



500 S. Main Street, Ste 400 Orange, CA 92868-4507 Telephone 714-550-4665 Facsimile 714-550-7294

> Peter Ramey Public Works, Capital Improvement Projects, City of Corona 400 S. Vicentia Avenue Corona, CA 92882

Subject: McKinley Street Grade Separation – Fee Proposal

City of Corona Project No. 2012-12, RFP 18-046CA

Dear Mr. Ramey:

Biggs Cardosa is pleased to present our fee proposal for the McKinley Street Grade Separation.

Our scope and fee proposal are based on the roundabout concept, and a network tied-arch bridge that is constructed off-site and moved into place, as presented in our proposal. It is important to note that these concepts represent significant overall savings in right-of-way and schedule (reduction in business loss liability).

The table below compares the overall project cost prepared in November 2017 and presented at the February 2018 City Council Study Session versus our opinion of probable cost presented in our proposal.

	Independent Cost Estimate November 2017	Biggs Cardosa Proposal
Construction Cost	\$37.9M	\$47.1M
Utility Relocation	\$3.6M	\$3.0M
Right-of-Way Cost	\$24.2M	\$5.0M
Total Capital Outlay Costs	\$65.7M	\$55.1M
Design, Environmental, Const. BNSF Coordination	\$9.5M + \$0.8M = \$10.3M	\$10.9M
Construction Management	\$6.8M	\$6.8M
City Oversight	\$1.9M	\$1.9M
Total Support Cost	\$19.0M	\$19.8M
Total Capital & Support Cost	\$84.7M	\$74.9M
Goodwill Loss Estimate	\$16.5M	\$8.0M
Total Project Cost	\$101.2M	\$82.7M
Current Funding	\$89.5M	\$89.5M
Budget Surplus / (Deficit)	(\$11.7M)	\$6.8M

Our concept represents significant overall cost savings and fits within the available \$89.5M of current funding.



Our fee proposal includes significant savings to the City based on our extensive pre-contractual work. We developed and refined concepts, conducted alternatives analysis, prepared an initial 3D interactive model, and gathered as-builts and existing data, among other items. These savings are passed onto the City in our cost proposal.

Our fees are broken down as follows:

Design, Environmental, Right-of-Way (Task 1-8): \$9,833,393
 Engineering Construction Services: \$770,116
 Optional Services: \$326,789

The attached fee proposal includes a summary sheet (p. 1-5) and a detailed breakdown for each consultant (p. 6-19).

We look forward to working with you on this project. If you have any questions, please do not hesitate to give me a call.

Sincerely,

BIGGS CARDOSA ASSOCIATES, INC.

Michael Thomas, PE, SE

Project Manager

Enclosures: Fee Proposal Summary/Breakdown

Scope of Services



					Subconsultan	t Task Totals			
	S.O.W. Phase / Task	Biggs Cardosa Associates	Kimley-Horn & Associates	David Evans & Associates	ICF	Earth Mechanics	BKF Engineers	Arellano Associates	Task Totals
Task	1 - Project Administration								\$784,460
1.1	Project Management Plan	\$52,367	\$4,564	\$4,497	\$0	\$2,143	\$0	\$0	\$63,571
1.2	Quality Control Plan	\$89,705	\$10,880	\$14,324	\$0	\$545	\$9,744	\$0	\$125,198
1.3	Project Controls	\$108,366	\$88,550	\$7,362	\$30,444	\$1,636	\$20,507	\$17,363	\$274,228
1.4	Project Development Team Meetings	\$130,166	\$109,128	\$0	\$25,518	\$0	\$12,655	\$43,996	\$321,463
Task	2 - Data Collection								\$853,357
2.1	Aerial Mapping	\$3,133	\$4,315	\$0	\$0	\$0	\$69,377	\$0	\$76,825
2.2	Field Survey	\$5,723	\$9,669	\$0	\$0	\$0	\$106,089	\$0	\$121,480
2.3	Potholing	\$1,485	\$271,890	\$0	\$0	\$0	\$10,769	\$0	\$284,144
2.4	Right-of-Way Base Mapping	\$4,798	\$4,315	\$0	\$0	\$0	\$156,622	\$0	\$165,735
2.5	Utility Notification	\$5,121	\$19,640	\$0	\$0	\$0	\$0	\$0	\$24,761
2.6	Utility Base Mapping	\$1,477	\$24,643	\$0	\$0	\$0	\$0	\$0	\$26,120
2.7	Geotechnical Records Research & Findings	\$0	\$0	\$0	\$0	\$4,287	\$0	\$0	\$4,287
2.8	Traffic Analyses								
2.8.1	Preliminary Traffic Analyses	Task perform	ed pre-contractu	ally. No cost to	the City.				\$0
2.8.2	Update Traffic Analyses	\$5,307	\$61,538	\$0	\$0	\$0	\$0	\$0	\$66,844
2.9	Caltrans Traffic Reports								
2.9.1	Intersection Control Evaluation	\$2,048	\$18,507	\$0	\$0	\$0	\$0	\$0	\$20,554
2.9.2	Traffic Forecasting Volumes Report	\$2,048	\$14,127	\$0	\$0	\$0	\$0	\$0	\$16,174
2.9.3	Ramp Meter and Merge Analysis	\$2,048	\$14,968	\$0	\$0	\$0	\$0	\$0	\$17,016
2.9.4	Roundabout Analysis	\$2,604	\$26,813	\$0	\$0	\$0	\$0	\$0	\$29,416
Task	3 - Concept Development & Project Approval								\$293,470
3.1	Geometric Concepts	Task perform	ed pre-contractu	ally. No cost to	the City.				\$0
3.2	Bridge and Retaining Wall Concepts	Task perform	ed pre-contractu	ally. No cost to	the City.				\$0
3.3	Project Concept Report								
3.3.1	Plan and Profile Exhibits	\$13,439	\$13,532	\$0	\$0	\$0	\$0	\$0	\$26,971
3.3.2	Right-of-Way Exhibits	\$10,374	\$0	\$0	\$0	\$0	\$0	\$0	\$10,374
3.3.3	Utility Exhibits	\$5,587	\$4,542	\$0	\$0	\$0	ļ		\$10,129
3.3.4	Structure Exhibits	\$56,666	\$0	\$13,730	\$0	\$0	\$0	\$0	\$70,396
3.3.5	Preliminary Geotechnical Report	\$3,152			\$0	\$10,679	\$0	\$0	\$13,831
3.3.6	Preliminary Traffic Analysis Report	\$3,343	\$0	\$0	\$0	\$0	\$0	\$0	\$3,343
3.3.7	Construction Cost Estimates	\$13,227	\$2,487	\$0	\$0	\$0	\$0	\$0	\$15,715
3.3.8	Right-of-Way Cost Estimates	\$11,588	\$0	\$0	\$0	\$0	\$0	\$0	\$11,588
3.3.9	Project Concept Report	\$55,488	\$0	\$0	\$0	\$0	\$0	\$0	\$55,488
3.4	Project Concept Approval	\$17,922	\$14,562	\$0	\$0	\$0			\$32,484
3.5	Design Basis Memorandum	\$28,892	\$9,961	\$4,298	\$0	\$0	\$0	\$0	\$43,150
Task	4 - Environmental Documentation								\$509,875
4.1	CEQA Statutory Exemption	\$1,112	\$0		\$875	\$0			
4.2	Technical Studies	\$71,894	\$11,163	\$0	\$393,124	\$31,705	\$0	\$0	\$507,887

				Subconsultar	nt Task Totals			
S.O.W. Phase / Task	Biggs Cardosa Associates	Kimley-Horn & Associates	David Evans & Associates	ICF	Earth Mechanics	BKF Engineers	Arellano Associates	Task Totals
Task 5 - Plans, Specifications & Estimates (PS&E)								\$5,916,455
5.1 Reports								
5.1.1 Water Quality Management Plan	\$2,971	\$29,845	\$0	\$0	\$0	\$0	\$0	\$32,816
5.1.2 Hydrology & Hydraulics Reports	\$2,598	\$57,765	\$0	\$0	\$0	\$0	\$0	\$60,363
5.1.3 Traffic Management Plan	\$7,053	\$51,188	\$0	\$0	\$0	\$0	\$0	\$58,242
5.1.4 Geotechnical Investigations & Report	\$11,474	\$0	\$0	\$0	\$460,332	\$0	\$0	\$471,806
5.1.5 Landscaping & Aesthetic Concepts	\$13,954	\$13,497	\$0	\$0	\$0	\$0	\$0	\$27,452
5.1.6 Structure Type Selection Report	\$51,624	\$0	\$18,040	\$0	\$0	\$0	\$0	\$69,663
Task 5 - 35% PS&E								
5.2 Calculations								
5.2.1 Civil/Survey Calculations	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5.2.2 Structural Calculations	\$74,943	\$0	\$0	\$0	\$0	\$0	\$0	\$74,943
5.3 Plan Preparation								
5.3.1 General Plans	\$3,117	\$2,141	\$0	\$0	\$0	\$0	\$0	\$5,258
5.3.4 Roadway Plans	\$2,604	\$145,894	\$0	\$0	\$0	\$0	\$0	\$148,498
5.3.5 Traffic Plans	\$2,604	\$80,896	\$0	\$0	\$0	\$0	\$0	\$83,500
5.3.6 Utility Plans	\$2,604	\$81,815	\$0	\$0	\$0	\$0	\$0	\$84,419
5.3.8 Drainage Plans	\$1,302	\$72,677	\$0	\$0	\$0	\$0	\$0	\$73,979
5.3.9 Bridge Plans	\$55,018	\$4,607	\$0	\$0	\$0	\$0	\$0	\$59,626
5.3.10 Retaining Wall Plans	\$57,647	\$4,607	\$0	\$0	\$0	\$0	\$0	\$62,254
5.5 Cost Estimates	\$9,138	\$37,565	\$0	\$0	\$0	\$0	\$0	\$46,703
Task 5 - 65% PS&E								
5.2 Calculations								
5.2.1 Civil/Survey Calculations	\$0	\$12,221	\$0	\$0	\$0	\$0	\$0	\$12,221
5.2.2 Structural Calculations	\$428,974	\$0	\$0	\$0	\$0	\$0	\$0	\$428,974
5.3 Plan Preparation								
5.3.1 General Plans	\$4,967	\$0	\$0	\$0	\$0	\$0	\$0	\$4,967
5.3.2 Survey Control Plan	\$1,302	\$0	\$0	\$0	\$0	\$0	\$0	\$1,302
5.3.3 Right-of-Way Plans	\$4,841	\$0	\$0	\$0	\$0	\$0	\$0	\$4,841
5.3.4 Roadway Plans	\$11,140	\$215,002	\$0	\$0	\$0	\$0	\$0	\$226,143
5.3.5 Traffic Plans	\$2,604	\$119,289	\$0	\$0	\$0	\$0	\$0	\$121,893
5.3.6 Utility Plans	\$7,432	\$109,286	\$0	\$0	\$0	\$0	\$0	\$116,718
5.3.7 Landscaping & Irrigation Plans	\$2,421	\$50,560	\$0	\$0	\$0	\$0	\$0	\$52,981
5.3.8 Drainage Plans	\$4,268	\$114,477	\$0	\$0	\$0	\$0	\$0	\$118,745
5.3.9 Bridge Plans	\$365,897	\$9,214	\$0	\$0	\$0	\$0	\$0	\$375,112
5.3.10 Retaining Wall Plans	\$180,250	\$9,214	\$0	\$0	\$0	\$0	\$0	\$189,464
5.3.11 Log of Test Borings	\$2,048	\$0	\$0	\$0	\$15,755	\$0	\$0	\$17,803
5.4 Specifications	\$59,781	\$53,084	\$0	\$0	\$400	\$0	\$0	\$113,265
5.5 Cost Estimates	\$45,575	\$37,565	\$0	\$0	\$0	\$0	\$0	\$83,140
5.6 Construction Schedule	\$15,965	\$0	\$0	\$0	\$0	\$0	\$0	\$15,965

