Mid County Parkway

RIVERSIDE COUNTY, CALIFORNIA
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DRAFT ENVIRONMENTAL IMPACT REPORT/ ENVIRONMENTAL IMPACT STATEMENT AND SECTION 4(F) EVALUATION VOLUME III OF III

Prepared by the
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and the
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Appendix K Regional Transportation Improvement Program (RTIP)

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FINAL ADOPTED 2006 REGIONAL TRANSPORTATION PROGRAM (RTIP) WITH APPROVED AMENDMENTs 1-9 – LOCAL PROJECTS

RIVERSIDE COUNTY

LEAD AGENCY	PROJECT ID	AIR BASIN	MODEL NO	PROG CODE	RTE	POST MI BEG	POST MI END	DESCRIPTION	FUND	YEAR	ENG	ROW	CONS	TOTAL	PRIOR	2006/07	2007/08	2008/09	2009/10	2010/11 2011/12	PROJECT TOTAL	CONF CAT	ELMT
RIVERSIDE COUNTY	RIV031226	MDAB		NCR31	.00000.0	.0		IN AND NEAR BLYTHE ON DE FRAIN BLVD - RECONSTRUCT/REHAB & CHANNELIZATION IMPROVEMENTS FROM HOBSON WAY TO 6TH AVE INCLUDING TURNING POCKETS & SHOULDER WIDENING	AGENCY	06/07	100	0	0	100	0	100	810	0	0	0	910	EXEMPT	1
									STPL	07/08	0	0	810	810									
RIVERSIDE COUNTY	RIV041043	SCAB	R370	PLN40	.00000.0	.0		WIDEN RECHE VISTA DR 2 TO 4 LNS (HEACOCK ST/PERRIS BLVD-RECHE CYN RD); WIDEN RECHE CYN RD 2 TO 4 LNS (RECHE VISTA-BARTON/HUNTS) PLUS REALIGN, SIGNALS, MEDIANS	CO	PRIOR	1230	0	0	1230	1230	2154	0	0	0	0	3384	NON-EXEMPT	2
									CO	06/07	341	0	0	341									
									WRVTUMF	06/07	1126	0	0	1126									
									XRIV	06/07	687	0	0	687									
RIVERSIDE COUNTY	RIV060123	SCAB		PLN40	.00000.0	.0		ON CLAY ST APPROX 0.5 MILES E/O VAN BUREN BLVD AND N/O THE SANTA ANA RIVER; CONSTRUCT CLAY ST UNDERCROSSING UNDER THE UPRR (PA&ED/PRE-DESIGN ONLY)	CO	06/07	100	0	0	100	0	500	1250	1375	0	0	3125	EXEMPT	1
									PNRS	06/07	400	0	0	400									
									CO	07/08	250	0	0	250									
									PNRS	07/08	1000	0	0	1000									
									CO	08/09	275	0	0	275									
									PNRS	08/09	1100	0	0	1100									
RIVERSIDE COUNTY	RIV62015	SCAB	R263	CAR60	.00000.0	.0		IN NORTHWESTERN RIVERSIDE COUNTY AT RIVER ROAD BRIDGE OVER SANTA ANA RIVER (0.27 MILE N/O BLUFF ST) - REPLACE EXISTING 2 LANE BRIDGE WITH A 4 LANE BRIDGE (HBRR#: 56C0017)	CO	PRIOR	500	0	0	500	2500	3360	57205	0	0	0	63065	NON-EXEMPT	3
									HBRR-L	PRIOR	2000	0	0	2000									
									CO	06/07	372	172	0	544									
									HBRR-L	06/07	1488	1328	0	2816									
									CO	07/08	0	0	6539	6539									
									HBRR-L	07/08	0	0	50644	50644									
									LBSRA	07/08	0	0	22	22									
RIVERSIDE COUNTY TRANS COMMISSION (RCTC)	RIV031218	SCAB		PLN40	.00000.0	.0		CETAP - MID COUNTY PARKWAY CORRIDOR; COMPLETE ENVIRONMENTAL WORK/ROUTE ALTERNATIVES (PHASES 1+2) FROM SR79 THROUGH LAKE MATHEWS/MEAD VALLEY TO I-15 (PA&ED+PRE DESIGN)	DEMOT21	PRIOR	500	0	0	500	13500	22631	0	0	0	0	36131	EXEMPT	2
									WRVTUMF	PRIOR	13000	0	0	13000									
									AGENCY	06/07	22631	0	0	22631									
RIVERSIDE COUNTY TRANS COMMISSION (RCTC)	RIV041047	VAR		LUM04	.00000.0	.0		THROUGHOUT RIVERSIDE COUNTY - LUMP SUM TRANSPORTATION ENHANCEMENT (TE) PROJECTS	CITY	06/07	0	0	157	157	0	894	10998	4471	3931	1396	21690	EXEMPT	3
									STPE-R	06/07	0	0	737	737									
									CITY	07/08	0	0	1262	1262									
									STPE-R	07/08	0	0	9736	9736									
									CITY	08/09	0	0	594	594									
									STPE-R	08/09	0	0	3877	3877									
									CITY	09/10	0	0	532	532									
									STPE-R	09/10	0	0	3399	3399									
									CITY	10/11	0	0	330	330									
									STPE-R	10/11	0	0	1066	1066									
RIVERSIDE COUNTY TRANS COMMISSION (RCTC)	RIV050101	VAR		PPM01	.00000.0	.0		AB 3090 REIMBURSEMENT PROJECT: EA 08-RVC0T, PPNO 1109 (FOR PLANNING, PROGRAMMING, & MONITORING - RIV62047, EA 412374, PPNO 9803)	STCASH3	07/08	166	0	0	166	0	0	166	0	0	0	166	EXEMPT	1
RIVERSIDE COUNTY TRANS COMMISSION (RCTC)	RIV050301	SCAB		STUDY	.00000.0	.0		CETAP - RIVERSIDE CNTY TO ORANGE CNTY CORRIDOR: FOR PA&ED & PRE-DESIGN WORK IN SUPPORT OF ENVIRONMENTAL DOCUMENT DEVELOPMENT (Earmarks: FY05 HR4818 + SAFETEA LU #122+363)	AGENCY	PRIOR	1290	0	0	1290	8717	0	12640	3160	0	0	24517	EXEMPT	2
									DEMOSTL	PRIOR	5427	0	0	5427									
									STP4818	PRIOR	2000	0	0	2000									
									AGENCY	07/08	3160	0	0	3160									
									DEMOSTL	07/08	6320	0	0	6320									
									LOC-AC	07/08	3160	0	0	3160									
									HPP-ACC	08/09	3160	0	0	3160									
RIVERSIDE COUNTY TRANS COMMISSION (RCTC)	RIV061162	SCAB		TDM24	.00000.0	.0		AT DOWNTOWN RIVERSIDE METROLINK STATION FOR UCR (CE-CERT): IMPLEMENT UCR INTELLISHARE SYSTEM (INTELLIGENT SHARED-USE VEHICLE SYSTEM) AT 2 DESIGNATED PARKING SPACES	CMAQ	PRIOR	0	0	27	27	27	57	16	0	0	0	100	TCM	3
									AGENCY	06/07	0	0	9	9									
									CMAQ	06/07	0	0	48	48									
									AGENCY	07/08	0	0	16	16									
RIVERSIDE COUNTY TRANS COMMISSION (RCTC)	RIV62047	SCAB		PPM01	.00000.0	.0		RESERVE FOR SB45 PLANNING (UP TO 2%) (PPM - PLANNING PROGRAMMING AND MONITORING) (EA: 412374, PPNO: 9803)	AGENCY	PRIOR	166	0	0	166	535	1947	152	1000	0	0	3634	EXEMPT	7
									STCASHR	PRIOR	369	0	0	369									
									STCASHR	06/07	1947	0	0	1947									
									STCASHR	07/08	152	0	0	152									
									STCASHR	08/09	1000	0	0	1000									
RIVERSIDE, CITY OF	RIV011208	SCAB	R278	CAX63	.00000.0	.0		IN RIVERSIDE - WIDEN VAN BUREN BLVD FROM 4 TO 6 LANES FROM JACKSON STREET TO THE SANTA ANA RIVER AND ADD DEDICATED RIGHT-TURN LANES AT MAJOR INTERSECTIONS	CITY	PRIOR	760	1400	0	2160	2160	7600	0	0	0	0	9760	NON-EXEMPT	3
									CITY	06/07	0	0	6695	6695									
									WRVTUMF	06/07	0	0	905	905									
RIVERSIDE, CITY OF	RIV050502	SCAB		PLN40	.00000.0	.0		IN THE CITY OF RIVERSIDE - GRADE SEPARATION IMPROVEMENT PLANNING ACTIVITIES FOR FIVE RAILROAD GRADE SEPARATIONS (PA&ED/PRE-DESIGN) (HR4818 FY 05+SAFETEA LU Earmarks)	CITY	PRIOR	666	0	0	666	1327	4164	1000	1000	0	0	7491	EXEMPT	2
									STP4818	PRIOR	661	0	0	661									
									CITY	06/07	833	0	0	833									
									DEMOSTL	06/07	1000	0	0	1000									
									LOC-AC	06/07	2000	0	0	2000									
									STP4818	06/07	331	0	0	331									
									HPP-ACC	07/08	1000	0	0	1000									
									HPP-ACC	08/09	1000	0	0	1000									
RIVERSIDE, CITY OF	RIV990703	SCAB	R374	CAN72	.00000.0	.0		IN RIVERSIDE AT JURUPA AVE AND UP RR - CONSTRUCT UNDERPASS AND CLOSE DOWN MOUNTAIN VIEW AVE AT UPRR TRACKS	CMAQ	PRIOR	0	3100	0	3100	8102	14338	0	0	0	0	22440	NON-EXEMPT	4
									CITY	PRIOR	320	902	0	1222									
									STA-PUC	PRIOR	1280	2500	0	3780									
									AGENCY	06/07	0	0	1087	1087									
									CITY	06/07	0	0	860	860									
									CMAQ	06/07	0	0	3171	3171									
									DEMOSTL	06/07	0	0	2000	2000									
									PNRS	06/07	0	0	6000	6000									
									STA-PUC	06/07	0	0	1220	1220									

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Appendix L United States Fish and Wildlife Service (USFWS) Letter

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United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
Carlsbad Fish and Wildlife Office
6010 Hidden Valley Road
Carlsbad, California 92011

In Reply Refer To:
FWS-WRIV-4214.5

JAN 2 3 2006

Wendy Walters
LSA Associates, Inc.
1650 Spruce Street, Fifth Floor
Riverside, California 92507

Subj: Species List for Mid-County Parkway Project in Riverside County, California

Dear Ms. Walters:

This letter is in response to your written request, received on November 15, 2005, for information on federally endangered, threatened, and proposed species that may occur in the vicinity of the proposed Mid-County Parkway project in Riverside County, California. The proposed project extends from Interstate 15 on the west and State Route 79 on the east. The study area is about 32 miles long and ranges from 1 to 4 miles in width. The project is being developed by the Riverside County Transportation Commission in cooperation with Caltrans District 8 and the Federal Highway Administration. To assist you in evaluating the potential occurrence of federally listed endangered, threatened, proposed, and candidate species that may occur in the vicinity of the area identified, we are providing the enclosed list.

The proposed project is located in the plan area of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). The MSHCP establishes a multiple species conservation program to minimize and mitigate habitat loss and the incidental take of covered species associated with covered activities. Caltrans and Riverside County are signatory to the MSHCP, and, therefore, should conduct this project consistent with the provisions of the MSHCP and its associated implementation agreement and permit.

Section 7 of the Endangered Species Act of 1973 (Act), as amended, requires Federal agencies to consult with us, the U.S. Fish and Wildlife Service, should it be determined that their actions may affect federally listed threatened or endangered species. Section 9 of the Act prohibits the "take" (e.g., harm, harassment, pursuit, injury, kill) of federally listed wildlife. "Harm" is further defined to include habitat modification or degradation where it kills or injures wildlife by impairing essential behavioral patterns including breeding, feeding, or sheltering. Take incidental to otherwise lawful activities can be authorized under sections 7 (Federal consultations) and 10 (habitat conservation plans) of the Act.

If a proposed project is authorized, funded, or carried out by a Federal agency and may affect a listed species, then the Federal agency must consult with us on behalf of the applicant, pursuant to section

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7 of the Act. In other words, any activity on private land that requires Federal involvement (such as the issuance of a section 404 permit under the Clean Water Act by the U.S. Army Corps of Engineers) and may affect listed species must be reviewed by us to ensure that the continued existence of the species would not be jeopardized. During the section 7 process, measures to avoid and minimize project effects to listed species and their habitat will be identified and incorporated into a biological opinion that includes an incidental take statement that authorizes incidental take by the Federal agency and applicant.

If a proposed project does not involve a Federal agency, but is likely to result in the take of a listed animal species, then the landowner or project proponent should apply for an incidental take permit, pursuant to section 10 of the Act. When an application is made for an incidental take permit, measures to avoid, minimize, or mitigate for effects to listed species and their habitat will be identified and incorporated into a habitat conservation plan. If the habitat conservation plan and the application for the permit meet the issuance criteria, a permit authorizing incidental take is issued.

We do not have site-specific information for this area. Therefore, we recommend that project proponents seek assistance from a biologist familiar with the habitat conditions and associated species in and around their project site to assess the actual potential for direct, indirect and cumulative impacts likely to result from the proposed activity.

We are also concerned for the following habitat community types that could potentially occur in the area and are becoming more rare. These include woodlands, coastal sage scrub, alluvial fan scrub, native grasslands, wetlands, riparian habitat, and vernal pools. In addition, we are concerned about the effects of the proposed project on habitat connectivity and wildlife movement in the region.

Please contact the California Department of Fish and Game for State-listed and other sensitive species that may occur in the area of the project. State-listed species are protected under the provisions of the California Endangered Species Act. Rare plant species that may occur in the project area are included in the California Native Plant Society's (CNPS) inventory of rare and endangered vascular plants in California. State-listed and CNPS species require full consideration under the California Environmental Quality Act.

Should you have any questions regarding the species list provided, or your responsibilities under the Act, please contact Doreen Stadtlander, Division Chief for Western Riverside County, at (760) 431-9440.

Sincerely,

for Karen A. Goebel
Assistant Field Supervisor

Enclosure

Federally Endangered, Threatened, Proposed, and Candidate Species that May Occur in the Vicinity of the Proposed Mid-County Parkway Project in Riverside County, California

January 23, 2006

Common Name	Scientific Name	Federal Status
Mammals		
San Bernardino kangaroo rat	*Dipodomys merriami parvus*	endangered
Stephens' kangaroo rat	*Dipodomys stephensi*	endangered
Birds		
yellow-billed cuckoo	*Coccyzus americanus*	candidate
southwestern willow flycatcher	*Empidonax traillii extimus*	endangered
bald eagle	*Haliaeetus leucocephalus*	threatened
coastal California gnatcatcher	*Polioptila californica californica*	threatened
least Bell's vireo	*vireo bellii pusillus*	endangered
Amphibians		
arroyo toad	*Bufo californicus*	endangered
California red-legged frog	*Rana aurora draytoni*	threatened
Invertebrates		
vernal pool fairy shrimp	*Branchinecta lynchii*	threatened
Quino checkerspot butterfly	*Euphydryas editha quino*	endangered
Riverside fairy shrimp	*Streptocephalus woottoni*	endangered
Plants		
Munz's onion	*Allium munzii*	endangered
San Diego ambrosia	*Ambrosia pumila*	endangered
Braunton's milk-vetch	*Astragalus brauntonii*	endangered
San Jacinto Valley crownscale	*Atriplex coronata* var. *notatior*	endangered
Nevin's barberry	*Berberis nevinii*	endangered
thread-leaved brodiaea	*Brodiaea filifolia*	threatened

Federally Endangered, Threatened, Proposed, and Candidate Species that May Occur in the Vicinity of the Proposed Mid-County Parkway Project in Riverside County, California

January 23, 2006

Common Name	Scientific Name	Federal Status
Plants (cont.)		
San Diego button celery	*Eryngium aristulatum* var. *parishii*	endangered
slender-horned spineflower	*Dodecahema leptoceras*	endangered
spreading navarretia	*Navarretia fossalis*	threatened
California Orcutt grass	*Orcuttia californica*	endangered
Brand's phacelia	*Phacelia stellaris*	candidate

Appendix M Flood Insurance Rate Maps (FIRMs)

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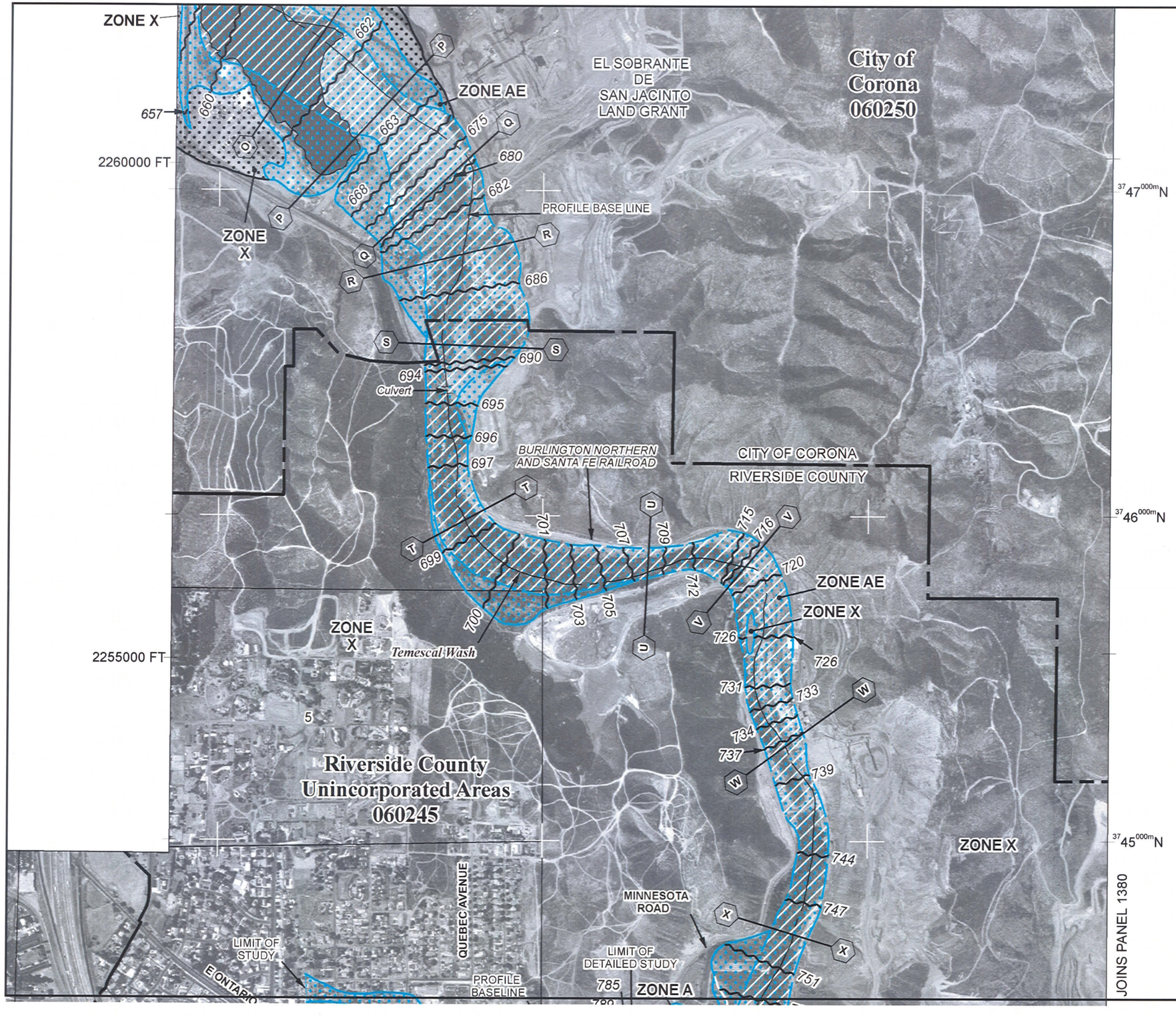

MAP SCALE 1" = 1000'

500 0 1000 2000 FEET

METER

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 1360G

FIRM

FLOOD INSURANCE RATE MAP

RIVERSIDE COUNTY, CALIFORNIA
AND INCORPORATED AREAS

PANEL 1360 OF 3805
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
CORONA, CITY OF	060250	1360	G
RIVERSIDE COUNTY	060245	1360	G

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
06065C1360G

EFFECTIVE DATE
AUGUST 28, 2008

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

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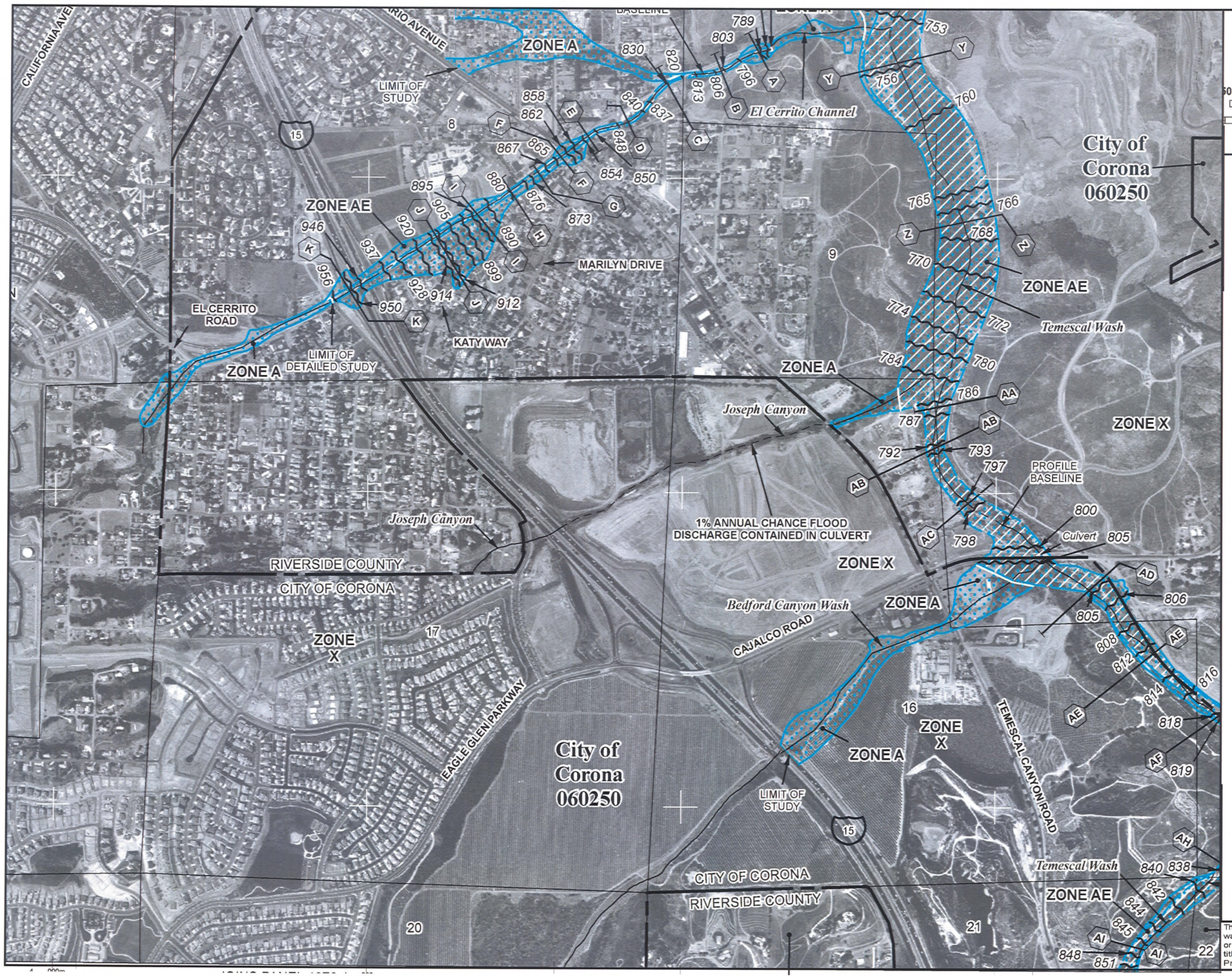

MAP SCALE 1" = 1000'

500 0 1000 2000 FEET

METER

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 1360G

FIRM

FLOOD INSURANCE RATE MAP

RIVERSIDE COUNTY, CALIFORNIA
AND INCORPORATED AREAS

PANEL 1360 OF 3805
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
CORONA, CITY OF	060250	1360	G
RIVERSIDE COUNTY	060245	1360	G

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

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MAP SCALE 1" = 1000'

500 0 1000 2000

FEET

METER

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 1385G

FIRM

FLOOD INSURANCE RATE MAP

RIVERSIDE COUNTY, CALIFORNIA
AND INCORPORATED AREAS

PANEL 1385 OF 3805
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
RIVERSIDE COUNTY	060245	1385	G

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
06065C1385G

EFFECTIVE DATE
AUGUST 28, 2008

Federal Emergency Management Agency

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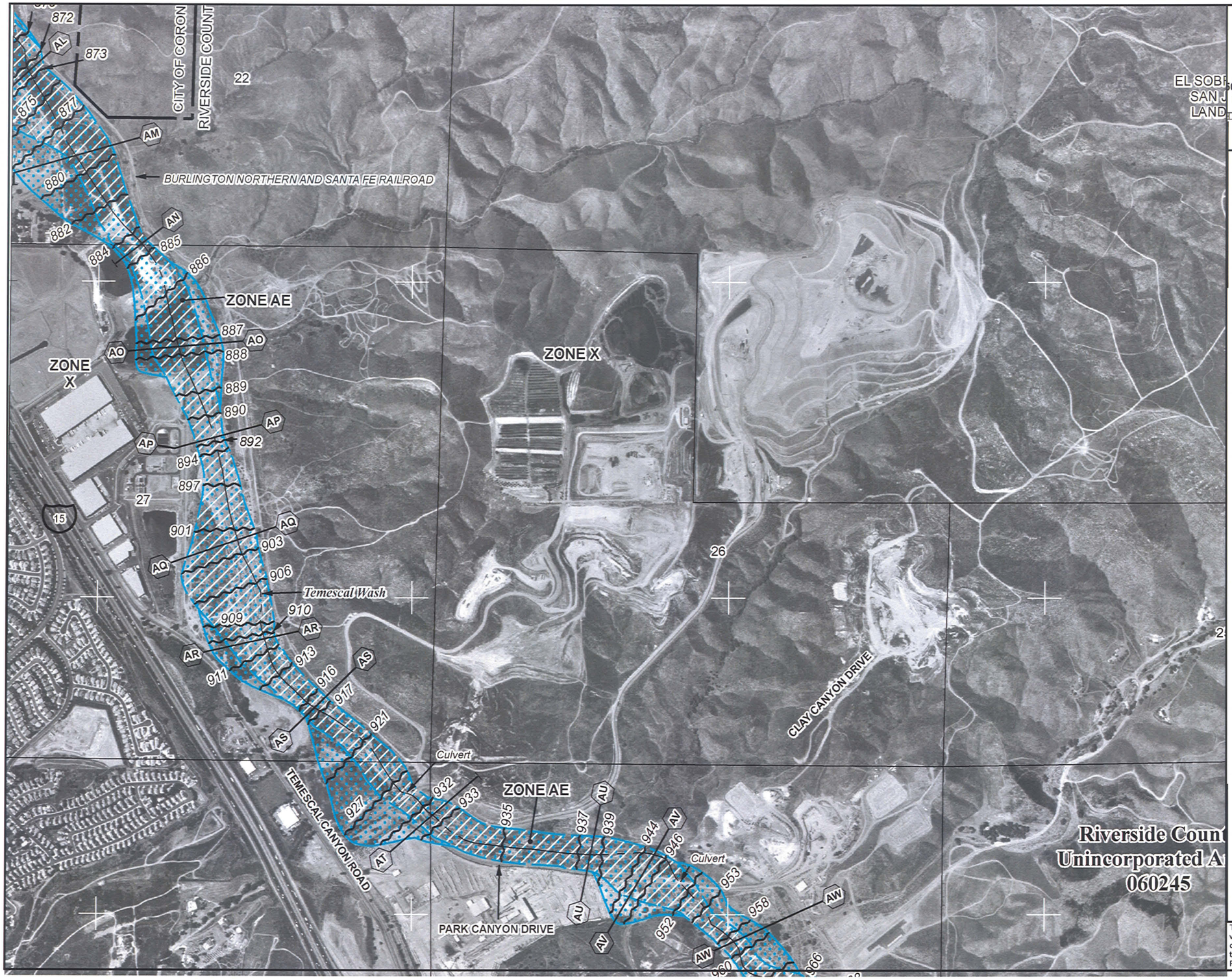

MAP SCALE 1" = 1000'

500 0 1000 2000 FEET

METER

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 1390G

FIRM

FLOOD INSURANCE RATE MAP

RIVERSIDE COUNTY, CALIFORNIA
AND INCORPORATED AREAS

PANEL 1390 OF 3805
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
CORONA, CITY OF	060250	1390	G
RIVERSIDE COUNTY	060245	1390	G

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
06065C1390G

EFFECTIVE DATE
AUGUST 28, 2008

Federal Emergency Management Agency

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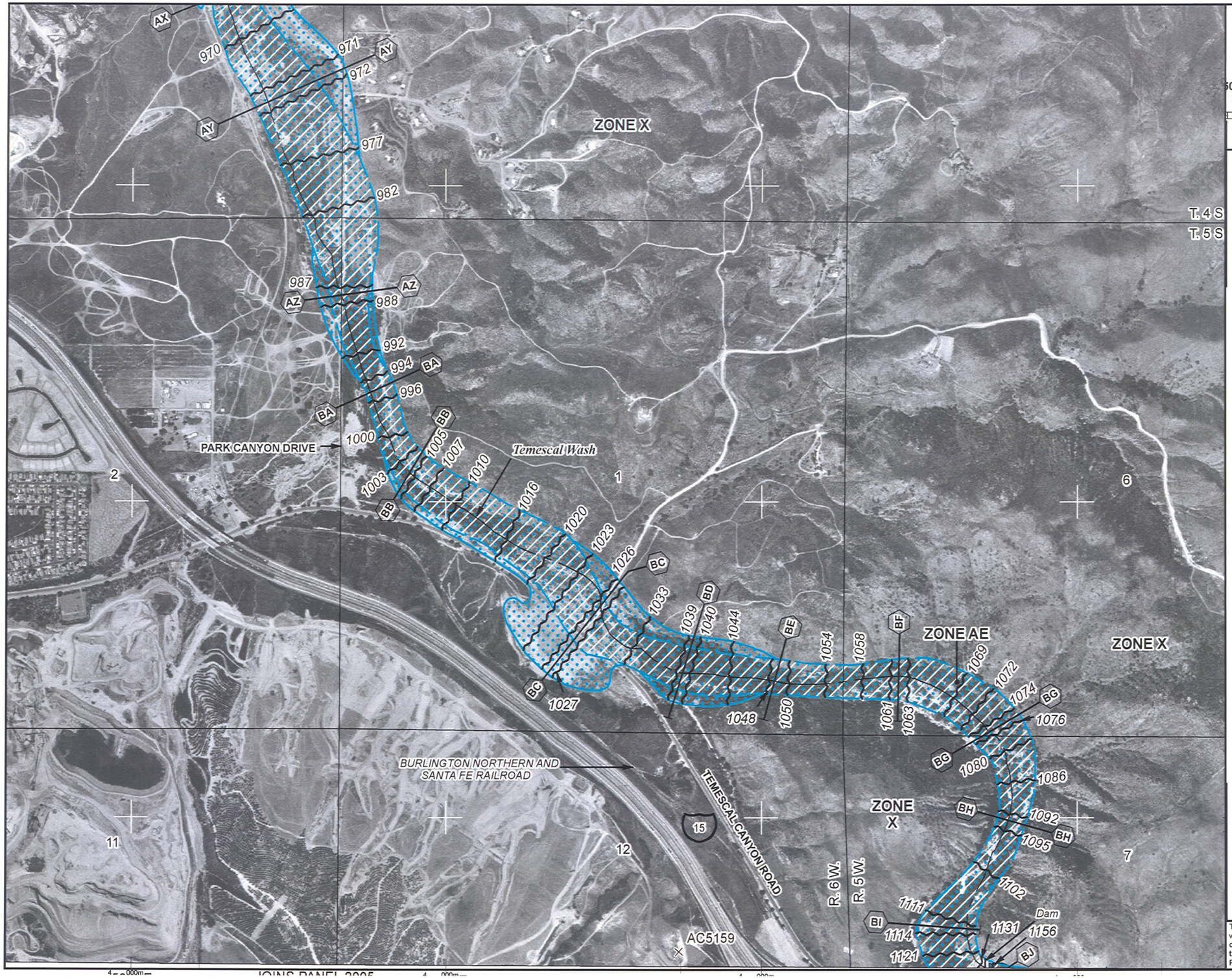

MAP SCALE 1" = 1000'

500 0 1000 2000 FEET

METER

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 1390G

FIRM

FLOOD INSURANCE RATE MAP

RIVERSIDE COUNTY, CALIFORNIA
AND INCORPORATED AREAS

PANEL 1390 OF 3805
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
CORONA, CITY OF	060250	1390	G
RIVERSIDE COUNTY	060245	1390	G

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
06065C1390G

EFFECTIVE DATE
AUGUST 28, 2008

Federal Emergency Management Agency

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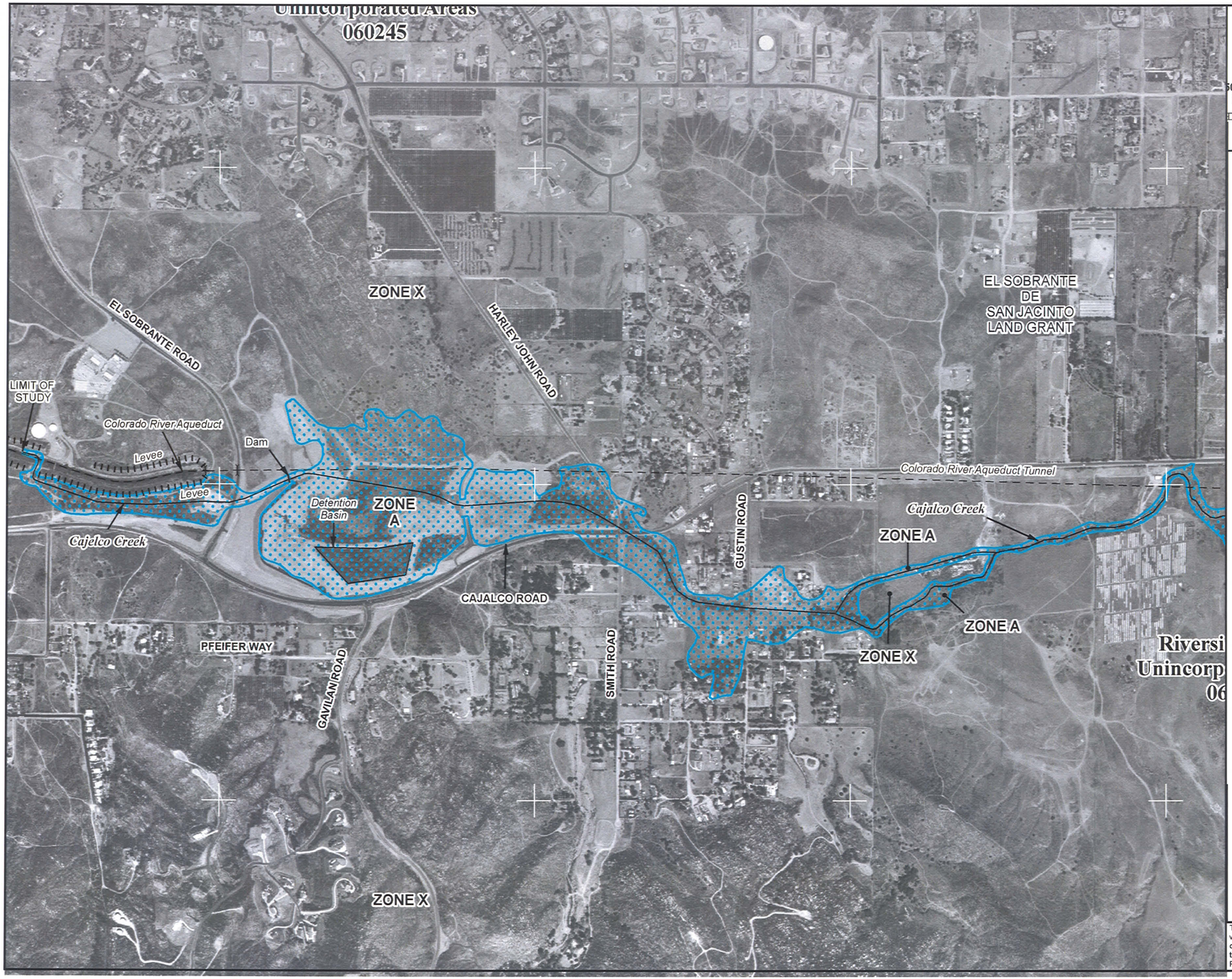

MAP SCALE 1" = 1000'

500 0 1000 2000 FEET

METER

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 1405G

FIRM

FLOOD INSURANCE RATE MAP

RIVERSIDE COUNTY, CALIFORNIA
AND INCORPORATED AREAS

PANEL 1405 OF 3805
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
RIVERSIDE COUNTY	060245	1405	G

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
06065C1405G

EFFECTIVE DATE
AUGUST 28, 2008

Federal Emergency Management Agency

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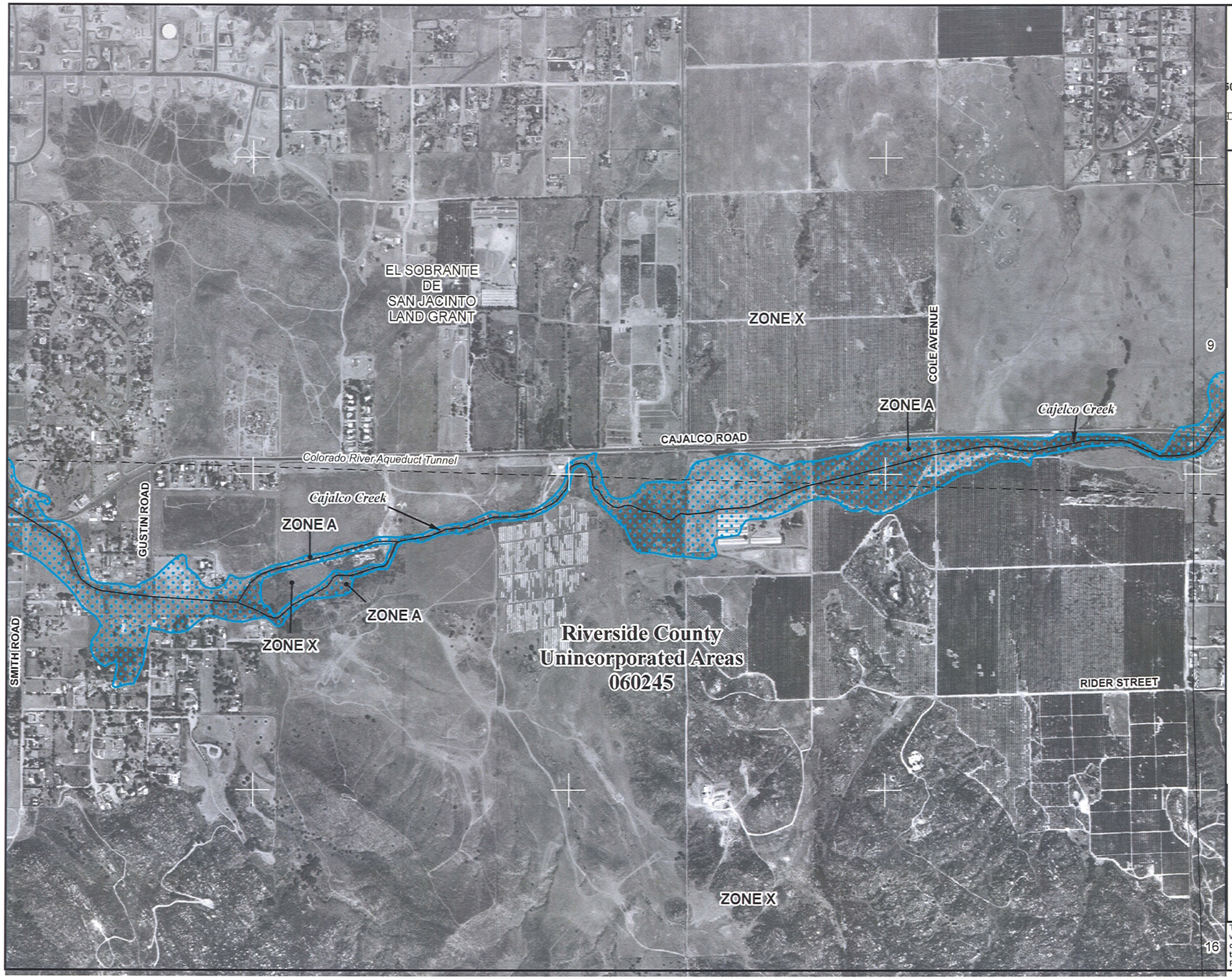

MAP SCALE 1" = 1000'

500 0 1000 2000 FEET

METER

NFIP

PANEL 1405G

NATIONAL FLOOD INSURANCE PROGRAM

FIRM

FLOOD INSURANCE RATE MAP

RIVERSIDE COUNTY, CALIFORNIA
AND INCORPORATED AREAS

PANEL 1405 OF 3805
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
RIVERSIDE COUNTY	060245	1405	G

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
06065C1405G

EFFECTIVE DATE
AUGUST 28, 2008

Federal Emergency Management Agency

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060245

LIMIT OF STUDY

ZONE A

4

ZONE X

ALEXANDER STREET

MARY STREET

THOMAS LANE

PERRY STREET

BROWN STREET

BYRON STREET

Cajalco Creek Tributary B

JEAN STREET

MARTIN STREET

ZONE A

BURNS STREET

Cajalco Creek

MOORE STREET

ZONE A

Cajalco Creek

WELLS STREET

DX3832

9

SOUDER STREET

UNA STREET

MEAD STREET

ZONE X

MARKHAM STREET

LIMIT OF STUDY

3

MARY STREET

LANE STREET

ZONE X

ZONE A

PERRY STREET

BYRON STREET

Cajalco Creek Tributary C

JEAN STREET

KINNEY STREET

HICKS STREET

DAWES STREET

HAINES STREET

CLARK STREET

CARROLL STREET

SHORT RIDGE STREET

JOHNSON STREET

ZONE A

10

CAJALCO ROAD

ELMWOOD STREET

OAKWOOD STREET

Cajalco Creek

PINEWOOD STREET

RIDER STREET

LIMIT OF STUDY

CEDAR STREET

Riverside Co
Unincorporate
060245

MAP SCALE 1" = 1000'

500 0 1000 2000

FEET

METER

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 1410G

FIRM

FLOOD INSURANCE RATE MAP

RIVERSIDE COUNTY, CALIFORNIA
AND INCORPORATED AREAS

PANEL 1410 OF 3805
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
PERRIS, CITY OF	060258	1410	G
RIVERSIDE COUNTY	060245	1410	G

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
06065C1410G

EFFECTIVE DATE
AUGUST 28, 2008

Federal Emergency Management Agency

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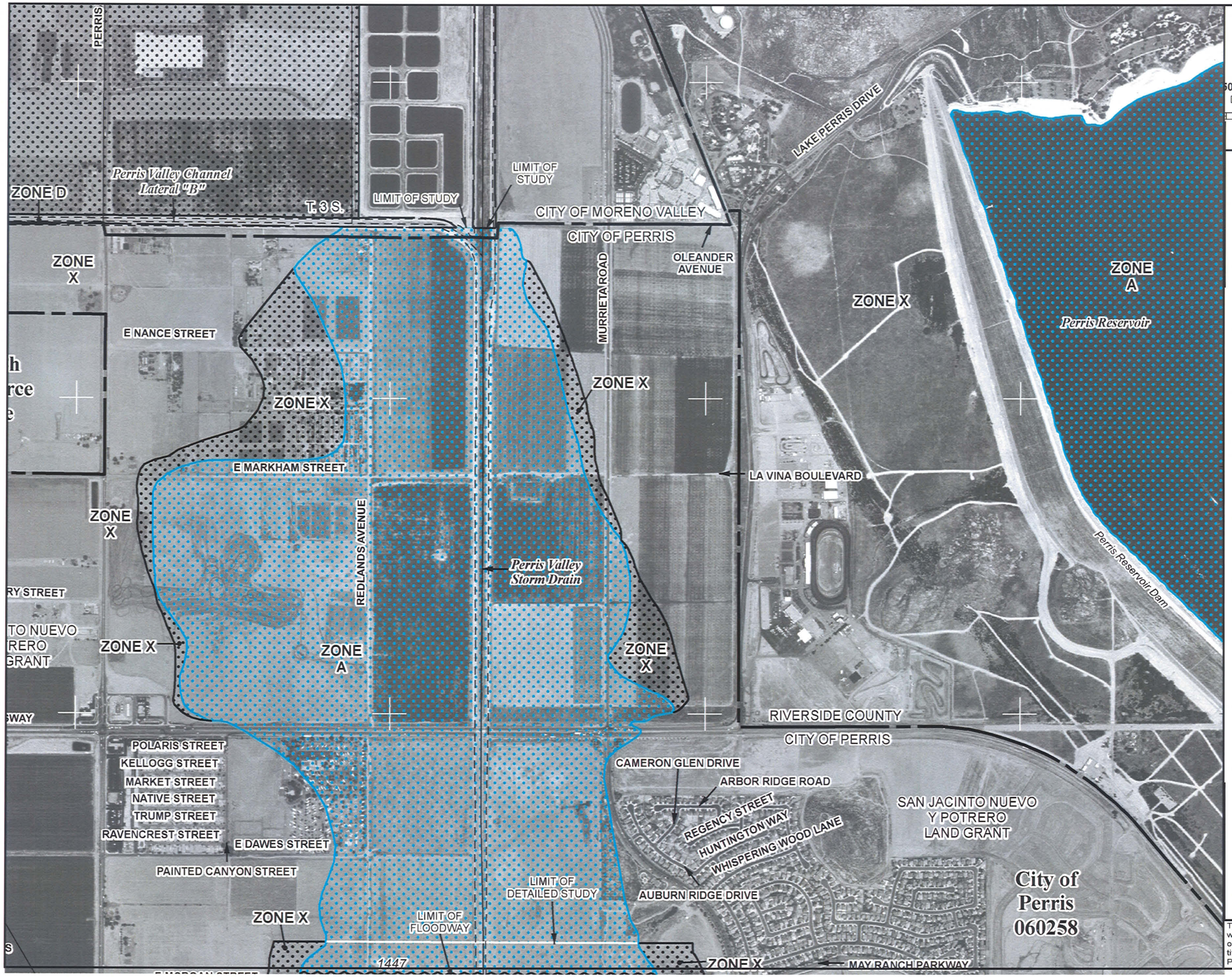

MAP SCALE 1" = 1000'

500 0 1000 2000 FEET

METER

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 1430G

FIRM

FLOOD INSURANCE RATE MAP

RIVERSIDE COUNTY, CALIFORNIA
AND INCORPORATED AREAS

PANEL 1430 OF 3805
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
MORENO VALLEY, CITY OF	065074	1430	G
PERRIS, CITY OF	060258	1430	G
RIVERSIDE COUNTY	060245	1430	G

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
06065C1430G

EFFECTIVE DATE
AUGUST 28, 2008

Federal Emergency Management Agency

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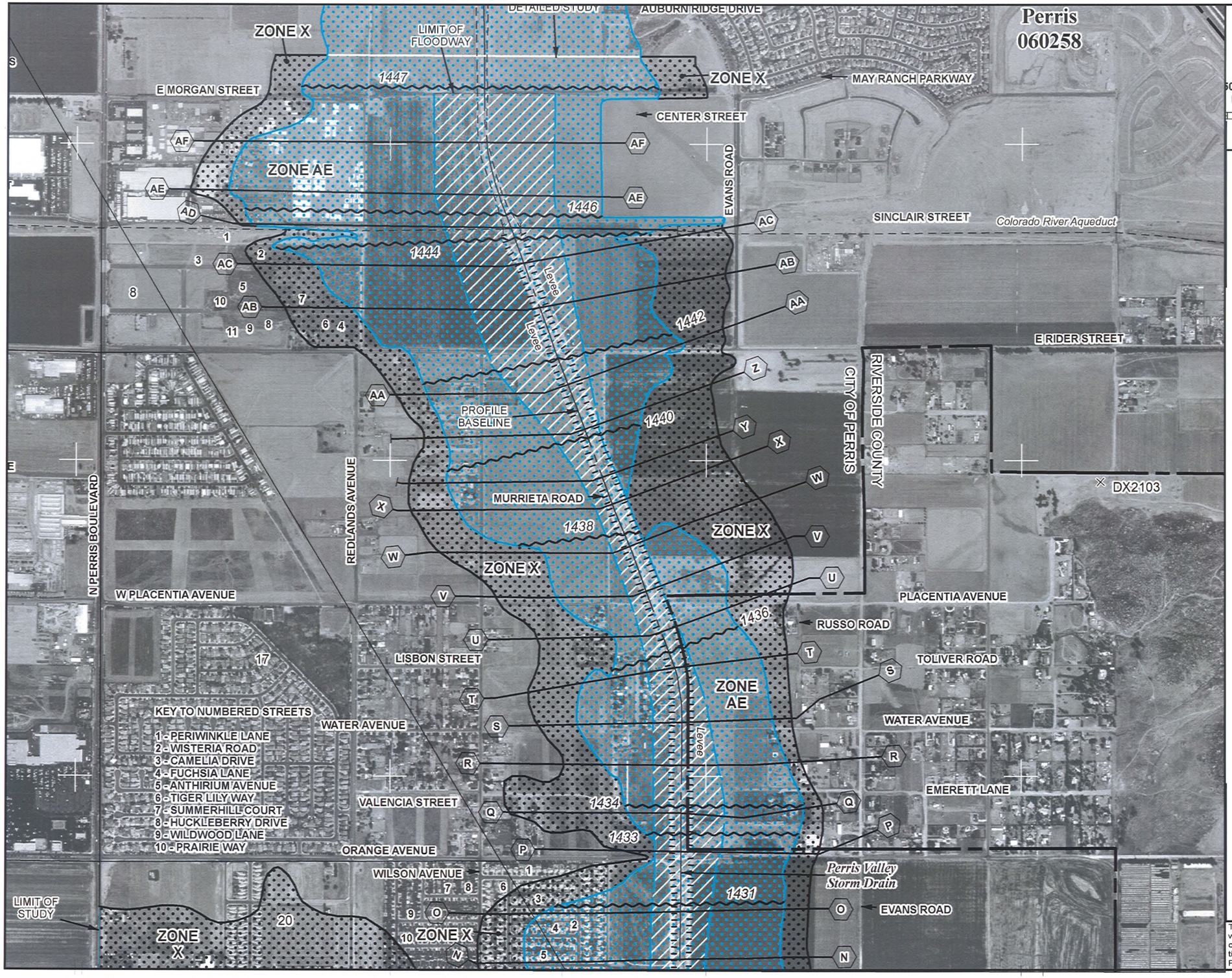

MAP SCALE 1" = 1000'

500 0 1000 2000 FEET

METER

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 1430G

FIRM

FLOOD INSURANCE RATE MAP

RIVERSIDE COUNTY, CALIFORNIA
AND INCORPORATED AREAS

PANEL 1430 OF 3805
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
MORENO VALLEY, CITY OF	065074	1430	G
PERRIS, CITY OF	060258	1430	G
RIVERSIDE COUNTY	060245	1430	G

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
06065C1430G

EFFECTIVE DATE
AUGUST 28, 2008

Federal Emergency Management Agency

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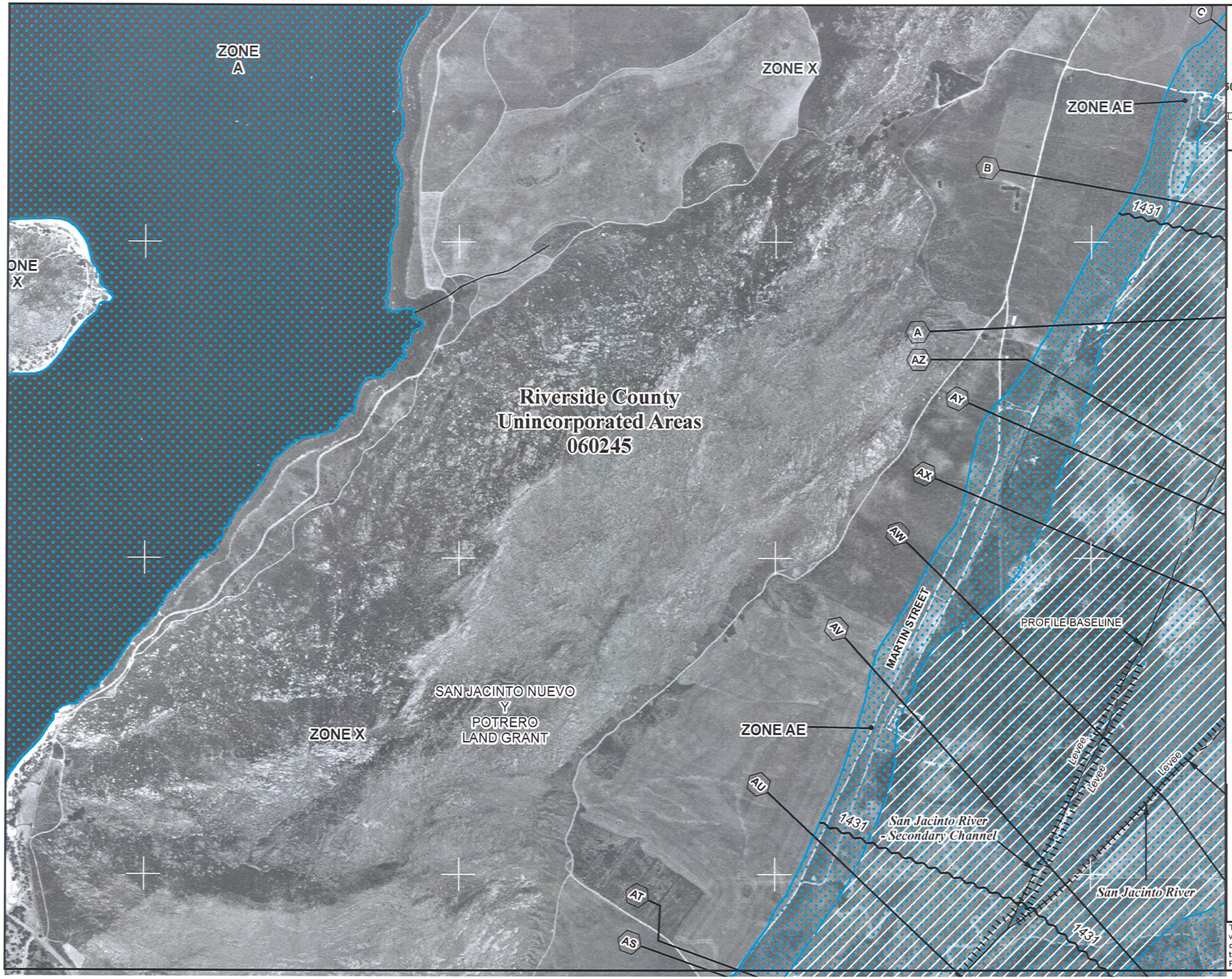

MAP SCALE 1" = 1000'

500 0 1000 2000 FEET

METER

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 1435G

FIRM

FLOOD INSURANCE RATE MAP

RIVERSIDE COUNTY, CALIFORNIA
AND INCORPORATED AREAS

PANEL 1435 OF 3805
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
PERRIS, CITY OF	060258	1435	G
RIVERSIDE COUNTY	060245	1435	G

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
06065C1435G

EFFECTIVE DATE
AUGUST 28, 2008

Federal Emergency Management Agency

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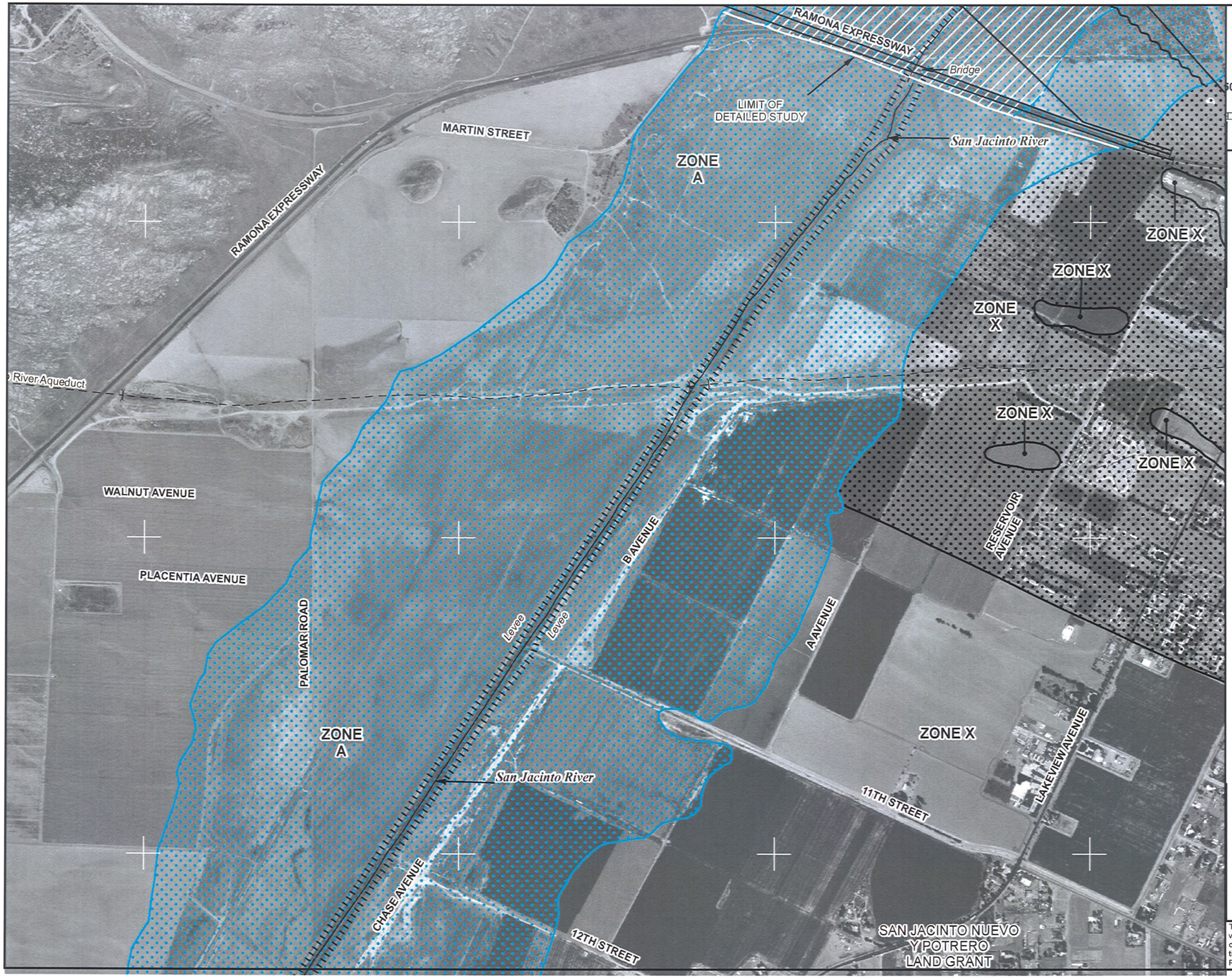

MAP SCALE 1" = 1000'

500 0 1000 2000 FEET

METER

NFIP

PANEL 1435G

FIRM

FLOOD INSURANCE RATE MAP

RIVERSIDE COUNTY, CALIFORNIA
AND INCORPORATED AREAS

PANEL 1435 OF 3805
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
PERRIS, CITY OF	060258	1435	G
RIVERSIDE COUNTY	060245	1435	G

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
06065C1435G

EFFECTIVE DATE
AUGUST 28, 2008

Federal Emergency Management Agency

NATIONAL FLOOD INSURANCE PROGRAM

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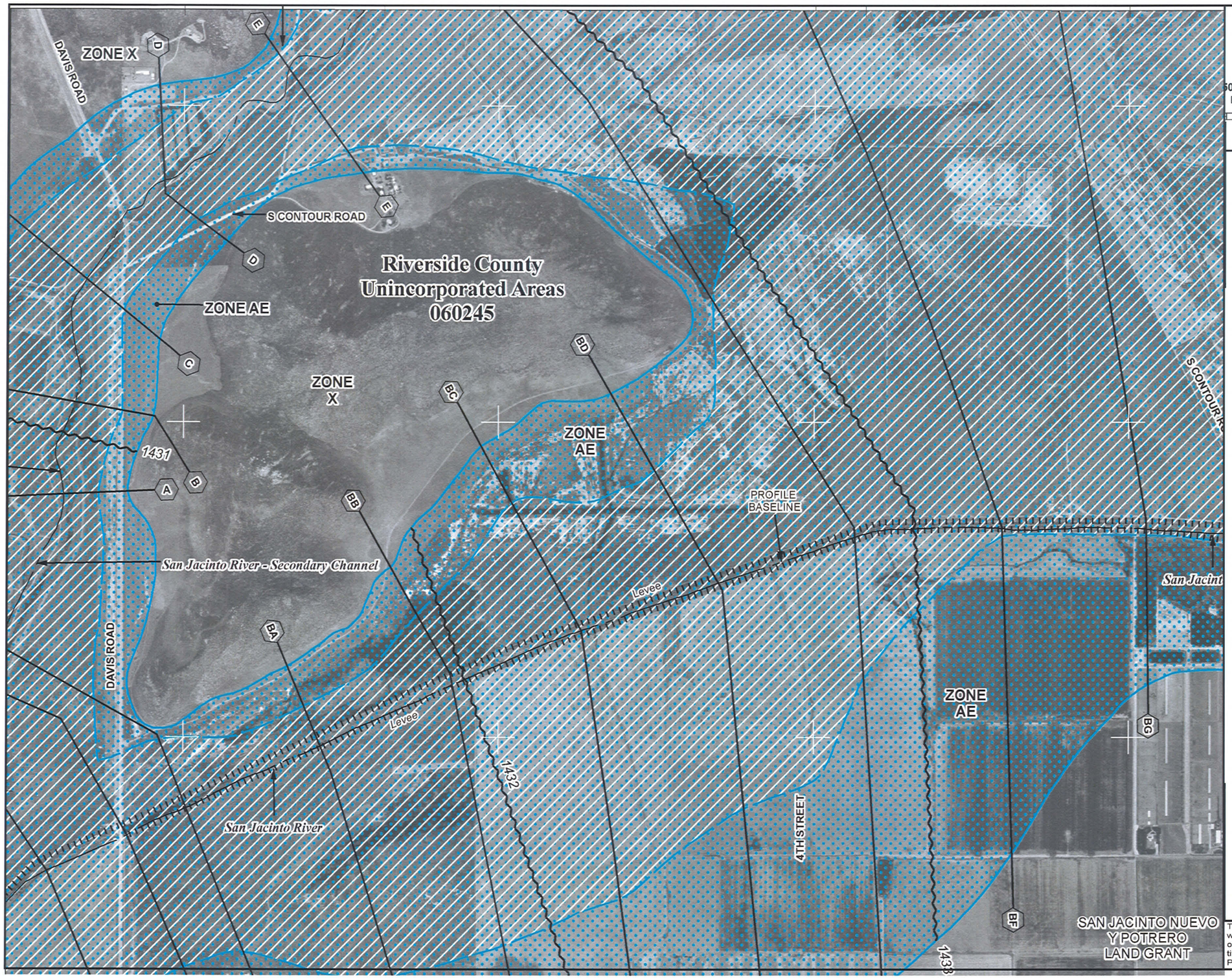

MAP SCALE 1" = 1000'

500 0 1000 2000

FEET

METER

NFIP

PANEL 1455G

NATIONAL FLOOD INSURANCE PROGRAM

FIRM

FLOOD INSURANCE RATE MAP

RIVERSIDE COUNTY, CALIFORNIA
AND INCORPORATED AREAS

PANEL 1455 OF 3805
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
RIVERSIDE COUNTY	060245	1455	G

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
06065C1455G

EFFECTIVE DATE
AUGUST 28, 2008

Federal Emergency Management Agency

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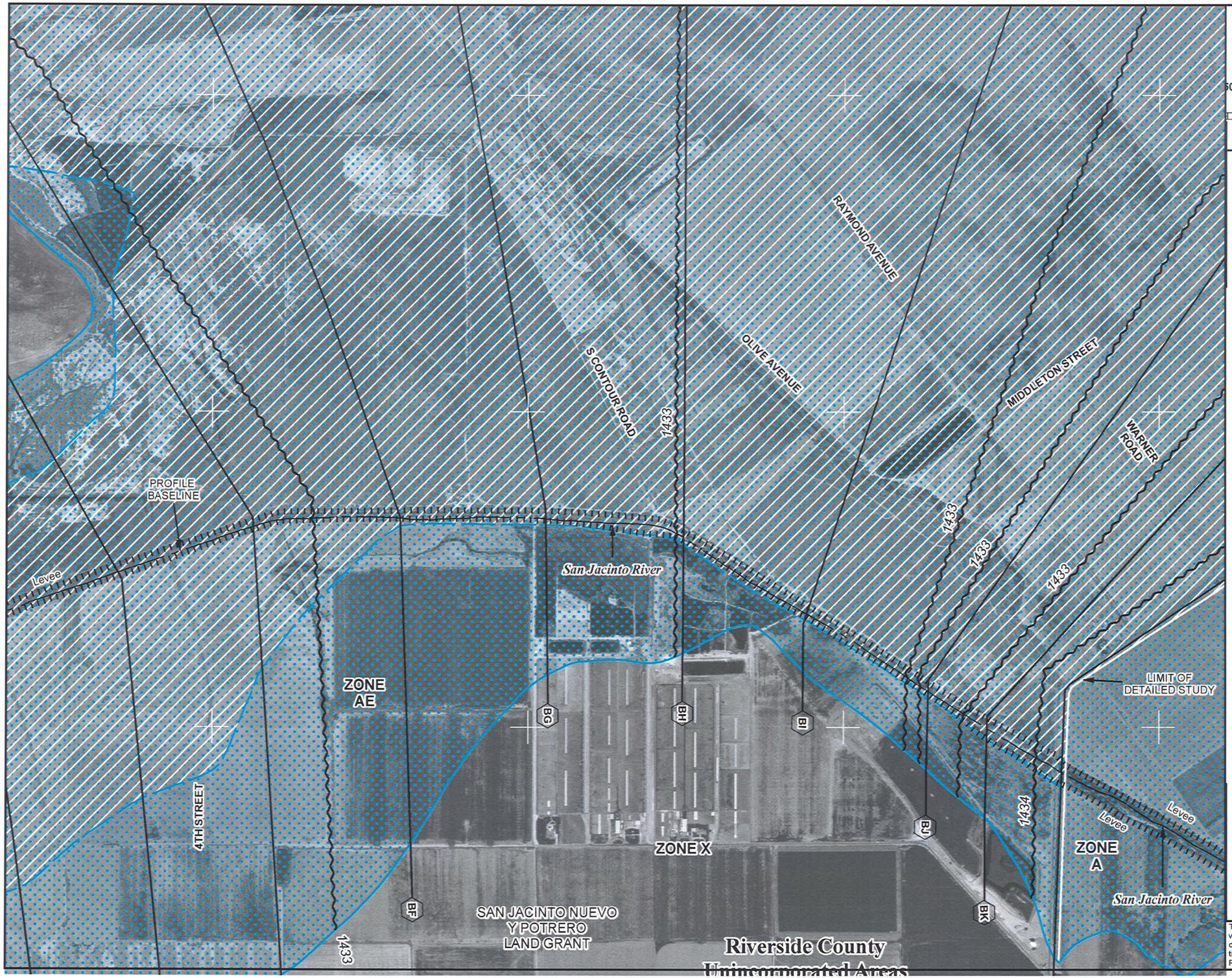

MAP SCALE 1" = 1000'

500 0 1000 2000

FEET

METER

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 1455G

FIRM

FLOOD INSURANCE RATE MAP

RIVERSIDE COUNTY, CALIFORNIA
AND INCORPORATED AREAS

PANEL 1455 OF 3805
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
RIVERSIDE COUNTY	060245	1455	G

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
06065C1455G

EFFECTIVE DATE
AUGUST 28, 2008

Federal Emergency Management Agency

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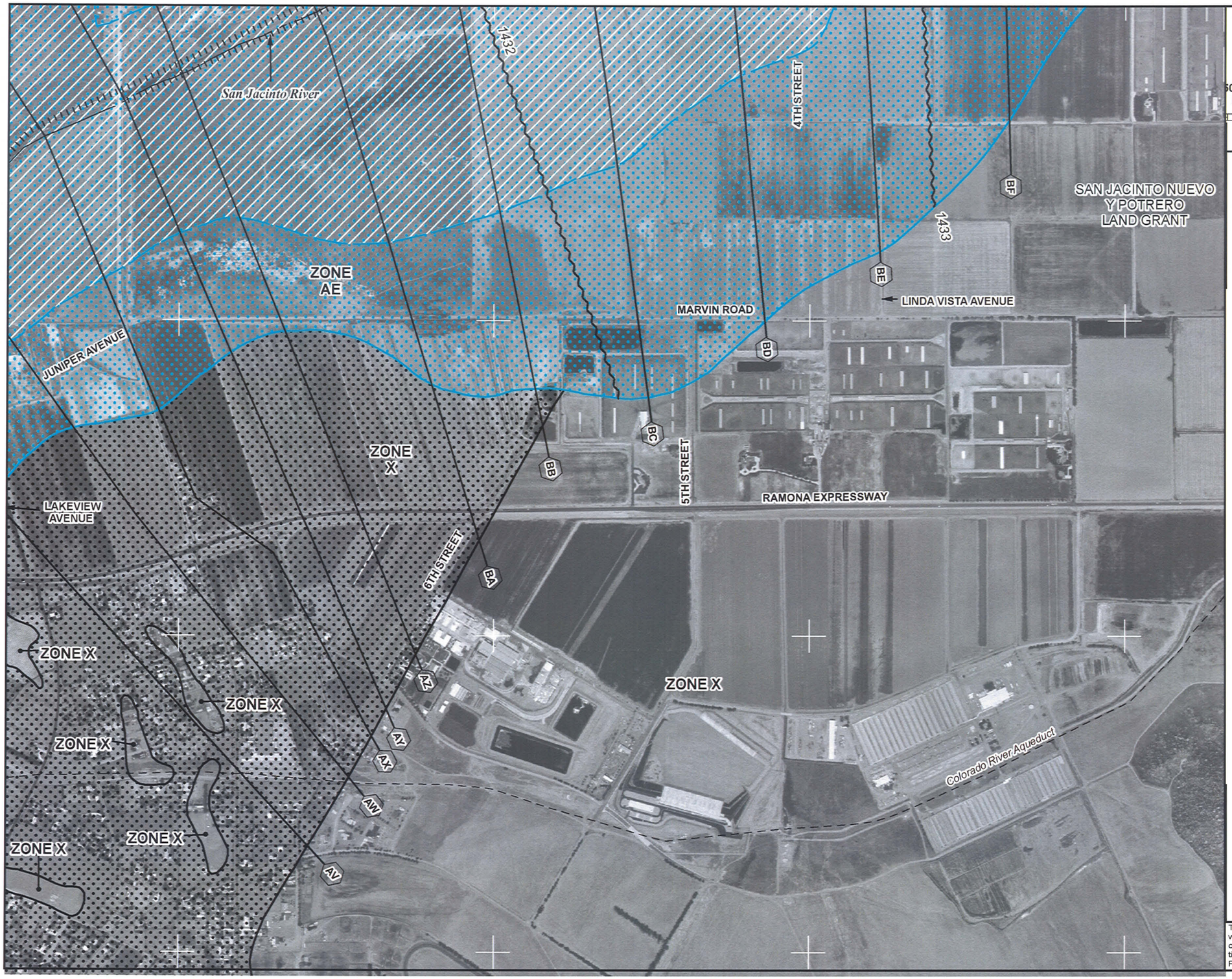

MAP SCALE 1" = 1000'

500 0 1000 2000 FEET

METER

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 1455G

FIRM

FLOOD INSURANCE RATE MAP

RIVERSIDE COUNTY, CALIFORNIA
AND INCORPORATED AREAS

PANEL 1455 OF 3805
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
RIVERSIDE COUNTY	060245	1455	G

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
06065C1455G

EFFECTIVE DATE
AUGUST 28, 2008

Federal Emergency Management Agency

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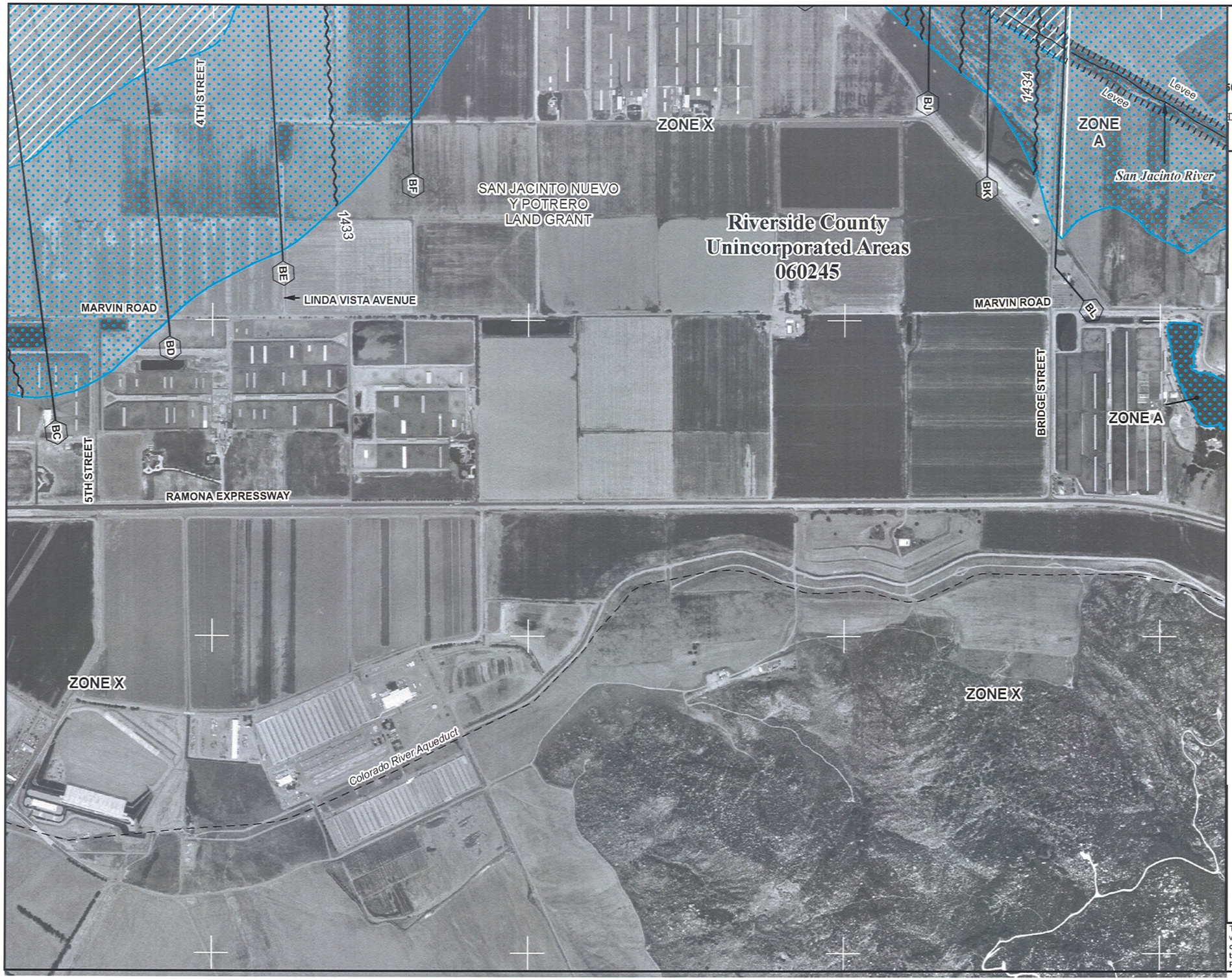

MAP SCALE 1" = 1000'

500 0 1000 2000 FEET

METER

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 1455G

FIRM

FLOOD INSURANCE RATE MAP

RIVERSIDE COUNTY, CALIFORNIA
AND INCORPORATED AREAS

PANEL 1455 OF 3805
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
RIVERSIDE COUNTY	060245	1455	G

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
06065C1455G

EFFECTIVE DATE
AUGUST 28, 2008

Federal Emergency Management Agency

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MAP SCALE 1" = 1000'

500 0 1000 2000 FEET

METER

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 1455G

FIRM

FLOOD INSURANCE RATE MAP

RIVERSIDE COUNTY, CALIFORNIA
AND INCORPORATED AREAS

PANEL 1455 OF 3805
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
RIVERSIDE COUNTY	060245	1455	G

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
06065C1455G

EFFECTIVE DATE
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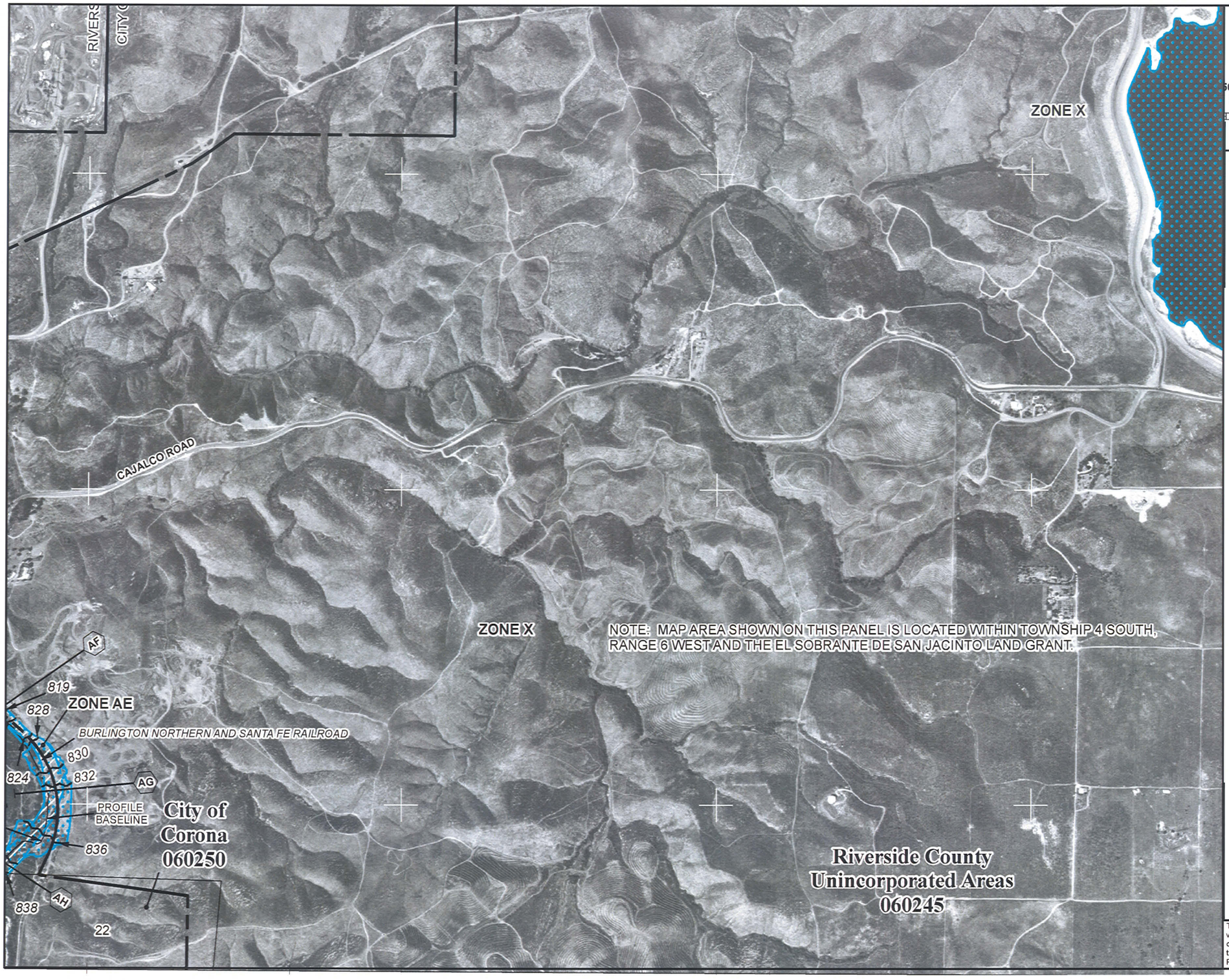

MAP SCALE 1" = 1000'

500 0 1000 2000

FEET

METER

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 1380G

FIRM

FLOOD INSURANCE RATE MAP

RIVERSIDE COUNTY, CALIFORNIA
AND INCORPORATED AREAS

PANEL 1380 OF 3805
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
CORONA, CITY OF	060250	1380	G
RIVERSIDE COUNTY	060245	1380	G

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
06065C1380G

EFFECTIVE DATE
AUGUST 28, 2008

Federal Emergency Management Agency

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MAP SCALE 1" = 1000'

500 0 1000 2000 FEET

METER

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 1370G

FIRM

FLOOD INSURANCE RATE MAP

RIVERSIDE COUNTY, CALIFORNIA
AND INCORPORATED AREAS

PANEL 1370 OF 3805
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
CORONA, CITY OF	060250	1370	G
RIVERSIDE COUNTY	060245	1370	G

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
06065C1370G

EFFECTIVE DATE
AUGUST 28, 2008

Federal Emergency Management Agency

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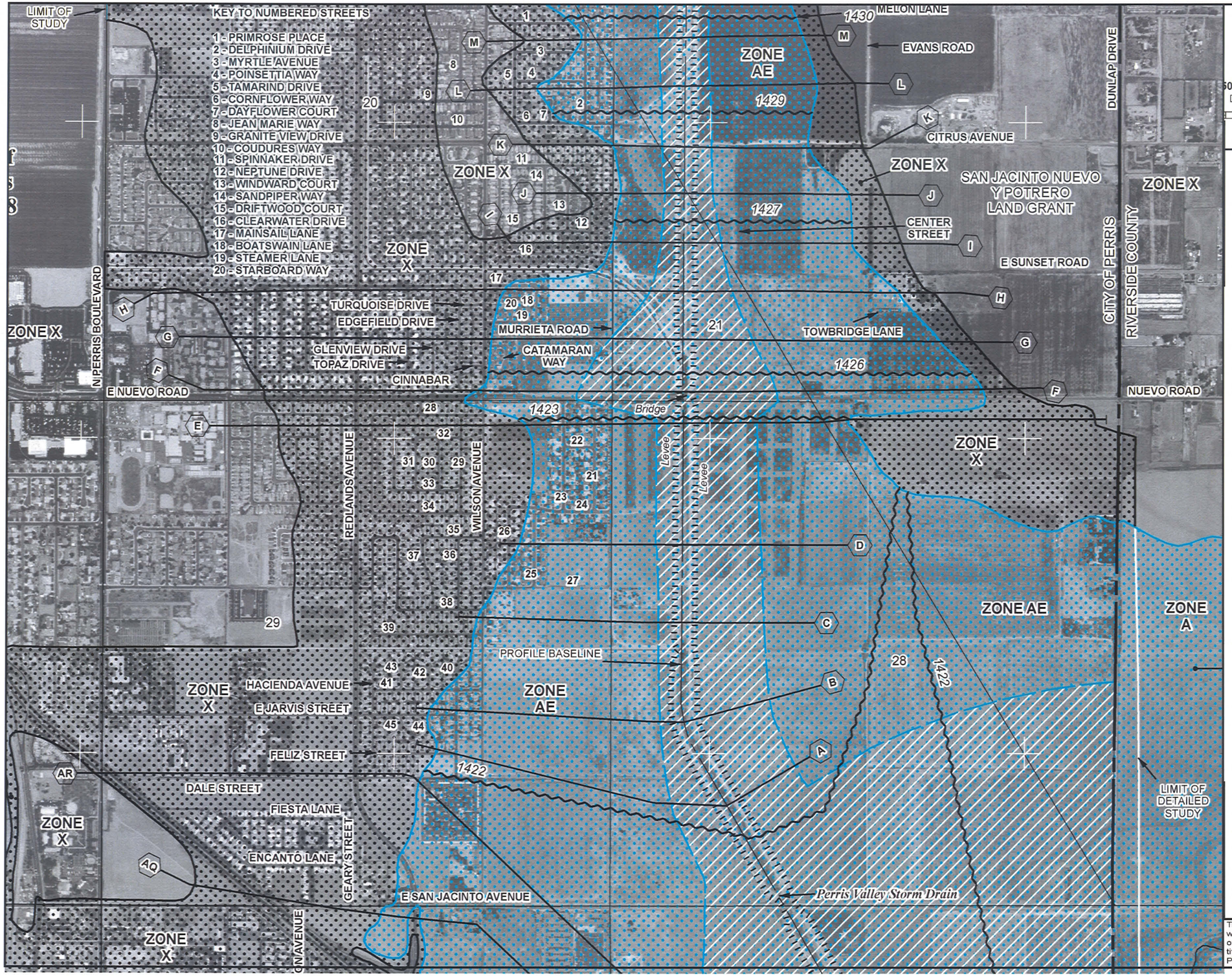

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 1440G

FIRM

FLOOD INSURANCE RATE MAP

RIVERSIDE COUNTY, CALIFORNIA
AND INCORPORATED AREAS

PANEL 1440 OF 3805
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
PERRIS, CITY OF	060258	1440	G
RIVERSIDE COUNTY	060245	1440	G

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
06065C1440G

EFFECTIVE DATE
AUGUST 28, 2008

Federal Emergency Management Agency

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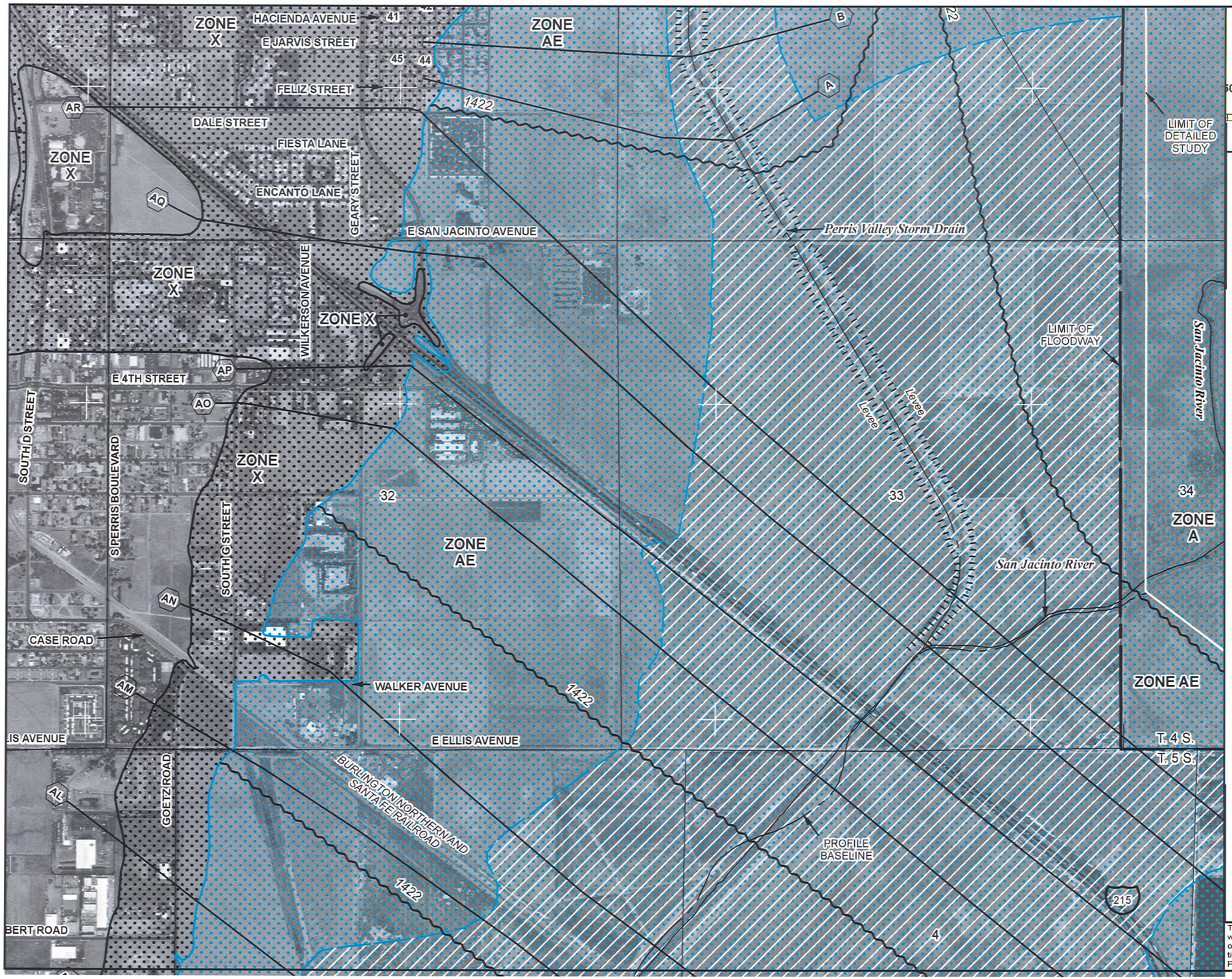

MAP SCALE 1" = 1000'

500 0 1000 2000 FEET

METER

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 1440G

FIRM

FLOOD INSURANCE RATE MAP

RIVERSIDE COUNTY, CALIFORNIA
AND INCORPORATED AREAS

PANEL 1440 OF 3805
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
PERRIS, CITY OF	060258	1440	G
RIVERSIDE COUNTY	060245	1440	G

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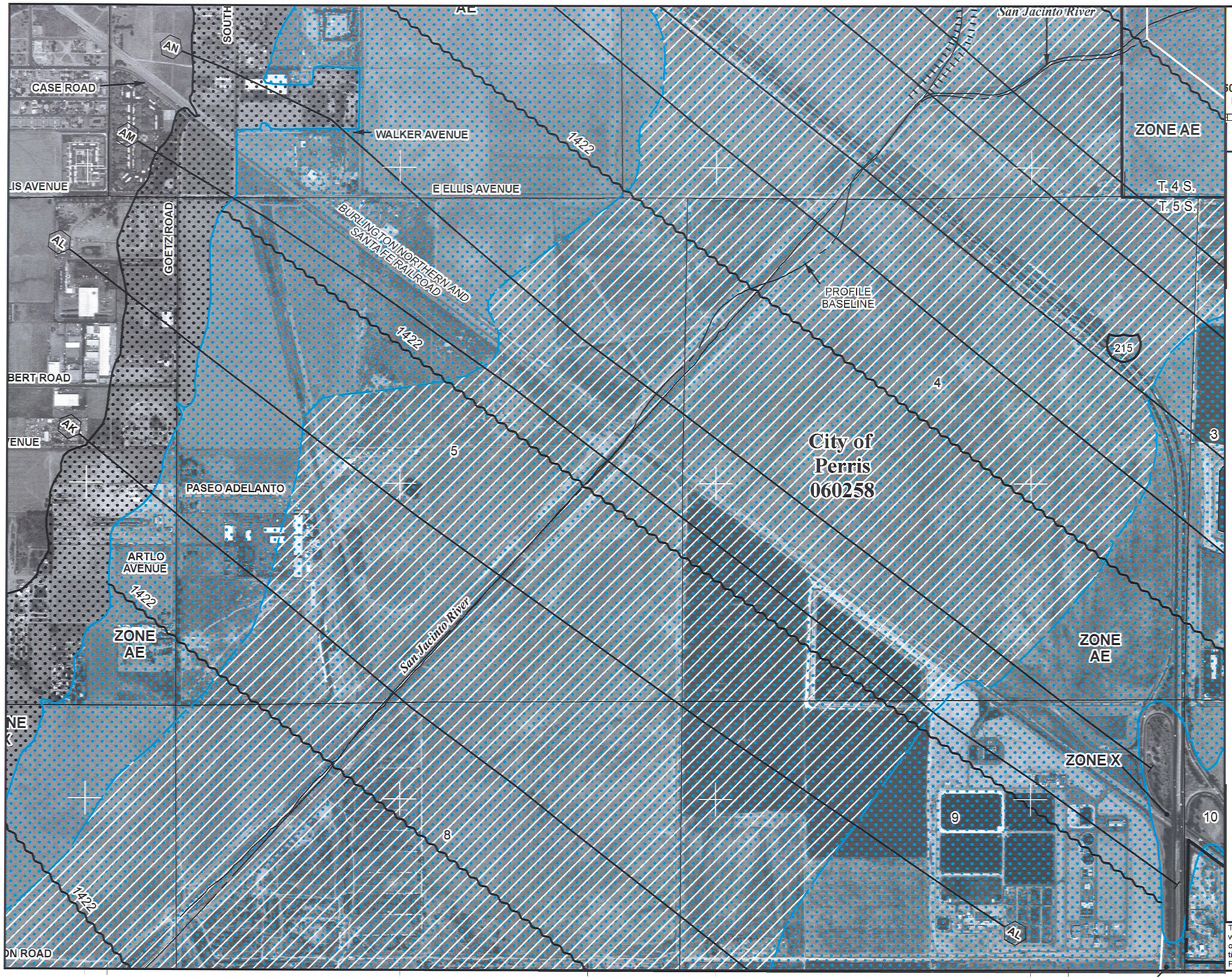

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NATIONAL FLOOD INSURANCE PROGRAM

PANEL 1440G

FIRM

FLOOD INSURANCE RATE MAP

RIVERSIDE COUNTY, CALIFORNIA
AND INCORPORATED AREAS

PANEL 1440 OF 3805
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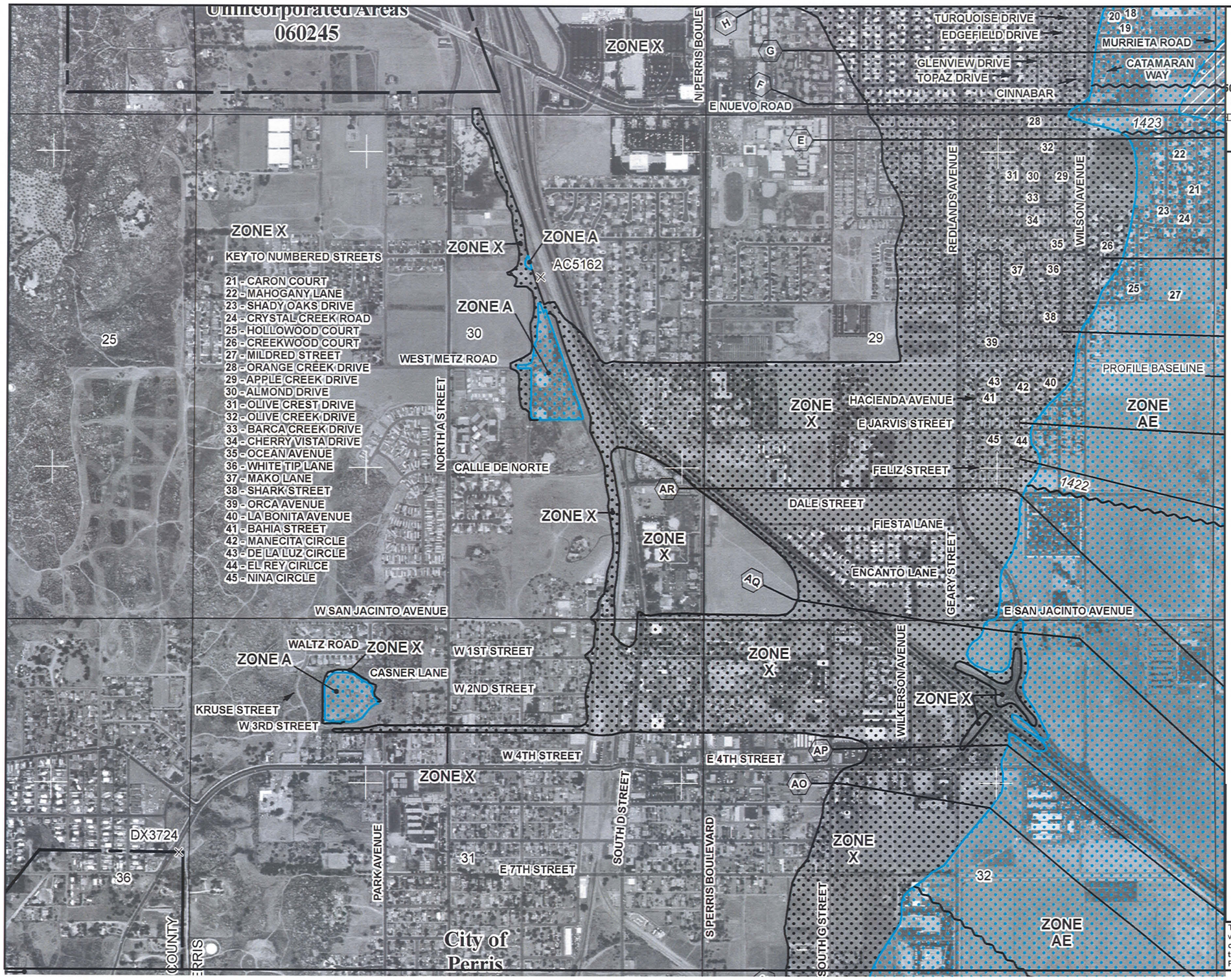

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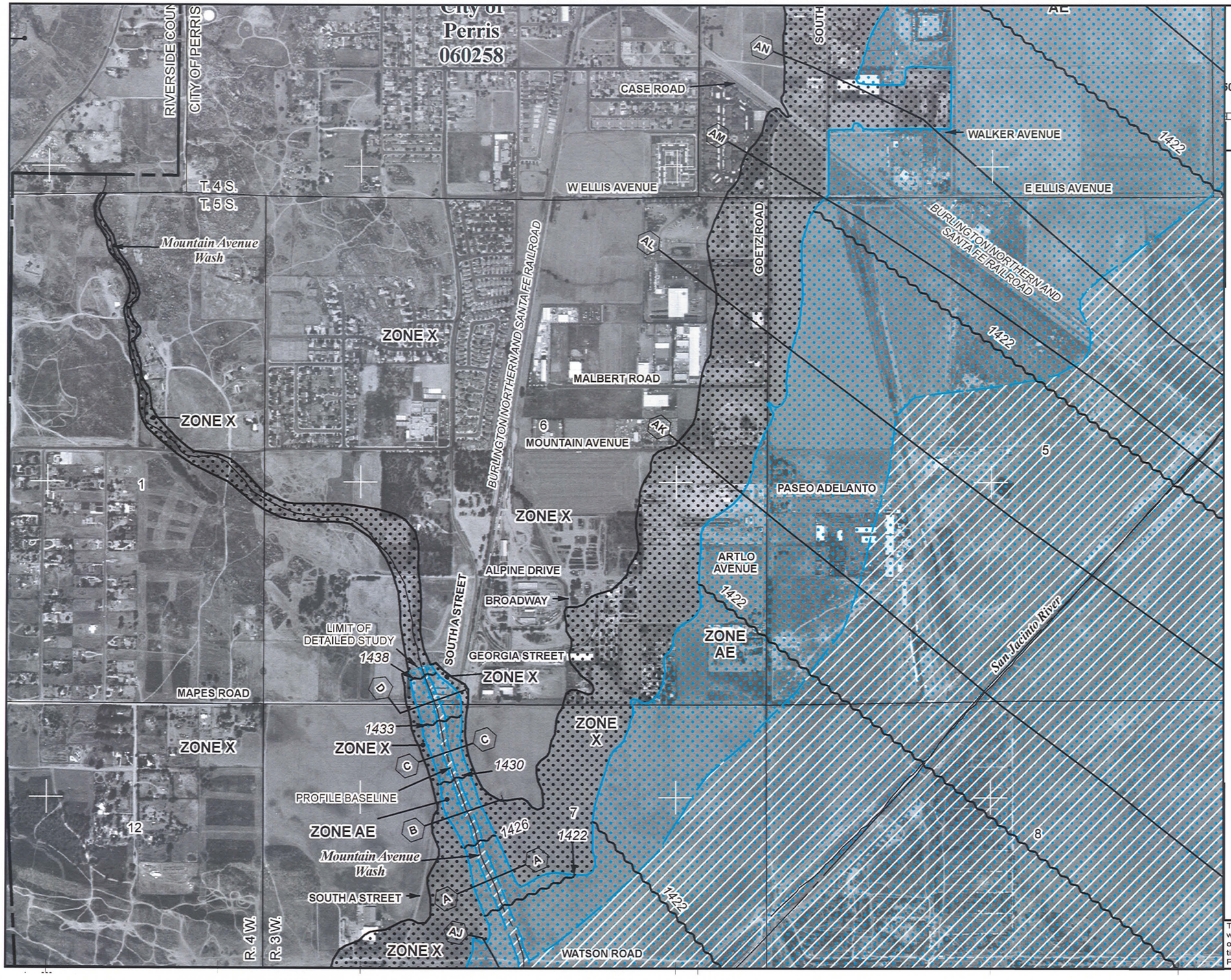

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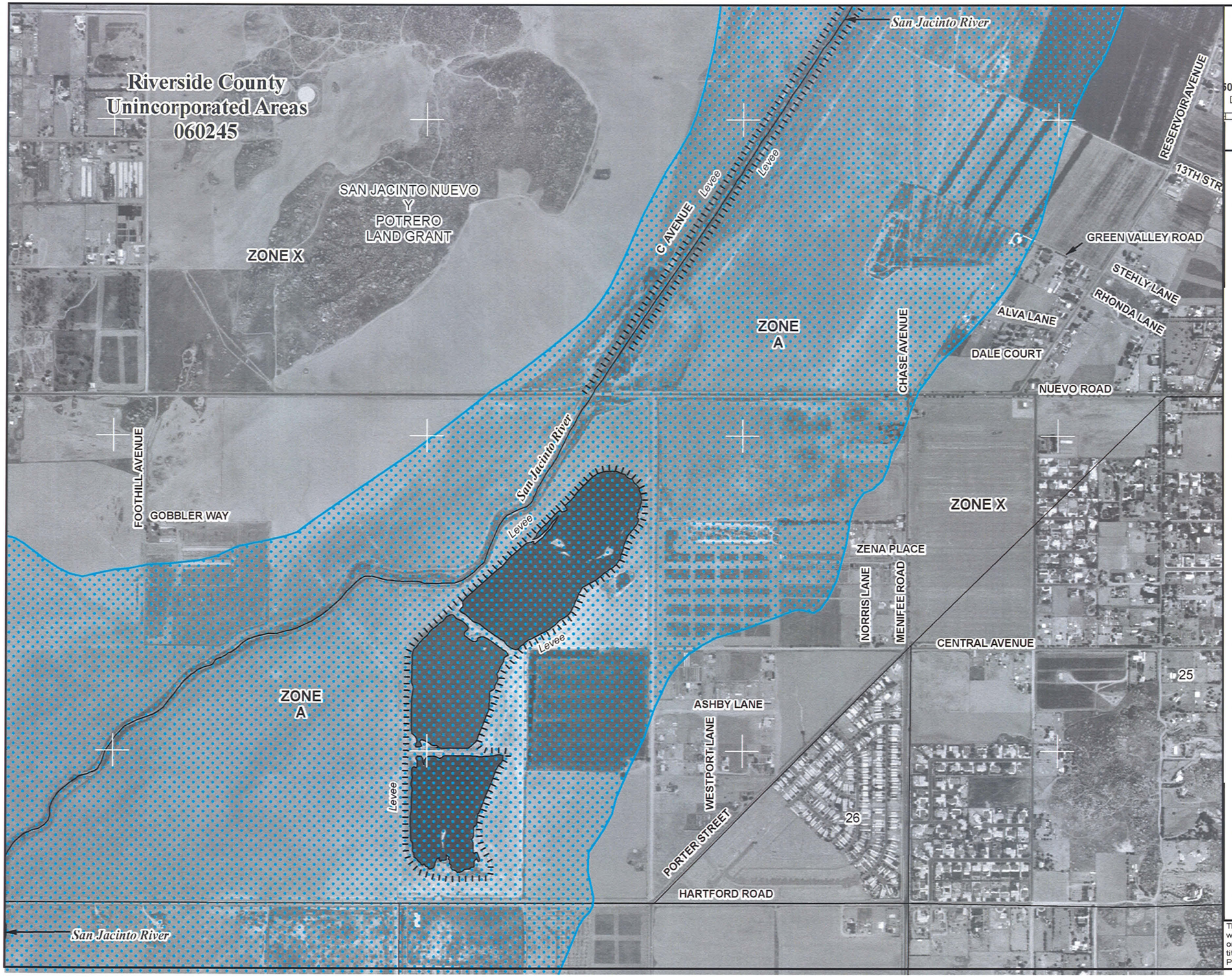

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PANEL 1445G

FIRM

FLOOD INSURANCE RATE MAP

RIVERSIDE COUNTY, CALIFORNIA
AND INCORPORATED AREAS

PANEL 1445 OF 3805
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

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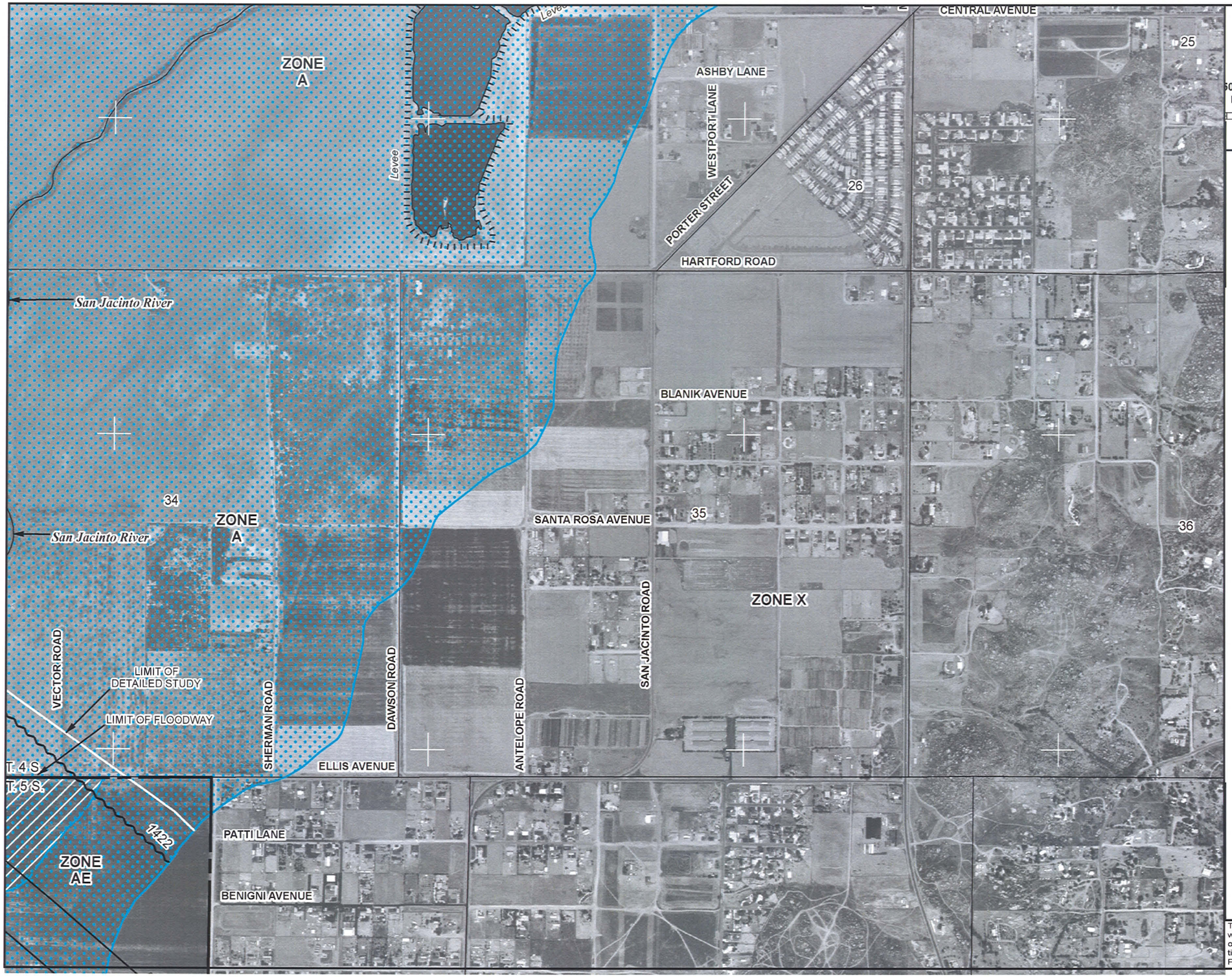

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NATIONAL FLOOD INSURANCE PROGRAM

PANEL 1445G

FIRM

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RIVERSIDE COUNTY, CALIFORNIA
AND INCORPORATED AREAS

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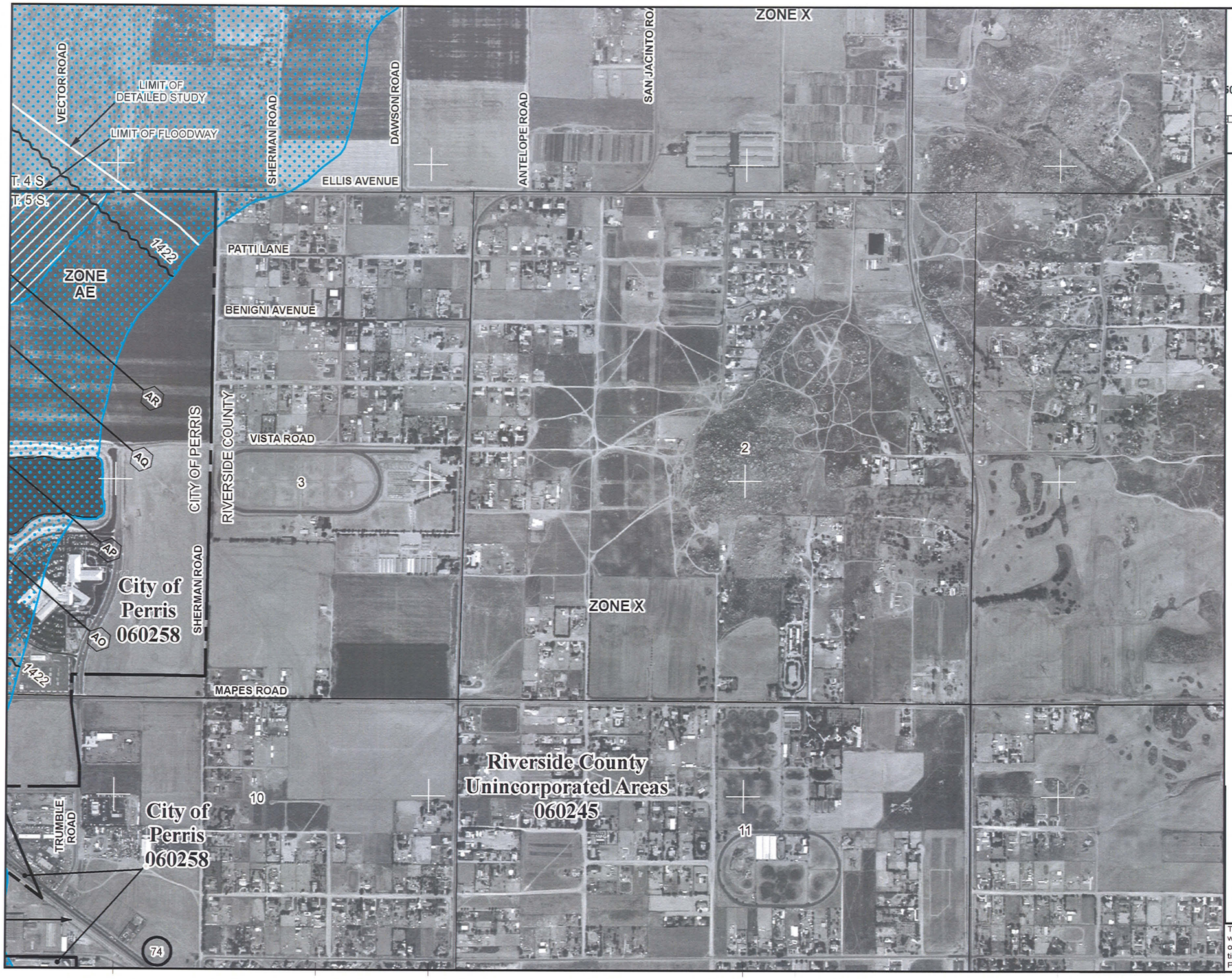

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PANEL 1445G

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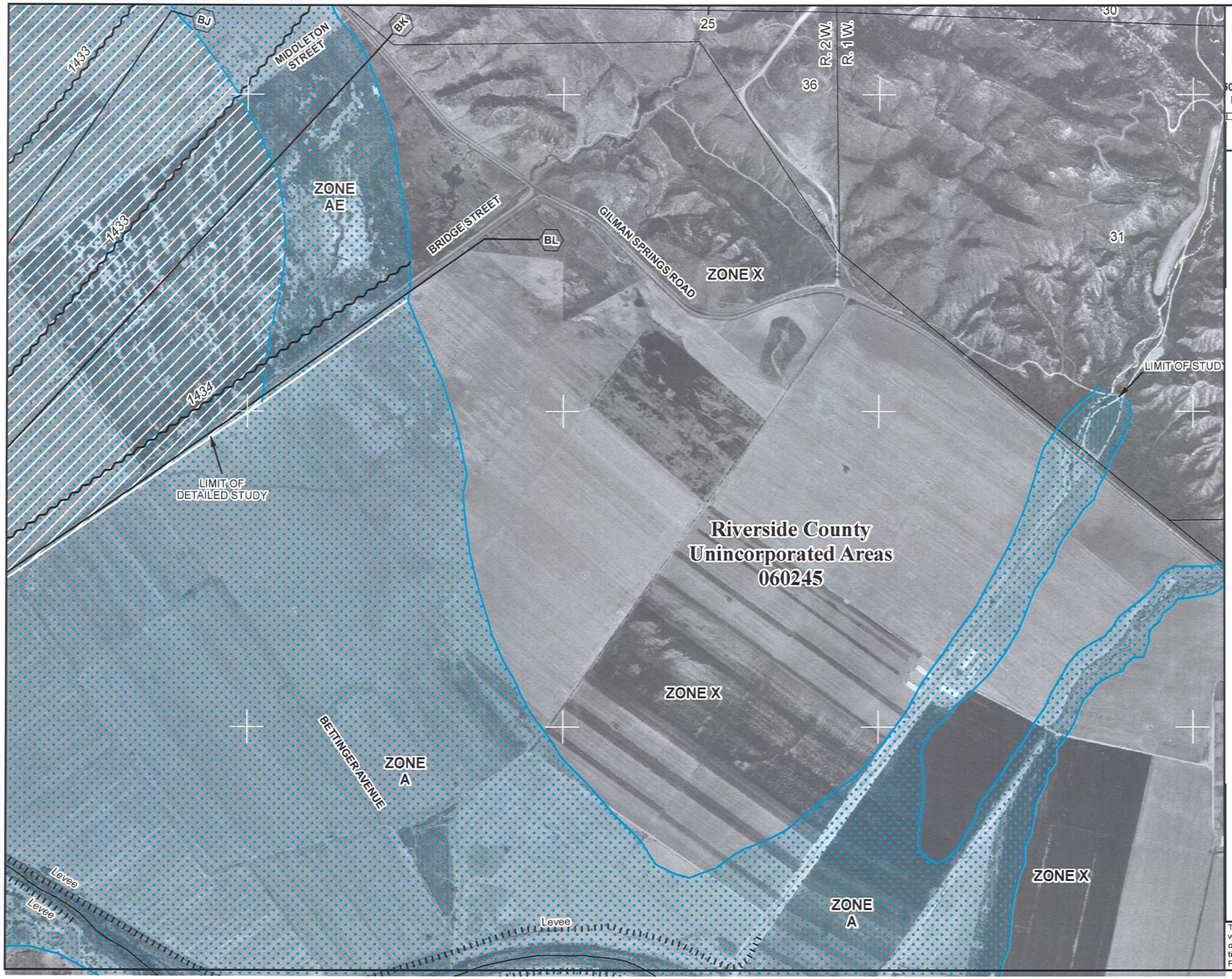

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NATIONAL FLOOD INSURANCE PROGRAM

PANEL 1460G

FIRM

FLOOD INSURANCE RATE MAP

RIVERSIDE COUNTY, CALIFORNIA
AND INCORPORATED AREAS

PANEL 1460 OF 3805
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
RIVERSIDE COUNTY	060245	1460	G
SAN JACINTO, CITY OF	065056	1460	G

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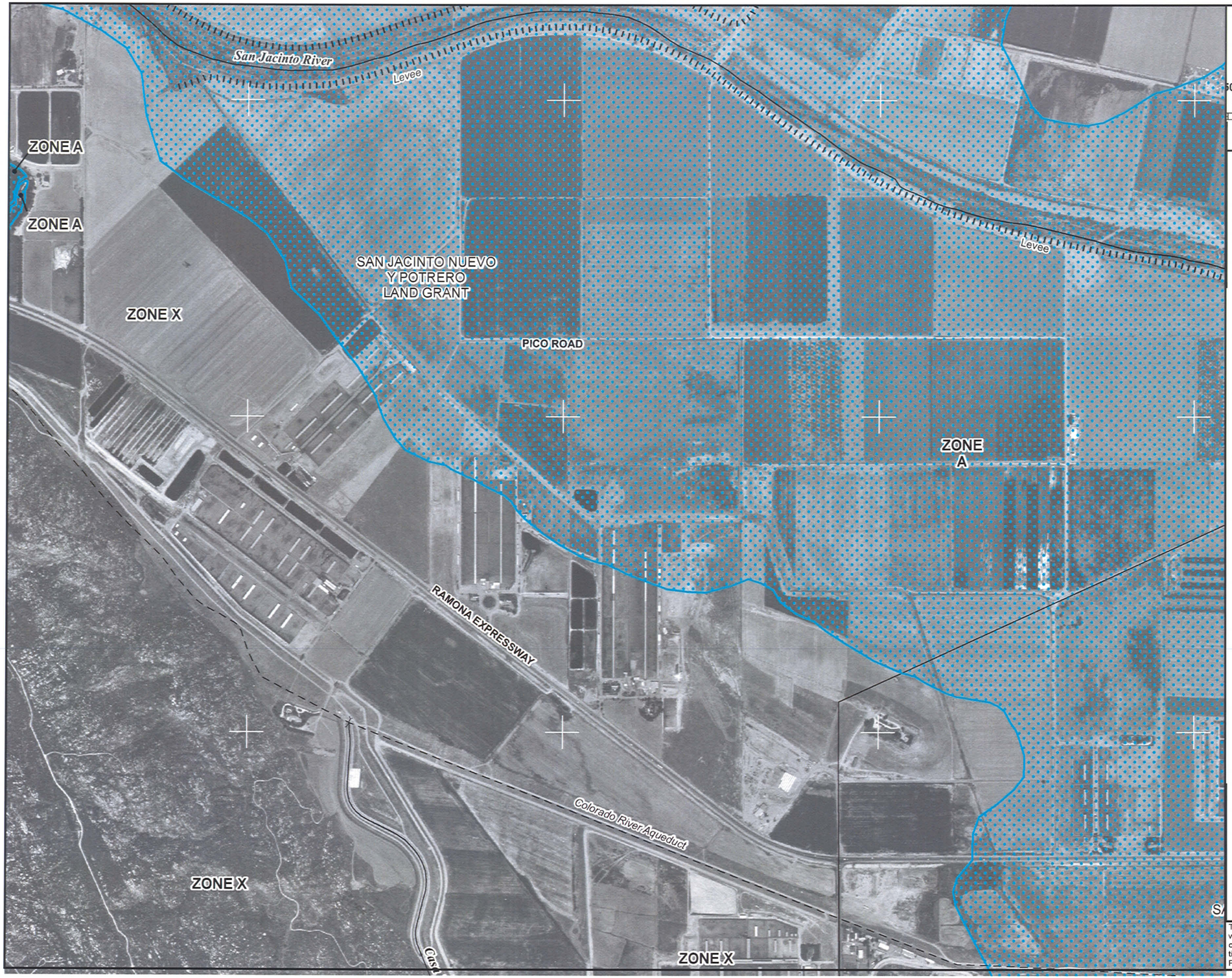

MAP SCALE 1" = 1000'

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NATIONAL FLOOD INSURANCE PROGRAM

PANEL 1460G

FIRM

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RIVERSIDE COUNTY, CALIFORNIA
AND INCORPORATED AREAS

PANEL 1460 OF 3805
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

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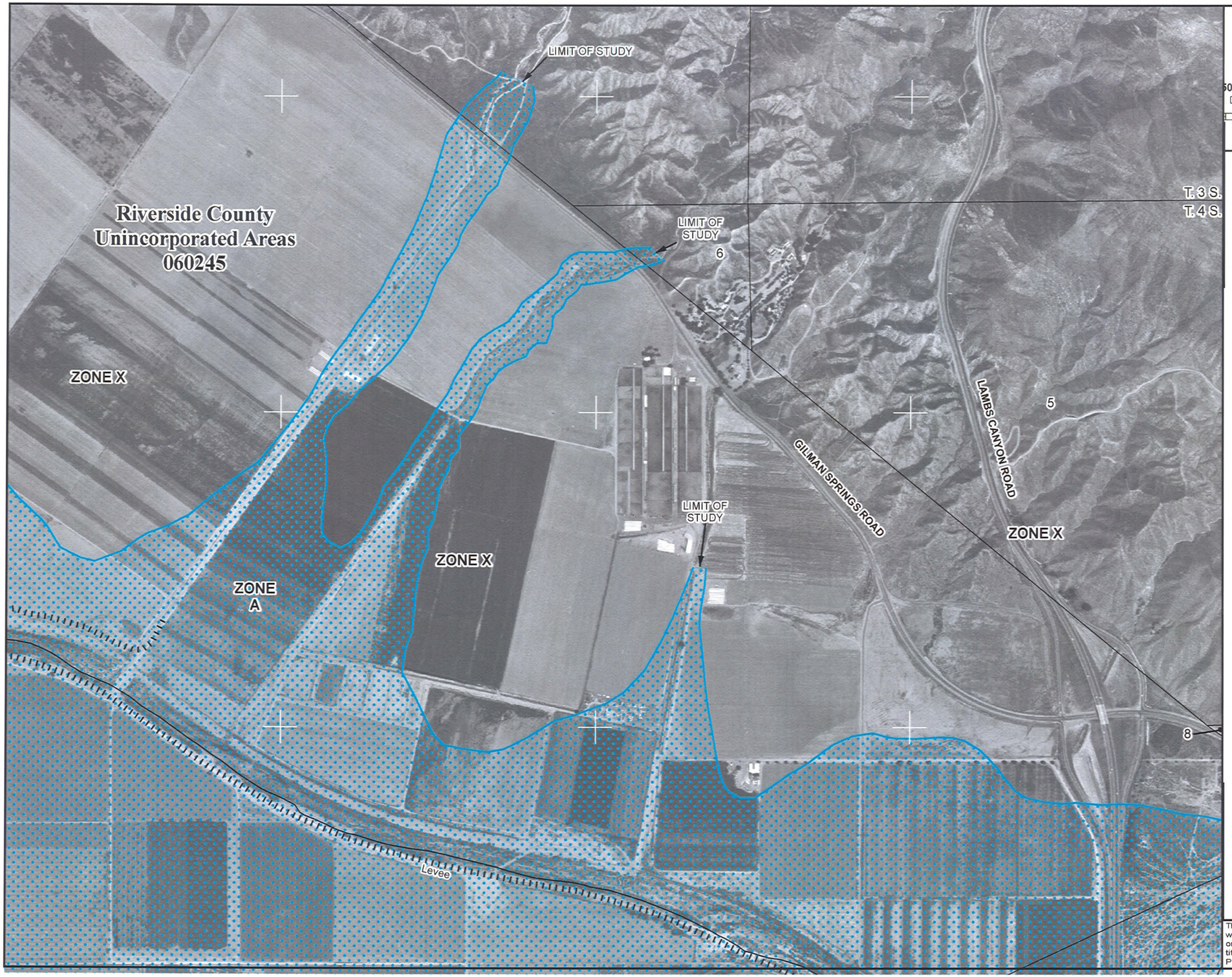

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NATIONAL FLOOD INSURANCE PROGRAM

PANEL 1460G

FIRM

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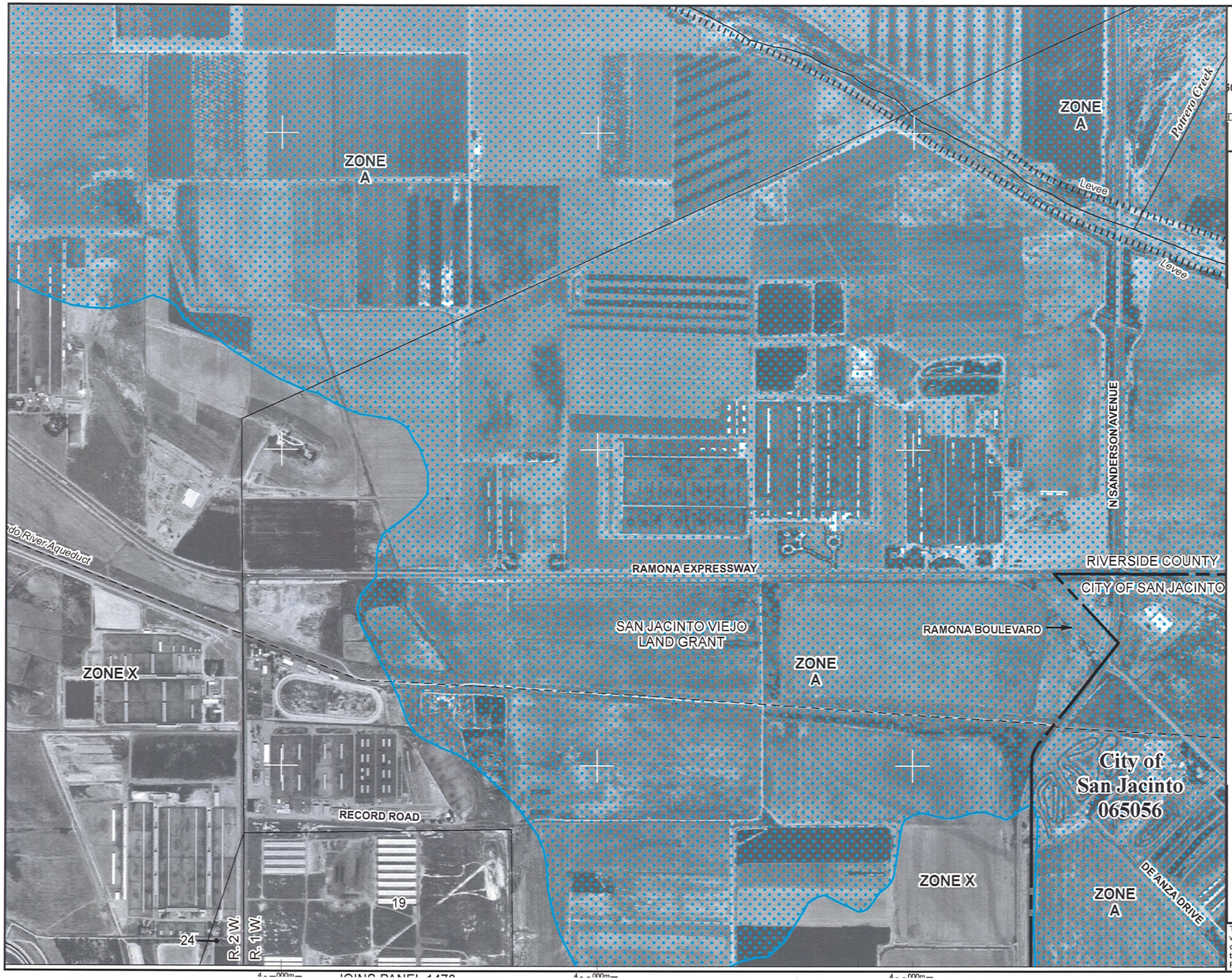

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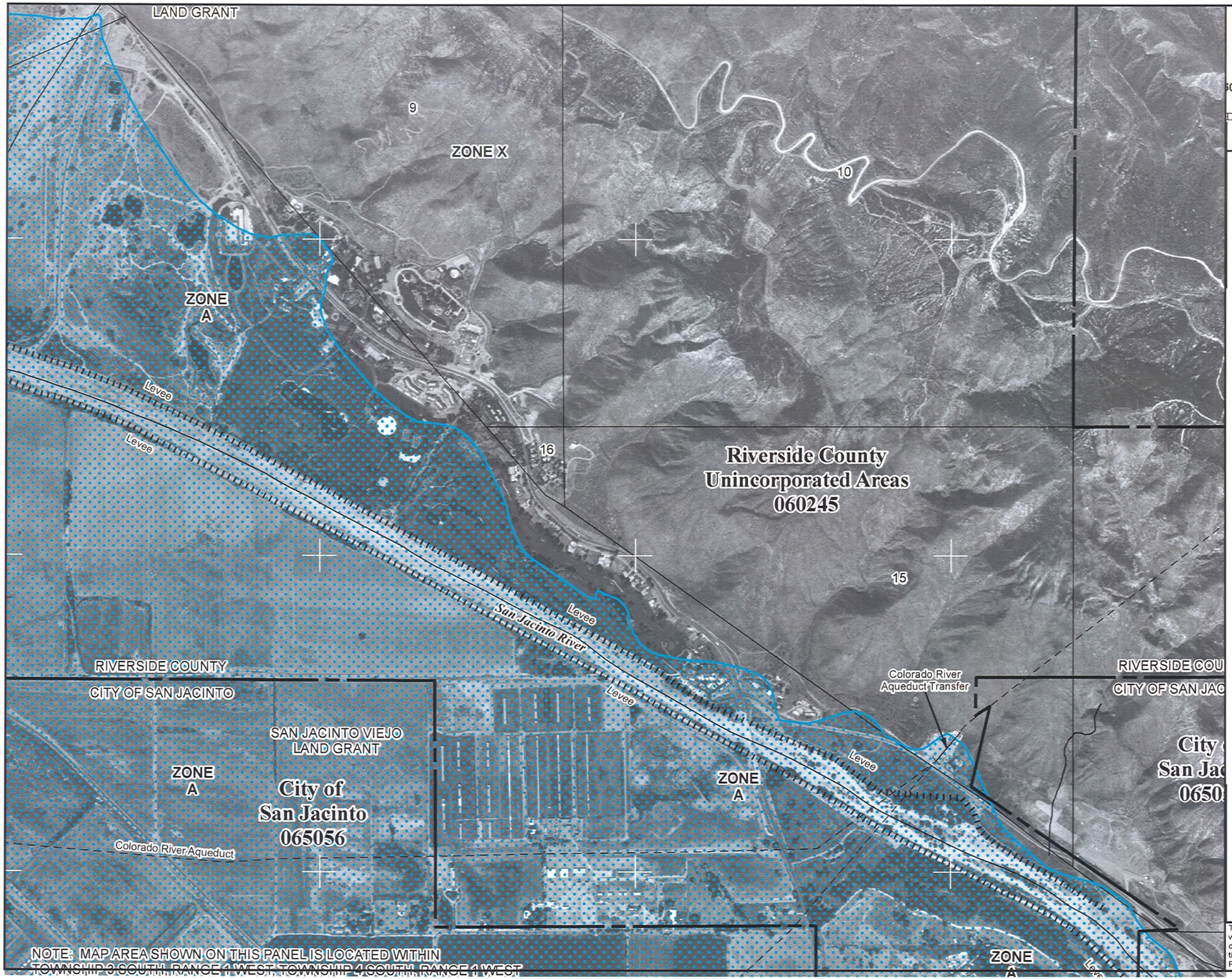

MAP SCALE 1" = 1000'

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NATIONAL FLOOD INSURANCE PROGRAM

PANEL 1480G

FIRM

FLOOD INSURANCE RATE MAP

RIVERSIDE COUNTY, CALIFORNIA
AND INCORPORATED AREAS

PANEL 1480 OF 3805
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
BEAUMONT, CITY OF	060247	1480	G
RIVERSIDE COUNTY	060245	1480	G
SAN JACINTO, CITY OF	065056	1480	G

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Appendix N 404(b)(1) Alternatives Analysis

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MID COUNTY PARKWAY

District 8-Riv-KP 0.0/51.0 (PM 0.0/31.7)

EA 08-0F3200

404(B)(1) ALTERNATIVES ANALYSIS

Prepared by the

U.S. Department of Transportation

Federal Highway Administration

and the

State of California Department of Transportation

and the Riverside County Transportation Commission

August 2008

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404(B)(1) ALTERNATIVES ANALYSIS

MID COUNTY PARKWAY

08-Riv-KP 0.0/51.0 (PM 0.0/31.7)
EA 08-0F3200

August 2008

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1.0 INTRODUCTION

This Alternatives Analysis has been prepared on behalf of the Riverside County Transportation Commission (RCTC) to assist the United States Army Corps of Engineers (USACE) in determining the proposed project's compliance with Clean Water Act (CWA) Section 404(b)(1) Guidelines for Specification of Disposal Sites for Dredge or Fill Material (40 CFR 230). As recommended by the National Environmental Policy Act (NEPA)/404 Memorandum of Understanding (MOU) Guidance Paper[1], this Alternatives Analysis presents the full range and scope of all reasonable and practicable alternatives so as to sharply define the issues and provide a clear basis of choice among the alternatives.

1.1 PROPOSED ACTION

RCTC, in cooperation with the Federal Highway Administration (FHWA) and the California Department of Transportation (Caltrans) District 8, the County of Riverside (County), and the cities of Corona, Perris, and San Jacinto, has initiated a study of a range of alignment alternatives for a new west-east transportation corridor. The proposed action would adopt an alignment for the new corridor, named the Mid County Parkway (MCP), and construct a major limited-access transportation facility to meet current and projected travel demand for the year 2035 for the 32 miles between Interstate 15 (I-15) on the west to State Route 79 (SR-79) on the east (Figures 1 and 2). The proposed MCP will supersede the existing designations in the Circulation Element of the County General Plan of the Hemet to Corona/Lake Elsinore (HCLE) Community and Environmental Transportation Acceptability Process (CETAP) corridor and will constitute a minor amendment to the Circulation Element of the adopted County General Plan (October 2003). RCTC may recommend this facility for adoption as a new State highway route.

1.2 PROJECT LOCATION

The proposed project alignments are located in northwestern Riverside County parallel to existing Cajalco Road between I-15 and Interstate 215 (I-215) and the Ramona Expressway east of I-215 to SR-79.

The project area passes from west to east, specifically beginning in Section 16, Township 4 South, Range 6 West, of the United States Geological Survey (USGS) 7.5-minute Corona South, California quadrangle, passing east through the Lake Mathews, Steele Peak, Perris, and Lakeview quadrangles respectively, and ending in Section 15, Township 4 South, Range 1 West, of the USGS 7.5-minute San Jacinto quadrangle. The approximate Universal Transverse Mercator (UTM) Zone 11 coordinates for the survey area are 452800 East by 3742550 North at the western boundary and 502520 East by 3742210 North at the eastern boundary. The elevation generally increases from west to east, from

[1] http://www.fhwa.dot.gov/cadiv/pre/guide2.htm, accessed March 21, 2007.

