

**ENGINEER'S ESTIMATE OF PROBABLE COST
SH 30 - HAMPDEN & HAVANA PEDESTRIAN SAFETY CONNECTIONS PROJECT
FINAL DESIGN DEVELOPMENT**

4/29/2016						PLM	CEI	KECI	Villalobos				
Item	Description	Unit	Quantity	Unit Price	Extended Price	Granite Re, Inc.	Travelers Casualty and Surety	Contractors Bonding & Ins.	Western Surety Company				
201	Clearing and Grubbing	LS	1	\$30,000.00	\$30,000	11,500.00	11,500.00	45,000.00	45,000.00	60,000.00	60,000.00	5,000.00	5,000.00
202	Removal of Sidewalk	SY	300	\$14.00	\$4,200	18.60	5,580.00	13.00	3,900.00	24.00	7,200.00	15.00	4,500.00
202	Removal of Curb and Gutter	LF	500	\$9.00	\$4,500	11.75	5,875.00	5.00	2,500.00	10.00	5,000.00	7.00	3,500.00
202	Removal of Concrete Curb Ramp	SY	65	\$25.00	\$1,625	18.65	1,212.25	20.00	1,300.00	35.00	2,275.00	18.00	1,170.00
202	Removal of Concrete Gutter	SY	14	\$25.00	\$350	18.65	261.10	18.00	252.00	45.00	630.00	18.00	252.00
202	Removal of Manhole	EA	1	\$800.00	\$800	2,000.00	2,000.00	1,400.00	1,400.00	2,000.00	2,000.00	400.00	400.00
202	Removal of Pipe	LF	20	\$30.00	\$600	53.85	1,077.00	55.00	1,100.00	44.00	880.00	120.00	2,400.00
202	Removal of End Section	EA	2	\$800.00	\$1,600	670.00	1,340.00	340.00	680.00	400.00	800.00	200.00	400.00
202	Removal of Gate	EA	2	\$500.00	\$1,000	2,370.00	4,740.00	700.00	1,400.00	300.00	600.00	300.00	600.00
202	Removal of Asphalt Mat	SY	300	\$20.00	\$6,000	85.00	25,500.00	19.00	5,700.00	40.00	12,000.00	22.00	6,600.00
202	Removal of Water Valve	EA	1	\$300.00	\$300	940.00	940.00	215.00	215.00	1,210.00	1,210.00	300.00	300.00
202	Removal of Backflow Preventer	EA	1	\$1,000.00	\$1,000	2,000.00	2,000.00	245.00	245.00	825.00	825.00	500.00	500.00
202	Removal of Pull Box	EA	11	\$200.00	\$2,200	363.50	3,998.50	350.00	3,850.00	135.00	1,485.00	301.52	3,316.72
202	Removal of Sign (Special)	EA	1	\$1,000.00	\$1,000	4,750.00	4,750.00	2,200.00	2,200.00	4,500.00	4,500.00	200.00	200.00
202	Removal of Fence	LF	1,220	\$3.00	\$3,660	1.35	1,647.00	7.00	8,540.00	5.00	6,100.00	5.00	6,100.00
202	Grinding and Texturing Concrete Pavement	SY	5	\$500.00	\$2,500	1,350.00	6,750.00	400.00	2,000.00	130.00	650.00	1,500.00	7,500.00
202	Clean Valve Box	EA	5	\$200.00	\$1,000	270.00	1,350.00	245.00	1,225.00	150.00	750.00	150.00	750.00
203	Embankment Material (Complete In Place)	CY	4,220	\$20.00	\$84,400	15.85	66,887.00	19.00	80,180.00	39.00	164,580.00	18.00	75,960.00
203	Potholing	HR	40	\$200.00	\$8,000	275.00	11,000.00	310.00	12,400.00	300.00	12,000.00	120.00	4,800.00
203	Muck Excavation	CY	500	\$30.00	\$15,000	39.50	19,750.00	40.00	20,000.00	32.00	16,000.00	16.00	8,000.00
206	Shoring (Area 1) (Retaining Wall) (Rockery)	LS	1	\$30,000.00	\$30,000	60,500.00	60,500.00	115,000.00	115,000.00	50,000.00	50,000.00	35,000.00	35,000.00
