GARDINER

LEWISTON



THE GOLD STAR **MEMORIAL HIGHWAY**

MAINE TURNPIKE AUTHORITY

CONTRACT 2019 15 GRAY SERVICE PLAZA FUEL SYSTEM REPLACEMENT MILE 58.8 NB

DANIEL E. WATHEN, CHAIR ROBERT D. STONE, VICE CHAIR MICHAEL J. CIANCHETTE, MEMBER ANN R. ROBINSON, MEMBER JOHN E. DORITY, MEMBER THOMAS J. ZUKE, CPA, MEMBER BRUCE A. VAN NOTE, MEMBER EX-OFFICIO

S. PETER MILLS, EXECUTIVE DIRECTOR

CONTRACT 2019.15 GRAY SERVICE PLAZA FUEL SYSTEM REPLACEMENT MILE 58.8 NB

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PORTSMOUTH

ATLANTIC

YORK BEACH

WESTBROOK

PORTLAND

SACO

NORTH

BERWICK

SOUTH

BIDDEFORD

OGUNQUIT

LOCATION MAP

ALFRED

SANFORD

MAINE TURNPIKE AUTHORITY

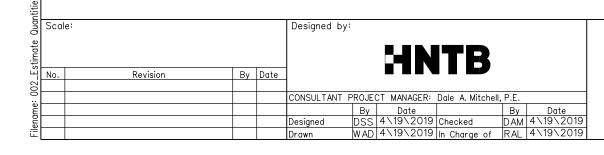
PETER S. MERFELD, P.E. - CHIEF OPERATIONS OFFICER

HNTB



ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY
202.17	Removing Existing Structural Concrete	LS	1
202.202	Removing Pavement Surface	SY	820
203.20	Common Excavation	CY	340
203.2312	Health and Safety Plan	LS	1
203.2333	Disposal/Treatment of Special Excavation	TON	535
203.2334	Disposal/Treatment of Contaminated Groundwater	GAL	300,000
206.061	Structural Earth Excavation - Drainage Minor Structures Below Grade	CY	25
304.10	Aggregate Subbase Course - Gravel	CY	450
304.14	Aggregate Base Course - Type A	CY	90
403.207	Hot Mix Asphalt, 19.0 mm Nominal Maximum Size	Ton	340
403.208	Hot Mix Asphalt, 12.5 mm Nominal Maximum Size	Ton	400
409.15	Bituminous Tack Coat, Applied	Gal	210
419.30	Sawing Bituminous Pavement	LF	1,110
502.701	Concrete Gas Island and Slab	CY	74
502.702	Concrete Diesel Island and Slab	CY	37
502.703	Concrete Fuel Tank Slab	CY	39
503.14	Epoxy-Coated Reinforcing Steel, Fabricated and Delivered	LB	12,200
503.15	Epoxy-Coated Reinforcing Steel, Placing	LB	12,200
524.30	Temporary Structural Support	EA	1
526.306	Temporary Concrete Barrier, Type I - Supplied by Authority (500 LF)	LS	1
603.165	15 inch Reinforced Concrete Pipe - Class III	LF	100
604.09	Catch Basin Type B1	EA	3
604.15	Manhole	EA	1
604.30	Oil-water Separator	EA	1
605.09	6" Underdrain Type B	LF	50
606.265	Terminal End - single rail- Galvanized steel	EA	4
606.356	Underdrain Delineator Post	EA	3
606.3605	Guardrail Remove and Reset	LF	162.5
607.18	6 Foot Chain Link Safety Fence	LF	500
609.31	Curb Type 3	LF	120
610.08	Plain Riprap	CY	9
613.319	Erosion Control Blanket	SY	18
615.07	Loam	CY	80
618.13	Seeding Method Number 1	Unit	5
619.1201	Mulch - Plan Quantity	Unit	5
619.1202	Temporary Mulch	LS	1
622.10	Transplanting Shrub	EA	13
626.13	18" X 12" X 18" Quazite Junction Box	EA	1
626.22	Non-Metallic Conduit	LF	70
626.32	24 Inch Diameter Foundation	EA	2
626.36	Remove or Modify Concrete Foundation	EA	2
627.731	Temporary 6 Inch Black Pavement Marking Tape	LF	100
627.733	4" White or Yellow Painted Pavement Marking Line	LF	650
627.78	Temporary Pavement Marking Line White or Yellow	LF	840
629.05	Hand Labor, Straight Time	MH	20
	, , <u>, , , , , , , , , , , , , , , , , </u>		

ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY
631.12	All Purpose Excavator (including operator)	HR	20
631.172	Truck Large (including operator)	HR	40
631.221	Small Front End Loader (including operator)	HR	20
631.32	Culvert Cleaner (including operator)	HR	12
631.36	Foreman	HR	20
634.208	Remove and Reset Light Standards	EA	2
634.23	Temporary Lighting	LS	1
639.19	Field Office, Type B	EA	1
645.109	Remove and Reset Sign	EA	1
652.33	Drum	EA	70
652.34	Cones	EA	25
652.35	Construction Signs	SF	146
652.361	Maintenance of Traffic Control Devices	LS	1
652.38	Flaggers	HR	40
652.41	Portable Changeable Message Sign	EA	1
655.101	#6 AWG Wire	LF	180
655.11	#10 AWG Wire	LF	90
656.50	Baled Hay, in place	EA	12
656.632	30 Inch Temporary Silt Fence	LF	280
659.10	Mobilization	LS	1
800.01	Removal of Underground Tanks (Gasoline and Diesel)	LS	1
800.02	Underground Tank Installation (Gasoline and Diesel)	LS	1
800.03	Aboveground Diesel Tank Installation	LS	1
800.04	Aboveground Gasoline Tank Installation	LS	1
800.50	New Canopy (Diesel)	LS	1



HNTB CORPORATION 340 County Road, Suite 6-C Westbrook, ME 04092 TEL (207) 774-5155 FAX (207) 228-0909



GRAY SERVICE PLAZA FUEL SYSTEM REPLACEMENT

ESTIMATED QUANTITIES

CONTRACT:2019.15

SHEET NUMBER: EQ-01

MTA PROJECT MANAGER: Ralph C. Norwood, IV, P.E.,P.T.O.E.

2 OF 32

GENERAL

- I. ALL WORK SHALL CONFORM TO THE MAINE DEPARTMENT OF TRANSPORTATION (MAINEDOT) STANDARD DETAILS FOR HIGHWAYS AND BRIDGES (LATEST REVISION), THE MAINEDOT BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROL (LATEST REVISION) AND THE 2014 MAINEDOT STANDARD SPECIFICATIONS, EXCEPT AS MODIFIED BY THE MAINE TURNPIKE'S SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS UNLESS OTHERWISE INCLUDED IN THESE PLANS.
- 2. THE CONTRACTOR SHALL SUBMIT THE PROPOSED STAGING AREA(S) AND FIELD TRAILER LOCATION TO THE RESIDENT FOR APPROVAL PRIOR TO STARTING WORK.
- 3. ANY DAMAGE TO FINAL PAVEMENT, SLOPES, OR STRUCTURES CAUSED BY THE CONTRACTOR'S EQUIPMENT, PERSONNEL OR OPERATIONS SHALL BE REPAIRED TO THE SATISFACTION OF THE RESIDENT. ALL WORK, EQUIPMENT, AND MATERIALS REQUIRED TO MAKE REPAIRS SHALL BE AT THE CONTRACTOR'S EXPENSE.
- 4. AS-BUILT PLANS FOR THE SERVICE PLAZAS AND EXISTING FUEL SYSTEM ARE AVAILABLE FROM THE AUTHORITY UPON REQUEST.
- 5. CONTRACTOR IS RESPONSIBLE FOR THE FINAL DESIGN OF ALL FUEL SYSTEM AND FUEL SYSTEM RELATED ITEMS UNLESS OTHERWISE NOTED IN THE PLANS OR SPECIFICATIONS. CONTRACTOR SHALL SUBMIT FINAL P.E. STAMPED DRAWINGS FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION OR AS NOTED IN THE PLANS AND SPECIFICATIONS.
- 6. CONTRACTOR TO PROVIDE, FOR APPROVAL, LAYOUT PLAN AND DETAILS FOR TEMPORARY POWER AND COMMUNICATION TO TEMPORARY FUEL SYSTEM AND KINSKS
- 7. CLEARING FOR TANK REMOVAL AND INSTALLATION SHALL BE INCIDENTAL TO THE CONTRACT, PER ITEM 800.01.
- 8. THE CONTRACTOR SHALL PROVIDE AS-CONSTRUCTED PLANS WIHT HORIZONTAL AND VERTICAL LOCATIONS OF PIPES, CONDUITS, TANKS ETC. AT A MINIMUM, THE AS CONSTRUCTED PLANS SHALL BE CADD QUALITY IN PDF FORMAT.
- 9. HORIZONTAL AND VERTICAL CONTROL POINTS:

POINT */OIO - TBM SET SPK IO'W PINE NORTHING; 36/781.38 EASTING: 29/2096.93 ELEVATION: 3/O.06'

POINT #2074 - TBM X LP BASE ABIO NORTHING; 361116.34 EASTING: 2912430.42 FIFVATION: 300.37'

LIGHTING

- I. EXISTING LIGHTING WITHIN THE PROJECT LIMITS SHALL BE OPERATIONAL AT ALL TIMES UNLESS NOTED OTHERWISE ON THE PLANS.
- 2. ALL ENCOUNTERED WIRE SHALL BE CAREFULLY CROSSED. NO SPLICES ALLOWED IN LINE, ONLY IN JUNCTION BOXES.
- 3. EXISTING CONDUIT MAY BE ASBESTOS CEMENT CONDUIT. CONTRACTOR SHALL TAKE EXTREME CARE NOT TO DAMAGE IT. ALL EXISTING CONDUIT THAT REQUIRES REMOVAL DUE TO NEW CONSTRUCTION SHALL BE REMOVED PER THE SPECIFICATIONS, SPECIAL PROVISION 105.2 AND AS DIRECTED BY THE RESIDENT.
- 4. ALL WIRE SHALL BE COPPER, NO ALUMINUM WIRE IS ALLOWED.
- 5. ALL LIGHT STANDARD AND CONDUIT TRENCHES SHALL BE INSTALLED IN A MANNER THAT AVOIDS DRAINAGE STRUCTURES AND UTILITIES.
- 6. PROPOSED NON-METALLIC CONDUIT SHALL BE 2" SCHEDULE 80 PVC AND CONTAIN TWO (2) *6 AND ONE (1) *10 (GROUND) WIRES CONSISTENT WITH EXISTING CIRCUIT. CONTRACTOR TO FIELD VERIFY.
- 7. LIGHTING CONDUIT, JUNCTION BOXES, AND WIRE SHALL BE PAID FOR UNDER THE APPROPRIATE PAY ITEMS.

EARTHWORK

- I. SPECIAL EXCAVATION SHALL BE DISPOSED OF OFF THE PROJECT SITE, IN ACCORDANCE WITH CHAPTER 404, DEPARTMENT OF ENVIRONMENTAL PROTECTION SOLID WASTE MANAGEMENT RULES. CLASSIFICATION OF SPECIAL EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR DURING EXCAVATION OPERATIONS.
- 2. EXCAVATIONS ACCOMPLISHED AS PART OF THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH OSHA SUBPART P OF 29 CFR PART 1926.650-652 (CONSTRUCTION STANDARDS FOR EXCAVATION).
- 3. COMMON BORROW SHALL BE COMPACTED TO 90% OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR, GRANULAR BORROW AND AGGREGATE SHALL BE COMPACTED TO 95% OF THEIR MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR.

EROSION CONTROL

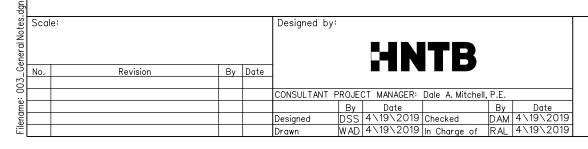
- I. THE CONTRACTOR SHALL PROPOSE ACTUAL TYPE AND LOCATION OF DEVICES FOR APPROVAL BY THE RESIDENT. ADDITIONAL MEASURES MAY BE PROPOSED BY THE CONTRACTOR DUE TO SITE OR WEATHER CONDITIONS. THE RESIDENT MAY DIRECT THE CONTRACTOR TO IMPLEMENT ADDITIONAL MEASURES. ANY ADDITIONAL MEASURES APPROVED BY THE RESIDENT WILL BE MEASURED FOR DAYLEGT.
- 2. 4 LOAM HAS BEEN ESTIMATED FOR 100% OF THE DISTURBED SLOPE AREA. ACTUAL PLACEMENT OF THE LOAM SHALL BE AS DESIGNATED BY THE RESIDENT.
- 3. UNLESS OTHERWISE NOTED, SEEDING METHOD NO. I SHALL BE UTILIZED ON ALL LAWNS AND DEVELOPED AREAS; SEEDING METHOD NO. 2 SHALL BE UTILIZED ON ALL OTHER AREAS.
- 4. MULCH SHALL BE APPLIED IN AREAS SEEDED EXCEPT WHERE EROSION CONTROL BLANKET IS SPECIFIED.
- 5. ALL TEMPORARY AND PERMANENT EROSION CONTROL DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE MAINE ENVIRONMENTAL PROTECTION BEST MANAGEMENT PRACTICES.
- 6. TEMPORARY SEED SHALL BE APPLIED TO ALL DISTURBED AREAS THAT WILL NOT BE SEEDED WITH FINAL SEED WITHIN 30 DAYS.
- 7. TEMPORARY STABILIZATION WITH MULCH OR OTHER NON-ERODABLE COVER IS REQUIRED ON ALL EXPOSED SOILS THAT WILL NOT BE WORKED ON FOR MORE THAN 7 DAYS. AREAS WITHIN 75 FEET OF A WETLAND OR WATERBODY SHALL BE STABILIZED WITHIN 48 HOURS OF THE INITIAL DISTURBANCE OF THE SOIL OR PRIOR TO ANY STORM EVENT, WHICHEVER COMES FIRST.
- 8. TEMPORARY EROSION CONTROL BLANKET, ITEM 613.319 SHALL BE INSTALLED IN ALL DITCHES AND SLOPES 2:1 AND STEEPER FROM THE TOP TO TOE OF SLOPE. LOAM AND SEED SHALL BE PLACED PRIOR TO THE INSTALLATION OF THE EROSION CONTROL BLANKET. LIMITS OF THE EROSION CONTROL BLANKET IN DITCHES SHALL BE 6'WIDE UNLESS OTHERWISE SPECIFIED ON THE PLANS OR AS DESIGNATED BY THE RESIDENT.

