COMPANY:	SCOPE OF WORK	DATE:	REV:
Chang Consultants		5/5/2015	1
PROJECT:		MILESTONE/PHASE/PROJ SUMMARY:	
Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)		Phase 1	

DIRECT LABOR

PERSONNEL	FUNCTION	HOURS		RATE	AMOUNT
Howard Chang	Principal Engineer	56	@	$76.11	$4,262.16
Wayne Chang	Senior Engineer	178	@	$59.20	$10,537.60
	TOTAL HOURS	234		TOTAL DIRECT LABOR	$14,799.76

MULTIPLIERS

ESCALATION @		(Rate)		
OVERHEAD @	115.00%	(of Total Direct Labor + Escalation)	$17,019.72	
PAYROLL ADDITIVES @		(of Total Direct Labor + Escalation)		
			TOTAL MULTIPLIERS	$17,019.72

OTHER DIRECT EXPENSES ••• Billed at Actual Cost •••

ITEM	QUANTITY	UNIT		UNIT COST	AMOUNT
Delivery	5	EA	@	$100	$501.60
				TOTAL OTHER DIRECT EXPENSES	$501.60

OUTSIDE SERVICES (w/o fee)

COMPANY	LABOR	MULTIPLIER	EXPENSES	TOTAL
			TOTAL OUTSIDE SERVICES	

FEES

OUTSIDE SERVICES ADMIN FEE @		(of Total Outside Services & Outside Services Fees)		
CHANG CONSULTANTS @	10.00%	(of Total Direct Labor + Total Multipliers)	$3,181.95	
OUTSIDE SERVICES @	10.00%	(of Total Labor + Total Multiplier for Outside Services		
			TOTAL FEES	$3,181.95
			TOTAL COST	**$35,503.03**

COMPANY:	SCOPE OF WORK	DATE:	REV:
Tatsumi & Partners		5/5/2015	1
PROJECT:		MILESTONE/PHASE/PROJ SUMMARY:	
Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)		Phase I	

DIRECT LABOR

PERSONNEL	FUNCTION	HOURS		RATE	AMOUNT
Senior Principal	Principal-in-Charge	9	@	$92.26	$830.34
Senior Associate	Design			$50.00	
Associate	Design	55	@	$42.00	$2,310.00
Technical Staff II	Design/Project Manager	62	@	$36.81	$2,282.22
Technical Staff I	Irrigation Design/Drafting	301	@	$34.86	$10,492.86
Staff	Landscape Support			$24.00	
	TOTAL HOURS	427		TOTAL DIRECT LABOR	$15,915.42

MULTIPLIERS

ESCALATION @		(Rate)		
OVERHEAD @	179.00%	(of Total Direct Labor + Escalation)	$28,488.60	
PAYROLL ADDITIVES @		(of Total Direct Labor + Escalation)		
			TOTAL MULTIPLIERS	$28,488.60

OTHER DIRECT EXPENSES ••• Billed at Actual Cost •••

ITEM	QUANTITY	UNIT		UNIT COST	AMOUNT
Reproduction - VIA	1	ea	@	$1,750.00	$1,750.00
Reproduction - Landscape PS&E	1	ea			
Travel (Mileage)	1	ea	@	$400.00	$400.00
Shipping/Delivery	1	ea			
Presentation Graphics (24" x 36")	10	sheets	@	$40.00	$400.00
Agency As-Builts and Research Materials	100	sheets	@	$2.00	$200.00
				TOTAL OTHER DIRECT EXPENSES	$2,750.00

OUTSIDE SERVICES (w/o fee)

COMPANY	LABOR	MULTIPLIER	EXPENSES	TOTAL
			TOTAL OUTSIDE SERVICES	

FEES

OUTSIDE SERVICES ADMIN FEE @		(of Total Outside Services & Outside Services Fees)		
TATSUMI & PARTNERS @	10.00%	(of Total Direct Labor + Total Multipliers)	$4,440.40	
OUTSIDE SERVICES @	10.00%	(of Total Labor + Total Multiplier for Outside Services		
			TOTAL FEES	$4,440.40
			TOTAL COST	**$51,594.42**

COMPANY:	SCOPE OF WORK	DATE:	REV:
Diaz Yourman & Associates		5/5/2015	1
PROJECT:		**MILESTONE/PHASE/PROJ SUMMARY:**	
Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)		Phase 1	

DIRECT LABOR

PERSONNEL	FUNCTION	HOURS		RATE	AMOUNT
Principal	Principal	21	@	$68.29	$1,434.09
Associate	Associate	36	@	$57.20	$2,059.20
Senior Engineer	Senior Engineer				
Project Engineer	Project Engineer	97	@	$43.27	$4,197.19
Staff Engineer	Staff Engineer	65	@	$33.17	$2,156.05
CADD Designer/Drafter	CADD Designer/Drafter	6	@	$22.07	$132.42
Technical Editing	Technical Editing	10	@	$33.66	$336.60
Clerk/Word Processor/Clerical	Clerk/Word Processor/Clerical	10	@	$33.66	$336.60
	TOTAL HOURS	245		TOTAL DIRECT LABOR	$10,652.15

