7.0 project impacts on land use, public facilities and services

7.0 PROJECT IMPACTS ON LAND USE PUBLIC FACILITIES AND SERVICES

7.1 Land Use and Population

Context

The 380 acre project site is vacant, existing as a fallow agricultural site, which has not been farmed for a number of years. The project site is situated within a larger surrounding area that is presently (or has been previously), used for agricultural purposes.

The project site along with the balance of the square mile section in which it is located has been designated in the City General Plan as a Specific Plan Area, anticipating a range of residential uses, supporting commercial and municipal activities, along with development of urban infrastructure (see Figure 3.1, in Section 3.2.1).

A related action which took place at the time of General Plan amendment involved the City Council's granting of "Conditional" Specific Plan Zoning. Once a final plan for Applicant's Project is adopted, it will set the standards for property development and will become project specific zoning regulations. (Refer to Section 3.0, "Project Description", for a complete description of proposed land uses; and, Section 5.0, "Implementation", for use and development/zoning standards.)

The project site is contained within the larger city planning area entitled, "East Valley Community Plan". This plan of some ± 15 square miles, is envisioned to address land use policy for an area that was previously considered agriculture, agricultural transition, or where land use was non-specific.

Project Impacts

The decision regarding the future use of Applicant's Project Site has been made by the Coachella City Council, in that they have indicated it should be used for urban purposes, versus rural, agriculture or other open space designation. Impacts in terms of land use (this project as opposed to another development program), are only subtly distinguishable, by the amounts and types of urban uses which are combined together. (See Section 8.5 for a discussion of alternatives to the proposed action). An inevitable and immediate consequence of the project is development of land that now exists in a vacant state. The proposed project will also involve other interim land use impacts to the degree development phases and improvements

influence present uses or urban conversion of adjacent or similarly situated properties. The Draft Specific Plan incorporates agricultural buffers and protection measures identified in landscape design guidelines.

The proposed project defines a mix of residential, commercial and municipal land uses. They have been arranged on the 380 acre site to take best advantage of the circulation system (i.e., commercial clustered near to the Highway 86/Avenue 52 interchange) and to provide a compatible transition among the project uses. To be consistent with the City of Coachella General Plan a number of policies must be addressed by the Specific Plan. (See Section 4.0, for a discussion of General Plan consistency.) In summary, General Plan goals and policies seek to have created attractive, safe and convenient neighborhoods with attendant amenities and support facilities. Goals and policies have the objective of providing housing choices for a broad segment of the population, while stimulating the economy with commercial/industrial development and employment opportunities. The General Plan cites Specific Plans as the methodology for seeking to achieve environmental compatibility.

For purposes of project resident population projection, the average household occupancy size within the Coachella Valley[1] has been used and applied to all contemplated residential uses in the proposed project. That factor is 2.97 persons per household, which is less than the 1988 City of Coachella estimate of 4.50 persons/household.[2] Household size in Coachella has historically been larger than in the other communities of the Coachella Valley, reflecting the predominantly Hispanic population of Coachella, in which large households and extended families are common.[3] Historically, Coachella has not had the large retirement populations which characterize other Desert Cities and contribute to lower household sizes in these cities.[4] Residents of Coachella have tended to be employed in the relatively low paying fields of agriculture, the hospitality industry, or retail trade, and the median income is correspondingly low.[5]

[1] Source: Coachella Valley Association of Governments, "Regional Housing Needs Analysis", April 3, 1989.
[2] Source: Department of Finance
[3] Source: Housing Element, City of Coachella General Plan, January 1990.
[4] Ibid.
[5] Source: CVAG Regional Housing Needs Analysis, April 1989.

Since the project area is to be served by a major transportation link (Highway 86), project residents may work in a variety of occupations throughout the valley and can be expected to present a profile more closely resembling that of the subregion than of Coachella. While the project is not specifically designed for retirement, the proposed patio homes and attached units (as well as the amenities in this and neighboring developments) may be attractive to seniors, resulting in a higher percentage of retiree households than is currently found in Coachella. In general, the mix of single-family detached homes, patio homes, and attached units is projected to attract a mix of families, singles and retirees representative of valley-wide trends. In accordance with the Housing Element's support of efforts to collect and develop accurate data as a basis for realistic decision making (page 29, Goal 2, Program 7), a factor (2.97) which reflects a reasonable estimate of future household size based on current subregional patterns was considered more appropriate than a factor based on Coachella's historical occupancy pattern. The nature of this and other proposed projects suggests that with future development, Coachella as a whole will move closer to the mean occupancy characteristic of the subregion. The Southern California Association of Government's projections for the year 2010 yield an estimated household size for the four census tracts which include portions of Coachella of 2.88. The Applicant's Project provides for 1,326 dwelling units which could yield a projected population of up to 3,938 persons over a ten year period. The balance of the Specific Plan Area, if it were to develop within the Medium Low Density Residential land use range (3.5 to 5.5 dwelling units per acre), could after subtracting a factor of 25% for streets, result in an additional 682 to 1,072 dwelling units. Over the entire square mile Specific Plan Area, the housing density would be 3.1 to 3.7 dwelling units per acre, with a human population of 5,964 to 7,122 persons, which could add one half again to the current City population estimate of 14,115, by the State Department of Finance (as of January 1, 1989).

Mitigation Measures

The phased conversion of the Applicant's Project area from rural to urban land use involves all of the attendant primary and secondary impacts associated with development of vacant property, but if it is implemented in accordance with the regulations, standards and guidelines of the Specific Plan along with any conditions assigned in the City review/approval process it will be consistent with the body of City policy for land use.

As mentioned, impacts of a land use nature will occur in the course of phased development. These will primarily consist of conflicts between urban and remaining agricultural operations. Interim impacts may be mitigated by appropriate development phasing and provision of buffers between non-project lands.

7.2 Traffic and Circulation

A Traffic Impact Analysis was prepared for the Brandenburg-Butters project, by Linscott, Law and Greenspan, engineers, dated August 9, 1989 and revised on May 11, 1990. A detailed summary of this study, which is contained in the technical appendices, is presented below.

Context

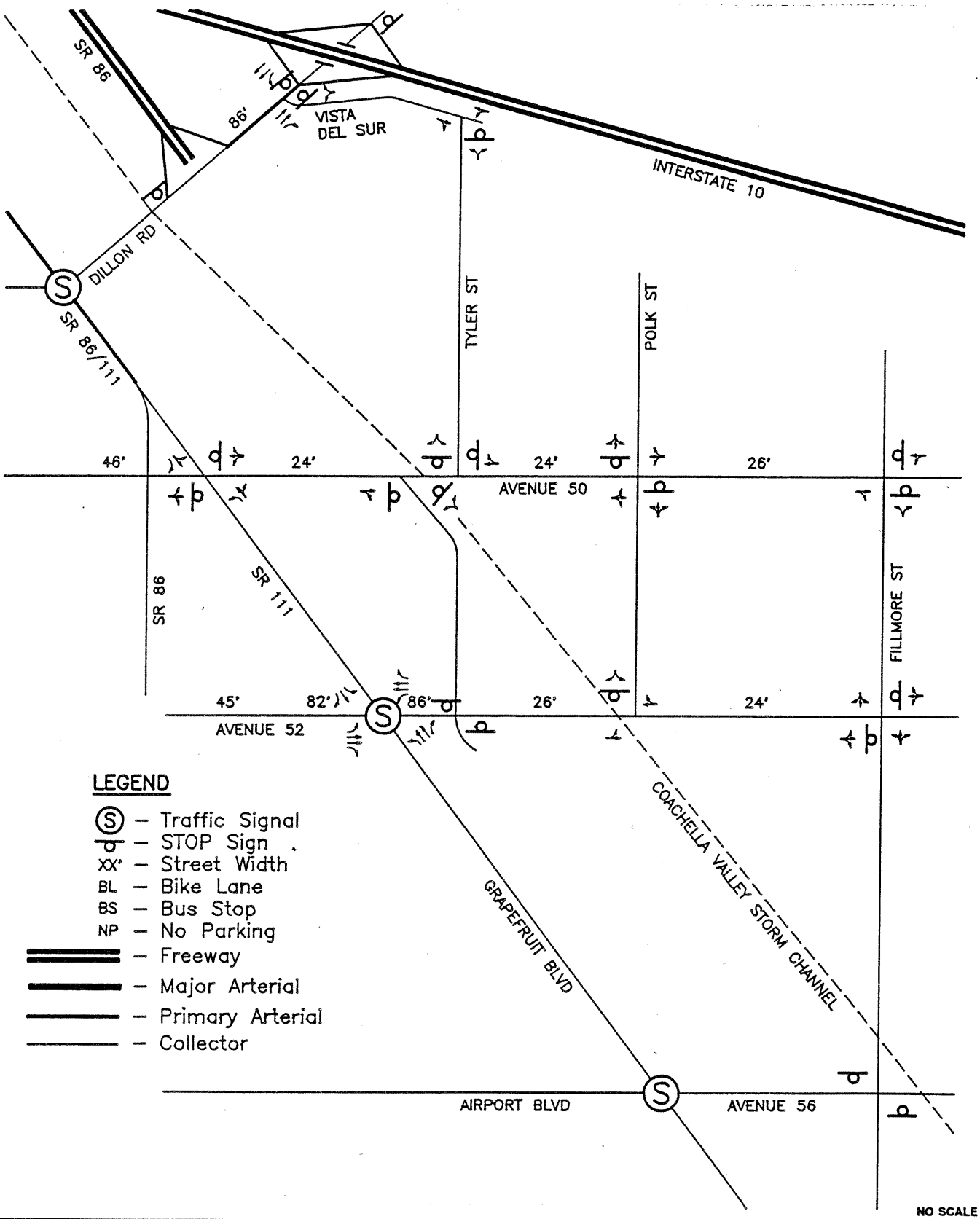
Existing Street System

Immediate access to the project site will be from Polk Avenue, Avenue 50 and Avenue 52. Regional access will primarily be from Highway 111, Interstate 10 and future Highway 86. Exhibit 7.1 shows the Existing Condition Diagram.

Major Arterials are the largest street section with 120 feet of R/W. Primary Arterials are in 110 feet of R/W. Secondary Arterials are in 100 feet of R/W. Collectors are in up to 72 feet of R/W.

Highway 111 (Grapefruit Boulevard)

Highway 111 (SR-111) is classified as a Major Arterial north of and a Primary Arterial south of Avenue 50. It serves as a major carrier of regional traffic into the site area due to its present connection, via Dillon Road, with Interstate 10 (I-10). Two lanes of travel are provided in each direction between Avenue 52 and Airport Boulevard. There is one lane each way north of Avenue 52. Curbs are in place intermittently along the west side of Highway 111, while the east side is a continuous pavement edge with level sandy shoulders. Left-turn pockets are provided at major intersections, as well as at those smaller streets which lead into the downtown area. Highway 111 is signalized at Avenue 52. It is posted at 40 mph and 55 mph. Existing two-way daily traffic volumes on SR-111 are in the range of 12,000 - 15,000 vehicles per day (vpd).



NO SCALE

DRAWING TITLE:

EXISTING TRAFFIC CONDITIONS

N

Smith, Peroni & Fox

SOURCE: Linscott, Law & Greenspan

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FIGURE # 7.1

Avenue 50

Avenue 50 is classified as a Primary Arterial west of Highway 86 and a Collector east of Highway 86. It forms the northern-most four-legged intersection with Highway 111 inside Coachella City limits and will provide access to the site area from the west. Avenue 50 is STOP controlled in the eastbound and westbound directions of Highway 111. The Southern Pacific Railroad tracks are located roughly 120 feet east of the intersection. No crossing gates are provided to stop traffic at this location.

Starting from Highway 111, Avenue 50 extends eastward with a 25-foot wide two-lane section, divided by a broken yellow line. A sag crossing exists at the Coachella Valley Storm Channel, where the pavement width narrows slightly to 22 feet. Rough, sandy shoulders are present on Avenue 50 for the entire distance between Highway 111 and its eastern terminus at Fillmore Street. Westbound and southbound traffic at the eastern of the two intersections with Tyler Avenue is STOP controlled. Eastbound and northbound traffic are STOP controlled at the westerly intersection. Avenue 50 is posted at 45 mph.

Avenue 52

Avenue 52 is classified as a Major Arterial west of Highway 86, a Secondary Arterial east of Highway 86 and a Collector east of Fillmore Street. At the Highway 111 intersection, Avenue 52 exists as an 86-foot wide curb-to-curb section on the east leg, with two through lanes and a single left-turn lane on the westbound approach. The west leg is 82 feet in width with an abrupt transition down to a 45-foot section as the road extends westward into a residential neighborhood. The Highway 111/Avenue 52 intersection is signalized with separate left-turn phasing for the north and southbound approaches. East of this intersection, railroad crossing gates and signals are provided. Curbed raised medians provide for left-turning movements at the intersection of Tyler Street/Industrial Way.

Further to the east of the Tyler Street intersection, the 86-foot curb-to-curb dimension narrows to a 20-foot width. Development at this location changes from commercial to agricultural uses on both sides of the street. From the narrow section east of Tyler, continuing to Fillmore Street, Avenue 52 has one lane of travel in each direction, separated by a single broken yellow line. No curbs exist along these segments, and roadway widths vary from 20 to 26 feet with poor pavement and

loose shoulders. A sag crossing exists at the storm channel slightly west of Polk Street. Avenue 52 traffic is stop controlled at Fillmore Street. It is posted at 35 mph west of Highway 111.

Polk Street

Polk Street is a non-designated north-south roadway extending from an undercrossing beneath the I-10 Freeway south to a "T" intersection at Avenue 52. Traffic flow on Polk is controlled by STOP signs at the Avenue 50 and 52 intersections, while east-west traffic is not STOP controlled. Adjacent to the proposed property west boundary (between Avenues 50 and 52), Polk Street is a two-lane street, 24 feet in width, without curbs or a center line. It is unpaved north of Avenue 50.

Tyler Street

Tyler Street is a non-designated north-south roadway from Vista Del Sur to Avenue 52. An alignment deviation occurs at its intersection with Avenue 50 due to an existing sag crossing creating two separate T-intersections. Tyler Street is controlled by STOP signs at the Vista Del Sur, Avenue 50 and Avenue 52 intersections. Currently, Tyler Street varies between 24 and 26 feet wide with one travel lane in each direction. The speed limit is posted at 35 mph.

Fillmore Street

Fillmore Street is the first north-south Collector between Avenue 52 and Airport Boulevard. Its entire length extends from Avenue 50 south to Avenue 58 and carries one lane of traffic in each direction. A single broken yellow line separates the northbound and southbound lanes. Street widths on Fillmore are 22 feet except for a 20-foot section over a narrow bridge just south of Avenue 52, and 25 feet in width near Airport Boulevard. No curbs exist on Fillmore, and shoulders consist of wide, sandy areas. Traffic is STOP controlled at the Airport Boulevard intersection.

Airport Boulevard

Airport Boulevard is classified as a Major Arterial west of SR-86 and is not designated east of SR-86. It is the major east-west street through the City of Thermal and is STOP controlled at Highway 111. Roadway cross-sections measure 35 feet east of Fillmore. A 25-foot wide bridge which crosses the storm channel (Whitewater River) is located on Airport Boulevard. This is the only permanent crossing of the channel in the area.

Existing Traffic Volumes

Table 7.1 is a summary of recent traffic counts in the area. Machine counts conducted by the County of Riverside and by Caltrans District 8 reflect daily traffic volumes in the project area. Exhibit 7.2 shows the existing PM peak hour turning moves and Average Daily Traffic (ADT) volumes for the surrounding street segments. In general, volumes are light in the project area, however traffic on Highway 111 is approaching the capacity of its two lane segments.

Relevant Circulation Plans

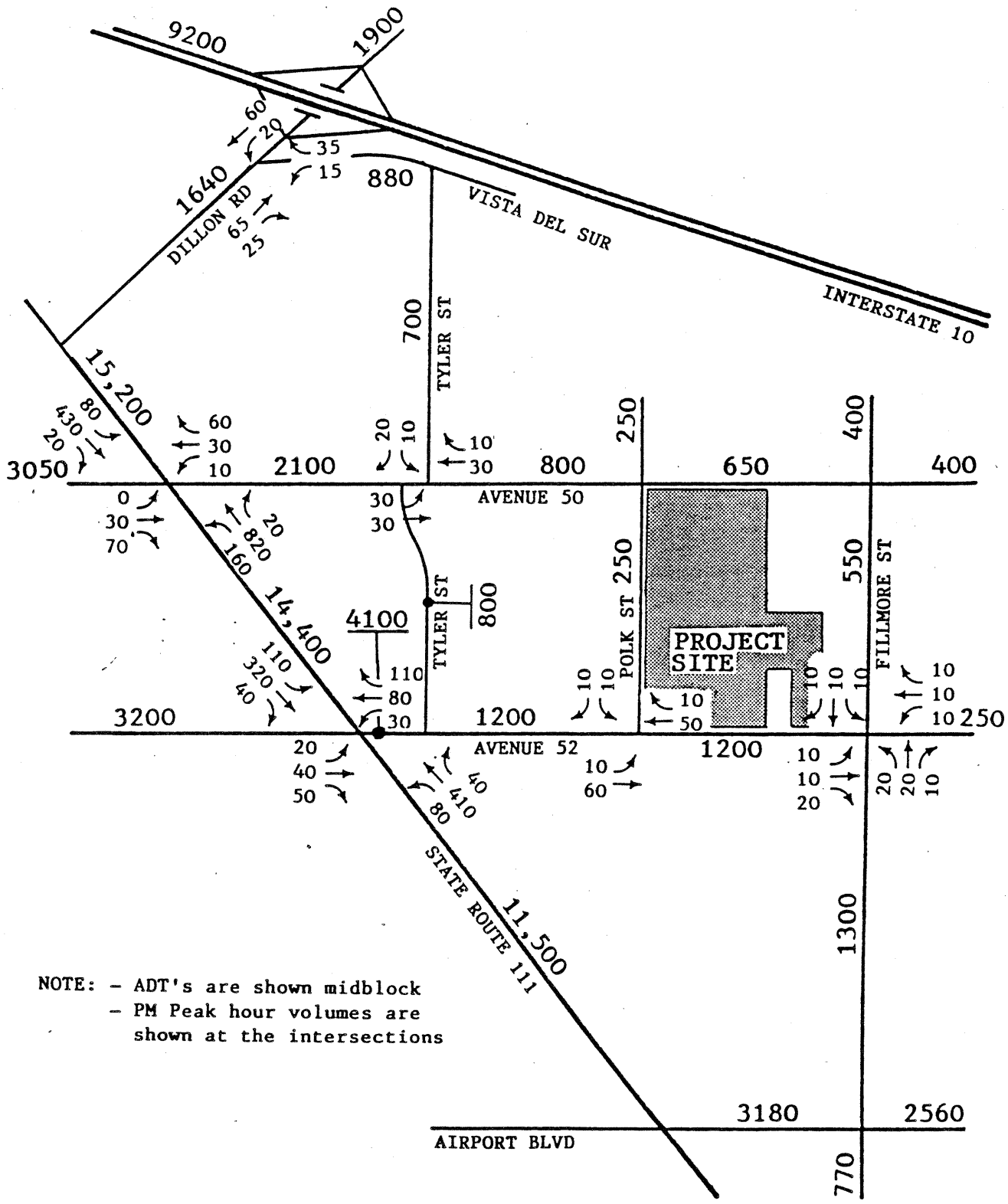
City of Coachella

The Circulation Element of the Coachella General Plan details the general location and extent of the circulation system required to serve future traffic demands associated with build-out per the Land Use Element of the General Plan. Exhibit 7.3 illustrates the master planned circulation system in the project vicinity.

Avenue 50 (west of Fillmore Street) and Fillmore Street (south of Avenue 50) are planned as Collector streets which provide two travel lanes with a 40-48 foot curb-to-curb width in a 64-72 foot right-of-way. Avenue 52 is planned as a Secondary Arterial from Fillmore Street westerly to the planned State Highway 86 alignment (where a new interchange is planned). Secondary Arterials provide four travel lanes with 76 feet curb-to-curb and a 12-foot median within a 100-foot right-of-way.

TABLE 7.1
EXISTING TRAFFIC VOLUMES

STREET/LOCATION	DATE	DIR	24-HOUR VOLUME	PM PEAK HOUR BEGAN	VOL
Highway 111 n/o Avenue 50	1988	Total	15,200		
Highway 111 n/o Avenue 52	1988	Total	14,400		
Highway 111 n/o Avenue 56	1988	Total	11,500		
Highway 86 n/o Avenue 50	1988	Total	17,100		
Highway 86 n/o Avenue 52	1988	Total	15,400		
Highway 86 n/o Avenue 56	1988	Total	11,300		
Avenue 50 e/o Highway 86	1989	Total	3,050E		
Avenue 50 e/o Highway 111	1989	Total	2,100E		
Avenue 50 e/o Tyler Street	1989	Total	800E		
Avenue 50 e/o Polk Street	1989	Total	650E		
Avenue 50 e/o Filmore Street	1989	Total	400E		
Avenue 52 e/o Highway 86	1989	Total	3,200E		
Avenue 52 e/o Highway 111	1989	Total	4,100E		
Avenue 52 e/o Tyler Street	1989	Total	1,200E		
Avenue 52 e/o Polk Street	1989	Total	1,200E		
Avenue 52 e/o Filmore Street	1989	Total	250E		
Tyler Street n/o Avenue 50	1989	Total	700E		
Tyler Street n/o Avenue 52	1989	Total	800E		
Polk Street n/o Avenue 50	1989	Total	250E		
Polk Street n/o Avenue 52	1989	Total	250E		
Filmore Street n/o Avenue 50	1989	Total	400E		
Filmore Street n/o Avenue 52	1989	Total	550E		
Filmore Street n/o Avenue 56	1989	Total	1,300E		
Highway 111 @ Avenue 50	3/88	NB	Manual		1,000
		SB	Count		530
		EB			100
		WB			100
Highway 111 @ Avenue 52	3/88	NB	Manual		530
		SB	Count		470
		EB			110
		WB			220
Avenue 50 @ Tyler Street	3/88	SB	Manual		30
		EB	Count		60
		WB			40
Avenue 52 @ Polk Street	3/88	SB	Manual		20
		EB	Count		70
		WB			60
Avenue 52 @ Filmore Street	3/88	NB	Manual		50
		SB	Count		30
		EB			40
		WB			30
Dillon Road & Vista Del Sur	3/88	NB	Manual		90
		EB	Count		80
		WB			50



NOTE: - ADT's are shown midblock
- PM Peak hour volumes are shown at the intersections

NO SCALE

DRAWING TITLE:

EXISTING TRAFFIC VOLUMES PM PEAK - ADT

N

Smith, Peroni & Fox

SOURCE: Endo Engineering / Linscott, Law & Greenspan

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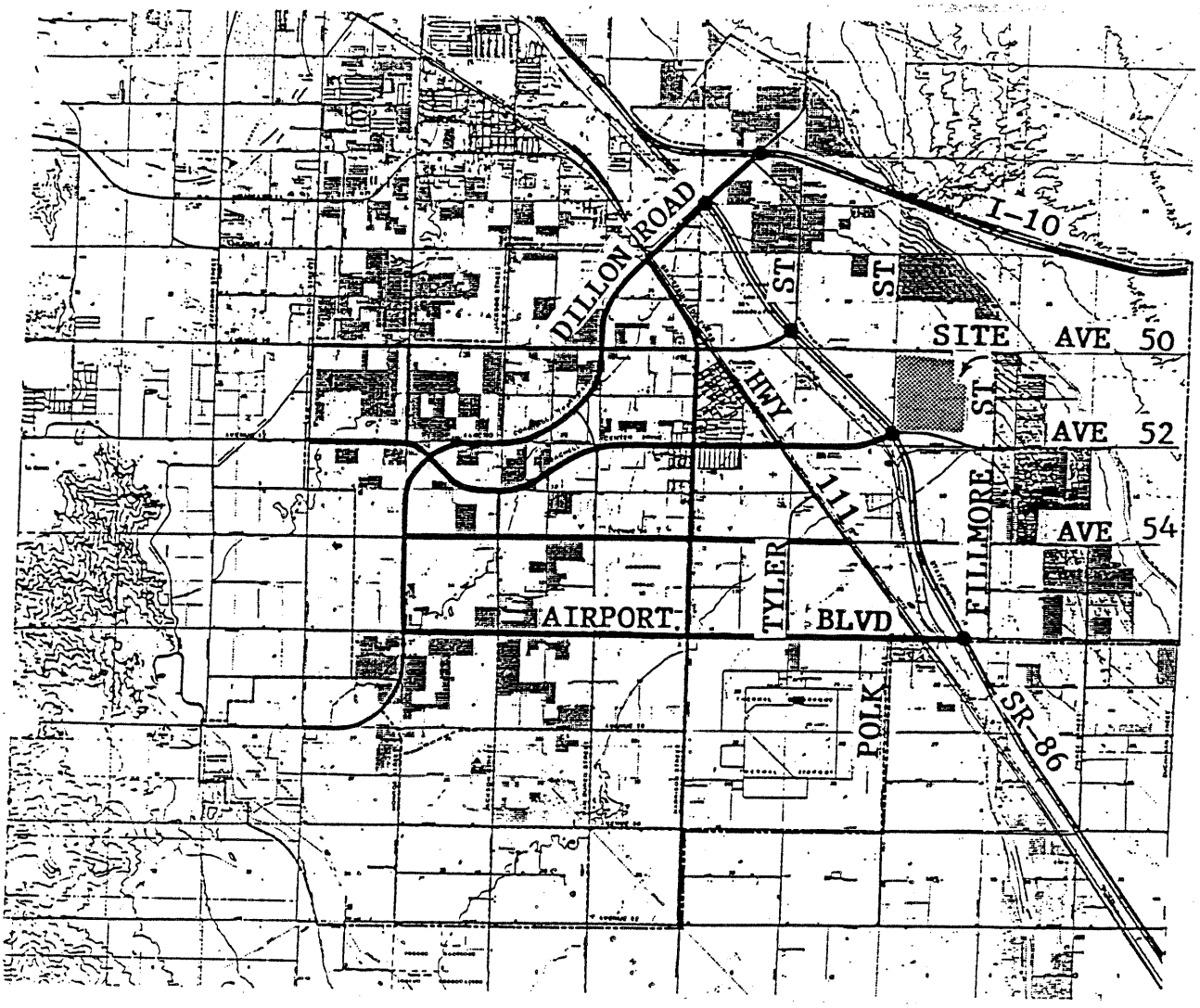
FIGURE # 7.2



LEGEND

CIRCULATION CLASSIFICATION

- FREEWAY
- INTERCHANGE
- MAJOR ARTERIAL
- PRIMARY ARTERIAL
- SECONDARY ARTERIAL
- COLLECTOR
- EXISTING STREETS (NOT DESIGNATED)

Source: City of Coachella General Plan Update

NO SCALE

DRAWING TITLE:

CITY OF COACHELLA CIRCULATION ELEMENT

N

Smith, Peroni & Fox

SOURCE: Endo Engineering / Linscott, Law & Greenspan

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C O A C H E L L A 3 8 0

FIGURE # 7.3

The Route 86S Freeway is a planned 6-lane freeway along the Coachella Valley Storm Channel east of State Highway 111. Within the project vicinity, grade separated interchanges are planned at Dillon Road, Fourth Street, Avenue 50, Avenue 52, and Airport Boulevard. Initially, SR 86S will be constructed as an at-grade 4 lane expressway, with an expected completion date of 1993.

Caltrans anticipates a 5 to 6 year construction build-out period for the Route 86S Freeway. Traffic volume projections for the point when the freeway opens are in the range of 9,000 - 10,000 ADT. Ultimate projections indicate 18,600 ADT by the year 2005. This is consistent with the City population growth forecasts for the same period which indicate that the current population of 14,000 will grow to 22,000-28,000 by the year 2005.

Coachella Valley Area Transportation Study

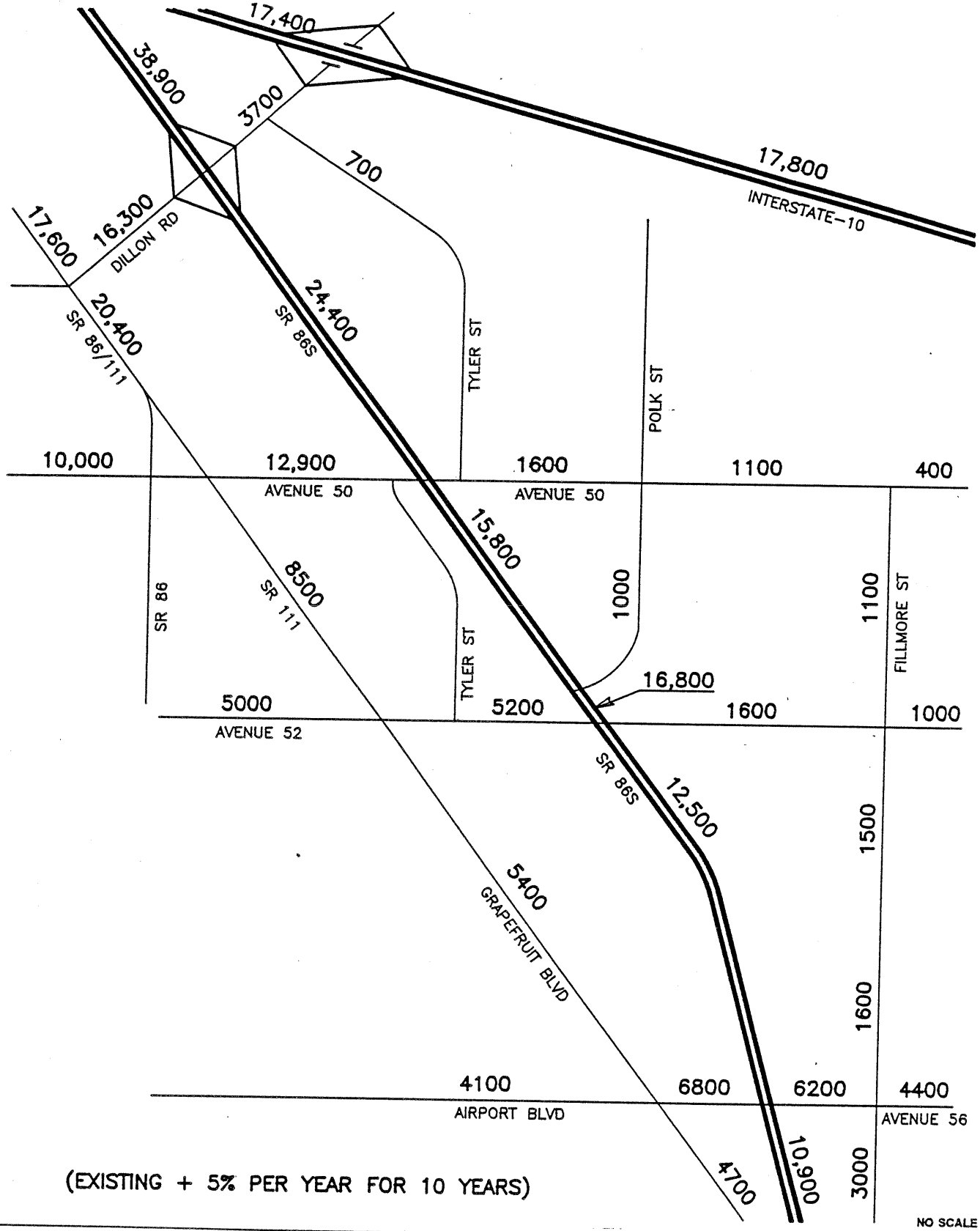
The Coachella Valley Area Transportation Study (CVATS) is the result of an effort to develop a highway improvement plan to accommodate growth through the year 2010. Preliminary investigations indicated the need for transportation facility improvements in the Coachella Valley.