DRAINAGE

- I. NO EXISTING DRAINAGE SHALL BE ABANDONED, REMOVED OR PLUGGED WITHOUT PRIOR APPROVAL OF THE RESIDENT.
- 2. INLETS AND OUTLETS OF ALL CULVERTS SHALL BE RIPRAPPED UNLESS OTHERWISE NOTED ON THE PLANS OR DIRECTED BY THE RESIDENT.
- 3. IF FOUNDATION MATERIAL IS REQUIRED UNDER CULVERTS, IT SHALL MEET THE REQUIREMENTS FOR GRANULAR BORROW UNDERWATER BACKFILL.
- 4. ANY NECESSARY CUTTING OF EXISTING CATCH BASINS TO TAKE A PROPOSED PIPE WILL NOT BE PAID FOR SEPARATELY AND SHALL BE INCIDENTAL TO THE PROPOSED CULVERT ITEMS.
- 5. ANY NECESSARY CUTTING OF EXISTING PIPES TO FIT IN AREAS OF PROPOSED CATCH BASINS WILL NOT BE PAID FOR SEPARATELY AND SHALL BE INCIDENTAL TO THE PROPOSED CATCH BASIN ITEMS.
- 6. EXISTING CULVERTS TO REMAIN SHALL BE CLEANED AS DIRECTED BY THE RESIDENT, PAYMENT WILL BE MADE UNDER ITEM 631.32-CULVERT CLEANER (INCLUDING OPERATORS)

UTILITIES

- I. EXISTING UTILITIES ON THESE PLANS WERE COMPILED FROM FIELD SURVEY AND VARIOUS OTHER SOURCES. LOCATIONS ARE NOT GUARANTEED TO BE ACCURATE NOR IS IT GUARANTEED THAT ALL UTILITIES ARE SHOWN, NO SEPARATE OR ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR DUE TO ANY VARIANCE BETWEEN THE DATA SHOWN ON THE PLANS AND THE ACTUAL FIELD CONDITIONS ENCOUNTERED. NO WORK SHALL BE STARTED UNTIL THE OWNERS OF THE VARIOUS UTILITIES ARE NOTIFIED BY THE CONTRACTOR OF THE PROPOSED CONSTRUCTION, THE CONTRACTOR IS ALSO REQUIRED TO CALL DIG SAFE AT 1-888-344-7233 PRIOR TO THE START OF THE WORK, THE CONTRACTOR SHALL NOTIFY THE RESIDENT IO DAYS PRIOR TO CONSTRUCTION SO THE RESIDENT MAY COORDINATE WITH DIG SMART.
- 2. ALL UTILITY FACILITIES SHALL BE ADJUSTED BY THE RESPECTIVE UTILITIES UNLESS NOTED OTHERWISE.
- 3. THE UTILITIES INVOLVED IN THIS CONTRACT ARE:
 THE MAINE TURNPIKE AUTHORITY (SEWER, WATER, AND ELECTRIC).
 OTELCO (COMMUNICATIONS)
 CHARTER (FORMERLY TIME WARNER)
 CENTRAL MAINE POWER
- 4.THE CONTRACTOR SHALL NOTIFY THE RESIDENT IO DAYS PRIOR TO CONSTRUCTION SO THE RESIDENT CAN ARRANGE FOR MAINE TURNPIKE UNDERGROUND UTILITY LOCATION. ALL PROPOSED SIGN LOCATIONS AND EXCAVATION LOCATIONS SHALL BE MARKED AT THE NOTIFICATION TIME. EXCAVATION WILL NOT BE PERMITTED UNTIL THE AUTHORITY HAS LOCATED AND MARKED ITS' UNDERGROUND UTILITIES, OR NOTIFIED THE RESIDENT THERE ARE NO UNDERGROUND UTILITIES IN THE MARKED AREAS. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE UTILITY LOCATIONS.
- 5. UNLESS OTHERWISE NOTED OR APPROVED BY THE ENGINEER, THE CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES IN SERVICE AT ALL TIMES.
- 6. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING UTILITY SERVICES. IF THE CONTRACTOR DAMAGES UTILITY SERVICES, HE SHALL IMMEDIATELY NOTIFY THE RESPECTIVE UTILITY COMPANY AND SHALL IMMEDIATELY REPLACE THEM AT HIS OWN EXPENSE.
- 7. THE CONTRACTOR SHALL EXERCISE EXTREME CARE WHEN EXCAVATING AND BACKFILLING NEAR EXISTING UTILITIES, INCLUDING THE USE OF HAND EXCAVATION WHERE NEFDED.



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THE GOLD STAR MEMORIAL HIGHWAY GRAY SERVICE PLAZA FUEL SYSTEM REPLACEMENT

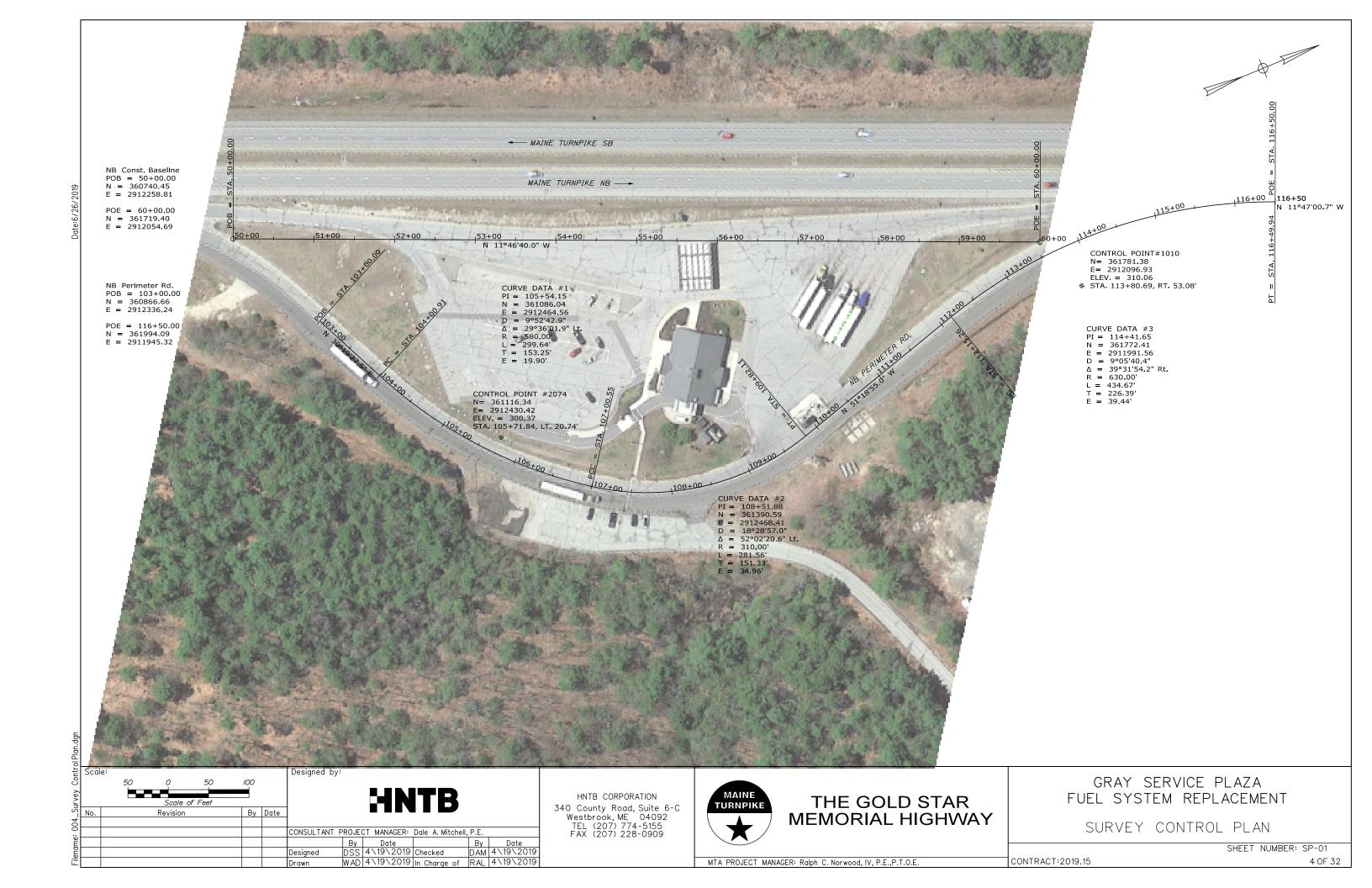
GENERAL NOTES

SHEET NUMBER: GN-01

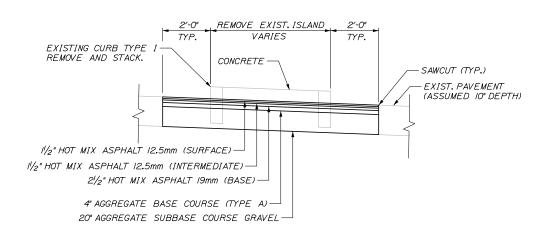
MTA PROJECT MANAGER: Ralph C. Norwood, IV, P.E.,P.T.O.E.

CONTRACT:2019.15

3 OF 3



- I. A COATING OF HOT RUBBERIZED ASPHALT (ASTM D6690 TYPE IV) SHALL BE APPLIED AT THE TOP SURFACE LIFT TO ALL TRANSVERSE BUTT JOINTS AND LONGITUDINAL JOINTS EXCEPT WHERE THE NOTCHED WEDGE IS USED
- 2. BITUMINOUS TACK COAT IS REQUIRED BETWEEN EXISTING PAVEMENT AND PROPOSED HMA.



REMOVAL OF EXISTING CURBED ISLAND N.T.S.

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Filename:						Ву	Date		Ву	Date
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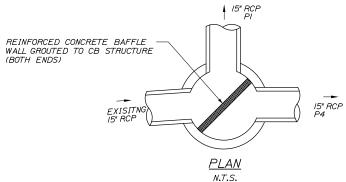


GRAY SERVICE PLAZA FUEL SYSTEM REPLACEMENT

SITE TYPICAL SECTIONS

CONTRACT:2019.15

SHEET NUMBER: TS-01

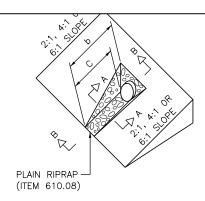


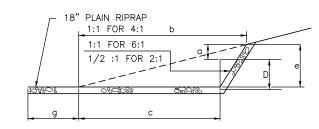
DIVERSION STRUCTURE NOTES:

I. SEE DRAINAGE NOTES FOR ADDITIONAL INVERT AND GRATE ELEVATIONS.

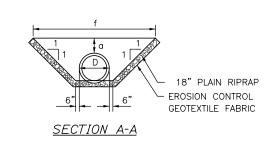
DIMENSIONS FOR SLOPE OF 2:1

							SIONE	STONE
D	a	b	С	e	f	g	DEPTH	(CY)
	(FT)	(FT)	(FT)	(FT)	(FT)	(FT)	(FT)	
12"	1.00	4.00	3.00	2.00	6.00	1.00	1.50	1.30
15"	1.00	4.50	3.37	2.25	6.75	1.63	1.50	1.70
18"	1.00	5.00	3.75	2.50	7.50	2.25	1.50	2.09
21"	1.00	5.50	4.13	2.75	8.25	2.88	1.50	2.58
24"	1.00	6.00	4.50	3.00	9.00	3.50	1.50	3.12
30"	1.00	7.00	5.25	3.50	10.50	4.75	1.50	4.33
36"	1.00	8.00	6.00	4.00	12.00	6.00	1.50	5.75
42"	1.00	9.00	6.75	4.50	13.50	7.25	1.50	7.37
48"	1.00	10.00	7.50	5.00	15.00	8.50	1.50	9.18
54"	1.00	11.00	8.25	5.50	16.50	9.75	1.50	11.19
60"	1.00	12.00	9.00	6.00	18.00	11.00	1.50	13.40
66"	1.00	13.00	9.75	6.50	19.50	12.25	1.50	15.81
72"	1.00	14.00	10.50	7.00	21.00	13.50	1.50	18.41
84"	1.00	16.00	12.00	8.00	24.00	16.00	1.50	24.22





SECTION B-B



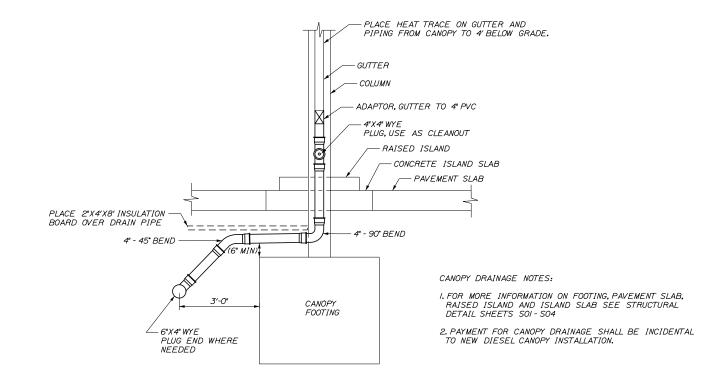
ROADWAY CULVERT END SLOPE TREATMENT

CULVERT NOTES:

CONTRACT:2019.15

I. THE DIMENSIONS SHOWN ARE APPROXIMATE AND MAY BE MODIFIED BY THE RESIDENT.

2. STONE QUANTITIES ARE FOR ONE END OF THE PIPE.



CANOPY DRAINAGE DETAIL N.T.S.

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					CONSULTANT F	ROJE	CT MANAGER:	Dale A. Mitchell,	P.E.	
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THE GOLD STAR **MEMORIAL HIGHWAY**

GRAY SERVICE PLAZA FUEL SYSTEM REPLACEMENT

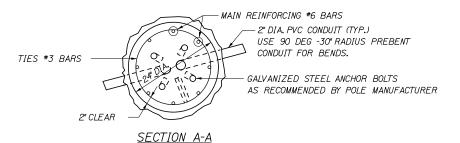
DRAINAGE DETAILS

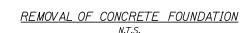
SHEET NUMBER: MD-01



I. SEE SHEET TD-01 FOR STANDARD CONDUIT TRENCH DETAIL

- 2. QUAZITE® JUNCTION BOXES FOR HIGHWAY LIGHTING SHALL BE QUAZITE AND IN ACCORDANCE WITH SPECIAL PROVISION 626.
- 3. SPLICES IN JUNCTION BOX SHALL BE MADE WITH ILSCO USPA-350-SS-DB SAFETYSUB 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.



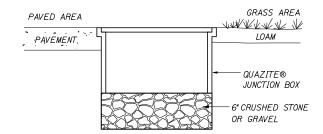


-SLOPE

EMBANKMENT

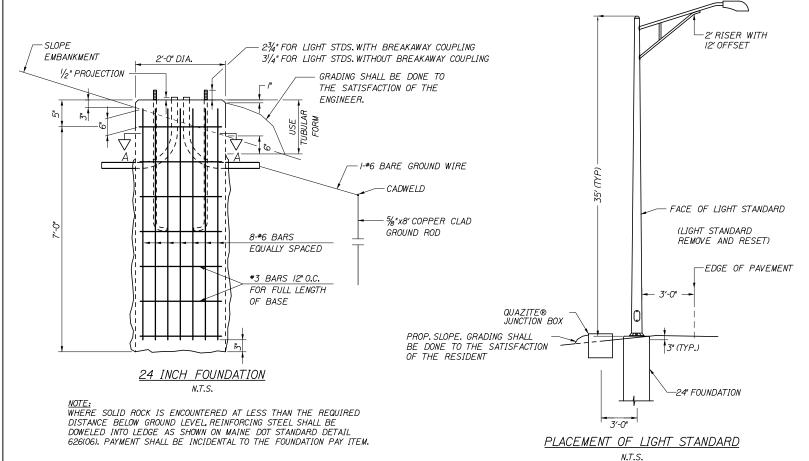
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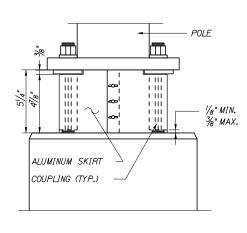
EMOVE AND DISPOSE EXISTING CONCRETE H



JUNCTION BOX COVER & FRAME

NOTE: INSTALL JUNCTION BOXES ON GRADE



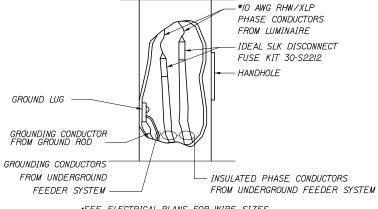


BREAKAWAY COUPLINGS

AND SKIRT DETAIL *

N.T.S.

