









SH 7 PEL Study Estimate of Conceptual Project Costs Summary of Segment 1	 SH 7 PEL Planning Environmental Linkage Study
	Date Prepared: May 8, 2013

			Notes
^{1a} SH 7 (960' total; each side of Iowa Avenue)	738,000		Urban Typical Section
^{1b} SH 7 (Burlington Avenue to 119th/120th Street)	2,798,000		Urban Typical Section
Total for Segment 1	\$3,536,000		

SH 7 PEL Study Estimate of Conceptual Project Costs 960' total; each side of Iowa Avenue	 SH 7 PEL Planning Environmental Linkage Study
	Date Prepared: May 8, 2013

Input Factors			Notes
¹ Length of Improvements	LF	960	
² Approximate Width of Widening (North Side)	Feet	7	
³ Approximate Width of Widening (South Side)	Feet	7	
⁴ Approximate Width of Proposed ROW (North Side)	Feet	0	
⁵ Approximate Width of Proposed ROW (South Side)	Feet	0	
⁶ Number of Major Drainageways	#	0	
⁷ Required Bridge Widening	SF	0	
⁸ Number of Signalized Intersections	#	0	

Output Factors		(In 2012\$)	Notes
⁸ Urban Typical Section Project Costs		\$738,000	Preferred Typical Section
⁹ Rural Typical Section Project Costs		\$457,000	

SH 7 PEL Study
Estimate of Conceptual Project Costs
Urban Typical Section w/ Curb & Gutter

SH 7 PEL
 Planning Environmental Linkage Study

Date Prepared: **May 8, 2013**

Item	Unit Cost	Quantity	Extended Cost	Notes	
1 Earthwork	CY	\$12.33	0	\$0	
2 Aggregate Base Course (Class 6)	TON	\$15.45	894	\$13,809	12-Inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	\$61.56	986	\$60,674	12" Depth - Widening / 2" Overlay - Existing
4 Curb and Gutter	LF	\$21.30	3,840	\$81,792	Includes Median & Outside Edge C&G
5 Concrete Sidewalk	SY	\$29.84	2,133	\$63,659	10-Foot Shared Use Path
6 Concrete Box Culvert	Each	\$500,000.00	0	\$0	181-Foot Length (\$2,700/lf Unit Price)
7 Bridge Widening	SF	\$125.00	0	\$0	
8 Traffic Signal	Each	\$250,000.00	0	\$0	
9				\$0	
10				\$0	
Total Major Items			\$220,000		

		% of Major Item Cost			
Total Major Items				\$220,000 A	
Drainage / Utilities	% of A	12.3%	\$28,000	B-1	
Environmental	% of A	9.6%	\$22,000	B-2	
Miscellaneous	% of A	2.7%	\$6,000	B-3	
Mobilization	% of A	15.4%	\$34,000	B-4	
Removals / Resets	% of A	13.0%	\$29,000	B-5	
Roadway	% of A	7.0%	\$16,000	B-6	
Signing and Striping	% of A	5.0%	\$11,000	B-7	
Traffic / Lighting / ITS	% of A	10.8%	\$24,000	B-8	
Traffic Control / Detour	% of A	20.6%	\$46,000	B-9	
Structural - Minor Structures / Walls	% of A	5.5%	\$13,000	B-10	
Bid Force Accounts	% of A	0.4%	\$1,000	B-11	
Total of Bid Construction Items			\$450,000	B	
Force Account - Misc.	% of B	6.8%	\$31,000	C-1	
Minor Contract Revisions	% of B	7.7%	\$35,000	C-2	
Total of Bid Construction Items & Force Account Items			\$516,000	C	
Design Engineering	% of C	10.0%	\$52,000	D-1	
Construction Engineering	% of C	17.0%	\$88,000	D-2	
Total Design & Construction Cost			\$656,000	D	
Right-of-Way	0	SF	\$5	\$0	E-1
Utilities	% of D	8.0%	\$53,000	E-2	
Total Project, Design & Construction Cost			\$709,000	E	
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	15.0%	\$29,000	F	
Total Project Cost Estimate			\$738,000	G	

SH 7 PEL Study
Estimate of Conceptual Project Costs
Rural Typical Section w/ Roadside Ditches

SH 7 PEL
 Planning Environmental Linkage Study

Date Prepared: **May 8, 2013**

Item	Unit Cost	Quantity	Extended Cost	Notes	
1 Earthwork	CY	\$12.33	0	\$0	
2 Aggregate Base Course (Class 6)	TON	\$15.45	894	\$13,809	12-Inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	\$61.56	986	\$60,674	12" Depth - Widening / 2" Overlay - Existing
4 Concrete Sidewalk	SY	\$29.84	2,133	\$63,659	10-Foot Shared Use Path
5 Concrete Box Culvert	Each	\$500,000.00	0	\$0	181-Foot Length (\$2,700/lf Unit Price)
6 Bridge Widening	SF	\$125.00	0	\$0	
7 Traffic Signal	Each	\$250,000.00	0	\$0	
8				\$0	
9				\$0	
10				\$0	
Total Major Items			\$139,000		

		% of Major Item Cost			
Total Major Items				\$139,000 A	
Drainage / Utilities	% of A	6.4%	\$9,000	B-1	
Environmental	% of A	9.6%	\$14,000	B-2	
Miscellaneous	% of A	2.7%	\$4,000	B-3	
Mobilization	% of A	15.4%	\$22,000	B-4	
Removals / Resets	% of A	13.0%	\$19,000	B-5	
Roadway	% of A	7.0%	\$10,000	B-6	
Signing and Striping	% of A	5.0%	\$7,000	B-7	
Traffic / Lighting / ITS	% of A	10.8%	\$16,000	B-8	
Traffic Control / Detour	% of A	20.6%	\$29,000	B-9	
Structural - Minor Structures / Walls	% of A	5.5%	\$8,000	B-10	
Bid Force Accounts	% of A	0.4%	\$1,000	B-11	
Total of Bid Construction Items			\$278,000	B	
Force Account - Misc.	% of B	6.8%	\$19,000	C-1	
Minor Contract Revisions	% of B	7.7%	\$22,000	C-2	
Total of Bid Construction Items & Force Account Items			\$319,000	C	
Design Engineering	% of C	10.0%	\$32,000	D-1	
Construction Engineering	% of C	17.0%	\$55,000	D-2	
Total Design & Construction Cost			\$406,000	D	
Right-of-Way	0	SF	\$5	\$0	E-1
Utilities	% of D	8.0%	\$33,000	E-2	
Total Project, Design & Construction Cost			\$439,000	E	
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	15.0%	\$18,000	F	
Total Project Cost Estimate			\$467,000	G	

SH 7 PEL Study Estimate of Conceptual Project Costs from Burlington Avenue to 119th/120th Street	 SH 7 PEL Planning Environmental Linkage Study Date Prepared: May 8, 2013
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Input Factors			Notes
1 Length of Improvements	LF	1,500	
2 Approximate Width of Widening (North Side)	Feet	12	
3 Approximate Width of Widening (South Side)	Feet	15	
4 Approximate Width of Proposed ROW (North Side)	Feet	15	
5 Approximate Width of Proposed ROW (South Side)	Feet	10	
6 Number of Major Drainageways	#	0	
7 Required Bridge Widening	SF	0	
8 Number of Signalized Intersections	#	1	
Output Factors			Notes
		(In 2012\$)	
8 Urban Typical Section Project Costs		\$2,798,000	Preferred Typical Section
9 Rural Typical Section Project Costs		\$2,539,000	

SH 7 PEL Study Estimate of Conceptual Project Costs Urban Typical Section w/ Curb & Gutter	 SH 7 PEL Planning Environmental Linkage Study Date Prepared: May 8, 2013
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Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	3,889	\$47,950	
2 Aggregate Base Course (Class 6)	TON	2,693	\$41,611	12-Inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	3,410	\$209,920	12" Depth - Widening / 2" Overlay - Existing
4 Curb and Gutter	LF	6,000	\$127,800	Includes Median & Outside Edge C&G
5 Concrete Sidewalk	SY	3,333	\$99,467	10-Foot Shared Use Path
6 Concrete Box Culvert	Each	0	\$0	181-Foot Length (\$2,700/lf Unit Price)
7 Bridge Widening	SF	0	\$0	
8 Traffic Signal	Each	1	\$250,000	
9			\$0	
10			\$0	
Total Major Items			\$777,000	

		% of Major Item Cost		
Total Major Items				\$777,000 A
Drainage / Utilities	% of A	12.3%	\$96,000	B-1
Environmental	% of A	9.6%	\$75,000	B-2
Miscellaneous	% of A	2.7%	\$21,000	B-3
Mobilization	% of A	15.4%	\$120,000	B-4
Removals / Resets	% of A	13.0%	\$102,000	B-5
Roadway	% of A	7.0%	\$55,000	B-6
Signing and Striping	% of A	5.0%	\$39,000	B-7
Traffic / Lighting / ITS	% of A	10.8%	\$84,000	B-8
Traffic Control / Detour	% of A	20.6%	\$161,000	B-9
Structural - Minor Structures / Walls	% of A	5.5%	\$43,000	B-10
Bid Force Accounts	% of A	0.4%	\$4,000	B-11
Total of Bid Construction Items			\$1,577,000	B
Force Account - Misc.	% of B	6.8%	\$108,000	C-1
Minor Contract Revisions	% of B	7.7%	\$122,000	C-2
Total of Bid Construction Items & Force Account Items			\$1,807,000	C
Design Engineering	% of C	10.0%	\$181,000	D-1
Construction Engineering	% of C	17.0%	\$308,000	D-2
Total Design & Construction Cost			\$2,296,000	D
Right-of-Way	37,500 SF	\$5	\$188,000	E-1
Utilities	% of D	8.0%	\$184,000	E-2
Total Project, Design & Construction Cost			\$2,668,000	E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	15.0%	\$130,000	F
Total Project Cost Estimate			\$2,798,000	G

SH 7 PEL Study Estimate of Conceptual Project Costs Rural Typical Section w/ Roadside Ditches	 SH 7 PEL Planning Environmental Linkage Study
Date Prepared: May 8, 2013	

Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	9,556	\$117,820	
2 Aggregate Base Course (Class 6)	TON	2,693	\$41,611	12-Inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	3,410	\$209,920	12" Depth - Widening / 2" Overlay - Existing
4 Concrete Sidewalk	SY	3,333	\$99,467	10-Foot Shared Use Path
5 Concrete Box Culvert	Each	0	\$0	181-Foot Length (\$2,700/lf Unit Price)
6 Bridge Widening	SF	0	\$0	
7 Traffic Signal	Each	1	\$250,000	
8			\$0	
9			\$0	
10			\$0	
Total Major Items			\$719,000	

		% of Major Item Cost		
Total Major Items				\$719,000 A
Drainage / Utilities	% of A	6.4%	\$47,000	B-1
Environmental	% of A	9.6%	\$70,000	B-2
Miscellaneous	% of A	2.7%	\$20,000	B-3
Mobilization	% of A	15.4%	\$111,000	B-4
Removals / Resets	% of A	13.0%	\$94,000	B-5
Roadway	% of A	7.0%	\$51,000	B-6
Signing and Striping	% of A	5.0%	\$36,000	B-7
Traffic / Lighting / ITS	% of A	10.8%	\$78,000	B-8
Traffic Control / Detour	% of A	20.6%	\$149,000	B-9
Structural - Minor Structures / Walls	% of A	5.5%	\$40,000	B-10
Bid Force Accounts	% of A	0.4%	\$3,000	B-11
Total of Bid Construction Items			\$1,418,000 B	
Force Account - Misc.	% of B	6.8%	\$97,000	C-1
Minor Contract Revisions	% of B	7.7%	\$110,000	C-2
Total of Bid Construction Items & Force Account Items			\$1,625,000 C	
Design Engineering	% of C	10.0%	\$163,000	D-1
Construction Engineering	% of C	17.0%	\$277,000	D-2
Total Design & Construction Cost			\$2,065,000 D	
Right-of-Way	37,500 SF	\$5	\$188,000	E-1
Utilities	% of D	8.0%	\$166,000	E-2
Total Project, Design & Construction Cost			\$2,419,000 E	
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	15.0%	\$120,000	F
Total Project Cost Estimate			\$2,539,000 G	

SH 7 PEL Study Estimate of Conceptual Project Costs Intersection of SH 7 and US 287	 SH 7 PEL Planning Environmental Linkage Study
Date Prepared: May 8, 2013	

Input Factors			Notes
1 Length of Auxiliary Lanes (Combined Western/Eastern Legs)	LF	825	
2 Approximate Width of Widening (North Side)	Feet	6	
3 Approximate Width of Widening (South Side)	Feet	8	
4 Approximate Width of Proposed ROW (North Side)	Feet	0	Match Existing ROW
5 Approximate Width of Proposed ROW (South Side)	Feet	0	Match Existing ROW
6 Length of Cross Street Widening (Combined Northern/Southern Legs)	LF	0	Match Existing
7 Approximate Width of Widening (West Side)	Feet	0	
8 Approximate Width of Widening (East Side)	Feet	0	
9 Approximate Width of Proposed ROW (West Side)	Feet	0	
10 Approximate Width of Proposed ROW (East Side)	Feet	0	
11 Is the Intersection Signalized?	Yes/No	1	

Output Factors		(In 2012\$)	Notes
6 Urban Typical Section Project Costs		\$866,000.00	Preferred Typical Section
9 Rural Typical Section Project Costs		\$762,000.00	

SH 7 PEL Study Estimate of Conceptual Project Costs Urban Typical Section w/ Curb & Gutter	SH 7 PEL Planning Environmental Linkage Study
Date Prepared: May 8, 2013	

Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	1,344	\$16,577	
2 Aggregate Base Course (Class 6)	TON	768	\$11,867	12-Inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	1,069	\$65,797	10" Depth - Widening / 2" Overlay - Existing
4 Curb and Gutter	LF	3,300	\$70,290	Includes Outside Edge & Median C&G
5 Concrete Sidewalk	SY	917	\$27,353	5-Foot Sidewalk (Both Sides)
6 Traffic Signal	Each	1	\$250,000	
7			\$0	
8			\$0	
9			\$0	
10			\$0	
Total Major Items			\$442,000	

		% of Major Item Cost			
Total Major Items				\$442,000	A
Drainage / Utilities	% of A	8.0%		\$36,000	B-1
Environmental	% of A	3.0%		\$14,000	B-2
Miscellaneous	% of A	1.5%		\$7,000	B-3
Mobilization	% of A	9.3%		\$42,000	B-4
Removals / Resets	% of A	3.7%		\$17,000	B-5
Roadway	% of A	0.4%		\$2,000	B-6
Signing and Striping	% of A	2.1%		\$10,000	B-7
Traffic / Lighting / ITS	% of A	3.0%		\$14,000	B-8
Traffic Control / Detour	% of A	9.6%		\$43,000	B-9
Structural - Minor Structures / Walls	% of A	1.0%		\$5,000	B-10
Bid Force Accounts	% of A	1.4%		\$7,000	B-11
Total of Bid Construction Items				\$639,000	B
Force Account - Misc.	% of B	2.6%		\$17,000	C-1
Minor Contract Revisions	% of B	4.0%		\$26,000	C-2
Total of Bid Construction Items & Force Account Items				\$682,000	C
Design Engineering	% of C	8.0%		\$55,000	D-1
Construction Engineering	% of C	17.0%		\$116,000	D-2
Total Design & Construction Cost				\$853,000	D
Right-of-Way	0	SF	\$5	\$0	E-1
Utilities	% of D	1.0%		\$9,000	E-2
Total Project, Design & Construction Cost				\$862,000	E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	2.0%		\$4,000	F
Total Project Cost Estimate				\$866,000	G

SH 7 PEL Study Estimate of Conceptual Project Costs Rural Typical Section w/ Roadside Ditches	SH 7 PEL Planning Environmental Linkage Study
Date Prepared: May 8, 2013	

Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	3,667	\$45,210	
2 Aggregate Base Course (Class 6)	TON	768	\$11,867	12-Inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	1,069	\$65,797	10" Depth - Widening / 2" Overlay - Existing
4 Concrete Sidewalk	SY	917	\$27,353	5-Foot Sidewalk (Both Sides)
5 Traffic Signal	Each	1	\$250,000	
6			\$0	
7			\$0	
8			\$0	
9			\$0	
10			\$0	
Total Major Items			\$401,000	

		% of Major Item Cost			
Total Major Items				\$401,000	A
Drainage / Utilities	% of A	5.4%		\$22,000	B-1
Environmental	% of A	3.0%		\$13,000	B-2
Miscellaneous	% of A	1.5%		\$7,000	B-3
Mobilization	% of A	9.3%		\$38,000	B-4
Removals / Resets	% of A	3.7%		\$15,000	B-5
Roadway	% of A	0.4%		\$2,000	B-6
Signing and Striping	% of A	2.1%		\$9,000	B-7
Traffic / Lighting / ITS	% of A	1.0%		\$5,000	B-8
Traffic Control / Detour	% of A	9.6%		\$39,000	B-9
Structural - Minor Structures / Walls	% of A	1.0%		\$5,000	B-10
Bid Force Accounts	% of A	1.4%		\$6,000	B-11
Total of Bid Construction Items				\$562,000	B
Force Account - Misc.	% of B	2.6%		\$15,000	C-1
Minor Contract Revisions	% of B	4.0%		\$23,000	C-2
Total of Bid Construction Items & Force Account Items				\$600,000	C
Design Engineering	% of C	8.0%		\$48,000	D-1
Construction Engineering	% of C	17.0%		\$102,000	D-2
Total Design & Construction Cost				\$750,000	D
Right-of-Way	0	SF	\$5	\$0	E-1
Utilities	% of D	1.0%		\$8,000	E-2
Total Project, Design & Construction Cost				\$758,000	E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	2.0%		\$4,000	F
Total Project Cost Estimate				\$762,000	G

SH 7 PEL Study		 SH 7 PEL Planning Environmental Linkage Study
Estimate of Conceptual Project Costs		
Intersection of SH 7 and Iowa Avenue		
Date Prepared:		May 8, 2013

Input Factors			Notes	
1	Length of Auxiliary Lanes (Combined Western/Eastern Legs)	LF	900	
2	Approximate Width of Widening (North Side)	Feet	7	
3	Approximate Width of Widening (South Side)	Feet	7	
4	Approximate Width of Proposed ROW (North Side)	Feet	0	Match Existing ROW
5	Approximate Width of Proposed ROW (South Side)	Feet	0	Match Existing ROW
6	Length of Cross Street Widening (Combined Northern/Southern Legs)	LF	0	Match Existing
7	Approximate Width of Widening (West Side)	Feet	0	
8	Approximate Width of Widening (East Side)	Feet	0	
9	Approximate Width of Proposed ROW (West Side)	Feet	0	
10	Approximate Width of Proposed ROW (East Side)	Feet	0	
11	Is the Intersection Signalized?	Yes/No	0	

Output Factors		(In 2012\$)	Notes
8	Urban Typical Section Project Costs	\$327,000.00	Preferred Typical Section
9	Rural Typical Section Project Costs	\$301,000.00	

SH 7 PEL Study		 SH 7 PEL Planning Environmental Linkage Study
Estimate of Conceptual Project Costs		
Urban Typical Section w/ Curb & Gutter		
Date Prepared:		May 8, 2013

Item	Unit Cost	Quantity	Extended Cost	Notes	
1	Earthwork	CY	\$12.33	1,467	\$18,084
2	Aggregate Base Course (Class 6)	TON	\$15.45	838	\$12,946
3	Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	\$61.56	1,034	\$63,653
4	Curb and Gutter	LF	\$21.30	1,800	\$38,340
5	Concrete Sidewalk	SY	\$29.84	1,000	\$29,840
6	Traffic Signal	Each	\$250,000.00	0	\$0
7					\$0
8					\$0
9					\$0
10					\$0
Total Major Items			\$163,000		

		% of Major Item Cost		
Total Major Items				\$163,000 A
Drainage / Utilities	% of A	8.0%	\$14,000	B-1
Environmental	% of A	3.0%	\$5,000	B-2
Miscellaneous	% of A	1.5%	\$3,000	B-3
Mobilization	% of A	9.3%	\$16,000	B-4
Removals / Resets	% of A	3.7%	\$7,000	B-5
Roadway	% of A	0.4%	\$1,000	B-6
Signing and Striping	% of A	2.1%	\$4,000	B-7
Traffic / Lighting / ITS	% of A	3.0%	\$5,000	B-8
Traffic Control / Detour	% of A	9.6%	\$16,000	B-9
Structural - Minor Structures / Walls	% of A	1.0%	\$2,000	B-10
Bid Force Accounts	% of A	1.4%	\$3,000	B-11
Total of Bid Construction Items			\$239,000	B
Force Account - Misc.	% of B	2.6%	\$7,000	C-1
Minor Contract Revisions	% of B	4.0%	\$10,000	C-2
Total of Bid Construction Items & Force Account Items			\$256,000	C
Design Engineering	% of C	8.0%	\$21,000	D-1
Construction Engineering	% of C	17.0%	\$44,000	D-2
Total Design & Construction Cost			\$321,000	D
Right-of-Way	0 SF	\$5	\$0	E-1
Utilities	% of D	1.0%	\$4,000	E-2
Total Project, Design & Construction Cost			\$325,000	E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	2.0%	\$2,000	F
Total Project Cost Estimate			\$327,000	G

<p>SH 7 PEL Study</p> <p>Estimate of Conceptual Project Costs</p> <p>Rural Typical Section w/ Roadside Ditches</p>	<p>SH 7 PEL Planning Environmental Linkage Study</p>
<p>Date Prepared: May 8, 2013</p>	

Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	4,000	\$49,320	
2 Aggregate Base Course (Class 6)	TON	838	\$12,946	12-Inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	1,034	\$63,653	10" Depth - Widening / 2" Overlay - Existing
4 Concrete Sidewalk	SY	1,000	\$29,840	5-Foot Sidewalk (Both Sides)
5 Traffic Signal	Each	0	\$0	
6			\$0	
7			\$0	
8			\$0	
9			\$0	
10			\$0	
Total Major Items			\$156,000	

