

 PROJECT BOUNDARY



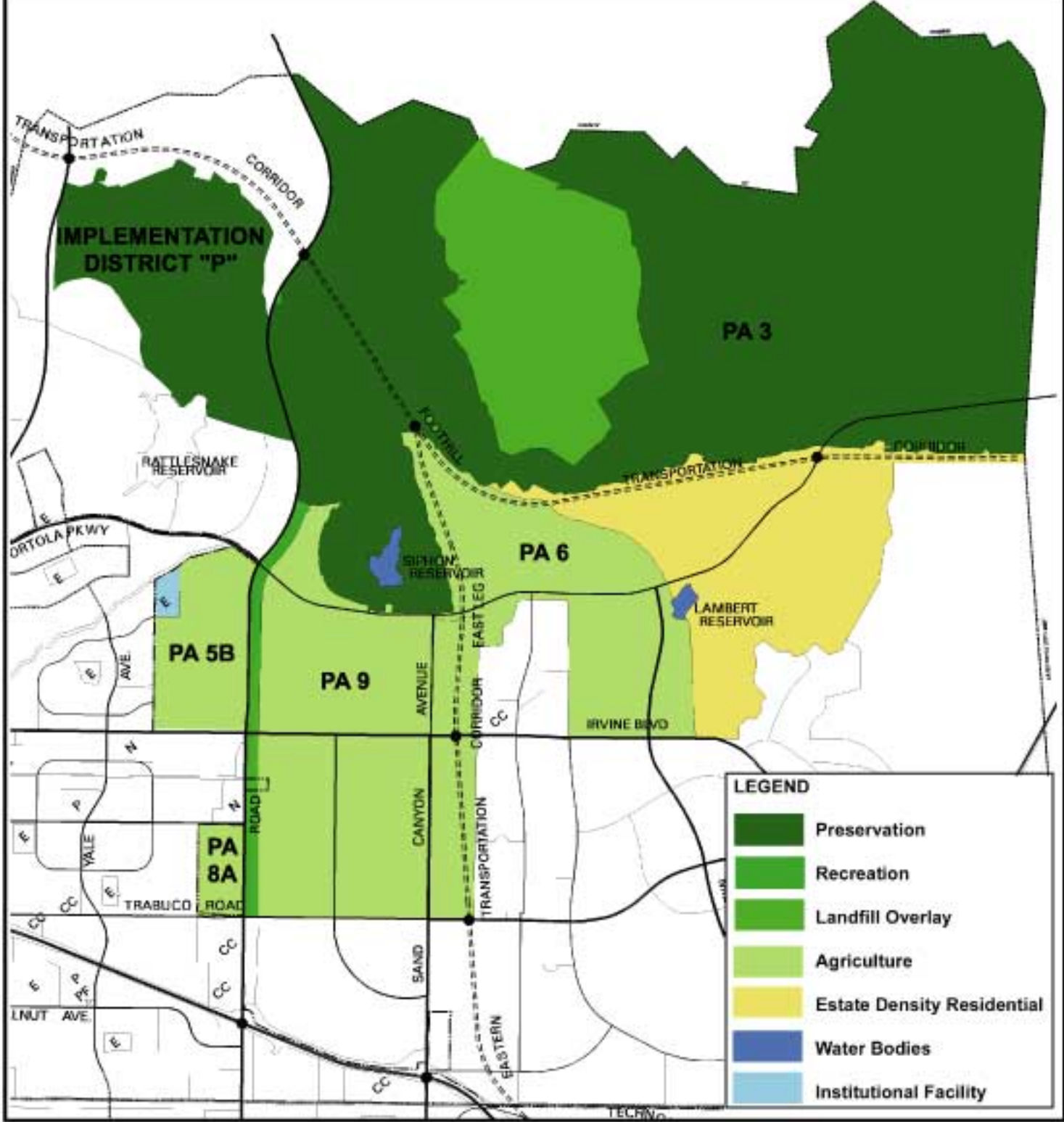


Exhibit 2-4
EXISTING CITY
GENERAL PLAN DESIGNATIONS

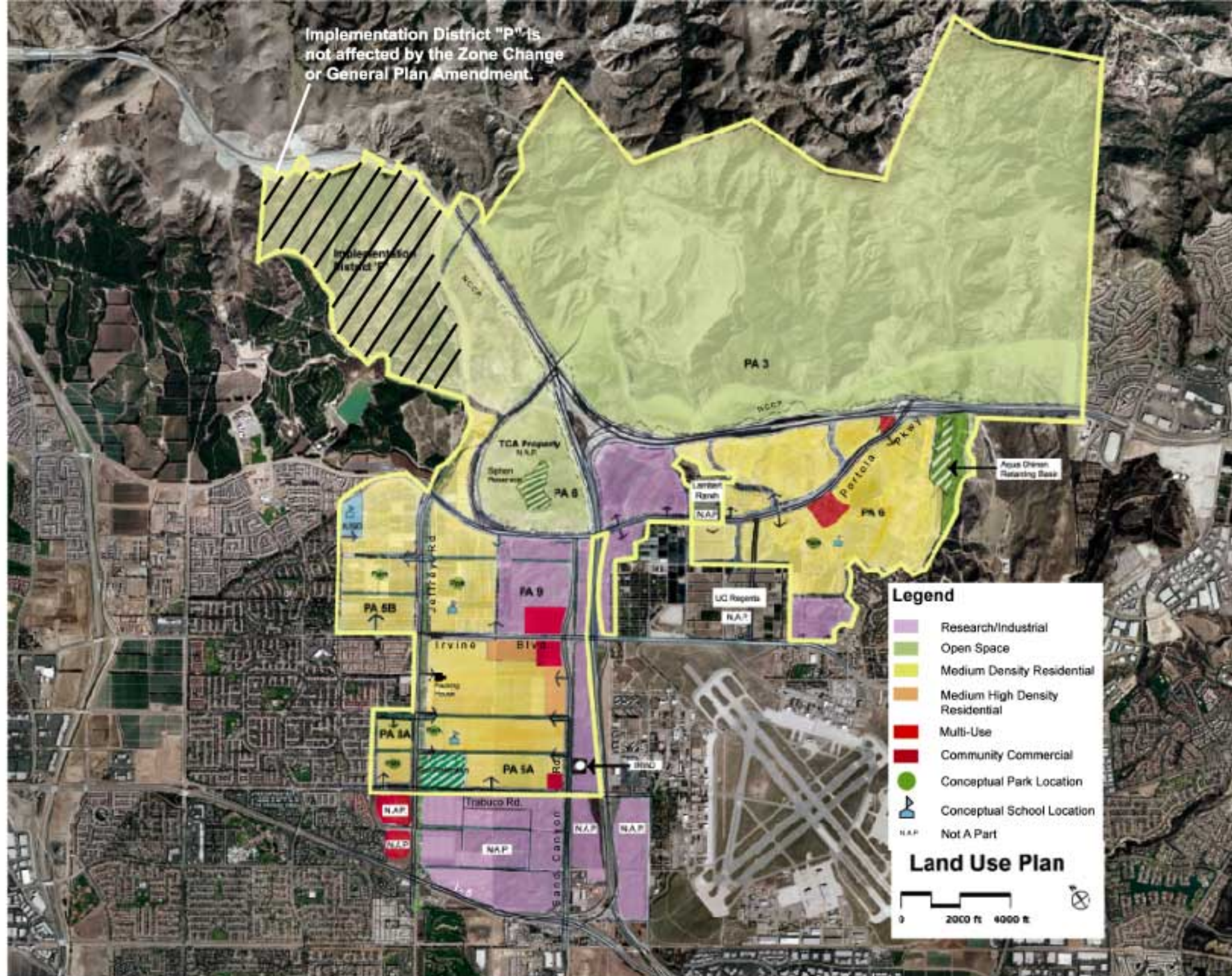
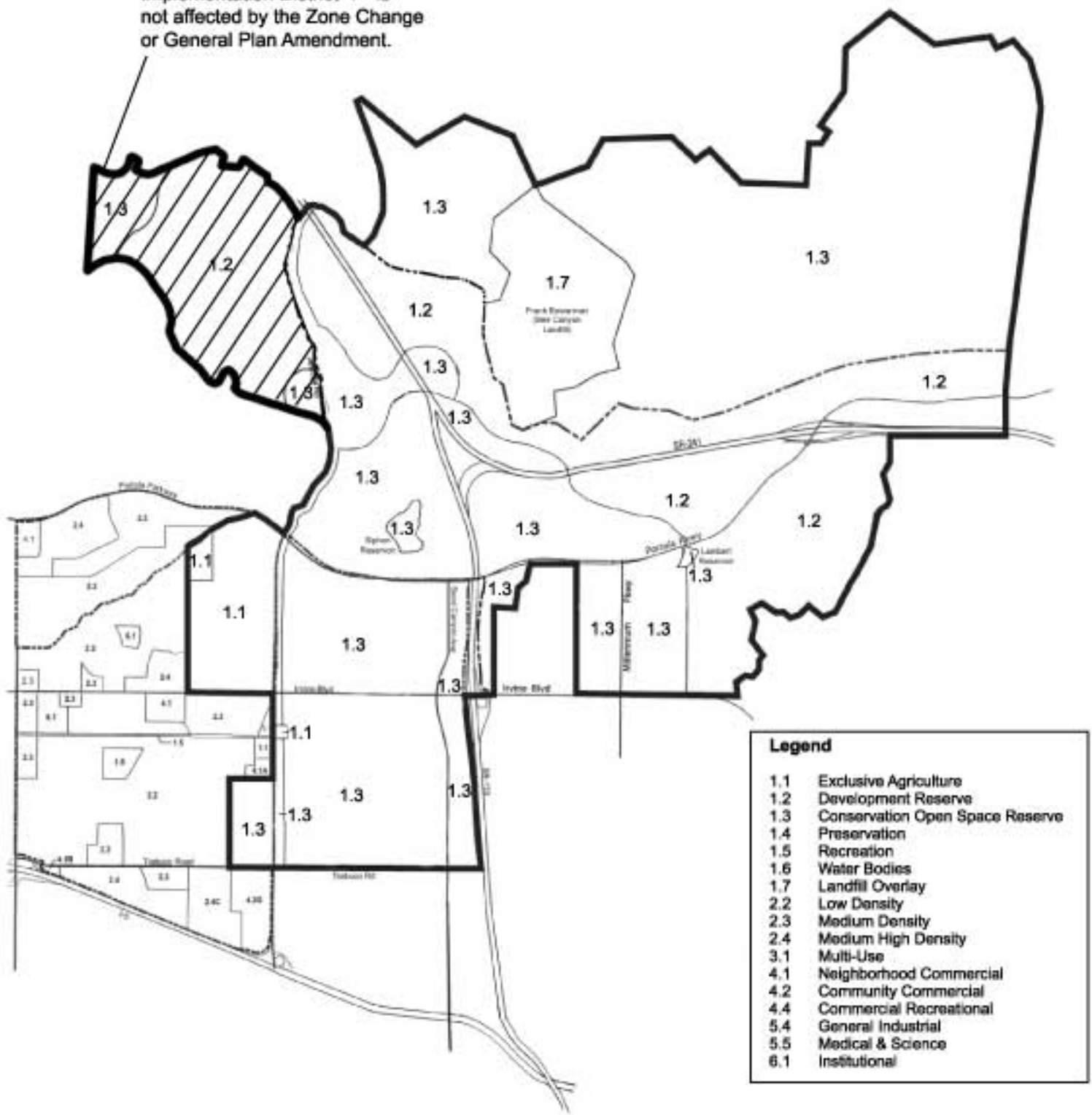




Exhibit 2-6
INTERSECTIONS BEING
CONSIDERED FOR LOS "E"

Implementation District "P" is not affected by the Zone Change or General Plan Amendment.



Legend	
1.1	Exclusive Agriculture
1.2	Development Reserve
1.3	Conservation Open Space Reserve
1.4	Preservation
1.5	Recreation
1.6	Water Bodies
1.7	Landfill Overlay
2.2	Low Density
2.3	Medium Density
2.4	Medium High Density
3.1	Multi-Use
4.1	Neighborhood Commercial
4.2	Community Commercial
4.4	Commercial Recreational
5.4	General Industrial
5.5	Medical & Science
6.1	Institutional



Northern Sphere Area EIR

Exhibit 2-7
EXISTING CITY
ZONING DESIGNATIONS

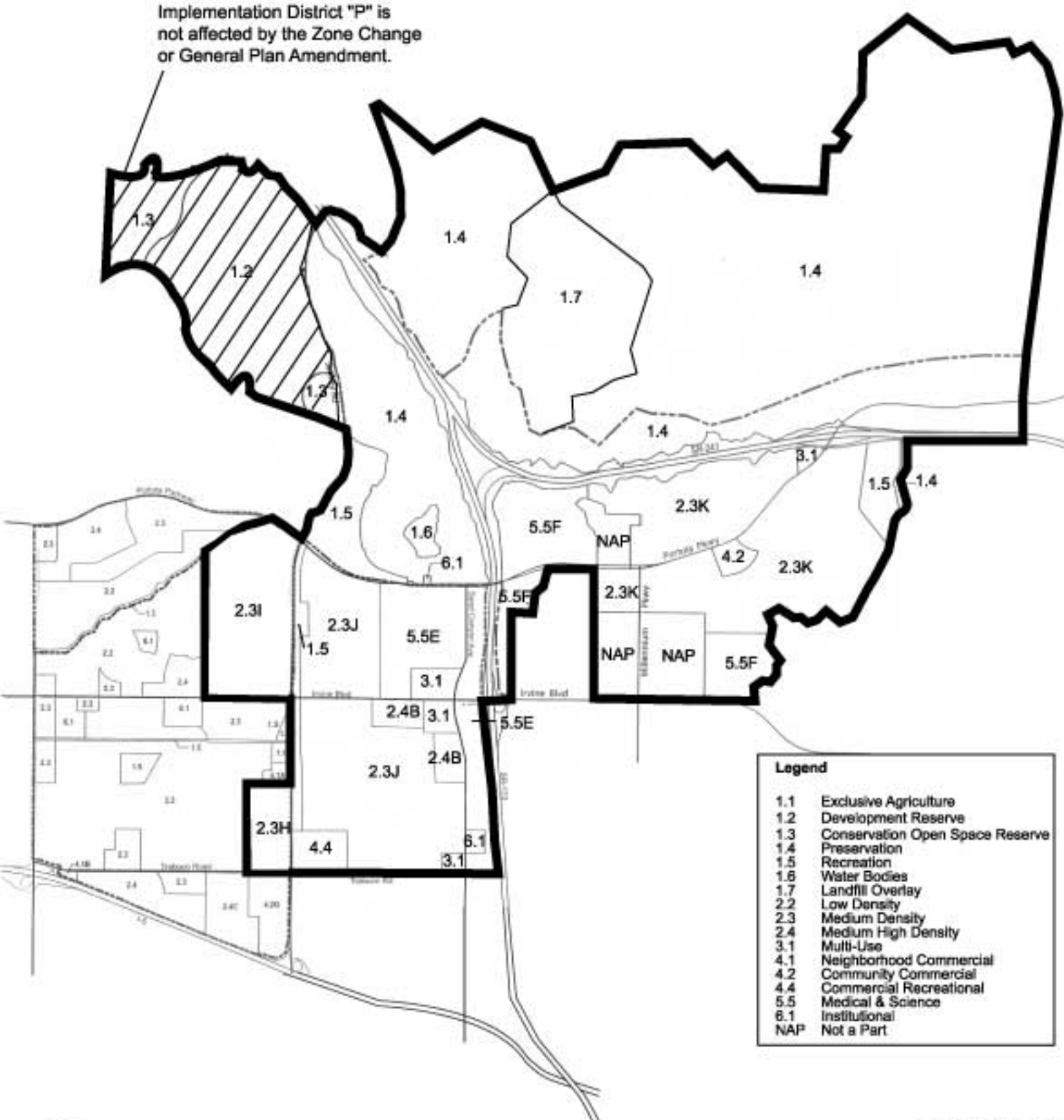


TEMPLETON PLANNING GROUP

NO SCALE



Implementation District "P" is not affected by the Zone Change or General Plan Amendment.



Legend	
1.1	Exclusive Agriculture
1.2	Development Reserve
1.3	Conservation Open Space Reserve
1.4	Preservation
1.5	Recreation
1.6	Water Bodies
1.7	Landfill Overlay
2.2	Low Density
2.3	Medium Density
2.4	Medium High Density
3.1	Multi-Use
4.1	Neighborhood Commercial
4.2	Community Commercial
4.4	Commercial Recreational
5.5	Medical & Science
6.1	Institutional
NAP	Not a Part

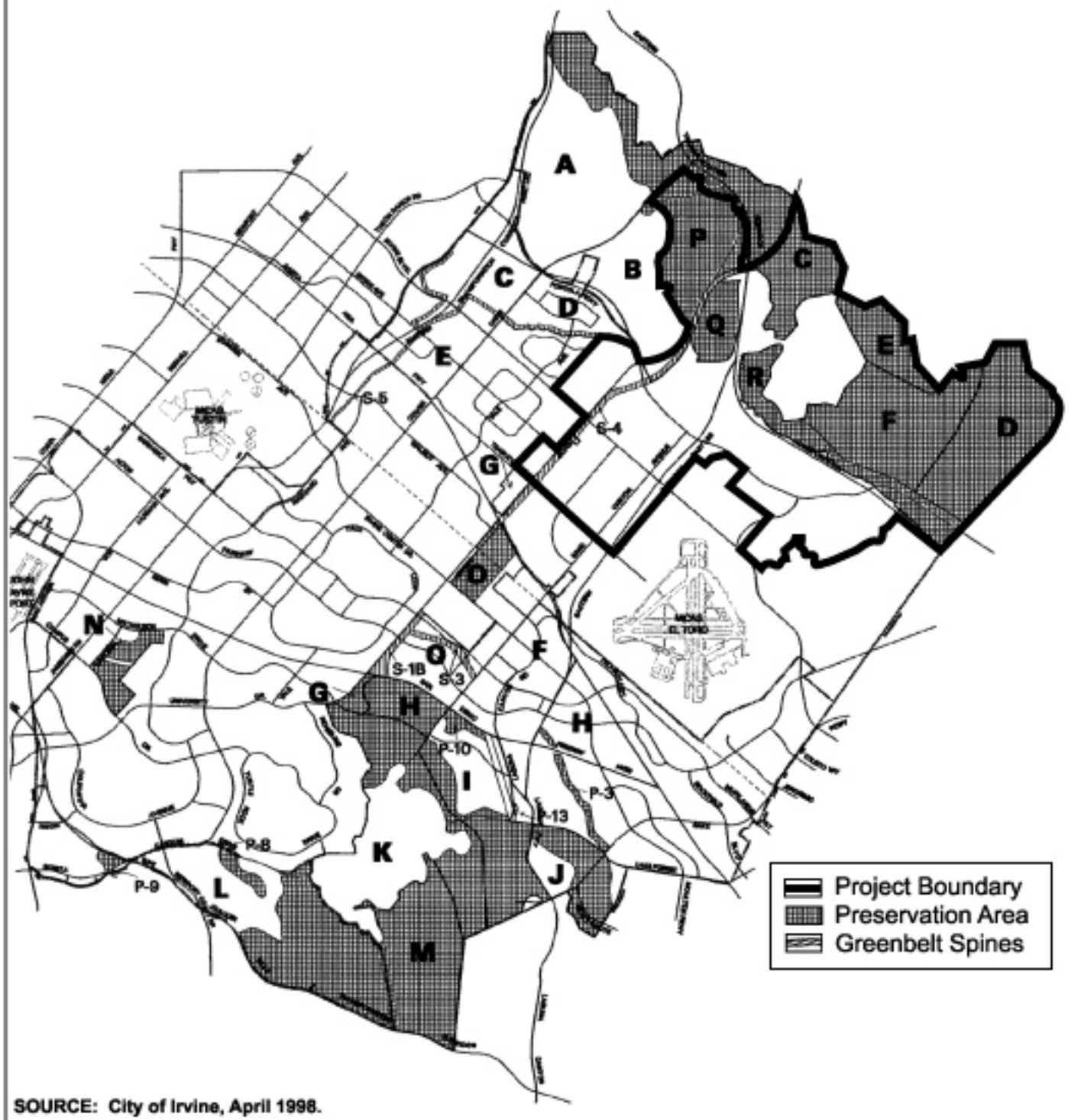
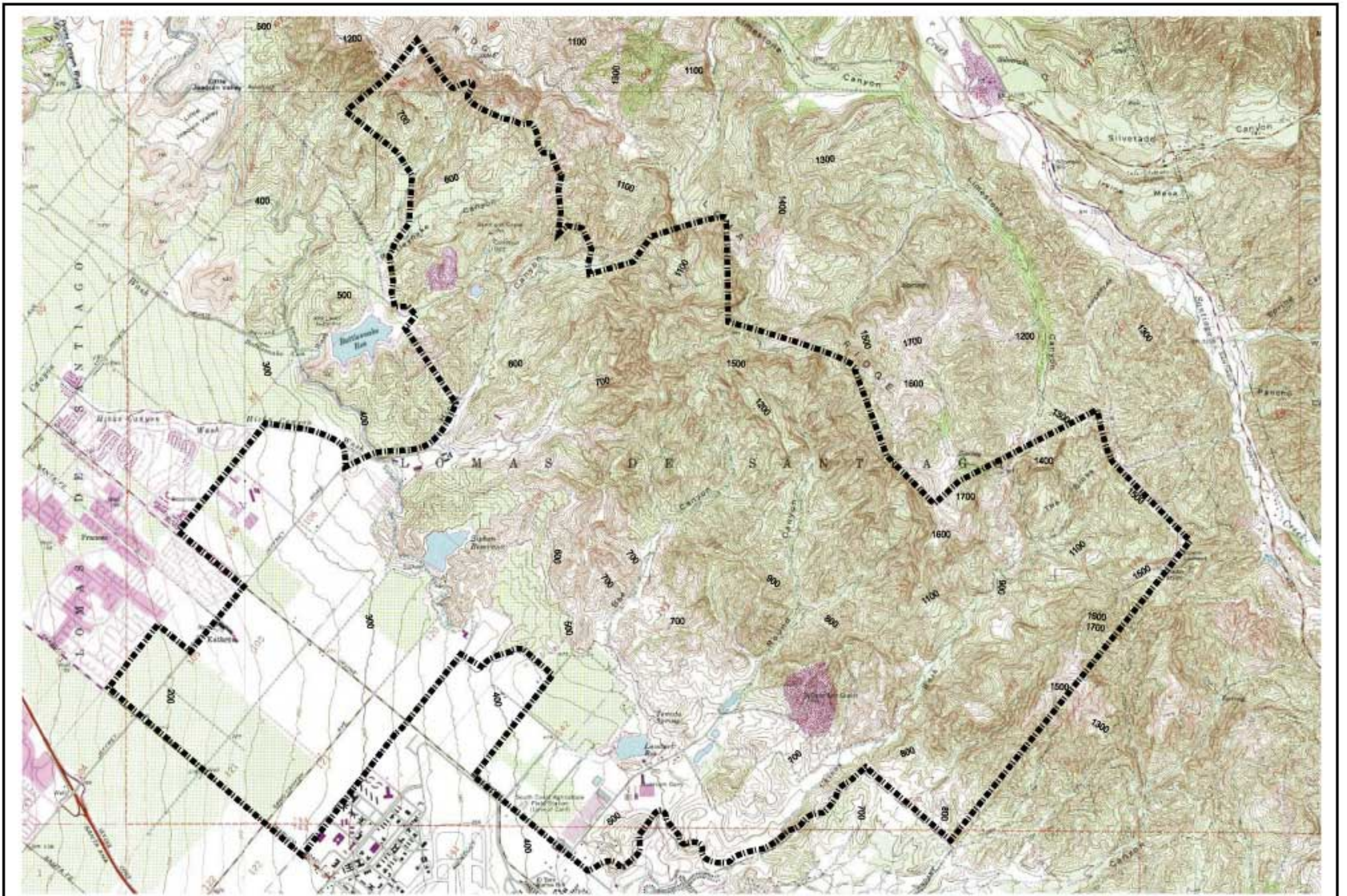
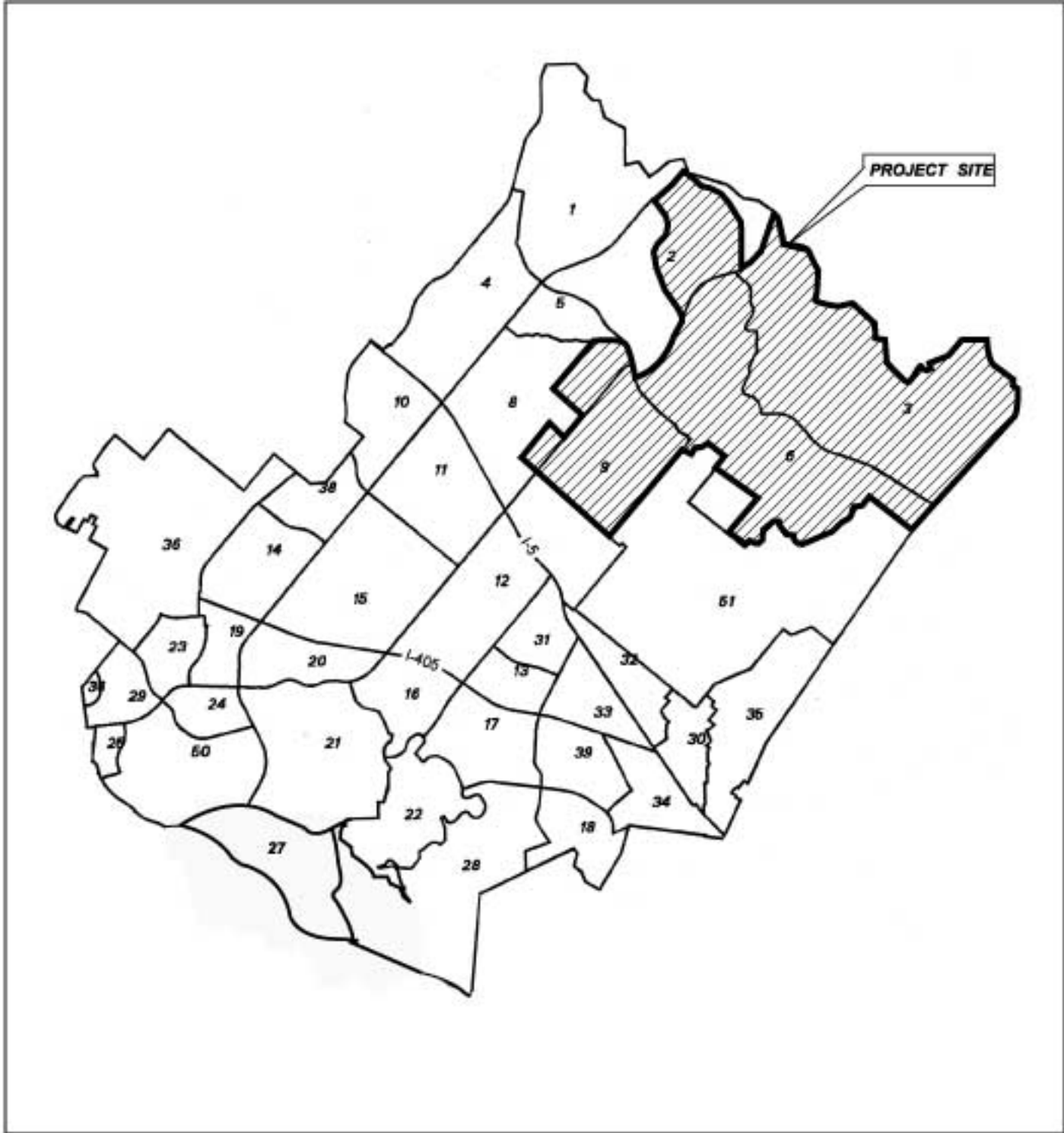


Exhibit 2-9
CITY OF IRVINE
CONSERVATION/OPEN SPACE
IMPLEMENTATION DISTRICTS



Source: Maptech MapServer



SOURCE: City of Irvine, March 9, 1999

Exhibit 3-2
CITY OF IRVINE
PLANNING AREAS



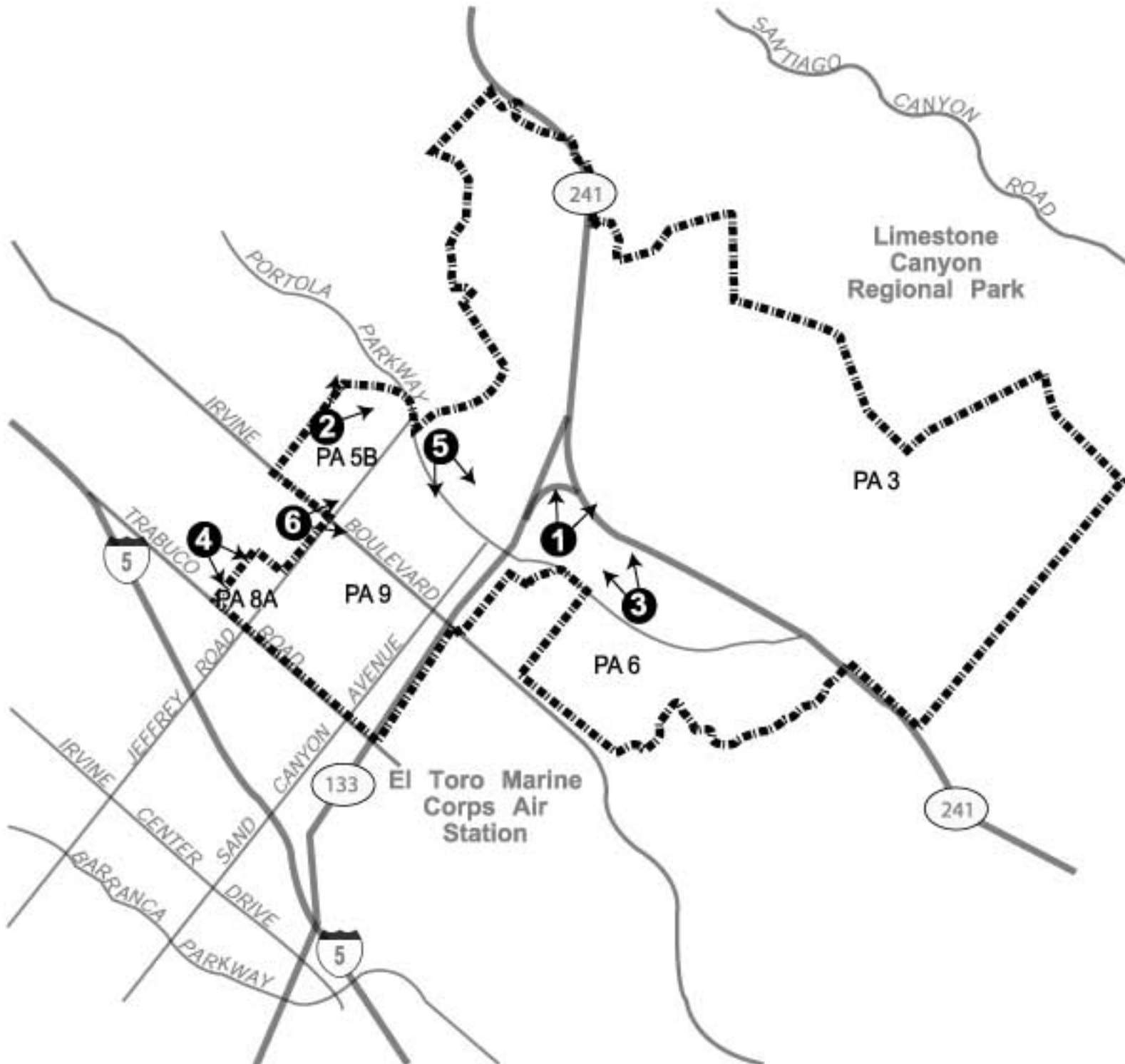
Northern Sphere Area EIR



TEMPLETON PLANNING GROUP

no scale





 PROJECT BOUNDARY



Photograph 6:
View looking west at
Planning Area 9 near
the intersection of Sand
Canyon Avenue and
Irvine Boulevard.

Existing

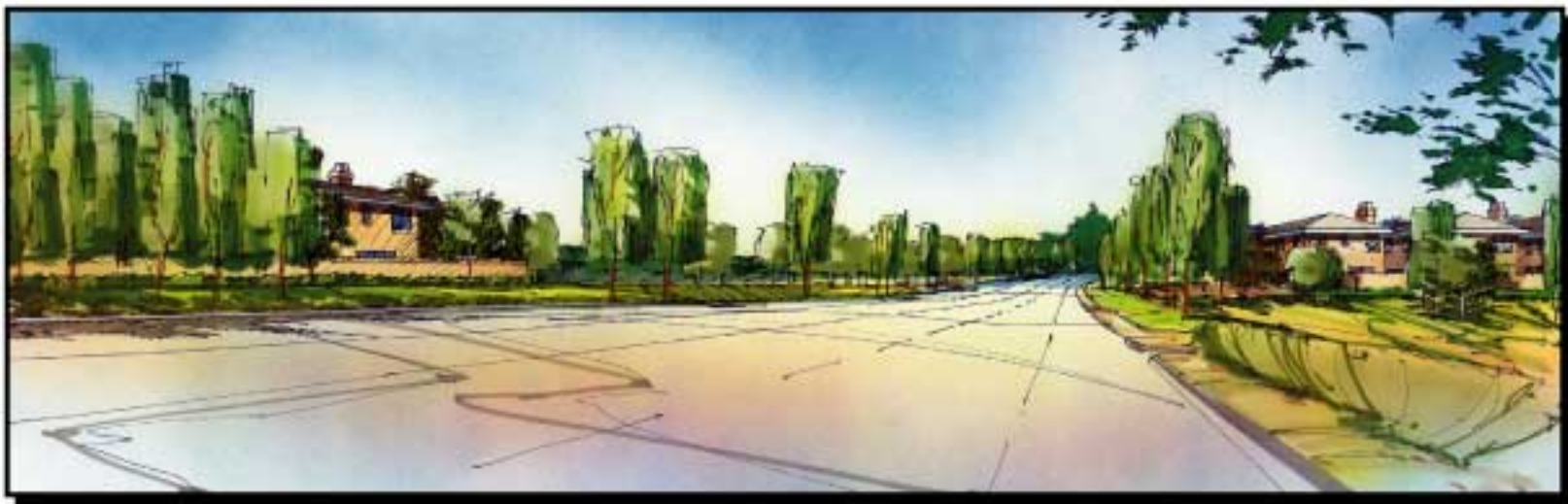


Proposed

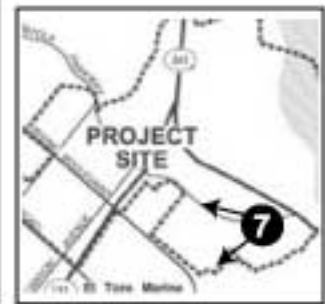


Photograph 7:
View looking west at
Planning Area 6 from
Portola Parkway south
of the SR-241.

Existing



Proposed



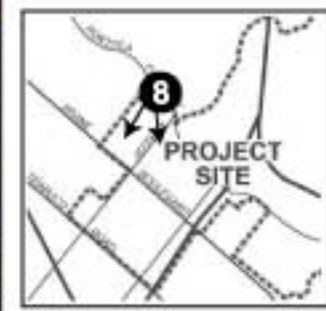


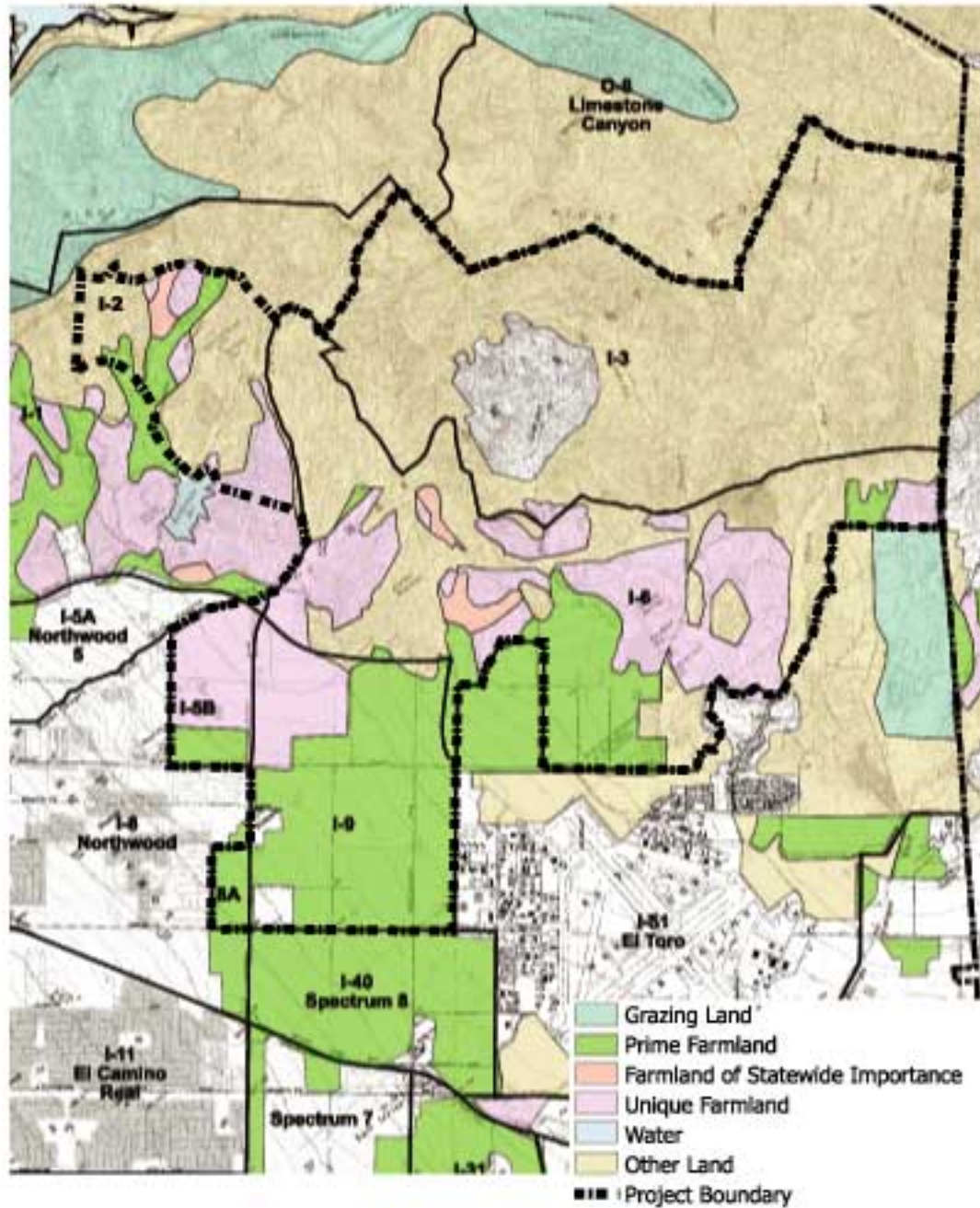
Photograph 8:
View looking south from Northwood Point in the direction of Hicks Canyon Trail and Planning Area 5B.

Existing



Proposed





Source: Department of Conservation's Division of Land Resource Protection

Exhibit 4-13
FMMP'S 1998
ORANGE COUNTY
SIGNIFICANT FARMLAND MAP

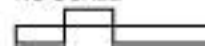


Northern Sphere Area EIR



TEMPLETON PLANNING GROUP

NO SCALE





● Receptor Location

LEGEND	
Receptor	Intersection Location
1	Barranca and Jamboree
2	Walnut and Culver
3	Irvine Blvd and Yale
4	Irvine Center Drive and Jeffrey
5	Trabuco and Sand Canyon
6	Millennium and Bake
7	Oak Canyon and Sand Canyon

Source: Mestre Greve Associates

Exhibit 4-14

**CALINE4 MODELING
RECEPTOR LOCATIONS**



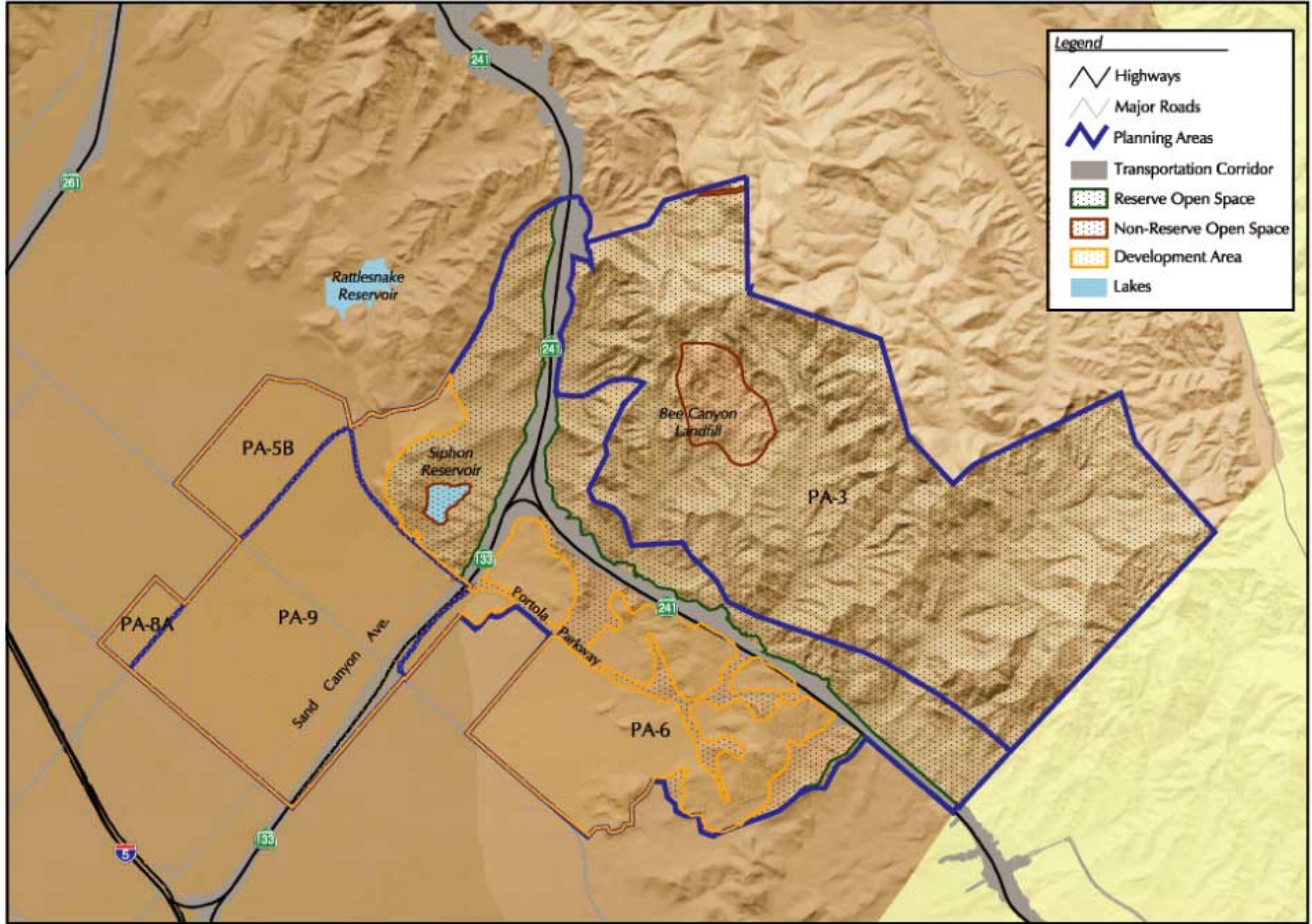
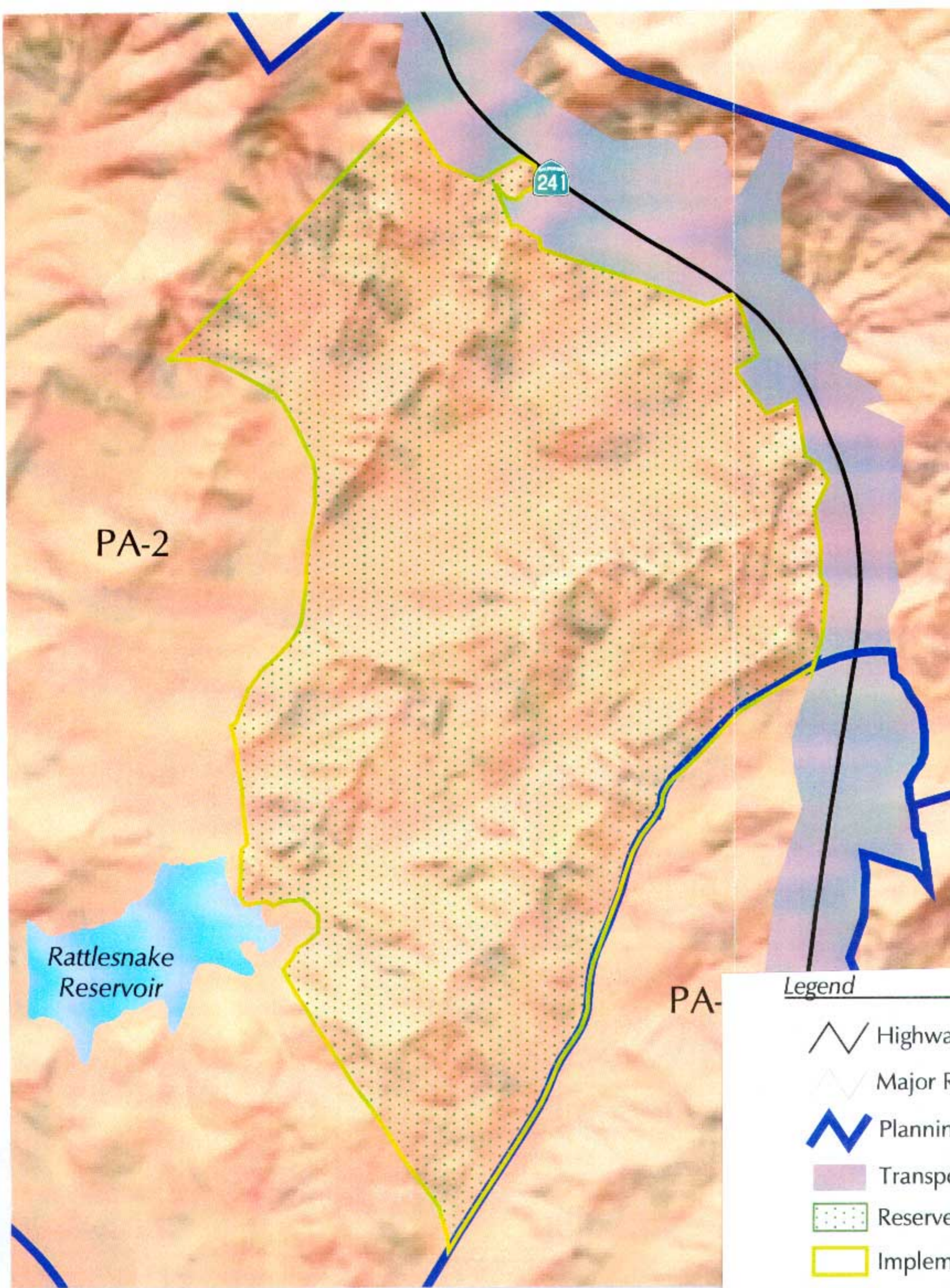


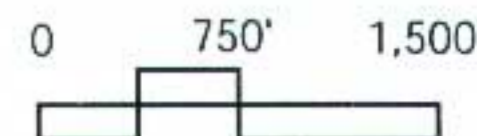
Exhibit 4-15
NATURAL COMMUNITY
CONSERVATION PLAN AREA



Legend

-  Highways
-  Major Roads
-  Planning Areas
-  Transportation Corridor
-  Reserve Open Space
-  Implementation Area P

Exhibit 4-16
NATURAL COMMUNITY
CONSERVATION PLAN AREA
(IMPLEMENTATION DISTRICT "P")



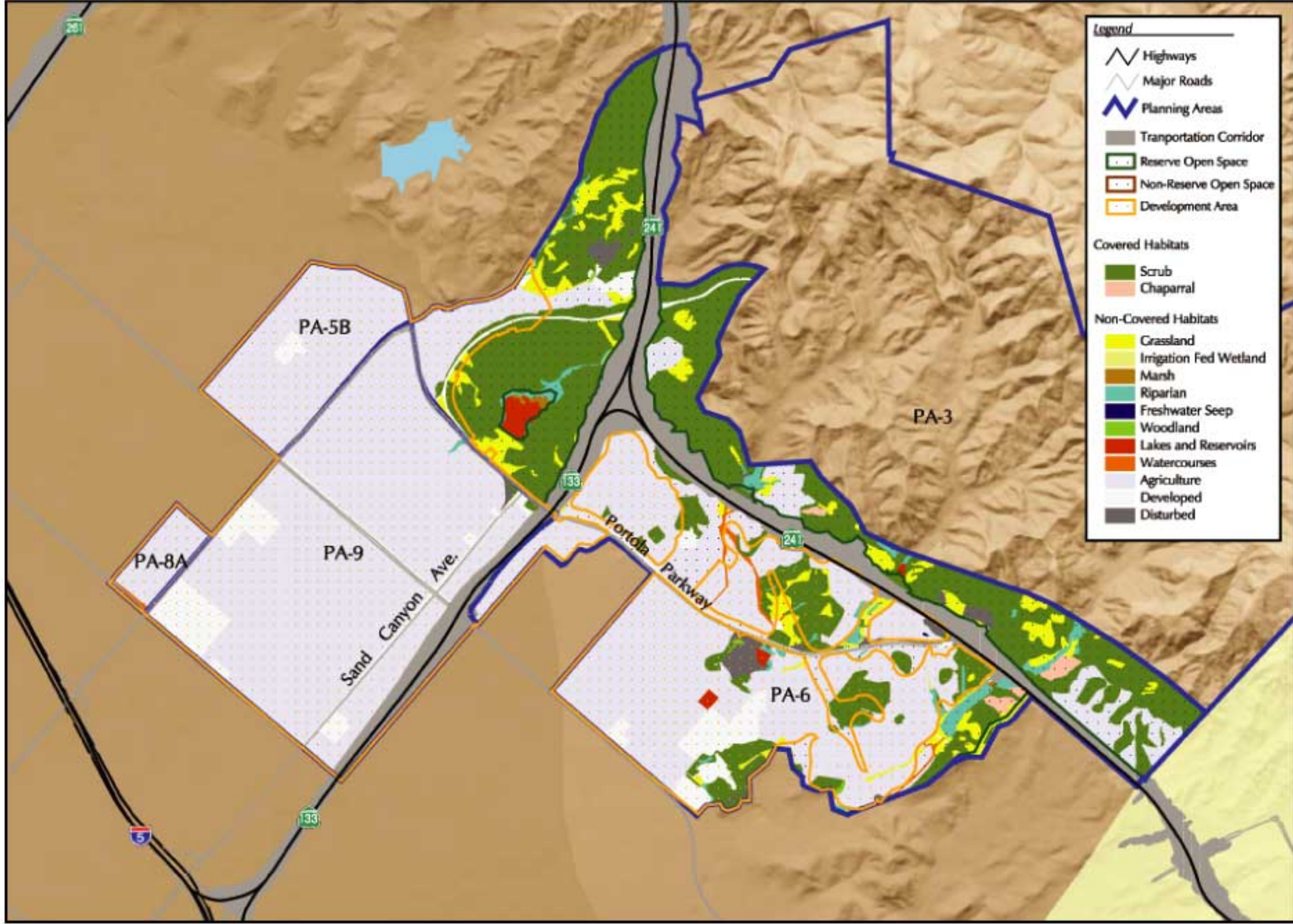
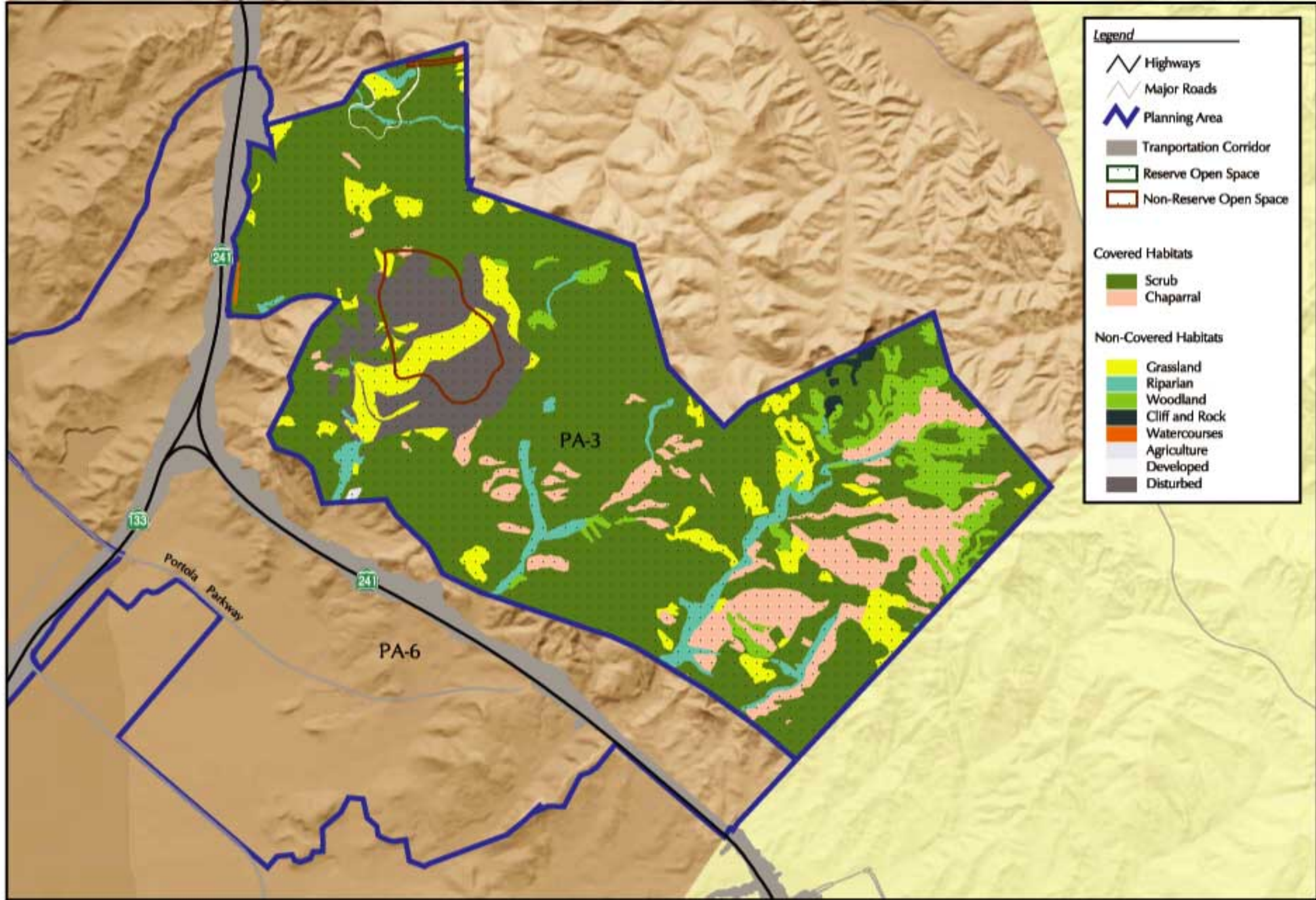