An analysis of the recommended year 2010 highway system revealed that the proposed system will be able to properly mitigate the bulk of the projected year 2010 capacity deficiencies.*

Background Traffic

The background traffic volumes were derived from the Kunzman traffic reports for the Lusardi and McNaughton Specific Plans. These volumes were calculated by expanding existing volumes by 5% per year for 10 years to the design year of 1999. Background volumes do not include traffic from the B&B, Slater, Lusardi & McNaughton projects. Exhibit 7.4 shows the background volumes with SR 86S constructed as a 4-lane expressway with at-grade inter-sections. Exhibit 7.5 shows the expected condition diagram after mitigation for background traffic.

* Coachella Valley Area Transportation Study, Southern California Association of Governments, December, 1987.



(EXISTING + 5% PER YEAR FOR 10 YEARS)

NO SCALE

DRAWING TITLE:

BACKGROUND TRAFFIC VOLUMES WITH SR 86, ADT's

N

SOURCE: Linscott, Law & Greenspan

Smith, Peroni & Fox

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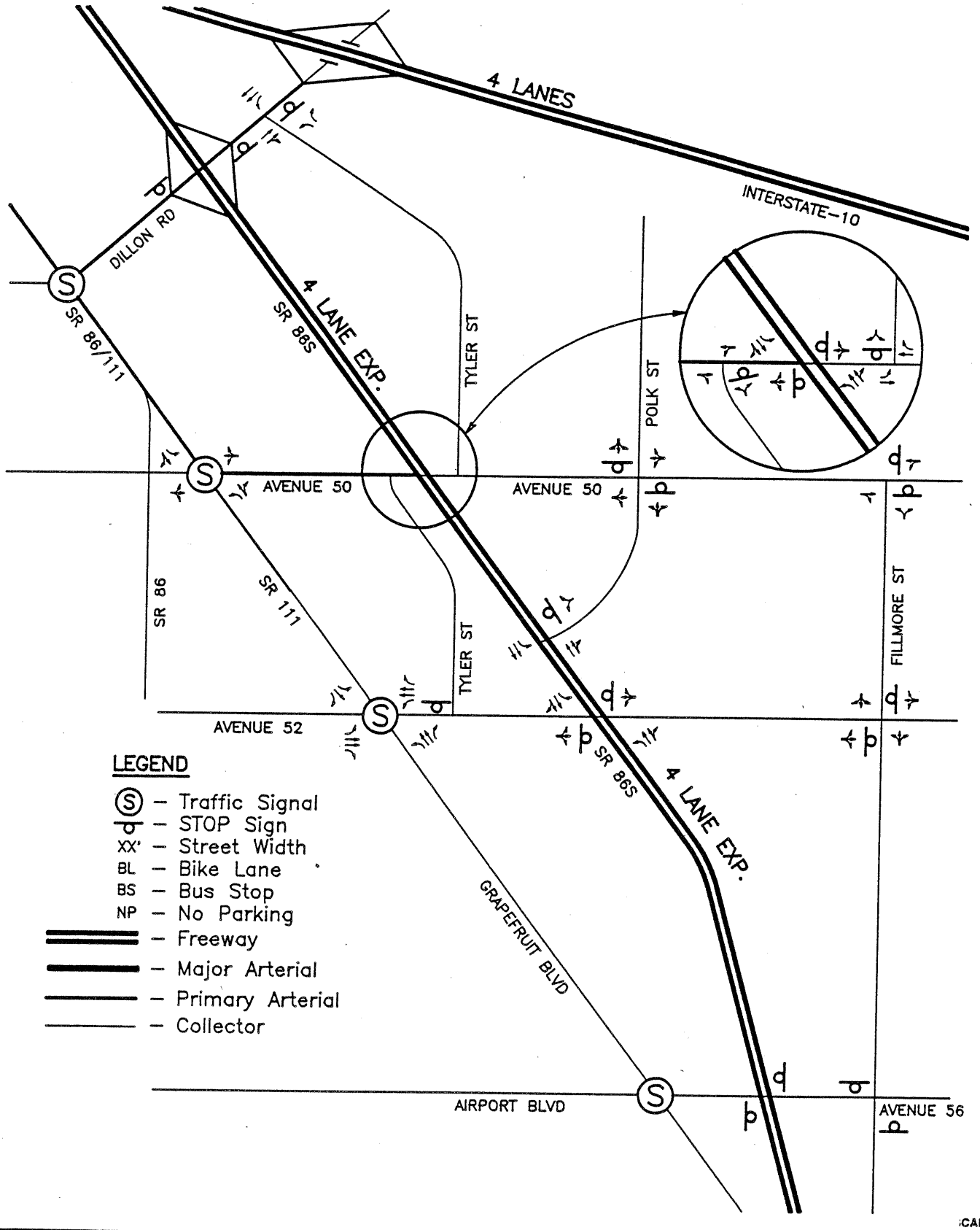
C O A C H E L L A 3 8 0

FIGURE # 7.4



SCALE

DRAWING TITLE:

MITIGATED CONDITION DIAGRAM FOR BACKGROUND TRAFFIC

SOURCE: Linscott, Law & Greenspan

Smith, Peroni & Fox

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FIGURE # 7.5

Project Impacts

Traffic Generation

The estimated number of daily trips and peak hour rates to be generated by the project are based on traffic generation rates published by ITE (4th Edition 1987). A number of adjustments were made to the rates to avoid double counting and to insure an accurate depiction of trips that would be generated by the proposed mix of uses within the Brandenburg & Butters Specific Plan. It was assumed that 25% of the commercial trips would be pass-by. It was assumed that 10% of the residential trips would interact with the commercial uses.

Table 7.2 shows the traffic generation calculations for proposed developments within the Brandenburg & Butters Specific Plan. The proposed project is estimated to generate 41,080 external daily trip ends with 1,940 inbound and 1,810 outbound trips during the PM peak hour.

Traffic Distribution

The estimated traffic to be generated by the project was distributed to the roadway system based on existing and proposed roadway configurations, desired travel routes, regional employment/shopping areas and anticipated site access roadway characteristics. Exhibit 7.6 identifies the anticipated percentage distribution for the proposed project with the completion of Highway 86S.

Traffic Assignment

The project generated traffic was assigned to the surrounding street system. Primary factors in route selection are minimum time and distance paths along with the generalized traffic direction.

Exhibit 7.7 shows the total project only trip assignment on a daily basis with Highway 86S. Exhibit 7.8 shows the background plus project daily traffic volumes.

Related Projects Traffic

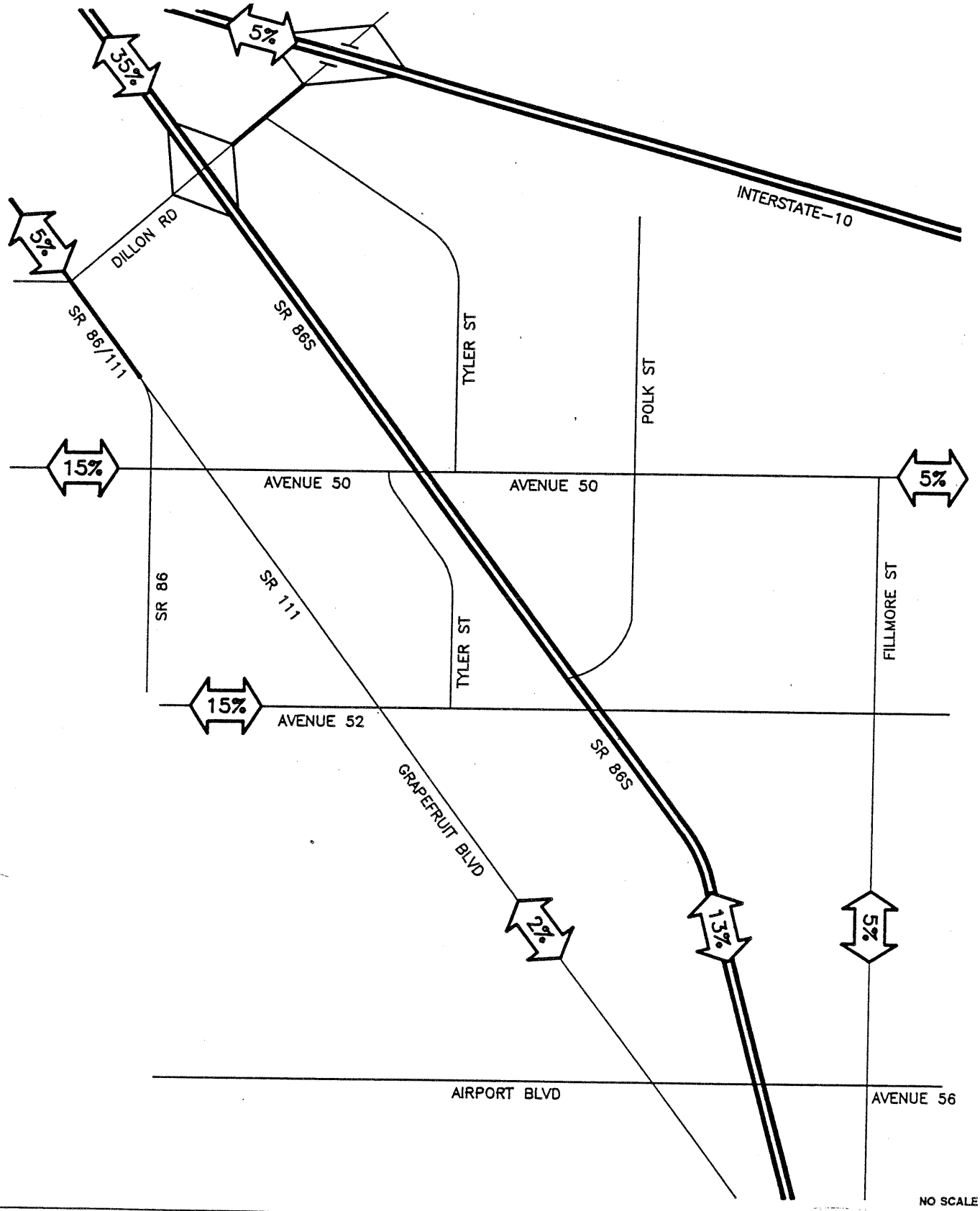
Three related projects were included in the analysis to determine overall cumulative impacts in the project area. More details on this subject may be found in the original Traffic Impact Analysis in the Technical Appendix.

TABLE 7.2
PROJECT TRAFFIC GENERATION

USE	SIZE	DAILY TRIP ENDS FACTOR	DAILY TRIP ENDS VOLUME	PM PEAK HOUR FACTOR IN	PM PEAK HOUR FACTOR OUT	PM PEAK HOUR VOLUME IN	PM PEAK HOUR VOLUME OUT
Medium Low Density SFD	739 DU	9.06	6,690	0.61	0.36	450	265
Medium High Density SFD	250 DU	9.67	2,420	0.64	0.38	160	95
High Density Multi-FD	337 DU	5.31	1,790	0.34	0.18	115	60
Neighborhood Commercial	157 TSF	63.5	9,960	2.45	2.58	385	405
Regional Commercial	499 TSF	36.8	18,380	1.57	1.77	785	885
General Commercial	287 TSF	46.3	13,280	1.83	2.07	525	595
Park	6 AC	5.9	40	--	--	10	10
Municipal Use	4.5 AC	2.6	10	1.11	1.11	5	5
TOTAL			52,570			2,435	2,320
PASS-BY TOTAL			41,080			1,940	1,810

SOURCE: Generation Factor from ITE, 1987 4th Edition

1. Factor is a trip end per acre, 1,000 square feet or dwelling unit.
2. Trip ends are one-way traffic movements, entering or leaving.
3. All numbers rounded to nearest 5.
4. 25% Pass-by trip reduction used for regional and general commercial.
5. 10% trip reduction for commercial/residential interaction.



NO SCALE

DRAWING TITLE:

REGIONAL TRAFFIC DISTRIBUTION

N

SOURCE: Linscott, Law & Greenspan

Smith, Peroni & Fox

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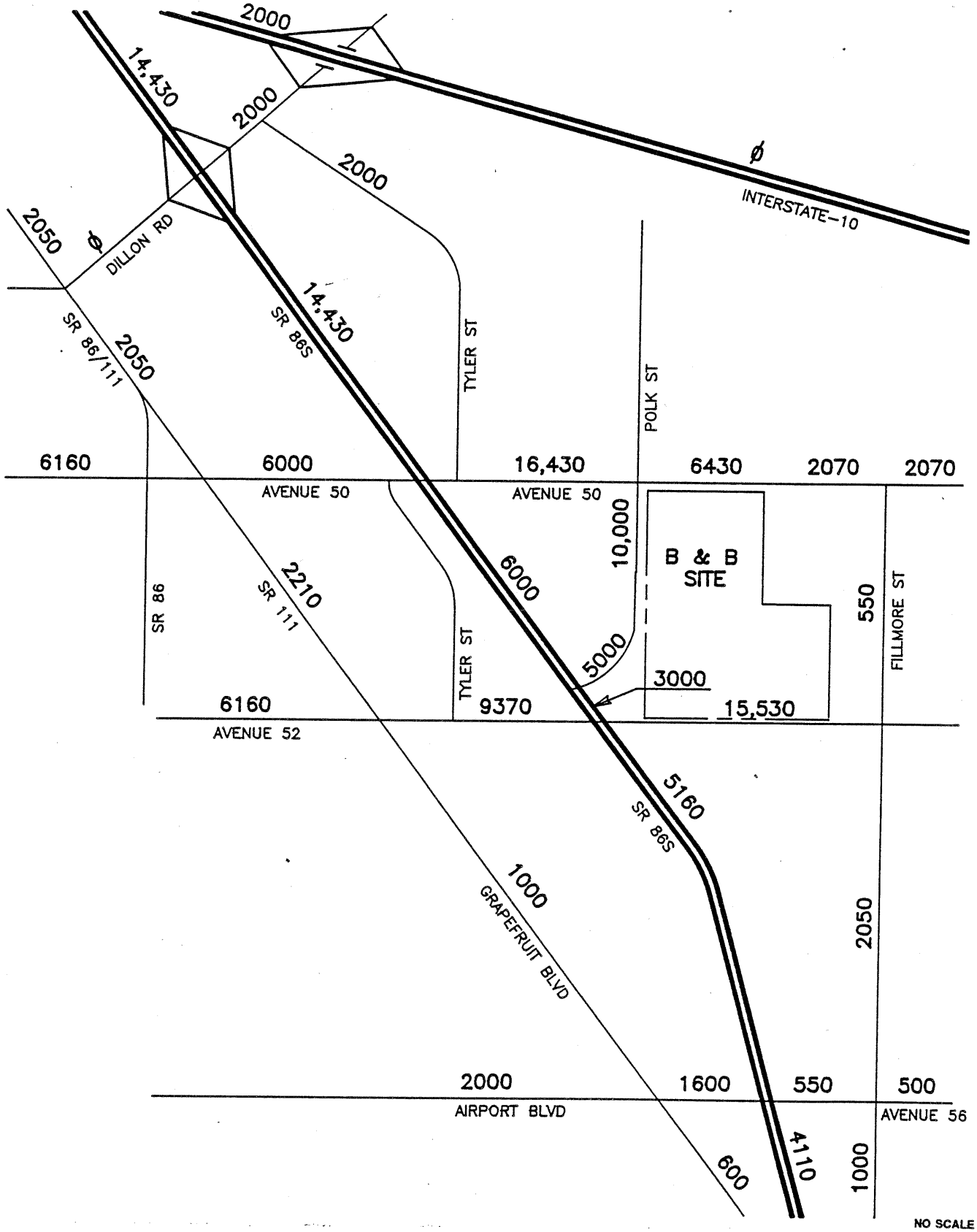
FIGURE # 7.6



NO SCALE

DRAWING TITLE:

PROJECT TRAFFIC VOLUMES W/ ROUTE 86

N

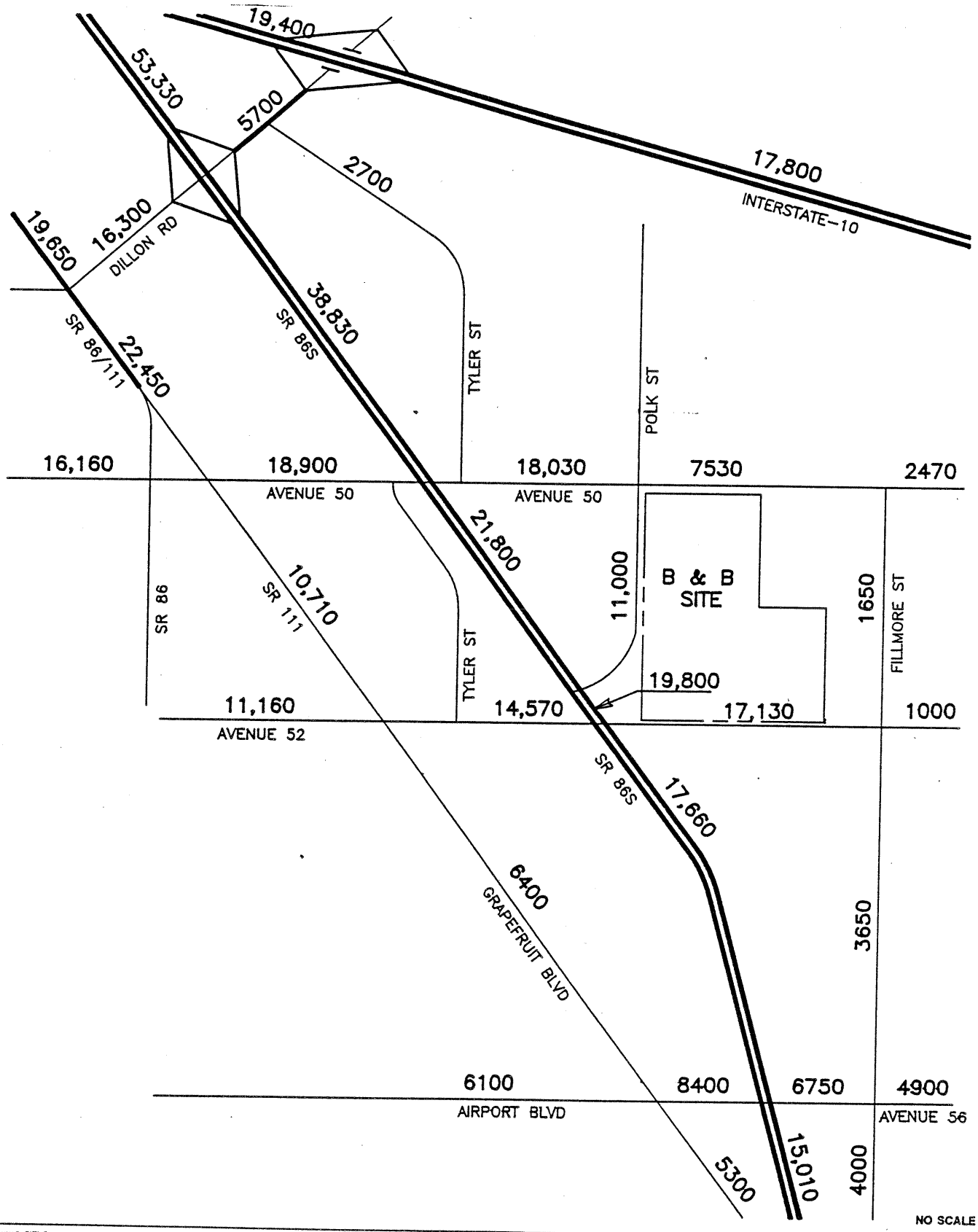
Smith, Peroni & Fox

SOURCE: Linscott, Law & Greenspan

brandenburg | butters

C O A C H E L L A 3 8 0

FIGURE # 7.7



NO SCALE

DRAWING TITLE:

BACKGROUND + PROJECT TRAFFIC VOLUMES WITH SR 86, ADT's

N

SOURCE: Linscott, Law & Greenspan

Smith, Peroni & Fox

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COACHELLA 380

FIGURE # 7.8

The Slater project is located north of Avenue 50 and west of Polk Street. This project is expected to generate 2,400 daily trip ends with 245 PM peak hour trips. Exhibit 7.9 shows the Slater traffic volumes.

The Lusardi Specific Plan is located south of 54th Avenue and east of Fillmore Street. The project will generate 37,830 external daily vehicle trips with 3,290 PM peak hour trips.* Exhibit 7.10 displays the Lusardi Specific Plan Traffic Volumes. Exhibit 7.11 shows the background plus project plus Slater and Lusardi daily traffic volumes.

The McNaughton Specific Plan is located south of Interstate 10 and east of the All American Canal. The project will generate 111,700 external daily vehicle trips with 9,950 PM peak hour trips.**

Exhibit 7.12 displays the McNaughton Specific Plan traffic volumes. Exhibit 7.13 shows the daily volumes after Slater, Lusardi and, the McNaughton projects. These volumes constitute the "horizon year" for this traffic analysis.

Table 7.3 provides a summary of the street segment Average Daily Trips (ADT) and Level of Service (LOS). At LOS C, the capacity of a Major Arterial is 50,000 ADT; the capacity of a Primary Arterial is 30,000 ADT; the capacity of a Secondary Arterial is 24,000 ADT; and the capacity of a Collector is 12,000 ADT.

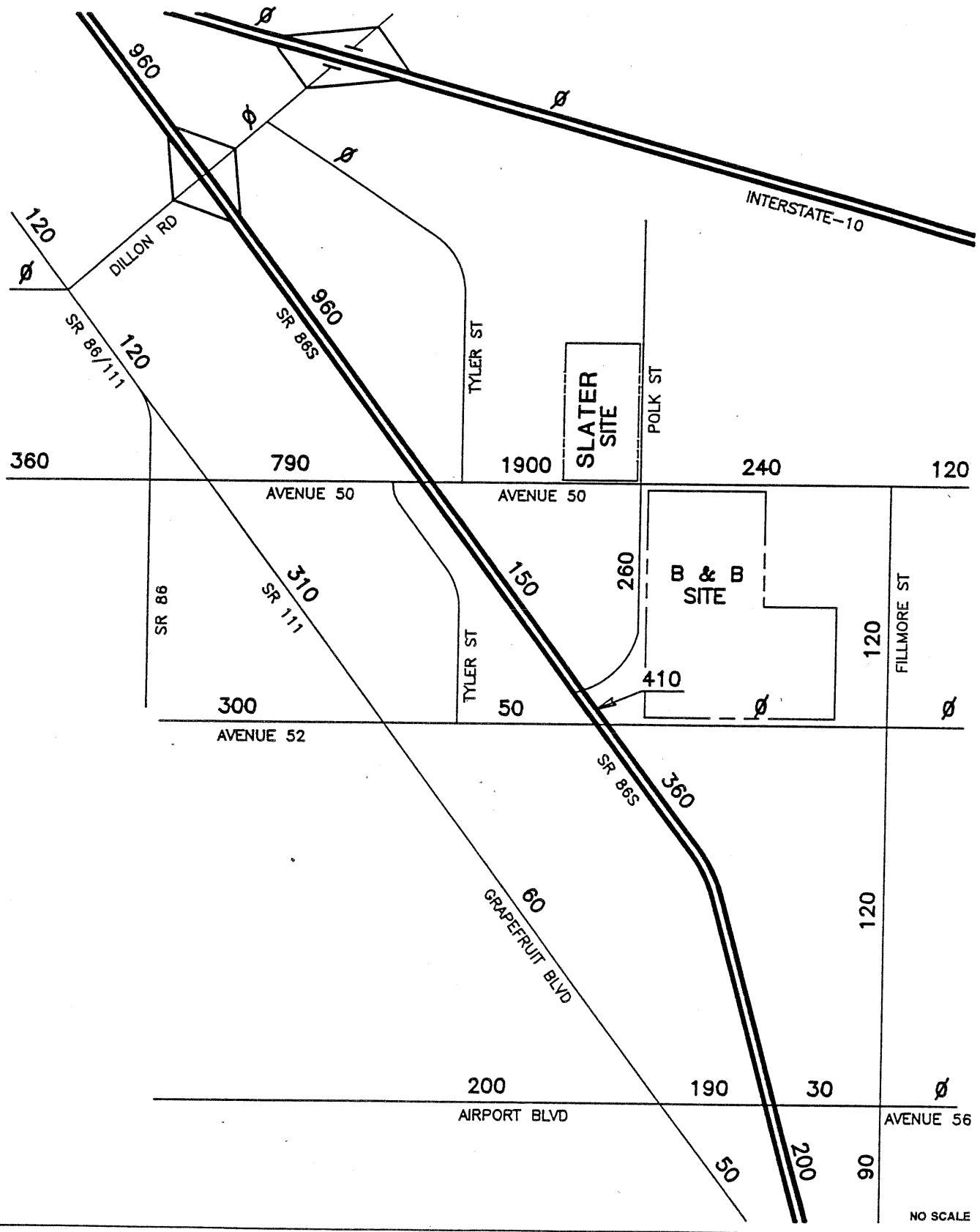
Existing Operations

Review of Table 7.3 indicates that most of the street segments in the project vicinity are calculated to be currently operating at LOS A. The street segment below LOS C is Highway 111 north of Avenue 52 (LOS E). The current ADT's on Highway 111 are approaching available roadway capacity.

Background with SR 86S Operations

Table 7.3 shows the expected background conditions before the proposed project with SR 86S as an expressway with at-grade intersections. Level of Service C or better can be obtained by widening several roadway segments.

* Lusardi Specific Plan Traffic Study, Kunzman Associates, November, 1988.
** McNaughton Specific Plan Traffic Study, Kunzman Associates, October, 1988.



DRAWING TITLE:

SLATER TRAFFIC VOLUMES WITH SR 86, ADT's

N

SOURCE: Linscott, Law & Greenspan

Smith, Peroni & Fox

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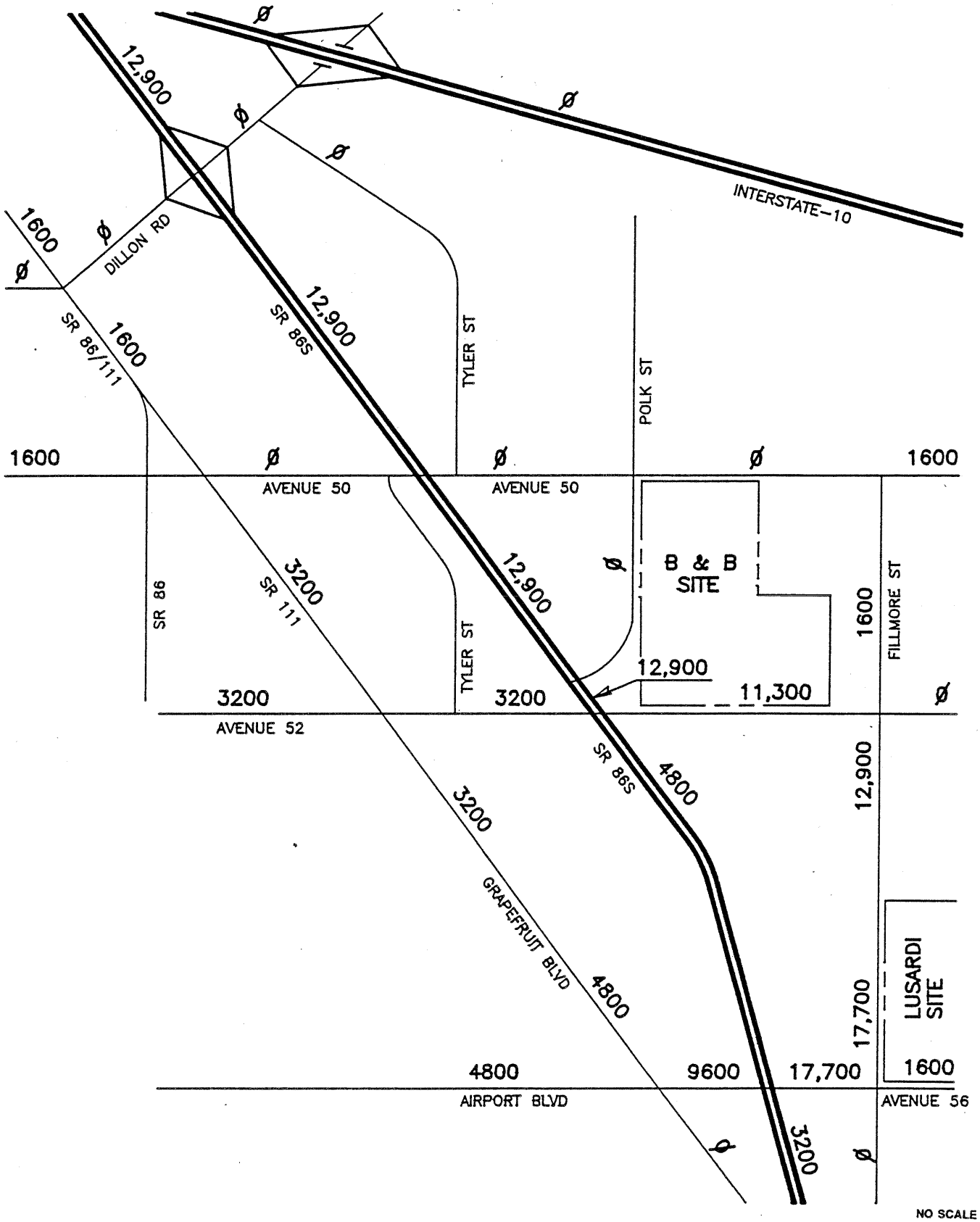
FIGURE # 7.9



NO SCALE

DRAWING TITLE:

LUSARDI S.P. TRAFFIC VOLUMES

N

Smith, Peroni & Fox

SOURCE: Linscott, Law & Greenspan Draft McNaughton Specific Plan, Keith Companies, Feb 1989