MULTIPLIERS

ESCALATION @		(Rate)		
OVERHEAD @	215.7%	(of Total Direct Labor + Escalation)	$22,974.56	
PAYROLL ADDITIVES @		(of Total Direct Labor + Escalation)		
			TOTAL MULTIPLIERS	$22,974.56

OTHER DIRECT EXPENSES ••• Billed at Actual Cost •••

ITEM	QUANTITY	UNIT		UNIT COST	AMOUNT
Truck	16	EA	@	$18	$290.35
FedEx	1	EA	@	$50	$50.00
				TOTAL OTHER DIRECT EXPENSES	$340.35

OUTSIDE SERVICES (w/o fee)

COMPANY	LABOR	MULTIPLIER	EXPENSES	TOTAL
Environmental Database			$1,000.00	$1,000.00
Cert. Industrial Hyg.			$1,000.00	$1,000.00
Laboratory			$3,808.00	$3,808.00
Drilling			$3,271.00	$3,271.00
			TOTAL OUTSIDE SERVICES	$9,079.00

FEES

OUTSIDE SERVICES ADMIN FEE @		(of Total Outside Services & Outside Services Fees)		
DIAZ YOURMAN & ASSOCIAT	10.00%	(of Total Direct Labor + Total Multipliers)	$3,362.67	
OUTSIDE SERVICES @		(of Total Labor + Total Multiplier for Outside Services		
			TOTAL FEES	$3,362.67
			TOTAL COST	**$46,408.72**

COMPANY:	SCOPE OF WORK	DATE:	REV:
Value Management Strategies	VA Study	5/5/2015	1

PROJECT:	MILESTONE/PHASE/PROJ SUMMARY:
Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)	Phase 1

DIRECT LABOR

PERSONNEL	FUNCTION	HOURS		RATE	AMOUNT
R. Terry Hays	Program Manager	4	@	$95.00	$380.00
CVS Team Leader	CVS Team Leader	120	@	$64.27	$7,712.40
Cheryl Kramer	Project Coordinator	8	@	$49.04	$392.32
April Hiller	Technical Editor	48	@	$28.85	$1,384.80
Sandy Northrop	Administrative Assistant	6	@	$28.95	$173.70
Rob Stewart	QA/QC	8	@	$95.00	$760.00
	TOTAL HOURS	194		TOTAL DIRECT LABOR	$10,803.22

MULTIPLIERS

ESCALATION @	(Rate)		
OVERHEAD @	195.00%	(of Total Direct Labor + Escalation)	$21,066.28
PAYROLL ADDITIVES @		(of Total Direct Labor + Escalation)	
		TOTAL MULTIPLIERS	$21,066.28

OTHER DIRECT EXPENSES ••• Billed at Actual Cost •••

ITEM	QUANTITY	UNIT		UNIT COST	AMOUNT
Airfare	3	trips	@	$600.00	$1,800.00
Round trip airport transportation	3	trips	@	$90.00	$270.00
Rental Car	7	days	@	$75.00	$525.00
Meals	7	days	@	$40.00	$280.00
Hotel	7	days	@	$130.00	$910.00
Parking	7	days	@	$15.00	$105.00
Shipping	1		@	$250.00	$250.00
Printing	6	reports	@	$100.00	$600.00
				TOTAL OTHER DIRECT EXPENSES	$4,740.00

OUTSIDE SERVICES (w/o fee)

COMPANY	LABOR	MULTIPLIER	EXPENSES	TOTAL
			TOTAL OUTSIDE SERVICES	

FEES

OUTSIDE SERVICES ADMIN FEE @		(of Total Outside Services & Outside Services Fees)	
VALUE MANAGEMENT STRAT	10.00%	(of Total Direct Labor + Total Multipliers)	$3,186.95
OUTSIDE SERVICES @	10.00%	(of Total Labor + Total Multiplier for Outside Services	
		TOTAL FEES	$3,186.95
		TOTAL COST	**$39,796.45**

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
Kleinfelder		5/5/2015	1
PROJECT:		MILESTONE/PHASE/PROJECT SUMMARY:	
Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)		Project Summary	

Kleinfelder Summary

TASK	Project Manager	Senior Structural Engineer	Senior Engineer	Senior Engineer/QA/QC	Associate Engineer	Associate Engineer	Senior Technician	PM Assistant	Principal Engineer	Technical Peer Reviewer	Principal Geologist/Reviewer	PM/Principal Geotechnical Engr	Senior Geologist	Senior Engineer	Staff Engineer II	Staff Geologist II	Word Processing/Admin.	Draftsperson	Project Administrator/Admin	Billing Administrator/Admin	TOTAL
	$86.71	$72.31	$72.94	$60.89	$45.67	$40.22	$59.55	$35.23	$113.58	$72.50	$83.19	$59.51	$48.80	$39.56	$34.98	$32.27	$22.00	$30.08	$24.10	$37.49	
Phase 1 Subtotal	627	812		4	142	162	198	273	40	6	4	39	34	24	58		6	12	1	1	2,443
Totals	627	812		4	142	162	198	273	40	6	4	39	34	24	58		6	12	1	1	2,443

