

Maryland Transportation Authority

CAPITAL COMMITTEE MEETING

THURSDAY, MAY 4, 2023

2310 BROENING HIGHWAY BALTIMORE, MARYLAND 21224

CAPITAL COMMITTEE MONTHLY MEETING May 4, 2023 – 9:00 AM

This meeting will be livestreamed on the MDTA Capital Committee Page

NOTE: This is an Open Meeting being conducted via livestreaming. The public is welcomed to watch the meeting at the link listed above. If you wish to comment on an agenda item please email your name, affiliation, and the agenda item to esogard@mdta.state.md.us no later than 3:00 p.m. on Monday, May 1, 2023. You MUST pre-register in order to comment. Once you have pre-registered you will receive an email with all pertinent information.

AGENDA

OPEN SESSION – 9:00 a.m.

Call Meeting to Order

1.	Approval - Open Session Meeting Minutes of April 6, 2023	Chairman	5 mins
2.	<u>Approval</u> – MR-3031-0000 – On-Call Electrical and ITS Repairs and Services	Sonia Thomas	5 mins
3.	<u>Update</u> – CTP Process/Additions	Jeanne Marriott	10 mins

Vote to Adjourn Meeting

MARYLAND TRANSPORTATION AUTHORITY CAPITAL COMMITTEE MEETING THURSDAY, APRIL 6, 2023 OPEN MEETING VIA LIVESTREAMING

OPEN SESSION

MEMBERS ATTENDING: Mario J. Gangemi – Chairman

William C. Ensor, III – via telephone

William H. Cox, Jr. W. Lee Gaines

STAFF ATTENDING: Joseph Sagal

William Pines Mary O'Keeffe Sushmita Mitra Moreshwar Kulkarni Donna DiCerbo Jeffrey Davis

Kimberly Millender Nafiz Alqasem Timothy Sheets Selena McKissick Natalie Henson Ganine Steffe Liz Zito-Lynch

Member Gangemi called the meeting of the Maryland Transportation Authority (MDTA) Capital Committee to order at 9:00 a.m. The meeting was held via video conference and livestreamed on the MDTA Board Meeting web page.

APPROVAL – OPEN SESSION MEETING MINUTES OF MARCH 2, 2023

Upon motion by Member Cox and seconded by Member Gaines, the Open Session meeting minutes of the Capital Committee's meeting held on March 2, 2023, were unanimously approved.

<u>APPROVAL – KH3030, I-95 ETL NB EXTENSION-NOISE WALL ALONG I-95/MD 24 AT WOODSDALE</u>

Mr. Alqasem provided the MDTA Capital Committee with an overview of the KH3030 I-95 ETL NB Extension Noise Wall along I-95/MD 24 at Woodsdale.

Upon motion by Member Cox and seconded by Member Gaines, the Members unanimously recommended contingent approval of Contract No. KH3030 – I-95 ETL NB Extension Noise Wall Along I-95/MD 24 at Woodsdale to Allan Myers MD, Inc. to the full MDTA Board for award at its next scheduled meeting.

There being no further business, the meeting of the MDTA Capital Committee was adjourned by consensus at 9:09 a.m. following a motion by Member Ensor and seconded by Member Gaines.

The next meeting of the MDTA Capital Committee is scheduled for Thursday, May 4, 2023, at 9:00 a.m., this meeting will be virtual conducted via livestream.

Mario J. Gangemi, Chairman

APPROVED AND CONCURRED IN:



CAPITAL COMMITTEE PROJECT SUMMARY

MR-3031 On-Call Electrical and ITS Repairs and Services

MDTAPBJ000228 **PIN NUMBER CONTRACT NUMBER**

MR-3031-0000

CONTRACT TITLE

On-Call Electrical and ITS Repairs and Services

PROJECT SUMMARY

This project is a multi-award, task-based contract to provide the labor, equipment, and materials necessary in performing miscellaneous electrical, ITS and other types of repairs, upgrades, replacements, and new construction as directed by the Engineer. This work may be required on any MDTA assets (bridges, tunnels, highways, buildings. and all ancillary structures) or any of the MDTA's facilities.

SCHEDULE

ADVERTISEMENT DATE ANTICIPATED NOTICE TO PROCEED DATE DURATION (CALENDAR DAYS)	1/19/2023 Jul-23 1,095	MBE PARTICIPATION	(\$) Advertised GOAL (%)	Proposed GOAL (%)
		OVERALL MBE	16.00%	16.00%
		AFRICAN AMERICAN	-	-
		ASIAN AMERICAN	-	-
		HISPANIC AMERICAN	-	-
		WOMEN	-	-
		VSBE	1.00%	1.00%

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			BID RESULTS	BID AMOUNT (\$)	% VARIANCE TO EE
BID PROTEST	YES □	NO☑	Dvorak, LLC.	\$3,877,000.00	-4%
			Mona Electric Group, Inc	\$4,707,620.71	16%
FUNDING SOURCE	100.00%	6 TOLL REVENUE	Brawner Builders, Inc	\$4,878,647.99	21%



Wes Moore, Governor Aruna Miller, Lt. Governor Paul J. Wiedefeld, Chairman

Board Members:

W. Lee Gaines, Jr.

Dontae Carroll Mario J. Gangemi, P.E.
William H. Cox, Jr. Cynthia D. Penny-Ardinger
William C. Ensor, III Jeffrey S. Rosen

John F. von Paris

William Pines, P.E., Executive Director

MEMORANDUM

TO: SUSHMITA MITRA, PE, PTOE, PMP, DIRECTOR OF ENGINEERING **FROM:** SONIA THOMAS, EIT, PMP, ITS/ELECTRICAL DISCIPLINE MANAGER

SUBJECT: CONTRACT NO. MR-3031-0000

ON-CALL ELECTRICAL AND ITS REPAIRS AND SERVICES

BID JUSTIFICATION

DATE: APRIL 18, 2023

On March 15, 2023, three (3) bids were opened for the referenced Contract. The bid amounts were:

Dvorak, LLC (Dvorak): \$3,877,000.00
 Mona Electric Group, Inc (Mona): \$4,707,620.71
 Brawner Builders, Inc (Brawner): \$4,878,647.99

The Engineer's Estimate (EE) for this project was \$4,047,745.99. Evaluation of three bids were performed. Dvorak's price was 4% lower than the EE while Mona Electric's price was 16 % higher than the EE. Brawner Builders' price was 20.5% higher than the EE.