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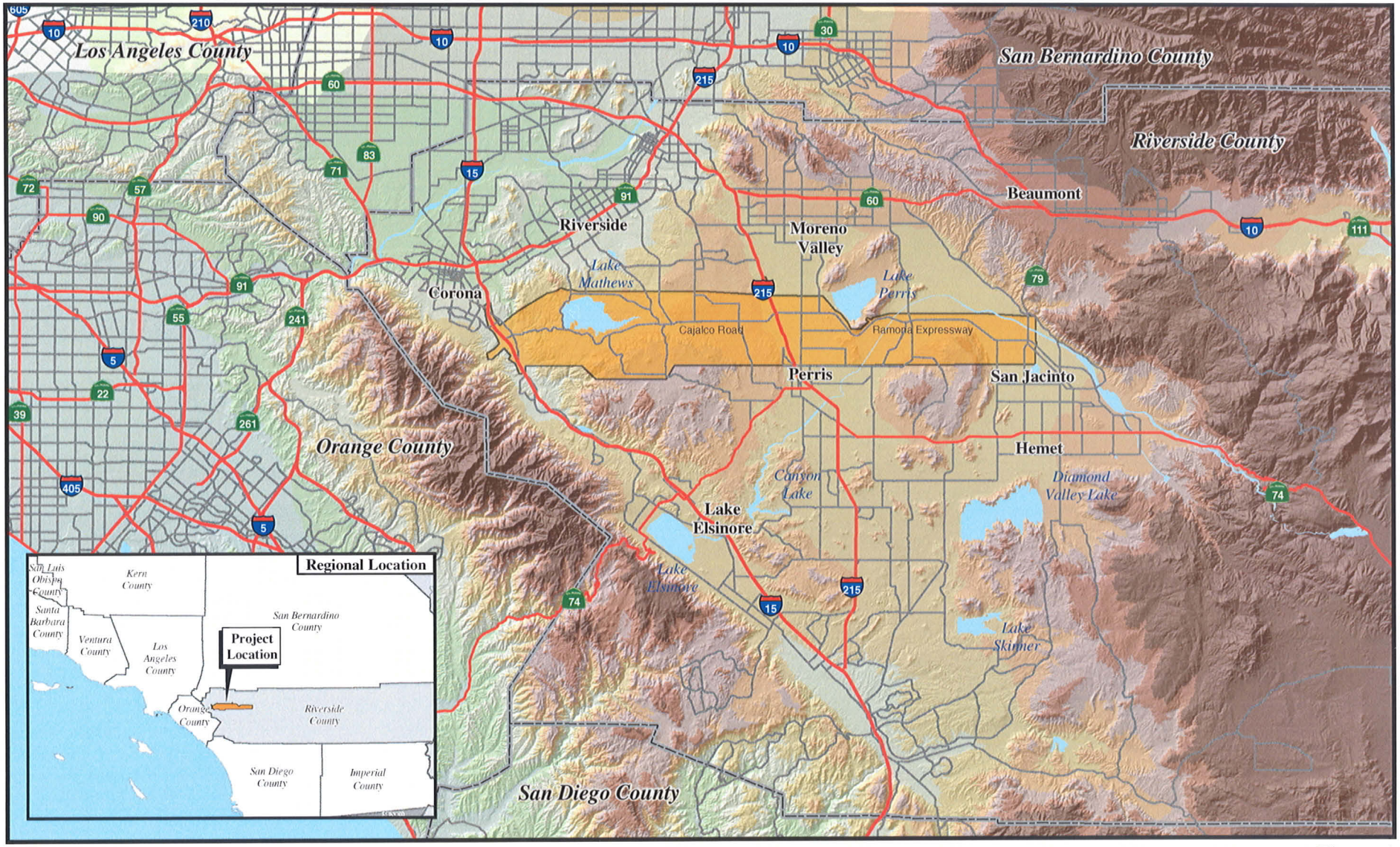

Figure 1

Legend

Mid County Parkway Study Area

SOURCE: ESRI (2006); TBM (2006), Jacobs Engineering (2/07)

0 2.5 5 10 Miles

0 4 8 16 Kilometers

Regional Location

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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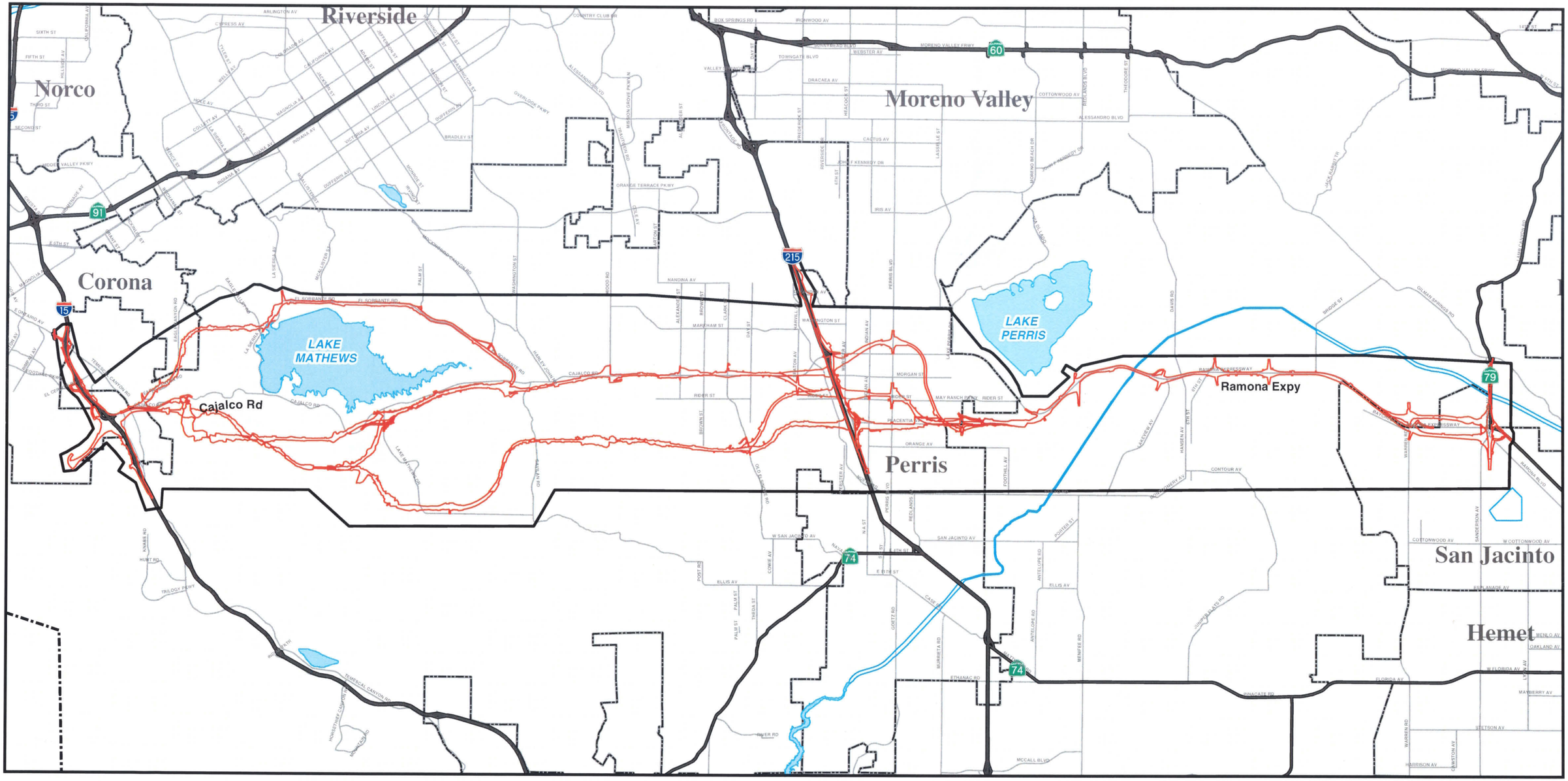

Legend

- County Boundary
- City Limits
- Highways
- Major Roads
- Mid County Parkway Study Area
- Right-of-Way All Alternatives

SOURCE: TBM (2006); Jacobs Engineering (2/2007)

0 5,500 11,000 22,000 Feet

0 1,750 3,500 7,000 Meters

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Figure 2

Project Area Overview

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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approximately 228 meters (m) (750 feet [ft]) near the I-15 to 457 m (1,500 ft) above mean sea level (amsl) near SR-79. There are several high peaks within the project area as well, with elevations as high as 720 m (2,361 ft) amsl.

1.3 PROJECT HISTORY

The MCP was identified as a key west-east regional transportation corridor as a result of several years of comprehensive land use and transportation planning in Riverside County through the Riverside County Integrated Project (RCIP). The RCIP is an unprecedented, multiyear planning effort to simultaneously prepare environmental, transportation, housing, and development guidelines for Riverside County for the first half of the 21st century. The purpose of the RCIP is to address the planning, environmental, and transportation issues that would result from the anticipated doubling of population in Riverside County, from 1.5 million residents currently to approximately 3.0 million by 2020. Major milestones achieved in the RCIP process included a comprehensive update to the Riverside County General Plan (adopted October 2003), the western Riverside County Multiple Species Habitat Conservation Plan (MSHCP; adopted June 2003), completion of environmental documents for two major new transportation corridors through the CETAP process (draft documents circulated for public review in July 2002), and initiation of the San Jacinto River Special Area Management Plan (SAMP).

1.4 NEPA/SECTION 404 INTEGRATION PROCESS MOU

In 2003, in accordance with the 1994 MOU for the NEPA and Section 404 Integration Process for Surface Transportation Projects in Arizona, California, and Nevada (NEPA/Section 404 MOU), RCTC initiated coordination to implement the MOU policies in developing the Environmental Impact Statement (EIS) and Section 404 permitting for the MCP project. The NEPA/Section 404 MOU implements the FHWA, USACE, and United States Environmental Protection Agency (EPA) policies of improved interagency coordination and integration of NEPA and Section 404 procedures.

The NEPA/Section 404 MOU applies to projects requiring FHWA action under NEPA and a USACE individual permit under Section 404 of the CWA. The signatory agencies to the NEPA/Section 404 MOU for the MCP project include FHWA, EPA, USACE, the United States Fish and Wildlife Service (USFWS), the National Marine Fisheries Service, and Caltrans. In 2006, the agencies entered into an updated MOU for projects in California.

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2.0 PROJECT PURPOSE

The basic project purpose, as defined in 40 Code of Federal Regulations (CFR) 230.10(a)(3), is to construct a transportation facility that is not water-dependent. The overall project purpose is to provide a transportation facility that will effectively and efficiently accommodate regional west-east movement of people and goods between and through the cities Corona, Perris, and San Jacinto. More specifically, the selected alternative will:

- Provide increased capacity to support the forecast travel demand for the 2035 design year;
- Provide a limited-access facility;
- Provide roadway geometrics to meet State highway design standards;
- Accommodate the Surface Transportation Assistance Act of 1982 (STAA) National Network for large trucks; and
- Provide a facility that is compatible with a future multimodal transportation system.

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3.0 SECTION 404(B)(1) GUIDELINES

The Section 404(b)(1) Guidelines (Guidelines) are the substantive environmental standards by which all Section 404 permit applications are evaluated. The Guidelines were published by the EPA in December 1980. The Guidelines provide that discharges of dredged or fill material into waters of the United States (U.S.), including wetlands, should not occur unless it can be demonstrated that such discharges will not result in unacceptable adverse effects on the aquatic ecosystem. No discharge of dredge or fill material is permitted if there is a practicable alternative to the proposed discharge that would have a less adverse impact on the aquatic ecosystem, as long as the alternative does not have other significant adverse environmental consequences (40 CFR 230.10[a]).

The Memorandum to the Field from the EPA and USACE dated July 13, 2000, entitled "Appropriate Level of Analysis Required for Evaluating Compliance with the Section 404(b)(1) Guidelines Alternatives Requirements," provides guidance on the level of analysis appropriate for a 404(b)(1) alternatives analysis. The Memorandum provides that the Guidelines:

> "Do not contemplate that the same intensity of analysis will be required for all types of projects but instead envision a correlation between the scope of the evaluation and the potential extent of adverse impacts on the aquatic environment. The Introduction to Section 230.10(a) recognizes that the level of analysis required may vary with the nature and complexity of each individual case."
>
> . . .
>
> "The Guidelines provide the USACE and USEPA with discretion for determining the necessary level of analysis to support a conclusion as to whether or not an alternative is practicable. Practicable alternatives are those alternatives that are available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes." 40 CFR 230.10(a)(2).
>
> . . .
>
> "[I]f an alternative is unreasonably expensive to the applicant, the alternative is not 'practicable.'" Guidelines Preamble, "Economic Factors", 45 Federal Register 85343 (December 24, 1980).

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4.0 ALTERNATIVES DEVELOPMENT

4.1 DEVELOPMENT OF INITIAL MCP ALTERNATIVES

The MCP Alternatives were developed through a multiple agency coordination process, working as a collaborative group referred to as the Small Working Group (SWG). The SWG includes representatives from RCTC, FHWA, County of Riverside, Caltrans, USFWS, EPA, California Department of Fish and Game (CDFG), and USACE.[1] The alternatives development process as undertaken by the SWG originally resulted in eight alternatives that were intended to provide a reasonable range of alternatives to satisfy the Purpose and Need for the project. The range of alternatives is intended to meet the requirements for alternatives analysis under the California Environmental Quality Act (CEQA), NEPA, Section 404 of the federal CWA, and Section 4(f) of the Department of Transportation Act (now codified at 49 United States Code [USC] 303). The initial set of eight alternatives was presented to the public in scoping meetings held in December 2004. The initial set of alternatives included two Parkway Alternatives with alignments north of Lake Mathews that have since been eliminated as a result of engineering feasibility issues.

4.1.1 Constraints

A number of constraints were considered in the development of the initial project alternatives, including engineering requirements, the existing built environment, natural resources such as habitat reserves and drainages, and cultural resources such as previously recorded archaeological sites. Engineering constraints included the ability of alternatives to meet Caltrans design requirements (such as for curves, grade, and interchange spacing) and design standards for the STAA[2] National Network for large trucks. Alternatives were also sited to avoid or minimize impacts to existing and approved (but not yet built) communities and public facilities/ infrastructure to the extent feasible. Land use constraints include the Lake Mathews Estates, Mead Valley, Gavilan Hills, and Perris communities; other existing residential areas; dams at Lake Mathews and Lake Perris; approved/ entitled land development projects; existing railroad facilities; the Perris State Fairgrounds; existing commercial, industrial, and agricultural facilities; the Lake Perris State Recreation Area; and public facilities such as the City of Corona Water Treatment Plant, Val Verde High School, the Federal Records Center, the proposed Perris Metrolink Rail Station, and others.

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1 The USFWS submitted a letter dated December 9, 2005, stating that it will participate in the MCP process informally (i.e., would not provide formal concurrence on the project purpose and need or project alternatives), with a focus on providing technical assistance.

2 STAA allows large trucks to operate on the Interstate and certain primary routes called collectively the National Network.

4.1.2 Scoping Process

A series of "prescoping" public meetings were held in September 2004 to obtain public input on factors that should be considered in developing the MCP Alternatives. In November 2004, a Notice of Intent (NOI) and a Notice of Preparation (NOP) for the MCP project were published. The NOI and NOP described eight project alternatives, including a No Action/No Project Alternative, six Build Alternatives that were either full parkway alternatives or a combination of proposed parkway and General Plan arterial improvements, and a General Plan Circulation Element Alternative. The issuance of the NOI and NOP initiated the formal scoping process for the MCP project to identify issues and alternatives to be studied in the Draft Environmental Impact Report (EIR)/EIS. Three public scoping meetings were held in December 2004. Input received from the public and public agencies during the prescoping and scoping meetings was integrated into the alternative development and evaluation processes for the project. As a result of the comments received during the scoping period and a multiagency Value Analysis (VA) Study on the original eight alternatives, two new alignments were developed in 2005 as possible new alternatives for the project: the Far South (now Alternative 9) and the Perris Valley Storm Drain (now incorporated into Alternatives 4 and 6). RCTC held a community meeting on August 3, 2005, to present the two new alignments under consideration. At the meeting, RCTC also included: (1) a review of the project's purpose and need, (2) the history of the alternatives, and (3) a review of the comments received during the original scoping process. A Supplemental NOP soliciting input from public agencies and other interested parties regarding the revised suite of alternatives prior to the release of the Draft EIR/EIS for public review was circulated to public agencies and interested parties on July 31, 2007.

4.2 ALTERNATIVES REFINEMENT PROCESS

After the NOI and NOP were published in 2004, Caltrans conducted a VA Study in April 2005 to determine whether there were additional alignment refinements that could more effectively and efficiently meet the project Purpose and Need. As a result of the VA Study, new information became available with regard to the practicability of some of the alternative alignments, as well as opportunities to further avoid or minimize adverse environmental impacts to existing habitat reserves, Section 404 waters and Section 4(f) properties, and existing communities (see below for additional information regarding the VA Study process). In addition, during this same period, the MCP engineering and environmental project team conducted engineering studies, environmental studies, field work, public scoping meetings, and traffic modeling for the MCP project. Based on these studies and analyses, the SWG considered and approved the refined set of alternatives to be evaluated. As described in further detail below, the revised set of alternatives eliminated the two alternatives (Alternatives 2 and 3) that included a parkway north of Lake Mathews due to engineering feasibility issues, rerouted a segment of Alternatives 4 and 6 away from the Perris Dam, renumbered Alternative 8 to Alternative 1B (No Action/No Project General Plan Circulation Element Conditions), and added Alternative 9 (the Far South Alternative), which avoids the Metropolitan Water District of Southern California (Metropolitan) Habitat Conservation Plan (HCP) Reserve. Specific considerations in the alternatives refinement process are discussed below.

4.2.1 Value Engineering Analysis Process

The National Highway System (NHS) Act of 1995 included a value engineering analysis provision (later codified in Subchapter G Part 627 of Title 23 CFR) requiring the Secretary of the Department of Transportation to ". . . establish a program to require states to carry out a value engineering analysis for all projects on the National Highway System with an estimated total cost of $25 million or more." In California, Caltrans coordinates with FHWA to apply the VA Study process in order to:

- Maintain federal funding for proposed projects;
- Build consensus with transportation partners (FHWA, Caltrans, RCTC, County of Riverside, and the cities of Corona, Perris, and San Jacinto, specifically for the MCP project);
- Solve difficult transportation problems;
- Reduce costs while maintaining or improving project quality; and
- Eliminate detrimental design influences.

The VA Study for the MCP Alternatives was conducted by Caltrans District 8 and a consultant facilitator in April 2005. The VA Study objectives were to identify alternatives that would maintain or improve MCP project performance, reduce costs if possible, and minimize impacts to local agency land use plans, including local circulation access. The MCP mainline VA Study conducted in April 2005 complemented earlier VA studies that focused on the configuration of the MCP project connections at SR-79, I-15, and I-215.

4.2.2 Engineering Constraints (Dams)

Two of the initial alternatives (Alternatives 2 and 3) included a parkway north of Lake Mathews near Cajalco Dam, and three of the initial alternatives (Alternatives 2, 4, and 6) included a parkway along the existing Ramona Expressway near Perris Dam. Lake Mathews and Cajalco Dam are owned and operated by Metropolitan. Perris Dam is owned and operated by the State Department of Water Resources (DWR), and Metropolitan is the principal user of water from Lake Perris. DWR, Division of Safety and Dams, regulates the safety and integrity of dams in California.

The parkway alternative north of Lake Mathews was included in the initial set of MCP Alternatives, in part to ensure evaluation of an alternative that minimized impacts to the Metropolitan HCP Reserve compared with the alignment south of Lake Mathews. Given the engineering and safety constraints related to Cajalco Dam, the VA team determined that it was prudent to consider other alternatives that would both avoid close proximity to the dam and fully avoid the Metropolitan HCP Reserve. These efforts resulted in the proposed Far South Alternative, now known as Alternative 9.

There are several constraints in the area adjacent to Perris Dam, including Metropolitan facilities (pipeline, tunnels, and power plant), Stephens' kangaroo rat (SKR) Reserve area, State Fairgrounds, and DWR emergency facilities. Both the SKR Reserve area and the State Fairgrounds are Section 4(f) properties. The VA team developed a revised alignment to avoid the area adjacent to Perris Dam that also attempted to minimize community impacts in the city of Perris. The alignment proposed by the VA team would extend west from Antelope Road, west along the South Perris alignment to the Perris Drain, north past Evans Road, and parallel to and west of the Perris Drain, then turn west and

join the North Perris alignment before Perris Boulevard (at Perry Street). The advantages of this alignment include full avoidance of Perris Dam, SKR Reserve, and the State Fairgrounds. One disadvantage of the Perris Drain alignment is that it would require flood control improvements as part of the MCP project to locate the parkway outside the Perris Drain floodway or place the facility on a structure to avoid impacts to the floodway. As a result of consultation with the Riverside County Flood Control District (RCFCD) regarding the feasibility of a flood control project, it was decided to design the Perris Drain alignment on an elevated structure (such as a viaduct) to avoid the floodway.

RCTC and the MCP project team consulted with the Metropolitan engineering staff and the DWR preceding and concurrent with the VA Study process. The discussion focused on safety issues with regard to excavation, construction activities, and ultimate operation of a major transportation facility in proximity to the two major dam structures, Cajalco Dam and Perris Dam. In a letter dated May 13, 2005, Metropolitan specified that excavation for the MCP project could not take place within 305 m (1,000 ft) of the Cajalco Dam abutment. In letters dated June 8, 2005, and August 19, 2005, DWR also expressed similar concerns regarding the potential impacts of a major transportation facility adjacent to Perris Dam, with specific concerns regarding the recent DWR seismic stability analysis, adjacent wildlife areas, and the need to maintain access to emergency outlet structures and a seepage collection system at the base of the dam. DWR requested that RCTC not move forward with the North Perris alignment in this location due to impacts to existing facilities and the need to maintain right of way (ROW) for possible seismic repair operations. Alternatives 4 and 6 were modified to eliminate the segment by the Perris Dam and replace that segment with the Perris Drain alignment.

4.2.3 Access Constraints

The VA team evaluated the need to maintain parallel west-east access through the MCP study area to accommodate local west-east traffic movement, especially through the Mead Valley area located between I-15 and Lake Mathews. The specific traffic concern identified by the VA team was that a parkway alternative on Cajalco Road would eliminate Cajalco Road as a major west-east thoroughfare for local traffic in Mead Valley. Although the County of Riverside Transportation staff identified long-term opportunities for the development of parallel access as provided for in the General Plan Circulation Element, the VA team also considered this concern in the development of other possible MCP Alternatives.

4.2.4 Environmental Constraints

Key environmental constraints considered by the SWG in developing the initial MCP Alternatives included the need to avoid or minimize impacts to a number of existing and planned habitat reserve areas, including the Metropolitan HCP Reserve, the SKR Reserve (which includes lands adjacent to both Lake Mathews and Lake Perris), the El Sobrante Landfill Reserve, and criteria areas identified for conservation in the western Riverside County MSHCP. The Metropolitan HCP and SKR Reserves are existing reserves. The MSHCP is an approved, largely future reserve that will be created through the conservation of specific lands to be acquired over a period of time.

The VA team considered the constraints presented by each of these reserves relative to the successful implementation of an MCP Alternative. The Metropolitan HCP, SKR, and El Sobrante Landfill Reserves are existing reserves, and an amendment to the respective HCPs for those reserves would be

required to allow for new or expanded roads within the reserves. The lead agencies for the MCP project (RCTC, Caltrans, and FHWA) do not have the ability to amend the existing HCPs, and these reserves present a potential constraint to the implementation of an MCP Alternative. For example, an amendment to the Metropolitan HCP Reserve to permit construction of the MCP project through Metropolitan HCP Reserve lands would need to be initiated by Metropolitan because it is the permittee for that reserve. The timing and successful approval of such an amendment would be outside the jurisdiction and control of RCTC, FHWA, and Caltrans, as they are not signatories to the permit. Similarly, an amendment to the SKR Reserve would require action on the part of the Riverside County Habitat Conservation Agency (RCHCA). Although amending the SKR Reserve would still be outside the jurisdiction and control of RCTC, FHWA, and Caltrans, that HCP is written to allow for future amendments and, therefore, is not as much of a constraint to the development of the MCP project as the Metropolitan HCP Reserve. The El Sobrante Landfill Multiple Species Habitat Conservation Plan, which was prepared by USA Waste of California, Inc., covers impacts to two federally and/or State listed species (coastal California gnatcatcher and Stephens' kangaroo rat) and to 29 nonlisted species resulting from expansion of the El Sobrante Landfill. Any impacts to the El Sobrante Landfill HCP Reserve would require a major amendment to the HCP.

The MSHCP is also a constraint to locating a major transportation facility such as the MCP project because a consistency finding is required, and an amendment to the MSHCP will be needed to adopt an MCP Alternative. However, the MSHCP identifies approximately 129,500 hectares (ha) (320,000 acres [ac]) of potential reserve area (Criteria Area) in the form of criteria cells, of which 61,900 ha (approximately 153,000 ac) are to be acquired for conservation purposes. The MCP Alternatives were sited in a manner intended to minimize impacts to the MSHCP Criteria Areas to the greatest extent feasible. There are a variety of ways to implement the MSHCP, and most of the acquisition of specific MSHCP lands (through dedications and purchases from willing sellers) will be undertaken in the future. The MSHCP criteria cells were considered a constraint in the VA Study, but to a lesser degree than the areas within the three existing reserves.

The initial MCP Alternatives north and south of Lake Mathews (Alternatives 2 through 5) traverse parts of the Metropolitan HCP Reserve. While the alternatives north of Lake Mathews avoid habitat fragmentation south of Lake Mathews, they did not accomplish a full avoidance of the Metropolitan HCP Reserve because the reserve extends east and north of Lake Mathews. Given the constraints related to the HCP amendment process for the Metropolitan HCP Reserve and the previously mentioned engineering constraints associated with Cajalco Dam that could possibly render the alignment north of Lake Mathews not practicable, the VA team determined that it was prudent to consider alternatives that provided full avoidance of the Metropolitan HCP Reserve and the Cajalco Dam facilities, resulting in the proposed Far South Alternative (Alternative 9).

4.2.5 Refinement to San Jacinto Alignment in the Area East of Warren Road to SR-79

The initially proposed alignment located the MCP project just north of the existing Ramona Expressway between the San Jacinto River and SR-79. Through the VA Study process, a second alignment was proposed in this area where the MCP project alignment parallels the Colorado River Aqueduct (CRA) and is sited between Ramona Expressway and adjacent to the CRA. This alignment south of Ramona Expressway was proposed to better fit with planned land uses, improve the interchange configuration at SR-79, and move the alignment farther from the San Jacinto River

and floodplain. The San Jacinto South alignment is now the proposed project alignment, and the north alignment (San Jacinto North) is being evaluated as a design variation.

4.2.6 Reorganization of the No Project/No Action Alternatives

Two No Project/No Action Alternatives were described in the November 2004 NOI and NOP. Alternative 1 was represented by projected 2035 traffic on the planned street network with the exception of Cajalco Road and the Ramona Expressway, which would remain as they exist today.[1] Alternative 8 was described as full implementation of the Riverside County General Plan Circulation Element street network, including the planned improvements to Cajalco Road and the Ramona Expressway. Both of these alternatives are considered No Action Alternatives for RCTC, FHWA, and Caltrans, as they reflect conditions that would occur without the MCP project. Therefore, to clarify the status of these alternatives as No Action Alternatives, they were renumbered as Alternatives 1A and 1B and titled "No Action/No Project—Existing Conditions" and "No Action/No Project—General Plan Circulation Element Conditions," respectively, as follows:

- **Alternative 1A (Originally Alternative 1): No Project/No Action—Existing Conditions.** Alternative 1A is the CEQA No Project Alternative comparing the MCP project to existing conditions ("plan to ground" comparison) and 2035 traffic on the planned street network except for Cajalco Road and Ramona Expressway, which would remain as they exist today.
- **Alternative 1B (Originally Alternative 8): No Project/No Action—General Plan Circulation Element Conditions.** Alternative 1B is the NEPA No Action Alternative, including foreseeable future actions and 2035 traffic on the planned street network according to the Circulation Element of the Riverside County General Plan.

4.2.7 No Action Alternative

A specific 404 No Action Alternative has been developed as part of this Section 404(b)(1) alternatives analysis. The 404 No Action Alternative identifies what measures are needed (e.g., bridges) to fully avoid dredge or fill within waters of the U.S. so that a Section 404 permit would not be required for the MCP project.

4.3 AGENCY CONCURRENCE ON THE CURRENT MCP ALTERNATIVES

In December 2005, the USACE and EPA sent letters to FHWA indicating their preliminary agreement on the addition of Alternative 9 (the Far South Alternative) and the elimination of Alternatives 2 and 3 (the MCP Alternatives north of Lake Mathews). These agencies also agreed to modify the portion of Alternatives 4 and 6 in the north Perris area to replace the Perris Dam alignment with the Perris Drain alignment.

In July 2007, final refinements were made to minimize effects to the El Sobrante Landfill MSHCP Reserve lands. As part of the NEPA/404 Integration Process in October 2007, FHWA submitted a

[1] The planned street network includes improvements in the 2003 Riverside County General Plan Circulation Element.

request for concurrence on the final suite of alternatives to the federal resource agencies (USACE, EPA, and USFWS). USACE and EPA submitted letters of concurrence to FHWA in December 2007. USFWS declined to concur, consistent with their prior letter of December 9, 2005, stating that they would not formally participate in the NEPA/404 process.

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5.0 MCP SEGMENT DESCRIPTIONS

The MCP project will be a new highway constructed generally along and/or parallel to segments of existing Cajalco Road and Ramona Expressway. All the MCP Build Alternatives would meet travel demand in 2035 between and through the cities of Corona, Perris, and San Jacinto and connect with I-15, I-215, and the proposed realignment of SR-79. Many of the alternatives share common segments (see Figures 3a and 3b, and Table A). To organize data collection and analysis for the MCP Alternatives and to reduce redundancy in reporting given the many common segments, data were collected and tabulated for the project technical reports by segment. The 13 MCP Study Segments shown in Figures 3a and 3b are listed below, generally from west to east, and are described in more detail.

- Temescal Wash Area with Collector-Distributor Roads (**TWS-C**) Segment: Begins at the western terminus of the MCP project and ends near the Temescal Canyon Road/Cajalco Road intersection; includes CD Roads from Weirick Road to Ontario Avenue
- Lake Mathews South (**LMS**) Segment: Begins at eastern terminus of TWS-C and proceeds east from TWS-C, south of Lake Mathews, to east of El Sobrante Road to Mead Valley (MV) Segment
- Lake Mathews North General Plan **(LMN-GP)** Segment: From near the Temescal Canyon Road/Cajalco Road intersection to MV Segment
- Lake Mathews South General Plan **(LMS-GP)** Segment: From near the Temescal Canyon Road/Cajalco Road intersection to MV Segment
- Mead Valley (**MV**) Segment: From LMS Segment to east of Day Street
- Far South (**FS**) Segment: From TWS-C Segment to east of Brown Street
- Connector Perris 1 (**C1**) Segment: From MV Segment to Patterson Avenue
- Connector Perris 3 (**C3**) Segment: From FS Segment to Patterson Avenue
- Perris Drain (**PD**) Segment: From MV Segment to San Jacinto (SJ) Segment
- Rider Street (**RD**) Segment: From C1 Segment to SJ Segment
- Placentia Avenue/Perris Boulevard Depressed Grade (**PP-D**) Segment: From C3 Segment to SJ Segment
- San Jacinto (**SJ**) Segment: From PD, RD, or PP-D Segment to San Jacinto South (SJS) Segment
- San Jacinto South (**SJS**) Segment: From west of Warren Road to SR-79

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Temescal Wash Area

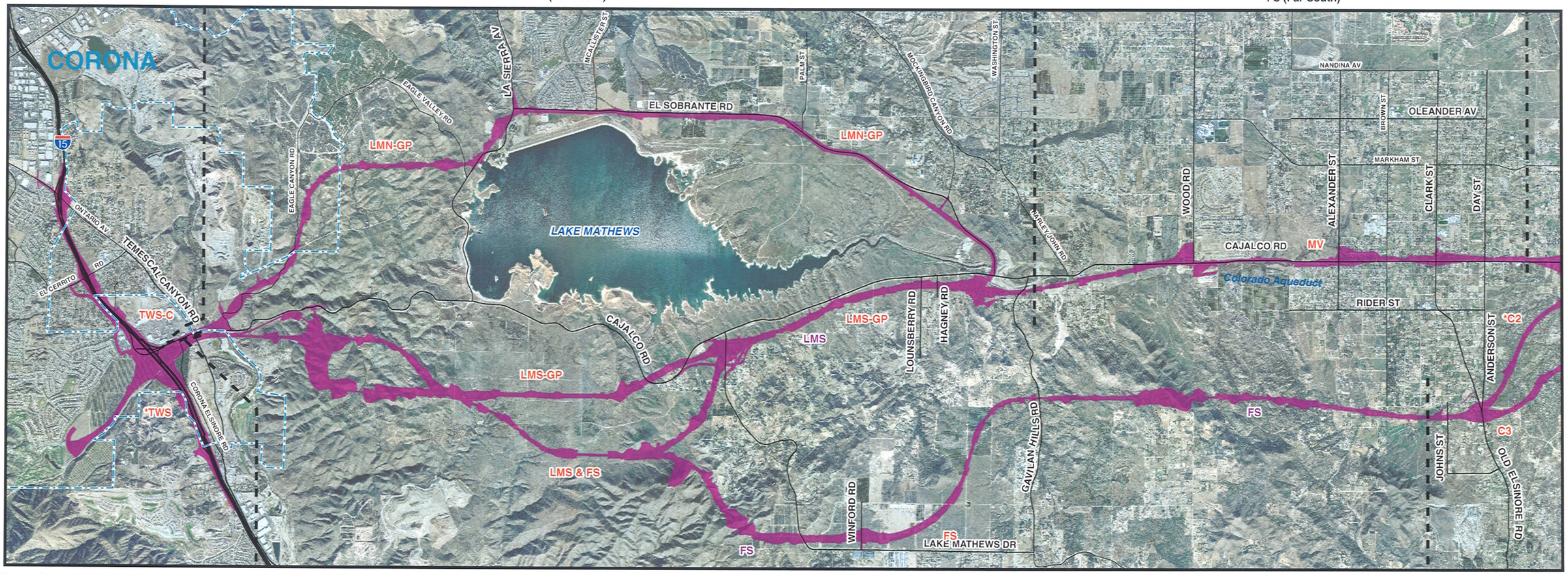
----- SEGMENTS -----
TWS-C (Temescal Wash Area with Collector Distributor)
*TWS (Temescal Wash Area with 1/2 Diamond at El Cerrito)

Lake Mathews Area

----- SEGMENTS -----
LMS (Lake Mathews South)
LMN-GP (Lake Mathews North General Plan)
LMS-GP (Lake Mathews South General Plan)
FS (Far South)

Mead Valley Far South Area

----- SEGMENTS -----
MV (Mead Valley)
FS (Far South)



Legend

- City Limits
- Alternative Segment
- Alternative Alignment

* Denotes Design Variation segment

SOURCE: Airphoto USA (2006), TBM (2006), Jacobs Engineering (02/2007)

0 0.805 1.61 3.22 Kilometers

0 0.5 1 2 Miles

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FIGURE 3a

Alternative Segments

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Perris Area

----- SEGMENTS -----
C1 (Connector Perris 1)
*C2 (Connector Perris 2)
C3 (Connector Perris 3)

----- SEGMENTS -----
PD (Perris Drain)
RD (Rider)
PP-D (Placentia Perris Depressed)
*PP-E (Placentia Perris Elevated)

San Jacinto Area

----- SEGMENT -----
SJ (San Jacinto)

San Jacinto Design Variation Area

----- SEGMENTS -----
*SJN (San Jacinto North)
SJS (San Jacinto South)

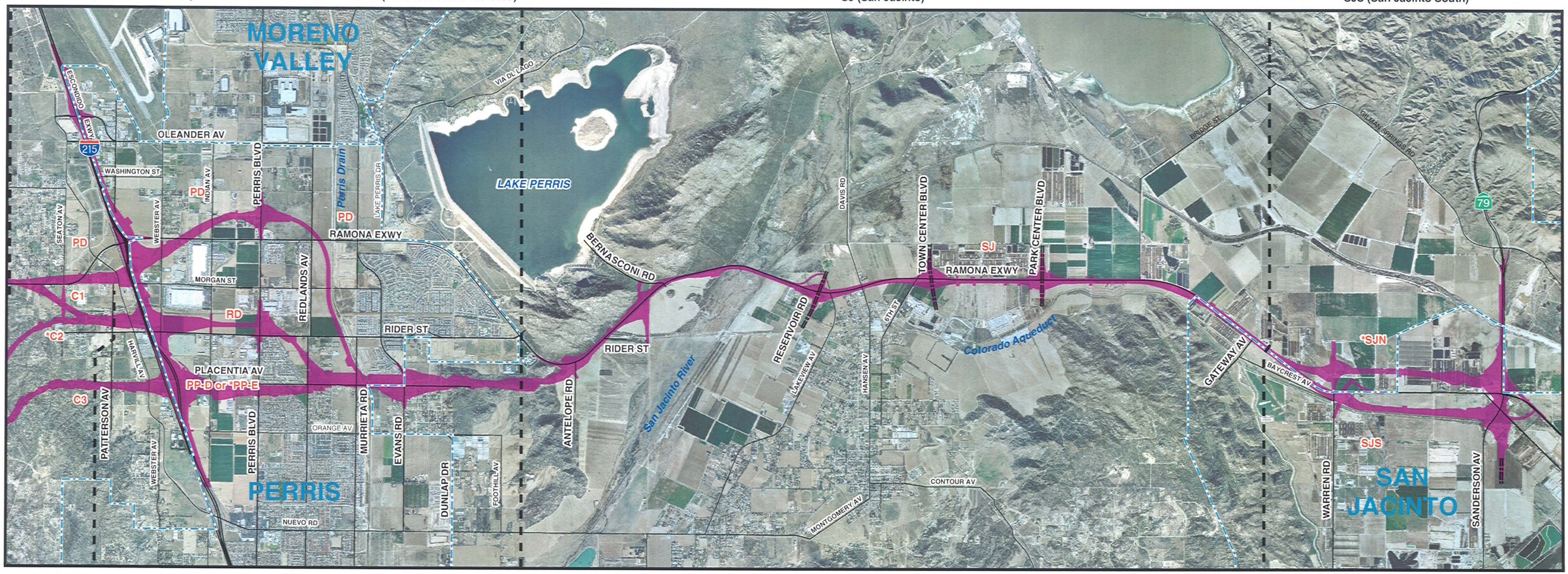

FIGURE 3b

Legend

- Alternative Segment
- Alternative Alignment
- Planned Roads

* Denotes Design Variation segment

SOURCE: Airphoto USA (2006), TBM (2006), Jacobs Engineering (02/2007)

0 0.805 1.61 3.22 Kilometers
0 0.5 1 2 Miles

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Alternative Segments

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Table 2.4.A Mid County Parkway Segments Representing Each Build Alternative

Alternative	Alternative Name	MCP Segments																
		TWS-C	TWS	LMS	LMN-GP	LMS-GP	MV	FS	C1	C2	C3	PD	RD	PP-D	PP-E	SJ	SJN	SJS
4	South of Lake Mathews/ North Perris (Drain)	**Yes**	DV	**Yes**	N/A	N/A	**Yes**	N/A	N/A	N/A	N/A	**Yes**	N/A	N/A	N/A	**Yes**	DV	**Yes**
5	South of Lake Mathews/ South Perris (at Rider Street)	**Yes**	DV	**Yes**	N/A	N/A	**Yes**	N/A	**Yes**	N/A	N/A	N/A	**Yes**	N/A	N/A	**Yes**	DV	**Yes**
6	General Plan North and South of Lake Mathews/North Perris (Drain)	**Yes**	DV	N/A	**Yes**	**Yes**	**Yes**	N/A	N/A	N/A	N/A	Yes	N/A	N/A	N/A	**Yes**	DV	**Yes**
7	General Plan North and South of Lake Mathews/ South Perris (at Rider Street)	**Yes**	DV	N/A	**Yes**	**Yes**	**Yes**	N/A	**Yes**	N/A	N/A	N/A	**Yes**	N/A	N/A	**Yes**	DV	**Yes**
9	Far South/ Placentia Avenue	**Yes**	DV	N/A	N/A	N/A	N/A	Yes	N/A	DV	**Yes**	N/A	DV	**Yes**	DV	**Yes**	DV	**Yes**

Source: Jacobs, 2008.
Yes = Segment applies to the Alternative
N/A = Segment not applicable to the Alternative

MCP Segment Abbreviations:

TWS-C	Temescal Wash Area with Collector-Distributor Roads	LMN-GP	Lake Mathews North General Plan	C1	Connector Perris 1	PP-E	Placentia Avenue/Perris Boulevard Elevated Grade (Design Variation)
TWS	Temescal Wash Area (Design Variation)	LMS-GP	Lake Mathews South General Plan	C2	Connector Perris 2 (Design Variation)	SJ	San Jacinto
LMS	Lake Mathews South Segment	MV	Mead Valley	C3	Connector Perris 3	SJN	San Jacinto North (Design Variation)
		FS	Far South	PD	Perris Drain	SJS	San Jacinto South
				RD	Rider Street (Design Variation)	DV	Design Variation
				PP-D	Placentia Avenue/Perris Boulevard Depressed		

In addition to these segments, there are four other segments that are specific only to design variations:

- Temescal Wash Area (**TWS**) Segment: Begins at the western terminus of the MCP and ends near Temescal Canyon Road/Cajalco Road intersection; includes elimination of the southbound on-ramp and northbound off-ramp at El Cerrito Road and I-15
- Connector Perris 2 (**C2**) Segment: From FS Segment to Patterson Avenue
- Placentia Avenue/Perris Boulevard Elevated Grade (**PP-E**) Segment: From C3 Segment to SJ Segment
- San Jacinto North (**SJN**) Segment: From west of Warren Road to SR-79

A more detailed description of each segment, including the beginning and end points (in a west-to-east direction), is provided below. All distances provided are approximate.

5.1 TEMESCAL WASH AREA WITH COLLECTOR-DISTRIBUTOR (CD) ROADS (TWS-C) SEGMENT

The TWS-C Segment begins at the western terminus of the MCP project and ends 250 m (840 ft) east of the Temescal Canyon Road/Cajalco Road intersection. This segment includes segments of I-15 north and south of the existing I-15 interchange at Cajalco Road and east and west of I-15 in the vicinity of existing Cajalco Road. This segment extends approximately 3,140 m (10,300 ft) south of the existing Cajalco Road, approximately 3,500 m (11,600 ft) north of existing Cajalco Road, approximately 2,150 m (7,050 ft) west of I-15, and approximately 975 m (3,200 ft) east of I-15. The alignment remains south of the existing Cajalco Road to 250 m (840 ft) east of the Temescal Canyon Road and the Cajalco Road Intersection. The CD roads will extend from Weirick Road to Ontario Avenue. The MCP project mainline crosses over the I-15. Other circulation improvements include capacity enhancement for Ontario Avenue and the Ontario Avenue/I-15 interchange and a modified I-15 interchange at Cajalco Road.

5.2 LAKE MATHEWS SOUTH (LMS) SEGMENT

The LMS Segment begins at the eastern terminus of the TWS-C Segment, south of existing Cajalco Road, and at the Temescal Canyon Road/Cajalco Road intersection and proceeds east through predominantly vacant land (primarily habitat reserve lands owned by the RCHCA, USA Waste, or Metropolitan) remaining south of existing Cajalco Road. It connects with the MV Segment approximately 789 m (2,590 ft) east of El Sobrante Road. A two-way frontage road is proposed directly adjacent to the south side of the new facility to accommodate local traffic approaching from the south. This frontage road starts west of Lake Mathews Drive and ends at the El Sobrante Road interchange.

5.3 LAKE MATHEWS NORTH GENERAL PLAN (LMN-GP) SEGMENT

The Riverside County General Plan Circulation Element proposes an urban arterial[1] north of Lake Mathews. The LMN-GP Segment proceeds from the Temescal Canyon Road/Cajalco Road intersection along a new alignment north to where it connects to El Sobrante Road at its intersection with La Sierra Avenue. From La Sierra Avenue, the LMN-GP Segment follows the existing alignment of El Sobrante Road north of Lake Mathews, connecting to the MV Segment, 789 m (2,590 ft) east of the El Sobrante Road and Cajalco Road intersection. This segment is a four-lane urban arterial with local intersections throughout its entire length. Changes to existing conditions within this segment include realignment of a portion of existing Cajalco Road from 1,038 m (3,407 ft) west of Mockingbird Canyon Road to 682 m (2,240 ft) east of Mockingbird Canyon Road.

5.4 LAKE MATHEWS SOUTH GENERAL PLAN (LMS-GP) SEGMENT

The Riverside County General Plan Circulation Element proposes to realign existing Cajalco Road as a four-lane, access-controlled expressway[2] with a 40 m (128 ft) ROW. The LMS-GP Segment proceeds from the Temescal Canyon Road/Cajalco Road intersection to 789 m (2,590 ft) east of El Sobrante Road at the western terminus of the MV Segment. The segment climbs the hills on an alignment that initially parallels existing Cajalco Road and then traverses the hills to the south of Cajalco Road to minimize the grade changes on the proposed road. A two-way frontage road is proposed directly adjacent to the south side of the new facility to accommodate local traffic approaching from the south. This frontage road starts west of Lake Mathews Drive and ends at the El Sobrante Road interchange.

5.5 MEAD VALLEY (MV) SEGMENT

The MV Segment extends east from the terminus of the LMS Segment, 789 m (2,590 ft) east of El Sobrante Road, and extends to 696 m (2,285 ft) east of Day Street. The alignment of the MV Segment is sited generally parallel to and just north of existing Cajalco Road.

5.6 FAR SOUTH (FS) SEGMENT

The FS Segment begins at the eastern terminus of the TWS-C Segment, south of existing Cajalco Road, at the Temescal Canyon Road/Cajalco Road intersection and proceeds east through predominantly vacant land (primarily habitat reserve lands owned by the RCHCA, USA Waste, or Metropolitan) remaining south of existing Cajalco Road, approximately 3.2 km (2.0 mi) south of

---

1 An urban arterial is a highway primarily for through traffic where anticipated traffic volumes exceed four-lane capacity. Access from other streets or highways shall be limited to approximately 0.40 kilometer (km) (0.25 mile [mi]) intervals. (Source: County of Riverside General Plan, Circulation Element).S

2 An expressway is a multimodal highway corridor for through traffic to which access from abutting property is restricted. Intersections with other streets or highways are limited to approximately 0.8 km (0.5 mi) intervals. (Source: County of Riverside General Plan, Circulation Element).

existing Cajalco Road, and extends to the C3 Segment, 125 m (410 ft) east of Haines Street. The FS Segment traverses a portion of the Gavilan Hills and only applies to Alternative 9.

5.7 CONNECTOR PERRIS 1 (C1) SEGMENT

The C1 Segment begins 790 m (2,600 ft) east of Day Street at the eastern terminus of the MV Segment and ends at Patterson Avenue, a distance of approximately 1.6 km (1.0 mi). This segment connects the MV Segment to the RD Segment.

5.8 CONNECTOR PERRIS 3 (C3) SEGMENT

The C3 Segment begins 125 m (410 ft) east of Haines Street at the eastern terminus of the FS Segment and extends east to approximately 272 m (895 ft) west of Patterson Avenue to Segments PP-E or PP-D.

5.9 PERRIS DRAIN (PD) SEGMENT

The PD Segment provides a connection between the MV and SJ Segments along the Perris Drain. This segment begins 696 m (2,285 ft) east of Day Street on the west and ends at 87 m (291 ft) west of Dawson Street. In this segment, approximately 1.6 km (1.0 mi) of the MCP project would be elevated approximately 4.5–7.6 m (15–25 ft) above grade on a viaduct structure. This segment also includes an MCP/I-215 interchange extending along I-215, approximately 3,200 m (11,500 ft) north and 3,100 m (10,250 ft) south of the existing Ramona Expressway/I-215 interchange. The MCP mainline crosses over the I-215.

5.10 RIDER STREET (RD) SEGMENT

The RD Segment connects I-215 with the San Jacinto (SJ) alignment. It extends from 21 m (71 ft) east of Patterson Avenue on the west to 87 m (291 ft) west of Dawson Street. This segment also includes an MCP/I-215 interchange extending along I-215 2,530 m (8,300 ft) north and 1,845 m (6,050 ft) south of Rider Street. The MCP project mainline crosses over the I-215.

5.11 PLACENTIA AVENUE/PERRIS BOULEVARD DEPRESSED GRADE (PP-D) SEGMENT

The PP-D Segment follows Placentia Avenue at the eastern terminus of the C3 Segment at a point approximately 272 m (895 ft) west of Patterson Avenue and extends east to 87 m (291 ft) west of Dawson Street. This segment includes an MCP/I-215 interchange, extending along I-215 1,585 m (5,200 ft) north and 1,860 m (6,100 ft) south of Placentia Avenue. The MCP project mainline crosses over the I-215. For the PP-D Segment, the road is approximately 9 m (30 ft) depressed from grade from Barrett Avenue to Wilson Avenue. This segment only applies to Alternative 9.

5.12 SAN JACINTO (SJ) SEGMENT

The SJ Segment extends along existing Ramona Expressway from the eastern terminus of the PD, RD, and PP-D Segments to 1.0 km (0.6 mi) west of Warren Road on the east. The SJ Segment terminates at the SJN and SJS Segments and measures a total distance of approximately 12.3 km (7.63 mi).

5.13 SAN JACINTO SOUTH (SJS) SEGMENT

The SJS Segment extends from the eastern terminus of the SJ Segment 1.32 km (0.82 mi) west of Warren Road east to SR-79. It follows an alignment approximately 300 m (990 ft) south of the existing Ramona Expressway adjacent to the CRA. This segment also extends approximately 1,080 m (3,550 ft) north of the Ramona Expressway along SR-79 and approximately 2,560 m (8,400 ft) south of the Ramona Expressway along SR-79.

5.14 TEMESCAL WASH AREA DESIGN VARIATION (TWS DV) SEGMENT

This is a design variation for the TWS-C Segment that removes partial access from I-15 to El Cerrito Road. Changes to existing conditions included within this segment include closing the existing southbound on-ramp and northbound off-ramp at El Cerrito Road that connect to I-15. The El Cerrito overcrossing will remain open, connecting local streets from one side of I-15 to the other side, and the CD roads will extend from Weirick Road to just north of Cajalco Road. The MCP project mainline crosses over the I-15. Other circulation improvements include capacity enhancement for Ontario Avenue and the Ontario Avenue/I-15 interchange and a modified I-15 interchange at Cajalco Road. This design variation applies to all of the MCP Build Alternatives.

5.15 CONNECTOR PERRIS 2 DESIGN VARIATION (C2 DV) SEGMENT

The C2 Segment begins at the eastern terminus of the FS Segment 125 m (410 ft) east of Haines Street. This segment veers northward at Anderson Street, follows north of Rider Street, and connects to the RD Segment 21 m (71 ft) east of Patterson Avenue. This design variation only applies to Alternative 9.

5.16 PLACENTIA AVENUE/PERRIS BOULEVARD ELEVATED GRADE DESIGN VARIATION (PP-E DV) SEGMENT

The PP-E Segment is an elevated design variation of Segment PP-D. The PP-E Segment follows Placentia Avenue at the eastern terminus of the C3 Segment at a point approximately 272 m (895 ft) west of Patterson Avenue and extends east to 87 m (291 ft) west of Dawson Street. This segment includes an MCP/I-215 interchange extending along I-215 1,585 m (5,200 ft) north and 1,860 m (6,100 ft) south of Placentia Avenue. The MCP project mainline crosses over the I-215. For this design variation, the road is approximately 8.0 m (26.2 ft) elevated above grade from Barrett Avenue to Wilson Avenue. This design variation only applies to Alternative 9.

5.17 SAN JACINTO NORTH DESIGN VARIATION (SJN DV) SEGMENT

The SJN Segment extends from the eastern terminus of the SJ Segment 1.32 km (0.82 mi) west of Warren Road east to SR-79. It follows an alignment approximately 300 m (990 ft) north of the existing Ramona Expressway. This segment also extends approximately 2,160 m (7,090 ft) north of the Ramona Expressway along SR-79 and 1,520 m (4,990 ft) south of the Ramona Expressway along SR-79. The SJN Segment is a design variation of the SJS Segment for all of the MCP Build Alternatives.

6.0 ALTERNATIVES CONSIDERED AND WITHDRAWN FROM FURTHER STUDY

Two alternatives were evaluated and eliminated from further study during the alternatives refinement process described previously. Table B identifies and describes the two alternatives and provides a summary of the decision to remove these alternatives from further study.

Table B: Summary of Alternatives Withdrawn from Further Study

Alternative Number	Alternative Name	Description	Comment
2	North Lake Mathews/ North Perris Alternative	Provide a six- to eight-lane, controlled-access facility north of Lake Mathews and a north alignment through the City of Perris	This alternative was eliminated due to engineering safety concerns regarding proximity to the Lake Perris Dam, Cajalco Dam, and Metropolitan facilities, as stated in letters from Metropolitan dated May 13, 2005, and DWR dated August 19, 2005.
3	North Lake Mathews/ South Perris Alternative	Provide a six- to eight-lane, controlled-access facility north of Lake Mathews and a south alignment through the City of Perris	This alternative was eliminated due to engineering safety concerns regarding proximity to Cajalco Dam and Metropolitan facilities, as stated in a letter from Metropolitan dated May 13, 2005.

DWR = State Department of Water Resources
Metropolitan = Metropolitan Water District of Southern California

As noted above, the parkway alternatives north of Lake Mathews were eliminated from further analysis as a result of engineering safety constraints. However, Alternatives 6 and 7 (combination Parkway and General Plan Alternatives) do include General Plan improvements to El Sobrante Road north of Lake Mathews, as included in the adopted Riverside County Circulation Element of the General Plan. RCTC determined that the General Plan improvements could be constructed and still meet the dam safety criteria stipulated by Metropolitan.

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7.0 ALTERNATIVE ROADWAY ALIGNMENTS ANALYZED AND BROUGHT FORWARD FOR FURTHER REVIEW

Descriptions of the two No Project/No Action Alternatives (Alternatives 1A and 1B), the five Build Alternatives (Alternatives 4, 5, 6, 7, and 9), and the 404 No Action Alternative are provided below. As stated above, Alternatives 2 and 3 (North Lake Mathews/North Perris Alternative and North Lake Mathews/South Perris Alternative) were considered but eliminated from further analysis. The No Project/No Action General Plan Circulation Element Conditions Alternative, originally identified as Alternative 8, was renumbered Alternative 1B.

The alignments of the MCP Alternatives are shown on Figures 4a and 4b through Figures 8a and 8b.

7.1 ALTERNATIVE 1A: NO PROJECT/NO ACTION—EXISTING GROUND CONDITIONS

Alternative 1A represents 2035 traffic on the planned street network except there would not be any future improvements to Cajalco Road and Ramona Expressway, which would remain as they exist today. Construction of the MCP project would not be implemented with the No Project/No Action Alternative 1A. The future west-east traffic described in the MCP study area would be served by existing Cajalco Road and El Sobrante Road between I-15 and I-215 and by the existing Ramona Expressway between I-215 and SR-79. This alternative assumes 2035 land use conditions and implementation of planned improvements to the regional and local circulation system, as accounted for in the adopted Riverside County General Plan (2003), RCTC's Measure A program, and other adopted plans and policies.

7.2 ALTERNATIVE 1B: NO PROJECT/NO ACTION—GENERAL PLAN CIRCULATION ELEMENT CONDITIONS

Alternative 1B represents 2035 traffic levels on the planned street network, according to the Circulation Element of the Riverside County General Plan. Construction of the MCP project would not be implemented with No Project/No Action Alternative 1B. This alternative is the same as Alternative 1A but includes implementation of Cajalco Road and Ramona Expressway consistent with the Riverside County General Plan Circulation Element.

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Temescal Wash Area

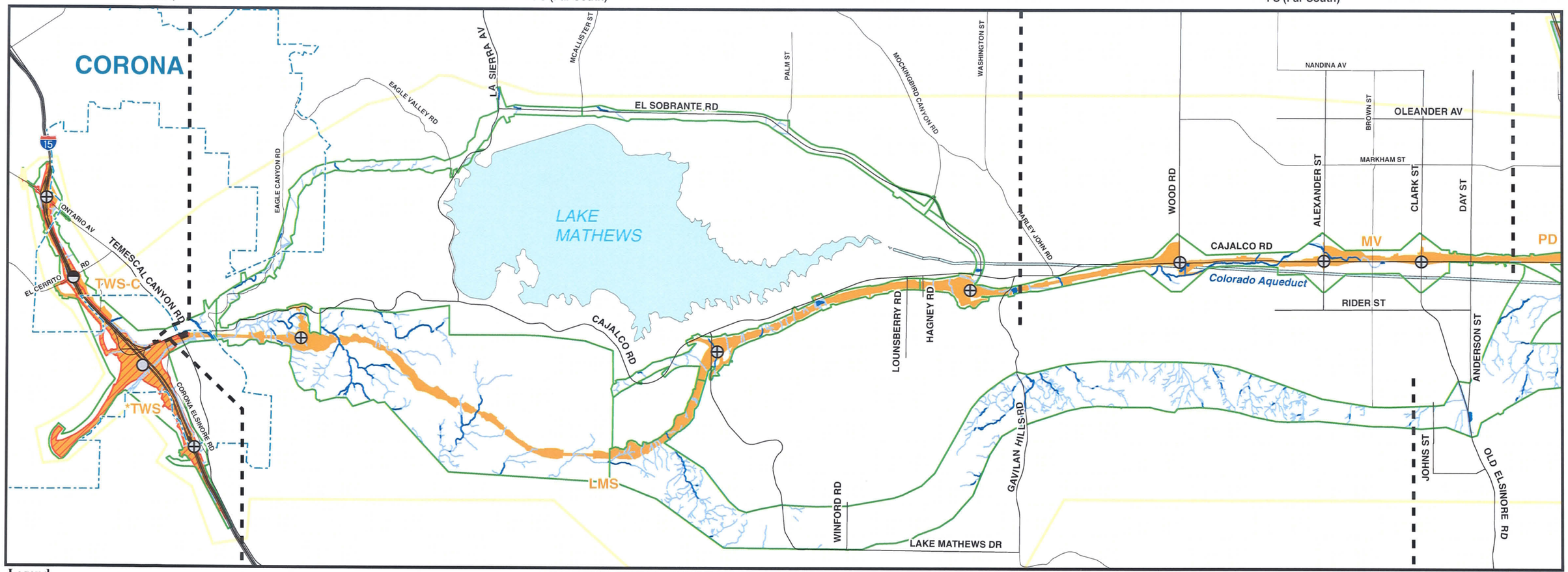
----- SEGMENTS -----
TWS-C (Temescal Wash Area with Collector Distributor)
*TWS (Temescal Wash Area with 1/2 Diamond at El Cerrito)

Lake Mathews Area

----- SEGMENTS -----
LMS (Lake Mathews South)
LMN-GP (Lake Mathews North General Plan)
LMS-GP (Lake Mathews South General Plan)
FS (Far South)

Mead Valley Far South Area

----- SEGMENTS -----
MV (Mead Valley)
FS (Far South)



Legend

- Alternative Segment
- Study Area

Interchanges
- Service
- Service (1/2 Diamond)
- System

Waters of the U.S.
- Non-Wetland
- Wetland
- Survey Area

- Alternative 4 (South Lake Mathews/Perris North (Drain))
- Temescal Wash Design Variation (1/2 Diamond at El Cerrito) (All Parkway Alternatives)

* Denotes Design Variation segment

SOURCE: TBM (2006), Jacobs Engineering (02/2007)

0 0.805 1.61 3.22 Kilometers
0 0.5 1 2 Miles

FIGURE 4a

Alternative 4

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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Perris Area

----- SEGMENTS -----
C1 (Connector Perris 1)
*C2 (Connector Perris 2)
C3 (Connector Perris 3)

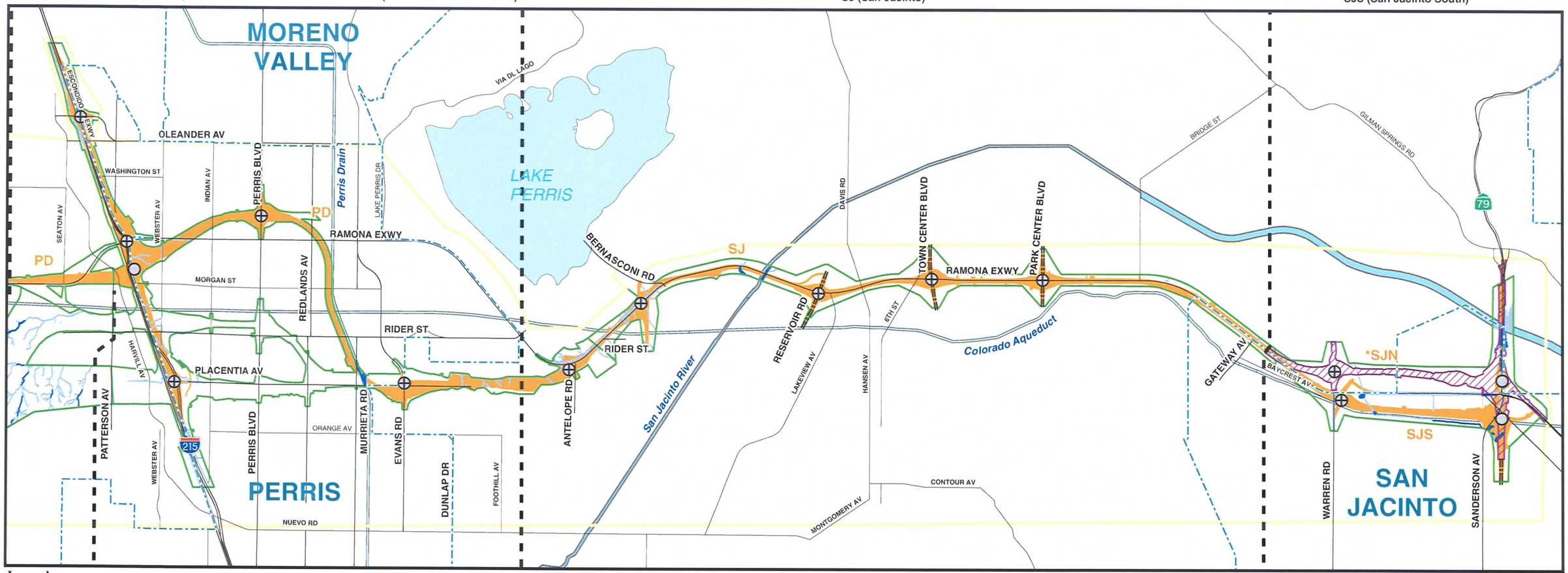
----- SEGMENTS -----
PD (Perris Drain)
RD (Rider)
PP-D (Placentia Perris Depressed)
*PP-E (Placentia Perris Elevated)

San Jacinto Area

----- SEGMENT -----
SJ (San Jacinto)

San Jacinto Design Variation Area

----- SEGMENTS -----
*SJN (San Jacinto North)
SJS (San Jacinto South)



Legend

- Alternative Segment
- Planned Road
- Study Area
- Interchanges
  - Service
  - System
- Waters of the U.S.
  - Non-Wetland
  - Wetland
  - Survey Area
- Alternative 4 (South Lake Mathews/Perris North (Drain))
- San Jacinto North Design Variation (All Parkway Alternatives)

* Denotes Design Variation segment

SOURCE: TBM (2006), Jacobs Engineering (02/2007)

0 0.805 1.61 3.22 Kilometers
0 0.5 1 2 Miles

FIGURE 4b

Alternative 4

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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Temescal Wash Area

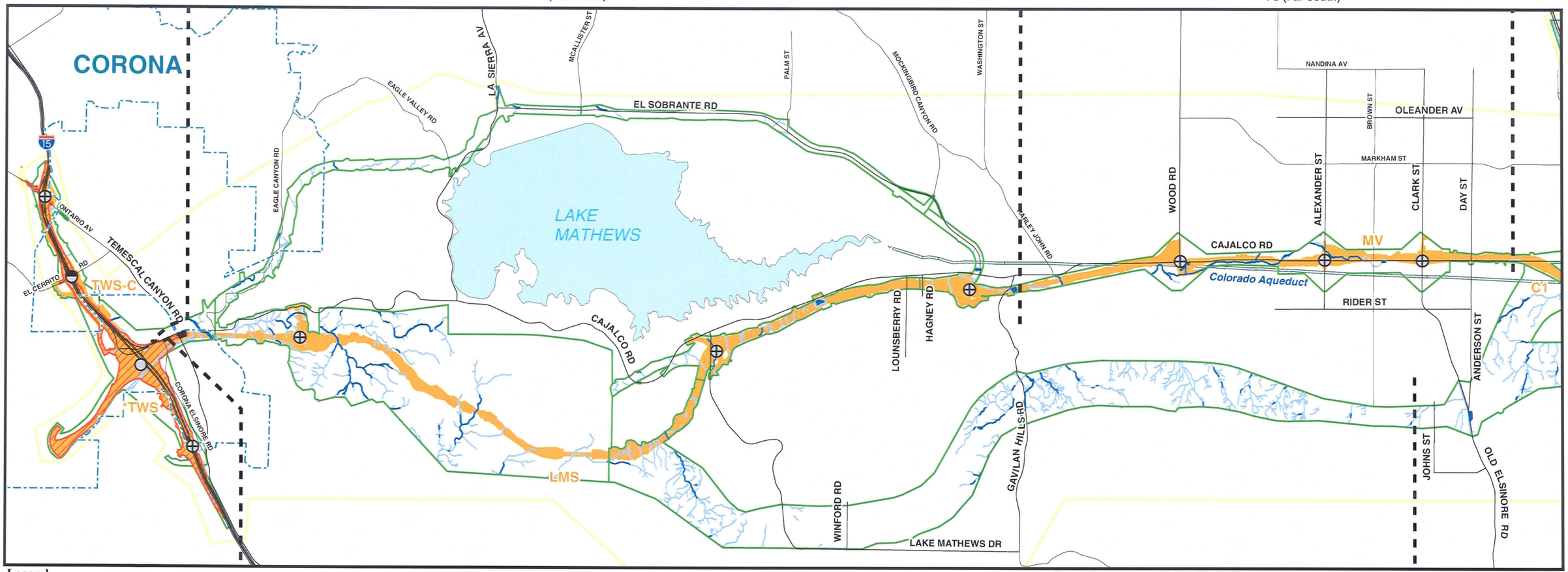
----- SEGMENTS -----
TWS-C (Temescal Wash Area with Collector Distributor)
*TWS (Temescal Wash Area with 1/2 Diamond at El Cerrito)

Lake Mathews Area

----- SEGMENTS -----
LMS (Lake Mathews South)
LMN-GP (Lake Mathews North General Plan)
LMS-GP (Lake Mathews South General Plan)
FS (Far South)

Mead Valley Far South Area

----- SEGMENTS -----
MV (Mead Valley)
FS (Far South)



Legend

- Alternative Segment
- Study Area

Interchanges
- Service
- Service (1/2 Diamond)
- System

- Survey Area

Waters of the U.S.
- Non-Wetland
- Wetland

- Alternative 5 (South Lake Mathews/Perris South (at Rider Street))
- Temescal Wash Design Variation (1/2 Diamond at El Cerrito) (All Alternatives)

* Denotes Design Variation segment

SOURCE: TBM (2006), Jacobs Engineering (02/2007)

0 0.805 1.61 3.22 Kilometers
0 0.5 1 2 Miles

FIGURE 5a

Alternative 5

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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Perris Area

----- SEGMENTS -----
C1 (Connector Perris 1)
*C2 (Connector Perris 2)
C3 (Connector Perris 3)

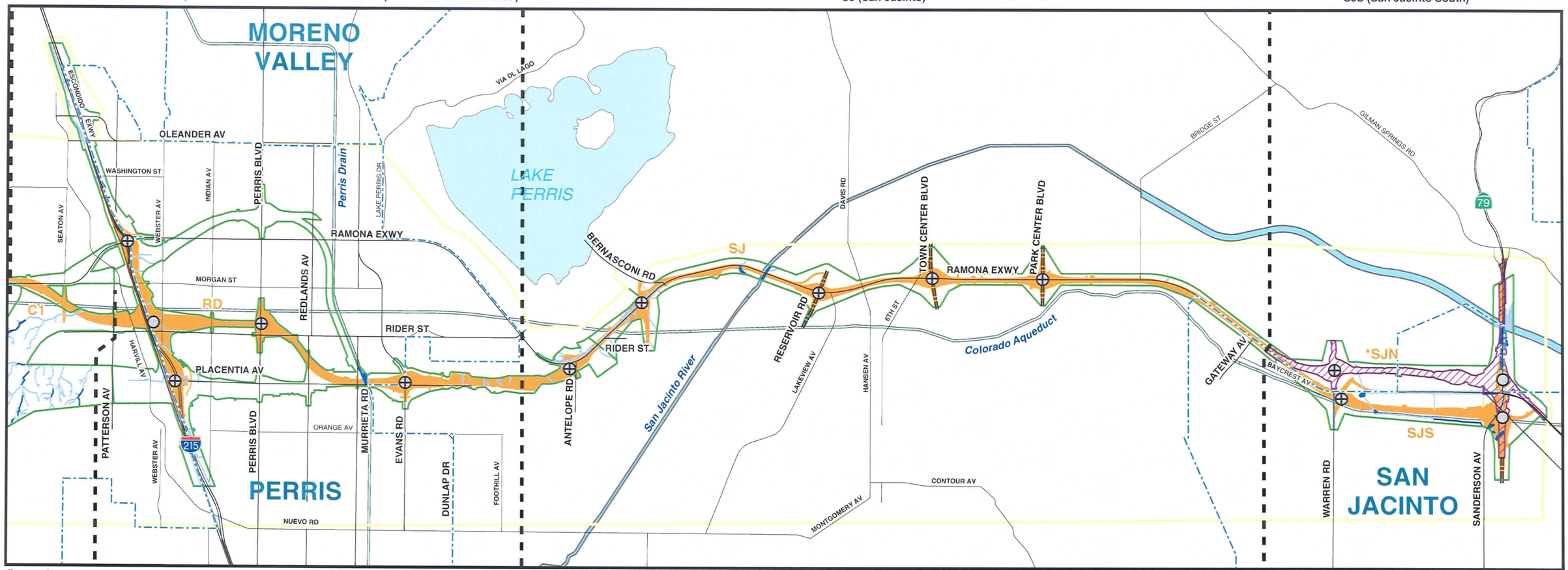
----- SEGMENTS -----
PD (Perris Drain)
RD (Rider)
PP-D (Placentia Perris Depressed)
*PP-E (Placentia Perris Elevated)

San Jacinto Area

----- SEGMENT -----
SJ (San Jacinto)

San Jacinto Design Variation Area

----- SEGMENTS -----
*SJN (San Jacinto North)
SJS (San Jacinto South)



Legend

- Alternative Segment
- Planned Road
- Study Area
- Interchanges
  - Service
  - System
- Survey Area
- Waters of the U.S.
  - Non-Wetland
  - Wetland
- Alternative 5 (South Lake Mathews/Perris South (at Rider Street))
- San Jacinto North Design Variation (All Parkway Alternatives)

* Denotes Design Variation segment

SOURCE: TBM (2006), Jacobs Engineering (02/2007)

0 0.805 1.61 3.22 Kilometers
0 0.5 1 2 Miles

FIGURE 5b

Alternative 5

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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Temescal Wash Area

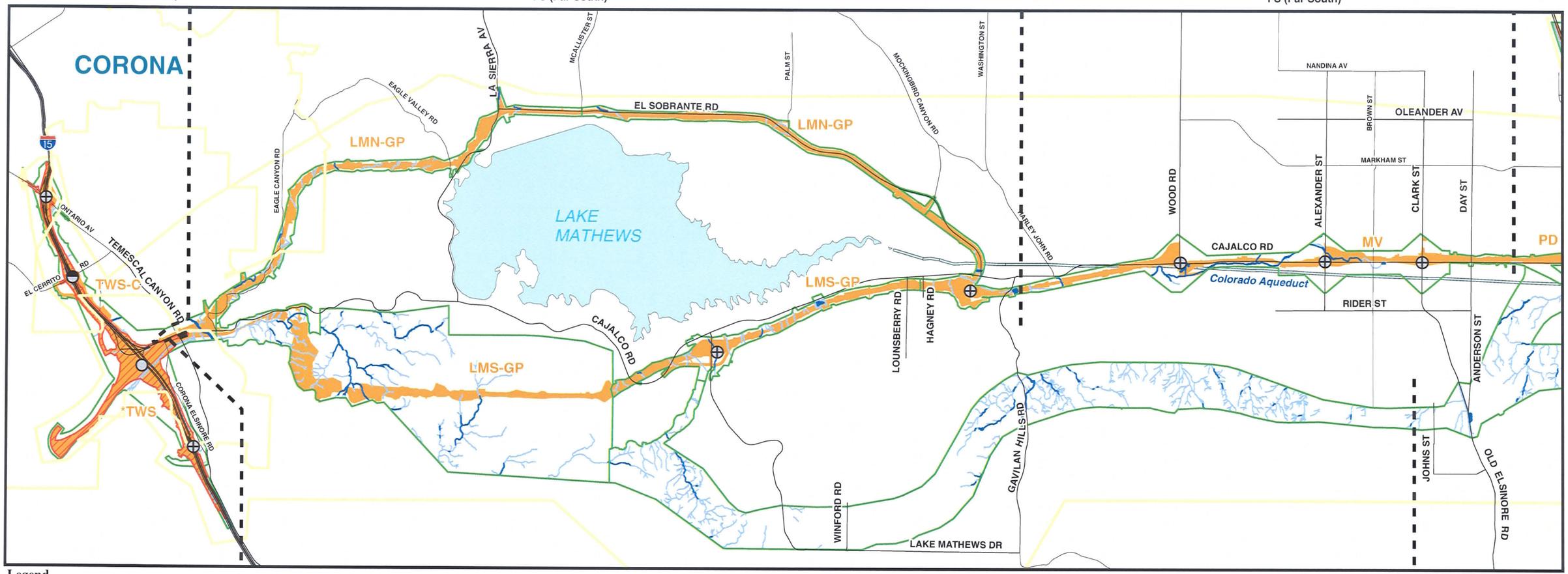
----- SEGMENTS -----
TWS-C (Temescal Wash Area with Collector Distributor)
*TWS (Temescal Wash Area with 1/2 Diamond at El Cerrito)

Lake Mathews Area

----- SEGMENTS -----
LMS (Lake Mathews South)
LMN-GP (Lake Mathews North General Plan)
LMS-GP (Lake Mathews South General Plan)
FS (Far South)

Mead Valley Far South Area

----- SEGMENTS -----
MV (Mead Valley)
FS (Far South)



Legend

- City Limits
- Alternative Segment
- Study Area

Interchanges
- Service
- Service (1/2 Diamond)
- System

- Survey Area

Waters of the U.S.
- Non-Wetland
- Wetland

- Alternative 6 (General Plan North and General Plan South of Lake Mathews/Perris North (Drain))
- Temescal Wash Design Variation (1/2 Diamond at El Cerrito) (All Parkway Alternatives)

* Denotes Design Variation segment

SOURCE: TBM (2006), Jacobs Engineering (02/2007)

0 0.805 1.61 3.22 Kilometers
0 0.5 1 2 Miles

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FIGURE 6a

Alternative 6

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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Perris Area

----- SEGMENTS -----
C1 (Connector Perris 1)
*C2 (Connector Perris 2)
C3 (Connector Perris 3)

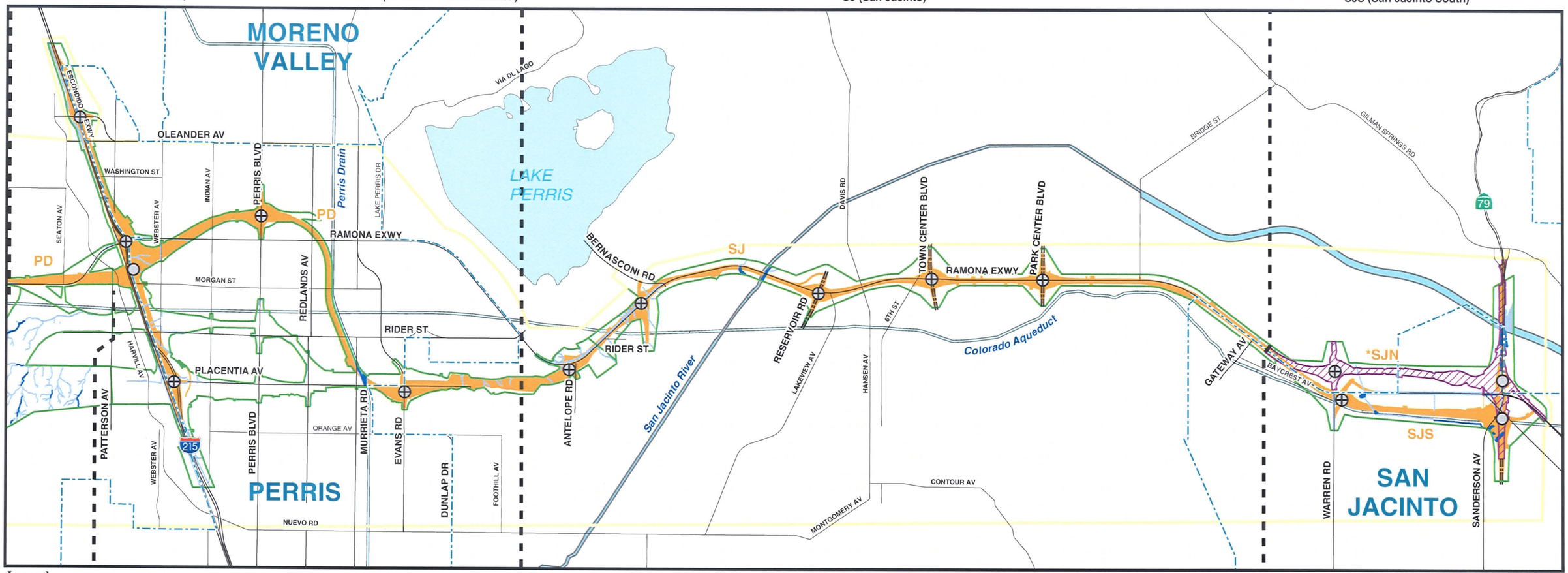
----- SEGMENTS -----
PD (Perris Drain)
RD (Rider)
PP-D (Placentia Perris Depressed)
*PP-E (Placentia Perris Elevated)

San Jacinto Area

----- SEGMENT -----
SJ (San Jacinto)

San Jacinto Design Variation Area

----- SEGMENTS -----
*SJN (San Jacinto North)
SJS (San Jacinto South)



Legend

- Alternative Segment
- Planned Road
- Study Area
- Survey Area
- Alternative 6 (General Plan North and South of Lake Mathews/North Perris (Drain))
- San Jacinto North Design Variation (All Parkway Alternatives)

Interchanges
- Service
- System

Waters of the U.S.
- Non-Wetland
- Wetland

* Denotes Design Variation segment

SOURCE: TBM (2006), Jacobs Engineering (02/2007)

0 0.805 1.61 3.22 Kilometers

0 0.5 1 2 Miles

FIGURE 6b

Alternative 6

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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Temescal Wash Area

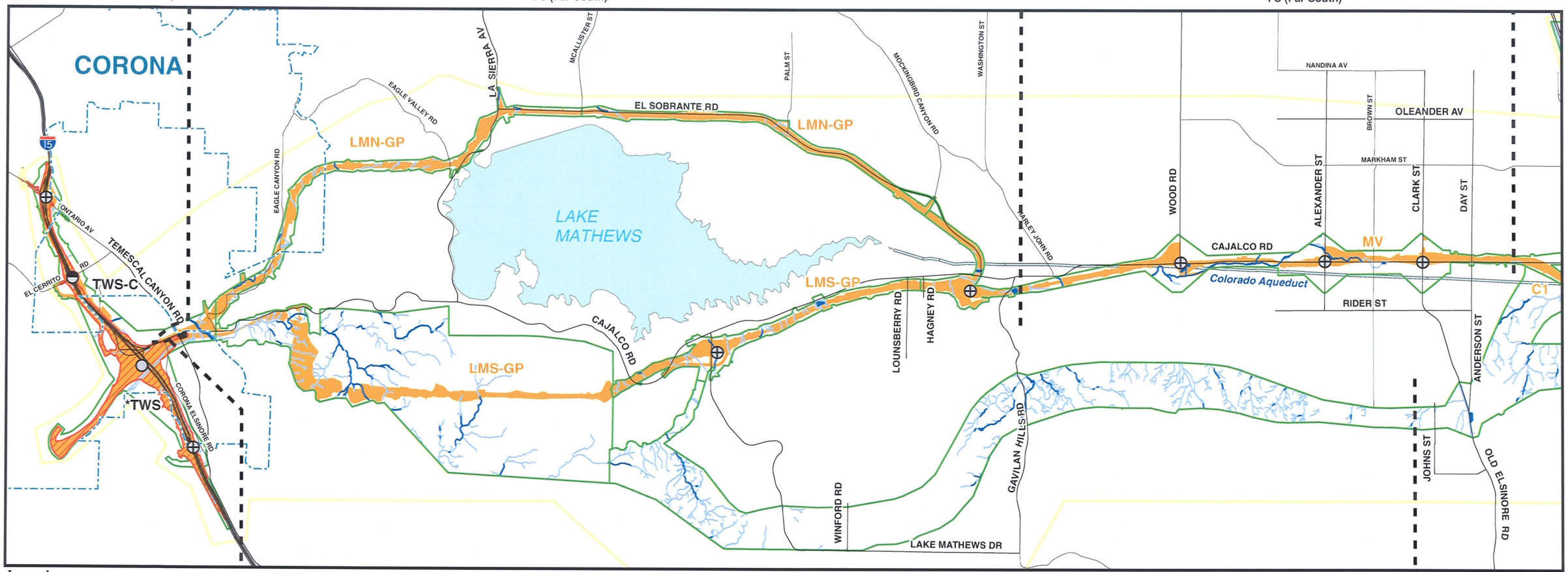
----- SEGMENTS -----
TWS-C (Temescal Wash Area with Collector Distributor)
*TWS (Temescal Wash Area with 1/2 Diamond at El Cerrito)

Lake Mathews Area

----- SEGMENTS -----
LMS (Lake Mathews South)
LMN-GP (Lake Mathews North General Plan)
LMS-GP (Lake Mathews South General Plan)
FS (Far South)

Mead Valley Far South Area

----- SEGMENTS -----
MV (Mead Valley)
FS (Far South)



Legend

- Alternative Segment
- Study Area

Interchanges
- Service
- Service (1/2 Diamond)
- System

- Survey Area

Waters of the U.S.
- Non-Wetland
- Wetland

- Alternative 7 (General Plan North and General Plan South of Lake Mathews / Perris South - Rider)
- Temescal Wash Design Variation (1/2 Diamond at El Cerrito) (All Parkway Alternatives)

* Denotes Design Variation segment

SOURCE: TBM (2006), Jacobs Engineering (02/2007)

0 0.805 1.61 3.22 Kilometers
0 0.5 1 2 Miles

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FIGURE 7a

Alternative 7

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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Perris Area

----- SEGMENTS -----
C1 (Connector Perris 1)
*C2 (Connector Perris 2)
C3 (Connector Perris 3)

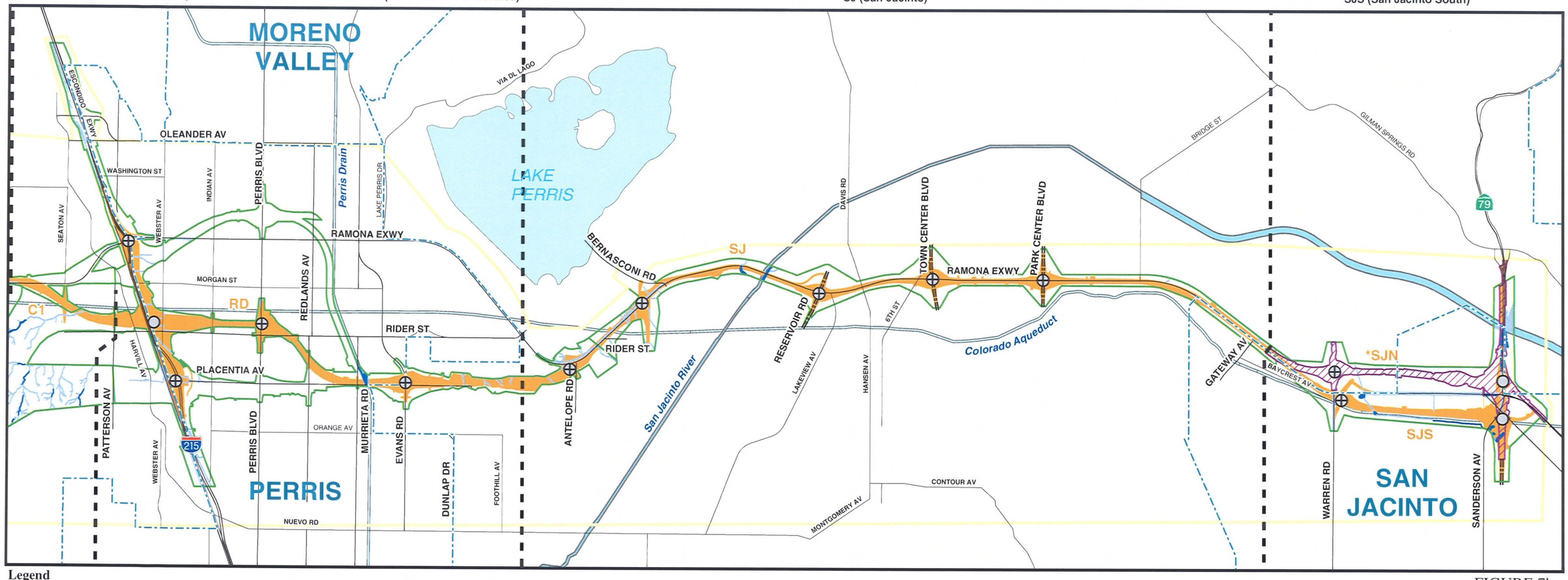
----- SEGMENTS -----
PD (Perris Drain)
RD (Rider)
PP-D (Placentia Perris Depressed)
*PP-E (Placentia Perris Elevated)

San Jacinto Area

----- SEGMENT -----
SJ (San Jacinto)

San Jacinto Design Variation Area

----- SEGMENTS -----
*SJN (San Jacinto North)
SJS (San Jacinto South)



Legend

- Alternative Segment
- Planned Road
- Study Area
- Survey Area
- Alternative 7 (General Plan North and General Plan South of Lake Mathews/Perris South (at Rider Street))
- San Jacinto North Design Variation (All Parkway Alternatives)

Interchanges
- Service
- System

Waters of the U.S.
- Non-Wetland
- Wetland

* Denotes Design Variation segment

SOURCE: TBM (2006), Jacobs Engineering (02/2007)

0 0.805 1.61 3.22 Kilometers
0 0.5 1 2 Miles

FIGURE 7b

Alternative 7

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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Temescal Wash Area

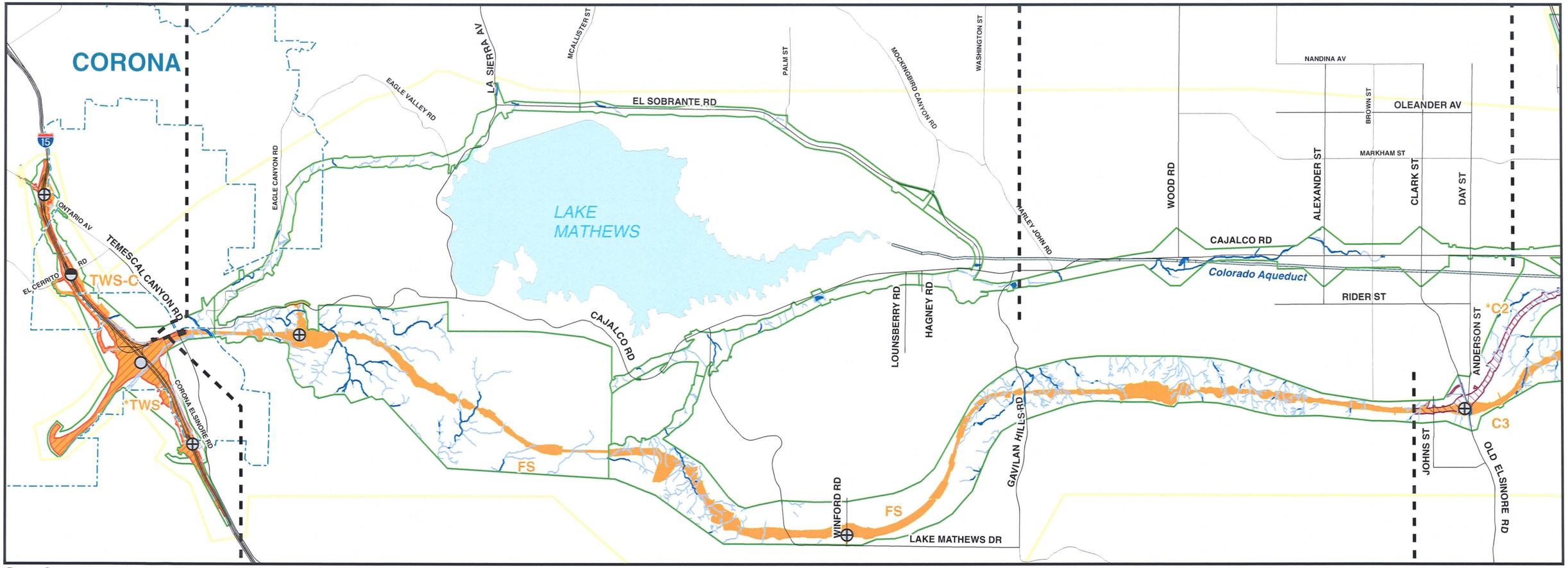
----- SEGMENTS -----
TWS-C (Temescal Wash Area with Collector Distributor)
*TWS (Temescal Wash Area with 1/2 Diamond at El Cerrito)

Lake Mathews Area

----- SEGMENTS -----
LMS (Lake Mathews South)
LMN-GP (Lake Mathews North General Plan)
LMS-GP (Lake Mathews South General Plan)
FS (Far South)

Mead Valley Far South Area

----- SEGMENTS -----
MV (Mead Valley)
FS (Far South)



Legend

- Alternative Segment
- Study Area

Interchanges
- Service
- Service (1/2 Diamond)
- System

- Survey Area

Waters of the U.S.
- Non-Wetland
- Wetland

- Alternative 9 (Far South/Placentia Avenue)
- Temescal Wash Design Variation (1/2 Diamond at El Cerrito)
- Rider Design Variation (Alternative 9)

* Denotes Design Variation segment

SOURCE: TBM (2006), Jacobs Engineering (02/2007)

0 0.805 1.61 3.22 Kilometers
0 0.5 1 2 Miles

FIGURE 8a

Alternative 9

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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Perris Area

----- SEGMENTS -----
C1 (Connector Perris 1)
*C2 (Connector Perris 2)
C3 (Connector Perris 3)

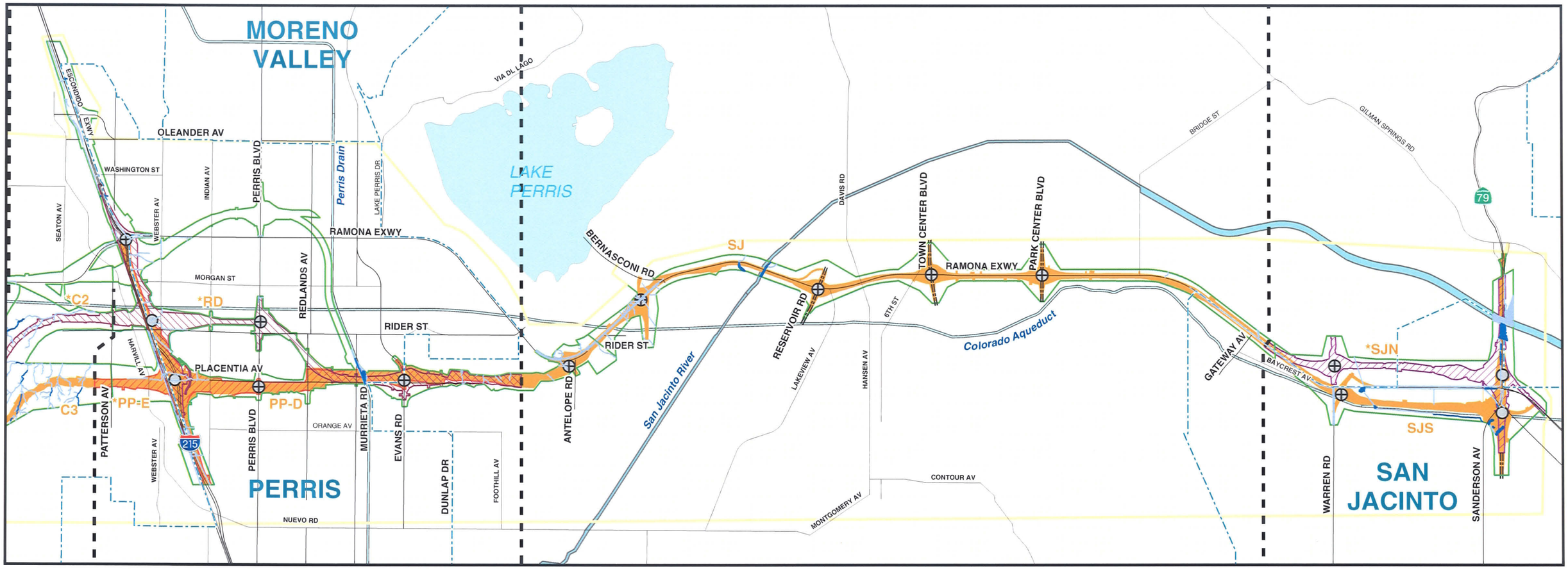
----- SEGMENTS -----
PD (Perris Drain)
RD (Rider)
PP-D (Placentia Perris Depressed)
*PP-E (Placentia Perris Elevated)

San Jacinto Area

----- SEGMENT -----
SJ (San Jacinto)

San Jacinto Design Variation Area

----- SEGMENTS -----
*SJN (San Jacinto North)
SJS (San Jacinto South)



Legend

- Alternative Segment
- Planned Road
- Study Area
- Interchanges: Service, System
- Survey Area
- Waters of the U.S.: Non-Wetland, Wetland
- Alternative 9 (Far South / Placentia Avenue)
- San Jacinto North Design Variation (All Parkway Alternatives)
- Perris and Placentia Interchange Design Variation (Alternative 9,Elevated Grade)
- Rider Design Variation (Alternative 9)

* Denotes Design Variation segment

SOURCE: TBM (2006), Jacobs Engineering (02/2007)

0 0.805 1.61 3.22 Kilometers
0 0.5 1 2 Miles

FIGURE 8b

Alternative 9

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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7.3 ALTERNATIVE 4: SOUTH OF LAKE MATHEWS/NORTH PERRIS (DRAIN)

Alternative 4 proposes a six- to eight-lane, controlled-access parkway with six mixed-flow lanes for most of its length, and up to eight mixed-flow lanes near the I-215 interchange. Alternative 4 is located south of Lake Mathews and follows a northern alignment through the City of Perris (as shown on Figures 4a and 4b). The Alternative 4 alignment is south of existing Cajalco Road, west of Lake Mathews Drive, and north of Ramona Expressway from I-215 to east of Redlands Avenue. Alternative 4 extends from the TWS-C Segment on the west to the SJS Segment on the east and includes the LMS, MV, PD, SJ, and SJS Segments.

System interchanges are proposed for all Build Alternatives at I-15, I-215, and SR-79. The MCP project mainline would cross over the I-15 and I-215 at the respective system interchanges. The I-15 interchange is proposed at four levels and would be approximately 30.5 to 38.1 m (100 to 125 ft) in height. The proposed four-level design will not preclude possible future high-occupancy vehicle (HOV) direct connectors at the system interchange at I-15. A CD road is proposed to run north-south to provide local access to I-15 from local interchanges at Weirick Road, Cajalco Road, El Cerrito Road, and Ontario Avenue. Similarly, the I-215 system interchange is proposed as a three-level interchange that will not preclude possible future HOV direct connectors. At its highest point, the interchange would be approximately 23 to 30 m (75 to 100 ft) above ground level. A CD road is proposed to run north-south to provide local access to I-215 from the local interchanges at Placentia Avenue, Ramona Expressway, and Oleander Avenue. This alternative includes a realignment of the I-215 mainline to east of the existing location, from Placentia Avenue to just north of Strata Road. The existing railroad tracks west of I-215 are proposed to remain in place. CD roads are needed and are located on the west side of I-215. A three-level interchange is proposed at SR-79 at an approximate height of 15 m (50 ft).

Service interchanges for Alternative 4 are proposed at: (1) a location approximately 2,000 m (6,560 ft) east of Temescal Canyon Road (referred to as the Estelle Mountain interchange); (2) Lake Mathews Drive; (3) El Sobrante Road; (4) Wood Road; (5) Alexander Street; (6) Clark Street; (7) Perris Boulevard; (8) Evans Road; (9) Ramona Expressway; (10) Bernasconi Road; (11) Reservoir Road; (12) Town Center Boulevard (new arterial proposed to be added to the Riverside County General Plan Circulation Element in 2008); (13) Park Center Boulevard (new arterial proposed to be added to the Riverside County General Plan Circulation Element in 2008); and (14) Warren Road. The alignment between El Sobrante Road and Wood Road is south of existing Cajalco Road, which would continue to be used as a two-way frontage road after the MCP project is constructed. Portions of existing Cajalco Road in Mead Valley would be incorporated into the local street network.

Alternative 4 includes two design variations at the western and eastern termini that use: (1) a smaller system of CD roads at the MCP/I-15 interchange and includes the removal of the existing southbound on-ramp and northbound off-ramp from I-15 to El Cerrito Road; and (2) the SJN Segment instead of the SJS Segment to connect with SR-79.

7.4 ALTERNATIVE 5: SOUTH OF LAKE MATHEWS/SOUTH PERRIS (AT RIDER STREET)

Alternative 5 is a six- to eight-lane, controlled-access parkway with six mixed-flow lanes for most of its length and up to eight mixed-flow lanes near the I-215 interchange. Alternative 5 is south of Lake Mathews and follows a southern alignment through the City of Perris along Rider Street (as shown on Figures 5a and 5b). The Alternative 5 alignment is south of existing Cajalco Road, west of Lake Mathews Drive, and located south of the Ramona Expressway from I-215 to just west of Antelope Road. Like Alternative 4, Alternative 5 extends from the TWS-C Segment on the west to the SJS Segment on the east. Alternative 5 also coincides with Alternative 4 for the LMS and MV Segments. Alternative 5 differs from Alternative 4 in the Perris Segments. Where Alternative 4 includes the PD Segment, Alternative 5 follows a connector from Mead Valley (the C1 Segment) to Rider Street (the RD Segment), the SJ Segment, and the SJS Segment.

System interchanges proposed for Alternative 5 are the same as Alternative 4, with connections at I-15, I-215, and SR-79. The I-215 system interchange differs from Alternative 4, as it connects the MCP project to I-215 near Rider Street. As with Alternative 4, it is proposed as a three-level interchange that will not preclude possible future HOV direct connectors. The interchange will be approximately 23 to 30 m (75 to 1,000 ft) above ground level. A CD road is proposed to run north-south to provide local access to I-215 from the local interchanges at Placentia Avenue, Ramona Expressway, and Oleander Avenue. This alternative requires a realignment of the I-215 mainline to east of the existing location, from Placentia Avenue to Ramona Expressway. The existing railroad tracks west of I-215 are proposed to remain in place.

Service interchanges for Alternative 5 are proposed at: (1) a location approximately 2,000 m (6,560 ft) east of Temescal Canyon Road (referred to as the Estelle Mountain interchange); (2) Lake Mathews Drive; (3) El Sobrante Road; (4) Wood Road; (5) Alexander Street; (6) Clark Street; (7) Perris Boulevard; (8) Evans Road; (9) Ramona Expressway; (10) Bernasconi Road; (11) Reservoir Road; (12) Town Center Boulevard (new arterial proposed to be added to the Riverside County General Plan Circulation Element in 2008); (13) Park Center Boulevard (new arterial proposed to be added to the Riverside County General Plan Circulation Element in 2008); and (14) Warren Road. The alignment between El Sobrante Road and Wood Road is south of existing Cajalco Road, which would continue to be used as a two-way frontage road after the MCP project is constructed. Portions of existing Cajalco Road in Mead Valley would be incorporated into the local street network.

Alternative 5 includes two design variations at the western and eastern termini of the alternative that use: (1) a smaller system of CD roads at the MCP/I-15 interchange and includes the removal of the existing southbound on-ramp and northbound off-ramp from I-15 to El Cerrito Road; and (2) the SJN Segment instead of the SJS Segment to connect with SR-79.

7.5 ALTERNATIVE 6: GENERAL PLAN NORTH AND SOUTH OF LAKE MATHEWS/NORTH PERRIS (DRAIN)

Alternative 6 involves the implementation of General Plan Circulation Element improvements between I-15 and El Sobrante Road and a new six- to eight-lane, controlled-access parkway east of El Sobrante Road to SR-79 (as shown on Figures 6a and 6b). Alternative 6 is the same as Alternative 4

(described above) east of El Sobrante Road and is located north of Ramona Expressway from I-215 to east of Perris Boulevard. West of El Sobrante Road to I-15, the project includes a four-lane urban arterial north of Lake Mathews[1] and a four-lane, controlled-access expressway south of Lake Mathews. The proposed arterial street improvements north and south of Lake Mathews are consistent with the Riverside County General Plan Circulation Element. The facility south of Lake Mathews would be a controlled-access expressway that ties into the same system interchange configuration at I-15 as the other Build Alternatives.

System interchanges are proposed for all of the Build Alternatives, including Alternative 6, at I-15, I-215, and SR-79. Please see the description of system interchanges for Alternative 4 above. Service interchanges for Alternative 6 are at the same locations as for Alternative 4, even though the location of the MCP alignment south of Lake Mathews is somewhat different than Alternative 4. These interchanges include: (1) Estelle Mountain; (2) Lake Mathews Drive; (3) El Sobrante Road; (4) Wood Road; (5) Alexander Street; (6) Clark Street; (7) Perris Boulevard; (8) Evans Road; (9) Ramona Expressway; (10) Bernasconi Road; (11) Reservoir Road; (12) Town Center Boulevard (new arterial proposed to be added to the Riverside County General Plan Circulation Element in 2008); (13) Park Center Boulevard (new arterial proposed to be added to the Riverside County General Plan Circulation Element in 2008); and (14) Warren Road.

The General Plan arterial north of Lake Mathews included in Alternative 6 would modify the existing intersection of El Sobrante Road at La Sierra Avenue and result in a new arterial road extension from La Sierra Avenue in a southwesterly direction to connect with Cajalco Road. The alignment between El Sobrante Road and Wood Road is south of existing Cajalco Road, which would continue to be used as a two-way frontage road after the project is constructed. Portions of existing Cajalco Road in Mead Valley would be incorporated into the local street network.

The segments for the General Plan north and south of the Lake Mathews area include the TWS-C Segment and the LMN-GP and LMS-GP Segments. The LMS-GP Segment provides a four-lane, access-controlled expressway that connects to I-15. The LMN-GP Segment provides a four-lane arterial that connects to Cajalco Road. The segments from the MV Segment to the SJS Segment are the same as Alternative 4.

Alternative 6 includes two design variations at the western and eastern termini of the alternative that use: (1) a smaller system of CD roads at the MCP/I-15 interchange and includes the removal of the existing southbound on-ramp and northbound off-ramp from I-15 to El Cerrito Road; and (2) the SJN Segment instead of the SJS Segment to connect with SR-79.

7.6 ALTERNATIVE 7: GENERAL PLAN NORTH AND SOUTH OF LAKE MATHEWS/SOUTH PERRIS (AT RIDER STREET)

Alternative 7 involves the implementation of General Plan Circulation Element improvements between I-15 and El Sobrante Road and a new six- to eight-lane, controlled-access parkway east of El Sobrante Road to SR-79 (as shown on Figures 7a and 7b). Alternative 7 is the same as Alternative 5 (described above) east of El Sobrante Road and follows a southerly alignment through Perris. West of

[1] The Riverside County General Plan provides for up to six lanes in this location; however, traffic forecast modeling indicates that four lanes will meet projected demand.

El Sobrante Road to I-15, the Riverside County General Plan includes a four-lane urban arterial north of Lake Mathews[1] and a four-lane, controlled-access expressway south of Lake Mathews. The proposed arterial street improvements north and south of Lake Mathews are consistent with the Riverside County General Plan Circulation Element and are the same as described above for Alternative 6. The facility south of Lake Mathews would be a controlled-access expressway that ties into the same system interchange configuration at I-15 as the other Build Alternatives. System interchanges are proposed for all of the Build Alternatives, including Alternative 7, at I-15, I-215, and SR-79. Please see the description of system interchanges for Alternative 5 above. Service interchanges for Alternative 7 are at the same locations as for Alternative 5, even though the location of the MCP alignment south of Lake Mathews is somewhat different than Alternative 5. These interchanges include: (1) Estelle Mountain; (2) Lake Mathews Drive; (3) El Sobrante Road; (4) Wood Road; (5) Alexander Street; (6) Clark Street; (7) Perris Boulevard; (8) Evans Road; (9) Ramona Expressway; (10) Bernasconi Road; (11) Reservoir Road; (12) Town Center Boulevard (new arterial proposed to be added to the Riverside County General Plan Circulation Element in 2008); (13) Park Center Boulevard (new arterial proposed to be added to the Riverside County General Plan Circulation Element in 2008); and (14) Warren Road.

The General Plan arterial north of Lake Mathews included in Alternative 7 would modify the existing intersection at La Sierra Avenue and result in a new arterial road extension from La Sierra Avenue in a southwesterly direction to connect with Cajalco Road. The alignment between El Sobrante Road and Wood Road is south of existing Cajalco Road, which would continue to be used as a two-way frontage road after the project is constructed. Portions of existing Cajalco Road in Mead Valley would be incorporated into the local street network.

The segments for the General Plan north and south of the Lake Mathews area include the TWS-C Segment and the LMN-GP and LMS-GP Segments. The LMS-GP Segment provides a four-lane, access-controlled expressway that connects into I-15. The LMN-GP Segment provides a four-lane arterial that connects into Cajalco Road. The segments from the MV Segment to the SJS Segment are the same as Alternative 5.

Alternative 7 includes two design variations at the western and eastern termini of the alternative that use: (1) a smaller system of CD roads at the MCP/I-15 interchange and includes the removal of the existing southbound on- and northbound off-ramps from I-15 to El Cerrito Road; and (2) the SJN Segment instead of the SJS Segment to connect with SR-79.

7.7 ALTERNATIVE 9: FAR SOUTH/PLACENTIA AVENUE

Alternative 9 is a four- to six-lane, controlled-access parkway south of both Lake Mathews and Mead Valley; a six- to eight-lane, controlled-access parkway between Old Elsinore Road and I-215; and a six- to eight-lane, controlled-access parkway between I-215 and SR-79. Alternative 9 is approximately 3.2 km (2.0 mi) south of Cajalco Road for much of its length but shares the same connection to I-15 as Alternatives 4 and 5 (TWS-C Segment). The alignment and proposed interchange locations for Alternative 9 are shown in Figures 8a and 8b.

[1] The Riverside County General Plan provides for up to six lanes in this location; however, traffic forecast modeling indicates that four lanes will meet projected demand.

Alternative 9 is comprised of the following segments: TWS-C, FS, C3, PP-D, SJ, and SJS. Alternative 9 is unique compared to the other MCP Build Alternatives for the portion of the FS Segment between Lake Mathews Drive and Placentia/Rider Streets. The segments unique to Alternative 9 include the FS, C3 (the connector to Placentia Avenue), and PP-D Segments.

System interchanges are proposed for all the Build Alternatives, including Alternative 9, at I-15, I-215, and SR-79. System interchanges at I-15 and SR-79 are the same as proposed for Alternatives 4, 5, 6, and 7. The proposed I-215 system interchange differs from the other Build Alternatives, as it connects the MCP project to I-215 approximately 45 m (150 ft) south of Placentia Avenue. The MCP project mainline crosses over I-215 at this interchange. The system interchange is proposed as a three-level interchange, and the proposed design will not preclude possible future HOV direct connectors. At its highest point, the interchange would be approximately 23 to 30 m (75 to 100 ft). This alternative does not require a CD road system at the I-215 interchange, nor does it require any change to the existing railroad tracks west of I-215. There is a local interchange at a realigned Placentia Avenue for the I-215 and a local interchange at Perris Boulevard for access to the MCP project.

Service interchanges for Alternative 9 are proposed: (1) at a location approximately 2,000 m (6,560 ft) east of Temescal Canyon Road (referenced as the Estelle Mountain interchange); (2) Lake Mathews Drive; (3) Old Elsinore Road; (4) Perris Boulevard; (5) Evans Road; (6) Ramona Expressway; (7) Bernasconi Road; (8) Reservoir Road; (9) Town Center Boulevard (new arterial proposed to be added to the Riverside County General Plan Circulation Element in 2008); (10) Park Center Boulevard (new arterial proposed to be added to the Riverside County General Plan Circulation Element in 2008); and (11) Warren Road.

There are four design variations that apply to Alternative 9, as described below in Section 7.9.

7.8 404 NO ACTION ALTERNATIVE

Several alignments were analyzed for the 404 No Action Alternative, and it was determined that no feasible alignment exists within the project study area that would completely avoid waters of the U.S. As a result, the 404 No Action Alternative follows the proposed alignment for Alternative 9, but provides for bridge structures to be built over all water crossings in order to fully avoid dredge or fill within waters of the U.S. Alternative 9 was chosen as the base for the 404 No Action Alternative because it is the Build Alternative with the least impacts to waters of the U.S. The alignment and proposed interchange locations for the 404 No Action Alternative are identical to those of Alternative 9. Implementation of the 404 No Action Alternative would necessitate revisions to 10 planned bridge structures that would require longer spans and the placement of 89 additional bridge structures to completely avoid waters of the U.S. The 404 No Action Alternative is shown in Figures 9a and 9b with location sitings of the bridge structures necessary to implement this alternative.

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Temescal Wash Area

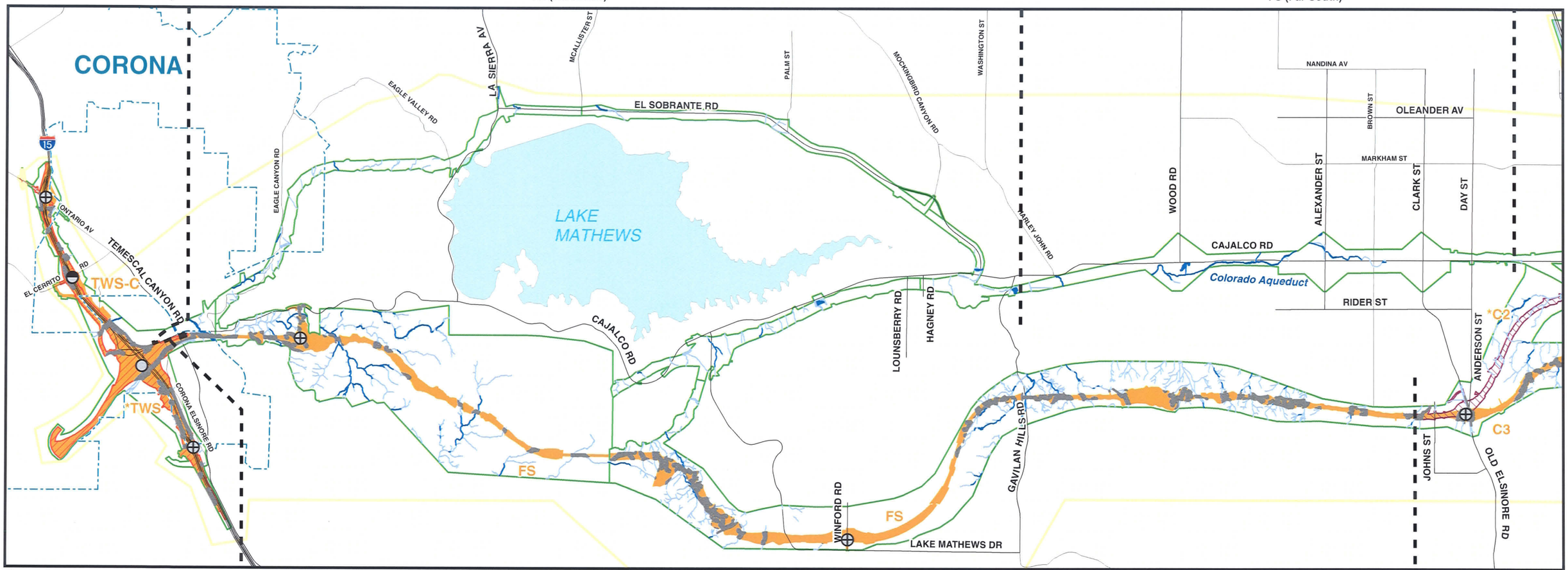
----- SEGMENTS -----
TWS-C (Temescal Wash Area with Collector Distributor)
*TWS (Temescal Wash Area with 1/2 Diamond at El Cerrito)

Lake Mathews Area

----- SEGMENTS -----
LMS (Lake Mathews South)
LMN-GP (Lake Mathews North General Plan)
LMS-GP (Lake Mathews South General Plan)
FS (Far South)

Mead Valley Far South Area

----- SEGMENTS -----
MV (Mead Valley)
FS (Far South)



Legend

- Alternative Segment
- Study Area
- Bridged Areas for Full Avoidance

Interchanges
- Service
- Service (1/2 Diamond)
- System

- Survey Area

Waters of the U.S.
- Non-Wetland
- Wetland

- Alternative 9 (Far South/Placentia Avenue)
- Temescal Wash Design Variation (1/2 Diamond at El Cerrito)
- Rider Design Variation (Alternative 9)

* Denotes Design Variation segment

SOURCE: TBM (2006), Jacobs Engineering (02/2007)

0 0.805 1.61 3.22 Kilometers
0 0.5 1 2 Miles

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FIGURE 9a

404 No Action Alternative

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Perris Area

----- SEGMENTS -----
C1 (Connector Perris 1)
*C2 (Connector Perris 2)
C3 (Connector Perris 3)

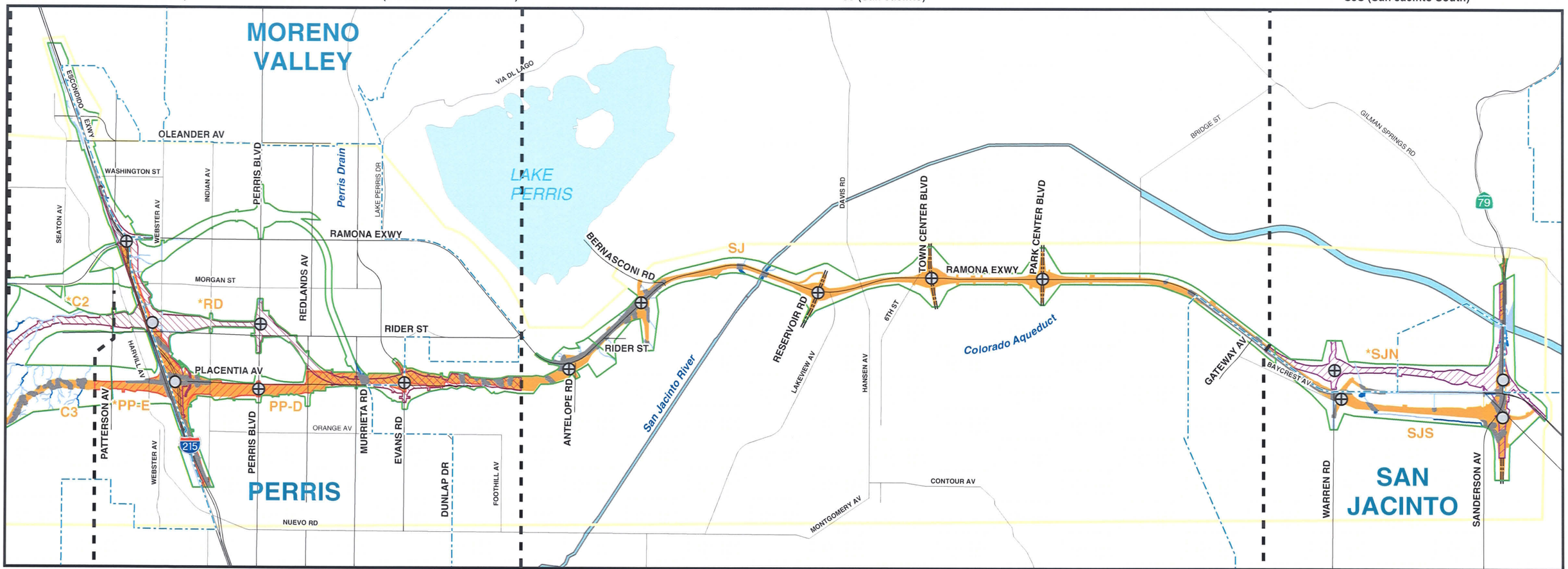
----- SEGMENTS -----
PD (Perris Drain)
RD (Rider)
PP-D (Placentia Perris Depressed)
*PP-E (Placentia Perris Elevated)

San Jacinto Area

----- SEGMENT -----
SJ (San Jacinto)

San Jacinto Design Variation Area

----- SEGMENTS -----
*SJN (San Jacinto North)
SJS (San Jacinto South)



Legend

- Alternative Segment
- Planned Road
- Study Area
- Bridged Areas for Full Avoidance

Interchanges
- Service
- System

- Survey Area

Waters of the U.S.
- Non-Wetland
- Wetland

- Alternative 9 (Far South / Placentia Avenue)
- San Jacinto North Design Variation (All Parkway Alternatives)
- Perris and Placentia Interchange Design Variation (Alternative 9,Elevated Grade)
- Rider Design Variation (Alternative 9)

* Denotes Design Variation segment

SOURCE: TBM (2006), Jacobs Engineering (02/2007)

0 0.805 1.61 3.22 Kilometers
0 0.5 1 2 Miles

FIGURE 9b

404 No Action Alternative

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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7.9 DESIGN VARIATIONS

The following design variations apply to all of the MCP Build Alternatives.

- **Temescal Wash Area Design Variation (TWS DV).** This is a design variation for the TWS-C Segment that partially removes access to I-15 from El Cerrito Road. In this variation, the El Cerrito Road interchange southbound on-ramp and northbound off-ramp would be closed. A CD road system is provided from Weirick Road to Cajalco Road with modifications to the existing Weirick, El Cerrito, and Ontario interchanges and implementation of a new interchange at Cajalco Road just north of the existing Cajalco Road/I-15 interchange, which would be removed. The TWS Segment is a design variation of the TWS-C Segment for all of the MCP Build Alternatives (see Figures 4a, 5a, 6a, 7a, and 8a).
- **San Jacinto North Design Variation (SJN DV).** The SJN Segment extends from the eastern terminus of the SJ Segment 1.32 km (0.82 mi) west of Warren Road and east to SR-79. It follows an alignment approximately 347.4 m (1,140 ft) north of the existing Ramona Expressway. This segment also extends approximately 1.48 km (0.92 mi) north of the Ramona Expressway along SR-79 and approximately 1.06 km (0.67 mi) south of the Ramona Expressway along SR-79. The SJN Segment is a design variation of the SJS Segment for all of the MCP Build Alternatives (see Figures 4a, 5a, 6a, 7a, and 8a).

The following two design variations apply only to Alternative 9.

- **Rider Street Design Variation (RD DV).** The Rider Street Design Variation begins at the eastern terminus of the FS Segment, approximately 125 m (410 ft) east of Haines Street. This design variation includes all of the C2 and RD Segments. The combination of Segments C2 and RD is only applicable as a design variation for Alternative 9. The RD Segment is also part of Alternatives 5 and 7. The Rider Street Design Variation terminates 87 m (291 ft) west of Dawson Street. This design variation also includes the MCP/I-215 interchange similar to Alternatives 5 and 7, with it extending along I-215 north and south of Rider Street (see Figures 8a and 8b).
- **Placentia Avenue/Perris Boulevard Elevated Grade Design Variation (PP-E DV).** The PP-E Segment is an elevated design variation of the PP-D Segment in Alternative 9. The PP-E Segment follows Placentia Avenue at the eastern terminus of the C3 Segment at a point approximately 272 m (895 ft) west of Patterson Avenue and extends east to 87 m (291 ft) west of Dawson Street. This segment includes an MCP/I-215 interchange, extending along I-215, approximately 1,570 m (5,150 ft) north and 1,870 m (6,100 ft) south of Placentia Avenue. The MCP project mainline crosses over the I-215. For this design variation, the road is elevated above grade approximately 8 m (26 ft) from Barrett Avenue to Wilson Avenue.

7.10 BRIDGES FOR WATER AND NATURAL RESOURCE CROSSINGS

The Build Alternatives include a number of bridge structures crossing water and natural resource features in the MCP study area. Bridges will be constructed to Caltrans design standards and are proposed for all major river/stream crossings, including Temescal Wash, Cajalco Creek, Perris Valley Storm Drain, and the San Jacinto River, among others. The major river/stream crossings are described below.

- **Temescal Wash.** All of the Build Alternatives cross Temescal Wash. It is a natural watercourse at the base of a steep bluff. As part of the project, two parallel, approximately 1,395 m (4,577 ft) long bridges would be constructed for Alternatives 4, 5, and 9 across Temescal Canyon Road and Temescal Wash, gaining elevation to the top of the bluff on the east side of Temescal Wash. For Alternatives 6 and 7, this bridge would be 1,720 m (5,643 ft) long. The bridge height ranges from 6 to 39 m (20 to 128 ft) for Alternatives 4, 5, and 9, and 8 to 32 m (26 to 105 ft) for Alternatives 6 and 7. The location of this bridge is within the western Riverside County MSHCP Criteria Area and would accommodate wildlife movement and avoid or minimize direct impacts to the environment since pier bents will completely avoid Temescal Creek and Bedford Canyon Wash; however, since the alignment of Cajalco Creek weaves in and out in the eastern portion of the bridge, some pier bents and protective revetments will impact waters along Cajalco Creek.
- **Unnamed Drainage South of Lake Mathews.** Alternatives 4, 5, and 9 have a bridge crossing over a valley with an unnamed drainage. The bridge is in the El Sobrante Landfill HCP Reserve, adjacent to the Lake Mathews MSHCP Reserve, and would accommodate wildlife movement. For Alternatives 4 and 5, the South Lake Mathews Viaduct is 530 m (1,745 ft), and for Alternative 9, the South Lake Mathews Viaduct length is 804 m (2,638 ft). The bridge height ranges from 5 to 23 m (17 to 76 ft). The viaduct would consist of two parallel structures, one with MCP project westbound travel lanes and the other with eastbound travel lanes. The bridge would completely avoid wetlands, waters, and CDFG jurisdictional areas. There is no fill, abutments, piers, or riprap in any of the jurisdictional areas.
- **Perris Drain.** Alternatives 4 and 6 include a section adjacent to the west side of the Perris Valley Storm Drain (Perris Drain) that crosses the Perris Drain near Placentia Avenue. For Alternatives 4 and 6, a 3,417 m (11,210 ft) long bridge is proposed to avoid impacting the floodplain. Approximately 240 m (656 ft) of the bridge is crossing over the Perris Drain. Alternatives 5 and 7 cross the Perris Drain in one location with a 213 m (698 ft) bridge. Alternative 9 crosses in one location with a 273 m (896 ft) bridge. The bridge height ranges from 1 to 3 m (4 to 10 ft). The bridge crossing of the Perris Drain would accommodate all proposed future improvements to the Perris Drain with minimal effect on the channel. The bridge completely avoids waters, wetlands, and CDFG jurisdictional areas along Perris Valley Drain. All abutments are located outside the channel and jurisdictional federal and state areas; however, pier bents will impact these areas.
- **San Jacinto River.** All the Build Alternatives cross the San Jacinto River Floodplain. It is a natural curving watercourse, approximately 1,200 m (3,936 ft) wide. The project would construct two parallel three-lane bridges approximately 1,317 m (4,321 ft) long and 4 to 13 m (12 to 42 ft) high downstream of the existing Ramona Expressway crossing of the San Jacinto River. This design would minimize floodplain encroachment and reduce hydraulic impacts. The existing two-lane bridge for Ramona Expressway is expected to overtop with the 100-year flow. The proposed new bridges would be separated by a gap approximately 11.6 m (38.1 ft) apart. The width of the bridges would be 47 m (154 ft). The existing Ramona Expressway bridge would become part of a frontage road. This bridge is within the western Riverside County MSHCP Criteria Area and would accommodate wildlife movement within the San Jacinto River Floodplain. The bridge would completely avoid wetlands, waters, and CDFG jurisdictional areas while crossing the river floodplain. All abutments and pier bents are located outside all waters of the U.S. and CDFG jurisdictional areas.

More detailed discussion on the siting of bridge locations over water resources and determination of lengths of bridges over water resources can be found in Appendix A: Bridge Location Planning Process, and Appendix B: Bridge, Waters, and Wetlands Considerations.

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8.0 ALTERNATIVE SELECTION CRITERIA AND COMPARISON OF ALTERNATIVES

The MCP alternatives have been evaluated using the selection criteria agreed to by the SWG in December 2004 for use in selecting the Least Environmentally Damaging Practicable Alternative (LEDPA). These criteria included three broad categories with specific criteria under each. These broad categories included Purpose and Need, Reasonable and Practicable, and Environmental. Using findings from the MCP technical studies, two matrices were prepared to present information to allow for comparison of the alternatives based on the predetermined criteria. These two matrices are provided in Appendices C and D. The first is a summary of the key criteria for the five Build Alternatives that typically influence a route selection decision (e.g., jurisdictional waters of the U.S., Section 4[f] properties, threatened/endangered species, and residential/business displacements). Where applicable, the least impacting alternative is highlighted for each criterion. The second matrix is taken directly from the evaluation criteria agreed to by the SWG in December 2004 and includes information for all of the criteria for each alternative. This matrix describes the "value" or "metric" for each criterion (some are quantitative while others are "yes/no"). The information presented in the Alternative Evaluation Detail matrix (Appendix D) is described below. In addition, the results of an analysis of the impacts of the various alignments on riparian ecosystem integrity by the United States Army Engineer and Research Development Center (ERDC; Smith, 2008) are used as appropriate; this analysis is included as Appendix E. For some environmental criteria (e.g., effects on habitat as measured in acres of direct effect), the ERDC analysis is not as precise as the data in Appendix D because the ERDC analysis is based on a landscape-level data base, whereas the data in Appendix D are derived from project-specific habitat mapping and impact analysis that are included in the Natural Environment Study.

The evaluation initially compares each of the base alternatives. Subsequently, in Section 9.0, the four design variations described in Section 7.9 are considered with respect to the selection criteria, so that these design variations can be compared to the applicable portions of the base alternative(s).

8.1 PURPOSE AND NEED

Seven specific criteria make up the Purpose and Need criteria. These are taken directly from the approved Statement of Purpose and Need for the MCP project (January 2004) and are described below. An alternative's ability to meet the project purpose and need is critical to determining whether an alternative is reasonable and practicable.

1. **Provide Capacity for 2035.** Based on the traffic studies conducted, all Build Alternatives provide the capacity sufficient to meet the 2035 traffic demand in the MCP study area.
2. **Serve Regional Movement of People and Goods.** All Build Alternatives have been evaluated and will carry long-haul through trips through the MCP study area in addition to serving major employment generators.

3. **Provide Roadway Geometrics to Meet State Highway Design Standards.** All Build Alternatives have been designed to meet or exceed State highway design standards and provide a higher level of traffic safety.
4. **Provide Limited Access Facility.** All Build Alternatives have been designed to be a limited access transportation facility with interchange spacing of at least 1.6 km (1.0 mi). Alternative 9 has 14 access points, Alternatives 4 and 5 have 17 access points, and Alternatives 6 and 7 have 21 access points.
5. **Accommodate STAA National Priority Network Trucks.** Based on the design for each alternative, all Build Alternatives will meet or exceed STAA truck requirements.
6. **Provide a Facility that is Compatible with a Future Multimodal Transportation System.** All Build Alternatives will accommodate future multimodal opportunities including but not limited to carpool lanes, commuter bikeways, express bus service, bus rapid transit, light rail, and high speed rail.
7. **Provide Effective and Efficient Connection Between and Through Corona, Perris, and San Jacinto.** All Build Alternatives have been designed to effectively and efficiently provide a connection between and through the cities of Corona, Perris, and San Jacinto.

8.2 REASONABLE AND PRACTICABLE

The evaluation of alternatives considered a reasonable range of options that could fulfill the project purpose and need. Reasonable alternatives are those that "are practical or feasible from the technical and economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant" (CEQ, 1981). The NEPA/404 Guidance Paper notes that an alternative is practicable if it: (1) meets the purpose and need; (2) is available and capable of being done (i.e., it can be accomplished within the financial resources that could reasonably be made available, and it is feasible from the standpoint of technology and logistics); and (3) will not create other unacceptable impacts such as severe operation or safety problems, or serious socioeconomic or environmental impacts.

Similarly, the evaluation of alternatives for purposes of the 404(b)(1) Guidelines must consider a reasonable range of practicable alternatives. Practicable is defined in regulation as "available and capable of being done after taking into consideration cost, existing technology, and logistics in light of the overall project purposes" (40 CFR 230). Accordingly, the criteria listed below address whether an alternative is "reasonable" (NEPA) and "practicable" (Section 404 of the CWA).

- **Cost.** This criterion addresses the total cost of each alternative including the costs of construction, ROW acquisition, environmental mitigation, and engineering/design. The 404 No Action Alternative is the most expensive alternative, with an estimated cost of $4.1 billion. The most costly Build Alternatives are Alternatives 6 and 7 at $4.51 and $4.21 billion, respectively, and the least expensive Build Alternative is Alternative 9 at $3.83 billion.
- **Technological Constraints.** All MCP Alternatives were deemed to have no technological constraints, including that of safety and/or engineering issues.
- **Logistical Constraints.** All MCP Alternatives were deemed to have no logistical constraints.

- **Other NEPA/404 Criteria.** No MCP Alternatives pose any unacceptable adverse social, economic, or environmental impacts or result in any serious community disruption that would be so severe as to render these alternatives unreasonable or impracticable.

8.3 ENVIRONMENTAL IMPACTS

This category addresses a variety of environmental criteria that are fundamental to the determination of the LEDPA. Foremost, the 404(b)(1) Guidelines require that the practicable alternative that results in the least adverse impact to aquatic resources be selected unless this alternative would result in other significant adverse environmental impacts (40 CFR 230.10[a]). In making this determination, deference is given to aquatic resources in that it is presumed that practicable alternatives exist that have less adverse impacts on special aquatic sites, and that all practicable alternatives that do not involve a discharge into a special aquatic site are presumed to have less adverse impact on the aquatic ecosystem, unless clearly demonstrated otherwise. Figures 10a through 10ba show the project alternatives and their impact on aquatic resources.

8.3.1 Water Resources/Aquatic Ecosystem

Jurisdictional Waters/Wetlands Impacts (including vernal pools). These criteria assess the acreage of federal jurisdictional waters of the U.S. and State jurisdictional waters directly impacted by each alternative. As for federal jurisdictional waters of the U.S. (wetland and nonwetland), Alternative 9 impacts a total of 7.9 ha (19.6 ac) of aquatic resources, while the next lowest Build Alternative (Alternative 5) impacts a total of 9.6 ha (23.6 ac) of aquatic resources. For State jurisdictional waters, Alternative 9 impacts 9.9 ha (24.5 ac) of CDFG riparian area, compared to the next lowest Build Alternative (Alternative 5) at 14.6 ha (36.2 ac). No vernal pools are impacted by any of the alternatives.

Habitat Integrity. Based on the Functional Assessment prepared by the ERDC, at 0.3 Alternative 9 has the lowest normalized rank score of the alternative corridor alignments for loss of habitat integrity in riparian ecosystems. A lower sum normalized rank score equates to lower comparative impact. The next lowest score is 0.6 for Alternative 5, , and the highest scores are 0.9, 0.9, and 1.0 for Alternatives 4, 7, and 6, respectively

Hydrologic Integrity. Based on the Functional Assessment prepared by the ERDC, at 0.09 Alternative 9 has the lowest normalized rank score of the alternative corridor alignments for loss of hydrologic integrity in riparian ecosystems. A lower sum normalized rank score equates to lower comparative impact. The next lowest scores are 0.63 and 0.67 for Alternatives 4 and 5, respectively, and the highest scores are 1.0 for Alternatives 6 and 7.

Consistent with Special Area Management Plan (SAMP) Goals. This criterion assesses each alternative's ability to meet aquatic resource conservation goals of the proposed SAMP for western Riverside County. However, as the SAMP is still in preparation, information is not available to compare each alternative with respect to conservation goals.

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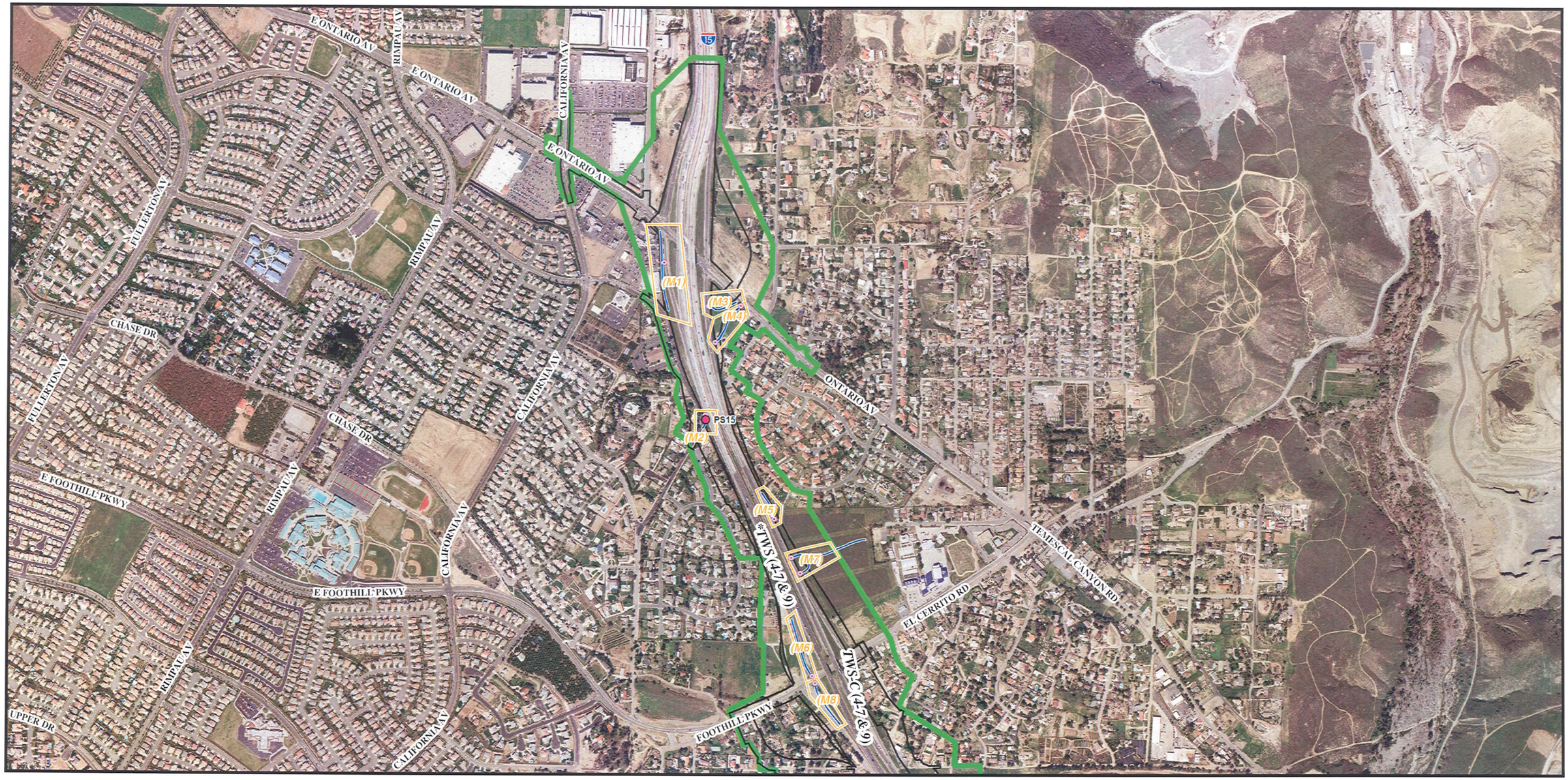

Legend

- Wetland Soil Data Pits
- Pipes/Culverts
- USACE (Federal) Wetlands
- USACE Non-wetland Waters
- Isolated Waters
- Drainage System with # (#5)
- Miscellaneous Drainages with # (M11)
- Right-of-Way FS(9) with Segment (Alternative)
- Survey Area
- * Denotes Design Variation segment

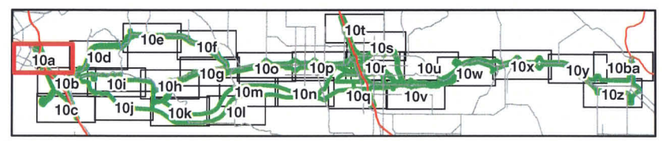

Figure 10a

SOURCE: Eagle Aerial (3/11/2004), Jacobs Engineering (2/2007), LSA (2007)

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0 150 300 600 Meters

Impacts to Waters of the U.S.