				Subconsultar	nt Task Totals			
S.O.W. Phase / Task	Biggs Cardosa Associates	Kimley-Horn & Associates	David Evans & Associates	ICF	Earth Mechanics	BKF Engineers	Arellano Associates	Task Totals
Task 5 - 95% PS&E								
5.2 Calculations								
5.2.1 Civil/Survey Calculations	\$2,781	\$5,992	\$0	\$0	\$0	\$13,038	\$0	\$21,810
5.2.2 Structural Calculations	\$159,609	\$0	\$0	\$0	\$0	\$0	\$0	\$159,609
5.2.3 Independent Check	\$108,274	\$0	\$192,949	\$0	\$0	\$0	\$0	\$301,223
5.3 Plan Preparation								
5.3.1 General Plans	\$4,967	\$0	\$0	\$0	\$0	\$0	\$0	\$4,967
5.3.2 Survey Control Plan	\$1,302	\$0	\$0	\$0	\$0	\$9,339	\$0	\$10,641
5.3.3 Right-of-Way Plans	\$3,350		\$0	\$0	\$0	\$15,307	\$0	\$18,656
5.3.4 Roadway Plans	\$6,320	\$215,002	\$0	\$0	\$0	\$0	\$0	\$221,322
5.3.5 Traffic Plans	\$2,604	\$102,959	\$0	\$0	\$0	\$0	\$0	\$105,563
5.3.6 Utility Plans	\$5,208	\$93,712	\$0	\$0	\$0	\$0	\$0	\$98,920
5.3.7 Landscaping & Irrigation Plans	\$2,048	\$63,646	\$0	\$0	\$0	\$0	\$0	\$65,694
5.3.8 Drainage Plans	\$3,716	\$79,166	\$0	\$0	\$0	\$0	\$0	\$82,882
5.3.9 Bridge Plans	\$176,995	\$9,214	\$64,220	\$0	\$0	\$0	\$0	\$250,430
5.3.10 Retaining Wall Plans	\$73,707	\$9,214	\$0	\$0	\$0	\$0	\$0	\$82,921
5.3.11 Log of Test Borings	\$2,048	\$0	\$0	\$0	\$1,855	\$0	\$0	\$3,903
5.4 Specifications	\$63,258	\$53,084	\$18,374	\$0	\$400	\$0	\$0	\$135,116
5.5 Cost Estimates	\$27,674	\$37,565	\$0	\$0	\$0	\$0	\$0	\$65,239
5.6 Construction Schedule	\$11,870	\$0	\$0	\$0	\$0	\$0	\$0	\$11,870
Task 5 - 100% PS&E								
5.2 Calculations								
5.2.1 Civil/Survey Calculations	\$0	\$0	\$0	\$0	\$0		\$0	\$0
5.2.2 Structural Calculations	\$77,992	\$0	\$0	\$0	\$0	\$0	\$0	\$77,992
5.3 Plan Preparation								
5.3.1 General Plans	\$3,863							\$3,863
5.3.2 Survey Control Plan	\$1,302			\$0			\$0	\$1,302
5.3.3 Right-of-Way Plans	\$2,604	\$0		\$0	\$0		\$0	\$2,604
5.3.4 Roadway Plans	\$4,462			\$0				\$128,618
5.3.5 Traffic Plans	\$2,231	\$50,182		\$0	\$0		\$0	\$52,413
5.3.6 Utility Plans	\$3,906			\$0			\$0	\$75,609
5.3.7 Landscaping & Irrigation Plans	\$1,302			\$0	\$0		\$0	\$53,647
5.3.8 Drainage Plans	\$2,787	\$54,616		\$0	\$0		\$0	\$57,403
5.3.9 Bridge Plans	\$89,322	\$4,607	\$26,391	\$0	\$0		\$0	\$120,320
5.3.10 Retaining Wall Plans	\$41,987	\$4,607	\$0	\$0	\$0		\$0	\$46,594
5.3.11 Log of Test Borings	\$1,302			\$0		-		\$3,157
5.4 Specifications	\$36,540		\$10,047	\$0	\$400	+	\$0	\$73,624
5.5 Cost Estimates	\$16,488			\$0			\$0	\$35,157
5.6 Construction Schedule	\$10,271	\$0	\$0	\$0	\$0	\$0	\$0	\$10,271

					Subconsultar	nt Task Totals			
	S.O.W. Phase / Task	Biggs Cardosa Associates	Kimley-Horn & Associates	David Evans & Associates	ICF	Earth Mechanics	BKF Engineers	Arellano Associates	Task Totals
Task	5 - Issued for Bid (IFB)								
5.3	Plan Preparation								
5.3.1	General Plans	\$1,850	\$0	\$0	\$0	\$0	\$0	\$0	\$1,850
5.3.2	Survey Control Plan	\$746	\$0	\$0	\$0	\$0	\$0	\$0	\$746
5.3.3	Right-of-Way Plans	\$1,491	\$0	\$0	\$0	\$0	\$0	\$0	\$1,491
5.3.4	Roadway Plans	\$2,604	\$54,994	\$0	\$0	\$0	\$0	\$0	\$57,598
5.3.5	Traffic Plans	\$0	\$16,141	\$0	\$0	\$0	\$0	\$0	\$16,141
5.3.6	Utility Plans	\$3,160	\$12,113	\$0	\$0	\$0	\$0	\$0	\$15,273
5.3.7	Landscaping & Irrigation Plans	\$746	\$17,055	\$0	\$0	\$0	\$0	\$0	\$17,801
5.3.8	Drainage Plans	\$746	\$14,470	\$0	\$0	\$0	\$0	\$0	\$15,216
5.3.9	Bridge Plans	\$64,313	\$2,304	\$10,207	\$0	\$0	\$0	\$0	\$76,824
5.3.10	Retaining Wall Plans	\$33,426	\$2,304	\$0	\$0	\$0	\$0	\$0	\$35,729
5.3.11	Log of Test Borings	\$0	\$0	\$0	\$0	\$1,191	\$0	\$0	\$1,191
5.4	Specifications	\$15,557	\$11,183	\$5,024	\$0	\$400	\$0	\$0	\$32,163
5.5	Cost Estimates	\$9,472	\$8,567	\$0	\$0	\$0	\$0	\$0	\$18,038
Task	6 - Right-of-Way								\$414,004
6.1	Right-of-Way Requirements	\$8,570	\$76,213	\$0	\$0	\$0	\$24,614	\$0	\$109,397
6.2	Right-of-Way Maps	\$33,702	\$0	\$0	\$0	\$0	\$56,540	\$0	\$90,242
6.3	Appraisal Maps, Plats, and Descriptions	\$91,217	\$0	\$0	\$0	\$0	\$123,148	\$0	\$214,365
Task	7 - Coordination, Agreements & Permits								\$877,394
7.1	BNSF Railway								
7.1.1	Construction & Maintenance Agreement	\$81,025	\$0	\$13,796	\$0	\$0	\$0	\$0	\$94,822
7.1.2	Submittals	\$70,880	\$0	\$5,332	\$0	\$0	\$0	\$0	\$76,213
7.2	California Public Utilities Commission	\$23,402	\$0	\$0	\$0	\$0	\$0	\$0	\$23,402
7.3	Caltrans District 8	\$70,823	\$161,576	\$0	\$0	\$0	\$0	\$0	\$232,399
7.4	Riverside County Flood Control & WCD	\$14,107	\$20,332	\$0	\$0	\$0	\$0	\$0	\$34,439
7.5	Utility Coordination	\$68,474	\$119,311	\$0	\$0			\$0	\$187,785
7.6	Community Engagement	\$101,589	\$0	\$0	\$0	\$0	\$0	\$126,745	\$228,335
Task	8 - Bidding Services								\$184,379
8.1	Resident Engineer (RE) Pending File	\$32,878	\$24,150	\$0	\$0	\$0	\$0	\$0	\$57,027
8.2	Bidding Phase Support	\$13,411	\$35,778	\$0	\$0	\$0	\$0	\$0	\$49,189
8.3	Conformed Plans and Specifications	\$43,631	\$34,532	\$0	\$0	\$0	\$0	\$0	\$78,163
	Design (Tasks 1 - 8) Totals	\$3,885,101	\$3,740,305	\$408,591	\$449,962	\$533,582	\$627,748	\$188,104	\$9,833,393

Fee Proposal | Summary

					Subconsultar	t Task Totals			
	S.O.W. Phase / Task	Biggs Cardosa Associates	Kimley-Horn & Associates	David Evans & Associates	ICF	Earth Mechanics	BKF Engineers	Arellano Associates	Task Totals
Task	9 - Engineering Construction Services								
9.1	Engineering Support (RFIs, Shop Drawings)	\$371,495	\$247,437	\$41,776	\$0	\$5,377	\$0	\$0	\$666,085
9.2	Preparation of Record Documents (As-Builts)	\$64,688	\$39,342	\$0	\$0	\$0	\$0	\$0	\$104,030
	Const. Support (Task 9) Totals	\$436,182	\$286,779	\$41,776	\$0	\$5,377	\$0	\$0	\$770,116
Task	10 - Optional Services								
10.1	Construction Staking	\$0	\$0	\$0	\$0	\$0	\$201,782	\$0	\$201,782
10.2	Right-of-Way Staking for Partial Acquisitions	\$0	\$0	\$0	\$0	\$0	\$38,165	\$0	\$38,165
10.3	Project Closeout Items	\$0	\$0	\$0	\$0	\$0	\$86,843	\$0	\$86,843
	Optional Services (Task 10) Totals	\$0	\$0	\$0	\$0	\$0	\$326,789	\$0	\$326,789

- 1. Costs for printing, mileage, telephone, mailing and other expenses incidental to the performance of the main items of the Engineering Services to be rendered are included in the hourly rates.
- 2. All charges for subconsultants/subcontract services shall be in the same amount as actually invoiced to and paid by Biggs Cardosa, plus a 5% markup.

