

MAINE TURNPIKE AUTHORITY

ADDENDUM NO. 1

CONTRACT 2019.10

BRIDGE REPLACEMENT  
WARREN AVENUE OVERPASS (MILE 49.0)

**General**

The final addendum is scheduled to be issued on Thursday April 18, 2019. All questions regarding Contract 2019.10 shall be submitted by **noon on Tuesday April 16, 2019** to be answered in that addendum. Questions received after that time may not be answered.

**Make the following changes to the bid documents:**

In the Contract Plans, **REMOVE** sheets 2, 4, 7, 21A, 24-27, 37, 38, 44-51, 55-57, and 92 and **REPLACE** with the attached revised sheets 2, 4, 7, 21A, 24-27, 37, 38, 44-51, 55-57, and 92.

In the Contract Plans, **ADD** the attached sheet 61A.

In the Contract Documents, Proposal, **REMOVE** pages P-2 through P-14 and **REPLACE** with the attached revised pages P-2 through P-14.

In the Contract Documents, Part 2 – Special Provisions, **REMOVE** Special Provision Section 526 – Concrete Barrier (Temporary Concrete Barrier, Anchored) and **REPLACE** with the attached revised Special Provision Section 526 – Concrete Barrier (Temporary Concrete Barrier, Anchored).

In the Contract Documents, Part 2 – Special Provisions, **REMOVE** Special Provision Section 526 – Concrete Barrier (Temporary Concrete Barrier Type I) and **REPLACE** with the attached Special Provision Section 526 – Concrete Barrier (Temporary Concrete Barrier Type I – Supplied by Authority).

In the Contract Documents, Part 2 – Special Provisions, **ADD** the attached Special Provision Section 604 – Manholes, Inlets and Catch Basins.

In the Contract Documents, Part 2 – Special Provisions, **ADD** the attached Special Provision Section 604 – Manholes, Inlets and Catch Basins (Secure Catch Basin Grate).

In the Contract Documents, Part 2 – Special Provisions, **REMOVE** Special Provision Section 626 – Foundations, Conduit, and Junction Boxes for Highway Signing, Lighting and Signals (Light Standard Foundation) and **REPLACE** with the attached revised Special Provision Section 626 – Foundations, Conduit, and Junction Boxes for Highway Signing, Lighting and Signals (Light Standard Foundation).

In the Contract Documents, Part 2 – Special Provisions, **REMOVE** Special Provision Section 627 – Pavement Markings (Temporary Raised Pavement Markers) and **REPLACE** with the attached revised Special Provision Section 627 – Pavement Markings (Temporary Raised Pavement Markers).

In the Contract Documents, Part 2 – Special Provisions, **REMOVE** Special Provision Section 655 – Electrical Work (AWG Wire) and **REPLACE** with the attached revised Special Provision Section 655 – Electrical Work (AWG Wire).

### **Questions:**

**The following are questions asked at the pre-bid meeting held on April 2, 2019 or submitted to the Maine Turnpike Authority in writing. Answers to the questions are noted. Bidders shall utilize this information in preparing their bid.**

**Question 1:** Drawings note steel to be ASTM A709, Grade 50W which is weathering steel yet all steel shall be either metalized (girders) or galvanized (cross frames). Is this a typo or is this actually a requirement of the project?

**Response:** *Structural steel that shall be metalized or galvanized is not required to be weathering steel. See revised Contract Plan Sheet 92 which has been revised to reflect this response.*

**Question 2:** What is the difference between Phases 1A and 1B?

**Response:** *The primary difference between Phases 1A and 1B is the configuration of the Exit 48 Northbound On-ramp and the southerly end of the required Maintenance of Traffic. Phase 1A includes a reduced acceleration lane. See Contract Plans sheets 67 through 70 for details of both phases.*

**Question 3:** Please clarify how temporary concrete barrier is paid?

**Response:** *Temporary concrete barrier is paid as 2 items; Item 526.304 – Temporary Concrete Barrier, Anchored, and Item 526.306 – Temporary Concrete Barrier, Type 1 – Supplied by Authority. Note that as part of this addendum, Temporary Concrete Barrier, Type 1 is now supplied by the Authority. Previously, the Temporary Concrete Barrier, Type 1 was to be supplied by the Contractor. See Special Provision Section 526 – Temporary Concrete Barrier, Anchored and Special Provision Section 526 – Temporary Concrete Barrier, Supplied by Authority for additional information regarding each type of barrier.*

**Question 4:** Please clarify the fee for stoppage of traffic for equipment moves?

**Response:** *Stoppages for moving heavy or slow equipment across or on the travel lanes shall be no longer than 5 minutes and shall be approved by the Resident. The Contractor shall reimburse the Authority at a rate of \$500 per minute for each minute in excess of the five-minute allowance. See MTA Supplemental Specification Section 652 for additional requirements.*

**Question 5:** Could any adjustments be made to the restrictions regarding when Contractor vehicles can merge onto the highway?

**Response:** Yes. A revised Special Provision 652 is scheduled to be issued as part of Addendum No. 2.

**Attachments**

- Contract Plan Sheets 2, 4, 7, 21A, 24-27, 37, 38, 44-51, 55-57, 61A (23 pages) and 92
- Proposal Pages P-2 through P-14 (13 pages)
- Special Provision Section 526 – Concrete Barrier – (Temporary Concrete Barrier, Anchored) (3 pages)
- Special Provision Section 526 – Concrete Barrier – (Temporary Concrete Barrier Type 1 – Supplied by Authority) (3 pages)
- Special Provision Section 604 – Manholes, Inlets and Catch Basins (2 pages)
- Special Provision Section 604 – Manholes, Inlets and Catch Basins (Secure Catch Basin Grate) (2 pages)
- Special Provision Section 626 – Foundations, Conduit, and Junction Boxes for Highway Signing, Lighting and Signals (Light Standard Foundation) (2 pages)
- Special Provision Section 627 – Pavement Markings (Temporary Raised Pavement Markers) (2 pages)
- Special Provision Section 655 – Electrical Work (AWG wire) (1 page)
- Pre-Bid Agenda (5 pages)
- Pre-Bid Sign-In Sheet (1 page)

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

The total number of pages included with this addendum is sixty-one (61).

All bidders are requested to acknowledge the receipt of the Addendum No. 1 by signing below and faxing this sheet to Nate Carll, Purchasing Department, (207) 871-7739. Bidders are also required to acknowledge receipt of this Addendum No. 1 on Page P-15 of the bid package.

\_\_\_\_\_  
Business Name

\_\_\_\_\_  
Print Name and Title

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

April 11, 2019

Very truly yours,

MAINE TURNPIKE AUTHORITY

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Purchasing Manager  
Maine Turnpike Authority

Date: 4/10/2019

Filename: ...BRIDGE.MSTAD002\_qnty\_01.dgn

ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
202.15	Removing Manhole or Catch Basin	2	EA
202.151	Abandoning Existing Manhole or Catch Basin	2	EA
202.16	Removing Existing Pipe	230	LF
202.161	Abandoning Existing Pipe	200	LF
202.19	Removing Existing Bridge	1	LS
202.202	Removing Pavement Surface - Mainline	61,500	SY
202.2026	Removing Pavement Surface - Drainage Paths	460	SF
202.203	Pavement Butt Joints	3,000	SY
202.205	Rumble Strips - Shoulder	19,400	LF
203.20	Common Excavation	19,050	CY
203.24	Common Borrow	9,950	CY
203.25	Granular Borrow	11,560	CY
203.33	Lightweight Fill	7,000	CY
304.10	Aggregate Subbase Course - Gravel	8,550	CY
304.14	Aggregate Base Course - Type A	4,450	CY
403.207	Hot Mix Asphalt - 19.0 mm	10,850	Ton
403.208	Hot Mix Asphalt - 12.5 mm	120	Ton
403.2081	Hot Mix Asphalt, 12.5 mm (Polymer Modified) - RAP	6,850	Ton
403.209	Hot Mix Asphalt - 9.5 mm (sidewalks, drives, & incidentals)	34	Ton
403.212	Hot Mix Asphalt - 4.75mm (Shim)	1,700	Ton
403.213	Hot Mix Asphalt - 12.5mm HMA (base and intermediate course)	2,500	Ton
409.15	Bituminous Tack Coat RS-I or RS-II - Applied	8,950	Gallon
419.30	Sawing Bituminous Pavement	8,500	LF
461.131	Temporary Pavement	40	Ton
470.08	Berm Dropoff Correction - Grindings	660	Ton
470.081	Berm Correction	20,000	LF
501.231	Dynamic Loading Test	4	EA
501.50	Steel H-Beam Piles 89 lb/ft, delivered	2,400	LF
501.501	Steel H-Beam Piles 89 lb/ft, in place	2,400	LF
501.90	Pile Tips	40	EA
501.91	Pile Splices	40	EA
501.92	Pile Driving Equipment Mobilization	1	LS
502.21	Structural Concrete, Abutments and Retaining Walls	250	CY
502.26	Structural Concrete Roadway and Sidewalk Slab on Steel Bridges	(610 CY)*	1 LS
502.264	Structural Concrete Parapets	52	CY
502.31	Structural Concrete Approach Slab	(190 CY)*	1 LS
502.72	FRP Bridge Drain - Type F	12	EA
503.14	Epoxy-Coated Reinforcing Steel, Fabricated and Delivered	250,000	LB
503.15	Epoxy-Coated Reinforcing Steel, Placing	250,000	LB
503.17	Mechanical/Welded Splice	1,560	EA
503.26	Stainless Steel Reinforcement, Fabricated and Delivered	21,800	LB
503.27	Stainless Steel Reinforcement, Placing	21,800	LB
504.70	Structural Steel Fabricated and Delivered	(746,500 LB)*	1 LS
504.71	Structural Steel Erection	(746,500 LB)*	1 LS
505.08	Shear Connectors	(8,064 EA)*	1 LS
506.9104	Thermal Spray Coating (Shop Applied)	1	LS
507.091	Aluminum Bridge Railing, 1 Bar	(475 LF)*	1 LS
508.14	High Performance Waterproofing Membrane	(1550 SY)*	1 LS
508.15	Membrane Waterproofing	(5 SY)*	1 LS
511.091	Temporary Earth Support Systems	1	LS
514.06	Curing Box for Concrete Cylinders	1	EA
515.202	Clear Protective Coating for Concrete Surfaces	850	SY
520.23	Asphaltic Plug Joint	242	LF
524.40	Protective Shielding - Steel Girders	1,940	SY
526.304	Temporary Concrete Barrier, Anchored	(900 LF)*	1 LS
526.306	Temporary Concrete Barrier, Type I - Supplied by Authority	(7,800 LF)*	1 LS
526.35	Median Barrier	2,850	LF
526.361	Bridge Endpost Median Barrier Transition	2	EA
526.362	Guardrail Median Barrier Transition	2	EA
527.341	Work Zone Crash Cushions - TL-3	4	U
603.159	12 inch Culvert Pipe Option III	64	LF
603.28	Concrete Collar for Reinforcing Concrete Pipe	2	EA
603.431	36" RCP Class 5	40	LF
604.092	Catch Basin Type B1-C	7,375	EA
604.164	Rebuilding Catch Basin	1	EA
604.18	Adjusting Manhole or Catch Basin to Grade	2	EA
604.247	Catch Basin Type F5-C	5	EA
604.262	Catch Basin Type B5-C	9	EA
604.40	Secure Catch Basin Grate	1	EA
605.09	6 inch Underdrain Pipe Type B	600	LF
605.10	6 inch Underdrain Outlet	160	LF
605.11	12 inch Underdrain Pipe Type C	2,050	LF
605.12	15 inch Underdrain Pipe Type C	740	LF
606.1301	3" W-Beam Guardrail - Mid-way Splice (8' Steel Posts, 8' Offset Blocks, Single Faced)	1,537.5	LF
606.1306	3" W-Beam Guardrail - Mid-way Splice Tangent Terminal	2	EA
606.1351	Terminal End - Anchored End - 3" W-Beam Guardrail	2	EA
606.1723	Bridge Transition - Type III	4	EA
606.1725	Guardrail Transition Type III (Modified)	2	EA

Quantities are Estimated Only

ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
606.352	ReflectORIZED Beam Guardrail Delineator	34	EA
606.356	Underdrain Delineator Post	36	EA
606.3561	Delineator Post - Remove and Reset	18	EA
606.3606	Guardrail Remove, Modify and Reset, Double Rail	175	LF
607.17	Chain Link Fence - 6 foot	280	LF
607.23	Chain Link Fence Gate	2	EA
607.32	Bracing Assembly Type I - Metal Posts	10	EA
607.33	Bracing Assembly Type II - Metal Posts	8	EA
609.11	Vertical Curb Type I	640	LF
609.12	Vertical Curb Type I - Circular	13	LF
609.15	Sloped Curb Type I	516	LF
609.191	Concrete Curb Type 2	88	LF
609.234	Terminal Curb Type I - 4 foot	1	EA
609.2341	Terminal Curb Type I - 4 ft - Circular	1	EA
609.238	Terminal Curb Type I - 8 foot	1	EA
610.08	Plain Riprap	1,050	CY
610.181	Temporary Stone Check Dam	10	CY
613.319	Erosion Control Blanket	700	SY
615.07	Loam	1,600	CY
618.14	Seeding Method Number 2	130	Unit
618.143	Special Seeding	40	Unit
619.1201	Mulch - Plan Quantity	170	Unit
619.1202	Temporary Mulch	1	LS
619.14	Erosion Control Mix	200	CY
620.58	Erosion Control Geotextile	1,200	SY
620.70	HDPE Geomembrane	600	SY
624.01	Stormwater Soil Filter Bed	140	CY
626.12	Quartzite Junction Box	11	EA
626.204	3" Schedule 80 PVC Conduit	2730	LF
626.341	Light Standard Foundation	11	EA
627.30	Grooving for Painted Pavement Markings	19,750	SF
627.712	White or Yellow Pavement Marking Line	23,165	LF
627.73	Temporary 6 Inch Pavement Marking Tape	25,000	LF
627.77	Removing Existing Pavement Marking	21,100	SF
627.78	Temporary Pavement Marking Type, White or Yellow	185,000	LF
627.812	Temporary Raised Pavement Markers	5,100	EA
627.94	Pavement Marking Tape	7,575	LF
629.05	Hand Labor, Straight Time	100	HR
631.10	Air Compressor (Including Operator)	40	HR
631.11	Air Tool (Including Operator)	80	HR
631.12	All Purpose Excavator (Including Operator)	30	HR
631.171	Truck - Small (Including Operator)	50	HR
631.18	Chain Saw Rental (Including Operator)	10	HR
631.22	Front End Loader (Including Operator)	70	HR
631.32	Culvert Cleaner (Including Operator)	10	HR
631.36	Foreperson	30	HR
634.208	Remove and Reset Light Standard	3	EA
639.18	Field Office, Type A	1	EA
645.105	Remove and Stack Sign	1	EA
645.106	Demount Regulatory, Warning, Confirmation and Route Marker Assembly Sign	7	EA
645.109	Remove and Reset Sign	4	EA
645.271	Regulatory, Warning, Confirmation and Route Assembly Sign, Type I	97.5	SF
645.272	Regulatory, Warning and Bridge Number Signs, Type I - Supplied by Authority	2	EA
645.511	LED Flashing Sign	2	EA
652.30	Flashing Arrow	2	EA
652.312	Type III Barricades	8	EA
652.33	Drum	425	EA
652.34	Cone	100	EA
652.35	Construction Signs	2,331	SF
652.361	Maintenance of Traffic Control Devices	1	LS
652.38	Flaggers	160	HR
652.381	Traffic Officers	160	HR
652.41	Portable-Changeable Message Sign	5	EA
652.45	Truck Mounted Attenuator	60	CD
652.452	Automated Trailer Mounted Speed Limit Sign	2	EA
656.50	Baled Hay, In Place	50	EA
656.632	30 inch Temporary Silt Fence	6,150	LF
659.10	Mobilization	1	LS
802.182	20" Class 52 DI Restrained Joint Pipe	300	LF
802.32	Casing Spacers	21	EA
830.279	Horizontal Directional Drilling, 18-inch HDPE Culvert	140	LF



Scale:			
No.	Revision	By	Date
1	Addendum No. 1	GME	4/19

Designed by:			
CONSULTANT PROJECT MANAGER: T. Bryant			
	By	Date	
Designed	MED	3/22/19	Checked
Drawn	DPD	3/22/19	In Charge of
			By
			GME
			3/22/19
			TSB
			3/22/19

VANASSE HANGEN BRUSTLIN, INC.  
 500 Southborough Dr.  
 Suite 105B  
 South Portland, ME 04106  
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 FAX (207) 253-5596

## THE GOLD STAR MEMORIAL HIGHWAY

MTA PROJECT MANAGER: Ralph Norwood, IV

# WARREN AVENUE OVERPASS BRIDGE REPLACEMENT

## ESTIMATED QUANTITIES

VHB: 55191.01 SHEET NUMBER: 2  
 CONTRACT: 2019.10 2 OF 141

Date: 4/10/2019

Filename: ...MSTA\004\_ConstructionNotes.dgn

**ITEM 526.35 - MEDIAN BARRIER (PRECAST)**  
 STATION TO STATION OFFSET QUANTITY (LF)  
 MAINE TURNPIKE  
 2423+28 TO 2436+21 -- 1303.4  
 2437+43 TO 2452+84 -- 1511.4

**ITEM 526.362 - GUARDRAIL MEDIAN BARRIER TRANSITION (PRECAST)**  
 STATION TO STATION OFFSET QUANTITY (EA)  
 MAINE TURNPIKE  
 2423+18 TO 2423+28 -- 1  
 2452+84 TO 2452+94 -- 1

**ITEM 603.159 - 12" CULVERT PIPE OPTION III**  
 LOCATION QUANTITY (LF)  
 MAINE TURNPIKE  
 CB-1A TO CB-1B 4  
 CB-1C TO CB-2 4  
 CB-3 TO CB-4 4  
 CB-5 TO CB-6 4  
 CB-7 TO CB-8 4  
 CB-11 TO CB-12 29  
 CB-16 TO CB-17 4

WARREN AVE  
 224+08, 27.3' RT TO CB-100 5  
 224+52, 27.3' LT TO CB-101 5

**ITEM 604.40 - SECURE CATCH BASIN GRATE**  
 STATION OFFSET QUANTITY (EA)  
 MAINE TURNPIKE  
 2416+49 41.7 RT 1

**ITEM 606.1301 - 31"W-BEAM GUARDRAIL MID-WAY SPLICE (8' STEEL POST, 8' OFFSET BLOCKS, SINGLE FACED)**  
 STATION TO STATION OFFSET QUANTITY (LF)  
 MAINE TURNPIKE  
 2432+87 TO 2436+49 RT 362.5  
 2435+40 TO 2435+90 LT 50.0  
 2437+56 TO 2446+81 LT 925.0  
 2438+14 TO 2440+14 RT 200.0

**ITEM 606.1306 - 31"W-BEAM GUARDRAIL - MID-WAY SPLICE TANGENT TERMINAL**  
 STATION TO STATION OFFSET QUANTITY (EA)  
 MAINE TURNPIKE  
 2432+40 TO 2432+87 RT 1  
 2446+81 TO 2447+28 LT 1

**ITEM 606.1351 - TERMINAL END - ANCHORED END 31"W-BEAM GUARDRAIL**  
 LOCATION OFFSET QUANTITY (EA)  
 MAINE TURNPIKE  
 2435+30 LT 1  
 2440+20 RT 1

**ITEM 606.1723 - BRIDGE TRANSITION TYPE III**  
 STATION TO STATION OFFSET QUANTITY (EA)  
 MAINE TURNPIKE  
 2435+90 TO 2436+09 LT 1  
 2436+49 TO 2436+67 RT 1  
 2437+38 TO 2437+56 LT 1  
 2437+96 TO 2438+14 RT 1

**ITEM 606.1725 - GUARDRAIL TRANSITION TYPE III (MODIFIED)**  
 STATION TO STATION OFFSET QUANTITY (EA)  
 MAINE TURNPIKE  
 2423+00 TO 2423+18 -- 1  
 2452+94 TO 2453+13 -- 1

**ITEM 606.352 - REFLECTORIZED BEAM GUARDRAIL DELINEATOR**  
 LOCATION QUANTITY (EA)  
 MAINE TURNPIKE  
 ALL LOCATIONS 34

**ITEM 606.356 - UNDERDRAIN DELINEATOR POST**  
 LOCATION QUANTITY (EA)  
 MAINE TURNPIKE  
 ALL LOCATIONS 36

**ITEM 606.3561 - DELINEATOR POST REMOVE AND RESET**  
 LOCATION QUANTITY (EA)  
 MAINE TURNPIKE  
 ALL LOCATIONS 18

**ITEM 606.3606 - GUARDRAIL REMOVE, MODIFY AND RESET (DOUBLE RAIL)**  
 STATION TO STATION OFFSET QUANTITY (LF)  
 MAINE TURNPIKE  
 2422+24 TO 2423+00 -- 76.0  
 2453+13 TO 2454+09 -- 96.0

**ITEM 607.17 - CHAIN LINK FENCE - 6 FOOT**  
 STATION TO STATION OFFSET QUANTITY (LF)  
 MAINE TURNPIKE  
 2435+40 TO 2436+10 LT 81.4  
 2436+20 TO 2436+75 RT 78.5  
 2437+25 TO 2437+60 LT 61.5  
 2437+95 TO 2438+40 RT 53.7

**ITEM 607.23 - CHAIN LINK FENCE GATE**  
 LOCATION QUANTITY (EA)  
 MAINE TURNPIKE  
 ALL LOCATIONS 2

**ITEM 609.191 - VERTICAL CURB TYPE 2**  
 STATION TO STATION OFFSET QUANTITY (EA)  
 MAINE TURNPIKE  
 2423+00 TO 2423+18 - 18.1  
 2435+97 TO 2436+09 LT 11.9  
 2436+55 TO 2436+67 RT 11.9  
 2437+38 TO 2437+49 LT 11.9  
 2437+96 TO 2438+08 RT 11.9  
 2452+94 TO 2453+13 - 18.1

**ITEM 610.08 - PLAIN RIPRAP**  
 STATION TO STATION OFFSET QUANTITY (CY)  
 MAINE TURNPIKE  
 2422+44 103.0' RT 0.5  
 2423+62 69.1' RT 3.4  
 2436+41 TO 2436+70 -- 486.1  
 2436+01 65.6' LT 11.1  
 2436+60 66.4' RT 9.0  
 2437+34 TO 2437+63 -- 486.1  
 2443+98 76.3' LT 2.1

