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Amending Ordinances

Ordinance No.	Adoption Date	Subject
324	October 24, 2006	Adopted the North Apple Valley Industrial Specific Plan
325	October 24, 2006	Amended the General Plan and Zoning maps by creating a Specific Plan overlay for lands generally located east of Dale Evans Parkway, south of Quarry Road, west of Central Road and north of Waalew Road.
351	August 14, 2007	Amended Specific Plan text to reflect corrected land use acreage and square footage calculations; added language addressing roofing materials; and corrected typographical errors and formatting throughout the document.
352	August 14, 2007	Amended the General Plan and Zoning maps by adding 163.5 acres of land to the southwest corner of the Specific Plan
381	June 10, 2008	Amended portions of Section III and Section IV of the Specific Plan as they relate to Allowable Land Uses, Development Standards and Street Improvements.
412	September 14, 2010	Established regulations related to photovoltaic solar farms
413	September 28, 2010	Amended Specific Plan standards and guidelines as they relate to exposed metal and the non-conforming status of existing buildings with exposed metal
427	January 24, 2012	Amended the General Plan and Zoning maps by adding 1,120 acres of land located between Quarry and Langley Roads and the northeast area (Annexation No. 2008-002).
428	January 24, 2012	Amended Specific Plan text to reflect increased land use acreage, square footage calculations, exhibits to reflect the new specific plan boundary and amend Exhibit II-2 (Land Use map) to reflect Industrial - Specific Plan (I-SP) for the Amendment area.

I. INTRODUCTION *(Amended Ord. No. 351, 428)*

A. Background *(Amended Ord. No. 351, 428)*

The land use pattern in Apple Valley has been primarily residential, with commercial development occurring on State Route 18 and Bear Valley Road, the Town’s connection to surrounding communities. The General Plan for the Town of Apple Valley includes a number of Special Study Areas in which additional planning and land use studies have been recommended to address unique challenges and opportunities associated with developing these areas. These Special Study areas include the Airport Influence Area; the Dry Lake Flood Area; the Apple Valley Village Area located west of Central Avenue; the Highway 18 Improvement Area; the I-15 Corridor; and the Bear Valley Road Improvement Area. The North Apple Valley Industrial Specific Plan has at its center the Airport Influence Area.

This Specific Plan has been prepared to establish long-term development goals, standards and guidelines for 6,220-acres including and surrounding the airport. The primary land uses envisioned in this area are industrial and commercial land uses, which will provide the Town with long-term economic growth and vitality, job growth, and revenue.

1. Statutory Authority

California Government Code Section 65450 through 65457 authorizes cities to adopt Specific Plans as a tool in the implementation of their General Plan. Government Code further specifies the content of Specific Plans, including the following minimum requirements:

1. Text and diagrams that provide the distribution, location and extent of land uses; the distribution, location and extent of transportation, water, sewer, drainage and other utilities; and the standards and criteria by which these improvements will proceed;
2. Implementation measures including regulations, programs, public works projects and financing measures required to implement the Plan;
3. Consistency analysis to assure that the Specific Plan is compatible with the General Plan.

Government Code further allows local jurisdictions to adopt Specific Plans either by resolution or ordinance. The Town of Apple Valley Development Code Section 9.03.070 specifies that Specific Plans shall be adopted by ordinance.

2. Relationship to the General Plan *(Amended Ord. No. 351, 428)*

The North Apple Valley Industrial Specific Plan is a tool for implementing the goals of the Town's General Plan related to the 6,221-acre area that includes and surrounds the Apple Valley Airport. The Specific Plan is consistent with the Apple Valley General Plan, and implements the goals of the General Plan related to the Airport Influence Area.

3. Relationship to the Development Code *(Amended Ord. No. 351, 428)*

This Specific Plan establishes development standards and guidelines for the Specific Plan area. This Specific Plan provides the zoning ordinance for the Specific Plan area. Where a development standard is different in the Development Code than in this Specific Plan, the provisions in this Specific Plan shall apply. Where a standard is not provided in this Specific Plan, the standards of the Development Code shall apply.

The Specific Plan implements four land use and zoning designations:

General Commercial – Specific Plan provides for a wide range of commercial uses intended to support the industrial development in the Specific Plan area. Appropriate land uses in this designation include hotels and motels, professional services, retail commercial land uses, in the form of both free-standing businesses and retail centers. General Commercial lands total 270.6 acres, and are located at the corners of the Specific Plan area, on major roadways. The location of the commercial areas is designed to encourage the patronage of surrounding residents, and facilitate access to the High Desert Corridor and Interstate 15.

Industrial – Airport is assigned to lands within the control of the Apple Valley Airport. Land uses permitted include airport-related activities, such as hangars, repair and fueling facilities, and similar uses. Also appropriate in the Industrial – Airport designation are support commercial facilities, and quasi-public uses, such as restaurants and museums, respectively. This designation has been assigned to 740.1 acres located in the center of the Specific Plan area.

Industrial – Specific Plan allows for a broad range of clean manufacturing and warehousing uses, ranging from furniture manufacture to warehouse distribution facilities. All uses must be conducted within enclosed buildings. Outdoor storage must be completely screened from view. Appropriate land uses in this designation include manufacturing facilities with showrooms and offices, regional warehousing facilities, and support services for manufacturing and warehousing. This designation is the most prevalent in the Specific Plan area, having been assigned to 4,788.5-acres of land.

Industrial – General allows for more intense manufacturing uses, including uses which may be conducted outdoors. Appropriate in this designation are such users as cement batch plants, welding shops, and vehicle dismantling. This land use designation has been applied to 340 acres located in the northeastern portion of the Specific Plan area.

B. Project Location (*Amended Ord. No. 428*)

The Town of Apple Valley is located in the Victor Valley area which is located forty miles north of San Bernardino; 25 miles southwest of Barstow; and 100 miles northeast of Los Angeles. Apple Valley is located in San Bernardino County.

The Specific Plan area is located in the northern portion of the Town. Its boundaries include Langley Road on the north, Waalew Road on the south, Dale Evans Parkway on the west, and Central and Joshua Roads on the east. At its eastern boundary along Central Road and Joshua Road, the Specific Plan area abuts unincorporated lands within San Bernardino County. Please see Exhibit I-1 Regional Location, Exhibit I-2 Vicinity Map, and Exhibit I-3 Existing Conditions.

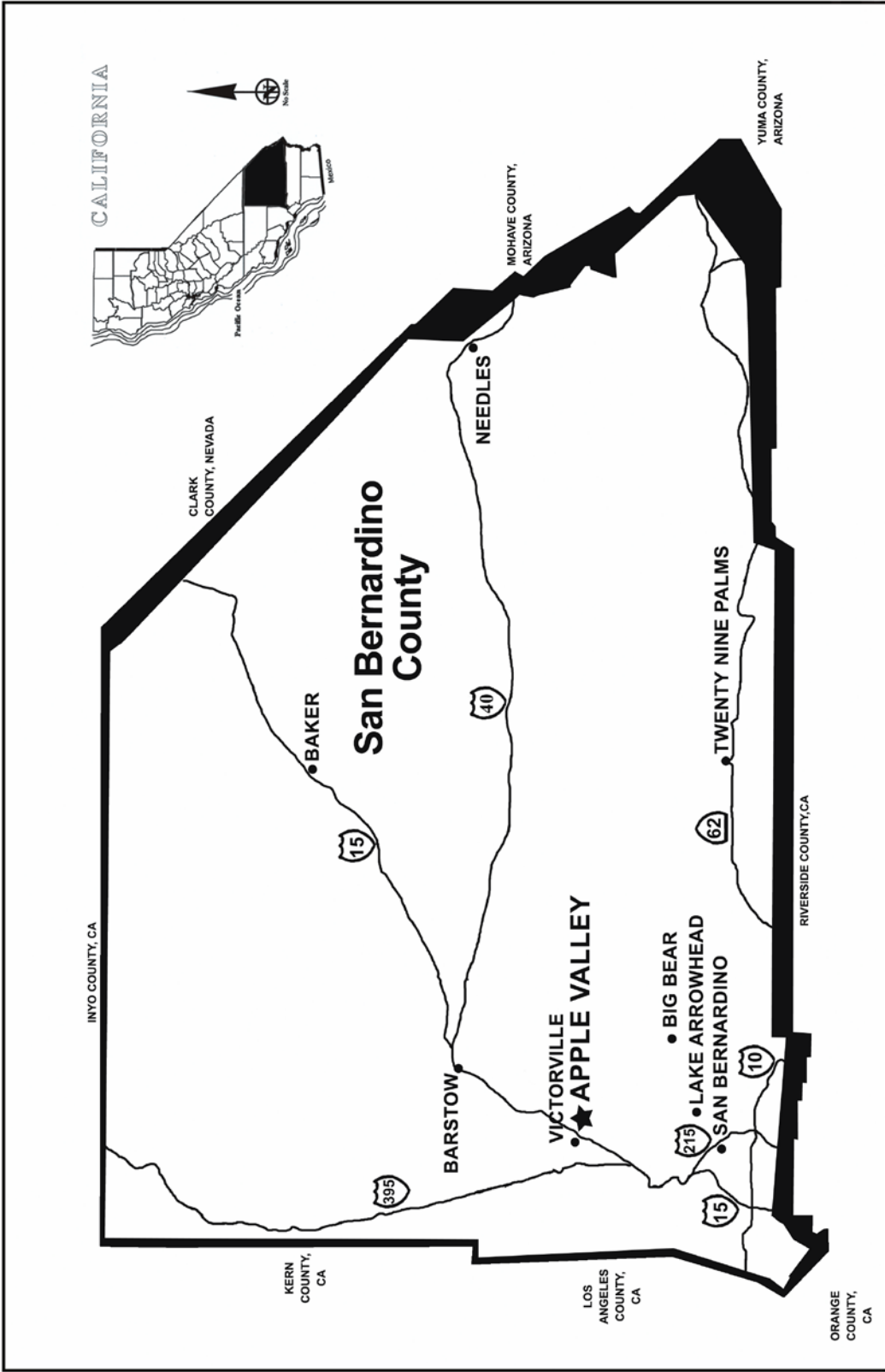
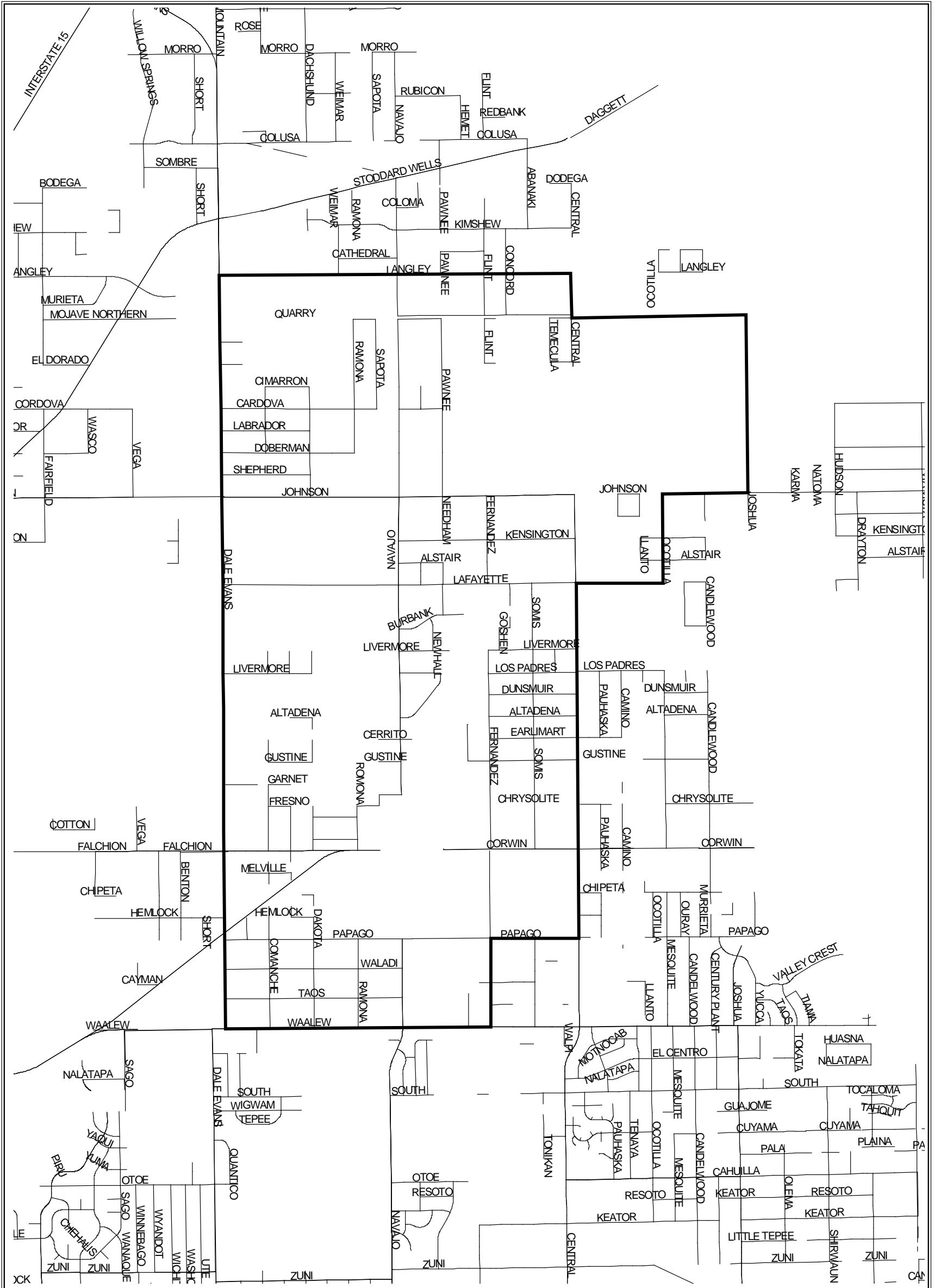


Exhibit
I-1

North Apple Valley Industrial Specific Plan
 Regional Location Map
 Apple Valley, California



Get a Slice of the Apple.



North Apple Valley Industrial Specific Plan Project Vicinity Map



— Project Boundary Line

0.25 0 0.25 0.5 0.75 1 Miles



Exhibit

I-2



North Apple Valley Industrial Specific Plan Existing Conditions

Exhibit

I-3

C. Specific Plan

1. Opportunities

The North Apple Valley Industrial Specific Plan capitalizes on the opportunities and advantages that the area offers, and promotes the use of the area as a regional center for industry and manufacturing. Unique advantages provided by the Specific Plan area include:

- Proximity to a significant regional transportation system that includes State Route 18, Interstate 15, historic State Route 66, State Route 395, and the Burlington Northern Santa Fe Railroad.
- Uncongested access to regional business centers such as San Bernardino and Barstow; international commerce centers such as Las Vegas and Los Angeles; and to the ports of Long Beach and San Pedro.
- A range of businesses, industries, and institutions that have already developed around the airport. These include utility company facilities; fuel and flight related businesses; airplane hangars; industrial storage facilities; law enforcement facilities; the WalMart warehouse/distribution facility; vehicle and equipment rental and storage areas; auto salvage yards; and machine shops.
- An expanding regional airport with current ability to accommodate both general aviation and commercial jets.
- Generally flat, vacant and unconstrained land which can suit any size of business or industry.

These attributes combine to make the Specific Plan area an ideal site for a wide range of industrial, commercial, institutional, office, and airport-related uses.

Attracting corporations and industries that have linkages with local firms, and that can support and build upon successful operations that have already developed in and around the Specific Plan area, is likely to be a critical factor in the speed of industrial development, and the type of industrial development that will take place.

The efforts of local businesses, chambers of commerce, and elected officials, as well as local and regional economic development staffs and related resources will determine the direction, pace, and quality of the build out of this Specific Plan. Likewise, the Town's Economic Development Department and Redevelopment Agency are charged with accomplishing the Town's economic development goals and will be instrumental in the success of the North Apple Valley Industrial Specific Plan.

As part of its recent emphasis on commercial and industrial development, the Town Council has established the financing and installation of public infrastructure as its number one economic development priority. The Town has a Development Advisory Board and a Coordinating Task Force that will also be acting to facilitate the location of business and industry in the Specific Plan area. The Task Force includes high-level Town personnel in a range of departments including planning, engineering, building and safety, and public works.

This Specific Plan is structured to provide local and regional decision makers with the tools needed to successfully develop the area, and implement infrastructure improvements which assure long term success.

2. Challenges

There are many challenges that will need to be addressed as the Specific Plan is implemented, including:

- Constraints upon east-west roads due to the location of the airport's primary 18-26 runway;
- The ownership of Quarry Road by private interests, and its conversion to a public right of way;
- The absence of existing utility infrastructure in much of the Specific Plan area;
- The running of utility lines under the Apple Valley Airport runways;
- The lack of existing roads and drainage systems in the majority of the Specific Plan area; and
- Redesign of the roads in the southwestern portion of the Specific Plan area that will be dead-ended by the High Desert Corridor, and the reorganization of circulation patterns in this area.

3. Goals

The Specific Plan has been developed to provide land owners, developers, business owners and the Town with development standards and guidelines which lead to:

- Long-term economic growth.
- Clean industry, ranging from manufacturing to warehousing.
- A wide range of employment opportunities.
- Adequate and available backbone infrastructure – roads, water, sewer and utilities.
- A streamlined permitting process.
- Flexibility for individual properties and developers.
- High quality construction.
- Master planned landscaping that unifies and defines the area.

4. Overview

Key considerations in the development of the Specific Plan include:

- Creating a professional, well-maintained and attractive environment for the development of industrial and commercial master planned projects.
- Restricting outdoor manufacturing to the northeastern portion of the Specific Plan area.
- Establishing clearly identifiable entries to the Specific Plan area which set the landscaping theme.
- Providing buffers which allow sufficient separation between the commercial and industrial businesses in the Specific Plan area and the surrounding residences.

- Establishing pleasing architectural treatments for buildings, incorporating the use of natural building materials and natural colors.
- Constructing high quality roads that can serve large numbers of cars and heavy trucks that will have sufficient width, turning radii, and other amenities, and operate at acceptable levels of service.
- Realigning roads in the southwest portion of the Specific Plan area to adjust for the High Desert Corridor, while providing adequate access both to and through the Specific Plan area.
- Placing all utilities underground.
- Planting and maintaining high quality landscaping that utilizes desert vegetation (with low water demands); that limits turf areas; and that is aesthetically pleasing.
- Restricting building heights where necessary to prevent interference with airport take-off and landing operations.
- Restricting lighting intensity, placement, and direction to prevent interference with airport operations; to avoid glare to nearby residents and motorists; to curtail unnecessary energy use; and to support the Town’s Dark Night Sky aesthetic and policies.

5. Purpose

The Specific Plan creates land use districts that will facilitate the development of well-planned projects that are consistent with the objectives outlined in Apple Valley’s General Plan, and that will provide good jobs and other clear benefits to the Apple Valley community. These districts are designed to:

- Create suitable locations for high quality industrial, light industrial, value additive, and high technology enterprises which further the Town’s economic development and land use goals.
- Provide suitable locations for office, commercial, retail, utility, and institutional uses that support the industrial and employment base in the Specific Plan area by providing goods and services for these employees and nearby residents.
- Locate manufacturing uses in such a way that the Town’s residential population is not impacted by noise, light, pollution, traffic, or other nuisances or hazards.
- Facilitate the construction of utilities, roads, and other major infrastructure investments that will be sufficiently sized to adequately serve the Specific Plan area and its surroundings through build out of the Town.
- Determine design specifications and development criteria for the lands within the Specific Plan boundaries that are consistent with the Town’s existing Development Code.
- Create an application review process that streamlines the permitting process, while fully vetting all issues, public concerns, and unique impacts associated with each proposed project.

6. Format

This document is organized into sections which address specific issues. In addition to this section, which provides an introduction to the Specific Plan, Section II describes in greater detail the land use designations established in this Specific Plan. Section III provides the development standards and guidelines to implement the Specific Plan, including landscaping, parking and

signage standards. Section IV provides a detailed description of existing and future infrastructure within the Specific Plan area, and includes cost estimates and funding sources for its implementation.

D. CEQA Compliance (*Amended Ord. No. 351, 428*)

In compliance with the California Environmental Quality Act (CEQA), the Town identified the preparation of this Specific Plan as a “project” under CEQA, and prepared an Initial Study. The Initial Study found that the Specific Plan had a potential to significantly impact the environment, and that an Environmental Impact Report (EIR) must be prepared. The Town circulated to all responsible and trustee agencies a Notice of Preparation (NOP) of an EIR. All comments received in response to the NOP were considered and incorporated into the EIR. The EIR was circulated to all responsible and trustee agencies, and all other interested parties, for a period of 45 days. All comments received in response to the EIR were considered in the Response to Comments prepared for the Planning Commission and Town Council. The Town Council certified the EIR prior to adopting this Specific Plan, on October 10, 2006.

In 2007, the Town approved an Amendment to the Specific Plan which added 163.9 acres to the southwestern corner of the Specific Plan. That Amendment was reviewed under CEQA through the preparation of an Initial Study, tiering off the certified EIR. The Initial Study found that impacts associated with the Amendment could be mitigated to less than significant levels, and a Mitigated Negative Declaration was adopted.

In 2011, the Town finalized the annexation of the Northeast Industrial area, consisting of 805.1± acres of land (Annexation No. 2008-02) located immediately east of, and adjacent to the Town limits and contiguous with the North Apple Valley Industrial Specific Plan (NAVISP). Also, included within the Amendment is an additional 315± acres located north of Quarry Road and contiguous to the NAVISP. Both areas were reviewed under CEQA through the General Plan Update which included the certification of the Environmental Impact Report (EIR). Therefore, proposed Amendment is exempt from further CEQA review.

II. LAND USE *(Amended Ord. No. 351, 413, 428)*

Introduction *(Amended Ord. No. 351, 428)*

This section of the Specific Plan describes the vision, the design concepts and the land use designations within the Specific Plan area.

The Specific Plan governs land use for an area totaling 6,221-acres in the northern portion of the Town. The intent of the Town is to establish land use designations which facilitate industrial and commercial development to broaden the Town’s economic base, and provide long term growth and prosperity.

The Town of Apple Valley General Plan recognizes the importance of commercial and industrial development for the Town’s future, and supports the development within the Specific Plan for industrial development surrounding the Apple Valley Airport¹. To that end, the Town analyzed those areas which could support industrial and commercial development, and determined the boundary of the Specific Plan area, as shown throughout this document.

A. Previous Land Use and Zoning Designations *(Amended Ord. No. 351, 428)*

Prior to the adoption of the NAVISP, the General Plan previously designated lands within the Specific Plan area Community Reserve, Planned Industrial, and General Commercial, as shown in Exhibit II-1, Previous General Plan Land Use Designations. Table II-1 illustrates the acreage in each of these land use designations. The acreage identified in Table II-1 are based on the original specific plan boundaries and do not reflect the subsequent amendments to the specific plan boundary.

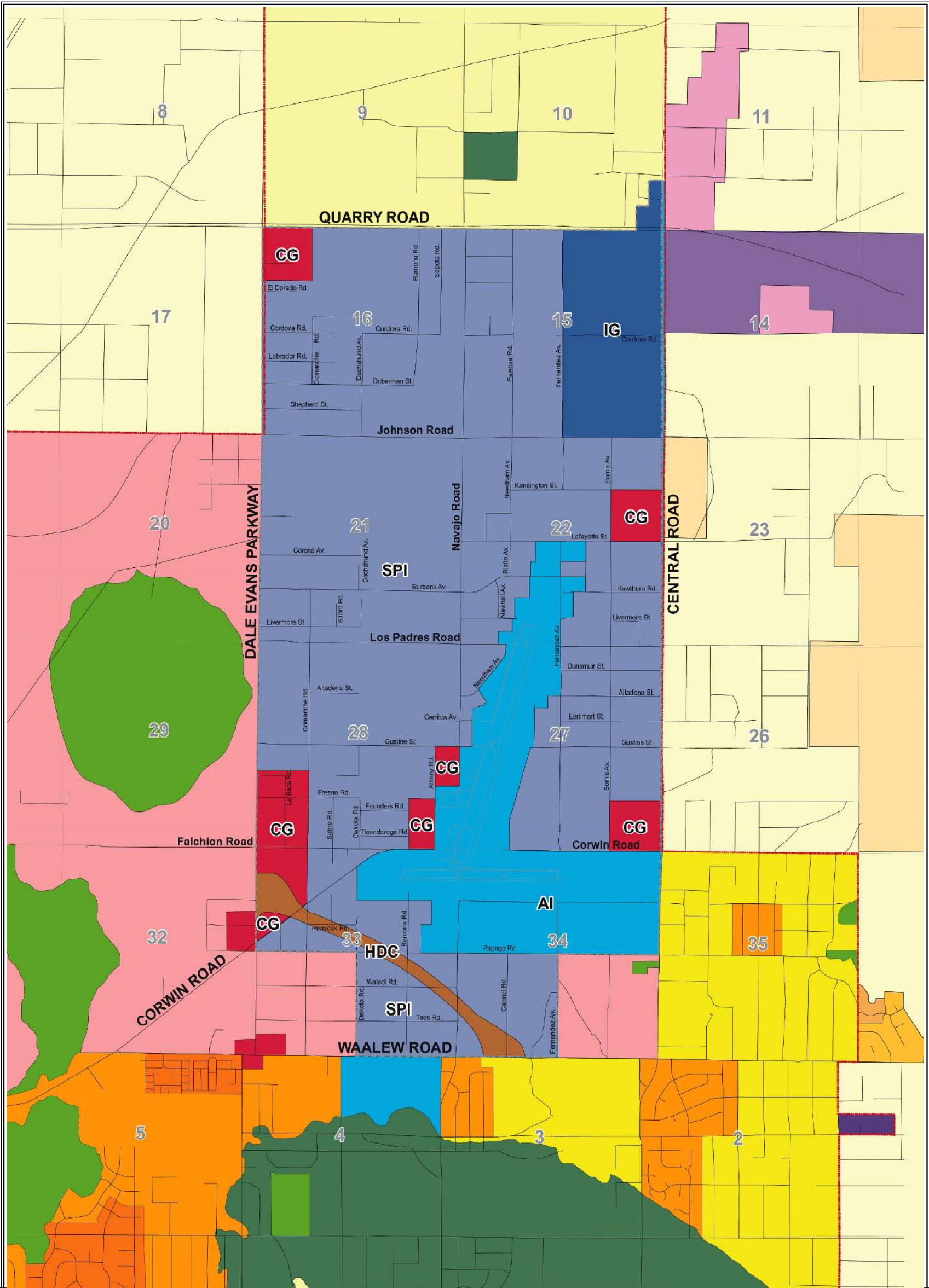
Table II-1 Previous General Plan Designations *Amended Ord. No. 351)*

Land Use Designation	Acres		
	Acres Vacant	Developed	Acres Total
General Commercial	29.6	16.6	46.2
Planned Industrial	2,205.2	698.0	2,903.2
Community Reserve	2,024.4	45.4	2,069.8
High Desert Corridor*	73.7	8.0	81.7
Total	4,332.9	768.0	5,100.9

*High Desert Corridor is not a General Plan designation, but is included in these calculations because of the future potential for these lands being lost to development.

¹ Town of Apple Valley General Plan, Land Use Goal LU-7, Program LU-7.A.2, and Policy 7.C .

As shown in the Table, two thirds of the land within the Specific Plan area is designated for industrial development currently. Approximately one third of the area is designated for single-family residential land uses. The lands in the Community Reserve designation could support up to 2,070 single-family residential units, while the General Commercial and Planned Industrial lands could ultimately support 442,744 square feet and 27,821,946 square feet of development, respectively.



Legend				
	General Plan Res.	General Plan Comm.	General Plan Other	Specific Plan Designations
Apple Valley Airport	Very Low Density	Service	Specific Plan	Airport Industrial
Town of Apple Valley Limits	Low Density	Regional	Planned Industrial	General Commercial
Streets and Highways	Estate	General	Public Facilities	Proposed High Dorsort Corridor
Township/Range Sections	Single Family	Office Professional	Mineral Resources	General Industrial
	Medium Density		Open Space	Specific Plan Industrial
			Community Reserve	
	SB County Designations			
	CN, Neighborhood Commercial		RC, Resource Conservation	
	IC, Community Industrial		RL, Rural Living	
	IR, Regional Industrial		RS > 10,000 and < 40,000 Sq. Ft.	
			RS >= 40,000 Sq. Ft.	

North Apple Valley Industrial Specific Plan Previous General Plan Land Use



Exhibit
II-1

B. Land Use Concept

The Town of Apple Valley wishes to facilitate the development of high quality industrial development to provide for the Town's economic future. To that end, this Specific Plan establishes development standards and guidelines intended to guide land owners and developers in their project designs. These standards and guidelines assure the long-term development of a quality industrial park which will include distinctive, highly identifiable complements, such as entry monumentation and landscaping, which give the North Apple Valley Industrial Specific Plan area a sense of place and identity in the community.

The land use map for the Specific Plan has been developed to maximize development potential, and consider the logical location of land uses. Industrial land uses were determined to be the single most important land uses within the Specific Plan area. These land uses are envisioned to provide employment opportunities at all levels, to contribute to a stable and varied economy for the Town's future, and to improve the Town's tax base. Two types of industrial designations are included in the Specific Plan: the Industrial – Specific Plan and the Industrial – General designations. The former provides for a broad range of development, from warehousing to manufacturing uses, conducted entirely within a structure. The latter allows for more intense industrial uses, including using requiring outdoor manufacturing facilities.

The Town recognizes the importance of the Apple Valley Airport, and the associated constraints and opportunities which it provides the Town and the Specific Plan area. The potential land uses on airport-owned properties are specific to the airport, and will support and enhance its operations. As a result, a land use designation has been developed specifically for that area, which includes components of both commercial and quasi-industrial development.

The future industrial development, which is at the core of this Specific Plan, will require support services, and will generate a need for commercial development to serve both the businesses and the employees of the area. Commercial nodes, located at major intersections in the Specific Plan area, are intended to provide goods and services to both the Specific Plan businesses, and to development in the immediate area. This commercial development is intended to support the intensity of development within the Specific Plan, and not to replace the core of the Town's commercial development along Happy Trails Highway (Highway 18) and Bear Valley Road.

Finally, the Town recognizes that this Specific Plan will create the potential for more intense land uses, which will need to be good neighbors to the residential development which now surrounds the area, and which will continue to develop in the future. To that end, the Specific Plan incorporates design standards and buffer areas to assure a significant physical separation between the Specific Plan and other lands. These buffer areas will act as transition areas, protecting the surrounding residents from the impacts of industrial and commercial development.

C. Specific Plan Land Use Designations *(Amended Ord. No. 351, 428)*

This Specific Plan includes a one-map approach. That is to say, the General Plan and Zoning designations, and concurrent maps, are identical. Only one Land Use and Zoning Map is included in this Specific Plan (please see Exhibit II-2, Specific Plan Land Use Map).

The Specific Plan includes four land use designations, and one overlay. The land use designations are: General Commercial – Specific Plan; Industrial – Airport; Industrial – Specific Plan; and Industrial – General. The overlay is provided for the High Desert Corridor, a California State Highway currently in the planning stages.

Table II-2 depicts the acreage in each of the Specific Plan designations, as well as the development potential of these lands. As demonstrated in the Table, the Specific Plan area has the potential to generate up to 48,346,285 square feet of commercial and industrial space.

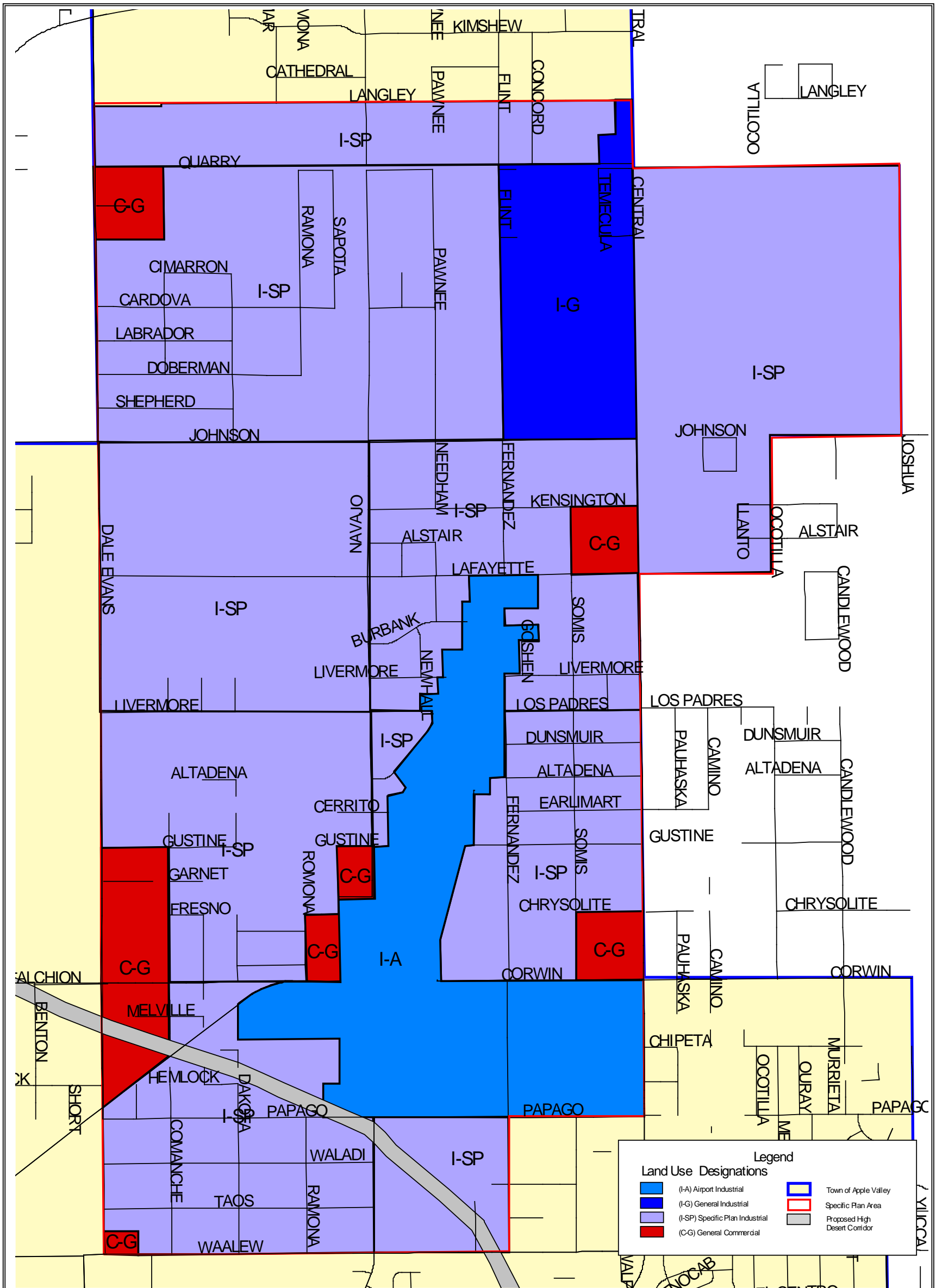
**Table II-2 Specific Plan Land Use Designations
 Buildout Summary**
(Amended Ord. No. 351, 428)

Designation	Acres Vacant	Acres Developed	Acres Total	Existing Square Footage*	Potential Square Footage**	Total Square Footage
General Commercial	265.7	4.9	270.6	46,958	2,546,256	2,593,214
Industrial - Airport	329.5	410.6	740.1	N/A	N/A	N/A
Industrial - Specific Plan	4,445.2	343.3	4,788.5	3,287,037	42,599,240	45,886,277
Industrial - General	334.0	6.1	340.1	58,458	3,200,789	3,259,246
High Desert Corridor	73.7	8.0	81.7	N/A	N/A	N/A
Total	5,374.4	772.9	6,221	3,392,453	48,346,285	51,738,737

*Assumes that existing development, which is generally non-conforming under the Specific Plan, will be re-developed with up to 22% building coverage.

