7.01. EXISTING INFRASTRUCTURE
A. Circulation
B. Signals
C. Drainage
D. Utilities

7.02. PROPOSED INFRASTRUCTURE
A. Overall Concept
B. Circulation
C. Signals
D. Drainage

7.03. INFRASTRUCTURE MAP
A. Key Infrastructure Needs
B. Exhibit 50. INFRASTRUCTURE LOCATION MAP
CIRCULATION
Public streets surrounding the project site may be summarized as follows:

- Avenue K-8 currently exists as an isolated frontage road east of the Amargosa Creek. It was constructed when the existing multi-family housing was built to the north and consists of full improvements on the north side of the ultimate street’s centerline and to approximately 20 feet on the south side of the centerline. Avenue K-8 at this location begins approximately 900 feet east of 10th Street West and extends approximately 1,050 linear feet easterly toward 5th Street West, and does not provide an outlet at either street.

- A secondary arterial is to be constructed along the eastern boundary of the project site, identified as 5th Street West. It currently exists as an unimproved road along its southern most stretch bordering the site, providing access from Avenue L to a public (L.A. County) well and related improvements.

- Avenue L full width improvements have been constructed north of the centerline except for a segment roughly between what would be future 7th Street West and future 8th Street West. Presently, a bridge structure provides passage over the Amargosa Creek.

- Avenue K-15 exists as a partially completed street to provide access from the north to the multi-family housing facility that is situated on the northeast corner of the intersection of Avenue L and 10th Street West.

- 10th Street West has been constructed to full major arterial width along the westerly boundary of the project site.

SIGNALS
Two traffic signals currently exist along the project’s boundary. At the northwest corner of the project area, a 3-way signal provides traffic control at the intersection of 10th Street West and Avenue K-8. At the intersection of 10th Street West and Avenue K-15, a protected all-way traffic signal controls traffic entering the Costco site and the multi-family housing area from 10th Street West.

DRAINAGE
Amargosa Creek is the primary north-south corridor for storm water conveyance through this area, and is included as a part of the Lancaster Master Plan of Drainage. Nonetheless, the California Department of Fish and Game (CDF&G) maintains oversight authority for this streambed. Roughly along the north-south alignment of the future 7th Street West from Avenue L to the Amargosa Creek, a graded ditch carries local storm water into the Amargosa Creek.
UTILITIES

Existing public utilities in the perimeter street rights-of-way should be adequate – albeit that the extension of servicing mains in some rights-of-way will be necessary – to provide service to the facilities identified in the Specific Plan.

- The right-of-way for future Avenue K-8 presently contains a 12-inch water main. Terminating from the north roughly at the centerline of Gadsden Avenue is a 10-inch sanitary sewer collector and a natural gas line.

- Within the right-of-way for the future 5th Street West is a 12-inch water main.

- Avenue L between 5th Street West and 10th Street West contains all utilities along at least a portion of the street.

- Within the 10th Street West right-of-way all utilities services are installed along the full frontage of the project site.
OVERALL CONCEPT

A.1. Summary. Public infrastructure improvements will be limited primarily to perimeter arterial street alignments. The development of this property under the Specific Plan will also require the installation of a new traffic signals at key locations as a condition of development. Except for the construction of underground drainage to convey storm flows through the Amargosa Creek corridor, all other improvements interior to the perimeter of the overall project are expected to be privately held and maintained.

A.2. Timing & Changes. Development of the site is expected to proceed in phases, and will be coordinated with the provision of adequate infrastructure. The Reviewing Agency shall be responsible for determining the extent and timing of the infrastructure required for each phase as development moves forward, including the determination of any necessary changes to the infrastructure plan.

CIRCULATION

Anticipated public street improvements are as follows:

- Along the frontage of this project on 10th Street West, the project will require landscaped medians - in 10th Street West - and 150-foot long deceleration lanes with 90-foot long tapers at three entrances to the commercial area as well as at the intersection with future Avenue K-8. Also required will be some pavement improvements, curbs, gutters, sidewalks, curb ramps, landscaping, and relocated street lighting.

- Avenue K-8 improvements required of the project include pavement improvements, four deceleration lanes, curbs, gutters, sidewalks, landscaping, curb ramps, landscaped raised-median, and street lighting. Avenue K-8 construction will also require the extension of 10-inch and 8-inch sewer mains, fire hydrants, water service laterals, and dry utility extensions. A separate project planned for the northeast corner of 10th Street West and Avenue K-8 may construct first and will build a portion of Avenue K-8.

