MAINE TURNPIKE AUTHORITY

MAINE TURNPIKE

CONTRACT DOCUMENTS

CONTRACT 2025.16

Widened Concrete Haunch Removals

Ramp J (MM 1.5)
Ramp M (MM1.7)
Wilson Road (MM 2.0)
Berwick Road (MM 13.8)
Fletcher Street/Route 35 (MM 25.3)
Alfred Street (MM 31.3)
Beech Ridge Road (MM 41.4)
Scarborough Interchange (MM 42.5)

Bridge Mounted Sign Relocation

Gorham Road (MM 44.0)

NOTICE TO CONTRACTORS

PROPOSAL

CONTRACT AGREEMENT

CONTRACT BOND

FINAL LIEN AND CLAIM WAIVER AND AFFIDAVIT

SPECIFICATIONS

MAINE TURNPIKE AUTHORITY SPECIFICATIONS

The Specifications are divided into two parts:
Part I, Supplemental Specifications and Part II, Special
Provisions.

The Maine Turnpike Supplemental Specifications are additions and alterations to the 2014 Maine Department of Transportation Standard Specifications. See Subsection 100.1.

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MAINE TURNPIKE AUTHORITY NOTICE TO CONTRACTORS

Sealed Proposals will be received by the Maine Turnpike Authority for:

CONTRACT 2025.16

Widened Concrete Haunch Removals

Ramp J (MM 1.5)
Ramp M (MM1.7)
Wilson Road (MM 2.0)
Berwick Road (MM 13.8)
Fletcher Street/Route 35 (MM 25.3)
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Scarborough Interchange (MM 42.5)

Bridge Mounted Sign Relocation

Gorham Road (MM 44.0)

at the office of the Maine Turnpike Authority, 2360 Congress Street, Portland, ME, until 11:00 a.m., prevailing time as determined by the Authority on November 18, 2025, at which time and place the Proposals will be publicly opened and read. Bids will be accepted from Contractors **prequalified** by the Maine Department of Transportation for Bridge Projects. All other bids may be rejected. This Project includes a wage determination developed by the State of Maine Department of Labor.

The work consists of completely removing the widened concrete haunches over the paved surface of the roadway, removing all debris from below the bridge, and sealing with clear protective coating. Also included will be the installation of the street name plaque on both faces of the Wilson Road and Alfred Street bridges, as well as relocating the bridge mounted sign structure on the Gorham Road bridge. Maintenance of traffic and all other work incidental thereto will be completed in accordance with the Plans and Specifications.

The half size Plans and Contract Documents may be obtained from the Authority upon payment of One Hundred (\$100.00) Dollars for each set, which payment will not be returned. Checks shall be made payable to: Maine Turnpike Authority. The Plans and Contract Documents may also be downloaded from a link on our website at http://www.maineturnpike.com/project-and-planning/Construction-Contracts.aspx.

For general information regarding Bidding and Contracting procedures, contact Nate Carll, Purchasing Manager, at (207) 482-8115. For information regarding Schedule of Items, plan holders list and bid results, visit our website at http://www.maineturnpike.com/project-and-planning/Construction-Contracts.aspx. To submit project specific questions, use the electronic Request for Information (RFI) tab at https://www.maineturnpike.com/projects/construction-contracts for Contract 2025.16. Responses will not be prepared for questions received by telephone. Bidders shall not contact any other Authority staff or Consultants for clarification of Contract provisions, and the Authority will not be responsible for any interpretations so obtained.

All work shall be governed by the Specifications entitled "State of Maine, Department of Transportation, Standard Specifications, Revision of November 2014", "Standard Details, Revision of November 2020" and "Best Management Practices for Erosion and Sediment Control", latest issue. Copies and recent updates to these publications can be downloaded at: http://www.maine.gov/mdot/contractors/publications/.

Proposals must be accompanied by an original bid bond, certified or cashier's check payable to the Maine Turnpike Authority in an amount not less than Five (5%) Percent of the Total Amount in the Proposal, but not less than \$500.00. The Bidder to whom a Contract is awarded will be required to furnish a Surety Corporation Bond, satisfactory to the Authority, on the standard Contract Bond form of the Authority, for a sum not less than the Total Amount of the Proposal.

Proposals must be made upon the Proposal Forms furnished by the Authority separately with the Contract Documents, and must be enclosed in the sealed special addressed envelope provided therefore bearing the name and address of the Bidder, the name of the Contract, and the date and time of Proposal opening on the outside.

A pre-bid conference will be held on November 12, 2025 at 11:30 AM at the Maine Turnpike Authority, 2360 Congress Street, Portland, Maine. All contractor questions shall be sent to Nate Carll at the above contact information by 12:00 PM on Thursday, November 13, 2025.

The Authority reserves the unqualified right to reject any or all Proposals and to accept that Proposal which in its sole judgment will under all circumstances serve its best interest.

MAINE TURNPIKE AUTHORITY

Nate Carll Purchasing Manager Maine Turnpike Authority Portland, Maine

Maine Turnpike Authority

MAINE TURNPIKE

PROPOSAL

CONTRACT 2025.16

Widened Concrete Haunch Removals

Ramp J (MM 1.5)
Ramp M (MM1.7)
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Scarborough Interchange (MM 42.5)

Bridge Mounted Sign Relocation

Gorham Road (MM 44.0)

MAINE TURNPIKE AUTHORITY

PROPOSAL

CONTRACT 2025.16

Widened Concrete Haunch Removals

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Scarborough Interchange (MM 42.5)

Bridge Mounted Sign Relocation

Gorham Road (MM 44.0)

TO MAINE TURNPIKE AUTHORITY:

The work consists of completely removing the widened concrete haunches over the paved surface of the roadway, removing all debris from below the bridge, and sealing with clear protective coating. The work also includes installation of the street name plaque on both faces of the Wilson Road and Alfred Street bridges, as well as relocating the bridge mounted sign structure on the Gorham Road bridge. Maintenance of traffic and all other work incidental thereto will be completed in accordance with the Plans and Specifications.

This Work will be done under a Contract known as Contract 2025.16 according to the Plans and Specifications which are on file in the office of the Maine Turnpike Authority, 2360 Congress Street, Portland, Maine.

On the acceptance of this Proposal for said Work, the undersigned will give the required bond with good security conditioned for the faithful performance of said Work, according to said Plans and Specifications, and the doing of all other work required by said Specifications for the consideration herein named and with the further condition that the Maine Turnpike Authority shall be saved harmless from any and all damages that might accrue to any person, persons or property by reason of the carrying out of said Work, or any part thereof, or by reason of negligence of the undersigned, or any person or persons under his employment and engaged in said Work.

The undersigned hereby declares that he/she has carefully examined the Plans, Specifications and other Contract Documents, and that he/she will contract to carry out and complete the said Work as specified and delineated at the price per unit of measure for each scheduled item of Work stated in the Schedule of Prices as follows:

It is understood that the TOTAL AMOUNT stated by the undersigned in the following Schedule of Prices is based on approximate quantities and will be used solely for the comparison of bids, and that the quantities stated in the Schedule of Prices for the various items are estimates only and may be increased or decreased all as provided in the Specifications.

SCHEDULE OF BID PRICES CONTRACT NO. 2025.16 WIDENED CONCRETE HAUNCH REMOVAL

Ramp J (MM 1.5)
Ramp M (MM1.7)
Wilson Road (MM 2.0)
Berwick Road (MM 13.8)
Fletcher Street/Route 35 (MM 25.3)
Alfred Street (MM 31.3)
Beech Ridge Road (MM 41.4)
Scarborough Interchange (MM 42.5)

BRIDGE MOUNTED SIGN RELOCATION

Gorham Road (MM 44.0)

Item No	Item Description	Units	Approx. Quantities	Unit Prices		Bid Amount in Numbers	
110	item bescription	Offics	Quartities	Dollars	Cents	Dollars	Cents
202.1211	Remove Existing Concrete Haunches	Linear Foot	9,200				
645.501	Remove and Reset Bridge Mounted Sign	Lump Sum	1				
652.3611	Maintenance of Traffic Control Devices at Ramp J	Lump Sum	1				
652.3612	Maintenance of Traffic Control Devices at Ramp M	Lump Sum	1				
652.3613	Maintenance of Traffic Control Devices at Wilson Road	Lump Sum	1				
652.3614	Maintenance of Traffic Control Devices at Berwick Road	Lump Sum	1				
652.3615	Maintenance of Traffic Control Devices at Fletcher Street/Route 35	Lump Sum	1				
652.3616	Maintenance of Traffic Control Devices at Alfred Street	Lump Sum	1				

CARRIED FORWARD:	
------------------	--

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	-
	'			Dollars	Cents	Dollars	Cents
BROUGHT FORWARD:							
652.3617	Maintenance of Traffic Control Devices at Beech Ridge Road	Lump Sum	1				
652.3618	Maintenance of Traffic Control Devices at Scarborough Interchange	Lump Sum	1				
652.3619	Maintenance of Traffic Control Devices at Gorham Road	Lump Sum	1				
659.10	Mobilization	Lump Sum	1				
				TC	OTAL:		

Acknowledgment is hereby made of the foll and Specifications:	owing Addenda received since issuance of the Plans
	original bid bond, cashiers or certified check on Bank, for,
payable to the Maine Turnpike Authority. I Turnpike Authority and the undersigned sho security required by the Maine Turnpike Au time fixed therein, an amount of money equ Proposal for the Contract awarded to the und	In case this Proposal shall be accepted by the Maine buld fail to execute a Contract with, and furnish the athority as set forth in the Specifications, within the lal to Five (5%) Percent of the Total Amount of the dersigned, but not less than \$500.00, obtained out of leck, shall become the property of the Maine Turnpike
The performance of said Work und specified in Subsection 107.1.	er this Contract will be completed during the time
	e of this Contract and that I (we) will, in the event of the time limit named above, pay to Maine Turnpike or amounts stated in the Specifications.
	rtnership/Corporation under the laws of the State of at,
	(SEAL)
Affix Corporate Seal or Power of Attorney	(SEAL)
Where Applicable	(SEAL)
	By:
	Its:

Information below to be typed or printed where ap	plicable:				
INDIVIDUAL:					
(Name)	(Address)				
PARTNERSHIP - Name and Address of General	Partners:				
(Name)	(Address)				
(Name)	(Address)				
(Name)	(Address)				
(Name)	(Address)				
INCORPORATED COMPANY:					
(President)	(Address)				
(Vice-President)	(Address)				
(Secretary)	(Address)				
(Treasurer)	(Address)				

MAINE TURNPIKE AUTHORITY

MAINE TURNPIKE

YORK TO AUGUSTA

CONTRACT AGREEMENT

This Agreement made and entered into between the Maine Turnpike Authority, and sometimes termed the "Authority", and
herein termed the "Contractor":
WITNESSETH: That the Authority and the Contractor, in consideration of the premises and of the mutual covenants, considerations and agreements herein contained, agree as follows:
FIRST: The parties hereto mutually agree that the documents attached hereto and herein incorporated and made a part hereof collectively evidencing and constituting the entire Contract to the same extent as if herein written in full, are the Notice to Contractors, the Accepted Proposal, the Specifications, the Plans, this Agreement, the Contract Bond and all Addenda to the Contract Documents duly issued and herewith enumerated:
SECOND: The Contractor for and in consideration of certain payments to be made as hereafter specified, hereby covenants and agrees to perform and execute all of the provisions of this Contract and of all documents and parts attached hereto and made a part thereof, and at his own cost and expense to furnish and perform everything necessary and required to construct and complete, ready for its intended purpose, in accordance with the Contract and such instructions as the Engineer may give, acceptable to the Authority, in the times provided, all of the Work covered and included under Contract No as herein described.
THIRD: In consideration of the performance by the Contractor of his covenants and agreements as herein set forth, the Authority hereby covenants and agrees to pay the Contractor according to the Schedule of Prices set forth in the Proposal with additions and deductions as

elsewhere herein provided in the times and in the manner stated in the Specifications. This Agreement shall insure to the benefit of, and shall be binding upon the parties hereto, and upon their respective successors and assigns; but neither party hereto shall assign or transfer his interest

herein in whole or in part without the consent of the other, except as herein provided.

IN WITNESS WHEREOF the parties to this Agreement have executed the same in quintuplicate.

	AUTHORITY -
	MAINE TURNPIKE AUTHORITY
	By: Title: CHAIRMAN
	Date of Signature:
ATTEST:	
Secretary	
	CONTRACTOR -
	CONTRACTOR
	By:
	Title:
	Date of Signature:
WITNESS:	

CONTRACT BOND

KNOW ALL MEN BY	THESE PRESENT	ΓS that	
of in the	e County of	and State of _	
as Principal, and		a Corporation duly orga	nized under the
laws of the State of	and having a	usual place of business in	
		o the Maine Turnpike AuthorityDollars (\$	
to be paid to said Maine Turnpil	ke Authority, or it	s successors, for which payment ors, successors and assigns jointly	, well and truly
foregoing Contract Nosatisfy all claims and demands equipment and all other items contemplated by said Contract, which the Obligee may incur in shall be null and void; otherwise	shall incurred for the secontracted for, of and shall fully refer making good any etit shall remain in	at the Principal, designated as Confaithfully perform the Contract same and shall pay all bills for lar used by him, in connection with the Contract same and shall pay all bills for lar used by him, in connection with the Contract of the	on his part and labor, material, with the Work ay and expense this Obligation
Witnesses:	·	CONTRACTOR	
			(SEAL)
			(SEAL)
			(SEAL)
		SURETY	
			(SEAL)
			(SEAL)
			(SEAL)

CB-1

(Surety must attach copy of Power of Attorney showing authority of Office or Agent to execute bonds)

FINAL LIEN AND CLAIM WAIVER AND AFFIDAVIT

Upon receipt of the sum of	, which sum
	current payment for work done and materials supplied for
Project No, in	Maine, under the undersigned's
Contract with the Maine Turnpike Authority.	
The undersigned, on oath, states that t	the Final Payment of is the
final payment for all work, labor, materials, serv	vices and miscellaneous (all of which are hereinafter referred
	ect through and that no
additional sum is claimed by the undersigned r	especting said Project.
	t all persons and firms who supplied Work Items to the eve been fully paid by the undersigned for such Work Items nediately upon receipt of this payment.
* *	ith made, the undersigned does fully and finally release and and its Surety, if any, from any and all claims, liens or right er any applicable bond, law or statute.
It is understood that this Affidavit is sclaims relating to the Work Items furnished by	submitted to assure the Owner and others that all liens and the undersigned are paid.
(Contractor)	_
	Ву:
	Title:
State of MAINE	Title
County of	
country of	
I,, hereby certif	fy on behalf of(Company Name)
its, being first o	luly sworn and stated that the foregoing representations are
(Title)	
	nd that the foregoing is his free act and deed in said capacity
	(Company Name)
The above-named,	, personally appeared before me this day of
and swears that this is his fi	ree act and deed.
	(SEAL)
	Notary Public
	·
	My Commission Expires:

MAINE TURNPIKE AUTHORITY

SPECIFICATIONS

<u>PART I – 2016 MTA SUPPLEMENTAL SPECIFICATIONS</u>

Available on the MTA Website

MAINE TURNPIKE AUTHORITY

SPECIFICATIONS

<u>PART II – SPECIAL PROVISIONS</u>

PART II - SPECIAL PROVISIONS

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-	PLANS	SP-1
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102.6	BID GUARANTY	SP-2
103.4	NOTICE OF AWARD	SP-2
104.3.8	WAGE RATES AND LABOR LAWS	SP-2
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515.	PROTECTIVE COATINGS FOR CONCRETE SURFACES (Clear Protective Coating)	SP-13
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MAINE TURNPIKE AUTHORITY

SPECIFICATIONS

PART II - SPECIAL PROVISIONS

All work shall be governed by the Maine Department of Transportation Standard Specifications, Revision of November 2014, except for that work which applies to sections of the Maine Department of Transportation Standard Specifications which are amended by the 2016 Maine Turnpike Supplemental Specifications and the following modifications, additions and deletions.

General Description of Work

The work consists of completely removing the widened concrete haunches over the paved surface of the roadway, removing all debris from below the bridge, and sealing with clear protective coating. The work also includes installation of the street name plaque on both faces of the Wilson Road and Alfred Street bridges, as well as relocating the bridge mounted sign structure on the Gorham Road bridge. Maintenance of traffic and all other work incidental thereto will be completed in accordance with the Plans and Specifications.

Plans

The drawings included in these Contract Documents, and referred to as the Plans, show the general character of the work to be done under this Contract. They bear the general title "Maine Turnpike – Contract 2025.16 – Widened Concrete Haunch Removal. The right is reserved by the Resident to make such minor corrections or alterations in the Plans as he deems necessary without change in the unit prices on the Schedule of Prices of the Proposal.

101.2 Definition

Holidays

The following are added to the list of Holidays with extended Holiday Period:

<u>HOLIDAY</u>	<u>HOLIDAY PERIOD</u>
Christmas	12:00 p.m. (noon) on December 23rd to 6:00 p.m. following Sunday.
New Year's Day	12:00 p.m. (noon) on December 31st to 6:00 p.m. following Sunday.