**ITEM 620.58 - EROSION CONTROL GEOTEXTILE**  
 STATION TO STATION OFFSET QUANTITY (SY)  
 MAINE TURNPIKE  
 2422+44 103.0' RT 4.0  
 2423+62 69.1' RT 15.2  
 2436+41 TO 2436+70 -- 532.8  
 2436+01 65.6' LT 36.4  
 2436+60 66.4' RT 29.9  
 2437+34 TO 2437+63 -- 532.8  
 2443+98 76.3' LT 12.0

**ITEM 620.70 - HDPE GEOMEMBRANE**  
 LOCATION QUANTITY (SY)  
 MAINE TURNPIKE  
 2424+00 TO 2430+00 RT 600

**ITEM 624.01 - STORMWATER SOIL FILTER BED**  
 LOCATION QUANTITY (CY)  
 MAINE TURNPIKE  
 2424+00 TO 2430+00 RT 140

**EARTHWORK SUMMARY**

COMMON EXCAVATION FOR ESTIMATE	PHASE 1 CONSTRUCTION	PHASES 2, 3, AND WARREN AVE CONSTRUCTION
COMMON EXCAVATION (FROM MODEL OR PLANS)	9047	4445
GRUBBING IN FILL	3926	365
PAVEMENT SALVAGE IN FILL	1065	1119
<b>TOTAL COMMON EXCAVATION</b>	<b>14038</b>	<b>5929</b>
<b>FILL FOR BORROW CALCULATIONS</b>		
COMMON FILL (FROM MODEL OR PLANS)	12797	250
GRUBBING IN FILL	3926	365
PAVEMENT SALVAGE IN FILL	1065	1119
<b>TOTAL FILL</b>	<b>17788</b>	<b>1734</b>
<b>AVAILABLE COMMON EXCAVATION FOR BORROW CALCULATIONS</b>		
ALL DEDUCTIONS:		
GRUBBING IN CUT	3120	1028
GRUBBING IN FILL	3926	365
PAVEMENT SALVAGE (CUT & FILL)	1357	2008
<b>TOTAL DEDUCTIONS</b>	<b>8403</b>	<b>3401</b>
<b>TOTAL AVAILABLE COMMON EXCAVATION (-) TOTAL DEDUCTIONS</b>	<b>5635</b>	<b>2528</b>
<b>TOTAL AVAILABLE STRUCTURAL EXCAVATION (UNDERDRAIN ONLY)</b>	<b>167</b>	<b>775</b>
<b>RIPRAP EXCAVATION</b>	<b>27</b>	<b>0</b>
<b>TOTAL AVAILABLE NON-ROCK EXCAVATION</b>	<b>5829</b>	<b>3303</b>
<b>COMPUTATION OF WASTE STORAGE &amp; WASTE MATERIAL</b>		
TOTAL AVAILABLE WASTE STORAGE AREA (FROM CROSS SECTIONS)	0	0
GRUBBING IN CUT	3120	1028
GRUBBING IN FILL	3926	365
<b>TOTAL WASTE MATERIAL</b>	<b>7046</b>	<b>1393</b>
<b>TOTAL WASTE MATERIAL TO BE UTILIZED</b>	<b>0</b>	<b>0</b>
<b>TOTAL WASTE MATERIAL TO BE WASTED</b>	<b>7046</b>	<b>1393</b>
<b>COMPUTATION FOR GRANULAR BORROW FOR ESTIMATE</b>		
LIGHT WEIGHT FILL	2545	4424
GRANULAR BORROW TO MAINTAIN TRAFFIC	50	0
<b>TOTAL GRANULAR BORROW</b>	<b>2595</b>	<b>4424</b>
<b>COMPUTATION FOR SURPLUS MATERIAL OR COMMON BORROW FOR ESTIMATE</b>		
TOTAL AVAILABLE NON-ROCK EXCAVATION	5829 x 0.90 = 5246	3303 x 0.90 = 2972.7
TOTAL WASTE MATERIAL TO BE UTILIZED	0 x 0.90 = 0	0 x 0.90 = 0
<b>TOTAL AVAILABLE EXCAVATION</b>	<b>5246</b>	<b>2973</b>
<b>BORROW NEEDED = TOTAL FILL (-) TOTAL AVAILABLE EXCAVATION</b>	<b>12542</b>	<b>0</b>
LIGHT WEIGHT FILL	2545	
GRANULAR BORROW TO MAINTAIN TRAFFIC	50	
<b>BORROW NEEDED (-) REQUIRED GRANULAR BORROW WITHIN FILL</b>	<b>9947</b>	
<b>COMMON BORROW</b>	<b>9947 CY</b>	<b>SURPLUS MATERIAL 2632 CY</b>

Scale:

No.	Revision	By	Date
1	Addendum No. 1	ECF	4/19

Designed by:



CONSULTANT PROJECT MANAGER: T. Bryant

	By	Date	By	Date
Designed	AGC	3/22/19	Checked	ECF 3/22/19
Drawn	BMD	3/22/19	In Charge of	AG 3/22/19

VANASSE HANGEN BRUSTLIN, INC.  
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**THE GOLD STAR MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ralph Norwood, IV

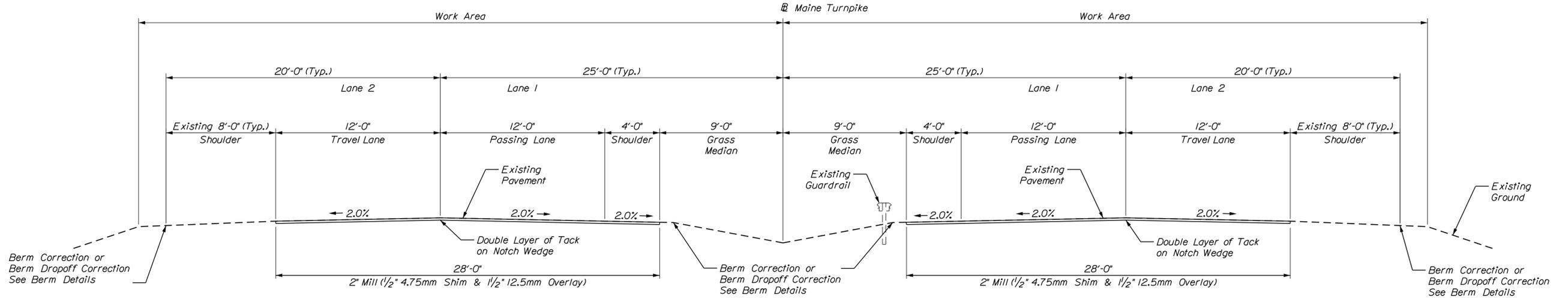
WARREN AVENUE OVERPASS  
 BRIDGE REPLACEMENT  
 CONSTRUCTION NOTES  
 & EARTHWORK SUMMARY

VHB: 55191.01 SHEET NUMBER: 4  
 CONTRACT: 2019.10

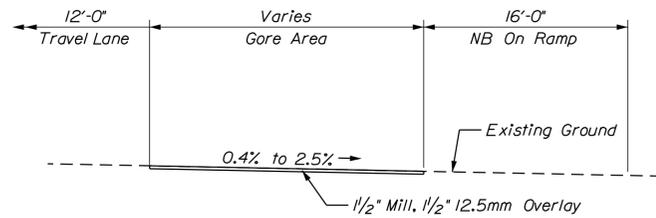
Contract 2019.10  
 Addendum No. 1  
 Page 6 of 61

Date: 4/10/2019

Reference:  
 MM 49.3 = Sta. 2453+13  
 MM 51.2 = Sta. 2551+93

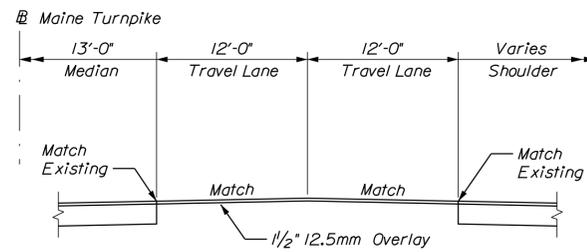


**Pavement Mill & Overlay - NB & SB**  
 MM 49.3 - MM 51.2  
 Not to Scale



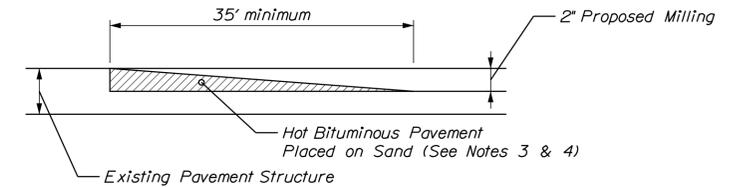
Notes:  
 1. Cross slope of gore area shall be straight.  
 2. Secure catch basin grate and mill around existing catch basin as directed.

**Pavement Mill & Overlay - NB On Ramp Gore**  
 Sta. 2411+18 to 2418+95 Rt  
 Not to Scale



Note: Northbound lanes shown. Mirror typical for Southbound lanes.

**Typical Section - 1/2" Overlay**  
 Sta. 2442+25 to 2453+13  
 Not to Scale



**Temporary Bituminous Ramp**  
 Not to Scale

**Notes:**

1. A coating of hot rubberized asphalt ASTM D6690 Type IV shall be applied to all transverse butt joints and longitudinal joints except where the notch wedge is used.
2. Bituminous tack coat is required between existing pavement and HMA, 12.5mm or shim.
3. Hot Mix Asphalt for temporary ramps will not be measured for payment, but shall be incidental to Hot Mix Asphalt 12.5mm.
4. Removal of temporary bituminous ramps will not be measured for payment, but shall be incidental to Hot Mix Asphalt 12.5mm.
5. Bituminous tack coat is required between all lifts of pavement. Bituminous tack coat is required on all existing paved or milled surfaces prior to placing proposed pavement.
6. Crowns for all courses of pavement shall be straight.
7. Pavement depths as shown on the plan are intended to be nominal.

Filename: ...:\007\_Typicals03\_PavementRehab.dgn

Scale: Not to Scale

No.	Revision	By	Date
1	Addendum No. 1	ECF	4/19

Designed by:



CONSULTANT PROJECT MANAGER: T. Bryant					
	By	Date	By	Date	
Designed	AGC	3/22/19	Checked	ECF	3/22/19
Drawn	BMD	3/22/19	In Charge of	AG	3/22/19

VANASSE HANGEN BRUSTLIN, INC.  
 500 Southborough Dr.  
 Suite 105B  
 South Portland, ME 04106  
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**THE GOLD STAR MEMORIAL HIGHWAY**

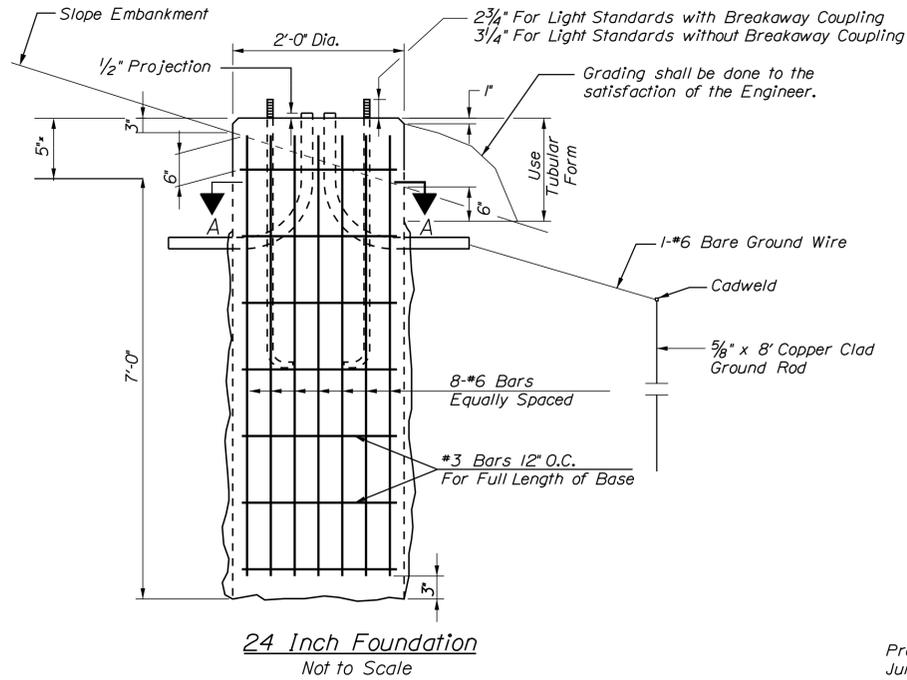
MTA PROJECT MANAGER: Ralph Norwood, IV

WARREN AVENUE OVERPASS  
 BRIDGE REPLACEMENT  
 MILL & OVERLAY LOCATIONS  
 TYPICAL SECTIONS (3 OF 4)

VHB: 55191.01  
 CONTRACT: 2019.10

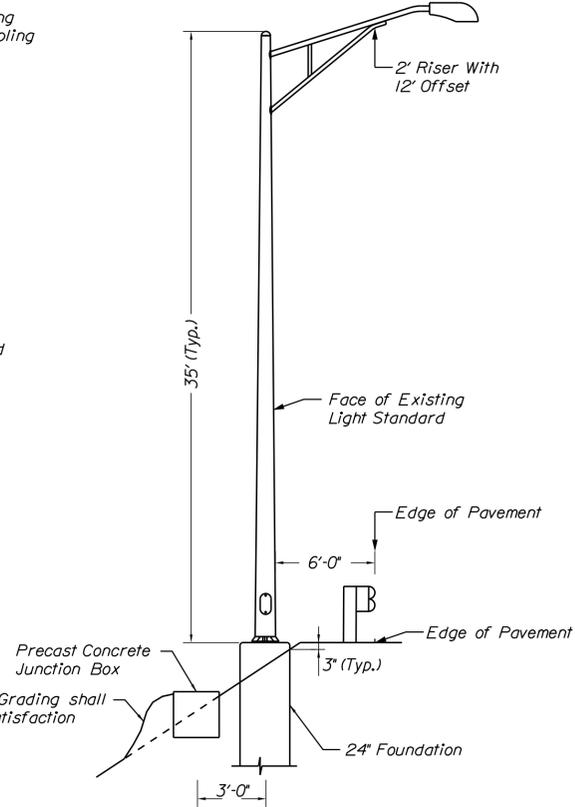
SHEET NUMBER: 7  
 7 OF 141

Date: 4/10/2019

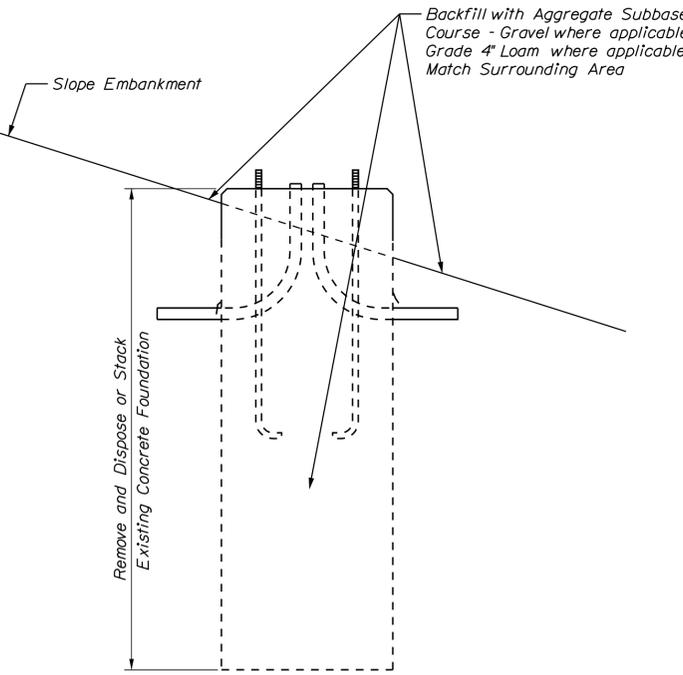


24 Inch Foundation  
Not to Scale

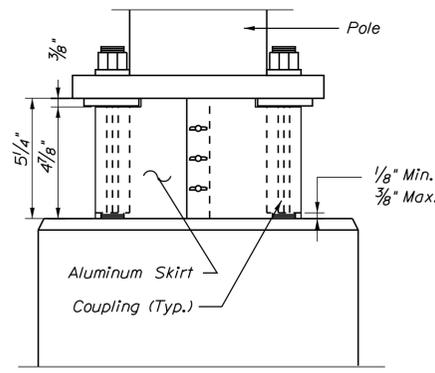
Note: Where solid rock is encountered at less than the required distance below ground level, reinforcing steel shall be doveled into ledge as shown on MaineDOT Standard Detail 626(06). Payment shall be incidental to the foundation pay item.



Placement of Light Standard  
Not to Scale

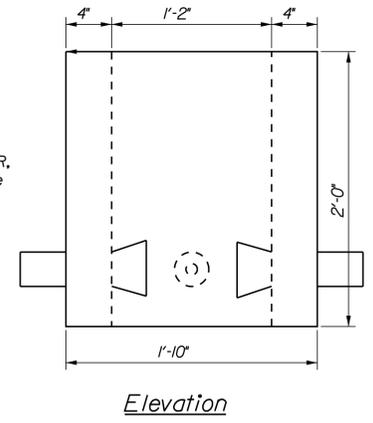


Removal of Concrete Foundation  
Not to Scale

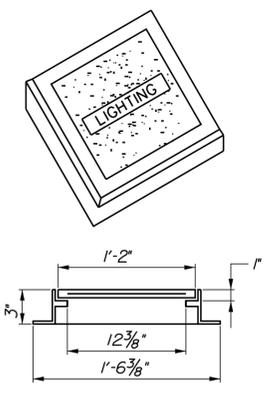


Breakaway Couplings and Skirt Detail  
Not to Scale

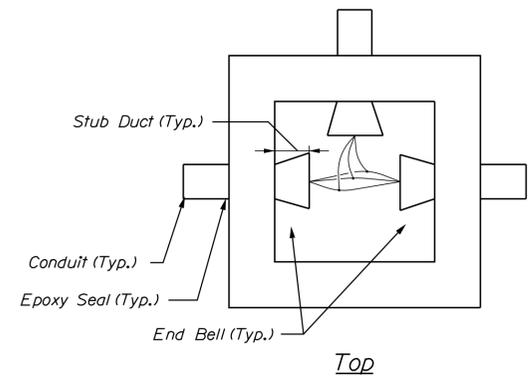
Note: Splices in box shall be made with ILSCO USPA-350-SS-DB Safety sub water tight direct bury splice wire range 350MCM-10-STR, only. Provide enough slack in the wire to allow removal of splices and neatly arrange wire in box.



Elevation

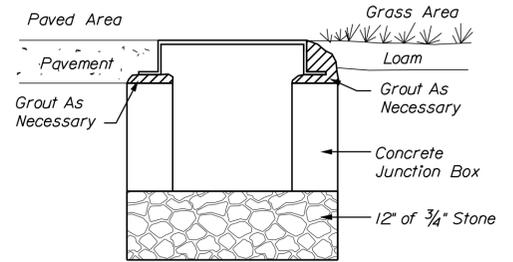


Electrical Pull Box Cover



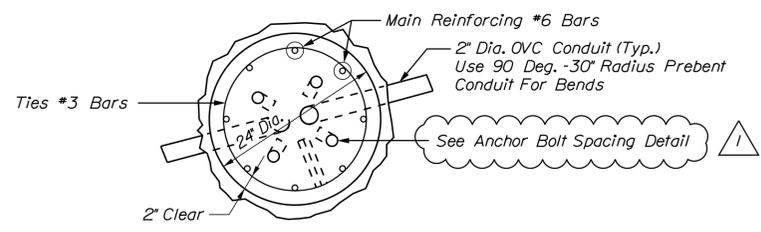
Top

Precast Concrete Junction Box  
Not to Scale

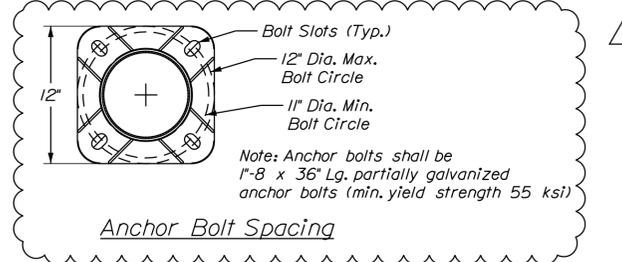


Junction Box Cover & Frame

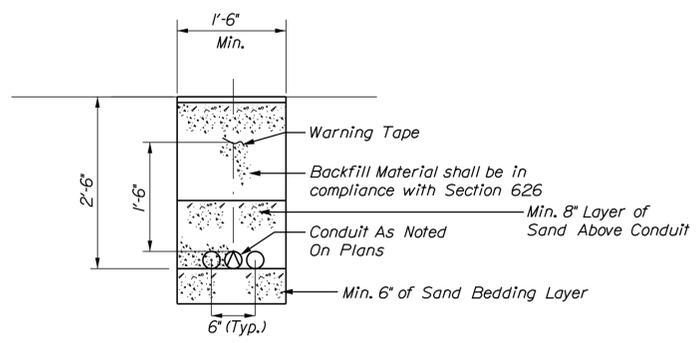
Note: Install junction boxes on grade, grout as necessary as shown above.



