
III. Project-Wide Development Plans

III. PROJECT-WIDE DEVELOPMENT PLANS

A. SPECIFIC PLAN GOALS AND OBJECTIVES

1. Project Goals

The following are goals of the Fox Field Industrial Corridor project which are implemented through development of the plans and provisions of the Specific Plan. The project is intended to fulfill the following goals:

Land Use

- a. Identify industrial/business park land uses near the Fox Field Airport, taking advantage of the visibility from the Antelope Valley Freeway;
- b. Provide large building sites to interested industrial users;
- c. Develop a land use plan which:
 - Is consistent with the airport land use plan;
 - Provides a buffer to protect the airport from residential encroachment; and
 - Accommodates large public, private, or institutional users.
- d. Take advantage of the fact that Fox Field is the last general aviation airport in the County that has not been encroached on by residential development;
- e. Establish flexible development and design guidelines which will accommodate future market trends and tenant needs while providing a consistent level of design;
- f. Provide maximum flexibility in parcel sizes by facilitating lot line adjustments.

Economic

- a. Encourage new businesses to locate in the City of Lancaster;
- b. Provide a local job market for the residents of the City of Lancaster;
- c. Increase tax revenues to the City and County by placing unused County-owned land on the tax rolls;

Infrastructure

- a. Provide adequate infrastructure (water, wastewater and drainage) to support the specific plan land uses.

Circulation

- a. Provide for the efficient movements of goods and people into and throughout the project area, establishing adequate access to individual land uses.
- b. Provide for effective access to the future fairgrounds which is coordinated with the circulation system for the project and which provides multiple points of access for the future fairgrounds.
- c. Establish landscaped corridors into the project on the regional arterials to establish a project theme and identity and enhance the City's image.

2. Phase 1 Objectives

- a. Implement Avenue G as a project identity street or "spine" because it connects with Fox Field:
 - Install 35 foot wide drought tolerant landscaping on both sides of the street to present a frontage which contributes to the image of Avenue G as the primary project street;
 - Buildings on both sides of Avenue G will present a facade to contribute to the image of this street as the primary street;
 - Service area/loading docks may not face Avenue G directly; they must be "side loaded" or screened from public view.
- b. Create Fox Field East and West development zones. At project inception, direct approximately 200-300,000 square feet of building to Fox Field West (airport) in order to begin development in that area.
- c. Set recommended land use zones in place for future phases:
 - **Office:** This land use would be adjacent to the freeway and future fairgrounds. This will consist of campus-style development;
 - **Commercial:** This use would be located at the first signal between the fairgrounds and the proposed office, and research & development uses on Avenue G, visible from freeway in Phase 1;
 - **Research & Development:** This land use is located south of Avenue G and east of 30th Street, near the office uses and fairgrounds;
 - **Manufacturing/Light Industrial:** This use is located north of Avenue G, in an area with room for expansion without impacting the future fairground site.
- d. Choose easily assembled (few owners) land parcels for development.

- e. Minimize up-front infrastructure costs while creating a strong image and a sense that the development is well established--a linear development pattern accomplishes this. Development should develop outwards, north and south from Avenue G.
- f. Provide maximum flexibility in parcel sizes by allowing lot line adjustments. Larger 10-20 acre parcels may be subdivided into smaller parcels by adding a small cul-de-sac street.
- g. Install interior streets adequate for allowing expansion during any phase. Much of Phase 1 interior streets are single loaded to allow for maximum flexibility on the undeveloped side of the street.
- h. Consolidate development areas in order to avoid a checkerboard of "left over" lots between developed parcels. This strategy also gives the business park a completed, established look.
- i. Install monument signage at the freeway and also at entries.
- j. At the airport property (Fox Field West), start development adjacent to the existing airport edge and develop south towards Avenue G. Create a new entry boulevard right-of-way from Avenue G at 45th Street to the existing airport terminal. Reserve a zone along the north side of Avenue G between 45th/50th Streets for future office/support commercial uses. Encourage Phase 1 office uses to concentrate at Fox Field East (freeway property).
- k. At Fox Field West (airport), begin development at the western side (50th Street) and move east. Hold several "super block" areas for large users. These superblocks may be subdivided further or developed as multiple tenant sites if demand requires.

3. Phase 1A and 1B Objectives

Phase 1A and 1B have been identified as the first development anticipated for the Fox Field Specific Plan Area. These phases are anticipated to include approximately 500,000 gross square feet of building and a 200 to 250 room hotel, to be located in Planning Area 1 on approximately 75 acres.

- a. Implement Planning Area 1 as a commercial/office/recreation area, including a 250 room hotel.
- b. Phase 1A is planned to consist of approximately 150,000 building square feet (gross) of commercial space. Phase 1B would consist of an additional 350,000 building square feet (gross) and a 200 to 250 room hotel.
- c. Phases 1A and 1B are strategically located in the Fox Field Specific Plan in Area 1 for several reasons:
 - Location directly adjacent to the Avenue G off/on ramp for the Antelope Valley Freeway.

- Minimal amount of off-site infrastructure will be required for these two initial phases.
 - Land is currently controlled by one owner, eliminating the need for costly and time consuming property acquisitions.
- d. Off-site infrastructure that must be completed prior to occupancy in Phase 1A will include the following:
- Completion of full street section (including landscaping) of Avenue G from the Antelope Valley Freeway to the project's entry drive, labeled on the plan as "Airport Loop Drive."
 - Construction of Project entry signage landscaping and "Gateway Feature" on the south side of Avenue G at the Antelope Valley Freeway.
 - Construction of Primary intersection landscaping and signage on the southeast corner of the intersection of Avenue G and Airport Loop Drive.

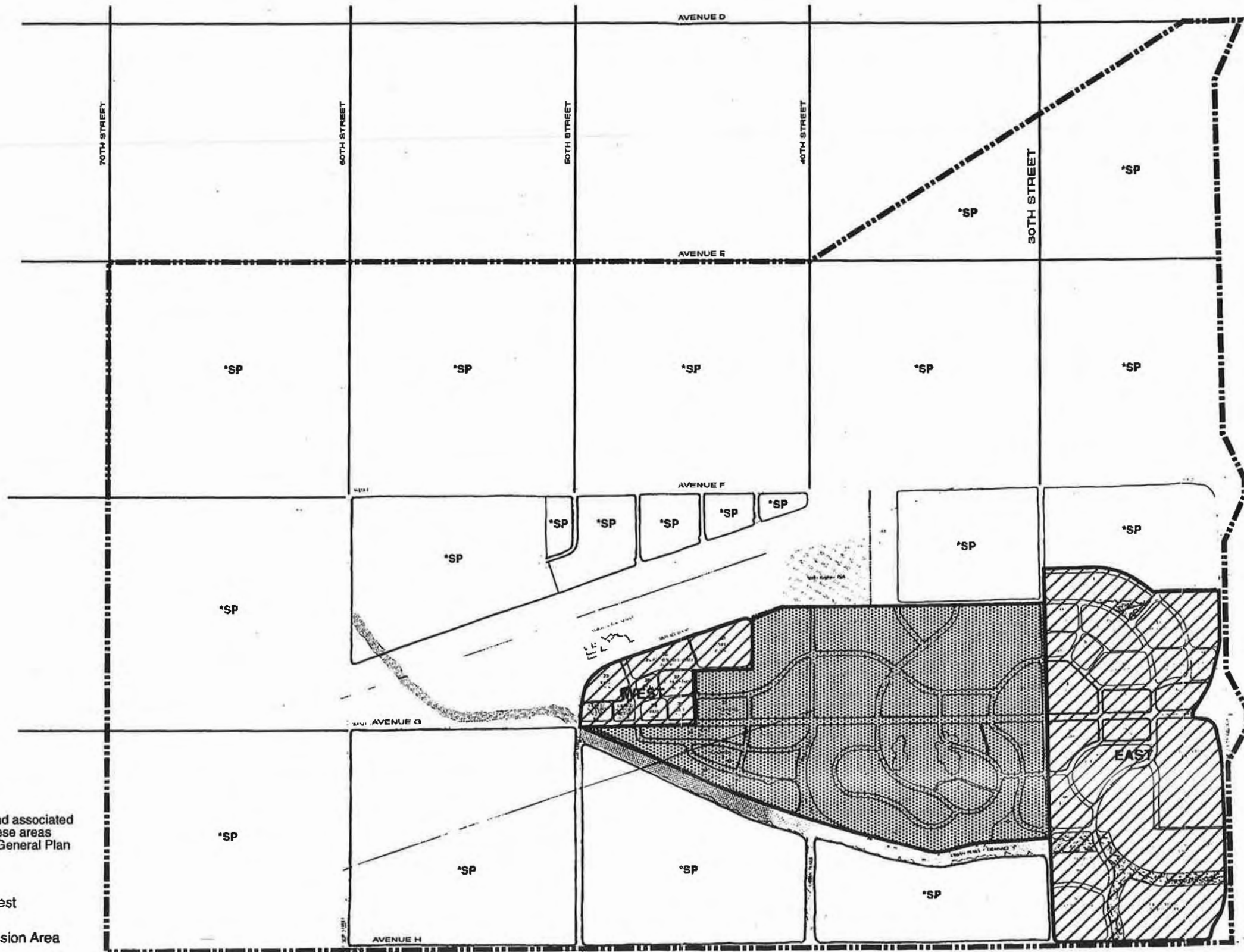
B. COMPREHENSIVE LAND USE PLAN

1. Description





The planning concept for the Fox Field Industrial Corridor is to create a landscaped, high quality campus environment which may accommodate a variety of clean businesses including manufacturing, light industrial, professional, administrative, high technology and research uses. These will be accomplished by limited commercial activities and the use of open space. The quality and design of the Fox Field Industrial Corridor will be an asset to the City and an enhancement to the surrounding area.

The Fox Field project Land Use Plan includes lands surrounding the Fox Field general aviation airport, and focuses on two areas: Fox Field East, and Fox Field West. These two areas, encompassing approximately 685.7 acres, are intended for immediate development in four major phases over a 20 year period, and are located to the east of the airport. The remaining Expansion Area for future business park uses surrounds the airport and acts as a buffer to protect the airport from the encroachment of residential uses.

The overall land use concept for the Fox Field Specific Plan area is a mixed use business park on approximately 8,200 acres which provides a non-residential buffer around Fox Field (see Exhibit 3, *Land Use Plan* and Exhibit 4, *Focused Planning Area Land Use Plan*). The Land Use Plan consists of Office, Research and Development, Light Industrial, Manufacturing, and Commercial in the focus areas and Business Park in the expansion area; a Public land use is located in the southwestern portion of the site. An open space network composed of parks, parkways, a greenbelt corridor, and urban trails provide a connecting element for the focus areas in the eastern portion of the project.

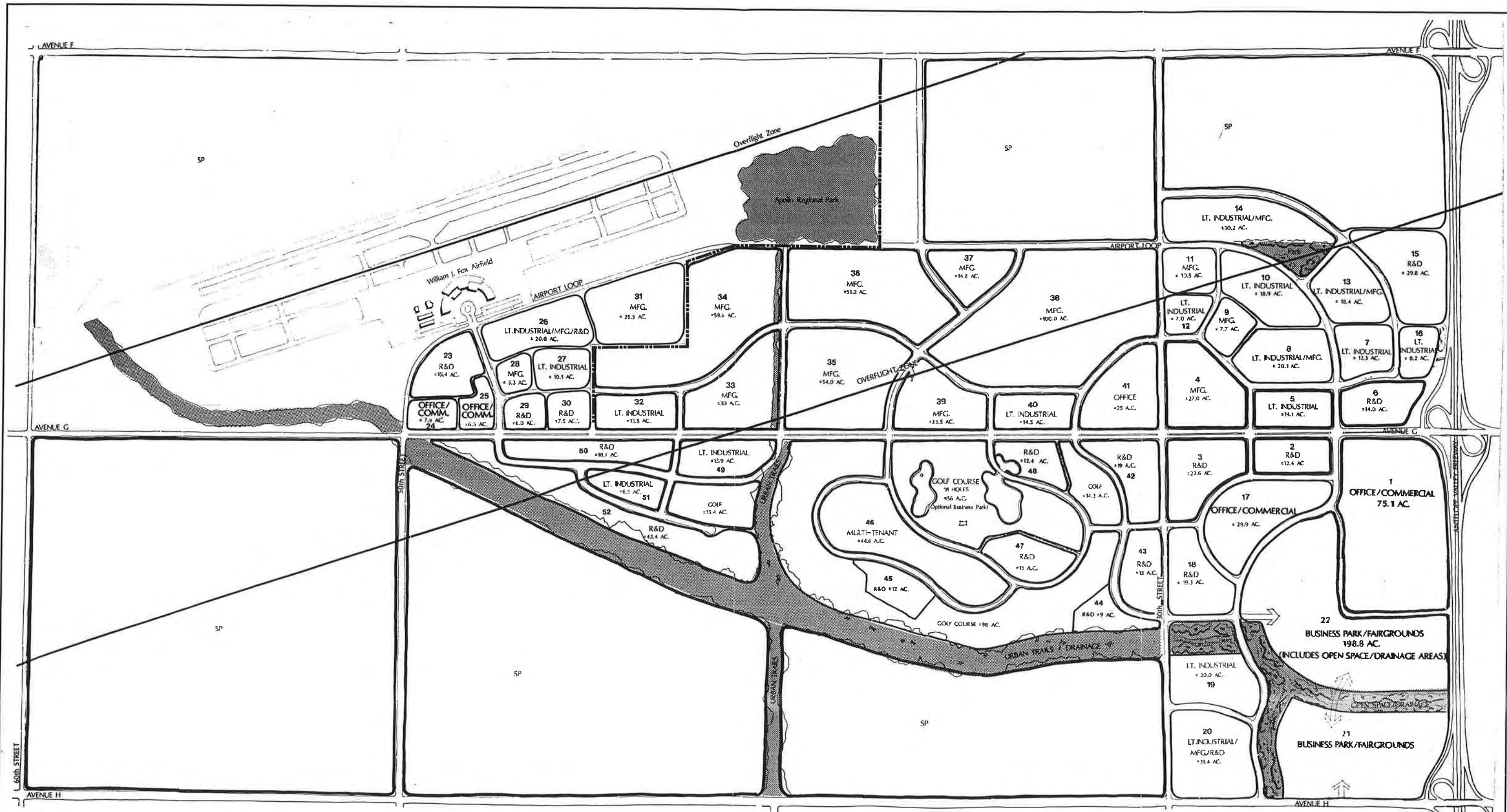


* The Land Use designation (and associated development standards) in these areas correspond to the underlying General Plan Land Use designation.

-  Fox Field East & West
-  East to West Expansion Area
-  Specific Plan Area
- 

Source: Langdon • Wilson

**FOX FIELD INDUSTRIAL CORRIDOR
Land Use Plan**



Open Space Network



RB Robert Bein, William Frost & Associates
3-95 JIN 20133-4180

Source: Langdon • Wilson

FOX FIELD INDUSTRIAL CORRIDOR
Focused Planning Area
Land Use Plan

Plan Flexibility: It is the intent of this specific plan that there be some flexibility of future street alignment and parcel sizes in the business park to accommodate unforeseen conditions. The overall master plan concept of Avenue G as the linear focus or "spine" of the business park and the spacing of intersections of future streets are fixed.

Because the area is large, the specific plan land uses have been divided into the following areas:

- a. **Fox Field East:** Fox Field East Focused Planning Area consists of approximately 547.1 gross acres located to the east of the airport, adjacent to the Antelope Valley Freeway between Avenue H and Avenue F. The planning area is accessed by Avenue G and H, each with a full interchange with the Antelope Valley Freeway (SR-14). Because of its visibility and access from the freeway, this planning area contains a wide range of land use types. These include Research & Development and Support Commercial concentrated south of Avenue G; and Light Industrial and Manufacturing concentrated north of Avenue G (see Exhibit 4, *Focused Planning Area Land Use Plan* and Table 2, *Land Use Statistics*). The future fairgrounds are located in the southeastern portion of this planning area and consist of 198.8 acres not included in the Fox Field East acreage.
- b. **Fox Field West:** Fox Field West Focused Planning Area consists of approximately 138.6 gross acres located to the east and south of the airport, north of Avenue G and south of Apollo Park. The planning area is accessed by Avenue G and a proposed Airport Loop Drive which connects this area with Fox Field East. A secondary roadway provides a direct connection with the airport terminal from Avenue G. Because of its distance from SR-14 and its close proximity to the airport, uses in this planning area focus on Light Industrial, Manufacturing, and Research & Development with limited Support Commercial. It is anticipated that these uses will concentrate on airport-related or airport-dependent industry.
- c. **East to West Expansion Area:** This expansion area consists of approximately 1,042.3 gross acres located between Fox Field East and West. The area is bounded by the drainage canal on the south, airport loop drive on the north, 30th street on the east, and Fox Field West on the west. The area is expected to develop in Phases 5 and 6, after the 20 year buildout of Fox Field East and West. Commercial Recreation/Golf Course uses are permitted in a portion of the Expansion Area, subject to approval by the Director of Community Development.
- d. **Long Term Expansion Area:** The Long Term Expansion Area consists of approximately 6,309 gross acres surrounding the airport. The airport itself consists of approximately 1,300 acres of county-owned land. The expansion area is accessed by Avenue E to the north, the Antelope Freeway to the east, Avenue H to the south, and 70th Street West to the west. The Expansion Area is anticipated to develop at some time after Fox Field East and West, a time period in excess of approximately 20 years. Land uses are anticipated to include Business Park (anticipated for development in the future), and Public (for public, quasi-public, and institutional use).