102.6 Bid Guaranty

Replace the last paragraph with:

Bid Bonds must be (A) issued by an insurance company licensed or approved by the State of Maine, Department of Business Regulation, Bureau of Insurance, to do business in the State of Maine; and (B) properly signed by the Bidder (as Principal) and duly authorized representative of the insurance company referenced above.

103.4 Notice of Award

The following sentence is added:

The Maine Turnpike Authority Board is scheduled to consider the Contract Award on November 20, 2025.

104.3.8 Wage Rates and Labor Laws

Section 104.3.8 Wage Rates and Labor Laws has been amended as follows:

The fair minimum hourly rates determined by the State of Maine Department of Labor for this Contract are as follows:

State of Maine Department of Labor Bureau of Labor Standards Augusta, Maine 04333-0045 Telephone (207) 623-7906

Wage Determination - In accordance with 26 MRS §1301 et. seq., this is a determination by the Bureau of Labor Standards, of the fair minimum wage rate to be paid to laborers and workers employed on the below titled project.

2025 Fair Minimum Wage Rates - Heavy & Bridge York County

Occupational Title	Minimum Wage	Minimum Benefit	<u>Total</u>
Brickmasons And Blockmasons	\$31.00	\$6.52	\$37.52
Bulldozer Operator	\$32.68	\$5.28	\$37.96
Carpenter	\$32.00	\$4.11	\$36.11
Cement Masons And Concrete Finisher	\$25.33	\$17.07	\$42.40
Construction And Maintenance Painters	\$46.51	\$26.16	\$72.67
Construction Laborer	\$27.50	\$4.94	\$32.44
Crane And Tower Operators	\$45.00	\$5.60	\$50.60
Crushing Grinding And Polishing Machine Operators	\$27.50	\$5.64	\$33.14
Earth Drillers - Except Oil And Gas	\$22.42	\$4.18	\$26.60
Electrical Power - Line Installer And Repairers	\$54.05	\$23.81	\$77.86
Electricians	\$37.00	\$15.58	\$52.58
Elevator Installers And Repairers	\$71.21	\$43.75	\$114.96
Excavator Operator	\$39.00	\$5.50	\$44.50
Fence Erectors	\$22.00	\$2.06	\$24.06
Flaggers	\$21.50	\$0.54	\$22.04
Floor Layers - Except Carpet/Wood/Hard Tiles	\$26.50	\$3.83	\$30.33
Glaziers	\$46.26	\$22.61	\$68.87
Grader/Scraper Operator	\$31.00	\$6.86	\$37.86
Hazardous Materials Removal Workers	\$21.13	\$1.14	\$22.27
Heating And Air Conditioning And Refrigeration Mechanics And Installers	\$35.00	\$5,49	\$40.49
Heavy And Tractor - Trailer Truck Drivers	\$30.13	\$2.61	\$32.74
Highway Maintenance Workers	\$22.85	\$4.79	\$27.64
Industrial Machinery Mechanics	\$29.50	\$3.83	\$33.33
Industrial Truck And Tractor Operators	\$26.17	\$3,49	\$29.66
Insulation Worker - Mechanical	\$25.50	\$6.07	\$31.57
Ironworker - Ornamental	\$31.37	\$25.82	\$57.19
Light Truck Or Delivery Services Drivers	\$28.00	\$3.95	\$31.95
Loading Machine And Dragline Operators	\$35.50	\$5.44	\$40.94
Millwrights	\$35.00	\$4.23	\$39.23
Mobile Heavy Equipment Mechanics - Except Engines	\$44.25	\$2.87	\$47.12
Operating Engineers And Other Equipment Operators	\$41.25	\$8.91	\$50.16
Paving Surfacing And Tamping Equipment Operators	\$30.00	\$5.04	\$35.04
Pile-Driver Operators	\$36.00	\$2.87	\$38.87
Pipe/Steam/Sprinkler Fitter	\$33.25	\$8.37	\$41.62
Pipelayers	\$27.48	\$4.72	\$32.20
Plumbers	\$35.00	\$4.47	\$39.47
Pump Operators - Except Wellhead Pumpers	\$56.03	\$34.76	\$90.79
Radio Cellular And Tower Equipment Installers	\$30.00	\$4.85	\$34.85
Reinforcing Iron And Rebar Workers	\$31.95	\$25.00	\$56.95
Riggers	\$30.50	\$8.25	\$38.75
Roofers	\$24.67	\$4.23	\$28.90
Sheet Metal Workers	\$27.00	\$6.21	\$33.21
Structural Iron And Steel Workers	\$31.95	\$25.00	\$56.95
Tapers	\$28.50	\$3.93	\$32.43
Telecommunications Equipment Installers And Repairers - Except Line Installers	\$29.00	\$5.43	\$34.43
Telecommunications Line Installers And Repairers	\$29.00	\$1.84	\$29.84
relecommunications line installers And Repairers	\$28.00	\$1.84	\$29.84

Welders are classified as the trade to which welding is incidental (e.g. welding structural steel is Structural Iron and Steel Worker)

Apprentices – The minimum wage rates for registered apprentices are the rates recognized in the sponsorship agreement for registered apprentices working in the pertinent classification.

For any other specific trade on this project not listed above, contact the Bureau of Labor Standards for further clarification.

Title 26 §1310 requires that a clearly legible statement of all fair minimum wage and benefits rates to be paid the several classes of laborers, workers and mechanics employed on the construction on the public work must be kept posted in a prominent and easily accessible place at the site by each contractor and subcontractor subject to sections 1304 to 1313.

Appeal – Any person affected by the determination of these rates may appeal to the Commissioner of Labor by filing a written notice with the Commissioner stating the specific grounds of the objection within ten (10) days from the filing of these rates.

A true copy

Attest: Scall R Cobine

Scott R. Cotnoir Wage & Hour Director Bureau of Labor Standards

Expiration Date: 12-31-2025 Revision Date: 2-3-2025 State of Maine Department of Labor Bureau of Labor Standards Augusta, Maine 04333-0045 Telephone (207) 623-7906

Wage Determination - In accordance with 26 MRS §1301 et. seq., this is a determination by the Bureau of Labor Standards, of the fair minimum wage rate to be paid to laborers and workers employed on the below titled project.

2025 Fair Minimum Wage Rates - Heavy & Bridge Cumberland County

Occupational Title	Minimum Wage	Minimum Benefit	<u>Total</u>
Brickmasons And Blockmasons	\$31.00	\$6.52	\$37.52
Bulldozer Operator	\$32.68	\$5.28	\$37.96
Carpenter	\$30.78	\$4.43	\$35.21
Cement Masons And Concrete Finisher	\$24.35	\$15.65	\$40.00
Construction And Maintenance Painters	\$45.01	\$26.14	\$71.15
Construction Laborer	\$27.00	\$4.94	\$31.94
Crane And Tower Operators	\$44.07	\$6.92	\$50.99
Crushing Grinding And Polishing Machine Operators	\$27.50	\$5.64	\$33.14
Earth Drillers - Except Oil And Gas	\$22.42	\$4.18	\$26.60
Electrical Power - Line Installer And Repairers	\$53.13	\$21.58	\$74.71
Electricians	\$32.00	\$8.91	\$40.91
Elevator Installers And Repairers	\$71.21	\$43.75	\$114.96
Excavator Operator	\$37.88	\$6.67	\$44.55
Fence Erectors	\$22.00	\$2.06	\$24.06
Flaggers	\$21.50	\$0.54	\$22.04
Floor Layers - Except Carpet/Wood/Hard Tiles	\$26.50	\$3.83	\$30.33
Glaziers	\$46.26	\$22.61	\$68.87
Grader/Scraper Operator	\$31.00	\$6.86	\$37.86
Hazardous Materials Removal Workers	\$21.13	\$1.14	\$22.27
Heating And Air Conditioning And Refrigeration Mechanics And Installers	\$35.00	\$5.49	\$40.49
Heavy And Tractor - Trailer Truck Drivers	\$29.75	\$2.52	\$32.27
Highway Maintenance Workers	\$22.85	\$4.79	\$27.64
Industrial Machinery Mechanics	\$29.50	\$3.83	\$33.33
Industrial Truck And Tractor Operators	\$26.17	\$3.49	\$29.66
Insulation Worker - Mechanical	\$25.50	\$6.07	\$31.57
Ironworker - Ornamental	\$31.37	\$25.82	\$57.19
Light Truck Or Delivery Services Drivers	\$28.00	\$3.95	\$31.95
Loading Machine And Dragline Operators	\$34.63	\$4.94	\$39.57
Millwrights	\$34.50	\$7.70	\$42.20
Mobile Heavy Equipment Mechanics - Except Engines	\$42.50	\$4.04	\$46.54
Operating Engineers And Other Equipment Operators	\$41.25	\$8.91	\$50.16
Paving Surfacing And Tamping Equipment Operators	\$28.00	\$5.04	\$33.04
Pile-Driver Operators	\$36.00	\$2.87	\$38.87
Pipe/Steam/Sprinkler Fitter	\$33.25	\$8.37	\$41.62
Pipelayers	\$27.48	\$4.72	\$32.20
Plumbers	\$35.00	\$4.47	\$39.47
Pump Operators - Except Wellhead Pumpers	\$56.03	\$34.76	\$90.79
Radio Cellular And Tower Equipment Installers	\$30.00	\$4.85	\$34.85
Reinforcing Iron And Rebar Workers	\$31.95	\$25.00	\$56.95
Riggers	\$30.50	\$8.25	\$38.75
Roofers	\$24.67	\$4.23	\$28.90
Sheet Metal Workers	\$27.00	\$6.21	\$33.21
Structural Iron And Steel Workers	\$31.50	\$20.09	\$51.59
Tapers	\$28.50	\$3.93	\$32.43
Telecommunications Equipment Installers And Repairers - Except Line Installers	\$29.00	\$5.43	\$34.43
Telecommunications Equipment Installers And Repairers - except line installers Telecommunications Line Installers And Repairers	\$29.00	\$1.84	\$29.84
relecommunications line installers and kepairers	\$28.00	\$1.84	\$29.84

Welders are classified as the trade to which welding is incidental (e.g. welding structural steel is Structural Iron and Steel Worker)

Apprentices – The minimum wage rates for registered apprentices are the rates recognized in the sponsorship agreement for registered apprentices working in the pertinent classification.

For any other specific trade on this project not listed above, contact the Bureau of Labor Standards for further clarification.

Title 26 §1310 requires that a clearly legible statement of all fair minimum wage and benefits rates to be paid the several classes of laborers, workers and mechanics employed on the construction on the public work must be kept posted in a prominent and easily accessible place at the site by each contractor and subcontractor subject to sections 1304 to 1313.

Appeal – Any person affected by the determination of these rates may appeal to the Commissioner of Labor by filing a written notice with the Commissioner stating the specific grounds of the objection within ten (10) days from the filing of these rates.

A true copy

Attest: Scatt R Colonia

Scott R. Cotnoir Wage & Hour Director Bureau of Labor Standards

Expiration Date: 12-31-2025 Revision Date: 2-3-2025

104.4.6 Utility Coordination

- A. <u>Pre-construction Utility Meeting</u> Whereas utility impacts are not expected as part of this project, a Pre-Construction Utility Meeting will not be held for this project.
- B. <u>Utilities Within Right-of-Way</u>: Except as provided otherwise in the Contract including but not limited to subsection E Temporary Relocations below, all Utility Facilities of all Utility Companies within the Right-of-Way will be relocated and adjusted as provided in the Contract by and at the expense of the affected Utility Company, provided, however, that the Contractor is responsible for scheduling its Work in accordance with the time allowed for utility relocation as provided in the Contract. Utility relocation Work may not proceed without authorization from the Department.

C. Contractor's Responsibilities

- 1. Utility Coordination –The Contractor has primary responsibility for coordinating its work with utilities after contract award. The Contractor shall communicate directly with the utilities regarding any utility work necessary to maintain the Contractor's schedule and prevent project construction delays. The Contractor shall notify the Resident of any issues. The Contractor shall plan and conduct its work accordingly.
- 2. The Contractor must exercise every reasonable precaution to prevent damage to Utility Facilities or interruption to utility services known to or discovered by the Contractor, whether or not shown on the Plans. Such precautions must include notice to Utility Companies before undertaking Work that could damage Utility Facilities. The Contractor must provide each Utility Company with notice at least three Business Days before the date a Utility Company will have to support any pole.
- 3. The Contractor must take all reasonable precautions to determine the presence of underground Utility Facilities before commencing any excavation Work and must provide all affected Utility Companies with at least 72-hour prior notice of the proposed excavation. The Contractor must comply with 23 MRSA § 3360-A, entitled "Protection of Underground Facilities," Maine's "Dig Safe" statute, and also contact the non-member underground facility operators in the Maine Public Utilities Commission's "OK-TO-DIG" directory.
- 4. The contractor shall notify the Resident 10 calendar days prior to submitting a utility locate request through Dig Safe so that the Resident can arrange for Maine Turnpike underground utility location. All proposed sign locations and excavation shall be marked at the notification time.
- 5. The Contractor must maintain initial markings (spray paint, stakes, etc.) made by the authorized representative of a Utility Company to indicate the location of underground Utility Facilities and otherwise comply with 23 MRSA § 3360-A(4).

- 6. The Contractor must cooperate with Utility Companies in its relocation or operations so that these operations proceed in a logical sequence, minimize duplication of Work, and avoid unnecessary interruptions to utility service.
- 7. If utility services are interrupted as a result of the Contractor's Work, the Contractor must promptly notify the appropriate Utility Company and must cooperate fully in the restoration of service. If service is interrupted, repair Work will be continuous until the service is restored. No Work can be undertaken around fire hydrants until the local fire authority has approved provisions for continued services.
- 8. The Contractor must schedule its Work so as to provide for all Utility Company Work and to complete the Work within the Contract Time. The estimated number of workdays required by each Utility Company to perform its relocation Work contained in the Contract is provided by the Utility Companies and are estimates only. Such Utility Facility relocation times assume normal Working times (Monday through Friday, 8 hours per day), and are dependent upon normal weather, normal Working conditions, and freedom from emergencies. The Authority is not responsible for the accuracy of these estimates. If a Utility Company fails to perform its Work within the time frames set forth in the Contract or in the minutes of the Pre-construction Utility Meeting, and such failure affects the Contractor's Critical Path, the Contractor may request a suspension of Work pursuant to Section 107.5.2 and such Delay will be analyzed in accordance with Section 109.5 Adjustments for Delay.
- 9. Any clearing and tree removal that is a part of the Contract and that must be done in areas where Utility Companies are involved must be completed by the Contractor before the Utility Company can relocate its Utility Facilities. Any clearing, cutting of single trees, or limbing required for the temporary or permanent Utility Facility location must be approved by the Authority. The Contractor must provide the Authority with prior notice of at least 4 Days before removing or trimming any trees or other vegetation.
- 10. If blasting occurs on the Project, the Contractor must provide each Utility Company having Utility Facilities that could be damaged by the blast with at least 24-hour prior notice that includes the anticipated time of the initial blast.
- 11. If the Contractor observes a Utility Company Working within the Project Limits in a manner that (A) violates the MUTCD, the Contractor's Traffic Control Plan, or an applicable OSHA requirement or commonly accepted safety practices, and (B) represents a clear and immediate risk of significant bodily injury to any person within the Project Limits, then the Contractor must notify the Resident and the Utility Company immediately.
- 12. The Contractor agrees to indemnify, defend, and hold harmless the Authority from and against any and all claims or causes of action arising from any act or omission of the Contractor, the Subcontractors or their respective agents, representatives, or employees for failure to comply with this Section. This clause is not meant to limit in any way the Contractor's general indemnification obligations under this Contract.

D. <u>Cost</u> The cost of all Work related to utility coordination is Incidental to the Contract.

Bridge mounted utilities are present in the northern and southern girder bays at Wilson Road (MM 2.0). Bridge mounted utilities are present in the northern girder bays at Scarborough Interchange (MM 42.5). Access in and around the utilities shall be incidental to the work. Utility relocation to perform the work is prohibited. See plans for bridge mounted utilities existing condition photos.

Utility working days are Monday through Friday, conditions permitting. Times are estimated on the basis of a single crew for each utility. Any times and dates mentioned are estimates only and are dependent upon favorable weather, working conditions, and freedom from emergencies. The Contractor shall have no claim against the Authority if they are exceeded.

The Contractor shall plan and conduct his operations in accordance with the following utility schedule. The Contractor must comply with all OSHA regulations pertaining to work adjacent to utility wires. The Contractor shall plan and conduct his work accordingly.

The following utilities are located within the Project limits. The Contractor shall ascertain the location of the existing utilities and any other necessary information by direct inquiry at the office of the following utility owners:

AERIAL UTILITIES

COMMUNICATION:

Consolidated Communications
5 Davis Farm Road
Portland, ME 04013
ATTN: Marty Pease (207) 272-7993
martin.pease@consolidated.com

Consolidated Communications has bridge mounted utilities and services within project limits at Wilson Road underpass. No work or coordination is anticipated as part of this project.

