MAINE TURNPIKE AUTHORITY

ADDENDUM NO. 2

CONTRACT 2018.08

Bridge Repairs
Dennett Road Overpass Mile 0.6
Snow Fence Installation
Wilson Road Underpass Mile 2.0
Wearing Surface Repairs
York River Bridge Mile 5.2

The following changes are made to the Proposal, Plans, and Specifications.

PROPOSAL

Proposal Sheets P-6 and P-7 are deleted and replaced with sheets P-6 and P-7 (Revised 2/15/18). The quantity of items 627.812 and 652.35 were changed.

PLANS

Plan Sheet 2 of 40, "Estimated Quantities" is deleted and replaced in its entirety with the attached revised sheet 2.

Plan Sheet 5 of 40, "Traffic Control Details Sheet 2 of 5" is deleted and replaced in its entirety with the attached revised sheet 5.

Plan Sheets 15 and 16 of 40, "Maintenance of Traffic Sign Summary 1 of 2" and "Maintenance of Traffic Sign Summary 2 of 2" are deleted and replaced with the attached revised sheets 15 and 16.

SPECIFICATIONS

Special Provision Section 515 PROTECTIVE COATING FOR CONCRETE SURFACES (Broadcast Sealant for Concrete Surfaces), sheets SP-36 to SP-39, has been removed and replaced with the attached revised Special Provision, sheets to SP-36 (Revised 2/15/18) to SP-39 (Revised 2/15/18).

Special Provision Section 518 STRUCTURAL CONCRETE REPAIR (Longitudinal Joint Repair), sheets SP-45 to SP-46, has been removed and replaced with the attached revised Special Provision, sheets to SP-45 (Revised 2/15/18) to SP-46a (Revised 2/15/18).

QUESTIONS

The following are questions asked and comments submitted to the Maine Turnpike Authority in writing. The answers to the questions are noted. Bidders shall utilize this information in preparing their bid.

Question 1: What is the required spacing for the temporary raised pavement markers, Item 627.812?

Answer: For solid lines, the spacing shall be 10 feet. For BWLL there should be a group of 3 within 10 ft and then 30 ft between groups

Question 2: In reference to Sheet 11 note 5 and due to schedule requirements, temporary pavement will be required thru the early phases of the project. How is this work paid for?

Answer: Note 5 refers to temporary pavement necessary to back up the adjusted shoulder pavement and slope to the existing paved median. Payment for this temporary pavement will be made under Item 403.211 – Hot Mix Asphalt (Shimming).

Question 3: In reference to Sheet 11 note 5, can the precast and cast in place median barrier be installed in Phase 1?

Answer: As noted during the Pre-Bid Meeting, the barrier cannot be installed in Phase I as there would be inadequate space available during Phase III.

ATTACHMENTS

- Proposal Sheets (2 page)
- Plan Sheets (4 pages)
- Specifications (7 pages)

Notes: The above items shall be considered as part of the bid submittal.

The total number of pages included with this addendum is sixteen (16).

All bidders are requested to acknowledge the receipt of the Addendum No. 2 by signing below and faxing this sheet to Nathaniel Carll, Purchasing Department, Maine Turnpike Authority at 207-871-7739. Bidders are also required to acknowledge receipt of this Addendum No. 2 on Page P-8 of the bid package.

_____
Business Name

_____
Print Name and Title

_____
Signature

_____
Date

February 15, 2018

Very truly yours,

MAINE TURNPIKE AUTHORITY

_____
Nathaniel Carll
Purchasing Department
Maine Turnpike Authority

Item No.	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
				BROUGHT FORWARD:			
606.3621	GUARDRAIL ADJUST, SINGLE RAIL	Linear Foot	250				
607.431	SNOW FENCE	Linear Foot	460				
609.191	CONCRETE CURB TYPE 2	Linear Foot	72				
627.18	12" SOLID WHITE PAVEMENT MARKING LINE	Linear Foot	320				
627.744	6" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE	Linear Foot	6,100				
627.77	REMOVING PAVEMENT MARKINGS	Square Foot	3,300				
627.78	TEMPORARY PAVEMENT MARKING LINE WHITE OR YELLOW	Linear Foot	10,600				
627.812	TEMPORARY RAISED PAVEMENT MARKERS	Each	5,640				
629.05	HAND LABOR , STRAIGHT TIME	Hour	20				
631.10	AIR COMPRESSOR (INCLUDING OPERATOR)	Hour	20				
631.11	AIR TOOL (INCLUDING OPERATOR)	Hour	20				
631.172	TRUCK - LARGE (INCLUDING OPERATOR)	Hour	10				
				CARRIED FORWARD:			

Item No.	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
				BROUGHT FORWARD:			
652.30	FLASHING ARROW BOARD	Each	9				
652.312	TYPE III BARRICADE	Each	10				
652.33	DRUM	Each	600				
652.34	CONE	Each	200				
652.35	CONSTRUCTION SIGNS	Square Foot	3,750				
652.361	MAINTENANCE OF TRAFFIC CONTROL DEVICES	Lump Sum	1				
652.38	FLAGGERS	Hour	290				
652.410	PORTABLE - CHANGEABLE MESSAGE SIGN	Each	3				
652.45	TRUCK MOUNTED ATTENUATOR	Cal. Day	95	200	00	19000	00
652.451	AUTOMATED TRAILER MOUNTED SPEED LIMIT SIGN	Cal. Day	115	75	00	8625	00
659.10	MOBILIZATION	Lump Sum	1				
				TOTAL:			