		% of Major Item Cost	\$156,000	A
Total Major Items				
Drainage / Utilities	% of A	5.4%	\$9,000	B-1
Environmental	% of A	3.0%	\$5,000	B-2
Miscellaneous	% of A	1.5%	\$3,000	B-3
Mobilization	% of A	9.3%	\$15,000	B-4
Removals / Resets	% of A	3.7%	\$6,000	B-5
Roadway	% of A	0.4%	\$1,000	B-6
Signing and Striping	% of A	2.1%	\$4,000	B-7
Traffic / Lighting / ITS	% of A	1.0%	\$2,000	B-8
Traffic Control / Detour	% of A	9.6%	\$15,000	B-9
Structural - Minor Structures / Walls	% of A	1.0%	\$2,000	B-10
Bid Force Accounts	% of A	1.4%	\$3,000	B-11
Total of Bid Construction Items			\$221,000	B
Force Account - Misc.	% of B	2.6%	\$6,000	C-1
Minor Contract Revisions	% of B	4.0%	\$9,000	C-2
Total of Bid Construction Items & Force Account Items			\$236,000	C
Design Engineering	% of C	8.0%	\$19,000	D-1
Construction Engineering	% of C	17.0%	\$41,000	D-2
Total Design & Construction Cost			\$296,000	D
Right-of-Way	0	SF	\$5	\$0 E-1
Utilities	% of D	1.0%	\$3,000	E-2
Total Project, Design & Construction Cost			\$299,000	E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	2.0%	\$2,000	F
Total Project Cost Estimate			\$301,000	G

<p>SH 7 PEL Study</p> <p>Estimate of Conceptual Project Costs</p> <p>Intersection of SH 7 and Burlington Avenue</p>	<p>SH 7 PEL Planning Environmental Linkage Study</p>
<p>Date Prepared: May 8, 2013</p>	

Input Factors			Notes
1 Length of Auxiliary Lanes (Combined Western/Eastern Legs)	LF	350	
2 Approximate Width of Widening (North Side)	Feet	0	
3 Approximate Width of Widening (South Side)	Feet	0	
4 Approximate Width of Proposed ROW (North Side)	Feet	0	Match Existing ROW
5 Approximate Width of Proposed ROW (South Side)	Feet	5	Ultimate ROW Width
6 Length of Cross Street Widening (Combined Northern/Southern Legs)	LF	0	Access to North already Constructed
7 Approximate Width of Widening (West Side)	Feet	0	Access to South not included in SH 7 Costs
8 Approximate Width of Widening (East Side)	Feet	0	
9 Approximate Width of Proposed ROW (West Side)	Feet	0	
10 Approximate Width of Proposed ROW (East Side)	Feet	0	
11 Is the Intersection Signalized?	Yes/No	0	

Output Factors		(In 2012\$)	Notes
8 Urban Typical Section Project Costs		\$91,000.00	Preferred Typical Section
9 Rural Typical Section Project Costs		\$74,000.00	

<p>SH 7 PEL Study</p> <p>Estimate of Conceptual Project Costs</p> <p>Urban Typical Section w/ Curb & Gutter</p>	
<p>Date Prepared: May 8, 2013</p>	

Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	207	\$2,557	
2 Aggregate Base Course (Class 6)	TON	0	\$0	12-Inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	103	\$6,320	10" Depth - Widening / 2" Overlay - Existing
4 Curb and Gutter	LF	700	\$14,910	Includes Outside Edge C&G
5 Concrete Sidewalk	SY	389	\$11,604	10-Foot Shared Use Path (One Side Only)
6 Traffic Signal	Each	0	\$0	
7			\$0	
8			\$0	
9			\$0	
10			\$0	
Total Major Items			\$36,000	

		% of Major Item Cost		
Total Major Items				\$36,000 A
Drainage / Utilities	% of A	8.0%	\$3,000	B-1
Environmental	% of A	3.0%	\$2,000	B-2
Miscellaneous	% of A	1.5%	\$1,000	B-3
Mobilization	% of A	9.3%	\$4,000	B-4
Removals / Resets	% of A	3.7%	\$2,000	B-5
Roadway	% of A	0.4%	\$1,000	B-6
Signing and Striping	% of A	2.1%	\$1,000	B-7
Traffic / Lighting / ITS	% of A	3.0%	\$2,000	B-8
Traffic Control / Detour	% of A	9.6%	\$4,000	B-9
Structural - Minor Structures / Walls	% of A	1.0%	\$1,000	B-10
Bid Force Accounts	% of A	1.4%	\$1,000	B-11
Total of Bid Construction Items			\$58,000	B
Force Account - Misc.	% of B	2.6%	\$2,000	C-1
Minor Contract Revisions	% of B	4.0%	\$3,000	C-2
Total of Bid Construction Items & Force Account Items			\$63,000	C
Design Engineering	% of C	8.0%	\$6,000	D-1
Construction Engineering	% of C	17.0%	\$11,000	D-2
Total Design & Construction Cost			\$80,000	D
Right-of-Way	1,750 SF	\$5	\$9,000	E-1
Utilities	% of D	1.0%	\$1,000	E-2
Total Project, Design & Construction Cost			\$90,000	E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	2.0%	\$1,000	F
Total Project Cost Estimate			\$91,000	G

<p>SH 7 PEL Study</p> <p>Estimate of Conceptual Project Costs</p> <p>Rural Typical Section w/ Roadside Ditches</p>	
<p>Date Prepared: May 8, 2013</p>	

Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	830	\$10,229	
2 Aggregate Base Course (Class 6)	TON	0	\$0	12-Inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	103	\$6,320	10" Depth - Widening / 2" Overlay - Existing
4 Concrete Sidewalk	SY	389	\$11,604	10-Foot Shared Use Path (One Side Only)
5 Traffic Signal	Each	0	\$0	
6			\$0	
7			\$0	
8			\$0	
9			\$0	
10			\$0	
Total Major Items			\$29,000	

		% of Major Item Cost		
Total Major Items				\$29,000 A
Drainage / Utilities	% of A	5.4%	\$2,000	B-1
Environmental	% of A	3.0%	\$1,000	B-2
Miscellaneous	% of A	1.5%	\$1,000	B-3
Mobilization	% of A	9.3%	\$3,000	B-4
Removals / Resets	% of A	3.7%	\$2,000	B-5
Roadway	% of A	0.4%	\$1,000	B-6
Signing and Striping	% of A	2.1%	\$1,000	B-7
Traffic / Lighting / ITS	% of A	1.0%	\$1,000	B-8
Traffic Control / Detour	% of A	9.6%	\$3,000	B-9
Structural - Minor Structures / Walls	% of A	1.0%	\$1,000	B-10
Bid Force Accounts	% of A	1.4%	\$1,000	B-11
Total of Bid Construction Items			\$46,000	B
Force Account - Misc.	% of B	2.6%	\$2,000	C-1
Minor Contract Revisions	% of B	4.0%	\$2,000	C-2
Total of Bid Construction Items & Force Account Items			\$50,000	C
Design Engineering	% of C	8.0%	\$4,000	D-1
Construction Engineering	% of C	17.0%	\$9,000	D-2
Total Design & Construction Cost			\$63,000	D
Right-of-Way	1,750 SF	\$5	\$9,000	E-1
Utilities	% of D	1.0%	\$1,000	E-2
Total Project, Design & Construction Cost			\$73,000	E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	2.0%	\$1,000	F
Total Project Cost Estimate			\$74,000	G

SH 7 PEL Study		SH 7 PEL Planning Environmental Linkage Study	
Estimate of Conceptual Project Costs			
Intersection of SH 7 and 119th/120th Street			
		Date Prepared:	May 8, 2013

Input Factors			Notes
1	Length of Auxiliary Lanes (Combined Western/Eastern Legs)	LF	1,350
2	Approximate Width of Widening (North Side)	Feet	36
3	Approximate Width of Widening (South Side)	Feet	12
4	Approximate Width of Proposed ROW (North Side)	Feet	30
5	Approximate Width of Proposed ROW (South Side)	Feet	15
6	Length of Cross Street Widening (Combined Northern/Southern Legs)	LF	1,010
7	Approximate Width of Widening (West Side)	Feet	10
8	Approximate Width of Widening (East Side)	Feet	10
9	Approximate Width of Proposed ROW (West Side)	Feet	0
10	Approximate Width of Proposed ROW (East Side)	Feet	0
11	Is the Intersection Signalized?	Yes/No	1

Output Factors		(In 2012\$)	Notes
8	Urban Typical Section Project Costs	\$1,828,000.00	
9	Rural Typical Section Project Costs	\$1,887,000.00	Preferred Typical Section

SH 7 PEL Study		SH 7 PEL Planning Environmental Linkage Study	
Estimate of Conceptual Project Costs			
Urban Typical Section w/ Curb & Gutter			
		Date Prepared:	May 8, 2013

Item		Unit Cost	Quantity	Extended Cost	Notes
1	Earthwork	CY	7,600	\$93,708	
2	Aggregate Base Course (Class 6)	TON	4,309	\$66,577	12-Inch Depth
3	Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	4,356	\$268,155	10" Depth - Widening / 2" Overlay - Existing
4	Curb and Gutter	LF	2,700	\$57,510	Includes Outside Edge C&G
5	Concrete Sidewalk	SY	1,500	\$44,760	10-Foot Shared Use Path (One Side Only)
6	Traffic Signal	Each	1	\$250,000	
7				\$0	
8				\$0	
9				\$0	
10				\$0	
Total Major Items				\$781,000	

		% of Major Item Cost		
Total Major Items				\$781,000 A
Drainage / Utilities	% of A	8.0%	\$63,000	B-1
Environmental	% of A	3.0%	\$24,000	B-2
Miscellaneous	% of A	1.5%	\$12,000	B-3
Mobilization	% of A	9.3%	\$73,000	B-4
Removals / Resets	% of A	3.7%	\$29,000	B-5
Roadway	% of A	0.4%	\$4,000	B-6
Signing and Striping	% of A	2.1%	\$17,000	B-7
Traffic / Lighting / ITS	% of A	3.0%	\$24,000	B-8
Traffic Control / Detour	% of A	9.6%	\$75,000	B-9
Structural - Minor Structures / Walls	% of A	1.0%	\$8,000	B-10
Bid Force Accounts	% of A	1.4%	\$11,000	B-11
Total of Bid Construction Items			\$1,121,000	B
Force Account - Misc.	% of B	2.6%	\$30,000	C-1
Minor Contract Revisions	% of B	4.0%	\$45,000	C-2
Total of Bid Construction Items & Force Account Items			\$1,196,000	C
Design Engineering	% of C	8.0%	\$96,000	D-1
Construction Engineering	% of C	17.0%	\$204,000	D-2
Total Design & Construction Cost			\$1,496,000	D
Right-of-Way	60,750 SF	\$5	\$304,000	E-1
Utilities	% of D	1.0%	\$15,000	E-2
Total Project, Design & Construction Cost			\$1,815,000	E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	2.0%	\$13,000	F
Total Project Cost Estimate			\$1,828,000	G

<p>SH 7 PEL Study</p> <p>Estimate of Conceptual Project Costs</p> <p>Rural Typical Section w/ Roadside Ditches</p>	<p>SH 7 PEL Planning Environmental Linkage Study</p>
<p>Date Prepared: May 8, 2013</p>	

Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	16,800	\$207,144	
2 Aggregate Base Course (Class 6)	TON	4,309	\$66,577	12-Inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	4,356	\$268,155	10" Depth - Widening / 2" Overlay - Existing
4 Concrete Sidewalk	SY	1,500	\$44,760	10-Foot Shared Use Path (One Side Only)
5 Traffic Signal	Each	1	\$250,000	
6			\$0	
7			\$0	
8			\$0	
9			\$0	
10			\$0	
Total Major Items			\$837,000	

		% of Major Item Cost			
Total Major Items				\$837,000	A
Drainage / Utilities	% of A	5.4%		\$46,000	B-1
Environmental	% of A	3.0%		\$26,000	B-2
Miscellaneous	% of A	1.5%		\$13,000	B-3
Mobilization	% of A	9.3%		\$78,000	B-4
Removals / Resets	% of A	3.7%		\$31,000	B-5
Roadway	% of A	0.4%		\$4,000	B-6
Signing and Striping	% of A	2.1%		\$18,000	B-7
Traffic / Lighting / ITS	% of A	1.0%		\$9,000	B-8
Traffic Control / Detour	% of A	9.6%		\$81,000	B-9
Structural - Minor Structures / Walls	% of A	1.0%		\$9,000	B-10
Bid Force Accounts	% of A	1.4%		\$12,000	B-11
Total of Bid Construction Items				\$1,164,000	B
Force Account - Misc.	% of B	2.6%		\$31,000	C-1
Minor Contract Revisions	% of B	4.0%		\$47,000	C-2
Total of Bid Construction Items & Force Account Items				\$1,242,000	C
Design Engineering	% of C	8.0%		\$100,000	D-1
Construction Engineering	% of C	17.0%		\$212,000	D-2
Total Design & Construction Cost				\$1,554,000	D
Right-of-Way	60,750 SF	\$5		\$304,000	E-1
Utilities	% of D	1.0%		\$16,000	E-2
Total Project, Design & Construction Cost				\$1,874,000	E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	2.0%		\$13,000	F
Total Project Cost Estimate				\$1,887,000	G

<p>SH 7 PEL Study</p> <p>Estimate of Conceptual Project Costs</p> <p>Summary of Segment 2</p>	<p>SH 7 PEL Planning Environmental Linkage Study</p>
<p>Date Prepared: May 8, 2013</p>	

			Notes
2a SH 7 (119th/120th Street to County Line Road)		12,140,000	Rural Typical Section
2b SH 7 (County Line Road to Sheridan Parkway)		29,921,000	Urban Typical Section
Total for Segment 2		\$42,061,000	

SH 7 PEL Study Estimate of Conceptual Project Costs from 119th/120th Street to County Line Road	 Date Prepared: May 8, 2013
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Input Factors			Notes
1 Length of Improvements	LF	5,300	
2 Approximate Width of Widening (North Side)	Feet	36	
3 Approximate Width of Widening (South Side)	Feet	24	
4 Approximate Width of Proposed ROW (North Side)	Feet	20	
5 Approximate Width of Proposed ROW (South Side)	Feet	15	
6 Number of Major Drainageways	#	0	
7 Required Bridge Widening	SF	0	
8 Number of Signalized Intersections	#	2	
Output Factors			Notes
		(In 2012\$)	
9 Urban Typical Section Project Costs		\$12,528,000	
9 Rural Typical Section Project Costs		\$12,140,000	Preferred Typical Section

SH 7 PEL Study Estimate of Conceptual Project Costs Urban Typical Section w/ Curb & Gutter	 Date Prepared: May 8, 2013
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Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	26,696	\$329,165	
2 Aggregate Base Course (Class 6)	TON	21,147	\$326,721	12-Inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	24,421	\$1,503,370	12" Depth - Widening / 2" Overlay - Existing
4 Curb and Gutter	LF	21,200	\$451,560	Includes Median & Outside Edge C&G
5 Concrete Sidewalk	SY	11,778	\$351,449	10-Foot Shared Use Path
6 Concrete Box Culvert	Each	0	\$0	181-Foot Length (\$2,700/lf Unit Price)
7 Bridge Widening	SF	0	\$0	
8 Traffic Signal	Each	2	\$500,000	
9			\$0	
10			\$0	
Total Major Items			\$3,463,000	
Total Major Items				% of Major Item Cost
Drainage / Utilities	% of A		12.3%	\$426,000 B-1
Environmental	% of A		9.6%	\$333,000 B-2
Miscellaneous	% of A		2.7%	\$94,000 B-3
Mobilization	% of A		15.4%	\$534,000 B-4
Removals / Resets	% of A		13.0%	\$451,000 B-5
Roadway	% of A		7.0%	\$243,000 B-6
Signing and Striping	% of A		5.0%	\$174,000 B-7
Traffic / Lighting / ITS	% of A		10.8%	\$375,000 B-8
Traffic Control / Detour	% of A		20.6%	\$714,000 B-9
Structural - Minor Structures / Walls	% of A		5.5%	\$191,000 B-10
Bid Force Accounts	% of A		0.4%	\$14,000 B-11
Total of Bid Construction Items			\$7,012,000	B
Force Account - Misc.	% of B		6.8%	\$477,000 C-1
Minor Contract Revisions	% of B		7.7%	\$540,000 C-2
Total of Bid Construction Items & Force Account Items			\$8,029,000	C
Design Engineering	% of C		10.0%	\$803,000 D-1
Construction Engineering	% of C		17.0%	\$1,365,000 D-2
Total Design & Construction Cost			\$10,197,000	D
Right-of-Way	185,500 SF		\$5	\$928,000 E-1
Utilities	% of D		8.0%	\$816,000 E-2
Total Project, Design & Construction Cost			\$11,941,000	E
Contingency (Engineering, ROW & Utilities Only)			15.0%	\$587,000 F
Total Project Cost Estimate			\$12,528,000	G

<p>SH 7 PEL Study</p> <p>Estimate of Conceptual Project Costs</p> <p>Rural Typical Section w/ Roadside Ditches</p>	
Date Prepared: May 8, 2013	

Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	59,674	\$735,781	
2 Aggregate Base Course (Class 6)	TON	21,147	\$326,721	12-Inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	24,875	\$1,531,284	12" Depth - Widening / 2" Overlay - Existing
4 Concrete Sidewalk	SY	11,778	\$351,449	10-Foot Shared Use Path
5 Concrete Box Culvert	Each	0	\$0	181-Foot Length (\$2,700/lf Unit Price)
6 Bridge Widening	SF	0	\$0	
7 Traffic Signal	Each	2	\$500,000	
8			\$0	
9			\$0	
10			\$0	
Total Major Items			\$3,446,000	

		% of Major Item Cost			
Total Major Items			\$3,446,000	A	
Drainage / Utilities	% of A	6.4%	\$221,000	B-1	
Environmental	% of A	9.6%	\$331,000	B-2	
Miscellaneous	% of A	2.7%	\$94,000	B-3	
Mobilization	% of A	15.4%	\$531,000	B-4	
Removals / Resets	% of A	13.0%	\$448,000	B-5	
Roadway	% of A	7.0%	\$242,000	B-6	
Signing and Striping	% of A	5.0%	\$173,000	B-7	
Traffic / Lighting / ITS	% of A	10.8%	\$373,000	B-8	
Traffic Control / Detour	% of A	20.6%	\$710,000	B-9	
Structural - Minor Structures / Walls	% of A	5.5%	\$190,000	B-10	
Bid Force Accounts	% of A	0.4%	\$14,000	B-11	
Total of Bid Construction Items			\$6,773,000	B	
Force Account - Misc.	% of B	6.8%	\$461,000	C-1	
Minor Contract Revisions	% of B	7.7%	\$522,000	C-2	
Total of Bid Construction Items & Force Account Items			\$7,756,000	C	
Design Engineering	% of C	10.0%	\$776,000	D-1	
Construction Engineering	% of C	17.0%	\$1,319,000	D-2	
Total Design & Construction Cost			\$9,851,000	D	
Right-of-Way	185,500 SF		\$5	\$928,000	E-1
Utilities	% of D	8.0%	\$789,000	E-2	
Total Project, Design & Construction Cost			\$11,568,000	E	
Contingency (Engineering, ROW & Utilities Only)		% of D1, D2, E1, E2	15.0%	\$572,000	F
Total Project Cost Estimate			\$12,140,000	G	

<p>SH 7 PEL Study</p> <p>Estimate of Conceptual Project Costs</p> <p>from County Line Road to Sheridan Parkway</p>	
Date Prepared: May 8, 2013	

Input Factors			Notes
1 Length of Improvements	LF	13,300	
2 Approximate Width of Widening (North Side)	Feet	36	
3 Approximate Width of Widening (South Side)	Feet	25	
4 Approximate Width of Proposed ROW (North Side)	Feet	25	
5 Approximate Width of Proposed ROW (South Side)	Feet	15	
6 Number of Major Drainageways	#	0	
7 Required Bridge Widening	SF	0	
8 Number of Signalized Intersections	#	4	
Output Factors			Notes
			(In 2012\$)
9 Urban Typical Section Project Costs		\$29,921,000	Preferred Typical Section
9 Rural Typical Section Project Costs		\$29,041,000	

SH 7 PEL Study
Estimate of Conceptual Project Costs
Urban Typical Section w/ Curb & Gutter

SH 7 PEL
 Planning Environmental Linkage Study

Date Prepared: **May 8, 2013**

Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	67,978	\$838,166	
2 Aggregate Base Course (Class 6)	TON	53,951	\$833,550	12-Inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	62,096	\$3,822,643	12" Depth - Widening / 2" Overlay - Existing
4 Curb and Gutter	LF	53,200	\$1,133,160	Includes Median & Outside Edge C&G
5 Concrete Sidewalk	SY	16,530	\$493,255	10' Shared Use Path/1-Side Only thru Anthem
6 Concrete Box Culvert	Each	0	\$0	181-Foot Length (\$2,700/ft Unit Price)
7 Bridge Widening	SF	0	\$0	
8 Traffic Signal	Each	4	\$1,000,000	
9			\$0	
10			\$0	
Total Major Items			\$8,121,000	

		% of Major Item Cost		
Total Major Items				\$8,121,000 A
Drainage / Utilities	% of A	12.3%	\$999,000	B-1
Environmental	% of A	9.6%	\$780,000	B-2
Miscellaneous	% of A	2.7%	\$220,000	B-3
Mobilization	% of A	15.4%	\$1,251,000	B-4
Removals / Resets	% of A	13.0%	\$1,056,000	B-5
Roadway	% of A	7.0%	\$569,000	B-6
Signing and Striping	% of A	5.0%	\$407,000	B-7
Traffic / Lighting / ITS	% of A	10.8%	\$878,000	B-8
Traffic Control / Detour	% of A	20.6%	\$1,673,000	B-9
Structural - Minor Structures / Walls	% of A	5.5%	\$447,000	B-10
Bid Force Accounts	% of A	0.4%	\$33,000	B-11
Total of Bid Construction Items			\$16,434,000	B
Force Account - Misc.	% of B	6.8%	\$1,118,000	C-1
Minor Contract Revisions	% of B	7.7%	\$1,266,000	C-2
Total of Bid Construction Items & Force Account Items			\$18,818,000	C
Design Engineering	% of C	10.0%	\$1,882,000	D-1
Construction Engineering	% of C	17.0%	\$3,200,000	D-2
Total Design & Construction Cost			\$23,900,000	D
Right-of-Way	532,000 SF	\$5	\$2,660,000	E-1
Utilities	% of D	8.0%	\$1,912,000	E-2
Total Project, Design & Construction Cost			\$28,472,000	E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	15.0%	\$1,449,000	F
Total Project Cost Estimate			\$29,921,000	G