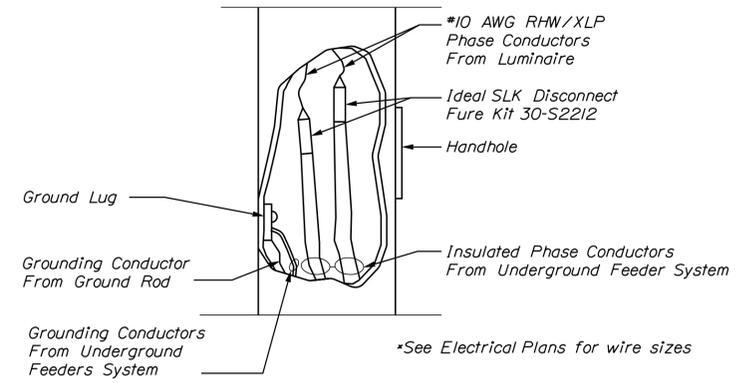
Section A-A



Anchor Bolt Spacing



Trench Cross Section  
Not to Scale



Typical Pole Wiring Detail  
Not to Scale

Filename: ...MSTA\21A\_Details\_Lighting.dgn

Scale: Not to Scale			
No.	Revision	By	Date
1	Addendum No. 1	ECF	4/19

Designed by:					
CONSULTANT PROJECT MANAGER: T. Bryant					
	By	Date	By	Date	
Designed	AGC	3/22/19	Checked	ECF	3/22/19
Drawn	BMD	3/22/19	In Charge of	AG	3/22/19

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500 Southborough Dr.  
Suite 105B  
South Portland, ME 04106  
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THE GOLD STAR MEMORIAL HIGHWAY

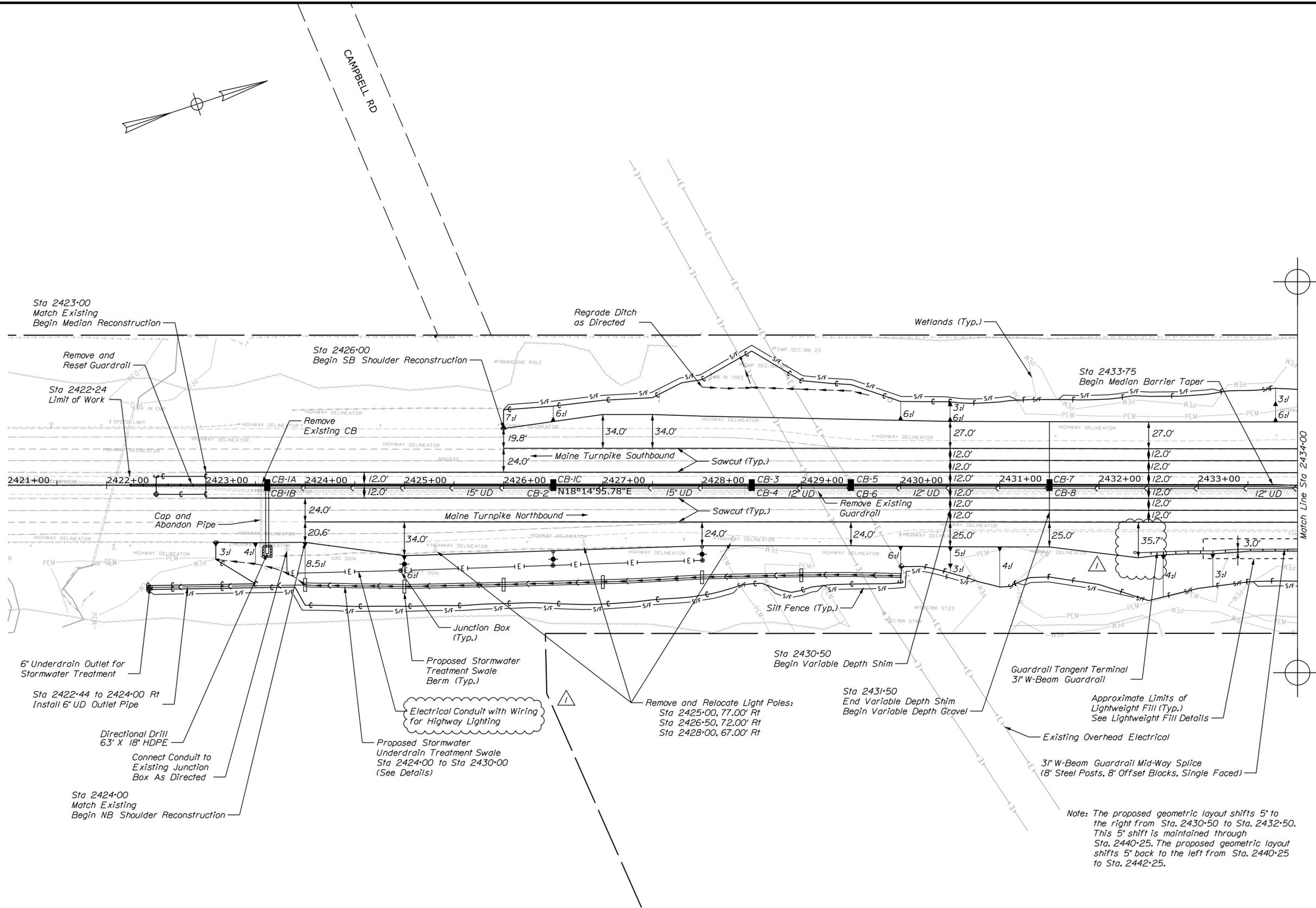
MTA PROJECT MANAGER: Ralph Norwood, IV

WARREN AVENUE OVERPASS  
BRIDGE REPLACEMENT  
LIGHTING DETAILS

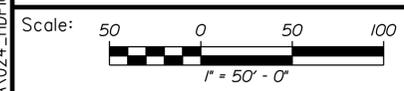
VHB: 55191.01 SHEET NUMBER: 21A  
CONTRACT: 2019.10 21A OF 141

Date: 4/11/2019

Filename: ...MSTAV024\_HDPlan2\_6A.dgn



Note: The proposed geometric layout shifts 5' to the right from Sta. 2430+50 to Sta. 2432+50. This 5' shift is maintained through Sta. 2440+25. The proposed geometric layout shifts 5' back to the left from Sta. 2440+25 to Sta. 2442+25.



No.	Revision	By	Date
1	Addendum No. 1	ECF	4/19

Designed by:



CONSULTANT PROJECT MANAGER: T. Bryant

	By	Date	By	Date
Designed	AGC	3/22/19	Checked	ECF 3/22/19
Drawn	BMD	3/22/19	In Charge of	AG 3/22/19

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**THE GOLD STAR  
 MEMORIAL HIGHWAY**

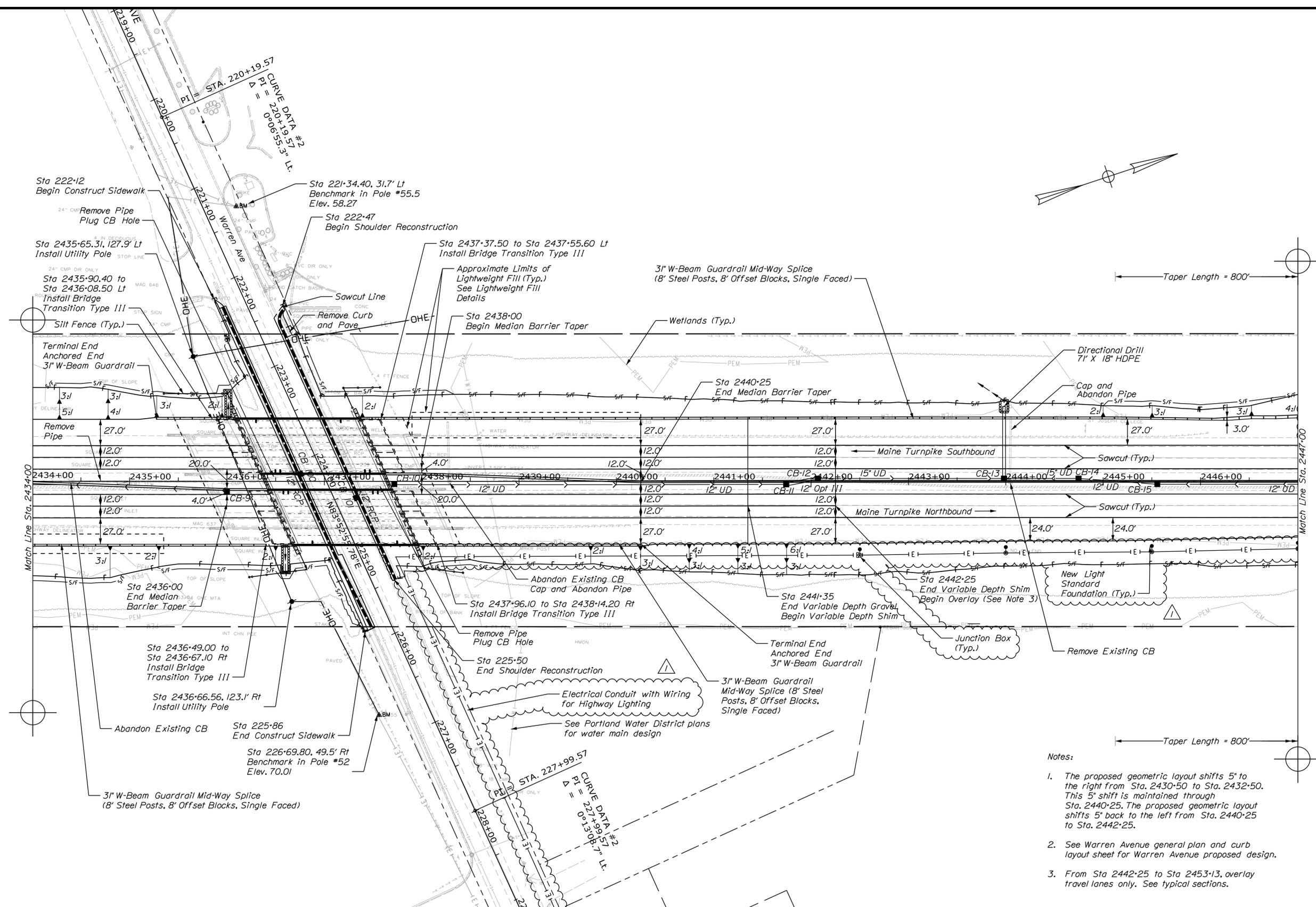
MTA PROJECT MANAGER: Ralph Norwood, IV

**WARREN AVENUE OVERPASS  
 BRIDGE REPLACEMENT  
 MAINE TURNPIKE  
 GENERAL PLANS (1 OF 3)**

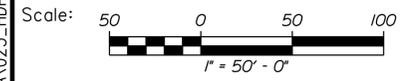
VHB: 55191.01 SHEET NUMBER: 24  
 CONTRACT: 2019.10 24 OF 141

Date: 4/11/2019

Filename: ...MSTA025\_HDP1an.3\_6A.dgn



- Notes:
1. The proposed geometric layout shifts 5' to the right from Sta. 2430+50 to Sta. 2432+50. This 5' shift is maintained through Sta. 2440+25. The proposed geometric layout shifts 5' back to the left from Sta. 2440+25 to Sta. 2442+25.
  2. See Warren Avenue general plan and curb layout sheet for Warren Avenue proposed design.
  3. From Sta. 2442+25 to Sta. 2453+13, overlay travel lanes only. See typical sections.



Designed by:



CONSULTANT PROJECT MANAGER: T. Bryant

No.	Revision	By	Date
1	Addendum No. 1	ECF	4/19

	By	Date	By	Date
Designed	AGC	3/22/19	Checked	ECF 3/22/19
Drawn	BMD	3/22/19	In Charge of	AG 3/22/19

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**THE GOLD STAR  
MEMORIAL HIGHWAY**

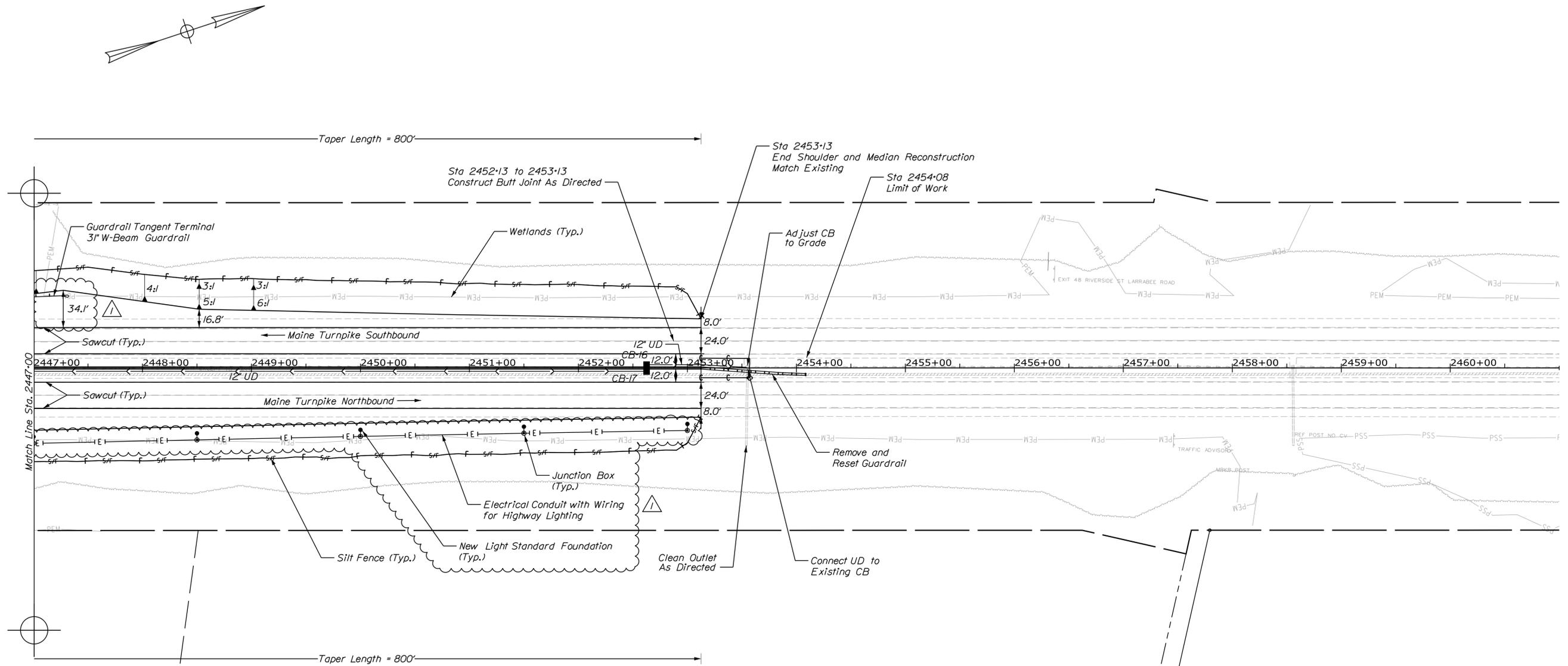
MTA PROJECT MANAGER: Ralph Norwood, IV

**WARREN AVENUE OVERPASS  
BRIDGE REPLACEMENT  
MAINE TURNPIKE  
GENERAL PLANS (2 OF 3)**

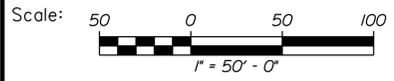
VHB: 55191.01 SHEET NUMBER: 25  
 CONTRACT: 2019.10 25 OF 141

Date: 4/11/2019

Filename: ...MSTA\026\_HDP\plan4\_6A.dgn



Note: From Sta 2442+25 to Sta 2453+13, overlay travel lanes only. See typical sections.



No.	Revision	By	Date
1	Addendum No. 1	ECF	4/19

Designed by:



CONSULTANT PROJECT MANAGER: T. Bryant

	By	Date	By	Date
Designed	AGC	3/22/19	Checked	ECF 3/22/19
Drawn	BMD	3/22/19	In Charge of	AG 3/22/19

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**THE GOLD STAR  
MEMORIAL HIGHWAY**

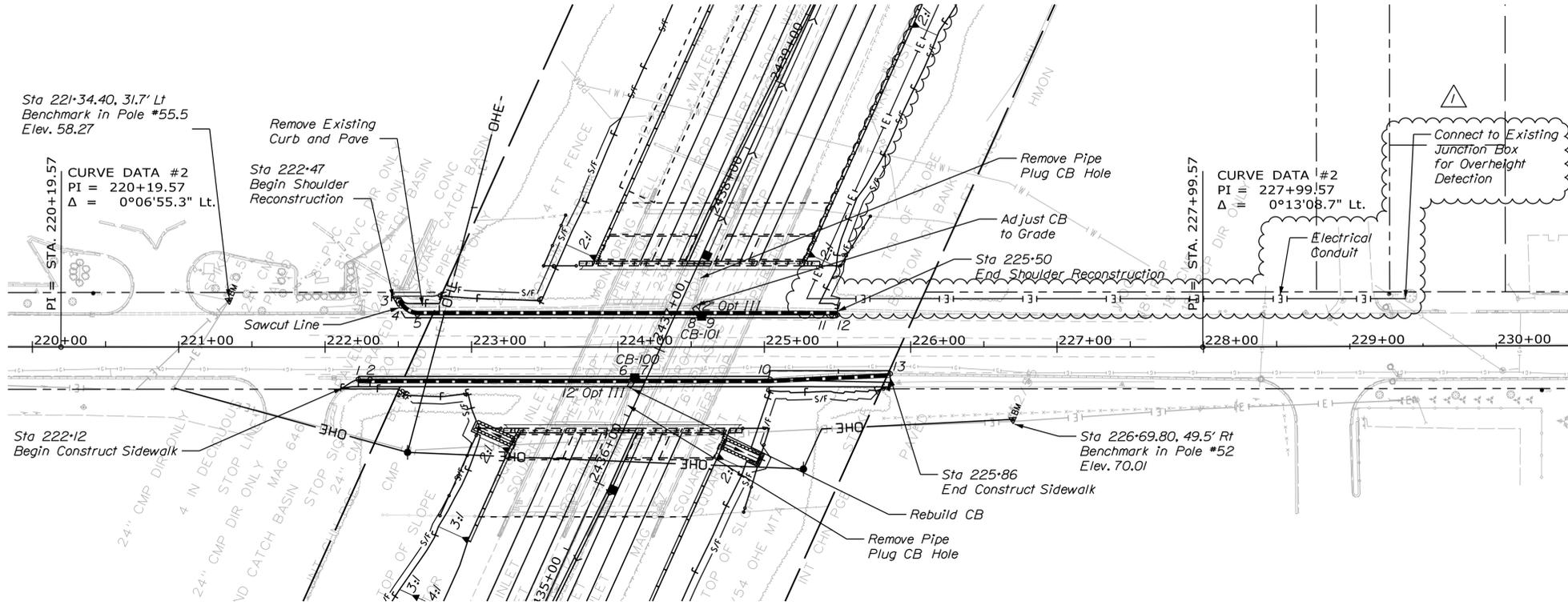
MTA PROJECT MANAGER: Ralph Norwood, IV

**WARREN AVENUE OVERPASS  
BRIDGE REPLACEMENT  
MAINE TURNPIKE  
GENERAL PLANS (3 OF 3)**

VHB: 55191.01  
 CONTRACT: 2019.10

SHEET NUMBER: 26  
 26 OF 141

Date: 4/10/2019



CONTROL POINTS				
POINT	STATION	OFFSET	Y. COORD.	X. COORD
1	222+22.70	22.0 RT.	311003.60	2911329.68
2	222+30.70	22.0 RT.	311004.50	2911337.63
3	222+50.00	31.5 LT.	311059.76	2911351.12
4	222+52.00	27.9 LT.	311056.43	2911353.49
5	222+63.00	22.0 LT.	311051.72	2911365.06
6	224+09.57	22.0 RT.	311023.56	2911515.48
7	224+13.57	22.0 RT.	311023.99	2911519.46
8	224+55.10	22.0 LT.	311072.16	2911556.06
9	224+59.10	22.0 LT.	311072.59	2911560.04
10	225+04.00	22.0 RT.	311033.62	2911609.38
11	225+46.00	22.0 LT.	311081.85	2911646.45
12	225+50.00	22.0 LT.	311082.28	2911650.42
13	225+86.00	18.2 RT.	311046.18	2911690.50

ITEM 609.11 - VERTICAL CURB TYPE 1		
PT. TO PT.	RADIUS	LENGTH
2 TO 6	-	178.9'
5 TO 8	-	192.1'
7 TO 10	-	90.4'
9 TO 11	-	86.9'
10 TO 13	-	82.1'

ITEM 609.12 - VERTICAL CURB TYPE 1 - CIRCULAR		
PT. TO PT.	RADIUS	LENGTH
4 TO 5	15.0'	12.9'

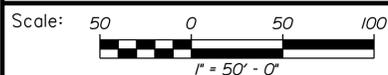
ITEM 609.234 - TERMINAL CURB TYPE 1 - 4 FOOT		
PT. TO PT.	RADIUS	LENGTH
11 TO 12	-	4.0'

ITEM 609.2341 - TERMINAL CURB TYPE 1 - 4 FOOT - CIRCULAR		
PT. TO PT.	RADIUS	LENGTH
3 TO 4	15.0'	4.0'

ITEM 609.238 - TERMINAL CURB TYPE 1 - 8 FOOT		
PT. TO PT.	RADIUS	LENGTH
1 TO 2	-	8.0'

CURB INLET (INCIDENTAL TO CATCH BASIN ITEM)		
PT. TO PT.	RADIUS	LENGTH
6 TO 7	-	4.0'
8 TO 9	-	4.0'

Note: Curb inlets shall be considered incidental to CB Type F5-C, Item 604.247



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THE GOLD STAR  
 MEMORIAL HIGHWAY

WARREN AVENUE OVERPASS  
 BRIDGE REPLACEMENT  
 WARREN AVENUE  
 GENERAL PLAN & CURB LAYOUT

No.	Revision	By	Date
1	Addendum No. 1	ECF	4/19

CONSULTANT PROJECT MANAGER: T. Bryant					
	By	Date	By	Date	
Designed	AGC	3/22/19	Checked	ECF	3/22/19
Drawn	BMD	3/22/19	In Charge of	AG	3/22/19

MTA PROJECT MANAGER: Ralph Norwood, IV

VHB: 55191.01  
 CONTRACT: 2019.10

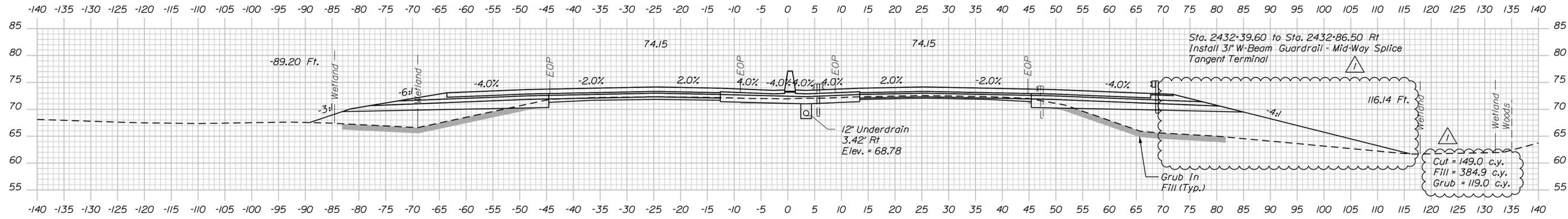
SHEET NUMBER: 27

27 OF 141

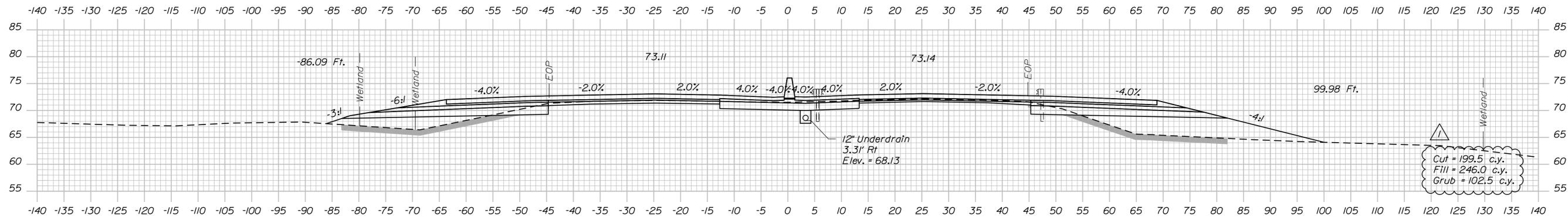
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Date: 4/10/2019