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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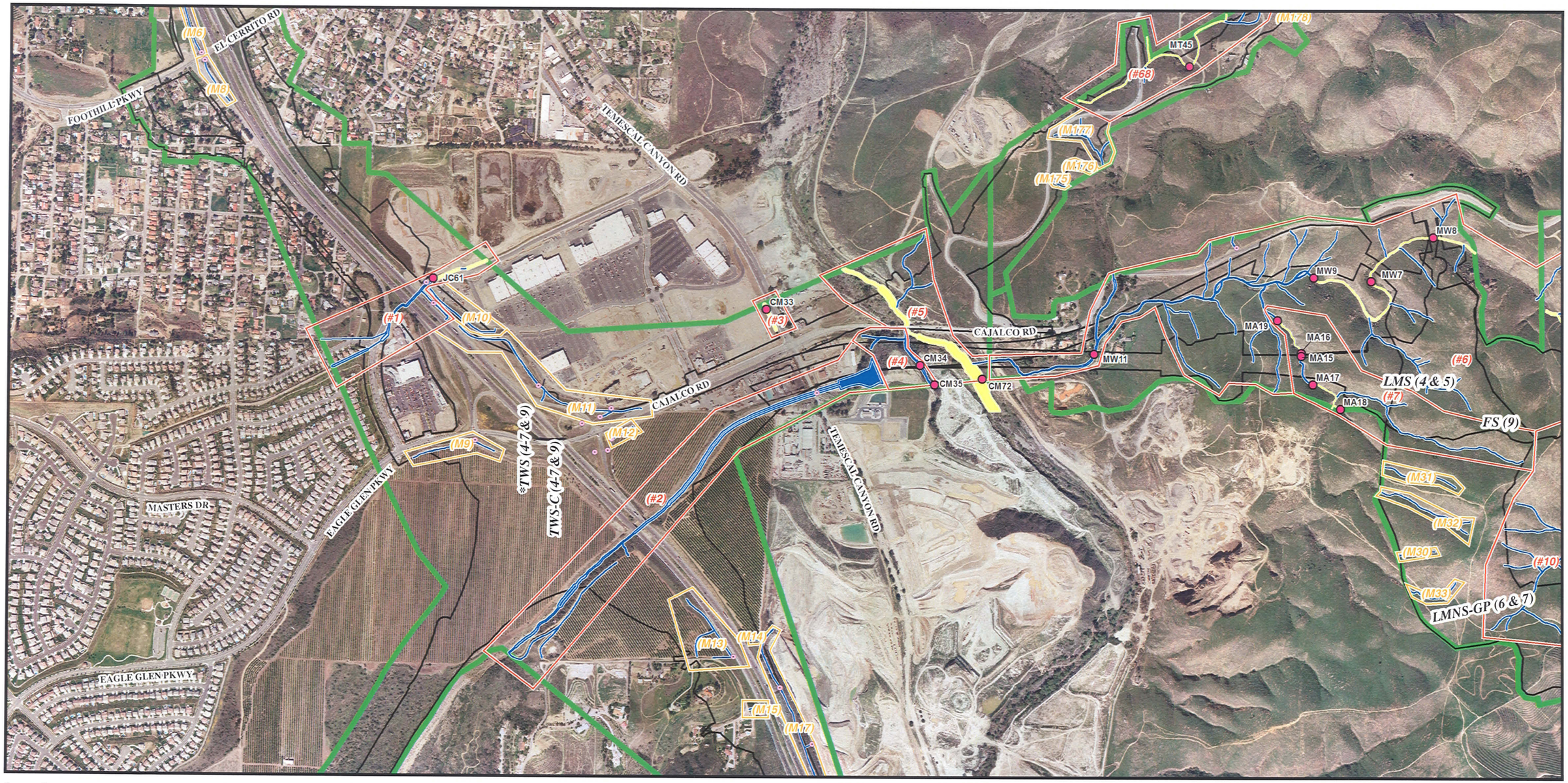

Legend

- Wetland Soil Data Pits
- Pipes/Culverts
- USACE (Federal) Wetlands
- USACE Non-wetland Waters
- Isolated Waters
- Drainage System with # (#5)
- Miscellaneous Drainages with # (M11)
- Right-of-Way FS(9) with Segment (Alternative)
- Survey Area

* Denotes Design Variation segment

Figure 10b

SOURCE: Eagle Aerial (3/11/2004), Jacobs Engineering (2/2007), LSA (2007)

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Impacts to Waters of the U.S.

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Legend

- Wetland Soil Data Pits
- Pipes/Culverts
- USACE (Federal) Wetlands
- USACE Non-wetland Waters
- Isolated Waters
- Drainage System with # (#5)
- Miscellaneous Drainages with # (M11)
- Right-of-Way FS(9) with Segment (Alternative)
- Survey Area

* Denotes Design Variation segment

Figure 10c

SOURCE: Eagle Aerial (3/11/2004), Jacobs Engineering (2/2007), LSA (2007)

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Impacts to Waters of the U.S.

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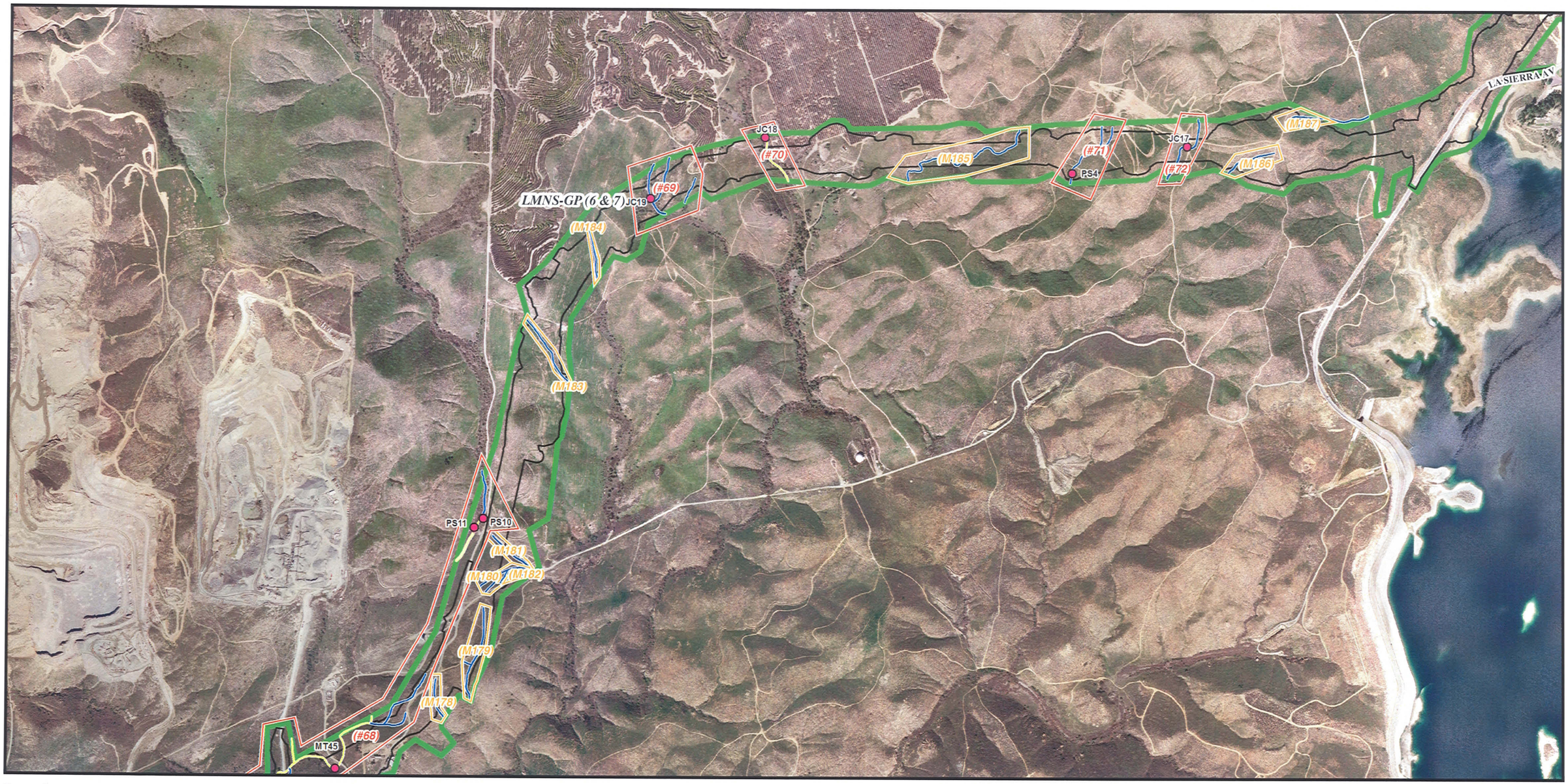

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- Wetland Soil Data Pits
- Pipes/Culverts
- USACE (Federal) Wetlands
- USACE Non-wetland Waters
- Isolated Waters
- Drainage System with # (#5)
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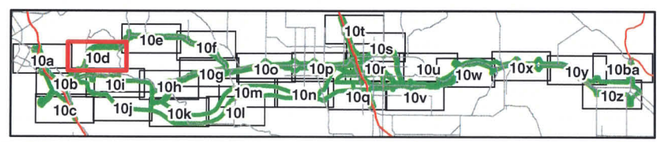

Figure 10d

SOURCE: Eagle Aerial (3/11/2004), Jacobs Engineering (2/2007), LSA (2007)

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Impacts to Waters of the U.S.

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SAN JACINTO—CORONA

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Legend

- Wetland Soil Data Pits
- Pipes/Culverts
- USACE (Federal) Wetlands
- USACE Non-wetland Waters
- Isolated Waters
- Drainage System with # (#5)
- Miscellaneous Drainages with # (M11)
- Right-of-Way FS(9) with Segment (Alternative)
- Survey Area

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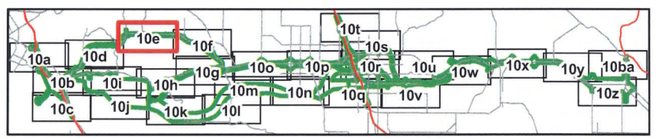

Figure 10e

SOURCE: Eagle Aerial (3/11/2004), Jacobs Engineering (2/2007), LSA (2007)

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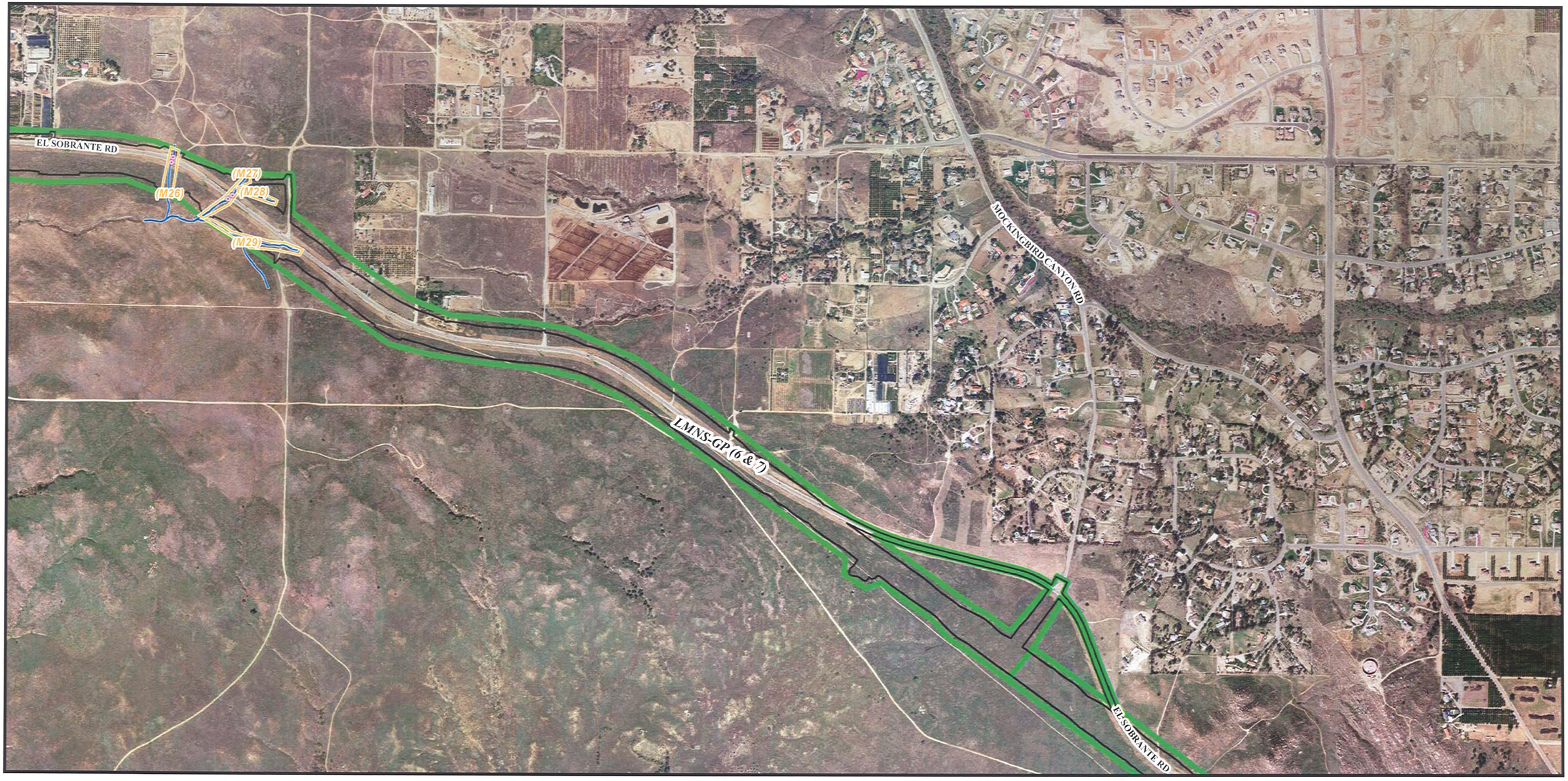

Legend

- Wetland Soil Data Pits
- Pipes/Culverts
- USACE (Federal) Wetlands
- USACE Non-wetland Waters
- Isolated Waters
- Drainage System with # (#5)
- Miscellaneous Drainages with # (M11)
- Right-of-Way FS(9) with Segment (Alternative)
- Survey Area

* Denotes Design Variation segment

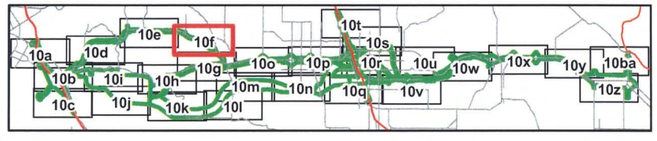

Figure 10f

SOURCE: Eagle Aerial (3/11/2004), Jacobs Engineering (2/2007), LSA (2007)

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Impacts to Waters of the U.S.

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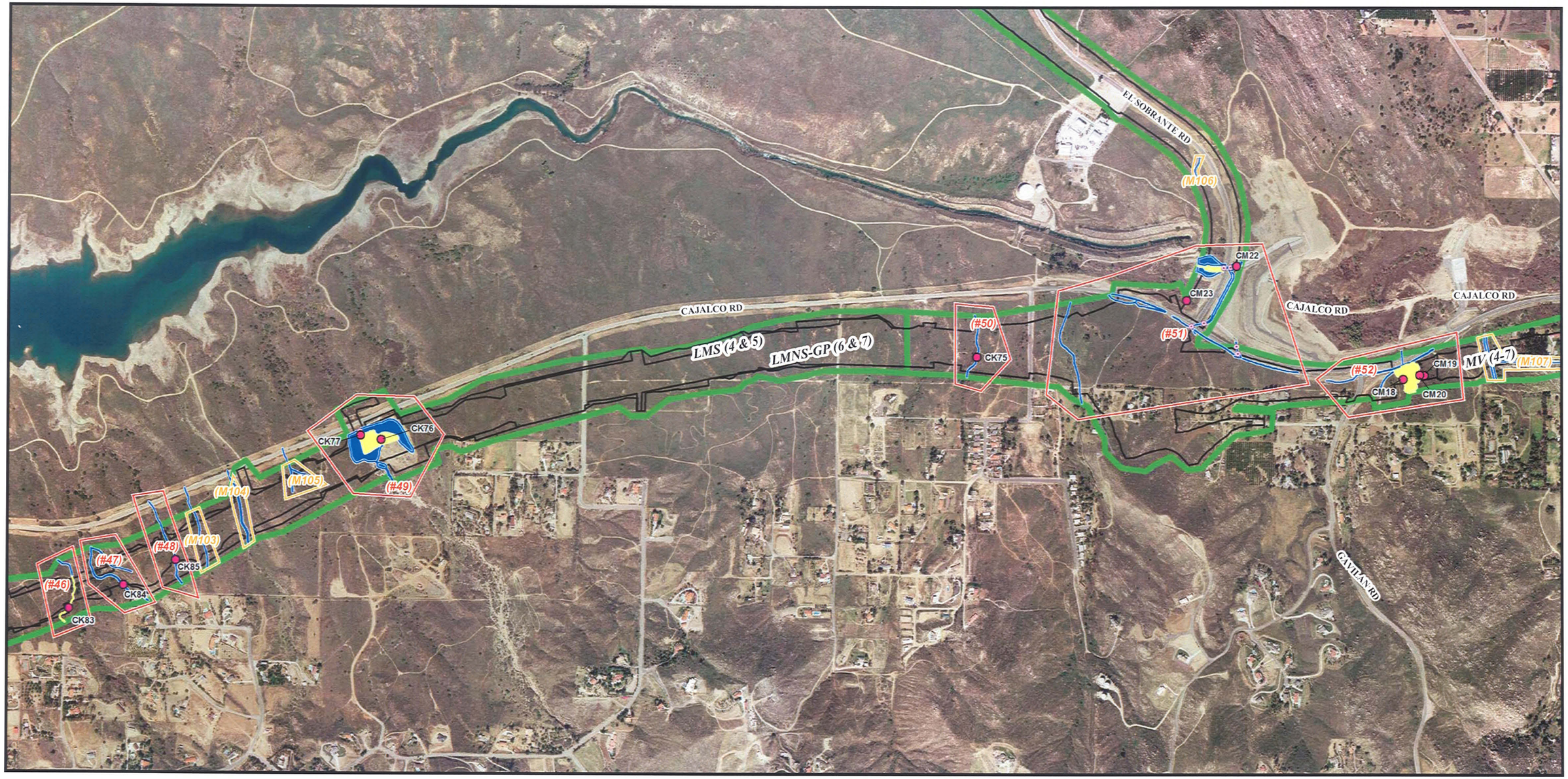

Legend

- Wetland Soil Data Pits
- Pipes/Culverts
- USACE (Federal) Wetlands
- USACE Non-wetland Waters
- Isolated Waters
- Drainage System with # (#5)
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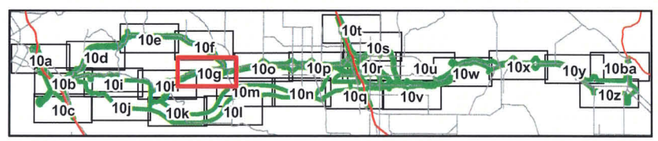

Figure 10g

SOURCE: Eagle Aerial (3/11/2004), Jacobs Engineering (2/2007), LSA (2007)

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Impacts to Waters of the U.S.

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CAJALCO RD
CAJALCO RD
CAJALCO RD
LAKE MATHEWS DR
LMNS-GP (6 & 7)
LMS (4 & 5)
CK62
CK63
CK64
CK65
CK78
CK79
CK80
CK81
CK82
CK83
CK84
CK85
CK76
CK77
IB8
MA1
(#21)
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Legend

- Wetland Soil Data Pits
- Pipes/Culverts
- USACE (Federal) Wetlands
- USACE Non-wetland Waters
- Isolated Waters
- Drainage System with # (#5)
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- Right-of-Way FS(9) with Segment (Alternative)
- Survey Area

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SOURCE: Eagle Aerial (3/11/2004), Jacobs Engineering (2/2007), LSA (2007)

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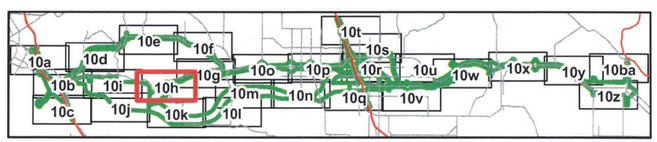

Figure 10h

Impacts to Waters of the U.S.

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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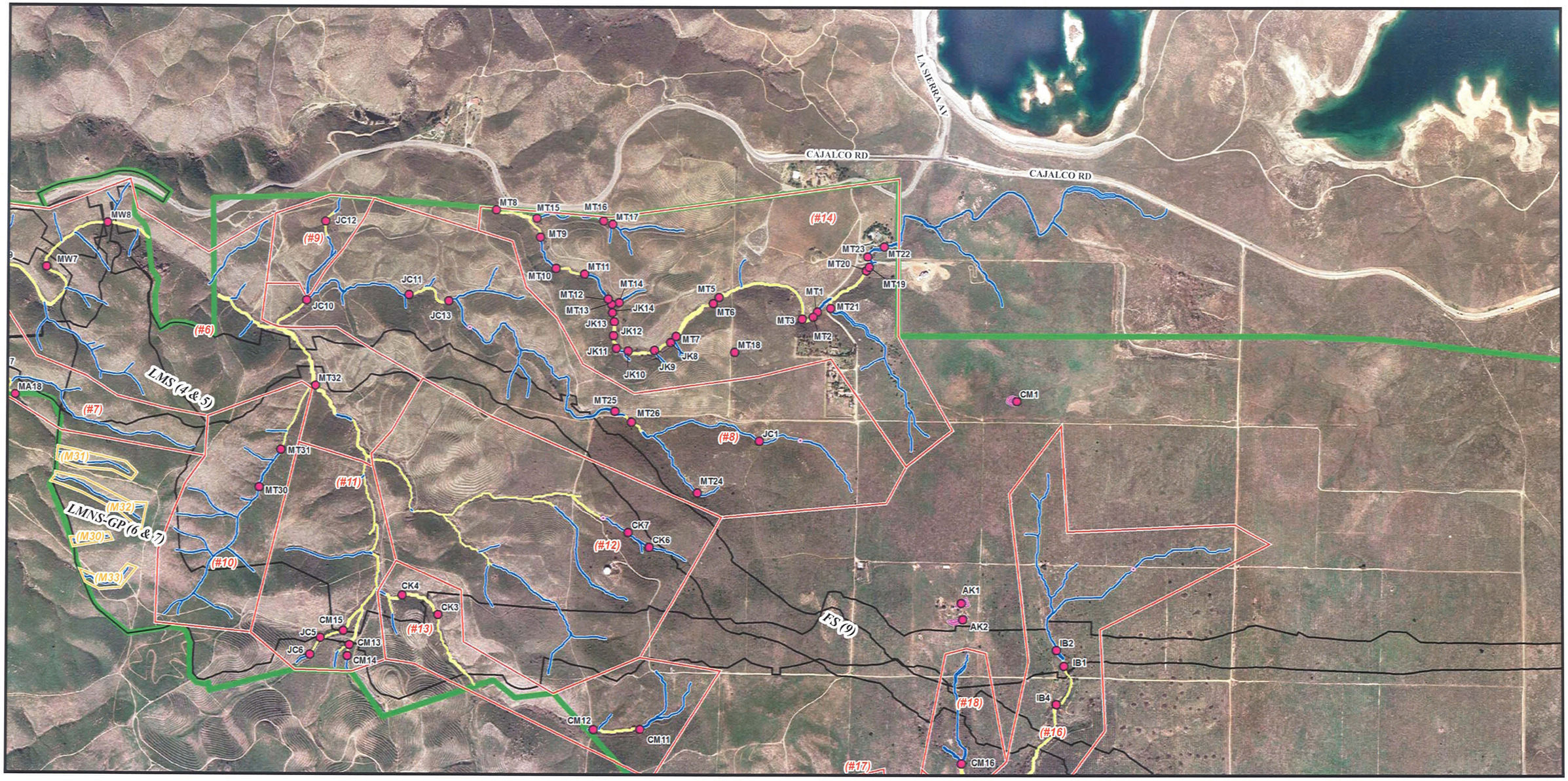

Legend

- Wetland Soil Data Pits
- Pipes/Culverts
- USACE (Federal) Wetlands
- USACE Non-wetland Waters
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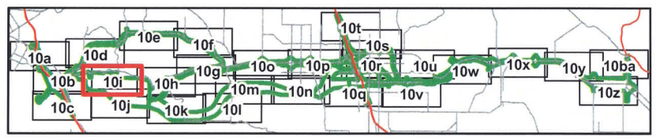

SOURCE: Eagle Aerial (3/11/2004), Jacobs Engineering (2/2007), LSA (2007)

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Figure 10i

Impacts to Waters of the U.S.

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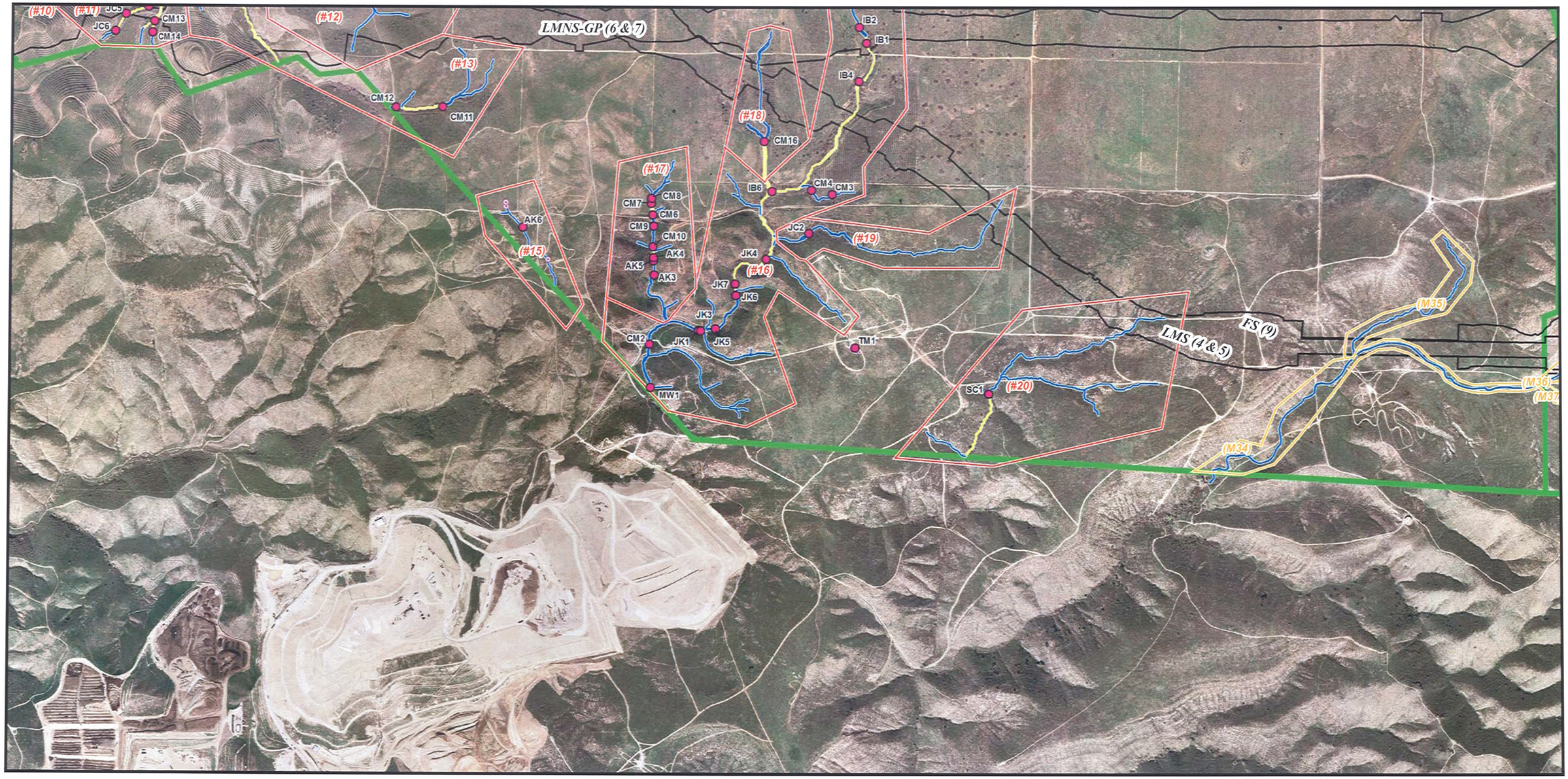

Legend

- Wetland Soil Data Pits
- Pipes/Culverts
- USACE (Federal) Wetlands
- USACE Non-wetland Waters
- Isolated Waters
- Drainage System with # (#5)
- Miscellaneous Drainages with # (M11)
- Right-of-Way FS(9) with Segment (Alternative)
- Survey Area

* Denotes Design Variation segment

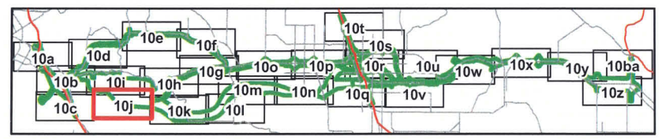

Figure 10j

SOURCE: Eagle Aerial (3/11/2004), Jacobs Engineering (2/2007), LSA (2007)

0 500 1,000 2,000 Feet

0 150 300 600 Meters

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Impacts to Waters of the U.S.

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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(M45)
LMS (4 & 5)
(M36)
(M40)
(M39)
(M38)
(M34)
(M42)
FS (9)
(M37)
PS61
PS60
PS59
PS58
PS57
(#21)
PS56
PS54
PS55
(M41)
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CM54
LAKE MATHEWS DR

Legend

- Wetland Soil Data Pits
- Pipes/Culverts
- USACE (Federal) Wetlands
- USACE Non-wetland Waters
- Isolated Waters
- Drainage System with # (#5)
- Miscellaneous Drainages with # (M11)
- Right-of-Way
- FS(9) with Segment (Alternative)
- Survey Area

* Denotes Design Variation segment

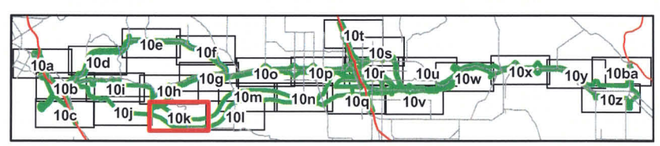

Figure 10k

SOURCE: Eagle Aerial (3/11/2004), Jacobs Engineering (2/2007), LSA (2007)

0 500 1,000 2,000 Feet

0 150 300 600 Meters

Impacts to Waters of the U.S.

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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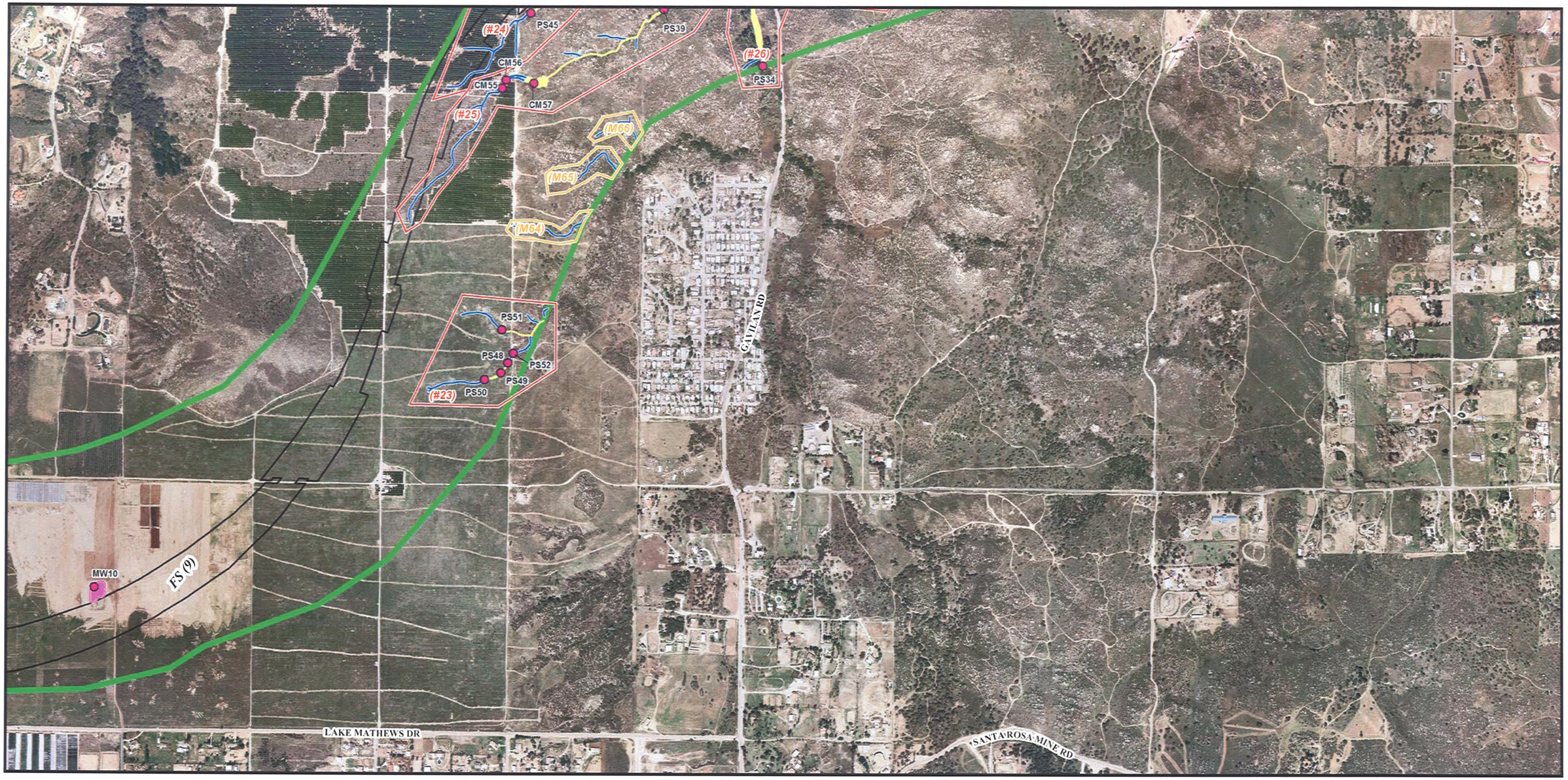
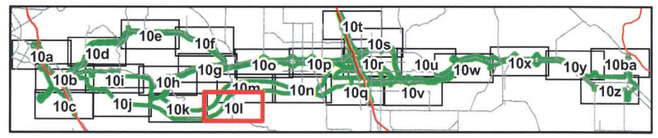


Legend

- Wetland Soil Data Pits
- Pipes/Culverts
- USACE (Federal) Wetlands
- USACE Non-wetland Waters
- Isolated Waters
- Drainage System with # (#5)
- Miscellaneous Drainages with # (M11)
- Right-of-Way FS(9) with Segment (Alternative)
- Survey Area
- * Denotes Design Variation segment



SOURCE: Eagle Aerial (3/11/2004), Jacobs Engineering (2/2007), LSA (2007)

0 500 1,000 2,000 Feet

0 150 300 600 Meters

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Figure 10l

Impacts to Waters of the U.S.

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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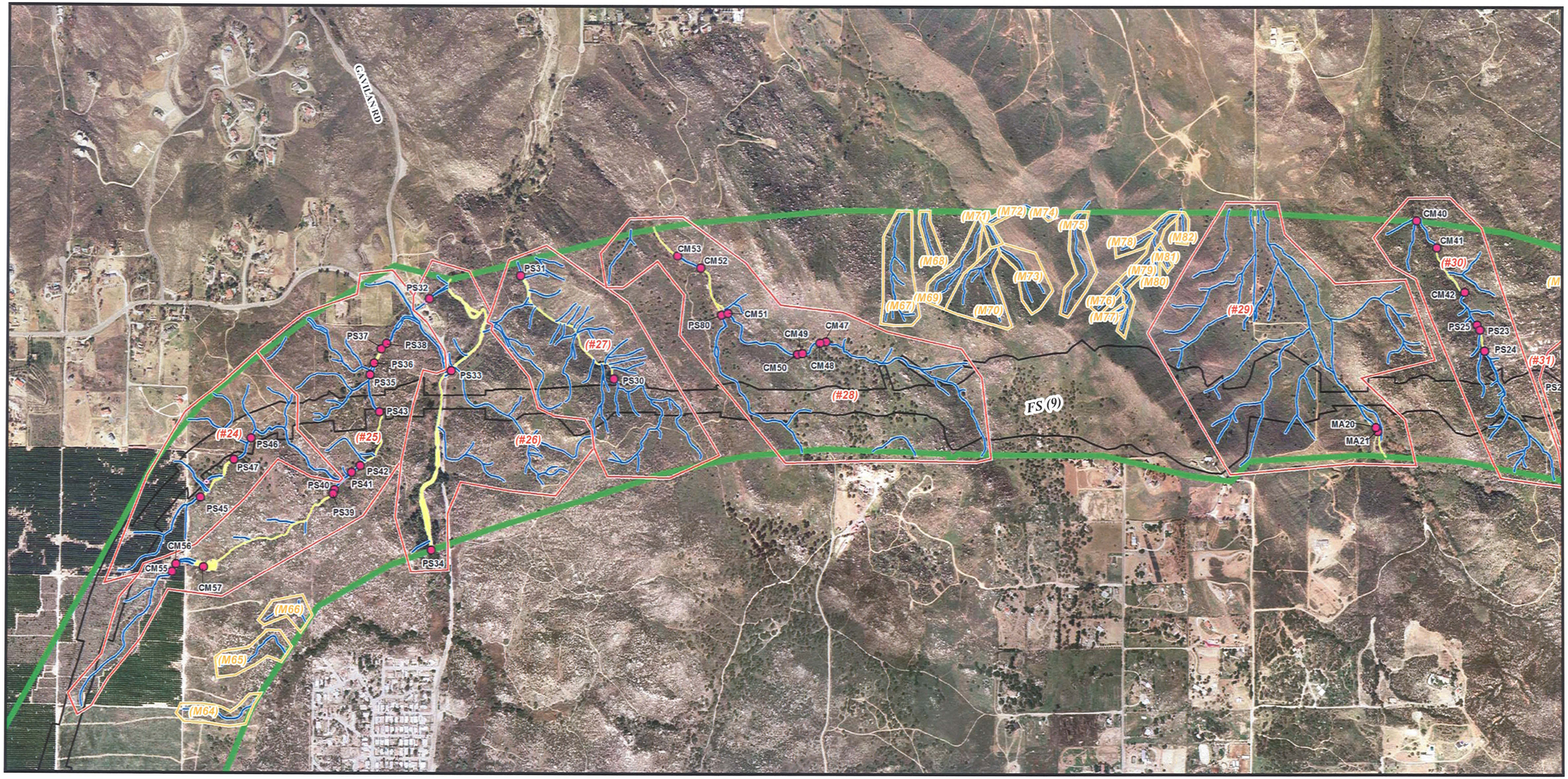

Legend

- Wetland Soil Data Pits
- Pipes/Culverts
- USACE (Federal) Wetlands
- USACE Non-wetland Waters
- Isolated Waters
- Drainage System with # (#5)
- Miscellaneous Drainages with # (M11)
- Right-of-Way FS(9) with Segment (Alternative)
- Survey Area

* Denotes Design Variation segment

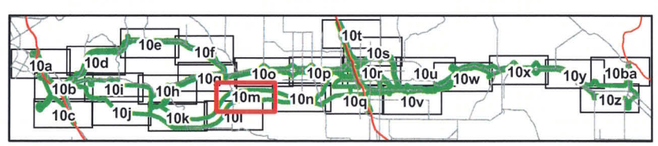

Figure 10m

SOURCE: Eagle Aerial (3/11/2004), Jacobs Engineering (2/2007), LSA (2007)

0 500 1,000 2,000 Feet

0 150 300 600 Meters

Impacts to Waters of the U.S.

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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Legend

- Wetland Soil Data Pits
- Pipes/Culverts
- USACE (Federal) Wetlands
- USACE Non-wetland Waters
- Isolated Waters
- Drainage System with # (#5)
- Miscellaneous Drainages with # (M11)
- Right-of-Way FS(9) with Segment (Alternative)
- Survey Area
- * Denotes Design Variation segment

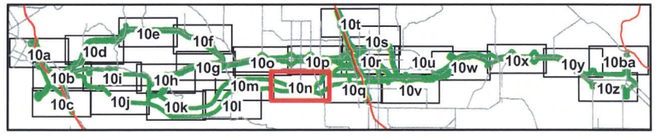

Figure 10n

SOURCE: Eagle Aerial (3/11/2004), Jacobs Engineering (2/2007), LSA (2007)

0 500 1,000 2,000 Feet

0 150 300 600 Meters

Impacts to Waters of the U.S.

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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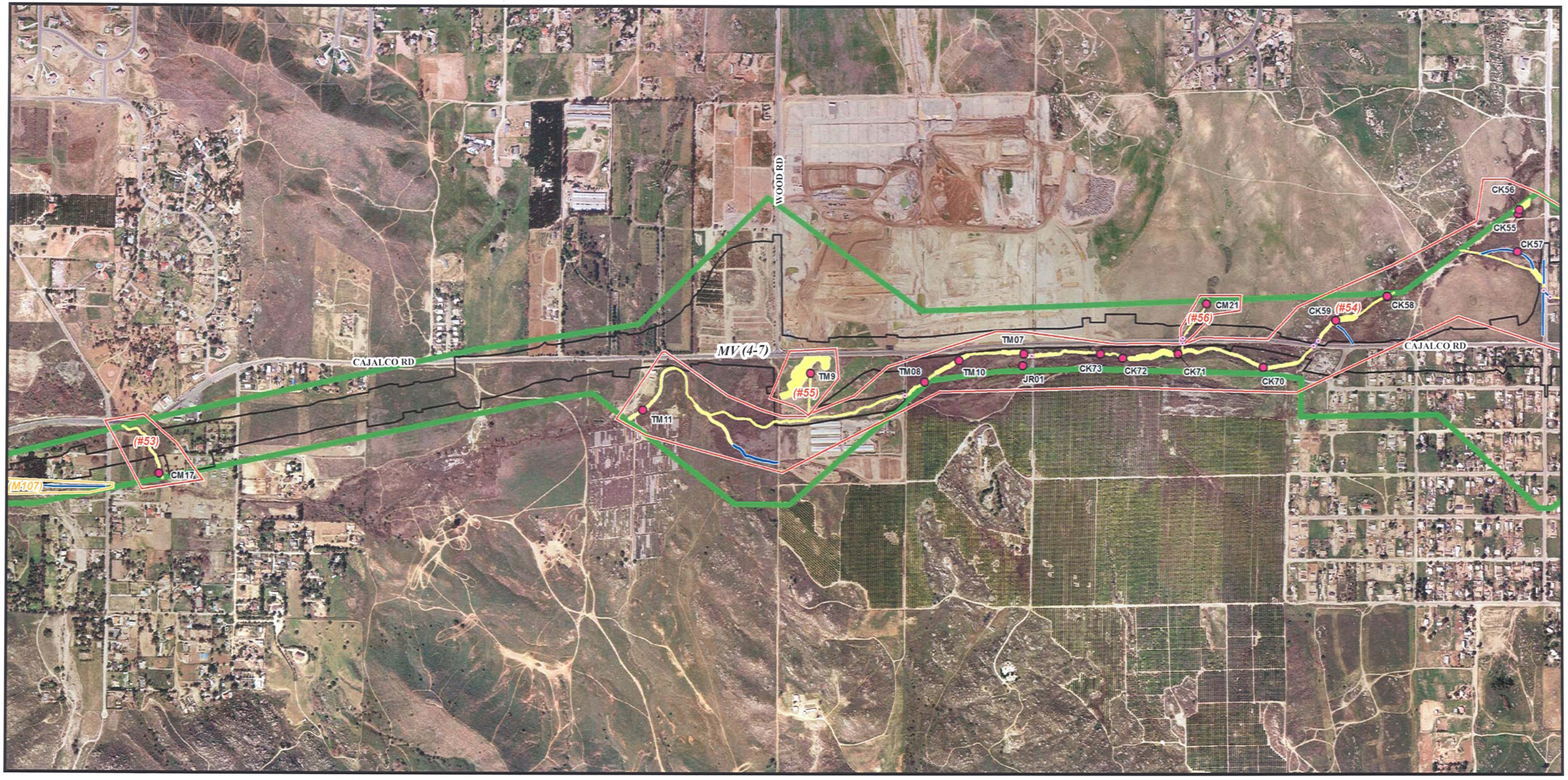

Legend

- Wetland Soil Data Pits
- Pipes/Culverts
- USACE (Federal) Wetlands
- USACE Non-wetland Waters
- Isolated Waters
- Drainage System with # (#5)
- Miscellaneous Drainages with # (M11)
- Right-of-Way FS(9) with Segment (Alternative)
- Survey Area

* Denotes Design Variation segment

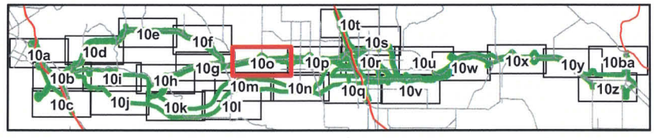

Figure 10o

SOURCE: Eagle Aerial (3/11/2004), Jacobs Engineering (2/2007), LSA (2007)

0 500 1,000 2,000 Feet

0 150 300 600 Meters

Impacts to Waters of the U.S.

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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CK56
CK55
CK57
(#54)
CK60
CK61
LD1
CK53
CK54
CK52
MW5
MW4
MW2
MW3
MV (4-7)
CAJALCO RD
CK51
CLARK ST
CK50
OLD ELSINORE RD
CAJALCO RD
(M108)
CAJALCO EXWY
PD (4 & 6)
CI (5 & 7)
SEATON AV
HARVILL AV
MA2
PS9
PS8
MA3
(M96)
*C2 (9)
CJ1
(#38)
(#37)

Legend

- Wetland Soil Data Pits
- Pipes/Culverts
- USACE (Federal) Wetlands
- USACE Non-wetland Waters
- Isolated Waters
- Drainage System with # (#5)
- Miscellaneous Drainages with # (M11)
- Right-of-Way FS(9) with Segment (Alternative)
- Survey Area
- * Denotes Design Variation segment

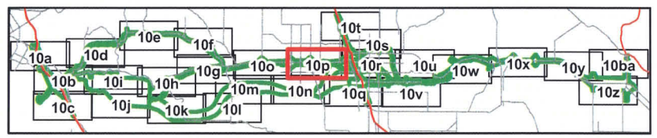

Figure 10p

SOURCE: Eagle Aerial (3/11/2004), Jacobs Engineering (2/2007), LSA (2007)

0 500 1,000 2,000 Feet

0 150 300 600 Meters

Impacts to Waters of the U.S.

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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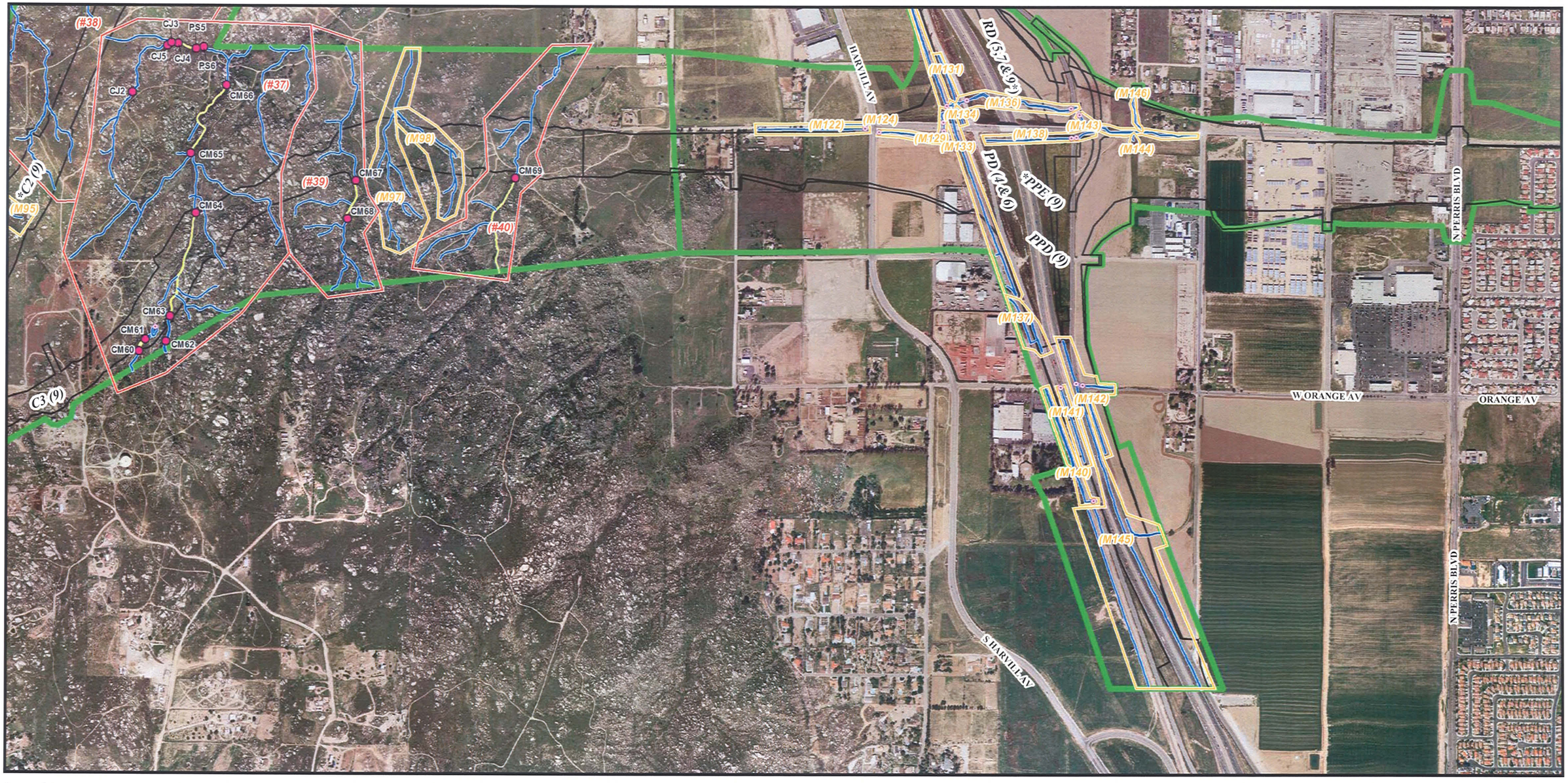

Legend

- Wetland Soil Data Pits
- Pipes/Culverts
- USACE (Federal) Wetlands
- USACE Non-wetland Waters
- Isolated Waters
- Drainage System with # (#5)
- Miscellaneous Drainages with # (M11)
- Right-of-Way FS(9) with Segment (Alternative)
- Survey Area
- * Denotes Design Variation segment

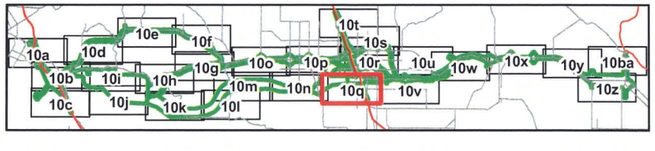

Figure 10q

SOURCE: Eagle Aerial (3/11/2004), Jacobs Engineering (2/2007), LSA (2007)

0 500 1,000 2,000 Feet

0 150 300 600 Meters

Impacts to Waters of the U.S.

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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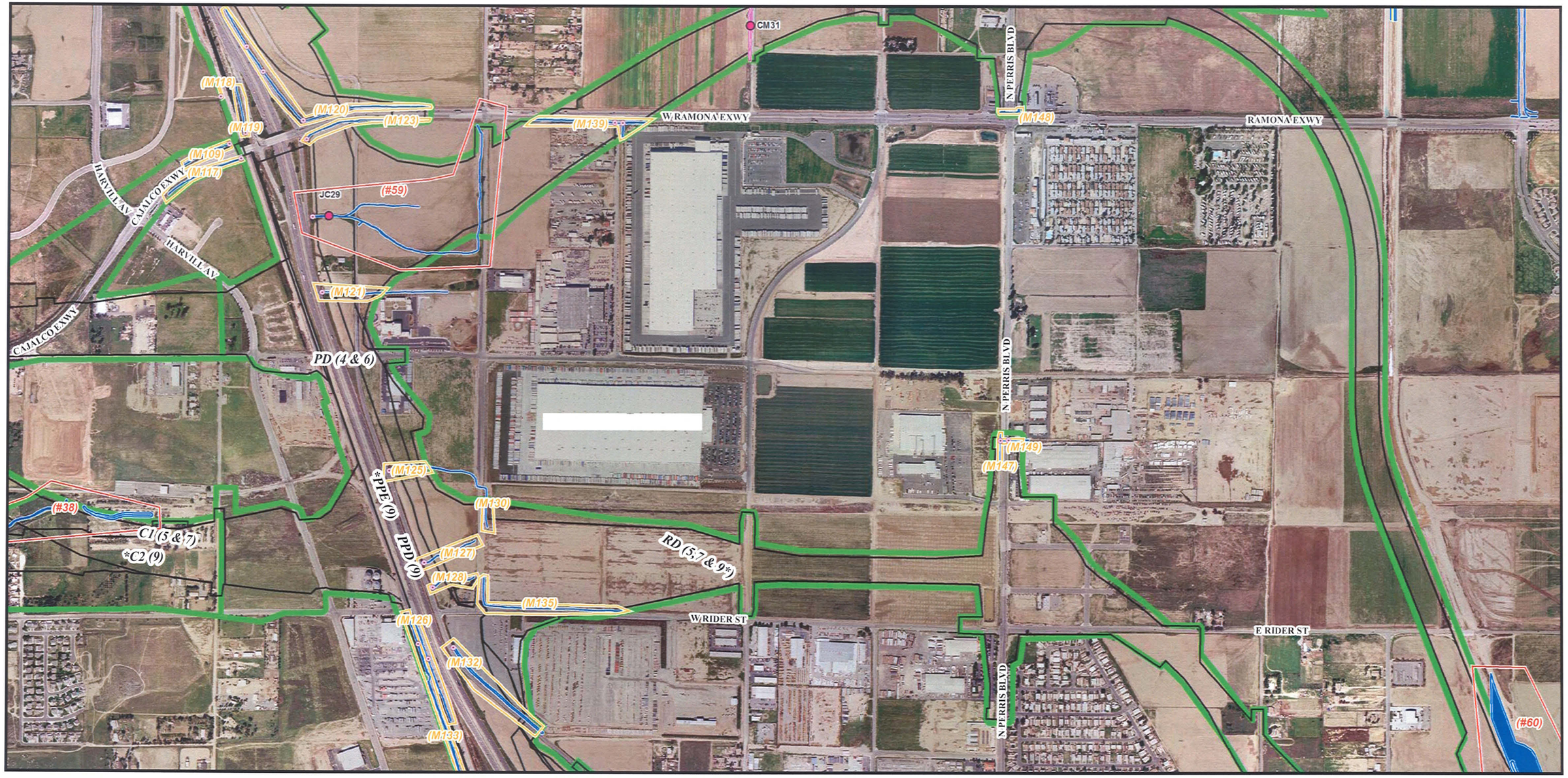
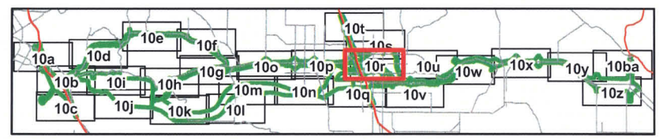


Legend

- Wetland Soil Data Pits
- Pipes/Culverts
- USACE (Federal) Wetlands
- USACE Non-wetland Waters
- Isolated Waters
- Drainage System with # (#5)
- Miscellaneous Drainages with # (M11)
- Right-of-Way FS(9) with Segment (Alternative)
- Survey Area
- * Denotes Design Variation segment



SOURCE: Eagle Aerial (3/11/2004), Jacobs Engineering (2/2007), LSA (2007)

0 500 1,000 2,000 Feet

0 150 300 600 Meters

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Figure 10r

Impacts to Waters of the U.S.

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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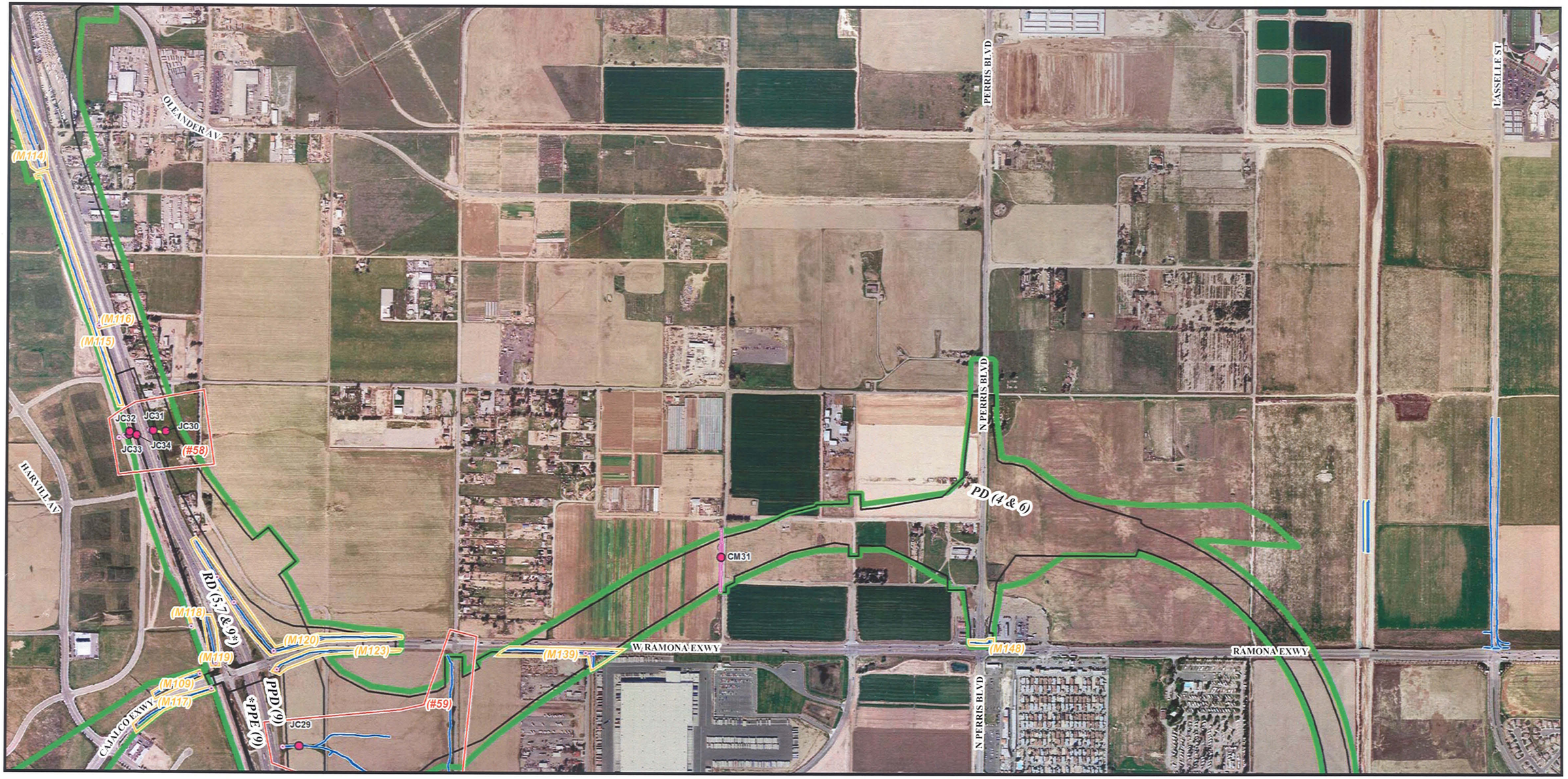

Legend

- Wetland Soil Data Pits
- Pipes/Culverts
- USACE (Federal) Wetlands
- USACE Non-wetland Waters
- Isolated Waters
- Drainage System with # (#5)
- Miscellaneous Drainages with # (M11)
- Right-of-Way FS(9) with Segment (Alternative)
- Survey Area

* Denotes Design Variation segment

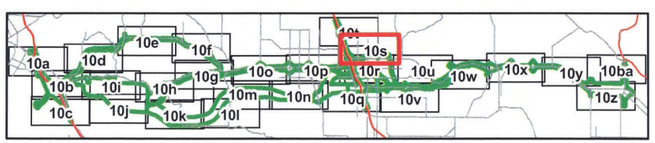

Figure 10s

SOURCE: Eagle Aerial (3/11/2004), Jacobs Engineering (2/2007), LSA (2007)

0 500 1,000 2,000 Feet

0 150 300 600 Meters

Impacts to Waters of the U.S.

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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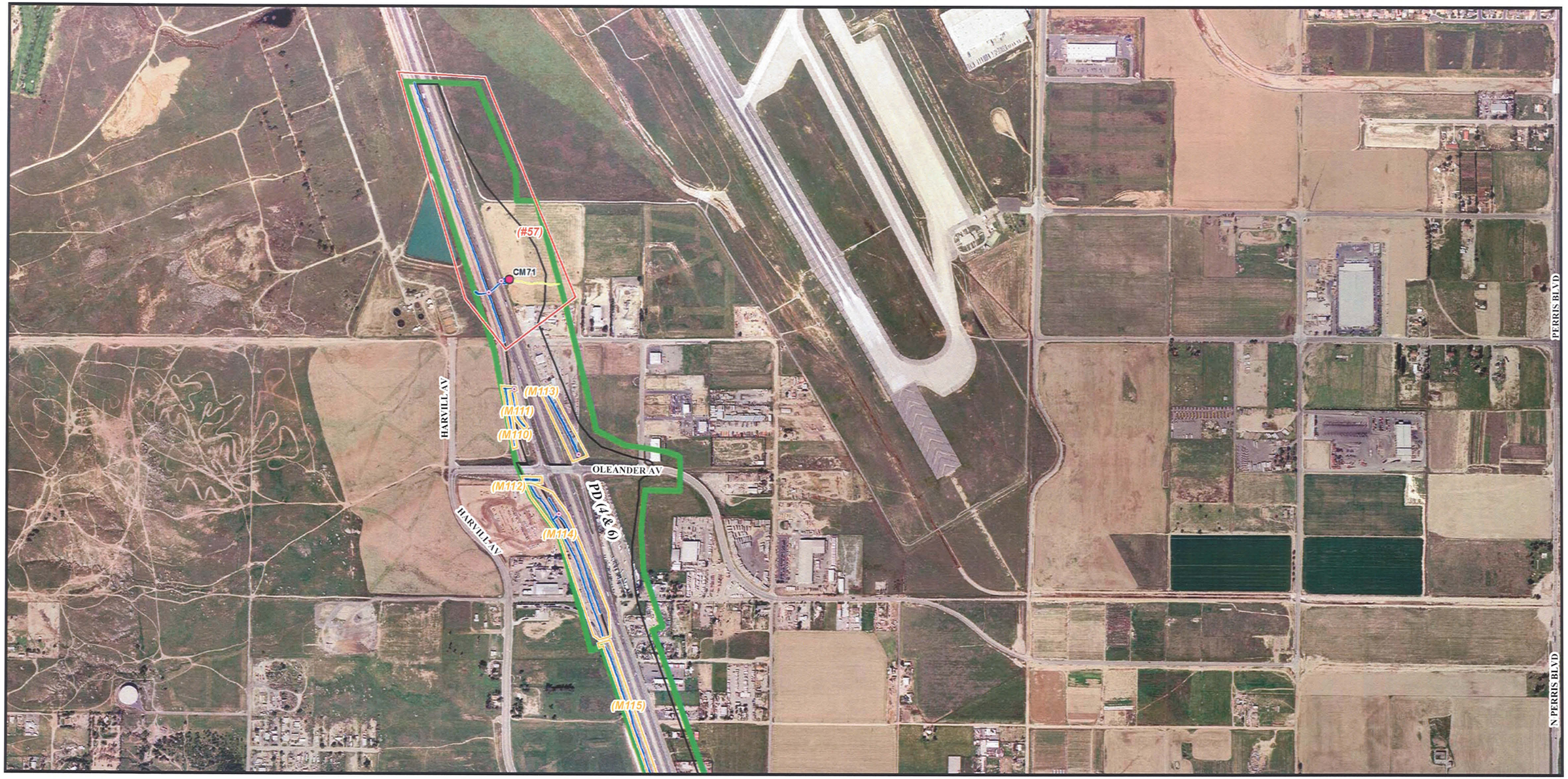

Legend

- Wetland Soil Data Pits
- Pipes/Culverts
- USACE (Federal) Wetlands
- USACE Non-wetland Waters
- Isolated Waters
- Drainage System with # (#5)
- Miscellaneous Drainages with # (M11)
- Right-of-Way
- FS(9) with Segment (Alternative)
- Survey Area

* Denotes Design Variation segment

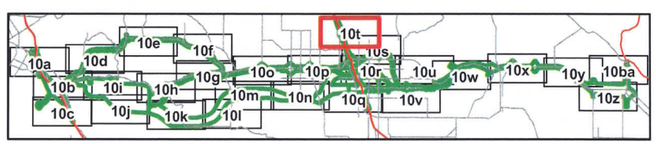

Figure 10t

SOURCE: Eagle Aerial (3/11/2004), Jacobs Engineering (2/2007), LSA (2007)

0 500 1,000 2,000 Feet

0 150 300 600 Meters

Impacts to Waters of the U.S.

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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RAMONA EXWY
LAKE PERRIS DR
RAMONA EXWY
E RIDER ST
RIDER ST
RAMONA EXWY
PD (4 & 6)
(#60)
PPD (9)
*PPE (9)
(M165)
(M164)
(M163)
(M162)
(M161)
(M160)
SJ (4-7 & 9)

Legend

- Wetland Soil Data Pits
- Pipes/Culverts
- USACE (Federal) Wetlands
- USACE Non-wetland Waters
- Isolated Waters
- Drainage System with # (#5)
- Miscellaneous Drainages with # (M11)
- Right-of-Way FS(9) with Segment (Alternative)
- Survey Area

* Denotes Design Variation segment

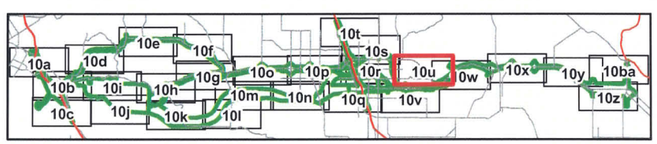

Figure 10u

SOURCE: Eagle Aerial (3/11/2004), Jacobs Engineering (2/2007), LSA (2007)

0 500 1,000 2,000 Feet

0 150 300 600 Meters

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Impacts to Waters of the U.S.

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

MID COUNTY PARKWAY
CETAP
SAN JACINTO—CORONA

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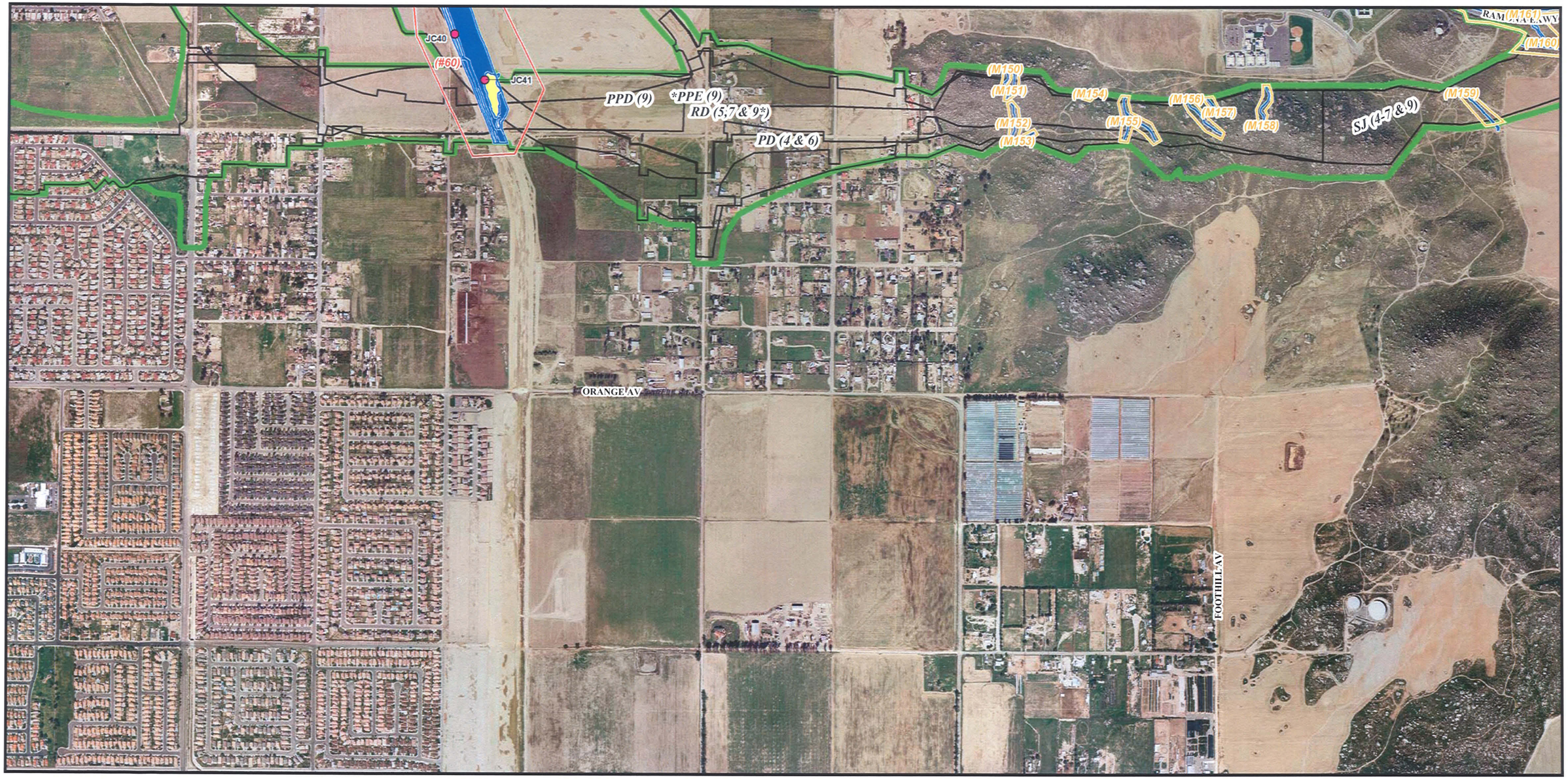

Legend

- Wetland Soil Data Pits
- Pipes/Culverts
- USACE (Federal) Wetlands
- USACE Non-wetland Waters
- Isolated Waters
- Drainage System with # (#5)
- Miscellaneous Drainages with # (M11)
- Right-of-Way FS(9) with Segment (Alternative)
- Survey Area

* Denotes Design Variation segment

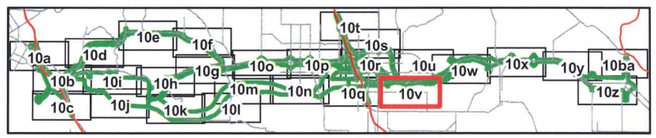

Figure 10v

SOURCE: Eagle Aerial (3/11/2004), Jacobs Engineering (2/2007), LSA (2007)

0 500 1,000 2,000 Feet

0 150 300 600 Meters

Impacts to Waters of the U.S.

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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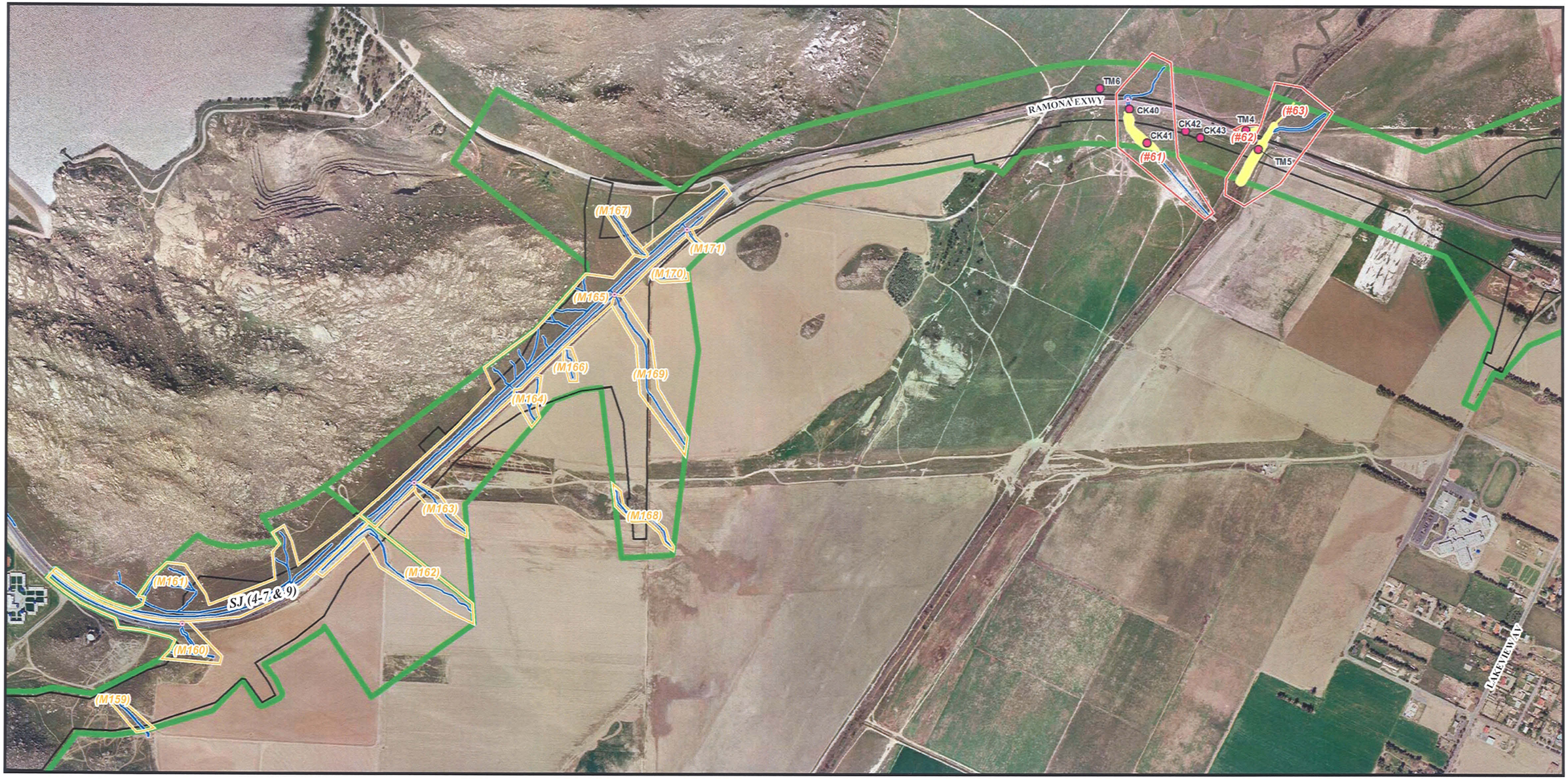

Legend

- Wetland Soil Data Pits
- Pipes/Culverts
- USACE (Federal) Wetlands
- USACE Non-wetland Waters
- Isolated Waters
- Drainage System with # (#5)
- Miscellaneous Drainages with # (M11)
- Right-of-Way
- FS(9) with Segment (Alternative)
- Survey Area

* Denotes Design Variation segment

Figure 10w

SOURCE: Eagle Aerial (3/11/2004), Jacobs Engineering (2/2007), LSA (2007)

0 500 1,000 2,000 Feet

0 150 300 600 Meters

Impacts to Waters of the U.S.

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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TM3
TM2
SJ (4-7 & 9)
RAMONA EXWY
RAMONA EXWY
RAMONA EXWY
HANSEN AV
LAKEVIEW AV

Legend

- Wetland Soil Data Pits
- Pipes/Culverts
- USACE (Federal) Wetlands
- USACE Non-wetland Waters
- Isolated Waters
- Drainage System with # (#5)
- Miscellaneous Drainages with # (M11)
- Right-of-Way FS(9) with Segment (Alternative)
- Survey Area

* Denotes Design Variation segment

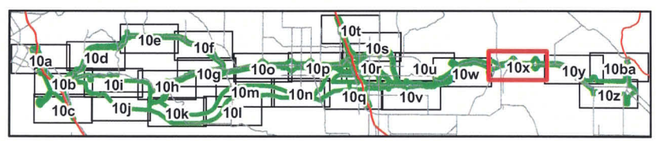

Figure 10x

SOURCE: Eagle Aerial (3/11/2004), Jacobs Engineering (2/2007), LSA (2007)

0 500 1,000 2,000 Feet

0 150 300 600 Meters

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Impacts to Waters of the U.S.

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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BRIDGE ST

RAMONA EXWY

RAMONA EXWY

(M172)

CK35

SJ (4-7 & 9)

CK34

CK33

(M174)

(M173)

SJS (4-7 & 9)

*SJN (4-7 & 9)

(#65)

Legend

- Wetland Soil Data Pits
- Pipes/Culverts
- USACE (Federal) Wetlands
- USACE Non-wetland Waters
- Isolated Waters
- Drainage System with # (#5)
- Miscellaneous Drainages with # (M11)
- Right-of-Way FS(9) with Segment (Alternative)
- Survey Area

* Denotes Design Variation segment

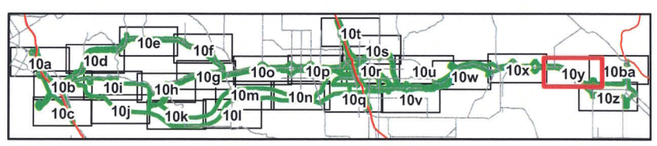

Figure 10y

SOURCE: Eagle Aerial (3/11/2004), Jacobs Engineering (2/2007), LSA (2007)

0 500 1,000 2,000 Feet

0 150 300 600 Meters

Impacts to Waters of the U.S.

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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Legend

- Wetland Soil Data Pits
- Pipes/Culverts
- USACE (Federal) Wetlands
- USACE Non-wetland Waters
- Isolated Waters
- Drainage System with # (#5)
- Miscellaneous Drainages with # (M11)
- Right-of-Way FS(9) with Segment (Alternative)
- Survey Area

* Denotes Design Variation segment

SOURCE: Eagle Aerial (3/11/2004), Jacobs Engineering (2/2007), LSA (2007)

0 500 1,000 2,000 Feet

0 150 300 600 Meters

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Figure 10z

Impacts to Waters of the U.S.

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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Legend

- Wetland Soil Data Pits
- Pipes/Culverts
- USACE (Federal) Wetlands
- USACE Non-wetland Waters
- Isolated Waters
- Drainage System with # (#5)
- Miscellaneous Drainages with # (M11)
- Right-of-Way FS(9) with Segment (Alternative)
- Survey Area
- * Denotes Design Variation segment

Figure 10ba

SOURCE: Eagle Aerial (3/11/2004), Jacobs Engineering (2/2007), LSA (2007)

0 500 1,000 2,000 Feet

0 150 300 600 Meters

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Impacts to Waters of the U.S.

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

MID COUNTY PARKWAY
CETAP
SAN JACINTO—CORONA

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Floodplain Impacts. There are four existing 100-year floodplains in the MCP study area: Temescal Wash (Zone A1), Cajalco Creek (Zone A), Perris Valley Storm Drain (Zone A1), and San Jacinto River (Zone X). The Temescal Wash and San Jacinto River will be affected by all five Build Alternatives. Alternative 9 will have the same number and type of encroachments as all of the Build Alternatives at the San Jacinto River and Temescal Wash but will not affect Cajalco Creek.

Beneficial Uses Affected. There are a number of beneficial uses present in the MCP study area. Municipal and domestic water supply, agricultural water supply, industrial service supplies, groundwater recharge, water contact recreation, noncontact water recreation, warm freshwater habitat, and wildlife habitat are the primary beneficial uses present in the MCP study area. With proper implementation of the best management practices (BMPs) proposed, no adverse effects to beneficial uses will result from construction or operation of any of the Build Alternatives.

Water Quality Impacts. Impacts resulting from soil disturbance from construction activities are anticipated to be the least under Alternative 4. In addition, Alternative 5 will be constructed through areas containing the fewest number of steep slopes and therefore would have the lowest potential to result in soil erosion.

Alternative 9 will be constructed over the fewest number of streams and therefore would have the lowest potential for pollutants to enter the waters from bridge construction. Alternative 9 also introduces the least amount of new pavement and therefore will result in the lowest increase in the volume of storm water runoff.

Based on the Functional Assessment prepared by the ERDC, at 0.02 Alternative 9 has the lowest normalized rank score of the alternative corridor alignments for loss of water quality integrity in riparian ecosystems. A lower sum normalized rank score equates to lower comparative impact. The next lowest scores are 0.59 and 0.96 for Alternatives 4 and 5, respectively, and the highest scores are 1.0 for Alternatives 6 and 7.

With the proposed treatment BMPs implemented, all the alternatives are anticipated to decrease the annual loading of total suspended solids, total lead, and total zinc to surface waters. Alternatives 4, 5, and 9 are anticipated to result in the smallest increase in annual total phosphorus loading when compared to Alternatives 6 and 7. Alternatives 4 and 5 and their design variations are anticipated to result in the smallest increase in annual nitrate loading, while Alternatives 6 and 7 are anticipated to result in the largest increase in annual nitrate loading. Alternative 9 and Alternative 9 design variations are anticipated to result in the smallest increase in annual total copper, lead, and zinc loadings because they add the smallest area of new impervious surfaces.

8.3.2 Threatened and Endangered Species

This criterion assesses the acreage of impacts to habitat of federally listed threatened and endangered wildlife and plant species. Impacts to habitat for species covered under the western Riverside County MSHCP are listed by acres of mapped critical habitat area impacted. The acreage shown for impacts to critical habitat is based on the following: coastal California gnatcatcher final critical habitat (December 2007), Quino checkerspot butterfly final critical habitat (April 2002) and proposed critical

habitat (June 2007), and San Bernardino kangaroo rat final critical habitat (April 2002) and proposed critical habitat (January 2008). The areas impacted have not been reviewed to determine how much of the affected area contains constituent elements for the particular species. The matrix also lists impacts to occupied habitat for least Bell's vireo, San Bernardino kangaroo rat, and Los Angeles pocket mouse based on the focused surveys conducted for these species.

None of the Build Alternatives impact any acres of proposed San Bernardino kangaroo rat critical habitat or proposed Quino checkerspot butterfly critical habitat. All of the Build Alternatives impact the same total acres of final San Bernardino kangaroo rat critical habitat and occupied habitat suitable for long-term conservation for the San Bernardino kangaroo rat and Los Angeles pocket mouse. Alternative 9 impacts the least total acres of occupied habitat suitable for long-term conservation for the least Bell's vireo habitat. Alternatives 4 and 5 impact the least total acres of final coastal California gnatcatcher critical habitat. Alternatives 4 and 5 impact the least acres of Quino checkerspot butterfly critical habitat.

In addition to the wildlife, the Build Alternatives would impact areas of long-term conservation value for two plant species, as follows:

- Spreading navarretia (0.31 ha [0.77 ac] under all Build Alternatives)
- Munz's onion (3.07 ha [7.58 ac] under Alternatives 4, 5, and 9 and 0.01 ha [0.02 ac] under Alternatives 6 and 7)

8.3.3 Plant Communities

This criterion assesses each alternative's impacts on sensitive plant communities within the study area, including Diegan coastal sage scrub, Riversidean upland sage scrub, and peninsular juniper woodland/scrub. The impacts are roughly the same for all Build Alternative acres (ranging from 158.5–185.3 ha [391.7–457.8 ac]), with Alternative 5 being the lowest.

8.3.4 Effects on Existing Habitat Conservation Plans (HCPs)

This criterion assesses the acreage of impact that each alternative will have on existing HCPs in the study area, including the Metropolitan HCP, the SKR HCP, and the El Sobrante Landfill HCP. Alternative 9 impacts 77.6 total hectares (191.7 total acres) of existing HCP lands, which is less than half of the area impacted under the next lowest alternative (Alternatives 4 and 5 impact 177.1 total hectares [437.5 total acres] of existing HCP lands). In addition, Alternative 9 is the only alternative that completely avoids the Metropolitan HCP reserve lands.

8.3.5 Western Riverside County MSHCP

This criterion assesses each alternative's acreage of impact to MSHCP Criteria Area. These lands are part of the over 121,405 ha (300,000 ac) in western Riverside County that are in criteria "cells" out of which 61,917 ha (153,000 ac) will be acquired for conservation within the MSHCP Reserve. The lands traversed by the MCP Alternatives have not been acquired for the future MSHCP. Under this criterion, Alternative 4 is the least impacting (154.4 ha [381.4 ac]) alternative. All Build Alternatives

would require an MSHCP consistency determination if selected, and Alternatives 4, 5, and 9 would require concurrence from the wildlife agencies since they follow a CETAP alignment that is south of Lake Mathews.

8.3.6 Section 4(f) Properties

This criterion identifies the Section 4(f) properties affected by direct use impacts under each alternative (none of the alternatives were determined to have constructive use impacts). All Build Alternatives impact the Lake Mathews/Estelle Mountain Reserve, with Alternative 9 being the least impacting (68.3 ha [168.7 ac]). Alternative 9 impacts Paragon Park, a community park within the City of Perris. Design features associated with Alternative 9 include providing replacement park acreage in excess of what exists today within the community that utilizes Paragon Park. Alternatives 4 through 7 would all impact the same amount of acreage in the Cajalco Creek Site (P-33-13791), which is currently being assessed for eligibility for the National Register of Historic Places (National Register) by the USACE as part of a separate project. Site P-33-13791 contains a locus (33-816) that is considered to be a Traditional Cultural Property (TCP), which makes this a potential sacred site. All Build Alternatives with the exception of Alternative 9 impact site 33-13791. Alternatives 6 and 7 would each impact the same acreage in the Cajalco Tin Mine District (P-33-4795/H), which has been recommended for eligibility for listing on the National Register under Criteria A, B, and C, and possibly under Criterion D. As such, site P-33-4795/H is a potential Section 4(f) property. In addition to these two potential Section 4(f) properties, of the cultural resource sites that may warrant testing to determine National Register eligibility based on the data reviewed to date and those sites in Alternative 9 where Phase II testing has been conducted, it is likely that all sites except one, Site P-33-16598, would only be eligible under Criterion D (data potential); therefore, they would not qualify as Section 4(f) properties. All Build Alternatives impact cultural site 33-16598 (CA-RIV-8712), a multiuse prehistoric site that is considered a Section 4(f) property, since it has been recommended as eligible for the National Register under Criteria "C" and "D".

8.3.7 Section 6(f)

Alternatives 4, 5, 6, 7, and 9 do not impact Section 6(f) lands.

8.3.8 Cultural Resources

The MCP cultural resource studies are currently in progress. The fieldwork associated with the Phase I identification and Extended Phase I (XPI) Surveys, as well as the Phase II evaluation testing for sites located within the proposed ROW of Alternative 9, have been completed.

This criterion quantifies the total number of previously recorded prehistoric, historic, and sacred resources affected by each alternative that are listed on or eligible for listing on the National Register (see Appendix C). In addition, the numbers of resources that may warrant Phase II testing were assessed for each alternative. Since this criterion is also influenced by the significance of resources affected and not just the quantity, a "least damaging" alternative for cultural resources has not been highlighted in the matrix. Alternative 4 has a total of 16 cultural resources, including at least five sites that may require Phase II evaluation. Alternative 5 has a total of 12 cultural resources and at least five sites that may require Phase II evaluation. Alternative 6 contains a total of 24 cultural resources, of

which seven sites may require Phase II evaluation. Alternative 7 has a total of 20 cultural resources and at least seven sites that may require Phase II evaluation. Alternative 9 contains a total of 62 cultural resources, of which eight have been evaluated during Phase II fieldwork. After Phase II excavations, only one of these eight sites is considered a potential Section 4(f) property. While Alternatives 4 through 7 impact lower cumulative numbers of cultural resources than do Alternatives 9 and 9 (Rider Design Variation), they impact a potentially sacred site (P-33-13791) that contains TCPs and has been recommended as National Register eligible under Criterion D. The only alternative that does not impact this potential sacred site is Alternative 9.

8.3.9 Land Use Impacts

This criterion assesses key factors addressing land use impacts from implementation of the MCP, including business and residential access, consistency with local plans, and acreage of impacted farmland. As listed on the matrix, all alternatives impact business and residential access, both temporary and permanent. Alternative 9 was determined to have the fewest property acquisitions and employees displaced out of the five Build Alternatives since much of the alignment traverses areas with little or no residential or business access.

With regard to overall General Plan Consistency, adoption of any of the Build Alternatives will require Riverside County and the cities of Corona, Perris, and San Jacinto to amend their General Plan Land Use and Circulation Elements to reflect the final MCP alignment, interchange locations, and elimination or modification of any land uses that may need to be acquired for the project.

Farmland directly impacted by each alternative was also assessed. Alternative 9 will impact 11 percent fewer total acres than the next lowest Build Alternative (Alternative 5). Of the total acres impacted for each Build Alternative, Alternative 9 impacts the least amount of Prime, Unique, and Farmland of Local Importance. Alternative 5 impacts the least amount of Farmland of Statewide Importance compared to other Build Alternatives, and Alternatives 4, 5, and 9 impact the least number of acres for Grazing Land out of the Build Alternatives.

8.3.10 Socioeconomic/Community Impacts

This criterion assesses socioeconomic and community impacts that each alternative will have on the study area. It is important to note that even though each alternative can adversely affect communities in the study area as a result of residential and business displacements, implementation of the proposed MCP project can also provide beneficial effects to the affected communities by improving mobility. Support of an alternative by the affected local jurisdictions, community groups, and the general public will be noted for each alternative after the Draft EIR/EIS has been circulated for public review.

Impacts to travel patterns were assessed during the evaluation. Implementation of all Build Alternatives will disrupt travel patterns to some degree by limiting mobility of residents of the communities along each alternative, adding temporary detours, and blocking pedestrian travel. For comparative reasons, a ranking of 1 through 6 was assigned to each alternative, 1 being the least impacting and 6 the most. Alternative 9 was deemed to be the least impacting to existing travel patterns out of the five Build Alternatives since it disrupts the least amount of existing roadways.

Furthermore, each Build Alternative will affect highly cohesive communities and result in some degree of community disruption. Alternatives 4, 5, 6 and 7 will disrupt the Mead Valley Area where there is a presence of small community retail businesses, long-tenured residents, and a high level of pedestrian traffic. Alternative 9 will disrupt a community along Placentia Avenue where there are long-tenured residents, an existing park (Paragon Park) that will be impacted by loss of park acreage, and will require relocation of a fire department and police substation in the City of Perris.

While all the Build Alternatives will require property acquisitions and disrupt the community, Alternative 9 displaces the fewest number of homes and businesses, impacts a smaller number of low-income/minority populations, and displaces the least number of employees.

8.3.11 Air Quality Impacts

This criterion measures differences in emissions between alternatives and notes, if any, which alternatives would result in emissions standards being exceeded. None of the Build Alternatives were determined to exceed National Ambient Air Quality Standard (NAAQS) emission standards, and the criteria pollutant emissions in the MCP region were roughly the same for each Build Alternative.

8.3.12 Noise Impacts

Noise criteria were assessed based on the Draft Noise Study Report. A total of 237 noise receptor locations were set up across the study area to measure the existing noise level. Models were used to assess future worst-case scenarios, and Alternative 9 resulted in the least amount of receptors that would experience adverse noise impacts. Because of this, Alternative 9 requires the least amount of sound barriers in quantity and length.

8.4 CONCLUSION REGARDING BASE ALTERNATIVES

Alternatives 1A and 1B do not meet the project purpose and need and thus cannot be considered practicable. The 404 No Action Alternative also cannot be considered practicable because it would add an additional cost of $979 million (approximately one-third more than Alternative 9) and has thus been determined to be unreasonably expensive. Based on the key evaluation criteria for the MCP Alternatives, Alternative 9 is recommended as the LEDPA. Of all the practicable alternatives, Alternative 9 is the least damaging to water resources and aquatic ecosystems, wildlife threatened and endangered species, Section 4(f) properties, and existing reserve lands. Alternative 9 also completely avoids the Metropolitan MSHCP Reserve area and a potential sacred Native American site in Mead Valley. Alternative 9 is the least impacting to existing business and residential access and travel patterns, impacts the least acreage of farmland, and requires the least number of displacements for ROW acquisition. Alternative 9 does not impact schools and has the lowest direct impacts to low-income/minority populations. Finally, Alternative 9 will have the least impact to noise-sensitive land uses and will require the fewest sound barriers.

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9.0 ANALYSIS OF DESIGN VARIATIONS

As noted in Section 7.9, there are four design variations that apply to one or more of the base alternatives. The Temescal Wash Area Design Variation (TWS DV) and San Jacinto North Design Variation (SJN DV) can apply to all of the alternatives, whereas the Rider Street Design Variation (RD DV) and Placentia Avenue/Perris Boulevard Elevated Grade Design Variation (PP-E DV) apply only to Alternative 9. Those design variations are analyzed here to determine: (1) whether any of the design variations could alter the determination of the LEDPA as applied to the base alternatives; and (2) to determine if any of the design variations applied to the LEDPA could further reduce the impacts of the LEDPA. The selection criteria applied to the design variations are the same as those for the base alternatives.

9.1 PURPOSE AND NEED

All of the four design variations achieve the purpose and need of the project as described in Section 8.1.

9.2 REASONABLE AND PRACTICABLE

Three of the four design variations were deemed to be reasonable and practicable. However, there are substantial constraints associated with the RD DV for Alternative 9; these constraints are discussed in the following subsections. The practicability constraints of this design variation are associated with the fact that since MCP technical studies were initiated in 2005, entitlements have been approved by the City of Perris for several large intermodal warehouse and shipping facilities along the Rider Street alignment. It is expected that these will be constructed prior to ROW acquisition for the MCP project, resulting in substantial facility relocation requirements.

9.2.1 Cost

The cost of right-of-acquisition for this segment of MCP, using the RD DV for Alternative 9 is approximately $300 million more than for the corresponding segment of the base alternative. The estimated relocation costs include building costs, relocation, loss of goodwill, and impact fees paid to the Val Verde Unified School District. The costs for acquisition of these warehouse facilities have not been included in the ROW cost estimate provided in the MCP Draft EIR/EIS. At the time of the ROW cost estimate, which is based on the *Draft Relocation Impact Report* (Epic, June 2007), these facilities were not approved projects. It is noted that this cost would also apply to Alternatives 5 and 7 because there are no design variations for this segment in those alternatives. While this cost is not prohibitive in the context of the entire MCP project (i.e., on the order of 10 percent of the project cost), the extra cost should also be considered in the context of the relatively short distance (6 km [4 mi]) of this segment.

The cost differentials for the other design variations compared to the base alternatives do not affect practicability, but the TWS-DV is approximately $100 to $150 million less than the base alternative.

9.2.2 Technological Constraints

There are no technological constraints to any of the design variations.

9.2.3 Logistical Constraints

There are no logistical constraints to any of the design variations.

9.2.4 Other NEPA/404 Criteria

None of the design alternatives pose any unacceptable adverse social, economic, or environmental impacts or result in any serious community disruption that would be so severe as to render these alternatives unreasonable or impracticable. However, it should be noted that the RD DV (as well as the Rider Street Segment for Alternatives 5 and 7) could be locally disruptive with respect to social and economic impacts, especially if the intermodal facilities relocation could not be accommodated within the city of Perris. On the other hand it should be noted that the RD DV would eliminate the impacts to Paragon Park, which would be caused by implementation of the base Alternative 9.

9.3 ENVIRONMENTAL IMPACTS

This category reviews the environmental criteria that are fundamental to the determination of the LEDPA, with reference to the four design variations considered here.

9.3.1 Water Resources/Aquatic Ecosystem

Jurisdictional Waters/Wetlands Impacts (including vernal pools). Each of the design variations has different effects on waters of the U.S. (wetland and nonwetland). Table C summarizes these differences compared to the base Alternative 9.

The TWS DV would reduce permanent impacts to nonwetland waters by 0.2 ha (0.5 ac). The SJN DV would have a total decrease in impacts of 0.7 ha (1.4 ac), but most of this decrease is due to a relatively large decrease in temporary impacts. In fact, this design variation would result in an increase of permanent impacts of wetland waters of the U.S. of 0.5 ha (1.0 ac) and a net loss of all waters of the U.S. of 0.2 ha (0.4 ac). The RD DV would result in lower impacts in all categories, totaling 2.3 ha (5.9 ac), but nearly half of these decreased impacts are temporary, and the decrease in permanent loss of wetland would be 0.4 ha (0.9 ac). Finally, PP-E DV would not result in any change in impacts to waters of the U.S.

Table C: Summary of Changes in Impacts with Design Variations

Design Variation	Permanent				Temporary				Totals					
	Wetland		Nonwetland		Wetland		Nonwetland		Permanent		Temporary		Total	
	ha	ac	ha	ac	ha	ac	ha	ac	ha	ac	ha	ac	ha	ac
TWS DV	NC	NC	(0.2)[1]	(0.4)	NC	NC	0.0	0.1	(0.2)	(0.4)	0.0	0.1	(0.2)	(0.5)
SJN DV	0.6	1.6	(0.2)	(0.4)	(1.1)	(2.6)	NC	NC	0.4	1.2	(1.1)	(2.6)	(0. 7)	(1.4)
PP-E DV	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
RD DV	(0.4)	(0.9)	(0.8)	(2.1)	(0.4)	(1.1)	(0.7)	(1.8)	(1.2)	(3.0)	(1.1)	(2.9)	(2.3)	(5.9)

[1] Numbers in parentheses ( ) indicate a decrease in impacts compared to the corresponding segment of the base alternative. Numbers without parentheses indicate an increase in impacts compared to the base alternative.

ac = acres
ha = hectares
NC = no change
PP-E DV = Placentia Avenue/Perris Boulevard Elevated Grade Design Variation
RD DV = Rider Street Design Variation
SJN DV = San Jacinto North Design Variation
TWS DV = Temescal Wash Area Design Variation

Consistent with Special Area Management Plan (SAMP) Goals. As the SAMP is still in preparation, information is not available to compare each design variation. However, given their locations and relatively small area of effect compared to the entire project, none of the design variations are likely to affect the achievement of the aquatic resource conservation goals of the proposed SAMP for western Riverside County.

Floodplain Impacts. The TWS, SJN and PP-E design variations would have no effect on the Alternative 9 floodplain encroachments. Likewise, neither the C3 nor C2 connectors would encroach into the Perris Valley Storm Drain floodplain. However, the Rider Street segment of the RD DV would eliminate one transverse encroachment into the Perris Valley Storm Drain floodplain in the Placentia Avenue Segment, compared to the base Alternative 9.

Beneficial Uses Affected. With proper implementation of the BMPs proposed, no adverse effects to beneficial uses will result from construction or operation of Alternative 9 with any of the design variations.

Water Quality Impacts. As shown in Table C, the TWS DV would slightly reduce permanent impacts to nonwetland streambeds, and thus have less impact on water quality function of existing streams. The SJN DV would reduce short-term water quality impacts compared to the base Alternative 9 due to fewer temporary impacts to jurisdictional waters, but would increase the permanent impacts to wetland, thus having greater impact on existing water quality functions. The RD DV would decrease both permanent and temporary impacts to water quality functions compared to the base alternative. The PP-E DV would not change the Alternative 9 impacts to water quality.

With the proposed treatment BMPs implemented, Alternative 9 is expected to decrease the annual loading of total suspended solids, total lead, and total zinc to surface waters, regardless of design variations. Alternative 9 is expected to result in the smallest increase in annual total copper, lead, and

zinc loadings compared to the other build alternatives because it adds the smallest area of new impervious surfaces. However, the RD DV would have somewhat longer road segments and slightly higher pollutant loadings than the base alternative for all constituents that were modeled. The other design variations have varying degrees of minor differences in pollutant loads compared to the base alternative, with some constituents slightly higher and some slightly lower, depending on the design variation. However, the TWS DV does not exceed the base alternative's predicted loads for any constituent.

9.3.2 Threatened and Endangered Species

There are no differences in impacts between the design alternatives and the base Alternative 9 with respect to the mapped critical habitat of federally listed threatened and endangered wildlife covered under the western Riverside County MSHCP (including coastal California gnatcatcher, Quino checkerspot butterfly, and San Bernardino kangaroo rat). Similarly, the design variations do not alter the Alternative 9 effects on endangered or threatened plants.

9.3.3 Plant Communities

This criterion assesses each alternative's impacts on sensitive plant communities within the study area, including Diegan coastal sage scrub, Riversidean upland sage scrub, and peninsular juniper woodland/scrub. The impacts are virtually the same for most design variations of Alternative 9, except that the RD DV would reduce impacts to Riversidean upland sage scrub by approximately 15 ha (38 ac).

There are no differences in impacts to sensitive plant species as identified in the MSHCP (NEPSSA/CASSA[1] plant species) when comparing the design variations to the base alternative.

9.3.4 Effects on Existing Habitat Conservation Plans (HCPs)

The design variations would not have any bearing on the impacts of Alternative 9 to any of the existing HCPs or the Estelle Mountain Reserve.

9.3.5 Western Riverside County MSHCP

As noted in Section 8.3.5, the base Alternative 9 requires an MSHCP consistency determination (as would all of the other Build Alternatives). None of the design variations would have a substantial effect on the ability to obtain this consistency determination. With respect to core preserve areas and MSHCP criteria cells, there are no differences between the base Alternative 9 and any of the design variations. Similarly, there are no differences in impacts to existing or proposed linkages. However, the RD DV would impact 34 to 38 fewer acres (14 to 15 fewer hectares) of Proposed Non-Contiguous Habitat Block 4.

[1] NEPSSA/CASSA = Narrow Endemic Plant Species Survey Area/Criteria Area Species Survey Area

9.3.6 Section 4(f) Properties

This criterion considers the Section 4(f) properties affected by direct use impacts under each of the design variations. Most of the design variations would have no bearing on Section 4(f) properties. However, as noted in Section 8.3.6, the base Alternative 9 would impact Paragon Park, a community park within the city of Perris. Design features associated with Alternative 9 include providing replacement park acreage in excess of what exists today within the community that utilizes Paragon Park. The RD DV would avoid impacting this park by routing the MCP to the north.

9.3.7 Section 6(f)

As with the base alternatives, none of the design variations would impact Section 6(f) lands.

9.3.8 Cultural Resources

There are two potentially sacred sites in the overall MCP project area. Because neither are located in areas affected by the design variations, there would be no change in impacts compared to the base alternatives. Section 8.3.8 also compares the total numbers of prehistoric and historic types, regardless of resource value. In addition, the total number of sites for the design variations and the base Alternative 9 are compared in Section 8.3.8. The RD DV for Alternative 9 contains a total of 63 cultural resources sites (a net change of one more than the base alternative). However, there are two additional sites compared to the base alternative that would need to be evaluated with Phase II work. There are no differences in the number of sites for the TWS DV, SJN DV, and PP-E DV.

9.3.9 Land Use Impacts

PP-E DV and SJN DV have land use impacts very similar to the base Alternative 9, with overall net differences of less than 1 percent and differences in the various categories of just a few acres each. The TWS DV has 25 fewer acres (10 fewer hectares) of impact to residential area than the base alternative, and 44 fewer acres (18 fewer hectares) overall. The RD DV has the greatest differences of land use impacts compared to the base alternative, with approximately 56 ac (23 ha) of greater impact overall. The land use categories with the largest variances are farmland (86 ac [35 ha] more impact with the design variation), industrial (20 fewer acres [8 fewer hectares] with the design variation), residential (24 fewer acres [10 fewer hectares] with the design variation), and public facilities (9 more acres [4 more hectares] with the design variation).

9.3.10 Socioeconomic/Community Impacts

As described in Section 8.3.10, all the Build Alternatives will require property acquisitions and will disrupt the community, but Alternative 9 displaces the fewest number of homes and businesses, impacts a smaller number of low-income/minority populations, and displaces the least number of employees. The TWS DV would further reduce total displacements by 77 (69 residential and 9 nonresidential). The RD DV would reduce total displacements by a similar amount (82), but these would consist of 96 fewer residential displacements and 14 more nonresidential displacements. It is noted at the beginning of Section 9 that several large intermodal distribution facilities are also

planned along this C2-RD alignment. In addition to the extraordinary relocation costs of $300 million, these facilities will employ approximately 800 people, thereby providing an important source of employment in the area. The PP-E and SJN design variations have less effect on displacements, with 18 fewer and 3 more, respectively.

9.3.11 Air Quality Impacts

Just as the criteria pollutant emissions in the MCP region were roughly the same for each Build Alternative, these would not substantively change with any of the design variations for Alternative 9.

9.3.12 Noise Impacts

The TWS DV would result in less noise impact than the base alternative, and thus fewer sound walls are required. Similarly, there are fewer sensitive receptors affected by the RD DV than along Placentia Avenue, although the impacts do not merit sound walls under the test for "Reasonable and Feasible" noise abatement for either the base alternative or the design variation. The elevated design variation along Placentia Avenue (PP-E DV) would result in more impacts, but again, does not merit sound walls. There is no difference in noise impacts with the SJN DV.

9.4 CONCLUSION REGARDING ALTERNATIVE 9 DESIGN VARIATIONS

All of the design variations for Alternative 9 meet the project purpose and need. The RD DV cannot be considered practicable because it would add an additional cost of approximately $300 million and has thus been determined to be unreasonably expensive considering the relatively small reductions in environmental impacts that would be achieved. These reductions can be summarized as follows:

- **Waters of the U.S.:** Permanent loss reduction of 0.4 ha (0.9 ac) of wetland and 0.8 ha (2.1 ac) of nonwetland waters.
- **Hydrology:** One fewer encroachment into the existing floodplain (Perris Valley).
- **Plant Communities:** Reduction of Riversidean upland sage scrub impacts by 15 ha (38 ac).
- **Section 4(f) Properties:** Elimination of impact to one community park (Paragon Park).
- **Cultural Resources:** Additional impact to one prehistoric multiuse site and one historic site (cultural significance unknown; Phase II testing would be required to make determinations of National Register eligibility).
- **Socioeconomic/Community Impacts:** Reduction of residential relocations by 96 and increase in nonresidential relocations of 14 (total residential relocations for the base Alternative 9 equal 268).

Other environmental impacts of the RD DV are either greater or not substantially different than the corresponding segments of the base alternative.

The TWS DV is deemed reasonable and practicable, and would have slightly less environmental impact with respect to waters of the U.S., water quality, land use, socioeconomic/community factors, and noise. With respect to other environmental impacts, there is no change with TWS DV compared

to the corresponding segment of the base alternative. Therefore, this design variation would further contribute to the minimization of impacts by Alternative 9.

The other two design variations (PP-E and SJN) would have either no substantive effect on environmental impacts or in some cases (permanent wetland loss for SJN and noise for PP-E) would have slightly greater impacts. Therefore, these design variations would not lessen the environmental impacts of Alternative 9.

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10.0 CONCLUSION

Alternatives 1A and 1B do not meet the project purpose and need and thus cannot be considered practicable. The 404 No Action Alternative also cannot be considered practicable because it would add an additional cost of $979 million and has thus been determined to be unreasonably expensive. Based on the key evaluation criteria for the MCP Alternatives, Alternative 9 is recommended as the least environmentally damaging of the base alternatives. Of all the practicable alternatives, Alternative 9 is the least damaging to water resources and aquatic ecosystems, wildlife threatened and endangered species, Section 4(f) properties, and existing reserve lands. Alternative 9 also completely avoids the Metropolitan MSHCP Reserve area and a potential Native American sacred site. Alternative 9 is the least impacting to existing business and residential access and travel patterns, impacts the least acreage of farmland, and requires the least number of displacements for ROW acquisition. Alternative 9 does not impact schools and has the lowest direct impacts to low income/minority populations. Alternative 9 will have the least impact to noise-sensitive land uses and will require the fewest sound barriers.

The environmental impacts of Alternative 9 can be further reduced with the implementation of the TWS DV. While RD DV would also further reduce environmental impacts in some categories, the extra cost of $300 million for this design variation is deemed unreasonably expensive and not practicable. Therefore, Alternative 9 TWS DV is recommended as the LEDPA.

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APPENDIX A

BRIDGE LOCATION PLANNING PROCESS

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Appendix A - Bridge Location Planning Process Avoidance and Minimization

1. General: To fully integrate environmental avoidance with engineering design the consultant team went through a rigorous process to site wildlife crossings and bridges. This process ensured that engineering considerations did not drive the alignments and alignment features, i.e. bridge length and location. The end result is that the alternatives meet and in most cases exceed MSHCP criteria for accommodating wildlife movement and maintains connectivity between habitat areas.

2. Initial Alignments: Initially the alignments for each of the alternatives were laid out to avoid existing reserves and known cultural sites as much as possible, while meeting Caltrans geometric design standards. Though these alignments provided some engineering challenges, this process allowed significant environmental avoidance. If avoidance was not possible, then the alignments were refined to minimize impacts. Following the initial layout, the engineering team and environmental teams held several joint workshops to further ensure that environmental issues and avoidance were adequately addressed. These workshops took place as the environmental surveys were being completed. The last workshop was held after the completion of the environmental surveys to provide final changes to the alignments as the survey information on specific resource locations was known.

3. Wildlife Crossings: The environmental and engineering teams worked together to initially site wildlife crossing locations for each of the alternatives. Layouts maximized the use of terrain to provide bridges for wildlife crossings. Bridge locations were identified based on the height and length required to span the terrain. If a site was identified as either being suitable for a bridge or culvert, then a bridge was used. During the environmental and engineering workshops, the bridge locations were discussed to determine if they would be beneficial as wildlife crossings. The environmental team provided input on key areas for crossings, i.e. linkages, as well as spacing between crossings based on MSHCP criteria. If the distances were too great between crossings, or other areas were identified that needed wildlife crossings, culvert locations were analyzed on whether they could provide a logical site as a combined wildlife crossing and culvert. When this approach was taken the undercrossing (culvert) was sized and features added (such as benching) so that normal flows would still allow dry crossings by wildlife. Additionally, in all cases, these wildlife crossings were sized to provide a minimum of a 1:1 aspect ratio (ratio between distance of undercrossing to the size of the opening in square feet) so that sufficient light is provided for wildlife to see from opening to end. Also a minimum height was established for the safe crossing of the large mammals such as deer. Wildlife overcrossings (land bridges) were also located in those areas in which an overcrossing would provide more benefit than an undercrossing and the terrain was compatible for an overcrossing.

4. Waters / Wetlands: The initial layout also took into consideration avoidance of waters and wetlands. Initially, the U. S. Army Corps of Engineer's Special Area Management Plan (SAMP) data was used which provided a useful landscape level view of the waters and wetlands in the area. SAMP data was available for all the alignments. The alignments were changed to avoid these potentially jurisdictional areas as much as possible. In those places which avoidance was not practical, bridges and in some cases walls were used to avoid these waters and wetlands. When the draft MCP Jurisdictional Delineation was completed this new data was compared to the SAMP data to make sure areas were avoided as much as possible. More detailed discussion on the siting of bridge locations over water resources and determination of length of bridge over water resources can be found in Appendix B, Bridge Waters and Wetlands Considerations.

Conclusion:

After a draft plan of bridge crossings was completed, the engineering and environmental team met with USFWS and CDFG in September 2006 and presented some typical crossings and locations of all proposed crossings for all alignments. The agencies provided initial feedback and suggestions for additional locations for crossings and to provide some smaller culverts to accommodate movement of smaller mammals.

APPENDIX B

BRIDGE, WATERS, AND WETLANDS CONSIDERATIONS

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Appendix B– BRIDGE, WATERS, AND WETLANDS CONSIDERATION

	Bridge Name and Location	Alternative/s	Reach/Drainage System*	Length (m)	Height (m)	Wetland Shading Impact	Positioning Considerations	Impact to Federal and State Jurisdictional Areas
1	**MCP/I-15 Interchange**	**All Alts**	**Reach 1/DS#2**	Multiple Bridges	10–30	Does not cross wetland	MCP/I-15 Interchange will result in the existing I-15 crossing the Bedford Canyon Wash to be widened. No impacts will occur to the waters and wetlands along the crossing. Connectors, ramps and Collector-Distributor roads will all have bridges over the Wash south of the MCP mainline. Interchange alignment cannot be easily moved due to interchange spacing requirements from FHWA and Caltrans.	The abutments and piers will all be out of the jurisdictional waters/wetlands and California Department of Fish and Game (CDFG) streambed and riparian habitat jurisdictional areas. Waters/wetlands will be completely avoided by the bridge placements. Temporary impacts are likely to occur during construction of the bridges.
2	**Temescal Canyon Viaduct, 106+80 to 118+04**	**4, 5, 9**	**Reach 1/DS#2, DS#4, DS#5, Reach 2/DS#6**	1395	6-39	HW Ratio** = 1.35 No Significant Impact	Long bridge sited to avoid wetlands and waters to largest extent possible. Bridge siting also provides good topography fit and allows wildlife crossing opportunities. Bridge is very high over existing terrain to reduce climbing grade up from the Temescal Valley.	Bridge minimizes impacts to jurisdictional waters. No impact to United States Army Corps of Engineers (USACE) jurisdictional areas along Bedford Canyon Wash and Temescal Creek. Pier bents, abutments and fill will completely avoid Temescal Creek and Bedford Canyon Wash. There will be impacts along Cajalco Creek. Waters, wetlands, and CDFG jurisdictional areas cannot be totally avoided since the alignment of Cajalco Creek weaves in and out in the eastern portion of the bridge. Some pier bents and protective revetments will impact waters along Cajalco Creek.
3	**River Rock Viaduct, 120+45 to 124+55**	**4, 5, 9**	**Reach 2/DS#7**	410	6-32	Does not cross wetland	Bridge positioned to minimize impacts to wetlands and waters. Fill and culverts would have been used if wetlands and waters were not a priority.	Bridge completely avoids wetlands, waters, and riparian on the east half of bridge. Pier bents are positioned high on slopes and away from the reaches. Fill from the eastbound off-ramp does impact some waters on the west side of the bridge. Waters and CDFG areas are also impacted near the Estelle Mountain Interchange at the end of drainage system 7.
4	**Cajalco Canyon Overcrossing (access to Cajalco Road), 13+85 to 15+45**	**4, 5, 9**	**Reach 2/DS#6**	160	9-36	HW Ratio = 1.13 No Significant Impact	Bridge provides access to Cajalco Road from MCP Estelle Mountain Interchange. Bridge positioned to cross Cajalco Creek transversely to avoid waters and wetlands impacts while minimizing bridge length. Estelle Mountain IC cannot be moved farther east due to MSHCP prohibitions on interchanges located in public lands or west due to standard interchange spacing requirements. Provides wildlife corridor.	Bridge completely avoids wetlands, waters, and CDFG jurisdictional areas. Pier bents are positioned high on slopes and away from the reach. There is no fill, abutments, piers, or riprap in any of the jurisdictional areas. There are also no temporary impacts since the steep slope, inaccessible jurisdictional area, and height preclude placing any construction equipment in the jurisdictional area.
5	**Eagle Rock Bridge, 132+20 to 133+52**	**4, 5, 9**	**Reach 2/DS#6**	129	13-35	HW Ratio = 1.85 No Significant Impact	MCP mainline bridge positioned to cross very steep creek transversely to avoid waters and wetlands impacts while minimizing bridge length. Provides good north-south wildlife corridor. Requires a wall to the northeast to ensure abutment fill does not impact jurisdictional areas.	Bridge completely avoids wetlands, waters, and CDFG areas. Pier bents are positioned high on slopes and away from the reach. There is no fill, abutments, piers, or riprap in any of the jurisdictional areas. There are also no temporary impacts since the steep slope, inaccessible jurisdictional area, and height preclude placing any construction equipment in the jurisdictional area.
6	**Farley Bridge** **156+00 to 157+60**	**4, 5, 9**	**Reach 2/ DS#18**	160	20-22	Does not cross wetland	MCP mainline bridge positioned to cross a creek. Bridge provides a wildlife crossing for either side of the creek in the flat. Provides a good north-south wildlife corridor to and from the plateau.	Bridge completely avoids wetlands, waters and CDFG areas. Pier bents are positioned away from the jurisdictional areas. There is no fill, abutments, piers, or riprap in any of the jurisdictional areas.
7	**Black Rock Bridge, 159+00 to 160+85**	**4, 5, 9**	**Reach 2/ DS#16**	186	7-20	HW Ratio = 0.37 Moderate potential to impact underlying vegetation.	MCP mainline bridge positioned to cross to cross a wide vegetated creek. Bridge provides a wildlife crossing for either side of the creek. Provides a good north-south wildlife corridor to and from the plateau.	Bridge completely avoids wetlands, waters and CDFG areas. Pier bents are positioned away from the reach. There is no fill, abutments, piers, or riprap in any of the jurisdictional areas.
8	**Olsen Creek Bridge, 164+75 to 165+85**	**4, 5, 9**	**Reach 2/ DS#19**	110	6-9	Does not cross wetland	MCP mainline bridge positioned to cross to cross a creek. Bridge provides a wildlife crossing for either side of the creek in the flat. Provides a good north-south wildlife corridor to and from the plateau.	Bridge completely avoids wetlands, waters and CDFG areas. Pier bents are positioned away from the reach. There is no fill, abutments, piers, or riprap in any of the jurisdictional areas.
9	**South Lake Mathews Viaduct, 179+36 to 187+40**	**9**	**Reach 2/DS Misc.**	804	5-23	Does not cross wetland	MCP mainline bridge positioned to cross very steep drop. Bridge avoids waters while ensuring a very large wildlife corridor. Bridge selected in lieu of an embankment and culvert to avoid waters and avoid direct impacts of fill on the existing Metropolitan Reserve.	Bridge completely avoids wetlands, waters, and CDFG. Pier bents are positioned away from the reach. There is no fill, abutments, piers, or riprap in any of the jurisdictional areas.
10	**Descanso Viaduct, 199+06 to 200+90**	**9**	**Reach 3/DS#21**	184	10-32	HW Ratio = 2.22 No Significant Impact	MCP mainline bridge positioned to cross steep valley. Bridge avoids waters and wetlands and provides a wildlife corridor. Bridge positioning avoids waters to maximum extent to enable a crossing of the valley while turning the alignment up the steep valley parallel to the DS#21.	Bridge completely avoids wetlands, waters, and CDFG areas along the main tributary. Ephemeral waters are impacted to the west of the bridge. Pier bents are positioned on slopes and away from the main reach. Ephemeral waters leading into the wetlands and main tributary are impacted somewhat. There is no fill, abutments, piers, or riprap in any of the jurisdictional wetland or waters areas on the main tributary.

	Bridge Name and Location	Alternative/s	Reach/Drainage System*	Length (m)	Height (m)	Wetland Shading Impact	Positioning Considerations	Impact to Federal and State Jurisdictional Areas
11	**Gavilan Viaduct, 273+30 to 276+10**	**9**	**Reach 3/DS#26**	258	15-30	HW Ratio = 2.78 No Significant Impact	MCP mainline bridge positioned to Cross Gavilan Valley and Road. Bridge avoids main tributary waters and wetlands while crossing perpendicular to the creek. Alignment avoids significant cultural resources to the south while providing a good fit for the terrain. Bridge also provides a natural wildlife corridor.	Bridge completely avoids wetlands and waters along the main tributary. Ephemeral waters are impacted to the east of the bridge. Pier bents are positioned on slopes and away from the main reach. There is no fill, abutments, piers, or riprap in any of the jurisdictional wetland or waters areas on the main tributary.
12	**Juniper Viaduct Far South, 301+93 to 303+87**	**9**	**Reach 3/DS#29**	196	3-35	Does not cross wetland	MCP mainline bridge positioned to cross a U-shaped valley. Bridge crosses jurisdictional areas perpendicularly. Alignment provides only cost-effective way of crossing major ridgeline. Bridge avoids waters while ensuring a large wildlife corridor.	Bridge completely avoids wetlands and waters. Pier bents are positioned high on slopes and away from the reach. There is no fill, abutments, piers, or riprap in any of the jurisdictional areas including CDFG areas.
13	**Masoncrest Far South, 311+26 to 311+77**	**9**	**Reach 3/DS#31**	59	8-16	Does not cross wetland	MCP mainline bridge positioned to cross steep valley. Bridge avoids waters and allows a north-south large wildlife corridor. Bridge selected in lieu of an embankment and culvert due to the sensitivity of waters.	Bridge completely avoids wetlands, waters, and CDFG areas along the main tributary. Pier bents are positioned on slopes and away from the main reach. There is no fill, abutments, piers, or riprap in any of the jurisdictional wetland or waters areas on the main tributary.
14	**Perris Valley Storm Drain, 197+40 to 200+10 (alt 9), 198+25 to 200+43 (alts 5, 7), 186+80 to 221+000 (alts 4, 6)**	**5, 7, 9, 4, 6**	**Reach 6/DS#60**	273, 213, 3417	4-10	HW Ratio = 0.46 Moderate potential to impact underlying vegetation.	MCP mainline bridge for Rider and Placentia Alternatives 5, 7 and 9 positioned to cross the Perris Valley Storm Drain. Bridge is aligned to cross the drain at a near-perpendicular crossing to reduce length and minimize waters/wetlands impacts. Bridge also aligned to minimize impacts to local community and to ensure the interchange at Evans meets Caltrans standards. Bridge for Alternatives 4 and 6 includes a section that is directly adjacent to the west side of the Perris Valley Storm Drain and then crosses the Perris Drain near Placentia Avenue. For Alternatives 4 and 6 a 3,417 m (11,210 ft) long bridge is proposed in this area to avoid impacting the floodplain. Approximately 240 m (656 ft) of the bridge is crossing over the Perris Drain.	Bridge for Alternatives 4, 6, 5, 7, and 9 minimizes impacts to wetlands, waters, and CDFG areas along the Perris Valley Drain. All abutments are located outside of the channel and jurisdictional areas. Some pier bents will impact wetlands, waters and CDFG areas within the Perris Valley Storm Drain.
15	**San Jacinto River/Lakeview Nuevo, 272+83 to 286+00**	**All Alts**	**Reach 7/ DS#61, DS#62, DS#63**	1317	4–13	HW Ratio = 0.38 Moderate potential to impact underlying vegetation.	MCP mainline bridge crossing the San Jacinto River. Bridge is over 1,300 m long to completely avoid waters/wetlands impacts while also ensuring that flows downstream are not retained and that flows upstream do not back up. A small bridge and embankment would have been proposed except for concerns about the waters and wetlands in the area. The entire floodplain is crossed by the bridge. Bridge also provides excellent wildlife crossing opportunities for the MSHCP linkage of the San Jacinto.	Bridge completely avoids wetlands, waters, and CDFG areas while crossing the river floodplain. Pier bents will be placed outside all jurisdictional federal and state areas. All abutments and pier bents are located outside of the waters and wetlands.
16	**MCP/SR-79 Interchange, San Jacinto South**	**All Alts**	**Reach 8/DS#64**	Multiple Bridges	10–25	Unknown	MCP/SR-79 interchange crosses wetlands and waters on the south side of the MCP mainline alignment. Crossings are a combination of bridges and embankment for the southern connectors with SR-79. This interchange is sited to optimize Caltrans spacing requirements between the next SR-79 Interchanges at Gilman Springs and Sanderson. Aligning MCP along the Colorado Aqueduct reduces disruption to land use and local circulation.	Waters/wetlands cannot be completely avoided due to the density of ramps and connectors in the area. Connectors and ramps on the southwest quadrant of the interchange impact waters, wetlands, and CDFG areas.
17	**San Jacinto River Viaduct/City of San Jacinto**	**All Alts**	**Reach 8/DS#66, DS#67**	390	5-13	Unknown	SR-79 bridge crossing the San Jacinto River. Current viaduct will be lengthened to 400 m long and will be widened to the west. Viaduct required to allow transition from MCP connectors to SR-79 alignment.	Viaduct will minimize impacts to waters/wetlands within the San Jacinto River mainline. Pier bents will be placed in line where they are currently located within the San Jacinto River. Wetlands south of the river along the existing Sanderson Avenue embankment will be impacted by bridge pier bents and scour protection.
18	**Temescal Canyon Viaduct, General Plan, 106+80 to 124+00**	**6, 7**	**Reach 1/DS#2, DS#4, DS#5, Reach 2/DS#6 and DS#7**	1720	8-32	HW Ratio = 1.08 No Significant Impact	Long bridge sited to meet Riverside County General Plan. Alignment follows General Plan to meet requirements to be covered under the MSHCP. Bridge siting also provides good topography fit and allows wildlife crossing opportunities. Bridge is very high over existing terrain to reduce climbing grade from the Temescal Valley.	No impact to USACE jurisdictional areas along Bedford Canyon Wash and Temescal Creek. Pier bents abutments and fill will completely avoid Temescal Creek and Bedford Canyon Wash. Due to the alignment of Cajalco Creek weaving in and out of the bridge, impacts to jurisdictional areas cannot be avoided and some pier bents and protective revetments will impact waters and CDFG jurisdictional areas along Cajalco Creek and DS#6.
19	**General Plan, 127+20 to 128+80**	**6, 7**	**Reach 2/DS#6**	165	12-28	HW Ratio = 1.14 No Significant Impact	Bridge positioned to minimize impacts to wetlands and waters. Fill and culverts would have been proposed if wetlands and waters were not a priority.	Bridge completely avoids wetlands, waters, and CDFG jurisdictional areas. Pier bents are positioned on slopes and away from the reach. No fill or abutments in jurisdictional areas.

	Bridge Name and Location	Alternative/s	Reach/Drainage System*	Length (m)	Height (m)	Wetland Shading Impact	Positioning Considerations	Impact to Federal and State Jurisdictional Areas
20	**Cajalco Canyon Overcrossing, General Plan South, two bridges, 26+65 to 28+10, and 26+65 to 31+55**	**6, 7**	**Reach 2/DS#6**	145 and 461	6-42	HW Ratio = 1.13 No Significant Impact	Bridge provides access to Cajalco Road from MCP Estelle Mountain Interchange. Bridge positioned to cross Cajalco Creek perpendicularly to avoid waters and wetlands impacts while minimizing bridge length. Estelle Mountain IC cannot be moved farther east due to MSHCP prohibitions on interchanges located in public lands and not west due to interchange spacing requirements. Provides wildlife corridor.	Bridge completely avoids wetlands, waters, and CDFG areas. Pier bents are positioned high on slopes and away from the reach. There is no fill, abutments, piers, or riprap in any of the jurisdictional areas. There are also no temporary impacts since the steep slope, inaccessible jurisdictional area, and height preclude placing any construction equipment in the jurisdictional area.
21	**General Plan South, 145+05 to 146+50**	**6, 7**	**Reach 2/DS#11, DS#13**	147	6-13	HW Ratio = 0.97 No Significant Impact	MCP mainline bridge positioned to cross two steep creeks. Alignment is locked in to meet the General Plan and MSHCP criteria. MCP crossing the west creek has a longitudinal skew angle. Provides good north-south wildlife corridor.	Bridge piers completely avoid wetlands, waters, and CDFG areas. Both the east and west crossing impacts water due to the location of the abutments.
22	**General Plan South, 216+80 to 218+85**	**6, 7**	**Reach 4/DS#46, DS#47, DS#48**	207	3-9	HW Ratio = 0.83 No Significant Impact	MCP mainline bridge positioned to cross two creeks. Alignment is locked in to meet General Plan and MSHCP criteria. Crossing the west creek has a longitudinal skew angle. The easternmost crossing is a near perpendicular crossing. Provides good north-south wildlife corridor.	Bridge completely avoids wetlands, waters, and CDFG areas for the east crossing. The west crossing impacts waters and CDFG areas due to the abutment.
23	**General Plan South, 265+45 to 266+85**	**6, 7**	**Reach 5/DS#52**	140	2-5	HW Ratio = 0.27 High potential to impact underlying vegetation.	MCP General Plan South mainline bridge positioned to cross existing wetland area. Alignment is locked in to meet the General Plan and MSHCP criteria. Alignment is adjacent to Metropolitan Water District's (Metropolitan) Cajalco Dam. Provides a north-south wildlife corridor. Crossing would be an embankment if not for concern about waters and wetlands.	Bridge piers do impact existing wetlands and CDFG riparian habitat. Bridge span cannot be lengthened since bridge is too low to increase span length.
24	**General Plan North, 128+00 to 132+00**	**6, 7**	**Reach 9/DS#68**	400	4-20	Does not cross wetland	MCP General Plan North bridge positioned to cross deep ravine complex. Alignment is locked in to meet the General Plan and MSHCP criteria. Alignment is adjacent to Metropolitan's Cajalco Dam. Provides an east-west wildlife corridor.	No impact to existing waters. Bridge piers will avoid waters and wetlands and CDFG jurisdictional areas.
25	**General Plan North, 145+00 to 146+50**	**6, 7**	**Reach 9/DS#70**	150	4-8	HW Ratio = 0.32 Moderate potential to impact underlying vegetation.	MCP General Plan North bridge positioned to cross ravine complex. Alignment is locked in to meet the General Plan and MSHCP criteria. Alignment is adjacent to Metropolitan's Cajalco Dam. Provides a north-south wildlife corridor. Alignment would be fill with culvert instead of bridge except for concern for waters.	Bridge abutment and piers will impact waters and CDFG riparian.
26	**General Plan North, 149+60 to 153+20**	**6, 7**	**Reach 9/DS#71**	360	4-10	Does not cross wetland	MCP General Plan North bridge positioned to cross ravine complex. Alignment is locked in to meet the General Plan and MSHCP criteria. Segment would be fill with culvert if not for waters concerns. Provides a north-south wildlife corridor.	Bridge abutment and piers will impact waters and CDFG riparian. Bridge is positioned longitudinally with stream so bridge piers will impact the streambed.
27	**General Plan North, 157+80 to 159+25**	**6, 7**	**Reach 9/DS#72**	145	4-12	Does not cross wetland	MCP General Plan North bridge positioned to cross stream. Alignment crosses stream longitudinally. Alignment is locked in to meet the General Plan and MSHCP criteria. Provides a north-south wildlife corridor.	Bridge abutment and piers will impact waters and CDFG riparian. Bridge is positioned somewhat longitudinally with stream so bridge piers will impact the streambed.
28	**General Plan North, 265+75 to 266+05**	**6, 7**	**Reach 5/DS#51**	30	8	HW Ratio = 0.93 No Significant Impact	MCP General Plan North existing bridge expanded by two lanes to cross outlet for Cajalco Dam. Alignment as determined in the General Plan and MSHCP criteria.	Bridge widens existing bridge. Abutment and piers will not impact waters and CDFG riparian. Bridge is positioned perpendicular to stream so that bridge piers will not impact the streambed.
29	**South Lake Mathews Viaduct, 179+30 to 184+82**	**4, 5**	**Reach 2/DS Misc.**	530	5-23	Does not cross wetland	MCP mainline bridge positioned to cross very steep drop. Bridge avoids waters while ensuring a very large wildlife corridor. Bridge selected in lieu of an embankment and culvert to avoid waters and avoid direct impacts of fill on the existing Metropolitan Reserve.	Bridge completely avoids wetlands, waters, and CDFG. Pier bents are positioned away from the reach. There is no fill, abutments, piers, or riprap in any of the jurisdictional areas.
30	**Lake Mathews South, 222+25 to 223+05**	**4, 5**	**Reach 4/DS#46**	80	4-10	HW Ratio = 0.56 Low potential to impact underlying vegetation.	MCP mainline bridges and frontage road bridge positioned to cross small stream. Bridge crosses jurisdictional areas perpendicularly. Alignment positioned to be on southern edge of Metropolitan Reserve to minimize impacts. Bridge avoids waters and wetlands while ensuring a wildlife corridor.	Bridge completely avoids wetlands, waters, and CDFG riparian. Pier bents are positioned away from the reach. There is no fill, abutments, piers, or riprap in any of the jurisdictional areas.
31	**Lake Mathews South, 223+10 to 224+15**	**4, 5**	**Reach 4/DS#47**	102	4-7	HW Ratio = 0.56 Low potential to impact underlying vegetation.	MCP mainline bridge positioned to cross small stream. Bridge crosses jurisdictional areas perpendicularly. Alignment positioned to be on southern edge of Metropolitan Reserve to minimize impacts. Bridge avoids waters and wetlands while ensuring a wildlife corridor. Frontage road bridge crosses jurisdictional areas longitudinally.	Mainline bridges completely avoid wetlands, waters, and CDFG riparian. Pier bents are positioned away from the reach. There is no fill, abutments, piers, or riprap in any of the jurisdictional areas. Frontage road bridge will impact waters/wetlands and CDFG riparian.