The following summarizes our analysis:

The apparent lowest bidder, Dvorak's price was within 10% of the EE. A review of their bid was performed, which indicated that it is reasonable and balanced.

The apparent second lowest bid from Mona was \$659,874.72 higher than the EE due mainly to two (2) items: Bid Items 8011 and 8021. These two (2) bid items accounted for \$325,478.00 of the total difference. This price differential accounts for half of the 16% difference in the low bid price. These bid items comprise approximately 8% of the total amount of the EE and 6.9% of the overall low bid amount.

For Bid Item 8011 (Furnish and Install 30"X48" Deep Concrete Elec/Comm Manhole with Collar), all bidders were higher than the EE. This is justified because of recent market price escalations and material cost increases. For Bid Item 8021 (Furnish & Install up to 4" Sch 80 PVC Conduit – Trenched, Any Location), Mona's price is higher than the EE, but still reasonable, as there are a limited number of subcontractor firms that perform trenching. Although the bid price for this item is high, we believe that this item can be successfully utilized within contract based on previous experience in similar contracts. It is also noteworthy that numerous other bid items were significantly under our Engineer's Estimate. Overall, we believe that the price is acceptable.

RECOMMENDATION:

Based on our review, MDTA recommends accepting the bids from Dvorak and Mona Electric. Two (2) bids were responsive and acceptable. They were deemed qualified to perform the work based on their experience questionnaire. Dvorak, LLC has a successful history working for the MDTA and has an excellent reputation for doing high-quality, efficient work. Mona Electric, Inc. has worked with the MDTA on MR-3028 contract and has performed acceptably.

In accordance with the provisions in the IFB with respect to award multiple contracts, MDTA recommend awarding two contracts with the following Not-to-Exceed amounts:

• Dvorak, LLC:

\$6,500,000.00

Mona, Electric, Inc.:

\$4,500,000.00

Approved:

d: Justinite Illia SUSHMITA MITRA, PE, PTOE, PMP

4/24/2023

Date

ATTACHMENTS: Bid Tabulations and comparisons

Maryland Transportation Authority

Contract Name: MR-3031 ITS Electrical On-Call

Contract Number: MR-3031

Bid Date:

Bid Tabulation

					Е	ngineer's Estimate		D	vorak LLC		
ITEM NO.	CAT CODE	DESCRIPTION	UNITS	QUANTITY		UNIT PRICE	TOTAL	UN	NIT PRICE	TOTAL	+/- % of Est.
1001	100000	FLAGGING OPERATION	HR	83	\$	275.00	\$ 22,825.00	\$	227.00	\$ 18,841.00	-17.45
1002	100000	SINGLE LANE CLOSURE	UD	66	\$	2,640.00	\$ 174,240.00	\$	2,660.00	\$ 175,560.00	0.76
1003	100000	SHOULDER LANE CLOSURE	UD	83	\$	2,310.00	\$ 191,730.00	\$	2,045.00	\$ 169,735.00	-11.47
1004	100000	PARTIAL RAMP CLOSURE	UD	3	\$	2,310.00	\$ 6,930.00	\$	2,045.00	\$ 6,135.00	-11.47
1005	100000	DOUBLE LANE CLOSURE	UD	6	\$	3,025.00	\$ 18,150.00	\$	3,430.00	\$ 20,580.00	13.39
1006	100000	ADDITIONAL PROTECTION VEHICLE WITH OPERATOR	UD	66	\$	715.00	\$ 47,190.00	\$	898.00	\$ 59,268.00	25.59
1007	110360	TYPE C ENGINEER'S OFFICE	UM	36	\$	2,640.00	\$ 95,040.00	\$	5,875.00	\$ 211,500.00	122.54
4001	400000	UNSKILLED/COMMON LABOR, DAY RATE	HR	1,000		\$55.00	\$ 55,000.00	\$	52.00	\$ 52,000.00	-5.45
4002	400000	UNSKILLED/COMMON LABOR, AFTER HOURS RATE	HR	99		\$83.00	\$ 8,217.00	\$	72.00	\$ 7,128.00	-13.25
4003	400000	SKILLED LABOR TECH W/TOOLS, DAY RATE	HR	5,000		\$130.00	\$ 650,000.00	\$	110.00	\$ 550,000.00	-15.38
4004	400000	SKILLED LABOR TECH W/TOOLS, AFTER HOURS RATE	HR	783		\$195.00	\$ 152,685.00	\$	158.00	\$ 123,714.00	-18.97
4005	400000	EQUIPMENT/MACHINE OPERATOR, DAY RATE	HR	666		\$110.00	\$ 73,260.00	\$	87.00	\$ 57,942.00	-20.91
4006	400000	EQUIPMENT/MACHINE OPERATOR, AFTER HOURS RATE	HR	200		\$165.00	\$ 33,000.00	\$	107.00	\$ 21,400.00	-35.15
4007	400000	FIBER TECHNICIAN W/TOOLS, DAY RATE	HR	333		\$160.00	\$ 53,280.00	\$	125.00	\$ 41,625.00	-21.88
4008	400000	FIBER TECHNICIAN W/TOOLS, AFTER HOURS RATE	HR	66		\$240.00	\$ 15,840.00	\$	162.00	\$ 10,692.00	-32.50
4009	400000	MASTER ELECTRICIAN W/TOOLS, DAY RATE	HR	366		\$155.00	\$ 56,730.00	\$	125.00	\$ 45,750.00	-19.35
4010	400000	MASTER ELECTRICIAN W/TOOLS, AFTER HOURS RATE	HR	91		\$233.00	\$ 21,203.00	\$	162.00	\$ 14,742.00	-30.47
4011	400000	JOURNEYPERSON ELECTRICIAN W/TOOLS, DAY RATE	HR	733		\$120.00	\$ 87,960.00	\$	115.00	\$ 84,295.00	-4.17
4012	400000	JOURNEYPERSON ELECTRICIAN W/TOOLS, AFTER HOURS RATE	HR	183		\$180.00	\$ 32,940.00	\$	165.00	\$ 30,195.00	-8.33

