheds tributary to New River and Alamo River, and one (1) major drainage basin (Watershed 3) comprised of the tributary drainage areas from the east towards the northern portion of the Plan Area. The Coachella Canal and East Highline Canal bisect Watershed 3 and in the past intercepted runoff from the eastern mountains in Watershed 3. However, an extreme weather event in 2023 resulted in

[12] Imperial County Hydrology Manual: https://publicworks.imperialcounty.org/wp-content/uploads/2023/05/Imperial-Cnty-Hydrology-Manual_10-9-18.pdf

sediment from the eastern mountains and desert to be captured within the East Highline Canal preventing further water flows in that canal for a brief period. This resulted in stormwater runoff as well as sediment overflows entering the Plan Area. These overflows combined with local runoff from the east and on-site runoff generated by the Plan Area should be designed to route through the Plan Area to the Alamo River, New River, and Salton Sea.

It is important to note that IID is not a flood control district, and its facilities do not provide flood control. The purpose and use of IID drains is to provide drainage of the water that IID canals and laterals delivers to its customers. IID drains are not intended to provide flood control services. However, IID facilities do not prevent stormwater from entering the drains and essentially functions as stormwater conveyance to Alamo River, New River, and Salton Sea during storm events.

IID canals and laterals are currently primarily used to convey water for irrigation to agricultural fields. IID drains are used to convey irrigation return flows from agricultural fields to Alamo River/New River/Salton Sea. To the extent feasible and agreed to by local jurisdictions, canals and/or drains could be converted to stormwater channels for drainage conveyance since the proposed land use plan within the specific plan area would reduce the area's demand for irrigation water supply. IID could either transfer the ownership of these drains at that point over to Imperial County or to a new Flood Control District. The Flood Control District could be funded by an impact fee to be paid by the future developments and projects.

A select network of these canals can be converted to interceptor swales and stormwater channels to convey stormwater runoff from the parcels to the rivers or Salton Sea. Figure 6-4 illustrates one possible conceptual configuration of these interceptor swales and stormwater channels. It is critical to recognize that upstream water users will continue to require water delivery and drainage, regardless of land use changes and canal/drain conversions to stormwater channels within the Plan Area. Since these water deliveries occur upstream, water conveyance through IID canals to upstream users will not be affected by downstream conversions. However, any IID drains converted to stormwater channels must be designed to accept return flows from upstream users, which have historically discharged through IID drains into the Salton Sea, Alamo River, or New River. Additionally, IID drains that are converted to stormwater channels must be designed with thoughtful consideration to accommodate sensitive species (e.g., desert pupfish) that may be currently present in the drains. If these drains are sized and designed properly to accommodate these sensitive species, they could serve dual purpose of not only stormwater conveyance but also serve as habitat. Drains/Canal conversions to stormwater channels might require resource agency permits through the California State Water Resources Control Board (401 permit), US Army Corps of Engineers (404 permit), and California Department of Fish and Wildlife (1600 series permit).

If there are IID customers along the proposed stormwater channel paths, canals from adjacent blocks may be rerouted to serve them under interim conditions, provided rerouting is feasible in terms of cost, right-of-way or easement dedication, and topography. As agricultural use phases out, remaining canals within the specific plan area may eventually be abandoned. Importantly, not all IID canals or drains need to be converted to stormwater channels; conversions can be selectively implemented at strategic locations, while others may remain in place or be improved as needed to support any ongoing IID customer demands. Refer to Figure 6-4 for one possible conceptual configuration of these interceptor swales and stormwater channels.

As with the previously discussed river corridor approach, thoughtful planning and phasing are essential when implementing drain extensions, interceptor swales, and stormwater channels. Constructing the entire network prior to any development may not be practical due to various constraints. Therefore, initial developments will need to rely on existing infrastructure and follow current strategies, consistent with the Imperial County Hydrology Manual and the Imperial County Engineering Design Guidelines. Once the stormwater network is in place, future

developments can utilize it to convey runoff to the rivers or the Salton Sea.

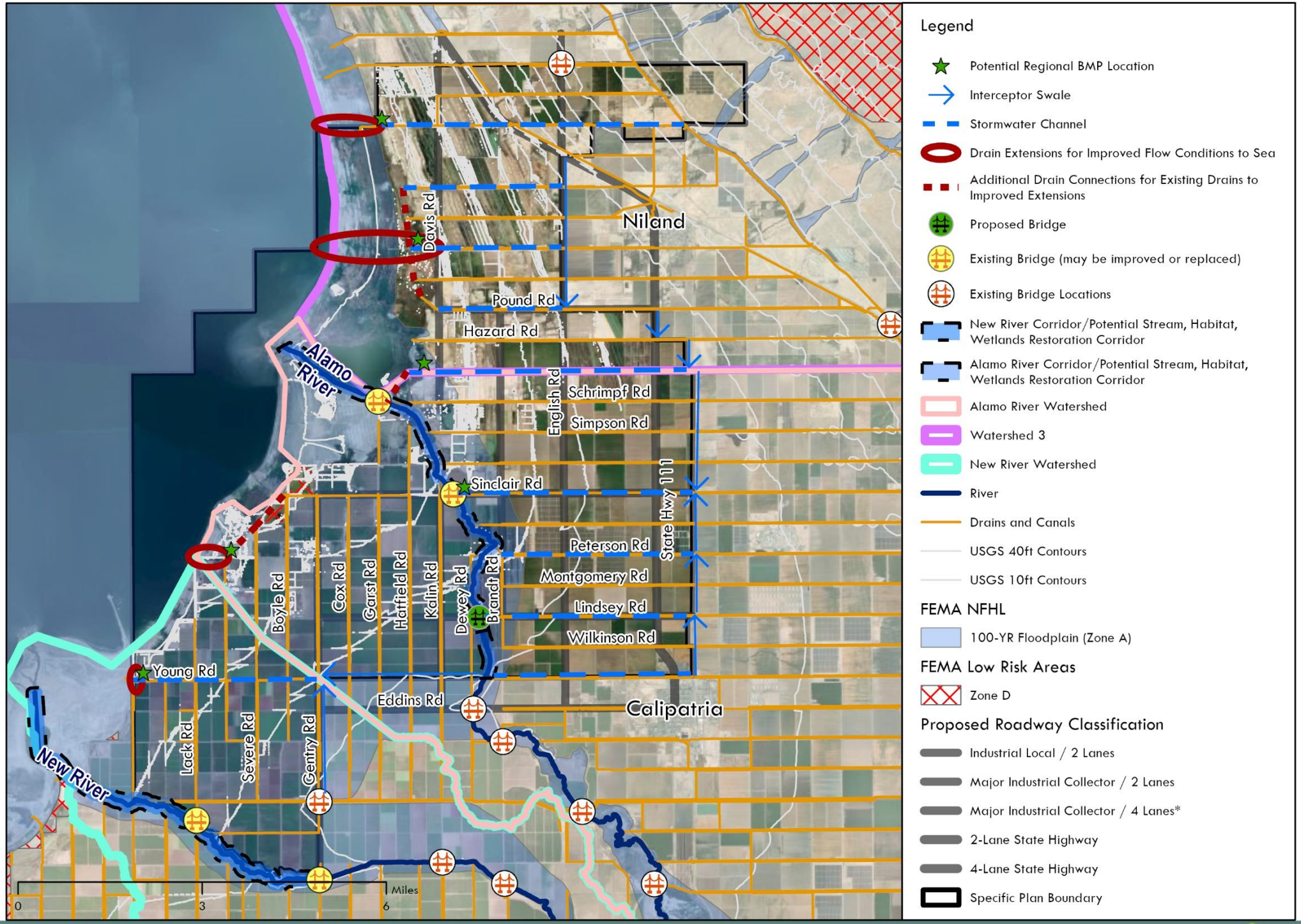

Figure 6-4, Drainage Infrastructure Opportunities

6.3.4 Stormwater Quality Recommendations

The applicable stormwater regulations include the Construction General Permit (CGP), Municipal Separate Storm Sewer System (MS4) Permit, and the Industrial General Permit (IGP), including any subsequent amendments thereto.

The Construction General Permit applies to all projects in which construction activity disturbs one acre or more of soil, including linear underground projects (LUP). Construction activity subject to this permit includes clearing, grading, and disturbances to the ground, such as layout areas, stockpiling, and excavation. The Construction General Permit requires the development and implementation of a construction SWPPP, which would include and specify best management practices (BMPs) designed to prevent pollutants from contacting stormwater and keep all products of erosion from moving off-site into receiving waters. The 2022 CGP (SWRCB Order No. 2022-0057-DWQ) was adopted by the California State Water Resources Control Board on September 8th, 2022, and became effective on September 1st, 2023.

The State Water Resources Control Board issued a General Permit for the Discharge of Storm Water from Small MS4s (Order 2003-0005-DWQ) to provide permit coverage for smaller municipalities, including non-traditional Small MS4s, which include facilities such as military bases, public campuses, prisons, and hospital complexes. The Phase II Small MS4 General Permit covers Phase II permittees statewide. On February 5, 2013, the Phase II Small MS4 General Permit was re-adopted (Order 2013-0001-DWQ) and the new requirements became effective on July 1, 2013. Imperial County is a Phase II Traditional Small MS4 Permittee. Based on the MS4 permit, development projects that create or replace less than 2,500 SF of impervious areas are not required to implement any post-construction BMPs. Development projects that create or replace between 2,500 SF and 5,000 SF of impervious areas are categorized as "Standard Projects" and are required to implement Site Design BMPs. Development projects that create or replace more than 5,000 SF of impervious areas are categorized as "Regulated Projects". Regulated projects are required to implement Site Design BMPs, Source Control BMPs and Low Impact Development (LID) Treatment BMPs. Certain development projects fall under exempt categories that don't require any post-construction BMPs. These exempt categories include routine maintenance, certain sidewalk or trail projects, projects that only involve work on building interiors, and linear underground/overhead utility projects (LUP) or road projects that create less than 5,000 SF of new, contiguous impervious areas. LUPs that create more than 5,000 SF of new, contiguous impervious areas are required to implement BMPs for regulated projects, with an Environmental Protection Agency (EPA) Green Infrastructure Option such as bioswales, permeable pavers, bioretention and/or detention, curb extensions etc. In addition to post-construction BMP requirements, development projects that create or replace at least one acre of impervious area, increase impervious area relative to the pre-project condition are subject to Hydromodification Management requirements. Impervious areas include but are not limited to building roofs, concrete and asphalt surfaces etc.

The Industrial General Permit (*SWRCB Order No. 2014-0057-DWQ)* is applicable to certain categories of industrial activity, including facilities that store, treat, recycle, and reclaim sewage. The IGP is applicable to treatment facilities and may be applicable to pump stations and other ancillary facilities. The final designs of pump stations and ancillary facilities shall make the evaluation and determination of applicability. The IGP requires stormwater dischargers to eliminate unauthorized non-stormwater discharges, develop and implement Industrial SWPPPs, implement BMPs, conduct monitoring, compare monitoring results to numeric action levels, perform appropriate exceedance response actions when numeric action levels are exceeded, and certify and submit all permit registration documents. Many of the proposed land use per the proposed land use plan will be required to file for coverage under the IGP.

