

FOR NEGOTIATED CONTRACTS ON THE STH SYSTEM

CORRESPONDENCE/MEMORANDUM

State of Wisconsin

Date: March 15, 2013

To: Bureau of Technical Services
Attn: Chief of Pavement Section

From: City of Milwaukee
841 North Broadway, Room 701
Milwaukee, WI 53202

Subject: Cost Effectiveness Finding
Project ID #1300-13-91
IH 794 Milwaukee River to Carferry Drive
Street Lighting
IH 794
Milwaukee County

Attached is a letter from the City of Milwaukee requesting permission to construct the above project with local forces under a Local Force Account (LFA) agreement. The work involves Street Lighting Improvements.

The City of Milwaukee has submitted the attached estimate showing a cost of \$103,185.26 which represents a 11.7% savings from the estimated cost to let the work. The included cost is estimated at \$36,286.90 and the excluded cost is estimated at \$66,898.36. The approval of this CEF does not exceed the allowed fiscal allocation for LFA's in the Southeast Region.

Funding for this project is in the legislative program 304 and is 100% state.

Your approval of doing this work by LFA agreement is requested.

CONCUR:

PDS Project Manager, SE Region

Date

APPROVED:

Chief Materials Management BTS

Date

ATTACHMENT #1
CITY OF MILWAUKEE COST ESTIMATE

PROJECT UNIT COST ANALYSIS

ESTIMATE OF QUANTITIES
 PROJECT ID 1300-13-91
 IH 794 MILWAUKEE RIVER TO CARRERY DRIVE - STREET LIGHTING
 IH 794
 MILWAUKEE COUNTY

Item No.	Description	Unit	Quantity	Excluded Costs	City Unit	City Total
90005-2	2.5" PVC CONDUIT (HOLE HOG)	LF	150	\$ 209.57	\$ 12.35	\$ 1,852.50
90005-6	3" PVC CONDUIT (DIRECTIONAL BORED)	LF	120	\$ 322.04	\$ 15.16	\$ 1,819.20
90005-7	METAL PEDESTAL CABINET	EACH	4	\$ 193.87	\$ 124.90	\$ 499.60
90005-8	13"X24"X18" RECTANGULAR VAULT & COVER	EACH	5	\$ 1,232.99	\$ 389.20	\$ 1,946.00
90005-10	3#2/1#8 LTP UNDERGROUND CABLE	LF	1250	\$ 5,093.50	\$ 6.38	\$ 7,975.00
90005-11	3#4/1#8 LTP UNDERGROUND CABLE	LF	250	\$ 683.92	\$ 5.04	\$ 1,260.00
90005-12	3#6/1#8 LTP UNDERGROUND CABLE	LF	2000	\$ 3,735.84	\$ 4.18	\$ 8,360.00