SEWER:

Kittery Sewer Department 200 Rogers Road Kittery, ME 03904 Tim Babkirk (207) 439-4646 tbabkirk@kitteryme.org

Town of Kittery Sewer has bridge mounted utilities and services within project limits at Wilson Road underpass. No work or coordination is anticipated as part of this project.

ELECTRIC:

Central Maine Power Company 57 Old Winthrop Road Augusta, Maine 04330 Timothy Laney (207) 620-3410 timothy.laney@cmpco.com

Central Maine Power has bridge mounted utilities and services within project limits at Scarborough Interchange underpass. No work or coordination is anticipated as part of this project.

104.4.7 Cooperation With Other Contractors

This subsection is amended by the addition of the following:

Adjacent Contracts currently scheduled for the 2025-2026 Construction season include:

MTA Contract 2022.07 Saco Interchange (MM 35.0 – MM 36.0)

MTA Contract 2025.01 Pavement Rehabilitation, Guardrail & Drainage Improvements, Bridge Joint Repairs (MM 13.4 – MM 20.0)

MTA Contract 2025.02 Paving – NB (MM 42.0 – MM 49.3)

MTA Contract 2025.04 Bridge Repairs (MM 4.8 and MM 34.40)

MTA Contract 2025.07 Culvert Repair – Dunstan River (MM 40.3)

MTA Contract 2025.17 Bridge Repairs (MM 33.0 and MM 50.0)

MTA Contract 2026.02 Paving (MM 27.2 – MM 30.0)

MTA Contract 2026.04 Bridge Painting (MM 4.8, MM 10.6, MM 13.8 and MM 25.3)

MTA Contract 2026.05 Bridge Repairs (MM 39.9, MM 44.3 and MM 44.91)

MTA Contract 2026.06 Bridge Repairs (MM 19.9, MM 21.7, MM 23.6, and MM 24.7)

MTA Contract 2026.14 Bridge Repairs (MM 0.7, MM 31.6, MM 35.7)

107.1 Contract Time and Contract Completion Date

This Subsection is amended by the addition of the following:

All Work on Berwick Road and Fletcher Street shall be completed on or before April 1, 2026.

All work shall be completed on or before May 20, 2026.

107.1.1 Interim Substantial Completion and Substantial Completion

This Subsection is amended by the addition of the following:

All work shall be substantially completed by May 15, 2026. Substantially complete shall be defined by the authority as the following:

- All haunch removal complete
- All Clear protective coating complete
- Local Road Name Sign installation complete
- Bridge Mounted Sign Relocation complete
- No lane closure or demobilization (Removal of construction, and general clean up) remaining

107.3.2 Night Work

This Subsection is amended by the addition of the following:

Nightwork will be allowed within the limitations defined in Section 652. The Contractor shall formally notify the Resident of their intent to perform night work a minimum of 14 calendar days ahead of the planned nightwork.

107.3.3 Sundays and Holidays

This Subsection is amended by the addition of the following:

Sunday work operations will be allowed within the limitations defined in Section 652. The Contractor shall formally notify the Resident of their intent to work on a Sunday a minimum of 14 calendar days ahead of the planned Sunday work.

108.2.1 Generation of Progress Payments

The Authority will estimate the amount of Work performed at least monthly and make payment based upon such estimates. Estimates may be paid bimonthly (twice-amonth) if the bimonthly (twice-a-month) invoices exceed \$100,000. No such estimates or payment will be made if, in the judgment of the Authority, the Work is not proceeding in accordance with the provisions of the Contract. The Contractor agrees to waive all claims related to the timing and amount of such estimates.

108.8 Final Payment

The first paragraph is deleted in its entirety and replaced with the following:

Following conditional acceptance of the physical Work under subsection 107.9.3, and submission of 100% As-built plans to the Resident, in accordance with Special Provision 105, the Authority will prepare a final Invoice reflecting final quantities of the items of Work performed. The Authority may require the Contractor to provide information necessary to substantiate Pay Items, including Statements itemizing Force Account Work. The Authority will make final payment upon approval of the Authority's board, in the amount of the Work done, less all previous payments and all amounts to be retained or deducted under the provisions of the Contract. For a related provision, see Section 107.9.5 – Final Acceptance.

SPECIAL PROVISION

SECTION 202

REMOVING STRUCTURES AND OBSTRUCTIONS

(Removing Existing Girder Haunches)

202.03 Removing Existing Superstructure, Structural Concrete, Railings, Curbs, Sidewalks and Bridges

The following paragraphs are added:

Removing existing girder haunches shall consist of removing and properly disposing of concrete haunches as shown on the plans and shall be accomplished without damage to the portion of the existing structure to remain. The Contractor shall submit a girder haunch removal plan to the Resident for approval. The girder haunch removal plan shall describe the removal procedure, type and size of equipment, containment methods and disposal.

The existing girder haunches shall be removed using pneumatic chipping hammers of a size approved by the Resident, or other methods approved by the Resident. The Contactor shall remove the haunch to an approximate 45° angle, as shown in the Plans. The Contractor is not required to grind the removal line to a smooth finish.

The Contractor shall coat all newly exposed areas of concrete, as well as areas of concrete haunch removal previously completed by Turnpike maintenance staff, with a Type lc penetrating silane concrete sealer, in accordance with Standard Specification Section 515.

The Contractor shall install and remove all traffic control devices required to complete the work including Flashing Arrow Boards, Drums, Cones, Construction Signs, and Flaggers as well as Maintenance of Traffic Control Devices.

202.07 Method of Measurement

The following paragraph is added:

Removing Existing Girder Haunches completed in accordance with these specifications and the plans contained herein shall be measured by the linear foot. The haunch on each side of the girder shall be measured for payment separately.

Maintenance of Traffic Control Devices will not be measured for payment under this item but shall be paid separately under the respective bid items.

202.08 Basis of Payment

The accepted work for Removing Existing Girder Haunches shall be paid at the Contract unit price per linear foot complete, accepted and disposed of. The payment of will be full compensation for furnishing all materials, labor, equipment, access, and for all incidentals required to complete the work, including coating all newly exposed areas of concrete.

Payment will be made under

Pay Item		Pay Unit
202.1211	Remove Existing Girder Haunches	Linear Foot

SPECIAL PROVISION

SECTION 515

PROTECTIVE COATING FOR CONCRETE SURFACES

(Clear Concrete Protective Coating)

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 clear protective coating on concrete surfaces to protect existing concrete exposed by concrete haunch removals completed by the contractor, or previously completed by MTA maintenance forces. The coating system shall be applied to areas of haunch removal between the faces of roadside piers or, where roadside piers are not present, between the outside edges of roadway pavement. Coating application shall be in accordance with the Plans, Specifications and the manufacturer's published recommendations.

515.02 Materials

The penetrating sealer shall be:

Certi-Vex Penseal 244-100%

Type lc Penetrating Silane Min. Appl. Temp. (F) 20-90

Silanes (%) 100% silane, alcohol based

VOCs (g/L) < 250

Sikagard 705 L

Type lc Penetrating Silane Min. Appl. Temp. (F) 40-95

Silanes (%) 100% silane, alcohol based

VOCs (g/L) 100

SIL-ACT ATS-100 LV Silane

Type lc Penetrating Silane Min. Appl. Temp. (F) 40-110

Silanes (%) 100% silane, alcohol based

VOCs(g/L) < 250

SIL-ACT ATS-300

Type lc Penetrating Silane

Min. Appl.Temp. (F) 20-110

Silanes (%) 100% silane, solvent based

VOCs (g/L) 242

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's data sheets, material safety data sheets and recommended instructions for application.

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

515.03 Surface Preparation

All caulking, patching, and joint sealant shall be installed prior to application of the sealer. On new surfaces to be treated, all voids shall be dressed by dry rubbing to remove form marks and blemishes to present a neat appearance. Concrete and masonry surfaces shall be cleaned free of dust, surface dirt, oil, efflorescence and contaminants to ensure penetration of the sealer.

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.

515.04 Application

The Contractor shall apply the clear concrete protective coating in strict accordance with the manufacturer's published recommendations.

The work shall not be conducted when there is a chance of the surface temperature falling below minimum allowable temperature in the 24-hours following application; nor should it be applied on hot, windy days.

The treatment shall not be applied during rain to wet surfaces. It shall not be applied when winds are sufficient to carry airborne chemicals. Product shall be cured per the manufacturer's recommendations.

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.

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. Pre-testing is required to determine acceptability of the procedure.

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.

When the sealer is applied to vertical and sloped surfaces, it shall be applied in a "wet-on-wet" application for best results on most porous materials. In the case of extremely dense concrete, it may be necessary to restrict the amount of material applied to one saturating application in order to prevent surface darkening.

515.05 Method of Measurement

Clear Protective Coating for Concrete Surfaces will not be measured for payment separately but shall be incidental to the Remove Existing Girder Haunches Pay Item.

SPECIAL PROVISION

SECTION 524

TEMPORARY STRUCTURAL SUPPORTS

(Protective Curtain Shielding - Steel Girders)

524.01 Description

The following paragraph is added:

This work shall also consist of furnishing all labor, equipment and materials required to provide protection for the public during removal of existing girder haunches. This protection shall include, but not necessarily be limited to, protective curtain shielding attached to existing structures during chipping work and concrete removal, containing concrete removal debris within the work area and preventing demolition debris from entering the adjacent active travel lane.

The following Subsections are added:

524.031 Protective Curtain Shielding Design

Prior to the start of work, the Contractor shall submit working drawings for review and comment indicating the sizes and dimensions of protective curtain shielding. The proposed methods of protective curtain shielding, including connections and fasteners, shall be in accordance with the following criteria:

The protective shielding shall be designed to safely contain concrete haunch removal debris, without ripping or tearing, and withstanding wind loads, including wind loads imposed by adjacent vehicular traffic. The protective curtain shielding shall be temporarily secured to the flanges of the steel girders, between the webs of the steel girders tight to the concrete deck, and the bottom shall be weighted at ground level with edges and laps made tight to protect the Turnpike motorists from dust, debris and falling objects.

The Contractor will not be permitted to shoot fasteners or drill holes in the steel girders or concrete deck to support the shielding.

524.041 Protective Curtain Shielding Erection and Removal

The following paragraphs are added:

No portion of the protective curtain shielding installed over a roadway, within the temporary lane closure, will be permitted to project beyond a vertical plane into the adjacent active travel lane. The protective curtain shielding shall be erected after the travel lane is closed and shall be removed prior to reopening the lane to traffic. All components and hardware used to attach the protective curtain shielding to the structure shall be removed prior to reopening the lane to traffic.

The protective curtain shielding shall be attached to the steel girders and shall be weighted at the bottom of the curtain to the ground to prevent wind gusts and vehicular induced wind gusts from displacing the deployed protective curtain shielding. Installed shielding shall be approved by the Resident prior to the start of any demolition work. The protective curtain shielding shall be in place when concrete haunch removal is occurring within 6 feet of an active travel lane, unless otherwise approved by the Resident.

524.28 Method of Measurement

The following paragraph is added:

Protective Curtain Shielding will not be measured for payment but shall be considered incidental to the Remove Existing Girder Haunches Pay Item.

SPECIAL PROVISION

SECTION 645

HIGHWAY SIGNING

(Remove and Reset Bridge Mounted Sign)

645.01 Description

The following paragraph is added:

This work shall consist of removing and resetting the existing highway guide sign on Gorham Road Bridge (MM 44.0), including exit plaque, as shown on the Plans. The work includes a combination of the following: removing and remounting the guide sign and exit plaque, removal, modifying, and resetting the bridge mounted steel sign support, and includes temporary removal and reinstallation of the existing snow fence.

645.02 General

The following paragraphs are added:

All existing structural steel shapes comprising the bridge mounted sign structure are in acceptable condition and will not be replaced as part of moving the structure. The structure may be disassembled as required with the removal of any bolted fasteners. Welded connections or individual members shall not be cut or modified as part of resetting the bridge mounted steel sign support. Any structural bolts that are detensioned during resetting the structure shall be replaced with new galvanized ASTM F3125 Grade A325 bolts matching the diameter of the existing bolts.

Existing highway guide sign to be remounted level with the roadway below.

Travel lanes under the sign structure shall be closed to traffic while the sign or the bridge mounted sign support is being removed or reset. The Contractor shall submit a temporary traffic control plan detailing the limits of work, including crane location(s) and boom swing path(s), to the Resident a minimum of 10 days prior to the proposed work, for review and approval.

Shop drawings of the existing bridge mounted steel sign support follow this Special Provision.

645.05 Signs

The following paragraphs are added:

The removal and resetting of the mainline signs shall be completed in accordance with the details as shown on the Plans. The Contractor shall keep all signs visible to turnpike drivers except

for the period of time necessary to actually complete the relocation. Three (3) working days are allowed for the sign relocation.

Any damaged area of the bridge mounted steel structural support shall be repaired with two coats of zinc-rich chromium paint.

645.08 Method of Measurement

The following sentence is added:

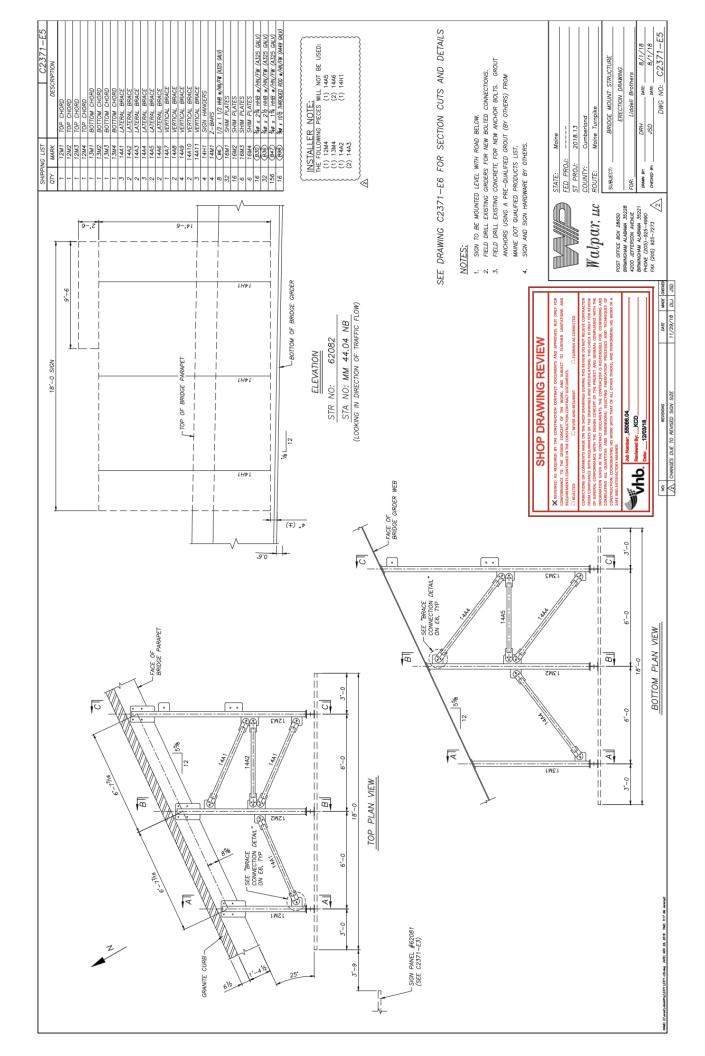
Remove and Reset Bridge Mounted Sign, including the exit plaque, shall be measured for payment as one lump sum.