* BREAKAWAY COUPLINGS SHALL BE REQUIRED ON ALL NEW LIGHT STANDARDS



*SEE ELECTRICAL PLANS FOR WIRE SIZES

TYPICAL POLE WIRING DETAIL

N.T.S.

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BACKFILL WITH AGGREGATE SUBBASE

COURSE-GRAVEL WHERE APPLICABLE
GRADE 4" LOAM WHERE APPLICABLE

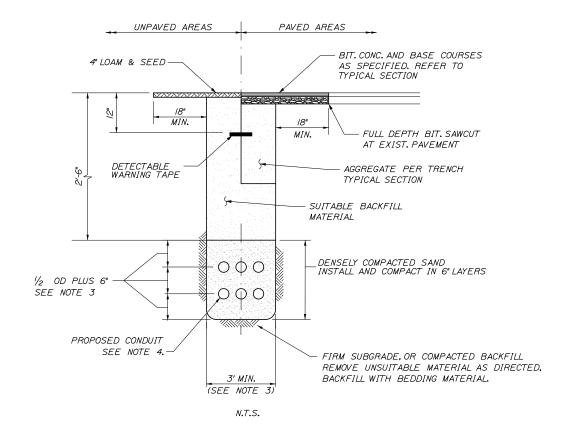
MATCH SURROUNDING AREA

THE GOLD STAR MEMORIAL HIGHWAY GRAY SERVICE PLAZA FUEL SYSTEM REPLACEMENT

LIGHT STANDARDS DETAIL

SHEET NUMBER: LS-01

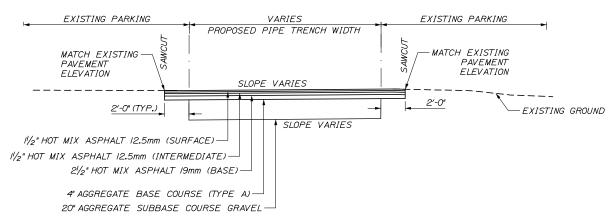
MTA PROJECT MANAGER: Ralph C. Norwood, IV, P.E.,P.T.O.E.



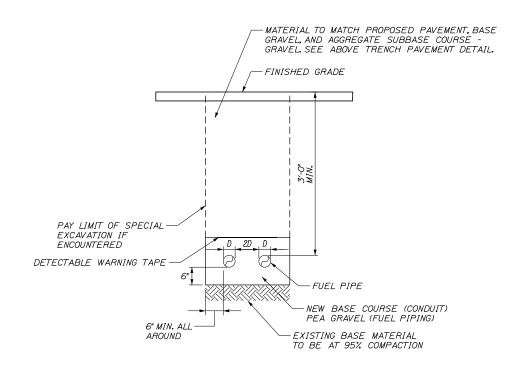
STANDARD PIPE/CONDUIT TRENCH DETAIL

NOTES:

- I. BEDDING SHALL BE COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY. USE HAND TAMPERS OR VIBRATORY COMPACTORS.
- 2. CONTRACTOR SHALL SHORE TRENCH SIDES WHEN REQUIRED OR AS DIRECTED BY THE RESIDENT.
- 3. CONTRACTOR SHALL COMPLY WITH MINIMUM DISTANCES, BOTH HORIZONTALLY AND VERTICALLY, BETWEEN UTILITIES PER APPLICABLE CODE REQUIREMENTS. DIMENSIONS ABOVE ARE MINIMUMS.
- 4. CONDUIT SHALL BE SCHEDULE 80 OR RMC UNDER PAVEMENT. IF CONTRACTOR USES OTHER CONDUIT TYPE, 4" CONCRETE COVER OVER TRENCH WIDTH IS REQUIRED.
- 5. MINIMUM OF 6" BETWEEN PIPES OR CONDUITS TO TRENCH WALLS IS REQUIRED.



TRENCH PAVEMENT TYPICAL SECTION N.T.S.



TYPICAL BURIED FUEL PIPING SECTION N.T.S.

NOTES:

PROVIDE UTILITY MARKING TAPE WITH METALLIC TRACE WIRE ABOVE EACH UTILITY.

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No.	Revision	Ву	Date						
				CONSULTANT F	PROJE	CT MANAGER:	Dale A. Mitchell,	P.E.	
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				Designed				DAM	4\19\20
				Drawn	WAD	4\19\2019	In Charge of	RAL	4\19\20

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THE GOLD STAR MEMORIAL HIGHWAY

GRAY SERVICE PLAZA FUEL SYSTEM REPLACEMENT

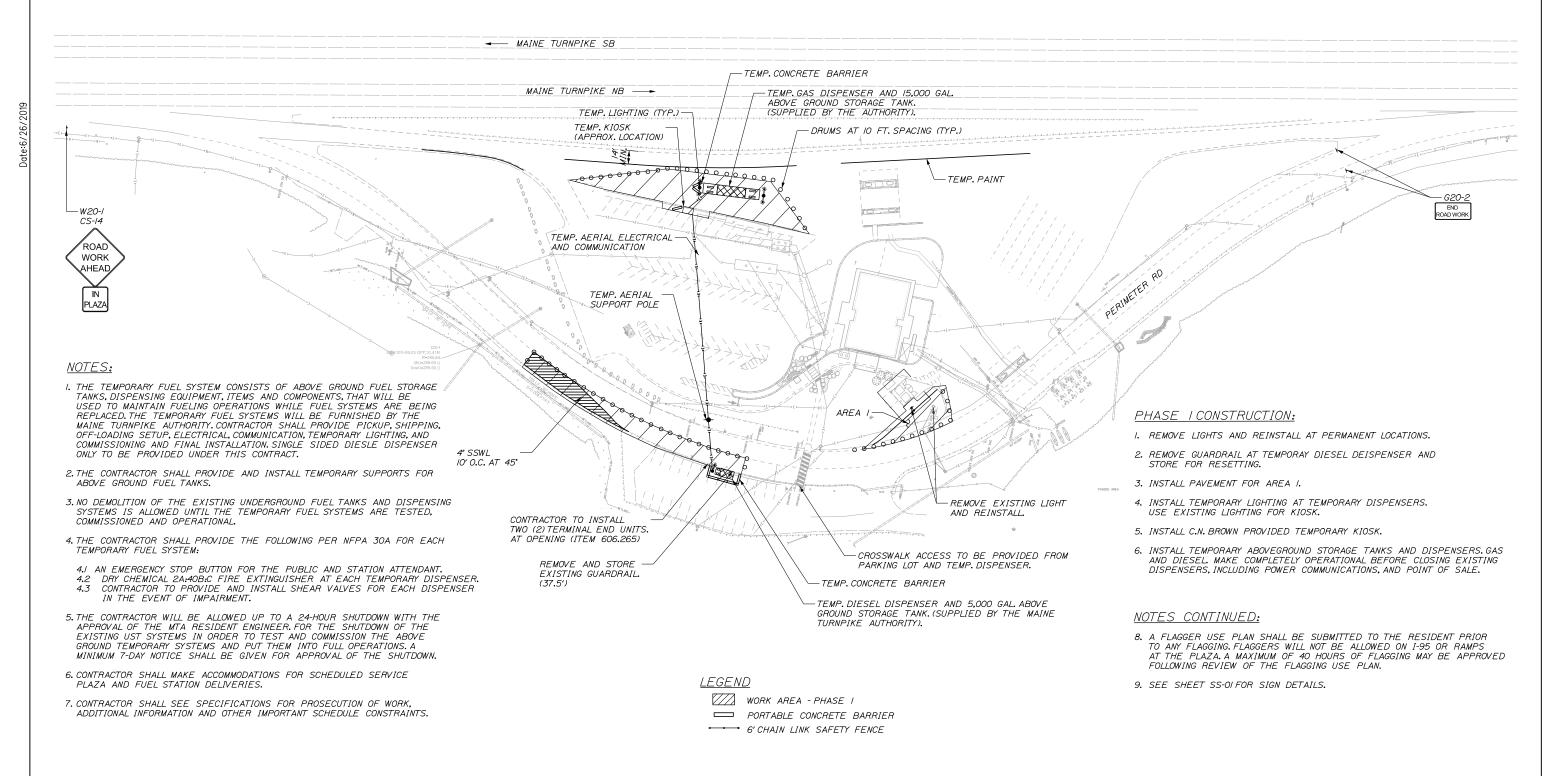
STANDARD TRENCH DETAILS

SHEET NUMBER: TD-01

MTA PROJECT MANAGER: Ralph C. Norwood, IV, P.E.,P.T.O.E.

CONTRACT: 2019,15 8 0F 3





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al l								Ву	Date		Ву	Date
Filename							Designed	DSS	6/26/2019	Checked	DAM	6/26/2019
ĒΓ							Drawn	WAD	6/26/2019	In Charge of	RAL	6/26/2019

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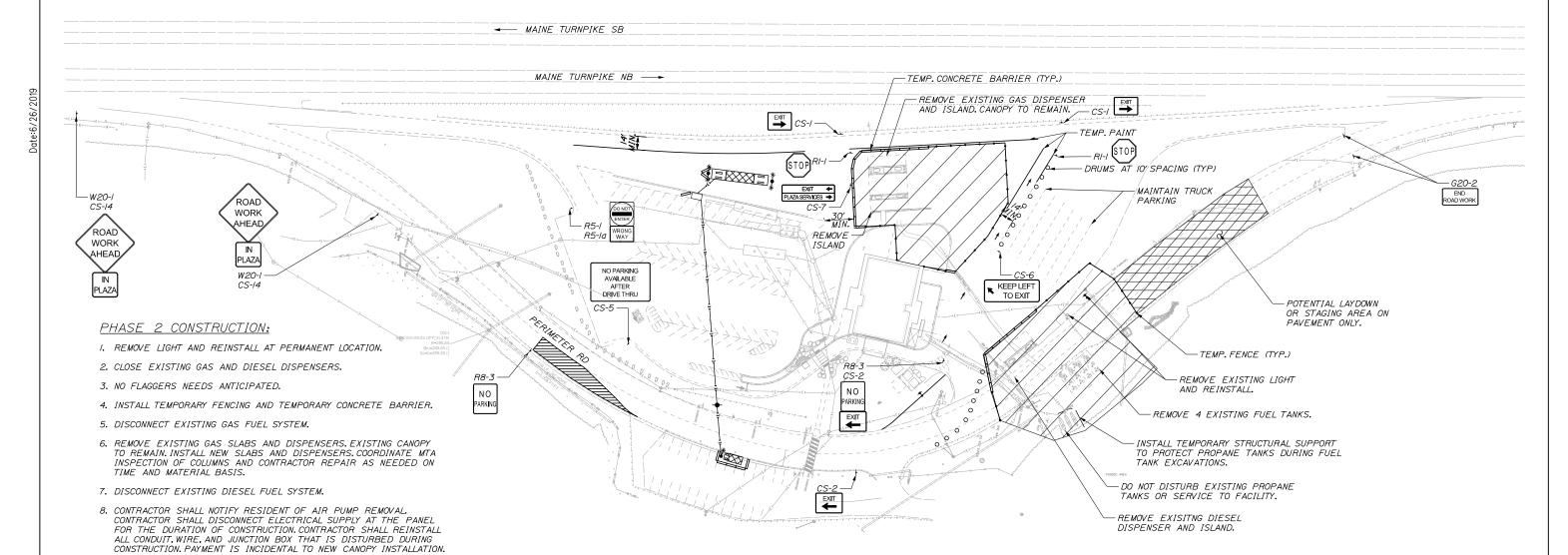
THE GOLD STAR **MEMORIAL HIGHWAY**

GRAY SERVICE PLAZA FUEL SYSTEM REPLACEMENT MAINTENANCE OF TRAFFIC PHASE 1

CONTRACT:2019.15

SHEET NUMBER: MOT-01





LEGEND

WORK AREA - PHASE 2

PORTABLE CONCRETE BARRIER

← 6' CHAIN LINK SAFETY FENCE

POTENTIAL LAYDOWN AREA

NOTES:

CONTRACT:2019.15

- I. CONTRACTOR SHALL MAKE ACCOMMODATIONS FOR SCHEDULED SERVICE PLAZA AND FUEL STATION DELIVERIES.
- 2. GRANITE CURB REMOVED SHALL BE SALVAGED TO MTA.
- 3. SEE SHEET SS-OI FOR SIGN DETAILS.

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				CONSULTANT	PROJE	CT MANAGER:	Dale A. Mitchell	, P.E.	
					Ву	Date		Ву	Date
				Designed		6/26/2019	Checked	DAM	6/26/20
				Drawn	WAD	6/26/2019	In Charge of	RAL	6/26/20

9. REMOVE EXISTING DIESEL SLABS AND DISPENSERS. INSTALL NEW

IO. CONTRACTOR SHALL COORDINATE WITH RESIDENT AND C.N. BROWN FOR REMOVAL AND INSTALLATION OF DISPENSERS. C.N. BROWN WILL TAKE DELIVERY OF DISPENSERS, STORE THEM, AND PROVIDE NEW/

12. EXCAVATE AND REMOVE EXISTING GAS AND DIESEL FUEL TANKS.

13. RUN ELECTRICAL SLEEVES AND/OR PIPING UNDER PERIMETER ROAD

II. REMOVE EXISTING RAISED ISLAND NEAR GAS DISPENSERS.

14. INSTALL FUEL TANKS PRIOR TO INSTALLING GUARDRAIL ALONG

TO DIESEL DISPENSERS AND LIMIT OF WORK ZONE.

REFURBISHED DISPENSERS FOR INSTALLATION.

SLAB, CANOPY, AND DISPENSERS.