SH 7 PEL Study
Estimate of Conceptual Project Costs
Rural Typical Section w/ Roadside Ditches

SH 7 PEL
 Planning Environmental Linkage Study

Date Prepared: **May 8, 2013**

Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	151,719	\$1,870,689	
2 Aggregate Base Course (Class 6)	TON	53,951	\$833,550	12-Inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	63,234	\$3,892,692	12" Depth - Widening / 2" Overlay - Existing
4 Concrete Sidewalk	SY	16,530	\$493,255	10' Shared Use Path/1-Side Only thru Anthem
5 Concrete Box Culvert	Each	0	\$0	181-Foot Length (\$2,700/ft Unit Price)
6 Bridge Widening	SF	0	\$0	
7 Traffic Signal	Each	4	\$1,000,000	
8			\$0	
9			\$0	
10			\$0	
Total Major Items			\$8,091,000	

		% of Major Item Cost		
Total Major Items				\$8,091,000 A
Drainage / Utilities	% of A	6.4%	\$518,000	B-1
Environmental	% of A	9.6%	\$777,000	B-2
Miscellaneous	% of A	2.7%	\$219,000	B-3
Mobilization	% of A	15.4%	\$1,247,000	B-4
Removals / Resets	% of A	13.0%	\$1,052,000	B-5
Roadway	% of A	7.0%	\$567,000	B-6
Signing and Striping	% of A	5.0%	\$405,000	B-7
Traffic / Lighting / ITS	% of A	10.8%	\$874,000	B-8
Traffic Control / Detour	% of A	20.6%	\$1,667,000	B-9
Structural - Minor Structures / Walls	% of A	5.5%	\$446,000	B-10
Bid Force Accounts	% of A	0.4%	\$33,000	B-11
Total of Bid Construction Items			\$15,896,000	B
Force Account - Misc.	% of B	6.8%	\$1,081,000	C-1
Minor Contract Revisions	% of B	7.7%	\$1,224,000	C-2
Total of Bid Construction Items & Force Account Items			\$18,201,000	C
Design Engineering	% of C	10.0%	\$1,821,000	D-1
Construction Engineering	% of C	17.0%	\$3,095,000	D-2
Total Design & Construction Cost			\$23,117,000	D
Right-of-Way	532,000 SF	\$5	\$2,660,000	E-1
Utilities	% of D	8.0%	\$1,850,000	E-2
Total Project, Design & Construction Cost			\$27,627,000	E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	15.0%	\$1,414,000	F
Total Project Cost Estimate			\$29,041,000	G

SH 7 PEL Study		 SH 7 PEL Planning Environmental Linkage Study
Estimate of Conceptual Project Costs Intersection of SH 7 and County Line Rd. - Roundabout		
Date Prepared:		May 8, 2013

Input Factors			Notes	
1	Length of Auxiliary Lanes (Combined Western/Eastern Legs)	LF	1,610	Assumed to be same as signalized
2	Approximate Width of Widening (North Side)	Feet	18	Assumed to be same as signalized
3	Approximate Width of Widening (South Side)	Feet	24	Slightly higher to accommodate roundabout
4	Approximate Width of Proposed ROW (North Side)	Feet	20	Assumed to be same as signalized
5	Approximate Width of Proposed ROW (South Side)	Feet	10	Assumed to be same as signalized
6	Length of Cross Street Widening (Combined Northern/Southern Legs)	LF	60	Does not include costs for extending County Line Road to the existing alignment
7	Approximate Width of Widening (West Side)	Feet	0	
8	Approximate Width of Widening (East Side)	Feet	0	
9	Approximate Width of Proposed ROW (West Side)	Feet	0	
10	Approximate Width of Proposed ROW (East Side)	Feet	0	
11	Is the Intersection Signalized?	Yes/No	0	

Output Factors		(In 2012\$)	Notes
8	Urban Typical Section Project Costs	\$1,443,000.00	Preferred Typical Section
9	Rural Typical Section Project Costs	\$1,338,000.00	

SH 7 PEL Study		 SH 7 PEL Planning Environmental Linkage Study
Estimate of Conceptual Project Costs Urban Typical Section w/ Curb & Gutter		
Date Prepared:		May 8, 2013

Item	Unit Cost	Quantity	Extended Cost	Notes		
1	Earthwork	CY	\$12.33	5,963	\$73,523	
2	Aggregate Base Course (Class 6)	TON	\$15.45	4,497	\$69,474	12-Inch Depth
3	Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	\$61.56	4,605	\$283,459	10" Depth - Widening / 2" Overlay - Existing
4	Curb and Gutter	LF	\$21.30	4,830	\$102,879	Includes Outside Edge & Roundabout C&G
5	Concrete Sidewalk	SY	\$29.84	1,789	\$53,380	10-Foot Shared Use Path (One Side Only)
6	Traffic Signal	Each	\$250,000.00	0	\$0	
7					\$0	
8					\$0	
9					\$0	
10					\$0	
Total Major Items				\$583,000		

		% of Major Item Cost		
Total Major Items				\$583,000 A
Drainage / Utilities	% of A	8.0%		\$47,000 B-1
Environmental	% of A	3.0%		\$18,000 B-2
Miscellaneous	% of A	1.5%		\$9,000 B-3
Mobilization	% of A	9.3%		\$55,000 B-4
Removals / Resets	% of A	3.7%		\$22,000 B-5
Roadway	% of A	0.4%		\$3,000 B-6
Signing and Striping	% of A	2.1%		\$13,000 B-7
Traffic / Lighting / ITS	% of A	3.0%		\$18,000 B-8
Traffic Control / Detour	% of A	17.0%		\$100,000 B-9
Structural - Minor Structures / Walls	% of A	1.0%		\$6,000 B-10
Bid Force Accounts	% of A	1.4%		\$9,000 B-11
Total of Bid Construction Items				\$883,000 B
Force Account - Misc.	% of B	2.6%		\$23,000 C-1
Minor Contract Revisions	% of B	4.0%		\$36,000 C-2
Total of Bid Construction Items & Force Account Items				\$942,000 C
Design Engineering	% of C	8.0%		\$76,000 D-1
Construction Engineering	% of C	17.0%		\$161,000 D-2
Total Design & Construction Cost				\$1,179,000 D
Right-of-Way	48,300 SF	\$5		\$242,000 E-1
Utilities	% of D	1.0%		\$12,000 E-2
Total Project, Design & Construction Cost				\$1,433,000 E
Contingency (Engineering, ROW & Utilities Only)		% of D1, D2, E1, E2	2.0%	\$10,000 F
Total Project Cost Estimate				\$1,443,000 G

SH 7 PEL Study Estimate of Conceptual Project Costs Rural Typical Section w/ Roadside Ditches	 SH 7 PEL Planning Environmental Linkage Study
Date Prepared: May 8, 2013	

Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	13,834	\$170,574	
2 Aggregate Base Course (Class 6)	TON	4,497	\$69,474	12-Inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	4,605	\$283,459	10" Depth - Widening / 2" Overlay - Existing
4 Concrete Sidewalk	SY	1,789	\$53,380	10-Foot Shared Use Path (One Side Only)
5 Traffic Signal	Each	0	\$0	
6			\$0	
7			\$0	
8			\$0	
9			\$0	
10			\$0	
Total Major Items			\$577,000	

		% of Major Item Cost	\$577,000	A
Total Major Items				
Drainage / Utilities	% of A	5.4%	\$32,000	B-1
Environmental	% of A	3.0%	\$18,000	B-2
Miscellaneous	% of A	1.5%	\$9,000	B-3
Mobilization	% of A	9.3%	\$54,000	B-4
Removals / Resets	% of A	3.7%	\$22,000	B-5
Roadway	% of A	0.4%	\$3,000	B-6
Signing and Striping	% of A	2.1%	\$13,000	B-7
Traffic / Lighting / ITS	% of A	1.0%	\$6,000	B-8
Traffic Control / Detour	% of A	9.6%	\$56,000	B-9
Structural - Minor Structures / Walls	% of A	1.0%	\$6,000	B-10
Bid Force Accounts	% of A	1.4%	\$9,000	B-11
Total of Bid Construction Items			\$805,000	B
Force Account - Misc.	% of B	2.6%	\$21,000	C-1
Minor Contract Revisions	% of B	4.0%	\$33,000	C-2
Total of Bid Construction Items & Force Account Items			\$859,000	C
Design Engineering	% of C	8.0%	\$69,000	D-1
Construction Engineering	% of C	17.0%	\$147,000	D-2
Total Design & Construction Cost			\$1,075,000	D
Right-of-Way	48,300 SF		\$5	E-1
Utilities	% of D	1.0%	\$11,000	E-2
Total Project, Design & Construction Cost			\$1,328,000	E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	2.0%	\$10,000	F
Total Project Cost Estimate			\$1,338,000	G

SH 7 PEL Study Estimate of Conceptual Project Costs Intersection of SH 7 and County Line Rd. - Signalized	 SH 7 PEL Planning Environmental Linkage Study
Date Prepared: May 8, 2013	

Input Factors			Notes
1 Length of Auxiliary Lanes (Combined Western/Eastern Legs)	LF	1,610	
2 Approximate Width of Widening (North Side)	Feet	18	
3 Approximate Width of Widening (South Side)	Feet	12	
4 Approximate Width of Proposed ROW (North Side)	Feet	20	Ultimate ROW Width
5 Approximate Width of Proposed ROW (South Side)	Feet	10	Ultimate ROW Width
6 Length of Cross Street Widening (Combined Northern/Southern Legs)	LF	60	Does not include costs for extending County
7 Approximate Width of Widening (West Side)	Feet	0	Line Road to the existing alignment
8 Approximate Width of Widening (East Side)	Feet	0	
9 Approximate Width of Proposed ROW (West Side)	Feet	0	
10 Approximate Width of Proposed ROW (East Side)	Feet	0	
11 Is the Intersection Signalized?	Yes/No	1	

Output Factors		(In 2012\$)	Notes
8 Urban Typical Section Project Costs		\$1,589,000.00	Preferred Typical Section
9 Rural Typical Section Project Costs		\$1,563,000.00	

SH 7 PEL Study Estimate of Conceptual Project Costs Intersection of SH 7 and Vista Parkway	 SH 7 PEL Planning Environmental Linkage Study
Date Prepared: May 8, 2013	

Input Factors			Notes
1 Length of Auxiliary Lanes (Combined Western/Eastern Legs)	LF	1,700	
2 Approximate Width of Widening (North Side)	Feet	12	
3 Approximate Width of Widening (South Side)	Feet	4	
4 Approximate Width of Proposed ROW (North Side)	Feet	27	Ultimate ROW Width
5 Approximate Width of Proposed ROW (South Side)	Feet	6	Ultimate ROW Width
6 Length of Cross Street Widening (Combined Northern/Southern Legs)	LF	545	
7 Approximate Width of Widening (West Side)	Feet	4	Minor Widening to North at "T" Intersection
8 Approximate Width of Widening (East Side)	Feet	4	
9 Approximate Width of Proposed ROW (West Side)	Feet	0	
10 Approximate Width of Proposed ROW (East Side)	Feet	0	
11 Is the Intersection Signalized?	Yes/No	1	

Output Factors		(In 2012\$)	Notes
8 Urban Typical Section Project Costs		\$1,497,000.00	Preferred Typical Section
9 Rural Typical Section Project Costs		\$1,463,000.00	

SH 7 PEL Study Estimate of Conceptual Project Costs Urban Typical Section w/ Curb & Gutter	 SH 7 PEL Planning Environmental Linkage Study
Date Prepared: May 8, 2013	

Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	4,030	\$49,685	
2 Aggregate Base Course (Class 6)	TON	1,809	\$27,946	12-Inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	2,660	\$163,722	10" Depth - Widening / 2" Overlay - Existing
4 Curb and Gutter	LF	3,400	\$72,420	Includes Outside Edge C&G
5 Concrete Sidewalk	SY	1,889	\$56,364	10-Foot Shared Use Path (One Side Only)
6 Traffic Signal	Each	1	\$250,000	
7			\$0	
8			\$0	
9			\$0	
10			\$0	
Total Major Items			\$621,000	

	% of Major Item Cost		
Total Major Items			\$621,000 A
Drainage / Utilities	% of A	8.0%	\$50,000 B-1
Environmental	% of A	3.0%	\$19,000 B-2
Miscellaneous	% of A	1.5%	\$10,000 B-3
Mobilization	% of A	9.3%	\$58,000 B-4
Removals / Resets	% of A	3.7%	\$23,000 B-5
Roadway	% of A	0.4%	\$3,000 B-6
Signing and Striping	% of A	2.1%	\$14,000 B-7
Traffic / Lighting / ITS	% of A	3.0%	\$19,000 B-8
Traffic Control / Detour	% of A	9.6%	\$60,000 B-9
Structural - Minor Structures / Walls	% of A	1.0%	\$7,000 B-10
Bid Force Accounts	% of A	1.4%	\$9,000 B-11
Total of Bid Construction Items			\$893,000 B
Force Account - Misc.	% of B	2.6%	\$24,000 C-1
Minor Contract Revisions	% of B	4.0%	\$36,000 C-2
Total of Bid Construction Items & Force Account Items			\$953,000 C
Design Engineering	% of C	8.0%	\$77,000 D-1
Construction Engineering	% of C	17.0%	\$163,000 D-2
Total Design & Construction Cost			\$1,193,000 D
Right-of-Way	56,100 SF	\$5	\$281,000 E-1
Utilities	% of D	1.0%	\$12,000 E-2
Total Project, Design & Construction Cost			\$1,486,000 E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	2.0%	\$11,000 F
Total Project Cost Estimate			\$1,497,000 G

SH 7 PEL Study Estimate of Conceptual Project Costs Rural Typical Section w/ Roadside Ditches	 SH 7 PEL Planning Environmental Linkage Study
Date Prepared: May 8, 2013	

Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	10,074	\$124,213	
2 Aggregate Base Course (Class 6)	TON	1,809	\$27,946	12-Inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	2,660	\$163,722	10" Depth - Widening / 2" Overlay - Existing
4 Concrete Sidewalk	SY	1,889	\$56,364	10-Foot Shared Use Path (One Side Only)
6 Traffic Signal	Each	1	\$250,000	
7			\$0	
8			\$0	
9			\$0	
10			\$0	
Total Major Items			\$623,000	

		% of Major Item Cost		
Total Major Items				\$623,000 A
Drainage / Utilities	% of A	5.4%		\$34,000 B-1
Environmental	% of A	3.0%		\$19,000 B-2
Miscellaneous	% of A	1.5%		\$10,000 B-3
Mobilization	% of A	9.3%		\$58,000 B-4
Removals / Resets	% of A	3.7%		\$24,000 B-5
Roadway	% of A	0.4%		\$3,000 B-6
Signing and Striping	% of A	2.1%		\$14,000 B-7
Traffic / Lighting / ITS	% of A	1.0%		\$7,000 B-8
Traffic Control / Detour	% of A	9.6%		\$60,000 B-9
Structural - Minor Structures / Walls	% of A	1.0%		\$7,000 B-10
Bid Force Accounts	% of A	1.4%		\$9,000 B-11
Total of Bid Construction Items				\$868,000 B
Force Account - Misc.	% of B	2.6%		\$23,000 C-1
Minor Contract Revisions	% of B	4.0%		\$35,000 C-2
Total of Bid Construction Items & Force Account Items				\$926,000 C
Design Engineering	% of C	8.0%		\$75,000 D-1
Construction Engineering	% of C	17.0%		\$158,000 D-2
Total Design & Construction Cost				\$1,159,000 D
Right-of-Way	56,100 SF	\$5		\$281,000 E-1
Utilities	% of D	1.0%		\$12,000 E-2
Total Project, Design & Construction Cost				\$1,452,000 E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	2.0%		\$11,000 F
Total Project Cost Estimate				\$1,463,000 G

SH 7 PEL Study Estimate of Conceptual Project Costs Intersection of SH 7 and Mountain View Boulevard	 SH 7 PEL Planning Environmental Linkage Study
Date Prepared: May 8, 2013	

Input Factors			Notes
1 Length of Auxiliary Lanes (Combined Western/Eastern Legs)	LF	1,565	
2 Approximate Width of Widening (North Side)	Feet	12	
3 Approximate Width of Widening (South Side)	Feet	5	
4 Approximate Width of Proposed ROW (North Side)	Feet	30	Ultimate ROW Width
5 Approximate Width of Proposed ROW (South Side)	Feet	4	Ultimate ROW Width
6 Length of Cross Street Widening (Combined Northern/Southern Legs)	LF	200	
7 Approximate Width of Widening (West Side)	Feet	4	Match Existing to North "T" Intersection
8 Approximate Width of Widening (East Side)	Feet	5	
9 Approximate Width of Proposed ROW (West Side)	Feet	0	
10 Approximate Width of Proposed ROW (East Side)	Feet	0	
11 Is the Intersection Signalized?	Yes/No	1	

Output Factors		(In 2012\$)	Notes
8 Urban Typical Section Project Costs		\$1,449,000.00	Preferred Typical Section
9 Rural Typical Section Project Costs		\$1,419,000.00	

<p>SH 7 PEL Study</p> <p>Estimate of Conceptual Project Costs</p> <p>Urban Typical Section w/ Curb & Gutter</p>	<p>SH 7 PEL Planning Environmental Linkage Study</p>
<p>Date Prepared: May 8, 2013</p>	

Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	3,941	\$48,598	
2 Aggregate Base Course (Class 6)	TON	1,769	\$27,335	12-Inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	2,544	\$156,608	10" Depth - Widening / 2" Overlay - Existing
4 Curb and Gutter	LF	3,130	\$66,669	Includes Outside Edge C&G
5 Concrete Sidewalk	SY	1,739	\$51,888	10-Foot Shared Use Path (One Side Only)
6 Traffic Signal	Each	1	\$250,000	
7			\$0	
8			\$0	
9			\$0	
10			\$0	
Total Major Items			\$602,000	

		% of Major Item Cost		
Total Major Items				\$602,000 A
Drainage / Utilities	% of A	8.0%	\$49,000	B-1
Environmental	% of A	3.0%	\$19,000	B-2
Miscellaneous	% of A	1.5%	\$10,000	B-3
Mobilization	% of A	9.3%	\$56,000	B-4
Removals / Resets	% of A	3.7%	\$23,000	B-5
Roadway	% of A	0.4%	\$3,000	B-6
Signing and Striping	% of A	2.1%	\$13,000	B-7
Traffic / Lighting / ITS	% of A	3.0%	\$19,000	B-8
Traffic Control / Detour	% of A	9.6%	\$58,000	B-9
Structural - Minor Structures / Walls	% of A	1.0%	\$7,000	B-10
Bid Force Accounts	% of A	1.4%	\$9,000	B-11
Total of Bid Construction Items			\$868,000	B
Force Account - Misc.	% of B	2.6%	\$23,000	C-1
Minor Contract Revisions	% of B	4.0%	\$35,000	C-2
Total of Bid Construction Items & Force Account Items			\$926,000	C
Design Engineering	% of C	8.0%	\$75,000	D-1
Construction Engineering	% of C	17.0%	\$158,000	D-2
Total Design & Construction Cost			\$1,159,000	D
Right-of-Way	53,210 SF	\$5	\$267,000	E-1
Utilities	% of D	1.0%	\$12,000	E-2
Total Project, Design & Construction Cost			\$1,438,000	E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	2.0%	\$11,000	F
Total Project Cost Estimate			\$1,449,000	G

<p>SH 7 PEL Study</p> <p>Estimate of Conceptual Project Costs</p> <p>Rural Typical Section w/ Roadside Ditches</p>	<p>SH 7 PEL Planning Environmental Linkage Study</p>
<p>Date Prepared: May 8, 2013</p>	

Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	9,738	\$120,067	
2 Aggregate Base Course (Class 6)	TON	1,769	\$27,335	12-Inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	2,544	\$156,608	10" Depth - Widening / 2" Overlay - Existing
4 Concrete Sidewalk	SY	1,739	\$51,888	10-Foot Shared Use Path (One Side Only)
5 Traffic Signal	Each	1	\$250,000	
6			\$0	
7			\$0	
8			\$0	
9			\$0	
10			\$0	
Total Major Items			\$606,000	

		% of Major Item Cost		
Total Major Items				\$606,000 A
Drainage / Utilities	% of A	5.4%	\$33,000	B-1
Environmental	% of A	3.0%	\$19,000	B-2
Miscellaneous	% of A	1.5%	\$10,000	B-3
Mobilization	% of A	9.3%	\$57,000	B-4
Removals / Resets	% of A	3.7%	\$23,000	B-5
Roadway	% of A	0.4%	\$3,000	B-6
Signing and Striping	% of A	2.1%	\$13,000	B-7
Traffic / Lighting / ITS	% of A	1.0%	\$7,000	B-8
Traffic Control / Detour	% of A	9.6%	\$59,000	B-9
Structural - Minor Structures / Walls	% of A	1.0%	\$7,000	B-10
Bid Force Accounts	% of A	1.4%	\$9,000	B-11
Total of Bid Construction Items			\$846,000	B
Force Account - Misc.	% of B	2.6%	\$22,000	C-1
Minor Contract Revisions	% of B	4.0%	\$34,000	C-2
Total of Bid Construction Items & Force Account Items			\$902,000	C
Design Engineering	% of C	8.0%	\$73,000	D-1
Construction Engineering	% of C	17.0%	\$154,000	D-2
Total Design & Construction Cost			\$1,129,000	D
Right-of-Way	53,210 SF	\$5	\$267,000	E-1
Utilities	% of D	1.0%	\$12,000	E-2
Total Project, Design & Construction Cost			\$1,408,000	E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	2.0%	\$11,000	F
Total Project Cost Estimate			\$1,419,000	G

SH 7 PEL Study Estimate of Conceptual Project Costs Intersection of SH 7 and Sheridan Parkway		 SH 7 PEL Planning Environmental Linkage Study	
		Date Prepared:	May 8, 2013

Input Factors			Notes	
1	Length of Auxiliary Lanes (Combined Western/Eastern Legs)	LF	1,925	
2	Approximate Width of Widening (North Side)	Feet	12	
3	Approximate Width of Widening (South Side)	Feet	12	
4	Approximate Width of Proposed ROW (North Side)	Feet	30	Ultimate ROW Width
5	Approximate Width of Proposed ROW (South Side)	Feet	35	Ultimate ROW Width
6	Length of Cross Street Widening (Combined Northern/Southern Legs)	LF	1,170	
7	Approximate Width of Widening (West Side)	Feet	10	
8	Approximate Width of Widening (East Side)	Feet	8	
9	Approximate Width of Proposed ROW (West Side)	Feet	0	
10	Approximate Width of Proposed ROW (East Side)	Feet	0	
11	Is the Intersection Signalized?	Yes/No	1	