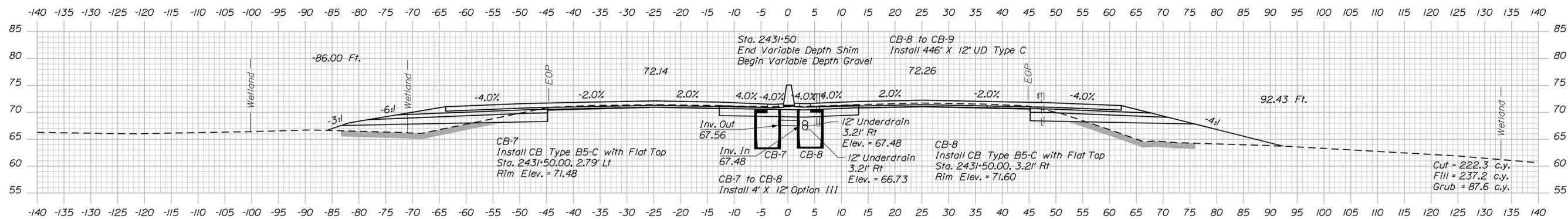
Filename: ... \037\_Xsect\_Mainline\_6A\_06.dgn



2432+50.00

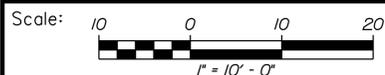


2432+00.00



2431+50.00

Sta. 2431+50.00 to Sta. 2432+50.00



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THE GOLD STAR  
MEMORIAL HIGHWAY

WARREN AVENUE OVERPASS  
BRIDGE REPLACEMENT  
MAINE TURNPIKE  
CROSS SECTIONS

No.	Revision	By	Date
1	Addendum No. 1	ECF	4/19

CONSULTANT PROJECT MANAGER: T. Bryant					
	By	Date	By	Date	
Designed	AGC	3/22/19	Checked	ECF	3/22/19
Drawn	BMD	3/22/19	In Charge of	AG	3/22/19

MTA PROJECT MANAGER: Ralph Norwood, IV

VHB: 55191.01  
CONTRACT: 2019.10

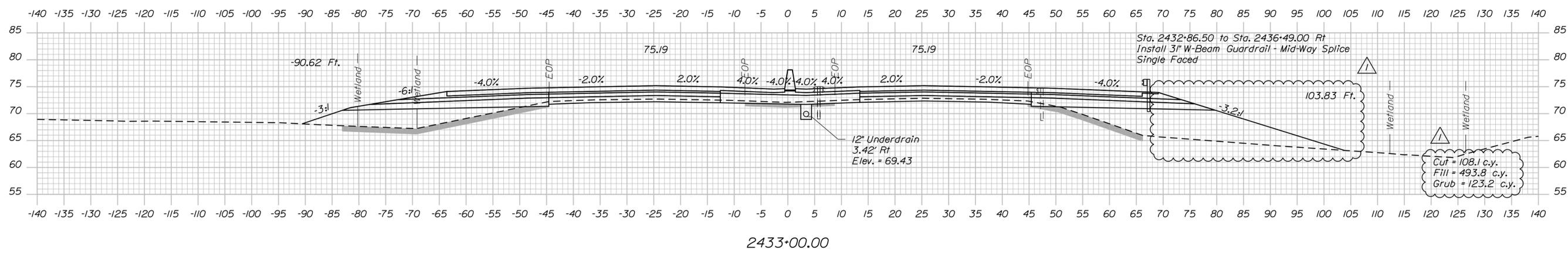
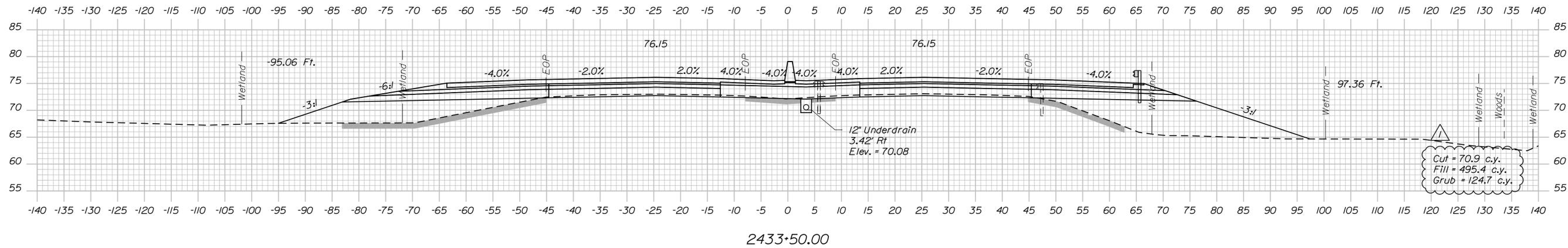
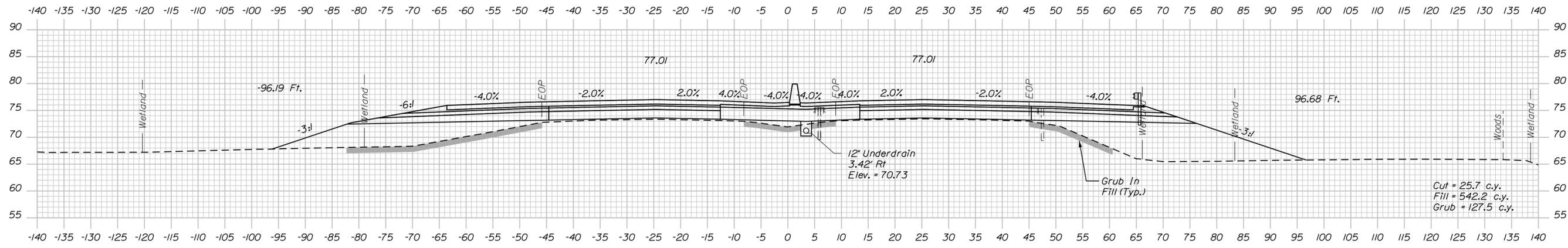
SHEET NUMBER: 37

37 OF 141

Contract 2019.10  
Addendum No. 1  
Page 13 of 61

Date: 4/10/2019

Filename: ... \038\_Xsect\_Mainline\_6A\_07.dgn



Sta. 2433+00.00 to Sta. 2434+00.00

Scale: 1" = 10' - 0"

No.	Revision	By	Date
1	Addendum No. 1	ECF	4/19

Designed by:

CONSULTANT PROJECT MANAGER: T. Bryant

	By	Date	Checked	By	Date
Designed	AGC	3/22/19	Checked	ECF	3/22/19
Drawn	BMD	3/22/19	In Charge of	AG	3/22/19

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500 Southborough Dr.  
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South Portland, ME 04106  
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**THE GOLD STAR  
MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ralph Norwood, IV

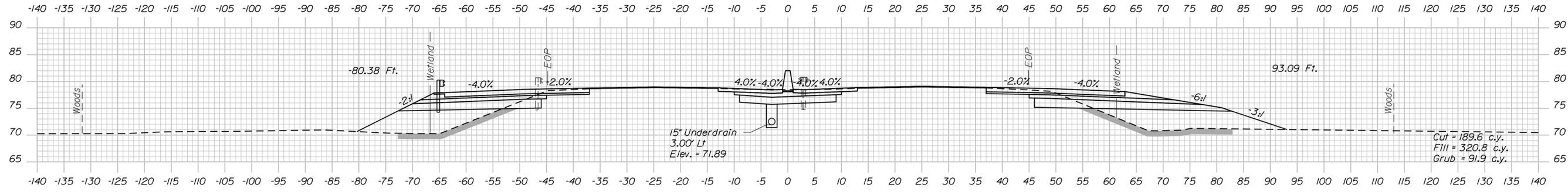
**WARREN AVENUE OVERPASS  
BRIDGE REPLACEMENT  
MAINE TURNPIKE  
CROSS SECTIONS**

VHB: 55191.01  
CONTRACT: 2019.10

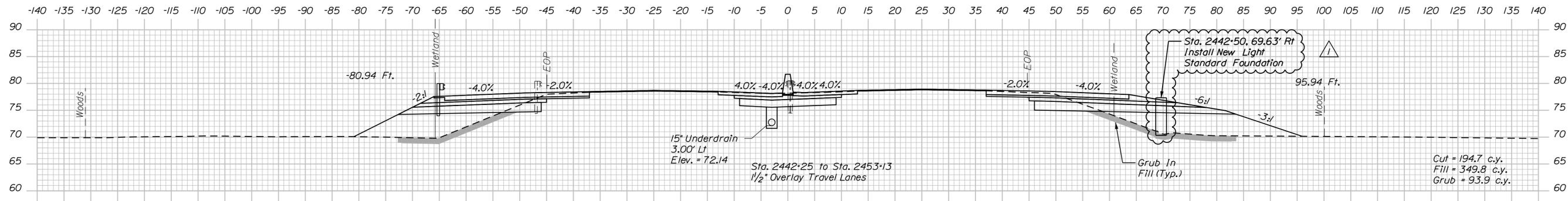
SHEET NUMBER: 38  
38 OF 141

Date: 4/10/2019

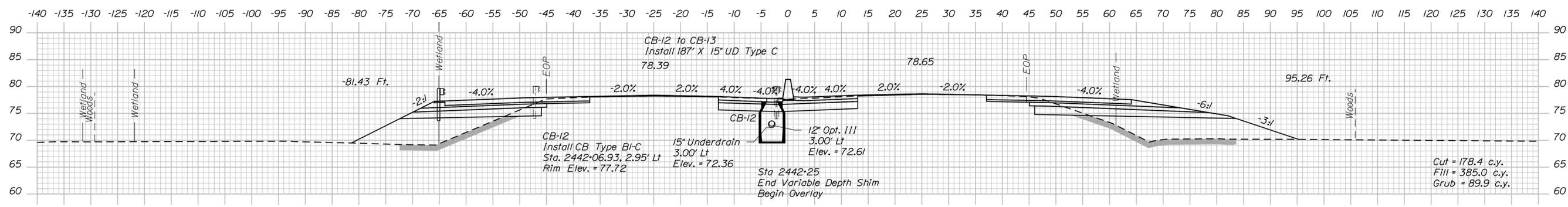
Filename: ...044\_Xsect\_Mainline\_6A\_13.dgn



2443+00.00

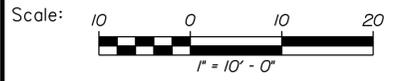


2442+50.00



2442+00.00

Sta. 2442+00.00 to Sta. 2443+00.00



Designed by:



No.	Revision	By	Date
1	Addendum No. 1	ECF	4/19

CONSULTANT PROJECT MANAGER: T. Bryant

	By	Date	Checked	By	Date
Designed	AGC	3/22/19	Checked	ECF	3/22/19
Drawn	BMD	3/22/19	In Charge of	AG	3/22/19

VANASSE HANGEN BRUSTLIN, INC.  
 500 Southborough Dr.  
 Suite 105B  
 South Portland, ME 04106  
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 FAX (207) 253-5596



**THE GOLD STAR  
 MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ralph Norwood, IV

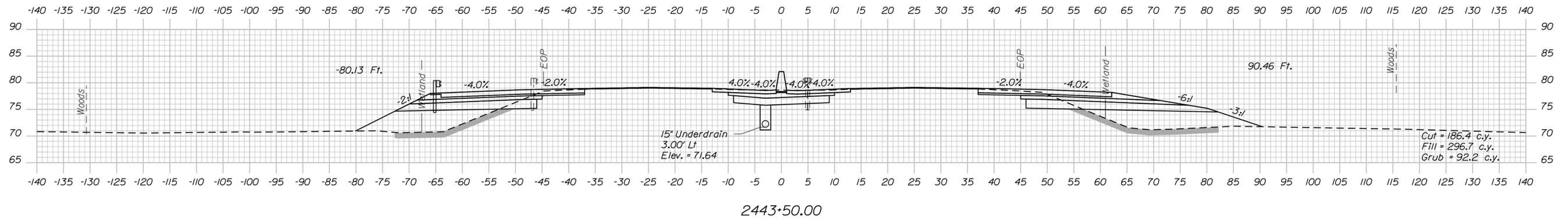
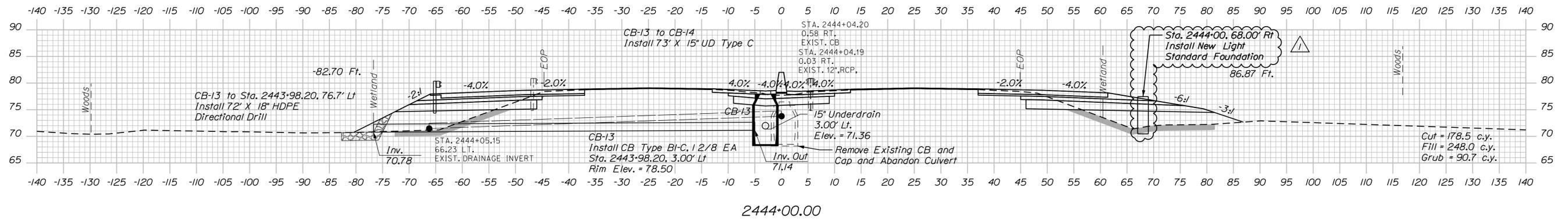
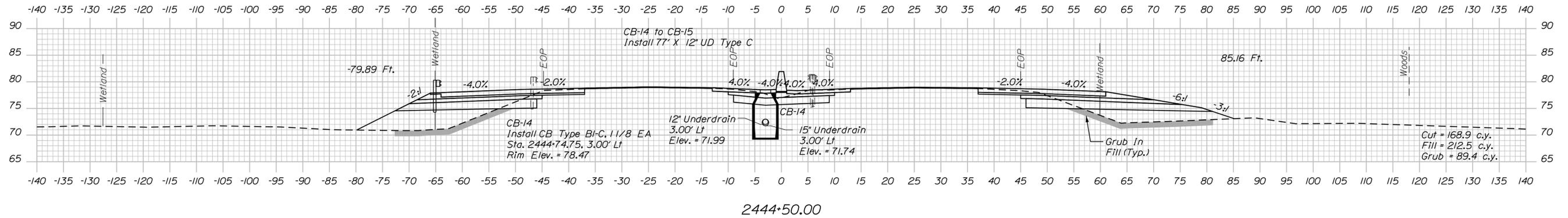
WARREN AVENUE OVERPASS  
 BRIDGE REPLACEMENT  
 MAINE TURNPIKE  
 CROSS SECTIONS

VHB: 55191.01  
 CONTRACT: 2019.10

SHEET NUMBER: 44  
 44 OF 141

Date: 4/10/2019

Filename: ...045\_Xsect\_Mainline\_6A\_14.dgn



Sta. 2443+50.00 to Sta. 2444+50.00



Designed by:



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THE GOLD STAR  
MEMORIAL HIGHWAY

WARREN AVENUE OVERPASS  
BRIDGE REPLACEMENT  
MAINE TURNPIKE  
CROSS SECTIONS

No.	Revision	By	Date
1	Addendum No. 1	ECF	4/19

CONSULTANT PROJECT MANAGER: T. Bryant					
	By	Date	Checked	By	Date
Designed	AGC	3/22/19	Checked	ECF	3/22/19
Drawn	BMD	3/22/19	In Charge of	AG	3/22/19

MTA PROJECT MANAGER: Ralph Norwood, IV

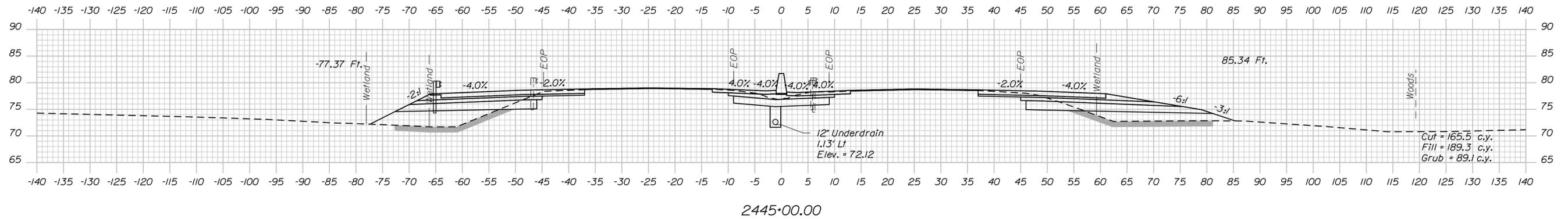
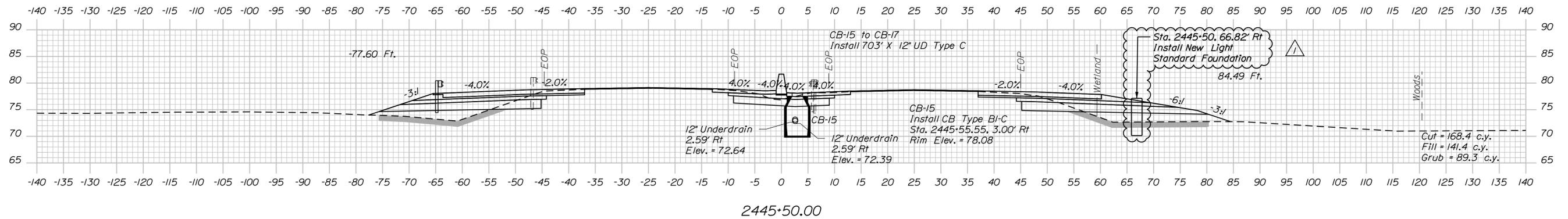
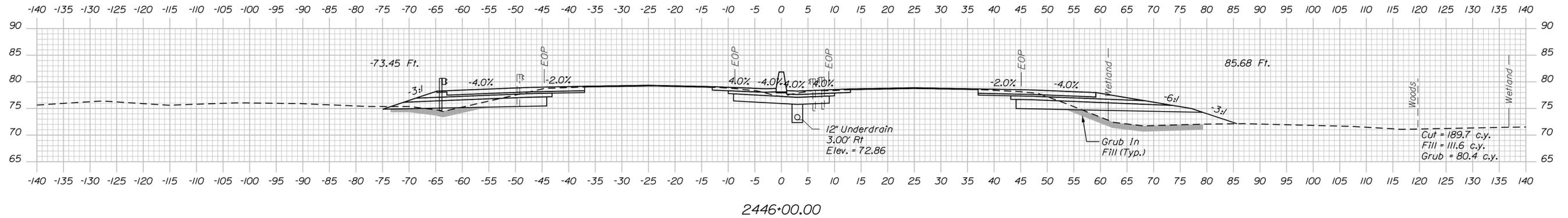
VHB: 55191.01  
CONTRACT: 2019.10

SHEET NUMBER: 45

45 OF 141

Date: 4/10/2019

Filename: ... \046\_Xsect\_Mainline\_6A\_15.dgn



Sta. 2445+00.00 to Sta. 2446+00.00

Scale: 1" = 10' - 0"

No.	Revision	By	Date
1	Addendum No. 1	ECF	4/19

Designed by:

CONSULTANT PROJECT MANAGER: T. Bryant			
	By	Date	
Designed	AGC	3/22/19	Checked ECF 3/22/19
Drawn	BMD	3/22/19	In Charge of AG 3/22/19

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 FAX (207) 253-5596

**THE GOLD STAR MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ralph Norwood, IV

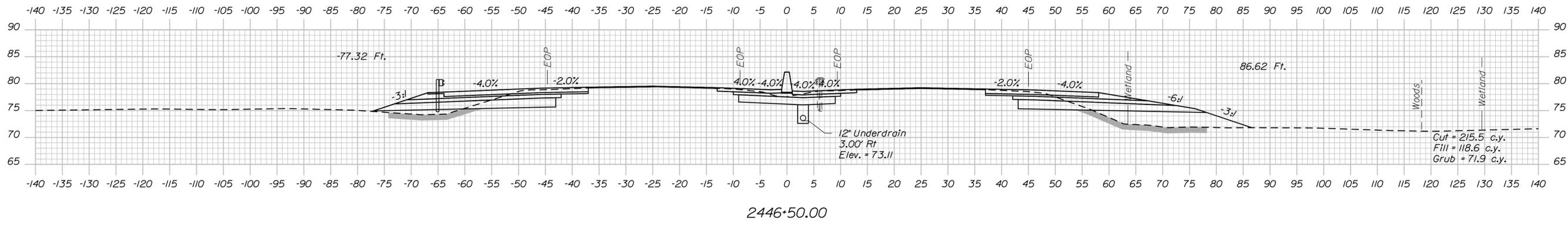
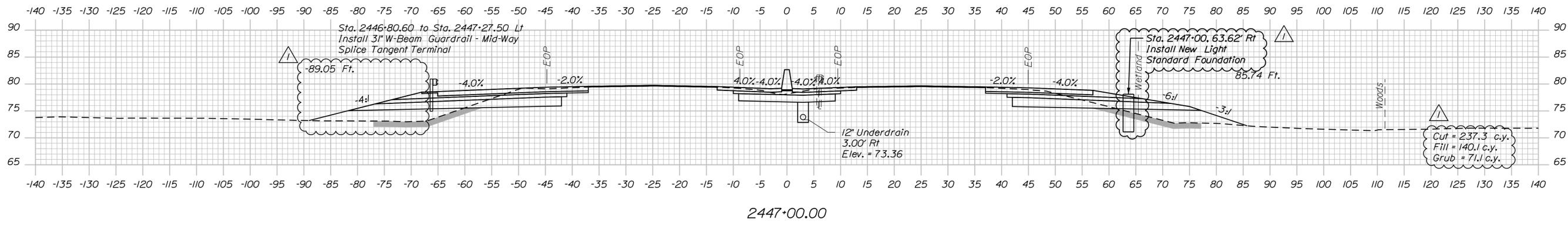
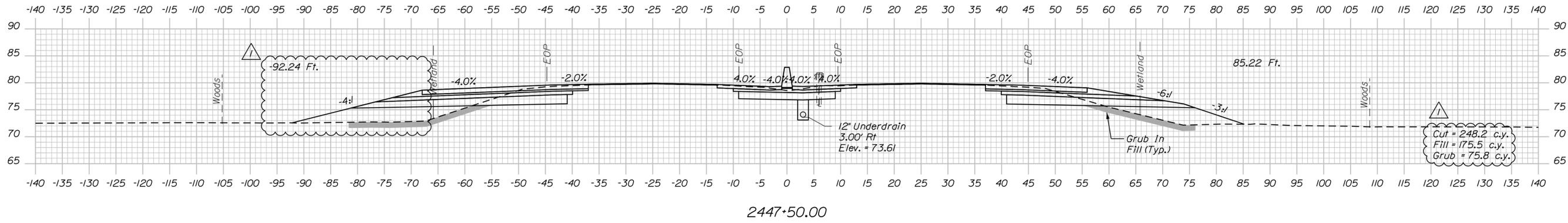
WARREN AVENUE OVERPASS  
 BRIDGE REPLACEMENT  
 MAINE TURNPIKE  
 CROSS SECTIONS

