# APPENDIX C ATTACHMENT D

# **COST ENGINEERING**

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# **American River Watershed**

Common Features General Reevaluation Report



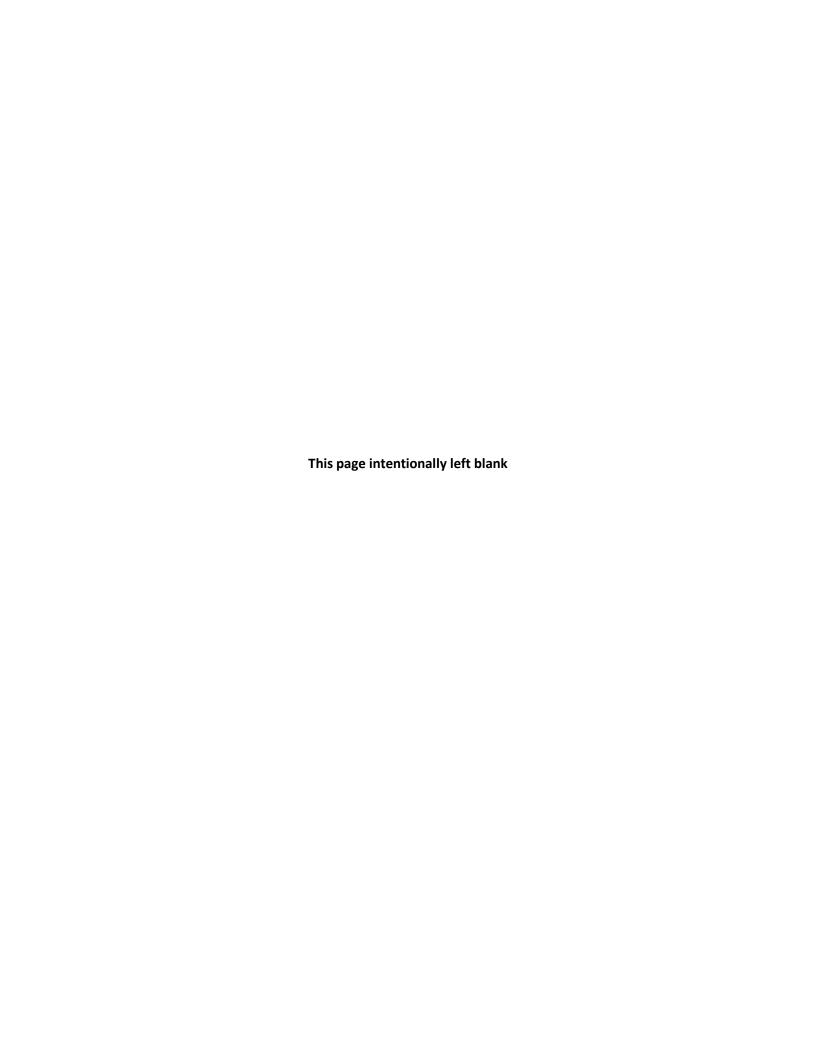
Cover Photos courtesy of the Sacramento District:
Sacramento Weir during operation
Sacramento River facing south near the Pocket and Little Pocket neighborhoods
High flows on the American River at the Highway 160 overcrossing
Folsom Dam releasing high flows

## AMERICAN RIVER, CALIFORNIA COMMON FEATURES PROJECT GENERAL REEVALUATION REPORT

Attachment D
Cost Engineering

U.S. Army Corps of Engineers Sacramento District

February 2015



## **Abbreviated Risk Analysis**

Project: American River Common Features - GRR - Alt 1

Project Development Stage: Feasibility (Alternatives)

Risk Category: Moderate Risk: Typical Project or Possible Life Safety

Total Construction Contract Cost = \$ 794,694,000

	<u>CWWBS</u>	Feature of Work	<u>C</u>	ontract Cost	% Contingency	<u>\$</u>	Contingency	<u>Total</u>
	01 LANDS AND DAMAGES	Real Estate	\$	89,850,307	43.41%	\$	39,007,943 \$	128,858,250
1	02 RELOCATIONS	Rel - Penetr, Pos Closures, PP	\$	37,689,392	39.46%	\$	14,870,893 \$	52,560,285
2	11 01 LEVEES	SWPP	\$	32,698,642	14.59%	\$	4,770,584 \$	37,469,226
3	11 01 LEVEES	Earthwork (Degrade & Reused)	\$	96,929,982	19.85%	\$	19,237,364 \$	116,167,346
4	11 01 LEVEES	Earthwork (Imported Borrow)	\$	43,617,186	20.96%	\$	9,143,859 \$	52,761,045
5	11 01 LEVEES	Cutoff Walls	\$	139,412,365	31.04%	\$	43,273,487 \$	182,685,852
6	11 01 LEVEES	Floodwalls	\$	31,806,867	16.59%	\$	5,277,254 \$	37,084,121
7	11 01 LEVEES	Slope/Erosion Protection	\$	252,737,933	17.42%	\$	44,034,738 \$	296,772,671
8	11 01 LEVEES	Planting	\$	38,300,637	18.68%	\$	7,155,218 \$	45,455,855
9	11 01 LEVEES				0.00%	\$	- \$	-
10	11 01 LEVEES				0.00%	\$	- \$	-
11	11 01 LEVEES				0.00%	\$	- \$	-
12		Remaining Construction Items	\$	121,500,996	20.79%	\$	25,262,601 \$	146,763,597
13	30 PLANNING, ENGINEERING, AND DESIGN	Planning, Engineering, & Design	\$	122,449,000	21.77%	\$	26,660,401 \$	149,109,401
14	31 CONSTRUCTION MANAGEMENT	Construction Management	\$	67,819,000	21.77%	\$	14,765,998 \$	82,584,998
		Totals  Real Estate  Total Construction Estimate  Total Planning, Engineering & Design  Total Construction Management	\$ \$	89,850,307 794,694,000 122,449,000 67,819,000	43.41% 21.77% 21.77% 21.77%	\$ \$ \$	39,007,943 \$ 173,025,999 \$ 26,660,401 \$ 14,765,998 \$	128,858,250 967,719,999 149,109,401 82,584,998
		Sub-Total	\$	1,074,812,307		\$	253,460,342 \$	1,328,272,649

## **Abbreviated Risk Analysis**

Project (less than \$40M): American River Common Features - GRR - Alt 2

Project Development Stage: Feasibility (Alternatives)

Risk Category: Moderate Risk: Typical Project or Possible Life Safety

Total Construction Contract Cost = \$ 914,119,000

	<u>CWWBS</u>	Feature of Work	Cont	ract Cost	% Contingency	\$	Contingency	<u>Total</u>
	01 LANDS AND DAMAGES	Real Estate	\$	72,390,701	33.91%	\$	24,547,424 \$	96,938,125
_1_	02 RELOCATIONS	Rel - Penetr, Pos Closures, PP, Rds, RR	\$	52,083,126	29.02%	\$	15,116,663 \$	67,199,789
2	11 01 LEVEES	SWPP	\$	35,690,334	14.59%	\$	5,207,059 \$	40,897,393
3	11 01 LEVEES	Earthwork (Degrade & Reused)	\$	109,182,547	19.85%	\$	21,669,088 \$	130,851,635
4	11 01 LEVEES	Earthwork (Imported Borrow)	\$	76,854,734	20.96%	\$	16,111,743 \$	92,966,477
5	11 01 LEVEES	Cutoff Walls	\$	140,727,551	31.04%	\$	43,681,720 \$	184,409,271
6	11 01 LEVEES	Floodwalls	\$	28,868,492	12.82%	\$	3,699,641 \$	32,568,133
7	11 01 LEVEES	Slope/Erosion Protection 5	\$	252,737,933	17.42%	\$	44,034,738 \$	296,772,671
8	11 01 LEVEES	Planting	\$	38,300,637	18.68%	\$	7,155,218 \$	45,455,855
9	11 01 LEVEES				0.00%	\$	- \$	<u> </u>
10	11 01 LEVEES				0.00%	\$	- \$	
11	15 FLOODWAY CONTROL AND DIVERSION STRUCTURES	Widen Sac Bypass Structure	\$	44,336,160	16.91%	\$	7,495,995 \$	51,832,155
12		Remaining Construction Items	\$	135,337,486	20.79%	\$	28,139,497 \$	163,476,983
13	30 PLANNING, ENGINEERING, AND DESIGN	Planning, Engineering, & Design	\$	141,737,000	21.04%	\$	29,818,476 \$	171,555,476
14	31 CONSTRUCTION MANAGEMENT	Construction Management	\$	78,150,000	21.04%	\$	16,441,112 \$	94,591,112
		Totals						
		Real Estate S	*	72,390,701	33.91%	\$	24,547,424 \$	96,938,125
		Total Construction Estimate		914,119,000	21.04%	\$	192,311,362 \$	1,106,430,362
		Total Planning, Engineering & Design S Total Construction Management S		141,737,000 78,150,000	21.04% 21.04%	\$ \$	29,818,476 \$ 16,441,112 \$	171,555,476 94,591,112
		Sub-Total S		,206,396,701	Z1.U4/0	\$	263,118,374 \$	1,469,515,075
		- Cub Total (	· .	,,,		-	===, 5,0	.,,,

assumes contingency for 30 & 31 accounts same as that for construction estimate

Sunk Costs

Total Costs \$ 1,206,396,701

Printed:12/19/2014 Page 1 of 17

PROJECT: American River Common Features GRR - Alt1

PROJECT NO: P2 149827 LOCATION: Sacramento, CA

This Estimate reflects the scope and schedule in report;

Draft Feasibility Report

DISTRICT: SPK - Sacramento District PREPARED: 12/19/2014
POC: CHIEF, COST ENGINEERING, Jeremiah Fr

Civi	l Works Work Breakdown Structure		ESTIMATE (in \$10				-		OJECT FIRST COS nstant Dollar Basis (in \$1000s)				(FUL	PROJECT COS LY FUNDED) n \$1000s)	ST
								Program \	Year (Budget EC):	2015					
								Effective	Price Level Date:	1 OCT 14	•				
										Spent Thru:	TOTAL FIRST				
WBS	Civil Works	COST	CNTG	CNTG	TOTAL	ESC	COST	CNTG	TOTAL	10/1/2014	COST	ESC	COST	CNTG	FULL
NUMBER	Feature & Sub-Feature Description	<u>(\$K)</u>	(\$K)	(%)	(\$K)	(%)	(\$K)	(\$K)	(\$K)	(\$K)	<u>(\$K)</u>	(%)	(\$K)	(\$K)	(\$K)
Α	В	С	D	E	F	G	Н	I	J				М	N	0
06	FISH & WILDLIFE FACILITIES	\$42,423	\$9,237	22%	\$51,659	0.0%	\$42,423	\$9,237	\$51,659	\$0	\$51,659				
11	LEVEES & FLOODWALLS	\$695,322	\$151,390	22%	\$846,713	0.0%	\$695,322	\$151,390	\$846,713	\$0	\$846,713				
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0 -		\$0	-	\$0	\$0	\$0	\$0	\$0				
16	BANK STABILIZATION	\$0	\$0 -		\$0	-	\$0	\$0	\$0	\$0	\$0				
18	CULTURAL RESOURCE PRESERVATION	\$15,778	\$3,435	22%	\$19,213	0.0%	\$15,778	\$3,435	\$19,213	\$0	\$19,213				
	CONSTRUCTION ESTIMATE TOTALS:	\$753,523	\$164,062	=	\$917,585	0.0%	\$753,523	\$164,062	\$917,585	\$0	\$917,585	-			
01	LANDS AND DAMAGES (FED)	\$8,598	\$452	5%	\$9,050	0.0%	\$8,598	\$452	\$9,050	\$0	\$9,050				
01	LANDS AND DAMAGES (NON-FED)	\$81,253	\$38,555	47%	\$119,808	0.0%	\$81,253	\$38,555	\$119,808	\$0	\$119,808				
02	RELOCATIONS	\$37,689	\$8,206	22%	\$45,895	0.0%	\$37,689	\$8,206	\$45,895	\$0	\$45,895				
30	RELOCATIONS - PED	\$9,422	\$2,051	22%	\$11,474	0.0%	\$9,422	\$2,051	\$11,474	\$0	\$11,474				
31	RELOCATIONS - CM	\$3,769	\$821	22%	\$4,590	0.0%	\$3,769	\$821	\$4,590	\$0	\$4,590				
18	CULTURAL RESOURCES-DATA RECOV.	\$3,482	\$758	22%	\$4,240	0.0%	\$3,482	\$758	\$4,240	\$0	\$4,240				
30	PLANNING, ENGINEERING & DESIGN	\$113,027	\$24,609	22%	\$137,636	0.0%	\$113,027	\$24,609	\$137,636	\$0	\$137,636				
31	CONSTRUCTION MANAGEMENT	\$64,050	\$13,945	22%	\$77,995	0.0%	\$64,050	\$13,945	\$77,995	\$0	\$77,995				
	PROJECT COST TOTALS:	\$1,074,812	\$253,461	24%	\$1,328,273		\$1,074,812	\$253,461	\$1,328,273	\$0	\$1,328,273	<u> </u> 			

CHIEF, COST ENGINEERING, Jeremiah Frost

PROJECT MANAGER, Dan Tibbits

CHIEF, REAL ESTATE, Sharon Caine

CHIEF, ENGINEERING, Rick Poeppelman

ESTIMATED TOTAL FIRST COST (in \$1000s):

\$1,328,273

#### \*\*\*\* CONTRACT COST SUMMARY \*\*\*\*

PROJECT: American River Common Features GRR - Alt1

LOCATION: Sacramento, CA

 DISTRICT: SPK - Sacramento District

POC: CHIEF, COST ENGINEERING, Jeremiah Frost

PREPARED: 12/19/2014

Civi	Works Work Breakdown Structure		ESTIMATE (in \$10				(Consta	CT FIRST CO nt Dollar Bas n \$1000s)			TOTAL PRO	JECT COST (FULLY F (in \$1000s)	UNDED)	
			nate Prepared ive Price Leve		<b>10/1/2014</b> 10/1/2014		m Year (Bud ve Price Leve		2015 1 OCT 14					
			R	ISK BASED										
WBS	Civil Works	COST	CNTG	CNTG	TOTAL	ESC	COST	CNTG	TOTAL	Mid-Point	ESC	COST	CNTG	FULL
NUMBER A	Feature & Sub-Feature Description	(\$K) <b>C</b>	(\$K) <b>D</b>	<u>(%)</u> <i>E</i>	_(\$K) <b>F</b>	<u>(%)</u> <b>G</b>	(\$K) <b>H</b>	(\$K)	(\$K) J	Date P	<u>(%)</u> <b>L</b>	(\$K) <b>M</b>	(\$K) <b>N</b>	(\$K) <b>O</b>
^	ARS - Reach A	U	D	_	-		"	,	J	,	_	IM	14	U
06	FISH & WILDLIFE FACILITIES	\$10,287	\$2,240	22%	\$12,526	0.0%	\$10,287	\$2,240	\$12,526					
11	LEVEES & FLOODWALLS	\$102,021	\$22,213	22%	\$124,234	0.0%	\$102,021	\$22,213	\$124,234					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$2,111	\$460	22%	\$2,570	0.0%	\$2,111	\$460	\$2,570					
							\$0							
	CONSTRUCTION ESTIMATE TOTALS:	\$114,418	\$24,912	22%	\$139,330	-	\$114,418	\$24,912	\$139,330					
01	LANDS AND DAMAGES (FED)	005	0.5	=0/	0400	0.00/	005	0.5	<b>A</b> 400					
01 01	LANDS AND DAMAGES (FED)  LANDS AND DAMAGES (NON-FED)	\$95	\$5	5%	\$100	0.0%	\$95	\$5	\$100					
01	RELOCATIONS	\$1,907	\$827	43%	\$2,734	0.0%	\$1,907	\$827	\$2,734					
30	RELOCATIONS - PED	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
30 31	RELOCATIONS - CM	\$0 \$0	\$0 \$0	22% 22%	\$0 \$0	0.0% 0.0%	\$0 \$0	\$0 \$0	\$0 \$0					
3 i 18	CULTURAL RESOURCES - DATA RECOV.	\$466	\$101	22%	\$0 \$567	0.0%	\$466	\$101	\$567					
10	SOLIGINAL NESSONISES BANANIESSA	φ400	\$101	2276	φ367	0.0%	<b>\$400</b>	\$101	φ307					
30	PLANNING, ENGINEERING & DESIGN													
1.6%	S Project Management	\$1,831	\$399	22%	\$2,230	0.0%	\$1,831	\$399	\$2,230					
1.3%	6 Planning & Environmental Compliance	\$1,487	\$324	22%	\$1,811	0.0%	\$1,487	\$324	\$1,811					
5.6%	Engineering & Design	\$6,407	\$1,395	22%	\$7,802	0.0%	\$6,407	\$1,395	\$7,802					
0.3%		\$343	\$75	22%	\$418	0.0%	\$343	\$75	\$418					
0.3%		\$343	\$75	22%	\$418	0.0%	\$343	\$75	\$418					
1.3%		\$1,487	\$324	22%	\$1,811	0.0%	\$1,487	\$324	\$1,811					
2.0%	0 0	\$2,288	\$498	22%	\$2,786	0.0%	\$2,288	\$498	\$2,786					
1.3%		\$1,487	\$324	22%	\$1,811	0.0%	\$1,487	\$324	\$1,811					
1.3%	6 Project Operations	\$1,487	\$324	22%	\$1,811	0.0%	\$1,487	\$324	\$1,811					
31	CONSTRUCTION MANAGEMENT													
5.9%	Construction Management	\$6,751	\$1,470	22%	\$8,221	0.0%	\$6,751	\$1,470	\$8,221					
1.2%	Project Operation:	\$1,373	\$299	22%	\$1,672	0.0%	\$1,373	\$299	\$1,672					
1.4%	Project Management	\$1,602	\$349	22%	\$1,951	0.0%	\$1,602	\$349	\$1,951					
	CONTRACT COST TOTALS:	\$143,772	\$31,699		\$175,471		\$143,772	\$31,699	\$175,471					