90005-13	3#8/1#8 LTP UNDERGROUND CABLE	LF	575	\$ 747.58	\$ 3.61	\$ 2,075.75
90005-14	3#10 WITH GROUND UF UNDERGROUND CABLE	LF	2400	\$ 2,683.23	\$ 3.43	\$ 8,232.00
90005-15	3#12 UF W/ GROUND UNDERGROUND CABLE	LF	100	\$ 63.59	\$ 2.94	\$ 294.00
90005-17	2#12 UF UNDERGROUND CABLE	LF	1100	\$ 546.32	\$ 2.80	\$ 3,080.00
90005-28	INSTALL A31 CONCRETE POLE (BLACK) INCLUDES RISER CABLE	EACH	6	\$ 9,142.04	\$ 1,795.26	\$ 10,795.56
90005-42	14.7" BLACK STEEL POLE WITH DECORATIVE BASE ON EXISTING CONCRETE BASE, 70W/240 VOLT HARP FIXTURE, WITH A HIGH PRESSURE SODIUM LAMP (INCLUDE RISER CABLE)	EACH	2	\$ 17,379.26	\$ 9,039.52	\$ 18,079.04
90005-47	REMOVE CONCRETE, WOOD, AND ALUMINUM POLE	EACH	2	\$ 33.77	\$ 396.39	\$ 792.78
90005-60	INSTALL A31 BLACK MILWAUKEE LANTERN CLAMP	EACH	10	\$ 1,057.51	\$ 131.23	\$ 1,312.30
90005-67	INSTALL 250W/240V BLACK MILWAUKEE LANTERN ARM	EACH	10	\$ 4,616.50	\$ 512.60	\$ 5,126.00
90005-70	REMOVE / REINSTALL BRACKET AND FIXTURE COMPLETE	EACH	10	\$ 33.05	\$ 54.28	\$ 542.60
90005-79	INSTALL 70W/240V WALL PACK FIXTURE & 70 WATT HIGH PRESSURE SODIUM LAMP	EACH	31	\$ 7,215.11	\$ 385.60	\$ 11,953.60
90005-87	INSTALL BLACK MILWAUKEE LANTERN FIXTURE, & 250 WATT HIGH PRESSURE SODIUM LAMP	EACH	10	\$ 4,323.32	\$ 508.76	\$ 5,087.80
90005-99	SECONDARY SPLICE	EACH	1	\$ 3.38	\$ 121.66	\$ 121.66
90005-103	HAND HOLE OR PEDESTAL SPLICE	EACH	56	\$ 113.40	\$ 73.00	\$ 4,088.00
90005-116	4"X4"X4" CAST IRON BOX (STEEL CHECKERED PLATE COVER)	EACH	1	\$ 278.23	\$ 349.56	\$ 349.56
90005-122	1/4" GALVANIZED LUMINAIRE MOUNTING PLATE	EACH	24	\$ 1,286.86	\$ 56.17	\$ 1,348.01
90005-123	3/4" RIGID METALLIC CONDUIT	LF	470	\$ 1,782.29	\$ 3.75	\$ 1,762.50
90005-124	3/4" LIQUID TIGHT CONDUIT	LF	490	\$ 1,574.81	\$ 3.21	\$ 1,572.90
90005-125	LUMINAIRE MOUNTING CHANNEL	LF	40	\$ 857.04	\$ 21.43	\$ 857.20
90005-126	GIRDER CLAMPS	EACH	80	\$ 1,286.86	\$ 16.85	\$ 1,348.00
90005-127	3PR. 19GA. CONTROL CIRCUIT CABLE	LF	130	\$ 422.48	\$ 5.03	\$ 653.90
TOTAL CITY COST						\$103,185.26
TOTAL EXCLUDED COSTS						\$66,998.36