	Bridge Name and Location	Alternative/s	Reach/Drainage System*	Length (m)	Height (m)	Wetland Shading Impact	Positioning Considerations	Impact to Federal and State Jurisdictional Areas
32	**Lake Mathews South, 225+70 to 226+45**	**4, 5**	**Reach 4/DS#48**	75	4-7	Does not cross wetland	MCP mainline bridge positioned to cross small stream. Bridge crosses jurisdictional areas perpendicularly. Alignment positioned to be on southern edge of Metropolitan Reserve to minimize impacts. Bridge avoids waters and wetlands while ensuring a wildlife corridor. Frontage road bridge crosses jurisdictional areas longitudinally.	Mainline and frontage road bridges completely avoid wetlands, waters, and CDFG riparian. Pier bents are positioned away from the reach. There is no fill, abutments, piers, or riprap in any of the jurisdictional areas. Frontage road bridge will not impact waters/wetlands and CDFG riparian.
33	**Lake Mathews South, 265+45 to 266+85**	**4, 5**	**Reach 5/DS#52**	140	2-5	HW Ratio = 0.56 Low potential to impact underlying vegetation.	MCP mainline bridge positioned to cross wetlands. Bridge crosses jurisdictional areas perpendicularly. Alignment positioned to be on southern edge of Metropolitan Reserve to minimize impacts.	Mainline bridges impact waters, wetlands, and CDFG riparian. Pier bents must be positioned in jurisdictional areas.
34	**Mead Valley, 271+75 to 274+30**	**4, 5,6,7**	**Reach 5/DS#53**	258	3-10	HW Ratio = 0.56 Low potential to impact underlying vegetation.	MCP mainline bridge positioned to cross stream. Bridge crosses jurisdictional areas perpendicularly. Alignment positioned to allow Cajalco Road to handle local traffic, and MCP is positioned to allow alignment to use southern edge of Metropolitan Reserve to minimize impacts.	Mainline bridges do not impact waters/wetlands and CDFG riparian. Pier bents positioned in jurisdictional areas.
35	**Mead Valley, 268+40 to 269+55**	**4, 5,6,7**	**Reach 5/DS Misc.**	114	3	Does not cross wetland	MCP mainline bridge positioned to cross open channel. Bridge crosses jurisdictional areas. Bridge used instead of embankment to reduce impacts to the wetland area. Bridge length restricted since clearance does not allow deeper stringers.	Mainline bridges do not impact waters, wetlands, and CDFG riparian. Abutments and pier bents positioned outside of jurisdictional areas.
36	**Mead Valley, 294+65 to 295+52**	**4, 5,6,7**	**Reach 5/DS#55**	94	3	HW Ratio = 0.28 High potential to impact underlying vegetation.	MCP mainline bridge positioned to cross low wetland area near Cajalco Creek. Bridge crosses jurisdictional areas. Bridge used instead of embankment to reduce impacts to the wetland area. Bridge length restricted since clearance does not allow deeper stringers.	Mainline bridges do impact waters, wetlands, and CDFG riparian. Abutments and pier bents positioned in jurisdictional areas.
37	**Mead Valley, 309+45 to 310+95**	**4, 5,6,7**	**Reach 5/DS#56**	148	2-7	HW Ratio = 0.56 Low potential to impact underlying vegetation.	MCP mainline bridge positioned to cross Cajalco Creek. Alignment crosses the Creek perpendicularly. No abutments or bridge piers are positioned in the jurisdictional areas.	Mainline bridges do not impact waters/wetlands and CDFG riparian.
38	**Mead Valley, 324+15 to 325+40**	**4, 5,6,7**	**Reach 5/DS#54**	125	9	Does not cross wetland	MCP mainline bridge positioned to cross realigned and channeled Cajalco Creek Bridge. Bridge piers are positioned in the realigned channel. Channel required since Cajalco Creek flows parallel with the mainline MCP.	Mainline bridges do impact waters/wetlands and CDFG riparian. Pier bents are positioned in the realigned channel. Existing Cajalco Creek is channeled.
39	**Wildlife Crossings - Combined wildlife and undercrossing drainage culverts**	**All Alts**	**All are located between I-15 and I-215. Additional crossing between Lakeview Nuevo and San Jacinto**	Varies, 85-125	3–7.7	Not relevant	Selected culverts positioned to carry drainage under MCP have been expanded to provide wildlife crossings. Openings are in excess of 6 m in diameter, providing improved waters benefits from small culverts.	

Source: Jacobs Civil Engineering, 2008 and LSA 2008.

* Reach/Drainage System = geographic portion of study area, as discussed in the May 2007(Revised February 2008) MCP Jurisdictional Delineation.
** HW ratio = height to width ratio. The effects on vegetation from shading for MCP was conducted according to SanClements (2003).

APPENDIX C

ALTERNATIVE EVALUATION SUMMARY MATRIX

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APPENDIX C - ALTERNATIVE EVALUATION SUMMARY MATRIX
Mid County Parkway Project

Alternative Selection Criteria	Alternative 4	Alternative 5	Alternative 6	Alternative 7	Alternative 9
Cost	$4.37	$4.07	$4.51	$4.21	$3.83
Water Resources/ Aquatic Ecosystem	•10.7 acres of jurisdictional wetlands •14.6 acres of nonwetland waters of the U.S. •25.2 total acres of aquatic resources	•9.8 acres of jurisdictional wetlands •13.8 acres of non-wetland waters of the U.S. •23.7 total acres of aquatic resources	•12.0 acres of jurisdictional wetlands •16.1 acres of non-wetland waters of the U.S. •28.2 total acres of aquatic resources	•11.2 acres of jurisdictional wetlands •15.4 acres of non-wetland waters of the U.S. •26.6 total acres of aquatic resources	•7.1 acres of jurisdictional wetlands •12.6 acres of non-wetland waters of the U.S. •19.6 total acres of aquatic resources
Threatened and Endangered Species	•6.1 acres of least Bell's vireo habitat •35.5 acres of final CAGN critical habitat •157.6 acres of final QCB critical habitat •2.9 acre of final SBKR critical habitat •0.6 acre of occupied SBKR habitat •40.0 acres of occupied LAPM habitat •0.77 acre of occupied spreading navarretia habitat •7.6 acres of occupied Munz's onion habitat	•6.1 acres of least Bell's vireo habitat •35.5 acres of final CAGN critical habitat •157.6 acres of final QCB critical habitat •2.9 acre of final SBKR critical habitat •1.0 acre of occupied SBKR habitat •40.0 acres of LAPM habitat •0.77 acre of occupied spreading navarretia habitat •7.6 acres of occupied Munz's onion habitat	•8.5 acres of least Bell's vireo habitat •0 acres of final CAGN critical habitat •140.0 acres of final QCB critical habitat •2.9 acre of final SBKR critical habitat •1.0 acre of occupied SBKR habitat •40.0 acres of LAPM habitat •0.77 acre of occupied spreading navarretia habitat •0.02 acres of occupied Munz's onion habitat	•8.5 acres of least Bell's vireo habitat •0 acres of final CAGN critical habitat •140.2 acres of final QCB critical habitat •2.9 acre of final SBKR critical habitat •1.0 acre of occupied SBKR habitat •40.0 acres of LAPM habitat •0.77 acre of occupied spreading navarretia habitat •0.02 acres of occupied Munz's onion habitat	•2.2 acres of least Bell's vireo habitat •40.1 acres of final CAGN critical habitat •327.6 acres of final QCB critical habitat •2.9 acres of final SBKR critical habitat •1.0acre of occupied SBKR habitat •40.0 acres of occupied LAPM habitat •0.77 acre of occupied spreading navarretia habitat •7.6 acres of occupied Munz's onion habitat
Sensitive Plant Communities	•2.5 acres of Diegan coastal sage scrub •368.4 acres of Riversidean upland sage scrub •23.4 acres of peninsular juniper woodland/scrub	•2.5 acres of Diegan coastal sage scrub •365.8 acres of Riversidean upland sage scrub •23.4 acres of peninsular juniper woodland/scrub	•6.6 acres of Diegan coastal sage scrub •423.0 acres of Riversidean upland sage scrub •28.2 acres of peninsular juniper woodland/scrub	•6.6 acres of Diegan coastal sage scrub •420.4 acres of Riversidean upland sage scrub •28.2 acres of peninsular juniper woodland/scrub	•2.5 acres of Diegan coastal sage scrub •404.6 acres of Riversidean upland sage scrub •26.8 acres of peninsular juniper woodland/scrub
Effects on Existing HCPs	•255.9 acres impacted within MWD HCP •22.4 acres impacted within El Sobrante Landfill HCP •159.2additional acres impacted within SKR HCP	•255.9 acres impacted within MWD HCP •22.4 acres impacted within El Sobrante Landfill HCP •159.2additional acres impacted within SKR HCP	•389.9 acres impacted within MWD HCP •0.0 acres impacted within El Sobrante Landfill HCP •141.9 additional acres impacted within SKR HCP	•389.9 acres impacted within MWD HCP •0.0 acres impacted within El Sobrante Landfill HCP •141.9 additional acres impacted within SKR HCP	•0.0 acres impacted within MWD HCP •22.0 acres impacted within El Sobrante Landfill HCP •168.7 additional acres impacted within SKR HCP
Western Riverside County MSHCP	• 381.4 acres of impacts to MSHCP Criteria Area	• 406.8 acres of impacts to MSHCP Criteria Area	• 638.0 acres of impacts to MSHCP Criteria Area	• 663.4 acres of impacts to MSHCP Criteria Area	• 634.5 acres of impacts to MSHCP Criteria Area
Section 4(f) Resources	•20.8 acres of the Cajalco Creek Site •2.36 acres of El Cerrito Sports Park •415.1 acres of Lake Mathews-Estelle Mountain Reserve •22.4 acres of El Sobrante Landfill MSHCP Area •5.18 acres of CA-RIV-8712 Cultural Site	• 20.8 acres of the Cajalco Creek Site • 2.36 acres of El Cerrito Sports Park • 415.1 acres of Lake Mathews-Estelle Mountain Reserve • 22.4 acres of El Sobrante Landfill MSHCP Area • 5.18 acres of CA-RIV-8712 Cultural Site	• 20.8 acres of the Cajalco Creek Site • 62.5 acres of the Cajalco Tin Mine District • 2.36 acres of El Cerrito Sports Park • 540.3 acres of Lake Mathews-Estelle Mountain Reserve • 5.18 acres of CA-RIV-8712 Cultural Site	• 20.8 acres of the Cajalco Creek Site • 62.5 acres of the Cajalco Tin Mine District • 2.36 acres of El Cerrito Sports Park • 540.3 acres of Lake Mathews-Estelle Mountain Reserve • 5.18 acres of CA-RIV-8712 Cultural Site	• 2.36 acres of El Cerrito Sports Park • 168.7 acres of Lake Mathews-Estelle Mountain Reserve • 22.0 acres of El Sobrante Landfill MSHCP Area • 8.9 acres of Paragon Park • 5.18 acres of CA-RIV-8712 Cultural Site
Cultural Resources	•16 prehistoric and historic archeological resources, 2 sacred sites	•12 prehistoric and historic archeological resources, 2 sacred sites	•24 prehistoric and historic archeological resources, 2 sacred sites	•20 prehistoric and historic archeological resources, 2 sacred sites	•62 prehistoric and historic archeological resources, 1 sacred site
Land Use Impacts	•Final NRCS-CPA-106 Score of 138 •966.8 acres of farmland impacted •41.5 acres of Williamson Act Preserves impacted •2,789.2 total acres impacted	•Final NRCS-CPA-106 Score of 138 •915.3 acres of farmland impacted •91.6 acres of Williamson Act Preserves impacted •2,704.1 total acres impacted	•Final NRCS-CPA-106 Score of 138 •1,052.2 acres of farmland impacted •60.4 acres of Williamson Act Preserves impacted •3,289.1 total acres impacted	•Final NRCS-CPA-106 Score of 138 •1,000.6 acres of farmland impacted •60.35 acres of Williamson Act Preserves impacted •3,206.9 total acres impacted	•Final NRCS-CPA-106 Score of 139 •822.2 acres of farmland impacted •41.5 acres of Williamson Act Preserves impacted •2,636.9 total acres impacted
Socioeconomic/Community Impacts	•643 property acquisitions required •1,232 occupants displaced •730 employees potentially displaced •$1.09 Million potential property tax loss	•573 property acquisitions required •1,066 occupants displaced •623 employees potentially displaced •$1.04 Million potential property tax loss	•669property acquisitions required •1,058 occupants displaced •765 employees potentially displaced •$1.09 Million potential property tax loss	•599 property acquisitions required •1,048 occupants displaced •657 employees potentially displaced •$1.03 Million potential property tax loss	•478 property acquisitions required •917 occupants displaced •604 employees potentially displaced •$1.01 Million potential property tax loss

* Cells highlighted in blue signify alternative with least impact

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APPENDIX D

ALTERNATIVE EVALUATION DETAIL MATRIX

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APPENDIX D - ALTERNATIVE EVALUATION DETAIL MATRIX
Mid County Parkway Project

CRITERIA	VALUES (METRICS)	Alternative 1A	Alternative 1B	Alternative 4	Alternative 5	Alternative 6	Alternative 7	Alternative 9
I. PURPOSE AND NEED								
1. Provide capacity for 2035	Y/N	NO	NO	YES	YES	YES	YES	YES
2. Serve regional movement of people and goods	Y/N	NO	NO	YES	YES	YES	YES	YES
3. Provide roadway geometrics to meet State Highway design standards	Y/N	NO	NO	YES	YES	YES	YES	YES
4. Provide limited access facility	Number of Access Points	More than Alternatives 4-9	More than Alternatives 4-9	17	17	21	21	14
5. Accommodate STAA trucks	Y/N	NO	NO	YES	YES	YES	YES	YES
6. Provide a facility that is compatible with a future multimodal transportation system	Y/N	NO	NO	YES	YES	YES	YES	YES
7. Provide an effective and efficient connection between and through San Jacinto, Perris, and Corona	Y/N	NO	NO	YES	YES	YES	YES	YES
II. REASONABLE AND PRACTICABLE								
1. COST								
1.1 Construction [1]	US Dollars	$0	Less than Alternatives 4-9	$2.71 Billion	$2.39 Billion	$2.77 Billion	$2.45 Billion	$ 2.36 Billion
1.2 Right-of-way Acquisition	US Dollars	$0	Less than Alternatives 4-9	$0.78 Billion	$0.85 Billion	$0.82 Billion	$0.89 Billion	$0.68 Billion
1.4 Mitigation [2]	US Dollars	$0	Less than Alternatives 4-9	$0.15 Billion	$0.15 Billion	$0.17 Billion	$0.17 Billion	$0.15 Billion
1.3 Total (Construction, Mitigation, ROW)	US Dollars	$0	Less than Alternatives 4-9	$3.64 Billion	$3.39 Billion	$3.76 Billion	$3.51 Billion	$3.19 Billion
1.5 Engineering/Design	US Dollars	$0	Less than Alternatives 4-9	$0.73 Billion	$0.68 Billion	$0.75 Billion	$0.70 Billion	$0.64 Billion
2. TECHNOLOGICAL CONSTRAINTS								
2.1 Safety (Non-Highway)	Y/N	NO	NO	NO	NO	NO	NO	NO
2.2 Engineering Issues	Y/N	NO	NO	NO	NO	NO	NO	NO
3. LOGISTICAL CONSTRAINTS								
3.1 Logistical Constraints	Y/N	NO	NO	NO	NO	NO	NO	NO
4. OTHER NEPA/404 CRITERIA								
4.1 Unacceptable Adverse Social, Economic, or Environmental Impacts	Y/N	NO	NO	NO	NO	NO	NO	NO
4.2 Serious Community Disruption	Y/N	NO	NO	NO	NO	NO	NO	NO
III. ENVIRONMENTAL								
1. WATER RESOURCES/AQUATIC ECOSYSTEM								
1.1 Jurisdictional Waters/Wetlands (Impacts to Waters of the U.S.) including vernal pools	Acreage	NO IMPACT	* 7 acres of jurisdictional wetlands * 11 acres of nonwetland waters of the United States * 18 total acres of aquatic resources	* 10.7 acres of jurisdictional wetlands (5.2 acres of permanent impacts; 5.5 acres of temporary impacts) * 14.6 acres of nonwetland waters of the United States (10.5 acres of permanent impacts; 4.1 acres of temporary impacts) * 25.2 total acres of aquatic resources	* 9.8 acres of jurisdictional wetlands (5.0 acres of permanent impacts; 4.8 acres of temporary impacts) * 13.8 acres of nonwetland waters of the United States (10.5 acres of permanent impacts; 3.4 acres of temporary impacts) * 23.7 total acres of aquatic resources	* 12.0 acres of jurisdictional wetlands (6.1 acres of permanent impacts; 5.9 acres of temporary impacts) * 16.1 acres of nonwetland waters of the United States (11.7 acres of permanent impacts; 4.4 acres of temporary impacts) * 28.2 total acres of aquatic resources	* 11.2 acres of jurisdictional wetlands (6.0 acres of permanent impacts; 5.2 acres of temporary impacts) * 15.4 acres of nonwetland waters of the United States (11.7 acres of permanent impacts; 3.7 acres of temporary impacts) * 26.6 total acres of aquatic resources	* 7.1 acres of jurisdictional wetlands (2.4 acres of permanent impacts; 4.7 acres of temporary impacts) * 12.6 acres of nonwetland waters of the United States (8.8 acres of permanent impacts; 3.8 acres of temporary impacts) * 19.6 total acres of aquatic resources
1.1A. California Department of Fish and Game Riparian Area	Acreage	NO IMPACT	* 36 acres of CDFG wetlands	* 27.8 acres of permanent impacts * 10.0 acres of temporary impacts	* 27.6 acres of permanent impacts * 8.6 acres of temporary impacts	* 36.1 acres of permanent impacts *11.9 acres of temporary impacts	* 35.9 acres of permanent impacts * 10.5 acres of temporary impacts	* 15.9 acres of permanent impacts * 8.6 acres of temporary impacts
1.2 Functions/Values Affected	Sum of normalized rank scores for all criteria for alternatives corridor alignments from ERDC Functional Assessment (lower number = higher ranking)	Not evaluated in Functional Assessment by ERDC	Not evaluated in Functional Assessment by ERDC	9.1	10.8	14.1	14.1	6.1
1.3 Consistent with SAMP goals	NO DATA CURRENTLY AVAILABLE; SAMP STILL PENDING APPROVAL	NO DATA CURRENTLY AVAILABLE; SAMP STILL PENDING APPROVAL	NO DATA CURRENTLY AVAILABLE; SAMP STILL PENDING APPROVAL	NO DATA CURRENTLY AVAILABLE; SAMP STILL PENDING APPROVAL	NO DATA CURRENTLY AVAILABLE; SAMP STILL PENDING APPROVAL	NO DATA CURRENTLY AVAILABLE; SAMP STILL PENDING APPROVAL	NO DATA CURRENTLY AVAILABLE; SAMP STILL PENDING APPROVAL	NO DATA CURRENTLY AVAILABLE; SAMP STILL PENDING APPROVAL
1.4 Floodplain Impacts	Floodplain Affected: Transverse Encroachment (TE) Longitudinal Encroachment (LE)	NO IMPACT	* Temescal Wash: TE * Cajalco Creek: TE, LE * Perris Valley Storm Drain: TE * San Jacinto River: TE, LE	* Temescal Wash: TE * Cajalco Creek: TE, LE * Perris Valley Storm Drain: TE * San Jacinto River: TE, LE	* Temescal Wash: TE * Cajalco Creek: TE, LE * San Jacinto River: TE, LE	* Temescal Wash: TE * Cajalco Creek: TE, LE * Perris Valley Storm Drain: TE * San Jacinto River: TE, LE	* Temescal Wash: TE * Cajalco Creek: TE, LE * San Jacinto River: TE, LE	* Temescal Wash: TE * Perris Valley Storm Drain: TE * San Jacinto River: TE, LE
1.5 Beneficial Uses Affected	Beneficial Use	NO IMPACT	With implementation of BMP's there will be no adverse effects to Beneficial Uses	With implementation of BMP's there will be no adverse effects to Beneficial Uses	With implementation of BMP's there will be no adverse effects to Beneficial Uses	With implementation of BMP's there will be no adverse effects to Beneficial Uses	With implementation of BMP's there will be no adverse effects to Beneficial Uses	With implementation of BMP's there will be no adverse effects to Beneficial Uses
1.6 Water Quality Construction Impacts	No. of Stream Crossings: Acres of soil distubrance	NO IMPACT	* 50 stream crossings * 1,650 acres of maximum disturbed soil	* 68 stream crossings * 2,249 acres of maximum disturbed soil	* 58 stream crossings * 2,333 acres of maximum disturbed soil	* 76 stream crossings * 2,368 acres of maximum disturbed soil	* 74 stream crossings * 2,452 acres of maximum disturbed soil	* 51 stream crossings * 2,281 acres of maximum disturbed soil
1.7 Water Quality Permanent Impacts	Acres of new pavement; Acres of steep slopes; Increase/Decrease in pollutant loads	NO IMPACT	* 688 acres of new pavement * 27.3 acres of steep slopes * Decrease annual loading with implemented BMPs	* 769 acres of new pavement * 45.9 acres of steep slopes * Decrease annual loading with implemented BMPs	* 769 acres of new pavement * 44.2 acres of steep slopes * Decrease annual loading with implemented BMPs	* 882 acres of new pavement * 55.5 acres of steep slopes * Decrease annual loading with implemented BMPs	* 882 acres of new pavement * 53.9 acres of steep slopes * Decrease annual loading with implemented BMPs	* 739 acres of new pavement * 88.7 acres of steep slopes * Least increase in copper, lead, and zinc loading with implemented BMPs. * Decrease annual loading with implemented BMPs
2. THREATENED AND ENDANGERED SPECIES								

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APPENDIX D - ALTERNATIVE EVALUATION DETAIL MATRIX
Mid County Parkway Project

CRITERIA	VALUES (METRICS)	Alternative 1A	Alternative 1B	Alternative 4	Alternative 5	Alternative 6	Alternative 7	Alternative 9
2.1 Species/Populations Affected (Wildlife)	Acreage	NO IMPACT	* 10 acres of least Bell's vireo habitat * 40.1 acres of final CAGN critical habitat * 140 acres of final QCB critical habitat (2002); 0 acres of new proposed QCB critical habitat (2008) * 0 acres of final SBKR critical habitat (2002); 0 acres new proposed SBKR critical habitat (2007) * 0 acres of occupied SBKR habitat * 4 acres of occupied LAPM habitat	* 6.1 acres of least Bell's vireo habitat * 33.5 acres of final CAGN critical habitat * 157.6 acres of final QCB critical habitat (2002); 0 acres new proposed QCB critical habitat (2008) * 2.9 acres of final SBKR critical habitat (2002); 0 acres new proposed SBKR critical habitat (2007) * 1.0 acre of occupied SBKR habitat * 40 acres of occupied LAPM habitat	* 6.1 acres of least Bell's vireo habitat * 33.5 acres of final CAGN critical habitat * 157.6 acres of final QCB critical habitat (2002); 0 acres new proposed QCB critical habitat (2008) * 2.9 acres of final SBKR critical habitat (2002); 0 acres new proposed SBKR critical habitat (2007) * 1.0 acre of occupied SBKR habitat * 40 acres of occupied LAPM habitat	* 8.5 acres of least Bell's vireo habitat * 0 acres of final CAGN critical habitat * 140.0 acres of final QCB critical habitat (2002); 0 acres new proposed QCB critical habitat (2008) * 2.9 acres of final SBKR critical habitat (2002); 0 acres new proposed SBKR critical habitat (2007) * 1.0 acre of occupied SBKR habitat * 40 acres of occupied LAPM habitat	* 8.5 acres of least Bell's vireo habitat * 0 acres of final CAGN critical habitat * 140.0 acres of final QCB critical habitat (2002); 0 acres proposed QCB critical habitat (2008) * 2.9 acres of final SBKR critical habitat (2002); 0 acres new proposed SBKR critical habitat (2007) * 1.0 acre of occupied SBKR habitat * 40 acres of occupied LAPM habitat	* 2.2 acres of least Bell's vireo habitat * 40.1 acres of final CAGN critical habitat * 327.6 acres of final QCB critical habitat (2002); 0 acres proposed QCB critical habitat (2008) * 2.9 acres of final SBKR critical habitat (2002); 0 acres proposed SBKR critical habitat (2008) * 1.0 acre of occupied SBKR habitat * 40 acres of occupied LAPM habitat
2.2 Species/Populations Affected (Plants)	Acreage	NO IMPACT	* 0.3 acre of spreading navarretia * 0.02 acre of Munz's onion (inferred presence)	* 0.77 acre of spreading navarretia * 7.6 acres of Munz's onion (inferred presence)	* 0.77 acre of spreading navarretia * 7.6 acres of Munz's onion (inferred presence)	* 0.77 acre of spreading navarretia * 0.02 acre of Munz's onion (inferred presence)	* 0.77 acre of spreading navarretia * 0.02 acre of Munz's onion (inferred presence)	* 0.77 acre of spreading navarretia * 7.6 acres of Munz's onion (inferred presence)
3. PLANT COMMUNITIES								
3.1 Sensitive Plant Communities Affected	Acreage	NO IMPACT	* 5 acres of Diegan coastal sage scrub * 310 acres of Riversidean upland sage scrub * 28 acres of peninsular juniper woodland/scrub	* 2.5 acres of Diegan coastal sage scrub * 368.4 acres of Riversidean upland sage scrub * 23.4 acres of peninsular juniper woodland/scrub	* 2.5 acres of Diegan coastal sage scrub * 365.8 acres of Riversidean upland sage scrub * 23.4 acres of peninsular juniper woodland/scrub	* 6.6 acres of Diegan coastal sage scrub * 423.0 acres of Riversidean upland sage scrub * 28.2 acres of peninsular juniper woodland/scrub	* 6.6 acres of Diegan coastal sage scrub * 420.4 acres of Riversidean upland sage scrub * 28.2 acres of peninsular juniper woodland/scrub	* 2.5 acres of Diegan coastal sage scrub * 404.6 acres of Riversidean upland sage scrub * 26.8 acres of peninsular juniper woodland/scrub
4. EFFECTS ON EXISTING HCPS								
4.1 MWD MSHCP	Acreage	NO IMPACT	399 acres impacted	255.9 acres impacted	255.9 acres impacted	389.9 acres impacted	389.9 acres impacted	0.0 acre impacted
4.2 SKR HCP AREAS	Acreage	NO IMPACT	143 additional acres impacted	159.2 additional acres impacted	159.2 additional acres impacted	141.9 additional acres impacted	141.9 additional acres impacted	168.7 additional acres impacted
4.3 El Sobrante HCP Area	Acreage	NO IMPACT	0.0 acres impacted	22.4 acres impacted	22.4 acres impacted	0.0 acre impacted	0.0 acre impacted	22.0 acres impacted
4.4 Total HCP Area	Acreage	NO IMPACT	542 acres impacted	437.5 acres impacted	437.5 acres impacted	531.8 acres impacted	531.8 acres impacted	190.7 acres impacted
5. WESTERN RIVERSIDE COUNTY MSHCP								
5.1 MSHCP Consistency Determination	Consistency Determination & Amendment Requirement	*No consistency determination required *No wildlife agency concurrence required	* Requires MSHCP consistency determination	* Requires MSHCP consistency determination * Requires wildlife agency concurrence	* Requires MSHCP consistency determination * Requires wildlife agency concurrence	* Requires MSHCP consistency determination	* Requires MSHCP consistency determination	* Requires MSHCP consistency determination * Requires wildlife agency concurrence
5.2 Conservation Goals Met	Acreage of Criteria Area Affected & Conservation Goals	0 acres of impact to MSHCP Criteria Area	525 acres of impacts to MSHCP Criteria Area	381.4 acres of impacts to MSHCP Criteria Area	406.8 acres of impacts to MSHCP Criteria Area	638.0 acres of impacts to MSHCP Criteria Area	663.4 acres of impacts to MSHCP Criteria Area	634.5 acres of impacts to MSHCP Criteria Area
5.3 Mitigation Acreage Required	Acreage	0 acres	1067 acres	818.9 acres	844.3 acres	1,169.8 acres	1,195.2 acres	825.2 acres
5.4 Mitigation Acreage Available	Y/N	N/A	YES	YES	YES	YES	YES	YES
6. SECTION 4(f) RESOURCES								
6.1 Section 4(f) Resources - direct use	Total Section 4 (f) resources, Acreage & Cultural Sites	NO IMPACT	* 540 acres of Lake Mathews-Estelle Mountain Reserve * 24.7 acres of Lake Perris State Recreation Area * RIV-816 Cultural Site * 33-13791 Cultural Site * 33-4759 Cultural Site * SRI VOL-22 Cultural Site	* 20.8 acres of the Cajalco Creek Site * 2.36 acres of El Cerrito Sports Park * 415.1 acres of Lake Mathews-Estelle Mountain Reserve * 22.4 acres of El Sobrante Landfill MSHCP Area * 5.18 acres of CA-RIV-8712 Cultural Site	* 20.8 acres of the Cajalco Creek Site * 2.36 acres of El Cerrito Sports Park * 415.1 acres of Lake Mathews-Estelle Mountain Reserve * 22.4 acres of El Sobrante Landfill MSHCP Area * 5.18 acres of CA-RIV-8712 Cultural Site	* 20.8 acres of the Cajalco Creek Site * 62.5 acres of the Cajalco Tin Mine District * 2.36 acres of El Cerrito Sports Park * 540.3 acres of Lake Mathews-Estelle Mountain Reserve * 5.18 acres of CA-RIV-8712 Cultural Site	* 20.8 acres of the Cajalco Creek Site * 62.5 acres of the Cajalco Tin Mine District * 2.36 acres of El Cerrito Sports Park * 540.3 acres of Lake Mathews-Estelle Mountain Reserve * 5.18 acres of CA-RIV-8712 Cultural Site	* 2.36 acres of El Cerrito Sports Park * 168.7 acres of Lake Mathews-Estelle Mountain Reserve * 22.0 acres of El Sobrante Landfill MSHCP Area * 8.9 acres of Paragon Park * 5.18 acres of CA-RIV-8712 Cultural Site
6.2 Section 4(f) Resources - constructive use	Number of Section 4(f) resources	None	None	None	None	None	None	None
7. SECTION 6(f) LANDS								
7.1 Section 6(f) Lands Affected	Acreage	0.0 acre	0.0 acre	0.0 acre	0.0 acre	0.0 acre	0.0 acre	0.0 acre
8. CULTURAL RESOURCES (includes sites not eligible for National Register)								
8.1 Prehistoric archaeological resources	Number of Sites	0 sites	12 sites	10 sites	10 sites	15 sites	15 sites	54 sites
8.2 Historic archaeological/architectural resources	Number of Sites	0 sites	7 sites	6 sites	2 sites	9 sites	5 sites	8 sites
8.3 Sacred Sites	Number of Sites	0 sites	2 sites	2 sites	2 sites	2 sites	2 sites	1 site
9. LAND USE IMPACTS								
9.1 Business/Residential Access Impacts	Ranking 1-6 (1 Least Impact, 6 Worst Impact)	N/A	1	3	5	4	6	2
9.2 Consistency with General Plan Land Use Element								
9.2A. Cities of San Jacinto, Perris, & Corona	Inconsistencies	NONE	NONE	* City of Corona Policy 1.12.1 conflict for impact to designated commercial and industrial land uses. * Inconsistent with designated roadways and land uses for the City of Perris General Plan because does not follow original CETAP alignment. * Amendments to San Jacinto General Plan required to reflect either San Jacinto North or San Jacinto South alignment at east end of MCP.	* City of Corona Policy 1.12.1 conflict for impact to designated commercial and industrial land uses. * Inconsistent with designated roadways and land uses for the City of Perris General Plan because does not follow original CETAP alignment. * Amendments to San Jacinto General Plan required to reflect either San Jacinto North or San Jacinto South alignment at east end of MCP.	* City of Corona Policy 1.12.1 conflict for impact to designated commercial and industrial land uses. * Inconsistent with designated roadways and land uses for the City of Perris General Plan because does not follow original CETAP alignment. * Amendments to San Jacinto General Plan required to reflect either San Jacinto North or San Jacinto South alignment at east end of MCP.	* City of Corona Policy 1.12.1 conflict for impact to designated commercial and industrial land uses. * Inconsistent with designated roadways and land uses for the City of Perris General Plan because does not follow original CETAP alignment. * Amendments to San Jacinto General Plan required to reflect either San Jacinto North or San Jacinto South alignment at east end of MCP.	* City of Corona Policy 1.12.1 conflict for impact to designated commercial and industrial land uses. * Inconsistent with designated roadways and land uses for the City of Perris General Plan focused along Placentia Avenue. * Amendments to San Jacinto General Plan required to reflect either San Jacinto North or San Jacinto South alignment at east end of MCP.

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APPENDIX D - ALTERNATIVE EVALUATION DETAIL MATRIX
Mid County Parkway Project

CRITERIA	VALUES (METRICS)	Alternative 1A	Alternative 1B	Alternative 4	Alternative 5	Alternative 6	Alternative 7	Alternative 9
9.2B. County of Riverside	Inconsistencies	* Would not provide transportation capacity to support General Plan Land Uses	NONE	* Inconsistent with Riverside County General Plan Circulation Element for proposed portion south of Lake Mathews. * Inconsistent with Land Use Policies LU16.2, 16.4, and 17.3, which protect agricultural lands. * Inconsistent with Land Use Policy MVAP 1.1 of Mead Valley Area Plan for lot maintenance size. ROW acquisitions will reduce lot size below standard.	* Inconsistent with Riverside County General Plan Circulation Element for proposed portion south of Lake Mathews. * Inconsistent with Land Use Policies LU16.2, 16.4, and 17.3, which protect agricultural lands. * Inconsistent with Land Use Policy MVAP 1.1 of Mead Valley Area Plan for lot maintenance size. ROW acquisitions will reduce lot size below standard.	* Inconsistent with Land Use Policies LU16.2, 16.4, and 17.3, which protect agricultural lands. * Inconsistent with Land Use Policy MVAP 1.1 of Mead Valley Area Plan for lot maintenance size. ROW acquisitions will reduce lot size below standard.	* Inconsistent with Land Use Policies LU16.2, 16.4, and 17.3, which protect agricultural lands. * Inconsistent with Land Use Policy MVAP 1.1 of Mead Valley Area Plan for lot maintenance size. ROW acquisitions will reduce lot size below standard.	* Inconsistent with Mead Valley and Lake Mathews/Woodcrest Area Plans for areas designated for very low density and rural residential uses. * Inconsistent with Land Use Policy LMW AP 5.1 of Lake Mathews/Woodcrest Area Plan which maintains established agricultural activities. * Inconsistent with Land Use Policies LU16.2, 16.4, and 17.3, which protect agricultural lands.
9.3 Farmland Impacts	Acreage	NO IMPACT	Prime Farmland 58.23 acres, Farmland of State Importance 51.18 acres, Unique Farmland 28.62 acres, Farmland of Local Importance 136.52 acres, & Grazing Land 5.04 acres. **(Total: 279.59 acres)**	Prime Farmland 219.1 acres, Farmland of State Importance 160.7 acres, Unique Farmland 121.8 acres, Farmland of Local Importance 456.9 acres, & Grazing Land 8.3 acres. **(Total: 966.8 acres)**	Prime Farmland 244.4 acres, Farmland of State Importance 140.8 acres, Unique Farmland 128.5 acres, Farmland of Local Importance 393.4 acres, & Grazing Land 8.3 acres. **(Total: 915.3 acres)**	Prime Farmland 221.6 acres, Farmland of State Importance 162.7 acres, Unique Farmland 132.2 acres, Farmland of Local Importance 526.4 acres, & Grazing Land 9.2 acres. **(Total: 1,052.2 acres)**	Prime Farmland 246.9 acres, Farmland of State Importance 142.8 acres, Unique Farmland 138.9 acres, Farmland of Local Importance 462.8 acres, & Grazing Land 9.2 acres. **(Total: 1,000.6 acres)**	Prime Farmland 192.3 acres, Farmland of State Importance 151.8 acres, Unique Farmland 115.2 acres, Farmland of Local Importance 354.6 acres, & Grazing Land 8.3 acres. **(Total: 822.2 acres)**
10. SOCIOECONOMIC/COMMUNITY IMPACTS								
10.1 Business Displacements	Property acquisitions & employees displaced	NO IMPACT	Less than Alternatives 4-9	* 292 non-residential property acquisitions * 730 employees potentially displaced	* 268 non-residential property acquisitions * 623 employees potentially displaced	* 333 non-residential property acquisitions * 765 employees potentially displaced	* 309 non-residential property acquisitions * 657 employees potentially displaced	* 210 non-residential property acquisitions * 604 employees potentially displaced
10.2 Residential Displacements	Property acquisitions & occupants displaced	NO IMPACT	Less than Alternatives 4-9	* 351 residential property acquisitions * 1,232 occupants displaced	* 305 residential property acquisitions * 1,066 occupants displaced	* 336 residential property acquisitions * 1,058 occupants displaced	* 290 residential property acquisitions * 1,048 occupants displaced	* 268 residential property acquisitions * 917 occupants displaced
10.3 Travel Pattern Disruptions	Ranking 1-6 (1 Least Impact, 6 Worst Impact)	N/A	1	3	5	4	6	2
10.4 Environmental Justice Concerns	Impacts to minority/low-income populations	NO IMPACT	Impacts to low income/minority populations are more than Alt 9 but less than Alt 4-7.	Greater direct impacts to low income/minority populations.	Greater direct impacts to low income/minority populations.	Greater direct impacts to low income/minority populations.	Greater direct impacts to low income/minority populations.	Lower direct impacts to low income/minority populations.
10.5 Community Service Disruptions (EMS, fire, police)	Property acquisitions	NO IMPACT	NO IMPACT	* Partial property acquisition directly impacting Temescal Public Safety Facility (City of Corona).	* Partial property acquisition directly impacting Temescal Public Safety Facility (City of Corona).	* Partial property acquisition directly impacting Temescal Public Safety Facility (City of Corona).	* Partial property acquisition directly impacting Temescal Public Safety Facility (City of Corona).	* Partial property acquisition directly impacting Temescal Public Safety Facility (City of Corona). * Full property acquisition directly impacting Fire Station No. 90 and Police Substation (City of Perris).
10.6 Neighborhood/Community Impacts	Y/N	NO	NO	Yes	Yes	Yes	Yes	Yes
10.7 Schools	Direct Impacts	No direct impact to schools.	No direct impact to schools.	Direct impact to portable classrooms of Val Verde High School and Val Verde Unified School District Administrative and Facilities Operation Building (City of Perris).	Direct impact to portable classrooms of Val Verde High School and Val Verde Unified School District Administrative and Facilities Operation Building (City of Perris).	Direct impact to portable classrooms of Val Verde High School and Val Verde Unified School District Administrative and Facilities Operation Building (City of Perris).	Direct impact to portable classrooms of Val Verde High School and Val Verde Unified School District Administrative and Facilities Operation Building (City of Perris).	No direct impact to schools.
10.8 Support by local jurisdictions, community groups, and public	Support/Opposition	To be determined after public circulation of EIR/EIS	To be determined after public circulation of EIR/EIS	To be determined after public circulation of EIR/EIS	To be determined after public circulation of EIR/EIS	To be determined after public circulation of EIR/EIS	To be determined after public circulation of EIR/EIS	To be determined after public circulation of EIR/EIS
11. AIR QUALITY IMPACTS								
11.1 Criteria Pollutant Emissions in the MCP Region	Tons/Day	* 53.41 tons/day of CO * 2.79 tons/day of ROG * 15.48 tons/day of NOx * 0.06 tons/day of SOx * 0.72 tons/day of PM10	* 19.37 tons/day of CO * 0.92 tons/day of ROG * 4.61 tons/day of NOx * 0.10 tons/day of SOx * 0.99 tons/day of PM10	* 19.90 tons/day of CO * 0.94 tons/day of ROG * 4.76 tons/day of NOx * 0.10 tons/day of SOx * 1.02 tons/day of PM10	* 19.77 tons/day of CO * 0.94 tons/day of ROG * 4.72 tons/day of NOx * 0.10 tons/day of SOx * 1.02 tons/day of PM10	* 19.84 tons/day of CO * 0.94 tons/day of ROG * 4.74 tons/day of NOx * 0.10 tons/day of SOx * 1.02 tons/day of PM10	* 19.84 tons/day of CO * 0.94 tons/day of ROG * 4.74 tons/day of NOx * 0.10 tons/day of SOx * 1.02 tons/day of PM10	* 19.86 tons/day of CO * 0.94 tons/day of ROG * 4.75 tons/day of NOx * 0.10 tons/day of SOx * 1.02 tons/day of PM10
11.2 Exceedances of NAAQS Emission Standards	Y/N	N/A-baseline	N/A-baseline	NO	NO	NO	NO	NO
12. NOISE IMPACTS								
12.1 Sensitive Receptors Affected	Number of Modeled Receptors Affected	NO IMPACT	Less than Alternatives 4-9	88	85	81	79	65
12.2 Amount of Mitigation Required	Number and Length of Sound Barriers	NO IMPACT	Less than Alternatives 4-9	18 Sound Barriers 15,181 m	17 Sound Barriers 14,329 m	17 Sound Barriers 14,916 m	16 Sound Barriers 14,064 m	13 Sound Barriers 8,760 m

[1] Construction cost includes mitigation costs for each alternative

[2] Environmental Mitigation Costs include cost to purchase acreage for mitigation and combined wildlife crossing culverts

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APPENDIX E

ANALYSIS OF MCP ALTERNATIVE CORRIDORS ALIGNMENT IMPACTS

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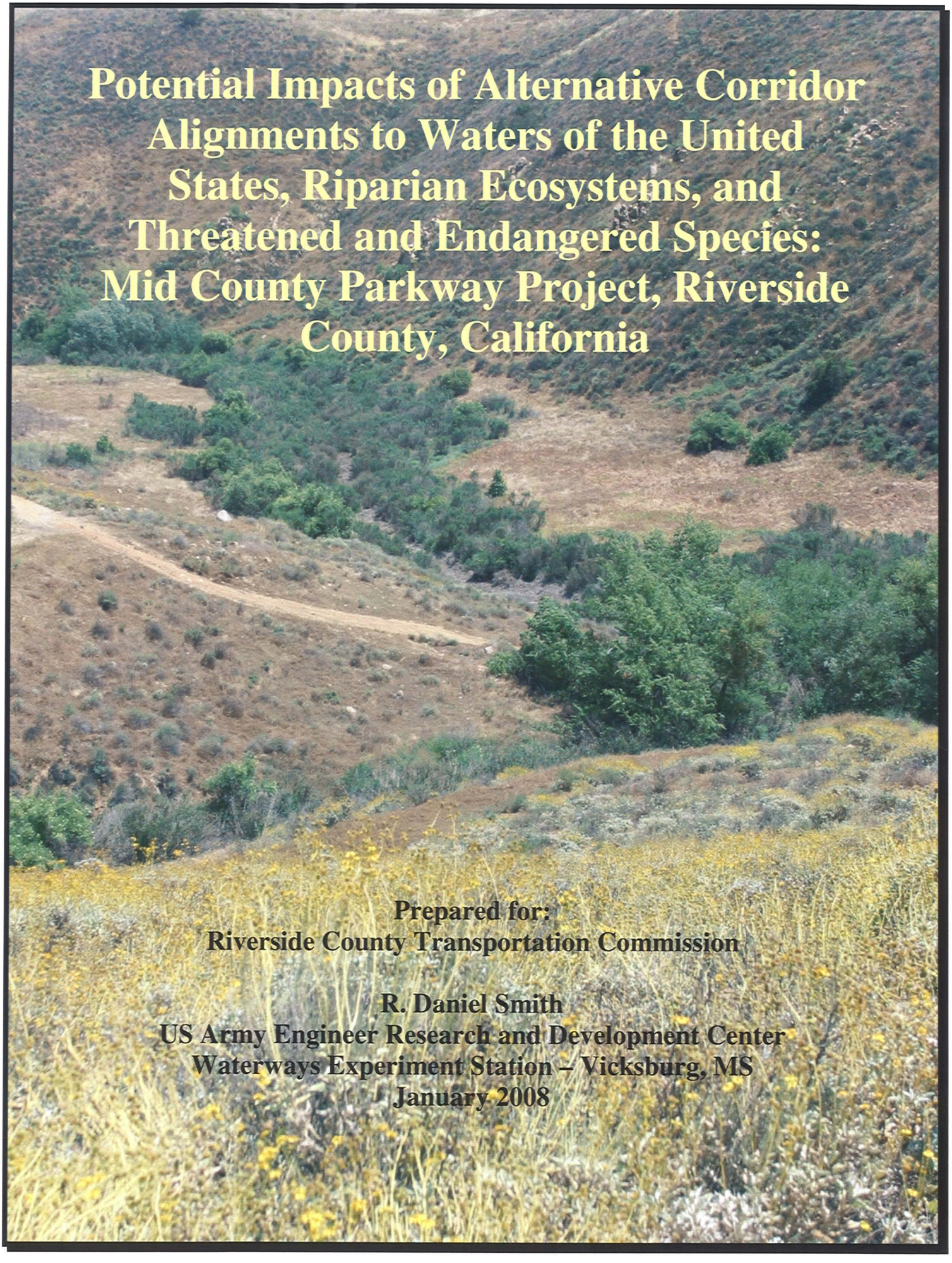

Potential Impacts of Alternative Corridor Alignments to Waters of the United States, Riparian Ecosystems, and Threatened and Endangered Species: Mid County Parkway Project, Riverside County, California

Prepared for:
Riverside County Transportation Commission

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Executive Summary

The Federal Highway Administration is preparing a Draft Environmental Impact Statement for the Mid County Parkway Project (MCPP). In conjunction with this effort, the Riverside County Transportation Commission is preparing a Draft Environmental Impact Report (EIR) for the MCPP. Seven alternative corridor alignments, including a No Action/No Build Alternative, are currently under consideration for the MCPP. The objective of this technical study was to analyze and compare the potential direct and indirect impacts of the alternative corridor alignments on Waters of the United States (WoUS) and riparian ecosystems, with consideration given to direct effects on several federally protected critical habitat threatened, endangered, and other sensitive wildlife species. The results of this study will be integrated into the Draft EIS/EIR and considered during the final decision-making process for the MCPP.

In order to accomplish the objective Waters of the United States were identified and riparian ecosystems were assessed in the areas potentially impacted by the proposed corridor alignments. Waters of the United States were identified using a planning-level delineation approach that adapts the methods outlined in the Corps of Engineers Wetlands Delineation Manual to a watershed scale. Riparian ecosystem integrity was assessed by identifying "riparian reach" assessment units and then assessing each riparian reach using a suite of hydrologic, water quality, and habitat integrity indicators that represented physical, chemical and biological characteristics and processes of riparian ecosystems at three spatial scales: the riparian reach proper, uplands adjacent to the riparian reach, and the drainage basin of the riparian reach. Indicator metrics related to land use / land cover, vegetation communities, hydrology, sediment, and disturbance factors were measured in the field using ground data collection methods supplemented with aerial photography. Selected indicators were combined in hydrologic, water quality, and habitat integrity indices for each riparian reach.

Fifteen assessment criteria were used to evaluate the potential impacts of each alternative corridor alignment. The criteria included:

Criterion 1: Non-wetland waters stream channels directly impacted
Criterion 2: Main stem and tributary stream channels directly impacted
Criterion 3: Riparian ecosystems directly impacted
Criterion 4: Aquatic resources directly impacted

Criterion 5a: Critical habitat of California gnatcatcher directly impacted

Criterion 5b: Critical habitat of Quino Checkerspot butterfly directly impacted

Criterion 5c: Critical habitat of Stephen's kangaroo rat directly impacted

Criterion 5d: Multi-Species Habitat Conservation Plan (MSHCP) areas directly impacted

Criterion 6: Areas of observed habitat for selected threatened, endangered, and sensitive species directly impacted

Criterion 7a: Change in the quantity of hydrologic integrity units in riparian ecosystems directly impacted

Criterion 7b: Change in the quantity of water quality integrity units in riparian ecosystems directly impacted

Criterion 7c: Change in the quantity of habitat integrity units in riparian ecosystems directly impacted

Criterion 8a: Change in quantity of hydrologic integrity units in riparian ecosystems directly and indirectly impacted

Criterion 8b: Change in quantity of water quality integrity units in riparian ecosystems directly and indirectly impacted

Criterion 8c: Change in quantity of habitat integrity units in riparian ecosystems directly and indirectly impacted

Potential direct and indirect impacts of alternative corridor alignments on hydrologic, water quality, and habitat integrity of riparian ecosystems were assessed by simulating the changes that could be expected to occur as a result of implementing each alternative corridor alignment, and then comparing the simulated assessment results (i.e., post-project) to baseline assessment results (i.e., pre-project) in terms of the assessment criteria listed above. Results were summarized for each alternative corridor alignment in terms of the assessment, and compared to other alternative alignment corridors using tables and graphs.

The results of this analysis indicated that, in terms of assessment criteria related to aquatic resources and riparian ecosystems, alternative corridor alignments 6 and 7 had the greatest potential impact, alternative corridor alignments 4 and 5 had the second greatest potential impact, and alternative corridor alignments 9 and 9-I15 had the least potential impacts. For these criteria, the level of potential impact generally correlated with the size of the permanent impact footprint associated with each alternative corridor alignment (i.e., larger permanent impact footprint equals greater impacts). Anomalies in this general trend (e.g., Criterion 1 non-wetland waters) were due to factors related to topographic variation, historical distribution of

disturbance/alteration, naturally unequal distribution of riparian ecosystems, disproportionate lateral extent of riparian ecosystem in association with different size stream channels, and the specific location of an alternative corridor alignment. Overall, the potential impact of all alternative corridor alignments to riparian ecosystems was minimal given the relatively large size of the permanent impact footprint associated the alternative corridor alignments. This was attributed to the strategic placement of alternative corridor alignments to largely avoid riparian ecosystems.

With respect to the assessment criteria related to threatened, endangered, and sensitive species, alternative corridor alignments 6 and 7 had the greatest potential impact, alternative corridor alignments 9 and 9-I15 had the second greatest potential impact, and alternative corridor alignments 4 and 5 had the least potential impact, but only slightly less that alternative corridor alignments 9 and 9-I15. For Criterion 5a (California gnatcatcher) and Criterion 5c (Stephen's kangaroo rat) the level of potential impact correlated with the size of the permanent impact footprint of each alternative corridor alignment. For these criteria, the critical habitat was relatively equally distributed across the alternative corridor alignment locations. However, for Criterion 5b (Quino Checkerspot butterfly), Criterion 5d (Multi-Species Habitat Conservation Plan areas), and Criterion 6 (Observed Habitat for Threatened, Endangered, and Sensitive Species) the distribution of critical habitat was relatively unequally distributed across the alternative corridor alignment locations. Consequently, for these criteria, alternative corridor alignments with largest permanent impact footprint did not necessarily have the greatest potential impact.

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1.0 Introduction

The Federal Highway Administration is preparing a Draft Environmental Impact Statement (SDEIS) for the Mid County Parkway Project (MCPP). In conjunction with this effort, the Riverside County Transportation Commission (RCTC) is preparing a Draft Environmental Impact Report (EIR) for the MCPP. The study described in this document was conducted in support of the Draft EIS/EIR.

Seven alternative corridor alignments, including a No Action/ alternative, are currently under consideration for the MCPP. A composite of the alternative corridor alignment locations is shown in Figure 1. Individual alternative alignment locations are shown in Figures 3-8. The names used to identify the alternative corridor alignments throughout this report are listed below. Detailed descriptions of the alternative corridor alignments are available from the RCTC.

Alternative 4
Alternative 5
Alternative 6
Alternative 7
Alternative 9
Alternative 9-I15
No Action/No Build Alternative

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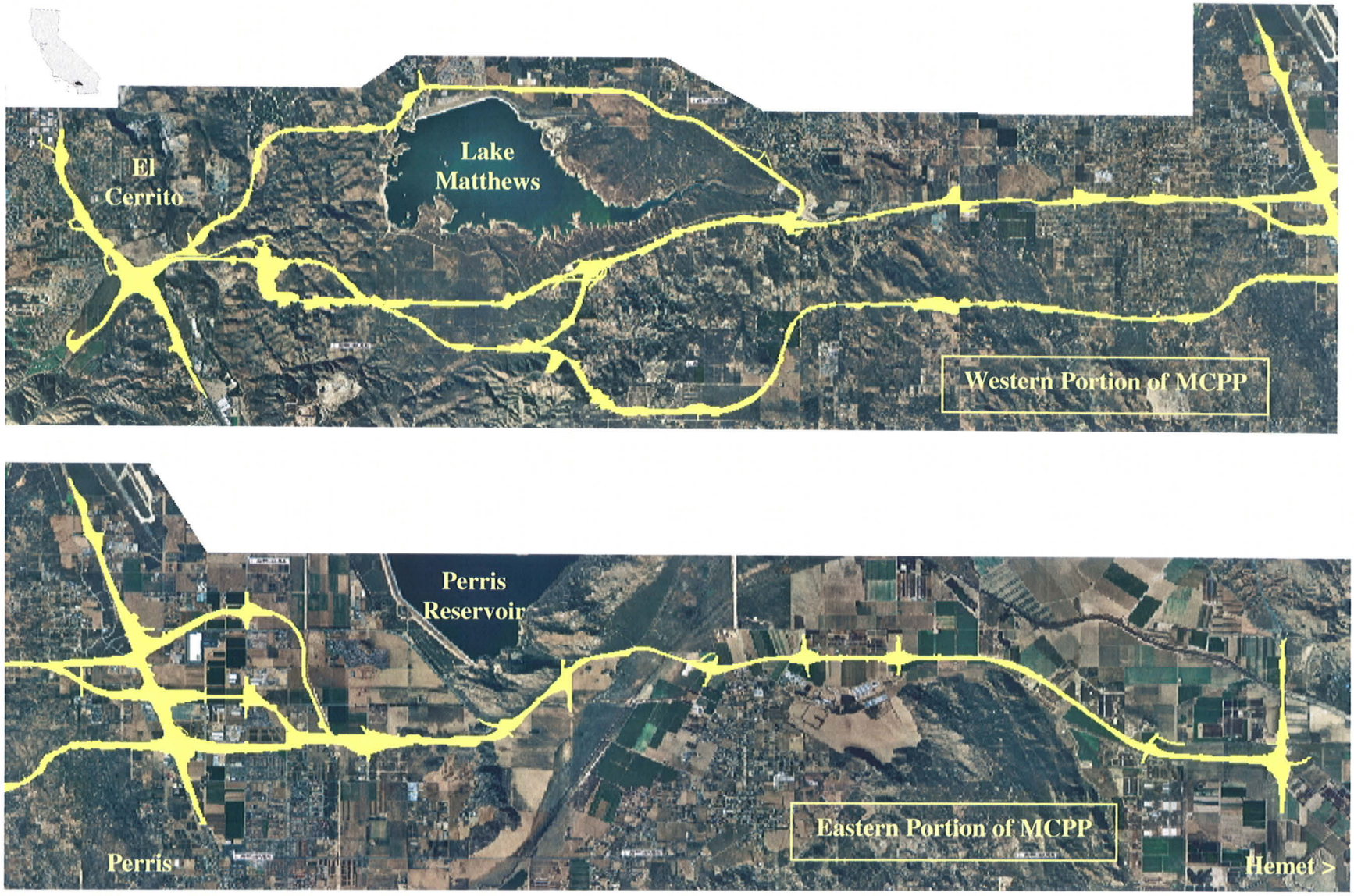

Figure 1. Composite of the alternative corridor alignments for the Mid County Parkway Project

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2.0 Objective

The objective of this study was to qualitatively and quantitatively assess and compare potential direct and indirect impacts of the proposed MCPP alternative corridor alignments on Waters of the United States (WoUS) and riparian ecosystems, with consideration given to direct effects on several federally protected critical habitat threatened, endangered, and other sensitive wildlife species. Fifteen assessment criteria were used to assess the potential impact of the alternative corridors alignments. The fifteen criteria are listed below and described in detail in Section 4.2.

Criterion 1: Non-wetland waters stream channels directly impacted

Criterion 2: Main stem and tributary stream channels directly impacted

Criterion 3: Riparian ecosystems directly impacted

Criterion 4: Aquatic resources directly impacted

Criterion 5a: Critical habitat of California gnatcatcher directly impacted

Criterion 5b: Critical habitat of Quino Checkerspot butterfly directly impacted

Criterion 5c: Critical habitat of Stephen's kangaroo rat directly impacted

Criterion 5d: Multi-Species Habitat Conservation Plan (MSHCP) areas directly impacted

Criterion 6: Areas of observed habitat for selected threatened, endangered, and sensitive species directly impacted

Criterion 7a: Change in the quantity of hydrologic integrity units in riparian ecosystems directly impacted

Criterion 7b: Change in the quantity of water quality integrity units in riparian ecosystems directly impacted

Criterion 7c: Change in the quantity of habitat integrity units in riparian ecosystems directly impacted

Criterion 8a: Change in quantity of hydrologic integrity units in riparian ecosystems directly and indirectly impacted

Criterion 8b: Change in quantity of water quality integrity units in riparian ecosystems directly and indirectly impacted

Criterion 8c: Change in quantity of habitat integrity units in riparian ecosystems directly and indirectly impacted

Waters of the United States were identified and riparian ecosystem integrity was assessed in several studies completed in the Santa Ana River and San Jacinto watersheds (Lichvar et al. 2003, Lichvar and Ericsson 2004, Smith 2003, and Smith 2006). In these studies

WoUs were identified using a planning-level delineation approach that adapts methods outlined in the Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory 1987) and 33 CFR 328 to a watershed scale (Lichvar et al. 2003). The approach provides a high quality map of jurisdictional wetlands and WoUS, suitable for project planning purposes.

Riparian ecosystem integrity was assessed by first identifying "riparian reach" assessment units and then assessing each riparian reach using a suite of hydrologic, water quality, and habitat integrity indicators (Smith 2003, 2006). Riparian reaches were defined as a segment of the main stem, bankfull stream channel and the adjacent riparian ecosystem exhibiting relatively homogenous characteristics with respect to geology, geomorphology, channel morphology, substrate type, vegetation communities, and cultural alteration. Riparian ecosystem integrity in each riparian reach was assessed using a suite of indicators related to the physical, chemical and biological condition of riparian ecosystems at three spatial scales: the riparian reach proper, uplands adjacent to the riparian reach, and the drainage basin of the riparian reach. Multi-indicators related to land use / land cover, vegetation communities, hydrology, sediment, and disturbance factors were used. Indicator metrics were measured in the field using ground data collection methods supplemented with aerial photography. Indicator metrics were scaled to a culturally unaltered "reference condition", and selected indicators were then combined into hydrology, water quality, and habitat integrity indices for each riparian reach.

3.0 Background, Definitions, and Assumptions

3.1 Riparian Ecosystems

Riparian ecosystems are linear corridors of variable width that occur along perennial, intermittent, and ephemeral streams (Williams 1978). Perennial streams flow through the whole year in response to surface and/or ground water inflows. Intermittent streams flow periodically or seasonally in response to surface and/or groundwater inflows. Ephemeral streams flow less frequently, typically in response to surface water inflows resulting from discrete precipitation events.

Three primary characteristics distinguish riparian ecosystems. One is the hydrologic interaction that occurs between the stream channel and adjacent areas through the periodic exchanges of surface and ground water between the stream channel and the adjacent riparian areas. The second characteristic relates to the distinct geomorphic features that result from the hydrologic interaction such as floodplains, point bars, and terraces (Figure 2). The third characteristic relates to the distinctive vegetation communities that develop in response to the hydrologic interaction (Richards 1982, Harris 1987, Kovalchik and Chitwood 1990, Gregory et al. 1991, Malanson 1993, and Goodwin et al. 1997).

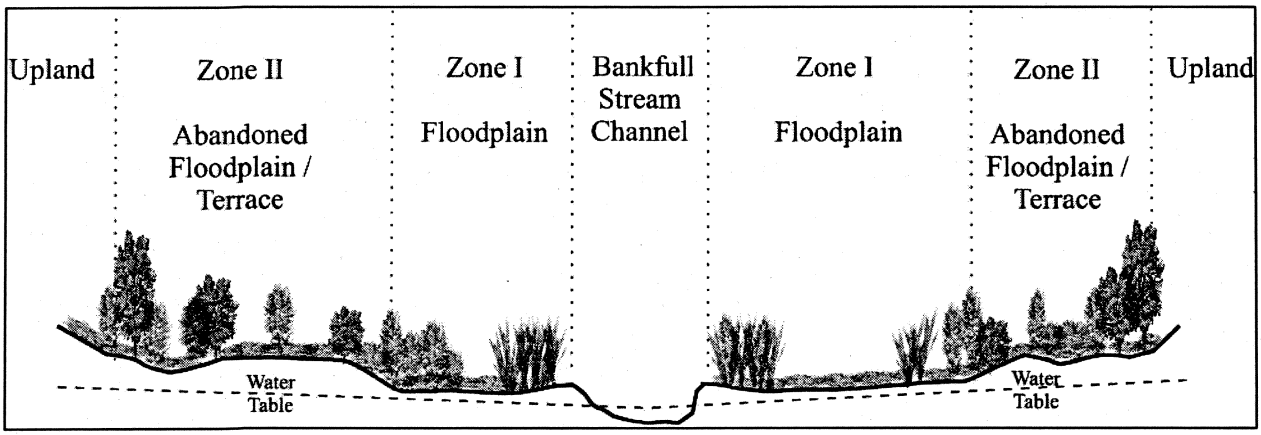

Figure 2. Generalized cross section of a riparian ecosystem

The hydrologic interaction between streams and adjacent riparian areas typically results in two distinct zones, although either zone may be narrow and seemingly absent under certain geologic or geomorphic conditions. The first zone, the active floodplain, includes the areas that are inundated by overbank flooding on average at least once every five years (Figure 2). This

zone exhibits the geomorphic features associated with recurring overbank flooding such as point bars, areas of scour and sediment accumulation, natural levees, debris wrack, and vegetation communities that are either short lived or adapted to the effects of frequent flooding.

The second zone consists of abandoned floodplains and historical terraces formed by fluvial processes that took place under a historical, and often different, climatic condition or hydrologic regime (Knox et al. 1975, Graf et al. 1991, Rumsby and Macklin 1994) (Figure 2). Under current climatic conditions and hydrologic regimes these areas are infrequently flooded during large magnitude events (Dunn and Leopold 1978). Vegetation communities in this zone are generally composed of woody perennials that often depend on the higher water tables present in the riparian ecosystem.

For this project, riparian ecosystems were defined from a functional perspective as the areas along perennial, intermittent, and ephemeral streams where the interaction with surface and groundwater results in distinctive geomorphic features and vegetation communities. Under natural circumstances, the riparian ecosystem includes the bank full stream channel, active floodplain (Zone 1), and less frequently flooded, historical floodplains/terraces (Zone II).

3.2 Waters of the United States Versus Functional Riparian Ecosystems

Waters of the United States (WoUS) are the areas subject to regulation under Section 404 of the Clean Water Act (33 CFR Part 328.3). Wetlands are a special aquatic site and a subset of WoUS, and therefore, throughout this report, the term WoUS includes wetlands. Two categories of WoUS occur in association with southern California riparian ecosystems. The first category, non-wetland or "other" waters, are the areas along perennial, intermittent, and ephemeral stream channels that exhibit a distinct bed and bank, but fail to meet one or more of the hydrologic, hydrophytic vegetation, and hydric soils criteria outlined in the Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory 1987). The second category is wetlands which includes the areas that meet the hydrologic, hydrophytic vegetation, and hydric soils criteria.

It is important to recognize that "functional" riparian ecosystems, as defined above, have no special recognition, meaning, or status in the context of the 404 Program. While functional riparian ecosystems normally include all WoUS regulated under the 404 Program and California Department of Fish and Game (CDFG) 1600 Program, the functional riparian ecosystem may include areas that fall outside the jurisdiction of one or both of these programs. Consequently, a

one-to-one spatial correspondence between riparian ecosystems and WoUS in the watershed may be absent. The lack of spatial correspondence between jurisdictional wetlands and functional riparian ecosystems is common in the arid southwestern United States, where the active floodplain or historical terrace portion of the riparian ecosystem often meets one or two of the delineation criteria, but fails to meet all three delineation criteria necessary to qualify as a regulated wetland.

The spatial inconsistency between WoUS and riparian ecosystems is a result of the relatively generic hydrologic, hydrophytic vegetation, and hydric soil delineation criteria developed under the 404 Program for use in the wide variety of wetland types that occur in the United States. These generic delineation criteria necessarily ignore the unique way in which specific characteristics and processes contribute to the creation and maintenance of riparian as well as other functional wetland ecosystems. The intra- and inter-regional insensitivity of the generic delineation criteria is widely recognized and the development of "regionalized" versions of the Corps of Engineers Wetland Delineation Manual is underway (Wakeley 2002, USACE 2006).

The spatial inconsistency is problematic in the context of the mandate to assess functions of WoUS as part of the 404 permit review process. Clearly, an assessment cannot be accomplished by considering only the characteristics and processes of WoUS proper. This is because the functions of WoUS are influenced by characteristics and processes taking place in the riparian ecosystem, the upland areas adjacent to the riparian ecosystem, and the drainage basin of the riparian ecosystem (Kratz et al. 1991, Hornbeck and Swank 1992, Bedford 1996).

A solution for meeting this challenge was outlined as part of the Hydrogeomorphic (HGM) Approach (Smith et al. 1995). In this approach, characteristics and processes of functional ecosystems, as well as the adjacent upland areas and the drainage basin are considered during the assessment process. However, when applying the results of the assessment in the context of the 404 permit review process, the results are applied only to WoUS. This project used a similar approach in that the influence of the riparian ecosystem, adjacent uplands, and drainage basin were considered in assessing riparian ecosystem integrity. Consequently, when applying the results of the assessment, consistency with policies and assumptions of the 404 permit review process, consultation under Section 7 of the Endangered Species Act, or the California Department of Fish and Game 1600 Program must be taken into account.

4.0 Methods

All of the methods used to identify WoUS and assess riparian ecosystem integrity were developed during previous studies in the San Jacinto watershed project (Lichvar et al., 2003, Lichvar and Ericsson 2004, Smith 2003, and Smith 2006). Reports from these studies are available from the US Army Corps of Engineers, Los Angeles District Regulatory Division. Methods from these previous studies are not repeated here. Rather, reference is made to these studies throughout this report where appropriate. Methods unique to this study are described below.

4.1 Preparation of Geographical Information System Themes

In order to assess potential direct and indirect impacts of alternative transportation corridor alignments several polygon and vector themes were developed using the ArcMap® geographical information system (GIS). These themes are described in the following sections. Polygon and vector GIS files for each of the themes are described in Appendix 1 and included on the CD accompanying this report.

4.1.1 Alternative Corridor Alignment Rights-of-Way

This set of polygon themes represented the right-of-way footprint of each alternative corridor alignments (Figures 3-8). These polygon files were provided by LSA Associates, Inc. (Point of Contact: Rob McCann). For all of the assessments completed for this study, only the "permanent" impact category polygons were included because of the difficulty of assessing the potential impacts of temporary impacts. For all of the alternative corridor alignments, polygons in the permanent impact category accounted for at least 93% of all impact polygons.

4.1.2 Main Stem and Tributary Stream Channels

This vector theme represents the main stem stream channel of each riparian reach and tributary stream channels that connect directly to the main stem stream channel of each riparian reach (Figure 9). Main stem and tributary streams are based on the blue lines shown on United States Geological Survey (USGS) 7.5 Minute Quadrangles. The theme includes coverage of the San Jacinto watershed and additional areas necessary to analyze the MCPP alternative corridor alignments watershed (Smith 2003, 2006). This theme was digitized using digital raster graphic (DRG) images and aerial photographic images (US AirPhoto February 2002) as a background.

Figure 3. Alternative 4 corridor alignment location

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Figure 4. Alternative 5 corridor alignment location

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Figure 5. Alternative 6 corridor alignment location

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Figure 6. Alternative 7 corridor alignment location

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Figure 7. Alternative 9 corridor alignment location

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Figure 8. Alternative 9-I15 corridor alignment location

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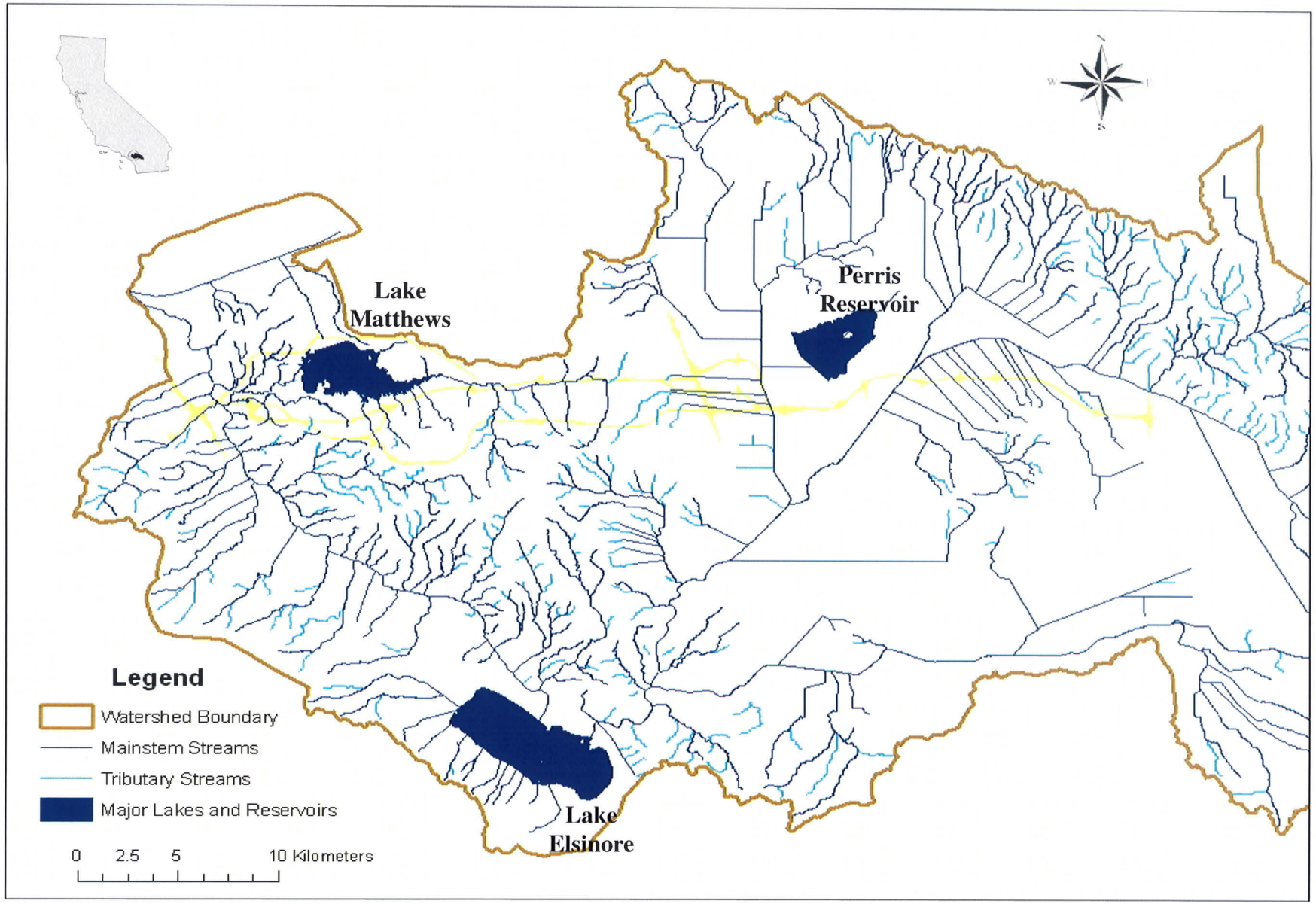

Figure 9. Main stem and tributary stream channels in the MCPP project area

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4.1.3 Non-Wetland Waters Stream Channels

This vector theme includes non-wetland waters stream channel (Figure 10). The theme includes coverage of the San Jacinto watershed and additional areas necessary to analyze the current MCPP alternative corridor alignments (Lichvar et al. 2003, Lichvar and Ericsson 2004). This theme was digitized using DRG images and aerial photographic images (US AirPhoto February 2002) as a background.

4.1.4 Aquatic Resources

This polygon theme includes aquatic resources (wetlands and WoUS) in the San Jacinto watershed and additional areas necessary to analyze the MCPP alternative corridor alignments (Lichvar et al. 2003, Lichvar and Ericsson 2004) (Figure 11). Aquatic resources were identified using a high precision, planning-level delineation approach, which is a modification of the sampling methods outlined in the Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory 1987) and 33 CFR 328, applied at a watershed scale. Lichvar et al. (2003) contains a complete description of methods used to identify aquatic resources.

4.1.5 Riparian Ecosystems

This polygon theme includes riparian ecosystems associated with the main stem stream channels of each riparian reach (Figure 12). The theme was created by removing non-riparian ecosystem polygons from the aquatic resources theme. Removed polygons generally included open water areas, isolated wetlands, and other areas not associated with a main stem stream channel of a riparian reach.

4.1.6 Threatened, Endangered, and Sensitive Species Habitats

This set of polygon themes identified the location of critical and important habitats for selected species. Two types of information were used. The first was critical habitat maps developed by the Fish and Wildlife Service for the California gnatcatcher (Figure 13), Quino Checkerspot butterfly (Figure 14), and Stephen's kangaroo rat (Figure 15) (65 FR 63679-63743 October 24, 2000).

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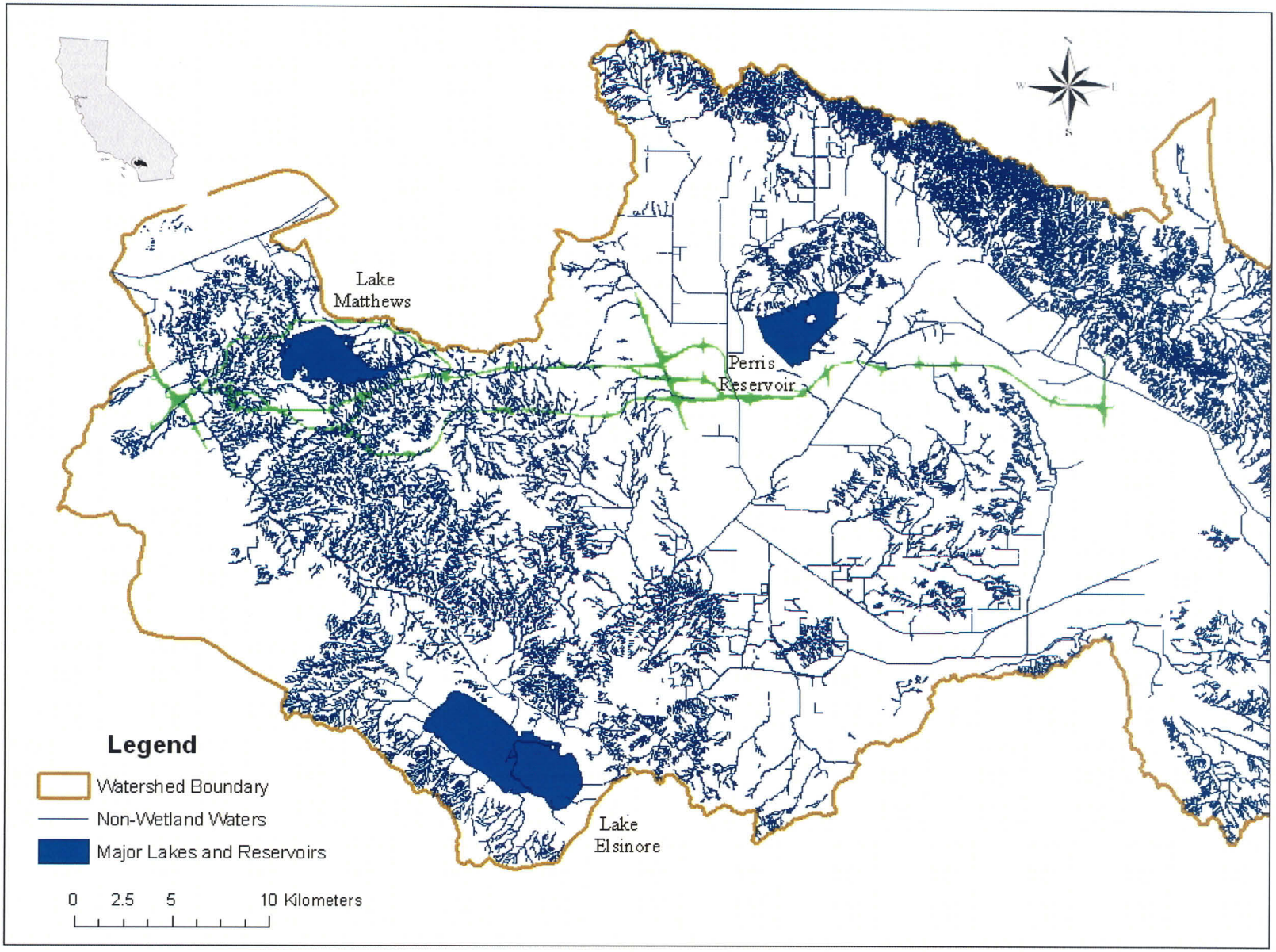

Figure 10. Non-wetland waters stream channels in the MCPP project area

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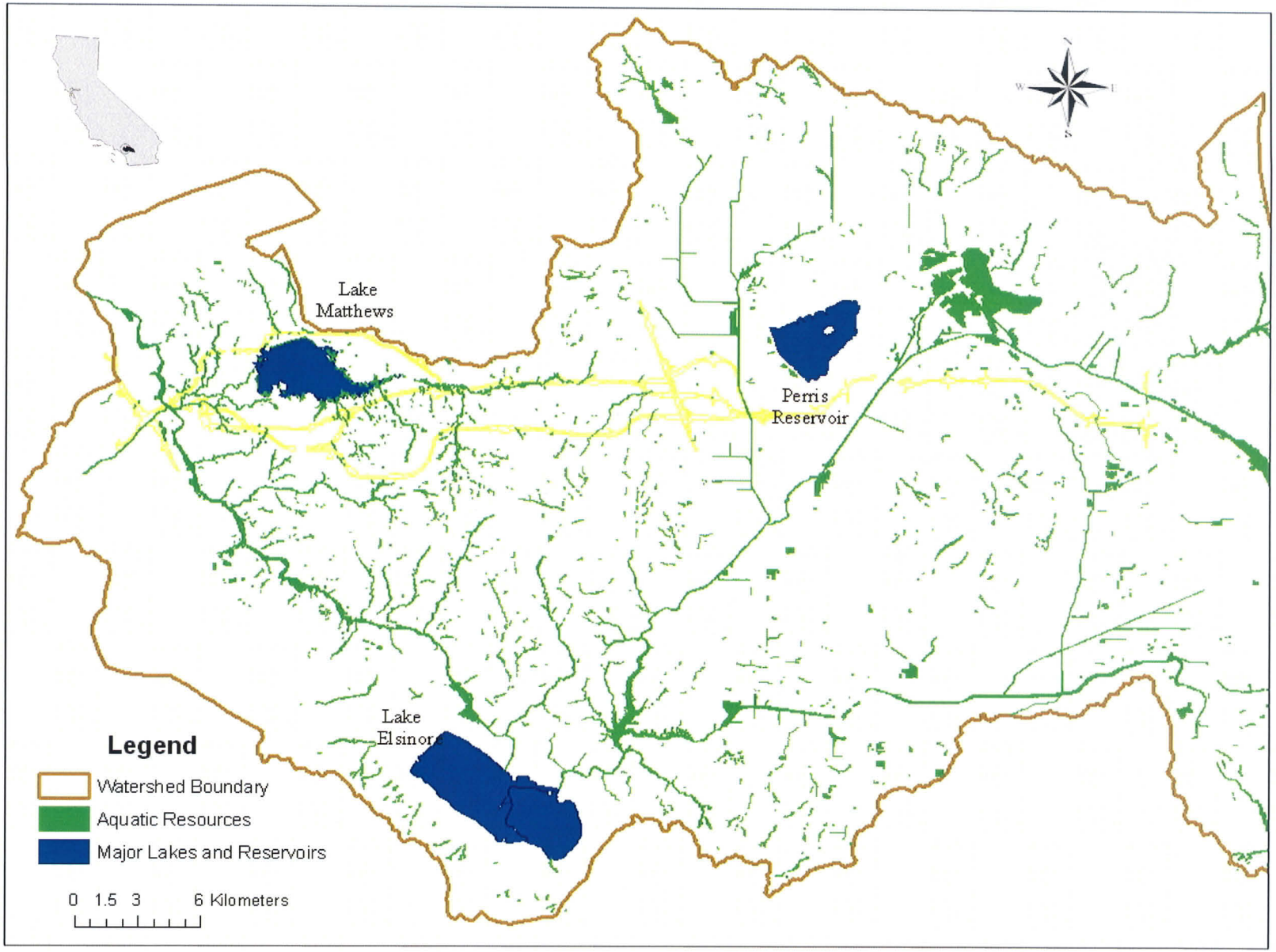

Figure 11. Aquatic resources in the MCPP project area

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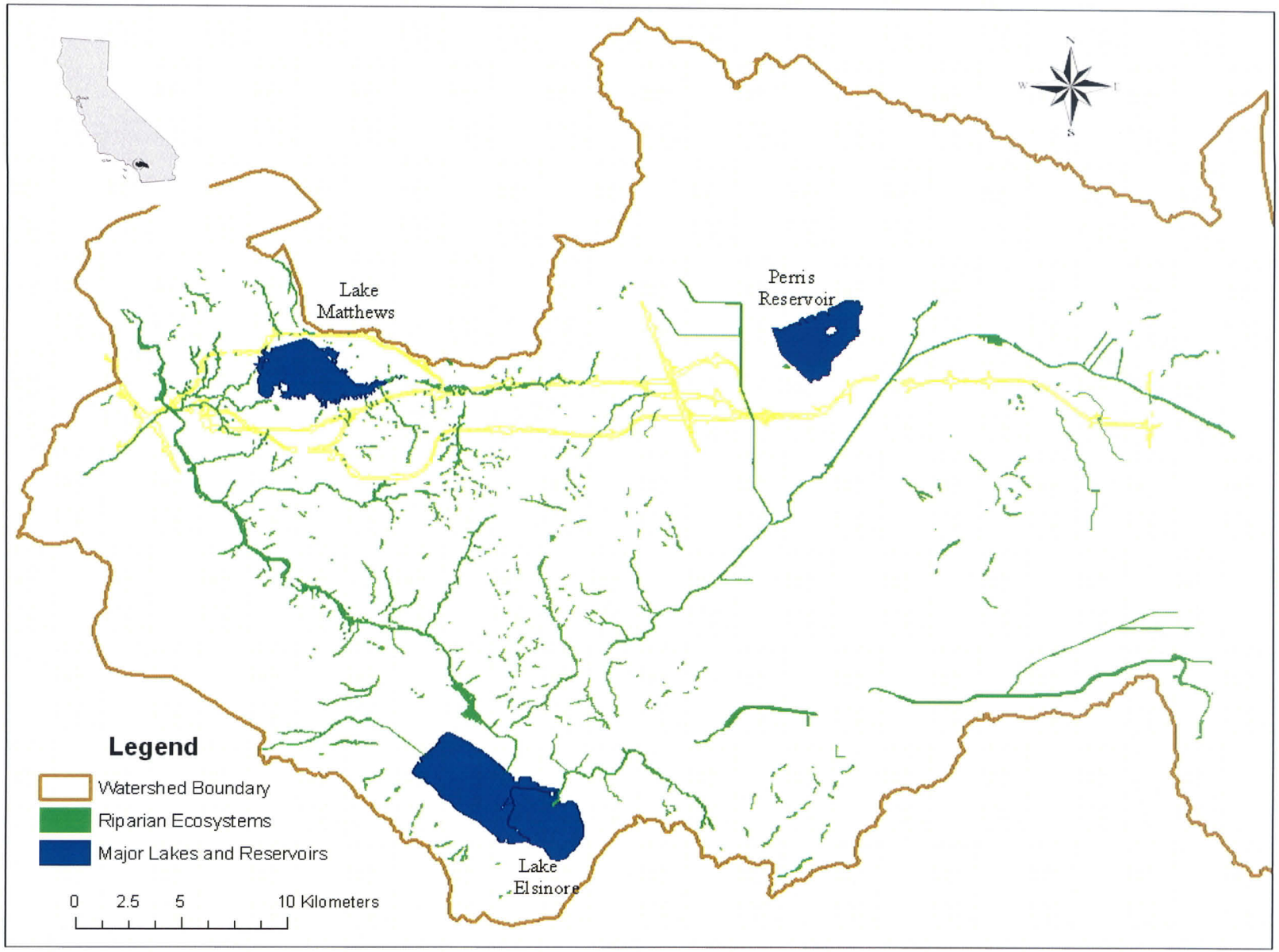

Figure 12. Riparian ecosystems in the MCPP project area

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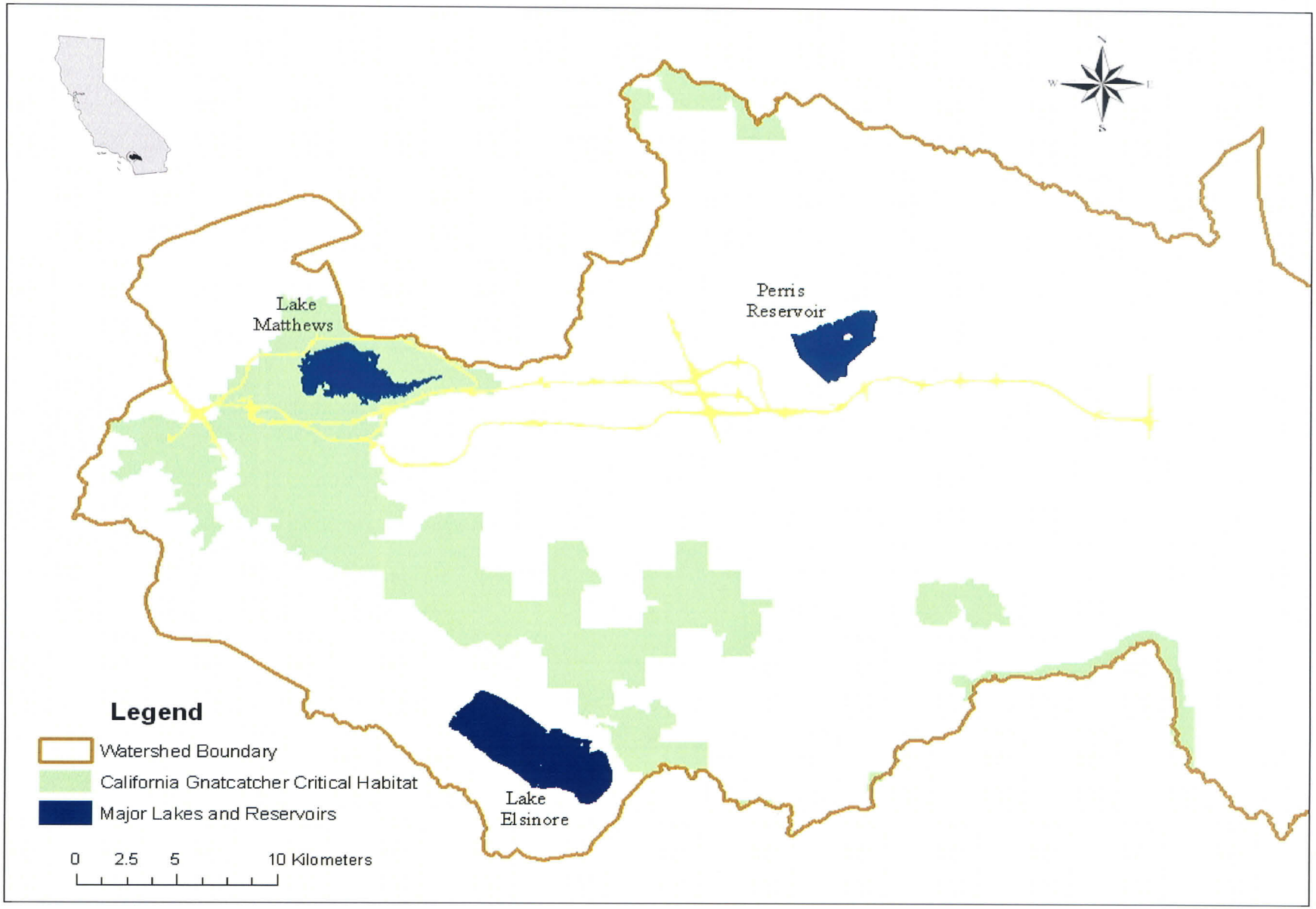

Figure 13. California gnatcatcher critical habitat in the MCPP project area

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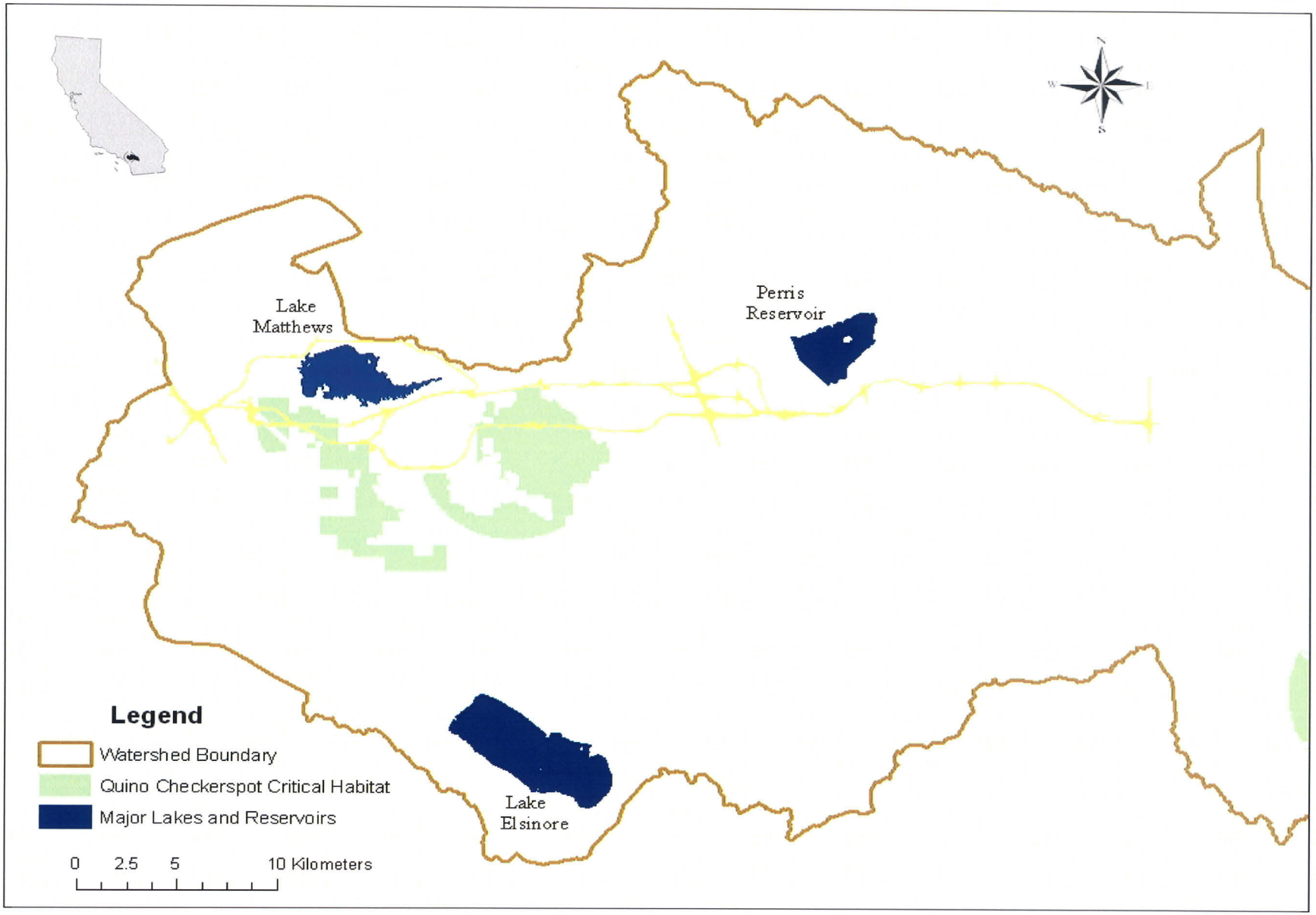

Figure 14. Quino Checkerspot butterfly critical habitat in the MCPP project area

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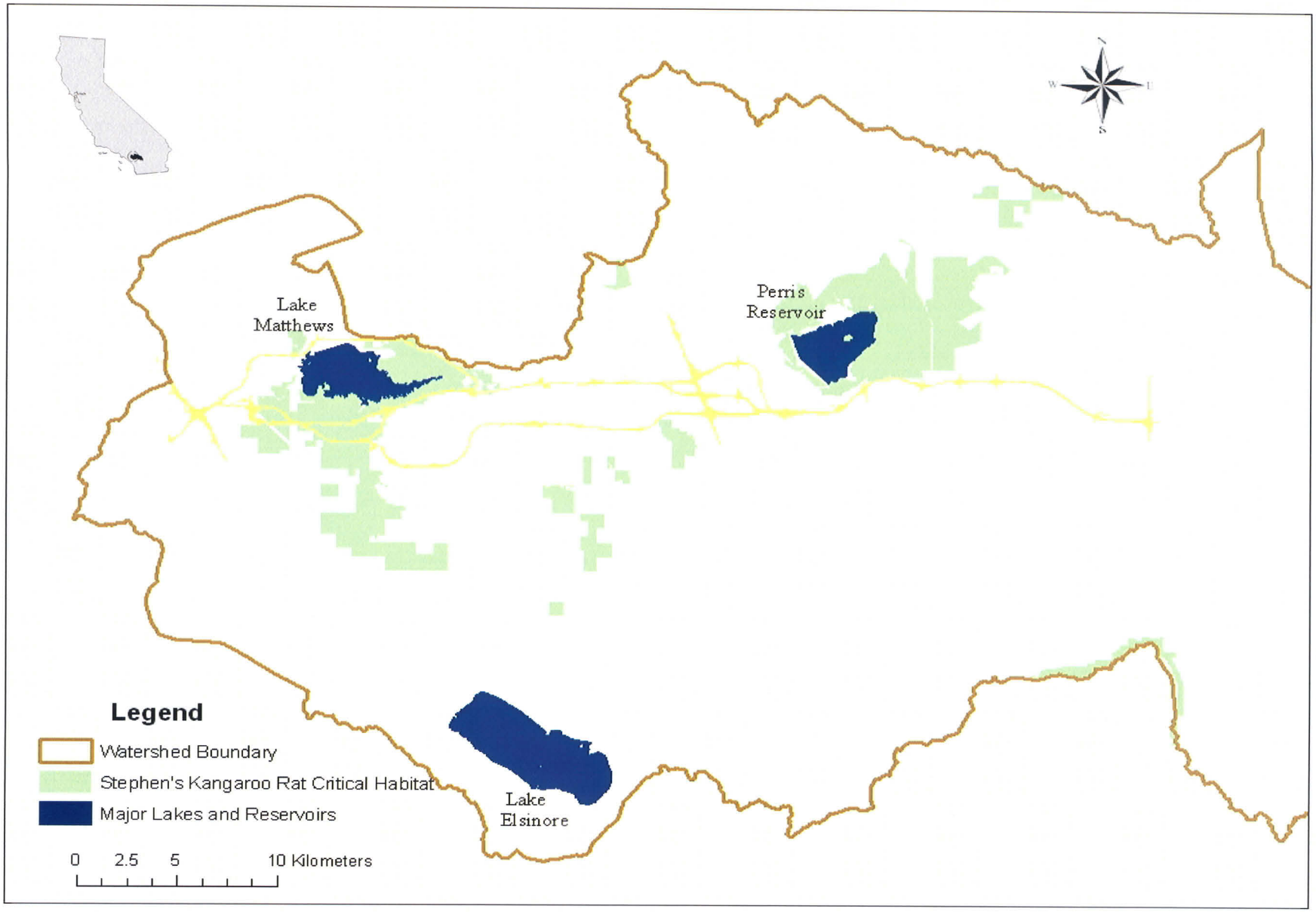

Figure 15. Stephen's kangaroo rat critical habitat in the MCPP project area

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The second type of data was the Multi-Species Habitat Conservation Plan (MSHCP) area map (Figure 16). Shape files for the MSHCP were provided by the RCTC (Point of Contact: Cathy Bechtel).

4.1.7 Observed Habitat Locations of Threatened, Endangered, and Sensitive Species

This polygon theme was based on observation points for a variety of threatened, endangered, and sensitive species (Figure 17). This information was also provided by the RCTC (Point of Contact: Cathy Bechtel). For this analysis, it was assumed that each data point represented a verified observation of an individual animal or plant. Polygon themes were created by buffering each observation point with a 164-ft radius circle that resulted in a polygon of slightly less than 2 acres around each observation point.

4.2 Criteria for Assessing the Potential Impact of Alternative Corridor Alignments

Fifteen criteria were used to assess the potential impact of alternative corridor alignments on WoUS, riparian ecosystems, and threatened, endangered, and sensitive species. The fifteen criteria are listed and described below.

Criterion 1: Non-wetland waters stream channels directly impacted

Criterion 2: Main stem and tributary stream channels directly impacted

Criterion 3: Riparian ecosystems directly impacted

Criterion 4: Aquatic resources directly impacted

Criterion 5a: Critical habitat of California gnatcatcher directly impacted

Criterion 5b: Critical habitat of Quino Checkerspot butterfly directly impacted

Criterion 5c: Critical habitat of Stephen's kangaroo rat directly impacted

Criterion 5d: Multi-Species Habitat Conservation Plan (MSHCP) areas directly impacted

Criterion 6: Areas of observed habitat for selected threatened, endangered, and sensitive species directly impacted

Criterion 7a: Change in the quantity of hydrologic integrity units in riparian ecosystems directly impacted

Criterion 7b: Change in the quantity of water quality integrity units in riparian ecosystems directly impacted

Criterion 7c: Change in the quantity of habitat integrity units in riparian ecosystems directly impacted

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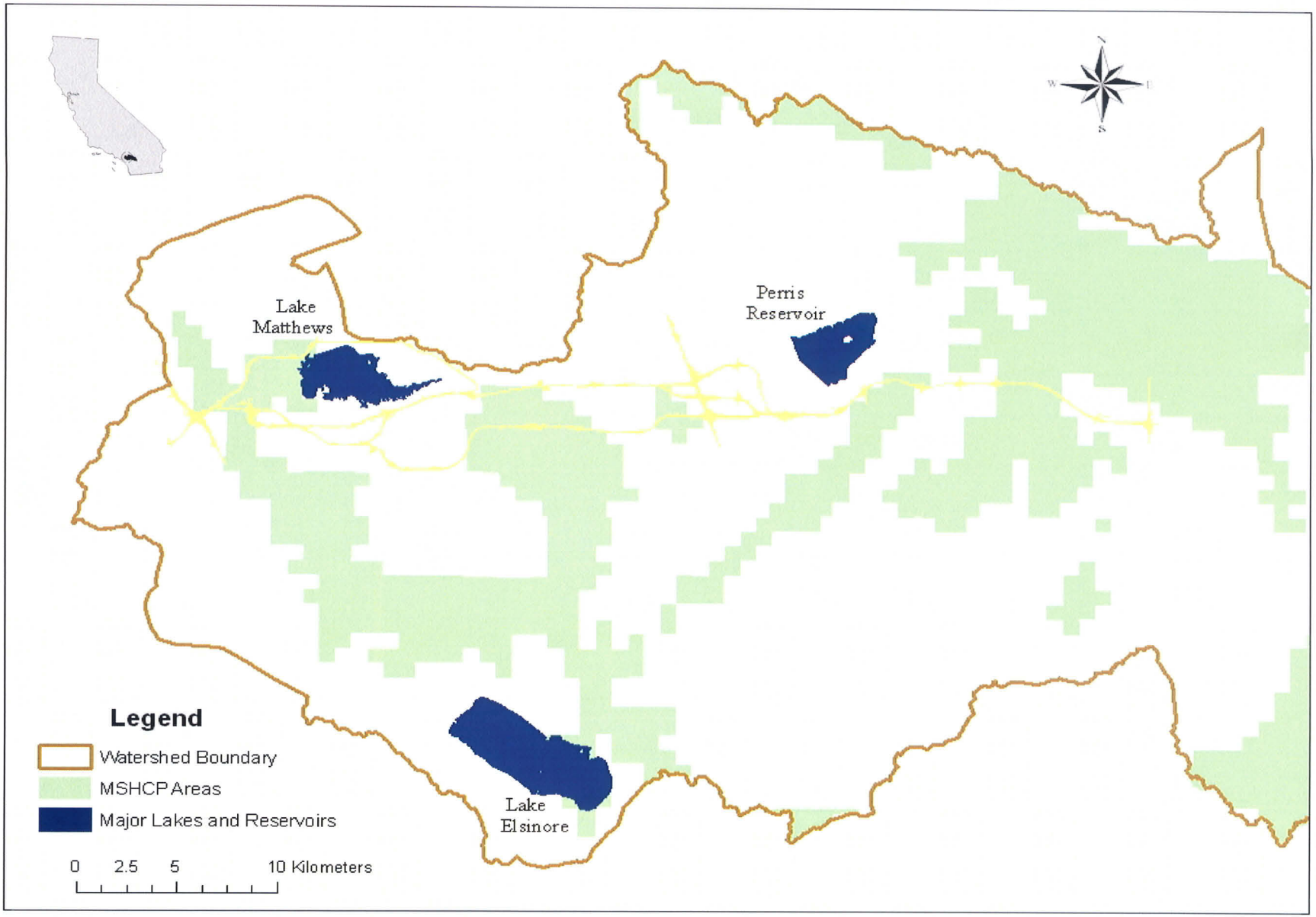

Figure 16. Multi-Species Habitat Conservation Plan area in the MCPP project area

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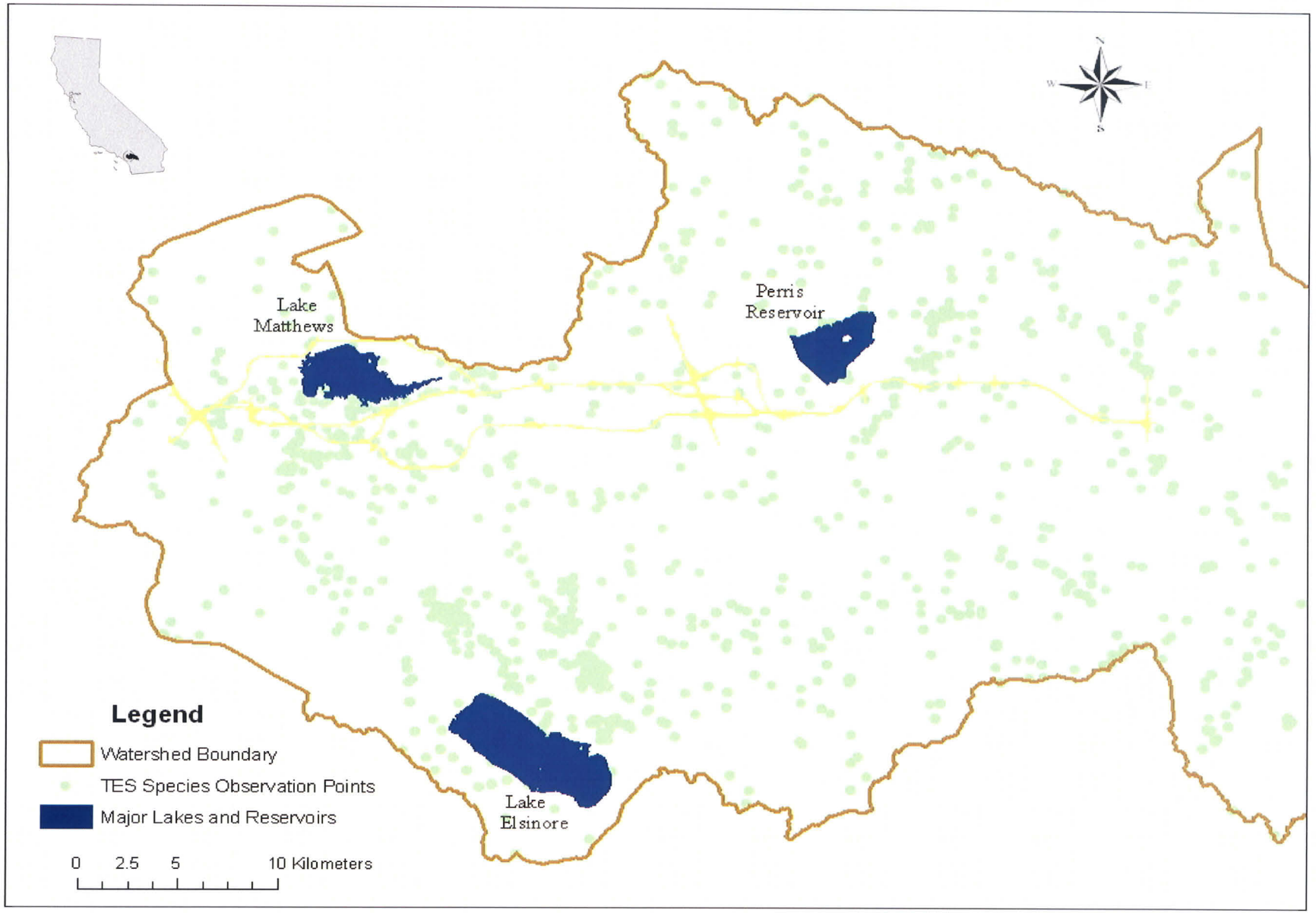

Figure 17. Observation points for threatened, endangered, and sensitive species in the MCPP project area

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Criterion 8a: Change in quantity of hydrologic integrity units in riparian ecosystems directly and indirectly impacted

Criterion 8b: Change in quantity of water quality integrity units in riparian ecosystems directly and indirectly impacted

Criterion 8c: Change in quantity of habitat integrity units in riparian ecosystems directly and indirectly impacted

The fifteen criteria represent several different ways to assess the potential impact of the alternative corridor alignments. Criteria 1-6 quantitatively assess the potential impacts of alternative corridor alignments on non-wetland waters and main stem and tributary stream channels in terms of miles; and on aquatic resources, riparian ecosystems, and designated critical habitat or potentially important habitat of threatened, endangered, or sensitive species in terms of acres. These comparisons are useful, but necessarily ignore "qualitative" differences that exist in each of the criteria. For example, when assessing potential impacts to non-wetland waters (Criterion 1) no distinction is made to account for differences in the "quality" or degree of disturbance/alteration of the non-wetland waters being impacted. In other words, a highly altered, 200 foot segment of non-wetland waters, and an undisturbed, 200 foot segment of non-wetland waters, are treated equally. Similarly, aquatic resources, riparian ecosystems, and areas of critical habitat are treated equally regardless of their "quality" or degree of disturbance/alteration.

Criteria 7 and 8 take a different approach that assesses potential impacts in terms of both a quantity and quality. The hydrologic, water quality, and habitat integrity indices of a riparian reach represent the quality of riparian ecosystems in a riparian reach, while the quantity of riparian ecosystem in a riparian reach is represented by the extent (i e., acres) of riparian ecosystem in a riparian reach. Integrity units are calculated by multiplying the hydrologic, water quality, and habitat integrity indices of a riparian reach by the acres of riparian ecosystem in a riparian reach. This provides an integrated measure of riparian ecosystem quality and quantity in a riparian reach (Smith 2003, 2006).

4.2.1 Criterion 1: Non-wetland Waters Stream Channels Directly Impacted

Criterion 1 assessed the potential of each alternative corridor alignment to directly impact non-wetland water stream channels. The metric used to evaluate this criterion was miles of stream channel directly impacted. The metric was calculated by clipping the non-wetland waters

vector theme with the permanent impact category polygons of the alternative corridor alignments right-of-way polygon theme.

4.2.2 Criterion 2: Main Stem and Tributary Stream Channels Directly Impacted

Criterion 2 assessed the potential of each alternative corridor alignment to directly impact main stem stream channels and topographic blue line tributary stream channels. The metric used to evaluate this criterion was miles of stream channel directly impacted. This metric was calculated by clipping the main stem and tributary stream channels vector theme with the permanent impact category polygons of the alternative corridor alignments right-of-way polygon theme.

4.2.3 Criterion 3: Riparian Ecosystems Directly Impacted

Criterion 3 assessed the potential of each alternative corridor alignment to directly impact riparian ecosystems. The metric used to evaluate this criterion was acres of riparian ecosystem directly impacted. This metric was calculated by clipping the riparian ecosystems polygon theme with the permanent impact category polygons of the alternative corridor alignments right-of-way polygon theme.

4.2.4 Criterion 4: Aquatic Resources Directly Impacted

Criterion 4 assessed the potential of each alternative corridor alignment to directly impact aquatic resources. This criterion differs from Criterion 3 in that it included all aquatic resources and not just riparian ecosystems. The metric used to evaluate this criterion was acres of aquatic resources directly impacted. This metric was calculated by clipping the aquatic resources polygon theme with the permanent impact category polygons of the alternative corridor alignments right-of-way polygon theme.

4.2.5 Criteria 5a-d: Critical Habitat of Threatened, Endangered, and Sensitive Species Directly Impacted

Criteria 5a-d assessed the potential of each alternative corridor alignment to directly impact critical habitat of the California gnatcatcher, Quino Checkerspot butterfly, and Stephen's kangaroo, and the MSHCP areas. The metric used to evaluate this criterion was the acres of California gnatcatcher, Quino Checkerspot butterfly, and Stephen's kangaroo critical habitat, and the MSHCP areas directly impacted. The analysis was done by clipping California gnatcatcher,

Quino Checkerspot butterfly, Stephen's kangaroo critical habitat, and MSHCP area polygon themes with the permanent impact category polygons of the alternative corridor alignments right-of-way polygon theme.

4.2.6 Criterion 6: Areas of Observed Habitat for Selected Threatened, Endangered, and Sensitive Species Directly Impacted

Criteria 6 assessed the potential for each alternative corridor alignment to directly impact habitat areas of observed habitat for selected threatened, endangered, or sensitive species. The metric used to evaluate this criterion was acres of habitat directly impacted for selected threatened, endangered, or sensitive species. The analysis was done by first buffering each observation point with a 164-ft radius circle. That resulted in a buffered area slightly less than 2 acres around each observation point. The buffered habitat areas of observed habitat for selected threatened, endangered, or sensitive species polygon theme was then with clipped with the permanent impact category polygons of the alternative corridor alignments right-of-way polygon theme.

4.2.7 Criteria 7a-c: Change in the Quantity of Hydrologic, Water Quality, and Habitat Integrity Units for Riparian Reaches Directly Impacted

Criteria 7a-c assessed the potential for each alternative corridor alignment to directly impact hydrologic, water quality, and habitat integrity of riparian ecosystems in each riparian reach. The metric used to evaluate these criteria was integrity units (i.e., integrity index multiplied by acres of riparian ecosystem). The analysis was done by clipping the riparian ecosystem theme with the permanent impact portion of the alternative corridor alignments right-of-way polygon theme, and then multiplying the resulting number of acres of riparian ecosystem in the riparian reach by the habitat, water quality, and habitat integrity indices for the riparian reach.

It should be noted that Criteria 7a-c and Criterion 3 are not the same. In the case of Criterion 3, the quantity (acres) of riparian ecosystems directly impacted in a riparian reach is the metric used to assess the impact, while in Criteria 7a-c the quantity and quality (integrity units) of riparian ecosystems directly impacted in a riparian reach is the metric used to assess the potential impact. The assessment of these two criteria may result in different normalized rank scores (see Sections 5.1 and 5.2) for alternative corridor alignments because, even though the acres of riparian ecosystem directly impacted are the same for both criteria, the multiplier (i.e.,

the integrity index) often varies for different riparian reaches resulting in different quantities of integrity units and thus different normalized rank scores.

4.2.8 Criteria 8a-c: Change in the Quantity of Hydrologic, Water Quality, and Habitat Integrity Units for Riparian Reaches with Direct and Indirect Impacts

Criteria 8a-c assessed the potential for each alternative corridor alignment to impact hydrologic, water quality, and habitat integrity of riparian ecosystems in riparian reaches impacted both directly and indirectly. The metric used to evaluate these criteria was integrity units. Change in value of indicator metrics resulting from potential direct and indirect impacts of a alternative corridor alignment was simulated by overlaying the permanent impact portion of the alternative corridor alignments right-of-way polygon theme on the baseline conditions maps and aerial photographs in ArcMap® and determining whether, as a result of potential impacts associated with a alternative corridor alignment, the value of an indicator metric would change. For example, if an alternative corridor right-of-way polygon directly impacted riparian ecosystems in a riparian reach, the metric value of several indicators including Improved Hydraulic Conveyance, Floodplain Interaction, Vegetation Condition, and Riparian Corridor Connectivity had the potential to change. In addition, even if the alternative corridor right-of-way polygon only impacted the local drainage or drainage basin of a riparian reach, several indicators related to Land Use / Land Cover at the buffer, local drainage, and drainage basin spatial scales could be expected to change. Based on the expected changes to indicator metric values, "simulated" integrity indices and "simulated" integrity units were recalculated for directly and indirectly impacted riparian reaches. The change in hydrologic, water quality, and habitat integrity units between baseline and simulated conditions was determined for each alternative by subtracting the baseline integrity units from the simulated integrity units for directly impacted riparian reaches, and then multiplying the acres of riparian ecosystem in the riparian reach by the habitat, water quality, and habitat integrity indices for each riparian reach.

5.0 Results and Discussion

5.1 Criteria for Assessing Potential Direct and Indirect Impacts

5.1.1 Criterion 1: Non-wetland Waters Stream Channels Directly Impacted

Results from the assessment of Criterion 1 are shown in Table 1 and Figure 18. In the table, Column 2 indicates the total acreage of the permanent impact category polygons in acres, Column 3 indicates the miles of non-wetland waters stream channel directly impacted, and Column 4 indicates the normalized rank score.

Table 1. Criterion 1: Non-wetland waters stream channels directly impacted

Corridor Alternative	Acres of Permanent Impact Category Polygons	Miles of Non-Wetland Waters Stream Channels Impacted	Normalized Rank Score
4	2605	14.3	0.7
5	2527	15.3	0.8
6	3090	18.6	1.0
7	3012	19.5	1.0
9	2454	16.9	0.9
9-I15	2410	16.9	0.9

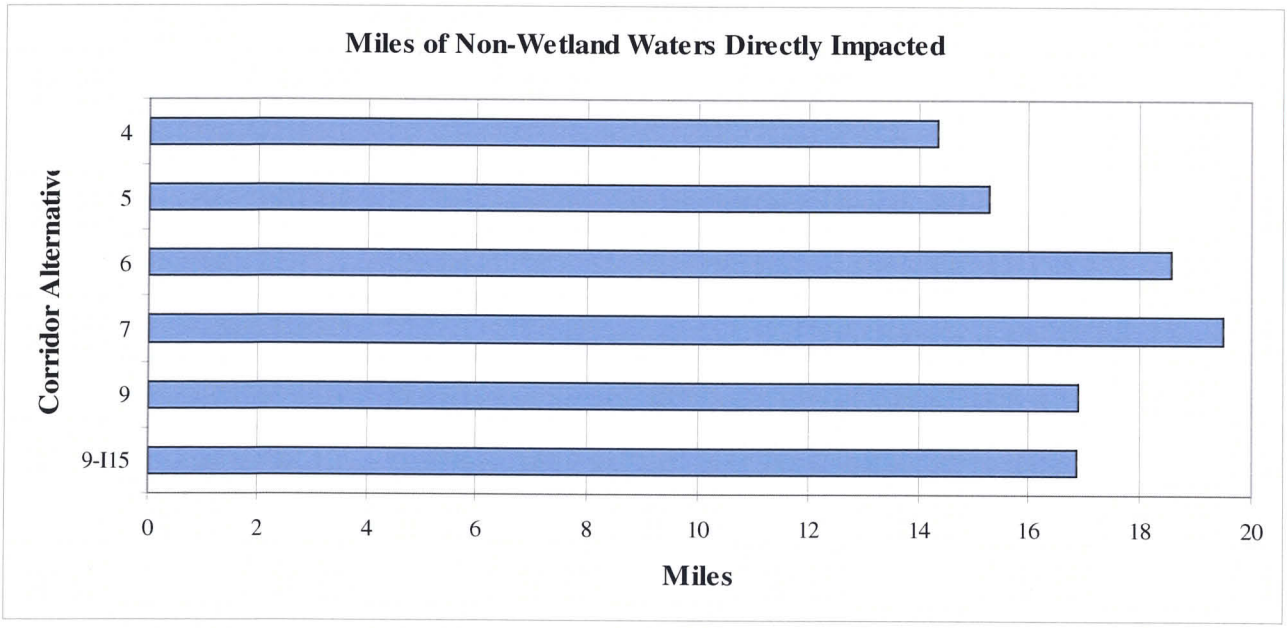

Figure 18. Criterion 1: Non-wetland waters stream channels directly impacted

Normalized rank scores, in this and all subsequent assessments, were calculated by dividing the potential impact (i.e., length, area, integrity units) of each alternative corridor alignment by the potential impact of the alternative corridor alignment with the greatest impact. For example in Table 1, the number of miles potentially impacted by each alternative corridor alignment was divided by 19.5, the number of miles potentially impacted by the alternative corridor alignment with the greatest potential impact. Normalized rank scores for all criteria are summarized and discussed in Section 5.2.

Three factors account for Criterion 1 results. The first was the size of the alternative corridor alignment permanent impact footprint (i e., impact polygons in the permanent category - see Section 4.1.1). Alternative corridor alignments 6 and 7 had the largest permanent impact footprint and the greatest potential impact on non-wetland waters. The second factor relates to the fact that fewer non-wetland waters occur in areas that are topographically flat. The third factor relates to the fact that the natural distribution of non-wetland waters has been modified by the non-random, historical patterns of agricultural activity, urban development, and other disturbances in the watershed. When an alternative corridor alignment traverses an area that is topographically flat, or has experienced a disproportionate reduction in non-wetland stream channels due to historical disturbance patterns, fewer non-wetland stream channels will be impacted. When the conditions for these factors are reversed, a greater number of non-wetland stream channels will be impacted. The second and third factors explain why alternative corridor alignments 4 and 5, with larger permanent impact footprints, impacted fewer non-wetland waters than alternative corridor alignments 9 and 9-I15 with smaller permanent impact footprints.

5.1.2 Criterion 2: Main Stem and Tributary Stream Channels Directly Impacted

Results from the assessment of Criterion 2 are shown in Table 2 and Figure 19. In the table, Column 2 indicates the total acreage of the permanent impact category polygons in acres, Column 3 indicates the miles of main stem and tributary stream channels directly impacted, and Column 4 indicates the normalized rank score.

Table 2. Criterion 2: Main stem and tributary stream channels directly impacted

Corridor Alternative	Acres of Permanent Impact Category Polygons	Miles of Main Stem and Tributary Stream Channels Directly Impacted	Normalized Rank Score
4	2605	4.1	0.6
5	2527	6.0	0.9
6	3090	5.0	0.7
7	3012	6.9	1.0
9	2454	3.3	0.5
9-I15	2410	3.2	0.5

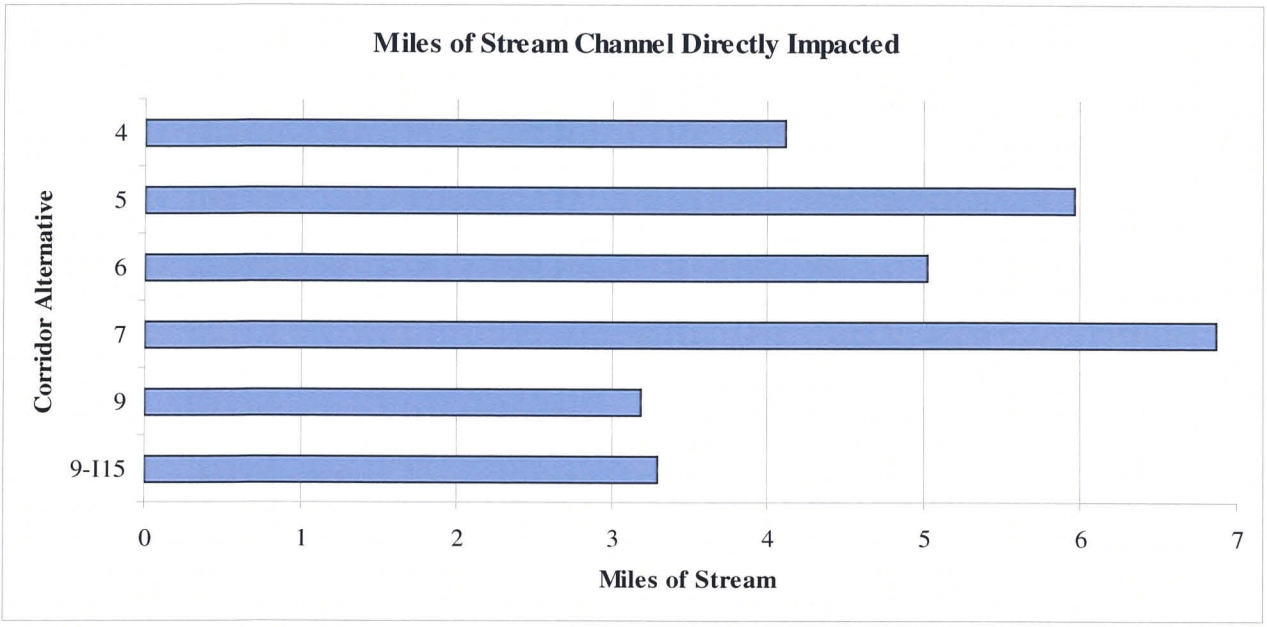

Figure 19. Criterion 2: Length of main stem and tributary stream channels directly impacted

The results for Criterion 2 also show a correlation between the size of the permanent impact footprint and the level of impact, with the influence of the topography and historical disturbance factors accounting for anomalies in the pattern.

5.1.3 Criterion 3: Riparian Ecosystems Directly Impacted

Results from the assessment of Criterion 3 are shown in Table 3 and Figure 20. In the table, Column 2 indicates the total acreage of the permanent impact category polygons in acres, Column 3 indicates the acres of riparian ecosystem directly impacted, and Column 4 indicates the normalized rank score.

Table 3. Criterion 3: Riparian ecosystems directly impacted

Corridor Alternative	Acres of Permanent Impact Category Polygons	Acres of Riparian Ecosystems Impacted	Normalized Rank Score
4	2605	5.2	0.6
5	2527	5.4	0.6
6	3090	8.6	1.0
7	3012	8.7	1.0
9	2454	1.3	0.2
9-I15	2410	1.3	0.2

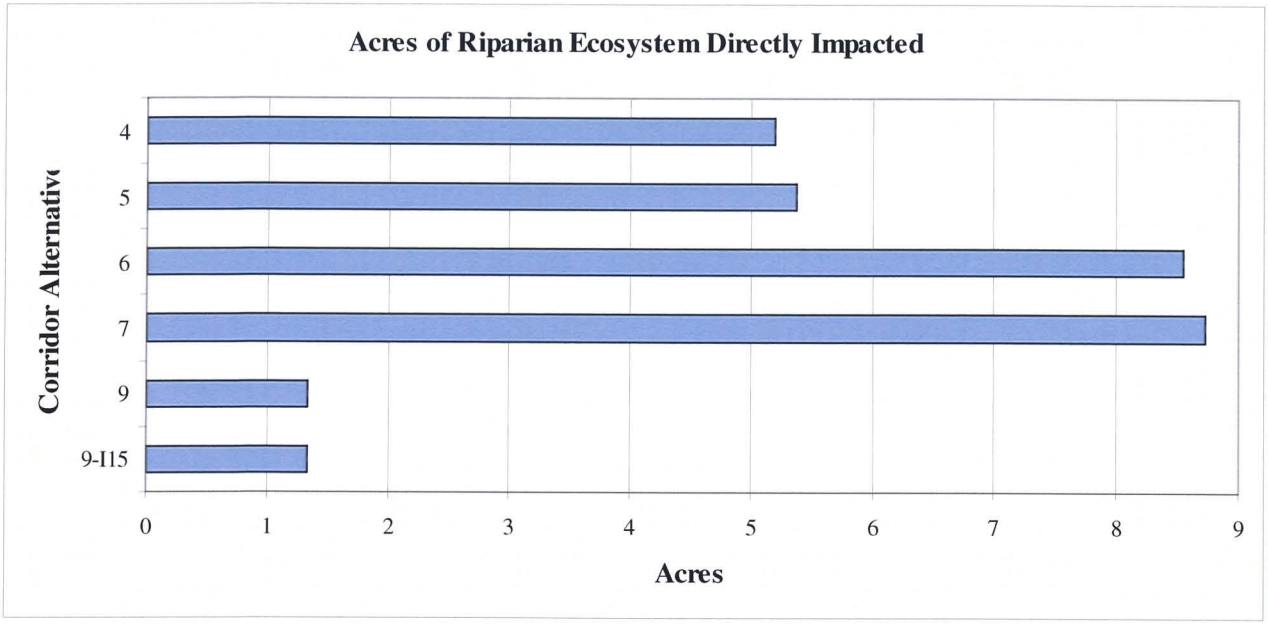

Figure 20. Criterion 3: Acres of riparian ecosystems directly impacted

The results for Criterion 3 also show a correlation between the size of the permanent impact footprint and the level of impact, with the influence of the topography and historical disturbance factors accounting for anomalies in the pattern. An additional factor that could come into play in Criteria 3 results is the fact that the lateral extent of riparian ecosystems increases disproportionately with the size of the associated stream channel. Thus, an alternative corridor alignment that crosses a few large streams could have a greater impact than an alternative corridor alignment that crosses many small streams.

5.1.4 Criterion 4: Aquatic Resources Directly Impacted

Results from the assessment of Criterion 4 are shown in Table 4 and Figure 21. In the table, Column 2 indicates the area of the alternative corridor right-of-way polygon in acres, Column 3

indicates the acres of aquatic resources directly impacted by each alternative corridor alignment, and Column 4 the normalized rank score.

Table 4. Criterion 4: Aquatic resources directly impacted

Corridor Alternative	Acres of Permanent Impact Category Polygons	Acres of Aquatic Resources Directly Impacted	Normalized Rank Score
4	2605	8.4	0.6
5	2527	8.7	0.7
6	3090	12.6	1.0
7	3012	13.0	1.0
9	2454	2.3	0.2
9-I15	2410	2.3	0.2

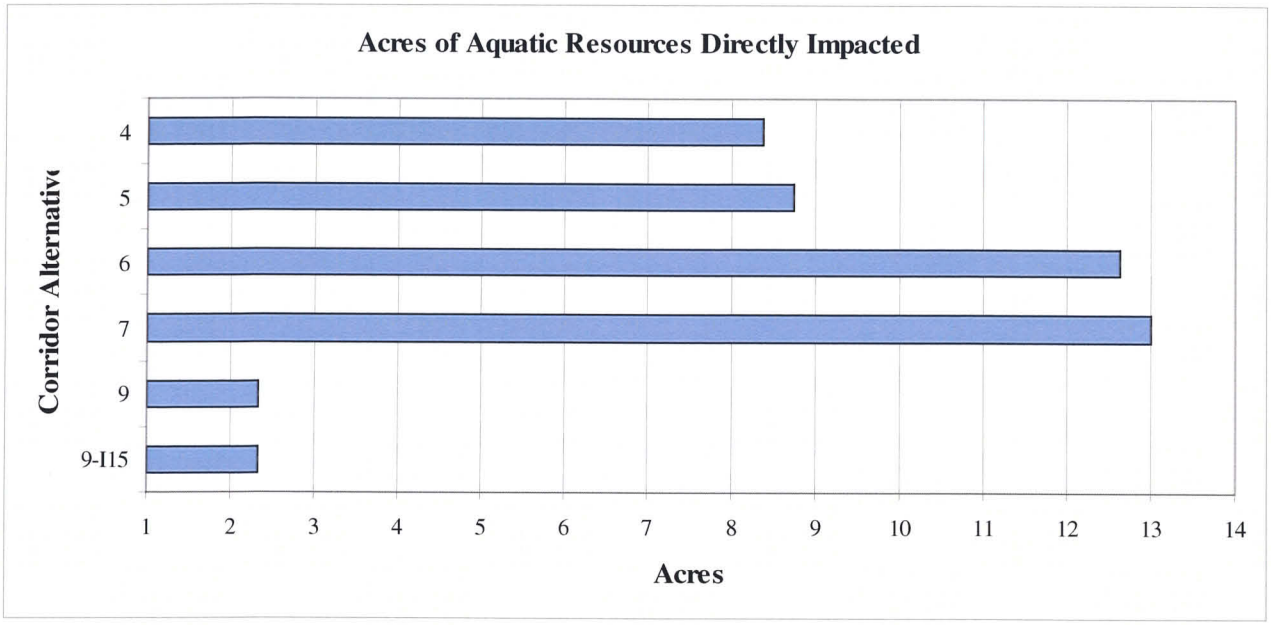

Figure 21. Criterion 4: Acres of aquatic resources directly impacted

The results for Criterion 4 also show a correlation between the size of the permanent impact footprint and the level of impact, with the influence of the topography and historical disturbance factors accounting for anomalies in the pattern. Two additional factors could account for the anomalies seen in Criteria 4 results. The first is again the fact that the lateral extent of riparian ecosystems increases disproportionately with the size of the associated stream channel. Thus, an alternative corridor alignment that crosses a few large streams can have a greater impact than an alternative corridor alignment that crosses many small streams.

The second is the fact that a number of aquatic resources have been created in association with man-made reservoirs, lakes, and ponds throughout the watershed. When an alternative corridor alignment traverses an area in the vicinity of created lakes, reservoirs, or ponds more aquatic resources could be impacted.

5.1.5 Criteria 5a: California gnatcatcher Critical Habitat Directly Impacted

Results from the assessment of Criterion 5a are shown in Table 5 and Figure 22. In the table, Column 2 indicates the area of the alternative corridor right-of-way polygon in acres, Column 3 indicates the acres of California gnatcatcher critical habitat directly impacted by each alternative corridor alignment, and Column 4 the normalized rank score.

Table 5. Criterion 5a: Direct impacts to California gnatcatcher critical habitat

Corridor Alternative	Acres of Permanent Impact Category Polygons	Acres of California gnatcatcher Critical Habitat Directly Impacted	Normalized Rank Score
4	2605	630	0.6
5	2527	630	0.6
6	3090	1084	1.0
7	3012	1084	1.0
9	2454	359	0.3
9-I15	2410	359	0.3

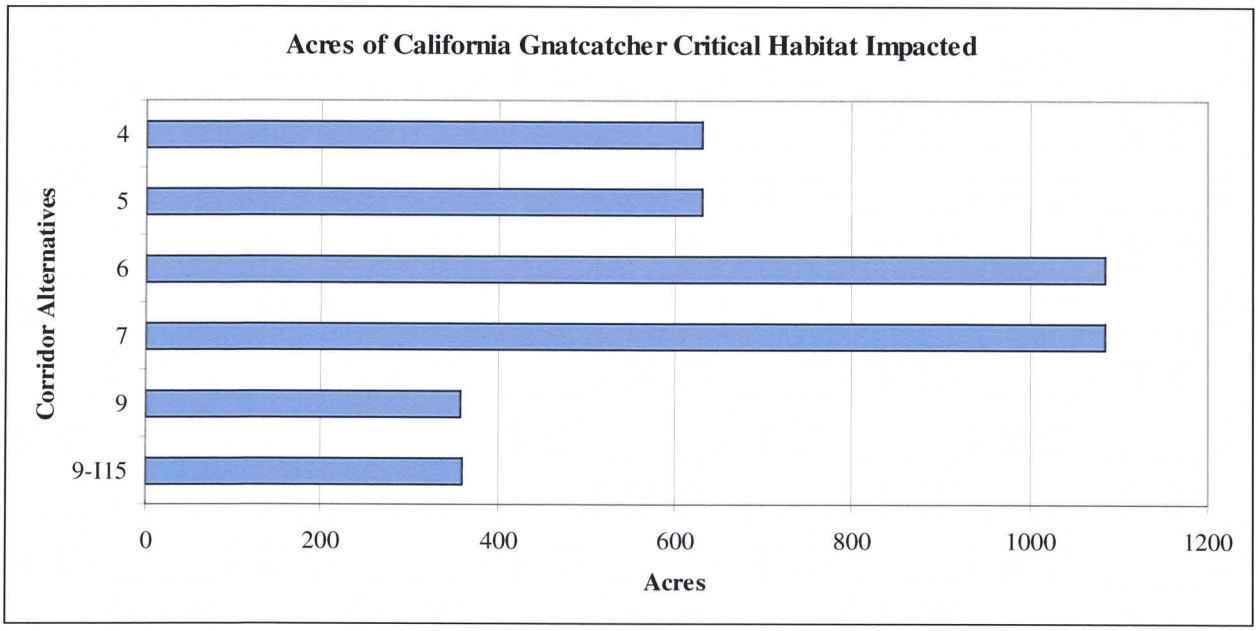

Figure 22. Criterion 5a: Direct impacts to California gnatcatcher critical habitat

The results for Criterion 5a also show a correlation between the size of the permanent impact footprint and the level of impact. This is because California gnatcatcher critical habitat is relatively equally distributed north to south in the western third of the MCPP Project Area.

5.1.6 Criteria 5b: Quino Checkerspot butterfly Critical Habitat Directly Impacted

Results from the assessment of Criterion 5b are shown in Table 6 and Figure 23. In the table, Column 2 indicates the area of the alternative corridor right-of-way polygon in acres, Column 3 indicates the acres of Quino Checkerspot butterfly critical habitat directly impacted by each alternative corridor alignment, and Column 4 the normalized rank score.

Table 6. Criterion 5b: Direct impacts to Quino Checkerspot butterfly critical habitat

Corridor Alternative	Acres of Permanent Impact Category Polygons	Acres of Quino Checkerspot butterfly Critical Habitat Directly Impacted	Normalized Rank Score
4	2605	147	0.5
5	2527	147	0.5
6	3090	140	0.4
7	3012	140	0.4
9	2454	301	1.0
9-I15	2410	312	1.0

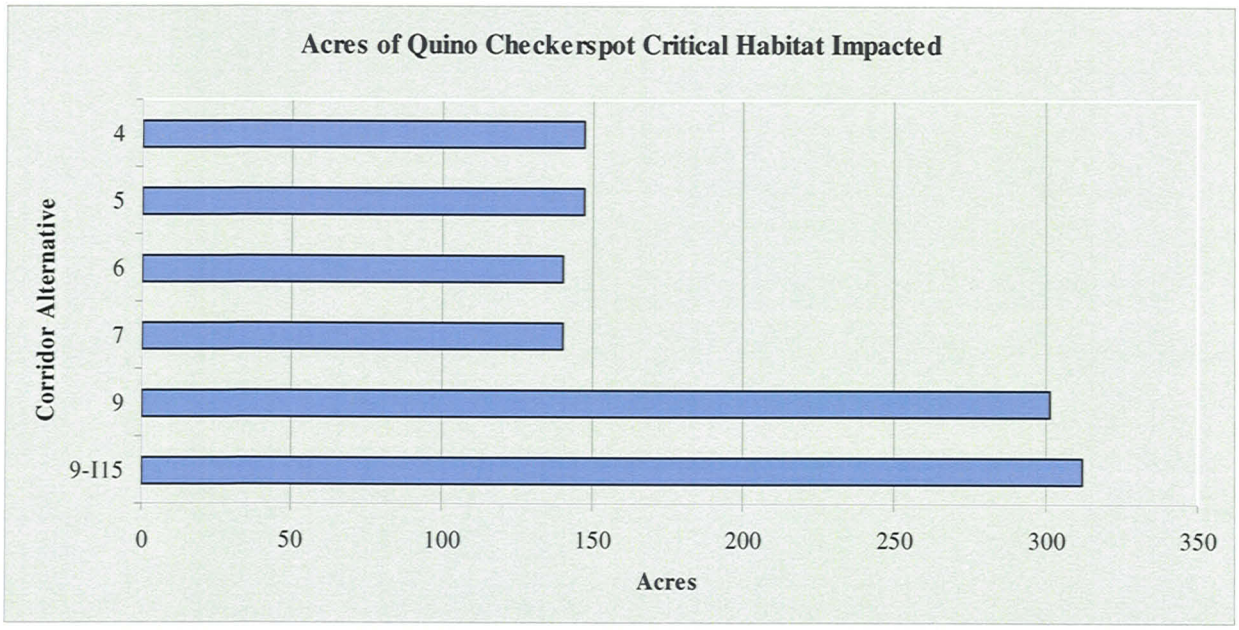

Figure 23. Criterion 5b: Direct impacts to Quino Checkerspot butterfly critical habitat

The results for Criterion 5b reflect the fact that most of the Quino Checkerspot butterfly critical habitat occurs in the southwestern portion of the MCPP Project Area. A larger portion of alternative corridor alignments 9 and 9-I15 occur in this portion of the project area than alternative corridor alignments 4, 5, 6, and 7.