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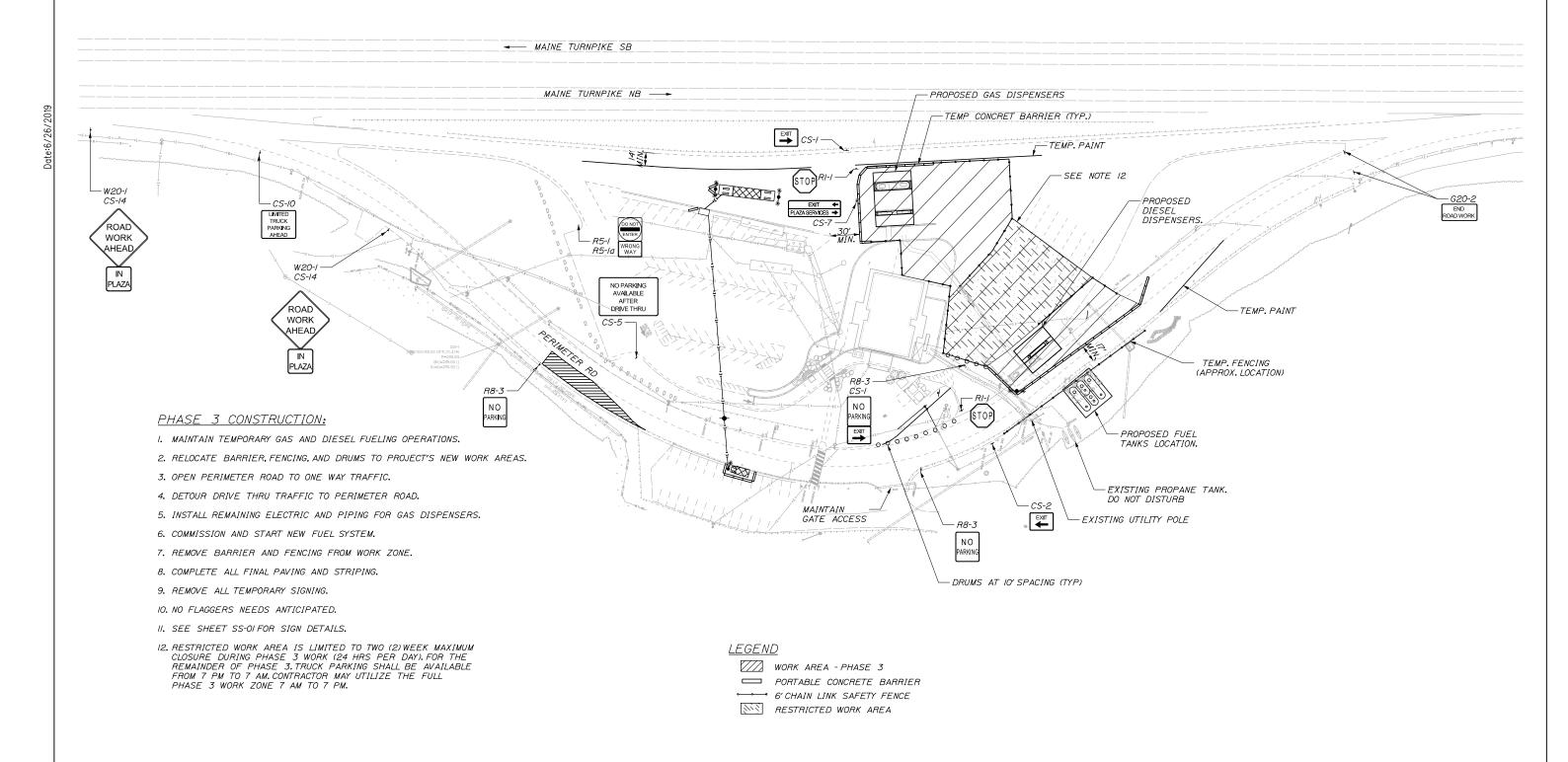


THE GOLD STAR **MEMORIAL HIGHWAY**

GRAY SERVICE PLAZA FUEL SYSTEM REPLACEMENT MAINTENANCE OF TRAFFIC PHASE 2

SHEET NUMBER: MOT-02





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					CONSULTANT F	ROJE	CT MANAGER:	Dale A. Mitchell	, P.E.	
						Ву	Date		Ву	Date
							6/26/2019		DAM	6/26/201
					Drawn	WAD	6/26/2019	In Charge of	RAL	6/26/201

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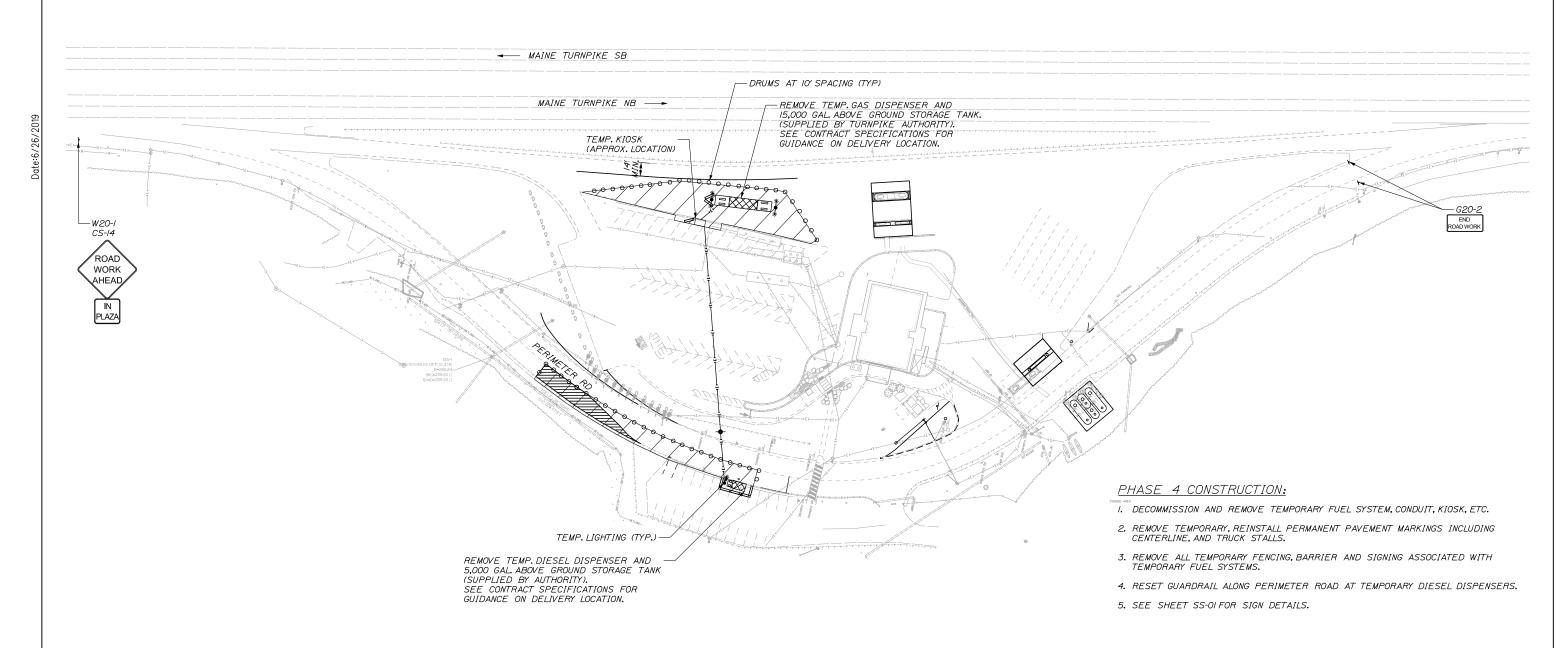


THE GOLD STAR MEMORIAL HIGHWAY

GRAY SERVICE PLAZA FUEL SYSTEM REPLACEMENT MAINTENANCE OF TRAFFIC PHASE 3

SHEET NUMBER: MOT-03
CONTRACT:2019.15 11 OF 32





<u>LEGEND</u>

WORK AREA - PHASE 4

PORTABLE CONCRETE BARRIER

← 6' CHAIN LINK SAFETY FENCE

Designed by: By Date CONSULTANT PROJECT MANAGER: Dale A. Mitchell, P.E. By Date By Date DSS 6/26/2019 Checked DAM 6/26/2019 WAD 6/26/2019 In Charge of RAL 6/26/2019 Designed

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THE GOLD STAR **MEMORIAL HIGHWAY**

GRAY SERVICE PLAZA FUEL SYSTEM REPLACEMENT MAINTENANCE OF TRAFFIC PHASE 4

SHEET NUMBER: MOT-04

MTA PROJECT MANAGER: Ralph C. Norwood, IV, P.E.,P.T.O.E.

CONSTRUCTION SIGN SUMMARY

IDENTIFI-		E OF GN		TEXT DI	MENSIONS	(INCHES)	NUMBER OF		COLO	OR .		AREA IN
CATION NUMBER	WIDTH	HEIGHT	TEXT	LETTER HEIGHT	VERTICAL SPACING	ARROW RTE.MKR.	SIGNS REQUIRED	BAC GROU		LEGE BORL		SQUARE FEET
CS-I	30"	24"	EXIT	4"C	3" 3" //" 3"	4.5"XI8"	2	ORA	NGE I	BL	ACK I	6.75 (13.50)
CS-2	30"	24"	EXIT	4"C	3" 3" //" 3"	4.5"x/8"	2					6.75 (13.50)
CS-5	48"	36"	NO PARKING AVAILABLE AFTER DRIVE THRU	4"C 4"C 4"C 4"C	6" 3" 3" 3" 5"	4"x6"	1					12.00 (12.00)
CS-6	42"	/8"	KEEP LEFT TO EXIT	4"C 4"C	3.5" 3" 3.5"	4"x6"	1					5.25 (5.25)
CS-7	54"	/8"	← EXIT PLAZA SERVICES →	4"C 4"C	3" 4" 3"	4"x6" 4"X6"	/					6.75 (6.75)
CS-10	36"	30"	LIMITED TRUCK PARKING AHEAD	4"C 4"C 4"C 4"C	2.5" 3" 3" 3" 2.5"		1					7.50 (7.50)
CS-14	18"	<i>18</i> "	IN PLAZA	4"C 4"C	3.5" 3" 3.5"		2					2.25 (4.50)

IDENTIFI- CATION		E OF GN		TEX	(T DI	MENS.	IONS	(INCHES)	NUMBER OF	COLO	OR .	AREA IN
NUMBER	WIDTH	HEIGHT	TEXT		TER GHT	VERT SPA	TICAL CING	ARROW RTE.MKR.	SIGNS REQUIRED	BACK- GROUND	LEGEND BORDER	SQUARE FEET
				ST	CON ANDAI 204 E	IFORM RD H	TO TGHWA DN AN	Y SIGNS D 2012				
RI-I	36"	36"	STOP						2	RED	WHITE	9 . 00 (18.00)
R8-3	18"	24"	N O PARKING						3	WHITE	RED	3.00 (9.00)
G20-2	36"	/8"	END ROAD WORK						2	ORANGE	BLACK	4.50 (9.00)
W20-I	48"	48"	ROAD WORK AHEAD						2	ORANGE	BLACK	16.00 (32.00)
R5-I	36"	36"	DO NOT ENTER						/	RED	WHITE	9.00 (9.00)
R5-la	36"	24"	WRONG WAY						/	ORANGE	BLACK	6.00 (6.00)

Scale: Designed by: NOT TO SCALE Revision By Date CONSULTANT PROJECT MANAGER: Dale A. Mitchell, P.E.
 By
 Date
 By
 Date

 DSS
 4 \ 19 \ 2019
 Checked
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 In Charge of
 RAL
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 Designed Drawn

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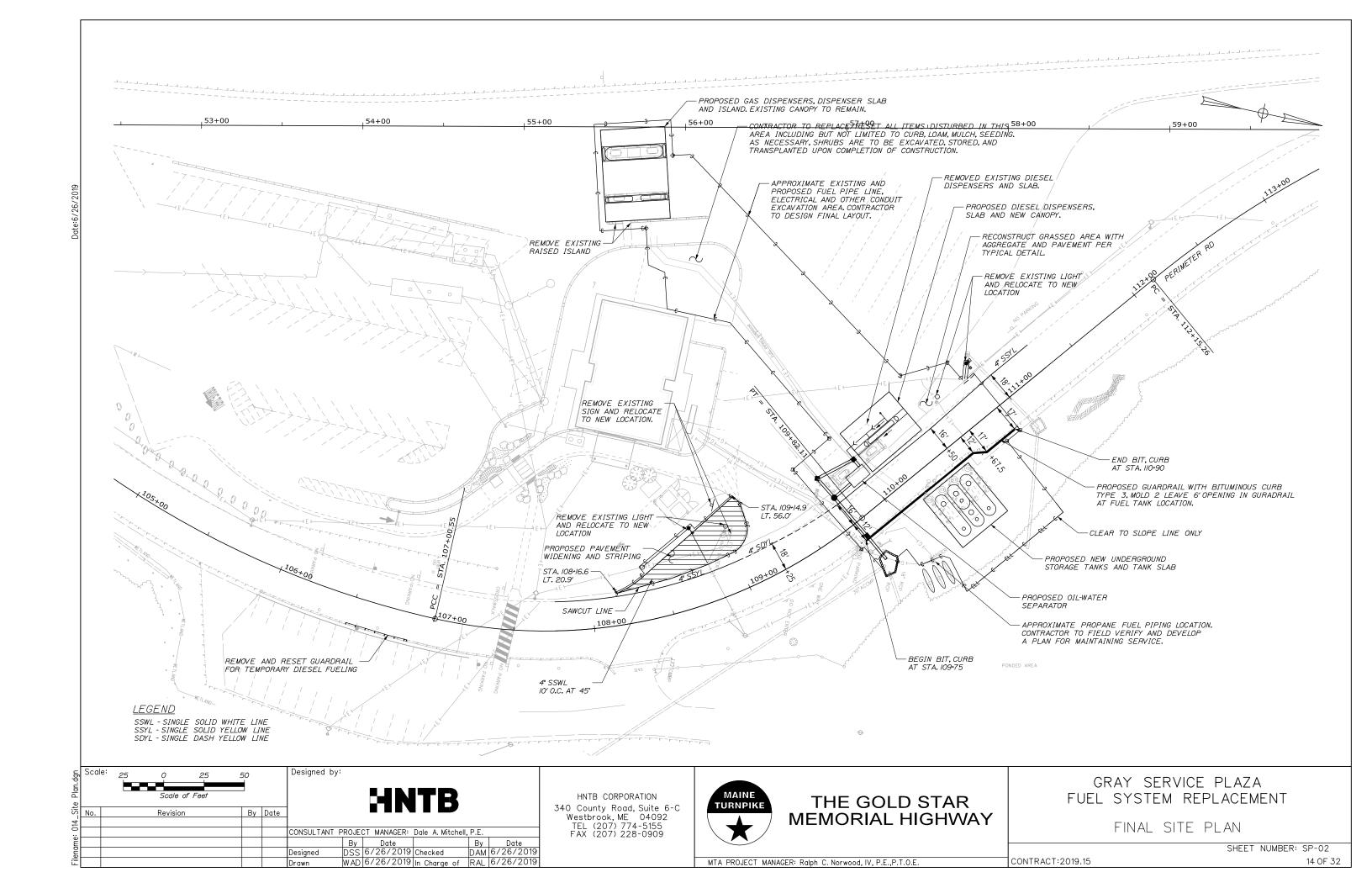