Exhibit 4-17
VEGETATION TYPES
(PA 5B, PA 6, PA 8A, PA 9)



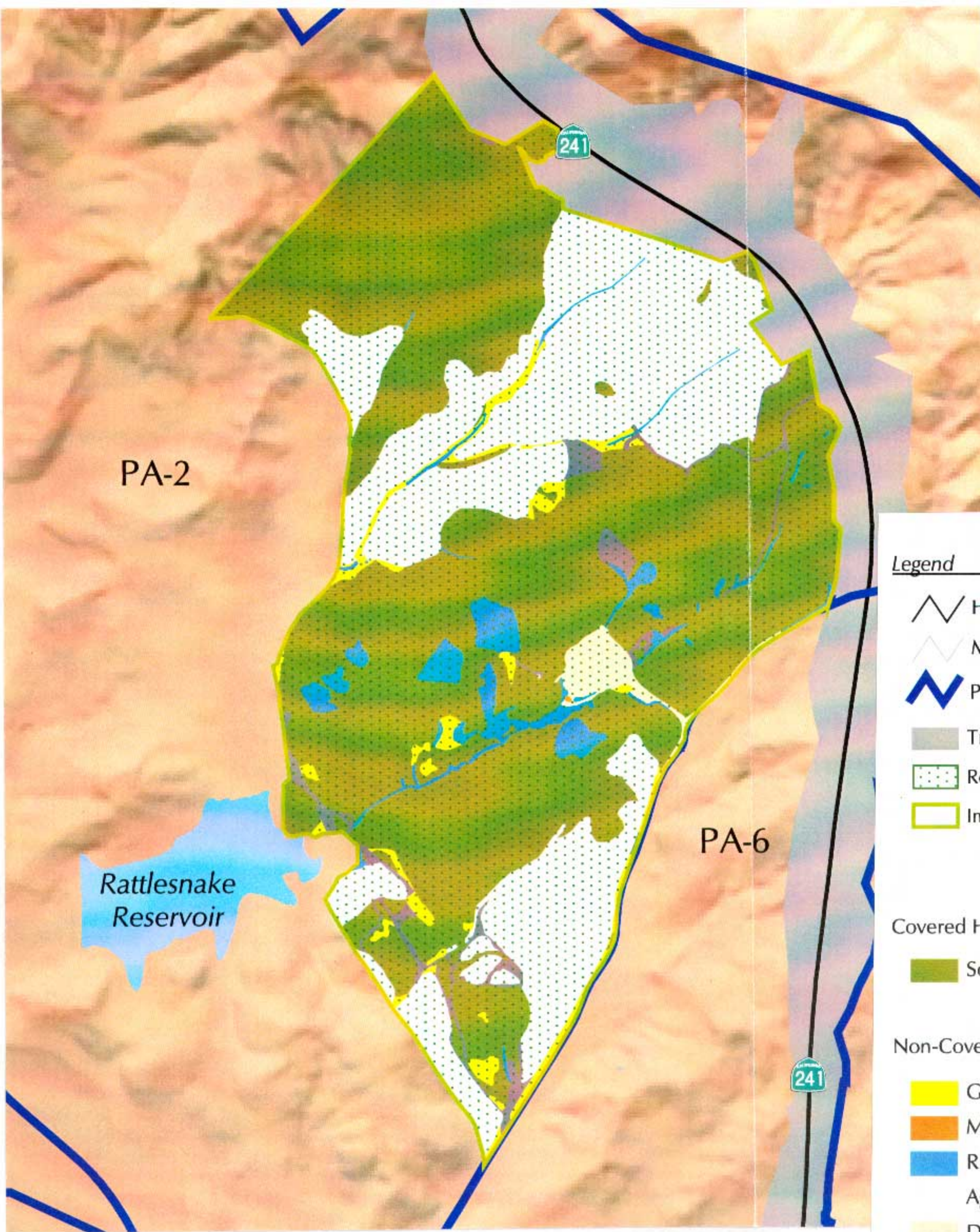
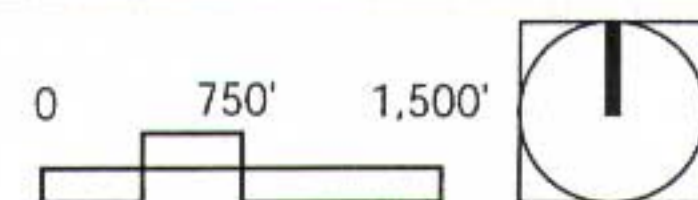
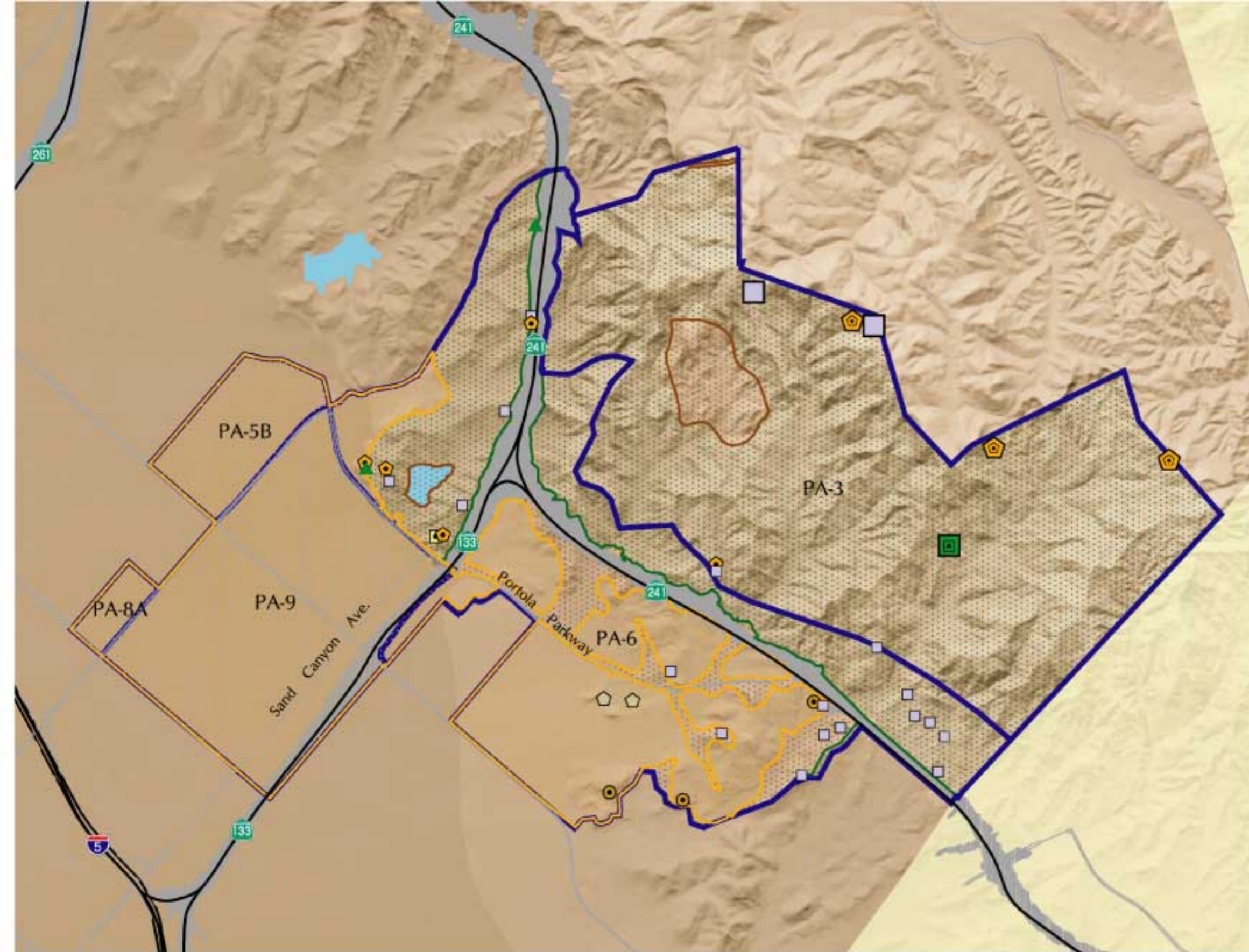


Exhibit 4-19

**VEGETATION TYPES
(IMPLEMENTATION DISTRICT "P")**





Legend

- Highways
- Major Roads
- Planning Areas
- Lakes
- Transportation Corridor
- Reserve Open Space
- Non-Reserve Open Space
- Development Area

Special Status Plant Populations

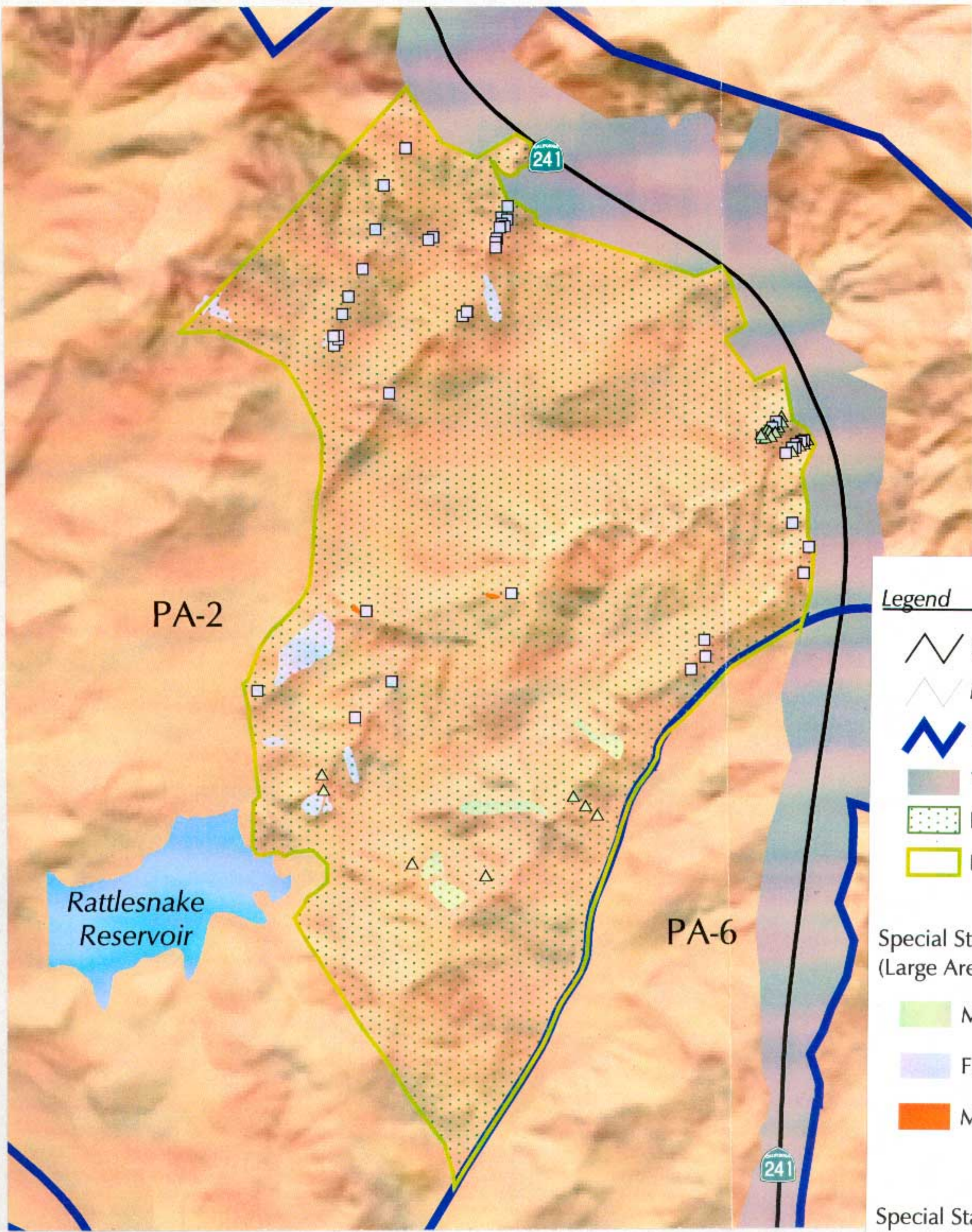
- Both Foothill & Catalina Mariposa Lily
- Catalina Mariposa Lily
- Foothill Mariposa Lily

Special Status Plant Locations

- Catalina Mariposa Lily
- Foothill Mariposa Lily
- Many Stemmed Dudleya
- Mud Nama
- Prostrate Spineflower
- Small Flowered Microseris

Note: Plant Populations from Roberts, 1999;
Plant Locations, Hammsworth Associates, 2001

Exhibit 4-20
SPECIAL STATUS PLANT
LOCATIONS AND POPULATIONS



Legend

- Highways
- Major Roads
- Planning Areas
- Transportation Corridor
- Reserve Open Space
- Implementation Area P

Special Status Plant Locations (Large Areas)

- Mariposa Lily Species
- Foothill Mariposa Lily
- Many Stemmed Dudleya

Special Status Plant Locations (Small Areas)

- Mariposa Lily Species
- Foothill Mariposa Lily

Exhibit 4-21

**IMPLEMENTATION DISTRICT "P"
SPECIAL STATUS PLANT LOCATIONS**

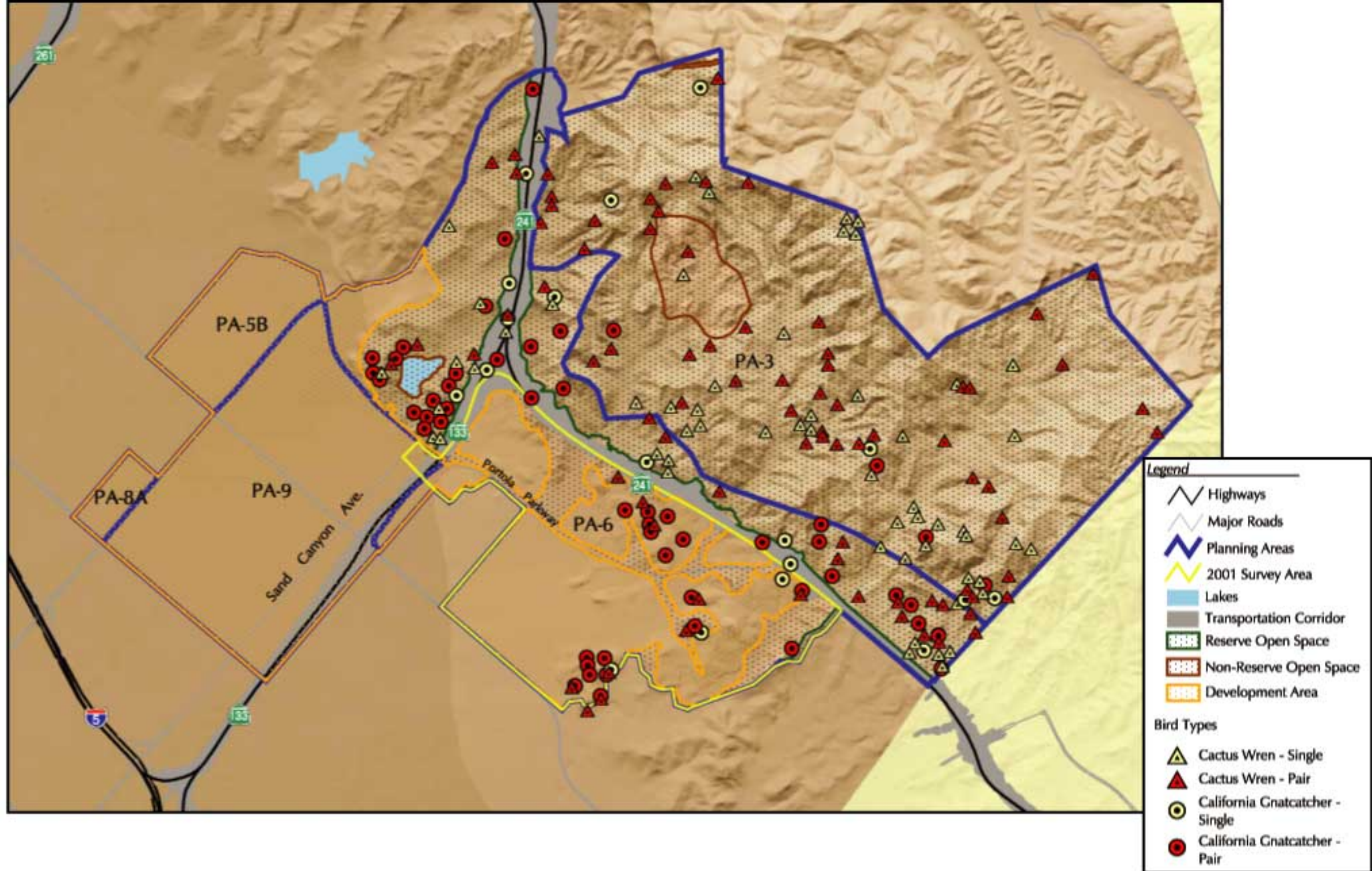
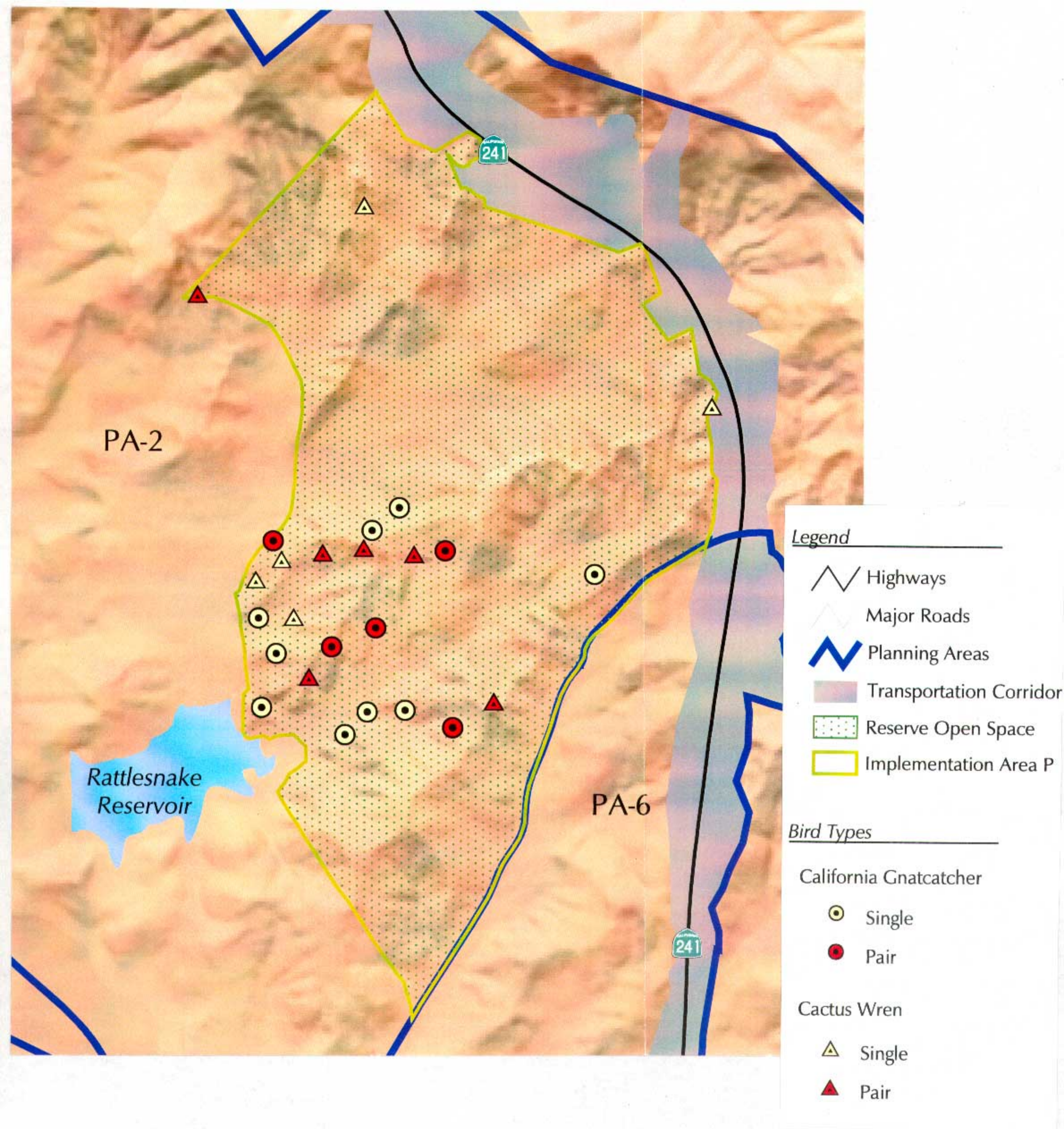


Exhibit 4-22
CALIFORNIA GNATCATCHER
AND CACTUS WREN LOCATIONS



Legend

- Highways
- Major Roads
- Planning Areas
- Transportation Corridor
- Reserve Open Space
- Implementation Area P

Bird Types

California Gnatcatcher

- Single
- Pair

Cactus Wren

- Single
- Pair

Exhibit 4-23

**CALIFORNIA GNATCATCHER
AND CACTUS WREN LOCATIONS
(IMPLEMENTATION DISTRICT "P")**



Legend

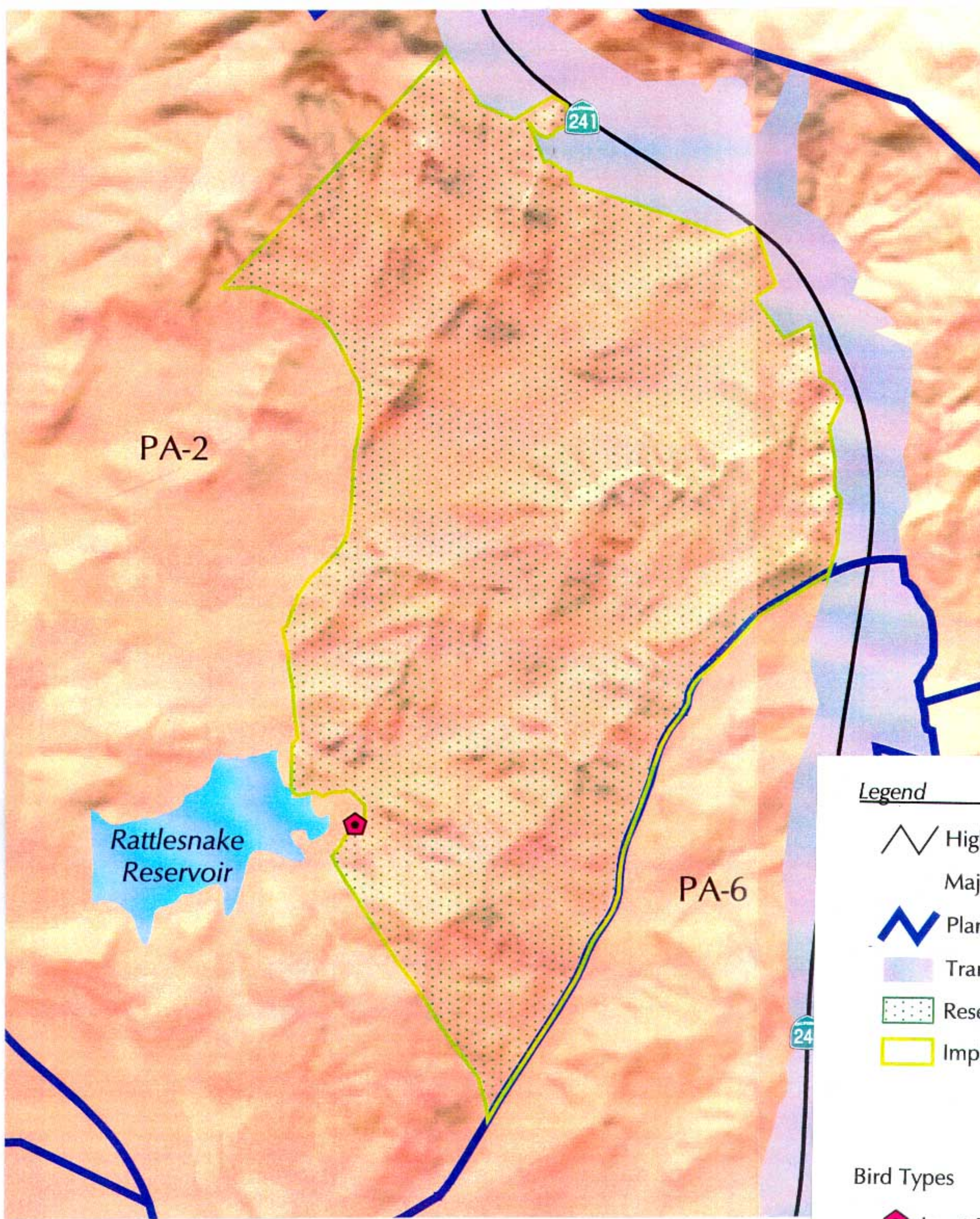
- Highways
- Major Roads
- Planning Areas
- Transportation Corridor
- Lakes
- Reserve Open Space
- Non-Reserve Open Space
- Development Area

Bird Types

- Least Bell's Vireo - Single
- Least Bell's Vireo - Pair
- Willow Flycatcher (Sighted in a Prior Survey taken in 1997)

Note: During the conducted survey, there were no sightings of the Willow Flycatchers species.
Survey Conducted 2001.

Exhibit 4-24
LEAST BELL'S VIREO AND
WILLOW FLYCATCHER LOCATIONS



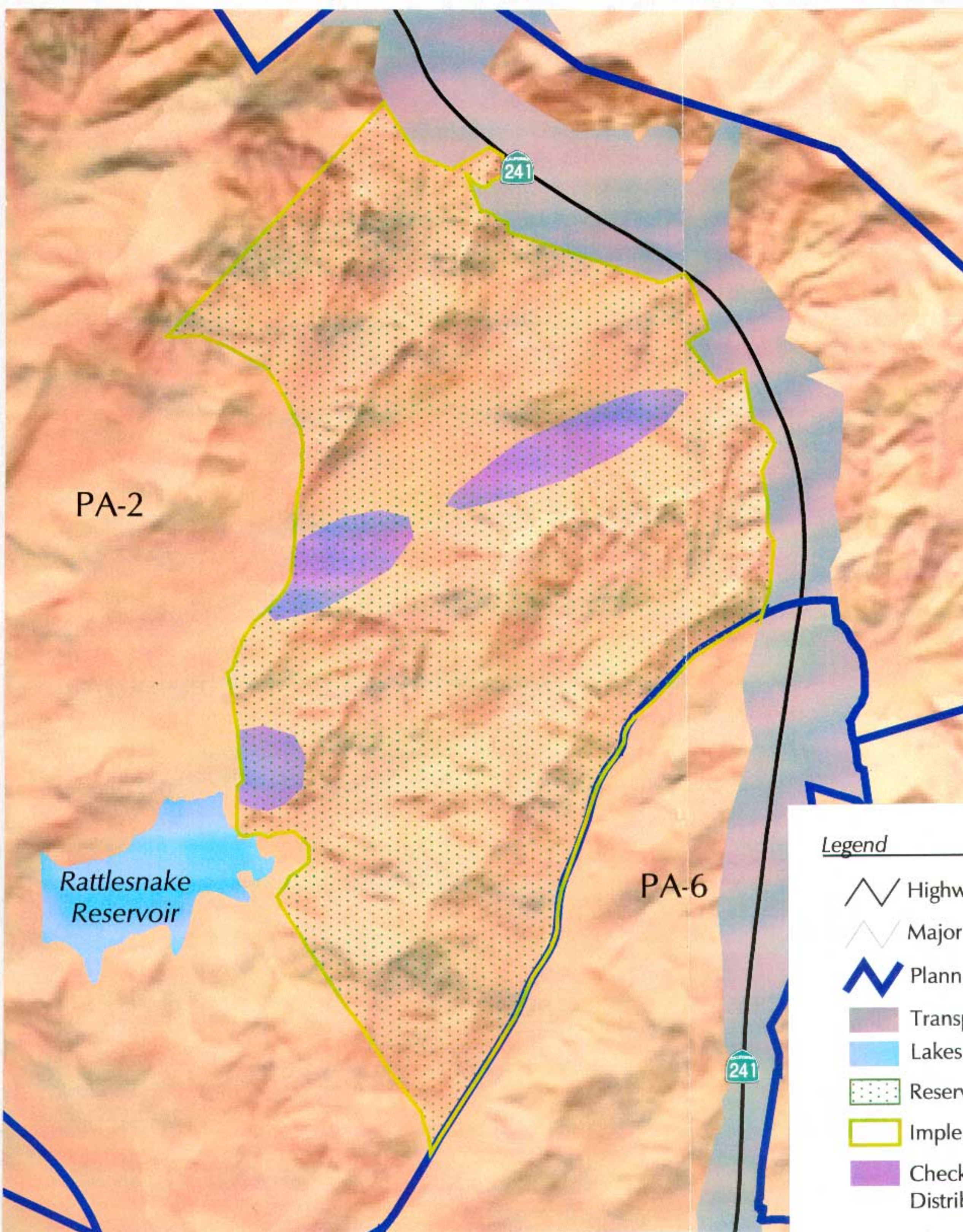
Legend

-  Highways
-  Major Roads
-  Planning Areas
-  Transportation Corridor
-  Reserve Open Space
-  Implementation Area P

Bird Types

-  Least Bell's Vireo - Pair

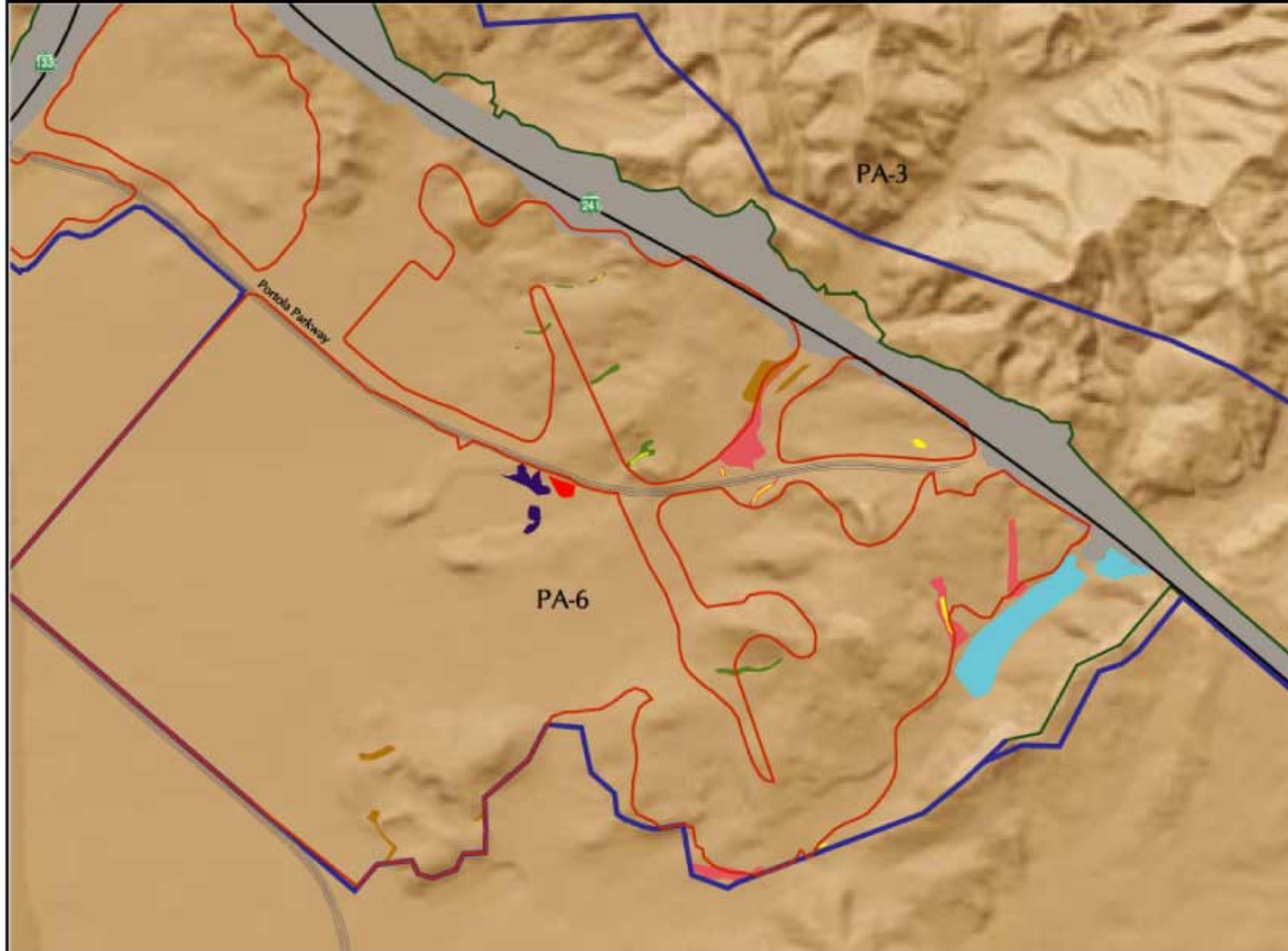
Exhibit 4-25
LEAST BELL'S VIREO AND
WILLOW FLYCATCHER LOCATIONS
(IMPLEMENTATION DISTRICT "P")



Legend

- Highways
- Major Roads
- Planning Areas
- Transportation Corridor
- Lakes
- Reserve Open Space
- Implementation Area P
- Checkerspot Host Plant Distribution

Exhibit 4-26
QUINO CHECKERSPOT
BUTTERFLY HABITAT IN
IMPLEMENTATION DISTRICT "P"



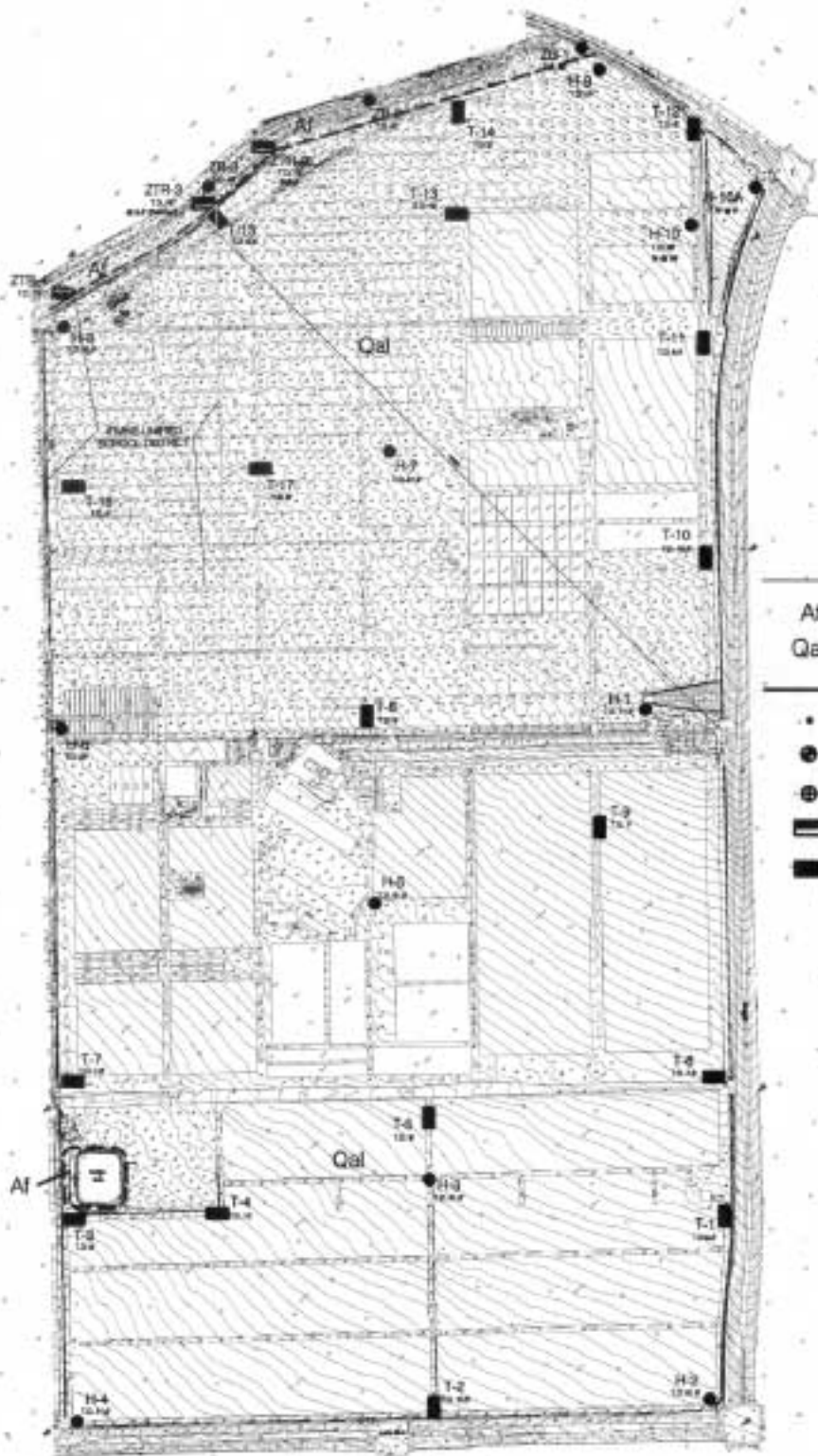
Legend

- Highways
- Major Roads
- Planning Area
- Transportation Corridor
- Reserve Open Space
- Development Area

Riparian Area, CDFG Jurisdiction and ACDE Wetlands

- Not Vireo Habitat and not Subject to CDFG Jurisdiction Under 1603 Program or ACDE Jurisdiction
- Occupied Vireo Habitat and not Subject to CDFG Jurisdiction Under 1603 Program or ACDE Jurisdiction
- Occupied Vireo Habitat and not Subject to CDFG Jurisdiction Under 1603 Program, but is wetland under ACDE Jurisdiction
- Not Vireo Habitat and is Subject to CDFG Jurisdiction Under 1603 Program
- Unoccupied Vireo Habitat and is Subject to CDFG Jurisdiction Under 1603 Program
- ACDE Jurisdictional Wetlands
- Not Vireo Habitat and ACDE Jurisdiction not Determined

Note: Riparian Area in PA-9 not shown, this area is unoccupied Vireo habitat and not subject to CDFG 1603 Program or ACDE jurisdiction.

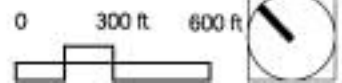


LEGEND

- | | |
|------------------|--------------------------------------------------------------------------|
| Af | ARTIFICIAL FILL |
| Qal | ALLUVIUM |
| | GEOLOGIC CONTACT, DOTTED AND NEAR BURIED |
| • | LOCATION OF SURFACE AT SEEPAGE |
| ● H-10
12.0' | HOLLOW STEM AUGER BORING BY H&M SHOWING TOTAL DEPTH AND DEPTH TO BEDROCK |
| ● ZTR-3
12.0' | HOLLOW STEM BORING BY ZISSER/KING, 1986 |
| ▬ ZTR-4 | TRENCH BY ZISSER/KING, 1986 |
| ▬ T-10 | TRENCH BY H&M |

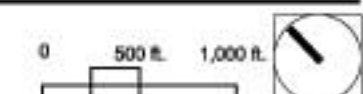
Source: NMG Geotechnical, Inc.

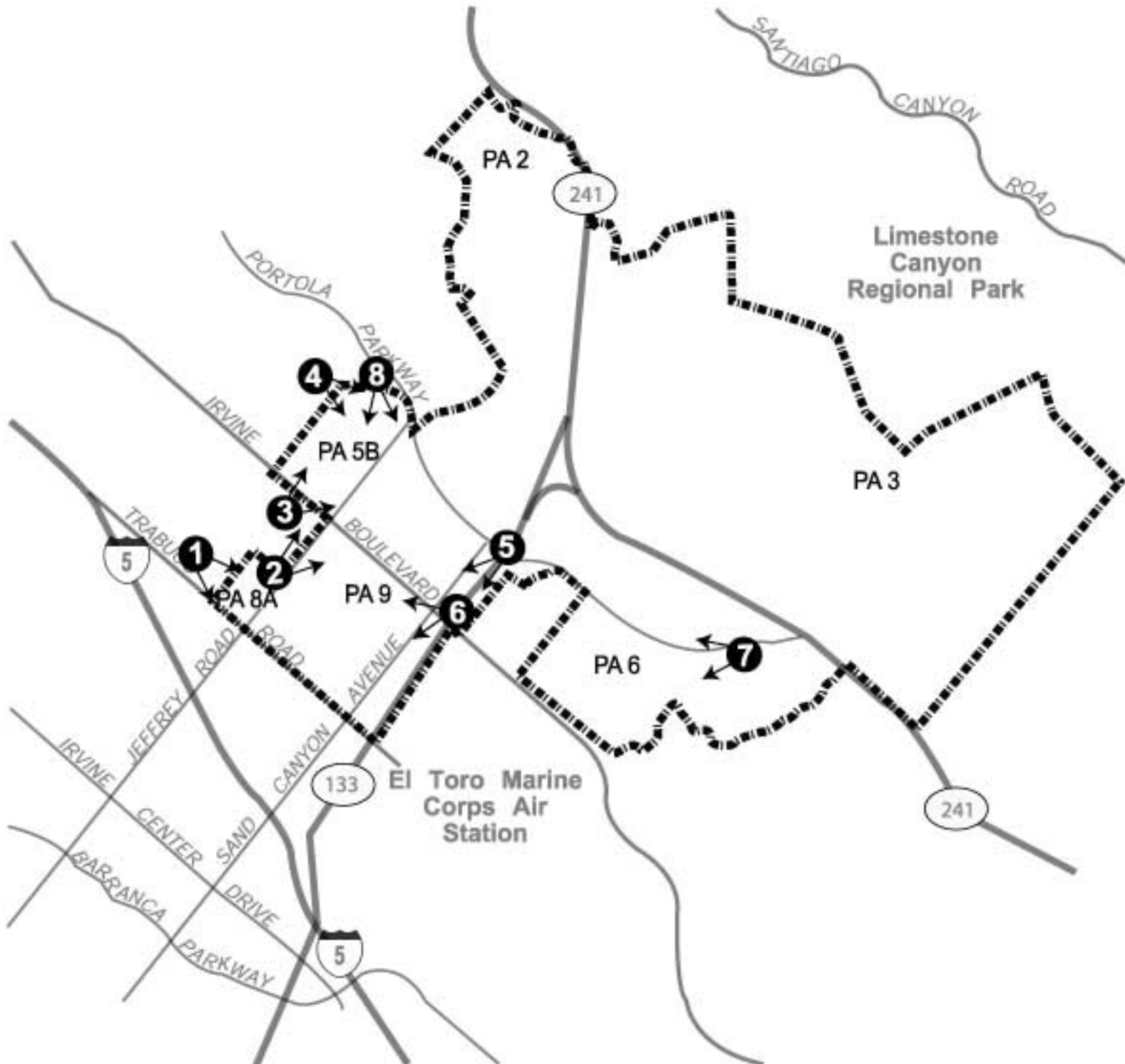
Exhibit 4-28
PLANNING AREA 5B
GEOLOGICAL FEATURES MAP



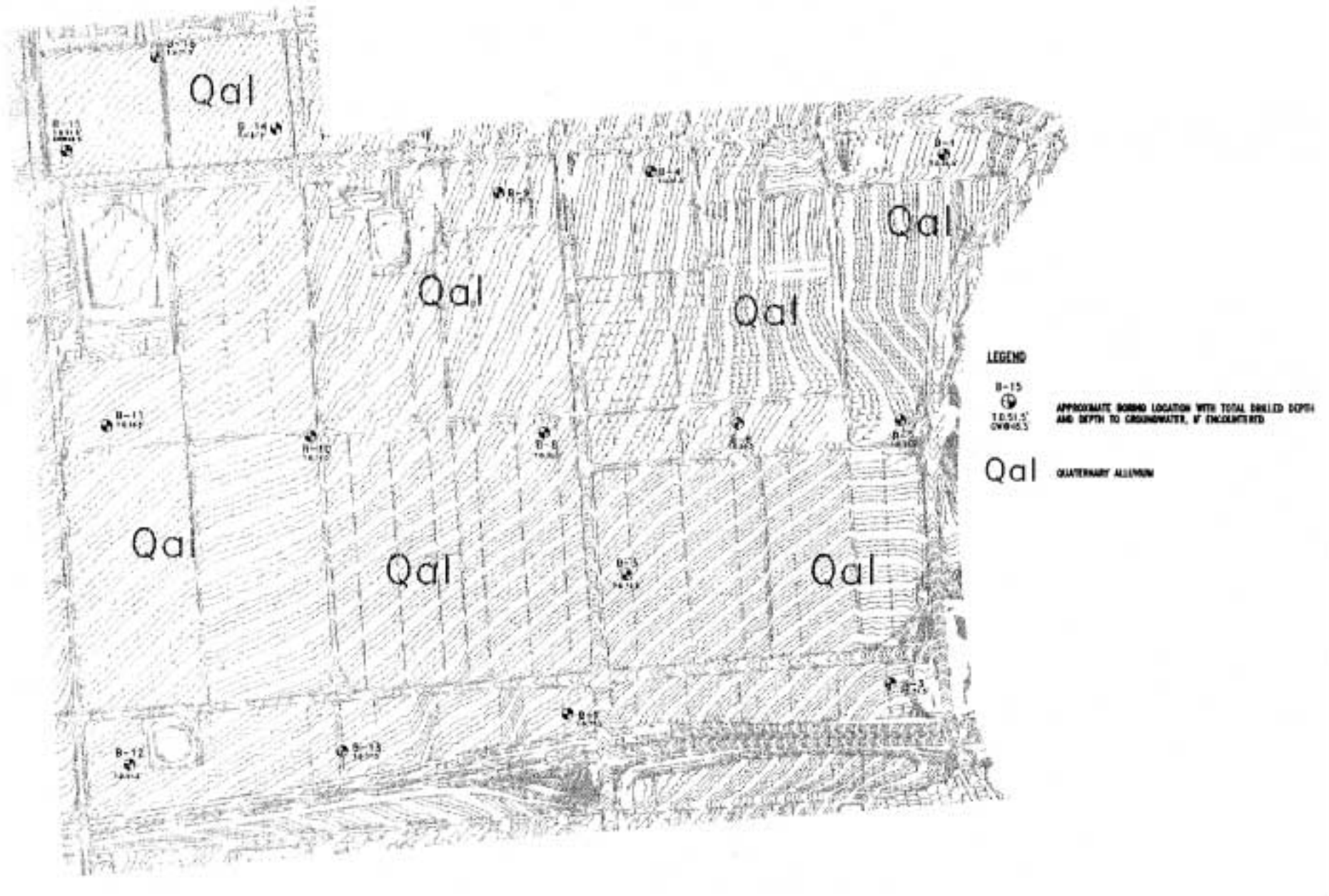


Source: NMG Geotechnical, Inc.






 PROJECT BOUNDARY



LEGEND

B-15
 APPROXIMATE BOREHOLE LOCATION WITH TOTAL DRILLED DEPTH AND DEPTH TO GROUNDWATER, IF ENCOUNTERED

Qal
 QUATERNARY ALLUVIUM

Source: NMG Geotechnical


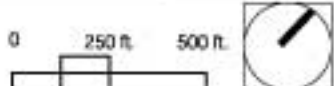
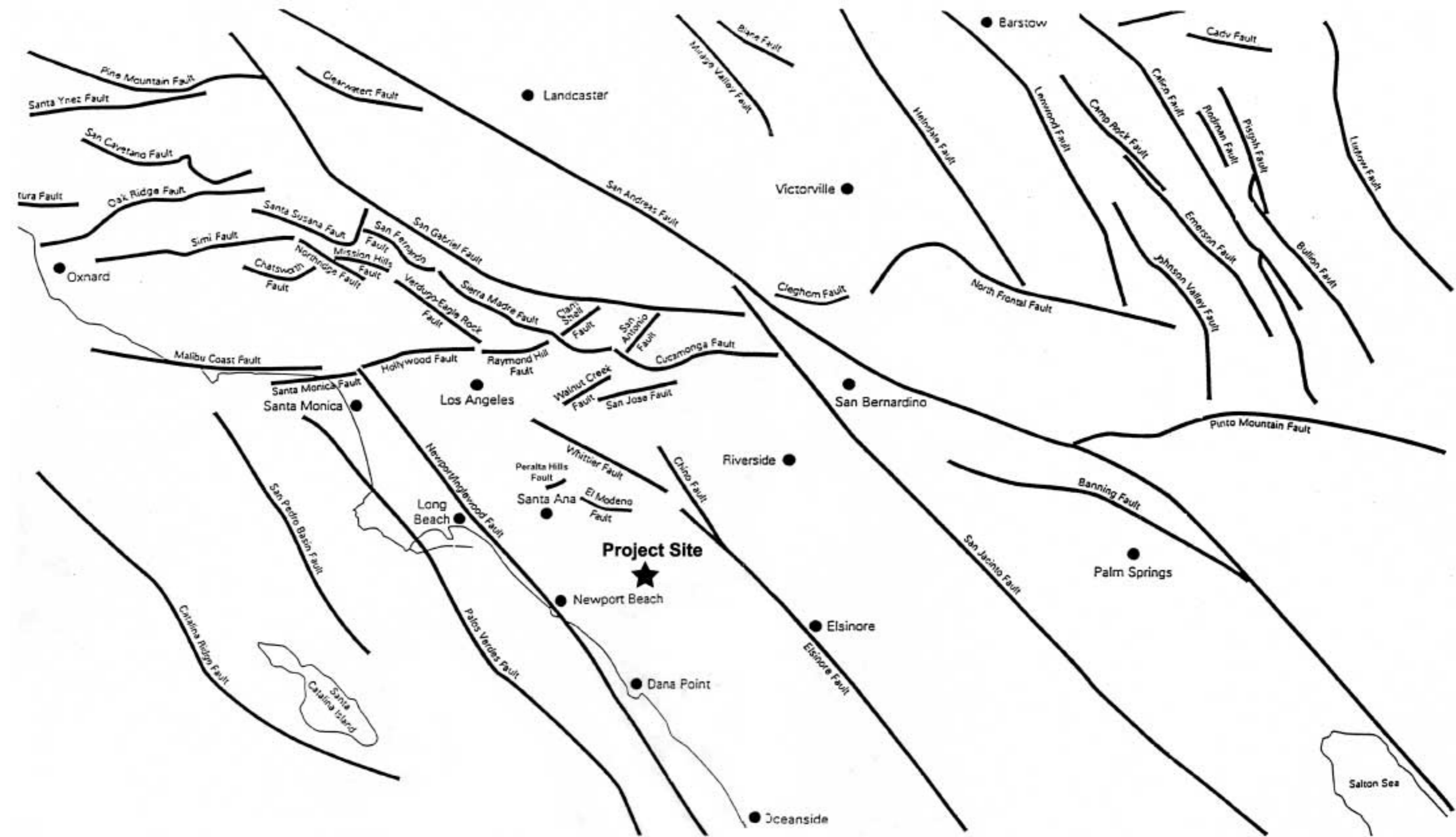
 Northern Sphere Area EIR

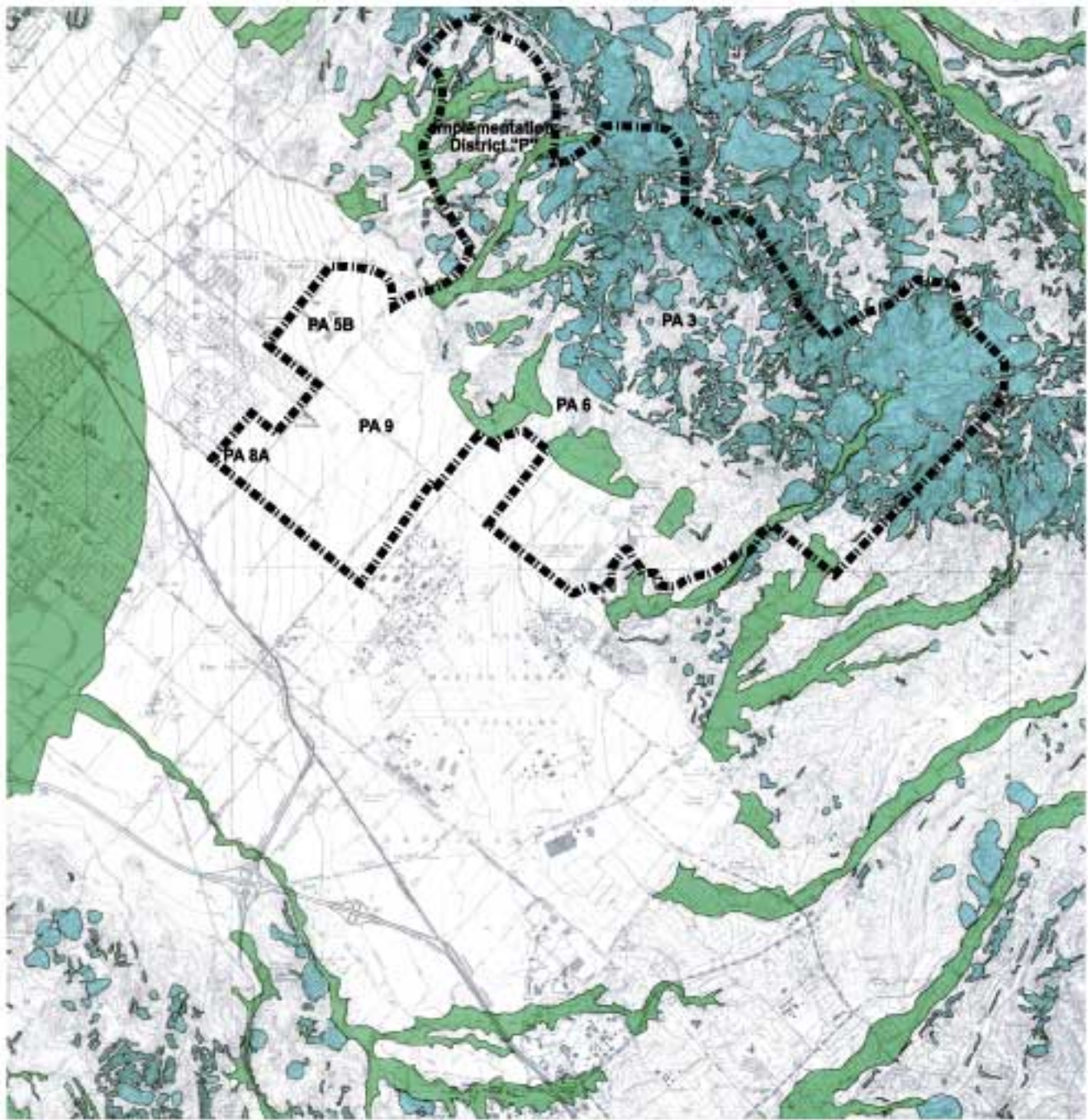
Exhibit 4-30
PLANNING AREAS 8A & 9
GEOLOGIC FEATURES MAP

 TEMPLETON PLANNING GROUP





SOURCE: Zeiser Kling Consultants, Inc., May 1998.