**Assumes new development at 22% building coverage.

The land use designations within the Specific Plan allow a broad range of development. Each of the designations is described below. Specific development standards and guidelines for each designation are provided in Section III of this document



North Apple Valley Industrial Specific Plan Land Use Plan



2000 0 2000 4000 Feet

Exhibit

II-2

1. Industrial – Specific Plan

This designation allows for a broad range of clean manufacturing and warehousing uses, ranging from furniture manufacture to warehouse distribution facilities. Key features of this designation include:

1. Outdoor storage must be completely screened from view.
2. All uses must be conducted within enclosed buildings.
3. Perimeter landscaping must be complementary with that of surrounding projects to provide a unified, cohesive streetscape.

Appropriate land uses in this designation include manufacturing facilities with showrooms and offices, regional warehousing facilities, and support services for manufacturing and warehousing.

2. Industrial – General

This designation allows for more intense manufacturing uses, including those which may produce limited emissions due to manufacturing processes. Key features of this designation include:

1. Outdoor storage is permitted, with appropriate approvals.
2. Outdoor manufacturing is permitted, with appropriate approvals.
3. Perimeter landscaping must be complementary with that of surrounding projects to provide a unified, cohesive streetscape.

Appropriate in this designation are such users as cement batch plants, welding shops, and vehicle dismantling. Land uses also permitted in the Industrial – Specific Plan designation, such as warehousing and manufacturing, may also be permitted here.

3. Industrial – Airport

This designation is assigned to lands within the control of the Apple Valley Airport. Key features of this designation include:

1. Permitted uses are related to those needed for an airport, or complementary to airport operations.
2. A mix of commercial and industrial uses is allowed.
3. Perimeter landscaping must be complementary with that of surrounding projects to provide a unified, cohesive streetscape.

Land uses permitted include hangars, airplane repair and fueling facilities, and similar uses. Also appropriate are support commercial facilities, and quasi-public uses, such as restaurants and museums, respectively.

4. General Commercial – Specific Plan

This designation provides for a wide range of commercial uses intended to support the industrial development in the Specific Plan area. Key features of this designation include:

- Commercial services which provide activity centers for the industrial development.
- Services and offices are encouraged.
- Perimeter landscaping must be complementary with that of surrounding projects to provide a unified, cohesive streetscape.

Appropriate land uses in this designation include hotels and motels, professional services, retail commercial land uses, in the form of both free-standing businesses and retail centers. Heavier commercial land uses, including vehicle repair, and vehicle storage may also be appropriate, particularly if related to the industrial development adjacent.

High Desert Corridor designates lands identified by the California Department of Transportation (CalTrans) as the future location of State Highway 220. Should development be proposed on these lands, it can occur within the limits of the General Commercial – Specific Plan regulations for lands west of Corwin Road, and within the limits of the Industrial – Specific Plan regulations for lands east of Corwin Road.

D. Design Principles

As discussed in Section I, this Specific Plan is intended to provide guidance to developers and landowners to assure that the Specific Plan area is developed in a manner which will provide long term economic growth for the Town. One of the keys to providing this growth is to ensure that development within the Specific Plan area is of the highest quality. The following design principles should be implemented for all projects proposed:

1. A building's function must be balanced with a building's design.
 - a. Large structures still function efficiently, even when the wall planes are articulated and architectural relief is provided on the outside.
2. Because of the Town's flat topography, buildings and development sites can be seen from all sides at a distance.
 - a. All sides of all buildings should present an attractive view to those who may see them.
 - b. The same level of architectural detail should be applied to all four sides of a structure.
3. Parking is not a design feature.
 - a. Employee parking should not be the focus of a project's front yard.
 - b. Commercial vehicle parking must be hidden from view, and should never be located in a front or street side yard.
 - c. Landscaping and berming will enhance a project, and provide an inexpensive design solution to hide parking areas.

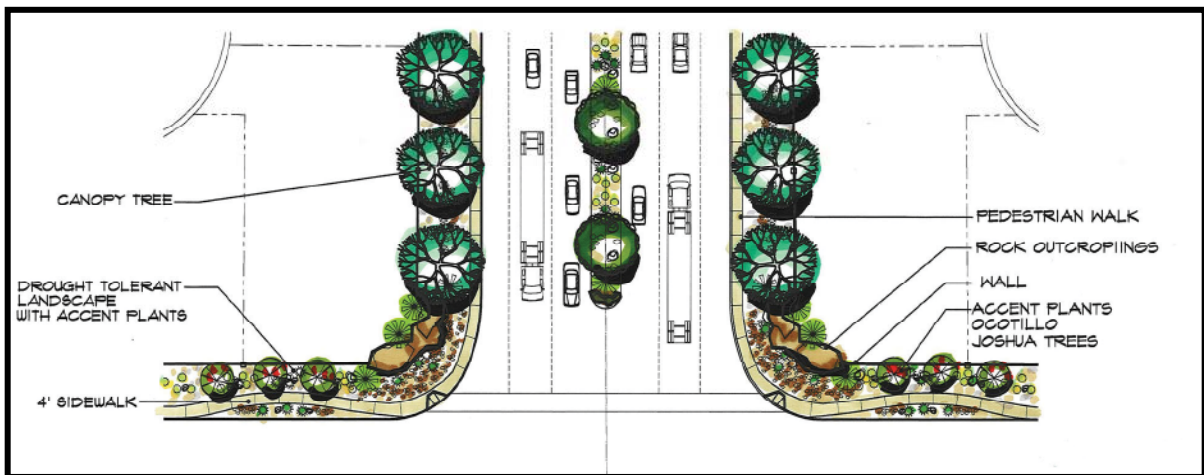
4. Minimum development standards are not maximum development standards.
 - a. Although the Town is sensitive to the costs of development, any project will benefit from setbacks that exceed the standards in this Specific Plan, or more trees than required in a parking lot.
5. All development should be sensitive to its surroundings.
 - a. Site design should always consider what development occurs on adjacent parcels, and be compatible with it.
 - b. The desert environment must be respected and integrated into all projects in terms of providing shade and passive solar design, native landscaping materials and water efficiency.

E. Special Provisions

The Development Standards and Guidelines included in Section III of this Specific Plan are consistent with the requirements of the Town Development Code. Several special provisions have been added to this Specific Plan, due to factors such as location, economic development potential, and community concern.

1. Entry Statements *(Amended Ord. No. 351, 428)*

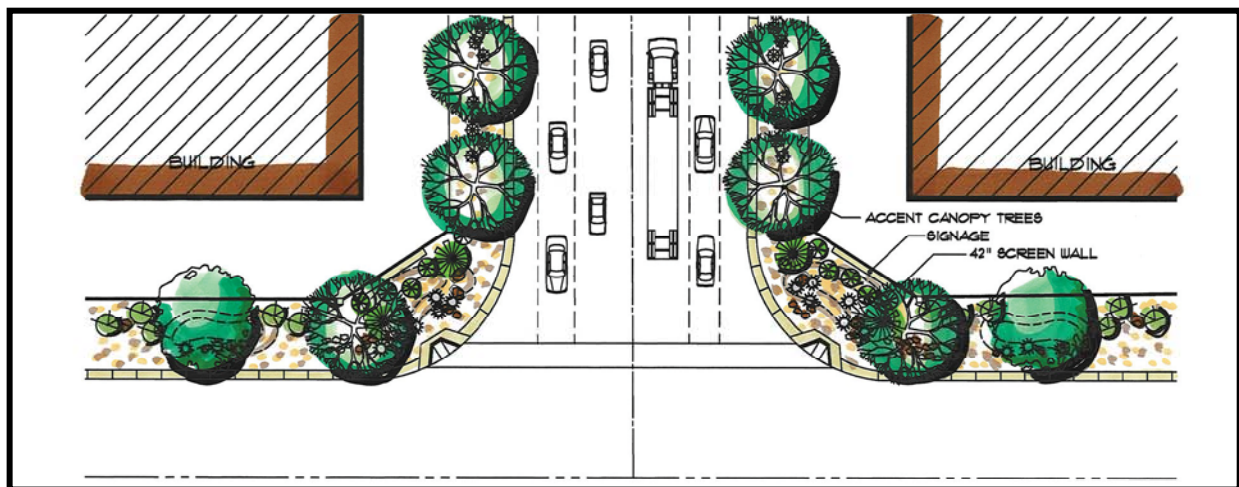
Major entry statements are to provide a sense of arrival to the Specific Plan area. Major entry statements shall be located at the following locations (see Exhibit II-3, Special Provisions):



Major Entry Statement

1. On Dale Evans Parkway at the off ramps of High Desert Corridor (SR-220)
2. Entry at Dale Evans Parkway and Fresno Road
3. Entry at Dale Evans Parkway and Johnson Road
4. At the corner of Dale Evans Parkway and Quarry Road
5. At the corner of Central Road and Papago Road

Major project entries should include landscaping, monument signage, and a park-like setting in an area of about one acre. The landscaping palette should utilize vertical accents such as Incense Cedar and Arizona Cypress to provide a sense of arrival to the project.



Secondary Entry Statement

Secondary entry statements are to maintain a sense of place to the Specific Plan area. These entries should be similar to the major entry statements, but with fewer features and reduced landscaping area and density. Secondary entry statements shall be located at the following locations:

1. Entry at Johnson Road and Joshua Road
2. At the corner of Central Road and Quarry Road
3. Entry at Dale Evans Parkway and Waalew Road

Entry statements can be part of an individual project, but must be consistent with each other. Typical major entry statements are depicted in Section III of this document. These special provisions are outlined in greater detail in Section III.

2. Buffer Areas *(Amended Ord. No. 351, 428)*

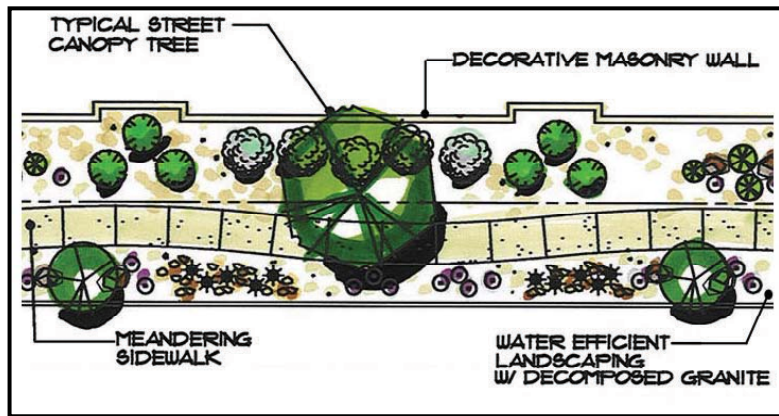
Landscaping and building setbacks on the perimeter streets within the Specific Plan are required to assure that sufficient distance is provided between the industrial and commercial uses and the residences across each of these streets. The buffer areas are as follows:

Table II-3 Buffer Areas
(Amended Ord. No. 351, 428)

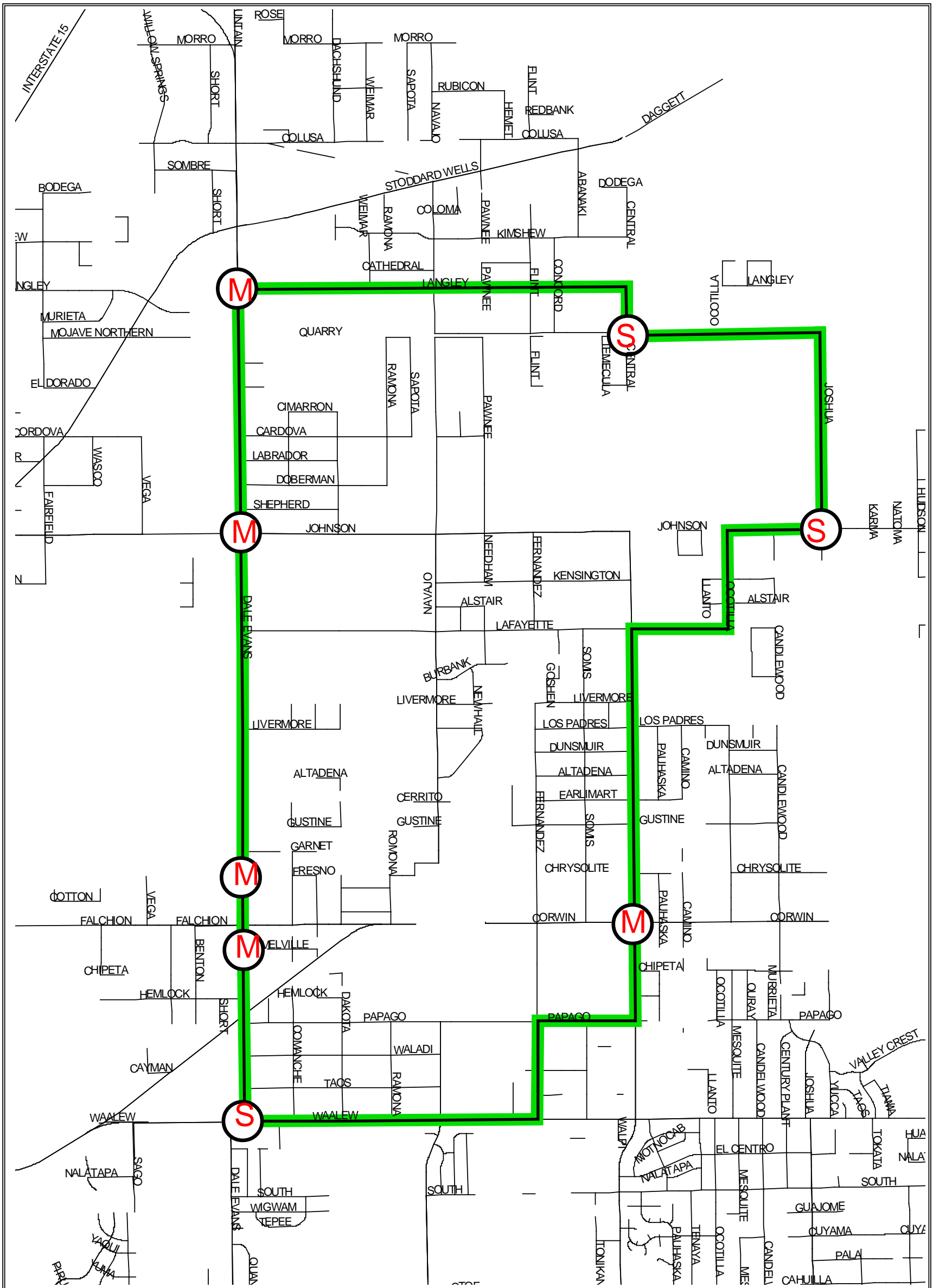
Location	Landscaping Setback (feet)*	Building Setback (feet)*
Dale Evans Parkway	25	50
Central Road	25	50
Papago Road	50	75
Waalew Road	50	75
Fernandez Street	50	75
Joshua Road	50	75
Lafayette (East of Central)	50	75
Langley Road	50	75
Ocotilla	50	75

*From outside edge of public right of way

Landscape buffer areas will be planted with the streetscape plant palette established in Section III of this document. The locations of buffer areas are shown in Exhibit II-3, Special Provisions. A depiction of the landscaped setback is shown below.



Typical Buffer Area



North Apple Valley Industrial Specific Plan Special Provisions



- Project Boundary Line
- Buffer Areas
- M Major Entries
- S Secondary Entries

0.25 0 0.25 0.5 0.75 1 Miles



Exhibit

II-3

3. Permit Streamlining

This Specific Plan includes provisions for the permitting of projects through an administrative process, called Site Plan Review. Qualifying projects (permitted uses not requiring a SUP or CUP) will be reviewed and approved by the Director of Economic and Community Development or his representative. Site Plan Review is a process unique to this Specific Plan in the Town, and is designed to provide qualifying projects with streamlined permitting requirements which do not require public hearings before the Planning Commission or Town Council. The detailed provisions for Site Plan Review are provided in Section III of this Specific Plan.

4. Existing Development (*Amended Ord. No. 413*)

Existing development in the Specific Plan area falls under one of two categories:

1. Development which does not conform to the permitted and conditionally permitted land uses under the Specific Plan, such as single family residences; or
2. Development which conforms to the permitted and conditionally permitted uses, but which does not conform to the design standards and guidelines.

Residential units in the Specific Plan area existing as of the adoption of this Specific Plan may remain in perpetuity, and may be expanded, renovated or remodeled in conformance with the development standards for the Low Density Residential zone.

Non-conforming commercial or industrial buildings and uses in the Specific Plan area existing as of the adoption of this Specific Plan may continue to operate, and are not required to conform to the provisions of this Specific Plan unless the building or use is abandoned for a period of 6 months. These buildings or uses may also be replaced if damaged by fire or act of God. Expansion of these buildings or uses will require the approval of a Conditional Use Permit. Buildings proposing to expand the existing use of, or replace, exposed metal, require the approval of a Conditional Use Permit. The use of exposed metal that has been approved with a Conditional Use Permit shall not be considered a non-conforming use.

5. Restrictions on Eminent Domain

Property owners in the Specific Plan area expressed concern that the Town would exercise powers of eminent domain on their parcels, and force the sale for purposes of assemblage or development incentives to business interests. Although the Specific Plan is not within a Town Redevelopment Area at this time, and in order to protect property owners within the Specific Plan from the uncontrolled sale of their property, the Town shall not exercise eminent domain for purposes of conveying property for private ownership or use.

III. DEVELOPMENT STANDARDS AND GUIDELINES (*Amended Ord. No. 351, 381, 412, 413, 428*)

This section of the Specific Plan serves as the Specific Plan’s Development Code. Standards and guidelines which are applied to the Specific Plan area only are described in detail below. When the Development Code standards and guidelines apply, a reference is made to the appropriate Section of the Development Code.

A. Purpose

The purpose of the land use districts in the North Apple Valley Industrial Specific Plan is to encourage the development of well-planned projects which are consistent with the goals and objectives of the Town’s General Plan and this Specific Plan. The Specific Plan land use districts are intended to:

1. Provide lands for high quality, clean industrial and quasi-industrial land uses which further the economic development and land use goals of the Town.
2. Provide lands for retail and office commercial land uses which support the industrial development and associated employee base in the Specific Plan Area by providing services and goods for these employees and surrounding residents.
3. Provide development standards which assure consistent and compatible development within the Specific Plan Area.
4. Encourage the development of industrial uses which are located in such a manner as to avoid nuisances and hazards for the Town’s residents.
5. Provide for the development of coordinated and adequately sized infrastructure to serve the development potential of the District.

B. Land Use Districts

1. Industrial – Specific Plan (I-SP) (*Amended Ord. No. 351*)

The Specific Plan Industrial District is intended to support the development of a broad range of clean, well planned industrial, quasi-industrial and commercial support uses within the North Apple Valley Industrial Specific Plan. Uses can range from manufacturing and warehousing to offices and retail facilities which support the employee population within the Specific Plan Area. Uses which generate excessive noise or other environmental impacts are not permitted in the District. All uses are to be conducted within enclosed structures. Outdoor storage may be permitted, if completely screened from view.

2. Industrial – General (I-G SP)

The General Industrial District is consistent with the District described in the Development Code. The District allows more intense industrial activities, including manufacturing, warehousing, wholesale distribution, storage and outdoor manufacturing activities.

3. Industrial – Airport (I-A SP)

The Airport Industrial District has been assigned to those lands owned by the Apple Valley Airport. Land uses allowed include direct airport-related activities, such as hangars and fueling operations, and support services related to airport operations, including restaurants, offices, and distribution facilities. Uses which generate excessive noise or other environmental impacts are not permitted in the District. Outdoor storage may be permitted, if completely screened from view.

4. General Commercial – Specific Plan (C-G SP)

The Specific Plan General Commercial District is generally consistent with the district described in the Development Code. The District allows retail stores, offices and personal and business services designed to support the employees within the Specific Plan Area. Uses which are geared to residential neighborhoods (such as grocery stores) are not permitted in this District. The District locations have been sited along major roadways within the Specific Plan Area.

C. Allowable Uses (*Amended Ord. No. 351, 381, 412, 428*)

Uses permitted in the land use districts within the Specific Plan Area are listed in Table III-1, below. If a proposed use is not listed in the Table, the Community Development Director shall, upon written request and in conformance with the provisions of Section 9.05.070 of the Development Code, review the proposed unlisted use and determine whether it is permitted, or requires a Conditional or Special Use Permit.

All uses listed in the Table will be applied to requests for new development, expansion of existing uses, tenant improvements resulting in a listed use, or change in occupancy.

All uses shown as permitted in the Table require the approval of a Site Plan Review (SPR) permit. The requirements and process for all applications, including the SPR, are described in Section III-G of this Specific Plan.

Table III-1 Allowable Uses
(Amended Ord. No. 351, 381, 412, 428)

TYPE OF USE ⁽¹⁾	COMMERCIAL ⁽²⁾		INDUSTRIAL ⁽²⁾		AIRPORT ⁽²⁾
	SP	C-G	I-SP	I-G	IA-SP
A. Residential Uses					
1. Caretakers residence	-		SUP	SUP	CUP
2. Congregate care facilities (Senior Housing)	-		-	-	-
3. Emergency shelters/transitional housing ⁽⁴⁾	-		-	-	-
B. Office and Related Uses					
1. Administrative, professional and general offices	-		P	P	CUP
2. Administrative, professional and general offices when incidental to a permitted or conditional use that does not occupy more than twenty-five (25) percent of the gross floor area.	-		P	P	P
C. Commercial Uses					
1. Commercial retail uses such as clothing, food, gifts, studios, services and other similar uses.	SUP		-	-	-
2. Radio and television broadcasting studios	-		P	-	-
3. Studios, such as art, dance, music and photo	-		P	-	-
4. Retail commercial, when incidental to a permitted or conditional use and when goods offered for sale are manufactured, produced or assembled on the premises, not occupying more than twenty-five (25) percent of the gross floor area. Sale of accessory merchandise is also permitted.	-		P	P	CUP
5. Adult/sexually oriented businesses	-		-	-	-
6. Alcoholic beverage sales:					
a. Liquor stores, no on-site consumption	-		-	-	-
b. Convenience stores, no on-site consumption	P		-	-	CUP
c. Grocery Stores, no on-site consumption	-		-	-	-
d. Restaurants, on-site consumption	SUP		-	-	P
e. Taverns, bars, on-site consumption	CUP		-	-	P
7. Arcades	-		-	-	-
8. Carpenter, furniture or cabinet shop	P		-	-	-
9. Catering establishments	-		P	-	-
10. Mortuary, cremation service	-		-	-	-

Table III-1 Allowable Uses
(Amended Ord. No. 351, 381, 412, 428)

TYPE OF USE ⁽¹⁾	COMMERCIAL ⁽²⁾		INDUSTRIAL ⁽²⁾		AIRPORT ⁽²⁾
	SP C-G	I-SP	I-G	IA-SP	
11. Child day care center	CUP	SUP	-	-	-
12. Commercial recreation facilities including:					
a. Health/fitness clubs	P	SUP	-	CUP	
b. Indoor recreational uses such as bowling, billiards, or theaters	-	SUP	-	CUP	
c. Outdoor uses such as golf, tennis, basketball, baseball, family amusement centers	-	-	-	-	
13. Communications and cable television facilities	-	-	-	-	
14. Concessionaire, small kiosks not located in a parking lot	-	-	-	-	
15. Kiosks for key shops, film drops in parking lots	-	-	-	-	
16. Convenience stores, with or without gasoline sales	P	-	-	-	
17. Drive-thru/drive up	SUP	-	-	-	
18. Home improvement centers (retail):					
a. Material stored and sold within enclosed buildings	P	P	P	CUP	
b. Outdoor storage of material such as lumber and other building material	SUP	SUP	P	CUP	
19. Feed and tack, including the incidental exterior storage of hay, packaged feed and related bulk feed products on site ⁽⁵⁾	P	-	-	CUP	
20. Hotels, motels and convention centers	P	SUP	CUP	-	
21. Nurseries and garden supply stores, including outdoor display of plants	-	SUP	P	-	
22. Parking lots/structures	P	CUP	-	P	
23. Pawn shops	-	-	-	-	
24. Restaurants:					
a. Not drive-in or drive through	P	-	-	P	
b. Drive through	SUP	-	-	-	
25. Spiritualist readings or astrological forecasting	-	-	-	-	
27. Thrift or second hand stores	-	-	-	-	
28. Swimming pool supplies	P	P	-	-	
29. Vocational and business trade schools:					
a. Shop related	P	-	-	P	
b. All other	CUP	-	-	P	

Table III-1 Allowable Uses
(Amended Ord. No. 351, 381, 412, 428)

TYPE OF USE ⁽¹⁾	COMMERCIAL ⁽²⁾		INDUSTRIAL ⁽²⁾		AIRPORT ⁽²⁾
	SP C-G	I-SP	I-G	IA-SP	
30. Locksmith	-	P	-	-	
31. Ice dealer	-	P	-	-	
32. Parcel delivery service	-	P	-	P	
33. Banks and financial services	SUP	-	-	-	
34. Automatic teller machine (ATM), not a bank	SUP	-	-	P	
<i>D. Agricultural Uses</i>					
1. Animal grazing or raising, commercial or noncommercial, on vacant property, minimum of two and one-half (2-1/2) acres lot size	-	-	-	-	
2. Farm animal projects, accessory to a nonconforming residence	P	P	P	-	
3. Farms or ranches for orchards, tree crops, field crops, truck or flower gardening, growing of nursery plants and the sale of agricultural products	-	P	-	-	
<i>E. Manufacturing and Production Uses</i>					
1. Inside or enclosed assembly, manufacturing, compounding, or treatment of articles or merchandise from previously prepared materials such as, but not limited to canvas, cellophane, cloth, cork, felt, fiber, fur, glass, leather, metals, paper (no milling), precious or semi-precious stones, plaster, plastics, rubber, synthetics, shells, textiles, tobacco, wood, and yarns; novelty items (not including fireworks or other explosive type items), electrical appliances and motors, electronic items, precision instruments, medical and dental instruments, timing and measuring instruments, audio machinery; visual machinery; food, cosmetics, drugs, perfumes, toiletries, soap (not including refining or rendering of fats or oils) and research and testing.	-	P	P	CUP	
2. Bottling plants	-	P	P	-	
3. Bakery Plants	-	P	P	-	
4. Beverage Production	-	P	P	-	
5. Production of dairy products	-	P	P	-	
6. Ceramic products, including the manufacturing thereof using only previously pulverized clay and kilns fired only by	-	P	-	-	

Table III-1 Allowable Uses
(Amended Ord. No. 351, 381, 412, 428)

TYPE OF USE ⁽¹⁾	COMMERCIAL ⁽²⁾		INDUSTRIAL ⁽²⁾		AIRPORT ⁽²⁾
	SP	C-G	I-SP	I-G	IA-SP
electricity or low-pressure gas					
7. Carpet cleaning plants	-		P	-	-
8. Fruit and vegetable packing houses, including cannery	-		P	P	-
9. Cement and asphalt manufacturing and products	-		-	CUP	-
10. Chemical processing	-		P	CUP	-
11. Laboratories and research, including chemical, dental, electrical, optical, mechanical and medical	-		P	-	CUP
12. Mining	-		-	-	-
13. Outdoor manufacturing	-		-	CUP	-
14. Production of entertainment/educational media	-		P	P	-
15. Photovoltaic Solar Farms 10 acres or less	-		P	P	P
16. Photovoltaic Solar Farms greater than 10 acres and less than 400 acres located east of Navajo Road	-		CUP	CUP	CUP
<i>F. Aviation Uses, Activities and Facilities</i>					
1. Airfields & Heliports					P
2. Airport Operations					
a. Control Towers	-		-	-	P
b. Hangers	-		-	-	P
c. Terminals	-		-	-	P
d. Tiedown Areas	-		-	-	P
e. Fueling operations	-		-	-	P
3. Aircraft sales, rentals, service, repair, storage, charter services and flying schools.	-		-	-	P
<i>G. Storage and Wholesale Trades</i>					
1. Vehicle fleet storage, impound lot	-		P	SUP	CUP
2. Equipment storage, sales, rentals:					
a. Inside	-		P	P	CUP
b. Outside	-		SUP	SUP	CUP
3. Registered vehicle sales/rental including boats, trailers, campers, farm/construction, manufactured housing	P		-	-	-
4. New construction of outdoor storage	-		SUP	SUP	CUP
5. Storage yards/facilities including and limited to boats, RV's, trucks, mini storage	-		P	P	CUP

Table III-1 Allowable Uses
(Amended Ord. No. 351, 381, 412, 428)

TYPE OF USE ⁽¹⁾	COMMERCIAL ⁽²⁾	INDUSTRIAL ⁽²⁾		AIRPORT ⁽²⁾
	SP C-G	I-SP	I-G	IA-SP
and equipment/supplies				
6. General warehousing, wholesaling, distribution and showrooms	-	P	P	CUP
H. Services				
1. Animal care facility, including animal hospital veterinarian, commercial kennel, grooming:				
a. Excluding exterior kennel, pens or runs	-	P	-	-
b. Including exterior kennel, pens or runs	-	SUP	-	-
2. Automotive services, including motorcycles, boats, motor-homes, trailers, and campers:				
a. Vehicle fueling/service stations	P	SUP	P	P
b. Vehicle fueling/service stations and/or carwash	P	SUP	P	-
c. Major repairs, including engine work, painting, body work, and upholstery (indoor only with no storage)	-	SUP	P	CUP
d. Minor repairs including such as smog check, tune-ups, tires, brakes, batteries, mufflers (indoor only with no storage)	P	SUP	P	P
3. Services, such as barber/beauty	CUP	-	-	-
4. Repair of office equipment, appliances, computers, TVs, and the like.	P	-	-	-
5. Copy services	-	P	-	-
6. Wholesale cleaning, laundry and dyeing plant	-	P	CUP	-
7. General printing and lithography	-	P	P	-
8. Recycling facilities for reusable domestic materials:	-			
a. Reverse vending machines	P	P	P	-
b. Recycling Collection Point less than 500 sq ft	P	P	P	-
c. Recycling Collection Point over 500 sq ft	P	SUP	SUP	-
d. Recycling Center	P	SUP	CUP	-
e. Yard waste composting facilities, outdoors	-	CUP	CUP	-
f. Recycling Plants	-	SUP	CUP	-

Table III-1 Allowable Uses
(Amended Ord. No. 351, 381, 412, 428)

TYPE OF USE ⁽¹⁾	COMMERCIAL ⁽²⁾	INDUSTRIAL ⁽²⁾		AIRPORT ⁽²⁾
	SP C-G	I-SP	I-G	IA-SP
9. Transportation facilities, train, bus and taxi depots or terminals, not including office uses	-	CUP	CUP	CUP
10. Trucking facilities such as:				
a. Truck terminals	-	SUP	CUP	CUP
b. Truck yards	-	SUP	CUP	CUP
c. Truck repair	-	SUP	CUP	CUP
<i>I. Public and Semi-Public Uses</i>				
1. Religious institutions	-	-	-	-
2. Convalescent facilities and hospitals	-	-	-	-
3. Educational institutions	-	-	-	CUP
4. Libraries and museums, public or private	-	-	-	P
5. Private and public clubs and lodges, including YMCA, YWCA and similar youth groups	-	-	-	-
6. Government facilities/offices	P	P	P	P
7. Public utility installations, other than offices	P	P	P	P
8. Theaters, auditoriums and meeting halls	-	-	-	CUP
9. Parks, playgrounds and athletic fields	P	P	-	CUP
<i>J. Accessory Uses</i>				
1. Commercial and non-commercial antennas and telecommunication facilities:				
a. Antennas 35 feet or less	P	P	P	CUP
b. Antennas over 35 feet	CUP	SUP	SUP	CUP
c. Ham radio	-	P	P	-
2. Water Storage tanks:				
a. Less than 5,000 gallons	P	P	P	-
b. More than 5,000 gallons	SUP	SUP	SUP	-
3. Liquid, petroleum or Gas (LPG) Tanks:				
a. Tanks not exceeding 200 gallons	P	P	P	-
b. Tanks greater than 200 gallons or flammable tanks up to 2,500 gallons	CUP	SUP	SUP	-
c. Tanks greater than 2,500 gallons	-	CUP	CUP	-
4. Overnight commercial vehicle parking for vehicles not related to the on-site use which does not reduce available parking spaces during business hours	-	P	SUP	-

- (1) All uses shall be conducted within a completely enclosed building unless the use is specifically permitted in this Chapter as an outdoor use or the outdoor use is specifically approved through a Conditional Use Permit or Special Use Permit.
 - (2) CUP: Conditional Use Permit; P: Permitted Uses; SUP: Special Use Permit; “-“ Denotes uses are prohibited.
 - (3) Industrial activities other than mining or mineral extraction are permitted only after the site has been mined and the land reclaimed. Vacant land not previously used for mining may be used on an interim basis with approval of a Conditional Use Permit provided that such use does not preclude, in any way, future mining or mineral extraction operations.
 - (4) Fees Waived.
 - (5) The incidental exterior storage of hay, packaged feed and related bulk feed products when associated with a Feed and Tack business is permitted and may be located anywhere on site to the rear of the leading edge of the building on said site or behind.
-

D. Development Standards *(Amended Ord. No. 351, 381, 428)*

Table III-2 summarizes the site development standards for each zoning district within the Specific Plan Area. These standards shall be applied to projects in conjunction with the permitted use standards, the specific use regulation provided in Section III- C, and the design standards and guidelines provided in Section III-F.

Table III-2 Development Standards
(Amended Ord. No. 351, 381, 428)

	SP C-G	I-SP	I-G	I-A
Min. Lot Size (Ac)	1	2	5	n/a
Min. Lot Width (Feet)	200	100	200	200
Min. Lot Depth (Feet)	200	100	200	200
Min. Front Setback or Street Side Setback (Feet)				
▪ Landscaping				
○ On Dale Evans Pkwy				
○ On Central Road	25	25	n/a	n/a
○ On Papago Rd. (east of Fernandez Rd.), Waalew Rd., or Fernandez St. Joshua Rd., Lafayette (east of Central), Langley Rd., Ocotilla	25 50	25 50	25 n/a	25 50
○ On any other road	15	15	15	15
▪ Building				
○ On Dale Evans Pkwy				
○ On Central Road	50	50	n/a	n/a
○ On Papago Rd. (east of Fernandez Rd.), Waalew Rd., or Fernandez St. Joshua Rd., Lafayette (east of Central), Langley Rd., Ocotilla	50 75	50 75	50 n/a	50 75
○ On any other road	25	25	25	25
Min. Building Rear Setback (Feet)	0	15	15	15
Min. Building Interior Side Yard Setback (Feet)	0	0	0	0
Min. Building Setback (feet) from rock outcropping	50	50	50	50
Max. Bldg. Coverage (%)	65	45	45	60
Maximum Height (Feet)				
▪ Within Airport Influence Area (A-1)	35	35	35	35
▪ Within Airport Influence Area (A-2)	35	50	50	50
▪ Outside Airport Influence Area	35	50	100	50

E. Land Use Regulations

1. Airport Overlay Districts

The standards and requirements of Chapter 9.65 shall apply to all proposed uses within the boundaries of the Airport Overlays.

2. Buffering and Screening

Buffering and screening in all districts shall conform to the provisions of Section 9.37.060 of the Development Code.

3. Accessory Uses and Structures

Accessory Uses

Accessory uses, such as retail showrooms, barber or beauty shops, coffee shops, cafeterias, etc., ancillary to the primary use of the structure, and not exceeding 25% of the total building area, shall be permitted, provided that they are expected to be used primarily or solely by the tenants or employees of the primary use, and that no separate signage is provided on any building exterior.

Accessory Structures

Accessory structures shall meet the following standards:

1. Accessory structures shall not be located in the front or street side setback or in front of the primary structure.
2. Accessory structures shall meet all of the development standards in Table III-2, Development Standards.
3. Accessory structures shall not exceed the height of the primary structure.
4. Accessory structures shall have the same architectural style and coatings as the primary structure.
5. If a pre-fabricated structure is proposed for an accessory structure, the requirements of Section III-E.7 shall apply.

4. Parking and Loading Requirements

Parking and loading requirements in all districts shall conform to the requirements of Section 9.72 of the Development Code.

5. Outdoor Uses *(Amended Ord. 412)*

All manufacturing and active uses in the SP, C-G and I-SP districts shall be conducted entirely within and enclosed building, with the exception of photovoltaic solar farms where permitted.

Outdoor storage may be permitted in the I-SP and I-G Districts, if entirely screened from view. Outdoor storage must be located in the rear of the property, and may only occur in conjunction with a permanent building. An eight (8)-foot solid masonry wall shall be constructed on all side and rear property lines, except in street ROW where the maximum height is 42 inches. Storage areas shall not be allowed in required setback areas, parking areas, driveways or right-of-way.