S.O.W. Phase / Task	S. Biggs Principal-in- Charge Principal III \$305.00	M. Thomas Project Manager Principal II	D. Devlin QA Manager Principal II \$270.00	D. De Vera QC Manager Associate \$210.00	R. Ketring BNSF Coord. Railroad Coordinator \$263.00	E. Pheifer Struct. Mgr. Engineering Manager \$181.00	Senior Engineer \$164.00	Project Engineer \$147.00	Staff Engineer \$134.00	Assistant Engineer \$124.00	Senior Computer Drafter \$134.00	Project Admin. \$147.00	Project Coordinator \$122.00	Secretarial \$97.00	Total Hours	Labor Subtotal	Escalation**	Expenses	Task Totals
Task 1 - Project Administration			<u> </u>			· ·						<u> </u>							\$380,605
1.1 Project Management Plan	2	80	4	8		80			T	40		T	40	16	270	\$50,842	\$1,525	\$0	
1.2 Quality Control Plan	4	80	16	16		160	16	16	104	24	24		8	16	484	\$87,092	\$2,613	\$0	
1.3 Project Controls	30	180	10	10		60	10	10	104	27	27	120	60	120	570	\$105,210	\$3,156	\$0	
1.4 Project Development Team Meetings	30	150			50	200						120	200	125	725	\$103,210	\$3,791	\$0	
Task 2 - Data Collection		130			30	200							200	125	723	\$120,575	Ψ3,731	ΨΟ	\$35,790
2.1 Aerial Mapping	T	ı	T	Ī	Ι	2		I	16		1	T	I		22	\$3,042	\$91	\$0	
2.2 Field Survey		4				4			24		4				36	\$5,556	\$167	\$0	
· · · · · · · · · · · · · · · · · · ·		4				2			24		4	+			6	\$3,330 \$1,442	\$107	\$0	
2.3 Potholing	+	4				2			8		16	+			30	\$1, 44 2 \$4,658	\$140	\$0 \$0	
2.4 Right-of-Way Base Mapping		8				4	8		0		16			0		\$4,658 \$4,972	\$140 \$149	\$0 \$0	
2.5 Utility Notification		٥				2	0				0			0	28				
2.6 Utility Base Mapping									 		8				10	\$1,434	\$43	\$0	
2.7 Geotechnical Records Research & Findings									1			<u> </u>			0	\$0	\$0	\$0	\$0
2.8 Traffic Analyses	T. 1			Cl															
2.8.1 Preliminary Traffic Analyses	l ask perfor	T -	actual by Biggs	Cardosa. No co	ost to the City.						<u> </u>		1		0	\$0	\$0	\$0	
2.8.2 Update Traffic Analyses		4				8	16		1			1			28	\$5,152	\$155	\$0	\$5,307
2.9 Caltrans Traffic Reports		_	1	ı	1			1	1		T	1	1						
2.9.1 Intersection Control Evaluation		2				8									10	\$1,988	\$60	\$0	
2.9.2 Traffic Forecasting Volumes Report		2				8									10	\$1,988	\$60	\$0	
2.9.3 Ramp Meter and Merge Analysis		2				8									10	\$1,988	\$60	\$0	
2.9.4 Roundabout Analysis		4				8									12	\$2,528	\$76	\$0	
Task 3 - Concept Development & Project Approval																			\$219,678
3.1 Geometric Concepts			actual by Biggs												0	\$0	\$0	\$0	
3.2 Bridge and Retaining Wall Concepts	Task perform	med pre-contr	actual by Biggs	Cardosa. No co	ost to the City.										0	\$0	\$0	\$0	\$0
3.3 Project Concept Report																			
3.3.1 Plan and Profile Exhibits		32				16					4		8		60	\$13,048	\$391	\$0	
3.3.2 Right-of-Way Exhibits		24				8					16				48	\$10,072	\$302	\$0	\$10,374
3.3.3 Utility Exhibits		4				24									28	\$5,424	\$163	\$0	\$5,587
3.3.4 Structure Exhibits		12	2	16		60	80			120	60		8		358	\$55,016	\$1,650	\$0	\$56,666
3.3.5 Preliminary Geotechnical Report		2				8			8						18	\$3,060	\$92	\$0	\$3,152
3.3.6 Preliminary Traffic Analysis Report		8				6									14	\$3,246	\$97	\$0	\$3,343
3.3.7 Construction Cost Estimates		8	2	4	2	16		40							72	\$12,842	\$385	\$0	\$13,227
3.3.8 Right-of-Way Cost Estimates		8	1	2		8		40			8				67	\$11,250	\$338	\$0	\$11,588
3.3.9 Project Concept Report		16	4	20		80	80		40				80	16	336	\$53,872	\$1,616	\$0	\$55,488
3.4 Project Concept Approval		16				16	20				8		16	40	116	\$17,400	\$522	\$0	
3.5 Design Basis Memorandum	2	16	4	8		40	80								150	\$28,050	\$842		
Task 4 - Environmental Documentation																			\$73,006
4.1 CEQA Statutory Exemption		4													4	\$1,080	\$32	\$0	
4.2 Technical Studies		120	40			120							40		320	\$69,800	\$2,094		
Task 5 - Plans, Specifications & Estimates (PS&E)		•																	\$2,522,313
5.1 Reports																			
5.1.1 Water Quality Management Plan		8				4									12	\$2,884	\$87	\$0	\$2,971
5.1.2 Hydrology & Hydraulics Reports		8				2									10	\$2,522	\$76	\$0	
5.1.3 Traffic Management Plan	†	20	1			8			†			†			28	\$6,848	\$205	\$0	
5.1.4 Geotechnical Investigations & Report	†	8	1			20			40			†			68	\$11,140	\$334	\$0	
5.1.5 Landscaping & Aesthetic Concepts	1	12	2	4		16			10	40	8	†			82	\$13,548	\$406	\$0	1
5.1.6 Structure Type Selection Report	4	8	4	16		80	80	8	+	80	24	+		Δ	308	\$13,348	\$1,504	\$0	-
Task 5 - 35% PS&E	1 4	<u> </u>	1 4	10	<u> </u>	OU	OU	l o	<u> </u>	ου		<u> </u>		4	308	\$30,120	\$1,504	\$ U	\$31,024
5.2 Calculations		1	1	l	I			I	Т			Т	1						-
5.2.1 Civil/Survey Calculations									100	100		1			0	\$0	\$0	\$0	
5.2.2 Structural Calculations		8	8			40	80	80	160	120					496	\$72,760	\$2,183	\$0	\$74,943