5.1.7 Criteria 5c: Stephen's kangaroo rat Critical Habitat Directly Impacted

Results from the assessment of Criterion 5c are shown in Table 7 and Figure 24. In the table, Column 2 indicates the area of the alternative corridor right-of-way polygon in acres, Column 3 indicates the acres of Stephen's kangaroo rat critical habitat directly impacted by each alternative corridor alignment, and Column 4 the normalized rank score.

Table 7. Criterion 5c: Direct impacts to Stephen's kangaroo rat critical habitat

Corridor Alternative	Acres of Permanent Impact Category Polygons	Acres of Stephen's kangaroo rat Critical Habitat Directly Impacted	Normalized Rank Score
4	2605	400	0.7
5	2527	400	0.7
6	3090	539	1.0
7	3012	539	1.0
9	2454	154	0.3
9-I15	2410	154	0.3

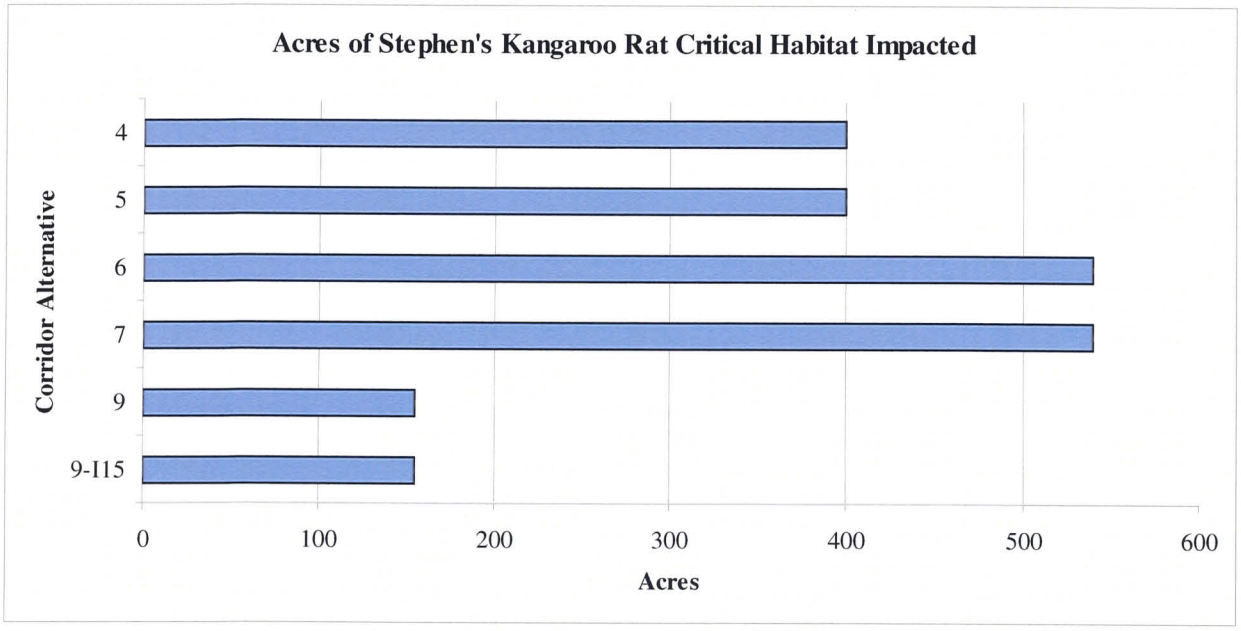

Figure 24. Criterion 5c: Direct impacts to Stephen's kangaroo rat critical habitat

The results for Criterion 5c also show a correlation between the size of the permanent impact footprint and the level of impact. This is because Stephen's kangaroo rat critical habitat is relatively equally distributed in the western third of the MCPP Project Area.

5.1.8 Criteria 5d: Multi-Species Habitat Conservation Plan Areas Directly Impacted

Results from the assessment of Criterion 5d are shown in Table 8 and Figure 25. In the table, Column 2 indicates the area of the alternative corridor right-of-way polygon in acres, Column 3 indicates the acres of MSHCP Plan areas directly impacted by each alternative corridor alignment, and Column 4 the normalized rank score.

Table 8. Criterion 5d: Direct impacts to Multi-Species Habitat Conservation Plan areas

Corridor Alternative	Acres of Permanent Impact Category Polygons	Acres of Multi-Species Habitat Conservation Plan Areas Directly Impacted	Normalized Rank Score
4	2605	311	0.5
5	2527	311	0.5
6	3090	572	1.0
7	3012	572	1.0
9	2454	333	0.6
9-I15	2410	333	0.6

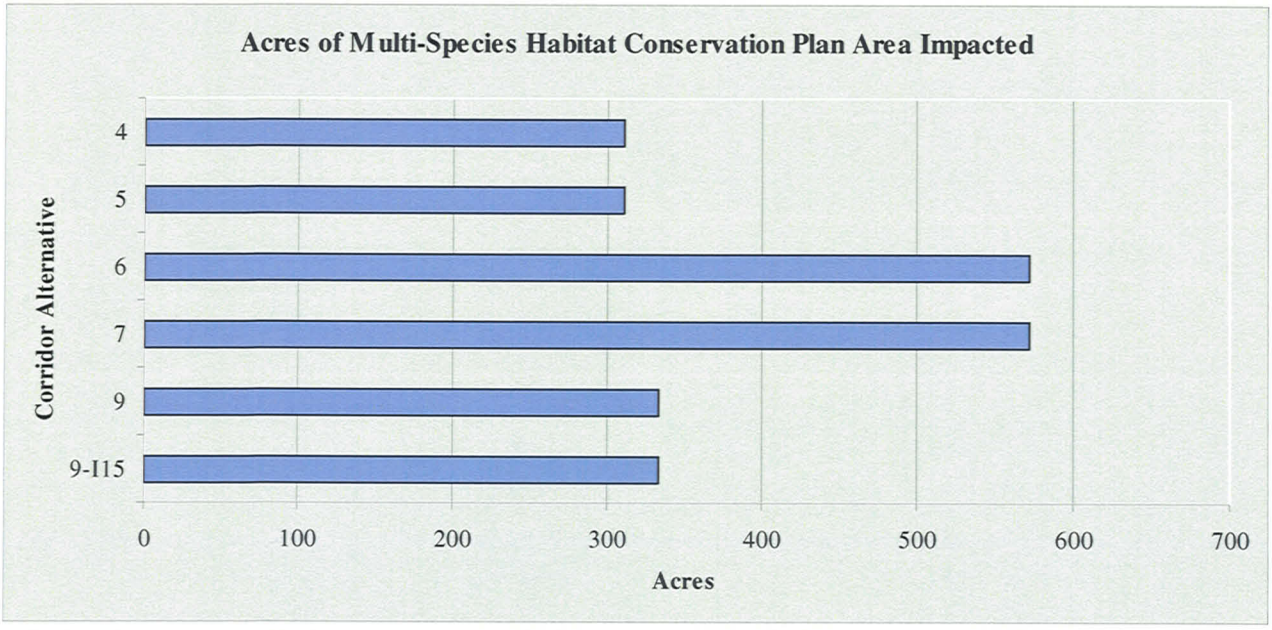

Figure 25. Criterion 5d: Direct impacts to Multi-Species Habitat Conservation Plan

The results for Criterion 5d also show a correlation with the size of permanent impact footprints. The lack of MSHCP area in the northwestern portion of the MCPP Project area accounts for the fact that alternative corridor alignments 4 and 5 have less impact than alternative corridor alignments 9 and 9-I15.

5.1.9 Criteria 6: Areas of Observed Habitat for Selected Threatened, Endangered, and Sensitive Species Directly Impacted

Results from the assessment of Criterion 6 are shown in Table 9 and Figure 26. . In the table, Column 2 indicates the area of the alternative corridor right-of-way polygon in acres, Column 3 indicates the acres of Observed Habitat for Selected Threatened, Endangered, and Sensitive Species habitat directly impacted by each alternative corridor alignment, and Column 4 the normalized rank score.

Table 9. Criterion 6: Areas of observed habitat for selected threatened, endangered, and sensitive species directly impacted

Corridor Alternative	Acres of Permanent Impact Category Polygons	Acres of Observed Habitat for Selected TES Species Directly Impacted	Normalized Rank Score
4	2605	50	0.7
5	2527	47	0.7
6	3090	58	0.9
7	3012	56	0.8
9	2454	67	1.0
9-I15	2410	67	1.0

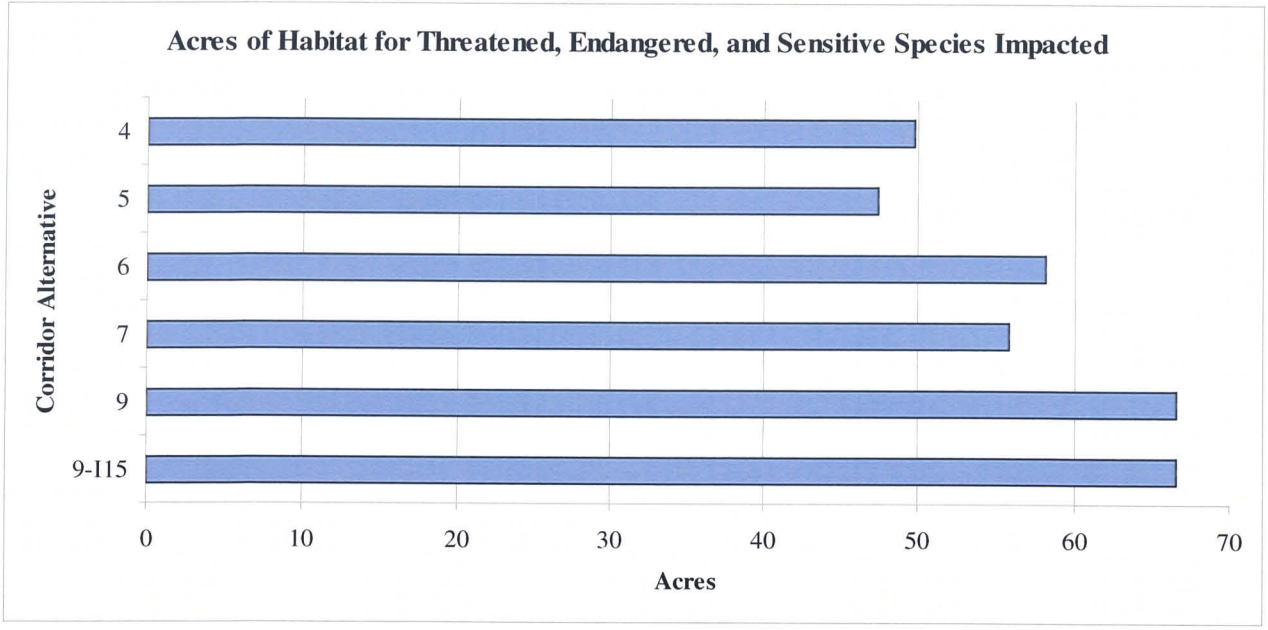

Figure 26. Criterion 6: Direct impacts to threatened, endangered, and sensitive species buffered observation point areas

The results for Criterion 6 did not correlate with the total acreage of permanent impact category polygons because the species observation points are unequally distributed in relation to the alternative corridor alignments.

5.1.10 Criteria 7a-c: Change in the Quantity of Hydrologic, Water Quality, and Habitat Integrity Units in Riparian Ecosystems Directly Impacted

Results from the assessment of Criterion 7a, 7b, and 7c are shown in Tables 10-12 and Figures 27-29 respectively. Potential impacts of alternative corridor alignments on riparian ecosystems were minimal. This was attributed to the fact that, in most cases, the permanent impact category polygons for all alternative corridor alignments avoided riparian ecosystems. In the tables, Columns 2-4 indicate the total number of hydrologic integrity units lost as a result of direct potential impacts to riparian ecosystems. Hydrologic integrity units are grouped into low, medium, and high ranges to help discern the integrity of the riparian ecosystem impacted. The low range included riparian reaches with integrity indices <0.4, the moderate range included riparian reaches with integrity indices ≥0.4 and <0.7, and the high range included riparian reaches with integrity indices ≥0.7. Column 5 indicates the total number of integrity units lost, and Column 6 the normalized rank score.

Table 10. Criterion 7a: Loss of hydrologic integrity units in riparian reaches directly impacted

Corridor Alternative	Loss of Hydrologic Integrity Units in Riparian Reaches Directly Impacted				Normalized Rank Score
	Low Range	Moderate Range	High Range	Total	
4	0.00	0.01	0.37	0.38	0.5
5	0.00	0.01	0.39	0.40	0.5
6	0.00	0.01	0.74	0.75	1.0
7	0.00	0.01	0.74	0.75	1.0
9	0.00	0.00	0.01	0.02	0.0
9-I15	0.00	0.00	0.01	0.02	0.0

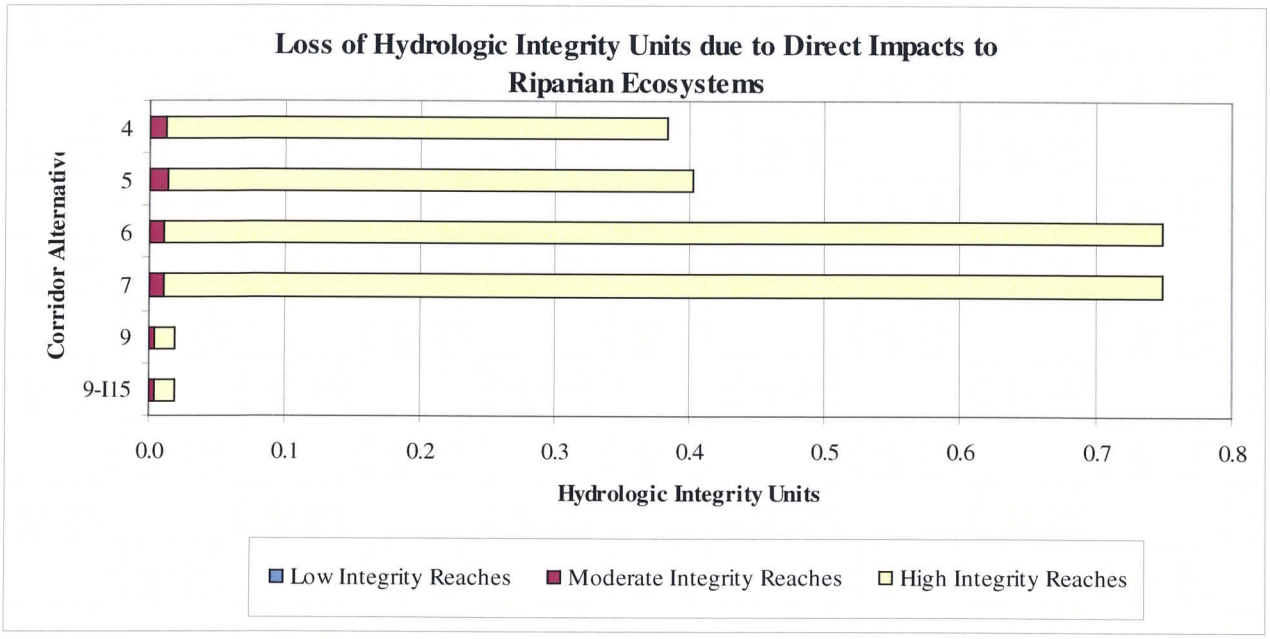

Figure 27. Criterion 7a: Loss of hydrologic integrity units in riparian reaches directly Impacted

Table 11. Criterion 7b: Loss of water quality integrity units in riparian reaches directly impacted

Corridor Alternative	Loss of Water Quality Integrity Units in Riparian Reaches Directly Impacted				Normalized Rank Score
	Low Range	Moderate Range	High Range	Total	
4	0.00	0.01	0.21	0.22	0.5
5	0.00	0.01	0.28	0.29	0.6
6	0.00	0.04	0.42	0.46	1.0
7	0.00	0.04	0.42	0.46	1.0
9	0.00	0.00	0.00	0.01	0.0
9-I15	0.00	0.00	0.00	0.01	0.1

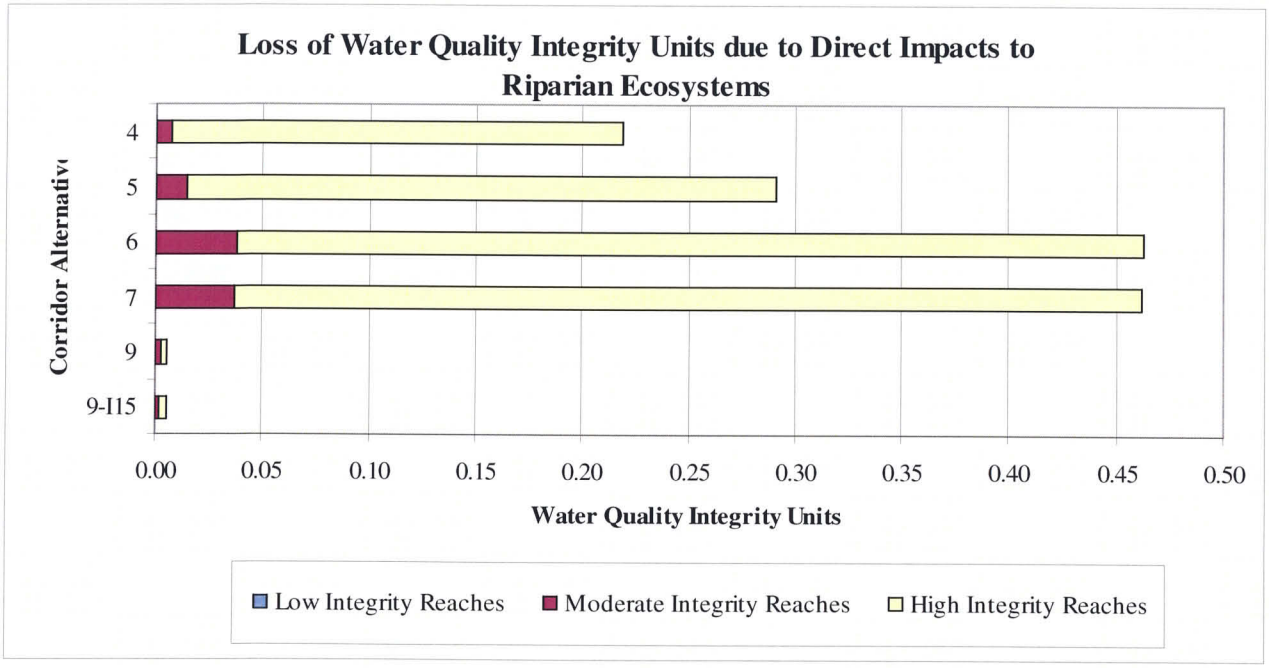

Figure 28. Criterion 7b: Loss of water quality integrity units in riparian reaches directly impacted

Table 12. Criterion 7c: Loss of habitat integrity units in riparian reaches directly impacted

Corridor Alternative	Loss of Habitat Integrity Units in Riparian Ecosystems Directly Impacted				Normalized Rank Score
	Low Range	Moderate Range	High Range	Total	
4	0.03	0.08	0.00	0.12	0.2
5	0.04	0.16	0.00	0.20	0.4
6	0.02	0.50	0.03	0.55	1.0
7	0.02	0.50	0.03	0.55	1.0
9	0.01	0.03	0.00	0.04	0.1
9-I15	0.01	0.03	0.00	0.04	0.1

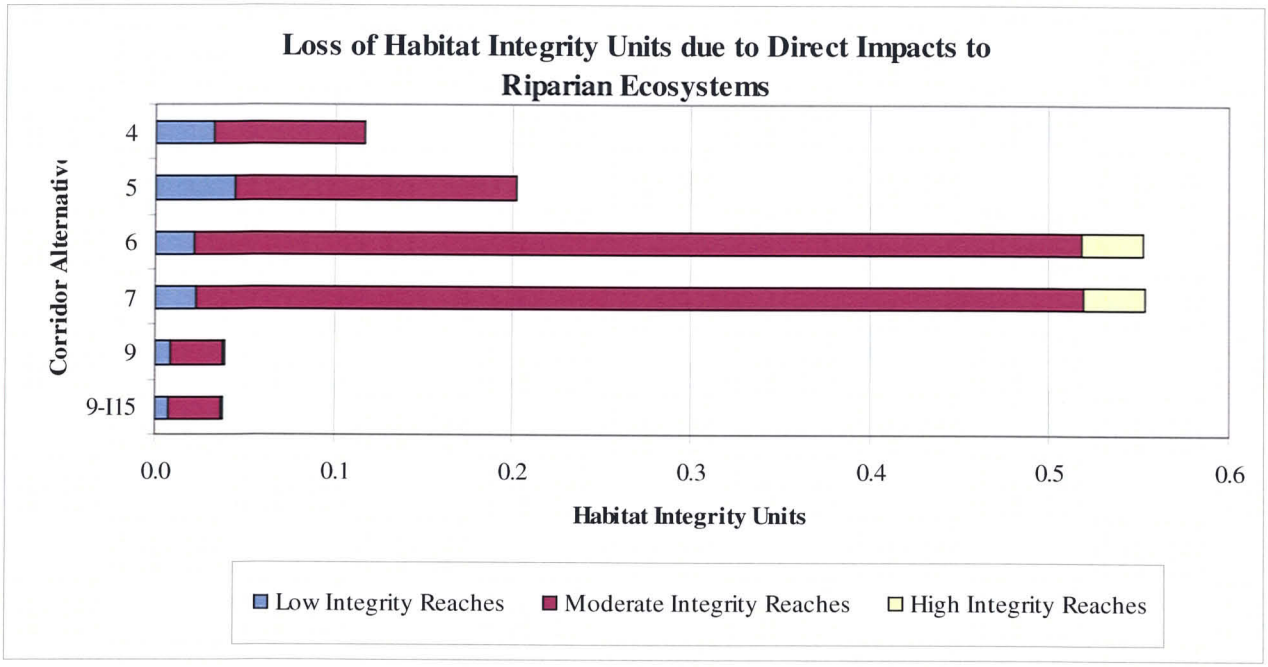

Figure 29. Criterion 7c: Loss of habitat integrity units in riparian reaches directly Impacted

The results for Criterion 7a-c also tend to correlate with the size of the permanent impact footprint. The factors of the topography, historical disturbance, and disproportionate lateral extent of riparian ecosystems account for anomalies in this pattern.

5.1.11 Criteria 8a-c: Change in Quantity of Hydrologic, Water Quality, and Habitat Integrity Units in Riparian Reaches with Direct and Indirect Impacts

Results from the assessment of Criterion 8a are shown in Tables 13-15 and Figures 30-33. Potential impacts of alternative corridor alignments on riparian ecosystems were minimal. This

was attributed to the fact that, in most cases, the permanent impact category polygons for all alternative corridor alignments avoided riparian ecosystems. In the tables, Columns 2-4 indicate the total number of hydrologic integrity units lost as a result of direct potential impacts to riparian ecosystems. Hydrologic integrity units are grouped into low, medium, and high ranges to help discern the integrity of the riparian ecosystem impacted. The low range included riparian reaches with integrity indices <0.4, the moderate range included riparian reaches with integrity indices ≥0.4 and <0.7, and the high range included riparian reaches with integrity indices ≥0.7. Column 5 indicates the total number of integrity units lost, and Column 6 the normalized rank score.

Table 13. Criterion 8a: Loss of hydrologic integrity units in riparian reaches with direct and indirect impacts

Corridor Alternative	Loss of Hydrologic Integrity Units in Riparian Reaches with Direct and Indirect Impacts				Normalized Rank Score
	Low Range	Moderate Range	High Range	Total	
4	0.00	0.26	4.29	4.56	0.6
5	0.00	0.28	4.56	4.84	0.6
6	0.00	0.34	7.68	8.02	1.0
7	0.00	0.33	7.67	8.00	1.0
9	0.00	0.16	1.88	2.04	0.3
9-I15	0.00	0.16	1.87	2.04	0.3

Table 14. Criterion 8b: Loss of water quality integrity units in riparian reaches with direct and indirect impacts

Corridor Alternative	Loss of Water Quality Integrity Units in Riparian Reaches with Direct and Indirect Impacts				Normalized Rank Score
	Low Range	Moderate Range	High Range	Total	
4	0.00	0.00	1.95	1.95	0.6
5	0.00	0.00	3.43	3.43	1.0
6	0.00	0.07	3.27	3.34	1.0
7	0.00	0.07	3.27	3.34	1.0
9	0.00	0.00	0.24	0.24	0.1
9-I15	0.00	0.00	0.25	0.25	0.1

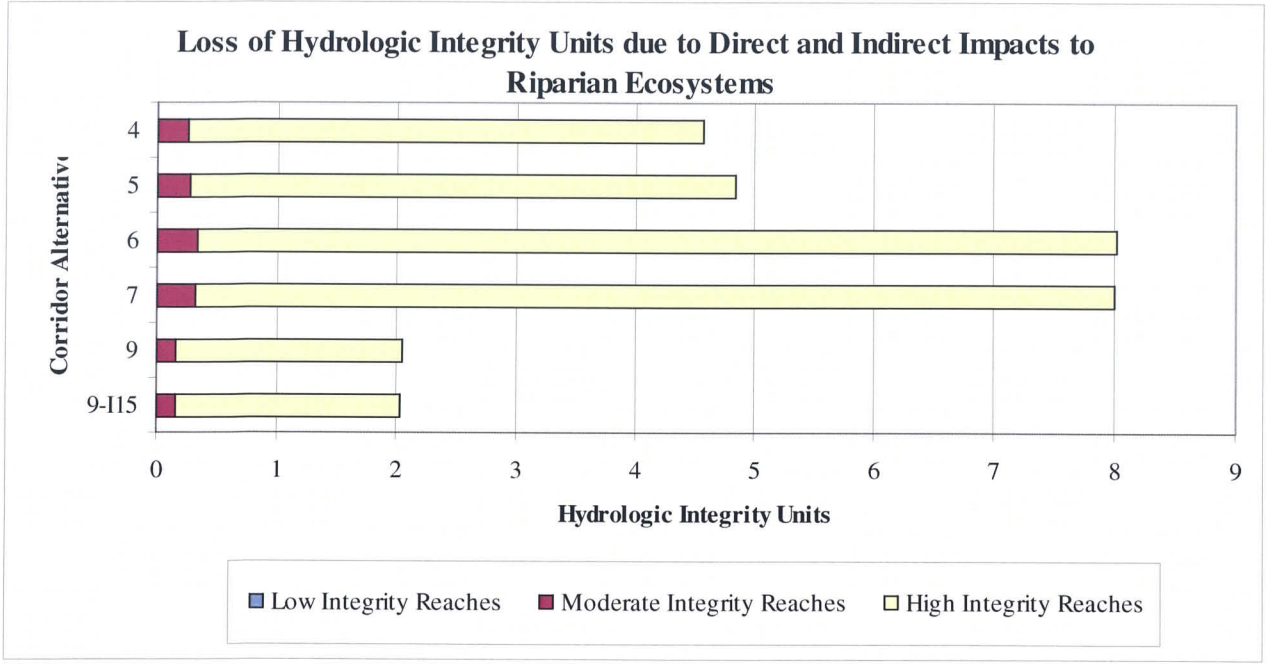

Figure 30. Criterion 8a: Loss of hydrologic integrity units in riparian reaches with direct and indirect impacts

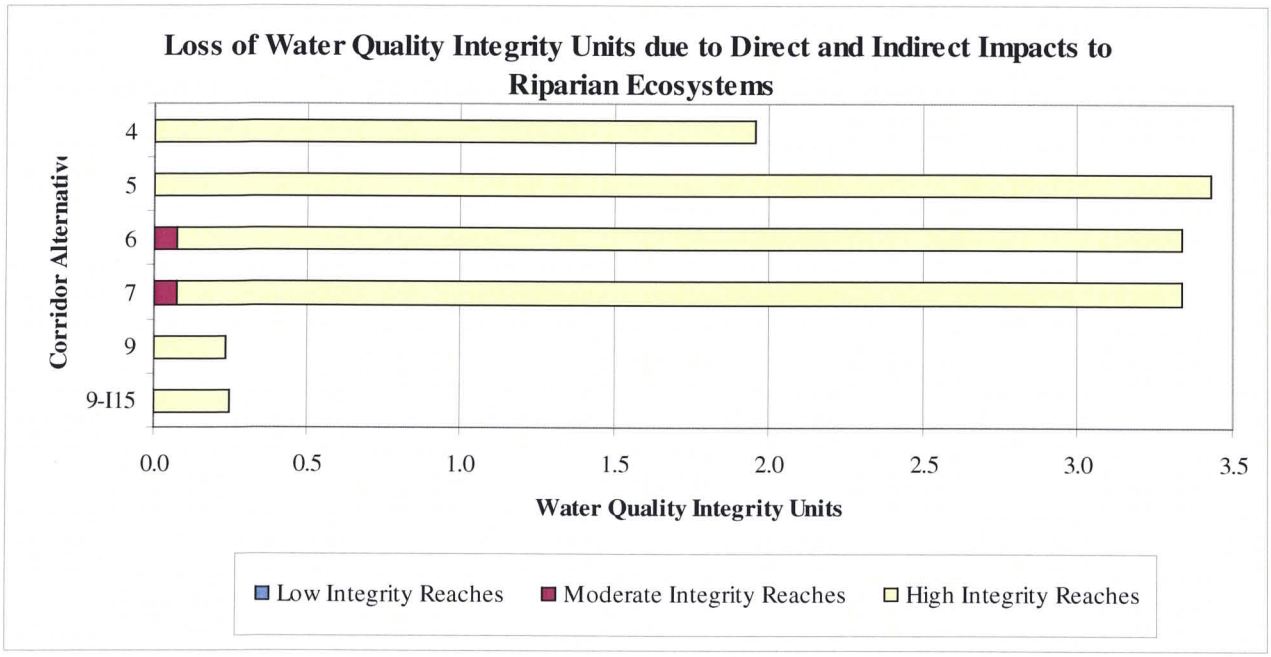

Figure 31. Criterion 8b: Loss of water quality integrity units in riparian reaches with direct and indirect impacts

Table 15. Criterion 8c: Loss of habitat integrity units in riparian reaches with direct and indirect impacts

Corridor Alternative	Change in the Quantity of Habitat Integrity Units in Riparian Reaches with Direct and Indirect Impacts				Normalized Rank Score
	Low Range	Moderate Range	High Range	Total	
4	1.61	3.25	0.29	5.15	0.6
5	1.97	5.91	0.38	8.26	0.9
6	1.53	6.86	0.54	8.93	1.0
7	0.96	6.86	0.54	8.36	0.9
9	0.56	1.56	0.83	2.95	0.3
9-I15	0.56	1.50	0.83	2.89	0.3

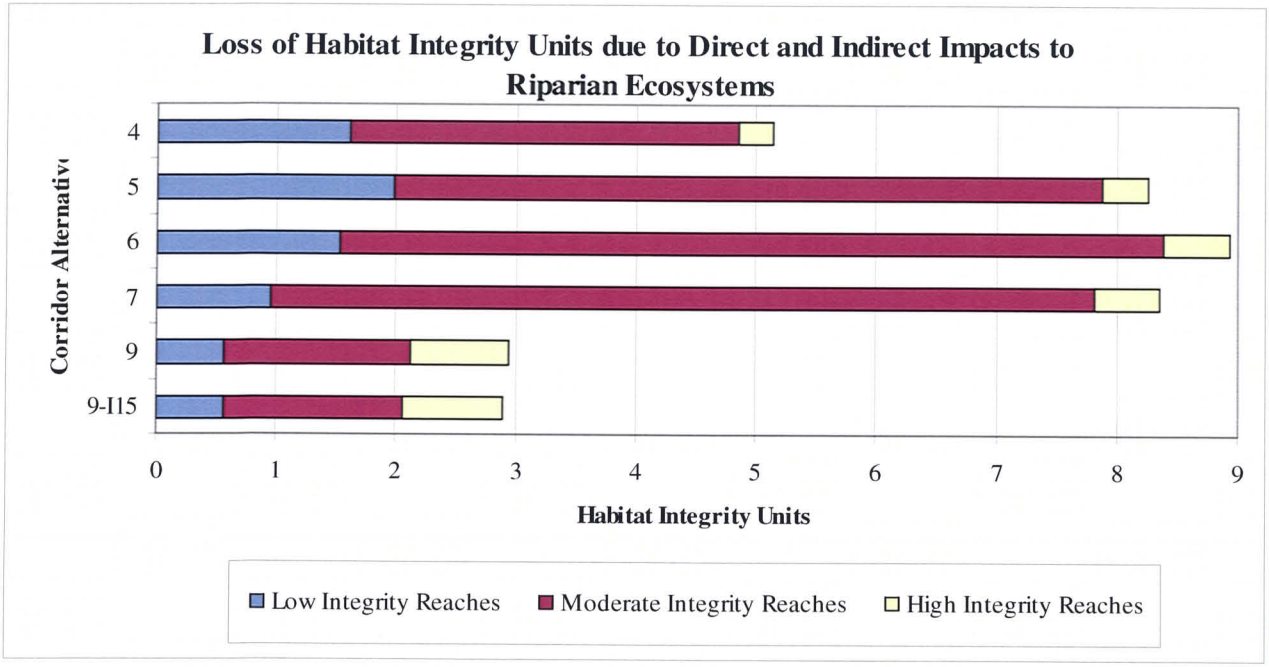

Figure 32. Criterion 8c: Loss of habitat integrity units in riparian reaches with direct and indirect impacts

The results for Criterion 8a-c also tend to correlate with the size of the permanent impact footprint. The factors of the topography, historical disturbance, and disproportionate lateral extent of riparian ecosystems account for anomalies in this pattern.

5.2 Normalized Rank Scores Summary

The assessment of potential impacts generates vast amounts of data and information that can be analyzed in various ways. It is difficult to distill the essence of the data and information without losing the subtleties contained in the details, or introducing bias or misconceptions. There is no substitute for total immersion in the details of the data to achieve complete understanding. In spite of the foregoing caveats, this section attempts such a distillation.

Alternative corridor alignments were assigned a normalized rank score for each of the criteria assessed as a means for comparing the potential impacts of the alternative corridor alignments. As a reminder, normalized rank scores were calculated by dividing the potential impact (i.e., length, area, integrity units) of each alternative corridor alignment by the potential impact of the alternative corridor alignment with the greatest impact. For example in Table 1, the number of miles potentially impacted by each alternative corridor alignment was divided by 19.5, the number of miles potentially impacted by the alternative corridor alignment with the greatest impact.

Normalized rank scores for the fifteen assessment criteria are summarized in Table 16 and Figure 33 with the last column showing the sum of the normalized rank scores with a possible range of 0-15. The sum of normalized rank scores provides a general indication of the overall potential impact of each alternative corridor alignment. For example, alternative corridor alignments with values near the maximum value of 15 consistently had the greatest level of potential impact across all criteria. However, it should be noted that this aggregation of normalized rank scores assumes equal weight for all fifteen criteria. This may, or may not, be a suitable way to summarize given that it includes biases and redundancies that result from equally weighting all fifteen criteria. Ultimately, when using normalized rank scores an explicit statement of how and why a particular level of importance (i.e., weighting) was assigned to specific criteria should be included. Table 17 and Figure 34 summarize the normalized rank scores for criteria assessing direct impacts to WoUS and riparian ecosystems (i.e., Criteria 1, 2, 3, 4, 7a-c, and 8a-c). Table 18 and Figure 35 summarize the normalized rank scores for criteria assessing threatened, endangered, and sensitive species habitat (i.e., Criteria 5a-d and 6).

Table 16. Normalized rank scores of all criteria for alternatives corridor alignments

Alternative	Criteria															Sum of Normalized Rank Scores
	1	2	3	4	5a	5b	5c	5d	6	7a	7b	7c	8a	8b	8c	
4	0.7	0.6	0.6	0.6	0.6	0.5	0.7	0.5	0.7	0.5	0.5	0.2	0.6	0.6	0.6	8.5
5	0.8	0.9	0.6	0.7	0.6	0.5	0.7	0.5	0.7	0.5	0.6	0.4	0.6	1.0	0.9	10.0
6	1.0	0.7	1.0	1.0	1.0	0.4	1.0	1.0	0.9	1.0	1.0	1.0	1.0	1.0	1	14.0
7	1.0	1.0	1.0	1.0	1.0	0.4	1.0	1.0	0.8	1.0	1.0	1.0	1.0	1.0	0.9	14.1
9	0.9	0.5	0.2	0.2	0.3	1.0	0.3	0.6	1.0	0.0	0.0	0.1	0.3	0.1	0.3	5.8
9-I15	0.9	0.5	0.2	0.2	0.3	1.0	0.3	0.6	1.0	0.0	0.1	0.1	0.3	0.1	0.3	5.9

Table 17. Normalized rank scores for criteria assessing direct impacts to WoUS and riparian ecosystems

Alternative	Criterion 1	Criterion 2	Criterion 3	Criterion 4	Sum of Normalized Rank Scores
4	0.7	0.6	0.6	0.6	2.5
5	0.8	0.9	0.6	0.7	3.0
6	1.0	0.7	1.0	1.0	3.7
7	1.0	1.0	1.0	1.0	4.0
9	0.9	0.5	0.2	0.2	1.8
9-I15	0.9	0.5	0.2	0.2	1.8

Table 18. Normalized rank scores for criteria assessing threatened, endangered, or sensitive species habitat

Alternative	Criterion 5a	Criterion 5b	Criterion 5c	Criterion 5d	Criterion 6	Sum of Normalized Rank Scores
4	0.6	0.5	0.7	0.5	0.7	3.0
5	0.6	0.5	0.7	0.5	0.7	3.0
6	1.0	0.4	1.0	1.0	0.9	4.3
7	1.0	0.4	1.0	1.0	0.8	4.2
9	0.3	1.0	0.3	0.6	1.0	3.2
9-I15	0.3	1.0	0.3	0.6	1.0	3.2

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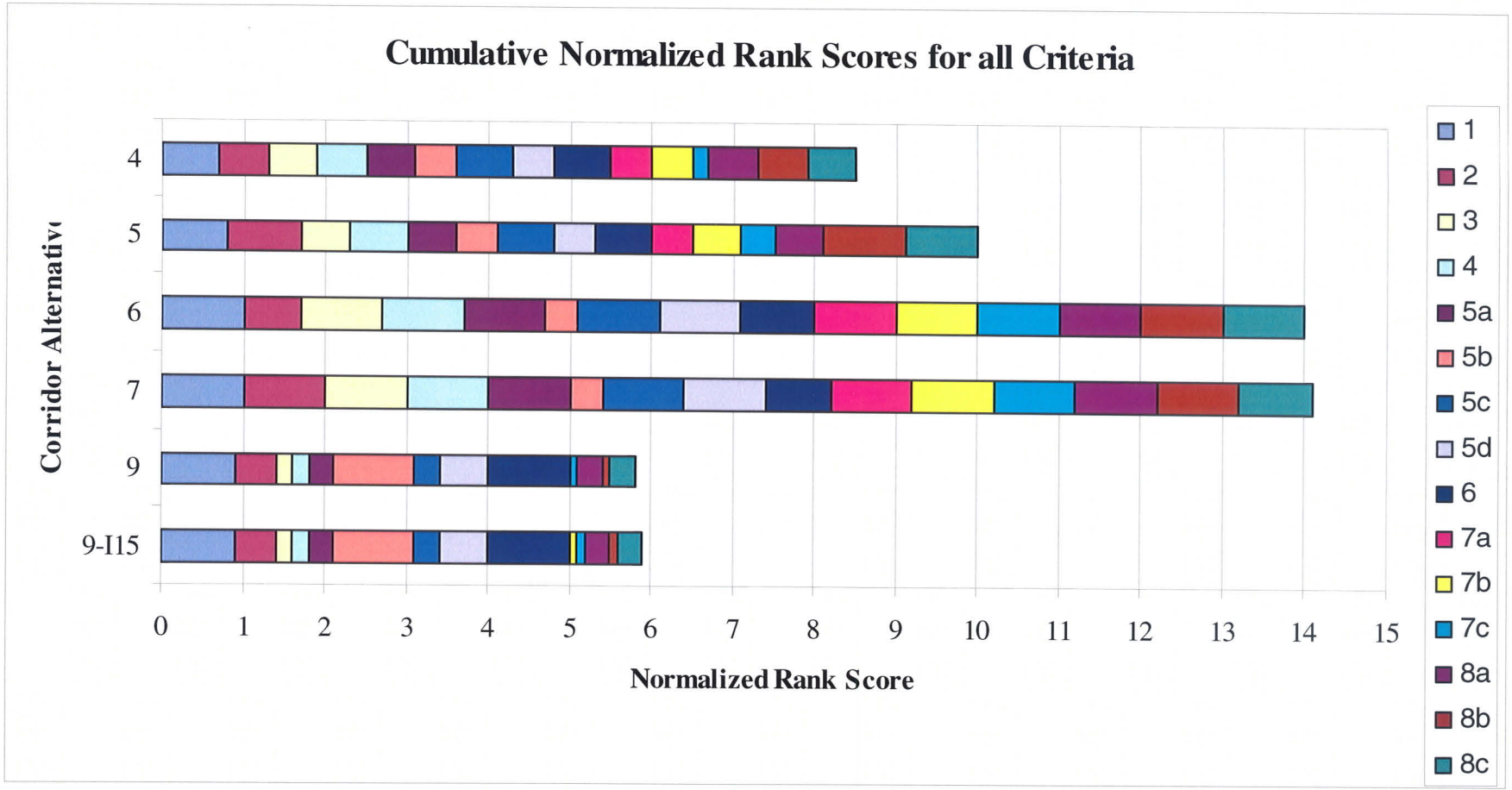

Figure 33. Cumulative normalized rank scores for all criteria

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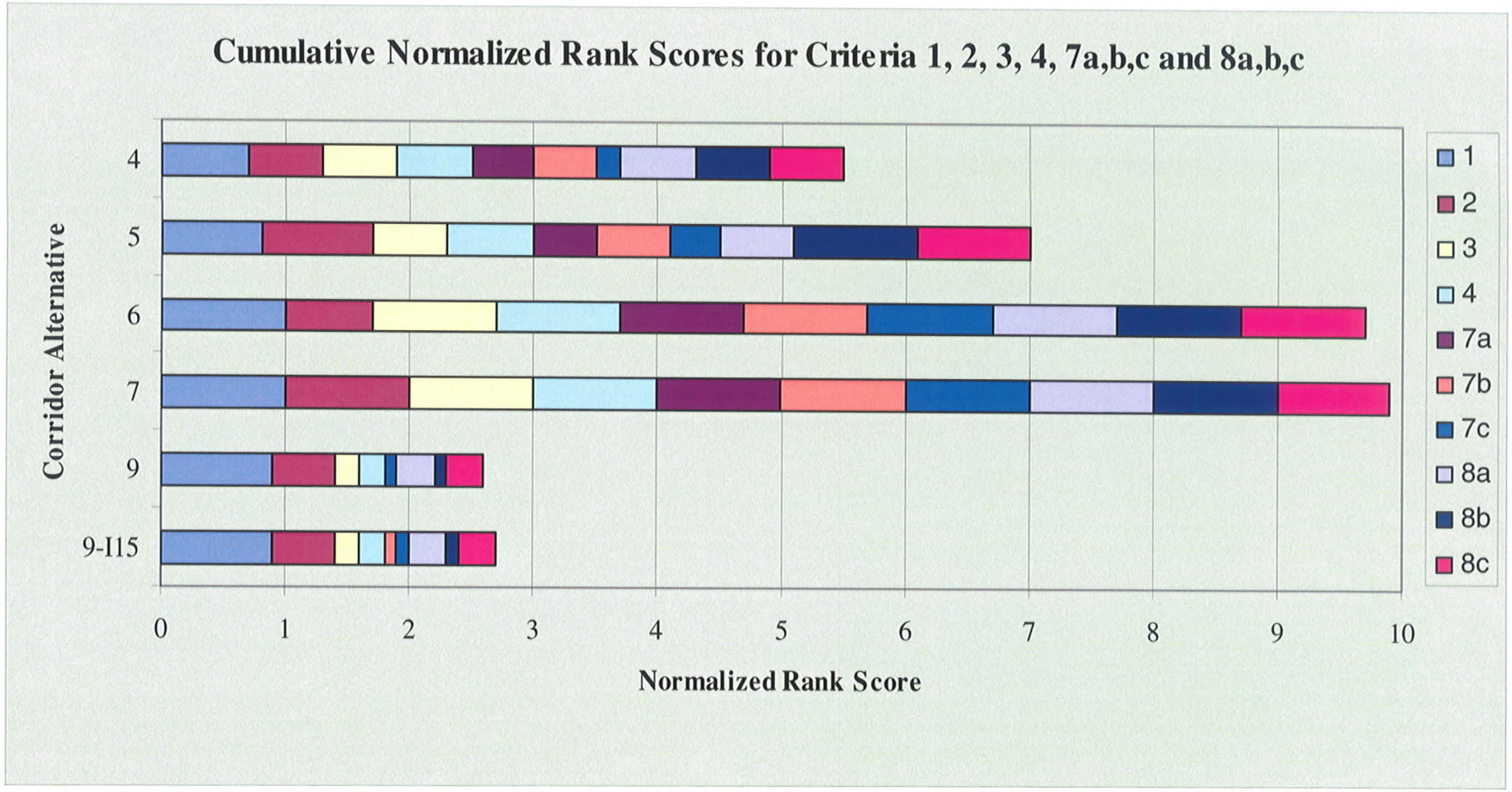

Figure 34. Cumulative normalized rank scores for criteria related to WoUS and riparian ecosystems

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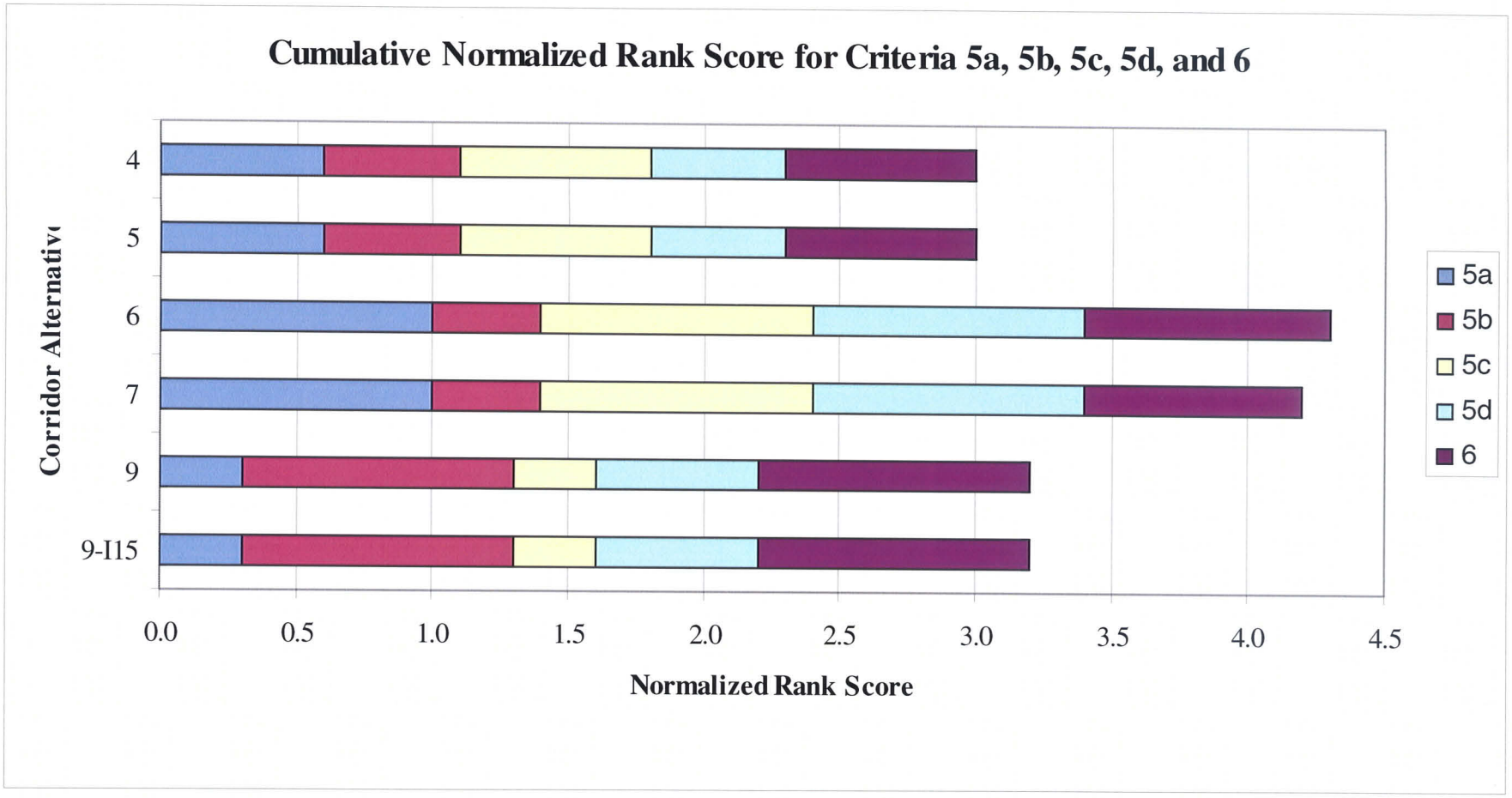

Figure 35. Cumulative normalized rank scores for criteria related to threatened, endangered, or sensitive species habitat

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5.3 Summary of Results

The results of this analysis indicated that, in terms of assessment criteria related to aquatic resources and riparian ecosystems, alternative corridor alignments 6 and 7 had the greatest potential impact, alternative corridor alignments 4 and 5 had the second greatest potential impact, and alternative corridor alignments 9 and 9-I15 had the least potential impacts (Figure 34). For these criteria, the level of potential impact generally correlated with the size of the permanent impact footprint associated with each alternative corridor alignment (i.e., larger permanent impact footprint equals greater impacts). Anomalies in this general trend (e.g., Criteria 1 non-wetland waters) were due to factors related to topographic variation, historical distribution of disturbance/alteration, naturally unequal distribution of riparian ecosystems, disproportionate lateral extent of riparian ecosystem in association with different size stream channels, and the specific location of an alternative corridor alignment. Overall, the potential impact of all alternative corridor alignments to riparian ecosystems was minimal given the relatively large size of the permanent impact footprint associated the alternative corridor alignments. This was attributed to the strategic placement of alternative corridor alignments to largely avoid riparian ecosystems.

With respect to the assessment criteria related to threatened, endangered, and sensitive species, alternative corridor alignments 6 and 7 had the greatest potential impact, alternative corridor alignments 9 and 9-I15 had the second greatest potential impact, and alternative corridor alignments 4 and 5 had the least potential impact, but only slightly less that alternative corridor alignments 9 and 9-I15 (Figure 35). For Criterion 5a (California gnatcatcher) and Criterion 5c (Stephen's kangaroo rat) the level of potential impact correlated with the size of the permanent impact footprint of each alternative corridor alignment. For these criteria, the critical habitat was relatively equally distributed across the alternative corridor alignment locations. However, for Criteria 5b (Quino Checkerspot butterfly), Criteria 5d (Multi-Species Habitat Conservation Plan areas), and Criteria 6 (Observed Habitat for Threatened, Endangered, and Sensitive Species) the distribution of critical habitat was relatively unequally distributed across the alternative corridor alignment locations. Consequently, for these criteria, alternative corridor alignments with largest permanent impact footprint did not necessarily have the greatest potential impact.

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Appendix 1: ArcMap® Themes, Images, Spreadsheets, and Reports

ArcMap® themes developed for this project are contained in folders on the accompanying CD. The folders and the shape files are described below. The "xxx" designates the various ArcMap® extensions attached to the shape files created for each theme (i.e., dbf, shp, shx, etc.).

Alternative Corridor Alignment Right-of-Way

The shape files for the six alternative corridor alignments are contained in the "corridor alignments" folder on the accompanying CD. Polygon themes are identified by the acronym assigned to each corridor on Page 1 of the report. The names of the shape files in this folder are:

Alt_4.xxx
Alt_5.xxx
Alt_6.xxx
Alt_7.xxx
Alt_9.xxx
Alt_9_wI15.xxx

Non-wetland Waters Stream Channels

The polygon files for the non-wetland waters stream channels theme are contained in the "non-wetland waters" folder. The polygon files in this folder are named:

nonwetland waters.xxx

Main Stem and Tributary Stream Channels

The vector files for the main stem and tributary stream channels theme are contained in the "mains and tribs" folder. The vector files in this folder are named:

mains and tribs.xxx

Aquatic Resources

The polygon files for the aquatic resources are contained in the "aquatic resources" folder. The polygon files in this folder are named:

aquatic resources.xxx

Riparian Ecosystems

The polygon files for the riparian ecosystem theme are contained in the "riparian" folder. The polygon files in this folder are named:

riparian.xxx

Threatened, Endangered, and Sensitive Species Habitats

The polygon files for each of threatened, endangered, and sensitive species analyzed are the "tes species" folder. They include California gnatcatcher critical habitat (cgnat), Stephen's kangaroo rat critical habitat (skr), Quino Checkerspot butterfly critical habitat (quino), MSHCP areas (mshcp), and observation locations for threatened, endangered, and sensitive species (species obs). The shapefiles in this folder are named using the parenthetical acronyms above. For example, California gnatcatcher files are named "gnat.xxx." Polygon files in this folder are named:

cgnat ch.xxx
skr ch.xxx
quino ch.xxx
mshcp.xxx
species obs.xxx

Images

This folder contains aerial and digital raster graphic ArcMap® images for the MCPP project area. The aerial images are from US Air Photo, and were taken in February of 2002. The digital raster graphic images are from Sure Maps Raster. The names of files in this folder are:

Cetap3.xxx	11.xxx	23.xxx
Cetap4.xxx	14.xxx	24.xxx
Cetap5.xxx	15.xxx	25.xxx
Cetap7.xxx	16.xxx	26.xxx
08.xxx	17.xxx	
10.xxx	22.xxx	

Spreadsheets and Reports

This folder contains spreadsheets with the indicator metrics and integrity indices for baseline and simulated conditions of each alternative corridor alignment, and this draft report in Microsoft Excel® and Word® formats respectively.

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Appendix O Regional Species of Concern and Coverage Under Habitat Conservation Plans

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Appendix O – Regional Species of Concern and Coverage Under Habitat Conservation Plans

Scientific Name	Common Name	Status	Habitat and Distribution	Blooming / Activity Period	Species Coverage[1]			Habitat Present/ Absent in BSA	Rationale
					MSHCP	Lake Mathews MSHCP	El Sobrante Landfill MSHCP		
Plants									
Allium munzii	Munz's onion	US: FE CA: ST CNPS: 1B	Clay soils on mesic exposures or seasonally moist microsites in grassy openings of coastal sage scrub, chaparral, juniper woodland or valley, and foothill grassland. The MSHCP account for this species states that "Munz's onion is found on clay and cobbly clay soils which include the following series: Altamont, Auld, Bosanko, Claypit, and Porterville." The account also mentions that "one population (Bachelor Mountain) is reported to be associated with pyroxenite outcrops instead of clay." However, pyroxenite, like other crystalline (i.e. igneous and metamorphic) rocks, decomposes into sediments rich in clay. With bioturbation, those sediments become soils. Weathering of pyroxenite, specifically, generally results in a clay soil (Robert E. Reynolds pers. comm. to Stan Spencer, Mar. 8, 2005). It is therefore expected that any Munz's onion population associated with pyroxenite outcrops would be in clay soils.	Blooms April through May (Perennial bulb)	X			IP	Results of focused 2005 and 2006 surveys for this species were negative. However, additional potentially suitable habitat for this species will be surveyed in 2008. This species is inferred to be present in Alternatives 4, 5, and 9 pending the results of the 2008 survey.
Ambrosia pumila	San Diego ambrosia	US: FE CA: SP CNPS: 1B	Open floodplain terraces on Garretson gravelly fine sandy loams, or in the watershed margins of vernal pools or alkali playas on Las Posas loam in close proximity to Willow silty alkaline soils. Occurs in sparse annual vegetation.	Generally non-flowering (perennial herb)	X			A	Results of focused survey for this species were negative. Not known from the project vicinity.
Atriplex coronata var. *notatior*	San Jacinto Valley crownscale	US: FE CA: SP CNPS: 1B	Highly alkaline silty-clay soils in association with the Traver-Domino-Willows soil association in floodplains (seasonal wetlands) dominated by alkali scrub, alkali playas, vernal pools, and, to a lesser extent, alkali grasslands. The majority (approximately 80%) of the populations are associated with Willows soils.	Blooms April through May (annual herb)	X			P	Four individuals of this species were observed in the BSA during focused plant surveys in 2005. However, no individuals were observed within the footprint of any project alternative.
Atriplex parishii	Parish's brittlescale	US: – CA: SP CNPS: 1B	Domino, Willows, and Traver soils in alkali vernal pools, alkali annual grassland, alkali playa, and alkali scrub components of alkali vernal plains.	Blooms June through October (annual herb)	X			A	The results of the focused survey for this species were negative.
Atriplex serenana var. *davidsonii*	Davidson's saltscale	US: – CA: SP CNPS: 1B	Domino, Willows, and Traver soils in alkali vernal pools, alkali annual grassland, alkali playa, and alkali scrub components of alkali vernal plains.	Blooms May through October (annual herb)	X			A	The results of the focused survey for this species were negative.
Berberis nevinii	Nevin's barberry	US: FE CA: SE CNPS: 1B	Gravelly wash margins in alluvial scrub, or coarse soils in chaparral; typically 275 to 825 meters (900 to 2,700 feet) elevation; Los Angeles, San Bernardino, Riverside, and San Diego Counties. In Riverside County, this species occurs in restricted localized populations in the Vail Lake area, Jurupa Hills, the Badlands, and Aguanga. A lone individual has been reported from the City of Riverside, and a report from Temecula needs to be verified.	Blooms March through April (evergreen shrub, survey year-round)	X			A	This species is not known from nor expected to occur in the project vicinity.
Brodiaea filifolia	Thread-leaved brodiaea	US: FT CA: SE CNPS: 1B	Clay or alkaline silty-clay soils in semi-alkaline mudflats, vernal pools, mesic southern needlegrass grassland, mixed native – non-native grassland and alkali grassland.	Blooms March through June (Perennial bulb)	X			A	The results of the focused survey for this species were negative.

Appendix O – Regional Species of Concern and Coverage Under Habitat Conservation Plans

Scientific Name	Common Name	Status	Habitat and Distribution	Blooming / Activity Period	Species Coverage[1]			Habitat Present/ Absent in BSA	Rationale
					MSHCP	Lake Mathews MSHCP	El Sobrante Landfill MSHCP		
Calochortus plummerae	Plummer's mariposa lily	US: – CA: SP CNPS: 1B	Sandy or rocky sites of (usually) granitic or alluvial material in valley and foothill grassland, coastal scrub, chaparral, cismontane woodland, and lower montane coniferous forest at 100 to 1,700 meters (300 to 5,600 feet) elevation. Known from the Santa Monica Mountains to San Jacinto Mountains in Riverside, San Bernardino, Los Angeles, and Ventura Counties. In western Riverside County, this species is known from the foothills of the San Bernardino Mountains, northeastern Santa Ana Mountains, Box Springs Mountains, and from the Lake Skinner area (*The Vascular Plants of Western Riverside County, California*. F.M. Roberts et al., 2004).	Blooms May through July (perennial herb)	X			HP	This species was not observed during the focused surveys. Given the known distribution and habitat requirements of this species, there is a low probability of occurrence in the BSA.
Calochortus weedii var. *intermedius*	Intermediate mariposa lily	US: – CA: SP CNPS: 1B	Rocky areas in hills with annual grassland and coastal sage scrub. 180 to 855 meters (600 to 2,800 feet) elevation. Los Angeles, Orange, and Riverside Counties. In western Riverside County, this species is known from the hills and valleys west of Lake Skinner and Vail Lake (*The Vascular Plants of Western Riverside County, California*. F.M. Roberts et al., 2004).	June through July	X			HP	This species was not observed during the focused surveys. Given the known distribution of this species, there is a low probability of occurrence in the BSA.
Centromadia (Hemizonia) parryi ssp. *australis*	Southern tarplant	US: – CA: SP CNPS: 1B	Edges of marshes and swamps, vernal pools, and vernally wet areas in grasslands below 425 meters (1,400 feet) elevation. In California, known only from Santa Barbara, Ventura, Los Angeles, Orange, and San Diego Counties.	May through November		X		A	Site is outside the known range of this species. Species is not covered by the MSHCP, but is a Lake Mathews MSHCP covered species.
Centromadia (Hemizonia) pungens ssp. *laevis*	Smooth tarplant	US: – CA: SP CNPS: 1B	Primarily alkaline soils in alkali scrub, alkali playas, riparian woodland, watercourses, and alkaline grasslands. The MSHCP account for this species states that "Suitable habitat for the smooth tarplant includes alkali scrub, alkali playas, and grasslands with alkaline affinities...smooth tarplant is restricted to clay and alkaline, silty-clay soils."	Blooms April through November (annual herb)	X			P	This species was observed during focused surveys in alkaline areas in the eastern portion of the BSA.
Chorizanthe polygonoides var. *longispina*	Long-spined spineflower	US: – CA: SP CNPS: 1B	Clay soils in chaparral, coastal scrub, meadows and seeps, valley and foothill grassland at 30 to 1,450 meters (100 to 4,800 feet) elevation. Occurs in Riverside and San Diego Counties.	April through July (annual herb)	X		X	P	This species was observed during focused surveys south of Lake Mathews. El Sobrante Landfill MSHCP target species.
Dodecahema leptoceras	Slender-horned spineflower	US: FE CA: SE CNPS: 1B	Sandy soils in association with mature alluvial scrub (Riversidean alluvial fan sage scrub); or gravel soils of Temecula arkose deposits (i.e., coarse, decomposing pale feldspar-rich sandstone) in association with open chamise chaparral in the Vail Lake area. The ideal habitat appears to be terraces and benches that receive overbank deposits every 50–100 years. The MSHCP account for this species states that "this species is dependent on mature alluvial scrub that is maintained by periodic flooding and sediment transport and only occurs along Arroyo Seco and Kolb Creeks, Temescal Wash at Indian Creek, central Bautista Creek, Vail Lake, and the upper San Jacinto River near Valle Vista and Hemet. Cryptogrammic crusts are frequently present in areas occupied by slender-horned spine flower."	Blooms April through June (annual herb)	X			A	The results of the focused survey for this species were negative.
Dudleya multicaulis	Many-stemmed dudleya	US: – CA: SP CNPS: 1B	Clay soils in barrens, rocky places, ridgelines, and thinly vegetated openings in chaparral, coastal sage scrub, and southern needlegrass grasslands. Visible population size varies considerably year-to-year depending on rainfall patterns. The MSHCP account for this species states that "Many-stemmed dudleya is associated with openings in chaparral, coastal sage scrub, and grasslands underlain by clay and cobbly clay soils of the following series: Altamont, Auld, Bosanko, Claypit, and Porterville."	Blooms May through June (perennial herb)	X		X	IP	This species was observed south of Lake Mathews, but not within the areas to be impacted. However, additional potentially suitable habitat for this species will be surveyed in 2008. This species is inferred to be present in Alternatives 4, 5, and 9 pending the results of the 2008 survey. El Sobrante Landfill MSHCP target species.

Appendix O – Regional Species of Concern and Coverage Under Habitat Conservation Plans

Scientific Name	Common Name	Status	Habitat and Distribution	Blooming / Activity Period	Species Coverage[1]			Habitat Present/ Absent in BSA	Rationale
					MSHCP	Lake Mathews MSHCP	El Sobrante Landfill MSHCP		
Erodium macrophyllum	Round-leaved filaree	US: – CA: SP CNPS: 2	Clay soils in open cismontane woodland (e.g. oak, juniper woodlands) and valley and foothill grassland. The MSHCP account for this species states that it is restricted to "very friable clay soils...Within the Plan Area, two of the mapped localities occur on Bosanko clay soils" and that "this species tends to be associated primarily with wild oats (*Avena fatua*)."	Blooms March through May (annual herb)	X	X		P	This species was observed south of Lake Mathews.
Eryngium aristulatum var. *parishii*	San Diego button-celery	US: FE CA: SE CNPS: 1B	Vernal pools at 15 to 620 meters (50 to 2,000 feet) elevation. In California, known only from Riverside and San Diego Counties.	April through June	X			A	This species is a vernal pool obligate species known to occur in Riverside County only on the Santa Rosa Plateau.
Harpagonella palmeri	Palmer's grappling hook	US: – CA: SP CNPS: 2	Clay soils in openings in coastal sage scrub, juniper woodland, and grassland below 830 meters (2,700 feet) elevation. In California, known only from Orange, Riverside, and San Diego Counties and the Channel Islands.		X	X		P	This species was observed in the BSA but outside the project footprint.
Horkelia cuneata ssp. *puberula*	Mesa horkelia	US: – CA: SP CNPS: 1B	Sandy or gravelly soils in chaparral, or rarely in cismontane woodland or coastal scrub at 70 to 825 meters (200 to 2,700 feet) elevation. Occurs in San Luis Obispo, Santa Barbara, Ventura, Los Angeles, and Orange Counties. Believed extirpated from San Bernardino, Riverside, and San Diego Counties.	February through September	X			HP	Although this species is known from the County from very few collections, there is a low probability that it could occur in the BSA in areas of chaparral. Species is not covered by the MSHCP.
Lasthenia glabrata ssp. *coulteri*	Coulter's goldfields	US: – CA: SP CNPS: 1B	Traver, Domino, or (usually) Willows soils in alkali scrub, alkali playas, vernal pools, and alkali grasslands. The MSHCP account for this species states that "Coulter's goldfields is restricted to clay and alkaline, silty-clay soils."	Blooms February through June (annual herb)	X			P	This species was observed in the eastern portion of the BSA.
Monardella macrantha ssp. *hallii*	Hall's monardella	US: – CA: SP CNPS: 1B	Dry slopes and ridges in openings in chaparral, woodland, and forest at 695 to 2,195 meters (2,280 to 7,200 feet) elevation. Known only from San Diego, Orange, Riverside, and San Bernardino Counties. In western Riverside County, known only from higher elevations in the Santa Ana and Aqua Tibia Mountains (*The Vascular Plants of Western Riverside County, California*. F.M. Roberts et al., 2004).	June through August (perennial herb)	X			A	This species has not been reported from the project vicinity. Suitable habitat within the BSA is outside the known elevation range of this species.
Myosurus minimus ssp. *apus*	Little mousetail	US: – CA: SP CNPS: 3	Alkaline soils in vernal pools and vernal plains. The MSHCP account for this species states that "little mousetail is found in areas that have semiregular inundation."	Blooms April through May (annual herb)	X			A	This species was not observed during focused surveys.
Nama stenocarpum	Mud nama	US: – CA: SP CNPS: 2	Muddy embankments of marshes and swamps, and within lake margins and riverbanks.	Blooms January through July (annual or perennial herb)	X			A	This species was not observed during focused surveys.
Navarretia fossalis	Spreading navarretia	US: FT CA: SP CNPS: 1B	Saline alkaline soils of vernal pools and depressions and ditches in areas that once supported vernal pools. The MSHCP account for this species states that it "is primarily restricted to the alkali floodplains of the San Jacinto River, Mystic Lake and Salt Creek in association with Willows, Domino and Traver soils" and that "in western Riverside County, spreading navarretia has been found in relatively undisturbed and moderately disturbed vernal pools, within a larger vernal floodplains dominated by annual alkali grassland or alkali playa."	Blooms April through June (annual herb)	X			P	This species was observed along Ramona Expressway in the eastern portion of the site.

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Orcuttia californica	California Orcutt grass	US: FE CA: SE CNPS: 1B	Alkaline soils and southern basaltic claypan in vernal pools. The MSHCP account for this species states that, in Riverside County, it "is found in southern basaltic claypan vernal pools at the Santa Rosa Plateau, and alkaline vernal pools as at Skunk Hollow and at Salt Creek west of Hemet."	Blooms April through June (annual grass)	X			A	This species was not observed during focused surveys.
Phacelia stellaris	Brand's phacelia	US: FC CA: SP CNPS: 1B	Sandy soils of washes or benches in alluvial flood plains. This species is generally dependent on periodic flooding and sediment transport. The MSHCP account for this species states that "within western Riverside County, Brand's phacelia is restricted to sandy benches along the Santa Ana River."	Blooms March through June (annual herb)	X			A	This species was not observed during focused surveys.
Satureja chandleri	San Miguel savory	US: – CA: SP CNPS: 1B	Rocky, gabbroic, and metavolcanic substrates in chaparral or oak woodland. MSHCP Table 6-1 lists chaparral, coastal sage scrub, cismontane woodland, riparian woodland, and valley and foothill grasslands as potential habitat for this species. However, this species prefers moist rocky canyons with trees or large shrubs and would not be expected in coastal sage scrub or open grassland except at the margins of chaparral or oak woodland, nor would it be expected in woodlands outside of rocky canyons (Andrew C. Sanders, UC Riverside Herbarium, pers. comm. to Stan Spencer, Dec. 8, 2004). All occurrences of this species in the CNDDB that include habitat information (16 occurrences in Riverside, Orange, and San Diego Counties) list coast live oak (*Quercus agrifolia*) or chaparral species as associates, or indicate that the habitat is chaparral, oak woodland, a chaparral-coastal sage scrub interface, or grassy openings in chaparral. In Riverside County, this species is known only from the Santa Ana Mountains and Santa Rosa Plateau, except for a dubious record of an occurrence near Sage Road south of Hemet (Andrew C. Sanders, UC Riverside Herbarium, pers. comm. to Stan Spencer, Dec. 8, 2004; MSHCP species account for San Miguel savory).	Blooms March through May (perennial herb)	X			IP	This species was not observed during focused surveys. This species is inferred to be present in some areas of the BSA that have not been surveyed, but is not present within the project footprint.
Sibaropsis hammittii	Hammitt's clay-cress	US:– CA: SP CNPS: 1B	Clay soils in chaparral and valley and foothill grassland habitats at 700 to 1,100 meters (2,300–3,600 feet) elevation. The MSHCP account for this species states that "Hammitt's clay-cress is associated with clay soils, such as Altamont, Auld, Bosanko, Claypit, and Porterville soil series" and that, in western Riverside County "Hammitt's clay-cress is only known from the Elsinore Peak area of the Santa Ana Mountains in grasslands."	Blooms March through April (annual herb)	X			A	This species was not observed during focused surveys.
Trichocoronis wrightii var. *wrightii*	Wright's trichocoronis	US: – CA: SP CNPS: 2	Alkali soils in alkali playa, alkali annual grassland, and alkali vernal pools. The MSHCP account for this species states that "Wright's trichocoronis is restricted to highly alkaline, silty-clay soils in association with Traver, Domino, and Willows soils."	Blooms May through September (annual or perennial herb)	X			A	This species was not observed during focused surveys.

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Scientific Name	Common Name	Status	Habitat and Distribution	Blooming / Activity Period	Species Coverage[1]			Habitat Present/ Absent in BSA	Rationale
					MSHCP	Lake Mathews MSHCP	El Sobrante Landfill MSHCP		
Invertebrates									
Branchinecta lynchi	Vernal pool fairy shrimp	US: FT CA: SA	Vernal pools and swales in grassland areas. Known from the Central Valley, the central coast and south coast mountains as far south as Ventura County, and from the Santa Rosa Plateau, Skunk Hollow, and a vernal pool just west of Hemet in Riverside County.	Seasonally following rains; typically January through April	X			A	This species was not observed during focused surveys.
Euphydryas editha quino	Quino checkerspot butterfly	US: FE CA: SA	Meadows or openings within coastal sage scrub or chaparral where food plants (*Plantago erecta* and/or *Orthocarpus purpurascens*) are present. Historically known from Santa Monica Mountains to northwest Baja California; currently known only from southwestern Riverside County, southern San Diego County, and northern Baja California.	January through late April	X			HP CH	Potentially suitable habitat exists in non-native grassland and openings in scrub communities on the site. Critical habitat within the BSA is located south of Lake Mathews and in the Gavilan Hills; however, Quino checkerspot butterfly has been extirpated from this area according to the MSHCP.
Streptocephalus woottoni	Riverside fairy shrimp	US: FE CA: SA	Warm-water vernal pools (i.e., large, deep pools that retain water into the warm season) including artificially created or enhanced pools, such as some stock ponds, that have vernal pool-like hydrology and vegetation. Known from areas within about 50 miles of the coast from Ventura County south to San Diego County.	Seasonally following rains; typically January through April	X			A	This species was not observed during focused surveys.
Fish									
Gila orcutti	Arroyo chub	US: – CA: CSC	Perennial streams or intermittent streams with permanent pools; slow water sections of streams with mud or sand substrates; spawning occurs in pools. Native to Los Angeles, San Gabriel, San Luis Rey, Santa Ana, and Santa Margarita River systems; introduced in Santa Ynez, Santa Maria, Cuyama, and Mojave River systems and smaller coastal streams.	Year-round	X			HP	Potentially suitable habitat exists in the permanent pools of Temescal Wash. Species is known to occur in Temescal Wash, in Riverside County.
Amphibians									
Bufo californicus	Arroyo toad	US: FE CA: CSC	Washes and arroyos with open water; sand or gravel beds; for breeding, pools with sparse overstory vegetation. Coastal and a few desert streams from Monterey County to Baja California.	March through July	X			HP	Project site is located outside of MSHCP designated survey area for this species. Potentially suitable habitat exists in washes and open water areas on site. The arroyo toad has historically been known to occur within the San Jacinto River or tributaries in higher elevations within the San Bernardino National Forest; however, these observations are approximately 10 kilometers (6 miles) to the east of the BSA.
Rana aurora draytonii	California red-legged frog	US: FT CA: CSC MSHCP: S	Streams with slow-moving water and deep pools; dense, shrubby riparian vegetation at pool edges. Foothills surrounding the Sacramento Valley and coastal streams from Marin County to northwestern Baja California. Believed to be extirpated between Los Angeles County and the Mexican border.	December through April			X	A	Only one remnant and possibly extirpated population is found in western Riverside County (located at the Santa Rosa Plateau).
Spea (=Scaphiopus) hammondii	Western spadefoot	US: – CA: CSC MSHCP: C	Grasslands and occasionally hardwood woodlands; requires temporary pools (persisting for at least three weeks) for breeding; burrows in loose soils during dry season. Occurs in the Central Valley and adjacent foothills, the non-desert areas of southern California, and in Baja California, Mexico.	October through April (following onset of winter rains)		X	X	P	Species observed during 2005 field surveys. Potentially suitable habitat exists in alkali grasslands and oak woodland communities on site. Known populations found in the City of Corona, Lake Mathews Reserve area, and Temescal Wash. El Sobrante Landfill MSHCP target species.
Taricha torosa torosa	Coast Range newt	US: – CA: CSC	Breeds in ponds, reservoirs, and slow-moving streams; uses nearby upland areas including grassland, chaparral, and woodland; coastal drainages from Mendocino County south to San Diego County. Populations south of Monterey County designated as sensitive.	October through May	X			HP	Potentially suitable habitat exists along ponds and streams adjacent to grassland, chaparral, and woodland communities.

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					MSHCP	Lake Mathews MSHCP	El Sobrante Landfill MSHCP		
Reptiles									
Aspidoscelis hyperythra beldingi	Belding's orange-throated `	US: – CA: CSC	Prefers chaparral, coastal sage scrub, juniper woodland, and oak woodland from sea level to 915 meters (3,000 feet) elevation; inland and coastal valleys of Riverside, Orange, and San Diego Counties to Baja California.	March through July with reduced activity August through October	X		X	P	Species observed during 2006 surveys. Potentially suitable habitat exists in chaparral, coastal sage scrub, juniper woodland, and oak woodland communities on site. El Sobrante Landfill MSHCP target species.
Crotalus ruber ruber	Northern red-diamond rattlesnake	US: – CA: CSC	Desert scrub, thornscrub, open chaparral and woodland; occasional in grassland and cultivated areas. Prefers rocky areas and dense vegetation. Morongo Valley in San Bernardino and Riverside Counties to the west and south to Baja California.	Mid-spring through mid-fall	X	X	X	P	Species observed during 2005 field surveys. Potentially suitable habitat exists in chaparral, rocky sage scrub, and oak and juniper woodland communities on site. Found throughout western Riverside County. El Sobrante Landfill MSHCP target species.
Emys (=Clemmys) marmorata pallida	Southwestern pond turtle	US: – CA: CSC	Inhabits permanent or nearly permanent water below 1,830 meters (6,000 feet) from central California, west of the Sierra-Cascade crest south to north-western Baja California. Absent from desert regions, except in the Mojave Desert along the Mojave River and its tributaries. Requires basking sites such as partially submerged logs, rocks, or open mud banks.	Year-round with reduced activity November through March	X	X		HP	Potentially suitable habitat exists along the San Jacinto River and its tributaries on site. Known populations include Cajalco Creek and Temescal Wash. Lake Mathews MSHCP target species.
Lampropeltis zonata pulchra	San Diego mountain king snake	US: – CA: CSC	In the interior mountain ranges, this subspecies occurs primarily in associations of ponderosa, Jeffrey, and Coulter pine, and black oak. At lower elevations and in the coastal ranges, it occurs in riparian woodlands, usually in canyon bottoms, that have western sycamore, Fremont's cottonwood, coast live oak, willows, wild rose, poison oak, and blackberries. Found most commonly in the vicinity of rocks or boulders near streams or lake shores. This species ranges from the Santa Monica Mountains (Los Angeles County), Santa Ana Mountains (Orange and Riverside Counties), Santa Rosa Mountains (Riverside County), to the mountain areas of San Diego County. Documented from sea level to about 1,800 meters (5,900 feet) elevation. The lower elevational ranges are for coastal situations with lower temperatures and fog or abundant cloud cover. The inland locations are more typical and primarily support the subspecies between 1,220 meters (4,000 feet) and 1,830 meters (6,000 feet).	Active diurnally throughout most of the year. Nocturnal in warm weather.	X			A	Known range for the species in Riverside County includes the Santa Ana and Santa Rosa Mountains. Project site does not provide suitable habitat.
Phrynosoma coronatum	Coast horned lizard (including San Diego horned lizard)	US: – CA: CSC	Occurs in annual grassland, coastal sage scrub, chaparral, and woodland communities. Prefers open country, especially sandy areas, washes, and floodplains. Requires open areas for sunning, bushes for cover, patches of loose soil for burial, and an abundant supply of ants or other insects. Occurs in Siskiyou County, in the Central Valley and adjacent foothills below 1,200 meters (4,000 feet) elevation, in coastal areas of central California, and in non-desert areas of southern California below 1,830 meters (6,000 feet) elevation, and throughout the Baja California Peninsula.	April through July with reduced activity August through October	X	X	X	P	Species observed in non-native grasslands and coastal sage scrub within the Lake Mathews Reserve during 2005 surveys. El Sobrante Landfill MSHCP target species.
Birds									
Accipiter cooperii (nesting)	Cooper's hawk	US: – CA: CSC	Primarily forests and woodlands throughout North America.	Present year-round, nesting February through July	X	X	X	P	Species observed during 2005 field surveys. Potentially suitable habitat exists in juniper and oak woodland, riparian scrub and forest communities. El Sobrante Landfill MSHCP target species.

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Accipiter striatus (nesting)	Sharp-shinned hawk	US: – CA: CSC	Nests in woodland, coniferous/deciduous forest. Winter visitor and migrant to coastal southern California. Forages over a variety of habitats.	Fall and winter; scarce in summer	X	X	X	HP	Species is not known to nest in Riverside County. Species is adequately conserved under the MSHCP. Target species of Lake Mathews MSHCP. El Sobrante Landfill MSHCP target species. Suitable winter foraging habitat exists throughout the BSA. Species is known to migrate through and winter in the Lake Mathews and Lake Perris areas.
Agelaius tricolor (nesting colony)	Tricolored blackbird	US: – CA: CSC	Open country in western Oregon, California, and northwestern Baja California. Breeds near fresh water, preferably in emergent wetland with tall, dense cattails or tules, but also in thickets of willow, blackberry, wild rose, tall herbs and forages in grassland and cropland habitats. Seeks cover for roosting in emergent wetland vegetation, especially cattails and tules, and also in trees and shrubs.	Present year-round, nesting March through June	X	X		HP	Potentially suitable nesting habitat exists along the San Jacinto River and its tributaries in riparian thickets adjacent to grasslands. Due to the nomadic behavior of the species, its exact range is difficult to document.
Aimophila ruficeps canescens	Southern California rufous-crowned sparrow	US: – CA: CSC	Steep, rocky coastal sage scrub and open chaparral habitats, particularly scrubby areas mixed with grasslands. From Santa Barbara County to northwestern Baja California.	Year-round, diurnal activity	X	X	X	P	Species observed during 2005 field surveys. Potentially suitable habitat exists in coastal sage scrub and chaparral communities on site. El Sobrante Landfill MSHCP target species.
Amphispiza belli belli	Bell's sage sparrow	US: – CA: CSC	Occupies chaparral and coastal sage scrub from west central California to northwestern Baja California.	Year-round, diurnal activity	X	X	X	P	Species observed during 2005 field surveys. Potentially suitable habitat exists in coastal sage scrub and chaparral communities on site.
Aquila chrysaetos	Golden eagle	US: – CA: CSC, CFP	Generally open country of the Temperate Zone worldwide. Uncommon resident in southwestern California.	Year-round diurnal	X	X	X	P	Species observed during 2005 and 2006 field surveys. Potentially suitable foraging habitat exists in grasslands and juniper and oak woodland communities on site. El Sobrante Landfill MSHCP target species.
Athene cunicularia (burrow sites)	Burrowing owl	US: – CA: CSC	Open country in much of North and South America. Usually occupies ground squirrel burrows in open, dry grasslands, agricultural and range lands, railroad rights-of-way, margins of highways, golf courses, and airports. Often utilizes man-made structures, such as earthen berms, cement culverts, cement, asphalt, rock, or wood debris piles.	Year-round	X		X	P	Burrowing owl was observed within the BSA in 2006. Suitable habitat exists for burrowing owls in grasslands, agricultural and range lands, dairies, and other disturbed areas on site. Species known to occur in the Perris Reservoir Area, City of Corona, and Lake Mathews Reserve. El Sobrante Landfill MSHCP target species.
Buteo regalis (wintering)	Ferruginous hawk	US: – CA: CSC	Open country in western North America; north to Canada in summer and south to Mexico in winter.	Mid-September through mid-April	X	X		HP	Potentially suitable wintering habitat exists in open fields, grasslands, agricultural areas, and juniper woodland communities on site.
Buteo swainsoni (nesting)	Swainson's hawk	US: – CA: ST	Grassland and agricultural areas; large trees for nesting. Breeds and nests in western North America; winters in South America; in California nesting is essentially restricted to Central Valley and Modoc Plateau.	Spring and fall (in migration)	X	X		HP	Species is not known to nest within Riverside County. Suitable foraging habitat exists over open fields, grasslands, and agricultural areas.
Campylorhynchus brunneicapillus sandiegensis (San Diego County and Orange County)	San Diego cactus wren	US: – CA: CSC	Inhabits coastal sage scrub, nesting almost exclusively in thickets of cholla (*Opuntia prolifera*) and prickly pear (*Opuntia littoralis* and *Opuntia oricola*), typically below 150 m (500 feet) elevation. Found in coastal areas of Orange County and San Diego Counties, and extreme northwestern Baja California.	Year-round (non-migratory)	X	X	X	A	Subspecies is not known from Riverside County (CDFG 2006). Lake Mathews MSHCP target species. The mainland cactus wren (*Campylorhynchus brunneicapillus anthonyi*) was observed on site, but is not a sensitive species. Although cactus wren is a covered species under the MSHCP, Lake Mathews MSHCP and El Sobrante Landfill MSHCP, cactus wren in Riverside County is not considered sensitive by CDFG and is not a federally listed or candidate species (CDFG CNDDB 2006b).
Circus cyaneus (nesting)	Northern harrier	US: – CA: CSC	Open country in the Temperate Zone worldwide.	Present year-round, nesting April through July	X	X	X	P	Species observed during 2005 field surveys. Potentially suitable nesting habitat exists in grassland and marsh communities on site. El Sobrante Landfill MSHCP target species.

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Scientific Name	Common Name	Status	Habitat and Distribution	Blooming / Activity Period	Species Coverage[1]			Habitat Present/ Absent in BSA	Rationale
					MSHCP	Lake Mathews MSHCP	El Sobrante Landfill MSHCP		
Coccyzus americanus occidentalis (nesting)	Western yellow-billed cuckoo	US: FC CA: SE	Breeds and nests in extensive stands of dense cottonwood/ willow riparian forest along broad, lower flood bottoms of larger river systems at scattered locales in western North America; winters in South America.	May through September	X			A	Project area is outside of the known nesting locations of this species. Species known to occur in the Prado Basin.
Dendroica petechia brewsteri (nesting)	California yellow warbler	US: – CA: CSC	Riparian woodland while nesting in the western United States and northwestern Baja California; more widespread in brushy areas and woodlands during migration and winter, when occurring from western Mexico to northern South America.	April through September	X			P	Species observed during 2005 and 2006 field surveys. Potentially suitable nesting habitat exists in riparian forest and scrub communities on site.
Elanus leucurus (nesting)	White-tailed kite	US: – CA: CFP	Open country in South America and southern North America. Typically nests in riparian trees such as oaks, willows, and cottonwoods.	Present year-round, nesting February through July	X	X	X	P	Species, including juveniles, observed during 2005 and 2006 field surveys. Potentially suitable nesting habitat exists in riparian forest communities on site. El Sobrante Landfill MSHCP target species.
Empidonax traillii extimus (nesting)	Southwestern willow flycatcher	US: FE CA: SE	Rare and local breeder in riparian habitat usually with standing water, in the southwestern United States and (formerly?) northwestern Mexico. Winters in Central and South America.	May through September	X			HP	Subspecies considered absent based on protocol surveys in 2005 and 2006. Potentially suitable habitat exists in riparian forest communities on site.
Eremophila alpestris actia	California horned lark	US: – CA: CSC	Open grasslands and fields, agricultural area, open montane grasslands. This subspecies is resident from northern Baja California northward throughout non-desert areas to Humboldt County, including the San Joaquin Valley and the western foothills of the Sierra Nevada (north to Calaveras County). During the breeding season, this is the only subspecies of horned lark in non-desert southern California; however, from September through April or early May, other subspecies visit the area.	Year-round	X	X	X	P	Species observed during 2005 and 2006 field surveys. Potentially suitable habitat exists in grasslands and agricultural areas on site.
Falco columbarius (wintering)	Merlin	US: – CA: CSC	Open country; breeds in the Holarctic Region and winters south to the tropics. Rare fall migrant and winter visitor to southwestern California.	September through April	X			HP	Species could occur anywhere in the study area.
Falco mexicanus (nesting)	Prairie falcon	US: – CA: CSC	Open country in much of North America. Nests in cliffs or rocky outcrops; forages in open arid valleys and agricultural fields. Rare in southwestern California.	Present year-round diurnal, nesting March through June	X		X	P	Species observed foraging within study area; however, unlikely to nest in the vicinity of the project site. El Sobrante Landfill MSHCP target species.
Falco peregrinus anatum (nesting)	American peregrine falcon	US: Delisted CA: SE, CFP	Widespread, but scarce and local throughout North America. Wetlands near high cliffs; few known to nest in urban settings on tall buildings.	Present year-round, nesting March through June	X			A	Species unlikely to nest in the vicinity of the project site due to lack of nesting habitat.
Haliaeetus leucocephalus	Bald eagle	US: Delisted CA: SE, CFP	Winters locally at deep lakes and reservoirs feeding on fish and waterfowl. Locally rare throughout North America.	November through February	X	X		P	This species was observed during 2005 site surveys within Metropolitan Water District land adjacent to Lake Mathews. Potentially suitable foraging/wintering habitat exists in deep lakes and reservoirs adjacent to and within the BSA. However, the BSA does not include suitable nesting habitat for this species near the lake.
Icteria virens (nesting)	Yellow-breasted chat	US: – CA: CSC	Riparian thickets of willow, brushy tangles near watercourses. Nests in riparian woodland throughout much of western North America. Winters in Central America.	April through September	X			P	Species observed during 2005 and 2006 field surveys. Suitable habitat exists in riparian forests and scrub communities on site.

Appendix O – Regional Species of Concern and Coverage Under Habitat Conservation Plans

Scientific Name	Common Name	Status	Habitat and Distribution	Blooming / Activity Period	Species Coverage[1]			Habitat Present/ Absent in BSA	Rationale
					MSHCP	Lake Mathews MSHCP	El Sobrante Landfill MSHCP		
Lanius ludovicianus (nesting)	Loggerhead shrike	US: – CA: CSC	Open country in much of North America, but declining in many areas, including southwestern California.	Present year-round, nesting February through June	X	X	X	P	Species observed during 2005 and 2006 field surveys. Potentially suitable habitat exists in grasslands and juniper and oak woodland and scrub communities on site. El Sobrante Landfill MSHCP target species.
Plegadis chihi (rookery site)	White-faced ibis	US: – CA: CSC	Winters locally in wet meadows, shallow freshwater marshes, ponds, lakes, rivers, flooded fields, and estuaries. May frequent brackish areas or feed in flooded fields. Known rookery in western Riverside County. In the Coachella Valley and Imperial Valley, this species primarily occurs in irrigated agricultural lands, particularly alfalfa and wheat.	Year-round diurnal activity	X			P	Species observed foraging during 2005 field surveys. Project area is outside the known breeding range of the species.
Polioptila californica californica	Coastal California gnatcatcher	US: FT CA: CSC	Inhabits coastal sage scrub in low-lying foothills and valleys in cismontane southwestern California and Baja California.	Year-round	X	C	X	P CH	Species observed during 2005 and 2006 field surveys. Suitable habitat exists in coastal sage scrub communities on site. Portions of Alternatives 4, 5, and 9 south of Lake Mathews are within new final (2007) critical habitat.
Progne subis (nesting)	Purple martin	US: – CA: CSC	Open agricultural areas, towns, and marsh edges. Nesting habitat consists of old sycamores and pines, often within oak woodland or open coniferous forest. Breeds throughout much of North America, but rare and local in southern California. Winters in South America.	Summer – resident	X			HP	Potentially suitable nesting habitat exists in oak woodland communities on site.
Riparia riparia (nesting)	Bank swallow	US: – CA: ST	Nesting habitat is vertical banks of fine textured soils, most commonly along streams and rivers. In southern California, fairly common spring and fall transient in interior; very uncommon spring transient and rare fall transient along coast. Casual in winter.	Variable Year-round		X		A	The BSA is outside the nesting range for this species. Lake Mathews MSHCP target species. Species is not covered by the MSHCP.
Vireo bellii pusillus	Least Bell's vireo	US: FE CA: SE	Riparian forests and willow thickets. Nests from central California to northern Baja California. Winters in southern Baja California.	April through September	X			P	Species observed during 2005 and 2006 field surveys in western half of BSA. Suitable habitat exists in riparian forest communities on site.
Chaetodipus fallax fallax	Northwestern San Diego pocket mouse	US: – CA: CSC	Found in coastal scrub, chaparral, grasslands, and sagebrush in western San Diego and southwestern Riverside Counties. Ranges from southern Los Angeles County to northern Baja California.	Year-round	X	X	X	P	Species captured during small mammal trapping. Suitable habitat exists in coastal sage scrub, chaparral, and grassland communities on site. El Sobrante Landfill MSHCP target species.
Dipodomys merriami parvus	San Bernardino Merriam's kangaroo rat	US: FE CA: CSC	Gravelly and sandy soils of alluvial fans, braided river channels, active channels and sandy terraces; San Bernardino Valley (San Bernardino County) and San Jacinto Valley (Riverside County).	Nocturnal, active year-round	X			P CH	Species was found in a 2006 survey of habitat that is contiguous with habitat on the project site. Potentially suitable habitat exists in alluvial fan sage scrub communities on site. Critical habitat is located along San Jacinto River at the eastern edge of BSA. Species known range includes the vicinity of Lake Perris.
Dipodomys stephensi	Stephens' kangaroo rat	US: FE CA: ST	Found in plant communities transitional between grassland and coastal sage scrub, with perennial vegetation cover of less than 50%. Most commonly associated with *Artemesia tridentata*, *Eriogonum fasciculatum*, and *Erodium*. Requires well-drained soils with compaction characteristics suitable for burrow construction. Not found in soils that are highly rocky, less than 20 inches deep, or heavily alkaline or clay, or in areas exceeding 25% slope. Occurs only in western Riverside County and northern San Diego County, below 915 meters (3,000 feet) elevation. In northeastern Riverside County, known only from east of Interstate 15.	Year-round	X	X	X	P	Species detected during 2005 field surveys (no trapping was conducted). Potentially suitable habitat exists in grassland and coastal sage scrub communities on site. Known range of species includes the vicinity of Lake Mathews and Lake Perris. El Sobrante Landfill MSHCP target species.
Lepus californicus bennettii	San Diego black-tailed jackrabbit	US: – CA: CSC	Variety of habitats including herbaceous and desert scrub areas, early stages of open forest and chaparral. Most common in relatively open habitats. Restricted to the cismontane areas of southern California and northwestern Baja California, extending from the coast to the Santa Monica, San Gabriel, San Bernardino, and Santa Rosa Mountain ranges.	Year-round, diurnal and crepuscular activity	X	X	X	P	Species observed during 2005 and 2006 field surveys. Suitable habitat exists in scrub and chaparral communities on site. El Sobrante Landfill MSHCP target species.
Neotoma lepida intermedia	San Diego desert woodrat	US: – CA: CSC	Frequents poorly vegetated arid lands and is especially associated with cactus patches. Occurs along the Pacific slope from San Luis Obispo County to northwest Baja California.	Year-round, mainly nocturnal,	X	X	X	P	Species captured during small mammal trapping surveys. Suitable habitat exists in coastal sage scrub and chaparral communities on site. El Sobrante Landfill MSHCP target species.

Appendix O – Regional Species of Concern and Coverage Under Habitat Conservation Plans

Scientific Name	Common Name	Status	Habitat and Distribution	Blooming / Activity Period	Species Coverage[1]			Habitat Present/ Absent in BSA	Rationale
					MSHCP	Lake Mathews MSHCP	El Sobrante Landfill MSHCP		
				occasionally crepuscular and diurnal					
Nyctinomops macrotis	Big free-tailed bat	US: – CA: CSC	Found from northern South America and the Caribbean Islands northward to the western United States. In the southwestern United States, populations appear to be scattered.	Primarily the warmer months; nocturnal		X		HP	There is insufficient information on data and habitat for this species. Species is not known to occur within the study area (although was included in the Lake Mathews MSHCP). Species is not covered by the MSHCP.
Perognathus longimembris brevinasus	Los Angeles pocket mouse	US: – CA: CSC	Prefers sandy soil for burrowing, but has been found on gravel washes and stony soils. Found in coastal scrub in Los Angeles, Riverside, and San Bernardino Counties.	Nocturnal. Active late spring through early fall.	X			P	Species captured during 2005 field trapping surveys. Suitable habitat exists in coastal sage scrub communities on site.

[1] Species coverage refers to regional species of concern identified in the *Natural Environment Study* that are covered/target species under Habitat Conservation Plans. Covered species of Habitat Conservation Plans that are not considered sensitive by regulatory agencies or CNPS and species not targeted under the Habitat Conservation Plans are not included in this table.

BSA = Biological Study Area
CDFG = California Department of Fish and Game
CNDDB = California Natural Diversity Database
MSHCP = Multiple Species Habitat Conservation Plan

LEGEND	
US: Federal Classifications	
FE	Taxa listed as Endangered.
FT	Taxa listed as Threatened.
FPE	Taxa proposed for listing as Endangered.
FPT	Taxa proposed for listing as Threatened.
FPD	Taxa proposed for delisting.
FC	Candidate for listing as Threatened or Endangered.
CA: State Classifications	
SE	Taxa State-listed as Endangered.
ST	Taxa State-listed as Threatened.
SR	Taxa State-listed as Rare.
SCE	Candidate for State-listing as Endangered.
SCT	Candidate for State-listing as Threatened.
CSC	California Species of Special Concern. Refers to animals with vulnerable or seriously declining populations.
CFP	California Fully Protected. Refers to animals protected from take under Fish and Game Code sections 3511, 4700, 5050, and 5515.
SA	Special Animal. Refers to any other animal monitored by the Natural Diversity Data Base, regardless of its legal or protection status.
SP	Special Plant. Refers to any other plant monitored by the Natural Diversity Data Base, regardless of its legal or protection status.
CNPS: California Native Plant Society Classifications	
1A	Plants presumed extinct in California.
1B	Plants considered by CNPS to be rare, threatened, or endangered in California and elsewhere.
2	Plants considered by CNPS to be rare, threatened, or endangered in California, but more common elsewhere.
3	Plants about which more information is needed – a CNPS review list.
MSHCP: Western Riverside County MSHCP Status	
X	Covered species include: Target species under El Sobrante and Lake Mathews HCP and the following MSHCP covered species: 1) species adequately conserved by the MSHCP, but surveys are required within indicated habitats and/or survey areas; 2) species adequately conserved by the MSHCP; and 3) species covered but not considered adequately conserved pending completion of MSHCP specified requirements.
Habitat Presence/Absence Determinations	
A	Habitat absent, or habitat may be present but the species was determined to be absent.
HP	Habitat is or may be present. The species may be present.
P	The species was determined to be present.
AP	The species is assumed to be present pending the results of the 2008 focused survey for NEPSSA plants.
CH	Project footprint is located within a designated critical habitat unit.

Appendix P Parcel Acquisitions

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Parcel Acquisitions

APN	Segment	Acquisitions			Mailing Address	Physical Location Address	Alternative																	
		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
107180041	TWS*		X		10921 Westminster Ave; Garden Grove CA 92843	1445 E Ontario Ave; Corona CA 92881			X			X			X			X				X
107330015	TWS*		X		PO Box 105842; Atlanta GA 30348	1355 E Ontario Ave; Corona CA 92881			X			X			X			X				X
107330016	TWS*		X		PO Box 8700; Newport Beach CA 92658	1375 E Ontario Ave; Corona CA 92881			X			X			X			X				X
107330017	TWS*		X		PO Box 8700; Newport Beach CA 92658	1395 E Ontario Ave; Corona CA 92881			X			X			X			X				X
120190002	TWS-C		X		1788 Claycord Ave; Concord CA 94521		X	X		X	X		X	X		X	X		X	X	X	X	
120190005	TWS-C			X	5850 Avenida Encinas Ste A; Carlsbad CA 92008	2355 Compton Ave; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
120190008	TWS*	X			PO Box 5015; Buena Park CA 90622	1402 E Ontario Ave; Corona CA 92881			X			X			X			X				X
	TWS-C		X		PO Box 5015; Buena Park CA 90622	1402 E Ontario Ave; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
120200004	TWS-C		X		22587 Canyon Club Dr; Canyon Lake CA 92587	1508 Taber St; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
120200005	TWS-C		X		50 E North Temple; Salt Lake City UT 84150	1510 Taber St; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
120270012	TWS-C	X			5318 Tyrone Ave; Sherman Oaks CA 91401		X	X		X	X		X	X		X	X		X	X	X	X	
120270013	TWS-C	X			5318 Tyrone Ave; Sherman Oaks CA 91401		X	X		X	X		X	X		X	X		X	X	X	X	
120270014	TWS-C	X			2520 State St; Corona CA 92881	2520 State St; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
120280002	TWS*	X			25891 Hitching Rail Rd; Laguna Hills CA 92653				X			X			X			X				X
	TWS-C	X			25891 Hitching Rail Rd; Laguna Hills CA 92653		X	X		X	X		X	X		X	X		X	X	X	X	
120280005	TWS*	X			3019 E Lake Hill Dr; Orange CA 92867	1649 E Ontario Ave; Corona CA 92881			X			X			X			X				X
	TWS-C		X		3019 E Lake Hill Dr; Orange CA 92867	1649 E Ontario Ave; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
120280010	TWS*		X		2306 State St; Corona CA 92881	2306 State St; Corona CA 92881			X			X			X			X				X
	TWS-C	X			2306 State St; Corona CA 92881	2306 State St; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
120280011	TWS*	X			2308 State St; Corona CA 92881	2308 State St; Corona CA 92881			X			X			X			X				X
	TWS-C	X			2308 State St; Corona CA 92881	2308 State St; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
120280012	TWS*		X		1925 Sunnycrest Dr Apt 125; Fullerton CA 92835				X			X			X			X				X
	TWS-C	X			1925 Sunnycrest Dr Apt 125; Fullerton CA 92835		X	X		X	X		X	X		X	X		X	X	X	X	
120280014	TWS*	X			2601 W Dunlap Ave #10; Phoenix AZ 85021	1550 E Ontario Ave; Corona CA 92881			X			X			X			X				X
	TWS-C	X			2601 W Dunlap Ave #10; Phoenix AZ 85021	1550 E Ontario Ave; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
120280015	TWS*	X			22460 Mission Hills Ln; Yorba Linda CA 92887	1600 E Ontario Ave; Corona CA 92881			X			X			X			X				X
	TWS-C	X			22460 Mission Hills Ln; Yorba Linda CA 92887	1600 E Ontario Ave; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
120290009	TWS-C	X			2550 State St; Corona CA 92881	2550 State St; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
120290010	TWS-C	X			2530 State St; Corona CA 92881	2530 State St; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
120510004	TWS*	X			1990 Bundy Dr Ste 500; Los Angeles CA 90025				X			X			X			X				X
120510012	TWS*		X		1990 S Bundy Dr Ste 500; Los Angeles CA 90025	1300 E Ontario Ave; Corona CA 92881			X			X			X			X				X
120510016	TWS*		X		2315 California Ave; Corona CA 92881	2240 Compton Ave; Corona CA 92881			X			X			X			X				X
270130007	LMNS-GP		X		PO Box 54153; Los Angeles CA 90054								X	X	X	X	X	X					
270140001	LMNS-GP		X		PO Box 5831; Denver CO 80217	14170 El Sobrante Rd A, Riverside CA 92503							X	X	X	X	X	X					
270140002	LMNS-GP		X		PO Box 7398; Riverside CA 92513								X	X	X	X	X	X					
270140003	LMNS-GP		X		PO Box 7398; Riverside CA 92513								X	X	X	X	X	X					
270140004	LMNS-GP		X		3410 La Sierra Ave F169; Riverside CA 92503	14250 El Sobrante Rd; Riverside CA 92503							X	X	X	X	X	X					

Parcel Acquisitions

APN	Segment	Acquisitions			Mailing Address	Physical Location Address	Alternative																
		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
270140005	LMNS-GP		X		3410 La Sierra Ave F169; Riverside CA 92503	17878 Vista Del Lago Dr; Riverside 92503							X	X	X	X	X	X					
120200004	TWS-C		X		22587 Canyon Club Dr; Canyon Lake CA 92587	1508 Taber St; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
120200005	TWS-C		X		50 E North Temple; Salt Lake City UT 84150	1510 Taber St; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
270160001	LMNS-GP		X		9851 Bolsa Ave Spc 196; Westminster CA 92683								X	X	X	X	X	X					
270160010	LMNS-GP		X		244 E Hoover Ave; Orange CA 92867								X	X	X	X	X	X					
270160014	LMNS-GP		X		15320 Placid Dr: La Mirada CA 90638								X	X	X	X	X	X					
270160016	LMNS-GP		X		21906 Verne Ave Apt 1; Hawaiian Gardens CA 90716								X	X	X	X	X	X					
270160021	LMNS-GP		X		PO Box 813; Parker AZ 85344								X	X	X	X	X	X					
270160022	LMNS-GP		X		PO Box 1987; Perris CA 92572								X	X	X	X	X	X					
270160023	LMNS-GP		X		9622 James Cir; Villa Park CA 92861								X	X	X	X	X	X					
270160024	LMNS-GP		X		PO Box 1987; Perris CA 92572	13300 El Sobrante Rd; Riverside CA 92503							X	X	X	X	X	X					
270160025	LMNS-GP		X		25885 Sandy Lodge Rd; Sun City CA 92586	13220 El Sobrante Rd; Riverside CA 92503							X	X	X	X	X	X					
270160026	LMNS-GP		X		13850 El Sobrante Rd; Riverside CA 92503	13850 El Sobrante Rd; Riverside CA 92503							X	X	X	X	X	X					
270160027	LMNS-GP		X		5159 E Crescent Dr; Anaheim CA 92807								X	X	X	X	X	X					
270160028	LMNS-GP		X		1210 W Dwyer Dr; Anaheim CA 92801								X	X	X	X	X	X					
270180010	LMNS-GP		X		9851 Bolsa Ave Spc 196; Westminster CA 92683								X	X	X	X	X	X					
270190011	LMNS-GP		X		PO Box 54153; Los Angeles CA 90054								X	X	X	X	X	X					
270190017	LMNS-GP		X		12201 Magnolia Ave No 100; Riverside CA 92503								X	X	X	X	X	X					
270190019	LMNS-GP		X		PO Box 54153; Los Angeles CA 90054								X	X	X	X	X	X					
270190020	LMNS-GP		X		PO Box 54153; Los Angeles CA 90054								X	X	X	X	X	X					
270210069	LMNS-GP	X			603 S Valencia Ave; Brea CA 92822								X	X	X	X	X	X					
270210070	LMNS-GP		X		1250 Corona Pointe Ct Ste 600; Corona CA 92879								X	X	X	X	X	X					
270210072	LMNS-GP	X			1 Polaris Way Ste 100; Aliso Viejo CA 92656								X	X	X	X	X	X					
270240070	LMNS-GP	X			2280 Wardlow Cir Ste 260; Corona CA 92880								X	X	X	X	X	X					
270240071	LMNS-GP	X			1250 Corona Pointe Ct Ste 600; Corona CA 92879								X	X	X	X	X	X					
270240072	LMNS-GP	X			2280 Wardlow Cir Ste 260; Corona CA 92880								X	X	X	X	X	X					
270330043	LMNS-GP		X		603 S Valencia Ave; Brea CA 92822								X	X	X	X	X	X					
270330044	LMNS-GP		X		27349 Jefferson Ave Ste 101; Temecula CA 92590	17997 Willow Dr; Riverside CA 92503							X	X	X	X	X	X					
270330047	LMNS-GP	X			27349 Jefferson Ave Ste 101; Temecula CA 92590	17996 Willow Dr; Riverside CA 92503							X	X	X	X	X	X					
270330048	LMNS-GP	X			27349 Jefferson Ave Ste 101; Temecula CA 92590	17998 Willow Dr; Riverside CA 92503							X	X	X	X	X	X					
270330051	LMNS-GP		X		895 Dove St Ste 200; Newport Beach CA 92660								X	X	X	X	X	X					
270350010	LMNS-GP		X		17973 Aloe Ln; Riverside CA 92503	17973 Aloe Ln; Riverside CA 92503							X	X	X	X	X	X					
270350059	LMNS-GP	X			2280 Wardlow Cir Ste 260; Corona CA 92880	12800 El Sobrante Rd; Riverside CA 92503							X	X	X	X	X	X					
270350060	LMNS-GP		X		1250 Corona Pointe Ct Ste 600; Corona CA 92879	17885 Mc Allister St; Riverside CA 92503							X	X	X	X	X	X					
270350070	LMNS-GP		X		PO Box 800; Rosemead CA 91770								X	X	X	X	X	X					
277020019	TWS*	X			23 Corporate Plaza Dr Suite 247; Newport Beach CA 92660				X			X			X			X					X
	TWS-C	X			23 Corporate Plaza Dr Suite 247; Newport Beach CA 92660		X	X		X	X		X	X		X	X		X	X	X	X	

Parcel Acquisitions

APN	Segment	Acquisitions			Mailing Address	Physical Location Address	Alternative																	
		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
277020020	TWS*	X			23 Corporate Plaza Dr Suite 247; Newport Beach CA 92660				X			X			X			X					X
	TWS-C	X			23 Corporate Plaza Dr Suite 247; Newport Beach CA 92660		X	X		X	X		X	X		X	X		X	X	X	X	
277020021	TWS*	X			23 Corporate Plaza Dr Suite 247; Newport Beach CA 92660				X			X			X			X					X
	TWS-C	X			23 Corporate Plaza Dr Suite 247; Newport Beach CA 92660		X	X		X	X		X	X		X	X		X	X	X	X	
277020022	TWS*	X			23 Corporate Plaza Dr Suite 247; Newport Beach CA 92660				X			X			X			X					X
	TWS-C	X			23 Corporate Plaza Dr Suite 247; Newport Beach CA 92660		X	X		X	X		X	X		X	X		X	X	X	X	
277020023	TWS*	X			23 Corporate Plaza Dr Suite 247; Newport Beach CA 92660				X			X			X			X					X
	TWS-C	X			23 Corporate Plaza Dr Suite 247; Newport Beach CA 92660		X	X		X	X		X	X		X	X		X	X	X	X	
277020024	TWS-C	X			23 Corporate Plaza Dr Suite 247; Newport Beach CA 92660		X	X		X	X		X	X		X	X		X	X	X	X	
277020025	TWS*	X			23 Corporate Plaza Dr Suite 247; Newport Beach CA 92660				X			X			X			X					X
	TWS-C	X			23 Corporate Plaza Dr Suite 247; Newport Beach CA 92660		X	X		X	X		X	X		X	X		X	X	X	X	
277020026	TWS*	X			23 Corporate Plaza Dr Suite 247; Newport Beach CA 92660				X			X			X			X					X
	TWS-C	X			23 Corporate Plaza Dr Suite 247; Newport Beach CA 92660		X	X		X	X		X	X		X	X		X	X	X	X	
277181001	TWS-C	X			8543 Sylvan Ave; Riverside CA 92503	19888 Katy Way; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277181011	TWS-C		X		7630 Liberty Ave; Corona CA 92881	7630 Liberty Ave; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277181016	TWS-C	X			19940 Katy Way; Corona CA 92881	19940 Katy Way; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277181017	TWS*		X		19962 Katy Way; Corona CA 92881	19962 Katy Way; Corona CA 92881			X			X			X			X					X
	TWS-C	X			19962 Katy Way; Corona CA 92881	19962 Katy Way; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277181018	TWS*		X		7540 Liberty Ave; Corona CA 92881	7540 Liberty Ave; Corona CA 92881			X			X			X			X					X
	TWS-C	X			7540 Liberty Ave; Corona CA 92881	7540 Liberty Ave; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277181019	TWS-C	X			7570 Liberty Ave; Corona CA 92881	7570 Liberty Ave; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277201001	TWS*		X		1660 Waltham Rd; Concord CA 94520	7461 El Cerrito Rd; Corona CA 92881			X			X			X			X					X
	TWS-C	X			1660 Waltham Rd; Concord CA 94520	7461 El Cerrito Rd; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277201011	TWS-C	X			19800 Frances St; Corona CA 92881	19800 Frances St; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277210002	TWS*		X		1123 Via Santiago; Corona CA 92882				X			X			X			X					X
	TWS-C		X		1123 Via Santiago; Corona CA 92882		X	X		X	X		X	X		X	X		X	X	X	X	
277210003	TWS*		X		11871 Goodale Ave; Fountain Valley CA 92708				X			X			X			X					X
	TWS-C		X		11871 Goodale Ave; Fountain Valley CA 92708		X	X		X	X		X	X		X	X		X	X	X	X	
277210008	TWS*		X		PO Box 282; Redondo Reach CA 90277				X			X			X			X					X
	TWS-C		X		PO Box 282; Redondo Reach CA 90277		X	X		X	X		X	X		X	X		X	X	X	X	
277220005	TWS*		X		1123 Via Santiago; Corona CA 92882				X			X			X			X					X
	TWS-C		X		1123 Via Santiago; Corona CA 92882		X	X		X	X		X	X		X	X		X	X	X	X	
277220006	TWS*		X		1123 Via Santiago; Corona CA 92882				X			X			X			X					X
	TWS-C		X		1123 Via Santiago; Corona CA 92882		X	X		X	X		X	X		X	X		X	X	X	X	
277220007	TWS*		X		815 W 6th St; Corona CA 92882				X			X			X			X					X
	TWS-C		X		815 W 6th St; Corona CA 92882		X	X		X	X		X	X		X	X		X	X	X	X	

Parcel Acquisitions

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		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
277230001	TWS*		X		15775 Vista Verde; Perris CA 92570	7429 El Cerrito Dr; Corona CA 92881			X			X			X			X				X
	TWS-C	X			15775 Vista Verde; Perris CA 92570	7429 El Cerrito Dr; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277230002	TWS*		X		15775 Vista Verde; Perris CA 92570				X			X			X			X				X
	TWS-C	X			15775 Vista Verde; Perris CA 92570		X	X		X	X		X	X		X	X		X	X	X	X	
277230003	TWS*		X		15775 Vista Verde; Perris CA 92570	19801 Frances St; Corona CA 92881			X			X			X			X				X
	TWS-C	X			15775 Vista Verde; Perris CA 92570	19801 Frances St; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277230004	TWS*		X		19821 Frances St; Corona CA 92881	19821 Frances St; Corona CA 92881			X			X			X			X				X
	TWS-C	X			19821 Frances St; Corona CA 92881	19821 Frances St; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277230005	TWS*		X		19829 Frances St; Corona CA 92881	19829 Frances St; Corona CA 92881			X			X			X			X				X
	TWS-C	X			19829 Frances St; Corona CA 92881	19829 Frances St; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277230006	TWS-C	X			19835 Frances St; Corona CA 92881	19835 Frances St; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277230007	TWS-C	X			19841 Frances St; Corona CA 92881	19841 Frances St; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277230008	TWS-C	X			19925 Katy Way; Corona CA 92881	19925 Katy Way; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277230009	TWS*		X		19941 Katy Way; Corona CA 92881	19941 Katy Way; Corona CA 92881			X			X			X			X				X
	TWS-C	X			19941 Katy Way; Corona CA 92881	19941 Katy Way; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277230010	TWS*	X			815 W 6th St; Corona CA 92882				X			X			X			X				X
	TWS-C	X			815 W 6th St; Corona CA 92882		X	X		X	X		X	X		X	X		X	X	X	X	
277240005	TWS*			X	815 W 6th St; Corona CA 92882	7313 El Cerrito Rd; Corona CA 92881			X			X			X			X				X
	TWS-C			X	815 W 6th St; Corona CA 92882	7313 El Cerrito Rd; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277240006	TWS*	X			6350 Hawarden Dr; Riverside CA 92506				X			X			X			X				X
	TWS-C	X			6350 Hawarden Dr; Riverside CA 92506		X	X		X	X		X	X		X	X		X	X	X	X	
277240015	TWS-C	X			844 Big Spring Ct; Corona CA 92880	19990 Layton St; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277240016	TWS-C	X			7270 Liberty Ave; Corona CA 92881	7270 Liberty Ave; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277240017	TWS-C	X			7291 Liberty Ave; Corona CA 92881	7300 Liberty Ave; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277240018	TWS-C	X			7330 Liberty Ave; Corona CA 92881	7330 Liberty Ave; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277240019	TWS-C	X			7370 Liberty Ave; Corona CA 92881	7370 Liberty Ave; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277240020	TWS-C	X			7420 Liberty Ave; Corona CA 92881	7420 Liberty Ave; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277240021	TWS*		X		19905 Bedord Canyon Rd; Corona CA 92881	19905 Bedord Canyon Rd; Corona CA 92881			X			X			X			X				X
	TWS-C	X			19905 Bedord Canyon Rd; Corona CA 92881	19905 Bedord Canyon Rd; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277240023	TWS*		X		20300 Corona St; Corona CA 92881	19875 Bedord Canyon Rd; Corona CA 92881			X			X			X			X				X
	TWS-C	X			20300 Corona St; Corona CA 92881	19875 Bedord Canyon Rd; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277240029	TWS*		X		7275 El Cerrito Rd; Corona CA 92881	7275 El Cerrito Rd; Corona CA 92881			X			X			X			X				X
	TWS-C	X			7275 El Cerrito Rd; Corona CA 92881	7275 El Cerrito Rd; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277240030	TWS*		X		6350 Hawarden Dr; Riverside CA 92506	7295 El Cerrito Rd; Corona CA 92881			X			X			X			X				X
	TWS-C	X			6350 Hawarden Dr; Riverside CA 92506	7295 El Cerrito Rd; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277240032	TWS-C	X			7245 El Cerrito Rd; Corona CA 92881	7245 El Cerrito Rd; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	

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		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
277240035	TWS-C	X			19890 Layton St; Corona 92881	19890 Layton St; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277240036	TWS*	X			7430 Liberty Ave; Corona CA 92881	7430 Liberty Ave; Corona CA 92881			X			X			X			X					X
	TWS-C	X			7430 Liberty Ave; Corona CA 92881	7430 Liberty Ave; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277240038	TWS-C	X			19850 Layton St; Corona 92881	19850 Layton St; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277240043	TWS*		X		7251 El Cerrito Rd; Corona CA 92881	7251 El Cerrito Rd; Corona CA 92881			X			X			X			X					X
	TWS-C	X			7251 El Cerrito Rd; Corona CA 92881	7251 El Cerrito Rd; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277240050	TWS*		X		19835 Bedford Canyon Rd; Corona CA 92881	19835 Bedford Canyon Rd; Corona CA 92881			X	X	X	X			X			X					X
	TWS-C	X			19835 Bedford Canyon Rd; Corona CA 92881	19835 Bedford Canyon Rd; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277250005	TWS-C			X	32524 Seacliff Dr; Rancho Palos Verdes CA 90275	7170 Starne Rd; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277290003	TWS-C	X			7235 El Cerrito Rd; Corona CA 92881	7235 El Cerrito Rd; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277290004	TWS-C	X			19945 Layton St; Corona CA 92881	19945 Layton St; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277290005	TWS-C	X			19915 Layton St; Corona CA 92881	19915 Layton St; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277290023	TWS-C		X		24 Fremont St; Newport Beach CA 92663		X	X		X	X		X	X		X	X		X	X	X	X	
277290025	TWS-C		X		19995 Layton St; Corona CA 92881	19995 Layton St; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277301007	TWS*		X		19260 State St; Corona CA 92881	19260 State St; Corona CA 92881			X			X			X			X					X
	TWS-C		X		19260 State St; Corona CA 92881	19260 State St; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277301014	TWS*		X		7243 Piute Creek Dr; Corona CA 92881	7243 Piute Creek Dr; Corona CA 92881			X			X			X			X					X
	TWS-C		X		7243 Piute Creek Dr; Corona CA 92881	7243 Piute Creek Dr; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277301015	TWS*		X		7249 Piute Creek Dr; Corona CA 92881	7249 Piute Creek Dr; Corona CA 92881			X			X			X			X					X
	TWS-C	X			7249 Piute Creek Dr; Corona CA 92881	7249 Piute Creek Dr; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277301016	TWS*		X		7255 Piute Creek Dr; Corona CA 92881	7255 Piute Creek Dr; Corona CA 92881			X			X			X			X					X
	TWS-C	X			7255 Piute Creek Dr; Corona CA 92881	7255 Piute Creek Dr; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277301017	TWS*		X		7261 Piute Creek Dr; Corona CA 92881	7261 Piute Creek Dr; Corona CA 92881			X			X			X			X					X
	TWS-C	X			7261 Piute Creek Dr; Corona CA 92881	7261 Piute Creek Dr; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277301018	TWS*		X		7267 Piute Creek Dr; Corona CA 92881	7267 Piute Creek Dr; Corona CA 92881			X			X			X			X					X
	TWS-C	X			7267 Piute Creek Dr; Corona CA 92881	7267 Piute Creek Dr; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277301019	TWS*		X		7273 Piute Creek Dr; Corona CA 92881	7273 Piute Creek Dr; Corona CA 92881			X			X			X			X					X
	TWS-C		X		7273 Piute Creek Dr; Corona CA 92881	7273 Piute Creek Dr; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277313004	TWS*		X		7291 Piute Creek Dr; Corona CA 92881	7291 Piute Creek Dr; Corona CA 92881			X			X			X			X					X
	TWS-C		X		7291 Piute Creek Dr; Corona CA 92881	7291 Piute Creek Dr; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277313005	TWS*		X		7285 Piute Creek Dr; Corona CA 92881	7285 Piute Creek Dr; Corona CA 92881			X			X			X			X					X
	TWS-C		X		7285 Piute Creek Dr; Corona CA 92881	7285 Piute Creek Dr; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277313006	TWS*		X		7279 Piute Creek Dr; Corona CA 92881	7279 Piute Creek Dr; Corona CA 92881			X			X			X			X					X
	TWS-C		X		7279 Piute Creek DR; Corona CA 92881	7279 Piute Creek DR; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277330008	TWS-C	X			7389 Calico Cir; Corona CA 92881	7389 Calico Cir; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277330009	TWS-C	X			12732 Topaz St; Garden Grove CA 92845	19490 Dry Gulch Rd; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	

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		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
277330010	TWS-C	X			19476 Dry Gulch Rd; Corona CA 92881	19476 Dry Gulch Rd; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277330011	TWS-C	X			19460 Dry Gulch Rd; Corona CA 92881	19460 Dry Gulch Rd; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277330012	TWS-C	X			19446 Dry Gulch Rd; Corona CA 92881	19446 Dry Gulch Rd; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277330013	TWS-C	X			19430 Dry Gulch Rd; Corona CA 92881	19430 Dry Gulch Rd; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277330014	TWS-C	X			19414 Dry Gulch Rd; Corona CA 92881	19414 Dry Gulch Rd; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277330015	TWS-C	X			19402 Dry Gulch Rd; Corona CA 92881	19402 Dry Gulch Rd; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277343002	TWS*		X		7315 Calico Cir; Corona CA 92881	7315 Calico Cir; Corona CA 92881			X			X			X			X					X
	TWS-C	X			7315 Calico Cir; Corona CA 92881	7315 Calico Cir; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277343003	TWS*		X		7329 Calico Cir; Corona CA 92881	7329 Calico Cir; Corona CA 92881			X			X			X			X					X
	TWS-C	X			7329 Calico Cir; Corona CA 92881	7329 Calico Cir; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277343004	TWS*		X		7347 Calico Cir; Corona CA 92881	7347 Calico Cir; Corona CA 92881			X			X			X			X					X
	TWS-C	X			7347 Calico Cir; Corona CA 92881	7347 Calico Cir; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277343005	TWS-C	X			7361 Calico Cir; Corona CA 92881	7361 Calico Cir; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
277343006	TWS-C	X			7375 Calico Cir; Corona CA 92881	7375 Calico Cir; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
278060013	TWS-C		X		18995 State St; Corona CA 92881	18995 State St; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
278060014	TWS-C		X		18989 State St; Corona CA 92881	18989 State St; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
278060015	TWS*			X	18961 State St; Corona CA 92881	18961 State St; Corona CA 92881			X			X			X			X					X
	TWS-C		X		18961 State St; Corona CA 92881	18961 State St; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
278060016	TWS*		X		18929 State St; Corona CA 92881	18929 State St; Corona CA 92881			X			X			X			X					X
	TWS-C		X		18929 State St; Corona CA 92881	18929 State St; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
278060017	TWS*		X		18901 State St; Corona CA 92881	18901 State St; Corona CA 92881			X			X			X			X					X
	TWS-C		X		18901 State St; Corona CA 92881	18901 State St; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
278060018	TWS*		X		18875 State St; Corona CA 92881	18875 State St; Corona CA 92881			X			X			X			X					X
	TWS-C		X		18875 State St; Corona CA 92881	18875 State St; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
278060019	TWS-C		X		18849 State St; Corona CA 92881	18849 State St; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
278060024	TWS*		X		NW Corner Compton Ave & Ontario; Corona CA 91719	2163 Compton Ave; Corona CA 92881			X			X			X			X					X
	TWS-C		X		NW Corner Compton Ave & Ontario; Corona CA 91719	2163 Compton Ave; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
278060028	TWS*		X		NW Corner Compton Ave & Ontario; Corona CA 91719				X			X			X			X					X
278060029	TWS*		X		NW Corner Compton Ave & Ontario; Corona CA 91719				X			X			X			X					X
278060030	TWS*		X		NW Corner Compton Ave & Ontario; Corona CA 91719				X			X			X			X					X
278060033	TWS-C		X		NW Corner Compton Ave & Ontario; Corona CA 91719	2163 Compton Ave; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
278060034	TWS-C		X		NW Corner Compton Ave & Ontario; Corona CA 91719	2163 Compton Ave; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
278060035	TWS-C		X		NW Corner Compton Ave & Ontario; Corona CA 91719	2163 Compton Ave; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
278140005	LMNS-GP		X		30 Rolling Wood Ln; Fallbrook CA 92028								X	X	X	X	X	X					
278140006	LMNS-GP		X		PO Box 78655; Corona CA 92877								X	X	X	X	X	X					
278140007	LMNS-GP			X	PO Box 54153; Los Angeles CA 90054								X	X	X	X	X	X					
278140010	LMNS-GP		X		PO Box 54153; Los Angeles CA 90054								X	X	X	X	X	X					

Parcel Acquisitions

APN	Segment	Acquisitions			Mailing Address	Physical Location Address	Alternative															
		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
278140012	LMNS-GP		X		PO Box 54153; Los Angeles CA 90054								X	X	X	X	X	X					
278150002	LMNS-GP		X		PO Box 54153; Los Angeles CA 90054								X	X	X	X	X	X					
278150003	LMNS-GP		X		n/a								X	X	X	X	X	X					
278150004	LMNS-GP		X		PO Box 54153; Los Angeles CA 90054								X	X	X	X	X	X					
278150005	LMNS-GP		X		PO Box 54153; Los Angeles CA 90054								X	X	X	X	X	X					
278160007	LMNS-GP		X		PO Box 54153; Los Angeles CA 90054								X	X	X	X	X	X					
278160008	LMNS-GP	X			22482 Walnut Dr; Wildomar CA 92595								X	X	X	X	X	X					
278160010	LMNS-GP	X			430 Thirty Second St 200; Newport Beach CA 92663								X	X	X	X	X	X					
278160011	LMNS-GP	X			430 Thirty Second St 200; Newport Beach CA 92663								X	X	X	X	X	X					
278160012	LMNS-GP	X			430 Thirty Second St 200; Newport Beach CA 92663								X	X	X	X	X	X					
278160013	LMNS-GP	X			430 Thirty Second St 200; Newport Beach CA 92663								X	X	X	X	X	X					
278160014	LMNS-GP		X		430 32nd St; Newport Beach CA 92663								X	X	X	X	X	X					
278160016	LMNS-GP	X			430 32nd St; Newport Beach CA 92663								X	X	X	X	X	X					
278160017	LMNS-GP	X			1522 Granite St; Ontario CA 91762								X	X	X	X	X	X					
278160018	LMNS-GP	X			1534 Ronan Ave; Wilmington CA 90744								X	X	X	X	X	X					
278160019	LMNS-GP	X			7142 Orangethorpe Ave; Buena Park CA 90621								X	X	X	X	X	X					
278160020	LMNS-GP	X			7142 Orangethorpe Ave; Buena Park CA 90621								X	X	X	X	X	X					
278160030	LMNS-GP		X		PO Box 639069; San Diego CA 92163								X	X	X	X	X	X					
278160031	LMNS-GP	X			430 Thirty Second St 200; Newport Beach CA 92663								X	X	X	X	X	X					
278160037	LMNS-GP		X		430 Thirty Second St 200; Newport Beach CA 92663								X	X	X	X	X	X					
278160041	LMNS-GP		X		PO Box 7804; Irwindale CA 91706								X	X	X	X	X	X					
278170001	LMNS-GP		X		430 Thirty Second St 200; Newport Beach CA 92663								X	X	X	X	X	X					
278180002	LMNS-GP		X		PO Box 7804; Irwindale CA 91706								X	X	X	X	X	X					
278180003	LMNS-GP		X		PO Box 639069; San Diego CA 92163								X	X	X	X	X	X					
278180004	LMNS-GP	X			PO Box 7804; Irwindale CA 91706								X	X	X	X	X	X					
278180005	LMNS-GP	X			12155 Magnolia Ave Ste 3G; Riverside CA 92503								X	X	X	X	X	X					
278180007	LMNS-GP	X			430 Thirty Second St 200; Newport Beach CA 92663								X	X	X	X	X	X					
278180008	LMNS-GP	X			26005 Via Pera; Mission Viejo CA 92691	19880 Eagle Canyon Rd; Corona CA 92881							X	X	X	X	X	X					
278180010	LMNS-GP		X		3241 Kips Korner Rd; Norco CA 92860								X	X	X	X	X	X					
278180012	LMNS-GP	X			PO Box 639069; San Diego CA 92163								X	X	X	X	X	X					
278180013	LMNS-GP	X			PO Box 639069; San Diego CA 92163								X	X	X	X	X	X					
278180014	LMNS-GP		X		PO Box 54153; Los Angeles CA 90054								X	X	X	X	X	X					
278180015	LMNS-GP		X		658 Redondo Ln: Corona CA 92882								X	X	X	X	X	X					
278180016	LMNS-GP	X			12902 Lemonwood Ln; Garden Grove CA 92840								X	X	X	X	X	X					
278180020	LMNS-GP		X		PO Box 800; Rosemead CA 91770								X	X	X	X	X	X					
278180023	LMNS-GP	X			12202 Orvillina Dr; Santa Ana CA 92705								X	X	X	X	X	X					
278180024	LMNS-GP	X			12202 Orvillina Dr; Santa Ana CA 92705								X	X	X	X	X	X					

Parcel Acquisitions

APN	Segment	Acquisitions			Mailing Address	Physical Location Address	Alternative															
		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
278180025	LMNS-GP	X			PO Box 54153; Los Angeles CA 90054								X	X	X	X	X	X					
278180026	LMNS-GP	X			PO Box 54153; Los Angeles CA 90054								X	X	X	X	X	X					
278180027	LMNS-GP	X			280 Corporate Ter; Corona CA 92879								X	X	X	X	X	X					
278180028	LMNS-GP		X		430 Thirty Second St 200; Newport Beach CA 92663								X	X	X	X	X	X					
278180029	LMNS-GP		X		430 Thirty Second St 200; Newport Beach CA 92663								X	X	X	X	X	X					
278180030	LMNS-GP	X			PO Box 54153; Los Angeles CA 90054								X	X	X	X	X	X					
278180031	LMNS-GP		X		323 W Court St Ste 403; San Bernardino CA 92401								X	X	X	X	X	X					
278180032	LMNS-GP	X			PO Box 7804; Irwindale CA 91706								X	X	X	X	X	X					
278180033	LMNS-GP	X			PO Box 7804; Irwindale CA 91706								X	X	X	X	X	X					
278210007	LMNS-GP		X		PO Box 54153; Los Angeles CA 90054								X	X	X	X	X	X					
278210009	LMNS-GP				PO Box 54153; Los Angeles CA 90054								X	X	X	X	X	X					
278210010	LMNS-GP		X		PO Box 54153; Los Angeles CA 90054								X	X	X	X	X	X					
278210020	LMNS-GP		X		PO Box 54153; Los Angeles CA 90054								X	X	X	X	X	X					
278210021	LMNS-GP		X		PO Box 54153; Los Angeles CA 90054								X	X	X	X	X	X					
278210023	LMNS-GP		X		15310 Rayneta Dr; Sherman Oaks CA 91403								X	X	X	X	X	X					
278210024	LMNS-GP		X		PO Box 54153; Los Angeles CA 90054								X	X	X	X	X	X					
278210026	LMNS-GP			X	PO Box 54153; Los Angeles CA 90054								X	X	X	X	X	X					
278210027	LMNS-GP			X	PO Box 54153; Los Angeles CA 90054								X	X	X	X	X	X					
278210028	LMNS-GP		X		PO Box 54153; Los Angeles CA 90054								X	X	X	X	X	X					
278230020	TWS*		X		7365 Bel Air St; Corona CA 92881	7365 Bel Air St; Corona CA 92881			X			X			X			X					X
	TWS-C		X		7365 Bel Air St; Corona CA 92881	7365 Bel Air St; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
278230068	TWS*		X		3991 MacArthur Blvd Ste 100; Newport Beach CA 92660	2055 Compton Ave; Corona CA 92881			X			X			X			X					X
	TWS-C		X		3991 MacArthur Blvd Ste 100; Newport Beach CA 92660	2055 Compton Ave; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
279070014	LMNS-GP		X		PO Box 33441; St Paul MN 55133								X	X	X	X	X	X					
279101019	TWS-C	X			7291 Liberty Ave; Corona CA 92881	7291 Liberty Ave; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
279102001	TWS-C	X			20011 Case St; Corona CA 92881		X	X		X	X		X	X		X	X		X	X	X	X	
279102002	TWS-C	X			20011 Case St; Corona CA 92881	20011 Case St; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
279102022	TWS-C	X			20010 Kayne St; Corona CA 92881	20010 Kayne St; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
279103001	TWS-C	X			7461 Liberty Ave; Corona CA 92881	20011 Newton St; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
279103014	TWS-C	X			7401 Liberty Ave; Corona CA 92881	7401 Liberty Ave; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
279103015	TWS-C	X			20025 Newton St; Corona CA 92881	20025 Newton St; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
279104007	TWS*	X			20020 Newton St; Corona CA 92881	20020 Newton St; Corona CA 92881			X			X			X			X					X
	TWS-C	X			20020 Newton St; Corona CA 92881	20020 Newton St; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
279104008	TWS*	X			PO Box 56525; Riverside CA 92517				X			X			X			X					X
	TWS-C	X			PO Box 56525; Riverside CA 92517		X	X		X	X		X	X		X	X		X	X	X	X	
279104014	TWS*	X			20061 Klyne St; Corona CA 92881	20061 Klyne St; Corona CA 92881			X			X			X			X					X
	TWS-C	X			20061 Klyne St; Corona CA 92881	20061 Klyne St; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	

Parcel Acquisitions

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		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
279104017	TWS*	X			20031 Bedford Canyon Rd; Corona CA 92881	20031 Bedford Canyon Rd; Corona CA 92881			X			X			X			X				X
	TWS-C	X			20031 Bedford Canyon Rd; Corona CA 92881	20031 Bedford Canyon Rd; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
279104018	TWS*	X			20045 Bedford Canyon Rd; Corona CA 92881				X			X			X			X				X
	TWS-C	X			20045 Bedford Canyon Rd; Corona CA 92881		X	X		X	X		X	X		X	X		X	X	X	X	
279104019	TWS*	X			20031 Bedford Canyon Rd; Corona CA 92881				X			X			X			X				X
	TWS-C	X			20031 Bedford Canyon Rd; Corona CA 92881		X	X		X	X		X	X		X	X		X	X	X	X	
279104020	TWS*	X			20045 Bedford Canyon Rd; Corona CA 92881	20045 Bedford Canyon Rd; Corona CA 92881			X			X			X			X				X
	TWS-C	X			20045 Bedford Canyon Rd; Corona CA 92881	20045 Bedford Canyon Rd; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
279104021	TWS-C			X	5980 Blarney Way; Pilot Hill CA 95664	20075 Klyne St; Pilot Hill CA 95664	X	X		X	X		X	X		X	X		X	X	X	X	
279104022	TWS-C	X			5980 Blarney Way; Pilot Hill CA 95664		X	X		X	X		X	X		X	X		X	X	X	X	
279104023	TWS-C	X			20050 Newton St; Corona CA 92881	20050 Newton St; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
279104024	TWS-C	X			20046 Newton St; Corona CA 92881	20046 Newton St; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
279121004	TWS*		X		10900 Wilshire Blvd Ste 1600; Los Angeles CA 90024				X			X			X			X				X
	TWS-C		X		10900 Wilshire Blvd Ste 1600; Los Angeles CA 90024		X	X		X	X		X	X		X	X		X	X	X	X	
279121005	TWS*		X		19700 Fairchild Ste 300; Irvine CA 92612	3350 Stormy Ln; Corona CA 92881			X			X			X			X				X
	TWS-C		X		19700 Fairchild Ste 300; Irvine CA 92612	3350 Stormy Ln; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
279121006	TWS*		X		10900 Wilshire Blvd Ste 1600; Los Angeles CA 90024				X			X			X			X				X
281110013	FS	X			4328 Corona Ave: Norco CA 92860														X	X	X	X	X
	LMS	X			4328 Corona Ave: Norco CA 92860		X	X	X	X	X	X											
281110015	FS		X		430 Thirty Second St 200; Newport Beach CA 92663														X	X	X	X	X
	LMNS-GP		X		430 Thirty Second St 200; Newport Beach CA 92663								X	X	X	X	X	X					
	LMS		X		430 Thirty Second St 200; Newport Beach CA 92663		X	X	X	X	X	X											
281120002	FS			X	PO Box 800; Rosemead CA 91770														X	X	X	X	X
	LMNS-GP			X	PO Box 800; Rosemead CA 91770								X	X	X	X	X	X					
	LMS			X	PO Box 800; Rosemead CA 91770		X	X	X	X	X	X											
281120003	FS	X			4641 Minuet Dr; Huntington Beach CA 92649														X	X	X	X	X
	LMS	X			4641 Minuet Dr; Huntington Beach CA 92649		X	X	X	X	X	X											
281120004	FS	X			4641 Minuet Dr; Huntington Beach CA 92649														X	X	X	X	X
	LMS	X			4641 Minuet Dr; Huntington Beach CA 92649		X	X	X	X	X	X											
281120005	FS	X			13631 Annandale Dr Apt 6G; Seal Beach CA 90740														X	X	X	X	X
	LMS	X			13631 Annandale Dr Apt 6G; Seal Beach CA 90740		X	X	X	X	X	X											
281120008	FS		X		430 Thirty Second St 200; Newport Beach CA 92663														X	X	X	X	X
	LMNS-GP		X		430 Thirty Second St 200; Newport Beach CA 92663								X	X	X	X	X	X					
	LMS		X		430 Thirty Second St 200; Newport Beach CA 92663		X	X	X	X	X	X											
281120009	FS		X		430 Thirty Second St 200; Newport Beach CA 92663														X	X	X	X	X
	LMNS-GP		X		430 Thirty Second St 200; Newport Beach CA 92663								X	X	X	X	X	X					
	LMS		X		430 Thirty Second St 200; Newport Beach CA 92663		X	X	X	X	X	X											