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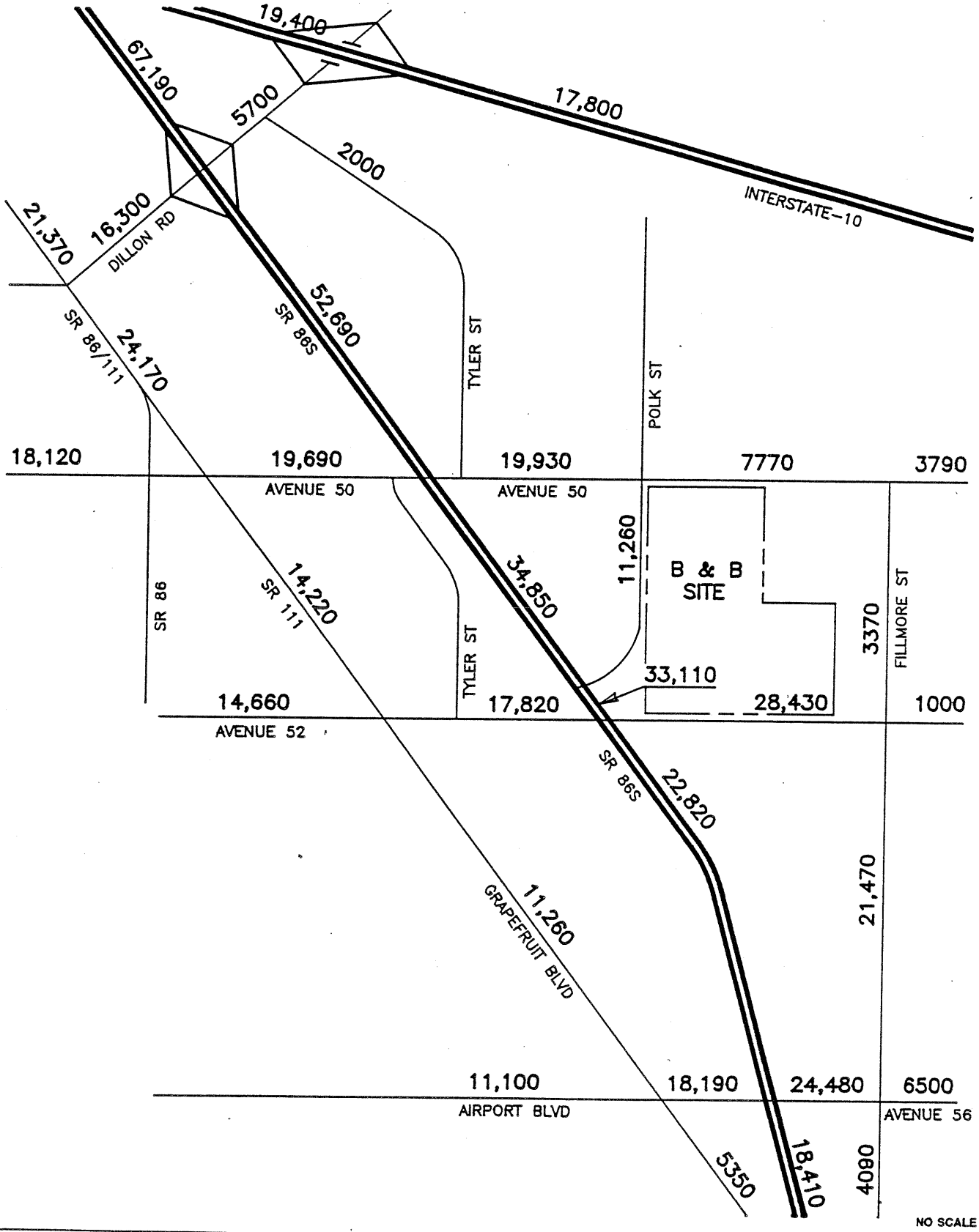
FIGURE # 7.10



NO SCALE

DRAWING TITLE:

BACKGROUND + PROJECT + SLATER + LUSARDI TRAFFIC VOLUMES WITH SR 86, ADT's

N

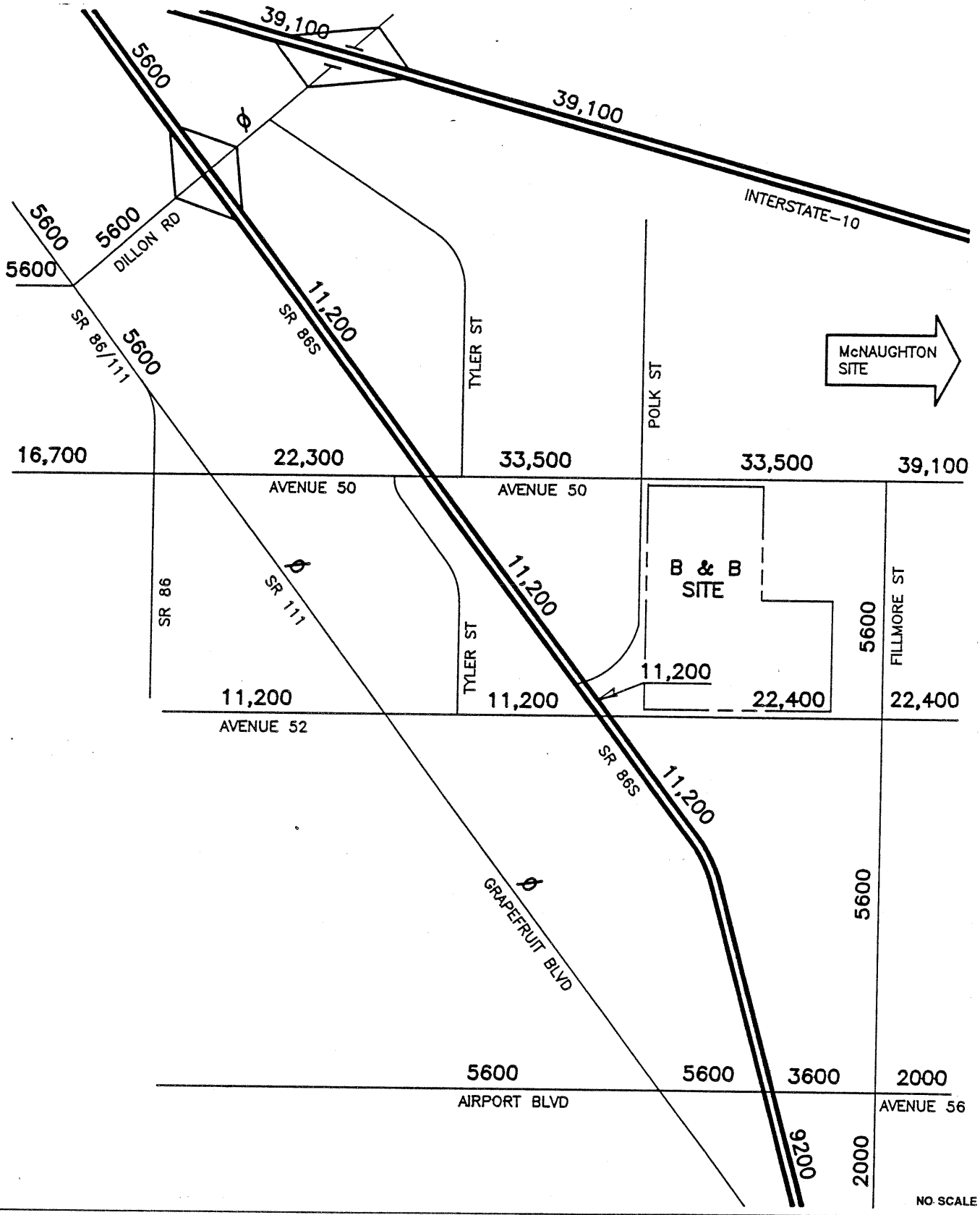
SOURCE: Linscott, Law & Greenspan

Smith, Peroni & Fox

brandenburg | butters

C O A C H E L L A 3 8 0

FIGURE # 7.11



NO SCALE

DRAWING TITLE:

MC NAUGHTON S.P. TRAFFIC VOLUMES WITH SR 86 ADT's

N

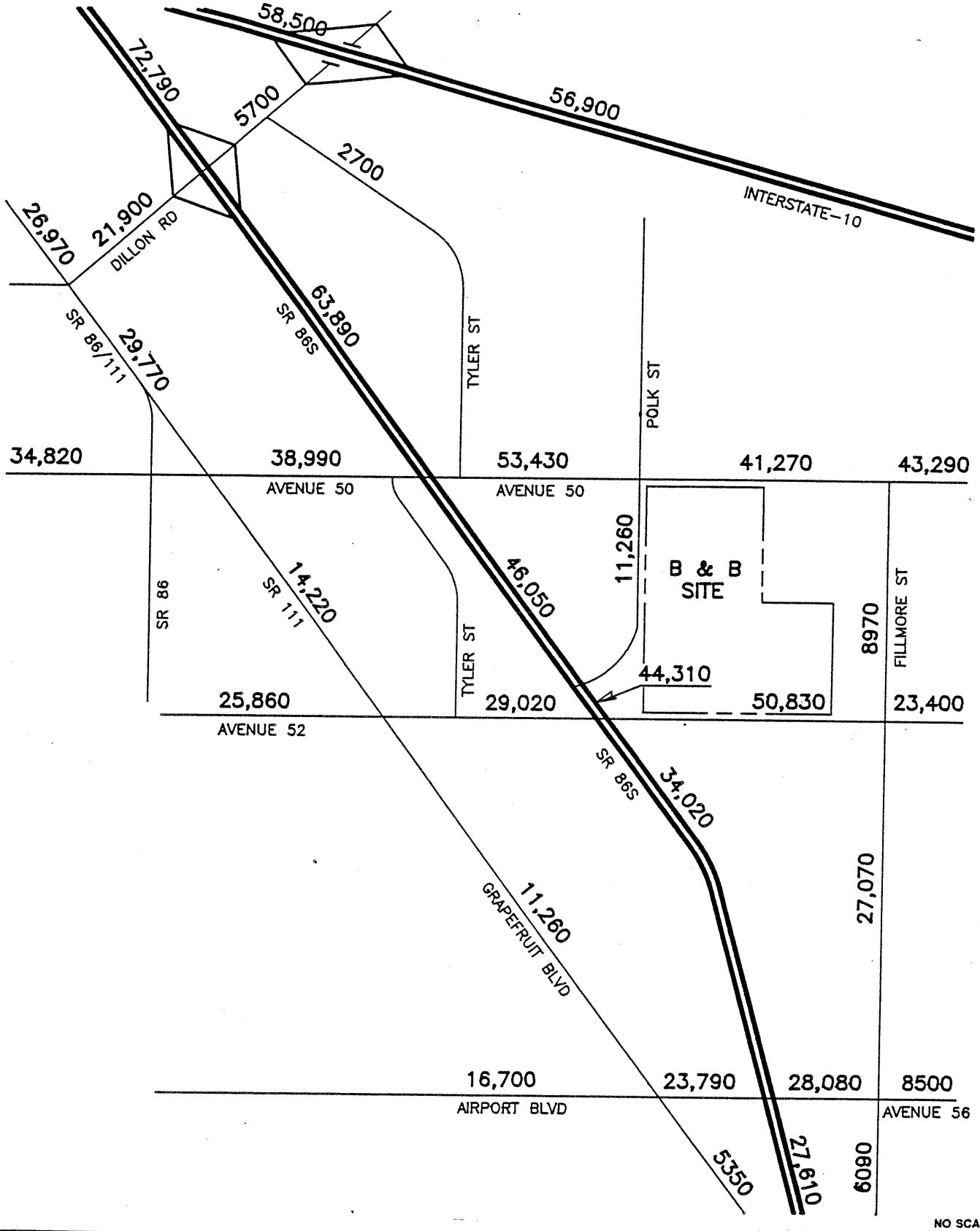
Smith, Peroni & Fox

SOURCE: Linscott, Law & Greenspan Draft McNaughton Specific Plan, Keith Companies, Feb 1989

brandenburg | butters

COACHELLA 380

FIGURE # 7.12



NO SCALE

DRAWING TITLE:

BACKGROUND + PROJECT + LUSARDI + SLATER + McNAUGHTON TRAFFIC VOLUMES WITH SR 86, ADT's

N

SOURCE: Linscott, Law & Greenspan

Smith, Peroni & Fox

brandenburg | butters

COACHELLA 380

FIGURE 7.13

Table 7.3
STREET SEGMENT OPERATIONS

STREET	EXISTING WITHOUT 86			BACKGROUND WITH 86			BACKGROUND + PROJECT			BACKGROUND+PROJECT+ SLATON+LUSARDI			BACKGROUND+PROJECT+ SLATON+LUSARDI+ McNAUGHTON		
	VOL	CAP	LOS	VOL	CAP	LOS	VOL	CAP	LOS	VOL	CAP	LOS	VOL	CAP	LOS
Highway 111 n/o Dillon Road	--	---	-	17,600	30K	B	19,650	30K	B	21,370	30K	B/C	26,970	30K	C
Highway 111 n/o Avenue 50	15,200	30K	B	20,400	30K	B	22,450	30K	C	24,170	30K	C	29,770	30K	C/D
Highway 111 n/o Avenue 52	14,400	12K	E	8,500	12K	B/C	10,710	12K	C	14,220	12K 30K	D B	14,220	30K	B
Highway 111 n/o Airport Blvd	11,500	12K	C	5,400	12K	A/B	6,400	12K	B	11,260	12K	C	11,260	12K	C
Highway 111 s/o Airport Blvd	---	---	-	4,700	12K	A	5,300	12K	A/B	5,350	12K	A/B	5,350	12K	A/B
SR 86 n/o Dillon Road	17,100	64K	A	38,900	64K	B	53,330	64K	C	67,190	64K	D	72,790	64K 96K	D C
SR 86 n/o Avenue 50	---	---	-	24,400	64K	A	38,830	64K	B	52,690	64K	C	63,890	64K 96K	C/D B
SR 86 n/o Polk Street	---	---	-	15,800	64K	A	21,800	64K	A	---	---	-	---	---	-
SR 86 n/o Avenue 52	---	---	-	16,800	64K	A	19,800	64K	A	33,110	64K	B	44,310	64K	B/C
SR 86 n/o Airport Blvd	---	---	-	12,500	64K	A	17,660	64K	A	22,820	64K	A	34,020	64K	B
Sr 86 s/o Airport Blvd	---	---	-	10,900	64K	A	15,010	64K	A	18,410	64K	A	27,610	64K	A/B
Dillon Road w/o SR 86	---	---	-	16,300	12K 30K	F B	16,300	30K	B	16,300	30K	B	21,900	30K	B/C
Dillon Road e/o SR 86	1,640	30K	A	3,700	30K	A	5,700	30K	A	5,700	30K	A	5,700	30K	A
Avenue 50 w/o Highway 111	---	---	-	10,000	12K	C	16,160	12K 30K	F B	18,120	30K	B	34,820	30K 50K	D B
Avenue 50 w/o SR 86	2,100E	12K	A	12,900	12K 30K	D A	18,900	30K	B	19,690	30K	B	38,990	30K 50K	E/F C
Avenue 50 w/o Polk Street	3,050E	12K	A	1,600	12K	A	18,030	12K 30K	F B	19,930	30K	B	53,430	30K 50K	F D
Avenue 50 w/o Fillmore Street	650E	12K	A	1,100	12K	A	7,530	12K	B	7,770	12K	B	41,270	12K 50K	F C
Avenue 50 e/o Fillmore Street	400E	12K	A	400	12K	A	2,470	12K	A	4,190	12K	A	43,290	12K 50K	F C

Table 7.3
STREET SEGMENT OPERATIONS
Continued

STREET	EXISTING WITHOUT 86			BACKGROUND WITH 86			BACKGROUND + PROJECT			BACKGROUND+PROJECT+ SLATON+LUSARDI			BACKGROUND+PROJECT+ SLATON+LUSARDI+ McNAUGHTON		
	VOL	CAP	LOS	VOL	CAP	LOS	VOL	CAP	LOS	VOL	CAP	LOS	VOL	CAP	LOS
Avenue 52 w/o Highway 111	3,200E	12K	A	5,000	12K	A	11,160	12K	C	14,660	12K 30K	E B	25,860	30K	C
Avenue 52 w/o SR 86	4,100E	12K	A	5,200	12K	A	14,570	12K 30K	E B	17,820	30K	B	29,020	30K	C
Avenue 52 w/o Fillmore Street	3,200E	12K	A	1,600	12K	A	17,130	12K 30K	F B	28,430	30K	C	50,830	30K 50K	F C/D
Avenue 52 e/o Fillmore Street	250E	12K	A	1,000	12K	A	1,000	12K	A	1,000	12K	A	23,400	12K 30K	F C
Airport Blvd w/o Highway 111	---	---	-	4,100	12K	A	6,100	12K	B	11,100	12K	C	16,700	12K 30K	F B
Airport Blvd w/o SR 86	---	---	-	6,800	12K	B	8,400	12K	B/C	18,190	12K 30K	F B	23,790	30K	C
Airport Blvd w/o Fillmore Street	3,180	12K	A	6,200	12K	B	6,750	12K	B	24,480	12K 30K	F C	28,080	30K	C
Avenue 56 e/o Fillmore Street	2,560	12K	A	4,400	12K	A	4,900	12K	A	6,500	12K	B	8,500	12K	B/C
Tyler Stfeet s/o Dillon Road	700E	12K	A	700	12K	A	2,700	12K	A	2,700	12K	A	2,700	12K	A
Polk Street s/o Avenue 50	250E	12K	A	1,000	12K	A	11,000	12K 30K	C A	11,260	30K	A	11,260	30K	A
Fillmore Street n/o Avenue 52	550E	12K	A	1,100	12K	A	1,650	12K	A	3,370	12K	A	8,970	12K	C
Fillmore Street n/o Airport Blvd	1,300E	12K	A	1,600	12K	A	3,650	12K	A	21,470	12K 30K	F B/C	27,070	30K	C
Fillmore Street Airport Blvd	---	---	-	3,000	12K	A	4,000	12K	A	4,090	12K	A	6,090	12K	B

Note: 1) A second capacity is listed if a particular street segment requires mitigation
2) 12K = 12,000, 30K = 30,000 ,etc.
3) E = estimated
4) CAPACITY AT LOS C

CAPACITY AT LOS C	CLASSIFICATION
12k	Collector
30K	Primary Arterial
50K	Major Arterial
64K	4 Lane Expressway
96K	6 Lane Expressway

Source: 1985 HCM, Table 3-12, page 3-24

A	≤ 0.45
B	$0.46 \leq 0.71$
C	$0.72 \leq 1.00$
D	$1.01 \leq 1.20$
E	$1.21 \leq 1.30$
F	> 1.31

Background Plus Project Operations

Table 7.3 shows the changes in daily volumes and resulting Levels of Service from adding Brandenburg & Butter traffic to the background volumes. The project's impacts are calculated to be significant but mitigatable. Level of Service C or better can be obtained by widening roadway segments and incorporating other major mitigation measures.

Background Plus Project Plus Slater Plus Lusardi Operations

Table 7.3 shows the changes in daily volumes and resulting Levels of Service from adding the Slater and Lusardi projects' traffic volumes to the previous condition. The impact of the Slater project is not expected to be significant while the Lusardi project is expected to have significant but mitigatable traffic impacts. Level of Service C or better can be obtained by widening roadways and incorporating other major mitigation measures.

Background Plus Project Plus Slater Plus Lusardi Plus McNaughton Operations

Table 7.3 shows the traffic volume and LOS changes that result from adding the McNaughton traffic to the previous condition. The impact of the McNaughton project will be significant and mitigatable. Level of Service C or better can be obtained by widening roadways and incorporating other major mitigation measures.

Site Access and Internal Circulation

The internal circulation system for the Specific Plan area is shown on the circulation plan displayed in Exhibit 3.4. Primary access will be via Polk Street, Avenue 52 and the future Highway 86. Both Polk Street and Avenue 52 are to be realigned with construction of Highway 86S. Avenue 52 is looped to the north to provide a 90 degree approach angle to the Highway 86S interchange. Polk Street is also looped to the east to intersect with Avenue 52 approximately 1,000 feet east of the Highway 86S/Avenue 52 interchange.

Three internal collector roadways are provided to distribute trips within and through the project site. Street 'A' traverses the site in a north/south manner, connecting with Avenue 50 on the north and intersecting with Avenue 52 approximately 1,000 feet east of the Polk Street/Avenue 52 intersection, before cul-de-sacing 950 feet to the south. Internal collector street 'B' traverses the project site east to west, creating 'T'

intersections with Polk Street on the west and Fillmore Street to the east. The three internal collector roadways are shown as two lane (72 feet of right-of-way) Collectors which will accommodate anticipated traffic volumes at acceptable levels of service.

The proposed internal circulation system has been reviewed and found satisfactory from a traffic engineering perspective. Adequate access will exist to serve the proposed land uses. To summarize, the roadways internal to the Specific Plan area, and external as recommended by this study, will accommodate both project and cumulative traffic and provide needed capacity to insure acceptable Levels of Service and good circulation in the project vicinity.

Mitigation/Transportation Phasing Plan

The calculated traffic volumes show the need to provide mitigation for expected background traffic as well as for planned development projects. The mitigation needed to accommodate future increases in traffic volumes should be carefully planned. The mitigation measures outlined below are based on a very specific assumed pattern of development. This pattern of development is likely to be modified as time proceeds. Therefore, the mitigation program must be dynamic enough to respond to probable changes.

Detailed traffic reports for each development project at incremental phases must be prepared at the Tract Map Stage to determine the improvements needed for that particular phase of the project. Each individual traffic study must identify the ultimate Right-of-Way needed, the improvements needed, the funding mechanism and the time that physical improvements will be constructed.

Some of the mitigation measures require intersection signalization with "enhanced intersection geometrics". Enhanced geometrics are outlined in Table 7.4 as a standard for right-turn and left-turn lanes at typical intersections. Additional turning lanes beyond what is shown in Table 7.4, may be needed at some intersections, especially near freeway interchanges. The provision for double left-turn lanes and/or right-turn lanes may require additional R/W than is provided for in the typical roadway cross-section.

Table 7.5 provides a summary of the proposed changes to the Circulation Element for the "horizon year" of this study, which is the combined background, B&B, Slater, Lusardi & McNaughton projects' traffic. Roadways currently shown on the Circulation Element that are larger than on Exhibit 7.16 should remain at the larger size.

TABLE 7.4
INTERSECTION STANDARDS

MAINLINE STREET	INTERSECTING STREET	LEFT-TURN LANE REQUIREMENTS	RIGHT-TURN LANE
Collector	Collector	Single	No
Collector	Primary Arterial	Single	No
Collector	Major Arterial	Single	No
Primary Arterial	Collector	Single	No
Primary Arterial	Primary Arterial	Double	No
Primary Arterial	Major Arterial	Double	Yes
Major Arterial	Collector	Single	No
Major Arterial	Primary Arterial	Double	Yes
Major Arterial	Major Arterial	Double	Yes

TABLE 7.5
PROPOSED CHANGES TO CIRCULATION PLAN
TO ACCOMMODATE "BACKGROUND + PROJECT + SLATER + LUSARDI + McNAUGHTON" TRAFFI(

STREET SEGMENT	EXISTING CLASSIFICATION	PROPOSED CLASSIFICATION
Avenue 50		
- Harrison St. to SR 86S	Primary Arterial	Major Arterial
- SR 86S to Fillmore St.	Collector	Major Arterial
Avenue 52		
- SR 86S to Fillmore St.	Secondary Arterial	Major Arterial
- e/o Fillmore St.	not designated	Primary Arterial
Polk Street		
- n/o Avenue 50	not designated	Collector
- Avenue 50 to Avenue 52	not designated	Primary Arterial
Fillmore Street		
- Avenue 52 to Avenue 56	Secondary Arterial	Primary Arterial

Note: Roadways currently shown on the Circulation Element that are larger than on Exhibit 7.16 should remain at the larger size.

The traffic mitigation requirements described below assume and are based on, the construction by Caltrans of Route 86S from Dillon Road to Avenue 58 as a 4-lane expressway with "at grade" cross-street STOP sign controlled intersections at Avenue 50, Polk Street, Avenue 52 and Avenue 56 prior to development of the project.

Background Mitigation

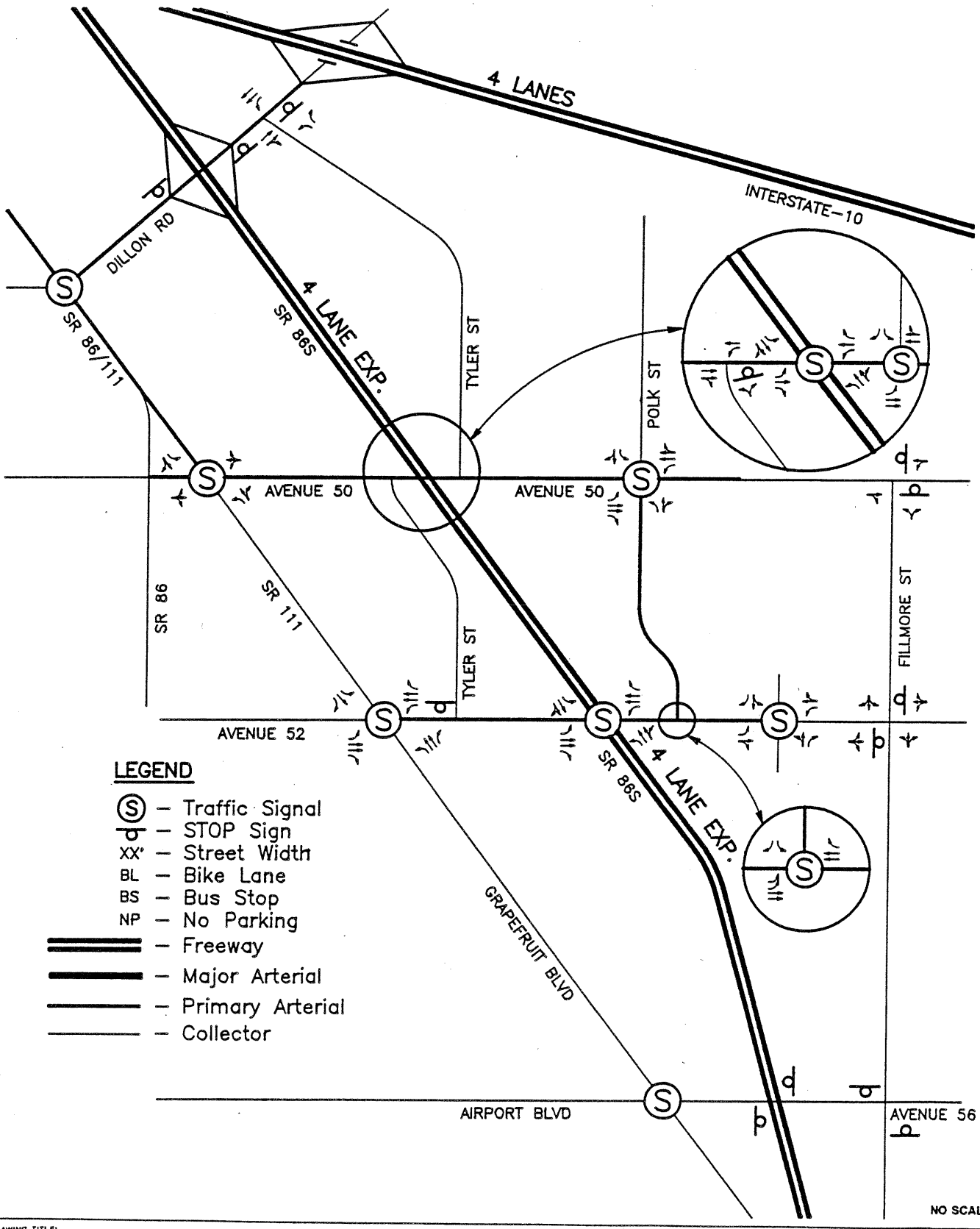
Exhibit 7.5 shows the completion of currently planned or needed circulation improvements. These improvements should be paid for by the City, County, Caltrans and/or other developments. The B&B project is generally not dependant on these improvements. Based on the traffic analysis, the following roadway improvements would be required to accommodate the expected background traffic:

1) Construct 4 lanes on Dillon Road between Highway 111 and SR 86S.
2) Construct 4 lanes on Avenue 50 between Highway 111 and SR 86S.
3) Signalize Avenue 50/Highway 111 with enhanced intersection geometrics.
4) Realign Tyler Street to intersect with Dillon Road midway between I-10 and SR 86S. Provide separate turning lanes to/from Tyler Street.
5) Restrict Vista Del Sur at Dillon Road to right-turns.

Background + Project Mitigation

Based on the traffic analysis, the following roadway improvements would be required, to accommodate the expected background and B&B buildout project traffic. These improvements are shown graphically on Exhibit 7.14.

1) The improvements described under the heading "Background Mitigation".
2) Construct four lanes on Avenue 50 between old SR 86 (Harrison Street) and Highway 111. Note: It is anticipated that proposed commercial development adjacent to the old SR 86 and Highway 111 intersection may require this improvement to be made at an earlier date.
3) Construct four lanes on Avenue 50 between SR 86S and east of Polk Street.
4) Construct 4 lanes on Avenue 52 between Highway 111 and Street A (e/o Polk Street).
5) Construct 4 lanes on Polk Street between Avenue 50 and Avenue 52.
6) Signalize SR 86S/Avenue 50 with enhanced intersection geometrics.
7) Signalize Avenue 50/Tyler Street with enhanced intersection geometrics.
8) Signalize Avenue 50/Polk Street with enhanced intersection geometrics.
9) Signalize SR 86S/Avenue 52 with enhanced intersection geometrics.
10) Realign Polk Street from SR 86S to Avenue 52.
11) Signalize Avenue 52/Polk Street with enhanced intersection geometrics.



NO SCALE

DRAWING TITLE:

MITIGATED CONDITION DIAGRAM FOR BACKGROUND + PROJECT TRAFFIC

N

SOURCE: Linscott, Law & Greenspan

Smith, Peroni & Fox

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FIGURE # 7.14

12) Signalize Avenue 52/Street A with enhanced intersection geometrics.
13) Dedicate the ultimate R/W on the streets adjacent to the project frontage.
14) Implement a Transportation Demand Management program to comply with Regulation XV.