Filename: ARCF-PCS-Alt1\_1st\_Cost\_20141219.xlsx

**TPCS** 

PROJECT FIRST COST

#### \*\*\*\* CONTRACT COST SUMMARY \*\*\*\*

PROJECT: American River Common Features GRR - Alt1

LOCATION: Sacramento, CA

DISTRICT: SPK - Sacramento District

POC: CHIEF, COST ENGINEERING, Jeremiah Frost

Civi	Works Work Breakdown Structure		ESTIMATE (in \$10				(Consta	nt Dollar Bas n \$1000s)			TOTAL PRO	OJECT COST (FULLY F (in \$1000s)	UNDED)	
			ate Prepared ve Price Leve		<b>10/1/2014</b> 10/1/2014		m Year (Budç ve Price Leve		2015 1 OCT 14					
WBS <u>NUMBER</u> <b>A</b>	Civil Works Feature & Sub-Feature Description  8	COST (\$K) <b>C</b>	CNTG (\$K) <b>D</b>	CNTG _(%) <i>E</i>	TOTAL _(\$K)_ <b>F</b>	ESC (%) <b>G</b>	COST (\$K) H	CNTG (\$K)	TOTAL _(\$K) 	Mid-Point <u>Date</u> <b>P</b>	ESC (%) <i>L</i>	COST _(\$K) <b>M</b>	CNTG (\$K) <b>N</b>	FULL (\$K) <b>O</b>
^	ARS - Reach B			-	•	∥ ັ		,	J	,	_		,,	Ū
06	FISH & WILDLIFE FACILITIES	\$2,454	\$534	22%	\$2,988	0.0%	\$2,454	\$534	\$2,988					
11	LEVEES & FLOODWALLS	\$25,040	\$5,452	22%	\$30,492	0.0%	\$25,040	\$5,452	\$30,492					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$524	\$114	22%	\$639	0.0%	\$524 \$0	\$114	\$639					
	CONSTRUCTION ESTIMATE TOTALS:	\$28,018	\$6,100	22%	\$34,119	-	\$28,018	\$6,100	\$34,119					
01	LANDS AND DAMAGES (FED)	\$166	\$9	5%	\$175	0.0%	\$166	\$9	\$175					
01	LANDS AND DAMAGES (NON-FED)	\$845	\$199	24%	\$1,044	0.0%	\$845	\$199	\$1,044					
02	RELOCATIONS	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
30	RELOCATIONS - PED	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
31	RELOCATIONS - CM	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCES - DATA RECOV.	\$116	\$25	22%	\$141	0.0%	\$116	\$25	\$141					
30	PLANNING, ENGINEERING & DESIGN													
1.6%	6 Project Management	\$448	\$98	22%	\$546	0.0%	\$448	\$98	\$546					
1.3%	6 Planning & Environmental Compliance	\$364	\$79	22%	\$443	0.0%	\$364	\$79	\$443					
5.6%	Engineering & Design	\$1,569	\$342	22%	\$1,911	0.0%	\$1,569	\$342	\$1,911					
0.3%		\$84	\$18	22%	\$102	0.0%	\$84	\$18	\$102					
0.3%	Life Cycle Updates (cost, schedule, risks)	\$84	\$18	22%	\$102	0.0%	\$84	\$18	\$102					
1.3%	0 . 0 .	\$364	\$79	22%	\$443	0.0%	\$364	\$79	\$443					
2.0%	Engineering During Construction	\$560	\$122	22%	\$682	0.0%	\$560	\$122	\$682					
1.3%	• •	\$364	\$79	22%	\$443	0.0%	\$364	\$79	\$443					
1.3%	6 Project Operations	\$364	\$79	22%	\$443	0.0%	\$364	\$79	\$443					
31	CONSTRUCTION MANAGEMENT													
5.9%	Construction Management	\$1,653	\$360	22%	\$2,013	0.0%	\$1,653	\$360	\$2,013					
1.2%	6 Project Operation:	\$336	\$73	22%	\$409	0.0%	\$336	\$73	\$409					
1.4%	6 Project Management	\$392	\$85	22%	\$477	0.0%	\$392	\$85	\$477					
	CONTRACT COST TOTALS:	\$35,727	\$7,767		\$43,494		\$35,727	\$7,767	\$43,494					

#### \*\*\*\* CONTRACT COST SUMMARY \*\*\*\*

American River Common Features GRR - Alt1 PROJECT:

LOCATION: Sacramento, CA

Draft Feasibility Report This Estimate reflects the scope and schedule in report;

DISTRICT: SPK - Sacramento District

POC: CHIEF, COST ENGINEERING, Jeremiah Frost

Civil	Works Work Breakdown Structure		ESTIMATE (in \$10				(Consta	CT FIRST CO nt Dollar Bas n \$1000s)			TOTAL PRO	JECT COST (FULLY FU (in \$1000s)	NDED)	
			ate Prepared ve Price Leve		<b>10/1/2014</b> 10/1/2014		m Year (Budo ve Price Leve		2015 1 OCT 14					
WBS <u>NUMBER</u> <b>A</b>	Civil Works Feature & Sub-Feature Description B	COST (\$K) <b>C</b>	CNTG (\$K) <b>D</b>	CNTG _(%) <i>E</i>	TOTAL _(\$K)_ <b>F</b>	ESC (%) <b>G</b>	COST _(\$K)_ <i>H</i>	CNTG _(\$K)_ 	TOTAL _(\$K) <b>J</b>	Mid-Point <u>Date</u> <b>P</b>	ESC (%) <i>L</i>	COST _(\$K) <i>M</i>	CNTG (\$K) <b>N</b>	FULL <u>(\$K)</u> <b>O</b>
06	ARS - Reach C FISH & WILDLIFE FACILITIES	\$170	\$37	22%	\$207	0.0%	\$170	\$37	\$207					
11	LEVEES & FLOODWALLS	\$23,655	\$5,150	22%	\$28,805	0.0%	\$23,655	\$5,150	\$28,805					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0 \$0	\$0	22%	\$0 \$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$454	\$99	22%	\$553	0.0%	\$454 \$0	\$99	\$553					
	CONSTRUCTION ESTIMATE TOTALS:	\$24,279	\$5,286	22%	\$29,566	-	\$24,279	\$5,286	\$29,566					
01	LANDS AND DAMAGES (FED)	\$143	\$7	5%	\$150	0.0%	\$143	\$7	\$150					
01	LANDS AND DAMAGES (NON-FED)	\$733	\$175	24%	\$908	0.0%	\$733	\$175	\$908					
02	RELOCATIONS	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
30	RELOCATIONS - PED	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
31	RELOCATIONS - CM	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCES - DATA RECOV.	\$100	\$22	22%	\$122	0.0%	\$100	\$22	\$122					
30	PLANNING, ENGINEERING & DESIGN													
1.6%	S Project Management	\$388	\$84	22%	\$472	0.0%	\$388	\$84	\$472					
1.3%	Planning & Environmental Compliance	\$316	\$69	22%	\$385	0.0%	\$316	\$69	\$385					
5.6%	Engineering & Design	\$1,360	\$296	22%	\$1,656	0.0%	\$1,360	\$296	\$1,656					
0.3%		\$73	\$16	22%	\$89	0.0%	\$73	\$16	\$89					
0.3%	Life Cycle Updates (cost, schedule, risks)	\$73	\$16	22%	\$89	0.0%	\$73	\$16	\$89					
1.3%		\$316	\$69	22%	\$385	0.0%	\$316	\$69	\$385					
2.0%	0 0	\$486	\$106	22%	\$592	0.0%	\$486	\$106	\$592					
1.3%	8 8	\$316	\$69	22%	\$385	0.0%	\$316	\$69	\$385					
1.3%	6 Project Operations	\$316	\$69	22%	\$385	0.0%	\$316	\$69	\$385					
31	CONSTRUCTION MANAGEMENT													
5.9%	Construction Management	\$1,432	\$312	22%	\$1,744	0.0%	\$1,432	\$312	\$1,744					
1.2%	6 Project Operation:	\$291	\$63	22%	\$354	0.0%	\$291	\$63	\$354					
1.4%	6 Project Management	\$340	\$74	22%	\$414	0.0%	\$340	\$74	\$414					
	CONTRACT COST TOTALS:	\$30,962	\$6,733		\$37,695		\$30,962	\$6,733	\$37,695					

#### \*\*\*\* CONTRACT COST SUMMARY \*\*\*\*

PROJECT: American River Common Features GRR - Alt1

LOCATION: Sacramento, CA

Draft Feasibility Report This Estimate reflects the scope and schedule in report;

DISTRICT: SPK - Sacramento District

PREPARED: 12/19/2014

POC: CHIEF, COST ENGINEERING, Jeremiah Frost

Civi	Works Work Breakdown Structure		ESTIMATE (in \$10				(Consta	CT FIRST CO nt Dollar Bas n \$1000s)			TOTAL PRO	JECT COST (FULLY F (in \$1000s)	FUNDED)	
			ate Prepared		10/1/2014	_	ram Year (B		2015 1 OCT 14		FILL	LV ELINDED DDO IEG	T FOTIMATE	
		Епеси	ve Price Leve	HI.	10/1/2014	Епе	ective Price L	evel Date:	1 001 14		FULI	LY FUNDED PROJEC	I ESTIMATE	
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST (\$K)	CNTG (\$K)	CNTG _(%)	TOTAL _(\$K)_	ESC (%)	COST (\$K)	CNTG (\$K)	TOTAL _(\$K)	Mid-Point <u>Date</u>	ESC (%)	COST _(\$K)_	CNTG (\$K)	FULL (\$K)
Α	B ARS - Reach D	С	D	E	F	G	Н	1	J	P	L	M	N	0
06	FISH & WILDLIFE FACILITIES	\$4,227	\$920	22%	\$5,147	0.0%	\$4,227	\$920	\$5,147					
11	LEVEES & FLOODWALLS	\$80,332	\$17,490	22%	\$97,822	0.0%	\$80,332	\$17,490	\$97,822					
15	FLOODWAY CONTROL & DIVERSION STRU		\$0	22%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$1,691	\$368	22%	\$2,059	0.0%	\$1,691	\$368	\$2,059					
							\$0							
						-								
	CONSTRUCTION ESTIMATE TOTALS:	\$86,249	\$18,779	22%	\$105,028		\$86,249	\$18,779	\$105,028					
01	LANDS AND DAMAGES (FED)	\$214	\$11	5%	\$225	0.0%	\$214	\$11	\$225					
01	LANDS AND DAMAGES (NON-FED)	\$1,820	\$623	34%	\$2,443	0.0%	\$1,820	\$623	\$2,443					
02	RELOCATIONS	\$4,625	\$1,007	22%	\$5,632	0.0%	\$4,625	\$1,007	\$5,632					
30	RELOCATIONS - PED	\$1,156	\$252	22%	\$1,408	0.0%	\$1,156	\$252	\$1,408					
31	RELOCATIONS - CM	\$462	\$101	22%	\$563	0.0%	\$462	\$101	\$563					
18	CULTURAL RESOURCES - DATA RECOV.	\$373	\$81	22%	\$454	0.0%	\$373	\$81	\$454					
30	PLANNING, ENGINEERING & DESIGN													
1.6%	S Project Management	\$1,380	\$300	22%	\$1,680	0.0%	\$1,380	\$300	\$1,680					
1.3%	6 Planning & Environmental Compliance	\$1,121	\$244	22%	\$1,365	0.0%	\$1,121	\$244	\$1,365					
5.6%	Engineering & Design	\$4,830	\$1,052	22%	\$5,882	0.0%	\$4,830	\$1,052	\$5,882					
0.3%		\$259	\$56	22%	\$315	0.0%	\$259	\$56	\$315					
0.3%		\$259	\$56	22%	\$315	0.0%	\$259	\$56	\$315					
1.3% 2.0%	0 , 0 ,	\$1,121 \$1,725	\$244 \$376	22% 22%	\$1,365 \$2,404	0.0% 0.0%	\$1,121 \$1,725	\$244 \$376	\$1,365 \$2,101					
1.3%	0 0	\$1,725 \$1,121	\$376 \$244	22%	\$2,101 \$1,365	0.0%	\$1,725	\$376 \$244	\$2,101 \$1,365					
1.3%	•	\$1,121 \$1,121	\$244 \$244	22%	\$1,365 \$1,365	0.0%	\$1,121	\$244 \$244	\$1,365 \$1,365					
31	CONSTRUCTION MANAGEMENT													
5.9%		\$5,089	\$1,108	22%	\$6,197	0.0%	\$5,089	\$1,108	\$6,197					
1.2%	9	\$1,035	\$225	22%	\$1,260	0.0%	\$1,035	\$225	\$1,260					
1.4%		\$1,207	\$263	22%	\$1,470	0.0%	\$1,207	\$263	\$1,470					
	CONTRACT COST TOTALS:	\$115,167	\$25,266		\$140,434		\$115,167	\$25,266	\$140,434					

#### \*\*\*\* CONTRACT COST SUMMARY \*\*\*\*

PROJECT: American River Common Features GRR - Alt1

LOCATION: Sacramento, CA

DISTRICT: SPK - Sacramento District

POC: CHIEF, COST ENGINEERING, Jeremiah Frost

Civil	Works Work Breakdown Structure		ESTIMATI (in \$1	000s)			(Consta	CT FIRST CO nt Dollar Bas n \$1000s)	is)		TOTAL PRO	OJECT COST (FULLY I (in \$1000s)	FUNDED)	
			ate Prepared ve Price Leve		<b>10/1/2014</b> 10/1/2014		ram Year (B ective Price L		2015 1 OCT 14		FU	LLY FUNDED PROJEC	T ESTIMATE	
WBS NUMBER A	Civil Works Feature & Sub-Feature Description B	COST (\$K) <b>C</b>	CNTG (\$K) <b>D</b>	CNTG _(%) <i>E</i>	TOTAL _(\$K)_ <i>F</i>	ESC (%) <b>G</b>	COST (\$K) <i>H</i>	CNTG _(\$K)	TOTAL _(\$K) 	Mid-Point <u>Date</u> <i>P</i>	ESC (%) <i>L</i>	COST (\$K) <b>M</b>	CNTG (\$K) <b>N</b>	FULL (\$K) <b>O</b>
	ARS - Reach E													
06	FISH & WILDLIFE FACILITIES	\$2,895	\$630	22%	\$3,526	0.0%	\$2,895	\$630	\$3,526					
11	LEVEES & FLOODWALLS	\$67,662	\$14,732	22%	\$82,394	0.0%	\$67,662	\$14,732	\$82,394					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$1,421	\$309	22%	\$1,730	0.0%	\$1,421 \$0	\$309	\$1,730					
	CONSTRUCTION ESTIMATE TOTALS:	\$71,978	\$15,672	22%	\$87,650	-	\$71,978	\$15,672	\$87,650					
01	LANDS AND DAMAGES (FED)	\$1,401	\$74	5%	\$1,475	0.0%	\$1,401	\$74	\$1,475					
01	LANDS AND DAMAGES (NON-FED)	\$5,137	\$678	13%	\$5,816	0.0%	\$5,137	\$678	\$5,816					
02	RELOCATIONS	\$774	\$169	22%	\$942	0.0%	\$774	\$169	\$942					
30	RELOCATIONS - PED	\$193	\$42	22%	\$236	0.0%	\$193	\$42	\$236					
31	RELOCATIONS - CM	\$77	\$17	22%	\$94	0.0%	\$77	\$17	\$94					
18	CULTURAL RESOURCES - DATA RECOV.	\$314	\$68	22%	\$382	0.0%	\$314	\$68	\$382					
30	PLANNING, ENGINEERING & DESIGN													
1.6%	Project Management	\$1,152	\$251	22%	\$1,403	0.0%	\$1,152	\$251	\$1,403					
1.3%	Planning & Environmental Compliance	\$936	\$204	22%	\$1,140	0.0%	\$936	\$204	\$1,140					
5.6%	0 0	\$4,031	\$878	22%	\$4,909	0.0%	\$4,031	\$878	\$4,909					
0.3%		\$216	\$47	22%	\$263	0.0%	\$216	\$47	\$263					
0.3%		\$216	\$47	22%	\$263	0.0%	\$216	\$47	\$263					
1.3%		\$936	\$204	22%	\$1,140	0.0%	\$936	\$204	\$1,140					
2.0%	0 0 0	\$1,440	\$314	22%	\$1,754	0.0%	\$1,440	\$314	\$1,754					
1.3%	0 0	\$936	\$204	22%	\$1,140	0.0%	\$936	\$204	\$1,140					
1.3%	Project Operations	\$936	\$204	22%	\$1,140	0.0%	\$936	\$204	\$1,140					
31	CONSTRUCTION MANAGEMENT													
5.9%		\$4,247	\$925	22%	\$5,172	0.0%	\$4,247	\$925	\$5,172					
1.2%	Project Operation:	\$864	\$188	22%	\$1,052	0.0%	\$864	\$188	\$1,052					
1.4%	Project Management	\$1,008	\$219	22%	\$1,227	0.0%	\$1,008	\$219	\$1,227					
	CONTRACT COST TOTALS:	\$96,793	\$20,403		\$117,196		\$96,793	\$20,403	\$117,196					

#### \*\*\*\* CONTRACT COST SUMMARY \*\*\*\*

PROJECT: American River Common Features GRR - Alt1

LOCATION: Sacramento, CA

DISTRICT: SPK - Sacramento District

POOL OUTE OOOT ENGINEERING To accept to

POC: CHIEF, COST ENGINEERING,	Jeremiah	Frost
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Civi	Works Work Breakdown Structure		ESTIMATE (in \$10				(Consta	CT FIRST CO nt Dollar Bas n \$1000s)			TOTAL PRO	DJECT COST (FULLY F (in \$1000s)	FUNDED)	
			ate Prepared		<b>10/1/2014</b> 10/1/2014		ram Year (B ective Price L		2015 1 OCT 14		FUL	LLY FUNDED PROJEC	T ESTIMATE	
WBS <u>NUMBER</u> <b>A</b>	Civil Works Feature & Sub-Feature Description  B	COST (\$K) <b>C</b>	CNTG (\$K) <b>D</b>	CNTG _(%) <i>E</i>	TOTAL _(\$K)_ <i>F</i>	ESC (%) <b>G</b>	COST _(\$K)_ <b>H</b>	CNTG _(\$K)/	TOTAL (\$K) J	Mid-Point <u>Date</u> <b>P</b>	ESC _(%)	COST _(\$K) <b>M</b>	CNTG _(\$K)	FULL (\$K) <b>O</b>
	ARS - Reach F				-									-
06	FISH & WILDLIFE FACILITIES	\$11,167	\$2,431	22%	\$13,599	0.0%	\$11,167	\$2,431	\$13,599					
11	LEVEES & FLOODWALLS	\$180,793	\$39,364	22%	\$220,157	0.0%	\$180,793	\$39,364	\$220,157					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$4,247	\$925	22%	\$5,171	0.0%	\$4,247	\$925	\$5,171					
							\$0							
	CONSTRUCTION ESTIMATE TOTALS:	\$196,207	\$42,720	22%	\$238,927	-	\$196,207	\$42,720	\$238,927					
01	LANDS AND DAMAGES (FED)	\$3,016	\$159	5%	<b>©2.47</b> E	0.0%	\$3,016	\$159	\$3,175					
01	LANDS AND DAMAGES (NON-FED)	\$3,016	\$159	5% 56%	\$3,175 \$58,443	0.0%	\$37,420	\$21,023	\$58,443					
02	RELOCATIONS	\$37,420 \$4,155	\$905	22%	\$5,060	0.0%	\$4,155	\$905	\$5,060					
30	RELOCATIONS - PED	\$1,039	\$905 \$226	22%	\$5,060 \$1,265	0.0%	\$1.039	\$226	\$3,060 \$1,265					
31	RELOCATIONS - CM	\$416	\$90	22%	\$1,265 \$506	0.0%	\$1,039 \$416	\$90	\$1,265 \$506					
18	CULTURAL RESOURCES - DATA RECOV.	\$937	\$90 \$204	22%	\$1,141	0.0%	\$937	\$204	\$1,141					
10	SSET STATE RESIDENCES BATTANESS II	φ931	<b>\$204</b>	22 /0	φ1,141	0.078	ψ937	Ψ204	\$1,141					
30	PLANNING, ENGINEERING & DESIGN													
1.6%	Project Management	\$3,139	\$683	22%	\$3,822	0.0%	\$3,139	\$683	\$3,822					
1.3%	Planning & Environmental Compliance	\$2,551	\$555	22%	\$3,106	0.0%	\$2,551	\$555	\$3,106					
5.6%	Engineering & Design	\$10,988	\$2,392	22%	\$13,380	0.0%	\$10,988	\$2,392	\$13,380					
0.3%	· · · · · · · · · · · · · · · · · · ·	\$589	\$128	22%	\$717	0.0%	\$589	\$128	\$717					
0.3%		\$589	\$128	22%	\$717	0.0%	\$589	\$128	\$717					
1.3%	0 . 0 .	\$2,551	\$555	22%	\$3,106	0.0%	\$2,551	\$555	\$3,106					
2.0%	0 0	\$3,924	\$854	22%	\$4,778	0.0%	\$3,924	\$854	\$4,778					
1.3%	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	\$2,551	\$555	22%	\$3,106	0.0%	\$2,551	\$555	\$3,106					
1.3%	6 Project Operations	\$2,551	\$555	22%	\$3,106	0.0%	\$2,551	\$555	\$3,106					
31	CONSTRUCTION MANAGEMENT													
5.9%	Construction Management	\$11,576	\$2,520	22%	\$14,096	0.0%	\$11,576	\$2,520	\$14,096					
1.2%	Project Operation:	\$2,354	\$513	22%	\$2,867	0.0%	\$2,354	\$513	\$2,867					
1.4%	Project Management	\$2,747	\$598	22%	\$3,345	0.0%	\$2,747	\$598	\$3,345					
	CONTRACT COST TOTALS:	\$289,300	\$75,366		\$364,667		\$289,300	\$75,366	\$364,667					