MR-3031 Page 1 of 9

4013	400000	APPRENTICE ELECTRICIAN W/TOOLS, DAY RATE	HR	366	\$90.00	\$ 32,940.00	\$ 95.00	\$ 34,770.00	5.56
4014	400000	APPRENTICE ELECTRICIAN W/TOOLS, AFTER HOURS RATE	HR	91	\$135.00	\$ 12,285.00	\$ 135.00	\$ 12,285.00	0.00
8001	800000	BUCKET TRUCK (60 FT MAXIMUM PLATFORM HEIGHT)	UD	50	\$1,000.00	\$ 50,000.00	\$ 585.00	\$ 29,250.00	-41.50
8002	800000	AIR COMPRESSOR (160 TO 185 CFM)	UD	13	\$200.00	\$ 2,600.00	\$ 195.00	\$ 2,535.00	-2.50
8003	800000	FLATBED TRUCK (18 TO 20 FT BED)	UD	40	\$310.00	\$ 12,400.00	\$ 345.00	\$ 13,800.00	11.29
8004	800000	SKID-STEER LOADER (2000 LBS MINIMUM)	UD	50	\$550.00	\$ 27,500.00	\$ 360.00	\$ 18,000.00	-34.55
8005	800000	MINI EXCAVATOR (< .75 CY)	UD	50	\$450.00	\$ 22,500.00	\$ 420.00	\$ 21,000.00	-6.67
8006	800000	TRUCK CRANE (30 TON)	UD	16	\$2,500.00	\$ 40,000.00	\$ 3,075.00	\$ 49,200.00	23.00
8007	800000	SNOOPER TRUCK (60 FT) WITH OPERATING CREW	UD	25	\$4,000.00	\$ 100,000.00	\$ 4,000.00	\$ 100,000.00	0.00
8008	800000	FURNISH & INSTALL PULL AND JUNCTION BOX, NON-METALLIC, UP TO 18"X18"X12" NEMA 3X	EA	16	\$800.00	\$ 12,800.00	\$ 785.00	\$ 12,560.00	-1.88
8009	800000	JUNCTION BOX, STAINLESS STEEL, UP TO 18"X18"X12" NEMA 4X	EA	16	\$1,800.00	\$ 28,800.00	\$ 1,975.00	\$ 31,600.00	9.72
8010	800000	FURNISH & INSTALL 24"x24" ELEC/COMM CONCRETE HANDHOLE WITH COLLAR	EA	20	\$4,600.00	\$ 92,000.00	\$ 5,200.00	\$ 104,000.00	13.04
8011	800000	FURNISH & INSTALL 30"X48" DEEP CONCRETE ELEC/COMM MANHOLE WITH COLLAR	EA	10	\$5,000.00	\$ 50,000.00	\$ 6,765.00	\$ 67,650.00	35.30
8012	800000	XHHW STRANDED COPPER CONDUCTOR	LF	5,000	\$6.00	\$ 30,000.00	\$ 5.25	\$ 26,250.00	-12.50
8013	800000	XHHW STRANDED COPPER CONDUCTOR	LF	10,000	\$5.00	\$ 50,000.00	\$ 4.05	\$ 40,500.00	-19.00
8014	800000	XHHW STRANDED COPPER CONDUCTOR	LF	6,666	\$3.50	\$ 23,331.00	\$ 2.90	\$ 19,331.40	-17.14
8015	802501	FURNISH & INSTALL #6 AWG BARE COPPER CONDUCTOR	LF	666	\$4.00	\$ 2,664.00	\$ 2.45	\$ 1,631.70	-38.75
8016	800000	FURNISH & INSTALL 96-COUNT SINGLEMODE FIBER OPTIC CABLE	LF	4,000	\$9.00	\$ 36,000.00	\$ 5.80	\$ 23,200.00	-35.56
8017	800000	FURNISH & INSTALL 12-COUNT SINGLEMODE FIBER OPTIC CABLE	LF	1,666	\$6.00	\$ 9,996.00	\$ 3.12	\$ 5,197.92	-48.00
8018	800000	MISCELLANEOUS MATERIALS	AL	1	\$333,333.33	\$ 333,333.33	\$333,333.33	\$ 333,333.33	0.00
8019	800000	SPECIALTY EQUIPMENT	AL	1	\$333,333.33		\$333,333.33	\$ 333,333.33	0.00

MR-3031 Page 2 of 9

8020	800000	SPECIALTY SUBCONTRACTORS	AL	1	\$333,333.33	\$ 333,333.33	\$333,333.33	\$ 333,333.3	0.00
8021	800000	FURNISH & INSTALL UP TO 4" SCH 80 PVC CONDUIT - TRENCHED, ANY LOCATION	LF	4,733	\$60.00	\$ 283,980.00	\$ 37.00	\$ 175,121.0	-38.33
8022	800000	HDPE SDR 11 CONDUIT - DIRECTONALLY BORED OR SLOTTED, ANY LOCATION, TO INCLUDE MULTIPLE CONDUITS	LF	3,833	\$70.00	\$ 268,310.00	\$ 80.00	\$ 306,640.0	14.29
8023	800000	FURNISH 2" RGS CONDUIT	LF	666	\$20.00	\$ 13,320.00	\$ 34.00	\$ 22,644.0	70.00
8024	800000	FURNISH & INSTALL UP TO 200 AMP BASE MOUNTED METERED SERVICE PEDESTAL	EA	3	\$5,000.00	\$ 15,000.00	\$ 6,877.33	\$ 20,631.9	9 37.55
8025	800000	FURNISH & INSTALL NEMA, 3X, 480V/240-120V, SINGLE PHASE, 3KVA TRANSFORMER	EA	3	\$3,000.00	\$ 9,000.00	\$ 2,190.00	\$ 6,570.0	-27.00
8026	800000	FURNISH & INSTALL 600V, 30 AMP, 3-POLE, NEMA4X, SS, DISCONNECT SWITCH	EA	3	\$2,500.00	\$ 7,500.00	\$ 2,475.00	\$ 7,425.0	-1.00
8027	800000	FURNISH & INSTALL 600V, 60 AMP, 3-POLE, NEMA4X, SS, DISCONNECT SWITCH	EA	3	\$2,700.00	\$ 8,100.00	\$ 2,930.00	\$ 8,790.0	8.52
8028	800000	FURNISH & INSTALL 600V, 100 AMP, 3-POLE, NEMA4X, SS, DISCONNECT SWITCH	EA	3	\$3,500.00	\$ 10,500.00	\$ 5,105.00	\$ 15,315.0	45.86
					TOTAL	\$4,047,745.99		\$ 3,877,000.	00 -4.22