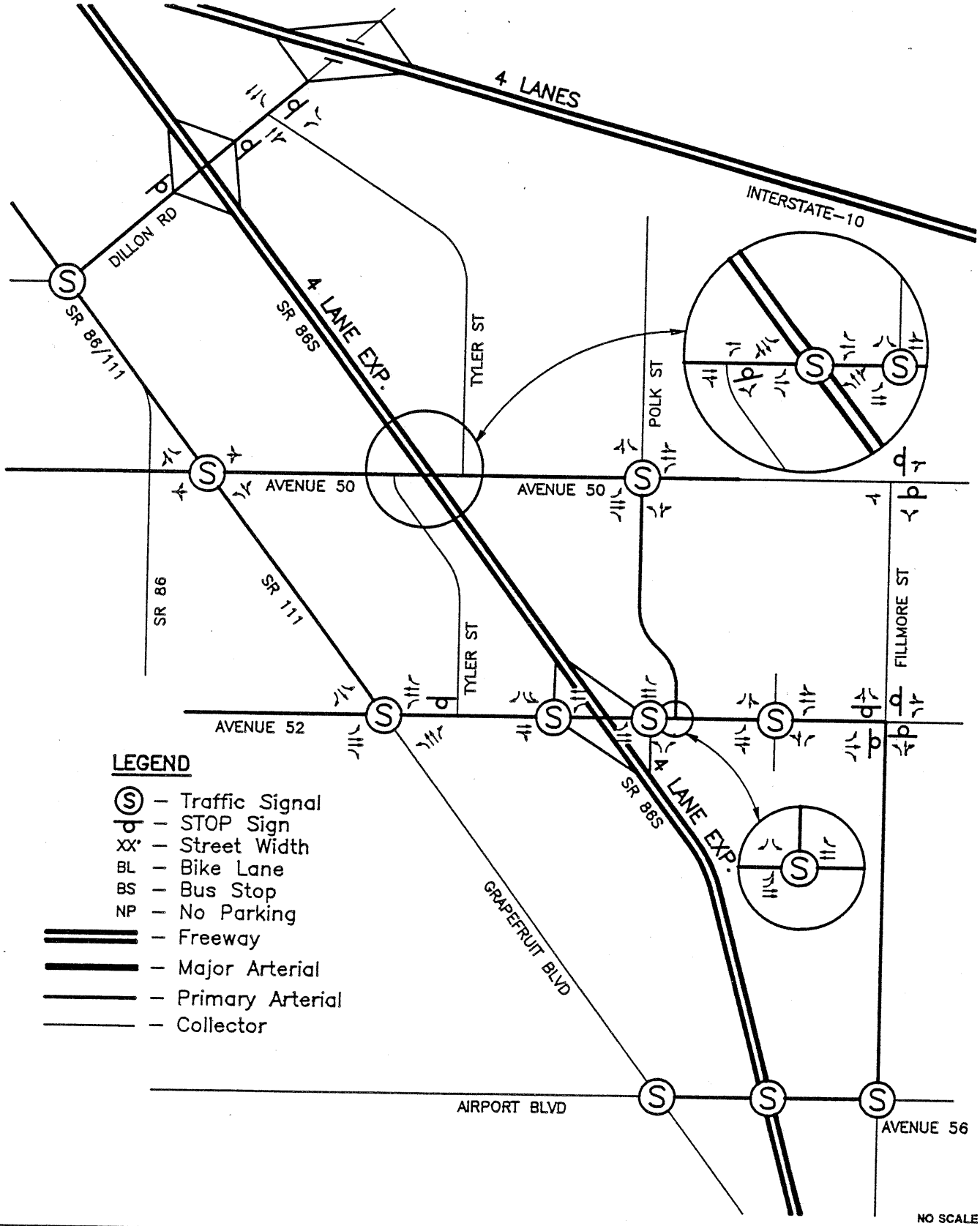
Background + Project + Slater + Lusardi Mitigation

Based on the traffic analysis, the following roadway improvements would be required to accommodate the expected background, B&B, Slater and Lusardi buildout project traffic. These improvements are shown graphically on Exhibit 7.15. Mitigation measures 2-14 are not needed in order for the B&B project to proceed.

1) The improvements described under the heading "Background + Project Mitigation".
2) Construct a 4 lane grade separated diamond interchange on SR 86S at Avenue 52.
3) Widen Highway 111 to 4 lanes between Avenue 50 and Avenue 52.
4) Widen Avenue 52 to 4 lanes between old SR 86 and Highway 111.
5) Widen Avenue 52 to 4 lanes between Street A (B&B Site) and Fillmore Street.
6) Widen Avenue 56 to 4 lanes between Highway 111 and Fillmore street.
7) Widen Fillmore Street to 4 lanes between Avenue 52 and Avenue 56.
8) Signalize Avenue 52/southbound SR 86S ramps with enhanced intersection geometrics.
9) Signalize Avenue 52/northbound SR 86S ramps with enhanced intersection geometrics.
10) Signalize Avenue 56/SR 86S with enhanced intersection geometrics.
11) Signalize Avenue 56/Fillmore Street with enhanced intersection geometrics.
12) Install an all-way STOP at Avenue 52/Fillmore Street.
13) Implement a Transportation Demand Management program.
14) Dedicate the ultimate R/W on the streets adjacent to the project frontage.

Background + Project + Slater + Lusardi + McNaughton Mitigation

Based on the traffic analysis, the following roadway improvements would be required to accommodate the expected background, B&B, Slater, Lusardi and McNaughton buildout project traffic. These improvements are shown graphically on Exhibit 7.16. Mitigation measures 2-13 are not needed in order for the B&B, Slater or Lusardi projects to proceed.



NO SCALE

DRAWING TITLE:

MITIGATED CONDITION DIAGRAM FOR BACKGROUND + PROJECT + SLATER + LUSARDI TRAFFIC

N

SOURCE: Linscott, Law & Greenspan

Smith, Peroni & Fox

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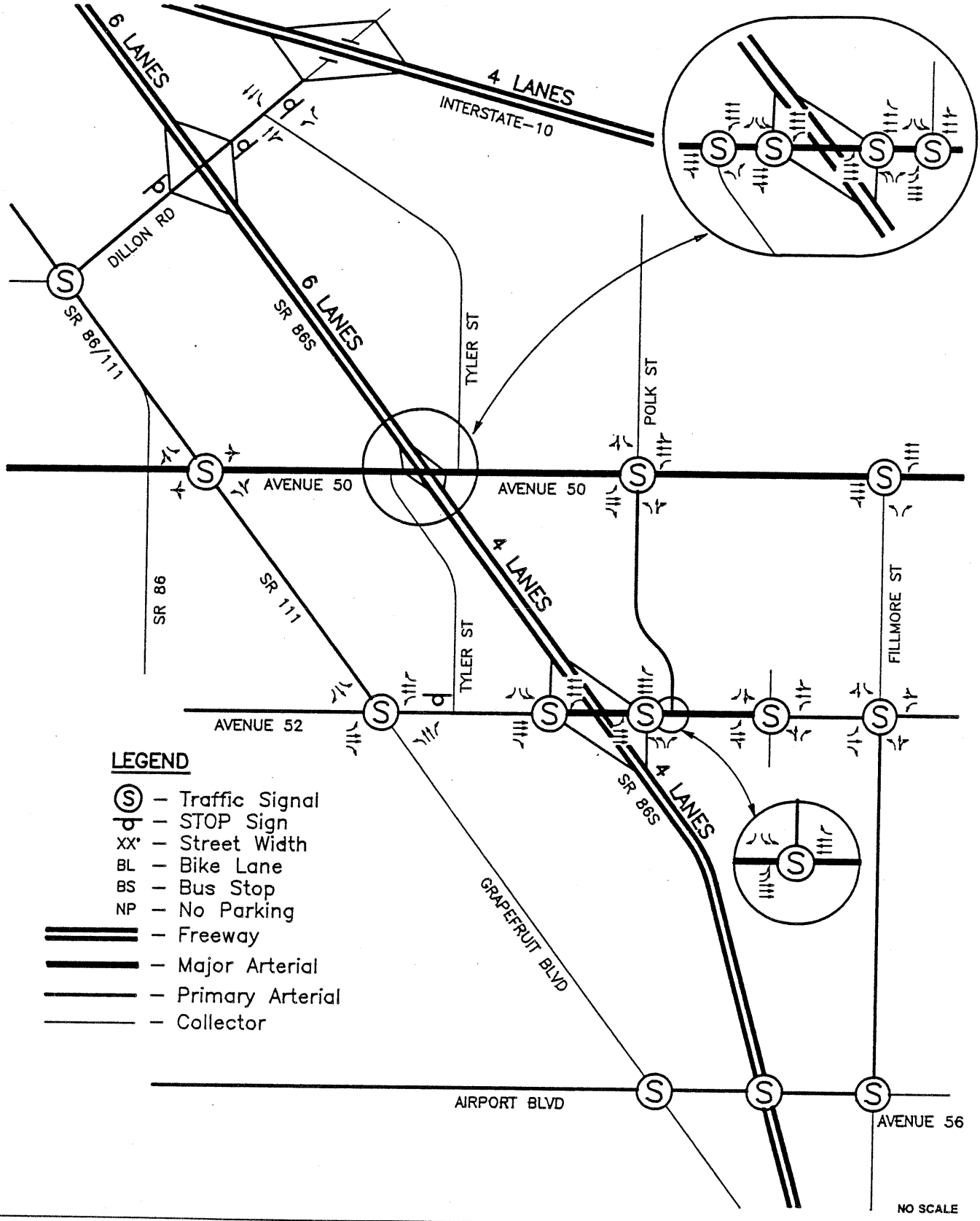
FIGURE # 7.15



NO SCALE

DRAWING TITLE:

MITIGATED CONDITION DIAGRAM FOR BACKGROUND+ PROJECT + SLATER + LUSARDI + McNAUGHTON TRAFFIC

N

SOURCE: Linscott, Law & Greenspan

Smith, Peroni & Fox

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FIGURE # 7.16

1) The improvements described under the headings "Background + Project + Slater + Lusardi Mitigation".
2) Construct a 6 lane grade separated diamond interchange on SR 86S at Avenue 50.
3) Widen SR 86S to 6 lanes between I-10 and Avenue 50.
4) Widen Avenue 50 to 6 lanes between just west of Highway 111 and the McNaughton site.
5) Widen Avenue 52 to 6 lanes between SR 86S (including bridge) and "Street A".
6) Widen Avenue 52 to 4 lanes between Fillmore Street and the McNaughton site.
7) Widen Avenue 56 to 4 lanes just west of Highway 111.
8) Signalize Avenue 50/southbound SR 86S ramps with enhanced intersection geometrics.
9) Signalize Avenue 50/northbound SR 86S ramps with enhanced intersection geometrics.
10) Signalize Avenue 50/Fillmore Street with enhanced intersection geometrics.
11) Signalize Avenue 52/Fillmore Street with enhanced intersection geometrics.
12) Implement a Transportation Demand Management program.
13) Dedicate the ultimate R/W on the streets adjacent to the project frontage.

Internal Circulation Mitigation

As detailed site access plans become available, a more refined review of circulation impacts is recommended. All streets should be designed and constructed to City minimum roadway improvement standards. Placement of access points will also have to meet the City minimum intersection spacing criteria. Stop signs should be installed at all unsignalized site egress points to properly control exiting traffic. Street lights, sidewalks and parking should be provided in accordance with City standards.

Implementation and Financing of Improvements

The roadway improvements needed to accommodate the background traffic will be required whether or not the B&B project, Slater, Lusardi or McNaughton projects go forward. These projects are not dependent upon the construction of these improvements. Therefore, it is recommended that the City establish a funding mechanism separate and distinct from these projects (e.g. traffic mitigation fees) to fund these improvements and that any future developments within the City that contribute to the traffic problems at these locations pay their fair share to make the required improvements.

The analysis has determined the specific mitigation measures required to accommodate the project (items 2-14 under the section titled "Background + Project Mitigation"), the project, Slater and Lusardi development (items listed under the section titled "Background + Project + Slater + Lusardi" and not including the improvements listed under the section titled "Background Mitigation") and the project, Slater, Lusardi and McNaughton developments (items listed under the section titled "Background + Project + Slater + Lusardi + McNaughton" and not including the improvements listed under the section titled "Background Mitigation").

In order to determine the proper method to implement and finance the required improvements, an initial determination should be made as to whether or not the project should proceed separately from any other development east of SR 86 or if it should proceed in conjunction with the other developments (and if so with which developments).

The alternatives available to finance the required traffic mitigation improvements are as follows:

1) If it is determined that the Project (B&B) should be allowed to go forward independently of the other developments contemplated east of future SR 86, then the developer should be required to pay for those mitigation improvements described in items 2-14 in the section titled "Background + Project Mitigation" above and to implement appropriate "on-site improvements". The project related mitigation should be implemented as needed during the construction phasing of the B&B project. The developer would be able to make use of assessment district financing for implementing these improvements and would be entitled to partial reimbursement from benefitting parties when they develop. B&B should also reimburse future developers for improvements that they benefit from. B&B would also be required to contribute its fair share toward the construction of the roadway improvements outlined in the section titled "Background Mitigation" above and to participate in whatever funding mechanism the City adopts to finance the background mitigation improvements.

2) If it is determined that the Project should not go forward until sufficient mitigation of roadway improvements has been undertaken or financing is in place to construct the roadway improvements necessary to accommodate the Project, Slater and Lusardi projects, then it is recommended that an assessment or taxing district (e.g. Mello-Roos Facilities District) be formed

for the purpose of raising revenues from participating land owners to cause construction of the roadway improvements (as needed during construction phasing) required to accommodate the Project, Slater and Lusardi projects. These improvements are listed under the section titled "Background + Project + Slater + Lusardi Mitigation" and should not include the improvements listed under "Background Mitigation". Each participating property shall bear its fair share of these mitigation costs. Again, each participating developer should agree to pay its fair share of the cost to construct the roadway improvements outlined in the section titled "Background Mitigation" above and to participate in whatever funding mechanism the City adopts to finance the background mitigation improvements.

3) If it is determined that the Project should not go forward until sufficient mitigation of roadway improvements has been undertaken or financing is in place to construct the roadway improvements necessary to accommodate the Project, Slater, Lusardi and McNaughton projects, then it is recommended that an assessment or taxing district (e.g. Mello-Roos Facilities District) be formed for the purpose of raising revenues from participating land owners to cause construction of the roadway improvements (as needed during construction phasing) required to accommodate the Project, Slater, Lusardi and McNaughton projects. These improvements are listed under the section titled "Background + Project + Slater + Lusardi + McNaughton" and should not include the improvements listed under "Background Mitigation". Each participating property shall bear its fair share of these mitigation costs. Again, each participating developer should agree to pay its fair share of the cost to construct the roadway improvements outlined in the section titled "Background Mitigation" above and to participate in whatever funding mechanism the City adopts to finance the background mitigation improvements.

Table 7.6 presents the suggested mitigation implementation and financing in a tabular format.

TABLE 7.6
MITIGATION IMPLEMENTATION & FINANCING

RESPONSIBLE PROJECT	BACKGROUND MITIGATION	B&P MITIGATION	B+P+S+L MITIGATION	B+P+S+L+Mc MITIGATION
Background Growth	City, County, Caltrans, others	N/A	N/A	N/A
B & B	Fair share reimbursement	Implement items 2-14	Implement Mello-Roos for Area 1, items 1-14 (without background)	Contribute fair share of Mello-Roos for Area 2
Slater	Fair share reimbursement	Fair share reimbursement	Implement Mello-Roos for Area 1, items 1-14 (without background)	Contribute fair share of Mello-Roos for Area 2
Lusardi	Fair share reimbursement	Fair share reimbursement	Implement Mello-Roos for Area 1, items 1-14 (without background)	Contribute fair share of Mello-Roos for Area 2
McNaughton	Fair share reimbursement	Fair share reimbursement	Fair share reimbursement	Implement Mello-Roos for Area 2, items 1-13 (without background)

Notes: 1) Mitigation measures should be implemented as needed based on construction phasing at the Tentative Map level.

2) Each of the "Mitigation Options" columns are not mutually exclusive. For example, the B + P mitigation column could be skipped in lieu of the B+P+S+L.

3) B = Background L = Lusardi
P = B&B project Mc= McNaughton
S = Slater

7.3 Water

Context

The City of Coachella's domestic water distribution system does not currently serve the project site. The nearest existing facilities are a 12" main located approximately 1/4 mile west from the southwest corner of the site across the Whitewater River on Avenue 52,and a 16" main located 1 mile west from the northwest corner of the site at Tyler Street and Avenue 50.

The City currently has a production capacity of 4,916 gallons per minute (gpm) and a total storage capacity of 5.1 million gallons (mg). Based on the 4,916 gpm production capacity, the City can supply 7 million gallons per day (mgd). The City has indicated their current demand is approximately 5.5 mgd. The City, therefore, currently has an excess capacity or 1.5 mgd, or 1,040 gpm.

Project Impacts

At ultimate build-out, the total project water demand is estimated to be 2.8 mgd, or 1,938 gpm. This demand would be greater than the City's current production capacity.

The City Fire Department has indicated that a 5,000 gpm 19-hour duration fire flow will be required for commercial projects in the City. As the other fire flow requirements are less, this flow would govern the sizing requirements for the project. This fire flow would require a total City-wide storage of 5.7 mg which is greater than the current City storage capacity.

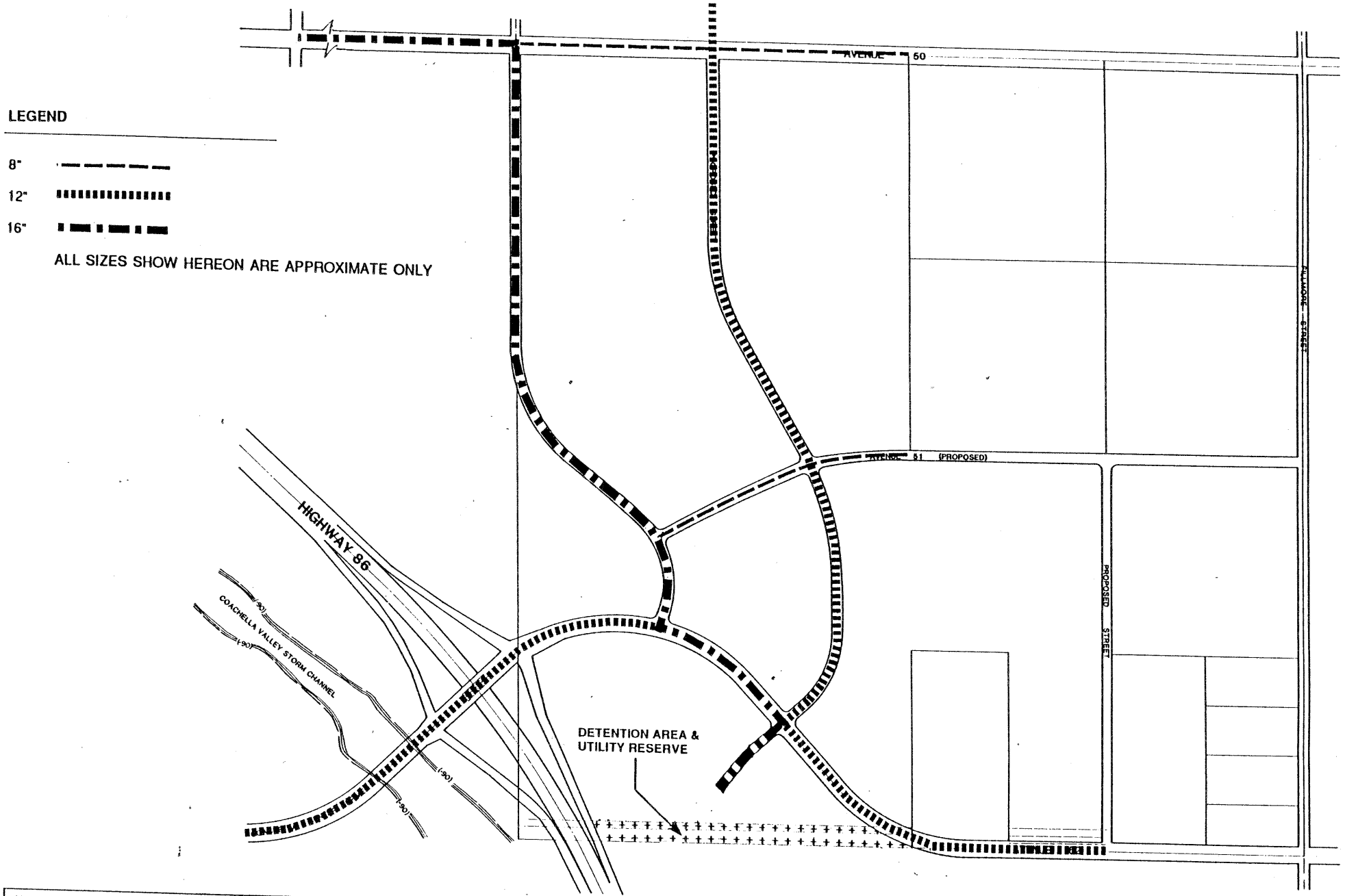
The proposed water master plan (Figure 7.17) would extend the City's existing water supply system across the Whitewater River on Avenue 52 to the site and along Avenue 50 to the northwest corner of the site. These would then be connected by the proposed on-site water system to create a "looped" system for the project. This would insure a supply from either connection.

The City will determine at a later date the number and locations of well sites it may require. Also, water quality tests will need to be conducted to guide placement. As it relates to this project, the well would minimally need to be sized to overcome any anticipated capacity shortfall at ultimate project build-out.

Associated with the ultimate location of a well site(s) would be a reservoir. The reservoir would be included to increase the City's storage capacity. The City Fire Department has indicated they would require this project to install a 1 mg reservoir. This reservoir would provide the additional 0.6 mg needed to supply the City's fire flow requirements plus provide surplus for possible future developments.

Mitigation Measures

The Water Master Plan proposed as a part of the Specific Plan should be implemented with development of the project.



DRAWING TITLE:

PROPOSED WATER MASTER PLAN

Source: ASL Consulting Engineers, August 1989

100 300 700 1500 FEET
0

FIGURE #

7.17

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The project should provide needed well sites as determined/approved by the City.

The project should contribute its share to the construction of a water reservoir, with arrangements made for reimbursement of any oversizing of storage to supply an area larger than the Applicant's Project. As with other capital improvements and utility extensions, consideration should be given to the formation of a special taxing district (Mello-Roos), revenue bond financing or other assessment mechanism.

7.4 Sewer

Context

Presently the site has no sewer facilities available. Sewage treatment service would be available from the City of Coachella only after extension of the existing facilities.

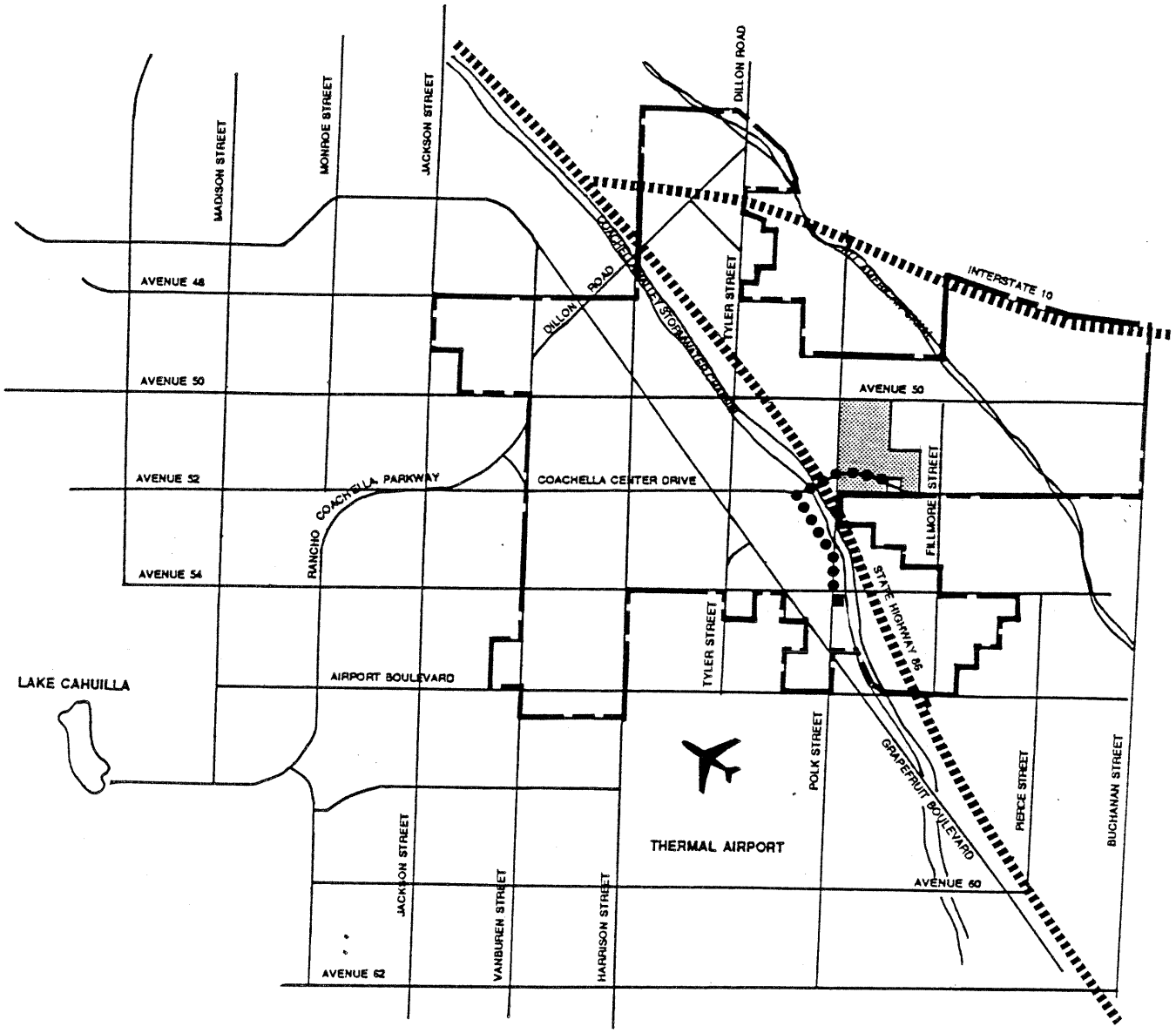
The nearest point of connection to the existing sewer system is a 12" main located approximately 1/4 mile west of the southwest corner of the site on the west side of the Whitewater River (Figure 7.18). From this point of connection a gravity flow system discharges to the sewage treatment plant.

The City's sewage treatment plant currently has a capacity of 3 million gallons per day (mgd). The City has indicated the current load on the treatment plant is approximately 2 mgd. There is therefore excess capacity of approximately 1 mgd.

Project Impacts

The project sewage generation at ultimate build-out is estimated to be approximately 1.3 mgd. This quantity of sewage would increase the total sewage effluent over the City's current treatment capacity.

At ultimate project development the anticipated peak flows from the Applicant's Project would be approximately 3.9 cubic feet per second (cfs). Common practice is to size sewer mains 12" and smaller flowing 1/2 full, and 15" and larger 3/4 full. Using the stated criteria the existing 12" sewer main has a capacity of approximately 1.26 cfs. Therefore this project alone at ultimate build-out would over-burden the existing system not withstanding the current demand to the system.



LEGEND

●●●●●● SEWER FORCE MAIN & GRAVITY FLOW ALIGNMENT TO TREATMENT PLANT

■ SEWAGE TREATMENT PLANT

— — — CITY BOUNDARY

APPLICANT'S PROJECT SITE

DRAWING TITLE:

MAIN CONNECTION TO ON-SITE SEWER SYSTEM

SOURCE: ASL Consulting Engineers, August 1989

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C O A C H E L L A 3 8 0

FIGURE # 7.18

The proposed on-site collection system (Figure 7.19) will gravity feed to a proposed pump station at the municipal portion of the project site. The pump station will then pump the effluent across the Whitewater River in a force main to a gravity flow system which would discharge at the existing treatment plant.

In addition to the pump station and force main, a new sewer main will be necessary off-site to run from Avenue 52 to the treatment plant. It is estimated that a 15 inch main will be required to serve the site at ultimate build-out.

The City's treatment plant currently has excess capacity of approximately 1 mgd. However, with the additional flows generated by this project, the treatment plant will lack sufficient capacity at ultimate project development. Therefore, plant expansion can be anticipated at approximately 75% build-out based on this project alone. Expansion may be necessary at an earlier stage depending upon other development within the City.

Mitigation Measures

Implement the proposed on-site collection system with project development.

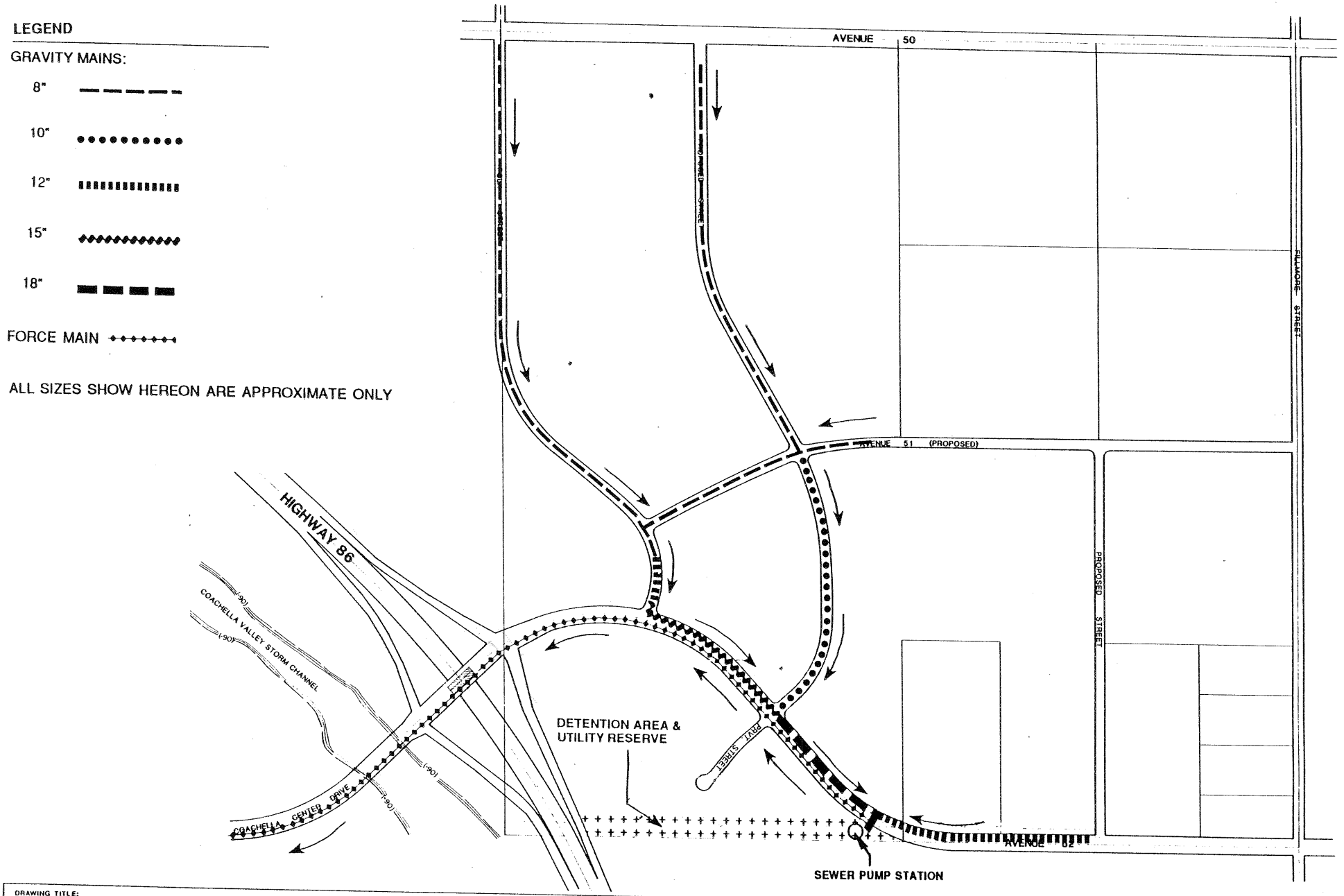
The project should provide for funding of its share of main sizing and treatment plant expansion in whatever program the City establishes for major capital improvements. As with other capital improvements and utility extensions, consideration should be given to the formation of a special taxing district (Mello-Roos), revenue bond financing or other assessment mechanism.