#### \*\*\*\* CONTRACT COST SUMMARY \*\*\*\*

PROJECT: American River Common Features GRR - Alt1

LOCATION: Sacramento, CA

DISTRICT: SPK - Sacramento District

POC: CHIEF, COST ENGINEERING, Jeremiah Frost

Civi	l Works Work Breakdown Structure		ESTIMATE (in \$10				(Consta	T FIRST CO nt Dollar Bas n \$1000s)			TOTAL PRO	JECT COST (FULLY F (in \$1000s)	FUNDED)	
			ate Prepared ve Price Leve		<b>10/1/2014</b> 10/1/2014		ram Year (B ctive Price L	,	2015 1 OCT 14		FUL	LY FUNDED PROJEC	T ESTIMATE	
WBS <u>NUMBER</u> <b>A</b>	Civil Works Feature & Sub-Feature Description B  ARS - Reach G	COST (\$K) C	CNTG _(\$K) 	CNTG _(%) 	TOTAL _(\$K)_ <b>F</b>	ESC (%) <b>G</b>	COST _(\$K) <i>H</i>	CNTG _(\$K) _/	TOTAL _(\$K)	Mid-Point <u>Date</u> <b>P</b>	ESC _(%)_ <i>L</i>	COST (\$K) <b>M</b>	CNTG (\$K) N	FULL (\$K) <b>O</b>
06	FISH & WILDLIFE FACILITIES	\$5,429	\$1,182	22%	\$6,610	0.0%	\$5,429	\$1,182	\$6,610					
11	LEVEES & FLOODWALLS	\$61,177	\$13,320	22%	\$74,497	0.0%	\$61,177	\$13,320	\$74,497					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$1,482	\$323	22%	\$1,805	0.0%	\$1,482 \$0	\$323	\$1,805					
	CONSTRUCTION ESTIMATE TOTALS:	\$68,088	\$14,825	22%	\$82,912	=	\$68,088	\$14,825	\$82,912					
01	LANDS AND DAMAGES (FED)	\$570	\$30	5%	\$600	0.0%	\$570	\$30	\$600					
01	LANDS AND DAMAGES (NON-FED)	\$4,766	\$1,466	31%	\$6,232	0.0%	\$4,766	\$1,466	\$6,232					
02	RELOCATIONS	\$8,303	\$1,808	22%	\$10,111	0.0%	\$8,303	\$1,808	\$10,111					
30	RELOCATIONS - PED	\$2,076	\$452	22%	\$2,528	0.0%	\$2,076	\$452	\$2,528					
31	RELOCATIONS - CM	\$830	\$181	22%	\$1,011	0.0%	\$830	\$181	\$1,011					
18	CULTURAL RESOURCES - DATA RECOV.	\$327	\$71	22%	\$398	0.0%	\$327	\$71	\$398					
30	PLANNING, ENGINEERING & DESIGN													
1.6%	6 Project Management	\$1,089	\$237	22%	\$1,326	0.0%	\$1,089	\$237	\$1,326					
1.3%	6 Planning & Environmental Compliance	\$885	\$193	22%	\$1,078	0.0%	\$885	\$193	\$1,078					
5.6%	0 0 0	\$3,813	\$830	22%	\$4,643	0.0%	\$3,813	\$830	\$4,643					
0.3%		\$204	\$44	22%	\$248	0.0%	\$204	\$44	\$248					
0.3%		\$204	\$44	22%	\$248	0.0%	\$204	\$44	\$248					
1.39		\$885	\$193	22%	\$1,078	0.0%	\$885	\$193	\$1,078					
2.0%	II	\$1,362	\$297	22%	\$1,659	0.0%	\$1,362	\$297	\$1,659					
1.3% 1.3%	ů ů	\$885 \$885	\$193 \$193	22% 22%	\$1,078 \$1,078	0.0% 0.0%	\$885 \$885	\$193 \$193	\$1,078 \$1,078					
31	CONSTRUCTION MANAGEMENT													
5.9%	6 Construction Management	\$4,017	\$875	22%	\$4,892	0.0%	\$4,017	\$875	\$4,892					
1.29	, II	\$817	\$178	22%	\$995	0.0%	\$817	\$178	\$995					
1.4%	6 Project Management	\$953	\$207	22%	\$1,160	0.0%	\$953	\$207	\$1,160					
	CONTRACT COST TOTALS:	\$100,959	\$22,316		\$123,275		\$100,959	\$22,316	\$123,275					

PREPARED: 12/19/2014

#### \*\*\*\* TOTAL PROJECT COST SUMMARY \*\*\*\*

#### \*\*\*\* CONTRACT COST SUMMARY \*\*\*\*

PROJECT: American River Common Features GRR - Alt1

LOCATION: Sacramento, CA

DISTRICT: SPK - Sacramento District

POC: CHIEF, COST ENGINEERING, Jeremiah Frost

Civi	Works Work Breakdown Structure		ESTIMATE (in \$10	000s)			(Consta (iı	CT FIRST CO nt Dollar Bas n \$1000s)	sis)		TOTAL PROJ	JECT COST (FULLY I (in \$1000s)	FUNDED)	
			ate Prepared ve Price Leve		<b>10/1/2014</b> 10/1/2014		ram Year (B ective Price L		2015 1 OCT 14		FULI	LY FUNDED PROJEC	T ESTIMATE	
WDO	Otreit Warden	0007	ONTO	ONTO	TOTAL	500	0007	ONTO	TOTAL	Mid Delet	F00	2007	ONTO	FILL
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST (\$K)	CNTG (\$K)	CNTG _(%)_	TOTAL _(\$K)_	ESC (%)	COST _(\$K)	CNTG (\$K)	TOTAL _(\$K)_	Mid-Point <u>Date</u>	ESC <u>(%)</u>	COST _(\$K)_	CNTG (\$K)	FULL (\$K)
A	В	C	D	E	F	G	Н	1	J	P	L	M	N	0
	ARN - Reach A													
06	FISH & WILDLIFE FACILITIES	\$5,060	\$1,102	22% \$	6,161	0.0%	\$5,060	\$1,102	\$6,161					
11	LEVEES & FLOODWALLS	\$74,180	\$16,151	22% \$	90,331	0.0%	\$74,180	\$16,151	\$90,331					
15	FLOODWAY CONTROL & DIVERSION STRU		\$0	22% \$	-	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	22% \$	-	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$1,493	\$325	22% \$	1,818	0.0%	\$1,493 \$0	\$325	\$1,818					
						-								
	CONSTRUCTION ESTIMATE TOTALS:	\$80,732	\$17,578	22%	98,309		\$80,732	\$17,578	\$98,309					
01	LANDS AND DAMAGES (FED)	\$190	\$10	5% \$	200	0.0%	\$190	\$10	\$200					
01	LANDS AND DAMAGES (NON-FED)	\$1,456	\$508	35% \$	1,964	0.0%	\$1,456	\$508	\$1,964					
02	RELOCATIONS	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
30	RELOCATIONS - PED	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
31	RELOCATIONS - CM	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCES - DATA RECOV.	\$329	\$72	22%	\$401	0.0%	\$329	\$72	\$401					
30	PLANNING, ENGINEERING & DESIGN													
1.6%	'	\$1,292	\$281	22%	1,573	0.0%	\$1,292	\$281	\$1,573					
1.3%	, •	\$1,050	\$229	22%	1,279	0.0%	\$1,050	\$229	\$1,279					
5.6%	,	\$4,521	\$984	22%	5,505	0.0%	\$4,521	\$984	\$5,505					
0.3%	0 0	\$242	\$53	22%	295	0.0%	\$242	\$53	\$295					
0.3%	Life Cycle Updates (cost, schedule, risks)	\$242	\$53	22%	\$295	0.0%	\$242	\$53	\$295					
1.3%	Contracting & Reprographics	\$1,050	\$229	22%	1,279	0.0%	\$1,050	\$229	\$1,279					
2.0%	Engineering During Construction	\$1,615	\$352	22%	1,967	0.0%	\$1,615	\$352	\$1,967					
1.3%	6 Planning During Construction	\$1,050	\$229	22%	1,279	0.0%	\$1,050	\$229	\$1,279					
1.3%	6 Project Operations	\$1,050	\$229	22%	1,279	0.0%	\$1,050	\$229	\$1,279					
31	CONSTRUCTION MANAGEMENT													
5.9%	Construction Management	\$4,763	\$1,037	22%	5,800	0.0%	\$4,763	\$1,037	\$5,800					
1.2%	Project Operation:	\$969	\$211	22%	1,180	0.0%	\$969	\$211	\$1,180					
1.4%	6 Project Management	\$1,130	\$246	22%	1,376	0.0%	\$1,130	\$246	\$1,376					
	CONTRACT COST TOTALS:	\$101,682	\$22,298		123,980		\$101,682	\$22,298	\$123,980					

#### \*\*\*\* CONTRACT COST SUMMARY \*\*\*\*

PROJECT: American River Common Features GRR - Alt1

LOCATION: Sacramento, CA

 DISTRICT: SPK - Sacramento District

POC: CHIEF, COST ENGINEERING, Jeremiah Frost

PREPARED: 12/19/2014

Civi	l Works Work Breakdown Structure		ESTIMATE (in \$10				(Consta	T FIRST CO nt Dollar Bas n \$1000s)	-		TOTAL PRO	DJECT COST (FULLY F (in \$1000s)	UNDED)	
			ate Prepared ve Price Leve		<b>10/1/2014</b> 10/1/2014		ram Year (Bo ctive Price L		2015 1 OCT 14		FU	LLY FUNDED PROJEC	T ESTIMATE	
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST (\$K)	CNTG (\$K)	CNTG _(%)	TOTAL _(\$K)_	ESC (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	Mid-Point <u>Date</u>	ESC (%) <i>L</i>	COST _(\$K)_	CNTG (\$K)	FULL (\$K)
Α	В	С	D	E	F	G	Н	1	J	P	L	М	N	0
0.4	ARN - Reach B													
06	FISH & WILDLIFE FACILITIES	\$443	\$97	22%	\$540	0.0%	\$443	\$97	\$540					
11	LEVEES & FLOODWALLS	\$4,097	\$892	22%	\$4,989	0.0%	\$4,097	\$892	\$4,989					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$88	\$19	22%	\$107	0.0%	\$88 \$0	\$19	\$107					
	CONSTRUCTION ESTIMATE TOTALS:	\$4,628	\$1,008	22%	\$5,635	=	\$4,628	\$1,008	\$5,635					
01	LANDS AND DAMAGES (FED)	\$48	\$2	5%	\$50	0.0%	\$48	\$2	\$50					
01	LANDS AND DAMAGES (NON-FED)	\$187	\$39	21%	\$226	0.0%	\$187	\$39	\$226					
02	RELOCATIONS	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
30	RELOCATIONS - PED	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
31	RELOCATIONS - CM	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCES - DATA RECOV.	\$19	\$4	22%	\$24	0.0%	\$19	\$4	\$24					
30	PLANNING, ENGINEERING & DESIGN													
1.6%	6 Project Management	\$74	\$16	22%	\$90	0.0%	\$74	\$16	\$90					
1.3%	6 Planning & Environmental Compliance	\$60	\$13	22%	\$73	0.0%	\$60	\$13	\$73					
5.6%	6 Engineering & Design	\$259	\$56	22%	\$315	0.0%	\$259	\$56	\$315					
0.3%	Reviews, ATRs, IEPRs, VE	\$14	\$3	22%	\$17	0.0%	\$14	\$3	\$17					
0.3%	Life Cycle Updates (cost, schedule, risks)	\$14	\$3	22%	\$17	0.0%	\$14	\$3	\$17					
1.3%	Contracting & Reprographics	\$60	\$13	22%	\$73	0.0%	\$60	\$13	\$73					
2.0%	6 Engineering During Construction	\$93	\$20	22%	\$113	0.0%	\$93	\$20	\$113					
1.3%	0 0	\$60	\$13	22%	\$73	0.0%	\$60	\$13	\$73					
1.3%	6 Project Operations	\$60	\$13	22%	\$73	0.0%	\$60	\$13	\$73					
31	CONSTRUCTION MANAGEMENT													
5.9%	6 Construction Management	\$273	\$59	22%	\$332	0.0%	\$273	\$59	\$332					

CONTRACT COST TOTALS:

1.2% Project Operation:

1.4% Project Management

\$56

\$65

\$5,970

\$12

\$14

\$1,290

22%

22%

\$68

\$79

\$7,260

0.0%

0.0%

\$56

\$65

\$5,970

\$12

\$14

\$1,290

\$68

\$79

\$7,260

#### \*\*\*\* CONTRACT COST SUMMARY \*\*\*\*

PROJECT: American River Common Features GRR - Alt1

LOCATION: Sacramento, CA

Draft Feasibility Report This Estimate reflects the scope and schedule in report;

DISTRICT: SPK - Sacramento District

PREPARED: 12/19/2014 POC: CHIEF, COST ENGINEERING, Jeremiah Frost

Civi	Works Work Breakdown Structure		ESTIMATE (in \$10	000s)			(Constai	T FIRST CO nt Dollar Bas n \$1000s)	is)		TOTAL PRO	JECT COST (FULLY F (in \$1000s)	FUNDED)	
			ate Prepared		<b>10/1/2014</b> 10/1/2014		ram Year (Bu		2015 1 OCT 14		FUL	LY FUNDED PROJEC	T ESTIMATE	
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST (\$K)	CNTG _(\$K)	CNTG _(%)_	TOTAL _(\$K)	ESC (%)	COST (\$K)	CNTG (\$K)	TOTAL _(\$K)	Mid-Point	ESC (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
A	B	<u>(\$R)</u>	<u>(\$15)</u>	E	<i>F</i>	G (78)	<u>(\$R)</u>	<u>(\$R)</u>	<u> (\$R)</u> <b>J</b>	<u>Date</u> <b>P</b>	<u>(78)</u> <b>L</b>	<u>(\$R)</u> <b>M</b>	N	(\$K) <b>O</b>
	ARN - Reach C													
06	FISH & WILDLIFE FACILITIES	\$34	\$8	22%	\$42	0.0%	\$34	\$8	\$42					
11	LEVEES & FLOODWALLS	\$7,285	\$1,586	22%	\$8,871	0.0%	\$7,285	\$1,586	\$8,871					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$156	\$34	22%	\$190	0.0%	\$156	\$34	\$190					
							\$0							
	CONSTRUCTION ESTIMATE TOTALS:	\$7,476	\$1,628	22%	\$9,103	-	\$7,476	\$1,628	\$9.103					
	CONSTRUCTION ESTIMATE TOTALS.	\$7,476	φ1,020	2270	<b>\$9,103</b>		\$7,470	\$1,020	\$9,103					
01	LANDS AND DAMAGES (FED)	\$48	\$2	5%	\$50	0.0%	\$48	\$2	\$50					
01	LANDS AND DAMAGES (NON-FED)	\$341	\$115	34%	\$456	0.0%	\$341	\$115	\$456					
02	RELOCATIONS	\$725	\$158	22%	\$882	0.0%	\$725	\$158	\$882					
30	RELOCATIONS - PED	\$181	\$39	22%	\$221	0.0%	\$181	\$39	\$221					
31	RELOCATIONS - CM	\$72	\$16	22%	\$88	0.0%	\$72	\$16	\$88					
18	CULTURAL RESOURCES - DATA RECOV.	\$34	\$7	22%	\$42	0.0%	\$34	\$7	\$42					
30	PLANNING, ENGINEERING & DESIGN													
1.6%	•	\$120	\$26	22%	\$146	0.0%	\$120	\$26	\$146					
1.3%	, ,	\$97	\$21	22%	\$118	0.0%	\$97	\$21	\$118					
5.6%	,	\$419	\$91	22%	\$510	0.0%	\$419	\$91	\$510					
0.3%	Reviews, ATRs, IEPRs, VE	\$22	\$5	22%	\$27	0.0%	\$22	\$5	\$27					
0.3%	Life Cycle Updates (cost, schedule, risks)	\$22	\$5	22%	\$27	0.0%	\$22	\$5	\$27					
1.3%	Contracting & Reprographics	\$97	\$21	22%	\$118	0.0%	\$97	\$21	\$118					
2.0%	Engineering During Construction	\$150	\$33	22%	\$183	0.0%	\$150	\$33	\$183					
1.3%	Planning During Construction	\$97	\$21	22%	\$118	0.0%	\$97	\$21	\$118					
1.3%	Project Operations	\$97	\$21	22%	\$118	0.0%	\$97	\$21	\$118					
31	CONCEDUCTION MANAGEMENT													
<b>31</b> 5.9%	CONSTRUCTION MANAGEMENT Construction Management	\$441	\$96	22%	\$537	0.0%	\$441	\$96	\$537					
5.9% 1.2%	•	\$90	\$96 \$20	22%	\$537 \$110	0.0%	\$ <del>44</del> 1 \$90	\$96 \$20	\$537 \$110					
1.4%		\$105	\$20 \$23	22%	\$110	0.0%	\$105	\$20 \$23	\$110 \$128					
1.470		Ψ100	Ψ20	22/0	ψ.20	0.070	Ψ100	Ψ20	ψ120					
	CONTRACT COST TOTALS:	\$10,633	\$2,349		\$12,982		\$10,633	\$2,349	\$12,982					
		,	- /		* /	11	,			II				ı

#### \*\*\*\* CONTRACT COST SUMMARY \*\*\*\*

PROJECT: American River Common Features GRR - Alt1

LOCATION: Sacramento, CA

 DISTRICT: SPK - Sacramento District

POC: CHIEF, COST ENGINEERING, Jeremiah Frost

Civi	l Works Work Breakdown Structure		ESTIMATE (in \$10				(Constar	T FIRST CO nt Dollar Bas 1 \$1000s)	-		TOTAL PRO	JECT COST (FULLY (in \$1000s)	FUNDED)	
			ate Prepared ve Price Leve		<b>10/1/2014</b> 10/1/2014	_	n Year (Budg ve Price Leve		2015 1 OCT 14					
			RI	SK BASED										
WBS	Civil Works	COST	CNTG	CNTG	TOTAL	ESC	COST	CNTG	TOTAL	Mid-Point	ESC	COST	CNTG	FULL
NUMBER	Feature & Sub-Feature Description	(\$K)	(\$K) <b>D</b>	<u>(%)</u> <i>E</i>	(\$K) <b>F</b>	(%) <b>G</b>	(\$K) <b>H</b>	(\$K)/	(\$K) J	<u>Date</u>	<u>(%)</u> L	(\$K) <b>M</b>	(\$K) <b>N</b>	(\$K) <b>O</b>
Α	B ARN - Reach D	С	D	E	F	G	н	,	J	P	L	IVI	N	Ü
06	FISH & WILDLIFE FACILITIES	\$34	\$8	22%	\$42	0.0%	\$34	\$8	\$42					
11	LEVEES & FLOODWALLS	\$18,045	\$3,929	22%	\$21,974	0.0%	\$18,045	\$3,929	\$21,974					
15	FLOODWAY CONTROL & DIVERSION STRU		\$0	22%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$463	\$101	22%	\$563	0.0%	\$463	\$101	\$563					
		,					\$0		,					
						-								
	CONSTRUCTION ESTIMATE TOTALS:	\$18,542	\$4,037	22%	\$22,579		\$18,542	\$4,037	\$22,579					
	LANDO AND DAMAGEO (FED)													
01	LANDS AND DAMAGES (FED)	\$665	\$35	5%	\$700	0.0%	\$665	\$35	\$700					
01	LANDS AND DAMAGES (NON-FED)	\$2,285	\$370	16%	\$2,655	0.0%	\$2,285	\$370	\$2,655					
02	RELOCATIONS	\$4,120	\$897	22%	\$5,017	0.0%	\$4,120	\$897	\$5,017					
30	RELOCATIONS - PED	\$1,030	\$224	22%	\$1,254	0.0%	\$1,030	\$224	\$1,254					
31	RELOCATIONS - CM	\$412	\$90	22%	\$502	0.0%	\$412	\$90	\$502					
18	CULTURAL RESOURCES - DATA RECOV.	\$102	\$22	22%	\$124	0.0%	\$102	\$22	\$124					
30	PLANNING, ENGINEERING & DESIGN													
1.6%	6 Project Management	\$297	\$65	22%	\$362	0.0%	\$297	\$65	\$362					
1.3%	· · · · · · · · · · · · · · · · · · ·	\$241	\$52	22%	\$293	0.0%	\$241	\$52	\$293					
5.6%		\$1,038	\$226	22%	\$1,264	0.0%	\$1,038	\$226	\$1,264					
0.3%	6 Reviews, ATRs, IEPRs, VE	\$56	\$12	22%	\$68	0.0%	\$56	\$12	\$68					
0.3%	Life Cycle Updates (cost, schedule, risks)	\$56	\$12	22%	\$68	0.0%	\$56	\$12	\$68					
1.3%	6 Contracting & Reprographics	\$241	\$52	22%	\$293	0.0%	\$241	\$52	\$293					
2.0%	6 Engineering During Construction	\$371	\$81	22%	\$452	0.0%	\$371	\$81	\$452					
1.3%	6 Planning During Construction	\$241	\$52	22%	\$293	0.0%	\$241	\$52	\$293					
1.3%	6 Project Operations	\$241	\$52	22%	\$293	0.0%	\$241	\$52	\$293					
31	CONSTRUCTION MANAGEMENT													
5.9%		\$1,094	\$238	22%	\$1,332	0.0%	\$1,094	\$238	\$1,332					
1.2%	Ÿ	\$223	\$49	22%	\$272	0.0%	\$223	\$49	\$272					
1.4%	, ,	\$260	\$57	22%	\$317	0.0%	\$260	\$57	\$317					
	CONTRACT COST TOTALS:	\$31,515	\$6,624		\$38,139		\$31,515	\$6,624	\$38,139					