S.O.W. Phase / Task	S. Biggs Principal-in- Charge Principal III \$305.00	M. Thomas Project Manager Principal II \$270.00	D. Devlin QA Manager Principal II \$270.00	D. De Vera QC Manager Associate \$210.00	R. Ketring BNSF Coord. Railroad Coordinator \$263.00	E. Pheifer Struct. Mgr. Engineering Manager \$181.00	Senior Engineer \$164.00	Project Engineer \$147.00	Staff Engineer \$134.00	Assistant Engineer \$124.00	Senior Computer Drafter \$134.00	Project Admin. \$147.00	Project Coordinator \$122.00	Secretarial \$97.00	Total Hours	Labor Subtotal	Escalation**	Expenses	Task Totals
5.3 Plan Preparation	4303.00	4270.00	427 0.00	4220.00	Ψ200.00	4202.00	Ψ20 H00	Ψ217100	Ψ23σσ	Ψ22 1.00	Ψ20 H00	4217100	422.00	437.00					
5.3.1 General Plans		2	1	2		4					8				17	\$3,026	\$91	\$0	\$3,117
5.3.4 Roadway Plans		4				8									12	\$2,528	\$76	\$0	\$2,604
5.3.5 Traffic Plans		4				8									12	\$2,528	\$76	\$0	\$2,604
5.3.6 Utility Plans		4				8									12	\$2,528	\$76	\$0	\$2,604
5.3.8 Drainage Plans		2				4									6	\$1,264	\$38	\$0	\$1,302
5.3.9 Bridge Plans		24	40			80	40	48			60				292	\$53,416	\$1,602	\$0	\$55,018
5.3.10 Retaining Wall Plans		16	8	40		40	8	8	80	80	80				360	\$55,968	\$1,679	\$0	\$57,647
5.5 Cost Estimates	4	8	4	16	4										36	\$8,872	\$266	\$0	\$9,138
Task 5 - 65% PS&E	•		•				•			•									
5.2 Calculations																			
5.2.1 Civil/Survey Calculations															0	\$0	\$0	\$0	\$0
5.2.2 Structural Calculations		80	40	40		400	320	240	720	960					2800	\$416,480	\$12,494	\$0	\$428,974
5.3 Plan Preparation		•	•	•	•	•		•	•		•	•	•	•					
5.3.1 General Plans		2	1	2		8					16				29	\$4,822	\$145	\$0	\$4,967
5.3.2 Survey Control Plan		2				4									6	\$1,264	\$38	\$0	\$1,302
5.3.3 Right-of-Way Plans		4				20									24	\$4,700	\$141	\$0	\$4,841
5.3.4 Roadway Plans		20				24					8				52	\$10,816	\$324	\$0	\$11,140
5.3.5 Traffic Plans		4				8									12	\$2,528	\$76	\$0	\$2,604
5.3.6 Utility Plans		16				16									32	\$7,216	\$216	\$0	\$7,432
5.3.7 Landscaping & Irrigation Plans		2				10									12	\$2,350	\$71	\$0	\$2,421
5.3.8 Drainage Plans		8				8					4				20	\$4,144	\$124	\$0	\$4,268
5.3.9 Bridge Plans		80	60	20		200	160	240	480	960	240				2440	\$355,240	\$10,657	\$0	\$365,897
5.3.10 Retaining Wall Plans		16	12	80		80	80	120	300	180	320				1188	\$175,000	\$5,250	\$0	\$180,250
5.3.11 Log of Test Borings		2				8									10	\$1,988	\$60	\$0	\$2,048
5.4 Specifications		80	4	16		40	80							120	340	\$58,040	\$1,741	\$0	\$59,781
5.5 Cost Estimates	8	40	8	24		16			8	160					264	\$44,248	\$1,327	\$0	\$45,575
5.6 Construction Schedule		8	2	8		40								40	98	\$15,500	\$465	\$0	\$15,965
Task 5 - 95% PS&E	•	•	•	•	•	•		•	•		•	•							
5.2 Calculations																			
5.2.1 Civil/Survey Calculations		2	8												10	\$2,700	\$81	\$0	\$2,781
5.2.2 Structural Calculations		8	40			200	160	120	240	240					1008	\$154,960		\$0	
5.2.3 Independent Check			16	120			120	240	80	80					656	\$105,120	\$3,154	\$0	
5.3 Plan Preparation		•	•	•		•	•		•	•			•			·		•	
5.3.1 General Plans		2	1	2		8					16				29	\$4,822	\$145	\$0	\$4,967
5.3.2 Survey Control Plan		2				4									6	\$1,264	\$38	\$0	\$1,302
5.3.3 Right-of-Way Plans		4				12									16	\$3,252	\$98	\$0	\$3,350
5.3.4 Roadway Plans		12				16									28	\$6,136	\$184	\$0	\$6,320
5.3.5 Traffic Plans		4				8									12	\$2,528	\$76	\$0	\$2,604
5.3.6 Utility Plans		8				16									24	\$5,056	\$152	\$0	\$5,208
5.3.7 Landscaping & Irrigation Plans		2				8									10	\$1,988	\$60	\$0	\$2,048
5.3.8 Drainage Plans		8				8									16	\$3,608	\$108	\$0	\$3,716
5.3.9 Bridge Plans		40	16			120	80	200	200	400	120				1176	\$171,840	\$5,155	\$0	\$176,995
5.3.10 Retaining Wall Plans		16				40	40	80	80	120	120				496	\$71,560	\$2,147	\$0	\$73,707
5.3.11 Log of Test Borings		2				8									10	\$1,988	\$60	\$0	\$2,048
5.4 Specifications		48	16	120		40	24							80	328	\$61,416	\$1,842	\$0	\$63,258
5.5 Cost Estimates	4	20	8	20		16			8	80					156	\$26,868	\$806	\$0	\$27,674
5.6 Construction Schedule		4	2	8		24								40	78	\$11,524	\$346	\$0	\$11,870
Task 5 - 100% PS&E																			
5.2 Calculations																			
5.2.1 Civil/Survey Calculations															0	\$0	\$0	\$0	\$0

S.O.W. Phase / Task	S. Biggs Principal-in- Charge Principal III \$305.00	M. Thomas Project Manager Principal II	D. Devlin QA Manager Principal II \$270.00	D. De Vera QC Manager Associate \$210.00	R. Ketring BNSF Coord. Railroad Coordinator \$263.00	E. Pheifer Struct. Mgr. Engineering Manager \$181.00	Senior Engineer \$164.00	Project Engineer \$147.00	Staff Engineer \$134.00	Assistant Engineer \$124.00	Senior Computer Drafter \$134.00	Project Admin. \$147.00	Project Coordinator \$122.00	Secretarial \$97.00	Total Hours	Labor Subtotal	Escalation**	Expenses	Task Totals
522 6 1611	\$305.00			\$210.00	\$263.00						\$134.00	\$147.00	\$122.00	\$97.00	F00	¢75 700	¢2.272	¢0	£77.000
5.2.2 Structural Calculations		4	16			80	80	80	120	120					500	\$75,720	\$2,272	\$0	\$77,992
5.3 Plan Preparation			1 -	1 -	ı	T -					_	1	I						1000
5.3.1 General Plans		2	1	2		8					8				21	\$3,750	\$113	\$0	\$3,863
5.3.2 Survey Control Plan		2				4									6	\$1,264	\$38	\$0	\$1,302
5.3.3 Right-of-Way Plans		4				8									12	\$2,528	\$76	\$0	\$2,604
5.3.4 Roadway Plans		8				12									20	\$4,332	\$130	\$0	\$4,462
5.3.5 Traffic Plans		4				6									10	\$2,166	\$65	\$0	\$2,231
5.3.6 Utility Plans		6				12									18	\$3,792	\$114	\$0	\$3,906
5.3.7 Landscaping & Irrigation Plans		2				4									6	\$1,264	\$38	\$0	\$1,302
5.3.8 Drainage Plans		6				6									12	\$2,706	\$81	\$0	\$2,787
5.3.9 Bridge Plans		16	16			40	40	120	120	160	80				592	\$86,720	\$2,602	\$0	\$89,322
5.3.10 Retaining Wall Plans		12	12	24		20	24	24	40	60	40				256	\$40,764	\$1,223	\$0	\$41,987
5.3.11 Log of Test Borings		2				4									6	\$1,264	\$38	\$0	\$1,302
5.4 Specifications		24	8	60		32	16							60	200	\$35,476	\$1,064	\$0	\$36,540
5.5 Cost Estimates		16	4	8		16			8	40					92	\$16,008	\$480	\$0	\$16,488
5.6 Construction Schedule		4	2	8		24								24	62	\$9,972	\$299	\$0	\$10,271
Task 5 - Issued for Bid (IFB)																			
5.3 Plan Preparation								_			_	_							
5.3.1 General Plans						4					8				12	\$1,796	\$54	\$0	\$1,850
5.3.2 Survey Control Plan						4									4	\$724	\$22	\$0	\$746
5.3.3 Right-of-Way Plans						8									8	\$1,448	\$43	\$0	\$1,491
5.3.4 Roadway Plans		4				8									12	\$2,528	\$76	\$0	\$2,604
5.3.5 Traffic Plans															0	\$0	\$0	\$0	\$0
5.3.6 Utility Plans		6				8									14	\$3,068	\$92	\$0	\$3,160
5.3.7 Landscaping & Irrigation Plans						4									4	\$724	\$22	\$0	\$746
5.3.8 Drainage Plans						4									4	\$724	\$22	\$0	\$746
5.3.9 Bridge Plans		8	4			40	40	80	80	120	60				432	\$62,440	\$1,873	\$0	\$64,313
5.3.10 Retaining Wall Plans		8	8	12		20	24	24	32	48	32				208	\$32,452	\$974	\$0	\$33,426
5.3.11 Log of Test Borings															0	\$0	\$0	\$0	\$0
5.4 Specifications		20	4	8		16			8	24					80	\$15,104	\$453	\$0	\$15,557
5.5 Cost Estimates		4	2	8		24								16	54	\$9,196	\$276	\$0	\$9,472
Task 6 - Right-of-Way																			\$133,488
6.1 Right-of-Way Requirements		4				40									44	\$8,320	\$250	\$0	\$8,570
6.2 Right-of-Way Maps		8				80					120				208	\$32,720	\$982	\$0	\$33,702
6.3 Appraisal Maps, Plats, and Descriptions		16	40			80	80			240	120				576	\$88,560	\$2,657	\$0	\$91,217
Task 7 - Coordination, Agreements & Permits																			\$430,301
7.1 BNSF Railway																			
7.1.1 Construction & Maintenance Agreement	8	40			160	80		40							328	\$75,680	\$2,270	\$3,075	\$81,025
7.1.2 Submittals		60				80		80		120	80			8	428	\$68,816	\$2,064	\$0	\$70,880
7.2 California Public Utilities Commission		8				40		40		60					148	\$22,720	\$682	\$0	\$23,402
7.3 Caltrans District 8		80				120	60		80				40		380	\$68,760	\$2,063	\$0	\$70,823
7.4 Riverside County Flood Control & WCD		40				16									56	\$13,696	\$411	\$0	\$14,107
7.5 Utility Coordination		80				80	120				80				360	\$66,480	\$1,994	\$0	\$68,474
7.6 Community Engagement***		20				100		120		240	120				600	\$86,980	\$2,609	\$12,000	\$101,589
Task 8 - Bidding Services																			\$89,919
8.1 Resident Engineer (RE) Pending File		8	4	8		40	60			80					200	\$31,920	\$958	\$0	\$32,878
8.2 Bidding Phase Support		8				60									68	\$13,020	\$391	\$0	\$13,411
8.3 Conformed Plans and Specifications		4	4	8		40	60		80		80				276	\$42,360	\$1,271	\$0	\$43,631
Design (Tasks 1 - 8) Totals	66	2,014	499	758	216	3,962	2,176	2,088	3,164	4,996	2,004	120	500	733	23,296	\$3,757,307	\$112,719	\$15,075	