2. Planning Districts

The three major areas of the Fox Field project, East, West, and the East to West Expansion Area, have their parcels grouped into districts which are designated with a letter (see Exhibits 5-7, *Planning Districts*). The purpose of illustrating these districts is to show which parcels may be combined with others to form large parcels of land, if required. In other words, the edges of the districts illustrate fixed boundaries and the internal streets and parcels within a district may be reconfigured depending upon the land requirements of a particular user. Although the internal configurations may change within a district, the total acreage of each land use type (e.g. Research and Development) within the district must remain generally consistent with the Land Use Plan. District boundaries include Avenue G, Avenue H, 30th Street, 40th Street, Airport Loop Drive, and the major drainage way. Also fixed are the locations of the intersections along the major and minor arterials: Avenues G and H and 30th and 40th Streets.

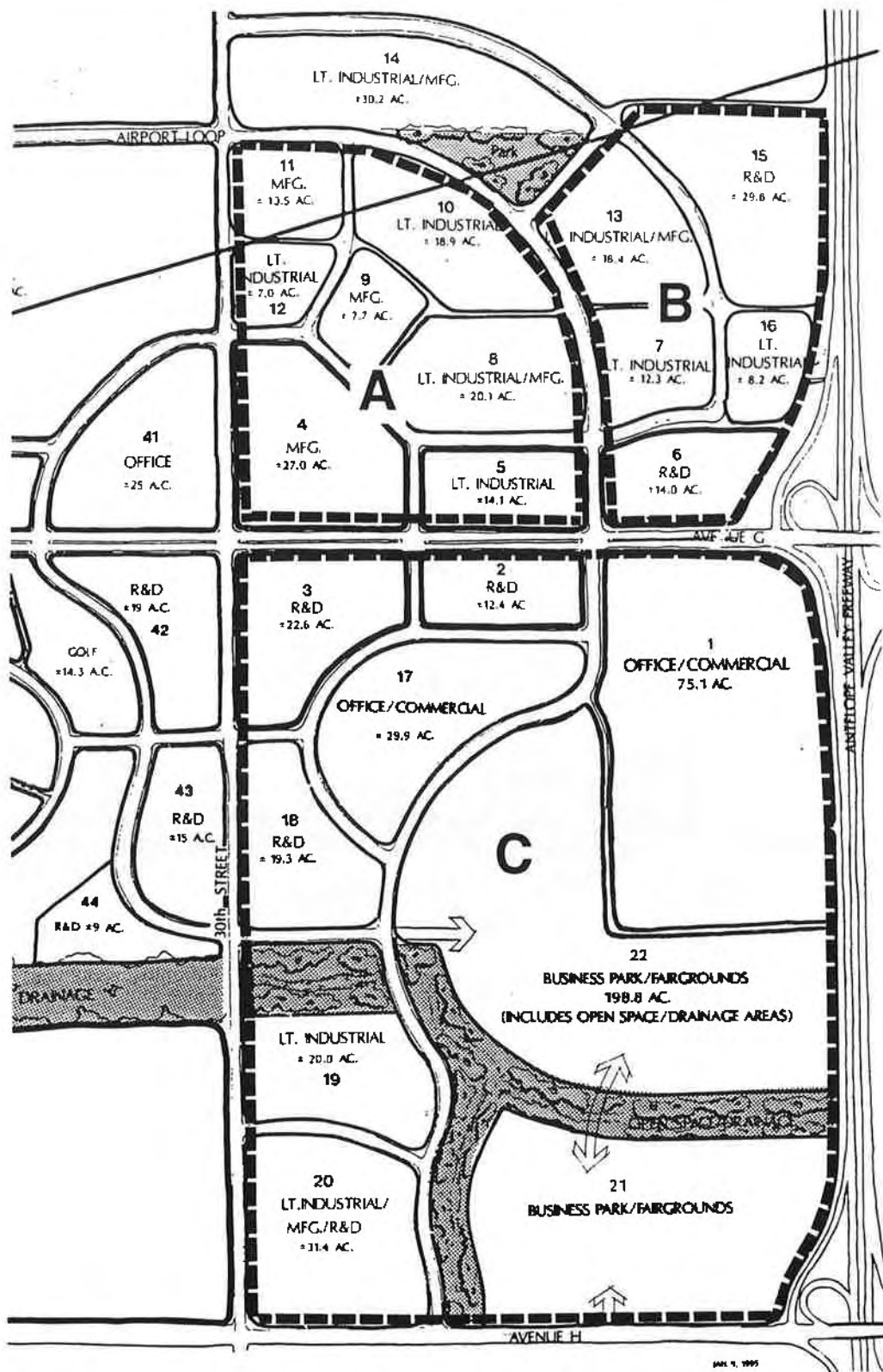
As Table 3, *Subarea Size Distribution* illustrates, the majority of the parcels planned for both Fox Field East and West range in size from 20 to 30 acres. The parcels' configurations and width-to-depth ratios allow them to be subdivided into smaller lots, if necessary. Conversely, the creation of the planning district concept allows maximum flexibility while maintaining the key elements of the Specific Plan.

In the event that an interior street or parcel is changed to accommodate the specific needs of a future tenant, then the entire district of which that subarea is a part must be revised showing the new interior street and planning area configurations. These revisions may be done administratively, without a Specific Plan Amendment, as long as the acreages of the land uses within district are consistent with the overall Land Use Plan. This constant updating and monitoring throughout the development's build-out will assure that the Specific Plan continues to be a useful tool throughout the life of the project.

3. Land Uses

Land use designations in the specific plan area include:

- **Office:** This designation is intended for general and professional office park uses in a campus-style development. A total of 42.5 acres of office use are proposed, with 12.6 acres in Fox Field West, and 29.9 acres in Fox Field East. The majority of the office uses are concentrated near the freeway off Avenue G, adjacent to the future fairgrounds;
- **Research & Development (R&D):** A total of 126 acres of this land use is proposed, with 27.9 acres located in Fox Field West and 98.1 acres located in Fox Field East near the office uses and fairgrounds. This use is located in areas with room for expansion.



JAN 9, 1995



Planning District Boundary

Source: Langdon + Wilson

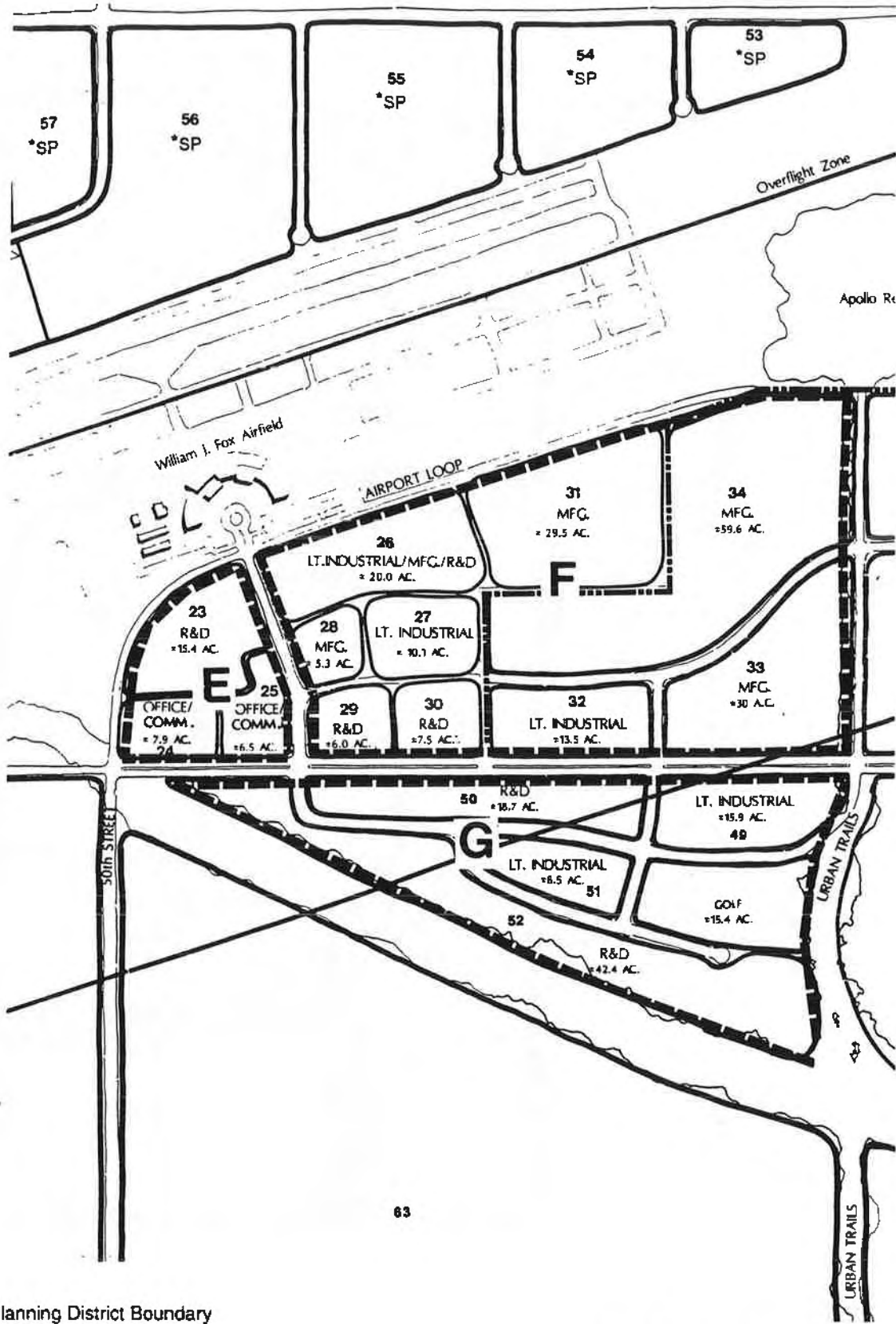


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FOX FIELD INDUSTRIAL CORRIDOR
Planning Districts
 - Fox Field East




Robert Bein, William Post & Associates
 3-95 JN 29133-4314

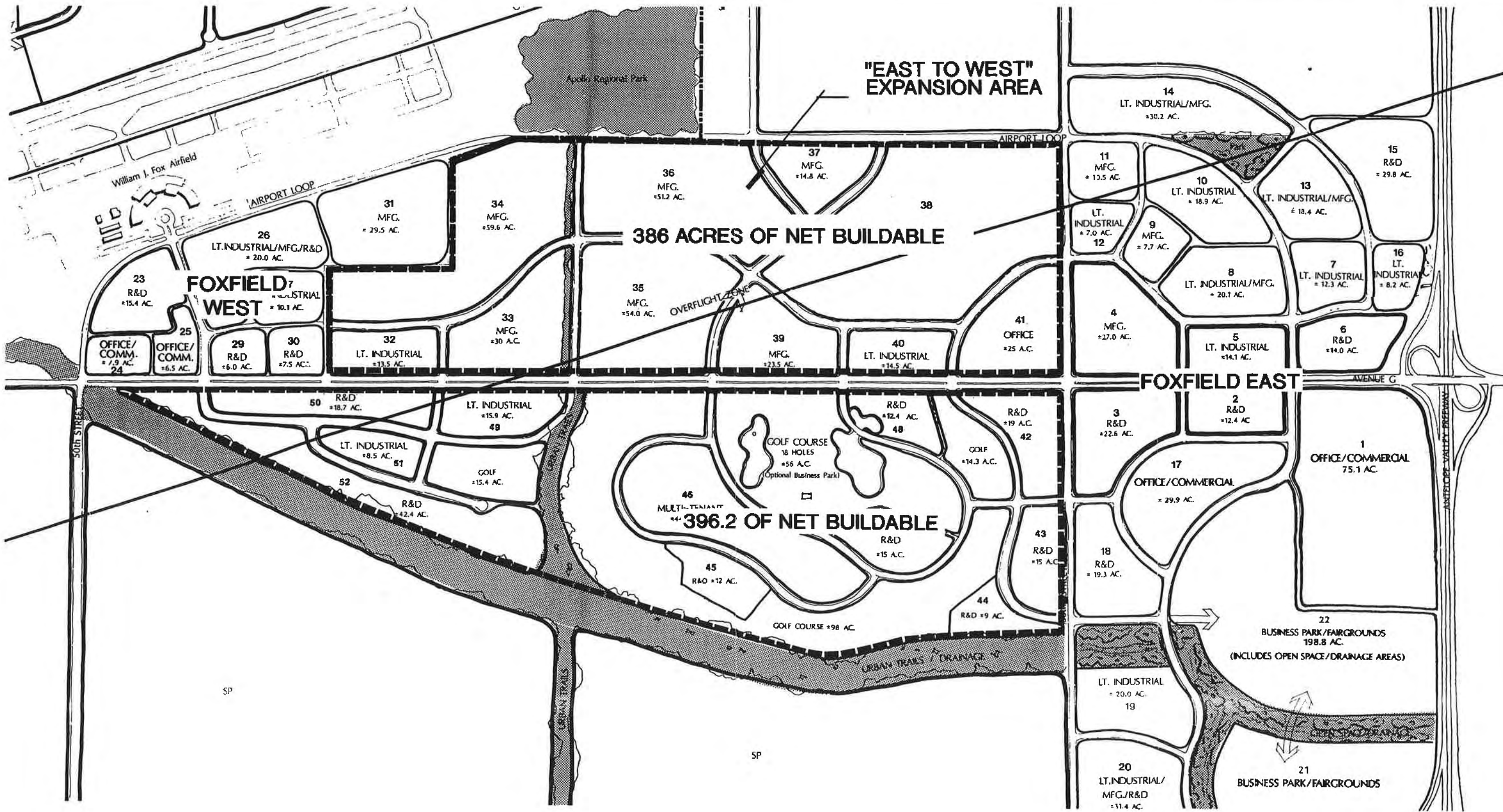


 Planning District Boundary

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FOX FIELD INDUSTRIAL CORRIDOR
Planning Districts
 • Fox Field West



Source: Langdon • Wilson

FOX FIELD INDUSTRIAL CORRIDOR
Planning Districts
 Fox Field East to Fox Field West Expansion Area

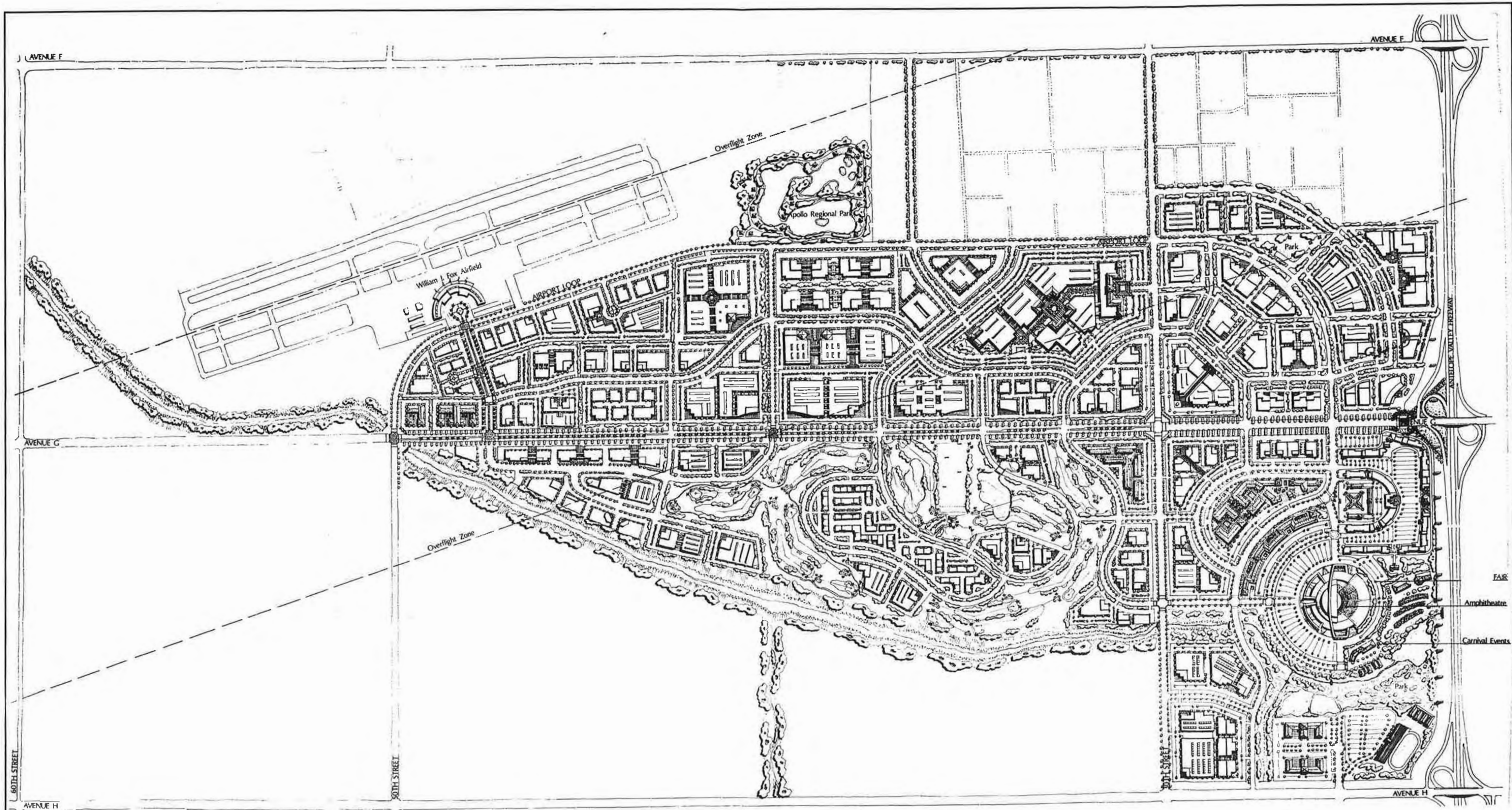


- **Commercial:** Commercial uses may include support services for the Business park, general commercial, entertainment, restaurants, and recreation. A total of 76.9 acres is proposed, with 1.8 acres in Fox Field West, and 75.1 acres in Fox Field East. The majority of the support commercial is located in Fox Field East near the future fairgrounds.
- **Light Industrial:** This use is intended for light industrial uses. A total of 206.4 acres is proposed, with 180.6 acres in Fox Field East and 25.8 acres in Fox Field West.
- **Manufacturing/Distribution:** This use is intended for manufacturing uses. A total of 85.3 acres of Manufacturing is proposed, with 40.1 acres in Fox Field West and 45.2 acres in Fox Field East. These uses are located in areas with room for expansion.
- **Mixed Use Business Park:** This is a designation for the lands in the Expansion Areas of the Specific Plan. These lands are identified for uses similar in nature to those in Fox Field West and East; however, due to the anticipated long-range development of this area and unknown market conditions, the land use designation is general in nature. A total of 5,331.6 acres is proposed.
- **Commercial Recreation/Golf Course:** A 183.7 acre, 18-hole golf course is proposed in the Expansion Area between Avenues F and G in the western portion of the site. This golf course is a potential use, subject to a conditional use permit (approval by the Director of Community Development), in the East to West Expansion Area between Fox Field East and West. Should a golf course not be developed in this area, business park uses will take its place.
- **Open Space:** Open space accounts for a total of 794 acres of the project area, including 47.6 acres in Fox Field East, 12.4 acres in Fox Field West, and 734 acres in the Expansion Areas. Open Space includes the parkways on the major corridors such as Avenues G and H; the park proposed for Fox Field East; the urban trail system; and the greenbelt corridor located along the streambed which traverses the site (see the detailed discussion in the Open Space section of this Specific Plan).
- **Specific Plan Land Use Designation:** The land use designation of properties in the Long Term Expansion Area is the underlying Lancaster General Plan land use designation. Development standards for these areas shall be the City Zoning Standards for those General Plan land use designations.