- The construction of 5th Street West between Avenue K-8 and Avenue K-12 (half the total length) will include full improvements for the westerly half of the ultimate 84-foot right of way plus 20 feet east of the centerline with painted medians. Street improvements will include pavements, curbs, gutters, curb ramps, sidewalks, four deceleration lanes, and street lighting. Utilities to be constructed in this right-of-way include a 12-inch sewer main extension, water service laterals, 6-inch gas line extension, fire hydrants, and dry utilities.

- Avenue K-15 will require widening improvements along its northerly frontage. To be constructed are pavement improvements, curb, gutter, curb ramps, sidewalks, landscaping, street lighting, fire hydrants and dry utilities extension.

- The Avenue L right-of-way will require widening along the northerly frontage to include pavement improvements, three deceleration lanes, landscaped medians, curbs, gutters, sidewalks, landscaping, and street lighting. Avenue L construction will also include the extensions and laterals for water, sewer, and storm drain services, as well as dry utilities installation.
C  SIGNALS
Anticipated signal improvements are as follows:

• The existing traffic signal located at the intersection of 10th Street West and Avenue K-8 will be modified to accommodate four-way traffic with protected left turns. Included will be all conduit, poles, signs, lights, and controllers with video detection.

• New traffic signals will be constructed at the intersection of Avenue K-8 and Drivers Way, the new primary entrance to the project site on 10th Street West that aligns with the entrance to Lancaster City Park, and the new intersection on 10th Street West that provides a more southerly entrance to the project near what would normally be Avenue K-12. The new signals will provide for protected left turns and will include all conduit, poles, signs, lights, and controllers with video detection.

• Two new traffic signals will be constructed at the intersections of Avenue L and the future 5th Street West and 7th Street West. The new signals will provide for protected left turns and will include all conduit, poles, signs, lights, and controllers with video detection.

D  DRAINAGE
With the approval of the California Department of Fish and Game and the receipt of a streambed alteration agreement, the Amargosa Creek will be totally reconstructed as an underground conveyance. This construction will allow for the continued recharge of the underlying aquifer by storm water or other water that may be introduced for the purpose of aquifer recharge. Between Avenue K-8 and Avenue L, and based upon the preferred site layout of the Specific Plan, it is estimated that approximately 3,500 linear feet of underground storm channel will be constructed; that portion passing through the commercial development site is estimated to be approximately 2,200 feet in length.
A. The construction of the south half of Avenue K-8 (which includes pavement improvements, four deceleration lanes, curb and gutter, sidewalk, curb ramps, 10” and 8” sewer mainline extension, fire hydrants, water service extensions, dry utility extensions, and street lighting).

B. The construction of the west half of 5th Street West (which includes pavement improvements, four deceleration lanes, curb and gutter, sidewalk, curb ramps, fire hydrants, 12” sewer mainline extension, water service extensions, 6” gas extension dry utility extensions, and street lighting).

C. The construction of the Avenue L widening to the north (which includes pavement improvements, three deceleration lanes, landscaped medians, curb and gutter, sidewalk, curb ramps, fire hydrants, water service extension, sewer service extensions, storm drain extension, dry utility extensions, and street lighting).

D. The construction of the Avenue K-15 widening to the north (which includes pavement improvements, curb and gutter, sidewalk, curb ramps, fire hydrants, dry utility extensions, and street lighting).

E. The construction of the 10th Street West improvements (which includes four deceleration lanes, pavement improvements, landscape medians, curb and gutter, sidewalk, curb ramps).

F. The construction of the Amargosa Creek concrete arch culvert with Armorflex bottom (which includes excavation/backfill, concrete arch, and an armorflex lining).

G. The construction of a new traffic signal at Drivers Way and Avenue K-8 (which includes all conduit, poles, signs, and lights).

H. The modification of an existing traffic signal at 10th Street West and Avenue K-8 (which includes all conduit, poles, signs, and lights).

I. The construction of a new traffic signal at 10th Street West and Avenue K-10 (which includes all conduit, poles, signs, and lights).

J. The construction of a new traffic signal at 10th Street West and Avenue K-12 (which includes all conduit, poles, signs, and lights).

K. The construction of a new traffic signal at 7th Street West and Avenue L (which includes all conduit, poles, signs, and lights).

L. The construction of a new traffic signal at 5th Street West and Avenue L (which includes all conduit, poles, signs, and lights).

B. EXHIBIT 50. INFRASTRUCTURE LOCATION MAP