

AGREED UNIT PRICE (AUP) UNIT COST ANALYSIS  
 INFRASTRUCTURE SERVICES DIVISION  
 DEPARTMENT OF PUBLIC WORKS - CITY OF MILWAUKEE  
 STATE PROJECT I.D.#2275-03-90  
 2007 SURFACE TRANSPORTATION PROGRAM  
 N. 20TH ST. - W. HIGHLAND AV. TO W. NORTH AV.  
 LOCAL FORCE ACCOUNT - STATE

**TRAFFIC SIGNS**

ITEM	DESCRIPTION	QUANTITY X MATERIAL		QUANTITY X EQUIPMENT		QUANTITY X LABOR		TOTAL COST **	
		QUANTITY	MATERIAL	EQUIPMENT	LABOR	LABOR *	UNIT COST		
73000	30 X 30 STOP	18	40.51	0.34	729.18	6.12	11.74	\$52.59	\$986.68
73034	12X18 PARKING-SINGLE MESSAGE	10	9.90	0.34	99.00	3.40	11.74	\$21.98	\$229.81
73036	18X24 PARKING-DOUBLE MESSAGE	2	19.74	0.34	39.48	0.68	27.92	\$48.00	\$100.42
73056	30X30 SCHOOL	15	45.51	0.34	682.65	5.10	11.74	\$57.59	\$900.23
73060	24X48 SCHOOL SPEED LIMIT ____ WCAP	4	67.88	0.34	271.52	1.36	11.74	\$79.96	\$333.12
73081	12X36 HAZARD MARKER (LEFT MOUNT)	4	16.90	0.34	67.60	1.36	11.74	\$28.98	\$121.05
73082	12X36 HAZARD MARKER (RIGHT MOUNT)	14	16.90	0.34	236.60	4.76	11.74	\$28.98	\$423.65
73097	24X30 KEEP RIGHT	6	32.85	0.34	197.10	2.04	11.74	\$44.93	\$281.09
73140	15X21 PUSH BUTTON FOR WALK SIGNAL	8	5.68	0.34	45.44	2.72	11.74	\$17.76	\$148.74
73177	24X36 NO TRUCKS 3 TONS OR OVER	3	39.26	0.34	117.78	1.02	11.74	\$51.34	\$160.54
73181	24X24 NO LEFT TURN	2	26.14	0.34	52.28	0.68	11.74	\$38.22	\$79.74
73188	18X24 BIKE ROUTE	1	19.75	0.34	19.75	0.34	11.74	\$31.83	\$33.23
73194	24X30 SPEED LIMIT ____	6	32.85	0.34	197.10	2.04	11.74	\$44.93	\$281.09
73294	3' RSP SOCKET	47	19.83	0.68	932.01	31.96	15.39	\$35.92	\$1,762.31
73295	SOC. (CONC. INST.)	1	9.51	1.02	9.51	1.02	23.09	\$33.62	\$35.20
73296	2" X 96" PIPE	35	43.14	0.14	1509.90	4.90	3.08	\$46.36	\$1,688.63
73298	2' X 11'-0" PIPE	13	48.08	0.14	625.04	1.82	3.08	\$3.21	\$693.99
73310	MOUNTING HARDWARE CP/ISS/AP	82	0.00	0.14	0.00	11.48	3.07	\$276.37	\$270.86
73311	MOUNTING HARDWARE PS	62	0.96	0.14	59.52	8.68	3.07	\$4.17	\$270.86
73312	SNS MOUNTING CP	32	18.38	0.14	588.16	4.48	3.08	\$21.60	\$719.88
73313	SNS MOUNTING PS	6	0.00	0.14	0.00	0.84	3.07	\$3.21	\$20.22
73317	12X18 SNOW ROUTE	24	9.90	0.34	237.60	8.16	11.74	\$21.98	\$551.55
73318	GREEN SNS 30"	36	24.66	0.34	887.76	12.24	11.74	\$36.74	\$1,379.94
73319	GREEN SNS 36"	7	28.83	0.34	201.81	2.38	11.74	\$40.91	\$298.68
73325	SNS MOUNTING SIGNALS	5	15.65	0.00	78.25	0.00	0.00	\$15.65	\$81.38
73326	9X12 PUSH BUTTON FOR WALK SIGNAL	5	5.46	0.34	27.30	1.70	11.74	\$17.54	\$91.82
73327	6X8 PUSH BUTTON FOR WALK SIGNAL	7	0.22	0.34	1.54	2.38	11.74	\$12.30	\$90.40
73333	12X24 AHEAD	7	16.20	0.34	113.40	2.38	11.74	\$28.28	\$206.73
73338	12X24 DIAGONAL DOWN	8	16.20	0.34	129.60	2.72	11.74	\$28.28	\$236.27