Kimley-Horn & Associates Summary

	Sen Rdwy Engineer	Traffic Engineer	QC/Senior Engineer		Proj Engr Civil	Proj Engr Traffic	Surveyor	Engineer	Assist. Engr / Technician	CADD Designer	Admin Support										TOTAL
	$79.34	$75.00	$99.04		$62.75	$52.66	$54.01	$46.69	$36.67	$46.64	$30.16										
Phase 1 Subtotal	309	126	36		397	200	68	414	126	195	36										1,907
Totals	309	126	36		397	200	68	414	126	195	36										1,907

LSA Associates Summary

	Principal in Charge	Envir. Team Leader	Technical Principal	Technical Staff	Technical Staff	Technical Staff	Technical Staff	Word Processing/Editor	Graphics/GIS	Administrative Support											TOTAL
	$84.89	$49.53	$68.10	$46.53	$39.37	$30.09	$21.96	$25.74	$37.39	$18.10											
Phase 1 Subtotal	192	483	115	564	562	1.495	336	499	452	229											4,927

Chang Consultants Summary

	Principal Engineer	Senior Engineer																			TOTAL
	$76.11	$59.20																			
Phase 1 Subtotal	56	178																			234

Tatsumi & Partners Summary

	Principal-in-Charge	Design	Design	Irrigation Design/ Drafting	Irrigation Design/Drafting	Landscape Support															TOTAL
	$92.26	$50.00	$42.00	$36.81	$34.86	$24.00															
Phase 1 Subtotal	9	55	62	301																	427
Totals	9	55	62	301																	427

Diaz Yourman & Associates Summary

	Principal	Associate	Senior Engineer	Project Engineer	Staff Engineer	CADD Designer/ Drafter	Technical Editing	Clerk/Word Processor/Clerical													TOTAL
	$68.29	$57.20		$43.27	$33.17	$22.07	$33.66	$33.66													
Phase 1 Subtotal	21	36		97	65	6	10	10													245

Value Management Strategies Summary

	Program Manager	CVS Team Leader	Project Coordinator	Technical Editor	Administrative Assistant	QA/QC															TOTAL
Phase 1 Subtotal	4	120	8	48	6	8															194

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
Kleinfelder	Preliminary Engineering/Environmental Clearance/Technical Report	5/5/2015	1
PROJECT:		**MILESTONE/PHASE/PROJECT SUMMARY:**	
Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)		Phase 1	

TASK	Project Manager	Senior Structural Engineer	Senior Engineer	Senior Engineer/QA/QC	Associate Engineer	Associate Engineer	Senior Technician	PM Assistant	Principal Engineer	Technical Peer Reviewer	Principal Geologist/Reviewer	PM/Principal Geotechnical Engr	Senior Geologist	Senior Engineer	Staff Engineer II	Staff Geologist II	Word Processing/Admin.	Draftsperson	Project Administrator/Admin	Billing Administrator/Admin	TOTAL
Total Manhours	627	812		4	142	162	198	273	40	6	4	39	34	24	58		6	12	1	1	**2,443**
ARTICLE AII - PROJECT ADMINISTRATION																					
A. Project Management																					
Project Management Services	192							144													**336**
Project Management Plan / Work Plan	8							8													**16**
Communication Plan	1							1													**2**
B. Budgeting																					
Project Budgeting																					
C. Cost Accounting																					
Project Cost Accounting	24							48													**72**
D. Scheduling																					
Project Scheduling	24							24													**48**
E. Progress Reporting																					
Progress Reporting	24																				**24**
F. Contract Administration																					
Contract Administration Services																					
ARTICLE AIII - PLANNING AND PROJECT DEVELOPMENT																					
A. Research and Data Gathering																					
Obtain Project Information																					
B. Project Development Team																					
Monthly PDT Meetings	130	168						24													**322**
C. Permits																					
Encroachment and Right of Entry Permits																					
D. Design Surveys																					
Coordinate Work Provided by County		16					8														**24**
E. Preliminary Design Drainage Report																					

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
Kleinfelder	Preliminary Engineering/Environmental Clearance/Technical Report	5/5/2015	1
PROJECT:		MILESTONE/PHASE/PROJECT SUMMARY:	
Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)		Phase 1	

TASK	Project Manager	Senior Structural Engineer	Senior Engineer	Senior Engineer/QA/QC	Associate Engineer	Associate Engineer	Senior Technician	PM Assistant	Principal Engineer	Technical Peer Reviewer	Principal Geologist/Reviewer	PM/Principal Geotechnical Engr	Senior Geologist	Senior Engineer	Staff Engineer II	Staff Geologist II	Word Processing/Admin.	Draftsperson	Project Administrator/Admin	Billing Administrator/Admin	TOTAL
Field Reconnaissance and Documentation																					
Analysis and Report																					
Drainage Design Coordination and Meetings																					
F. Preliminary Water Quality Management Plan (PWQMP)																					
Prepare Preliminary WQMP																					
Prepare Draft Concept SWPPP																					
Water Quality Coordination and Meetings																					
G. Preliminary Geotechnical Report																					
Obtain Available Geotechnical Information																					
Review Data Obtained																					
Prepare Draft Preliminary Geotechnical Report																					
H. Planning Studies																					
Support County with HBP documentation		8							40												48
Prepare Plan View Alternatives & Typical Sections	4	40					8														52
Prepare necessary Profiles & SE Diagrams																					
Coordination and Constructability Review Meeting	2	4																			6
Prepare Final Exhibits of Alternatives	2	4																			6
Structures APS (2)	8	40				130	40														218
Hydraulic Study	2	16																			18
Prepare Construction Cost Estimates	2	24				32															58
I. Environmental Determination and Environmental Issues																					
Environmental Task Coordination																					
Project Initiation																					
Field Review Meeting and PES	8	8																			16
Environmental Technical Studies																					
Air Quality Analysis (Exempt from Conformity Requirements)	2	4																			6