ITEM NO.	ITEM DESCRIPTION	UNIT	DENNETT RD. QUANTITY	WILSON ST. QUANTITY	YORK RIVER BRIDGE	TOTAL QUANTITY
202.121	REMOVING EXISTING CONCRETE (5 CY)	LS	1	-	-	1
202.17	REMOVING EXISTING STRUCTURAL CONCRETE (1 CY)	LS	1	-	-	1
202.202	REMOVING PAVEMENT SURFACE	SY	895	-	-	895
202.203	PAVEMENT BUTT JOINTS	SY	30	-	-	30
202.206	REMOVING RUMBLE STRIPS	LF	2350	-	-	2,350
304.10	AGGREGATE SUBBASE COURSE - GRAVEL	CY	25	-	-	25
403.2081	HOT MIX ASPHALT, 12.5MM NOMINAL MAXIMUM SIZE (POLYMER MODIFIED)	TON	74	-	-	74
403.210	HOT MIX ASPHALT, 9.5MM NOMINAL MAXIMUM SIZE	TON	25	-	-	25
403.211	HOT MIX ASPHALT, 9.5 MM NOMINAL MAXIMUM SIZE (SHIMMING)	TON	25	-	-	25
403.213	HOT MIX ASPHALT, 12.5 MM NOMINAL MAXIMUM SIZE (BASE AND INTERMEDIATE BASE COURSE)	TON	8	-	-	8
409.15	BITUMINOUS TACK COAT, APPLIED	GAL	72	-	-	72
502.21	STRUCTURAL CONCRETE ABUTMENTS AND RETAINING WALLS	CY	6	-	-	6
503.14	EPOXY-COATED REINFORCING STEEL, FABRICATED AND DELIVERED	LB	1500	-	-	1,500
503.15	EPOXY-COATED REINFORCING STEEL, PLACING	LB	1500	-	-	1,500
504.801	STRUCTURAL STEEL REPAIR	LS	1	-	-	1
506.9103	ZINC-RICH PROTECTIVE COATING SYSTEM	LS	1	-	-	1
507.095	ALUMINUM BRIDGE RAILING - SPLICE MODIFICATION	EA	4	-	-	4
515.202	CLEAR PROTECTIVE COATING FOR CONCRETE SURFACES	SY	770	-	-	770
515.203	BROADCAST SEALANT FOR CONCRETE SURFACES	SY	-	-	8600	8,600
518.10	ABUTMENT REPAIRS	SF	440	-	-	440
518.39	GRANITE CURB JOINT MORTAR AND BEDDING MORTAR REPAIR	LF	20	-	-	20
518.40	EPOXY INJECTION CRACK REPAIR	LF	45	-	150	195
518.41	LONGITUDINAL JOINT REPAIR	LF	-	-	2400	2,400
518.70	REPAIR OF OVERHEAD SURFACES <8 INCHES	SF	275	-	-	275
518.75	FASCIA AND OVERHANG REPAIRS	SF	50	-	-	50
520.232	EXPANSION DEVICE - ASPHALTIC PLUG JOINT	LF	226	-	-	226
520.234	EXPANSION DEVICE - MULTI-DIRECTIONAL STRUCTURAL SEAL	LF	97	-	-	97
520.251	EXPANSION DEVICE - BONDED SILICONE-AND-FOAM HYBRID JOINT SEAL	LF	9	-	-	9
523.5211	BEARING REHABILITATION, ROCKER BEARINGS	EA	21	-	-	21
526.306	TEMPORARY CONCRETE BARRIER, TYPE 1 - SUPPLIED BY AUTHORITY	LS	1		-	1
526.351	MEDIAN BARRIER TYPE 1 - PRECAST	LF	60	-	-	60
526.3515	MEDIAN BARRIER TYPE 1 - CAST-IN-PLACE	LF	102	-	-	102
526.361	MEDIAN BARRIER TYPE 1 - PRECAST	EA	2	-	-	2
527.341	WORK ZONE CRASH CUSHIONS - TL-3	UNIT	2	1	-	3
603.159	12" CULVERT PIPE OPTION III	LF	8	-	-	8
603.199	24" CULVERT PIPE OPTION III	LF	6	-	-	6
604.09	CATCH BASIN TYPE B1	EA	2	-	-	2
604.246	CATCH BASIN TYPE F5	EA	2	-	-	2
605.11	12" UNDERDRAIN TYPE C	LF	43	-	-	43

ITEM NO.	ITEM DESCRIPTION	UNIT	DENNETT RD. QUANTITY	WILSON ST. QUANTITY	YORK RIVER BRIDGE	TOTAL QUANTITY
606.1723	BRIDGE TRANSITION - TYPE III	EA	4	-	-	4
606.1724	BRIDGE TRANSITION - TYPE III, MODIFIED	EA	2	-	-	2
606.278	TERMINAL END - ANCHORED END	EA	2	-	-	2
606.352	REFLECTORIZED BEAM GUARDRAIL DELINEATOR	EA	155	-	-	155
606.356	UNDERDRAIN DELINEATOR POST	EA	2	-	-	2
606.3605	REMOVE, MODIFY AND RESET, SINGLE RAIL	LF	130	-	-	130
606.3606	REMOVE, MODIFY AND RESET, DOUBLE RAIL	LF	50	-	-	50
606.3621	GUARDRAIL ADJUST, SINGLE RAIL	LF	250	-	-	250
607.431	SNOW FENCE	LF	460	-	-	460
609.191	CONCRETE CURB TYPE 2	LF	72	-	-	72
627.18	12" SOLID WHITE PAVEMENT MARKING LINE	LF	320	-	-	320
627.744	6" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE	LF	6100	-	-	6,100
627.77	REMOVING PAVEMENT MARKINGS	SF	3300	-	-	3,300
627.78	TEMPORARY PAVEMENT MARKING LINE WHITE OR YELLOW	LF	10600	-	-	10,600
627.812	TEMPORARY RAISED PAVEMENT MARKERS	EA	5400	-	2 240	5,640
629.05	HAND LABOR , STRAIGHT TIME	HR	-	-	20	20
631.10	AIR COMPRESSOR (INCLUDING OPERATOR)	HR	-	-	20	20
631.11	AIR TOOL (INCLUDING OPERATOR)	HR	-	-	20	20
631.172	TRUCK - LARGE (INCLUDING OPERATOR)	HR	-	-	10	10
652.30	FLASHING ARROW BOARD	EA	3	2	4	9
652.312	TYPE III BARRICADE	EA	10	-	-	10
652.33	DRUM	EA	170	200	230	600
1 652.34	CONE	EA	100	100	-	200 2
652.35	CONSTRUCTION SIGNS	SF	1950	940	860	3,750
652.361	MAINTENANCE OF TRAFFIC CONTROL DEVICES	LS	0.49	0.30	.21	1
652.38	FLAGGERS	HR	230	60	-	290
652.410	PORTABLE - CHANGEABLE MESSAGE SIGN	EA	1	-	2	3
652.45	TRUCK MOUNTED ATTENUATOR	CD	50	-	45	95
652.451	AUTOMATED TRAILER MOUNTED SPEED LIMIT SIGN	CD	50	20	45	115
659.10	MOBILIZATION	LS	0.64	0.07	0.29	1