Permitted uses within each of these land use categories is presented in Section V of this document. Public facilities (i.e., fire or police stations) that may be required in the future may be located in any of the land use categories listed above.

4. Illustrative Site Plan

A pictorial example of the eventual build-out of Fox Field East and West is shown on Exhibit 8, *Illustrative Site Plan*. This conceptual plan shows one scenario of the build-out of the east and west zone as well as the expansion areas between. Actual parcel sizes



Source: Langdon • Wilson



**TABLE 2
LAND USE STATISTICS**

<i>Land Use</i>	<i>Acres</i>	<i>Projected F.A.R. (net)</i>	<i>Projected Bldg. Square Footage (net)</i>
Fox Field East			
Office/Commercial	29.9	.40	520,978
Research & Development	98.1	.40	1,709,294
Commercial	75.1	.40	1,308,542
Light Industrial	180.6	.40	3,146,774
Manufacturing/Distribution	45.2	.40	787,565
Open Space	47.6	--	--
Roads	70.6	--	--
Subtotal	547.1 gross/ 428.9 net	.40	7,473,153
Fox Field West			
Office	12.6	.40	548,856
Research & Development	27.9	.40	486,130
Commercial	1.8	.40	31,363
Light Industrial	25.8	.40	449,539
Manufacturing/Distribution	40.1	.40	698,702
Open Space	12.4	--	--
Roads	18.0	--	--
Subtotal	138.6 gross/ 108.2 net	.40	2,214,590
Total Focused Planning Areas	685.7 gross/ 537.1 net	.40	9,687,743
Fairgrounds/Business Park	198.8	0	0
East to West Expansion Area			
Golf Course	183.7	--	*
Business Park	598.6		10,454,400
Open Space	104.0	--	--
Roads	156.0	--	--
Subtotal	1,042.3 gross/ 782.3 net	.40	10,454,400
Long Term Expansion Area			
Business Park	4,093	.40	71,316,432
Public/Institutional or Business Park	640	N/A	N/A
Open Space	630	--	--
Roads	946	--	--
Subtotal	6,309 gross/ 4,733 net	.40	71,316,432
TOTAL	8,235.8	.40	91,458,575

Note: The FAR figures and building square footages are projected numbers; the maximum FAR permitted is .50 for all parcels. Should the Golf Course not be developed, a total of 3,200,788 square feet of building square footage may be developed, at a projected FAR of 0.4.

All acreages are approximate.

**TABLE 3
PARCEL SIZE DISTRIBUTION**

Fox Field East		
<i>Parcel #</i>	<i>Acres</i>	<i>Land Use</i>
Parcel Size: 7.0-10.5 acres		
11	10.5	Light Industrial
9	7.7	Manufacturing
16	8.2	Light Industrial
12	7.0	Light Industrial
Subtotal	33.4	8%
Parcel Size: 12.3-14.1 acres		
7	12.3	Light Industrial
2	12.4	Research & Development
6	14.0	Research & Development
5	14.1	Light Industrial
Subtotal	52.8	13%
Parcel Size: 18.4-23.1 acres		
13	18.4	Light Industrial
10	18.9	Light Industrial
18	19.3	Research & Development
19	20.0	Light Industrial
8	20.1	Light Industrial
3	22.6	Research & Development
Subtotal	119.3	29%
Parcel Size: 27.0-55.1 acres		
4	27.0	Manufacturing/Light Industrial
1	75.1	Office/Commercial
15	29.8	Research & Development
17	29.9	Office/Commercial
14	30.2	Lt. Ind/Mfg
20	31.4	Lt. Ind/Mfg/R&D
Subtotal	203.4	50%
Total Fox Field East	428.9 acres*	

*Excludes area 22, proposed Fairgrounds/Business Park

Fox Field West		
<i>Parcel #</i>	<i>Acres</i>	<i>Land Use</i>
Parcel Size: 5.3-7.9 acres		
28	5.3	Manufacturing
29	6.0	Research & Development
25	6.5	Office/Commercial
30	7.5	Research & Development
24	7.9	Office/Commercial
Subtotal	33.2	31%
Parcel Size: 10.1-29.5 acres		
27	10.1	Light Industrial
23	15.4	Research & Development
26	20.0	Lt. Ind/Mfg/R&D
31	29.5	Manufacturing
Subtotal	75.0	69%
Total Fox Field West	108.2 acres	

and configurations will vary from this conceptual drawing depending upon land acquisitions and the land requirements of future tenants.

C. Circulation Plan

1. Regional Access

The regional highway providing access to the City of Lancaster and the Fox Field Industrial Corridor is the Antelope Valley Freeway (SR-14), which is a four-lane, north-south running freeway with interchanges providing access to the project area at Avenues H, G, and F. The Antelope Valley Freeway is located adjacent to Fox Field East. Other regional access is provided by State Route 138 and Sierra Highway, which links the area with the I-5/SR-14 interchange.

Existing arterial highways which provide access to Fox Field East and West include:

- *Avenue G*: This is a two-lane, east-west running Regional Arterial (105 foot right-of-way) which is the southern boundary of the airport and is connected to the Antelope Valley Freeway with a full interchange;
- *Avenue H*: This roadway is a two lane east-west running Regional Arterial (105 foot right-of-way) which is the southern boundary of the project area and is connected to the Antelope Valley Freeway with a full interchange. This roadway is a major connecting roadway for developments to the west of Fox Field, including the proposed Del Sur Ranch;
- *Avenue F*: This roadway is a two-lane, east-west running Major Arterial (100 foot right-of-way) which is the northern boundary of the airport and is connected to the Antelope Valley Freeway with a full interchange;
- *30th Street West*: This existing two-lane roadway is a north-south running Major Arterial (85 foot right-of-way) which is located between the two focused planning areas;
- *40th Street West*: This two-lane roadway is a north-south running Major Arterial which is discontinuous in the vicinity of the airport, terminating at Avenue G and restarting at Avenue F. This roadway is currently paved to Avenue I on the south.

The existing roadway system within the study area operates at a high Level of Service (LOS A) because of the sparsity of existing development.

2. Circulation Plan Components

Circulation improvements within the specific plan area are concentrated in Fox Field East and West and will be phased to coordinate with land use development. An outline of the phased circulation improvements is included in Table 4 of the Phasing discussion.

Improvements have been calculated for accommodating the 685.7 acre development of Fox Field East and West. These improvements have been predicated upon an estimation of the future building square footage of Fox Field East and West. Additional circulation improvements may be required once these areas are built out and development occurs in the "East to West" Expansion area or the remaining expansion area.

Circulation improvements include the following (see Exhibit 9, *Circulation Plan*):

1) *Freeways*

Improvements to two freeway ramps will be required to accommodate project-related traffic:

- The on-off ramp to the Antelope Valley Freeway at Avenue G (South northbound) will be widened to two lanes at the intersection only, with an additional "take-off" lane added from the northbound freeway to Avenue G.
- The on-off ramp to the Antelope Valley Freeway at Avenue H (north/ south bound) will be widened to two lanes at the intersection only, and an additional "take-off" lane will be added to the northbound Antelope Valley Freeway to Avenue H.

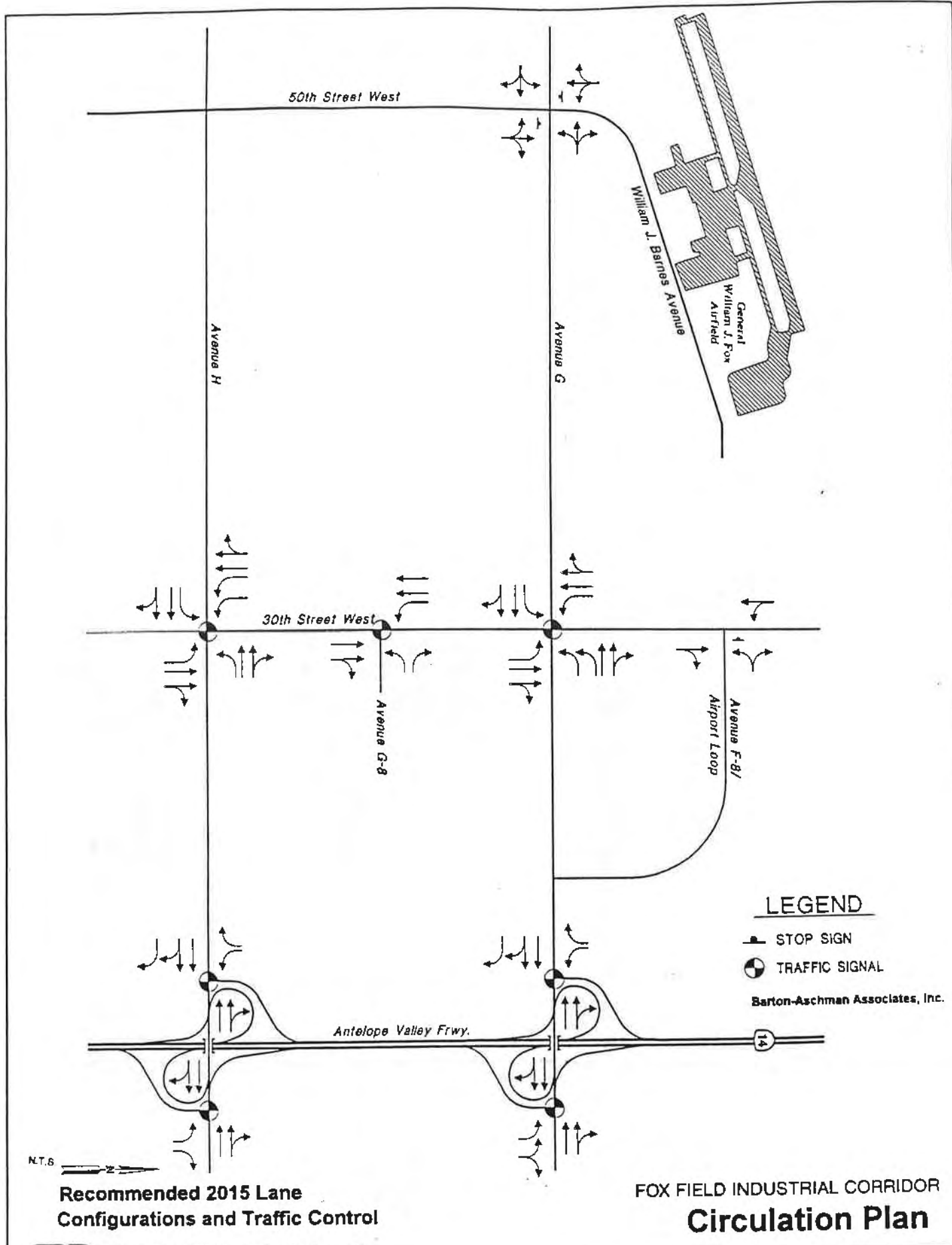
2) *Arterials*

Improvements to arterial streets include widening of Avenues G and H, and 30th Street, as follows:

- Avenue G will ultimately be widened to six lanes between the freeway and 30th Street, and to four lanes from 30th Street to 50th Street (see Exhibit 10 *Road Cross Sections*). In the early phases of the project, a portion of the right-of-way will be comprised of landscaping until the additional widening is needed;
- Avenue H will be widened to six lanes between the freeway and 30th Street;
- 30th Street will be widened to four lanes between Avenue G-8 and Avenue H;
- Bridges on Avenues G and H will be widened, and bridges added over earthen channels at 30th Street and Avenue H.

3) *Internal Circulation*

Internal roadways will include in-tract roads which may be public or private; the construction of an Airport Loop Road which will connect the airport/Fox Field West with 30th Street and Fox Field East; and the construction of a roadway which connects Avenue G to the airport terminal through Fox Field West (see Exhibit 10, *Road Cross Sections*).



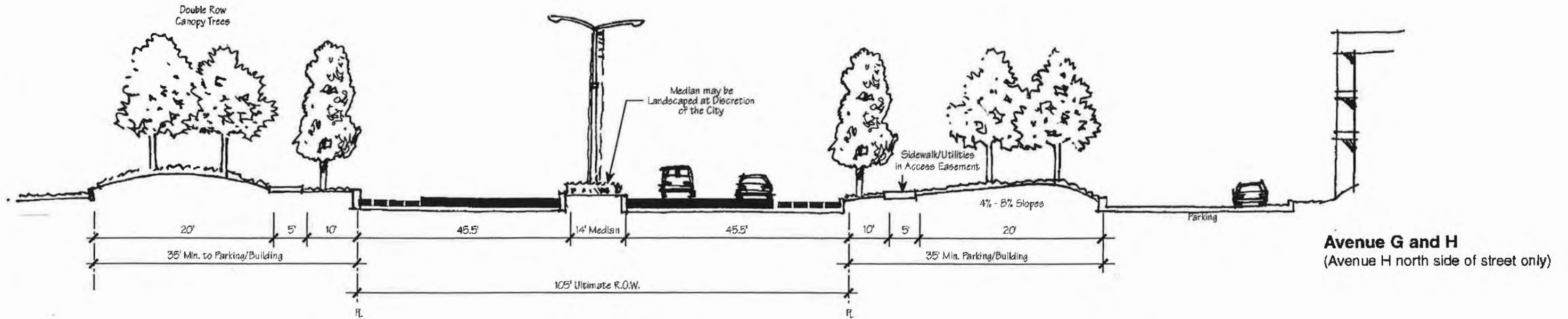
LEGEND

- ▬ STOP SIGN
- TRAFFIC SIGNAL

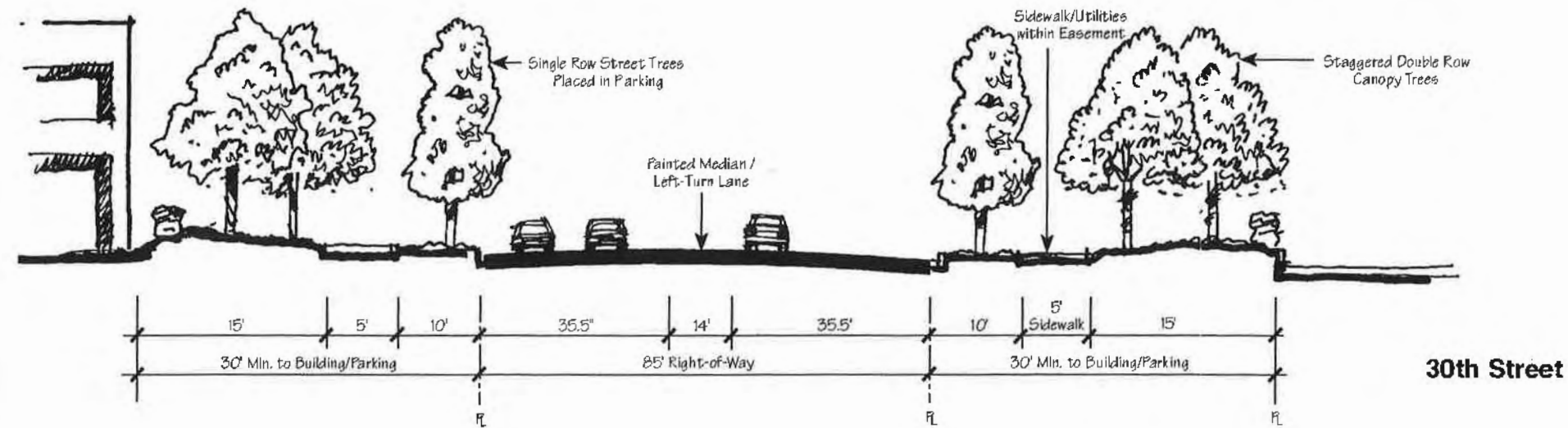
Barton-Aschman Associates, Inc.