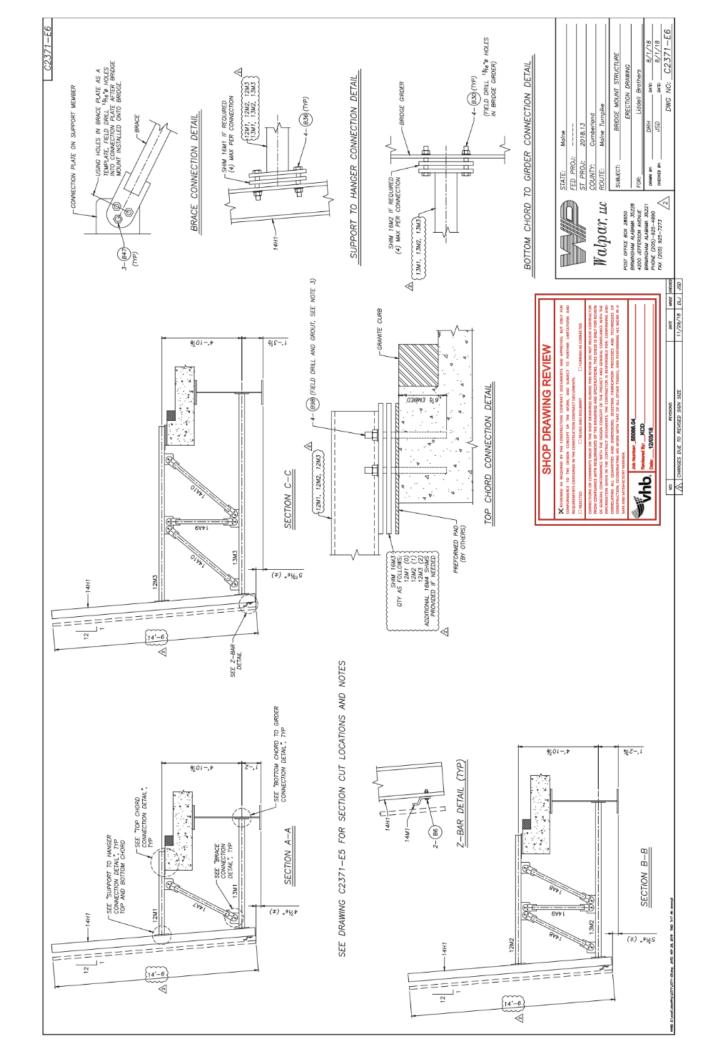
645.09 Basis of Payment

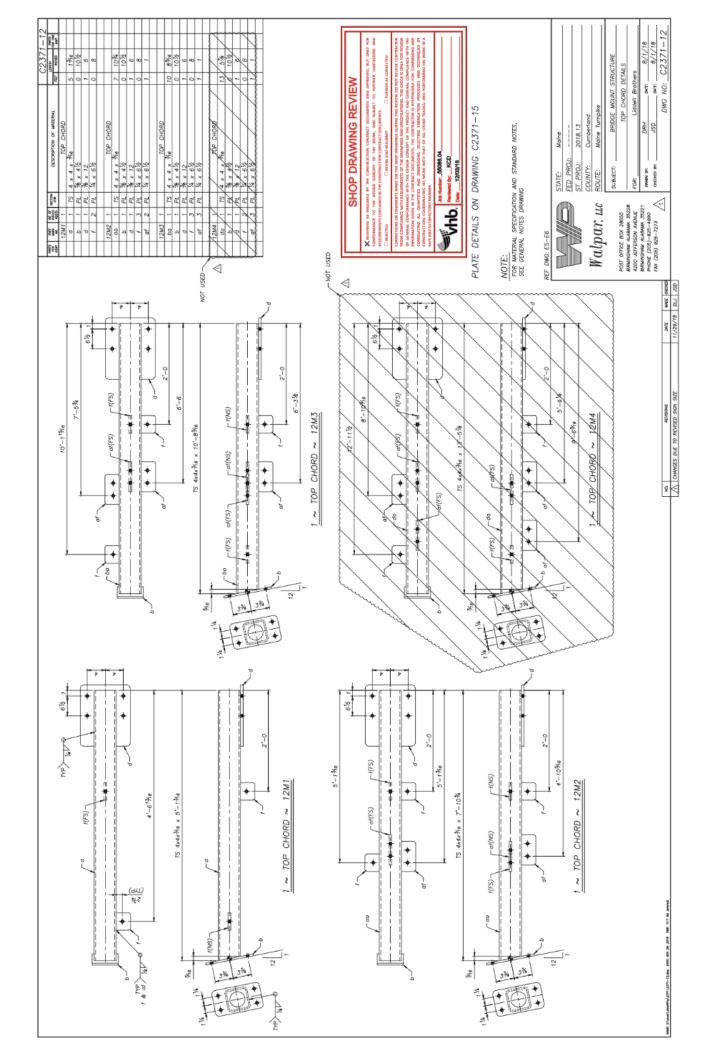
The payment for Remove and Reset Bridge Mounted Sign shall be at the Contract lump sum price. This payment shall be full compensation for furnishing all labor, equipment and materials, removing, modifying, and resetting existing support structure; guide sign; and exit plaque, and all other incidentals necessary to complete the installation in accordance with the details as shown on the Plans. This includes furnishing and installing new materials such as bolts and anchor rods, grout, filling any open holes in steel members with new bolts, removing and resetting the existing snow fence, as required for access, and patching the existing snow fence. Also included is the general restoration of the curb at locations where the sign support structure is removed; removal of existing grout pads, cutting off existing concrete anchor rods, and patching the concrete.

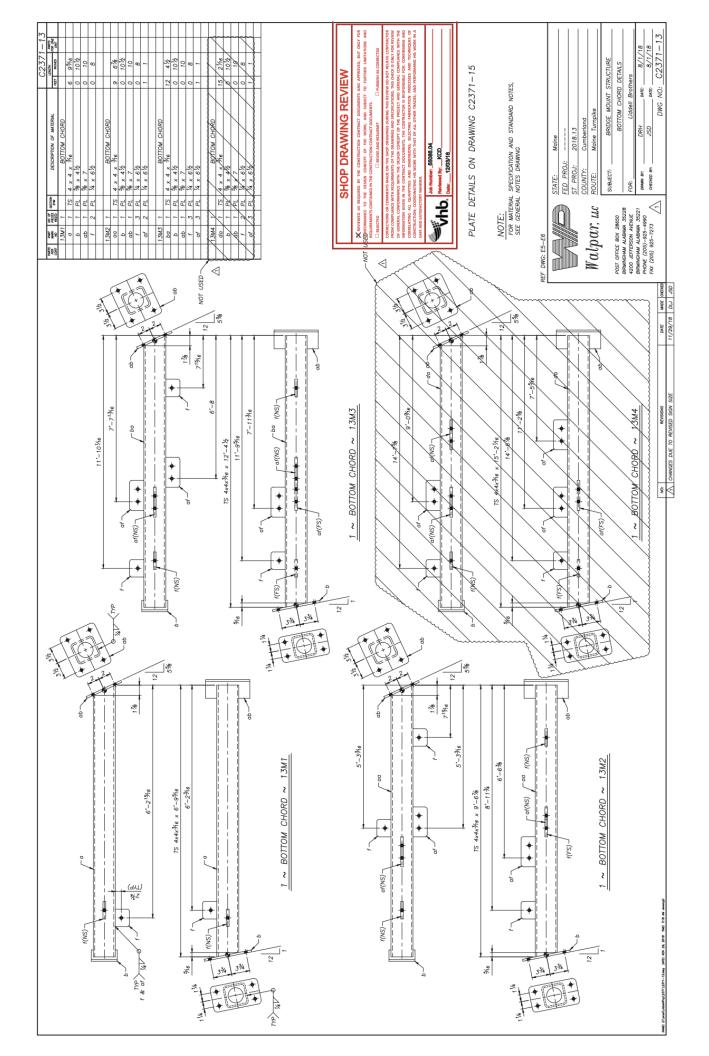
Payment will be made under:

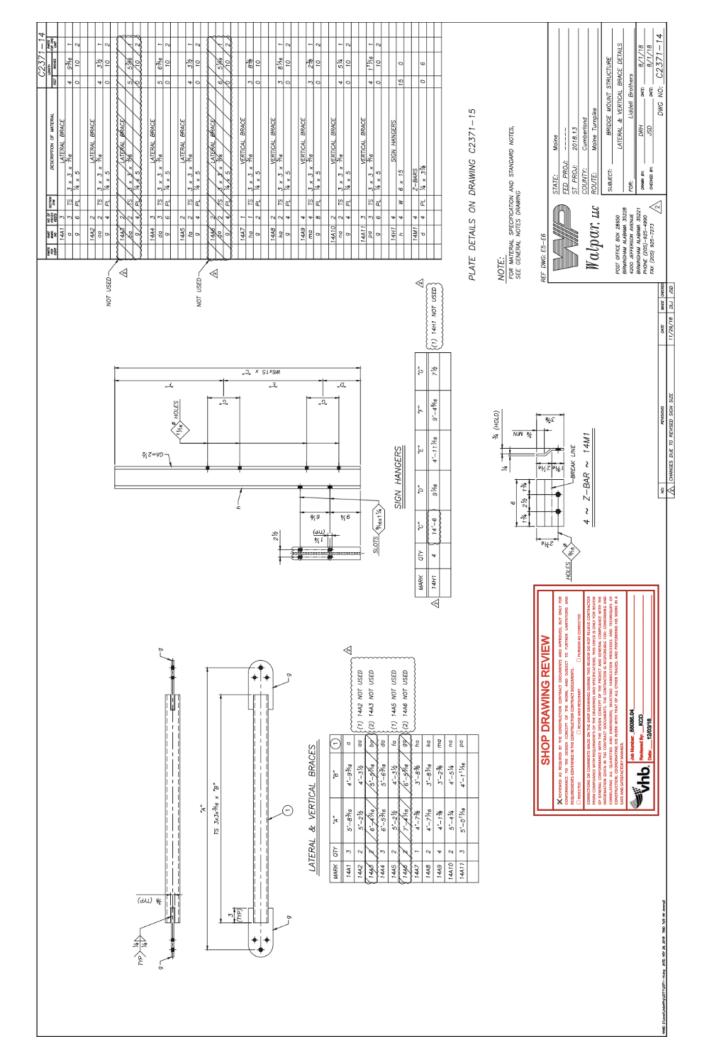
Pay Item		Pay Unit	
645.501	Remove and Reset Bridge Mounted Sign	Lump Sum	











SPECIAL PROVISION

SECTION 645

HIGHWAY SIGNING

(Overlay Existing Guide Sign)

645.01 Description

The following paragraph is added:

This work shall consist of installing sheet aluminum overlays for Type I guide signs in accordance with these specifications and in reasonably close conformity with the Plans. The yellow "Exit Only" with down arrow panel shall be overlaid as shown on the reference plans for Gorham Road (MM 44.0).

645.06 Installation of Type I Signs

The following section is added:

c. Sheet Aluminum Overlays Prior to fabrication of the sheet aluminum overlays, the Contractor shall carefully measure the area of the existing sheet aluminum overlay. The Contractor shall measure and record the rivet layout of the existing aluminum overlay. The measurements (width and height of the existing aluminum overlay and rivet layout) shall be submitted to the Resident Engineer for review.

645.8 Method of Measurement

The following paragraph is added:

New sheet aluminum overlays installed on existing guide signs will not be measured for payment but shall be considered incidental to the Remove and Reset Bridge Mounted Sign item.

645.9 Basis of Payment

The following paragraph is added:

All costs associated with the measurement and installation of sheet aluminum overlays, pick-up and transport of the new signs from the MTA Sign shop to the job site, and all other labor, tools, and incidentals necessary to complete the work shall be considered incidental to the Remove and Reset Bridge Mounted Sign item.

SPECIAL PROVISION

SECTION 645

HIGHWAY SIGNING

(Local Road Name Sign)

645.01 Description

The following paragraph is added:

Local Road Name Sign: This work shall consist of installing or replacing the local road name sign as identified on the Plans. Local road name signs shall be mounted to each fascia girder over the center pier at Wilson Road Bridge and Alfred Street Bridge.

645.02 General

The following paragraphs are added:

Local road name sign panels will be provided by the MTA and installed by the Contractor. The existing local road name signs removed by the Contractor will become the property of the Contractor.

All existing structural steel shapes comprising the sign supports for the existing local road name signs are in acceptable condition and will not be replaced as part of setting a new local road name sign.

For installation of a new local road name sign where a sign does not currently exist, but sign supports are needed, the Contractor shall provide hot dipped galvanized steel sign supports and hardware. This work involves field drilling new holes into the existing steel girder and new galvanized ½" diameter ASTM F3125 Grade A325 Type 1 bolts. Sign supports shall be located within two feet of sign ends. Sign supports shall have a maximum spacing of 5'-0" on center. See detail on next page. Location of the local road name sign support shall be field determined by the Resident. Any damaged area of the bridge mounted steel structural support or existing steel girder shall be repaired with two coats of zinc-rich chromium paint.

Lane 1 shall be closed to traffic while the existing or new sign is being removed or reset.

645.08 Method of Measurement

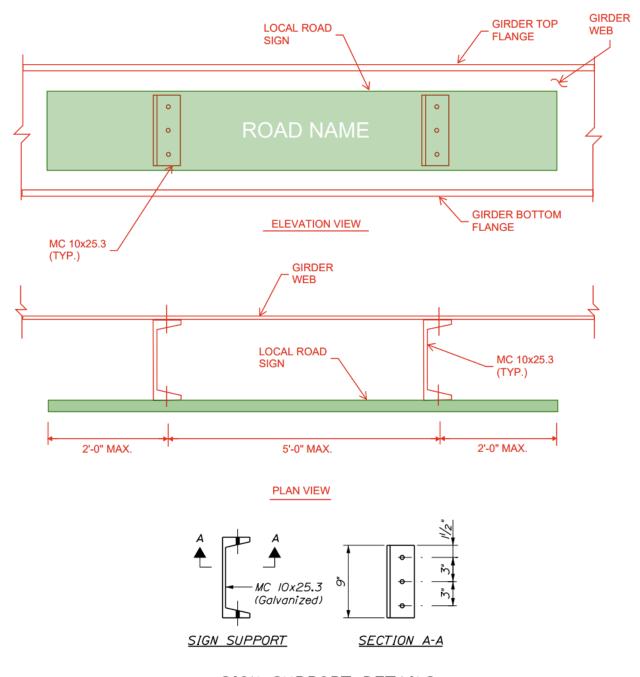
The following paragraph is added:

Removal and installation of the identified local road name signs will not be measured for payment but shall be considered incidental to the Remove Existing Girder Haunches Pay Item. See

Special Provision 202 for measurement of payment of Maintenance of Traffic Control Devices.

645.09 Basis of Payment

All costs associated with the removal of local road name signs, installation of new local road name signs, pick-up and transport of the new signs from MTA Sign Shop to the job site, and all other labor, tools, hardware, sign supports, and incidentals necessary to complete the work shall be considered incidental to the Remove Existing Girder Haunches Pay Item.



SIGN SUPPORT DETAILS

SPECIAL PROVISION

SECTION 652

MAINTENANCE OF TRAFFIC

MaineDOT Standard Specification 2014 Edition Section 652 – Maintenance of Traffic and the Maine Turnpike Authority 2016 Supplemental Specification Section 652 – Maintenance of Traffic are deleted in their entirety and replaced with the following:

652.1 Description

This work shall consist of furnishing, installing, maintaining and removing traffic control devices necessary to provide reasonable protection for motorists, pedestrians and construction workers in accordance with these Specifications, the applicable provisions of Section 105.4.5 - Special Detours, and the plans.

Traffic control devices include signs, signals, lighting devices, markings, barricades, channelizing, and hand signaling devices, portable light towers, truck mounted impact attenuators, portable rumble strips, portable speed trailers, sequential warning lights, traffic officers, and flaggers.

652.2 Materials

All maintenance of traffic control devices shall conform to the requirements of the latest edition of the MUTCD, NCHRP 350 guidelines and all Traffic control devices shall meet Manual for Assessing Safety Hardware (MASH) 16 guidelines if date of manufacture was after December 31, 2019.

All signs shall be fabricated with high intensity fluorescent retroreflective sheeting conforming to ASTM D 4956 - Type VIII, or Type IX (prismatic). All barricades, drums, and vertical panel markers shall be fabricated with high intensity orange and white fluorescent retroreflective sheeting conforming ASTM D 4956 - Type VII, Type VIII, or Type IX (prismatic).

Construction signs shall be fabricated from materials that are flat, free from defects, retroreflectorized, and of sufficient strength to withstand deflections using a wind speed of 80 miles/hr.

652.2.1 Signs

Only signs with symbol messages conforming to the design of the Manual of Uniform Traffic Control Devices (MUTCD) shall be used unless the Resident approves the substitution of word messages.

Any proposed use of temporary plaques to cover text or to change text shall be approved by the resident. All signs or proposed plaques shall have a uniform face and be constructed from

similar sheeting.

All signs shall be new, or in like new condition and maintained in like new condition throughout the project duration. Signs shall be cleaned just prior to installation and throughout the project utilizing a method that will not damage the reflective sign sheeting.

652.2.2 Flashing Arrow Board

Flashing Arrow Boards must be of a type that has been submitted to AASHTO's National Transportation Product Evaluation Program (NTPEP) for evaluation and placed on the Maine Department of Transportations' Approved Products List of Portable Changeable Message Signs & Flashing Arrow Boards.

Flashing Arrow Boards units shall meet requirements of the current Manual on Uniform Traffic Control Devices (MUTCD) for Type "C" panels as described in Section 6F.56 - Temporary Traffic Control Devices. Flashing Arrow Boards shall have matrix of a minimum of 15 low-glare, sealed beam, Par 46 elements capable of either flashing or sequential displays as well as the various operating modes as described in the MUTCD, Chapter 6-F. If a Flashing Arrow Board consisting of a bulb matrix is used, each element should be recess-mounted or equipped with an upper hood of not less than 180 degrees. The color presented by the elements shall be yellow.

Flashing Arrow Board elements shall be capable of at least a 50 percent dimming from full brilliance. Full brilliance should be used for daytime operation and the dimmed mode shall be used for nighttime operation. Flashing Arrow Board shall be at least 96 inches x 48 inches and finished in non-reflective black. The Flashing Arrow Board shall be interpretable for a distance not less than 1 mile.

Operating modes shall include, flashing arrow, sequential arrow, sequential chevron, flashing double arrow, and flashing caution. In the three arrow signals, the second light from the arrow point shall not operate.

The minimum element on-time shall be 50 percent for the flashing mode, with equal intervals of 25 percent for each sequential phase. The flashing rate shall be not less than 25 nor more than 40 flashes per minute. All on-board circuitry shall be solid state.