Output Factors		(In 2012\$)	Notes
8	Urban Typical Section Project Costs	\$2,233,000.00	Preferred Typical Section
9	Rural Typical Section Project Costs	\$2,243,000.00	

SH 7 PEL Study Estimate of Conceptual Project Costs Urban Typical Section w/ Curb & Gutter			 SH 7 PEL Planning Environmental Linkage Study	
			Date Prepared:	May 8, 2013

Item	Unit Cost	Quantity	Extended Cost	Notes		
1	Earthwork	CY	\$12.33	7,130	\$87,908	
2	Aggregate Base Course (Class 6)	TON	\$15.45	3,072	\$47,467	12-Inch Depth
3	Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	\$61.56	4,659	\$286,777	10" Depth - Widening / 2" Overlay - Existing
4	Curb and Gutter	LF	\$21.30	3,850	\$82,005	Includes Outside Edge C&G
5	Concrete Sidewalk	SY	\$29.84	2,139	\$63,824	10-Foot Shared Use Path (One Side Only)
6	Traffic Signal	Each	\$250,000.00	1	\$250,000	
7					\$0	
8					\$0	
9					\$0	
10					\$0	
Total Major Items					\$818,000	

		% of Major Item Cost	
Total Major Items			\$818,000 A
Drainage / Utilities	% of A	8.0%	\$66,000 B-1
Environmental	% of A	3.0%	\$25,000 B-2
Miscellaneous	% of A	1.5%	\$13,000 B-3
Mobilization	% of A	9.3%	\$77,000 B-4
Removals / Resets	% of A	3.7%	\$31,000 B-5
Roadway	% of A	0.4%	\$4,000 B-6
Signing and Striping	% of A	2.1%	\$18,000 B-7
Traffic / Lighting / ITS	% of A	3.0%	\$25,000 B-8
Traffic Control / Detour	% of A	9.6%	\$79,000 B-9
Structural - Minor Structures / Walls	% of A	1.0%	\$9,000 B-10
Bid Force Accounts	% of A	1.4%	\$12,000 B-11
Total of Bid Construction Items			\$1,177,000 B
Force Account - Misc.	% of B	2.6%	\$31,000 C-1
Minor Contract Revisions	% of B	4.0%	\$48,000 C-2
Total of Bid Construction Items & Force Account Items			\$1,256,000 C
Design Engineering	% of C	8.0%	\$101,000 D-1
Construction Engineering	% of C	17.0%	\$214,000 D-2
Total Design & Construction Cost			\$1,571,000 D
Right-of-Way	125,125 SF	\$5	\$626,000 E-1
Utilities	% of D	1.0%	\$16,000 E-2
Total Project, Design & Construction Cost			\$2,213,000 E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	2.0%	\$20,000 F
Total Project Cost Estimate			\$2,233,000 G

<p>SH 7 PEL Study</p> <p>Estimate of Conceptual Project Costs</p> <p>Rural Typical Section w/ Roadside Ditches</p>	<p>SH 7 PEL Planning Environmental Linkage Study</p>
<p>Date Prepared: May 8, 2013</p>	

Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	16,541	\$203,947	
2 Aggregate Base Course (Class 6)	TON	3,072	\$47,467	12-Inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	4,659	\$286,777	10" Depth - Widening / 2" Overlay - Existing
4 Concrete Sidewalk	SY	2,139	\$63,824	10-Foot Shared Use Path (One Side Only)
5 Traffic Signal	Each	1	\$250,000	
6			\$0	
7			\$0	
8			\$0	
9			\$0	
10			\$0	
Total Major Items			\$853,000	

Item	%	Cost	Code
Total Major Items		\$853,000	A
Drainage / Utilities	5.4%	\$47,000	B-1
Environmental	3.0%	\$26,000	B-2
Miscellaneous	1.5%	\$13,000	B-3
Mobilization	9.3%	\$80,000	B-4
Removals / Resets	3.7%	\$32,000	B-5
Roadway	0.4%	\$4,000	B-6
Signing and Striping	2.1%	\$18,000	B-7
Traffic / Lighting / ITS	1.0%	\$9,000	B-8
Traffic Control / Detour	9.6%	\$82,000	B-9
Structural - Minor Structures / Walls	1.0%	\$9,000	B-10
Bid Force Accounts	1.4%	\$12,000	B-11
Total of Bid Construction Items		\$1,185,000	B
Force Account - Misc.	2.6%	\$31,000	C-1
Minor Contract Revisions	4.0%	\$48,000	C-2
Total of Bid Construction Items & Force Account Items		\$1,264,000	C
Design Engineering	8.0%	\$102,000	D-1
Construction Engineering	17.0%	\$215,000	D-2
Total Design & Construction Cost		\$1,581,000	D
Right-of-Way		\$626,000	E-1
Utilities	1.0%	\$16,000	E-2
Total Project, Design & Construction Cost		\$2,223,000	E
Contingency (Engineering, ROW & Utilities Only)	2.0%	\$20,000	F
Total Project Cost Estimate		\$2,243,000	G

<p>SH 7 PEL Study</p> <p>Estimate of Conceptual Project Costs</p> <p>Segment 2 Multimodal Costs</p>	<p>SH 7 PEL Planning Environmental Linkage Study</p>
<p>Date Prepared: May 8, 2013</p>	

Input Factors			Notes
1 Length of Improvements	LF	7,920	
2 Approximate Width of Widening (North Side)	Feet	12	
3 Approximate Width of Widening (South Side)	Feet	12	
4 Approximate Width of Proposed ROW (North Side)	Feet	0	
5 Approximate Width of Proposed ROW (South Side)	Feet	0	
6 Number of Major Drainageways	#	0	
7 Required Bridge Widening	SF	0	
8 Number of Signalized Intersections	#	6	
Output Factors			Notes
9 Urban Typical Section Project Costs		(In 2012\$)	
		\$8,542,000	Preferred Typical Section

<p>SH 7 PEL Study</p> <p>Estimate of Conceptual Project Costs</p> <p>Urban Typical Section w/ Curb & Gutter</p>	
Date Prepared: May 8, 2013	


Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	18,773	\$231,475	
2 Aggregate Base Course (Class 6)	TON	12,640	\$195,293	12-Inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	13,939	\$858,097	12" Depth - Widening / 2" Overlay - Existing
4 Curb and Gutter	LF	15,840	\$337,392	Outside C&G Only
5 Concrete Sidewalk	SY	28,041	\$836,747	10-Foot Shared Use Path (Both Side - Anthem's)
6 Concrete Box Culvert	Each	0	\$0	181-Foot Length (\$2,700/lf Unit Price)
7 Bridge Widening	SF	0	\$0	
8 Traffic Signal Modifications	Each	6	\$120,000	
9			\$0	
10			\$0	
Total Major Items			\$2,580,000	


		% of Major Item Cost		
Total Major Items			\$2,580,000	A
Drainage / Utilities	% of A	12.3%	\$318,000	B-1
Environmental	% of A	9.6%	\$248,000	B-2
Miscellaneous	% of A	2.7%	\$70,000	B-3
Mobilization	% of A	15.4%	\$398,000	B-4
Removals / Resets	% of A	13.0%	\$336,000	B-5
Roadway	% of A	7.0%	\$181,000	B-6
Signing and Striping	% of A	5.0%	\$129,000	B-7
Traffic / Lighting / ITS	% of A	10.8%	\$279,000	B-8
Traffic Control / Detour	% of A	20.6%	\$532,000	B-9
Structural - Minor Structures / Walls	% of A	5.5%	\$142,000	B-10
Bid Force Accounts	% of A	0.4%	\$11,000	B-11
Total of Bid Construction Items			\$5,224,000	B
Force Account - Misc.	% of B	6.8%	\$356,000	C-1
Minor Contract Revisions	% of B	7.7%	\$403,000	C-2
Total of Bid Construction Items & Force Account Items			\$5,983,000	C
Design Engineering	% of C	10.0%	\$599,000	D-1
Construction Engineering	% of C	17.0%	\$1,018,000	D-2
Total Design & Construction Cost			\$7,600,000	D
Right-of-Way	0	SF	\$5	\$0 E-1
Utilities	% of D	8.0%	\$608,000	E-2
Total Project, Design & Construction Cost			\$8,208,000	E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	15.0%	\$334,000	F
Total Project Cost Estimate			\$8,542,000	G

<p>SH 7 PEL Study</p> <p>Estimate of Conceptual Project Costs</p> <p>Rural Typical Section w/ Roadside Ditches</p>	
Date Prepared: May 8, 2013	

Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	46,933	\$578,688	
2 Aggregate Base Course (Class 6)	TON	12,640	\$195,293	12-Inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	19,747	\$1,215,638	12" Depth - Widening / 2" Overlay - Existing
4 Concrete Sidewalk	SY	4,574	\$136,501	10-Foot Shared Use Path (Both Side - Anthem's)
5 Concrete Box Culvert	Each	0	\$0	181-Foot Length (\$2,700/lf Unit Price)
6 Bridge Widening	SF	0	\$0	
7 Traffic Signal	Each	6	\$1,500,000	
8			\$0	
9			\$0	
10			\$0	
Total Major Items			\$3,627,000	

		% of Major Item Cost		
Total Major Items			\$3,627,000	A
Drainage / Utilities	% of A	6.4%	\$233,000	B-1
Environmental	% of A	9.6%	\$349,000	B-2
Miscellaneous	% of A	2.7%	\$98,000	B-3
Mobilization	% of A	15.4%	\$559,000	B-4
Removals / Resets	% of A	13.0%	\$472,000	B-5
Roadway	% of A	7.0%	\$254,000	B-6
Signing and Striping	% of A	5.0%	\$182,000	B-7
Traffic / Lighting / ITS	% of A	10.8%	\$392,000	B-8
Traffic Control / Detour	% of A	20.6%	\$748,000	B-9
Structural - Minor Structures / Walls	% of A	5.5%	\$200,000	B-10
Bid Force Accounts	% of A	0.4%	\$15,000	B-11
Total of Bid Construction Items			\$7,129,000	B
Force Account - Misc.	% of B	6.8%	\$485,000	C-1
Minor Contract Revisions	% of B	7.7%	\$549,000	C-2
Total of Bid Construction Items & Force Account Items			\$8,163,000	C
Design Engineering	% of C	10.0%	\$817,000	D-1
Construction Engineering	% of C	17.0%	\$1,388,000	D-2
Total Design & Construction Cost			\$10,368,000	D
Right-of-Way	0	SF	\$5	\$0 E-1
Utilities	% of D	8.0%	\$830,000	E-2
Total Project, Design & Construction Cost			\$11,198,000	E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	15.0%	\$456,000	F
Total Project Cost Estimate			\$11,654,000	G

SH 7 PEL Study		 SH 7 PEL Planning Environmental Linkage Study	
Estimate of Conceptual Project Costs			
Summary of Segment 3		Date Prepared: May 8, 2013	
			<i>Notes</i>
^{3a}	SH 7 (Sheridan Parkway to I-25)	19,815,000	<i>Urban Typical Section</i>
^{3b}	SH 7 (I-25 to 164th Avenue)	7,596,000	<i>Urban Typical Section</i>
^{3c}	SH 7 (164th Avenue to York Street)	13,092,000	<i>Urban Typical Section</i>
	Total for Segment 3	\$40,503,000	

SH 7 PEL Study		 SH 7 PEL Planning Environmental Linkage Study	
Estimate of Conceptual Project Costs			
from Sheridan Parkway to I-25		Date Prepared: May 8, 2013	
Input Factors			<i>Notes</i>
¹	Length of Improvements	LF	6,488
²	Approximate Width of Widening (North Side)	Feet	38
³	Approximate Width of Widening (South Side)	Feet	38
⁴	Approximate Width of Proposed ROW (North Side)	Feet	45
⁵	Approximate Width of Proposed ROW (South Side)	Feet	35
⁶	Number of Major Drainageways	#	0
⁷	Required Bridge Widening	SF	0
⁸	Number of Signalized Intersections	#	3
Output Factors			<i>Notes</i>
		(In 2012\$)	
⁸	Urban Typical Section Project Costs	\$19,815,000	<i>Preferred Typical Section</i>
⁹	Rural Typical Section Project Costs	\$19,558,000	

SH 7 PEL Study
Estimate of Conceptual Project Costs
Urban Typical Section w/ Curb & Gutter

SH 7 PEL
 Planning Environmental Linkage Study

Date Prepared: **May 8, 2013**

Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	40,370	\$497,759	
2 Aggregate Base Course (Class 6)	TON	32,790	\$506,611	12-Inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	38,142	\$2,348,036	12" Depth - Widening / 2" Overlay - Existing
4 Curb and Gutter	LF	25,952	\$552,778	Includes Median & Outside Edge C&G
5 Concrete Sidewalk	SY	14,418	\$430,226	10-Foot Shared Use Path
6 Concrete Box Culvert	Each	0	\$0	181-Foot Length (\$2,700/lf Unit Price)
7 Bridge Widening	SF	0	\$0	
8 Traffic Signal	Each	3	\$750,000	
9			\$0	
10			\$0	
Total Major Items			\$5,086,000	

		% of Major Item Cost		
Total Major Items				\$5,086,000 A
Drainage / Utilities	% of A	12.3%	\$626,000	B-1
Environmental	% of A	9.6%	\$489,000	B-2
Miscellaneous	% of A	2.7%	\$138,000	B-3
Mobilization	% of A	15.4%	\$784,000	B-4
Removals / Resets	% of A	13.0%	\$662,000	B-5
Roadway	% of A	7.0%	\$357,000	B-6
Signing and Striping	% of A	5.0%	\$255,000	B-7
Traffic / Lighting / ITS	% of A	10.8%	\$550,000	B-8
Traffic Control / Detour	% of A	20.6%	\$1,048,000	B-9
Structural - Minor Structures / Walls	% of A	5.5%	\$280,000	B-10
Bid Force Accounts	% of A	0.4%	\$21,000	B-11
Total of Bid Construction Items			\$10,296,000	B
Force Account - Misc.	% of B	6.8%	\$701,000	C-1
Minor Contract Revisions	% of B	7.7%	\$793,000	C-2
Total of Bid Construction Items & Force Account Items			\$11,790,000	C
Design Engineering	% of C	10.0%	\$1,179,000	D-1
Construction Engineering	% of C	17.0%	\$2,005,000	D-2
Total Design & Construction Cost			\$14,974,000	D
Right-of-Way	519,040 SF	\$5	\$2,596,000	E-1
Utilities	% of D	8.0%	\$1,198,000	E-2
Total Project, Design & Construction Cost			\$18,768,000	E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	15.0%	\$1,047,000	F
Total Project Cost Estimate			\$19,815,000	G

SH 7 PEL Study
Estimate of Conceptual Project Costs
Rural Typical Section w/ Roadside Ditches

SH 7 PEL
 Planning Environmental Linkage Study

Date Prepared: **May 8, 2013**

Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	88,429	\$1,090,330	
2 Aggregate Base Course (Class 6)	TON	32,790	\$506,611	12-Inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	38,697	\$2,382,207	12" Depth - Widening / 2" Overlay - Existing
4 Concrete Sidewalk	SY	14,418	\$430,226	10-Foot Shared Use Path
5 Concrete Box Culvert	Each	0	\$0	181-Foot Length (\$2,700/lf Unit Price)
6 Bridge Widening	SF	0	\$0	
7 Traffic Signal	Each	3	\$750,000	
8			\$0	
9			\$0	
10			\$0	
Total Major Items			\$5,160,000	

		% of Major Item Cost		
Total Major Items				\$5,160,000 A
Drainage / Utilities	% of A	6.4%	\$331,000	B-1
Environmental	% of A	9.6%	\$496,000	B-2
Miscellaneous	% of A	2.7%	\$140,000	B-3
Mobilization	% of A	15.4%	\$795,000	B-4
Removals / Resets	% of A	13.0%	\$671,000	B-5
Roadway	% of A	7.0%	\$362,000	B-6
Signing and Striping	% of A	5.0%	\$258,000	B-7
Traffic / Lighting / ITS	% of A	10.8%	\$558,000	B-8
Traffic Control / Detour	% of A	20.6%	\$1,063,000	B-9
Structural - Minor Structures / Walls	% of A	5.5%	\$284,000	B-10
Bid Force Accounts	% of A	0.4%	\$21,000	B-11
Total of Bid Construction Items			\$10,139,000	B
Force Account - Misc.	% of B	6.8%	\$690,000	C-1
Minor Contract Revisions	% of B	7.7%	\$781,000	C-2
Total of Bid Construction Items & Force Account Items			\$11,610,000	C
Design Engineering	% of C	10.0%	\$1,161,000	D-1
Construction Engineering	% of C	17.0%	\$1,974,000	D-2
Total Design & Construction Cost			\$14,745,000	D
Right-of-Way	519,040 SF	\$5	\$2,596,000	E-1
Utilities	% of D	8.0%	\$1,180,000	E-2
Total Project, Design & Construction Cost			\$18,521,000	E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	15.0%	\$1,037,000	F
Total Project Cost Estimate			\$19,558,000	G

SH 7 PEL Study Estimate of Conceptual Project Costs from I-25 to 164th Avenue	 Date Prepared: May 8, 2013
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Input Factors			Notes
1 Length of Improvements	LF	2,800	
2 Approximate Width of Widening (North Side)	Feet	25	
3 Approximate Width of Widening (South Side)	Feet	23	
4 Approximate Width of Proposed ROW (North Side)	Feet	21	
5 Approximate Width of Proposed ROW (South Side)	Feet	55	
6 Number of Major Drainageways	#	0	
7 Required Bridge Widening	SF	0	
8 Number of Signalized Intersections	#	2	
Output Factors			Notes
8 Urban Typical Section Project Costs		(In 2012\$) \$7,596,000	Preferred Typical Section
9 Rural Typical Section Project Costs		\$7,286,000	

SH 7 PEL Study Estimate of Conceptual Project Costs Urban Typical Section w/ Curb & Gutter	 Date Prepared: May 8, 2013
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Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	11,615	\$143,211	
2 Aggregate Base Course (Class 6)	TON	8,938	\$138,086	12-Inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	11,670	\$718,392	12" Depth - Widening / 2" Overlay - Existing
4 Curb and Gutter	LF	11,200	\$238,560	Includes Median & Outside Edge C&G
5 Concrete Sidewalk	SY	6,222	\$185,671	10-Foot Shared Use Path
6 Concrete Box Culvert	Each	0	\$0	181-Foot Length (\$2,700/ft Unit Price)
7 Bridge Widening	SF	0	\$0	
8 Traffic Signal	Each	2	\$500,000	
9			\$0	
10			\$0	
Total Major Items			\$1,924,000	
			% of Major Item Cost	
Total Major Items			\$1,924,000	A
Drainage / Utilities	% of A		12.3%	\$237,000 B-1
Environmental	% of A		9.6%	\$185,000 B-2
Miscellaneous	% of A		2.7%	\$52,000 B-3
Mobilization	% of A		15.4%	\$297,000 B-4
Removals / Resets	% of A		13.0%	\$251,000 B-5
Roadway	% of A		7.0%	\$135,000 B-6
Signing and Striping	% of A		5.0%	\$97,000 B-7
Traffic / Lighting / ITS	% of A		10.8%	\$208,000 B-8
Traffic Control / Detour	% of A		20.6%	\$397,000 B-9
Structural - Minor Structures / Walls	% of A		5.5%	\$106,000 B-10
Bid Force Accounts	% of A		0.4%	\$8,000 B-11
Total of Bid Construction Items			\$3,897,000	B
Force Account - Misc.	% of B		6.8%	\$265,000 C-1
Minor Contract Revisions	% of B		7.7%	\$301,000 C-2
Total of Bid Construction Items & Force Account Items			\$4,463,000	C
Design Engineering	% of C		10.0%	\$447,000 D-1
Construction Engineering	% of C		17.0%	\$759,000 D-2
Total Design & Construction Cost			\$5,669,000	D
Right-of-Way	212,800 SF		\$5	\$1,064,000 E-1
Utilities	% of D		8.0%	\$454,000 E-2
Total Project, Design & Construction Cost			\$7,187,000	E
Contingency (Engineering, ROW & Utilities Only)			\$409,000	F
Total Project Cost Estimate			\$7,596,000	G

<h2 style="margin: 0;">SH 7 PEL Study</h2> <p style="margin: 0;">Estimate of Conceptual Project Costs</p> <p style="margin: 0;">Rural Typical Section w/ Roadside Ditches</p>	
Date Prepared: May 8, 2013	

Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	26,548	\$327,339	
2 Aggregate Base Course (Class 6)	TON	8,938	\$138,086	12-Inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	11,909	\$733,139	12" Depth - Widening / 2" Overlay - Existing
4 Concrete Sidewalk	SY	6,222	\$185,671	10-Foot Shared Use Path
5 Concrete Box Culvert	Each	0	\$0	181-Foot Length (\$2,700/lf Unit Price)
6 Bridge Widening	SF	0	\$0	
7 Traffic Signal	Each	2	\$500,000	
8			\$0	
9			\$0	
10			\$0	
Total Major Items			\$1,885,000	

		% of Major Item Cost	Total	Code
Total Major Items			\$1,885,000	A
Drainage / Utilities	% of A	6.4%	\$121,000	B-1
Environmental	% of A	9.6%	\$181,000	B-2
Miscellaneous	% of A	2.7%	\$51,000	B-3
Mobilization	% of A	15.4%	\$291,000	B-4
Removals / Resets	% of A	13.0%	\$246,000	B-5
Roadway	% of A	7.0%	\$132,000	B-6
Signing and Striping	% of A	5.0%	\$95,000	B-7
Traffic / Lighting / ITS	% of A	10.8%	\$204,000	B-8
Traffic Control / Detour	% of A	20.6%	\$389,000	B-9
Structural - Minor Structures / Walls	% of A	5.5%	\$104,000	B-10
Bid Force Accounts	% of A	0.4%	\$8,000	B-11
Total of Bid Construction Items			\$3,707,000	B
Force Account - Misc.	% of B	6.8%	\$253,000	C-1
Minor Contract Revisions	% of B	7.7%	\$286,000	C-2
Total of Bid Construction Items & Force Account Items			\$4,246,000	C
Design Engineering	% of C	10.0%	\$425,000	D-1
Construction Engineering	% of C	17.0%	\$722,000	D-2
Total Design & Construction Cost			\$5,393,000	D
Right-of-Way	212,800 SF		\$5	\$1,064,000 E-1
Utilities	% of D	8.0%	\$432,000	E-2
Total Project, Design & Construction Cost			\$6,889,000	E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	15.0%	\$397,000	F
Total Project Cost Estimate			\$7,286,000	G