Recommended 2015 Lane Configurations and Traffic Control

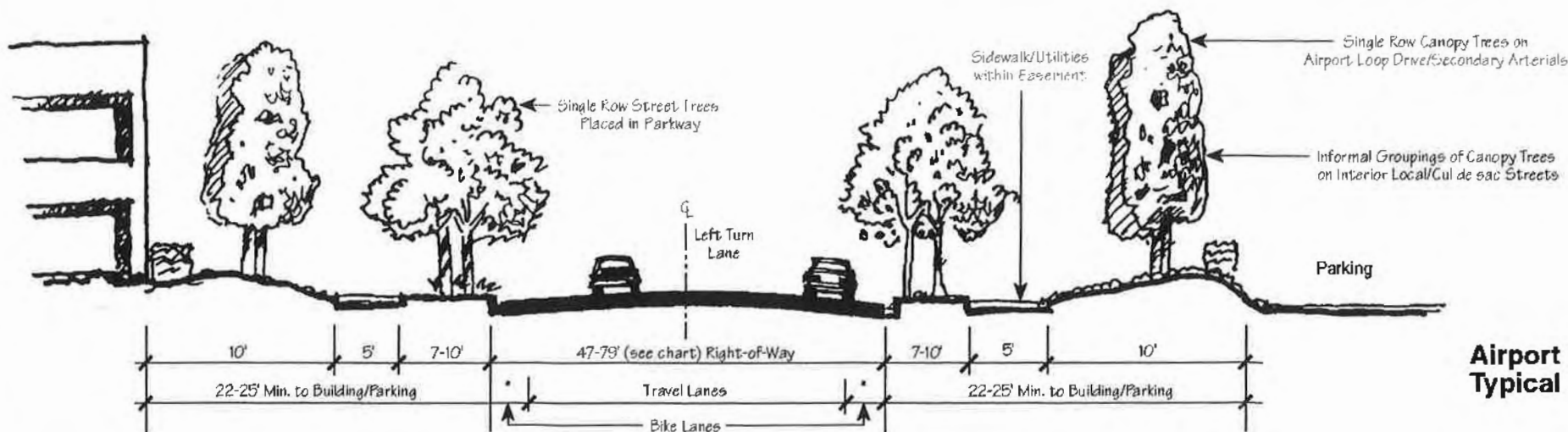
**FOX FIELD INDUSTRIAL CORRIDOR
Circulation Plan**



Avenue G and H
(Avenue H north side of street only)



30th Street



**Airport Loop Drive /
Typical Interior Project Streets**

STREET DIMENSION CHART				
Street	R.O.W	Bike Lanes	Parkway	Overall Building/ Parking Setback
Airport Loop/ Secondary Arterial	79'	8' each side	10'	25'
Interior Local	53'	6' each side	7'	22'
Cul-de-sac 500' maximum length	47'	not required	7'	22'

Source: Langdon & Wilson

**FOX FIELD INDUSTRIAL CORRIDOR
Street Cross Sections**

4) *Traffic Signals*

A total of 17 traffic signals will be added to control traffic in the specific plan area (see Exhibit 9, *Circulation Plan*).

5) *Parking*

No parking will be permitted on streets within the Fox Field project area; the project Development Standards contain provisions for off-street parking to accommodate anticipated needs.

6) *Transportation Demand Management (TDM)*

The project will participate in any applicable City Transportation Demand Management (TDM) programs, which reduce vehicular trips and thus reduce air quality and circulation impacts. As applicable, the individual businesses within Fox Field shall comply with the South Coast Air Quality Management District's (SCAQMD) Regulation XV, which requires trip reduction methods for businesses with over 100 employees at a single worksite, implemented through a Trip Reduction Plan by the individual businesses.

7) *Bicycle Trails*

Bicycle trails are included in the master plan for Fox Field. These trails may be used for both recreational and commuter travel to and from the area as part of the City's overall trip reduction efforts. On-street bicycle lanes are provided on Airport Loop Drive, the secondary arterials, and the interior local streets within the project; as well as the proposed off-street trail system that will connect to the City's overall trail system.

D. INFRASTRUCTURE AND UTILITIES PLANS

1. Drainage Plan

a. Description

1) Background

The "*Antelope Valley Master Plan of Drainage*," which was developed by the Los Angeles County Department of Public Works in 1985, is an analysis of flood hazards in the Antelope Valley. The objective of the Master Plan was to provide a coordinated plan of flood control which allows further conversion of open space in the Antelope Valley to residential and commercial development without increasing flood hazards. The Master Plan has proposed a combined regional flood control program including both flood conveyance structures and multiple retention/detention basins.

In June 1987, Los Angeles County Department of Public Works adopted the Final Report on the Antelope Valley Comprehensive Plan of Flood Control and Water Conservation. The plan is a pre-requisite to the collection of fees from future subdividers. It provides an equitable financial mechanism by which new developments within the Antelope Valley Drainage area will share the costs of providing new drainage facilities necessary to protect the developments from stormwater, mitigate the changes in storm waters caused by the developments, manage the floodplains in the rural areas of the valley, and mitigate the impacts of runoff reaching Edwards Air Force Base (AFB). The plan describes the proposed Antelope Valley Comprehensive Plan of Flood Control and Water Conservation within the project area. According to the plan, the off-site and on-site flows will be conveyed in a number of Floodplain Management Paths and Earthen Trapezoidal Channels throughout the site, and ultimately discharge into the existing Caltrans retention basin located to the northeastern corner of Antelope Valley Freeway (I-14) and Avenue H. The flow out of the basin and tributary flows from east of the freeway are conveyed in proposed channels and in a northeasterly and northerly direction towards the Rosamond Dry Lakes and the Edwards Air Force.

The City of Lancaster is currently in the process of updating and preparing a Revised Master Drainage Plan (MDP) for the entire City of Lancaster limits. The major difference between the new City Master Plan and the County Plan is the addition of two new storm drains along Avenue "F" and "G" and their lateral systems along the intersecting streets. The system along Avenue "F" begins at 55th Street as a 72-inch pipe and ends at the City limits just to the west of the Antelope Freeway as a 5' by 18' feet box. The system along Avenue "G" starts as a 5' by 10' box at 45th Street and ends as a 5' by 18' box at the City limits to the west of Antelope Freeway. Other changes include addition of laterals to the eastern channels and Floodplain Management Paths shown on the L.A. County Plan. All drainage system design within the City of Lancaster shall conform to this new drainage Master Plan.

Existing Floodplain Mapping: The project area is located within FEMA, Flood Insurance Rate Map Panels 060672 0005B (1-6-82), 060672 0015B (1-6-82), and 060672 0010B (1-6-82) adopted by the City of Lancaster and Panel 065043 0095B (12-2-80) adopted by LA County. The flood hazard zones within the site include Zone "A", "B", "C", "AH", and "AO". The basic requirement for development located within the 100-year flow hazardous zone is to raise the building pad elevations one foot above the 100 year base flood elevation.

Alluvial Fan Hazards: The Antelope Valley is an enclosed inland drainage basin, with no ocean outlet for the generated runoff. The numerous streams originating in the mountains and foothills surrounding the valley carry highly erodible soils onto the valley floor, depositing sediments. The deposited sediments forms the large alluvial fans atypical of the valley floors in this area. These fans develop at the transition from the steep mountain slopes to the gentle valley floor. Usually all areas on alluvial fans are subject to a flood hazard.

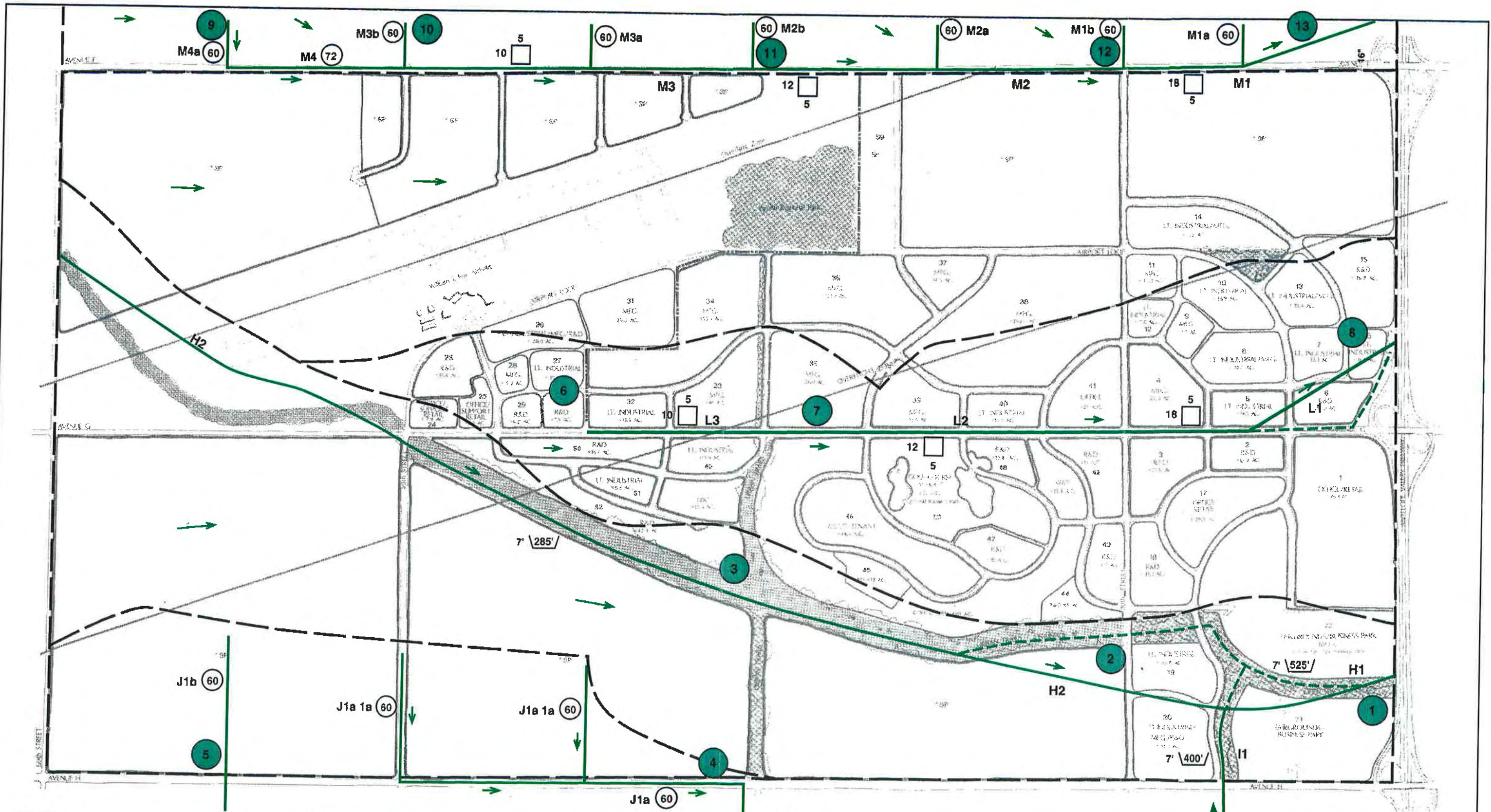
The project site terrain can generally be classified as being an alluvial fan. Even though the entire site has not been identified to be within a "Zone A" flood hazard zone on the FIRM, the location on the alluvial fan poses erosion and sheet flow hazards which are not identified on the FIRM. Extension of the National Flood Insurance Act of 1968 to alluvial fans is a key element in flood loss protection on alluvial fan areas and towards strengthening the necessary mitigation measures. The flooding process on alluvial fans is highly complex. Flows on alluvial fans typically have a high velocity, unpredictably change direction, and carry large amounts of debris. The soils on alluvial fans are usually highly porous and easily erodible. In addition, flow characteristics change abruptly over short distances on most alluvial fans. However hydrologic and hydraulic characteristics varies widely among various alluvial fans. All watercourse on alluvial fans are ephemeral. Channel patterns and flooding zones vary with each flood.








These flooding conditions are most severe at the upstream edge of urbanization on a fan, where the unpredictable and debris-laden flows must be retained or collected and channelized, and the sites must be armored against impact damages on the upstream side.

Regional Water Quality Control Board Design Constraints: On August 20, 1992, the State Water Resources Control Board adopted a final General Construction permit. The permit provisions require that discharges of storm water from construction activities of five acres or more must be regulated as an industrial activity and covered by a National Pollutant Discharge Elimination System (NPDES) permit. In a recent ruling by Ninth Circuit Court of Appeals, the court revoked the USEPA exemption of construction activities less than five acres and has requested USEPA for further action of the set regulation. However, until further clarification is directed from USEPA, the five-acre criteria remains in effect. The general construction permit is implemented and enforced by the nine California Regional Water Quality Control Boards.

The construction activities covered under the general permit include clearing, grading, or excavations that cause disturbance of at least five acres of land. Those portions of the projects that require a Corps of Engineers 404 permit because of dredging and/or filling are excluded. The general construction permit requires dischargers to eliminate/reduce non-storm water discharges to storm water systems, develop and implement a stormwater pollution prevent plan (SWPPP), and inspect storm water control structures and pollution prevention measures. The SWPPP shall be implemented concurrent with the beginning of the construction activities and kept on-site for projects commencing on and after October 1, 1992.

In order to obtain coverage under the general construction permit, the project applicant/owner is required to submit a Notice of Intent (NOI) prior to the commencement of construction, filed with the State Water Resources Control Board.



-  City of Lancaster Master Drainage Plan
-  Drainage Basin Boundaries
-  Drainage Direction
-  60" Pipe Diameter
-  5'x10' Box
-  Proposed Retention / Detention Basin Location & Number
-  410' x 10' Earthen Channel WIDE DEEP

Source: Langdon • Wilson

FOX FIELD INDUSTRIAL CORRIDOR Drainage Master Plan

2) *Drainage Plan Components*

The Drainage Master Plan consists of two major components, a storm drain system and 14 detention/retention basins to convey storm flows (see Exhibit 11, *Drainage Master Plan*). In addition to this system, the drainage course will be relocated south of the proposed fairgrounds.

b. *Development Standards and Criteria*

City of Lancaster's Design Requirements: All drainage design within the City of Lancaster shall conform to the City's revised Master Drainage Plan.

The City of Lancaster requires that the 50-year flows be contained below street curb line limits, and storm drain pipelines be designed for 25-year design flowrates. In addition, the City requires that the excess generated volume of runoff associated with development be retained on the project site. Regional facilities and retention/detention basins should be designed based on the 50-year design storm. In addition building pad elevations should be placed one foot above the 100 year base flood elevation.

The City approves of the use of properly designed detention or retention facilities for storing the excess generated flows associated with development. However, detention facilities are preferred since they do not require pump stations. All detention and retention facilities should be excavated below natural ground and not impound water above grade. Basins should be buffered from adjacent developments.

Drainage Fees: All developments within the City of Lancaster are required to pay a drainage fee for construction of regional facilities. The drainage fees are due and payable to the City at the time of building permit issuance.

Maintenance Fees: All developments are required to annex into the Lancaster Drainage Benefit Assessment District (LDBAD) to provide for maintenance of facilities whether planned drainage facilities or other drainage facilities. Annexation is required whether drainage facilities are constructed or not. The developer will pay the fees necessary to annex into the district. Planned Drainage Facilities constructed by the City will be accepted into the LDBAD for maintenance.

2. **Water Plan**

a. *Description*

1) *Background*

Sources of Supply: The Los Angeles County Water Works District (LACWWD) No. 4 is the agency responsible for providing retail water service to the Lancaster Area. This agency relies on local groundwater as well as imported State Project Water to meet the needs of customers within its Service Area.

A supplemental supply to local groundwater in the Antelope Valley is State Project water furnished by the Antelope Valley-East Kern Water Agency (AVEK). AVEK currently operates four water treatment plants in its service area with a fifth plant potentially constructed in the Fairmont Area. The Quartz Hill Water Treatment Plant (QHWTP) is located southwest of the City of Lancaster adjacent to the east branch of the California Aqueduct. This plant provides a source of filtered water supply for domestic use to the Lancaster Area. The AVEK imported water supply is provided by LACWWD No. 4, the retail water agency, to the Lancaster Area via the AVEK South Feeder. LACWWD No. 4 has constructed water supply facilities, as shown in Exhibit 12, *Regional Water System*, to provide the imported water supply at the appropriate pressures throughout the Lancaster Area. The AVEK QHWTP's current capacity is 65 mgd and plant expansions will occur as needed.

2) *Proposed Water System Components*

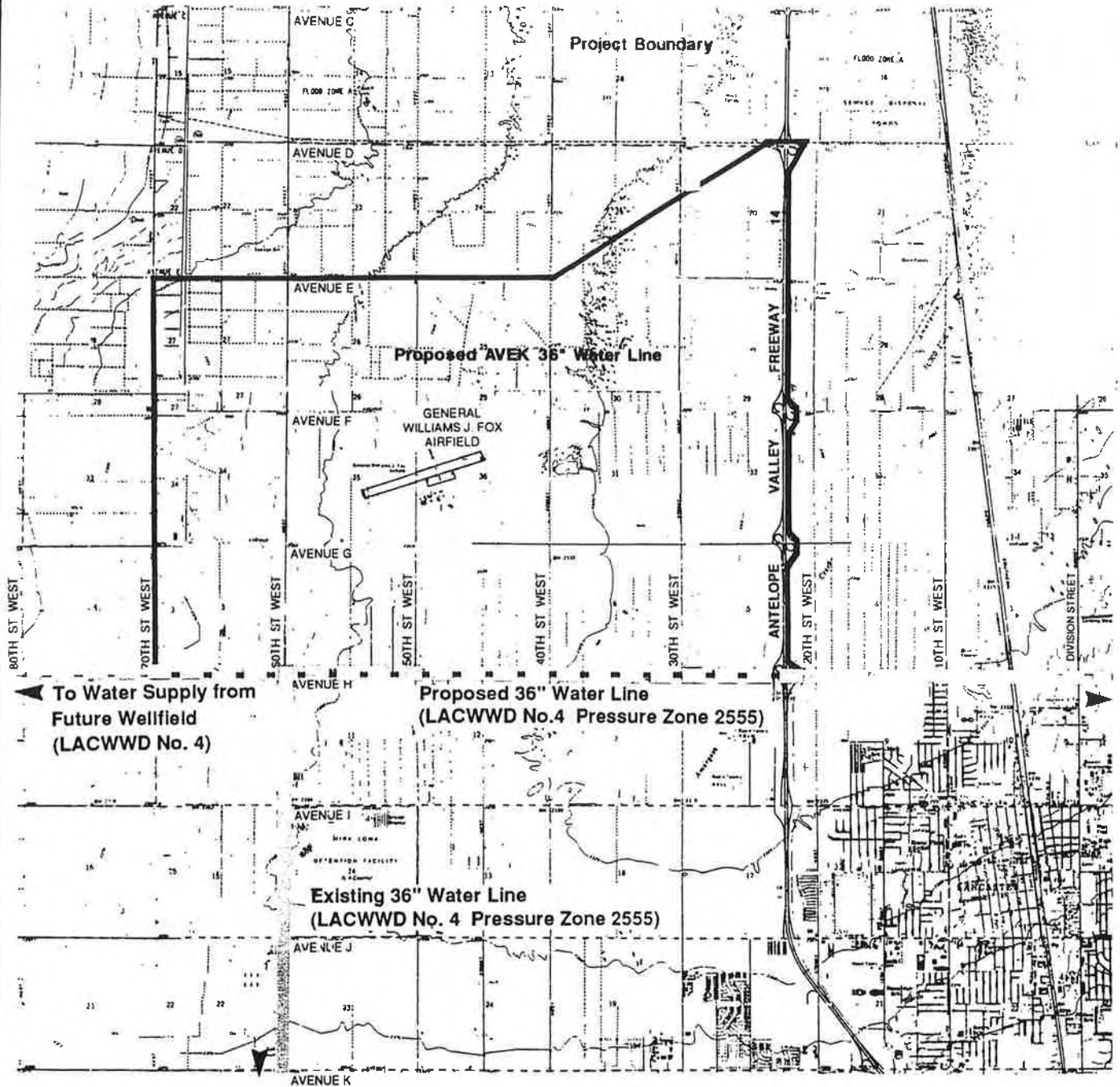
The Fox Field Industrial Corridor will require the construction of the northerly portion of the LACWWD No. 4 major transmission loop serving the Lancaster Area (see Exhibits 12-13, *Regional Water System* and *Water Master Plan*). This 36-inch diameter pipeline project is master planned to be constructed in Avenue "H" and will connect to the existing 36-inch in 60th Street West. The 36-inch pipeline will extend from the proposed well fields, west of the Fox Field Industrial Corridor, to the east side of the Antelope Valley Freeway.