APPROVED BY:



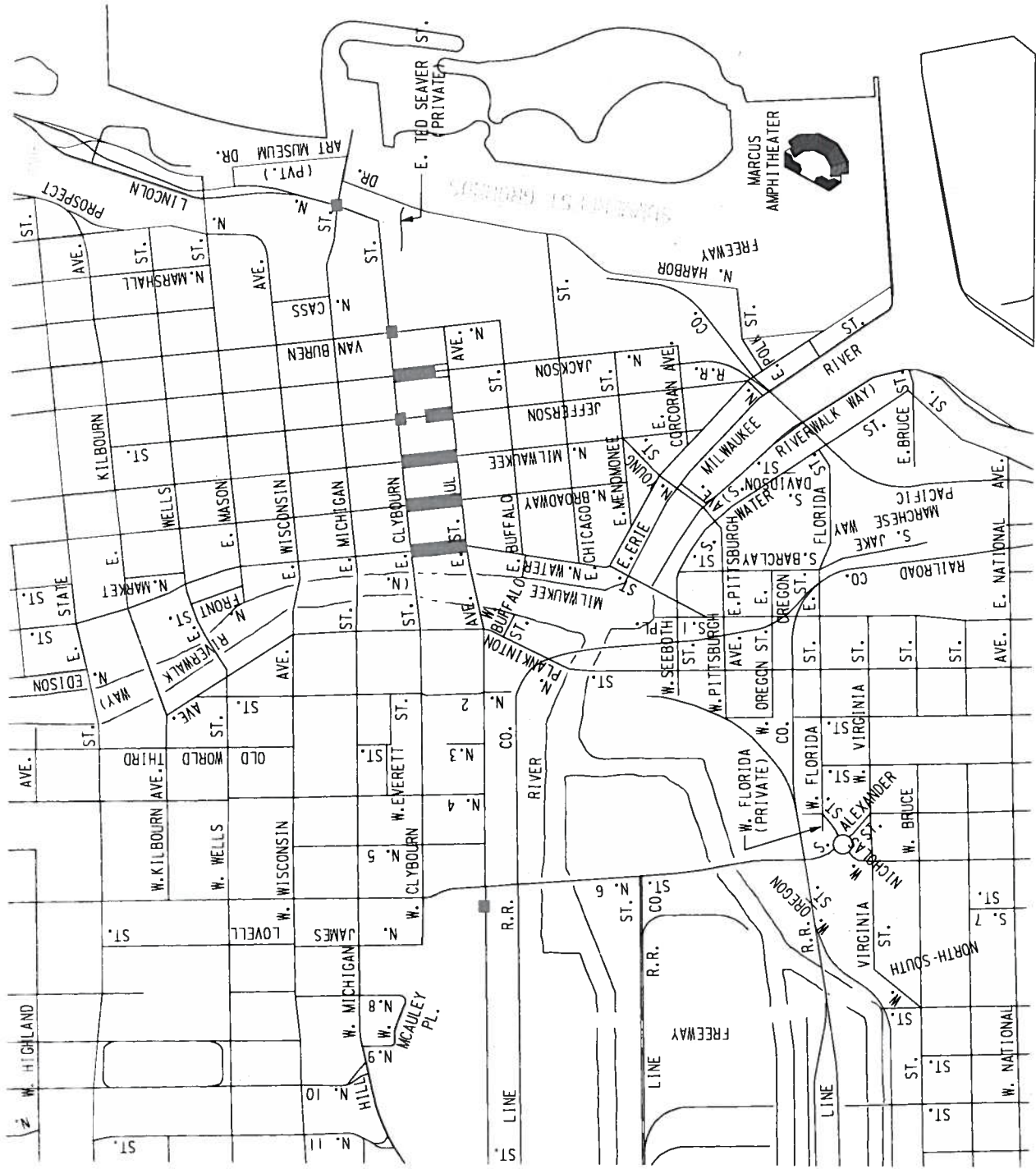
ROBERT W. BRYSON
 CHIEF TRAFFIC AND LIGHTING ENGINEER

TRANSPORTATION SECTION
 TRAFFIC AND LIGHTING DESIGN UNIT

DENIS KOZELEK
 REVISED: 3-15-13

Please note that the Total City Cost includes the embedded costs of mobilization, traffic control, mounting hardware, equipment removal, and construction staking electrical installations which are included in the times used for calculating City Unit Costs on the attached worksheets.