Primary power source shall be 12 volt solar with a battery back-up to provide continuous operation when failure of the primary power source occurs, up to 30 days with fully charged batteries. Batteries must be capable of being charged from an onboard 110 volt AC power source and the unit shall be equipped with a cable for this purpose.

Controller and battery compartments shall be enclosed in lockable, weather-tight boxes.

The Flashing Arrow Board shall be mounted on a pneumatic-tired trailer or other suitable support for hauling to various locations, as directed. The minimum mounting height of an arrow panel should be 7 feet from the roadway to the bottom of the panel.

The face of the trailer shall be delineated on a permanent basis by affixing retro-reflective material, known as conspicuity material, in a continuous line as seen by oncoming drivers.

A portable changeable message sign may be used to simulate an arrow panel display.

652.2.3 Other Devices

Vertical panel markers shall be orange and white striped, 8 inches wide by 24 inches high. On the Interstate System, vertical panel markers shall be orange and white striped, 12 inches wide by 36 inches high.

Cones shall be orange in color, a minimum of 28 inches high, and retro-reflectorized. Retro-reflection shall be provided by a white bands of retro-reflective sheeting conforming to the MUTCD. All cones utilized on the project shall be new or in like new condition and shall have a consistent design/appearance.

Drums shall be of plastic or other yielding material and shall be a minimum of 36 inches high and a minimum of 18 inches in diameter. There shall be at least two retro-reflectorized orange and at least two retro-reflectorized white stripes a minimum of 4 inches wide on each drum. All drums utilized on the project shall be new or in like new condition and shall have a consistent design/appearance.

Flaggers shall use a STOP / SLOW handheld paddle as the primary and preferred hand signaling device. Flags shall only be limited to emergencies. STOP / SLOW paddles shall have high intensity prismatic retro reflective sheeting, have an octagonal shape on a rigid handle and shall be at least 18 inches wide with letters at least 6 inches high and shall be constructed from light semi-rigid material. The STOP (R1-1) face shall have white letters and a white border on a red background. The SLOW (W20-8) face shall have black letters and a black border on an orange background.

STOP / SLOW paddles shall also incorporate either white or red flashing lights on the STOP face and white or yellow flashing lights on the SLOW face of the paddle and always be in use.

Paddles must conform to one of the following patterns:

- A. Two white or red lights (colors shall be all white or all red), one centered vertically above and one centered vertically below the STOP legend; and/or two white or yellow lights (colors shall be all white or all yellow), one centered vertically above and one centered vertically below the SLOW legend.
- B. Two white or red lights (colors shall be all white or all red), one centered horizontally on each side of the STOP legend; and/or two white or yellow lights (colors shall be all white or all yellow), one centered horizontally on each side of the SLOW legend.

- C. One white or red light centered below the STOP legend; and/or one white or yellow light centered below the SLOW legend.
- D. A series of eight or more small all white or all red lights no larger than 1/4 inch in diameter along the outer edge of the paddle, arranged in an octagonal pattern at the eight corners of the border of the STOP face; and/or a series of eight or more small all white or all yellow lights no larger than 1/4 inch in diameter along the outer edge of the paddle, arranged in a diamond pattern along the border of the SLOW face; or
- E. A series of white lights forming the shapes of the letters in the legend. Flashing light patterns shall be compliant with Section 6E.03 Hand Signaling Devices in the most current version of the Manual on Uniform Traffic Control Devices.

All flashing light patterns on the STOP / SLOW paddle shall be visible from a minimum distance of 1000 feet.

Type I barricades shall be 2 feet minimum, 8 feet maximum in length with an 8 inch wide rail mounted 3 feet minimum above the ground. Type II barricades shall be 2 feet in length with two 8 inch wide rails, and the top rail shall be mounted 3 feet minimum above the roadway. Type III barricades shall be 8 feet in length with three 8 inch wide rails, and the top rail shall be mounted 5 feet minimum above the roadway. The cross members of all barricades shall be of ½ or 5% inch thick plywood or other lightweight rigid material such as plastic, fiberglass or fiber wood as approved by the Resident. The predominant color for supports and other barricade components shall be white, except that unpainted galvanized metal or aluminum components may be used.

652.2.4 Portable Changeable Message Sign

Portable-Changeable Message Signs (PCMS) will be furnished by the Contractor and shall be Ver-Mac PCMS-1210 or an approved equal. The face of the PCMS trailer shall be delineated on a permanent basis by affixing retro-reflective material, known as conspicuity material, in a continuous line as seen by oncoming drivers. PCMS's shall be located and relocated to locations approved by the Resident within the Project limits for the duration of the Project.

Features to the Ver-Mac PCMS shall include:

- An all-LED display.
- Be legible from a distance of 1,000 feet.
- Have three (3) lines available for messages.
- Be NTCIP compliant (NTCIP 1203 & 1204).
- Be capable of being programmed by a remote computer via a data (IP over Cell)

cellular modem connection.

- Have GPS location capability by adding on a GPS device capable of providing GPS location remotely to the MTA Communications' Center.
- Be programmable by Vanguard Software by Daktronics.

The Contractor shall complete and/or provide the following:

- Submit a catalog cut shop drawing to the Resident of all proposed equipment for review and approval.
- Establish and pay for a data cellular account so that PCMS may be remotely programmed and operated from the MTA Communications' Center.
- Provide to the Authority technical support from the PCMS manufacturer that may be necessary to integrate the PCMS into the MTA software platform (Vanguard Software by Daktronics).
- Provide the manufacturer's software necessary to change the PCMS messages remotely from the MTA Communications' Center and the Resident's computer if necessary or requested.
- Provide training on the operation of the PCMS to the Resident and the MTA Communications' Center representative.
- Make all PCMS on the Project work site available to the MTA for any/all emergency situations as defined by the MTA. This shall include the preemption of any messages running at the time of need as approved by the MTA and the Resident.

The Contractor shall also:

- Furnish, operate, relocate and maintain the PCMS as approved or requested by the Resident.
- Be responsible for the day-to-day programming and operation of the PCMS for Project purposes.

The PCMS(s) shall be on-site, with data cellular account established, GPS location capable, and all training required complete within one month after mobilization <u>or</u> seven days prior to implementing traffic shifts, detours or stoppages, whichever is sooner. Implementation of traffic shifts, detours, or stoppages of traffic will not be allowed without PCMS boards on-site with the specified MTA Communications' Center Software Platform integration and training.

652.2.5 Truck Mounted Attenuator

The truck mounted attenuator system shall conform to the following requirements:

- Truck and attached attenuator shall conform to the NCHRP Report 350, Test Level 3 criteria or MASH if manufactured after 2019.
- Amber, Green, white or any variation of those colors strobe lights with 360degree visibility.
- An arrow light bar fixed to the vehicle.
- The attenuator shall be mounted to a vehicle with a minimum weight of 24,000 lbs. unless otherwise specified.

Installation: The TMA shall be located in the closed lane adjacent to active traffic; for double lane closures, only the outer closed lane requires the TMA. If a buffer zone is required the TMA shall not be located in the buffer zone. The shadow vehicle shall have its front wheels turned away from the work area and from traffic, have parking brake set, and be put in park if an automatic transmission; or if a manual transmission it shall have its front wheels turned away from the work area and from traffic, have parking brake set and should be placed in gear and shut off if possible while still maintaining warning lights. If length of time or weather are a concern for the battery since the warning lights must be maintained the engine should be started and run periodically for battery recharging. No other vehicles or equipment shall park in front of the shadow vehicle or within the buffer space behind the shadow vehicle. For placement details, reference the Manual on Uniform Traffic Control Devices (MUTCD).

A Truck Mounted Attenuator **shall** be utilized in all lane closures, and shoulder closures, where workers are not protected by other positive means (i.e., closures that do not include temporary concrete barrier). If work is being completed behind guardrail a TMA shall be required for all work that is being completed within the deflection zone of the guardrail (minimum of four feet behind the guardrail post).

The placement and positioning of the vehicle shall be in accordance with the Manual on Uniform Traffic Control Devices and the manufacturer's recommendation. TMAs used on the Turnpike mainline shall have a minimum weight of 24,000 lbs and shall provide a 200 foot shadow distance from vehicles or the work zone. For lane and shoulder closures in excess of 3,000 feet containing multiple work zones a TMA shall be used at each work zone.

If a Truck Mounted Attenuator is not used as described above, then it will be considered a Traffic Control Plan violation and result in a reduction of payment as outlined in Section 652.

652.2.6 Sequential Flashing Warning Lights

When included in contracts as a bid item Sequential Flashing Warning Lights on drums used for merging tapers and shifting tapers during nighttime operation for project use. The purpose

of these lights is to assist the motorist in determining which direction to merge or shift and to reduce the number of late merges resulting in devices being struck and having to be reset to maintain positive guidance at the merge point. The successive flashing of the lights shall occur from the upstream end of the taper to the downstream end of the taper in order to identify the desired vehicle path.

The Sequential Flashing Warning Lights shall meet all of the requirements for warning lights within the current edition of the MUTCD. Each light unit shall be capable of operating fully and continuously for a minimum of 500 hours when equipped with a standard battery set. Each light in sequence shall be flashed at a rate of not less than 55 times per minutes and not more than 75 times per minute. The flash rate and flash duration shall be consistent throughout the sequence.

Sequential Flashing Warning Lights shall be "Pi-Lit" Sequential Barricade Warning Lamps or an approved equal.

Sequential Flashing Warning lights are to be used for merging and shifting tapers that are in place during the nighttime hours (12-hours when ambient light is dimmed). These lights shall flash sequentially beginning with the first light and continuing until the final light at the beginning of a tangent section.

The Sequential Flashing Warning Lights shall automatically flash in sequence when placed on the drums that form the merging or shifting tapers.

The number of lights used in the drum taper shall equal one half the number of drums used in the taper.

Drums are the only channelizing device permitted for mounting the Sequential Flashing Warning Lights.

The Sequential Flashing Warning Lights shall be weather independent and visual obstruction shall not interfere with the operation of the lights.

The Sequential Flashing Warning Lights shall automatically sequence when placed in line in an open area with a distance between lights of 25 to 150 feet. A 10-foot stagger in the line of lights shall have no adverse effect on the operation of the lights.

If one light fails, the flashing sequence shall continue. Non-sequential flashing is prohibited.

652.2.7 Automated Trailer Mounted Speed Sign

The Contract will furnish, operate, and maintain Automated Trailer Mounted Speed Limit Sign(s) for project use. The automated speed sign shall be required when there is a Work Zone Speed Limit in place. The Contractor shall furnish, operate, and maintain the Automated Trailer Mounted Radar Speed Limit Signs during the project operations

Trailer mounted speed limit signs shall be self-contained units including sign assembly, flashing lights, directional radar to measure speed limits, a regulatory speed limit sign, and power supply specifically constructed to operate as a trailer-mounted sign. The preferred color of the unit shall be "construction orange".

Base material for the regulatory speed limit signs shall be weatherproof, rigid substrate specifically manufactured for highway signing and meet the retro-reflective sheeting application requirements of the sheeting manufacturer.

Sign text shall consist of the letters, digits and symbols either applied by stick-on or silk screen, to conform to the dimensions and designs indicated in the Contract, MUTCD and/or FHWA Standard Highway Signs. The materials and methods shall be in accordance with standard commercial processes.

"Work Zone" construction signs shall be mounted on the trailer unit above the regulatory speed limit sign. (see attached graphic details).

Signs and secondary signs shall follow the MUTCD for minimum mounting heights.

The power supply shall be either full battery power with solar panel charging (capable of maintaining a charged battery level) and 135 amperes, 12-volt deep cycle batteries, or diesel powered generator with a fuel capacity sufficient for 10 hours of continuous operation.

Each unit shall be equipped with two mono-directional flashing lights, placed in accordance with the MUTCD, with amber lenses and reflectors, which are visible through a range of 120 degrees when viewed facing the sign. The lights shall be a minimum of 8-inch diameter, either LED, halogen, or incandescent lamps, and shall be visible for a minimum distance of one mile under daylight conditions and shall have a minimum flash rate of 40 flashes per minute. An "On" indicator light shall be mounted on the back of the signs, which is visible for at least 500 feet to provide confirmation that the flashing lights are operating.

The directional radar shall monitor approaching traffic only. The radar shall be capable of measuring speeds from 5 to 70 MPH at a distance of up to 1500 feet and shall have a high speed cut off thresh hold. Speed data shall be recorded and stored on the sign and must be made available to the Authority as requested.

All existing speed limit signs, which conflict with the construction zone trailer mounted speed limit signs shall be covered completely when the work zone speed limit is in place.

Automated Trailer Mounted Speed Limit Signs shall only be used when a work zone speed limit is in place **and shall be required when the work zone speed limit is active**. The Contractor shall manage the utilization and operation of the Automated Trailer Mounted Speed Limit Signs and if at least one is not used when work zone speed limits are in place then it will be considered a Traffic Control Plan violation and result in a reduction of payment as outlined in Section 652.

The Resident will record the actual time and location for the signs on a daily basis when

the Automated Trailer Mounted Speed Limit Signs are in use.

The Automated Trailer Mounted Radar Speed Limit Sign may be placed as shown on the plans, or may replace the posted regulatory speed limit signs, or may be placed at a location within the closed lane that has a reduced speed limit.

Automated Trailer Mounted Speed Limit Signs shall be delineated with retro-reflective temporary traffic control devices while in use and shall also be delineated by affixing a retro-reflective material directly on the trailer.

Upon delivery of the Automated Trailer Mounted Speed Limit Sign and before acceptance by the Authority, the Contractor shall have a representative of the manufacturer review the condition and notify the Resident in writing, of all deficiencies noted.

The Contractor shall arrange to have all necessary repairs performed at no cost to the Authority.

To avoid impairing driver vision, the Contractor shall dim the lighted speed limit readings by 50 percent during nighttime use and restore full power lighting during daytime operation.

652.2.8 Temporary Portable Rumble Strips

If a pay item is included in the contract or the Contract desires to utilize Temporary Portable Rumble Strips this work consists of furnishing and placing temporary portable rumble strips RoadQuake 2F TPRS or an approved equal. Furnishing a temporary portable rumble strip system includes a method to transport and move these to on-site locations where they will be used. The Contractor shall submit for approval, literature and all necessary certifications to the Maine Turnpike prior to procurement of the product.

If used, Temporary Portable Rumble Strips may not be practicable in areas where the roadway has more than two travel lanes, where volume windows do not allow for breaks in traffic to set up and monitor and adjust, or during nighttime lane closures.

Provide rumble strips where the plans show or as directed by the Resident as follows:

Prior to placing rumble strips, clean the roadway of sand and other materials, that may cause slippage.

Place one end of the rumble strips 6 inches from the roadway centerline. Extend the strips perpendicular to the direction of travel. Ensure strips lay flat on the roadway surface.

Only one series of rumble strips, placed before the first work zone, is required per direction of travel for multiple work zones spaced 1 mile or less apart. Work zones spaced greater than 1 mile apart require a separate series of rumble strips. Each lane shall use one group of temporary rumble strips.

Bracketed "Rumble Strip Ahead" and "Bump" signs shall be utilized and will be paid for under the respective construction sign pay items.

Maintain rumble strips as follows:

If rumble strips slide, become out of alignment, or are no longer in the wheel path of approaching vehicles during the work period, thoroughly clean both sides of the rumble strips and reset on a clean roadway.

Repair or replace damaged rumble strips immediately.

652.3.1 Responsibility of the Authority

The Authority will provide Project specific traffic control requirements and traffic control plans for use by the Contractor. The specific traffic control requirements for the Project are identified in Special Provision Section 652, Maintenance of Traffic (Specific Project Maintenance of Traffic Requirements). No revisions to these requirements or Plans will be permitted unless the Contractor can thoroughly demonstrate an overall benefit to the public and a Contract Modification is approved.

The Maine Turnpike Authority may erect lane closures on the mainline within the Project area to collect survey, provide layout, and for any other reasons deemed necessary by the Authority.

652.3.2 Responsibility of the Contractor

The Contractor shall provide continuous and effective traffic control and management for the Project that is appropriate to the construction means, methods, and sequencing allowed by the Contract and selected by the Contractor:

The Contractor shall ensure all jobsite personnel shall wear a safety vest labeled as ANSI 107-2004 standard performance for Class 3 risk exposures at all times. This requirement also applies to truck drivers and equipment operators when out of an enclosed cab.