See file prepared by U.S. Geological Survey, 1985, referenced 100

**STATE OF CALIFORNIA
SEISMIC HAZARD ZONES**

Adopted in compliance with
Chapter 14, Article 11 of the California Public Resources Code
(Seismic Hazard Mapping Act)

--- Project Boundary

Seismic Hazard Evaluation under 07 Sec 17.1 under earthquake, Chapter 14, California, Division of Mines and Geology, Open-File Report 1985-010

MAP EXPLANATION

Zones of Required Investigation:

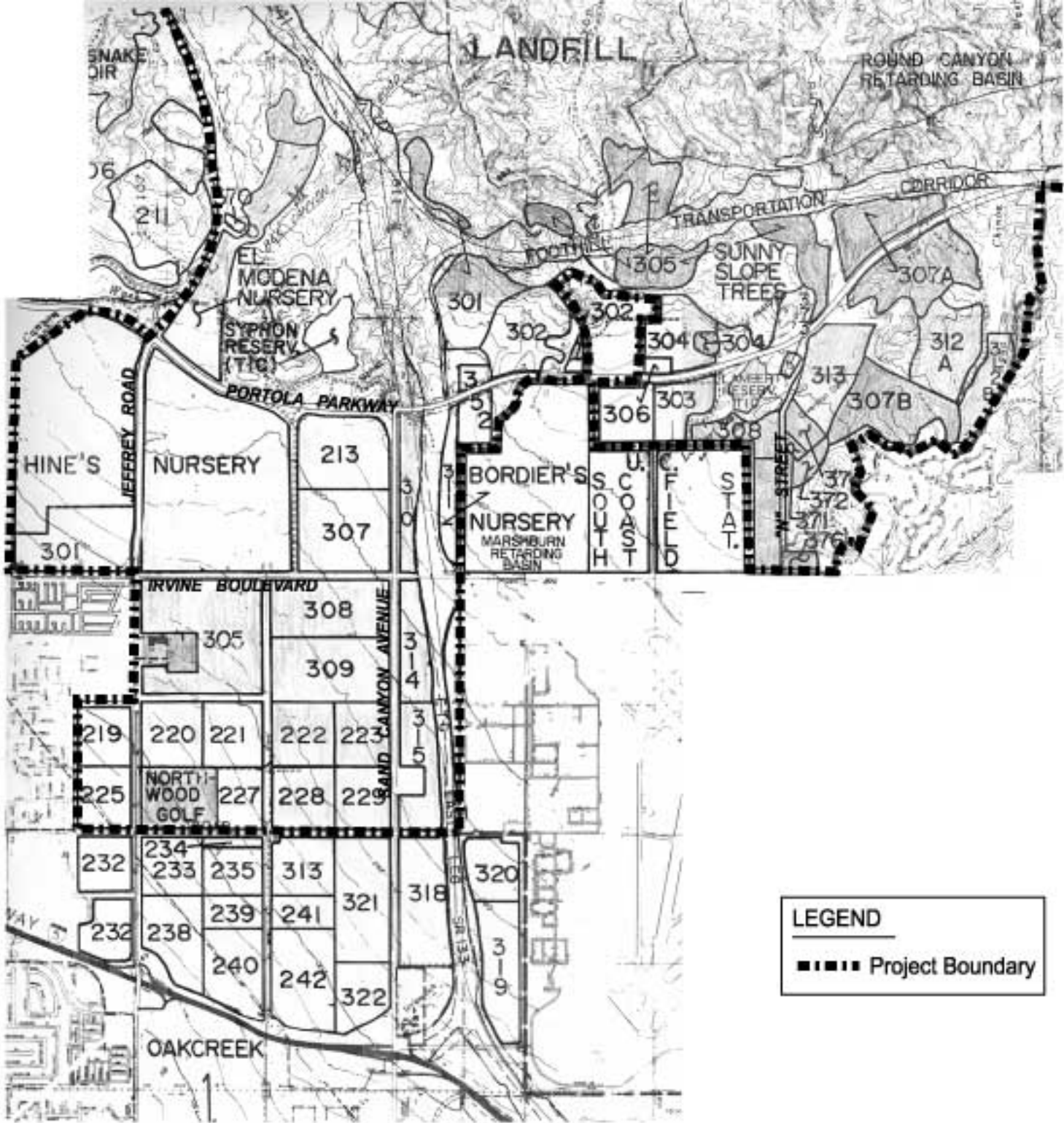
Liquefaction:

Areas where historic occurrence of liquefaction, or soil strength, geologic, geotechnical and subsurface water conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 25202(c) would be required.

Earthquake-Induced Lateralities:

Areas where previous occurrence of liquefaction movement, or soil strength, geologic, geotechnical and subsurface water conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 25202(c) would be required.

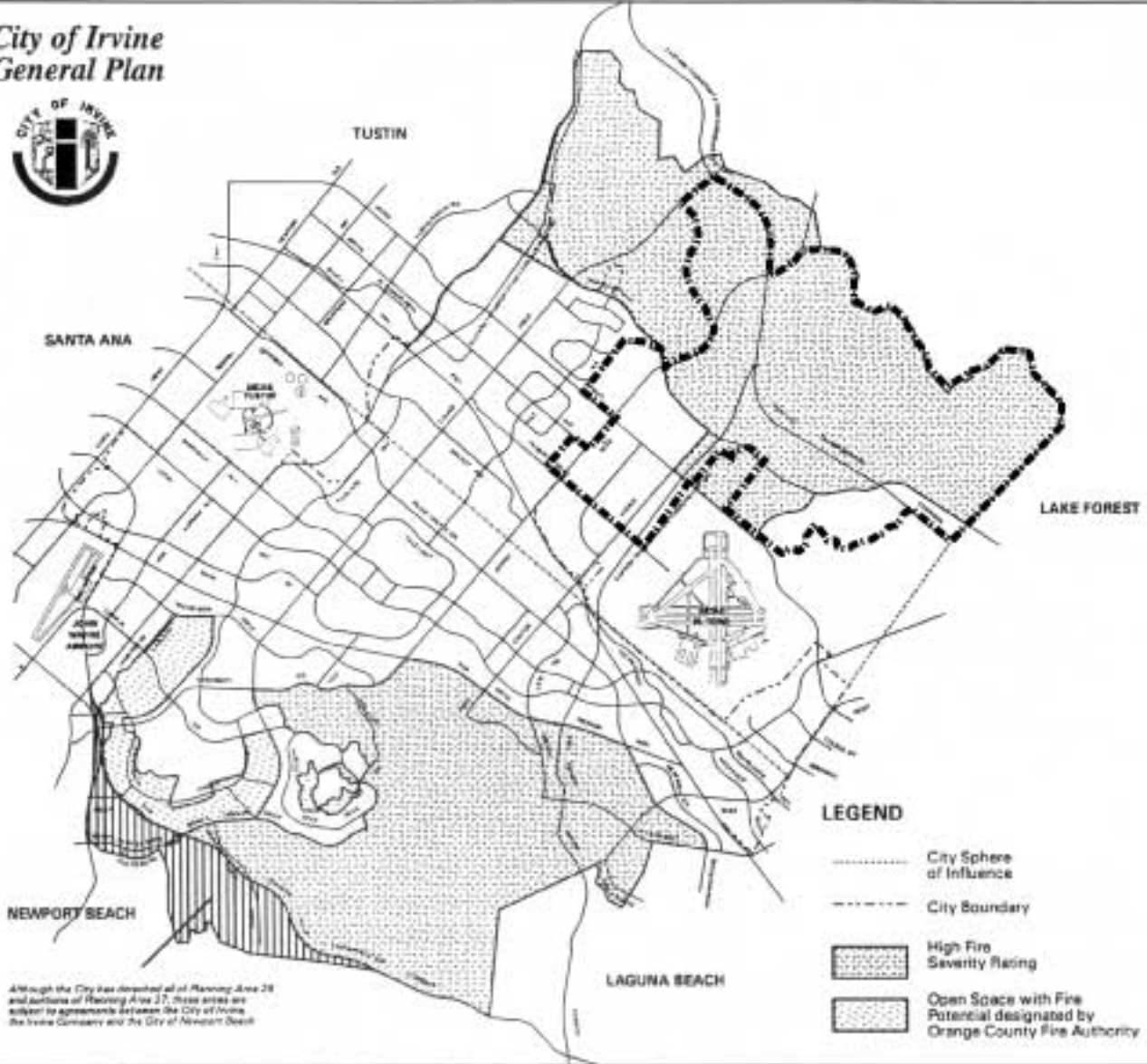




LEGEND
 ■■■■ Project Boundary



**City of Irvine
General Plan**



Although the City has divested all of Planning Area 28 and portions of Planning Area 27, these areas are subject to agreements between the City of Irvine, the Irvine Conservancy and the City of Newport Beach.

LEGEND

- City Sphere of Influence
- - - - - City Boundary
- [Stippled Box] High Fire Severity Rating
- [Cross-hatched Box] Open Space with Fire Potential designated by Orange County Fire Authority

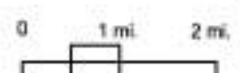


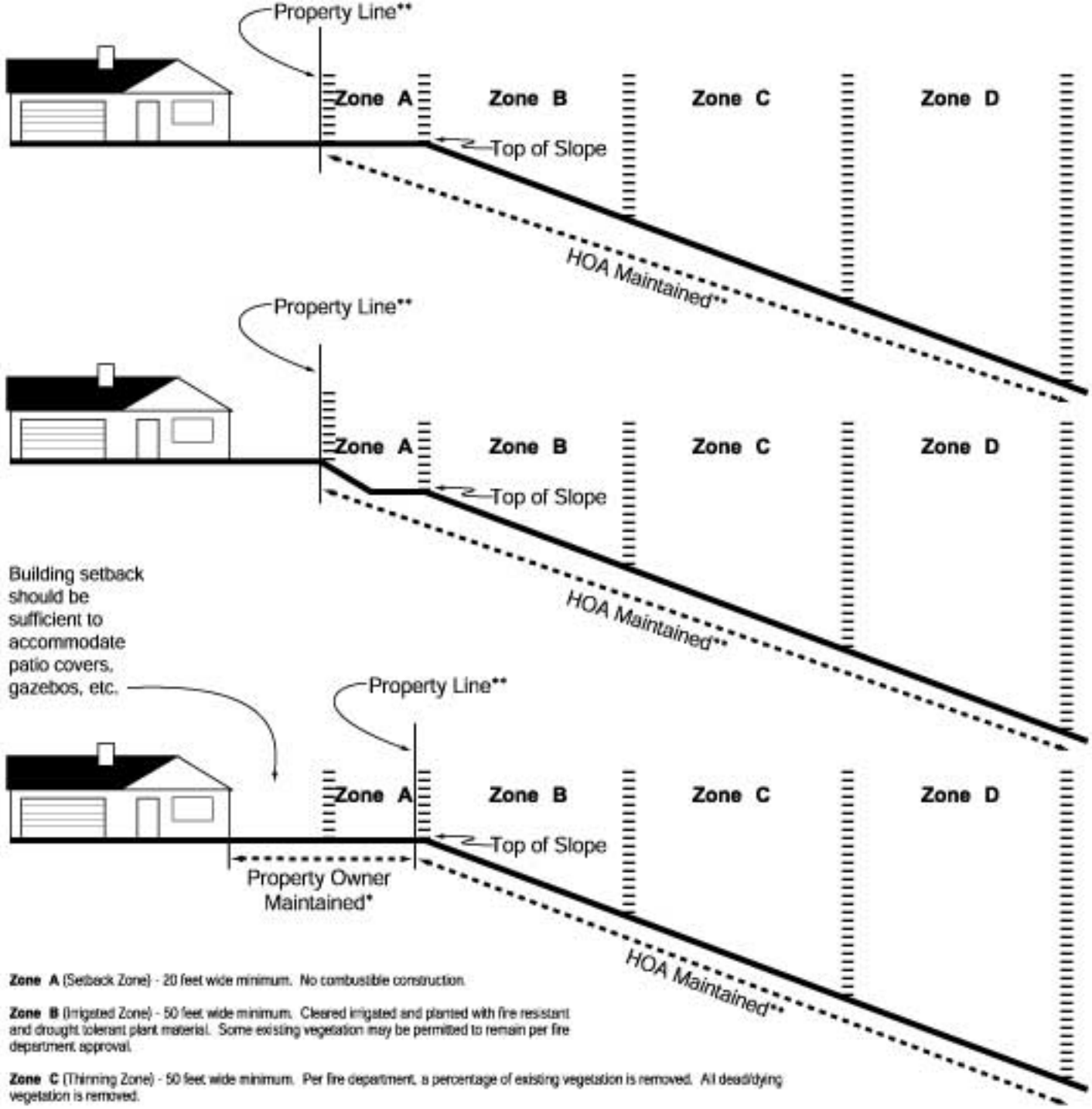
Northern Sphere Area EIR

**Exhibit 4-33
CITY OF IRVINE
FIRE HAZARD AREAS**



TEMPLETON PLANNING GROUP





Building setback should be sufficient to accommodate patio covers, gazebos, etc.

Zone A (Setback Zone) - 20 feet wide minimum. No combustible construction.

Zone B (Irrigated Zone) - 50 feet wide minimum. Cleared irrigated and planted with fire resistant and drought tolerant plant material. Some existing vegetation may be permitted to remain per fire department approval.

Zone C (Thinning Zone) - 50 feet wide minimum. Per fire department, a percentage of existing vegetation is removed. All dead/dying vegetation is removed.

Zone D (Thinning Zone) - 50 feet wide minimum. Per fire department, a percentage of existing vegetation is removed. All dead/dying vegetation is removed.

** The location of property lines will vary; however, if property lines must be located within fuel modification areas, appropriate documentation [e.g., maintenance easements and/or deed restrictions] shall be established to: 1) restrict certain activities and uses on those portions of any private property within the fuel modification area, and 2) identify those responsible for the establishment and continued maintenance of the fuel modification area located on private property.

* Regardless of the entity responsible for fuel modification maintenance, the continued maintenance shall be in accordance with the Maintenance and Enforcement Section of the Orange County Fire Authority guidelines.

SOURCE: Orange County Fire Authority
 "Guidelines for Fuel Modification Plans and Maintenance" Rev. 6/1/95

Exhibit 4-34

FUEL MODIFICATION ZONE STANDARDS (DOWNSLOPE)



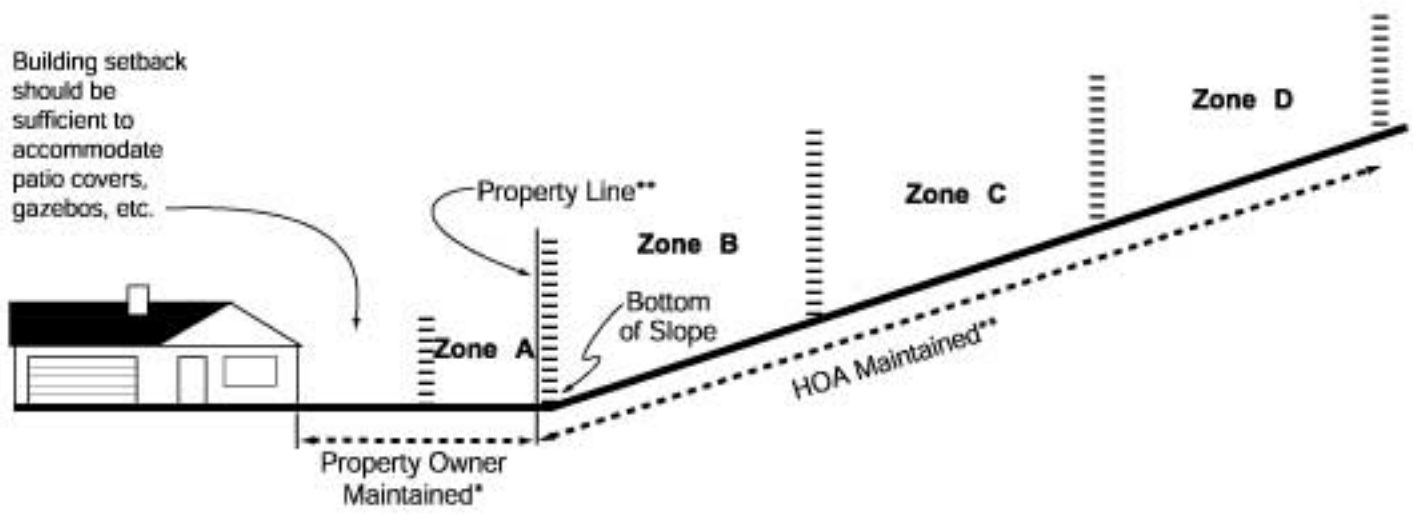
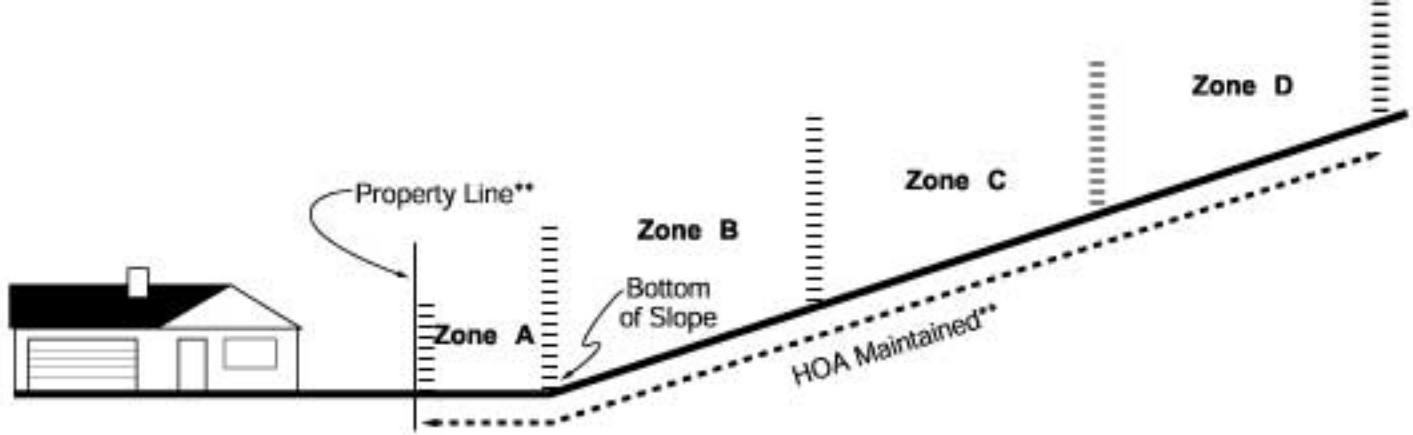
Northern Sphere Area EIR



TEMPLETON PLANNING GROUP

NO SCALE





Building setback should be sufficient to accommodate patio covers, gazebos, etc.

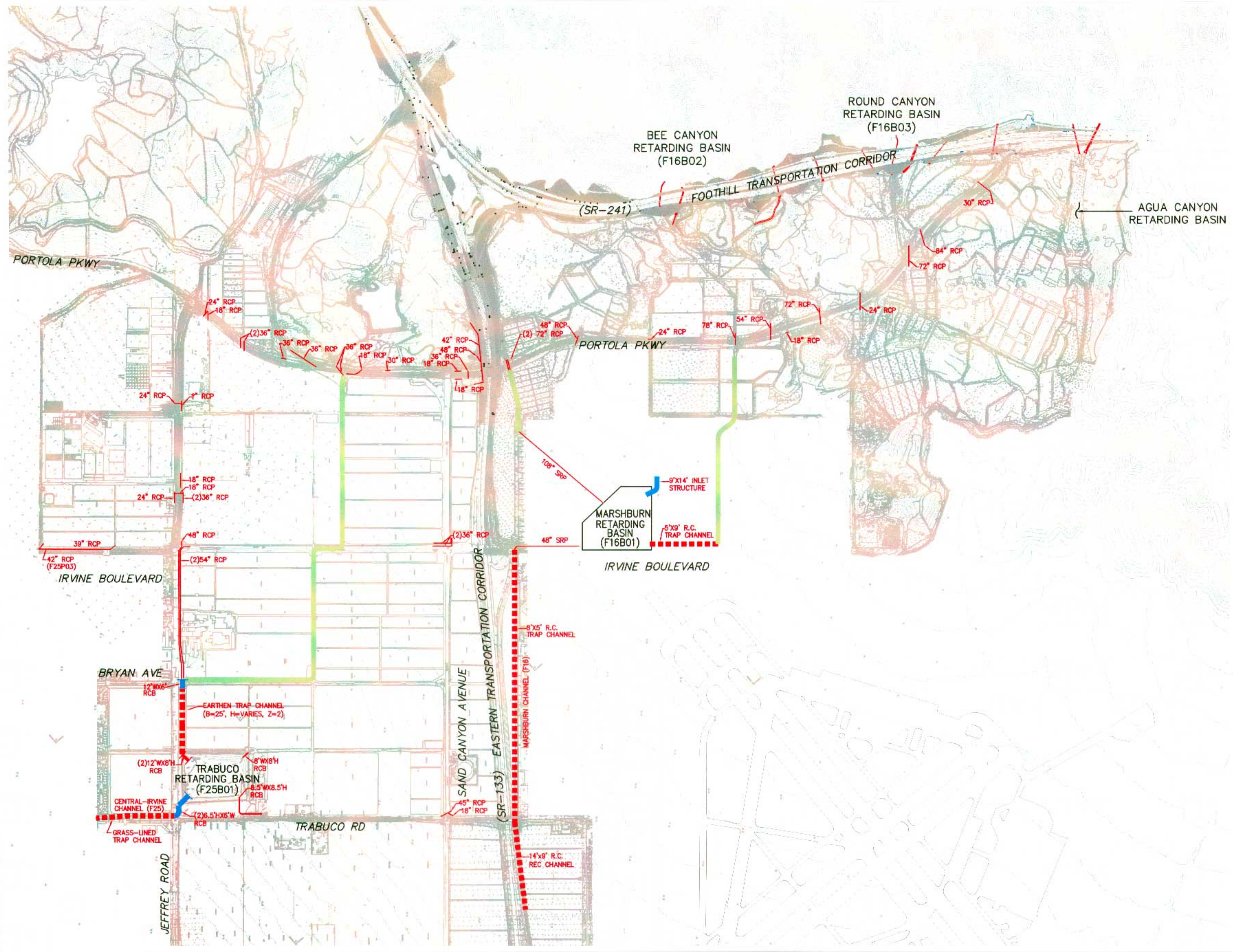
- Zone A (Setback Zone)** - 20 feet wide minimum. No combustible construction.
- Zone B (Irrigated Zone)** - 50 feet wide minimum. Cleared irrigated and planted with fire resistant and drought tolerant plant material. Some existing vegetation may be permitted to remain per fire department approval.
- Zone C (Thinning Zone)** - 50 feet wide minimum. Per fire department, a percentage of existing vegetation is removed. All dead/dying vegetation is removed.
- Zone D (Thinning Zone)** - 50 feet wide minimum. Per fire department, a percentage of existing vegetation is removed. All dead/dying vegetation is removed.

** The location of property lines will vary; however, if property lines must be located within fuel modification areas, appropriate documentation (e.g., maintenance easements and/or deed restrictions) shall be established to: 1) restrict certain activities and uses on those portions of any private property within the fuel modification area, and 2) identify those responsible for the establishment and continued maintenance of the fuel modification area located on private property.





* Regardless of the entity responsible for fuel modification maintenance, the continued maintenance shall be in accordance with the Maintenance and Enforcement Section of the Orange County Fire Authority guidelines.

SOURCE: Orange County Fire Authority
 "Guidelines for Fuel Modification Plans and Maintenance" Rev. 6/1/95

Exhibit 4-35
FUEL MODIFICATION ZONE
STANDARDS (UPSLOPE)

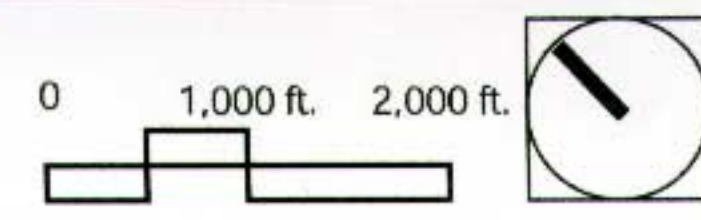


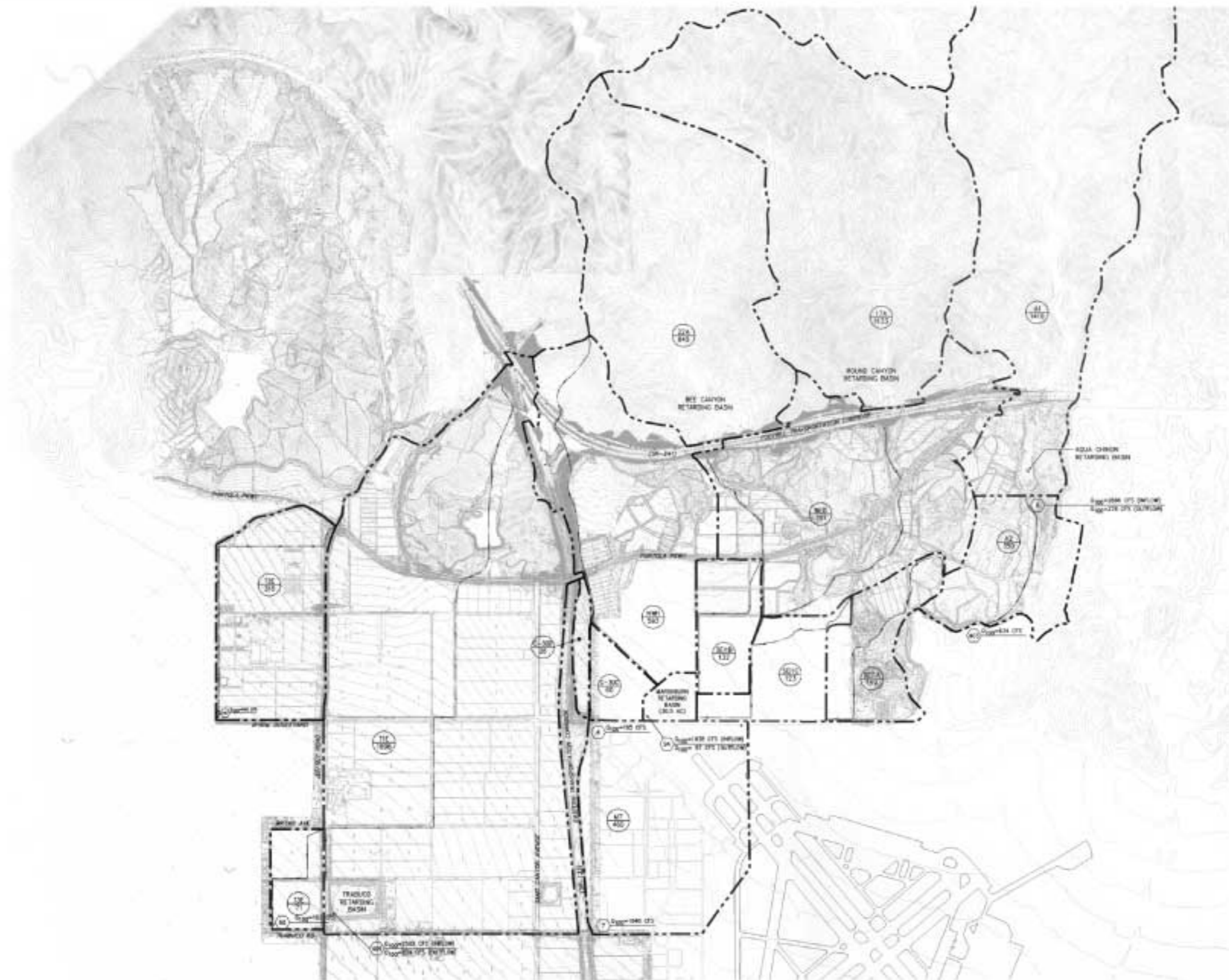
LEGEND

	EXISTING STORM DRAIN PIPE
	EXISTING RCB
	EXISTING OPEN CHANNEL
	AGRICULTURE DITCH





RBF CONSULTING ■ PLANNING ■ DESIGN ■ CONSTRUCTION

14725 ALTON PARKWAY
IRVINE, CALIFORNIA 92618-2027
949.472.3505 • FAX 949.472.8373 • www.RBF.com





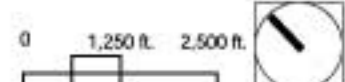
LEGEND

-  WATERSHED BOUNDARY
-  FLOW PATH
-  WATERSHED DESIGNATION
DRAINAGE AREA (ACRES)
-  HYDROLOGY NODE

REFERENCES:

1. MARSHBURN BASIN EXISTING CONDITION HYDROLOGY FROM "FINAL DESIGN REPORT, MARSHBURN RETARDING BASIN" PREPARED BY JOHN M. TETTEMER & ASSOC., AUGUST 21, 1997.
2. AQUA CHINO EXISTING CONDITION HYDROLOGY FROM "APPLICATION/CERTIFICATION FORM TO OBTAIN A LETTER OF MAP REVISION FOR AQUA CHINO RETARDING BASIN, AQUA CHINO WASH IN ORANGE COUNTY, CALIFORNIA," PREPARED BY TETTEMER & ASSOC., NOVEMBER 2000.

Source: RBF Consulting



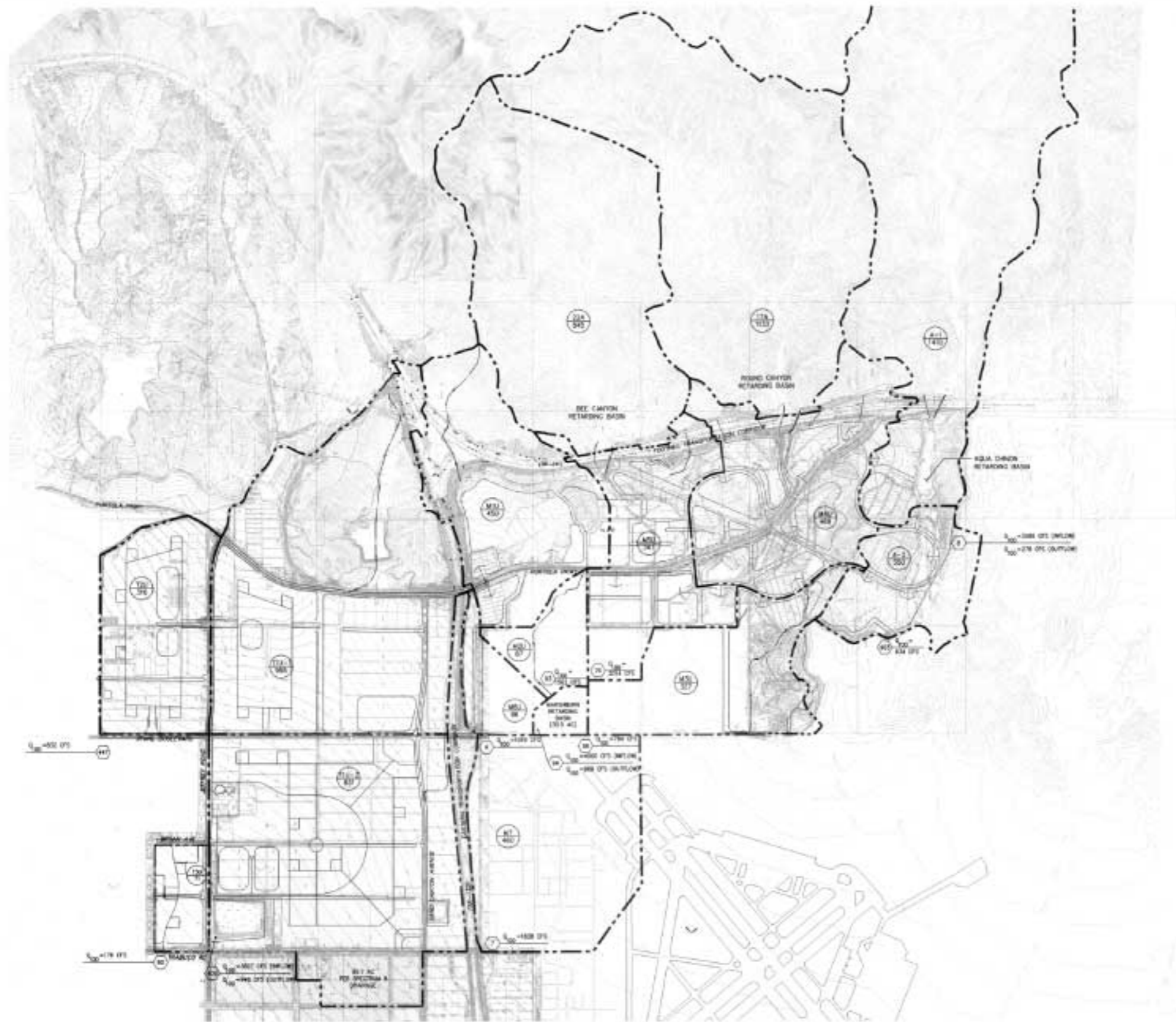


- LEGEND**
- ZONE A (100 YEAR)
 - ZONE X (100-500 YEAR) (SHADED)
 - ZONE X (OUTSIDE 500 YEAR) (UNSHADED)





RBF PLANNING • DESIGN • CONSTRUCTION
 CONSULTING

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 IRVINE, CALIFORNIA 92614-2207
 949.412.3333 • FAX 949.412.8372 • WWW.RBF.COM

Source: RBF Consulting



LEGEND

-  BOUNDARY
-  WATERSHED DESIGNATION
DRAINAGE AREA (ACRES)
-  HYDROLOGY NODE
-  FLOWPATH/NATURAL DRAINAGE CHANNEL

Source: RBF Consulting



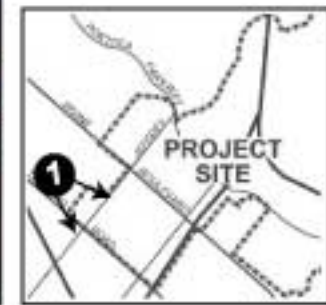


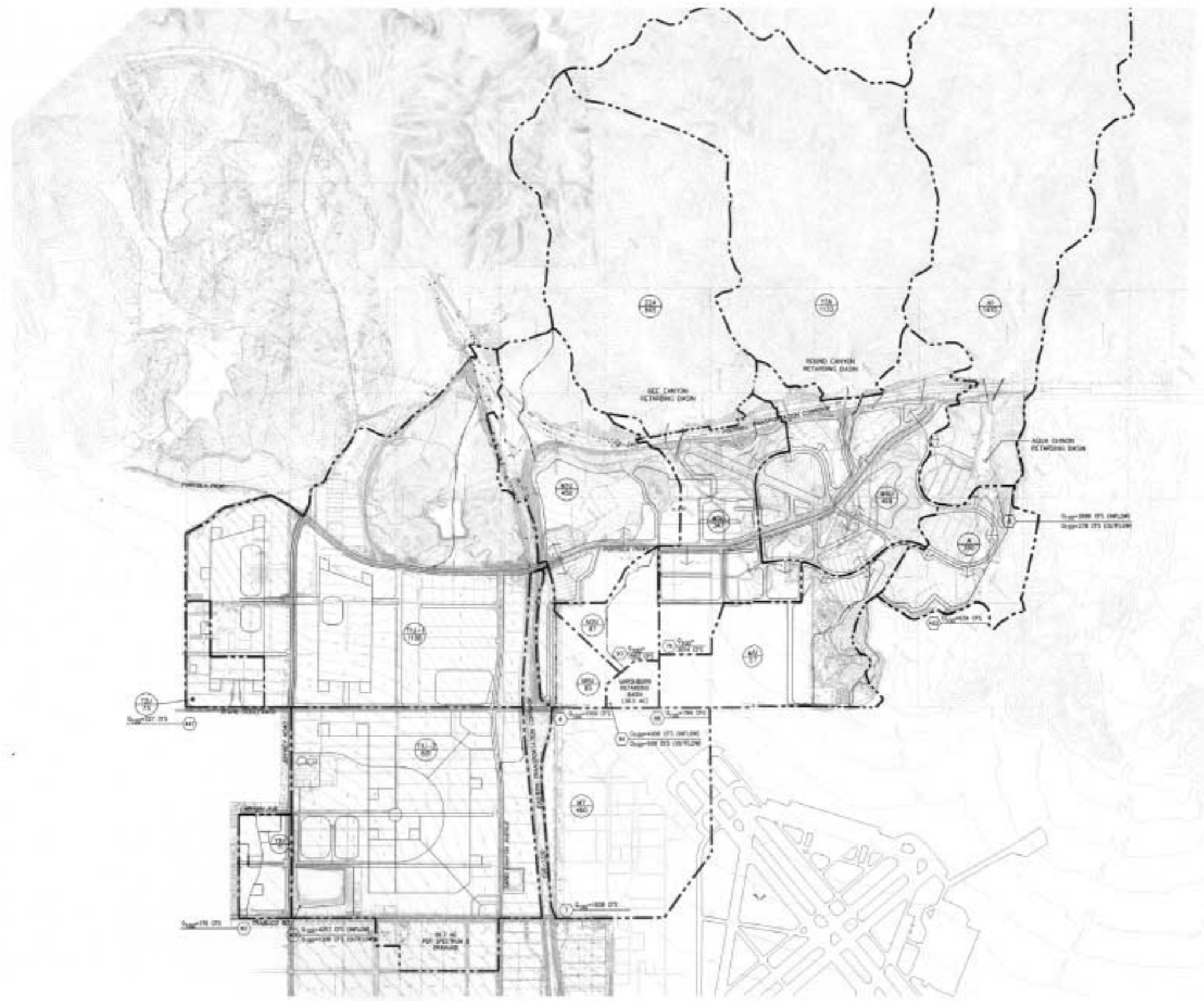
Photograph 1:
View looking east from
Blue Gum Park at
Planning Area 8A.

Existing







Proposed

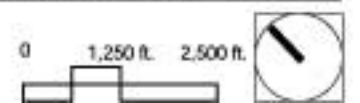








LEGEND

-  BOUNDARY
-  WATERSHED DESIGNATION
DRAINAGE AREA (ACRES)
-  HYDROLOGY NODE
-  FLOWPATH/NATURAL DRAINAGE CHANNEL

Source: RBF Consulting





- LEGEND**
-  PROP. STORM DRAIN PIPE
 -  PROP. CHANNEL CULVERT
 -  PROP. SOFT BOTTOM CHANNEL
 -  STORM WATER DETENTION BASIN




RBF PLANNING • DESIGN • CONSTRUCTION
 CONSULTING

4720 ALTON PARKWAY
 SUITE 200
 SAN JOSE, CALIFORNIA 95128
 408-435-1200 • FAX 408-435-1201 • WWW.RBF.COM

Exhibit 4-41
MASTER PLAN OF DRAINAGE
FACILITIES MAP - ALTERNATIVE 'A'

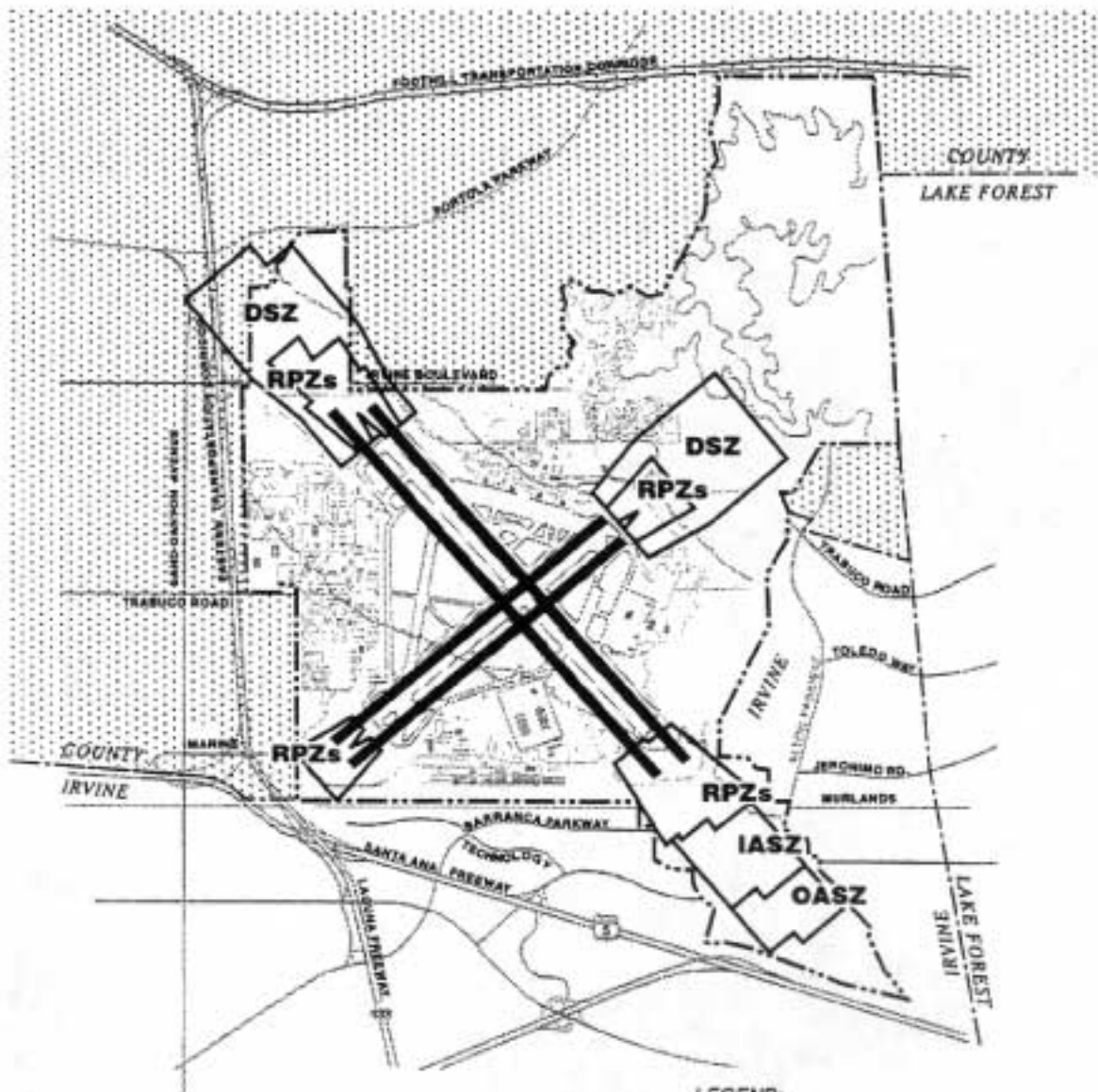


LEGEND



-  PROP. STORM DRAIN PIPE
-  PROP. CHANNEL CULVERT
-  PROP. SOFT BOTTOM CHANNEL
-  STORM WATER DETENTION BASIN

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 4725 ALTON PARKWAY
 IRVINE, CALIFORNIA 92618-3027
 949-472-0000 • FAX 949-472-0070 • WWW.RBF.COM

Exhibit 4-42
MASTER PLAN OF DRAINAGE
FACILITIES MAP - ALTERNATIVE "B"



LEGEND:

IASZ	INNER APPROACH SAFETY ZONE
OASZ	OUTER APPROACH SAFETY ZONE
DSZ	DEPARTURE SAFETY ZONE
RPZ	RUNWAY PROTECTION ZONE
	UNINCORPORATED AREA
	CITY BORDER



Northern Sphere Area EIR

Exhibit 4-43
AIR SAFETY ZONES
PROPOSED FOR OCX



TEMPLETON PLANNING GROUP

0 3,000 ft 6,000 ft



SOUND LEVELS AND LOUDNESS OF ILLUSTRATIVE NOISES IN INDOOR AND OUTDOOR ENVIRONMENTS

Numbers in Parentheses are the A-Scale Weighted Sound Levels for that Noise Event

dB(A)	OVER-ALL LEVEL Sound Pressure Level Reference: 0.0002 Microbars	COMMUNITY (Outdoor)	HOME OR INDUSTRY	LOUDNESS Human Judgement of Different Sound Levels
130		Military Jet Aircraft Take-Off With After-burner From Aircraft Carrier @ 50 Ft. (130)	Oxygen Torch (121)	120 dB(A) 32 Times as Loud
120 110	UNCOMFORTABLY LOUD	Turbo-Fan Aircraft @ Take Off Power @ 200 Ft. (110)	Riveting Machine (110) Rock-N-Roll Band (108-114)	110 dB(A) 16 Times as Loud
100		Jet Flyover @ 1000 Ft. (103) Boeing 707, DC-8 @ 6080 Ft. Before Landing (96) Bell J-2A Helicopter @ 100 Ft. (100)		100 dB(A) 8 Times as Loud
90	VERY LOUD	Power Mower (96) Boeing 737, DC-9 @ 6080 Ft. Before Landing (97) Motorcycle @ 25 Ft. (90)	Newspaper Press (97)	90 dB(A) 4 Times as Loud
80		Car Wash @ 30 Ft. (89) Prop. Airplane Flyover @ 1000 Ft. (88) Diesel Truck, 40 MPH @ 50 Ft. (84) Diesel Train, 45 MPH @ 100 Ft. (82)	Food Blender (88) Milling Machine (85) Garbage Disposal (80)	80 dB(A) 2 Times as Loud
70	MODERATELY LOUD	High Urban Ambient Sound (80) Passenger Car, 65 MPH @ 25 Ft. (77) Freeway @ 50 Ft. From Pavement Edge, 10:00 AM (76 + or - 6)	Living Room Music (76) TV-Audio, Vacuum Cleaner	70 dB(A)
60		Air Conditioning Unit @ 100 Ft. (60)	Cash Register @ 10 Ft. (65-70) Electric Typewriter @ 10 Ft. (64) Dishwasher (Rinse) @ 10 Ft. (60) Conversation (60)	60 dB(A) 1/2 as Loud
50	QUIET	Large Transformers @ 100 Ft. (50)		50 dB(A) 1/4 as Loud
40		Bird Calls (44) Lower Limit Urban Ambient Sound (40)		40 dB(A) 1/8 as Loud
20	JUST AUDIBLE	Desert at Night (dB(A) Scale Interrupted)		
10	THRESHOLD OF HEARING			

SOURCE: Reproduced from Melville C. Branch and R. Dale Beland, "Outdoor Noise in the Metropolitan Environment,"
Published by the City of Los Angeles, 1970, p.2.

Source: Mestre Greve Associates

Exhibit 4-44

TYPICAL

A-WEIGHTED NOISE LEVELS

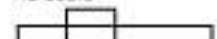


Northern Sphere Area EIR

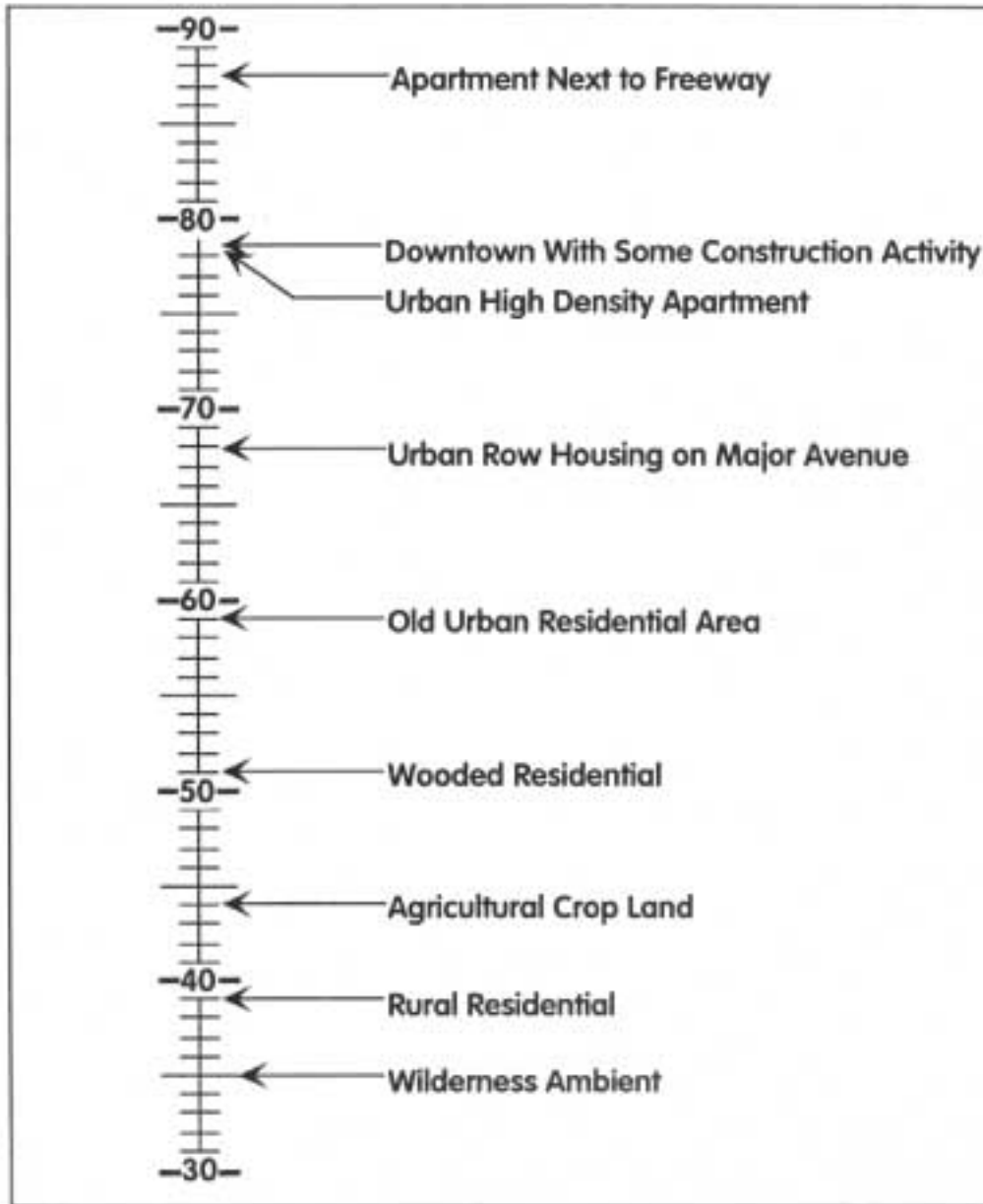


TEMPLETON PLANNING GROUP

no scale



CNEL Outdoor Location



Source: U.S. Environmental Protection Agency, "Impact Characterization of Noise Including Implications of Identifying and Achieving Levels of Cumulative Noise Exposure," EPA Report NTID 73.4, 1973.