VHB: 55191.01  
 CONTRACT: 2019.10

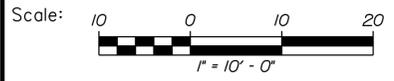
SHEET NUMBER: 46  
 46 OF 141

Date: 4/10/2019

Filename: ...047\_xsect\_Mainline\_6A\_16.dgn



Sta. 2446+50.00 to Sta. 2447+50.00



Designed by:



No.	Revision	By	Date
1	Addendum No. 1	ECF	4/19

CONSULTANT PROJECT MANAGER: T. Bryant			
	By	Date	
Designed	AGC	3/22/19	Checked
Drawn	BMD	3/22/19	In Charge of

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**THE GOLD STAR  
 MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ralph Norwood, IV

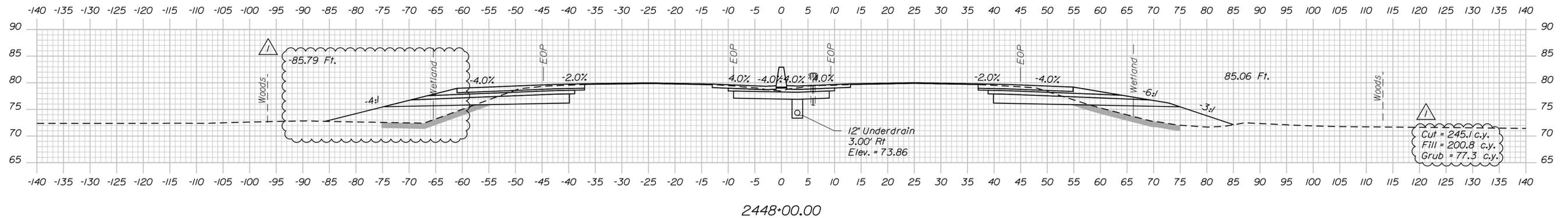
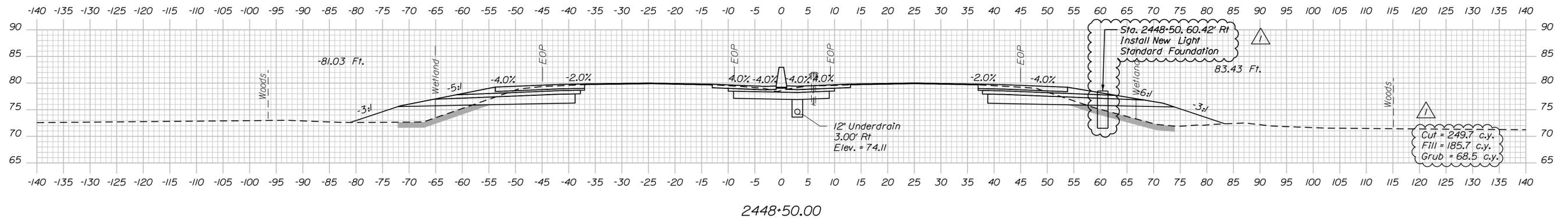
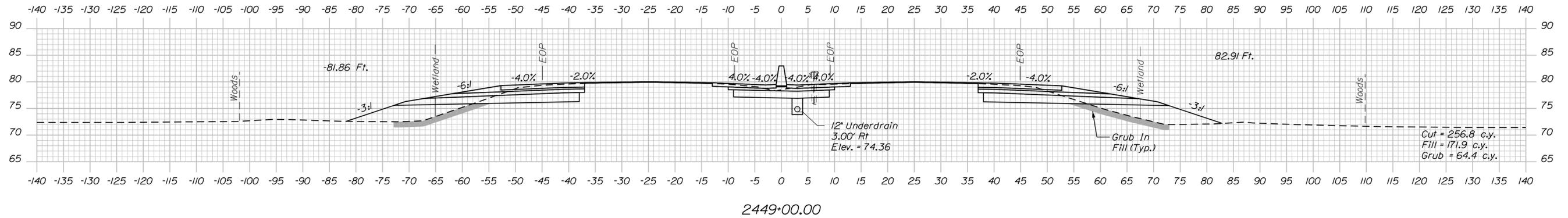
**WARREN AVENUE OVERPASS  
 BRIDGE REPLACEMENT  
 MAINE TURNPIKE  
 CROSS SECTIONS**

VHB: 55191.01  
 CONTRACT: 2019.10

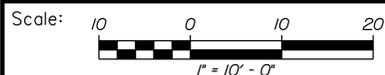
SHEET NUMBER: 47  
 47 OF 141

Date: 4/10/2019

Filename: ...048\_Xsect\_Mainline\_6A\_17.dgn



Sta. 2448+00.00 to Sta. 2449+00.00



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THE GOLD STAR  
MEMORIAL HIGHWAY

WARREN AVENUE OVERPASS  
BRIDGE REPLACEMENT  
MAINE TURNPIKE  
CROSS SECTIONS

No.	Revision	By	Date
1	Addendum No. 1	ECF	4/19

CONSULTANT PROJECT MANAGER: T. Bryant			
	By	Date	
Designed	AGC	3/22/19	Checked ECF 3/22/19
Drawn	BMD	3/22/19	In Charge of AG 3/22/19

VHB: 55191.01  
CONTRACT: 2019.10

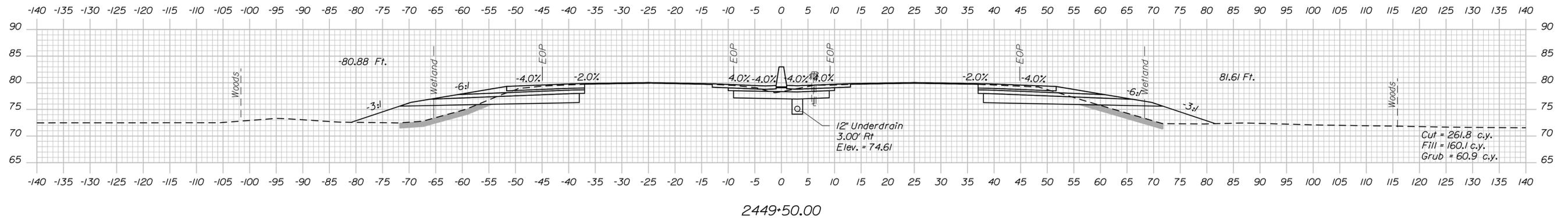
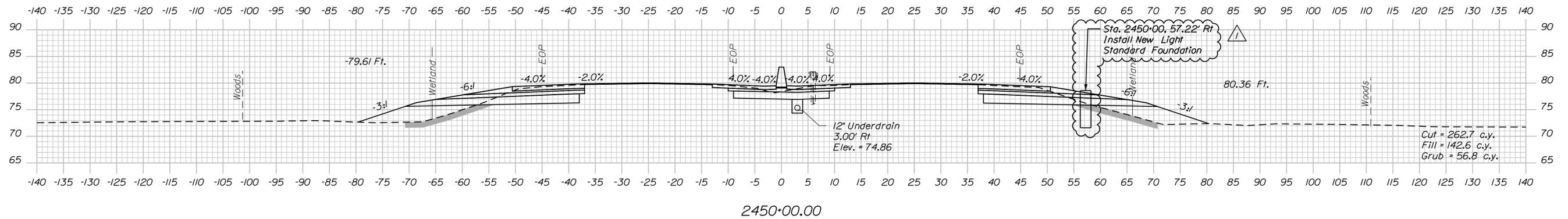
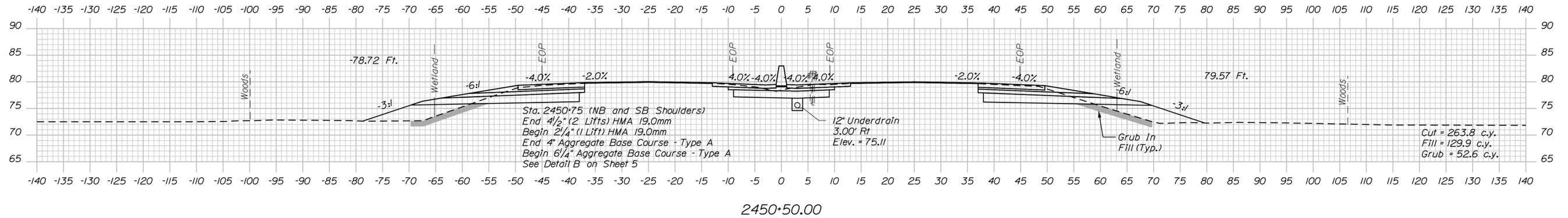
SHEET NUMBER: 48

48 OF 141

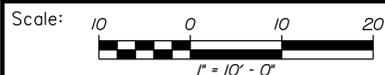
Contract 2019.10  
Addendum No. 1  
Page 19 of 61

Date: 4/10/2019

Filename: ...049\_Xsect\_Mainline\_6A\_18.dgn



Sta. 2449+50.00 to Sta. 2450+50.00



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THE GOLD STAR  
 MEMORIAL HIGHWAY

WARREN AVENUE OVERPASS  
 BRIDGE REPLACEMENT  
 MAINE TURNPIKE  
 CROSS SECTIONS

No.	Revision	By	Date
1	Addendum No. 1	ECF	4/19

CONSULTANT PROJECT MANAGER: T. Bryant					
	By	Date	Checked	By	Date
Designed	AGC	3/22/19	Checked	ECF	3/22/19
Drawn	BMD	3/22/19	In Charge of	AG	3/22/19

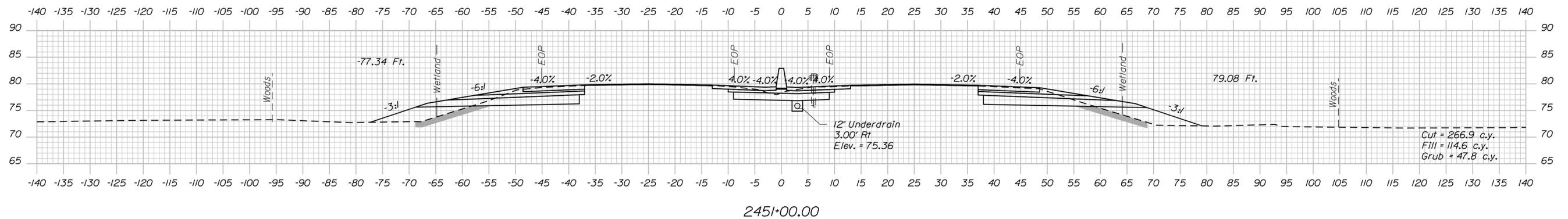
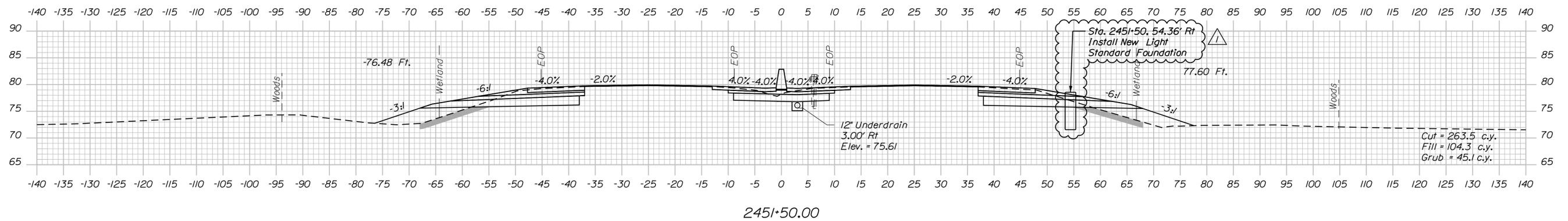
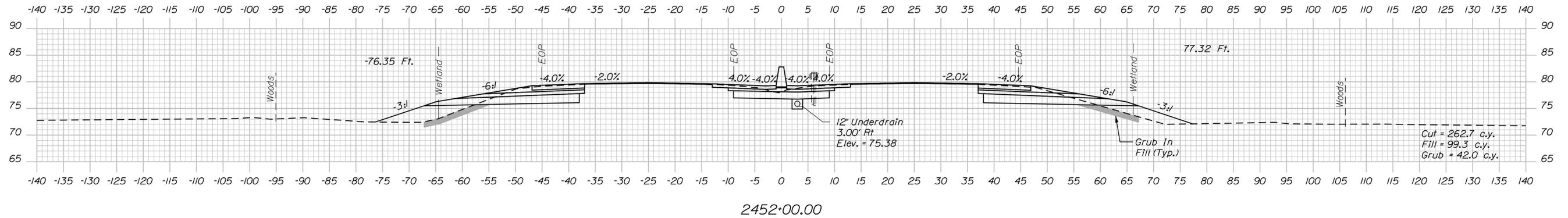
VHB: 55191.01  
 CONTRACT: 2019.10

SHEET NUMBER: 49  
 49 OF 141

MTA PROJECT MANAGER: Ralph Norwood, IV

Date: 4/10/2019

Filename: ...050\_Xsect\_Mainline\_6A\_19.dgn



Sta. 2451+00.00 to Sta. 2452+00.00



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THE GOLD STAR  
MEMORIAL HIGHWAY

WARREN AVENUE OVERPASS  
BRIDGE REPLACEMENT  
MAINE TURNPIKE  
CROSS SECTIONS

No.	Revision	By	Date
1	Addendum No. 1	ECF	4/19

CONSULTANT PROJECT MANAGER: T. Bryant					
	By	Date	Checked	By	Date
Designed	AGC	3/22/19		ECF	3/22/19
Drawn	BMD	3/22/19	In Charge of	AG	3/22/19

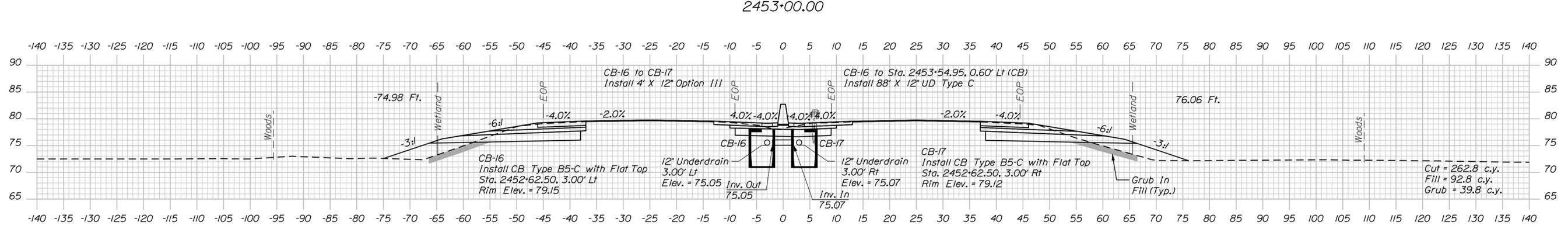
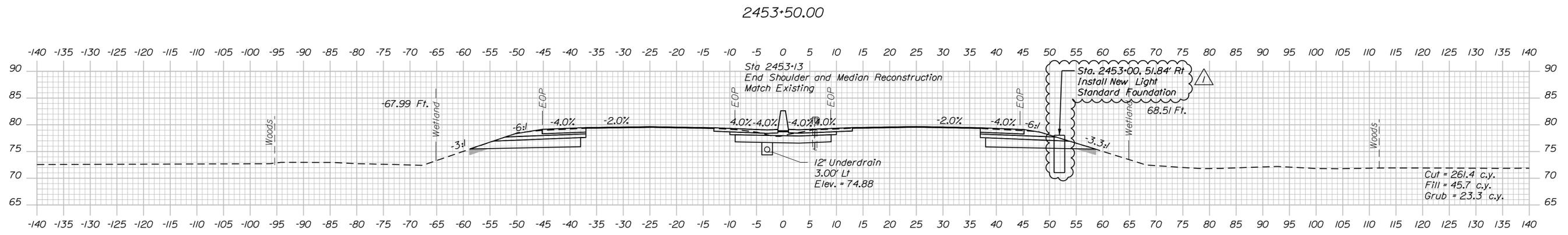
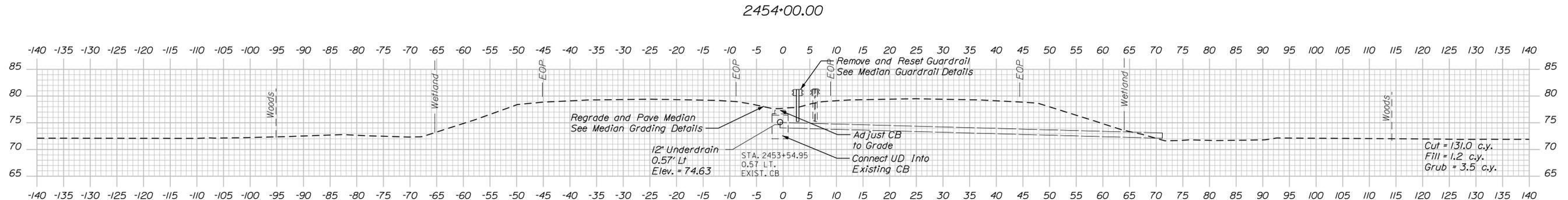
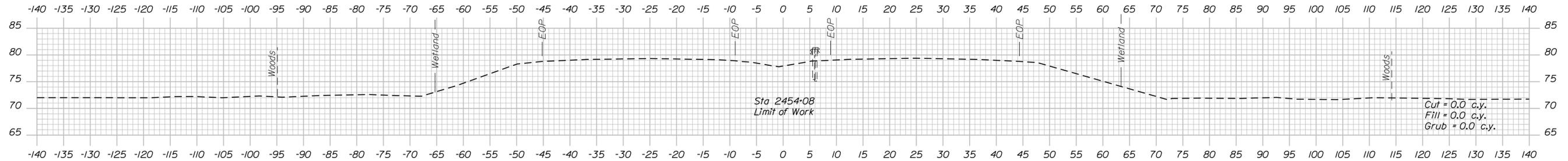
MTA PROJECT MANAGER: Ralph Norwood, IV

VHB: 55191.01  
CONTRACT: 2019.10

SHEET NUMBER: 50  
50 OF 141

Date: 4/10/2019

Filename: ... \051\_xsect\_Mainline\_6A\_20.dgn



Sta. 2452+50.00 to Sta. 2454+00.00

Scale: 1" = 10' - 0"

No.	Revision	By	Date
1	Addendum No. 1	ECF	4/19

Designed by:

CONSULTANT PROJECT MANAGER: T. Bryant					
	By	Date	By	Date	
Designed	AGC	3/22/19	Checked	ECF	3/22/19
Drawn	BMD	3/22/19	In Charge of	AG	3/22/19

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**THE GOLD STAR  
MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ralph Norwood, IV

WARREN AVENUE OVERPASS  
BRIDGE REPLACEMENT  
MAINE TURNPIKE  
CROSS SECTIONS

VHB: 55191.01  
CONTRACT: 2019.10

SHEET NUMBER: 51  
51 OF 141

Date: 4/10/2019

Filename: ...055\_Disturbance\_Plan1\_6A.dgn



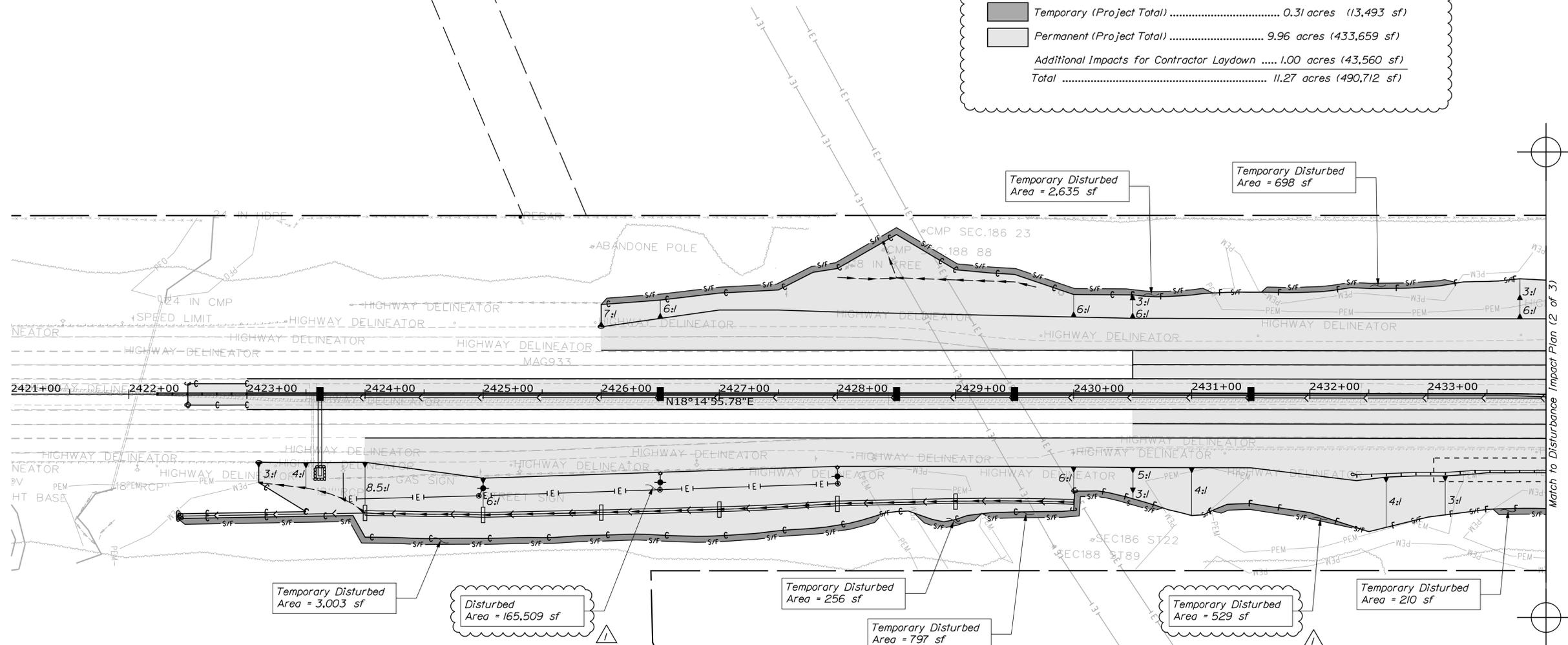
CAMPBELL RD

**NOTES**

- All work must be completed without impacting wetlands beyond what is shown in these plans. Any additional disturbance to existing wetlands shall be reported immediately to the Resident. Any corrective actions or delays resulting from environmental non-compliance shall be at the sole cost of the Contractor.
- See Disturbance Impact Plan (2 of 3) and Disturbance Impact Plan (3 of 3) for additional impact areas.