Fee Proposal | Biggs Cardosa Associates

	S.O.W. Phase / Task	S. Biggs Principal-in- Charge Principal III	Principal II	D. Devlin QA Manager Principal II	D. De Vera QC Manager Associate	Coordinator	E. Pheifer Struct. Mgr. Engineering Manager	Senior Engineer		Staff Engineer	Assistant Engineer	Senior Computer Drafter	Project Admin.	Project Coordinator	Secretarial	Total Hours	Labor Subtotal	Escalation**	Expenses	Task Totals
Tack	9 - Engineering Construction Services	\$305.00	\$270.00	\$270.00	\$210.00	\$263.00	\$181.00	\$164.00	\$147.00	\$134.00	\$124.00	\$134.00	\$147.00	\$122.00	\$97.00					
Task	5 - Engineering Construction Services					1														
9.1	Engineering Support (RFIs, Shop Drawings)		120			24	600		600		600	80		200		2224	\$345,032	\$26,463	\$0	\$371,495
9.2	Preparation of Record Documents (As-Builts)		16	8	16		80	120				120				360	\$60,080	\$4,608	\$0	\$64,688
	Const. Support (Task 9) Totals	0	136	8	16	24	680	120	600	0	600	200	0	200	0	2,584	\$405,112	\$31,070	\$0	\$436,182

Task 10 - Optional Services	ask 10 - Optional Services																		
10.1 Construction Staking															0	\$0	\$0	\$0	\$0
10.2 Right-of-Way Staking for Partial Acquisitions															0	\$0	\$0	\$0	\$0
10.3 Project Closeout Items															0	\$0	\$0	\$0	\$0
Optional Services (Task 10) Totals	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0	\$0

	_	
	BNSF Temporary Occupancy Permit	\$2,500
	BNSF Railroad Protective Liability Insurance	\$575
	Modelo 3D Interactive Cloud-Based Model (2 Years)	\$12,000
Francisco Bucchelorum		
Expenses Breakdown*		
	Expense Subtotal	\$15,075

^{*} Costs for printing, mileage, telephone, mailing and other expenses incidental to the performance of the main items of the Engineering Services to be rendered are included in the hourly rates.

^{**} Escalation is based on 3.0%/year (latest table 5 of Bureau of Labor Statistics). Design (Tasks 1 - 8) are escalated to the mid-point of design (1 year). Const. Support (Task 9) is escalated to the mid-point of the contract (2.5 years).

^{***} The initial 3D interactive model was developed pre-contractual at no cost to the City. This fee includes updates/refinements to the initial model.

S.O.W. Phase / Task	Duningt	Su Took	Senior	Canian							Duningt		Total	Labor	Escalation**	Expenses	Task Totals
	Project Manager	Sr. Tech. Advisor	Professional II	Senior Professional I	Professional II	Professional I	Senior Analyst	Analyst	Senior Designer	Designer	Project Support	Clerical	Hours	Subtotal	Escalation	Expenses	Task Totals
	\$310.00	\$351.00	\$265.00	\$225.00	\$210.00	\$145.00	\$130.00	\$115.00	\$150.00	\$125.00	\$180.00	\$88.00					
Task 1 - Project Administration	\$310.00	\$331.00	\$205.00	\$223.00	\$210.00	ψ1 4 3.00	\$130.00	\$115.00	\$130.00	\$125.00	\$100.00	\$00.00					\$202,973
1.1 Project Management Plan	8	Т	T	Δ	4	Ι	T 1		T	I	T	П	16	\$4,220	\$127	\$0	
1.2 Quality Control Plan	4		4	8	8	16	8	8					56	\$10,060	\$302	\$0	
1.3 Project Controls	50	2	100	25	75	10	0	0			50	100	402	\$10,060	\$2,456	\$0 \$0	
	100	4	100	100	150	100					30	100				\$0 \$0	
1.4 Project Development Team Meetings Task 2 - Data Collection	100	4		100	130	100							454	\$100,904	\$3,027	\$0	\$103,931 \$448,023
	T 2	T	1 2	T	Ι ο	0	1		1	1	1	T T	20	#2.00 <i>6</i>	¢1.00	¢0	
2.1 Aerial Mapping	2		2		8	8					1		20	\$3,990	\$120		
2.2 Field Survey	2		4		18	24							48	\$8,940	\$268	\$0	
2.3 Potholing	6		6	6	80		50						148	\$28,100	\$843	\$230,000	\$258,943
2.4 Right-of-Way Base Mapping	2		2		8	8							20	\$3,990	\$120	\$0	\$4,110
2.5 Utility Notification	6				20		40	60					126	\$18,160	\$545	\$0	
2.6 Utility Base Mapping	4		6	4	30		90					12	146	\$22,786	\$684	\$0	
2.7 Geotechnical Records Research & Findings													0	\$0	\$0	\$0	\$0
2.8 Traffic Analyses														_			
2.8.1 Preliminary Traffic Analyses	Task perfori	med pre-contr	actual by Kimle	y-Horn. No co	st to the City.								0	\$0	\$0	\$0	
2.8.2 Update Traffic Analyses	10		6	80		100		120				12	328	\$52,046	\$1,561	\$5,000	\$58,607
2.9 Caltrans Traffic Reports				_						-							
2.9.1 Intersection Control Evaluation	6			20		40		40				4	110	\$17,112	\$513	\$0	\$17,625
2.9.2 Traffic Forecasting Volumes Report	6			20		20		30				4	80	\$13,062	\$392	\$0	\$13,454
2.9.3 Ramp Meter and Merge Analysis	4			20		40		20					84	\$13,840	\$415	\$0	\$14,255
2.9.4 Roundabout Analysis	4		40	20		40		20				4	128	\$24,792	\$744	\$0	\$25,536
Task 3 - Concept Development & Project Approval																	\$42,938
3.1 Geometric Concepts	Task perfori	med pre-contr	actual by Kimle	y-Horn. No co	st to the City.								0	\$0	\$0	\$0	\$0
3.2 Bridge and Retaining Wall Concepts													0	\$0	\$0	\$0	\$0
3.3 Project Concept Report		_															
3.3.1 Plan and Profile Exhibits	4	2	8	6	20	20							60	\$12,512	\$375	\$0	\$12,887
3.3.2 Right-of-Way Exhibits													0	\$0	\$0	\$0	\$0
3.3.3 Utility Exhibits	2		4		12								18	\$4,200	\$126		
3.3.4 Structure Exhibits													0	\$0	\$0	\$0	
3.3.5 Preliminary Geotechnical Report													0	\$0	\$0	\$0	
3.3.6 Preliminary Traffic Analysis Report													0	\$0	\$0	\$0	\$0
3.3.7 Construction Cost Estimates	2				8								10	\$2,300	\$69		\$2,369
3.3.8 Right-of-Way Cost Estimates													0	\$0	\$0	\$0	
3.3.9 Project Concept Report													0	\$0	\$0	\$0	
3.4 Project Concept Approval	20		6	3	10	20			<u> </u>		1		59	\$13,465	\$404		
3.5 Design Basis Memorandum	4		6	8	8	20	1				1		46	\$9,210			
Task 4 - Environmental Documentation													40	Ψ5,210	4270	70	\$10,632
4.1 CEQA Statutory Exemption	T		T	T T	T				I		T	T T	0	\$0	\$0	\$0	
4.2 Technical Studies	8	2	4	8	8		20				1		50	\$10,322	\$310		
Task 5 - Plans, Specifications & Estimates (PS&E)			<u> </u>				20						30	ψ10,322	\$310	φU	\$2,408,209
5.1 Reports	1																ψ <u>υ</u> , 100,203
5.1.1 Water Quality Management Plan	4		I	8	50		100		I		1	12	174	\$27,596	\$828	\$0	\$28,424
5.1.2 Hydrology & Hydraulics Reports	8			12	100		200					14	334	\$53,412	\$1,602	\$0	
5.1.3 Traffic Management Plan	Q Q		+	52	12	85	200	150			1	12	319	\$47,331	\$1,602	\$0 \$0	
5.1.4 Geotechnical Investigations & Report	0			32	12	o)		130	 	1	1	14		\$47,331	\$1,420	\$0 \$0	
	8		+		20	40	+		 		1		0				
5.1.5 Landscaping & Aesthetic Concepts	0			1	20	40							68	\$12,480 \$0	\$374		
5.1.6 Structure Type Selection Report						<u> </u>			<u> </u>				0	\$0	\$0	\$0	\$0
Task 5 - 35% PS&E	I																
5.2 Calculations												1					
5.2.1 Civil/Survey Calculations									1	1	1		0	\$0			
5.2.2 Structural Calculations									<u> </u>				0	\$0	\$0	\$0	\$0