Source: Mestre Greve Associates



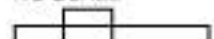
Northern Sphere Area EIR

Exhibit 4-45 TYPICAL OUTDOOR NOISE LEVELS



TEMPLETON PLANNING GROUP

NO SCALE



LAND USE CATEGORIES		ENERGY AVERAGE CNEL	
CATEGORIES	USES	INTERIOR ¹	EXTERIOR ²
RESIDENTIAL	Single Family, Duplex, Multiple Family	45 ³ 55 ⁴	65
	Mobile Home	65	65
COMMERCIAL INDUSTRIAL INSTITUTIONAL	Hotel, Motel, Transient Lodging	45	65 ⁶
	Commercial Retail, Bank, Restaurant	55	-----
	Office Building, Research and Development, Professional Offices, City Office Building	50	-----
	Amphitheater, Concert Hall Auditorium, Meeting Hall	45	-----
	Gymnasium (Multipurpose)	50	-----
	Sports Club	55	-----
	Manufacturing, Warehousing, Wholesale, Utilities	65	-----
	Movie Theaters	65	-----
INSTITUTIONAL	Hospital, Schools' Classroom	45	65
	Church, Library	45	-----
OPEN SPACE	Parks	-----	65

INTERPRETATION

- Indoor environment excluding: Bathrooms, toilets, closets, corridors
- Outdoor environment limited to: Private yard of single family
Multi-family private patio or balcony which is served by a means of an exit from inside.
Mobile home park
Hospital patio
Park's picnic area
School's playground
Hotel and motel recreation area
- Noise level requirement with closed windows. Mechanical ventilating system or other means of natural ventilation shall be provided as part of Chapter 12, Section 1205 of UBC.
- Noise level requirement with open windows, if they are used to meet natural ventilation requirement.
- Exterior noise level should be such that the interior noise level will not exceed 45 CNEL.
- Except those areas affected by aircraft noise.

Source: Mestre Greve Associates



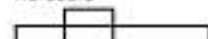
Northern Sphere Area EIR

Exhibit 4-46 CITY OF IRVINE NOISE STANDARDS

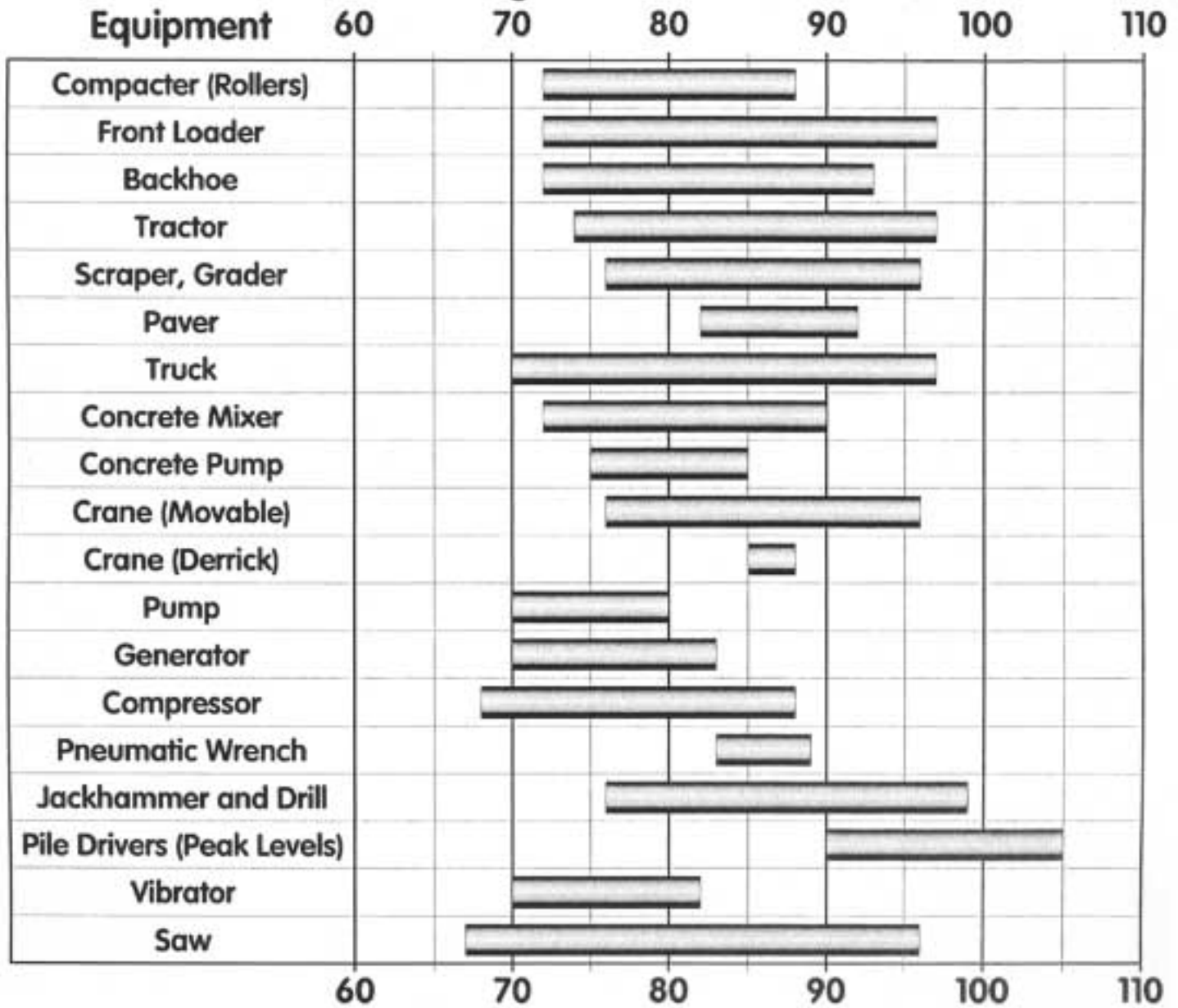


TEMPLETON PLANNING GROUP

no scale



A-Weighted Sound Level (dBA) At 50 Feet



Source: "Handbook of Noise Control,"
by Cyril Harris, 1979

Source: Mestre Greve Associates



Exhibit 4-47

CONSTRUCTION EQUIPMENT NOISE LEVELS



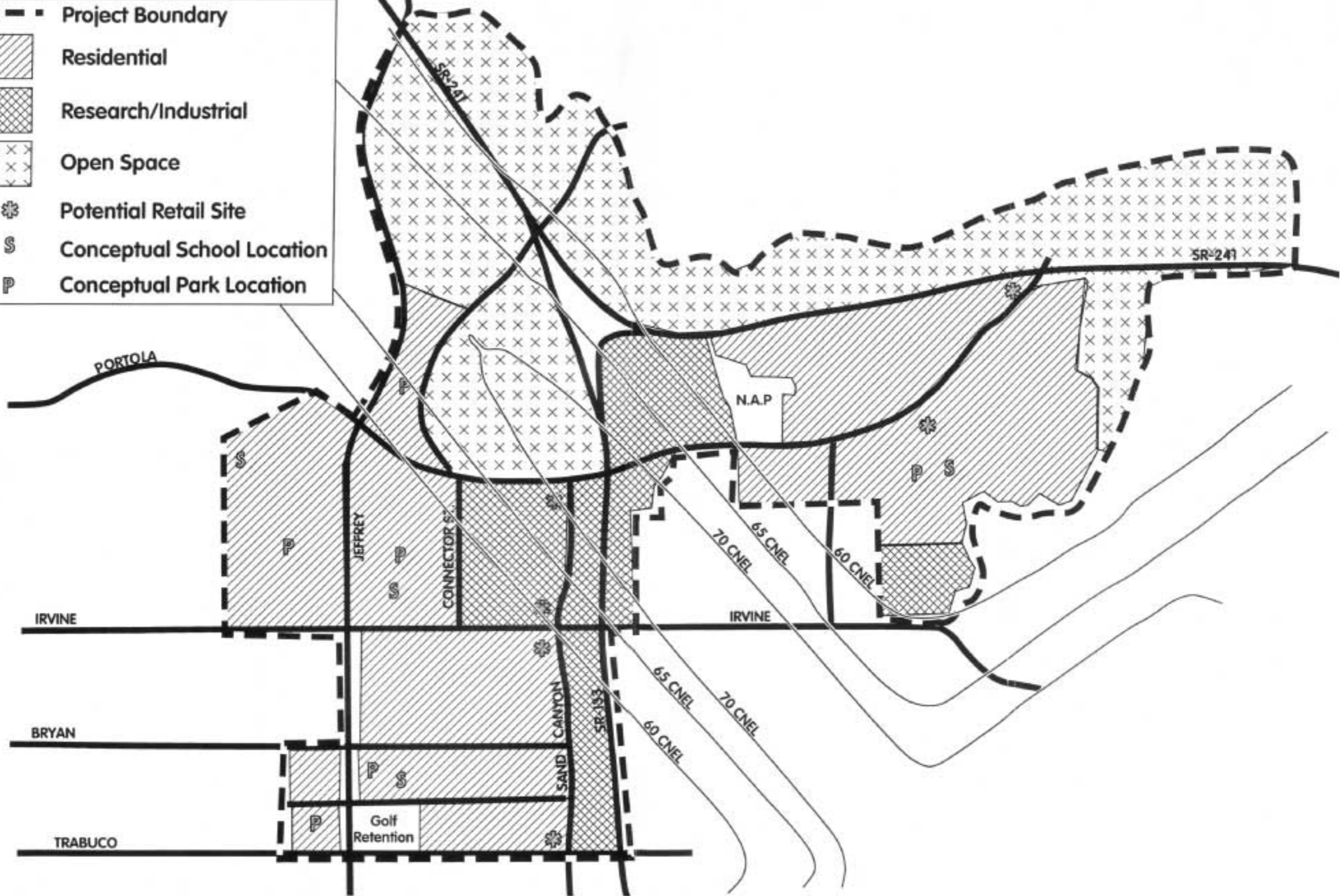
TEMPLETON PLANNING GROUP

NO SCALE



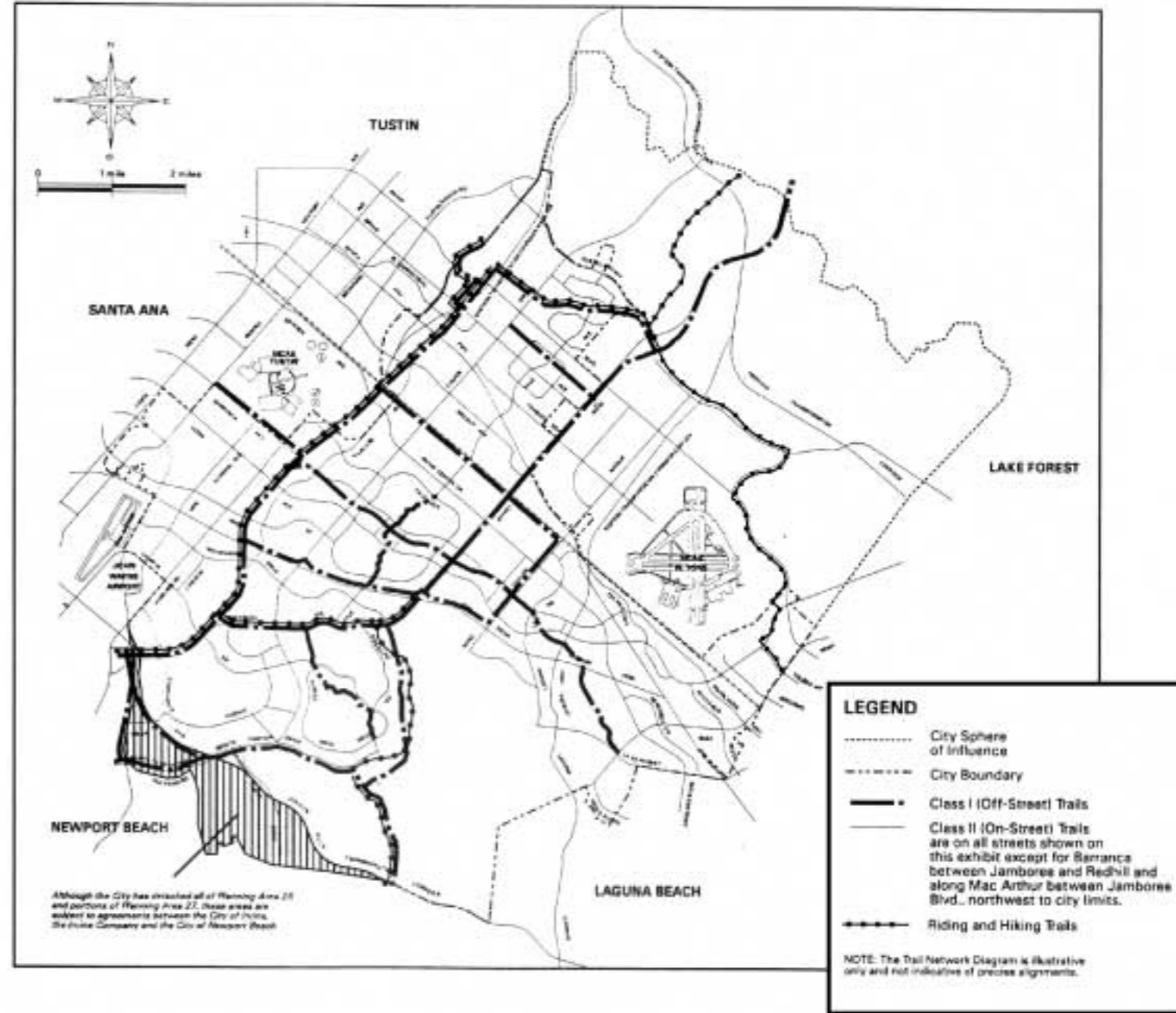
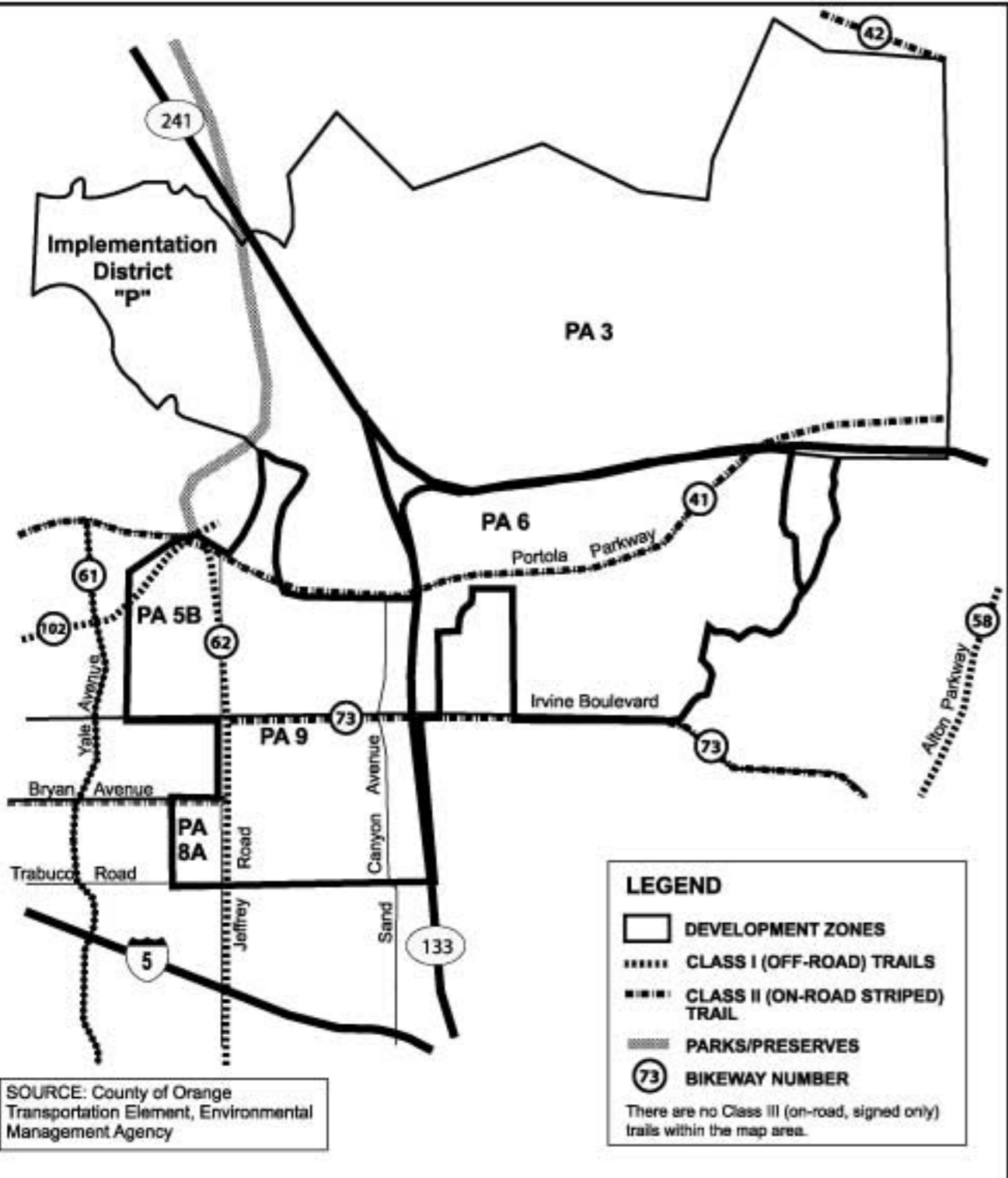
LEGEND

- Project Boundary
- Residential
- Research/Industrial
- Open Space
- Potential Retail Site
- Conceptual School Location
- Conceptual Park Location



Source: Mestre Greve Associates

Exhibit 4-48
OCX ALTERNATIVE B
AIRCRAFT NOISE CONTOURS





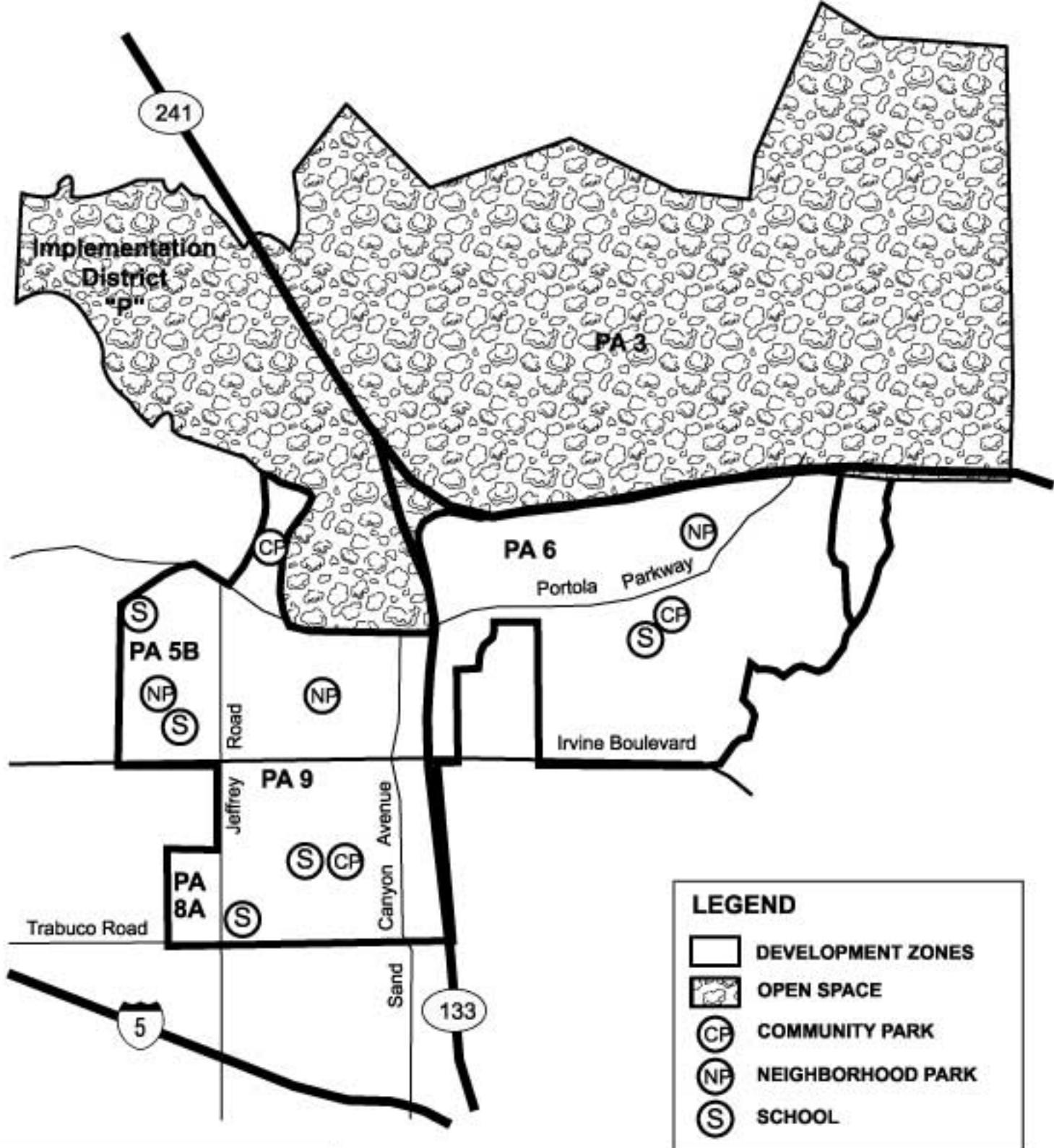
Photograph 2:
View looking north from
Jeffrey Road at
Planning Area 9.

Existing



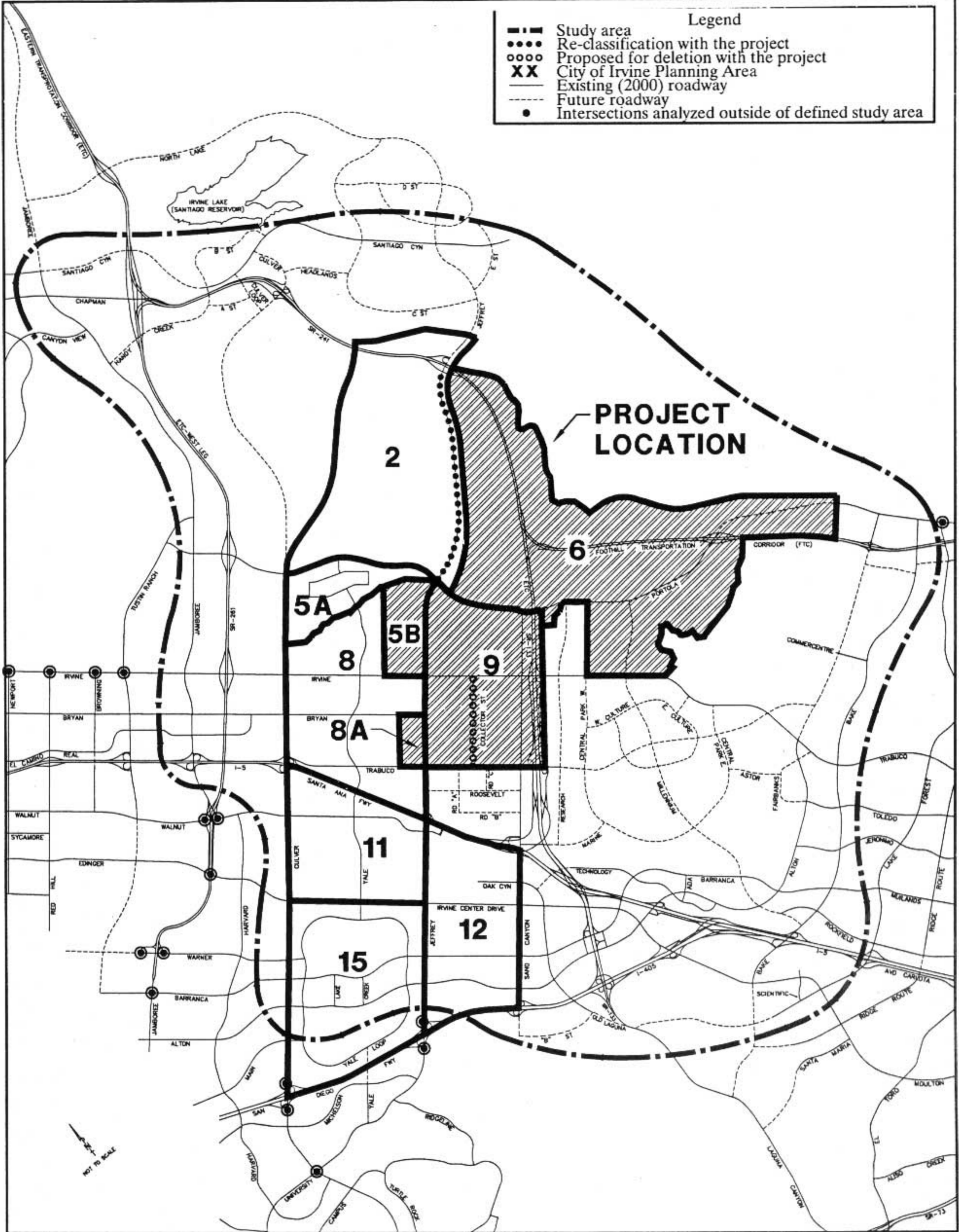
Proposed





NOTE: This is a graphic representation of a parks and school concept. It is not intended to show the precise locations.

**Exhibit 4-50
PRELIMINARY PARKS
AND SCHOOLS LOCATION MAP**

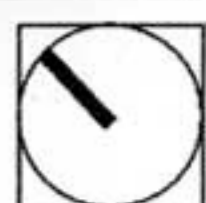


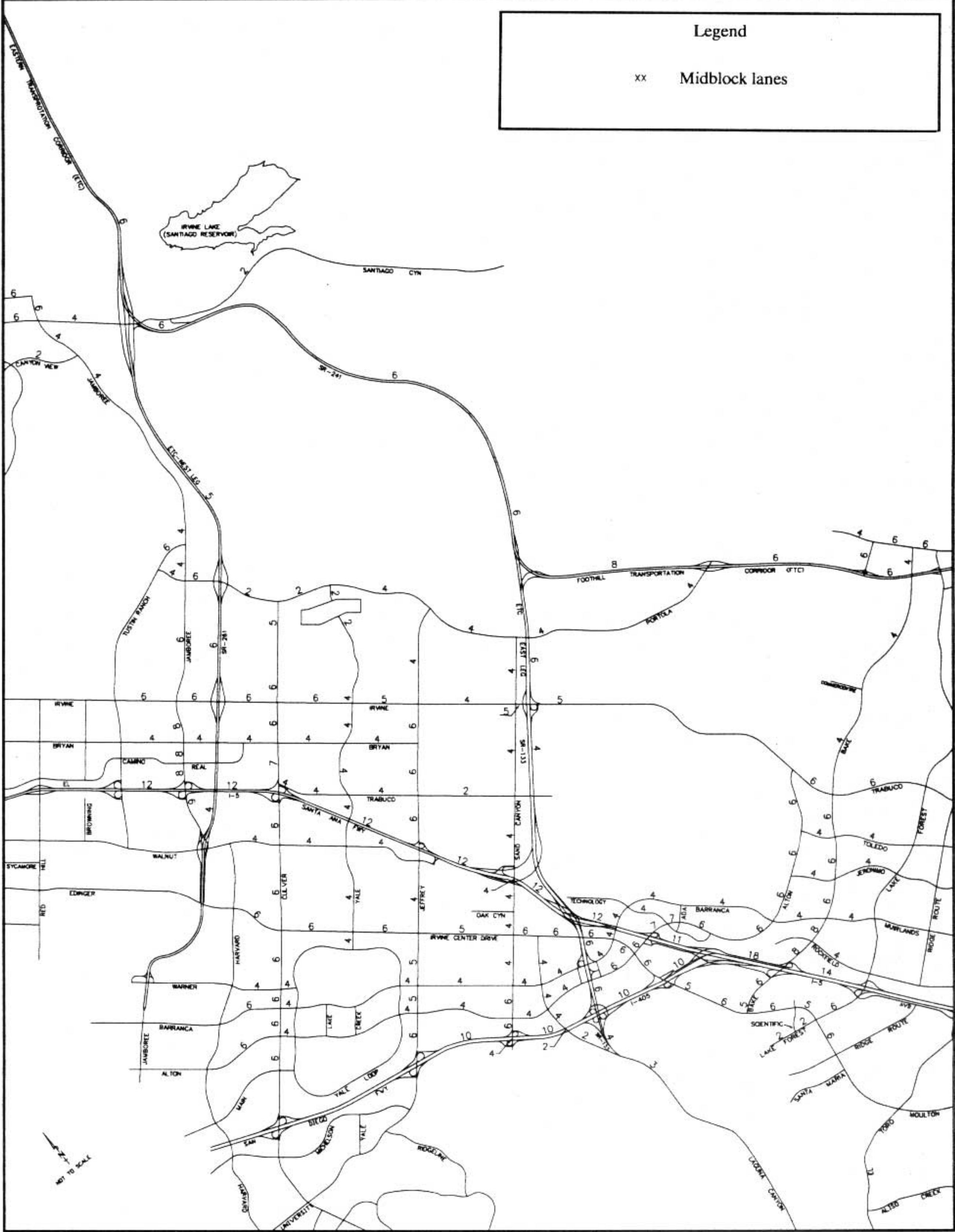
- Legend**
- Study area
 - Re-classification with the project
 - Proposed for deletion with the project
 - XX City of Irvine Planning Area
 - Existing (2000) roadway
 - - - Future roadway
 - Intersections analyzed outside of defined study area

PROJECT LOCATION

Exhibit 4-51

TRAFFIC STUDY AREA BOUNDARY





Legend
xx Midblock lanes

Exhibit 4-52

EXISTING

CIRCULATION SYSTEM

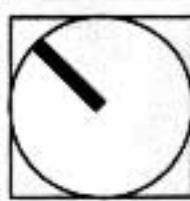
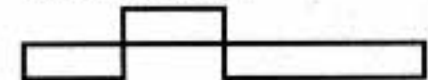


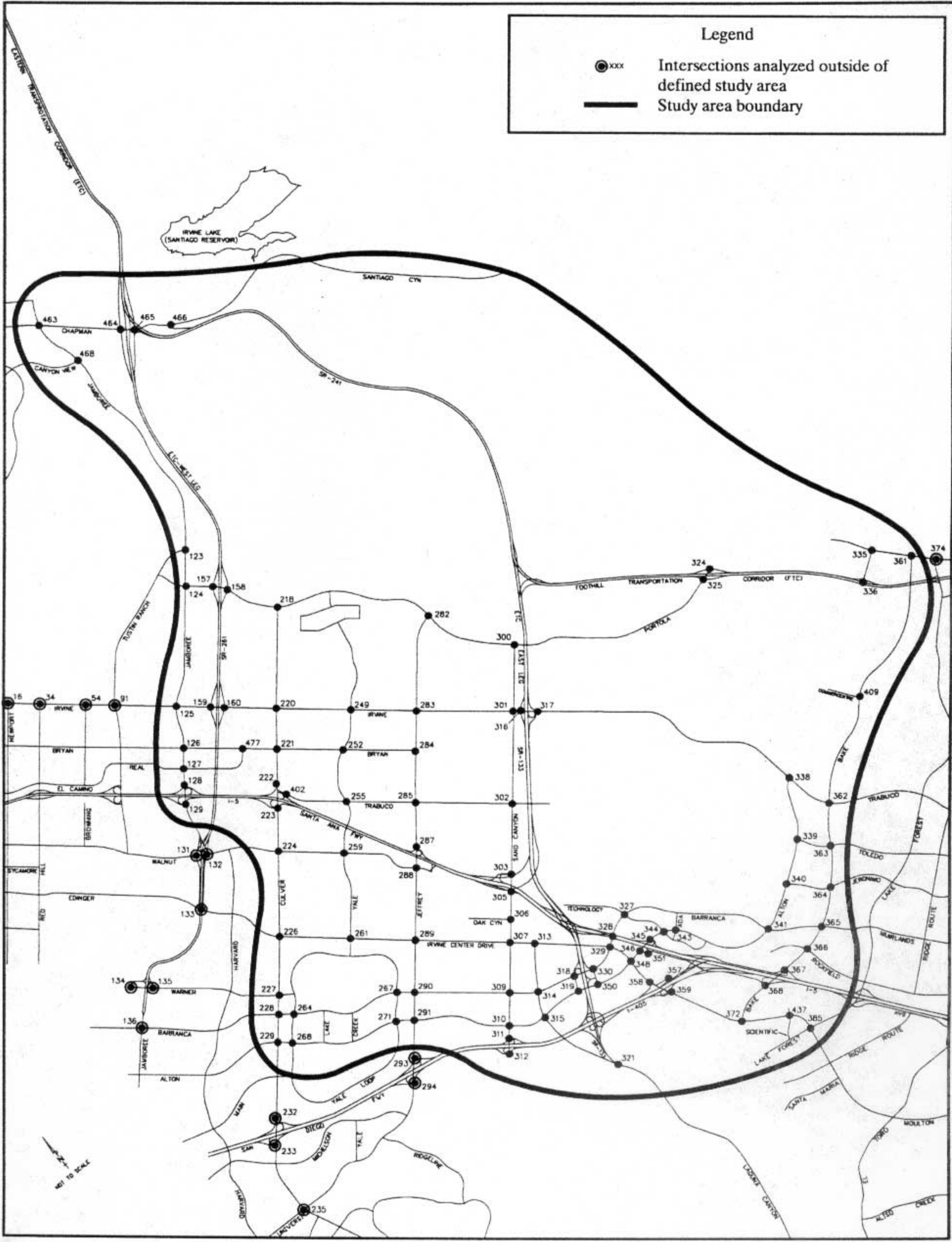
Northern Sphere Area EIR



TEMPLETON PLANNING GROUP

NO SCALE





Legend



 Intersections analyzed outside of defined study area
 Study area boundary

Exhibit 4-54

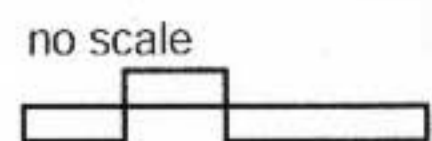
EXISTING INTERSECTION LOCATION MAP

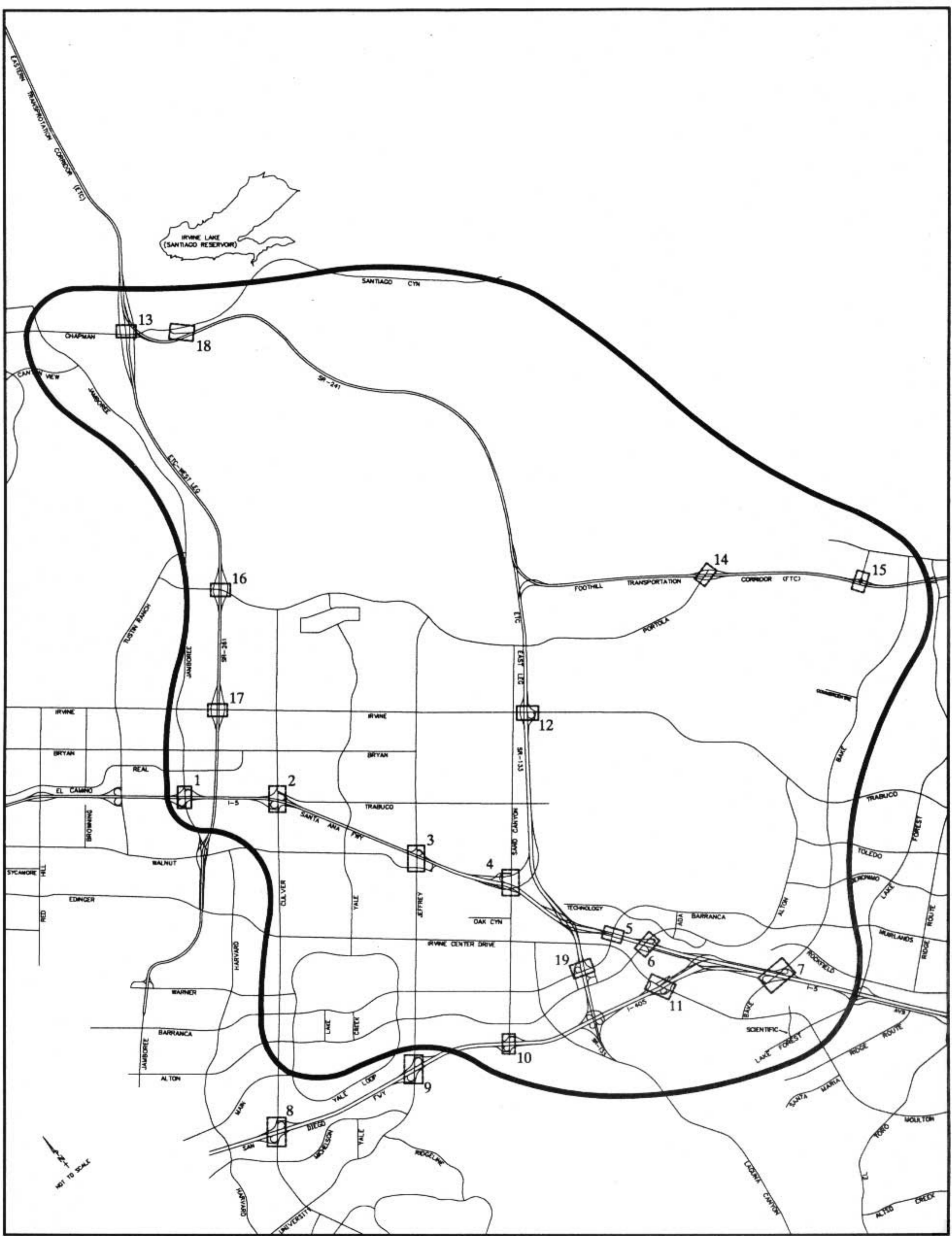


Northern Sphere Area EIR



TEMPLETON PLANNING GROUP





Austin-Foust Associates, Inc.

Exhibit 4-55

**EXISTING (2000)
FREEWAY LOCATION MAP**

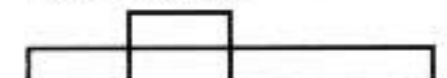


Northern Sphere Area EIR



TEMPLETON PLANNING GROUP

NO SCALE



Legend

XX Percent of project trip distribution

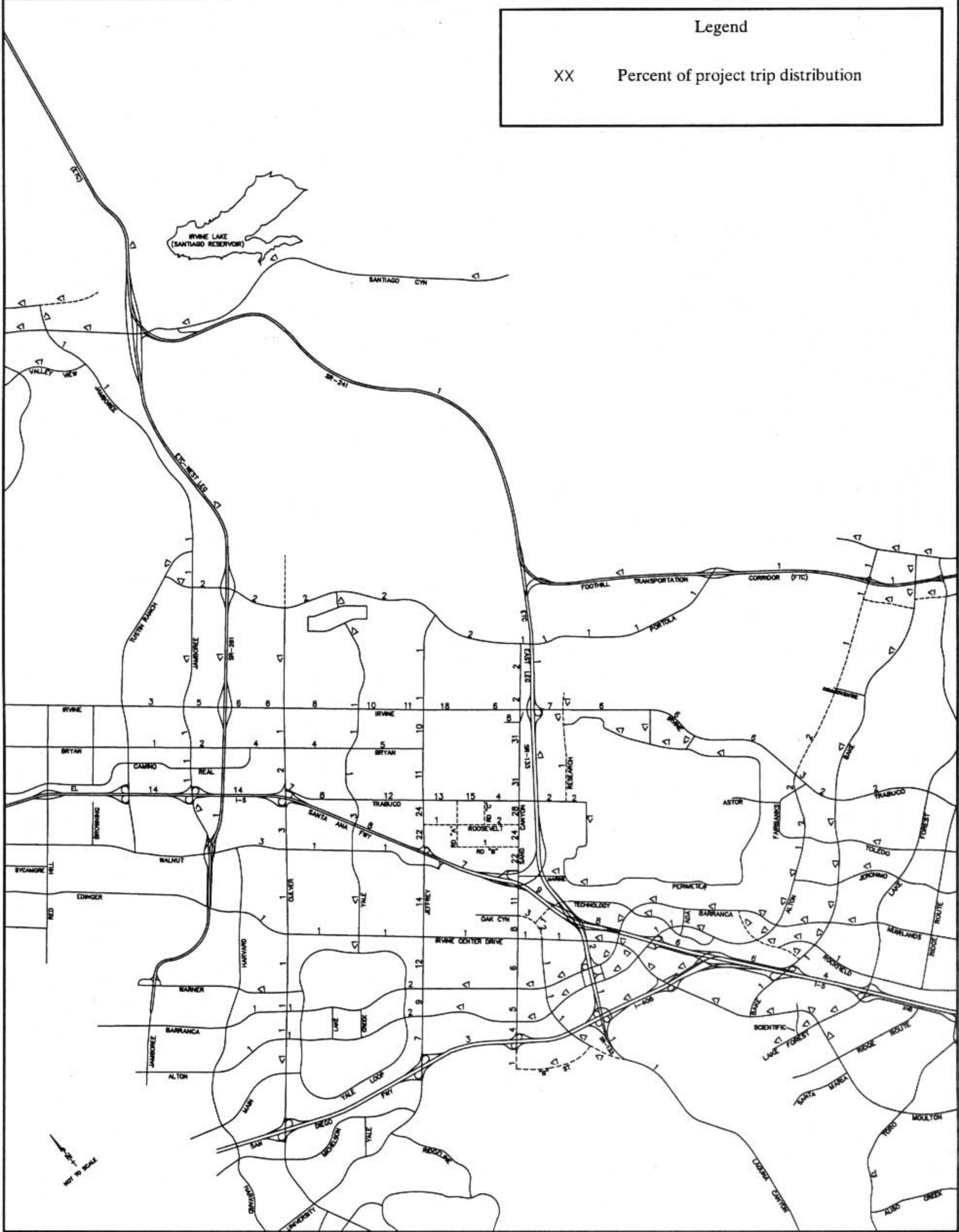


Exhibit 4-56
2007 PROJECT
TRIP DISTRIBUTION

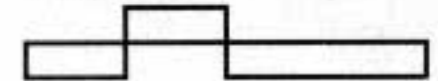


Northern Sphere Area EIR



TEMPLETON PLANNING GROUP

NO SCALE




Legend

XX Percent of project trip distribution

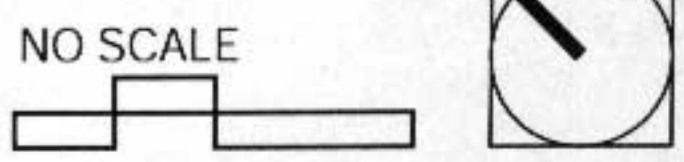


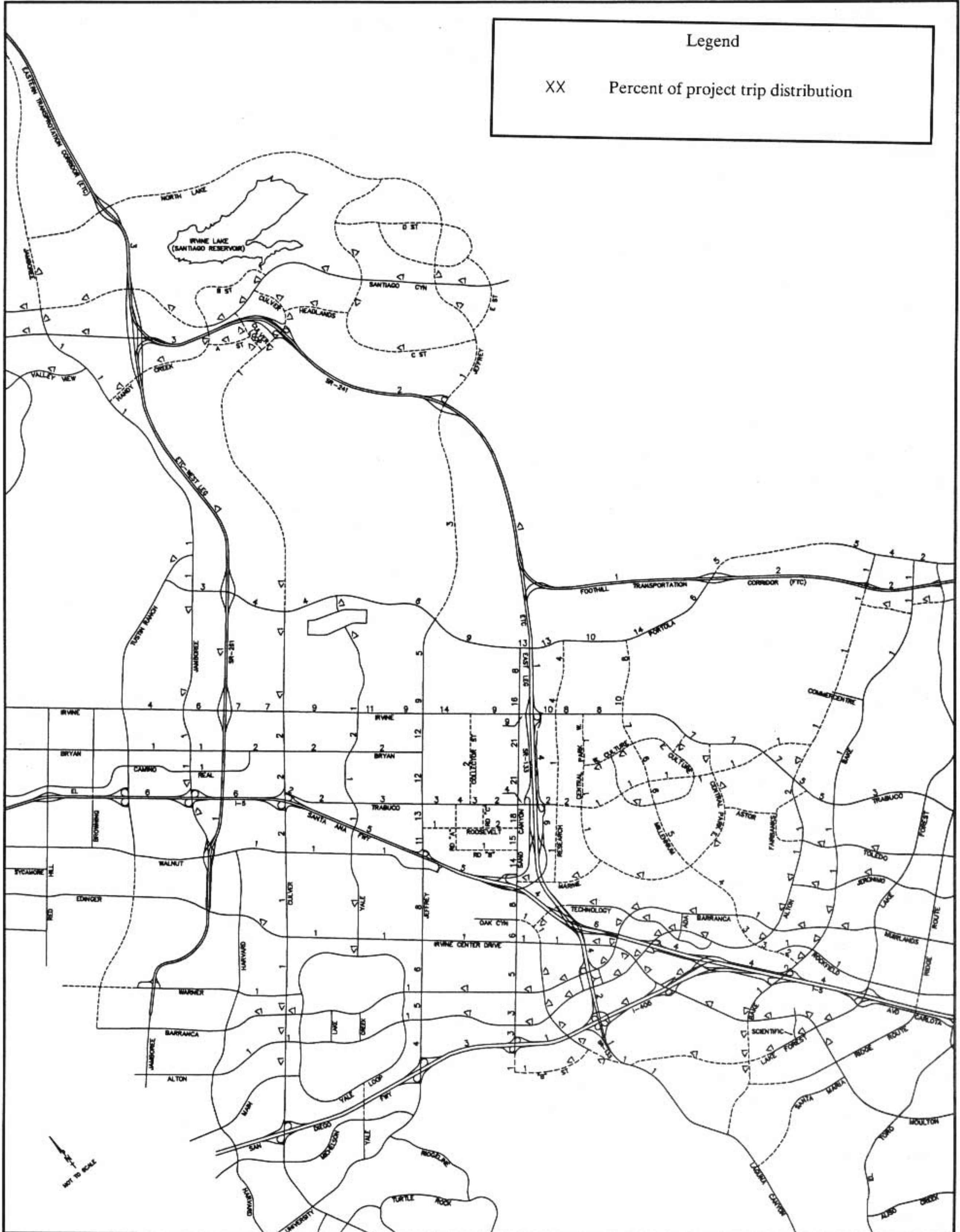
Exhibit 4-57
2025 (CONSTRAINED)
PROJECT TRIP DISTRIBUTION

 Northern Sphere Area EIR

 TEMPLETON PLANNING GROUP

NO SCALE





Legend
 XX Percent of project trip distribution

Exhibit 4-58

**2025 (BUILDOUT TOLL)
 PROJECT TRIP DISTRIBUTION**

Legend

XX Percent of project trip distribution



Exhibit 4-59
POST-2040
PROJECT TRIP DISTRIBUTION

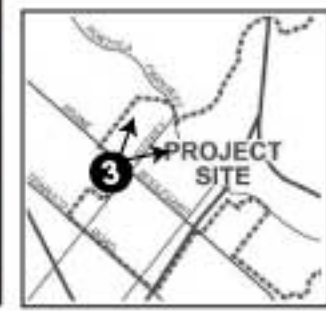


Photograph 3:
View looking north from
The Groves Mobile Home
Park at Planning Area 5B.