Water Quality is a significant existing issue when it comes to the Salton Sea and has been extensively studied and documented over the years. The Alamo River and New River also have Sediment and Bacteria Total

Maximum Daily Loads (TMDLs) in place, respectively. A TMDL is the calculation of the maximum amount of a pollutant allowed to enter a waterbody so that the waterbody will meet and continue to meet water quality standards for that pollutant. A TMDL determines a pollutant reduction target and allocates load reductions necessary to the source(s) of the pollutant. Therefore, it is vital for any new development to address stormwater quality during construction and post-construction (i.e. per CGP & MS4 Permit) due to the presence of Sediment and Bacteria TMDL in Alamo and New River, respectively.

One potential strategy to address water quality and reduce overall costs would be to implement LID Treatment BMPs such as bioretention and/or detention at a regional scale in select strategic locations. Some of these potential locations at a conceptual level have been identified in Figure 6-4 Drainage Infrastructure Opportunities. Development projects tributary to these Regional LID Treatment BMPs would not be needed to implement any on-site project specific LID Treatment BMPs and would only need to implement Site Design and Source Control BMPs. This can significantly reduce the regulatory burden on the individual development projects and promote ease of development in the Specific Plan Area. A cash-in-lieu system wherein the developers pay a certain fee proportional to their project size/treatment volume required instead of implementing on-site project specific LID Treatment BMPs could help fund the construction and maintenance of these regional LID Treatment BMPs. On the other hand, on-site project specific implementation of LID Treatment BMPs is a decentralized strategy that could allow flexibility to the developers to implement and maintain their own LID Treatment BMPs on-site. An advantage of the Regional Treatment BMP strategy besides its reduction of required lands for treatment, reduced capital costs, and promotion of ease of development has to do with the ease of BMP inventory tracking and maintenance due to their centralized location. LID Treatment BMPs in general would also contribute towards improving the overall water quality of the Salton Sea, Alamo River, and New River.

The MS4 permit requires hydromodification management requirements for development projects that create or replace at least one acre of impervious area and increase impervious area relative to the pre-project condition. This requirement helps to prevent significant developments from geo-morphing sensitive receiving waters. However, in the case of Lithium Valley, if the flood corridor and drainage strategies discussed earlier are implemented effectively to establish a stable and safe conveyance to the Salton Sea, a reasonable case can be made for hydromodification management exemption. This would further reduce the regulatory requirements to promote the ease of development and reduce required BMP footprints and volumes. This holistic approach should be organized and discussed with the Regional Water Quality Control Board (RWQCB) for review and concurrence prior to approving development projects as exempt from hydromodification management requirements.

It is also worth noting that there are separate ongoing efforts to improve water quality within the Alamo River, New River and the Salton Sea. As such, there would be significant overlapping benefits for regional floodplain, drainage and water quality strategies with these other efforts that could serve as funding sources and implementation opportunities to collaborate with multiple stakeholders that result in regional benefits.

6.4 Electrical Transmission

6.4.1 Energy Demand

Due to the high investment costs to construct transmission lines, the existing process is that existing transmission lines owned and operated by IID are constructed to support development at the time of construction. Preliminary energy demand estimates and energy production estimates were calculated to quantify the total energy needed to power all phases of the Lithium Valley Specific Plan.

As shown in Table 6-3 Energy Production and Demand (megawatts/hour), the preliminary estimates calculated that there is an overall energy balance with a slight surplus. The energy production estimates assume that new geothermal facilities will generate up to 150MW. Energy will also be generated from solar farms and rooftop solar. Solar energy production estimates were based on the acreage designated for solar, a solar capacity factor of 28.4%[13] and a 0.20MW/acre solar generation factor[14]. Rooftop solar rates were based on, and the building square footage eligible for rooftop solar.

Energy demand in megawatt/hours (MW/h) shown in Table 6-3, are based on an estimated total energy demand of the Specific Plan Area based on industry averages and case studies, applied to the estimated building square footage, totaling approximately 2,642 megawatt hours (MW/h) at the projected buildout. If we assume the power generated within the Plan Area is used within the Plan Area and subtract the total energy demand by the total energy produced, we estimate the projected energy generated could support the project demand at buildout.

Table 6-3 Energy Production and Demand (megawatts/hour)

	Phase 1	Phase 2	Phase 3	Buildout Total
Energy Produced (+)	1,767	607	305	2,679
Energy Demand (-)	1,625	418	635	2,642
Delta	(+)142	(+)190	(-330)	(+)38

Source: RICK and Dudek 2025

The recommended electrical transmission network, shown in Figure 6-6, Electrical Transmission, intends to provide the voltage and locations of the transmission lines that will require upgrades and/or extensions into the Specific Plan Area. Collector lines, or gen-tie lines are the transmission lines that carry electricity from generation projects (solar, geothermal, etc.) to the first and nearest substation located outside the Plan Area. Transmission line access roads shall be a minimum of 24 feet in width and shall be added to the ROW to calculate the total width of linear disturbance. It is important to note that Figure 6-5, Electrical Transmission is a conceptual design, and the project's electrical transmission implementation will depend on several factors, including the level of generation developed. Without site-specific information, it is not possible to identify where and how many substations would be needed to meet the expected demand in the Draft Specific Plan.

It is possible that energy providers operating under the California Independent System Operator (CAISO), other than IID, could develop transmission lines within or near the Plan Area. If such infrastructure is constructed, interconnection to these facilities may be considered to enhance grid reliability and support regional energy balance.

[13] U.S. Energy Information Administration. (2019, June 12). *Southwestern states have better solar resources and higher solar PV capacity factors*. Today in Energy. U.S. Department of Energy. https://www.eia.gov/todayinenergy/detail.php?id=39832

[14] Solar Energy Industries Association. (n.d.). *Land use & solar development*. SEIA. https://seia.org/initiatives/land-use-solar-development

6.4.2 Applicable Energy Policy and Procedure

Non-residential development applications requesting electrical services from IID that do not generate electricity are required to submit an application to IID's Power Division. Extension of distribution lines of 15kv or less will be made by IID. Extensions of distribution lines greater than 15kv are subject to IID's discretion to service the site.

Interconnection of a generating facility (e.g. geothermal plant) to IID's transmission system is governed by IID's Open Access Transmission Service Tariff. Through this process, IID will assess the project's effect on the existing transmission network and determine if network upgrades will be required to service the development. IID is authorized to revise these standards as necessary to respond to legislation, regulatory action, industry practice, operating requirements, or average service cost.

Applicants for microgrid interconnection to the IID system shall complete an Application for Interconnection of Distributed Generation Facility and provide IID with any relevant additional information requested by IID.

See IID's website for current policies and procedure.

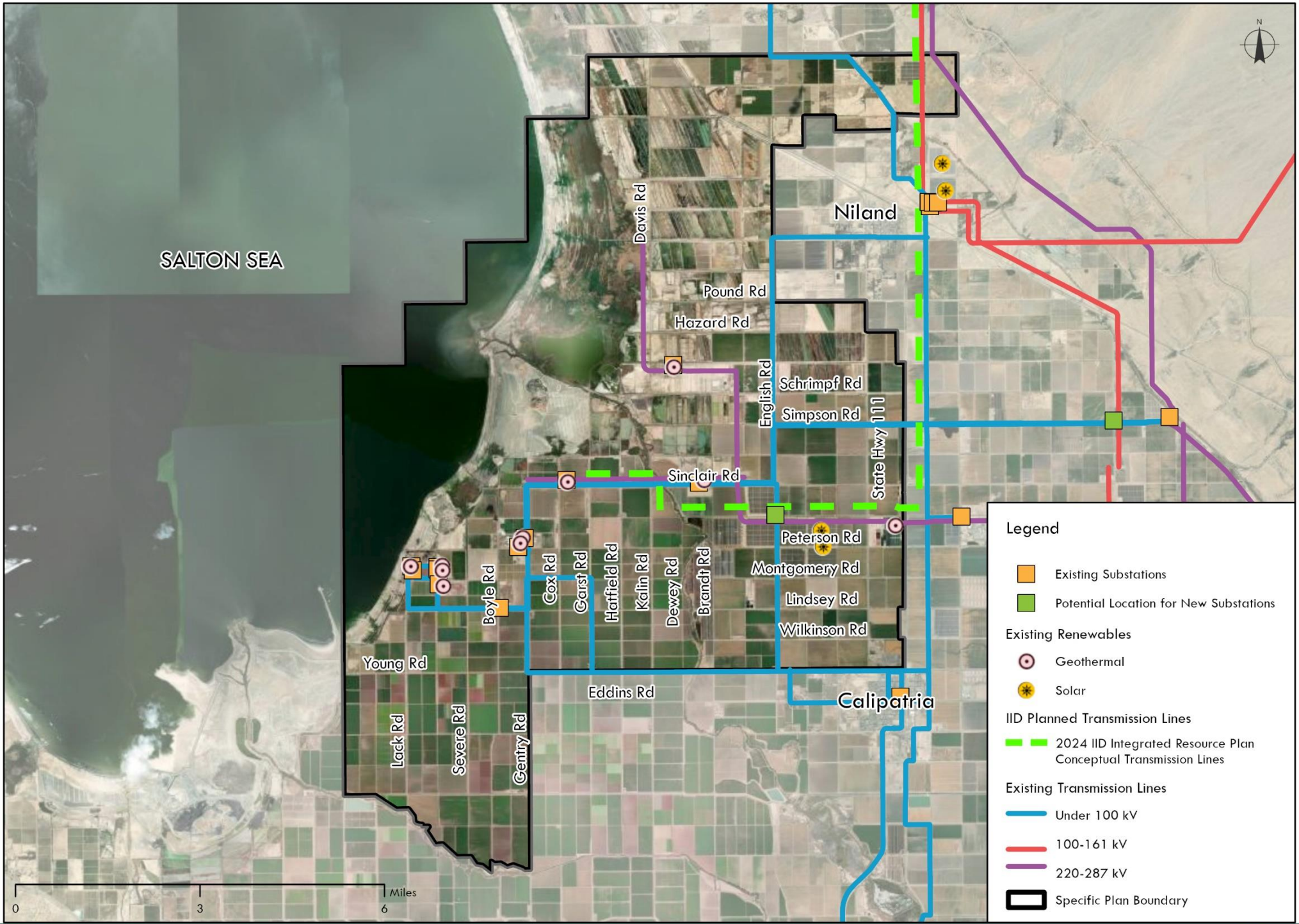

Figure 6-5, Electrical Transmission

6.5 Solid Waste Disposal

Solid waste generated within Imperial County is primarily disposed of at municipal solid waste (MSW) landfills that are permitted to receive non-hazardous waste. Locally, Republic Services operates a landfill in Imperial, while Burrtec operates a landfill near the Salton Sea. The County of Imperial operates landfills in Niland and Calexico. Additionally, CR&R Environmental Services (CR&R) operates a landfill in Yuma, Arizona, and transfers waste from select cities in Imperial County under its franchise agreements.

New development within the Specific Plan Area will be required to establish waste collection services that transport solid waste to permitted landfills with adequate capacity. Currently, the landfills with available disposal capacity include Republic Services' Imperial Landfill, Burrtec's Salton Sea Landfill, the County-operated Niland and Calexico Landfills, and the CR&R landfill in Yuma. However, given that any future expansion of the Calexico and Niland landfills would require significant capital investment to install necessary landfill liners, it is anticipated that Republic, Burrtec, and CR&R will serve as the primary disposal sites during the early stages of Phase 1. Additionally, projects may elect to use privately established waste collection services and landfill(s).

As the Specific Plan Area develops, the newly formed Special District is expected to coordinate solid waste collection in accordance with the requirements of Senate Bill (SB) 1383, which mandates organic waste diversion and reductions in landfill disposal. These efforts will ensure compliance with state regulations while maintaining efficient waste management services within the district.