**KEY**

- Temporary (Project Total) ..... 0.31 acres (13,493 sf)
- Permanent (Project Total) ..... 9.96 acres (433,659 sf)
- Additional Impacts for Contractor Laydown ..... 1.00 acres (43,560 sf)
- Total ..... 11.27 acres (490,712 sf)



Designed by:



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**THE GOLD STAR  
 MEMORIAL HIGHWAY**

**WARREN AVENUE OVERPASS  
 BRIDGE REPLACEMENT  
 DISTURBANCE IMPACT PLAN (1 OF 3)**

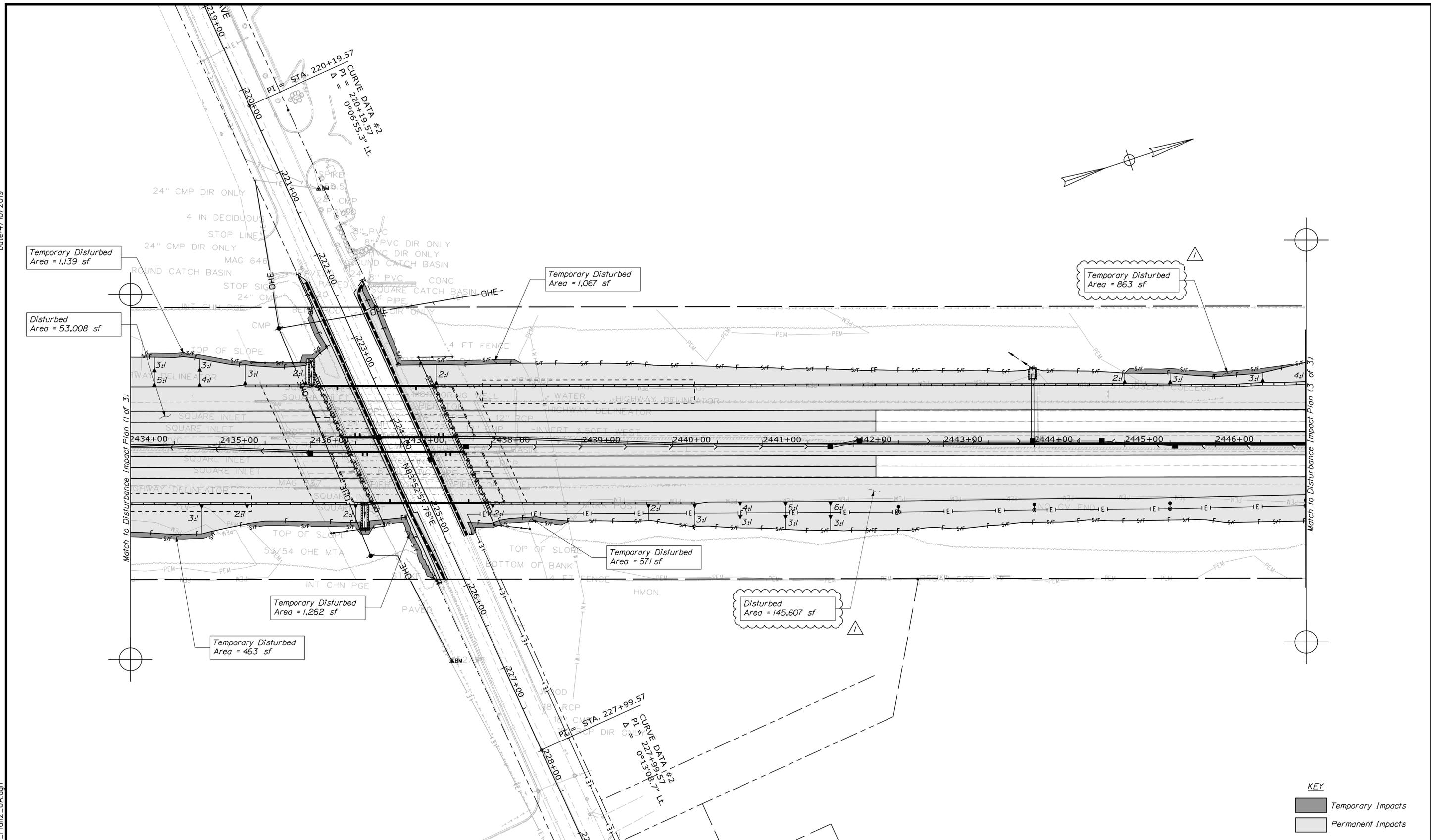
No.	Revision	By	Date
1	Addendum No. 1	ECF	4/19

CONSULTANT PROJECT MANAGER: T. Bryant					
	By	Date	By	Date	
Designed	AGC	3/22/19	Checked	ECF	3/22/19
Drawn	BMD	3/22/19	In Charge of	AG	3/22/19

VHB: 55191.01 SHEET NUMBER: 55  
 CONTRACT: 2019.10 55 OF 141

Date: 4/10/2019

Filename: ...056\_Disturbance\_Plan2\_6A.dgn



**KEY**

	Temporary Impacts
	Permanent Impacts

Scale: 50 0 50 100  
1" = 50' - 0"

No.	Revision	By	Date
1	Addendum No. 1	ECF	4/19

Designed by:



CONSULTANT PROJECT MANAGER: T. Bryant

	By	Date	By	Date
Designed	AGC	3/22/19	Checked	ECF 3/22/19
Drawn	BMD	3/22/19	In Charge of	AG 3/22/19

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**THE GOLD STAR  
MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ralph Norwood, IV

**WARREN AVENUE OVERPASS  
BRIDGE REPLACEMENT**

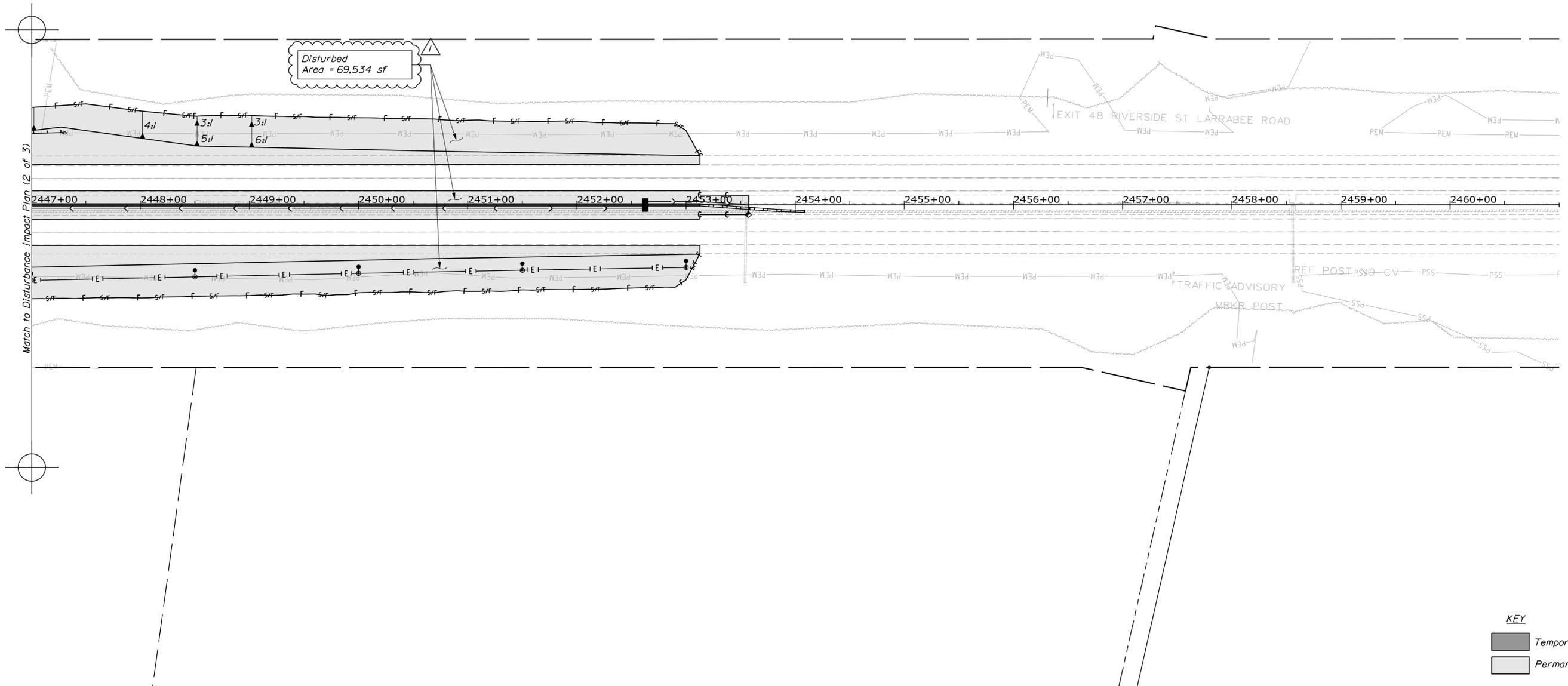
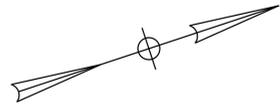
**DISTURBANCE IMPACT PLAN (2 OF 3)**

VHB: 55191.01  
 CONTRACT: 2019.10

SHEET NUMBER: 56  
 56 OF 141

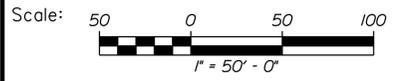
Date: 4/10/2019

Filename: ...057\_Disturbance\_Plan3\_6A.dgn



**KEY**

	Temporary Impacts
	Permanent Impacts



Designed by:



VANASSE HANGEN BRUSTLIN, INC.  
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**THE GOLD STAR  
 MEMORIAL HIGHWAY**

**WARREN AVENUE OVERPASS  
 BRIDGE REPLACEMENT  
 DISTURBANCE IMPACT PLAN (3 OF 3)**

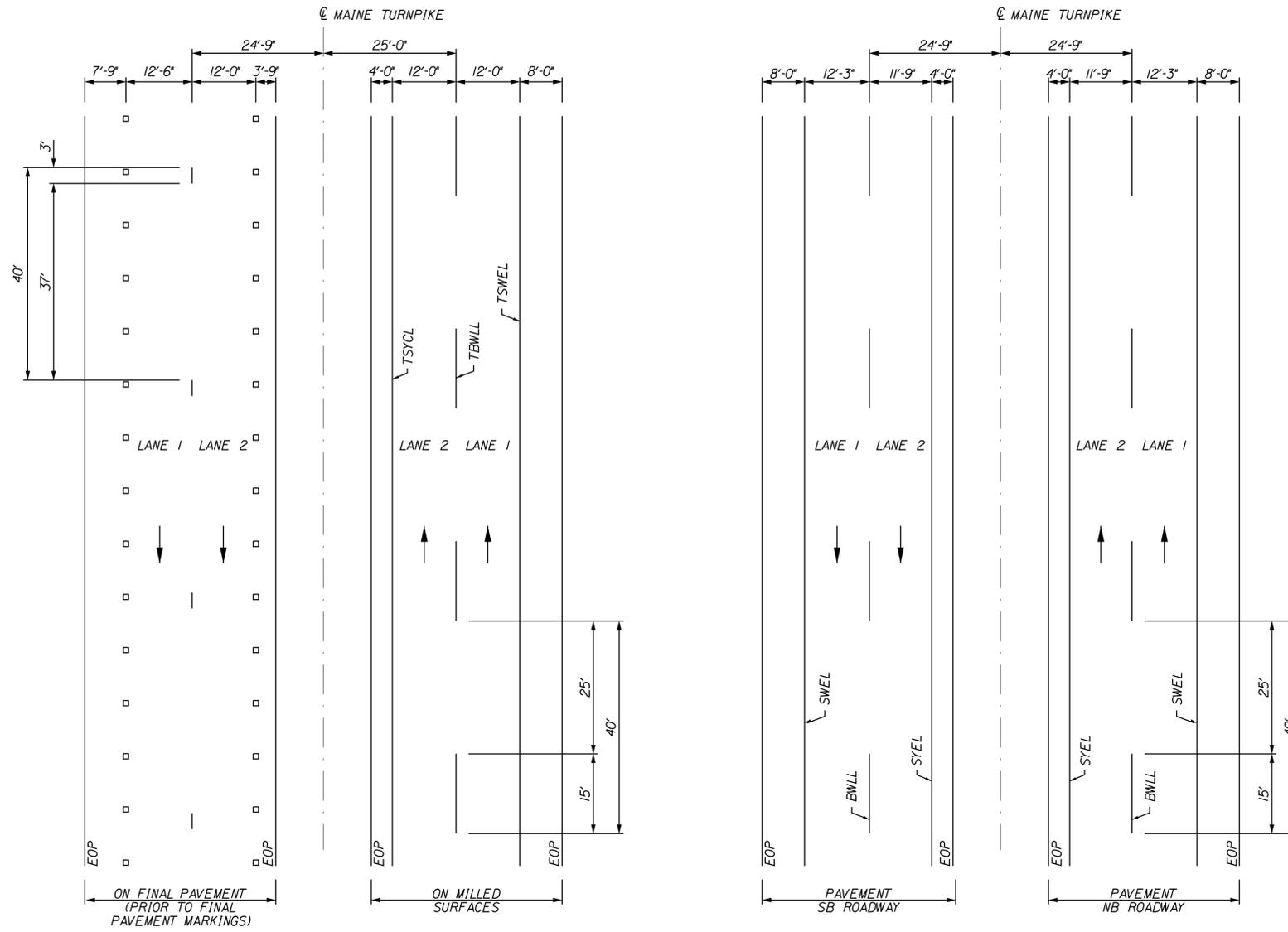
No.	Revision	By	Date
1	Addendum No. 1	ECF	4/19

CONSULTANT PROJECT MANAGER: T. Bryant					
	By	Date	Checked	By	Date
Designed	AGC	3/22/19		ECF	3/22/19
Drawn	BMD	3/22/19	In Charge of	AG	3/22/19

VHB: 55191.01 SHEET NUMBER: 57  
 CONTRACT: 2019.10 57 OF 141

Date: 4/8/2019

Filename: \\vhb\qbl\proj\SPortland\55191.01 Warren Ave FinalDesign\Cod\_MEDot\MaineDOT\HIGHWAY\MSTA\061a\_SignStripe5.dgn



TEMP PAVEMENT MARKINGS  
2 LANE ROADWAYS

PERMANENT PAVEMENT MARKINGS  
2 LANE ROADWAYS

**NOTES:**

1. TEMPORARY PAVEMENT MARKINGS ON MILLED PAVEMENT SHALL BE 6" SOLID WHITE, BROKEN WHITE, AND SOLID YELLOW PAINT LINES.
2. IMMEDIATELY FOLLOWING THE FINAL PAVEMENT (SURFACE) COURSE, THE CONTRACTOR SHALL INSTALL TEMPORARY RAISED PAVEMENT MARKERS (ITEM 627.812) ALONG THE OUTSIDE EDGE LINES. THE CONTRACTOR SHALL INSTALL TEMPORARY 6 INCH PAVEMENT MARKING TAPE (ITEM 627.73) IN 3-FOOT SEGMENTS AT 40-FOOT SPACING ON CENTER FOR THE BROKEN LANE LINES.
3. FINAL PAVEMENT MARKINGS SHALL BE LAID OUT BY THE CONTRACTOR FOR REVIEW AND APPROVAL BY THE RESIDENT. UPON APPROVAL, THE CONTRACTOR SHALL INSTALL THE GROOVES FOR PLACEMENT OF PAVEMENT MARKINGS (ITEM 627.30) IN COORDINATION WITH AUTHORITY'S SCHEDULE FOR FINAL PAVEMENT MARKINGS. THE AUTHORITY WILL BE RESPONSIBLE FOR FINAL PAVEMENT MARKING APPLICATION.
4. CONTRACTOR SHALL INSTALL THE PERMANENT MARKING GROOVES TO AVOID OVERLAPPING THE TEMPORARY BROKEN LANE LINE SEGMENTS. FOLLOWING THE INSTALLATION OF THE PERMANENT PAVEMENT MARKINGS, THE CONTRACTOR SHALL REMOVE THE TEMPORARY TAPE BROKEN LANE LINES.

No.	Revision	By	Date
1	Addendum No. 1	MDS	4/19

Designed by:					
CONSULTANT PROJECT MANAGER: T. Bryant					
	By	Date	By	Date	
Designed	MLG	3/22/19	Checked	MDS	3/22/19
Drawn	JAR	3/22/19	In Charge of	TSB	3/22/19

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**THE GOLD STAR  
MEMORIAL HIGHWAY**

MTA PROJECT MANAGER: Ralph Norwood, IV

**WARREN AVENUE OVERPASS  
BRIDGE REPLACEMENT  
MILL & OVERLAY  
STRIPING PLAN**

VHB: 55191.01  
CONTRACT: 2019.10

SHEET NUMBER: 61A  
61A OF 141

**SPECIFICATIONS**

Design: AASHTO LRFD Bridge Design Specifications, 2018.  
 Construction: State of Maine Department of Transportation Standard Specifications, Revision of November 2014.  
 State of Maine Department of Transportation Standard Details for Highways and Bridges, 2014, with all revisions thereto.  
 AASHTO LRFD Bridge Construction Specifications, Fourth Edition.

**DESIGN LOADING**

Live Load ..... HL - 93 (Modified)

**MATERIALS**

Concrete (Unless noted otherwise) ..... Class "AAA"  
 Concrete (Deck) ..... Class "AAA-Deck"  
 Reinforcing Steel ..... ASTM A615, Grade 60, Epoxy Coated  
 ..... ASTM A955, Grade 60, Stainless  
 Structural Steel:  
 Welded Girders ..... ASTM A709/A709M, Grade 50, Metalized  
 High Strength Bolts (except as noted) ..... ASTM A325, Type 3  
 Anchor Rods ..... ASTM F1554, Grade 55  
 Steel H-Piles ..... ASTM A572, Grade 50  
 All Other Structural Steel ..... ASTM A709, Grade 36 or Approved Equal

**PROTECTIVE COATING**

Girder plates, including flanges, webs, connection plates, leveling plates, bearing stiffeners, and intermediate stiffeners, shall be metallized after fabrication in accordance with Special Provision Section 506, Shop Applied Protective Coating - Steel (Thermal Spray Coating - Shop Applied). Crossframes shall either be metallized or hot-dipped galvanized after fabrication. Payment for metallizing and/or galvanizing, as applicable, shall be made under Item 506.9104, Thermal Spray Coating (Shop Applied).