#### \*\*\*\* CONTRACT COST SUMMARY \*\*\*\*

PROJECT: American River Common Features GRR - Alt1

LOCATION: Sacramento, CA

DISTRICT: SPK - Sacramento District

POC: CHIEF, COST ENGINEERING, Jeremiah Frost

Civi	l Works Work Breakdown Structure		ESTIMATE (in \$10				(Consta	T FIRST CO nt Dollar Bas n \$1000s)			TOTAL PRO	JECT COST (FULLY FUNI (in \$1000s)	DED)
			nate Prepared ive Price Leve		<b>10/1/2014</b> 10/1/2014		m Year (Budç ve Price Leve		2015 1 OCT 14				
WBS NUMBER	Civil Works Feature & Sub-Feature Description  B	COST _(\$K)	CNTG _(\$K) <b>D</b>	CNTG _(%) <i>E</i>	TOTAL _(\$K) <i>F</i>	ESC (%) <b>G</b>	COST (\$K) H	CNTG (\$K)	TOTAL (\$K) J	Mid-Point <u>Date</u> <b>P</b>	ESC _(%)		CNTG FULL (\$K) (\$K)
Α	ARN - Reach E	C	D	_	F	6	п	'	J	,	L	IVI	N O
06	FISH & WILDLIFE FACILITIES	\$119	\$26	22%	\$145	0.0%	\$119	\$26	\$145				
11	LEVEES & FLOODWALLS	\$18,497	\$4,027	22%	\$22,524	0.0%	\$18,497	\$4,027	\$22,524				
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0				
16	BANK STABILIZATION	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0				
18	CULTURAL RESOURCE PRESERVATION	\$540	\$118	22%	\$658	0.0%	\$540 \$0	\$118	\$658				
	CONSTRUCTION ESTIMATE TOTALS:	\$19,157	\$4,171	22%	\$23,328	-	\$19,157	\$4,171	\$23,328				
01	LANDS AND DAMAGES (FED)	\$974	\$51	5%	\$1,025	0.0%	\$974	\$51	\$1,025				
01	LANDS AND DAMAGES (NON-FED)	\$3,351	\$543	16%	\$3,894	0.0%	\$3,351	\$543	\$3,894				
02	RELOCATIONS	\$6,453	\$1,405	22%	\$7,857	0.0%	\$6,453	\$1,405	\$7,857				
30	RELOCATIONS - PED	\$1,613	\$351	22%	\$1,964	0.0%	\$1,613	\$351	\$1,964				
31	RELOCATIONS - CM	\$645	\$140	22%	\$786	0.0%	\$645	\$140	\$786				
18	CULTURAL RESOURCES - DATA RECOV.	\$119	\$26	22%	\$145	0.0%	\$119	\$26	\$145				
30	PLANNING, ENGINEERING & DESIGN												
1.6%	6 Project Management	\$307	\$67	22%	\$374	0.0%	\$307	\$67	\$374				
1.3%	6 Planning & Environmental Compliance	\$249	\$54	22%	\$303	0.0%	\$249	\$54	\$303				
5.6%	6 Engineering & Design	\$1,073	\$234	22%	\$1,307	0.0%	\$1,073	\$234	\$1,307				
0.3%		\$57	\$12	22%	\$69	0.0%	\$57	\$12	\$69				
0.3%		\$57	\$12	22%	\$69	0.0%	\$57	\$12	\$69				
1.3%		\$249	\$54	22%	\$303	0.0%	\$249	\$54	\$303				
2.0% 1.3%		\$383 \$249	\$83 \$54	22% 22%	\$466 \$303	0.0% 0.0%	\$383 \$249	\$83 \$54	\$466 \$303				
1.3%	0 0	\$249 \$249	\$54 \$54	22%	\$303 \$303	0.0%	\$249 \$249	\$54 \$54	\$303 \$303				
31	CONSTRUCTION MANAGEMENT												
5.9%	6 Construction Management	\$1,130	\$246	22%	\$1,376	0.0%	\$1,130	\$246	\$1,376				
1.2%	6 Project Operation:	\$230	\$50	22%	\$280	0.0%	\$230	\$50	\$280				
1.4%	6 Project Management	\$268	\$58	22%	\$326	0.0%	\$268	\$58	\$326				
	CONTRACT COST TOTALS:	\$36,813	\$7,668		\$44,480		\$36,813	\$7,668	\$44,480				

#### \*\*\*\* CONTRACT COST SUMMARY \*\*\*\*

PROJECT: American River Common Features GRR - Alt1

LOCATION: Sacramento, CA

DISTRICT: SPK - Sacramento District

POC: CHIEF, COST ENGINEERING, Jeremiah Frost

Civil	Works Work Breakdown Structure		ESTIMATE (in \$10				(Consta	T FIRST CO nt Dollar Bas n \$1000s)			TOTAL PRO	JECT COST (FULLY FU (in \$1000s)	JNDED)	
			ate Prepared ve Price Leve		<b>10/1/2014</b> 10/1/2014		m Year (Budç ve Price Leve		2015 1 OCT 14					
WBS <u>NUMBER</u> <b>A</b>	Civil Works Feature & Sub-Feature Description  B	COST _(\$K)_ <b>C</b>	CNTG (\$K) <b>D</b>	CNTG _(%)_ <i>E</i>	TOTAL _(\$K)_ <i>F</i>	ESC (%) <b>G</b>	COST (\$K) H	CNTG _(\$K)	TOTAL _(\$K)_ <b>J</b>	Mid-Point <u>Date</u> <b>P</b>	ESC (%) <i>L</i>	COST _(\$K) <b>M</b>	CNTG (\$K) N	FULL (\$K) <b>O</b>
••	ARN - Reach F		_	_	•		••	•	•		_	···	••	•
06	FISH & WILDLIFE FACILITIES	\$34	\$8	22%	\$42	0.0%	\$34	\$8	\$42					
11	LEVEES & FLOODWALLS	\$20,946	\$4,561	22%	\$25,507	0.0%	\$20,946	\$4,561	\$25,507					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$505	\$110	22%	\$615	0.0%	\$505 \$0	\$110	\$615					
	CONSTRUCTION ESTIMATE TOTALS:	\$21,486	\$4,678	22%	\$26,164	-	\$21,486	\$4,678	\$26,164					
01	LANDS AND DAMAGES (FED)	\$71	\$4	5%	\$75	0.0%	\$71	\$4	\$75					
01	LANDS AND DAMAGES (NON-FED)	\$385	\$150	39%	\$535	0.0%	\$385	\$150	\$535					
02	RELOCATIONS	\$5,419	\$1,180	22%	\$6,598	0.0%	\$5,419	\$1,180	\$6,598					
30	RELOCATIONS - PED	\$1,355	\$295	22%	\$1,650	0.0%	\$1,355	\$295	\$1,650					
31	RELOCATIONS - CM	\$542	\$118	22%	\$660	0.0%	\$542	\$118	\$660					
18	CULTURAL RESOURCES - DATA RECOV.	\$111	\$24	22%	\$136	0.0%	\$111	\$24	\$136					
30	PLANNING, ENGINEERING & DESIGN													
1.6%	Project Management	\$344	\$75	22%	\$419	0.0%	\$344	\$75	\$419					
1.3%	Planning & Environmental Compliance	\$279	\$61	22%	\$340	0.0%	\$279	\$61	\$340					
5.6%	Engineering & Design	\$1,203	\$262	22%	\$1,465	0.0%	\$1,203	\$262	\$1,465					
0.3%	Reviews, ATRs, IEPRs, VE	\$64	\$14	22%	\$78	0.0%	\$64	\$14	\$78					
0.3%	Life Cycle Updates (cost, schedule, risks)	\$64	\$14	22%	\$78	0.0%	\$64	\$14	\$78					
1.3%	Contracting & Reprographics	\$279	\$61	22%	\$340	0.0%	\$279	\$61	\$340					
2.0%	Engineering During Construction	\$430	\$94	22%	\$524	0.0%	\$430	\$94	\$524					
1.3%	Planning During Construction	\$279	\$61	22%	\$340	0.0%	\$279	\$61	\$340					
1.3%	Project Operations	\$279	\$61	22%	\$340	0.0%	\$279	\$61	\$340					
31	CONSTRUCTION MANAGEMENT													
5.9%	•	\$1,268	\$276	22%	\$1,544	0.0%	\$1,268	\$276	\$1,544					
1.2%	, ,	\$258	\$56	22%	\$314	0.0%	\$258	\$56	\$314					
1.4%	Project Management	\$301	\$66	22%	\$367	0.0%	\$301	\$66	\$367					
	CONTRACT COST TOTALS:	\$34,417	\$7,548		\$41,965		\$34,417	\$7,548	\$41,965					

#### \*\*\*\* CONTRACT COST SUMMARY \*\*\*\*

PROJECT: American River Common Features GRR - Alt1

LOCATION: Sacramento, CA

Draft Feasibility Report This Estimate reflects the scope and schedule in report;

DISTRICT: SPK - Sacramento District

POC: CHIEF, COST ENGINEERING, Jeremiah Frost

Civil	Works Work Breakdown Structure		ESTIMATE (in \$10				(Consta	CT FIRST CO nt Dollar Bas n \$1000s)	-		TOTAL PRO	JECT COST (FULLY F (in \$1000s)	FUNDED)	
			ate Prepared		10/1/2014	II ~	ram Year (B	,	2015		E		T = 0.T.11.1.T.	
		Effecti	ve Price Leve	el:	10/1/2014	Effe	ective Price L	.evel Date:	1 OCT 14		FUL	LY FUNDED PROJEC	LESTIMATE	
WBS	Civil Works	COST	CNTG	CNTG	TOTAL	ESC	COST	CNTG	TOTAL	Mid-Point	ESC	COST	CNTG	FULL
NUMBER	Feature & Sub-Feature Description	(\$K)	(\$K)	(%)	(\$K)	_(%)_	(\$K)	(\$K)	<u>(\$K)</u>	<u>Date</u>	<u>(%)</u>	<u>(\$K)</u>	(\$K)	<u>(\$K)</u>
Α	<i>B</i> ARN - Reach G	С	D	E	F	G	Н	1	J	P	L	М	N	0
06	FISH & WILDLIFE FACILITIES	\$34	\$8	22%	\$42	0.0%	\$34	\$8	\$42					
11	LEVEES & FLOODWALLS	\$7,394	\$1,610	22%	\$9,003	0.0%	\$7,394	\$1,610	\$9,003					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$218	\$47	22%	\$265	0.0%	\$218	\$47	\$265					
							\$0							
	CONSTRUCTION ESTIMATE TOTALS:	\$7,646	\$1,665	22%	\$9,310	=	\$7,646	\$1,665	\$9,310					
01	LANDS AND DAMAGES (FED)	\$285	\$15	5%	\$300	0.0%	\$285	\$15	\$300					
01	LANDS AND DAMAGES (NON-FED)	\$840	\$89	11%	\$929	0.0%	\$840	\$89	\$929					
02	RELOCATIONS	\$3,116	\$678	22%	\$3,795	0.0%	\$3,116	\$678	\$3,795					
30	RELOCATIONS - PED	\$779	\$170	22%	\$949	0.0%	\$779	\$170	\$949					
31	RELOCATIONS - CM	\$312	\$68	22%	\$379	0.0%	\$312	\$68	\$379					
18	CULTURAL RESOURCES - DATA RECOV.	\$48	\$10	22%	\$58	0.0%	\$48	\$10	\$58					
30	PLANNING, ENGINEERING & DESIGN													
1.6%		\$122	\$27	22%	\$149	0.0%	\$122	\$27	\$149					
1.3%	, ,	\$99	\$22	22%	\$121	0.0%	\$99	\$22	\$1 <b>4</b> 3					
5.6%	-	\$428	\$93	22%	\$521	0.0%	\$428	\$93	\$521					
0.3%	0 0	\$23	\$5	22%	\$28	0.0%	\$23	\$5	\$28					
0.3%		\$23	\$5	22%	\$28	0.0%	\$23	\$5	\$28					
1.3%	Contracting & Reprographics	\$99	\$22	22%	\$121	0.0%	\$99	\$22	\$121					
2.0%	Engineering During Construction	\$153	\$33	22%	\$186	0.0%	\$153	\$33	\$186					
1.3%	6 Planning During Construction	\$99	\$22	22%	\$121	0.0%	\$99	\$22	\$121					
1.3%	6 Project Operations	\$99	\$22	22%	\$121	0.0%	\$99	\$22	\$121					
31	CONSTRUCTION MANAGEMENT													
5.9%	Construction Management	\$451	\$98	22%	\$549	0.0%	\$451	\$98	\$549					
1.2%	6 Project Operation:	\$92	\$20	22%	\$112	0.0%	\$92	\$20	\$112					
1.4%	6 Project Management	\$107	\$23	22%	\$130	0.0%	\$107	\$23	\$130					
	CONTRACT COST TOTALS:	\$14,821	\$3,086		\$17,907		\$14,821	\$3,086	\$17,907					

PREPARED: 12/19/2014

#### \*\*\*\* TOTAL PROJECT COST SUMMARY \*\*\*\*

#### \*\*\*\* CONTRACT COST SUMMARY \*\*\*\*

PROJECT: American River Common Features GRR - Alt1

LOCATION: Sacramento, CA

DISTRICT: SPK - Sacramento District

POC: CHIEF, COST ENGINEERING, Jeremiah Frost

Civil	Works Work Breakdown Structure		ESTIMATE (in \$10				(Consta	CT FIRST CO ant Dollar Bas in \$1000s)				T COST (FULLY FU	UNDED)	
			nate Prepared ve Price Leve		<b>10/1/2014</b> 10/1/2014		ram Year (E ective Price		2015 1 OCT 14		FULLY F	UNDED PROJECT	ESTIMATE	
WBS NUMBER A	Civil Works Feature & Sub-Feature Description B	COST (\$K) C	CNTG _(\$K) 	CNTG _(%) <i>E</i>	TOTAL _(\$K) <i>F</i>	ESC (%) <b>G</b>	COST (\$K) <i>H</i>	CNTG _(\$K)	TOTAL _(\$K) 	Mid-Point <u>Date</u> <b>P</b>	ESC (%) <i>L</i>	COST (\$K) M	CNTG _(\$K)	FULL (\$K) <b>O</b>
06	ARN - Reach H FISH & WILDLIFE FACILITIES	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
11	LEVEES & FLOODWALLS	\$0	\$0	22%	\$0 \$0	0.0%	\$0	\$0 \$0	\$0 \$0	0	0.0%	\$0	\$0	\$0
15	FLOODWAY CONTROL & DIVERSION STRU	\$0 \$0	\$0 \$0	22%	\$0 \$0	0.0%	\$0 \$0	\$0 \$0	\$0 \$0	0	0.0%	\$0 \$0	\$0 \$0	\$0 \$0
16	BANK STABILIZATION	\$0 \$0	\$0 \$0	22%	\$0 \$0	0.0%	\$0	\$0 \$0	\$0 \$0	0	0.0%	\$0 \$0	\$0 \$0	\$0
18	CULTURAL RESOURCE PRESERVATION	\$0 \$0	\$0 \$0	22%	\$0 \$0	0.0%	\$0	\$0 \$0	\$0 \$0	0	0.0%	\$0 \$0	\$0 \$0	\$0
10	COLTONAL RESOURCE PRESERVATION	ΨΟ	Ψ0	22 /0	ΨΟ	0.076	\$0	ΨΟ	φυ		0.076	ΨΟ	\$0	\$0
	CONSTRUCTION ESTIMATE TOTALS:	\$0	\$0	0%	\$0	-	\$0	\$0	\$0			\$0	\$0	\$0
01	LANDS AND DAMAGES (FED)	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
01	LANDS AND DAMAGES (NON-FED)	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
02	RELOCATIONS	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
30	RELOCATIONS - PED	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
31	RELOCATIONS - CM	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
18	CULTURAL RESOURCES - DATA RECOV.	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
30	PLANNING, ENGINEERING & DESIGN													
1.6%	Project Management	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
1.3%	Planning & Environmental Compliance	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
5.6%	Engineering & Design	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
0.3%	Reviews, ATRs, IEPRs, VE	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
0.3%	Life Cycle Updates (cost, schedule, risks)	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
1.3%	Contracting & Reprographics	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
2.0%	Engineering During Construction	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
1.3%	Planning During Construction	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
1.3%	Project Operations	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
31	CONSTRUCTION MANAGEMENT													
5.9%	ŭ	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
1.2%	, ,	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
1.4%	Project Management	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0
	CONTRACT COST TOTALS:	\$0	\$0		\$0		\$0	\$0	\$0			\$0	\$0	\$0