206	Shoring (Area 2) (Rock Embankment)	LS	1	\$5,000.00	\$5,000	1,150.00	1,150.00	32,000.00	32,000.00	1,000.00	1,000.00	25,000.00	25,000.00
208	Erosion Control Supervisor	DAY	130	\$200.00	\$26,000	323.25	42,022.50	205.00	26,650.00	265.00	34,450.00	220.00	28,600.00
208	Storm Drain Inlet Protection (Type 2)	LF	25	\$25.00	\$625	128.00	3,200.00	66.00	1,650.00	46.00	1,150.00	50.00	1,250.00
208	Erosion Log (12 Inch)	LF	1,250	\$5.00	\$6,250	5.40	6,750.00	8.00	10,000.00	5.00	6,250.00	5.00	6,250.00
208	Silt Fence	LF	5,000	\$2.00	\$10,000	1.70	8,500.00	2.00	10,000.00	2.50	12,500.00	2.85	14,250.00
208	Concrete Washout Structure	EA	3	\$1,000.00	\$3,000	1,680.00	5,040.00	1,300.00	3,900.00	1,100.00	3,300.00	1,500.00	4,500.00
208	Vehicle Tracking Pad	EA	3	\$1,500.00	\$4,500	3,000.00	9,000.00	2,800.00	8,400.00	2,700.00	8,100.00	3,000.00	9,000.00
210	Reset Fence (Barbed Wire)	LF	788	\$7.00	\$5,516	4.10	3,230.80	13.00	10,244.00	5.50	4,334.00	5.00	3,940.00
210	Reset Ground Sign	EA	6	\$300.00	\$1,800	405.00	2,430.00	250.00	1,500.00	500.00	3,000.00	335.03	2,010.18
210	Adjust Manhole	EA	7	\$500.00	\$3,500	610.00	4,270.00	500.00	3,500.00	825.00	5,775.00	250.00	1,750.00
210	Adjust Valve Box	EA	5	\$400.00	\$2,000	335.00	1,675.00	260.00	1,300.00	550.00	2,750.00	200.00	1,000.00
212	Seeding (Native)	AC	4.00	\$800.00	\$3,200	1,175.00	4,700.00	1,325.00	5,300.00	2,000.00	8,000.00	1,859.39	7,437.56
212	Soil Conditioning	AC	5.00	\$3,000.00	\$15,000	3,000.00	15,000.00	9,500.00	47,500.00	4,700.00	23,500.00	27,000.00	135,000.00
213	Mulching (Weed Free Straw)	AC	4.00	\$800.00	\$3,200	1,100.00	4,400.00	1,350.00	5,400.00	1,300.00	5,200.00	1,323.35	5,293.40
213	Mulch Tackifier	LB	400	\$3.00	\$1,200	4.75	1,900.00	5.00	2,000.00	3.00	1,200.00	3.00	1,200.00
213	Mulching (Decorative) (Rock)	CF	4,883	\$5.00	\$24,415	4.50	21,973.50	5.00	24,415.00	3.75	18,311.25	5.00	24,415.00
213	Landscape Weed Barrier Fabric	SY	1,643	\$1.40	\$2,300	1.55	2,546.65	2.00	3,286.00	1.50	2,464.50	1.28	2,103.04
213	Landscape Boulder	EA	93	\$450.00	\$41,850	620.00	57,660.00	700.00	65,100.00	505.00	46,965.00	512.59	47,670.87
214	Landscape Maintenance	LS	1	\$35,000.00	\$35,000	21,000.00	21,000.00	54,000.00	54,000.00	17,100.00	17,100.00	17,365.48	17,365.48
214	Deciduous Tree (2 Inch Caliper)	EA	64	\$500.00	\$32,000	675.00	43,200.00	596.25	38,160.00	550.00	35,200.00	558.38	35,736.32
214	Deciduous Shrub (5 Gallon Container)	EA	345	\$50.00	\$17,250	35.70	12,316.50	50.00	17,250.00	30.00	10,350.00	29.59	10,208.55
214	Perennials (1 Gallon Container)	EA	1,176	\$16.00	\$18,816	13.50	15,876.00	25.00	29,400.00	11.00	12,936.00	11.17	13,135.92