Outdoor manufacturing or other active use is prohibited in the SP, C-G and I-SP Districts, with the exception of photovoltaic solar farms where permitted and as described in paragraph 5.

Outdoor manufacturing or other active use may be permitted in the I-G District, under the standards provided below.

1. All outdoor manufacturing shall require approval of a Conditional Use Permit.
2. All outdoor manufacturing shall be located a minimum of one thousand (1,000) feet from a residential district.
3. All outdoor manufacturing shall be located a minimum of two hundred (200) feet from a commercial use or district.
4. All outdoor manufacturing shall be screened from public view with:
 - a. A minimum twenty-five (25)-foot wide landscaped area along all street frontages; and
 - b. An eight (8)-foot solid masonry wall at the rear of the landscaped area along all street frontages, and along all side and rear property lines, except in street ROW where the maximum height is 42 inches; and
 - c. Gates for vehicular access shall be of solid metal construction, and shall be the same height as the adjacent wall. Solid gates used for screening purposes shall be closed at all times, except when being used for ingress or egress; and
 - d. All work and storage areas shall be paved with a minimum of two inches of asphaltic concrete or equivalent; and
 - e. Outdoor manufacturing can only occur in conjunction with a permanent building which houses, at a minimum, office and restroom facilities; and
 - f. Outdoor lighting shall be limited to that necessary for the manufacturing activity, shall be fully shielded, and shall not spill over on adjacent properties. All outdoor lighting shall be on a timer set to shut off at the close of business; and
 - g. All performance standards included in Chapter 9.70 of the Development Code have been met.

6. Intensity Bonus

The Intensity Bonus allowed in Chapter 9.46.060 of the Development Code shall not apply in the Specific Plan Area. An Intensity Bonus shall be granted to project that employ amenities for employees, customers, and or the general public. At such time that development occurs and amenities are proposed, the Economic and Community Development Director shall determine the Intensity Bonus, which may range from 5% to 20% bonus in development coverage. Amenities may include, but are not limited to:

1. Onsite employee child day-care.
2. Onsite employee gym or exercise equipment.
3. Outdoor seating areas.
4. Use of 36-inch box trees throughout project site.
5. Other amenities as proposed by site developers.

7. Pre-Fabricated Structures/Metal Buildings (*Amended Ord. 413*)

Buildings with exposed metal are discouraged in the Specific Plan Area, with the exception of airplane hangers located on the airport property, in the Industrial-Airport District. Buildings proposing to use exposed metal shall require the approval of a Conditional Use Permit.

Existing prefabricated structures/exposed metal buildings may remain within the Specific Plan Area, if they are improved to meet the following standards:

- a. The design of the structure is compatible with the design of surrounding structures.
- b. The outside finishes of the pre-fabricated structure create the appearance of a permanent, conventional construction building.
- c. Roofs of pre-fabricated buildings shall be standing seam, tile or shingle.
- d. Pre-fabricated buildings shall be erected on permanent foundations.

8. Trash Enclosures

Trash enclosures in all districts within the Specific Plan shall be provided for each project pursuant to the requirements of Chapter 9.35.090 of the Development Code for commercial uses and Chapter 9.46.080 of the Development Code for industrial uses, or as modified by the individual permit.

9. Utilities

All utilities for all projects within the Specific Plan Area shall be placed under ground, pursuant to the current requirements of Chapter 14.28 of the Municipal Code.

10. Photovoltaic Solar Farms (*Added Ord. 412*)

All photovoltaic solar farms within the I-SP, I-G and IA-SP Districts shall be fenced with chain link or wrought iron fencing a maximum of ten (10) feet high. The use of barbed wire and outdoor lighting is prohibited. Solar Panels shall have a maximum height of thirty-five (35) feet within the Airport Influence area (A-1) and fifty (50) feet in Airport Influence area (A-2), I-SP and I-G. Photovoltaic solar farms greater than 10 acres in size shall be located east of Navajo Road. Street setbacks shall be the minimum landscape setbacks as described in Table III-2 of this Section. Interior setbacks shall be zero. Setbacks from rock outcroppings shall be twenty-five (25) feet. All buildings ancillary to the solar farm shall comply with the development standards in Table III-2 of this Section. Decorative gravel/rock shall be placed along the street frontage from the back of curb to the setback line. There is no requirement for off-street parking. All adjacent roadways shall be improved to Town standards for industrial areas.

F. Design Standards and Guidelines

1. Architecture

a. General Provisions

1. Architecture should reflect the Town's desert setting and long-term traditional values. Building design options should be compatible with existing development to the greatest extent possible.
2. A variety of building designs and a mixture of one and two story profiles are encouraged.
3. Rooftop mechanical and electrical equipment shall be screened as an integral part of the architecture.



Typical Building Profile

4. Similar architectural treatments shall be used to create a theme or sense of unity among buildings in a development.
5. Plazas and courtyards shall be sited to best take advantage of sun angles, wind protection, and vistas.
6. Building design and interior layout shall incorporate noise buffering sufficient to meet the Community Noise Exposure standards contained in Table N-1 of the Town General Plan.

b. Entries

1. Building entries shall be identified through the use of various architectural elements to avoid box-like structures.
2. Building entries shall be identified through the use of architectural elements such as arches, columns and colonnades, recessed entries, projecting architectural treatments, loggias, overhangs, entry path paving, arcades, and entries through plazas and courtyards.

3. Entries shall be consistent with the scale and massing of the building.

c. Scale

1. The scale of buildings shall be generally consistent throughout a development, except where anchor or major tenants require larger building areas.
2. The different parts of a building's facade shall be articulated through the use of color, arrangement of facade elements, or a change in materials.



Typical Building Entry



Typical Tall Building

3. Recesses that provide shade and create an interplay of light and shadow, such as building pop-outs, covered walkways, colonnades, arcades, and other human scale openings shall be provided to reduce the impact of building mass and create visual interest.
4. All visible elevations of structures shall be architecturally treated and conform to these standards.
5. Development shall consider the scale of adjacent residential areas and provide an appropriate transition using landscaping, setbacks, building height and/or other architectural or site design elements. Maximum building heights are included in the following table.

**Table III-3
 Maximum Building Heights (in feet)**

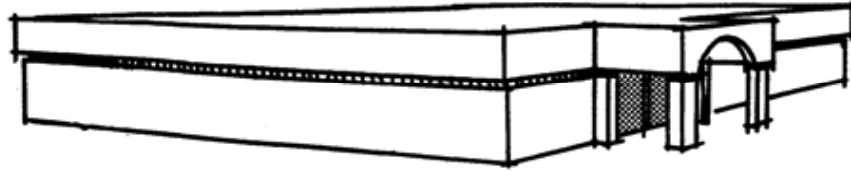
	SP C-G	I-SP	SP I-G	SP I-A
Within the Airport Influence Area (A-1)	35	35	35	35
Within the Airport Influence Area (A-2)	35	50	50	50
Outside Airport Influence Area	35	50	100	50

d. Windows and Doors

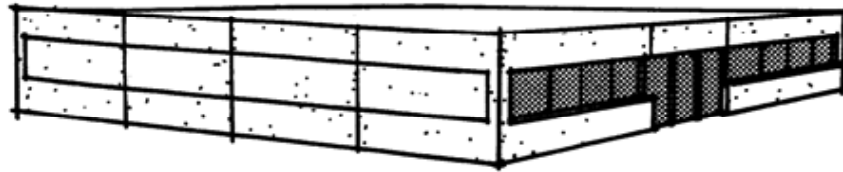
1. The size and placement of windows and doors should relate to the overall form of the building.
2. Awnings shall be compatible with the architectural design of the structure and shall not dominate the building facade.
3. Windows, doors, wall vents, stairways, and other architectural features shall be highlighted and treated in a decorative manner to break up flat surfaces that otherwise appear massive and bulky. Exceptions may be made for pueblo and adobe architecture. Techniques such as building cut-outs, overhangs, and staggered buildings shall be utilized to reduce the appearance of mass and bulk.



Typical Windows and Doors



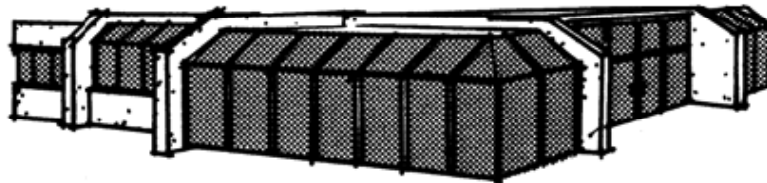
Entry projection and indentation color bands



Vertical seams, window glazing bands and textured walls

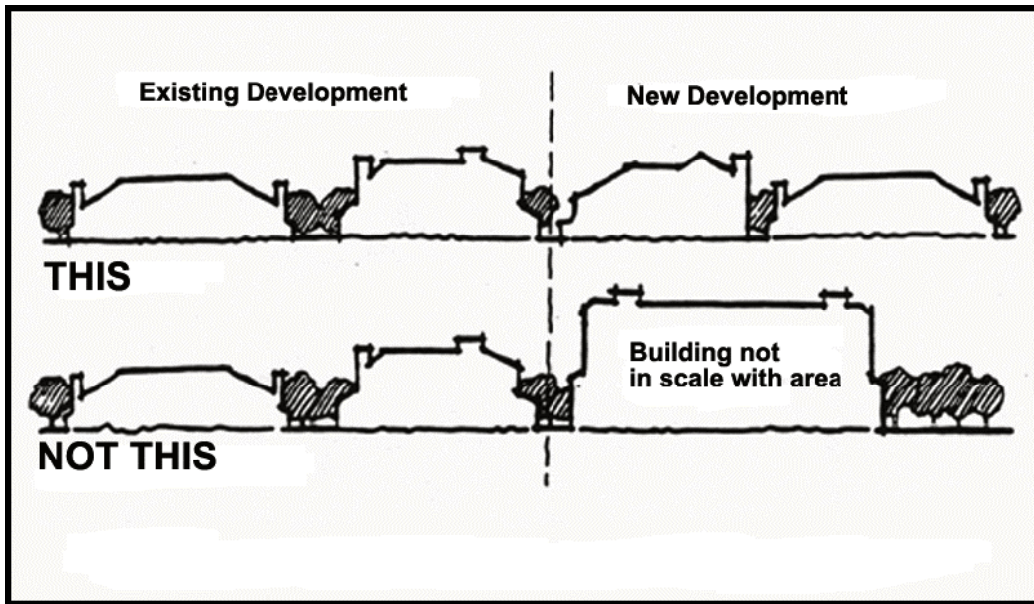


Window glazing, color bands, textured walls and entry indentation



Mix of complimentary materials, varied wall planes, increased window areas, and some textured walls

Recommended Design Features and Materials



Scale of Commercial Development

e. Building Materials and Colors

Allowable

1. Building materials shall provide architectural aesthetic quality, durability and ease of maintenance and shall be compatible with the architectural style of the building.



Preferred Building Materials and Colors

2. New development shall be encouraged to utilize adobe, stucco, smooth plasters, earthen color block, natural stone, wood and terra cotta tile as the dominant building materials in response to the Town's desert environment. The use of some decorative metal features on the exterior of any portion of a structure is allowed.

3. The use of wood siding should consider factors such as fading, staining and prematurely breaking down in the extreme climate of the high desert; and shall be maintained.

4. Exterior building materials shall be composed of colors that will be consistent with the environment.

Prohibited

1. The use of metal panels or metal sheathing, highly reflective or mirror-like materials, and/or standard gray concrete block on the exterior walls of any building or structure shall be prohibited with the exception that such materials may be used if finished with a masonry veneer including, but not limited to brick or stucco.
2. Exposed plywood or particle board shall be prohibited on any building or structure.
3. Piecemeal embellishment and frequent changes in material or color shall be avoided.
4. High-intensity colors, metallic colors, black, or fluorescent colors shall not be used. Building trim and accent areas may feature brighter colors, including primary colors, provided that the width of the trim shall not exceed two (2) feet.

f. Roofing Materials (*Amended Ord. No. 351*)

A broad range of roofing materials can be permitted in the Specific Plan area. However, corrugated metal, unpainted materials and/or reflective materials are not permitted.

2. Landscape

a. Landscape Design Standards

Landscaping shall be designed, installed and maintained in accordance with the following standards:

Principles of Xeriscape Landscaping

Landscape developments shall be designed, installed and maintained in accordance with the following seven basic principles of Xeriscape landscaping:

Planning and Design - Use a water conservation design. Implement a "mini-oasis" concept. Water using plants and turf should be concentrated in small areas near buildings where they may be enjoyed at the pedestrian level.

Limited Turf Areas - Limit the use of turf to small areas where it will be actively used and efficiently watered.

Efficient Irrigation - Utilize the most efficient irrigation system for the area being served. Drip irrigate individual plants rather than flooding larger areas. Group plantings with common water requirements together to be watered on the same irrigation control zone.

Soil Improvements - Add soil amendments within planned areas to increase the water holding capacity of the soil and improve the health and vigor of plants.

Mulching - Cover final soil surfaces with organic or inorganic mulches to insulate against soil temperature extremes and conserve moisture.

Use Lower Water Demand Plants - Utilize only those plants listed in the officially approved low water use plant lists or alternative plants approved by the Director.

Appropriate Maintenance - Maintain irrigation systems so they operate at peak efficiency. Lessen water demand by keeping weed growth down and by thinning unwanted wood from trees rather than cropping them.

Unity and Continuity¹

Landscape unity and continuity may be significantly enhanced through the selection of a dominant tree and shrub species. Such dominance shall be established by making the selected species clearly in the majority (60% or more).

Ground Surface Treatment

If pre-treatment of ground surfaces is required a pre-emergent herbicide shall be applied to the ground prior to and after the placement of natural surface materials (decomposed granite, gravel, crushed rock, river run rock, etc.) in any landscaped area to prevent weed growth.

Inorganic ground covers (decomposed granite, crushed stone, etc.) shall be of a natural color harmonious with other site and architectural materials and shall be installed to a minimum depth of two (2) inches.

All portions of a development site (including future building pads) not occupied by buildings, structures, paved improvements, and required landscape areas shall be temporarily landscaped with plant materials in accordance with this Section or treated with an appropriate inorganic ground cover and maintained in a weed and dust free condition.

Plant Massing

The massing of trees and shrubs into groups containing three (3) or more plants is required unless standards elsewhere within this Section require only a single element, e.g., single trees within parking lot planter islands. Planting of single shrub specimens, unless used to repeat an element already established within a massed planting within the same visual area, is prohibited.

Plant Groupings

The grouping of plant species commonly found together in natural associations or of common environmental requirements (soil type, water, sun exposure, temperature limitations, etc.) is required.

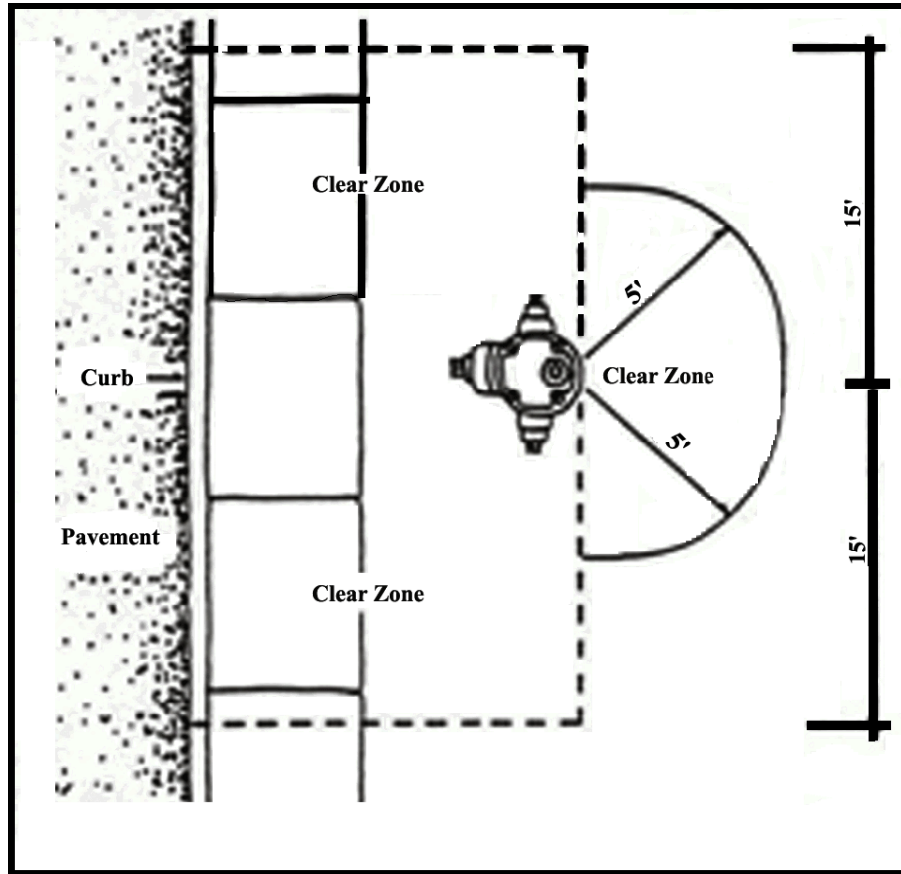
Plant Spacing

In order to foster a more natural look, an uneven spacing of plants is required unless such plants are being used to create a massed shrub or groundcover bed. The spacing of shrubs shall be sufficient to allow plants to reach their natural mature size and form.

¹ Plant palettes partially implemented through the construction of one or more phases of a previously approved project, except for turf areas in excess of the limitations established by these landscape standards, shall be continued throughout the development of that project.

Tree and Shrub Placement in Proximity to Fire Hydrants

Trees, as measured from trunk center, shall be placed a minimum of five (5) feet from fire hydrants. Shrubs, as measured from their mature perimeter, shall be located a minimum of five (5) feet from the rear of a fire hydrant. In no case shall any material other than groundcover be placed between the street or roadway and within fifteen (15) feet of either side or front of a fire hydrant.



Fire Hydrant Clear Zone

Consistency with Existing Streetscape Standards

Street frontage landscaping shall be consistent with any previously adopted specific streetscape standards.

b. Landscape Area Requirements and Materials *(Amended Ord. No. 351, 428)*

New developments shall be landscaped in accordance with the following minimum standards. Landscaping types shall be divided into five areas, including major entry statements, parkway landscape treatments, secondary streetscape treatments, site development landscape treatments, and screening for large buildings.

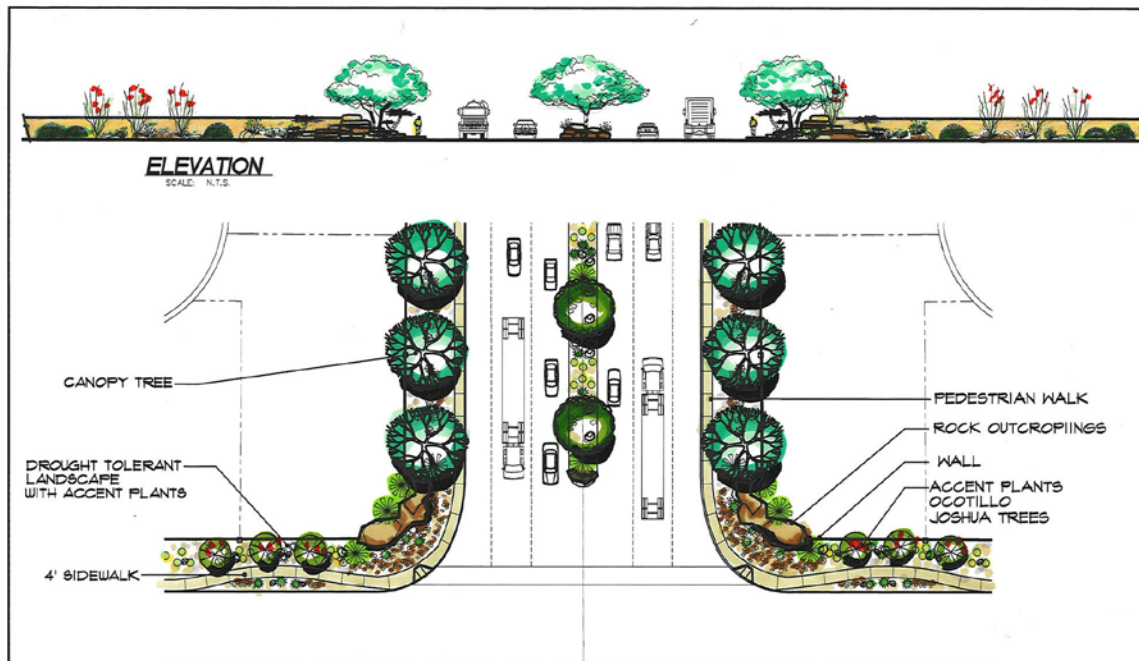
Entry Statements (*Amended Ord. No. 351*)

Areas which serve to focus vehicular traffic should be accented by the use of colorful shrubs and ground covers for enhanced visual interest. Project entries should utilize vertical accents such as Incense Cedar and Arizona Cypress to provide a sense of arrival to the project. In addition, plant materials at major project entries should be located to avoid interference with motorists. There are two types of entry statements, major and secondary. Major entry statements will include a wide variety of plant materials with medium to high densities (see Exhibit III-1), where as secondary entry statements should have a more limited variety of plant materials with low to medium densities (see Exhibit III-2). Both types of entries shall borrow from a similar plant palette.

Major entry statements shall be located at the following locations:

1. On Dale Evans Parkway at the off ramps of High Desert Corridor (SR-220)
2. Entry at Dale Evans Parkway and Fresno Road
3. Entry at Dale Evans Parkway and Johnson Road
4. At the corner of Dale Evans Parkway and Quarry Road
5. Corner of Central Road and Papago Road

Exhibit III-1



TKD

Major Entry Concept

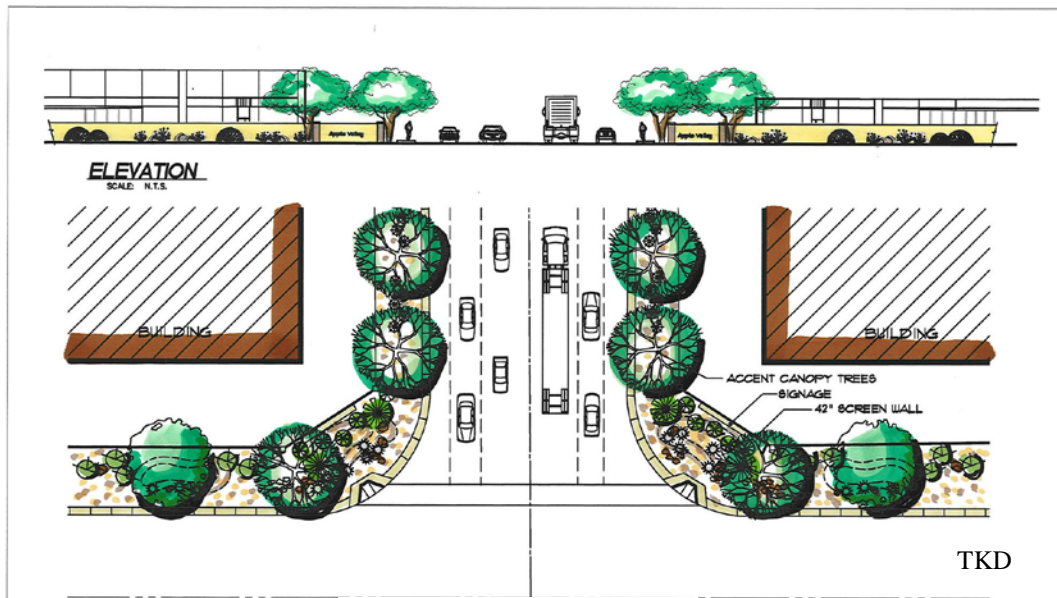
Secondary entry statements shall be located at the following locations:

1. Entry at Johnson Road and Joshua Road.
2. At the corner of Central Road and Quarry Road.
3. Entry at Dale Evans Parkway and Waalew Road.

Landscape Requirements

Trees shall be planted in a formal structure to reinforce the grand scale and formal design composition of the entries. Shrubs should be planted behind trees to provide a solid visual backdrop to define the visual limits of the entries. Shrubs and groundcovers should be planted in groups or masses to enhance and reflect the entry points. The use of flowers should be used to provide color and visual interest that would change with the seasons.

Exhibit III-2



Secondary Entry Concept

Landscape Materials

Landscape materials for Major and Secondary Entry Statements shall include the plants in the following tables.

**Table III-4
 Major Entry Plant List**

Category	Plant Botanical Name	Plant Common Name
Trees	Albizia julibrissin	Silk Tree
Trees	Arbutus unedo	Strawberry Tree
Trees	C. microphyllum	Little Leaf Palo Verde
Trees	P. caroliniana	Purple Leaf Plum
Trees	Platanus acerfolia	London Plane Tree
Trees	Pyrus kawakamii	Evergreen Pear
Trees	R. pacemosa	California Sycamore

**Table III-4
Major Entry Plant List**

Category	Plant Botanical Name	Plant Common Name
Trees	<i>Ulmus parvifolia</i>	Chinese Elm
Shrubs	<i>Fouquieria splendens</i>	Ocotillo
Shrubs	<i>Leucophyllum</i>	Texas Ranger
Shrubs	<i>Ligustrum texanum</i>	Wax Leaf Privet
Shrubs	<i>Mahonia species</i>	Oregon Grape
Shrubs	<i>Penstemon species</i>	Beard Tongue
Shrubs	<i>Raphiolepis indica</i>	Indian Hawthorne
Shrubs	<i>Rosa banksiae</i>	Banks Rose
Shrubs	<i>Salvia species</i>	Sage
Shrubs	<i>Yucca species</i>	Yucca
Shrubs	<i>Zauschneria californica</i>	California Fuchsia
Shrubs	<i>Chamaerops humilis</i>	Mediterranean Fan Palm
Shrubs	<i>Chilopsis linearis</i>	Desert Willow
Shrubs	<i>Cotoneaster species</i>	Cotoneaster
Vines	<i>Campsis radicans</i>	Common Trumpet Creeper
Vines	<i>Wisteria species</i>	Wisteria
Plants For Color	<i>Eschscholzia californica</i>	California Poppy
Plants For Color	<i>Lavandula angustifolia</i>	English Lavender
Groundcover	<i>Acacia redolens</i>	Prostrate Acacia
Groundcover	<i>Baccharis pilularis</i>	"Centennial," Coyote Brush
Groundcover	<i>Cerastium tomentosum</i>	Snow-in-Summer
Groundcover	<i>Convolvulus mauritanicus</i>	Ground Morning Glory
Groundcover	<i>Dalea greggii</i>	Trailing Indigo Bush
Groundcover	<i>Gazania species</i>	Gazania
Groundcover	<i>Oenothera berlandieri</i>	Mexican Evening Primrose
Groundcover	<i>Pyracantha species</i>	Pyracantha
Groundcover	<i>Rosmarinus officinalis</i>	Rosemary
Groundcover	<i>Santolina chamaecyparissus</i>	Lavender Cotton
Groundcover	<i>Verbena peruviana</i>	Verbena

The following table outlines the allowable plants for development of secondary entries.

**Table III-5
Secondary Entry Plant List**

Category	Plant Botanical Name	Plant Common Name
Trees	<i>Albizia julibrissin</i>	Silk Tree
Trees	<i>Arbutus unedo</i>	Strawberry Tree
Trees	<i>C. microphyllum</i>	Little Leaf Palo Verde
Trees	<i>P. caroliniana</i>	Purple Leaf Plum

**Table III-5
Secondary Entry Plant List**

Category	Plant Botanical Name	Plant Common Name
Trees	<i>Platanus acerfolia</i>	London Plane Tree
Trees	<i>Pyrus kawakamii</i>	Evergreen Pear
Trees	<i>Quercus berberidifolia</i>	Scrub Oak
Trees	<i>R. pacemosa</i>	California Sycamore
Trees	Idaho Locust	<i>Ribinia idahoensis</i>
Trees	<i>Ulmus parvifolia</i>	Chinese Elm
Shrubs	<i>Fouquieria splendens</i>	Ocotillo
Shrubs	<i>Leucophyllum</i>	Texas Ranger
Shrubs	<i>Ligustrum texanum</i>	Wax Leaf Privet
Shrubs	<i>Mahonia species</i>	Oregon Grape
Shrubs	<i>Penstemon species</i>	Beard Tongue
Shrubs	<i>Raphiolepis indica</i>	Indian Hawthorne
Shrubs	<i>Romneya coulteri</i>	Matilija Poppy
Shrubs	<i>Rosa banksiae</i>	Banks Rose
Shrubs	<i>Salvia species</i>	Sage
Shrubs	<i>Yucca species</i>	Yucca
Shrubs	<i>Zauschneria californica</i>	California Fuchsia
Shrubs	<i>Chamaerops humilis</i>	Mediterranean Fan Palm
Shrubs	<i>Chilopsis linearis</i>	Desert Willow
Shrubs	<i>Cotoneaster species</i>	Cotoneaster
Vines	<i>Campsis radicans</i>	Common Trumpet Creeper
Vines	<i>Wisteria species</i>	Wisteria
Plants For Color	<i>Eschscholzia californica</i>	California Poppy
Plants For Color	<i>Lavendula angustifolia</i>	English Lavender
Groundcover	<i>Acacia redolens</i>	Prostrate Acacia
Groundcover	<i>Baccharis pilularis</i>	"Centennial," Coyote Brush
Groundcover	<i>Cerastium tomentosum</i>	Snow-in-Summer
Groundcover	<i>Convolvulus mauritanicus</i>	Ground Morning Glory
Groundcover	<i>Dalea greggii</i>	Trailing Indigo Bush
Groundcover	<i>Gazania species</i>	Gazania
Groundcover	<i>Oenothera berlandieri</i>	Mexican Evening Primrose
Groundcover	<i>Pyracantha species</i>	Pyracantha
Groundcover	<i>Rosmarinus officinalis</i>	Rosemary
Groundcover	<i>Santolina chamaecyparissus</i>	Lavender Cotton
Groundcover	<i>Verbena peruviana</i>	Verbena

Parkway Landscape Treatments

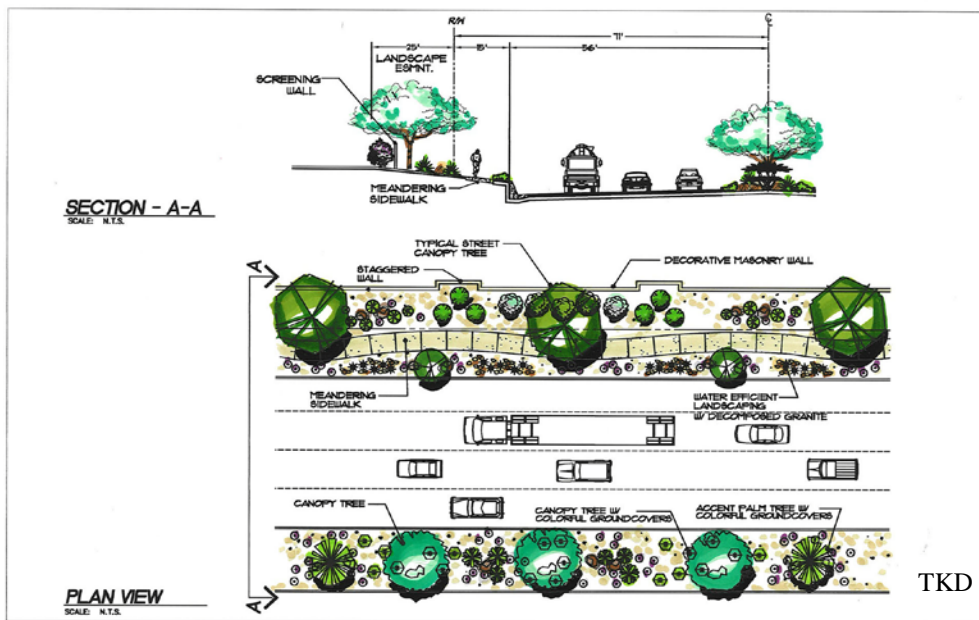
Along the project parkways in the public right-of-way, and continued into the associated the building setbacks, the landscape treatments should be grouped and clustered as they would be found in natural conditions. Landscaping in these areas should provide a sense of place by defining the major roadways. Locations for Parkway Landscape Treatments include the edge

buffers on Papago Road east of Fernandez Road, Waalew Road and Fernandez Street, as well as the edge buffers on Dale Evens Parkway and Central Road.

Landscape Requirements

Landscaping shall include one (1) tree for each 200 square feet of required landscape area. Said tree shall be a minimum twenty-four (24) inch box size; and a six (6)-foot decorative masonry wall reflecting the design, material, and color of the primary structures within the project, excluding approved gate openings; and evergreen trees a minimum of six (6) feet in height planted at a maximum spacing of twenty (20) feet on center and shrubs planted at a rate of five (5) per one hundred linear feet. Exhibit III-3 illustrates the typical parkway landscape treatment.

Exhibit III-3



Typical Parkway Landscaping Treatment

Landscape Materials

Landscape materials for the development of Parkway shall include a combination of the materials in the following table.