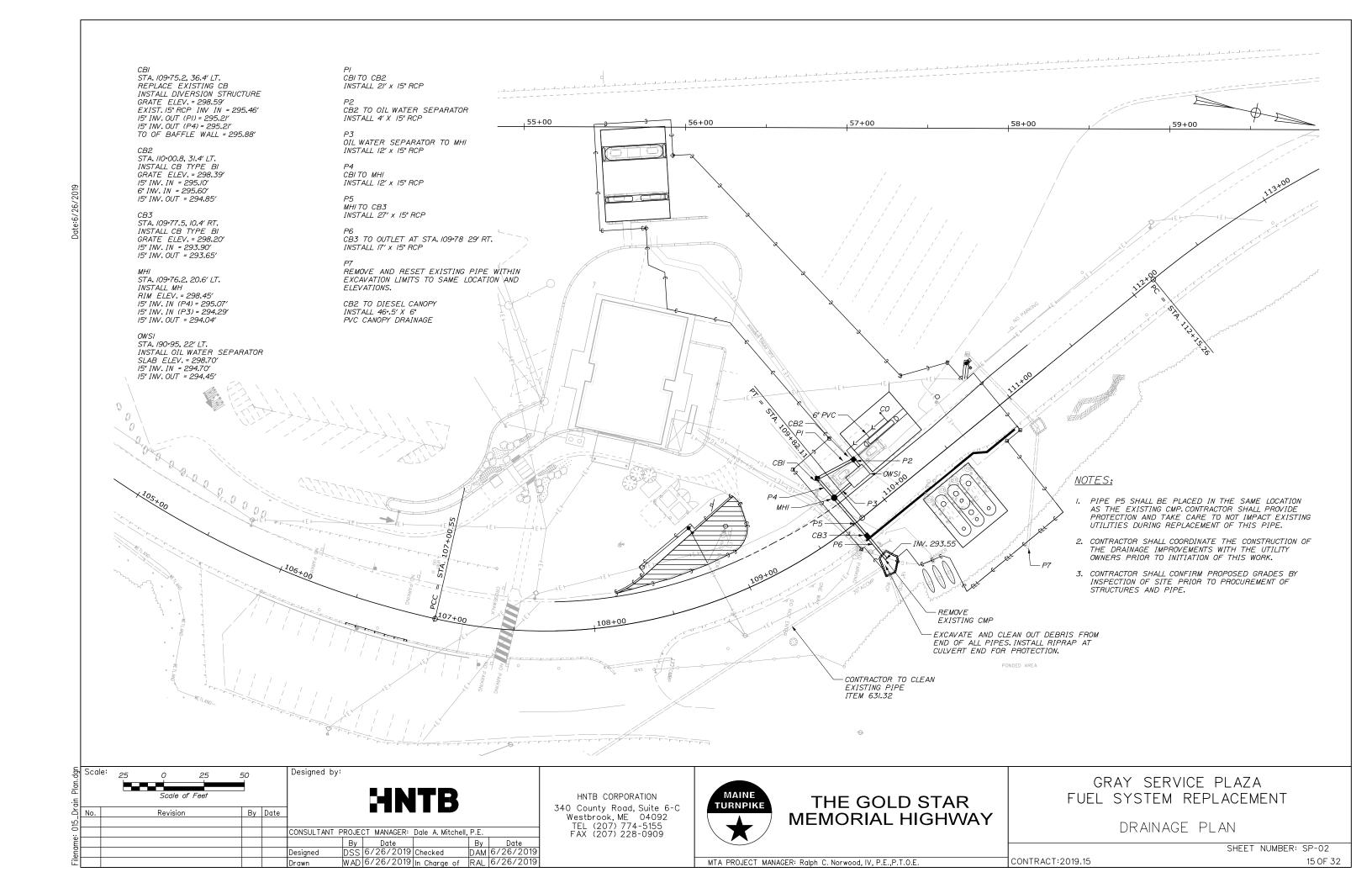
THE GOLD STAR MEMORIAL HIGHWAY

GRAY SERVICE PLAZA FUEL SYSTEM REPLACEMENT MAINTENANCE OF TRAFFIC SIGN SUMMARY

CONTRACT:2019.15

SHEET NUMBER: SS-01







→ MAINE TURNPIKE SB MAINE TURNPIKE NB ---AREA 2

NORTHBOUND PLAZA LIMIT OF DISTURBANCE

AREA |=1,733 SF AREA 2 = 27,25| SF TOTAL = 28,984 SF (0.67 ACRES)

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						Ву	Date		Ву	Date
					Designed		6/26/2019		DAM	6/26/201
					Drawn	WAD	6/26/2019	In Charge of	RAL	6/26/201

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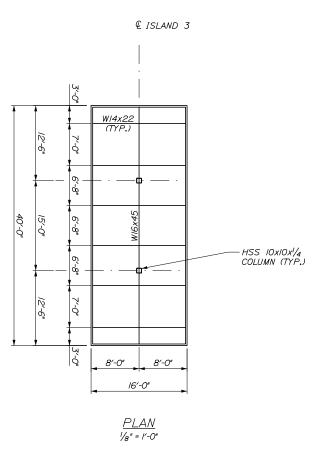
GRAY SERVICE PLAZA FUEL SYSTEM REPLACEMENT

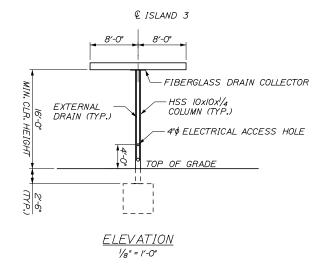
LIMIT OF DISTURBANCE PLAN

SHEET NUMBER: XX-01

MTA PROJECT MANAGER: Ralph C. Norwood, IV, P.E.,P.T.O.E.







NOTES:

- I. ALL ELEMENT SIZES AND LAYOUT ARE FOR INFORMATION ONLY. CANOPY AND ALL ASSOCIATED SYSTEMS INCLUDING BUT NOT LIMITED TO LIGHTING, ELECTRICAL, FIRE SUPPRESSION, COMMUNICATION, DRAINAGE, ETC., SHALL BE DESIGNED BY THE CONTRACTOR IN ACCORDANCE WITH SP800.
- 2. CANOPY LAYOUT AND DETAILS SHALL BE CONSISTENT WITH DETAILS OF THE DIESEL DISPENSER SLABS SHOWN ON SHEETS S-03 AND S-04.
- 3. ALL STRUCTURAL STEEL SHALL BE AS FOLLOWS:

 - -W SHAPES: ASTM A992 -HOLLOW STRUCTURAL SHAPES: ASTM A500 GRADE B
 - PLATES: ASTM A572 GRADE 50
 - FASTENERS: F3125
- 4. ALL WELDING SHALL BE PERFORMED IN ACCORDANCE WITH AWS DIJ.
- 5. DIESEL DISPENSER CANOPY SHOWN, EXISTING GAS CANOPY TO REMAIN.
- 6. C.N. BROWN WILL PROVIDE CANOPY DECALS FOR FACTORY TO INSTALL. CONTRACTOR TO COORDINATE WITH RESIDENT AND C.N. BROWN ACCORDINGLY.
- 7. PAYMENT FOR CANOPY DRAINAGE SHALL BE INCIDENTAL TO NEW DIESEL
- 8. DIESEL CANOPY DESIGN SHALL PROVIDE 15'-6" CLEARANCE FROM GROUND TO FIRE SUPPRESSION NOZZLE.
- 9. ALL EXPOSED NEW CONCRETE SHALL BE TREATED WITH CLEAR PROTECTIVE COATING PER MANUFACTURERS RECOMMENDATIONS.

Scale: Designed by: AS NOTED By Date Revision CONSULTANT PROJECT MANAGER: Dale A. Mitchell, P.E. | By | Date | By | Date | | DAM | 4\19\2019 | DA Designed

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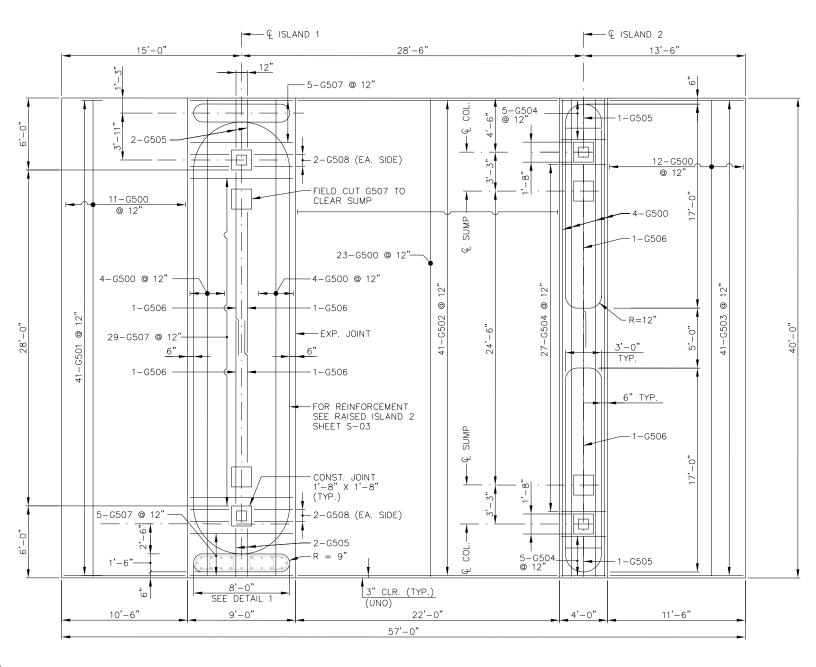


THE GOLD STAR **MEMORIAL HIGHWAY**

GRAY SERVICE PLAZA FUEL SYSTEM REPLACEMENT DIESEL CANOPY PLAN AND ELEVATION

CONTRACT:2019.15

SHEET NUMBER: S-01



PLAN

GASOLINE PLAZA

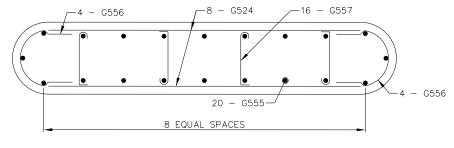
 $\frac{1}{4}$ " = 1'-0"

5-G553 (4-BUMPER) (1-RAISED ISLAND SLAB) 1-G509 -4-G554 -2-G550 1-G512 14-G513 S AS SHO 1-G510 FIELD CUT G513 TO CLEAR SUMP (FIELD CUT TO AVOID SUMP) 1-G551-R=12" - TYPICAL FUEL ISLAND (2 LOCATIONS) (TYP.)--DISPENSER SUMP SEE NOTE 5 -CONCRETE BUMPER -(2 LOCATIONS) SEE DETAIL SHEET S-03 4'-0"

F SLAND 2

PLAN RAISED ISLAND 2 GASOLINE PLAZA

- 1. CONTRACTOR SHALL VERIFY CANOPY COLUMN SPACING PRIOR TO SUBMITTING REBAR SHOP DRAWINGS FOR APPROVAL.
- 2. ALL CONCRETE SHALL BE CLASS AAA.
- 3. CONCRETE SLABS AT THE DISPENSING ISLANDS TO HAVE A BRUSH FINISH.
- 4. ALL REINFORCING STEEL TO BE EPOXY COATED.
- 5. CONTRACTOR SHALL VERIFY EXISTING COLUMNS SHALL NOT CONFLICT WITH SLAB OR ISLAND. IF A CONFLICT EXISTS CONTRACTOR SHALL BE RESPONSIBLE FOR MODIFYING REBAR.
- 6. ALL EXPOSED CONCRETE TO BE TREATED WITH CLEAR PROTECTIVE COATING.
- 7. MIN. CLEAR COVER SHALL BE 3" U.N.O.
- 8. FOR SECTION VIEW OF PLAZA SEE SHEET S-07.



DETAIL 1 $\frac{1}{4}$ " = 1'-0"

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Ē					Drawn	WAD	4\19\2019	In Charge of	RAL	4\19\2019

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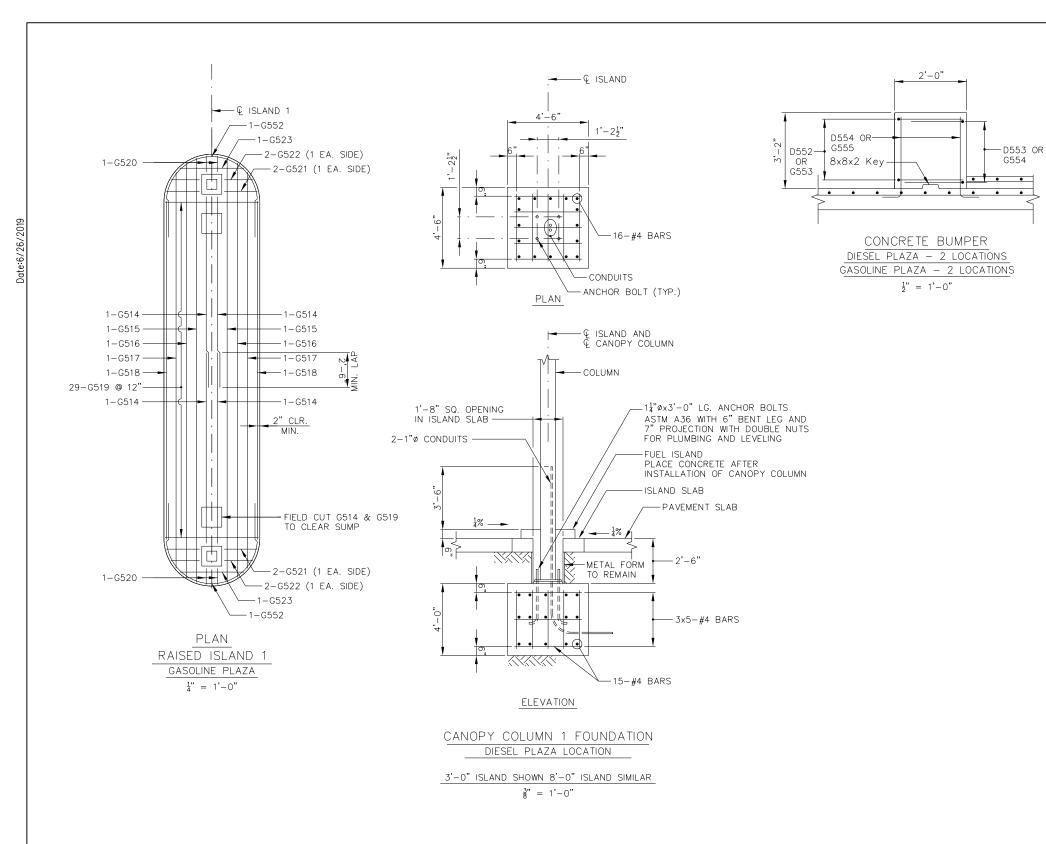


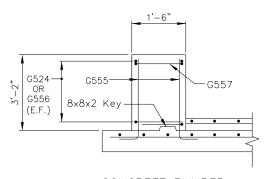
THE GOLD STAR **MEMORIAL HIGHWAY**

GRAY SERVICE PLAZA FUEL SYSTEM REPLACEMENT CONCRETE SLAB AND ISLANDS AT GASOLINE DISPENSERS

SHEET NUMBER: S-02

MTA PROJECT MANAGER: Ralph C. Norwood, IV, P.E.,P.T.O.E.





CONCRETE BUMPER

GASOLINE PLAZA - 2 LOCATIONS

1/2" = 1'-0"

NOTES:

- 1. FOR NOTES SEE SHEET S-02.
- 2. CANOPY COLUMN FOUNDATION IS SHOWN FOR INFORMATIONAL PURPOSES ONLY AND SHALL BE DESIGNED BY THE CANOPY SUPPLIER.

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No.	Revision	Ву	Date						
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					Ву	Date		Ву	Date
								DAM	4\19\20
				Drawn	WAD	4\19\2019	In Charge of	RAL	4\19\2C

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THE GOLD STAR MEMORIAL HIGHWAY

GRAY SERVICE PLAZA
FUEL SYSTEM REPLACEMENT

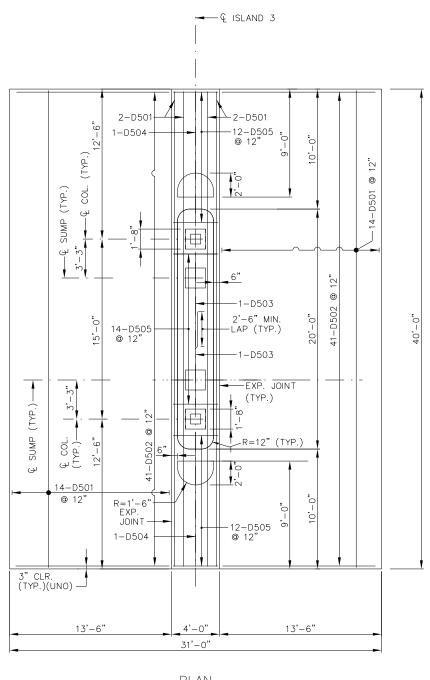
CONCRETE ISLAND 1

CANOPY COLUMN AND BUMPER DETAILS

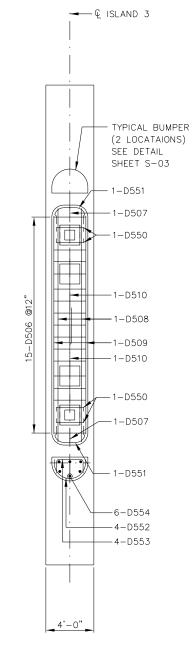
SHEET NUMBER: S-03

MTA PROJECT MANAGER: Ralph C. Norwood, IV, P.E.,P.T.O.E.