216	Soil Retention Blanket (Straw/Coconut)	SY	1,000	\$3.00	\$3,000	2.70	2,700.00	5.00	5,000.00	3.00	3,000.00	2.79	2,790.00
218	Noxious Weed Management	LS	1	\$5,000.00	\$5,000	13,750.00	13,750.00	6,000.00	6,000.00	10,000.00	10,000.00	11,418.78	11,418.78
240	Wildlife Biologist	HR	20	\$75.00	\$1,500	110.00	2,200.00	120.00	2,400.00	87.00	1,740.00	88.22	1,764.40
240	Removal of Nests	HR	20	\$75.00	\$1,500	110.00	2,200.00	120.00	2,400.00	87.00	1,740.00	100.00	2,000.00
240	Netting	SY	50	\$10.00	\$500	44.00	2,200.00	60.00	3,000.00	36.00	1,800.00	35.00	1,750.00
304	Aggregate Base Course (Class 6)	TON	3,356	\$30.00	\$100,680	15.90	53,360.40	28.00	93,968.00	51.00	171,156.00	18.00	60,408.00
403	Hot Mix Asphalt (Patching) (Asphalt)	TON	150	\$150.00	\$22,500	85.00	12,750.00	100.00	15,000.00	210.00	31,500.00	307.10	46,065.00
412	Concrete Pavement (6 Inch)	SY	1,932	\$50.00	\$96,600	47.00	90,804.00	59.00	113,988.00	65.00	125,580.00	39.00	75,348.00
504	Retaining Wall (Rockery)	SF	1,990	\$100.00	\$199,000	75.75	150,742.50	61.00	121,390.00	60.00	119,400.00	60.00	119,400.00
504	Rock Embankment	CY	79	\$400.00	\$31,600	975.00	77,025.00	720.00	56,880.00	775.00	61,225.00	750.00	59,250.00
506	Soil Riprap (9 Inch)	CY	6	\$150.00	\$900	330.00	1,980.00	120.00	720.00	825.00	4,950.00	69.00	414.00
514	Pedestrian Railing (Steel)	LF	758	\$130.00	\$98,540	205.00	155,390.00	205.00	155,390.00	195.00	147,810.00	111.68	84,653.44
603	18" Reinforced Concrete Pipe (Complete In Place)	LF	200	\$90.00	\$18,000	122.60	24,520.00	115.00	23,000.00	220.00	44,000.00	85.00	17,000.00
604	Inlet No. 16 (Double)	EA	2	\$5,000.00	\$10,000	13,600.00	27,200.00	8,800.00	17,600.00	6,500.00	13,000.00	5,500.00	11,000.00
604	Storm Sewer Standard Manhole (4' I.D.)	EA	2	\$6,000.00	\$12,000	7,360.00	14,720.00	5,600.00	11,200.00	6,000.00	12,000.00	6,500.00	13,000.00
604	Rock Headwall for 18" Pipe	EA	3	\$3,000.00	\$9,000	2,750.00	8,250.00	2,500.00	7,500.00	2,500.00	7,500.00	2,200.00	6,600.00
604	Rock Headwall for 48" Pipe	EA	2	\$5,000.00	\$10,000	7,200.00	14,400.00	5,000.00	10,000.00	5,800.00	11,600.00	6,000.00	12,000.00
607	Fence (Plastic)	LF	6,280	\$3.00	\$18,840	4.20	26,376.00	4.00	25,120.00	2.25	14,130.00	2.00	12,560.00
607	Fence (Wood)	LF	1,012	\$25.00	\$25,300	33.70	34,104.40	25.00	25,300.00	55.00	55,660.00	10.00	10,120.00
608	Concrete Sidewalk (6")	SY	5,707	\$40.00	\$228,280	44.50	253,961.50	60.00	342,420.00	55.00	313,885.00	35.00	199,745.00
608	Concrete Sidewalk (6") (Mow Strip)	SY	146	\$60.00	\$8,760	107.75	15,731.50	86.00	12,556.00	98.00	14,308.00	60.00	8,760.00
608	Concrete Sidewalk (6") (Colored)	SY	405	\$60.00	\$24,300	120.00	48,600.00	138.00	55,890.00	175.00	70,875.00	50.00	20,250.00