7.5 Fire Protection

The information contained in this subsection is based in large part on the July 14, 1989, interview with Fire Department representative Fire Marshal Bill Vargas.

Context

Fire services in the City of Coachella are provided by a Fire Protection District via the City Fire Department. District boundaries and the City limits are coterminous, and the City Council serves as the District Board of Commissioners. Funding sources for the District include secured and unsecured property taxes, county special district augmentation fund, Fire Development Fee (related to new construction), and miscellaneous service charges (emergency medical, public services, inspection, plan check fees, etc.).



DRAWING TITLE:

PROPOSED ON-SITE SEWER SYSTEM

Source: ASL Consulting Engineers, August 1989

100 300 700 1500 FEET
0

FIGURE #
7.19

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The only existing fire facilities in the City are located at the headquarters station, Sixth and Palm Streets (see Figure 7.20). The station is operated on a three platoon shift, consisting of two fire fighters and one captain on a 24-hour duty schedule. Fire personnel have basic emergency medical training, but advanced life support is provided by Springs Ambulance Service, a private company.

The headquarters station houses the administrative offices of the Fire Chief and Fire Marshall. Inspection services and Fire Code reviews are conducted by the Fire Marshall during normal business hours.

The month of May, 1989, was cited[6] as a typical activity period for the Coachella Fire Department. In that month the following responses, calls and assistance were rendered:

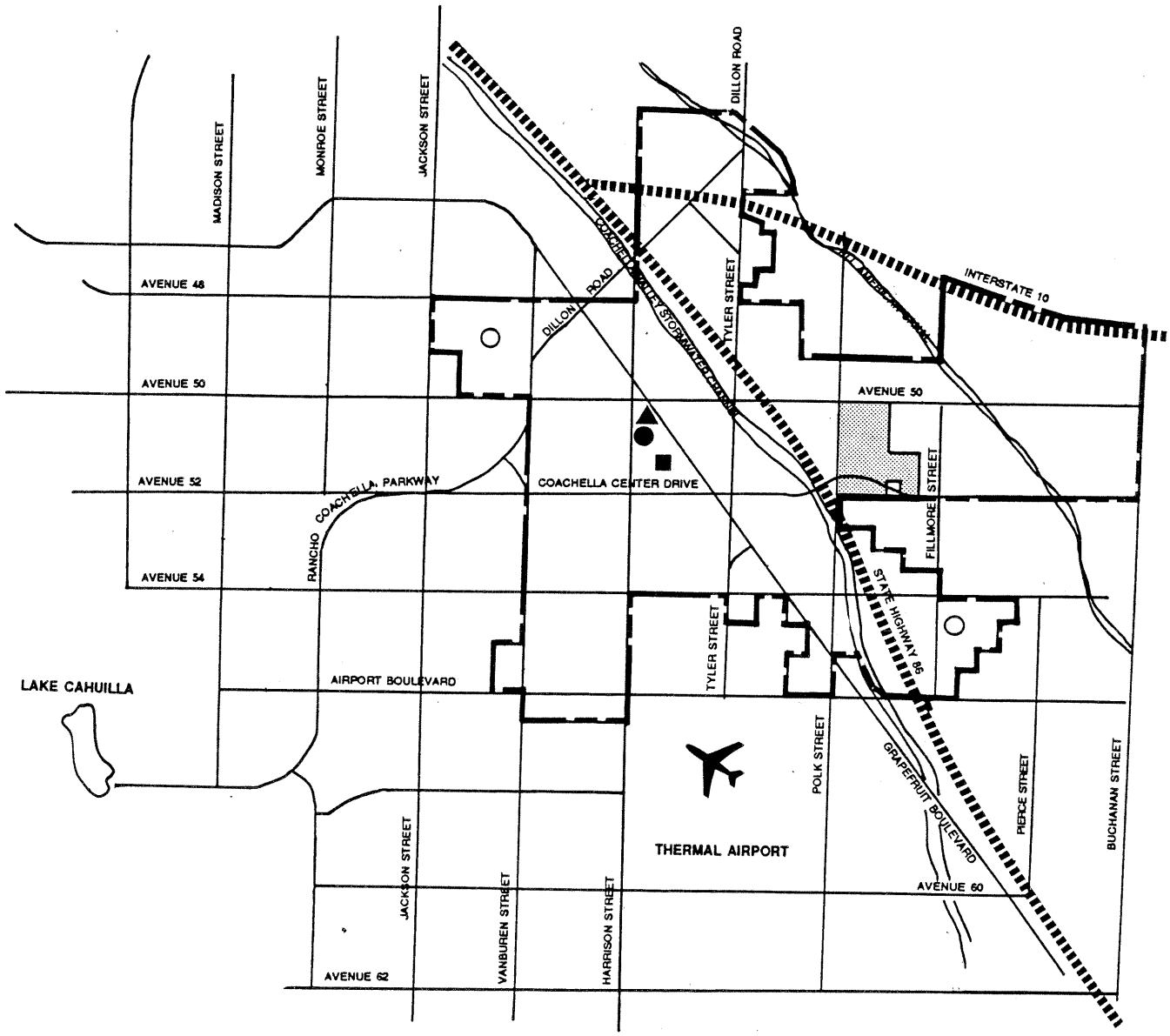
Responses with fire equipment within the fire district	31
Responses with fire equipment for mutual aid	9
Responses with resuscitator	24
Responses with medical aid	70
Fire Department rescue calls	4
Fire Department service calls	23
Chemical spill responses	2
Referral: Code enforcement weed abatement	10
Referral: Code enforcement vehicle abatement	1
Referral: Code enforcement nuisance complaints	2

The Fire Marshall indicated that the project site (in its fallow agricultural state), presents a certain fire hazard.

Project Impacts

The proposed project will place additional demands on the Fire District/Fire Department for service. Under present traffic conditions, the City Fire Marshall estimates the response time to a fire scene in the project area to be approximately five minutes; if delay is not experienced due to a train crossing. At-grade train crossings exist between the Applicant's Project area and the headquarters station. Response time to the site will increase as enroute traffic conditions become more congested resulting from future volume of traffic and number of access points onto thoroughfares.

[6] Source: Monthly report, John M. Rios, Fire Chief



LEGEND

- ■ LIBRARY
- ● FIRE STATION
- ○ PROPOSED FIRE STATION
- ▲ POLICE STATION
- APPLICANT'S PROJECT SITE
- CITY BOUNDARY

NO SCALE

DRAWING TITLE:

PUBLIC SERVICES, CITY OF COACHELLA

N

Smith, Peroni & Fox

SOURCE: City of Coachella, May 1988 / Draft Rancho Coachella Specific Plan 88-2 GR, The Keith Companies, March 1988

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C O A C H E L L A 3 8 0

FIGURE # 7.20

The Lusardi Company Specific Plan, "Rancho Coachella Vineyards", proposes to dedicate to the City a fire station site located on the east side of Filmore Street between Avenue 54 and Avenue 55, approximately 1-1/4 miles south of the southeast corner of the subject Specific Plan area (see Figure 7.20).

The Applicant proposes to dedicate to the City a 4.5 acre municipal use site on the south side of Avenue 52 (as realigned). The City may choose to use a portion of this site for fire facilities if it is deemed to be strategicly important, or if the subject project develops before the Lusardi property.

Domestic waterlines will be necessary to provide fire flow to the Applicant's Project area. The contemplated project involves extension of existing City water mains (see subsection 7.3, Water, for further discussion). Lines will need to be adequately sized to accommodate the following gallons per minute flow rates listed by land use:

Land Use	Minimum Flow GPM*
Residential, low density	1,000
Residential, medium density	2,500
Residential, high density	3,500
Commercial	5,000
Industrial	5,000
Schools, hospitals and civic	3,500
Parks and Open Space	1,000

* Source: City of Coachella Fire Department Development Guide

It is also noted that a well exists on the southeast corner of Avenue 50 and Polk Street, and that it should be properly secured and/or abandoned so that it does not present a safety problem.

Mitigation Measures

The Applicant proposes to dedicate to the City a 4.5 acre municipal site, a portion of which may be used for construction of fire facilities if deemed appropriate by the City/District. This would provide immediate response time to the project site.

Development within the project area will contribute fees and taxes towards the cost of fire facilities and personnel. (Refer to subsection 7.14, Cost/Revenue - Fiscal Impact Analysis for detail information.)

Water lines for fire suppression purposes shall be extended to the project site in accordance with the proposed water master plan.

Improvement projects could be assisted by the formation of a special taxing district (for items not already within the purview of the Fire Protection District), or other assessment mechanism used to this end.

Hazards of any type, which would impact emergency services and rescue, should be abated in the course of property development.

7.6 Law Enforcement Services

The information contained in this subsection is based in large part on the July 14, 1989, interview with Police Department representative Sergeant Joe Murillo.

Context

The City of Coachella currently maintains a 36 member Police Department, with 26 sworn officers and 10 non-sworn personnel. The Police Department is housed in the City Hall, located at 1515 Sixth Street (see Figure 7.20).

The desired police officer to citizen ratio is 1 to 1.5 officers per every 1,000 citizens, according to a department representative citing law enforcement agency standards.

Response time to the Specific Plan Area would be approximately five minutes, if delay was not experienced due to train crossing or other unexpected event.

Project Impacts

The proposed project will generate a need for additional police protection services and facilities. Based on the cited ratio, demand attributable to the project site would account for the addition of four to six officers at project build-out. The Police Department desires the ability to deploy officers from within defined districts of the City and would, therefore, look to have satellite office space in the Specific Plan Area.

The land use arrangement at this point does not appear to present any security/surveillance or access problems, according to Police Department staff. As more detailed plans become available in the development of the Applicant's Project, evaluation from the law enforcement perspective will be important.

Mitigation Measures

The proposed project will be developed in phases over a contemplated ten year period. The Police Department advises that service to the very initial or beginning increment of development will not present significant problems. Annual budgeting should, of course, need to assess staffing requirements for the future year based on development activity.

Consideration should be given by the City to providing satellite office facilities on the municipal use site.

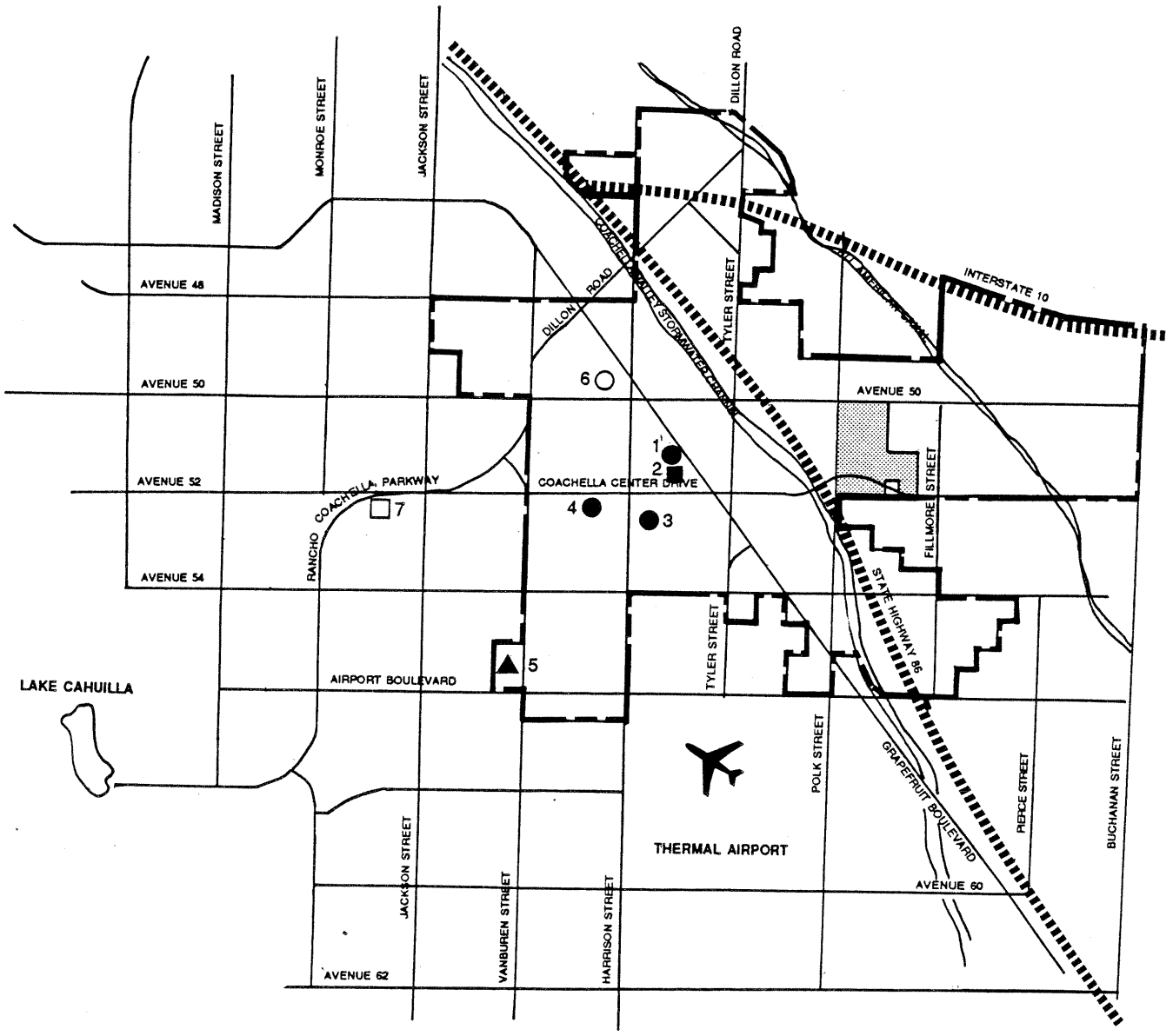
As part of the architectural review/site plan analysis process, police department review of new construction proposals should routinely take place.

Developers of Applicant's Project will contribute their fair share towards the improvement of access roadways. Improvement projects could be facilitated by the formation of a special taxing district (Mello-Roos), or other assessment mechanism.

7.7 Schools

Context

The Coachella Valley Unified School District currently operates four schools in the City of Coachella which would serve the project site: two elementary schools serving kindergarten through fifth grade, one junior high school serving grades six through eight, and one high school serving grades nine through twelve. The schools currently in operation are Palm View Elementary, Valley View Elementary, Bobby Duke Junior High, and Coachella Valley High School. Total enrollment at the four schools is 4,427; all are currently overcrowded with new students being housed in portable classrooms. Two additional schools will be built by the district over the next two years: Caesar Chavez Elementary, scheduled for completion by September, 1990, and a new junior high school with an estimated completion date of September, 1991. The junior high school will handle grades 7 through 9, thus relieving some pressure on the high school (see Figure 7.21). One other elementary school (Peter Pendelton) exists within the City of Coachella, but is not forecast to serve the Applicant's Project site.



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SCHOOLS:

- ●1 PALM VIEW (Elementary)
- ■2 BOBBY DUKE (Middle)
- ●3 VALLEY VIEW (Elementary)
- ● 4 PETER PENDLETON (Elementary)
- ▲ 5 COACHELLA VALLEY (High)
- ○ 6 CESAR CHAVEZ (Elementary-Proposed)
- □ 7 APPROXIMATE LOCATION UNNAMED MIDDLE SCHOOL, (Proposed 1991)
- PROJECT SITE
- CITY BOUNDARY

NO SCALE

DRAWING TITLE:

SCHOOLS IN THE PROJECT VICINITY

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Smith, Peroni & Fox

SOURCE: Coachella Valley Unified School District, August 1989

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FIGURE # 7.21

At the level of post-secondary eduction,Coachella is serviced by the Coachella Valley Community College District with its main campus, College of the Desert, in Palm Desert. Students can continue their education toward an associate degree and/or transfer credits to a four-year institution; the college also offers certificate programs in hospitality trades, management, business, data processing,and other technical fields. Although residents of the project would be eligible to attend the College of the Desert, no facilities are located in the project vicinity. College of the Desert offers a limited number of night classes on middle school and high school campuses in Indio and Coachella through its off-campus Eastern Valley Center program. College of the Desert has no unused capacity at the Palm Desert campus.

Project Impacts

The proposed project will result in the generation of additional students to be accommodated by Valley educational institutions. The proposed project will contain up to 1,326 dwelling units built over a ten year period. See Section 3.2.5 and Table 3.1, for projected unit phasing and population by year.

Student Generation Factors

In the "Development Fee Analysis - AB1600" report prepared by School Planning Services, May 1989, under contract to the Coachella Valley Unified School District[7], the following pertinent discussion is noted:

Overview --

In order to determine the impact of the identified new development within the Coachella Valley Unified School District, it was first necessary to calculate the total number of students that would be generated by those dwelling units. Traditionally, a student generation factor for a district is calculated by deriving the number of dwelling units within a district by some means, such as census information, and then dividing that number into the total enrollment of the district at the time. While this method produces a factor which is useful to compare with similarly derived factors from previous years, it does not have any direct relationship with the character of future development.

[7] The Coachella Valley Unified School District adopted this study and uses it on the basis for impact fee collection.

For the last twenty years the number of persons and, consequently,the number of school-aged children per household has been steadily decreasing throughout California. This has been brought on by a number of demographic factors including a declining birth rate, people desiring to have smaller families, and a significant increase in the number of single-parent households. All of these factors and more have caused straight-line projections of enrollment based on a static analysis of students per household to overestimate the number of students that can be expected out of new development. In addition to these factors, the diverse ethnicity of the students throughout the District causes different factors to be appropriate in different areas of the District. As the nature of development in the District continues to evolve to meet these changing demographic factors, the character of the new dwelling units will continue to change relative to the existing dwelling units in the District.

Consequently, in order to take into consideration these evolving factors, developments in the Coachella Valley area were examined using the following methodology.

Methodology --

Rather than basing the factors on the generation trends exhibited throughout the area as a whole (including older residential areas as well as new developments), the data from which the factors were derived is tied to prototypical residential projects (exemplars) which will reflect the development likely to occur within each district's attendance area in the years to come.

Whenever possible, specific residential project exemplars were selected from developments still active in sales phases and located within or immediately adjacent to the attendance area itself. For density categories that do not currently have exemplars within a given attendance area, exemplars from outside the area may have been substituted. In most cases, an average of the generation propensities of several exemplar projects has been used to calculate the specific attendance area's generation potential from a given density category.

Street names and address ranges were collected in the Urban plan report for exemplar projects when available, and project-wide data was collected from District staff in some cases. These figures were used to determine how many students (grades K-6,7-8, and 9-12) were (1986-1987 school year) being generated from each exemplar area. A listing of all students enrolled in the appropriate school district during the current school year was examined to produce the student counts for each project. From the project builder-developers, estimates of the number of homes

occupied in each project were obtained. Dividing the student counts by the occupied dwelling unit estimates provided generation factors.

Table 7.7 is a summary of the results of applying this methodology to the proposed development within the Coachella Valley Unified School District area. While reviewing the factors shown in the table, it should be remembered that they are not representative of the entire District, but reflect the market segments that are now being attracted to new development within the District or will be in the near future by the product types that are being made available to the public by the builders in the area.

Table 7.7
COACHELLA VALLEY STUDENT GENERATION FACTORS
NEW RESIDENTIAL DEVELOPMENT BY GRADE RANGE

K - 6	.61/unit
7 - 8	.11
9 - 12	.37

In aggregates,the student generation factors used form the Urban Plan survey of the District for K-12 are 1.09 students per unit. These figures are dramatically lower than the findings from the past three years of residential development fee data in which an average of 2.0 students per unit was calculated, including the vagaries of sales and occupancy timing. Based on this data and the historical experience within the District, in the opinion of the consultant the 1.09 per unit generation rate used in this analysis is conservative and thereby understates potential residential impact on the District. This conservative student generation factor has been used in this analysis as a conservative estimate of residential impact.

Of the contemplated 1,326 dwelling units, 739 would, presumably, be developed as conventional single-family dwellings within the medium low density range, with occupancy factors and pupil generation normally associated with this tenure, whereas, 587 dwelling units (or approximately 45% of the total), would have different occupancy characteristics related to the type of unit (housing product) actually built. This Specific Plan/EIR assessment has been based on the assumption that the medium high density units would be developed as patio homes (or other semi-attached configuration), providing housing for singles, older couples whose children have left home,or starter families with infants and preschool age children. The 337 high density range units are projected to be rental apartments consisting of studios, one and two bedroom units. Large family rentals are not contemplated to be a part of the housing market segment addressed by this land use category.

The household size multiplier used throughout this Specific Plan/EIR analysis has

been 2.97 persons/household; which is the Coachella Valley average. Since 45% of the proposed project is other than conventional detached single-family dwellings, using a household size of 2.97 as an average for all 1,326 potential units, is believed to be liberally stated. The student generation factor which equates to this household size factor is something less than 0.97 school age children per household. In the projections made by the School District consultant the averaged factor was 1.09 pupils per household; for purposes of impact assessment this EIR will defer to the School District's adopted factor. Table 7.8, lists the estimated number of pupils to be generated by this project by year; Table 7.9 provides a summary by grade range.

By reviewing the noted tables some assumptions may be made with regard to when facilities would need to come online, related to pupils originating from the subject project. Also, it can be seen that impacts on the School District do not occur all at once. Therefore, some advance facility planning activities may take place, and revenues from new development may be accumulated or other funding sources identified.

In an inquiry response, dated August 7,1989[8], the Assistant Superintendent, Facilities and Operations, for the Coachella Valley School District, took issue with the adopted School District study, and indicated that he believed the subject project will generate 2.0 students per household (rather than 1.09). He also advised that the proposed project will generate a need for two Elementary Schools, one Middle School,and expansion of the High School. To mitigate this impact he suggested that 40 acres of land be given to the School District; that the infrastructure be provided to the property; and, that a special taxing district be set-up to have project residents (property owners) finance school construction.

Beyond the annualized funding of school districts from property taxes and other sources, the Coachella Valley Unified School District assesses a school impact fee of $1.56 per square foot for all residential construction and $0.26 per square foot for all commercial development within the District's boundary. It was the intent of the State Legislature in allowing the current impact fee, to mitigate the impact of growth on school facilities. It is the property developer's legal obligation to pay the development impact fees and/or negotiate land dedication in lieu of cash payment. The School District as a political subdivision of the State, has the right of eminent domain, which allows it to condemn private property for school use.

[8] Response to Information Inquiry letter sent by Smith, Peroni and Fox to Jorge B. Gutierrez, Assistant Superintendent, Coachella Valley Unified School District.

Table 7.8

STUDENT GENERATION BY YEAR

Years/Units/Pupils

YEAR	1	2	3	4	5	6	7	8	9	10
Dwelling Units	99	99	99	269	99	99	266	99	99	98
Grade Range										
K - 6	60.39	60.39	60.39	164.09	60.39	60.39	162.26	60.39	60.39	59.78
7 - 8	10.89	10.89	10.89	29.59	10.89	10.89	29.26	10.89	10.89	10.78
9 - 12	36.63	36.63	36.63	99.53	36.63	36.63	98.42	36.63	36.63	36.26
Total by Year	107.91	107.91	107.91	293.21	107.91	107.91	289.94	107.91	107.91	106.82
Cumulative Total	107.91	215.82	323.73	616.94	724.85	832.76	1122.70	1230.61	1338.52	1445.34

Table 7.9

CUMULATIVE TOTAL STUDENT GENERATION BY GRADE RANGE

Years/Pupils

Grade Range	1	2	3	4	5	6	7	8	9	10
K - 6	60.39	120.78	181.17	345.26	405.65	466.04	628.30	688.69	749.08	808.86
7 - 8	10.89	21.78	32.67	62.26	73.15	84.04	113.30	124.19	135.08	145.86
9 - 12	36.63	73.26	109.89	209.42	246.05	282.68	381.10	417.77	454.36	490.62

The proposed project has reserved 10 acres of land for school facilities (see Figure 7.22). The reservation is based on the proposal that the reserved area not be developed until after year 5 of the phasing program. This would allow the School District opportunity to purchase/condemn this property or other sites, or negotiate for dedication in lieu of impact fees.

Additionally, the impact mitigation fees which the School District collects may be used to lease portable classrooms to house students during the construction phase of permanent facilities, as well as,for the construction itself. The District is in the LeRoy Greene Lease Purchase Program, and the District will become eligible to build additional schools, providing the money is available.

Caesar Chavez Elementary School, (opening September 1990) and the new junior high school (opening September 1991) could both serve children from the subject project. However, they were planned to accommodate general population growth from Coachella without specifically contemplating pupils generated by this project.

The Coachella Valley Community College District projects an impact from the potential adult population (College age and older) generated by the 1,326 dwelling units proposed for development. This population increase, and that associated with Rancho Coachella Vineyards and McNaughton Specific Plans, as well as general population growth in the eastern valley is cited as necessitating either an expansion of facilities in Palm Desert or a satellite campus. In locating a satellite campus, first priority will be given to the eastern end of the valley.[9] Project residents will pay property taxes to assist in funding of community college facilities and programs. The project site, itself, is not at the scale in which a $\pm$ 100 acre satellite campus site could be accommodated or reserved.

Mitigation Measures

A 10 acre site as shown in Figure 7.22, should be reserved (at least through year five) for acquisition by the Coachella Valley Unified School District.

In accordance with State law the project developer is required to pay school impact mitigation fees as established by the Coachella Valley Unified School District at the time of construction approval.

The developer and school district may by mutual agreement, negotiate for dedication of land in lieu of all or part of the impact fee payment.

[9] Source: Telecommunications August 16, 1989, between J.S. Kassovic, Smith, Peroni and Fox, and Jack Matlock, consultant to Coachella Valley Community College District.

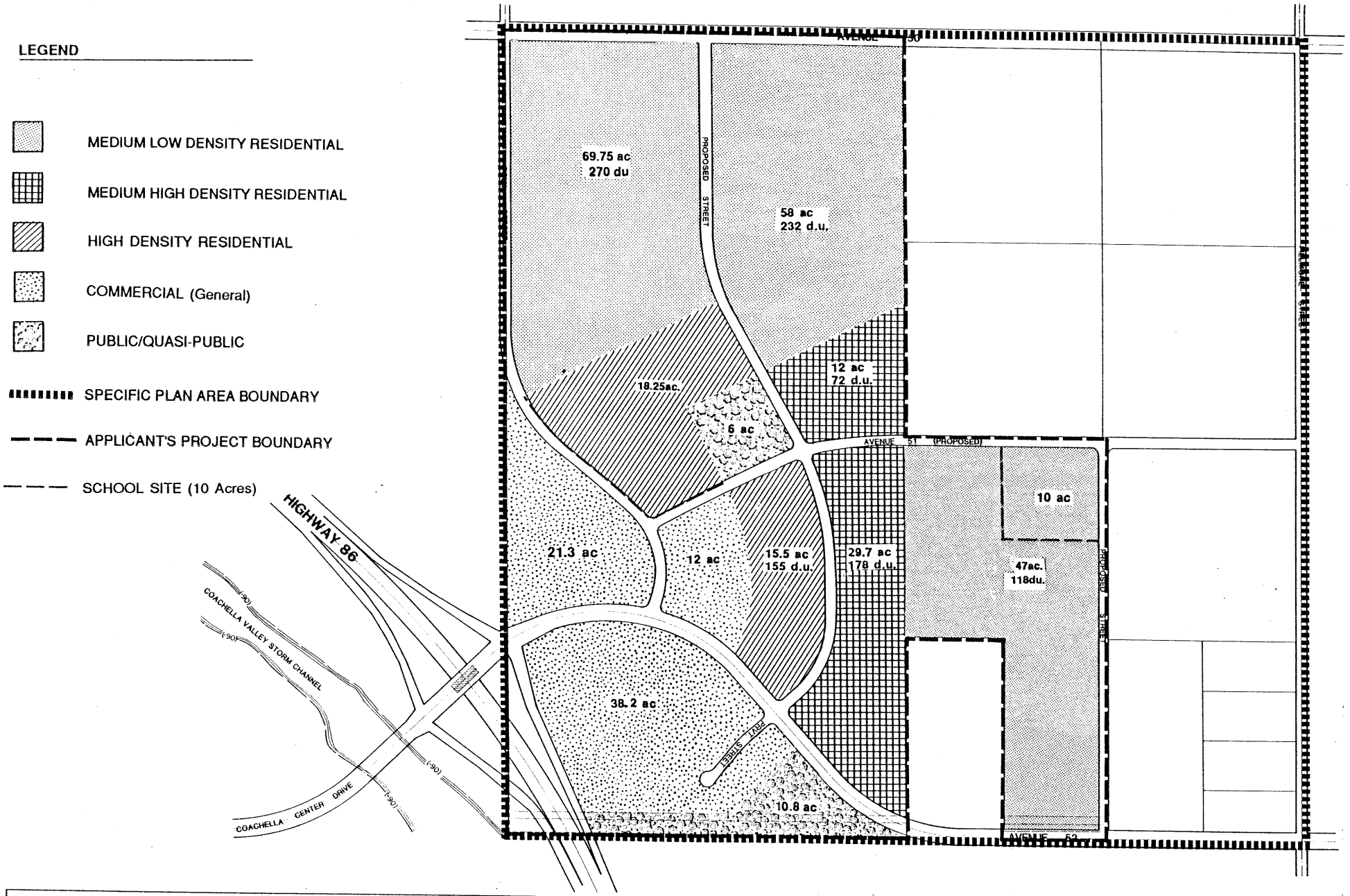
LEGEND
MEDIUM LOW DENSITY RESIDENTIAL
MEDIUM HIGH DENSITY RESIDENTIAL
HIGH DENSITY RESIDENTIAL
COMMERCIAL (General)
PUBLIC/QUASI-PUBLIC
SPECIFIC PLAN AREA BOUNDARY
APPLICANT'S PROJECT BOUNDARY
SCHOOL SITE (10 Acres)
HIGHWAY 86
COACHELLA VALLEY STORM CHANNEL
COACHELLA CENTER DRIVE
AVENUE 50
PROPOSED STREET
69.75 ac
270 du
58 ac
232 d.u.
12 ac
72 d.u.
18.25ac.
6 ac
AVENUE 51 (PROPOSED)
10 ac
21.3 ac
12 ac
15.5 ac
155 d.u.
29.7 ac
178 d.u.
47ac.
118du.
38.2 ac
10.8 ac
AVENUE 52
DRAWING TITLE:
PROPOSED SCHOOL RESERVATION
100 300 700 1500 FEET
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FIGURE #
7.22
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Property within the project shall be taxed at the established rate for the Unified School District and Community College District.