#### \*\*\*\* CONTRACT COST SUMMARY \*\*\*\*

PROJECT: American River Common Features GRR - Alt1

LOCATION: Sacramento, CA

DISTRICT: SPK - Sacramento District

POC: CHIEF, COST ENGINEERING, Jeremiah Frost

PREPARED: 12/19/2014

Civi	l Works Work Breakdown Structure		ESTIMATE (in \$10				(Consta	CT FIRST CO nt Dollar Bas n \$1000s)	-		TOTAL PRO	JECT COST (FULLY F (in \$1000s)	FUNDED)	
			ate Prepared ve Price Leve		<b>10/1/2014</b> 10/1/2014		ram Year (B ective Price L		2015 1 OCT 14		FUL	LY FUNDED PROJEC	T ESTIMATE	
WBS <u>NUMBER</u> <b>A</b>	Civil Works Feature & Sub-Feature Description  B  ARN - Reach I	COST (\$K) <b>C</b>	CNTG (\$K) <b>D</b>	CNTG _(%) <i>E</i>	TOTAL _(\$K) <b>F</b>	ESC (%) <b>G</b>	COST (\$K) <b>H</b>	CNTG (\$K) /	TOTAL (\$K) J	Mid-Point <u>Date</u> <b>P</b>	ESC (%) <i>L</i>	COST (\$K) M	CNTG (\$K) N	FULL (\$K) <b>O</b>
06	FISH & WILDLIFE FACILITIES	\$34	\$8	22%	\$42	0.0%	\$34	\$8	\$42					
11	LEVEES & FLOODWALLS	\$4,198	\$914	22%	\$5,112	0.0%	\$4,198	\$914	\$5,112					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$386	\$84	22%	\$470	0.0%	\$386	\$84	\$470					
		****	•		•		\$0		•					
	CONSTRUCTION ESTIMATE TOTALS:	\$4,618	\$1,005	22%	\$5,623	-	\$4,618	\$1,005	\$5,623					
01	LANDS AND DAMAGES (FED)	\$713	\$38	5%	\$750	0.0%	\$713	\$38	\$750					
01	LANDS AND DAMAGES (NON-FED)	\$19,780	\$11,750	59%	\$31,530	0.0%	\$19,780	\$11,750	\$31,530					
02	RELOCATIONS	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
30	RELOCATIONS - PED	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
31	RELOCATIONS - CM	\$0	\$0	22%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCES - DATA RECOV.	\$85	\$19	22%	\$104	0.0%	\$85	\$19	\$104					
30	PLANNING, ENGINEERING & DESIGN													
1.6%	•	\$74	\$16	22%	\$90	0.0%	\$74	\$16	\$90					
1.3%	, -	\$60	\$13	22%	\$73	0.0%	\$60	\$13	\$73					
5.6%		\$259	\$56	22%	\$315	0.0%	\$259	\$56	\$315					
0.3%		\$14	\$3	22%	\$17	0.0%	\$14	\$3	\$17					
0.3%		\$14	\$3	22%	\$17	0.0%	\$14	\$3	\$17					
1.3%	6 Contracting & Reprographics	\$60	\$13	22%	\$73	0.0%	\$60	\$13	\$73					
2.0%		\$92	\$20	22%	\$112	0.0%	\$92	\$20	\$112					
1.3%	6 Planning During Construction	\$60	\$13	22%	\$73	0.0%	\$60	\$13	\$73					
1.3%	6 Project Operations	\$60	\$13	22%	\$73	0.0%	\$60	\$13	\$73					
31	CONSTRUCTION MANAGEMENT													
5.9%	6 Construction Management	\$272	\$59	22%	\$331	0.0%	\$272	\$59	\$331					
1.2%	Project Operation:	\$55	\$12	22%	\$67	0.0%	\$55	\$12	\$67					
1.4%	6 Project Management	\$65	\$14	22%	\$79	0.0%	\$65	\$14	\$79					

\$26,280 \$13,048

\$39,328

CONTRACT COST TOTALS:

\$26,280

\$13,048

\$39,328

\$1,469,516

PROJECT: American River Common Features GRR - Alt2

PROJECT NO: P2 149827 LOCATION: Sacramento, CA

This Estimate reflects the scope and schedule in report;

Draft Feasibility Report

DISTRICT: SPK - Sacramento District PREPARED: 12/19/2014
POC: CHIEF, COST ENGINEERING, Jeremiah Frc

Civ	il Works Work Breakdown Structure		ESTIMATEI (in \$100						JECT FIRST COST stant Dollar Basis) (in \$1000s)				(FUL	PROJECT COS LY FUNDED) n \$1000s)	ST
								Program \	Year (Budget EC):	2015					
								Effective	Price Level Date:	1 OCT 14	•				
										Spent Thru:	TOTAL FIRST				
WBS	Civil Works	COST	CNTG	CNTG	TOTAL	ESC	COST	CNTG	TOTAL	10/1/2014	COST	ESC	COST	CNTG	FULL
NUMBER	Feature & Sub-Feature Description	(\$K)	(\$K)	(%)	_(\$K)	(%)	(\$K)	(\$K)	(\$K)	_(\$K)	_(\$K)_	(%)	(\$K)	(\$K)	(\$K)
Α	В	С	D	E	F	G	Н	1	J				М	N	0
06	FISH & WILDLIFE FACILITIES	\$45,830	\$9,642	21%	\$55,472	0.0%	\$45,830	\$9,642	\$55,472	\$0	\$55,472				
11	LEVEES & FLOODWALLS	\$750.253	\$157.837	21%	\$908.090	0.0%	\$750,253	\$157.837	\$908.090	\$0	\$908.090				
15	FLOODWAY CONTROL & DIVERSION STRU	\$44.336	\$9.327	21%	\$53,664	0.0%	\$44.336	\$9.327	\$53,664	\$0	\$53.664				
16	BANK STABILIZATION	\$0	\$0 -		\$0	0.070	\$0	\$0	\$0	\$0	\$0				
18	CULTURAL RESOURCE PRESERVATION	\$17,709	\$3,726	21%	\$21,435	0.0%	\$17,709	\$3,726	\$21,435	\$0	\$21,435				
	CONSTRUCTION ESTIMATE TOTALS:	\$858,128	\$180,532	=	\$1,038,660	0.0%	\$858,128	\$180,532	\$1,038,660	\$0	\$1,038,660				
01	LANDS AND DAMAGES (FED)	\$8,764	\$461	5%	\$9,225	0.0%	\$8,764	\$461	\$9,225	\$0	\$9,225				
01	LANDS AND DAMAGES (NON-FED)	\$63,627	\$24,086	38%	\$87,713	0.0%	\$63,627	\$24,086	\$87,713	\$0	\$87,713				
02	RELOCATIONS	\$52,083	\$10,957	21%	\$63,040	0.0%	\$52,083	\$10,957	\$63,040	\$0	\$63,040				
30	RELOCATIONS - PED	\$13,021	\$2,739	21%	\$15,760	0.0%	\$13,021	\$2,739	\$15,760	\$0	\$15,760				
31	RELOCATIONS - CM	\$5,208	\$1,096	21%	\$6,304	0.0%	\$5,208	\$1,096	\$6,304	\$0	\$6,304				
18	CULTURAL RESOURCES-DATA RECOV.	\$3,908	\$822	21%	\$4,730	0.0%	\$3,908	\$822	\$4,730	\$0	\$4,730				
30	PLANNING, ENGINEERING & DESIGN	\$128,716	\$27,079	21%	\$155,795	0.0%	\$128,716	\$27,079	\$155,795	\$0	\$155,795				
31	CONSTRUCTION MANAGEMENT	\$72,942	\$15,345	21%	\$88,287	0.0%	\$72,942	\$15,345	\$88,287	\$0	\$88,287				
	PROJECT COST TOTALS:	\$1,206,397	\$263,119	22%	\$1,469,516		\$1,206,397	\$263,119	\$1,469,516	\$0	\$1,469,516				

	CHIEF, COST ENGINEERING, Jeremiah Frost	
_	PROJECT MANAGER, Dan Tibbits	
	_ CHIEF, REAL ESTATE, Sharon Caine	ESTIMATED TOTAL FIRST COST (in \$1000s):
	CHIEF, ENGINEERING, Rick Poeppelman	

PROJECT: American River Common Features GRR - Alt2 LOCATION: Sacramento, CA

This Estimate reflects the scope and schedule in report; Draft Feasibility Report DISTRICT: SPK - Sacramento District

PREPARED: 12/19/2014

POC: CHIEF, COST ENGINEERING, Jeremiah Frost

Civi	Works Work Breakdown Structure		ESTIMATEI (in \$100				(Constan	FIRST COS Dollar Basis \$1000s)			TOTAL PRO	OJECT COST (FULLY FU (in \$1000s)	JNDED)	
			ate Prepared: ve Price Level		<b>10/1/2014</b> 10/1/2014		am Year (Budge ive Price Level		2015 1 OCT 14					
WBS NUMBER A	Civil Works Feature & Sub-Feature Description B  ARS - Reach A	COST (\$K) <b>C</b>	CNTG (\$K) <b>D</b>	SK BASED CNTG <u>(%)</u> <b>E</b>	TOTAL _(\$K) 	ESC _(%) <b>G</b>	COST _(\$K) H	CNTG _(\$K)	TOTAL _(\$K) 	Mid-Point <u>Date</u> <i>P</i>	ESC (%) <i>L</i>	COST (\$K) M	CNTG _(\$K)_ <b>N</b>	FULL (\$K) <b>O</b>
06 11	FISH & WILDLIFE FACILITIES LEVEES & FLOODWALLS	\$10,287 \$102,021	\$2,164 \$21,463	21% 21%	\$12,451 \$123,484	0.0%	\$10,287 \$102,021	\$2,164 \$21,463	\$12,451 \$123,484					
15 16 18	FLOODWAY CONTROL & DIVERSION STRUI BANK STABILIZATION CULTURAL RESOURCE PRESERVATION	\$0 \$0 \$2,111	\$0 \$0 \$444	21% 21% 21%	\$0 \$0 \$2,555	0.0% 0.0% 0.0%	\$0 \$0 \$2,111 \$0	\$0 \$0 \$444	\$0 \$0 \$2,555					
	CONSTRUCTION ESTIMATE TOTALS:	\$114,418	\$24,071	21%	\$138,489	-	\$114,418	\$24,071	\$138,489					
01	LANDS AND DAMAGES (FED)	\$95	\$5	5%	\$100	0.0%	\$95	\$5	\$100					
01	LANDS AND DAMAGES (NON-FED)	\$1,907	\$827	43%	\$2,734	0.0%	\$1,907	\$827	\$2,734					
02	RELOCATIONS	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
30	RELOCATIONS - PED	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
31 18	RELOCATIONS - CM CULTURAL RESOURCES - DATA RECOV.	\$0 \$466	\$0 \$98	21% 21%	\$0 \$564	0.0% 0.0%	\$0 \$466	\$0 \$98	\$0 \$564					
30	PLANNING, ENGINEERING & DESIGN													
1.6%	-	\$1,831	\$385	21%	\$2,216	0.0%	\$1,831	\$385	\$2,216					
1.3%	, 0	\$1,487	\$313	21%	\$1,800	0.0%	\$1,487	\$313	\$1,800					
5.6%	-	\$6,407	\$1,348	21%	\$7,755	0.0%	\$6,407	\$1,348	\$7,755					
0.3%	Reviews, ATRs, IEPRs, VE	\$343	\$72	21%	\$415	0.0%	\$343	\$72	\$415					
0.3%		\$343	\$72	21%	\$415	0.0%	\$343	\$72	\$415					
1.3%		\$1,487	\$313	21%	\$1,800	0.0%	\$1,487	\$313	\$1,800					
2.0%	5 5 5	\$2,288	\$481	21%	\$2,769	0.0%	\$2,288	\$481	\$2,769					
1.3% 1.3%	0 0	\$1,487 \$1,487	\$313 \$313	21% 21%	\$1,800 \$1,800	0.0% 0.0%	\$1,487 \$1,487	\$313 \$313	\$1,800 \$1,800					
31	CONSTRUCTION MANAGEMENT													
5.9%		\$6,751	\$1,420	21%	\$8,171	0.0%	\$6,751	\$1,420	\$8,171					
1.2%	ū	\$1,373	\$289	21%	\$1,662	0.0%	\$1,373	\$289	\$1,662					
1.4%	Project Management	\$1,602	\$337	21%	\$1,939	0.0%	\$1,602	\$337	\$1,939					
	CONTRACT COST TOTALS:	\$143,772	\$30,657		\$174,429		\$143,772	\$30,657	\$174,429					

PROJECT: American River Common Features GRR - Alt2

LOCATION: Sacramento, CA

This Estimate reflects the scope and schedule in report;

Draft Feasibility Report

DISTRICT: SPK - Sacramento District

POC: CHIEF, COST ENGINEERING, Jeremiah Frost

Civi	il Works Work Breakdown Structure		ESTIMATE (in \$100				(Constant	FIRST COS Dollar Basis 1000s)			TOTAL PRO	OJECT COST (FULLY FO (in \$1000s)	JNDED)	
			ate Prepared: /e Price Leve		<b>10/1/2014</b> 10/1/2014		am Year (Budge ive Price Level		2015 1 OCT 14					
WBS <u>NUMBER</u> <b>A</b>	Civil Works Feature & Sub-Feature Description  B	COST (\$K) <b>C</b>	CNTG (\$K)	CNTG _(%) <i>E</i>	TOTAL _(\$K) 	ESC (%) <b>G</b>	COST (\$K) H	CNTG (\$K)	TOTAL (\$K) J	Mid-Point <u>Date</u> <i>P</i>	ESC (%) <i>L</i>	COST _(\$K) <i>M</i>	CNTG (\$K)	FULL (\$K) <b>O</b>
А	ARS - Reach B	C	Ъ	E	F	G	н	,	J	P	L	IVI	N	U
06	FISH & WILDLIFE FACILITIES	\$2,454	\$516	21%	\$2,970	0.0%	\$2,454	\$516	\$2,970					
11	LEVEES & FLOODWALLS	\$25,040	\$5,268	21%	\$30,308	0.0%	\$25,040	\$5,268	\$30,308					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
18			\$635	0.0%	\$524 \$0	\$110	\$635							
	CONSTRUCTION ESTIMATE TOTALS:	\$28,018	\$5,895	21%	\$33,913	_	\$28,018	\$5,895	\$33,913					
01	LANDS AND DAMAGES (FED)	\$166	\$9	5%	\$175	0.0%	\$166	\$9	\$175					
01	LANDS AND DAMAGES (NON-FED)	\$845	\$199	24%	\$1,044	0.0%	\$845	\$199	\$1,044					
02	RELOCATIONS	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
30	RELOCATIONS - PED	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
31	RELOCATIONS - CM	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCES - DATA RECOV.	\$116	\$24	21%	\$140	0.0%	\$116	\$24	\$140					
30	PLANNING, ENGINEERING & DESIGN													
1.6%	6 Project Management	\$448	\$94	21%	\$542	0.0%	\$448	\$94	\$542					
1.3%		\$364	\$77	21%	\$441	0.0%	\$364	\$77	\$441					
5.6%	6 Engineering & Design	\$1,569	\$330	21%	\$1,899	0.0%	\$1,569	\$330	\$1,899					
0.3%		\$84	\$18	21%	\$102	0.0%	\$84	\$18	\$102					
0.3%		\$84	\$18	21%	\$102	0.0%	\$84	\$18	\$102					
1.3%		\$364	\$77	21%	\$441	0.0%	\$364	\$77	\$441					
2.0%	0 0	\$560	\$118	21%	\$678	0.0%	\$560	\$118	\$678					
1.3%	0 0	\$364	\$77	21%	\$441	0.0%	\$364	\$77	\$441					
1.3%	6 Project Operations	\$364	\$77	21%	\$441	0.0%	\$364	\$77	\$441					
31	CONSTRUCTION MANAGEMENT													
5.9%	G	\$1,653	\$348	21%	\$2,001	0.0%	\$1,653	\$348	\$2,001					
1.2%		\$336	\$71	21%	\$407	0.0%	\$336	\$71	\$407					
1.4%	6 Project Management	\$392	\$82	21%	\$474	0.0%	\$392	\$82	\$474					
	CONTRACT COST TOTALS:	\$35,727	\$7,512		\$43,239		\$35,727	\$7,512	\$43,239					

PROJECT: American River Common Features GRR - Alt2

LOCATION: Sacramento, CA

This Estimate reflects the scope and schedule in report;

Draft Feasibility Report

DISTRICT: SPK - Sacramento District

POC: CHIEF, COST ENGINEERING, Jeremiah Frost

Civi	l Works Work Breakdown Structure		ESTIMATE (in \$10				(Constant	FIRST COS Dollar Basi 1000s)			TOTAL PRO	DJECT COST (FULLY F (in \$1000s)	UNDED)	
			ate Prepared re Price Leve		<b>10/1/2014</b> 10/1/2014		am Year (Budge ive Price Level I		2015 1 OCT 14					
WBS NUMBER A	Civil Works Feature & Sub-Feature Description  B	COST (\$K) <b>C</b>	CNTG _(\$K) 	CNTG _(%) <i>E</i>	TOTAL _(\$K) 	ESC (%) <b>G</b>	COST _(\$K)_ <i>H</i>	CNTG _(\$K)	TOTAL (\$K) <b>J</b>	Mid-Point <u>Date</u> <b>P</b>	ESC (%) <i>L</i>	COST (\$K) <b>M</b>	CNTG _(\$K)	FULL (\$K) <b>O</b>
06	ARS - Reach C FISH & WILDLIFE FACILITIES	\$170	\$36	21%	\$206	0.0%	\$170	\$36	\$206					
11	LEVEES & FLOODWALLS	\$23,655	\$4,976	21%	\$28,631	0.0%	\$23,655	\$4,976	\$28,631					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$454	\$96	21%	\$550	0.0%	\$454 \$0	\$96	\$550					
	CONSTRUCTION ESTIMATE TOTALS:	\$24,279	\$5,108	21%	\$29,387	-	\$24,279	\$5,108	\$29,387					
01	LANDS AND DAMAGES (FED)	\$143	\$7	5%	\$150	0.0%	\$143	\$7	\$150					
01	LANDS AND DAMAGES (NON-FED)	\$733	\$175	24%	\$908	0.0%	\$733	\$175	\$908					
02	RELOCATIONS	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
30	RELOCATIONS - PED	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
31	RELOCATIONS - CM	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCES - DATA RECOV.	\$100	\$21	21%	\$121	0.0%	\$100	\$21	\$121					
30	PLANNING, ENGINEERING & DESIGN													
1.6%	6 Project Management	\$388	\$82	21%	\$470	0.0%	\$388	\$82	\$470					
1.3%	6 Planning & Environmental Compliance	\$316	\$66	21%	\$382	0.0%	\$316	\$66	\$382					
5.6%	Engineering & Design	\$1,360	\$286	21%	\$1,646	0.0%	\$1,360	\$286	\$1,646					
0.3%		\$73	\$15	21%	\$88	0.0%	\$73	\$15	\$88					
0.3%		\$73	\$15	21%	\$88	0.0%	\$73	\$15	\$88					
1.3%		\$316	\$66	21%	\$382	0.0%	\$316	\$66	\$382					
2.0%		\$486	\$102	21%	\$588	0.0%	\$486	\$102	\$588					
1.3%	5 5	\$316	\$66	21%	\$382	0.0%	\$316	\$66	\$382					
1.3%	6 Project Operations	\$316	\$66	21%	\$382	0.0%	\$316	\$66	\$382					
31	CONSTRUCTION MANAGEMENT													
5.9%	5	\$1,432	\$301	21%	\$1,733	0.0%	\$1,432	\$301	\$1,733					
1.2%		\$291	\$61	21%	\$352	0.0%	\$291	\$61	\$352					
1.4%	6 Project Management	\$340	\$72	21%	\$412	0.0%	\$340	\$72	\$412					
	CONTRACT COST TOTALS:	\$30,962	\$6,512		\$37,474		\$30,962	\$6,512	\$37,474					

PROJECT: American River Common Features GRR - Alt2

LOCATION: Sacramento, CA

This Estimate reflects the scope and schedule in report;