**BASIC DESIGN STRESSES**

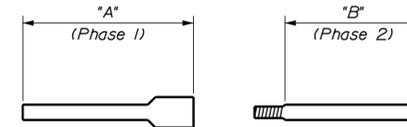
Concrete .....  $f'c = 4,500 \text{ psi}$   
 Reinforcing Steel .....  $f_y = 60,000 \text{ psi}$   
 Structural Steel:  
 ASTM A 709/A 709M, Grade 50W .....  $F_y = 50,000 \text{ psi}$   
 ASTM A 709/A 709M, Grade 36 .....  $F_y = 36,000 \text{ psi}$   
 ASTM A 325 .....  $F_u = 120,000 \text{ psi}$   
 ASTM F1554 .....  $F_y = 55,000 \text{ psi}$

**TRAFFIC DATA - WARREN AVENUE**

AADT ..... 17,710  
 Heavy Trucks (% AADT) ..... N/A  
 Design Speed (MPH) ..... 35  
 Functional Class ..... Minor Arterial

**TRAFFIC DATA - MAINE TURNPIKE**

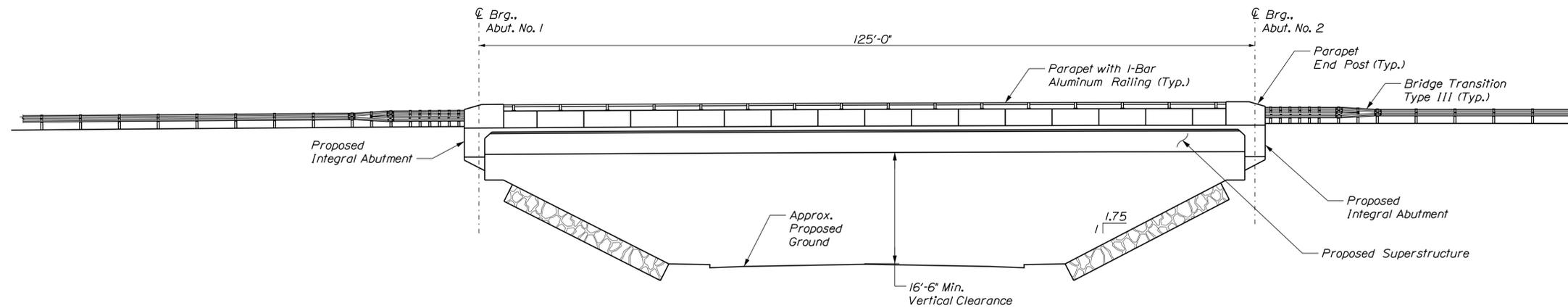
AADT ..... 19,720 NB, 21,350 SB  
 Heavy Trucks (% AADT) ..... 10%  
 Design Speed (MPH) ..... 65  
 Functional Class ..... Principal Arterial Interstate



Location	Bar Size	Dim "A"	Dim "B"	Quantity (EA)
Deck	#5	3'-1"	2'-8"	1028
Approach Slab	#4	5'-0"	2'-5"	368
Abutment	#6	2'-9"	2'-9"	160

**MECHANICAL CONNECTOR**

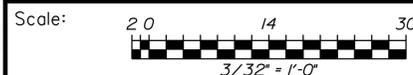
**DETAIL**  
 Not to Scale



**ELEVATION**  
 Scale:  $\frac{1}{32}'' = 1'-0''$

Date: 4/8/2019

Filename: ...MSTA\092\_Bridge\_Elev.dgn



No.	Revision	By	Date
1	Addendum No. 1	GME	4/19

Designed by:

CONSULTANT PROJECT MANAGER: T. Bryant

	By	Date	By	Date	
Designed	MED	3/22/19	Checked	GME	3/22/19
Drawn	DPD	3/22/19	In Charge of	TSB	3/22/19

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**THE GOLD STAR  
 MEMORIAL HIGHWAY**

**WARREN AVENUE OVERPASS  
 BRIDGE REPLACEMENT  
 BRIDGE ELEVATION**

VHB: 55191.01  
 CONTRACT: 2019.10

SHEET NUMBER: 92  
 92 OF 141

**SCHEDULE OF BID PRICES  
CONTRACT NO. 2019.10**

**BRIDGE REPLACEMENT  
WARREN AVENUE OVERPASS  
MILE 49.0**

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
202.15	Removing Manhole or Catch Basin	Each	2				
202.151	Abandoning Existing Manhole or Catch Basin	Each	2				
202.16	Removing Existing Pipe	Linear Foot	230				
202.161	Abandoning Existing Pipe	Linear Foot	200				
202.19	Removing Existing Bridge	Lump Sum	1				
202.202	Removing Pavement Surface - Mainline	Square Yard	61500				
202.2026	Removing Pavement Surface - Drainage Paths	Square Foot	460				
202.203	Pavement Butt Joints	Square Yard	3000				
202.205	Rumble Strips - Shoulder	Linear Foot	19400				
203.20	Common Excavation	Cubic Yard	19050				
203.24	Common Borrow	Cubic Yard	9950				

**CARRIED FORWARD:**

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
<b>BROUGHT FORWARD:</b>							
203.25	Granular Borrow	Cubic Yard	11560				
203.33	Lightweight Fill	Cubic Yard	7000				
304.10	Aggregate Subbase Course - Gravel	Cubic Yard	8550				
304.14	Aggregate Base Course - Type A	Cubic Yard	4450				
403.207	Hot Mix Asphalt - 19.0 mm	Ton	10850				
403.208	Hot Mix Asphalt - 12.5 mm	Ton	120				
403.2081	Hot Mix Asphalt, 12.5 mm (Polymer Modified) – RAP	Ton	6850				
403.209	Hot Mix Asphalt - 9.5 mm (sidewalks, drives, & incidentals)	Ton	34				
403.212	Hot Mix Asphalt - 4.75mm (Shim)	Ton	1700				
403.213	Hot Mix Asphalt - 12.5mm HMA (base and intermediate course)	Ton	2500				
409.15	Bituminous Tack Coat RS-1 or RS1h– Applied	Gallon	8950				
419.30	Sawing Bituminous Pavement	Linear Foot	8500				

**CARRIED FORWARD:**

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
<b>BROUGHT FORWARD:</b>							
461.131	Temporary Pavement	Ton	40				
470.08	Berm Dropoff Correction - Grindings	Ton	660				
470.081	Berm Correction	Linear Foot	20000				
501.231	Dynamic Loading Test	Each	4				
501.50	Steel H-Beam Piles 89 lb/ft, delivered	Linear Foot	2400				
501.501	Steel H-Beam Piles 89 lb/ft, in place	Linear Foot	2400				
501.90	Pile Tips	Each	40				
501.91	Pile Splices	Each	40				
501.92	Pile Driving Equipment Mobilization	Lump Sum	1				
502.21	Structural Concrete, Abutments and Retaining Walls	Cubic Yard	250				
502.26	Structural Concrete Roadway and Sidewalk Slab on Steel Bridges	Lump Sum	1				
502.264	Structural Concrete Parapets	Cubic Yard	52				

<b>CARRIED FORWARD:</b>
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Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
<b>BROUGHT FORWARD:</b>							
502.31	Structural Concrete Approach Slab	Lump Sum	1				
502.72	FRP Bridge Drain - Type F	Each	12				
503.14	Epoxy-Coated Reinforcing Steel, Fabricated and Delivered	Pounds	250000				
503.15	Epoxy-Coated Reinforcing Steel, Placing	Pounds	250000				
503.17	Mechanical/Welded Splice	Each	1560				
503.26	Stainless Steel Reinforcement, Fabricated and Delivered	Pounds	21800				
503.27	Stainless Steel Reinforcement, Placing	Pounds	21800				
504.70	Structural Steel Fabricated and Delivered	Lump Sum	1				
504.71	Structural Steel Erection	Lump Sum	1				
505.08	Shear Connectors	Lump Sum	1				
506.9104	Thermal Spray Coating (Shop Applied)	Lump Sum	1				
507.091	Aluminum Bridge Railing, 1 Bar	Lump Sum	1				

**CARRIED FORWARD:**

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
<b>BROUGHT FORWARD:</b>							
508.14	High Performance Waterproofing Membrane	Lump Sum	1				
508.15	Membrane Waterproofing	Lump Sum	1				
511.091	Temporary Earth Support Systems	Lump Sum	1				
514.06	Curing Box for Concrete Cylinders	Each	1				
515.202	Clear Protective Coating for Concrete Surfaces	Square Yard	850				
520.23	Asphaltic Plug Joint	Linear Foot	242				
524.40	Protective Shielding - Steel Girders	Square Yard	1940				
526.304	Temporary Concrete Barrier, Anchored	Lump Sum	1				
526.306	Temporary Concrete Barrier, Type 1 - Supplied by Authority	Lump Sum	1				
526.35	Median Barrier	Linear Foot	2850				
526.361	Bridge Endpost Median Barrier Transition	Each	2				
526.362	Guardrail Median Barrier Transition	Each	2				

**CARRIED FORWARD:**

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
<b>BROUGHT FORWARD:</b>							
527.341	Work Zone Crash Cushions - TL-3	Unit	4				
603.159	12 inch Culvert Pipe Option III	Linear Foot	64				
603.28	Concrete Collar for Reinforcing Concrete Pipe	Each	2				
603.431	36" RCP Class 5	Linear Foot	40				
604.092	Catch Basin Type B1-C	Each	7.375				
604.164	Rebuilding Catch Basin	Each	1				
604.18	Adjusting Manhole or Catch Basin to Grade	Each	2				
604.247	Catch Basin Type F5-C	Each	5				
604.262	Catch Basin Type B5-C	Each	9				
604.40	Secure Catch Basin Grate	Each	1				
605.09	6 inch Underdrain Pipe Type B	Linear Foot	600				
605.10	6 inch Underdrain Outlet	Linear Foot	160				

**CARRIED FORWARD:**

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
<b>BROUGHT FORWARD:</b>							
605.11	12 inch Underdrain Pipe Type C	Linear Foot	2050				
605.12	15 inch Underdrain Pipe Type C	Linear Foot	740				
606.1301	31" W-Beam Guardrail – Midway Splice (8' Steel Posts, 8" Offset Blocks, Single Faced)	Linear Foot	1537.5				
606.1306	31" W-Beam Guardrail - Midway Splice Tangent Terminal	Each	2				
606.1351	Terminal End - Anchored End - 31" W-Beam Guardrail	Each	2				
606.1723	Bridge Transition - Type III	Each	4				
606.1725	Guardrail Transition Type III (Modified)	Each	2				
606.352	Reflectorized Beam Guardrail Delineator	Each	34				
606.356	Underdrain Delineator Post	Each	36				
606.3561	Delineator Post - Remove and Reset	Each	18				
606.3606	Guardrail Remove, Modify and Reset, Double Rail	Linear Foot	175				
607.17	Chain Link Fence - 6 foot	Linear Foot	280				

**CARRIED FORWARD:**

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
<b>BROUGHT FORWARD:</b>							
607.23	Chain Link Fence Gate	Each	2				
607.32	Bracing Assembly Type I - Metal Posts	Each	10				
607.33	Bracing Assembly Type II - Metal Posts	Each	8				
609.11	Vertical Curb Type 1	Linear Foot	640				
609.12	Vertical Curb Type 1 - Circular	Linear Foot	13				
609.15	Sloped Curb Type 1	Linear Foot	516				
609.191	Concrete Curb Type 2	Linear Foot	88				
609.234	Terminal Curb Type 1 - 4 foot	Each	1				
609.2341	Terminal Curb Type 1- 4 ft - Circular	Each	1				
609.238	Terminal Curb Type 1 - 8 foot	Each	1				
610.08	Plain Riprap	Cubic Yard	1050				
610.181	Temporary Stone Check Dam	Cubic Yard	10				

**CARRIED FORWARD:**

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
<b>BROUGHT FORWARD:</b>							
613.319	Erosion Control Blanket	Square Yard	700				
615.07	Loam	Cubic Yard	1600				
618.14	Seeding Method Number 2	Unit	130				
618.143	Special Seeding	Unit	40				
619.1201	Mulch - Plan Quantity	Unit	170				
619.1202	Temporary Mulch	Lump Sum	1				
619.14	Erosion Control Mix	Cubic Yard	200				
620.58	Erosion Control Geotextile	Square Yard	1200				
620.70	HDPE Geomembrane	Square Yard	600				
624.01	Stormwater Soil Filter Bed	Cubic Yard	140				
626.12	Quazite Junction Box	Each	11				
626.204	3" Schedule 80 PVC Conduit	Linear Foot	2730				

**CARRIED FORWARD:**

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
<b>BROUGHT FORWARD:</b>							
626.341	Light Standard Foundation	Each	11				
627.30	Grooving for Painted Pavement Markings	Square Foot	19750				
627.712	White or Yellow Pavement Marking Line	Linear Foot	23165				
627.73	Temporary 6 Inch Pavement Marking Tape	Linear Foot	25000				
627.77	Removing Existing Pavement Marking	Square Foot	21100				
627.78	Temporary Pavement Marking Type, White or Yellow	Linear Foot	185000				
627.812	Temporary Raised Pavement Markers	Each	5100				
627.94	Pavement Marking Tape	Linear Foot	7575				
629.05	Hand Labor, Straight Time	Hour	100				
631.10	Air Compressor (Including Operator)	Hour	40				
631.11	Air Tool (Including Operator)	Hour	80				
631.12	All Purpose Excavator (Including Operator)	Hour	30				

**CARRIED FORWARD:**

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
<b>BROUGHT FORWARD:</b>							
631.171	Truck - Small (Including Operator)	Hour	50				
631.18	Chain Saw Rental (Including Operator)	Hour	10				
631.22	Front End Loader (Including Operator)	Hour	70				
631.32	Culvert Cleaner (Including Operator)	Hour	10				
631.36	Foreperson	Hour	30				
634.208	Remove and Reset Light Standard	Each	3				
639.18	Field Office, Type A	Each	1				
645.105	Remove and Stack Sign	Each	1				
645.106	Demount Regulatory, Warning, Confirmation and Route Marker Assembly Sign	Each	7				
645.109	Remove and Reset Sign	Each	4				
645.271	Regulatory, Warning, Confirmation and Route Assembly Sign, Type I	Square Foot	97.5				
645.272	Regulatory, Warning and Bridge Number Signs, Type I - Supplied by Authority	Each	2				

<b>CARRIED FORWARD:</b>
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Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
<b>BROUGHT FORWARD:</b>							
645.511	LED Flashing Sign	Each	2				
652.30	Flashing Arrow	Each	2				
652.312	Type III Barricades	Each	8				
652.33	Drum	Each	425				
652.34	Cone	Each	100				
652.35	Construction Signs	Square Foot	2331				
652.361	Maintenance of Traffic Control Devices	Lump Sum	1				
652.38	Flaggers	Hour	160				
652.381	Traffic Officers	Hour	160				
652.41	Portable-Changeable Message Sign	Each	5				
652.45	Truck Mounted Attenuator	Cal. Day	60				
652.452	Automated Trailer Mounted Speed Limit Sign	Each	2				

**CARRIED FORWARD:**

Item No	Item Description	Units	Approx. Quantities	Unit Prices in Numbers		Bid Amount in Numbers	
				Dollars	Cents	Dollars	Cents
<b>BROUGHT FORWARD:</b>							
656.50	Baled Hay, In Place	Each	50				
656.632	30 inch Temporary Silt Fence	Linear Foot	6150				
659.10	Mobilization	Lump Sum	1				
802.182	20" Class 52 DI Restrained Joint Pipe	Linear Foot	300				
802.32	Casing Spacers	Each	21				
830.279	Horizontal Directional Drilling, 18-inch HDPE Culvert	Linear Foot	140				

<b>TOTAL:</b>
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SPECIAL PROVISION

SECTION 526

CONCRETE BARRIER

(Temporary Concrete Barrier, Anchored)

526.01 Description

The following paragraphs are added:

This work shall consist of furnishing, setting and removing Temporary Concrete Barrier, Anchored to the existing and new bridge decks and highway approaches as needed during phased construction to the limits on the Plans. The barrier shall have attachments allowing individual sections to be connected into a continuous barrier and provisions shall be made in the casting of the barrier for anchoring the barrier to the bridge deck.

Temporary Bi-Directional Delineators and Temporary Barrier Markers shall be installed on all temporary concrete barrier in conformance with Special Provision 526, Concrete Barrier (Temporary Concrete Barrier Type I – Supplied by Authority).

The following concrete barrier designation is added:

Temporary Concrete Barrier, Anchored. Removable concrete barrier of the shape shown on the plans that is capable of being anchored to the bridge deck or approach roadway.

526.02 Materials

The following paragraphs are added:

f. Adhesive anchoring material for holding deck anchors shall be selected from the Qualified Products List of Concrete Adhesive Anchor Systems for Type I Reinforcing Steel (> #9) and Anchors (> 1") and shall be approved by MaineDOT's Transportation Research Division and the Bridge Program.

g. Material for filling inserts or sleeves in precast deck panels shall be a non-shrink grout selected from the Qualified Products List of Grout Materials and approved by the Resident.

The following Subsection is added:

526.021 Acceptance

The Resident shall have the authority to accept or reject all Temporary Concrete Barrier, Anchored used on the Project.

526.03 Construction Requirements

The following paragraphs are added:

All Temporary Concrete Barrier, Anchored on the bridge decks and approach roadways shall meet NCHRP 350 Test Level III (TL-3) crash test requirements. Prior to fabrication and installation of the barrier the Contractor shall submit the proposed barrier and anchorage design for approval. The proposed design shall be designed to in accordance with AASHTO LRFD Bridge Design Specifications, latest edition with all interims thereto (see Table A13.2-1 and related Provisions). The proposed barrier and anchorage design, including any required additional concrete deck reinforcement, shall be prepared and stamped by a Professional Engineer licensed in the State of Maine.

Thru-bolting of the barrier shall not be permitted to the proposed deck. Where thru-bolting of the existing deck is not permitted, anchorage shall be achieved through chemical adhesives or mechanical anchors. Where thru-bolting of the new deck is not permitted, anchorage shall be achieved through the use of mechanical anchors. In all cases, the barrier anchors shall be securely fastened and tightened prior to beginning any bridge demolition work.

Once the Temporary Concrete Barrier, Anchored has been removed, and prior to placing the second lift of pavement, all holes in the new bridge decks shall be repaired as follows:

- 1) Using a three inch diameter core bit, remove the area of pavement surrounding the anchor rod hole. Care shall be exercised to avoid removing or damaging the underlying high performance membrane;
- 2) Thoroughly clean the area to receive the repair and pack the void in the concrete deck with an approved repair mortar;
- 3) Once cured, coat the mortar surface and surrounding membrane with hot rubber sealant;
- 4) Fill the hole left by the three inch diameter pavement core with Hot Mix Asphalt, 12.5 mm Nominal Maximum Size, and thoroughly compact the repair using a hand tamp or other appropriate tools.

Temporary Concrete Barrier requiring pinning to the asphalt pavement shall not be used on the final pavement wearing surface.

#### 526.04 Method of Measurement

The following paragraph is added:

Temporary Concrete Barrier, Anchored shall be measured for payment by the lump sum.

The setting, resetting, and temporary storage of concrete barrier between construction phases, if required, will not be measured separately for payment, but shall be incidental to the cost of the barrier. The anchoring of bridge barrier, removal of anchors, and the filling of voids will not be measured separately for payment, but shall be incidental to the cost of the barrier.

#### 526.05 Basis of Payment

The following paragraph is added:

Temporary Concrete Barrier, Anchored will be paid for at the Contract lump sum price, complete in place. Payment shall be full compensation for furnishing, setting, anchoring, assembling, and resetting the barrier, barrier removal, temporary bi-directional delineators,

temporary barrier markers, and all other incidentals, tools, material and labor necessary to complete the work.

Payment will be made under:

<u>Pay Item</u>		<u>Pay Unit</u>
526.304	Temporary Concrete Barrier, Anchored	Lump Sum

SPECIAL PROVISION

SECTION 526

CONCRETE BARRIER

(Temporary Concrete Barrier Type I - Supplied by Authority)

526.01 Description

The following paragraphs are added:

This work shall consist of loading, transporting, setting, resetting, removing, transporting and stacking Temporary Concrete Barrier Type I – Supplied by Authority. The barrier shall have attachments allowing individual sections to be connected into a continuous barrier.

The work also includes supplying connecting pins and furnishing and mounting retro-reflective delineators and temporary barrier markers, per Subsection 526.02 and 526.03.

Concrete barriers supplied by Authority shall be available at the following location(s):

<u>Maintenance Area</u>	<u>Linear Feet of Barrier</u>
Kennebunk Rest Area Mile 32 Northbound	3,200 LF
Crosby Maintenance Area Mile 46 Southbound	4,600 LF

Upon substantial completion of work, the Contractor shall remove and transport the barrier back to its maintenance area of origin. All barrier shall be returned, sorted and stacked according to type in locations directed by the project Resident or maintenance area foreman.

526.02 Materials

The following paragraphs are added:

- f. Delineators shall be bi-directional with a minimum effective reflective area of eight square inches as approved by the Resident. The reflectors shall be methyl methacrylate and the housing of acrylonitrile butadiene styrene. Color shall be in accordance with the MUTCD.
- g. Temporary barrier markers shall be "Big Dog" barrier markers manufactured by Custom Products Corporation, or approved equal. Markers shall be bi-directional with a minimum effective reflective area of 96 square inches (48 square inches each side) as approved by the Resident. The reflectors shall meet MUTCD reflectivity requirements and shall be orange in color.

526.021 Acceptance

The Resident shall have the authority to accept or reject all Temporary Concrete Barrier Type I – Supplied by Authority used on the Project that does not meet the requirements of this specification.

526.03 Construction Requirements

The following paragraphs are added:

The Contractor shall notify the Resident prior to the scheduled pick-up and delivery of concrete barrier. No barrier shall be removed from or stacked at the Turnpike Maintenance Area without approval of the Resident.

The Contractor shall move and place barrier-utilizing methods that will not damage the barrier. Barrier that is damaged by the Contractor by failing to use proper methods shall be replaced by the Contractor at no additional cost to the Maine Turnpike Authority.

Concrete barrier supplied by the Authority consists of several different styles. Not all barriers may be compatible. The Contractor shall utilize caution when setting barrier to use identical barrier types as adjacent barrier. Non-compatible barrier that cannot be attached together shall be overlapped by a minimum of 10 feet with the blunt end on the non-traffic side of the barrier. This work will not be measured separately for payment, but shall be incidental to the concrete barrier.

Concrete barrier placed at roadway low points shall be shimmed on 1” by 2” by 2’ long wood planks to allow drainage to pass under the barrier. In addition, the Resident may direct the Contractor to shim the concrete barrier at other locations to provide for proper roadway drainage. All labor, material, and equipment necessary to shim the barrier will not be measured separately for payment, but shall be incidental to the Concrete Barrier.

The removal of concrete barrier from adjacent to the travel lane may be conducted without a lane closure if it is accomplished in accordance with the following requirements:

1. Barrier is removed from the trailing end and the workmen and equipment involved in the operation are always behind the barrier. No workmen or equipment shall enter the travel lane.
2. Barrier shall be dragged away from the travel lane to at least a 30-degree angle by the use of a cable.
3. Barrier shall be lifted no more than six inches while within 10 feet of the travel lane.

Retro-Reflective Delineators shall be mounted as follows:

1. One on top of each barrier.
2. One on the traffic side of every barrier used in a taper.
3. One on the traffic side of every other barrier at regularly spaced intervals and locations.
4. Delineators shall be installed on both sides of the barrier if barrier is used to separate opposing traffic.

5. Delineators shall be physically adhered so as to withstand the force of throw from a snow plow.
6. If more than 25% of delineators in any 50 foot section of barrier fall off for any reason, the Contractor will be responsible for reinstalling all the delineators in that run at that their own cost.
7. Contractor is required to submit the installation method for review and approval to the Resident.

Temporary barrier markers shall be mounted as follows:

1. On tangent sections, one marker on every fourth barrier. In taper sections, one marker on every second barrier.
2. Delineators shall be physically adhered so as to withstand the force of throw from a snow plow.
3. If more than 25% of delineators in any 50 foot section of barrier fall off for any reason, the Contractor will be responsible for reinstalling all the delineators in that run at their own cost.
4. Contractor is required to submit the installation method for review and approval to the Resident.

#### 526.04 Method of Measurement

The following paragraphs are added:

Temporary Concrete Barrier Type I – Supplied by Authority shall be measured for payment by the lump sum.

The loading, transporting, setting, resetting, removing, transporting, sorting and stacking of the barrier, the furnishing, installation and maintenance of the barrier delineators and temporary barrier markers, and furnishing and installing connector pins will not be measured separately for payment, but shall be incidental to the cost of the Barrier. Temporary storage of Concrete Barrier between construction phases, if required, will not be measured separately for payment, but shall be incidental to the cost of the Barrier. All equipment required to load, unload, transport and stack Concrete Barrier shall be supplied by the Contractor.