PROJECT LOCATION MAP



■ Project Improvement Location

ATTACHMENT #2
COST COMPARISON ANALYSIS
CITY OF MILWAUKEE UNIT PRICES VS. PRIVATE CONTRACT COST

Cost Comparison for Project #1300-13-91

City Cost	Bid Cost	Percent Savings
\$103,185.26	\$116,795.54	11.7%

BID UNIT COST ANALYSIS

ESTIMATE OF QUANTITIES

PROJECT ID 1300-13-91

IH 794 MILWAUKEE RIVER TO CARFERRY DRIVE - STREET LIGHTING

IH 794

MILWAUKEE COUNTY

Item No.	Description	Unit	Quantity	Bid Unit	Total Bid Cost
619.1000	Mobilization	Each	1	\$ 6,233.33	\$ 6,233.33
643.0100	Traffic Control	Each	1	\$ 5,933.33	\$ 5,933.33
650.8500	Construction Staking Electrical Installations (project)	LS	1	\$ 633.33	\$ 633.33
652.0105	3/4" Rigid Metallic Conduit**	LF	470	\$ 3.76	\$ 1,767.20
652.0610	Conduit Special 2 1/2-Inch	LF	110	\$ 15.90	\$ 1,749.00
652.0615	Conduit Special 3-Inch	LF	120	\$ 14.88	\$ 1,785.60
655.0610	Electrical Wire Lighting 12 AWG	LF	3,700	\$ 0.55	\$ 2,035.00
655.0615	Electrical Wire Lighting 10 AWG	LF	9,600	\$ 0.71	\$ 6,816.00
655.0620	Electrical Wire Lighting 8 AWG	LF	5,800	\$ 0.86	\$ 4,988.00
655.0625	Electrical Wire Lighting 6 AWG	LF	6,000	\$ 0.93	\$ 5,580.00
655.0630	Electrical Wire Lighting 4 AWG	LF	750	\$ 1.28	\$ 960.00
655.0635	Electrical Wire Lighting 2 AWG	LF	3,750	\$ 2.03	\$ 7,612.50
SPV.0060.01	Metal Pedestal	Each	4	\$ 191.30	\$ 765.20
659.0125	Luminaires Utility 250 W	Each	10	\$ 314.55	\$ 3,145.50
659.0205	Luminaires Underdeck 70 Watts**	Each	31	\$ 385.60	\$ 11,953.60
659.0700	14.7' Black Steel pole with decorative base on existing concrete base, 70w/240 volt harp fixture, with a high pressure sodium lamp (includes riser cable) **	Each	2	\$ 9,039.52	\$ 18,079.04
SPV.0060.02	13"x24"x18" rectangular vault & cover	Each	5	\$ 1,666.67	\$ 8,333.35
SPV.0060.03	Removing Pole	Each	2	\$ 405.00	\$ 810.00
SPV.0060.04	A31 Concrete Pole (Black) includes riser cable ***	Each	6	\$ 1,799.26	\$ 10,795.56
SPV.0060.05	A31 Black Milwaukee Lantern Clamp ***	Each	10	\$ 131.23	\$ 1,312.30
SPV.0060.06	250w/240v Black Milwaukee Lantern Arm ***	Each	10	\$ 512.60	\$ 5,126.00
SPV.0060.07	Secondary Splice***	Each	1	\$ 121.66	\$ 121.66
SPV.0060.08	4"x4"x4" Cast Iron Box (Steel Checkered Plate Cover)***	Each	1	\$ 349.56	\$ 349.56
SPV.0060.09	Hand Hole or Pedestal Splice***	Each	58	\$ 73.00	\$ 4,234.00
SPV.0060.10	Remove / Reinstall bracket and Fixture Complete***	Each	10	\$ 54.26	\$ 542.60
SPV.0060.11	1/4" Galvanized Luminaire Mounting Plate***	Each	24	\$ 56.17	\$ 1,348.08
SPV.0060.12	Girder Clamps***	Each	80	\$ 16.85	\$ 1,348.00
SPV.0090.01	3/4" Liquidtight Conduit***	LF	490	\$ 3.22	\$ 1,577.80
SPV.0090.02	Luminaire Mounting Channel***	LF	40	\$ 21.50	\$ 860.00
SPV.0090.03	3PR. 19GA. Control Circuit Cable	LF	130	\$ 0.56	\$ 72.80

TOTAL ESTIMATED BID COST \$ 116,868.34

TRANSPORTATION SECTION
STREET LIGHTING DESIGN UNIT
DENIS KOZELEK
REVISED: MARCH 15, 2013

Bid unit costs are based on averages of unit costs on similar projects from the Standard Bid Item and Non-Standard Bid Item databases maintained by the Wisconsin Department of Transportation.

** Bid unit is a Standard Bid Item and or Non-Standard Bid Item of the Wisconsin Department of Transportation but has no similar projects to compare with. City of Milwaukee costs are substituted as low-bid costs due to bulk purchasing by the City of Milwaukee

*** These items have no comparable item or costs for comparison in the Non-Standard Bid Item database. City of Milwaukee costs are substituted as low-bid costs due to bulk purchasing by the City of Milwaukee.