608	Concrete Sidewalk (12") (Colored)	SY	100	\$80.00	\$8,000	175.00	17,500.00	235.00	23,500.00	245.00	24,500.00	117.00	11,700.00
608	Concrete Curb Ramp	SY	47	\$120.00	\$5,640	150.00	7,050.00	135.00	6,345.00	165.00	7,755.00	120.00	5,640.00
608	Detectable Warnings	SF	40	\$60.00	\$2,400	22.35	894.00	54.00	2,160.00	50.00	2,000.00	72.00	2,880.00
609	Concrete Curb and Gutter Type 2 (Section II-B)	LF	500	\$20.00	\$10,000	23.30	11,650.00	28.00	14,000.00	26.00	13,000.00	18.00	9,000.00
610	Median Cover Material (Concrete)	SF	28	\$6.00	\$168	16.25	455.00	26.00	728.00	28.00	784.00	8.00	224.00
613	Pull Box (Special)	EA	11	\$1,000.00	\$11,000	1,800.00	19,800.00	600.00	6,600.00	720.00	7,920.00	1,495.33	16,448.63
614	Sign Panel (Class 1)	SF	41	\$25.00	\$1,025	33.70	1,381.70	46.00	1,886.00	33.00	1,353.00	27.92	1,144.72

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4/29/2016						PLM	CEI	KECI	Villalobos				
Item	Description	Unit	Quantity	Unit Price	Extended Price	Granite Re, Inc.	Travelers Casualty and Surety	Contractors Bonding & Ins.	Western Surety Company				
614	Sign Panel (Class 2)	SF	5	\$30.00	\$150	202.50	1,012.50	46.00	230.00	40.00	200.00	33.50	167.50
614	Steel Sign Support (2 Inch Round) (Post)	LF	120	\$10.00	\$1,200	40.50	4,860.00	37.00	4,440.00	22.00	2,640.00	33.50	4,020.00
619	1 -1/2 Inch Plastic Pipe (Lateral)	LF	605	\$5.00	\$3,025	5.25	3,176.25	3.00	1,815.00	4.50	2,722.50	4.36	2,637.80
619	2-Inch Plastic Pipe (Lateral)	LF	605	\$6.00	\$3,630	6.00	3,630.00	3.50	2,117.50	5.00	3,025.00	4.91	2,970.55
619	2-Inch Plastic Pipe (Mainline)	LF	75	\$8.00	\$600	8.35	626.25	4.00	300.00	7.00	525.00	6.92	519.00
619	2 -1/2 Inch Plastic Pipe (Mainline)	LF	2,650	\$10.00	\$26,500	7.30	19,345.00	5.00	13,250.00	6.00	15,900.00	6.03	15,979.50
619	2 -1/2 Inch Plastic Pipe (Lateral)	LF	80	\$7.50	\$600	5.80	464.00	5.00	400.00	5.00	400.00	4.80	384.00
619	3-Inch Plastic Pipe (Mainline)	LF	1,550	\$12.00	\$18,600	24.25	37,587.50	6.00	9,300.00	20.00	31,000.00	20.10	31,155.00
619	1-Inch Polyethylene Pipe (Lateral)	LF	15,200	\$2.00	\$30,400	4.60	69,920.00	2.30	34,960.00	4.00	60,800.00	3.80	57,760.00
619	1-1/4-Inch Polyethylene Pipe (Lateral)	LF	1,750	\$3.00	\$5,250	5.00	8,750.00	3.00	5,250.00	4.00	7,000.00	4.08	7,140.00
619	1-Inch Copper Pipe	LF	100	\$5.00	\$500	19.50	1,950.00	28.00	2,800.00	16.00	1,600.00	16.19	1,619.00
619	1-1/2 Inch Copper Pipe	LF	50	\$7.00	\$350	26.26	1,313.00	31.00	1,550.00	22.00	1,100.00	21.78	1,089.00
619	6-Inch Plastic Pipe (Irrigation Sleeve)	LF	161	\$25.00	\$4,025	21.50	3,461.50	16.00	2,576.00	18.00	2,898.00	17.87	2,877.07
619	4-Inch Plastic Pipe (Irrigation Sleeve)	LF	145	\$24.00	\$3,480	21.50	3,117.50	10.00	1,450.00	15.00	2,175.00	14.52	2,105.40