7.8 Parks and Recreation

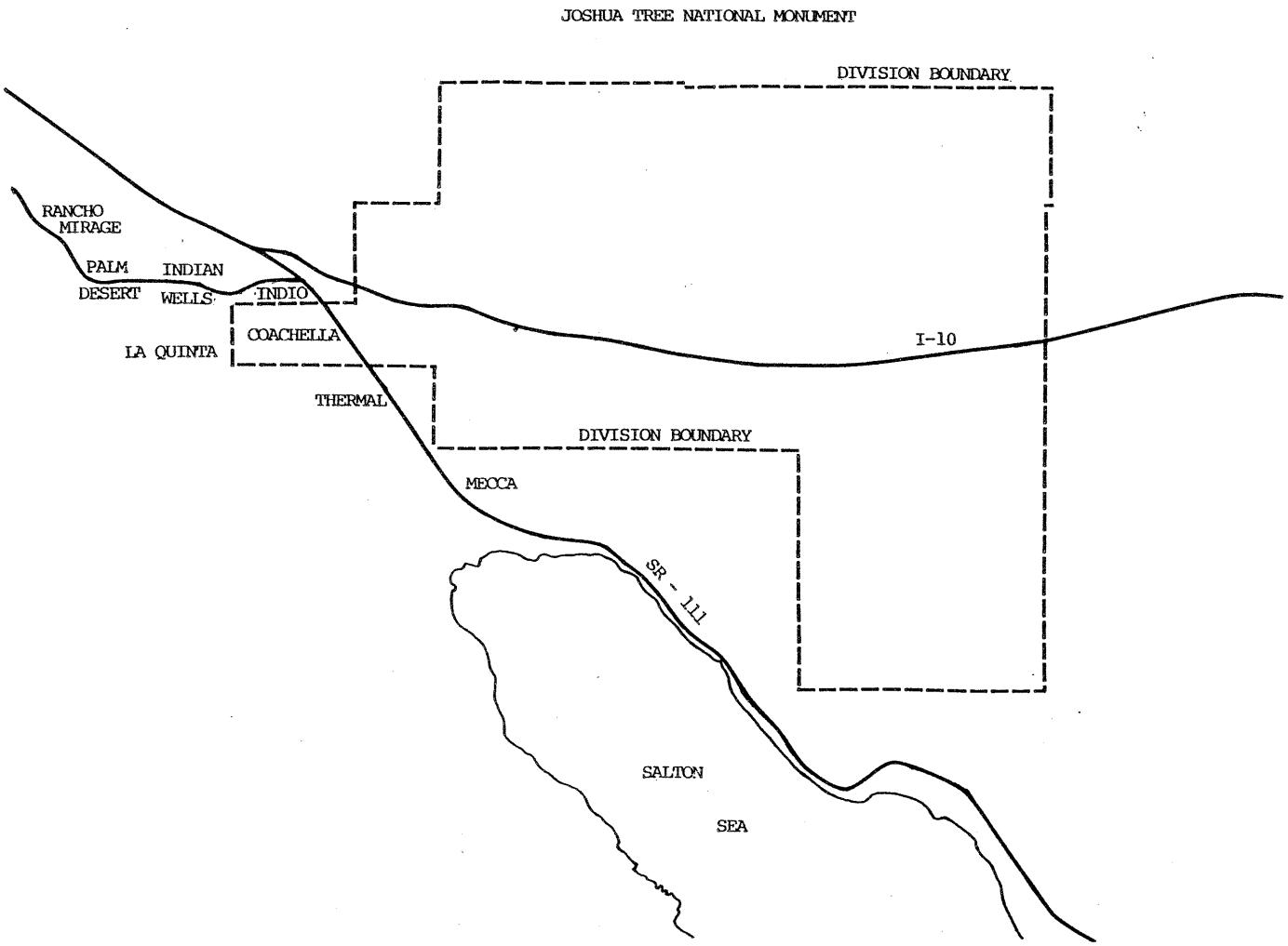
Context

A number of general and special purpose agencies provide park and recreation services to Coachella residents. Three state recreational facilities are located within a thirty-mile radius of the Specific Plan area: Salton Sea State Recreational Area; Anza-Borrego Desert State Park; and Mount San Jacinto State Park. Joshua Tree National Monument (federal), also lies within this radius.

The local regional park, maintained by Riverside County Parks Department,is Lake Cahuilla County Park, located approximately 7 miles southwest of Coachella, which offers swimming, boating, camping, fishing, and picnicking. The Department also maintains the 208 acre Fish Traps Park (10 miles south of Indio); the 640 acre Mecca Hills Park was recently traded to the Bureau of Land Management. Both parks provide open space but are undeveloped, with no recreational facilities on-site. Fist Traps Park is of archaeological interest, containing stone fish traps carved by the indigenous inhabitants when the area was covered by ancient Lake Cahuilla.

The Coachella Valley Recreation and Park District, is a special purpose agency established before the City of Coachella incorporated. The entire City as well as a large portion of the Coachella Valley is within the District's boundary. The City of Coachella is located within Division 2 of the District's service area. (See Figure 7.23) Although most of the Division lies to the east of Coachella, the City represents approximately 90% of the population served. The Recreation and Park District adopted a Master Plan in June of 1988, which projects a need for district owned and operated facilities in or adjacent to the City of Coachella, within Division 2, as follows:

Date	Facilities Needed
1990	1 additional Community Park
1995	1 additional Neighborhood Park
2000	1 additional Sports Complex and 1 additional Neighborhood Park
2005	1 additional Neighborhood Park and 1 additional Community Park
2010	1 additional Neighborhood Park and additions to existing parks



DRAWING TITLE:

COACHELLA VALLEY RECREATION AND PARK DISTRICT, DIVISION 2

Source: Coachella Valley Recreation and Park District

FIGURE #

7.23

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Presently, the District administers many of the programs which are conducted in City owned parks. The District runs both youth and adult recreation and sports programs; the youth sports and recreation programs are subsidized from 10%-90% of their costs by tax dollars from property taxes, and by profits, if any, from the adult softball program. Adult recreational programs are intended to break even, users paying fees to cover costs.

The City of Coachella presently owns and maintains six public parks within their corporate limits (see Figure 7.24); the largest of which is the Bagdouma Park (Bagdad Avenue and Douma Street). Facilities in this park include: 2 baseball fields, 2 basketball courts, 2 soccer fields, a swimming pool,a community activity center; and, a picnic area. Since the Specific Plan Area and its environs have existed as rural agricultural lands and only recently annexed to the City, no public parks presently exist in this area.

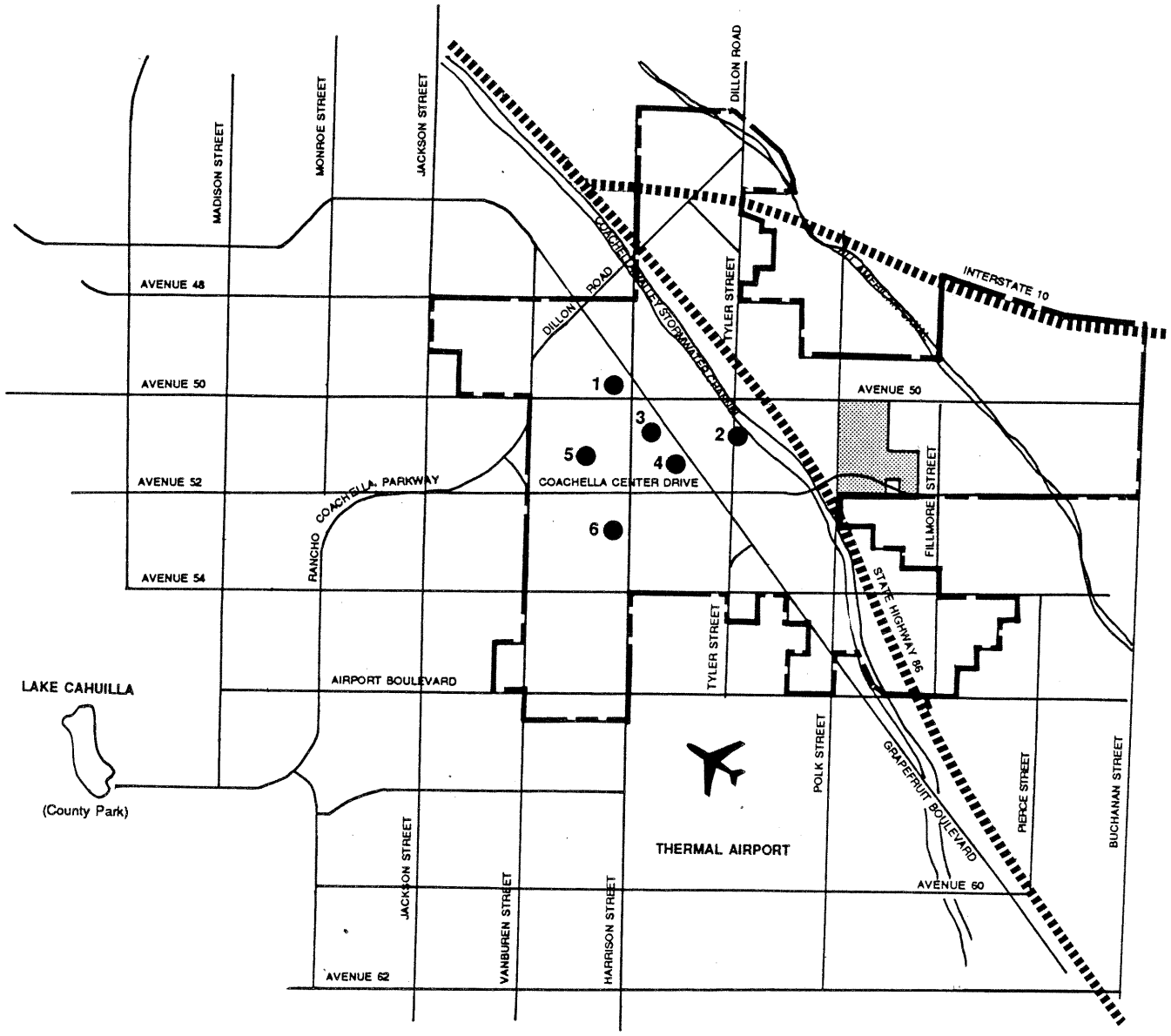
Standards for City park development, as they relate to the Applicant's Project, come from two sources. The City General Plan in the newly adopted Parks and Recreation Element calls for one neighborhood park of at least 10 acres for every area of approximately 4,500 population. The City Municipal Code in Section 21-266 "Dedication of Land for Park and Recreation Purposes", provides that subdividers shall dedicate land or pay a fee, or a combination thereof, in such ratio as recommended by the Commission and approved by the Council. Dedication of land shall be at a rate of not less than one and two-tenths (2/10) acres of land per 100 lots in the subdivision or 5% of the total area in the subdivision,whichever is greater. In the case of condominiums or multi-family developments, the number of dwelling units proposed shall be considered as the number of lots.

Project Impacts

The subject project will generate an estimated resident population of 3,938 persons occupying up to 1,326 lots/units; on approximately 250.2[10] acres of land. The estimated park responsibility (impact) of the project to the City would be as follows:

1. General Plan - Parks and Recreation Element: 8.75 acres
2. Municipal Code - Subdivision Requirements:
   a) By lot/unit method - 15.9 acres
   b) By percent of area method- 12.51 acres

[10] Excludes ten acres of residential land set aside for school purposes.



LEGEND

● PARKS:

1 DE ORO
2 SIERRA VISTA
3 CITY HALL
4 BRIGGS FIELD
5 BAGDOUMA
6 "TOT LOT"

PROJECT SITE

CITY BOUNDARY

NO SCALE

DRAWING TITLE:

PARKS IN THE PROJECT VICINITY

N

Smith, Peroni & Fox

SOURCE: City of Coachella, May 1988

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C O A C H E L L A 3 8 0

FIGURE # 7.24

The subject project proposes to dedicate to the City a 6 acre park site for neighborhood use plus, reserve 9.9 acres for pocket parks to be dedicated with phases of development.

The Riverside County Parks Department advises that Lake Cahuilla Park is operating at capacity, and that Fish Traps Park and Mecca Hills Park will not service significant numbers of residents in their current undeveloped state.

Improvement (development) of the project site will proportionally increase the tax revenues which flow to the Recreation and Park District and may assist to acquire and develop the park facilities envisioned within their Master Plan. Likewise, Riverside County will receive an increase in tax revenue to address regional recreation pursuits. The City of Coachella is the only government agency which may directly require dedication of land or payment of monies as a prerequisite to development.

Mitigation Measures

As proposed in the subject project Specific Plan, a 6 acre park site shall be dedicated to the City and up to 9.9 acres of land shall be reserved for vest pocket parks.

7.9 Utilities and Energy Conservation

Context

Telephone

Telephone services are provided to the area by General Telephone (GTE). Additional service lines will be necessary when development of Applicant's Project occurs.

Electricity

Imperial Irrigation District provides electrical service to the City of Coachella and adjacent County lands. Internal distribution and service lines would need to be planned for development of the proposed project.

Natural Gas

Southern California Gas Company provides natural gas to the City of Coachella and presently has a main in Avenue 52, 650 feet east of Tyler Street.

Project Impacts

Telephone

Development will require extension of existing lines to accommodate proposed land uses. The telephone company will provide additional service as required. No impacts are anticipated in terms of services; other considerations would suggest that future service lines be placed underground to avoid impacts of an aesthetic nature.

Electricity

The additional electrical load that would be generated by the proposed project would increase the peak demand on the District's existing facilities. This would result in the need for construction and installation of new electrical facilities (at the developer's expense). The following improvements may be necessary to accommodate the contemplated project:

- Electrical substation(s) to be interconnected with transmission and distribution lines now existing in the vicinity. Construction of the substation would be undertaken by the District on property provided by the developer (subject to agreements being reached).

- Expansion of the Districts existing or planned transmission line(s) to provide electrical energy to the mentioned substation(s) now or in the future.

- Distribution lines to serve the project and to provide electrical ties to the existing or future distribution facilities that are in the proposed projects immediate vicinity.

Applicant's Project will utilize an estimated additional 29,651,186 KWH per year at buildout; energy conservation techniques should be employed in the actual project construction.

Natural Gas

Development in the project area will require extension of off-site mains (presently existing in Avenue 52, 650 feet east of Tyler Street) along easements presently held or acquired for this purpose. This should be able to be accomplished without significant impacts. The availability of natural gas service is based upon the

condition of gas supply and regulatory policies. The company has several programs to provide assistance in selecting the most effective applications of energy conservation techniques for a particular project.

The proposed project is estimated to use 111,173,412 cubic feet per year of natural gas.

Mitigation Measures

Telephone

- Underground all new telephone lines.

Electricity

- All structures should be constructed to Uniform Building Code Standards and meet California Energy Code requirements.
- Structures and landscaping should be placed to maximize the use of shade features to minimize the use of air conditioning in the summer, yet allow for solar warming in the winter.
- Fixtures and appliances should be selected for their energy efficiency characteristics.
- Provision should be made in precise project planning to accommodate any substation and distribution facilities needed to serve the project.

Natural Gas

- Buildings should be constructed using insulation and air tight seals to conserve natural gas when it is used for space heating. The building standards referenced under "Electricity", should also be employed in any construction activity.
- Site developers should avail themselves of any technical support which may be offered by the utility provider in the selection of energy conservation techniques.

7.10 Solid Waste

Context

Western Waste Industries, the fifth largest refuse hauler in the United States, provides solid waste services in Coachella under contract to the city.

Solid waste from Coachella is taken to the 640 acre Coachella Sanitary Landfill. This facility is currently receiving approximately 700 tons of solid waste per day, according to the July 1989 Riverside County Solid Waste Management Plan. The County expects the landfill to reach capacity and be closed between 2020 and 2023. The primary sources of solid waste for the landfill are nearby residential, commercial, and industrial uses.

Project Impacts

Table 7.10 summarizes the estimated solid waste which would be generated daily by the project at buildout. Western Waste anticipates no difficulty in hauling this amount of trash to the Coachella Sanitary Landfill. The 31,195 lbs. generated daily by this project site would represent approximately 2% of the 700 tons of solid waste received at the landfill daily. The project will incrementally reduce the life of the landfill; however, the impact is not considered significant.

Table 7.10
ESTIMATED SOLID WASTE GENERATION

Land Use	Generation Factor Per Day	Solid Waste Lbs/Day
Residential		
989 SFDU	10.5[1]	10,385
337 MFDU	8.0[1]	2,696
Commercial		
715,000 SF/Retail[2]	2.5 lbs/100 sqft[1]	17,875
		31,956

[1] Source: National Solid Waste Management Association Technical Bulletin #85-86. Basic Data: Solid Waste Amounts, Composition and Management Systems.

[2] Estimated square footage for retail use only over entire 73.3 acres, at 10,000 sq.ft./acre.

Mitigation Measures

None required.

7.11 Health Services

Context

The closest hospital to the proposed project area is John F. Kennedy Memorial Hospital, a major, full service hospital located approximately 6 miles northwest of the project site in Indio. It is licensed for 130 beds and operates at an average daily census of 65% capacity. Plans are underway to expand by approximately 40% (52 beds) by 1992-93, with the expansion financed by the hospital's owner, National Medical Enterprises.

Project Impacts

John F. Kennedy Memorial Hospital estimates that the project would generate approximately 11 in-patients per month. They anticipate no impact on their ability to provide medical services to the community.

Mitigation Measures

None required.

7.12 Library Services

Information and data regarding facilities and services was, in large part, taken from an inquiry response provided by the Riverside City/County Public Library, Judith M. Auth, Assistant Library Director, in letter dated August 2, 1989.

Context

The City of Coachella and surrounding unincorporated County area is served by a Riverside City/County Free Library System branch, located 2-1/4 miles west of the project site at 1538 Seventh Street (see Figure 7.20). Branch facilities include a 3,000 square foot building, housing 12,836 cataloged volumes of a 501,359 volume network system.

Sources of funding for the library system include a little over 2-1/2% of the 1% general county tax levy, and competitive request for County imposed development mitigation fees. This new development fee was established by the County Board of Supervisors to lessen the fiscal impact of growth within the County. The City of Coachella does not directly fund or have any administrative relationship with the library system.

The Coachella branch library is estimated to have a service population of 18,000 people; the current (January 1, 1989), State Department of Finance estimate for population within the City of Coachella is 14,115.

Project Impacts

The subject project is estimated to yield up to 3, 938 new City residents over the ten year phased period. These new residents will at the same time place demands for library services and provide revenue from taxation. The Assistant Library Director (in the referenced correspondence), asserts that present system-wide volumes per capita and square footage per capita are inadequate, due to population growth throughout the County.

The library system's "Projected Facilities Needs to the Year 2000", has envisioned a 15,000 square foot building for the Coachella branch, with a construction cost of 3.1 million dollars and target construction date of 1996-97. The estimated annual operating cost for this facility is $473,275. Apparently, a funding scheme has not been identified to accompany this projection.

Standards for library collections have not been published in the last twenty (plus) years, due in large part to the changing nature of library services which have evolved from the single stand alone community libraries to the large networking organizations such as the Riverside City/County and the Inland Empire systems which serve Coachella Valley cities. Therefore, it is difficult for a third party to objectively evaluate the impacts of the proposed project and/or the validity of assertions of inadequacy.

The Assistant Library Director advises that the perceived impact of the project may be mitigated by the following:

a. A one time assessment of a library facilities and collections fee (in 1989 dollars) of $325 per residential unit to maintain the current level of service, or $354 per residential unit to provide the desired level of service.

b. The determination that the project's estimated assessed valuation will provide at least $40,031 per year (in 1989 dollars) to the County Library District to finance ongoing expenses at the current level of service, or $69,628 per year to finance ongoing expenses at the desired level of service.

Mitigation Measures

Lessening of a project impact is based on some objective theory as to the type and degree of impact which will result. In this instance it has been asserted that there will be a service level impact as a result of the project, and the suggested mitigation is an increase in funding. The City of Coachella neither acts as a tax collector or budget approval authority for the library system. Funding at whatever level is determined to be adequate, is a political decision which rests with the County Board of Supervisors and/or the electorate of the library taxing district.

Options for Coachella City Council action could include:

1. Requesting that the project sponsor negotiate an impact fee with the Library Director; or
2. Look to other (which could include more cost effective) means of providing library services (such as city affiliation with the Inland Empire system); or,
3. Allow the County Board of Supervisors (and/or electorate), to address funding and service levels for the library system, as they may deem appropriate within the library's service area.

7.13 Easements

Context

A number of easements exist on the project site as well as dedicated and reserved street right-of-way. The following list which is keyed to Figure 7.25, enumerates the known easements/right-of-ways on the project site.

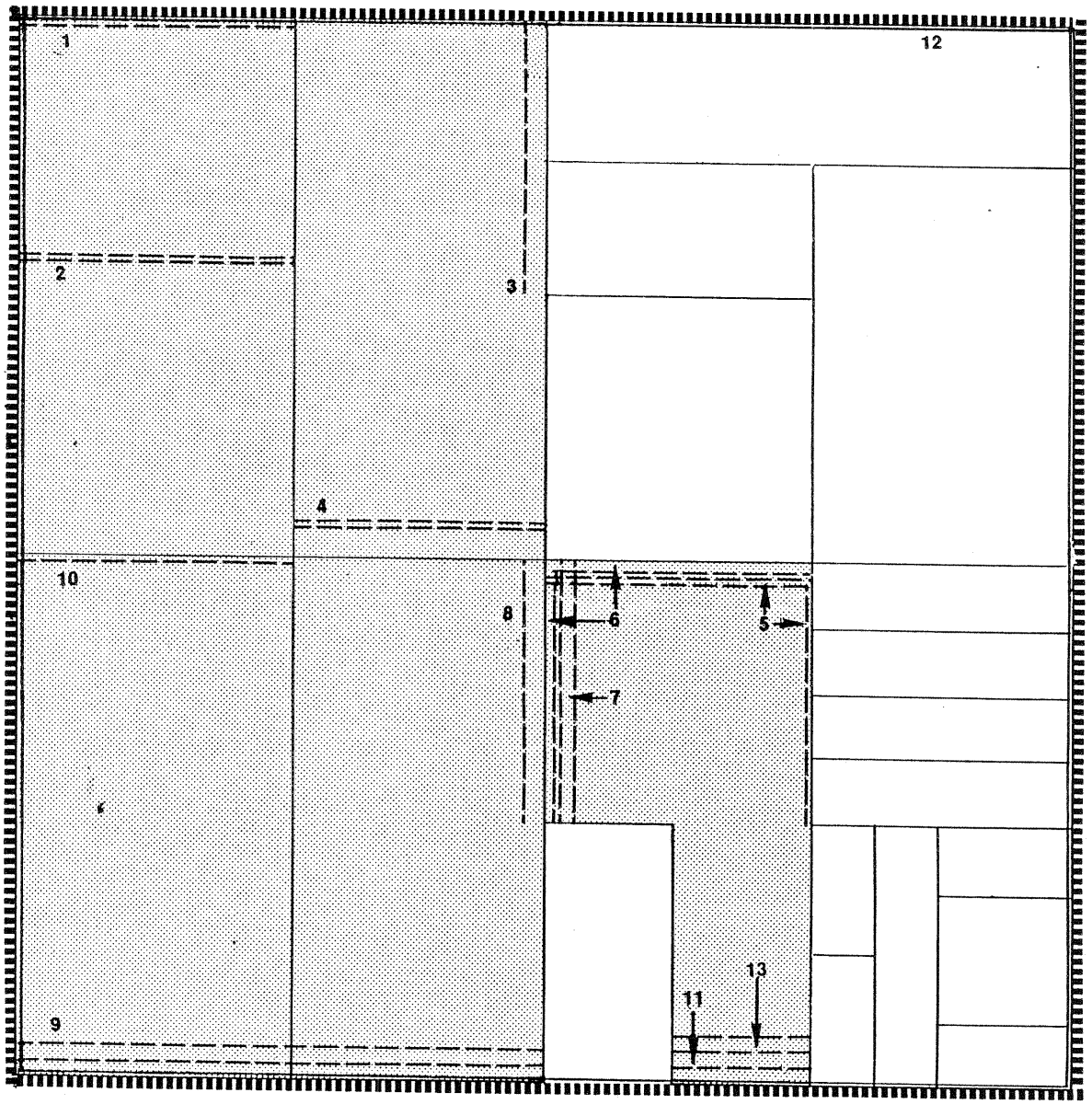
1. Ten foot easement for water pipeline, Southern Pacific Company.
2. Twenty foot easement for pipeline, Van Der Steen Enterprises.
3. Centerline of easement for irrigation distribution system, width unknown.
4. Twenty foot easement for pipeline "in favor of Ellis".
5. Ten foot easement for water pipeline, granted to USA.
6. Twenty foot easement public road; reserved in deed from Southern Pacific Land Company.
7. Fifty foot easement for public utilities granted to C.V.C.W.D.

LEGEND

SPECIFIC PLAN AREA BOUNDARY

EASEMENT

ROAD RIGHT-OF-WAY



DRAWING TITLE:

EASEMENTS AND ROAD RIGHTS-OF-WAY

Source:
Safeco Title Insurance Company, Policy of Title Insurance, Policy No. 529065-2, Dec. 1985.
Stewart Title Guaranty Company, Policy of Title Insurance, Policy No. CNJP 1501-122288, March 1987.
Assessor's Map Book 763, pp 7-8, Riverside County, CA.

100 300 700 1500 FEET
0

FIGURE #
7.25

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COACHELLA 380

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Smith, Peroni & Fox

8. Centerline of easement for irrigation distribution system (width unknown).
9. Fifty foot easement for public utilities (electrical power transmission line).
10. Twenty foot easement public road.
11. Fifty foot right-of-way for electrical transmission power line.
12. Thirty foot right-of-way for Avenue 50, Avenue 52, Polk Street, and Fillmore Street.
13. Fifty foot easement for public utilities.

Project Impacts

Implementation of the proposed project will require that a number of easements be abandoned or relocated. This is normally a subject which becomes important at the time of land subdivision. The project would not appear to adversely impact or be effected by any purposeful easements. The project design has taken into consideration the facilities which are maintained by the Imperial Irrigation District consisting of two 92 KV lines and 12,000 KV distribution line running along the north side of Avenue 52.

It will be assumed that as alternate alignments for Avenue 52 and Polk Street are improved and dedicated that the City of Coachella will vacate surplus right-of-way to the adjacent property owners.

Mitigation Measures

- Provide any new or replacement easements necessary for public and utility purposes at the time of land subdivision.

7.14 Fiscal Impact Analysis

Introduction

This particular impact section will deviate somewhat in its format, to accommodate the report prepared by Roger M. Rostvold, Real Property Consultant, which presents an analysis of the potential project-related public costs-benefits, to allow a determination as to whether or not the fiscal benefits of the project are greater than the incremental public costs of the development. To the extent that public revenues (benefits) contributed by the project exceed the public costs, the project will have a net positive (beneficial) impact in a fiscal sense.

This analysis has been prepared utilizing the case study approach and the per-capita cost allocation (multiplier) methodology, where appropriate.

Subsequent to the preparation of this analysis the City staff and project sponsor mutually agreed to amend the project proposal to eliminate five acres of neighborhood commercial land use; reduce the municipal area to 10.8 acres; increase the Regional Commercial site to 38.2 acres; and, add 20 single family units. This modification results in the following ramifications to the findings of the report which is contained below. The increase of 20 residential units would result in the following:

Net increase in Revenue (Table 7.18) in the tenth year of $18,595 or 1.75%
Net increase in Total Cost (Table 7.19) in the tenth year of $15,935 or 1.56%
Net increase in Revenue/Cost (Table 7.20) in the tenth year of $2,926 or 1.5%
The final cost to benefit ratio would increase from 1.057 to 1.059.

The modification of commercial development would result in a reduction of expected revenue (Table 7.21) in the tenth year of $28,780 to $1,023,185.

The above change is not significant as it relates to the fiscal impacts of the project. The project will have a positive fiscal impact on the City.

Because this is not deemed to materially effect the conclusion drawn in this report it is published with original findings.

Project Description

The subject project of this Fiscal Impact Analysis is proposed to consist of 719 single family detached residential units, 250 attached, or semi-attached, "patio" homes and 337 apartment units. The typical single family home would have an average of 1,600 square feet of living area floor space, while the patio home would average 1,300 square feet. Home values would average $117,600 and $88,725, respectively, when the first phase reaches the market in 1991.

It is estimated that development of the proposed project would be phased over a ten year time period. Apartment units would be built in the fourth and seventh years of the project. Commercial elements of the project would be constructed in the third, fifth and seventh years of the project.

Table 7.11 (Assumptions and Base Data) provides a phasing plan for development of the residential portion of the project. In addition, we can estimate that the project would have an ultimate population base of 3,879 persons, assuming a factor of 2.97 persons per household dwelling unit.

TABLE 7.11

BRANDENBURG-BUTTERS "COACHELLA 380" SPECIFIC PLAN

CITY OF COACHELLA, CALIFORNIA

ASSUMPTIONS AND BASE DATA

	AVERAGE UNIT SIZE	PER SQUARE FOOT VALUE	PERSONS PER UNIT
MEDIUM LOW DENSITY	1,600 SQUARE FEET	$70.00	2.97
MEDIUM HIGH DENSITY	1,300 SQUARE FEET	$65.00	2.97
HIGH DENSITY	750 SQUARE FEET	$50.00	2.97

ANNUAL VALUE ESCALATION FACTOR: 5.0%

PROJECT ROAD LANE MILES: 8.1

AVERAGE UNIT VALUE:	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEDIUM LOW DENSITY	117,600	123,480	129,654	136,137	142,944	150,091	157,595	165,475	173,749	182,436
MEDIUM HIGH DENSITY	88,725	93,161	97,819	102,710	107,846	113,238	118,900	124,845	131,087	137,642
HIGH DENSITY	39,375	41,344	43,411	45,581	47,861	50,254	52,766	55,405	58,175	61,084

UNIT SALES [PHASING]:	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEDIUM LOW DENSITY	72	72	72	72	72	72	72	72	72	71
MEDIUM HIGH DENSITY	25	25	25	25	25	25	25	25	25	25
HIGH DENSITY				170			167			
ANNUAL TOTAL	97	97	97	267	97	97	264	97	97	96
CUMULATIVE TOTAL	97	194	291	558	655	752	1,016	1,113	1,210	1,306

ANNUAL SALES VALUE:	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEDIUM LOW DENSITY	8,467,200	8,890,560	9,335,088	9,801,842	10,291,935	10,806,531	11,346,858	11,914,201	12,509,911	12,952,970
MEDIUM HIGH DENSITY	2,218,125	2,329,031	2,445,483	2,567,757	2,696,145	2,830,952	2,972,500	3,121,125	3,277,181	3,441,040
TOTAL ANNUAL SALES	10,685,325	11,219,591	11,780,571	12,369,599	12,988,079	13,637,483	14,319,357	15,035,325	15,787,092	16,394,010
CUMULATIVE SALES	10,685,325	21,904,916	33,685,487	46,055,086	59,043,166	72,680,649	87,000,006	102,035,332	117,822,423	134,216,433

POPULATION:	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
NUMBER OF UNITS	97	194	291	558	655	752	1,016	1,113	1,210	1,306
TOTAL POPULATION	288	576	864	1,657	1,945	2,233	3,018	3,306	3,594	3,879

Fiscal Impact Analysis - Residential Development

This section of the report will summarize the findings with respect to the fiscal impact of the residential portion of the proposed project. The impact of the commercial elements will be addressed in a later section. The approach of this analysis is to address the residential project impacts separate from the commercial development. The derivation of revenue and cost factors is summarized in Appendix A of this report. Factors were developed through case study methodology, public documents and detailed analysis of the 1988-89 and 1989-90 Fiscal Year budgets for the City of Coachella. It should be noted that the public revenue and public cost impacts are focused on the City of Coachella and, generally, not related to other public agencies, such as Riverside County, Coachella Valley Unified School District, etc. Results are presented in constant (1989-90) dollar terms, and represent those revenues and costs which are recurring on an annual basis.