Existing



Proposed



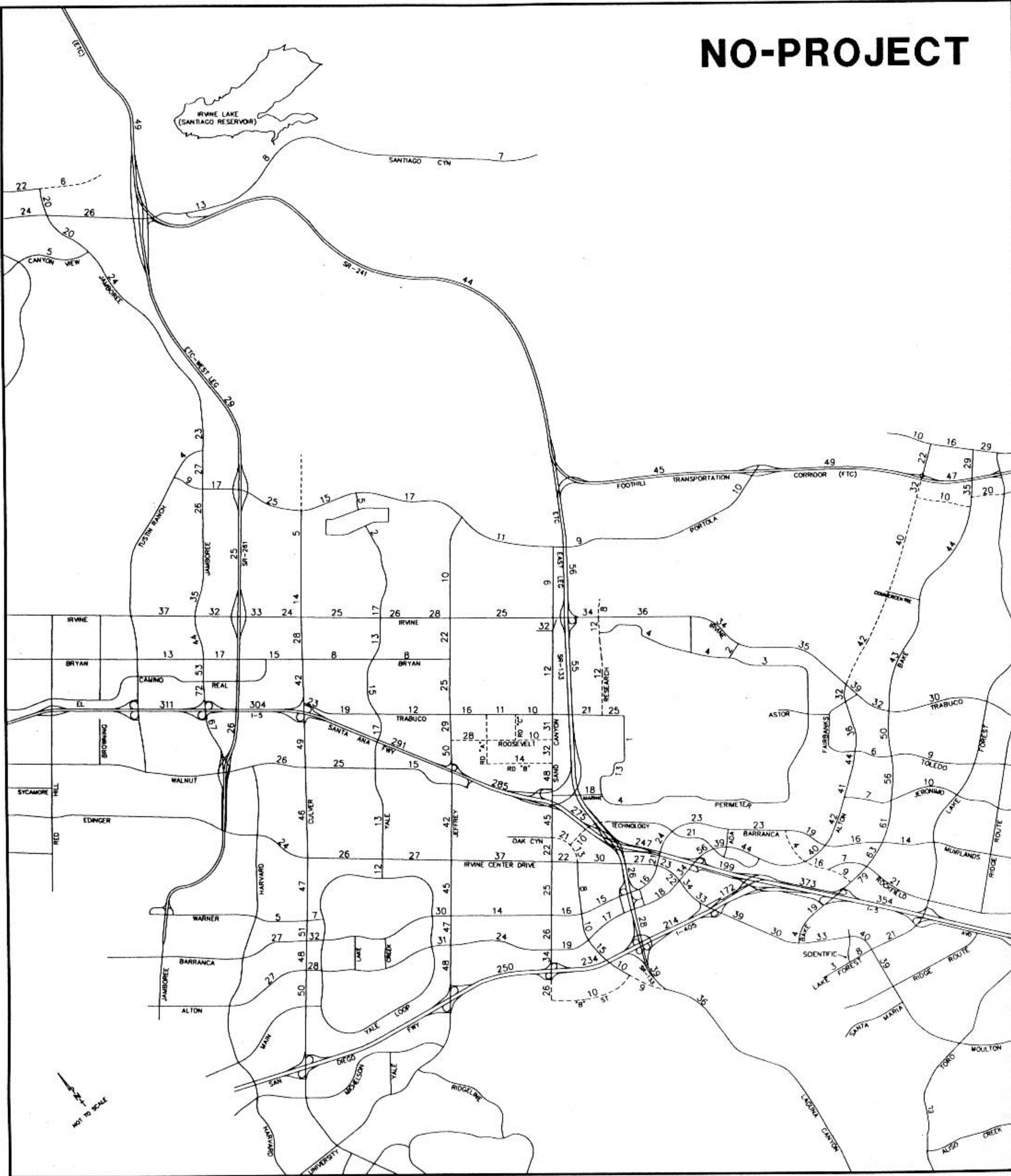


Legend	
xx	Midblock lanes
(m)	Midblock lanes with-project only
---	Future roadway in for 2007
—	Existing roadway

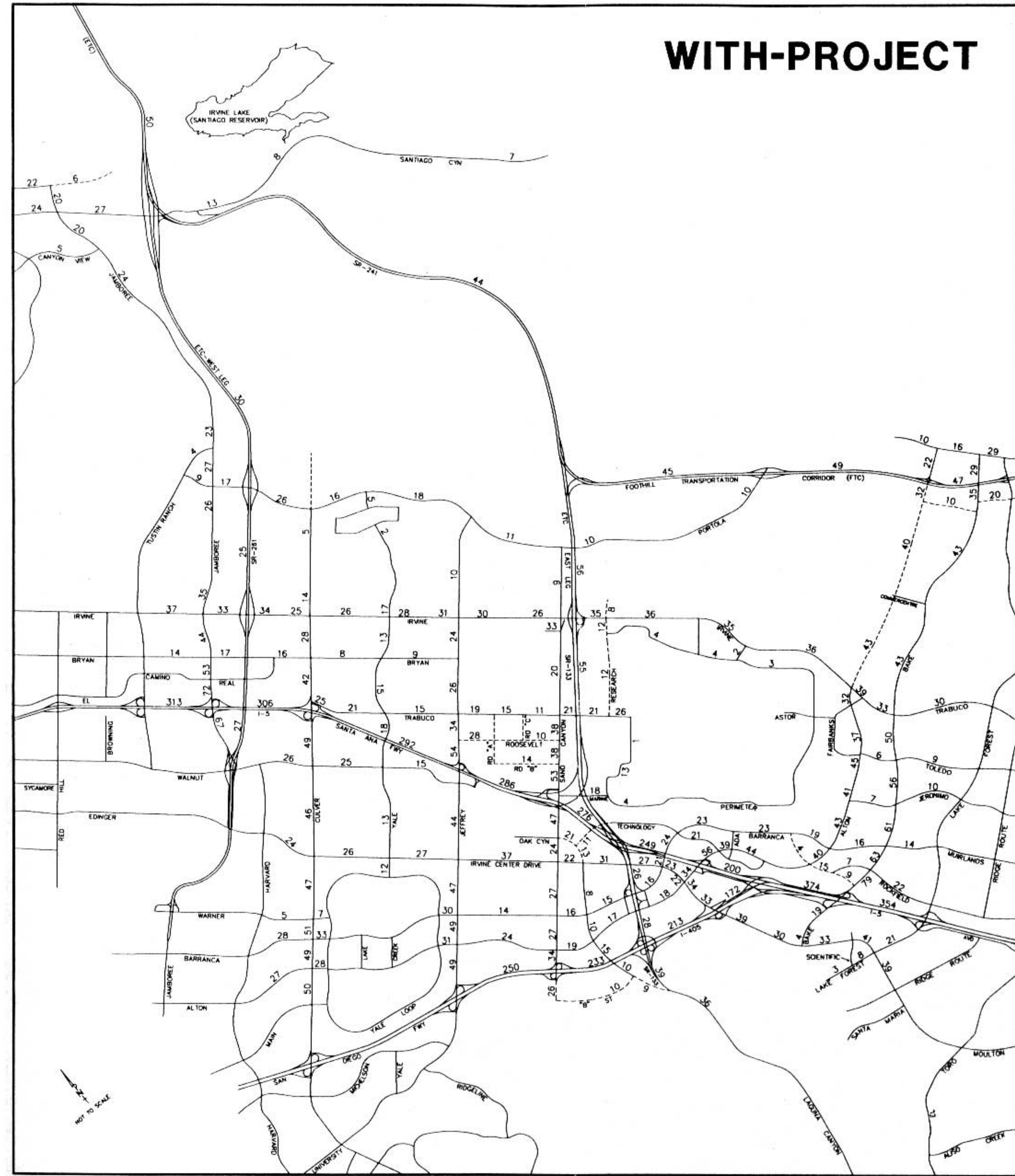
Exhibit 4-60
2007

CIRCULATION SYSTEM

NO-PROJECT



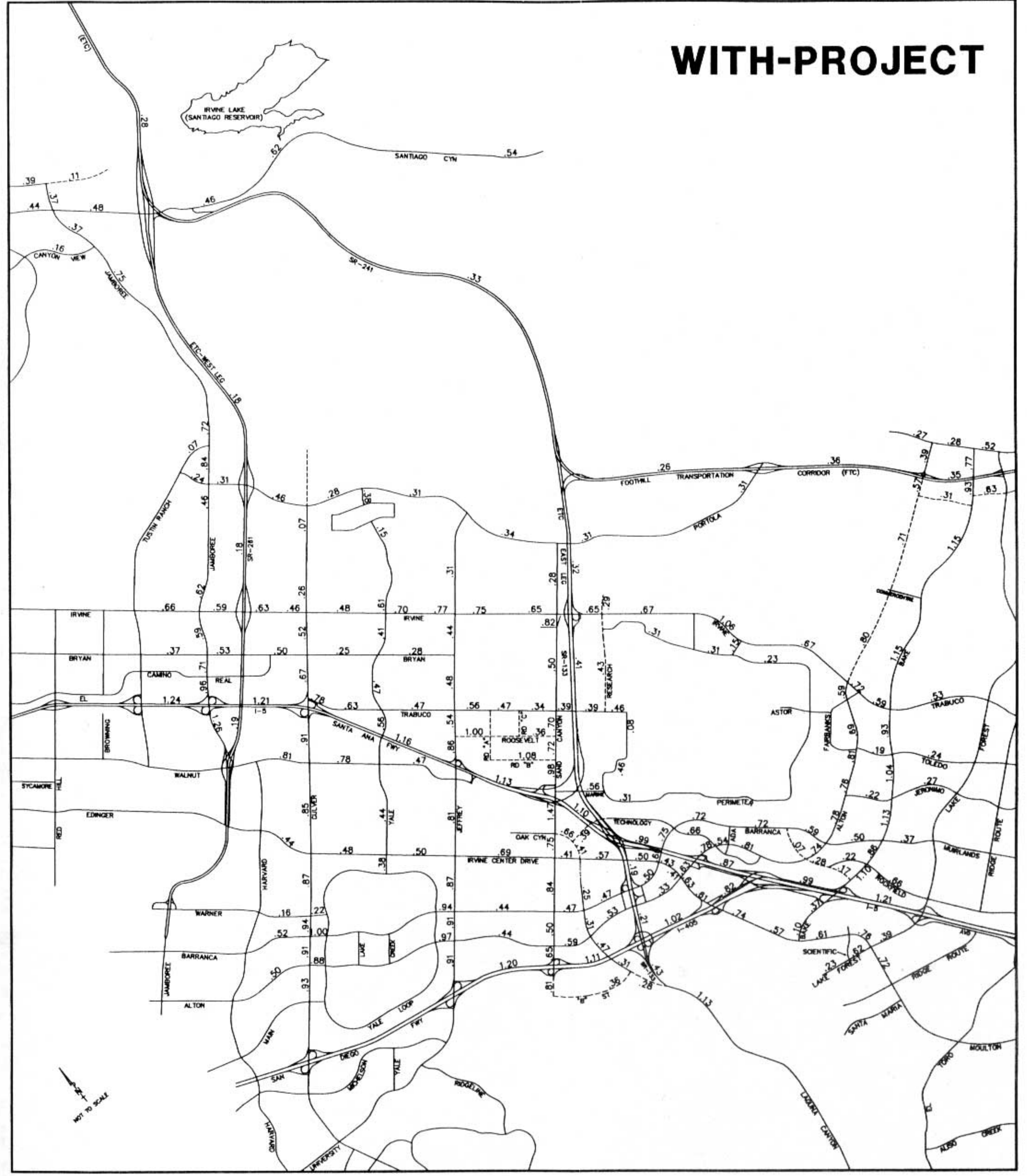
WITH-PROJECT

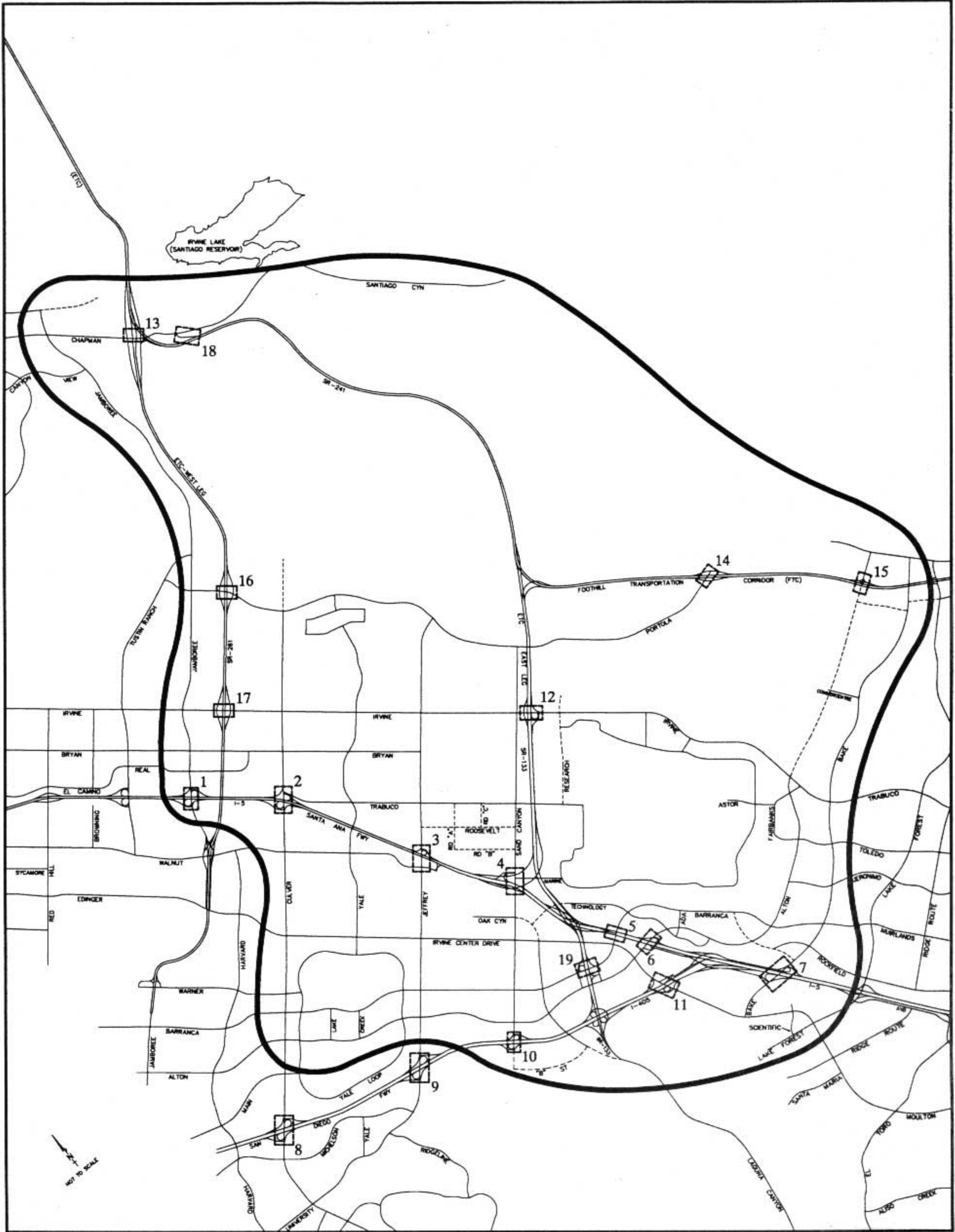


NO-PROJECT



WITH-PROJECT





NOT TO SCALE



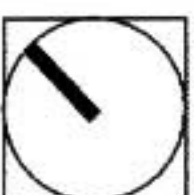
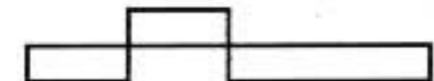
Northern Sphere Area EIR

Exhibit 4-63
2007 FREEWAY
RAMP LOCATION MAP



TEMPLETON PLANNING GROUP

NO SCALE





Legend

XX	Midblock lanes
(YY)	Midblock lanes with-project only
---	Future roadway in for 2025 (constrained toll)
—	Existing roadway

Exhibit 4-64

**2025 (CONSTRAINED)
CIRCULATION SYSTEM**

Northern Sphere Area EIR

TEMPLETON PLANNING GROUP

NO SCALE

NO-PROJECT

WITH-PROJECT

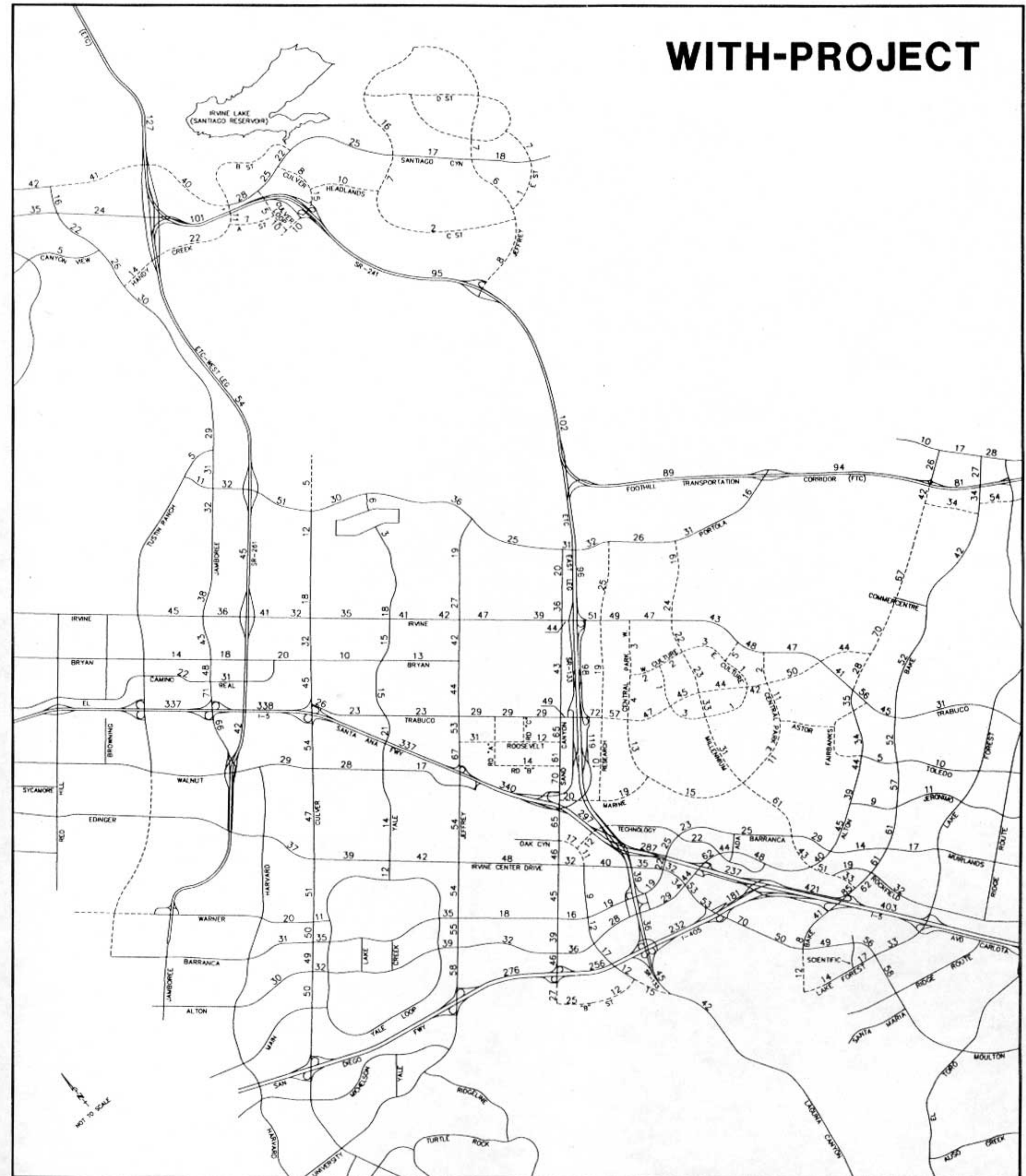
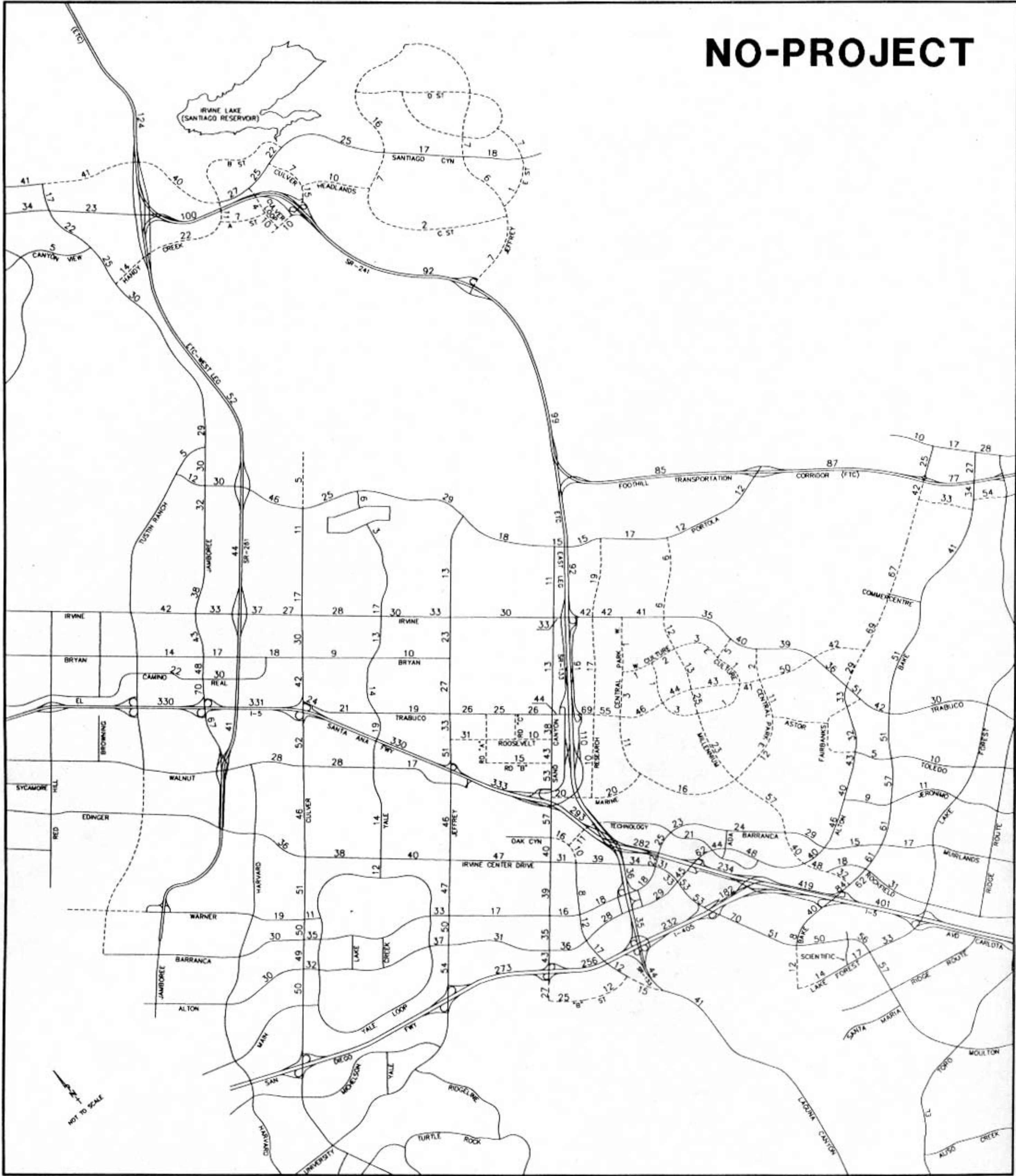
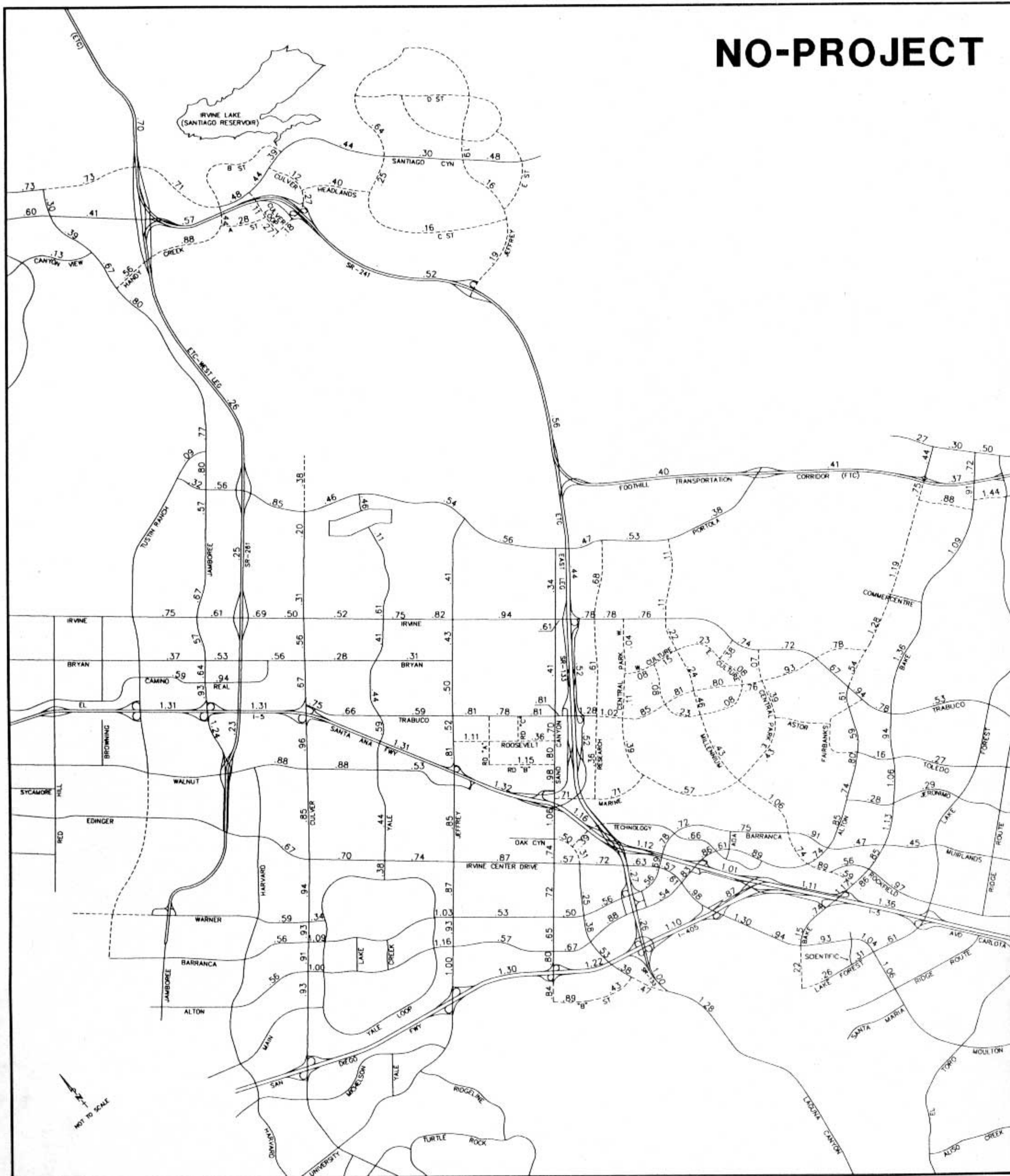


Exhibit 4-65
2025 (CONSTRAINED)
ADT VOLUMES

NO-PROJECT



WITH-PROJECT

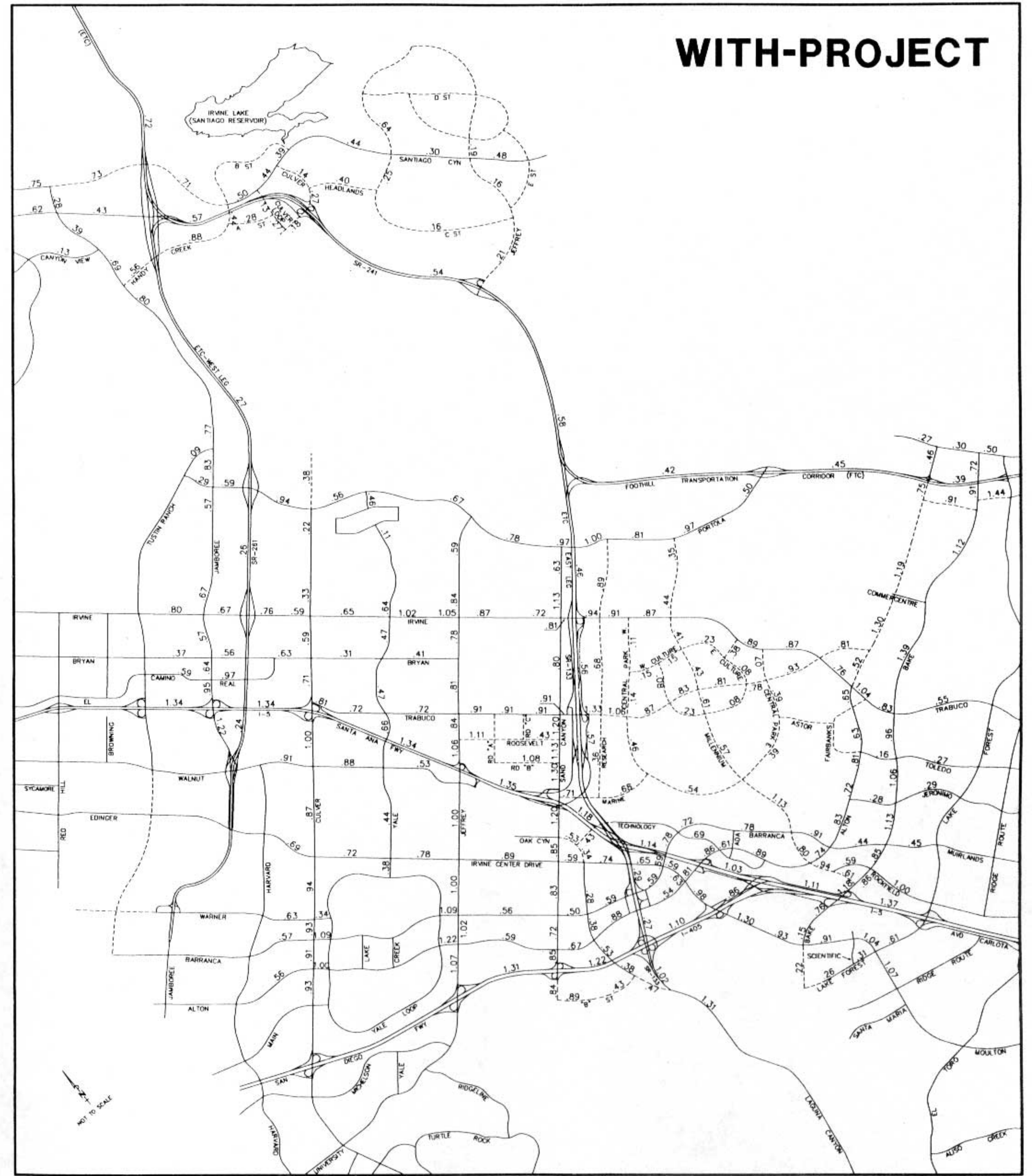




Exhibit 4-67

2025 (CONSTRAINED)

FREEWAY RAMP LOCATION MAP

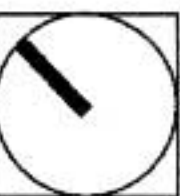


Northern Sphere Area EIR



TEMPLETON PLANNING GROUP

NO SCALE



Legend

- Re-classification with the project
- Proposed for deletion with the project
- XX Midblock lanes
- (YY) Midblock lanes with-project only
- Future roadway in for buildout
- _____ Existing roadway

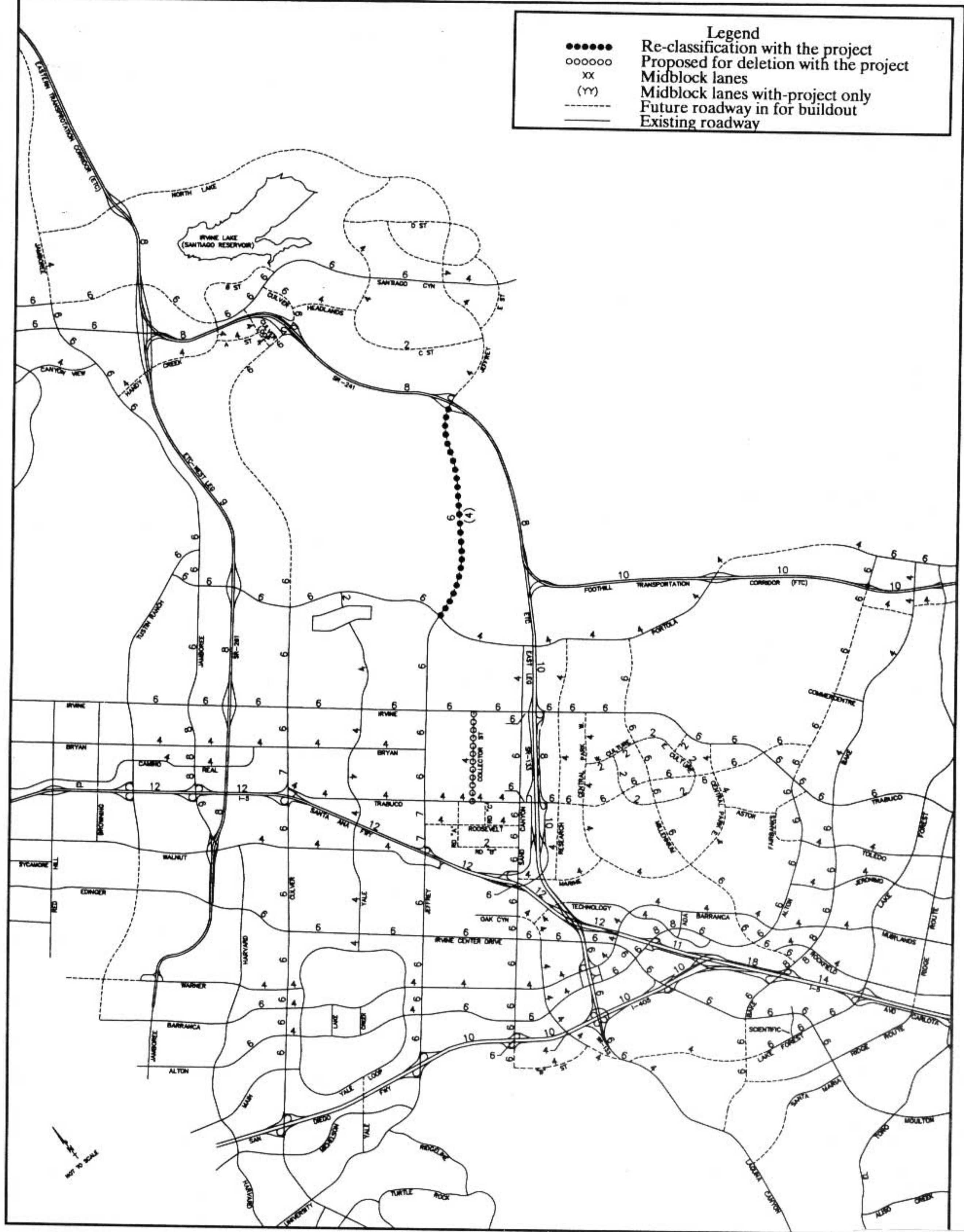


Exhibit 4-68

**BUILDOUT
CIRCULATION SYSTEM -
2025 TOLL & 2040 TOLL-FREE**



Exhibit 4-69
ADOPTED GENERAL
PLAN CIRCULATION

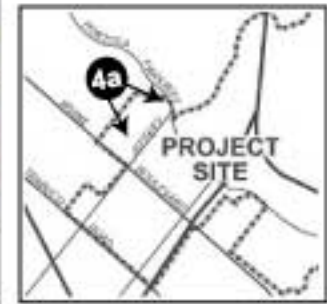


Photograph 4a:
View looking east from
the existing terminus of
Hicks Canyon Road, with
no thru connection to
Planning Area 5B.

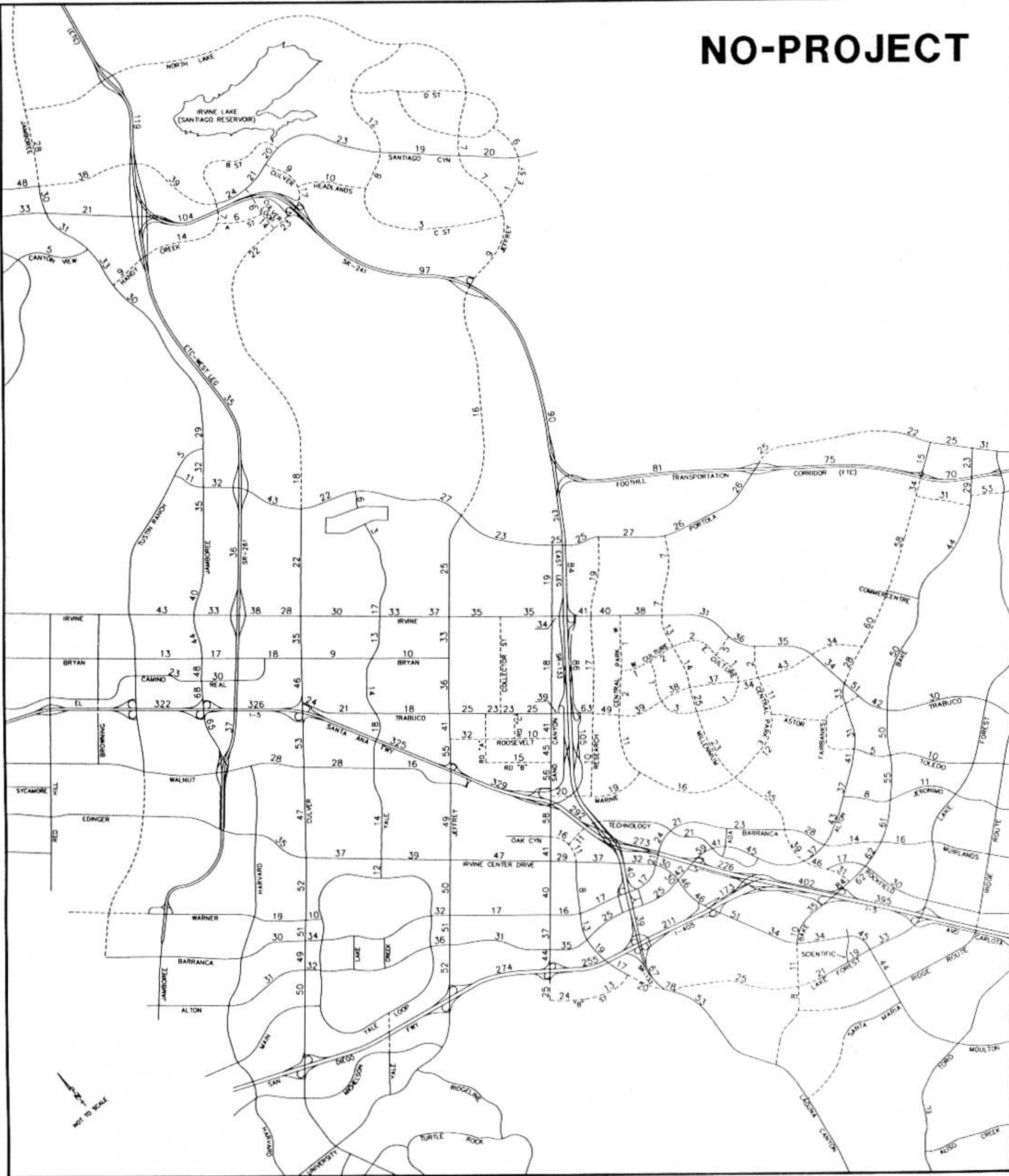
Existing



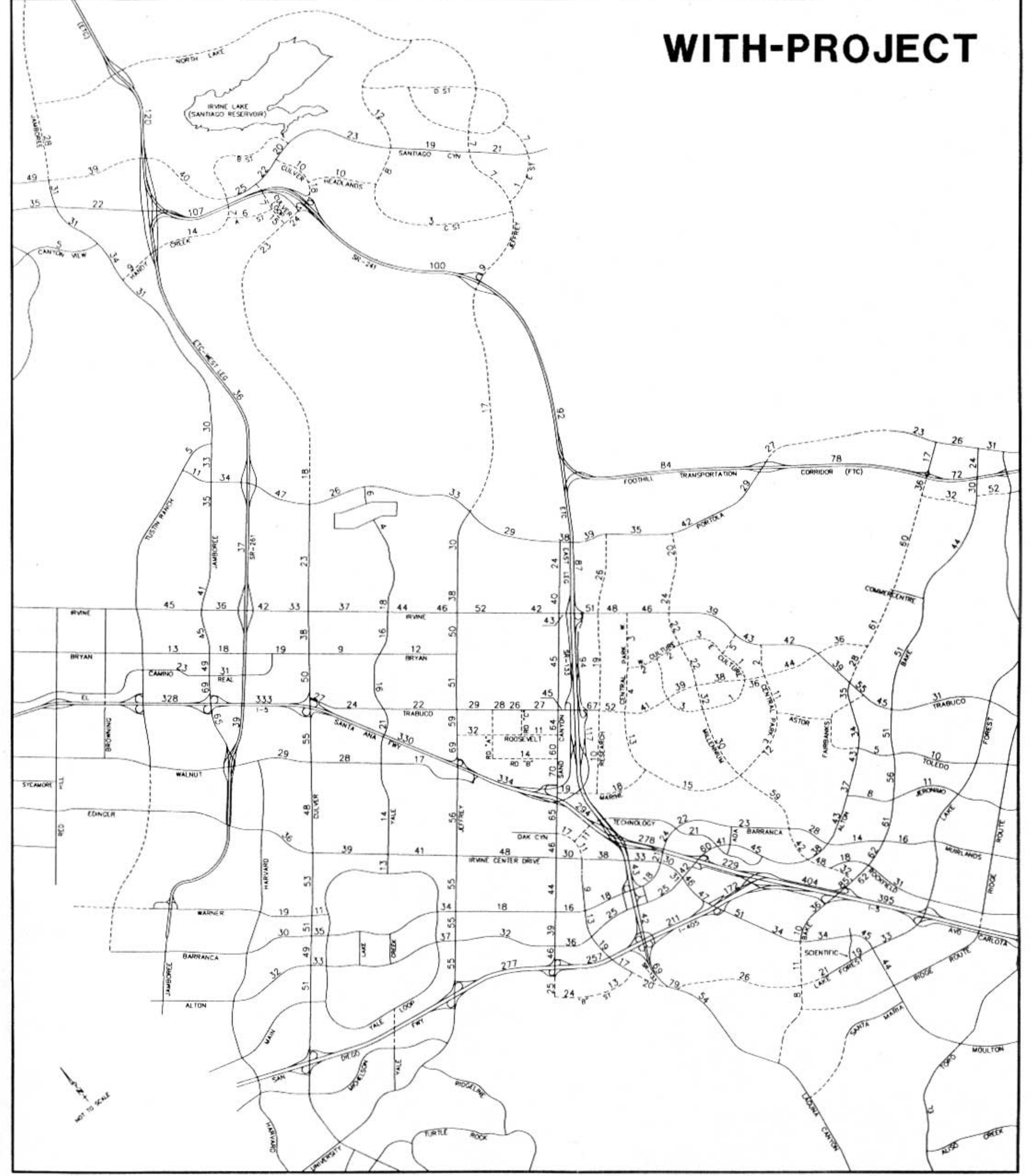
Proposed



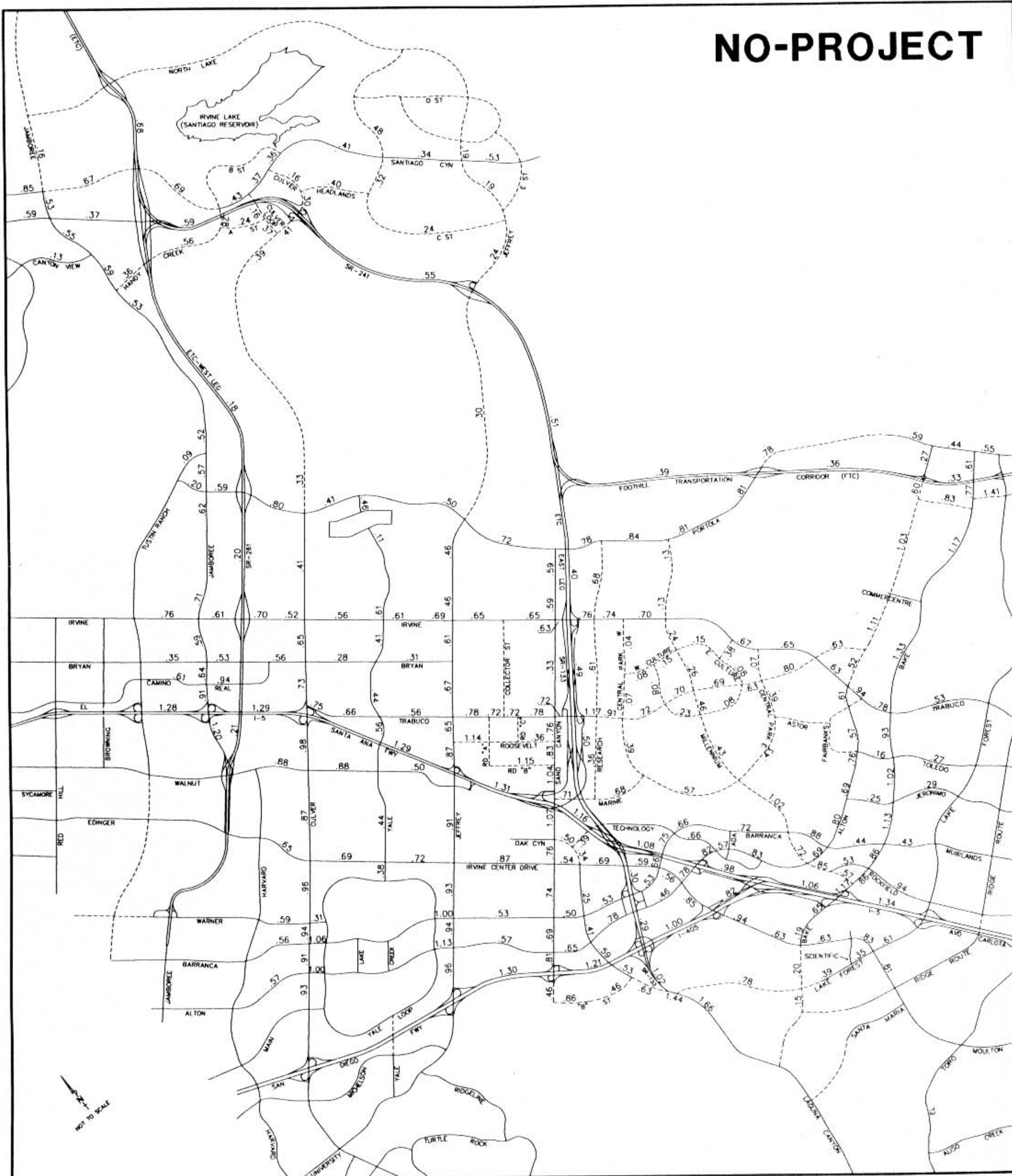
NO-PROJECT



WITH-PROJECT



NO-PROJECT



WITH-PROJECT

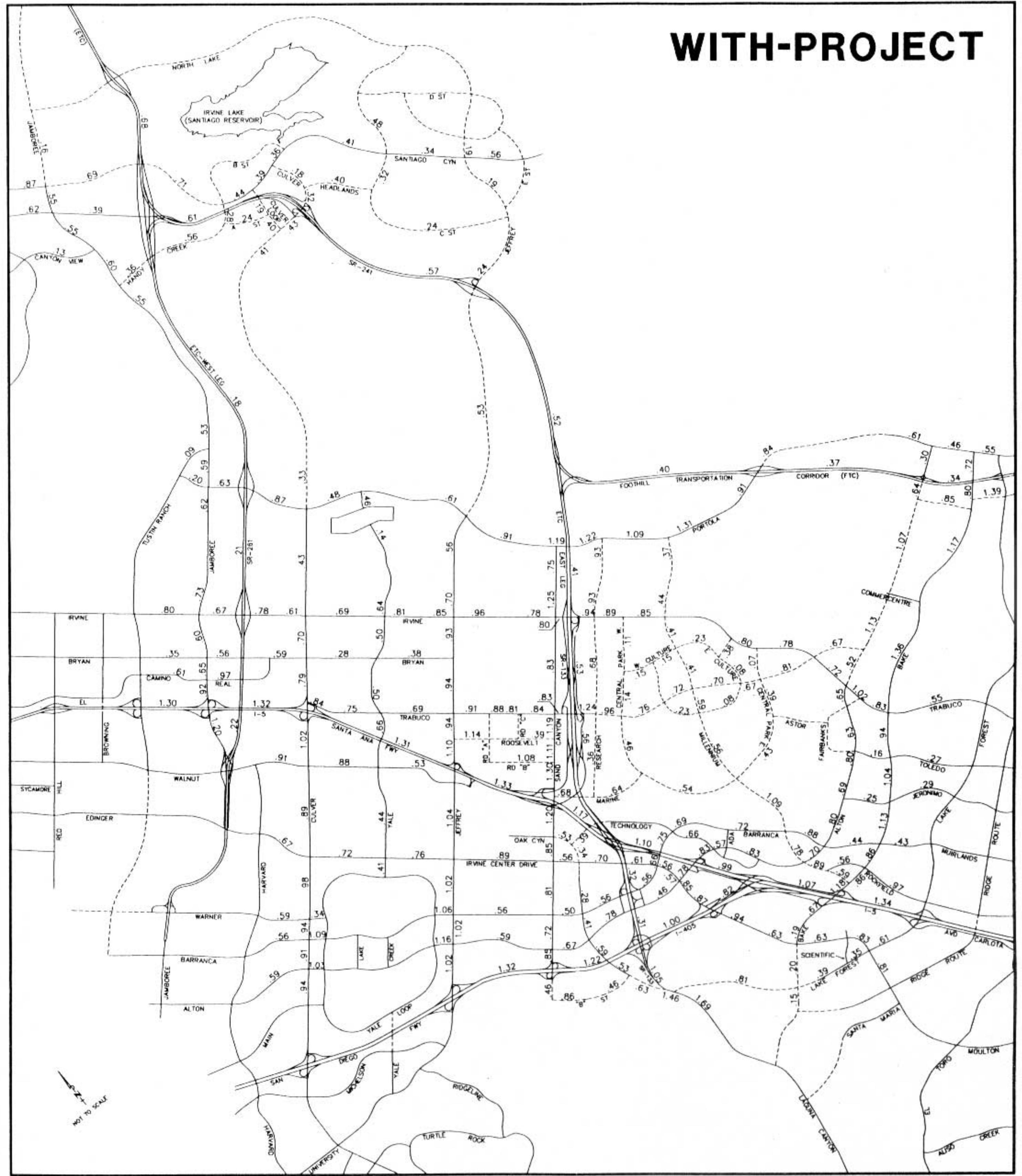
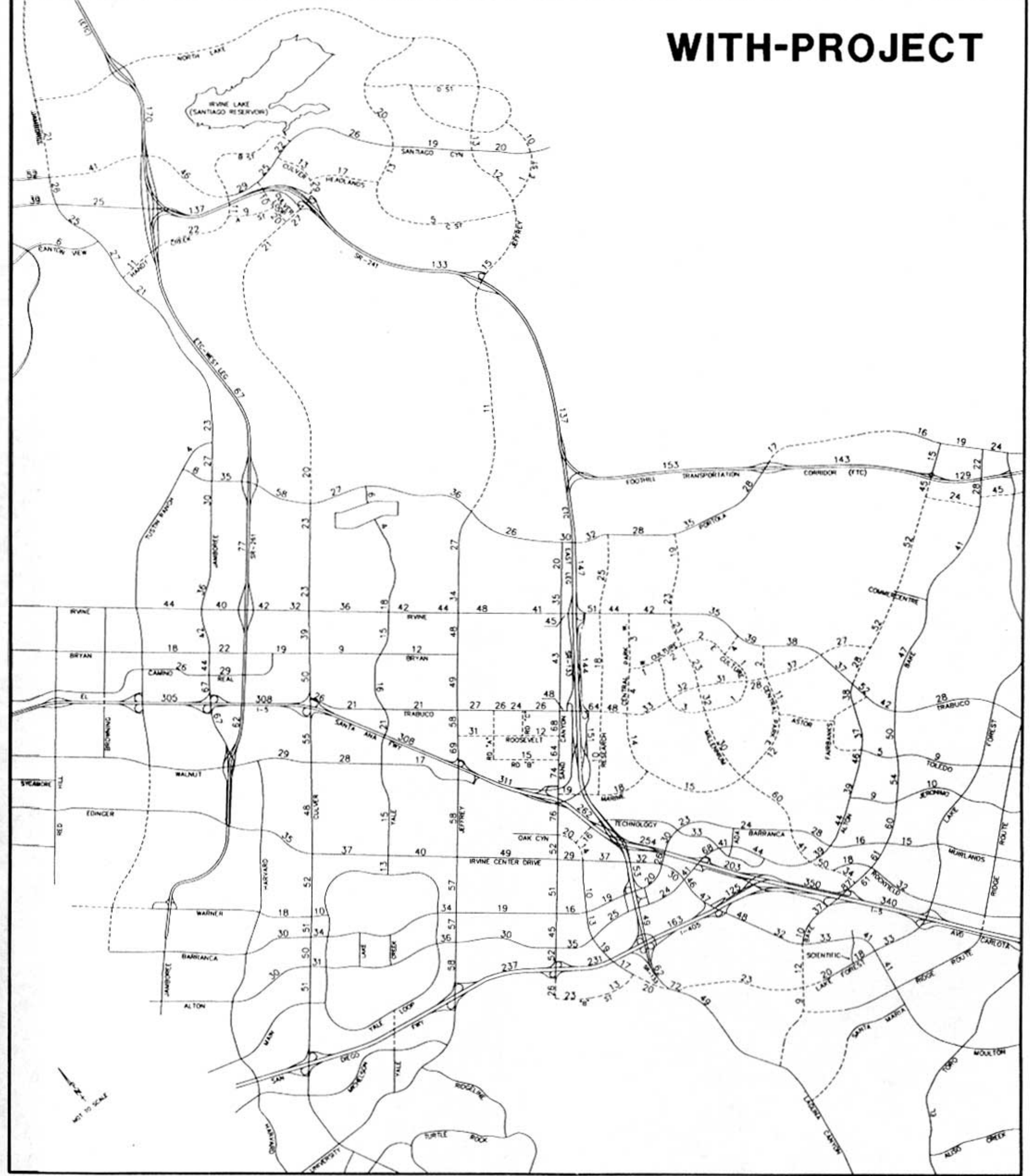
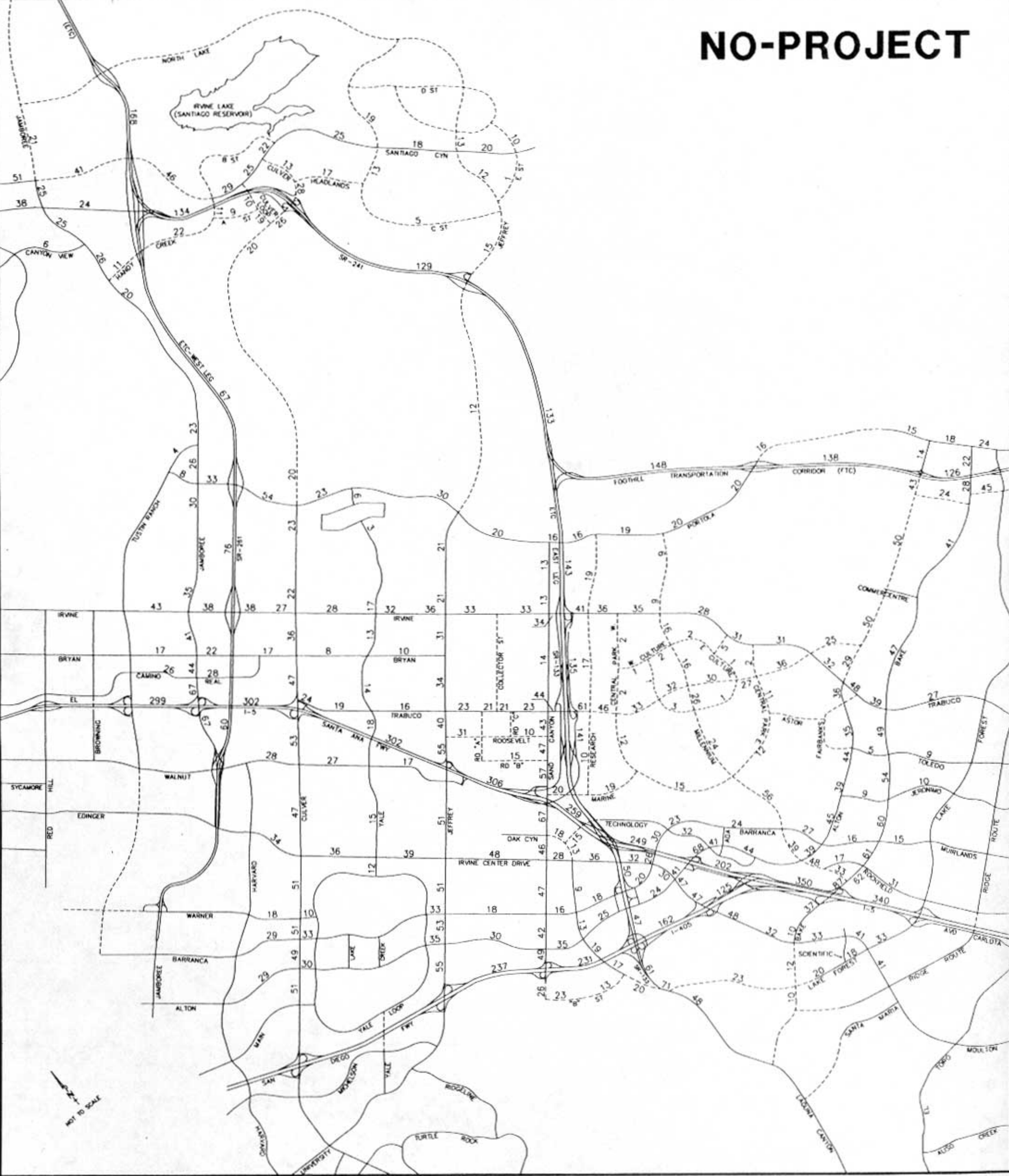