The Fox Field Industrial Corridor will also require the construction of in-tract water distribution mains. The in-tract system will consist of 10- to 20-inch water mains and four inter-connections to the LACWWD No. 4's 36-inch main as shown on Exhibit 13. Discussions with the WW No. 4 staff indicated that no new pump station or reservoir are anticipated for the project at this time.



LACWWD No. 4's water duty factors were utilized to compute the water demands for the project site. A factor of 2.0 was applied to the average daily flow to obtain the maximum daily flow. The estimated water demand for the Proposed Fox Field Development is approximately 2.5 million gallons per day (MGD) average flow and approximately 5.0 MGD maximum daily flow. The estimated water demand for the Future Fox Field Development – the Future Development being the West Expansion Area and Expansion Area north of Avenue F – is approximately 10.4 MGD average daily flow and 20.8 MGD maximum daily flow. The combined estimated total being 12.9 MGD average daily flow and 25.8 maximum daily flow. Based on the maximum daily flow and the maximum fire flow required by the Los Angeles County Fire Department the water distribution system depicted in Exhibit 13 was developed.

Development of well fields to provide groundwater supplies to the distribution system proposed to the west of the Fox Field Industrial Corridor will also be

To AVEK Rosamond Water Treatment Plant



To AVEK Quartz Hill Water Treatment Plant

-  Existing Water Line
-  Proposed Water Line



N.T.S.



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FOX FIELD INDUSTRIAL CORRIDOR Regional Water System

required by LACWWD No. 4. The LACWWD has indicated that a comprehensive water master plan will be required for the Fox Field Industrial Corridor to evaluate the sizing and location of supply and transmission facilities.

LACWWD No. 4 requires the golf course, located south of Avenue G between the Urban Trails and 30th Street West, be supplied with non-domestic water. Currently, the water district does not allow a green belt or landscaped area, such as a park or golf course, to be irrigated with domestic water unless it is proven to be highly unfeasible to irrigate with reclaimed water. The average and maximum daily flows required at the golf course were determined to be 0.6 MGD and 1.3 MGD, respectively. A duty factor of 4 acre-feet per acre per year (AF/AC/YR) was used to compute this estimated water demand. A factor of 2.0 was applied to the average daily flow to compute the estimated maximum daily flow.

Provided residential units will not be developed on the golf course, the water demand may be met with secondary effluent from a waste water treatment plant under current regulations. If, however, residential units are developed on the golf course or the current regulations are modified, it will be necessary to meet the water demands with reclaimed water treated to a tertiary level. The Lancaster Water Reclamation Plant (LWRP) would be a likely source of supply for the golf course. The non-domestic distribution system will most likely consist of two 30 horsepower pumps (100 percent redundant) and a 25,000 linear foot 12-inch transmission main from the LWRP to the golf course site as shown on Exhibit 16.

b. Development Standards and Criteria

The Los Angeles County Water Works District No. 4 (LACWWD No. 4) has expressed a willingness and ability to provide water service to the proposed Fox Field Industrial Corridor in the Lancaster Area. Water service would be contingent on the following conditions:

- 1) Annexation of the Study Area to LACWWD No. 4, which is currently within its sphere of influence.
- 2) Development of a groundwater supply program to provide the maximum day demands for the Study Area.
- 3) Construction of regional water supply facilities necessary to "import" water from Antelope Valley - East Kern Water Agency (AVEK) to the Study Area.
- 4) Construction of internal water distribution system within the Study Area, consisting of the necessary transmission and above ground storage facilities to provide both domestic and fire protection service.

- 5) Dedication of the required water supply and distribution system to LACWWD No. 4 accompanied by easements for future access and maintenance to these facilities.
- 6) Payment of the appropriate annexation and connection fees to AVEK and LACWWD No. 4 in order for connections to be made to existing regional facilities and service provided to the proposed Fox Field Industrial Corridor.

3. Sewer

a. Description

1) Background

Existing Treatment Capacity: The proposed Fox Field Industrial Corridor lies within the drainage area served by the CSDLAC Lancaster Water Reclamation Plant (see Exhibit 15). This plant is located at the intersection of Avenue "D" and the Antelope Valley Freeway, and is at a low point that can serve a drainage area of approximately 140 square miles west of Little Rock Wash and tributary to Amargosa Creek.

The LWRP is currently a 10 mgd water reclamation plant consisting of primary treatment facilities followed by oxidation ponds for secondary biological treatment.

Proposed Treatment Capacity: The LWRP is proposed to be expanded to an average flow of 16 mgd through the addition of aeration devices to increase the treatment capacity of the existing oxidation ponds.

The CSDLAC has estimated that the ultimate service area for the LWRP may ultimately produce an average flow of 47 mgd, which corresponds to a peak capacity of 83 mgd, by the year 2020. Expansions beyond the presently planned 16 mgd may require conversion of the existing LWRP to a more advanced treatment plant to meet future capacity requirements, and provide effluent for industrial and agricultural reuse as well as for groundwater recharge of the Antelope Valley basin.

Effluent Disposal: The CSDLAC Lancaster WRP currently utilizes 270 acres of oxidation ponds to provide secondary biological treatment of the primary effluent. Approximately 0.6 mgd of the effluent receives advanced tertiary treatment which is used for irrigating the Apollo Park adjacent to the William J. Fox Airfield.

The remaining secondary effluent is conveyed to the Piute Ponds northeast of the plant site. Historically, the secondary effluent had been discharged to the Amargosa Creek. Through the development of an Effluent Management Program, CSDLAC is attempting to reuse the effluent for irrigation purposes.

CSDLAC is in the process of developing a new Effluent Management Program for the next 16 mgd expansion increment.

2) *Proposed Sewage System Components*

The CSDLAC provides outfall interceptor capacity in the 48-inch Rosamond Outfall, located in 20th Street West (see Exhibits 14, 15 and 16, *Regional Sewer System, Sewer Master Plan and Non-Potable Water Master Plan*). CSDLAC currently maintains Trunk "E" and Trunk "F" facilities, as shown on Exhibit 16, *Regional Sewer System*.

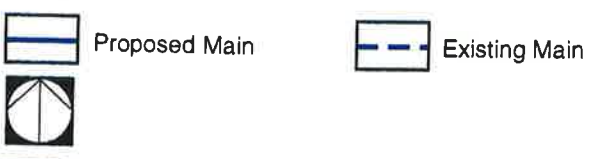
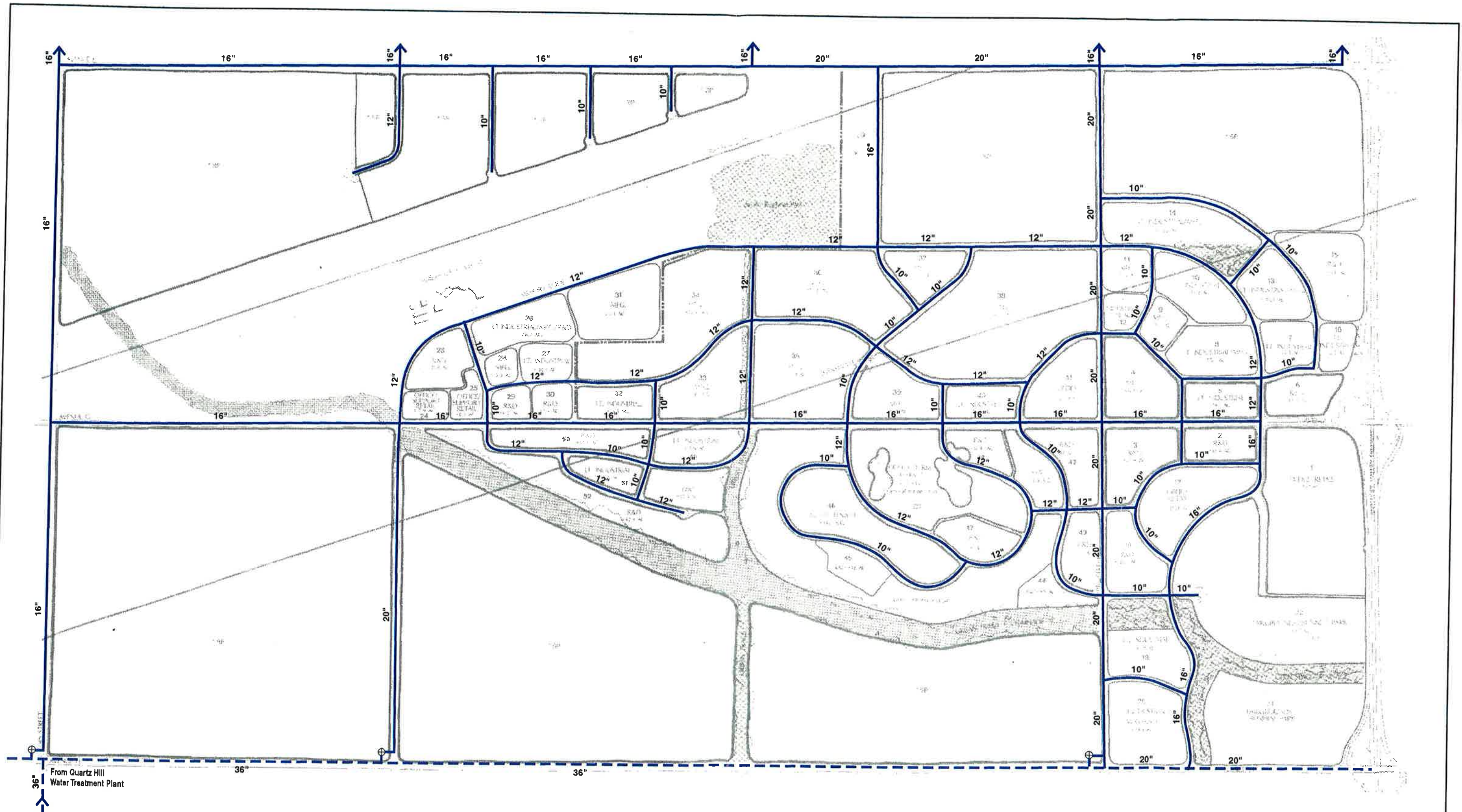
Two of the master planned trunk sewers will be located within the Fox Field Industrial Corridor. One trunk sewer, 27- to 33-inch in diameter, is proposed in Avenue F and the other trunk sewer, 27- to 30-inch in diameter, is proposed in Avenue H. Both trunk sewers are proposed to connect into the Rosamond Outfall, which discharges directly into the LWRP. The project site falls within two sub-basin boundaries as shown on Exhibit 15. Approximately half of the project site drains to the trunk sewer in Avenue F and approximately half drains to the trunk sewer in Avenue H. All in-tract sewer mains drain by gravity to the collector mains, thus eliminating the need for lift stations. An existing local sewer serves Fox Airfield and Apollo Park, operated by the Los Angeles County Public Works. The line ranges from 8-inches to 24-inches in diameter and is located in Avenue F-8, extending from 20th Street to the Service Road west of the Airfield. The line could be used for initial development (approximately 380 acres) around the existing airstrip and/or along the sewer line alignment in Avenue F-8.

The in-tract collection system will consist of 8- to 18-inch sewer mains. Ninety percent of the average water demand duty factor of 2,000 gpd/AC is 1,800 gpd/AC, which is the duty factor utilized to estimate the average amount of sewage to be generated. A factor of 3.0 was applied to the average flow to determine the peak flow. The peak flow is then used to estimate the sizes of the sewer mains. The average flow was estimated to be 2.0 MGD for the Proposed Fox Field Development and 8.52 MGD for the Future Fox Field Development. The peak flow was estimated to be 9.3 cubic feet per second (cfs) for the Proposed Fox Field Development and 39.5 cfs for the Future Fox Field Development.

b. *Development Standards and Criteria*

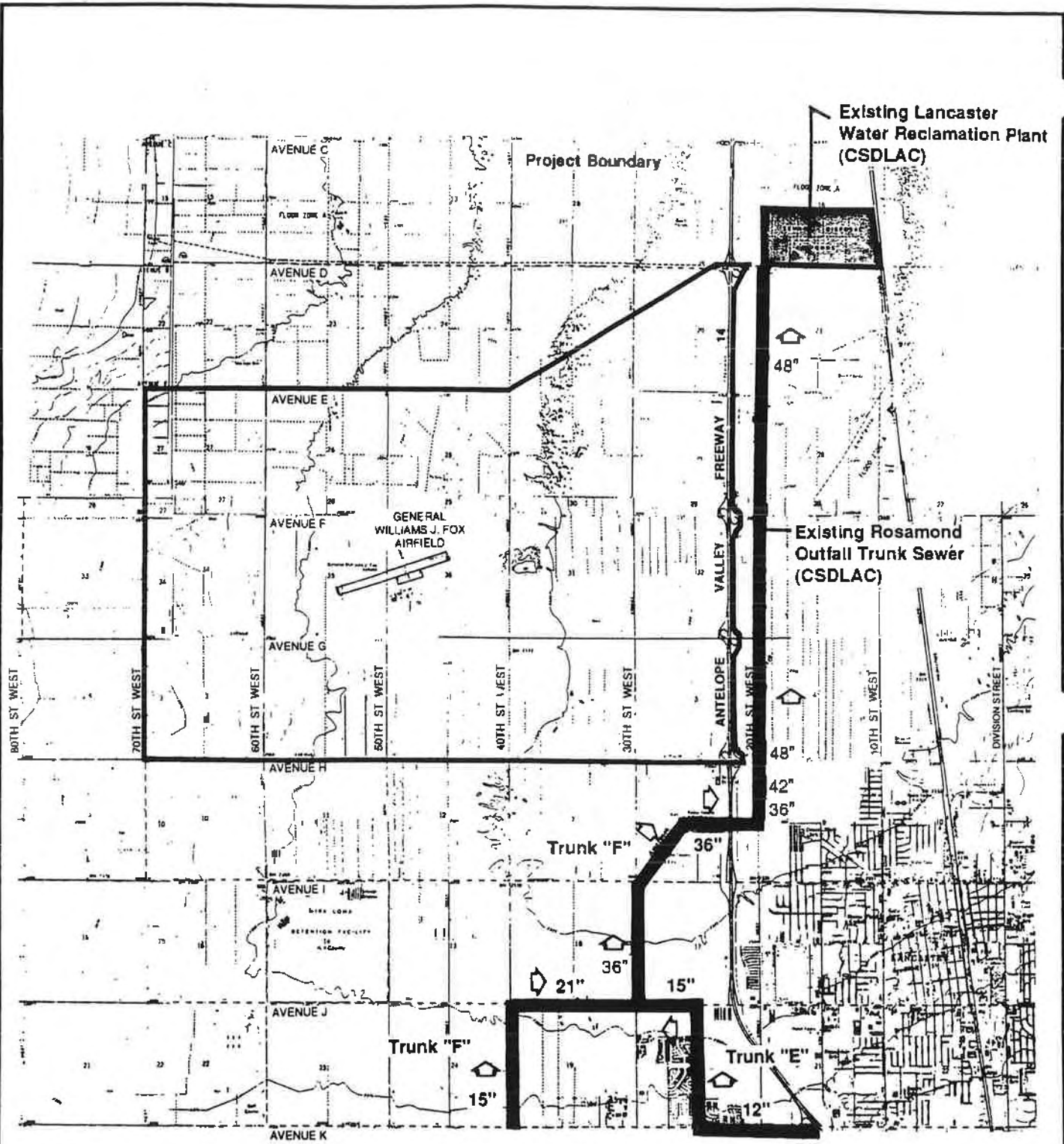
The County Sanitation Districts of Los Angeles County (CSDLAC) has expressed a willingness and ability to provide wastewater interceptor conveyance, treatment and effluent disposal service to the proposed Fox Field Industrial Corridor. Sewage service would be contingent on the following conditions.



- 1) Annexation of the Fox Field Industrial Corridor to CSDLAC District No. 14.