Date:2/15/2018

Filename: ...\MSTA\002b_Quantities.dgn

Scale: NOT TO SCALE

No.	Revision	By	Date
1	Update sign quantities, remove stray text	DSM	2/18
1	Update sign and RPM quantities	DSM	2/18

Designed by: T.Y.LIN INTERNATIONAL

CONSULTANT PROJECT MANAGER: Heath Cowan

	By	Date		By	Date
Designed	BLT	1/2018	Checked	DSM	1/2018
Drawn	BLT	1/2018	In Charge of	DSM	1/2018

T.Y. Lin International
12 Northbrook Drive
Building A, Suite One
Falmouth, Maine 04105
TEL: (207) 781-4721
FAX: (207) 781-4753

MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ralph C. Norwood, IV

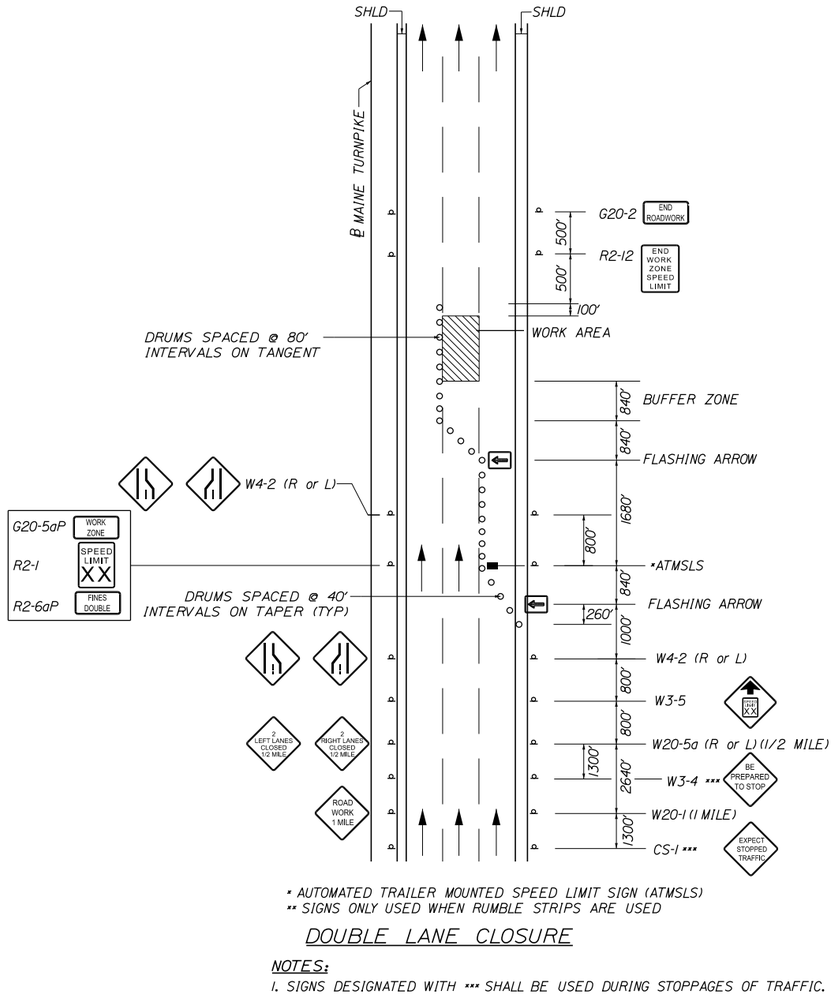
BRIDGE REPAIRS
DENNETT ROAD OVERPASS

QUANTITIES

CONTRACT:2018.08

SHEET NUMBER: QT-01

Date:2/15/2018

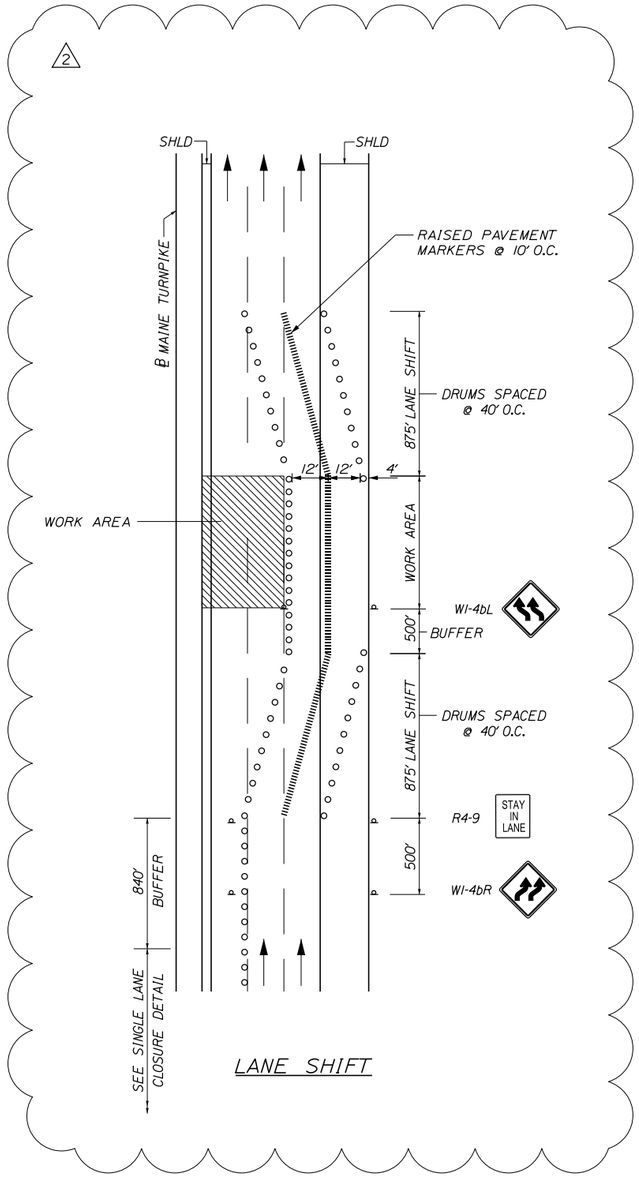


* AUTOMATED TRAILER MOUNTED SPEED LIMIT SIGN (ATMSLS)
** SIGNS ONLY USED WHEN RUMBLE STRIPS ARE USED

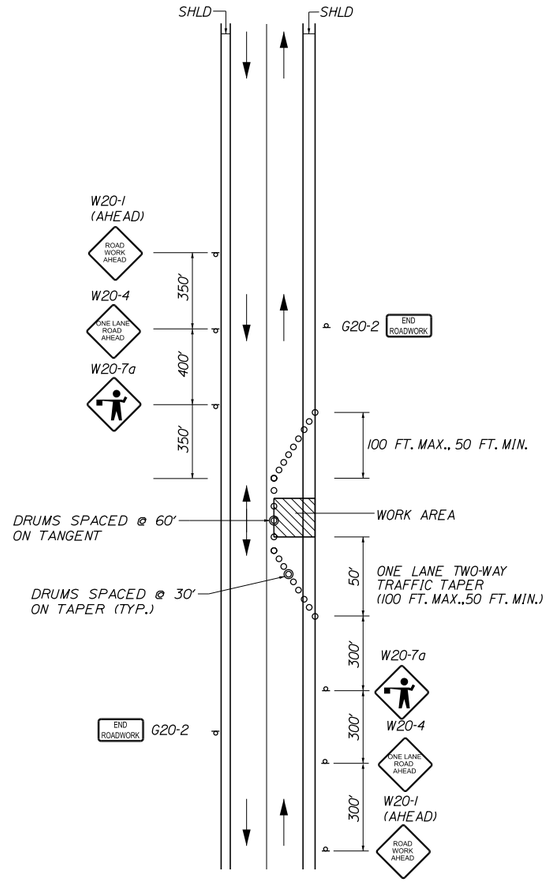