Public Revenue Impact

Development of 1,306 residential units, as set forth in the proposed project, will incur a fiscal impact on the City of Coachella. The cost of providing public services to the project's residents is off-set by the generation of public revenues. Public revenues attributed to the proposed project will include property taxes, retail sales taxes, municipal service fees (e.g. water and sewer), and general fund "per capita" revenue, such as franchise fees, vehicle registration, gas tax, etc. The most significant public revenues, attributed to the residential portion of the proposed project, include water and sewer service fees, property tax, motor vehicle license fees and retail sales taxes.

Real Property Tax Revenue

The estimation of real property tax revenue is based on the allocation of the one percent of the assessed valuation general levy. Assessed values were adjusted downward, by $7,000, for each of the single family homes which are subject to the homeowner's exemption. For purposes of this analysis, we have assumed that all units, excluding apartments, would be eligible for the homeowner's exemption. The assessed value of each property is assumed to increase by two percent annually, per Proposition 13, however the base value of each home is maintained in constant dollars, (rather than assuming an inflated base each year). The City of Coachella receives a portion of the base levy, as allocated by Riverside County. The pro-rata share of the property tax revenue is dependent on the Tax Rate Area in which the property is situated. The proposed project is in TRA 012-040. As such, the City of

Coachella will receive 7.687 percent of the base levy. In addition, the Coachella Fire Protection District will receive 5.443 percent of the base levy. Table 7.12 summarizes the estimated annual property tax revenue which would accrue to the benefit of the City of Coachella, based on the development of the residential phases of the project, over a ten-year time period. Upon project stabilization, we estimate that the residential portion of the project would generate annual property tax revenue of $163,625 for the benefit of the City of Coachella. It should be noted that the City of Coachella has instituted a new incremental property tax for police and fire protection. This tax has a five-year term and will impact the project in the first three years of development. The added benefit of the parcel tax will amount to $58,200 over three years. The potential benefit beyond Fiscal Year 1993-94 is unknown, at this time. Transfer of title of each residential unit, from the project developer to the home buyer, will incur a property transfer tax. Based on an assessment of $0.55 per $1,000, the property transfer tax benefit to the City of Coachella will average $6,600 per year.

Retail Sales Tax Revenue

Development of the project will establish new residential household units in the City of Coachella. These families would allocate a portion of their household budget to the purchase of goods and services which are subject to retail sales and use tax. The local taxing entity receives a tax increment equal to one percent of retail sales. Estimated household income is derived from the average purchase price of the new homes sold. It is assumed that 80.0 percent of the purchase price is financed at a loan constant factor of 0.1025. Conventional financing terms require that housing expense, including property tax, be no more than 28.0 percent of total household income. We have assumed that the average household income, for residents of the apartment units, will be $16,000. The estimation of retail sales is calculated using a factor of 25.0 percent of total household income being spent on taxable goods and services. Table 7.13 summarizes the estimated retail sales tax revenue which will be generated by residents of the proposed project. As can be seen, annual sales tax revenue will increase to $101,156 at project "build out" in year 10. This translates into a per capita revenue factor of $26.08. It should be noted that the City of Coachella budget (1988-89) indicates a per capita revenue factor of $38.01 for sales tax revenue.

TABLE 7.12

BRANDENBURG-BUTTERS "COACHELLA 380" SPECIFIC PLAN

CITY OF COACHELLA, CALIFORNIA

PROPERTY TAX REVENUE

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
ASSESSED VALUE : PRIOR YEAR	0	10,685,325	21,584,357	32,701,369	50,734,471	62,434,485	74,368,500	93,116,820	105,664,482	118,463,096
ADDED VALUE : NEW SALES	10,685,325	10,685,325	10,685,325	17,379,075	10,685,325	10,685,325	17,260,950	10,685,325	10,685,325	10,567,725
ADDED VALUE : REASSESSMENT	0	213,707	431,687	654,027	1,014,689	1,248,690	1,487,370	1,862,336	2,113,290	2,369,262
ADJUSTED ASSESSED VALUE	10,685,325	21,584,357	32,701,369	50,734,471	62,434,485	74,368,500	93,116,820	105,664,482	118,463,096	131,400,083
LESS: HOMEOWNER EXEMPTION	679,000	1,358,000	2,037,000	2,716,000	3,395,000	4,074,000	4,753,000	5,432,000	6,111,000	6,783,000
NET ASSESSED VALUE	10,006,325	20,226,357	30,664,369	48,018,471	59,039,485	70,294,500	88,363,820	100,232,482	112,352,096	124,617,083

HOMEOWNER EXEMPTION VALUE: $7,000 PER UNIT ANNUAL REASSESSMENT FACTOR 2.0%

PROPERTY TAX REVENUE

ACCOUNT	FACTOR									
GENERAL FUND	0.07687	7,692	15,548	23,572	36,912	45,384	54,036	67,926	77,049	86,366	95,794
FIRE DEPARTMENT	0.05443	5,447	11,009	16,691	26,137	32,136	38,262	48,098	54,558	61,155	67,831
RESIDENTIAL PROPERTY TAX		13,138	26,558	40,263	63,049	77,520	92,298	116,023	131,607	147,520	163,625

SOURCE: RIVERSIDE COUNTY ASSESSOR'S OFFICE;
ROGER M. ROSTVOLD, REAL PROPERTY CONSULTANT

TABLE 7.13

BRANDENBURG-BUTTERS "COACHELLA 380" SPECIFIC PLAN

CITY OF COACHELLA, CALIFORNIA

RETAIL SALES TAX REVENUE

AVERAGE HOUSEHOLD INCOME:

MEDIUM LOW DENSITY	$38,640
MEDIUM HIGH DENSITY	$29,153
HIGH DENSITY	$16,000

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
NUMBER OF HOUSEHOLDS:										
MEDIUM LOW DENSITY	72	144	216	288	360	432	504	576	648	719
MEDIUM HIGH DENSITY	25	50	75	100	125	150	175	200	225	250
HIGH DENSITY	0	0	0	170	170	170	337	337	337	337
HOUSEHOLD INCOME:										
MEDIUM LOW DENSITY	2,782,080	5,564,160	8,346,240	11,128,320	13,910,400	16,692,480	19,474,560	22,256,640	25,038,720	27,782,160
MEDIUM HIGH DENSITY	728,813	1,457,625	2,186,438	2,915,250	3,644,063	4,372,875	5,101,688	5,830,500	6,559,313	7,288,125
HIGH DENSITY	0	0	0	2,720,000	2,720,000	2,720,000	5,392,000	5,392,000	5,392,000	5,392,000
TOTAL HOUSEHOLD INCOME	3,510,893	7,021,785	10,532,678	16,763,570	20,274,463	23,785,355	29,968,248	33,479,140	36,990,033	40,462,285
RETAIL SALES FACTOR 25.0% OF HOUSEHOLD INCOME ALLOCATED TO TAXABLE RETAIL GOODS AND SERVICES										
ANNUAL RETAIL SALES	877,723	1,755,446	2,633,169	4,190,893	5,068,616	5,946,339	7,492,062	8,369,785	9,247,508	10,115,571
SALES TAX FACTOR 1.0%										
ANNUAL SALES TAX REVENUE	8,777	17,554	26,332	41,909	50,686	59,463	74,921	83,698	92,475	101,156

SOURCE: ROGER M. ROSTVOLD, REAL PROPERTY CONSULTANT

General Fund (non-property) Tax Revenue

The City of Coachella receives general fund revenues which can be estimated on a per unit, or per capita basis. These revenue sources include franchise fees, motor vehicle in-lieu fees, cigarette tax, fuel tax and fines. In total, the per capita fees are estimated at $75.81 per person, per year. Table 7.14 provides a summary of the estimation of each of the general fund revenue accounts, on a year by year basis. Upon project stabilization, the City of Coachella would receive an annual revenue benefit of $316,578. Motor vehicle in-lieu fees are the most significant benefit in this revenue category. We find that the project would generate up to $135,014 in annual vehicle fees, at ultimate project build out.

Utility Services Revenues

The City of Coachella has a proprietary interest in supplying domestic water to the residents of Coachella. Likewise, the city operates the wastewater treatment system. Assuming that such services would be available to the subject project, we can estimate annual revenues generated from utility services fees.

The projected estimate of fee revenue for utility services is summarized in Table 7.15. Domestic water service would generate revenue in the amount of $320,942, when all of the residential units are completed and occupied. Likewise, wastewater treatment would incur service fees of $139,481, on an annual basis.

At the present time, excess revenues generated by the municipal utility service departments, can be utilized for general expenditure purposes, by the City of Coachella. In three years, however, excess water department revenues must be used to repay certificates of participation. Development of the proposed project will generate surplus revenues which will allow the certificates to be paid in full on a shorter time schedule.

Induced Revenue

As previously stated, development of the proposed project will create new household units in the City of Coachella. A significant level of retail spending will be attributed to the households. This retail spending will have an induced effect in the support of new commercial floor space. The new induced commercial development will create net additional revenue benefits, primarily, through property tax, business license tax and gas franchise tax.

TABLE 7.14

BRANDENBURG-BUTTERS "COACHELLA 380" SPECIFIC PLAN

CITY OF COACHELLA, CALIFORNIA

GENERAL FUND REVENUE
[PER CAPITA/UNIT]

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
NUMBER OF UNITS:	97	194	291	558	655	752	1,016	1,113	1,210	1,306
PROJECT POPULATION:	288	576	864	1,657	1,945	2,233	3,018	3,306	3,594	3,879

GENERAL FUND REVENUE

ACCOUNT	FACTOR	[** DENOTES PER UNIT, ALL OTHERS PER CAPITA]									
NATURAL GAS **	$8.17	792	1,584	2,376	4,556	5,348	6,140	8,296	9,088	9,880	10,663
CABLE TV **	$9.07	880	1,760	2,640	5,062	5,942	6,822	9,217	10,097	10,977	11,848
REFUSE FRANCHISE	$2.20	634	1,267	1,901	3,644	4,278	4,911	6,636	7,269	7,903	8,530
VEHICLE LICENSE	$34.81	10,028	20,056	30,084	57,686	67,714	77,742	105,034	115,062	125,090	135,014
CIGARETTE TAX	$1.84	529	1,057	1,586	3,041	3,570	4,098	5,537	6,066	6,594	7,118
2106 GAS TAX	$4.88	1,405	2,809	4,214	8,081	9,486	10,890	14,713	16,118	17,523	18,913
2107 GAS TAX	$8.86	2,552	5,103	7,655	14,678	17,230	19,782	26,726	29,278	31,829	34,355
GENERAL FINES	$2.41	693	1,386	2,079	3,987	4,680	5,373	7,259	7,952	8,645	9,331
VEHICLE FINES	$4.12	1,188	2,376	3,564	6,835	8,023	9,211	12,444	13,632	14,820	15,996
ADMIN. SERVICES	$10.31	2,970	5,940	8,910	17,085	20,055	23,025	31,108	34,078	37,047	39,987
RECREATION & PARKS	$1.58	455	910	1,366	2,618	3,074	3,529	4,768	5,223	5,678	6,129
OTHER	$4.82	1,389	2,777	4,166	7,988	9,377	10,765	14,544	15,933	17,322	18,696
ANNUAL GENERAL FUND REVENUE		23,513	47,026	70,539	135,261	158,774	182,287	246,282	269,795	293,308	316,578

SOURCE: ROGER M. ROSTVOLD, REAL PROPERTY CONSULTANT;

TABLE 7.15

BRANDENBURG-BUTTERS "COACHELLA 380" SPECIFIC PLAN

CITY OF COACHELLA, CALIFORNIA

UTILITY SERVICES REVENUES

		1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
NUMBER OF UNITS:											
SINGLE FAMILY		97	194	291	388	485	582	679	776	873	969
MULTIPLE FAMILY		0	0	0	170	170	170	337	337	337	337
TOTAL UNITS		97	194	291	558	655	752	1,016	1,113	1,210	1,306
WATER SERVICE	FACTOR										
SINGLE FAMILY	$67.80	6,577	13,153	19,730	26,306	32,883	39,460	46,036	52,613	59,189	65,698
MULTIPLE FAMILY	$36.00	0	0	0	6,120	6,120	6,120	12,132	12,132	12,132	12,132
CONSUMPTION FEE	$186.15	18,057	36,113	54,170	103,872	121,928	139,985	189,128	207,185	225,242	243,112
TOTAL ANNUAL WATER REVENUE		24,633	49,266	73,899	136,298	160,931	185,564	247,297	271,930	296,563	320,942
SEWER SERVICE	FACTOR										
SINGLE FAMILY	$111.60	10,825	21,650	32,476	43,301	54,126	64,951	75,776	86,602	97,427	108,140
MULTIPLE FAMILY	$93.00	0	0	0	15,810	15,810	15,810	31,341	31,341	31,341	31,341
TOTAL ANNUAL SEWER REVENUE		10,825	21,650	32,476	59,111	69,936	80,761	107,117	117,943	128,768	139,481
UTILITY SERVICE REVENUE		35,458	70,917	106,375	195,409	230,867	266,326	354,414	389,872	425,331	460,424

SOURCE: CITY OF COACHELLA, DEPARTMENT OF FINANCE;
ROGER M. ROSTVOLD, REAL PROPERTY CONSULTANT

A reasonable estimate of market demand would be one square foot of space for each $125.00 of retail sales. Based on project development, the induced demand would be 80,925 square feet of new floor space, supported by household spending for retail goods and services. The estimated induced revenue benefit to the City of Coachella would be $14,974 per year. The induced revenue is summarized on an annual basis in Table 7.16.

Revenue Summary

This Fiscal Impact Analysis has identified and quantified the relevant public revenues, that can be attributed to the phased development of the residential units of the proposed project, which will accrue to the benefit of the City of Coachella. These are the revenues which will be directly available to city government for payment of public services.

Table 7.17 summarizes the incremental revenues which will result from development of the proposed project. We find that the estimate of annual revenues begins at $88,063 and increases to $1,062,569 in the tenth year of project construction. Again, these are the revenues which are attributed to just the residential elements of the project.

Other Project Revenue

The proposed project would also generate revenues which would occur on a one-time basis, generally, as the residential units are constructed. These revenues include plan check fees, building permit fees, service connection fees and impact mitigation fees. For example, the Coachella Valley Fire Protection District will receive a one-time fee of $140.00 per residential unit for facilities, equipment and operations.

It is assumed that plan check fees, building permit fees, and service connection fees are for services rendered at the time of project development and, therefore, do not represent a net recurring benefit to the City of Coachella.

Public Cost Impact

Development of the proposed project will require that the City of Coachella agree to provide certain municipal services. The public services include public safety (police and fire protection), road maintenance, park maintenance, recreation programming, water and sewer service, and general government administration.

TABLE 7.16

BRANDENBURG-BUTTERS "COACHELLA 380" SPECIFIC PLAN

CITY OF COACHELLA, CALIFORNIA

INDUCED REVENUE

		1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
ANNUAL RETAIL SALES		877,723	1,755,446	2,633,169	4,190,893	5,068,616	5,946,339	7,492,062	8,369,785	9,247,508	10,115,571
DEMAND FACTOR [PER SQ FT]		$125.00									
GROSS FLOOR AREA [SQ FT]		7,022	14,044	21,065	33,527	40,549	47,571	59,936	66,958	73,980	80,925
VALUE FACTOR [PER SQ FT]		$80.00									
GROSS VALUE [ASSESSED]		561,743	1,123,486	1,685,228	2,682,171	3,243,914	3,805,657	4,794,920	5,356,662	5,918,405	6,473,966
PROPERTY TAX REVENUE											
ACCOUNT	FACTOR										
GENERAL FUND	0.07687	432	864	1,295	2,062	2,494	2,925	3,686	4,118	4,550	4,977
FIRE DEPARTMENT	0.05443	306	612	917	1,460	1,766	2,071	2,610	2,916	3,221	3,524
PROPERTY TAX REVENUE		738	1,475	2,213	3,522	4,259	4,997	6,296	7,033	7,771	8,500
BUSINESS LICENSE TAX											
FACTOR [PER SQ FT]:	$0.05	351	702	1,053	1,676	2,027	2,379	2,997	3,348	3,699	4,046
GAS FRANCHISE TAX											
FACTOR [PER SQ FT]:	$0.03	211	421	632	1,006	1,216	1,427	1,798	2,009	2,219	2,428
TOTAL INDUCED REVENUE		1,299	2,599	3,898	6,204	7,503	8,803	11,091	12,390	13,689	14,974

SOURCE: ROGER M. ROSTVOLD, REAL PROPERTY CONSULTANT

TABLE 7.17

BRANDENBURG-BUTTERS "COACHELLA 380" SPECIFIC PLAN

CITY OF COACHELLA, CALIFORNIA

REVENUE SUMMARY

	1991	1992	1993	1994	1995	1996	1997	1998	1999	200(
PROPERTY TAX REVENUE	13,138	26,558	40,263	63,049	77,520	92,298	116,023	131,607	147,520	163,625
PROPERTY TRANSFER TAX	5,877	5,877	5,877	9,558	5,877	5,877	9,494	5,877	5,877	5,812
RETAIL SALES TAX REVENUE	8,777	17,554	26,332	41,909	50,686	59,463	74,921	83,698	92,475	101,156
GENERAL FUND REVENUE	23,513	47,026	70,539	135,261	158,774	182,287	246,282	269,795	293,308	316,578
UTILITY SERVICE REVENUE	35,458	70,917	106,375	195,409	230,867	266,326	354,414	389,872	425,331	460,424
INDUCED REVENUE	1,299	2,599	3,898	6,204	7,503	8,803	11,091	12,390	13,689	14,974
TOTAL ANNUAL REVENUE	88,063	170,531	253,284	451,390	531,228	615,054	812,224	893,239	978,200	1,062,569

SOURCE: ROGER M. ROSTVOLD, REAL PROPERTY CONSULTANT

In order to determine the appropriate cost factors, the City of Coachella budgets for Fiscal Years 1988-89 and 1989-90 were analyzed. In addition, discussions were held with representatives of the Finance, Police, Fire and Community Development Departments. Reference was, also, made to the Rancho Coachella Vineyards project fiscal impact analysis, prepared by Stanley R. Hoffman Associates.

The assumptions utilized to derive the public cost factors are summarized in Appendix B. The potential public cost implications of the residential portion of the proposed project are addressed in Table 7.18. A discussion of the individual impacts is included in the following few pages.

Police Department

The demand for police protection services is analyzed based on the project population. The desired goal is 1.5 uniformed officers per 1,000 persons. However, the City of Coachella Police Department is, generally, staffed at 1.5 total personnel per 1,000. This represents a minimum acceptable standard. Detailed costs for officers and support personnel has not been developed by the Police Department. Therefore, an estimated cost factor was developed by reference to the budget. The determined factor is $79.52 per capita for Fiscal Year (FY) 1989-90.

At full project development and occupancy, the impact on the Police Department would amount to $308,444 on an annual basis. This is the single greatest cost factor which can be attributed to the proposed project, representing 29.9 percent of the total public cost of the project.

Fire Department

The desired goal for fire protection service is two fire- fighters per 1,000 population base and a facility of approximately three to four thousand square feet. Analysis of the City of Coachella budget indicates a per capita operations cost of $45.07. The resulting cost factor for the proposed project would be $133.86 per dwelling unit.

The estimated annual cost of fire protection services would increase to $174,819 after project build out. The proposed project may also include a site for a fire station within the 14.0 acres reserved for municipal uses.

TABLE 7.18

BRANDENBURG-BUTTERS "COACHELLA 380" SPECIFIC PLAN

CITY OF COACHELLA, CALIFORNIA

PUBLIC COST SUMMARY

		1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
NUMBER OF UNITS:		97	194	291	558	655	752	1,016	1,113	1,210	1,306
PROJECT POPULATION:		288	576	864	1,657	1,945	2,233	3,018	3,306	3,594	3,879
POLICE PROTECTION											
FACTOR [PER CAPITA]	$79.52	22,909	45,818	68,727	131,785	154,694	177,603	239,953	262,862	285,771	308,444
FIRE PROTECTION											
FACTOR [PER UNIT]	$133.86	12,984	25,968	38,953	74,693	87,677	100,661	136,000	148,984	161,968	174,819
PUBLIC WORKS											
ROAD MAINTENANCE	$5,235	4,240	8,481	12,721	16,961	21,202	25,442	29,682	33,923	38,163	42,404
PARK MAINTENANCE	$5,900	0	0	0	0	0	35,400	35,400	35,400	35,400	35,400
PARKS & RECREATION											
FACTOR [PER CAPITA]	$2.55	733	1,467	2,200	4,219	4,953	5,686	7,683	8,416	9,150	9,875
UTILITY SERVICES											
WATER DEPARTMENT	$149.58	14,509	29,019	43,528	58,187	72,696	87,205	101,864	116,373	130,883	145,242
SEWER	$135.13	13,108	26,215	39,323	52,566	65,673	78,781	92,024	105,131	118,239	131,211
ADMINISTRATION											
FACTOR	20.3%	13,902	27,804	41,707	68,697	82,600	103,688	130,449	144,351	158,253	172,021
TOTAL PUBLIC COST		82,386	164,772	247,158	407,108	489,495	614,467	773,054	855,440	937,827	1,019,416

SOURCE: ROGER M. ROSTVOLD, REAL PROPERTY CONSULTANT

Road Maintenance

The proposed project will have approximately 8.10 lane miles of arterial and collector roadways. It has been estimated (Stanley R. Hoffman Associates) that the annual maintenance cost is $5,235 per lane mile. Thus, the project impact would amount to $42,404 annually when all roadways are completed.

Park Maintenance

The project will have a six acre dedicated public park site. It is assumed that the park will be developed in the fifth year of project phasing and that maintenance requirements will begin in the sixth year. The estimated annual cost, thereafter, is $35,400.

Parks and Recreation

Budget analysis for FY 1989-90 indicates that programming will be primarily focused on senior services. The per capita expenditure for all park and recreation programming will be $2.55. The projected impact of the proposed project, at this level of cost, would be $9,875 on an annual basis.

Water and Sewer

The operating cost of providing on-going water and sewer service to the project will have a significant impact on the City of Coachella. The city maintains approximately 2,700 accounts, of which 87.0 percent are residential customers. Multiple unit projects are considered a single account when served by one meter.

It is estimated that the annually recurring cost for water service will be $145,242 when the residential units are completed. The project impact on sewer department operations will reach $131,211 per year.

Administration

In many cases, certain administrative costs can be considered to be "fixed" overhead for the operation of the city. For example, development of a new project would not require the hiring of a second city manager, or police chief. However, we know that many of the administrative costs of a city will increase as new demands are placed

on staff. For purposes of analysis of the subject project, an administrative overhead load factor of 20.3 percent has been utilized. This factor has been confirmed by the Finance Department as being reasonable.

We find that direct and indirect public administration costs of the proposed project would reach an annual total of $172,021.

Summary of Public Costs

The public cost impacts of the proposed project are summarized in Table 7.18. The City of Coachella will incur a public cost of $82,386 in the first year of project development. By the tenth year, at completion of the residential phases of the project, the annual cost of city services will increase to $1,019,416.

Comparison of Revenues and Costs

Table 7.19 presents a comparison of the public revenues, that can be attributed to the residential portion of the project, with the public costs. When the residential units are built and occupied the projected annual revenue is $1,077,543. Upon project stabilization, the annually recurring public cost would be $1,019,416. Thus, the net public revenue benefit would be $58,127, in the tenth year of development.

Subject to the validity of the assumptions and factors contained in this analysis, we find that the residential portion of the proposed project would have a cumulative net positive fiscal benefit, on the City of Coachella, that would amount to $347,108, over the ten-year development period.

The ratio of public revenues to public costs ranges from 1.015 to 1.124. As the project approaches build out, the ratio is approximately 1.05. In other words, the project would generate $1.05 of public revenue for each $1.00 of incurred public cost.

Capital Improvements and Infrastructure Development Costs

Development of the proposed project will require the construction of on- and off-site infrastructure systems, such as roads, domestic water and wastewater treatment. In addition, the development of this, and other, projects would have a cumulative impact that would require the construction of a fire station.

TABLE 7.19

BRANDENBURG-BUTTERS "COACHELLA 380" SPECIFIC PLAN

CITY OF COACHELLA, CALIFORNIA

REVENUE/COST COMPARISON

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
PUBLIC REVENUE	89,363	173,129	257,182	457,594	538,731	623,856	823,315	905,629	991,890	1,077,543
PUBLIC COST	82,386	164,772	247,158	407,108	489,495	614,467	773,054	855,440	937,827	1,019,416
NET ANNUAL IMPACT	6,977	8,357	10,024	50,486	49,236	9,389	50,260	50,189	54,063	58,127
CUMULATIVE IMPACT	6,977	15,334	25,357	75,843	125,079	134,469	184,729	234,917	288,981	347,108
REVENUE/COST RATIO	1.085	1.051	1.041	1.124	1.101	1.015	1.065	1.059	1.058	1.057

SOURCE: ROGER M. ROSTVOLD, REAL PROPERTY CONSULTANT

The estimated cost of developing the necessary infrastructure is not known at this time. However, it is known that the City of Coachella does not have the current financial resources to develop such systems. Therefore, the ultimate cost of capital improvements must be paid for by project-generated resources. The alternatives for financing public capital improvements may include a Mello-Roos Community Facilities District, impact mitigation fees, general obligation bond, assessment bond, revenue bond or tax increment bond financing, or any other financing mechanism that is deemed effective and appropriate such as Bridge Benefit District financing.

Fiscal Impact Analysis - Commercial Development

The previous sections of this report have addressed the potential public revenue and cost impacts of the residential phases of the proposed project. The development plan also includes elements of commercial land use. These are identified as neighborhood commercial, regional commercial and tourist/highway commercial. A total of 73.3 acres of the project site have been allocated to commercial development.

An analysis of the potential public revenue impacts is presented for illustrative purposes. However, there is an inherent conflict in accounting for the public revenues of commercial development without "double-counting" revenues which are, traditionally, allocated to residential development.

For example, we have already accounted for retail sales tax dollars which would be generated by new household spending. Since the proposed residential units could not fully support the proposed level of commercial development, the balance of market demand must come from additional residential development within the market area. At that time, we would need to properly allocate the additional revenues to the residential sector, if we are to achieve fiscal balance within the region.

Another approach to the relevance of considering the fiscal revenue impacts of commercial development is focused on the fact that commercial development does not generate sales per se. The retail sales which result in the market demand for new commercial floor space and generate retail sales tax dollars are the result of market demand from incremental increases in the population base. In other words, you cannot have viable commercial development without the market support of new household spending for goods and services.

Table 7.20 indicates that the commercial elements of the proposed project have potential annual sales generation of $91,625,000. Of the total, $63,750,000 in sales result from neighborhood commercial and regional commercial development. If average household income is $30,000 per year and 25.0 percent is allocated to retail purchases, we find that you would need a market support base of 25,500 persons, if these centers captured 100.0 percent of sales.

This is not to say that commercial development is not appropriate for the project site. The site will have a prominent location on Avenue 52 and will have a full interchange with new Highway 86. It is necessary, however, to consider that the full revenue benefits of the commercial elements of the project will not be realized without the impact of additional residential development within the market area.

The tourist/highway element of commercial development is not dependent on the local population base. To the extent that the project is able to capture revenue from this element, we would find a net positive fiscal benefit to the City of Coachella. The location of the project site is suitable for highway related commercial development and we have assumed that such development would occur in the fifth and seventh years of project phasing.

In conclusion, the commercial elements of the proposed project will generate substantial revenues to the benefit of the City of Coachella. However, in order to maintain the methodological consistency of this Fiscal Impact Analysis, it is necessary to note that the benefits cannot occur without significant additional residential development within the market area.

TABLE 7.20

BRANDENBURG-BUTTERS "COACHELLA 380" SPECIFIC PLAN

CITY OF COACHELLA, CALIFORNIA

COMMERCIAL DEVELOPMENT REVENUE IMPACT

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
SQUARE FEET OF FLOOR AREA:										
NEIGHBORHOOD COMMERCIAL [B]			50,000							
NEIGHBORHOOD COMMERCIAL [A]					120,000					
REGIONAL COMMERCIAL							350,000			
TOURIST/HIGHWAY COMMERCIAL					113,000		100,000			
VALUE FACTOR [PER SQ. FT.]	$80.00									
CUMULATIVE SQUARE FEET			50,000	50,000	283,000	283,000	733,000	733,000	733,000	733,000
ASSESSED VALUE			4,000,000	4,000,000	22,640,000	22,640,000	58,640,000	58,640,000	58,640,000	58,640,000
PROPERTY TAX REVENUE										
GENERAL FUND 0.07687			3,075	3,075	17,404	17,404	45,077	45,077	45,077	45,077
FIRE DEPARTMENT 0.05443			2,177	2,177	12,323	12,323	31,918	31,918	31,918	31,918
PROPERTY TAX REVENUE			5,252	5,252	29,727	29,727	76,995	76,995	76,995	76,995
RETAIL SALES TAX										
ANNUAL SALES FACTOR $125			6,250,000	6,250,000	35,375,000	35,375,000	91,625,000	91,625,000	91,625,000	91,625,000
RETAIL SALES TAX @ 1.0%			62,500	62,500	353,750	353,750	916,250	916,250	916,250	916,250
BUSINESS LICENSE & FRANCHISE TAX										
FACTOR [PER SQ FT] $0.08			4,000	4,000	22,640	22,640	58,640	58,640	58,640	58,640
TOTAL ANNUAL REVENUE			71,752	71,752	406,117	406,117	1,051,885	1,051,885	1,051,885	1,051,885

SOURCE: ROGER M. ROSTVOLD, REAL PROPERTY CONSULTANT

8.0 mandatory CEQA topics

8.0 MANDATORY CEQA TOPICS

8.1 Cumulative Impacts

Sections 6 and 7 have discussed the impacts of this particular project on the environment and on land use, public facilities, and services. All identified impacts are either insignificant or can be mitigated to an insignificant level; however, the residual impacts must be considered for the incremental effect which they may have on the overall cumulative impacts of the three projects currently proposed for the Eastern Coachella area and additional General Plan growth in the vicinity.