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
Kleinfelder	Preliminary Engineering/Environmental Clearance/Technical Report	5/5/2015	1
PROJECT:		**MILESTONE/PHASE/PROJECT SUMMARY:**	
Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)		Phase 1	

TASK	Project Manager	Senior Structural Engineer	Senior Engineer	Senior Engineer/QA/QC	Associate Engineer	Associate Engineer	Senior Technician	PM Assistant	Principal Engineer	Technical Peer Reviewer	Principal Geologist/Reviewer	PM/Principal Geotechnical Engr	Senior Geologist	Senior Engineer	Staff Engineer II	Staff Geologist II	Word Processing/Admin.	Draftsperson	Project Administrator/Admin	Billing Administrator/Admin	TOTAL
Noise Study Memorandum	2	4																			6
Floodplain Encroachment Summary	2	4																			6
NES and supporting biological resources tasks	16	16																			32
Literature and Database Search																					
USFWS Listed Species Coordination Letter																					
NES Report																					
Focused Surveys																					
Vegetation Mapping																					
Burrowing Owl Survey																					
Bat Assessment																					
Santa Ana Sucker Habitat Suitability Assessment																					
Jurisdictional Delineation																					
MSHCP Consistency																					
MSHCP Consistency Analysis																					
DBESP																					
ESA/Section 7 Consultation																					
Cultural Resource Assessment	2	4																			6
Caltrans APE Map							2														2
Research																					
Coordination/Consultation																					
Field Survey																					
Historic Property Survey Report																					
Paleontological Identification Report	2	4																			6
Section 4(f) De Minimis	2	4																			6
Initial Site Assessment	2	4																			6
Visual Impact Assessment	2	16					16														34

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
Kleinfelder	Preliminary Engineering/Environmental Clearance/Technical Report	5/5/2015	1
PROJECT:		MILESTONE/PHASE/PROJECT SUMMARY:	
Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)		Phase 1	

TASK	Project Manager	Senior Structural Engineer	Senior Engineer	Senior Engineer/QA/QC	Associate Engineer	Associate Engineer	Senior Technician	PM Assistant	Principal Engineer	Technical Peer Reviewer	Principal Geologist/Reviewer	PM/Principal Geotechnical Engr	Senior Geologist	Senior Engineer	Staff Engineer II	Staff Geologist II	Word Processing/Admin.	Draftsperson	Project Administrator/Admin	Billing Administrator/Admin	TOTAL
Administrative Draft IS/MND	4	8																			12
Second Administrative Draft IS/MND	2	4																			6
Draft IS/MND	2	2																			4
Public Review of the Draft IS/MND																					
Response to Comments	2	4																			6
Administrative Final IS/MND	2	2																			4
Final IS/MND	2	2																			4
CE Checklist and Environmental Commitments Record	2	4																			6
CE/CE for Geotechnical Field Work	4	8					4														16
Permitting for Geotechnical Borings																					
Optional Environmental Services																					
Community Outreach Meeting	40	24					32														96
Air PM2.5/PM10 Hot-spot Analysis Form, Air Quality Conformity Analysis, Checklist	2	4																			6
Noise Study Report	2	4																			6
Noise Abatement Decision Report	2	4																			6
Sensitive Plant Species Focused Surveys	2	4																			6
Nighttime Bat Focused Surveys and Report	2	4																			6
Historical Resources Evaluation Report	2	4																			6
Paleontological Evaluation Report PER/PIR (Combined)	2	4																			6
Community Impact Assessment	2	4																			6
Relocation Impact Report	2	4																			6
Initial Study/Environmental Assessment	16	32																			48
Administrative Draft IS/EA																					
2nd Administrative Draft IS/EA																					
Draft EA																					
Public Review Draft EA																					

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
Kleinfelder	Preliminary Engineering/Environmental Clearance/Technical Report	5/5/2015	1
PROJECT:		MILESTONE/PHASE/PROJECT SUMMARY:	
Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)		Phase 1	