652.3.3 Submittal of Traffic Control Plan

The Contractor shall provide continuous and effective traffic control and management for the Project that is appropriate to the means, methods and sequencing allowed by the Contract; and consistent with the Traffic Control Plans and Maintenance of Traffic Specifications. The Contractor is responsible for ensuring a safe environment for the Contract workforce, local road users, and turnpike users; and maintaining the safe efficient flow of traffic through the construction zone at all times during the Contract. The protocols and requirements outlined in the Contract shall be strictly enforced. The Contractor shall submit, at or before the Preconstruction Meeting, a Traffic Control Plan (TCP) that provides the following information to the Authority:

a. The name, telephone number, and other contact numbers (cellular phone, pager, if any) of the Contractor's Traffic Control Supervisor (TCS). The TCS is the person with overall responsibility for ensuring the contractor follows the TCP, and who has received Work Zone Traffic Control Training commensurate with the level of responsibility shown in the requirements of the Contract, and who is empowered to immediately resolve any work zone traffic control deficiencies or issues. Provide documentation that the Traffic Control Supervisor has completed a Work Zone Traffic Control Training Course (AGC, ATSSA, or other industry- recognized training), and a Supervisory refresher training every 5 years thereafter. Submit training certificates or attendance roster that includes the course name, training entity, and date of training. State how the traffic control devices will be maintained including a frequency of inspection for both temporary and permanent traffic control devices.

Traffic Control Training Course curriculum must be based on the standards and guidelines of the MUTCD and must include, at a minimum, the following:

- 1. Parts of Temporary Traffic Control Zone
- 2. Appropriate use and spacing of signs
- 3. Use and spacing of channelizing devices
- 4. Flagging basics
- 5. Typical examples and applications

The Traffic Control Supervisor, or designee directly overseeing physical installation, adjustment, and dismantling of work zone traffic control, will ensure all personnel performing those activities are trained to execute the work in a safe and proper manner, in accordance with their level of decision-making and responsibility. The emergency contact list shall contain a listing of individuals who may be contacted during non-work hours and shall adequately respond to the request.

- **b.** Proposed revisions to the construction phasing or sequencing that reasonably minimizes traffic impacts.
- c. A written narrative and/or plan explaining how traffic and pedestrians will be moved through the Project Limits, including transitions during the change from one phase of construction to the next, as applicable.
- **d.** Temporary traffic control treatments at all intersections with roads, rail crossings, businesses, parking lots, pedestrian ways, bike paths, trails, residences, garages, farms, and other access points, as applicable.

- e. A list of all Contractor or Subcontractor certified flaggers to be used on the Project, together with the number of flaggers which will be used for each type of operation that flagging is needed. If the Contractor is using a flagging Subcontractor, then the name and address of the Subcontractor may be provided instead of a list of flaggers.
- **f.** A procedure for notifying the Resident of the need to change the traffic control plan or the need to remove a lane restriction.
- **g.** A description of any special detours including provisions for constructing, maintaining, signing, and removing the detour or detours, including all temporary bridges and accessory features and complete restoration of the impacted land.
- **h.** The maximum length of requested contiguous lane closure. The Contractor shall not close excessive lengths of traffic lane to avoid moving traffic control devices.
- i. The proposed temporary roadway surface conditions and treatments. The Contractor shall provide an adequate roadway surface at all times; taking into account traffic speed, volume, and duration.
- **j.** The coordination of appropriate temporary items (drainage, concrete barriers, barrier end treatments, impact attenuators, and traffic signals) with the TCP.
- **k.** The plan for unexpected nighttime work, the contractor shall provide a list of emergency nighttime lighting equipment and safety personnel available on-site or have the ability to have them on site within an hour of the time of need.
- **l.** The plan for meeting any project specific requirements contained in special provision 105 and/or 107, and/or Section 656
- **m.** The lighting plan if night work is anticipated.

The Authority will review the TCP for completeness and conformity with Contract provisions, the current edition of the MUTCD, and Authority policy and procedures. The Authority will review and provide comments to the Contractor within 14 days of receipt of the TCP. No review or comment by the Authority, or any failure to review or comment, shall operate to absolve the contractor of its responsibility to design and implement the plan in accordance with the Contract, or to shift any responsibility to the Authority. If the TCP is determined by the Authority to be operationally ineffective, the Contractor shall submit modifications of the TCP to the Authority for review and shall implement these changes at no additional cost to the Contract. Nothing in this Section shall negate the Contractor's obligations set forth in Section 110 - Indemnification, Bonding, and Insurance. The creation and modification of the TCP will be considered incidental to the related 652 items.

652.3.4 General

Prior to starting any work on any part of the project adjacent to or being used by the traveling public, the Contractor shall install the appropriate traffic control devices in accordance with the plans, specifications and the latest edition of Manual of Uniform Traffic Control Devices, Part VI. The Contractor shall continuously maintain the traffic control devices in their proper position, and they shall be kept clean, legible and in good repair throughout the duration of the work. If notified that the traffic control devices are not in place or not properly maintained, the Contractor may be ordered to immediately suspend work until all deficiencies are corrected.

No equipment or vehicles of the Contractor, their subcontractors, or employees engaged in work on this contract shall be parked or stopped on lanes carrying traffic, or on lanes or shoulders adjacent to lanes carrying traffic, at any time, except as required by ongoing work operations. Contractor equipment or vehicles shall never be used to stop, block, or channelize traffic.

Vehicles parked on the shoulder shall be located so all portions of the vehicle(s) are a minimum of one foot from the traveled way. No operation shall be conducted on or near the traveled lanes or shoulders without first setting up the proper lane closure and traffic control devices. These precautions shall be maintained at all times while this Work is being performed. The Contractor shall keep all paved areas of the highway as clear as possible at all times. No materials shall be stored on any paved area of the highway or within 30 feet of the traveled way (unless protected by concrete barriers and specifically approved by the Resident). Private vehicles owned by Contractor's employees shall be parked close together in a group no closer than 30 feet from the traveled way in pre-approved areas.

Channelization devices shall include Vertical Panel Markers, Barricades, Cones, and Drums shall be in accordance with the MUTCD. These devices shall be installed and maintained at the spacing determined by the MUTCD through the work area.

The Contractor shall maintain existing guardrails and/or barriers until removal is necessary for construction. The Contractor shall use a temporary barrier or appropriate channelizing devices, as approved by the Resident, while the guardrails and/or barriers are absent. Permanent guardrails and barriers shall be installed as soon as possible to minimize risk to the public.

When Contractor operations or shoulder grading leave a continuous 3 inch or less exposed vertical face at the edge of the traveled way, including the shoulder, or when traffic is shifted into the shoulder adjacent to the edge of pavement where an existing 3 inch or less exposed vertical face creates a safety hazard, channelization devices should be placed 2 feet outside the edge of the pavement at intervals not exceeding 600 feet and, depending on type and location of the exposed vertical face, a 48 inch by 48 inch W8-9 Low Shoulder, or W8-11 Uneven Lane, and/or a W8-17P Shoulder Drop-Off sign should be placed at a maximum spacing of ½ mile. When Contractor operations or shoulder grading leave greater than a 3-inch exposed continuous vertical face at the edge of the traveled way, including the shoulder, or when an existing condition of an exposed vertical face of 3 inches or more is adjacent to active traffic shifted into

shoulder, the Contractor shall place shoulder material at a slope not exceeding 3 horizontal to 1 vertical to meet the pavement grade, before the lane is opened to traffic.

Special Detours and temporary structures, if used, shall meet applicable AASHTO standards, including curve radii and grade.

Maine Turnpike Traffic Control Requirements

This Section outlines the minimum requirements that shall be maintained for working on, over, or adjacent to the Maine Turnpike roadway.

General

Two travel lanes in each direction (each direction being 24 feet wide including/excluding shoulder) in the two lane portion of the turnpike, and three travel lanes in each direction (each direction being 36 feet wide including/excluding shoulder) in the three lane portion of the turnpike (Mile 0.0 to mile 44.3) shall be maintained at all times except while performing work in a designated lane, directly over or adjacent to traffic, and during the placement and removal of traffic control devices.

Unless otherwise specified in the contract documents the minimum main line width for a single travel lane shall be 14 ft and minimum ramp widths of 16 ft which must be maintained at all times, from $\frac{1}{2}$ hour before sunrise and $\frac{1}{2}$ hour after sunset as indicated on the Sunrise/Sunset Table at: http://www.sunrisesunset.com/usa/Maine.asp . If the Project town is not listed, the closest town on the list will be used as agreed at the Preconstruction Meeting.

Shoulder closures, lane closures, and lane shifts meeting the MUTCD guidelines, other than those shown in the plans, must be submitted for approval from the MTA prior to use in the construction operations.

No lane closures will be allowed during non-working hours, weekends and/or holiday periods unless included in the Contract as long-term traffic control requirement as outlined in Section 652 – Specific Project Maintenance of Traffic Requirements unless written permission is obtained from the Authority.

Any special signs, barricades or other devices deemed necessary by the Resident shall be furnished and maintained by the Contractor. Extra care shall be taken so that the traffic flow will not be disturbed. The use of construction signs and warning devices not shown on the Plans or in the MUTCD is prohibited unless approved by the Resident

The Contractor's personnel and equipment shall avoid crossing traffic whenever possible. No Contractor's vehicle may slow down or stop in a traffic lane unless said lane has previously been made safe with signs and barricades as required by the Resident.

No vehicle will move onto the traveled way at such a time or in such a manner so as to cause undue concern or danger to traffic approaching from either direction. The Contractor or

his employees are not empowered to stop traffic.

The Contractor shall take necessary care at all times, in all operations and use of his equipment, to protect and facilitate traffic. During periods of idleness, the equipment shall not be left in a way to obstruct the traffic artery or to interfere with traffic.

The Contractor shall furnish approved signs reading "Construction Vehicle - Keep Back" to be used on trucks hauling to the Project. The signs shall be a minimum of 30-inch by 60-inch, Black and Orange, and meet construction sign retro reflectivity requirements

All vehicles used on the Project shall be equipped with amber flashing lights, by means of a single or multiple, flashing LED or strobe lights mounted so as to be visible 360 degrees. In addition, vehicles operating under direction of the Maine Turnpike Authority may be equipped with auxiliary lights that are green, white or amber or any combination of green, white or amber. Auxiliary lighting shall have sufficient intensity to be visible at 500 feet in normal daylight and a flash rate between 1Hz and 4Hz. The vehicle flashing system shall be in continuous operation while the vehicle is on any part of the project and positioned or mounted in such a way to not be obstructed by vehicle mounted or other equipment. Dump trucks, concrete trucks and utility trucks at a minimum shall have a strobe light mounted on each side of the vehicle. The use of motorcycles is not permitted within a construction site or as a means to arrive at or leave a work zone.

Where space is available pavement striping for all tapers shall create a minimum buffer of 250 feet to the point where the temporary concrete barrier taper ends and becomes parallel to the travelway. Temporary concrete barrier shall be tapered at a minimum 8:1 unless space is available and then it should be tapered at 15:1 or 100 feet whichever is longest.

Milling and paving of interchange ramps shall be done between 9:00 p.m. and 5:00 AM, unless otherwise shown on the Maintenance of Traffic Phasing Plans or as directed by the MTA. Only a single ramp at an interchange may be closed at once. Ramp closures will not be permitted the day before or after holidays, on holidays, or on Saturdays or Sundays. The Contractor shall request approval from the Resident/Authority two weeks prior for all ramp closures. Portable changeable message signs shall be used to provide advance notice and warning of the ramp closure. PCMS's shall be operational a minimum of 1 week prior to ramp closure to notify Patrons. The contractor shall coordinate PCMS locations with the Resident and the MTA.

Access to, and egress from, the construction area shall be with the direction of travel without crossing traffic. Construction vehicles are prohibited from merging with mainline traffic during the AM and PM peak traffic hours unless approved in writing from the MTA. The contractor shall develop work zone access/egress with acceleration and deacceleration areas and should utilize interchange ramp areas whenever feasible.

Temporary Mainline Lane Closures

A lane closure may be required whenever personnel will be actively working within four

feet of a travel lane.

Loading/unloading trucks shall not be closer than six feet from an open travel lane. Temporary lane closures will only be allowed at the times outlined in Special Provision, Section 652, Specific Project Maintenance of Traffic Requirements. These hours may be adjusted based on the traffic volume each day by the Resident.

A lane closure is required when a danger to the traveling public may exist. The following is a partial list of activities requiring lane closures. Lane closures may be required for other activities as well:

- Milling and Paving Operations
- Bridge work
- Drainage Installation and/or Adjustment
- Clear Zone Improvements
- Pavement Markings Layout and Placement
- Work directly over traffic within six feet of a travel lane as measured from the painted pavement marking line or traffic control device will require a lane closure. This work includes but is not limited to the following:
 - 1. Unbolting structural steel
 - 2. Removing structural steel
 - 3. Erecting structural steel
 - 4. Erecting or moving sign panels on bridges or sign structures
 - 5. Bolting structural steel
 - 6. Loading and unloading trucks
 - 7. Light pole removal or installation
 - 8. Snow fence installation

Lane closures shall be removed if work requiring the lane closure is not ongoing unless included in the Contract as a long-term traffic control requirement or approved by the Resident.

During adverse weather condition when the speed limit on the Maine Turnpike has been reduced to 45 MPH, or during fog or when there is less than ½ mile of visibility, shoulder/lane closures cannot be set up and any currently in place shall be removed. Only work on the turnpike mainline that is behind temporary concrete barrier will be allowed when speed is reduced to 45 MPH or fog/visibility conditions exist.

Daytime lane closures shall be a maximum of three (3) miles. Only one daytime lane closure will be permitted per direction. Nighttime lane closures may extend through the entire length of the Project.

Temporary single lane closures are allowed upon approval of the Resident. Lane and/or ramp closure setup may not begin until the beginning time specified. Closures that are setup early or that remain in place outside of the approved time period shall be subject to a lane rental fee of \$1,000 per five minutes for every five minutes outside of the approved time. The installation of the construction signs will be considered setting up the lane closure. Removal of the last construction sign will be considered removal of the closure. Construction signs shall be installed immediately prior to the start of the closure and shall be promptly removed when no longer required. The installation and removal of a closure, including signs, channelizing devices, and arrow boards shall be a continuous operation. The Authority reserves the right to order the removal of an approved closure.

The Authority desires to minimize the number of daytime lane closures and the number of times that a complete stoppage of traffic is required. The Contractor is encouraged to schedule work so that the interference with the flow of traffic will be minimized. Lane closures will not be allowed until traffic associated with complete stoppages of traffic has cleared. Complete stoppages of traffic or lane closures may not be allowed on a particular day if another complete stoppage of traffic has been previously approved for another project.

The Resident is required to receive approval from the Maine Turnpike Authority for all lane closures. The Resident is required to submit a request for lane closures by noon on Thursday for any lane closures needed for the following week. The Contractor shall plan the work accordingly.

Temporary Mainline Shoulder Closures

Shoulder closures are anticipated at locations where Contractor access to the mainline is required.

Shoulder closures with plastic drums shall be removed at the end of the workday. Temporary shoulder closures with plastic drums will not be allowed during periods of inclement weather as determined by the Authority.

The location (limits) of shoulder closures with concrete barrier are shown on the Plans. The barrier must be placed prior to the start of the work requiring concrete barrier and shall remain in place until the work activity is complete.

Equipment Moves

The complete stoppage of traffic for an equipment move (including delivery of materials to the median) will be considered for approval if the action cannot reasonably be completed with the erection of a lane closure. Contractor shall be responsible for the installation of Signs CS-3, "Expect Stopped Traffic" and Signs W3-4 "Be Prepared to Stop", in accordance with the Single Lane Closure Detail immediately prior to the equipment move. Signs will be required on any adjacent ramps within proximity to the stoppage. These signs shall be covered when not applicable.

State Police will be used to stop traffic. Cost for State Police will be the responsibility of the Authority. The times requested for trooper assisted equipment moves by on-duty troopers cannot be guaranteed. The MTA will not be held responsible for any delays or costs associated with the delay, postponement or cancellation of an on-duty trooper assisted equipment move.

The maximum time for which traffic may be stopped and held for an equipment move across mainline or ramp at any single time shall be five (5) minutes. The duration shall be measured as the time between the time the last car passes the Resident until the time the Resident determines that all travel lanes are clear. The traffic shall only be stopped for the minimum period of time required to complete the approved activity. The Contractor shall reimburse the Authority at a rate of \$500 per minute for each minute in excess of the five-minute allowance.

Unapproved movement of equipment or materials across the travel lanes shall be considered a violation of the Maintenance of Traffic Requirements and is subject to a minimum fine of \$500 per occurrence with an additional \$500 per minute thereafter.

Request for Complete Stoppage of Traffic

A request for a complete stoppage of traffic must be submitted to the Resident for approval. The Resident is required to receive approval from the Maine Turnpike Authority for all stoppages. The request shall be submitted to the Authority by the Resident at least five (5) working days prior to the day of the requested stoppage of traffic and two (2) days for a stoppage less than five minutes. All requests must be received by 12:00 p.m. noon to be considered as received on that day. Requests received after 12:00 p.m. shall be considered as received the following day. The Contractor shall plan the work accordingly.

<u>During the erection or removal of overhead structures or signs</u> traffic shall be stopped and may be held for periods of up to 25 minutes during these operations. Before the roadway is reopened, all materials shall be secured so they will not endanger traffic passing underneath. The Contractor will reimburse the Authority at the rate of \$2,500.00 per five-minute period for each roadway not reopened (northbound and southbound), in excess of the 25-minute limit. Total penalty shall be deducted from the next pay estimate.