**Table III-6
 Parkway Plant List**

Category	Plant Botanical Name	Plant Common Name
Trees	Albizia julibrissin	Silk Tree
Trees	Arbutus unedo	Strawberry Tree
Trees	C. microphyllum	Little Leaf Palo Verde
Trees	E. nicholii	Willow Lead Peppermint
Trees	Fraxinus velutina	Arizona Ash
Trees	Fraxinus velutina	Modesto Ash
Trees	Gleditsia triacanthus	Honey Locust
Trees	Koelreuteria paniculata	Goldenrain Tree

**Table III-6
 Parkway Plant List**

Category	Plant Botanical Name	Plant Common Name
Trees	<i>P. caroliniana</i>	Purple Leaf Plum
Trees	<i>P. Edulis</i>	Pinion Pine
Trees	<i>Parkinsonia aculata</i>	Mexican Palo Verde
Trees	<i>Pinus Eldarica</i>	Mondel Pine
Trees	<i>Pinus Halepensis</i>	Aleppo Pine
Trees	<i>Pistacia chinensis</i>	Chinese Pistache
Trees	<i>Platanus acerfolia</i>	London Plane Tree
Trees	<i>Pyrus kawakamii</i>	Evergreen Pear
Trees	<i>Quercus berberidifolia</i>	Scrub Oak
Trees	<i>R. pacemosa</i>	California Sycamore
Trees	<i>Rhus lancea</i>	African Sumac
Trees	Idaho Locust	Ribinia idahoensis
Trees	Black Locust	Robinia pseudoacacia
Trees	<i>Sophora secundiflora</i>	Texas Mountain Laurel
Trees	<i>Ulmus parvifolia</i>	Chinese Elm
Shrubs	<i>Fouquieria splendens</i>	Ocotillo
Shrubs	<i>Fremontodendron californicum</i>	Flannel Bush
Shrubs	<i>Larrea tridentata</i>	Creosote Bush
Shrubs	<i>Leucophyllum</i>	Texas Ranger
Shrubs	<i>Ligustrum texanum</i>	Wax Leaf Privet
Shrubs	<i>Mahonia species</i>	Oregon Grape
Shrubs	<i>Penstemon species</i>	Beard Tongue
Shrubs	<i>Pittosporum tobira</i>	Wheeler's Dwarf
Shrubs	<i>Raphiolepis indica</i>	Indian Hawthorne
Shrubs	<i>Rhus ovata</i>	Sugar Bush
Shrubs	<i>Rosa banksiae</i>	Banks Rose
Shrubs	<i>Salvia species</i>	Sage
Shrubs	<i>Yucca species</i>	Yucca
Shrubs	<i>Zauschneria californica</i>	California Fuchsia
Shrubs	<i>Atriplex canescens</i>	Saltbush
Shrubs	<i>Caesalpinia gilliesii</i>	Bird of Paradise Bush
Shrubs	<i>Calliandra eriophylla</i>	Fairy Duster
Shrubs	<i>Cassia Wislizeni</i>	Shrubby senna
Shrubs	<i>Chamaerops humilis</i>	Mediterranean Fan Palm
Shrubs	<i>Chilopsis linearis</i>	Desert Willow
Shrubs	<i>Cotoneaster species</i>	Cotoneaster
Vines	<i>Campsis radicans</i>	Common Trumpet Creeper
Vines	<i>Wisteria species</i>	Wisteria
Plants For Color	<i>Eschscholzia californica</i>	California Poppy
Plants For	<i>Lavendula angustifolia</i>	English Lavender

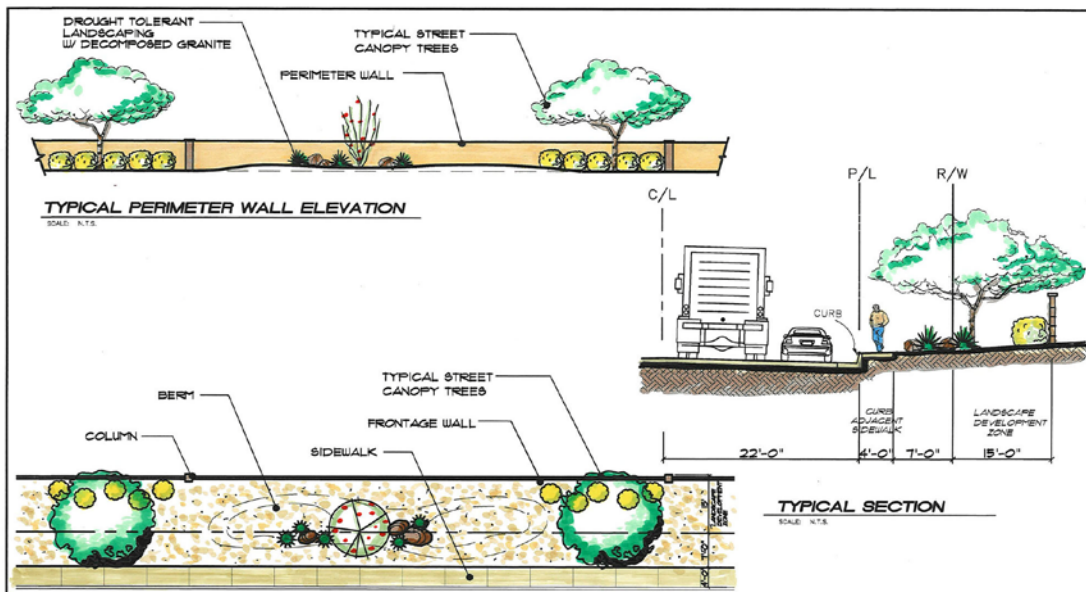
**Table III-6
 Parkway Plant List**

Category	Plant Botanical Name	Plant Common Name
Color		
Groundcover	Acacia redolens	Prostrate Acacia
Groundcover	Atriplex semibaccata	Australian Saltbush
Groundcover	Baccharis pilularis	"Centennial," Coyote Brush
Groundcover	Cerastium tomentosum	Snow-in-Summer
Groundcover	Convolvulus mauritanicus	Ground Morning Glory
Groundcover	Dalea greggii	Trailing Indigo Bush
Groundcover	Gazania species	Gazania
Groundcover	Oenothera berlandieri	Mexican Evening Primrose
Groundcover	Pyracantha species	Pyracantha
Groundcover	Rosmarinus officinalis	Rosemary
Groundcover	Santolina chamaecyparissus	Lavender Cotton
Groundcover	Verbena peruviana	Verbena

Secondary Streetscape Treatments (along major internal roadways)

Specialized landscape improvements shall be located along the secondary streets that pass through the project. These improvements shall be located in the public right-of-way, and continued into the associated the building setbacks. The locations for these improvements include edge buffers on Fresno Road (E/W), Lafayette Street (E/W), Johnson Road (E/W), and Navajo Trail (N/S). Exhibit III-4 illustrates the typical secondary streetscape landscape treatment.

Exhibit III-4



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Parkway for Minor Arterial Street

Landscape Requirements

Landscaping in other perimeter areas shall be provided at a minimum rate of one (1) tree and six (6) shrubs per forty (40) linear feet plus sufficient groundcover plantings to provide combined shrub and ground coverage of forty (40) percent of the total landscaped area, except where screening is required. Trees shall be a minimum fifteen (15) gallon size when planted and twenty-four (24) inch box size. Trees and shrubs may be grouped, but gaps between groupings of plants shall not exceed fifty (50) feet.

Landscape Materials

Landscape materials shall include a combination of the plant materials in the following table.

**Table III-7
 Secondary Roadway Plant List**

Category	Plant Botanical Name	Plant Common Name
Trees	<i>Albizia julibrissin</i>	Silk Tree
Trees	<i>Arbutus unedo</i>	Strawberry Tree
Trees	<i>C. microphyllum</i>	Little Leaf Palo Verde
Trees	<i>E. nicholii</i>	Willow Lead Peppermint
Trees	<i>Fraxinus velutina</i>	Arizona Ash
Trees	<i>Fraxinus velutina</i>	Modesto Ash
Trees	<i>Gleditsia triacanthus</i>	Honey Locust
Trees	<i>Koelreuteria paniculata</i>	Goldenrain Tree
Trees	<i>P. caroliniana</i>	Purple Leaf Plum
Trees	<i>P. Edulis</i>	Pinion Pine
Trees	<i>Pinus Eldarica</i>	Mondel Pine
Trees	<i>Pistacia chinensis</i>	Chinese Pistache
Trees	<i>Platanus acerfolia</i>	London Plane Tree
Trees	<i>Pyrus kawakamii</i>	Evergreen Pear
Trees	<i>Quercus berberidifolia</i>	Scrub Oak
Trees	<i>R. pacemosa</i>	California Sycamore
Trees	<i>Rhus lancea</i>	African Sumac
Trees	Idaho Locust	<i>Ribinia idahoensis</i>
Trees	Black Locust	<i>Robinia pseudoacacia</i>
Trees	<i>Sophora secundiflora</i>	Texas Mountain Laurel
Trees	<i>Ulmus parvifolia</i>	Chinese Elm
Shrubs	<i>Fouquieria splendens</i>	Ocotillo
Shrubs	<i>Fremontodendron californicum</i>	Flannel Bush
Shrubs	<i>Larrea tridentata</i>	Creosote Bush
Shrubs	<i>Leucophyllum</i>	Texas Ranger
Shrubs	<i>Ligustrum texanum</i>	Wax Leaf Privet
Shrubs	<i>Mahonia species</i>	Oregon Grape
Shrubs	<i>Penstemon species</i>	Beard Tongue
Shrubs	<i>Pittosporum tobira</i>	Wheeler's Dwarf

**Table III-7
 Secondary Roadway Plant List**

Category	Plant Botanical Name	Plant Common Name
Shrubs	Raphiolepis indica	Indian Hawthorne
Shrubs	Romneya coulteri	Matilija Poppy
Shrubs	Rhus ovata	Sugar Bush
Shrubs	Rosa banksiae	Banks Rose
Shrubs	Salvia species	Sage
Shrubs	Yucca species	Yucca
Shrubs	Zauschneria californica	California Fuchsia
Shrubs	Atriplex canescens	Saltbush
Shrubs	Caesalpinia gilliesii	Bird of Paradise Bush
Shrubs	Calliandra eriophylla	Fairy Duster
Shrubs	Cassia Wislizeni	Shrubby senna
Shrubs	Chamaerops humilis	Mediterranean Fan Palm
Shrubs	Chilopsis linearis	Desert Willow
Shrubs	Cotoneaster species	Cotoneaster
Vines	Campsis radicans	Common Trumpet Creeper
Vines	Wisteria species	Wisteria
Plants For Color	Eschscholzia californica	California Poppy
Plants For Color	Lavendula angustifolia	English Lavender
Groundcover	Acacia redolens	Prostrate Acacia
Groundcover	Atriplex semibaccata	Australian Saltbush
Groundcover	Baccharis pilularis	"Centennial," Coyote Brush
Groundcover	Cerastium tomentosum	Snow-in-Summer
Groundcover	Convolvulus mauritanicus	Ground Morning Glory
Groundcover	Dalea greggii	Trailing Indigo Bush
Groundcover	Gazania species	Gazania
Groundcover	Oenothera berlandieri	Mexican Evening Primrose
Groundcover	Pyracantha species	Pyracantha
Groundcover	Rosmarinus officinalis	Rosemary
Groundcover	Santolina chamaecyparissus	Lavender Cotton
Groundcover	Verbena peruviana	Verbena

Site Development Landscape Treatment

The following landscape treatments are applicable to the individual development sites and roadways that are not listed or impacted by the landscape requirements outlined above.

Landscape Requirements

All portions of a development site not utilized for building development, service areas, paved or improved storage areas, parking, driveways, etc., shall be landscaped. Minimum areas of landscaping are as follows:

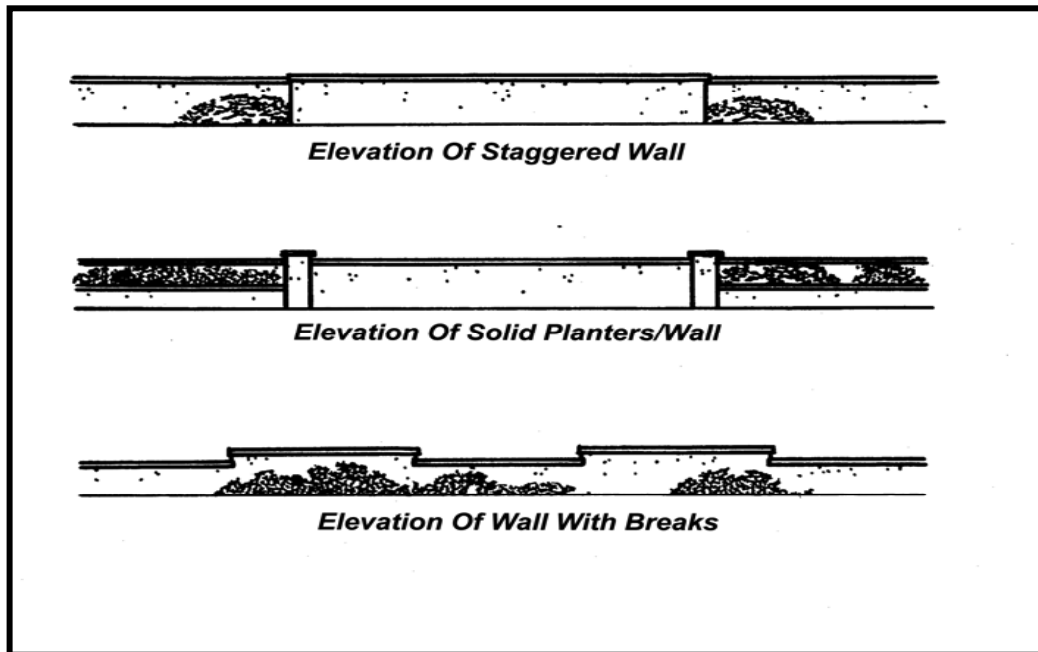
Front Building Setback/Street Right-of-Way Areas - All front building setback and street right-of-way areas located between on-site improvements and the back of existing or future public sidewalks or street curbs, except needed access driveways, shall be fully landscaped, unless otherwise provided for in this Specific Plan.

Landscaping in the front building setback area shall be provided at a minimum rate of one (1) tree and six (6) shrubs per thirty (30) linear feet of frontage plus sufficient groundcover plantings to provide combined shrub and ground coverage of fifty (50) percent of the total landscaped area. Trees and shrubs may be grouped, but gaps between groupings of plants shall not exceed forty (40) feet.

Parking Lot Area - The following landscaping standards apply to parking lots. In order to reduce the "heat island effect" of large expanses of unprotected paved areas, a minimum of thirty (30) percent of the interior parking surface of all parking lots shall be shaded at the maturity of the landscaping.

Provide a minimum of one (1) tree (minimum twenty-four (24) inch box when planted) for each seven (7) parking spaces located so as to visually disrupt long rows of parking spaces, trees may be clustered where appropriate.

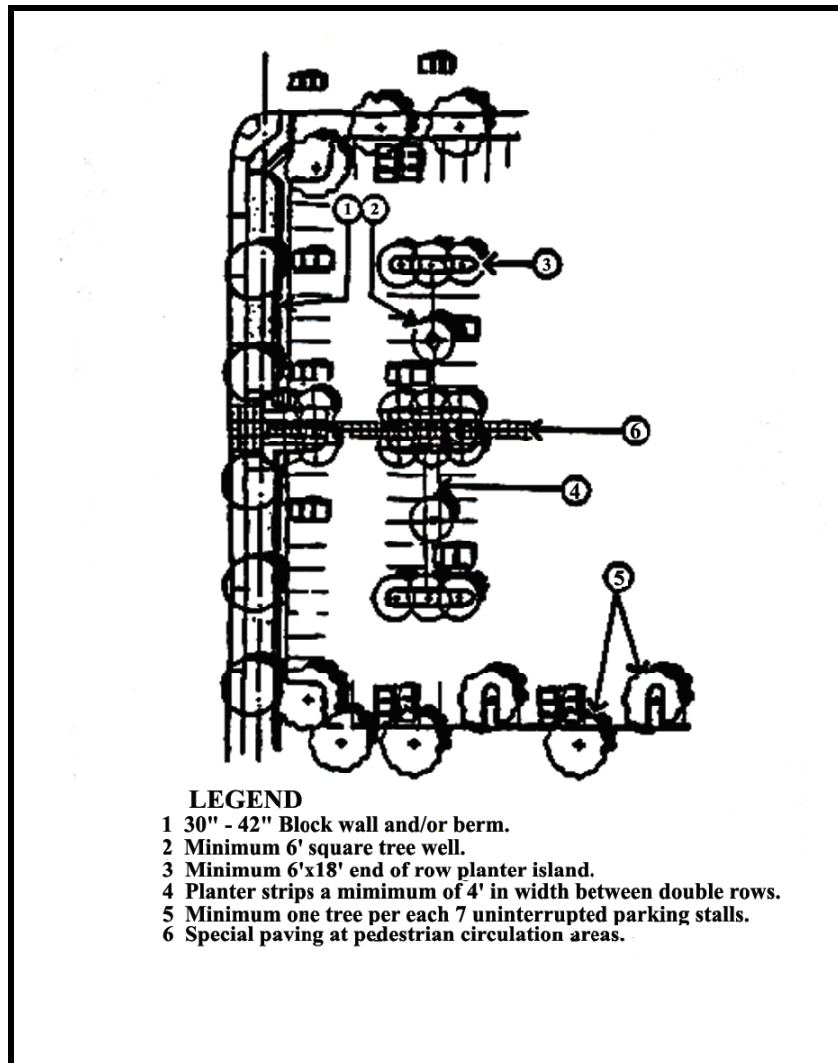
A thirty-six to forty-two (36-42) inch high decorative masonry wall, hedge or landscaped berm, as measured from the finished grade of the parking area, shall also be used adjacent to public rights-of-way to screen the parking area. The height of the screening wall or berm may be reduced when the parking lot is below grade. Horizontal and vertical variations in the design of screening walls are required where the length of such walls exceed forty (40) feet. Said variations are subject to Planning Staff approval.



Recommended Design Features and Materials

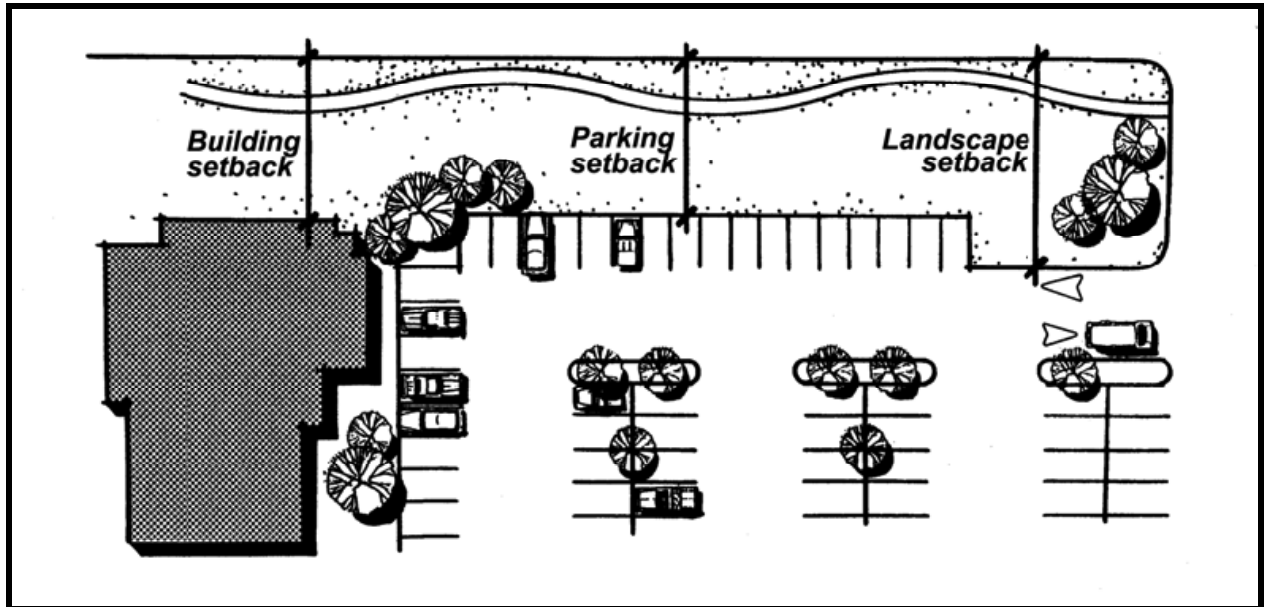
A minimum of five (5) percent of the interior parking surface area of all parking lots shall be landscaped. Such percentage may be achieved by combining paragraph (1) below with paragraph (2) and/or (3).

1. Planter islands a minimum of five (5) feet in width shall be located at the ends of all rows of parking stalls between the last stall and any drive aisle. Where drive aisles are curved, alternative dimensions with similar area may be approved; and
2. Planter islands, shall be uniformly distributed throughout the interior parking area, and protected by raised curbs; or
3. Planter strips, located between double rows of parking stalls, shall be a minimum of four (4) feet in width.
4. Each parking stall may overhang two (2) feet into this area.



Planter Island/Strips

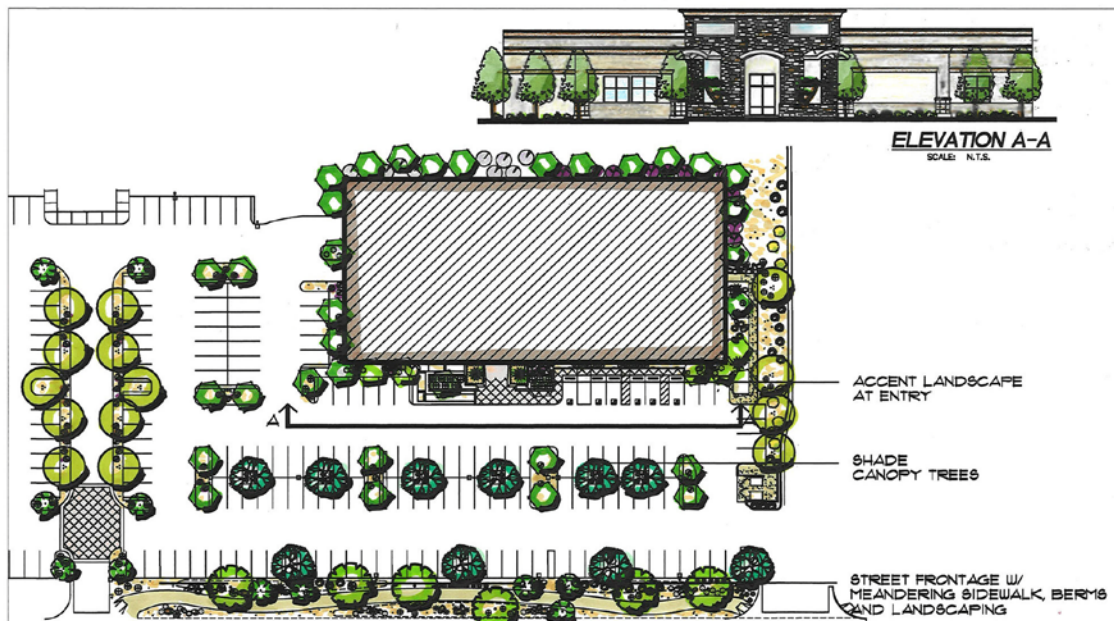
Trees within parking lots shall be kept trimmed to a minimum clear canopy height of six (6) feet for visual safety.



Landscape Areas

Commercial Development - One (1) tree and six (6) shrubs per 500 square feet of interior open space plus any additional ground cover which, upon maturity, will cover a minimum of 50% of all interior open space surfaces. Inclusion of turf is subject to the limitation of 20% of the total landscaped area. Exhibit III-5 illustrates the typical landscape for commercial buildings.

Exhibit III-5

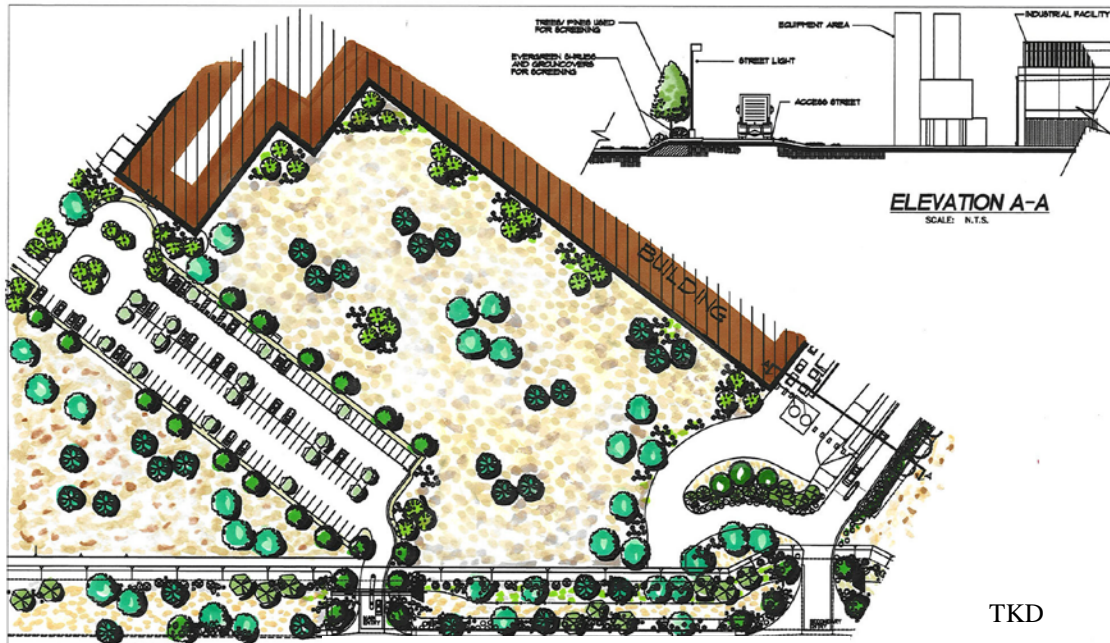


Typical Landscape for Commercial Building

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Industrial Development - One (1) tree and six (6) shrubs per 750 square feet of interior open space plus such additional vegetative ground cover which, upon maturity, will cover a minimum of 40% of all interior open space surfaces. The inclusion of turf is subject to the limitation of 10% of the total landscaped area. Exhibit III-6 illustrates the typical landscape for industrial buildings.

Exhibit III-6



Typical Landscape for Industrial Building

Landscape Materials

Landscape materials for commercial, industrial and airport industrial shall include a combination of the plants from the following table.

**Table III-8
 Site Development Plant List**

Category	Plant Botanical Name	Plant Common Name	Commercial	Industrial	Airport
Trees	Albizia julibrissin	Silk Tree	X		
Trees	Arbutus unedo	Strawberry Tree	X	X	X
Trees	C. microphyllum	Little Leaf Palo Verde	X	X	
Trees	Parkinsonia aculata	Mexican Palo Verde		X	
Trees	Pyrus kawakamii	Evergreen Pear	X		
Trees	Quercus berberidifolia	Scrub Oak	X		
Trees	Idaho Locust	Ribinia idahoensis	X		
Trees	Black Locust	Robinia pseudoacacia	X	X	
Trees	Sophora secundiflora	Texas Mountain Laurel	X		
Trees	Ulmus parvifolia	Chinese Elm	X	X	
Shrubs	Fouquieria splendens	Ocotillo			
Shrubs	Fremontodendron californicum	Flannel Bush		X	X

**Table III-8
Site Development Plant List**

Category	Plant Botanical Name	Plant Common Name	Commercial	Industrial	Airport
Shrubs	<i>Larrea tridentata</i>	Creosote Bush		X	X
Shrubs	<i>Leucophyllum</i>	Texas Ranger	X	X	X
Shrubs	<i>Ligustrum texanum</i>	Wax Leaf Privet	X	X	
Shrubs	<i>Mahonia species</i>	Oregon Grape	X		
Shrubs	<i>Myrtus communis</i>	True Myrtle	X		
Shrubs	<i>Nandina domestica</i>	Heavenly Bamboo	X		
Shrubs	<i>Penstemon species</i>	Beard Tongue	X		
Shrubs	<i>Pittosporum tobira</i>	Wheeler's Dwarf	X		
Shrubs	<i>Raphiolepis indica</i>	Indian Hawthorne	X		
Shrubs	<i>Romneya coulteri</i>	Matilija Poppy	X	X	
Shrubs	<i>Rhus ovata</i>	Sugar Bush	X	X	X
Shrubs	<i>Rosa banksiae</i>	Banks Rose	X		
Shrubs	<i>Salvia species</i>	Sage	X		
Shrubs	<i>Simmondsia chinensis</i>	Jojoba	X	X	X
Shrubs	<i>Chamaerops humilis</i>	Mediterranean Fan Palm*	X	X	X
Shrubs	<i>Chilopsis linearis</i>	Desert Willow*	X	X	X
Shrubs	<i>Cotoneaster species</i>	Cotoneaster	X	X	X
Vines	<i>Campsis radicans</i>	Common Trumpet Creeper	X		
Vines	<i>Wisteria species</i>	Wisteria	X		
Plants For Color	<i>Eschscholzia californica</i>	California Poppy	X		
Plants For Color	<i>Lavendula angustifolia</i>	English Lavender	X		
Groundcover	<i>Acacia redolens</i>	Prostrate Acacia	X	X	X
Groundcover	<i>Atriplex semibaccata</i>	Australian Saltbush		X	X
Groundcover	<i>Baccharis pilularis</i>	"Centennial," Coyote Brush	X	X	X
Groundcover	<i>Cerastium tomentosum</i>	Snow-in-Summer	X		
Groundcover	<i>Convolvulus mauritanicus</i>	Ground Morning Glory	X		
Groundcover	<i>Dalea greggii</i>	Trailing Indigo Bush	X	X	X
Groundcover	<i>Festuca ovina glauca</i>	Blue Fescue	X		
Groundcover	<i>Gazania species</i>	Gazania	X	X	X
Groundcover	<i>Liriope muscari</i>	Lily Turf	X		
Groundcover	<i>Oenothera berlandieri</i>	Mexican Evening Primrose*	X		
Groundcover	<i>Pyracantha species</i>	Pyracantha	X	X	X
Groundcover	<i>Rosmarinus officinalis</i>	Rosemary	X	X	X
Groundcover	<i>Santolina chamaecyparissus</i>	Lavender Cotton	X		
Groundcover	<i>Verbena peruviana</i>	Verbena	X		

Screening for Large Buildings

Additional landscaping treatments shall be implemented to screen large buildings adjacent to on site parkways and secondary roadways, and or residential uses. Large buildings are defined as those buildings that are more than fifty (50) feet in height, up to a maximum of one hundred (100) feet in height and or over 750,000 square feet in floor area. Exhibit III-7 illustrates the typical screening for large buildings.

Exhibit III-7



Typical Screening of Large Buildings

Landscape Requirements

Plant materials shall consist of compact evergreen plants. Such planting shall be of a kind or used in such a manner as to provide screening with a minimum thickness of two (2) feet within eighteen (18) months after initial installation. Permanent automatic irrigation shall be provided. If, after eighteen (18) months after installation, plant materials have not formed an opaque screen or if an opaque screen is not maintained, the Director of Community Development may require that a wall, solid fence, or berm be installed.

Landscape Materials

Landscape materials used to screen large buildings shall be plants from the following table.

**Table III-9
Screening Large Buildings Plant List**

Category	Plant Botanical Name	Plant Common Name
Trees	C. microphyllum	Little Leaf Palo Verde
Trees	Calocedrus decurrens	Incense Cedar
Trees	Cedrus deodora	Deodar Cedar
Trees	Cercidium floridum	Blue Palo Verde
Trees	Cupressus arizonica	Arizona Cypress
Trees	E. nicholii	Willow Lead Peppermint
Trees	Fraxinus velutina	Arizona Ash
Trees	Fraxinus velutina	Modesto Ash
Trees	P. caroliniana	Purple Leaf Plum
Trees	P. Edulis	Pinion Pine
Trees	P. pinea	Chir Pine
Trees	Pinus Eldarica	Mondel Pine
Trees	Pinus Halepensis	Aleppo Pine
Trees	Pistacia chinensis	Chinese Pistache
Trees	Platanus acerfolia	London Plane Tree
Trees	Prosopis species	Texas/Honey Mesquite
Trees	R. pacemosa	California Sycamore
Trees	Rhus lancea	African Sumac
Trees	Sophora secundiflora	Texas Mountain Laurel
Trees	Ulmus parvifolia	Chinese Elm
Shrubs	Larrea tridentata	Creosote Bush
Shrubs	Leucophyllum	Texas Ranger
Shrubs	Ligustrum texanum	Wax Leaf Privet
Shrubs	Rhus ovata	Sugar Bush
Shrubs	Simmondsia chinensis	Jojoba
Shrubs	Chilopsis linearis	Desert Willow
Groundcover	Pyracantha species	Pyracantha
Groundcover	Rosmarinus officinalis	Rosemary

General Landscape Improvement Requirements

The following minimum landscape improvements are required within the following landscape areas:

Grading in the Front Building Setback - Front setback areas shall be graded in a manner which creates natural and pleasing ground forms in accordance with the following guidelines:

1. A maximum of fifty (50) percent of the front building setback area may be used for storm water retention;

2. Soil excavated to create needed retention basins shall, within the slope limitations established below, be used to create complementary earth mounds elsewhere within the same front building setback area;
3. Earth mounds with a maximum slope ratio of four to one (4:1), horizontal to vertical, shall be located and designed to minimize street views into retention basins;
4. Grading and other site preparation shall preclude the run-off of rain and/or irrigation water from landscaped surfaces onto paved surfaces.

Finished Grade Surfaces - All landscaped areas shall be graded so that finish grade surfaces of all nonliving materials (i.e., decomposed granite, crushed rock, mulch, and the like) are at least one and one-half (1 1/2) inches below concrete or other paved surfaces.

Protection of Landscaped Areas - Landscaped areas adjacent to vehicular drives or parking areas shall be protected by a six (6) inch vertical curb. Areas surfaced with different materials (i.e. lawn and decomposed granite) shall be separated by masonry, wood, or mowing strips.

Irrigation Systems - The use of drip irrigation systems or systems of equivalent efficiency for all landscaping is required.

Limitations on the Use of Turf

Unless watered with "reclaimed" water, the use of turf in specific land uses shall be limited to 20% for Commercial Development, 10% for Industrial Development, and 10% for Airport Development.

Decorative Water Features

Within commercial, industrial and airport developments the use of decorative water features including, but not limited to, pools, ponds, fountains, streams, and waterfalls, unless serviced with "reclaimed water", shall be limited to small scale pedestrian oriented locations and features. Water feature designs that reduce evaporation, e.g. cascading water rather than vertical sprays, are required.

c. Landscape Maintenance

Landscaping shall be maintained (watering, fertilizing, weeding, mowing, trash pick-up, and pruning) by the landowner or the lesser in accordance with Apple Valley Development Code 9.75.060, Landscape Maintenance.

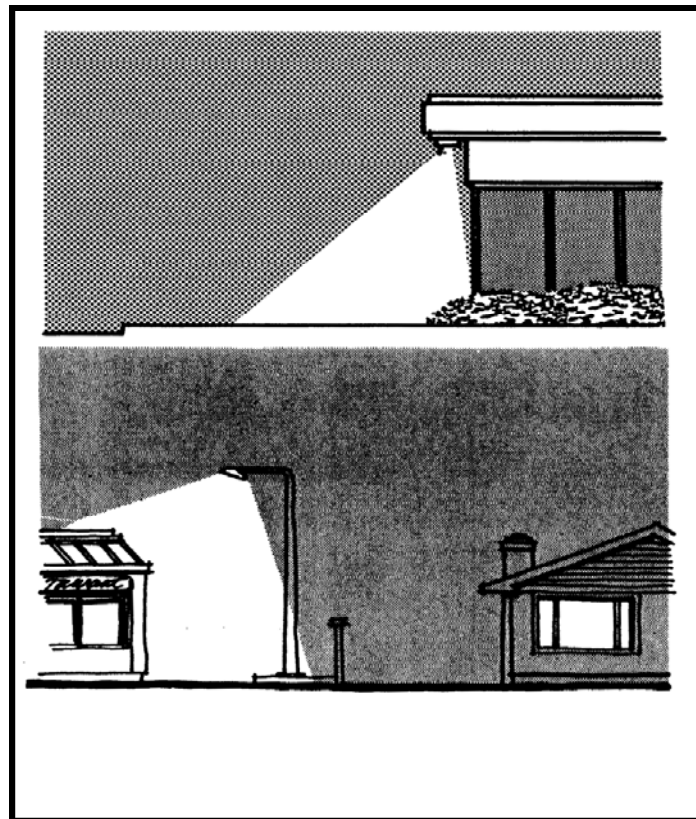
3. Lighting

a. General Provisions

General lighting provisions include the following:

1. Lighting shall be used only for the functional requirements of safety, security, and identification. Unnecessary lighting is prohibited in the interest of energy efficiency and maintenance of the Town's Dark Sky Policy.

2. All light and glare shall be directed onto the site and away from adjacent properties.
3. Light standards shall blend architecturally with buildings, pedestrian areas, and other hardscape elements.
4. Lighting fixtures in the vicinity of the airport shall be compatible with airport operations.
5. All lighting used in parking lots for security purposes or safety-related uses shall be scheduled so light rays emitted by the fixture are projected below the imaginary horizontal plane passing through the lowest point of the fixture and in such a manner that the light is directed away from streets and adjoining properties.
6. If lighting is used or is necessary for color rendition, the primary lighting system shall be supplemented with a secondary lighting system which shall serve as security-level lighting and shall be the sole source of lighting during the non-operating hours of each business.
7. Lighting standards and fixtures shall be of a design compatible with the architecture of on-site buildings.
8. Flashing lights are prohibited.
9. The intensity of light at the boundary of any development onsite shall not exceed seventy-five (75) foot lamberts from a source of reflected light.
10. Light standards should be limited to eighteen (18) to twenty-five (25) feet.



Confine Light to Within the Project Boundaries

b. Requirements for Shielding and Filtering

The requirements for shielding and filtering of light emissions for outdoor light fixtures include the following:

**Table III-10
 Requirements for Shielding and Filtering of Outdoor Lighting**

Fixture Lamp Type	Shielding Requirement	Filtering Requirement
Low Pressure Sodium	Partially	None
High Pressure Sodium	Fully	None
Metal Halide	Fully	Yes
Fluorescent	Fully	Yes
Quartz	Fully	None
Incandescent, greater than 160 watts	Fully	None
Incandescent, less than 160 watts	None	None
Mercury Vapor	Fully	Yes
Fossil fuel	None	None
Gas tubes filled with neon, argon, or Krypton	None	None

c. Prohibited Lighting

Outdoor Building/Landscaping Illumination - The unshielded outdoor illumination of any building, landscaping, signing, or other purpose is prohibited except with incandescent fixtures less than 160 watts, fossil fuels, and/or glass tubes (see Table 10 above).

New Mercury Vapor Installations - The installation of mercury vapor fixtures is prohibited. All existing mercury vapor lights installed shall be fully shielded.

Illuminated Awnings - The use of lighting inside a transparent ground or wall mounted awning is prohibited.

4. Walls and Fences

a. General Provisions

1. Unless required for a specific screening or security purpose, walls should avoided within commercial areas. Walls shall be kept as low as possible while still performing their screening or security function.
2. The design and architecture of all walls, retaining walls, and fences shall reinforce the Town's desert character by the use of natural looking materials which can be expected to withstand the extremes of the high desert climate.
3. Walls design shall be compatible with the architectural character of the primary structures and the surrounding area.