Solid waste management is overseen by the County of Imperial Solid Waste Local Enforcement Agency (LEA). The LEA enforces federal, state, and local laws related to solid waste management within the County, ensuring that safe and proper practices are followed to protect public health and the environment. As mandated by state law (Public Resources Code), each local jurisdiction must designate an LEA certified by the California Department of Resources Recycling and Recovery (CalRecycle) to manage and enforce these regulations.

The Niland Solid Waste Site, which serves as the closest landfill for disposing of Class III non-hazardous solid wastes from the Specific Plan Area. While the facility occupies a total of 100 acres, the estimated remaining service life as of September 22, 2022, is 38 years, indicating the landfill will have capacity through 2060.. The anticipated solid waste demand to be generated from the total project is listed below:

Table 6-4 Solid Waste Demand (metric tons/year)

Phase 1	Phase 2	Phase 3	Full Buildout
76,496	46,550	69,619	192,665

Source: RICK 2024

Hazardous waste management is primarily overseen by the California Department of Toxic Substances Control (DTSC), which enforces regulations related to hazardous materials and waste. The DTSC serves as the Certified Unified Program Agency (CUPA) for the County. The CUPA consolidates six state environmental programs and is responsible for inspecting facilities that handle or store hazardous materials, generate hazardous waste, or operate aboveground or underground storage tanks, ensuring compliance with the California Accidental Release Prevention (CalARP) Program.

For specialized waste types like hazardous materials or large-scale commercial waste, including any hazardous materials from mineral extraction activities, specialized companies and facilities are equipped to manage these safely and in compliance with environmental regulations. These companies have the expertise to handle hazardous materials such as toxic chemicals, solvents, and heavy metals, as well as large volumes of commercial and industrial waste that, while not classified as hazardous, still require proper disposal to prevent environmental contamination. Commercial processes are currently in a research and development phase with some developers, While it is expected that some mineral extractions processes will not generate any hazardous waste, any hazardous waste produced shall be legally and properly disposed of. All

hazardous waste is regulated by DTSC and the federal Resource Conservation and Recovery Act.

Compliance with California's SB 1383, which mandates a 75% reduction in organic waste sent to landfills by 2025, is essential. SB 1383 also focuses on recovering 20% of edible food waste, aiming to reduce methane emissions, a major contributor to climate change. In addition, the California Green Building Standards Code (CALGreen) mandates that at least 65% of construction and demolition waste must be recycled, further promoting sustainability. It is necessary to verify that local companies are capable of managing these waste streams in compliance with SB 1383 and CALGreen, ensuring safe and environmentally responsible disposal practices.

To efficiently manage both non-hazardous and hazardous wastes generated during construction and operational phases it is imperative to leverage the expertise of private companies which comply with local, state, and federal regulations. To contract with these companies, it is recommended that the newly established or expanded existing Special District oversee the provision of waste disposal services and provide funding through a structured budget allocation. This budget should cover the costs associated with waste collection, transportation, recycling, and disposal services. The Special District will establish clear contract terms, performance metrics, and compliance requirements to ensure that the waste management companies meet all regulatory standards and deliver efficient and effective services. The Special District will also oversee and evaluate how developers are responsibly disposing of hazardous wastes by implementing strict reporting requirements and conducting site inspections to ensure compliance with all hazardous waste management regulations.

The Special District will prioritize minimizing waste generation, maximizing recycling efforts, and ensuring proper storage and disposal of wastes. This will include strict procedures for hazardous waste management, regular collection and disposal schedules, and environmental safeguards to protect air, water, and soil quality. Collaborating with the Imperial Valley Resource Management Agency (IVRMA) and specialized waste management companies will ensure adherence to mandatory recycling regulations and promote sustainable waste management practices.

6.6 Telecommunications and Broadband

Telecommunications and broadband infrastructure will be a critical component for the success of Lithium Valley. High-speed internet and reliable telecommunications will facilitate efficient operations, attract businesses, and support the workforce. These technologies are essential for industrial operations, data management, and communication, ensuring the area can compete on a global scale.

As shown in Figure 6-6, Recommended Broadband Network, it is recommended that broadband fiber cables be installed along the major ingress/egress routes of English, Pound Road, Sinclair Road, and Brandt Road connecting the Phase 1 users to the Statewide broadband network.

6.6.1 Telecommunications and Broadband Recommendations

As further defined in Program I-18, a high level design summary for the Plan Area is recommended to further refine the broadband network map included in this Specific Plan. Consultation of the various broadband agencies and entities will help produce an implementable broadband network.

Telecommunications and broadband may be included as services provided by the newly established Special District. The Special District may be considered for the role of owner of the broadband infrastructure and lease the fiber to a public or private entity, such as but not limited to the Rural County Representative of California (RCRC), Golden State Connect Authority (GSCA), Middle Mile Broadband Initiative (MMBI) or MMBI operator, Imperial Valley Telecommunications Authority (IVTA), Spectrum, Verizon, or AT&T.

As further defined in Policy I-26 and Program I-19, broadband fiber conduit should be installed during any linear utility improvement within the Plan Area.

For immediate, lesser-capacity coverage, point-to-point wireless solutions, such as dish networks, can be deployed. Additionally, satellite broadband, using point-to-multi-point connections with large cellular antennas, can provide shared capacity in remote areas. For temporary and small-scale connectivity, satellite connections, like Starlink, could serve as a viable option for development such as workforce housing or construction trailers.

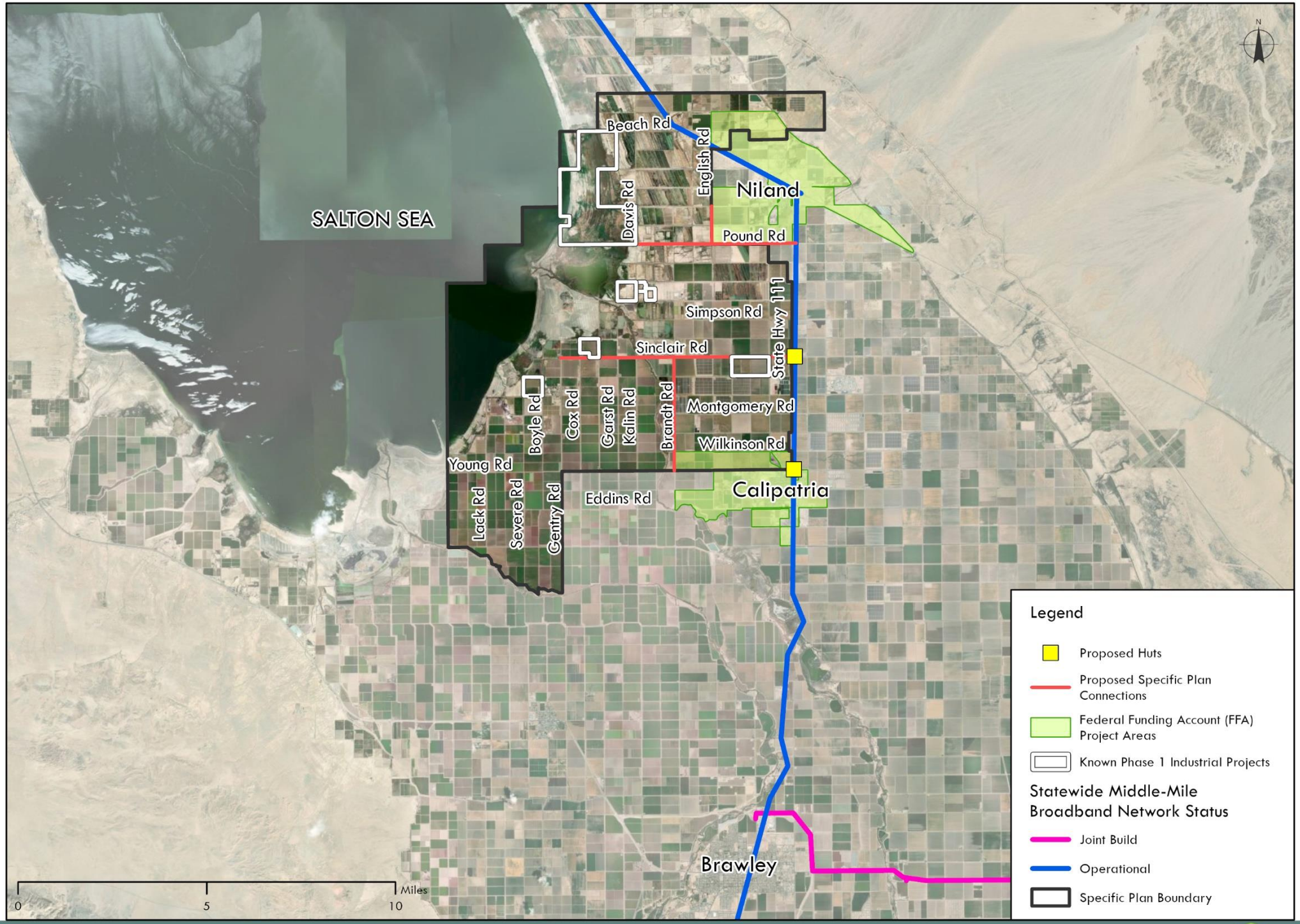

Figure 6-6, Recommended Broadband Network

6.6.2 Initiatives to Leverage

To better prepare and equip the implementing parties of this Specific Plan, there are many initiatives occurring throughout the nation to be aware of, with the goal of connecting unserved Californians to affordable and reliable broadband access. In partnership with GSCA, the County should explore the following initiatives to synergize efforts and bring broadband to parts of Lithium Valley.

California Middle-Mile Broadband Initiative: This initiative aims to build the "middle mile" of broadband infrastructure across California. The "middle mile" refers to the portion of the network that connects the high-capacity core internet backbone to local "last mile" networks, which deliver service to homes and businesses. The proposed routes for leased and pre-construction broadband delivery lines that border the Salton Sea are part of a broader effort to provide connectivity in rural and disadvantaged areas.

California Last-Mile Investments: The "last mile" refers to the final leg of the telecommunications network that delivers internet from the middle mile to end users. These projects often require partnership between local governments, internet service providers, and state agencies to bring fiber or other broadband technologies directly to homes and businesses. The California Public Utilities Commission (CPUC) oversees both the middle-mile and last-mile initiatives and designates Federal Funding Account (FFA) Project Areas to receive funding the FFA to improve broadband access. As shown in Figure 6-6 Recommended Broadband Network, there are last-mile FFA Project Areas in Niland and Calipatria where final connections are to be made.

California Department of Technology (CDT) Joint-Build Partnerships: The CDT has partnered with private companies (e.g., American Dark Fiber, Vero Networks) to accelerate the installation of broadband networks throughout California. These joint-build partnerships focus on shared infrastructure, where multiple stakeholders collaborate to install fiber-optic cables and other necessary components more efficiently.

Early Development Conduit Installations: In new developments, including business parks, mixed-use projects, and data centers, installing fiber conduit early in the planning and construction phases is crucial for future-proofing. such as Data Centers that require significant fiber infrastructure. Collaborating with developers to integrate additional conduit during these early installations can reduce the need for retrofitting in the future.

6.7 Essential Services

6.7.1 Police

Police protection services within the Specific Plan Area will be overseen by the Imperial County Sheriff's Office (ICSO). The closest existing sheriff's station is located in Niland and currently serves the study area. The City of Calipatria's Police Department operates from its station located within its city limits. To meet the anticipated increase in demand, expansion of the ICSO facilities and staffing will be necessary.