Any Barrier lost or damaged by the Contractor shall be replaced by the Contractor at no additional cost to the Authority.

#### 526.05 Basis of Payment

The fifth paragraph is deleted and not replaced.

The following paragraphs are added:

Temporary Concrete Barrier Type I – Supplied by Authority will be paid for at the Contract lump sum price, complete in place. Such payment shall be full compensation for loading, transporting, setting, resetting, temporary storage, removing, transporting and stacking at the area designated, furnishing all materials, and all other incidentals necessary to complete the work. Temporary Concrete Barrier Type I – Supplied by Authority and all connecting pins shall remain

the property of the Authority, and shall be returned to the Turnpike Maintenance Area as designated in Subsection 526.01.

Payment of Concrete Barrier shall be based on a percentage of the work accomplished during that pay period.

Payment will be made under:

<u>Pay Item</u>		<u>Pay Unit</u>
526.306	Temporary Concrete Barrier, Type I – Supplied by Authority	Lump Sum

SPECIAL PROVISION

SECTION 604

MANHOLES, INLETS AND CATCH BASINS

604.01 Description

This Subsection is amended by the addition of the following:

The work locations are listed on the Drainage Summary sheets of the Plans.

604.02 Materials

The third paragraph should be deleted and replaced with:

Catch Basin Frames and Grates shall be as outlined below and be manufactured by EJ Company of Brockton, Massachusetts or an approved equal and shall meet or exceed the AASHTO M306 Loading Requirements.

Catch Basin Frames shall be manufactured by EJ Company of Brockton, Massachusetts (or an approved equal) with the following product numbers:

5521Z - 8 Inch Frame Product Number 00552111  
5546Z - 6 Inch Frame Product Number 00554611  
5544Z - 4 Inch Frame Product Number 00554411

Catch Basin Frames shall be 8" frames unless otherwise specified by the plans or approved by the resident.

Catch Basin Grates shall be a square holed grate as manufactured by EJ Company of Brockton, Massachusetts (or an approved equal) with the following product number:

5520M5 Grate Product Number 00552060

If a cascade catch basin grate is specified on the plans then it shall be manufactured by EJ Company of Brockton, Massachusetts (or an approved equal) with the following product numbers depending on the direction of flow:

5520M8 Product Number 00552084 or 5520M8 Product Number 00552085

604.04 Altering, Adjusting, and Rebuilding Catch Basins and Manholes

This Subsection is deleted and replaced with the following:

When adjusting the existing catch basins they shall be dismantled sufficiently to allow reconstruction in accordance with the following requirements and as shown on the Plans:

Any frame or grate damaged by the Contractor’s operations shall be replaced by the Contractor at no additional cost to the Authority. Replacement frame and grate shall meet the requirements of Subsection 604.02. Damaged frames and grates shall become the property of the Contractor and shall be removed from Turnpike property.

604.06 Basis of Payment

The second paragraph is deleted and replaced with the following:

Excavation and backfill will not be measured separately for payment, but shall be incidental to the following pay items.

Sawing bituminous pavement will not be measured separately for payment, but shall be incidental to the related drainage items.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
604.092      Catch Basin Type B1-C	Each
604.164      Rebuilding Catch Basin	Each
604.18        Adjusting Manhole of Catch Basin to Grade	Each
604.247      Catch Basin Type F5-C	Each
604.262      Catch Basin Type B5-C	Each

SPECIAL PROVISION

SECTION 604

MANHOLES, INLETS, AND CATCH BASINS

(Secure Catch Basin Grate)

604.01 Description

This work shall consist of removing existing catch basin grates in the existing four foot paved shoulder, or other locations noted on the plans, cleaning existing frames, furnishing and applying elastomeric sealer to frame seats, and furnishing and installing new grates. This work shall be completed prior to opening paved shoulders to traffic.

604.02 Materials

The following sentences are added:

Catch Basin Grates shall be a square holed grate meeting or exceed the AASHTO M306 Loading Requirements and be manufactured by EJ Company of Brockton, Massachusetts (or an approved equal) with the following product number:

5520M5 Grate Product Number 00552060

Elastomeric sealer shall be Sikaflex 1a as manufactured by Sika or an approved equal.

604.03 Construction Requirements

The following paragraphs are added:

After removal of an existing grate, the frame shall be cleaned to accept elastomeric sealer. Sealer shall be placed in a continuous bead over horizontal and vertical surfaces in accordance with the manufacturer's recommendations. Installed grates shall be preloaded and allowed to set for a minimum of 1.5-hours before receiving traffic loads to assure adequate adhesion of the sealer. The old grates shall be transported to the Crosby Maintenance Area Mile 46 Southbound and stacked at a location designated by the Resident. Old grates shall remain the property of the Authority.

New grates shall remain in place at the completion of construction and shall become the property of the Maine Turnpike Authority.

The Contractor is required to have two additional grates on-site at all times for use as backup devices. Unused grates shall become the property of the Authority and shall be stacked at Crosby Maintenance Area Mile 46 Southbound.

604.05 Method of Measurement

The following sentence is added:

Secure Catch Basin Grate will be measured for payment by each unit secured and accepted.

604.06 Basis of Payment

The following paragraphs are added:

The accepted quantity of Secure Catch Basin Grate will be paid for at the Contract unit price each. This price shall be full compensation for removing the existing grate, cleaning the horizontal and vertical surfaces, applying the elastomeric sealer, furnishing and installing the new grate, transporting and stacking the old grate, and all other labor, equipment, and materials required to complete the work.

Unused backup grates stacked at Crosby Maintenance Area will be paid for at the Contract unit price each under the Secure Catch Basin Grate item.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
604.40      Secure Catch Basin Grate	Each

SPECIAL PROVISION

SECTION 626

FOUNDATIONS, CONDUIT, AND JUNCTION BOXES  
FOR HIGHWAY SIGNING, LIGHTING AND SIGNALS

(Light Standard Foundation)

General

The following paragraph is added:

Light standard foundations shall be pre-cast concrete as manufactured and shall be meet the requirements of the plans and/or light standard manufacturer for bolt circle diameter, anchor bolt thickness, anchor bolt projection, depth, and width.

The light standard foundation shall accommodate and include break away devices and shall meet all MTA and MaineDOT requirements.

Method of Measurement

The light standard foundation shall be measured by each unit in place and accepted for existing or new light standards.

Basis of Payment

The light standard foundation shall be paid for by each unit in place including all excavation, backfill, anchor bolts, break away devices, equipment, material and labor to complete the installation.

Payment will be made under:

<u>Pay Item</u>		<u>Pay Unit</u>
626.341	Light Standard Foundation	Each

SPECIAL PROVISION

SECTION 627

PAVEMENT MARKINGS

(Temporary Raised Pavement Markers)

627.01 Description

The following sentence is added:

This work shall consist of furnishing, placing and removing temporary raised pavement markers at locations as shown on the Plans or as directed by the Resident.

627.02 Materials

The second paragraph is deleted and replaced with the following:

The temporary raised pavement markers shall be white or yellow one way markers (Type Tom W-1, Y-1, Grade WZ) as distributed by Davidson Plastics Co. (DAPCO), Kent, WA, or an approved equal. Colors shall conform to 2009 MUTCD requirements.

627.04 General

The following sentences are added:

Temporary raised pavement markers shall be used to delineate travel lanes (BWLL) after placement of the surface course (HMA 12.5 mm).

Temporary raised pavement marker that lose reflectivity, becomes broken, dislodged or missing during the life of the Contract shall be replaced by the Contractor at no additional cost to the Authority.

The spacing and number of temporary pavement markers installed as edge lines shall be 10 feet on center..

627.09 Method of Measurement

The following sentence is added:

Temporary Raised Pavement Markers will be measured by each unit, complete in place, maintained and accepted.

627.10 Basis of Payment

The following paragraphs are added:

The accepted quantity of Temporary Raised Pavement Markers white and/or yellow will be paid for at the Contract price each. This price shall include all labor and materials to furnish, install, maintain, and remove the markers.

Payment will be made under:

<u>Pay Item</u>		<u>Pay Unit</u>
627.812	Temporary Raised Pavement Markers	Each

SPECIAL PROVISION

SECTION 655

ELECTRICAL WORK

(AWG Wire)

The following Section is added:

655.01 Description

This task shall include providing and installing the AWG wire, as described herein, including grounding wires (where applicable) and other locations called for in the plans/specifications. Wire shall be installed as necessary for the complete operation of the 3 relocated light standards south of the Warren Avenue Overpass and 8 future light standards north of the Warren Avenue Overpass at the locations shown on the plans. All wire installed in conduit must be burial grade, suitable for wet locations.

All wire sizes shall be determined by the Contractor. The wire sizes shall be determined by a Licensed Electrician in the State of Maine in accordance with the National Electrical Code. The design of the wire shall assume a 3% voltage drop. The proposed wire sizes shall be submitted to the Resident for approval prior to placing any wire.

655.05 Measurement of Payment

The quantity of AWG Wire will not be measured for payment, but shall be considered incidental to Pay Item 626.204 3" Schedule 80 PVC Conduit.

655.06 Basis of Payment

No separate payment will be made. Payment shall be considered incidental to the related lighting pay items.

**MAINE TURNPIKE AUTHORITY**

Pre-Bid Conference

CONTRACT 2019.10

BRIDGE REPLACEMENT  
WARREN AVENUE OVERPASS  
(MILE 49.0)

April 2, 2019 1:00 PM

1) Location:

The general limits of work are as shown in the Contract Plans. The Warren Avenue Overpass is located near Mile 49.0 of the Maine Turnpike.

2) General Description:

The work consists of replacing the Warren Avenue Overpass (NB & SB) bridges in the City of Portland, Maine. The work includes phased construction, removal of the existing bridges, construction of new concrete decks and steel girder superstructures on new integral abutments, and approach roadway work including paving, guardrail, bridge rail, median barrier, maintenance of traffic and all other work incidental thereto in accordance with the Plans and Specifications.

3) Bid:

- a) April 23, 2019 at 11:00 A.M. at MTA headquarters 2360 Congress Street, Portland.
- b) All bid and contractual questions shall be directed to Purchasing Department, Phone No. (207) 482-8115.
- c) All questions on plans and specifications shall be in writing and shall be directed to Nate Carll, Purchasing Manager, at (207) 871-7739 (fax) or email ncarll@maineturnpike.com.

4) Notification:

- a) Contractor shall notify and obtain approval from the Authority prior to visiting the Project sites for field inspection. The contact person is Mr. Steve Tartre at (207) 482-8144 or startre@maineturnpike.com.

5) Construction Schedule/Prosecution of Work:

a) Construction Schedule:

- Anticipated award date: April 25, 2019
- Contract substantial completion date: November 13, 2020
- Contract completion date: June 25, 2021.

b) Prosecution of Work

- Phase 1A Construction
  - Phase 1A Construction shall not exceed 25 consecutive calendar days.
  - Supplemental Liquidated damages will be assessed for each calendar day beyond 25 that Phase 1A is not complete.
  - Phase 1B Construction may be concurrent with Phase 1A Construction so long as the Exit 48 on-ramp acceleration area is opened to Phase 1B conditions by the end of the 25 day requirement.
  
- Phase 3 Construction
  - Phase 3 Construction shall not exceed 30 consecutive calendar days. This includes work designated as Phase 3A and Phase 3B.
  - Phase 3A shall be the default traffic control condition throughout Phase 3. Phase 3B shall only be in place at night in accordance with the Turnpike lane closure allowances included in Table A of the Section 652 special provision.
  - Supplemental Liquidated damages will be assessed for each calendar day beyond 30 that Phase 3 is not complete.
  - Early Opening Incentive – The Contractor will be paid a \$5,000 incentive for each complete Calendar Day that Phase 3 Construction is complete prior to the 30 consecutive calendar day allowable deadline.
  - Late Opening Disincentive – The Contractor will be assessed a \$5,000 disincentive for each Calendar Day, or portion of a Calendar Day, that Phase 3 Construction is not complete beyond the 30 consecutive calendar day allowable deadline.
  - Maximum Total Contract Incentives/Disincentives – The maximum combined monetary incentive is capped at \$50,000 for Phase 3 Construction. The maximum combined disincentive is not capped. These are in addition to contract liquidated damages.
  
- Mill and Overlay Construction
  - The Mill and Overlay Construction between STA 2459+50 and STA 2551+83 shall be substantially complete by September 15, 2019. Once the Mill and Overlay Construction has begun, the Contractor shall work continuously to complete the work in a diligent manner.
  - The Mill and Overlay Construction between STA 2453+13 and STA 2459+50 shall be completed as part of the final surface paving after all temporary traffic control devices associated with the bridge construction have been removed.
  - Supplemental Liquidated damages on a calendar day basis in accordance with Subsection 107.8 of the Contract Book shall be assessed for each calendar day that the Mill and Overlay Construction between STA 2459+50 and STA 2551+83 is not complete after September 15, 2019.
  
- Bridge Closure Pour Placement
  - The bridge deck closure pours shall be completed as part of Phase 3 Construction.
  - At the Contractor’s option, the bridge deck closure pours may be completed as part of Phase 2 Construction provided that the requirements outlined in Subsection 107.8 of the Contract Book are met.

- c) The Contractor shall submit to the Authority a construction schedule which shall document that the Contractor has the necessary labor and equipment to work immediately and continuously at the project site once the long term lane shifts are implemented.
  - d) Supplemental Liquidated Damages on a calendar day basis in accordance with Subsection 107.8 shall be assessed as described in Special Provisions 107.1 and 107.1.1.
- 6) Maine Department of Labor – Fair Hourly Wages (Special Provision 104.3.8)
- a) Highway and Earthwork wages
  - b) Heavy and Bridge wages
- 7) Lead Paint (Special Provision 105.2.4.2):
- a) The Contractor shall note that the existing bridge structure does not contain lead based paint. A copy of the Lead Determination Report is attached to the Contract Book as Appendix E.
- 8) Maintenance During Winter Construction (Supplemental Specification 105.4.3)
- a) Contractor responsible for the maintenance of erosion control and traffic control devices.
  - b) Contractor responsible for removal of snow and ice to maintain drainage.
  - c) Authority is responsible for winter road maintenance for the Maine Turnpike paved travel way open to traffic.
- 9) Utility Coordination (Special Provision 104.4.6)
- a) There are existing aerial utilities that cross the Maine Turnpike over Span 1 of the existing bridges. These utilities will be relocated approximately 8 feet south from their current location to provide clearance between the aerial utilities and the proposed piles to be driven at Abutment 1. Central Maine Power will install a new pole east of the southern end of the new bridge and reset pole #54 which is located west of the southern end of the new bridge. After the two poles have been set, Central Maine Power, Spectrum and FirstLight will move their lines to the new poles. This work is anticipated to be completed prior to July 1, 2019.
  - b) In addition to the relocation of the poles and aerial utilities, Central Maine Power has indicated that the electric lines can be de-energized as needed. The Contractor shall coordination with Central Maine Power regarding the schedule and length of time that the electric lines can be de-energized. Note that in the event of a power emergency, the electric lines may need to be re-energized at any time. Proper warning will be given to the Contractor by Central Maine Power prior to any re-energizing of the lines.
  - c) Portland Water District owns a 20-inch underground water main within the project limits. This watermain crosses the Turnpike near STA 2438+67 north of the overpass. As part of this contract the water main will be replaced, and the casing will be extended. See Water Line Details and Appendix D for more information.
- 10) Permit Requirements (Special Provision 105.8.2)
- a) The Project is being constructed under the Maine Department of Environmental Protection (DEP) Natural Resources Protection Act Permit by Rule regulations, Section 11 – State Transportation Facilities, updated June 8, 2012. A copy of the Section 11 – State Transportation Facilities Permit by Rule regulations is attached to the Contract Book as Appendix B.
  - b) The Project is being permitted under Section 404 of the Clean Water Act, through the US Army Corps of Engineers Maine Programmatic General Permit, Category 2. A copy of the Army Corps of

Engineers Maine Category 2 permit and General Permit standards and conditions is attached to the Contract Book as Appendix A.

- c) The Project is subject to the requirements of the Maine Pollutant Discharge Elimination System (MPDES) General Permit for Stormwater Discharge from Construction Activity
- d) A Notice of Intent (NOI), accompanied by a Limit of Disturbance (LOD) plan, will be submitted by the Authority to the DEP for coverage under the Maine Construction General Permit (MCGP).
- e) This Project is also subject to the requirements of the Maine Pollutant Discharge and Elimination System (MPDES) General Permit for the Discharge of Stormwater from MTA's Municipal Separate Storm Sewer Systems (MS4), because it is located within an Urbanized Area (UA) as defined by the 2000 census by the U.S. Bureau of the Census. MS4 compliance requires all Contractors to be properly trained in Erosion and Sedimentation Control (ESC) measures (as per Special Provision Subsections 105.8.1 and 656.07) and implement measures to reduce pollutants in stormwater runoff from construction activities
- f) Compliance with the erosion and sedimentation control requirements outlined in this Contract is required by the Contractor.
- g) MaineDOT Best Management Practices

11) General Requirements

- a) U-Turns at toll plazas and median openings not allowed. (Supplemental Specification 105.5.1)
- b) Contractor access to and from the mainline shall not negatively impact mainline traffic flow. The Contractor may be required to establish lane closures to provide for safe access. Refer to Special Provision 652, Specific Project Maintenance of Traffic Requirements, for lane closure requirements and restrictions.
- c) All vehicles used on the Project, including concrete delivery trucks, shall be equipped with amber flashing beacons in accordance with Supplemental Specification 652.3.4.
- d) Class III safety vests must be worn at all times.

12) Traffic Control (Special Provision Section 107/652):

- a) The Contractor shall complete the work as shown on the phasing and maintenance of traffic plans. Modifications to the phasing or associated maintenance of traffic plans will not be permitted unless approved by the Resident.
- b) The Contractor will not be permitted to place and remove temporary pavement markings on the final lift of surface pavement unless noted in the plans. The final surface lift of pavement shall be placed utilizing temporary lane closures once all concrete barrier has been removed.
- c) The Contractor shall provide proper and adequate illumination of the work area when work is occurring at night. Refer to the MTA Supplemental Specifications available on the MTA website for requirements.
- d) Contractor is responsible for supplying all traffic control devices.
- e) Contractor is responsible for placement, relocation, removal and maintenance of traffic control devices. Maintenance of traffic control devices is a 24-hour a day, seven days per week, responsibility. Contractor shall inspect devices as required.

f) Turnpike Lane closures

- i) Two lanes of traffic flowing in each direction at all times except as permitted in Section 652. Minimum traveling width of 11' required.

- ii) Requests for temporary lane closures shall be submitted a minimum of two working days in advance of scheduled closure. Requests are subject to approval by MTA.
- iii) Supplemental liquidated damages shall be assessed at \$1,000 per minute for every minute that a temporary lane closure is in place outside of the allowable times.
- g) Stoppages of traffic for moving heavy or slow equipment across or on the travel lanes (stoppages less than five minutes)
  - i) Fee of \$500 per five minutes in excess of the five-minute allowance.
  - ii) Requests shall be submitted two working days in advance of scheduled stoppage. Request subject to approval by MTA.
- h) Warren Avenue may be fully closed and detoured between the hours of 10 p.m. and 5 a.m. for the removal or installation of structural steel only. Warren Avenue shall be open to traffic at all other times.
- i) Flaggers along Warren Avenue will only be measured for payment when Warren Avenue traffic is reduced to a single lane with alternating two-way traffic and during the installation and removal of bridge shielding.
- j) The Contractor shall provide, to the maximum extent possible, a minimum of 6 feet of right-side shoulder between November 15<sup>th</sup> and April 1<sup>st</sup> during construction. Additional shoulder width shall be provided by relocating or removing concrete barrier when safe to do so.
- k) All signs, which do not apply to current construction activity, shall be 100% covered or removed in accordance with the plans. This includes any speed limit signs when work zone speed is in operation.
- l) Traffic control devices shall be NCHRP 350 compliant.

13) Specific Contract Items

- a) Special Provision 203 Lightweight Fill. Lightweight Fill shall be placed as shown in the Contract Plans and as specified in Special Provision 203.
- b) Special Provision 511 Cofferdams. Temporary Earth Support Systems will be required to accommodate the phased construction. The actual locations, limits and design of temporary earth support systems shall be the responsibility of the Contractor. Temporary Earth Support Systems shall be paid for under Pay Item 511.091 Temporary Earth Support Systems.
- c) Special Provision 526 Concrete Barrier.
  - i) Temporary Concrete Barrier, Anchored: Where concrete barrier is located on a new concrete deck, thru-bolting will be prohibited. All Temporary Concrete Barrier, Anchored that is required on the bridge deck or the approaches shall meet NCHRP 350 Test Level III (TL-3) crash test requirements.
  - ii) Temporary Concrete Barrier, Type I: All required temporary concrete barrier for this project shall be provided by the Contractor.
- d) Special Provision 624 Stormwater Treatment. This work shall consist of constructing a stormwater underdrain treatment swale to treat stormwater runoff. All work shall be completed in accordance with the project Specifications and Plans, and as directed by the Resident, to provide a complete and operating system. There are several additional pay items associated with this work that are not outlined in detail as part of this agenda.

14) Questions:

Warren Avenue Bridge Replacement

PREBID MEETING 1:00PM APRIL 2, 2019 - ATTENDANCE SHEET

NAME	COMPANY	EMAIL	PHONE
GREG SCOTT	SCOTT CONST. CORP	gscott207@gmail.com	632-0521
Joe Oliver	Cianbro	joliver@cianbro.com	609-2293
Bob Brady	Shaw Brothers	BBrady@shawbrothers.com	839-2552
Larry Grandin	R.J. Grandin Sons	estimators@grandinconstruction.com	854-1147
John Phillips	Reed + Reed Inc	jphillips@reed-reed.com	841-6231
Steve Perry	Sargent Corp.	sperry@sargent-corp.com	207-827-4435
Mitchell Bois	CPM Constructors	mbois@cpmconstructors.com	207-720-1718
Scott Warchol	Maine Turnpike Authority	swarchol@maineturnpike.com	(207)-482-8121
Tim Lemire	GPI	tlemire@gpinet.com	603-766-8252
Jasper Jenkins	GPI	jjenkins@gpinet.com	603-762-6852
Nate Carll	MTA	ncarll@maineturnpike.com	207-482-8115
KRISTI VAN ODYEN	MTA	kvandyen@maineturnpike.com	207-482-8113
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