MR-3031 Page 3 of 9

Maryland Transportation Authority

Contract Name: MR-3031 ITS Electrical On-Call

Contract Number: MR-3031

Bid Date:

Bid Tabulation

Engineer's Estimate Mona Electric

					8				
ITEM NO.	CAT CODE	DESCRIPTION	UNITS	QUANTITY	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	+/- % of Est.
1001	100000	FLAGGING OPERATION	HR	83	\$ 275.00	\$ 22,825.00	\$ 561.00	\$ 46,563.00	104.00
1002	100000	SINGLE LANE CLOSURE	UD	66	\$ 2,640.00	\$ 174,240.00	\$ 3,838.00	\$ 253,308.00	45.38
1003	100000	SHOULDER LANE CLOSURE	UD	83	\$ 2,310.00	\$ 191,730.00	\$ 3,109.00	\$ 258,047.00	34.59
1004	100000	PARTIAL RAMP CLOSURE	UD	3	\$ 2,310.00	\$ 6,930.00	\$ 3,793.00	\$ 11,379.00	64.20
1005	100000	DOUBLE LANE CLOSURE	UD	6	\$ 3,025.00	\$ 18,150.00	\$ 4,780.00	\$ 28,680.00	58.02
1006	100000	ADDITIONAL PROTECTION VEHICLE WITH OPERATOR	UD	66	\$ 715.00	\$ 47,190.00	\$ 1,391.00	\$ 91,806.00	94.55
1007	110360	TYPE C ENGINEER'S OFFICE	UM	36	\$ 2,640.00	\$ 95,040.00	\$ 848.00	\$ 30,528.00	-67.88
4001	400000	UNSKILLED/COMMON LABOR, DAY RATE	HR	1,000	\$55.00	\$ 55,000.00	\$ 62.75	\$ 62,750.00	14.09
4002	400000	UNSKILLED/COMMON LABOR, AFTER HOURS RATE	HR	99	\$83.00	\$ 8,217.00	\$ 88.36	\$ 8,747.64	6.46
4003	400000	SKILLED LABOR TECH W/TOOLS, DAY RATE	HR	5,000	\$130.00	\$ 650,000.00	\$ 114.58	\$ 572,900.00	-11.86
4004	400000	SKILLED LABOR TECH W/TOOLS, AFTER HOURS RATE	HR	783	\$195.00	\$ 152,685.00	\$ 176.70	\$ 138,356.10	-9.38
4005	400000	EQUIPMENT/MACHINE OPERATOR, DAY RATE	HR	666	\$110.00	\$ 73,260.00	\$ 122.87	\$ 81,831.42	11.70
4006	400000	EQUIPMENT/MACHINE OPERATOR, AFTER HOURS RATE	HR	200	\$165.00	\$ 33,000.00	\$ 175.32	\$ 35,064.00	6.25
4007	400000	FIBER TECHNICIAN W/TOOLS, DAY RATE	HR	333	\$160.00	\$ 53,280.00	\$ 307.85	\$ 102,514.05	92.41
4008	400000	FIBER TECHNICIAN W/TOOLS, AFTER HOURS RATE	HR	66	\$240.00	\$ 15,840.00	\$ 396.22	\$ 26,150.52	65.09
4009	400000	MASTER ELECTRICIAN W/TOOLS, DAY RATE	HR	366	\$155.00	\$ 56,730.00	\$ 153.83	\$ 56,301.78	-0.75
4010	400000	MASTER ELECTRICIAN W/TOOLS, AFTER HOURS RATE	HR	91	\$233.00	\$ 21,203.00	\$ 200.88	\$ 18,280.08	-13.79
4011	400000	JOURNEYPERSON ELECTRICIAN W/TOOLS, DAY RATE	HR	733	\$120.00	\$ 87,960.00	\$ 128.21	\$ 93,977.93	6.84