4. Long expanses of wall surface or fence surface shall be offset and architecturally designed to avoid monotony. Pilasters shall be provided at regular intervals consistent with the length and scale of the wall but at a minimum of every fifty (50) feet and landscape pockets shall be provided.
5. Construction materials and colors shall be consistent with the project architecture and provide an element of continuity throughout the project.
6. Wall shall be designed to blend with the architecture of the site, both sides of all walls shall be finished.
7. Retaining walls of more than one hundred twenty (120) square feet shall be constructed of finished decorative material which is compatible with the primary material used on the main building.
8. When on-site barriers are necessary for security, open view fencing shall be used. Open view fencing shall have pilasters of a material which complements the building architecture. Metal rails and pickets shall be sufficiently spaced to restrict trespassing. Spires or spikes or other detailing may be used to impede trespassing.

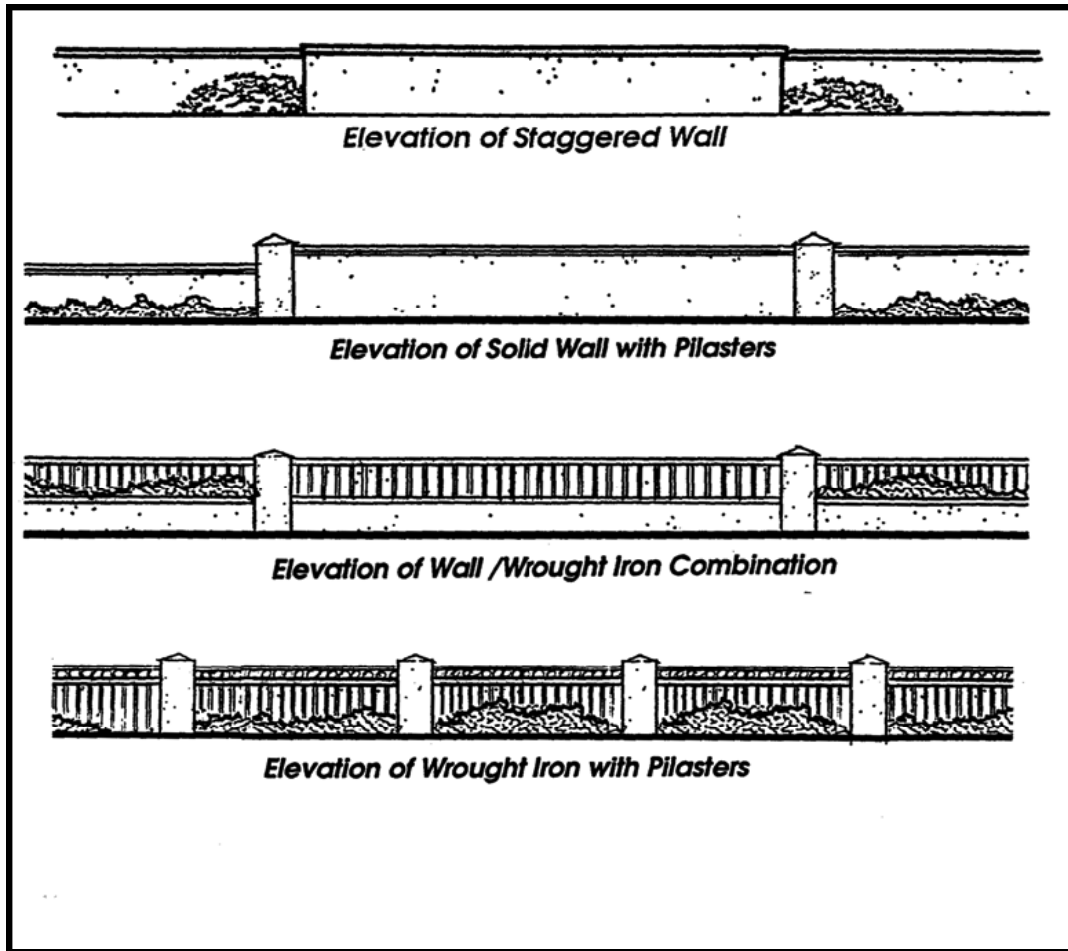
b. Design Standards

1. On all other lots, and corner lots outside of the Clear Sight Triangle, a maximum six (6) foot high solid wall or fence may be located anywhere except in the required front or street side setback, unless greater height is required to screen an outdoor use in accordance with the Apple Valley Development Code.
2. A Wall Height Permit shall be required for a wall or fence above six (6) feet in height, up to a maximum of eight (8) feet in height, as measured from the lowest grade adjacent to either side of the wall, and may be approved by the Planning Division, where such wall or fence separates a commercial or industrial use from an existing residential use or residentially zoned property.
3. A Conditional Use Permit shall be required for a wall or fence above eight (8) feet in height, up to a maximum of ten (10) feet in height, as measured from the lowest grade adjacent to either side of the wall, and may be approved by the Planning Division.
4. The Wall Height Permit shall not be approved or issued until the Planning Division has received written acceptance of the proposed wall or fence from all adjacent property owners. Further, the fence or wall shall be architecturally and aesthetically consistent with the primary commercial or industrial structure built on site.



Typical Wall

5. Within the required front or street side setback, solid walls or fences are limited to forty-two (42) inches in height; open fences constructed of wrought iron incorporating decorative features, such as pilasters and spires or other embellishments, may be six (6) feet in height.
6. The use of chain link fencing shall be discouraged and approval is at the discretion of the Planning Division. Chain link fencing shall incorporate visual impediments (slats or the like) such that they cannot be seen through. The use of chain link fencing shall be limited to those areas that are outside of the public view, including back and side yards. Partial walls or decorative fencing shall be required within the public view. Chain link fencing shall not be used along back and side yards that abut public roads.



Recommended Wall Design Features and Materials

5. Signage

a. General Design Criteria

Signs make public statements about what they identify through the quality of materials and workmanship, size and positioning, and the method of illumination. The cumulative effect of high quality signs results in a higher quality image for development within the Specific Plan planning area. The purpose of this Section is to assist designers and the general public in understanding the Specific Plan goals and objectives for achieving high quality, efficient signage within the planning area. These criteria and standards are intended to provide direction for the development of signage within the planning area. These criteria and standards will be used during the Town's development review process to encourage a high degree of sign quality while providing the flexibility necessary to encourage creativity on the part of sign designers.

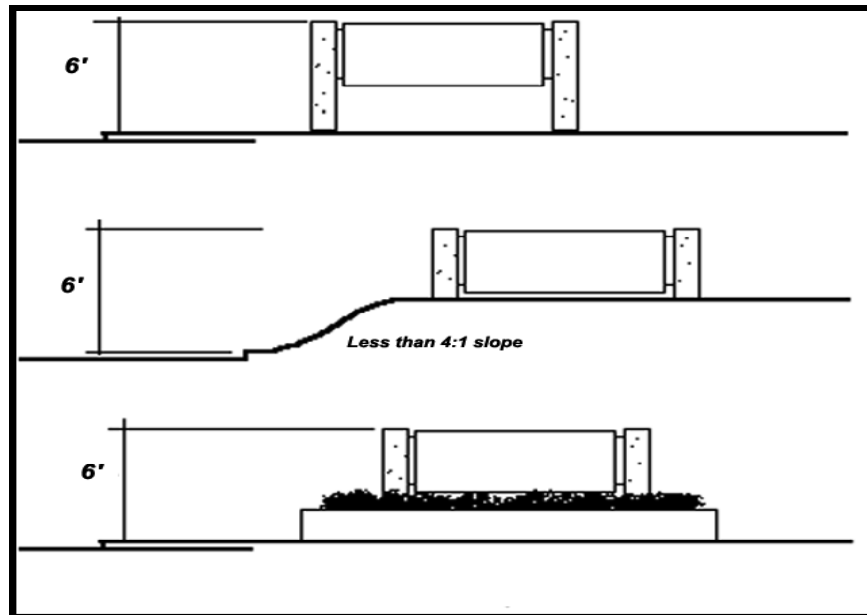
The criteria and standards in this Section apply to all sign proposals. These criteria and standards should be followed unless the purpose of this Section can better be achieved through other design techniques. Sign standards are provided in Design Standards following this Section.

Computations

The following methods shall be used to measure sign height, sign area and the number and location of signs.

Sign Height

1. The distance from ground level to highest point of the sign structure, providing, however, that where the structure is on a berm, mound or slope, the slope shall not exceed a four to one (4:1) horizontal to vertical ratio. If the slope exceeds this ratio then height shall be measured from the toe (or bottom) of the slope, or a point where the slope does not exceed four to one. Where a planter or retaining wall exists, the height shall be measured from the top of the footing, unless the wall is on the side of the sign away from the public right-of-way and is not visible from the public right-of-way (see illustration below).
2. Where visibility of a monument sign face is obstructed by a grade differential, the height of the sign may be increased so that the base of the sign would be considered as that point where there is no obstruction of the line of sight for a driver in any lane of the main highway or road (not including outer highway or frontage roads).
3. No sign attached to a structure shall be placed above the roofline.



Sign Height

Sign Area

1. Sign area is defined as the entire area within the outside border of the sign. The area of a sign having no continuous border or lacking a border shall mean the entire area within a single continuous perimeter formed by no more than eight straight lines enclosing the extreme limits of writing, representations, emblem, or any fixture or similar character, integral part of the display or used as a border excluding the necessary supports or uprights on which such sign is placed.

- a. Where a sign has two (2) or more faces, the area of all faces shall be included in determining the area of the sign, except that where (2) two such faces are placed back-to-back and are at no point more than three feet (3) from one another, the area of the sign shall be taken as the area of one (1) face if the two faces of equal area, or as the area of the larger face if the two (2) faces are of unequal area.
2. Building or street frontages may not be combined to permit a larger area on any one frontage.

Number and Location of Signs

1. Except as otherwise specified, the total cumulative sign area of each sign type (i.e., monument signs or wall signs) allowed for a building or street frontage may be divided among more than one sign, of the same sign type (i.e., monument signs or wall signs) provided that the total of all signs of each sign type, except exempt signs, does not exceed the cumulative sign area allowed for that sign type and signs comply with the following criteria. This applies to wall and monument signs.
 - a. Monument signs on an individual property shall be a minimum of one hundred (100) feet apart, which may limit the permissible number of signs. Signs on separate properties shall be located to minimize obstruction of signs on other properties to the greatest extent feasible.
 - b. The number of monument signs shall not exceed the number of entrances to a site, except that sign area may be allocated for individual free-standing buildings occupied by a single tenant within a project to allow signage for such tenants.
 - c. Monument signs shall be located near an entrance to the site or near a street intersection or adjacent to the free-standing business to which it relates.
2. Signs shall not obstruct vehicular sight distance, view of right-of-way, or pedestrian/bicycle circulation. In no case shall signs be allowed to interfere with the "Clear Sight Triangle" (see definition in Chapter 9.08 of the Apple Valley Development Code).

Architectural Compatibility and Context

Relationship to Buildings

1. Signs shall be designed as an integral part of the total building and site design and shall relate to the architectural style of the buildings or structures with which they are associated.
2. Signs shall be consistent with the scale and proportions of building elements within the facade rather than conceal, compete, detract from or dominate them. The shape and layout of architectural features of the building shall be reflected in the sign shape (vertical and horizontal rectangles, arches, squares, etc.). For instance, dominant horizontal or rectangular architectural elements shall not be accompanied by square or vertically oriented signs. Dominant building lines shall not be obscured by the sign shape.

3. Signs shall be designed to incorporate or be compatible with the predominant visual elements of the building, such as type of construction materials, architectural elements, color, or other design detail or style.
4. Signs shall be adequately separated to avoid clutter and difficulty in reading the message.
5. No sign attached to a structure shall be placed above the roofline.
6. Can or raceway type wall signage shall be expressly prohibited in the entire Specific Plan area, with the exception of logos and graphics.

Relationship to Other Signs

1. Signs on the same lot or within the same center shall be related to each other by incorporating similar design elements or theme.

Relationship to the Site

1. Signs shall provide a visual reference to business or building location. Signs shall be placed to indicate the location of access to a building or business. Whenever possible, signs shall be placed at or near the entrance to a building or site to indicate the most direct access to the business. The identification of each building or unit's address in a minimum of six (6) inch high numbers over the entry doorway or within ten (10) feet of the main entry, shall be required.
2. Signs shall be located entirely on the site to which the sign pertains and shall be set back a minimum of one (1)-foot from any public right-of-way to any portion of the sign structure.
3. All monument signs shall be located in a planted landscaped area which is of a shape, design, and size that will provide a compatible setting and ground definition to the sign, a minimum ratio of four (4) square feet of landscaped area for each one (1) square foot of sign area shall be required.
4. The design and placement of signs shall insure that no lighting sources create negative impacts on surrounding properties or roadways.

Scale and Proportion

1. All signs and sign structures shall reflect proportion and scale appropriate to its location and overall design.
2. All monument signs and sign structures shall be consistent and compatible with the scale and proportions of the buildings and elements of the site where such signs are located.

Sign Copy

1. Letter size shall be proportional to the background and overall sign size. Sign copy shall not occupy more than a maximum of seventy-five (75) percent of the portion of the facade or building element where it is placed.

2. Graphics consistent with the nature of the product to be advertised are encouraged, i.e., hammer symbol for hardware, or mortar and pestle for a drug store. However, these shall be considered as part of the sign area.
3. Logos are encouraged and are considered part of the sign area.
4. Monument signs shall include the address of the site in letters or numerals at least six (6) inches high. Addresses using letters or numerals larger than ten (10) inches in height shall be calculated as part of sign area. Centers shall display the range of addresses for that site on any monument signs.

Materials

1. All signs, except those provided for in Sections 9.74.150 thru 170 (Temporary Signs) of the Apple Valley Development Code shall be permanent in nature and shall reflect the architectural design of structures and natural features of the site with which they are associated by containing unifying features and materials.
2. High quality and natural materials, such as exterior grade building materials are encouraged. All signs shall reflect high quality, enhance community design and be harmonious with the desert character through the following:
 - a. Evokes a special relationship to the structures and uses located on site by incorporating elements of the structural architecture and/or natural features of the site, without dominating the site;
 - b. Makes use of high quality and/or natural or indigenous building materials including, but not limited to, rock, adobe, timber, carved wood and incised lettering in stone;
 - c. Identifies the site or use without extensive sign copy (text) by use of graphic imagery and/or logo;
 - d. Utilizes reverse channel lettering or opaque sign field (background) with illuminated routed copy.
3. Materials shall be selected to contribute to legibility and design integrity.

Illumination

Preservation of Night Sky

1. In order to preserve views of the night skies, sign illumination shall minimize the potential for glare. Harsh or unnecessarily bright sign lighting shall also be minimized to avoid negative impacts on surrounding properties or roadways.
2. Indirect or exterior lighting shall utilize focusing light fixtures that do not allow light or glare to shine above the horizontal plane of the top of the sign.
3. Where direct or interior sign lighting is permitted, only low intensity illumination shall be used.
4. Sign illumination shall conform to the Town of Apple Valley's performance standards addressing outdoor lighting.

Neon Signs

1. *Exterior neon signs* - Neon tubing may be permitted as a material in exterior monument signs and wall signs subject to the following provisions:
 - a. Exterior neon signs shall only be permitted in the General Commercial zone;
 - b. Within shopping centers, neon signs may be allowed as a part of a sign program;
 - c. Exterior neon signs shall be limited to business identification only, and may include graphic symbols; and
2. *Interior neon signs* - Neon tubing may be permitted as a sign material for interior window signs subject to the following standards:
 - a. Interior neon signs shall only be permitted in the General Commercial zone;
 - b. No more than two (2) neon window signs shall be permitted per business; and
 - c. Neon window signs shall not exceed four (4) square feet per sign. A combination of graphic symbols and names may be used, however, the total combined sign area of interior neon signs shall not exceed eight (8) square feet.
3. Neon tubing is not permitted as a sign material for exterior or interior window signs within the Airport Industrial, General Industrial, and Specific Plan Industrial land use designations.

b. Design Standards

Signs should provide information and be designed with the appropriate scale and proportion, with the graphic elements limited to the necessary minimum. In addition, sign colors, materials and lighting should be restrained and harmonious with the building and site to which it principally relates. In general, the types of signs that are prohibited include those signs that are animated, make sounds, that are painted on fences or natural features, as well as those listed in Section 9.74.050 (Prohibited Signs) in the Apple Valley Development Code. The signage designs and descriptions listed below are permitted within the Specific Plan boundaries.

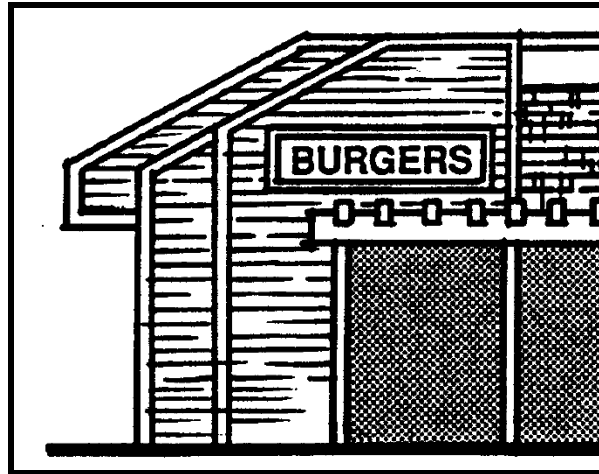
No sign, outdoor advertising structure, or display of any kind shall be permitted in Specific Plan Area except those provided for below and those provided for in Section 9.74.060 (Exemptions), and Sections 9.74.150 thru 170 (Temporary Signs) of the Apple Valley Development Code. No sign shall be permitted that does not pertain directly to an approved business or other activity conducted on the premises, except as provided in Section 9.74.060 (Exemptions) of the Apple Valley Development Code.

Signs for Free-standing Single Tenant Buildings and Sites

Wall Signs (see illustration below)

1. The cumulative total sign area per frontage allowed for wall signs shall be one (1) square foot per linear foot of building frontage. Any wall sign removed or obstructed due to construction of an adjacent building cannot be relocated unless a new sign permit is obtained and it complies with all the requirements for new signs.

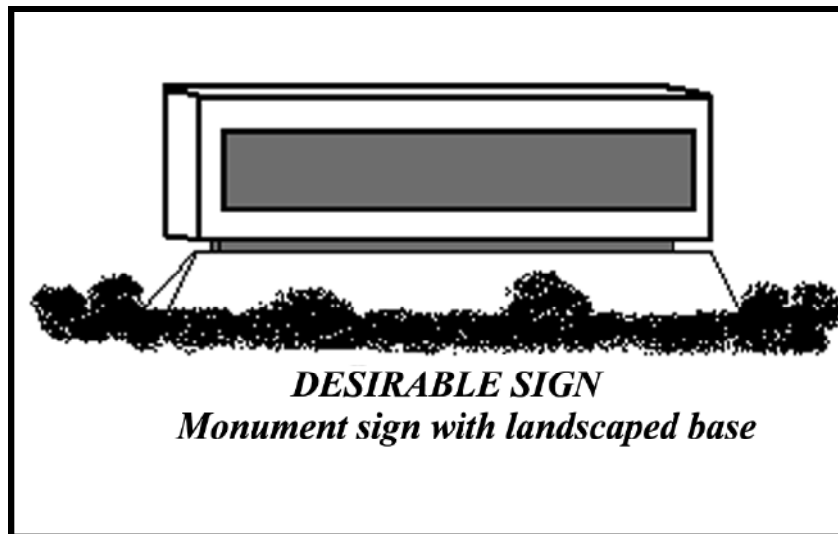
2. Awnings or canopy signs may be allowed, with their sign area allocated against the total cumulative sign area for wall signs.
3. Permanent window signs may also be allowed to identify the business or use with their sign area allocated against the total cumulative sign area for wall signs.
4. No signs or sign related projections shall be allowed above the roof line.



Typical Wall Sign

Monument Signs

1. The cumulative total sign area allowed for monument signs shall be two (2) square feet per ten (10) linear feet of street frontage on which the sign is located.
2. No single sign shall exceed sixty (60) square feet in area.
3. Maximum height of a monument sign shall not exceed six (6) feet.

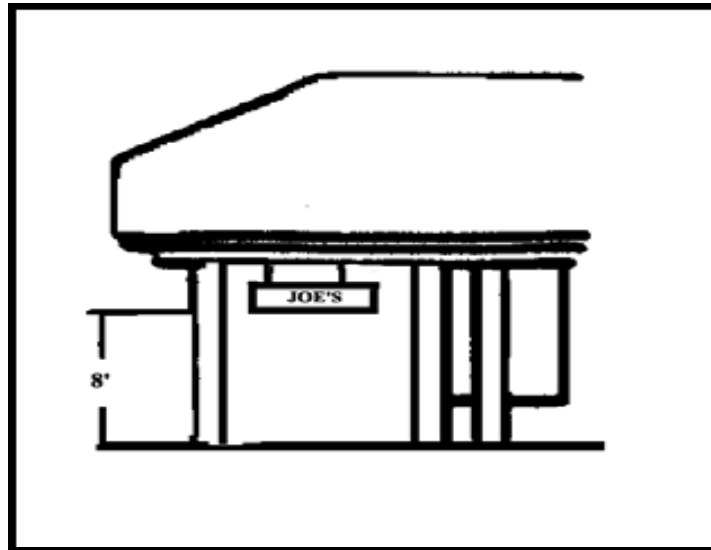


Typical Monument Sign

Projecting or Shingle Signs.

Small projecting, shingle or suspended signs may be permitted subject to the following (see illustration below):

1. A maximum of one (1) such sign per building entrance is permitted provided that it is perpendicular to the main face of the building suspended from a canopy or projects not more than three (3) feet from the building face;
2. Projecting or shingle signs shall not exceed two (2) square feet in area and shall have a minimum ground clearance of eight (8) feet;
3. All such signs shall be non-energized and non-electrical.
4. Nameplate and permanent window signs are allowed in accordance with the provisions of Section 9.74.060 (Exempt Signs) of the Apple Valley Development Code.



Typical Suspended Sign

Signs for Tenants Within Shopping Centers and Multiple Tenant Buildings

Sign Programs

A sign program shall be required for all industrial or commercial centers or any group of allowable land uses with shared sign facilities to insure that all signs are integrated and compatible. In addition, sign programs shall comply with all of the provisions of Section 9.74.100 (Sign Programs) of the Apple Valley Development Code. All signs in such developments shall comply with the provisions of the approved sign program in addition to the provisions of this Section of the Specific Plan.

Wall Signs

The cumulative total sign area allowed for wall signs shall be one (1) square foot per linear foot of building frontage. Subject to the approval of a sign program, the property owner may apportion the sign area to individual uses or overall building, or certain identification, provided that the total cumulative sign area is not exceeded.

Monument Signs

1. The cumulative total sign area allowed for monument signs shall be two (2) square feet per ten (10) linear feet of street frontage on which the sign is located.
2. No single sign shall exceed two hundred (200) square feet.
3. Maximum height of a monument sign shall not exceed six (6) feet.
4. Subject to approval of a sign program, the property owner may apportion the sign area to individual uses or overall center or building identification, provided that the total cumulative sign area per each type of sign is not exceeded. This allows a center to apportion sign area for monument signs, for example, between a center identification sign and monument signs for individual freestanding tenants in accordance with the provisions of Section 9.74.110.A.3 (General Design Criteria and Standards) of the Apple Valley Development Code.

Projecting or Shingle Signs

Small projecting, shingle or suspended signs may be permitted subject to the following:

1. A maximum of one (1) such sign per building entrance is permitted provided that it is perpendicular to the main face of the building and suspended from a canopy or projects not more than three (3) feet from the building face;
2. Signs shall not exceed six (6) square feet in area and shall have a minimum ground clearance of eight (8) feet;
3. All such signs shall be non-energized and non-electrical.

Name Plate and Permanent Window Signs

Nameplate and permanent window signs are allowed in accordance with the provisions of Section 9.74.060 (Exempt Signs) of the Apple Valley Development Code.

Gasoline and Vehicular Fuel Stations

Signs for gasoline and vehicular fuel dispensing establishments shall be the same as for other business, except for the following:

1. Monument signs shall not be within one-hundred feet (100) of another monument sign on the same property.
2. Signs on dispensers and dispenser islands shall be limited to identification and directions for use of pumps and payments, or other signs required by State regulations, except that video display terminals not exceeding thirteen (13) inches, measured diagonally, may be allowed.

Fast Food Menu Boards

In addition to the provisions for monument signs as outlined above, fast food restaurants with drive-thru or walk-up facilities may be allowed two (2) menu or reader boards with a maximum area of twenty-five (25) square feet each, and a maximum height of 6 feet each. Any pictures,

photographs, representations, or logos within or on the perimeter of the board shall be included in the computation of maximum area for such boards.

Automated Service Facilities

Signs for drive-up or walk-up service windows or machines, whether identified in monument signage or incorporated into a building, require special consideration for which uniform sign regulations cannot be established because of their unlimited variety and character. Therefore, the sign allowance for such facilities shall be determined on the basis of their function and use, when the sign permit application is being reviewed by staff.

1. In no event shall such signs exceed five (5) square feet in area.
2. Automated service signs shall not be allowed as a method for increasing the basic sign allowance for the principal use or to function as off-site advertising of the principal use. Examples of such facilities are drive-up or walk-up machines for banking and drive-up or walk-up windows for restaurants, grocery stores, and film processing.

G. Application Review Process

All projects within the Specific Plan Area will require approval of a permit prior to the initiation of construction. As shown in Table III-1, Allowable Uses, above, one of three permits will be required: Conditional Use Permit, Special Use Permit, or Site Plan Review. Applications for Conditional Use Permits and Special Use Permits shall be processed pursuant to the standards and requirements of Chapter 9.16 of the Development Code. Procedures and requirements for the processing of Site Plan Review permits are provided below.

1. Site Plan Review

Applicability

All uses listed as Permitted in Table III-1, Allowable Uses, shall require the approval of a Site Plan Review (SPR) permit. Permits are required for new construction, reconstruction or relocation totalling more than 50% of the existing floor area, or exterior remodelling or construction of an existing building which requires a building permit.

Review Authority

The Director, or his designee, shall approve, approve with conditions or deny SPR permits. The Director's decision may be appealed to the Planning Commission pursuant to Chapter 9.12.250 of the Development Code.

2. Application

Requests for SPR review shall require the submittal of a complete application form, as well as the following:

1. Ten (10) copies of a fully dimensioned site plan.
2. Ten (10) copies of fully dimensioned floor plan

3. Ten (10) copies of fully dimensioned elevations of all sides of all buildings.
4. Two (2) copies of a fully dimensioned preliminary landscaping plan.
5. One (1) copy of a materials board and one (1) colored building elevation of all sides.
6. Two (2) copies of a grading plan.
7. Two (2) copies of a drainage plan and preliminary hydrology study.
8. One (1) copy of a preliminary title report issued within 90 days of the date of application.
9. One (1) copy of a “will serve” letter from the Apple Valley Ranchos Water Company.
10. One (1) set of color photographs of the site from all sides of the property.
11. Any other information deemed necessary by the Director to review the application.
12. Application processing fees in place at the time of application submittal.

Applications for SPR review may only be made by the property owner or his/her authorized agent or representative.

Additional Information

The Director may request additional information in the course of processing the application, if such information could not be anticipated as part of the original application, including any information needed to review the application under the California Environmental Quality Act. A request for additional information shall not invalidate or change the original determination of completeness.

Determination of Completeness

All required application materials and fees must be submitted by the applicant before the application is deemed complete for processing. Within 30 days of receipt of the application (as date stamped at the offices of the Planning Division), the Director shall determine, in writing, the completeness of the application, and shall mail this determination to the applicant. Formal processing shall commence upon the date the application is deemed complete by the Director.

In accordance with Chapter 9.12.050 of the Development Code, an application shall be deemed abandoned when information and/or fees have been requested to complete an application and this information and/or fees have not been received within ninety (90) days.

Time Limits for Determination

Once determined complete, the Director shall process the application and either approve, approve with conditions or deny the application.

3. Findings

Prior to rendering a decision, the Director shall find:

1. That the location, size, design, density and intensity of the proposed development is consistent with the General Plan, the North Apple Valley Industrial Specific Plan, the Development Code, and the development policies and standards of the Town.

2. That the location, size and design of the proposed structures and improvements are compatible with the site's natural landforms, surrounding sites, structures and streetscapes.
3. That the materials, textures and details of the proposed construction are compatible with the adjacent and neighboring structures.
4. That quality in architectural design is maintained in order to enhance the visual environment of the Town and protect the economic value of existing structures.
5. That there are public facilities, services and utilities available at the appropriate levels or that these shall be installed at the appropriate time to serve the project.
6. That access to the site and internal circulation are safe.
7. That the project is consistent with the uses described in the North Apple Valley Industrial Specific Plan, and analyzed in the North Apple Valley Industrial Specific Plan Environmental Impact Report (SCH No. 2006031112).

4. Permits

Expiration of Permits

Site Plan Review permits shall be valid for a period of two (2) years. If, at the end of this two-year period, a building permit has not been issued, the permit shall become null and void. For projects approved as phased projects, each phase of the project shall be commenced within two (2) years of completion of the previous phase of construction.

Extension of Time

The applicant may request an extension of time on an SPR permit, by filing an application and fee at least thirty (30) days prior to the expiration of the SPR permit. The Director may, for good cause, grant a time extension not to exceed two (2) years. The Director shall review the approved permit for consistency with the General Plan, this Specific Plan and the Development Code, and may place conditions on the project to assure compliance with these documents.

Suspension/Revocation

An SPR permit may be suspended or revoked pursuant to the procedures and findings included in Chapter 9.17.120 of the Development Code.

IV. INFRASTRUCTURE *(Amended Ord. No. 351, 428)*

The basis for all development in the Specific Plan area will be the availability of infrastructure. The Specific Plan Area is currently primarily vacant and under-developed. Infrastructure development has been generally limited to that needed for specific small-scale development proposals.

Services for water supply and distribution, wastewater collection and treatment, industrial gray water, storm sewer, trash collection and disposal, natural gas, electric, telephone, cable TV/internet, parks, fire protection, airport improvements, and roads will be coordinated between the developers, and the appropriate private and/or public service providers to the North Apple Valley Industrial Specific Plan area. Details related to existing utilities and public facilities, as well as necessary improvements, are discussed below.

A. Circulation, Roads and Alternative Transportation

Existing roads in the North Apple Valley Industrial Specific Plan area are in many cases “paper roads” which have not been fully developed, widened, or paved. This is especially true in the northern portion of the Specific Plan area. In addition, many of the roads shown in the General Plan to occur across the entire Specific Plan Area are fragmented: they exist in one location, but do not occur in others. This is primarily a function of the limited development which has occurred in this area of Town to date.

1. Road Design Standards

The Town’s General Plan establishes standards for roads with various functional classifications as follows:

Alternate Divided Major Arterials have a minimum 142-foot right-of-way and include at least the characteristics of Divided Major Arterials.

Divided Major Arterials transport vehicles from the freeways to both major and secondary arterials. They have a minimum 128-foot right-of-way consisting of a minimum of six traffic lanes, two ten-foot parking lanes, and a twelve-foot wide continuous left turn lane or median strip. Traffic signals are often located at major intersections, and parking restrictions generally apply at intersections. Curbs, gutters, and sidewalks are required on all divided major arterials.

Major Roads have a minimum 104-foot right-of-way that is made up of at least four traffic lanes, two parking lanes, and a twelve-foot wide two-way left turn lane or median strip. Traffic lights are located at primary intersections, and parking restrictions are generally in place at

intersections. Sidewalks are generally required on major roads. Major Roads distribute traffic from freeways and divided major arterials to secondary roads.

Secondary Roads provide connections between major roads, and route local traffic to larger streets. They have a minimum right-of-way of 88 feet. Secondary roads may not be required to include curbs and gutters in Apple Valley’s low-density residential areas, but are required to do so in industrial areas such as the North Apple Valley Industrial Specific Plan. Within the Specific Plan area, Secondary Roads will not include sidewalks.

Local Industrial/Commercial Streets have rights of way of 66 feet, and are able to accommodate the increased trip generation associated with industrial areas, and the turning radius needed by delivery trucks. It is expected that local streets in the North Apple Valley Industrial Specific Plan area will be constructed to the standards for Local Industrial/Commercial Streets. Within the Specific Plan area, Local Industrial/Commercial Streets will not include sidewalks.

The following discussion addresses existing roadways, and their General Plan build out designation.

2. North-South Circulation

Currently there are no north-south roads within the North Apple Valley Industrial Specific Plan Area, that run continuously from the north boundary of the Specific Plan to the south boundary, with the exception of Dale Evans Parkway and Central Road which form the western and eastern boundaries of the Specific Plan area.

North-south access will be particularly challenging in the Specific Plan area due to the planned extension of the High Desert Corridor, the location of the airport, and the siting of the WalMart distribution center. The WalMart property is located on the south side of Johnson Road and extends from Dale Evans Parkway to Navajo Road. There can therefore be no north-south through-streets in the western half of the Specific Plan Area.

The High Desert Corridor will result in the interruption of most north-south streets which could occur, including Comanche Road, Dakota Road, Ramona Road, and Navajo Road. Dale Evans Parkway will provide through access, and an interchange to the corridor, as will Central Road.

The location of the airport in the eastern half of the Specific Plan Area restricts north-south access even more severely in the eastern half of the Specific Plan area than it does in the western half of the Specific Plan area. Somis Avenue, which is located east of the airport and west of Central Road, has the potential to be improved and expanded to provide north-south access in the eastern end of the Specific Plan Area. However it is located only one quarter of a mile from Central Road, and the benefits for through traffic will be limited.

The following describes the north-south roadways in the Specific Plan Area.

Dale Evans Parkway is designated in the Apple Valley General Plan as an Alternate Divided Major Arterial along the western boundary of the Specific Plan Area, with a 142-foot right of

way, and a paved area of 112 feet. Dale Evans Parkway will therefore become an essential access route for the Specific Plan Area. Dale Evans Parkway is currently misaligned, and jogs at Waalew Road. It is proposed to be realigned south of the Specific Plan Area, to connect directly to its extension south of Waalew Road. This segment is shown in the General Plan as becoming a Divided Major Arterial with a right of way of 128 feet to include six traffic lanes, two parking lanes, and a median strip.

Dale Evans Parkway extends north of Quarry Road (past the northern boundary of the Specific Plan area), to an interchange with Interstate 15.

Central Road runs along the eastern edge of the Specific Plan area, and is paved for this entire length. Central Road is designated as a Major Road from Johnson Road northward to Quarry Road. As such it requires a 104 foot minimum right of way and 80 feet of paving, consisting of at least four (4) traffic lanes, two (2) parking lanes, and a continuous left turn lane or median. South of Johnson Road, Central Road becomes a Divided Major Arterial and will have a right of way of 128 feet and a paved surface of 112 feet. This section will, therefore, have a minimum of six traffic lanes, two ten-foot parking lanes, and a twelve-foot wide continuous left turn lane or median strip. Central Road will eventually have traffic signals at major intersections, parking restrictions at intersections, curb, gutter, and sidewalks.

Navajo Road will become a major component of the area’s circulation system due to its location midway between Dale Evans Parkway and Central Road. Navajo Road is currently unpaved throughout the Specific Plan area. The portion of Navajo Road that is within the Specific Plan area and south of the airport is not a General Plan road. That portion that is north of the Airport, from Fresno to Johnson Road, is designated as a Divided Major Arterial, with a 128-foot right of way. From Johnson Road to Quarry Road, Central is designated a Secondary Road, with an 88-foot right-of-way, and a 66-foot paved width, including two traffic lanes and on-street parking. Traffic signals will be located at major intersections, and parking restrictions will apply at intersections, as well.

In the long term, Navajo Road cannot be extended south of Fresno Road, due to the location of both the planned High Desert Corridor and airport facilities.

Comanche Road occurs as an unpaved roadway from Papago Road (its southern boundary with the Specific Plan) to Burbank Avenue. It recurs 1.0 mile to the north at Doberman Street and continues to a point just north of Cordova Road, where it ends. Comanche Road is not a General Plan road, and is planned for improvement as a local street.