S.O.W. Phase / Task	Project Manager \$310.00	Sr. Tech. Advisor \$351.00	Senior Professional II \$265.00	Senior Professional I \$225.00	Professional II \$210.00	Professional I \$145.00	Senior Analyst \$130.00	Analyst \$115.00	Senior Designer \$150.00	Designer \$125.00	Project Support \$180.00	Clerical \$88.00		Total Hours	Labor Subtotal	Escalation**	Expenses	Task Totals
5.3 Plan Preparation		T	1 4	ı	1	1	1		ı	ı	ı	ı		10	* 4 000	*= 0	40	42.222
5.3.1 General Plans	10		4		100	100		8	100	100				12	\$1,980		\$0	\$2,039
5.3.4 Roadway Plans	40		100	0.0	100	180		160	120	100				800	\$134,900	\$4,047	\$0	\$138,947
5.3.5 Traffic Plans	20		1	80	150	120	220	180		100				500	\$74,800	\$2,244	\$0	\$77,044
5.3.6 Utility Plans	30		1	20	150	100	220			50				450	\$75,650	\$2,270	\$0	\$77,920
5.3.8 Drainage Plans	30		4	20	80	100	170							400	\$67,200	\$2,016	\$0	\$69,216
5.3.9 Bridge Plans	2		4	4	8									18	\$4,260	\$128	\$0	\$4,388
5.3.10 Retaining Wall Plans	2		4	4	8	20	60	00	10			0		18	\$4,260	\$128	\$0	\$4,388
5.5 Cost Estimates Task 5 - 65% PS&E	8		10	10	25	20	60	80	10			8		231	\$34,734	\$1,042	\$0	\$35,776
	T																	
5.2 Calculations	1		6	ı				60	1	20	1	1		07	¢11 200	¢220	¢o	¢11.C20
5.2.1 Civil/Survey Calculations	1		0					60		20				87 0	\$11,300 \$0	\$339 \$0	\$0 \$0	\$11,639 \$0
5.2.2 Structural Calculations 5.3 Plan Preparation		1	L							L				U	\$0	\$0	\$0	\$0
·			I	ı					1	I	1	1		0	¢ο	\$0	¢o	¢0
5.3.1 General Plans5.3.2 Survey Control Plan														0	\$0 \$0		\$0 \$0	\$0 \$0
5.3.3 Right-of-Way Plans														0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
	60		120		160	300	100	220	120	120				1200	\$198,800	\$5,964		\$204,764
5.3.4 Roadway Plans	40		120	140	100	180	100	220	120	120				700	\$198,800	\$3,309	\$0 \$0	
5.3.5 Traffic Plans	50			140	180	100	300	220		70				600		\$3,309	\$0	\$113,609
5.3.6 Utility Plans	10				80	90	300	120		70				300	\$101,050 \$46,750		\$0 \$0	\$104,082
5.3.7 Landscaping & Irrigation Plans	50			40	160	150	200	120						600		\$1,403 \$3,176	\$0 \$0	\$48,153
5.3.8 Drainage Plans	4		8	8	160	130	200								\$105,850 \$8,520	\$3,176	\$0	\$109,026
5.3.9 Bridge Plans	4		8	8	16									36				\$8,776
5.3.10 Retaining Wall Plans	4		٥	٥	10									36	\$8,520 \$0	\$256 \$0	\$0 \$0	\$8,776
5.3.11 Log of Test Borings	20	4	40	40	100							10		214			\$0 \$0	\$0 \$50,557
5.4 Specifications 5.5 Cost Estimates	8	4	10	10	25	20	60	80	10			8		231	\$49,084 \$34,734	\$1,473 \$1,042	\$0 \$0	\$50,557 \$35,776
5.6 Construction Schedule	0		10	10	23	20	00	80	10			0		0	\$34,734 \$0	\$1,042	\$0	\$33,776
Task 5 - 95% PS&E														U	\$0	\$ 0	\$0	\$0
5.2 Calculations																		
5.2.1 Civil/Survey Calculations	1		2	1				30	1	10	1	1		43	\$5,540	\$166	¢o	¢F 706
5.2.2 Structural Calculations	1		2					30		10				0	\$5,540 \$0		\$0 \$0	\$5,706 \$0
5.2.3 Independent Check														0	\$0	Ψο	\$0	\$0 \$0
5.3 Plan Preparation			<u> </u>		<u> </u>	<u> </u>				<u> </u>				U	\$ U	₽ ∪	\$0	ΦU
5.3.1 General Plans			I	I	1	1			I	I	I	I		0	\$0	\$0	\$0	\$0
5.3.2 Survey Control Plan														0	\$0		\$0	\$0
5.3.3 Right-of-Way Plans														0	\$0		\$0	\$0
5.3.4 Roadway Plans	60		120		160	300	100	220	120	120				1200	\$198,800	\$5,964	\$0	\$204,764
5.3.5 Traffic Plans	40		120	120	100	140	100	200	120	100				600	\$198,800	\$2,856	\$0	\$98,056
5.3.6 Utility Plans	40		20	120	150	140	240	200		50				500	\$86,650	\$2,600	\$0	\$89,250
5.3.7 Landscaping & Irrigation Plans	10		20		80	110	240	200		30				400	\$58,850	\$1,766	\$0	\$60,616
5.3.8 Drainage Plans	20		10	30	80	120	180	200						440	\$73,200	\$2,196	\$0	\$75,396
5.3.9 Bridge Plans	4		8	8	16	120	180							36	\$8,520	\$2,190	\$0	
5.3.10 Retaining Wall Plans	4		8	8	16	 								36	\$8,520	\$256	\$0 \$0	\$8,776 \$8,776
5.3.11 Log of Test Borings	7		O	0	10	 								0	\$8,520		\$0 \$0	\$8,776
5.4 Specifications	20	4	40	40	100	 						10		214	\$49,084	\$1,473	\$0 \$0	\$50,557
·	8	4	10	10	25	20	60	80	10			8		214	\$49,084 \$34,734		\$0 \$0	
	0		10	10	23	20	00	ου	10			0		0	\$34,/34 \$0		\$0 \$0	\$35,776 \$0
Task 5 - 100% PS&E				L	L	L			L		L	L		U	Φ0	\$0	\$0	\$ 0
5.2 Calculations			1	1					1	1	1	1	1					
5.2.1 Civil/Survey Calculations					<u> </u>									0	\$0	\$0	\$0	\$0

S.O.W. Phase / Task	Project	Sr. Tech.	Senior	Senior					Senior		Project				Total	Labor	Escalation**	Expenses	Task Totals
	Manager	Advisor	Professional II	Professional I	Professional II	Professional I	Senior Analyst	Analyst	Designer	Designer	Support	Clerical			Hours	Subtotal		•	
	\$310.00	\$351.00	\$265.00	\$225.00	\$210.00	\$145.00	\$130.00	\$115.00	\$150.00	\$125.00	\$180.00	\$88.00							
5.2.2 Structural Calculations															0	\$0	\$0	\$0	\$0
5.3 Plan Preparation																			
5.3.1 General Plans															0	\$0	\$0	\$0	\$0
5.3.2 Survey Control Plan															0	\$0	\$0	\$0	\$0
5.3.3 Right-of-Way Plans															0	\$0	\$0	\$0	\$0
5.3.4 Roadway Plans	40		80		60	200	40	160	40	80					700	\$114,800	\$3,444	\$0	\$118,244
5.3.5 Traffic Plans	20			50		60		100		70					300	\$46,400	\$1,392	\$0	\$47,792
5.3.6 Utility Plans	20		10		120		200			50					400	\$66,300	\$1,989	\$0	\$68,289
5.3.7 Landscaping & Irrigation Plans	20				80	80		120							300	\$48,400	\$1,452	\$0	\$49,852
5.3.8 Drainage Plans	20			20	60	80	120								300	\$50,500	\$1,515	\$0	\$52,015
5.3.9 Bridge Plans	2		4	4	8										18	\$4,260	\$128	\$0	\$4,388
5.3.10 Retaining Wall Plans	2		4	4	8										18	\$4,260	\$128	\$0	\$4,388
5.3.11 Log of Test Borings															0	\$0	\$0	\$0	\$0
5.4 Specifications	10	2	20	20	50							6			108	\$24,630	\$739	\$0	\$25,369
5.5 Cost Estimates	4		5	5	12	10	30	40	5			4			115	\$17,262	\$518	\$0	\$17,780
5.6 Construction Schedule							30								0	\$0	\$0	\$0	\$0
Task 5 - Issued for Bid (IFB)					l										Ŭ	Ψ0	ΨΟ	Ψ0	Ψ0
5.3 Plan Preparation																			
5.3.1 General Plans		1	1		1					I	I	I	Π		0	\$0	\$0	\$0	\$0
5.3.2 Survey Control Plan															0	\$0 \$0	\$0 \$0	\$0	\$0
5.3.3 Right-of-Way Plans															0	\$0 \$0	\$0	\$0	\$0
5.3.4 Roadway Plans	20		40		30	100	20	60		30					300	\$50,850	\$1,526	\$0	\$52,376
5.3.5 Traffic Plans	5		40	15	30	20	20	40		20					100	\$14,925	\$1,320	\$0	\$15,373
5.3.6 Utility Plans	10			15	20	20	30	40		20					60	\$14,923	\$336	\$0	\$13,573
5.3.7 Landscaping & Irrigation Plans	6				20	40	30	34							100	\$11,200 \$15,770	\$473	\$0	\$11,330
5.3.8 Drainage Plans	8			6	20	10	30	34							74	\$13,770	\$401	\$0	\$10,243
5.3.9 Bridge Plans	1		2	2	4	10	30								9	\$13,380	\$64	\$0	\$13,781
5.3.10 Retaining Wall Plans	1		2	2	4										9	\$2,130	\$64	\$0	\$2,194
5.3.11 Log of Test Borings	1		2	2	4										0	\$2,130 \$0	\$04	\$0	\$2,194
	4		10	10	20										44	\$10,340	\$310	\$0	\$10,650
	2		2	2	6	5	12	20	2			2			-	-	\$238	\$0	
5.5 Cost Estimates					0	3	12	20	2						53	\$7,921	\$238	\$0	\$8,159 \$72,58 4
Task 6 - Right-of-Way	20	1	16	I	100	1	220			I	I	ı	Г		20.4	¢70.470	¢2.11.4	¢0	
6.1 Right-of-Way Requirements	28		46		100		220								394	\$70,470	\$2,114	\$0	\$72,584
6.2 Right-of-Way Maps															0	\$0	\$0	\$0	\$0
6.3 Appraisal Maps, Plats, and Descriptions															0	\$0	\$0	\$0	\$0
Task 7 - Coordination, Agreements & Permits	1																		\$286,876
7.1 BNSF Railway		1			1					ı	ı		1					4.0	
7.1.1 Construction & Maintenance Agreement				<u> </u>											0	\$0	\$0	\$0	\$0
7.1.2 Submittals				ļ									 		0	\$0	\$0	\$0	\$0
7.2 California Public Utilities Commission															0	\$0	\$0	\$0	\$0
7.3 Caltrans District 8	188	6	60	10	123	246		60				28			721	\$149,400	\$4,482	\$0	\$153,882
7.4 Riverside County Flood Control & WCD	20				60										80	\$18,800	\$564	\$0	\$19,364
7.5 Utility Coordination	40				400		80					40			560	\$110,320	\$3,310	\$0	\$113,630
7.6 Community Engagement													<u> </u>		0	\$0	\$0	\$0	\$0
Task 8 - Bidding Services			<u> </u>										, ,						\$89,962
8.1 Resident Engineer (RE) Pending File	8		20	10	20	20	40						ļI		118	\$22,330	\$670	\$0	\$23,000
8.2 Bidding Phase Support	20	2		24	68		50						 		164	\$33,082	\$992	\$0	\$34,074
8.3 Conformed Plans and Specifications	8		20	10	20	20	40	40		40					198	\$31,930	\$958	\$0	\$32,888
Design (Tasks 1 - 8) Totals	1,375	28	1,055	1,178	3,697	3,322	3,110	2,980	437	1,150	50	298	0	0	18,680	\$3,230,287	\$96,909	\$235,000	\$3,562,196