The broad geographic area of the Plan Area complicates the capability to provide quick law enforcement responses. Limited resources, including understaffing and insufficient equipment, further affect the efficiency of police operations. Inadequate infrastructure, such as poorly maintained roads and limited communication networks, hinder patrol routes and emergency responses.

Growth in the workforce population due to the introduction of industrial, manufacturing, logistics uses, and workforce housing can strain law enforcement resources without adequate preparation, planning and engagement. Consultation with other law enforcement agencies and emergency services is crucial but complicated by jurisdictional overlaps and differing protocols.

To address these challenges, a new joint fire/police substation is recommended to be constructed during Phase 1 of development to accommodate the requirements of both emergency services, including secured holding areas for corrections and sheriff's custody operations. This joint facility should adhere to recommended size and infrastructure

standards, providing adequate space for personnel, equipment, training facilities, and operational needs. The ICSO will require an influx of sworn officers, non-sworn officers, and support staff. Given that the majority of the Plan Area will not have a residential population, population metrics will be counted by the number of employees working in the various industrial, manufacturing, and logistics sectors within the area.

Before the establishment of any workforce housing, essential public safety services, including law enforcement, should be operational.

6.7.2 Fire

The City of Calipatria Fire Department serves its incorporated area adjacent to the Specific Plan Area, while the County of Imperial Fire Department (ICFD) covers unincorporated areas throughout the region. Station 7 in Niland, staffed with a Captain, Firefighter, and Reserve Firefighter and equipped with a Type I engine, serves as the closest facility to the Plan Area. A Mutual Aid Agreement, adopted among the County Fire Department, cities, towns, and special districts, ensures mutual aid during emergencies without expectation of reimbursement. ICFD's services encompass fire protection, medical response, aircraft rescue firefighting, technical rescue, and hazardous materials incident response.

The Plan Area faces significant challenges regarding fire protection services due to limited infrastructure, personnel shortages, and limited access to water supplies. Rural areas across the County often struggle with insufficient staffing over vast geographic regions. Securing adequate water sources for firefighting is particularly challenging due to the scarcity of hydrants and accessible water sources, necessitating reliance on canals and non-potable water sources that constrain response times and prevention efforts.

With anticipated workforce influx and development in the Plan Area, there will be increased demand on fire protection resources beyond current capabilities. To meet these future demands, ICFD will need to expand services. This includes building additional facilities, acquiring more apparatus, hiring and training additional firefighters, and improving water supply systems to adequately protect the growing population and properties. Any additional fire services needed will be initially funded by Special District funding. As part of the development review process, all discretionary and ministerial project applications shall be reviewed by the Imperial County Fire Department to evaluate fire protection needs. Required fire safety measures, emergency access, and facility improvements—including but not limited to fire hydrants, fire flow availability, and potential fire station upgrades—shall be determined based on the project's potential demand for fire protection services, site-specific risk factors, and applicable local, state, and national fire safety standards.

Before major development begins in the Plan Area, existing fire protection facilities will handle emergency calls. However, preparing for increased service demands necessitates initial expansions in personnel and resources by ICFD. Per the General Plan, the County strives to maintain two full-time firefighters per 1,000 employees to ensure adequate staffing levels to address population growth.

During Phase 1 development, ICFD will recognize the need for a larger, strategically located fire station to optimize emergency responses. Collaborating with the Imperial County Sheriff's Office, both agencies will oversee the construction of a joint police/fire facility. This facility will cater to both agencies with offices, secure parking for emergency vehicles, and provide ample space for essential equipment and personnel.

The joint police/fire facility aims to enhance coordinated emergency response efforts, facilitating seamless collaboration between law enforcement and fire protection services. Its strategic location will prioritize areas with higher population densities or critical infrastructure, thus improving response times and coverage across the Plan Area. Consolidating resources and fostering inter-agency cooperation will enhance operational efficiency, resource allocation, and overall emergency service effectiveness within the region.

Ensuring the Imperial County Fire Department (ICFD) meets fire protection standards in the Specific Plan Area involves providing necessary personnel, equipment, and facilities. The ICFD strives for the performance standards aligned with the National Fire Protection Association (NFPA) Standard 1710 (2020 Edition), governing fire suppression, emergency medical operations, and special operations.

All future development projects within the Plan Area will be accessible by a paved road prior to providing a certificate of occupancy, therefore, improving access to public safety services.

6.7.3 Healthcare and Hospital Facilities

In 2023, the California State Senate Legislature approved Assembly Bill (AB) 918, formally establishing the Imperial Valley Healthcare District (IVHD). The IVHD is tasked with stabilizing and improving healthcare access across Imperial County, particularly in underserved areas. IVHD is expected to oversee hospital operations and collaborate with existing healthcare providers to enhance medical services, reduce redundancies, and address gaps in care.

Currently, healthcare services in Imperial County are primarily delivered by key institutions like Pioneers Memorial Hospital in Brawley and El Centro Regional Medical Center. These hospitals offer a broad range of services, including emergency care, specialized treatments, surgeries, and outpatient services. In addition, the Federally Qualified Health Center (FQHC) Innercare operates clinics in rural areas like Brawley and Niland. Healthcare services will be overseen by the Imperial Valley Healthcare District (IVHD), established to consolidate and improve healthcare access in underserved communities. These centers provide critical primary care services, with the Niland Health Clinic focusing on family medicine and preventive care for underserved populations.

Despite the presence of these healthcare providers, significant gaps remain under existing conditions, particularly in the northern region, extending from El Centro through Brawley, Calipatria, and Niland. Rural areas like Calipatria and Niland experience insufficient access to critical healthcare services. To address these geographic and service gaps, expanding telehealth services and establishing mobile clinics could provide a practical solution for temporary healthcare access. Telehealth can enhance patient-provider interactions by allowing residents in remote areas to consult with healthcare professionals without the need for travel, thereby reducing barriers related to distance and transportation.

Mobile clinics can deliver essential medical services directly to underserved communities, offering preventive care, screenings, and chronic disease management. Together, these strategies can improve healthcare accessibility, ensure timely interventions, and support overall community health. Workforce recruitment and training programs, in collaboration with local educational institutions, are crucial to expanding healthcare capacity.

Environmental health concerns linked to the Salton Sea further complicate the healthcare landscape. Poor air quality exacerbates respiratory illnesses in the region, making it essential for IVHD and other health authorities to install air quality monitoring stations and create asthma treatment centers.

IVHD will be required to provide an annual report to the Imperial County Local Agency Formation Commission (LAFCO) on healthcare service provision within the district. Additionally, IVHD will prepare a Service Area Plan (SAP) that outlines its capability to deliver adequate healthcare services and facilities for both current and future populations. LAFCO will conduct a Municipal Services Review (MSR) of the SAP every five years as an oversight mechanism. During this review, IVHD will update the SAP to reflect revised population estimates, identify planned improvements, and assess capacity constraints. This process ensures that the Plan remains responsive to the changing needs of the community, incorporating data on demographic shifts and service demands.

6.8 Infrastructure Goal, Policies, and Programs

Table 6-5, Infrastructure Goal, Polices, and Programs, below presents the infrastructure policies, and programs that provide actionable directives to support the overarching infrastructure goal, Specific Plan guiding principles and vision statement.

Table 6-5 Infrastructure Goal, Polices, and Programs

Goal 1: Infrastructure (I)	
Develop an innovative infrastructure system that ensures water and wastewater management, efficiently directs stormwater to the Salton Sea, provides reliable power through strategic planning, achieves broad coverage of 5G connectivity, and ensures adequate accessibility to essential services.	
Policy I-1: Reliable Water Supply	Consult with IID to provide a reliable water supply to the Special District through the preparation of a Water Master Plan (WMP). Water consumption in the Plan Area will be monitored at the time of individual project approvals by tracking agricultural land taken out of production against new water demand from buildout of the LVSP. If a project applicant is relying upon reduced agricultural demand to offset the project's water demand, the applicant shall demonstrate the net water demand in the Plan Area has been reduced, or that alternative water supplies will be provided.
Policy I-2: Special District	Manage and distribute water supply, wastewater systems, and solid waste service using a newly formed Infrastructure Special District (Special District). The Special District may establish a new fee structure to fund infrastructure improvements.
Policy I-3: Water Recycling	Require all mineral recovery operations to recycle 20% of their water within the mineral recovery process itself, with the exception of reinjected brine water. Every five years the percentage shall go up 10% until it reaches an 80% water recycling requirement in 2055.
Policy I-4: Wastewater Infrastructure Planning	Establish adequate infrastructure support at each phase. Early projects should utilize engineered septic systems compliant with Regional Water Quality Control Board requirements. As development progresses, upgrade existing wastewater treatment facilities in Niland and Calipatria or construct a central WWTP with tertiary treatment capabilities.
Policy I-5: Environmental Compliance	Improvements to WWTPs shall secure necessary permits and approvals from regulatory bodies, including the California Regional Water Quality Control Board and the US Army Corps of Engineers, to ensure compliance with stringent environmental standards.
Policy I-6: Regulatory Adherence	All applicants for development will comply with federal, state, and local statues and regulations related to floodplain, drainage, and stormwater quality.
Policy I-7: Floodplain Compliance	All applicants for development will comply with Federal Emergency Management Agency (FEMA) floodplain guidelines, policies and regulations if within the FEMA mapped flood zones.
Policy I-8: Drainage Compliance	All applicants for development will prepare a drainage study pursuant to the drainage standards set by the Imperial County Hydrology Manual.

Policy I-9: Construction Stormwater Quality Compliance	All applicants for development will comply with the Construction General Permit (CGP) for all construction activity that disturbs 1 acre or more of soil, including linear underground projects (LUP).
Policy I-10: Post-Construction Stormwater Quality Compliance	All applicants for development will comply with the Municipal Separate Storm Sewer System (MS4) permit.
Policy I-11: Industrial Stormwater Quality Compliance	All applicants for development of industrial activity will comply with the Industrial General Permit (IGP). Industrial activities include facilities that store, treat, recycle, and reclaim sewage, treatment facilities and may also include pump stations and other ancillary facilities.
Policy I-12: Waste Management Oversight and Compliance	The Special District will oversee contracts with waste management companies to ensure compliance with clear terms, performance metrics, and regulatory standards for managing both non-hazardous and hazardous wastes.
Policy I-13: Solid Waste Management	Solid waste will be properly contained in designated collection areas on site and regularly disposed of.
Policy I-14: Compliance	Disposal of solid/hazardous wastes generated during construction and operations will comply with local, federal, state, and county regulations and be disposed of at authorized facilities.
Policy I-15: Waste Management Plans for Permitting	Require waste management plans as a criterion for permitting, demonstrating compliance with waste diversion targets, proper waste handling procedures, and regulatory requirements before project approval.
Policy I-16: Comprehensive Waste Diversion Targets and Auditing	Establish and monitor comprehensive waste diversion targets for construction and operational phases through regular audits and transparent reporting to stakeholders.
Policy I-17: Hazardous Material Handling and Pollution Prevention	Enforce strict procedures for handling hazardous materials to prevent pollution of air, water, and soil during waste management and disposal activities.
Policy I-18: Efficient Waste Storage and Collection	Specify proper waste storage containers, designated areas, and regular collection schedules to optimize waste management practices and minimize environmental impact.
Policy I-19: Integration of Waste Management in Contracts and Training	Integrate waste management requirements into contracts and provide comprehensive training for personnel to ensure adherence to best practices and regulatory compliance.