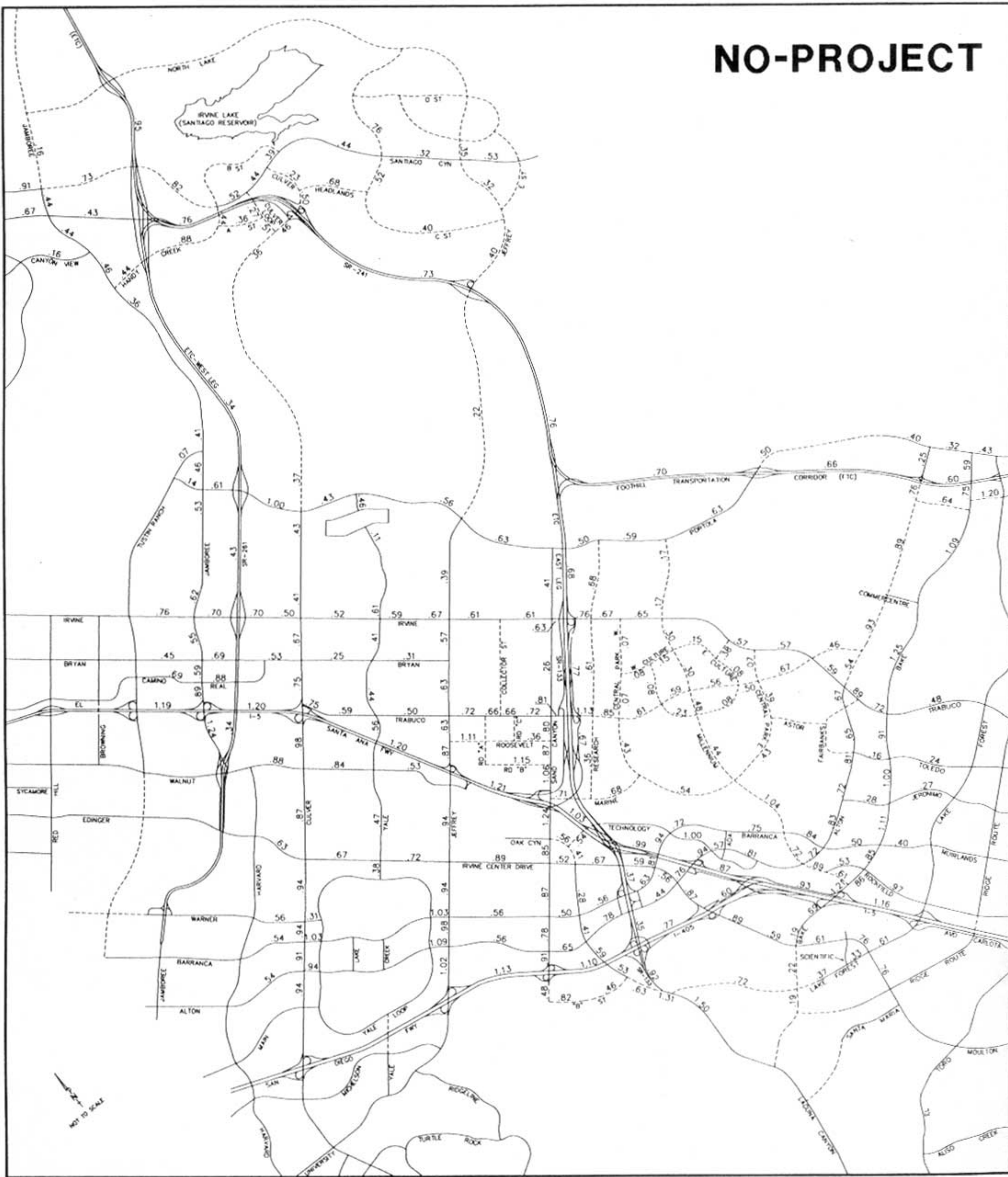
Exhibit 4-71
2025 (BUILDOUT)
ADT V/C RATIOS

NO-PROJECT

WITH-PROJECT



NO-PROJECT



WITH-PROJECT

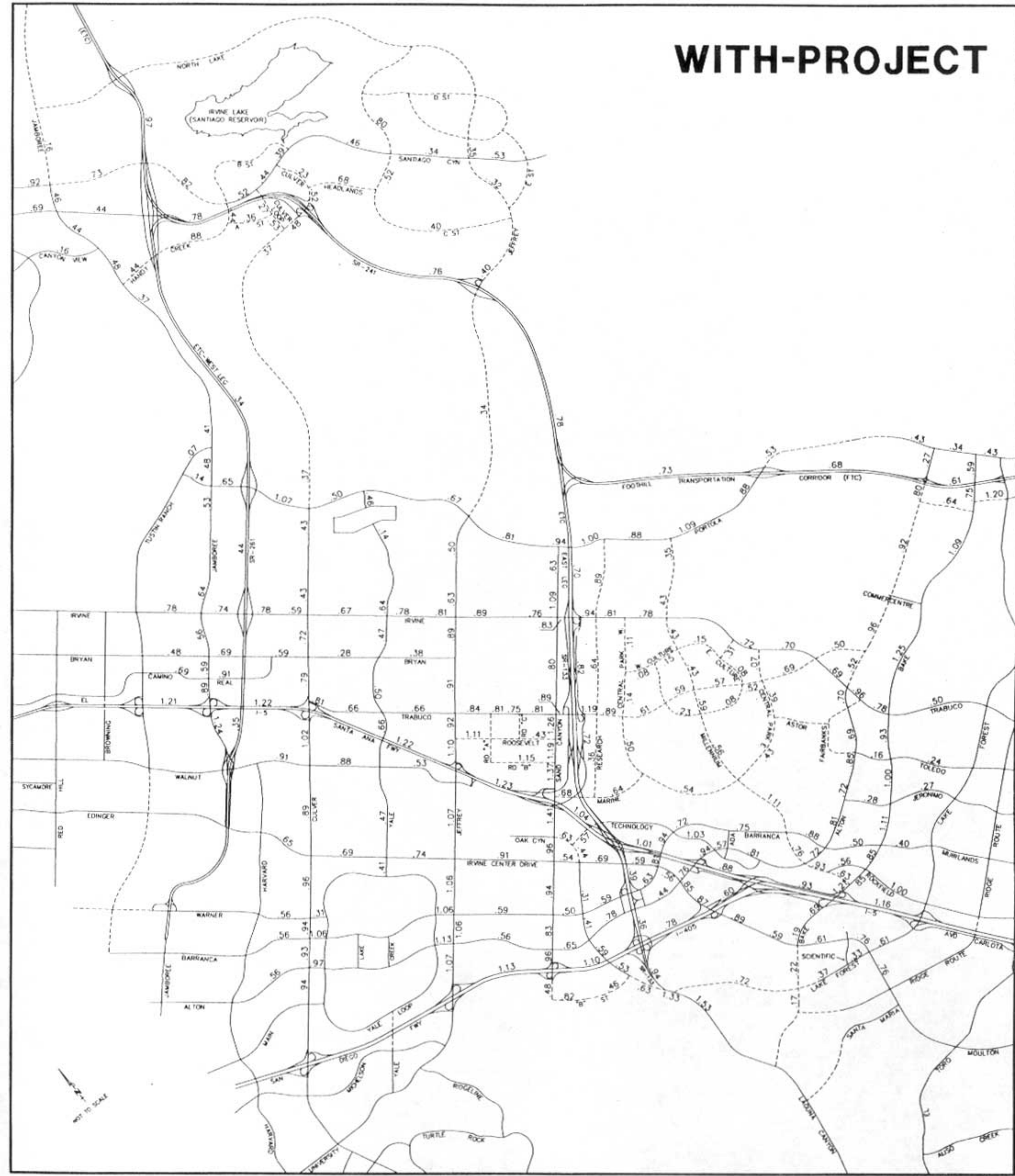




Exhibit 4-75

**POST-2040 FREEWAY
RAMP LOCATION MAP**

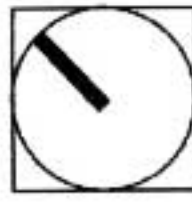
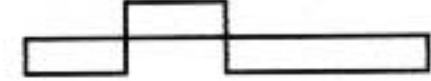


Northern Sphere Area EIR

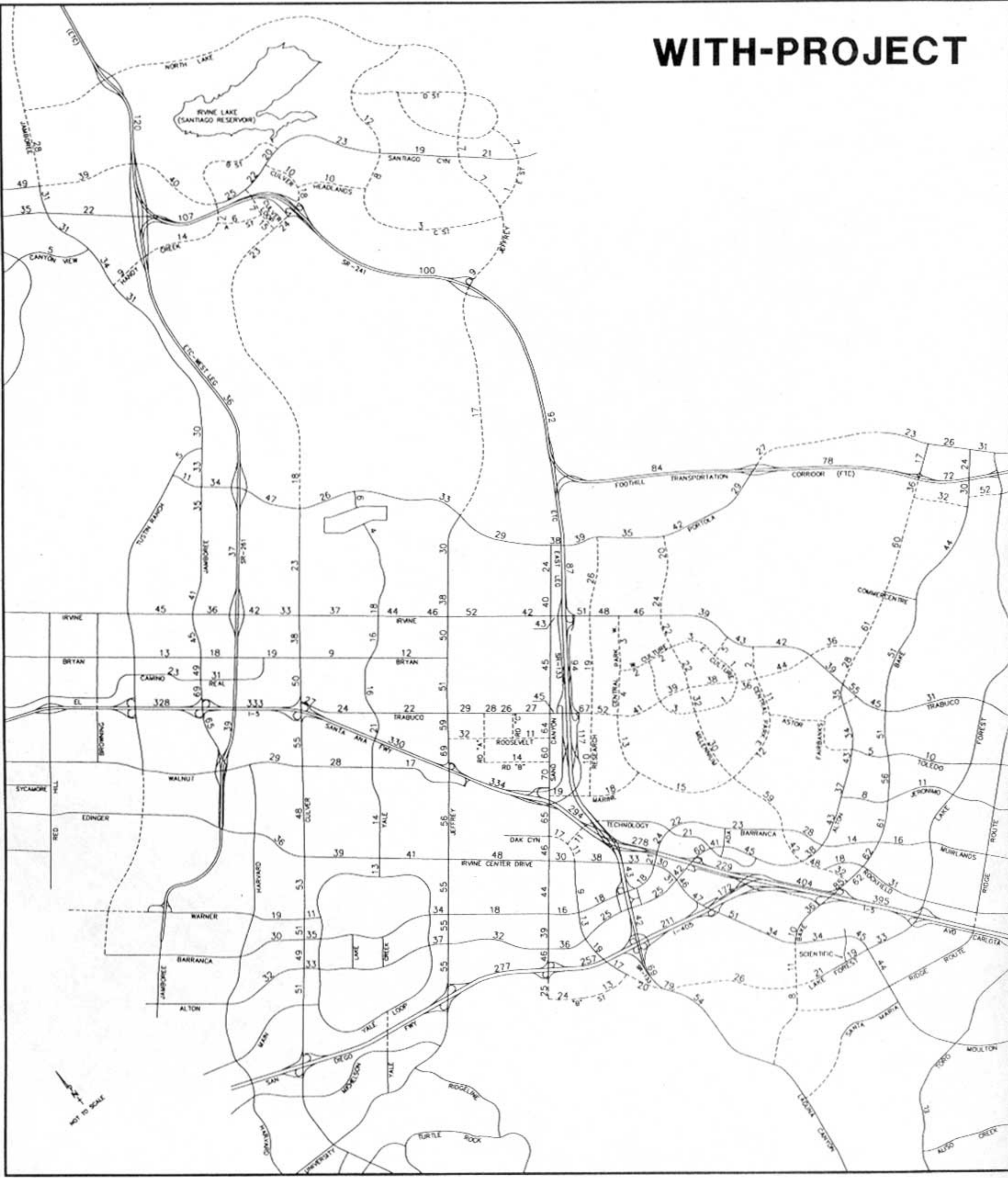


TEMPLETON PLANNING GROUP

NO SCALE



WITH-PROJECT



WITH "NOT APPROVED PROBABLE FUTURE" PROJECTS

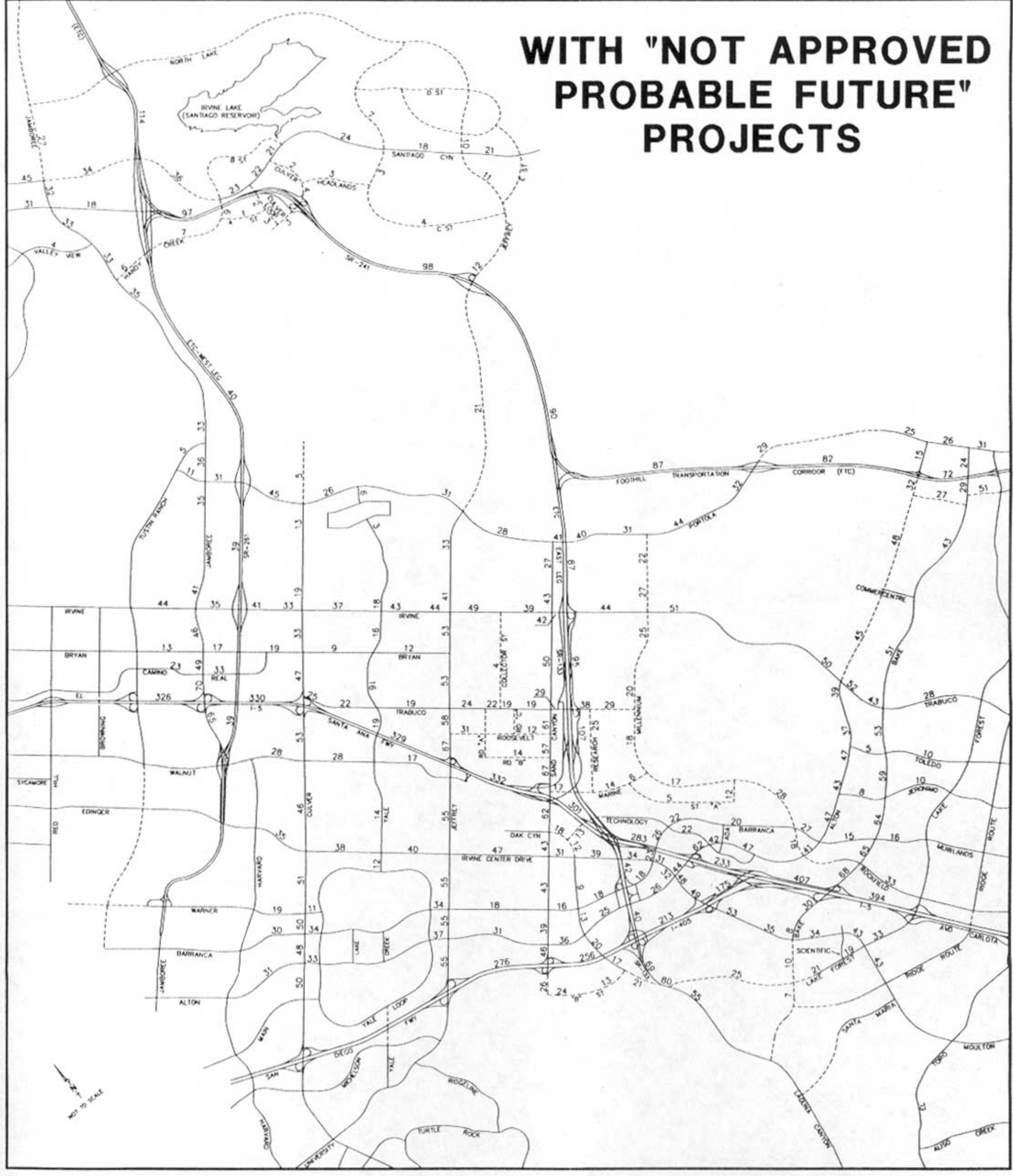
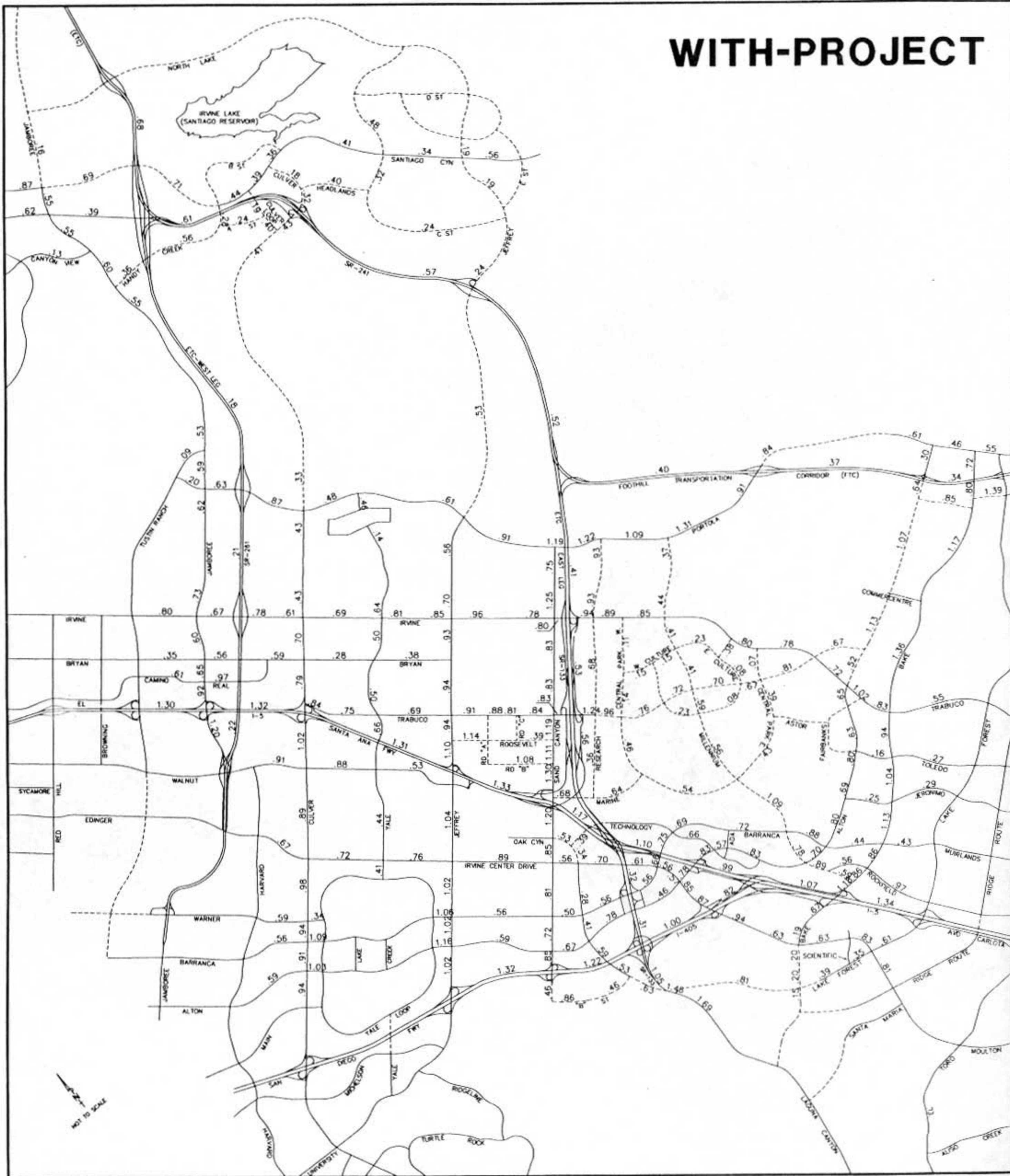


Exhibit 4-76
2025 (TOLL BUILDOUT) ADT
VOLUMES - NOT APPROVED
PROBABLE FUTURE PROJECTS

WITH-PROJECT



WITH "NOT APPROVED PROBABLE FUTURE" PROJECTS

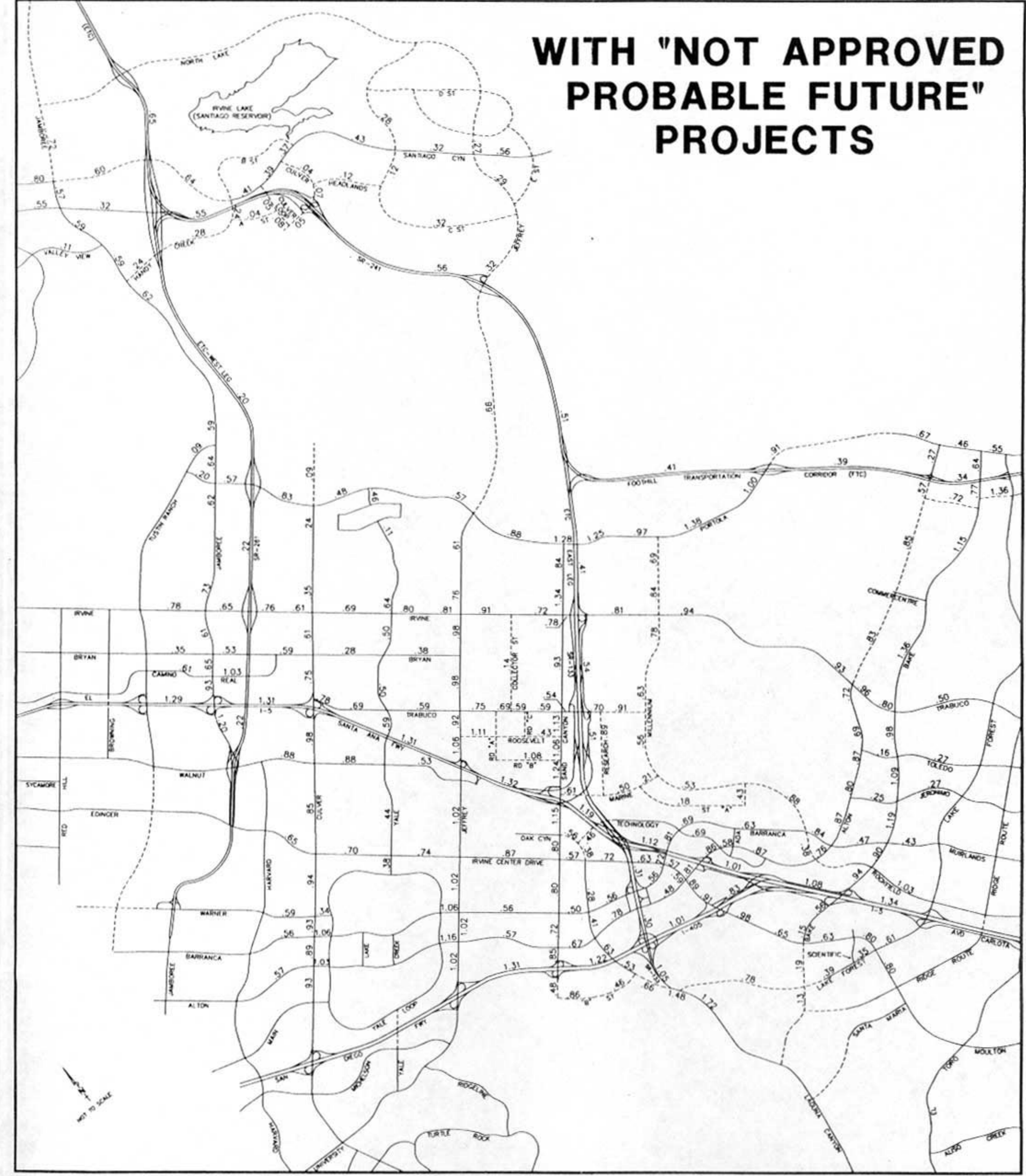
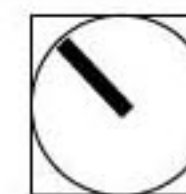
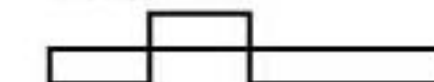
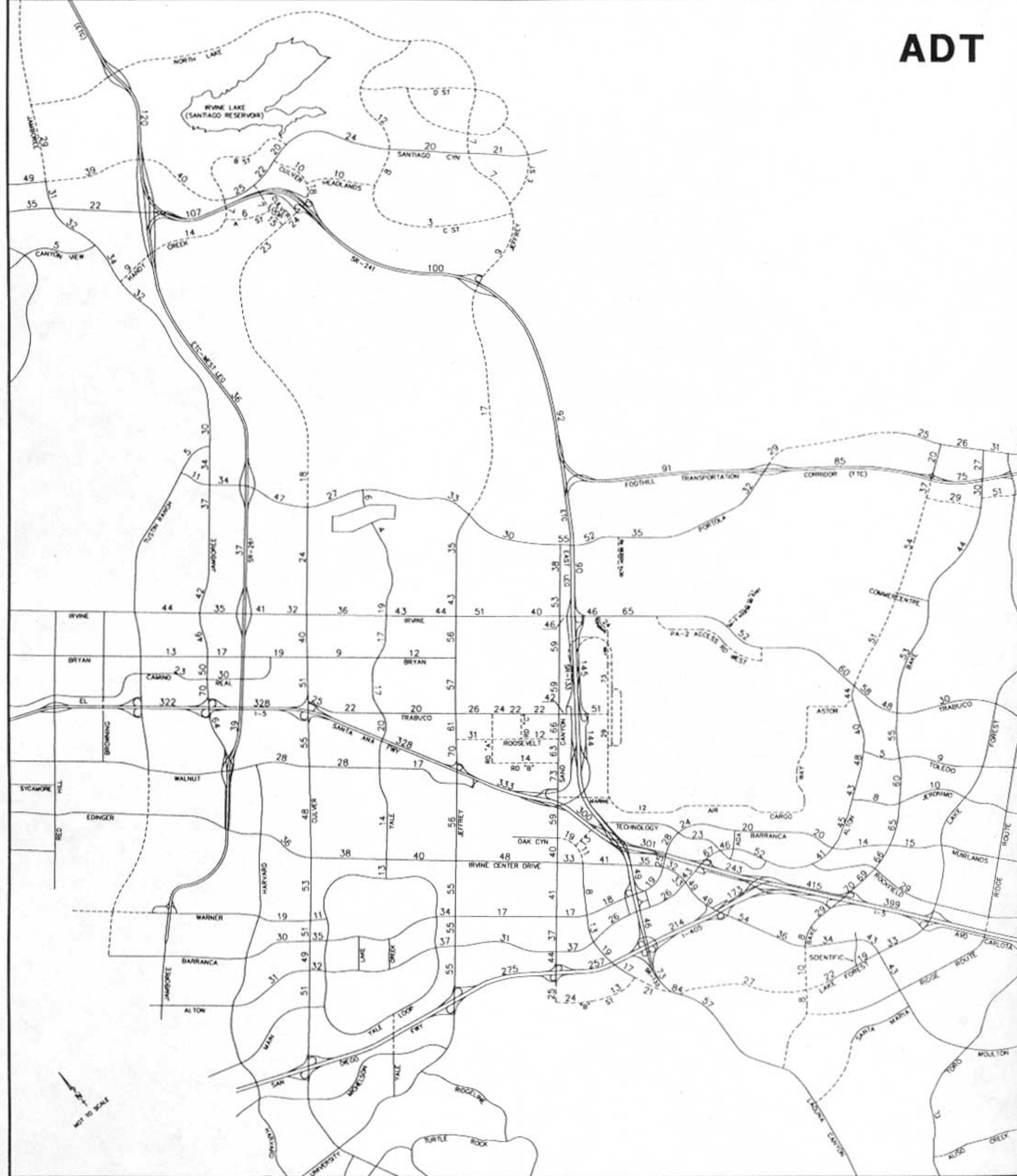


Exhibit 4-77
2025 (TOLL BUILDOUT)
V/C RATIOS - NOT APPROVED
PROBABLE FUTURE PROJECTS



ADT



V/C RATIOS

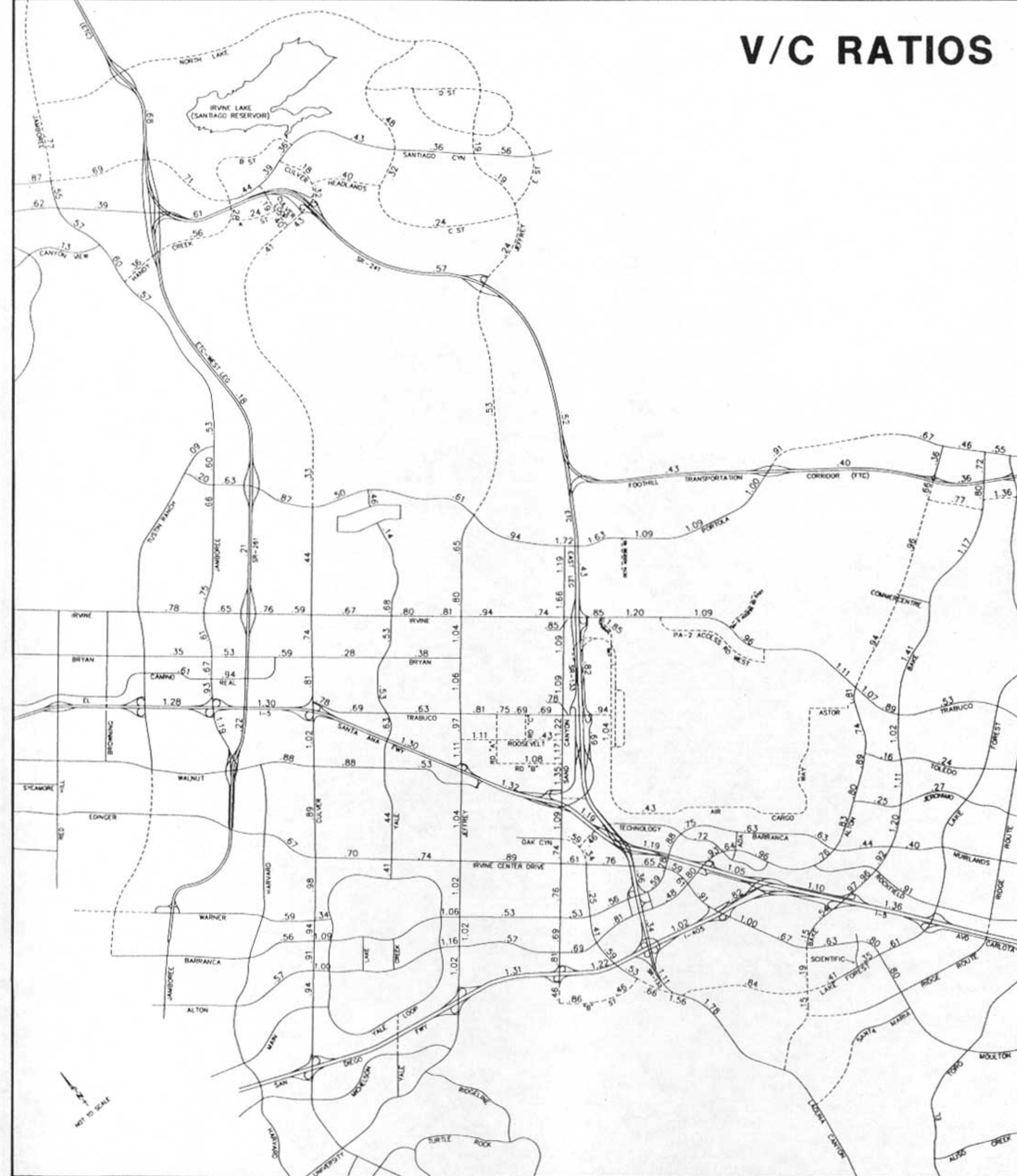
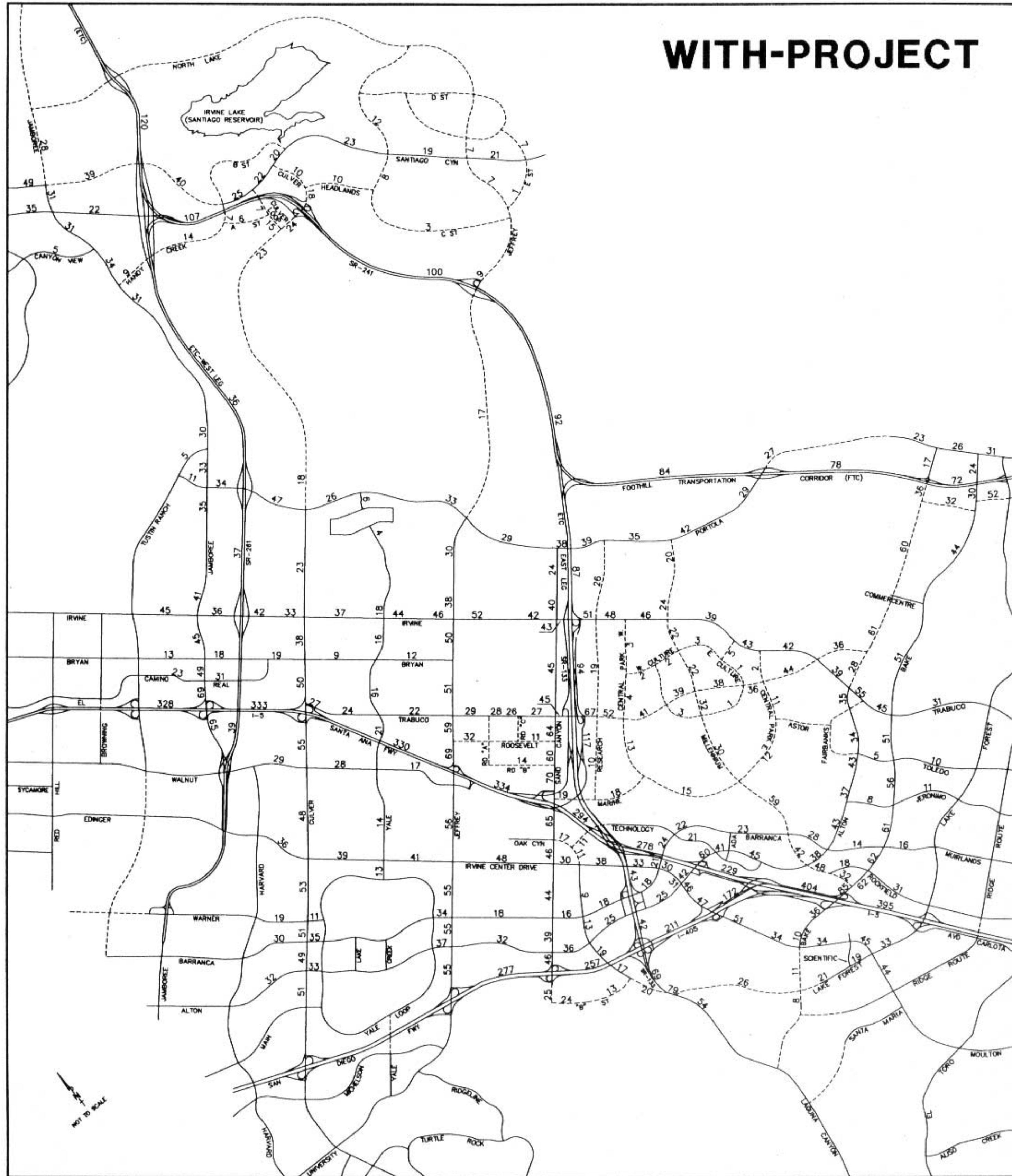


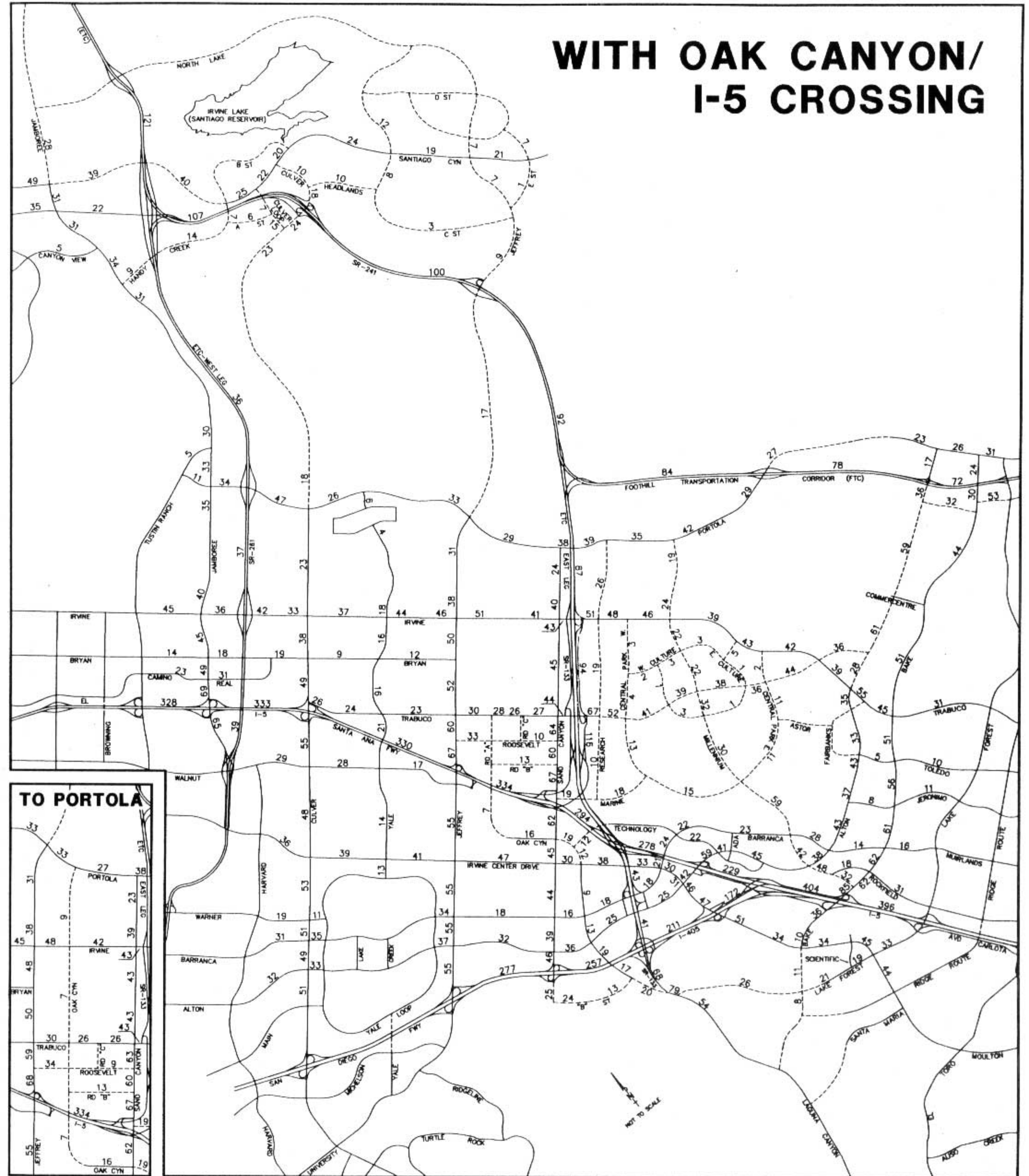
Exhibit 4-78

2025 (TOLL BUILDOUT) ADT VOLUMES - EL TORO AVIATION PLAN

WITH-PROJECT



WITH OAK CANYON/ I-5 CROSSING



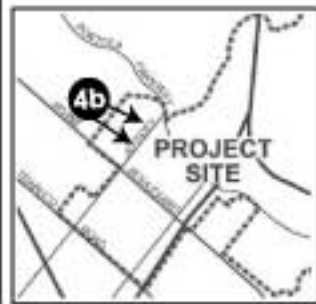


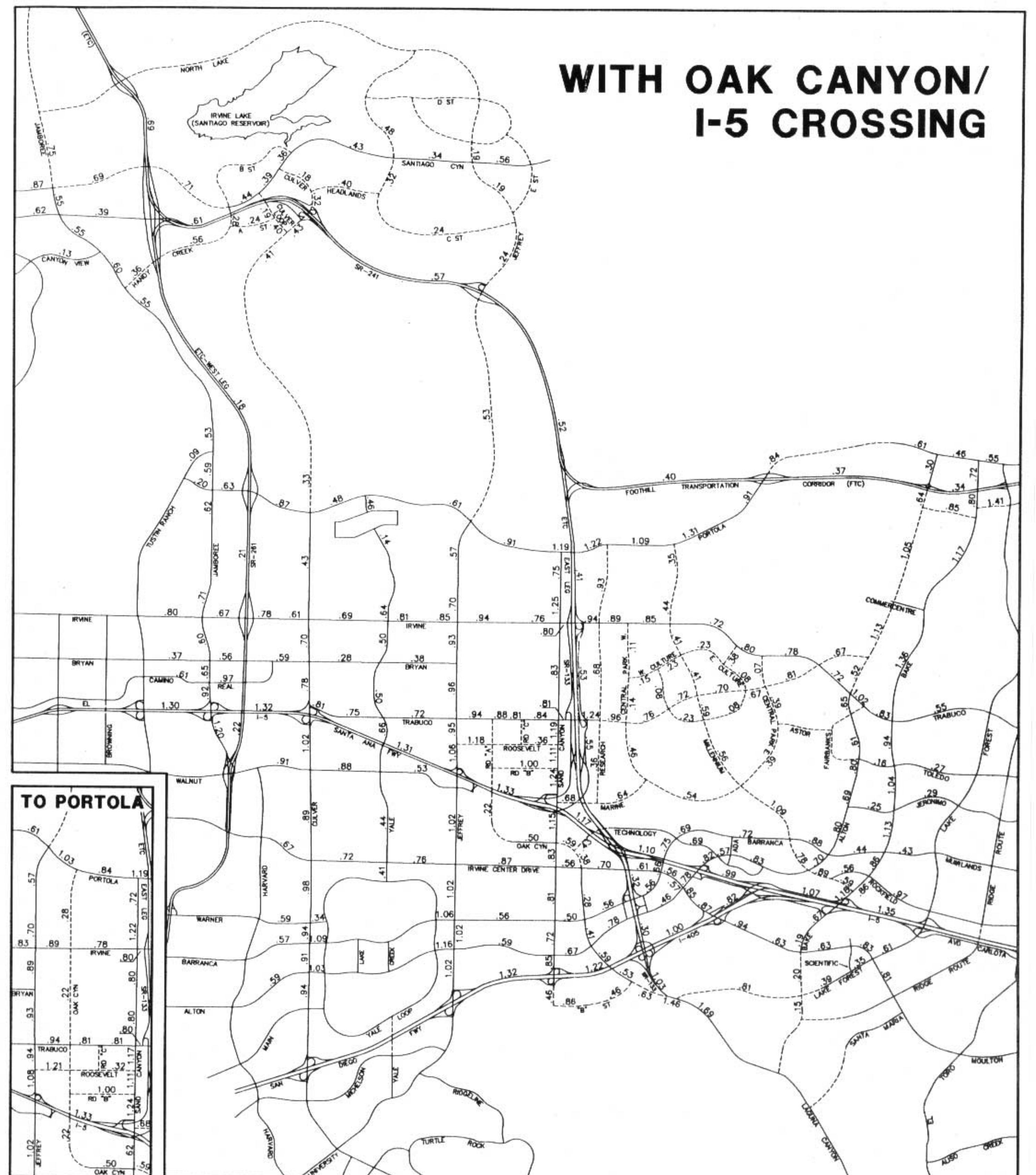
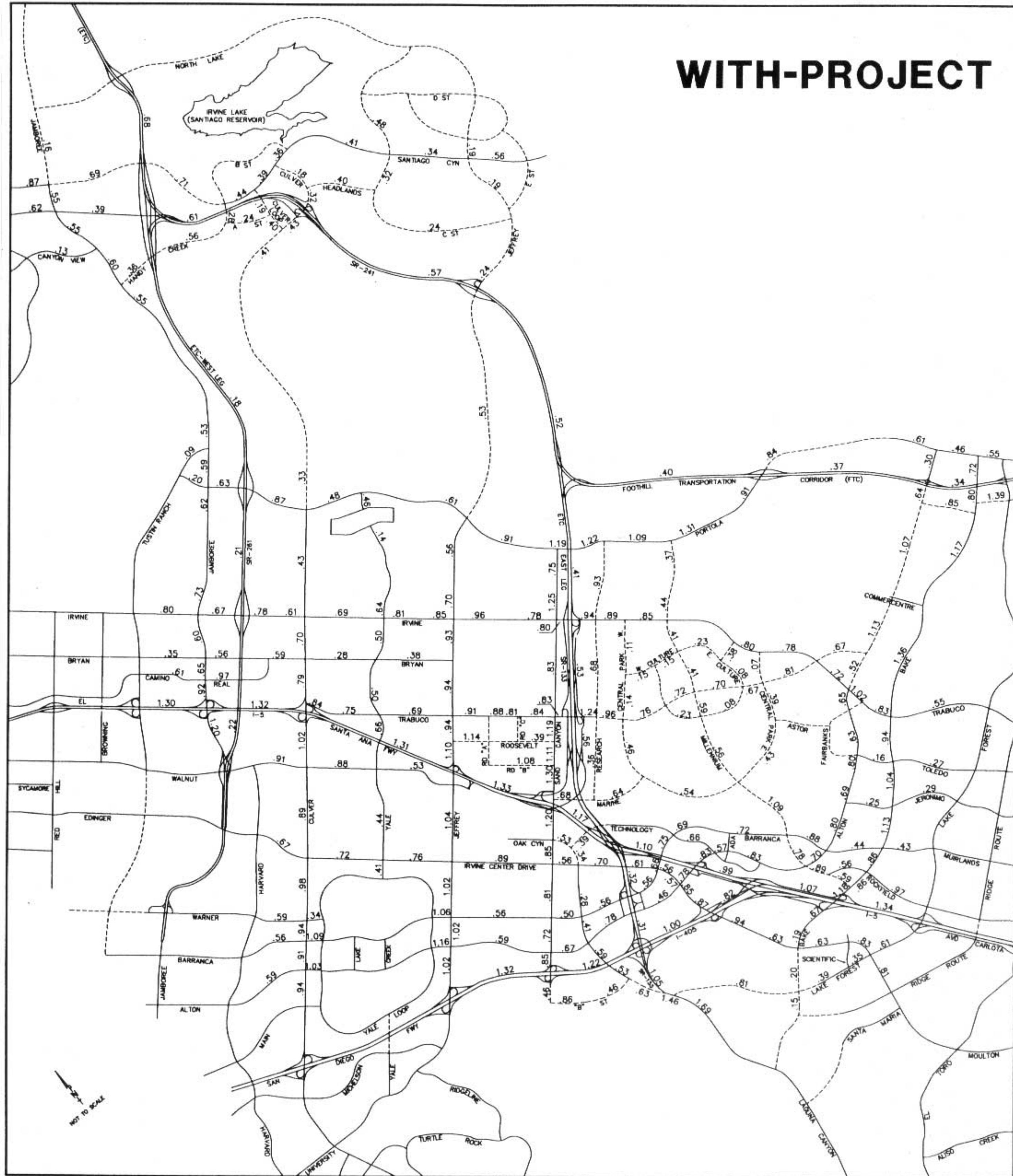
Photograph 4b:
View looking east from
the existing terminus
of Hicks Canyon Road,
with a thru connection
to Planning Area 5B.