Fee Proposal | Kimley-Horn

S.O.W. Phase / Task	Project Manager	Sr. Tech. Advisor	Senior Professional II	Senior Professional I	Professional II	Professional I	Senior Analyst	Analyst	Senior Designer	Designer	Project Support	Clerical			Total Hours	Labor Subtotal	Escalation**	Expenses	Task Totals
	\$310.00	\$351.00	\$265.00	\$225.00	\$210.00	\$145.00	\$130.00	\$115.00	\$150.00	\$125.00	\$180.00	\$88.00							
Task 9 - Engineering Construction Services																			
9.1 Engineering Support (RFIs, Shop Drawings)	78	8	158	186	226	260	40				50	100			1106	\$218,868	\$16,786	\$0	\$235,654
9.2 Preparation of Record Documents (As-Builts)	20		20	10	20	40	40	40		10		·	·		200	\$34,800	\$2,669	\$0	\$37,469
Const. Support (Task 9) Totals	98	8	178	196	246	300	80	40	0	10	50	100	0	0	1,306	\$253,668	\$19,455	\$0	\$273,123

Task 10 - Optional Services																			
10.1 Construction Staking															0	\$0	\$0	\$0	\$0
10.2 Right-of-Way Staking for Partial Acquisitions															0	\$0	\$0	\$0	\$0
10.3 Project Closeout Items															0	\$0	\$0	\$0	\$0
Optional Services (Task 10) Totals	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0	\$0

	Potholing	\$230,000
	Traffic Counts	\$5,000
Expenses Breakdown*		
	Expense Subtotal	\$235,000

- * Costs for printing, mileage, telephone, mailing and other expenses incidental to the performance of the main items of the Engineering Services to be rendered are included in the hourly rates.
- ** Escalation is based on 3.0%/year (latest table 5 of Bureau of Labor Statistics). Design (Tasks 1 8) are escalated to the mid-point of design (1 year). Const. Support (Task 9) is escalated to the mid-point of the contract (2.5 years).
- 1. Quantities within task descriptions above indicate portion of work within prime agreement for Kimley-Horn and is the basis for our agreed upon fees.
- 2. Kimley-Horn will not exceed the total maximum fee shown without authorization from the City. Individual task amounts are provided for budgeting purposes only. Kimley-Horn reserves the right to reallocate amounts among tasks as necessary.

Fee Proposal | David Evans and Associates

S.O.W. Phase / Task	Lwin Hwee PM	Jim Ellerbroek Rail Principal Engineer	Guido Portier Task Lead	Amanda Limburg Senior Rail Engineer	Br Engr	Greg Griffin Sr Br Engr	Br Engr	Rachel Bassil Br Des Engr	Dylan Anderson Junior Rail Engineer	Angie Jones Proj Ad					Total Hours	Labor Subtotal	Escalation**	Expenses	Task Totals
Task 1 - Project Administration	\$282.06	\$279.86	\$193.25	\$155.00	\$198.07	\$190.63	\$194.35	\$117.49	\$103.35	\$94.55									\$24,936
1.1 Project Management Plan	12		4	l	ı	I	ı	ı	I		l		1		16	\$4,158	\$125	\$0	1
	12		8	8	8	8	8	8			 		+		16			\$5,000	
1.2 Quality Control Plan1.3 Project Controls			٥	٥	٥	٥	٥	٥		72			1		48 72	\$8,390 \$6,808	\$252 \$204	\$5,000	
Task 3 - Concept Development & Project Approval										72					12	\$0,000	\$204	\$0	\$17,169
																			\$17,103
3.3 Project Concept Report 3.3.4 Structure Exhibits	2		31		31				ı			1	1		64	\$12,695	\$381	\$0	\$13,076
	1		7	 	31 7	5					<u> </u>		+				\$119	\$0 \$0	
3.5 Design Basis Memorandum Task 5 - Plans, Specifications & Estimates (PS&E)	1 1				/	5									20	\$3,974	\$119	\$0	\$4,094 \$328,811
	T																		\$320,011
5.1 Reports	1	T	30	1	20	20	T	T	I	ı	1	T	T	T	0.4	¢16.600	# F00	\$0	¢17.101
5.1.6 Structure Type Selection Report	4		30		30	20						<u> </u>			84	\$16,680	\$500	\$0	\$17,181
Task 5 - 95% PS&E	1																		
5.2 Calculations		1	T 40		160	200	200	200	I	1		I	ı	1	1000	\$170 too	#F 2F2	\$0	¢102.761
5.2.3 Independent Check		<u> </u>	40	<u> </u>	160	300	300	200			<u> </u>				1000	\$178,409	\$5,352	\$0	\$183,761
5.3 Plan Preparation			T		100		0.5		I	ı		1	1		212				
5.3.9 Bridge Plans			72		102	90	26	26							316	\$59,381	\$1,781	\$0	402/202
5.4 Specifications			8	<u> </u>	8	36	36				<u> </u>				88	\$16,989	\$510	\$0	\$17,499
Task 5 - 100% PS&E																			
5.3 Plan Preparation		1	T						ı	I		1	1	1					
5.3.9 Bridge Plans			20	ļ	40	40	16	16			ļ				132	\$24,402	\$732	\$0	, -
5.4 Specifications		L	8	L	8	16	16	L			<u> </u>	<u> </u>			48	\$9,290	\$279	\$0	\$9,569
Task 5 - Issued for Bid (IFB)																			
5.3 Plan Preparation		1	1 .	1	_		T -	_	ı	1	1	1	1	1					
5.3.9 Bridge Plans			8		8	20	8	8							52	\$9,438	\$283	\$0	1-7
5.4 Specifications			4		4	8	8								24	\$4,645	\$139	\$0	1 / -
Task 7 - Coordination, Agreements & Permits	1																		\$18,218
7.1 BNSF Railway			1				•		1	ı		1	1	T					
7.1.1 Construction & Maintenance Agreement		1	20	10	20				30						81	\$12,757	\$383	\$0	
7.1.2 Submittals		1		10					30						41	\$4,930	\$148	\$0	\$5,078
Design (Tasks 1 - 8) Totals	19	2	260	28	426	543	418	258	60	72	0	0	0	0	2,086	\$372,946	\$11,188	\$5,000	\$389,134
Task 9 - Engineering Construction Services																			
9.1 Engineering Support (RFIs, Shop Drawings)			50		50	100									200	\$38,628	\$1,159	\$0	\$39,787
Const. Support (Task 9) Totals	0	0	50	0	50	100	0	0	0	0	0	0	0	0	200	\$38,628	\$1,159	\$0	
Task 10 - Optional Services																			
Optional Services (Task 10) Totals	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0	\$0

	Travel (2 people, 1 nights each, 2 trips each)	\$5,000
Expenses Breakdown*		
	Expense Subtotal	\$5,000

^{*} Costs for printing, mileage, telephone, mailing and other expenses incidental to the performance of the main items of the Engineering Services to be rendered are included in the hourly rates.

^{*} Escalation is based on 3.0%/year (latest table 5 of Bureau of Labor Statistics). Design (Tasks 1 - 8) are escalated to the mid-point of design (1 year). Const. Support (Task 9) is escalated to the mid-point of the contract (2.5 years).

Fee Proposal | ICF

																						G1 1 1 1 1
S.O.W. Phase / Task					Moskus E															Gasca Ste		Chmiel K
	Calvert B	Yasui Y	Hardie J	33	Assoc Consult	Buehler D	Swiontek S	Irvin E	Cooper K	Whisman R	Souliotes D	Rocha L	Tong V	Hoisington G	Richards P	Flores M		Schwartz Pau		Sr	Crawford K	Sr
	Proj Dir	Sr Consult III	Sr Consult III	Sr Consult III	III	Proj Dir	Sr Consult I	Assoc Consult	Sr Tech Analyst	Sr Consult II	Admin Tech	Mng Consult	Assoc Consult I	Mng Consult	Sr Consult II	Sr Consult I	Sr Consult II	Sr Consult II	Mng Consult	Consult II	Proj Dir	Consult I
	\$289.32	\$181.45	\$179.65	\$177.08	\$97.91	\$264.94	\$109.34	\$137.30	\$210.91	\$134.49	\$63.59	\$177.69	\$114.16	\$185.24	\$153.13	\$121.68	\$148.63	\$145.39	\$173.42	\$178.95	\$205.04	\$112.70
Task 1 - Project Administration	•																					
1.3 Project Controls	36	96																				
1.4 Project Development Team Meetings	84																					
Task 4 - Environmental Documentation	·							•	•										•			
4.1 CEQA Statutory Exemption	1	3																				
4.2 Technical Studies	50	166	213	20	196	8	152	254	36	84	36	20	150	34		188					8	20
Design (Tasks 1 - 8) Totals	171	265	213	20	196	8	152	254	36	84	36	20	150	34	0	188	0	0	0	0	8	20
Task 9 - Engineering Construction Services																						
Const. Support (Task 9) Totals	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Task 10 - Optional Services																						
Optional Services (Task 10) Totals	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Fee Proposal | ICF

S.O.W. Phase / Task	Paul D Sr Consult II \$155.27	Starzak R Sr Proj Dir \$310.53	Roderick M Asst Consult \$92.29	Belcourt A Sr Consult I \$144.88	Shook J Admin Tech \$96.62	Cox N Assoc Consult I \$81.90	Hickman J Sr Consult II \$148.63	Schwartz P Sr Consult II \$145.39	Clendenin G Sr Tech Analyst \$220.51	Barrera M Sr Consult II \$128.74	Ban J Sr Consult II \$164.04	Johnson A Sr Consult I \$92.62	Trisal S Sr Tech Analyst \$206.76	Total Hours	Labor Subtotal	Escalation	Expenses	Task Totals
Task 1 - Project Administration	ψ133.27	\$310.55	\$32.23	Ψ111.00	\$30.02	\$01.50	\$110.03	\$113.33	Ψ220.51	Ψ120.71	\$101.01	ψ32.02	\$200.70					\$53,298
1.3 Project Controls	Τ				12									144	\$28,995	\$0	\$0	\$28,995
1.4 Project Development Team Meetings														84	\$24,303			\$24,303
Task 4 - Environmental Documentation	,		•		•	<u> </u>	<u> </u>				,		,					\$375,238
4.1 CEQA Statutory Exemption														4	\$834	\$0	\$0	\$834
4.2 Technical Studies	84	8	128	140		48	18	28	48	122	36	222	48	2565	\$355,104	\$0	\$19,300	\$374,404
Design (Tasks 1 - 8) Totals	84	8	128	140	12	48	18	28	48	122	36	222	48	2,797	\$409,236	\$0	\$19,300	\$428,536
Task 9 - Engineering Construction Services																		
Const. Support (Task 9) Totals	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0	\$0
Task 10 - Optional Services																		
Optional Services (Task 10) Totals	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0	\$0

	EDR Search	\$500
	Cultural Records Search	\$800
	Subconsultant (San Diego Natural History Museum)	\$18,000
Expenses Breakdown*		
Expenses breakdown		
	Expense Subtotal	\$19,300

^{*} Costs for printing, mileage, telephone, mailing and other expenses incidental to the performance of the main items of the Engineering Services to be rendered are included in the hourly rates.