Dakota Road/Dachshund Avenue: Dakota Road extends from Waalew Road to Hemlock Road as an unpaved roadway. It will be blocked by the future extension of the High Desert Corridor. It recurs between Falchion Road and Fresno Road, again as an unpaved roadway. It then resumes between Garnet Street and Gustine Street. To the north, and in the same north south alignment, Dachshund Avenue occurs. Dachshund starts at Livermore and extends just north of Burbank Avenue. It then recurs at Corona Avenue and extends for just one block, falling short of Lafayette Street, and then resumes at Johnson Street, immediately north of the WalMart distribution facility, and extends northerly to Cordova Road. With the recent completion of the

WalMart distribution facility, Dakota Road will not be able to provide uninterrupted north-south access through the Specific Plan Area.

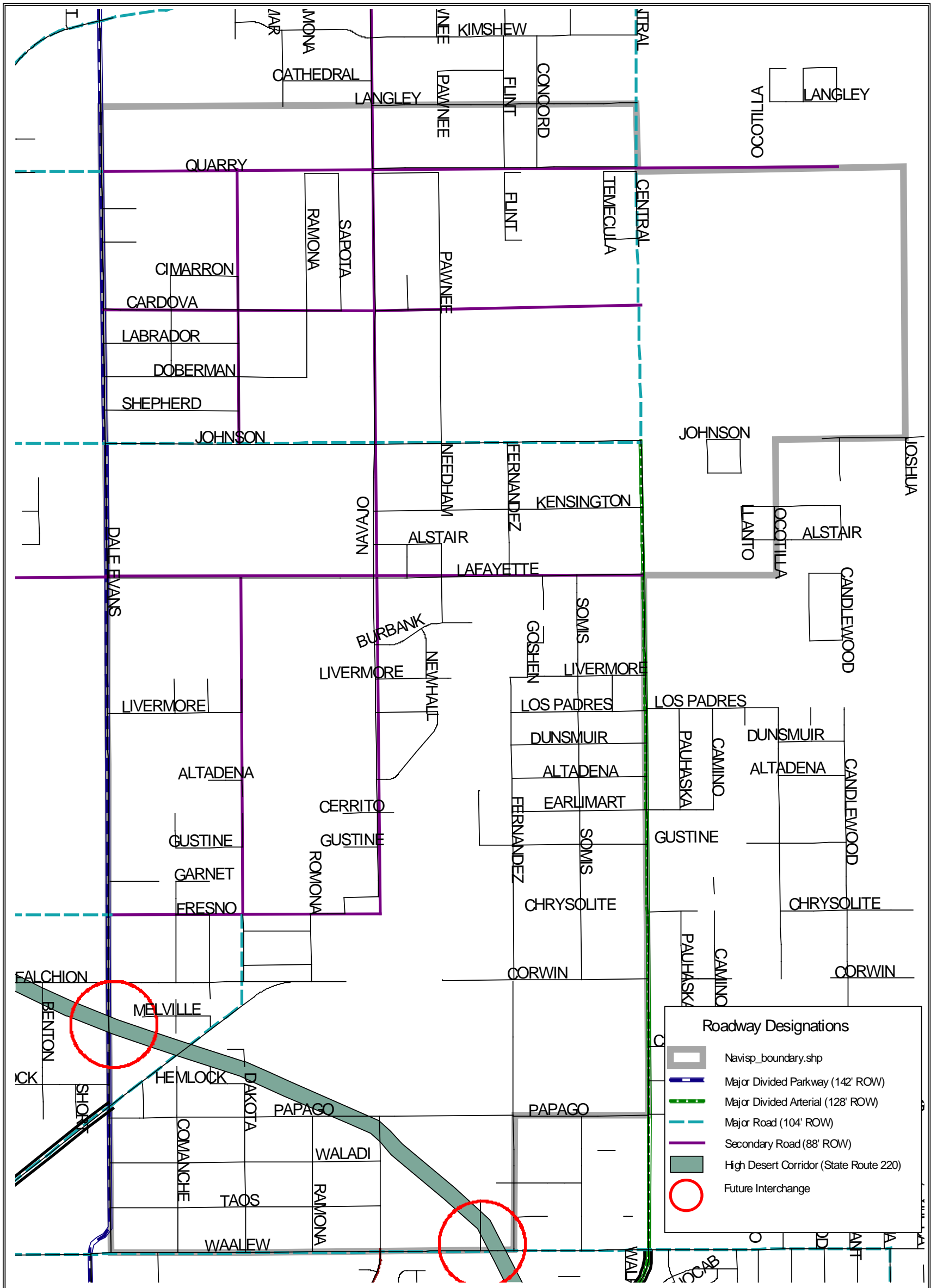
Dakota Road is designated a Secondary Road in the General Plan, from Corwin Road northward to Quarry Road. As such it will include an 88-foot right-of-way and 64 feet of paved surface, including two traffic lanes and two parking lanes.

Ramona Road currently occurs from Waalew to just south of the airport's 8-26 crosswinds runway, where it ends. It then resumes to the north between Corwin Road and Fresno Road. Ramona Road is not a General Plan road and is currently planned as a local street. The only section of Ramona Road that is paved lies between Corwin Road and Fresno Road.

Pawnee Road/ Needham Avenue/ Rialto Avenue. Pawnee Road is aligned with Needham Avenue and Rialto Avenue about one half mile east of Navajo Road. Pawnee Road is unpaved, and it is not a General Plan road. It can not be extended further south due to the airport. Pawnee then recurs in several sections: one south of Waalew Road; one south of Otoe Road; and again close to Thunderbird Road.

Fernandez Avenue is an unpaved road that runs from Quarry Road at the northern boundary of the Specific Plan Area southward to Kensington Street. It then resumes between Lafayette Street and Corwin Road on the east side of the airport. Fernandez Avenue could proceed further south if realigned around the airport. Fernandez is not currently a General Plan road.

Somis Avenue/Temecula Road. Somis Avenue is an unpaved local street. It currently occurs from Corwin Road northward to Johnson Road. Since it occurs east of the airport, it could be extended to provide north-south access within the Specific Plan Area.



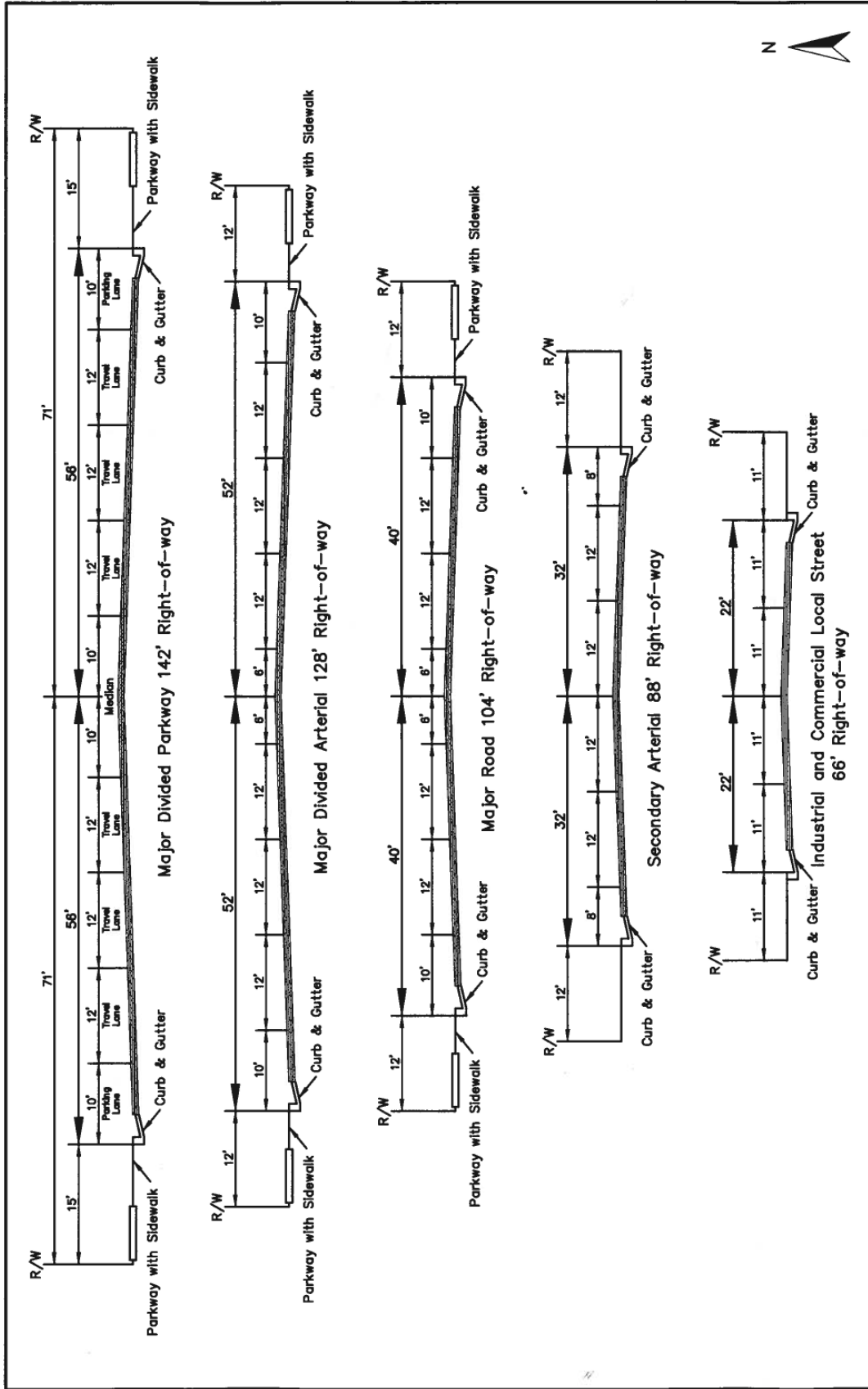
North Apple Valley Industrial Specific Plan General Plan Circulation Map

0.25 0 0.25 0.5 0.75 1 Miles



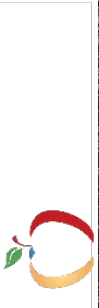
Exhibit

IV-1



IV-2

North Apple Valley Industrial Specific Plan (Amended Ord. No. 381)
 General Plan Roadway Cross Sections
 Apple Valley, California



3. East-West Circulation *(Amended Ord. No. 381, 428)*

The only roads that currently bisect the full width of the Specific Plan Area from Dale Evans Parkway to Central Road are Papago Road (which in some locations demarcates the southern boundary of the Specific Plan area), Quarry Road and Johnson Road in the northern third of the Specific Plan Area. Many of these roads are blocked by the airport, and will never connect from east to west. Those east-west roads that are blocked by the airport include Corwin Road, Gustine Street, Altadena Street, Los Padres Road, and Livermore Street.

Waalew Road is perhaps the primary road in the southern portion of the Apple Valley Specific Plan Area. It occurs from Dakota Road to Fernandez Avenue, and in this area, forms the southern boundary of the Specific Plan. Waalew Road is currently paved, and is designated a Major Road including a 104-foot right-of-way, and a paved width of 80 feet, including a four traffic lanes, two parking lanes, and continuous left turn lane or median strip.

Waladi Road runs from Dale Evans Parkway to Navajo Road. This road could be extended to Fernandez Avenue or Central Road. Waladi Road is not paved and it is not a General Plan road.

Papago Road extends from Dale Evans Parkway eastward to Central Road and beyond. It forms the southern boundary of the Specific Plan area in the far eastern portion of the Specific Plan area. Papago Road is not paved and it is not a General Plan road.

Corwin Road is currently the primary entrance to the Apple Valley Airport. The portion of Corwin Avenue to the southwest of the airport is currently paved, and is shown as a Divided Major Arterial in the Town General Plan, requiring a right-of-way of 128 feet with 112 feet of paved surface. Corwin Road will be dead-ended by the High Desert Corridor, however, and Fresno Road will become the major access road to the airport.

Corwin Road recurs to the east of the airport to Central Road and beyond. Corwin Road east of the airport is not a General Plan road, and it is not currently paved.

Fresno Road is currently unpaved and is shown on the General Plan as a Secondary Road from Dale Evans Parkway to the airport, with an 88-foot right-of-way and a 64-foot paved width. Fresno is not designated east of the airport.

Gustine Street is located both to the east and to the west of the Apple Valley Airport. East of the airport it runs from Hemet Street eastward across Central Road. Gustine Street is currently unpaved, and is proposed as a Secondary Road from Somis to Central. As such, it will have a right-of-way of 88 feet, and a minimum paved surface of 64 feet. From Somis to the airport, and from the airport to Dale Evans Parkway, Gustine is not a General Plan road.

Los Padres Road is just south of Livermore Street. It occurs eastward from Dale Evans Parkway to the airport. It then resumes to the east of the airport from Fernandez Avenue to Central Road. Los Padres Road is not a General Plan road and it is currently unpaved.

Altadena Street occurs west of the airport between Comanche Road and Dakota Road. East of the airport, Altadena Street occurs between Fernandez Avenue and Central Road. The section of Altadena Street located between Somis Avenue and Central Road is shown in the General Plan as a Secondary Road. Although currently unpaved, this section of Altadena is planned for an 88-foot right-of-way and a paved surface of at least 64 feet. It will have two (2) lanes of traffic and (2) two parking lanes.

Livermore Street occurs to the east of the Apple Valley Airport, as well as to the west. Livermore Street cannot be extended across the Specific Plan Area. Livermore Street is not a General Plan Road and it remains unpaved.

Burbank Avenue/ Hawthorne Road. Burbank Avenue on the west side of the airport is roughly in alignment with Hawthorne Road on the east side of the airport. Burbank Avenue is not a General Plan road and it is unpaved.

Lafayette Street begins at Dale Evans Parkway and stops at Dachshund Avenue. It resumes again at Navajo Road eastward to Joshua Road. The Town's General Plan indicates that Lafayette Street will be a Secondary Road between Dale Evans Parkway and Central Road. Although presently unpaved, Lafayette Street will have a right-of-way of 88 feet and a paved surface of 64 feet. This will allow for two (2) lanes of traffic and two (2) parking lanes.

Kensington Street extends eastward from Pawnee Road (also known as Needham Avenue and Rialto Avenue) to Central Road. Kensington does not extend westward within the Specific Plan area. Kensington Street is not paved and it is not a General Plan road.

Johnson Road is depicted in the Town's General Plan as a Major Road. It runs without interruption from Dale Evans Parkway eastward to Central Road. Johnson Road the primary east-west route in the Specific Plan area located north of the airport and south of Quarry Road. Johnson Road is currently paved from Dale Evans Parkway to Navajo Road. As a Major Road in the Apple Valley General Plan, Johnson Road will have a right of way of 104 feet and a paved surface of 80 feet across the entire width of the Specific Plan area from Dale Evans Parkway to Central Road. Johnson Road will have a minimum of four (4) traffic lanes, two (2) parking lanes, and a continuous left turn lane or median. This road will have traffic signals at major intersections such as Navajo Road.

Cordova Road is in the northwestern portion of the Specific Plan area. It extends for approximately one third of the two-mile width of the Specific Plan area. It is currently unpaved, however it is a General Plan Secondary Road across the entire Specific Plan area. As such, it will have an 88-foot right-of-way, a minimum paved surface of 64 feet, two lanes of traffic, and two parking lanes.

Quarry Road forms the northern boundary of the Specific Plan area, as well as the northern boundary of the Town of Apple Valley. Quarry Road is shown in the Town's General Plan as a Secondary Road, however it is privately owned. This road is a primary entrance to the Specific

Plan Area. Secondary Roads have 88-foot rights-of-way, a minimum of 64 feet of paved surface, two (2) lanes of traffic and two (2) parking lanes.

4. High Desert Corridor*(Amended Ord. No. 381)*

The High Desert Corridor will bisect the southwestern portions of the North Apple Valley Industrial Specific Plan area. The corridor is planned as a relocation of the existing State Route 18, and will include a 300-foot right-of-way at all locations except ramps and intersections, where the right-of-way will be wider. On and off ramps for the High Desert Corridor are being planned for both Dale Evans Parkway and Choco Road. Waalew Road will be an at-grade intersection.

The Corridor will connect the southeastern portion of Apple Valley with Interstate 15 through a freeway, rather than through the major arterial roadway that currently occurs through the Town. The Corridor will provide access between the Victor Valley and the Antelope Valley (which includes communities such as Lancaster and Palmdale). The Corridor will also provide the Specific Plan Area with a second regional access to the Los Angeles and Inland Empire areas, as well as the Barstow, Central Valley and Nevada markets to the north.

The following roads are inside the Specific Plan area, and will be blocked by the construction of the High Desert Corridor. Rather than having overpasses constructed, at-grade dead ends will be designed for each of the following roads:

- Ramona Road will have two dead ends, one at Papago Road, and the other at Waladi Road.
- Navajo Road will have two dead ends, one at Waladi Road, and the other at Taos Road.
- Dakota Road will have a dead end at Papago Road.
- Corwin Road will have a dead end south of the High Desert Corridor –north of Papago Road, west of Comanche, and east of Dale Evans Parkway. Corwin Road will also have a dead end north of the High Desert Corridor on Comanche Road.
- Comanche Road will dead end on the south side of the Corridor just north of Papago Road, and on the north side of the Corridor at Corwin Road.
- Papago Road will have a dead end on the west side of the Corridor at Dakota Road, and on the east side at Ramona Road, and
- Waladi Road will have a dead end west of the Corridor, and adjacent to Ramona Road.

In the Specific Plan Area, the High Desert Corridor will extend in a northwesterly arc from the intersection of Waalew Road and Carmel Road in the south to the intersection of Dale Evans Parkway with Corwin Road in the west (as illustrated on Exhibit IV-1, General Plan Circulation Map).

Land uses in the Specific Plan area located south and southeast of the bypass will be primarily comprised of commercial and professional offices, rather than the industrial uses that will prevail throughout the majority of the Specific Plan area.

5. General Plan Roads *(Amended Ord. No. 428)*

The majority of roads in the North Apple Valley Industrial Specific Plan area are not included in the Town's Streets and Roads Plan, and it is this Plan (along with the Town's annual budget and multi-year Capital Improvements Program) that guides investment in infrastructure. The roads included in the Streets and Roads portion of the Town's General Plan are:

▪ North-South Roads

- Dale Evans Parkway, an Alternative Divided Major Arterial that extends for the length of the Specific Plan area, and beyond.
- Central Road, a Divided Major Arterial from Johnson Road southward to Waalew Road and points farther south; and as a Major Road from Johnson Road northward to Pahond Road and ending at Stoddard Wells Road.
- Navajo Road, a Divided Major Arterial from Corwin Road to Johnson Road, and a Secondary Road from Johnson Road to Quarry Road.
- Dakota Road, a Secondary Road between Quarry Road and Corwin Road.
- Somis Road, west of Central Road is a Secondary Road between Corwin Road and Johnson Road.

▪ East-West Roads

- Corwin Road is not a General Plan road on the east side of the airport. The portion of Corwin to west of the airport is shown in the General Plan as a Divided Major Arterial.
- The High Desert Corridor is also a General Plan Road. Engineers have yet to finalize the plans for this Corridor, but it is expected to be larger than any other roads in the Specific Plan area, and will have a minimum right of way of 300 feet.
- Fresno Road is located on the west side of the Airport, and is a Secondary Road.
- Gustine Road is a Secondary Road for the distance between Somis Avenue and Central Road.
- Lafayette Street is a Secondary Road from Dale Evans Parkway to Central Road.
- Johnson Road is a Major Road from Dale Evans Parkway to Central Road.
- Cordova Road is a Secondary Road from Dale Evans Parkway to Central Road.

- Quarry Road is a Secondary Road along the entire northern boundary of the Specific Plan area.

Quarry Road is currently a private road owned by CEMEX through its Black Mountain Quarry operations, located east of the Specific Plan area. As such it is not eligible for state or federal funding for road improvements, despite the fact that it appears on the Town’s General Plan for Roads as a Secondary Road.

Quarry Road ultimately must be brought into the Town’s roadway system in order to allow funding from public sources, and provide a viable roadway for the northern boundary of the Specific Plan Area.

General Plan of Roads Amendments Required to Implement the Specific Plan

Implementation of the Specific Plan is not expected to require amendments to the Circulation Element of the Town General Plan. The current Circulation element provides adequate access and roadway capacity for the buildout of the Specific Plan and the Town General Plan and projected regional growth.

Intersection and Roadway Realignments needed inside the Specific Plan area

The Specific Plan Traffic Impact Report has determined that the type, intensity and distribution of land uses within the Plan area will be adequately served by existing and planned intersection and roadway alignments as set forth in the Town General Plan.

6. The Mojave Northern Mining Railroad

The Mojave Northern Mining Railroad is adjacent to and immediately north of Quarry Road. This railroad is inside the Town’s northern boundary. The railroad, owned by the owners of the Black Mountain Quarry, originates at the Black Mountain Quarry and heads westward into Victorville and across the Mojave River where it meets the Burlington Northern Santa Fe Railroad along Route 66.

7. Mass Transit

The great majority of mass transit routes in Apple Valley are located in the more populous southern areas of the Town. Mass transit is coordinated by the Victor Valley Transit Authority. Proposed mass transit corridors are located on the eastern and northern perimeters of the Specific Plan area along Central Road and Quarry Road.

The Circulation element of the Apple Valley Master Plan indicates that Apple Valley Airport is the site of a mass transit terminal. Two planned mass transit routes begin from this point. The first runs westward along Falchion Road to the Town’s boundary with Victorville and Hesperia area. The second runs along Corwin Road in a southwesterly direction toward the Victorville and Hesperia areas, including connections to St. Mary Desert Hospital, Victor Valley Community Hospital, Route 66, and the Amtrak station in Victorville.

This route along Corwin Road is further subdivided, for as it reaches Dale Evans Parkway another proposed mass transit route heads southward toward the heavily commercial Bear Valley Road area, and uses such as Victor Valley College, the Quad Cities Center, Kiowa Plaza, Granite Hills High School, and Apple Valley High School.

8. Bike Paths

As the North Apple Valley Industrial Specific Plan is being designed as an industrial park, the priority to have bike paths here is lower than it would be in a residential or open space area. Although Apple Valley has numerous bike paths, none of these are in the Specific Plan area except for a Class I bike path that runs north and south on Dale Evans Parkway, and another Class I bike path on Waalew Road. Thus, no bike paths penetrate the interior of the Specific Plan area, and the two (2) bike paths are located on the southern and western perimeters of the Specific Plan area.

As the area builds out, planning for bicycle-riding workers on Class II (on road striped lanes) should be incorporated into roadway planning.

B. Public Services and Utilities

1. Water Services

Apple Valley Ranchos Water Company is the private water supplier whose district includes all of the North Apple Valley Industrial Specific Plan Area. The Apple Valley Ranchos Water Company has no exact plans for expansion of its water lines inside the North Apple Valley Industrial Specific Plan Area¹; however, it will provide water line extensions in any portion of the Specific Plan area as demand grows.

Water pressure at the airport is higher than in most sections of Apple Valley, and this should be helpful in terms of supplying the airport with water and with fire fighting services. The Town of Apple Valley consists of twelve water pressure zones. The portion of the Specific Plan area located north of Los Padres Road is in Pressure Zone A (also known as the Stoddard pressure zone). The portion of the Specific Plan area located south of Los Padres Road (including all of the airport) is in Pressure Zone B (also known as the Bell Mountain pressure zone).

The ten-inch water line along Central Road is supplied from water wells to the north of the airport. Water lines that supply the airport itself originate from west and south of the airport.

Thirteen of the wells in Apple Valley are located near the Mojave River and the Town's border with Victorville. There are also eight wells south of the Specific Plan area, and two of these are within a few blocks of Waalew Road. Fire service does not require any significant infrastructure beyond the provision of water lines and connections to various industrial, commercial, and residential customers. If industries in the Specific Plan area are provided with water, then fire service is also available in the same area.

¹ Personal communication, Apple Valley Ranchos Water Company General Manager Jack Clarke, February 2006.

Several miles of additional water mains and extensions will be needed within the North Apple Valley Industrial Specific Plan area to serve the airport industrial park prior to build out. There is a new twelve-inch water main in Johnson Road to serve the WalMart. (There are no water or sewer mains along Dale Evans Parkway.)

Existing water mains in the Specific Plan area include the following:

Fourteen-inch water lines are currently located in the following areas:

- On Waalew between Ramona and Navajo
- On Comanche between Papago Road and Burbank Avenue
- One block south of Papago Road between Dakota Road and Navajo Road
- On Fresno Road from the water tank near Dakota Road eastward into the airport, and
- On Johnson Road between Somis Road and Central Road.

Twelve-inch water lines are currently located in the following areas:

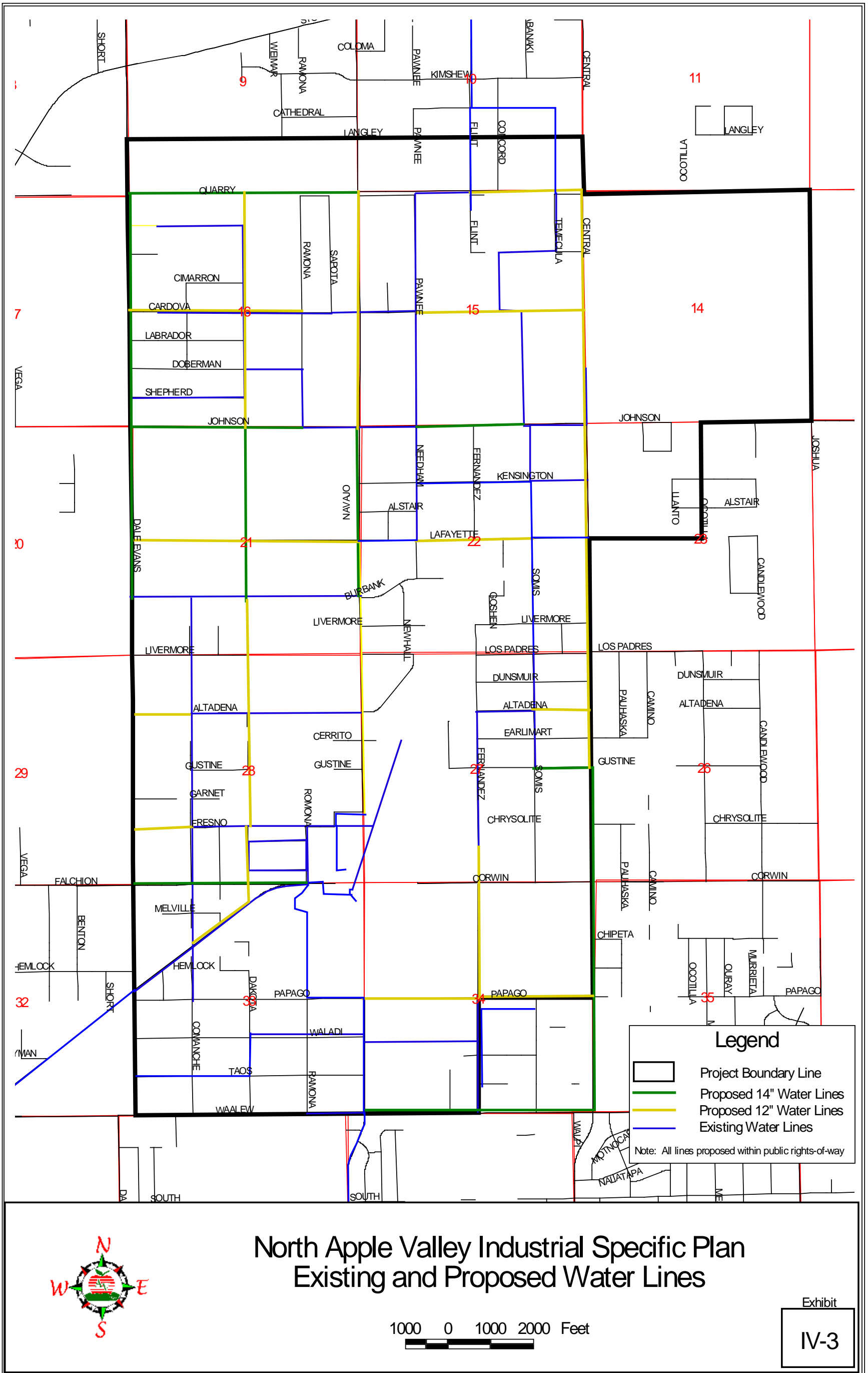
- Corwin Road to the western airport boundary
- On Ramona Road from Corwin Road to Fresno Road
- On Fresno Road from Comanche Road, eastward to the water tank near Dakota Road
- Along the western edge of the southern half of the airport's major runway
- In the Ticonderoga/ Founders Loop area
- Along Altadena from Comanche to Navajo Road
- Along Navajo from Fresno Road to Lafayette Street
- Along Burbank Avenue from the Bell Mountain water tank (west of Dale Evans Parkway) to Navajo Road
- Along Johnson Road from Ramona Road to Pawnee Road
- Along Pawnee Road from Lafayette Street to Quarry Road
- Along the roads that extend northward from Somis Road between Kensington Street and Quarry Road
- Along Kensington Street from Pawnee Road to Navajo Road
- Along Quarry Road between Navajo Road and Flint Road
- Along Cordova Road between Sapota Road to Pawnee Road
- Along Kensington Street from Somis Road eastward to the Bureau of Land Management Fire Prevention facility on the east side of Central Road
- Along Somis Road from Los Padres Road to Gustine Street
- Along Altadena Street from Somis Road to Fernandez Avenue, and
- Along Fernandez Avenue from Altadena Street to a point about three-eighths of a mile south of Gustine Street

Ten-inch water lines are currently located in the following areas:





- Along Fernandez Avenue in a portion of the area between Papago Road and Waalew Road
- Along Waladi Road between Navajo Road and Fernandez Avenue, and
- Along Central Road from Doberman Street to Johnson Road

Eight-inch water lines are currently located north of the WalMart warehouse/distribution facility, in the northwestern portion of the North Apple Valley Industrial Specific Plan area. Specific locations for these eight-inch water lines include:

- Dachshund Avenue from Shepherd Street to Tecaya Road
- Along Ramona Road from Johnson Road to Doberman Street
- Along Cordova Road from Sapota Road to a point half way between Comanche Road and Dale Evans Parkway
- Along Tecaya Road from Dachshund Avenue westward to a point just beyond half way between Comanche Road and Dale Evans Parkway
- Along Doberman Street from Dachshund Avenue to Ramona Road, and
- Along Shepherd Street from Dale Evans Parkway to Dachshund Avenue.



Legend

-  Project Boundary Line
-  Proposed 14" Water Lines
-  Proposed 12" Water Lines
-  Existing Water Lines

Note: All lines proposed within public rights-of-way

**North Apple Valley Industrial Specific Plan
 Existing and Proposed Water Lines**



1000 0 1000 2000 Feet

Exhibit
IV-3

2. Sewer Services (*Amended Ord. No. 428*)

a. Victor Valley Wastewater Reclamation Authority

Apple Valley is located in the Victor Valley Wastewater Reclamation Authority area. Members of the Victor Valley Wastewater Reclamation Authority (VWVRA) include the Town of Apple Valley; the Cities of Hesperia and Victorville; Service Area 64 (the Spring Valley Lake area); and Service Area 42 (the Oro Grande area).

The VWVRA was formed by the Mojave Water Agency to help meet the requirements of the Clean Water Act and to provide wastewater treatment for the growing area. The Authority's first treatment plant began operating in 1981, providing treatment for up to 4.5 million gallons of wastewater per day. Since that time, VWVRA has had several plant upgrades and several capacity increases. Current sewer treatment capacity of the VWVRA facility is 14 million gallons per day, and plans are currently being developed to process as many as 22 million gallons per day of wastewater. The Town of Apple Valley is presently 37% sewerred, and this is expected to increase to over 50% by 2020. Of the 12.55 million gallons per day processed by the regional plant, 2.04 million gallons (or 16%) is from Apple Valley.

Prior to 2004, the flow of wastewater to VWVRA was increasing at four to five percent a year. VWVRA indicates that the growth rate has increased to about 25% annually. The Town of Apple Valley in 2005 has over 60,000 residents, and covers 78 square miles, of which about 15% is currently developed. Estimates of flow for Apple Valley's sewerred population are based on 80 gallons per person per day.

A majority of the treated wastewater is discharged into the Mojave River, and a smaller amount is used to irrigate landscaping at a nearby golf course. User charges are based on volumes of wastewater requiring treatment, and surcharges are added for wastewater having concentrations of BOD (Biological Oxygen Demand) over 200 milligrams per liter; concentrations of TSS (total suspended solids) above 250 milligrams per liter; and concentrations of NH₃ (ammonia) in excess of 20 milligrams per liter.

The VWVRA Master Plan has recommended that a sub-regional wastewater treatment plant be constructed in Apple Valley. Other strategies including additional interceptor lines and expansion of the regional treatment plant in Victor Valley would allow economic development to occur in the Northern Apple Valley Specific Plan area.

b. Regional System Expansion Plans

To meet immediate needs until 2012, the Regional Treatment Plant in Victorville and the interceptor sewer system will be expanded to convey and treat up to eighteen million gallons per day of wastewater. Additional relief sewers, peak flow pumping facilities, off-line storage, or a combination of these will be needed to transport this additional flow to the regional plant.

Otoe Road has been identified as the likely location of a new wastewater plant to serve Apple Valley. Design capacity has been listed at 1.5 MGD, and the cost has been estimated at \$22.5 million². Solids generated by the Apple Valley facility may be discharged back into the regional interceptor system for treatment by the regional plant in Victorville. Recycled water produced by the Apple Valley treatment plant may be discharged into one or more remotely located percolation basins during wet weather periods, when irrigation demands are minimal.

A four MGD local reclamation facility will be constructed in Apple Valley by 2009. Solids generated by this local facility will be discharged into the regional interceptor system, with a small transport flow for treatment at the regional Victorville Plant. Distribution piping will be constructed for each local facility to transport recycled water to major customers, and to the remotely located percolation basins.

From 2012 to 2020, the capacity of the local facility in Apple Valley will be expanded if rapid growth continues. This includes the local treatment facility, pumping stations, and percolation ponds. It is expected that by 2020 the capacity of the regional treatment plant will be expanded to 22 million gallons per day (MGD) to serve needs of the region. The Authority may also need to purchase properties suitable for future expansion of the regional plant, local reclamation facilities, pumping stations, distribution systems, percolation ponds, and various storage and maintenance buildings.