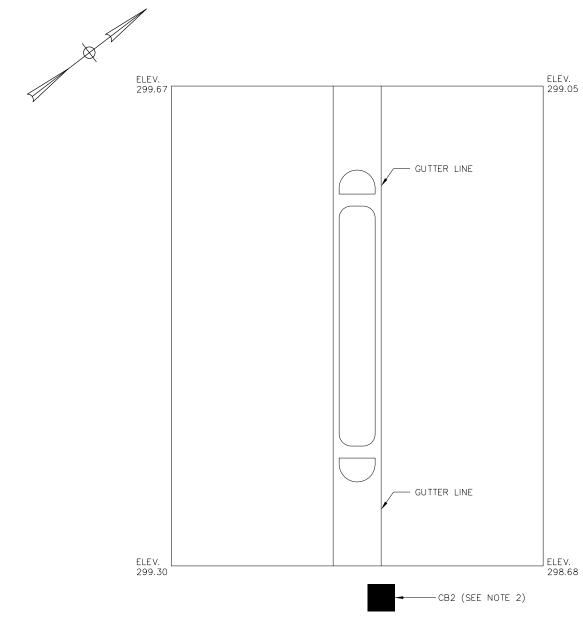
CONTRACT: 2019.15 SHEET NOMBER: 3-03



PLAN DIESEL PLAZA $\frac{1}{4}$ " = 1'-0"



PLAN RAISED ISLAND 3 DIESEL DISPENSER $\frac{1}{4}$ " = 1'-0"



DIESEL SLAB, ELEVATION, AND GRADING DETAIL $\frac{1}{4}$ " = 1'-0"

CONTRACT:2019.15

NOTES

- 1. CONTRACTOR SHALL FIELD VERIFY PROPOSED ELEVATIONS SHOWN ABOVE PRIOR TO CONSTRUCTION OF SLAB.
- 2. CONTRACTOR SHALL ENSURE THAT SLAB AND SURROUNDING AREA DRAINS TO CB2.

NOTES

- 1. FOR NOTES SEE SHEET S-02.
- 2. FIELD CUT D503 BARS TO AVOID SUMP.

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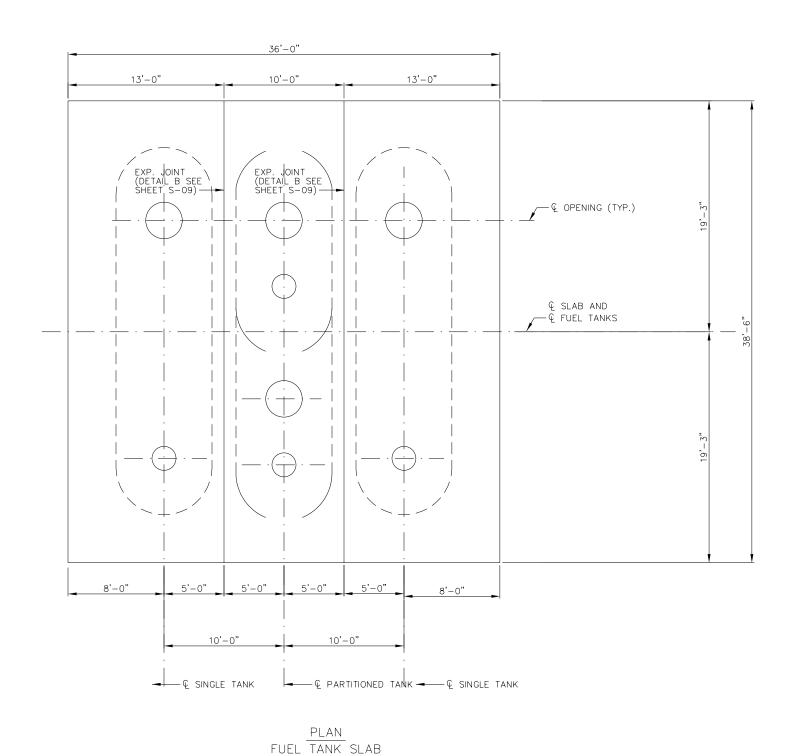
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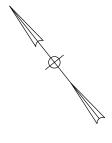


THE GOLD STAR **MEMORIAL HIGHWAY**

GRAY SERVICE PLAZA FUEL SYSTEM REPLACEMENT CONCRETE SLAB AND ISLANDS AT DIESEL DISPENSERS

SHEET NUMBER: S-04





NOTES

- 1. FOR NOTES SEE SHEET S-02.
- 2. FOR REINFORCING SEE SHEET S-06.
- 3. OPENINGS ARE APPROXIMATE, SEE MANUFACTURES SPECIFICATION FOR EXACT LOCATION AND WIDTHS OF OPENINGS.
- TANK SLAB ELEVATIONS TO BE COORDINATED DURING CONTRACTOR'S FINAL DESIGN AND SUBMITTED FOR REVIEW AND APPROVAL.

 $\frac{1}{4}$ " = 1'-0"

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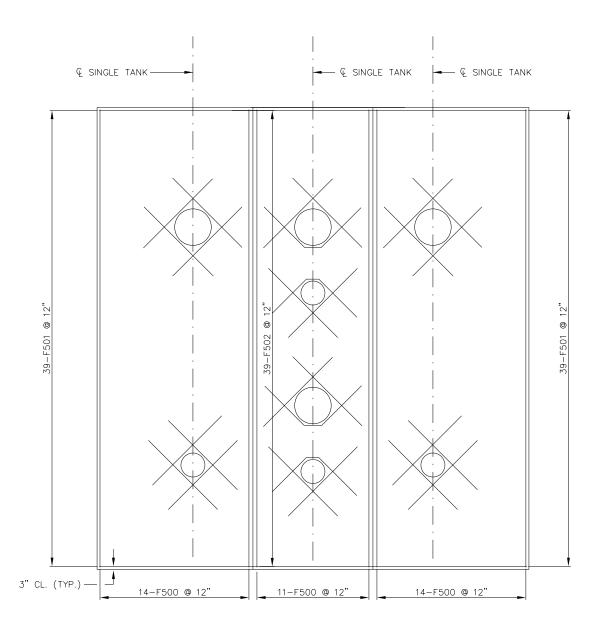
THE GOLD STAR MEMORIAL HIGHWAY GRAY SERVICE PLAZA
FUEL SYSTEM REPLACEMENT
CONCRETE SLABS
AT FUEL STORAGE TANKS

SHEET NUMBER: S-05

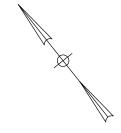
MTA PROJECT MANAGER: Ralph C. Norwood, IV, P.E.,P.T.O.E.

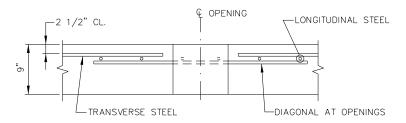
CONTRACT:2019.15

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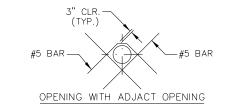


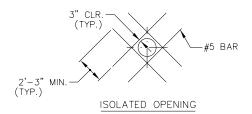
PLAN FUEL TANK SLAB $\frac{1}{4}$ " = 1'-0"





SECTION A-A TYPICAL SLAB OPENING NO SCALE





OPENING REINFORCING $\frac{1}{4}$ " = 1'-0"

NOTES

- 1. FOR NOTES SEE SHEET S-02.
- 2. FOR SLAB AND OPENING LAYOUT SEE SHEET S-05.
- 3. CONTRACTOR SHALL SUBMIT PROPOSED SUPPLEMENTAL OPENING REINFORCING FOR APPROVAL.

Scale: Designed by: AS NOTED By Date Revision CONSULTANT PROJECT MANAGER: Dale A. Mitchell, P.E. | By | Date | By | Date | JDW | 4\19\2019 | Checked | DAM | 4\19\2019 | WAD | 4\19\2019 | In Charge of | RAL | 4\19\2019 | Designed

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THE GOLD STAR **MEMORIAL HIGHWAY**

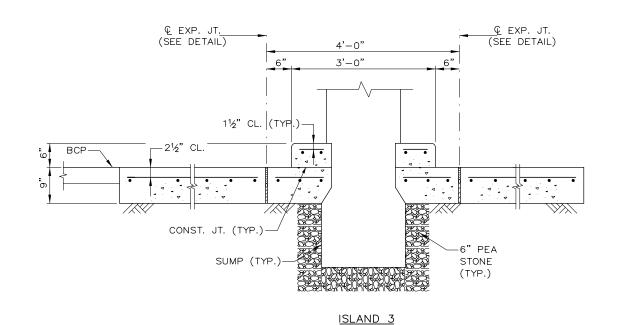
FUEL SYSTEM REPLACEMENT REINFORCING DETAILS - CONCRETE SLABS AT FUEL STORAGE TANKS

GRAY SERVICE PLAZA

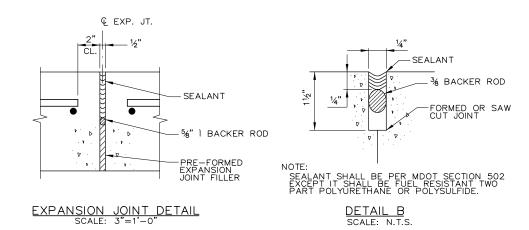
SHEET NUMBER: S-06

MTA PROJECT MANAGER: Ralph C. Norwood, IV, P.E.,P.T.O.E.

GAS DISPENSER ISLAND SECTIONS SCALE: 1" = 1'-0"



DIESEL DISPENSER ISLAND SECTIONS



Scale:				Designed by:					
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				CONSULTANT P	POJE(CT MANAGER:	Dale A. Mitchell,	, P.E.	
					Ву	Date		Ву	Date
				Designed	JDW	4\19\2019			
				Drawn	WAD	4\19\2019	In Charge of	RAL	4\19\201

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THE GOLD STAR **MEMORIAL HIGHWAY**

GRAY SERVICE PLAZA FUEL SYSTEM REPLACEMENT

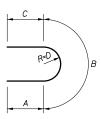
DISPENSER SLAB DETAILS

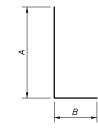
SHEET NUMBER: S-07

MTA PROJECT MANAGER: Ralph C. Norwood, IV, P.E.,P.T.O.E.

CONTRACT:2019.15 23 OF 32

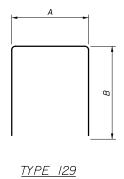
MARK	SIZE	NO.	LE	ENGTH	TYPE	Α	В	С	D	REMARKS
GASOLINE D		_								
G500	5	58	39' -	6"	Str					
G501	5	41	10' -	0"	Str					
G502	5	41	21' -	6"	Str					
G503	5	41	11' -	0"	Str					
G504	5	37	3' -	6"	Str					
G505	5	6	3' -	10"	Str					
G506	5	4	16' -	0"	Str					
G507	5	39	8' -	6"	Str					
G508	5	8	3' -	2"	Str					
G509	5	2	3' -	4"	Str					
G510	5	2	11' -	8"	Str					
G511	5	4	15' -	3"	Str					
G512	5	4	14' -	6"	Str					
G513	5	28	2' -	6"	Str					
G514	5	4	16' -	0"	Str					
G515	5	2	35' -	1"	Str					
G516	5	2	34' -	3"	Str					
G517	5	2	32' -	8"	Str					
G518	5	2	28' -	6"	Str					
G519	5	29	7' -	6"	Str					
G520	5	4	1' -	4"	Str					
G521	5	4	2' -	8"	Str					
G522	5	4	2' -	4"	Str					
G523	5	2	5' -	0"	Str					
G524	5	16	6' -	0"	Str					
G550	5	4	4' -	2"	129	2'-6"	10"			
G551	5	2	9' -	4"	140	3'-0"	1'-2"	1'-0"	9"	
G552	5	2	17' -	3"	117	2'-9"	11'-9"	2'-9"	3'-9"	
G553	5	10	4' -	5"	117	3"	3'-11"	3"	1'-3"	
G554	5	8	4' -	2"	129	2'-2"	1'-0"			
G555	5	52	4' -	0"	118	3'-2"	10"			
G556	5	16	7' -	1"	117	2'-9"	1'-7"	2'-9"	6"	
G557 DIESEL DISF	5 SENCED 6	32	1' -	11 1/2"	135	6"	1'-0"	5 1/2"	3 3/4"	
D501	5	32	39' -	6"	Str					
D502	5	82	13' -	0"	Str					
D502 D503	5	2	8' -	9"	Str					
D504	5	2	10' -	4"	Str					
D505	5	38	3' -	6"	Str					
D506	5	15	2' -	6"	Str					
D507	5	2	1' -	2"	Str			<u> </u>		
D508	5	2	19' -	2"	Str					
D509	5	2	18' -	1"	Str					
D510	5	2	7' -	8"	Str					
D550	5	4	4' -	2"	129	2'-6"	10"			
D550 D551	5	2	9' -	4"	140	3'-0"	1'-2"	1'-0"	9"	
D552	5	8	4' -	5"	117	3"	3'-11"	3"	1'-3"	
D553	5	8	4' -	2"	129	2'-2"	1'-0"		1-5	
D554	5	12	4' -	0"	118	3'-2"	10"			
FUEL SLAB	, ,	12	, , ,-	, ,	110	J -Z	10	1	1	1
F500	5	39	38' -	0"	Str					
F501	5	78	12' -	6"	Str					
F502	5	39	9' -	6"	Str					

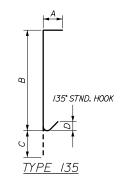


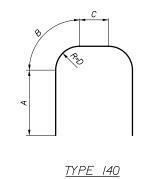


TYPE 117

TYPE 118







)ec										
Schec	Scale	9:			Designed by:					
.Reinforce-		NONE					HN	ITR		
- 1	No.	Revision	Ву	Date						
024										
					CONSULTANT F	ROJE	CT MANAGER:	Dale A. Mitchell,	P.E.	
me						Ву	Date		Ву	Date
Filename:							4\19\2019		DAM	4\19\2019
File					Drawn	WAD	4\19\2019	In Charge of	RAL	4\19\2019
	•	•								