Source: Langdon • Wilson

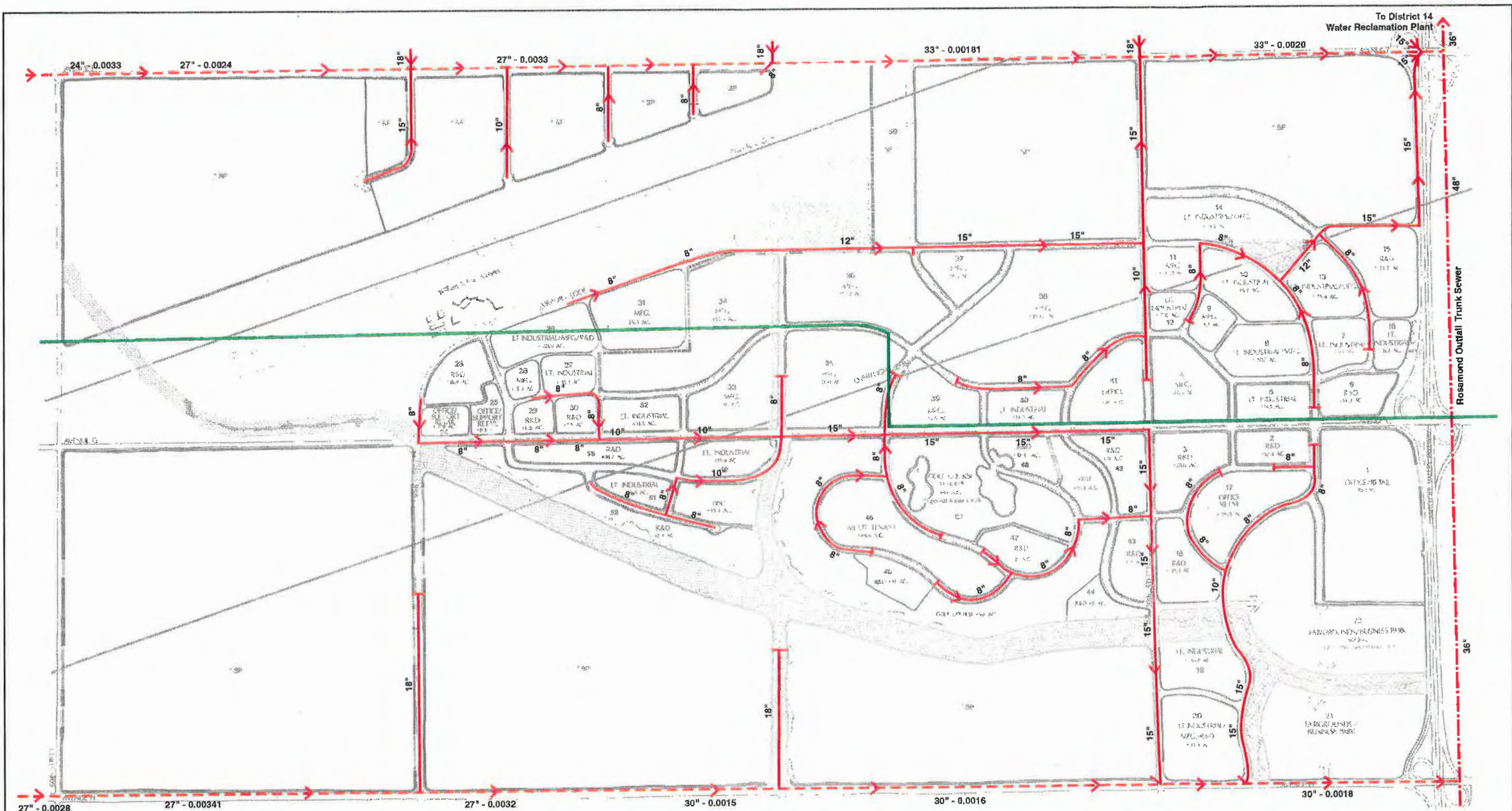
FOX FIELD INDUSTRIAL CORRIDOR
Water Master Plan



-  Existing Sewer
-  Water Reclamation Plant

 N.T.S.

FOX FIELD INDUSTRIAL CORRIDOR
Regional Sewer System



Source: Langdon • Wilson

- Existing Trunk Sewers
- Proposed County Sanitation Districts of LA County Proposed Trunk Sewer
- Proposed Trunk Sewers
- Sub-Basin Boundary

**FOX FIELD INDUSTRIAL CORRIDOR
Sewer Master Plan**




Effluent From Oxidation Ponds at Dist. 14 WRP

12" Force Main

12"

Source: Langdon • Wilson

FOX FIELD INDUSTRIAL CORRIDOR
Non-Potable Water Master Plan

 Proposed Reclaimed Water Line



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 3-05 JN 29133-4314

- 2) Construction of major east/west sewer interceptors within the Study Area to the existing Rosamond Sewer Outfall, located in 20th Street W, east of the Antelope Freeway.
- 3) Construction of local sewage collection system within the Industrial Corridor to connect to the proposed CSDLAC interceptors.
- 4) Timely expansion of the CSDLAC Lancaster Water Reclamation Plant (LWRP) to accommodate future development of the Fox Field Industrial Corridor as well as the remainder of the drainage areas served by LWRP.
- 5) Development of Effluent Management Programs by CSDLAC to maximize the use of reclaimed water for irrigation purposes and reduce dependency on imported State Project Water to supplement groundwater supplies.
- 6) Dedication of the required sewage collection system for the Fox Field Industrial Corridor to the appropriate jurisdictional agency accompanied by the necessary easements for access and maintenance.
- 7) Payment of the appropriate annexation and connection fees to the CSDLAC in order to purchase capacity in existing CSDLAC facilities and provide funding for future CSDLAC system expansion.

4. Grading

The grading required for the Fox Field project will be minimal due to the flat topography of the project area; grading will include raising of development pads which lie within the 100-year flood plain, as required by the final drainage study and engineering plans. All grading operations will comply with the grading requirements of the City of Lancaster and the project's Environmental Impact Report.

5. Utilities and Services

a. Electrical Service

Southern California Edison currently provides electrical service to the Lancaster area and the project site. Edison maintains several regional electrical transmission lines in the western portion of the City. There are two 220,000 volt transmission lines and one 500 kV line located in the southwest portion of the City. All other lines in the study area are 66 kV or less. One of the two power corridors parallels 120th Street West to south of Avenue F, then proceeds south towards the Los Angeles Basin. The second corridor crosses diagonally from the northwest corner of the City and proceeds south toward San Bernardino. Edison operates two regional substations, both located in the western portion of the City; one near 90th Street West and Avenue H and the other near Avenue J and 90th Street West.

Within the project area, a 66 kV line extends along Avenue H to State Route 14, where it turns south and continues east along Avenue I. Another 66 kV line extends west along Avenue E to the east side of State Route 14 where it turns south to Avenue I.

It is anticipated that adequate electrical service is available and that service can be provided by Southern California Edison to the land uses within the specific plan area. All lines within project will be placed underground.

b. Natural Gas Service

Natural gas is supplied to the Lancaster area and the project site by the Southern California Gas Company. The Gas Company maintains an extensive supply network within the incorporated and unincorporated sections of Lancaster. Within the Fox Field study area, an eight inch line extends north along 60th Street to Fox Field Airport. Another eight inch line feeds off this northerly line at Avenue H and extends west, and a short segment extends to the east at Avenue I.

It appears that adequate service is provided within and around the specific plan area to accommodate the specific plan land uses.

c. Telephone Service

The project area is located within the General Telephone Company (GTE) service area. Additional facilities will be required to service the specific plan land uses. It is anticipated that GTE will be able to provide service to the project.

d. Police Service

The City of Lancaster contracts for its law enforcement with the Los Angeles County Sheriff's Department. The Antelope Valley Sheriff's station, under the jurisdiction of the County of Los Angeles Sheriff's Department, provides the project area with police protection with approximately five to eight patrol units deployed throughout the City on various shifts. The Antelope Valley Sheriff's Station is being relocated to the intersection of Lancaster Boulevard and Sierra Highway.

e. Fire Service

The Los Angeles County Fire Department (LACFD) provides fire protection services to the Antelope Valley, including the Fox Field area of the City of Lancaster. Fire service for the project area is provided by the County of Los Angeles Fire Department, Fire Station 130. Station 130 is located on 40th Street West at Newgrove.

f. Solid Waste Disposal

Waste Management of Lancaster is the refuse collector for the project area. The landfill which would accommodate the project area is the Lancaster Sanitary Landfill, a Class II landfill located at 600 East Avenue F.

E. OPEN SPACE AND RECREATION PLAN

1. Existing Facilities

One existing park is located in the project area, Apollo Park, a 61 acre regional park just east of Fox Field between Avenues G and F.

2. Plan Components

The proposed open space and recreation components of the Fox Field project include parks, corridors, and trails (see Exhibit 4, *Focused Planning Area Land Use Plan*).

- a. **Parks (Feature Park and Apollo Park):** A small 32 acre park is planned for a prominent site on Airport Loop Drive between Avenues F and G. This park is intended to serve the surrounding business park areas, giving employees a place for walking or lunch. The park will be passive, with landscaping, picnic tables, walkways, and benches. The park may include a daycare center with related parking. Apollo Park, the existing park to the east of the airport, will be directly connected to an urban trail/linear park system as well as to the pedestrian walks along Airport Loop Drive.
- b. **Corridors:** Three types of open space corridors are proposed for the project: 1) landscaped parkways along arterial roadways, 2) a linear park, and 3) the drainage corridor formed by the existing streambed/earthen channel which traverses the site.
 - Major parkways are proposed for Avenues G and H, consisting of 35 feet of landscaping on each side of the road, outside of the right-of-way (see Exhibit 10, *Road Cross Sections*). These parkways will provide visual corridors into the project from the freeway and create a positive image for the project. Smaller parkways of 25 feet are proposed for the Airport Loop Drive and 30th Street. For additional detail on these parkways, refer to the Landscape Plan of this document.
 - A 150 foot wide linear park will be provided from Apollo Park to Avenue I. This linear open space element will contain an eight foot off-street bicycle trail and landscaping. This linear park and trail are consistent with the General Plan urban trail network.
 - The 500 foot wide drainage corridor will be landscaped along its top edge to create visual continuity along this linear element (see Exhibit 17, *Drainage Corridor Cross Section*). An eight foot bicycle trail/pedestrian pathway will be provided along the top edge on both sides; connecting to the linear park/urban trail at Avenue I.
- c. **Trails:** A looped trail system is proposed, comprised of the urban trail /linear park, the off-street trail on the top edge of the drainage corridor, and an eight-foot wide off-street bicycle/pedestrian trail on the Airport Loop Drive, connecting to the

drainage corridor through project roadways. This trail loop will connect Fox Field East and West and provide employees with recreational opportunities.

F. PROJECT AND PUBLIC FACILITY PHASING

1. Project Phasing Plan Description

The Fox Field East and West focused planning areas is anticipated for development in four phases over a 20 year period (see Exhibits 18 - 24 *Phasing Plan*). Table 4, *Land Use Phasing*, breaks down the land use development acreages by phase. In some cases, phases may overlap due to market trends which favor a particular land use. Infrastructure will be constructed to provide water, wastewater and drainage facilities to each phase as it develops. Circulation improvements will be phased to serve the land uses as they develop. These improvements are indicated in Table 5, *Circulation Improvement Phasing*.

The Director of Community Development and the City of Lancaster will monitor phasing through subdivision and design review procedures to ensure adequate capacity in infrastructure systems for each phase. The phasing of development is only proposed and can be modified as necessary by the Director of Community Development. The utility, drainage, and circulation improvements are what is expected to be necessary for ultimate build-out; the Director of Community Development may allow the installation of facilities on an interim basis that do not meet the ultimate plan.

G. RELATIONSHIP TO AIRPORT MASTER PLAN

1. Airport Master Plan

In 1985, the owner and operator of the Fox Field Airport adopted an Airport Master Plan. This Master Plan depicts future facilities at the airport for the next 20 years. Elements of the Airport Master Plan that could affect land uses adjacent to the airport included; extending the existing runway one thousand feet and each end to a total length of 7,000 feet; provided for an additional 5,000 foot runway, 700 feet north and parallel to the existing runway; and proposed an instrument landing system for the existing extended runway.

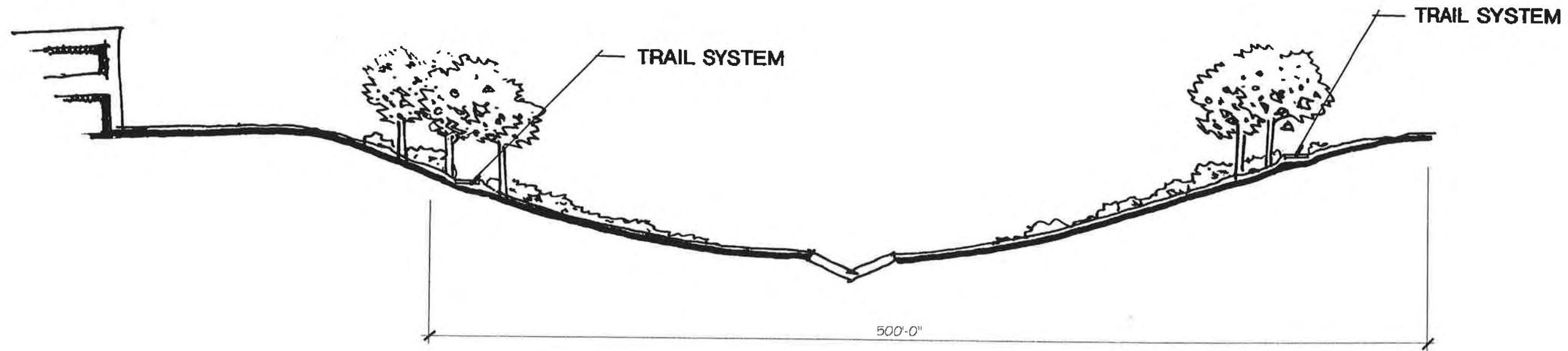
At the present time, the 1985 Airport Master Plan is being updated. This update will not be finalized until the Fox Field Industrial Corridor Project is completed. However, coordination with Los Angeles County indicates that no additional major aviation facilities will be included in the current Master Plan update.

Therefore, the criteria used to determine the effects of aviation activity on the Fox Field Industrial Corridor Project is based on the 1985 Airport Master Plan. This methodology will provide reasonable assurance that land uses proposed in the Fox Field Industrial Corridor Project will not conflict with existing and future aviation activity at the airport.

TABLE 4
LAND USE PHASING (IN ACRES)

<i>Phase</i>	<i>Land Use</i>	<i>Fox Field West</i>	<i>Fox Field East</i>	<i>Total</i>
Phase 1	Commercial	0.0	75.1	75.1
	Office	0.0	0.0	0.0
	R & D	7.7	54.3	62.0
	Lt. Industrial	7.7	20.0	27.7
	Manufacturing	0.0	0.0	0.0
	Open space	2.8	11.2	14.0
	Streets	4.0	16.0	20.0
	Subtotal	22.2	176.6	198.8
Phase 2	Commercial	1.0	0.0	1.0
	Office	5.5	29.9	35.4
	R & D	6.7	0.0	6.7
	Lt. Industrial	8.0	31.4	39.4
	Manufacturing	5.3	27.0	32.3
	Open space	3.2	10.8	14.0
	Streets	4.6	17.0	21.6
	Subtotal	34.3	116.1	150.4
Phase 3	Commercial	0.8	0.0	0.8
	Office	7.1	0.0	7.1
	R & D	13.5	14.0	27.5
	Lt. Industrial	10.1	72.4	82.5
	Manufacturing	5.3	7.7	13.0
	Open space	3.2	12.8	16.0
	Streets	4.8	19.2	24.0
	Subtotal	44.8	126.1	170.9
Phase 4	Commercial	0.0	0.0	0.0
	Office	0.0	0.0	0.0
	R & D	0.0	29.8	29.8
	Lt. Industrial	0.0	56.8	56.8
	Manufacturing	29.5	10.5	40.0
	Open space	3.2	12.8	16.0
	Streets	4.6	18.4	23.0
	Subtotal	37.3	128.3	165.6
Subtotal		138.6	547.1	685.7
Other	Fairgrounds/ Business Park	0.0	198.8	198.8
TOTAL		138.6	745.9	884.5

Note: Phases 1-4 comprise the build-out of the Fox Field East and West Planning Areas.
All acreages are approximate.