Policy I-20: Waste to Energy Technology	Explore opportunities for converting non-recyclable waste into energy through advanced technologies like anaerobic digestion or waste-to-energy facilities, contributing to renewable energy goals.
Policy I-21: Microgrids	Support the development of microgrids and distributed energy systems powered by energy storage batteries. Microgrids provide a reliable power supply independent of the main grid, while distributed energy systems decentralize energy generation and consumption, improving overall energy efficiency and reducing losses.
Policy I-22: Support Battery Storage	Promote the integration of renewable energy storage batteries into the grid to alleviate pressure during peak demand periods. Energy storage batteries can recharge from the grid during low-demand periods, facilitating interactive energy exchange and improving grid efficiency while reducing carbon emissions.
Policy I-23: Maximize Existing Transmission	To the extent practicable, maximize utilization of IID's transmission capacity in existing easements or rights-of-way. Encourage the location of all major transmission lines within designated corridors, easements, and rights-of-way.
Policy I-24: Broadband at Transit Hubs	New public transit hubs should prioritize broadband installation for its public users.
Policy I-25: Consult with Transmission Improvements	As roadway infrastructure improvements and IID transmission lines are planned, broadband fiber cables should be considered for parallel installation during roadway and transmission line improvements or construction.
Policy I-26: Leverage Linear Infrastructure	When citing broadband fiber installation, prioritize existing linear infrastructure and planned linear infrastructure improvements such as major roadways and existing IID transmission lines and utility poles to efficiently connect the existing or planned network to development in the Plan Area.
Policy I-27: Regulatory Adherence	The ICFD/Office of Emergency Services (OES) will enforce the current adopted California Fire, Building, and Electrical Codes, County Ordinances, National Fire Protection Association standards, Title 19 of the California Public Safety Code, and the California Health and Safety Code as amended.
Policy I-28: Public Safety Enforcement	The Imperial County Sheriff's Office will enforce California Constitution Article 20, Section 3, and Government Code Section 3102 to uphold public safety, maintain law and order, and safeguard constitutional rights within Imperial County.
Policy I-29: Performance Standards	Strive to maintain performance standards of law enforcement, fire protection and medical emergency response times within the Plan Area, ensuring the safety of the workforce population, the protection of people and property, as well as the preservation of natural resources.
Policy I-30: Emergency Preparedness	Ensure essential public services, including fire, law enforcement, and emergency medical services, are available before the establishment of workforce housing.
Policy I-31: Water Accessibility For Fire	Establish reliable water sources to improve access for firefighting operations in rural areas with limited water supplies. Consult with governing agencies to ensure access to water sources, including canals and drains, to optimize the Imperial County Fire Department's (ICFD) firefighting capabilities in rural areas.
Policy I-32: Development Requirements	Ensure buildings accommodate fire access, appropriate building heights, and adequate infrastructure for water access to facilitate effective emergency response and safety measures.

Policy I-33: Public Safety Standards	Enforce comprehensive policies to uphold fire safety, law enforcement, emergency response, and public services.				
Policy I-34: Underground Utilities	Transmission and gen-tie lines should be undergrounded to the extent feasible. In cases where underground placement is not feasible, the use of grid-enhancing technologies, such as advanced or high-performance conductors should be considered. Additionally, alternative strategies, such as virtual power plants, should be explored to minimize the need for new overhead lines in sensitive habitat areas.				
Policy I-35: Lithium Battery Safety	Facilities manufacturing lithium batteries must adhere to both Federal and California fire safety standards. For example, the California Fire Code contains fire safety requirements like fire safety plans, storage requirements, and auto fire detection and alarm system.				
Program		Responsible Party	Timeframe	Possible Funding Source	Guiding Principle
Water Programs					
Program I-1	At the time of PEIR approval, the County of Imperial shall begin the process to create a new Special District to provide water, wastewater services, and solid waste services to all projects within the Plan Area at the industrial rates. Provide an option for the City of Calipatria and town of Niland to opt into the new Special District as their water provider.	Public Works	1 - 3 Years	EIFD	Proactive Infrastructure & Services
Program I-2	A Water Master Plan will be prepared in consultation with IID to identify water supply infrastructure and policy mechanisms needed to provide long-term water supply to the Special District. See Section 6.1.2 Water Infrastructure for WMP details.	Public Works, Newly Formed Flood Control District	5 - 10 Years	Enhanced Infrastructure Financing District; SCAG Grants	Environmental Stewardship and Responsible Growth; Proactive Infrastructure & Services
Program I-3	Explore alternative water sources for cooling and processing, such as brine or recycled water, as regulated by the California State Water Quality Control Board, to minimize reliance on freshwater resources.	Public Works	1 - 3 Years	RAISE Grant Program	Proactive Infrastructure & Services
Wastewater Programs					

Program I-4	Implement initiatives, including a Sewer Master Plan, that collectively aim to modernize wastewater management in the Plan Area, ensuring better environmental protection, more efficient use of resources, and water reclamation: a. Define measurable benchmarks for infrastructure upgrades and specify phased transitions from septic systems to centralized treatment options, integrating water reclamation technologies. b. Improve the capacity and operational efficiency of Niland and Calipatria wastewater treatment plants to handle projected increases in wastewater volume, emphasizing water conservation and pre-treatment before entry into centralized treatment facilities. c. Plan and build a central WWTP with advanced tertiary treatment capabilities to ensure sustainable water management practices, including rigorous pre-treatment processes to safeguard environmental quality.	Public Works	8-10 years (in phases)	Enhanced Infrastructure Financing District; SCAG Grants	Proactive Infrastructure & Services
Program I-5	Effectively manage wastewater infrastructure development and operations through strategic oversight, private-public collaboration, and continuous improvement: a. Foster collaborations between private investors and public entities through incentivized tax credits, streamlined permitting processes, and proactive community engagement to promote water conservation and sustainable practices. b. Implement monitoring and reporting protocols to maintain regulatory compliance, focusing on effluent quality	Public Works	Ongoing	Enhanced Infrastructure Financing District; SCAG Grants	Proactive Infrastructure & Services

	and sustainable water reclamation practices, and secure ongoing funding for continuous wastewater treatment improvements.				
Stormwater/Drainage Programs					
Program I-6	Construct and maintain a river corridor in a phased approach for the Alamo River and New River that is wide enough to contain and convey the 100-year peak flow from its tributary and reduce the 100-year floodplain that currently encompasses a large portion of the Specific Plan Area.	Public Works, Newly Formed Flood Control District	5 - 10 Years	Enhanced Infrastructure Financing District; SCAG Grants	Environmental Stewardship and Responsible Growth
Program I-7	Identify and implement stream restoration, habitat mitigation, and wetland creation projects within the corridor.	Public Works	Ongoing	Environmental Enhancement and Mitigation Grant Program	Environmental Stewardship and Responsible Growth
Program I-8	Establish a dedicated flood control district tasked with overseeing the development, operations and maintenance of the stormwater channels, Alamo River Corridor and New River Corridor, utilizing Enhanced Infrastructure Financing District (EIFD) mechanisms to fund critical infrastructure upgrades, including advanced water reclamation technologies.	Public Works; Flood Control District (to be established)	1 - 3 Years	Enhanced Infrastructure Financing District; SCAG Grants	Environmental Stewardship and Responsible Growth
Program I-9	Prepare a Drainage Master Plan after the approval of the PEIR that defines drainage and stormwater infrastructure improvements needed to meet the long-term generation rates within the Plan Area. This may include hydraulic and hydrology studies and drainage plans.	Public Works	1 - 5 Years	Enhanced Infrastructure Financing District; SCAG Grants; General Fund	Proactive Infrastructure & Services
Program I-10	Secure all required permits and approvals from resource agencies (US Army Corps of Engineers, California State Water Resources Control Board, and California	Public Works	Ongoing	General Fund; Development Impact Fees	Environmental Stewardship and Responsible Growth

	Department of Fish and Wildlife), ensuring strict adherence to environmental standards and operational guidelines for the stormwater drainage infrastructure projects.				
Program I-11	Streamline permitting process and proactively engage with the community to promote sustainable stormwater quality and drainage practices.	Planning and Development Services	1 - 3 Years	General Fund	Environmental Stewardship and Responsible Growth
Program I-12	Plan and build Regional Low Impact Development (LID) Treatment Best Management Practices (BMPs) in select strategic locations to eliminate need for such BMPs at an individual project level.	Public Works	4 - 7 Years	RAISE Grant Program	Environmental Stewardship and Responsible Growth
Program I-13	Establish a cash-in-lieu system for applicants of development to pay and fund the construction, operation and maintenance of Regional LID BMPs. Fees shall be proportional to the development size or treatment volume required.	Planning and Development Services	1 - 3 Years	General Fund	Environmental Stewardship and Responsible Growth
Electrical Transmission Programs					
Program I-14	Continue consultation with IID to establish a programmatic transmission plan to: a. Identify the appropriate transmission voltage and transmission routes needed to accommodate planned development in the Plan Area b. Identify service provider(s) to operate and maintain transmission into the Edison system in which information will be shared.	Public Works	1 - 3 Years	General Fund	Proactive Infrastructure & Services
Program I-15	As roadways are improved, retrofit streetlights with LEDs.	Public Works	5 - 10 Years	Enhanced Infrastructure Financing District (EIFD); California Energy	Proactive Infrastructure & Services

				Commission (CEC) Grants	
Program I-16	Identify County owned land near existing transmission lines that can be leased to third parties to install and operate ground mounted solar photovoltaic projects.	Public Works	5 - 10 Years	General Fund	Proactive Infrastructure & Services
Program I-17	Where feasible, the County shall supply municipal facilities with on-site renewable electricity.	Public Works	1 - 3 Years	California Energy Commission (CEC) Grants	Proactive Infrastructure & Services
Telecommunication and Broadband Programs					
Program I-18	In partnership with Golden State Connect Authority (GSCA), Imperial County shall prepare a high level design summary for the Plan Area to further refine the broadband network map included in this Specific Plan. This may be prepared by a qualified contracted consultant. Representatives from the Rural County Representatives of California (RCRC), California Middle Mile, Broadband Initiative and the Department of Technology (MMBI) shall be consulted during the preparation of the high level design summary.	Planning and Development Services; Department of Public Works	1 - 5 Years	Special District; Enhanced Infrastructure Financing District; Development Impact Fees; SB 156; FFA Last Mile Award	Proactive Infrastructure & Services
Program I-19	As part of any linear utility improvement projects within the Plan Area, such as roadway paving, water or sewer installation, or transmission upgrades, the responsible agency should consult with the County Public Works Department to consider the installation of fiber conduit during improvement/installation of said utility.	Department of Public Works Imperial Irrigation District (IID)	1-7 Years	Special District; Enhanced Infrastructure Financing District; Development Impact Fees; SB 156; Lithium Valley Excise Tax	Proactive Infrastructure & Services
Solid Waste Disposal Programs					

Program I-20	The newly formed special district shall oversee contracts with waste management companies, ensuring clear terms, performance metrics, and regulatory compliance.	Public Works	Ongoing	General Fund	Proactive Infrastructure & Services
Program I-21	Require waste management plans as a criteria for permitting, ensuring that projects must demonstrate compliance with waste diversion targets and proper waste handling procedures before receiving approval.	Planning and Development Services	Ongoing	General Fund	Proactive Infrastructure & Services
Program I-22	Establish comprehensive waste diversion targets for construction and operational phases, with measurable milestones to track progress and ensure compliance.	Public Works	Ongoing	General Fund	Environmental Stewardship and Responsible Growth
Program I-23	For projects generating more than 30,000 tons of solid waster per year, conduct regular audits and reporting on waste generation and diversion rates, with transparent documentation of results to stakeholders.	Public Works	Ongoing	General Fund	Environmental Stewardship and Responsible Growth
Program I-24	Require applicant to comply with procedures for handling hazardous materials and ensure compliance with all regulations.	Public Works	Ongoing	General Fund	Environmental Stewardship and Responsible Growth
Program I-25	Specify proper storage containers and designated areas for waste, with regular collection schedules.	Public Works	Ongoing	General Fund	Environmental Stewardship and Responsible Growth
Program I-26	Implement regulations to prevent air, water, and soil pollution during waste handling and disposal.	Public Works	Ongoing	General Fund	Environmental Stewardship

7. Community Health and Prosperity

This chapter articulates the tools for fostering community health and prosperity within the Lithium Valley Specific Plan Area. The importance of community health and prosperity spans beyond the authority of this document, a land use regulatory document, which is why the County has undertaken multiple supplemental initiatives to provide economic and quality of life improvements to the local community.