Blasting of Ledge, The maximum time for which traffic may be stopped at any single time shall be six (6) minutes. This duration shall be measured as the time between the time that the last car passes the Resident, until the time the Resident determines that all travel lanes are cleared of blast debris. The Contractor shall reduce the size of the blast, change the design and method of the blast, use more mats, or otherwise alter the blasting so that the traffic is not stopped for more than six minutes. If, due to the throw of rock onto the highway or other blasting related activities, traffic is stopped for more than six minutes, the Contractor shall pay a penalty of \$1,000.00 per minute for every minute traffic is stopped in excess of the six-minute limit. The penalty shall be measured separately on the northbound and southbound roadway (or eastbound and westbound roadway). Total penalties will be deducted from the next pay estimate. Whenever the volume of traffic is excessive such that a six-minute interruption would cause objectionable congestion, in the opinion of the Authority, the hours during which blasting may occur may be further

restricted. A detailed blasting plan shall be submitted as required in Supplemental Specific or Special Provision Sections 105 or 107.

652.3.5 Installation of Traffic Control Devices

All traffic control devices shall be in conformance with NCHRP 350 requirements and MASH 16 requirements if manufactured after December 31, 2019 and installed as per manufactures recommendations.

Portable signs shall be erected on temporary sign supports approved crashworthy devices so that the bottom of the sign is either 1) 12 inches or 2) greater than 5 feet above the traveled way. The bottom of all regulatory signs and ramp exit signs shall be a minimum of 5 feet above the traveled way. The contractor is responsible for maintaining the temporary sign structures so that the sign face remains in a vertical position. Temporary signs supports shall not be used for signs that will remain in place at a single location for more than one month.

No signs on easels shall be placed on 4 foot shoulders with guardrail, signs required at these location shall be placed on taller easels on the median side of the guardrail.

Post-mounted signs shall be erected so the bottom of the sign is no less than 5 feet above the traveled way, and 7 feet above the traveled way in business, commercial, and residential areas. Post-mounted signs must be erected so that the sign face is in a true vertical position. All signs shall be placed so that they are not obstructed in any manner and immediately modified to ensure proper visibility if obstructed.

The bottom of mainline and ramp traffic control signs intending to remain longer than 3 days, except as provided in 2009 MUTCD Section 6F.03 paragraph 12, shall be mounted 5 feet or greater above the edge of pavement on posts or portable sign supports.

The Resident will verify the exact locations of the construction signs in the field. Construction signs behind guardrail shall be mounted high enough to be visible to traffic. Vertical panel markers shall be mounted with the top at least 4 feet above the traveled way.

Drums placed along the Turnpike mainline shall have a minimum of one drum weight. Drums that will remain in the same location for more than three days shall have double drum weights. (i.e. a minimum of 40 lbs of drum tire rings). Drums shall not be weighted on the top. Drain holes shall be provided to prevent water from accumulating in the drums During winter periods, drums shall be placed on the grass shoulder or removed from the roadway so winter maintenance operations will not be impacted. This requires the placement of drums behind the median guardrail. Drums shall not be placed on snowbanks.

The Contractor shall operate and maintain the flashing arrow board unit and for dependable service during the life of the contract. The units shall remain in continuous night and day service at locations designated until the Resident designates a new location or discontinuance of service.

The Contractor shall maintain the devices in proper position and clean them as necessary.

Maintenance shall include the covering and uncovering of all signs when no longer applicable (even if for a very short duration). The sign shall be considered adequately covered when no part of the sign face is visible either around or through the covering.

The Contractor shall replace damaged traffic control devices with devices of acceptable quality, as directed by the Resident.

The Contractor is required to cover all existing signs, including regulatory and warning signs, within the Work zone which may conflict with the proposed construction signs. The Contractor is also required to cover all permanent construction signs when they conflict with a daily traffic control setup. The method of covering existing signs must be approved by the Resident. The use of adhesives on the sign face is prohibited.

Work Zone Speed Limits

Work Zone Speed (Fines Doubled) is a regulatory speed limit that indicates the maximum legal speed through a work zone which is lower than the normal posted speed. The speed limit shall be displayed by black on white speed limit signs in conjunction with a black on orange "Work Zone" plate. Speed limit signs shall be installed at each mile within the work zone. Any existing regulatory speed limit signs within the reduced speed zone shall be covered once the reduced speed signs have been erected.

Two orange fluorescent flags shall be attached to all speed limit signs that are uncovered for a period of time exceeding one week. This work shall be incidental. Signs that are covered and uncovered on a regular basis are not required to have the supplemental flags.

The reduced speed limit signs shall be used when workers are adjacent to traffic, when travel lane(s) are closed, when indicated on Maintenance of Traffic Control Plans provided or other times as approved by the Resident:

The signs shall be covered or removed when not applicable. The covering and uncovering of signs shall be included for payment under Maintenance of Traffic. Signs relating to reduced speed shall be installed in accordance with the details. The Contractor shall note that all signs including those behind concrete barrier or guardrail are required to be clearly visible to all drivers at all times.

Lane Closure Installation and Removal Procedure

The Contractor will follow the following procedures when closing any travel lanes on the turnpike roadways:

- 1. The sign package shall be erected starting with the first sign and proceeding to the start of the taper. The sign crew shall erect signs with the vehicle within the outside shoulder.
- 2. Position the arrow board with the proper arrow at the beginning of the taper; and,

3. When arrow board is in place, continue with the drums/cones to secure the work area.

To dismantle the lane closure, start with last drums/cone placed and work in reverse order until all the drums are removed. The arrow board which was installed first shall be the final traffic control device removed, excluding the sign package. The remaining sign package shall be picked-up starting with the first sign placed and continuing in the direction of traffic and with the vehicle in the outside shoulder.

Trucking Plan

The Contractor shall submit a trucking plan to the Resident within 10 working days of the award of the Contract. The trucking plan shall consist of at least the following:

- Date of anticipated start of work per each location.
- Haul routes from plant/pit to work area and return.
- Haul routes from work area to disposal area and return.
- Entering / exiting the work area.
- Vehicle safety equipment and Vehicle inspection.
- Personal safety equipment.
- Communications equipment and plan.

The trucking plan will not be paid for separately but shall be incidental to the Contract.

652.3.6 Traffic Control

The existing travel way width shall be maintained to the maximum extent practical.

Vertical panel markers, drums, cones, or striping shall be used to clearly delineate the roadway through the construction area. Two-way traffic operation shall be provided at all times that the Contractor is not working on the project. One- way traffic shall be controlled through work areas by flaggers, utilizing radios, field telephones, or other means of direct communication.

The traffic control devices shall be moved or removed as the work progresses to assure compatibility between the uses of the traffic control devices and the traffic flow.

Pavement markings shall be altered as required to conform to the existing traffic flow pattern. Repainting of pavement marking lines, if required to maintain the effectiveness of the line, shall be considered **incidental to the** maintenance of traffic control devices, no separate payment will be made. Inappropriate pavement markings shall be removed whenever traffic is rerouted, and temporary construction pavement markings shall be placed. Removal of non-applicable

markings and **initial** placement of temporary construction pavement markings will be paid for under the appropriate Contract items. Traffic changes shall not be made unless there is sufficient time, equipment, materials, and personnel available to complete the change properly before the end of the workday. This provision will not be required when traffic is rerouted for brief periods and the route can be clearly defined by channelizing devices, or flaggers, or both.

All vehicles used during the installation and removal of traffic control devices, including lane closures, shall be equipped with a vehicle-mounted lighted arrow board **or high intensity LED full width light bar** acceptable to the Resident. The arrow board **or full width light bar** shall be capable of displaying a left arrow, right arrow, double arrow, and light bar **patterns**.

652.4 Flaggers

The Contractor shall furnish flaggers as required by contract documents or as otherwise specified by the Resident. Flaggers shall not stop traffic on Turnpike mainline or interchange ramps. Only State Police are allowed to stop traffic on mainline or interchange ramps.

All flaggers must have successfully completed a flagger test approved by the Maine Department of Transportation and administered by a Maine Department of Transportation approved Flagger-Certifier. All flaggers must carry an official certification card with them at all times while flagging.

For daytime conditions, flaggers shall wear a top (vest, shirt or jacket) that is orange, yellow, yellow-green, or fluorescent versions of these colors meeting ANSI 107-2004, Class 3, along with a hat with $360\,^{\circ}$ retro-reflectivity.

For nighttime conditions, flaggers shall wear all Class 3 apparel, meeting ANSI 107-2004, including a Class 3 top (vest, shirt or jacket) and a Class E bottom (pants or coveralls), shall be worn along with a hardhat with 360 ° retro-reflectivity and shall be visible at a minimum distance of 1000 ft. Flagger stations must be illuminated in nighttime conditions to assure visibility and will be specifically addressed in detail in the Contractor's TCP.

Flagger stations shall be located far enough in advance of the workspace so that approaching road users will have sufficient distance to stop at the intended stopping point. While flagging, the flagger should stand either on the shoulder adjacent to the traffic being controlled, or in the closed lane. At a spot obstruction with adequate sight distance, the flagger may stand on the shoulder opposite the closed sections to operate effectively. Under no circumstances shall the flagger stand in the lane being used by moving traffic or have their back to oncoming traffic. The flagger should be clearly visible to approaching traffic at all times and should have a clear escape route.

When conditions do not allow for proper approach sight distance of a flagger or storage space for waiting vehicles, additional flaggers shall be used at the rear of the backlogged traffic or at a point where approaching vehicles have adequate stopping sight distance to the rear of the backlogged traffic. All flagger stations shall be signed, even when in close proximity. The signs shall be removed or covered when flagger operations are not in place, even if it is for a very short

duration.

Flaggers shall be provided as a minimum, a 10-minute break, every 2 hours and a 30 minute or longer lunch period away from the workstation. Flaggers may only receive 1 unpaid break per day; all other breaks must be paid. Sufficient certified flaggers shall be available onsite to provide for continuous flagging operations during break periods. If the flaggers are receiving the appropriate breaks, breaker flagger(s) shall be paid starting 2 hours after the work begins and ending 2 hours before the work ends. A maximum of 1 breaker per 6 flaggers will be paid. (1 breaker flagger for 2 to 6 flaggers, 2 breaker flaggers for 7 to 12 flaggers, etc.). If a flagger station is manned for 10 hours or more, then ½ hour for lunch will be deducted from billable breaker flagger hours.

652.4.1 Traffic Officers

Local road traffic officers, if required, shall be uniformed police officers. State Police officers and vehicles shall be used to warn and stop traffic on the Maine Turnpike. All State Police shall be scheduled through the Maine Turnpike Authority. The Authority will make payment for the State Police officers and vehicles directly to the State Police.

The Contractor will not be entitled to additional compensation if scheduled Work is not completed due to the unavailability of State Police.

652.5.1 Rumble Strip Crossing

When lane shifts or lane closures require traffic to cross a permanent longitudinal rumble strip for 7 calendar days or less, the Contractor shall install warning signs that read "RUMBLE STRIP CROSSING" with a supplemental Motorcycle Plaque, (W8-15P).

When lane shifts or lane closures require traffic to cross a permanent longitudinal rumble strip for more than 7 calendar days, the Contractor shall pave in the rumble strips in the area that traffic will cross, unless otherwise directed by the Resident. Rumble strips shall be replaced prior to the end of the project, when it is no longer necessary to cross them.

652.6.1 Daylight Work Times

Unless otherwise described in the Contract, the Contractor is allowed to commence work and end work daily according to the Sunrise/Sunset Table at: http://www.sunrisesunset.com/usa/Maine.asp. If the Project town is not listed, the closest town on the list will be used as agreed at the Preconstruction Meeting. Any work conducted before sunrise or after sunset will be considered Night Work.

652.6.2 Night work

When Night Work occurs (either scheduled or unscheduled), the Contractor shall provide and maintain lighting on all equipment, at all workstations, and all flagger stations.

The lighting facilities shall be capable of providing light of sufficient intensity to permit good workmanship, safety, and proper inspection at all times. The lighting shall be cut off and arranged on stanchions at a height that will provide perimeter lighting for each piece of equipment and will not interfere with traffic, including commercial vehicles, approaching the work site from either direction.

The Contractor shall have available portable floodlights for special areas.

The Contractor shall utilize padding, shielding or other insulation of mechanical and electrical equipment, if necessary, to minimize noise, and shall provide sufficient fuel, spare lamps, generators, etc. to maintain lighting of the work site.

The Contractor shall submit a lighting plan prior to any night work for review showing the type and location of lights to be used for night work. The Resident may require modifications be made to the lighting set up in actual field conditions.

Prior to beginning any Night Work, the Contractor shall furnish a light meter for the Residents use that is capable of measuring the range of light levels from 5 to 20 foot-candles.

Horizontal illumination, for activities on the ground, shall be measured with the photometer parallel to the road surface. For purposes of roadway lighting, the photometer is placed on the pavement. Vertical illumination, for overhead activities, shall be measured with the photometer perpendicular to the road surface. Measurements shall be taken at the height and location of the overhead activity.

Night Work lighting requirements:

Mobile Operations: For mobile-type operations, each piece of equipment (paver, roller, milling machine, etc.) will carry indirect (i.e. balloon type) lights capable of producing at least 10 foot- candles of lighting around the work area of the equipment.

Fixed Operations: For fixed-type operations (flaggers, curb, bridge, pipes, etc.), direct (i.e. tower) lighting will be utilized capable of illuminating the work area with at least 10 foot- candles of light.

Hybrid Operations: For hybrid-type operations (guardrail, sweeping, In-slope excavation, etc.), either direct or indirect lighting may be utilized. The chosen lights must be capable of producing at least 10 foot-candles of light around the work area of the equipment

Inspection Operations: Areas required to be inspected by the Authority will require a minimum of 5 foot-candles of lighting. This may be accomplished through direct or indirect means.

The Contractor shall apply 2- inch wide retro-reflective tape, with alternating red and white segments, to outline the front back and sides of construction vehicles and equipment, to define their shape and size to the extent practicable. Pickup trucks and personal vehicles are exempt from

this requirement.

The Resident or any other representative of the Authority reserves the right to suspend the work at any time and request a meeting to discuss violations and remedies. The Authority shall not be held responsible for any delay in the work due to any suspension under this item.

Failure to follow the approved Lighting Plan will result in a Traffic Control violation.

Payment for lighting, vehicle mounted signs and other costs accrued because of night work will not be made directly but will be considered incidental to the related contract items.

652.6.3 Traffic Coordinator and Personnel

The Contractor shall submit to the Resident for approval a list of traffic control personnel assigned to the Project including qualifications, certifications and experience.

The Traffic Coordinator duties shall include, but are not necessarily limited to:

- a. Developing, in conjunction with the Resident and Project superintendent, a traffic control program for the days' work activities which will facilitate traffic in a safe and efficient manner.
- b. Ensure that all traffic control implements (signs, arrow boards, barrels, etc.) are onsite so the traffic program can be implemented effectively.
- c. Ensure a safe and effective setup or take-down of all signing implements to least impact the traveling motorist; and,
- d. Working knowledge of construction signing/traffic control requirements in conformance with the latest issued Manual on Uniform Traffic Control Devices.
- e. The Contractor shall supplement the traffic control plan with a daily plan, which includes schedules for utilizing traffic coordinators and flaggers. This plan shall be submitted daily and agreed upon cooperatively with the Resident.

652.7 Method of Measurement

Signs, signs supplied by the Authority, and panel markers will be measured by the square foot for all signs authorized and installed. Flashing arrow boards, portable-changeable message signs, and flashing and steady burn lights, will be measured by each unit authorized and installed on the project. Barricades and cones will be measured by each unit authorized. Drums will be measured by each or as a lump sum authorized and installed, as indicated on the plans and specifications. No additional payment will be made for devices that require replacement due to poor condition or inadequate retroreflectivity.

Flaggers or traffic officers used during the Contract, for the convenience of the Contractor,

will not be measured separately for payment, but shall be incidental to the various pay items. This includes use of Flaggers for the delivery of materials and equipment to the project or other Flagger use that is for the Contractor's convenience, as determined by the Resident Engineer. If flaggers are required to maintain traffic and there is not a pay item in the contractor for flaggers, then flaggers shall be incidental to the other Section 652 contract items and no separate payment shall be made.

The accepted quantity of traffic officer and flagger time will be the number of hours the designated station is occupied. The number of hours authorized for payment, **if any**, will be measured to the nearest ½ hour.

The Authority will make payment for the State Police officers and vehicles directly to the State Police when utilized for mainline traffic control activities. State Police escorts, if required to move oversize material or equipment loads to the jobsite, will not be paid separately, but shall be incidental to the various pay items.

Maintenance of traffic control devices, including Truck mounted impact attenuators and Automated trailer mounted speed limit signs required for the project will be measured by the calendar day or as one lump sum, as indicated in the plans and specifications, for all authorized and installed traffic control devices. Traffic control devices will only be measured for payment the first time used. Subsequent uses shall be incidental to Item 652.36 or 652.361.

The vehicle mounted arrow board, mounted on trucks used for installation and removal of lane closures, will not be measured separately for payment, but shall be incidental to Item 652.36 or 652.361.

The traffic coordinator(s) will not be measured separately for payment but shall be incidental to Item 652.36 or 652.361.