Draft Feasibility Report

DISTRICT: SPK - Sacramento District

POC: CHIEF, COST ENGINEERING, Jeremiah Frost

Civi	l Works Work Breakdown Structure		ESTIMATE (in \$10				(Constan	FIRST COS Dollar Basis \$1000s)			TOTAL PRO	OJECT COST (FULLY (in \$1000s)	FUNDED)	
			ate Prepared		10/1/2014		rogram Year (B	-	2015					
		Effectiv	e Price Leve	l:	10/1/2014		Effective Price L	evel Date:	1 OCT 14		FUL	LLY FUNDED PROJEC	CT ESTIMATE	
WBS	Civil Works	COST	CNTG	CNTG	TOTAL	ESC	COST	CNTG	TOTAL	Mid-Point	ESC	COST	CNTG	FULL
NUMBER	Feature & Sub-Feature Description	_(\$K)	(\$K)	(%)	_(\$K)	_(%)_	_(\$K)	(\$K)	_(\$K)	<u>Date</u>	_(%)	_(\$K)	(\$K)	_(\$K)
Α	B ARS - Reach D	С	D	E	F	G	Н	1	J	P	L	М	N	0
06	FISH & WILDLIFE FACILITIES	\$2,572	\$541	21%	\$3.113	0.0%	\$2,572	\$541	\$3,113					
11	LEVEES & FLOODWALLS	\$77,004	\$16,200	21%	\$93,204	0.0%	\$77,004	\$16,200	\$93,204					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$1,589	\$334	21%	\$1,923	0.0%	\$1,589	\$334	\$1,923					
		<b>V</b> 1,000	****		*.,		\$0	****	*1,222					
	CONSTRUCTION ESTIMATE TOTALS: \$81,165 \$17,075 21%		\$98,241	-	\$81,165	\$17,075	\$98,241							
01	LANDS AND DAMAGES (FED)	\$214	\$11	5%	\$225	0.0%	\$214	\$11	\$225					
01	LANDS AND DAMAGES (NON-FED)	\$1,191	\$364	31%	\$1,555	0.0%	\$1,191	\$364	\$1,555					
02	RELOCATIONS	\$4,625	\$973	21%	\$5,598	0.0%	\$4,625	\$973	\$5,598					
30	RELOCATIONS - PED	\$1,156	\$243	21%	\$1,399	0.0%	\$1,156	\$243	\$1,399					
31	RELOCATIONS - CM	\$462	\$97	21%	\$560	0.0%	\$462	\$97	\$560					
18	CULTURAL RESOURCES - DATA RECOV.	\$351	\$74	21%	\$424	0.0%	\$351	\$74	\$424					
20														
30	PLANNING, ENGINEERING & DESIGN	£4.000	<b>CO70</b>	040/	£4 570	0.00/	£4.000	<b>CO70</b>	£4 570					
1.6% 1.3%	,	\$1,299 \$1,055	\$273 \$222	21% 21%	\$1,572 \$1,277	0.0% 0.0%	\$1,299 \$1,055	\$273 \$222	\$1,572 \$1,277					
7.3% 5.6%	- · · · · · · · · · · · · · · · · · · ·	\$1,055 \$4,545	\$222 \$956	21%	\$1,277 \$5,501	0.0%	\$1,055 \$4,545	\$222 \$956	\$1,277 \$5,501					
0.3%	0 0	\$4,545 \$243	<del>\$950</del> \$51	21%	\$294	0.0%	\$4,545 \$243	\$51	\$5,501 \$294					
0.3%		\$243	\$51 \$51	21%	\$294	0.0%	\$243	\$51 \$51	\$294					
1.3%	, , , , , , , , , , , , , , , , , , ,	\$1,055	\$222	21%	\$1,277	0.0%	\$1,055	\$222	\$1,277					
2.0%	0 . 0 .	\$1,623	\$341	21%	\$1,964	0.0%	\$1,623	\$341	\$1,964					
1.3%		\$1,055	\$222	21%	\$1,277	0.0%	\$1,055	\$222	\$1,277					
1.3%		\$1,055	\$222	21%	\$1,277	0.0%	\$1,055	\$222	\$1,277					
31	CONSTRUCTION MANAGEMENT													
5.9%		\$4,789	\$1,008	21%	\$5,797	0.0%	\$4,789	\$1,008	\$5,797					
1.2%	-	\$974	\$205	21%	\$1,179	0.0%	\$974	\$205	\$1,179					
1.4%	6 Project Management	\$1,136	\$239	21%	\$1,375	0.0%	\$1,136	\$239	\$1,375					
	CONTRACT COST TOTALS:	\$108,236	\$22,850		\$131,086		\$108,236	\$22,850	\$131,086					

PROJECT: American River Common Features GRR - Alt2

LOCATION: Sacramento, CA

This Estimate reflects the scope and schedule in report;

Draft Feasibility Report

DISTRICT: SPK - Sacramento District

POC: CHIEF, COST ENGINEERING, Jeremiah Frost

Sacramento District PREPARED: 12/19/2014

Civil	Works Work Breakdown Structure		ESTIMATE (in \$10				(Constant	FIRST COS Dollar Basi: \$1000s)			TOTAL PR	OJECT COST (FULLY I (in \$1000s)	FUNDED)	
			ate Prepared: /e Price Leve		<b>10/1/2014</b> 10/1/2014		rogram Year (B Effective Price L		2015 1 OCT 14			JLLY FUNDED PROJEC	T ESTIMATE	
		Ellectiv	ve riice Leve	1.	10/1/2014	· '	Lilective Filce L	ever Date.	1 001 14		FO	JEET FOINDED FROJEC	, ESTIMATE	
WBS	Civil Works	COST	CNTG	CNTG	TOTAL	ESC	COST	CNTG	TOTAL	Mid-Point	ESC	COST	CNTG	FULL
NUMBER	Feature & Sub-Feature Description	(\$K) <b>C</b>	(\$K) <b>D</b>	<u>(%)</u> <b>E</b>	(\$K) <b>F</b>	_(%)_ <b>G</b>	_(\$K)	_(\$K)	_(\$K)	Date P	_(%) L	_(\$K)_ <b>M</b>	_(\$K)	(\$K) <b>O</b>
Α	ARS - Reach E	C	Б	E	•	G	н	'	J	P	L	IVI	N	U
06	FISH & WILDLIFE FACILITIES	\$1,241	\$261	21%	\$1,502	0.0%	\$1,241	\$261	\$1,502					
11	LEVEES & FLOODWALLS	\$67,466	\$14,193	21%	\$81,659	0.0%	\$67,466	\$14,193	\$81,659					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$1,385	\$291	21%	\$1,676	0.0%	\$1,385	\$291	\$1,676					
							\$0							
	CONSTRUCTION ESTIMATE TOTALS:	LS: \$70,091 \$14,746 21% <b>\$84,837</b>		-	\$70,091	\$14,746	\$84,837							
01	LANDS AND DAMAGES (FED)	\$1,401	\$74	5%	\$1,475	0.0%	\$1,401	\$74	\$1,475					
01	LANDS AND DAMAGES (NON-FED)	\$5,029	\$626	12%	\$5,656	0.0%	\$5.029	\$626	\$5,656					
02	RELOCATIONS	\$774	\$163	21%	\$937	0.0%	\$774	\$163	\$937					
30	RELOCATIONS - PED	\$193	\$41	21%	\$234	0.0%	\$193	\$41	\$234					
31	RELOCATIONS - CM	\$77	\$16	21%	\$94	0.0%	\$77	\$16	\$94					
18	CULTURAL RESOURCES - DATA RECOV.	\$306	\$64	21%	\$370	0.0%	\$306	\$64	\$370					
30	PLANNING, ENGINEERING & DESIGN													
1.6%	-	\$1,121	\$236	21%	\$1,357	0.0%	\$1,121	\$236	\$1,357					
1.3%	Planning & Environmental Compliance	\$911	\$192	21%	\$1,103	0.0%	\$911	\$192	\$1,103					
5.6%	Engineering & Design	\$3,925	\$826	21%	\$4,751	0.0%	\$3,925	\$826	\$4,751					
0.3%		\$210	\$44	21%	\$254	0.0%	\$210	\$44	\$254					
0.3%		\$210	\$44	21%	\$254	0.0%	\$210	\$44	\$254					
1.3%	0 . 0 .	\$911	\$192	21%	\$1,103 \$1,697	0.0%	\$911	\$192	\$1,103					
2.0% 1.3%	5 5 5	\$1,402 \$911	\$295 \$192	21% 21%	\$1,697 \$1,103	0.0%	\$1,402 \$911	\$295 \$192	\$1,697 \$1,103					
1.3%	0 0	\$911	\$192 \$192	21%	\$1,103	0.0%	\$911	\$192 \$192	\$1,103					
31	CONSTRUCTION MANAGEMENT													
5.9%	Construction Management	\$4,135	\$870	21%	\$5,005	0.0%	\$4,135	\$870	\$5,005					
1.2%		\$841	\$177	21%	\$1,018	0.0%	\$841	\$177	\$1,018					
1.4%	Project Management	\$981	\$206	21%	\$1,187	0.0%	\$981	\$206	\$1,187					
	CONTRACT COST TOTALS:	\$94,341	\$19,195		\$113,536		\$94,341	\$19,195	\$113,536					

PROJECT: American River Common Features GRR - Alt2

LOCATION: Sacramento, CA

This Estimate reflects the scope and schedule in report; Draft Feasibility Report DISTRICT: SPK - Sacramento District

POC: CHIEF, COST ENGINEERING, Jeremiah Frost

Civil Works Work Breakdown Structure	ESTIMATED COST (in \$1000s)	PROJECT FIRST COST (Constant Dollar Basis) (in \$1000s)	TOTAL PROJECT COST (FULLY FUNDED) (in \$1000s)
	Estimate Prepared: 10/1/20	Program Year (Budget EC): 2015	

Civil Works Work Breakdown Structure			ESTIMATEI (in \$100				(Constant	Dollar Basis			TOTAL PRO	OJECT COST (FULLY F (in \$1000s)	UNDED)	
			ate Prepared: e Price Level		<b>10/1/2014</b> 10/1/2014		rogram Year (B Effective Price L		2015 1 OCT 14		FUI	LLY FUNDED PROJEC	T ESTIMATE	
WBS <u>NUMBER</u> <b>A</b>	Civil Works <u>Feature &amp; Sub-Feature Description</u> <b>B</b>	COST (\$K) <b>C</b>	CNTG _(\$K) <b>D</b>	CNTG _(%) <i>E</i>	TOTAL _(\$K)	ESC (%) <b>G</b>	COST (\$K) <i>H</i>	CNTG (\$K)	TOTAL _(\$K) 	Mid-Point <u>Date</u> <b>P</b>	ESC (%) <i>L</i>	COST _(\$K) <b>M</b>	CNTG _(\$K) <b>N</b>	FULL (\$K) <b>O</b>
•	ARS - Reach F													
06	FISH & WILDLIFE FACILITIES	\$8,624	\$1,814	21%	\$10,438	0.0%	\$8,624	\$1,814	\$10,438					ļ
11	LEVEES & FLOODWALLS	\$175,784	\$36,981	21%	\$212,765	0.0%	\$175,784	\$36,981	\$212,765					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$3,821	\$804	21%	\$4,625	0.0%	\$3,821 \$0	\$804	\$4,625					ļ
	CONSTRUCTION ESTIMATE TOTALS:	\$188,228	\$39,599	21%	\$227,828	=	\$188,228	\$39,599	\$227,828					
01	LANDS AND DAMAGES (FED)	\$3,040	\$160	5%	\$3,200	0.0%	\$3,040	\$160	\$3,200					ļ
01	LANDS AND DAMAGES (NON-FED)	\$18,356	\$5,939	32%	\$24,295	0.0%	\$18,356	\$5,939	\$24,295					ļ
02	RELOCATIONS	\$4,155	\$874	21%	\$5,030	0.0%	\$4,155	\$874	\$5,030					
30	RELOCATIONS - PED	\$1,039	\$219	21%	\$1,257	0.0%	\$1,039	\$219	\$1,257					
31	RELOCATIONS - CM	\$416	\$87	21%	\$503	0.0%	\$416	\$87	\$503					
18	CULTURAL RESOURCES - DATA RECOV.	\$843	\$177	21%	\$1,021	0.0%	\$843	\$177	\$1,021					
30	PLANNING, ENGINEERING & DESIGN													
1.6%	Project Management	\$3,012	\$634	21%	\$3,646	0.0%	\$3,012	\$634	\$3,646					
1.3%	Planning & Environmental Compliance	\$2,447	\$515	21%	\$2,962	0.0%	\$2,447	\$515	\$2,962					
5.6%	Engineering & Design	\$10,541	\$2,218	21%	\$12,759	0.0%	\$10,541	\$2,218	\$12,759					
0.3%	Reviews, ATRs, IEPRs, VE	\$565	\$119	21%	\$684	0.0%	\$565	\$119	\$684					
0.3%	Life Cycle Updates (cost, schedule, risks)	\$565	\$119	21%	\$684	0.0%	\$565	\$119	\$684					
1.3%		\$2,447	\$515	21%	\$2,962	0.0%	\$2,447	\$515	\$2,962					
2.0%	Engineering During Construction	\$3,765	\$792	21%	\$4,557	0.0%	\$3,765	\$792	\$4,557					
1.3% 1.3%	Planning During Construction Project Operations	\$2,447 \$2,447	\$515 \$515	21% 21%	\$2,962 \$2,962	0.0% 0.0%	\$2,447 \$2,447	\$515 \$515	\$2,962 \$2,962					
31	CONSTRUCTION MANAGEMENT													
5.9%		\$11,105	\$2,336	21%	\$13,441	0.0%	\$11,105	\$2,336	\$13,441					
1.2%	· ·	\$2,259	\$475	21%	\$2,734	0.0%	\$2,259	\$475	\$2,734					
1.4%		\$2,635	\$554	21%	\$3,189	0.0%	\$2,635	\$554	\$3,189					
	CONTRACT COST TOTALS:	\$260,312	\$56,362		\$316,675		\$260,312	\$56,362	\$316,675					

PROJECT: American River Common Features GRR - Alt2

LOCATION: Sacramento, CA

This Estimate reflects the scope and schedule in report; Draft Feasibility Report DISTRICT: SPK - Sacramento District

POC: CHIEF, COST ENGINEERING, Jeremiah Frost

Civi	l Works Work Breakdown Structure		ESTIMATE (in \$100				(Constant	FIRST COS Dollar Basi 1000s)			TOTAL PR	OJECT COST (FULLY I (in \$1000s)	FUNDED)	
			ate Prepared: /e Price Leve		<b>10/1/2014</b> 10/1/2014		rogram Year (B Effective Price L		2015 1 OCT 14		Fl	JLLY FUNDED PROJEC	T ESTIMATE	
WBS <u>NUMBER</u> <b>A</b>	Civil Works Feature & Sub-Feature Description  B	COST (\$K) <b>C</b>	CNTG (\$K) <b>D</b>	CNTG _(%) <i>E</i>	TOTAL _(\$K)	ESC (%) <b>G</b>	COST (\$K) <i>H</i>	CNTG (\$K)	TOTAL (\$K) <b>J</b>	Mid-Point <u>Date</u> <b>P</b>	ESC (%) <i>L</i>	COST (\$K) <b>M</b>	CNTG (\$K) <b>N</b>	FULL (\$K) <b>O</b>
	ARS - Reach G													-
06	FISH & WILDLIFE FACILITIES	\$2,688	\$566	21%	\$3,254	0.0%	\$2,688	\$566	\$3,254					
11	LEVEES & FLOODWALLS	\$58,626	\$12,334	21%	\$70,959	0.0%	\$58,626	\$12,334	\$70,959					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$1,365	\$287	21%	\$1,652	0.0%	\$1,365 \$0	\$287	\$1,652					
						_	φυ							
	CONSTRUCTION ESTIMATE TOTALS:	\$62,679	\$13,186	21%	\$75,865		\$62,679	\$13,186	\$75,865					
01	LANDS AND DAMAGES (FED)	\$475	\$25	5%	\$500	0.0%	\$475	\$25	\$500					
01	LANDS AND DAMAGES (NON-FED)	\$3,562	\$1,021	29%	\$4,583	0.0%	\$3,562	\$1,021	\$4,583					
02	RELOCATIONS	\$8,303	\$1,747	21%	\$10,050	0.0%	\$8,303	\$1,747	\$10,050					
30	RELOCATIONS - PED	\$2,076	\$437	21%	\$2,513	0.0%	\$2,076	\$437	\$2,513					
31	RELOCATIONS - CM	\$830	\$175	21%	\$1,005	0.0%	\$830	\$175	\$1,005					
18	CULTURAL RESOURCES - DATA RECOV.	\$301	\$63	21%	\$364	0.0%	\$301	\$63	\$364					
20														
30	PLANNING, ENGINEERING & DESIGN		0044	0.407	04.044	0.00/	<b>0.4.000</b>	0044	04.044					
1.6%	, ,	\$1,003	\$211	21%	\$1,214	0.0%	\$1,003	\$211	\$1,214					
1.3% 5.6%	- · · · · · · · · · · · · · · · · · · ·	\$815 \$3,510	\$171 \$738	21% 21%	\$986 \$4,248	0.0% 0.0%	\$815 \$3,510	\$171 \$738	\$986 \$4,248					
0.3%		\$3,510 \$188	\$736 \$40	21%	\$4,246 \$228	0.0%	\$188	\$40	\$4,246 \$228					
0.3%		\$188	\$40	21%	\$228	0.0%	\$188	\$40	\$228					
1.3%		\$815	\$171	21%	\$986	0.0%	\$815	\$171	\$986					
2.0%		\$1,254	\$264	21%	\$1,518	0.0%	\$1,254	\$264	\$1,518					
1.3%		\$815	\$171	21%	\$986	0.0%	\$815	\$171	\$986					
1.3%	5 5	\$815	\$171	21%	\$986	0.0%	\$815	\$171	\$986					
31	CONSTRUCTION MANAGEMENT													
5.9%		\$3,698	\$778	21%	\$4,476	0.0%	\$3,698	\$778	\$4,476					
1.2%	-	\$752	\$158	21%	\$910	0.0%	\$752	\$158	\$910					
1.4%	, ,	\$878	\$185	21%	\$1,063	0.0%	\$878	\$185	\$1,063					
	CONTRACT COST TOTALS:	\$92,957	\$19,753		\$112,710		\$92,957	\$19,753	\$112,710					

PROJECT: American River Common Features GRR - Alt2

LOCATION: Sacramento, CA

This Estimate reflects the scope and schedule in report; Draft Feasibility Report DISTRICT: SPK - Sacramento District

PREPARED: 12/19/2014 POC: CHIEF, COST ENGINEERING, Jeremiah Frost

Civil	Works Work Breakdown Structure		ESTIMATE (in \$100				(Constant	FIRST COS Dollar Basis 1000s)			TOTAL PRO	DJECT COST (FULLY F (in \$1000s)	FUNDED)	
			ate Prepared: /e Price Leve		<b>0/1/2014</b> 0/1/2014		rogram Year (B Effective Price L		2015 1 OCT 14		FUI	LLY FUNDED PROJEC	T ESTIMATE	
WBS <u>NUMBER</u> <b>A</b>	Civil Works Feature & Sub-Feature Description B	COST (\$K) <b>C</b>	CNTG (\$K) <b>D</b>	CNTG _(%) <i>E</i>	TOTAL _(\$K) 	ESC (%) <b>G</b>	COST (\$K) H	CNTG (\$K)	TOTAL _(\$K)	Mid-Point <u>Date</u> P	ESC (%) <i>L</i>	COST _(\$K)_ M	CNTG (\$K) <b>N</b>	FULL (\$K) <b>O</b>
-	ARN - Reach A	Ü		-	•			•	Ü	•	-			ŭ
06	FISH & WILDLIFE FACILITIES	\$5,060	\$1,064	21% \$	6,124	0.0%	\$5,060	\$1,064	\$6,124					
11	LEVEES & FLOODWALLS	\$74,180	\$15,606	21% \$	89,786	0.0%	\$74,180	\$15,606	\$89,786					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	21% \$	-	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	21% \$	-	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$1,493	3 \$314 21% \$ 1,807 		0.0%	\$1,493 \$0	\$314	\$1,807						
	CONSTRUCTION ESTIMATE TOTALS:		\$16,984	21%	97,716	=	\$80,732	\$16,984	\$97,716					
01	LANDS AND DAMAGES (FED)	\$190	\$10	5% \$	200	0.0%	\$190	\$10	\$200					
01	LANDS AND DAMAGES (NON-FED)	\$1,456	\$508	35% \$	1,964	0.0%	\$1,456	\$508	\$1,964					
02	RELOCATIONS	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
30	RELOCATIONS - PED	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
31	RELOCATIONS - CM	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCES - DATA RECOV.	\$329	\$69	21%	\$399	0.0%	\$329	\$69	\$399					
30	PLANNING, ENGINEERING & DESIGN													
1.6%	, ,	\$1,292	\$272	21%	1,564	0.0%	\$1,292	\$272	\$1,564					
1.3%	Planning & Environmental Compliance	\$1,050	\$221	21%	1,271	0.0%	\$1,050	\$221	\$1,271					
5.6%	Engineering & Design	\$4,521	\$951	21%	5,472	0.0%	\$4,521	\$951	\$5,472					
0.3%	Reviews, ATRs, IEPRs, VE Life Cycle Updates (cost, schedule, risks)	\$242	\$51	21%	293	0.0%	\$242	\$51	\$293					
0.3%		\$242	\$51	21%	\$293	0.0%	\$242	\$51	\$293					
1.3% 2.0%	Contracting & Reprographics Engineering During Construction	\$1,050 \$1,615	\$221 \$340	21% 21%	1,271 1,955	0.0% 0.0%	\$1,050 \$1,615	\$221 \$340	\$1,271 \$1,955					
1.3%	Planning During Construction	\$1,010	\$221	21%	1,933	0.0%	\$1,050	\$221	\$1,935 \$1,271					
1.3%	II	\$1,050	\$221	21%	1,271	0.0%	\$1,050	\$221	\$1,271					
31	CONSTRUCTION MANAGEMENT													
5.9%	· ·	\$4,763	\$1,002	21%	5,765	0.0%	\$4,763	\$1,002	\$5,765					
1.2%	Project Operation:	\$969	\$204	21%	1,173	0.0%	\$969	\$204	\$1,173					
1.4%	Project Management	\$1,130	\$238	21%	1,368	0.0%	\$1,130	\$238	\$1,368					
	CONTRACT COST TOTALS:	\$101,682	\$21,563		123,245		\$101,682	\$21,563	\$123,245					