Existing



Proposed

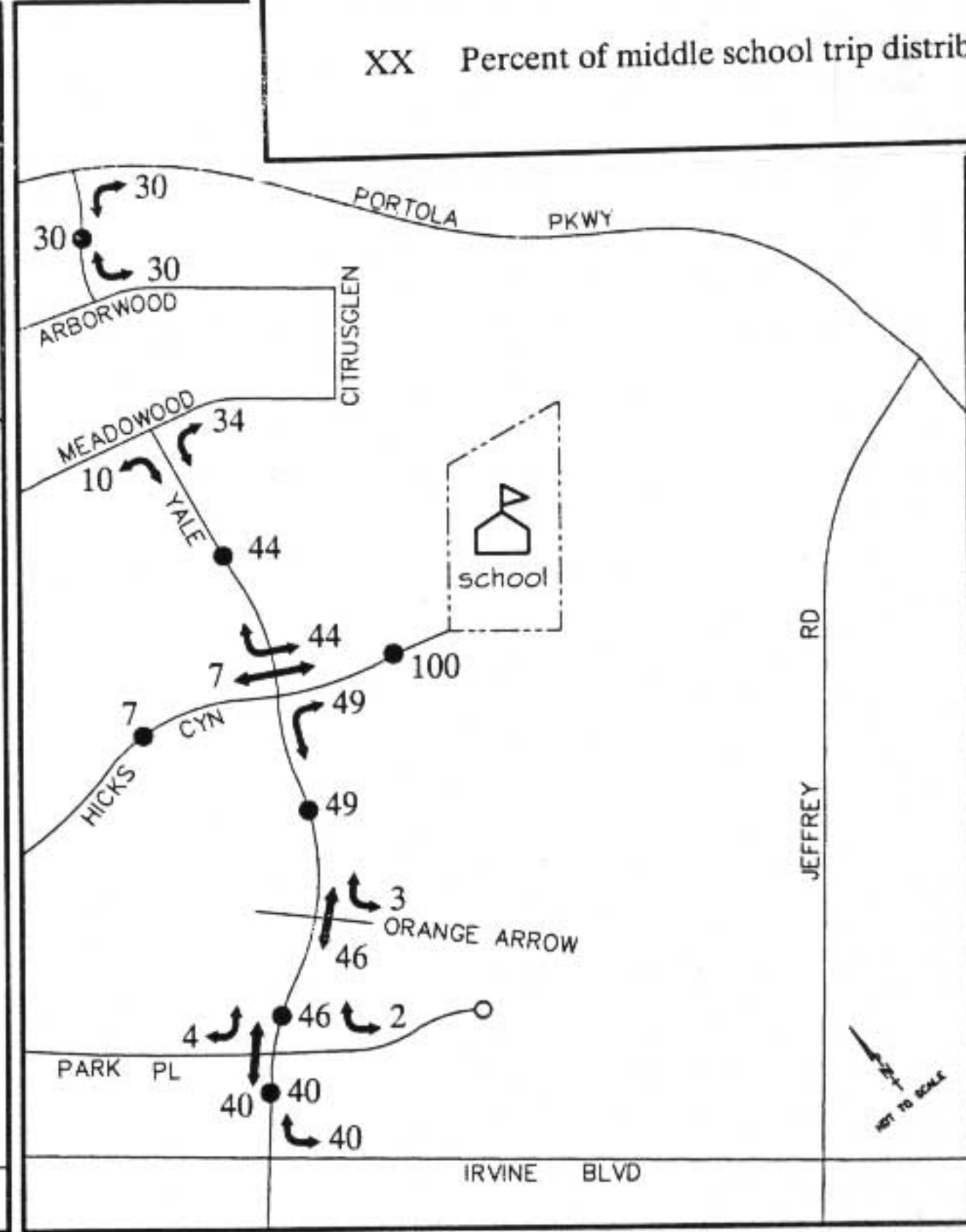
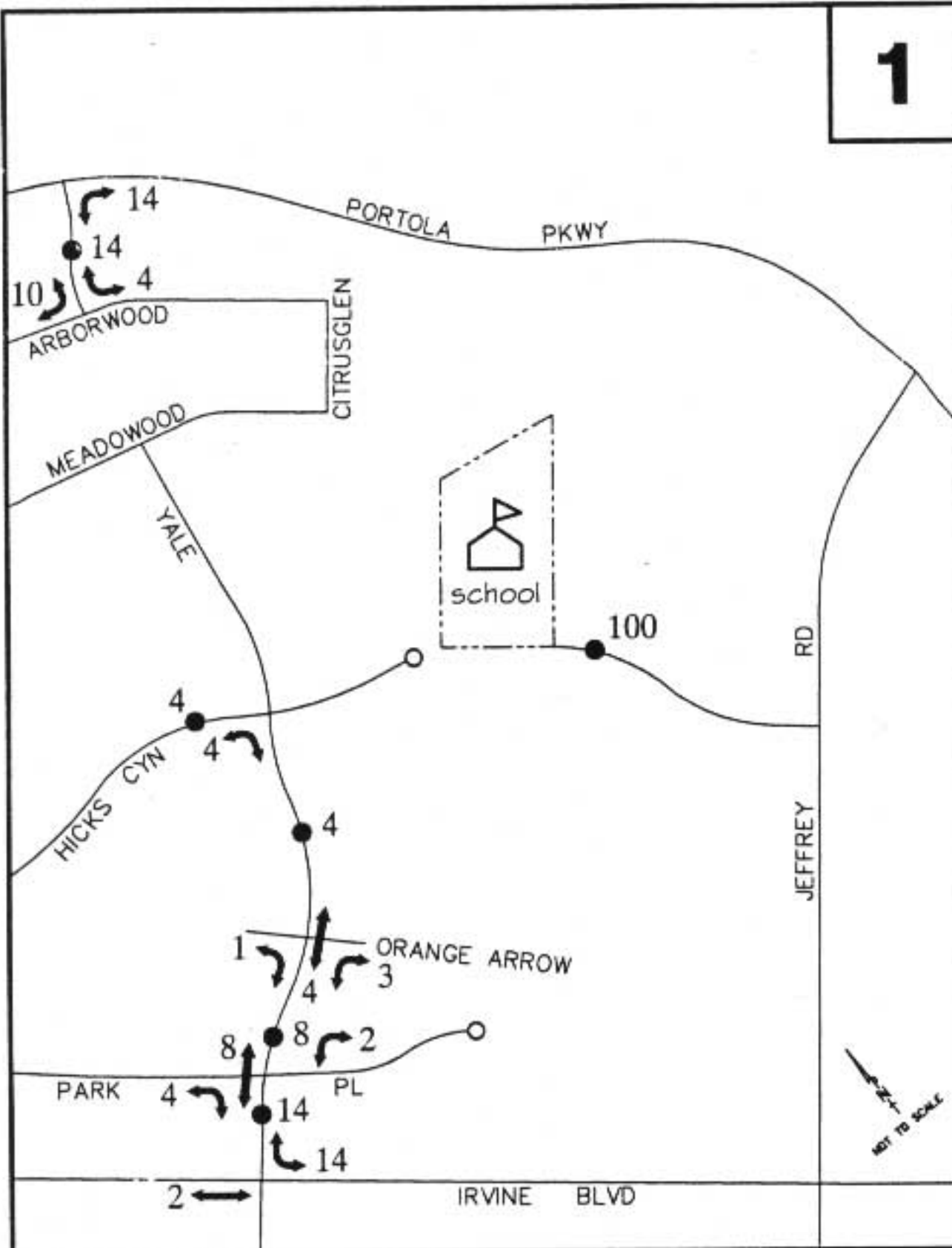




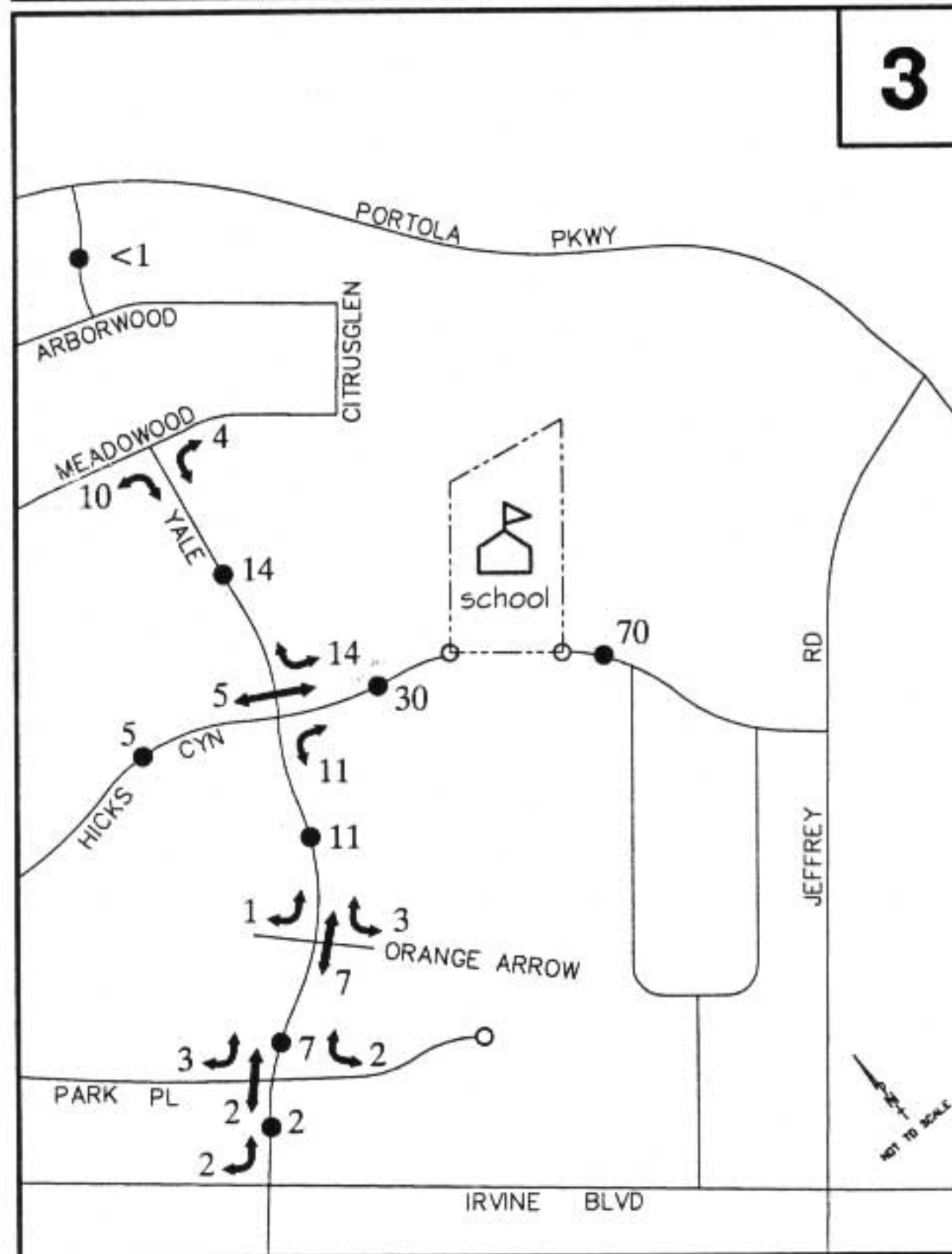
Legend

XX Percent of middle school trip distribution

1



3



4

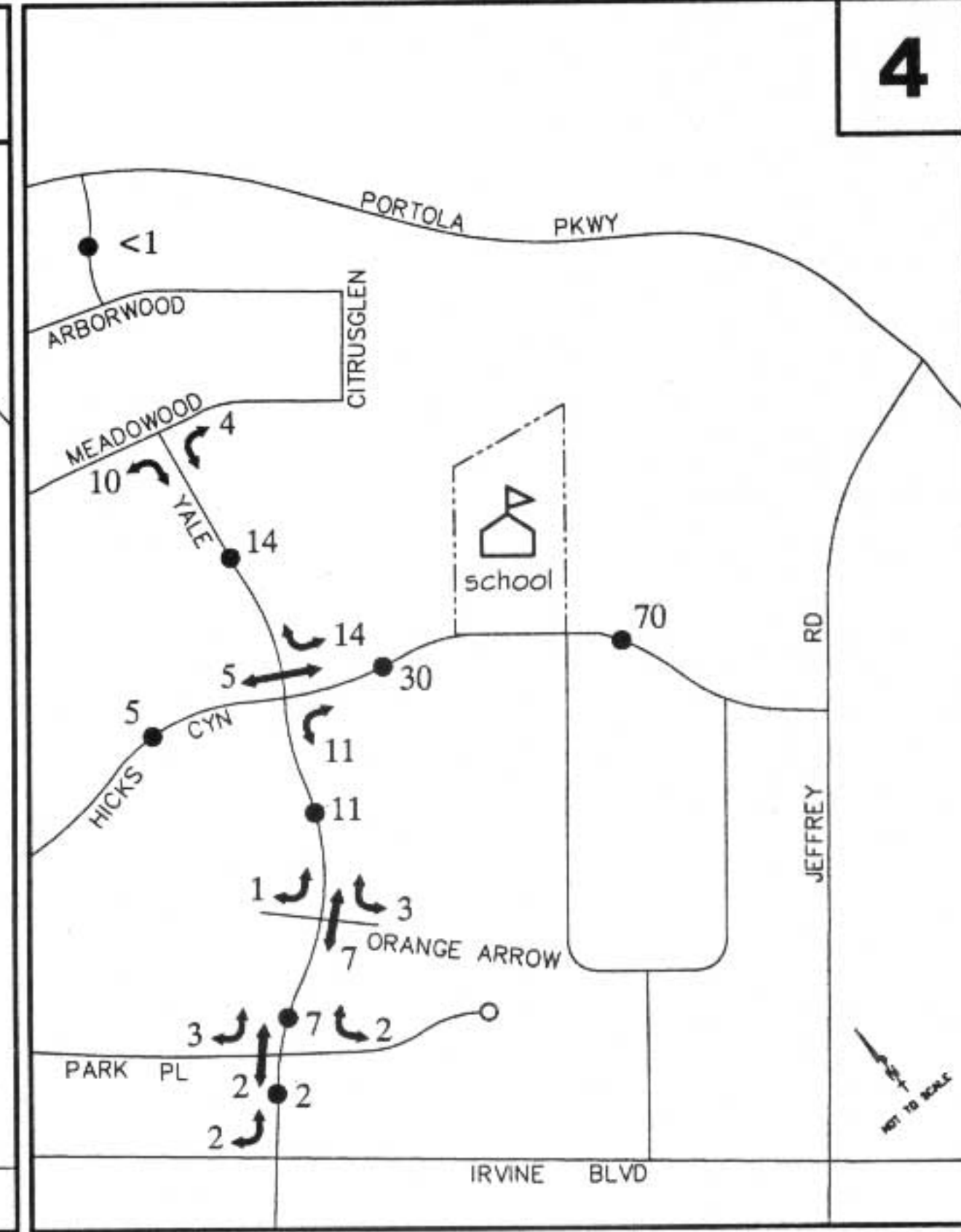


Exhibit 4-81

MIDDLE SCHOOL ACCESS ALTERNATIVES

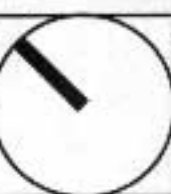
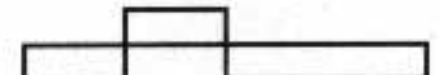


Northern Sphere Area EIR



TEMPLETON PLANNING GROUP

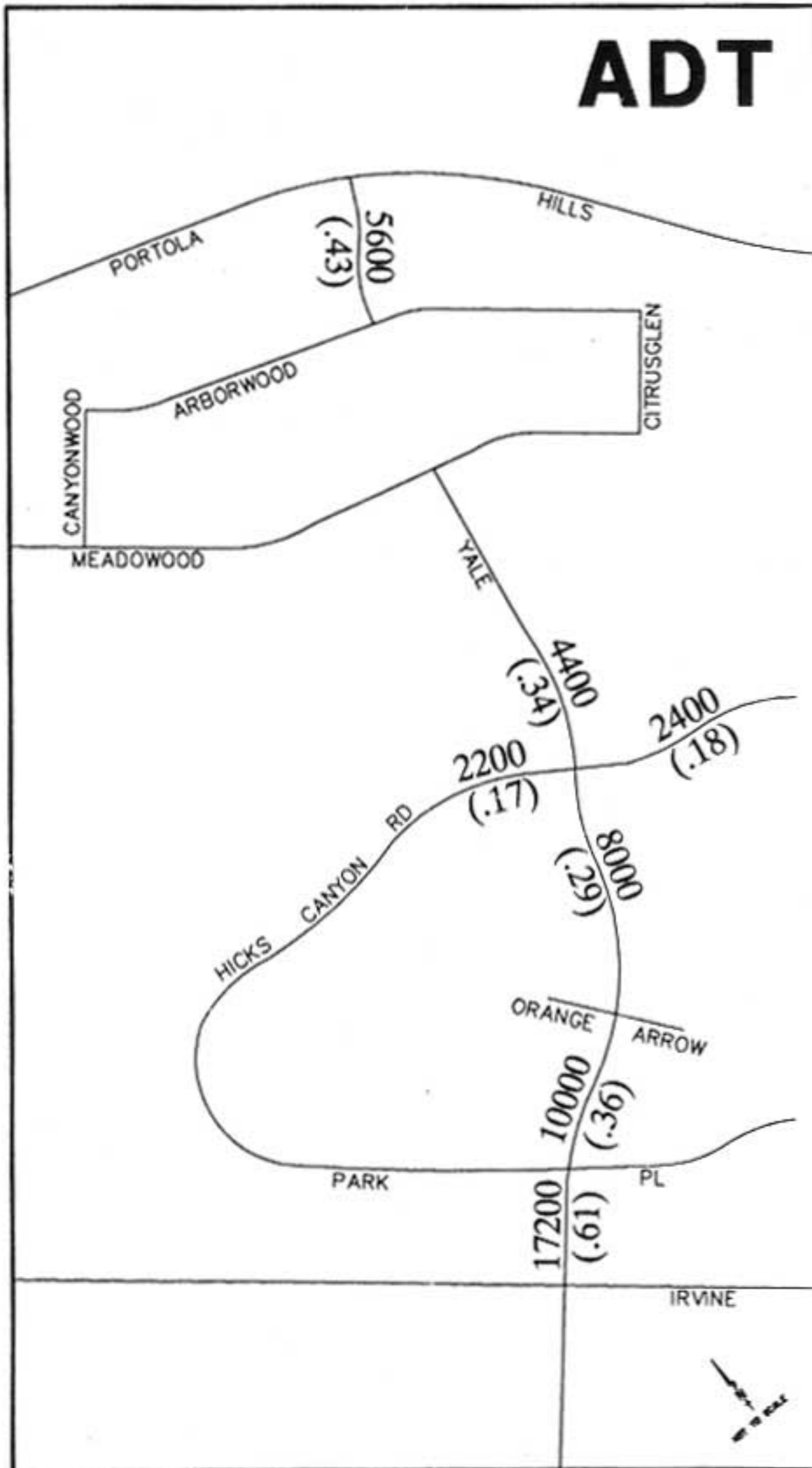
NO SCALE



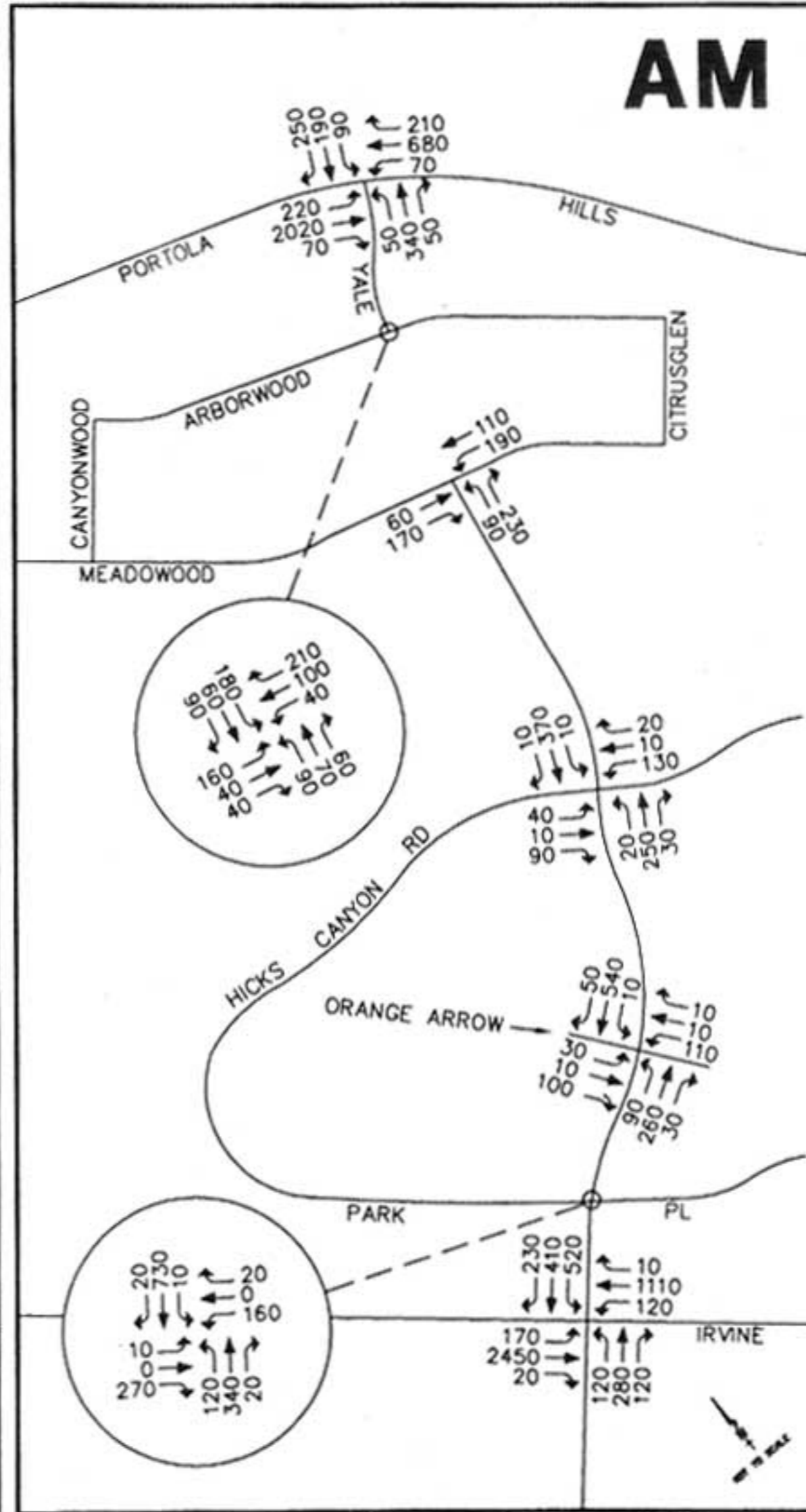
Legend

$\frac{XX}{(YY)}$ ADT Volume
V/C ratio

ADT



AM



PM

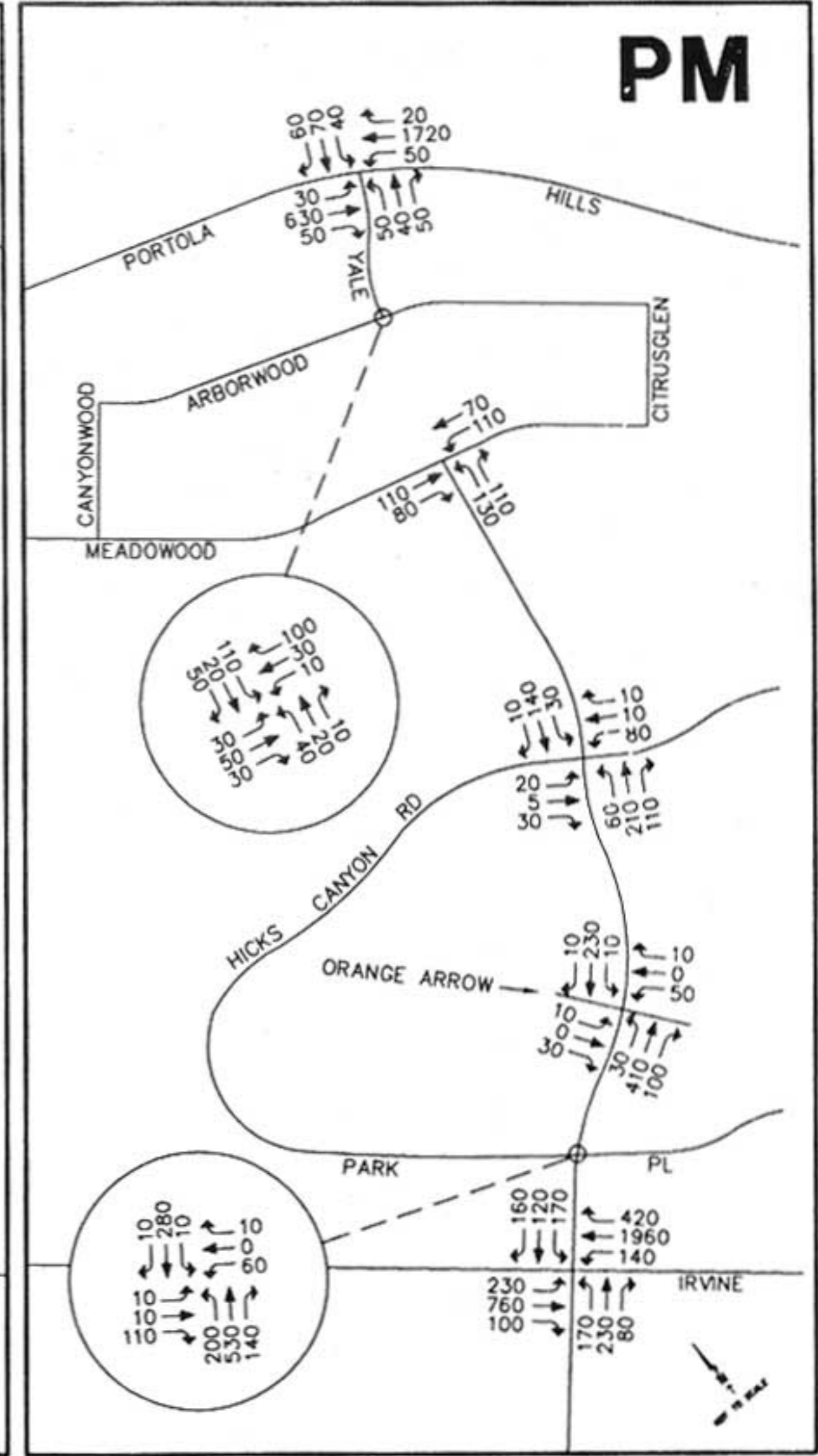
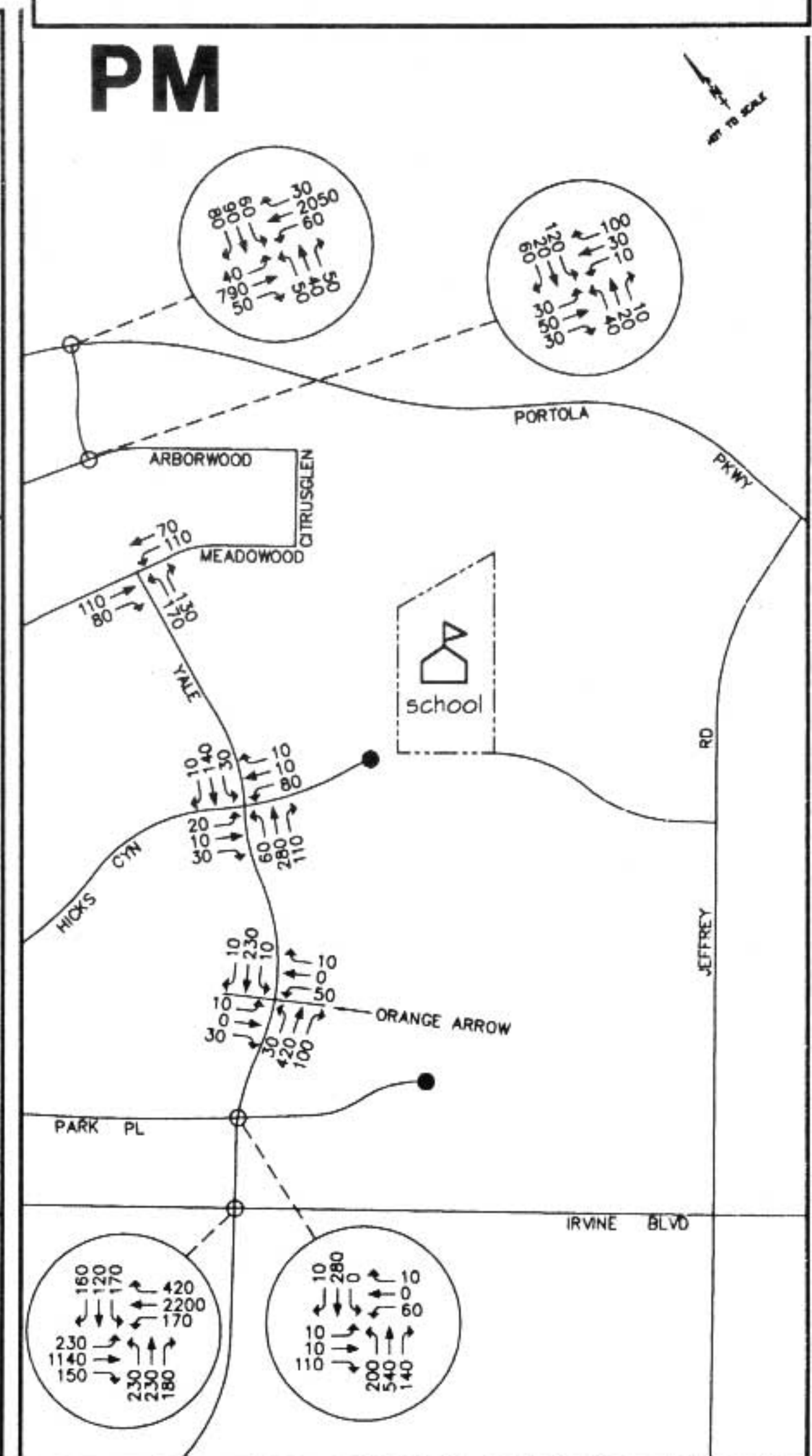
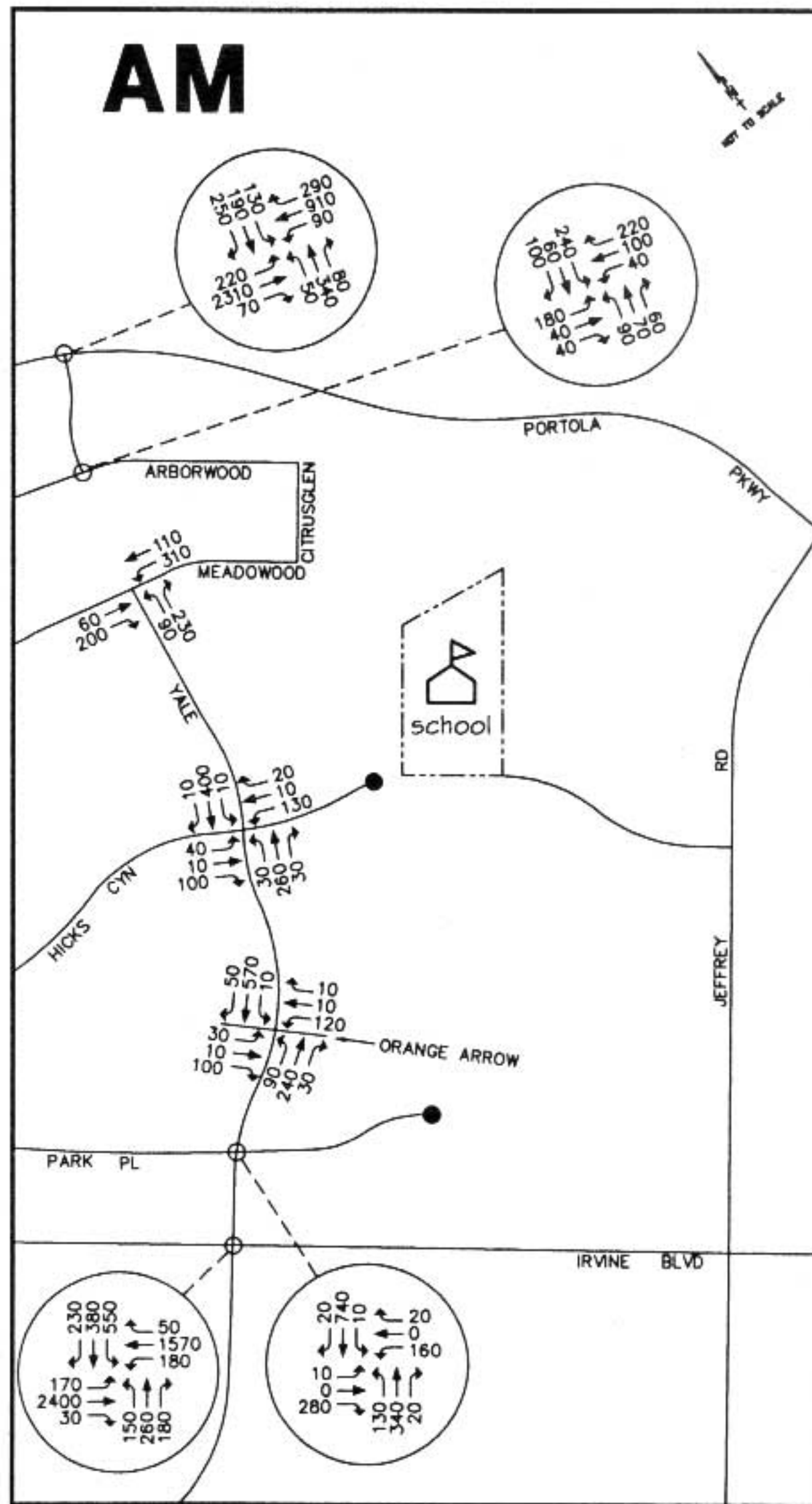
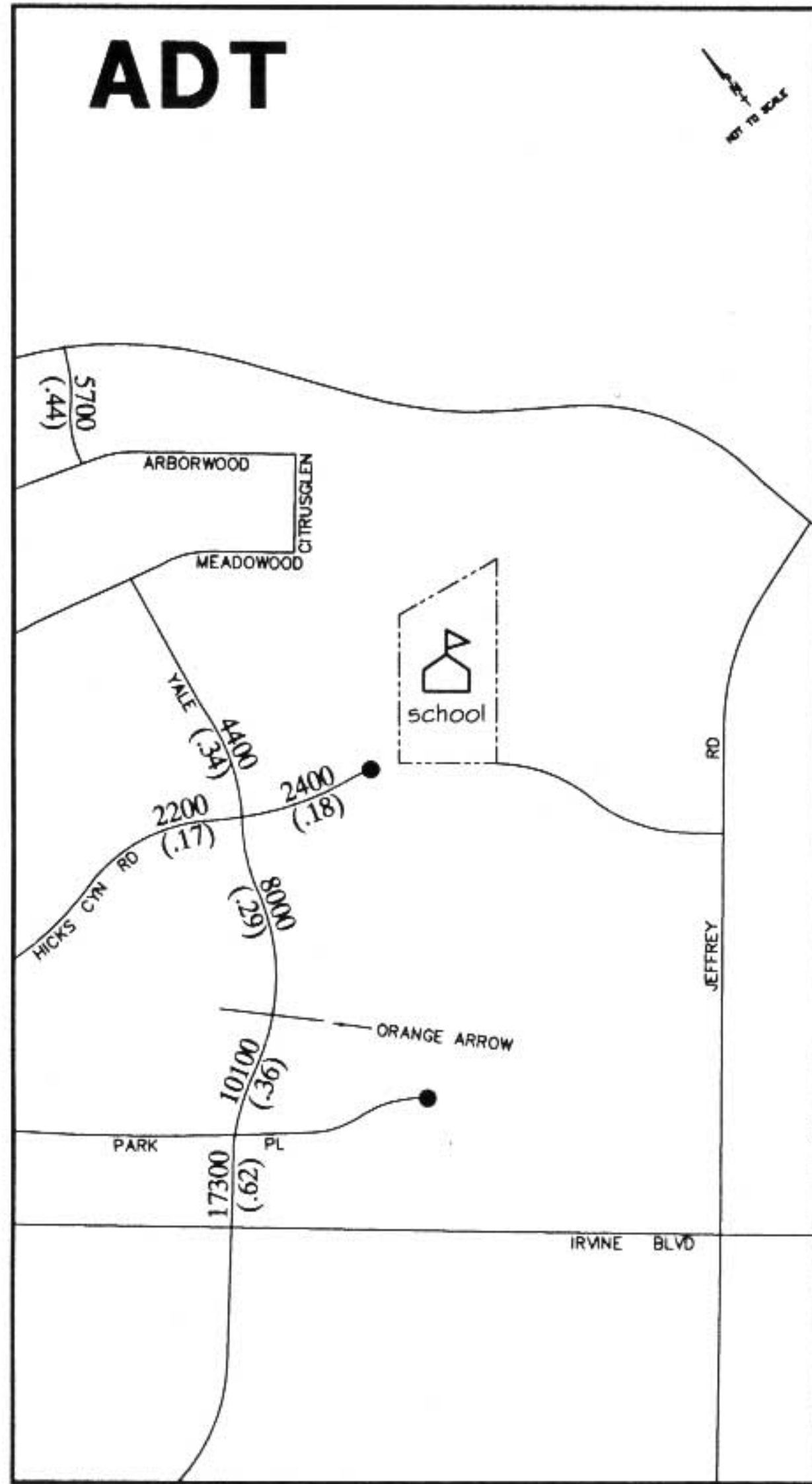


Exhibit 4-83
2025 BUILDOUT TOLL BASELINE (NO PROJECT) ADT AND PEAK HOUR VOLUMES - NO HICKS CANYON ROAD CONNECTION

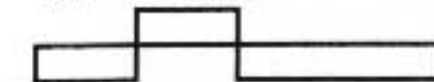


Legend

$\frac{XX}{YY}$ ADT Volume
V/C ratio

Exhibit 4-84

2025 BUILDOUT TOLL BASELINE (WITH PROJECT) ADT AND PEAK HOUR VOLUMES - MIDDLE SCHOOL ACCESS ALTERNATIVE 1



Legend

$\frac{XX}{(YY)}$ ADT Volume
V/C ratio

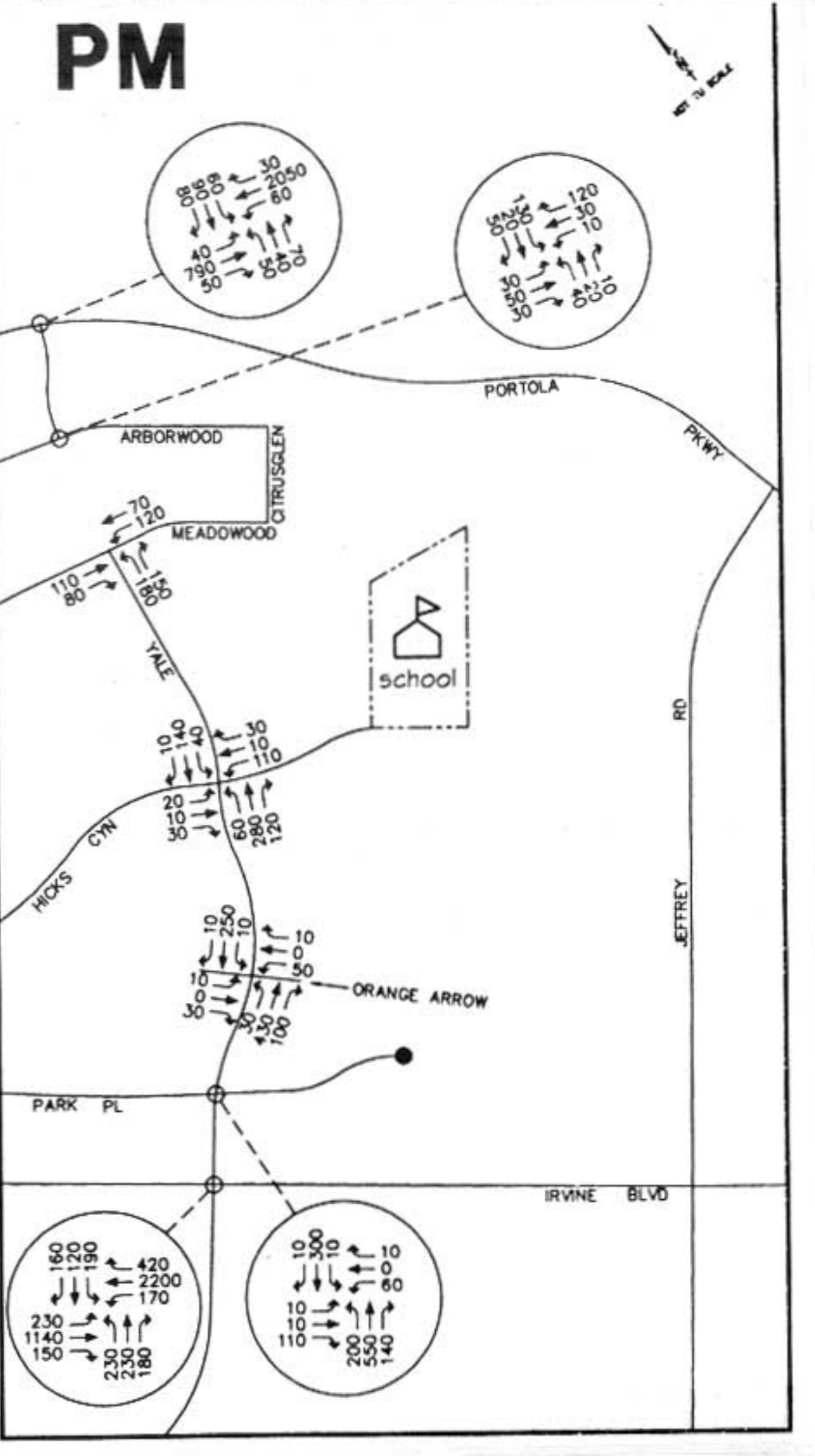
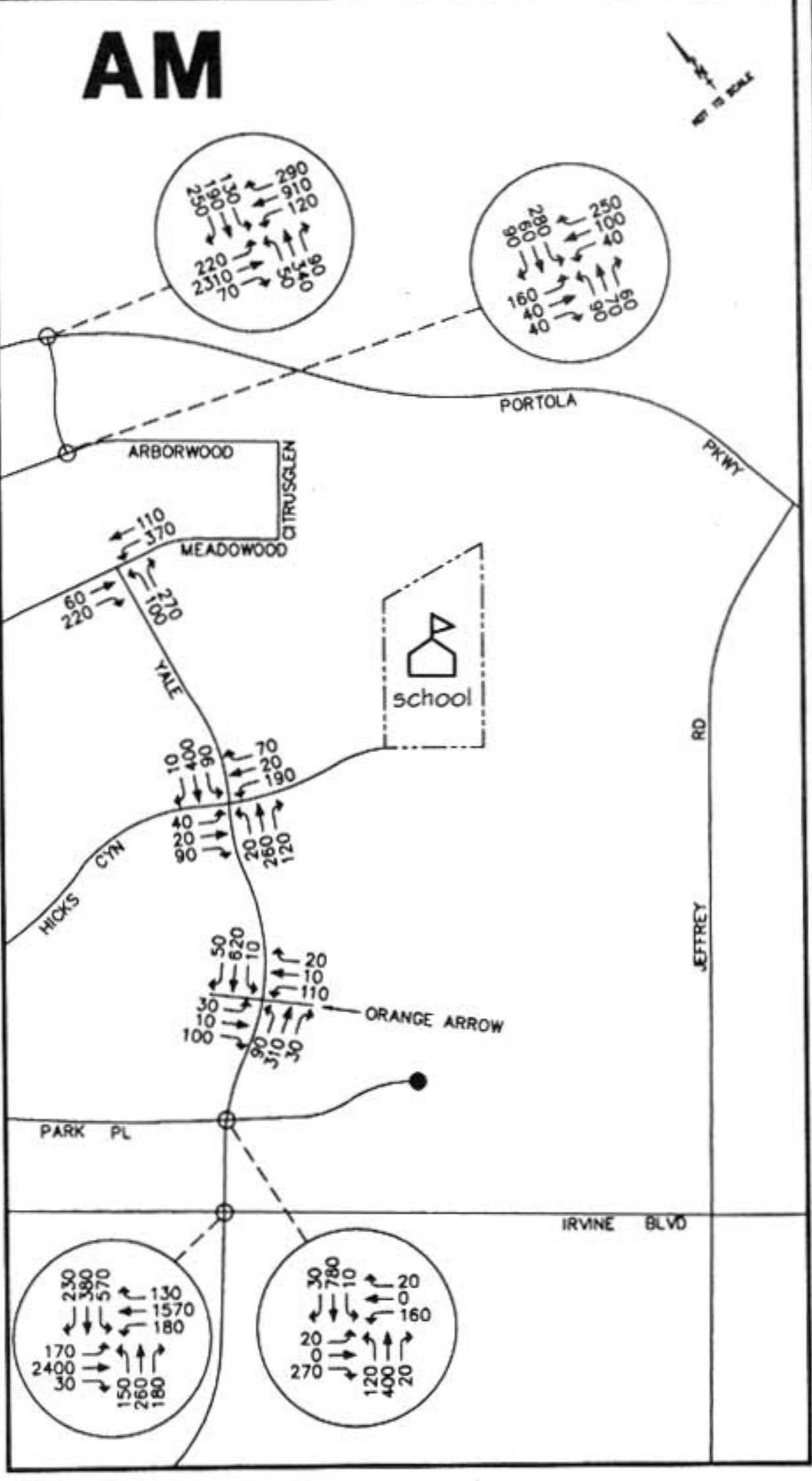
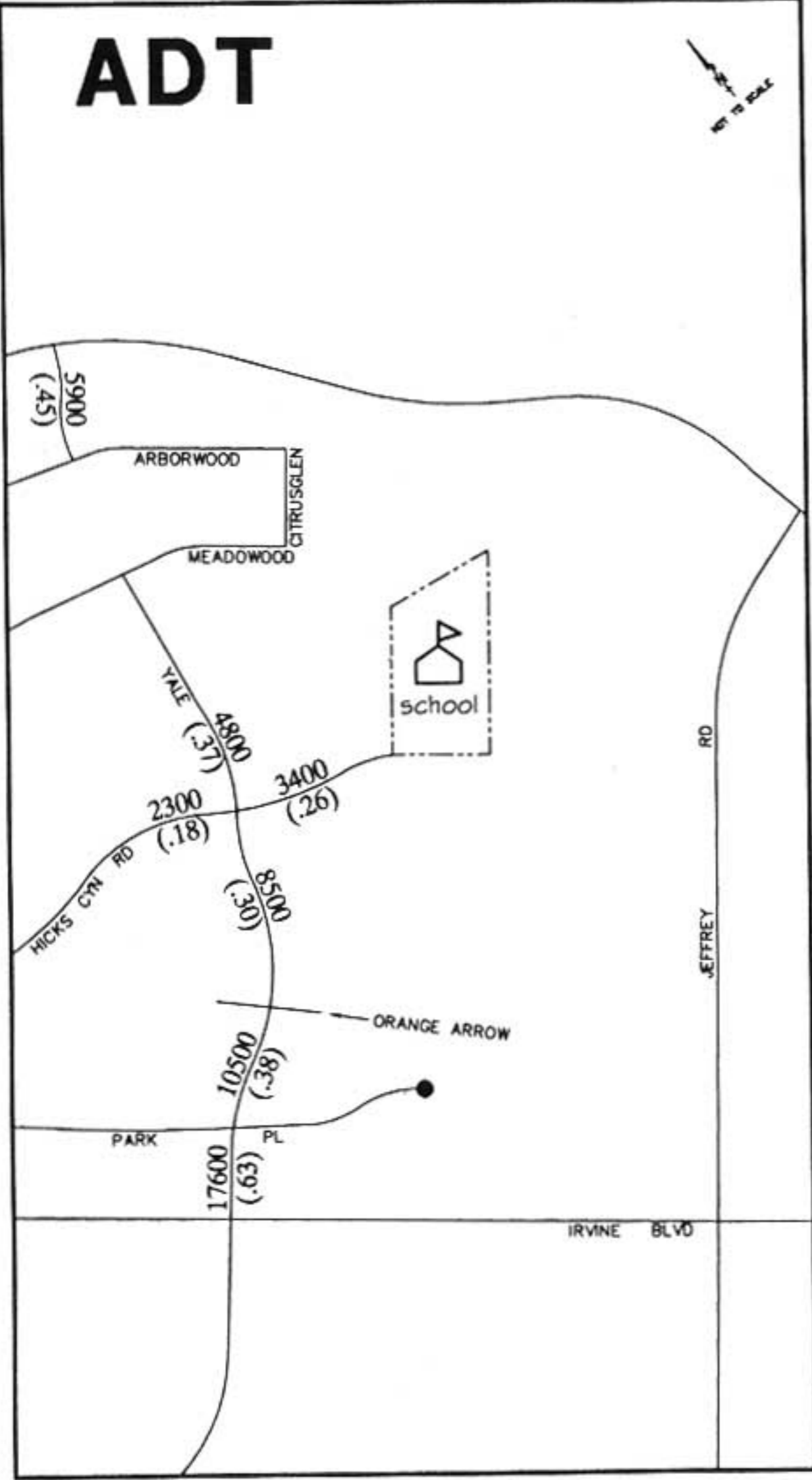


Exhibit 4-85
2025 BUILDOUT TOLL BASELINE (WITH PROJECT) ADT AND PEAK HOUR VOLUMES - MIDDLE SCHOOL ACCESS ALTERNATIVE 2

Legend

$\frac{XX}{(YY)}$ ADT Volume
V/C ratio

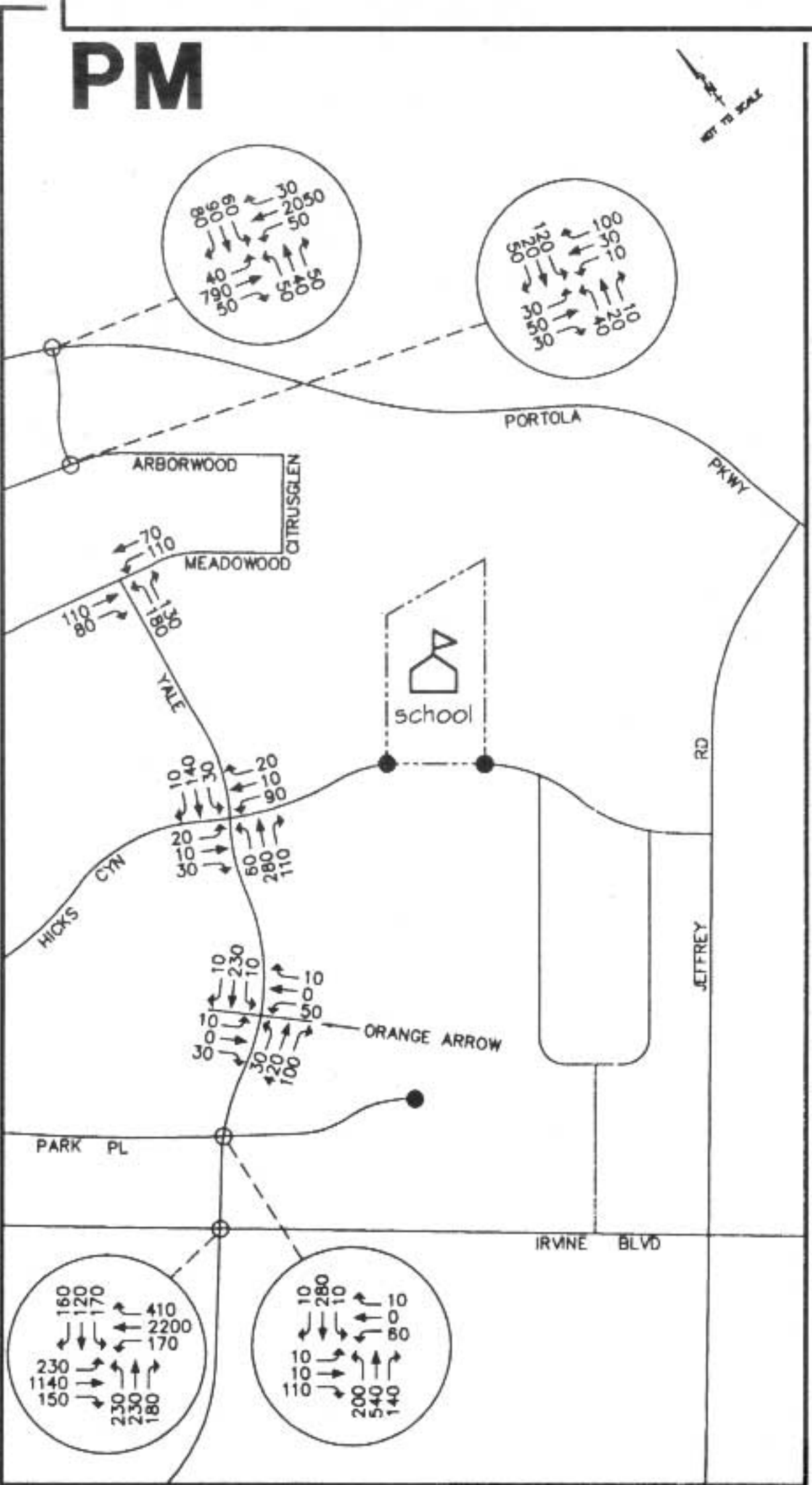
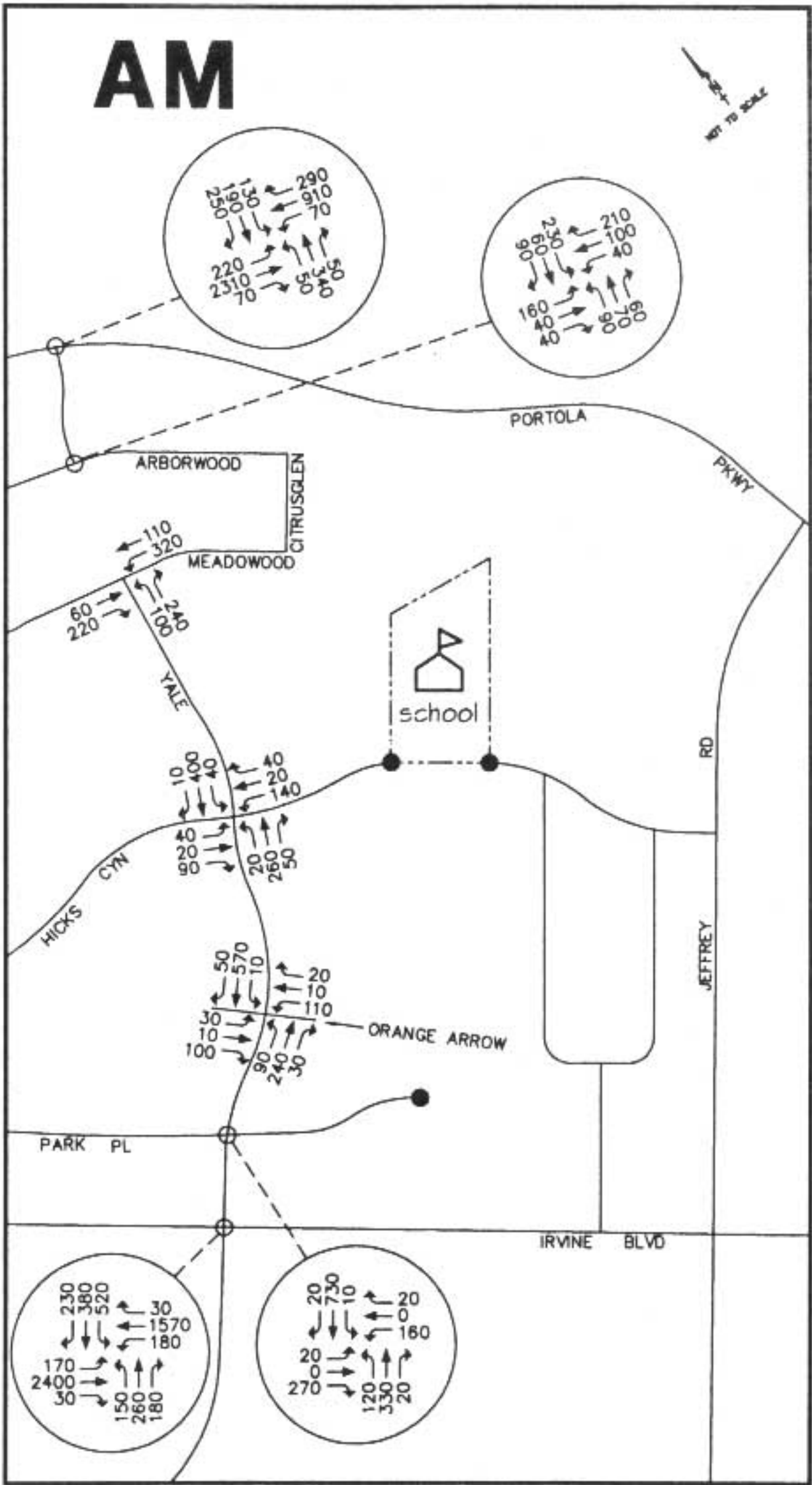
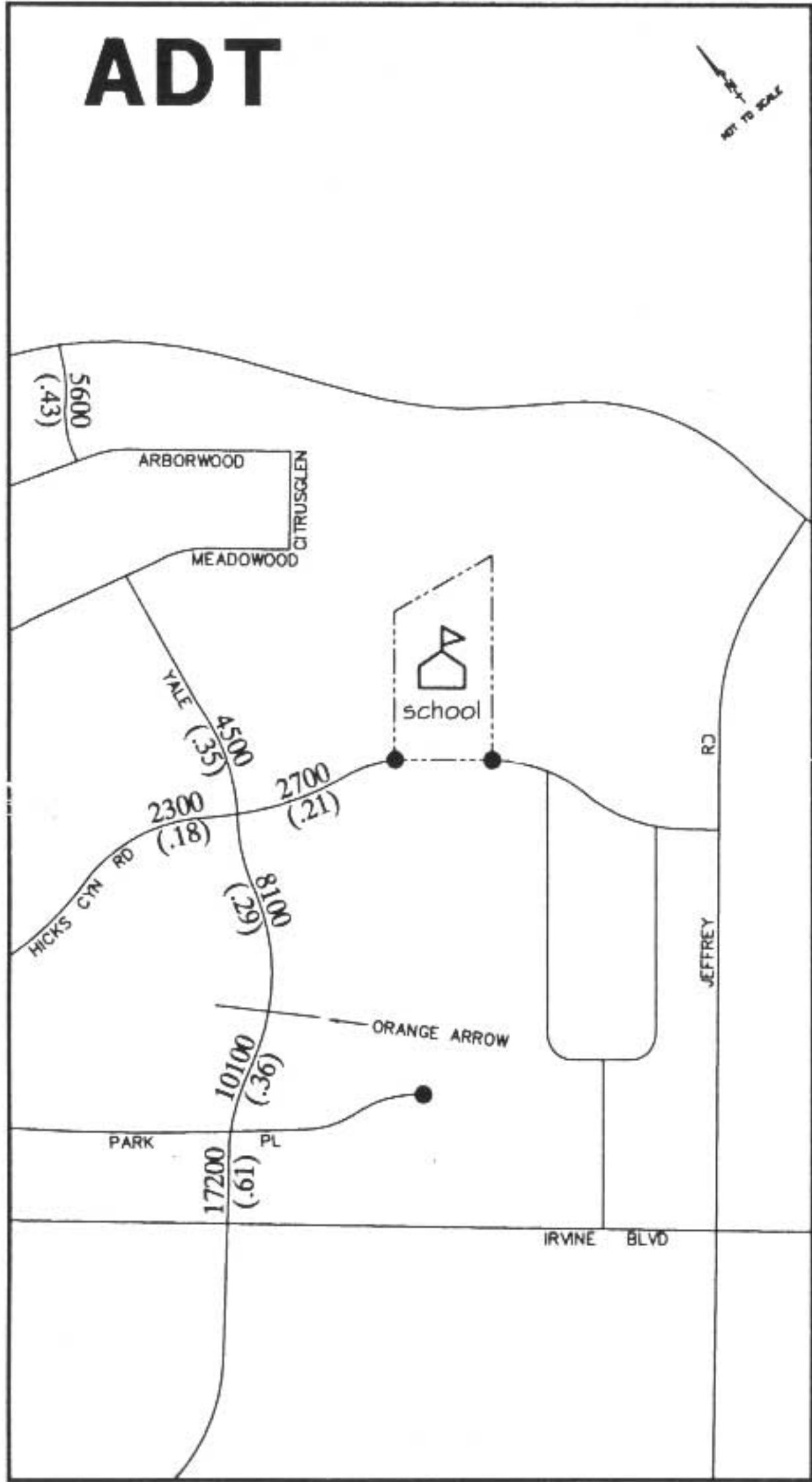