UNIT ITEM NUMBER COMPARISON

ESTIMATE OF QUANTITIES

PROJECT ID 1300-13-91

IH 794 MILWAUKEE RIVER TO CARFERRY DRIVE - STREET LIGHTING

IH 794

MILWAUKEE COUNTY

City Item No.	Std. Bid Item No.	Description	Unit	Std Items Included
90005-2	652.0610	2.5" PVC CONDUIT (HOLE HOG)	LF	
90005-6	652.0615	3" PVC CONDUIT (DIRECTIONAL BORED)	LF	
90005-7	SPV.0060.01	METAL PEDESTAL CABINET	EACH	Included Transf. Base (657.0255)
90005-8	SPV.0060.02	13"X24"X18" RECTANGULAR VAULT & COVER	EACH	SPV.0060.02
90005-10	SPV.0090.01	3#2/1#8 LTP UNDERGROUND CABLE	LF	655.0635 (3) and 655.0620 (1)
90005-11	SPV.0090.02	3#4/1#8 LTP UNDERGROUND CABLE	LF	655.0630 (3) and 655.0620 (1)
90005-12	SPV.0090.03	3#6/1#8 LTP UNDERGROUND CABLE	LF	655.0625 (3) and 655.0620 (1)
90005-13	SPV.0090.04	3#8/1#8 LTP UNDERGROUND CABLE	LF	655.0620 (4)
90005-14	SPV.0090.05	3#10 WITH GROUND UF UNDERGROUND CABLE	LF	655.0615 (3)
90005-15	SPV.0090.06	3#12 UF W / GROUND UNDERGROUND CABLE	LF	655.0610 (3)
90005-17	SPV.0090.07	2#12 UF UNDERGROUND CABLE	LF	655.0610 (2)
90005-28	SPV.0060.03	INSTALL A31 CONCRETE POLE (BLACK) INCLUDES RISER CABLE	EACH	657.0320 (pole), 654.0105 (base), and 657.0265 (pedestal)
90005-42	SPV.0060.04	14.7' BLACK STEEL POLE WITH DECORATIVE BASE ON EXISTING CONCRETE BASE,	EACH	659.07
90005-47	SPV.0060.05	REMOVE CONCRETE, WOOD, AND ALUMINUM POLE	EACH	Used Non-Standard Bid Item per WisDot database
90005-60	SPV.0060.06	INSTALL A31 BLACK MILWAUKEE LANTERN CLAMP	EACH	SPV.0060.05
90005-67	SPV.0060.07	INSTALL 250W/240V BLACK MILWAUKEE LANTERN ARM	EACH	SPV.0060.06
90005-70	SPV.0060.08	REMOVE / REINSTALL BRACKET AND FIXTURE COMPLETE	EACH	SPV.0060.10
90005-79	SPV.0060.09	INSTALL 70W/240V WALL PACK FIXTURE & 70 WATT HIGH PRESSURE SODIUM LAMP	EACH	659.0205
90005-87	SPV.0060.10	INSTALL BLACK MILWAUKEE LANTERN FIXTURE, & 250 WATT HIGH PRESSURE SODIUM LAMP	EACH	659.0125
90005-99	SPV.0060.11	SECONDARY SPLICE	EACH	SPV.0060.07
90005-103	SPV.0060.12	HAND HOLE OR PEDESTAL SPLICE	EACH	SPV.0060.09
90005-116	SPV.0060.13	4"X4"X4" CAST IRON BOX (STEEL CHECKERED PLATE COVER)	EACH	SPV.0060.08

UNIT ITEM NUMBER COMPARISON

ESTIMATE OF QUANTITIES

PROJECT ID 1300-13-91

IH 794 MILWAUKEE RIVER TO CARFERRY DRIVE - STREET LIGHTING

IH 794

MILWAUKEE COUNTY

City Item No.	Std. Bid Item No.	Description	Unit	Std Items Included
90005-122	SPV.0060.14	1/4" GALVANIZED LUMINAIRE MOUNTING PLATE	EACH	SPV.0060.11
90005-123	652.0105	3/4" RIGID METALLIC CONDUIT	LF	
90005-124	SPV.0090.08	3/4" LIQUID TIGHT CONDUIT	LF	SPV.0090.01
90005-125	SPV.0090.09	LUMINAIRE MOUNTING CHANNEL	LF	SPV.0090.02
90005-126	SPV.0060.15	GIRDER CLAMPS	EACH	SPV.0060.12
90005-127	SPV.0090.10	3PR. 19GA. CONTROL CIRCUIT CABLE	LF	SPV.0090.03

TRANSPORTATION SECTION
 TRAFFIC AND LIGHTING DESIGN UNIT
 DENIS KOZELEK
 REVISED: MARCH 15, 2013

* Please note that the Total City Cost includes the embedded costs of mobilization and traffic control which are included in the times used for calculating City Unit Costs on the attached worksheets.