<h2 style="margin: 0;">SH 7 PEL Study</h2> <p style="margin: 0;">Estimate of Conceptual Project Costs</p> <p style="margin: 0;">from 164th Avenue to York Street</p>	
Date Prepared: May 8, 2013	

Input Factors			Notes
1 Length of Improvements	LF	4,500	
2 Approximate Width of Widening (North Side)	Feet	43	
3 Approximate Width of Widening (South Side)	Feet	41	
4 Approximate Width of Proposed ROW (North Side)	Feet	30	
5 Approximate Width of Proposed ROW (South Side)	Feet	33	
6 Number of Major Drainageways	#	0	
7 Required Bridge Widening	SF	0	
8 Number of Signalized Intersections	#	1	

Output Factors		(In 2012\$)	Notes
8 Urban Typical Section Project Costs		\$13,092,000	<i>Preferred Typical Section</i>
9 Rural Typical Section Project Costs		\$13,032,000	

SH 7 PEL Study
Estimate of Conceptual Project Costs
Urban Typical Section w/ Curb & Gutter

SH 7 PEL
 Planning Environmental Linkage Study

Date Prepared: **May 8, 2013**

Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	30,667	\$378,120	
2 Aggregate Base Course (Class 6)	TON	25,137	\$388,367	12-inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	28,655	\$1,764,002	12" Depth - Widening / 2" Overlay - Existing
4 Curb and Gutter	LF	18,000	\$383,400	Includes Median & Outside Edge C&G
5 Concrete Sidewalk	SY	10,000	\$298,400	10-Foot Shared Use Path
6 Concrete Box Culvert	Each	0	\$0	181-Foot Length (\$2,700/lf Unit Price)
7 Bridge Widening	SF	0	\$0	
8 Traffic Signal	Each	1	\$250,000	
9			\$0	
10			\$0	
Total Major Items			\$3,463,000	

		% of Major Item Cost		
Total Major Items				\$3,463,000 A
Drainage / Utilities	% of A	12.3%	\$426,000	B-1
Environmental	% of A	9.6%	\$333,000	B-2
Miscellaneous	% of A	2.7%	\$94,000	B-3
Mobilization	% of A	15.4%	\$534,000	B-4
Removals / Resets	% of A	13.0%	\$451,000	B-5
Roadway	% of A	7.0%	\$243,000	B-6
Signing and Striping	% of A	5.0%	\$174,000	B-7
Traffic / Lighting / ITS	% of A	10.8%	\$375,000	B-8
Traffic Control / Detour	% of A	20.6%	\$714,000	B-9
Structural - Minor Structures / Walls	% of A	5.5%	\$191,000	B-10
Bid Force Accounts	% of A	0.4%	\$14,000	B-11
Total of Bid Construction Items			\$7,012,000	B
Force Account - Misc.	% of B	6.8%	\$477,000	C-1
Minor Contract Revisions	% of B	7.7%	\$540,000	C-2
Total of Bid Construction Items & Force Account Items			\$8,029,000	C
Design Engineering	% of C	10.0%	\$803,000	D-1
Construction Engineering	% of C	17.0%	\$1,365,000	D-2
Total Design & Construction Cost			\$10,197,000	D
Right-of-Way	283,500 SF	\$5	\$1,418,000	E-1
Utilities	% of D	8.0%	\$816,000	E-2
Total Project, Design & Construction Cost			\$12,431,000	E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	15.0%	\$661,000	F
Total Project Cost Estimate			\$13,092,000	G

SH 7 PEL Study
Estimate of Conceptual Project Costs
Rural Typical Section w/ Roadside Ditches

SH 7 PEL
 Planning Environmental Linkage Study

Date Prepared: **May 8, 2013**

Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	66,667	\$822,000	
2 Aggregate Base Course (Class 6)	TON	25,137	\$388,367	12-inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	29,040	\$1,787,702	12" Depth - Widening / 2" Overlay - Existing
4 Concrete Sidewalk	SY	10,000	\$298,400	10-Foot Shared Use Path
5 Concrete Box Culvert	Each	0	\$0	181-Foot Length (\$2,700/lf Unit Price)
6 Bridge Widening	SF	0	\$0	
7 Traffic Signal	Each	1	\$250,000	
8			\$0	
9			\$0	
10			\$0	
Total Major Items			\$3,547,000	

		% of Major Item Cost		
Total Major Items				\$3,547,000 A
Drainage / Utilities	% of A	6.4%	\$228,000	B-1
Environmental	% of A	9.6%	\$341,000	B-2
Miscellaneous	% of A	2.7%	\$96,000	B-3
Mobilization	% of A	15.4%	\$547,000	B-4
Removals / Resets	% of A	13.0%	\$462,000	B-5
Roadway	% of A	7.0%	\$249,000	B-6
Signing and Striping	% of A	5.0%	\$178,000	B-7
Traffic / Lighting / ITS	% of A	10.8%	\$384,000	B-8
Traffic Control / Detour	% of A	20.6%	\$731,000	B-9
Structural - Minor Structures / Walls	% of A	5.5%	\$196,000	B-10
Bid Force Accounts	% of A	0.4%	\$15,000	B-11
Total of Bid Construction Items			\$6,974,000	B
Force Account - Misc.	% of B	6.8%	\$475,000	C-1
Minor Contract Revisions	% of B	7.7%	\$537,000	C-2
Total of Bid Construction Items & Force Account Items			\$7,986,000	C
Design Engineering	% of C	10.0%	\$799,000	D-1
Construction Engineering	% of C	17.0%	\$1,358,000	D-2
Total Design & Construction Cost			\$10,143,000	D
Right-of-Way	283,500 SF	\$5	\$1,418,000	E-1
Utilities	% of D	8.0%	\$812,000	E-2
Total Project, Design & Construction Cost			\$12,373,000	E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	15.0%	\$659,000	F
Total Project Cost Estimate			\$13,032,000	G

<p>SH 7 PEL Study</p> <p>Estimate of Conceptual Project Costs</p> <p>Intersection of SH 7 and Pecos Street</p>	
Date Prepared: May 8, 2013	

Input Factors			Notes
1	Length of Auxiliary Lanes (Combined Western/Eastern Legs)	LF	1,555
2	Approximate Width of Widening (North Side)	Feet	18
3	Approximate Width of Widening (South Side)	Feet	18
4	Approximate Width of Proposed ROW (North Side)	Feet	35 <i>Ultimate ROW Width</i>
5	Approximate Width of Proposed ROW (South Side)	Feet	35 <i>Ultimate ROW Width</i>
6	Length of Cross Street Widening (Combined Northern/Southern Legs)	LF	95
7	Approximate Width of Widening (West Side)	Feet	0 <i>Match Existing</i>
8	Approximate Width of Widening (East Side)	Feet	0
9	Approximate Width of Proposed ROW (West Side)	Feet	0
10	Approximate Width of Proposed ROW (East Side)	Feet	0
11	Is the Intersection Signalized?	Yes/No	1

Output Factors			Notes
8	Urban Typical Section Project Costs	(In 2012\$)	\$1,970,000.00 <i>Preferred Typical Section</i>
9	Rural Typical Section Project Costs		\$1,961,000.00

<p>SH 7 PEL Study</p> <p>Estimate of Conceptual Project Costs</p> <p>Urban Typical Section w/ Curb & Gutter</p>	
Date Prepared: May 8, 2013	

Item	Unit Cost	Quantity	Extended Cost	Notes	
1	Earthwork	CY	\$12.33	5,068	\$62,490
2	Aggregate Base Course (Class 6)	TON	\$15.45	3,723	\$57,515
3	Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	\$61.56	3,877	\$238,676
4	Curb and Gutter	LF	\$21.30	3,110	\$66,243
5	Concrete Sidewalk	SY	\$29.84	1,728	\$51,557
6	Traffic Signal	Each	\$250,000.00	1	\$250,000
7					\$0
8					\$0
9					\$0
10					\$0
Total Major Items			\$727,000		

% of Major Item Cost					
Total Major Items			\$727,000	A	
Drainage / Utilities	% of A	8.0%	\$59,000	B-1	
Environmental	% of A	3.0%	\$22,000	B-2	
Miscellaneous	% of A	1.5%	\$11,000	B-3	
Mobilization	% of A	9.3%	\$68,000	B-4	
Removals / Resets	% of A	3.7%	\$27,000	B-5	
Roadway	% of A	0.4%	\$3,000	B-6	
Signing and Striping	% of A	2.1%	\$16,000	B-7	
Traffic / Lighting / ITS	% of A	3.0%	\$22,000	B-8	
Traffic Control / Detour	% of A	9.6%	\$70,000	B-9	
Structural - Minor Structures / Walls	% of A	1.0%	\$8,000	B-10	
Bid Force Accounts	% of A	1.4%	\$11,000	B-11	
Total of Bid Construction Items			\$1,044,000	B	
Force Account - Misc.	% of B	2.6%	\$28,000	C-1	
Minor Contract Revisions	% of B	4.0%	\$42,000	C-2	
Total of Bid Construction Items & Force Account Items			\$1,114,000	C	
Design Engineering	% of C	8.0%	\$90,000	D-1	
Construction Engineering	% of C	17.0%	\$190,000	D-2	
Total Design & Construction Cost			\$1,394,000	D	
Right-of-Way	108,850 SF		\$5	\$545,000	E-1
Utilities	% of D	1.0%		\$14,000	E-2
Total Project, Design & Construction Cost				\$1,953,000	E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	2.0%		\$17,000	F
Total Project Cost Estimate				\$1,970,000	G

<p>SH 7 PEL Study</p> <p>Estimate of Conceptual Project Costs</p> <p>Rural Typical Section w/ Roadside Ditches</p>	
<p>Date Prepared: May 8, 2013</p>	

Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	11,979	\$147,704	
2 Aggregate Base Course (Class 6)	TON	3,723	\$57,515	12-Inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	3,877	\$238,676	10" Depth - Widening / 2" Overlay - Existing
4 Concrete Sidewalk	SY	1,728	\$51,557	10-Foot Shared Use Path (One Side Only)
5 Traffic Signal	Each	1	\$250,000	
6			\$0	
7			\$0	
8			\$0	
9			\$0	
10			\$0	
Total Major Items			\$746,000	

		% of Major Item Cost		
Total Major Items			\$746,000	A
Drainage / Utilities	% of A	5.4%	\$41,000	B-1
Environmental	% of A	3.0%	\$23,000	B-2
Miscellaneous	% of A	1.5%	\$12,000	B-3
Mobilization	% of A	9.3%	\$70,000	B-4
Removals / Resets	% of A	3.7%	\$28,000	B-5
Roadway	% of A	0.4%	\$3,000	B-6
Signing and Striping	% of A	2.1%	\$16,000	B-7
Traffic / Lighting / ITS	% of A	1.0%	\$8,000	B-8
Traffic Control / Detour	% of A	9.6%	\$72,000	B-9
Structural - Minor Structures / Walls	% of A	1.0%	\$8,000	B-10
Bid Force Accounts	% of A	1.4%	\$11,000	B-11
Total of Bid Construction Items			\$1,038,000	B
Force Account - Misc.	% of B	2.6%	\$27,000	C-1
Minor Contract Revisions	% of B	4.0%	\$42,000	C-2
Total of Bid Construction Items & Force Account Items			\$1,107,000	C
Design Engineering	% of C	8.0%	\$89,000	D-1
Construction Engineering	% of C	17.0%	\$189,000	D-2
Total Design & Construction Cost			\$1,385,000	D
Right-of-Way	108,850 SF		\$5	E-1
Utilities	% of D	1.0%	\$14,000	E-2
Total Project, Design & Construction Cost			\$1,944,000	E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	2.0%	\$17,000	F
Total Project Cost Estimate			\$1,961,000	G

<p>SH 7 PEL Study</p> <p>Estimate of Conceptual Project Costs</p> <p>Intersection of SH 7 and Huron Street</p>	
<p>Date Prepared: May 8, 2013</p>	

Input Factors			Notes
1	Length of Auxiliary Lanes (Combined Western/Eastern Legs)	LF	1,660
2	Approximate Width of Widening (North Side)	Feet	18
3	Approximate Width of Widening (South Side)	Feet	18
4	Approximate Width of Proposed ROW (North Side)	Feet	50
5	Approximate Width of Proposed ROW (South Side)	Feet	35
6	Length of Cross Street Widening (Combined Northern/Southern Legs)	LF	80
7	Approximate Width of Widening (West Side)	Feet	0
8	Approximate Width of Widening (East Side)	Feet	0
9	Approximate Width of Proposed ROW (West Side)	Feet	0
10	Approximate Width of Proposed ROW (East Side)	Feet	0
11	Is the Intersection Signalized?	Yes/No	1

Output Factors		(In 2012\$)	Notes
8	Urban Typical Section Project Costs	\$2,197,000.00	<i>Preferred Typical Section</i>
9	Rural Typical Section Project Costs	\$2,188,000.00	

SH 7 PEL Study
Estimate of Conceptual Project Costs
Urban Typical Section w/ Curb & Gutter

SH 7 PEL
 Planning Environmental Linkage Study

Date Prepared: **May 8, 2013**

Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	5,410	\$66,710	
2 Aggregate Base Course (Class 6)	TON	3,974	\$61,399	12-Inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	4,139	\$254,793	10" Depth - Widening / 2" Overlay - Existing
4 Curb and Gutter	LF	3,320	\$70,716	Includes Outside Edge C&G
5 Concrete Sidewalk	SY	1,844	\$55,038	10-Foot Shared Use Path (One Side Only)
6 Traffic Signal	Each	1	\$250,000	
7			\$0	
8			\$0	
9			\$0	
10			\$0	
Total Major Items			\$759,000	

		% of Major Item Cost		
Total Major Items			\$759,000	A
Drainage / Utilities	% of A	8.0%	\$61,000	B-1
Environmental	% of A	3.0%	\$23,000	B-2
Miscellaneous	% of A	1.5%	\$12,000	B-3
Mobilization	% of A	9.3%	\$71,000	B-4
Removals / Resets	% of A	3.7%	\$29,000	B-5
Roadway	% of A	0.4%	\$4,000	B-6
Signing and Striping	% of A	2.1%	\$16,000	B-7
Traffic / Lighting / ITS	% of A	3.0%	\$23,000	B-8
Traffic Control / Detour	% of A	9.6%	\$73,000	B-9
Structural - Minor Structures / Walls	% of A	1.0%	\$8,000	B-10
Bid Force Accounts	% of A	1.4%	\$11,000	B-11
Total of Bid Construction Items			\$1,090,000	B
Force Account - Misc.	% of B	2.6%	\$29,000	C-1
Minor Contract Revisions	% of B	4.0%	\$44,000	C-2
Total of Bid Construction Items & Force Account Items			\$1,163,000	C
Design Engineering	% of C	8.0%	\$94,000	D-1
Construction Engineering	% of C	17.0%	\$198,000	D-2
Total Design & Construction Cost			\$1,455,000	D
Right-of-Way	141,100 SF	\$5	\$706,000	E-1
Utilities	% of D	1.0%	\$15,000	E-2
Total Project, Design & Construction Cost			\$2,176,000	E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	2.0%	\$21,000	F
Total Project Cost Estimate			\$2,197,000	G

SH 7 PEL Study
Estimate of Conceptual Project Costs
Rural Typical Section w/ Roadside Ditches

SH 7 PEL
 Planning Environmental Linkage Study

Date Prepared: **May 8, 2013**


Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	12,788	\$157,678	
2 Aggregate Base Course (Class 6)	TON	3,974	\$61,399	12-Inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	4,139	\$254,793	10" Depth - Widening / 2" Overlay - Existing
4 Concrete Sidewalk	SY	1,844	\$55,038	10-Foot Shared Use Path (One Side Only)
5 Traffic Signal	Each	1	\$250,000	
6			\$0	
7			\$0	
8			\$0	
9			\$0	
10			\$0	
Total Major Items			\$779,000	

		% of Major Item Cost		
Total Major Items			\$779,000	A
Drainage / Utilities	% of A	5.4%	\$43,000	B-1
Environmental	% of A	3.0%	\$24,000	B-2
Miscellaneous	% of A	1.5%	\$12,000	B-3
Mobilization	% of A	9.3%	\$73,000	B-4
Removals / Resets	% of A	3.7%	\$29,000	B-5
Roadway	% of A	0.4%	\$4,000	B-6
Signing and Striping	% of A	2.1%	\$17,000	B-7
Traffic / Lighting / ITS	% of A	1.0%	\$8,000	B-8
Traffic Control / Detour	% of A	9.6%	\$75,000	B-9
Structural - Minor Structures / Walls	% of A	1.0%	\$8,000	B-10
Bid Force Accounts	% of A	1.4%	\$11,000	B-11
Total of Bid Construction Items			\$1,083,000	B
Force Account - Misc.	% of B	2.6%	\$29,000	C-1
Minor Contract Revisions	% of B	4.0%	\$44,000	C-2
Total of Bid Construction Items & Force Account Items			\$1,156,000	C
Design Engineering	% of C	8.0%	\$93,000	D-1
Construction Engineering	% of C	17.0%	\$197,000	D-2
Total Design & Construction Cost			\$1,446,000	D
Right-of-Way	141,100 SF	\$5	\$706,000	E-1
Utilities	% of D	1.0%	\$15,000	E-2
Total Project, Design & Construction Cost			\$2,167,000	E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	2.0%	\$21,000	F
Total Project Cost Estimate			\$2,188,000	G

SH 7 PEL Study Estimate of Conceptual Project Costs Intersection of SH 7 and North Washington Street	 SH 7 PEL Planning Environmental Linkage Study
	Date Prepared: May 8, 2013

Input Factors			Notes	
1	Length of Auxiliary Lanes (Combined Western/Eastern Legs)	LF	1,800	
2	Approximate Width of Widening (North Side)	Feet	6	
3	Approximate Width of Widening (South Side)	Feet	6	
4	Approximate Width of Proposed ROW (North Side)	Feet	30	<i>Ultimate ROW Width</i>
5	Approximate Width of Proposed ROW (South Side)	Feet	60	<i>Ultimate ROW Width</i>
6	Length of Cross Street Widening (Combined Northern/Southern Legs)	LF	0	<i>Match Existing</i>
7	Approximate Width of Widening (West Side)	Feet	0	
8	Approximate Width of Widening (East Side)	Feet	0	
9	Approximate Width of Proposed ROW (West Side)	Feet	0	
10	Approximate Width of Proposed ROW (East Side)	Feet	0	
11	Is the Intersection Signalized?	Yes/No	1	

Output Factors		(In 2012\$)	Notes
8	Urban Typical Section Project Costs	\$2,084,000.00	<i>Preferred Typical Section</i>
9	Rural Typical Section Project Costs	\$2,011,000.00	

SH 7 PEL Study Estimate of Conceptual Project Costs Urban Typical Section w/ Curb & Gutter	 SH 7 PEL Planning Environmental Linkage Study
	Date Prepared: May 8, 2013

Item	Unit Cost	Quantity	Extended Cost	Notes		
1	Earthwork	CY	\$12.33	2,667	\$32,880	
2	Aggregate Base Course (Class 6)	TON	\$15.45	1,436	\$22,192	12-Inch Depth
3	Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	\$61.56	3,300	\$203,148	10" Depth - Widening / 2" Overlay - Existing
4	Curb and Gutter	LF	\$21.30	3,600	\$76,680	Includes Outside Edge C&G (Median C&G Remains)
5	Concrete Sidewalk	SY	\$29.84	2,000	\$59,680	10-Foot Shared Use Path (One Side Only)
6	Traffic Signal	Each	\$250,000.00	1	\$250,000	
7					\$0	
8					\$0	
9					\$0	
10					\$0	
Total Major Items					\$645,000	

		% of Major Item Cost		
Total Major Items				\$645,000 A
Drainage / Utilities	% of A	8.0%	\$52,000	B-1
Environmental	% of A	3.0%	\$20,000	B-2
Miscellaneous	% of A	1.5%	\$10,000	B-3
Mobilization	% of A	9.3%	\$60,000	B-4
Removals / Resets	% of A	3.7%	\$24,000	B-5
Roadway	% of A	0.4%	\$3,000	B-6
Signing and Striping	% of A	2.1%	\$14,000	B-7
Traffic / Lighting / ITS	% of A	3.0%	\$20,000	B-8
Traffic Control / Detour	% of A	9.6%	\$62,000	B-9
Structural - Minor Structures / Walls	% of A	1.0%	\$7,000	B-10
Bid Force Accounts	% of A	1.4%	\$10,000	B-11
Total of Bid Construction Items			\$927,000	B
Force Account - Misc.	% of B	2.6%	\$25,000	C-1
Minor Contract Revisions	% of B	4.0%	\$38,000	C-2
Total of Bid Construction Items & Force Account Items			\$990,000	C
Design Engineering	% of C	8.0%	\$80,000	D-1
Construction Engineering	% of C	17.0%	\$169,000	D-2
Total Design & Construction Cost			\$1,239,000	D
Right-of-Way	162,000 SF	\$5	\$810,000	E-1
Utilities	% of D	1.0%	\$13,000	E-2
Total Project, Design & Construction Cost			\$2,062,000	E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	2.0%	\$22,000	F
Total Project Cost Estimate			\$2,084,000	G

SH 7 PEL Study Estimate of Conceptual Project Costs Rural Typical Section w/ Roadside Ditches	 SH 7 PEL Planning Environmental Linkage Study
Date Prepared: May 8, 2013	

Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	7,467	\$92,064	
2 Aggregate Base Course (Class 6)	TON	1,436	\$22,192	12-Inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	3,300	\$203,148	10" Depth - Widening / 2" Overlay - Existing
4 Concrete Sidewalk	SY	2,000	\$59,680	10-Foot Shared Use Path (One Side Only)
5 Traffic Signal	Each	1	\$250,000	
6			\$0	
7			\$0	
8			\$0	
9			\$0	
10			\$0	
Total Major Items			\$628,000	