DOUBLE LANE CLOSURE

NOTES:

1. SIGNS DESIGNATED WITH *** SHALL BE USED DURING STOPPAGES OF TRAFFIC.



LANE SHIFT



LOCAL ROAD SINGLE LANE CLOSURE

NOTES:

1. ROAD WORK AHEAD AND END ROAD WORK SIGNS MAY BE OMITTED FOR SHORT DURATION OPERATIONS (LESS THAN 1 HOUR).
2. FLAGGERS SHALL BE LOCATED SO THEY ARE CLEARLY VISIBLE TO APPROACHING DRIVERS.
3. SIGN SPACING ASSUMES LOCAL ROAD SPEED IS 40 MPH OR LESS.

Filename: ...\XXXa_Traffic_Control_Details_2.dgn

Scale: NOT TO SCALE

No.	Revision	By	Date
2	ADDED LANE SHIFT DETAIL	LZD	2/18

Designed by: T-Y-LIN INTERNATIONAL

CONSULTANT PROJECT MANAGER: Heath Cowan

	By	Date		By	Date
Designed	JRH	8/2017	Checked	KSD	9/2017
Drawn	JRH	8/2017	In Charge of	DSM	1/2018

T.Y. Lin International
12 Northbrook Drive
Building A, Suite One
Falmouth, Maine 04105
TEL: (207) 781-4721
FAX: (207) 781-4753

MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ralph C. Norwood, IV

BRIDGE REPAIRS
DENNETT ROAD OVERPASS

TRAFFIC CONTROL DETAILS
SHEET 2 OF 5

CONTRACT:2018.08

SHEET NUMBER: MT-02

IDENTIFICATION NUMBER	SIZE OF SIGN WIDTH	SIZE OF SIGN HEIGHT	TEXT	TEXT DIMENSIONS (INCHES) LETTER HEIGHT	TEXT DIMENSIONS (INCHES) VERTICAL SPACING	TEXT DIMENSIONS (INCHES) ARROW RTE. MKR.	NUMBER OF SIGNS REQUIRED	COLOR BACKGROUND	COLOR LEGEND BORDER	BORDER RADIUS	AREA IN SQUARE FEET	NOTES
CS-1	48"	48"	EXPECT STOPPED TRAFFIC	6" 6" 6"	4" 4"		1 8	ORANGE	BLACK		1 16.00 (128)	
CS-2	102"	18"	VIA EXIT 2	10" EM	4" 4"		2	ORANGE	BLACK		12.75 (25.5)	NO BORDER
CS-3	168"	42"	EXIT CLOSED	15" E	13.5" 13.5"		2	ORANGE	BLACK		49 (98)	
CS-5	48"	78"	I-95 SB EXIT 1 ON RAMP CLOSED USE EXIT 2	8D 8D 8D 8D 8D 8D	5 4 4 4 4 4 5		3	ORANGE	BLACK		26.00 (78)	
CS-8	48"	48"					2	ORANGE	BLACK		16.00 (32)	
CS-9	48"	48"					3	ORANGE	BLACK		16.00 (48)	
CS-10	48"	48"	TRUCKS ENTERING	7" 7"	6"		1	ORANGE	BLACK		16.00 (16)	
D3-1	48"	12"	Dennett Rd	TEXT DIMENSIONS SHALL CONFORM TO "STANDARD HIGHWAY SIGNS" - 2009 & 2012 SUPPLEMENT			4	ORANGE	BLACK		4.00 (16)	
E5-2a	48"	36"	EXIT CLOSED				1 6	ORANGE	BLACK		1 12.00 (72)	
G20-2	48" 36"	24" 18"	END ROAD WORK				1 12 4	ORANGE	BLACK		1 8.00 (96) 4.50 (18)	

IDENTIFICATION NUMBER	SIZE OF SIGN WIDTH	SIZE OF SIGN HEIGHT	TEXT	TEXT DIMENSIONS (INCHES) LETTER HEIGHT / VERTICAL SPACING / ARROW RTE. MKR.	NUMBER OF SIGNS REQUIRED	COLOR BACKGROUND	COLOR LEGEND BORDER	BORDER RADIUS	AREA IN SQUARE FEET	NOTES
G20-5aP	48"	24"	WORK ZONE	TEXT DIMENSIONS SHALL CONFORM TO "STANDARD HIGHWAY SIGNS" - 2009 & 2012 SUPPLEMENT	1 14	ORANGE	BLACK		1 8.00 (112)	
M1-1	24"	24"	INTERSTATE 95		5	RED/ BLUE	WHITE		4.00 (20)	
M3-1	24"	12"	SOUTH		5	WHITE	BLACK		2.00 (10)	
M4-5	24"	12"	TO		5	WHITE	BLACK		2.00 (10)	
M4-8	24"	12"	DETOUR		9	WHITE	BLACK		2.00 (18)	
M4-8a	24"	18"	END DETOUR		1	ORANGE	BLACK		3.00 (3)	
M4-9 (LEFT) (RIGHT)	30"	24"	DETOUR →		1 2	ORANGE	BLACK		5.00 (5) (10)	
M4-9 (SR)	30"	24"	DETOUR ↗		1	ORANGE	BLACK		5.00 (5)	
M6-1 (LEFT) (RIGHT)	30"	24"	→		4 2	WHITE	BLACK		5.00 (20) (10)	
M6-2 (LEFT) (RIGHT)	30"	24"	↗		1 1	WHITE	BLACK		5.00 (5) (5)	
M6-3	30"	24"	↑		1	ORANGE	BLACK		5.00 (5)	
R1-2	36"	36"	YIELD		1	WHITE	RED		3.90 (3.9)	
R2-1	48"	60"	SPEED LIMIT 55		1 14	WHITE	BLACK		1 20.00 (280)	
R2-6aP	48"	24"	FINES DOUBLE		1 14	WHITE	BLACK		1 8.00 (112)	
R2-12	36"	54"	END WORK ZONE SPEED LIMIT		12	WHITE	BLACK		13.5 (162)	
2 R4-9	36"	48"	STAY IN LANE		2	WHITE	BLACK		12.0 (24)	
R11-2	48"	30"	ROAD CLOSED		1 1	WHITE	BLACK		1 10 (30)	

Date:2/15/2018

Filename: ...\XXXb_MOT_Sign_Summary_01.dgn

No.	Revision	By	Date
1	UPDATED SIGN QUANTITIES	JTR	2/9/18
2	ADDED SIGNS	IZD	2/18

Scale: NOT TO SCALE

Designed by: T·Y LIN INTERNATIONAL

CONSULTANT PROJECT MANAGER: Heath Cowan

	By	Date		By	Date
Designed	TSK	10/2017	Checked	JRH	1/2018
Drawn	JTR	10/2017	In Charge of	DSM	1/2018

T.Y. Lin International
12 Northbrook Drive
Building A, Suite One
Falmouth, Maine 04105
TEL: (207) 781-4721
FAX: (207) 781-4753

MAINE TURNPIKE

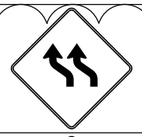
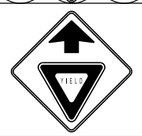
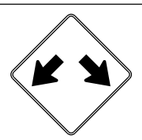
THE GOLD STAR MEMORIAL HIGHWAY

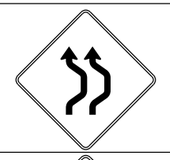
MTA PROJECT MANAGER: Ralph C. Norwood, IV