TOTAL COST MATERIAL \$8,156.88  
 TOTAL COST EQUIPMENT \$128.76  
 TOTAL COST LABOR \$3,717.85  
 OVERALL TOTAL COST \$12,483.62



ESTIMATED COST OF 2007 PAVING PROGRAM

\*\* Quantity X Labor includes an additional 1% of the labor cost for small tools  
 \*\* Total Cost includes an additional 4% for administrative support

APPROVED BY:

TRANSPORTATION SECTION  
 TRAFFIC & LIGHTING DESIGN UNIT

DALE A. DIETZE  
 January 25, 2006

ROBERT W. BRYSON

Revised:

AGREED UNIT PRICE (AUP) UNIT COST ANALYSIS  
 INFRASTRUCTURE SERVICES DIVISION - TRANSPORTATION  
 DEPARTMENT OF PUBLIC WORKS - CITY OF MILWAUKEE  
 STATE PROJECT I.D.# 2275-03-90  
 NORTH 20TH STREET (S.T.H. 57)  
 W. HIGHLAND AVE. TO W. NORTH AVE.

LOCAL FORCE ACCOUNT-STATE

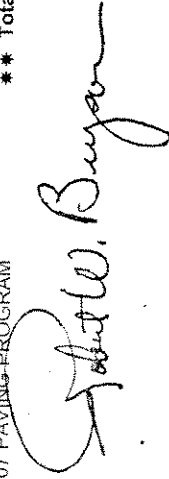
**SUMMARY COST ESTIMATE - TRAFFIC SIGNALS**