Exhibit 4-86

2025 BUILDOUT TOLL BASELINE (WITH PROJECT) ADT AND PEAK HOUR VOLUMES - MIDDLE SCHOOL ACCESS ALTERNATIVE 3

Legend

$\frac{XX}{(YY)}$ ADT Volume
V/C ratio

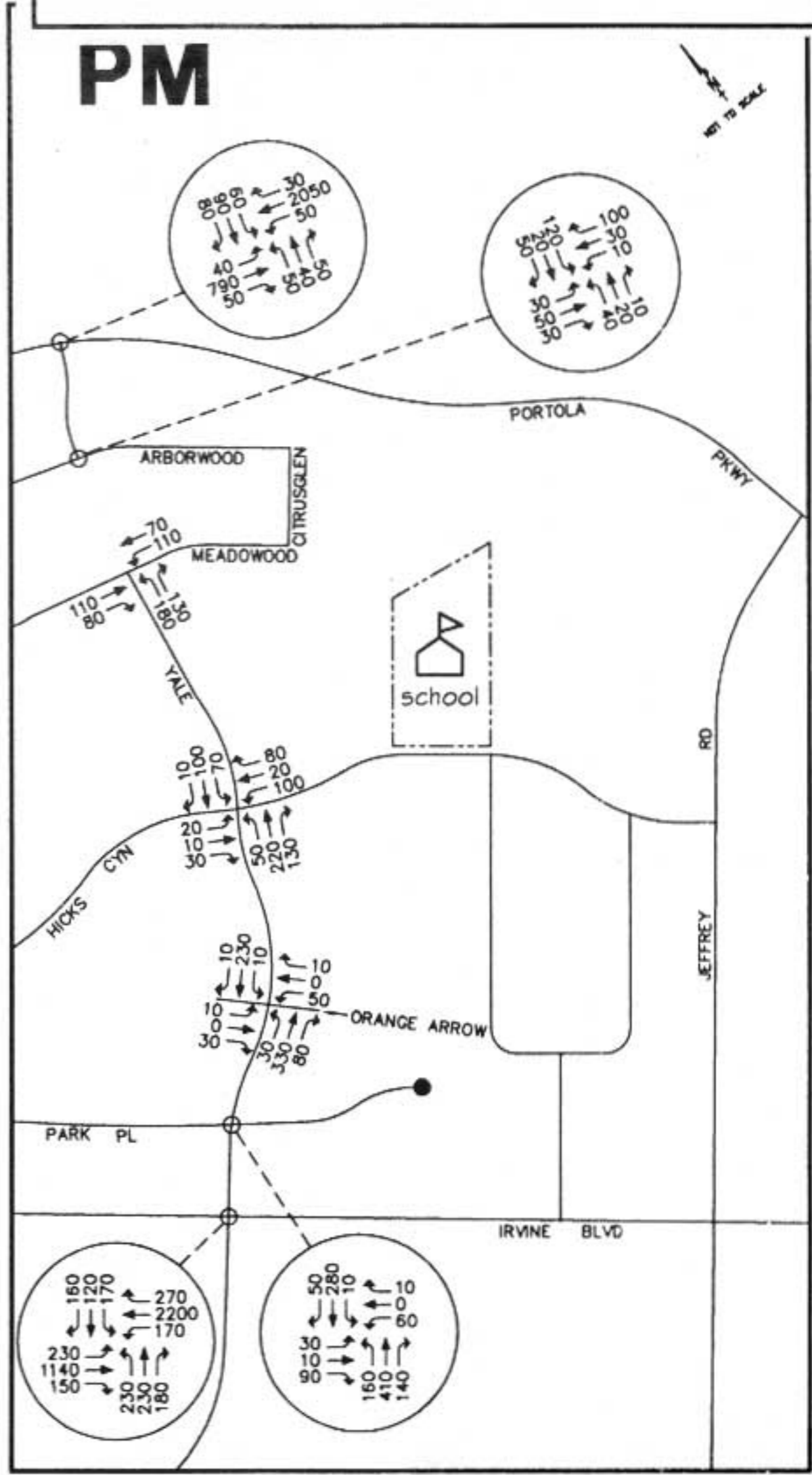
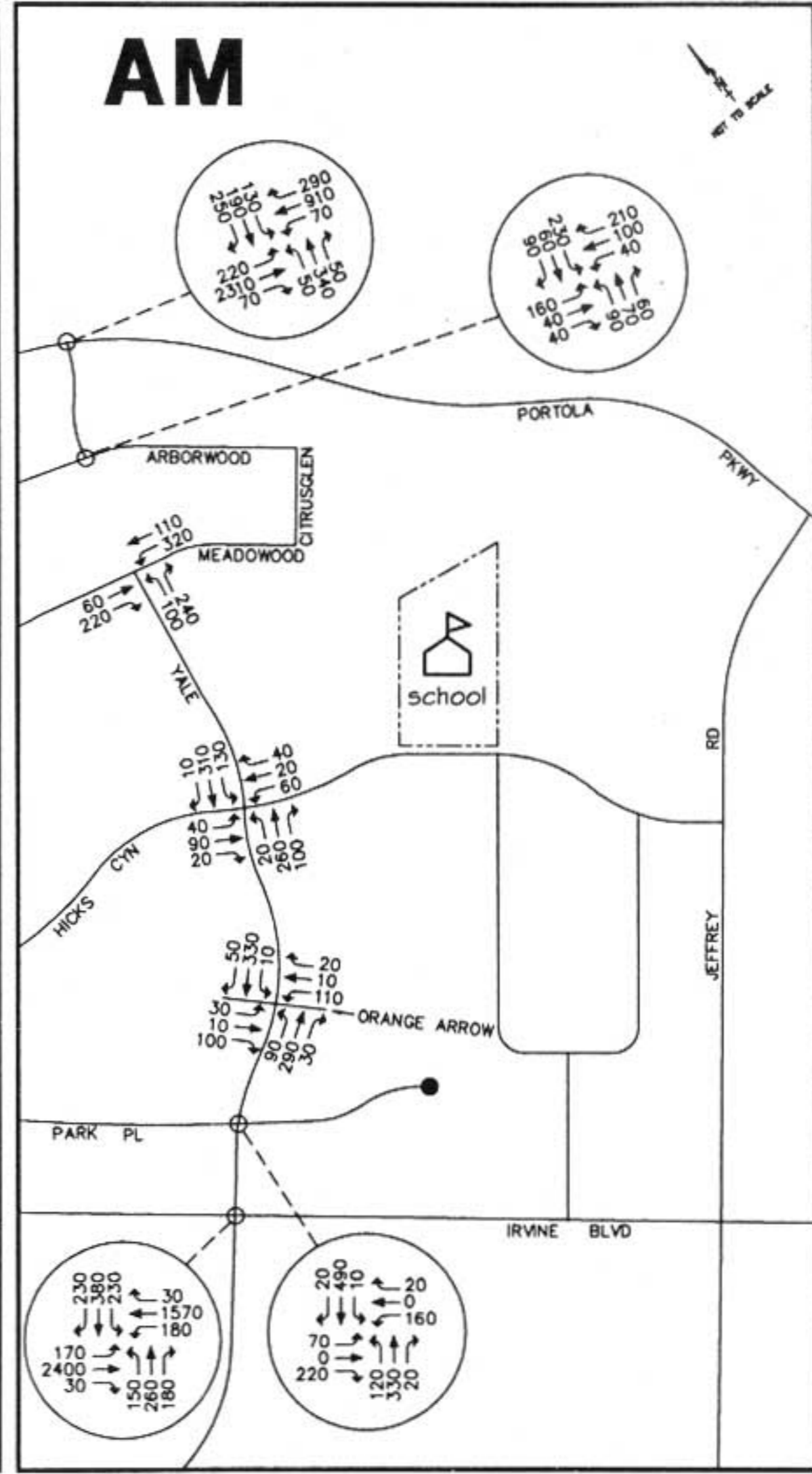
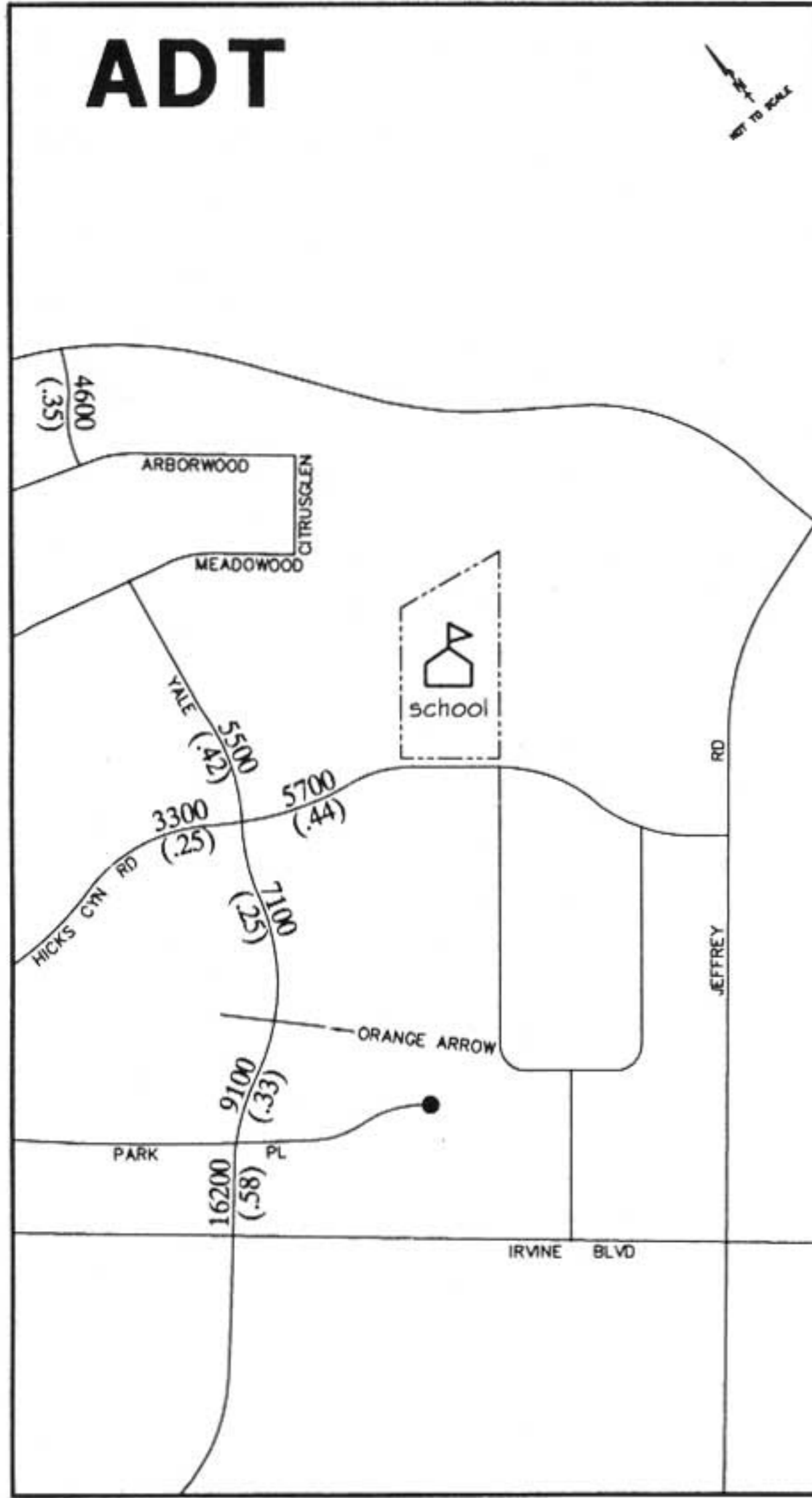


Exhibit 4-87

2025 BUILDOUT TOLL BASELINE (WITH PROJECT) ADT AND PEAK HOUR VOLUMES - MIDDLE SCHOOL ACCESS ALTERNATIVE 4

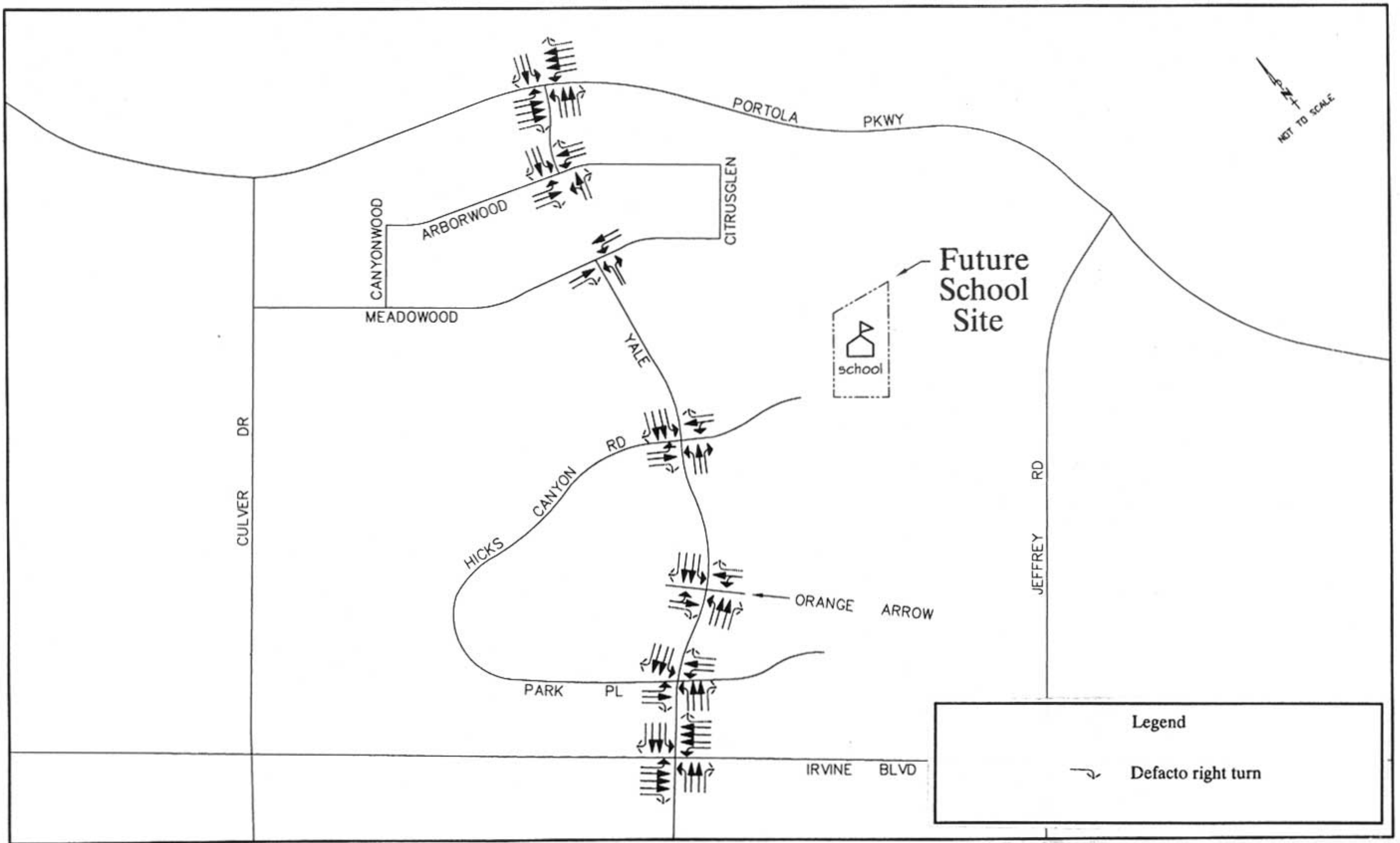
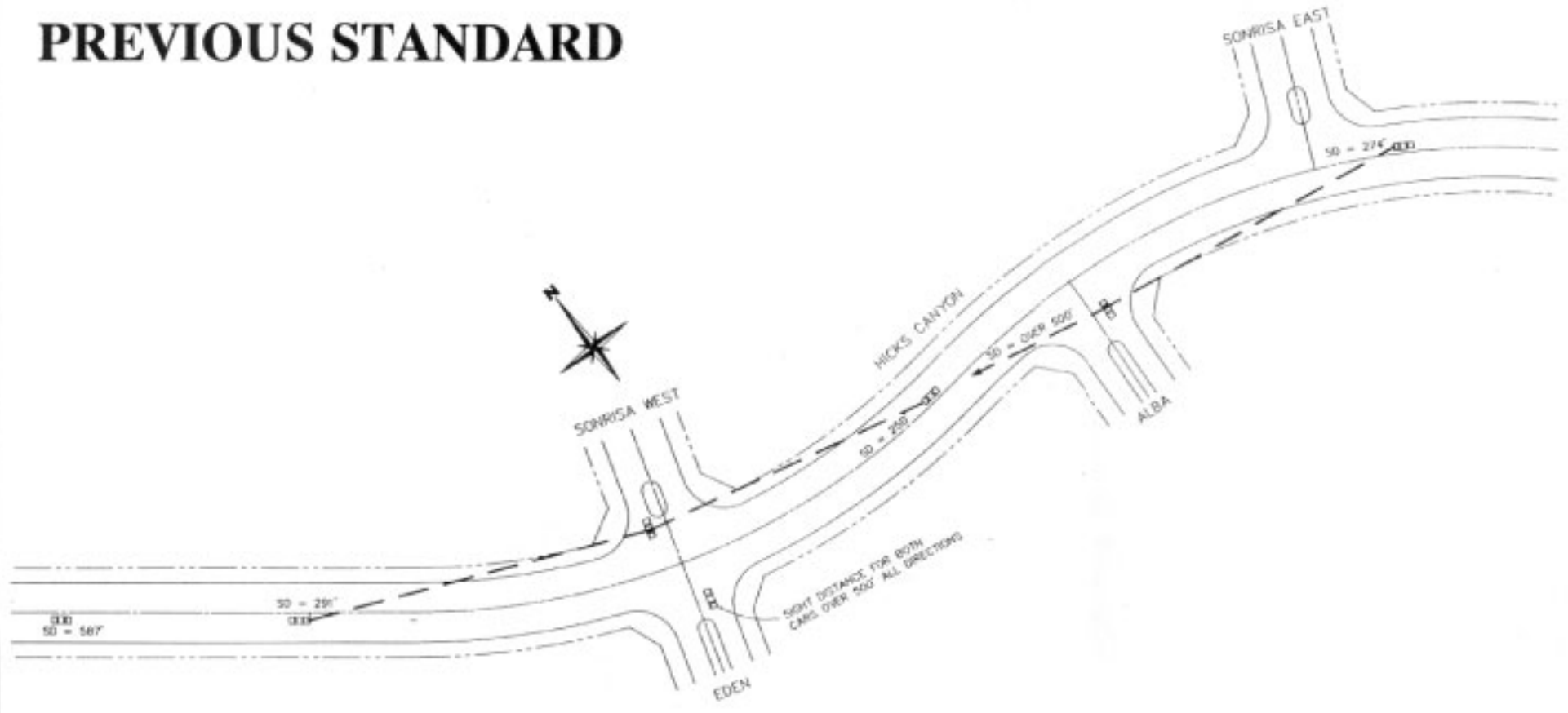


Exhibit 4-88
EXISTING & FUTURE HICKS
CANYON ROAD/YALE AVENUE
INTERSECTION LANE CONFIGURATIONS



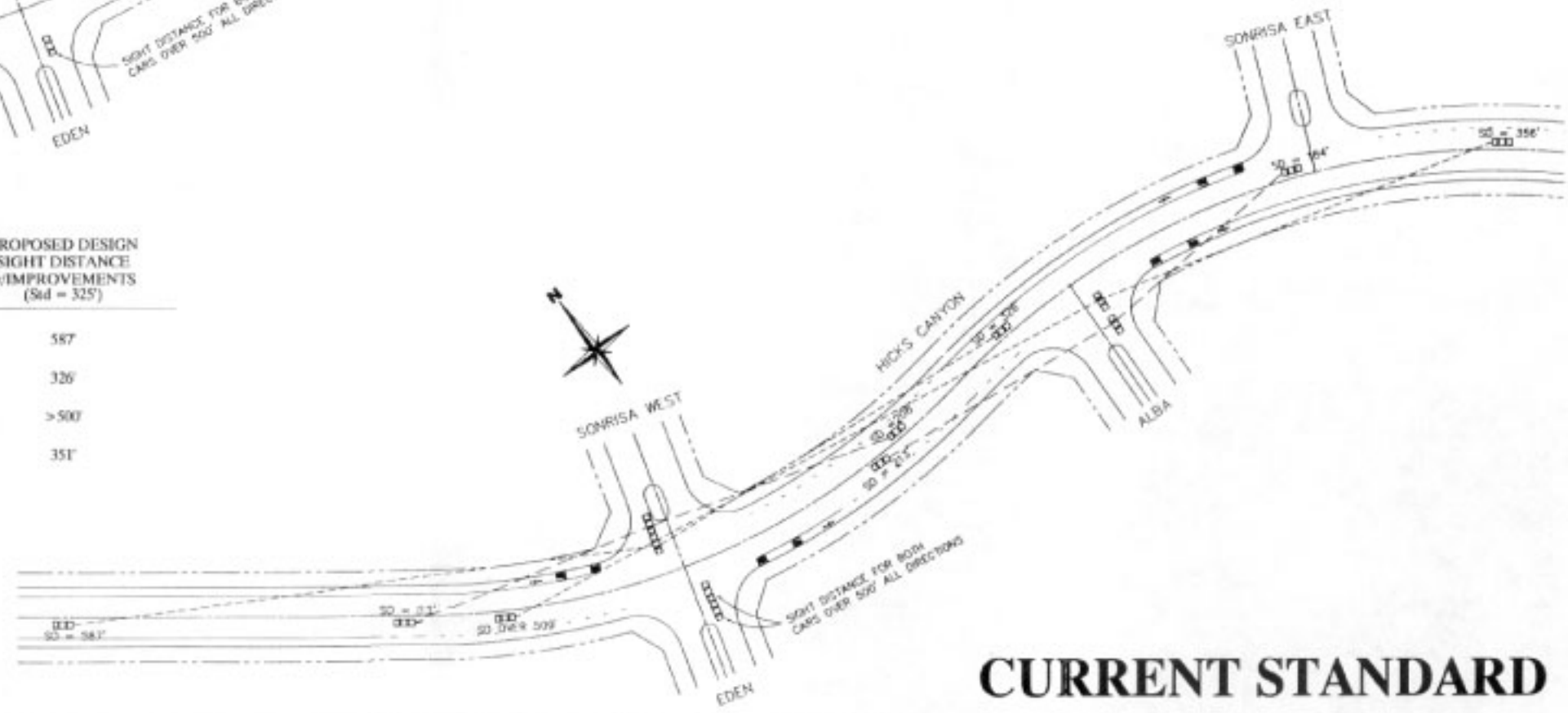
PREVIOUS STANDARD



CORNER SIGHT DISTANCE SUMMARY

INTERSECTION	PREVIOUS STANDARD (10' BACK) SIGHT DISTANCE w/o IMPROVEMENTS (Std = 250')	CURRENT STANDARD (15' BACK) SIGHT DISTANCE w/o IMPROVEMENTS (Std = 325')	PROPOSED DESIGN SIGHT DISTANCE w/IMPROVEMENTS (Std = 325')
SONRISA WEST E/B	291'	213'	587'
SONRISA WEST W/B	250'	208'	326'
ALBA E/B	>500'	213'	>500'
ALBA W/B	274'	184'	351'

- NOTES:
- 1) 250' SIGHT DISTANCE STANDARD WHEN BUILT (10' BACK FROM CURB LINE)
 - 2) 325' SIGHT DISTANCE STANDARD (15' BACK FROM CURB LINE)
 - 3) ALL SIGHT LINES ARE FROM DRIVERS' EYES
 - 4) MEASUREMENTS ABOVE ARE THE SIGHT DISTANCE PROVIDED



CURRENT STANDARD

Legend

---	Sight distance per previous standard without improvements
- - - -	Sight distance per current standard without improvements
.....	Proposed design sight distance w/improvements
SD = XXX	Sight distance to shown vehicle

Photograph 5:
View looking southwest
at Planning Area 9 from
the SR-133 near Portola
Parkway.

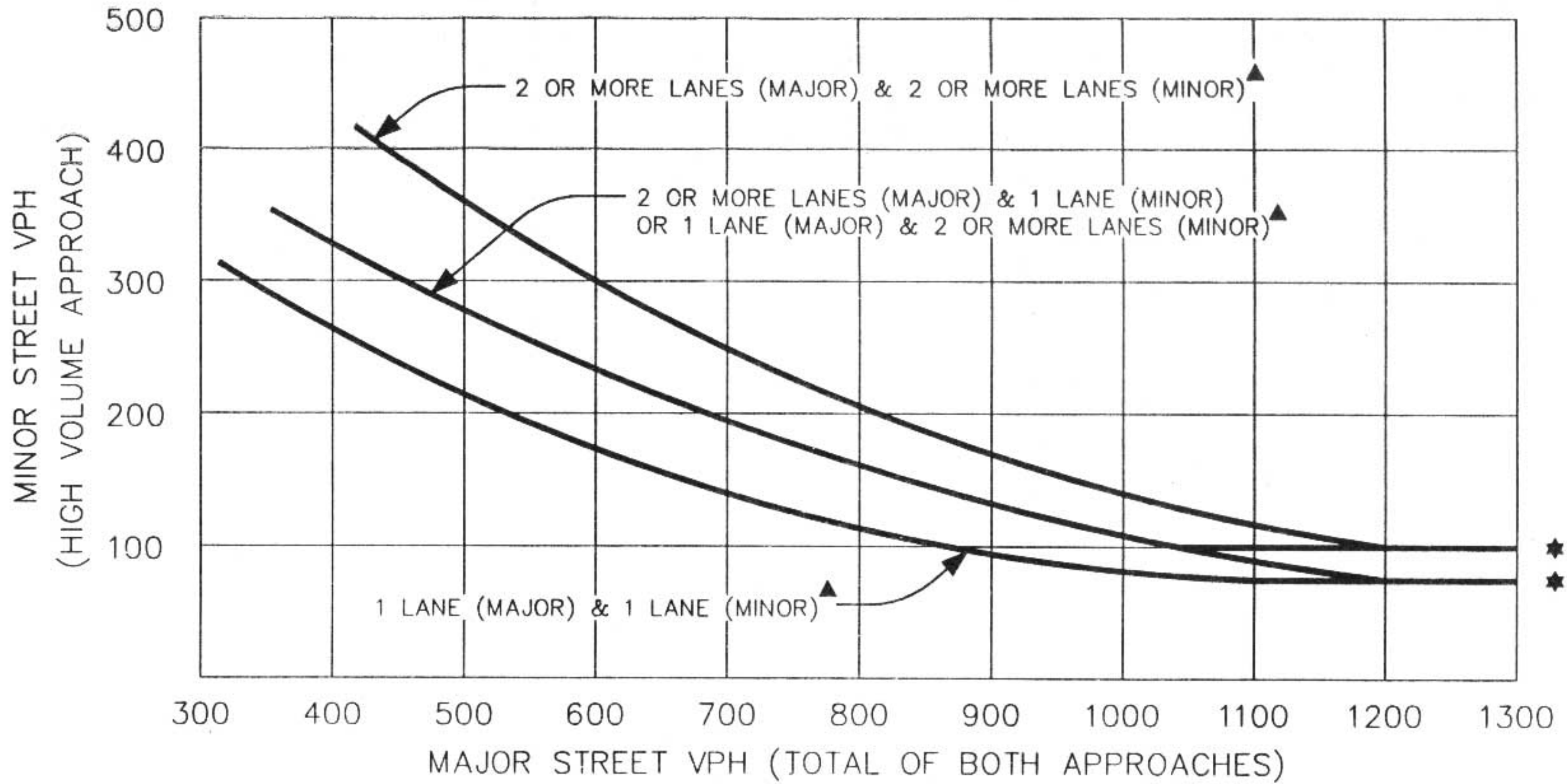


Existing



Proposed





- ▲ NOTE: THESE CURVES ARE RECOMMENDED FOR USE IN AREAS OF RURAL CLASSIFICATION (i.e. POSTED SPEED LIMIT ON THE MAJOR STREET IS 40 MPH OR HIGHER).
- ★ NOTE: 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES, AND 75 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH ONE LANE.

Exhibit 4-90

**PEAK HOUR SIGNAL WARRANT
(HIGHER SPEEDS/RURAL AREAS)**

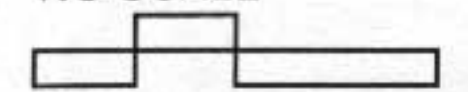


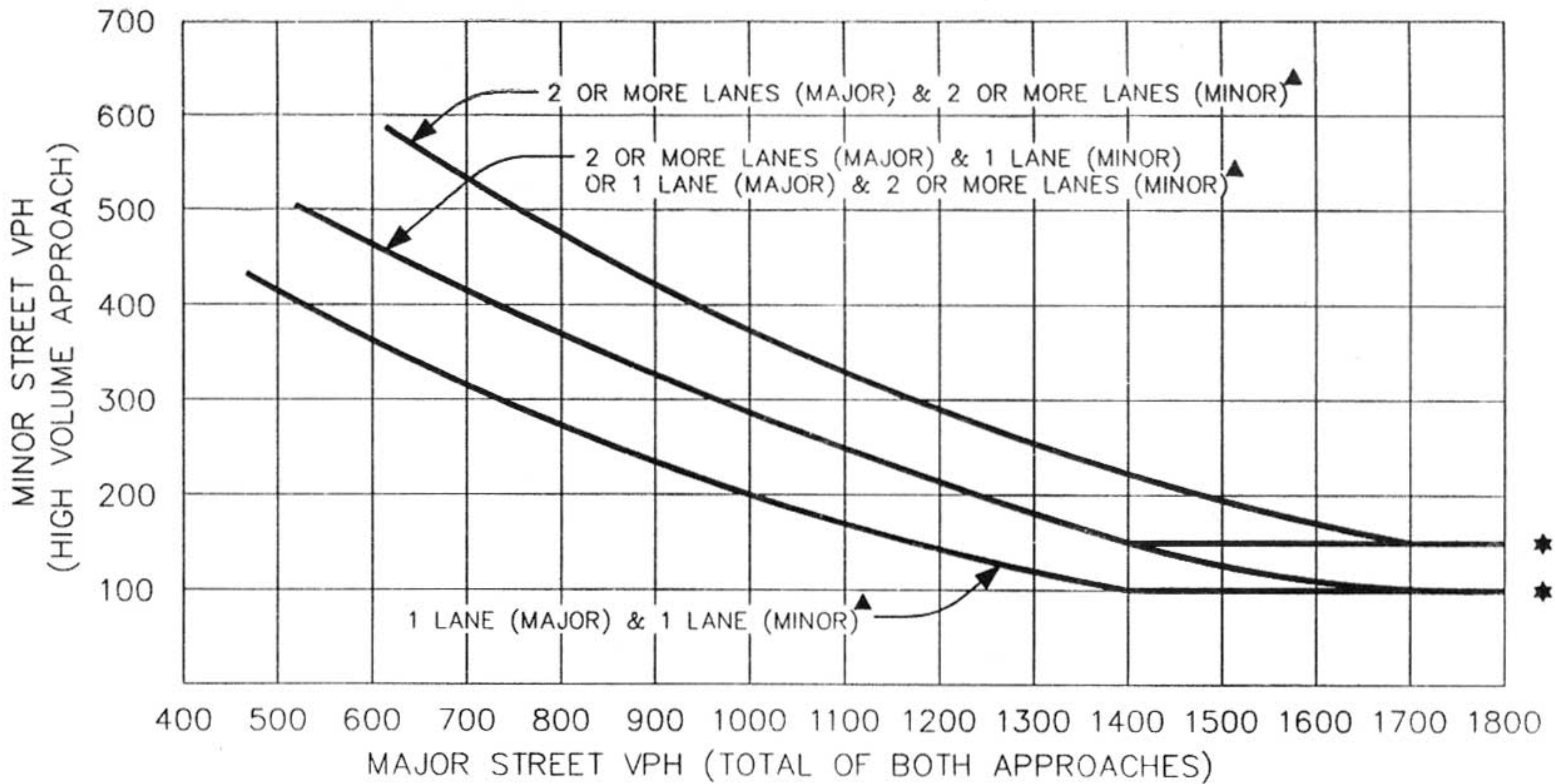
Northern Sphere Area EIR



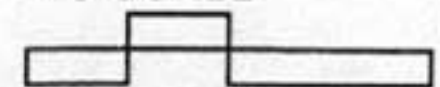
TEMPLETON PLANNING GROUP

NO SCALE



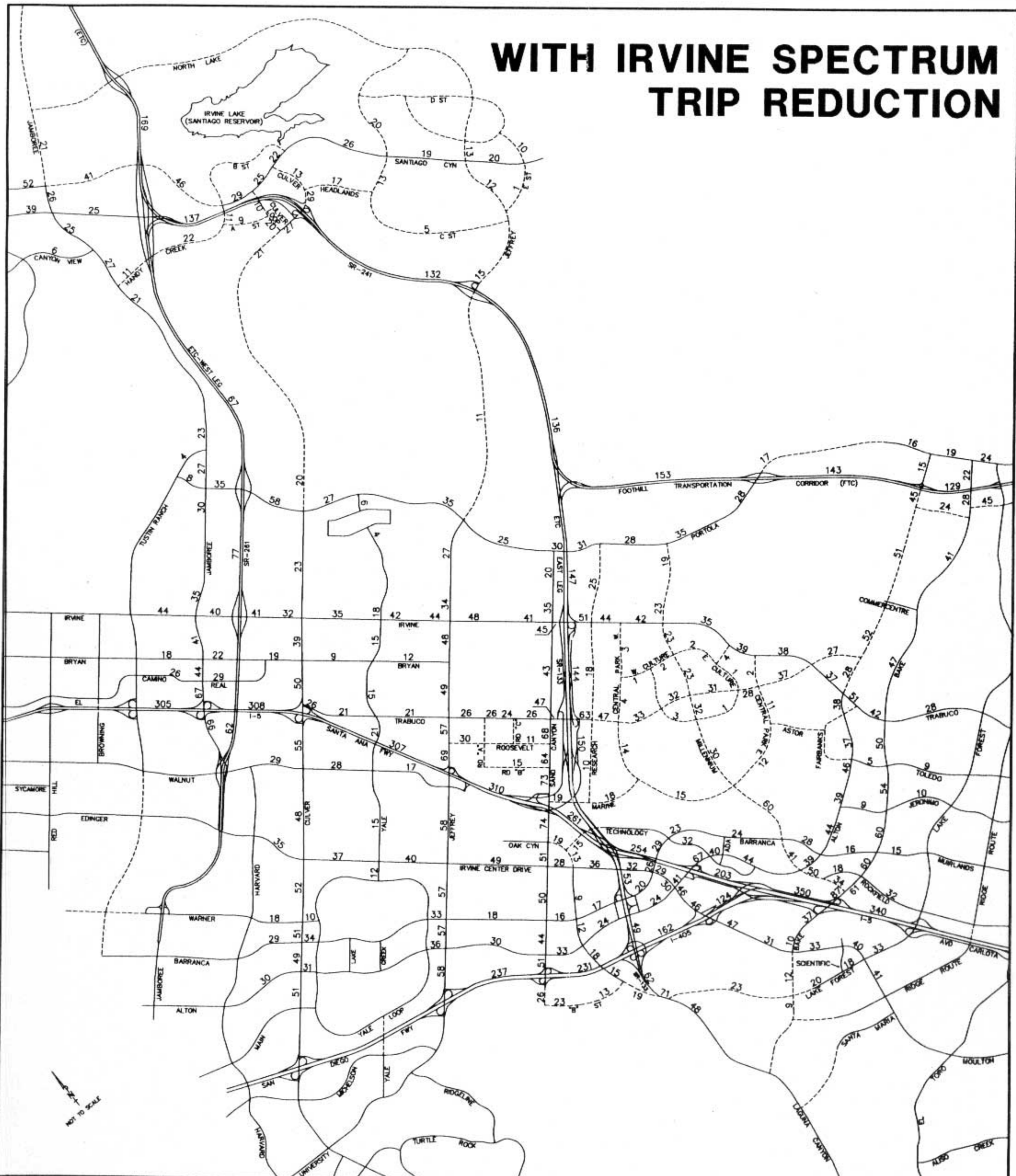
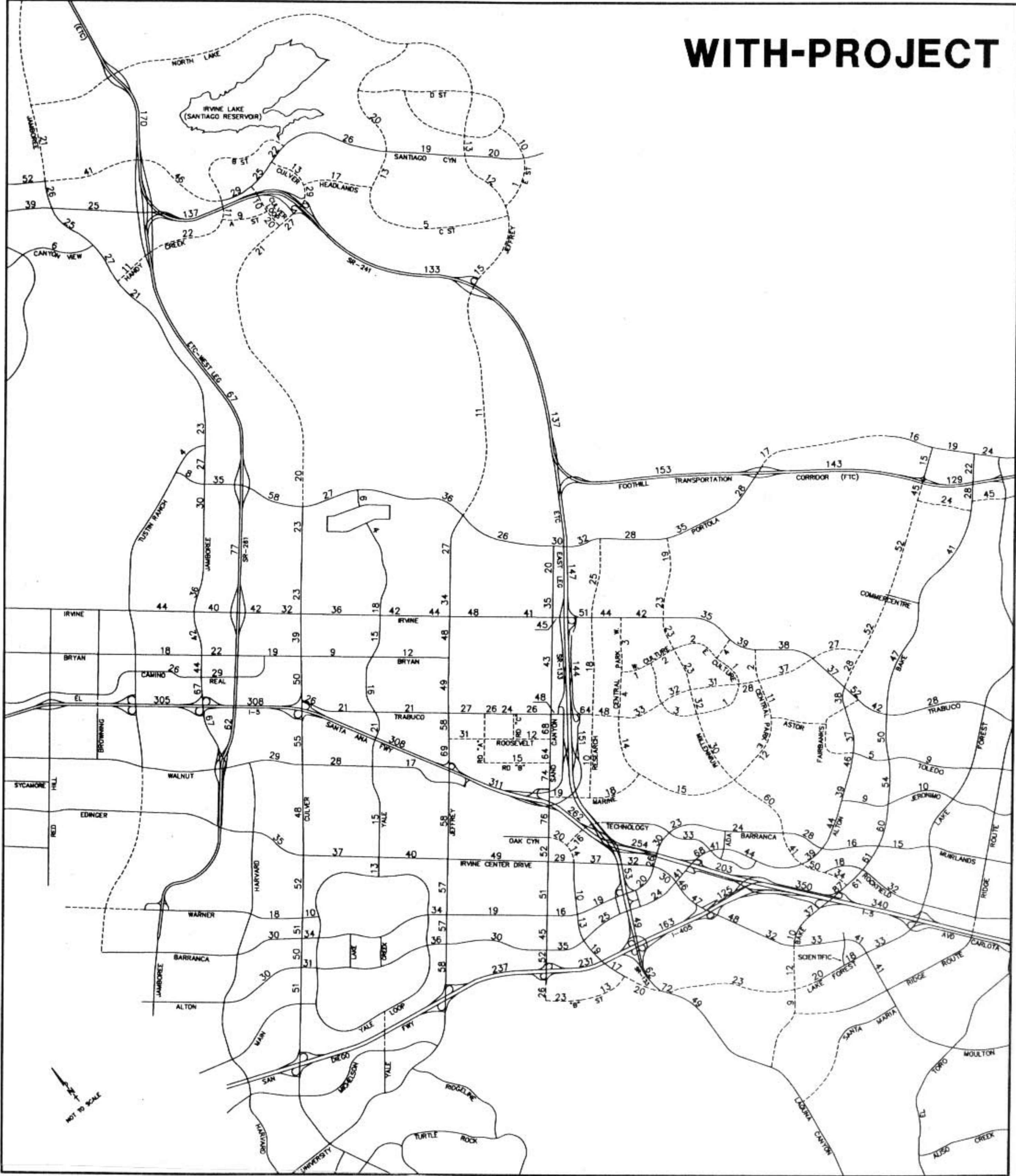


- ▲ NOTE: THESE CURVES ARE RECOMMENDED FOR USE IN AREAS OF URBAN CLASSIFICATION (i.e. POSTED SPEED LIMIT ON THE MAJOR STREET IS 35 MPH OR LESS).
- ★ NOTE: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES, AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH ONE LANE.



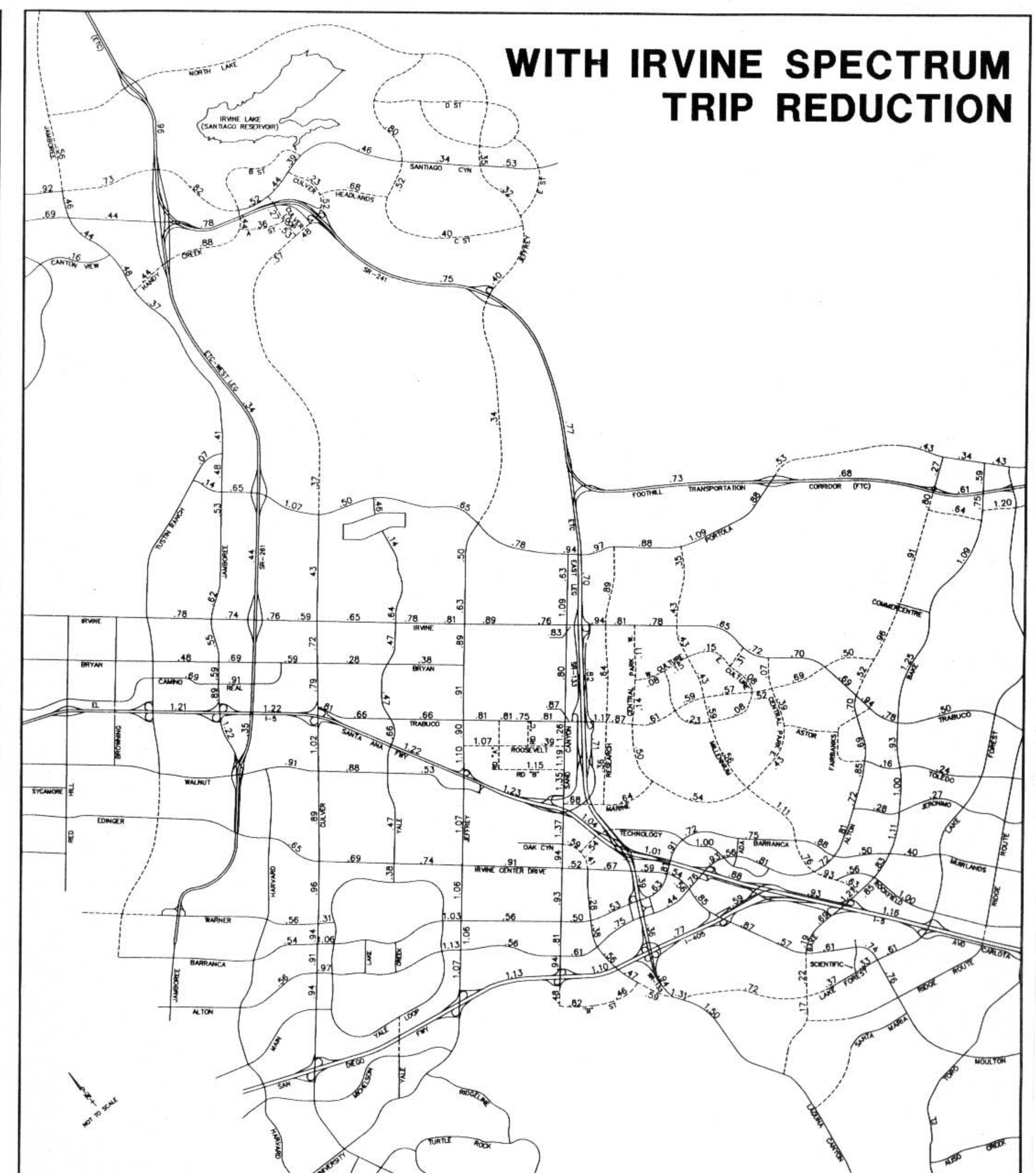
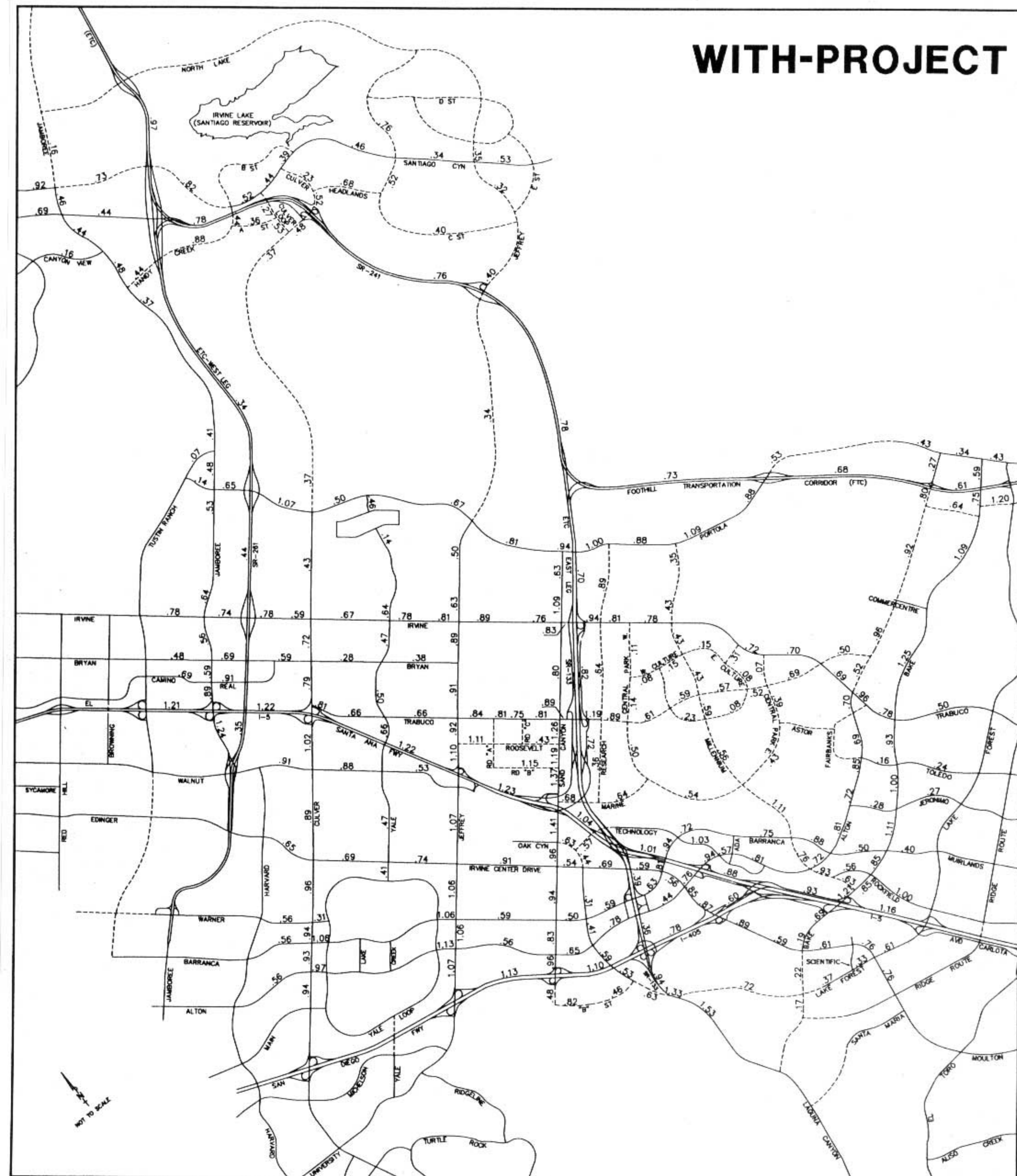
WITH-PROJECT

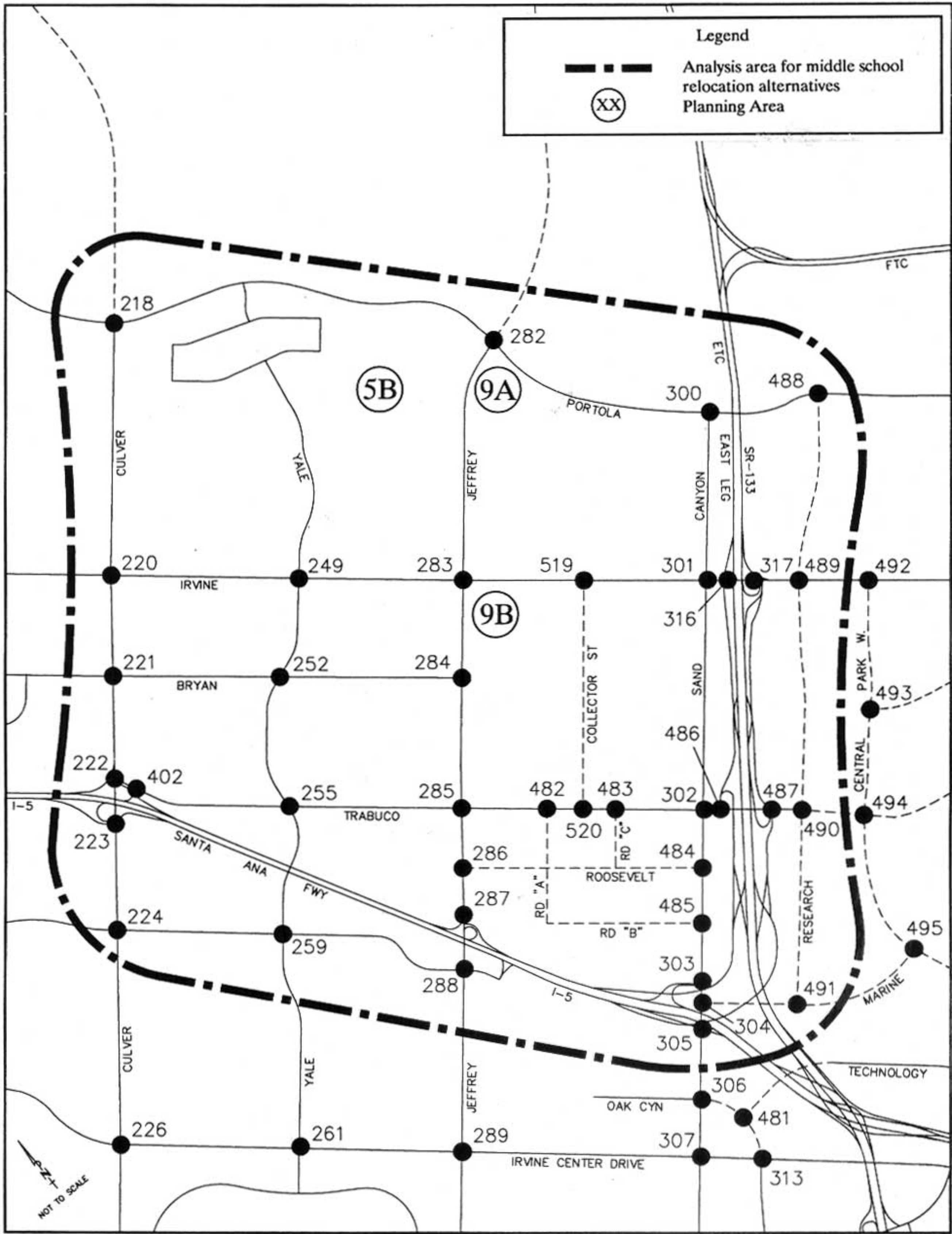
WITH IRVINE SPECTRUM TRIP REDUCTION



WITH-PROJECT

WITH IRVINE SPECTRUM TRIP REDUCTION





Legend

— — — — — Analysis area for middle school relocation alternatives

(XX) Planning Area

Exhibit 4-94

MIDDLE SCHOOL RELOCATION SITE ALTERNATIVES