Parcel Acquisitions

APN	Segment	Acquisitions			Mailing Address	Physical Location Address	Alternative																
		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
281130001	FS			X	PO Box 800; Rosemead CA 91770														X	X	X	X	X
	LMNS-GP	X			PO Box 800; Rosemead CA 91770								X	X	X	X	X	X					
	LMS			X	PO Box 800; Rosemead CA 91770		X	X	X	X	X	X											
281130002	FS	X			211 S Beach Blvd SPC 21; Anaheim CA 92804														X	X	X	X	X
	LMNS-GP	X			211 S Beach Blvd SPC 21; Anaheim CA 92804								X	X	X	X	X	X					
	LMS	X			211 S Beach Blvd SPC 21; Anaheim CA 92804		X	X	X	X	X	X											
281130003	FS	X			1434 White Holly Dr; Corona CA 92881														X	X	X	X	X
	LMNS-GP	X			1434 White Holly Dr; Corona CA 92881								X	X	X	X	X	X					
	LMS	X			1434 White Holly Dr; Corona CA 92881		X	X	X	X	X	X											
281130004	FS	X			1434 White Holly Dr; Corona CA 92881														X	X	X	X	X
	LMNS-GP	X			1434 White Holly Dr; Corona CA 92881								X	X	X	X	X	X					
	LMS	X			1434 White Holly Dr; Corona CA 92881		X	X	X	X	X	X											
281130005	FS	X			430 Thirty Second St 200; Newport Beach CA 92663														X	X	X	X	X
	LMNS-GP	X			430 Thirty Second St 200; Newport Beach CA 92663								X	X	X	X	X	X					
	LMS	X			430 Thirty Second St 200; Newport Beach CA 92663		X	X	X	X	X	X											
281130006	FS	X			PO Box 512164; Los Angeles CA 90051														X	X	X	X	X
	LMS	X			PO Box 512164; Los Angeles CA 90051		X	X	X	X	X	X											
281130009	FS		X		430 Thirty Second St 200; Newport Beach CA 92663														X	X	X	X	X
	LMNS-GP		X		430 Thirty Second St 200; Newport Beach CA 92663								X	X	X	X	X	X					
	LMS		X		430 Thirty Second St 200; Newport Beach CA 92663		X	X	X	X	X	X											
281140004	FS	X			8100 Bridle Path Cir; Riverside CA 92509														X	X	X	X	X
	LMS	X			8100 Bridle Path Cir; Riverside CA 92509		X	X	X	X	X	X											
281140021	FS		X		1555 N Verdugo Rd Ste 201; Glendale CA 91208														X	X	X	X	X
	LMS		X		1555 N Verdugo Rd Ste 201; Glendale CA 91208		X	X	X	X	X	X											
281140022	FS	X			430 Thirty Second St 200; Newport Beach CA 92663														X	X	X	X	X
	LMS	X			430 Thirty Second St 200; Newport Beach CA 92663		X	X	X	X	X	X											
281150027	FS		X		1555 N Verdugo Rd Ste 201; Glendale CA 91208														X	X	X	X	X
	LMS		X		1555 N Verdugo Rd Ste 201; Glendale CA 91208		X	X	X	X	X	X											
281150028	FS		X		430 Thirty Second St 200; Newport Beach CA 92663														X	X	X	X	X
	LMS		X		430 Thirty Second St 200; Newport Beach CA 92663		X	X	X	X	X	X											
281160001	FS	X			12520 Waynoka Rd; Apple Valley CA 92308														X	X	X	X	X
	LMS	X			12520 Waynoka Rd; Apple Valley CA 92308		X	X	X	X	X	X											
281160004	FS		X		430 Thirty Second St 200; Newport Beach CA 92663														X	X	X	X	X
	LMNS-GP		X		430 Thirty Second St 200; Newport Beach CA 92663								X	X	X	X	X	X					
	LMS		X		430 Thirty Second St 200; Newport Beach CA 92663		X	X	X	X	X	X											
281170001	FS	X			10 Coach Rd; Rancho Palos Verdes CA 90275														X	X	X	X	X
	LMNS-GP	X			10 Coach Rd; Rancho Palos Verdes CA 90275								X	X	X	X	X	X					

Parcel Acquisitions

APN	Segment	Acquisitions			Mailing Address	Physical Location Address	Alternative															
		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
	LMS	X			10 Coach Rd; Rancho Palos Verdes CA 90275		X	X	X	X	X	X											
281170003	FS			X	PO Box 800; Rosemead CA 91770														X	X	X	X	X
	LMNS-GP	X			PO Box 800; Rosemead CA 91770								X	X	X	X	X	X					
	LMS			X	PO Box 800; Rosemead CA 91770		X	X	X	X	X	X											
281170005	FS	X			1126 Dover Cir; Anaheim CA 92805														X	X	X	X	X
	LMS	X			1126 Dover Cir; Anaheim CA 92805		X	X	X	X	X	X											
281170007	FS	X			430 Thirty Second St 200; Newport Beach CA 92663														X	X	X	X	X
	LMNS-GP	X			430 Thirty Second St 200; Newport Beach CA 92663								X	X	X	X	X	X					
	LMS	X			430 Thirty Second St 200; Newport Beach CA 92663		X	X	X	X	X	X											
281170008	FS	X			430 Thirty Second St 200; Newport Beach CA 92663														X	X	X	X	X
	LMNS-GP		X		430 Thirty Second St 200; Newport Beach CA 92663								X	X	X	X	X	X					
	LMS	X			430 Thirty Second St 200; Newport Beach CA 92663		X	X	X	X	X	X											
281200002	LMNS-GP	X			PO BOX 5473; Parker AZ 85344								X	X	X	X	X	X					
281200003	LMNS-GP	X			3133 7th St; Riverside CA 92501								X	X	X	X	X	X					
281200004	FS		X		430 Thirty Second St 200; Newport Beach CA 92663														X	X	X	X	X
	LMNS-GP		X		430 Thirty Second St 200; Newport Beach CA 92663								X	X	X	X	X	X					
	LMS		X		430 Thirty Second St 200; Newport Beach CA 92663		X	X	X	X	X	X											
281210002	FS			X	PO Box 800; Rosemead CA 91770														X	X	X	X	X
	LMNS-GP		X		PO Box 800; Rosemead CA 91770								X	X	X	X	X	X					
	LMS			X	PO Box 800; Rosemead CA 91770		X	X	X	X	X	X											
281210003	FS		X		430 Thirty Second St 200; Newport Beach CA 92663														X	X	X	X	X
	LMNS-GP	X			430 Thirty Second St 200; Newport Beach CA 92663								X	X	X	X	X	X					
	LMS		X		430 Thirty Second St 200; Newport Beach CA 92663		X	X	X	X	X	X											
281210005	FS		X		430 Thirty Second St 200; Newport Beach CA 92663														X	X	X	X	X
	LMNS-GP		X		430 Thirty Second St 200; Newport Beach CA 92663								X	X	X	X	X	X					
	LMS		X		430 Thirty Second St 200; Newport Beach CA 92663		X	X	X	X	X	X											
281240001	LMNS-GP	X			4214 E Donato Dr; Gilvert AZ 85297								X	X	X	X	X	X					
281240005	LMNS-GP		X		430 Thirty Second St 200; Newport Beach CA 92663								X	X	X	X	X	X					
281250001	LMNS-GP	X			1174 Nakoa Ct; Henerson NV 89002								X	X	X	X	X	X					
281250002	LMNS-GP	X			5037 2nd. Ave; Los Angeles CA 90043								X	X	X	X	X	X					
281250004	LMNS-GP	X			29352 Harley Ct; Nuevo CA 92567								X	X	X	X	X	X					
281250005	LMNS-GP	X			1126 S. Dover Cir; Anaheim CA 92805								X	X	X	X	X	X					
281250006	LMNS-GP	X			PO BOX 432222; Los Angeles CA 90043								X	X	X	X	X	X					
281250007	LMNS-GP	X			3505 Nature View; Las Vegas NV 89129								X	X	X	X	X	X					
281250008	LMNS-GP	X			4549 E Stanford Ave; Higley AZ 85236								X	X	X	X	X	X					
281250009	LMNS-GP		X		430 Thirty Second St 200; Newport Beach CA 92663								X	X	X	X	X	X					
281270003	LMNS-GP	X			8051 283rd St NW; Standwood WA 98292								X	X	X	X	X	X					

Parcel Acquisitions

APN	Segment	Acquisitions			Mailing Address	Physical Location Address	Alternative																
		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
281270004	LMNS-GP	X			PO Box 3133; Landers CA 92285								X	X	X	X	X	X					
281270008	LMNS-GP		X		430 Thirty Second St 200; Newport Beach CA 92663								X	X	X	X	X	X					
281280001	LMNS-GP		X		430 Thirty Second St 200; Newport Beach CA 92663								X	X	X	X	X	X					
281280002	LMNS-GP	X			1905 Via Coronel; Palos Verdes Estates CA 90274								X	X	X	X	X	X					
281280003	LMNS-GP	X			13100 Theodores St; Moreno Valley CA 92555								X	X	X	X	X	X					
281280004	LMNS-GP	X			2015 Harvest Moon Dr; Cedar Part TX 78613								X	X	X	X	X	X					
281280005	LMNS-GP	X			1155 N State St Ste 408; Bellingham WA 98225								X	X	X	X	X	X					
281310001	LMNS-GP	X			3920 Corte Cancion; Thousand Oaks CA 91360								X	X	X	X	X	X					
281310002	LMNS-GP		X		313 7th. St; Riverside CA 92501								X	X	X	X	X	X					
281310003	LMNS-GP	X			11535 Tana Ave; Whittier CA 90604								X	X	X	X	X	X					
281310004	LMNS-GP		X		430 Thirty Second St 200; Newport Beach CA 92663								X	X	X	X	X	X					
282020012	TWS*			X	3536 Concours Ste 300; Ontario CA 91764				X			X			X			X					X
	TWS-C			X	3536 Concours Ste 300; Ontario CA 91764		X	X		X	X		X	X		X	X		X	X	X	X	
282030003	TWS*		X		29379 Rancho California Rd Ste 201; Temecula CA 92591				X			X			X			X					X
	TWS-C		X		29379 Rancho California Rd Ste 201; Temecula CA 92591		X	X		X	X		X	X		X	X		X	X	X	X	
282030004	TWS*		X		29379 Rancho California Rd Ste 201; Temecula CA 92591				X			X			X			X					X
	TWS-C		X		29379 Rancho California Rd Ste 201; Temecula CA 92591		X	X		X	X		X	X		X	X		X	X	X	X	
282030006	TWS*		X		29379 Rancho California Rd Ste 201; Temecula CA 92591				X			X			X			X					X
	TWS-C		X		29379 Rancho California Rd Ste 201; Temecula CA 92591		X	X		X	X		X	X		X	X		X	X	X	X	
282030008	TWS*		X		29379 Rancho California Rd Ste 201; Temecula CA 92591				X			X			X			X					X
	TWS-C		X		29379 Rancho California Rd Ste 201; Temecula CA 92591		X	X		X	X		X	X		X	X		X	X	X	X	
282030015	TWS*		X		16586 Mustang Dr; Springville CA 93265				X			X			X			X					X
	TWS-C		X		16586 Mustang Dr; Springville CA 93265		X	X		X	X		X	X		X	X		X	X	X	X	
282040003	TWS*		X		29379 Rancho California Rd Ste 201; Temecula CA 92591				X			X			X			X					X
	TWS-C		X		29379 Rancho California Rd Ste 201; Temecula CA 92591		X	X		X	X		X	X		X	X		X	X	X	X	
282050011	TWS*		X		8510 Weirick Rd; Corona CA 92883				X			X			X			X					X
	TWS-C		X		8510 Weirick Rd; Corona CA 92883		X	X		X	X		X	X		X	X		X	X	X	X	
282050013	TWS*	X			8405 Glen Rd; Corona CA 92883	8405 Glen Rd; Corona CA 92883			X			X			X			X					X
	TWS-C	X			8405 Glen Rd; Corona CA 92883	8405 Glen Rd; Corona CA 92883	X	X		X	X		X	X		X	X		X	X	X	X	
282050014	TWS*	X			8580 Glen Rd; Corona CA 92883	8580 Glen Rd; Corona CA 92883			X			X			X			X					X
	TWS-C	X			8580 Glen Rd; Corona CA 92883	8580 Glen Rd; Corona CA 92883	X	X		X	X		X	X		X	X		X	X	X	X	
282050015	TWS*		X		8600 Glen Rd; Corona CA 92883	8600 Glen Rd; Corona CA 92883			X			X			X			X					X
	TWS-C		X		8600 Glen Rd; Corona CA 92883	8600 Glen Rd; Corona CA 92883	X	X		X	X		X	X		X	X		X	X	X	X	
282050016	TWS*		X		8640 Glen Rd; Corona CA 92883	8640 Glen Rd; Corona CA 92883			X			X			X			X					X
	TWS-C		X		8640 Glen Rd; Corona CA 92883	8640 Glen Rd; Corona CA 92883	X	X		X	X		X	X		X	X		X	X	X	X	
282050026	TWS*		X		8335 Glen Rd; Corona CA 92883	8335 Glen Rd; Corona CA 92883			X			X			X			X					X
	TWS-C		X		8335 Glen Rd; Corona CA 92883	8335 Glen Rd; Corona CA 92883	X	X		X	X		X	X		X	X		X	X	X	X	

Parcel Acquisitions

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		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
282080012	TWS*	X			430 W Upper Dr; Corona CA 92881				X			X			X			X					X
	TWS-C	X			430 W Upper Dr; Corona CA 92881		X	X		X	X		X	X		X	X		X	X	X	X	
282080013	TWS*		X		P.O. Box 545l; Corona CA 92878 (no mail)	8530 Nob Hill Rd, Corona CA 92883			X			X			X			X					X
	TWS-C		X		P.O. Box 545l; Corona CA 92878 (no mail)	8530 Nob Hill Rd, Corona CA 92883	X	X		X	X		X	X		X	X		X	X	X	X	
282080014	TWS*		X		8510 Nob Hill Rd; Corona CA 92883	8510 Nob Hill Rd; Corona CA 92883			X			X			X			X					X
	TWS-C		X		8510 Nob Hill Rd; Corona CA 92883	8510 Nob Hill Rd; Corona CA 92883	X	X		X	X		X	X		X	X		X	X	X	X	
282100002	TWS*	X			430 W Upper Dr; Corona CA 92881				X			X			X			X					X
	TWS-C	X			430 W Upper Dr; Corona CA 92881		X	X		X	X		X	X		X	X		X	X	X	X	
282100017	TWS*		X		3536 Concours Ste 300; Ontario CA 91764				X			X			X			X					X
	TWS-C		X		3536 Concours Ste 300; Ontario CA 91764		X	X		X	X		X	X		X	X		X	X	X	X	
282100018	TWS-C		X		3536 Concours Ste 300; Ontario CA 91764		X	X		X	X		X	X		X	X		X	X	X	X	
282121001	TWS*	X			341 W 2nd St Ste 1; San Bernardino CA 92401				X			X			X			X					X
	TWS-C	X			341 W 2nd St Ste 1; San Bernardino CA 92401		X	X		X	X		X	X		X	X		X	X	X	X	
282121006	TWS*		X		21779 Temescal Canyon Rd; Corona CA 92883	21779 HWY 71; Corona CA 92881			X			X			X			X					X
	TWS-C		X		21779 Temescal Canyon Rd; Corona CA 92883	21779 HWY 71; Corona CA 92881	X	X		X	X		X	X		X	X		X	X	X	X	
282121008	TWS*		X		1027 E 3rd St; Corona CA 92879				X			X			X			X					X
	TWS-C		X		1027 E 3rd St; Corona CA 92879		X	X		X	X		X	X		X	X		X	X	X	X	
282121009	TWS*		X		21705 Temescal Canyon Rd; Corona CA 92883	21705 Temescal Canyon Rd; Corona CA 92883			X			X			X			X					X
	TWS-C		X		21705 Temescal Canyon Rd; Corona CA 92883	21705 Temescal Canyon Rd; Corona CA 92883	X	X		X	X		X	X		X	X		X	X	X	X	
282140002	TWS*		X		21761 Knabe Rd; Corona CA 92883	21761 Knabe Rd; Corona CA 92883			X			X			X			X					X
	TWS-C		X		21761 Knabe Rd; Corona CA 92883	21761 Knabe Rd; Corona CA 92883	X	X		X	X		X	X		X	X		X	X	X	X	
282140006	TWS*		X		341 W. 2nd St Ste1; San Bernardino CA 92401	8780 Badger Rd; Corona CA 92883			X			X			X			X					X
	TWS-C		X			8780 Badger Rd; Corona CA 92883	X	X		X	X		X	X		X	X		X	X	X	X	
282140020	TWS*		X		1125 N Lowell Rd; Golden Valley AZ 86413	21765 Temescal Cany Rd; Corona CA 92883			X			X			X			X					X
	TWS-C		X		1125 N Lowell Rd; Golden Valley AZ 86413	21765 Temescal Cany Rd; Corona CA 92883	X	X		X	X		X	X		X	X		X	X	X	X	
282140028	TWS-C		X			8780 Badger Rd; Corona CA 92883	X	X		X	X		X	X		X	X		X	X	X	X	
282140029	TWS-C	X			341 W 2nd St Ste 1; San Bernardino CA 92401		X	X		X	X		X	X		X	X		X	X	X	X	
282160023	TWS*		X		628 Lancer Ln; Corona CA 92879	22079 Forest Boundary Rd; Corona CA 92883			X			X			X			X					X
	TWS-C		X		628 Lancer Ln; Corona CA 92879	22079 Forest Boundary Rd; Corona CA 92883	X	X		X	X		X	X		X	X		X	X	X	X	
283020008	LMNS-GP		X		4080 Lemon St Fl 12th; Riverside CA 92501								X	X	X	X	X	X					
283020010	LMNS-GP		X		4080 Lemon St Fl 12th; Riverside CA 92501								X	X	X	X	X	X					
283020011	FS			X	4080 Lemon St Fl 12th; Riverside CA 92501														X	X	X	X	X
	LMNS-GP		X		4080 Lemon St Fl 12th; Riverside CA 92501								X	X	X	X	X	X					
	LMS			X	4080 Lemon St Fl 12th; Riverside CA 92501		X	X	X	X	X	X											
283020012	LMNS-GP		X		4080 Lemon St Fl 12th; Riverside CA 92501								X	X	X	X	X	X					

Parcel Acquisitions

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		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
283020013	LMNS-GP		X		4080 Lemon St Fl 12th; Riverside CA 92501								X	X	X	X	X	X					
283040001	FS			X	4080 Lemon St Fl 12th; Riverside CA 92501														X	X	X	X	X
	LMNS-GP		X		4080 Lemon St Fl 12th; Riverside CA 92501								X	X	X	X	X	X					
	LMS			X	4080 Lemon St Fl 12th; Riverside CA 92501		X	X	X	X	X	X											
283040002	FS			X	4080 Lemon St Fl 12th; Riverside CA 92501	11801 Cajalco Rd; Corona CA 92883													X	X	X	X	X
	FS			X	4080 Lemon St Fl 12th; Riverside CA 92501	11801 Cajalco Rd; Corona CA 92883													X	X	X	X	X
	LMNS-GP		X		4080 Lemon St Fl 12th; Riverside CA 92501	11801 Cajalco Rd; Corona CA 92883							X	X	X	X	X	X					
	LMS			X	4080 Lemon St Fl 12th; Riverside CA 92501	11801 Cajalco Rd; Corona CA 92883	X	X	X	X	X	X											
283080001	FS			X	4080 Lemon St Fl 12th; Riverside CA 92501														X	X	X	X	X
	FS			X	4080 Lemon St Fl 12th; Riverside CA 92501														X	X	X	X	X
	LMNS-GP		X		4080 Lemon St Fl 12th; Riverside CA 92501								X	X	X	X	X	X					
	LMS			X	4080 Lemon St Fl 12th; Riverside CA 92501		X	X	X	X	X	X											
283080003	FS			X	6221 Box Springs Blvd; Riverside CA 92507														X	X	X	X	X
	LMS			X	6221 Box Springs Blvd; Riverside CA 92507		X	X	X	X	X	X											
283080004	FS			X	6221 Box Springs Blvd; Riverside CA 92507														X	X	X	X	X
	LMS			X	6221 Box Springs Blvd; Riverside CA 92507		X	X	X	X	X	X											
283080005	FS			X	6221 Box Springs Blvd; Riverside CA 92507														X	X	X	X	X
	LMS			X	6221 Box Springs Blvd; Riverside CA 92507		X	X	X	X	X	X											
283080008	FS			X	6221 Box Springs Blvd; Riverside CA 92507														X	X	X	X	X
	FS			X	6221 Box Springs Blvd; Riverside CA 92507														X	X	X	X	X
	LMS			X	6221 Box Springs Blvd; Riverside CA 92507		X	X	X	X	X	X											
283080012	FS		X		PO Box 1450; Chicago IL 60690														X	X	X	X	X
	LMS		X		PO Box 1450; Chicago IL 60690		X	X	X	X	X	X											
283080013	FS		X		PO Box 1450; Chicago IL 60690														X	X	X	X	X
	LMS		X		PO Box 1450; Chicago IL 60690		X	X	X	X	X	X											
283090014	FS		X		PO Box 1450; Chicago IL 60690														X	X	X	X	X
	LMS		X		PO Box 1450; Chicago IL 60690		X	X	X	X	X	X											
283090015	FS		X		PO Box 1450; Chicago IL 60690														X	X	X	X	X
	LMS		X		PO Box 1450; Chicago IL 60690		X	X	X	X	X	X											
283380001	LMNS-GP		X		4080 Lemon St Fl 12th; Riverside CA 92501								X	X	X	X	X	X					
283423002	TWS*		X		4100 Newport Place Dr Ste 350; Newport Beach CA 92660				X			X			X			X					X
	TWS-C			X	4100 Newport Place Dr Ste 350; Newport Beach CA 92660		X	X		X	X		X	X		X	X		X	X	X	X	
285020002	LMNS-GP		X		12697 El Sobrante Rd; Riverside CA 92503	12697 El Sobrante Rd; Riverside CA 92503							X	X	X	X	X	X					
285020003	LMNS-GP		X		10076 Edison Ave; Ontario CA 91762	12667 El Sobrante Rd; Corona CA 92879							X	X	X	X	X	X					
285020004	LMNS-GP		X		12697 El Sobrante Rd; Riverside CA 92503								X	X	X	X	X	X					
285020005	LMNS-GP		X		PO Box 54153; Los Angeles CA 90054								X	X	X	X	X	X					
285020006	LMNS-GP	X			9851 Bolsa Ave Spc 196; Westminster CA 92683								X	X	X	X	X	X					

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285030001	LMNS-GP		X		9851 Bolsa Ave Spc 196; Westminster CA 92683								X	X	X	X	X	X					
285030005	LMNS-GP		X		PO Box 1449; Anaheim CA 92815	13599 El Sobrante Rd; Riverside CA 92503							X	X	X	X	X	X					
285030006	LMNS-GP		X		PO Box 1449; Anaheim CA 92815								X	X	X	X	X	X					
285030008	LMNS-GP		X		17241 Vista Del Lago Dr; Riverside CA 92503								X	X	X	X	X	X					
285030014	LMNS-GP		X		PO Box 54153; Los Angeles CA 90054								X	X	X	X	X	X					
285030015	LMNS-GP		X		PO Box 54153; Los Angeles CA 90054								X	X	X	X	X	X					
285040006	LMNS-GP		X		14870 El Sobrante Rd; Riverside CA 92503	14870 El Sobrante Rd; Riverside CA 92503							X	X	X	X	X	X					
285040007	LMNS-GP		X		PO Box 54153; Los Angeles CA 90054								X	X	X	X	X	X					
285040008	LMNS-GP		X		PO Box 54153; Los Angeles CA 90054								X	X	X	X	X	X					
285050003	LMNS-GP		X		PO Box 54153; Los Angeles CA 90054								X	X	X	X	X	X					
285050008	LMNS-GP		X		PO BOX 54153; Los Angeles CA 90054								X	X	X	X	X	X					
	LMS			X	PO BOX 54153; Los Angeles CA 90054		X	X	X	X	X	X											
285050010	LMNS-GP	X			PO Box 54153; Los Angeles CA 90054								X	X	X	X	X	X					
285050011	LMNS-GP		X		14870 El Sobrante Rd; Riverside CA 92503								X	X	X	X	X	X					
285060018	LMNS-GP		X		15016 El Sobrante Rd; Riverside CA 92503	15016 El Sobrante Rd; Riverside CA 92503							X	X	X	X	X	X					
285060020	LMNS-GP		X		5602 Club View Dr; Yorba Linda CA 92886								X	X	X	X	X	X					
285060038	LMNS-GP		X		6160 Golden Trails Ave; Rancho Cucamonga CA 91739								X	X	X	X	X	X					
285060039	LMNS-GP		X		PO Box 54153; Los Angeles CA 90054								X	X	X	X	X	X					
285060040	LMNS-GP	X			3017 Gage Ave; El Monte CA 91731								X	X	X	X	X	X					
285060041	LMNS-GP	X			15825 Graham St; Huntington Beach CA 92649								X	X	X	X	X	X					
285060047	LMNS-GP		X		24428 Penrose Ct; Diamond Bar CA 91765								X	X	X	X	X	X					
285070001	LMNS-GP		X		300 Paseo De La Playa Apt D; Redondo Beach CA 90277								X	X	X	X	X	X					
285070007	LMNS-GP		X		PO Box 54153; Los Angeles CA 90054								X	X	X	X	X	X					
285070008	LMNS-GP		X		PO Box 54153; Los Angeles CA 90054								X	X	X	X	X	X					
285070010	LMNS-GP		X		2880 Woodbridge Ct; Diamond Bar CA 91765								X	X	X	X	X	X					
285070011	LMNS-GP		X		n/a								X	X	X	X	X	X					
285070012	LMNS-GP	X			300 Paseo De La Playa Apt D; Redondo Beach CA 90277								X	X	X	X	X	X					
285090032	LMNS-GP		X		PO Box 54153; Los Angeles CA 90054								X	X	X	X	X	X					
285090046	LMNS-GP		X		17946 Sunrise Dr; Rowland Heights CA 91748								X	X	X	X	X	X					
285120020	LMNS-GP		X		PO Box 54153; Los Angeles CA 90054								X	X	X	X	X	X					
285120021	LMS			X	PO BOX 54153; Los Angeles CA 90054		X	X	X	X	X	X											
285120022	LMNS-GP		X		PO BOX 54153; Los Angeles CA 90054								X	X	X	X	X	X					
	LMS			X	PO BOX 54153; Los Angeles CA 90054		X	X	X	X	X	X											
285120023	LMNS-GP		X		PO BOX 54153; Los Angeles CA 90054								X	X	X	X	X	X					
	LMS			X	PO BOX 54153; Los Angeles CA 90054		X	X	X	X	X	X											
285120029	LMS			X	n/a		X	X	X	X	X	X											
285120030	LMNS-GP		X		PO Box 54153; Los Angeles CA 90054								X	X	X	X	X	X					

Parcel Acquisitions

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		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
285120031	LMNS-GP		X		PO Box 54153; Los Angeles CA 90054								X	X	X	X	X	X					
285120032	LMNS-GP			X	PO BOX 54153; Los Angeles CA 90054								X	X	X	X	X	X					
	LMS			X	PO BOX 54153; Los Angeles CA 90054		X	X	X	X	X	X											
285130014	LMNS-GP		X		PO BOX 54153; Los Angeles CA 90054								X	X	X	X	X	X					
	LMS			X	PO BOX 54153; Los Angeles CA 90054		X	X	X	X	X	X											
285130015	LMNS-GP		X		PO BOX 54153; Los Angeles CA 90054								X	X	X	X	X	X					
	LMS			X	PO BOX 54153; Los Angeles CA 90054		X	X	X	X	X	X											
285130016	LMNS-GP		X		19880 Kirkpatrick Rd; Perris CA 92570	N/A							X	X	X	X	X	X					
	LMS		X		19880 Kirkpatrick Rd; Perris CA 92570	N/A	X	X	X	X	X	X											
285150004	LMNS-GP	X			16577 Cajalco Rd; Perris CA 92570	16577 Cajalco Rd; Perris CA 92570							X	X	X	X	X	X					
	LMS	X			16577 Cajalco Rd; Perris CA 92570	16577 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X											
285150007	LMNS-GP	X			16577 Cajalco Rd; Perris CA 92570	16725 Pfeifer Way; Perris CA 92570							X	X	X	X	X	X					
	LMS		X		16577 Cajalco Rd; Perris CA 92570	16725 Pfeifer Way; Perris CA 92570	X	X	X	X	X	X											
285150008	LMNS-GP		X		3206 Oregon Ave; Costa Mesa CA 926626								X	X	X	X	X	X					
	LMS		X		3206 Oregon Ave; Costa Mesa CA 926626		X	X	X	X	X	X											
285150013	LMNS-GP	X			19880 Kirkpatrick Rd; Perris CA 92570	19802 Kirkpatrick Rd; Perris 92570							X	X	X	X	X	X					
	LMS	X			19880 Kirkpatrick Rd; Perris CA 92570	19802 Kirkpatrick Rd; Perris 92570	X	X	X	X	X	X											
285150023	LMNS-GP	X			19830 Kirkpatrick Rd; Perris CA 92570	19830 Kirkpatrick Rd; Perris CA 92570							X	X	X	X	X	X					
	LMS	X			19830 Kirkpatrick Rd; Perris CA 92570	19830 Kirkpatrick Rd; Perris CA 92570	X	X	X	X	X	X											
285150025	LMNS-GP	X			PO Box 54153; Los Angeles CA 90054	19835 Gavilan Rd; Perris CA 92570							X	X	X	X	X	X					
	LMS	X			PO Box 54153; Los Angeles CA 90054	19835 Gavilan Rd; Perris CA 92570	X	X	X	X	X	X											
285150026	LMNS-GP	X			24270 Via Lenardo; Yorba Linda CA 92887	16820 Pfeifer Way; Perris CA 92570							X	X	X	X	X	X					
	LMS		X		24270 Via Lenardo; Yorba Linda CA 92887	16820 Pfeifer Way; Perris CA 92570	X	X	X	X	X	X											
285150027	LMNS-GP		X		16800 Pfeifer Way; Perris CA 92570	16800 Pfeifer Way; Perris CA 92570							X	X	X	X	X	X					
	LMS		X		16800 Pfeifer Way; Perris CA 92570	16800 Pfeifer Way; Perris CA 92570	X	X	X	X	X	X											
285150030	LMNS-GP	X			19820 Banbury Cross Rd; Perris 92570	19820 Banbury Cross Rd; Perris 92570							X	X	X	X	X	X					
	LMS	X			19820 Banbury Cross Rd; Perris 92570	19820 Banbury Cross Rd; Perris 92570	X	X	X	X	X	X											
285150031	LMNS-GP	X			19820 Banbury Cross Rd; Perris 92570	N/A							X	X	X	X	X	X					
	LMS	X			19820 Banbury Cross Rd; Perris 92570	N/A	X	X	X	X	X	X											
285150041	LMNS-GP		X		16870 Pfeifer Way; Perris CA 92570	16870 Pfeifer Way; Perris CA 92570							X	X	X	X	X	X					
	LMS		X		16870 Pfeifer Way; Perris CA 92570	16870 Pfeifer Way; Perris CA 92570	X	X	X	X	X	X											
285170009	LMS	X			17400 Kramer Way; Perris CA 92570	17400 Kramer Way; Perris CA 92570	X	X	X	X	X	X											
	MV	X			17400 Kramer Way; Perris CA 92570	17400 Kramer Way; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
285170010	LMS	X			19685 Smith Rd; Perris CA 92570	19685 Smith Rd; Perris CA 92570	X	X	X	X	X	X											
	MV	X			19685 Smith Rd; Perris CA 92570	19685 Smith Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
285170011	LMS	X			19709 Smith Rd; Perris CA 92570	19709 Smith Rd; Perris CA 92570	X	X	X	X	X	X											
	MV	X			19709 Smith Rd; Perris CA 92570	19709 Smith Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					

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		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
285170012	LMS	X			19711 Smith Rd; Perris CA 92570	19711 Smith Rd; Perris CA 92570	X	X	X	X	X	X											
	MV	X			19711 Smith Rd; Perris CA 92570	19711 Smith Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
285170013	LMS			X	1995 Market St; Riverside CA 92501		X	X	X	X	X	X											
	MV			X	1995 Market St; Riverside CA 92501		X	X	X	X	X	X	X	X	X	X	X	X					
285170015	LMNS-GP			X	PO BOX 54153; Los Angeles CA 90054								X	X	X	X	X	X					
	LMS			X	PO BOX 54153; Los Angeles CA 90054		X	X	X	X	X	X											
	MV			X	PO BOX 54153; Los Angeles CA 90054		X	X	X	X	X	X	X	X	X	X	X	X					
285180010	LMNS-GP			X	PO BOX 54153; Los Angeles CA 90054								X	X	X	X	X	X					
	LMS			X	PO BOX 54153; Los Angeles CA 90054		X	X	X	X	X	X											
285180011	LMNS-GP			X	PO BOX 54153; Los Angeles CA 90054								X	X	X	X	X	X					
	LMS			X	PO BOX 54153; Los Angeles CA 90054		X	X	X	X	X	X											
	MV			X	PO BOX 54153; Los Angeles CA 90054		X	X	X	X	X	X	X	X	X	X	X	X					
285190014	LMS		X		19755 Smith Rd; Perris CA 92570	19755 Smith Rd; Perris CA 92570	X	X	X	X	X	X											
	MV		X		19755 Smith Rd; Perris CA 92570	19755 Smith Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
285190015	LMS		X		19755 Smith Rd; Perris CA 92570	19755 Smith Rd; Perris CA 92570	X	X	X	X	X	X											
	MV		X		19755 Smith Rd; Perris CA 92570	19755 Smith Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
285210003	LMS		X		18479 Glass Mountain Dr; Riverside CA 92504		X	X	X	X	X	X											
	MV		X		18479 Glass Mountain Dr; Riverside CA 92504		X	X	X	X	X	X	X	X	X	X	X	X					
285210004	MV		X		17679 Cajalco Rd; Perris CA 92570	17679 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
285210005	LMS		X		5258 Live Oak View Ave; Los Angeles CA 90041		X	X	X	X	X	X											
	MV		X		5258 Live Oak View Ave; Los Angeles CA 90041		X	X	X	X	X	X	X	X	X	X	X	X					
285210008	LMS		X		5258 Live Oak View Ave; Los Angeles CA 90041		X	X	X	X	X	X											
	MV		X		5258 Live Oak View Ave; Los Angeles CA 90041		X	X	X	X	X	X	X	X	X	X	X	X					
285210010	LMS		X		17679 Cajalco Rd; Perris CA 92570	17679 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X											
285210018	LMS			X	4080 Lemon St Fl 3rd; Riverside CA 92501		X	X	X	X	X	X											
	MV			X	4080 Lemon St Fl 3rd; Riverside CA 92501		X	X	X	X	X	X	X	X	X	X	X	X					
285210019	LMS			X	4080 Lemon St Fl 3rd; Riverside CA 92501		X	X	X	X	X	X											
	MV			X	4080 Lemon St Fl 3rd; Riverside CA 92501		X	X	X	X	X	X	X	X	X	X	X	X					
285210028	LMS	X			17612 Camino Martinez; Perris CA 92570	17612 Camino Martinez; Perris CA 92570	X	X	X	X	X	X											
	MV	X			17612 Camino Martinez; Perris CA 92570	17612 Camino Martinez; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
285210029	LMS	X			17620 Camino Martinez; Perris CA 92570	17620 Camino Martinez; Perris CA 92570	X	X	X	X	X	X											
	MV	X			17620 Camino Martinez; Perris CA 92570	17620 Camino Martinez; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
285210030	LMS	X			17630 Camino Martinez; Perris CA 92570	17630 Camino Martinez; Perris CA 92570	X	X	X	X	X	X											
	MV	X			17630 Camino Martinez; Perris CA 92570	17630 Camino Martinez; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
285210031	LMS			X	17640 Camino Martinez; Perris CA 92570	17640 Camino Martinez; Perris CA 92570	X	X	X	X	X	X											
	MV	X			17640 Camino Martinez; Perris CA 92570	17640 Camino Martinez; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
285210032	LMS		X		17611 Camino Martinez; Perris CA 92570	17611 Camino Martinez; Perris CA 92570	X	X	X	X	X	X											

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		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
	MV		X		17611 Camino Martinez; Perris CA 92570	17611 Camino Martinez; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
285210033	LMS	X			10111 Southworth Rd; Valley Springs CA 95252	17621 Camino Martinez; Perris CA 92570	X	X	X	X	X	X											
	MV	X			10111 Southworth Rd; Valley Springs CA 95252	17621 Camino Martinez; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
285210034	LMS	X			17366 Camino Martinez; Perris CA 92570	17633 Camino Martinez; Perris CA 92570	X	X	X	X	X	X											
	MV	X			17366 Camino Martinez; Perris CA 92570	17633 Camino Martinez; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
285220020	LMS		X		17981 Cajalco Rd; Perris CA 92570	17981 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X											
	MV		X		17981 Cajalco Rd; Perris CA 92570	17981 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
286020002	LMNS-GP		X		4080 Lemon St Fl 12th; Riverside CA 92501								X	X	X	X	X	X					
286020003	LMNS-GP		X		PO BOX 54153; Los Angeles CA 90054								X	X	X	X	X	X					
286020007	LMNS-GP		X		PO BOX 54153; Los Angeles CA 90054								X	X	X	X	X	X					
	LMS			X	PO BOX 54153; Los Angeles CA 90054		X	X	X	X	X	X											
286020009	LMS			X	PO Box 54153; Los Angeles CA 90054		X	X	X	X	X	X											
286030011	LMS		X		20751 Lake Mathews Dr; Perris CA 92570	20751 Lake Mathews Dr; Perris CA 92570	X	X	X	X	X	X											
286030012	LMS		X		20855 Lake Mathews Dr; Perris CA 92570	20855 Lake Mathews Dr; Perris CA 92570	X	X	X	X	X	X											
286030013	LMNS-GP		X		PO BOX 54153; Los Angeles CA 90054								X	X	X	X	X	X					
	LMS			X	PO BOX 54153; Los Angeles CA 90054		X	X	X	X	X	X											
286030014	LMNS-GP		X		PO BOX 54143; Los Angeles CA 90054								X	X	X	X	X	X					
	LMS			X	PO BOX 54143; Los Angeles CA 90054		X	X	X	X	X	X											
286030015	LMS	X			13699 Cajalco Rd; Perris CA 92570	13699 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X											
286030016	LMNS-GP		X		PO BOX 54153; Los Angeles CA 90054								X	X	X	X	X	X					
286030018	LMS	X			13880 Richey Way; Perris CA 92570	13880 Richey Way; Perris CA 92570	X	X	X	X	X	X											
286030019	LMS	X			13900 Richey Way; Perris CA 92570	13900 Richey Way; Perris CA 92570	X	X	X	X	X	X											
286040001	LMNS-GP	X			13580 Cajalco Rd; Perris CA 92570	13580 Cajalco Rd; Perris CA 92570							X	X	X	X	X	X					
286040002	LMNS-GP	X			13570 Cajalco Rd; Perris CA 92570								X	X	X	X	X	X					
286040005	LMNS-GP		X		7206 Avenida Altisima; Rancho Palos Verdes CA 90275								X	X	X	X	X	X					
286040007	LMNS-GP		X		PO BOX 361034; Los Angeles CA 90036								X	X	X	X	X	X					
286040008	LMNS-GP		X		4115 Rees St; Riverside CA 92504								X	X	X	X	X	X					
286040009	LMNS-GP		X		13586 Cajalco Rd; Perris CA 92507	13586 Cajalco Rd; Perris CA 92507							X	X	X	X	X	X					
286050017	LMNS-GP		X		13531 Cajalco Rd; Perris CA 92570	13531 Cajalco Rd; Perris CA 92570							X	X	X	X	X	X					
286050018	LMNS-GP		X		13521 Cajalco Rd; Perris CA 92570	13521 Cajalco Rd; Perris CA 92570							X	X	X	X	X	X					
286060028	LMNS-GP		X		20698 Lynette Ln; Perris CA 92570	20698 Lynette Ln; Perris CA 92570							X	X	X	X	X	X					
286060031	LMNS-GP	X			2296 Burning Tree Dr; Corona CA 92882								X	X	X	X	X	X					
286060032	LMNS-GP		X		2450 Lassalette Ct; Riverside CA 92503								X	X	X	X	X	X					
286060033	LMNS-GP	X			20677 Lynette Ln; Perris CA 92570	20677 Lynette Ln; Perris CA 92570							X	X	X	X	X	X					
286070002	FS			X	6221 Box Springs Blvd; Riverside CA 92507														X	X	X	X	X
	LMS			X	6221 Box Springs Blvd; Riverside CA 92507		X	X	X	X	X	X											
286070003	FS			X	6221 Box Springs Blvd; Riverside CA 92507														X	X	X	X	X

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		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
	LMS			X	6221 Box Springs Blvd; Riverside CA 92507		X	X	X	X	X	X											
286070004	FS			X	6221 Box Springs Blvd; Riverside CA 92507														X	X	X	X	X
	LMS			X	6221 Box Springs Blvd; Riverside CA 92507		X	X	X	X	X	X											
286070006	LMNS-GP			X	n/a								X	X	X	X	X	X					
	LMS			X	n/a		X	X	X	X	X	X											
286080003	FS			X	4080 Lemon St Fl 12th; Riverside CA 92501														X	X	X	X	X
	LMS			X	4080 Lemon St Fl 12th; Riverside CA 92501		X	X	X	X	X	X											
286080004	FS		X		690 Chaucer Rd; San Marino CA 91108														X	X	X	X	X
	LMS		X		690 Chaucer Rd; San Marino CA 91108		X	X	X	X	X	X											
286080007	FS			X	3133 Mission Inn Ave; Riverside CA 92507														X	X	X	X	X
	LMS			X	3133 Mission Inn Ave; Riverside CA 92507		X	X	X	X	X	X											
286090022	LMS			X	n/a		X	X	X	X	X	X											
286100001	FS			X	n/a	-													X	X	X	X	X
	LMS			X	n/a		X	X	X	X	X	X											
286100002	FS			X	n/a	-													X	X	X	X	X
	LMS			X	n/a		X	X	X	X	X	X											
286100003	FS		X		6480 Hawarden Dr; Riverside CA 92506	-													X	X	X	X	X
286100004	FS		X		6480 Hawarden Dr; Riverside CA 92506	-													X	X	X	X	X
286100010	FS	X			1627 Jamacha Way; El Cajon CA 92019	13985 Descanso Dr; Perris CA 92570													X	X	X	X	X
286100011	FS		X		13980 Descanso Dr. Perris CA 92570	13985 Descanso Dr; Perris CA 92570													X	X	X	X	X
286100017	FS		X		16705 Weeping Willow Dr; Riverside CA 92503	0													X	X	X	X	X
286110003	LMNS-GP		X		PO BOX 54153; Los Angeles CA 90054								X	X	X	X	X	X					
	LMS			X	PO BOX 54153; Los Angeles CA 90054		X	X	X	X	X	X											
286120001	LMNS-GP		X		20395 Somma Dr; Perris CA 92570	20395 Somma Dr; Perris CA 92570							X	X	X	X	X	X					
	LMS		X		20395 Somma Dr; Perris CA 92570	20395 Somma Dr; Perris CA 92570	X	X	X	X	X	X											
286130036	LMNS-GP		X		15696 Wendell Park Dr; Perris CA 92570	15696 Wendell Park Dr; Perris CA 92570							X	X	X	X	X	X					
286140001	LMNS-GP		X		1057 E Comstock Ave; Glendora CA 91741								X	X	X	X	X	X					
	LMS	X			1057 E Comstock Ave; Glendora CA 91741		X	X	X	X	X	X											
286140002	LMNS-GP		X		14166 Grande Vista Ave; Perris CA 92570	14166 Grande Vista Ave; Perris CA 92570							X	X	X	X	X	X					
	LMS	X			14166 Grande Vista Ave; Perris CA 92570	14166 Grande Vista Ave; Perris CA 92570	X	X	X	X	X	X											
286140003	LMNS-GP	X			14176 Grande Vista Ave; Perris CA 92570	14176 Grande Vista Ave; Perris CA 92570							X	X	X	X	X	X					
	LMS	X			14176 Grande Vista Ave; Perris CA 92570	14176 Grande Vista Ave; Perris CA 92570	X	X	X	X	X	X											
286140004	LMS	X			14186 Grande Vista Ave; Perris CA 92570	14186 Grande Vista Ave; Perris CA 92570	X	X	X	X	X	X											
286140005	LMS		X		14185 Grande Vista Ave; Perris CA 92570	14185 Grande Vista Ave; Perris CA 92570	X	X	X	X	X	X											
286140006	LMNS-GP		X		14155 Grande Vista Ave; Perris CA 92570	14155 Grande Vista Ave; Perris CA 92570							X	X	X	X	X	X					
	LMS	X			14155 Grande Vista Ave; Perris CA 92570	14155 Grande Vista Ave; Perris CA 92570	X	X	X	X	X	X											
286140007	LMNS-GP	X			14095 Grande Vista Ave; Perris CA 92570	14095 Grande Vista Ave; Perris CA 92570							X	X	X	X	X	X					

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APN	Segment	Acquisitions			Mailing Address	Physical Location Address	Alternative															
		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
	LMS	X			14095 Grande Vista Ave; Perris CA 92570	14095 Grande Vista Ave; Perris CA 92570	X	X	X	X	X	X											
286140008	LMNS-GP	X			14041 Grande Vista Ave; Perris CA 92570	14041 Grande Vista Ave; Perris CA 92570							X	X	X	X	X	X					
	LMS	X			14041 Grande Vista Ave; Perris CA 92570	14041 Grande Vista Ave; Perris CA 92570	X	X	X	X	X	X											
286140024	LMS	X			14010 Scenic View Rd; Perris CA 92570	14010 Scenic View Rd; Perris CA 92570	X	X	X	X	X	X											
286140025	LMS	X			14080 Scenic View Rd; Perris CA 92570	14080 Scenic View Rd; Perris CA 92570	X	X	X	X	X	X											
286140031	LMS	X			17344 Sandlewood Dr; Riverside CA 92503	14011 Scenic View Rd; Perris CA 92570	X	X	X	X	X	X											
286230020	FS		X		21785 Ridgedale Dr; Perris CA 92570	21785 Ridgedale Dr; Perris CA 92570													X	X	X	X	X
286230021	FS		X		1627 Jamacha Way; El Cajon CA 92019	-													X	X	X	X	X
287020013	LMNS-GP		X		PO BOX 54153; Los Angeles CA 90054								X	X	X	X	X	X					
	LMS			X	PO BOX 54153; Los Angeles CA 90054		X	X	X	X	X	X											
287150041	FS		X		712 Nob Circle; Vista CA 92084	-													X	X	X	X	X
287160001	FS		X		712 Nob Circle; Vista CA 92084	-													X	X	X	X	X
287160002	FS		X		712 Nob Circle; Vista CA 92084	-													X	X	X	X	X
287200003	FS		X		3742 Blue Bird Canyon Rd; Vista CA 92084	-													X	X	X	X	X
287200009	FS		X		15751 Belfast Ln; Huntington Beach CA 92647	-													X	X	X	X	X
287200010	FS		X		15751 Belfast Ln; Huntington Beach CA 92647	-													X	X	X	X	X
287200011	FS		X		16736 Intrepid Ln; Huntington Beach CA 92649	-													X	X	X	X	X
287210034	FS		X		444 S Flower St Ste 1200; Los Angeles CA 90071	-													X	X	X	X	X
287210035	FS		X		444 S Flower St Ste 1200; Los Angeles CA 90071	-													X	X	X	X	X
287210038	FS		X		444 S Flower St Ste 1200; Los Angeles CA 90071	-													X	X	X	X	X
287210040	FS		X		444 S Flower St Ste 1200; Los Angeles CA 90071	-													X	X	X	X	X
287220001	FS		X		444 S Flower St Ste 1200; Los Angeles CA 90071	16505 Calle Lima; Perris CA 92570													X	X	X	X	X
289120002	FS		X		1112 Wakefield; Anaheim CA 92802	-													X	X	X	X	X
289130002	FS		X		8695 Hillcrest Rd; Buena Park CA 90621	-													X	X	X	X	X
	FS		X		8695 Hillcrest Rd; Buena Park CA 90621	-													X	X	X	X	X
289130007	FS		X		1036 Peter Christian Cir; Corona CA 92881	-													X	X	X	X	X
289130008	FS		X		2404 Falling Oak Dr; Riverside CA 92506	-													X	X	X	X	X
289130009	FS		X		2404 Falling Oak Dr; Riverside CA 92506	-													X	X	X	X	X
289130010	FS		X		2404 Falling Oak Dr; Riverside CA 92506	-													X	X	X	X	X
289130011	FS		X		2404 Falling Oak Dr; Riverside CA 92506	-													X	X	X	X	X
289130013	FS		X		752 Vineland Ave; City of Industry CA 91746	-													X	X	X	X	X
289130014	FS		X		6753 Brockton Ave; Riverside CA 92506	-													X	X	X	X	X
289200003	FS		X		3742 Blue Bird Canyon Rd; Vista CA 92084	-													X	X	X	X	X
289200006	FS		X		9787 Crystal Ridge Dr; Escondido CA 92026	-													X	X	X	X	X
289200007	FS		X		9787 Crystal Ridge Dr; Escondido CA 92026	-													X	X	X	X	X
289200008	FS		X		3742 Blue Bird Canyon Rd; Vista CA 92084	-													X	X	X	X	X
289200009	FS		X		3742 Blue Bird Canyon Rd; Vista CA 92084	-													X	X	X	X	X

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289210004	FS		X		3742 Blue Bird Canyon Rd; Vista CA 92084	-													X	X	X	X	X
289210005	FS		X		7202 Petterson Ln; Paramount CA 90723	-													X	X	X	X	X
289210007	FS		X		444 S Flower St Ste 1200; Los Angeles CA 90071	-													X	X	X	X	X
294180028	PD		X		PO Box 2580; Park City UT 84060		X	X	X				X	X	X								
294180029	PD		X		PO Box 2580; Park City UT 84060		X	X	X				X	X	X								
294180030	PD		X		PO Box 2580; Park City UT 84060		X	X	X				X	X	X								
294180031	PD		X		1530 Nandina Ave; Perris CA 92571	1530 Nandina Ave; Perris CA 92571	X	X	X				X	X	X								
294190008	PD			X	PO Box 12008; Riverside CA 92502		X	X	X				X	X	X								
294190038	PD		X		333 W Wacker Dr Ste 2700; Chicago IL 60606		X	X	X				X	X	X								
294190050	PD		X		27505 Sun City Blvd; Sun City CA 92586	5055 Western Way; Perris CA 92571	X	X	X				X	X	X								
294190065	PD		X		36535 Oak Ridge Dr; Yucaipa CA 92399	1569 Nandina Ave; Perris CA 92571	X	X	X				X	X	X								
294190066	PD		X		42389 Winchester Rd Ste B; Temecula CA 92590		X	X	X				X	X	X								
294210003	PD			X	PO Box 12008; Riverside CA 92502		X	X	X				X	X	X								
294210034	PD	X			1 Maritime Plz Ste 1050; San Francisco CA 94111		X	X	X				X	X	X								
294210042	PD	X			31120 Nuevo Rd; Nuevo CA 92567	1452 W Oleander Ave; Perris CA 92571	X	X	X				X	X	X								
294210046	PD		X		1320 W Oleander Ave; Perris CA 92571		X	X	X				X	X	X								
294210049	PD			X	464 W 4th St Fl 6th; San Bernardino CA 92401		X	X	X				X	X	X								
294210050	PD			X	464 W 4th St Fl 6th; San Bernardino CA 92401		X	X	X				X	X	X								
294210051	PD			X	464 W 4th St Fl 6th; San Bernardino CA 92401		X	X	X				X	X	X								
294210056	PD	X			1 Maritime Plz Ste 1050; San Francisco CA 94111		X	X	X				X	X	X								
294320051	PD			X	464 W 4th St Fl 6th; San Bernardino CA 92401		X	X	X				X	X	X								
295300003	PD			X	PO Box 12008; Riverside CA 92502		X	X	X				X	X	X								
295300005	PD		X		PO Box 2580; Park City UT 84060		X	X	X				X	X	X								
295300006	PD			X	PO Box 12008; Riverside CA 92502		X	X	X				X	X	X								
295300007	PD		X		PO Box 2580; Park City UT 84060		X	X	X				X	X	X								
295300008	PD		X		PO Box 7480; Moreno Valley CA 92552		X	X	X				X	X	X								
295300009	PD	X			661 Wood Lake Dr; Brea CA 92821		X	X	X				X	X	X								
295310006	PD			X	PO Box 12008; Riverside CA 92502		X	X	X				X	X	X								
295310047	PD			X	PO Box 231; San Bernardino CA 92402		X	X	X				X	X	X								
302050002	PD		X		3520 Piedmont Rd NE Ste 365; Atlanta GA 30305		X	X	X				X	X	X								
302050003	PD		X		7641 Corto Rd; Anaheim CA 92807		X	X	X				X	X	X								
302050004	PD		X		3520 Piedmont Rd NE Ste 365; Atlanta Georgia 30305		X	X	X				X	X	X								
302050005	PD		X		3520 Piedmont Rd NE Ste 365; Atlanta GA 30305		X	X	X				X	X	X								
302060002	PD		X		18891 Camino Verde; Yorba Linda CA 92886		X	X	X				X	X	X								
302060005	PD		X		1688 N Perris Blvd Ste F4; Perris CA 92571		X	X	X				X	X	X								
302060011	PD	X			717 Periwinkle Ln; Perris CA 92571		X	X	X				X	X	X								
302060015	PD	X			20590 Nathan Dr; Riverside CA 92508	4194 N Perris Blvd; Perris CA 92571	X	X	X				X	X	X								

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302060017	PD	X			21744 Cheswold Ave; Santa Clarita CA 91350		X	X	X				X	X	X								
302060019	PD	X			31302 Paseo Naranja; San Juan Capistrano CA 92675	4164 N Perry Blvd; Perris CA 92571	X	X	X				X	X	X								
302060020	PD	X			27919 Jefferson Ave Ste 101; Temecula CA 92590		X	X	X				X	X	X								
302060021	PD	X			22244 150th St SE; Plummer Mn 56748	91 W Perry St; Perris CA 92571	X	X	X				X	X	X								
302060022	PD	X			31302 Paseo Naranja; San Juan Capistrano CA 92675	77 W Perry St; Perris CA 92571	X	X	X				X	X	X								
302060023	PD	X			5028 Willow Wood Rd; Rolling Hills Estates CA 90274		X	X	X				X	X	X								
302060024	PD	X			33 W Nuevo Rd; Perris CA 92571		X	X	X				X	X	X								
302060025	PD	X			31302 Paseo Naranja; San Juan Capistrano CA 92675	24925 Perry St; Perris CA 92571	X	X	X				X	X	X								
302060026	PD		X		17863 Calle Aurora; Rowland Heights CA 91748		X	X	X				X	X	X								
302060029	PD	X			12155 Magnolia Ave Ste 3B; Riverside CA 92503	111 W Perry St; Perris CA 92571	X	X	X				X	X	X								
302060030	PD		X		17863 Calle Aurora; Rowland Heights CA 91748		X	X	X				X	X	X								
302060031	PD		X		17863 Calle Aurora; Rowland Heights CA 91748		X	X	X				X	X	X								
302060032	PD		X		n/a		X	X	X				X	X	X								
302060033	PD	X			PO Box 8300; Perris CA 92572		X	X	X				X	X	X								
302060039	PD		X		4040 N Perris Blvd; Perris CA 92571		X	X	X				X	X	X								
302060040	PD		X		1688 N Perris Blvd Ste F4; Perris CA 92571		X	X	X				X	X	X								
302060041	PD		X		1688 N Perris Blvd Ste F4; Perris CA 92571		X	X	X				X	X	X								
302070001	PD		X		3520 Piedmont Rd NE Ste 365; Atlanta GA 30305		X	X	X				X	X	X								
302070006	PD		X		9433 Garibaldi Ave; Temple City CA 91780		X	X	X				X	X	X								
302070008	PD		X		3520 Piedmont Rd NE Ste 365; Atlanta GA 30305		X	X	X				X	X	X								
302070009	PD		X		3520 Piedmont Rd NE Ste 365; Atlanta GA 30305	4244 N Perris Blvd; Perris CA 92571	X	X	X				X	X	X								
302070015	PD		X		17863 Calle Aurora; Rowland Heights CA 91748	24745 Markham St; Perris CA 92571	X	X	X				X	X	X								
302070017	PD		X		17863 Calle Aurora; Rowland Heights CA 91748		X	X	X				X	X	X								
302120004	PD		X		3240 E Woodbine Rd; Orange CA 92867	18556 N Perris Blvd; Perris CA 92571	X	X	X				X	X	X								
302120006	PD	X			2006 Highway 305; Fallbrook CA 92028		X	X	X				X	X	X								
302120010	PD	X			2006 Highway 305; Fallbrook CA 92028		X	X	X				X	X	X								
302120013	PD		X		16715 Alderidge Ct; Riverside CA 92503		X	X	X				X	X	X								
302120016	PD		X		4245 W Feemster Ave; Visalia CA 93277		X	X	X				X	X	X								
302120017	PD		X		4280 Spoon Bill Way; Oceanside CA 92057		X	X	X				X	X	X								
302120018	PD	X			4280 Spoon Bill Way; Oceanside CA 92057		X	X	X				X	X	X								
302130001	PD		X		1674 Hollenbeck Ave Apt 20; Sunnyvale CA 94087		X	X	X				X	X	X								
302130002	PD		X		3398 Punta Alta Unit O; Laguna Woods CA 92637		X	X	X				X	X	X								
302130009	PD		X		802 N Whittier Dr; Beverly Hills CA 90210		X	X	X				X	X	X								
302130018	PD	X			1211 N Broadway; Santa Ana CA 92701		X	X	X				X	X	X								
302130021	PD	X			527 Casitas St; Monterey Park CA 91754		X	X	X				X	X	X								
302130022	PD	X			3398 Punta Alta Unit O; Laguna Woods CA 92637		X	X	X				X	X	X								
302130023	PD	X			527 Casitas St; Monterey Park CA 91754		X	X	X				X	X	X								

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302130024	PD	X			527 Casitas St; Monterey Park CA 91754		X	X	X				X	X	X								
302130027	PD		X		48507 Via Encanto; La Quinta CA 92253		X	X	X				X	X	X								
302130038	PD		X		4039 N Perris Blvd; Perris CA 92571	4039 N Perris Blvd; Perris CA 92571	X	X	X				X	X	X								
302140002	PD		X		713 Arroyo Rd; Los Altos CA 94024		X	X	X				X	X	X								
302140003	PD		X		713 Arroyo Rd; Los Altos CA 94024		X	X	X				X	X	X								
302260058	PD		X		PO Box 2039; Riverside CA 92516	700 W Ramona Expy; Perris CA 92571	X	X	X				X	X	X								
302260067	PD		X		7641 Corto Rd; Anaheim CA 92807		X	X	X				X	X	X								
303020005	PD	X			3931 Brennan Ave; Perris CA 92571		X	X	X				X	X	X								
303020019	PD		X		13857 Carmel Valley Rd; San Diego CA 92130		X	X	X				X	X	X								
303020022	PD	X			3931 Brennan Ave; Perris CA 92571		X	X	X				X	X	X								
303020023	PD	X			3931 Brennan Ave; Perris CA 92571		X	X	X				X	X	X								
303020024	PD	X			3931 Brennan Ave; Perris CA 92571		X	X	X				X	X	X								
303020025	PD	X			3931 Brennan Ave; Perris CA 92571		X	X	X				X	X	X								
303020034	PD	X			PO Box 1396; Redlands CA 92373		X	X	X				X	X	X								
303020035	PD	X			PO Box 1396; Redlands CA 92373		X	X	X				X	X	X								
303020036	PD	X			PO Box 1396; Redlands CA 92373		X	X	X				X	X	X								
303020037	PD	X			PO Box 1396; Redlands CA 92373		X	X	X				X	X	X								
303020038	PD	X			PO Box 1396; Redlands CA 92373		X	X	X				X	X	X								
303020039	PD		X		PO Box 1396; Redlands CA 92373		X	X	X				X	X	X								
303020040	PD		X		PO Box 1396; Redlands CA 92373		X	X	X				X	X	X								
303030018	PD		X		PO Box 1000; Mooresville NC 28115	3984 Indian Ave; Perris CA 92571	X	X	X				X	X	X								
303050002	PD		X		PO Box 15184; Santa Ana CA 92735		X	X	X				X	X	X								
	PPD		X		PO Box 15184; Santa Ana CA 92735	N/A													X			X	X
	PPE*		X		PO Box 15184; Santa Ana CA 92735	n/a														X			
	RD*	X			PO Box 15184; Santa Ana CA 92735					X	X	X				X	X	X		X			
303050003	RD*			X	n/a					X	X	X				X	X	X		X			
303080009	RD*		X		1688 N Perris Blvd Ste F4; Perris CA 92571	19519 Perris Blvd; Perris CA 92570				X	X	X				X	X	X		X			
303080011	RD*		X		1688 N Perris Blvd Ste F4; Perris CA 92571					X	X	X				X	X	X		X			
303080012	RD*		X		3411 N Perris Blvd; Perris CA 92571					X	X	X				X	X	X		X			
303090002	RD*	X			201 Covina Ave Ste 8; Long Beach CA 90803					X	X	X				X	X	X		X			
303090003	RD*	X			201 Covina Ave Ste 8; Long Beach CA 90803					X	X	X				X	X	X		X			
303090004	RD*	X			201 Covina Ave Ste 8; Long Beach CA 90803					X	X	X				X	X	X		X			
303090005	RD*	X			201 Covina Ave Ste 8; Long Beach CA 90803					X	X	X				X	X	X		X			
303090006	RD*	X			201 Covina Ave Ste 8; Long Beach CA 90803					X	X	X				X	X	X		X			
303090007	RD*		X		201 Covina Ave Ste 8; Long Beach CA 90803					X	X	X				X	X	X		X			
303090008	RD*		X		201 Covina Ave Ste 8; Long Beach CA 90803					X	X	X				X	X	X		X			
303090009	RD*	X			201 Covina Ave Ste 8; Long Beach CA 90803					X	X	X				X	X	X		X			

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303090010	RD*	X			201 Covina Ave Ste 8; Long Beach CA 90803					X	X	X				X	X	X		X			
303090011	RD*	X			201 Covina Ave Ste 8; Long Beach CA 90803					X	X	X				X	X	X		X			
303090012	RD*	X			201 Covina Ave Ste 8; Long Beach CA 90803					X	X	X				X	X	X		X			
303090013	RD*	X			201 Covina Ave Ste 8; Long Beach CA 90803					X	X	X				X	X	X		X			
303090014	RD*	X			201 Covina Ave Ste 8; Long Beach CA 90803					X	X	X				X	X	X		X			
303090015	RD*	X			201 Covina Ave Ste 8; Long Beach CA 90803					X	X	X				X	X	X		X			
303090016	RD*		X		201 Covina Ave Ste 8; Long Beach CA 90803	n/a				X	X	X				X	X	X		X			
303090017	RD*		X		201 Covina Ave Ste 8; Long Beach CA 90803					X	X	X				X	X	X		X			
303090018	RD*		X		201 Covina Ave Ste 8; Long Beach CA 90803					X	X	X				X	X	X		X			
303090019	RD*	X			201 Covina Ave Ste 8; Long Beach CA 90803					X	X	X				X	X	X		X			
303090020	RD*		X		201 Covina Ave Ste 8; Long Beach CA 90803	n/a				X	X	X				X	X	X		X			
303090021	RD*		X		1101 E Mendocino St; Altadena CA 91001					X	X	X				X	X	X		X			
303120012	RD*		X		3411 N Perris Blvd; Perris CA 92571	3411 N Perris Blvd; Perris CA 92571				X	X	X				X	X	X		X			
303120015	RD*		X		11290 Point East Dr Ste 200; Rancho Cordova CA 95742	3515 Perris Blvd; Perris CA 92570				X	X	X				X	X	X		X			
303130021	RD*		X		5280 Stonewood Dr; Riverside CA 92506					X	X	X				X	X	X		X			
303130027	RD*				n/a					X	X	X				X	X	X		X			
303130031	RD*		X		3070 Santo Tomas St; Perris CA 92571	3070 Santo Tomas St; Perris CA 92571				X	X	X				X	X	X		X			
303140001	PD		X		n/a		X	X	X				X	X	X								
303140002	PD		X		n/a		X	X	X				X	X	X								
303140003	PD		X		5990 Sepulveda Blvd Ste 610; Van Nuys CA 91411		X	X	X				X	X	X								
303140004	PD		X		5990 Sepulveda Blvd Ste 610; Van Nuys CA 91411		X	X	X				X	X	X								
303140005	PD		X		5990 Sepulveda Blvd Ste 610; Van Nuys CA 91411		X	X	X				X	X	X								
303140012	PD	X			n/a		X	X	X				X	X	X								
303140013	PD	X			n/a		X	X	X				X	X	X								
303140014	PD	X			n/a		X	X	X				X	X	X								
303140015	PD	X			n/a		X	X	X				X	X	X								
303140016	PD	X			n/a		X	X	X				X	X	X								
303140017	PD	X			n/a		X	X	X				X	X	X								
303150006	PD	X			391 N Main St Ste 201; Corona CA 92880		X	X	X				X	X	X								
303150007	PD	X			5990 Sepulveda Blvd Ste 610; Van Nuys CA 91411		X	X	X				X	X	X								
303150008	PD	X			PO Box 5111; Sherman Oaks CA 91413		X	X	X				X	X	X								
303150009	PD				n/a		X	X	X				X	X	X								
303160003	PD		X		23008 Road 132; Tulare CA 93274		X	X	X				X	X	X								
303160007	PD	X			23008 Road 132; Tulare CA 93274		X	X	X				X	X	X								
303160008	PD				n/a		X	X	X				X	X	X								
303170004	PD		X		23008 Road 132; Tulare CA 93274		X	X	X				X	X	X								
303170005	PD		X		23008 Road 132; Tulare CA 93274		X	X	X				X	X	X								

Parcel Acquisitions

APN	Segment	Acquisitions			Mailing Address	Physical Location Address	Alternative															
		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
303170015	PD			X	n/a		X	X	X				X	X	X							
303170016	PD			X	n/a		X	X	X				X	X	X							
303170017	PD			X	n/a		X	X	X				X	X	X							
303275036	RD*		X		35321 Wildwood Canyond Rd; Yucaipa CA 92339					X	X	X				X	X	X		X			
303275037	RD*	X			5280 Stonewood Dr; Riverside CA 92506					X	X	X				X	X	X		X			
303275039	RD*		X		7220 Brandon Ct; Riverside CA 92506					X	X	X				X	X	X		X			
303275040	RD*		X		7220 Brandon Ct; Riverside CA 92506					X	X	X				X	X	X		X			
303275044	RD*	X			5267 Warner Ave; Huntington Beach CA 92649					X	X	X				X	X	X		X			
303275045	RD*	X			5267 Warner Ave; Huntington Beach CA 92649					X	X	X				X	X	X		X			
303275046	RD*	X			5267 Warner Ave; Huntington Beach CA 92649					X	X	X				X	X	X		X			
303276011	RD*	X			14325 Frederick St Ste 1; Moreno Valley CA 92553					X	X	X				X	X	X		X			
303276012	RD*	X			14325 Frederick St Ste 1; Moreno Valley CA 92553					X	X	X				X	X	X		X			
303291001	RD*	X			PO Box 152206; Irving TX 75015					X	X	X				X	X	X		X			
303291002	RD*	X			PO Box 152206; Irving TX 75015					X	X	X				X	X	X		X			
303291003	RD*	X			3240 Mission Inn Ave; Riverside CA 92507					X	X	X				X	X	X		X			
303291004	RD*		X		3240 Mission Inn Ave; Riverside CA 92507					X	X	X				X	X	X		X			
303291006	RD*	X			981 Calle Negocio Ste 200; San Clemente CA 92673					X	X	X				X	X	X		X			
303292001	RD*	X			24780 Hayes Ave; Murrieta CA 92562					X	X	X				X	X	X		X			
303292002	RD*	X			24780 Hayes Ave; Murrieta CA 92562					X	X	X				X	X	X		X			
303292003	RD*	X			24780 Hayes Ave; Murrieta CA 92562					X	X	X				X	X	X		X			
303292004	RD*	X			3604 Cashmere Cir; Perris CA 92571	84 Business Park Dr; Perris CA 92571				X	X	X				X	X	X		X			
303292005	RD*	X			PO Box 3308; La Puente CA 91744					X	X	X				X	X	X		X			
303292006	RD*	X			10 Via Azur; Rancho Santa Margarita CA 92688					X	X	X				X	X	X		X			
303292007	RD*	X			5671 Gates St; Chino CA 91710					X	X	X				X	X	X		X			
303292008	RD*	X			5671 Gates St; Chino CA 91710					X	X	X				X	X	X		X			
303292009	RD*	X			5671 Gates St; Chino CA 91710					X	X	X				X	X	X		X			
303292010	RD*	X			981 Calle Negocio Ste 200; San Clemente CA 92673					X	X	X				X	X	X		X			
303292011	RD*	X			981 Calle Negocio Ste 200; San Clemente CA 92673					X	X	X				X	X	X		X			
303293001	RD*	X			3240 Mission Inn Ave; Riverside CA 92507					X	X	X				X	X	X		X			
303293002	RD*	X			170 Wilkerson Ave Ste B; Perris CA 92570					X	X	X				X	X	X		X			
303293005	RD*	X			5280 Stonewood Dr; Riverside CA 92506					X	X	X				X	X	X		X			
303293006	RD*	X			5280 Stonewood Dr; Riverside CA 92506					X	X	X				X	X	X		X			
303293007	RD*	X			3240 Mission Inn Ave; Riverside CA 92507					X	X	X				X	X	X		X			
303293008	RD*	X			4587 Mission Inn Ave; Riverside CA 92501					X	X	X				X	X	X		X			
305020017	PD	X			821 County Rd No 27; Brighton CO 80601		X	X	X				X	X	X							
	PPD	X			821 County Rd No 27; Brighton CO 80601	N/A													X			X	X
	PPE*	X			821 County Rd No 27; Brighton CO 80601															X			

Parcel Acquisitions

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		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
	RD*	X			821 County Rd No 27; Brighton CO 80601					X	X	X				X	X	X		X			
305020019	PD			X	464 W 4th St Fl 6th; San Bernardino CA 92401		X	X	X				X	X	X								
	PPD			X	464 W 4th St Fl 6th; San Bernardino CA 92401	N/A													X			X	X
	PPE*			X	464 W 4th St Fl 6th; San Bernardino CA 92401																X		
	RD*			X	464 W 4th St Fl 6th; San Bernardino CA 92401					X	X	X				X	X	X		X			
305020023	PD	X			821 County Rd No 27; Brighton CO 80601		X	X	X				X	X	X								
	PPD	X			821 County Rd No 27; Brighton CO 80601	N/A													X			X	X
	PPE*	X			821 County Rd No 27; Brighton CO 80601																X		
	RD*	X			821 County Rd No 27; Brighton CO 80601					X	X	X				X	X	X		X			
305020030	PD	X			821 County Rd No 27; Brighton CO 80601		X	X	X				X	X	X								
	PPD	X			821 County Rd No 27; Brighton CO 80601	N/A													X			X	X
	PPE*	X			821 County Rd No 27; Brighton CO 80601																X		
	RD*	X			821 County Rd No 27; Brighton CO 80601					X	X	X				X	X	X		X			
305020031	PD		X		821 County Rd No 27; Brighton CO 80601		X	X	X				X	X	X								
	PPD		X		821 County Rd No 27; Brighton CO 80601	N/A													X			X	X
	PPE*		X		821 County Rd No 27; Brighton CO 80601																X		
	RD*		X		821 County Rd No 27; Brighton CO 80601					X	X	X				X	X	X		X			
305020032	PD		X		821 County Rd No 27; Brighton CO 80601		X	X	X				X	X	X								
	PPD		X		821 County Rd No 27; Brighton CO 80601	N/A													X			X	X
	PPE*		X		821 County Rd No 27; Brighton CO 80601																X		
	RD*	X			821 County Rd No 27; Brighton CO 80601					X	X	X				X	X	X		X			
305030021	RD*		X		PO Box 9790; Maryville TN 37802	3100 N Perris Blvd; Perris CA 92571				X	X	X				X	X	X		X			
305030022	RD*		X		PO Box 9790; Maryville TN 37802					X	X	X				X	X	X		X			
305030052	RD*		X		41751 Cherry St; Murrieta CA 92562	n/a				X	X	X				X	X	X		X			
305030053	RD*		X		41751 Cherry St; Murrieta CA 92562	n/a				X	X	X				X	X	X		X			
305040017	PPD	X			2830 Barrett Ave; Perris CA 92571-3258	N/A													X			X	X
	PPE*	X			2830 Barrett Ave; Perris CA 92571-3258																X		
305040022	PPD	X			2830 Barrett Ave; Perris CA 92571-3258	2831 Indian Ave; Perris CA 92571-3206													X			X	X
	PPE*			X	2830 Barrett Ave; Perris CA 92571-3258	2831 Indian Ave; Perris CA 92571-3206															X		
305040036	PPD			X	101 N D St; Perris CA 92570														X			X	X
	PPE*		X		101 N D St; Perris CA 92570																X		
305040038	PPD			X	13743 Ventura Blvd; Sherman Oaks CA 91423														X			X	X
	PPE*			X	13743 Ventura Blvd; Sherman Oaks CA 91423																X		
305040043	PPD	X			2830 Barrett Ave; Perris CA 92571-3258	N/A													X			X	X
	PPE*		X		2830 Barrett Ave; Perris CA 92571-3258																X		
305050006	PPD	X			2817 Susan Ln; Perris CA 92571-3216	2817 Susan Ln; Perris CA 92571-3216													X			X	X
	PPE*	X			2817 Susan Ln; Perris CA 92571-3216	2817 Susan Ln; Perris CA 92571-3216															X		

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		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
305050012	PPD		X		485 Hagan Ln; Perris CA 92571-3221	485 Hagan Ln; Perris CA 92571-3221													X			X	X
	PPE*		X		485 Hagan Ln; Perris CA 92571-3221	485 Hagan Ln; Perris CA 92571-3221															X		
305050018	PPD	X			170 Wilkerson Ave, Ste B; Perris CA 92570-2200	2824 Indian Ave; Perris CA 92571-3206													X			X	X
	PPE*	X			170 Wilkerson Ave, Ste B; Perris CA 92570-2200	2824 Indian Ave; Perris CA 92571-3206															X		
305050027	PD		X		PO Box 12008; Riverside CA 92502		X	X	X				X	X	X								
	PPD			X	PO Box 12008; Riverside CA 92502	N/A													X			X	X
	PPE*			X	PO Box 12008; Riverside CA 92502																X		
	RD*			X	PO Box 12008; Riverside CA 92502					X	X	X				X	X	X		X			
305050028	PPD	X			PO Box 460; Perris CA 92572	2837 Susan Ln, Perris CA 92571-3216													X			X	X
	PPE*	X			PO Box 460; Perris CA 92572	2837 Susan Ln, Perris CA 92571-3216															X		
305050029	PPD	X			2217 Rockway Dr; West Covina CA 91790-5610	2804 Indian Ave; Perris CA 92571-3206													X			X	X
	PPE*	X			2217 Rockway Dr; West Covina CA 91790-5610	2804 Indian Ave; Perris CA 92571-3206															X		
305050035	PPD		X		25790 Trumble Rd; Sun City CA 92585-9793	N/A													X			X	X
	PPE*		X		25790 Trumble Rd; Sun City CA 92585-9793																X		
305050036	PPD	X			6966 Filkins Ave; Rancho Cucamonga CA 91701	N/A													X			X	X
	PPE*	X			6966 Filkins Ave; Rancho Cucamonga CA 91701																X		
305050049	PD			X	464 W 4th St Fl 6th; San Bernardino CA 92401		X	X	X				X	X	X								
	PPD			X	464 W 4th St Fl 6th; San Bernardino CA 92401	N/A													X			X	X
	PPE*			X	464 W 4th St Fl 6th; San Bernardino CA 92401																X		
	RD*			X	464 W 4th St Fl 6th; San Bernardino CA 92401					X	X	X				X	X	X		X			
305050051	PD		X		1851 Outpost Dr; Los Angeles CA 90068-3721		X	X	X				X	X	X								
	PPD		X		1851 Outpost Dr; Los Angeles CA 90068-3721	N/A													X			X	X
	PPE*		X		1851 Outpost Dr; Los Angeles CA 90068-3721																X		
	RD*	X			1851 Outpost Dr; Los Angeles CA 90068-3721					X	X	X				X	X	X		X			
305050055	PD		X		1851 Outpost Dr; Los Angeles CA 90068-3721		X	X	X				X	X	X								
	PPD		X		1851 Outpost Dr; Los Angeles CA 90068-3721	N/A													X			X	X
	PPE*		X		1851 Outpost Dr; Los Angeles CA 90068-3721																X		
	RD*		X		1851 Outpost Dr; Los Angeles CA 90068-3721					X	X	X				X	X	X		X			
305050057	PD			X	PO Box 231; San Bernardino CA 92402		X	X	X				X	X	X								
	PPD			X	PO Box 231; San Bernardino CA 92402	N/A													X			X	X
	PPE*			X	PO Box 231; San Bernardino CA 92402																X		
	RD*			X	PO Box 231; San Bernardino CA 92402					X	X	X				X	X	X		X			
305060003	PD		X		PO Box 9019; Calexico CA 92232		X	X	X				X	X	X								
305060008	PPD	X			470 Wilson Ave; Perris CA 92571	2726 Indian Ave; Perris CA 92751-3209													X			X	X
	PPE*	X			470 Wilson Ave; Perris CA 92571	2726 Indian Ave; Perris CA 92751-3209															X		
305060009	PPD	X			2756 Indian Ave; Perris CA 92751-3209	2756 Indian Ave; Perris CA 92751-3209													X			X	X
	PPE*	X			2756 Indian Ave; Perris CA 92751-3209	2756 Indian Ave; Perris CA 92751-3209															X		

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		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
305060010	PPD	X			562 S. Ashford Ave; Bloomington CA 92316-1202	N/A													X			X	X
	PPE*	X			562 S. Ashford Ave; Bloomington CA 92316-1202																X		
305060013	PD		X		PO Box 12008, Riverside CA 92502-2208		X	X	X				X	X	X								
	PPD			X	PO Box 12008, Riverside CA 92502-2208	N/A													X			X	X
	PPE*			X	PO Box 12008, Riverside CA 92502-2208																X		
	RD*			X	PO Box 12008, Riverside CA 92502-2208					X	X	X				X	X	X		X			
305060015	PPD		X		PO Box 1325 Newport Beach, CA 92659-0325	PO Box 1325; Newport Beach CA 92659				X	X	X							X			X	X
	PPE*		X		PO Box 1325 Newport Beach, CA 92659-0325	PO Box 1325; Newport Beach CA 92659															X		
305060019	PD		X		3197 Airport Loop Dr Ste C; Costa Mesa CA 92626		X	X	X				X	X	X								
	PPD	X			3197 Airport Loop Dr Ste C; Costa Mesa CA 92626	N/A													X			X	X
	PPE*	X			3197 Airport Loop Dr Ste C; Costa Mesa CA 92626																X		
	RD*		X		3197 Airport Loop Dr Ste C; Costa Mesa CA 92626					X	X	X				X	X	X		X			
305060021	PD		X		9681 Crestview Cir; Villa Park CA 02861-1311		X	X	X				X	X	X								
	PPD	X			9681 Crestview Cir; Villa Park CA 02861-1311	N/A													X			X	X
	PPE*	X			9681 Crestview Cir; Villa Park CA 02861-1311																X		
	RD*	X			9681 Crestview Cir; Villa Park CA 02861-1311					X	X	X				X	X	X		X			
305060023	PD		X		9681 Crestview Cir; Villa Park CA 92861		X	X	X				X	X	X								
	PPD	X			9681 Crestview Cir; Villa Park CA 92861	N/A													X			X	X
	PPE*	X			9681 Crestview Cir; Villa Park CA 92861																X		
	RD*	X			9681 Crestview Cir; Villa Park CA 92861					X	X	X				X	X	X		X			
305060025	PD		X		9681 Crestview Cir; Villa Park CA 92861		X	X	X				X	X	X								
	PPD	X			9681 Crestview Cir; Villa Park CA 92861	N/A													X			X	X
	PPE*	X			9681 Crestview Cir; Villa Park CA 92861																X		
	RD*	X			9681 Crestview Cir; Villa Park CA 92861					X	X	X				X	X	X		X			
305060029	PPD	X			PO Box 1325 Newport Beach, CA 92659-0325	N/A													X			X	X
	PPE*	X			PO Box 1325 Newport Beach, CA 92659-0325																X		
305060030	PPD			X	464 W. 4th. Street 6th. Fl. San Bernardino 93401	N/A													X			X	X
	PPE*			X	464 W. 4th. Street 6th. Fl. San Bernardino 93401																X		
305060035	PD		X		1201 E Highland Ave; San Bernardino CA 92404		X	X	X				X	X	X								
	PPD	X	X		1201 E Highland Ave; San Bernardino CA 92404	N/A													X			X	X
	PPE*		X		1201 E Highland Ave; San Bernardino CA 92404																X		
	RD*		X		1201 E Highland Ave; San Bernardino CA 92404	n/a				X	X	X				X	X	X		X			
305060036	PPD	X			1201 E Highland Ave; San Bernardino CA 92404	N/A													X			X	X
	PPE*		X		1201 E Highland Ave; San Bernardino CA 92404																X		
305060037	PPD	X			1201 E Highland Ave; San Bernardino CA 92404	N/A													X			X	X
	PPE*		X		1201 E Highland Ave; San Bernardino CA 92404																X		
305060038	PPE*			X	975 Morgan St; Perris CA 92571	n/a															X		

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305060066	PD		X		2716 Ocean park Blvd suite 2011; Santa Monica CA 90405		X	X	X				X	X	X							
305070003	PPD	X			1688 N Perris Blvd Ste F4; Perris CA 92571	2416 Indian Ave; Perris CA 92571													X			X	X
	PPE*		X		1688 N Perris Blvd Ste F4; Perris CA 92571	2416 Indian Ave; Perris CA 92571															X		
305080044	PPD		X		32823 Highway 79 South; Temecula CA 92592	N/A													X			X	X
	PPE*		X		32823 Highway 79 South; Temecula CA 92592																X		
305080045	PPD		X		1323 W Florida Ave; Hemet CA 92543	2674 N Perris Blvd; Perris CA 92571													X			X	X
	PPE*		X		1323 W Florida Ave; Hemet CA 92543	2674 N Perris Blvd; Perris CA 92571															X		
305080046	PPD			X	PO Box 9598; Laguna Beach CA 92652	N/A													X			X	X
	PPE*		X		PO Box 9598; Laguna Beach CA 92652																X		
305080047	PPD		X		32823 Highway 79 South; Temecula CA 92592	N/A													X			X	X
	PPE*		X		32823 Highway 79 South; Temecula CA 92592																X		
305080087	PPD	X			22275 Canyon Club Dr; Canyon Lake CA 92587	N/A													X			X	X
	PPE*	X			22275 Canyon Club Dr; Canyon Lake CA 92587																X		
305080088	PPD	X			11191 Calabash Ave; Fontanta CA 92337-7018	N/A													X			X	X
	PPE*	X			11191 Calabash Ave; Fontanta CA 92337-7018																X		
305080090	PPD	X			PO Box 8300; Perris CA 92572	N/A													X			X	X
	PPE*			X	PO Box 8300; Perris CA 92572																X		
305080091	PPD	X			PO Box 8300; Perris CA 92572	N/A													X			X	X
	PPE*			X	PO Box 8300; Perris CA 92572																X		
305080092	PPD	X			150 W Placentia Ave; Perris CA 92571-3200	N/A													X			X	X
	PPE*	X			150 W Placentia Ave; Perris CA 92571-3200																X		
305080093	PPD	X			7951 Arlington Ave; Riverside CA 92503	2750 N. Perris Blvd., Perris CA 93571-3234													X			X	X
	PPE*	X			7951 Arlington Ave; Riverside CA 92503	2750 N. Perris Blvd., Perris CA 93571-3234															X		
305090022	PD			X	PO Box 12008; Riverside CA 92502		X	X	X				X	X	X								
	PPD			X	PO Box 12008; Riverside CA 92502	N/A													X			X	X
	PPE*			X	PO Box 12008; Riverside CA 92502																X		
	RD*			X	PO Box 12008; Riverside CA 92502					X	X	X				X	X	X		X			
305090026	PPD		X		1688 N Perris Blvd Ste F4; Perris CA 92571	N/A													X			X	X
	PPE*		X		1688 N Perris Blvd Ste F4; Perris CA 92571																X		
305090028	PPD		X		1688 N Perris Blvd Ste F4; Perris CA 92571	N/A													X			X	X
	PPE*		X		1688 N Perris Blvd Ste F4; Perris CA 92571																X		
305090030	PPD		X		1688 N Perris Blvd Ste F4; Perris CA 92571	N/A													X			X	X
	PPE*		X		1688 N Perris Blvd Ste F4; Perris CA 92571																X		
305090032	PPD		X		1688 N Perris Blvd Ste F4; Perris CA 92571	N/A													X			X	X
	PPE*		X		1688 N Perris Blvd Ste F4; Perris CA 92571																X		
305090040	PD		X		3640 Hillview Dr; Riverside CA 92503		X	X	X				X	X	X								
	PPD	X			3640 Hillview Dr; Riverside CA 92503	N/A													X			X	X

Parcel Acquisitions

APN	Segment	Acquisitions			Mailing Address	Physical Location Address	Alternative															
		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
	PPE*	X			3640 Hillview Dr; Riverside CA 92503															X		
	RD*	X			3640 Hillview Dr; Riverside CA 92503					X	X	X				X	X	X		X			
305090043	PPD			X	464 W 4th St Fl 6th; San Bernardino CA 92401	N/A													X			X	X
	PPE*			X	464 W 4th St Fl 6th; San Bernardino CA 92401																X		
	RD*			X	464 W 4th St Fl 6th; San Bernardino CA 92401					X	X	X				X	X	X		X			
305090045	PD		X		PO Box 1404; Apple Valley CA 92307		X	X	X				X	X	X								
	PPD	X			PO Box 1404; Apple Valley CA 92307	N/A													X			X	X
	PPE*	X			PO Box 1404; Apple Valley CA 92307																X		
	RD*	X			PO Box 1404; Apple Valley CA 92307					X	X	X				X	X	X		X			
305090046	PD			X	464 W 4th St Fl 6th; San Bernardino CA 92401		X	X	X				X	X	X								
	PPD			X	464 W 4th St Fl 6th; San Bernardino CA 92401	N/A													X			X	X
	PPE*			X	464 W 4th St Fl 6th; San Bernardino CA 92401																X		
	RD*			X	464 W 4th St Fl 6th; San Bernardino CA 92401					X	X	X				X	X	X		X			
305090055	PPD		X		1688 N Perris Blvd Ste F4; Perris CA 92571	N/A													X			X	X
	PPE*		X		1688 N Perris Blvd Ste F4; Perris CA 92571																X		
305090056	PPD		X		1688 N Perris Blvd Ste F4; Perris CA 92571	N/A													X			X	X
	PPE*		X		1688 N Perris Blvd Ste F4; Perris CA 92571																X		
305100014	PPD			X	PO Box 12008; Riverside CA 92502	N/A													X			X	X
	PPE*			X	PO Box 12008; Riverside CA 92502																X		
305100015	PPD			X	PO Box 12008; Riverside CA 92502	N/A													X			X	X
	PPE*			X	PO Box 12008; Riverside CA 92502																X		
	RD*			X	PO Box 12008; Riverside CA 92502					X	X	X				X	X	X		X			
305100028	PPD		X		1688 N Perris Blvd Ste F4; Perris CA 92571	2364 Indian Ave; Perris CA 92571-3213													X			X	X
	PPE*		X		1688 N Perris Blvd Ste F4; Perris CA 92571	2364 Indian Ave; Perris CA 92571-3213															X		
305160022	PPD		X		1101 E Mendocino St; Altadena CA 91001														X			X	X
	PPE*		X		1101 E Mendocino St; Altadena CA 91001																X		
305170018	PPD		X		1688 N Perris Blvd Ste F4; Perris CA 92571	N/A													X			X	X
	PPE*		X		1688 N Perris Blvd Ste F4; Perris CA 92571																X		
305180037	PPD		X		35070 Antelope Rd; Murrieta CA 92563	N/A													X			X	X
	PPE*		X		35070 Antelope Rd; Murrieta CA 92563																X		
305180038	PPD		X		35070 Antelope Rd; Murrieta CA 92563	N/A													X			X	X
	PPE*		X		35070 Antelope Rd; Murrieta CA 92563																X		
305190014	PPD		X		1688 N Perris Blvd Ste F4; Perris CA 92571														X			X	X
	PPE*		X		1688 N Perris Blvd Ste F4; Perris CA 92571																X		
305190028	PPD		X		1688 N Perris Blvd Ste F4; Perris CA 92571														X			X	X
	PPE*		X		1688 N Perris Blvd Ste F4; Perris CA 92571																X		
306030022	PPD	X			37832 Sky High Dr; Murrieta CA 92562-3079	N/A													X			X	X

Parcel Acquisitions

APN	Segment	Acquisitions			Mailing Address	Physical Location Address	Alternative															
		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
	PPE*		X		37832 Sky High Dr; Murrieta CA 92562-3079															X		
306030024	PPD		X		101 N D St; Perris CA 92570-1917	N/A												X			X	X
	PPE*			X	101 N D St; Perris CA 92570-1917															X		
306030025	PPD	X			7643 Loma Verde Ave; Canoga Park CA 91304	N/A												X			X	X
	PPE*		X		7643 Loma Verde Ave; Canoga Park CA 91304															X		
306030035	PPD	X			101 N D St; Perris CA 92570-1917	N/A												X			X	X
	PPE*			X	101 N D St; Perris CA 92570-1917															X		
306030040	PPD	X			PO Box 800; Rosemead CA 91770-0800	N/A												X			X	X
	PPE*	X			PO Box 800; Rosemead CA 91770-0800															X		
306040002	PPD	X			421 Placentia Ave; Perris CA 92571-4004	421 Placentia Ave; Perris CA 92571-4004												X			X	X
	PPE*	X			421 Placentia Ave; Perris CA 92571-4004	421 Placentia Ave; Perris CA 92571-4004														X		
306040003	PPD	X			5 Forest Vale Pl; Monterey CA 93940-5803	431 Placentia Ave; Perris CA 92571-4004												X			X	X
	PPE*	X			5 Forest Vale Pl; Monterey CA 93940-5803	431 Placentia Ave; Perris CA 92571-4004														X		
306040004	PPD	X			441 Placentia Ave; Perris CA 92571-4004	441 Placentia Ave; Perris CA 92571-4004												X			X	X
	PPE*	X			441 Placentia Ave; Perris CA 92571-4004	441 Placentia Ave; Perris CA 92571-4004														X		
306040014	PPD	X			451 Placentia Ave; Perris CA 92571-4004	451 Placentia Ave; Perris CA 92571-4004												X			X	X
	PPE*	X			451 Placentia Ave; Perris CA 92571-4004	451 Placentia Ave; Perris CA 92571-4004														X		
306040015	PPD	X			461 Placentia Ave; Perris CA 92571-4004	461 Placentia Ave; Perris CA 92571-4004												X			X	X
	PPE*	X			461 Placentia Ave; Perris CA 92571-4004	461 Placentia Ave; Perris CA 92571-4004														X		
306040016	PPD	X			471 Placentia Ave; Perris CA 92571-4004	471 Placentia Ave; Perris CA 92571-4004												X			X	X
	PPE*	X			471 Placentia Ave; Perris CA 92571-4004	471 Placentia Ave; Perris CA 92571-4004														X		
306040017	PPD	X			481 Placentia Ave; Perris CA 92571-4004	481 Placentia Ave; Perris CA 92571-4004												X			X	X
	PPE*	X			481 Placentia Ave; Perris CA 92571-4004	481 Placentia Ave; Perris CA 92571-4004														X		
306040018	PPD		X		450 Lisbon St; Perris CA 92571	450 Lisbon St; Perris CA 92571												X			X	X
	PPE*			X	450 Lisbon St; Perris CA 92571	450 Lisbon St; Perris CA 92571														X		
306040020	PPD		X		470 Lisbon St; Perris CA 92571	470 Lisbon St; Perris CA 92571												X			X	X
	PPE*		X		470 Lisbon St; Perris CA 92571	470 Lisbon St; Perris CA 92571														X		
	RD*		X		470 Lisbon St; Perris CA 92571	470 Lisbon St; Perris CA 92571				X	X	X				X	X	X		X		
306040024	PPD	X			521 Placentia Ave; Perris CA 92571-4004	521 Placentia Ave; Perris CA 92571-4004												X			X	X
	PPE*	X			521 Placentia Ave; Perris CA 92571-4004	521 Placentia Ave; Perris CA 92571-4004														X		
306040027	PPD	X			541 Placentia Ave; Perris CA 92571-4004	541 Placentia Ave; Perris CA 92571-4004												X			X	X
	PPE*	X			541 Placentia Ave; Perris CA 92571-4004	541 Placentia Ave; Perris CA 92571-4004														X		
306040028	PPD	X			551 Placentia Ave; Perris CA 92571-4004	551 Placentia Ave; Perris CA 92571-4004												X			X	X
	PPE*	X			551 Placentia Ave; Perris CA 92571-4004	551 Placentia Ave; Perris CA 92571-4004														X		
306040031	PPE*	X			421 Placentia Ave; Perris CA 92571															X		

Parcel Acquisitions

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		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
306040034	PPD			X	2750 Wilson Ave; Perris CA 92571	2750 Wilson Ave; Perris CA 92571													X			X	X
	PPE*			X	2750 Wilson Ave; Perris CA 92571	2750 Wilson Ave; Perris CA 92571															X		
	RD*			X	2750 Wilson Ave; Perris CA 92571	2750 Wilson Ave; Perris CA 92571				X	X	X				X	X	X		X			
306040044	PPD	X			531 Placentia Ave; Perris CA 92571-4004	531 Placentia Ave; Perris CA 92571-4004													X			X	X
	PPE*	X			531 Placentia Ave; Perris CA 92571-4004	531 Placentia Ave; Perris CA 92571-4004															X		
306040045	PPD	X			PO Box 8674; Moreno Valley CA 92552-8674	N/A													X			X	X
	PPE*	X			PO Box 8674; Moreno Valley CA 92552-8674																X		
306040047	PPD	X			561 Placentia Ave; Perris CA 92571-4004	561 Placentia Ave; Perris CA 92571-4004													X			X	X
	PPE*	X			561 Placentia Ave; Perris CA 92571-4004	561 Placentia Ave; Perris CA 92571-4004															X		
306040050	PPD	X			511 Placentia Ave; Perris CA 92571-4004	511 Placentia Ave; Perris CA 92571-4004													X			X	X
	PPE*	X			511 Placentia Ave; Perris CA 92571-4004	511 Placentia Ave; Perris CA 92571-4004															X		
306040051	PPD	X			491 Placentia Ave; Perris CA 92571-4004	491 Placentia Ave; Perris CA 92571-4004													X			X	X
	PPE*	X			491 Placentia Ave; Perris CA 92571-4004	491 Placentia Ave; Perris CA 92571-4004															X		
306040053	PPD			X	2770 Wilson Ave; Perris CA 92571	2770 Wilson Ave; Perris CA 92571													X			X	X
	PPE*			X	2770 Wilson Ave; Perris CA 92571	2770 Wilson Ave; Perris CA 92571															X		
	RD*			X	2770 Wilson Ave; Perris CA 92571	2770 Wilson Ave; Perris CA 92571				X	X	X				X	X	X		X			
306040058	PPD	X			2781 Redlands Ave; Perris CA 92571-4023	2781 Redlands Ave; Perris CA 92571-4023													X			X	X
	PPE*	X			2781 Redlands Ave; Perris CA 92571-4023	2781 Redlands Ave; Perris CA 92571-4023															X		
306040060	PPD			X	490 Lisbon St; Perris CA 92571	490 Lisbon St; Perris CA 92571													X			X	X
	PPE*			X	490 Lisbon St; Perris CA 92571	490 Lisbon St; Perris CA 92571															X		
	RD*			X	490 Lisbon St; Perris CA 92571	490 Lisbon St; Perris CA 92571				X	X	X				X	X	X		X			
306040062	PPD	X			2771 Redlands Ave; Perris CA 92571-4023	2771 Redlands Ave; Perris CA 92571-4023													X			X	X
	PPE*	X			2771 Redlands Ave; Perris CA 92571-4023	2771 Redlands Ave; Perris CA 92571-4023															X		
306040063	PPD		X		8109 Constance St; Rosemead CA 91770														X			X	X
	PPE*		X		8109 Constance St; Rosemead CA 91770																X		
	RD*		X		8109 Constance St; Rosemead CA 91770					X	X	X				X	X	X		X			
306040068	PPD	X			2751 Redlands Ave; Perris CA 92571	2751 Redlands Ave; Perris CA 92571													X			X	X
	PPE*	X			2751 Redlands Ave; Perris CA 92571	2751 Redlands Ave; Perris CA 92571															X		
306040072	PPD	X			2761 Redlands Ave; Perris CA 92571-4023	2761 Redlands Ave; Perris CA 92571-4023													X			X	X
	PPE*	X			2761 Redlands Ave; Perris CA 92571-4023	2761 Redlands Ave; Perris CA 92571-4023															X		
306040073	PPD	X			411 Placentia Ave; Perris CA 92571-4004	411 Placentia Ave; Perris CA 92571-4004													X			X	X
	PPE*	X			411 Placentia Ave; Perris CA 92571-4004	411 Placentia Ave; Perris CA 92571-4004															X		
306040075	PPD			X	480 Lisbon St; Perris CA 92571	480 Lisbon St; Perris CA 92571													X			X	X
	PPE*			X	480 Lisbon St; Perris CA 92571	480 Lisbon St; Perris CA 92571															X		
	RD*			X	480 Lisbon St; Perris CA 92571	480 Lisbon St; Perris CA 92571				X	X	X				X	X	X		X			
306040076	PPD	X			2791 Redlands Ave; Perris CA 92571-4023	2791 Redlands Ave; Perris CA 92571-4023													X			X	X
	PPE*	X			2791 Redlands Ave; Perris CA 92571-4023	2791 Redlands Ave; Perris CA 92571-4023															X		

Parcel Acquisitions

APN	Segment	Acquisitions			Mailing Address	Physical Location Address	Alternative															
		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
306040079	PPD	X			2790 Wilson Ave; Perris CA 92751-4010	2790 Wilson Ave; Perris CA 92751-4010													X			X	X
	PPE*	X			2790 Wilson Ave; Perris CA 92751-4010	2790 Wilson Ave; Perris CA 92751-4010															X		
306060003	PD		X		PO Box 9019; Calexico CA 92232-9019		X	X	X				X	X	X								
	PPD	X			PO Box 9019; Calexico CA 92232-9019	N/A													X			X	X
	PPE*	X			PO Box 9019; Calexico CA 92232-9019																X		
	RD*	X			PO Box 9019; Calexico CA 92232-9019					X	X	X				X	X	X		X			
306060045	PD			X	NA		X	X	X				X	X	X								
	PPD			X	NA	N/A													X			X	X
	PPE*			X	NA																X		
	RD*			X	NA					X	X	X				X	X	X		X			
306060066	PD		X		2716 Ocean Park Blvd Ste 2011; Santa Monica CA 90405		X	X	X				X	X	X								
	PPD	X			2716 Ocean Park Blvd Ste 2011; Santa Monica CA 90405	N/A													X			X	X
	PPE*	X			2716 Ocean Park Blvd Ste 2011; Santa Monica CA 90405																X		
	RD*		X		2716 Ocean Park Blvd Ste 2011; Santa Monica CA 90405					X	X	X				X	X	X		X			
306060074	PPD		X		12235 El Camino Real Suite 100; San Diego CA 92130	N/A													X			X	X
	PPE*		X		12235 El Camino Real Suite 100; San Diego CA 92130																X		
306080005	PD		X		2235 E 7th St; Los Angeles CA 90023		X	X	X				X	X	X								
	PPD		X		2335 E 7th St; Los Angeles CA 90023	N/A													X			X	X
	PPE*		X		2335 E 7th St; Los Angeles CA 90023																X		
	RD*		X		2335 E 7th St; Los Angeles CA 90023					X	X	X				X	X	X		X			
306080006	PD	X			25318 Runsey Ct; Moreno Valley CA 92551-2411	20451 El Nido Ave; Perris CA 92571-8700	X	X	X				X	X	X								
	PPD	X			25318 Runsey Ct; Moreno Valley CA 92551-2411	20451 El Nido Ave; Perris CA 92571-8700													X			X	X
	PPE*	X			25318 Runsey Ct; Moreno Valley CA 92551-2411	20451 El Nido Ave; Perris CA 92571-8700															X		
	RD*	X			25318 Runsey Ct; Moreno Valley CA 92551-2411	20451 El Nido Ave; Perris CA 92571-8700				X	X	X				X	X	X		X			
306080007	PD	X			20463 El Nido; Perris CA 92570	20463 El Nido; Perris CA 92570	X	X	X				X	X	X								
	PPD	X			20463 El Nido; Perris CA 92570	20463 El Nido; Perris CA 92570													X			X	X
	PPE*	X			20463 El Nido; Perris CA 92570	20463 El Nido; Perris CA 92570															X		
	RD*	X			20463 El Nido; Perris CA 92570	20463 El Nido; Perris CA 92570				X	X	X				X	X	X		X			
306080008	PD	X			20463 El Nido Ave; Perris CA 92571	20475 El Nido Ave; Perris CA 92571	X	X	X				X	X	X								
	PPD	X			20463 El Nido Ave; Perris CA 92571	20475 El Nido Ave; Perris CA 92571													X			X	X
	PPE*	X			20463 El Nido Ave; Perris CA 92571	20475 El Nido Ave; Perris CA 92571															X		
	RD*	X			20463 El Nido Ave; Perris CA 92571	20475 El Nido Ave; Perris CA 92571				X	X	X				X	X	X		X			
306080009	PD	X			20487 El Nido Ave; Perris CA 92571-8700	20487 El Nido Ave; Perris CA 92571-8700	X	X	X				X	X	X								
	PPD	X			20487 El Nido Ave; Perris CA 92571-8700	20487 El Nido Ave; Perris CA 92571-8700													X			X	X
	PPE*	X			20487 El Nido Ave; Perris CA 92571-8700	20487 El Nido Ave; Perris CA 92571-8700															X		
	RD*	X			20487 El Nido Ave; Perris CA 92571-8700	20487 El Nido Ave; Perris CA 92571-8700				X	X	X				X	X	X		X			
306080016	PD		X		32823 Highway 79 South; Temecula CA 92592		X	X	X				X	X	X								

Parcel Acquisitions

APN	Segment	Acquisitions			Mailing Address	Physical Location Address	Alternative															
		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
	PPD		X		32823 Highway 79 South; Temecula CA 92592	N/A													X			X	X
	PPE*		X		32823 Highway 79 South; Temecula CA 92592	n/a															X		
	RD*		X		3283 Highway 79 South; Temecula CA 92592					X	X	X				X	X	X		X			
306080018	PD		X		3283 Highway 79 South; Temecula CA 92592		X	X	X				X	X	X								
	PPD	X			3283 Highway 79 South; Temecula CA 92592	N/A													X			X	X
	PPE*		X		3283 Highway 79 South; Temecula CA 92592																X		
	RD*		X		3283 Highway 79 South; Temecula CA 92592					X	X	X				X	X	X		X			
306080019	PPD		X		32823 Highway 79 South; Temecula CA 92592	32823 Highway 79 South; Temecula, CA 92592													X			X	X
	PPE*		X		32823 Highway 79 South; Temecula CA 92592	32823 Highway 79 South; Temecula, CA 92592															X		
	RD*		X		32823 Highway 79 South; Temecula CA 92592	32823 Highway 79 South; Temecula, CA 92592				X	X	X				X	X	X		X			
306080020	PPD		X		625 Lemon Hill Ter; Fullerton CA 92832	625 Lemon Hill Terrace; Fullerton, CA 92832													X			X	X
	PPE*		X		625 Lemon Hill Ter; Fullerton CA 92832	625 Lemon Hill Terrace; Fullerton, CA 92832															X		
	RD*		X		625 Lemon Hill Ter; Fullerton CA 92832	625 Lemon Hill Terrace; Fullerton, CA 92832				X	X	X				X	X	X		X			
306080024	PD		X		20400 Evans Rd; Perris CA 92571-7915	20400 Evans Rd; Perris CA 92571-7915	X	X	X				X	X	X								
	PPD	X			20400 Evans Rd; Perris CA 92571-7915	20400 Evans Rd; Perris CA 92571-7915													X			X	X
	PPE*	X			20400 Evans Rd; Perris CA 92571-7915	20400 Evans Rd; Perris CA 92571-7915															X		
	RD*	X			20400 Evans Rd; Perris CA 92571-7915	20400 Evans Rd; Perris CA 92571-7915				X	X	X				X	X	X		X			
306080025	PD	X			20430 Evans Rd; Perris CA 92571-7915	20430 Evans Rd; Perris CA 92571-7915	X	X	X				X	X	X								
	PPD	X			20430 Evans Rd; Perris CA 92571-7915	20430 Evans Rd; Perris CA 92571-7915													X			X	X
	PPE*	X			20430 Evans Rd; Perris CA 92571-7915	20430 Evans Rd; Perris CA 92571-7915															X		
	RD*	X			20430 Evans Rd; Perris CA 92571-7915	20430 Evans Rd; Perris CA 92571-7915				X	X	X				X	X	X		X			
306080026	PPD	X			20310 Evans Rd; Perris CA 92571-7462	20310 Evans Rd; Perris CA 92571-7462													X			X	X
	PPE*	X			20310 Evans Rd; Perris CA 92571-7462	20310 Evans Rd; Perris CA 92571-7462															X		
	RD*		X		20310 Evans Rd; Perris CA 92571-7462	20310 Evans Rd; Perris CA 92571-7462				X	X	X				X	X	X		X			
306080027	PPD	X			20350 Evans Rd; Perris CA 92571-7915	20350 Evans Rd; Perris CA 92571-7915													X			X	X
	PPE*	X			20350 Evans Rd; Perris CA 92571-7915	20350 Evans Rd; Perris CA 92571-7915															X		
	RD*	X			20350 Evans Rd; Perris CA 92571-7915	20350 Evans Rd; Perris CA 92571-7915				X	X	X				X	X	X		X			
306080028	PD	X			2410 Carlsbad Cir; Hemet CA 92545-5781	26802 Placentia Ave; Perris CA 92571-7400	X	X	X				X	X	X								
	PPD	X			2410 Carlsbad Cir; Hemet CA 92545-5781	26802 Placentia Ave; Perris CA 92571-7400													X			X	X
	PPE*	X			2410 Carlsbad Cir; Hemet CA 92545-5781	26802 Placentia Ave; Perris CA 92571-7400															X		
	RD*	X			2410 Carlsbad Cir; Hemet CA 92545-5781	26802 Placentia Ave; Perris CA 92571-7400				X	X	X				X	X	X		X			
306080029	PD	X			26530 Placentia Ave; Perris CA 92571-7400	26530 Placentia Ave; Perris CA 92571-7400	X	X	X				X	X	X								
	PPD	X			26530 Placentia Ave; Perris CA 92571-7400	26530 Placentia Ave; Perris CA 92571-7400													X			X	X
	PPE*	X			26530 Placentia Ave; Perris CA 92571-7400	26530 Placentia Ave; Perris CA 92571-7400															X		

Parcel Acquisitions

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		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
	RD*	X			26530 Placentia Ave; Perris CA 92571-7400	26530 Placentia Ave; Perris CA 92571-7400				X	X	X				X	X	X		X			
306080030	PD	X			26564 Placentia Ave; Perris CA 92571-7400	26564 Placentia Ave; Perris CA 92571-7400	X	X	X				X	X	X								
	PPD	X			26564 Placentia Ave; Perris CA 92571-7400	26564 Placentia Ave; Perris CA 92571-7400													X			X	X
	PPE*	X			26564 Placentia Ave; Perris CA 92571-7400	26564 Placentia Ave; Perris CA 92571-7400															X		
	RD*	X			26564 Placentia Ave; Perris CA 92571-7400	26564 Placentia Ave; Perris CA 92571-7400				X	X	X				X	X	X		X			
306080031	PD	X			26590 Placentia Ave; Perris CA 92571-7400	26590 Placentia Ave; Perris CA 92571-7400	X	X	X				X	X	X								
	PPD	X			26590 Placentia Ave; Perris CA 92571-7400	26590 Placentia Ave; Perris CA 92571-7400													X			X	X
	PPE*	X			26590 Placentia Ave; Perris CA 92571-7400	26590 Placentia Ave; Perris CA 92571-7400															X		
	RD*	X			26590 Placentia Ave; Perris CA 92571-7400	26590 Placentia Ave; Perris CA 92571-7400				X	X	X				X	X	X		X			
306080032	PD	X			20470 Eureka St; Perris CA 92571-7415	20470 Eureka St; Perris CA 92571-7415	X	X	X				X	X	X								
	PPD	X			20470 Eureka St; Perris CA 92571-7415	20470 Eureka St; Perris CA 92571-7415													X			X	X
	PPE*	X			20470 Eureka St; Perris CA 92571-7415	20470 Eureka St; Perris CA 92571-7415															X		
	RD*	X			20470 Eureka St; Perris CA 92571-7415	20470 Eureka St; Perris CA 92571-7415				X	X	X				X	X	X		X			
306080033	PD		X		20448 Eureka St; Perris CA 92571-7415	20448 Eureka St; Perris CA 92571-7415	X	X	X				X	X	X								
	PPD	X			20448 Eureka St; Perris CA 92571-7415	20448 Eureka St; Perris CA 92571-7415													X			X	X
	PPE*	X			20448 Eureka St; Perris CA 92571-7415	20448 Eureka St; Perris CA 92571-7415															X		
	RD*	X			20448 Eureka St; Perris CA 92571-7415	20448 Eureka St; Perris CA 92571-7415				X	X	X				X	X	X		X			
306080034	PD	X			20440 Eureka St; Perris CA 92571-7415	20440 Eureka St; Perris CA 92571-7415	X	X	X				X	X	X								
	PPD	X			20440 Eureka St; Perris CA 92571-7415	20440 Eureka St; Perris CA 92571-7415													X			X	X
	PPE*		X		20440 Eureka St; Perris CA 92571-7415	20440 Eureka St; Perris CA 92571-7415															X		
	RD*	X			20440 Eureka St; Perris CA 92571-7415	20440 Eureka St; Perris CA 92571-7415				X	X	X				X	X	X		X			
306080035	PD	X			26910 Placentia Ave; Perris CA 92571-9778	26910 Placentia Ave; Perris CA 92571-9778	X	X	X				X	X	X								
	PPD	X			26910 Placentia Ave; Perris CA 92571-9778	26910 Placentia Ave; Perris CA 92571-9778													X			X	X
	PPE*	X			26910 Placentia Ave; Perris CA 92571-9778	26910 Placentia Ave; Perris CA 92571-9778															X		
	RD*	X			26910 Placentia Ave; Perris CA 92571-9778	26910 Placentia Ave; Perris CA 92571-9778				X	X	X				X	X	X		X			
306090002	PD	X			20551 Eureka St; Perris CA 92571	20551 Eureka St; Perris CA 92571	X	X	X				X	X	X								
	PPE*		X		20551 Eureka St; Perris CA 92571	20551 Eureka St; Perris CA 92571															X		
	RD*		X		20551 Eureka St; Perris CA 92571	20551 Eureka St; Perris CA 92571				X	X	X				X	X	X		X			
306090021	PD		X		18777 Lamar Ct; Riverside CA 92508		X	X	X				X	X	X								
306090028	PD	X			7910 Crescent Executive Dr; Charlotte NC 28217	26625 Placentia Ave; Perris CA 92571	X	X	X				X	X	X								
	RD*	X			7910 Crescent Executive Dr; Charlotte NC 28217	26625 Placentia Ave; Perris CA 92571				X	X	X				X	X	X		X			
306090029	PD	X			26701 Placentia Ave; Perris CA 92571	26701 Placentia Ave; Perris CA 92571	X	X	X				X	X	X								
	RD*	X			26701 Placentia Ave; Perris CA 92571	26701 Placentia Ave; Perris CA 92571				X	X	X				X	X	X		X			
306090030	PD	X			PO Box 376; Nuevo CA 92567	26735 Placentia Ave; Perris CA 92571	X	X	X				X	X	X								
	RD*	X			PO Box 376; Nuevo CA 92567	26735 Placentia Ave; Perris CA 92571				X	X	X				X	X	X		X			
306090031	PD	X			20643 El Nido Ave; Perris CA 92571	20643 El Nido Ave; Perris CA 92571	X	X	X				X	X	X								
	RD*		X		20643 El Nido Ave; Perris CA 92571	20643 El Nido Ave; Perris CA 92571				X	X	X				X	X	X		X			

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306090040	PD	X			20590 Evans Rd, Perris CA 92571	20590 Evans Rd, Perris CA 92571	X	X	X				X	X	X							
	PPD		X		20590 Evans Rd, Perris CA 92571	20590 Evans Rd, Perris CA 92571													X		X	X
	PPE*		X		20590 Evans Rd; Perris CA 92571	20590 Evans Rd; Perris CA 92571														X		
	RD*	X			20590 Evans Rd; Perris CA 92571	20590 Evans Rd; Perris CA 92571				X	X	X				X	X	X		X		
306090041	PD	X			20620 Evans Rd; Perris CA 92571	20620 Evans Rd; Perris CA 92571	X	X	X				X	X	X							
	RD*	X			20620 Evans Rd; Perris CA 92571	20620 Evans Rd; Perris CA 92571				X	X	X				X	X	X		X		
306090042	PD	X			26620 Toliver Rd; Perris CA 92571	26620 Toliver Rd; Perris CA 92571	X	X	X				X	X	X							
306090043	PD	X			26620 Toliver Rd; Perris CA 92571	26650 Toliver Rd; Perris CA 92571	X	X	X				X	X	X							
306090045	PD		X		20550 Eureka St; Perris CA 92571	20550 Eureka St; Perris CA 92571	X	X	X				X	X	X							
306090047	PD	X			26730 Toliver Rd; Perris CA 92571	26730 Toliver Rd; Perris CA 92571	X	X	X				X	X	X							
306090048	PD	X			26744 Toliver Rd; Perris CA 92571	26744 Toliver Rd; Perris CA 92571	X	X	X				X	X	X							
306090049	PD	X			20633 El Nido Ave; Perris CA 92571	20633 El Nido Ave; Perris CA 92571	X	X	X				X	X	X							
306090055	PD	X			340 N Plymouth Blvd; Los Angeles CA 90004-3020		X	X	X				X	X	X							
	PPD	X			340 N Plymouth Blvd; Los Angeles CA 90004-3020	N/A													X		X	X
	PPE*		X		340 N Plymouth Blvd; Los Angeles CA 90004-3020															X		
	RD*	X			340 N Plymouth Blvd; Los Angeles CA 90004-3020					X	X	X				X	X	X		X		
306090056	PD	X			26561 Placentia Ave; Perris CA 92571	26561 Placentia Ave; Perris CA 92571	X	X	X				X	X	X							
	PPE*			X	26561 Placentia Ave; Perris CA 92571	26561 Placentia Ave; Perris CA 92571															X		
	RD*	X			26561 Placentia Ave; Perris CA 92571	26561 Placentia Ave; Perris CA 92571				X	X	X				X	X	X		X		
306090057	PD	X			1024 S Mohawk Dr; Santa Ana CA 92704	26585 Placentia Ave; Perris CA 92571	X	X	X				X	X	X							
	RD*	X			1024 S Mohawk Dr; Santa Ana CA 92704	26585 Placentia Ave; Perris CA 92571				X	X	X				X	X	X		X		
306090058	PD	X			26623 Placentia Ave; Perris CA 92571	26623 Placentia Ave; Perris CA 92571	X	X	X				X	X	X							
	RD*	X			26623 Placentia Ave; Perris CA 92571	26623 Placentia Ave; Perris CA 92571				X	X	X				X	X	X		X		
306090059	PD	X			1737 Starboard Way; Perris CA 92571	20510 Eureka St; Perris CA 92571	X	X	X				X	X	X							
	PPD		X		1737 Starboard Way; Perris CA 92571	20510 Eureka St; Perris CA 92571													X		X	X
	PPE*		X		1737 Starboard Way; Perris CA 92571	20510 Eureka St; Perris CA 92571														X		
	RD*	X			1737 Starboard Way; Perris CA 92571	20510 Eureka St; Perris CA 92571				X	X	X				X	X	X		X		
306090060	PD	X			26901 Placentia Ave; Perris CA 92571	26901 Placentia Ave; Perris CA 92571	X	X	X				X	X	X							
306090068	PD	X			26555 Toliver Rd; Perris CA 92571	26555 Toliver Rd; Perris CA 92571	X	X	X				X	X	X							
	RD*	X			26555 Toliver Rd; Perris CA 92571	26555 Toliver Rd; Perris CA 92571				X	X	X				X	X	X		X		
306090069	PD	X			PO Box 399; Perris CA 92572	20700 Evans Rd; Perris CA 92571	X	X	X				X	X	X							
	RD*	X			PO Box 399; Perris CA 92572	20700 Evans Rd; Perris CA 92571				X	X	X				X	X	X		X		
306300015	PPE*		X		671 Placentia Ave; Perris CA 92571	671 Placentia Ave; Perris CA 92571															X		
	RD*		X		671 Placentia Ave; Perris CA 92571	671 Placentia Ave; Perris CA 92571				X	X	X				X	X	X		X		
306300016	PPE*		X		28439 Forest Oaks Way; Moreno Valley CA 92555																X		
	RD*		X		28439 Forest Oaks Way; Moreno Valley CA 92555					X	X	X				X	X	X		X		
306300017	PPE*		X		691 Placentia Ave; Perris CA 92571	691 Placentia Ave; Perris CA 92571															X		

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	RD*	X			691 Placentia Ave; Perris CA 92571	691 Placentia Ave; Perris CA 92571				X	X	X				X	X	X		X			
306300023	PPE*		X		27708 Rockwood Ave; Moreno Valley CA 92555																X		
	RD*			X	27708 Rockwood Ave; Moreno Valley CA 92555					X	X	X				X	X	X		X			
306300024	RD*	X			721 Placentia Ave; Perris CA 92571	721 Placentia Ave; Perris CA 92571				X	X	X				X	X	X		X			
306300025	PPE*		X		PO Box 79; Nuevo CA 92567																X		
	RD*	X			PO Box 79; Nuevo CA 92567					X	X	X				X	X	X		X			
306300026	PPE*		X		741 Placentia Ave; Perris CA 92571	741 Placentia Ave; Perris CA 92571															X		
	RD*	X			741 Placentia Ave; Perris CA 92571	741 Placentia Ave; Perris CA 92571				X	X	X				X	X	X		X			
306300030	PPE*		X		751 Placentia Ave; Perris CA 92571	751 Placentia Ave; Perris CA 92571															X		
	RD*	X			751 Placentia Ave; Perris CA 92571	751 Placentia Ave; Perris CA 92571				X	X	X				X	X	X		X			
306300031	PPE*	X			16550 Bloomfield Ave; Cerritos CA 90703																X		
	RD*	X			16550 Bloomfield Ave; Cerritos CA 90703					X	X	X				X	X	X		X			
306300032	PPE*	X			31535 Contour Ave; Nuevo CA 92567																X		
	RD*	X			31535 Contour Ave; Nuevo CA 92567					X	X	X				X	X	X		X			
306300033	PPE*	X			31535 Contour Ave; Nuevo CA 92567																X		
	RD*	X			31535 Contour Ave; Nuevo CA 92567					X	X	X				X	X	X		X			
306300034	RD*	X			791 Placentia Ave; Perris CA 92571	791 Placentia Ave; Perris CA 92571				X	X	X				X	X	X		X			
306300035	RD*		X		2780 Murrieta Rd; Perris CA 92571	2780 Murrieta Rd; Perris CA 92571				X	X	X				X	X	X		X			
306300046	PPE*		X		2791 Wilson Ave; Perris CA 92571	2791 Wilson Ave; Perris CA 92571															X		
306300052	PPE*		X		16540 Wagon Wheel Dr; Riverside CA 92506																X		
	RD*		X		16540 Wagon Wheel Dr; Riverside CA 92506					X	X	X				X	X	X		X			
306341001	RD*		X		3090 Santo Tomas St; Perris CA 92571	3090 Avenida Santo Tomas St; Perris CA 92571				X	X	X				X	X	X		X			
306341002	RD*		X		3100 Santo Tomas St; Perris CA 92571	3100 Santo Tomas St; Perris CA 92571				X	X	X				X	X	X		X			
306341003	RD*		X		3110 Santo Tomas St; Perris CA 92571	3110 Santo Tomas St; Perris CA 92571				X	X	X				X	X	X		X			
306341004	RD*		X		3120 Santo Tomas St; Perris CA 92571	3120 Avenida Santo Tomas St; Perris CA 92571				X	X	X				X	X	X		X			
306341005	RD*		X		3130 Santo Tomas St; Perris CA 92571	3130 Avenida Santo Tomas; Perris CA 92571				X	X	X				X	X	X		X			
306341006	RD*		X		3140 Santo Tomas St; Perris CA 92571	3140 Avenida Santo Tomas; Perris CA 92571				X	X	X				X	X	X		X			
306341007	RD*	X			26430 Rio Vista Dr; Hemet CA 92544	23 E rider St; Perris CA 92571				X	X	X				X	X	X		X			
306341019	RD*		X		PO Box 890534; Temecula CA 92589	3192 El Rosario Dr; Perris CA 92571				X	X	X				X	X	X		X			
306341020	RD*		X		82 El Rosario Dr; Perris, CA 92571	3182 El Rosario Dr; Perris CA 92571				X	X	X				X	X	X		X			
306341021	RD*		X		92 El Rosario Dr; Perris, CA 92571	92 El Rosario Dr; Perris, CA 92571				X	X	X				X	X	X		X			
306341022	RD*		X		102 El Rosario Dr; Perris, CA 92571	102 El Rosario Dr; Perris, CA 92571				X	X	X				X	X	X		X			
306351001	RD*		X		3080 Santo Tomas St; Perris CA 92571	3080 Santo Tomas St; Perris CA 92571				X	X	X				X	X	X		X			
306351002	RD*		X		3070 Santo Tomas St; Perris CA 92571	3070 Santo Tomas St; Perris CA 92571				X	X	X				X	X	X		X			
306354001	RD*		X		3060 Santo Tomas St; Perris CA 92571	3060 Santo Tomas St; Perris CA 92571				X	X	X				X	X	X		X			

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APN	Segment	Acquisitions			Mailing Address	Physical Location Address	Alternative															
		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
306370005	PPE*			X	6753 Brockton Ave; Riverside CA 92506	2920 N Redlands Ave; Perris CA 92571														X		
	RD*			X	6753 Brockton Ave; Riverside CA 92506	2920 N Redlands Ave; Perris CA 92571				X	X	X				X	X	X		X			
306370006	PPE*		X		6753 Brockton Ave; Riverside CA 92506																X		
	RD*		X		6753 Brockton Ave; Riverside CA 92506					X	X	X				X	X	X		X			
306370007	PPD		X		6753 Brockton Ave; Riverside CA 92506	2810 Redlands Ave; Perris CA 92571													X			X	X
	PPE*		X		6753 Brockton Ave; Riverside CA 92506	2810 Redlands Ave; Perris CA 92571															X		
	RD*		X		6753 Brockton Ave; Riverside CA 92506	2810 Redlands Ave; Perris CA 92571				X	X	X				X	X	X		X			
306370008	RD*		X		898 N Sepulveda Blvd Ste 750; El Segundo CA 90245					X	X	X				X	X	X		X			
306370009	RD*		X		898 N Sepulveda Blvd Ste 750; El Segundo CA 90245					X	X	X				X	X	X		X			
306370010	RD*		X		527 Casitas St; Monterey Park CA 91754					X	X	X				X	X	X		X			
306370011	RD*		X		527 Casitas Street; Monterrey Park, CA 91754					X	X	X				X	X	X		X			
306370012	RD*		X		1573 Jameson Ct; Riverside CA 92507					X	X	X				X	X	X		X			
306370013	RD*		X		6863 Canyon Hill Dr; Riverside CA 92506					X	X	X				X	X	X		X			
306370014	RD*		X		6863 Canyon Hill Dr; Riverside CA 92506					X	X	X				X	X	X		X			
306370016	RD*	X			11965 Fouch Ln; Moreno Valley CA 92557					X	X	X				X	X	X		X			
306370017	RD*		X		1573 Jameson Ct; Riverside CA 92507					X	X	X				X	X	X		X			
306370018	RD*	X			1573 Jameson Ct; Riverside CA 92507					X	X	X				X	X	X		X			
306380004	RD*		X		27 Rue Cannes; Newport Beach, CA 92660	3085 Redlands Ave; Perris CA 92571				X	X	X				X	X	X		X			
306380005	RD*		X		27 Rue Cannes; Newport Beach, CA 92660	3055 Redlands Ave; Perris CA 92571				X	X	X				X	X	X		X			
306380007	RD*	X			126 N Main St; Lake Elsinore CA 92530					X	X	X				X	X	X		X			
306380008	RD*	X			27701 Golden Ridge Ln; San Juan Capistrano CA 92675					X	X	X				X	X	X		X			
306380009	PPD	X			27701 Golden Ridge Ln; San Juan Capistrano CA 92675	2905 Redlands Ave; Perris CA 92571													X			X	X
	RD*	X			27701 Golden Ridge Ln; San Juan Capistrano CA 92675	2905 Redlands Ave; Perris CA 92571				X	X	X				X	X	X		X			
306380010	PPD		X		23399 Saratoga Springs Pl; Murrieta CA 92562	2865 Redlands Ave; Perris CA 92571													X			X	X
	PPE*	X			23399 Saratoga Springs Pl; Murrieta CA 92562	2865 Redlands Ave; Perris CA 92571															X		
	RD*		X		23399 Saratoga Springs Pl; Murrieta CA 92562	2865 Redlands Ave; Perris CA 92571				X	X	X				X	X	X		X			
306380011	PPD	X			1205 Prospect St Ste 400; La Jolla CA 90237	2845 Redlands Ave; Perris CA 92571													X			X	X
	PPE*	X			1205 Prospect St Ste 400; La Jolla CA 90237	2845 Redlands Ave; Perris CA 92571															X		
	RD*		X		1205 Prospect St Ste 400; La Jolla CA 90237	2845 Redlands Ave; Perris CA 92571				X	X	X				X	X	X		X			
306380023	PPD			X	11118 E 219th St; Carson, CA 90745														X			X	X
	PPD	X			11118 E 219th St; Carson, CA 90745	N/A													X			X	X
	PPE*		X		11118 E 219th St; Carson, CA 90745	n/a															X		
	RD*	X			11118 E 219th St; Carson, CA 90745					X	X	X				X	X	X		X			
306380024	PPD	X			5501 Saint Andrews Ct; Plano TX 75093-4235	N/A													X			X	X
	PPE*	X			5501 Saint Andrews Ct; Plano TX 75093-4235	n/a															X		
	RD*	X			5501 Saint Andrews Ct; Plano TX 75093-4235					X	X	X				X	X	X		X			
306380025	PPD	X			5501 Saint Andrews Ct; Plano TX 75093-4235	N/A													X			X	X

Parcel Acquisitions

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		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
	PPE*	X			5501 Saint Andrews Ct; Plano TX 75093-4235															X		
	RD*	X			5501 Saint Andrews Ct; Plano TX 75093-4235					X	X	X				X	X	X		X			
306380026	PPD		X		6825 Boulder Creek Ln; Riverside CA 92506-5674	N/A													X			X	X
	PPE*	X			6825 Boulder Creek Ln; Riverside CA 92506-5674															X		
	RD*	X			6825 Boulder Creek Ln; Riverside CA 92506-5674					X	X	X				X	X	X		X			
306380027	PPD	X			32875 Bowhawk Rd; Nuevo CA 92567	N/A													X			X	X
	PPE*	X			32875 Bowhawk Rd; Nuevo CA 92567															X		
	RD*		X		32875 Bowhawk Rd; Nuevo CA 92567	n/a				X	X	X				X	X	X		X			
306380028	PPD	X			PO Box 5111; Sherman Oaks CA 91413-5111	N/A													X			X	X
	PPE*		X		PO Box 5111; Sherman Oaks CA 91413-5111															X		
306380032	RD*		X		7787 Lakeside Dr; Riverside CA 92509					X	X	X				X	X	X		X			
306380033	RD*	X			1560 W Lambert Rd; Brea CA 92821					X	X	X				X	X	X		X			
306380034	RD*		X		1560 W. Lambert Rd.; Brea, CA 92821					X	X	X				X	X	X		X			
306390005	PD			X	n/a		X	X	X				X	X	X								
306390010	PPD	X			20800 Paseo Panorama; Yorba Linda CA 92887	N/A													X			X	X
	PPE*	X			20800 Paseo Panorama; Yorba Linda CA 92887															X		
	RD*		X		20800 Paseo Panorama; Yorba Linda CA 92887					X	X	X				X	X	X		X			
306390012	PD		X		2989 S Citrus St; West Covina CA 91591		X	X	X				X	X	X								
	PPD	X			2989 S Citrus St; West Covina CA 91791	N/A													X			X	X
	RD*		X		2989 S Citrus St; West Covina CA 91791					X	X	X				X	X	X		X			
306390013	PD		X		2989 S Citrus St; West Covina CA 91591		X	X	X				X	X	X								
306390015	PD		X		14799 Chestnut St; Westminster CA 92663		X	X	X				X	X	X								
306390016	PD		X		PO Box 340; Perris CA 92572		X	X	X				X	X	X								
306390017	PD		X		3861 Wisteria St; Seal Beach CA 90740		X	X	X				X	X	X								
306390019	PPE*		X		2018 Orangeview Ave; Placentia CA 92870															X		
	RD*		X		2018 Orangeview Ave; Placentia CA 92870					X	X	X				X	X	X		X			
306390020	PPE*		X		16415 White Gold Ct; Riverside CA 92504															X		
	RD*		X		16415 White Gold Ct; Riverside CA 92504					X	X	X				X	X	X		X			
306390021	PPD			X	1560 W Lambert Rd; Brea CA 92821														X			X	X
	PPE*		X		1560 W Lambert Rd; Brea CA 92821															X		
	RD*		X		1560 W Lambert Rd; Brea CA 92821					X	X	X				X	X	X		X			
306390022	PPD	X			1560 W Lambert Rd; Brea CA 92821	N/A													X			X	X
	PPE*	X			1560 W Lambert Rd; Brea CA 92821															X		
	RD*		X		1560 W Lambert Rd; Brea CA 92821	n/a				X	X	X				X	X	X		X			
306390023	PPD	X			2209 Lyon St; Santa Ana CA 92705	N/A													X			X	X
	PPE*	X			2209 Lyon St; Santa Ana CA 92705															X		
	RD*	X			2209 Lyon St; Santa Ana CA 92705					X	X	X				X	X	X		X			

Parcel Acquisitions

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		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
306390024	PPD	X			3197 B Airport Loop Dr; Costa Mesa CA 92626	N/A													X			X	X
	PPE*	X			3197 B Airport Loop Dr; Costa Mesa CA 92626																X		
	RD*	X			3197 B Airport Loop Dr; Costa Mesa CA 92626					X	X	X				X	X	X		X			
306390025	PPD	X			3197 B Airport Loop Dr; Costa Mesa CA 92626	N/A													X			X	X
	PPE*	X			3197 B Airport Loop Dr; Costa Mesa CA 92626																X		
	RD*	X			3197 B Airport Loop Dr; Costa Mesa CA 92626					X	X	X				X	X	X		X			
306390026	PPD	X			3197 B Airport Loop Dr; Costa Mesa CA 92626	N/A													X			X	X
	PPE*	X			3197 B Airport Loop Dr; Costa Mesa CA 92626																X		
	RD*	X			3197 B Airport Loop Dr; Costa Mesa CA 92626					X	X	X				X	X	X		X			
306470001	PPE*			X	1830 W Carriage Dr; Santa Ana CA 92704	n/a															X		
	RD*		X		1830 W Carriage Dr; Santa Ana CA 92704					X	X	X				X	X	X		X			
306470014	PD			X	n/a		X	X	X				X	X	X								
	RD*			X	n/a					X	X	X				X	X	X		X			
306470015	PD	X			26301 Placentia Ave, Perris CA 92571-8702	26301 Placentia Ave, Perris CA 92571-8702	X	X	X				X	X	X								
	PPD		X		26301 Placentia Ave, Perris CA 92571-8702	26301 Placentia Ave, Perris CA 92571-8702													X			X	X
	PPE*		X		26301 Placentia Ave, Perris CA 92571-8702	26301 Placentia Ave, Perris CA 92571-8702															X		
	RD*	X			26301 Placentia Ave, Perris CA 92571-8702	26301 Placentia Ave, Perris CA 92571-8702				X	X	X				X	X	X		X			
306470016	PD	X			19907 Tennessee Trl; Walnut CA 91789		X	X	X				X	X	X								
	RD*		X		19907 Tennessee TRL; Walnut CA 91789	n/a				X	X	X				X	X	X		X			
306470017	PD		X		13661 Fairmont Way; Tustin CA 92780		X	X	X				X	X	X								
306470021	PD	X			PO Box 7389; Moreno Valley CA 92552	26425 Toliver Rd; Perris CA 92571	X	X	X				X	X	X								
306470022	PD	X			26485 Toliver Rd; Perris CA 92571	26485 Toliver Rd; Perris CA 92571	X	X	X				X	X	X								
306470023	PD	X			20657 Evans Rd; Perris CA 92571	20657 Evans Rd; Perris CA 92571	X	X	X				X	X	X								
	RD*	X			20657 Evans Rd; Perris CA 92571	20657 Evans Rd; Perris CA 92571				X	X	X				X	X	X		X			
306470024	PD	X			20691 Evans Rd; Perris CA 92571	20691 Evans Rd; Perris CA 92571	X	X	X				X	X	X								
	RD*	X			20691 Evans Rd; Perris CA 92571	20691 Evans Rd; Perris CA 92571				X	X	X				X	X	X		X			
306470028	PD	X			20715 Evans Rd; Perris CA 92571	20715 Evans Rd; Perris CA 92571	X	X	X				X	X	X								
306470030	PD	X			2488 Spectacular Bid St; Perris CA 92571-4635		X	X	X				X	X	X								
	PPD	X			2488 Spectacular Bid St; Perris CA 92571-4635	N/A													X			X	X
	PPE*		X		2488 Spectacular Bid St; Perris CA 92571-4635																X		
	RD*	X			2488 Spectacular Bid St; Perris CA 92571-4635					X	X	X				X	X	X		X			
306470031	PD	X			2488 Spectacular Bid St; Perris CA 92571-4635		X	X	X				X	X	X								
	PPD		X		2488 Spectacular Bid St; Perris CA 92571-4635	N/A													X			X	X
	PPE*		X		2488 Spectacular Bid St; Perris CA 92571-4635																X		
	RD*		X		2488 Spectacular Bid St; Perris CA 92571-4635					X	X	X				X	X	X		X			
306470034	PD	X			20733 Evans Rd; Perris CA 92571	20733 Evans Rd; Perris CA 92571	X	X	X				X	X	X								
306711001	PPD	X			2717 Genuine Risk St; Perris CA 92571	2717 Genuine Risk St; Perris CA 92571													X			X	X