BRIDGE REPAIRS
DENNETT ROAD OVERPASS
MAINTENANCE OF TRAFFIC SIGN SUMMARY 1 OF 2

CONTRACT:2018.08

SHEET NUMBER: MT-12

IDENTIFICATION NUMBER	SIZE OF SIGN WIDTH	SIZE OF SIGN HEIGHT	TEXT	TEXT DIMENSIONS (INCHES) LETTER HEIGHT	TEXT DIMENSIONS (INCHES) VERTICAL SPACING	TEXT DIMENSIONS (INCHES) ARROW RTE. MKR.	NUMBER OF SIGNS REQUIRED	COLOR BACKGROUND	COLOR LEGEND BORDER	BORDER RADIUS	AREA IN SQUARE FEET	NOTES
2 W1-4bL	48"	48"		TEXT DIMENSIONS SHALL CONFORM TO "STANDARD HIGHWAY SIGNS" - 2009 & 2012 SUPPLEMENT			2	ORANGE	BLACK		16.00 (32)	
2 W1-4bR	48"	48"					2	ORANGE	BLACK		16.00 (32)	
W3-2	48"	48"					1	ORANGE	BLACK		16.00 (16)	
W3-4	48"	48"					1 8	ORANGE	BLACK		1 16.00 (128)	
W3-5	48"	48"					12	ORANGE	BLACK		16.00 (192)	
W4-2 (LEFT) (RIGHT)	48"	48"					1 22 1 18	ORANGE	BLACK		1 16.00 (352) (288)	
W5-4	48"	48"					2	ORANGE	BLACK		16.00 (32)	
W7-3aP	36"	30"					1 4	ORANGE	BLACK		1 7.50 (30)	
W12-1	48"	48"					1	ORANGE	BLACK		1 16.00 (16)	
W20-1 (1 MILE) (AHEAD)	48" 48" (AHEAD)	48" 48" 36"					12 1 10 4	ORANGE	BLACK		16.00 (192) 1 (160) 9.00 (36)	

IDENTIFICATION NUMBER	SIZE OF SIGN WIDTH	SIZE OF SIGN HEIGHT	TEXT	TEXT DIMENSIONS (INCHES) LETTER HEIGHT	TEXT DIMENSIONS (INCHES) VERTICAL SPACING	TEXT DIMENSIONS (INCHES) ARROW RTE. MKR.	NUMBER OF SIGNS REQUIRED	COLOR BACKGROUND	COLOR LEGEND BORDER	BORDER RADIUS	AREA IN SQUARE FEET	NOTES
W20-5 (LEFT) (RIGHT)	48"	48"		TEXT DIMENSIONS SHALL CONFORM TO "STANDARD HIGHWAY SIGNS" - 2009 & 2012 SUPPLEMENT			1 4 4	ORANGE	BLACK		1 16.00 (64) (64)	
W20-5a (LEFT) (RIGHT)	48"	48"					1 10 8	ORANGE	BLACK		1 16.00 (160) (128)	
W20-4	36"	36"					4	ORANGE	BLACK		9.00 (36)	
W20-7a	36"	36"					4	ORANGE	BLACK		9.00 (36)	
W21-5	48"	48"					1	ORANGE	BLACK		16.00 (16)	
W21-5a (RIGHT) (LEFT)	48"	48"					1 1 2	ORANGE	BLACK		1 16.00 (16) (32)	
W21-5b (RIGHT) (LEFT)	48"	48"					1 1 2	ORANGE	BLACK		1 16.00 (16) (32)	
W24-1a (LEFT) (RIGHT)	48"	48"					2 2	ORANGE	BLACK		16.00 (32) (32)	
W24-1b (LEFT) (RIGHT)	48"	48"					2 2	ORANGE	BLACK		16.00 (32) (32)	

Date:2/15/2018

Filename: ...\XXXb_MOT_Sign_Summary_01.dgn

No.	Revision	By	Date
1	UPDATED SIGN QUANTITIES	JTR	2/9/18
2	ADDED SIGNS	IZD	2/18

Scale: NOT TO SCALE

Designed by: T-Y LIN INTERNATIONAL

CONSULTANT PROJECT MANAGER: Heath Cowan

	By	Date		By	Date
Designed	TSK	10/2017	Checked	JRH	1/2018
Drawn	JTR	10/2017	In Charge of	DSM	1/2018

T.Y. Lin International
12 Northbrook Drive
Building A, Suite One
Falmouth, Maine 04105
TEL: (207) 781-4721
FAX: (207) 781-4753

MAINE TURNPIKE

THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ralph C. Norwood, IV

BRIDGE REPAIRS
DENNETT ROAD OVERPASS
MAINTENANCE OF TRAFFIC
SIGN SUMMARY 2 OF 2

CONTRACT:2018.08

SHEET NUMBER: MT-13

SPECIAL PROVISION

SECTION 515

PROTECTIVE COATING FOR CONCRETE SURFACES

(Broadcast Sealant for Concrete Surfaces)

Section 515, Protective Coating for Concrete Surfaces, is deleted in its entirety and replaced with the following:

515.01 Description

The work shall include the surface preparation and application of a broadcast sealant on concrete surfaces to repair the concrete wearing surface at the York River Northbound and Southbound Bridges (MM 5.2). The coating system shall be applied to the bridge wearing surface in accordance with these Specifications and the manufacturer's published recommendations.

The repair of cracks greater than or equal to 0.06 inches, or the manufacturer's recommendation for maximum crack width, and the longitudinal joints shall be completed in accordance with Special Provision 518 Epoxy Injection Crack Repair and Special Provision 518 Longitudinal Joint Repair, respectively, before applying the broadcast sealant.

515.02 Materials

The broadcast sealer shall be one of the following three products or an approved equal.

- T-78 Methyl Methacrylate Crack Sealer, as manufactured by Transpo Industries, Inc.
- MasterSeal 630, as manufactured by BASF

The product shall comply with regulations limiting the Volatile Organic Compound (VOC) content of architectural and industrial maintenance coatings.

The Contractor shall submit the product data sheets, material safety data sheets and recommended instructions for application of the proposed sealer.