\*\*\*\* TOTAL PROJECT COST SUMMARY \*\*\*\*

PROJECT: American River Common Features GRR - Alt2

LOCATION: Sacramento, CA

This Estimate reflects the scope and schedule in report; Draft Feasibility Report DISTRICT: SPK - Sacramento District

PREPARED: 12/19/2014 POC: CHIEF, COST ENGINEERING, Jeremiah Frost

Civi	l Works Work Breakdown Structure		ESTIMATE (in \$100				(Constan	FIRST COS Dollar Basis \$1000s)			TOTAL PRO	OJECT COST (FULLY (in \$1000s)	FUNDED)	
			ate Prepared: re Price Leve		<b>10/1/2014</b> 10/1/2014		rogram Year (B Effective Price L		2015 1 OCT 14		FU	LLY FUNDED PROJEC	CT ESTIMATE	
WBS NUMBER <b>A</b>	Civil Works Feature & Sub-Feature Description  B	COST _(\$K)	CNTG (\$K)	CNTG _(%) <i>E</i>	TOTAL (\$K) <b>F</b>	ESC (%) <b>G</b>	COST (\$K) H	CNTG (\$K)	TOTAL (\$K) J	Mid-Point <u>Date</u> <b>P</b>	ESC (%) <i>L</i>	COST (\$K) <b>M</b>	CNTG _(\$K)	FULL (\$K)
	ARN - Reach B		_	-	•			•	· ·	•	-			· ·
06	FISH & WILDLIFE FACILITIES	\$443	\$93	21%	\$537	0.0%	\$443	\$93	\$537					
11	LEVEES & FLOODWALLS	\$4,097	\$862	21%	\$4,958	0.0%	\$4,097	\$862	\$4,958					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$88	\$18	21%	\$106	0.0%	\$88 \$0	\$18	\$106					
	CONSTRUCTION ESTIMATE TOTALS:	\$4,628	\$974	21%	\$5,601	_	\$4,628	\$974	\$5,601					
01	LANDS AND DAMAGES (FED)	\$48	\$2	5%	\$50	0.0%	\$48	\$2	\$50					
01	LANDS AND DAMAGES (NON-FED)	\$187	\$39	21%	\$226	0.0%	\$187	\$39	\$226					
02	RELOCATIONS	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
30	RELOCATIONS - PED	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
31	RELOCATIONS - CM	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCES - DATA RECOV.	\$19	\$4	21%	\$23	0.0%	\$19	\$4	\$23					
30	PLANNING, ENGINEERING & DESIGN													
1.6%	6 Project Management	\$74	\$16	21%	\$90	0.0%	\$74	\$16	\$90					
1.3%	6 Planning & Environmental Compliance	\$60	\$13	21%	\$73	0.0%	\$60	\$13	\$73					
5.6%	6 Engineering & Design	\$259	\$54	21%	\$313	0.0%	\$259	\$54	\$313					
0.3%		\$14	\$3	21%	\$17	0.0%	\$14	\$3	\$17					
0.39	Life Cycle Updates (cost, schedule, risks)	\$14	\$3	21%	\$17	0.0%	\$14	\$3	\$17					
1.39	0 . 0 .	\$60	\$13	21%	\$73	0.0%	\$60	\$13	\$73					
2.0%	0 0 0	\$93	\$20	21%	\$113	0.0%	\$93	\$20	\$113					
1.3%	6 Planning During Construction	\$60	\$13	21%	\$73	0.0%	\$60	\$13	\$73					
1.3%	6 Project Operations	\$60	\$13	21%	\$73	0.0%	\$60	\$13	\$73					
31	CONSTRUCTION MANAGEMENT													
5.9%	6 Construction Management	\$273	\$57	21%	\$330	0.0%	\$273	\$57	\$330					
1.29	6 Project Operation:	\$56	\$12	21%	\$68	0.0%	\$56	\$12	\$68					
1.4%	6 Project Management	\$65	\$14	21%	\$79	0.0%	\$65	\$14	\$79					
	CONTRACT COST TOTALS:	\$5,970	\$1,248		\$7,218		\$5,970	\$1,248	\$7,218					

PROJECT: American River Common Features GRR - Alt2

LOCATION: Sacramento, CA

This Estimate reflects the scope and schedule in report;

Draft Feasibility Report

DISTRICT: SPK - Sacramento District

POC: CHIEF, COST ENGINEERING, Jeremiah Frost

Civi	Civil Works Work Breakdown Structure			D COST 00s)			(Constant	FIRST COST Dollar Basis (1000s)			TOTAL PRO	OJECT COST (FULLY I (in \$1000s)	FUNDED)	
			ate Prepared: re Price Leve		<b>10/1/2014</b> 10/1/2014		ogram Year (Bu		2015 1 OCT 14		FU	LLY FUNDED PROJEC	T ESTIMATE	
WBS	Civil Works	COST	CNTG	CNTG	TOTAL	ESC	COST	CNTG	TOTAL	Mid-Point	ESC	COST	CNTG	FULL
NUMBER A	Feature & Sub-Feature Description  B	(\$K) <b>C</b>	(\$K)	(%) <b>E</b>	(\$K) <b>F</b>		(\$K) <b>H</b>	(\$K)	(\$K)	Date P	_(%) 	(\$K)	(\$K) <b>N</b>	(\$K) <b>O</b>
	ARN - Reach C	· ·	-	_	•			•	ŭ		-	•••		Ū
06	FISH & WILDLIFE FACILITIES	\$34	\$7	21%	\$42	0.0%	\$34	\$7	\$42					
11	LEVEES & FLOODWALLS	\$7,285	\$1,533	21%	\$8,818	0.0%	\$7,285	\$1,533	\$8,818					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$156	\$33	21%	\$189	0.0%	\$156 \$0	\$33	\$189					
	CONSTRUCTION ESTIMATE TOTALS:	\$7,476	\$1,573	21%	\$9,048	-	\$7,476	\$1,573	\$9,048					
01	LANDS AND DAMAGES (FED)	\$48	\$2	5%	\$50	0.0%	\$48	\$2	\$50					
01	LANDS AND DAMAGES (NON-FED)	\$341	\$115	34%	\$456	0.0%	\$341	\$115	\$456					
02	RELOCATIONS	\$725	\$152	21%	\$877	0.0%	\$725	\$152	\$877					
30	RELOCATIONS - PED	\$181	\$38	21%	\$219	0.0%	\$181	\$38	\$219					
31	RELOCATIONS - CM	\$72	\$15	21%	\$88	0.0%	\$72	\$15	\$88					
18	CULTURAL RESOURCES - DATA RECOV.	\$34	\$7	21%	\$42	0.0%	\$34	\$7	\$42					
30	PLANNING, ENGINEERING & DESIGN													
1.6%	, ,	\$120	\$25	21%	\$145	0.0%	\$120	\$25	\$145					
1.3%		\$97	\$20	21%	\$117	0.0%	\$97	\$20	\$117					
5.6%	0 0	\$419	\$88	21%	\$507	0.0%	\$419	\$88	\$507					
0.3%		\$22	\$5	21%	\$27	0.0%	\$22	\$5	\$27					
0.3%		\$22	\$5	21%	\$27	0.0%	\$22	\$5	\$27					
1.3% 2.0%	0 . 0 .	\$97 \$150	\$20 \$32	21% 21%	\$117 \$182	0.0%	\$97 \$150	\$20 \$32	\$117 \$182					
1.3%	0 0	\$150 \$97	\$32 \$20	21%	\$102 \$117	0.0%	\$150 \$97	\$32 \$20	\$102 \$117					
1.3%		\$97 \$97	\$20	21%	\$117 \$117	0.0%	\$97 \$97	\$20	\$117					
31	CONSTRUCTION MANAGEMENT													
5.9%	Construction Management	\$441	\$93	21%	\$534	0.0%	\$441	\$93	\$534					
1.2%	6 Project Operation:	\$90	\$19	21%	\$109	0.0%	\$90	\$19	\$109					
1.4%	6 Project Management	\$105	\$22	21%	\$127	0.0%	\$105	\$22	\$127					
	CONTRACT COST TOTALS:	\$10,633	\$2,273		\$12,907		\$10,633	\$2,273	\$12,907					

#### \*\*\*\* CONTRACT COST SUMMARY \*\*\*\*

PROJECT: American River Common Features GRR - Alt2

LOCATION: Sacramento, CA
This Estimate reflects the scope and schedule in report;

ort; Draft Feasibility Report

DISTRICT: SPK - Sacramento District

POC: CHIEF, COST ENGINEERING, Jeremiah Frost

PREPARED: 12/19/2014

Printed:12/19/2014 Page 12 of 18

Civi	l Works Work Breakdown Structure		ESTIMATEI (in \$100				(Constant	FIRST COS Dollar Basis (1000s)			TOTAL PRO	JECT COST (FULLY FI (in \$1000s)	JNDED)	
			ate Prepared: re Price Level		<b>10/1/2014</b> 10/1/2014		am Year (Budge ive Price Level I		2015 1 OCT 14					
			RI	SK BASED										
WBS	Civil Works	COST	CNTG	CNTG	TOTAL	ESC	COST	CNTG	TOTAL	Mid-Point	ESC	COST	CNTG	FULL
NUMBER	Feature & Sub-Feature Description	_(\$K)	_(\$K)_	<u>(%)</u>	_(\$K)	_(%)	(\$K)	_(\$K)	_(\$K)	Date P		_(\$K)	<u>(\$K)</u>	(\$K)
Α	B ARN - Reach D	С	D	E	F	G			J	Ρ	L	М	N	0
06	FISH & WILDLIFE FACILITIES	\$34	\$7	21%	\$42	0.0%	\$34	\$7	\$42					
11	LEVEES & FLOODWALLS	\$18,045	\$3,796	21%	\$21,841	0.0%	\$18,045	\$3,796	\$21,841					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$463	\$97	21%	\$560	0.0%	\$463	\$97	\$560					
							\$0							
	CONSTRUCTION ESTIMATE TOTALS:	\$18,542	\$3,901	21%	\$22,443	_	\$18,542	\$3,901	\$22,443					
01	LANDS AND DAMAGES (FED)	<b>#</b> 005	005	50/	0700	0.00/	<b>#</b> 005	005	<b>#700</b>					
01 01	LANDS AND DAMAGES (NON-FED)	\$665	\$35	5%	\$700	0.0%	\$665	\$35	\$700					
	RELOCATIONS	\$2,285	\$370	16%	\$2,655	0.0%	\$2,285	\$370	\$2,655					
02	RELOCATIONS - PED	\$4,120	\$867	21%	\$4,987	0.0%	\$4,120	\$867	\$4,987					
30 31	RELOCATIONS - CM	\$1,030	\$217	21%	\$1,247	0.0%	\$1,030	\$217	\$1,247					
31 18	CULTURAL RESOURCES - DATA RECOV.	\$412 \$102	\$87 \$21	21% 21%	\$499 \$124	0.0% 0.0%	\$412 \$102	\$87 \$21	\$499 \$124					
10		Ψ102	ΨΖΙ	2170	<b>\$12</b> 4	0.078	Ψ102	Ψ21	Ψ124					
30	PLANNING, ENGINEERING & DESIGN													
1.6%	6 Project Management	\$297	\$62	21%	\$359	0.0%	\$297	\$62	\$359					
1.3%	6 Planning & Environmental Compliance	\$241	\$51	21%	\$292	0.0%	\$241	\$51	\$292					
5.6%	0 0	\$1,038	\$218	21%	\$1,256	0.0%	\$1,038	\$218	\$1,256					
0.3%		\$56	\$12	21%	\$68	0.0%	\$56	\$12	\$68					
0.3%		\$56	\$12	21%	\$68	0.0%	\$56	\$12	\$68					
1.3%	0 . 0 .	\$241	\$51	21%	\$292	0.0%	\$241	\$51	\$292					
2.0%	0 0	\$371	\$78	21%	\$449	0.0%	\$371	\$78	\$449					
1.3%	5 5	\$241	\$51	21%	\$292	0.0%	\$241	\$51	\$292					
1.3%	6 Project Operations	\$241	\$51	21%	\$292	0.0%	\$241	\$51	\$292					
31	CONSTRUCTION MANAGEMENT													
5.9%	6 Construction Management	\$1,094	\$230	21%	\$1,324	0.0%	\$1,094	\$230	\$1,324					
1.2%		\$223	\$47	21%	\$270	0.0%	\$223	\$47	\$270					
1.4%	6 Project Management	\$260	\$55	21%	\$315	0.0%	\$260	\$55	\$315					
	CONTRACT COST TOTALS:	\$31,515	\$6,414		\$37,929		\$31,515	\$6,414	\$37,929					

#### \*\*\*\* CONTRACT COST SUMMARY \*\*\*\*

PROJECT: American River Common Features GRR - Alt2 LOCATION: Sacramento, CA

This Estimate reflects the scope and schedule in report; Draft Feasibility Report DISTRICT: SPK - Sacramento District

PREPARED: 12/19/2014

Printed:12/19/2014 Page 13 of 18

POC:	CHIEF, COST ENGINEERING, Jeremiah Frost	

Civil	Works Work Breakdown Structure		ESTIMATEI (in \$100				(Constan	FIRST COS Dollar Basi: \$1000s)			TOTAL PRO	OJECT COST (FULLY F (in \$1000s)	JNDED)	
			ate Prepared: /e Price Level	l:	<b>10/1/2014</b> 10/1/2014		ım Year (Budge ive Price Level		2015 1 OCT 14					
WBS <u>NUMBER</u> <b>A</b>	Civil Works Feature & Sub-Feature Description  B	COST (\$K) <b>C</b>	CNTG (\$K) <b>D</b>	CNTG _(%) <i>E</i>	TOTAL _(\$K)	ESC (%) <b>G</b>	COST _(\$K)_ <i>H</i>	CNTG (\$K)	TOTAL (\$K) J	Mid-Point <u>Date</u>	ESC (%) <i>L</i>	COST _(\$K) <b>M</b>	CNTG (\$K) N	FULL (\$K) <b>O</b>
^	ARN - Reach E	Ü	,	-	•	"	.,	•	•	,	_	III	"	Ŭ
06	FISH & WILDLIFE FACILITIES	\$119	\$25	21%	\$145	0.0%	\$119	\$25	\$145					
10	BREAKWATER & SEAWALLS	\$18,497	\$3,891	21%	\$22,389	0.0%	\$18,497	\$3,891	\$22,389					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$540	\$114	21%	\$654	0.0%	\$540 \$0	\$114	\$654					
	CONSTRUCTION ESTIMATE TOTALS:	\$19,157	\$4,030	21%	\$23,187	=	\$19,157	\$4,030	\$23,187					
01	LANDS AND DAMAGES (FED)	\$974	\$51	5%	\$1,025	0.0%	\$974	\$51	\$1,025					
01	LANDS AND DAMAGES (NON-FED)	\$3,351	\$543	16%	\$3,894	0.0%	\$3,351	\$543	\$3,894					
02	RELOCATIONS	\$6,453	\$1,357	21%	\$7,810	0.0%	\$6,453	\$1,357	\$7,810					
30	RELOCATIONS - PED	\$1,613	\$339	21%	\$1,953	0.0%	\$1,613	\$339	\$1,953					
31	RELOCATIONS - CM	\$645	\$136	21%	\$781	0.0%	\$645	\$136	\$781					
18	CULTURAL RESOURCES - DATA RECOV.	\$119	\$25	21%	\$144	0.0%	\$119	\$25	\$144					
30	PLANNING, ENGINEERING & DESIGN													
1.6%	Project Management	\$307	\$65	21%	\$372	0.0%	\$307	\$65	\$372					
1.3%		\$249	\$52	21%	\$301	0.0%	\$249	\$52	\$301					
5.6%	0 0	\$1,073	\$226	21%	\$1,299	0.0%	\$1,073	\$226	\$1,299					
0.3%		\$57	\$12	21%	\$69	0.0%	\$57	\$12	\$69					
0.3%		\$57	\$12	21%	\$69	0.0%	\$57	\$12	\$69					
1.3%	0 . 0 .	\$249	\$52	21%	\$301	0.0%	\$249	\$52	\$301					
2.0% 1.3%	0 0	\$383 \$249	\$81 \$52	21% 21%	\$464 \$301	0.0% 0.0%	\$383 \$249	\$81 \$52	\$464 \$301					
1.3%	5 5	\$249 \$249	\$52 \$52	21%	\$301	0.0%	\$249 \$249	\$52 \$52	\$301					
31	CONSTRUCTION MANAGEMENT													
5.9%	ŭ	\$1,130	\$238	21%	\$1,368	0.0%	\$1,130	\$238	\$1,368					
1.2%	, ,	\$230	\$48	21%	\$278	0.0%	\$230	\$48	\$278					
1.4%	Project Management	\$268	\$56	21%	\$324	0.0%	\$268	\$56	\$324					
	CONTRACT COST TOTALS:	\$36,813	\$7,429		\$44,242		\$36,813	\$7,429	\$44,242					