Parcel Acquisitions

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		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
	PPE*	X			2717 Genuine Risk St; Perris CA 92571	2717 Genuine Risk St; Perris CA 92571														X		
306711002	PPE*			X	2709 Genuine Risk St; Perris CA 92571	2709 Genuine Risk St; Perris CA 92571														X		
306711012	PPD	X			2718 Riva Ridge St; Perris CA 92571	2718 Riva Ridge St; Perris CA 92571												X			X	X
	PPE*	X			2718 Riva Ridge St; Perris CA 92571	2718 Riva Ridge St; Perris CA 92571														X		
306712020	PPE*		X		2716 Genuine Risk St; Perris CA 92571	2716 Genuine Risk St; Perris CA 92571														X		
306721001	PPD	X			2724 Genuine Risk St; Perris CA 92571-4671	2724 Genuine Risk St; Perris CA 92571-4671												X			X	X
	PPE*	X			2724 Genuine Risk St; Perris CA 92571-4671	2724 Genuine Risk St; Perris CA 92571-4671														X		
306721002	PPD	X			702 N Gilbert St; Anaheim CA 92801-3760	2732 Genuine Risk St; Perris CA 92571-4671												X			X	X
	PPE*	X			702 N Gilbert St; Anaheim CA 92801-3760	2732 Genuine Risk St; Perris CA 92571-4671														X		
306721003	PPD	X			2740 Genuine Risk St; Perris CA 92571-4671	2740 Genuine Risk St; Perris CA 92571-4671												X			X	X
	PPE*	X			2740 Genuine Risk St; Perris CA 92571-4671	2740 Genuine Risk St; Perris CA 92571-4671														X		
306721004	PPD	X			839 S Olive St; Santa Ana CA 92703-4931	2746 Genuine Risk St; Perris CA 92571-4671												X			X	X
	PPE*	X			839 S Olive St; Santa Ana CA 92703-4931	2746 Genuine Risk St; Perris CA 92571-4671														X		
306721005	PPD	X			2752 Genuine Risk St; Perris CA 92571-4671	2752 Genuine Risk St; Perris CA 92571-4671												X			X	X
	PPE*	X			2752 Genuine Risk St; Perris CA 92571-4671	2752 Genuine Risk St; Perris CA 92571-4671														X		
306721006	PPD	X			2758 Genuine Risk St; Perris CA 92571-4671	2758 Genuine Risk St; Perris CA 92571-4671												X			X	X
	PPE*	X			2758 Genuine Risk St; Perris CA 92571-4671	2758 Genuine Risk St; Perris CA 92571-4671														X		
306721007	PPD	X			2764 Genuine Risk St; Perris CA 92571-4671	2764 Genuine Risk St; Perris CA 92571-4671												X			X	X
	PPE*	X			2764 Genuine Risk St; Perris CA 92571-4671	2764 Genuine Risk St; Perris CA 92571-4671														X		
306721008	PPD	X			2772 Genuine Risk St; Perris CA 92571-4671	2772 Genuine Risk St; Perris CA 92571-4671												X			X	X
	PPE*	X			2772 Genuine Risk St; Perris CA 92571-4671	2772 Genuine Risk St; Perris CA 92571-4671														X		
306721009	PPD	X			2780 Genuine Risk St; Perris CA 92571-4671	2780 Genuine Risk St; Perris CA 92571-4671												X			X	X
	PPE*	X			2780 Genuine Risk St; Perris CA 92571-4671	2780 Genuine Risk St; Perris CA 92571-4671														X		
306721010	PPD	X			2786 Genuine Risk St; Perris CA 92571-4671	2786 Genuine Risk St; Perris CA 92571-4671												X			X	X
	PPE*	X			2786 Genuine Risk St; Perris CA 92571-4671	2786 Genuine Risk St; Perris CA 92571-4671														X		
306721011	PPD	X			100 Spectacular Bid St; Perris CA 92571-4664	100 Spectacular Bid St; Perris CA 92571-4664												X			X	X
	PPE*	X			100 Spectacular Bid St; Perris CA 92571-4664	100 Spectacular Bid St; Perris CA 92571-4664														X		
306721012	PPD	X			2842 E Virginia Ave; West Covina CA 91791-2100	112 Spectacular Bid St; Perris 92571-4664												X			X	X
	PPE*	X			2842 E Virginia Ave; West Covina CA 91791-2100	112 Spectacular Bid St; Perris 92571-4664														X		
306721013	PPD	X			124 Spectacular Bid St; Perris CA 92571-4664	124 Spectacular Bid St; Perris CA 92571-4664												X			X	X
	PPE*	X			124 Spectacular Bid St; Perris CA 92571-4664	124 Spectacular Bid St; Perris CA 92571-4664														X		
306721014	PPD	X			136 Spectacular Bid St; Perris CA 92571-4664	136 Spectacular Bid St; Perris CA 92571-4664												X			X	X
	PPE*	X			136 Spectacular Bid St; Perris CA 92571-4664	136 Spectacular Bid St; Perris CA 92571-4664														X		
306721015	PPD	X			148 Spectacular Bid St; Perris CA 92571-4664	148 Spectacular Bid St; Perris CA 92571-4664												X			X	X
	PPE*	X			148 Spectacular Bid St; Perris CA 92571-4664	148 Spectacular Bid St; Perris CA 92571-4664														X		
306721016	PPD	X			160 Spectacular Bid St; Perris CA 92571-4664	160 Spectacular Bid St; Perris CA 92571-4664												X			X	X
	PPE*	X			160 Spectacular Bid St; Perris CA 92571-4664	160 Spectacular Bid St; Perris CA 92571-4664														X		

Parcel Acquisitions

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		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
306721017	PPD	X			22764 Sagebrush Rd; Sun City CA 92585	172 Spectacular Bid St; Perris CA 92571													X			X	X
	PPE*	X			22764 Sagebrush Rd; Sun City CA 92585	172 Spectacular Bid St; Perris CA 92571															X		
306721018	PPD	X			184 Spectacular Bid St; Perris CA 92571-4664	184 Spectacular Bid St; Perris CA 92571-4664													X			X	X
	PPE*	X			184 Spectacular Bid St; Perris CA 92571-4664	184 Spectacular Bid St; Perris CA 92571-4664															X		
306721019	PPD	X			196 Spectacular Bid St; Perris CA 92571-4664	196 Spectacular Bid St; Perris CA 92571-4664													X			X	X
	PPE*	X			196 Spectacular Bid St; Perris CA 92571-4664	196 Spectacular Bid St; Perris CA 92571-4664															X		
306721020	PPD	X			204 Spectacular Bid St; Perris CA 92571-4664	204 Spectacular Bid St; Perris CA 92571-4664													X			X	X
	PPE*	X			204 Spectacular Bid St; Perris CA 92571-4664	204 Spectacular Bid St; Perris CA 92571-4664															X		
306721021	PPD	X			28491 Tulita Ln; Menifee CA 92584-9535	212 Spectacular Bid St; Perris CA 92571-4664													X			X	X
	PPE*	X			28491 Tulita Ln; Menifee CA 92584-9535	212 Spectacular Bid St; Perris CA 92571-4664															X		
306721022	PPD	X			224 Spectacular Bid St; Perris CA 92571-4664	224 Spectacular Bid St; Perris CA 92571													X			X	X
	PPE*	X			224 Spectacular Bid St; Perris CA 92571-4664	224 Spectacular Bid St; Perris CA 92571															X		
306722001	PPD	X			2773 Genuine Risk St; Perris CA 92571-4671	2773 Genuine Risk St; Perris CA 92571-4671													X			X	X
	PPE*	X			2773 Genuine Risk St; Perris CA 92571-4671	2773 Genuine Risk St; Perris CA 92571-4671															X		
306722002	PPD	X			2765 Genuine Risk St; Perris CA 92571-4671	2765 Genuine Risk St; Perris CA 92571-4671													X			X	X
	PPE*	X			2765 Genuine Risk St; Perris CA 92571-4671	2765 Genuine Risk St; Perris CA 92571-4671															X		
306722003	PPD	X			2759 Genuine Risk St; Perris CA 92571-4671	2759 Genuine Risk St; Perris CA 92571-4671													X			X	X
	PPE*	X			2759 Genuine Risk St; Perris CA 92571-4671	2759 Genuine Risk St; Perris CA 92571-4671															X		
306722004	PPD	X			2753 Genuine Risk St; Perris CA 92571-4671	2753 Genuine Risk St; Perris CA 92571-4671													X			X	X
	PPE*	X			2753 Genuine Risk St; Perris CA 92571-4671	2753 Genuine Risk St; Perris CA 92571-4671															X		
306722005	PPD	X			2747 Genuine Risk St; Perris CA 92571-4671	2747 Genuine Risk St; Perris CA 92571-4671													X			X	X
	PPE*	X			2747 Genuine Risk St; Perris CA 92571-4671	2747 Genuine Risk St; Perris CA 92571-4671															X		
306722006	PPD	X			2741 Genuine Risk St; Perris CA 92571-4671	2741 Genuine Risk St; Perris CA 92571-4671													X			X	X
	PPE*	X			2741 Genuine Risk St; Perris CA 92571-4671	2741 Genuine Risk St; Perris CA 92571-4671															X		
306722007	PPD	X			2733 Genuine Risk St; Perris CA 92571-4671	2733 Genuine Risk St; Perris CA 92571-4671													X			X	X
	PPE*	X			2733 Genuine Risk St; Perris CA 92571-4671	2733 Genuine Risk St; Perris CA 92571-4671															X		
306722008	PPD	X			2725 Genuine Risk St; Perris CA 92571-4671	2725 Genuine Risk St; Perris CA 92571-4671													X			X	X
	PPE*	X			2725 Genuine Risk St; Perris CA 92571-4671	2725 Genuine Risk St; Perris CA 92571-4671															X		
306722009	PPD	X			2726 Riva Ridge St; Perris CA 92571	2726 Riva Ridge St; Perris CA 92571													X			X	X
	PPE*	X			2726 Riva Ridge St; Perris CA 92571	2726 Riva Ridge St; Perris CA 92571															X		
306722010	PPD	X			2734 Riva Ridge St; Perris CA 92571-4663	2734 Riva Ridge St; Perris CA 92571-4663													X			X	X
	PPE*	X			2734 Riva Ridge St; Perris CA 92571-4663	2734 Riva Ridge St; Perris CA 92571-4663															X		
306722011	PPD	X			2742 Riva Ridge St; Perris CA 92571-4663	2742 Riva Ridge St; Perris CA 92571-4663													X			X	X
	PPE*	X			2742 Riva Ridge St; Perris CA 92571-4663	2742 Riva Ridge St; Perris CA 92571-4663															X		
306722012	PPD	X			3108 Buffalo Rd; Ontario CA 91761-0373	2748 Riva Ridge St; Perris CA 92571-4663													X			X	X
	PPE*	X			3108 Buffalo Rd; Ontario CA 91761-0373	2748 Riva Ridge St; Perris CA 92571-4663															X		
306722013	PPD	X			2754 Riva Ridge St; Perris CA 92571-4663	2754 Riva Ridge St; Perris CA 92571-4663													X			X	X

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APN	Segment	Acquisitions			Mailing Address	Physical Location Address	Alternative															
		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
	PPE*	X			2754 Riva Ridge St; Perris CA 92571-4663	2754 Riva Ridge St; Perris CA 92571-4663															X		
306722014	PPD	X			2760 Riva Ridge St; Perris CA 92571-4663	2760 Riva Ridge St; Perris CA 92571-4663													X			X	X
	PPE*	X			2760 Riva Ridge St; Perris CA 92571-4663	2760 Riva Ridge St; Perris CA 92571-4663															X		
306722015	PPD	X			2766 Riva Ridge St; Perris CA 92571-4663	2766 Riva Ridge St; Perris CA 92571-4663													X			X	X
	PPE*	X			2766 Riva Ridge St; Perris CA 92571-4663	2766 Riva Ridge St; Perris CA 92571-4663															X		
306722016	PPD	X			2774 Riva Ridge St; Perris CA 92571-4663	2774 Riva Ridge St; Perris CA 92571-4663													X			X	X
	PPE*	X			2774 Riva Ridge St; Perris CA 92571-4663	2774 Riva Ridge St; Perris CA 92571-4663															X		
306723001	PPD	X			179 Spectacular Bid St; Perris CA 92571-4664	179 Spectacular Bid St; Perris CA 92571-4664													X			X	X
	PPE*	X			179 Spectacular Bid St; Perris CA 92571-4664	179 Spectacular Bid St; Perris CA 92571-4664															X		
306723002	PPD	X			28491 Tulita Ln; Menifee CA 92584-9535	187 Spectacular Bid St; Perris CA 92571-4664													X			X	X
	PPE*	X			28491 Tulita Ln; Menifee CA 92584-9535	187 Spectacular Bid St; Perris CA 92571-4664															X		
306723003	PPD	X			197 Spectacular Bid St; Perris CA 92571-4664	197 Spectacular Bid St; Perris CA 92571-4664													X			X	X
	PPE*	X			197 Spectacular Bid St; Perris CA 92571-4664	197 Spectacular Bid St; Perris CA 92571-4664															X		
306723004	PPD	X			205 Spectacular Bid St; Perris CA 92571-4665	205 Spectacular Bid St; Perris CA 92571-4665													X			X	X
	PPE*	X			205 Spectacular Bid St; Perris CA 92571-4665	205 Spectacular Bid St; Perris CA 92571-4665															X		
306723005	PPD	X			213 Spectacular Bid St; Perris CA 92571-4665	213 Spectacular Bid St; Perris CA 92571-4665													X			X	X
	PPE*	X			213 Spectacular Bid St; Perris CA 92571-4665	213 Spectacular Bid St; Perris CA 92571-4665															X		
306723006	PPD	X			19472 Nandina Ave; Riverside CA 92508-9668	225 Spectacular Bid St; Perris CA 92571-4665													X			X	X
	PPE*	X			19472 Nandina Ave; Riverside CA 92508-9668	225 Spectacular Bid St; Perris CA 92571-4665															X		
306723007	PPD	X			239 Spectacular Bid St; Perris CA 92571-4665	239 Spectacular Bid St; Perris CA 92571-4665													X			X	X
	PPE*	X			239 Spectacular Bid St; Perris CA 92571-4665	239 Spectacular Bid St; Perris CA 92571-4665															X		
306761001	PPD	X			178 Sunny Halo Ct; Perris CA 92571-4666	178 Sunny Halo Ct; Perris CA 92571-4666													X			X	X
	PPE*	X			178 Sunny Halo Ct; Perris CA 92571-4666	178 Sunny Halo Ct; Perris CA 92571-4666															X		
306761002	PPD	X			186 Sunny Halo Ct; Perris CA 92571-4666	186 Sunny Halo Ct; Perris CA 92571-4666													X			X	X
	PPE*	X			186 Sunny Halo Ct; Perris CA 92571-4666	186 Sunny Halo Ct; Perris CA 92571-4666															X		
306761003	PPD	X			196 Sunny Halo Ct; Perris CA 92571-4666	196 Sunny Halo Ct; Perris CA 92571-4666													X			X	X
	PPE*	X			196 Sunny Halo Ct; Perris CA 92571-4666	196 Sunny Halo Ct; Perris CA 92571-4666															X		
306761004	PPD	X			202 Sunny Halo Ct; Perris CA 92571-4667	202 Sunny Halo Ct; Perris CA 92571-4667													X			X	X
	PPE*	X			202 Sunny Halo Ct; Perris CA 92571-4667	202 Sunny Halo Ct; Perris CA 92571-4667															X		
306761005	PPD	X			212 Sunny Halo Ct; Perris CA 92571-4667	212 Sunny Halo Ct; Perris CA 92571-4667													X			X	X
	PPE*	X			212 Sunny Halo Ct; Perris CA 92571-4667	212 Sunny Halo Ct; Perris CA 92571-4667															X		
306761006	PPD	X			224 Sunny Halo Ct; Perris CA 92571-4667	224 Sunny Halo Ct; Perris CA 92571-4667													X			X	X
	PPE*	X			224 Sunny Halo Ct; Perris CA 92571-4667	224 Sunny Halo Ct; Perris CA 92571-4667															X		
306761007	PPD	X			238 Sunny Halo Ct; Perris CA 92571-4667	238 Sunny Halo Ct; Perris CA 92571-4667													X			X	X
	PPE*	X			238 Sunny Halo Ct; Perris CA 92571-4667	238 Sunny Halo Ct; Perris CA 92571-4667															X		
306761008	PPD	X			266 Sunny Halo Ct; Perris CA 92571-4667	266 Sunny Halo Ct; Perris CA 92571-4667													X			X	X
	PPE*	X			266 Sunny Halo Ct; Perris CA 92571-4667	266 Sunny Halo Ct; Perris CA 92571-4667															X		

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		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
306761009	PPD	X			275 Spectacular Bid St; Perris CA 92571-4665	275 Spectacular Bid St; Perris CA 92571-4665													X			X	X
	PPE*	X			275 Spectacular Bid St; Perris CA 92571-4665	275 Spectacular Bid St; Perris CA 92571-4665															X		
306761010	PPD	X			12338 Dahlia Ave; El Monte CA 91732-3610	263 Spectacular Bid St; Perris CA 92571-4665													X			X	X
	PPE*	X			12338 Dahlia Ave; El Monte CA 91732-3610	263 Spectacular Bid St; Perris CA 92571-4665															X		
306761011	PPD	X			251 Spectacular Bid St; Perris CA 92571-4665	251 Spectacular Bid St; Perris CA 92571-4665													X			X	X
	PPE*	X			251 Spectacular Bid St; Perris CA 92571-4665	251 Spectacular Bid St; Perris CA 92571-4665															X		
306761012	PPD	X			101 N D St; Perris CA 92570-1917														X			X	X
	PPE*	X			101 N D St; Perris CA 92570-1917																X		
306762001	PPD				176 Count Turf Ct; Perris CA 92571	176 Count Turf Ct; Perris CA 92571													X			X	X
	PPD	X			176 Count Turf Ct; Perris CA 92571	176 Count Turf Ct; Perris CA 92571													X			X	X
	PPE*	X			176 Count Turf Ct; Perris CA 92571	176 Count Turf Ct; Perris CA 92571															X		
306762002	PPE*		X		8136 2nd St; Downey CA 90241	184 Count Turf Ct; Perris CA 92571															X		
306762003	PPE*		X		n/a	192 Count Turf Ct; Perris CA 92571															X		
306762004	PPE*		X		200 Count Turf Ct. Perris CA 92571	200 Count Turf Ct. Perris CA 92571															X		
306762005	PPE*		X		208 Count Turf Ct; Perris CA 92571	208 Count Turf Ct; Perris CA 92571															X		
306762006	PPD		X		220 Count Turf CT; Perris CA 92571	220 Count Turf CT; Perris CA 92571													X			X	X
	PPE*		X		220 Count Turf Ct; Perris CA 92571	220 Count Turf Ct; Perris CA 92571															X		
306762007	PPE*		X		228 Count Turf Ct; Perris CA 92571	228 Count Turf Ct; Perris CA 92571															X		
306762008	PPE*		X		240 Count Turf Ct; Perris CA 92571	240 Count Turf Ct; Perris CA 92571															X		
306762009	PPE*		X		248 Count Turf CT; Perris CA 92571	248 Count Turf Ct; Perris CA 92571															X		
306762010	PPE*		X		264 Count Turf Ct' Perris CA 92571	264 Count Turf Ct' Perris CA 92571															X		
306762011	PPE*		X		276 Count Turf Ct; Perris CA 92571	276 Count Turf Ct; Perris CA 92571															X		
306762012	PPD	X			288 Count Turf Ct; Perris CA92571-4669	288 Count Turf Ct; Perris CA 92571-4669													X			X	X
	PPE*	X			288 Count Turf Ct; Perris CA92571-4669	288 Count Turf Ct; Perris CA 92571-4669															X		
306762013	PPD	X			296 Count Turf Ct; Perris CA92571-4669	296 Count Turf Ct; Perris CA 92571-4669													X			X	X
	PPE*	X			296 Count Turf Ct; Perris CA92571-4669	296 Count Turf Ct; Perris CA 92571-4669															X		
306762014	PPD	X			304 Count Turf Ct; Perris CA92571-4669	304 Count Turf Ct; Perris CA 92571-4669													X			X	X
	PPE*	X			304 Count Turf Ct; Perris CA92571-4669	304 Count Turf Ct; Perris CA 92571-4669															X		
306762015	PPD	X			312 Count Turf Ct; Perris CA92571-4669	312 Count Turf Ct; Perris CA 92571-4669													X			X	X
	PPE*	X			312 Count Turf Ct; Perris CA92571-4669	312 Count Turf Ct; Perris CA 92571-4669															X		
306762016	PPD	X			309 Sunny Halo Ct; Perris CA 92571-4691	309 Sunny Halo Ct; Perris CA 92571-4691													X			X	X
	PPE*	X			309 Sunny Halo Ct; Perris CA 92571-4691	309 Sunny Halo Ct; Perris CA 92571-4691															X		
306762017	PPD	X			PO Box 1318; Perris CA 92572-1318	297 Sunny Halo Ct; Perris CA 92571-4667													X			X	X
	PPE*	X			PO Box 1318; Perris CA 92572-1318	297 Sunny Halo Ct; Perris CA 92571-4667															X		
306762018	PPD	X			285 Sunny Halo Ct; Perris CA 92571-4667	285 Sunny Halo Ct; Perris CA 92571-4667													X			X	X
	PPE*	X			285 Sunny Halo Ct; Perris CA 92571-4667	285 Sunny Halo Ct; Perris CA 92571-4667															X		
306762019	PPD	X			273 Sunny Halo Ct; Perris CA 92571-4667	273 Sunny Halo Ct; Perris CA 92571-4667													X			X	X

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		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
	PPE*	X			273 Sunny Halo Ct; Perris CA 92571-4667	273 Sunny Halo Ct; Perris CA 92571-4667														X		
306762020	PPD	X			261 Sunny Halo Ct; Perris CA 92571-4667	261 Sunny Halo Ct; Perris CA 92571-4667												X			X	X
	PPE*	X			261 Sunny Halo Ct; Perris CA 92571-4667	261 Sunny Halo Ct; Perris CA 92571-4667														X		
306762021	PPD	X			249 Sunny Halo Ct; Perris CA 92571-4667	249 Sunny Halo Ct; Perris CA 92571-4667												X			X	X
	PPE*	X			249 Sunny Halo Ct; Perris CA 92571-4667	249 Sunny Halo Ct; Perris CA 92571-4667														X		
306762022	PPD	X			237 Sunny Halo Ct; Perris CA 92571-4667	237 Sunny Halo Ct; Perris CA 92571-4667												X			X	X
	PPE*	X			237 Sunny Halo Ct; Perris CA 92571-4667	237 Sunny Halo Ct; Perris CA 92571-4667														X		
306762023	PPD	X			221 Sunny Halo Ct; Perris CA 92571-4667	221 Sunny Halo Ct; Perris CA 92571-4667												X			X	X
	PPE*	X			221 Sunny Halo Ct; Perris CA 92571-4667	221 Sunny Halo Ct; Perris CA 92571-4667														X		
306762024	PPD	X			211 Sunny Halo Ct; Perris CA 92571-4667	211 Sunny Halo Ct; Perris CA 92571-4667												X			X	X
	PPE*	X			211 Sunny Halo Ct; Perris CA 92571-4667	211 Sunny Halo Ct; Perris CA 92571-4667														X		
306762025	PPD	X			201 Sunny Halo Ct; Perris CA 92571-4667	201 Sunny Halo Ct; Perris CA 92571-4667												X			X	X
	PPE*	X			201 Sunny Halo Ct; Perris CA 92571-4667	201 Sunny Halo Ct; Perris CA 92571-4667														X		
306762026	PPD	X			726 Myrtle Ave; Inglewood CA 90301-3511	195 Sunny Halo Ct; Perris CA 92571-4666												X			X	X
	PPE*	X			726 Myrtle Ave; Inglewood CA 90301-3511	195 Sunny Halo Ct; Perris CA 92571-4666														X		
306762027	PPD	X			185 Sunny Halo Ct; Perris CA 92571-4666	185 Sunny Halo Ct; Perris CA 92571-4666												X			X	X
	PPE*	X			185 Sunny Halo Ct; Perris CA 92571-4666	185 Sunny Halo Ct; Perris CA 92571-4666														X		
306762028	PPD	X			177 Sunny Halo Ct; Perris CA 92571-4666	177 Sunny Halo Ct; Perris CA 92571-4666												X			X	X
	PPE*	X			177 Sunny Halo Ct; Perris CA 92571-4666	177 Sunny Halo Ct; Perris CA 92571-4666														X		
306763007	PPE*			X	312 Chant St; Perris CA 92571	312 Chant St; Perris CA 92571														X		
306763008	PPD		X		313 Count Turf Ct; Perris CA 92571	313 Count Turf Ct; Perris CA 92571												X			X	X
	PPE*		X		313 Count Turf Ct; Perris CA 92571	313 Count Turf Ct; Perris CA 92571														X		
306763009	PPE*			X	305 Count Turf Ct; Perris CA 92571	305 Count Turf Ct; Perris CA 92571														X		
306831012	PPE*		X		105 Galileo Ln; Perris CA 92571	105 Galileo Ln; Perris CA 92571														X		
306831013	PPE*			X	113 Galileo Ln; Perris CA 92571	113 Galileo Ln; Perris CA 92571														X		
306831032	PPE*		X		32823 State Highway 79; Temecula CA 92592															X		
306931001	PPE*		X		2909 Barn Owl Dr; Perris CA 92571	2909 Barn Owl Dr; Perris CA 92571														X		
	RD*	X			2909 Barn Owl Dr; Perris CA 92571	2909 Barn Owl Dr; Perris CA 92571				X	X	X				X	X	X		X		
306931002	PPE*		X		2917 Barn Owl Dr; Perris CA 92571	2917 Barn Owl Dr; Perris CA 92571														X		
306931003	PPE*		X		2925 Barn Owl Dr; Perris CA 92571	2925 Barn Owl Dr; Perris 92571														X		
306932001	PPE*		X		12235 El Camino Real Suite 100; San Diego CA 92130	2941 Barn Qwl Dr; Perris CA 92571														X		
306932002	PPE*			X	12235 El Camino Real Suite 100; San Diego CA 92130	2949 Barn Owl Dr; Perris CA 92571														X		
306932003	PPE*		X		12235 El Camino Real Suite 100; San Diego CA 92130	2957 Barn Owl Dr; Perris CA 92571														X		
306932004	PPE*		X		2965 Barn Owl Dr; Perris CA 92571	2965 Barn Owl Dr; Perris CA 92571														X		
306932005	PPE*		X		12235 El Camino Real Suite 100; San Diego CA 92130	2973 Barl Owl Dr; Perris CA 92571														X		
306933001	PPD	X			12235 El Camino Real Suite 100; San Diego CA 92130	2944 Old Evans Rd; Perris CA 92571												X			X	X
	PPE*	X			12235 El Camino Real Suite 100; San Diego CA 92130	2944 Old Evans Rd; Perris CA 92571														X		

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APN	Segment	Acquisitions			Mailing Address	Physical Location Address	Alternative															
		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
306933002	PD		X		2936 Old Evans Rd; Perris CA 92571	2936 Old Evans Rd; Perris CA 92571	X	X	X				X	X	X							
	PPD	X			2936 Old Evans Rd; Perris CA 92571	2936 Old Evans Rd; Perris CA 92571													X			X	X
	PPE*	X			2936 Old Evans Rd; Perris CA 92571	2936 Old Evans Rd; Perris CA 92571															X		
	RD*	X			2936 Old Evans Rd; Perris CA 92571	2936 Old Evans Rd; Perris CA 92571				X	X	X				X	X	X		X			
307030001	PD		X		19800 Macarthur Blvd Ste 280; Irvine CA 92612		X	X	X				X	X	X								
	PPD		X		19800 Macarthur Blvd Ste 280; Irvine CA 92612														X			X	X
	PPE*		X		19800 Macarthur Blvd Ste 280; Irvine CA 92612																X		
	RD*		X		19800 Macarthur Blvd Ste 280; Irvine CA 92612					X	X	X				X	X	X		X			
307030003	PD		X		19800 MacArthur Blvd Ste 280; Irvine CA 92612		X	X	X				X	X	X								
	PPD		X		19800 Macarthur Blvd Ste 280; Irvine CA 92612														X			X	X
	PPE*		X		19800 Macarthur Blvd Ste 280; Irvine CA 92612	n/a															X		
	RD*		X		19800 Macarthur Blvd Ste 280; Irvine CA 92612	n/a				X	X	X				X	X	X		X			
307030004 (previously 307050005)	PD		X		975 Morgan St; Perris CA 92571		X	X	X				X	X	X								
	PPD		X		975 Morgan St; Perris CA 92571														X			X	X
	PPE*		X		975 Morgan St; Perris CA 92571	n/a															X		
	RD*		X		975 Morgan St; Perris CA 92571					X	X	X				X	X	X		X			
307040004	SJ		X		10736 W Pico Blvd; Los Angeles CA 90064		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
307050008	SJ		X		975 Morgan St; Perris CA 92571		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
307060001	PD		X		1804 Angelo Dr; Beverly Hills CA 90210		X	X	X				X	X	X								
	PPE*		X		1804 Angelo Dr; Beverly Hills CA 90210																X		
	RD*		X		1804 Angelo Dr; Beverly Hills CA 90210					X	X	X				X	X	X		X			
307060006	PD		X		19800 MacArthur Blvd Ste 280; Irvine CA 92612		X	X	X				X	X	X								
	PPD		X		19800 MacArthur Blvd Ste 280; Irvine CA 92612														X			X	X
	PPE*		X		19800 MacArthur Blvd Ste 280; Irvine CA 92612	n/a															X		
	RD*		X		19800 MacArthur Blvd Ste 280; Irvine CA 92612					X	X	X				X	X	X		X			
307070001	SJ		X		1261 Tower Grove Dr; Beverly Hills CA 90210		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
307070004	SJ		X		407 E Harrison St; Corona CA 92879		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
307080005	SJ		X		407 E Harrison St; Corona CA 92879		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
307080007	SJ		X		407 E Harrison St; Corona CA 92879		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
307080008	SJ		X		407 E Harrison St; Corona CA 92879		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
307090001	SJ		X		407 E Harrison St; Corona CA 92879		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
307110007	SJ		X		407 E Harrison St; Corona CA 92879		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
307110009	SJ			X	PO Box 54153; Los Angeles CA 90054		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
307120001	SJ		X		614 26th St; Manhattan Beach CA 90266		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
307410001	PPD		X		19800 Macarthur Blvd Ste 280; Irvine CA 92612														X			X	X
307410002	PPD		X		19800 Macarthur Blvd Ste 280; Irvine CA 92612														X			X	X
308120003	SJ		X		2716 Ocean Park Blvd Suite 2011; Santa Monica CA 90405		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Parcel Acquisitions

APN	Segment	Acquisitions			Mailing Address	Physical Location Address	Alternative															
		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
308130002	SJ			X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
308130005	SJ		X		12534 Harlow Ave; Riverside CA 92503		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
308130006	SJ			X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
308130008	SJ		X		12534 Harlow Ave; Riverside CA 92503		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
308140003	SJ		X		4120 Jurupa St Ste 218; Ontario CA 91761		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
308140004	SJ		X		1416 9th St; Sacramento CA 95814		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
308140005	SJ			X	4120 Jurupa St Ste 218; Ontario CA 91761		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
308140006	SJ		X		12534 Harlow Ave; Riverside CA 92503		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
308140011	SJ			X	PO Box 54153; Los Angeles CA 90054		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
308140012	SJ		X		614 26th St; Manhattan Beach CA 90266	n/a	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
308150002	SJ			X	1416 9th St; Sacramento CA 92814		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
308150003	SJ		X		720 Via Zapata; Riverside CA 92507		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
308150005	SJ		X		4120 Jurupa St Ste 218; Ontario CA 91761		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
308150007	SJ		X		43529 Ridge Park Dr; Temecula CA 92590		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
308150015	SJ			X	1416 9th St; Sacramento CA 92814		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
308160002	SJ	X			10206 Provincetown Ct; Fairfax VA 22032		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
308160003	SJ		X		4120 Jurupa St Ste 218; Ontario CA 91761		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
308160004	SJ		X		4120 Jurupa St Ste 218; Ontario CA 91761		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
308160005	SJ		X		4120 Jurupa St Ste 218; Ontario CA 91761		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
308160006	SJ		X		4120 Jurupa St Ste 218; Ontario CA 91761		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
308160007	SJ		X		4120 Jurupa St Ste 218; Ontario CA 91761		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
308160008	SJ			X	4120 Jurupa St Ste 218; Ontario CA 91761	n/a	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
308160009	SJ		X		4120 Jurupa St Ste 218; Ontario CA 91761		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
308190001	SJ		X		4120 Jurupa St Ste 218; Ontario CA 91761		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
308190002	SJ		X		4120 Jurupa St Ste 218; Ontario CA 91761		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
308190003	SJ		X		4120 Jurupa St Ste 218; Ontario CA 91761		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
308190004	SJ		X		4120 Jurupa St Ste 218; Ontario CA 91761		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
308190005	SJ		X		4120 Jurupa St Ste 218; Ontario CA 91761		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
308190006	SJ	X			4120 Jurupa St Ste 218; Ontario CA 91761		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
308190007	SJ	X			4120 Jurupa St Ste 218; Ontario CA 91761		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
308190008	SJ	X			4120 Jurupa St Ste 218; Ontario CA 91761		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
308190009	SJ	X			4120 Jurupa St Ste 218; Ontario CA 91761		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
308190010	SJ	X			4120 Jurupa St Ste 218; Ontario CA 91761		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
308190011	SJ	X			4120 Jurupa St Ste 218; Ontario CA 91761		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
308190012	SJ		X		614 26th St; Manhattan Beach CA 90266		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
308190013	SJ		X		1807 13th St Ste 103; Sacramento CA 95814		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
309090029	PD	X			26701 Placentia Ave; Perris CA 92571	26701 Placentia Ave; Perris CA 92571	X	X	X				X	X	X								

Parcel Acquisitions

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		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
309090047	PD	X			26730 Toliver Rd; Perris CA 92571	26730 Toliver Rd; Perris CA 92571	X	X	X				X	X	X								
314100005	PD	X			10265 Victoria Ave; Riverside CA 92503		X	X	X				X	X	X								
314100008	PD	X			1688 N Perris Blvd Ste F4; Perris CA 92571	18030 Hwy 395; Perris CA 92571	X	X	X				X	X	X								
314100009	PD		X		1688 N Perris Blvd Ste F4; Perris CA 92571		X	X	X				X	X	X								
314100018	PD	X			1688 N Perris Blvd Ste F4; Perris CA 92571		X	X	X				X	X	X								
314100019	PD		X		1688 N Perris Blvd Ste F4; Perris CA 92571		X	X	X				X	X	X								
314100020	PD	X			25690 Rollin Hills Dr; Menifee CA 92584		X	X	X				X	X	X								
314100028	PD	X			12723 Los Nietos Rd; Santa Fe Springs CA 90670		X	X	X				X	X	X								
314100029	PD	X			12723 Los Nietos Rd; Santa Fe Springs CA 90670		X	X	X				X	X	X								
314100036	PD	X			291 Canada Sombre Rd; La Habra Heights CA 90631		X	X	X				X	X	X								
314100043	PD	X			12562 Putnam st; Whittier CA 90606		X	X	X				X	X	X								
314100047	PD	X			25690 Rollin Hills Dr; Menifee CA 92584	18100 Hwy 395; Perris CA 92571	X	X	X				X	X	X								
314100060	PD			X	PO Box 12008; Riverside CA 92502		X	X	X				X	X	X								
314100061	PD	X			4615 Wade Ave; Perris CA 92571	4615 Wade Ave; Perris CA 92571	X	X	X				X	X	X								
314100068	PD	X			PO Box 7269; Moreno Valley, CA 82552-7269	4605 Wade Ave; Perris CA 92571	X	X	X				X	X	X								
314100078	PD	X			12723 Los Nietos Rd; Santa Fe Springs CA 90670	4675 Wade Ave; Perris CA 92571	X	X	X				X	X	X								
314110008	PD	X			22923 Lava Way; Nuevo CA 92567	4585 Wade Ave; Perris CA 92571	X	X	X				X	X	X								
314110009	PD	X			19 Savona Walk; Long Beach CA 90803	4545 Wade St; Perris CA 92570	X	X	X				X	X	X								
314110010	PD	X			19 Savona Walk; Long Beach CA 90803		X	X	X				X	X	X								
314110016	PD	X			19 Savona Walk; Long Beach CA 90803		X	X	X				X	X	X								
314110017	PD	X			418 W 39th St; San Pedro CA 90731	4535 Wade Ave; Perris CA 92571	X	X	X				X	X	X								
314110018	PD	X			PO Box 1747; Brea CA 92822	4517 Wade Ave; Perris CA 92571	X	X	X				X	X	X								
314110031	PD	X			17793 Citron Ave; Fontana CA 92335	4439 Wade Ave; Perris CA 92571	X	X	X				X	X	X								
314110034	PD	X			4431 Wade Ave; Perris CA 92571	4431 Wade Ave; Perris CA 92571	X	X	X				X	X	X								
314110035	PD	X			393 Diamond Way; Perris CA 92571	4435 Wade Ave; Perris CA 92571	X	X	X				X	X	X								
314110036	PD	X			PO Box 3855; San Dimas CA 91773		X	X	X				X	X	X								
314110037	PD	X			393 Diamond Way; Perris CA 92571		X	X	X				X	X	X								
314110041	PD			X	PO Box 12008; Riverside CA 92502		X	X	X				X	X	X								
	RD*			X	PO Box 12008; Riverside CA 92502	n/a				X	X	X				X	X	X		X			
314110052	PD	X			PO Box 1747; Brea CA 92822	4495 Wade Ave; Perris CA 92571	X	X	X				X	X	X								
314110053	PD	X			PO Box 1747; Brea CA 92822	4495 Wade; Perris CA 92570	X	X	X				X	X	X								
314110055	PD	X			22254 Bear Creek Dr N; Murrieta CA 92562		X	X	X				X	X	X								
314110056	PD	X			22254 Bear Creek Dr N; Murrieta CA 92562	4461 Wade Ave; Perris CA 92571	X	X	X				X	X	X								
314110057	PD	X			22254 Bear Creek Dr N; Murrieta CA 92562	4465 Wade Ave; Perris CA 92571	X	X	X				X	X	X								
314110059	PD	X			19 Savona Walk; Long Beach CA 90803		X	X	X				X	X	X								
314120002	PD	X			4181 Green Ave; Los Alamitos CA 90720	18510 W Hwy 395; Perris CA 92570	X	X	X				X	X	X								
	RD*		X		4181 Green Ave; Los Alamitos CA 90720	18510 W Hwy 395; Perris CA 92570				X	X	X				X	X	X		X			

Parcel Acquisitions

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		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
314120017	PD		X		4181 Green Ave; Los Alamitos CA 90720	23491 W Markham St; Perris CA 92570	X	X	X				X	X	X							
	RD*		X		4181 Green Ave; Los Alamitos CA 90720	23491 W Markham St; Perris CA 92570				X	X	X				X	X	X		X			
314120018	PD			X	PO Box 12008; Riverside CA 92502		X	X	X				X	X	X							
	RD*			X	PO Box 12008; Riverside CA 92502					X	X	X				X	X	X		X			
314140026	PD			X	464 W 4th St Fl 6th; San Bernardino CA 92401		X	X	X				X	X	X							
	RD*			X	464 W 4th St Fl 6th; San Bernardino CA 92401					X	X	X				X	X	X		X			
314140027	PD			X	464 W 4th St Fl 6th; San Bernardino CA 92401		X	X	X				X	X	X							
	RD*			X	464 W 4th St Fl 6th; San Bernardino CA 92401					X	X	X				X	X	X		X			
314140032	RD*			X	PO Box 12008; Riverside CA 92502					X	X	X				X	X	X		X			
314140038	PD	X			1423 N Bronough St; Tallahassee FL 32303	4252 Patterson Ave; Perris CA 92570	X	X	X				X	X	X							
	RD*		X		1423 N Bronough St; Tallahassee FL 32303	4252 Patterson Ave; Perris CA 92570				X	X	X				X	X	X		X			
314140039	PD	X			1423 N Bronough St; Tallahassee FL 32303		X	X	X				X	X	X							
	RD*		X		1423 N Bronough St; Tallahassee FL 32303					X	X	X				X	X	X		X			
314140043	PD	X			PO Box 968; Perris CA 92572	23472 Perry St; Perris CA 92570	X	X	X				X	X	X							
	RD*	X			PO Box 968; Perris CA 92572	23472 Perry St; Perris CA 92570				X	X	X				X	X	X		X			
314140044	PD			X	PO Box 231; San Bernardino CA 92402		X	X	X				X	X	X							
	RD*			X	PO Box 231; San Bernardino CA 92402					X	X	X				X	X	X		X			
314140046	PD			X	PO Box 12008; Riverside CA 92502		X	X	X				X	X	X							
	RD*			X	PO Box 12008; Riverside CA 92502					X	X	X				X	X	X		X			
314140047	PD			X	PO Box 12008; Riverside CA 92502		X	X	X				X	X	X							
	RD*			X	PO Box 12008; Riverside CA 92502					X	X	X				X	X	X		X			
314140052	RD*			X	740 Carnegie Dr; San Bernardino CA 92408					X	X	X				X	X	X		X			
314140056	PD	X			2478 Piedmont Dr; Riverside CA 92506	23495 Perry St; Perris CA 92570	X	X	X				X	X	X							
	RD*	X			2478 Piedmont Dr; Riverside CA 92506	23495 Perry St; Perris CA 92570				X	X	X				X	X	X		X			
314170017	PD		X		1 Ironwood Dr; Newport Beach CA 92660		X	X	X				X	X	X							
314180009	PD		X		2517 Arroyo Dr; Riverside CA 92506		X	X	X				X	X	X							
	RD*		X		2517 Arroyo Dr; Riverside CA 92506					X	X	X				X	X	X		X			
314180010	PD	X			2478 Piedmont Dr; Riverside CA 92506		X	X	X				X	X	X							
	RD*	X			2478 Piedmont Dr; Riverside CA 92506					X	X	X				X	X	X		X			
314180011	PD		X		2478 Piedmont Dr; Riverside CA 92506		X	X	X				X	X	X							
314180013	PD		X		2478 Piedmont Dr; Riverside CA 92506		X	X	X				X	X	X							
314180014	PD	X			2478 Piedmont Dr; Riverside CA 92506		X	X	X				X	X	X							
	RD*	X			2478 Piedmont Dr; Riverside CA 92506					X	X	X				X	X	X		X			
314310003	RD*			X	4080 Lemon St Fl 4th; Riverside CA 92501					X	X	X				X	X	X		X			
314310006	PD			X	PO Box 12008; Riverside CA 92502		X	X	X				X	X	X							
	RD*			X	PO Box 12008; Riverside CA 92502					X	X	X				X	X	X		X			
317030021	MV	X			455 S I St; San Bernardino CA 92410	22024 Cajalco Rd; Perris CA 92410	X	X	X	X	X	X	X	X	X	X	X	X					

Parcel Acquisitions

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		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
317030022	MV		X				X	X	X	X	X	X	X	X	X	X	X	X					
317030023	MV	X			22080 Cajalco Rd; Perris CA 92570	22080 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
317030024	MV	X			1990 Murrieta Rd; Perris CA 92571	22120 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
317030026	MV		X		6523 Westview Dr; Riverside CA 92506		X	X	X	X	X	X	X	X	X	X	X	X					
317030028	MV	X			23109 Mercury Cir; Menifee CA 92586		X	X	X	X	X	X	X	X	X	X	X	X					
317030029	MV		X		22211 Marquez Rd; Perris CA 92570	22211 Marquez Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
317030030	MV	X			22220 Cajalco Rd; Perris CA 92570	22220 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
317030031	MV	X			22260 Cajalco Rd; Perris CA 92570		X	X	X	X	X	X	X	X	X	X	X	X					
317030034	MV	X			2204 W 153rd St; Compton CA 90220		X	X	X	X	X	X	X	X	X	X	X	X					
317030035	MV		X		PO Box 23015; San Bernardino CA 92406		X	X	X	X	X	X	X	X	X	X	X	X					
317030036	MV	X			22330 Cajalco Rd; Perris CA 92570	22330 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
317030038	C1		X		11003 Atkinson Ave; Inglewood CA 90303					X	X	X				X	X	X					
	MV		X		11003 Atkinson Ave; Inglewood CA 90303		X	X	X	X	X	X	X	X	X	X	X	X					
	PD		X		11003 Atkinson Ave; Inglewood CA 90303		X	X	X				X	X	X								
317030041	C1	X			22460 Cajalco Rd; Perris CA 92570	22460 Cajalco Rd; Perris CA 92570				X	X	X				X	X	X					
	MV			X	22460 Cajalco Rd; Perris CA 92570	22460 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
	PD	X			22460 Cajalco Rd; Perris CA 92570	22460 Cajalco Rd; Perris CA 92570	X	X	X				X	X	X								
317030042	C1	X			22490 Cajalco Rd; Perris CA 92570	22490 Cajalco Rd; Perris CA 92570				X	X	X				X	X	X					
	MV	X			22490 Cajalco Rd; Perris CA 92570	22490 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
	PD	X			22490 Cajalco Rd; Perris CA 92570	22490 Cajalco Rd; Perris CA 92570	X	X	X				X	X	X								
317030047	MV	X			22370 Cajalco Rd; Perris CA 92570	22370 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
317030048	MV		X		5017 W 16th St; Santa Ana CA 92703		X	X	X	X	X	X	X	X	X	X	X	X					
317030049	MV		X		22260 Cajalco Rd; Perris CA 92570	22265 Marquez Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
317030050	MV		X		22260 Cajalco Rd; Perris CA 92570		X	X	X	X	X	X	X	X	X	X	X	X					
317030051	MV	X			22160 Cajalco Rd; Perris CA 92570	22160 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
317030052	MV	X			22180 Cajalco Rd; Perris CA 92570	22180 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
317030053	MV	X			22290 Cajalco Rd; Perris CA 92570	22290 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
317050024	C1		X		19421 Decker Rd; Perris CA 92570	19421 Decker Rd; Perris CA 92570				X	X	X				X	X	X					
	PD		X		19421 Decker Rd; Perris CA 92570	19421 Decker Rd; Perris CA 92570	X	X	X				X	X	X								
317050025	C1		X		10232 Parkview Ave; Westminster CA 92683	22700 Cajalco Rd; Perris 92570				X	X	X				X	X	X					
	PD	X			10232 Parkview Ave; Westminster CA 92683	22700 Cajalco Rd; Perris 92570	X	X	X				X	X	X								
317050028	PD	X			22820 Cajalco Rd; Perris CA 92570	22810 Cajalco Rd; Perris CA 92570	X	X	X				X	X	X								
317050029	PD	X			22840 Cajalco Rd; Perris CA 92570	22840 Cajalco Rd; Perris 92570	X	X	X				X	X	X								
317050034	C1	X			28040 Kalmia Ave; Moreno Valley CA 92555	19451 Decker Rd; Perris CA 92570				X	X	X				X	X	X					
	PD	X			28040 Kalmia Ave; Moreno Valley CA 92555	19451 Decker Rd; Perris CA 92570	X	X	X				X	X	X								
317050035	C1	X			n/a					X	X	X				X	X	X					
	PD	X			n/a		X	X	X				X	X	X								

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		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
317050036	C1	X			21261 Salter Rd; Perris CA 92570					X	X	X				X	X	X					
	PD	X			21261 Salter Rd; Perris CA 92570		X	X	X				X	X	X								
317050037	C1	X			22530 Cajalco Rd; Perris CA 92570	22530 Cajalco Rd; Perris CA 92570				X	X	X				X	X	X					
	PD	X			22530 Cajalco Rd; Perris CA 92570	22530 Cajalco Rd; Perris CA 92570	X	X	X				X	X	X								
317050038	PD	X			28248 Tower View Ct; Romoland CA 92585		X	X	X				X	X	X								
317050039	PD	X			28248 Tower View Ct; Romoland CA 92585		X	X	X				X	X	X								
317050040	PD	X			22920 Cajalco Rd; Perris CA 92570	22920 Cajalco Rd; Perris CA 92570	X	X	X				X	X	X								
317050041	PD		X		2555 Alpine Rd; Upland CA 91784		X	X	X				X	X	X								
317050044	PD		X		113 Cologne Dr; Santa Ana CA 92703		X	X	X				X	X	X								
317050045	C1		X		3096 Kerry St; San Bernardino CA 92407					X	X	X				X	X	X					
	PD	X			3096 Kerry St; San Bernardino CA 92407		X	X	X				X	X	X								
317050050	PD		X		PO Box 303; Newberry Springs CA 92365		X	X	X				X	X	X								
317050051	PD		X		PO Box 303; Newberry Springs CA 92365		X	X	X				X	X	X								
317050052	C1		X		PO Box 303; Newberry Springs CA 92365					X	X	X				X	X	X					
	PD	X			PO Box 303; Newberry Springs CA 92365		X	X	X				X	X	X								
317050053	C1	X			PO Box 303; Newberry Springs CA 92365					X	X	X				X	X	X					
	PD	X			PO Box 303; Newberry Springs CA 92365		X	X	X				X	X	X								
317060035	MV		X		22191 Cajalco Rd; Perris CA 92570	22191 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
317060037	C1		X		2615 Blaze Trail; Diamond Bar CA 91765					X	X	X				X	X	X					
	MV		X		2615 Blaze Trail; Diamond Bar CA 91765		X	X	X	X	X	X	X	X	X	X	X	X					
317060043	MV		X		PO Box 8300; Perris CA 92572		X	X	X	X	X	X	X	X	X	X	X	X					
317080002	C1		X		4610 W 64th St; Inglewood CA 90302					X	X	X				X	X	X					
317080003	C1	X			22675 Cajalco Rd; Perris CA 92570	22675 Cajalco Rd; Perris CA 92570				X	X	X				X	X	X					
317080004	C1		X		11111 W Olympic Blvd; Los Angeles CA 90064					X	X	X				X	X	X					
317080005	C1	X			26753 Colt Dr; Corona CA 92883	22695 Cajalco Rd; Perris CA 92570				X	X	X				X	X	X					
317080006	C1	X			480 E Main St; Riverside CA 92507	22697 Cajalco Rd; Perris CA 92570				X	X	X				X	X	X					
317080007	C1	X			22765 Cajalco Rd; Perris CA 92570	22765 Cajalco Rd; Perris CA 92570				X	X	X				X	X	X					
317080008	C1		X		22775 Cajalco Rd; Perris CA 92570	22775 Cajalco Rd; Perris CA 92570				X	X	X				X	X	X					
317080019	C1		X		420 S Electric Ave; Alhambra CA 91803					X	X	X				X	X	X					
317080021	C1	X			27900 Wellston Dr; Santa Clarita 91350	19641 Seaton Ave; Perris CA 92570				X	X	X				X	X	X					
317080022	C1	X			420 S Electric Ave; Alhambra CA 91803					X	X	X				X	X	X					
317080023	C1		X		6562 E County Road 500 N; Fillmore IN 46128					X	X	X				X	X	X					
317080027	C1	X			3524 Mytle Ave; Long Beach CA 90807	19671 Seaton Ave; Perris CA 92570				X	X	X				X	X	X					
317080028	C1	X			985 S G St; Perris CA 92570	19701 Seaton Ave; Perris CA 92570				X	X	X				X	X	X					
317080029	C1	X			20771 Jean St; Perris CA 92570	19683 Seaton Ave; Perris CA 92570				X	X	X				X	X	X					
317080030	C1			X	PO Box 54153; Los Angeles CA 90054					X	X	X				X	X	X					
317080031	C1		X		714 S Hill St Ste 405; Los Angeles CA 90014					X	X	X				X	X	X					

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317080032	C1		X		411 N Main St; Janesville WI 53545					X	X	X				X	X	X					
317090010	C2*		X		714 S Hill St Ste 405; Los Angeles CA 90014															X			
317090011	C2*		X		714 S Hill St Ste 405; Los Angeles CA 90014															X			
317090014	C2*		X		17437 Tadmore St; La Puente CA 91744															X			
317090015	C2*		X		3708 W 118th St; Hawthorne CA 90250															X			
317090016	C2*		X		890 N Campus Ave No 8; Upland CA 91786															X			
317090017	C2*	X			1109 Acacia St; Corona CA 92879															X			
317090018	C2*		X		PO Box 2479; Berkeley CA 94702															X			
317090019	C2*		X		3515 Dixie Ln; Riverside CA 92503															X			
317090021	C2*	X			19991 Seaton Ave; Perris CA 92570															X			
317090022	C2*		X		22240 Ellis Ave; Perris CA 92570															X			
317090024	C2*		X		22761 Cajalco Rd; Perris CA 92570															X			
317090025	C2*		X		19783 Seaton Ave; Perris CA 92570															X			
317090029	C1		X		950 Highway 57; Collierville TN 38017	19991 Seaton Ave; Perris CA 92570				X	X	X				X	X	X					
	C2*		X		950 Highway 57; Collierville TN 38017	19991 Seaton Ave; Perris CA 92570														X			
317090030	C1		X		19865 Seaton Ave; Perris CA 92570	19865 Seaton Ave; Perris CA 92570				X	X	X				X	X	X					
317090031	C1		X		19865 Seaton Ave; Perris CA 92570					X	X	X				X	X	X					
	C2*	X			19865 Seaton Ave; Perris CA 92570															X			
317090032	C1		X		2993 E La Cadena Dr; Riverside CA 92507					X	X	X				X	X	X					
	C2*	X			2993 E La Cadena Dr; Riverside CA 92507															X			
317100016	PD		X		4080 Lemon St Fl 4th; Riverside CA 92501		X	X	X				X	X	X								
317100017	PD		X		4080 Lemon St Fl 4th; Riverside CA 92501		X	X	X				X	X	X								
317100019	PD		X		4080 Lemon St Fl 4th; Riverside CA 92501		X	X	X				X	X	X								
317100029	PD	X			4080 Lemon St Fl 4th; Riverside CA 92501		X	X	X				X	X	X								
317110003	PD	X			13925 Carol Ln; Perris CA 92570	23332 Cajalco Rd; Perris CA 92570	X	X	X				X	X	X								
317110004	PD	X			5501 Saint Andrews Ct; Plano TX 75093		X	X	X				X	X	X								
317110006	PD	X			PO Box 8; Temecula CA 92593		X	X	X				X	X	X								
317110008	PD	X			n/a		X	X	X				X	X	X								
317110009	PD	X			n/a	23320 Cajalco Rd; Perris CA 92570	X	X	X				X	X	X								
317110010	PD	X			n/a	23330 Cajalco Rd; Perris CA 92570	X	X	X				X	X	X								
317110034	PD		X		236 Craig Dr; Orange CA 92869		X	X	X				X	X	X								
317110037	PD	X			5501 Saint Andrews Ct; Plano TX 75093		X	X	X				X	X	X								
317110038	PD	X			15322 Weddington St Apt 6; Sherman Oaks CA 91411		X	X	X				X	X	X								
317110041	PD	X			41309 Avenida Biona; Temecula CA 92591		X	X	X				X	X	X								
317110042	PD	X			41309 Avenida Biona; Temecula CA 92591		X	X	X				X	X	X								
317110043	PD	X			41309 Avenida Biona; Temecula CA 92591		X	X	X				X	X	X								
317110044	PD	X			41309 Avenida Biona; Temecula CA 92591		X	X	X				X	X	X								

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317110045	PD	X			41309 Avenida Biona; Temecula CA 92591		X	X	X				X	X	X							
317110046	PD	X			41309 Avenida Biona; Temecula CA 92591		X	X	X				X	X	X							
317110047	PD	X			41309 Avenida Biona; Temecula CA 92591		X	X	X				X	X	X							
317110048	PD	X			41309 Avenida Biona; Temecula CA 92591		X	X	X				X	X	X							
317110049	PD	X			41309 Avenida Biona; Temecula CA 92591		X	X	X				X	X	X							
317110050	PD	X			41309 Avenida Biona; Temecula CA 92591		X	X	X				X	X	X							
317120007	PD		X		3812 E Kirkwood Ave; Orange CA 92869		X	X	X				X	X	X							
	RD*		X		3812 E Kirkwood Ave; Orange CA 92869					X	X	X				X	X	X		X			
317120015	PD	X			6207 Tecate Dr; Riverside CA 92506		X	X	X				X	X	X							
	PPD		X		6207 Tecate Dr; Riverside CA 92506	N/A													X		X	X
	PPE*		X		6207 Tecate Dr; Riverside CA 92506	n/a														X			
	RD*	X			6207 Tecate Dr; Riverside CA 92506					X	X	X				X	X	X		X			
317120016	PD			X	464 W 4th St Fl 6th; San Bernardino CA 92401		X	X	X				X	X	X							
	PPD			X	464 W 4th St Fl 6th; San Bernardino CA 92401	N/A													X		X	X
	PPE*			X	464 W 4th St Fl 6th; San Bernardino CA 92401	n/a														X			
	RD*			X	464 W 4th St Fl 6th; San Bernardino CA 92401					X	X	X				X	X	X		X			
317120017	PD			X	464 W 4th St Fl 6th; San Bernardino CA 92401		X	X	X				X	X	X							
	RD*			X	464 W 4th St Fl 6th; San Bernardino CA 92401					X	X	X				X	X	X		X			
317120019	PD			X	PO Box 12008; Riverside CA 92502		X	X	X				X	X	X							
	RD*			X	PO Box 12008; Riverside CA 92502					X	X	X				X	X	X		X			
317120020	C1			X	PO Box 12008; Riverside CA 92502	19865 Seaton Ave; Perris CA 92570				X	X	X				X	X	X					
	RD*			X	PO Box 12008; Riverside CA 92502	19865 Seaton Ave; Perris CA 92570				X	X	X				X	X	X		X			
317130006	PD		X		3812 E Kirkwood Ave; Orange CA 92869		X	X	X				X	X	X							
317130016	PD	X			11401 Pettit St; Moreno Valley CA 92555	3745 HWY 215; Perris CA 92570	X	X	X				X	X	X							
	PPD	X			11401 Pettit St; Moreno Valley CA 92555	3745 HWY 215; Perris CA 92570													X		X	X
	PPE*	X			11401 Pettit St; Moreno Valley CA 92555	3745 HWY 215; Perris CA 92570														X			
	RD*	X			11401 Pettit St; Moreno Valley CA 92555	3745 HWY 215; Perris CA 92570				X	X	X				X	X	X		X			
317130017	PD	X			11401 Pettit St; Moreno Valley CA 92555		X	X	X				X	X	X							
	RD*		X		11401 Pettit St; Moreno Valley CA 92555					X	X	X				X	X	X		X			
317130020	PD	X			11401 Pettit St; Moreno Valley CA 92555	3715 Hwy 215, Perris CA 92570	X	X	X				X	X	X							
	PPD	X			11401 Pettit St; Moreno Valley CA 92555	3715 Hwy 215, Perris CA 92570													X			X	X
	PPE*	X			11401 Pettit St; Moreno Valley CA 92555	3715 Hwy 215, Perris CA 92570														X			
	RD*	X			11401 Pettit St; Moreno Valley CA 92555	3715 Hwy 215, Perris CA 92570				X	X	X				X	X	X		X			
317130021	PD	X			11401 Pettit St; Moreno Valley CA 92555		X	X	X				X	X	X							
317130025	PD	X			635 W Allen Ave; San Dimas CA 91773		X	X	X				X	X	X							
	RD*		X		635 W Allen Ave; San Dimas CA 91773					X	X	X				X	X	X		X			
317130026	PD	X			3580 Wilshire Blvd Ste 100; Los Angeles CA 90010		X	X	X				X	X	X							

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	PPD		X		3580 Wilshire Blvd Ste 100; Los Angeles CA 90010	N/A													X			X	X
	PPE*		X		3580 Wilshire Blvd Ste 100; Los Angeles CA 90010	n/a															X		
	RD*	X			3580 Wilshire Blvd Ste 100; Los Angeles CA 90010					X	X	X				X	X	X		X			
317130030	PD			X	PO Box 12008; Riverside CA 92502		X	X	X				X	X	X								
	RD*			X	PO Box 12008; Riverside CA 92502					X	X	X				X	X	X		X			
317130034	PD	X			15322 Weddington St Apt 6; Sherman Oaks CA 91411		X	X	X				X	X	X								
317130035	PD	X			15322 Weddington St Apt 6; Sherman Oaks CA 91411		X	X	X				X	X	X								
317130037	PD	X			6207 Tecate Dr; Riverside CA 92506		X	X	X				X	X	X								
	PPD	X			6207 Tecate Dr; Riverside CA 92506	N/A													X			X	X
	PPE*	X			6207 Tecate Dr; Riverside CA 92506	n/a															X		
	RD*	X			6207 Tecate Dr; Riverside CA 92506					X	X	X				X	X	X		X			
317130038	PD			X	464 W 4th St Fl 6th; San Bernardino CA 92401		X	X	X				X	X	X								
	PPD			X	464 W 4th St Fl 6th; San Bernardino CA 92401	N/A													X			X	X
	PPE*			X	464 W 4th St Fl 6th; San Bernardino CA 92401	n/a															X		
	RD*			X	464 W 4th St Fl 6th; San Bernardino CA 92401					X	X	X				X	X	X		X			
317130040	PD			X	464 W 4th St Fl 6th; San Bernardino CA 92401		X	X	X				X	X	X								
	PPD			X	464 W 4th St Fl 6th; San Bernardino CA 92401	N/A													X			X	X
	PPE*	X			464 W 4th St Fl 6th; San Bernardino CA 92401	n/a															X		
	RD*			X	464 W 4th St Fl 6th; San Bernardino CA 92401					X	X	X				X	X	X		X			
317130041	PD	X			6207 Tecate Dr; Riverside, CA 92506		X	X	X				X	X	X								
	PPD	X			6207 Tecate Dr; Riverside, CA 92506	N/A													X			X	X
	PPE*			X	6207 Tecate Dr; Riverside, CA 92506	n/a															X		
	RD*	X			6207 Tecate Dr; Riverside, CA 92506					X	X	X				X	X	X		X			
317130043	PD	X			464 W 4th St Fl 6th; San Bernardino CA 92401		X	X	X				X	X	X								
	RD*			X	464 W 4th St Fl 6th; San Bernardino CA 92401					X	X	X				X	X	X		X			
317130047	PD		X		975 Morgan St; Perris CA 92571		X	X	X				X	X	X								
	RD*		X		975 Morgan St; Perris CA 92571					X	X	X				X	X	X		X			
317140019	C1		X		1485 Spruce St Ste J; Riverside CA 92507	19654 Seaton Ave; Perris CA 92570				X	X	X				X	X	X					
	RD*		X		1485 Spruce St Ste J; Riverside CA 92507	19654 Seaton Ave; Perris CA 92570				X	X	X				X	X	X		X			
317140020	C1		X		1485 Spruce St Ste J; Riverside CA 92507					X	X	X				X	X	X					
317140041	C1			X	PO Box 54153; Los Angeles CA 90054					X	X	X				X	X	X					
317140044	C1	X			23031 Cajalco Rd; Perris CA 92570	23031 Cajalco Rd; Perris CA 92570				X	X	X				X	X	X					
317140045	C1	X			19580 Seaton Ave; Perris CA 92570	19580 Seaton Ave; Perris CA 92570				X	X	X				X	X	X					
317140046	C1	X			7047 Snapdragon Dr; Carlsbad CA 92011	19600 Seaton Ave; Perris CA 92570				X	X	X				X	X	X					
317150002	C1		X		714 S Hill St Ste 405; Los Angeles CA 90014					X	X	X				X	X	X					
	C2*		X		714 S Hill St Ste 405; Los Angeles CA 90014															X			
	RD*		X		714 S Hill St Ste 405; Los Angeles CA 90014					X	X	X				X	X	X		X			

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APN	Segment	Acquisitions			Mailing Address	Physical Location Address	Alternative															
		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
317150006	C1		X		19971 Patterson Ave; Perris CA 92570	19971 Patterson Ave; Perris CA 92570				X	X	X				X	X	X					
	C2*	X			19971 Patterson Ave; Perris CA 92570	19971 Patterson Ave; Perris CA 92570														X			
	RD*	X			19971 Patterson Ave; Perris CA 92570	19971 Patterson Ave; Perris CA 92570				X	X	X				X	X	X		X			
317150007	C1			X	PO Box 54153; Los Angeles CA 90054	19851 Patterson Ave; Perris CA 92570				X	X	X				X	X	X					
	C2*			X	PO Box 54153; Los Angeles CA 90054	19851 Patterson Ave; Perris CA 92570														X			
	RD*			X	PO Box 54153; Los Angeles CA 90054	19851 Patterson Ave; Perris CA 92570				X	X	X				X	X	X		X			
317150010	C2*	X			671 W 21st St; San Bernardino CA 92405	23124 Rider St; Perris CA 92570														X			
317150016	C2*	X			23128 Rider St; Perris CA 92570	23128 Rider St; Perris CA 92570														X			
317150021	C1		X		4900 Santa Anita Ave Ste 2C; El Monte CA 91731	23040 Rider St; Perris CA 92570				X	X	X				X	X	X					
	C2*		X		4900 Santa Anita Ave Ste 2C; El Monte CA 91731	23040 Rider St; Perris CA 92570														X			
317150033	C1		X		4900 Santa Anita Ave Ste 2C; El Monte CA 91731					X	X	X				X	X	X					
	C2*	X			4900 Santa Anita Ave Ste 2C; El Monte CA 91731															X			
317150037	C2*	X			23120 Rider St; Perris CA 92570	23120 Rider St; Perris CA 92570														X			
317150039	C2*	X			21430 Kinney St; Perris CA 92570	23148 Rider St; Perris CA 92570														X			
317150041	C1			X	19765 Patterson Ave; Perris CA 92570	19765 Patterson Ave; Perris CA 92570				X	X	X				X	X	X					
	RD*			X	19765 Patterson Ave; Perris CA 92570	19765 Patterson Ave; Perris CA 92570				X	X	X				X	X	X		X			
317150042	C2*	X			23126 Rider St; Perris CA 92570	23126 Rider St; Perris CA 92570														X			
317150043	C2*	X			15420 Avenida Socorro; La Mirada CA 90638	23150 Rider St; Perris CA 92570														X			
317150045	C1		X		487 Velasco Dr; San Jose CA 95123					X	X	X				X	X	X					
	C2*	X			487 Velasco Dr; San Jose CA 95123															X			
317150046	C1		X		487 Velasco Dr; San Jose CA 95123					X	X	X				X	X	X					
	C2*	X			487 Velasco Dr; San Jose CA 95123															X			
	RD*		X		487 Velasco Dr; San Jose CA 95123					X	X	X				X	X	X		X			
317150053	C2*		X		11921 Goldring Rd; Arcadia CA 91006															X			
317150054	C2*		X		11921 Goldring Rd; Arcadia CA 91006															X			
317150055	C2*		X		11921 Goldring Rd; Arcadia CA 91006															X			
317150056	C1		X		2211 S Hacienda Blvd; Hacienda Heights CA 91745					X	X	X				X	X	X					
	C2*		X		2211 S Hacienda Blvd; Hacienda Heights CA 91745															X			
317150057	C1		X		4900 Santa Anita Ave Ste 2C; El Monte CA 91731					X	X	X				X	X	X					
	C2*		X		4900 Santa Anita Ave Ste 2C; El Monte CA 91731															X			
317150058	C1	X			827 W 59th St; Los Angeles CA 90044					X	X	X				X	X	X					
	C2*	X			827 W 59th St; Los Angeles CA 90044															X			
	RD*		X		827 W 59th St; Los Angeles CA 90044					X	X	X				X	X	X		X			
317150059	C1	X			PO Box 54153; Los Angeles CA 90054					X	X	X				X	X	X					
	RD*			X	PO Box 54153; Los Angeles CA 90054					X	X	X				X	X	X		X			
317150060	C1		X		30908 Cartier Dr; Rch Palos Vrd CA 90275					X	X	X				X	X	X					
	C2*		X		30908 Cartier Dr; Rch Palos Vrd CA 90275															X			

Parcel Acquisitions

APN	Segment	Acquisitions			Mailing Address	Physical Location Address	Alternative															
		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
	RD*		X		30908 Cartier Dr; Rch Palos Vrd CA 90275					X	X	X				X	X	X		X			
317150062	C1		X		487 Velasco Dr; San Jose CA 95123					X	X	X				X	X	X					
	C2*	X			487 Velasco Dr; San Jose CA 95123															X			
	RD*		X		487 Velasco Dr; San Jose CA 95123					X	X	X				X	X	X		X			
317150063	C1	X			PO Box 54153; Los Angeles CA 90054					X	X	X				X	X	X					
	RD*			X	PO Box 54153; Los Angeles CA 90054					X	X	X				X	X	X		X			
317160018	RD*			X	740 Carnegie Dr; San Bernardino CA 92408					X	X	X				X	X	X		X			
317160021	PD		X		42814 Beeman Dr; Murrieta CA 92562		X	X	X				X	X	X								
317160027	PD			X	PO Box 12008; Riverside CA 92502		X	X	X				X	X	X								
	PPD			X	PO Box 12008; Riverside CA 92502	N/A													X			X	X
	PPE*			X	PO Box 12008; Riverside CA 92502															X			
	RD*			X	PO Box 12008; Riverside CA 92502					X	X	X				X	X	X		X			
317160029	PD		X		975 Morgan St; Perris CA 92571		X	X	X				X	X	X								
	RD*		X		975 Morgan St; Perris CA 92571					X	X	X				X	X	X		X			
317160031	PD		X		635 W Allen Ave; San Dimas CA 91773		X	X	X				X	X	X								
	PPD		X		635 W Allen Ave; San Dimas CA 91773	N/A													X			X	X
	PPE*		X		635 W Allen Ave; San Dimas CA 91773	n/a														X			
	PPE*		X		635 W Allen Ave; San Dimas CA 91773	n/a														X			
	RD*		X		635 W Allen Ave; San Dimas CA 91773					X	X	X				X	X	X		X			
317160036	RD*			X	PO Box 54153; Los Angeles CA 90054					X	X	X				X	X	X		X			
317160041	PD	X			PO Box 8300; Perris CA 92572		X	X	X				X	X	X								
	PPD	X			PO Box 8300; Perris CA 92572	N/A													X			X	X
	PPE*			X	PO Box 8300; Perris CA 92572	n/a														X			
	RD*			X	PO Box 8300; Perris CA 92572					X	X	X				X	X	X		X			
317160043	PD		X		19543 Patterson Ave; Perris CA 92570		X	X	X				X	X	X								
317170012	PD			X	PO Box 12008; Riverside CA 92502		X	X	X				X	X	X								
	PPD			X	PO Box 12008; Riverside CA 92502	N/A													X			X	X
	PPE*			X	PO Box 12008; Riverside CA 92502	n/a														X			
	RD*			X	PO Box 12008; Riverside CA 92502					X	X	X				X	X	X		X			
317170015	PD			X	464 W 4th St Fl 6th; San Bernardino CA 92401		X	X	X				X	X	X								
	PPD			X	464 W 4th St Fl 6th; San Bernardino CA 92401	N/A													X			X	X
	PPE*			X	464 W 4th St Fl 6th; San Bernardino CA 92401															X			
	RD*			X	464 W 4th St Fl 6th; San Bernardino CA 92401					X	X	X				X	X	X		X			
317170016	PD		X		PO Box 8; Hemet CA 92546		X	X	X				X	X	X								
	PPD		X		PO Box 8; Hemet CA 92546	N/A													X			X	X
	PPE*		X		PO Box 8; Hemet CA 92546															X			
	RD*	X			PO Box 8; Hemet CA 92546					X	X	X				X	X	X		X			

Parcel Acquisitions

APN	Segment	Acquisitions			Mailing Address	Physical Location Address	Alternative															
		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
317170017	PD		X		PO Box 54153; Los Angeles CA 90054		X	X	X				X	X	X							
	PPD			X	PO Box 54153; Los Angeles CA 90054	N/A													X			X	X
	PPE*			X	PO Box 54153; Los Angeles CA 90054	n/a															X		
	RD*			X	PO Box 54153; Los Angeles CA 90054					X	X	X				X	X	X		X			
317170020	RD*	X			PO Box 2019; Corona CA 92878					X	X	X				X	X	X		X			
317170023	RD*	X			PO Box 910; Norco CA 92860	23840 Rider St; Perris CA 92570				X	X	X				X	X	X		X			
317170024	RD*	X			41120 Elm St; Murrieta CA 92562					X	X	X				X	X	X		X			
317170025	RD*	X			PO Box 127; Riverside CA 92502					X	X	X				X	X	X		X			
317170026	RD*	X			PO Box 127; Riverside CA 92502					X	X	X				X	X	X		X			
317170027	C1		X		PO Box 127; Riverside CA 92502					X	X	X				X	X	X					
	C2*		X		PO Box 127; Riverside CA 92502															X			
	RD*	X			PO Box 127; Riverside CA 92502					X	X	X				X	X	X		X			
317170028	C1		X		PO Box 127; Riverside CA 92502					X	X	X				X	X	X					
	C2*		X		PO Box 127; Riverside CA 92502															X			
	RD*	X			PO Box 127; Riverside CA 92502					X	X	X				X	X	X		X			
317170029	RD*			X	n/a					X	X	X				X	X	X		X			
317170030	RD*			X	n/a					X	X	X				X	X	X		X			
317170031	C1		X		PO Box 5167; Riverside CA 92517	19950 Patterson Ave; Perris CA 92570				X	X	X				X	X	X					
	C2*		X		PO Box 5167; Riverside CA 92517	19950 Patterson Ave; Perris CA 92570														X			
	RD*	X			PO Box 5167; Riverside CA 92517	19950 Patterson Ave; Perris CA 92570				X	X	X				X	X	X		X			
317170032	C1		X		PO Box 54153; Los Angeles CA 90054					X	X	X				X	X	X					
	C2*			X	PO Box 54153; Los Angeles CA 90054															X			
	RD*			X	PO Box 54153; Los Angeles CA 90054					X	X	X				X	X	X		X			
317170033	PD	X			PO Box 8; Hemet CA 92546	820 E Rider St; Perris CA 92571	X	X	X				X	X	X							
	PPD		X		PO Box 8; Hemet CA 92546	820 E Rider St; Perris CA 92571													X			X	X
	PPE*	X			PO Box 8; Hemet CA 92546	820 E Rider St; Perris CA 92571															X		
	RD*	X			PO Box 8; Hemet CA 92546	820 E Rider St; Perris CA 92571				X	X	X				X	X	X		X			
317180007	C2*		X		714 S Hill St Ste 405; Los Angeles CA 90014															X			
317180008	C2*		X		3807 Wilshire Blvd #740; Los Angeles CA 90010															X			
	C3		X		3807 Wilshire Blvd #740; Los Angeles CA 90010														X		X	X	X
317190003	C2*		X		716 9th St; Manhattan Beach CA 90266															X			
317190004	C3		X		714 S Hill Street; Los Angeles CA 90014														X		X	X	X
317190007	C2*		X		714 S Hill St Ste 405; Los Angeles CA 90014															X			
317190009	C3		X		7518 W 88th Pl; Los Angeles CA 90045														X		X	X	X
317190010	C3		X		1758 Valley View Ave; Norco CA 92860														X		X	X	X
317200003	C2*		X		714 S Hill St Ste 405; Los Angeles CA 90014															X			
317200010	C3		X		3763 Arlington Ave Ste 202; Riverside CA 92506														X		X	X	X

Parcel Acquisitions

APN	Segment	Acquisitions			Mailing Address	Physical Location Address	Alternative															
		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
317200011	C3		X		3763 Arlington Ave Ste 202; Riverside CA 92506														X		X	X	X
317200012	C3		X		3763 Arlington Ave Ste 202; Riverside CA 92506														X		X	X	X
317200013	C3	X			3763 Arlington Ave Ste 202; Riverside CA 92506														X		X	X	X
317200014	C3		X		3763 Arlington Ave Ste 202; Riverside CA 92506														X		X	X	X
317200015	C3		X		3763 Arlington Ave Ste 202; Riverside CA 92506														X		X	X	X
317200026	C3		X		3763 Arlington Ave Ste 202; Riverside CA 92506														X		X	X	X
317200027	C3		X		3763 Arlington Ave Ste 202; Riverside CA 92506														X		X	X	X
317200028	C3		X		3763 Arlington Ave Ste 202; Riverside CA 92506														X		X	X	X
317200029	C3		X		3763 Arlington Ave Ste 202; Riverside CA 92506														X		X	X	X
317200030	C3		X		3763 Arlington Ave Ste 202; Riverside CA 92506														X		X	X	X
317200032	C3		X		3763 Arlington Ave Ste 202; Riverside CA 92506														X		X	X	X
317200033	C3		X		3763 Arlington Ave Ste 202; Riverside CA 92506														X		X	X	X
317200034	C3		X		3763 Arlington Ave Ste 202; Riverside CA 92506														X		X	X	X
317200035	C3		X		3763 Arlington Ave Ste 202; Riverside CA 92506														X		X	X	X
317200036	C3		X		3763 Arlington Ave Ste 202; Riverside CA 92506														X		X	X	X
317200037	C3		X		3763 Arlington Ave Ste 202; Riverside CA 92506														X		X	X	X
317200038	C3		X		3763 Arlington Ave Ste 202; Riverside CA 92506														X		X	X	X
317220020	C3		X		584 6th. St; Norco CA 92860														X		X	X	X
317220021	C3		X		584 6th. St; Norco CA 92860	23340 Placentia St, Perris CA 92570													X		X	X	X
317220025	C3		X		714 S Hill Street; Los Angeles CA 90014														X		X	X	X
317230026	PD			X	PO Box 12008; Riverside CA 92502		X	X	X				X	X	X								
	PPD			X	PO Box 12008; Riverside CA 92502	N/A													X			X	X
	PPE*			X	PO Box 12008; Riverside CA 92502	n/a															X		
	RD*			X	PO Box 12008; Riverside CA 92502					X	X	X				X	X	X		X			
317230034	PD		X		821 County Rd No 27; Brighton CO 80601		X	X	X				X	X	X								
	PPD	X			821 County Rd No 27; Brighton CO 80601	N/A													X			X	X
	PPE*	X			821 County Rd No 27; Brighton CO 80601																X		
	RD*	X			821 County Rd No 27; Brighton CO 80601					X	X	X				X	X	X		X			
317230050	PD	X			821 County Rd No 27; Brighton CO 80601		X	X	X				X	X	X								
	PPD	X			821 County Rd No 27; Brighton CO 80601	N/A													X			X	X
	PPE*	X			821 County Rd No 27; Brighton CO 80601																X		
	RD*	X			821 County Rd No 27; Brighton CO 80601					X	X	X				X	X	X		X			
317240022	PD			X	PO Box 12008; Riverside CA 92502		X	X	X				X	X	X								
	PPD			X	PO Box 12008; Riverside CA 92502	N/A													X			X	X
	PPE*			X	PO Box 12008; Riverside CA 92502																X		
	RD*			X	PO Box 12008; Riverside CA 92502					X	X	X				X	X	X		X			
317240032	PPD		X		3520 Piedmont Rd NE Ste 100; Atlanta GA 30305	N/A													X			X	X

Parcel Acquisitions

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		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
	PPE*		X		3520 Piedmont Rd NE Ste 100; Atlanta GA 30305																X		
317240034	PPD			X	464 W 4th St Fl 6th; San Bernardino CA 92401	N/A													X			X	X
	PPE*			X	464 W 4th St Fl 6th; San Bernardino CA 92401																X		
317240035	PPD	X			3520 Piedmont Rd NE Ste 100; Atlanta GA 30305	N/A													X			X	X
	PPE*	X			3520 Piedmont Rd NE Ste 100; Atlanta GA 30305																X		
317240039	PPD		X		603 Reposado Dr; La Habra Heights CA 90631-7835	N/A													X			X	X
	PPE*		X		603 Reposado Dr; La Habra Heights CA 90631-7835																X		
317250006	C3		X		P.O. Box 1118; Perris CA 92572														X		X	X	X
317250007	C3		X		PO Box 1118; Perris CA 92572														X		X	X	X
	PPE*		X		PO Box 1118; Perris CA 92572																X		
317260003	PPD	X			23551 Placentia Ave; Perris CA 92570	23551 Placentia Ave; Perris CA 92570													X			X	X
	PPE*	X			23551 Placentia Ave; Perris CA 92570	23551 Placentia Ave; Perris CA 92570															X		
317260004	PPD	X			23551 Placentia Ave; Perris CA 92570	23551 Placentia Ave; Perris CA 92570													X			X	X
	PPE*	X			23551 Placentia Ave; Perris CA 92570	23551 Placentia Ave; Perris CA 92570															X		
317260005	PPD		X		20601 Tobacco Rd; Perris CA 92570	20601 Tobacco Rd; Perris CA 92570													X			X	X
	PPE*		X		20601 Tobacco Rd; Perris CA 92570	20601 Tobacco Rd; Perris CA 92570															X		
317260007	PPD	X			3197 Airport Loop Dr Ste B; Costa Mesa CA 92626	23815 Placentia Ave; Perris CA 92570-8897													X			X	X
	PPE*	X			3197 Airport Loop Dr Ste B; Costa Mesa CA 92626	23815 Placentia Ave; Perris CA 92570-8897															X		
317260017	PPD	X			12328 Oxford Dr; La Mirada CA 90638	23641 Placentia Ave; Perris CA 92570-8701													X			X	X
	PPE*	X	X		12328 Oxford Dr; La Mirada CA 90638	23641 Placentia Ave; Perris CA 92570-8701															X		
317260018	PPD	X			2273 Westwind Way; Signal Hill CA 90755	23745 Placentia Ave; Perris CA 92570-8701													X			X	X
	PPE*	X			2273 Westwind Way; Signal Hill CA 90755	23745 Placentia Ave; Perris CA 92570-8701															X		
317260019	PPD	X			23491 Placentia Ave; Perris CA 92570	23491 Placentia Ave; Perris CA 92570													X			X	X
	PPE*	X			23491 Placentia Ave; Perris CA 92570	23491 Placentia Ave; Perris CA 92570															X		
317260020	PPD		X		20610 Patterson Ave; Perris CA 92570	20550 Patterson Ave; Perris CA 92570													X			X	X
	PPE*	X			20610 Patterson Ave; Perris CA 92570	20550 Patterson Ave; Perris CA 92570															X		
317260021	PPE*		X		20610 Patterson Ave; Perris CA 92570	20610 Patterson Ave; Perris CA 92570															X		
317260024	PPD	X			23511 Placentia Ave; Perris CA 92570	23511 Placentia Ave; Perris CA 92570													X			X	X
	PPE*	X			23511 Placentia Ave; Perris CA 92570	23511 Placentia Ave; Perris CA 92570															X		
317260027	PPD	X			PO Box 1325 Newport Beach, CA 92659-0325	N/A													X			X	X
	PPE*	X			PO Box 1325 Newport Beach, CA 92659-0325																X		
317260029	PPD			X	464 W 4th St Fl 6th; San Bernardino CA 92401	N/A													X			X	X
	PPE*			X	464 W 4th St Fl 6th; San Bernardino CA 92401																X		
317260030	PPD	X			PO Box 1325 Newport Beach, CA 92659-0325	N/A													X			X	X
	PPE*	X			PO Box 1325 Newport Beach, CA 92659-0325																X		
317260031	PPD	X			PO Box 1325 Newport Beach, CA 92659-0325	N/A													X			X	X
	PPE*	X			PO Box 1325 Newport Beach, CA 92659-0325																X		

Parcel Acquisitions

APN	Segment	Acquisitions			Mailing Address	Physical Location Address	Alternative															
		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
317260032	PPD	X			PO Box 1325 Newport Beach, CA 92659-0325	N/A													X			X	X
	PPE*		X		PO Box 1325 Newport Beach, CA 92659-0325																X		
318061009	MV		X		29850 Lakeview Ave; Nuevo CA 92567		X	X	X	X	X	X	X	X	X	X	X	X					
318061010	MV	X			29850 Lakeview Ave; Nuevo CA 92567		X	X	X	X	X	X	X	X	X	X	X	X					
318061013	MV	X			7508 Rosecrans Ave; Paramount CA 90723		X	X	X	X	X	X	X	X	X	X	X	X					
318061014	MV	X			21740 Markham St; Perris CA 92570		X	X	X	X	X	X	X	X	X	X	X	X					
318061015	MV	X			21700 Markham St; Perris CA 92570		X	X	X	X	X	X	X	X	X	X	X	X					
318061016	MV	X			19433 Florence St; Perris CA 92570	19433 Florence St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
318061026	MV	X			21700 Markham St; Perris CA 92570	21020 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
318062011	MV	X			21110 Cajalco Rd; Perris CA 92570	21110 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
318062013	MV	X			3943 Irvine Blvd Ste 400; Irvine CA 92602		X	X	X	X	X	X	X	X	X	X	X	X					
318070005	MV		X		1271 Poplar Ave Apt 210; Sunnyvale CA 94086		X	X	X	X	X	X	X	X	X	X	X	X					
318070006	MV	X			9412 Wilmington Ave; Los Angeles CA 90002		X	X	X	X	X	X	X	X	X	X	X	X					
318070010	MV		X		PO Box 7731; Moreno Valley CA 92552		X	X	X	X	X	X	X	X	X	X	X	X					
318090007	MV	X			5856 Quinn St; Bell Gardens CA 90201		X	X	X	X	X	X	X	X	X	X	X	X					
318090008	MV	X			5856 Quinn St; Bell Gardens CA 90201		X	X	X	X	X	X	X	X	X	X	X	X					
318090009	MV	X			PO Box 2209; Newport Beach CA 92659		X	X	X	X	X	X	X	X	X	X	X	X					
318090010	MV	X			11655 Alabama St; Los Angeles CA 90059		X	X	X	X	X	X	X	X	X	X	X	X					
318090011	MV	X			11655 Alabama St; Los Angeles CA 90059	21291 Johnson St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
318090012	MV	X			19430 Haines St; Perris CA 92570	19430 Haines St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
318090013	MV	X			16723 Foz Trot Ln; Moreno Valley CA 92555	21258 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
318090014	MV	X			18331 Haines St; Perris CA 92570	21274 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
318090015	MV	X			11655 Alabama St; Los Angeles CA 90059		X	X	X	X	X	X	X	X	X	X	X	X					
318090016	MV	X			11655 Alabama St; Los Angeles CA 90059	21314 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
318090017	MV	X			1811 Willowbrook; Perris CA 92570		X	X	X	X	X	X	X	X	X	X	X	X					
318090018	MV	X			1811 Willowbrook; Perris CA 92570		X	X	X	X	X	X	X	X	X	X	X	X					
318090020	MV	X			1431 Grissom Park Dr; Fullerton CA 92833		X	X	X	X	X	X	X	X	X	X	X	X					
318090023	MV	X			1431 Grissom Park Dr; Fullerton CA 92833		X	X	X	X	X	X	X	X	X	X	X	X					
318090024	MV	X			1811 Willowbrook; Perris CA 92570		X	X	X	X	X	X	X	X	X	X	X	X					
318090028	MV	X			21760 Corso Alto Ave; Nuevo CA 92567	19391 Clark St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
318090030	MV	X			21334 Johnson St; Perris CA 92570	21454 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
318090031	MV	X			126 N Carmalita St; Hemet CA 92543		X	X	X	X	X	X	X	X	X	X	X	X					
318090032	MV	X			126 N Carmalita St; Hemet CA 92543		X	X	X	X	X	X	X	X	X	X	X	X					
318090034	MV	X			12771 Foreman Ave; Moreno Valley CA 92553		X	X	X	X	X	X	X	X	X	X	X	X					
318090035	MV		X		PO Box 742; Perris CA 92572		X	X	X	X	X	X	X	X	X	X	X	X					
318090036	MV	X			21760 Corso Alto Ave; Nuevo CA 92567		X	X	X	X	X	X	X	X	X	X	X	X					
318100004	MV	X			3133 7th St; Riverside CA 92501		X	X	X	X	X	X	X	X	X	X	X	X					

Parcel Acquisitions

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		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
318100011	MV	X			n/a		X	X	X	X	X	X	X	X	X	X	X	X					
318100022	MV		X		21705 Martin St; Perris CA 92570		X	X	X	X	X	X	X	X	X	X	X	X					
318100023	MV	X			2030 Main St ste 1300; Irvine CA 92614		X	X	X	X	X	X	X	X	X	X	X	X					
318100029	MV		X		2030 Main St ste 1300; Irvine CA 92614		X	X	X	X	X	X	X	X	X	X	X	X					
318110018	MV		X		19102 Laurenrae St; Riverside CA 92508	19421 Robinson St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
318110019	MV	X			14319 S Keene Ave; Compton CA 90220		X	X	X	X	X	X	X	X	X	X	X	X					
318110020	MV	X			2339 Montera Dr; Hacienda Heights CA 91745		X	X	X	X	X	X	X	X	X	X	X	X					
318110021	MV	X			21830 Cajalco Rd; Perris CA 92570	21820 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
318110022	MV	X			21858 Cajalco Rd; Perris CA 92570	21858 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
318110023	MV	X			1455 Garcia Pl; Placentia CA 92870		X	X	X	X	X	X	X	X	X	X	X	X					
318110024	MV	X			20873 Nandina Ave; Perris CA 92570		X	X	X	X	X	X	X	X	X	X	X	X					
318110025	MV		X		3691 Kansas Ave; Riverside CA 92507		X	X	X	X	X	X	X	X	X	X	X	X					
318110059	MV	X			1839 E Calstock St; Carson CA 90746		X	X	X	X	X	X	X	X	X	X	X	X					
318110060	MV	X			2006 N Salinas Ave; Los Angeles CA 90059	21962 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
318110061	MV	X			230 S Emerald St; Anaheim CA 92804		X	X	X	X	X	X	X	X	X	X	X	X					
318120030	MV		X		1014 Jadestone Ln; Corona CA 92882		X	X	X	X	X	X	X	X	X	X	X	X					
318120031	MV		X		1033 E Cumberland Rd; Orange CA 92865		X	X	X	X	X	X	X	X	X	X	X	X					
318130001	MV		X		6692 Indiana Ave; Riverside CA 92506		X	X	X	X	X	X	X	X	X	X	X	X					
318130002	MV		X		2406 W Washington Ave; Santa Ana CA 92706		X	X	X	X	X	X	X	X	X	X	X	X					
318130003	MV		X		21760 Corso Alto Ave; Nuevo CA 92567		X	X	X	X	X	X	X	X	X	X	X	X					
318130004	MV		X		21760 Corso Alto Ave; Nuevo CA 92567	21623 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
318130005	MV		X		3054 Field Ave; Los Angeles CA 90016		X	X	X	X	X	X	X	X	X	X	X	X					
318130012	MV		X		21705 Cajalco Rd; Perris CA 92570		X	X	X	X	X	X	X	X	X	X	X	X					
318140002	MV		X		21274 Cajalco Rd; Perris CA 92570	21321 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
318140003	MV		X		21760 Corso Alto Ave; Nuevo CA 92567		X	X	X	X	X	X	X	X	X	X	X	X					
318140004	MV	X			21760 Corso Alto Ave; Nuevo CA 92567	21381 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
318140005	MV	X			20280 Old Elsinore Rd; Perris CA 92570	21415 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
318140007	MV		X		100 Campanita Ct; Monterey Park CA 91754		X	X	X	X	X	X	X	X	X	X	X	X					
318140015	MV		X		21760 Corso Alto Ave; Nuevo CA 92567		X	X	X	X	X	X	X	X	X	X	X	X					
318140016	MV		X		2006 Old Highway 395; Fallbrook CA 92028		X	X	X	X	X	X	X	X	X	X	X	X					
318140017	MV		X		2339 Montera Dr; Hacienda Heights CA 91745		X	X	X	X	X	X	X	X	X	X	X	X					
318140019	MV			X	PO Box 8300; Perris CA 92572		X	X	X	X	X	X	X	X	X	X	X	X					
318140021	MV		X		21760 Corso Alto Ave; Nuevo CA 92567		X	X	X	X	X	X	X	X	X	X	X	X					
318140028	MV	X			21419 Cajalco Rd; Perris CA 92570	21419 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
318140029	MV	X			21419 Cajalco Rd; Perris CA 92570	21425 Cajalco Rd; Perris CA 29570	X	X	X	X	X	X	X	X	X	X	X	X					
318270012	C2*		X		1265 Lilac Ridge Dr; Perris CA 92571															X			
318270026	C2*	X			21790 Orange Ave; Perris CA 92570	21790 Orange Ave; Perris CA 92570														X			

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		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
318270027	C2*		X		21840 Orange Ave; Perris CA 92570	21840 Orange Ave; Perris CA 92570														X			
318270028	C2*		X		21910 Orange Ave; Perris CA 92570	20910 Old Elsinore Rd; Perris CA 92570														X			
318270034	C2*	X			6216 Flores Ave; Los Angeles CA 90056	21911 Orange Ave; Perris CA 92570														X			
318270035	C2*		X		638 W 121st St; Los Angeles CA 90044															X			
318270040	C2*		X		43945 12th St W #127; Lancaster CA 93534															X			
	C3		X		43945 12th St W #127; Lancaster CA 93534														X		X	X	X
318270045	C2*		X		PO Box 4163; Riverside CA 92514	20850 Old Elsinore Rd; Perris CA 29570														X			
318270046	C2*		X		20900 Old elsinore Rd; Perris CA 92570	20900 Old elsinore Rd; Perris CA 92570														X			
	C3		X		20900 Old Elsinore Rd; Perris CA 92570	20900 Old Elsinore Rd; Perris CA 92570													X		X	X	X
318270047	C2*	X			20950 Old Elsinore Rd; Perris CA 92570	20950 Old Elsinore Rd; Perris CA 92570														X			
	C3		X		20950 Old Elsinore Rd; Perris CA 92570	20950 Old Elsinore Rd; Perris CA 92570													X		X	X	X
318270048	C2*	X			20950 Old Elsinore Rd; Perris CA 92570	20992 Old Elsinore Rd; Perris CA 92570														X			
	C3		X		20950 Old Elsinore Rd; Perris CA 92570	20992 Old Elsinore Rd; Perris CA 92570													X		X	X	X
318270054	C2*		X		15550 Stoney Creek Dr; Riverside CA 92504	21770 Orange Ave; Perris CA 92570														X			
318270057	C2*		X		21720 Orange Ave No B; Perris CA 92571	21720 Orange Ave B; Perris CA 92570														X			
318270058	C2*		X		21910 Orange Ave; Perris CA 92570	21750 Orange Ave; Perris CA 92570														X			
318270063	C2*			X	PO Box 8300; Perris CA 92572	20935 Old Elsinore Rd; Perris CA 92570														X			
318270070	C2*	X			20915 Old Elsinore Rd; Perris CA 92570	20915 Old Elsinore Rd; Perris CA 92570														X			
318281030	MV	X			2030 Main St ste 1300; Irvine CA 92614		X	X	X	X	X	X	X	X	X	X	X	X					
318281031	MV	X			2030 Main St ste 1300; Irvine CA 92614		X	X	X	X	X	X	X	X	X	X	X	X					
318282042	MV		X		19290 Castlerock Trl; Perris CA 92570	19290 Castlerock Trl; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
318283001	MV		X		19295 Castlerock Trl; Perris CA 92570	19295 Castlerock Trl; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
318283002	MV		X		19305 Castlerock Trl; Perris CA 92570	19305 Castlerock Trl; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
318283003	MV		X		19315 Castlerock Trl; Perris CA 92570	19315 Castlerock Trl; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
318283004	MV		X		19325 Castlerock Trl; Perris CA 92570	19325 Castlerock Trl; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
318283005	MV		X		19335 Castlerock Trl; Perris CA 92570	19335 Castlerock Trl; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
318283006	MV	X			19345 Castlerock Trl; Perris CA 92570	19345 Castlerock Trl; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
318283007	MV	X			2030 Main St ste 1300; Irvine CA 92614		X	X	X	X	X	X	X	X	X	X	X	X					
319020018	MV		X		341 W 2nd St Ste 1; San Bernardino CA 92401		X	X	X	X	X	X	X	X	X	X	X	X					
319020019	MV		X		20750 Ventura Blvd Ste 205; Woodland Hills CA 92364		X	X	X	X	X	X	X	X	X	X	X	X					
319020020	MV		X		5023 Parkway Calabasas; Calabasas CA 91302		X	X	X	X	X	X	X	X	X	X	X	X					
319020022	MV		X		341 W 2nd St Ste 1; San Bernardino CA 92401		X	X	X	X	X	X	X	X	X	X	X	X					
319051021	MV			X	1327 W Brewster Ave; Anaheim CA 92801		X	X	X	X	X	X	X	X	X	X	X	X					
319051022	MV	X			20902 Wells St; Perris CA 92570	20902 Wells St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319051023	MV	X			423 Serrana Rd; Perris CA 92570		X	X	X	X	X	X	X	X	X	X	X	X					
319051024	MV	X			16113 Foothill Blvd; Fontana CA 92335		X	X	X	X	X	X	X	X	X	X	X	X					
319051025	MV	X			12212 Lorna St; Garden Grove CA 92841		X	X	X	X	X	X	X	X	X	X	X	X					

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319051026	MV	X			345 E Holly St; Rialto CA 92376		X	X	X	X	X	X	X	X	X	X	X	X					
319051027	MV	X			20802 Wells St; Perris CA 92570	20802 Wells St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319051028	MV	X			27341 Valley Center Rd; Valley Center CA 92082		X	X	X	X	X	X	X	X	X	X	X	X					
319051029	MV	X			20760 Wells St; Perris CA 92570	20760 Wells St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319052003	MV	X			PO Box 303; Pomona CA 91769		X	X	X	X	X	X	X	X	X	X	X	X					
319052004	MV	X			21590 Nance St; Perris CA 92570		X	X	X	X	X	X	X	X	X	X	X	X					
319052005	MV	X			6809 Brockton Ave; Riverside CA 92506		X	X	X	X	X	X	X	X	X	X	X	X					
319052006	MV	X			6809 Brockton Ave; Riverside CA 92506		X	X	X	X	X	X	X	X	X	X	X	X					
319052007	MV	X			423 Serrana Rd; Perris CA 92570		X	X	X	X	X	X	X	X	X	X	X	X					
319052008	MV	X			20901 Wells St; Perris CA 92570	20901 Wells St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319052009	MV	X			25316 Brodiaea Ave; Moreno Valley CA 92553	20915 Wells St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319052010	MV	X			25316 Brodiaea Ave; Moreno Valley CA 92553		X	X	X	X	X	X	X	X	X	X	X	X					
319052011	MV	X			320 W Bennett St; Compton CA 90220		X	X	X	X	X	X	X	X	X	X	X	X					
319052012	MV	X			320 W Bennett St; Compton CA 90220		X	X	X	X	X	X	X	X	X	X	X	X					
319052013	MV	X			320 W Bennett St; Compton CA 90220		X	X	X	X	X	X	X	X	X	X	X	X					
319052015	MV	X			2901 Amber Dr; Corona CA 92882		X	X	X	X	X	X	X	X	X	X	X	X					
319052016	MV	X			20950 Cajalco Rd; Perris CA 92570	20950 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319052017	MV	X			20934 Cajalco Rd; Perris CA 92570	20934 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319052018	MV	X			20914 Cajalco Rd; Perris CA 92570	20914 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319052019	MV	X			21590 Nancest; Perris CA 92570	20900 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319052020	MV	X			423 Serrana Rd; Perris CA 92570		X	X	X	X	X	X	X	X	X	X	X	X					
319052021	MV	X			12138 Elva Ave; Los Angeles CA 90059		X	X	X	X	X	X	X	X	X	X	X	X					
319052022	MV	X			16650 Stallion Pl; Riverside CA 92504	20858 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319052023	MV	X			4508 Lone Pine Ln; La Canada Flintridge CA 91011		X	X	X	X	X	X	X	X	X	X	X	X					
319052024	MV	X			1345 N Santiago St; Santa Ana CA 92701	20810 Cajalco Rd; Perris CA 92701	X	X	X	X	X	X	X	X	X	X	X	X					
319052025	MV	X			PO Box 303; Pomona CA 91769	20794 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319052026	MV	X			20780 Cajalco Rd; Perris CA 92570	20780 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319052027	MV	X			16231 Blossom Time Ct; Riverside CA 92503	20764 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319052028	MV	X			19444 Mead St; Perris CA 92570	19444 Mead St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319052029	MV	X			2901 Amber Dr; Corona CA 92882		X	X	X	X	X	X	X	X	X	X	X	X					
319061001	MV	X			15 Weizemann St No 6; Rishon Lezion Israel 75287	20525 Moore St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319061002	MV	X			26301 Amanda St; Hemet CA 92545	20541 Moore St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319061003	MV	X			PO Box 303; Perris CA 92572	20559 Moore St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319061004	MV	X			20573 Moore St; Perris CA 92570	20573 Moore St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319061005	MV	X			20585 Moore St; Perris CA 92570	20585 Moore St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319061006	MV	X			20605 Moore St; Perris CA 92570	20605 Moore St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319061007	MV	X			20621 Moore St; Perris CA 92570	20621 Moore St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					

Parcel Acquisitions

APN	Segment	Acquisitions			Mailing Address	Physical Location Address	Alternative															
		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
319061008	MV	X			20635 Moore St; Perris CA 92570	20635 Moore St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319061016	MV	X			20700 Wells St; Perris CA 92570	20700 Wells St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319061017	MV	X			20682 Wells St; Perris CA 92570	20682 Wells St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319061018	MV	X			20668 Wells St; Perris CA 92570	20668 Wells St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319061019	MV	X			20650 Wells St; Perris CA 92570	20650 Wells St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319061020	MV	X			20630 Wells St; Perris CA 92570	20630 Wells St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319061021	MV	X			20610 Wells St; Perris CA 92570	20610 Wells St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319061022	MV	X			20590 Wells St; Perris CA 92570	20590 Wells St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319061023	MV	X			20570 Wells St; Perris CA 92570	20570 Wells St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319061024	MV	X			20546 Wells St; Perris CA 92570	20546 Wells St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319061025	MV	X			1058 W Olive St; Corona CA 92882		X	X	X	X	X	X	X	X	X	X	X	X					
319061026	MV	X			19410 Alexander St; Perris CA 92570	19410 Alexander St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319061028	MV	X			20740 Wells St; Perris CA 92570	20740 Wells St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319061029	MV	X			20736 Wells St; Perris CA 92570	20736 Wells St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319062001	MV	X			19440 Alexander St; Perris CA 92570	19440 Alexander St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319062002	MV	X			19440 Alexander St; Perris CA 92570		X	X	X	X	X	X	X	X	X	X	X	X					
319062003	MV	X			PO Box 292514; Los Angeles CA 90029		X	X	X	X	X	X	X	X	X	X	X	X					
319062004	MV	X			Wells St; Perris CA 92570		X	X	X	X	X	X	X	X	X	X	X	X					
319062005	MV	X			1718 S Marine St; Santa Ana CA 92704		X	X	X	X	X	X	X	X	X	X	X	X					
319062006	MV	X			1718 S Marine St; Santa Ana CA 92704		X	X	X	X	X	X	X	X	X	X	X	X					
319062007	MV	X			20625 Wells St; Perris CA 92570	20625 Wells St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319062008	MV	X			20641 Wells St; Perris CA 92570	20641 Wells St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319062009	MV	X			20657 Wells St; Perris CA 92570	20657 Wells St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319062010	MV	X			20685 Wells St; Perris CA 92570	20685 Wells St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319062011	MV	X			17491 Bastanchury Rd; Yorba Linda CA 92886	20701 Wells St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319062012	MV	X			20723 Wells St; Perris CA 92570	20723 Wells St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319062013	MV	X			20723 Wells St; Perris CA 92570		X	X	X	X	X	X	X	X	X	X	X	X					
319062014	MV	X			6465 E Shady Valley Ln; Anaheim CA 92807		X	X	X	X	X	X	X	X	X	X	X	X					
319062015	MV	X			7749 Calle Bresca; Rancho Cucamonga CA 91730		X	X	X	X	X	X	X	X	X	X	X	X					
319062016	MV	X			7749 Calle Bresca; Rancho Cucamonga CA 91730		X	X	X	X	X	X	X	X	X	X	X	X					
319062017	MV	X			7749 Calle Bresca; Rancho Cucamonga CA 91730		X	X	X	X	X	X	X	X	X	X	X	X					
319062018	MV	X			10809 Anemore cir; Moreno Valley CA 92557	20680 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319062019	MV	X			n/a		X	X	X	X	X	X	X	X	X	X	X	X					
319062020	MV	X			4692 Hedrick Ave; Riverside CA 92505		X	X	X	X	X	X	X	X	X	X	X	X					
319062021	MV	X			5646 Van Buren Blvd; Riverside CA 92503		X	X	X	X	X	X	X	X	X	X	X	X					
319062022	MV	X			PO Box 4098; Riverside CA 92514		X	X	X	X	X	X	X	X	X	X	X	X					
319062023	MV	X			22215 Norma St; Perris CA 92570		X	X	X	X	X	X	X	X	X	X	X	X					

Parcel Acquisitions

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		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
319062024	MV	X			21720 Johns St; Perris CA 92570	20572 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319062025	MV	X			PO Box 292514; Los Angeles CA 90029		X	X	X	X	X	X	X	X	X	X	X	X					
319062026	MV	X			1001 E Saint Andrew Pl; Santa Ana CA 92707		X	X	X	X	X	X	X	X	X	X	X	X					
319062027	MV	X			1001 E Saint Andrew Pl; Santa Ana CA 92707		X	X	X	X	X	X	X	X	X	X	X	X					
319071001	MV	X			409 E Sherman St Apt B; Calexico CA 92231	20050 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319072001	MV	X			9549 Shoshone Ave; Northridge CA 91325		X	X	X	X	X	X	X	X	X	X	X	X					
319072002	MV	X			9549 Shoshone Ave; Northridge CA 91325		X	X	X	X	X	X	X	X	X	X	X	X					
319072003	MV	X			11530 Victoria Ave; Riverside CA 92503	20195 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319072004	MV	X			20211 Cajalco Rd; Perris CA 92570	20211 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319072005	MV	X			20221 Cajalco Rd; Perris CA 92570	20221 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319072006	MV	X			212 E Williams St; Barstow CA 92311	20231 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319072007	MV	X			4709 Gettysburg Ave; Chino CA 91710		X	X	X	X	X	X	X	X	X	X	X	X					
319072008	MV		X		19565 Una St; Perris CA 92570	19565 Una St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319072009	MV		X		18777 9th St; Bloomington CA 92316	20240 Souder St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319072010	MV		X		20200 Souder St; Perris CA 92570	20200 Souder St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319072011	MV		X		20190 Souder St; Perris CA 92570	20190 Souder St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319072012	MV		X		20180 Souder St; Perris CA 92570	20180 Souder St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319072013	MV		X		9549 Shoshone Ave; Northridge CA 91325		X	X	X	X	X	X	X	X	X	X	X	X					
319072014	MV		X		9549 Shoshone Ave; Northridge CA 91325		X	X	X	X	X	X	X	X	X	X	X	X					
319072015	MV		X		20735 Verta St; Perris CA 92570	20120 Souder St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319121001	MV	X			20253 Cajalco Rd; Perris CA 92570	20253 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319121002	MV	X			n/a		X	X	X	X	X	X	X	X	X	X	X	X					
319121003	MV	X			n/a		X	X	X	X	X	X	X	X	X	X	X	X					
319121004	MV	X			909 E Norwood Pl; Alhambra CA 91801		X	X	X	X	X	X	X	X	X	X	X	X					
319121005	MV	X			20295 Cajalco Rd; Perris CA 92570	20295 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319121006	MV	X			20337 Cajalco Rd; Perris CA 92570	20337 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319121007	MV	X			19400 Prospect St; Desert Hot Springs CA 92241	20355 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319121009	MV	X			20401Cajalco Rd; Perris CA 92570	20401Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319121010	MV	X			20415 Cajalco Rd; Perris CA 92570	20415 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319121011	MV	X			20764 Markham St; Perris CA 92570	20433 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319121012	MV	X			25308 Delphiniym Ave; Moreno Valley CA 92553	20443 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319121013	MV	X			20475 Cajalco Rd; Perris CA 92570	20475 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319121014	MV	X			20495 Cajalco Rd; Perris CA 92570	20495 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319121016	MV	X			PO Box 6153; March air Reserve Base CA 92518	20358 Souder St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319121019	MV		X		20348 Souder St; Perris CA 92570	20348 Souder St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319121020	MV		X		20342 Souder St; Perris CA 92570	20342 Souder St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319121021	MV		X		9549 Shoshone Ave; Northridge CA 91325		X	X	X	X	X	X	X	X	X	X	X	X					

Parcel Acquisitions

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		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
319121022	MV	X			20352 Souder St; Perris CA 92570	20352 Souder St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319121023	MV	X			20385 Cajalco Rd; Perris CA 92570	20385 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319121026	MV	X			19515 Alexander St; Perris CA 92570	19515 Alexander St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319121027	MV		X		PO Box 1258; Tustin CA 92781	20360 Souder St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319121028	MV		X		116 W Marshall St; San Gabriel CA 91776	20380 Souder St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319121029	MV		X		20627 Myron St; Perris CA 92570	20400 Souder St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319121030	MV		X		20412 Souder St; Perris CA 92570	20412 Souder St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319121031	MV		X		PO Box 1258; Tustin CA 92781	20430 Souder St; Tustin CA 92781	X	X	X	X	X	X	X	X	X	X	X	X					
319121033	MV	X			909 E Norwood Pl; Alhambra CA 91801		X	X	X	X	X	X	X	X	X	X	X	X					
319131001	MV	X			20505 Cajalco Rd; Perris CA 92570	20505 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319131002	MV	X			20505 Cajalco Rd; Perris CA 92570		X	X	X	X	X	X	X	X	X	X	X	X					
319131003	MV	X			21933 Perry St; Perris CA 92570		X	X	X	X	X	X	X	X	X	X	X	X					
319131004	MV	X			20551 Cajalco Rd; Perris CA 92570	20551 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319131009	MV	X			32391 Ortega Hwy; Lake Elsinore CA 92530	20601 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319131010	MV	X			20645 Cajalco Rd; Perris CA 92570	20645 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319131011	MV	X			22631 Strohm Dr; Perris CA 92570	20655 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319131012	MV	X			113 S Andres Pl; Santa Ana CA 92704		X	X	X	X	X	X	X	X	X	X	X	X					
319131013	MV	X			20673 Cajalco Rd; Perris CA 92570		X	X	X	X	X	X	X	X	X	X	X	X					
319131014	MV	X			20673 Cajalco Rd; Perris CA 92570	20673 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319131015	MV	X			n/a	20701 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319131016	MV	X			9239 Whiting Way; Riverside CA 92508	20721 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319131017	MV	X			8300 Cherry Ave Spc 9; Fontana CA 92335		X	X	X	X	X	X	X	X	X	X	X	X					
319131024	MV		X		20660 Souder St; Perris CA 92570	20660 Souder St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319131025	MV		X		PO Box 2264; Perris CA 92572		X	X	X	X	X	X	X	X	X	X	X	X					
319131026	MV		X		PO Box 2264; Perris CA 92572	20630 Souder St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319131027	MV		X		20610 Souder St; Perris CA 92570	20610 Souder St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319131028	MV		X		89 Blvd Des Mimosas; Saint Raphael, France 83700	20580 Souder St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319131033	MV	X			10550 Dunlap Crossing Rd Spc 76; Whittier CA 90606	19560 Alexander St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319131034	MV		X		PO Box 1599; Perris CA 92572	20560 Souder St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319131036	MV	X			20555 Cajalco Rd; Perris CA 92570	20555 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319131037	MV	X			20581 Cajalco Rd; Perris CA 92570	20581 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319181014	MV	X			193 S 6th Ave; Yuma AZ 85364	18565 Brown St; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319181027	MV	X			20761 Cajalco Rd; Perris CA 92570	20761 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319181028	MV	X			PO Box 17774; Irvine CA 92623	20775 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319181029	MV		X		802 Ford St; Corona CA 92879	20795 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319181030	MV		X		20815 Cajalco Rd; Perris CA 92570	20815 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
319181033	MV	X			1525 Euston Rd; San Marino CA 91108		X	X	X	X	X	X	X	X	X	X	X	X					

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		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
319210002	FS		X		PO Box 2001; Yorba Linda CA 92885	-													X	X	X	X	X
319230008	FS		X		19660 Glenwood Ave; Riverside CA 92508	-													X	X	X	X	X
321110012	LMS		X		16835 Algonquin St; Huntington Beach CA 92649	18300 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X											
	MV		X		16835 Algonquin St; Huntington Beach CA 92649	18300 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
321110014	LMS		X		18318 Cajalco Rd; Perris CA 92570	18318 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X											
	MV		X		18318 Cajalco Rd; Perris CA 92570	18318 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
321110018	MV		X		1783 Oak Ln; San Marino CA 91108		X	X	X	X	X	X	X	X	X	X	X	X					
321110019	MV		X		1783 Oak Ln; San Marino CA 91108		X	X	X	X	X	X	X	X	X	X	X	X					
321110020	MV		X		18318 Cajalco Rd; Perris CA 92570	19255 Wood Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
321110026	LMS		X		1783 Oak Ln; San Marino CA 91108		X	X	X	X	X	X											
	MV		X		1783 Oak Ln; San Marino CA 91108		X	X	X	X	X	X	X	X	X	X	X	X					
321110027	MV		X		1783 Oak Ln; San Marino CA 91108		X	X	X	X	X	X	X	X	X	X	X	X					
321120001	LMS		X		4525 Wilshire Blvd; Los Angeles CA 90010		X	X	X	X	X	X											
	MV		X		4525 Wilshire Blvd; Los Angeles CA 90010		X	X	X	X	X	X	X	X	X	X	X	X					
321120002	LMS	X			4525 Wilshire Blvd; Los Angeles CA 90010		X	X	X	X	X	X											
	MV	X			4525 Wilshire Blvd; Los Angeles CA 90010		X	X	X	X	X	X	X	X	X	X	X	X					
321120006	LMS		X		4525 Wilshire Blvd; Los Angeles CA 90010	18281 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X											
	MV		X		4525 Wilshire Blvd; Los Angeles CA 90010	18281 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
321120007	LMS		X		4525 Wilshire Blvd; Los Angeles CA 90010		X	X	X	X	X	X											
	MV		X		4525 Wilshire Blvd; Los Angeles CA 90010		X	X	X	X	X	X	X	X	X	X	X	X					
321120011	LMS			X	PO BOX 54153; Los Angeles CA 90054		X	X	X	X	X	X											
	MV			X	PO BOX 54153; Los Angeles CA 90054		X	X	X	X	X	X	X	X	X	X	X	X					
321120013	MV		X		9580 Garden Grove Blvd Ste 300; Garden Grove CA 92844	18591 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
321120014	LMS		X		4525 Wilshire Blvd; Los Angeles CA 90010		X	X	X	X	X	X											
	MV		X		4525 Wilshire Blvd; Los Angeles CA 90010		X	X	X	X	X	X	X	X	X	X	X	X					
321120015	LMS	X			4525 Wilshire Blvd; Los Angeles CA 90010		X	X	X	X	X	X											
	MV	X			4525 Wilshire Blvd; Los Angeles CA 90010		X	X	X	X	X	X	X	X	X	X	X	X					
321120016	MV		X		PO Box 5286; Riverside CA 92517		X	X	X	X	X	X	X	X	X	X	X	X					
321120017	MV		X		5023 Parkway Calabasas; Calabasas CA 91302		X	X	X	X	X	X	X	X	X	X	X	X					
321130016	MV		X		20750 Ventura Blvd Ste 205; Woodland Hills CA 92364		X	X	X	X	X	X	X	X	X	X	X	X					
321130017	MV		X		20750 Ventura Blvd Ste 205; Woodland Hills CA 92364		X	X	X	X	X	X	X	X	X	X	X	X					
321130018	MV		X		20750 Ventura Blvd Ste 205; Woodland Hills CA 92364		X	X	X	X	X	X	X	X	X	X	X	X					
321130039	MV		X		341 W 2nd St Ste 1; San Bernardino CA 92401		X	X	X	X	X	X	X	X	X	X	X	X					
321130042	MV		X		40925 County Center Dr Suite 110; Temecula CA 92591		X	X	X	X	X	X	X	X	X	X	X	X					
321140003	MV	X			601 Peralta Hills Dr; Anaheim CA 92806		X	X	X	X	X	X	X	X	X	X	X	X					
321140016	MV			X	PO Box 54153; Los Angeles CA 90054		X	X	X	X	X	X	X	X	X	X	X	X					
321140034	MV		X		PO Box 1987; Perris CA 92572	19203 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					

Parcel Acquisitions

APN	Segment	Acquisitions			Mailing Address	Physical Location Address	Alternative															
		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
321140035	MV		X		PO Box 1987; Perris CA 92572		X	X	X	X	X	X	X	X	X	X	X	X					
321140036	MV		X		PO Box 1987; Perris CA 92572		X	X	X	X	X	X	X	X	X	X	X	X					
321150009	FS		X		341 W 2nd St Ste 1; San Bernardino CA 92401	-													X	X	X	X	X
321150012	FS		X		N/A	-													X	X	X	X	X
321150013	FS		X		561 Fairview Rd; Simi Valley CA 93065	-													X	X	X	X	X
321150021	FS		X		2117 E Ward Ter; Anaheim CA 92806	-													X	X	X	X	X
321150022	FS		X		10854 Mercer Ave; Riverside CA 92505	-													X	X	X	X	X
321150025	FS		X		21085 Juniper Rd; Perris CA 92570	-													X	X	X	X	X
321150026	FS		X		444 S Flower St Ste 1200; Los Angeles CA 90071	-													X	X	X	X	X
321150027	FS		X		444 S Flower St Ste 1200; Los Angeles CA 90071	-													X	X	X	X	X
321260020	LMS		X		6087 Sunny Cir; Mira Loma CA 91752	18200 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X											
	MV		X		6087 Sunny Cir; Mira Loma CA 91752	18200 Cajalco Rd; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
321270008	FS		X		PO Box 570653; Tarzana CA 91357	-													X	X	X	X	X
321270027	FS	X			21085 Juniper Rd; Perris CA 92570	21085 Juniper Rd; Perris CA 92570													X	X	X	X	X
321483009	MV		X		19569 Rocky Summit Dr; Perris CA 92570	19569 Rocky Summit Dr; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
321483010	MV		X		19408 Sterling Hill Ln; Perris CA 92570	19408 Sterling Hill Ln; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
321493001	MV		X		19263 Rocky Summit Dr; Perris CA 92570	19263 Rocky Summit Dr; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
321493002	MV		X		19281 Rocky Summit Dr; Perris CA 92570	19281 Rocky Summit Dr; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
321493003	MV		X		19299 Rocky Summit Dr; Perris CA 92570	19299 Rocky Summit Dr; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
321493004	MV		X		19317 Rocky Summit Dr; Perris CA 92570	19317 Rocky Summit Dr; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
321493005	MV		X		16575 Bonanza Dr; Riverside CA 92504	19335 Rocky Summit Dr; Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X					
322020001	FS	X			744 N Morgan St Apt B; Orange CA 92867	-													X	X	X	X	X
322020002	FS		X		2430 S Burnside Ave; Los Angeles CA 90016	-													X	X	X	X	X
322020003	FS		X		18819 Clark St; Perris CA 92570	-													X	X	X	X	X
322030001	FS	X			PO Box 95; Perris CA 92572	20554 Fox St; Perris CA 92570													X	X	X	X	X
322030002	FS		X		1001 E Saint Andrew Pl; Santa Ana CA 92707	-													X	X	X	X	X
322030005	FS	X			12840 Waltham St; Baldwin Park CA 91706														X	X	X	X	X
322030006	FS	X			21011 Campos Road, Perris CA 92570	21011 Campos Road, Perris CA 92570													X	X	X	X	X
322030007	FS	X			PO Box 701; Perris CA 92572	21070 Fox St; Perris CA 92570													X	X	X	X	X
322030008	FS	X			21025 Campos Rd; Perris CA 92570	21025 Campos Rd; Perris CA 92570													X	X	X	X	X
322030010	FS		X		1224 S Gramercy Pl; Los Angeles CA 90019	-													X	X	X	X	X
322030015	FS		X		3217 W 133rd St; Hawthorne CA 90250	-													X	X	X	X	X
322030016	FS	X			PO Box 1078; Bloomington CA 92316	20891 Orange Ave; Perris CA 92570													X	X	X	X	X
322030017	FS	X			n/avail; Perris CA 92570	20921 Orange Ave; Perris CA 92570													X	X	X	X	X
322030018	FS	X			20991 Orange Ave; Perris CA 92570	20991 Orange Ave; Perris CA 92570													X	X	X	X	X
322030022	FS		X		10851 Date St; Stanton CA 90680	20980 Fox St; Perris CA 92570													X	X	X	X	X
322100002	C2*		X		1977 N Garey Ave Ste 5; Pomona CA 91767															X			

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		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
	C3		X		1977 N Garey Ave Ste 5; Pomona CA 91767													X		X	X	X
322100004	C2*		X		1977 N Garey Ave Ste 5; Pomona CA 91767														X			
	FS		X		1977 N Garey Ave Ste 5; Pomona CA 91767													X	X	X	X	X
322100005	C2*		X		1635 Foxgrove Ct; Upland CA 91784	21255 Orange Ave; Perris CA 92570													X			
	FS		X		1635 Foxgrove Ct; Upland CA 91784	21255 Orange Ave; Perris CA 92570												X	X	X	X	X
322100006	C2*		X		1977 N Garey Ave Ste 5; Pomona CA 91767														X			
	FS		X		1977 N Garey Ave Ste 5; Pomona CA 91767													X	X	X	X	X
322110001	C2*		X		21531 Orange Ave; Perris CA 92570	21531 Orange Ave; Perris CA 92570													X			
	C3	X			21531 Orange Ave; Perris CA 92570	21531 Orange Ave; Perris CA 92570												X		X	X	X
322110002	C2*	X			21581 Orange Ave; Perris CA 92570	21581 Orange Ave; Perris CA 92570													X			
	C3	X			21581 Orange Ave; Perris CA 92570	21581 Orange Ave; Perris CA 92570												X		X	X	X
322110005	C2*		X		PO Box 1244; Perris CA 92572														X			
	C3		X		PO Box 1244; Perris CA 92572													X		X	X	X
322110009	C2*		X		3656 Alhambra Ln; Perris CA 92571	21031 Old Elsinore Rd; Perris CA 92570													X			
	C3		X		3656 Alhambra Ln; Perris CA 92571	21031 Old Elsinore Rd; Perris CA 92570												X		X	X	X
322110010	C2*	X			PO Box 1178; Pomona CA 91769														X			
	C3		X		PO Box 1178; Pomona CA 91769													X		X	X	X
322110011	C2*	X			21055 Old Elsinore Rd; Perris CA 92570	21055 Old Elsinore Rd; Perris CA 92570													X			
	C3	X			21055 Old Elsinore Rd; Perris CA 92570	21055 Old Elsinore Rd; Perris CA 92570												X		X	X	X
322110012	C2*		X		21131 Old Elsinore Rd; Perris CA 92570	21131 Old Elsinore Rd; Perris CA 92570													X			
	C3	X			21131 Old Elsinore Rd; Perris CA 92570	21131 Old Elsinore Rd; Perris CA 92570												X		X	X	X
322110014	C3		X		21181 Old Elsinore Rd; Perris CA 92570	21181 Old Elsinore Rd; Perris CA 92570												X		X	X	X
322110019	C2*	X			23280 Cox Rd; Perris CA 92570														X			
	C3	X			23280 Cox Rd; Perris CA 92570													X		X	X	X
322110021	C2*		X		21140 Johns St; Perris CA 92570	21140 Johns St; Perris CA 92570													X			
	C3		X		21140 Johns St; Perris CA 92570	21140 Johns St; Perris CA 92570												X		X	X	X
322110027	C2*	X			16143 Abedul St; Moreno Valley CA 92551														X			
	C3		X		16143 Abedul St; Moreno Valley CA 92551													X		X	X	X
322110029	C2*		X		16143 Abedul St; Moreno Valley CA 92551														X			
322110031	C2*		X		18332 Haines St; Perris CA 92570	21725 Orange Ave; Perris CA 92570													X			
322110032	C2*	X			PO Box 705; Perris CA 92572	21721 Orange Ave; Perris CA 92570													X			
	C3	X			PO Box 705; Perris CA 92572	21721 Orange Ave; Perris CA 92570												X		X	X	X
322150001	C3		X		17915 Day St; Perris CA 92570													X		X	X	X
322150002	C3		X		330 S Holly Ave; Compton CA 90221													X		X	X	X
322150006	C3		X		21170 Old Elsinore Rd; Perris CA 92570	21170 Old Elsinore Rd; Perris CA 92570												X		X	X	X
322150013	C3		X		16865 Shelly Ct; Fontana CA 92337													X		X	X	X
322150015	C2*		X		26809 New Dobbel Ave; Hayward CA 94542	21200 Old Elsinor Rd; Perris CA 92570													X			

Parcel Acquisitions

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		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
	C3	X			26809 New Dobbel Ave; Hayward CA 94542	21200 Old Elsinor Rd; Perris CA 92570												X		X	X	X
322150017	C2*		X		18121 E Oakwood Pl: Aurora CO 80016														X			
	C3		X		18121 E Oakwood Pl: Aurora CO 80016													X		X	X	X
322150018	C2*	X			PO Box 25831; Fresno CA 93729														X			
322150019	C2*	X			760 S Carriage Cir; Anaheim CA 92807														X			
	C3		X		760 S Carriage Cir; Anaheim CA 92807													X		X	X	X
322160005	C3		X		P.O. Box 62085; Los Angeles CA 90062													X		X	X	X
381120002	LMNS-GP		X		PO Box 800; Rosemead CA 91770								X	X	X	X	X	X				
425070015	SJ		X		4271 Wilbur Ct; Hemet CA 92544	34860 Ramona Expy, San Jacinto CA 92582	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
425070017	SJ		X		4271 Wilbur Ct; Hemet CA 92544		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
425070024	SJ		X		14245 Anon Ct; Chino CA 91710		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
425070026	SJ		X		14245 Anon Ct; Chino CA 91710		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
425070027	SJ		X		PO Box 800; Rosemead CA 91770		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
425070028	SJ		X		PO Box 800; Rosemead CA 91770		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
425070029	SJ		X		PO Box 800; Rosemead CA 91770		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
425090003	SJ		X		N/Avail	35500 Ramona Expy, San Jacinto CA 92582	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
425090009	SJ		X		4271 Wilbur Ct; Hemet CA 92544		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
425090023	SJN*			X	35750 Ramona Exy; San Jacinto CA 92582			X			X			X			X					X	
425090025	SJ		X		4271 Wilbur Ct; Hemet CA 92544		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
425100005	SJ	X			7080 Cleveland Ave; Corona CA 92880	4050 Ramona Expy, San Jacinto CA 92582	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
425100016	SJ		X		PO Box 800; Rosemead CA 91770		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
425100017	SJ	X					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
425100019	SJ	X					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
425110004	SJ	X			34450 Ramona Exy; Lakeview CA 92567	34020 Ramona Expy, San Jacinto CA 92582	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
425110008	SJ			X	34450 Ramona Exy; Lakeview CA 92567	34240 Ramona Expy, San Jacinto CA 92582	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
425110009	SJ		X		34450 Ramona Exy; Lakeview CA 92567	34240 Ramona Expy, San Jacinto CA 92582	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
425110014	SJ		X		12774 Cloverdale Rd; Corona CA 92880		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
425110015	SJ		X		12774 Cloverdale Rd; Corona CA 92880		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
425120002	SJ		X		1156 N Mountain Ave; Upland CA 91786	33751 Ramona Expy, Nuevo CA 92567	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
425120011	SJ		X		1156 N Mountain Ave; Upland CA 91786		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
425120012	SJ	X			PO Box 8300; Perris CA 92572		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
425130010	SJ		X		PO Box 1310; Lakeview CA 92567	32920 Ramona Expy, Nuevo CA 92568	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
425130011	SJ		X		PO Box 1310; Lakeview CA 92567		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
425130013	SJ		X		445 S D St; Perris CA 92570		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
425130014	SJ		X		445 S D St; Perris CA 92570	33491 Marvin Rd, Perris CA 92570	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
425140001	SJ		X		PO Box 670; Upland CA 91785		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
425140006	SJ		X		1156 N Mountain Ave; Upland CA 91786		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Parcel Acquisitions

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		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
425140007	SJ		X		1156 N Mountain Ave; Upland CA 91786		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
425140011	SJ		X		33455 Ramona Expy; Lakeview CA 92567		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
425140012	SJ		X		1156 N Mountain Ave; Upland CA 91786		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
425150008	SJ	X			32300 Romona Exp; Lakeview CA 92550		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
425150009	SJ		X		32300 Ramona Exy; Lakeview CA 92550	32300 ramona Expy, Nuevo CA 92567	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
425150010	SJ		X		32100 Ramona Exy; Nuevo CA 92567	32100 Ramona Expy, Nuevo CA 92567	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
425160001	SJ		X		5600 Beach Blvd; Buena Park CA 90621		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
425160002	SJ		X		1156 N Mountain Ave; Upland CA 91786		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
425200004	SJ		X		N/Avail	35500 Ramona Expy, San Jacinto CA 92582	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	SJN*		X		N/Avail	35500 Ramona Expy, San Jacinto CA 92582		X			X			X			X					X	
425200014	SJN*		X		N/Avail	35600 Ramona Expy; San Jacinto CA 92582		X			X			X			X					X	
	SJS		X		N/Avail	35600 Ramona Expy; San Jacinto CA 92582	X		X	X		X	X		X	X		X	X	X	X		X
425200015	SJN*		X		24400 Los Rancherias Rd; Hemet CA 92545			X			X			X			X					X	
	SJS		X		24400 Los Rancherias Rd; Hemet CA 92545		X		X	X		X	X		X	X		X	X	X	X		X
425200017	SJN*		X		N/Avail			X			X			X			X					X	
	SJS		X		N/Avail		X		X	X		X	X		X	X		X	X	X	X		X
425200018	SJN*		X		N/Avail			X			X			X			X					X	
	SJS		X		N/Avail		X		X	X		X	X		X	X		X	X	X	X		X
425200019	SJN*		X		35750 Ramona Exy; San Jacinto CA 92582			X			X			X			X					X	
	SJS		X		35750 Ramona Exy; San Jacinto CA 92582	n/a	X		X	X		X	X		X	X		X	X	X	X		X
425200020	SJN*		X		35750 Ramona Exy; San Jacinto CA 92582	35750 Ramona Expy; San Jacinto CA 92582		X			X			X			X					X	
	SJS		X		35750 Ramona Exy; San Jacinto CA 92582	35750 Ramona Expy; San Jacinto CA 92582	X		X	X		X	X		X	X		X	X	X	X		X
425200021	SJS			X	PO Box 54143; Los Angeles CA 90054		X		X	X		X	X		X	X		X	X	X	X		X
425200024	SJ		X		PO Box 5167; Riverside CA 92517	n/a	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	SJN*		X		PO Box 5167; Riverside CA 92517			X			X			X			X					X	
426020005	SJ	X			12534 Harlow Ave; Riverside CA 92503		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
426020006	SJ		X		720 Via Zapata; Riverside CA 92507		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
426020007	SJ		X		PO Box 3369; Manhattan Beach CA 90266		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
426020009	SJ		X		1156 N Mountain Ave; Upland CA 91786		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
426020012	SJ			X	1995 Markey St; Riverside CA 92501		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
426030012	SJ		X		1156 N Mountain Ave; Upland CA 91786		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
426040002	SJ		X		1156 N Mountain Ave; Upland CA 91786	19290 Davis Rd, Nuevo CA 92567	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
426050001	SJ		X		1156 N Mountain Ave; Upland CA 91786		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
426050002	SJ		X		1156 N Mountain Ave; Upland CA 91786		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
426050003	SJ		X		1156 N Mountain Ave; Upland CA 91786	19600 6th. St, Nuevo CA 92567	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
426050004	SJ		X		5600 Beach Blvd; Buena Park CA 90621		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
426050009	SJ	X			1156 N Mountain Ave; Upland CA 91786		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Parcel Acquisitions

APN	Segment	Acquisitions			Mailing Address	Physical Location Address	Alternative															
		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
426060001	SJ		X		PO Box 3369; Manhattan Beach CA 90266		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
426060002	SJ		X		207 Emerald Ave; Newport Beach CA 92662		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
426060003	SJ		X		12774 Cloverdale Rd; Corona CA 92880		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
426060004	SJ		X		PO Box 6317; Norco CA 92860	30661 Reservoir Ave; Nuevo CA 92567	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
426060005	SJ		X		12774 Cloverdale Rd; Corona CA 92880		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
426060020	SJ	X			207 Emerald Ave; Newport Beach CA 92662		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
426060022	SJ		X		12774 Cloverdale Rd; Corona CA 92880		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
426071001	SJ		X		1156 N Mountain Ave; Upland CA 91786		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
426071002	SJ	X			1156 N Mountain Ave; Upland CA 91786		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
426071003	SJ		X		1156 N Mountain Ave; Upland CA 91786		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
426072001	SJ	X			207 Emerald Ave; Newport Beach CA 92662		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
426072002	SJ		X		31491 Nuevo Rd; Nuevo CA 92567	30900 Reservoir Ave, Nuevo CA 92567	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
426081001	SJ		X		1156 N Mountain Ave; Upland CA 91786		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
426081002	SJ			X	1156 N Mountain Ave; Upland CA 91786	n/a	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
426082002	SJ		X		1156 N Mountain Ave; Upland CA 91786		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
426085004	SJ		X		1156 N Mountain Ave; Upland CA 91786		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
426150001	SJ		X		5600 Beach Blvd; Buena Park CA 90621		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
426150006	SJ		X		19720 Orange St; Lakeview CA 92567	19710 Orange St; Nuevo CA 92567	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
430070011	SJN*		X		42131 San Jose Dr; San Jacinto CA 92583			X			X			X			X				X	
	SJS		X		42131 San Jose Dr; San Jacinto CA 92583		X		X	X		X	X		X	X		X	X	X	X		X
430070017	SJN*			X	N/Avail			X			X			X			X				X	
	SJS			X	N/Avail		X		X	X		X	X		X	X		X	X	X	X		X
430090005	SJN*		X		36620 Ramona Expy; San Jacinto CA 92582			X			X			X			X				X	
	SJS		X		36620 Ramona Expy; San Jacinto CA 92582	n/a	X		X	X		X	X		X	X		X	X	X	X		X
430090006	SJN*		X		36620 Ramona Expy; San Jacinto CA 92582	36580 Ramona Expy; San Jacinto CA 92582		X			X			X			X				X	
	SJS			X	36620 Ramona Expy; San Jacinto CA 92582	36580 Ramona Expy; San Jacinto CA 92582	X		X	X		X	X		X	X		X	X	X	X		X
430090012	SJN*		X		36620 Ramona Expy; San Jacinto CA 92582			X			X			X			X				X	
430090013	SJN*		X		2451 Ramona Exy; San Jacinto CA 92582			X			X			X			X				X	
430100001	SJS	X			35750 Ramona Exy; San Jacinto CA 92582	2041 Warren Rd, San Jacinto CA 92582	X		X	X		X	X		X	X		X	X	X	X		X
430100002	SJS		X		2212 Dupont Dr Ste B; Irvine CA 92612	San Jacinto CA 92582	X		X	X		X	X		X	X		X	X	X	X		X
430100010	SJS		X		138 Verdugo Ave; Glendora CA 91741	1953 N Warren Rd; San Jacinto CA 92582	X		X	X		X	X		X	X		X	X	X	X		X
430100011	SJS			X	PO Box 54143; Los Angeles CA 90054		X		X	X		X	X		X	X		X	X	X	X		X
430100012	SJS			X	PO Box 54143; Los Angeles CA 90054		X		X	X		X	X		X	X		X	X	X	X		X
430100013	SJS		X		12250 El Camino Real Suite 300; San Diego CA 92130		X		X	X		X	X		X	X		X	X	X	X		X
430100017	SJS		X		PO Box 2738; Temecula CA 92593		X		X	X		X	X		X	X		X	X	X	X		X
430110014	SJN*		X		42131 San Jose Dr; San Jacinto CA 92583			X			X			X			X				X	
	SJS		X		42131 San Jose Dr; San Jacinto CA 92583		X		X	X		X	X		X	X		X	X	X	X		X