Portable light towers, lighting on equipment and lighting plan will not be measured separately for payment but shall be incidental to the related Contract items.

Sequential Flashing Warning Lights shall be measured for payment by the maximum number of sequential flashing warning lights satisfactorily installed and properly functioning at any one time during the life of the project. Payment shall include all materials and labor to install, maintain and remove all Sequential Flashing Warning Lights.

Automated Trailer Mounted Speed Limit Sign shall incidental to the Maintenance of Traffic Control device item Payment shall include the Trailer, Radar Speed Limit Sign, flashing beacon amber lights, regulatory speed limit sign, fuel, necessary maintenance, and all checking of Radar Speed Limit Signs by manufacturer and all project moves including the transporting and delivery of the unit.

The accepted quantity of temporary portable rumble strips shall be measured by the unit complete in place, per lane closure application. A unit shall consist of 1 group of 3 full-lane width of rumble strips. As shown in the plans, a maximum of 3 units may be used at each lane closure.

A unit shall be measured for each group of rumble strips, each time they are used for a lane closure.

652.8 Basis of Payment

The accepted quantity of signs, signs supplied by the Authority, and panel markers will be paid for at the contract unit price per square foot. Such payment will be full compensation for furnishing (or retrieving from the Authority) and installing all signs, sign supports, and all incidentals necessary to complete the installation of the signs.

The accepted quantity of flashing arrow boards, barricades, battery operated flashing and steady burn lights, and cones will be paid for at the contract unit price each for the actual number of devices authorized, furnished, and installed. Such payment shall be full compensation for all incidentals necessary to install and maintain the respective devices.

The Sequential Flashing Warning Lights will be paid for at the Contract unit price per each. This price shall include all costs associated with furnishing, installing, operating, maintaining, relocating, and removing the Sequential Flashing Warning Lights.

The Truck Mounted Attenuator(s) will be incidental to the Maintenance of Traffic Control device item. This price shall include all costs associated with the use of the vehicle. Payment shall include operator, fuel, truck, maintenance, flashing lights, arrow board and all other incidentals necessary to operate the vehicle.

Failure by the contractor to reinstall cones, barrels, signs, covered/uncovered signs, and similar traffic control devices within an hour of them being displaced, moved, knocked over, uncovered and etc. will result in a \$150 fine per traffic control device if the issues is not resolved within 1 hour of notification by the resident. An additional \$150 will be assessed for each additional hour that the device has not been corrected. If the traffic control device is critical to the maintenance of traffic creating an actual or potential safety issue with traffic and is not corrected immediately then it will result in a violation letter as described below.

Failure by the contractor to follow the Contracts 652 Supplemental Specifications, Special Provisions and Standard Specification and/or the Manual on Uniform Traffic Control Devices (MUTCD) and/or the Contractors own Traffic Control Plan, or failure to correct a violation, will result in a violation letter and result in a reduction in payment as shown in the schedule below. The Resident or any other representative of the Authority reserves the right to suspend the work at any time and request a meeting to discuss violations and remedies. The Authority shall not be held responsible for any delay in the work due to any suspension under this item. Any reduction in payment under this Special Provision will be in addition to forfeiting payment of maintenance of traffic control devices for that day.

Amount of Penalty Damages per		
Violation		
1 st	2^{nd}	3 rd &
		Subsequent
\$500	\$1,000	\$2,500

652.8.1 Maintenance of Traffic Control Devices

Maintenance of Traffic Control Devices will be paid at the contract unit price per calendar day or lump sum price, as indicated in the plans and specifications. Such payment will be full compensation for all days that the Contractor maintains traffic as specified herein, and for moving devices as many times as necessary; for replacing devices damaged, lost, or stolen; and for cleaning, maintaining, and removing all devices used for traffic control, including replacing temporary pavement marking lines.

The contract price for Maintenance of Traffic Control Devices shall be full compensation for all days for such maintenance, encompassing all areas of the contract, regardless of whether or not the work areas or projects are geographically separated.

652.8.2 Other Items

The accepted quantities of flagger hours will be paid for at the contract unit price perhour for each flagging station occupied excluding lunch breaks, and for each approved breaker flagger. Overtime hours, as reported on the certified payrolls, will be paid an additional 30% of the bid price for 652.38. The computation and additional payment for overtime hours will occur during the project close-out process and will be paid as additional hours of 652.38 to the nearest ¼ hour. The contract unit price shall be full compensation for hiring, transporting, equipping, supervising, and the payment of flaggers and all overhead and incidentals necessary to complete the work.

There will be no payment made under any 652 pay items after the expiration of the adjusted total contract time.

The accepted quantities of traffic officer hours will be paid for at the contract unit price per ½ hour for each station occupied, with no additional payment for overtime. This price shall be full compensation for supplying uniformed officers with police cruisers, and all incidentals necessary to complete the work, including transportation, equipment, and supervision.

Payment for temporary pavement marking lines and pavement marking removal will be made under the respective pay item in Section 627 - Pavement Markings.

Payment for temporary traffic signals will be made under Section 643 - Traffic Signals. The accepted quantity of Portable Changeable Message Signs will be paid for at the Contract unit price each. This price shall be full compensation for furnishing, relocating, maintaining and removing the PCMS. The price also includes all costs associated with setting-up and paying for a data cellular account, technical support, training and any costs associated with the GPS location device.

Progress payment of each PCMS shall be pro-rated over the duration of the Contract. Contract duration shall be from the specified Contract start date to substantial completion or Contract completion, whichever is sooner.

For a PCMS that fails to operate when required, the Contractor will be given 24-hours to

repair or replace the PCMS. For periods longer than 24-hours, payment will be reduced based on the pro-rated time that the PCMS is out of service.

Drums will be paid for at the contract unit price each, or at the Contract lump sum price, as designated in the Plans and specifications. Such payment shall be full compensation for all drums as shown on the Plans or required to complete the work.

The accepted quantity of temporary portable rumble strips will be paid for at the contract unit price per unit which shall include the transport device. Payment is full compensation for providing, relocating, maintaining or replacing, and removing temporary portable rumble strips. If the pay item is not included in the contract quantities, then the Authority does not anticipate the use of this item on the contract. If contractor wishes to utilize temporary portable rumble strips and the item is not in the contract, then the contractor may propose use of them to the Authority for consideration.

Payment will be made under:

Pay Item		Pay Unit
652.3611	Maintenance of Traffic Control Devices at Ramp J	Lump Sum
652.3612	Maintenance of Traffic Control Devices at Ramp M	Lump Sum
652.3613	Maintenance of Traffic Control Devices at Wilson Road	Lump Sum
652.3614	Maintenance of Traffic Control Devices at Berwick Road	Lump Sum
652.3615	Maintenance of Traffic Control Devices at Fletcher Street/Route 35	Lump Sum
652.3616	Maintenance of Traffic Control Devices at Alfred Street	Lump Sum
652.3617	Maintenance of Traffic Control Devices at Beech Ridge Road	Lump Sum
652.3618	Maintenance of Traffic Control Devices at Scarborough Interchange	Lump Sum
652.3619	Maintenance of Traffic Control Devices at Gorham Road	Lump Sum

SPECIAL PROVISION

SECTION 652

MAINTENANCE OF TRAFFIC

(Specific Project Maintenance of Traffic Requirements)

This Specification describes the specific project maintenance of traffic requirements for this Project.

The following minimum traffic requirements shall be maintained. These requirements may be adjusted based on the traffic volume when authorized by the Authority.

Maine Turnpike Traffic Control Requirements

This Section outlines the minimum requirements that shall be maintained for work on, over, or adjacent to the Maine Turnpike roadway.

- a) Traffic Counts will be conducted by the MTA Resident to adjust the start and end times of allowable closures to provide the Contractor with maximum duration work windows.
- b) Weekend work requires approval from the Authority.
- c) Work zones that span multiple zones shall have the most restrictive times govern.
- d) Temporary shoulder closures are allowed at all times.
- e) Equipment Moves are allowed during low traffic periods as approved by the Authority.
- f) Operations for the travel lane closures are allowed as outlined in the following tables. Turnpike Lane Closures shall be removed if construction is not ongoing. Unattended lane closures are not allowed.

Haunch removal within 6 feet of a travel lane as measured from the painted pavement marking line or traffic control device will require a lane closure.

Route 1 Off-Ramp (NB Ramp J and M) Underpass*

Temporary single lane closures are permitted when active work is occurring at any time for work NB under the Ramp J and M bridge with approval of the Resident.

Route 1 On-Ramp (SB Ramp J) Underpass*

Temporary single lane closures are permitted when active work is occurring at any time for work SB under the Ramp J bridge with approval of the Resident.

*Work on NB and SB underpasses of Ramp J shall not be completed concurrently. Lane closures must be set up on different nights.

MAINTENANCE OF TRAFFIC LIMITATION TABLE: TURNPIKE MAINLINE APPROVED LANE CLOSURES

Temporary lane closures will be permitted when active work is occurring in accordance with the dates and times in the tables below with approval of the Resident.

Wilson Road

Mainline MM 2 - 7 Northbound (3 Lane Section)		
	Double Lane Closures (1 Lane Open)	Single Lane Closures (2 Lanes Open)
December 1, 2025 to May 23, 2026		
Sunday PM through Monday AM	9 PM to 8 AM	6 PM to Anytime
Monday PM through Friday AM	9 PM to 8 AM (next day)	Anytime (Fri 12 PM)

Mainline MM 2 - 7 Southbound (3 Lane Section)			
	Double Lane Closures (1 Lane Open)	Single Lane Closures (2 Lanes Open)	
December 1, 2025 to May 23, 2026			
Sunday PM through Monday AM	9 PM to 7 AM	6 PM to Anytime	
Monday PM through Friday AM	8 PM to 7 AM (next day) (Fri 8 AM)	Anytime (Fri 5 PM)	

Berwick Road

Mainline MM 7 - 19 Northbound (3 Lane Section)			
	Double Lane Closures (1 Lane Open)	Single Lane Closures (2 Lanes Open)	
December 1, 2025 to April 1, 2026			
Sunday PM through Monday AM	8 PM to 10 AM	6 PM to Anytime	
Monday PM through Friday AM	7 PM to 10 AM (next day)	Anytime (Fri 5 PM)	

Mainline MM 7 - 19 Southbound (3 Lane Section)			
	Double Lane Closures (1 Lane Open)	Single Lane Closures (2 Lanes Open)	
December 1, 2025 to April 1, 2026			
Sunday PM through Monday AM	8 PM to 7 AM	6 PM to Anytime	
Monday PM through Friday AM	7 PM to 7 AM (next day) (Fri 8 AM)	Anytime (Fri 5 PM)	

Fletcher Street/Route 35 Alfred Street

Mainline 25-32 Northbound (3 Lane Section)			
	Double Lane Closures (1 Lane Open)	Single Lane Closures (2 Lanes Open)	
December 1, 2025 to May 23, 2026			
Sunday PM through Monday AM	8 PM to 7 AM	6 PM to Anytime	
Monday PM through Friday AM	8 PM to 7 AM (next day) (Fri 8 AM)	Anytime (Fri 5 PM)	

Mainline MM 25-32 Southbound (3 Lane Section)			
Double Lane Closures Single Lane Closures (1 Lane Open) (2 Lanes Open)			
December 1, 2025 to May 23, 2026			
Sunday PM through Monday AM	8 PM to 8 AM	6 PM to Anytime	
Monday PM through Friday AM	8 PM to 8 AM (next day)	Anytime (Fri 5 PM)	

Beech Ridge Road

Mainline 36-42 Northbound (3 Lane Section)			
Double Lane Closures Single Lane Closures (1 Lane Open) (2 Lanes Open)			
December 1, 2025 to May 23, 2026			
Sunday PM through Monday AM	9 PM to 6 AM	6 PM to 7 AM	
Monday PM through Friday AM	9 PM to 6 AM (next day)	7 PM to 7 AM (next day) (Fri 8 AM)	

Mainline MM 36-42 Southbound (3 Lane Section)			
Double Lane Closures (1 Lane Open) Single Lane Closures (2 Lanes Open)			
December 1, 2025 to May 23, 2026			
Sunday PM through Monday AM	9 PM to 7 AM	6 PM to 8 AM	
Monday PM through Friday AM	9 PM to 7 AM (next day)	7 PM to 8 AM (next day) (Fri 11 AM)	

Scarborough Interchange Gorham Road

Mainline 42-44 Northbound (3 Lane Section)			
	Double Lane Closures (1 Lane Open)	Single Lane Closures (2 Lanes Open)	
December 1, 2025 to May 23, 2026			
Sunday PM through Monday AM	9 PM to 6 AM	6 PM to 7 AM	
Monday PM through Friday AM	9 PM to 6 AM (next day)	7 PM to 7 AM (next day) (Fri 8 AM)	

Mainline MM 42-44 Southbound (3 Lane Section)		
	Double Lane Closures (1 Lane Open)	Single Lane Closures (2 Lanes Open)
December 1, 2025 to May 23, 2026		
Sunday PM through Monday AM	9 PM to 7 AM	6 PM to 1 PM
Monday PM through Friday AM	9 PM to 7 AM (next day)	7 PM to 1 PM (next day)

SECTION 719

SIGNING MATERIAL

Section 719.01 Reflective Sheeting

This Subsection is deleted in its entirety and replaced with the following:

Retroreflective sheeting for signs shall meet at a minimum the requirements for ASTM 4956 – Type XI (Prismatic) manufactured by 3M Company, for all signs.

Reflective sheeting, used in sign construction, shall have been manufactured within the six months immediately prior to the fabrication of each sign. Upon delivery at the job site of each shipment of signs, a letter of certification shall be provided that the reflective sheeting conforms to the requirements.

For Type 1 Guide Signs, all reflective sheeting shall be color matched on each sign unit.

All warning signs shall be fluorescent yellow except for Ramp Advisory Speed signs which shall be yellow.

All Construction Series signs that use orange backgrounds shall be fluorescent orange.

All Pedestrian Signs shall be fluorescent yellow-green.

EZ-PASS Purple shall conform to the FHWA Purple color box.

719.02 Demountable High Intensity Reflectorized Letters, Numerals, Symbols, and Borders

This Subsection, including the title, is deleted in its entirety and replaced with the following:

719.02 Letters, Numerals, Symbols, and Borders

All signs shall be manufactured utilizing Direct Applied letters, numerals, symbols and borders or be Digitally Printed meeting all sign sheeting manufacturer's (3M) requirements to ensure that the manufacturer's warranty will be in full effect.

All Type 1 overhead signs, Type 1 interchange signs and any other Type 1 signs over 100 square feet shall utilize Direct Applied letters, numerals, symbols and borders.

Direct Applied

Direct reflectorized applied letters, numerals, symbols and borders shall consist of cut out sheeting that shall meet at a minimum the requirements for ASTM 4956 – Type XI (Prismatic) sheeting. The sheeting material used for the direct applied legend shall be the same type as used for the background.

Digitally Printed

Digital printing methods may be used to produce the sign copy and borders on retroreflective sheeting. Retroreflective sheeting complying with ASTM D 4956 Type XI and designated by the manufacturer as suitable for digital printing traffic signs along with associated ink and premium overlay film. Digitally Printed signs shall meet all sign sheeting manufacturer's (3M) requirements to ensure that the manufacturer's warranty will be in full effect

Transparent and opaque durable inks used in digital printed sign copy and borders shall be as recommended by the sheeting manufacturer (3M). Digital printed traffic colors shall be properly applied and shall have a warranty life of the base retroreflective sign sheeting. Digitally printed signs shall present a flat surface, free from foreign material, and all copy and borders shall be clear and sharp. Digital printed signs shall conform to 70% of the retroreflective minimum values established for its type and color (applicable to traffic colors only), as required by ASTM D 4956. Digital printed signs shall meet the daytime color and luminance, and nighttime color requirements of ASTM D 4956. Printed traffic colors shall meet the accelerated weathering and colorfastness requirements of ASTM D 4956. Digitally printed black shall remain sufficiently opaque for its intended use for the warranty period of the base sheeting. No variations in color or overlapping of colors will be permitted.

Digitally printed traffic signs shall have an integrated engineered match component clear UV- premium protective overlay recommended by the sheeting manufacturer applied to the entire face of the sign.

All digitally printed traffic signs shall utilize an integrated engineered match component system for materials and printing process and equipment. The integrated engineered match component system shall consist of retroreflective sheeting, durable ink(s), and clear protective overlay film, as specified by the sheeting manufacturer, applied to aluminum substrate.

The sign fabricator shall use an integrated engineered match component system digital printer approved by the sheeting manufacturer. Each approved digital printer shall only use the compatible retroreflective sign sheeting manufacturer's engineered match component system products. The sign fabricator shall maintain their digital printer's color calibration according to the sheeting manufacturer's requirements to help ensure digitally printed signs meet the manufacturer's specifications. The fabricator shall be trained by the sheeting manufacturer to produce digitally printed traffic signs that qualify for the sheeting manufacturer's warranty.

General

Type 1 Guide Signs shall have two-inch-tall, series C text that indicates the sign size, and the sign install date (MM/YY) located two inches above the bottom border of the sign.