7.1 State Laws

California's lithium extraction excise tax, part of SB125, will be collected for every metric ton of lithium extracted. A portion of those funds will be used towards Salton Sea restoration projects, and the rest will be distributed locally to directly and indirectly affected communities, the Lithium Community Benefits Program, and County service divisions. This Specific Plan may help guide the implementation of the Lithium Community Benefits Program, as well as guide the County services divisions towards the community and infrastructure improvement included herein.

7.2 Imperial County Programs

In consultation with local stakeholders, Imperial County concurrently prepared and created the Lithium Valley Construction Workforce Ordinance for Recruiting, Retention, Knowledge and Safety (Lithium Valley Construction WORRKS). The purpose of Lithium Valley Construction WORRKS is to create high road construction career pathways, strengthen local hiring and apprenticeship opportunities, ensure skilled and trained workforce standards, and promote public health and safety.

Imperial County has also put forward the Good Neighbor Community Benefit Agreement (CBA) Program which encourages companies to commit to the following six pillars:

1. Local & Priority Hiring
2. Workplace Safety & Quality Standards
3. Education and Skill Building
4. Community Engagement
5. Advancing Infrastructure
6. Supporting the Local Economy

The Good Neighbor CBA Program applies to interested existing or new industrial businesses or projects wanting to demonstrate community commitment and engagement. As such, the Good Neighbor CBA Program, may apply to many of the companies and projects looking to operate in the Plan Area. The Lithium Valley Specific Plan and the implementation processes described in Chapter 8, Implementation, offer an implementing mechanism to show compliance with the Good Neighbor CBA Program. As such, the six pillars are reflected in Community Health and Prosperity policies in Table 7-1.

The Imperial County Workforce Development Board (WDB) is responsible for preparing and adopting the Southern Border Regional (SRB) Plan which identifies tested innovative strategies for partnerships with high road employers. The SRB Plan's five strategic pillars guide their work to helping Imperial County residents sustain quality careers and help businesses thrive while growing the economies. The five pillars include:

1. Inclusive Business Growth

2. Job Quality
3. Outcomes-Focused Funding
4. Population-Specific Interventions
5. Two-Generational

The SRB Plan identifies potential funding opportunities for supportive initiatives that may benefit the future Lithium Valley community and it's neighboring communities. Future initiatives under the SRB Plan may include adult education programs, high-road training partnerships, vocational training, and supportive services.

Imperial County Workforce Development Board is also responsible for updating the Local Workforce Development Program, which develops a four-year plan with strategies for improving the workforce system in Imperial County. The guiding themes to these strategies are:

1. Training for Emerging Industries
2. Increasing Digital Access and Equity
3. Consolidating Planning
4. Increasing Resource Sharing Among Partners

Organizations operating within the Plan Area would be encouraged to become an America's Job enter partner and enter into a Memorandum of Understanding (MOU) with the Imperial County WDB.

Chapter 4, Development and Design Standards, offers standards that provide the community with quality development that both looks impressive, and operates with efficiency and integrity. Development applications within the Plan Area must show substantial conformance with those standards, in accordance with Section 8.1.2A, Substantial Conformance Review.

7.3 Tribal Heritage Trail

The County of Imperial, in consultation with local tribal members, is planning a future cultural trail that will honor and respect areas of importance to tribal communities. As illustrated in Figure 7-1, Illustrative Tribal Heritage Trail, the envisioned trail would connect multiple tribal cultural resources, with interpretive signage placed along the route to help users understand the history of the sites, highlight pre-contact trails, and share the cultural value of these locations. All signage content will be developed in consultation with the tribes to ensure accuracy, cultural sensitivity, and appropriate storytelling. Due to environmental conditions and feasibility for the public to safely access the sites, the trail is anticipated to be developed in two phases, with Phase 1 extending from McNerney Road to Red Island and Phase 2 proposed to continue north to the New Mud Pots, as shown in Figure 7-1, Illustrative Tribal Heritage Trail. Phase 1 of the trail would be complete by buildout of Phase 1 of the LVSP. Funded through developer impact fees and contributions associated with Lithium Valley development, the trail will be constructed gradually as the broader Lithium Valley area builds out. Phase 2 of the heritage trail will require feasibility studies to assess whether it can be constructed given the terrain (wetlands, hazards), and if determined feasible constructed before completion of Phase 3 of the LVSP.

7.4 Community Health and Prosperity Goal, Policies, and Programs

The goals, policies, and programs included in Table 7-1, Community Health and Prosperity Goal, Policies, and Programs, provide the overarching goal, targeted policies, and programs related to economic empowerment, public health, and workforce development. These policies and programs that provide actionable directives to support the overarching community health and prosperity goal, Specific Plan guiding principles and vision statement.

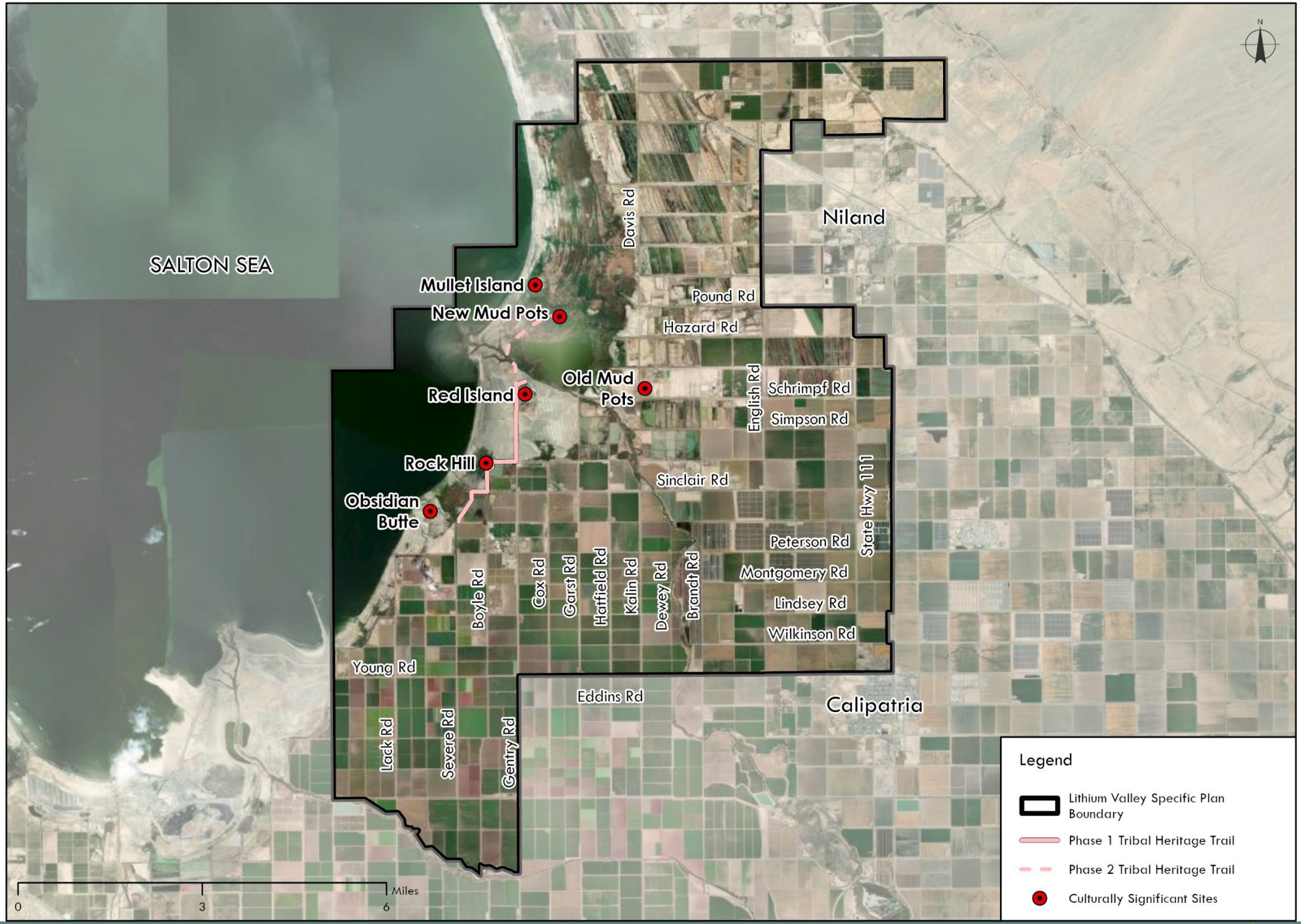

Figure 7-1, Illustrative Tribal Heritage Trail

Table 7-1 Community Health and Prosperity Goal, Policies, and Programs

Goal 5: Community Health and Prosperity (HP)	
Promote a sustainable employment hub rooted by renewable energy that provides mechanisms to improve the physical and economic health of the nearby communities.	
Policy HP-1: Best Practice for Quality of Life	Promote best practices that improve employees, community members, and visitors of Lithium Valley access to clean air, reliable clean and affordable water, affordable housing, and places to recreate.
Policy HP-2: Healthy Communities	Promote workforce support and community health and well-being, including access to high-quality healthcare services, healthy food options, recreational opportunities, and mental health support. Look for ways to reinforce the goals and strategies of the 2024-2027 Community Health Improvement Plan (as amended).
Policy HP-3: Economic Stewardship	Create pathways for economic growth and diversification, leveraging the opportunities presented by the incoming industry to generate employment, entrepreneurship, and investment in local businesses and industries. This may include encouraging employers to provide comprehensive benefits to full-time employees such as healthcare insurance, dental and vision insurance, 401k matching and/or retirement program. The County may also encourage employers to provide their employees with competitive salary and performance-based incentive opportunities.
Policy HP-4: Electric Vehicle Charging	Facilitate the deployment of EV charging infrastructure through the collaboration with local organizations to identify the best locations, funding mechanisms, and maintenance plans for EV charging stations.
Policy HP-5: Seamless Pathways	Create seamless pathways between high schools, community colleges, and vocational training programs to facilitate the transition of students into high-demand careers. The County shall encourage and foster partnerships between employers and local educational institutions.
Policy HP-6: Local Hiring	All employers shall practice local hiring strategies that prioritize Imperial County residents for direct employment, with an applicant's good faith of hiring 40% local workers, especially in construction, operations, maintenance, and administrative roles.
Policy HP-7: Local Training Programs	Encourage the establishment of necessary and applicable renewable energy training programs in local school systems in association with the renewable energy industry. Employers will be encouraged to offer pre-approved professional development courses or trainings to employees may attend either free of charge or offer reimbursement.
Policy HP-8: Reduce Dust	Minimize fugitive windblown dust from unpaved roads and surfaces, especially related to truck traffic and agricultural operations.
Policy HP-9: Renewable By Phase 2	Mandate the use of 95 percent (on average) renewable energy in the mineral recovery process by 2040, which may include credit for any renewable energy generated by the project.
Policy HP-10: Climate Resilience	Explore FEMA funding mechanisms for climate-resiliency technology and infrastructure development that address environmental injustice.
Policy HP-11: Reliable Water	Prioritize projects that secure reliable and affordable water sources for municipal water use within the Plan Area and the neighboring vulnerable communities.