ITEM	DESCRIPTION	UNIT	QUANTITY	MATERIAL	QUANTITY x MATERIAL	EQUIPMENT	QUANTITY x EQUIPMENT	LABOR	QUANTITY x LABOR	UNIT COST	TOTAL COST							
71034	DETECTOR, 4-CHANNEL OPTICOM (721)	EACH	4	\$547.99	\$2,191.96	\$4.71	\$18.84	\$79.18	\$319.89	\$631.89	\$2,631.92							
71060L	512 SIG. HOUS. W/LED MODULES	EACH	1	\$585.16	\$585.16	\$9.42	\$9.42	\$356.33	\$359.89	\$950.91	\$992.65							
71062L	312 SIG. HOUS. W/LED MODULES	EACH	15	\$376.11	\$5,641.65	\$4.71	\$70.65	\$197.96	\$2,999.09	\$578.78	\$9,059.85							
71064RL	112 RED LED MODULE	EACH	13	\$43.91	\$570.83	\$2.36	\$30.68	\$39.59	\$519.82	\$85.86	\$1,166.18							
71064YL	112 YELLOW LED MODULE	EACH	13	\$84.30	\$604.37	\$2.36	\$30.68	\$39.59	\$519.82	\$88.44	\$1,201.06							
71064GL	112 GREEN LED MODULE	EACH	13	\$61.55	\$1,095.90	\$2.36	\$30.68	\$39.59	\$519.82	\$126.26	\$1,712.26							
71064GAL	112 GREEN ARROW LED MODULE	EACH	2	\$123.10	\$246.20	\$2.36	\$4.72	\$39.59	\$79.97	\$103.50	\$216.10							
71064YAL	112 YELLOW ARROW LED MODULE	EACH	2	\$44.21	\$88.42	\$2.36	\$4.72	\$39.59	\$79.97	\$86.16	\$180.03							
71066LC	DW-W COMBO 12" SIG. HOUS. W/LED MODULE	EACH	40	\$234.80	\$9,392.00	\$7.08	\$283.20	\$197.96	\$7,997.58	\$439.84	\$18,379.69							
71067L	COUNTDOWN PED 12" SIG. HOUS.	EACH	8	\$455.36	\$3,642.88	\$7.07	\$56.56	\$197.96	\$1,599.52	\$660.39	\$5,510.92							
71071L	38 SIG. HOUS. W/LED MODULES	EACH	20	\$327.77	\$6,555.40	\$4.72	\$94.40	\$118.77	\$2,399.15	\$451.26	\$9,410.91							
71072RL	18 RED LED MODULES	EACH	10	\$40.50	\$405.00	\$2.36	\$23.60	\$39.59	\$399.86	\$82.45	\$861.60							
71072YL	18 YELLOW LED MODULES	EACH	10	\$43.07	\$430.70	\$2.36	\$23.60	\$39.59	\$399.86	\$85.02	\$888.33							
71072GL	18 GREEN LED MODULES	EACH	10	\$54.59	\$545.90	\$2.36	\$23.60	\$39.59	\$399.86	\$96.54	\$1,008.13							
71125	PUSH BUTTON MUSHROOM HEAD (ADA 2")	EACH	12	\$36.47	\$437.64	\$4.71	\$56.52	\$79.18	\$959.66	\$120.36	\$1,511.97							
71156	LEAD IN CABLE (PROBE)	LF	500	\$0.08	\$40.00	\$0.07	\$35.00	\$1.77	\$893.85	\$1.92	\$1,007.60							
71170	9#14 LTP	LF	2455	\$0.29	\$711.95	\$0.07	\$171.85	\$1.77	\$4,388.80	\$2.13	\$5,483.50							
71171	12#14 LTP	LF	725	\$0.39	\$282.75	\$0.07	\$50.75	\$1.77	\$1,296.08	\$2.23	\$1,694.76							
71172	17#14LTP	LF	1460	\$0.54	\$788.40	\$0.07	\$102.20	\$1.77	\$2,610.04	\$2.38	\$3,640.67							
71173	20#14 LTP	LF	840	\$0.64	\$537.60	\$0.07	\$58.80	\$1.77	\$1,501.67	\$2.48	\$2,181.99							
71197	SS 13'	EACH	14	\$485.80	\$6,801.20	\$11.77	\$164.78	\$353.17	\$4,993.82	\$850.74	\$12,438.19							
90030B	3#41# 8 LTP	LF	700	\$1.49	\$1,043.00	\$0.03	\$21.00	\$1.74	\$1,230.18	\$3.26	\$2,385.95							
90030Q	2.5" PVC CONDUIT (TRENCH)	LF	175	\$0.45	\$78.75	\$0.21	\$36.75	\$5.74	\$1,014.55	\$6.40	\$1,175.25							
<table border="0" style="width:100%"> <tr> <td style="text-align:right">TOTAL COST MATERIAL</td> <td>\$42,594.56</td> <td style="text-align:right">TOTAL COST EQUIP</td> <td>\$1,403.00</td> <td style="text-align:right">TOTAL COST LABOR</td> <td>\$37,482.75</td> <td style="text-align:right">OVERALL TOTAL COST</td> <td>\$84,739.51</td> </tr> </table>											TOTAL COST MATERIAL	\$42,594.56	TOTAL COST EQUIP	\$1,403.00	TOTAL COST LABOR	\$37,482.75	OVERALL TOTAL COST	\$84,739.51
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 \*\* Total Cost includes an additional 4% for administrative support

APPROVED BY:



ROBERT W. BRYSON  
 TRAFFIC & LIGHTING ENGINEER V

TRANSPORTATION SECTION  
 TRAFFIC & LIGHTING DESIGN UNIT  
 JOSEPH A. BONDOWSKI  
 January 23, 2007