Materials shall be delivered to the site in original packages or containers bearing the manufacturer's labels and identification.

The Contractor shall select a material with consideration given to their proposed work methods and available cure times. The material selected shall allow for surface cleaning, preparation, placement, and curing within the allotted lane closure times specified in Special Provision Section 652. The broadcast sealant preparation and application shall be conducted in strict conformance with the manufacturer's published recommendations.

515.021 Substitute Materials

The Contractor shall submit a written request for approval of proposed substitute material naming the proposed manufacturer and product. This request shall be accompanied by:

1. Test data from an independent testing laboratory stating that the proposed substitute meets or exceeds the specified requirements as listed and has been tested in accordance with the specified test standards.

2. Documentation that the proposed material has a proven record of performance when used in the intended application as confirmed by actual field tests and successful installations in place on at least five similar projects.

3. Certification that if two or more types of products are intended to be used as part of a system they will be supplied by the same manufacturer to ensure compatibility of materials, and to maintain single source manufacturer responsibility.

The Resident reserves the right to require additional testing to evaluate any proposed substitute product at no additional cost to the Authority. The Resident's decision as to the acceptability or non-acceptability of the proposed product shall be final.

The Contractor shall select a material with consideration given to their proposed work methods and available cure times. The material selected shall allow for surface cleaning, preparation, placement, and curing within the allotted lane closure times specified in Special Provision Section 652. The broadcast sealant preparation and application shall be conducted in strict conformance with the manufacturer’s published recommendations.

515.03 Surface Preparation

Concrete surfaces shall be cleaned free of dust, surface dirt, oil, efflorescence and contaminants to ensure penetration of the sealer. Surface preparation shall be performed in strict conformance with the manufacturer’s published recommendations.

The Contractor may use, when required, appropriate cleaning materials recommended by the sealer manufacturer in conjunction with high pressure water for cleaning the concrete or masonry. Collect all debris, other material removed from the surface and cracks, and cleaning materials used and dispose of in accordance with applicable federal, state, and local regulations.

Cover deck drains, expansion joints, or all other surfaces which are not to be coated with the broadcast sealer.

The Resident shall approve the prepared surface prior to applying the sealer.

515.04 Application

The Contractor shall apply the sealer in strict accordance with the manufacturer’s published recommendations and within allotted lane closures given the traffic volume for each bridge for the time of year, week, and day. If there is a conflict between the manufacturer’s recommendations and the restrictions below, the stricter of the two criteria shall apply.

The application shall not be conducted when surface and air temperatures are outside the range recommended by the manufacturer. The work shall not be conducted when there is a chance of the surface and air temperature falling outside of the recommended temperature range during the appropriate cure time for the air temperature plus 4 hours; nor should it be applied on hot, windy days.

The treatment shall not be applied during rain to wet surfaces or when there is a chance of rain within 24-hours after application. Following any rain fall, allow the deck to air dry a minimum of 48 hours before applying broadcast sealant. After treatment, surfaces should be protected from rain for not less than 48-hours. It shall not be applied when winds are sufficient to carry airborne chemicals to unprotected surfaces.

Prior to applying the sealer, the Contractor shall protect all surrounding non-masonry/non-concrete surfaces, landscape and lawn areas, and surfaces not designated for treatment, from contact with the penetrating sealer, and prevent overspray of the penetrating sealer caused by wind drift. Provide shielding as necessary to prevent dust, debris, and overspray from striking vehicular traffic.

The Contractor shall ensure that all safety equipment, facilities and precautions recommended by the product manufacturer are furnished and/or strictly adhered to.

The sealer material shall be applied in the manner and with the equipment recommended by the product manufacturer. Coverage will vary depending on condition, texture and porosity of the surfaces. A second coat may be required on very porous substrates. Pre-testing is required.

Sealer shall be applied as packaged without dilution or alteration. Sufficient material shall be applied to thoroughly saturate the surface making sure to brush out excess material that does not penetrate.

When the sealer is applied to horizontal surfaces, it shall be applied in a single saturating application with sufficient material and applied so the surface remains wet for one to two minutes before penetration into the concrete. Surface residues, pools and puddles shall be broomed-out thoroughly until they completely penetrate into the surface.

Broadcast sand shall be applied either by hand or mechanical means on the entire treated area of concrete surfaces prior to cure to achieve a uniform coverage. Follow the Manufacturer's requirements for the amount of sand per square area. Place the sand as the sealant begins to gel. Placing of the sand before the gelling of the sealant may cause settlement, excessive coating of the sand, and loss of friction characteristics. Additional sand that does not adhere to the sealant shall be brushed off. The surface shall be inspected and approved by the Resident before allowing traffic to resume. An alternative to sand, if the manufacturer's requirements allow, is providing a brushed finish for skid resistance.

515.05 Storage

Store in factory sealed containers of unmixed material at temperatures within the range recommended by the manufacturer away from direct sunlight and sources of heat. Once the

container is opened for product use the manufacturers requirements shall be followed for storage and the product shall not be used if the recommended shelf life is exceeded.

515.06 Method of Measurement

Broadcast Sealant for Concrete Surfaces will be measured for payment by the square yard, satisfactorily applied and accepted.

515.07 Basis of Payment

Broadcast Sealant for Concrete Surfaces will be paid at the Contract unit price per square yard, which price shall be full compensation for all labor, materials, equipment and incidentals required for furnishing and applying the sealer, in accordance with these Specifications or as approved by the Resident.

Surface preparation and protection of surfaces not designated for treatment will not be measured separately for payment, but shall be incidental to the Broadcast Sealant for Concrete Surfaces item.