Fee Proposal | Earth Mechanics

S.O.W. Phase / Task	Principal In	Project	Project	Senior											Total Hours	Labor Subtotal	Escalation	Expenses	Task Tota
	Charge	Manager	Geologist	Technician	Staff Engineer										nouis	Subtotal			
	\$250.68	\$129.82	\$125.34	\$117.88	\$93.26														
ask 1 - Project Administration			1	-	1			1	T	1	ı	1	1						\$4,1
1 Project Management Plan	4	8													12	\$2,041	\$0		
2 Quality Control Plan		4													4	\$519	\$0		
3 Project Controls		12	<u> </u>								<u> </u>	<u> </u>			12	\$1,558	\$0	\$0	. ,
ask 2 - Data Collection								_				_			1				\$4,0
.7 Geotechnical Records Research & Findings	8	16													24	\$4,083	\$0	\$0	
ask 3 - Concept Development & Project Approval																			\$10,
3.3 Project Concept Report																			
3.3.5 Preliminary Geotechnical Report	16	32	16												64	\$10,171	\$0	\$0	
Task 4 - Environmental Documentation																			\$30,3
2.2 Technical Studies	48	88	24		40										200	\$30,195	\$0	\$0	\$30,1
Task 5 - Plans, Specifications & Estimates (PS&E)																			\$459,6
5.1 Reports																			
5.1.4 Geotechnical Investigations & Report	534	632	276	440	120										2002	\$313,562	\$0	\$124,850	\$438,4
Task 5 - 65% PS&E																			
5.3 Plan Preparation																			
i.3.11 Log of Test Borings	22	30			60										112	\$15,005	\$0	\$0	\$15,0
5.4 Specifications	1	1													2	\$381	\$0	\$0	
ask 5 - 95% PS&E							•	•	•	•									
5.3 Plan Preparation																			
5.3.11 Log of Test Borings	2	4			8										14	\$1,767	\$0	\$0	\$1,7
5.4 Specifications	1	1								İ					2	\$381	\$0		
ask 5 - 100% PS&E														<u>, </u>		· · · · · · · · · · · · · · · · · · ·			
i.3 Plan Preparation																			
5.3.11 Log of Test Borings	2	4			8										14	\$1,767	\$0	\$0	\$1,7
5.4 Specifications	1	1													2	\$381	\$0		
Task 5 - Issued for Bid (IFB)																			
5.3 Plan Preparation																			
5.3.11 Log of Test Borings	2	2			4		I								8	\$1,134	\$0	\$0	\$1,1
6.4 Specifications	1	1													2	\$381	\$0	-	
	_	_																	
Design (Tasks 1 - 8) Totals	642	836	316	440	240	0	0	0	0	0	0	0	0	0	2,474	\$383,323	\$0	\$124,850	\$508,1
ask 9 - Engineering Construction Services																			
0.1 Engineering Support (RFIs, Shop Drawings)	8	24													32	\$5,121	\$0	\$0	\$5,1
Const. Support (Task 9) Totals	8	24	0	0	0	0	0	0	0	0	0	0	0	0	32	\$5,121			
ask 10 - Optional Services																			
Optional Services (Task 10) Totals	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0	

	Mud Rotary Drill Rig Rental	\$37,290					
	Hollow-Stem Auger Dril Rig Rental Caltrans Permit (Assumed)						
Expenses Breakdown*	Soil Cuttings Contaminants Testing	\$1,260					
Expenses bleakdown	Soil Cuttings (Drums) Disposal	\$3,960					
	Traffic Control	\$19,740					
	Drill Rig Rental for Infiltration Testing	\$30,800					
	Expense Subtotal	\$124,850					
	-						

^{*} Costs for printing, mileage, telephone, mailing and other expenses incidental to the performance of the main items of the Engineering Services to be rendered are included in the hourly rates.

Fee Proposal | BKF Engineers

S.O.W. Phase / Task															Total	Labor			
	Principal	Associate	Project Manager	Surveyor III	Surveyor II	Surveyor I	Field Party Chief	Field Chainman							Hours	Subtotal	Escalation**	Expenses	Task Totals
	\$237.00	\$206.00	\$197.00	\$168.00	\$148.00	\$129.00	\$169.00	\$109.00							-				
Task 1 - Project Administration	\$237.00	\$200.00	\$157.00	\$100.00	\$140.00	\$123.00	Ψ103.00	\$105.00											\$40,862
1.1 Project Management Plan			Ī									T T			0	\$0	\$0	\$0	
1.2 Quality Control Plan	8	4	16		8		8	8							52	\$9,280	\$0		
1.3 Project Controls	2	16	80												98	\$19,530	\$0	\$0	
1.4 Project Development Team Meetings	4	8	48												60	\$12,052	\$0	\$0	
Task 2 - Data Collection																			\$326,530
2.1 Aerial Mapping	1	4	8	4	16		32	32							97	\$14,573	\$0	\$51,500	\$66,073
2.2 Field Survey	1	8	24	48	160	80	120	120							561	\$82,037	\$0	\$19,000	\$101,037
2.3 Potholing		4	8		8		24	24							68	\$10,256	\$0	\$0	\$10,256
2.4 Right-of-Way Base Mapping	8	8	120	296	276	140	48	48							944	\$149,164	\$0	\$0	\$149,164
Task 5 - Plans, Specifications & Estimates (PS&E)																			\$35,889
Task 5 - 95% PS&E																			
5.2 Calculations																			
5.2.1 Civil/Survey Calculations	1	2	16	24	24	8									75	\$12,417	\$0	\$0	\$12,417
5.3 Plan Preparation																			
5.3.2 Survey Control Plan	2	4	4	8	16	24									58	\$8,894	\$0	\$0	\$0,031
5.3.3 Right-of-Way Plans	2	4	8	16	40	24									94	\$14,578	\$0	\$0	\$17,370
Task 6 - Right-of-Way																			\$194,574
6.1 Right-of-Way Requirements	2	8	40	80											130	\$23,442			7/
6.2 Right-of-Way Maps	4	4	60	120	80	64									332	\$53,848	\$0		400,010
6.3 Appraisal Maps, Plats, and Descriptions	4	16	80	280	200	160									740	\$117,284	\$0	\$0	\$117,284
Design (Tasks 1 - 8) Totals	39	90	512	876	828	500	232	232	0	0	0	0	0	0	3,309	\$527,355	\$0	\$70,500	\$597,855
Task 9 - Engineering Construction Services																			
Const. Support (Task 9) Totals	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0	\$0
Task 10 - Optional Services																			
10.1 Construction Staking	2	16	80	240	120	80	280	280							1098	\$165,770	\$26,403	\$0	\$192,173
10.2 Right-of-Way Staking for Partial Acquisitions	2	4	8	16	24		80	80							214	\$31,354	\$4,994	\$0	\$36,348
10.3 Project Closeout Items	16	32	80	120	64		56	56							424	\$71,344	\$11,363	\$0	\$82,707
Optional Services (Task 10) Totals	20	52	168	376	208	80	416	416	0	0	0	0	0	0	1,736	\$268,468	\$42,760	\$0	\$311,228

	Aerial Topographic Survey - ABC Mapping	\$40,000
	Aerial Mapping Miscellaneous Expenses	\$5,000
Expenses Breakdown*	Aerial Topographic Survey	\$6,500
expenses breakdown	BNSF Flagmen (5 Days @ \$1,800/Day)	\$9,000
	Traffic Control (5 Days @ \$2,000/Day)	\$10,000
	Expense Subtotal	\$70,500

^{*} Costs for printing, mileage, telephone, mailing and other expenses incidental to the performance of the main items of the Engineering Services to be rendered are included in the hourly rates.

^{**} Escalation is based on 3.0%/year (latest table 5 of Bureau of Labor Statistics). Post-Construction Services (Task 10) are escalated to the end of construction (5 years).

Fee Proposal | Arellano Associates

S.O.W. Phase / Task	Principal-in- Charge \$306.76	Senior Project Coordinator \$115.54	Project Coordinator \$76.08	Graphic Designer \$76.08	Assistant Project Coordinator \$53.99	Assistant Project Coordinator \$49.08									Total Hours	Labor Subtotal	Escalation	Expenses	Task Totals
Task 1 - Project Administration				<u> </u>				•	<u> </u>										\$58,437
1.3 Project Controls	10	100	20			8									138	\$16,536	\$0	\$0	\$16,536
1.4 Project Development Team Meetings	20	183	96	42	40	40									421	\$41,901	\$0	\$0	\$41,901
Task 7 - Coordination, Agreements & Permits																			\$120,710
7.6 Community Engagement	8	292	224	50	320	440									1334	\$95,910	\$0	\$24,800	\$120,710
Design (Tasks 1 - 8) Totals	38	575	340	92	360	488	0	0	0	0	0	0	0	0	1,893	\$154,346	\$0	\$24,800	\$179,146
Task 9 - Engineering Construction Services																			
Const. Support (Task 9) Totals	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0	\$0
Task 10 - Optional Services																			
Optional Services (Task 10) Totals	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0	\$0

	Collateral Material/Exhibits	\$7,500
	Parcel Data	\$1,500
	Notice Distribution	\$10,000
Expenses Breakdown*	Facility Rental	\$2,000
Expenses breakdown	Supplies and Refreshments	\$800
	Translation/Interpretation (as needed)	\$3,000
	Expense Subtotal	\$24,800

^{*} Costs for printing, mileage, telephone, mailing and other expenses incidental to the performance of the main items of the Engineering Services to be rendered are included in the hourly rates.