TRAIL SYSTEM

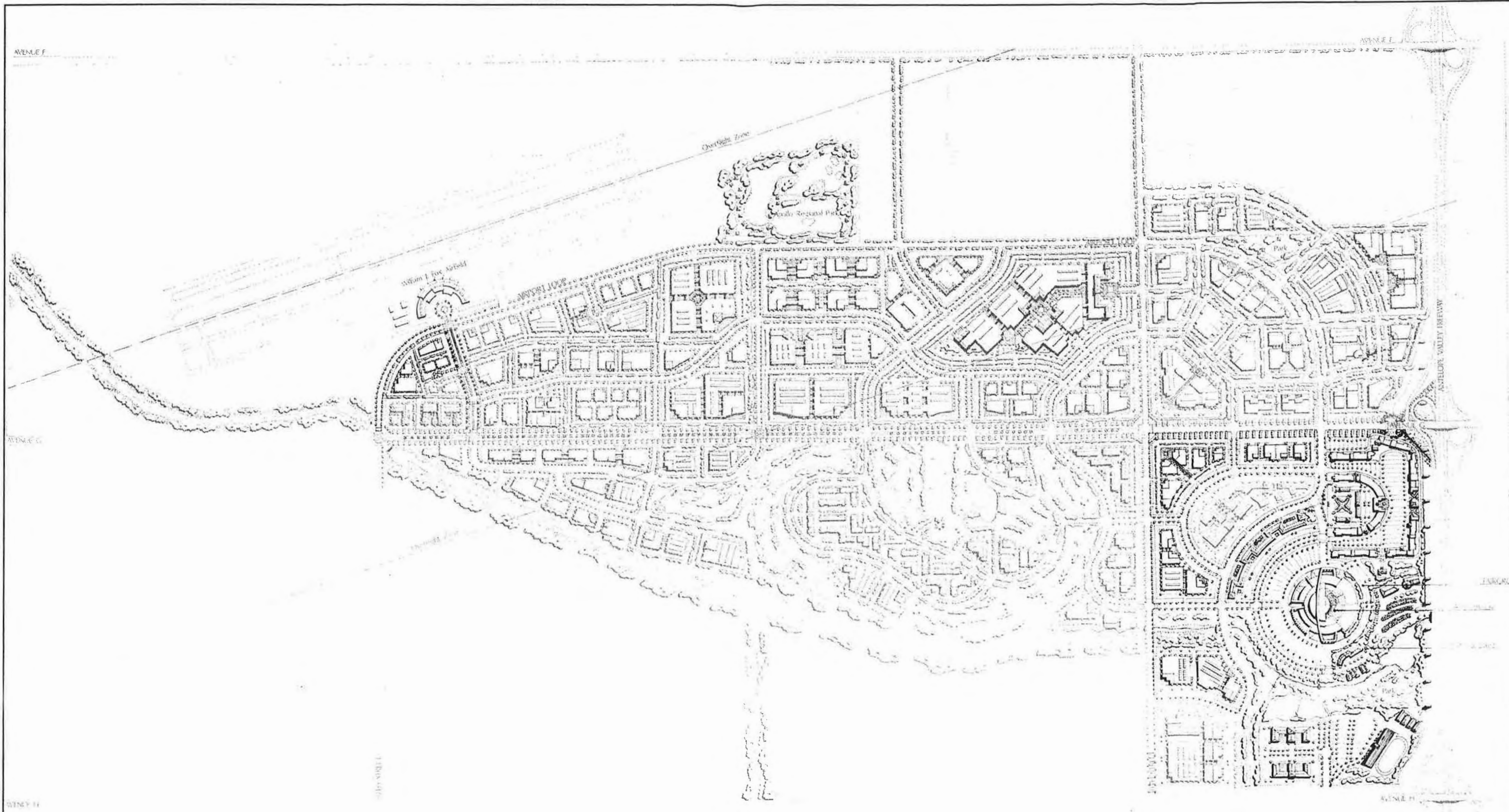
TRAIL SYSTEM

500'-0"

TRAIL CROSSINGS AT BRIDGES ONLY

Source: Langdon & Wilson

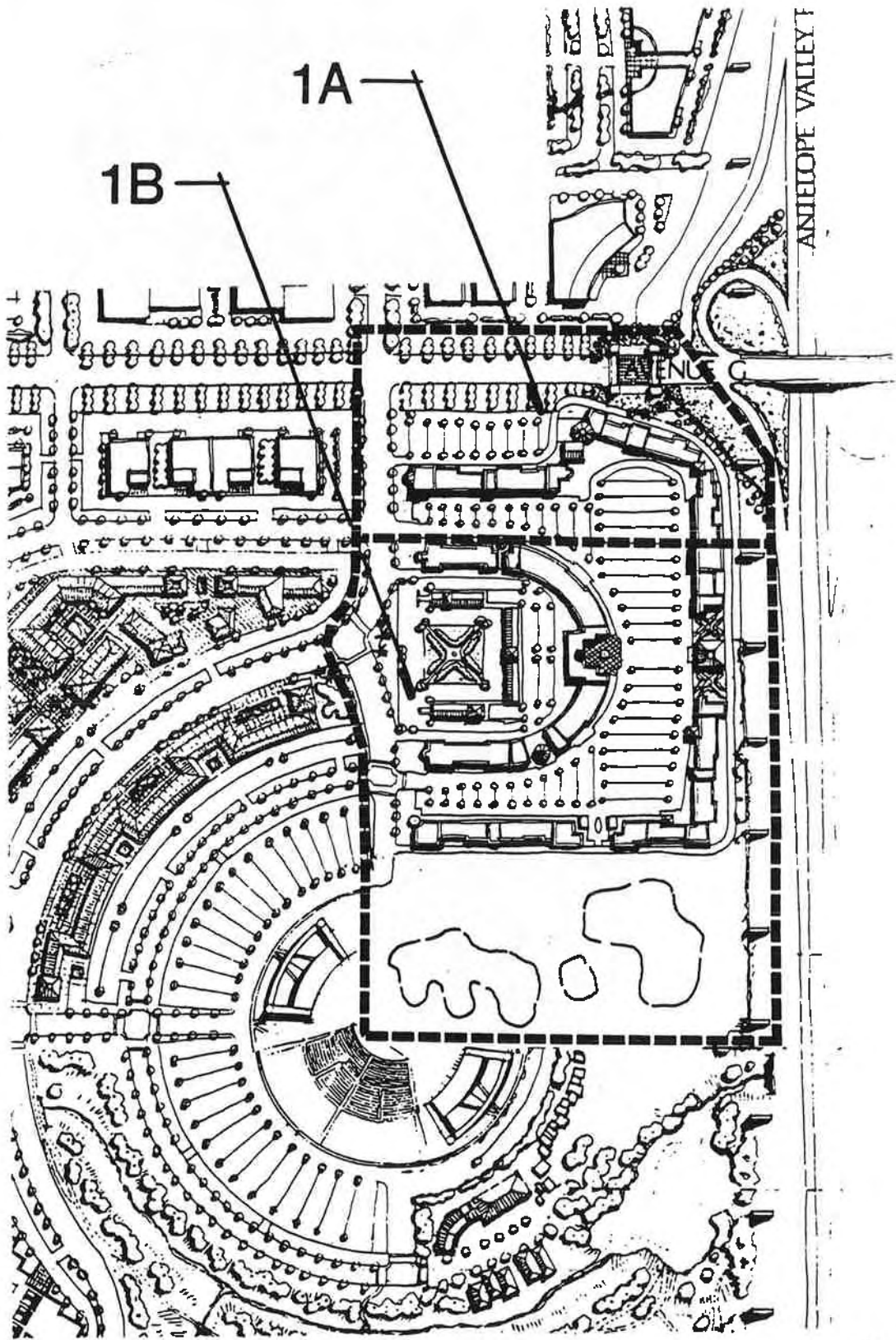
FOX FIELD INDUSTRIAL CORRIDOR
**Drainage Corridor
Cross Section**



Source: Langdon • Wilson

FOX FIELD INDUSTRIAL CORRIDOR
Project Phasing • Phase 1



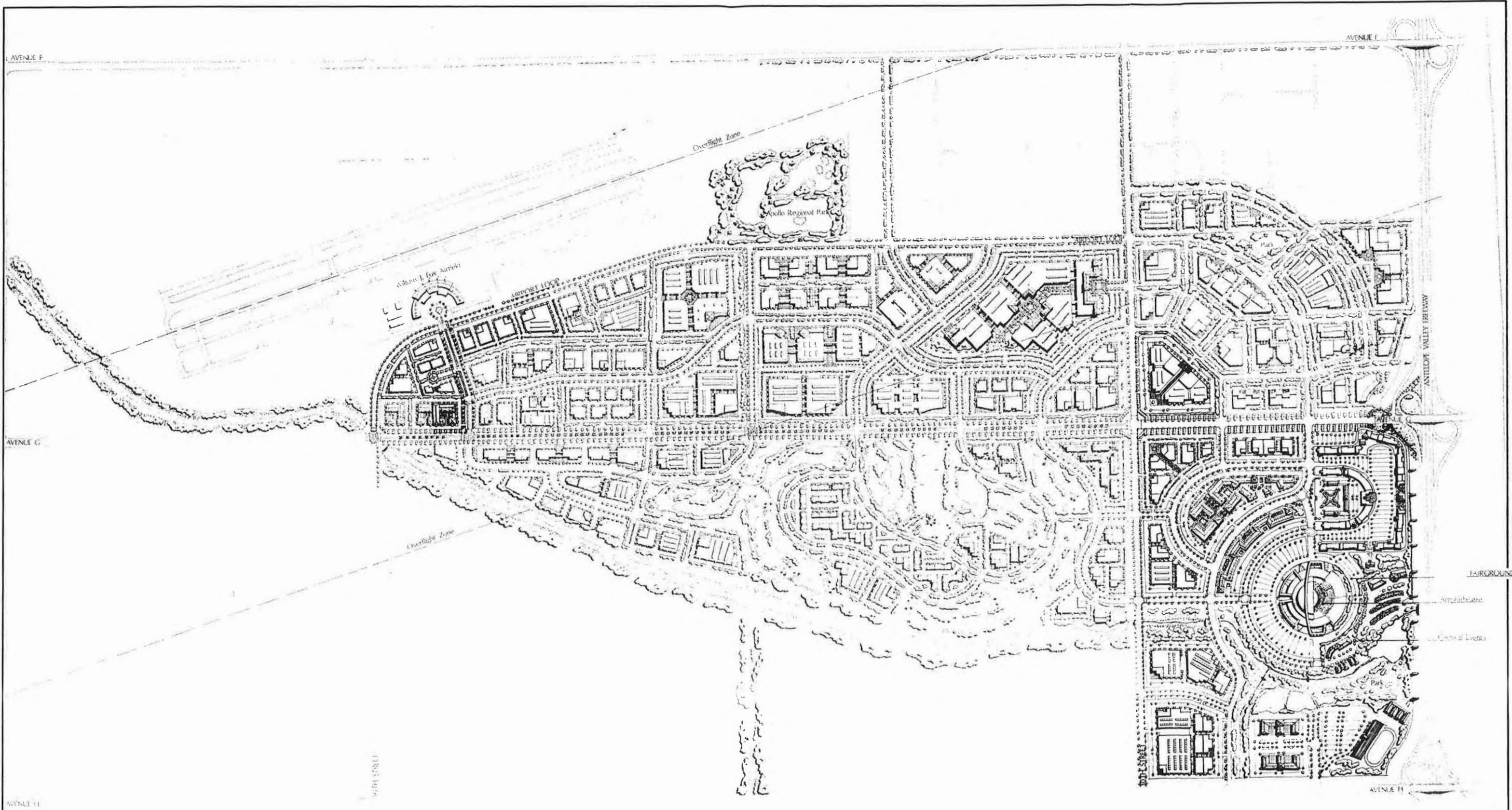


Source: Langdon • Wilson



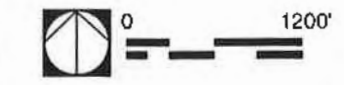
FOX FIELD INDUSTRIAL CORRIDOR
Project Phasing • Phase 1A/1B

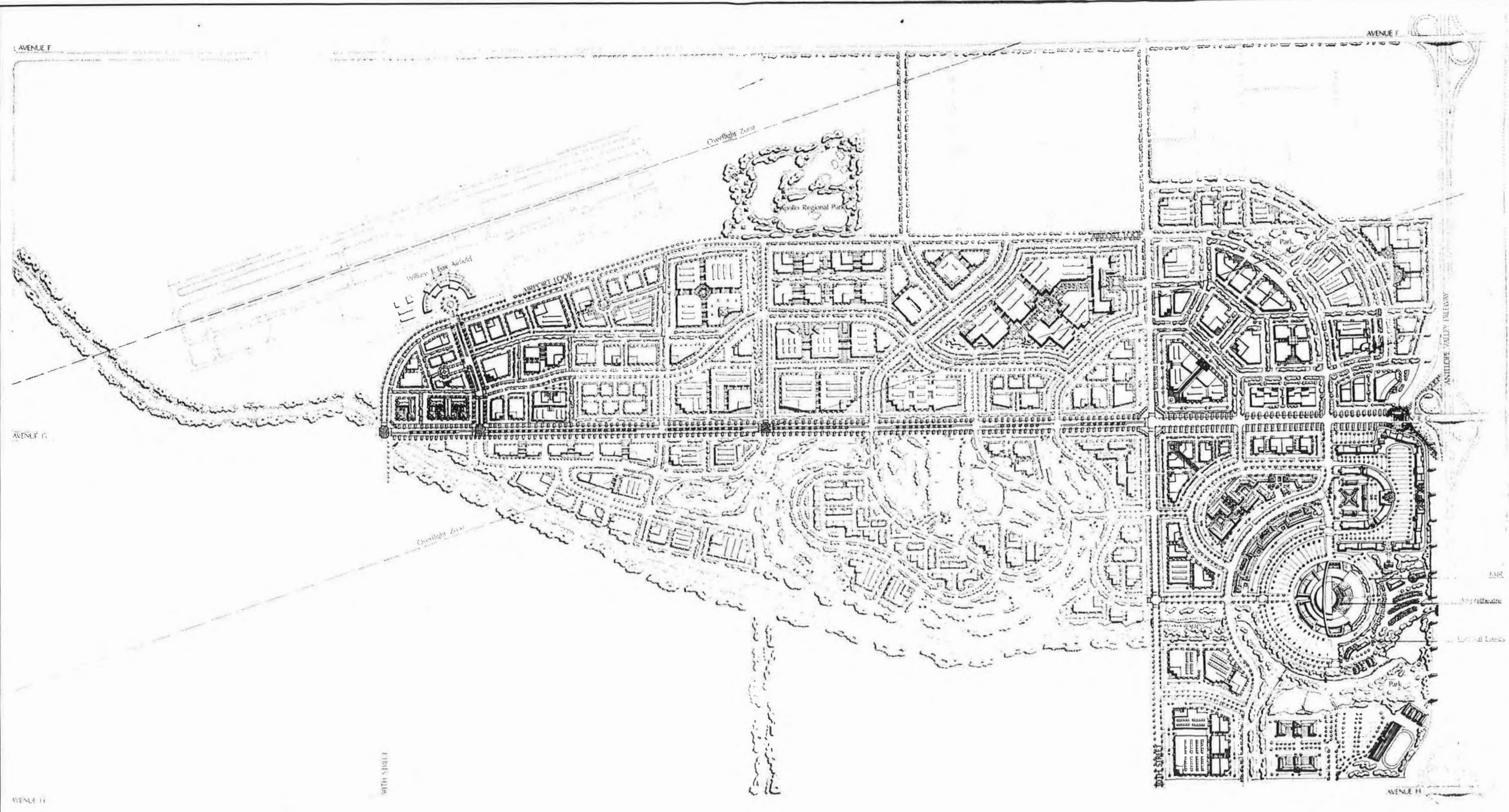
RF Robert Bein, William Frost & Associates
 3-95 JN 29133-4180