	% of Major Item Cost			
Total Major Items			\$628,000	A
Drainage / Utilities	% of A	5.4%	\$34,000	B-1
Environmental	% of A	3.0%	\$19,000	B-2
Miscellaneous	% of A	1.5%	\$10,000	B-3
Mobilization	% of A	9.3%	\$59,000	B-4
Removals / Resets	% of A	3.7%	\$24,000	B-5
Roadway	% of A	0.4%	\$3,000	B-6
Signing and Striping	% of A	2.1%	\$14,000	B-7
Traffic / Lighting / ITS	% of A	1.0%	\$7,000	B-8
Traffic Control / Detour	% of A	9.6%	\$61,000	B-9
Structural - Minor Structures / Walls	% of A	1.0%	\$7,000	B-10
Bid Force Accounts	% of A	1.4%	\$9,000	B-11
Total of Bid Construction Items			\$875,000	B
Force Account - Misc.	% of B	2.6%	\$23,000	C-1
Minor Contract Revisions	% of B	4.0%	\$35,000	C-2
Total of Bid Construction Items & Force Account Items			\$933,000	C
Design Engineering	% of C	8.0%	\$75,000	D-1
Construction Engineering	% of C	17.0%	\$159,000	D-2
Total Design & Construction Cost			\$1,167,000	D
Right-of-Way	162,000 SF	\$5	\$810,000	E-1
Utilities	% of D	1.0%	\$12,000	E-2
Total Project, Design & Construction Cost			\$1,989,000	E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	2.0%	\$22,000	F
Total Project Cost Estimate			\$2,011,000	G

SH 7 PEL Study Estimate of Conceptual Project Costs Intersection of SH 7 and York Street	 SH 7 PEL Planning Environmental Linkage Study
Date Prepared: May 8, 2013	

Input Factors			Notes
1	Length of Auxiliary Lanes (Combined Western/Eastern Legs)	LF	1,800
2	Approximate Width of Widening (North Side)	Feet	18
3	Approximate Width of Widening (South Side)	Feet	18
4	Approximate Width of Proposed ROW (North Side)	Feet	42
5	Approximate Width of Proposed ROW (South Side)	Feet	70
6	Length of Cross Street Widening (Combined Northern/Southern Legs)	LF	250
7	Approximate Width of Widening (West Side)	Feet	12
8	Approximate Width of Widening (East Side)	Feet	12
9	Approximate Width of Proposed ROW (West Side)	Feet	40
10	Approximate Width of Proposed ROW (East Side)	Feet	35
11	Is the Intersection Signalized?	Yes/No	1

Output Factors		(In 2012\$)	Notes
8	Urban Typical Section Project Costs	\$2,667,000.00	<i>Preferred Typical Section</i>
9	Rural Typical Section Project Costs	\$2,728,000.00	

<p>SH 7 PEL Study</p> <p>Estimate of Conceptual Project Costs</p> <p>Urban Typical Section w/ Curb & Gutter</p>	
<p>Date Prepared: May 8, 2013</p>	

Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	9,067	\$111,792	
2 Aggregate Base Course (Class 6)	TON	4,309	\$66,577	12-Inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	4,488	\$276,281	10" Depth - Widening / 2" Overlay - Existing
4 Curb and Gutter	LF	3,600	\$76,680	Includes Outside Edge C&G
5 Concrete Sidewalk	SY	2,000	\$59,680	10-Foot Shared Use Path (One Side Only)
6 Traffic Signal	Each	1	\$250,000	
7			\$0	
8			\$0	
9			\$0	
10			\$0	

Total Major Items \$842,000

		% of Major Item Cost		
Total Major Items			\$842,000	A
Drainage / Utilities	% of A	8.0%	\$68,000	B-1
Environmental	% of A	3.0%	\$26,000	B-2
Miscellaneous	% of A	1.5%	\$13,000	B-3
Mobilization	% of A	9.3%	\$79,000	B-4
Removals / Resets	% of A	3.7%	\$32,000	B-5
Roadway	% of A	0.4%	\$4,000	B-6
Signing and Striping	% of A	2.1%	\$18,000	B-7
Traffic / Lighting / ITS	% of A	3.0%	\$26,000	B-8
Traffic Control / Detour	% of A	9.6%	\$81,000	B-9
Structural - Minor Structures / Walls	% of A	1.0%	\$9,000	B-10
Bid Force Accounts	% of A	1.4%	\$12,000	B-11
Total of Bid Construction Items			\$1,210,000	B
Force Account - Misc.	% of B	2.6%	\$32,000	C-1
Minor Contract Revisions	% of B	4.0%	\$49,000	C-2
Total of Bid Construction Items & Force Account Items			\$1,291,000	C
Design Engineering	% of C	8.0%	\$104,000	D-1
Construction Engineering	% of C	17.0%	\$220,000	D-2
Total Design & Construction Cost			\$1,615,000	D
Right-of-Way	201,600 SF		\$5	E-1
Utilities	% of D	1.0%	\$17,000	E-2
Total Project, Design & Construction Cost			\$2,640,000	E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	2.0%	\$27,000	F
Total Project Cost Estimate			\$2,667,000	G

<p>SH 7 PEL Study</p> <p>Estimate of Conceptual Project Costs</p> <p>Rural Typical Section w/ Roadside Ditches</p>	
<p>Date Prepared: May 8, 2013</p>	

Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	20,267	\$249,888	
2 Aggregate Base Course (Class 6)	TON	4,309	\$66,577	12-Inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	4,488	\$276,281	10" Depth - Widening / 2" Overlay - Existing
4 Concrete Sidewalk	SY	2,000	\$59,680	10-Foot Shared Use Path (One Side Only)
5 Traffic Signal	Each	1	\$250,000	
6			\$0	
7			\$0	
8			\$0	
9			\$0	
10			\$0	

Total Major Items \$903,000

		% of Major Item Cost		
Total Major Items			\$903,000	A
Drainage / Utilities	% of A	5.4%	\$49,000	B-1
Environmental	% of A	3.0%	\$28,000	B-2
Miscellaneous	% of A	1.5%	\$14,000	B-3
Mobilization	% of A	9.3%	\$84,000	B-4
Removals / Resets	% of A	3.7%	\$34,000	B-5
Roadway	% of A	0.4%	\$4,000	B-6
Signing and Striping	% of A	2.1%	\$19,000	B-7
Traffic / Lighting / ITS	% of A	1.0%	\$10,000	B-8
Traffic Control / Detour	% of A	9.6%	\$87,000	B-9
Structural - Minor Structures / Walls	% of A	1.0%	\$10,000	B-10
Bid Force Accounts	% of A	1.4%	\$13,000	B-11
Total of Bid Construction Items			\$1,255,000	B
Force Account - Misc.	% of B	2.6%	\$33,000	C-1
Minor Contract Revisions	% of B	4.0%	\$51,000	C-2
Total of Bid Construction Items & Force Account Items			\$1,339,000	C
Design Engineering	% of C	8.0%	\$108,000	D-1
Construction Engineering	% of C	17.0%	\$228,000	D-2
Total Design & Construction Cost			\$1,675,000	D
Right-of-Way	201,600 SF		\$5	E-1
Utilities	% of D	1.0%	\$17,000	E-2
Total Project, Design & Construction Cost			\$2,700,000	E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	2.0%	\$28,000	F
Total Project Cost Estimate			\$2,728,000	G

SH 7 PEL Study		SH 7 PEL Planning Environmental Linkage Study	
Estimate of Conceptual Project Costs		Date Prepared: May 8, 2013	
Summary of Segment 4			
			<i>Notes</i>
^{4a} SH 7 (York Street to Holly Street)	26,197,000		<i>Rural Typical Section</i>
Total for Segment 4	\$26,197,000		

SH 7 PEL Study			SH 7 PEL Planning Environmental Linkage Study
Estimate of Conceptual Project Costs			Date Prepared: May 8, 2013
from York Street to Holly Street			
Input Factors			<i>Notes</i>
¹ Length of Improvements	LF	10,500	
² Approximate Width of Widening (North Side)	Feet	30	
³ Approximate Width of Widening (South Side)	Feet	30	
⁴ Approximate Width of Proposed ROW (North Side)	Feet	26	
⁵ Approximate Width of Proposed ROW (South Side)	Feet	31	
⁶ Number of Major Drainageways	#	1	
⁷ Required Bridge Widening	SF	0	
⁸ Number of Signalized Intersections	#	3	
Output Factors			<i>Notes</i>
		(In 2012\$)	
⁸ Urban Typical Section Project Costs		\$26,991,000	
⁹ Rural Typical Section Project Costs		\$26,197,000	<i>Preferred Typical Section</i>

SH 7 PEL Study
Estimate of Conceptual Project Costs
Urban Typical Section w/ Curb & Gutter

SH 7 PEL
 Planning Environmental Linkage Study

Date Prepared: **May 8, 2013**

Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	52,889	\$652,120	
2 Aggregate Base Course (Class 6)	TON	41,895	\$647,278	12-Inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	48,382	\$2,978,375	12" Depth - Widening / 2" Overlay - Existing
4 Curb and Gutter	LF	42,000	\$894,600	Includes Median & Outside Edge C&G
5 Concrete Sidewalk	SY	23,333	\$696,267	10-Foot Shared Use Path
6 Concrete Box Culvert	Each	1	\$500,000	181-Foot Length (\$2,700/lf Unit Price)
7 Bridge Widening	SF	0	\$0	
8 Traffic Signal	Each	3	\$750,000	
9			\$0	
10			\$0	
Total Major Items			\$7,119,000	

		% of Major Item Cost		
Total Major Items				\$7,119,000 A
Drainage / Utilities	% of A	12.3%	\$876,000	B-1
Environmental	% of A	9.6%	\$684,000	B-2
Miscellaneous	% of A	2.7%	\$193,000	B-3
Mobilization	% of A	15.4%	\$1,097,000	B-4
Removals / Resets	% of A	13.0%	\$926,000	B-5
Roadway	% of A	7.0%	\$499,000	B-6
Signing and Striping	% of A	5.0%	\$356,000	B-7
Traffic / Lighting / ITS	% of A	10.8%	\$769,000	B-8
Traffic Control / Detour	% of A	20.6%	\$1,467,000	B-9
Structural - Minor Structures / Walls	% of A	5.5%	\$392,000	B-10
Bid Force Accounts	% of A	0.4%	\$29,000	B-11
Total of Bid Construction Items			\$14,407,000	B
Force Account - Misc.	% of B	6.8%	\$980,000	C-1
Minor Contract Revisions	% of B	7.7%	\$1,110,000	C-2
Total of Bid Construction Items & Force Account Items			\$16,497,000	C
Design Engineering	% of C	10.0%	\$1,650,000	D-1
Construction Engineering	% of C	17.0%	\$2,805,000	D-2
Total Design & Construction Cost			\$20,952,000	D
Right-of-Way	598,500 SF	\$5	\$2,993,000	E-1
Utilities	% of D	8.0%	\$1,677,000	E-2
Total Project, Design & Construction Cost			\$25,622,000	E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	15.0%	\$1,369,000	F
Total Project Cost Estimate			\$26,991,000	G

SH 7 PEL Study
Estimate of Conceptual Project Costs
Rural Typical Section w/ Roadside Ditches

SH 7 PEL
 Planning Environmental Linkage Study

Date Prepared: **May 8, 2013**

Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	118,222	\$1,457,680	
2 Aggregate Base Course (Class 6)	TON	41,895	\$647,278	12-Inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	49,280	\$3,033,677	12" Depth - Widening / 2" Overlay - Existing
4 Concrete Sidewalk	SY	23,333	\$696,267	10-Foot Shared Use Path
5 Concrete Box Culvert	Each	1	\$500,000	181-Foot Length (\$2,700/lf Unit Price)
6 Bridge Widening	SF	0	\$0	
7 Traffic Signal	Each	3	\$750,000	
8			\$0	
9			\$0	
10			\$0	
Total Major Items			\$7,085,000	

		% of Major Item Cost		
Total Major Items				\$7,085,000 A
Drainage / Utilities	% of A	6.4%	\$454,000	B-1
Environmental	% of A	9.6%	\$681,000	B-2
Miscellaneous	% of A	2.7%	\$192,000	B-3
Mobilization	% of A	15.4%	\$1,092,000	B-4
Removals / Resets	% of A	13.0%	\$922,000	B-5
Roadway	% of A	7.0%	\$496,000	B-6
Signing and Striping	% of A	5.0%	\$355,000	B-7
Traffic / Lighting / ITS	% of A	10.8%	\$766,000	B-8
Traffic Control / Detour	% of A	20.6%	\$1,460,000	B-9
Structural - Minor Structures / Walls	% of A	5.5%	\$390,000	B-10
Bid Force Accounts	% of A	0.4%	\$29,000	B-11
Total of Bid Construction Items			\$13,922,000	B
Force Account - Misc.	% of B	6.8%	\$947,000	C-1
Minor Contract Revisions	% of B	7.7%	\$1,072,000	C-2
Total of Bid Construction Items & Force Account Items			\$15,941,000	C
Design Engineering	% of C	10.0%	\$1,595,000	D-1
Construction Engineering	% of C	17.0%	\$2,710,000	D-2
Total Design & Construction Cost			\$20,246,000	D
Right-of-Way	598,500 SF	\$5	\$2,993,000	E-1
Utilities	% of D	8.0%	\$1,620,000	E-2
Total Project, Design & Construction Cost			\$24,869,000	E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	15.0%	\$1,338,000	F
Total Project Cost Estimate			\$26,197,000	G


SH 7 PEL Study			SH 7 PEL Planning Environmental Linkage Study
Estimate of Conceptual Project Costs			Date Prepared: May 8, 2013
Intersection of SH 7 and Colorado Boulevard			
Input Factors			Notes
1	Length of Auxiliary Lanes (Combined Western/Eastern Legs)	LF 2,650	
2	Approximate Width of Widening (North Side)	Feet 17	
3	Approximate Width of Widening (South Side)	Feet 18	
4	Approximate Width of Proposed ROW (North Side)	Feet 14	Ultimate ROW Width
5	Approximate Width of Proposed ROW (South Side)	Feet 19	Ultimate ROW Width
6	Length of Cross Street Widening (Combined Northern/Southern Legs)	LF 250	Colorado Blvd. not included in SH 7 Costs
7	Approximate Width of Widening (West Side)	Feet 0	
8	Approximate Width of Widening (East Side)	Feet 0	
9	Approximate Width of Proposed ROW (West Side)	Feet 0	
10	Approximate Width of Proposed ROW (East Side)	Feet 0	
11	Is the Intersection Signalized?	Yes/No 1	
Output Factors		(In 2012\$)	Notes
8	Urban Typical Section Project Costs	\$2,527,000.00	
9	Rural Typical Section Project Costs	\$2,519,000.00	Preferred Typical Section

SH 7 PEL Study			SH 7 PEL Planning Environmental Linkage Study	
Estimate of Conceptual Project Costs			Date Prepared: May 8, 2013	
Urban Typical Section w/ Curb & Gutter				
Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY \$12.33	8,441	\$104,074	
2 Aggregate Base Course (Class 6)	TON \$15.45	6,168	\$95,294	12-Inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON \$61.56	6,834	\$420,704	10" Depth - Widening / 2" Overlay - Existing
4 Curb and Gutter	LF \$21.30	5,300	\$112,890	Includes Outside Edge C&G
5 Concrete Sidewalk	SY \$29.84	2,944	\$87,862	10-Foot Shared Use Path (One Side Only)
6 Traffic Signal	Each \$250,000.00	1	\$250,000	
7			\$0	
8			\$0	
9			\$0	
10			\$0	
Total Major Items			\$1,071,000	
			% of Major Item Cost	
Total Major Items				\$1,071,000 A
Drainage / Utilities	% of A		8.0%	\$86,000 B-1
Environmental	% of A		3.0%	\$33,000 B-2
Miscellaneous	% of A		1.5%	\$17,000 B-3
Mobilization	% of A		9.3%	\$100,000 B-4
Removals / Resets	% of A		3.7%	\$40,000 B-5
Roadway	% of A		0.4%	\$5,000 B-6
Signing and Striping	% of A		2.1%	\$23,000 B-7
Traffic / Lighting / ITS	% of A		3.0%	\$33,000 B-8
Traffic Control / Detour	% of A		9.6%	\$103,000 B-9
Structural - Minor Structures / Walls	% of A		1.0%	\$11,000 B-10
Bid Force Accounts	% of A		1.4%	\$15,000 B-11
Total of Bid Construction Items				\$1,537,000 B
Force Account - Misc.	% of B		2.6%	\$40,000 C-1
Minor Contract Revisions	% of B		4.0%	\$62,000 C-2
Total of Bid Construction Items & Force Account Items				\$1,639,000 C
Design Engineering	% of C		8.0%	\$132,000 D-1
Construction Engineering	% of C		17.0%	\$279,000 D-2
Total Design & Construction Cost				\$2,050,000 D
Right-of-Way	87,450 SF		\$5	\$438,000 E-1
Utilities	% of D		1.0%	\$21,000 E-2
Total Project, Design & Construction Cost				\$2,509,000 E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2		2.0%	\$18,000 F
Total Project Cost Estimate				\$2,527,000 G

<p>SH 7 PEL Study</p> <p>Estimate of Conceptual Project Costs</p> <p>Rural Typical Section w/ Roadside Ditches</p>	
<p>Date Prepared: May 8, 2013</p>	

Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	20,022	\$246,874	
2 Aggregate Base Course (Class 6)	TON	6,168	\$95,294	12-Inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	6,834	\$420,704	10" Depth - Widening / 2" Overlay - Existing
4 Concrete Sidewalk	SY	2,944	\$87,862	10-Foot Shared Use Path (One Side Only)
5 Traffic Signal	Each	1	\$250,000	
6			\$0	
7			\$0	
8			\$0	
9			\$0	
10			\$0	
Total Major Items			\$1,101,000	

		% of Major Item Cost		
Total Major Items				\$1,101,000 A
Drainage / Utilities	% of A	5.4%	\$60,000	B-1
Environmental	% of A	3.0%	\$34,000	B-2
Miscellaneous	% of A	1.5%	\$17,000	B-3
Mobilization	% of A	9.3%	\$103,000	B-4
Removals / Resets	% of A	3.7%	\$41,000	B-5
Roadway	% of A	0.4%	\$5,000	B-6
Signing and Striping	% of A	2.1%	\$24,000	B-7
Traffic / Lighting / ITS	% of A	1.0%	\$12,000	B-8
Traffic Control / Detour	% of A	9.6%	\$106,000	B-9
Structural - Minor Structures / Walls	% of A	1.0%	\$12,000	B-10
Bid Force Accounts	% of A	1.4%	\$16,000	B-11
Total of Bid Construction Items			\$1,531,000	B
Force Account - Misc.	% of B	2.6%	\$40,000	C-1
Minor Contract Revisions	% of B	4.0%	\$62,000	C-2
Total of Bid Construction Items & Force Account Items			\$1,633,000	C
Design Engineering	% of C	8.0%	\$131,000	D-1
Construction Engineering	% of C	17.0%	\$278,000	D-2
Total Design & Construction Cost			\$2,042,000	D
Right-of-Way	87,450 SF	\$5	\$438,000	E-1
Utilities	% of D	1.0%	\$21,000	E-2
Total Project, Design & Construction Cost			\$2,501,000	E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	2.0%	\$18,000	F
Total Project Cost Estimate			\$2,519,000	G

<p>SH 7 PEL Study</p> <p>Estimate of Conceptual Project Costs</p> <p>Intersection of SH 7 and Holly Street</p>	
<p>Date Prepared: May 8, 2013</p>	

Input Factors				Notes
1	Length of Auxiliary Lanes (Combined Western/Eastern Legs)	LF	2,300	
2	Approximate Width of Widening (North Side)	Feet	9	
3	Approximate Width of Widening (South Side)	Feet	8	
4	Approximate Width of Proposed ROW (North Side)	Feet	8	Ultimate ROW Width
5	Approximate Width of Proposed ROW (South Side)	Feet	0	Match Existing ROW
6	Length of Cross Street Widening (Combined Northern/Southern Legs)	LF	250	
7	Approximate Width of Widening (West Side)	Feet	0	Match Existing
8	Approximate Width of Widening (East Side)	Feet	0	
9	Approximate Width of Proposed ROW (West Side)	Feet	36	
10	Approximate Width of Proposed ROW (East Side)	Feet	16	
11	Is the Intersection Signalized?	Yes/No	1	

Output Factors		(In 2012\$)	Notes
8	Urban Typical Section Project Costs	\$1,547,000.00	
9	Rural Typical Section Project Costs	\$1,481,000.00	Preferred Typical Section

SH 7 PEL Study
Estimate of Conceptual Project Costs
Urban Typical Section w/ Curb & Gutter



SH 7 PEL
 Planning Environmental Linkage Study

Date Prepared: **May 8, 2013**

Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	4,259	\$52,517	
2 Aggregate Base Course (Class 6)	TON	2,600	\$40,172	12-Inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	3,739	\$230,159	10" Depth - Widening / 2" Overlay - Existing
4 Curb and Gutter	LF	4,600	\$97,980	Includes Outside Edge C&G
5 Concrete Sidewalk	SY	2,556	\$76,258	10-Foot Shared Use Path (One Side Only)
6 Traffic Signal	Each	1	\$250,000	
7			\$0	
8			\$0	
9			\$0	
10			\$0	

Total Major Items \$748,000

		% of Major Item Cost		
Total Major Items				\$748,000 A
Drainage / Utilities	% of A	8.0%	\$60,000	B-1
Environmental	% of A	3.0%	\$23,000	B-2
Miscellaneous	% of A	1.5%	\$12,000	B-3
Mobilization	% of A	9.3%	\$70,000	B-4
Removals / Resets	% of A	3.7%	\$28,000	B-5
Roadway	% of A	0.4%	\$3,000	B-6
Signing and Striping	% of A	2.1%	\$16,000	B-7
Traffic / Lighting / ITS	% of A	3.0%	\$23,000	B-8
Traffic Control / Detour	% of A	9.6%	\$72,000	B-9
Structural - Minor Structures / Walls	% of A	1.0%	\$8,000	B-10
Bid Force Accounts	% of A	1.4%	\$11,000	B-11
Total of Bid Construction Items			\$1,074,000 B	
Force Account - Misc.	% of B	2.6%	\$28,000	C-1
Minor Contract Revisions	% of B	4.0%	\$43,000	C-2
Total of Bid Construction Items & Force Account Items			\$1,145,000 C	
Design Engineering	% of C	8.0%	\$92,000	D-1
Construction Engineering	% of C	17.0%	\$195,000	D-2
Total Design & Construction Cost			\$1,432,000 D	
Right-of-Way	18,400 SF	\$5	\$92,000	E-1
Utilities	% of D	1.0%	\$15,000	E-2
Total Project, Design & Construction Cost			\$1,539,000 E	
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	2.0%	\$8,000	F
Total Project Cost Estimate			\$1,547,000 G	