MR-3031 Page 4 of 9

4012	400000	JOURNEYPERSON ELECTRICIAN W/TOOLS, AFTER HOURS RATE	HR	183	\$180.00	\$ 32,940.00	\$	117.90	\$	21,575.70	-34.50
4013	400000	APPRENTICE ELECTRICIAN W/TOOLS, DAY RATE	HR	366	\$90.00	\$ 32,940.00	\$	92.71	\$	33,931.86	3.01
4014	400000	APPRENTICE ELECTRICIAN W/TOOLS, AFTER HOURS RATE	HR	91	\$135.00	\$ 12,285.00	\$	111.28	\$	10,126.48	-17.57
8001	800000	BUCKET TRUCK (60 FT MAXIMUM PLATFORM HEIGHT)	UD	50	\$1,000.00	50,000.00	\$	779.00	\$	38,950.00	-22.10
8002	800000	AIR COMPRESSOR (160 TO 185 CFM)	UD	13	\$200.00	\$ 2,600.00	\$	239.00	\$	3,107.00	19.50
8003	800000	FLATBED TRUCK (18 TO 20 FT BED)	UD	40	\$310.00	12,400.00	\$	277.00	·	11,080.00	-10.65
8004	800000	SKID-STEER LOADER (2000 LBS MINIMUM)	UD	50	\$550.00	27,500.00	Ì	512.00		25,600.00	-6.91
8005	800000	MINI EXCAVATOR (< .75 CY)	UD	50	\$450.00	\$ 22,500.00	\$	526.00	\$	26,300.00	16.89
8006	800000	TRUCK CRANE (30 TON)	UD	16	\$2,500.00	\$ 40,000.00	\$	2,638.00	\$	42,208.00	5.52
8007	800000	SNOOPER TRUCK (60 FT) WITH OPERATING CREW	UD	25	\$4,000.00	\$ 100,000.00	\$	5,132.00	\$	128,300.00	28.30
8008	800000	FURNISH & INSTALL PULL AND JUNCTION BOX, NON-METALLIC, UP TO 18"X18"X12" NEMA 3X	EA	16	\$800.00	\$ 12,800.00	\$	1,151.00	\$	18,416.00	43.88
8009	800000	JUNCTION BOX, STAINLESS STEEL, UP TO 18"X18"X12" NEMA 4X	EA	16	\$1,800.00	\$ 28,800.00	\$	1,276.00	\$	20,416.00	-29.11
8010	800000	FURNISH & INSTALL 24"x24" ELEC/COMM CONCRETE HANDHOLE WITH COLLAR	EA	20	\$4,600.00	\$ 92,000.00	\$	6,281.00	\$	125,620.00	36.54
8011	800000	FURNISH & INSTALL 30"X48" DEEP CONCRETE ELEC/COMM MANHOLE WITH COLLAR	EA	10	\$5,000.00	\$ 50,000.00	\$	14,039.00	\$	140,390.00	180.78
8012	800000	XHHW STRANDED COPPER CONDUCTOR	LF	5,000	\$6.00	\$ 30,000.00	\$	16.61	\$	83,050.00	176.83
8013	800000	XHHW STRANDED COPPER CONDUCTOR	LF	10,000	\$5.00	\$ 50,000.00	\$	12.28	\$	122,800.00	145.60
8014	800000	XHHW STRANDED COPPER CONDUCTOR	LF	6,666	\$3.50	\$ 23,331.00	\$	9.28	\$	61,860.48	165.14
8015	802501	FURNISH & INSTALL #6 AWG BARE COPPER CONDUCTOR	LF	666	\$4.00	\$ 2,664.00	\$	2.38	\$	1,585.08	-40.50
8016	800000	FURNISH & INSTALL 96-COUNT SINGLEMODE FIBER OPTIC CABLE	LF	4,000	\$9.00	\$ 36,000.00	\$	16.83	\$	67,320.00	87.00

MR-3031 Page 5 of 9

8017	800000	FURNISH & INSTALL 12-COUNT SINGLEMODE FIBER OPTIC CABLE	LF	1,666	\$6.00	\$ 9,996.00	\$	15.81	\$ 26,339.46	163.50
8018	800000	MISCELLANEOUS MATERIALS	AL	1	\$333,333.33	\$ 333,333.33	\$33	33,333.33	\$ 333,333.33	0.00
8019	800000	SPECIALTY EQUIPMENT	AL	1	\$333,333.33	\$ 333,333.33	\$33	33,333.33	\$ 333,333.33	0.00
8020	800000	SPECIALTY SUBCONTRACTORS	AL	1	\$333,333.33	\$ 333,333.33	\$33	33,333.33	\$ 333,333.33	0.00
8021	800000	FURNISH & INSTALL UP TO 4" SCH 80 PVC CONDUIT - TRENCHED, ANY LOCATION	LF	4,733	\$60.00	\$ 283,980.00	\$	109.67	\$ 519,068.11	82.78
8022	800000	HDPE SDR 11 CONDUIT - DIRECTONALLY BORED OR SLOTTED, ANY LOCATION, TO INCLUDE MULTIPLE CONDUITS	LF	3,833	\$70.00	\$ 268,310.00	\$	41.61	\$ 159,491.13	-40.56
8023	800000	FURNISH 2" RGS CONDUIT	LF	666	\$20.00	\$ 13,320.00	\$	43.65	\$ 29,070.90	118.25
8024	800000	FURNISH & INSTALL UP TO 200 AMP BASE MOUNTED METERED SERVICE PEDESTAL	EA	3	\$5,000.00	\$ 15,000.00	\$	6,567.00	\$ 19,701.00	31.34
8025	800000	FURNISH & INSTALL NEMA, 3X, 480V/240-120V, SINGLE PHASE, 3KVA TRANSFORMER	EA	3	\$3,000.00	\$ 9,000.00	\$	7,889.00	\$ 23,667.00	162.97
8026	800000	FURNISH & INSTALL 600V, 30 AMP, 3-POLE, NEMA4X, SS, DISCONNECT SWITCH	EA	3	\$2,500.00	\$ 7,500.00	\$	2,779.00	\$ 8,337.00	11.16
8027	800000	FURNISH & INSTALL 600V, 60 AMP, 3-POLE, NEMA4X, SS, DISCONNECT SWITCH	EA	3	\$2,700.00	\$ 8,100.00	\$	2,841.00	\$ 8,523.00	5.22
8028	800000	FURNISH & INSTALL 600V, 100 AMP, 3-POLE, NEMA4X, SS, DISCONNECT SWITCH	EA	3	\$3,500.00	\$ 10,500.00	\$	4,534.00	\$ 13,602.00	29.54
					TOTAL	\$4,047,745.99			\$ 4,707,620.71	16.30

MR-3031 Page 6 of 9

Maryland Transportation Authority

Contract Name: MR-3031 ITS Electrical On-Call

Contract Number: MR-3031

Bid Date:

4014

400000

W/TOOLS, AFTER HOURS RATE

Bid Tabulation

		Bia racaiation										
					Eı	ngineer's Estimate		Bra	wner Builde	rs		
ITEM NO.	CAT CODE	DESCRIPTION	UNITS	QUANTITY		UNIT PRICE	TOTAL	U.	NIT PRICE		TOTAL	+/- % of Est.
1001	100000	FLAGGING OPERATION	HR	83	\$	275.00	\$ 22,825.00	\$	285.00	\$	23,655.00	3.64
1002	100000	SINGLE LANE CLOSURE	UD	66	\$	2,640.00	\$ 174,240.00	\$	2,400.00	\$	158,400.00	-9.09
1003	100000	SHOULDER LANE CLOSURE	UD	83	\$	2,310.00	\$ 191,730.00	\$	1,900.00	\$	157,700.00	-17.75
1004	100000	PARTIAL RAMP CLOSURE	UD	3	\$	2,310.00	\$ 6,930.00	\$	1,900.00	\$	5,700.00	-17.75
1005	100000	DOUBLE LANE CLOSURE	UD	6	\$	3,025.00	\$ 18,150.00	\$	2,600.00	\$	15,600.00	-14.05
1006	100000	ADDITIONAL PROTECTION VEHICLE WITH OPERATOR	UD	66	\$	715.00	\$ 47,190.00	\$	750.00	\$	49,500.00	4.90
1007	110360	TYPE C ENGINEER'S OFFICE	UM	36	\$	2,640.00	\$ 95,040.00	\$	5,500.00	\$	198,000.00	108.33
4001	400000	UNSKILLED/COMMON LABOR, DAY RATE	HR	1,000		\$55.00	\$ 55,000.00	\$	40.00	\$	40,000.00	-27.27
4002	400000	UNSKILLED/COMMON LABOR, AFTER HOURS RATE	HR	99		\$83.00	\$ 8,217.00	\$	60.00	\$	5,940.00	-27.71
4003	400000	SKILLED LABOR TECH W/TOOLS, DAY RATE	HR	5,000		\$130.00	\$ 650,000.00	\$	200.00	\$	1,000,000.00	53.85
4004	400000	SKILLED LABOR TECH W/TOOLS, AFTER HOURS RATE	HR	783		\$195.00	\$ 152,685.00	\$	100.00	\$	78,300.00	-48.72
4005	400000	EQUIPMENT/MACHINE OPERATOR, DAY RATE	HR	666		\$110.00	\$ 73,260.00	\$	75.00	\$	49,950.00	-31.82
4006	400000	EQUIPMENT/MACHINE OPERATOR, AFTER HOURS RATE	HR	200		\$165.00	\$ 33,000.00	\$	100.00	\$	20,000.00	-39.39
4007	400000	FIBER TECHNICIAN W/TOOLS, DAY RATE	HR	333		\$160.00	\$ 53,280.00	\$	150.00	\$	49,950.00	-6.25
4008	400000	FIBER TECHNICIAN W/TOOLS, AFTER HOURS RATE	HR	66		\$240.00	\$ 15,840.00	\$	250.00	\$	16,500.00	4.17
4009	400000	MASTER ELECTRICIAN W/TOOLS, DAY RATE	HR	366		\$155.00	\$ 56,730.00	\$	150.00	\$	54,900.00	-3.23
4010	400000	MASTER ELECTRICIAN W/TOOLS, AFTER HOURS RATE	HR	91		\$233.00	\$ 21,203.00	\$	205.00	\$	18,655.00	-12.02
4011	400000	JOURNEYPERSON ELECTRICIAN W/TOOLS, DAY RATE	HR	733		\$120.00	\$ 87,960.00	\$	125.00	\$	91,625.00	4.17
4012	400000	JOURNEYPERSON ELECTRICIAN W/TOOLS, AFTER HOURS RATE	HR	183		\$180.00	\$ 32,940.00	\$	180.00	\$	32,940.00	0.00
4013	400000	APPRENTICE ELECTRICIAN W/TOOLS, DAY RATE	HR	366		\$90.00	\$ 32,940.00	\$	100.00	\$	36,600.00	11.11
		APPRENTICE ELECTRICIAN								Γ.		