#### \*\*\*\* CONTRACT COST SUMMARY \*\*\*\*

PROJECT: American River Common Features GRR - Alt2

LOCATION: Sacramento, CA

 DISTRICT: SPK - Sacramento District

POC: CHIEF, COST ENGINEERING, Jeremiah Frost

amento District PREPARED: 12/19/2014

Printed:12/19/2014 Page 14 of 18

Civil	Works Work Breakdown Structure		ESTIMATEI (in \$100				(Constant	FIRST COS Dollar Basis 1000s)			TOTAL PRO	OJECT COST (FULLY FU (in \$1000s)	NDED)
			ate Prepared: ve Price Level		<b>10/1/2014</b> 10/1/2014		ım Year (Budge ive Price Level I		2015 1 OCT 14				
WBS NUMBER <b>A</b>	Civil Works Feature & Sub-Feature Description B	COST (\$K) <b>C</b>	CNTG _(\$K) <b>D</b>	CNTG _(%) <i>E</i>	TOTAL _(\$K)_ <b>F</b>	ESC (%) <b>G</b>	COST _(\$K)_ <i>H</i>	CNTG _(\$K)	TOTAL _(\$K)	Mid-Point <u>Date</u> P	ESC _(%)	COST _(\$K) <b>M</b>	CNTG FULL (\$K) (\$K) N O
	ARN - Reach F												
06	FISH & WILDLIFE FACILITIES	\$34	\$7	21%	\$42	0.0%	\$34	\$7	\$42				
11	LEVEES & FLOODWALLS	\$20,946	\$4,407	21%	\$25,353	0.0%	\$20,946	\$4,407	\$25,353				
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0				
16	BANK STABILIZATION	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0				
18	CULTURAL RESOURCE PRESERVATION	\$505	\$106	21%	\$612	0.0%	\$505 \$0	\$106	\$612				
	CONSTRUCTION ESTIMATE TOTALS:	\$21,486	\$4,520	21%	\$26,006	_	\$21,486	\$4,520	\$26,006				
01	LANDS AND DAMAGES (FED)	\$71	\$4	5%	\$75	0.0%	\$71	\$4	\$75				
01	LANDS AND DAMAGES (NON-FED)	\$385	\$150	39%	\$535	0.0%	\$385	\$150	\$535				
02	RELOCATIONS	\$5,419	\$1,140	21%	\$6,559	0.0%	\$5,419	\$1,140	\$6,559				
30	RELOCATIONS - PED	\$1,355	\$285	21%	\$1,640	0.0%	\$1,355	\$285	\$1,640				
31	RELOCATIONS - CM	\$542	\$114	21%	\$656	0.0%	\$542	\$114	\$656				
18	CULTURAL RESOURCES - DATA RECOV.	\$111	\$23	21%	\$135	0.0%	\$111	\$23	\$135				
30	PLANNING, ENGINEERING & DESIGN												
1.6%	-	\$344	\$72	21%	\$416	0.0%	\$344	\$72	\$416				
1.3%	, ,	\$279	\$59	21%	\$338	0.0%	\$279	\$59	\$338				
5.6%		\$1,203	\$253	21%	\$1,456	0.0%	\$1,203	\$253	\$1,456				
0.3%	Reviews, ATRs, IEPRs, VE	\$64	\$13	21%	\$77	0.0%	\$64	\$13	\$77				
0.3%	Life Cycle Updates (cost, schedule, risks)	\$64	\$13	21%	\$77	0.0%	\$64	\$13	\$77				
1.3%	Contracting & Reprographics	\$279	\$59	21%	\$338	0.0%	\$279	\$59	\$338				
2.0%	Engineering During Construction	\$430	\$90	21%	\$520	0.0%	\$430	\$90	\$520				
1.3%	Planning During Construction	\$279	\$59	21%	\$338	0.0%	\$279	\$59	\$338				
1.3%	Project Operations	\$279	\$59	21%	\$338	0.0%	\$279	\$59	\$338				
31	CONSTRUCTION MANAGEMENT												
5.9%	Construction Management	\$1,268	\$267	21%	\$1,535	0.0%	\$1,268	\$267	\$1,535				
1.2%	Project Operation:	\$258	\$54	21%	\$312	0.0%	\$258	\$54	\$312				
1.4%	Project Management	\$301	\$63	21%	\$364	0.0%	\$301	\$63	\$364				
	CONTRACT COST TOTALS:	\$34,417	\$7,298		\$41,715		\$34,417	\$7,298	\$41,715				

#### \*\*\*\* CONTRACT COST SUMMARY \*\*\*\*

PROJECT: American River Common Features GRR - Alt2

LOCATION: Sacramento, CA

This Estimate reflects the scope and schedule in report;

Draft Feasibility Report

DISTRICT: SPK - Sacramento District

POC: CHIEF, COST ENGINEERING, Jeremiah Frost

District PREPARED: 12/19/2014

Civil	Works Work Breakdown Structure		ESTIMATE (in \$100	00s)			(Constant	FIRST COS Dollar Basis (1000s)	s)		TOTAL PRO	JECT COST (FULLY F (in \$1000s)	FUNDED)	
			ate Prepared:		10/1/2014		rogram Year (Bi	,	2015				T = 0.T.M. T.F.	
		Effectiv	e Price Leve	l:	10/1/2014	E	Effective Price L	evel Date:	1 OCT 14		FUL	LLY FUNDED PROJEC	LESTIMATE	
WBS	Civil Works	COST	CNTG	CNTG	TOTAL	ESC	COST	CNTG	TOTAL	Mid-Point	ESC	COST	CNTG	FULL
NUMBER	Feature & Sub-Feature Description	_(\$K)	(\$K)	_(%)_	_(\$K)	_(%)	_(\$K)	_(\$K)	_(\$K)	<u>Date</u>	_(%)	_(\$K)_	_(\$K)	_(\$K)
Α	B ARN - Reach G	С	D	E	F	G	н	1	J	P	L	М	N	0
06	FISH & WILDLIFE FACILITIES	\$34	\$7	21%	\$42	0.0%	\$34	\$7	\$42					
11	LEVEES & FLOODWALLS	\$7,394	\$1,555	21%	\$8,949	0.0%	\$7,394	\$1,555	\$8,949					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$218	\$46	21%	\$263	0.0%	\$218	\$46	\$263					
							\$0							
	CONSTRUCTION ESTIMATE TOTALS:	\$7,646	\$1,609	21%	\$9,254	_	\$7,646	\$1,609	\$9,254					
01	LANDS AND DAMAGES (FED)	\$285	\$15	5%	\$300	0.0%	\$285	\$15	\$300					
01	LANDS AND DAMAGES (NON-FED)	\$840	\$89	11%	\$929	0.0%	\$840	\$89	\$929					
02	RELOCATIONS	\$3,116	\$656	21%	\$3,772	0.0%	\$3,116	\$656	\$3,772					
30	RELOCATIONS - PED	\$779	\$164	21%	\$943	0.0%	\$779	\$164	\$943					
31	RELOCATIONS - CM	\$312	\$66	21%	\$377	0.0%	\$312	\$66	\$377					
18	CULTURAL RESOURCES - DATA RECOV.	\$48	\$10	21%	\$58	0.0%	\$48	\$10	\$58					
30	PLANNING, ENGINEERING & DESIGN													
1.6%	Project Management	\$122	\$26	21%	\$148	0.0%	\$122	\$26	\$148					
1.3%	Planning & Environmental Compliance	\$99	\$21	21%	\$120	0.0%	\$99	\$21	\$120					
5.6%	Engineering & Design	\$428	\$90	21%	\$518	0.0%	\$428	\$90	\$518					
0.3%	Reviews, ATRs, IEPRs, VE	\$23	\$5	21%	\$28	0.0%	\$23	\$5	\$28					
0.3%	Life Cycle Updates (cost, schedule, risks)	\$23	\$5	21%	\$28	0.0%	\$23	\$5	\$28					
1.3% 2.0%	Contracting & Reprographics Engineering During Construction	\$99 \$153	\$21 \$32	21% 21%	\$120 \$185	0.0%	\$99 \$153	\$21 \$32	\$120 \$185					
1.3%	Planning During Construction	\$153	\$32 \$21	21%	\$100 \$120	0.0%	\$99	\$32 \$21	\$165 \$120					
1.3%		\$99	\$21	21%	\$120	0.0%	\$99	\$21	\$120					
31	CONSTRUCTION MANAGEMENT													
5.9%		\$451	\$95	21%	\$546	0.0%	\$451	\$95	\$546					
1.2%	Project Operation:	\$92	\$19	21%	\$111	0.0%	\$92	\$19	\$111					
1.4%	* •	\$107	\$23	21%	\$130	0.0%	\$107	\$23	\$130					
	CONTRACT COST TOTALS:	\$14,821	\$2,985		\$17,806		\$14,821	\$2,985	\$17,806					

PROJECT: American River Common Features GRR - Alt2

LOCATION: Sacramento, CA

This Estimate reflects the scope and schedule in report; Draft Feasibility Report DISTRICT: SPK - Sacramento District

PREPARED: 12/19/2014 POC: CHIEF, COST ENGINEERING, Jeremiah Frost

Civi	Civil Works Work Breakdown Structure		ESTIMATE (in \$10				(Constan	T FIRST COS it Dollar Basi: \$1000s)				T COST (FULLY FU in \$1000s)	JNDED)		
		Estimate Prepared: 10/1/2014 Effective Price Level: 10/1/2014					Program Year (E Effective Price		2015 1 OCT 14	FULLY FUNDED PROJECT ESTIMATE					
WBS	Civil Works	COST	CNTG	CNTG	TOTAL	ESC	COST	CNTG	TOTAL	Mid-Point	ESC	COST	CNTG	FULL	
NUMBER <b>A</b>	Feature & Sub-Feature Description  B	(\$K) <b>C</b>	_(\$K)	_(%) E	(\$K)	_(%) <b>G</b>	(\$K)	_(\$K)	_(\$K) <b>J</b>	<u>Date</u> <b>P</b>	_(%) <b>L</b>	_(\$K)_ <b>M</b>	_(\$K)	(\$K) <b>O</b>	
	ARN - Reach H														
06	FISH & WILDLIFE FACILITIES	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0	
11	LEVEES & FLOODWALLS	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0	
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0	
16	BANK STABILIZATION	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0	
18	CULTURAL RESOURCE PRESERVATION	\$0	\$0	21%	\$0	0.0%	\$0 \$0	\$0	\$0	0	0.0%	\$0	\$0	\$0	
	CONSTRUCTION ESTIMATE TOTALS:	\$0	\$0	0%	\$0	=	\$0	\$0	\$0			\$0	\$0	\$0	
01	LANDS AND DAMAGES (FED)	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0	
01	LANDS AND DAMAGES (NON-FED)	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0	
02	RELOCATIONS	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0	
30	RELOCATIONS - PED	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0	
31	RELOCATIONS - CM	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0	
18	CULTURAL RESOURCES - DATA RECOV.	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0	
30	PLANNING, ENGINEERING & DESIGN														
1.6%	6 Project Management	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0	
1.3%	6 Planning & Environmental Compliance	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0	
5.6%	0 0	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0	
0.3%		\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0	
0.3%		\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0	
1.3%	0 . 0 .	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0	
2.0%	5 5 5	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0	
1.3%	0 0	\$0 \$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0 \$0	
1.3%	6 Project Operations	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0	
31	CONSTRUCTION MANAGEMENT														
5.9%	6 Construction Management	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0	
1.2%	6 Project Operation:	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0	
1.4%	6 Project Management	\$0	\$0	0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0	
	CONTRACT COST TOTALS:	\$0	\$0		\$0		\$0	\$0	\$0			\$0	\$0	\$0	

#### \*\*\*\* CONTRACT COST SUMMARY \*\*\*\*

PROJECT: American River Common Features GRR - Alt2

LOCATION: Sacramento, CA

This Estimate reflects the scope and schedule in report; Draft Feasibility Report DISTRICT: SPK - Sacramento District

PREPARED: 12/19/2014

Printed:12/19/2014 Page 17 of 18

POC: CHIEF, COST ENGINEERING, Jeremiah Frost

Civi	Works Work Breakdown Structure		ESTIMATE (in \$10				(Constant	FIRST COS Dollar Basi: \$1000s)			TOTAL PRO	DJECT COST (FULLY F (in \$1000s)	UNDED)	
			ate Prepared re Price Leve		<b>10/1/2014</b> 10/1/2014		rogram Year (B Effective Price L		2015 1 OCT 14		FUI	LLY FUNDED PROJECT	T ESTIMATE	
WBS <u>NUMBER</u> <b>A</b>	Civil Works Feature & Sub-Feature Description B  ARN - Reach I	COST _(\$K) 	CNTG _(\$K) 	CNTG _(%) <i>E</i>	TOTAL _(\$K) <i>F</i>	ESC (%) <b>G</b>	COST _(\$K) <i>H</i>	CNTG _(\$K)	TOTAL _(\$K) 	Mid-Point <u>Date</u> <b>P</b>	ESC _(%) 	COST _(\$K) M	CNTG (\$K) <b>N</b>	FULL (\$K) <b>O</b>
06	FISH & WILDLIFE FACILITIES	\$34	\$7	21%	\$42	0.0%	\$34	\$7	\$42					
11	LEVEES & FLOODWALLS	\$4,198	\$883	21%	\$5,081	0.0%	\$4,198	\$883	\$5,081					
15	FLOODWAY CONTROL & DIVERSION STRU	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
16	BANK STABILIZATION	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCE PRESERVATION	\$386	\$81	21%	\$467	0.0%	\$386	\$81	\$467					
	ODETOTIVE RECOGNOST RECERVITION	φοσο	ΨΟΊ	2170	ψ-101	0.070	\$0	ΨΟΊ	ΨΨΟΙ					
	CONSTRUCTION ESTIMATE TOTALS:	\$4,618	\$972	21%	\$5,590	_	\$4,618	\$972	\$5,590					
01	LANDS AND DAMAGES (FED)	\$713	\$38	5%	\$750	0.0%	\$713	\$38	\$750					
01	LANDS AND DAMAGES (NON-FED)	\$19,780	\$11,750	59%	\$31,530	0.0%	\$19,780	\$11,750	\$31,530					
02	RELOCATIONS	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
30	RELOCATIONS - PED	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
31	RELOCATIONS - CM	\$0	\$0	21%	\$0	0.0%	\$0	\$0	\$0					
18	CULTURAL RESOURCES - DATA RECOV.	\$85	\$18	21%	\$103	0.0%	\$85	\$18	\$103					
30	PLANNING, ENGINEERING & DESIGN													
1.6%	Project Management	\$74	\$16	21%	\$90	0.0%	\$74	\$16	\$90					
1.3%	Planning & Environmental Compliance	\$60	\$13	21%	\$73	0.0%	\$60	\$13	\$73					
5.6%	Engineering & Design	\$259	\$54	21%	\$313	0.0%	\$259	\$54	\$313					
0.3%	Reviews, ATRs, IEPRs, VE	\$14	\$3	21%	\$17	0.0%	\$14	\$3	\$17					
0.3%	; Life Cycle Updates (cost, schedule, risks)	\$14	\$3	21%	\$17	0.0%	\$14	\$3	\$17					
1.3%		\$60	\$13	21%	\$73	0.0%	\$60	\$13	\$73					
2.0%	5 5 5	\$92	\$19	21%	\$111	0.0%	\$92	\$19	\$111					
1.3%	Planning During Construction	\$60	\$13	21%	\$73	0.0%	\$60	\$13	\$73					
1.3%	Project Operations	\$60	\$13	21%	\$73	0.0%	\$60	\$13	\$73					
31	CONSTRUCTION MANAGEMENT													
5.9%	Construction Management	\$272	\$57	21%	\$329	0.0%	\$272	\$57	\$329					
1.2%	Project Operation:	\$55	\$12	21%	\$67	0.0%	\$55	\$12	\$67					
1.4%	5 Project Management	\$65	\$14	21%	\$79	0.0%	\$65	\$14	\$79					
	CONTRACT COST TOTALS:	\$26,280	\$13,006		\$39,286		\$26,280	\$13,006	\$39,286					

PROJECT: American River Common Features GRR - Alt2

LOCATION: Sacramento, CA

This Estimate reflects the scope and schedule in report; Draft Feasibility Report DISTRICT: SPK - Sacramento District

PREPARED: 12/19/2014

POC: CHIEF, COST ENGINEERING, Jeremiah Frost

Civi	l Works Work Breakdown Structure		ESTIMATE (in \$10				(Constant	FIRST COS Dollar Basis 1000s)			TOTAL PRO	OJECT COST (FULLY (in \$1000s)	FUNDED)	
			ate Prepared re Price Leve		<b>10/1/2014</b> 10/1/2014		rogram Year (B Effective Price L		2015 1 OCT 14		FULLY FUNDED PROJECT ESTIMATE			
WBS NUMBER A	Civil Works Feature & Sub-Feature Description <b>B</b>	COST (\$K) <b>C</b>	CNTG _(\$K) 	CNTG _(%) <i>E</i>	TOTAL _(\$K) <i>F</i>	ESC (%) <b>G</b>	COST (\$K) H	CNTG _(\$K) 	TOTAL _(\$K) 	Mid-Point <u>Date</u> <b>P</b>	ESC (%) <i>L</i>	COST (\$K) M	CNTG (\$K) <b>N</b>	FULL (\$K) <b>O</b>
0/	Sac Bypass Widening	040.000	00.505	0.407	044.505	0.00/	040.000	<b>#0.505</b>	011505					
06 11	FISH & WILDLIFE FACILITIES LEVEES & FLOODWALLS	\$12,000	\$2,525 \$13.888	21% 21%	\$14,525 \$79.904	0.0%	\$12,000	\$2,525	\$14,525					
11 15	FLOODWAY CONTROL & DIVERSION STRUC	\$66,016		21% 21%		0.0%	\$66,016	\$13,888	\$79,904					
16		\$44,336	\$9,327 \$0		\$53,664 \$0		\$44,336	\$9,327 \$0	\$53,664 \$0					
18	BANK STABILIZATION	\$0		21%		0.0%	\$0							
18	CULTURAL RESOURCE PRESERVATION	\$2,612	\$550	21%	\$3,162	0.0%	\$2,612 \$0	\$550	\$3,162					
	CONSTRUCTION ESTIMATE TOTALS:	\$124,964	\$26,290	21%	\$151,254	-	\$124,964	\$26,290	\$151,254					
01	LANDS AND DAMAGES (FED)	\$238	\$12	5%	\$250	0.0%	\$238	\$12	\$250					
01	LANDS AND DAMAGES (NON-FED)	\$3,379	\$1,371	41%	\$4,750	0.0%	\$3,379	\$1,371	\$4,750					
02	RELOCATIONS	\$14,394	\$3,028	21%	\$17,422	0.0%	\$14,394	\$3,028	\$17,422					
30	RELOCATIONS - PED	\$3,598	\$757	21%	\$4,355	0.0%	\$3,598	\$757	\$4,355					
31	RELOCATIONS - CM	\$1,439	\$303	21%	\$1,742	0.0%	\$1,439	\$303	\$1,742					
18	CULTURAL RESOURCES - DATA RECOV.	\$576	\$121	21%	\$698	0.0%	\$576	\$121	\$698					
30	PLANNING, ENGINEERING & DESIGN													
1.6%	6 Project Management	\$1,999	\$421	21%	\$2,420	0.0%	\$1,999	\$421	\$2,420					
1.3%	6 Planning & Environmental Compliance	\$1,625	\$342	21%	\$1,967	0.0%	\$1,625	\$342	\$1,967					
5.6%	Engineering & Design	\$6,998	\$1,472	21%	\$8,470	0.0%	\$6,998	\$1,472	\$8,470					
0.3%		\$375	\$79	21%	\$454	0.0%	\$375	\$79	\$454					
0.3%	Life Cycle Updates (cost, schedule, risks)	\$375	\$79	21%	\$454	0.0%	\$375	\$79	\$454					
1.3%	0 . 0 .	\$1,625	\$342	21%	\$1,967	0.0%	\$1,625	\$342	\$1,967					
2.0%	0 0	\$2,499	\$526	21%	\$3,025	0.0%	\$2,499	\$526	\$3,025					
1.3%	3 - 3	\$1,625	\$342	21%	\$1,967	0.0%	\$1,625	\$342	\$1,967					
1.3%	6 Project Operations	\$1,625	\$342	21%	\$1,967	0.0%	\$1,625	\$342	\$1,967					
31	CONSTRUCTION MANAGEMENT													
5.9%		\$7,373	\$1,551	21%	\$8,924	0.0%	\$7,373	\$1,551	\$8,924					
1.2%	6 Project Operation:	\$1,500	\$316	21%	\$1,816	0.0%	\$1,500	\$316	\$1,816					
1.4%	6 Project Management	\$1,750	\$368	21%	\$2,118	0.0%	\$1,750	\$368	\$2,118					
	CONTRACT COST TOTALS:	\$177,958	\$38,061		\$216,019		\$177,958	\$38,061	\$216,019					