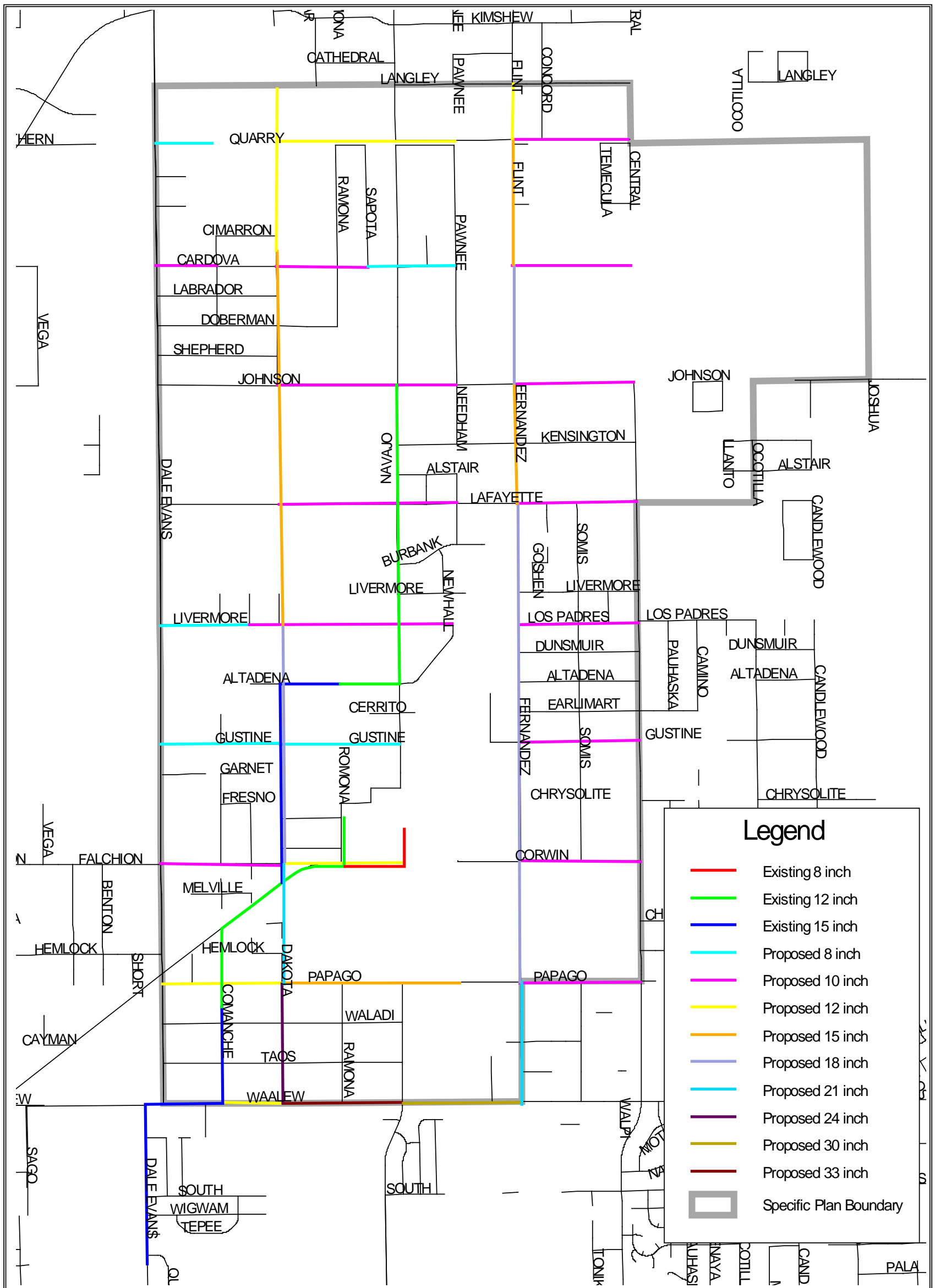
c. Sewer for the Specific Plan Area

All of the sewer lines currently occurring and proposed in the North Apple Valley Industrial Specific Plan area are shown on Exhibit IV-4. These lines are centered on the western edge of the Apple Valley Airport and its primary north-south runway, and they extend as far north as Johnson Road. There are no sewer lines on Dale Evans Parkway within the Specific Plan area.

There are several connected sewer lines along the west side of the Apple Valley Airport. From the north, these include: a twelve (12)-inch sewer line running along Navajo Road from Johnson Road to Altadena; this line then cuts westward along Altadena to Dakota Road. The sewer line increases in size to fifteen (15) inches and goes southward along Dachshund Road to Corwin Road. From here an eight (8)-inch collector line extends eastward to Ramona Road. The main line in Corwin Road is twelve (12) inches. This line proceeds south along Comanche Road where it is fifteen (15) inches. The sewer pipe then extends west along Waalew Road, and southward toward the more densely developed center of Town. These lines were sized with the airport industrial park in mind, and should be sufficient to serve much of the growth in the North Apple Valley Industrial Specific Plan area for some time.

These sewer lines were sized and built with the airport industrial park in mind, and are considered to be sufficient for development in the early phases of build out of the North Apple Valley Industrial Specific Plan. The WalMart warehouse/distribution facility at Johnson Road and Dale Evans Parkway is served from the southeast corner of its property by lines which extend from the twelve (12)-inch sewer line on Navajo Road.

² “Adopted Policy for Serving the Growth of the Community,” by the Victor Valley Wastewater Reclamation Authority, August 2005.



North Apple Valley Industrial Specific Plan Existing and Proposed Sewer Lines



0.5 0 0.5 1 Miles

Exhibit

IV-4

d. Industrial Gray Water

Industrial sewage from the North Apple Valley Industrial Specific Plan area will be treated according to the requirements of the Victor Valley Wastewater Reclamation Authority. In many cases, this will involve the installation, use, and monitoring of oil and grease traps; the creation of a sampling station where the manufacturers as well as VVWRA can test samples of effluent at any time; and other measures that are unique to the particular industry or manufacturer. Generally, all waste from manufacturers comes into the sewer lines and makes its way to the regional treatment facility.

However, in some industries there may be “gray water” or water that is still clean that does not need to be treated, and therefore does not need to be sent to the regional wastewater facility. Examples of this include boiler blow water, and water that is used for cooling purposes. According to the Reclamation Authority, it is the manufacturer’s responsibility to recycle or use this water in some way. The manufacturer might choose to use such gray water for onsite landscaping or irrigation purposes. If the manufacturer chooses not to do so, it will still have the option of sending this gray water into the sewer collection system to be treated along with the more traditional wastewater stream.

3. Solid Waste

Solid Waste and recycling services in the Town of Apple Valley are contracted by the Town through Burrtec Waste Industries of Fontana, California.

Solid waste from Apple Valley is hauled to the Victorville landfill which is part of the San Bernardino County landfill system. The closing date for the Victorville landfill is estimated to be 2055. The County is currently moving towards the acquisition of additional acreage at the landfill to expand capacity. Burrtec personnel have indicated that no additional infrastructure is needed to handle waste from an industrial park at the Apple Valley Airport³.

Mark Dvorak of San Bernardino County Solid Waste Department has indicated that the County’s landfill in Victorville is permitted to accept up to 1,600 tons of solid waste per day. There are two or three days each month when it comes quite close to meeting that limit, however, the typical amount of waste accepted is approximately one thousand tons per day.

The Victorville landfill accepts industrial waste as long as it is non-hazardous. Hazardous industrial waste is collected by private contractors and disposed of elsewhere by County approved hazardous waste disposal firms. Production and disposal of hazardous waste brings about the involvement of the San Bernardino County Fire Department. Collection of this commercial and industrial hazardous waste is coordinated through the County Fire Department, and one of the more commonly used areas for such disposal has been Cattleman’s Hill in Central California.

³ Personal communication, Robert Rios of Burrtec Waste Industries in Victorville, CA.

4. Flood Control and Hydrology

a. Local Topography Drainage

The Apple Valley watershed is located in the high desert of southern California, and encompasses 98 square miles that drain into the Apple Valley Dry Lake. The Apple Valley watershed boundary is generally defined by the Ord Mountains to the south, the Granite and Fairview Mountains on the east; and Black Mountain on the north. A portion of the westerly boundary is defined by Bell Mountain and by Catholic Hill (just south of Corwin Road and east of Rimrock), while the remaining westerly boundary follows a ridgeline between Apple Valley and Victorville. Apple Valley has steep impervious mountains with incised channels on the perimeter of the watershed, and the remainder of the watershed is valley floor which slopes gently to the dry lake.

Almost all waters in Apple Valley, except the extreme northwest, drain into the Apple Valley Dry Lake. The portion of Apple Valley that does not drain into the Apple Valley Dry Lake is in the northwest corner of the Specific Plan area, north of Johnson Road and west of Central Road.

Apple Valley Dry Lake is located about one and one quarter miles south of the Apple Valley Airport's crosswinds (east-west) runway. The dry lake area extends about a mile to the south, over a mile to the west, and almost two miles to the east. The Town has a history of flooding problems in and around the dry lake.

The north community is generally defined as the area of the Apple Valley Dry Lake watershed lying to the north of the dry lake. The area encompasses about 26 miles (about 26% of the total Apple Valley Dry Lake watershed).

The North Apple Valley Industrial Specific Plan area drains naturally from the northeast to the southwest, and slopes are generally one percent or less throughout the area. The intersection of Quarry Road and Central Road is the highest point in the Specific Plan area at 3,200 feet above sea level. The corner of the Specific Plan area at Papago and Central Road has an elevation of 2,997 feet. On the west side of the Specific Plan area, the intersection of Quarry Road and Dale Evans Parkway is at 3,051 feet above sea level, and the corner at Papago Road and Corwin Road is at 2,947 feet above sea level. The southernmost points in the Specific Plan area are along Waalew Road between Fernandez Avenue and Dakota Road, with elevation is in the range of 2,918 to 2,930 feet.

b. Apple Valley Master Plan for Drainage

The Town's current Master Plan for Drainage includes designs and costs for concrete drainage channels throughout Town (referred to in the Master Plan as Alternative 2). These were estimated to cost about \$353 million at the time of development of this Master Plan in 1988, and would cost close to a billion dollars today⁴. This would provide a fully urbanized underground storm drainage system, similar to the downtown areas of the City of San Bernardino and Orange County.

⁴ Personal communication, Deputy Town Engineer Richard Pederson, February 2006.

The other alternative included in the Master Plan for Drainage is referred to as Alternative 1. This is a much less expensive alternative, which maintains natural drainage channel alignments and enlarges them. Current policy for development projects in the Specific Plan Area will require that development retain storm flows on-site, and limit the impacts to regional flood control systems.

Existing and Proposed Drainage Infrastructure

Many drainage courses exist in Apple Valley, however, very few of these are located in the North Apple Valley Industrial Specific Plan area, because the northern part of the Town is relatively undeveloped, and because the portions of the Town where flooding is of the greatest concern are outside the Specific Plan area. This includes the Apple Valley Dry Lake which is south of Waalew Road, and the portions of the Town located closer to the Mojave River. All of the Specific Plan area lies higher in elevation than these more flood-prone areas.

The Town’s Master Plan for Drainage proposes numerous drainage courses and regional drainage facilities in the northern part of Town. Those with the prefix “N” lie north of the Apple Valley Dry Lake. Maintenance of, and improvements to, these flood control facilities will expedite development of the North Apple Valley Industrial Specific Plan area. The flood control facilities include:

Facility N-01 is an unimproved, open channel, and collects runoff from eight different sources in Fairview Mountain, all of which are diffused on the valley floor. The interception of this runoff from a 3.3 square mile area provides flood protection for buildings east of Central Road.

Facility N-02 is a shallow earthen channel adjacent to the airport, that runs through the majority of the Specific Plan area from Central Road (north of Johnson) to Waalew Road (west of Navajo Road). Runoff transported by Facility N-02 originates from the south side of Black Mountain and from the northeast side of Fairview Mountain, and covers an 8.7 mile area.

Facility N-03 is a riprap-lined channel that transports runoff from the industrial area east of the airport, and merges with facility N-02 south of Papago Road.

Facility N-04 is a fully leveed channel that conveys runoff southward from Black Mountain which is located north of the Mojave Northern Railroad. Channel N-04 drains an area of 7.6 square miles. A debris basin has been recommended for the railroad, because upstream of the railroad lines, there many drainage paths through the Black Mountain area.

Facility N-05 is an earthen channel (a portion of which has a riprap lining) that transports runoff generated entirely from the industrial area north of the airport. It merges with N-04 just south of Gustine Street where an earthen levee collects flows.

Facility N-06 carries runoff generated by Bell Mountain, Little Bell Mountain, and Catholic Hill – all on the western edge of the Specific Plan area. Channel N-06 drains 1.6 square miles of tributaries. It is a natural earthen channel in some areas; has riprap in other sections; and is fully leveed in its southernmost sections. Containment levees are needed on the east side of the upper

portions of the channel. In addition debris basins may be required, since the natural channels that drain Bell Mountain are intercepted.

Facility N-07 is a riprap-lined channel that carries runoff from Little Bell Mountain and Catholic Hill. This channel parallels Corwin Road and merges with N-06 at the intersection of Corwin Road and Papago Road. This facility requires a containment levee along Corwin Road to channelize flows, and a debris basin will be needed since the natural channels that drain Catholic Hill are intercepted.

Design Standards

The Town's Master Plan for drainage recommends maintaining natural drainage alignments whenever possible, and utilizing improved earthen channels unless flow velocities require the channels to be lined with riprap or concrete. Underground, urban-style storm drains have generally not been recommended. Channel alignments that are already present should continue to be used. The high percolation rates in local soils enable flash flows to subside within the channel system, often dissipating before reaching the dry lake. In addition to regional facilities, on-site retention will continue to be required for individual projects, to ensure water reclamation and conservation; control of nuisance flows such as runoff from over-irrigation of landscaping; flood control; and flood channel erosion control.

The high desert area receives little rainfall, but is subject to intense short duration rainstorms that can cause significant flooding, especially near the dry lake. Future development must meet certain drainage criteria prior to the issuance of building permits. *Design standards for property owners* shall include the following:

- Building pads must be elevated two feet above the existing ground elevation with drainage swales graded around buildings unless they can be shown to be outside of the 100 year floodplain.
- No buildings may be constructed within 200 feet of any known watercourse, or within 50 feet of anticipated or existing drainage rights-of-way.

Design standards and actions involving the Town shall include the following:

- The Town should begin to purchase rights of way and accept dedications for drainage channels. If a proposed development lies within the way of a drainage facility identified in the Town's Master Plan for Drainage, no building permit should be issued until the Town has received the associated dedication or a drainage easement.
- Debris basins should be constructed along the east side of Bell Mountain (just west of Dale Evans Parkway) as development in and around the Specific Plan Area occurs. Basin construction could be funded by the Town in conjunction with the San Bernardino County Flood Control District.
- Detention basins should be considered for several regional channels if rights of way can be obtained in a timely manner to facilitate their construction. The County Flood Control District should have primary funding responsibility, as the tributaries and runoff areas for drainage channels that impact the Specific Plan Area are generally located well outside the Town limits.

- Natural channel alignments should be maintained unless redirecting flows proves to be economically beneficial. The main drainage facilities in the northern portion of Apple Valley are primarily open channels where slopes are generally less than one degree, and where there is a high potential for debris production.
- Open channels should be designed for clear water flow with no debris, due to assumed upstream debris basins.
- All improved channels must be fenced for safety.
- There will be a 15-foot access road along each side of every improved channel.
- Improved earthen channels shall generally be very shallow with trapezoidal 3:1 side slopes.

5. Natural Gas

Southwest Gas has one gas main along the eastern edge of the North Apple Valley Industrial Specific Plan area on Central Road. The gas main along Central Road is supplied gas by the Pacific Gas & Electric Company through a PG&E main in Quarry Road on the Town’s northern boundary. At the intersection of Quarry Road and Central Road, Southwest Gas connects with PG&E’s Victorville “C” gas main.

From there, the gas main travels southward along Central Road to Papago Road, and continues southward beyond the North Apple Valley Industrial Specific Plan area to Waalew Road, and into the southern portions of the Town of Apple Valley. The pressure in this eight inch steel gas main is 240 pounds per square inch (psi).

There are several sites along Central Road where pressure can be stepped down from 240 psi to between 40 and 60 psi for distribution to industrial, commercial, and other users. These sites are at the intersections of Central Road and Johnson Road; Dexter Lane (just south of Central Road); Cayman Road (just south of Virginia Park); and Waalew Road.

Other gas lines in and around the North Apple Valley Industrial Specific Plan area include the following.

- Johnson Road and Dale Evans Parkway: This distribution line is immediately north of the Wal*Mart warehouse facility. In an east-west direction, it runs from Dachshund Avenue to Dale Evans Parkway, and at that intersection extends northward along Dale Evans Parkway to Quarry Road and then further north. Both distribution lines are made of polyethanol (PE) and are capable of carrying pressure of up to 60 psi. They currently carry pressure of 40 to 55 psi. The line along Johnson Street is four inches, and the line along Dale Evans Parkway is six inches.
- Along the portions of Corwin Road that are west of the airport but east of Ramona Road, and along the portions of Albany Road that are north of Corwin but south of Fresno Road, there is a polyvinylchloride (PVC) gas distribution line that supplies several of the airport-related facilities. This distribution line carries a maximum pressure of 40 psi. This line is four inches and electric and telephone lines are co-located in the same trench.

- Clustered just to the west of the Falchion/Corwin line is a group of four-inch polyethanol (PE) pipelines that carry gas at a pressure of 40 to 55 psi. These lines run along Ramona Road from Fresno Road to a point just south of the east-west runway; along Founders Road from Ramona to Dakota; along Ticonderoga Road from Ramona to Dakota Road; and along Dakota Road from Ticonderoga to Founders Road.
- Along Ramona Road is a four inch steel pipe carrying gas at a pressure of 40 psi. This distribution line begins on Ramona at a point just south of the east-west runway, and extends southward to Waalew Road.
- Along Carmel Lane, from Waalew Road to Papago Road, in the southern portion of the Specific Plan area, is a two inch steel gas distribution line carrying pressure of 40 psi.
- There is also a two-inch polyethanol gas line running along Taos Road for one block west of Ramona Road. This line carries pressure of 40 to 55 psi.

Proposed Gas Infrastructure

Southwestern Gas will expand its delivery system throughout the Specific Plan Area to serve the airport industrial park during the build out process. Pipeline extensions will be paid for by individual property owners, and are billed based upon a formula involving customer usage, account type, and the linear footage of pipeline that must be extended to service the incoming business or other account.

The plan of Southwest Gas for the Specific Plan Area is to upgrade all of its distribution lines to polyethanol (PE) pipe, and to carry pressure of 60 psi in all of these lines. Infrastructure improvements will be borne by Southwest Gas and its users.

6. Electric Service

Southern California Edison is the electric supplier for all of the Town of Apple Valley including the North Apple Valley Industrial Specific Plan area. Four major electric transmission corridors, each with 115 kV lines, cross through the Town and provide power to local businesses, manufacturing plants, institutions, and homes. Currently all new electric lines of 66kV or less are placed underground within the Town boundaries.

Industries that choose to locate in the North Apple Valley Industrial Specific Plan area should be encouraged to utilize solar panels and other types of alternative energy. Although the solar panels will constitute an added up-front expense for industrial developers, the investment provides financial returns similar to (and generally considerably in excess of) traditional bonds or annuities.

Southern California Edison administers a range of energy conservation programs for its consumers, including financial incentives to use high efficiency heating and cooling equipment; to use energy saving household appliances; and to conserve energy through programs such as peak shaving.

7. Telephone, Cable Television and Internet

Charter Communications supplies cable television, high speed internet, and telephone services. All Charter lines are aerial, and are on poles, and in all cases Charter is co-located with the lines of Southern California Edison.

Charter’s current infrastructure in Apple Valley is almost all south of the North Apple Valley Industrial Specific Plan area. The few existing lines inside the Specific Plan area are as follows:

- From a point just north of Taos Road southward along Dakota Road to Waalew Road, extending westward along Waalew Road toward Corwin Road and Victorville.
- From a point just north of Taos Road southward along Ramona Drive to the point half way between Taos Road and Waalew Road.
- From a point just north of Taos Road southward along Navajo Road to a point just north of Soboba Road, and then eastward along the south side of Waalew Road.
- Between Taos Road and Waalew Road (and parallel to these roads), from Dakota Road to Navajo Road.

Charter Communication’s lines have the capacity to provide service to about six hundred more customers (whether industrial, commercial, or residential) using existing lines⁵. Additional lines will be constructed in the North Apple Valley Industrial Specific Plan area once demand is in place to support this additional infrastructure. Charter also has plans to install a fiber optic line along Dale Evans Parkway, from Waalew Road to Johnson Road. Unlike Charter’s other lines, this line will be run underground. Cable and Internet lines are installed at the cost of the user.

8. Fire Prevention *(Amended Ord. No. 428)*

The Apple Valley Fire Protection District (AVFPD) is an independent jurisdiction that has legally separate status from both San Bernardino County and from the Town of Apple Valley, and its western boundary is the Mojave River. The district extends as far as the dry lakes toward Lucerne Valley.

Water is supplied to the fire district primarily by the Apple Valley Ranchos Water Company. There is a water storage tank at the north end of the district and there is another at the airport. Additional water tanks include the Bell Mountain Water tank just west of the intersection of Dale Evans Parkway and Burbank Avenue and a tank on Fresno Road just east of the Dakota Road. There are twelve and sixteen-inch water lines near the airport which can be used for fire fighting purposes (please also see the discussion of water supplies above).

⁵ Personal communication, Joe Bertola, Jr., Design Engineer for Charter Communications, Victorville, CA, February 2006.

The Fire Protection District has six (6) fire stations, staffed by paid, professional officers and support personnel. Four of the stations are staffed 24-hours per day, seven days per week, for emergency response. Two of the stations are staffed as needed by on-call firefighters. The fire stations that are closest to the airport include: one at Yucca Loma Lane, Central Road, and Highway 18 – this station also serves as the Fire District headquarters; another station near the intersection of Highway 18, Wakita Boulevard, Standing Rock Avenue, and Central Road; and a third at the intersection of Highway 18 and Tao Road, less than one half mile south of Corwin Road. The fire station at Tao Road and Highway 18 currently serves the new WalMart Distribution Facility on Dale Evans Parkway. All of these stations are located south of the southernmost boundary of the Specific Plan Area.

There is a seasonal fire station operated by the Bureau of Land Management on the east side of Central Road, just northeast of its intersection with Hawthorne Road. This fire station is outside the Town limits and is only used to respond to wild fires. It would not respond to a fire within the Specific Plan Area.

As the Specific Plan Area builds out, it is likely that a new fire station may need to be built inside the Specific Plan area, or somewhere in the northern portion of the service area of the Apple Valley Fire Protection District. Fire District personnel have indicated that it is possible that a new fire station north of the airport would be built and financed through a Mello-Roos Community Facilities District. This could potentially be a special district or fire district that is separate from the existing Apple Valley Fire Protection District. A new and separate fire district could potentially narrow the group of businesses and taxpayers supporting this district from all of those within the existing 206 square mile area, to only those within the Specific Plan Area.

The Police and Fire Protection Element of the Town of Apple Valley General Plan indicates the potential to construct an eighth fire station on approximately twelve (12) acres at the southwest corner of Johnson and Navajo Roads. The new station, if developed would be in association with the existing Victor Valley College fire training facility.

Water mains that supply industrial and commercial users, as well as those that serve residential users have sufficient size and pressure to provide water in fire prevention and safety operations. Water pressure in the area of the airport is higher than it is in most other sections of Apple Valley. The required flow to fight fires is based upon the type of construction of a building and the size of a building. Specifics of this can be found in Table 3A in the Appendix of the Fire Protection Codes manual. As an example, the WalMart warehouse/distribution facility at Johnson Road and Dale Evans Parkway was required to provide 3,750 gallons per minute for a duration of four hours, for fire fighting purposes.

Additional storage tanks to provide water to fight fires within the North Apple Valley Industrial Specific Plan area will also need to be constructed as the industrial park approaches buildout.

The National Fire Protection Association has recommended that there should be at least one full time firefighter for each 1,500 residents in a fire protection district. As the Apple Valley population increases over time as a result of the gradual buildout of the airport industrial park, additional firefighters will need to be hired. The current funding formula for the Apple Valley

Fire Protection District for commercial as well as residential properties is \$.0009 per each dollar of assessed property value⁶. A property assessed at \$2,000,000 would thus pay a fee to the Fire Protection District of \$1,800 per year.

9. Airport

The Apple Valley Airport is owned by San Bernardino County and is administered by the San Bernardino County Department of Airports. Other airports that are operated and maintained by San Bernardino County include those at Baker, Barstow-Daggett, Chino, Needles, and Twentynine Palms. Services available at the Apple Valley Airport include fuel, maintenance, charters, rentals, and flight training. San Bernardino County is actively involved in planning, interpreting, and implementing Federal Aviation Administration protocols.

The Apple Valley Airport can be accessed most directly from Corwin Road on the west side of the airport currently. Future plans for the High Desert Corridor will require the relocation of the airport's access to Fresno Road. Almost all existing and planned airport-related buildings are located on the west side of the airport – and are just west of the taxiway for Runway 18-36. Existing buildings within the airport property include the airport terminal; an airport maintenance building; as well as FBO hangars and T-hangars.

Planned buildings and uses in this area (along the western edge of the taxiway for Runway 18-36) include future executive hangars (just north of runway 8-26); a future law enforcement facility; a commercial aviation development area; several T-hangars; an apron infill area; and a service road that closely rings both of the airport runways (including the runway protection zones). The law enforcement facility and heliport are currently being constructed immediately south of the airport terminal.

Airport officials hope to purchase several parcels of property that are adjacent to the airport's existing lands. These include a 59.88 acre parcel to the southwest of the airport located just north of Papago Road and east of Dakota Road; a 170 acre property northwest of the airport; and a five acre property northeast of the airport, part of which is included in the runway protection zone at the north end of runway 18-36.

Runway 18-36

The Apple Valley Airport has two runways. The larger runway is called Runway 18-36 and it is aligned from north by northeast to south by southwest. This runway is 150 feet wide and 6,498 feet long. The runway has a right-of-way of 1,000 feet, and the runway itself lies in the center of this right-of-way.

Approaches to Runway 18-36 require a visibility of at least one mile. The runway and taxiway pavement are both constructed of asphalt. There is an additional 1,700-foot long runway protection zone at the north end of the runway. At the south end of Runway 18-36, there is a 1,000 foot runway protection zone, and to the south of this is an additional 1,000+ foot obstacle free zone.

⁶ Personal communication, Mark Reynolds, Finance Director, Apple Valley Fire Protection District, February 2006.

Runway 8-26

Runway 8-26 is located at the southern end of Runway 18-36. Runway 8-26 runs directly east to west. This runway is 60 feet wide and 4,099 feet in length. The runway and taxiway pavement are both made of asphalt. At both the east and the west ends of Runway 8-26, there are runway protection zones that are 1,000 feet long, and no less than 500 feet wide.

Funding of Improvements

Improvements to the airport itself are generally funded through the grant process. The federal government generally pays for ninety percent of approved airport upgrades and infrastructure; the state and local government (in this case the County) will pay for the remaining portion of improvement costs.

Utilities Under the Runway

There is no formal FAA prohibition on boring utility lines underneath airport runways⁷. It is possible that build out of the area will require the undergrounding of utilities through airport property to assure cost effective extension of these facilities.

Local utilities have already targeted the airport runways in Apple Valley for underground utility lines. At the western end of Runway 8-26 (the east-west crosswinds runway), both Southwestern Gas and Apple Valley Ranchos have lines underneath the runway protection zone. In both cases, the company's lines were designed to stay as close to Ramona Road as possible while avoiding the runway itself, and shifting slightly westward to occupy the space underneath the protection zone. Verizon has also indicated that it expects to eventually run its lines underneath the airport runway, and that it would most likely collocate with Southern California Edison's electricity lines.

⁷ Personal Communication, Richard Dykas, Supervisor of the Capacity Section of the Western Pacific Region of Federal Aviation Administration (FAA), Los Angeles, February 2006

General Plan Consistency

State law requires that this Specific Plan demonstrate its consistency with the Town's General Plan. The following describes how the Specific Plan is consistent with the General Plan, and the applicable goals and policies, for each of the General Plan elements.

Land Use Element

Goal LU-2: The Town will manage growth in an orderly manner in accordance with a long range plan which protects and enhances community values, and which does not exceed the provisions of requisite facilities and services.

Policy LU-2.4: The Town will require that all necessary infrastructure and support services be in place prior to occupancy of new development.

The Specific Plan is a long-range document which will guide the development of the Specific Plan area through development standards and guidelines. The Specific Plan also includes predictions for infrastructure needs, preliminary cost estimates to meet those needs, and methods available for financing.

Goal LU-4: The Town shall promote commercial and industrial development that are capable of strengthening the local economy and enhancing the quality of life of Town residents.

Policy LU-4.1: Industrial and commercial development will be permitted in areas where such uses are appropriate and where adequate roadways, infrastructure, and public services are appropriate.

Policy LU-4.5: The Town will encourage utilization of the Apple Valley Airport to enhance light industrial development and provide support for commercial development. The Town will consider establishment of a Specific Plan for this area.

Policy LU-4.6: Commercial and industrial activities will be clustered in areas adjacent to major roads and in the vicinity of the Apple Valley County Airport.

Policy LU-4.7: Development proposed within the Airport Influence Area will be subject to findings by the Town Planning Department to ensure compatibility with airport operations.

The Specific Plan was created to implement this goal and these policies. The lands included in the Specific Plan Area surround the airport property, and take advantage of its location. The standards for the safety zones required around the airport will be applied to all project located in these zones.

Circulation Element

Goal C-2.2: Develop a circulation plan and programs which are financially, technically, and legally implementable, both at the local and regional level.

Goal C-3: Develop a circulation system which supports the comprehensive goals of the Town, which is integrated with land use planning, and which ensures that the system is responsive to the needs of the community.

Policy C-3.3: Design and construct transportation corridors that are easy to follow and meet traffic safety standards.

The Specific Plan and its associated traffic impact analysis quantify the needed roadways for the area, and assure that adequate, but not excessive, infrastructure for roads is provided to the area. The transportation system is designed to accommodate the commercial traffic associated with the Specific Plan, and direct it to regional roadways and away from local neighborhoods.

Safety Element

Goal S-1: The Town will encourage development only in those areas without significant potential for risk to life and property.

Policy S-1.1: The Town will restrict development in those areas which are subject to flooding. Special geologic analysis will be required in hillside areas.

The Specific Plan EIR identifies areas with the potential for flooding, and provides mitigation measures to assure that all development within the Specific Plan Area is safe from this hazard.

Goal S-2: The Town The health and well-being of the community and the physical safety of its structures shall be safeguarded.

Goal S-3: The Town will make every effort to minimize potential hazards to public health, safety and welfare.

Policy S-3.3: The Town shall ensure that the appropriate safety and construction standards are maintained in all new development.

The Specific Plan assures the construction of buildings to the Town's latest construction standards through implementation of the development standards. Further, the Specific Plan EIR includes mitigation measures related to conformance with the Uniform Building Code, and with the health and safety requirements of appropriate agencies for the transport, use and storage of hazardous materials.

Public Facilities

Goal PF-1: Ensure that existing and future land uses have a water supply system capable of adequately meeting normal and emergency demands to ensure the public health and safety of Town residents.

Policy PF-1.1: New development shall be constructed with adequate water supplies which protect the health and safety.

Policy PF-1.3: Promote water conservation for all land uses through public education which addresses conservation practices such as reclaimed water use and, by example, through the operation of Town facilities.

The Specific Plan clearly lays out the water infrastructure requirements for build out of the Specific Plan, the costs associated with these improvements, and the potential financing mechanisms available to construct them.

Goal PF-2: Establish, extend, maintain and finance a safe and efficient wastewater collection, treatment and disposal system which maximizes treatment and water recharge, minimizes water use and work within applicable laws and regulations in an attempt to prevent groundwater degradation and contamination.

Policy PF-2.1: New development shall provide for the adequate collection, treatment and disposal of the wastewater it generates to ensure the Town's residents a safe and healthful environment.

PF-2.2: New development shall bear the cost of new services and facilities required to meet the increased demand which it generates.

PF-2.5: Private development shall participate in improvements to the sewage collection system and sub-regional treatment plant system, when developed, through sewer connection fees and construction of facilities.

The Specific Plan clearly lays out the wastewater infrastructure requirements for build out of the Specific Plan, the costs associated with these improvements, and the potential financing mechanisms available to construct them.

Goal PF-4: Plan, design, construct, fund and maintain flood control facilities and systems adequate to support planned land uses, protect the lives and property of Apple Valley residents, and promote public safety.

Policy PF-4.3: New development shall bear the cost of new facilities and upgrades to existing facilities to accommodate the additional storm runoff caused by the development.

The Specific Plan EIR clearly identifies those areas where flood control facilities will be required, and provides mitigation measures to assure that all development within the Specific Plan Area is constructed in a manner which controls and properly directs storm water flows to appropriate facilities.

Goal PF-6: Ensure infrastructure provision is planned and provided for in all new development, and that an integrated infrastructure planning, financing and implementation program is developed to protect and promote the public health and safety.

Policy PF-6.3: New development shall provide appropriate dedications, improvements and fees so as not to burden the tax base of the Town.

Policy PF-6.4: New development projects must provide their own infrastructure, and participate in appropriate funding mechanisms, such as assessment districts, for more regional facilities.

The Specific Plan details the requirements for infrastructure improvements for roads, water and sewer facilities, provides costs for these improvements, and methods of financing them.

Noise Element

Goal N-1: The Town will incorporate noise considerations into its various decisions in order to mitigate existing adverse noise conditions and establish noise-compatible land use for future development.

The Specific Plan includes buffer areas specifically designed to provide distance between surrounding residential land uses and the industrial and commercial development proposed. The Specific Plan EIR includes mitigation measures to assure that the individual projects proposed within the Specific Plan Area mitigate their noise impacts to levels which do not significantly impact the local and regional environment.

Preliminary Cost Estimates for Infrastructure

As previously stated, current infrastructure within the Specific Plan area is limited, and when it occurs has limited capacity, particularly for the scale of development envisioned in this Specific Plan. In order to establish basic parameters for the future requirements of the area, an analysis of the infrastructure needs to support development of the land use plan was conducted. This analysis resulted in recommendations for size and location of water, sanitary sewer and roadway infrastructure throughout the area.

Water Lines

A number of water lines currently occur within the Plan area. To support the proposed land use plan, however, additional water mains will be required. Both existing and proposed water lines are depicted in Exhibit IV-3. For purposes of this analysis, typical industrial development was assumed, with a focus on warehouse-type development. Should a water-intensive manufacturing use be proposed, up-sizing of water lines may be required. Based on the anticipated build out of the Plan area, 12 and 14-inch lines will be required throughout the Plan area. Table B-1 illustrates the costs associated with installation of these lines. Cost estimates include cost of pavement, connection laterals and pressure reducing stations.

Table B-1
Specific Plan Water Main Improvement Costs (2006 Dollars)

Water Line Size	Improvement Cost/Linear Foot	Miles of Line in Plan Area	Linear Feet of Line in Plan Area	Total Cost
12 inch	\$60.00	12	63,360	\$3,801,600
14 inch	\$70.00	8.75	46,200	\$3,234,000
Total Water Main Improvement Costs				\$7,035,600

Source: Fomotor Engineering, Terra Nova Planning

Sanitary Sewer Lines

As discussed above, only one sewer line, a 15-inch line, currently occurs in the Plan area. In order to assure that development is served by sanitary sewer as the Plan area develops, a number of main lines will be required. These lines are depicted in Exhibit IV-4, Specific Plan Future Sanitary Sewer Mains. The costs associated with the construction of these mains is illustrated in Table B-2, next page. The costs include piping, manholes, cleanouts, and associated infrastructure.

Table B-2
Specific Plan Sanitary Sewer Improvement Costs (2006 Dollars)

Sewer Line Size	Improvement Cost/Linear Foot	Miles of Line in Plan Area	Linear Feet of Line in Plan Area	Total Cost
8 inch	\$60.00	17.35	91,608	\$5,496,480
10 inch	\$70.00	4.2	22,176	\$1,552,320
12 inch	\$80.00	2.25	11,880	\$950,400
15 inch	\$90.00	1	5,280	\$475,200
18 inch	\$100.00	2.25	11,880	\$1,188,000
Total Sanitary Sewer Improvement Costs				\$7,048,800

Roadways

As discussed in Section IV.A.1., above, the Town has specific standards for each roadway classification, including medians, curb and gutter, sidewalk and parkway areas. Based on these standards, estimates of the costs of these improvements within the Specific Plan were developed. Table B-3, below, summarizes the information.