MR-3031 Page 7 of 9

HR

\$135.00

12,285.00 \$

12,740.00

3.70

140.00 \$

8001	800000	BUCKET TRUCK (60 FT MAXIMUM PLATFORM HEIGHT)	UD	50	\$1,000.00	\$ 50,000.00	\$ 315.00	\$ 15,750.00	-68.50
8002	800000	AIR COMPRESSOR (160 TO 185 CFM)	UD	13	\$200.00	\$ 2,600.00	\$ 175.00	\$ 2,275.00	-12.50
8003	800000	FLATBED TRUCK (18 TO 20 FT BED)	UD	40	\$310.00	\$ 12,400.00	\$ 225.00	\$ 9,000.00	-27.42
8004	800000	SKID-STEER LOADER (2000 LBS MINIMUM)	UD	50	\$550.00	\$ 27,500.00	\$ 450.00	\$ 22,500.00	-18.18
8005	800000	MINI EXCAVATOR (< .75 CY)	UD	50	\$450.00	\$ 22,500.00	\$ 300.00	\$ 15,000.00	-33.33
8006	800000	TRUCK CRANE (30 TON)	UD	16	\$2,500.00	\$ 40,000.00	\$ 1,500.00	\$ 24,000.00	-40.00
8007	800000	SNOOPER TRUCK (60 FT) WITH OPERATING CREW	UD	25	\$4,000.00	\$ 100,000.00	\$ 3,300.00	\$ 82,500.00	-17.50
8008	800000	FURNISH & INSTALL PULL AND JUNCTION BOX, NON-METALLIC, UP TO 18"X18"X12" NEMA 3X	EA	16	\$800.00	\$ 12,800.00	\$ 2,500.00	\$ 40,000.00	212.50
8009	800000	JUNCTION BOX, STAINLESS STEEL, UP TO 18"X18"X12" NEMA 4X	EA	16	\$1,800.00	\$ 28,800.00	\$ 3,500.00	\$ 56,000.00	94.44
8010	800000	FURNISH & INSTALL 24"x24" ELEC/COMM CONCRETE HANDHOLE WITH COLLAR	EA	20	\$4,600.00	\$ 92,000.00	\$ 7,500.00	\$ 150,000.00	63.04
8011	800000	FURNISH & INSTALL 30"X48" DEEP CONCRETE ELEC/COMM MANHOLE WITH COLLAR	EA	10	\$5,000.00	\$ 50,000.00	\$ 10,000.00	\$ 100,000.00	100.00
8012	800000	XHHW STRANDED COPPER CONDUCTOR	LF	5,000	\$6.00	\$ 30,000.00	\$ 5.00	\$ 25,000.00	-16.67
8013	800000	XHHW STRANDED COPPER CONDUCTOR	LF	10,000	\$5.00	\$ 50,000.00	\$ 3.50	\$ 35,000.00	-30.00
8014	800000	XHHW STRANDED COPPER CONDUCTOR	LF	6,666	\$3.50	\$ 23,331.00	\$ 2.50	\$ 16,665.00	-28.57
8015	802501	FURNISH & INSTALL #6 AWG BARE COPPER CONDUCTOR	LF	666	\$4.00	\$ 2,664.00	\$ 2.50	\$ 1,665.00	-37.50
8016	800000	FURNISH & INSTALL 96-COUNT SINGLEMODE FIBER OPTIC CABLE	LF	4,000	\$9.00	\$ 36,000.00	\$ 12.50	\$ 50,000.00	38.89
8017	800000	FURNISH & INSTALL 12-COUNT SINGLEMODE FIBER OPTIC CABLE	LF	1,666	\$6.00	\$ 9,996.00	\$ 8.00	\$ 13,328.00	33.33
8018	800000	MISCELLANEOUS MATERIALS	AL	1	\$333,333.33	\$ 333,333.33	\$ 333,333.33	\$ 333,333.33	0.00
8019	800000	SPECIALTY EQUIPMENT	AL	1	\$333,333.33	\$ 333,333.33	\$ 333,333.33	\$ 333,333.33	0.00
8020	800000	SPECIALTY SUBCONTRACTORS	AL	1	\$333,333.33	\$ 333,333.33	\$ 333,333.33	\$ 333,333.33	0.00
8021	800000	FURNISH & INSTALL UP TO 4" SCH 80 PVC CONDUIT - TRENCHED, ANY LOCATION	LF	4,733	\$60.00	\$ 283,980.00	\$ 120.00	\$ 567,960.00	100.00

MR-3031 Page 8 of 9

8022	800000	HDPE SDR 11 CONDUIT - DIRECTONALLY BORED OR SLOTTED, ANY LOCATION, TO INCLUDE MULTIPLE CONDUITS	LF	3,833	\$70.00	\$	268,310.00	\$ 120.00	\$ 459,960.00	71.43
8023	800000	FURNISH 2" RGS CONDUIT	LF	666	\$20.00	\$	13,320.00	\$ 40.00	\$ 26,640.00	100.00
8024	800000	FURNISH & INSTALL UP TO 200 AMP BASE MOUNTED METERED SERVICE PEDESTAL	EA	3	\$5,000.00	\$	15,000.00	\$ 4,600.00	\$ 13,800.00	-8.00
8025	800000	FURNISH & INSTALL NEMA, 3X, 480V/240-120V, SINGLE PHASE, 3KVA TRANSFORMER	EA	3	\$3,000.00	\$	9,000.00	\$ 950.00	\$ 2,850.00	-68.33
8026	800000	FURNISH & INSTALL 600V, 30 AMP, 3-POLE, NEMA4X, SS, DISCONNECT SWITCH	EA	3	\$2,500.00	\$	7,500.00	\$ 2,500.00	\$ 7,500.00	0.00
8027	800000	FURNISH & INSTALL 600V, 60 AMP, 3-POLE, NEMA4X, SS, DISCONNECT SWITCH	EA	3	\$2,700.00	\$	8,100.00	\$ 2,600.00	\$ 7,800.00	-3.70
8028	800000	FURNISH & INSTALL 600V, 100 AMP, 3-POLE, NEMA4X, SS, DISCONNECT SWITCH	EA	3	\$3,500.00	\$	10,500.00	\$ 5,600.00	\$ 16,800.00	60.00
			TOTAL \$4,047,745.99						\$ 4,878,647.99	20.53

MR-3031 Page 9 of 9



Wes Moore, Governor

Aruna Miller, Lt. Governor Paul J. Wiedefeld, Acting Chairman

Board Members:

Dontae Carroll
William H. Cox, Jr.
William C. Ensor, III
W. Lee Gaines, Jr.
Wario J. Gangemi, P.E.
Cynthia D. Penny-Ardinger
Jeffrey S. Rosen
John F. von Paris

William Pines, P.E., Executive Director

MEMORANDUM

TO: MDTA Capital Committee

FROM: Capital Program Manager Jeanne Marriott

SUBJECT: Consolidated Transportation Program (CTP) Process/Additions

DATE: May 4, 2023

PURPOSE OF MEMORANDUM

The purpose of the memorandum is to provide the MDTA Capital Committee with a review of the MDTA Consolidated Transportation Program (CTP) Process and an update of additions to the capital program. This information will be presented to the MDTA Board on May 25, 2023.

SUMMARY

Every year the Maryland Transportation Authority (MDTA) releases the CTP. The CTP presents MDTA's ongoing and new capital projects for a six-year period (the current year, the upcoming budget year, and the four succeeding planning years) for all MDTA facilities.

After approval by the MDTA Board in June of each year, the Draft CTP is presented to local elected officials and citizens in September through November throughout Maryland for review and comment. It is then revised and submitted, after MDTA Board approval in November, as the Final CTP as part of the Governor's budget to the Maryland General Assembly in January. This process is required by statute and applies to MDTA as well as the other MDOT business units.

The projects in the CTP are separated into three programs:

- 1. Construction Program Major Projects,
- 2. Development and Evaluation (D&E) Program Major Projects, and
- 3. System Preservation Minor Projects.

The Construction Program – Major Projects and System Preservation – Minor Projects programs include ongoing projects and those projects scheduled to begin construction within the six-year period. Only those projects that the MDTA can afford to complete, given the most recent revenue forecast, are included in the CTP.