TASK	Project Manager	Senior Structural Engineer	Senior Engineer	Senior Engineer/CAD/C	Associate Engineer	Associate Engineer	Senior Technician	PM Assistant	Principal Engineer	Technical Peer Reviewer	Principal Geologist/Reviewer	PM/Principal Geotechnical Engr	Senior Geologist	Senior Engineer	Staff Engineer II	Staff Geologist II	Word Processing/Admin.	Draftsperson	Project Administrator/Admin	Billing Administrator/Admin	TOTAL
Reponse to Comments																					
Administrative Final FONSI																					
Final FONSI																					
ECR																					
Hazardous Materials Testing	2	4																			6
J. Technical Report																					
Traffic Analysis																					
Prepare Draft Technical Study	16	160					40														216
Address County & Caltrans Comments	4	16					4														24
Prepare Pre Final Technical Study	4	8																			12
Address County & Caltrans Comments	2	8																			10
Prepare Final Technical Study	1	4																			5
K. Geometric Approval Drawings																					
Initial Preparation of GADs																					
Incorporate Comments / Final GADs																					
GAD Coordination and meetings																					
L. Geotechnical Investigation and Design																					
Preliminary Geologic, Geotechnical and Seismic Hazards Report										2	2	14	18		20		2	6			64
Preliminary Geotechnical Investigation and Design	1	4								4	2	25	16	24	38		4	6	1	1	126
M. Preliminary Right of Way Requirements Exhibits																					
Prepare R/W Exhibits	2	4						8													14
N. Agreements																					
Agreements Support Services	2	4																			6
O. Utility Coordination																					
Utility Mapping, Coordination and Management	2	4						16													22
P. Miscellaneous Design Support																					

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
Kleinfelder	Preliminary Engineering/Environmental Clearance/Technical Report	5/5/2015	1
PROJECT:		MILESTONE/PHASE/PROJECT SUMMARY:	
Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)		Phase 1	

TASK	Project Manager	Senior Structural Engineer	Senior Engineer	Senior Engineer/QA/QC	Associate Engineer	Associate Engineer	Senior Technician	PM Assistant	Principal Engineer	Technical Peer Reviewer	Principal Geologist/Reviewer	PM/Principal Geotechnical Engr	Senior Geologist	Senior Engineer	Staff Engineer II	Staff Geologist II	Word Processing/Admin.	Draftsperson	Project Administrator/Admin	Billing Administration/Admin	TOTAL
Prepare Fact Sheets	2	2																			4
Traffic Management Plan	2	2																			4
ARTICLE AIV - STRUCTURES																					
A. Structures Type Selection Report																					
Draft Type Selection Report	8	40			120		40														208
Type Selection Meeting	6	6			6																18
Final TSR	4	8			16		4														32
ARTICLE AVI - VALUE ENGINEERING																					
VA - Moderator																					
Attend VA -Study	8	16																			24
ARTICLE AVII - QUALITY CONTROL PLAN																					
Prepare Quality Control Plan	4	8		4																	16

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
Kimley-Horn & Associates	Civil Design Services	5/5/2015	1
PROJECT:		MILESTONE/PHASE/PROJECT SUMMARY:	
Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)		Phase I	

TASK	Sen Rdwy Engineer	Traffic Engineer	QC/Senior Engineer		Proj Engr Civil	Proj Engr Traffic	Surveyor	Engineer	Assist. Engr / Technician	CADD Designer	Admin. Support							TOTAL
Total Manhours	309	126	36		397	200	68	414	126	195	36							**1,907**
ARTICLE AIII - PLANNING AND PROJECT DEVELOPMENT																		
A. Research and Data Gathering																		
Obtain Project Information	2	2			6	6	6	20										**42**
B. Project Development Team																		
Monthly PDT Meetings	130	40			40		8											**218**
Progress Updates / Coordination	36	12																**48**
C. Permits																		
Encroachment and Right of Entry Permits	4				6													**10**
D. Design Surveys																		
Coordinate Work Provided by County																		
E. Preliminary Design Drainage Report																		
Field Reconnaissance and Documentation	4				6													**10**
Analysis and Report	8		2		40			80		6	6							**142**
Drainage Design Coordination and Meetings	4				6													**10**
F. Preliminary Water Quality Management Plan (PWQMP)																		
Prepare Preliminary WQMP	8		4		50			12		6	6							**86**
Prepare Draft Concept SWPPP	6		2		20			20		6	6							**60**
Water Quality Coordination and Meetings	3				4													**7**
G. Preliminary Geotechnical Report																		
Obtain Available Geotechnical Information																		
Review Data Obtained																		
Prepare Draft Preliminary Geotechnical Report																		

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
Kimley-Horn & Associates	Civil Design Services	5/5/2015	1
PROJECT:		**MILESTONE/PHASE/PROJECT SUMMARY:**	
Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)		Phase I	

TASK	Sen Rdwy Engineer	Traffic Engineer	QC/Senior Engineer		Proj Engr Civil	Proj Engr Traffic	Surveyor	Engineer	Assist. Engr / Technician	CADD Designer	Admin Support							TOTAL
H. Planning Studies																		
Support County with HBP documentation																		
Prepare Plan View Alternatives & Typical Sections	4		2		30			60		40								**136**
Prepare necessary Profiles & SE Diagrams	2		2		20			40		20								**84**
Coordination and Constructability Review Meeting	6				6													**12**
Prepare Final Exhibits of Alternatives	2		1		6			20		12								**41**
Structures APS (2)																		
Hydraulic Study																		
Prepare Construction Cost Estimates	6	6	4		20			40	20									**96**
I. Environmental Determination and Environmental Issues																		
Environmental Task Coordination																		
Project Initiation																		
Field Review Meeting and PES																		
Environmental Technical Studies																		
Air Quality Analysis (Exempt from Conformity Requirements)																		
Noise Study Memorandum																		
Floodplain Encroachment Summary																		
NES and supporting biological resources tasks																		
Literature and Database Search																		
USFWS Listed Species Coordination Letter																		
NES Report																		