Table B-3
Rough Order Of Magnitude Cost Estimates For 2030 On-Site Intersection Improvements, With Preferred Project Alternative

ON-SITE INTERSECTION	LAND USE ALTERNATIVE	TRAFFIC CONTROL ¹	INTERSECTION APPROACH LANES												TOTAL COST ²
			NORTH-BOUND			SOUTH-BOUND			EAST-BOUND			WEST-BOUND			
			L	T	R	L	T	R	L	T	R	L	T	R	
Dale Evans Pkwy. East (NS) / Quarry Rd. (EW)	Current Geometry	CSS	0	1	0	0	1	0	0	1	0	0	1	0	\$450,000
	Preferred Alternative Recommended Geometry	TS	1	1	0	1	1	0	1	1	0	1	1	0	
	Additional Improvements	TS	1	0	0	1	0	0	1	0	0	1	0	0	
Dale Evans Pkwy (NS) / "B" St. (EW)	Current Geometry	0	0	1	0	0	1	0	0	0	0	0	0	0	\$450,000
	Preferred Alternative Recommended Geometry	TS	0	1	1	1	1	0	0	0	0	1	0	1	
	Additional Improvements	TS	0	0	1	1	0	0	0	0	0	1	0	1	

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Dale Evans Pkwy. East (NS) / Johnson Rd. (EW)	Current Geometry	CSS	1	1	1	1	1	0	0	1	0	0.	0.	1>	\$1,150,000
	Preferred Alternative Recommended Geometry	TS	1	2	1>	1	2	1	1	2	1>	2	2	1>	
	Additional Improvements	TS	0	1	>	0	1	1	1	1	1>	2	1	0	
Dale Evans Pkwy (NS) / Los Padres/Saugus Rd. (EW)	Current Geometry	0	0	1	0	0	1	0	0	0	0	0	0	0	\$1,350,000
	Preferred Alternative Recommended Geometry	TS	1	2	1	1	2	1	2	1	1	2	1	1	
	Additional Improvements	TS	1	1	1	1	1	1	2	1	1	2	1	1	
Dale Evans Pkwy (NS) / Gustine Rd. (EW)	Current Geometry	0	0	1	0	0	1	0	0	0	0	0	0	0	\$1,425,000
	Preferred Alternative Recommended Geometry	TS	2	2	1	1	2	1	2	1	1>	2	1	1	
	Additional Improvements	TS	2	1	1	1	1	1	2	1	1>	2	1	1	
Dale Evans Pkwy (NS) / High Desert Corridor WB (EW)	Current Geometry	0	0	1	0	0	1	0	0	0	0	0	0	0	\$750,000
	Preferred Alternative Recommended Geometry	TS	1	2	0	0	2	1	0	0	0	1	0	1	
	Additional Improvements	TS	1	1	0	0	1	1	0	0	0	1	0	1	
Dale Evans Pkwy (NS) / High Desert Corridor EB (EW)	Current Geometry	0	0	1	0	0	1	0	0	0	0	0	0	0	\$850,000
	Preferred Alternative Recommended Geometry	TS	0	2	1	2	2	0	2	0	1	0	0	0	
	Additional Improvements	TS	0	1	1	2	1	0	2	0	1	0	0	0	
Dale Evans Pkwy. East (NS) / Corwin Rd. (EW)	Current Geometry	CSS	0	1	0	0	1	0	0	1	0	0	1	0	\$1,425,000
	Preferred Alternative Recommended Geometry	TS	1	2	1	2	2	1>	2	1	1	2	1	1	
	Additional Improvements	TS	1	1	1	2	1	1>	2	1	1	2	1	1	
"C" St. (NS) / Quarry Rd. (EW)	Current Geometry	0	0	0	0	0	0	0	0	1	0	0	1	0	\$450,000
	Preferred Alternative Recommended Geometry	TS	1	0	1	0	0	0	0	1	1	1	1	0	
	Additional Improvements	TS	1	0	1	0	0	0	0	0	1	1	0	0	
"C" St. (NS) / "B" St. (EW)	Current Geometry	0	0	0	0	0	0	0	0	0	0	0	0	0	\$1,050,000
Preferred Alternative Recommended Geometry	TS	1	1	0	1	1	0	1	1	0	1	1	0		
Additional Improvements	TS	1	1	0	1	1	0	1	1	0	1	1	0		

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"C" St. (NS) / Gustine Rd. (EW)	Current Geometry	0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	\$1,100,000
	Preferred Alternative Recommended Geometry	TS	1 1 0	1 1 1	1 1 0	1 1 0	1 1 0	
	Additional Improvements	TS	1 1 0	1 1 1	1 1 0	1 1 0	1 1 0	
Navajo Rd. (NS) / Quarry Rd. (EW)	Current Geometry	CSS	0 0 0	0 0 0	0 1 0	0 1 0	0 1 0	\$750,000
	Preferred Alternative Recommended Geometry	TS	1 1 0	1 1 0	1 1 0	1 1 0	1 1 0	
	Additional Improvements	TS	1 1 0	1 1 0	1 0 0	1 0 0	1 0 0	
Navajo Rd. (NS) / "B" St. (EW)	Current Geometry	0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	\$1,050,000
	Preferred Alternative Recommended Geometry	TS	1 1 0	1 1 0	1 1 0	1 1 0	1 1 0	
	Additional Improvements	TS	1 1 0	1 1 0	1 1 0	1 1 0	1 1 0	
Navajo Rd. (NS) / Johnson Rd. (EW)	Current Geometry	0	0 1 0	0 0 0	0 1 0	0 0 0	0 0 0	\$1,300,000
	Preferred Alternative Recommended Geometry	TS	1 1 1	1 1 1	2 2 0	2 2 1	2 2 1	
	Additional Improvements	TS	1 0 1	1 1 1	2 1 0	2 2 1	2 2 1	
Navajo Rd. (NS) / Los Padres/Saugus Rd. (EW)	Current Geometry	0	0 1 0	0 1 0	0 0 0	0 0 0	0 0 0	\$850,000
	Preferred Alternative Recommended Geometry	TS	1 1 0	1 1 1	2 1 0	1 1 0	1 1 0	
	Additional Improvements	TS	1 0 0	1 0 1	2 1 0	1 1 0	1 1 0	
High Desert Corridor EB (NS) / Waalew Rd. (EW)	Current Geometry	0	0 0 0	0 0 0	0 1 0	0 1 0	0 1 0	\$450,000
	Preferred Alternative Recommended Geometry	TS	0 0 0	1 0 1	0 1 1	1 1 0	1 1 0	
	Additional Improvements	TS	0 0 0	1 0 1	0 0 1	1 0 0	1 0 0	
High Desert Corridor WB (NS) / Waalew Rd. (EW)	Current Geometry	0	0 0 0	0 0 0	0 1 0	0 1 0	0 1 0	\$450,000
	Preferred Alternative Recommended Geometry	TS	1 0 1	0 0 0	1 1 0	0 1 1	0 1 1	
	Additional Improvements	TS	1 0 1	0 0 0	1 0 0	0 0 1	0 0 1	
Central Rd. (NS) / Quarry Rd. (EW)	Current Geometry	CSS	0 1 0	0 0 0	0 1 0	0.5 0.5 0	0.5 0.5 0	\$-
	Preferred Alternative Recommended Geometry	CSS	0 1 0	0 0 0	0 1 0	1 1 0	1 1 0	
	Additional Improvements	0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	

Central Rd. (NS) / "B" St. (EW)	Current Geometry	0	0 1 0	0 1 0	0 0 0	0 0 0	\$450,000
	Preferred Alternative Recommended Geometry	TS	2 1 0	0 1 0	1 0 1	0 0 0	
	Additional Improvements	TS	2 0 0	0 0 0	1 0 1	0 0 0	
Central Rd. (NS) / Johnson Rd. (EW)	Current Geometry	CSS	0 1 0	0 1 0	0 1 0	0 1 0	\$650,000
	Preferred Alternative Recommended Geometry	TS	2 1 1	1 1 1	1 1 1	1 1 0	
	Additional Improvements	TS	2 0 1	1 0 1	1 0 1	1 0 0	
Central Rd. (NS) Lafayette/Saugus Rd. (EW)	Current Geometry	0	0 1 0	0 1 0	0 0 0	0 0 0	\$750,000
	Preferred Alternative Recommended Geometry	TS	1 2 0	0 2 1	1 0 1	0 0 0	
	Additional Improvements	TS	1 1 0	0 1 1	1 0 1	0 0 0	
TOTAL ON-SITE COST - PREFERRED PROJECT ALTERNATIVE							\$17,150,000

¹ TS = Traffic Signal; CSS = Cross Street Stop

² Rough Order Magnitude cost estimates based on the following unit cost:

Traffic Signal = \$250,000; Left Turn Lane = \$50,000; Through Lane = \$150,000; Right Turn Lane = \$50,000;
 Right-Turn Overlap Phasing (>) = \$25,000; Free-Flow Right Turn (>>) = \$75,000

The improvements outlined above represent the major roadways within the Specific Plan Area which require improvement.

In addition, the costs associated with off-site road improvements required to the year 2030, as described in the Specific Plan Traffic Impact Analysis, was calculated. This information is included in Table B-4, below.

Table B-4
Rough Order of Magnitude Cost Estimates for 2030 Off-Site Intersection Improvements with Preferred Project Alternative

OFF SITE INTER-SECTION	LAND USE ALTERNATIVE	TRAFFIC CONTROL ¹	INTERSECTION APPROACH LANES												TOTAL COST ²
			L	T	R	L	T	R	L	T	R	L	T	R	
Stoddard Wells Rd. (NS) / High Desert Corridor (EW)	Current Geometry	0	0	0	0	0	0	0	0	0	0	0	0	0	\$1,450,000
	Preferred Alternative Recommended Geometry	TS	1	1	1	1	1	1	1	2	0	1	2	0	
	Additional Improvements	TS	1	1	1	1	1	1	1	2	0	1	2	0	
I-15 SB Ramps (NS) / Dale Evans Pkwy. (EW)	Current Geometry	CSS	0	0	0	0.5	0.5	1	0	1	0	0.5	0.5	0	\$100,000
	Preferred Alternative Recommended Geometry	CSS	0	0	0	1	1	1	0	1	0	1	1	0	
	Additional Improvements	0	0	0	0	1	0	0	0	0	0	1	0	0	
I-15 SB Ramps (NS) / Stoddard Wells Rd. North (EW)	Current Geometry	CSS	0	0	0	0	1	0	0.5	0.5	0	0	1	1 >	\$350,000
	Preferred Alternative Recommended Geometry	TS	0	0	0	1	0	1	1	1	0	0	1	1 >	
	Additional Improvements	TS	0	0	0	1	0	0	1	0	0	0	0	0	
I-15 SB Ramps (NS) / High Desert Corridor (EW)	Current Geometry	0	0	0	0	0	0	0	0	0	0	0	0	0	\$1,400,000
	Preferred Alternative Recommended Geometry	TS	0	0	0	1	0	1	0	2	1	2	2	0	
	Additional Improvements	TS	0	0	0	1	0	1	0	3	1	2	3	0	
I-15 SB Ramps (NS) / Stoddard Wells South (EW)	Current Geometry	CSS	0	0	0	0	1	0	0.5	0.5	0	1	0	1 >	\$550,000
	Preferred Alternative Recommended Geometry	TS	0	0	0	1	0	1	0	1	1	2	1	1 >	
	Additional Improvements	TS	0	0	0	1	0	0	0	0	1	1	1	0	
I-15 NB Ramps (NS) / Dale Evans Pkwy (EW)	Current Geometry	CSS	0.5	0.5	1	0	0	0	0.5	0.5	0	0	1	0	\$-
	Preferred Alternative Recommended Geometry	CSS	1	0	1	0	0	0	0.5	0.5	0	0	1	0	
	Additional Improvements	0	0	0	0	0	0	0	0	0	0	0	0	0	
I-15 NB Ramps / Outer Highway 15 (NS) / Stoddard Wells Rd. North (EW)	Current Geometry	CSS	0	1	0	0.5	0.5	1	0	1	0	0	1	0	\$900,000
	Preferred Alternative Recommended Geometry	TS	1	1	0	2	1	0	1	2	0	2	2	1	
	Add'l Improvements	TS	1	0	0	2	0	0	1	1	0	2	1	1	

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I-15 NB Ramps (NS) / High Desert Corridor (EW)	Current Geometry	0	0	0	0	0	0	0	0	0	0	0	\$1,075,000		
	Preferred Alternative Recommended Geometry	TS	1	0	>	0	0	0	1	2	0	0		2	1
	Additional Improvements	TS	1	0	>	0	0	0	1	2	0	0		2	1
I-15 NB Ramps (NS) / Stoddard Wells South (EW)	Current Geometry	CSS	0.5	0.5	0	0	1	0	0	0	0	0	1	0	
	Preferred Alternative Recommended Geometry	TS	1	0	1	0	1	0	1	1	0	0	1	1	
	Additional Improvements	TS	0	0	1	0	0	0	1	1	0	0	0	1	
Outer I-15 (NS) / Saugus Rd. (EW)	Current Geometry	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Preferred Alternative Recommended Geometry	TS	0	1	1	1	1	0	0	0	0	2	0	1	
	Additional Improvements	TS	0	1	1	1	1	0	0	0	0	2	0	1	
Outer I-15 Hwy (NS) / Gustine Rd. (EW)	Current Geometry	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Preferred Alternative Recommended Geometry	TS	0	2	0	1	2	0	0	0	0	2	0	1	
	Additional Improvements	TS	0	2	0	1	2	0	0	0	0	2	0	1	
Outer I-15 (NS) / High Desert Corridor (EW)	Current Geometry	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Preferred Alternative Recommended Geometry	TS	1	2	0	1	2	1>>	2	3	1	1	3	1	
	Additional Improvements	TS	1	2	0	1	2	1>>	2	3	1	1	3	1	
Outer I-15 Hwy (NS) / Falchion Rd. (EW)	Current Geometry	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Preferred Alternative Recommended Geometry	TS	0	1	1	1	1	0	0	0	0	1	0	1	
	Additional Improvements	TS	0	1	1	1	1	0	0	0	0	1	0	1	
Outer I-15 Hwy (NS) / Stoddard Wells Rd. South (EW)	Current Geometry	CSS	0.5	0.5	0	0	1	0	1	0	1	0	0	0	
	Preferred Alternative Recommended Geometry	TS	1	1	0	0	1	1>	1	0	1	0	0	0	
	Additional Improvements	TS	1	0	0	0	0	1>	0	0	0	0	0	0	
Apple Valley Rd. (NS) / Falchion Rd. (EW)	Current Geometry	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Preferred Alternative Recommended Geometry	TS	1	0	1	0	0	0	0	1	1	1	1	0	
	Additional Improvements	TS	1	0	1	0	0	0	0	1	1	1	1	0	
Apple Valley Rd. (NS) / Happy Trails Hwy. (SR-18) (EW)	Current Geometry	TS	1.5	0.5	1	1	1	1	2	2	1>	1	2	1	
	Preferred Alternative Recommended Geometry	TS	2	3	1>	2	3	1>	2	3	1>	2	3	1>	
	Additional Improvements	0	1	2	>	1	2	>	0	1	0	1	1	>	

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Apple Valley Rd. (NS) / Yucca Loma Rd. (EW)	Current Geometry	TS	1 1 1	1 1 1	1 2 1	1 1 1	\$750,000
	Preferred Alternative Recommended Geometry	TS	2 2 1 >	2 2 1 >	2 2 1 >	2 2 1 >	
	Additional Improvements	0	1 1 >	1 1 >	1 0 >	1 1 >	
Kasota Rd. (NS) / Happy Trails Hwy. (SR-18) (EW)	Current Geometry	TS	0 1 0	0 1 0	1 2 1	1 2 1	\$-
	Preferred Alternative Recommended Geometry	TS	0 1 0	0 1 0	1 2 1	1 2 1	
	Additional Improvements	0	0 0 0	0 0 0	0 0 0	0 0 0	
Corwin Rd. (NS) / Happy Trails Hwy. (SR-18) (EW)	Current Geometry	TS	0 0 0	1 0 2 >	1 2 0	0 2 0	\$50,000
	Preferred Alternative Recommended Geometry	TS	0 0 0	1 0 2 >	2 2 0	0 2 0	
	Additional Improvements	0	0 0 0	0 0 0	1 0 0	0 0 0	
Corwin Rd. (NS) / Waalew Rd. (EW)	Current Geometry	CSS	0 1 0	0.5 0.5 0	0 0 0	0 1 0	\$700,000
	Preferred Alternative Recommended Geometry	TS	0 2 1	1 2 0	0 0 0	1 0 1	
	Additional Improvements	TS	0 1 1	1 1 0	0 0 0	0 0 1	
Tao Rd. (NS) / Falchion Rd. (EW)	Current Geometry	0	0 0 0	0 0 0	0 0 0	0 0 0	\$700,000
	Preferred Alternative Recommended Geometry	TS	1 0 1	0 0 0	0 1 0	1 1 0	
	Additional Improvements	TS	1 0 1	0 0 0	0 1 0	1 1 0	
Tao Rd. (NS) / Corwin Rd. (EW)	Current Geometry	AWS	0 1 0	0 1 0	0 1 0	0 1 0	\$950,000
	Preferred Alternative Recommended Geometry	TS	1 1 1	1 1 1	1 2 1	1 2 1	
	Additional Improvements	TS	1 0 1	1 0 1	1 1 1	1 1 1	
Choco Rd. (NS) / Stoddard Wells Rd. (EW)	Current Geometry	0	0 0 0	0 0 0	0 1 0	0 1 0	\$700,000
	Preferred Alternative Recommended Geometry	TS	1 0 1	0 0 0	0 2 0	1 2 0	
	Additional Improvements	TS	1 0 1	0 0 0	0 1 0	1 1 0	
Choco Rd. (NS) / Saugus Rd. (EW)	Current Geometry	0	0 0 0	0 0 0	0 0 0	0 0 0	\$1,100,000
	Preferred Alternative Recommended Geometry	TS	1 1 0	1 1 0	1 1 0	1 1 1	
	Additional Improvements	TS	1 1 0	1 1 0	1 1 0	1 1 1	
Choco Rd. (NS) / High Desert Corridor WB (EW)	Current Geometry	0	0 0 0	0 0 0	0 0 0	0 0 0	\$750,000
	Preferred Alternative Recommended Geometry	TS	1 1 0	0 1 1	0 0 0	1 0 1	
	Additional Improvements	TS	1 1 0	0 1 1	0 0 0	1 0 1	

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Choco Rd. (NS) / High Desert Corridor EB (EW)	Current Geometry	0	0	0	0	0	0	0	0	0	0	0	\$750,000		
	Preferred Alternative Recommended Geometry	TS	0	1	1	1	1	0	1	0	1	0		0	
	Additional Improvements	TS	0	1	1	1	1	0	1	0	1	0		0	
Choco Rd. (NS) / Falchion Rd. (EW)	Current Geometry	0	0	0	0	0	0	0	0	0	0	0	\$1,050,000		
	Preferred Alternative Recommended Geometry	TS	1	1	0	1	1	0	1	1	0	1		1	
	Additional Improvements	TS	1	1	0	1	1	0	1	1	0	1		1	
Choco Rd. (NS) / Corwin Rd. (EW)	Current Geometry	CSS	0	1	0	0	1	0	0	1	0	0.5	0.5	1	\$2,000,000
	Preferred Alternative Recommended Geometry	TS	1	1	1	1	1	1	1	2	1	1	2	1	
	Additional Improvements	TS	1	0	1	1	0	1	1	1	1	1	1	0	
"A" St. (NS) / Saugus Rd. (EW)	Current Geometry	0	0	0	0	0	0	0	0	0	0	0	\$750,000		
	Preferred Alternative Recommended Geometry	TS	1	0	1	0	0	0	0	1	1	1		1	0
	Additional Improvements	TS	1	0	1	0	0	0	0	1	1	1		1	0
"A" St. (NS) / Gustine Rd. (EW)	Current Geometry	0	0	0	0	0	0	0	0	0	0	0	\$1,050,000		
	Preferred Alternative Recommended Geometry	TS	1	1	0	1	1	0	1	1	0	1		1	0
	Additional Improvements	TS	1	1	0	1	1	0	1	1	0	1		1	0
"A" St. (NS) / Falchion Rd. (EW)	Current Geometry	0	0	0	0	0	0	0	0	0	0	0	\$750,000		
	Preferred Alternative Recommended Geometry	TS	0	0	0	1	0	1	1	1	0	0		1	1
	Additional Improvements	TS	0	0	0	1	0	1	1	1	0	0		1	1
Stoddard Wells Rd. (NS) / Johnson Rd. (EW)	Current Geometry	CSS	0	1	0	0.5	0.5	0	0	0	0	0	1	0	\$475,000
	Preferred Alternative Recommended Geometry	TS	0	1	1	1	1	0	0	0	0	2	0	1	
	Additional Improvements	TS	0	0	1	1	0	0	0	0	0	2	0	0	
Stoddard Wells Rd. (NS) / Quarry Rd. (EW)	Current Geometry	CSS	0	1	0	0.5	0.5	0	0	0	0	0	1	0	\$300,000
	Preferred Alternative Recommended Geometry	CSS	1	1	1	0	1	0	0	1	0	1	1	0	
	Additional Improvements	0	1	0	1	0	0	0	0	1	0	1	0	0	
Rancherias Rd. (NS) / Otoe Rd. (EW)	Current Geometry	CSS	0	1	0	0	1	0	0	1	0	0	1	0	\$450,000
	Preferred Alternative Recommended Geometry	TS	1	1	0	1	1	0	1	1	0	1	1	0	
	Additional Improvements	TS	1	0	0	1	0	0	1	0	0	1	0	0	

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Rancherias Rd. (NS) / Thunderbird Rd. (EW)	Current Geometry	CSS	0 1 1	1 1 0	0 0 0	1 0 1	\$250,000
	Preferred Alternative Recommended Geometry	TS	0 1 1	1 1 0	0 0 0	1 0 1	
	Additional Improvements	TS	0 0 0	0 0 0	0 0 0	0 0 0	
Rancherias Rd. (NS) / Happy Trails Hwy. (SR-18) (EW)	Current Geometry	TS	1 1 0	1 1 1	1 2 1	1 2 1	\$-
	Preferred Alternative Recommended Geometry	TS	1 1 0	1 1 1	1 2 1	1 2 1	
	Additional Improvements	0	0 0 0	0 0 0	0 0 0	0 0 0	
Rincon Rd. (NS) / Yucca Loma Rd. (EW)	Current Geometry	CSS	0 1 0	0 1 0	1 1 0	1 1 0	\$650,000
	Preferred Alternative Recommended Geometry	TS	1 1 0	1 1 0	1 2 0	1 2 0	
	Additional Improvements	TS	1 0 0	1 0 0	0 1 0	0 1 0	
Dale Evans Pkwy. East (NS) / Stoddard Wells Rd. (EW)	Current Geometry	CSS	0 1 0	0 1 0	0 1 0	0 1 0	\$100,000
	Preferred Alternative Recommended Geometry	CSS	1 1 0	1 1 0	0 1 0	0 1 0	
	Additional Improvements	0	1 0 0	1 0 0	0 0 0	0 0 0	
Dale Evans Pkwy. East (NS) / Waalew Rd. (EW)	Current Geometry	CSS	0 0 0	0 1 0	0.5 0.5 0	0 1 0	\$800,000
	Preferred Alternative Recommended Geometry	TS	0 0 0	2 0 2	2 2 0	0 2 0	
	Additional Improvements	TS	0 0 0	2 0 1	2 1 0	0 1 0	
Dale Evans Pkwy. West (NS) / Waalew Rd. (NS)	Current Geometry	CSS	0 1 0	0 0 0	0 1 0	0.5 0.5 0	\$700,000
	Preferred Alternative Recommended Geometry	TS	1 0 1	0 0 0	0 2 0	2 2 0	
	Additional Improvements	TS	0 0 1	0 0 0	0 1 0	2 1 0	
Dale Evans Pkwy West (NS) / Otoe Rd. (EW)	Current Geometry	CSS	0 1 0	0 1 0	0 1 0	0 1 0	\$525,000
	Preferred Alternative Recommended Geometry	TS	1 1 1	1 1 1	1 1 0	1 1 0	
	Additional Improvements	TS	1 0 1	1 0 1	1 0 0	1 0 0	
Dale Evans Pkwy West (NS) / Thunderbird Rd. (EW)	Current Geometry	AWS	1 1 1	1 1 1	1 1 1	1 1 1	\$250,000
	Preferred Alternative Recommended Geometry	TS	1 1 1	1 1 1	1 1 1	1 1 1	
	Additional Improvements	TS	0 0 0	0 0 0	0 0 0	0 0 0	
Dale Evans Pkwy (NS) / Happy Trails Hwy (SR-18) (EW)	Current Geometry	TS	1 1 0	1 1 0	1 2 1	1 2 1	\$-
	Preferred Alternative Recommended Geometry	TS	1 1 0	1 1 0	1 2 1	1 2 1	
	Additional Improvements	0	0 0 0	0 0 0	0 0 0	0 0 0	

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Kiowa Rd. (NS) / Happy Trails Hwy. (SR-18) (EW)	Current Geometry	TS	1 1 0	1 1 0	1 2 1	1 2 1	\$50,000
	Preferred Alternative Recommended Geometry	TS	2 1 0	1 1 0	1 2 1	1 2 1	
	Additional Improvements	0	1 0 0	0 0 0	0 0 0	0 0 0	
Kiowa Rd. (NS) / Yucca Loma Rd. (EW)	Current Geometry	AWS	0 1 0	0 1 0	1 1 0	1 1 0	\$700,000
	Preferred Alternative Recommended Geometry	TS	1 1 0	1 1 0	1 2 1	1 2 0	
	Additional Improvements	TS	1 0 0	1 0 0	0 1 1	0 1 0	
Kiowa Rd. (NS) / Ottawa Rd. (EW)	Current Geometry	CSS	1 1 0	1 1 0	0 1 0	0 1 0	\$350,000
	Preferred Alternative Recommended Geometry	TS	1 1 0	1 1 0	1 1 0	1 1 0	
	Additional Improvements	TS	0 0 0	0 0 0	1 0 0	1 0 0	
Navajo Rd. (NS) / Thunderbird Rd. (EW)	Current Geometry	AWS	0 1 0	0 1 0	0 1 0	0 1 0	\$450,000
	Preferred Alternative Recommended Geometry	TS	1 1 0	1 1 0	1 1 0	1 1 0	
	Additional Improvements	TS	1 0 0	1 0 0	1 0 0	1 0 0	
Navajo Rd. (NS) / Happy Trails Hwy. (SR-18) (EW)	Current Geometry	TS	1 2 0	1 2 0	1 2 1	1 2 1	\$200,000
	Preferred Alternative Recommended Geometry	TS	2 2 1>	1 2 0	1 2 1>	2 2 1	
	Additional Improvements	0	1 0 1>	0 0 0	0 0 >	1 0 0	
Navajo Rd. (NS) / Ottawa Rd. (EW)	Current Geometry	CSS	1 2 1	1 2 1	0 1 0	0 1 0	\$350,000
	Preferred Alternative Recommended Geometry	TS	1 2 1	1 2 1	1 1 0	1 1 0	
	Additional Improvements	TS	0 0 0	0 0 0	1 0 0	1 0 0	
Central Rd. (NS) / Waalew Rd. (EW)	Current Geometry	AWS	0 1 0	0 1 0	0 1 0	0 1 0	\$850,000
	Preferred Alternative Recommended Geometry	TS	1 2 1	1 2 1	1 1 0	1 1 0	
	Additional Improvements	TS	1 1 1	1 1 1	1 0 0	1 0 0	
Central Rd. (NS) / High Desert Corridor WB (EW)	Current Geometry	0	0 1 0	0 1 0	0 0 0	0 0 0	\$750,000
	Preferred Alternative Recommended Geometry	TS	1 2 0	0 2 1	0 0 0	1 0 1	
	Additional Improvements	TS	1 1 0	0 1 1	0 0 0	1 0 1	

Central Rd. (NS) / High Desert Corridor EB (EW)	Current Geometry	0	0	1	0	0	1	0	0	0	0	0	\$750,000	
	Preferred Alternative Recommended Geometry	TS	0	2	1	1	2	0	1	0	1	0		0
	Additional Improvements	TS	0	1	1	1	1	0	1	0	1	0		0
Central Rd. (NS) / Thunderbird Rd. (EW)	Current Geometry	CSS	0.5	0.5	0	0	1	0	1	0	1	0	\$600,000	
	Preferred Alternative Recommended Geometry	TS	1	1	0	1	1	0	1	1	0	1		1
	Additional Improvements	TS	2	0	0	1	0	0	0	0	0	1		1
Central Rd. (NS) / Happy Trails Hwy. (SR-18) (EW)	Current Geometry	TS	0.5	0.5	1	0.5	0.5	1	1	2	1	1	2	\$100,000
	Preferred Alternative Recommended Geometry	TS	2	1	0	1	1	1	1	2	1	1	2	
	Additional Improvements	0	1	0	0	0	0	1	0	0	0	0	0	
Central Rd. (NS) / Ottawa Rd. (EW)	Current Geometry	CSS	0	1	0	0	1	0	0	1	0	0	1	\$450,000
	Preferred Alternative Recommended Geometry	TS	1	1	0	1	1	0	1	1	0	1	1	
	Additional Improvements	TS	1	0	0	1	0	0	1	0	0	1	0	
Joshua Rd. (NS) / Waalew Rd. (EW)	Current Geometry	CSS	0	1	0	0	1	0	0	1	0	0.5	0.5	\$200,000
	Preferred Alternative Recommended Geometry	CSS	1	1	0	1	1	0	1	1	0	1	1	
	Additional Improvements	0	1	0	0	1	0	0	1	0	0	1	0	
TOTAL OFF-SITE COST - PREFERRED PROJECT ALTERNATIVE												\$36,050,000		

¹ TS = Traffic Signal; AWS = All-Way Stop; CSS = Cross Street Stop

² Rough Order Magnitude cost estimates based on the following unit cost:

Traffic Signal = \$250,000; Left Turn Lane = \$50,000; Through Lane = \$150,000; Right Turn Lane = \$50,000;
 Right-Turn Overlap Phasing (>) = \$25,000; Free-Flow Right Turn (>>) = \$75,000

Priorities for Improvements

As described below, the funding of required infrastructure improvements can be accomplished in a number of ways. Funding which is to provide area-wide benefit could be undertaken ahead of development to promote and enhance development opportunities within the Specific Plan Area. The prioritizing of these improvements is difficult to ascertain at this time, because market forces will drive the development of the Specific Plan Area. However, the following basic recommendations are made:

1. Water line improvements should be prioritized by size. 14-inch lines should be considered for construction ahead of development. 12-inch lines should be considered as second tier improvements.
2. Sanitary sewer line improvements should be prioritized by size. 18 and 15-inch lines should be considered collectors, and considered for installation ahead of development.

3. Second tier sanitary sewer improvements should include all 12-inch lines within the Specific Plan Area.
4. Roadway improvements to Dale Evans Parkway, Johnson Road and Central Road, in that order, will benefit the greatest number of properties, and should be considered the “spine” of the Specific Plan Area.
5. Improvements to Papago, Waalew, Dakota and Temecula Roads, on the southern boundary of the Specific Plan Area, will provide residential land uses to the south with an immediate buffer, ahead of development.
6. Second tier roadway improvements which benefit a greater number of properties within the Specific Plan Area include Quarry Road, Navajo Road, C and D Streets (as identified in the Traffic Impact Analysis).

Funding of Infrastructure

Typically, infrastructure is constructed on a “fair share” basis by development as it occurs. In the Specific Plan area, however, where backbone infrastructure is limited, the costs of extending services and roadways may be a deterrent to development. A number of alternatives are available for the funding of infrastructure, with and without the Town’s participation.

When the Town makes roadway improvements currently, funding is primarily through the State’s fuel tax and traffic impact fees collected through the development process. The Town also has the ability to fund infrastructure projects through General Fund revenues, although in recent years reductions in State funding have made it much more unlikely for local jurisdictions to have discretionary funds in their General Fund.

Roadway and other infrastructure funding can also come from Town funds, regional, state and federal grants and loans, and funding mechanisms such as assessment districts, developer impact fees and Mello-Roos districts. Funding mechanisms available for the development of the Specific Plan’s infrastructure are discussed further below.

1. Special Improvement Districts

Special Improvement or Assessment Districts may be initiated by the municipality subject to the approval of property owners or voters. They allow the municipality to issue tax-exempt bonds for public infrastructure improvements. Assessments are generally accompanied by a formal lien against each property which receives the improvements. Those properties benefiting from the improvement are assessed an annual cost on their tax bill. Assessments are proportional to the amount of benefit being received by the property owner. The assessments are generally paid over up to 30 years, but may be prepaid. The boundary of an assessment area is set by the jurisdiction, which provides great flexibility. An assessment district can be created for a small neighborhood, or can extend Town-wide, as long as the benefit of the improvement is demonstrated.

2. General Obligation Bonds

General Obligation bonds may fund a wide range of capital improvement projects from road construction, to property acquisition, to fire prevention. The Town may enter into General Obligation Bond agreements upon approval by two thirds of participating voters in a ballot measure. These bonds are repaid over a finite period of time (ten, twenty, or thirty years), through an increase in the annual property tax being levied by the Town. Unlike assessment districts, general obligation bonds affect all property in Town. Residential property owners would, therefore, be financing improvements in the Specific Plan area which would not directly benefit them.

3. Developer Impact Fees

The state allows the imposition of developer impact fees for the costs of infrastructure, based on the level of impact of a project on a particular facility. Developer impact fees can be used for a variety of improvements, and require the preparation of cost estimates and fair share distribution based on a “rational nexus” that the fee being paid is equivalent to the cost which would otherwise be incurred by the developer to provide his fair share of an improvement. Developer impact fees are most typically used for regional improvements, when a single developer would be unlikely to support the cost of the installation of the improvement, and a pooling of funds is required. The appeal to the development community is the assurance provided in the payment of the fee – the potential cost is known and limited, and the improvement is the responsibility of the Town. In the Specific Plan area, backbone road improvements including major arterials (including the half-width improvements to the perimeter streets described above), water and sewer trunk lines and the project entry features’ improvements could all be financed through developer impact fees.

4. Landscaping and Lighting Districts

Landscaping and Lighting Districts may be created to provide a range of infrastructure improvements. Annual assessment would be raised from properties in the district. Funds may be used for construction and maintenance of curbs, gutters, sidewalks, paving, parkway landscaping and other facilities. The long-term maintenance of the Specific Plan area’s street system could be financed through this vehicle. The formation of the district occurs with the first development to occur in the Specific Plan area, and each subsequent development is required to annex into the district as maps are recorded or building permits are issued.

5. Mello-Roos Districts

Mello-Roos districts can be used to finance a wide range of improvements, including land purchases and maintenance. Mello-Roos districts require a 2/3 major vote of the registered voters within the district. District boundaries can be set by the Town to include any area benefiting from the improvement, and do not impact the entire community. The creation of the district results in a special tax levied on the affected property owners. Unlike general obligation bonds, Mello-Roos district taxes are not tied to property value, but rather to a special tax formula based on the level of benefit received by each property. With the formation of a Mello-Roos district, the Town would have the ability to issue bonds for the improvements included in the district, and build the improvements in anticipation of future need.

6. Infrastructure State Revolving Fund Program

The state operates the California Infrastructure and Economic Development Bank (I-Bank), which has loan funds available for infrastructure programs including streets, water, sanitary sewer and drainage improvements. The I-Bank periodically issues bonds whose proceeds are available to be loaned to local jurisdictions. A wide range of projects are eligible, including water, wastewater and street improvements. Loans can range from \$250,000 to \$10 million.

7. Water Conservation Bond Law of 1988

The California Department of Water Resources manages a loan program designed to fund new water improvement projects, including reservoirs, well fields, and reclaimed water facilities. Municipalities and water purveyors are eligible. Projects are funded to a limit of \$5 million.

8. Regional Transportation Funding

Funds through the Surface Transportation Program (STP) are made available each year as a result of the Intermodal Surface Transportation Efficiency Act. Eligible activities are enhancement programs that include pedestrian and bicycle facilities, scenic highway programs, removal of outdoor advertising, and the control of water quality impacts from street runoff. The Town may apply directly to the State of California for these funds, and may also work with the San Bernardino Association of Governments (SANBAG) to apply for available funds.

9. Existing Funding for Sewer Infrastructure

Growth of the population in the sanitary sewer service area, including the Specific Plan area, will be served by a combination of the existing Regional Treatment Plant and a number of local or town-level reclamation facilities that will be linked by the Regional Interceptors. Construction of these facilities will be financed by VVWRA using sewer connection fees, State revolving fund loans, grants, and municipal bonds. Collection fees generated by new connections will be collected by the individual municipalities and retained by the VVWRA. Fees will go toward construction or debt service requirements.

10. Existing Funding for Drainage Facilities

Financing Strategies and Costs

Estimated costs for Alternative 1 (using natural, earthen channels) in the Town's Master Plan for Drainage were \$67.6 million in 1988. All of the Specific Plan Area is within this northern drainage area, and constitutes the majority of the northern drainage area.

The average cost allocation for all non-residential drainage areas in the Apple Valley Master Plan for Drainage is stated at \$8,097 per acre, in 1988 dollars. The Town requires developers to pay mitigation fees depending upon their runoff potential. For industrial and commercial facilities, the fee is 11.5 cents per square foot of building footprint.

Financing strategies for the ultimate development of regional facilities include the following:

- Development fees for a drainage system to serve the entire industrial park are could be based upon a prorated share of allocation acreage.
- Private construction of master plan facilities could be allowed in place of development fees, when fee revenues are inadequate to provide timely flood protection, combined with long-term repayment agreements.
- Special Assessment or Mello-Roos financing for master planned facilities.