Policy HP-12: Cooling Centers	Allow for and promote cooling centers within the Specific Plan Area to protect the workforce and visitors of Lithium Valley from extreme heat.
Policy HP-13: Zero-Emission Transportation	Continue to consult with the Imperial County Transit Commission to offer zero-emission transportation methods throughout the North End of Imperial County.
Policy HP-14: Prioritize Disadvantaged Communities	Prioritize community improvements in the existing disadvantaged communities identified in SB 125. In doing so, engage with community leaders, organizations, and residents to understand their concerns and priorities related to environmental justice and pollution burdens.
Policy HP-15: Salton Sea Restoration Partnerships	Continue consultation and partnerships with the organizations working on Salton Sea restoration and enhancement projects, such as: the Salton Sea Authority, California Natural Resource Agency (CNRA), IID, Audubon California, and the Sierra Club.
Policy HP-16: Skilled and Trained Workforce	The County will encourage the construction of projects within the Specific Plan area by a skilled and trained workforce.
Policy HP-17: Career Education	Encourage local high schools and community colleges to expand articulation and dual enrollment courses in career education and technical fields to provide students with early exposure to industry-relevant skills and opportunities to earn college credits. The County may ask local employers to provide in-class presentations at local schools and universities.
Policy HP-18: Dust Suppression	To demonstrate compliance with ICAPCD Rules 800-806, all construction activities within the Specific Plan Area must implement the following dust control measures at a minimum: • Water the exposed area three times per 8-hour workday at a minimum • Water demolished area two times per 8-hour workday at a minimum • For on-road fugitive dust, water unpaved roads two times daily at a minimum • Limit vehicle speeds on unpaved roads to 15 miles per hour • Sweep paved roads one per month at a minimum • Pave unpaved roads as soon as feasible during the construction process.
Policy HP-19: Paved Roads	The County will ensure that all future development projects within the Plan Area are accessible by a paved road prior to providing a certificate of occupancy.
Policy HP-20: Emergency Generators	The County will encourage through streamlined permitting/processing the use of alternative fuels and low emission engines designs for all emergency generators with the plan area to the extent feasible.
Policy HP-21: Limit Solar Development Dust	New solar development shall seek alternative ground-disturbing techniques to avoid disc-and-roll in order to reduce dust production.

Program		Responsible Party	Timeframe	Possible Funding Source	Guiding Principle
Program HP-1	Continue community planning efforts and engagement with the local communities of Niland and Calipatria to provide greater definition to the Community Opportunity Areas land use designations. This may include future master planning efforts or Specific Plan Amendments once there is sufficient demand for such uses in these areas.	Planning & Development Services Dept.	4 - 6 years	General Fund	Advancing Opportunities; Job Creation and Local Economy; Community Engagement; Transformative and Innovative Planning
Program HP-2	Increase or bolster fire protection services in the Specific Plan area.	Fire Department	Ongoing	USDA Communities Facilities Direct Loans and Grants	Proactive Infrastructure and Services
Program HP-3	Implement County-led water conservation measures, infrastructure upgrades, and sustainable water management practices to offset diminishing water supplies from the Colorado River, and encourage IID to do the same.	Agricultural Commissioner; Public Works; Planning and Development Services	Ongoing	SCAG Grants; USDA Grants and Loans	Proactive Infrastructure and Services
Program HP-4	Implement standards that reduce the heat island effect through site design and landscaping practices.	Planning & Development Services Dept.	Ongoing	General Fund	Environmental Stewardship and Responsible Growth
Program HP-5	Facilitate the deployment of air quality monitors within the Specific Plan Area through collaboration with local organizations to identify the best locations, funding mechanisms, and maintenance plans for air quality monitoring stations. This effort may also recommend and implement colored flags to signify Air Quality Index (AQI) levels.	Air Pollution Control Department	4 - 6 years (depending on the timing of development)	Development Impact Fees	Environmental Justice; Environmental Stewardship and Responsible Growth

Program HP-6	In addition to what is required in Section 4.2.1B. Indoor and Outdoor Break Areas, develop an incentive program for employers to provide indoor air purifiers to improve indoor air quality.	Air Control District; Public Health Department	1 - 3 years	General Fund; Development Impact Fees	Proactive Infrastructure and Services
Program HP-7	All diesel-fueled off-road equipment shall meet EPA-rated Tier 4 Final engines consistent with Cal. Code Regs., tit. 13 § 2449 et seq. Electric or net-zero emissions equipment is preferred when commercially available and would also meet this requirement.	Air Pollution Control Department;	1 - 3 years	General Fund	Environmental Justice; Environmental Stewardship and Responsible Growth
Program HP-8	Facilitate the deployment of seismic activity monitors within the Specific Plan Area through collaboration with local organizations to identify the best locations, funding mechanisms, and maintenance plans for seismic activity monitoring stations.	County Executive Office; Planning and Development Services	4 - 6 years (depending on the timing of development)	General Fund; Development Impact Fees	Proactive Infrastructure and Services
Program HP-9	Pursue funding or subsidies for healthcare facilities to implement one-time or long-term health initiatives to provide comprehensive services to future employees and residents. This may include funding for establishment and operations of a new program at the County Public Health department.	Public Health Department	Ongoing	California Health Facilities Financing Authority	Proactive Infrastructure and Services
Program HP-10	Consult with local agencies to establish career centers in key locations across the county (El Centro, Brawley, Imperial, and Calexico) to rapidly connect residents with open jobs and provide resources for career development and training.	Planning & Development Services Dept.	1 - 3 years	General Fund	Job Creation and Local Economy
Program HP-11	Utilize the Lithium Valley Economic Opportunity Plan (LVIP) to attract private investment and partnership opportunities	Planning & Development Services Dept.	1 – 3 years	General Fund	Job Creation and Local Economy

	from industry and government entities at the state and federal levels.				
Program HP-12	Pursue funding sources to establish a career center in key locations in proximity to the Plan Area (such as Calipatria, Westmorland, Brawley) to rapidly connect residents with open jobs and provide resources for career development and training.	Workforce & Economic Development	4 - 6 years (depending on the timing of development)	CA Employment Development Department Grants; General Fund; Development Impact Fees	Advancing Opportunities; Job Creation and Local Economy
Program HP-13	Industrial projects shall submit a Safety and Health Program as part of the development application demonstrating their compliance with applicable Cal/OSHA and Federal OSHA regulations, and shall address safety protocols including but not limited to: a. Workplace hazards and risk mitigation strategies b. Emergency response protocols and reporting mechanisms c. A schedule for regular internal audits and compliance reviews d. Ongoing worker training to understand how the program works and how to carry out the responsibilities assigned to them under the program.	Public Health	Ongoing	Developer	Job Creation and Local Economy
Program HP-14	The County should create and maintain an 'Employment' tab on the Lithium Valley website to list all Specific Plan Implementation programs, a list of state approved apprenticeship programs and nonprofit initiatives and, if provided, job and training opportunities.	Workforce & Economic Development	Ongoing	General Fund	Job Creation and Local Economy

8. Implementation

The Implementation Chapter serves as a crucial component of the Lithium Valley Specific Plan, providing a comprehensive roadmap for bringing the Lithium Valley vision to fruition. This chapter outlines the project review process within the Plan Area; it outlines the maintenance responsibilities necessary to sustain the quality and longevity of the built infrastructure; it details known development incentives designed to attract desirable investments; it lists possible financing and funding mechanisms that may support the various programs initiatives, ensuring financial viability and sustainability. This section outlines the application and review process required for all development applications within the Specific Plan Area.

8.1 Application and Review Process

The County of Imperial oversees the implementation of this Specific Plan through the review of individual development project applications. All applications shall be submitted to the Planning and Development Services (PDS) department consistent with submittal requirements described in Section 90104.00 of the Land Use Ordinance. Within 30 days of receipt of submittal, the PDS department shall review each development application for completeness in accordance with the Permit Streamlining Act and County Code Section 90104.01 (as amended). The County may prepare a specific LVSP application, however applicants shall be responsible for providing all information necessary to assess consistency with the LVSP, including but not limited to water supply availability (PolicyI-1).

All proposed development shall be subject to an approval process, requiring one or more of the following stages of approval:

1. Pre-application Meeting (optional)
2. Site Plan Review/Substantial Conformance Review
3. Facility Decommissioning Plans (if needed)
4. Special Use Permit (if needed)
5. Specific Plan Amendment (if needed)
6. Subsequent Environmental Review (if needed)

Future development applications within the Specific Plan Area will either be processed through ministerial review or discretionary review. Ministerial review is a straightforward, non-discretionary process where the County evaluates the project through Site Plan Review and Substantial Conformance Review, as defined below. Development applications proposing by-right uses listed in Table 3-2, Use Table, are intended to use the ministerial review process. Additionally, applications for a Phase Exchange or Expansion Process (Section 3.3.1) may be processed ministerially. If the project meets all requirements, it must be approved. No public hearings are involved.

Discretionary review is case-by-case approval process where County reviewers and decision-makers exercise judgement in determining whether a project is appropriate, through some type of permit. Discretionary review is exercised through the process described in Section 8.1.3 Discretionary Review Process. Applications for a Special Use Permit or Specific Plan Amendment shall be processed via the discretionary review process. Supplemental environmental review may be needed for discretionary review projects; see Section 8.1.3(C) Subsequent Environmental Review.

8.1.1 Pre-Application Process

Prior to submitting an application for development within the Plan Area, potential applicants are encouraged to request a pre-application conference to review development proposals before formal submission. This step aims to familiarize both the County and the applicant with the project intentions, Specific Plan policies, applicable codes, and site constraints. Following receipt of a complete application and completion

of any required determination and action pursuant to CEQA, the PDS director shall issue a written determination of the project's compliance with the Specific Plan and any conditions of project approval as recommended by any County officials or affected agencies.

8.1.2 Ministerial Site Plan Review

Once a development application is submitted and deemed complete, internal County staff review will begin. The PDS department may approve a site plan review permit for development applications upon making the following findings:

1. The submitted site plan has been found to be in substantial conformance with the Specific Plan, pursuant to Section A, Substantial Conformance, below.
2. The submitted site plan, provides all applicable supplemental plans such as a Landscape Plan pursuant to Section 4.3.4(a)(9); a Signage Program; or a Facility Decommissioning Plan, pursuant to Section B.
3. The Imperial County Fire Department has evaluated and approved the plans for adequate fire protection.

A. Substantial Conformance

Once the application is deemed complete, PDS shall conduct a Substantial Conformance Review (SCR) to determine whether the application is consistent with the Lithium Valley Specific Plan (including incorporation of Standard Use Conditions from Section 3.5) and all other County applicable regulations. If approved, the applicant may submit formal application and structurally engineered plans. The goal of the SCR process is to evaluate development projects for consistency and compliance with land use standards (LVSP Sections 3.1 through 3.5), and development standards (LVSP Sections 4.1 through 4.2), Section 5.1.2 Truck Routes, and Policy I-1 Reliable Water Supply. Overall, the SCR process ensures that developments within the Lithium Valley area remain consistent with the established planning framework and environmental goals. No grading permit, foundation permit, building permit, land use permit, or permit for a change of use would be issued for a revised development project within the Specific Plan Area until the County has reached an SCR consistency finding.