Source: Langdon • Wilson

FOX FIELD INDUSTRIAL CORRIDOR
Project Phasing • Phase 2





AVENUE F

AVENUE F

AVENUE G

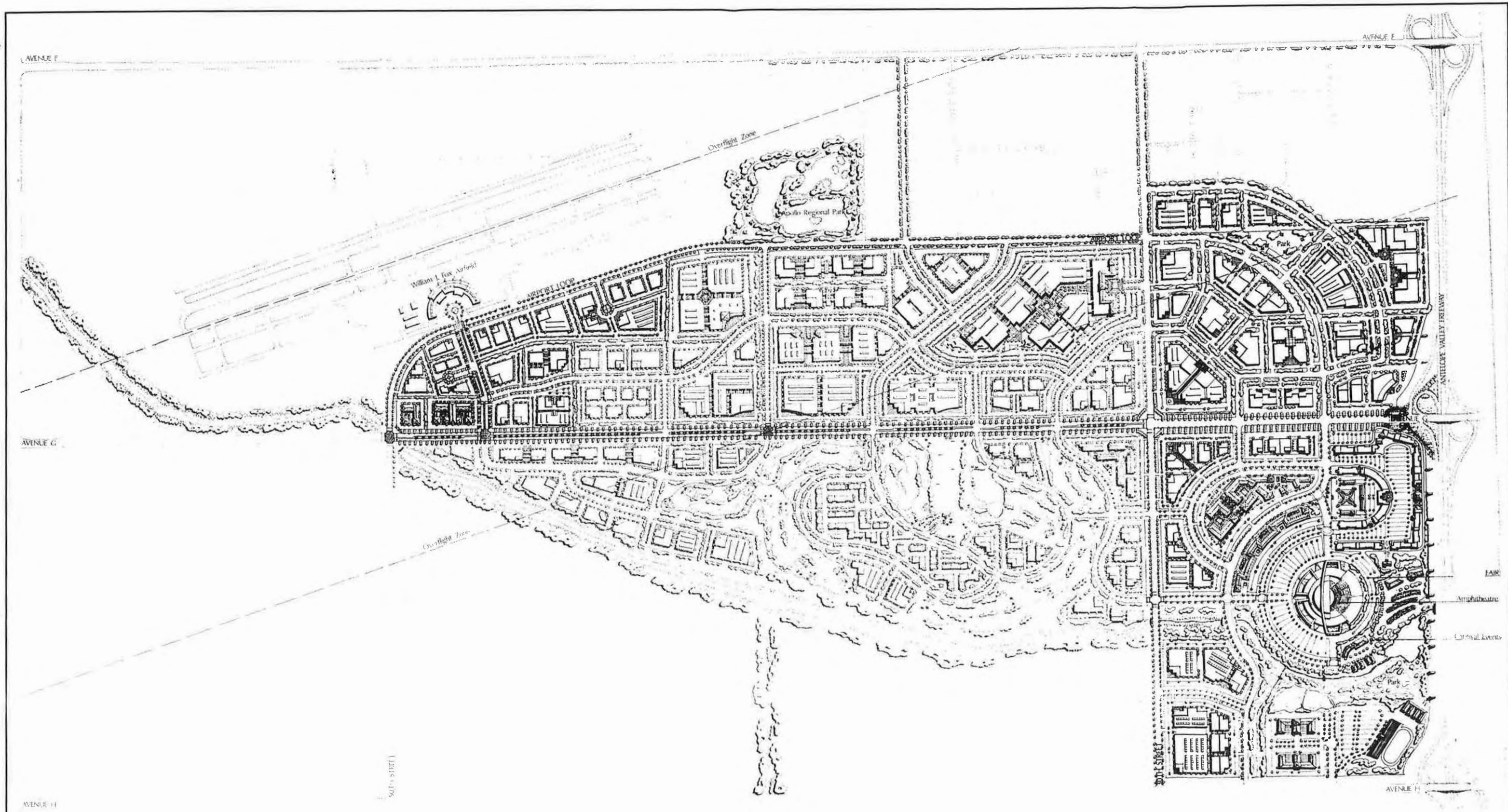
AVENUE H

ANTHONY VALLEY FREEWAY

Source: Langdon • Wilson



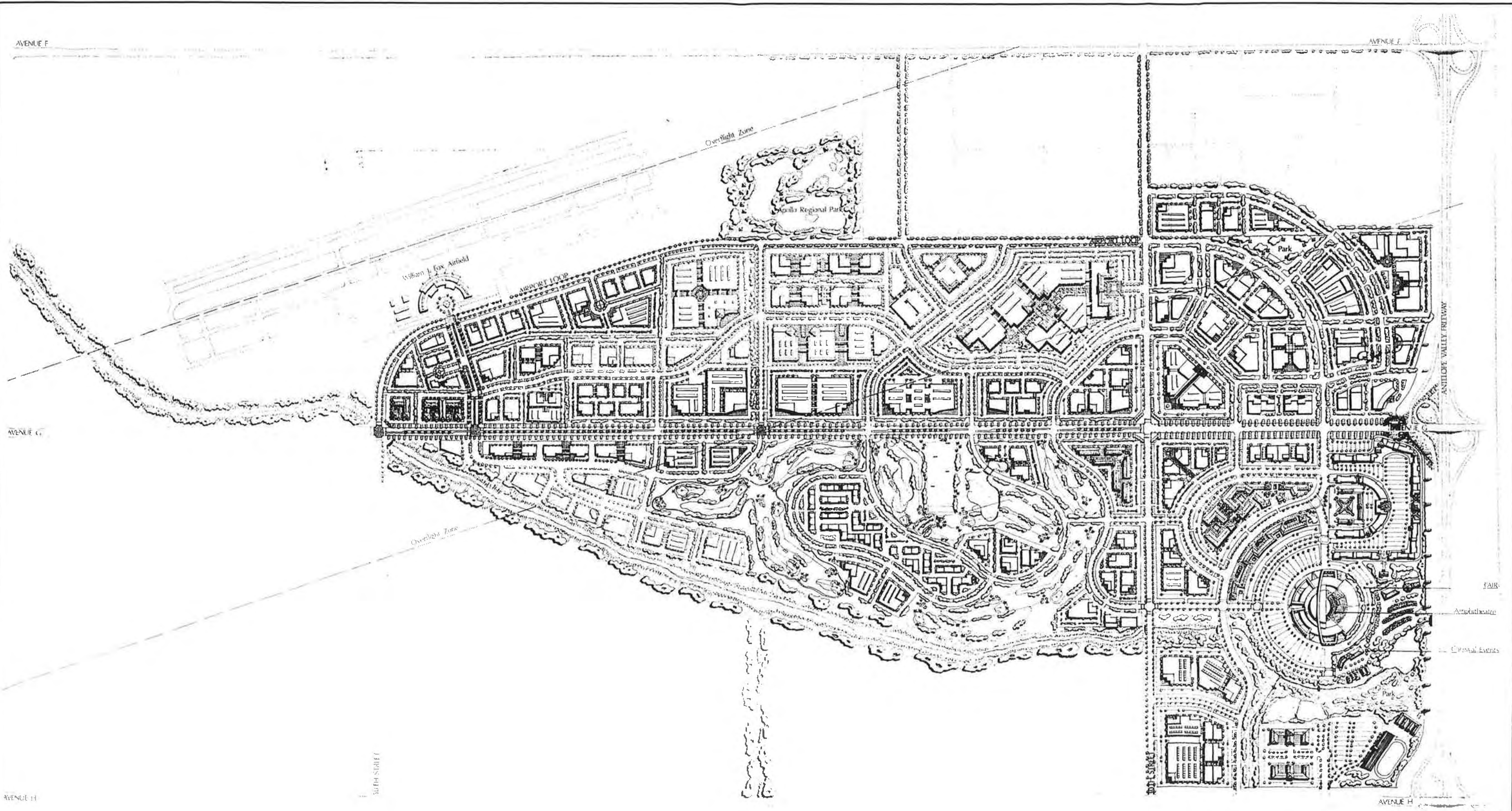
FOX FIELD INDUSTRIAL CORRIDOR
Project Phasing • Phase 3



Source: Langdon • Wilson

FOX FIELD INDUSTRIAL CORRIDOR
Project Phasing • Phase 4

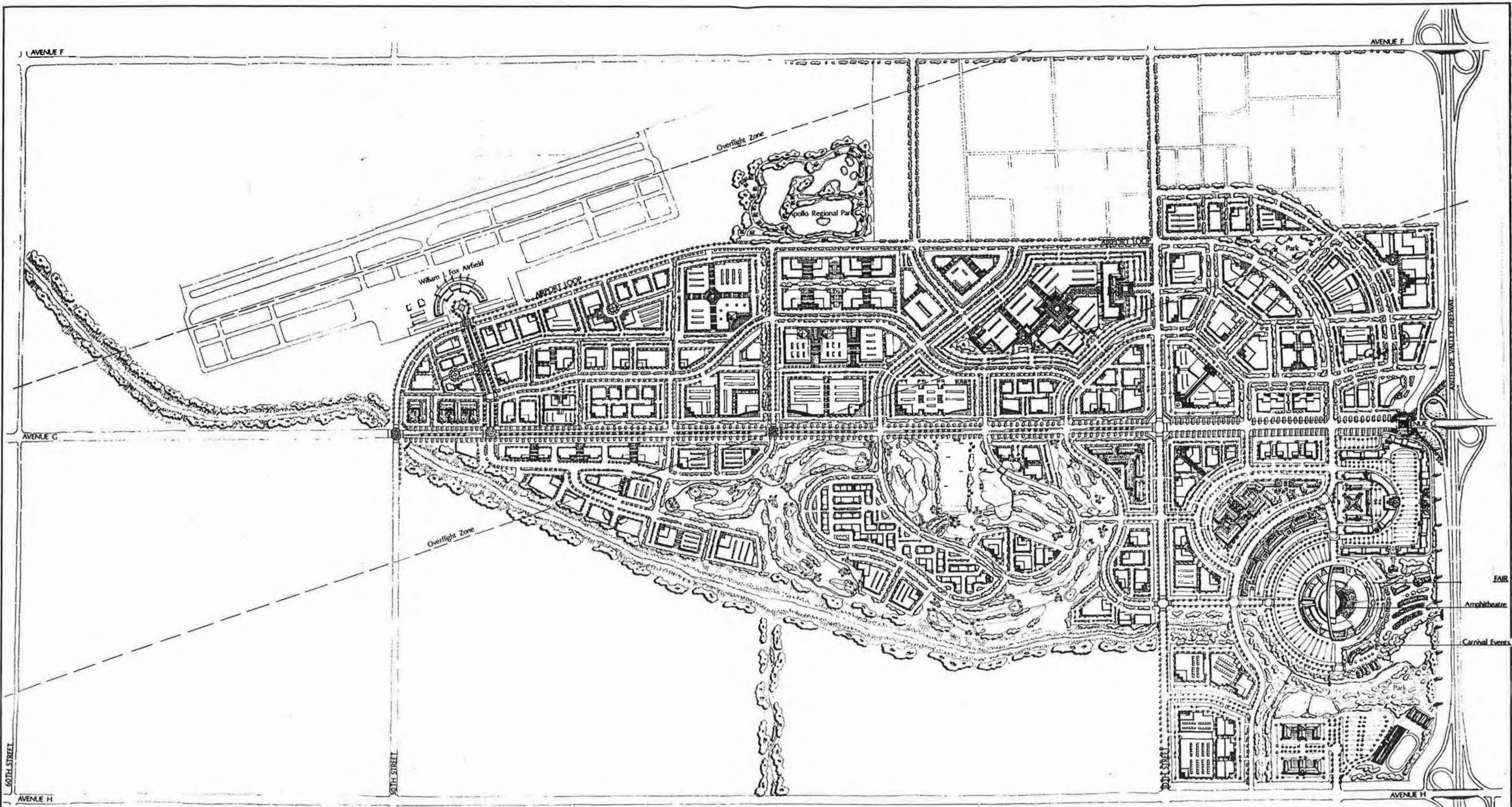




Source: Langdon • Wilson

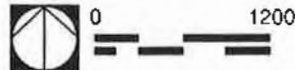
FOX FIELD INDUSTRIAL CORRIDOR
Project Phasing • Phase 5





Source: Langdon • Wilson

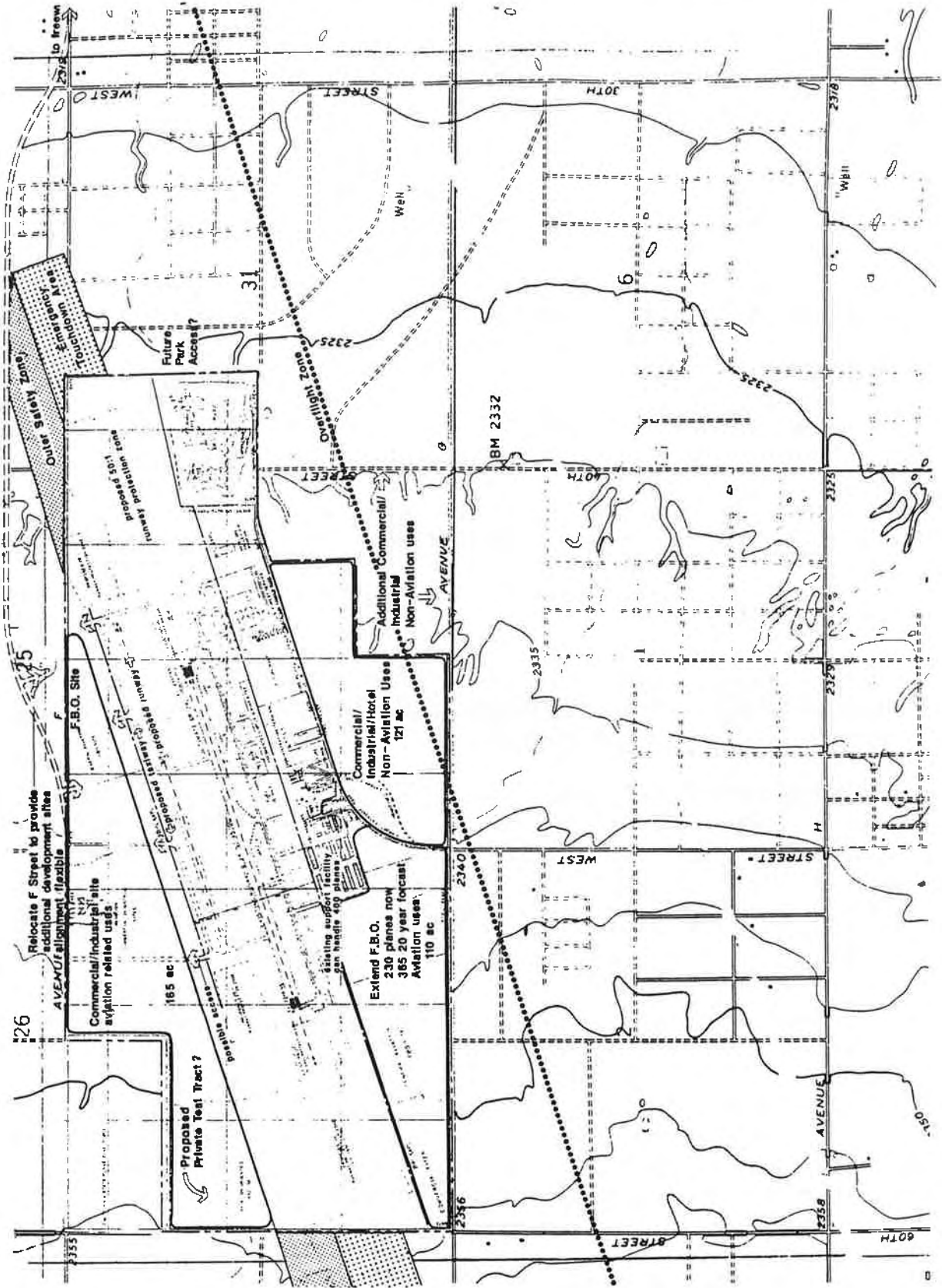
FOX FIELD INDUSTRIAL CORRIDOR
Project Phasing • Phase 6



**TABLE 5
CIRCULATION IMPROVEMENT PHASING**

<i>Phase</i>	<i>Improvements</i>
Phase 1	<ul style="list-style-type: none"> • Bridge Widening to four lanes (Avenues G and H) • Freeway on-off ramp widening to two lanes intersection only (Avenue G/South northbound) • Traffic Signals (5) • Avenue G: four lanes between freeway and 30th Street
Phase 2	<ul style="list-style-type: none"> • 30th Street four lanes between G-8 and the Airport Loop Road • Traffic Signals (6) • Avenue G: Add two lanes between the freeway and 30th Street • Build additional "take-off" lane from northbound freeway to Avenue G
Phase 3	<ul style="list-style-type: none"> • Avenue H: four lanes between the freeway and 30th Street • Avenue H: Bridge (four lanes) over earthen channel • Avenue G: four lanes from 30th Street to 50th Street • Bridge widening to four lanes (Avenue H) • Traffic signals (3) on Avenue H • Freeway on/off ramp widening to two lanes on Avenue H at intersection only • 30th Street: four lanes between G-8 and Avenue H • 30th Street Bridge at drainage channel (four lanes)
Phase 4	<ul style="list-style-type: none"> • Avenue H: addition of two lanes (six lanes total) between the freeway and 30th Street; • Widen Avenue H Bridge to six lanes; • Traffic Signals (3); • Construction of an additional "take-off" lane from northbound freeway to Avenue H; • Construction of Airport Loop Drive

Note: Phases 1-4 comprise the build-out of the Fox Field East and West Planning Areas.



FOX FIELD INDUSTRIAL CORRIDOR
Airport Hazard Zones

2. Planning Zones

The following are the recommended sizes of planning zones for Fox Field. The size and location of the zones selected for Fox Field are shown on Exhibit 25, *Airport Hazard Zones*, and Table 6.

a. Inner Safety Zone

Includes the obstruction free zone as defined in Federal Aviation Advisory Circular 150/5300-13. Except for aids to navigation, no structures are recommended. This area is immediately beyond the end of each runway. Its size is based on aircraft activity, type and the type of approach/departure assigned to the runway.

For a Precision Instrument Runway, the inner safety zone or runway protection zone starts 200 feet beyond the runway, is 1,000 feet wide nearest the runway, is 1,700 feet long, and the outer dimension is 1,425 feet.

For a visual runway, the inner safety zone starts 200 feet beyond the end of the runway, is 250 feet wide nearest the runway, is 1,000 feet long, and the outer dimension is 450 feet.

b. Outer Safety Zone

This area includes land that is regularly overflowed in the airport traffic pattern. This zone includes the aircraft flight paths during the critical portions of landing and/or takeoffs and touch and go operations.

This zone does not utilize FAA criteria. The California Land Use Planning Handbook recommends areas that conform to major flight tracks be given additional consideration. The areas selected for Fox Field include those portions of the aircraft flight tracks during maneuvering to or away from the runways while conducting touch and go operations. The areas recommended include over 720 acres north of the airport.

c. Extended Runway Centerline Zones

These areas apply to Precision type runways. These areas are provided to recognize that these runways will be used during periods of inclement weather.

This zone is not included in FAA criteria. The California Land Use Planning Handbook recommends this area for precision runways. This area is 1,000 feet wide and extends 10,000 feet beyond the end of the precision runway.

d. Overflight Zone

This zone includes the envelope of aircraft flight paths associated with aircraft operations while in the airport traffic pattern and approaching and departing the airport. This zone is the largest of all areas associated with aircraft operations.

**TABLE 6
FOX FIELD PRELIMINARY AVIATION ZONES**

Aviation Safety Zones	Permitted Land Uses	Excluded Land Uses	Maximum Structural Coverage	Maximum People/Acre	Maximum People/Bldg	Maximum Residential Du/Ac
Inner Safety Zone	<ul style="list-style-type: none"> • Transportation Facilities • Agriculture 	<ul style="list-style-type: none"> • No structures 	N/A	25	N/A	N/A
Extended Runway Centerline (Precision Runway)	<ul style="list-style-type: none"> • Transportation facility • Industrial w/no hazardous products • Small office • Agriculture 	<ul style="list-style-type: none"> • No residences • No hotel/motel • No hazard industries • No major office • No shopping centers • No schools • No hospitals 	20% gross 30% net	25	150	N/A
Outer Safety Zone	<ul style="list-style-type: none"> • Transportation Facility • Commercial • Industrial/Office • Agriculture 	<ul style="list-style-type: none"> • No residential • No schools • No large assemblies of people • No hospitals 	20% gross* 30% net	50	150	N/A
Overflight Zone (Primary)	<ul style="list-style-type: none"> • Transportation Facility • Commercial • Industrial/Office • Agriculture • Residential 	<ul style="list-style-type: none"> • No schools • No hospitals 	40% gross* 50% net	65	450	4.5 gross (calculated on 1/4 square mile)
FAA Part 77 Zones	N/A	N/A	N/A	N/A	N/A	N/A

* Gross coverage to be calculated by dividing the total building coverage by 40 acres.

e. Structure Height Limitation Zone

Federal Aviation Regulations Part 77 "Objects Affecting Navigable Airspace" defines structural height limits around all airports that are available for public use. A public use airport is one that is open to the general public with or without a prior request to use the airport. Fox Field is a public use airport. This regulation has three criteria:

- Notice requirements;
- Obstructions Standards; and
- Hazard determination resulting from a specific aeronautical study.

The Part 77 criteria recommended for Fox Field is the obstruction standard. This criteria balances the needs of the airspace user and the use of properties beneath the Part 77 areas.