619	3-Inch Plastic Pipe (Irrigation Sleeve)	LF	51	\$22.00	\$1,122	16.15	823.65	7.00	357.00	13.00	663.00	13.40	683.40
619	2-Inch Plastic Pipe (Irrigation Sleeve)	LF	309	\$20.00	\$6,180	14.80	4,573.20	6.00	1,854.00	12.00	3,708.00	12.28	3,794.52
623	Water Meter and Vault	EA	2	\$6,000.00	\$12,000	4,000.00	8,000.00	6,500.00	13,000.00	7,700.00	15,400.00	13,401.02	26,802.04
623	Stop and Waste Valve	EA	2	\$1,000.00	\$2,000	485.00	970.00	600.00	1,200.00	600.00	1,200.00	608.63	1,217.26
623	Backflow Preventer	EA	2	\$5,000.00	\$10,000	3,450.00	6,900.00	3,350.00	6,700.00	3,600.00	7,200.00	3,651.78	7,303.56
623	Master Valve	EA	2	\$1,000.00	\$2,000	735.00	1,470.00	2,300.00	4,600.00	830.00	1,660.00	838.68	1,677.36
623	Flow Sensor	EA	2	\$500.00	\$1,000	1,300.00	2,600.00	1,500.00	3,000.00	1,005.00	2,010.00	1,017.36	2,034.72
623	Isolation Gate Valve	EA	9	\$1,000.00	\$9,000	675.00	6,075.00	625.00	5,625.00	385.00	3,465.00	559.49	5,035.41
623	Quick Coupler Valve	EA	17	\$300.00	\$5,100	365.00	6,205.00	455.00	7,735.00	300.00	5,100.00	301.52	5,125.84
623	Automatic Control Valve	EA	48	\$500.00	\$24,000	535.00	25,680.00	500.00	24,000.00	435.00	20,880.00	442.23	21,227.04
623	Manual Drain Valve	EA	4	\$750.00	\$3,000	321.00	1,284.00	385.00	1,540.00	355.00	1,420.00	358.48	1,433.92
623	Pop-Up Spray Sprinkler (1812 Series)	EA	308	\$30.00	\$9,240	60.00	18,480.00	35.00	10,780.00	49.00	15,092.00	49.70	15,307.60
623	Pop-Up Spray Sprinkler (RD Series)	EA	62	\$35.00	\$2,170	61.25	3,797.50	39.00	2,418.00	50.00	3,100.00	50.81	3,150.22
623	Pop-Up Rotatory Sprinkler (1812 Series)	EA	444	\$75.00	\$33,300	66.00	29,304.00	41.00	18,204.00	54.00	23,976.00	54.72	24,295.68
623	Pop-Up Rotatory Sprinkler (RD Series)	EA	138	\$75.00	\$10,350	69.35	9,570.30	46.00	6,348.00	57.00	7,866.00	57.51	7,936.38
623	Pop-Up Rotor Sprinkler	EA	103	\$75.00	\$7,725	51.20	5,273.60	71.00	7,313.00	42.00	4,326.00	42.44	4,371.32
623	Rain Sensor	EA	2	\$400.00	\$800	124.00	248.00	1,035.00	2,070.00	101.00	202.00	102.74	205.48
623	Irrigation Controller	EA	2	\$20,000.00	\$40,000	24,000.00	48,000.00	25,000.00	50,000.00	20,000.00	40,000.00	19,878.17	39,756.34
623	1 Station Decoder	EA	6	\$200.00	\$1,200	205.00	1,230.00	315.00	1,890.00	170.00	1,020.00	169.75	1,018.50
623	2 Station Decoder	EA	5	\$300.00	\$1,500	380.00	1,900.00	365.00	1,825.00	312.00	1,560.00	316.04	1,580.20
623	4 Station Decoder	EA	7	\$500.00	\$3,500	440.00	3,080.00	425.00	2,975.00	360.00	2,520.00	364.06	2,548.42
623	Two-Wire Cable Grounding	LF	25	\$5.00	\$125	255.00	6,375.00	310.00	7,750.00	211.00	5,275.00	214.42	5,360.50
623	Two-Wire Cable	LF	4,275	\$3.50	\$14,963	1.10	4,702.50	1.00	4,275.00	1.00	4,275.00	0.84	3,591.00