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
Kimley-Horn & Associates	Civil Design Services	5/5/2015	1
PROJECT:		MILESTONE/PHASE/PROJECT SUMMARY:	
Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)		Phase I	

TASK	Sen Rdwy Engineer	Traffic Engineer	QC/Senior Engineer		Proj Engr Civil	Proj Engr Traffic	Surveyor	Engineer	Assist. Engr / Technician	CADD Designer	Admin Support							TOTAL
Focused Surveys																		
Vegetation Mapping																		
Burrowing Owl Survey																		
Bat Assessment																		
Santa Ana Sucker Habitat Suitability Assessment																		
Jurisdictional Delineation																		
MSHCP Consistency																		
MSHCP Consistency Analysis																		
DBESP																		
ESA/Section 7 Consultation																		
Cultural Resource Assessment																		
Caltrans APE Map																		
Research																		
Coordination/Consultation																		
Field Survey																		
Historic Property Survey Report																		
Paleontological Identification Report																		
Section 4(f) De Minimis																		
Initial Site Assessment																		
Visual Impact Assessment																		

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
Kimley-Horn & Associates	Civil Design Services	5/5/2015	1
PROJECT:		**MILESTONE/PHASE/PROJECT SUMMARY:**	
Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)		Phase I	

TASK	Sen Rdwy Engineer	Traffic Engineer	QC/Senior Engineer		Proj Engr Civil	Proj Engr Traffic	Surveyor	Engineer	Assist. Engr / Technician	CADD Designer	Admin Support							TOTAL
Administrative Draft IS/MND																		
Second Administrative Draft IS/MND																		
Draft IS/MND																		
Public Review of the Draft IS/MND																		
Response to Comments																		
Administrative Final IS/MND																		
Final IS/MND																		
CE Checklist and Environmental Commitments Record																		
CE/CE for Geotechnical Field Work																		
Permitting for Geotechnical Borings																		
Optional Environmental Services																		
Community Outreach Meeting	12				6	6		12		8								**44**
Air PM2.5/PM10 Hot-spot Analysis Form, Air Quality Conformity Analysis, Checklist																		
Noise Study Report																		
Noise Abatement Decision Report																		
Sensitive Plant Species Focused Surveys																		

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
Kimley-Horn & Associates	Civil Design Services	5/5/2015	1
PROJECT:		MILESTONE/PHASE/PROJECT SUMMARY:	
Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)		Phase I	

TASK	Sen Rdwy Engineer	Traffic Engineer	QC/Senior Engineer		Proj Engr Civil	Proj Engr Traffic	Surveyor	Engineer	Assist. Engr / Technician	CADD Designer	Admin Support							TOTAL
Nighttime Bat Focused Surveys and Report																		
Historical Resources Evaluation Report																		
Paleontological Evaluation Report PER/PIR (Combined)																		
Community Impact Assessment																		
Relocation Impact Report																		
Initial Study/Environmental Assessment																		
Administrative Draft EA																		
2nd Administrative Draft IS/EA																		
Draft EA																		
Public Review Draft EA																		
Reponse to Comments																		
Administrative Final FONSI																		
Final FONSI																		
ECR																		
Hazardous Materials Testing																		
J. Technical Report																		
Traffic Analysis		34	6			106			6	8	8							**168**
Prepare Draft Technical Study																		
Address County & Caltrans Comments																		
Prepare Pre Final Technical Study																		
Address County & Caltrans Comments																		
Prepare Final Technical Study																		

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
Kimley-Horn & Associates	Civil Design Services	5/5/2015	1
PROJECT:		**MILESTONE/PHASE/PROJECT SUMMARY:**	
Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)		Phase I	

TASK	Sen Rdwy Engineer	Traffic Engineer	QC/Senior Engineer		Proj Engr Civil	Proj Engr Traffic	Surveyor	Engineer	Assist. Engr / Technician	CADD Designer	Admin Support							TOTAL
K. Geometric Approval Drawings																		
Initial Preparation of GADs	6	2	2		12	6		40		20								**88**
Incorporate Comments / Final GADs	4	2	2		8			20		12								**48**
GAD Coordination and meetings	2				3													**5**
L. Geotechnical Investigation and Design																		
Preliminary Geologic, Geotechnical and Seismic Hazards Report																		
Preliminary Geotechnical Investigation and Design																		
M. Preliminary Right of Way Requirements Exhibits																		
Prepare R/W Exhibits	14		3		10		54	50		15								**146**
N. Agreements																		
Agreements Support Services																		
O. Utility Coordination																		
Utility Mapping, Coordination and Management	30		2		58	8			50	12								**160**
P. Miscellaneous Design Support																		
Prepare Fact Sheets	16	4	2		40					20	4							**86**
Traffic Management Plan		24	2			68			50	10	6							**160**

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
LSA Associates	Environmental Services	5/5/2015	1
PROJECT:		MILESTONE/PHASE/PROJECT SUMMARY:	
Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)		Phase 1	