The D&E Program contains those major projects which are being prepared for possible future addition to the Construction Program. Projects are moved from the D&E Program to the

Page 2 - CTP Process/Additions

Construction Program as funds and resources become available, based on the merits of the projects. Currently, the Tier 2 NEPA Bay Crossing Study is the only D&E project in MDTA's CTP.

PROJECT SELECTION

MDTA's capital projects originate from a variety of sources.

- Long Range Capital Needs (LRCN)
- Inspection findings
- Regulatory compliance
- Increased capacity needs
- Local Priority Letters/Legislative Requests

The Long Range Capital Needs (LRCN) includes planned rehabilitation or replacement projects based on life cycle. The Office of Engineering and Construction (OEC), the Division of Planning and Program Development (DPPD), the Division of Operations, and other stakeholders annually review the useful life of facility components and estimate costs and timelines to rehabilitate or replace the components. The expected useful life of a component does not provide an exact rehabilitation or replacement date but gives an idea of when the MDTA should begin planning and budgeting to address it.

Inspection findings are used in tandem with life cycle estimates to confirm rehabilitation or replacement is necessary as scheduled or to expedite a project when it is needed ahead of schedule. Additionally, inspections can reveal the opportunity for smaller scale repairs that can prevent a facility or component from degrading to the point of needing replacement via a larger, more expensive design-bid-build project. These small scope repairs can be diverted to on-call contracts. On-call contracts are a critical part of the program approach to system preservation.

The remaining sources – regulatory compliance, capacity needs, and local priorities – make up a smaller proportion of the CTP. Regulatory compliance includes projects for EPA-mandated storm water management. Increased capacity needs are based on traffic forecast recommendations. Local priorities are established each year as counties are asked to submit a list of priorities for the state transportation system. Generally, these priority letters include the concurrence signatures of the legislative delegation representing that county.

Once identified, projects are prioritized based on customer needs for safety and security, or increased capacity through improvements, or system preservation.

Funding availability to budget for identified projects is based on the MDTA's six-year financial forecast, which considers estimates of traffic and revenue (prepared annually), the operating budget and capital budget, debt service payments, the potential need for future bond sales and toll increases, and compliance with financial standards (Trust Agreement covenant, debt service coverage, unrestricted cash balance).

<u>ATTACHMENT</u>

Attachment A - New Projects Added to the FY 2024-2029 MDTA Capital Program

New Projects Added to the FY 2024-2029 MDTA Capital Program

Replace Electronic Toll Collection and Operating System - 4th Generation

Multi-Area (Pin 2590)

\$1,800,000 (Planning only)

Develop the framework and consequential contracts for the 4th generation (ETC-4G) toll system. The project's contracts will replace the Electronic Toll Collection - 3rd Generation (ETC-3G) contracts currently deployed.

The planning phase includes:

- 1. Incorporating lessons learned into the project plan and design approaches.
- 2. Benchmarking the industry for the kinds of procurements and contracts being done for these services and technical advances being made (AI in the CSC, Cloud, etc.).
- 3. Develop strengths and weaknesses of various approaches to the new contracts.
- 4. Help make decisions about the number of contracts, schedules, high level scope, budgets.
- 5. Provide support to determine procurement authority.
- 6. Develop the RFP's/Contracts.
- 7. Provide support for the Proposal reviews and selection process.

License Plate Recognition (LPR) System Upgrade

Multi-Area (Pin 2589)

\$1,118,008 (Construction only)

MDTA maintains an on-call maintenance and service plan for the designated ELSAG® License Plate Recognition (LPR) system currently installed at various locations throughout the MDTA. This capital project funds furnishing and installation of the upgraded cameras. The eighty-four cameras cost more than \$100,000 each and have an expected life of more than seven years. The maintenance portion will be charged to the Police Operating budget.

Mill and Overlay Fort McHenry Tunnel and Baltimore Harbor Tunnel Bridges

Multi-Area (Pin 2594)

\$400,000 (Engineering only)

Recent inspections have identified four bridges at the Fort McHenry Tunnel and Baltimore Harbor Tunnel facilities as having low condition ratings for the decks. This project includes an in-depth investigation to confirm the defects and perform the needed deck rehabilitation.

Rehabilitate Upper Plenum Liner and Ceiling

I-895 Baltimore Harbor Tunnel (Pin 2591)

\$100,000 (Engineering only)

Over height vehicles continuously hit and damage the ceiling panels of the Baltimore Harbor Tunnel. This project will investigate repair solutions and subsequently rehabilitate or replace the tunnel ceiling panels.

Maryland House Water Tower Rehabilitation

I-95 John F. Kennedy Memorial Highway (Pin 2631)

\$775,000 (Engineering and Construction)

The aging water tower at the Maryland House facility needs rehabilitation. Initial work will include a new liner and pipeline replacement.

Drainage Improvements of I-695 at MM 50.2 Quarantine Road

I-695 Francis Scott Key Bridge (Pin 2621)

\$500,000 (Engineering only)

This project will finalize necessary drainage improvements at MM 50.2 on I-695 and Quarantine Road related to previous flooding at this site.

Clean and Paint I-695 Bridge over Bear Creek

I-695 Francis Scott Key Bridge (Pin 2632)

\$100,000 (Engineering only)

Clean and paint the structural steel of the I-695 bridge over Bear Creek. This is part of routine system preservation.

Rehabilitation of Curtis Creek Drawbridge

I-695 Francis Scott Key Bridge (Pin 2619)

\$2,700,000 (Engineering only)

Replace the Curtis Creek Drawbridge Bascule Pier Waterproofing Membrane and Sump Pump, rehabilitate the navigational lights and the decks of the bascule span approaches, and make fender and miscellaneous concrete repairs.

Bay Bridge On-Call Structural Repairs and Modification

US 50/301 William Preston Lane Jr. Memorial (Bay) Bridge (Pin 2593)

\$100,000 (Engineering only)

Annual inspection reports have identified defects on the eastbound and westbound spans of the Bay Bridge. This contract will be used to address those defects as well as any emergency repairs needed on either span.