SH 7 PEL Study
Estimate of Conceptual Project Costs
Rural Typical Section w/ Roadside Ditches



SH 7 PEL
 Planning Environmental Linkage Study

Date Prepared: **May 8, 2013**

Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	11,244	\$138,644	
2 Aggregate Base Course (Class 6)	TON	2,600	\$40,172	12-Inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	3,739	\$230,159	10" Depth - Widening / 2" Overlay - Existing
4 Concrete Sidewalk	SY	2,556	\$76,258	10-Foot Shared Use Path (One Side Only)
5 Traffic Signal	Each	1	\$250,000	
6			\$0	
7			\$0	
8			\$0	
9			\$0	
10			\$0	

Total Major Items \$736,000

		% of Major Item Cost		
Total Major Items				\$736,000 A
Drainage / Utilities	% of A	5.4%	\$40,000	B-1
Environmental	% of A	3.0%	\$23,000	B-2
Miscellaneous	% of A	1.5%	\$12,000	B-3
Mobilization	% of A	9.3%	\$69,000	B-4
Removals / Resets	% of A	3.7%	\$28,000	B-5
Roadway	% of A	0.4%	\$3,000	B-6
Signing and Striping	% of A	2.1%	\$16,000	B-7
Traffic / Lighting / ITS	% of A	1.0%	\$8,000	B-8
Traffic Control / Detour	% of A	9.6%	\$71,000	B-9
Structural - Minor Structures / Walls	% of A	1.0%	\$8,000	B-10
Bid Force Accounts	% of A	1.4%	\$11,000	B-11
Total of Bid Construction Items			\$1,025,000 B	
Force Account - Misc.	% of B	2.6%	\$27,000	C-1
Minor Contract Revisions	% of B	4.0%	\$41,000	C-2
Total of Bid Construction Items & Force Account Items			\$1,093,000 C	
Design Engineering	% of C	8.0%	\$88,000	D-1
Construction Engineering	% of C	17.0%	\$186,000	D-2
Total Design & Construction Cost			\$1,367,000 D	
Right-of-Way	18,400 SF	\$5	\$92,000	E-1
Utilities	% of D	1.0%	\$14,000	E-2
Total Project, Design & Construction Cost			\$1,473,000 E	
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	2.0%	\$8,000	F
Total Project Cost Estimate			\$1,481,000 G	

SH 7 PEL Study		SH 7 PEL Planning Environmental Linkage Study	
Estimate of Conceptual Project Costs		Date Prepared: May 8, 2013	
Summary of Segment 5			
			Notes
5a	SH 7 (Holly Street to Yosemite Street)	26,003,000	Rural Typical Section
5b	SH 7 (Yosemite Street to Riverdale Road)	18,460,000	Rural Typical Section
5c	SH 7 (Riverdale Road to US 85)	19,551,000	Urban Typical Section
Total for Segment 5		\$64,014,000	

SH 7 PEL Study			SH 7 PEL Planning Environmental Linkage Study
Estimate of Conceptual Project Costs			Date Prepared: May 8, 2013
from Holly Street to Yosemite Street			
Input Factors			Notes
1	Length of Improvements	LF 10,600	
2	Approximate Width of Widening (North Side)	Feet 27	
3	Approximate Width of Widening (South Side)	Feet 29	
4	Approximate Width of Proposed ROW (North Side)	Feet 33	
5	Approximate Width of Proposed ROW (South Side)	Feet 19	
6	Number of Major Drainageways	# 1	
7	Required Bridge Widening	SF 0	
8	Number of Signalized Intersections	# 4	
Output Factors			Notes
		(In 2012\$)	
8	Urban Typical Section Project Costs	\$26,930,000	
9	Rural Typical Section Project Costs	\$26,003,000	Preferred Typical Section

SH 7 PEL Study
Estimate of Conceptual Project Costs
Urban Typical Section w/ Curb & Gutter



SH 7 PEL
Planning Environmental Linkage Study

Date Prepared: **May 8, 2013**

Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	50,252	\$619,605	
2 Aggregate Base Course (Class 6)	TON	39,474	\$609,879	12-Inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	46,251	\$2,847,232	12" Depth - Widening / 2" Overlay - Existing
4 Curb and Gutter	LF	42,400	\$903,120	Includes Median & Outside Edge C&G
5 Concrete Sidewalk	SY	23,556	\$702,898	10-Foot Shared Use Path
6 Concrete Box Culvert	Each	1	\$500,000	181-Foot Length (\$2,700/lf Unit Price)
7 Bridge Widening	SF	0	\$0	
8 Traffic Signal	Each	4	\$1,000,000	
9			\$0	
10			\$0	
Total Major Items			\$7,183,000	

		% of Major Item Cost		
Total Major Items				\$7,183,000 A
Drainage / Utilities	% of A	12.3%	\$884,000	B-1
Environmental	% of A	9.6%	\$690,000	B-2
Miscellaneous	% of A	2.7%	\$194,000	B-3
Mobilization	% of A	15.4%	\$1,107,000	B-4
Removals / Resets	% of A	13.0%	\$934,000	B-5
Roadway	% of A	7.0%	\$503,000	B-6
Signing and Striping	% of A	5.0%	\$360,000	B-7
Traffic / Lighting / ITS	% of A	10.8%	\$776,000	B-8
Traffic Control / Detour	% of A	20.6%	\$1,480,000	B-9
Structural - Minor Structures / Walls	% of A	5.5%	\$396,000	B-10
Bid Force Accounts	% of A	0.4%	\$29,000	B-11
Total of Bid Construction Items			\$14,536,000	B
Force Account - Misc.	% of B	6.8%	\$989,000	C-1
Minor Contract Revisions	% of B	7.7%	\$1,120,000	C-2
Total of Bid Construction Items & Force Account Items			\$16,645,000	C
Design Engineering	% of C	10.0%	\$1,665,000	D-1
Construction Engineering	% of C	17.0%	\$2,830,000	D-2
Total Design & Construction Cost			\$21,140,000	D
Right-of-Way	551,200 SF		\$5	\$2,756,000 E-1
Utilities	% of D	8.0%	\$1,692,000	E-2
Total Project, Design & Construction Cost			\$25,588,000	E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	15.0%	\$1,342,000	F
Total Project Cost Estimate			\$26,930,000	G

SH 7 PEL Study
Estimate of Conceptual Project Costs
Rural Typical Section w/ Roadside Ditches



SH 7 PEL
Planning Environmental Linkage Study

Date Prepared: **May 8, 2013**

Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	113,067	\$1,394,112	
2 Aggregate Base Course (Class 6)	TON	39,474	\$609,879	12-Inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	47,158	\$2,903,060	12" Depth - Widening / 2" Overlay - Existing
4 Concrete Sidewalk	SY	23,556	\$702,898	10-Foot Shared Use Path
5 Concrete Box Culvert	Each	1	\$500,000	181-Foot Length (\$2,700/lf Unit Price)
6 Bridge Widening	SF	0	\$0	
7 Traffic Signal	Each	4	\$1,000,000	
8			\$0	
9			\$0	
10			\$0	
Total Major Items			\$7,110,000	

		% of Major Item Cost		
Total Major Items				\$7,110,000 A
Drainage / Utilities	% of A	6.4%	\$456,000	B-1
Environmental	% of A	9.6%	\$683,000	B-2
Miscellaneous	% of A	2.7%	\$192,000	B-3
Mobilization	% of A	15.4%	\$1,095,000	B-4
Removals / Resets	% of A	13.0%	\$925,000	B-5
Roadway	% of A	7.0%	\$498,000	B-6
Signing and Striping	% of A	5.0%	\$356,000	B-7
Traffic / Lighting / ITS	% of A	10.8%	\$768,000	B-8
Traffic Control / Detour	% of A	20.6%	\$1,465,000	B-9
Structural - Minor Structures / Walls	% of A	5.5%	\$392,000	B-10
Bid Force Accounts	% of A	0.4%	\$29,000	B-11
Total of Bid Construction Items			\$13,969,000	B
Force Account - Misc.	% of B	6.8%	\$950,000	C-1
Minor Contract Revisions	% of B	7.7%	\$1,076,000	C-2
Total of Bid Construction Items & Force Account Items			\$15,995,000	C
Design Engineering	% of C	10.0%	\$1,600,000	D-1
Construction Engineering	% of C	17.0%	\$2,720,000	D-2
Total Design & Construction Cost			\$20,315,000	D
Right-of-Way	551,200 SF		\$5	\$2,756,000 E-1
Utilities	% of D	8.0%	\$1,626,000	E-2
Total Project, Design & Construction Cost			\$24,697,000	E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	15.0%	\$1,306,000	F
Total Project Cost Estimate			\$26,003,000	G

SH 7 PEL Study Estimate of Conceptual Project Costs from Yosemite Street to Riverdale Road	 SH 7 PEL Planning Environmental Linkage Study <hr/> Date Prepared: May 8, 2013
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Input Factors			Notes
1 Length of Improvements	LF	11,100	
2 Approximate Width of Widening (North Side)	Feet	23	
3 Approximate Width of Widening (South Side)	Feet	20	
4 Approximate Width of Proposed ROW (North Side)	Feet	16	
5 Approximate Width of Proposed ROW (South Side)	Feet	13	
6 Number of Major Drainageways	#	0	
7 Required Bridge Widening	SF	0	
8 Number of Signalized Intersections	#	1	
Output Factors		(In 2012\$)	Notes
8 Urban Typical Section Project Costs		\$19,646,000	
9 Rural Typical Section Project Costs		\$18,460,000	Preferred Typical Section

SH 7 PEL Study Estimate of Conceptual Project Costs Urban Typical Section w/ Curb & Gutter	 SH 7 PEL Planning Environmental Linkage Study <hr/> Date Prepared: May 8, 2013
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Item		Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	\$12.33	41,933	\$517,038	
2 Aggregate Base Course (Class 6)	TON	\$15.45	31,740	\$490,390	12-Inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	\$61.56	39,615	\$2,438,679	12" Depth - Widening / 2" Overlay - Existing
4 Curb and Gutter	LF	\$21.30	44,400	\$945,720	Includes Median & Outside Edge C&G
5 Concrete Sidewalk	SY	\$29.84	24,667	\$736,053	10-Foot Shared Use Path
6 Concrete Box Culvert	Each	\$500,000.00	0	\$0	181-Foot Length (\$2,700/lf Unit Price)
7 Bridge Widening	SF	\$125.00	0	\$0	
8 Traffic Signal	Each	\$250,000.00	1	\$250,000	
9				\$0	
10				\$0	
Total Major Items				\$5,378,000	

Total Major Items	% of Major Item Cost		Total Cost	Code
Drainage / Utilities	% of A	12.3%	\$662,000	A
Environmental	% of A	9.6%	\$517,000	B-1
Miscellaneous	% of A	2.7%	\$146,000	B-2
Mobilization	% of A	15.4%	\$829,000	B-3
Removals / Resets	% of A	13.0%	\$700,000	B-4
Roadway	% of A	7.0%	\$377,000	B-5
Signing and Striping	% of A	5.0%	\$269,000	B-6
Traffic / Lighting / ITS	% of A	10.8%	\$581,000	B-7
Traffic Control / Detour	% of A	20.6%	\$1,108,000	B-8
Structural - Minor Structures / Walls	% of A	5.5%	\$296,000	B-9
Bid Force Accounts	% of A	0.4%	\$22,000	B-10
Total of Bid Construction Items			\$10,885,000	B
Force Account - Misc.	% of B	6.8%	\$741,000	C-1
Minor Contract Revisions	% of B	7.7%	\$839,000	C-2
Total of Bid Construction Items & Force Account Items			\$12,465,000	C
Design Engineering	% of C	10.0%	\$1,247,000	D-1
Construction Engineering	% of C	17.0%	\$2,120,000	D-2
Total Design & Construction Cost			\$15,832,000	D
Right-of-Way	321,900 SF	\$5	\$1,610,000	E-1
Utilities	% of D	8.0%	\$1,267,000	E-2
Total Project, Design & Construction Cost			\$18,709,000	E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	15.0%	\$937,000	F
Total Project Cost Estimate			\$19,646,000	G

<p>SH 7 PEL Study</p> <p>Estimate of Conceptual Project Costs</p> <p>Rural Typical Section w/ Roadside Ditches</p>	 <p>SH 7 PEL Planning Environmental Linkage Study</p>
<p>Date Prepared: May 8, 2013</p>	

Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	97,022	\$1,196,284	
2 Aggregate Base Course (Class 6)	TON	31,740	\$490,390	12-Inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	40,564	\$2,497,140	12" Depth - Widening / 2" Overlay - Existing
4 Concrete Sidewalk	SY	24,667	\$736,053	10-Foot Shared Use Path
5 Concrete Box Culvert	Each	0	\$0	181-Foot Length (\$2,700/lf Unit Price)
6 Bridge Widening	SF	0	\$0	
7 Traffic Signal	Each	1	\$250,000	
8			\$0	
9			\$0	
10			\$0	
Total Major Items			\$5,170,000	

		% of Major Item Cost		
Total Major Items			\$5,170,000	A
Drainage / Utilities	% of A	6.4%	\$331,000	B-1
Environmental	% of A	9.6%	\$497,000	B-2
Miscellaneous	% of A	2.7%	\$140,000	B-3
Mobilization	% of A	15.4%	\$797,000	B-4
Removals / Resets	% of A	13.0%	\$673,000	B-5
Roadway	% of A	7.0%	\$362,000	B-6
Signing and Striping	% of A	5.0%	\$259,000	B-7
Traffic / Lighting / ITS	% of A	10.8%	\$559,000	B-8
Traffic Control / Detour	% of A	20.6%	\$1,066,000	B-9
Structural - Minor Structures / Walls	% of A	5.5%	\$285,000	B-10
Bid Force Accounts	% of A	0.4%	\$21,000	B-11
Total of Bid Construction Items			\$10,160,000	B
Force Account - Misc.	% of B	6.8%	\$691,000	C-1
Minor Contract Revisions	% of B	7.7%	\$783,000	C-2
Total of Bid Construction Items & Force Account Items			\$11,634,000	C
Design Engineering	% of C	10.0%	\$1,164,000	D-1
Construction Engineering	% of C	17.0%	\$1,978,000	D-2
Total Design & Construction Cost			\$14,776,000	D
Right-of-Way	321,900 SF		\$5	E-1
Utilities	% of D	8.0%	\$1,183,000	E-2
Total Project, Design & Construction Cost			\$17,569,000	E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	15.0%	\$891,000	F
Total Project Cost Estimate			\$18,460,000	G

<p>SH 7 PEL Study</p> <p>Estimate of Conceptual Project Costs</p> <p>from Riverdale Road to US 85</p>	 <p>SH 7 PEL Planning Environmental Linkage Study</p>
<p>Date Prepared: May 8, 2013</p>	

Input Factors			Notes
1 Length of Improvements	LF	5,400	
2 Approximate Width of Widening (North Side)	Feet	19	
3 Approximate Width of Widening (South Side)	Feet	29	
4 Approximate Width of Proposed ROW (North Side)	Feet	30	
5 Approximate Width of Proposed ROW (South Side)	Feet	7	
6 Number of Major Drainageways	#	1	
7 Required Bridge Widening	SF	19,300	
8 Number of Signalized Intersections	#	0	
Output Factors			Notes
(In 2012\$)			
8 Urban Typical Section Project Costs		\$19,551,000	Preferred Typical Section
9 Rural Typical Section Project Costs		\$18,765,000	

SH 7 PEL Study
Estimate of Conceptual Project Costs
Urban Typical Section w/ Curb & Gutter



SH 7 PEL
Planning Environmental Linkage Study

Date Prepared: **May 8, 2013**

Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	22,400	\$276,192	
2 Aggregate Base Course (Class 6)	TON	17,237	\$266,309	12-Inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	20,922	\$1,287,958	12" Depth - Widening / 2" Overlay - Existing
4 Curb and Gutter	LF	21,600	\$460,080	Includes Median & Outside Edge C&G
5 Concrete Sidewalk	SY	12,000	\$358,080	10-Foot Shared Use Path
6 Concrete Box Culvert	Each	1	\$500,000	181-Foot Length (\$2,700/lf Unit Price)
7 Bridge Widening	SF	19,300	\$2,412,500	
8 Traffic Signal	Each	0	\$0	
9			\$0	
10			\$0	
Total Major Items			\$5,562,000	

		% of Major Item Cost		
Total Major Items				\$5,562,000 A
Drainage / Utilities	% of A	12.3%	\$685,000	B-1
Environmental	% of A	9.6%	\$534,000	B-2
Miscellaneous	% of A	2.7%	\$151,000	B-3
Mobilization	% of A	15.4%	\$857,000	B-4
Removals / Resets	% of A	13.0%	\$724,000	B-5
Roadway	% of A	7.0%	\$390,000	B-6
Signing and Striping	% of A	5.0%	\$279,000	B-7
Traffic / Lighting / ITS	% of A	10.8%	\$601,000	B-8
Traffic Control / Detour	% of A	20.6%	\$1,146,000	B-9
Structural - Minor Structures / Walls	% of A	5.5%	\$306,000	B-10
Bid Force Accounts	% of A	0.4%	\$23,000	B-11
Total of Bid Construction Items			\$11,258,000	B
Force Account - Misc.	% of B	6.8%	\$766,000	C-1
Minor Contract Revisions	% of B	7.7%	\$867,000	C-2
Total of Bid Construction Items & Force Account Items			\$12,891,000	C
Design Engineering	% of C	10.0%	\$1,290,000	D-1
Construction Engineering	% of C	17.0%	\$2,192,000	D-2
Total Design & Construction Cost			\$16,373,000	D
Right-of-Way	199,800 SF	\$5	\$999,000	E-1
Utilities	% of D	8.0%	\$1,310,000	E-2
Total Project, Design & Construction Cost			\$18,682,000	E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	15.0%	\$869,000	F
Total Project Cost Estimate			\$19,551,000	G

SH 7 PEL Study
Estimate of Conceptual Project Costs
Rural Typical Section w/ Roadside Ditches



SH 7 PEL
Planning Environmental Linkage Study

Date Prepared: **May 8, 2013**

Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	51,200	\$631,296	
2 Aggregate Base Course (Class 6)	TON	17,237	\$266,309	12-Inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	21,384	\$1,316,399	12" Depth - Widening / 2" Overlay - Existing
4 Concrete Sidewalk	SY	12,000	\$358,080	10-Foot Shared Use Path
5 Concrete Box Culvert	Each	1	\$500,000	181-Foot Length (\$2,700/lf Unit Price)
6 Bridge Widening	SF	19,300	\$2,412,500	
7 Traffic Signal	Each	0	\$0	
8			\$0	
9			\$0	
10			\$0	
Total Major Items			\$5,485,000	

		% of Major Item Cost		
Total Major Items				\$5,485,000 A
Drainage / Utilities	% of A	6.4%	\$352,000	B-1
Environmental	% of A	9.6%	\$527,000	B-2
Miscellaneous	% of A	2.7%	\$149,000	B-3
Mobilization	% of A	15.4%	\$845,000	B-4
Removals / Resets	% of A	13.0%	\$714,000	B-5
Roadway	% of A	7.0%	\$384,000	B-6
Signing and Striping	% of A	5.0%	\$275,000	B-7
Traffic / Lighting / ITS	% of A	10.8%	\$593,000	B-8
Traffic Control / Detour	% of A	20.6%	\$1,130,000	B-9
Structural - Minor Structures / Walls	% of A	5.5%	\$302,000	B-10
Bid Force Accounts	% of A	0.4%	\$22,000	B-11
Total of Bid Construction Items			\$10,778,000	B
Force Account - Misc.	% of B	6.8%	\$733,000	C-1
Minor Contract Revisions	% of B	7.7%	\$830,000	C-2
Total of Bid Construction Items & Force Account Items			\$12,341,000	C
Design Engineering	% of C	10.0%	\$1,235,000	D-1
Construction Engineering	% of C	17.0%	\$2,098,000	D-2
Total Design & Construction Cost			\$15,674,000	D
Right-of-Way	199,800 SF	\$5	\$999,000	E-1
Utilities	% of D	8.0%	\$1,254,000	E-2
Total Project, Design & Construction Cost			\$17,927,000	E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	15.0%	\$838,000	F
Total Project Cost Estimate			\$18,765,000	G

SH 7 PEL Study		 SH 7 PEL Planning Environmental Linkage Study
Estimate of Conceptual Project Costs Intersection of SH 7 and Quebec Street		
Date Prepared:		May 8, 2013

Input Factors			Notes
1	Length of Auxiliary Lanes (Combined Western/Eastern Legs)	LF	2,300
2	Approximate Width of Widening (North Side)	Feet	11
3	Approximate Width of Widening (South Side)	Feet	10
4	Approximate Width of Proposed ROW (North Side)	Feet	32 <i>Ultimate ROW Width</i>
5	Approximate Width of Proposed ROW (South Side)	Feet	24 <i>Ultimate ROW Width</i>
6	Length of Cross Street Widening (Combined Northern/Southern Legs)	LF	0
7	Approximate Width of Widening (West Side)	Feet	0 <i>Match Existing</i>
8	Approximate Width of Widening (East Side)	Feet	0
9	Approximate Width of Proposed ROW (West Side)	Feet	0
10	Approximate Width of Proposed ROW (East Side)	Feet	50
11	Is the Intersection Signalized?	Yes/No	1

Output Factors		(In 2012\$)	Notes
8	Urban Typical Section Project Costs	\$2,155,000.00	
9	Rural Typical Section Project Costs	\$2,099,000.00	<i>Preferred Typical Section</i>

SH 7 PEL Study		 SH 7 PEL Planning Environmental Linkage Study
Estimate of Conceptual Project Costs Urban Typical Section w/ Curb & Gutter		
Date Prepared:		May 8, 2013