TASK	Principal In Charge	Envir. Team Leader	Technical Principal	Technical Staff	Technical Staff	Technical Staff	Technical Staff	Word Processing/Editor	Graphics/GIS	Administrative Support								TOTAL
Total Manhours	192	483	115	564	562	1,495	336	499	452	229								**4,927**
ARTICLE AIII - PLANNING AND PROJECT DEVELOPMENT																		
A. Research and Data Gathering																		
Obtain Project Information																		
B. Project Development Team																		
Monthly PDT Meetings																		
Progress Updates / Coordination																		
C. Permits																		
Encroachment and Right of Entry Permits																		
D. Design Surveys																		
Coordinate Work Provided by County																		
E. Preliminary Design Drainage Report																		
Field Reconnaissance and Documentation																		
Analysis and Report																		
Drainage Design Coordination and Meetings																		
F. Preliminary Water Quality Management Plan (PWQMP)																		
Prepare Preliminary WQMP																		
Prepare Draft Concept SWPPP																		
Water Quality Coordination and Meetings																		
G. Preliminary Geotechnical Report																		
Obtain Available Geotechnical Information																		
Review Data Obtained																		
Prepare Draft Preliminary Geotechnical Report																		

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
LSA Associates	Environmental Services	5/5/2015	1
PROJECT:		**MILESTONE/PHASE/PROJECT SUMMARY:**	
Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)		Phase 1	

TASK	Principal In Charge	Envir. Team Leader	Technical Principal	Technical Staff	Technical Staff	Technical Staff	Technical Staff	Word Processing/Editor	Graphics/GIS	Administrative Support								TOTAL
H. Planning Studies																		
Support County with HBP documentation																		
Prepare Plan View Alternatives & Typical Sections																		
Prepare necessary Profiles & SE Diagrams																		
Coordination and Constructability Review Meeting																		
Prepare Final Exhibits of Alternatives																		
Structures APS (2)																		
Hydraulic Study																		
Prepare Construction Cost Estimates																		
I. Environmental Determination and Environmental Issues																		
Environmental Task Coordination	20	140																**160**
Project Initiation	8	16		16	8	64			16									**128**
Field Review Meeting and PES	8	16		16		60		16	24	8								**148**
Environmental Technical Studies																		
Air Quality Analysis (Exempt from Conformity Requirements)	2		4	24		24		6		8								**68**
Noise Study Memorandum	2	4	4		24			8	2	4								**48**
Floodplain Encroachment Summary	2	4		8	22			12	8	8								**64**
NES and supporting biological resources tasks																		
Literature and Database Search		4			8				4									**16**
USFWS Listed Species Coordination Letter		2				4			1									**7**
NES Report	4	60	10			120	24	24	40	32								**314**

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
LSA Associates	Environmental Services	5/5/2015	1
PROJECT:		**MILESTONE/PHASE/PROJECT SUMMARY:**	
Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)		Phase 1	

TASK	Principal In Charge	Envir. Team Leader	Technical Principal	Technical Staff	Technical Staff	Technical Staff	Technical Staff	Word Processing/Editor	Graphics/GIS	Administrative Support								TOTAL
Focused Surveys																		
Vegetation Mapping							6		4	2								12
Burrowing Owl Survey			2			18	36	2	2	2								62
Bat Assessment					6	6		2	4	2								20
Santa Ana Sucker Habitat Suitability Assessment		2				8	4	2	4									20
Jurisdictional Delineation		4	8			64	56	6	40	8								186
MSHCP Consistency										8								8
MSHCP Consistency Analysis		4					32											36
DBESP							80	4	4	8								96
ESA/Section 7 Consultation		4			6													10
Cultural Resource Assessment																		
Caltrans APE Map		1			16				32									49
Research						6	16											22
Coordination/Consultation					34													34
Field Survey						8	6											14
Historic Property Survey Report	2	4	12		4	45	12	12	18									109
Paleontological Identification Report	2	2	4	48			4	8	8	8								84
Section 4(f) De Minimis	4	2	6			60		8	4	4								88
Initial Site Assessment																		
Visual Impact Assessment																		

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
LSA Associates	Environmental Services	5/5/2015	1
PROJECT:		MILESTONE/PHASE/PROJECT SUMMARY:	
Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)		Phase 1	

TASK	Principal In Charge	Envir. Team Leader	Technical Principal	Technical Staff	Technical Staff	Technical Staff	Technical Staff	Word Processing/Ed ito	Graphics/GIS	Administrative Support								TOTAL
Administrative Draft IS/MND	16	16		40		100		40	24	8								**244**
Second Administrative Draft IS/MND	8	8		24		80		24	8	8								**160**
Draft IS/MND	8	8		8		40		24	8	4								**100**
Public Review of the Draft IS/MND	8	8		8		24		16	8	4								**76**
Response to Comments	8	16		24		60		16		4								**128**
Administrative Final IS/MND	8	8		24		80		24	8	4								**156**
Final IS/MND	8	8		8		40		16	8	4								**92**
CE Checklist and Environmental Commitments Record	4	8		8		40		8		4								**72**
CE/CE for Geotechnical Field Work	2	8		8	8	40		8		4								**78**
Permitting for Geotechnical Borings	2	32						2	4	1								**41**
Optional Environmental Services																		
Community Outreach Meeting	4	40							24	8								**76**
Air PM2.5/PM10 Hot-spot Analysis Form, Air Quality Conformity Analysis, Checklist	2	2	6	40				4	4	2								**60**
Noise Study Report	4	4	12	16	202			18	24	8								**288**
Noise Abatement Decision Report	4	4	16	8	84		40	18		8								**182**
Sensitive Plant Species Focused Surveys			1		16		16	1	4	2								**40**