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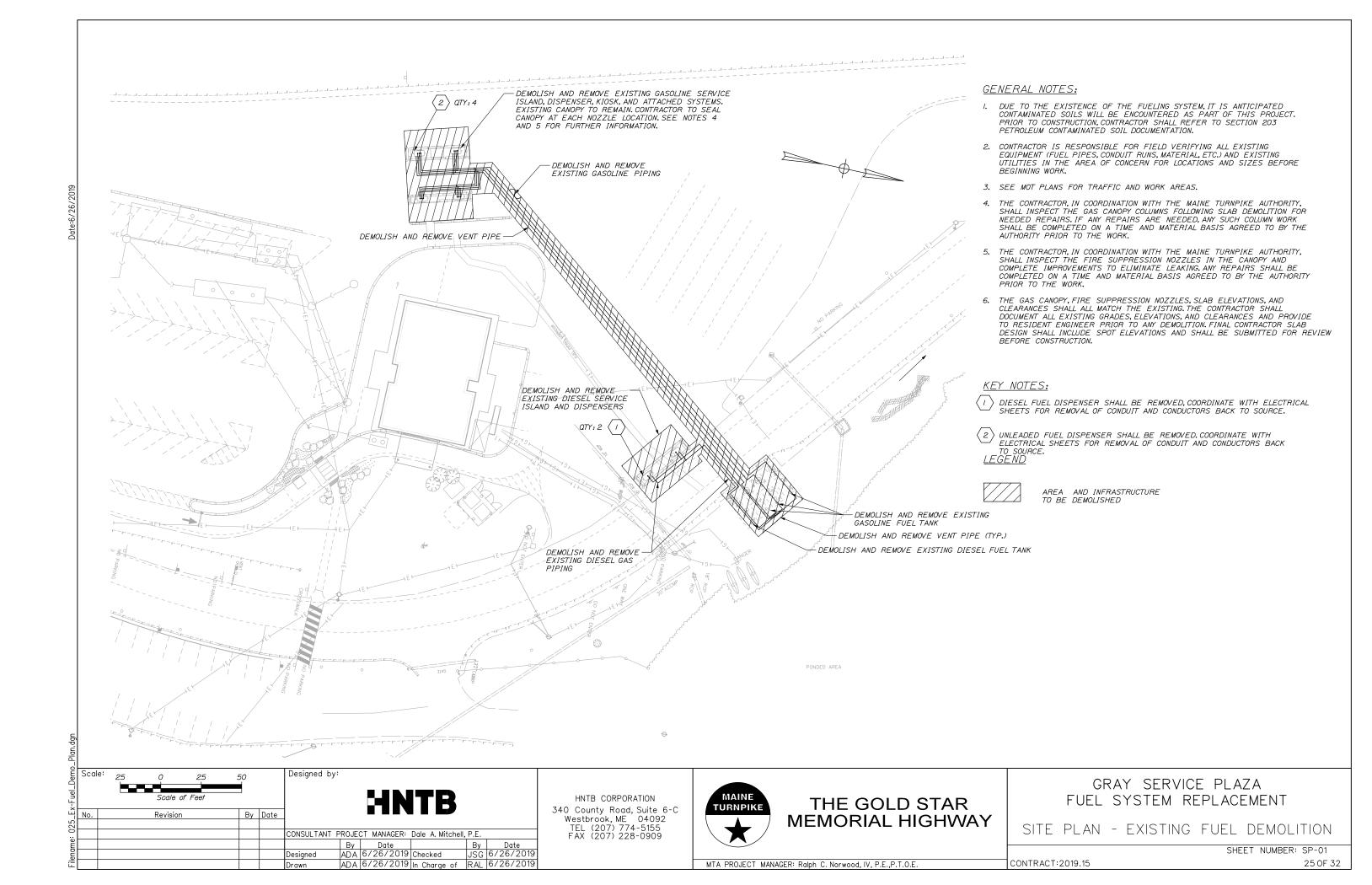
THE GOLD STAR MEMORIAL HIGHWAY

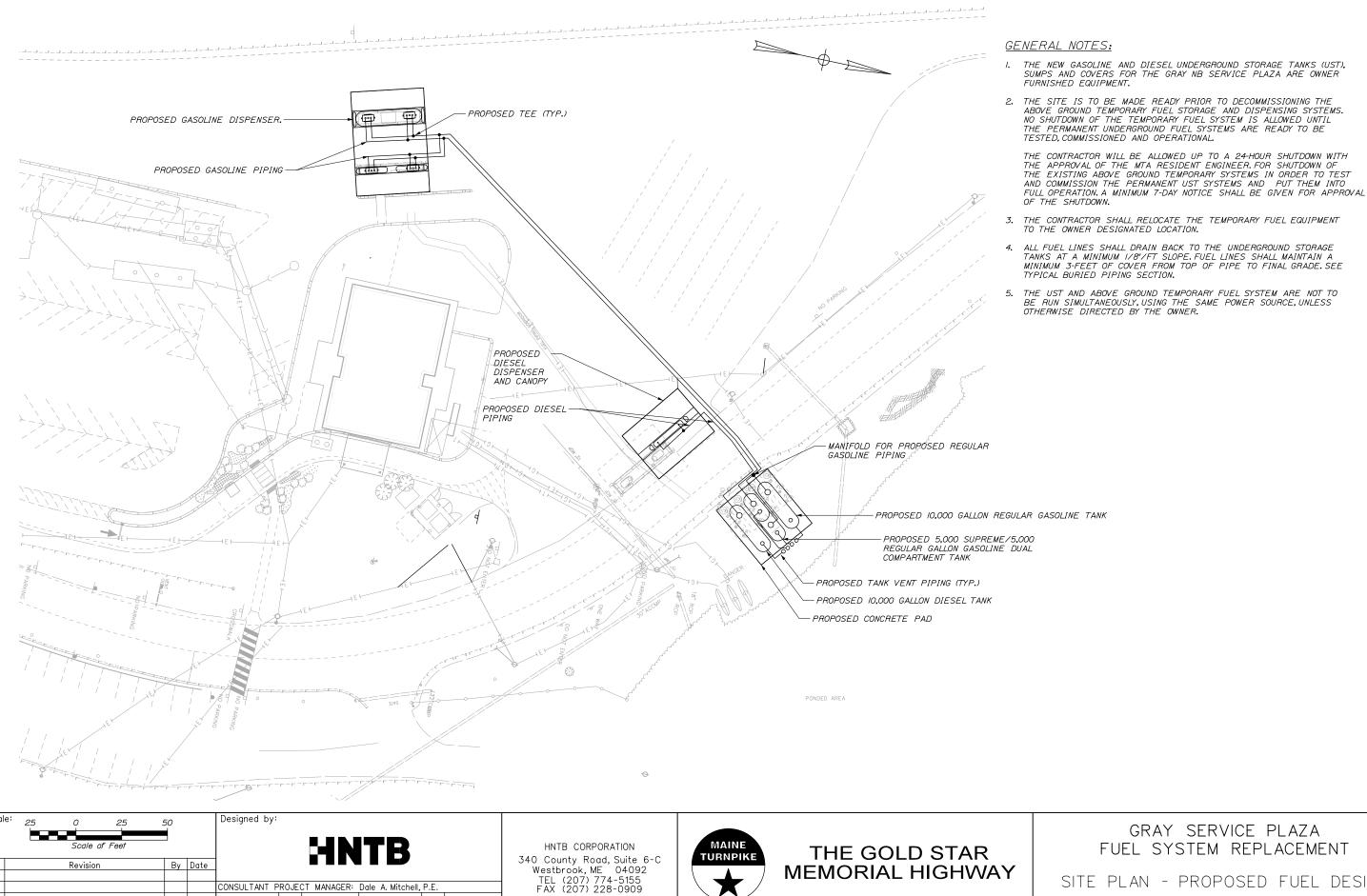
GRAY SERVICE PLAZA FUEL SYSTEM REPLACEMENT

REINFORCING SCHEDULE

SHEET NUMBER: S-8 24 OF 32

MTA PROJECT MANAGER: Ralph C. Norwood, IV, P.E.,P.T.O.E.





CONSULTANT PROJECT MANAGER: Dale A. Mitchell, P.E.

Designed

By	Date	By	Date	
ADA	6/26/2019	Checked	JSM	6/26/2019
ADA	6/26/2019	In Charge of	RAL	6/26/2019

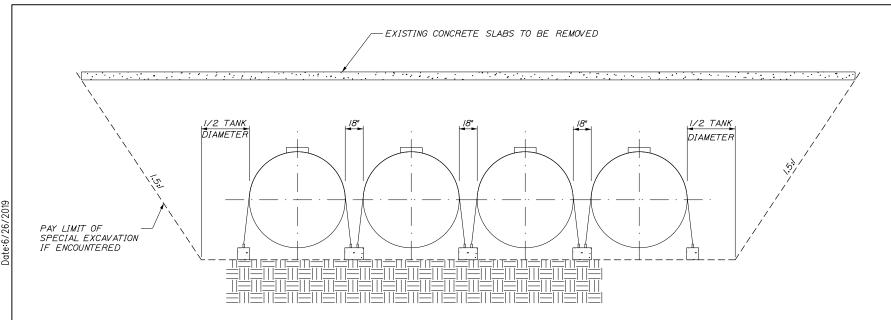
GRAY SERVICE PLAZA FUEL SYSTEM REPLACEMENT

SITE PLAN - PROPOSED FUEL DESIGN

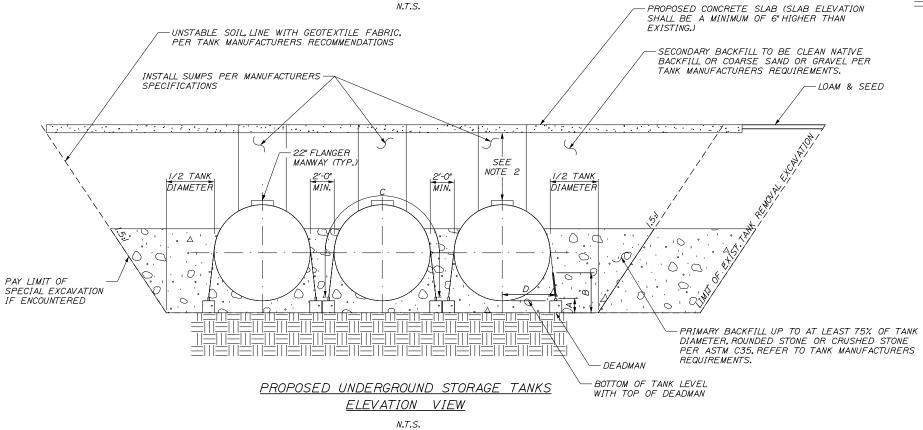
SHEET NUMBER: SP-01

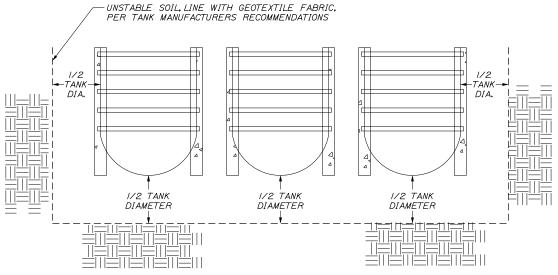
MTA PROJECT MANAGER: Ralph C. Norwood, IV, P.E., P.T.O.E.

MEMORIAL HIGHWAY



UNDERGROUND STORAGE TANK REMOVAL EXCAVATION LIMITS DETAIL





PROPOSED UNDERGROUND STORAGE TANK PLAN VIEW N.T.S.

ANCHORING DIMENSIONS										
TANK DIA.	Α	В	С	D						
8	14 5/8"	36"	14'-8'	54"						
DIMENSION A IS THE DISTANCE FROM THE										

HOOK POINT ON THE DISTANCE FROM T HOOK POINT ON THE ANCHOR STRAP TO THE BOTTOM OF THE DEADMAN.

DEAD	MAN DIMENSIONS
TANK DIA.	TYPICAL DEADMAN DIMENSIONS
8′	12" x 12" x 16′

NOTES:

- I. THE 10,000 GALLON UNDER GROUND STORAGE TANK (UST) ARE OWNER FURNISHED EQUIPMENT. REFER TO TANK MANUFACTURER'S SPECIFICATINS FOR INSTALLATION REQUIREMENTS, SUPPLIED, AND REQUIRED ACCESSORIES.
- 2. CONTRACTOR TO SET UST BURIAL DEPTH BASED ON MEETING THE REQUIRED 1/8 in/ff MINIMUM FUEL PIPE SLOPE AND MINIMUM 3'-O" PIPE BURIAL DEPTH. ALL FUEL PIPES TO DRAIN BACK TO THE USTS.

CONTRACT:2019.15

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	NOT TO SCALE				HN	ITB			
No.	Revision	Ву	Date						
				CONSULTANT	PROJEC	T MANAGER:	Dale A. Mitchell	, P.E.	
					Ву	Date		Ву	Date
				Designed	DSS	ADA	Checked	JSM	4\19\2019
				Drawn	WAD	WAD	In Charge of	RAL	4\19\2019

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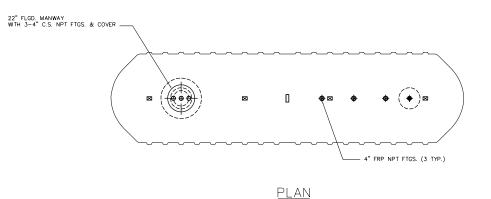


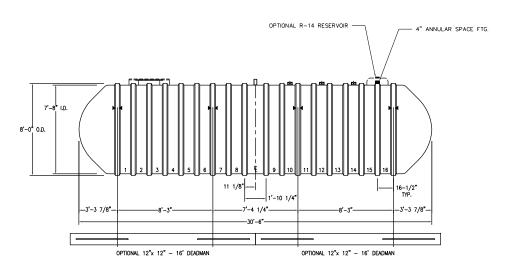
THE GOLD STAR **MEMORIAL HIGHWAY**

GRAY SERVICE PLAZA FUEL SYSTEM REPLACEMENT

FUEL TANK DETAILS

SHEET NUMBER: TD-02





NOTES:

MOTES:

HOLD DOWN STRAP CLIP

→ HOLD DOWN STRAP LOCATION

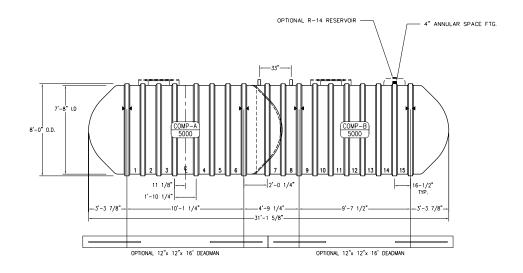
TYPE "13" LIFT LUG - SD
TYPE "13" LIFT LUG - HD

ELEVATION

TYPICAL 10,000 GALLON UNDERGROUND STORAGE TANK

22" FLGD. MANWAY WITH BLANK COVER (2 TYP.) _ $\left(\begin{array}{c} \bullet \end{array} \right) \boxtimes$

<u>PLAN</u>



NOTES:

MOLD DOWN STRAP CLIP

I HOLD DOWN STRAP LOCATION

TYPE "13" LIFT LUG - SD

TYPE "13" LIFT LUG - HD

ELEVATION

10,000 GALLON (50/50 SPLIT) UNDERGROUND COMPARTMENT STORAGE TANK SYSTEM 2

<u>NOTES:</u>

I.THESE DETAILS ARE PROVIDED FOR CONTRACTORS INFORMATION OF OWNER-FURNISHED UNDERGROUND STORAGE TANKS. THE TANKS ARE BEING PROCURED FROM CONTAINMENT SOLUTIONS INCORPORATED.