In addition to Brandenburg-Butter, with 1,326 dwelling units and 71.5 acres of commercial, and 16.8 acres Public/Quasi-Public Uses, the proposed projects are:

the Lusardi property (Rancho Coachella Vineyards southeast of Avenue 54 and Fillmore Street) with 1,085 residential units, 46 acres of commercial, and 25 acres of municipal uses and

the McNaughton Specific Plan (east of Fillmore between Interstate 10 and Avenue 52 with 8,000 residential units, 218 acres of retail and commercial recreation, 98 acres of hotels and lodging facilities, 399 acres of open-space/commercial recreation, and 324 acres of miscellaneous open space.

At buildout, these three projects will represent 10,391 new dwelling units in the City of Coachella. The Brandenburg-Butters project represents approximately 13% of the total. The 1989 Coachella Valley Association of Governments' Regional Housing Needs Analysis gives several estimates of total households in the City of Coachella in the year 2000 from a low of 6,593 to a high estimate of 9.495. The fact that the total from the three projects exceeds the highest estimate of the total population affords some measure of the demands which these projects could place on a city which has had the second lowest average annual growth rate (3.6%) in the Coachella Valley over the past three years.

The three projects will create significant demands on virtually all public services and utilities; these facilities are largely absent from the rural East Valley and are operating at or near capacity in Coachella itself. Each project will be required to implement its own mitigation measures; the proximity of the three sites suggests that in some instances a coordination of efforts would make it possible to locate facilities

to serve the entire area efficiently. This is particularly true of services requiring new facilities (schools, parks) or satellite facilities (law enforcement, fire). Careful planning can thus mitigate some of the cumulative impacts on public services and utilities.

These projects and other reasonably foreseeable future projects will contribute to the cumulative degradation of air quality. Each new household or business contributes incrementally to the production of solid waste, thus shortening incrementally the life of the Coachella Sanitary Landfill and hastening the day when a new landfill must be sought. The cumulative increase in traffic from the three project sis discussed at length in Section 7.2, Traffic and Circulation; the increased traffic translates into incrementally degraded air quality and increased noise. Increased population in proximity to the San Andreas Fault system increases the number of persons vulnerable in the event of an earthquake.

Buildout of all three projects will represent the loss of 2,579 acres of open space in the East Valley. A certain percentage of each project site has been designated as public open space, and some of the land is already too degraded through excessive salinity to be agriculturally productive. Nevertheless, the cumulative effect of the three projects can be seen as continuing the trend towards the reduction of rural land and open space in proximity to the urban environment. Fortunately, the quantity of acreage in Coachella Valley agricultural production has taken the opposite direction and has been on the increase in recent years.

8.2 Unavoidable Adverse Impacts

Any project which converts uncultivated agricultural land to urban/suburban uses will necessarily have a variety of impacts on the environment. The impacts of this project are discussed in detail in Sections 6.0 and 7.0 of this report. Nearly all of the impacts identified as significant in these sections can be mitigated entirely or reduced to a level of insignificance through the implementation of the mitigation measures described for each impact. However, certain significant environmental impacts remain which cannot be mitigated to a level of insignificance by means that are practicable and feasible with current technology. These unavoidable environmental effects include the following:

- There will be increases in traffic volumes on local streets and highways which will add to traffic congestion and increase street maintenance costs.
- There will be unavoidable consumption of non-renewable energy resources, including fossil fuels.
- The project will contribute to the overall decline of air quality in the area,

chiefly through increased emission of automobile-generated pollutants.

8.3 The Relationship Between Local Short-term Uses of Man's Environment and the Maintenance and Enhancement of Long-term Productivity

Over the centuries of human habitation of the lower Coachella Valley, both man and nature have altered the character of the site now proposed for development and changed its actual and potential productivity. Less than 500 years ago, the site was submerged by Lake Cahuilla, by whose shores the indigenous people captured fish in stone traps. As the lake dried up, the saline lake sediments became part of an arid habitat which supported the local inhabitants' hunting and gathering activities. These efforts diminished as contact with non-native peoples altered traditional subsistence patterns. By the turn of the century white settlers had begun to irrigate and cultivate the land around Coachella, producing melons, citrus, dates, and grapes to be shipped by rail across the country. Nearly a century later, irrigation has increased the salinity of the soil to the point where 1/3 of the site is no longer cultivable, and none of it has been farmed in recent years. From a human standpoint, the site today is less productive than it has ever been, although it functions as a natural, though degraded, habitat and as open space.

Development of this land for residential, commercial, and public use represents the long-term commitment of rural land to suburban and urban use. The site is rendered more productive, if productivity is measured in terms of land efficiency and economic return, but this development precludes its use for alternate short-term or other long-term purposes. In particular, the potential of future agricultural productivity is lost. However, the salinity that was an unforeseen impact of the earlier commitment of the land to agriculture has made its future use for food production highly problematical. The technology for desalinization exists, but the heavy soil and high salinity of this site would make desalinization prohibitively expensive.[1]

Short-term negative impacts of the project will be those associated with construction and will be confined to the site and the immediate area: dust, noise, emissions associated with construction vehicles, and traffic congestion. The short-term positive impact of this activity will be economic: the creation of local employment opportunities in the construction of the project.

[1] John Gilman, Agricultural Engineer, USDA Soil Conservation Service. Personal Communications, August 3, 1989.

Over the long-term, the construction of this project will commit the site to continued residential and commercial use, precluding its use for other purposes. Agricultural use is no longer a viable option. The similar residential/commercial character of the other developments currently proposed in the area suggests that, were this project not approved, future development proposals for the site would involve similar uses and hence similar long-term impacts. The long-term adverse impacts of this project would include increased traffic generation and an increased demand for public services in the local area. Positive long-term effects of the development would include greater economic productivity from the land. The residential portions of the project would contribute to meeting Coachella's housing demands and goals as set forth in the City's General Plan; the proposed commercial development would provide tax revenue and local employment opportunities.

8.4 Irreversible and Irretrievable Commitment of Energy Supplies and Other Resources Should the Project be Implemented

The transformation of the Brandenburg-Butters site from fallow agricultural land to residential and commercial uses constitutes an irreversible and irretrievable commitment of the land. The land is currently unsuitable for agriculture due to excessive salinity resulting from irrigation, and although the technology exists to desalinate such soil, the cost of doing so would be prohibitive. With the conversion to urban/suburban use, even the remote possibility of reconversion to agricultural use is lost. Development will put an end to the slow recolonization of the disturbed agricultural land by native and introduced species and result in a permanent loss of open space.

Implementation of the proposed project will result in the long-term, irreversible commitment of energy resources from non-renewable fossil fuels including natural gas and oil. There will be an increase in the consumption or destruction of other non-renewable resources and slowly renewable resources, including water, lumber, sand, gravel, asphalt, and metal.

The volume of traffic in the site area will increase, requiring the commitment of resources to the improvement and maintenance of roads. Chiefly as a result of automobile generated pollutants, air quality in the local area will be degraded.

8.5 Alternatives to the Proposed Action

The following section describes a range of reasonable alternatives to the proposed project and by means of a matrix listing provides for an evaluation of the comparative merits of four basic alternatives. A fifth alternative is described as a different location for the proposed project. In this instance an attempt has been made to focus on alternatives that are capable of eliminating/mitigating significant adverse effects, even when the alternative may to some degree impede the attainment of the project objectives and beneficial return to local government.

Alternative 1, is the "No Project" alternative required in each environmental analysis. It presents the least impact to the physical environment because the site remains in an open space/agricultural status. Alternative 2 is a reasonable use of the land for urban purposes, (consisting of light industrial, commercial and mobile home residential), but the mix of uses placed in that location was not initially found by City staff to be acceptable. Therefore, on the basis of land use policy interpretation this alternative was rejected. Alternative 3 is the proposed project which is the subject of the Specific Plan/EIR. Impacts of the proposed project are generally found to be mitigatable, but implementation of the project could result in some measure of unavoidable adverse impacts. Second to "No Project", this alternative has the fewest unmitigatable impacts and stands as the preferred alternative. Alternative 4, develops the project site under the General Plan category of suburban residential, averaging 3.0 dwelling units per gross site acreage, plus a commercial use and public park component. While presenting incrementally less of an impact on the physical environment, this alternative involves a number of other social and economic costs which tend to discount it as a viable option.

The final alternative examines the proposed project on an alternative site and is discussed in Section 8.5.2.

Table 8.1 provides a comparative listing of the first four alternatives, summarizing the environmental effects which are likely to occur upon implementation.

TABLE 8.1
COMPARATIVE MATRIX OF ALTERNATIVES

	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
Seismic Safety	No impacts.	528 mobile homes plus 3+ million ft^2 commercial and industrial structures subject to severe groundshaking. Highest risk of damage/harm.	1,326 detached and attached residential units plus .7 million ft^2 commercial uses subject to severe groundshaking. Risk of damage/harm higher than Alternatives 1 and 4, lower than Alternative 2.	1,140 detached dwelling units plus 50,000 ft^2 commercial uses subject to severe groundshaking. Minor decrease in residential exposure; major decrease in commercial property at risk as compared to Alternative 3.
Topography, Geology, Slopes and Erosion	Erosion potential due to flooding across site, ponding in southern portion of site from floods.	Minimal change to topography due to grading, landscaping. Surface development would increase erosion potential from runoff.	Similar to Alternative 2. Channelization and detention basin system will minimize erosion.	Additional erosion from flooding possible, would require improvements similar to those in Alternative 3.
Wind Erosion	No impacts.	Fugitive dust from construction short-term.	Similar to Alternative 2.	Similar to Alternatives 2 and 3.
Flooding	Sheetflow across southern portion of site would continue, ponding possible from 100-year storm.	Storm drainage channels would be required. Urban surfaces would increase runoff.	Storm drainage channels, detention basins,other structures will be constructed. Urban surfaces will increase runoff.	Similar to Alternatives 2 and 3.
Noise	Alignment of Highway 86 at Avenue 52 plus other developments in the area will increase noise levels, yet remain compatible with adjacent land uses.	Increased cumulative noise over Alternative 1, yet still compatible with adjacent land uses. Noise attenuation for commercial/industrial land uses near Highway 86.	Similar cumulative noise increases to Alternative 2.	Building attenuation for residential land uses will be required near Highway 86; outdoor living areas, open space may be subject to unacceptable noise levels after mitigation.
Air Quality	Negligible air quality decrease. All pollutant levels would remain very low.	Cumulative emissions would account for <.01 percent basin-wide pollutants. No standards exceeded, yet incrementally worse than Alternative 1.	Cumulative emissions will account for <.03 percent of basin-wide pollutants. More than Alternatives 1 and 2.	Air pollutant emissions will be less than those of Alternatives 2, and 3.

	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
Water Quality	Agricultural runoff will increase high salinity levels of secondary groundwater aquifer.	Urban-oriented pollutants (auto, household, industrial) would slightly pollute groundwater basin. Potable water provided by City from primary aquifer, meets all standards.	More groundwater impacts than Alternative 2, but still incremental and minor. Potable water provided by City.	Incrementally less groundwater impacts than Alternative 3.
Open Space and Conservation	No impacts. The site would remain vacant farm fields.	380 acres would be developed; removal of low value non-native weeds and Tamarisks.	Similar degree of removal of existing vegetation as Alternative 2. Park, other open space planned; landscaping with native plants.	Removal of 380 acres vegetation; about 7.5 acres parks required to support population; could landscape with native species.
Agriculture	No impacts.	Project removes 380 acres of agricultural land no longer considered viable due to poor soil conditions.	Same as Alternative 3.	Same as Alternatives 2 and 3. Possibility of increased land use conflict with surrounding areas.
Wildlife and Vegetation	Vast majority of plants, animals associated with agricultural setting. No sensitive species likely to establish.	Removal of most existing vegetation and animal habitat. Increased disturbance of habitat on-site and adjacent to site due to traffic, human occupancy, recreational use.	Similar to Alternative 2. Open space areas may provide new habitat locations.	Similar to Alternatives 2 and 3.
Energy Resources	No impacts.	Natural gas consumption: commercial ~304,000 ft^3/day; residential ~85,000 ft^3/day. Electricity consumption: commercial ~96,500 KWh/day; residential 11,022 KWh/day. Gasoline consumption: about 32,300 gpd.	Natural gas consumption: commercial <25% of Alternative 2; residential ~ 2 x Alternative 2. Electricity consumption: commercial <25% of Alternative 2; residential ~ 2 x Alternative 2. Gas consumption: ~ 60% Alternative 2.	Automotive gasoline and natural gas use would be slightly less than Alternative 3, but electric use substantially reduced.

	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
Aesthetics and Visual Analysis	No impacts.	Minimal change in visibility, landform alteration. Aesthetic improvement possible with sensitive landscaping.	Similar impacts as Alternative 2. Aesthetics improvement greater than Alternative 2.	Similar to Alternatives 2 and 3.
Historic and Prehistoric Resources	No impacts.	No impacts.	No impacts.	No impacts.
Land Use/Population	No impacts.	304 acres developed commercial and light industrial; 76 acres mobile homes; population 1,568.	71.5 acres developed commercial; 16.8 acres for park/municipal uses; 260.2 acres mixed density residential; population 3,938.	333 acres developed medium low density residential; 5 acres neighborhood commercial; and, 7.5 acre public park site; population 3,385.
Traffic and Circulation	Alignment of Highway 86 completed ~1993; cumulative traffic expected to be 18,600 ADT by 2005. Roadways around site LOS B; Highway 111 LOS C.	Cumulative traffic total 51,260 ADT; 20% exterior roadways will be LOS C or worse at peak hours; project-related traffic 20% of daily capacity of Highway 86 by 2005.	Cumulative traffic total 40,080 ADT; 40% of project trips are anticipated to be on Highway 86; majority of exterior roadways at LOS C or better during peak hours by 2005.	Cumulative traffic total 11,540 ADT; peak hour traffic am and pm primarily one-way (commuter). Less congestion than Alternatives 2 and 3.
Water	No impacts if site remains unused; if site returned to agricultural use, water demand between 2,200 and 2,700 a-f/year.	Project demand would be about 4.3 mgd; 5,000 gpm for 19 hours fire-fighting capacity required for industrial and commercial uses.	Project demand would be about 2.8 mgd; same required capacity for fire-fighting as Alternative 2.	Project demand would be about 1.7 mgd; minimum flow of 2,500 gpm for 19 hours fire-fighting capacity required.
Sewer	No impacts.	Sewage generation about 1.3 mgd; exceeds capacity of existing main; requires new force main, treatment plant expansion.	Same as Alternative 2.	Sewage generation about .45 mgd; does not exceed treatment plant's capacity; close to capacity of sewer main.

	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
Fire Protection	No impacts.	Population of 1,568 will cause increase in demand for services. Possible delay in response times due to traffic, railroad crossings. Increase in fire personnel required.	Population over twice that of Alternative 2 will cause more demand than that alternative. Delays in response times. Larger increase in fire personnel required.	Population slightly less than that of Alternative 3 will cause about the same demand. Delays possible; increase in fire personnel required.
Law Enforcement Services	No impacts.	One to two additional officer's required to meet officer population ratio. Additional facilities required.	Four to six additional officers required by project buildout. Additional facilities required.	4 to 5 additional officers required by project buildout. Additional facilities required.
Schools	No impact.	About 575 new students at project completion - initial impact on already crowded schools.	Almost 2.5 times number of students as in Alternative 2; cumulative impact increased; plan reserved 10 acres for one new school.	Slightly fewer number of students as in Alternative 3.
Parks and Recreation	No impacts.	Incremental demand for 3.5 acres new park land.	Increased population will require at least 8.6 acres new parks and recreational facilities.	Projected population will require at least 7.5 acre new park land, recreational facilities.
Utilities and Energy Conservation	No impacts.	Extension of sewer, water, natural gas, electric and telephone services required to service site; sewer extension required off-site.	More infrastructure than Alternative 2 on-site; same extensions required off-site.	Less efficient on-site infrastructure than other alternatives.
Solid Waste	No impacts.	Waste generation per day 44,974 lbs.; accounts for about 3% of landfill's daily receipt.	Waste generation per day 31,195 lbs.; accounts for 2% of landfill's daily receipt.	Waste generation per day 13,220 lbs., better than Alternatives 2 and 3; accounts for .9% of landfill's daily receipt.
Health Services	No impacts.	Very negligible impact on hospital services.	Slightly greater impact on hospital services; still negligible.	Slightly less impact on hospital services than Alternative 3.

	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
Library Services	No impacts.	New residents will increase demand for services.	Greater demand than Alternative 2.	Greater demand for services than Alternative 2, less than 3.
Fiscal	No significant demand for city services; payment of property taxes would continue.	Cost of providing public services to project would not be likely to be offset by revenue from project.	The project will result in a net fiscal revenue to the city.	The public services and infrastructure costs for this alternative would be greater than the revenues.
Easements	Right-of-way must be acquired by public agencies for Highway 86 interchange, Avenue 52 and Polk Street realignments.	Same as Alternative 1, plus rights-of-way for new local roads and public/utilities easements on-site required.	Same as Alternative 2.	Similar to Alternatives 2 and 3.

8.5.1 Alternative Considered

Alternative 1 - The "No Project" Alternative

The California Environmental Quality Act provides that the specific alternative of "no project" be included in the comparative evaluation of alternatives to the proposed action. As defined for the subject proposal, the "No Project" alternative assumes that the Specific Plan designation would not be utilized or implemented, that the "Conditional" zoning would expire and the subject project (or similar development) would not be realized in the future. In this instance, the project area would remain in its currently largely undeveloped/unimproved state, and historic agricultural may continue.

Assuming the project site could remain in its present fallow state or in some form of agricultural production,this alternative would avoid the range of impacts associated with the proposed project described in this Specific Plan/EIR, including: increased traffic, air and noise pollution, loss of open space, drainage modifications, and demands on public services and utilities. The disadvantages of this alternative are primarily economic and social. In addition to the lack of economic return on the land for the project proponents, this alternative would result in lost opportunities for new housing for city (and Coachella Valley) residents in close proximity to commercial and employment centers, new retail sales and service jobs, and potential tax revenues to the City of Coachella and other taxing agencies.

The No Project alternative is contrary to the project proponent's desire to secure a viable use of the project. As discussed in Section 6.9, continued agricultural use of the property is not a feasible option. The eastern portion of the City of Coachella will otherwise be committed to a suburban/urban intensity of development. Omitting the Specific Plan square mile area of land from the development sequence will forego a primary City entry and commercial Highway interchange opportunity (Highway 86/Avenue 52), cause other new development to leap over this square mile and result in loss of coordinated infrastructure extension/improvement and project related improvements to regional systems.

Alternative 2

This alternative was evaluated by the project sponsor as an initial approach to development of the subject property. It is composed of light industrial and commercial uses,with a mobile home housing component. Table 8.2 provides a detailed breakdown of conceptual site uses by acreage. The land use pattern to be established under this scenario is illustrated by Figure 8.1. The internal street

system for this alternative differs slightly from the proposal contained in the project now under consideration, due primarily to the difference in land uses and traffic generation projected by this and other area projects. Preliminary discussions with the City of Coachella led to the abandonment of this concept, based on the City's preference to keep its industrial land uses concentrated in their current planned locations.

TABLE 8.2
LAND USE BREAKDOWN FOR ALTERNATIVE 2

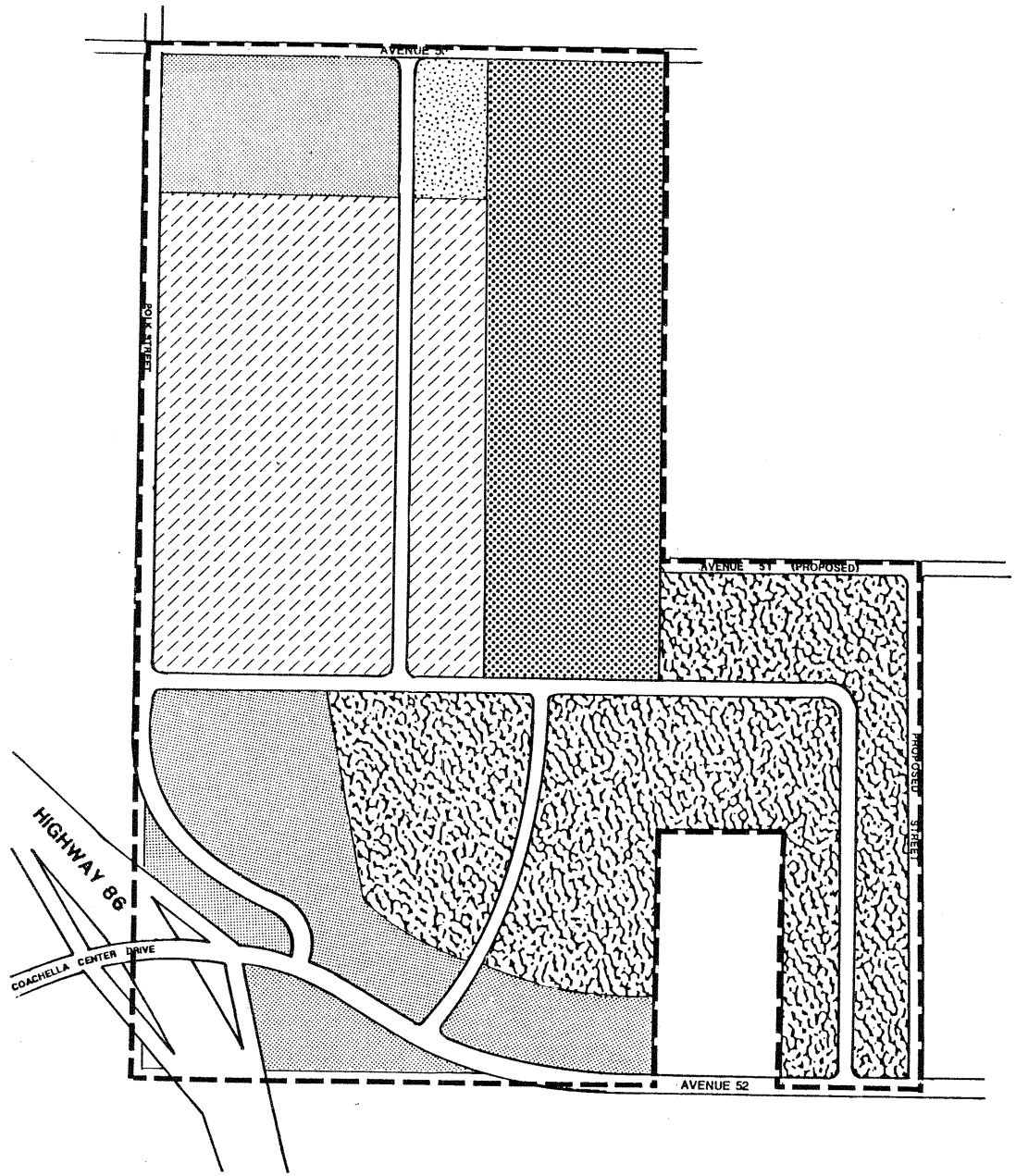
Land Use	% of Total Acreage	Gross Acreage	Net Acreage
Commercial	24	83	78
Office/Research Development	24	91	85
Light Industry	30	113	104
Mobile Home	20 (528 units)	75	66
Loss to Freeway	2	8	---
TOTAL	100%	380	333

Source: J.F.Davidson and Company, April 1988.

The resident population generated impacts associated with this alternative would be less significant than those of the proposed project (potential for 528 mobile homes versus 1,326 dwelling units). However, the emphasis on commercial and industrial uses involved with this alternative would have characteristic impacts related to traffic, consumption of motor fuels, water demand and solid waste generation. In terms of public cost-revenue analysis, mobile homes (as well as most residential development under a certain price range) run a deficit; industrial is typically nutural or "break even"; and, commercial land uses result in a positive fiscal balance. Because 78 acres of commercial land is more than this alternative could support by itself, all the revenues could not be assigned back to this type of project, therefore, on a project basis it would most likely result a negative fiscal impact.

LEGEND

- COMMERCIAL (General)
- COMMERCIAL (Neighborhood)
- COMMERCIAL (Office/Research Development)
- LIGHT INDUSTRIAL (Manufacturing Service)
- RESIDENTIAL (Mobile Homes)
- APPLICANT'S PROJECT BOUNDARY



DRAWING TITLE:

LAND USE - ALTERNATIVE 2

100 300 700 1500 FEET
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FIGURE #
8.1

brandenburg | butters

C O A C H E L L A 3 8 0

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Smith, Peroni & Fox

SOURCE:

Alternative 3

This alternative is the proposed Brandenburg-Butters, Coachella 380 Specific Plan project, which is now under consideration, and as further described in Section 3.0. The subject project consist of residential uses at varying densities, commercial land use with a range of activities being contemplated on four commercial sites, and the dedication of public property for park and other municipal uses. The impacts of this project are explored in detail in Section 6.0 and 7.0. Most impacts are those associated with the effects of conversion of vacant land to urban uses. Most impacts have been mitigated by virtue of project features or design. Although individually limited, impacts of the proposed action have a cumulative effect when combined together with the actions being contemplated on this site and those of other projects in the eastern portion of the City.

Beyond the unmitigable incremental adverse impacts on the physical environment, which may result from this project, a number of positive effect of the proposal may also be observed, including: creation of retail sales and service sector jobs; provision of additional housing stock and choices; and, positive city fiscal impact.

Alternative 4

Alternative 4 develops the project site under the General Plan category of "suburban residential" with the residential density averaging 3.0 units over the gross site area. This scenario would result in 1,140 dwelling units and a project population of 3,385 persons (using a factor of 2.97 persons per household). Subdivision of land would be in medium to larger lot configurations. Based on population the project would provide for the General Plan standard of five acres of neighborhood commercial (which may include a supermarket and other retail sales or services); and, 7.5 acres of public park would be dedicated.

This alternative would slighting reduce impacts associated with population and the physical environment, over that of Alternative 3, but significantly increase the proportionate cost of infrastructure and City services without having the land use mixture to produce compensating revenues. At lower suburban densities the housing created in this development would probably be all owner occupied and oriented to the upper middle income market. Significant employment in the neighborhood would not be created by this project example, therefore, residents of this development would probably be commuters relying on Highway 86 to access regional transportation routes.

8.5.2 Alternative Site

Under this alternative, the proposed project would be developed at another location. In its current concept, the project takes advantage of the Highway 86 realignment and Highway 111 to support its regional and general/highway/tourist commercial uses. Other sites offering this degree of access exist in Coachella; these include the McNaughton and (to a lessor degree) Lusardi Specific Plan Areas in the eastern section of the city, a transitional agriculture area north of the Cabazon Mission Indian Reservation in the northern portion of the city, and other transitional agricultural land lying in the western portion of Coachella.

Impacts of the project located in these other areas are likely to be similar to those anticipated from the project's current proposed location. Extension and costs of infrastructure could in some cases be reduced due to other sites' proximity to existing infrastructure. Conversely, traffic, noise and air quality impacts could increase due to these locations' proximity to major roadways such as Interstate 10 and Grapefruit Boulevard. The cumulative environmental impacts resulting from the proposed project in a different location are not perceived to be any less extensive than those expected from the current location.

8.6 Growth Inducing Impacts

The project site is currently vacant former agricultural land, surrounded on all sides by agricultural land and scattered rural housing. Any development of the site except for rural use would likely have some growth inducing impact. Development of this site will result in an extension of infrastructure (water, sewer, roads, etc.) to a new area. Extension of existing urban areas is considered to have a higher growth inducing impact than "infill" development in an already developed area.

Phased buildout of the project could lead to an increase in land values, putting pressure on the surrounding agricultural land and hastening its conversion to urban/suburban uses. Designation of the square mile which includes the project site as a "Specific Plan Area" in December 1988, implies the conversion of this rural area to urban intensities of development. Thus, while the project may speed up the conversion of adjacent agricultural land, this growth could be considered previously induced by the designation of a "Specific Plan Area" by the City of Coachella.

Domestic water and sewer facilities do not currently serve the project site. Extension of these facilities to the site will have a growth inducing effect particularly if the capacity of the facilities is greater than that required by the project. The project's needs will be served by extending the City's existing water supply system to the site on two sides and providing a well in proximity to the project site. In addition, a reservoir will be built in association with the well site; the reservoir is necessary to meet the City's fire flow requirements, and it will provide surplus for possible future developments. This project will require the installation of a new sewer main from Avenue 52 to the treatment plant; the treatment plant itself would have to be expanded to accommodate this project at 75% buildout. Expansion of the treatment plant whether necessitated by this project or other development within the City, will facilitate future development.

Roadway improvements required to accommodate the project build-out are detailed in Section 7.2, Traffic and Circulation. These roadway improvements, especially those already master planned, are more properly seen as a response to anticipated growth than as growth inducements.

The project will provide construction jobs as it is built and a variety of employment opportunities in the businesses which will make up the neighborhood commercial, regional commercial, and general/highway/tourist commercial uses. The availability of jobs would result in some subregional growth, although it is expected that some of the housing needs thus generated will be met within the project. The project population will also create a demand for commercial and business uses beyond those on site, thus fostering new commercial growth in the region.

It would be difficult to attribute further development in this area to the effect of this development alone. As discussed in Section 8.1, Cumulative Impacts, two other projects, one of comparable size and one significantly larger, are proposed for the Eastern Coachella area. Brandenburg-Butters represents approximately 13% of the housing units currently proposed for the area. Thus, it seems that the infrastructure will be extended to the area in the near future irrespective of this particular project. The annexation of the Brandenburg-Butters property to the City of Coachella in 1987 would seem to have anticipated its ultimate conversion to urban/suburban uses; its designation as a "Specific Plan Area" in the December 1988 General Plan amendment implies an eventual urban density and intensity of development. Finally, the Southern California Association of Governments (SCAG) growth forecasts for RSA 53[1] show substantially increased growth pressures in this area without reference to this project.

[1] Regional Statistical Area Number 53 - incorporates the project site.

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9.0 PERSONS AND ORGANIZATIONS CONTACTED

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   - Richard Douglas (former Principal Planner)
   - John Crosswhite, Planning Consultant for the City
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   - Sargent Joe Murillo, Police Department
   - Fire Marshal Bill Vargas, Fire Department
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2. Riverside City/County Public Library
   - Judith M.Auth, Assistant Library Director

3. The California Archaeological Inventory - Eastern Information Center (Archaeological Research Unit of the University of California at Riverside)
   - Kay White

4. California Department of Parks and Recreation
   - Jim Woodard, Archaeologist

5. Cabazon Band of Mission Indians
   - John Paul Nichols, Tribal Administrator/General Manager

6. Coachella Valley Community College District
   - John Matlock, Consultant

7. Coachella Valley Recreation and Parks District
   - Scott Morgan, Parks and Recreation Superintendent
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8. Coachella Valley Unified School District
   - Jorge B. Gutierrez, Assistant Superintendent of Facilities and Operations

9. John F. Kennedy Memorial Hospital
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10. Riverside County Parks Department
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11. Riverside County Waste Management
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12. USDA Soil Conservation Service
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13. Western Waste Industries
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14. Utility Companies
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