The steps for a site plan achieving "substantial conformance" are as follows:

a. Evaluation Criteria: The SCR process involves a comprehensive review of the project against approved exhibits, permit conditions, and applicable land-use policies in the Specific Plan. The evaluation ensures alignment with the overarching vision and guiding principles of the Lithium Valley Specific Plan.

b. Project Review: Each proposed development is evaluated on a case-by-case basis, considering its adherence to the Specific Plan's goals, policies, and standards. The review determines whether the project is compatible with and enhances the established or desired development character of the Lithium Valley vision. The decision may be appealed to Planning Commission. The Planning Commission's decision shall be final unless an appeal, (if so permitted by this title) is made to the Board of Supervisors and is filed with the clerk of the board within ten (10) calendar days as provided under Section 90101.10 of the County Code.

c. Flexibility: The SCR process allows for flexibility to accommodate changes or improvements over time while ensuring developments align with the Specific Plan's vision and environmental goals.

B. Facility Decommissioning Plans

The purpose of this section is to ensure the responsible and safe closure and decommissioning of renewables and industrial-type operations when they are deemed inoperable or economically unviable. Proper decommissioning safeguards public health, minimizes environmental

risks, and ensures that sites are restored to a condition suitable for future use.

All uses listed under 'Renewables and Industrial-Type Uses' in Table 3-2, Use Table, are required to submit a decommissioning plan as part of their application for building permits. The decommissioning plan must be reviewed and approved prior to the issuance of a building permit. The decommissioning plan shall be updated every five years and re-submitted to the regulatory authorities with proof of financing, processed ministerially. When updating a decommissioning plan, costs should be updated to reflect market changes such as inflation. The decommissioning plan shall include but not be limited to:

- An estimated timeline for decommissioning implementation;
- A cost estimate of facility decommissioning and remediation that could occur;
- A requirement for financial assurances, such as bonding, insurance, or a letter of credit, to cover the estimated cost of decommissioning and site remediation. These financial mechanisms must ensure that sufficient funds are available to complete decommissioning, even in the event of insolvency or financial difficulties for the operator;
- A detailed inventory of all structures, equipment, and materials that would need to be decommissioned and removed;
- A plan for soil stabilization;
- Environmental remediation of any site contamination caused by the facility operations and the plan for how land will be restored to suitable conditions.

8.1.3 Discretionary Review Process

Construction documents are submitted to the PDS for review. Plans are evaluated amongst relevant Imperial County departments for adherence to the Specific Plan standards and design guidelines. Proposed projects, including signage and new land uses within existing structures, undergo administrative review to ensure compliance with the Specific Plan and County Zoning Ordinance.

A. Special Use Permit Process

Some development applications are expected to require only administrative action by the PDS director (e.g., site plan review with requisite fees), except where a Special Use Permit, or other discretionary action is required by the County. A Special Use Permit (SUP) may be processed for a use specifically identified within Table 3-2, Use Table, and only if the proposed use conforms to the standards and conditions of this Specific Plan. A written application provided by the PDS shall be filed with the PDS accompanies by all information identified under Section 90104.00 of the Imperial County Municipal Code, as well as a Landscape Plan pursuant to LVSP Section 4.3.4(a)(9), Signage Program pursuant to LVSP Section 4.2.10, and if applicable, a Facility Decommissioning Plan pursuant to LVSP Section 8.1.2(B). Applications shall also include requisite fee(s) and any other information the department deems necessary.

The PDS director is granted authority to investigate, consider, approve and/or deny any special use permit application. The PDS director acting as a hearing officer shall conduct a duly noticed public hearing and consider all relevant facts, and hear all proponents and opponents. Notice for the hearing shall be provided in accordance with Section 90104.03(A) of the County Code.

The PDS director may administratively, without holding a public hearing, forward a conditional SUP application to the Planning Commission for hearing. The Planning Commission shall have the authority to investigate, review, and approve or deny any conditional SUP application.

The Planning Commission's decision shall be final unless an appeal, (if so permitted by this title) is made to the Board of Supervisors and is filed with the clerk of the board within ten (10) calendar days as provided under Section 90101.10 of the County Code.

The decision-making body may approve a Special Use Permit only if:

1. Findings can be made that the proposed project is consistent with the Lithium Valley Specific Plan;
2. The Director of Public Works, the Public Health Department Deputy Director, and the Fire Chief/OES Coordinator have reviewed the proposed project;
3. Environmental impacts have been mitigated to the extent feasible by the imposition of conditions;

Under Section 90203.10 of the County Code, the Imperial County Planning Commission may determine that an unlisted use is similar to permissible or special uses identified in Chapter 3.

B. Specific Plan Amendment

This Specific Plan can be amended pursuant to the provisions of the California Government Code (Sections 65453-65454). A Specific Plan Amendment shall be prepared in the same manner as general plans, as established in County Code Title 9, Division 2, Chapter 5, General Plan Amendments, except that a Specific Plan Amended mya occur as often as deemed necessary.

C. Subsequent Environmental Review

Subsequent development applications within the Plan Area must be evaluated to determine if additional CEQA documentation needs to be prepared. If a later activity would have environmental effects that were not examined in the PEIR, a new initial study would need to be prepared, consistent with CEQA's requirements, leading to either a Supplemental/Subsequent EIR or a negative declaration or mitigated negative declaration. That analysis may tier from the PEIR as provided in CEQA Guidelines. CEQA's tiering provisions allow agencies to rely on broader program-level environmental documents for later projects that are within the PEIR's scope. Projects requiring a Special Use Permit will be subject to County staff's discretion and may also provide an opportunity for public input during the review process.

As outlined in the CEQA Guidelines, the factors considered by the reviewing agency in determining the scope of a later activity include its consistency with allowable land use guidance from the Specific Plan, the planned density, building intensity, geographic area for environmental impacts, and covered infrastructure as outlined in the PEIR. If a later activity would have effects not covered in the PEIR, a new Initial Study may be required, potentially leading to either an EIR or a Negative Declaration (CEQA Guidelines Section 15162 and 15163).

1. Incorporation of Mitigation Measures: Feasible mitigation measures and alternatives adopted by the Board of Supervisors are integrated into later activities, ensuring that environmental concerns are addressed throughout the program's implementation.
2. Project-Level Assessment: For site-specific operations, a written checklist or similar tool should be used to assess if the environmental effects of the operation align with the scope of the PEIR.
3. Utilization of PEIR with Subsequent EIRs and Negative Declarations: The PEIR serves as a basis for determining whether subsequent environmental documents will be required while providing comprehensive information on significant effects, regional influences, cumulative impacts.

Residential projects, such as construction housing and operational workforce housing, and any zoning changes undertaken to implement the Specific Plan may also be exempt from the California Environmental Quality Act (CEQA) pursuant to Government Code Section 65457 or other exemption or statute.

8.1.4 Maintenance Responsibilities

This section delineates the obligations and duties for the upkeep of the recommended infrastructure improvements within the Lithium Valley Specific Plan area and greater vicinity. This section ensures that all infrastructure elements such as roads, utilities, and landscaping are routinely maintained to adequate standards. By clearly defining the roles and responsibilities of various stakeholders, including public agencies and newly formed maintenance districts, this section aims to promote accountability and long-term sustainability. When multiple entities are identified as the Maintenance Responsibility, it has yet to be determined which agency has long-term maintenance responsibility. In these cases, an interim agency is also listed. Where applicable, maintenance of these infrastructure elements may be funded by taxes retained by the Community Services District that is proposed for the Specific Plan Area. Maintenance of infrastructure may also be funded by the Lithium Valley Enhanced Infrastructure Financing District. See Section 8.3 Financing and Funding Mechanisms for more details on financing mechanisms.

Table 8-1 Maintenance Responsibilities

Infrastructure	Maintenance Responsibility
Roads	Caltrans, Public Works, Special District
Bridges	Public Works, Community Services District
Electrical Transmission	IID
Broadband Fiber	Service Provider, IVTA
Sewer	Special District
Water	Special District
Landscaping	Special District
Drainage	IID, Special District
Parks	Special District

8.2 Available Development Incentives

The Specific Plan calls for the County of Imperial to consult with various funding partners and economic development-oriented entities in California and beyond to formulate a program of development incentives to support and sustain projects within the Plan area. The following represent some of the likely development incentives as the Specific Plan moves through implementation:

- Enhanced Infrastructure Financing District (EIFD)
- California Economic Resiliency Fund Program
- GoBiz manufacturing incentives and grants
- Workforce Training Funding (ETP)
- Small Business Technical Assistance Program (SBTAP) Funding
- Partial Sales and Use Tax Exemption
- Full Sales and Use Tax Exclusion
- Research and Development (R&D) Tax Credits
- New Employment Tax Credit
- Homeless Hiring Tax Credit
- CHIPS Act
- California Competes Tax Credit
- California STEP Grant for International Expansion
- California Resource / Incentive Guide and Grant Portals

8.3 Financing and Funding Mechanisms

The Specific Plan calls for the County and its partners to explore the following categories of financing and funding mechanisms to implement the programs outlined in the Implementation Matrix. The County will need to update its information concerning these and other financing and funding mechanisms on a regular basis. Many governmental financing and funding programs change with different administrations and as input from communities and the business community informs changes in public policy.

This Specific Plan identifies the goals, policies, and programs to achieve the vision of the Lithium Valley Specific Plan. The following list of potential funding mechanisms may be used or applied for in order to fund the programs listed throughout this Specific Plan. The County or other partners may wish to explore additional funding and financing opportunities beyond those listed as follows, and within the Implementation Plan.

- Development Impact Fees
- Special Assessment Districts
- Enhanced Infrastructure Financing District (EIFD)
- Senate Bill 125 Lithium ExciseTax
- Private Funding
- Southern California Association of Governments (SCAG) Grants
- California Energy Commission (CEC) Grants and Energy Efficiency Financing
- California Climate Investments (CCI)
- United States Department of Agriculture (USDA) Community Facilities Direct Loans and Grants
- USDA Economic Impact Initiative Grants
- USDA Rural Community Development Initiative Grants
- California Economic Resiliency Fund Program
- Infrastructure for Rebuilding America (INFRA) Grant Program
- California Department of Resources Recycling and Recovery (CalRecycle) Funding
- Clean Water State Revolving Funds (CWSRF)
- Highway Safety Improvement Program
- California Active Transportation Program
- Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grant Program
- Safe Streets and Roads for All (SS4A) Grant Program
- Transit and Intercity Rail Capital Program
- Local Partnership Program (LPP)
- State Highway Operations and Protection Program (SHOPP)
- Congestion Mitigation and Air Quality Improvement (CMAQ) Program
- Local Street and Roads (LSR) Program
- Trade Corridor Enhancement Program
- Transformative Climate Communities (TCC)
- Solutions for Congested Corridors Program (SCCP)
- Transit-Oriented Development Planning Grant
- Caltrans Sustainable Transportation Planning Grants
- Environmental Enhancement and Mitigation Grant Program

- Office of Traffic Safety Grants
- California Jobs Plan Act of 2021
- Affordable Housing and Sustainable Communities (AHSC) Program
- Federal Tax Credits for Energy Efficiency
- Property-Assessed Clean Energy (PACE)