625	Construction Surveying	LS	1		\$30,000	27,900.00	27,900.00	25,000.00	25,000.00	15,000.00	15,000.00	9,213.19	9,213.19
626	Mobilization	LS	1		\$150,000	29,400.00	29,400.00	265,000.00	265,000.00	200,000.00	200,000.00	98,913.03	98,913.03
626	Public Information Services	LS	1	\$10,000.00	\$10,000	11,500.00	11,500.00	14,000.00	14,000.00	10,000.00	10,000.00	5,000.00	5,000.00
627	Epoxy Pavement Marking	GAL	4	\$200.00	\$800	67.40	269.60	530.00	2,120.00	300.00	1,200.00	25.07	100.28
628	Construction As-Builts	LS	1	\$5,000.00	\$5,000	3,250.00	3,250.00	12,500.00	12,500.00	6,000.00	6,000.00	5,000.00	5,000.00
630	Flagging	HR	350	\$25.00	\$8,750	33.70	11,795.00	31.00	10,850.00	26.00	9,100.00	20.00	7,000.00
630	Traffic Control Inspection	DAY	80	\$160.00	\$12,800	240.00	19,200.00	230.00	18,400.00	200.00	16,000.00	180.00	14,400.00
630	Traffic Control Management	DAY	32	\$600.00	\$19,200	1,100.00	35,200.00	955.00	30,560.00	650.00	20,800.00	480.00	15,360.00
630	Barricade (Type 3 M-B) (Temporary)	EA	6	\$150.00	\$900	310.00	1,860.00	445.00	2,670.00	275.00	1,650.00	160.00	960.00
630	Construction Traffic Sign (Panel Size A)	EA	30	\$50.00	\$1,500	87.60	2,628.00	83.00	2,490.00	85.00	2,550.00	110.00	3,300.00
630	Portable Message Sign Panel	EA	2	\$4,000.00	\$8,000	8,000.00	16,000.00	7,700.00	15,400.00	7,000.00	14,000.00	4,000.00	8,000.00
630	Advance Warning Flashing or Sequencing Arrow Panel (C Type)	EA	2	\$1,200.00	\$2,400	2,500.00	5,000.00	2,800.00	5,600.00	1,500.00	3,000.00	2,500.00	5,000.00
630	Drum Channelizing Device (With Light) (Steady Burn)	EA	300	\$25.00	\$7,500	87.50	26,250.00	100.00	30,000.00	75.00	22,500.00	27.00	8,100.00
630	Concrete Barrier (Temporary)	LF	1,300	\$30.00	\$39,000	29.60	38,480.00	34.00	44,200.00	15.00	19,500.00	65.00	84,500.00
630	Impact Attenuator (Temporary)	EA	1	\$5,000.00	\$5,000	7,000.00	7,000.00	4,650.00	4,650.00	6,000.00	6,000.00	10,000.00	10,000.00
700	F/A Minor Contract Revisions	F/A	1	\$50,000.00	\$50,000		50,000.00		50,000.00		50,000.00		50,000.00
700	F/A Furnish and Install Electrical Service	F/A	1	\$5,000.00	\$5,000		5,000.00		5,000.00		5,000.00		5,000.00
700	F/A Irrigation Tap and Meter Fees	F/A	1	\$3,000.00	\$3,000		3,000.00		3,000.00		3,000.00		3,000.00
700	F/A Erosion Control	F/A	1	\$5,000.00	\$5,000		5,000.00		5,000.00		5,000.00		5,000.00
700	F/A Partnering Program	F/A	1	\$5,000.00	\$5,000		5,000.00		5,000.00		5,000.00		5,000.00
700	F/A Fuel Cost Adjustment	F/A	1	\$5,000.00	\$5,000		5,000.00		5,000.00		5,000.00		5,000.00
					SUBTOTAL:	\$2,098,625	2,282,682.65		2,694,320.50		2,631,695.25		2,051,426.04
					Textura Fee		3,880.56		4,580.34		4,473.88		3,487.42
					Total Bid Amount		2,286,563.21		2,698,900.84		2,636,169.13		2,054,913.46