△ Scale: Designed by: NOT TO SCALE By Date Revision CONSULTANT PROJECT MANAGER: Dale A. Mitchell, P.E. Ву Checked N/A Designed N/A In Charge of N/A

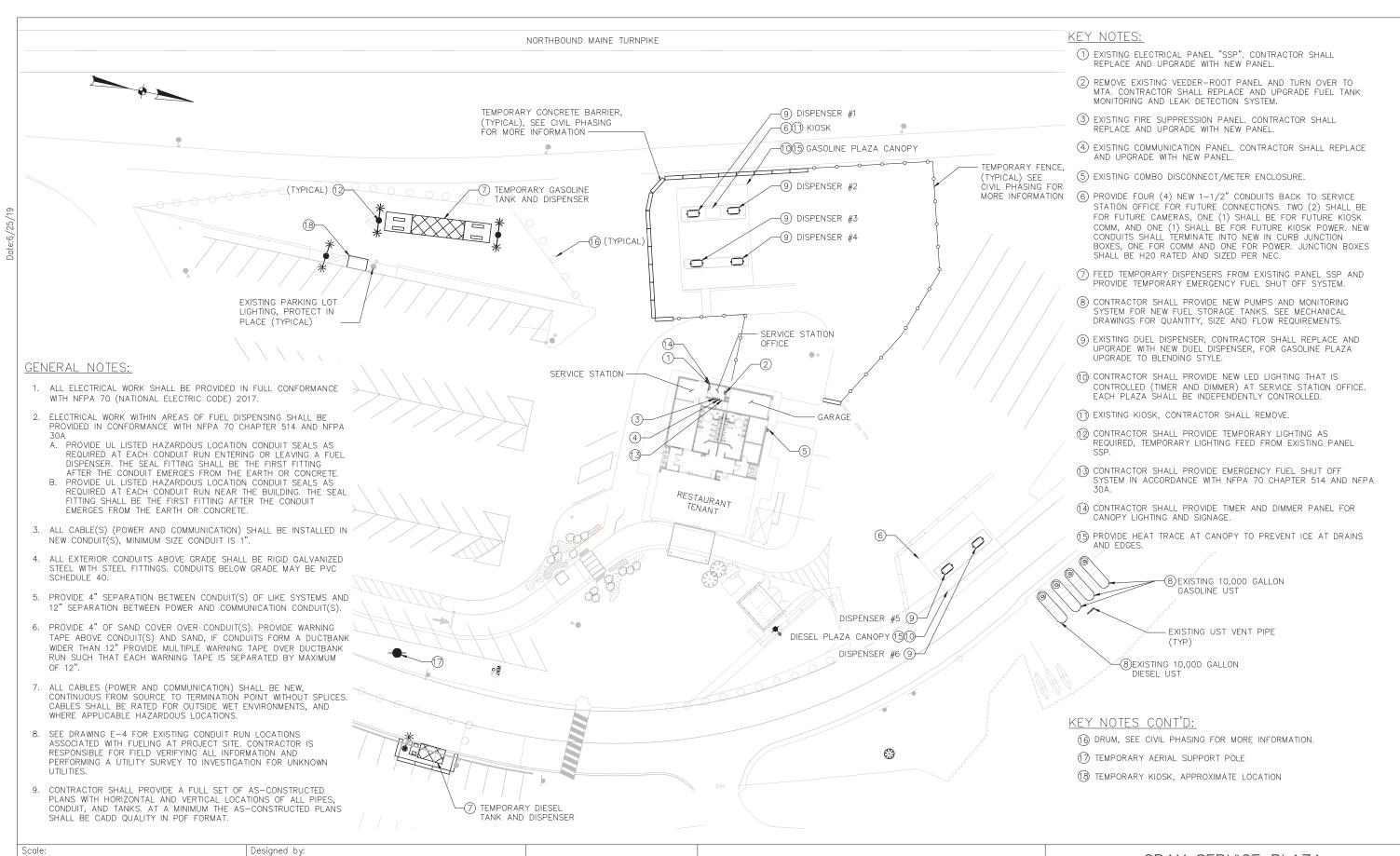
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GRAY SERVICE PLAZA FUEL SYSTEM REPLACEMENT

FUEL TANK DETAILS

SHEET NUMBER: M5 CONTRACT:2019.15





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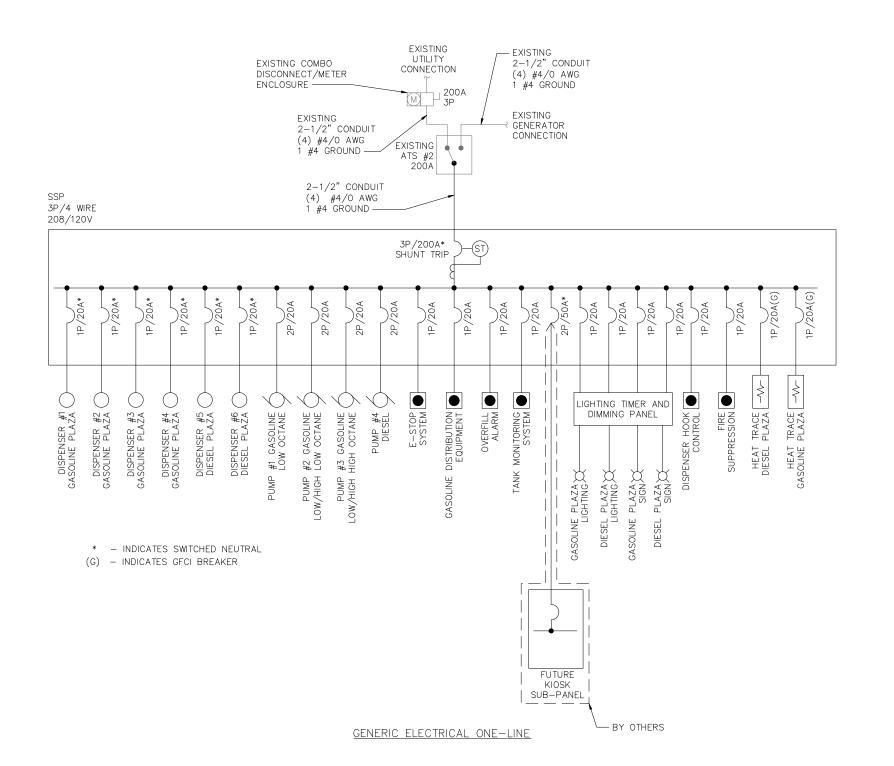
MTA PROJECT MANAGER: Ralph C. Norwood, IV, P.E., P.T.O.E.

GRAY SERVICE PLAZA FUEL SYSTEM REPLACEMENT

SITE PLAN - ELECTRICAL

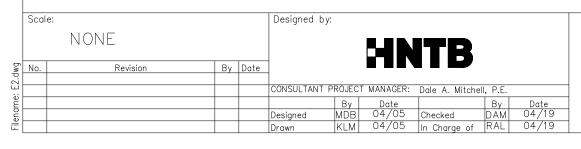
CONTRACT: 2019.15

SHEET NUMBER: E-01



NOTES:

- ELECTRICAL AND COMMUNICATION SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 70 (NATIONAL ELECTRIC CODE) AND WHERE APPLICABLE NFPA 70 CHAPTER 514 SPECIFICALLY.
- 2. ONE—LINE DIAGRAM IS GENERIC AND DIAGRAMMATIC, CONTRACTOR IS RESPONSIBLE FOR PROVIDING AN UPDATED ONE—LINE DIAGRAM WITH CABLE (CONDUCTOR) SIZES AND QUANTITY FOR EACH ITEM THAT WILL BE INSTALLED OR RE—FEED.
- CONTRACTOR IS RESPONSIBLE FOR PROVIDING A COMMUNICATION ONE—LINE DIAGRAM INDICATING ALL ITEMS (SENSORS, PANELS, ETC) ORIGINS AND TERMINATION POINTS.
- 4. CONTRACTOR IS RESPONSIBLE FOR PROVIDING AN ARC FLASH ANALYSIS SHORT CIRCUIT ANALYSIS, AND COORDINATION STUDY FOR ALL NEW WORK. CONTRACTOR IS RESPONSIBLE FOR PROVIDING LABELS BASED ON ANALYSIS. CONTRACTOR SHALL TRY TO LIMIT INCIDENT ENERGY AS BEST FEASIBLE.
- 5. CONTRACTOR SHALL PROVIDE LABELS AT EACH ITEM WITH SOURCE PANEL AND SOURCE BREAKER. LABELS SHALL BE PHENOLIC AND UV RESISTANT.
- 6. CONTRACTOR SHALL PROVIDE A LAMINATED PRINTED PANEL SCHEDULE(S) AND PLACE THEM INSIDE PANEL(S).
- 7. CONTRACTOR SHALL PROVIDE A LAMINATED OVERVIEW PLAN OF THE ELECTRICAL SYSTEM THAT INDICATES WHERE ITEMS ARE AND THEIR ASSOCIATED PANEL AND BREAKER. OVERVIEW PLAN SHALL BE PLACED WITH PANEL SCHEDULE INSIDE PANEL.



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MTA PROJECT MANAGER: Ralph C. Norwood, IV, P.E., P.T.O.E.

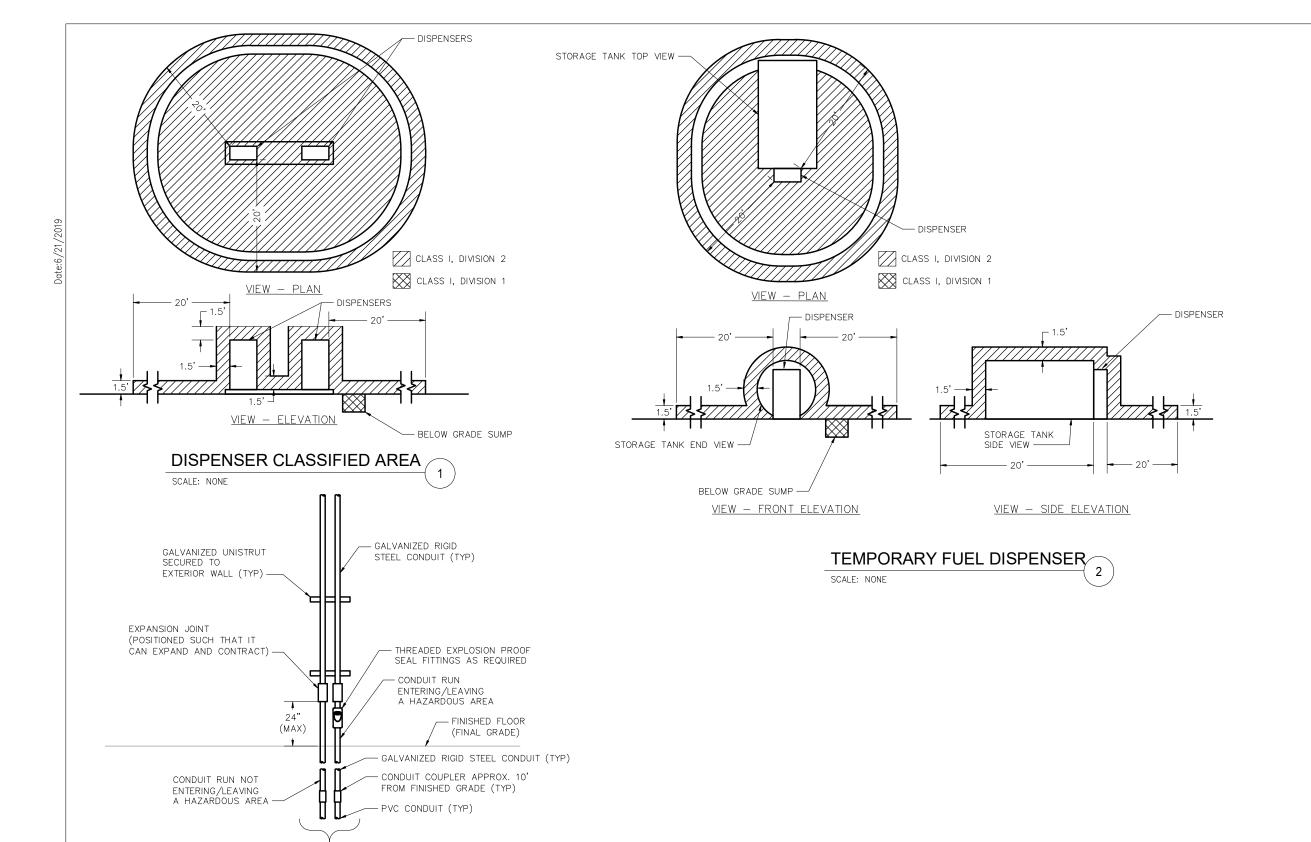
GRAY SERVICE PLAZA FUEL SYSTEM REPLACEMENT

ONE-LINE DIAGRAM - ELECTRICAL

SHEET NUMBER: E-02

CONTRACT: 2019.15

30 OF 3



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			50	0	50	100							
				Scale	e of Feet					HN	ITB		
dwg	No.			Revision		Ву	Date	-					
E3.								CONSULTANT F	PROJEC	T MANAGER:	Dale A. Mitche	II, P.E.	
name:									Ву	Date		Ву	Date
ilena								Designed	MDB	04/05	Checked	DAM	04/19
Ē				•				Drawn	KLM	04/05	In Charge of	RAL	04/19

CONDUIT QTY AND SIZE AS REQUIRED CONDUIT TRANSITION AT BUILDING

SCALE: NONE

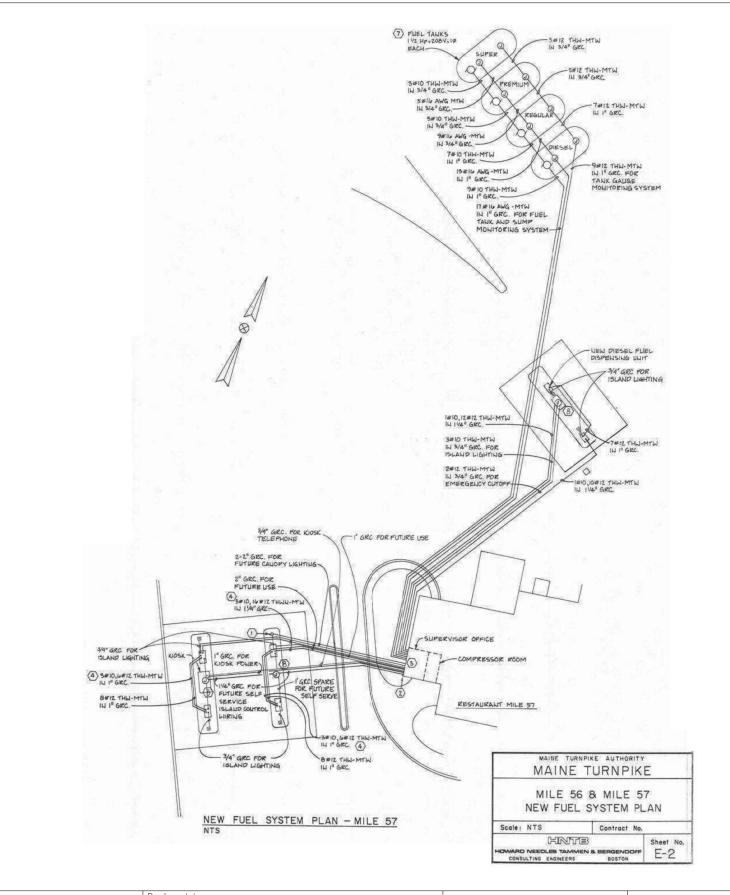
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GRAY SERVICE PLAZA FUEL SYSTEM REPLACEMENT

DETAILS - ELECTRICAL

SHEET NUMBER: E-03 CONTRACT: 2019.15



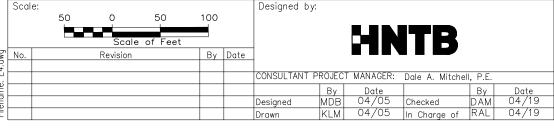
NOTES:

1. DRAWING IS FROM:

MAINE TURNPIKE AUTHORITY
AS-BUILTS
CONTRACT 90.6
FUEL SYSTEM REPLACEMENT
MILE 56-CUMBERLAND
MILE 57-GRAY

AND IS INFORMATION ONLY TO ASSIST THE CONTRACTOR WITH LOCATING EXISTING ELECTRICAL CONDUIT SYSTEM AT PROJECT SITE.

- 2. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL INFORMATION AND PERFORMING A UTILITY SURVEY TO INVESTIGATION FOR UNKNOWN UTILITIES.
- 3. CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL CONDUIT AND CONDUCTORS THAT ARE NOT USED.
- 4. CONTRACTOR SHALL ATTEMPT TO USE TRENCH MADE FROM REMOVAL OF EXISTING CONDUIT SYSTEM FOR NEW CONDUIT SYSTEM INSTALLATION TO LIMIT THE DAMAGE TO EXISTING PAVED SURFACES.



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GRAY SERVICE PLAZA
FUEL SYSTEM REPLACEMENT

EXISTING ELECTRICAL CONDITIONS

SHEET NUMBER: E-04

E., P.T.O.E. CONTRACT: 2019.15

32 OF 3