Item	Unit Cost	Quantity	Extended Cost	Notes	
1	Earthwork	CY	\$12.33	4,941	\$60,919
2	Aggregate Base Course (Class 6)	TON	\$15.45	3,212	\$49,625
3	Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	\$61.56	3,795	\$233,620
4	Curb and Gutter	LF	\$21.30	4,600	\$97,980
5	Concrete Sidewalk	SY	\$29.84	2,556	\$76,258
6	Traffic Signal	Each	\$250,000.00	1	\$250,000
7					\$0
8					\$0
9					\$0
10					\$0
Total Major Items			\$769,000		

		% of Major Item Cost		
Total Major Items				\$769,000 A
Drainage / Utilities	% of A	8.0%	\$62,000	B-1
Environmental	% of A	3.0%	\$24,000	B-2
Miscellaneous	% of A	1.5%	\$12,000	B-3
Mobilization	% of A	9.3%	\$72,000	B-4
Removals / Resets	% of A	3.7%	\$29,000	B-5
Roadway	% of A	0.4%	\$4,000	B-6
Signing and Striping	% of A	2.1%	\$17,000	B-7
Traffic / Lighting / ITS	% of A	3.0%	\$24,000	B-8
Traffic Control / Detour	% of A	9.6%	\$74,000	B-9
Structural - Minor Structures / Walls	% of A	1.0%	\$8,000	B-10
Bid Force Accounts	% of A	1.4%	\$11,000	B-11
Total of Bid Construction Items			\$1,106,000	B
Force Account - Misc.	% of B	2.6%	\$29,000	C-1
Minor Contract Revisions	% of B	4.0%	\$45,000	C-2
Total of Bid Construction Items & Force Account Items			\$1,180,000	C
Design Engineering	% of C	8.0%	\$95,000	D-1
Construction Engineering	% of C	17.0%	\$201,000	D-2
Total Design & Construction Cost			\$1,476,000	D
Right-of-Way	128,800 SF	\$5	\$644,000	E-1
Utilities	% of D	1.0%	\$15,000	E-2
Total Project, Design & Construction Cost			\$2,135,000	E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	2.0%	\$20,000	F
Total Project Cost Estimate			\$2,155,000	G

SH 7 PEL Study Estimate of Conceptual Project Costs Rural Typical Section w/ Roadside Ditches	 SH 7 PEL Planning Environmental Linkage Study
Date Prepared: May 8, 2013	

Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	12,607	\$155,449	
2 Aggregate Base Course (Class 6)	TON	3,212	\$49,625	12-Inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	3,795	\$233,620	10" Depth - Widening / 2" Overlay - Existing
4 Concrete Sidewalk	SY	2,556	\$76,258	10-Foot Shared Use Path (One Side Only)
5 Traffic Signal	Each	1	\$250,000	
6			\$0	
7			\$0	
8			\$0	
9			\$0	
10			\$0	
Total Major Items			\$765,000	

		% of Major Item Cost		
Total Major Items				\$765,000 A
Drainage / Utilities	% of A	5.4%	\$42,000	B-1
Environmental	% of A	3.0%	\$23,000	B-2
Miscellaneous	% of A	1.5%	\$12,000	B-3
Mobilization	% of A	9.3%	\$72,000	B-4
Removals / Resets	% of A	3.7%	\$29,000	B-5
Roadway	% of A	0.4%	\$4,000	B-6
Signing and Striping	% of A	2.1%	\$17,000	B-7
Traffic / Lighting / ITS	% of A	1.0%	\$8,000	B-8
Traffic Control / Detour	% of A	9.6%	\$74,000	B-9
Structural - Minor Structures / Walls	% of A	1.0%	\$8,000	B-10
Bid Force Accounts	% of A	1.4%	\$11,000	B-11
Total of Bid Construction Items			\$1,065,000	B
Force Account - Misc.	% of B	2.6%	\$28,000	C-1
Minor Contract Revisions	% of B	4.0%	\$43,000	C-2
Total of Bid Construction Items & Force Account Items			\$1,136,000	C
Design Engineering	% of C	8.0%	\$91,000	D-1
Construction Engineering	% of C	17.0%	\$194,000	D-2
Total Design & Construction Cost			\$1,421,000	D
Right-of-Way	128,800 SF	\$5	\$644,000	E-1
Utilities	% of D	1.0%	\$15,000	E-2
Total Project, Design & Construction Cost			\$2,080,000	E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	2.0%	\$19,000	F
Total Project Cost Estimate			\$2,099,000	G

SH 7 PEL Study Estimate of Conceptual Project Costs Intersection of SH 7 and Yosemite Street	 SH 7 PEL Planning Environmental Linkage Study
Date Prepared: May 8, 2013	

Input Factors			Notes	
1	Length of Auxiliary Lanes (Combined Western/Eastern Legs)	LF	3,100	
2	Approximate Width of Widening (North Side)	Feet	8	
3	Approximate Width of Widening (South Side)	Feet	10	
4	Approximate Width of Proposed ROW (North Side)	Feet	18	Ultimate ROW Width
5	Approximate Width of Proposed ROW (South Side)	Feet	8	Ultimate ROW Width Avg (East of Yosemite Street)
6	Length of Cross Street Widening (Combined Northern/Southern Legs)	LF	125	
7	Approximate Width of Widening (West Side)	Feet	12	North Side Only
8	Approximate Width of Widening (East Side)	Feet	0	
9	Approximate Width of Proposed ROW (West Side)	Feet	15	
10	Approximate Width of Proposed ROW (East Side)	Feet	32	
11	Is the Intersection Signalized?	Yes/No	1	

Output Factors		(In 2012\$)	Notes
8	Urban Typical Section Project Costs	\$2,246,000.00	
9	Rural Typical Section Project Costs	\$2,224,000.00	Preferred Typical Section

<p>SH 7 PEL Study</p> <p>Estimate of Conceptual Project Costs</p> <p>Urban Typical Section w/ Curb & Gutter</p>	
<p>Date Prepared: May 8, 2013</p>	

Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	8,726	\$107,591	
2 Aggregate Base Course (Class 6)	TON	3,711	\$57,330	12-Inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	4,774	\$293,887	10" Depth - Widening / 2" Overlay - Existing
4 Curb and Gutter	LF	6,200	\$132,060	Includes Outside Edge C&G
5 Concrete Sidewalk	SY	3,444	\$102,782	10-Foot Shared Use Path (One Side Only)
6 Traffic Signal	Each	1	\$250,000	
7			\$0	
8			\$0	
9			\$0	
10			\$0	

Total Major Items \$944,000

		% of Major Item Cost		
Total Major Items			\$944,000	A
Drainage / Utilities	% of A	8.0%	\$76,000	B-1
Environmental	% of A	3.0%	\$29,000	B-2
Miscellaneous	% of A	1.5%	\$15,000	B-3
Mobilization	% of A	9.3%	\$88,000	B-4
Removals / Resets	% of A	3.7%	\$35,000	B-5
Roadway	% of A	0.4%	\$4,000	B-6
Signing and Striping	% of A	2.1%	\$20,000	B-7
Traffic / Lighting / ITS	% of A	3.0%	\$29,000	B-8
Traffic Control / Detour	% of A	9.6%	\$91,000	B-9
Structural - Minor Structures / Walls	% of A	1.0%	\$10,000	B-10
Bid Force Accounts	% of A	1.4%	\$14,000	B-11
Total of Bid Construction Items			\$1,355,000	B
Force Account - Misc.	% of B	2.6%	\$36,000	C-1
Minor Contract Revisions	% of B	4.0%	\$55,000	C-2
Total of Bid Construction Items & Force Account Items			\$1,446,000	C
Design Engineering	% of C	8.0%	\$116,000	D-1
Construction Engineering	% of C	17.0%	\$246,000	D-2
Total Design & Construction Cost			\$1,808,000	D
Right-of-Way	80,600 SF	\$5	\$403,000	E-1
Utilities	% of D	1.0%	\$19,000	E-2
Total Project, Design & Construction Cost			\$2,230,000	E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	2.0%	\$16,000	F
Total Project Cost Estimate			\$2,246,000	G

<p>SH 7 PEL Study</p> <p>Estimate of Conceptual Project Costs</p> <p>Rural Typical Section w/ Roadside Ditches</p>	
<p>Date Prepared: May 8, 2013</p>	

Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	21,126	\$260,483	
2 Aggregate Base Course (Class 6)	TON	3,711	\$57,330	12-Inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	4,774	\$293,887	10" Depth - Widening / 2" Overlay - Existing
4 Concrete Sidewalk	SY	3,444	\$102,782	10-Foot Shared Use Path (One Side Only)
5 Traffic Signal	Each	1	\$250,000	
6			\$0	
7			\$0	
8			\$0	
9			\$0	
10			\$0	

Total Major Items \$965,000

		% of Major Item Cost		
Total Major Items			\$965,000	A
Drainage / Utilities	% of A	5.4%	\$53,000	B-1
Environmental	% of A	3.0%	\$29,000	B-2
Miscellaneous	% of A	1.5%	\$15,000	B-3
Mobilization	% of A	9.3%	\$90,000	B-4
Removals / Resets	% of A	3.7%	\$36,000	B-5
Roadway	% of A	0.4%	\$4,000	B-6
Signing and Striping	% of A	2.1%	\$21,000	B-7
Traffic / Lighting / ITS	% of A	1.0%	\$10,000	B-8
Traffic Control / Detour	% of A	9.6%	\$93,000	B-9
Structural - Minor Structures / Walls	% of A	1.0%	\$10,000	B-10
Bid Force Accounts	% of A	1.4%	\$14,000	B-11
Total of Bid Construction Items			\$1,340,000	B
Force Account - Misc.	% of B	2.6%	\$35,000	C-1
Minor Contract Revisions	% of B	4.0%	\$54,000	C-2
Total of Bid Construction Items & Force Account Items			\$1,429,000	C
Design Engineering	% of C	8.0%	\$115,000	D-1
Construction Engineering	% of C	17.0%	\$243,000	D-2
Total Design & Construction Cost			\$1,787,000	D
Right-of-Way	80,600 SF	\$5	\$403,000	E-1
Utilities	% of D	1.0%	\$18,000	E-2
Total Project, Design & Construction Cost			\$2,208,000	E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	2.0%	\$16,000	F
Total Project Cost Estimate			\$2,224,000	G

SH 7 PEL Study Estimate of Conceptual Project Costs Intersection of SH 7 and Havana Street		 SH 7 PEL Planning Environmental Linkage Study	
		Date Prepared:	May 8, 2013

Input Factors			Notes	
1	Length of Auxiliary Lanes (Combined Western/Eastern Legs)	LF	2,450	
2	Approximate Width of Widening (North Side)	Feet	13	
3	Approximate Width of Widening (South Side)	Feet	12	
4	Approximate Width of Proposed ROW (North Side)	Feet	14	Ultimate ROW Width
5	Approximate Width of Proposed ROW (South Side)	Feet	10	Ultimate ROW Width Avg (East of Havana Street)
6	Length of Cross Street Widening (Combined Northern/Southern Legs)	LF	0	Match Cross Street
7	Approximate Width of Widening (West Side)	Feet	0	
8	Approximate Width of Widening (East Side)	Feet	0	
9	Approximate Width of Proposed ROW (West Side)	Feet	20	
10	Approximate Width of Proposed ROW (East Side)	Feet	0	
11	Is the Intersection Signalized?	Yes/No	1	

Output Factors		(In 2012\$)	Notes
8	Urban Typical Section Project Costs	\$2,079,000.00	
9	Rural Typical Section Project Costs	\$2,032,000.00	Preferred Typical Section

SH 7 PEL Study Estimate of Conceptual Project Costs Urban Typical Section w/ Curb & Gutter				 SH 7 PEL Planning Environmental Linkage Study	
				Date Prepared:	May 8, 2013


Item	Unit Cost	Quantity	Extended Cost	Notes	
1 Earthwork	CY	\$12.33	5,989	\$73,843	
2 Aggregate Base Course (Class 6)	TON	\$15.45	4,073	\$62,930	12-inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	\$61.56	5,540	\$341,025	10" Depth - Widening / 2" Overlay - Existing
4 Curb and Gutter	LF	\$21.30	4,900	\$104,370	Includes Outside Edge C&G
5 Concrete Sidewalk	SY	\$29.84	2,722	\$81,231	10-Foot Shared Use Path (One Side Only)
6 Traffic Signal	Each	\$250,000.00	1	\$250,000	
7				\$0	
8				\$0	
9				\$0	
10				\$0	
Total Major Items			\$914,000		

		% of Major Item Cost		
Total Major Items			\$914,000	A
Drainage / Utilities	% of A	8.0%	\$74,000	B-1
Environmental	% of A	3.0%	\$28,000	B-2
Miscellaneous	% of A	1.5%	\$14,000	B-3
Mobilization	% of A	9.3%	\$86,000	B-4
Removals / Resets	% of A	3.7%	\$34,000	B-5
Roadway	% of A	0.4%	\$4,000	B-6
Signing and Striping	% of A	2.1%	\$20,000	B-7
Traffic / Lighting / ITS	% of A	3.0%	\$28,000	B-8
Traffic Control / Detour	% of A	9.6%	\$88,000	B-9
Structural - Minor Structures / Walls	% of A	1.0%	\$10,000	B-10
Bid Force Accounts	% of A	1.4%	\$13,000	B-11
Total of Bid Construction Items			\$1,313,000	B
Force Account - Misc.	% of B	2.6%	\$35,000	C-1
Minor Contract Revisions	% of B	4.0%	\$53,000	C-2
Total of Bid Construction Items & Force Account Items			\$1,401,000	C
Design Engineering	% of C	8.0%	\$113,000	D-1
Construction Engineering	% of C	17.0%	\$239,000	D-2
Total Design & Construction Cost			\$1,753,000	D
Right-of-Way	58,800 SF	\$5	\$294,000	E-1
Utilities	% of D	1.0%	\$18,000	E-2
Total Project, Design & Construction Cost			\$2,065,000	E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	2.0%	\$14,000	F
Total Project Cost Estimate			\$2,079,000	G

<p>SH 7 PEL Study</p> <p>Estimate of Conceptual Project Costs</p> <p>Rural Typical Section w/ Roadside Ditches</p>	 <p>SH 7 PEL Planning Environmental Linkage Study</p>
<p>Date Prepared: May 8, 2013</p>	

Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	14,881	\$183,489	
2 Aggregate Base Course (Class 6)	TON	4,073	\$62,930	12-Inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	5,540	\$341,025	10" Depth - Widening / 2" Overlay - Existing
4 Concrete Sidewalk	SY	2,722	\$81,231	10-Foot Shared Use Path (One Side Only)
5 Traffic Signal	Each	1	\$250,000	
6			\$0	
7			\$0	
8			\$0	
9			\$0	
10			\$0	
Total Major Items			\$919,000	

		% of Major Item Cost		
Total Major Items				\$919,000 A
Drainage / Utilities	% of A	5.4%	\$50,000	B-1
Environmental	% of A	3.0%	\$28,000	B-2
Miscellaneous	% of A	1.5%	\$14,000	B-3
Mobilization	% of A	9.3%	\$86,000	B-4
Removals / Resets	% of A	3.7%	\$35,000	B-5
Roadway	% of A	0.4%	\$4,000	B-6
Signing and Striping	% of A	2.1%	\$20,000	B-7
Traffic / Lighting / ITS	% of A	1.0%	\$10,000	B-8
Traffic Control / Detour	% of A	9.6%	\$89,000	B-9
Structural - Minor Structures / Walls	% of A	1.0%	\$10,000	B-10
Bid Force Accounts	% of A	1.4%	\$13,000	B-11
Total of Bid Construction Items			\$1,278,000	B
Force Account - Misc.	% of B	2.6%	\$34,000	C-1
Minor Contract Revisions	% of B	4.0%	\$52,000	C-2
Total of Bid Construction Items & Force Account Items			\$1,364,000	C
Design Engineering	% of C	8.0%	\$110,000	D-1
Construction Engineering	% of C	17.0%	\$232,000	D-2
Total Design & Construction Cost			\$1,706,000	D
Right-of-Way	58,800 SF	\$5	\$294,000	E-1
Utilities	% of D	1.0%	\$18,000	E-2
Total Project, Design & Construction Cost			\$2,018,000	E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	2.0%	\$40,000	F
Total Project Cost Estimate			\$2,032,000	G

<p>SH 7 PEL Study</p> <p>Estimate of Conceptual Project Costs</p> <p>Intersection of SH 7 and Riverdale Road</p>	 <p>SH 7 PEL Planning Environmental Linkage Study</p>
<p>Date Prepared: May 8, 2013</p>	

Input Factors			Notes
1 Length of Auxiliary Lanes (Combined Western/Eastern Legs)	LF	2,150	
2 Approximate Width of Widening (North Side)	Feet	8	
3 Approximate Width of Widening (South Side)	Feet	14	
4 Approximate Width of Proposed ROW (North Side)	Feet	0	Match Existing ROW
5 Approximate Width of Proposed ROW (South Side)	Feet	14	Ultimate ROW Width
6 Length of Cross Street Widening (Combined Northern/Southern Legs)	LF	100	
7 Approximate Width of Widening (West Side)	Feet	5	
8 Approximate Width of Widening (East Side)	Feet	5	
9 Approximate Width of Proposed ROW (West Side)	Feet	24	
10 Approximate Width of Proposed ROW (East Side)	Feet	15	
11 Is the Intersection Signalized?	Yes/No	1	

Output Factors		(In 2012\$)	Notes
8 Urban Typical Section Project Costs		\$1,667,000.00	Preferred Typical Section
9 Rural Typical Section Project Costs		\$1,650,000.00	

<p>SH 7 PEL Study</p> <p>Estimate of Conceptual Project Costs</p> <p>Urban Typical Section w/ Curb & Gutter</p>	<p>SH 7 PEL Planning Environmental Linkage Study</p>
<p>Date Prepared: May 8, 2013</p>	

Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	6,370	\$78,547	
2 Aggregate Base Course (Class 6)	TON	3,145	\$48,597	12-inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	3,837	\$236,178	10" Depth - Widening / 2" Overlay - Existing
4 Curb and Gutter	LF	4,300	\$91,590	Includes Outside Edge C&G
5 Concrete Sidewalk	SY	2,389	\$71,284	10-Foot Shared Use Path (One Side Only)
6 Traffic Signal	Each	1	\$250,000	
7			\$0	
8			\$0	
9			\$0	
10			\$0	
Total Major Items			\$777,000	

		% of Major Item Cost		
Total Major Items				\$777,000 A
Drainage / Utilities	% of A	8.0%	\$63,000	B-1
Environmental	% of A	3.0%	\$24,000	B-2
Miscellaneous	% of A	1.5%	\$12,000	B-3
Mobilization	% of A	9.3%	\$73,000	B-4
Removals / Resets	% of A	3.7%	\$29,000	B-5
Roadway	% of A	0.4%	\$4,000	B-6
Signing and Striping	% of A	2.1%	\$17,000	B-7
Traffic / Lighting / ITS	% of A	3.0%	\$24,000	B-8
Traffic Control / Detour	% of A	9.6%	\$75,000	B-9
Structural - Minor Structures / Walls	% of A	1.0%	\$8,000	B-10
Bid Force Accounts	% of A	1.4%	\$11,000	B-11
Total of Bid Construction Items			\$1,117,000	B
Force Account - Misc.	% of B	2.6%	\$30,000	C-1
Minor Contract Revisions	% of B	4.0%	\$45,000	C-2
Total of Bid Construction Items & Force Account Items			\$1,192,000	C
Design Engineering	% of C	8.0%	\$96,000	D-1
Construction Engineering	% of C	17.0%	\$203,000	D-2
Total Design & Construction Cost			\$1,491,000	D
Right-of-Way	30,100 SF	\$5	\$151,000	E-1
Utilities	% of D	1.0%	\$15,000	E-2
Total Project, Design & Construction Cost			\$1,667,000	E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	2.0%	\$10,000	F
Total Project Cost Estimate			\$1,667,000	G

<p>SH 7 PEL Study</p> <p>Estimate of Conceptual Project Costs</p> <p>Rural Typical Section w/ Roadside Ditches</p>	<p>SH 7 PEL Planning Environmental Linkage Study</p>
<p>Date Prepared: May 8, 2013</p>	

Item	Unit Cost	Quantity	Extended Cost	Notes
1 Earthwork	CY	15,289	\$188,512	
2 Aggregate Base Course (Class 6)	TON	3,145	\$48,597	12-inch Depth
3 Hot Mix Asphalt (Grade S)(100)(PG 64-22)	TON	3,837	\$236,178	10" Depth - Widening / 2" Overlay - Existing
4 Concrete Sidewalk	SY	2,389	\$71,284	10-Foot Shared Use Path (One Side Only)
5 Traffic Signal	Each	1	\$250,000	
6			\$0	
7			\$0	
8			\$0	
9			\$0	
10			\$0	
Total Major Items			\$795,000	

		% of Major Item Cost		
Total Major Items				\$795,000 A
Drainage / Utilities	% of A	5.4%	\$43,000	B-1
Environmental	% of A	3.0%	\$24,000	B-2
Miscellaneous	% of A	1.5%	\$12,000	B-3
Mobilization	% of A	9.3%	\$74,000	B-4
Removals / Resets	% of A	3.7%	\$30,000	B-5
Roadway	% of A	0.4%	\$4,000	B-6
Signing and Striping	% of A	2.1%	\$17,000	B-7
Traffic / Lighting / ITS	% of A	1.0%	\$8,000	B-8
Traffic Control / Detour	% of A	9.6%	\$77,000	B-9
Structural - Minor Structures / Walls	% of A	1.0%	\$8,000	B-10
Bid Force Accounts	% of A	1.4%	\$12,000	B-11
Total of Bid Construction Items			\$1,104,000	B
Force Account - Misc.	% of B	2.6%	\$29,000	C-1
Minor Contract Revisions	% of B	4.0%	\$45,000	C-2
Total of Bid Construction Items & Force Account Items			\$1,178,000	C
Design Engineering	% of C	8.0%	\$95,000	D-1
Construction Engineering	% of C	17.0%	\$201,000	D-2
Total Design & Construction Cost			\$1,474,000	D
Right-of-Way	30,100 SF	\$5	\$151,000	E-1
Utilities	% of D	1.0%	\$15,000	E-2
Total Project, Design & Construction Cost			\$1,640,000	E
Contingency (Engineering, ROW & Utilities Only)	% of D1, D2, E1, E2	2.0%	\$10,000	F
Total Project Cost Estimate			\$1,650,000	G