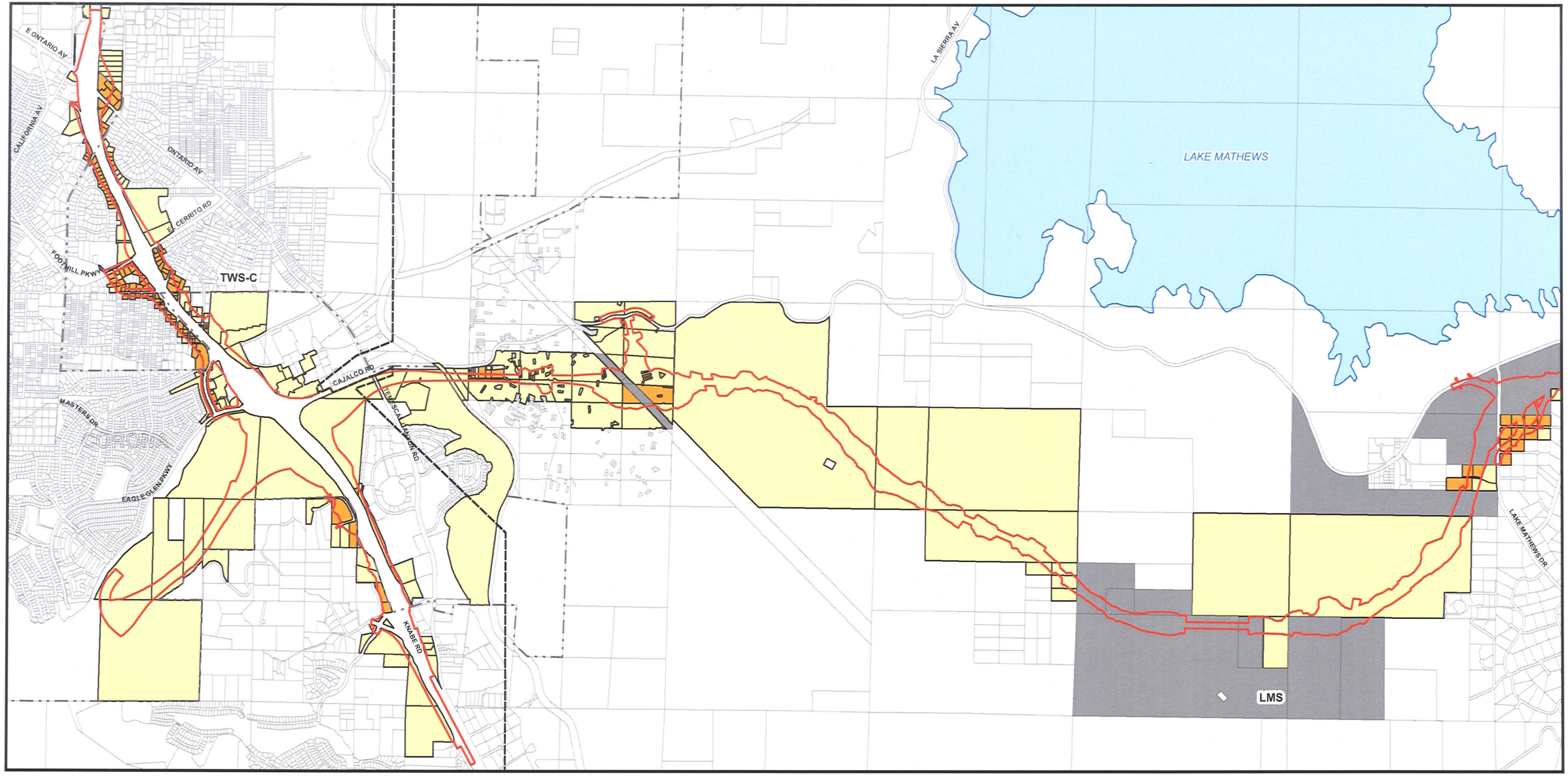
Parcel Acquisitions

APN	Segment	Acquisitions			Mailing Address	Physical Location Address	Alternative															
		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
430110015	SJN*		X		2451 Ramona Expy; San Jacinto CA 92582			X			X			X			X				X	
	SJS		X		2451 Ramona Expy; San Jacinto CA 92582		X		X	X		X	X		X	X		X	X	X	X		X
430110016	SJN*			X	2617 Stingle Ave; Rosemead CA 91770			X			X			X			X				X	
	SJS			X	2617 Stingle Ave; Rosemead CA 91770		X		X	X		X	X		X	X		X	X	X	X		X
430110017	SJN*			X	N/Avail			X			X			X			X				X	
	SJS			X	N/Avail		X		X	X		X	X		X	X		X	X	X	X		X
430110018	SJN*		X		N/Avail			X			X			X			X				X	
	SJS		X		N/Avail		X		X	X		X	X		X	X		X	X	X	X		X
430120010	SJN*		X		2441 Ramona Expy; San Jacinto CA 92582	2397 Ramona Expy; San Jacinto CA 92582		X			X			X			X				X	
430120011	SJN*		X		1199 Fairway Dr Ste 200; Walnut CA 91789	2451 Ramona Expy; San Jacinto CA 92582		X			X			X			X				X	
430120012	SJN*		X		2451 Ramona Exp; San Jacinto CA 92582	2249 W Ramona Expy; San Jacinto CA 92582		X			X			X			X				X	
	SJS		X		2451 Ramona Exp; San Jacinto CA 92582	2249 W Ramona Expy; San Jacinto CA 92582	X		X	X		X	X		X	X		X	X	X	X		X
430120013	SJN*		X		2617 Stingle Ave; Rosemead CA 91770	20450 Sanderson Ave; Hemet CA 92545		X			X			X			X				X	
	SJS		X		2617 Stingle Ave; Rosemead CA 91770	20450 Sanderson Ave; Hemet CA 92545	X		X	X		X	X		X	X		X	X	X	X		X
430130030	SJN*		X		1275 E Latham Ave Ste A; Hemet CA 92543			X			X			X			X				X	
	SJS		X		1275 E Latham Ave Ste A; Hemet CA 92543		X		X	X		X	X		X	X		X	X	X	X		X
430130034	SJN*		X		PO Box 2738; Temecula CA 92593			X			X			X			X				X	
	SJS	X			PO Box 2738; Temecula CA 92593		X		X	X		X	X		X	X		X	X	X	X		X
430130038	SJN*		X		2802 N Surrey St; Orange CA 92867			X			X			X			X				X	
	SJS		X		2802 N Surrey St; Orange CA 92867		X		X	X		X	X		X	X		X	X	X	X		X
430130040	SJN*		X		3560 University Ave Ste 100; Riverside CA 92501	2055 N Sanderson Ave; San Jacinto CA 92582		X			X			X			X				X	
	SJS		X		3560 University Ave Ste 100; Riverside CA 92501	2055 N Sanderson Ave; San Jacinto CA 92582	X		X	X		X	X		X	X		X	X	X	X		X
430130043	SJS		X		19505 Mountain Ave No 19; Ontario CA 91762		X		X	X		X	X		X	X		X	X	X	X		X
430130044	SJS			X	PO Box 54143; Los Angeles CA 90054		X		X	X		X	X		X	X		X	X	X	X		X
430130045	SJS			X	PO Box 54153; Los Angeles CA 90054		X		X	X		X	X		X	X		X	X	X	X		X
430130046	SJN*			X	PO Box 54153; Los Angeles CA 90054			X			X			X			X				X	
	SJS			X	PO Box 54153; Los Angeles CA 90054		X		X	X		X	X		X	X		X	X	X	X		X
430130049	SJN*		X		1275 E Latham Ave Ste A; Hemet CA 92543			X			X			X			X				X	
	SJS		X		1275 E Latham Ave Ste A; Hemet CA 92543		X		X	X		X	X		X	X		X	X	X	X		X
430130050	SJN*		X		1275 E Latham Ave Ste A; Hemet CA 92543			X			X			X			X				X	
	SJS		X		1275 E Latham Ave Ste A; Hemet CA 92543		X		X	X		X	X		X	X		X	X	X	X		X
	SJS		X		1275 E Latham Ave Ste A; Hemet CA 92543		X		X	X		X	X		X	X		X	X	X	X		X
430130051	SJN*		X		920 W Ramona Exy; San Jacinto CA 92582			X			X			X			X				X	
	SJS		X		920 W Ramona Exy; San Jacinto CA 92582		X		X	X		X	X		X	X		X	X	X	X		X
430130052	SJN*	X			20702 Sanderson Ave; San Jacinto CA 92582	2070 N Sanderson Ave; San Jacinto CA 92582		X			X			X			X				X	
	SJS	X			20702 Sanderson Ave; San Jacinto CA 92582	2070 N Sanderson Ave; San Jacinto CA 92582	X		X	X		X	X		X	X		X	X	X	X		X
430130056	SJS		X		920 W Ramona Exy; San Jacinto CA 92582		X		X	X		X	X		X	X		X	X	X	X		X

Parcel Acquisitions

APN	Segment	Acquisitions			Mailing Address	Physical Location Address	Alternative																
		Full	Partial	Easements			Alt. 4 Base Case	Alt. 4 SJN DV	Alt. 4 TWS DV	Alt. 5 Base Case	Alt. 5 SJN DV	Alt. 5 TWS DV	Alt. 6 Base Case	Alt. 6 SJN DV	Alt. 6 TWS DV	Alt. 7 Base Case	Alt. 7 SJN DV	Alt. 7 TWS DV	Alt. 9 Base Case	Alt. 9 RD DV	Alt. 9 PP-E DV	Alt. 9 SJN DV	Alt. 9 TWS DV
430130063	SJS	X			PO Box 2738; Temecula CA 92593		X		X	X		X	X		X	X		X	X	X	X		X
430130064	SJS		X		PO Box 2738; Temecula CA 92593		X		X	X		X	X		X	X		X	X	X	X		X
430130065	SJS		X		PO Box 2738; Temecula CA 92593		X		X	X		X	X		X	X		X	X	X	X		X
430130066	SJS		X		PO Box 2738; Temecula CA 92593		X		X	X		X	X		X	X		X	X	X	X		X
430130067	SJS		X		PO Box 2738; Temecula CA 92593		X		X	X		X	X		X	X		X	X	X	X		X
430130068	SJS		X		PO Box 2738; Temecula CA 92593		X		X	X		X	X		X	X		X	X	X	X		X
430130071	SJS			X	312 E Main St; San Jacinto CA 92583		X		X	X		X	X		X	X		X	X	X	X		X
430130073	SJN*		X		1950 S Mountain Ave. Apt 19; Ontario CA 91762	2004 Ramona Blvd; San Jacinto CA 92583		X			X			X			X					X	
	SJS		X		1950 S Mountain Ave. Apt 19; Ontario CA 91762	2004 Ramona Blvd; San Jacinto CA 92583	X		X	X		X	X		X	X		X	X	X	X		X
430130075	SJN*		X		19505 Mountain Ave #19; Ontario CA 91762	1996 Ramona Blvd; San Jacinto CA 92583		X			X			X			X					X	
	SJS		X		19505 Mountain Ave #19; Ontario CA 91762	1996 Ramona Blvd; San Jacinto CA 92583	X		X	X		X	X		X	X		X	X	X	X		X
430130076	SJN*		X		PO Box 2738; Temecula CA 92593			X			X			X			X					X	
	SJS		X		PO Box 2738; Temecula CA 92593		X		X	X		X	X		X	X		X	X	X	X		X
430130078	SJS			X	312 E Main St; San Jacinto CA 92583		X		X	X		X	X		X	X		X	X	X	X		X
430130079	SJS		X		12250 El Camino Real Suite 300; San Diego CA 92130		X		X	X		X	X		X	X		X	X	X	X		X
430140007	SJN*		X		42131 San Jose Dr; San Jacinto CA 92583			X			X			X			X					X	
	SJS		X		42131 San Jose Dr; San Jacinto CA 92583		X		X	X		X	X		X	X		X	X	X	X		X
430140009	SJN*			X	N/Avail			X			X			X			X					X	
	SJS			X	N/Avail		X		X	X		X	X		X	X		X	X	X	X		X
430190021	SJN*		X		1275 E Latham Ave Ste A; Hemet CA 92543			X			X			X			X					X	
	SJS		X		1275 E Latham Ave Ste A; Hemet CA 92543		X		X	X		X	X		X	X		X	X	X	X		X
430190022	SJN*			X	1275 E Latham Ave Ste A; Hemet CA 92543	n/a		X			X			X			X					X	
431030019	SJS		X		PO Box 2430; Temecula CA 92593		X		X	X		X	X		X	X		X	X	X	X		X
431030023	SJN*		X		40960 California Oaks 242; Murrieta CA 92565			X			X			X			X					X	
	SJS		X		40960 California Oaks 242; Murrieta CA 92565		X		X	X		X	X		X	X		X	X	X	X		X
431030035	SJS			X	PO Box 54153; Los Angeles CA 90054		X		X	X		X	X		X	X		X	X	X	X		X
431500002	SJN*		X		1545 Faraday Ave; Carlsbad CA 92008			X			X			X			X					X	
	SJS		X		1545 Faraday Ave; Carlsbad CA 92008		X		X	X		X	X		X	X		X	X	X	X		X
431500003	SJS		X		1545 Faraday Ave; Carlsbad CA 92008		X		X	X		X	X		X	X		X	X	X	X		X
431500004	SJN*		X		1600 E Florida Ave Ste 110; Hemet CA 92544			X			X			X			X					X	
	SJS		X		1600 E Florida Ave Ste 110; Hemet CA 92544		X		X	X		X	X		X	X		X	X	X	X		X
431510001	SJN*		X		1545 Faraday Ave; Carlsbad CA 92008			X			X			X			X					X	
	SJS		X		1545 Faraday Ave; Carlsbad CA 92008		X		X	X		X	X		X	X		X	X	X	X		X

Source: *Community Impact Assessment*, LSA Associates, Inc., 2008
* = Design variation



Legend

- Segment
- Alternative 4 Right-of-Way
- City
- Parcels with Full Acquisition
- Parcels with Partial Acquisition
- Easement or Other

SOURCE: EPIC (2007), Riverside County Assesors Office (09/06), Jacobs Engineering (2/2007)

0 1,250 2,500 5,000 Feet

0 375 750 1,500 Meters

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Figure P1

Alternative 4 Parcel Acquisitions

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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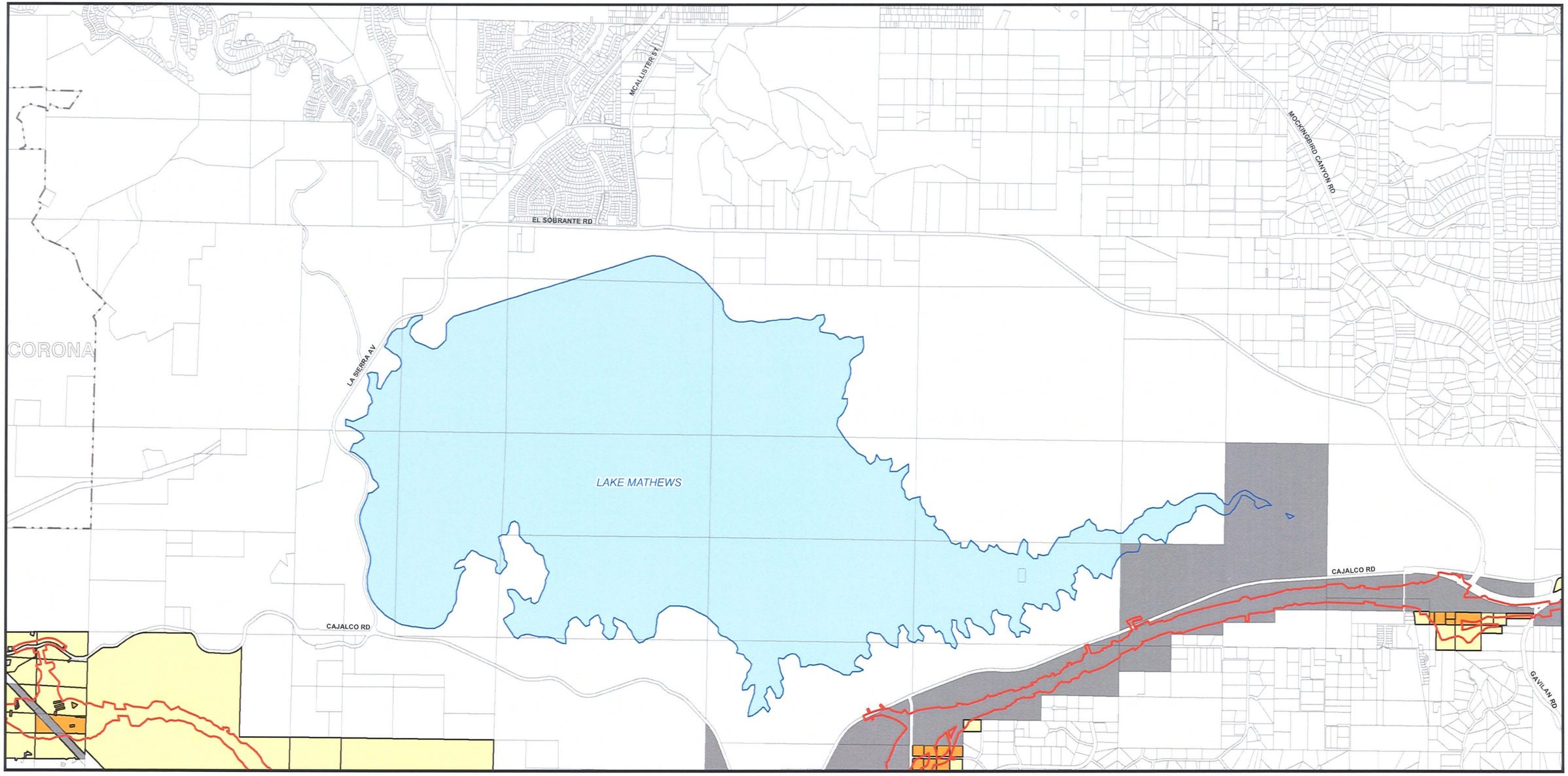

Legend

- Segment
- Alternative 4 Right-of-Way
- City
- Parcels with Full Acquisition
- Parcels with Partial Acquisition
- Easement or Other

Figure P2

SOURCE: EPIC (2007), Riverside County Assesors Office (09/06), Jacobs Engineering (2/2007)

0 1,250 2,500 5,000 Feet

0 375 750 1,500 Meters

Alternative 4 Parcel Acquisitions

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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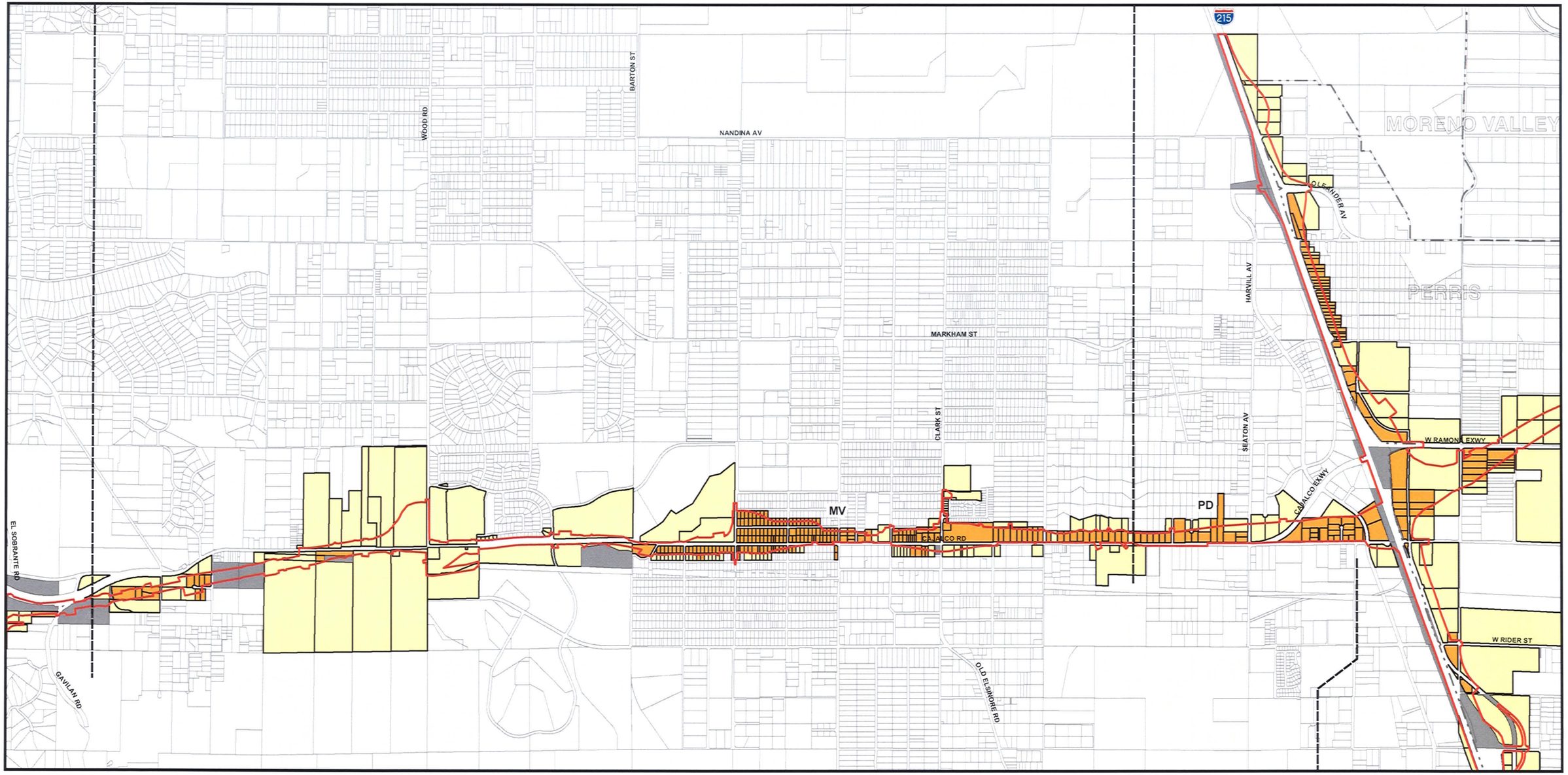

Legend

- Segment
- Alternative 4 Right-of-Way
- City
- Parcels with Full Acquisition
- Parcels with Partial Acquisition
- Easement or Other

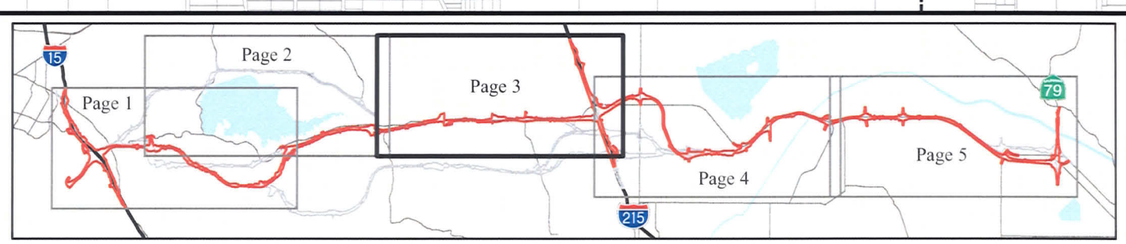

Figure P3

SOURCE: EPIC (2007), Riverside County Assesors Office (09/06), Jacobs Engineering (2/2007)

0 1,250 2,500 5,000 Feet

0 375 750 1,500 Meters

Alternative 4 Parcel Acquisitions

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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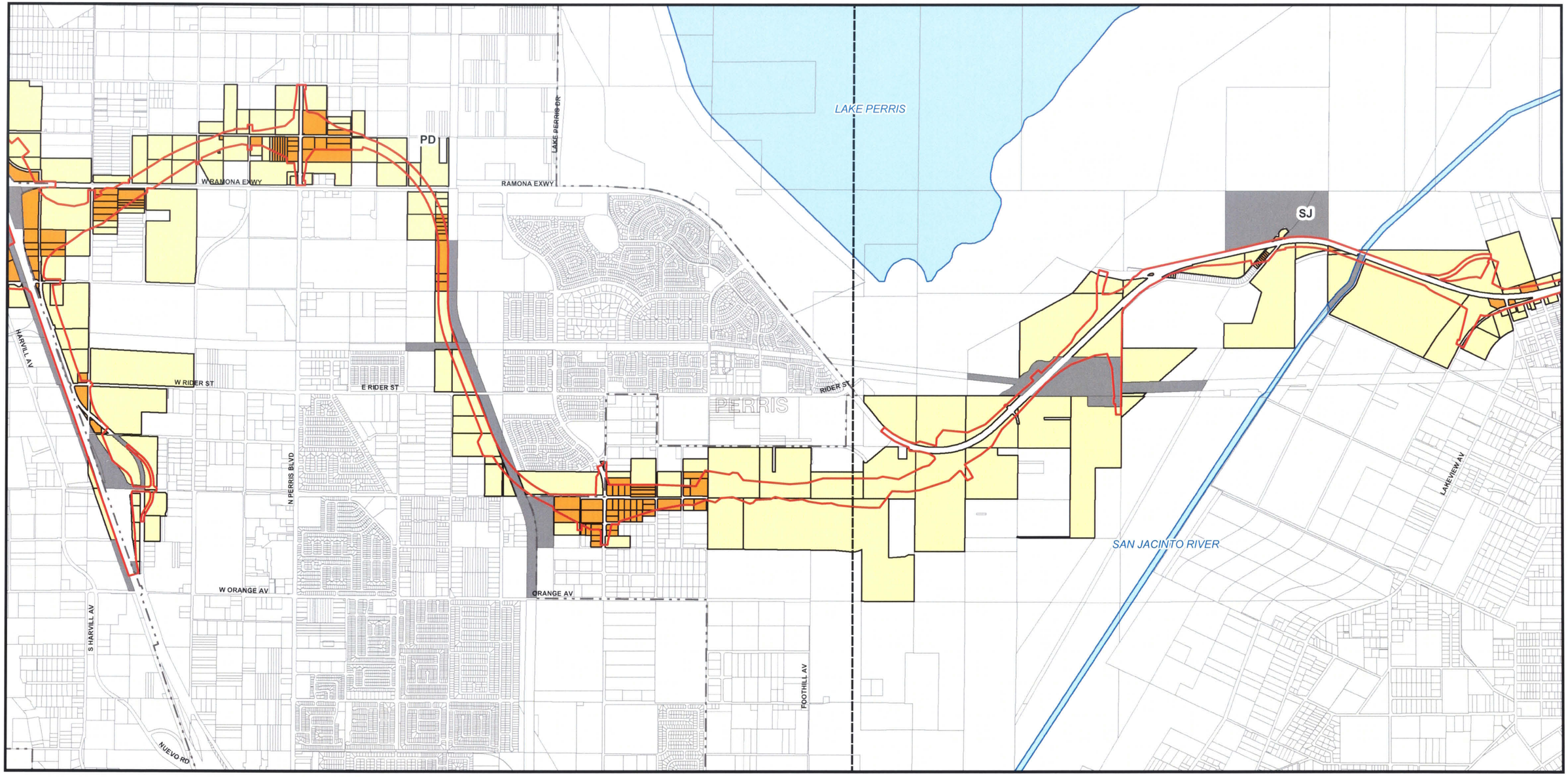

Legend

- Segment
- Alternative 4 Right-of-Way
- City
- Parcels with Full Acquisition
- Parcels with Partial Acquisition
- Easement or Other

Figure P4

SOURCE: EPIC (2007), Riverside County Assesors Office (09/06), Jacobs Engineering (2/2007)

0 1,250 2,500 5,000 Feet

0 375 750 1,500 Meters

Alternative 4 Parcel Acquisitions

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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BEAUMONT
SAN JACINTO
SAN JACINTO RIVER
BRIDGE ST
RAMONA EXWY
LAMB CANYON RD
GILMAN SPRINGS RD
HANSEN AV
CONTOUR AV
MONTGOMERY AV
JUNIPER FLATS RD
WARREN RD
SANDERSON AV
N RAMONA BLVD
SJS
79

Legend

- Segment
- Alternative 4 Right-of-Way
- City
- Parcels with Full Acquisition
- Parcels with Partial Acquisition
- Easement or Other

Figure P5

SOURCE: EPIC (2007), Riverside County Assesors Office (09/06), Jacobs Engineering (2/2007)

0 1,250 2,500 5,000 Feet

0 375 750 1,500 Meters

Alternative 4 Parcel Acquisitions

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

MID COUNTY PARKWAY
CETAP
SAN JACINTO–CORONA

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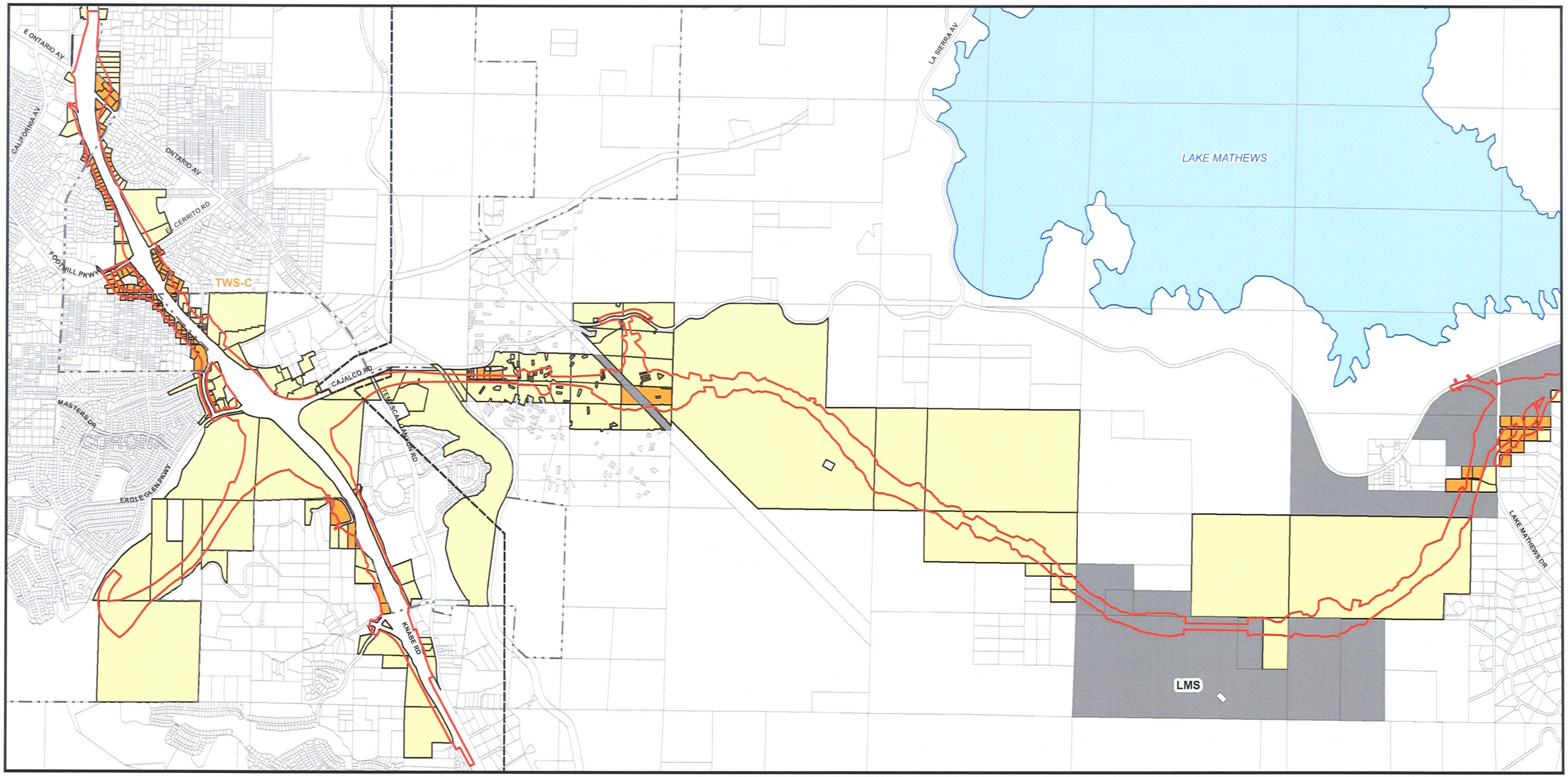

Legend

- Segment
- Alternative 5 Right-of-Way
- City
- Parcels with Full Acquisition
- Parcels with Partial Acquisition
- Easement or Other

Figure P6

SOURCE: EPIC (2007), Riverside County Assesors Office (09/06), Jacobs Engineering (2/2007)

0 1,250 2,500 5,000 Feet

0 375 750 1,500 Meters

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Alternative 5 Parcel Acquisitions

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

MID COUNTY PARKWAY
CETAP
SAN JACINTO–CORONA

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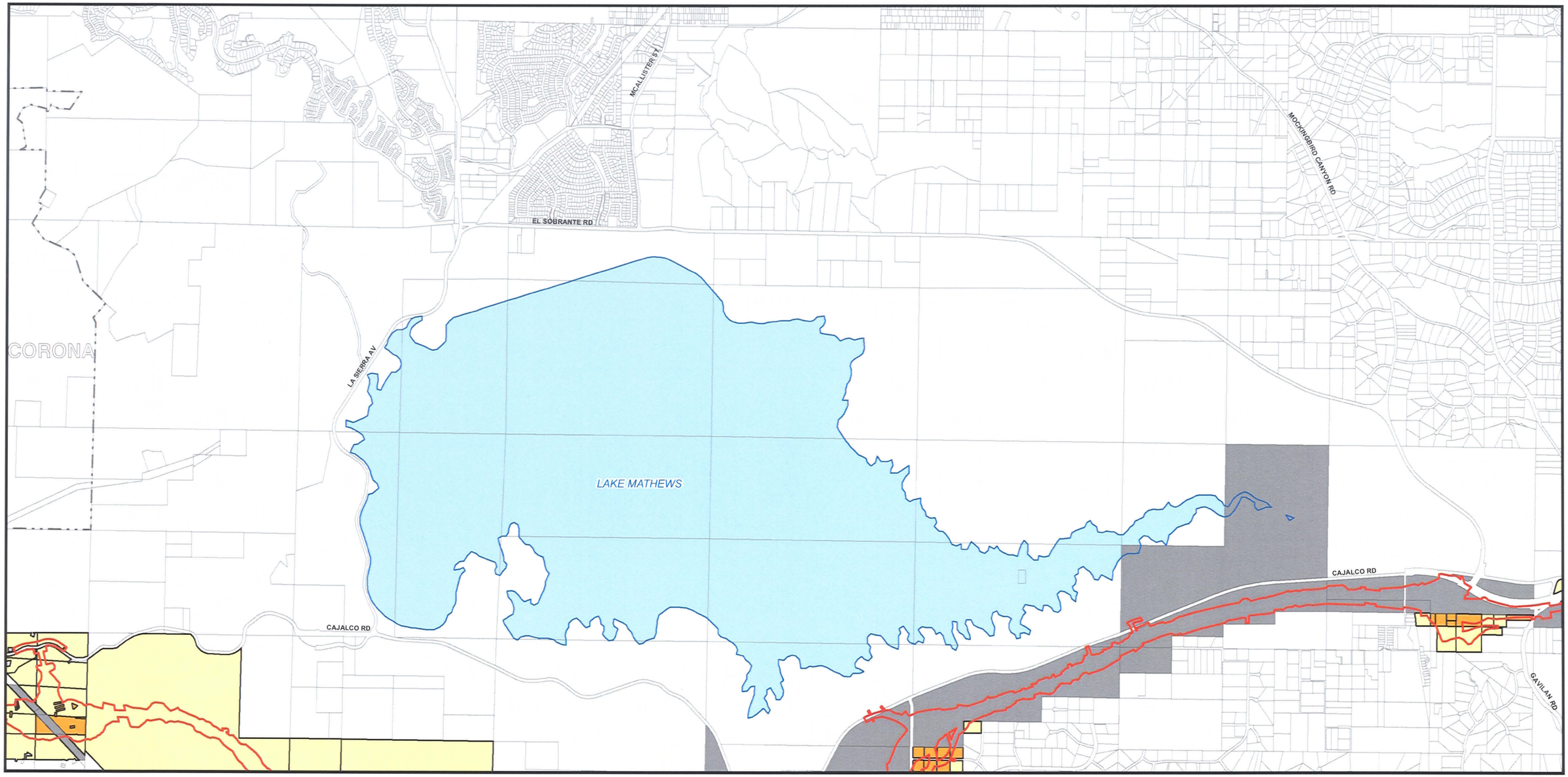

Legend

- Segment
- Alternative 5 Right-of-Way
- City
- Parcels with Full Acquisition
- Parcels with Partial Acquisition
- Easement or Other

Figure P7

SOURCE: EPIC (2007), Riverside County Assesors Office (09/06), Jacobs Engineering (2/2007)

0 1,250 2,500 5,000 Feet

0 375 750 1,500 Meters

Alternative 5 Parcel Acquisitions

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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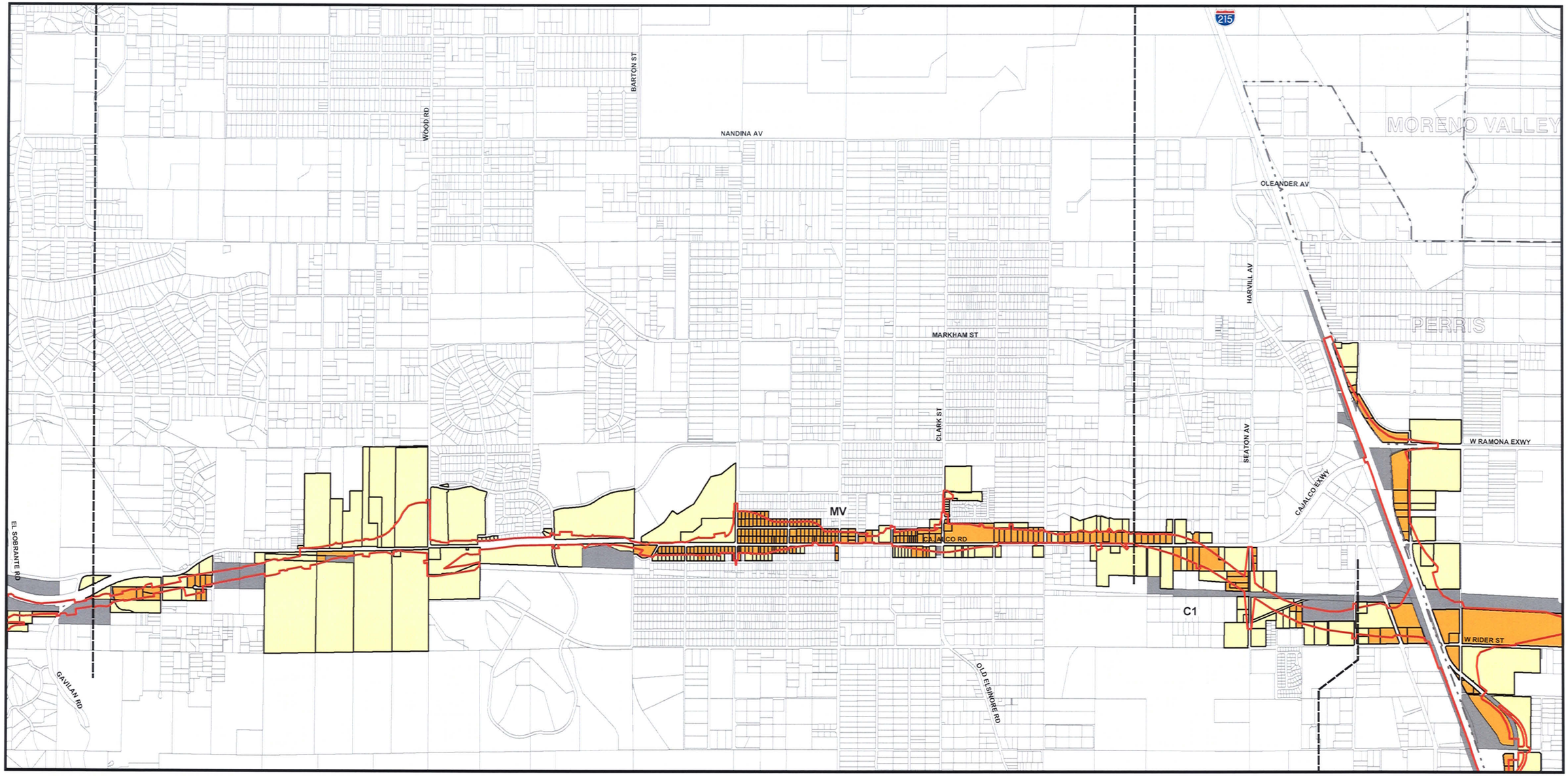

Legend

- Segment
- Alternative 5 Right-of-Way
- City
- Parcels with Full Acquisition
- Parcels with Partial Acquisition
- Easement or Other

SOURCE: EPIC (2007), Riverside County Assesors Office (09/06), Jacobs Engineering (2/2007)

0 1,250 2,500 5,000 Feet

0 375 750 1,500 Meters

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Figure P8

Alternative 5 Parcel Acquisitions

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

MID COUNTY PARKWAY
CETAP
SAN JACINTO—CORONA

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LAKE PERRIS

LAKE PERRIS DR

W RAMONA EXWY

RAMONA EXWY

SJ

RD

W RIDER ST

RIDER ST

RIDER ST

PERRIS

HARVILL AV

W ORANGE AV

N PERRIS BLVD

ORANGE AV

S HARVILL AV

NUEVO RD

FOOTHILL AV

SAN JACINTO RIVER

LAKEVIEW AV

Legend

- Segment
- Alternative 5 Right-of-Way
- City
- Parcels with Full Acquisition
- Parcels with Partial Acquisition
- Easement or Other

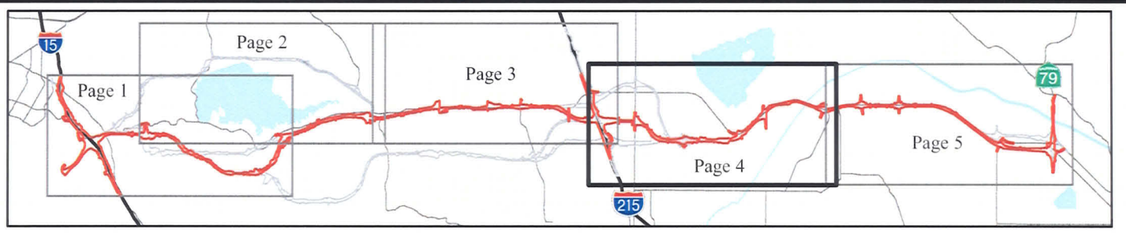

Figure P9

SOURCE: EPIC (2007), Riverside County Assesors Office (09/06), Jacobs Engineering (2/2007)

0 1,250 2,500 5,000 Feet

0 375 750 1,500 Meters

Alternative 5 Parcel Acquisitions

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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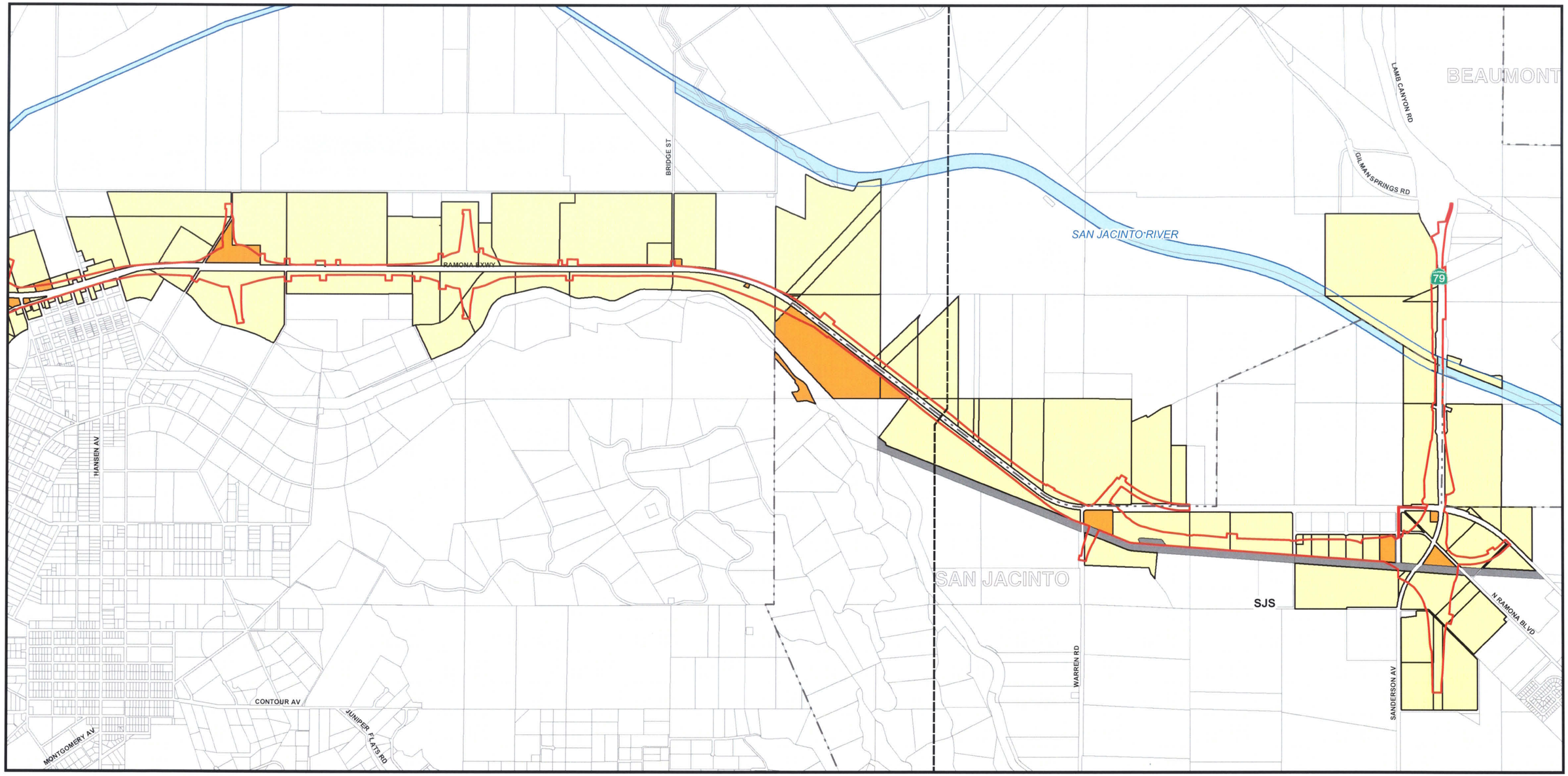

Legend

- Segment
- Alternative 5 Right-of-Way
- City
- Parcels with Full Acquisition
- Parcels with Partial Acquisition
- Easement or Other

Figure P10

SOURCE: EPIC (2007), Riverside County Assesors Office (09/06), Jacobs Engineering (2/2007)

0 1,250 2,500 5,000 Feet

0 375 750 1,500 Meters

Alternative 5 Parcel Acquisitions

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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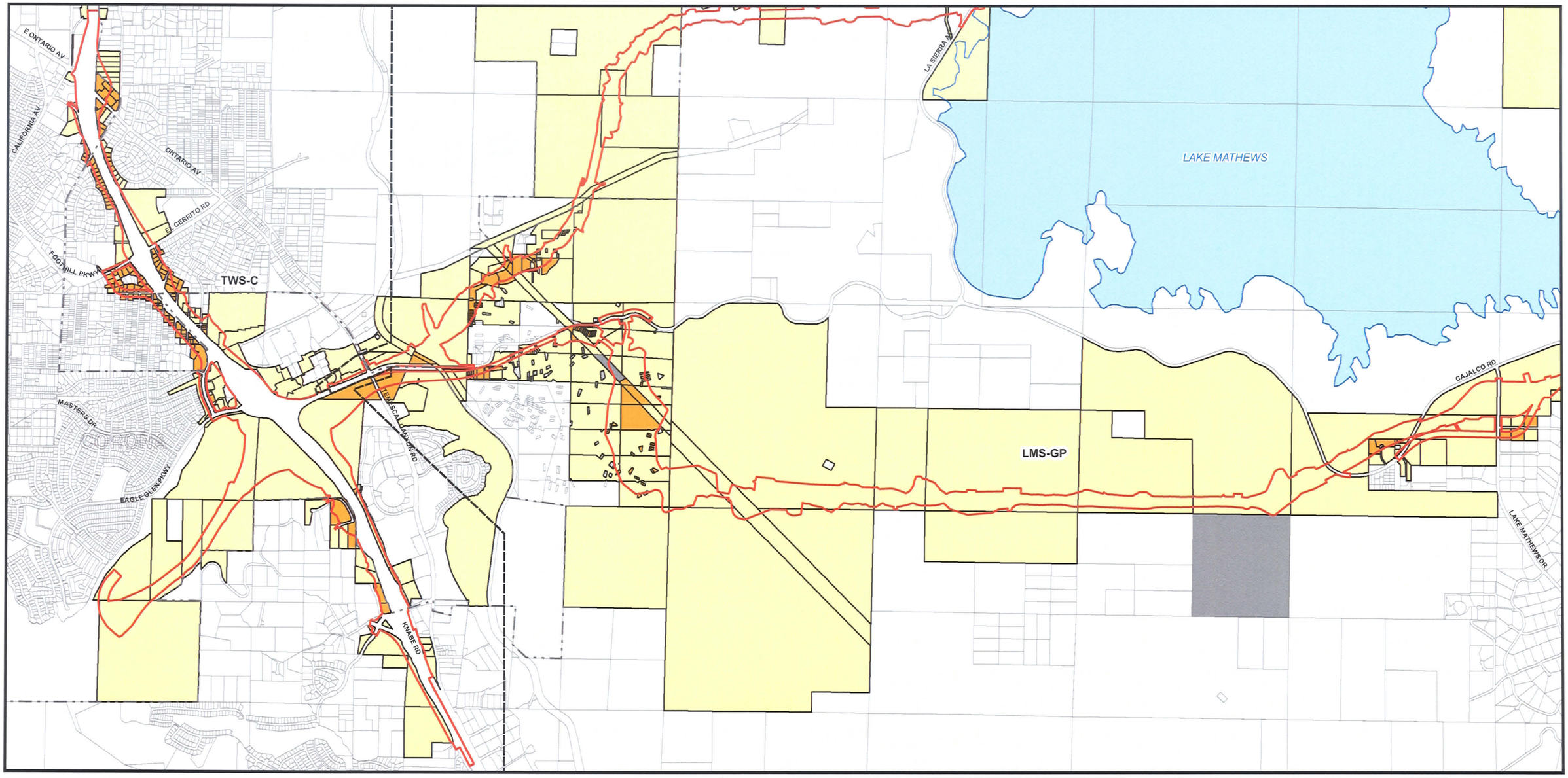

Legend

- Segment
- Alternative 6 Right-of-Way
- City

Parcels with Acquisition

- Parcels with Full Acquisition
- Parcels with Partial Acquisition
- Easement or Other

SOURCE: EPIC (2007), Riverside County Assesors Office (09/06), Jacobs Engineering (2/2007)

0 1,250 2,500 5,000 Feet

0 375 750 1,500 Meters

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Figure P11

Alternative 6 Parcel Acquisitions

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

MID COUNTY PARKWAY
CETAP
SAN JACINTO—CORONA

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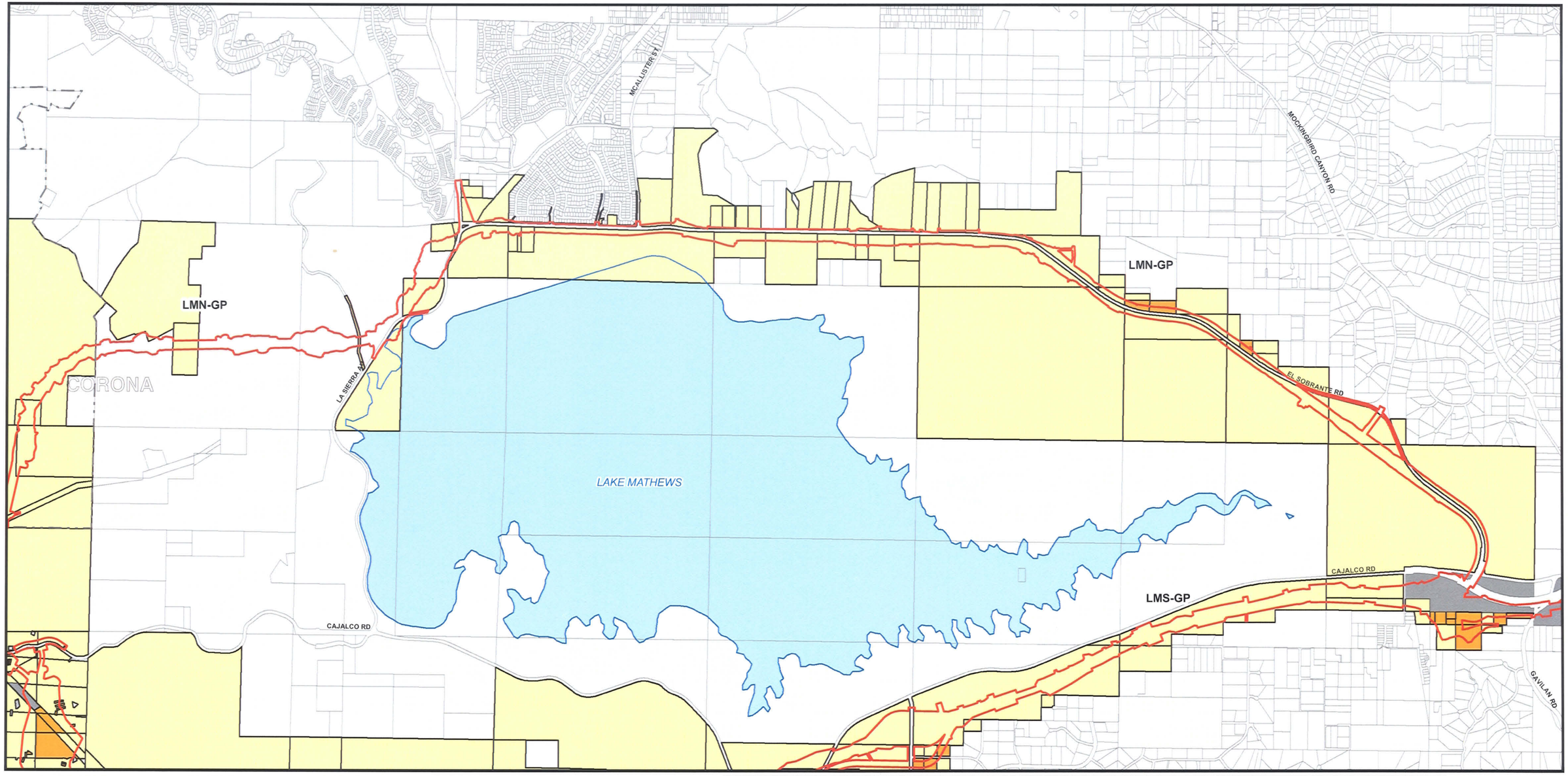

Legend

- Segment
- Alternative 6 Right-of-Way
- City

Parcels with Acquisition

- Parcels with Full Acquisition
- Parcels with Partial Acquisition
- Easement or Other

SOURCE: EPIC (2007), Riverside County Assesors Office (09/06), Jacobs Engineering (2/2007)

0 1,250 2,500 5,000 Feet

0 375 750 1,500 Meters

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Figure P12

Alternative 6 Parcel Acquisitions

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

MID COUNTY PARKWAY
CETAP
SAN JACINTO—CORONA

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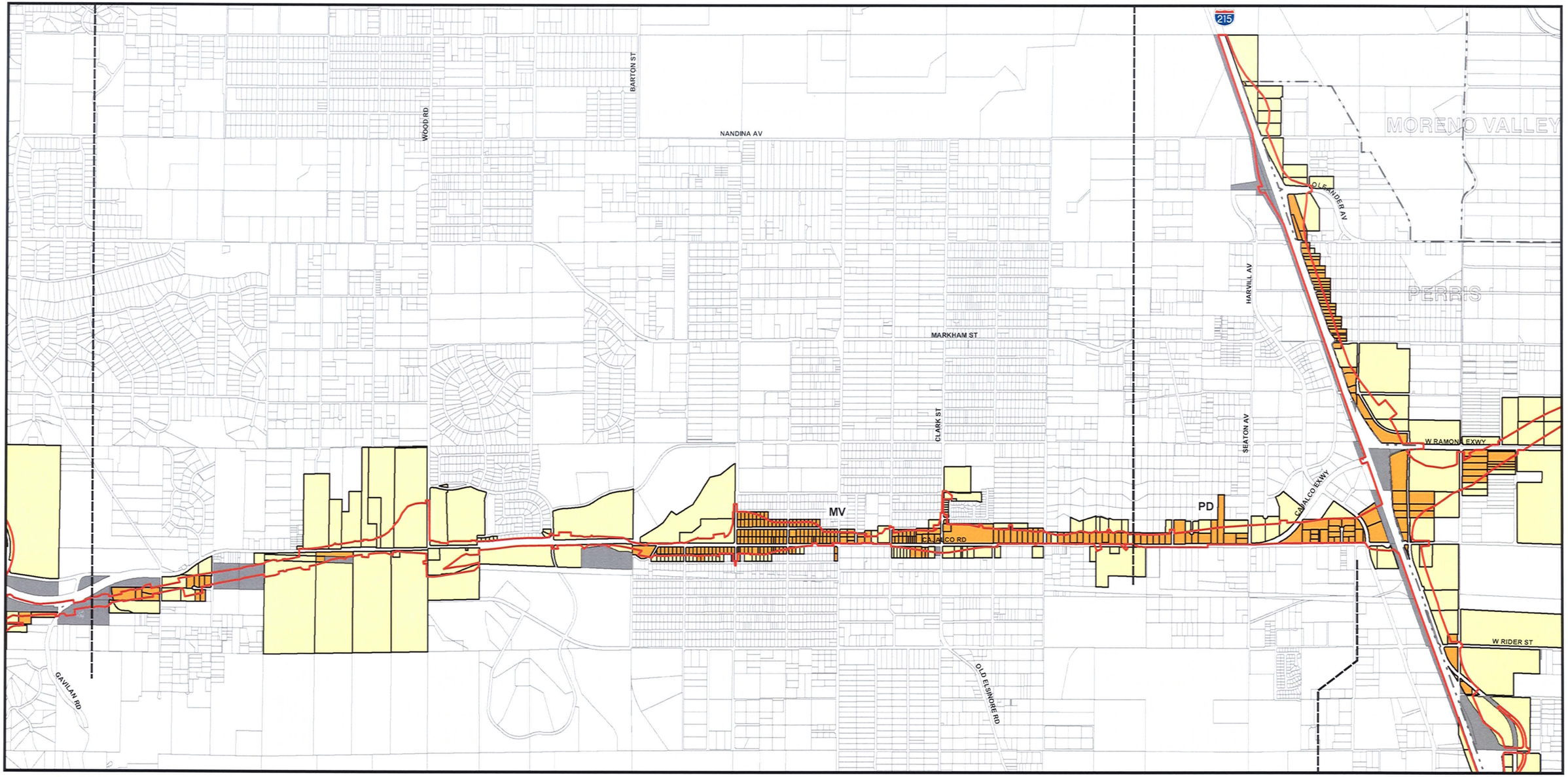

Legend

- Segment
- Alternative 6 Right-of-Way
- City

Parcels with Acquisition

- Parcels with Full Acquisition
- Parcels with Partial Acquisition
- Easement or Other

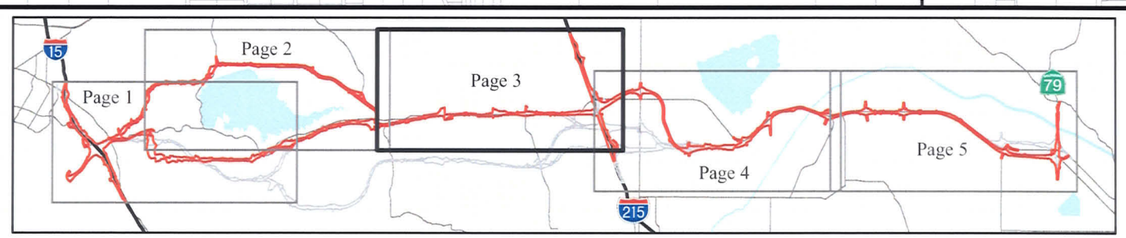

Figure P13

SOURCE: EPIC (2007), Riverside County Assesors Office (09/06), Jacobs Engineering (2/2007)

0 1,250 2,500 5,000 Feet

0 375 750 1,500 Meters

Alternative 6 Parcel Acquisitions

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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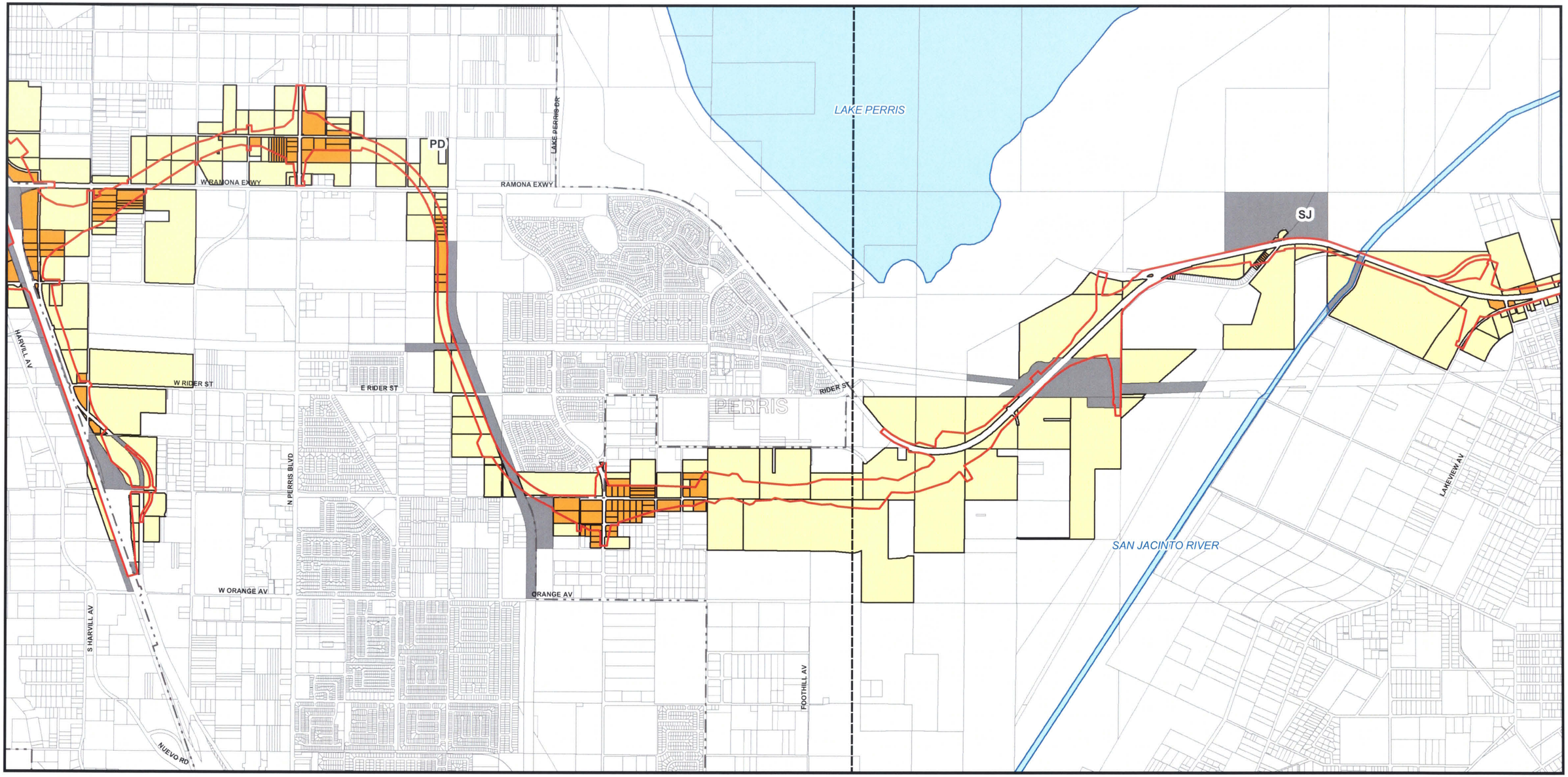
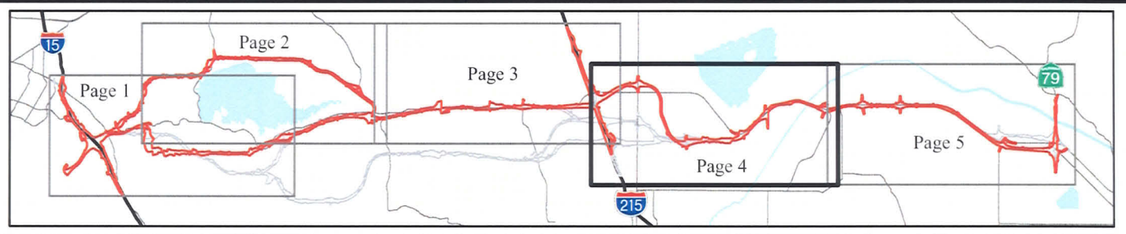


Legend

- Segment
- Alternative 6 Right-of-Way
- City

Parcels with Acquisition

- Parcels with Full Acquisition
- Parcels with Partial Acquisition
- Easement or Other



SOURCE: EPIC (2007), Riverside County Assesors Office (09/06), Jacobs Engineering (2/2007)

0 1,250 2,500 5,000 Feet

0 375 750 1,500 Meters

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Figure P14

Alternative 6 Parcel Acquisitions

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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BRIDGE ST
RAMONA EXWY
SAN JACINTO RIVER
LAMB CANYON RD
GILMAN SPRINGS RD
BEAUMONT
79
HANSEN AV
CONTOUR AV
JUNIPER FLATS RD
MONTGOMERY AV
SAN JACINTO
SJS
N RAMONA BLVD
WARREN RD
SANDERSON AV

Legend

Segment
Alternative 6 Right-of-Way
City

Parcels with Acquisition
Parcels with Full Acquisition
Parcels with Partial Acquisition
Easement or Other

SOURCE: EPIC (2007), Riverside County Assesors Office (09/06), Jacobs Engineering (2/2007)

0 1,250 2,500 5,000 Feet
0 375 750 1,500 Meters

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Figure P15

Alternative 6 Parcel Acquisitions

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

MID COUNTY PARKWAY
CETAP
SAN JACINTO—CORONA

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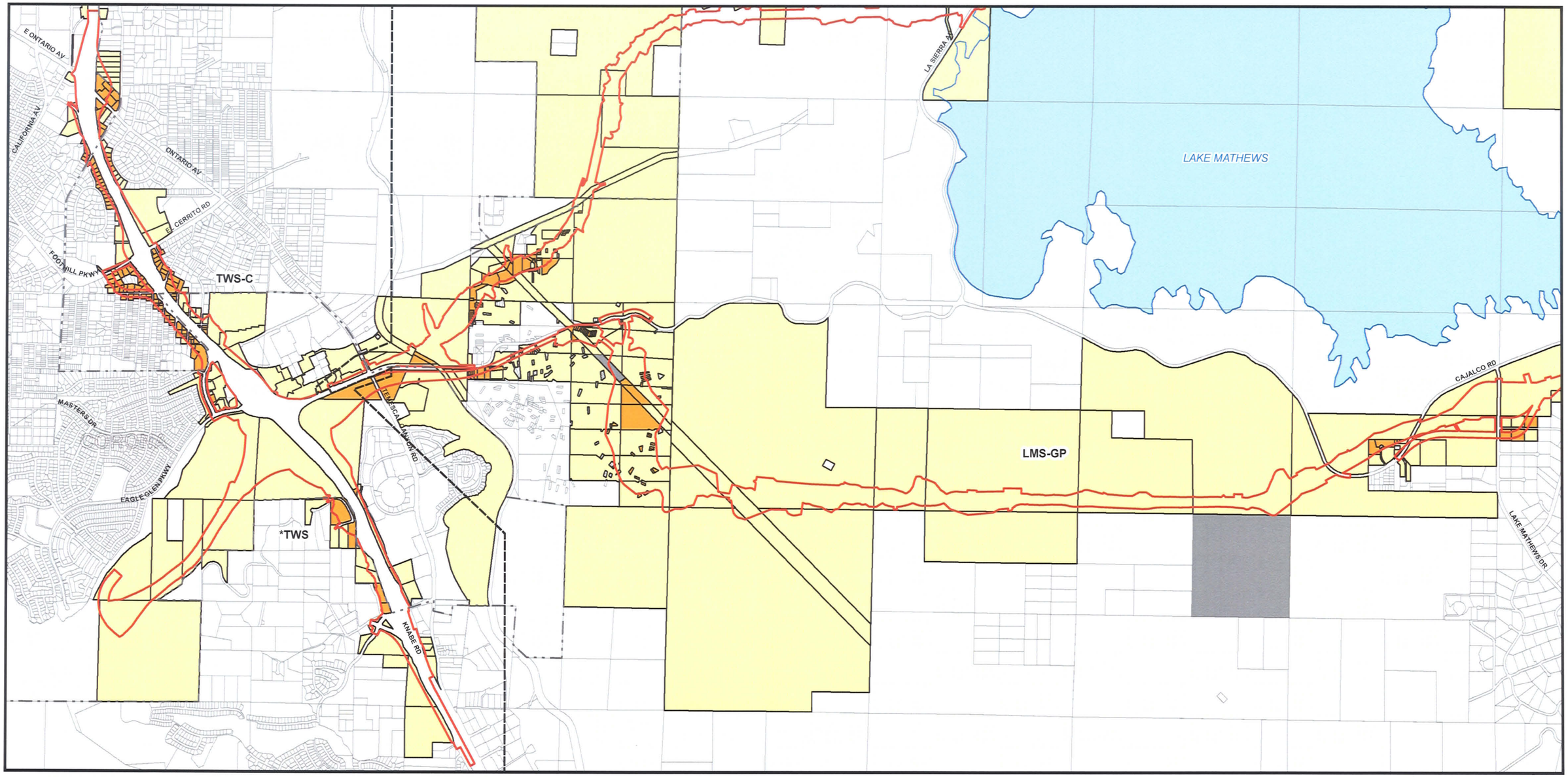

Legend

- Segment
- Alternative 7 Right-of-Way
- City
- Parcels with Full Acquisition
- Parcels with Partial Acquisition
- Easement or Other

Figure P16

SOURCE: EPIC (2007), Riverside County Assesors Office (09/06), Jacobs Engineering (2/2007)

0 1,250 2,500 5,000 Feet

0 375 750 1,500 Meters

Alternative 7 Parcel Acquisitions

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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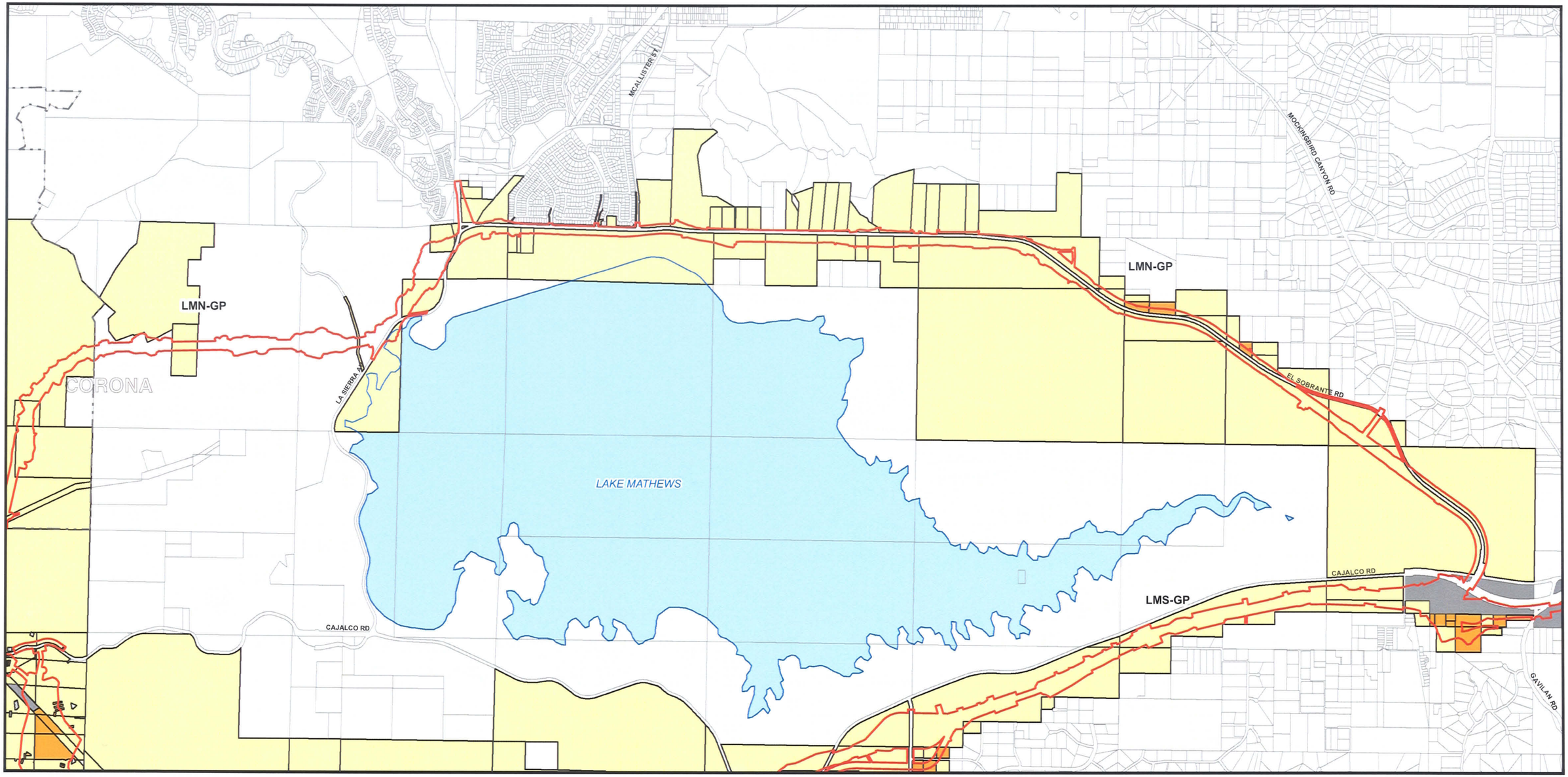

Legend

- Segment
- Alternative 7 Right-of-Way
- City
- Parcels with Full Acquisition
- Parcels with Partial Acquisition
- Easement or Other

Figure P17

SOURCE: EPIC (2007), Riverside County Assesors Office (09/06), Jacobs Engineering (2/2007)

0 1,250 2,500 5,000 Feet

0 375 750 1,500 Meters

Alternative 7 Parcel Acquisitions

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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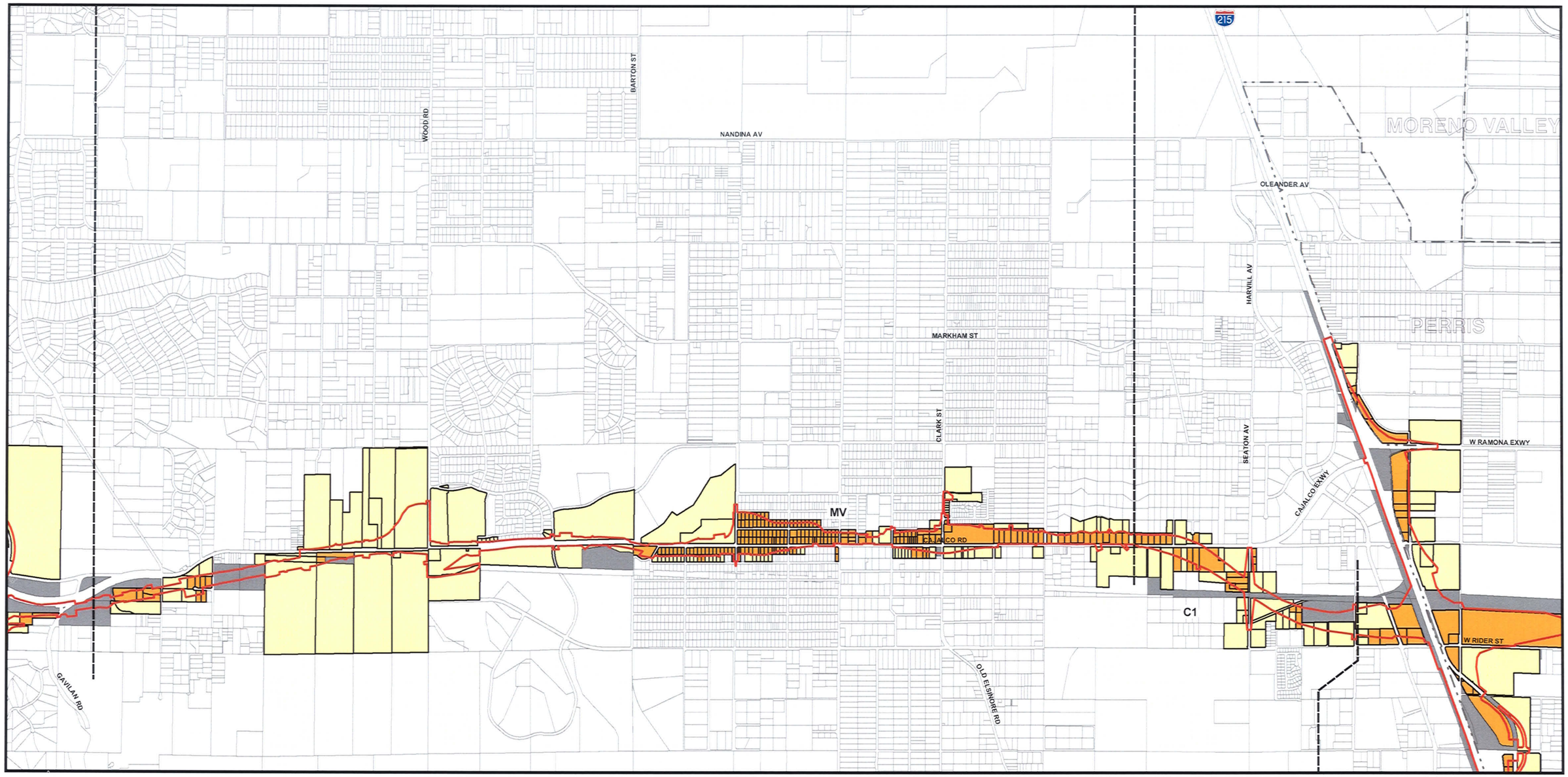

Legend

- Segment
- Alternative 7 Right-of-Way
- City
- Parcels with Full Acquisition
- Parcels with Partial Acquisition
- Easement or Other

Figure P18

SOURCE: EPIC (2007), Riverside County Assesors Office (09/06), Jacobs Engineering (2/2007)

0 1,250 2,500 5,000 Feet

0 375 750 1,500 Meters

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Alternative 7 Parcel Acquisitions

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

MID COUNTY PARKWAY
CETAP
SAN JACINTO – CORONA

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LAKE PERRIS

W RAMONA EXWY

RAMONA EXWY

LAKE PERRIS DR

RD

RIDER ST

PERRIS

HARVILL AV

W ORANGE AV

ORANGE AV

N PERRIS BLVD

S HARVILL AV

NUEVO RD

FOOTHILL AV

SJ

SAN JACINTO RIVER

LAKEVIEW AV

Legend

- Segment
- Alternative 7 Right-of-Way
- City
- Parcels with Full Acquisition
- Parcels with Partial Acquisition
- Easement or Other

Figure P19

SOURCE: EPIC (2007), Riverside County Assesors Office (09/06), Jacobs Engineering (2/2007)

0 1,250 2,500 5,000 Feet

0 375 750 1,500 Meters

Alternative 7 Parcel Acquisitions

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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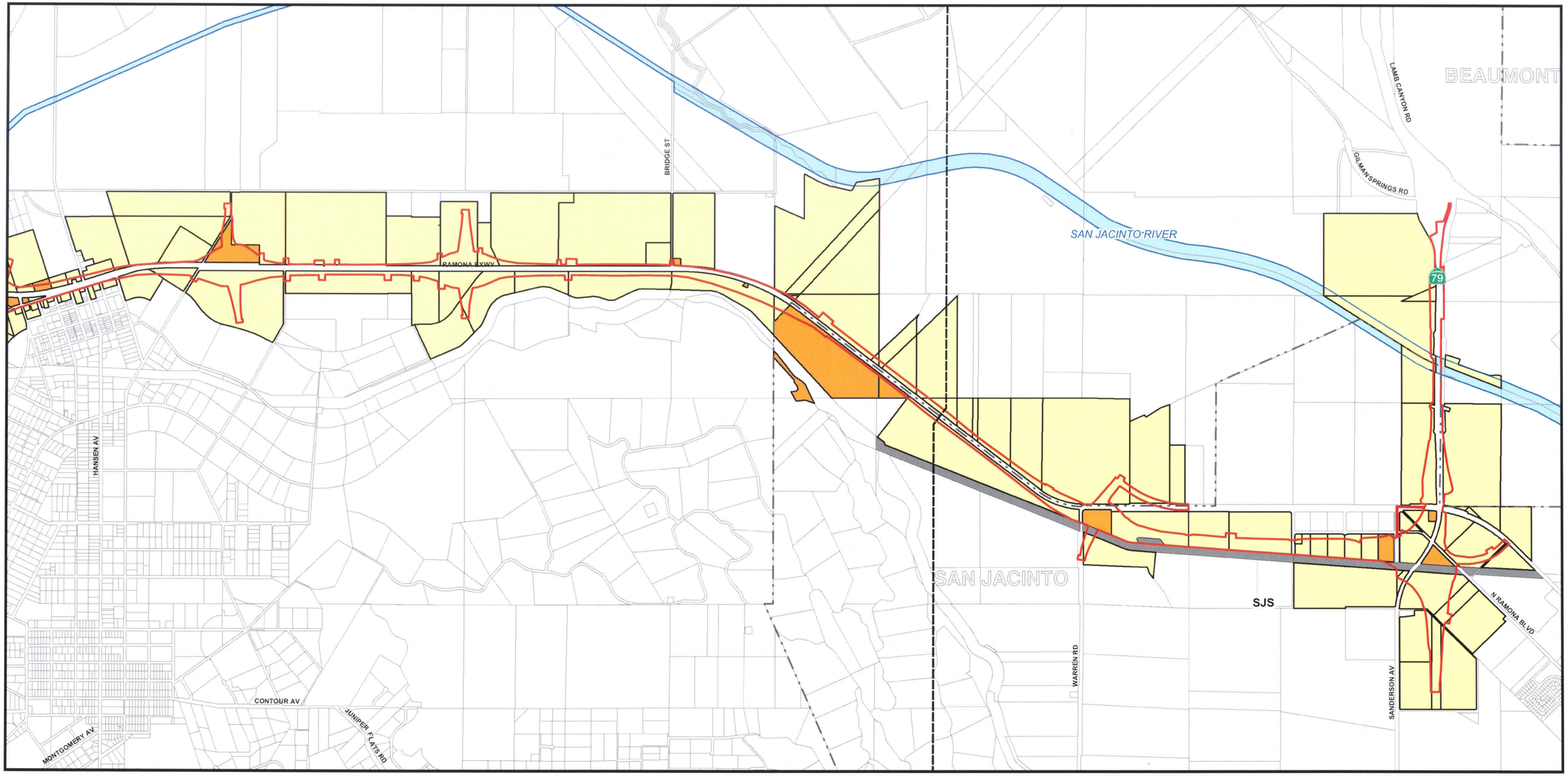

Legend

- Segment
- Alternative 7 Right-of-Way
- City
- Parcels with Full Acquisition
- Parcels with Partial Acquisition
- Easement or Other

Figure P20

SOURCE: EPIC (2007), Riverside County Assesors Office (09/06), Jacobs Engineering (2/2007)

0 1,250 2,500 5,000 Feet

0 375 750 1,500 Meters

Alternative 7 Parcel Acquisitions

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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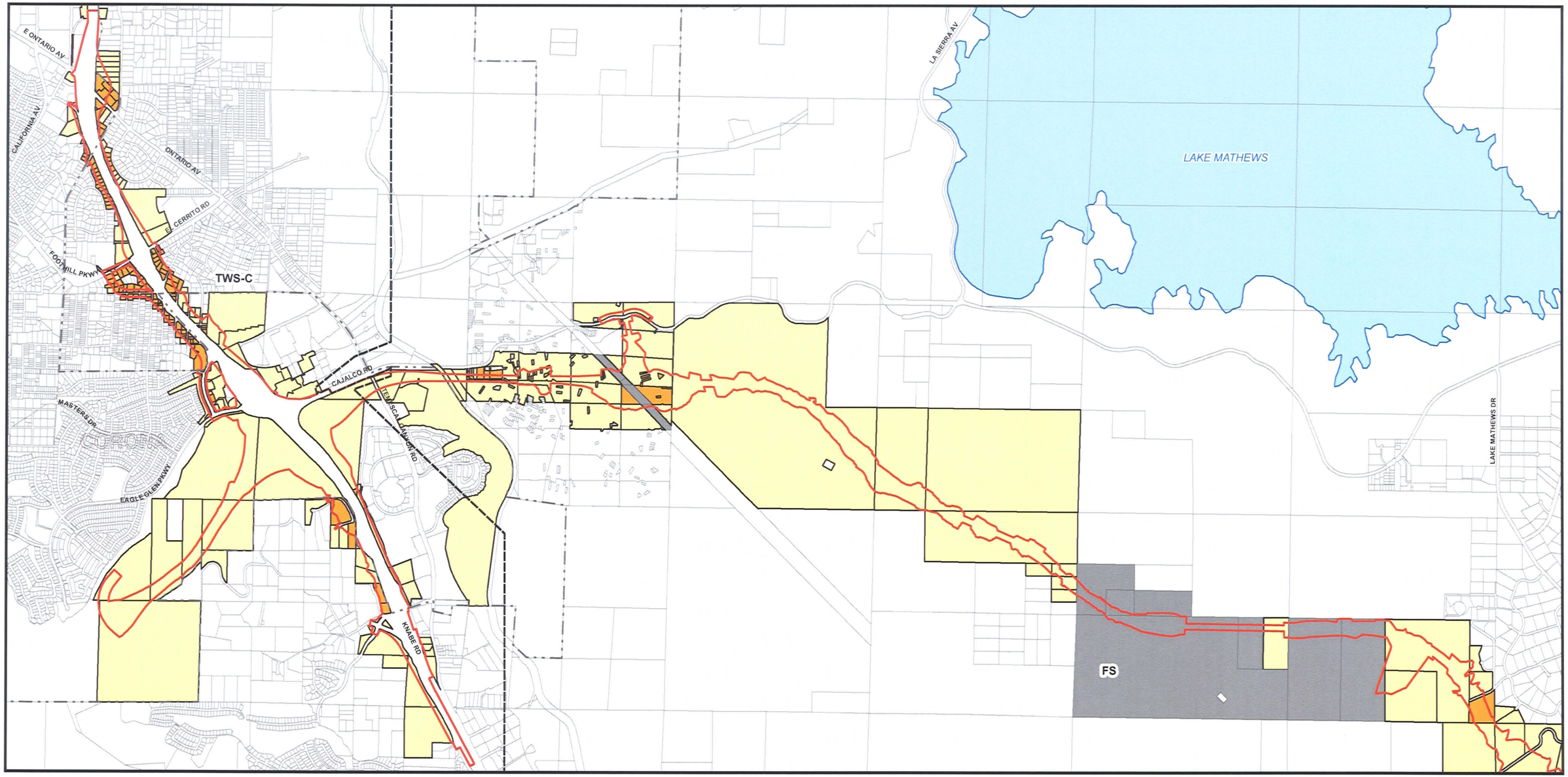

Legend

- Segment
- Alternative 9 Right-of-Way
- City
- Parcels with Full Acquisition
- Parcels with Partial Acquisition
- Easement or Other

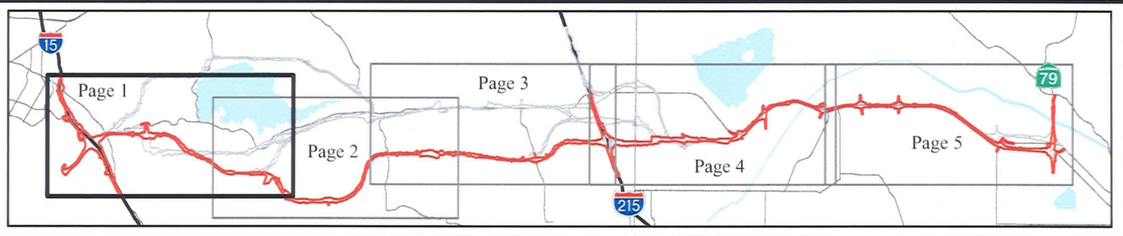

Figure P21

SOURCE: EPIC (2007), Riverside County Assesors Office (09/06), Jacobs Engineering (2/2007)

0 1,250 2,500 5,000 Feet

0 375 750 1,500 Meters

Alternative 9 Parcel Acquisitions

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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LAKE MATHEWS

CAJALCO RD

EL SOBRANTE RD

WOOD RD

FS

FS

LAKE MATHEWS DR

GAVILAN RD

SANTA ROSA MINE RD

Legend

- Segment
- Alternative 9 Right-of-Way
- City
- Parcels with Full Acquisition
- Parcels with Partial Acquisition
- Easement or Other

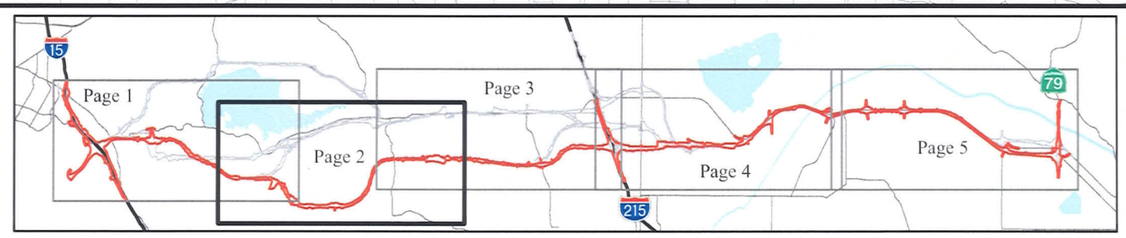

Figure P22

SOURCE: EPIC (2007), Riverside County Assesors Office (09/06), Jacobs Engineering (2/2007)

0 1,250 2,500 5,000 Feet

0 375 750 1,500 Meters

Alternative 9 Parcel Acquisitions

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

MID COUNTY PARKWAY
CETAP
SAN JACINTO—CORONA

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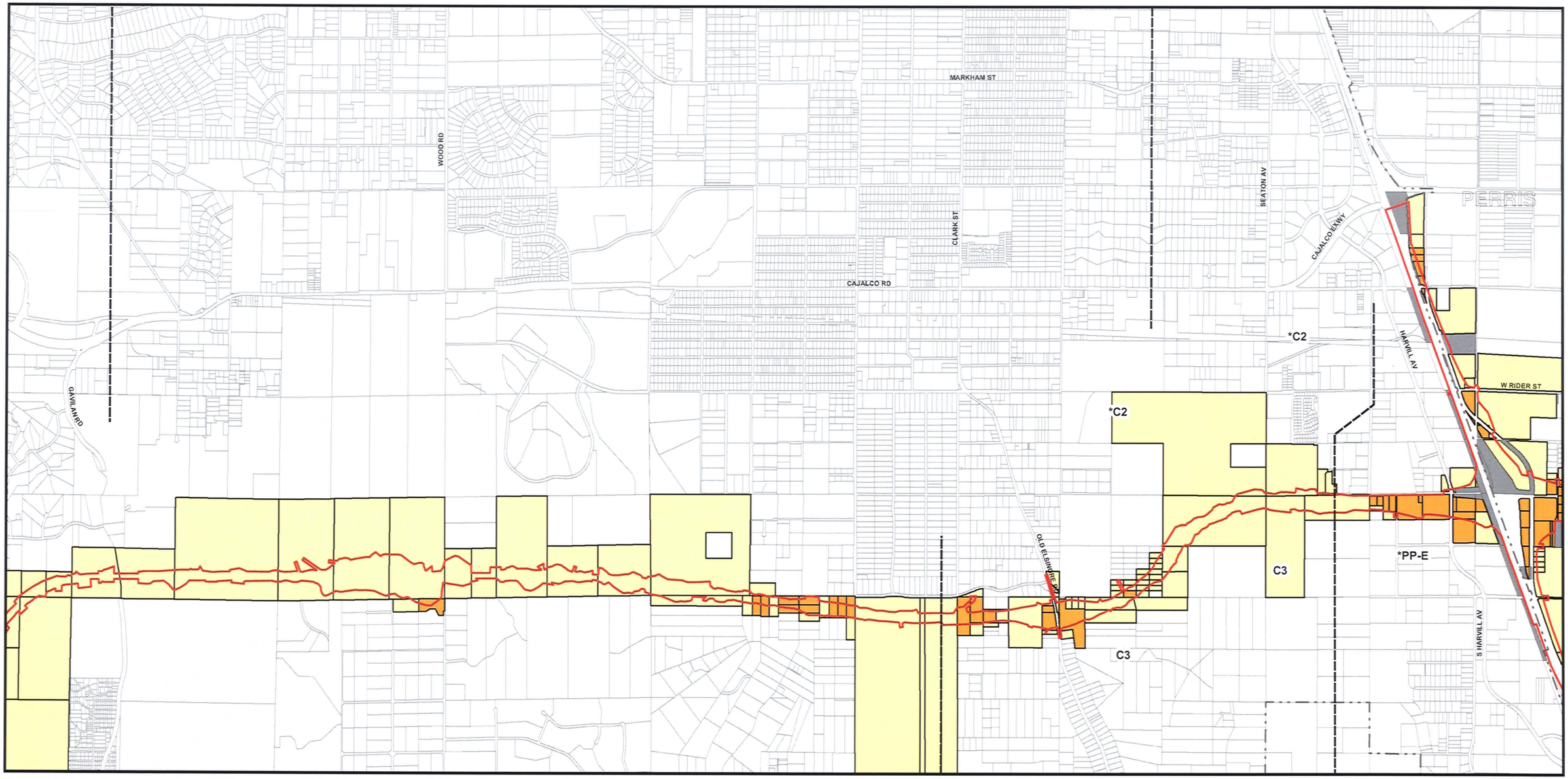

Legend

- Segment
- Alternative 9 Right-of-Way
- City
- Parcels with Full Acquisition
- Parcels with Partial Acquisition
- Easement or Other

Figure P23

SOURCE: EPIC (2007), Riverside County Assesors Office (09/06), Jacobs Engineering (2/2007)

0 1,250 2,500 5,000 Feet

0 375 750 1,500 Meters

Alternative 9 Parcel Acquisitions

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LAKE PERRIS

LAKE PERRIS DR

W RAMONA EXWY

RAMONA EXWY

SJ

*RD

HARVILL AV

W RIDER ST

E RIDER ST

RIDER ST

PERRIS

LAKEVIEW AV

SAN JACINTO RIVER

*PP-E

PP-D

W ORANGE AV

ORANGE AV

S HARVILL AV

N PERRIS BLVD

FOOTHILL AV

NUEVO RD

Legend

- Segment
- Alternative 9 Right-of-Way
- City
- Parcels with Full Acquisition
- Parcels with Partial Acquisition
- Easement or Other

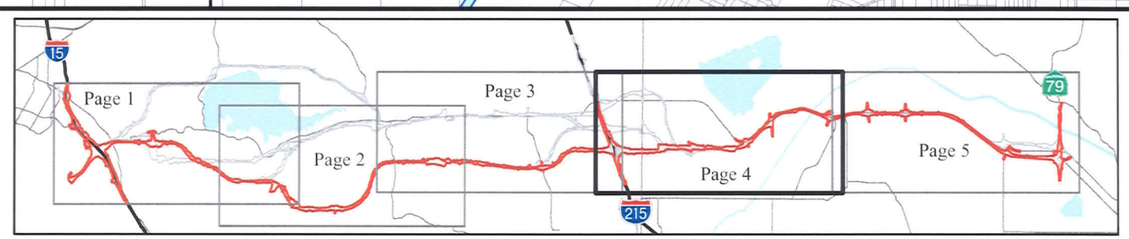

Figure P24

SOURCE: EPIC (2007), Riverside County Assesors Office (09/06), Jacobs Engineering (2/2007)

0 1,250 2,500 5,000 Feet

0 375 750 1,500 Meters

Alternative 9 Parcel Acquisitions

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BRIDGE ST
RAMONA EXWY
HANSEN AV
CONTOUR AV
JUNIPER FLATS RD
MONTGOMERY AV
SAN JACINTO RIVER
LAMB CANYON RD
GILMAN SPRINGS RD
BEAUMONT
79
SAN JACINTO
SJS
N RAMONA BLVD
WARREN RD
SANDERSON AV

Legend

- Segment
- Alternative 9 Right-of-Way
- City
- Parcels with Full Acquisition
- Parcels with Partial Acquisition
- Easement or Other

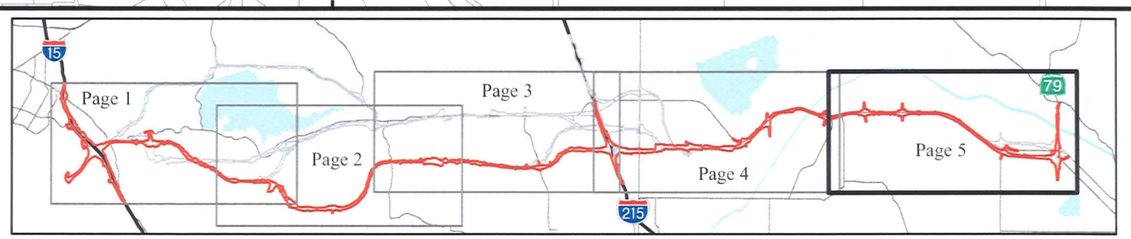

Figure P25

SOURCE: EPIC (2007), Riverside County Assesors Office (09/06), Jacobs Engineering (2/2007)

0 1,250 2,500 5,000 Feet

0 375 750 1,500 Meters

Alternative 9 Parcel Acquisitions

KP 0.0/51.0 (PM 0.0/31.7) EA 08-0F3200

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Appendix Q Conceptual Mitigation Plan for Impacts to Wetlands and Other Waters of the United States

Q.1 Introduction

This Conceptual Mitigation Plan (Plan) is intended to provide a framework for identifying the potential mitigation areas and approaches for impacts of the Mid County Parkway (MCP) project to wetlands and other waters of the United States and to demonstrate that this mitigation is feasible. The Plan focuses on impacts that are regulated by the United States Army Corps of Engineers (USACE) under the Clean Water Act (CWA) in order to satisfy the National Environmental Policy Act (NEPA) Section 404 of the CWA Integration Process. In addition, this Plan also serves as the framework and feasibility analysis for the mitigation of impacts to riparian resources pursuant to the California Environmental Quality Act (CEQA), as well as for resources regulated by the California Department of Fish and Game (CDFG) pursuant to Fish and Game Code Section 1602.

The Plan is based on the impacts of the Locally Preferred Alternative (Alternative 9 Temescal Wash Area Design Variation [TWS DV]) (see Figure 1), which are summarized in the following Table A.

Table A Summary of Impacts to Waters (acres)

	CDFG	USACE Non-wetland Waters	USACE Wetlands	USACE Total
Temporary	8.5	3.7	4.7	8.4
Permanent	15.5	8.4	2.4	10.7

CDFG = California Department of Fish and Game
USACE = United States Army Corps of Engineers

Mitigation will be achieved in accordance with the new USACE and United States Environmental Protection Agency (EPA) Final Rule (33 Code of Federal Regulations [CFR] Parts 325 and 332 and 40 CFR Part 230, respectively) on Compensatory Mitigation for Losses of Aquatic Resources. Mitigation approaches may include

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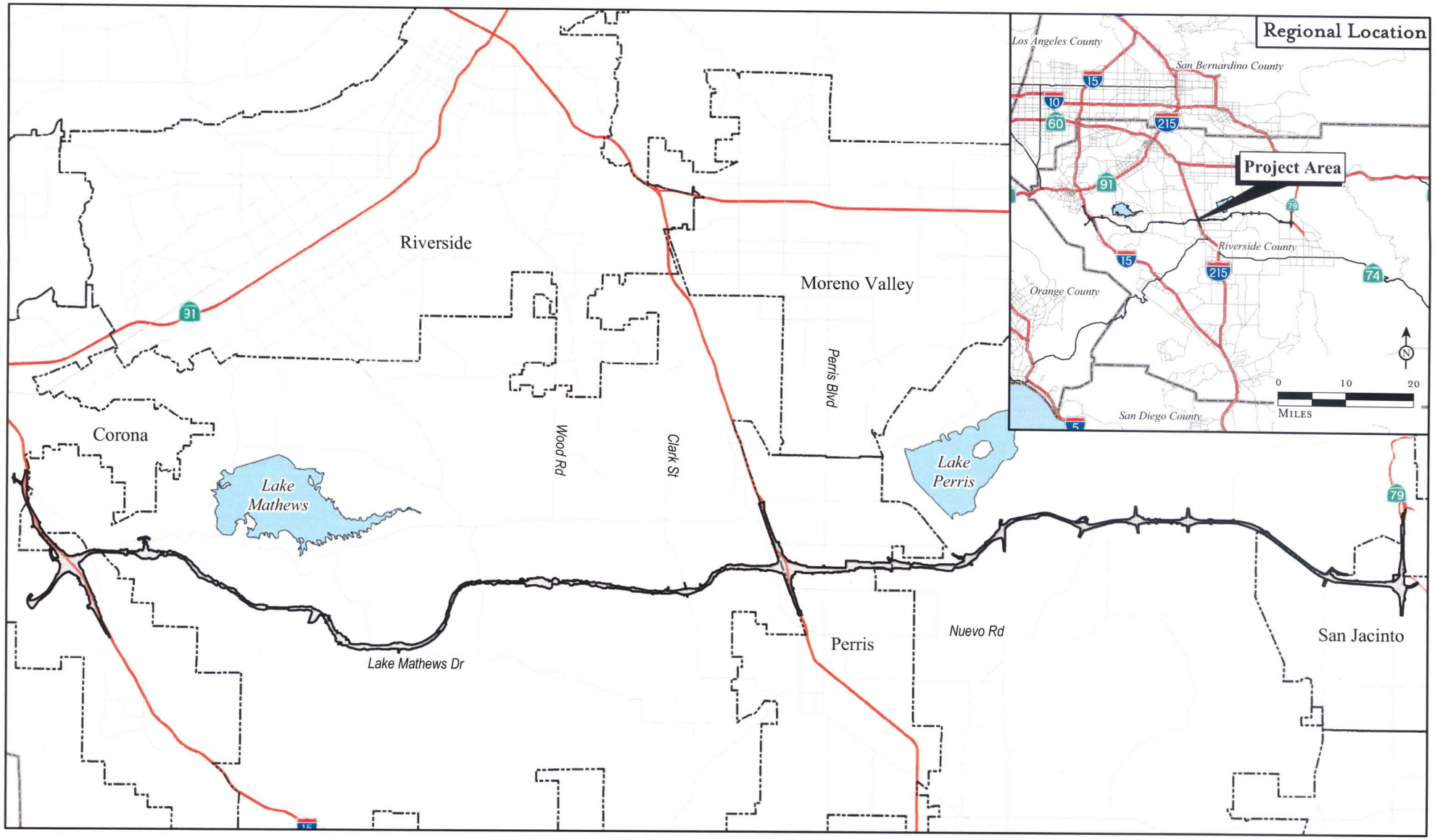

FIGURE 1

SOURCE: Jacobs (2007): Thomas Bros (2005)

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EA 08-0F3200
Riverside County
Mid County Parkway

REGIONAL AND PROJECT LOCATION MAP

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establishment (creation[1]), restoration, preservation or enhancement, as those terms are defined in the new Final Rule.

Existing tools for identifying mitigation opportunities, including the evaluation of expected gains in aquatic resource functions, include several studies that have been prepared by the USACE for the San Jacinto River Watershed Special Area Management Plan (SAMP) and for the MCP project in particular. These documents include:

- Riparian Ecosystem Restoration Plan for the San Jacinto River Watershed: General Design Criteria and Site Selection (Smith 2006)
- Assessment of Riparian Ecosystem Integrity: San Jacinto River Watershed, Riverside County, California (Smith 2002)
- Potential Impacts of Alternative Corridor Alignments to Waters of the United States, Riparian Ecosystems, and Threatened and Endangered Species: Mid County Parkway Project, Riverside County, California (Smith 2008)
- Planning Level Delineation and Geospatial Characterization of Aquatic Resources for San Jacinto and Portions of the Santa Margarita Watersheds, Riverside County, California (Lichvar 2002).

Q.2 Approach

Temporary impacts will be mitigated through in-place restoration of resources that are temporarily affected by project construction at a 1:1 ratio. Additional compensation for temporary impacts may be required by the permitting agencies if temporary impacts are of an extended duration (e.g., more than 2 years) in an effort to compensate for the interim loss of habitat value. Such additional compensatory mitigation, if necessary, will be provided in the same manner as mitigation for permanent impacts.

Compensatory mitigation for permanent impacts and extended temporary impacts will be provided using any or all of the mitigation approaches described in the Final

[1] Establishment is defined in the Final Rule as the manipulation of physical, chemical or biological characteristics to develop an aquatic resource that did not previously exist at an upland site, resulting in net gain of aquatic resource area and functions. The alternative term "creation" is used in this plan, as that term is more commonly used locally, and "establishment" is more often used in the context of establishing vegetation through planting.

Rule on compensatory mitigation. The goal of this mitigation will be no net loss of waters (i.e., creation of new waters or reestablishment [restoration[1]] of formerly functioning aquatic resources at a ratio of 1:1). Additional compensatory mitigation will be used to provide an overall minimum ratio of 1.5:1, for a net increase of aquatic resource function. Non-wetland aquatic resources will include restoration at a 3:1 ratio. The permitting agencies may require a higher ratio, depending on timing of mitigation, increases in functional values, etc. In accordance with the Final Rule, the compensatory mitigation will be based on a watershed approach, which is an analytical process that emphasizes the sustainability or improvement of aquatic resources in the watersheds that are affected by the project. The order of priority for using various approaches to compensatory mitigation for permanent impacts is as follows:

- On-site[2] creation or reestablishment
- Off-site creation or reestablishment
- On-site rehabilitation
- Off-site rehabilitation
- On-site enhancement
- Preservation

---

1 In the new Final Rule, "restoration" is defined as manipulation of physical, chemical or biological characteristics with the goal of returning natural/historic functions to a former or degraded aquatic resource. This term is further divided into two categories: (1) reestablishment results in rebuilding a former aquatic resource for a net gain in aquatic resource area; and (2) rehabilitation results in a net gain of aquatic resource function, but not area. These two subdivisions have traditionally been described locally as restoration and enhancement. However, the terms as defined in the Final Rule are used here. The term "enhancement" is defined differently in the Final Rule to mean manipulation of physical, chemical or biological characteristics of an existing aquatic resource to heighten, intensify or improve specific aquatic resource function(s). This approach does not necessarily involve a degraded system; this approach may be used on the MCP project, and the term enhancement is used here as defined in the Final Rule.

2 On site is defined as land that will be obtained by the Riverside County Transportation Commission (RCTC), including the project right of way, and immediately adjacent land that may be part of contiguous parcels.

Q.2.1 On-Site Creation or Reestablishment

On-site opportunities for replacing aquatic resource areas, through either creation or reestablishment, exist where drainage channels need to be realigned to accommodate flow through the project area, or where channels can be widened in conjunction with construction of some of the project drainage facilities.

Q.2.2 Off-Site Creation or Reestablishment

Off-site mitigation opportunities will focus on the type of "riparian ecosystem restoration" opportunities identified by Smith (2006) for the San Jacinto River watershed, especially those opportunities that involve physical manipulation of drainage channels to expand the area of riparian resources. This restoration will not be limited to the San Jacinto River watershed, but may also occur in other watersheds that are affected by the MCP project.

Q.2.3 On-Site Rehabilitation

On-site rehabilitation involves improving the functional capacity of existing drainages through such measures as correcting erosional degradation, removing nonnative vegetation, and possibly planting native vegetation to improve existing native habitat. In general, this does not involve the expansion of aquatic resource area and thus would be used primarily as an additional "ratio" multiple (i.e., beyond the basic 1:1 replacement ratio).

Q.2.4 Off-Site Rehabilitation

Off-site rehabilitation involves the same type of activities as on-site rehabilitation, but in off-site locations similar to those for the off-site creation or reestablishment. There should also be an effort to combine off-site restoration efforts (both reestablishment and rehabilitation) with upland habitat mitigation for the MCP project. As Smith (2006) notes, the condition of the surrounding upland watershed has an important effect on the function of riparian areas. Therefore, if mitigation for the upland habitats impacted by the MCP project includes conversion of rangeland or agricultural land to native vegetation, this can also have a positive effect on the functional capacity of associated riparian areas.

Q.2.5 On-Site Enhancement

On-site enhancement is similar to on-site creation or establishment in that both approaches involve the manipulation of physical, chemical, or biological characteristics of an existing aquatic resource to heighten, intensify or improve specific aquatic resource function. The primary difference is that the baseline for this type of improvement can be a relatively natural, functioning riparian ecosystem rather than an upland area or degraded aquatic resource. The potential for such an approach may be limited, but one example would be changing the hydrologic regime of a drainage system by directing the output of a water quality basin into an ephemeral drainage course in a local drainage area that previously received much less runoff.

Q.2.6 Preservation

Preservation of existing resources has usually not been considered by regulatory agencies as adequate compensation for loss of aquatic resources because of the net loss of aquatic resource function. However, the Final Rule on compensatory mitigation identifies some situations where this is appropriate, and it is expected that this will be consistent with the SAMP approach of preserving important resources on a watershed scale. Specifically, preservation may be appropriate where there are important functions that contribute significantly to the sustainability of the watershed, and where these resources are under threat of destruction or adverse modification. Ideally, this preservation would be done in conjunction with other restoration, establishment, and/or enhancement activities.

Q.3 Opportunities

In general, there are many mitigation opportunities within the project region. This is illustrated by some of the work by Smith (2006, 2008) relative to the restoration potential in the San Jacinto River watershed and the impacts of the MCP project, respectively. Smith (2008) calculated the reduction in functional capacity of the riparian ecosystems affected by the MCP project in terms of hydrologic integrity units, water quality integrity units, and habitat integrity units. This change in units reflects both direct and indirect impacts of the MCP project as follows: hydrologic integrity reduced by 2.04 units; water quality integrity reduced by 0.24 unit; habitat integrity reduced by 2.89 units. In contrast, Smith 2006 assessed the potential for increasing the functional capacity in the San Jacinto River watershed through a series of potential restoration scenarios. The results of this analysis are that habitat integrity indices could be raised by at least 0.3 point throughout most of the watershed.

Although a similar restoration feasibility assessment has not been done for local drainages associated with the MCP project (primarily to the west of the San Jacinto River watershed), it is reasonable to assume that similar gains could be made. Given that there are a total of 597 hectares (ha) (1,474 acres [ac]) of riparian ecosystem polygons mapped by Smith (2002, 2008) within drainage areas within a 2-mile buffer surrounding the MCP project, there is a potential for an increase of approximately 400 functional capacity units for habitat integrity, which far exceeds the impact of the project.

The following two subsections generally describe some of the locations where mitigation for the MCP impacts to riparian resources could be accomplished. This is a very preliminary assessment, derived from facts obtained during the preparation of the Natural Environment Study, Jurisdictional Delineation, draft Section 404(b)(1) Alternatives Analysis, and the Riparian Ecosystem Restoration Plan for the San Jacinto River Watershed: General Design Criteria and Site Selection (Smith 2006). Other mitigation opportunities likely exist and should not be excluded from consideration as the final mitigation is developed.

Q.3.1 Conservation in Perpetuity

Areas used for habitat restoration, creation, reestablishment, rehabilitation, or enhancement as mitigation for impacts to biological resources and jurisdictional waters are typically required to be preserved in perpetuity through a conservation easement, deed restriction or some other legal means to ensure the mitigation areas are preserved from development or other disturbances in perpetuity.

Q.3.2 On Site

Temporary impacts will be restored on site to their original condition at a 1:1 replacement ratio (or off site through an approved mitigation bank, as discussed in the following section). The project could result in up to 3.5 ha (8.5 ac) of temporary impacts to CDFG jurisdictional areas (USACE jurisdictional areas are less than this amount and are generally included within the areas of CDFG impacts). Temporary impacts were calculated based on a conservative estimation of impacts within the entire right of way, and actual impacts would likely be reduced within the right of way thus leaving additional area for potential on-site mitigation to occur.

Within the project right of way for Alternative 9 TWS DV, there are 13 riparian ecosystems mapped by Smith (2002). Riparian ecosystems in Smith's 2002 report are

defined from a functional perspective as the areas along perennial, intermittent, and ephemeral streams where the interaction with surface and groundwater results in distinctive geomorphic features and vegetation communities. These riparian ecosystems have habitat integrity index scores ranging from 0.22–0.81 (with a mean index score of 0.55) that are ranked as low (<0.4), moderate (0.4–0.7), and high (>0.7).

There is a total of 3.5 ha (8.6 ac) of on-site riparian ecosystems identified by Smith (2002) located within the right of way but outside the area of impact (for purposes of this plan, the cut/fill boundary was used as a conservative boundary for limits of impact). Of this amount, 1.7 ha (4.1 ac) are ranked as low habitat integrity and have the greatest potential to improve the integrity of the riparian ecosystem. An additional 1.6 ha (4.0 ac) are ranked as moderate habitat integrity, and 0.2 ha (0.5 ac) is already ranked as high habitat integrity.

On-site restoration within these riparian ecosystems may include localized reestablishment of native riparian vegetation, control of exotic species, and varying degrees of reconfiguration of existing alluvium surfaces (e.g., sculpting of terraces depending on engineering constraints). The greatest amount of improvement would occur in the lower scoring riparian ecosystems, especially those with low-scoring local drainage boundaries.

According to Smith (2006), conducting restoration in upland areas adjacent to the riparian ecosystems increases the riparian reach integrity, especially when active or former rangeland land use and agriculture are restored to native vegetation. Thus, restoring upland areas adjacent to the riparian ecosystems may also contribute to additional on-site and off-site mitigation. If on-site mitigation is feasible for the riparian ecosystems ranked by Smith (2002) as low and moderate for habitat quality, approximately 75 percent of the mitigation for MCP permanent impacts could potentially occur on site.

Additional analysis of potential on-site mitigation areas based on the MCP Jurisdictional Delineation may identify additional on-site mitigation potential beyond that identified as part of the large-scale mapping efforts for the San Jacinto River watershed. Thus, additional on-site mitigation land is likely available (refer to Figures 2a and 2b for locations of CDFG jurisdictional areas within the right of way) for

Legend

- Alternative 9 TWS DV Right-of-Way
- CDFG Jurisdictional Streambed and Associated Riparian Habitat within Right-of-Way

Riparian Ecosystem Habitat Integrity Index Ranking

- High (Minimal Potential for Mitigation)
- Moderate (Moderate Potential for Mitigation)
- Low (High Potential for Mitigation)

FIGURE 2a

SOURCE: AirPhoto USA (2007); Jacobs Engineering (2007); US Army Corps of Engineers (2003).

0 3,000 6,000 12,000 Feet

0 900 1,800 3,600 Meters

Potential On-Site Riparian Ecosystem Mitigation Areas

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Legend

- Alternative 9 TWS DV Right-of-Way
- CDFG Jurisdictional Streambed and Associated Riparian Habitat within Right-of-Way

Riparian Ecosystem Habitat Integrity Index Ranking

- High (Minimal Potential for Mitigation)
- Moderate (Moderate Potential for Mitigation)
- Low (High Potential for Mitigation)

FIGURE 2b

SOURCE: AirPhoto USA (2007); Jacobs Engineering (2007); US Army Corps of Engineers (2003).

0 3,000 6,000 12,000 Feet

0 900 1,800 3,600 Meters

Potential On-Site Riparian Ecosystem Mitigation Areas

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enhancement and, potentially, creation if sufficient hydrology is made available. For purposes of this Plan, it is estimated that approximately 20 percent of the delineated jurisdictional areas within the project right of way (approximately 1.5 ha [3.8 ac]) is located outside the cut/fill boundary and may provide additional area for potential mitigation. Thus, potentially 5.0 ha (12.4 ac) of riparian ecosystems (CDFG jurisdictional areas) may be available for on-site mitigation.

The identified potential restoration areas must be acquired as part of the right of way or, if the area is on an easement owned by another land owner, the restoration efforts must be approved by the property owner. On-site mitigation is preferred; however, if these riparian ecosystems cannot be utilized as mitigation due to issues involving land ownership/easement/flood control restrictions, engineering constraints, and/or agency preferences, off-site mitigation may be necessary.

Q.3.3 Off Site

Off-site mitigation may be required if there is insufficient opportunity for on-site mitigation or if regulatory agencies prefer off-site mitigation in order to restore a consolidated patch (e.g., sub-basin) of native habitat for certain target species.

There are numerous locations off site that would benefit the quality of the Santa Ana and San Jacinto River watersheds. Within a 2-mile radius of the MCP project, there are 71 ha (151 ac) of mapped riparian ecosystems that have low habitat integrity indices (<0.4), 396 ha (978 ac) having moderate habitat integrity indices (0.4–0.7), and 130 ha (321 ac) having high habitat integrity indices (>0.7) (refer to Figures 3a and 3b). As previously stated, there is a greater potential to improve the quality of the riparian ecosystem when the integrity index ranking of an ecosystem is low. There is less potential for mitigation in a riparian ecosystem where a high habitat integrity index already exists.

According to Smith (2006), depending on the objectives for mitigation, there are numerous strategies for determining which mitigation option is the best. One objective is to restore large patches (e.g., sub-basin) of native habitat for certain target species. Another objective could be to restore riparian corridors for the purpose of connecting existing large patches of habitat. Smith (2006) determined that conducting restoration in the riparian ecosystem proper as well as in adjacent upland areas (including restoring to native vegetation in areas of active or former range land use and agriculture) would increase riparian reach integrity. Thus, low-quality riparian ecosystems that are within the proposed parcels to be purchased as mitigation for the

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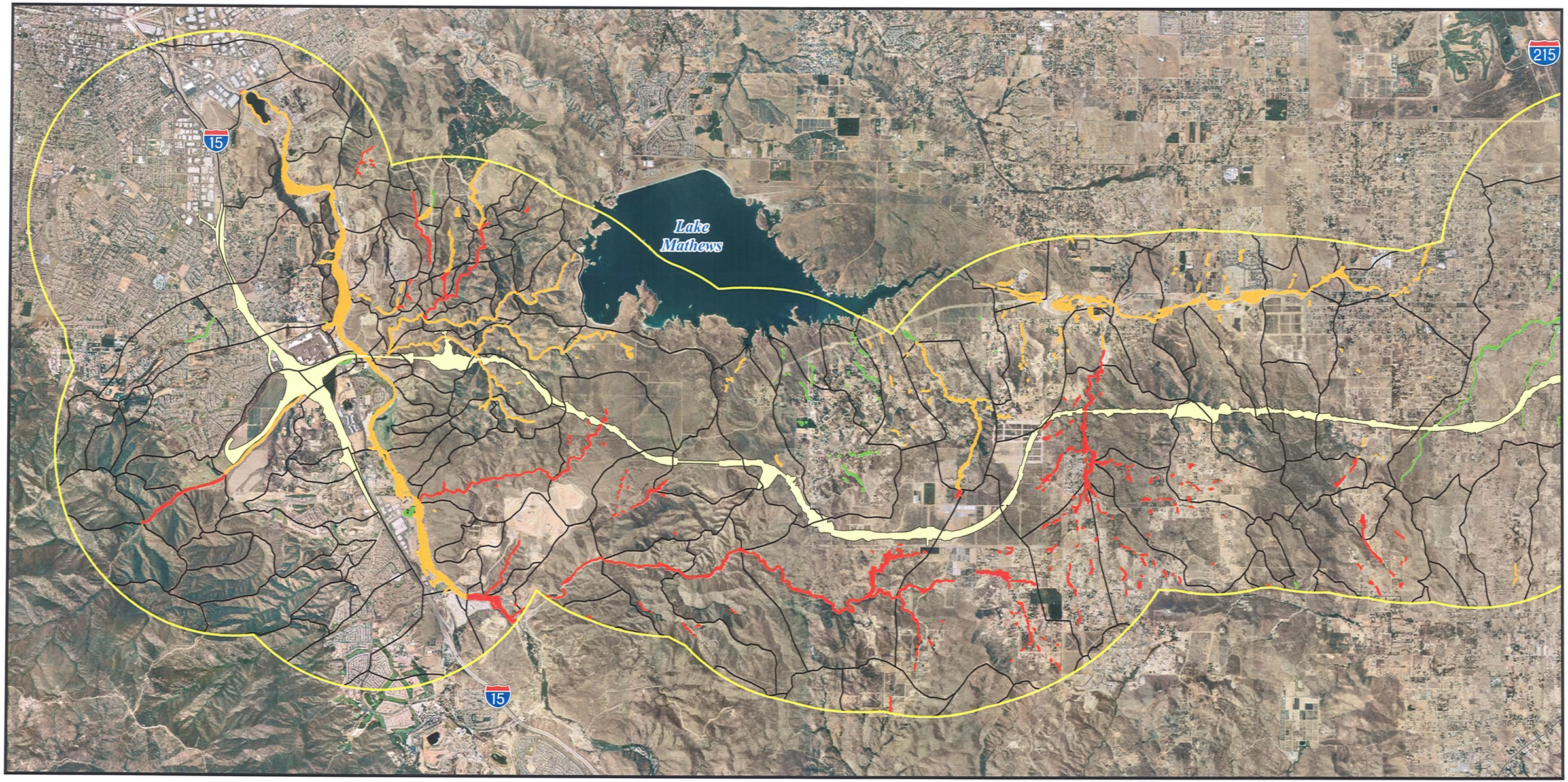

Legend

- Alternative 9 TWS DV Right-of-Way
- Potential Off-Site Mitigation Study Boundary
- Local Drainage Boundary

Riparian Ecosystem Habitat Integrity Index Ranking

- High (Minimal Potential for Mitigation)
- Moderate (Moderate Potential for Mitigation)
- Low (High Potential for Mitigation)

FIGURE 3a

SOURCE: AirPhoto USA (2007); Jacobs Engineering (2007); US Army Corps of Engineers (2003).

0 3,000 6,000 12,000 Feet

0 900 1,800 3,600 Meters

Potential Off-Site Riparian Ecosystem Mitigation Areas

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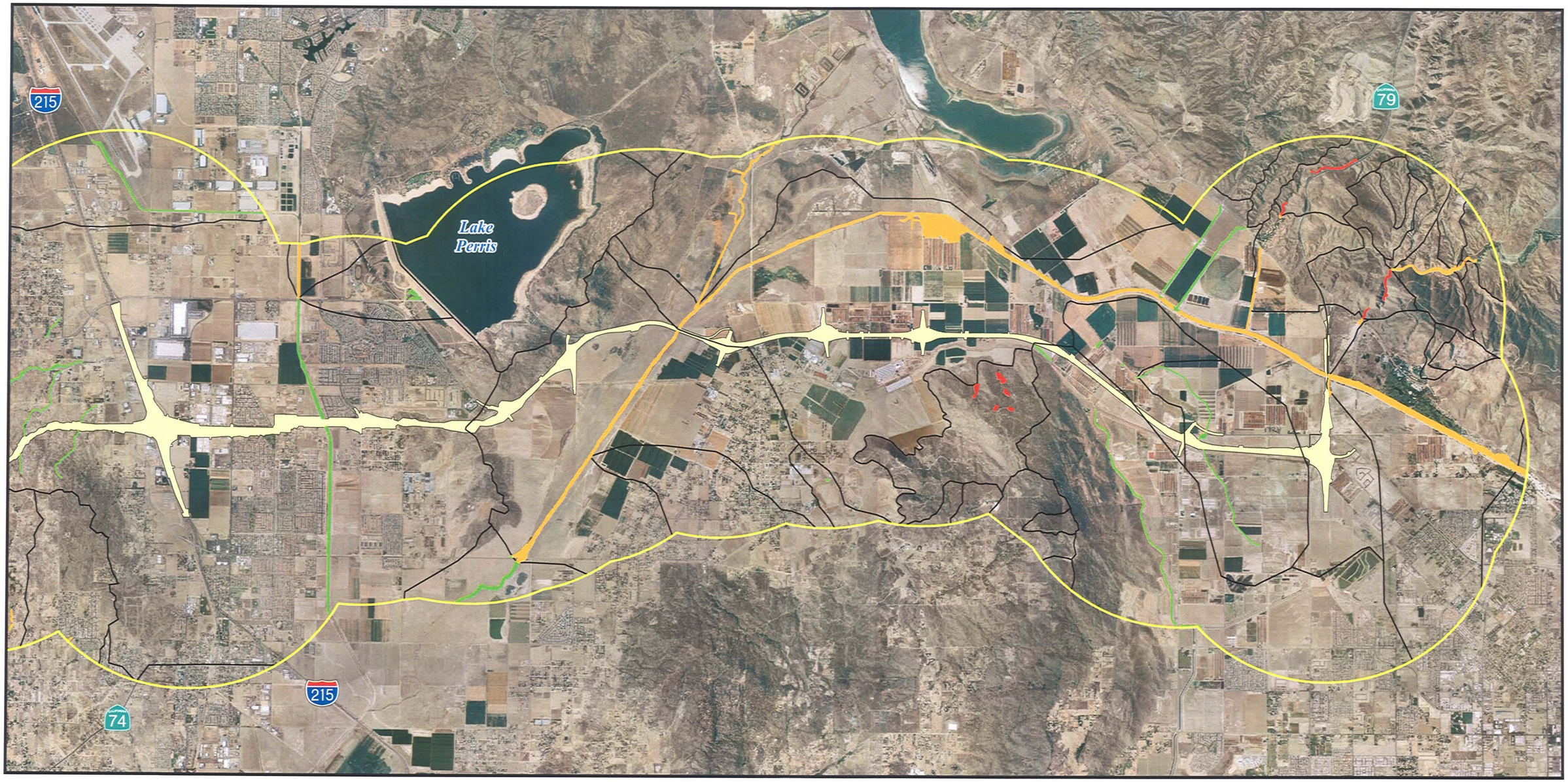

Legend

- Alternative 9 TWS DV Right-of-Way
- Potential Off-Site Mitigation Study Boundary
- Local Drainage Boundary

Riparian Ecosystem Habitat Integrity Index Ranking

- High (Minimal Potential for Mitigation)
- Moderate (Moderate Potential for Mitigation)
- Low (High Potential for Mitigation)

FIGURE 3b

SOURCE: AirPhoto USA (2007); Jacobs Engineering (2007); US Army Corps of Engineers (2003).

0 3,000 6,000 12,000 Feet

0 900 1,800 3,600 Meters

Potential Off-Site Riparian Ecosystem Mitigation Areas

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project to achieve consistency with the western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) consistency and as mitigation for coastal sage scrub would be a high priority for off-site mitigation.

Additionally, off-site mitigation may include the purchase of mitigation bank credits for removal of giant reed (*Arundo donax*) from a location approved by the USACE and CDFG under guidelines described by the resource and regulatory agencies through the permitting process, or through participation in another approved habitat mitigation bank. These off-site programs may occur for temporal loss of habitat value and for mitigation for permanent impacts beyond the basic 1:1 replacement ratio on site.

Q.4 Development of Detailed Mitigation Plan

The detailed mitigation plan will be developed as the project design information becomes more specific and as project implementation moves closer to reality. Because the detailed mitigation plan will likely include both on-site and off-site mitigation, part of its development will depend on engineering information (e.g., hydrology studies) and right of way definition for the MCP project. In particular, hydrology engineering will consider the needs and opportunities for creation or expansion of drainage features that can provide riparian ecosystem functions. Off-site mitigation will depend on the specific identification of the off-site opportunities and the acquisition of mitigation rights on off-site property. The off-site mitigation opportunities will also be guided by the continuing development of the San Jacinto River watershed SAMP, which will further define desired preservation and restoration areas.

Regardless of the emergence of specific mitigation opportunities, the detailed mitigation plan must be developed prior to issuance of the Section 404 Individual Permit by the USACE and the Streambed Alteration Agreement by CDFG. This development will take place in consultation with the representatives from CDFG, USACE, the Regional Water Quality Control Board (RWQCB), and United States Fish and Wildlife Service (USFWS). This consultation will focus on specific mitigation ratios and performance standards that will define the mitigation necessary to comply with the western Riverside County MSHCP, as well as state and federal agency policies regarding the conservation of wetlands and other waters.

Q.5 Elements of Detailed Mitigation Plan

The mitigation that is ultimately included in the detailed mitigation plan could consist of some combination of permittee-responsible mitigation, mitigation bank, or in lieu fees. There will certainly be a significant component of permittee-responsible mitigation associated with temporary impacts and other compensatory mitigation within the MCP right of way. Therefore, there will be a project-specific detailed mitigation plan, which is discussed in more detail below. It is also possible that some of the off-site mitigation may take the form of participation in a mitigation bank or payment of in lieu fees to a resource conservation district. In cases of a mitigation bank or in lieu fees, the responsibility for planning and carrying out the mitigation falls to the sponsors of the mitigation bank or in lieu fee program, and the detailed mitigation plan for MCP will merely provide the relevant details regarding the project participation (i.e., amount and type of mitigation, entity responsible for implementation, and mechanism for ensuring MCP participation).

The permittee responsible for mitigation will prepare a detailed mitigation plan, which will include the elements below. (Mitigation banks and in lieu fee programs must prepare their own mitigation plans, which also include these elements.)

- **Objectives** – This section of the plan will describe the amount and type of mitigation that will be provided, including the method (i.e., restoration, establishment, enhancement and/or preservation). This section must also describe how the resource functions to be provided will address the needs of the watershed.
- **Site Selection** – Site selection includes a discussion of the factors that were considered during the site selection process, including the needs of the watershed, site availability, alternative approaches and locations considered, and the feasibility of establishing ecologically self-sustaining functions, with an emphasis on habitat and hydrology functions.
- **Site Protection Instrument** – This section includes a description of measures by which the mitigation site will be preserved for mitigation purposes, including ownership and perpetual protection of the mitigation areas.
- **Baseline Information** – Baseline information that is important for the mitigation plan includes a description of the existing conditions of the mitigation area, including information on soils, hydrology, plant communities and other site characteristics that are important for determining the value of the proposed mitigation. This will include a wetland delineation of the mitigation site for comparison with the wetland impacts for the project.

- **Determination of Credits** – This section of the plan will provide information on both the permittee-responsible mitigation and any mitigation that is secured through mitigation banks or in lieu fee programs. For the permittee-responsible mitigation, this will include an explanation and rationale for how the proposed compensatory mitigation offsets the project impacts. To the extent that mitigation banks or in lieu fee programs are used, this section will include the number and resource type of the mitigation credits to be used and how these were determined.
- **Mitigation Work Plan** – The mitigation work plan will include the details for the physical implementation of the mitigation. This section will describe the basic responsibilities of the biological monitor/restoration ecologist and restoration contractor, and provide the implementation specifications. These details include: the specific geographic boundaries of the areas to be manipulated and/or planted; the construction methods, sequence and timing; grading plan, if applicable; sources of water, and methods for temporary irrigation, if necessary; control of invasive plant species; erosion control; species, density, sources, and planting methods for container plants, cuttings, and seed; and maintenance requirements for initial establishment of vegetation.
- **Maintenance Plan** – This section of the mitigation plan will describe the expected maintenance activities and responsibilities, including the specifications for maintaining the mitigation sites until the performance standards are achieved. Typical maintenance requirements are weed control, including specifications for use of herbicides, irrigation, herbivory control, erosion control, and supplemental planting. Maintenance schedules will depend on the site-specific conditions relative to weeds, temporary irrigation, etc. Therefore, maintenance requirements will be set forth in terms of performance specifications rather than time schedules. These performance specifications will be closely tied to the overall mitigation site performance standards discussed below.
- **Performance Standards** – In accordance with the Final Rule, performance standards must be based on attributes that are objective and verifiable. Depending on the specific nature and purpose of each of the mitigation sites, these standards may consist of vegetative/habitat-based measurements or measures of overall functional capacity. The vegetative/habitat-based measurements are most appropriate where the goal is replacement of habitat (e.g., for riparian birds). These standards will likely include criteria such as percent cover of various native strata, low weed cover, tree height, etc. For purposes of more general aquatic resource function, especially where the goal is to increase the functional capacity of existing resources, indices of functional capacity are appropriate for defining

performance standards. These may include functional assessment tools similar to those used by Smith (2002).

- **Long-Term Management Plan** – The long-term management plan will describe how the mitigation areas will be managed after the performance standards are achieved. The goal of this aspect of the mitigation plan is the long-term sustainability of the resources. It is likely that the mitigation areas will be in public ownership. Nevertheless, components of the long-term management plan should include ownership, financing, and management responsibility.
- **Adaptive Management Plan** – Adaptive management is a strategy to deal with unexpected changes in site conditions, responsibilities, or performance of the site. Essentially, this component of the plan will provide a process for resolution of these unexpected occurrences to ensure that adequate mitigation will occur.
- **Financial Assurances** – The purpose of this portion of the mitigation plan is to ensure a high level of confidence that the compensatory mitigation project will be successfully completed. There is usually no requirement for a bond or other financial assurance instruments for public projects. Nevertheless, the plan should demonstrate that the costs of the mitigation have been reasonably estimated and that adequate funding for the mitigation portion of the project exists.

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