Payment will be made under:

Pay Item		Pay Unit
515.203	Broadcast Sealant for Concrete Surfaces	Square Yard

SPECIAL PROVISION

SECTION 518

STRUCTURAL CONCRETE REPAIR

(Longitudinal Joint Repair)

518.01 Description

The following sentence is added:

This work shall consist of repairing one longitudinal concrete wearing surface construction joint on the York River Southbound Bridge and three longitudinal concrete wearing surface construction joints on the York River Northbound Bridge as approved by the Resident. The work will generally include: complete removal of existing joint sealant materials, cleaning existing joint surfaces to receive repair materials, applying broadcast sealant to fill any cracks located below the surface of longitudinal joint, and the application of an approved polyurethane joint sealant in accordance with these specifications and as directed by the Resident.

The proposed repairs shall be completed along the full length of the bridge joints.

The work specified herein shall be completed prior to commencing the work specified in Special Provision 515 Broadcast Sealant for Concrete Surfaces, with the exception of the construction joint preparation requirements in Subsection 518.071.

518.02 Repair Materials

The following paragraphs are added:

Longitudinal joints shall be sealed using a polyurethane, non-sag elastomeric sealant. The sealant selected shall be suitable for sealing 1/8" wide joints in concrete and shall be submitted to the Resident for approval. The selected joint sealant shall be compatible with the selected broadcast sealant. The Contractor shall select a material capable of allowing joint preparation, placement, and curing within 72 hours or less and within the allotted lane closure times. The longitudinal joint repair installation shall be conducted in strict conformance with the manufacturer's published recommendations.

The following Subsection is added:

518.032 Construction Requirements

The Contractor shall conduct the proposed repairs in strict accordance with the manufacturer's published recommendations for the selected repair materials. All materials shall be selected, and the work sequenced, with consideration given to material cure times and the allowable lane closure times and durations outlined in Special Provision 652.

The Contractor shall complete the work as outlined below, and as directed by the Resident:

1. The Contractor shall remove all existing joint filler, debris, or other foreign material from the full length of the longitudinal joint. The longitudinal joint shall be free of oil, solvent, grease, dirt, loose or debonded sealant, loose particles, laitance, and foreign matter. Cleaning of the joint shall be performed by sand blasting, power tool cleaning, or other methods approved by the Resident that provide a clean concrete surface suitable for the application of repair materials. Additional surface preparation shall be performed in strict conformance with the manufacturer's published recommendations. All surfaces to receive new material shall be cleaned no more than 36 hours ahead of the placement of the repair materials. Any areas that that have been rained on, exposed to high humidity or fog, or contaminated in any other manner shall be sandblasted again before the repair material is applied. All debris from the cleaning operations shall be thoroughly removed from the cleaned surfaces and adjacent areas using compressed, dry, air prior to the application of repair materials. All air compressor liens used for cleaning of repair areas shall be equipped with effective oil traps.

2. The Contractor shall apply Broadcast Sealant for Concrete Surfaces to fill the longitudinal joint in accordance with Special Provision 515. The sealer material shall be applied to the full length of each longitudinal joint by using squeeze bottles or other methods that allows the Broadcast Sealant to pond over, and completely fill, the longitudinal joint to ensure full joint saturation. Where required, the Contractor shall apply additional Broadcast Sealant to areas of the joint where the sealant drops below the roadway surface. The Contractor shall be responsible for inspecting the joint five minutes after the initial placement of Broadcast Sealant, and five minutes after each subsequent reapplication of sealant, to verify the longitudinal joint remains filled with broadcast sealant to the top of the deck surface. This process shall be repeated until reinspection of the joint determines that the reapplication of material is not required. Immediately following the final joint reinspection, the Contractor shall thoroughly broom out the joint surface to distribute any broadcast sealant residues, pools and puddles. Brooming of the joint surface shall be completed before the Broadcast Sealant Begins to gel. Prefilling of joints with sands, or other filler materials, will not be allowed. The Broadcast Sealant shall be cured to achieve a tack-free condition prior to proceeding to the next step.

3. Once the Broadcast Sealant has reached a tack-free condition the Contractor shall apply a high-quality polyurethane sealant approved by the Resident, such as Sikaflex 1A, to fill all remaining gaps or voids near the surface of the joint (e.g. where the edges of concrete have spalled and filling with Broadcast Sealant is not practical). The Contractor shall install the polyurethane sealant in accordance with the manufacturer's required application methods. Where required, a small trowel may be used to push the material into repair areas to ensure full bonding to the repair surface and to ensure the repair material is level with the top of the existing wearing surface. This work shall be completed immediately after the application of broadcast sealant and before reopening the roadway to traffic. The Contractor will not be required to complete a sawcut, or complete other work, to create a groove for the placement of polyurethane sealant. Where the broadcast sealant completely fills the joint to the roadway surface the Resident may waive the requirement to install polyurethane sealant in those areas.

4. All materials shall be allowed to achieve full cure in accordance with the manufacturer's recommendation prior to opening the roadway up to traffic.

Subsections 518.05 through 518.08 are deleted and are not replaced.

518.10 Method of Measurement

The following sentence is added:

The quantity of Longitudinal Joint Repair will be measured by the linear foot satisfactorily completed and accepted.

The application of the Broadcast Sealant completed as part of the longitudinal joint repairs will not be measured for payment separately, but shall be incidental to the Longitudinal Joint Repair pay item.

518.11 Basis of Payment

The following sentence is added:

Longitudinal Joint Repair will be paid for at the Contract unit price per linear foot, which price shall be considered full compensation for cleaning of the joint surfaces; the application of Broadcast Sealant to fill the longitudinal joint, the application of polyurethane sealant; and all materials, labor, equipment, and incidentals necessary to complete the work in accordance with these specifications, the plan, and as directed by the Resident.

Pay Item		Pay Unit
518.41	Longitudinal Joint Repair	Linear Foot