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
LSA Associates	Environmental Services	5/5/2015	1
PROJECT:		MILESTONE/PHASE/PROJECT SUMMARY:	
Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)		Phase 1	

TASK	Principal in Charge	Envir. Team Leader	Technical Principal	Technical Staff	Technical Staff	Technical Staff	Technical Staff	Word Processing/Editor	Graphical/GIS	Administrative Support								TOTAL
Nighttime Bat Focused Surveys and Report		2	2		24	40		2	4	2								76
Historical Resources Evaluation Report	4	2	8		100			16	5	8								143
Paleontological Evaluation Report PER/PIR (Combined)	2	2	4	60			4	8	8	8								96
Community Impact Assessment	8	4	8	40		120		24	16	4								224
Relocation Impact Report	8	4	8	40		100		24	16	4								204
Initial Study/Environmental Assessment																		
Administrative Draft EA	4	4		20		60		20	16	4								128
2nd Administrative Draft IS/EA	4	4		20		40		16	8	4								96
Draft EA	4	4		16		40		16	8	4								92
Public Review Draft EA	4	4		8		16		8	8	4								52
Reponse to Comments	4	4		16		20		8	8	4								64
Administrative Final FONSI	4	4		8		40		16	8	4								84
Final FONSI	4	4		4		20		8	8	4								52
ECR	2	2		4		8		4										20
Hazardous Materials Testing																		
J. Technical Report																		
Traffic Analysis																		
Prepare Draft Technical Study																		
Address County & Caltrans Comments																		
Prepare Pre Final Technical Study																		
Address County & Caltrans Comments																		
Prepare Final Technical Study																		

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
LSA Associates	Environmental Services	5/5/2015	1
PROJECT:		MILESTONE/PHASE/PROJECT SUMMARY:	
Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)		Phase 1	

TASK	Principal in Charge	Envir. Team Leader	Technical Principal	Technical Staff	Technical Staff	Technical Staff	Technical Staff	Word Processing/Ed itor	Graphics/GIS	Administrative Support								TOTAL
K. Geometric Approval Drawings																		
Initial Preparation of GADs																		
Incorporate Comments / Final GADs																		
GAD Coordination and meetings																		
L. Geotechnical Investigation and Design																		
Preliminary Geologic, Geotechnical and Seismic Hazards Report																		
Preliminary Geotechnical Investigation and Design																		
M. Preliminary Right of Way Requirements Exhibits																		
Prepare R/W Exhibits																		
N. Agreements																		
Agreements Support Services																		
O. Utility Coordination																		
Utility Mapping, Coordination and Management																		
P. Miscellaneous Design Support																		
Prepare Fact Sheets																		
Traffic Management Plan																		

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
Chang Consultants	Hydraulic Study	5/5/2015	1
PROJECT:		**MILESTONE/PHASE/PROJECT SUMMARY:**	
Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)		Phase 1	

TASK	Principal Engineer	Senior Engineer																TOTAL
Total Manhours	56	178																**234**

ARTICLE AIII - PLANNING AND PROJECT DEVELOPMENT

E. Preliminary Design Drainage Report																		
Analysis and Report	56	178																**234**

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
Tatsumi & Partners	Landscape Design and VIA	5/5/2015	1
PROJECT:		**MILESTONE/PHASE/PROJECT SUMMARY:**	
Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)		Phase I	

TASK	Principal-in-Charge	Design	Design	Irrigation Design/ Drafting	Irrigation Design/Drafting	Landscape Support												TOTAL
Total Manhours	9	55	62	301														**427**
ARTICLE AIII - PLANNING AND PROJECT DEVELOPMENT																		
I. Environmental Determination and Environmental Issues																		
Visual Impact Assessment	9	55	62	301														**427**

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
Diaz Yourman & Associates	Hazardous Waste and ISA	5/5/2015	1
PROJECT:		**MILESTONE/PHASE/PROJECT SUMMARY:**	
Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)		Phase 1	

TASK	Principal	Associate	Senior Engineer	Project Engineer	Staff Engineer	CADD Designer/ Drafter	Technical Editing	Clerk/Word Processor/Clerical										TOTAL
Total Manhours	21	36		97	65	6	10	10										**245**
ARTICLE AIII - PLANNING AND PROJECT DEVELOPMENT																		
I. Environmental Determination and Environmental Issues																		
Initial Site Assessment	13	9		37			4	5										**68**
Hazardous Materials Testing	8	27		60	65	6	6	5										**177**

COMPANY:	SCOPE OF WORK	DATE:	REVISION:
Value Management Strategies	VA Study	5/5/2015	1
PROJECT:		MILESTONE/PHASE/PROJECT SUMMARY:	
Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)		Phase 1	

TASK	Program Manager	CVS Team Leader	Project Coordinator	Technical Editor	Administrative Assistant	QA/QC												TOTAL
Total Manhours	4	120	8	48	6	8												**194**
ARTICLE AVI - VALUE ENGINEERING																		
VA Study	4	120	8	48	6	8												**194**