
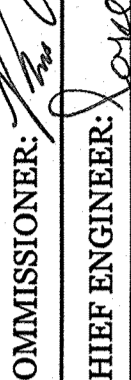
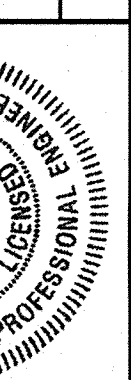


STATE OF MAINE DEPARTMENT OF TRANSPORTATION

PLANS PREPARED BY:
 500 Southborough Drive, Suite 105B
 South Portland, Maine 04106

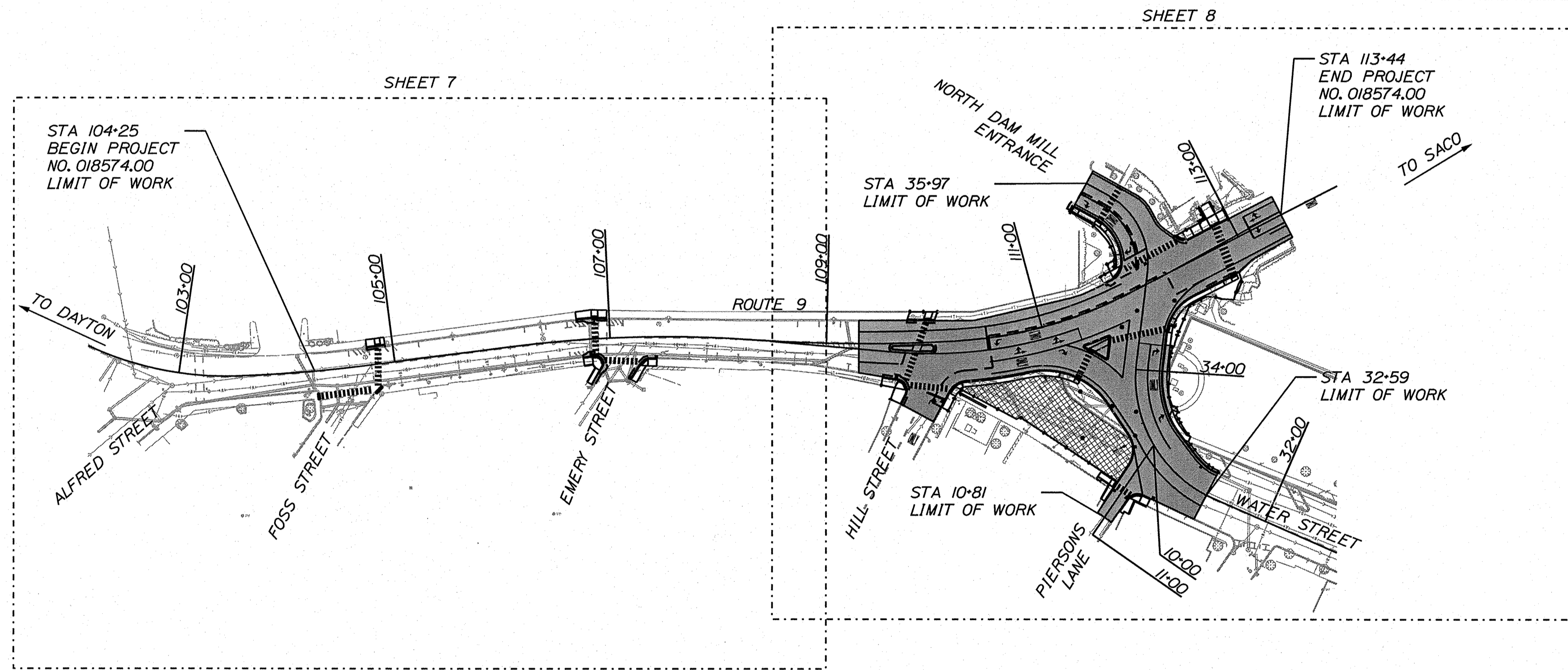
STATE OF MAINE
 DEPARTMENT OF TRANSPORTATION
 APPROVED: 
 COMMISSIONER: 
 CHIEF ENGINEER: 

PLAN LEGEND			
Town, County, State	_____	Catch Basins	▣ Existing ■ Proposed
Property Lines	-----	Manholes	○ Existing ● Proposed
R/W Lines-Existing	-----	Proposed Underdrain	-----
R/W Lines-Proposed	-----	Proposed Ditch	-----
Culvert-Existing	=====	Existing Ditch	-----
Culvert Proposed	=====	Utility Poles	◇ Existing ◆ Proposed
Curbing Existing	=====	Fire Hydrants	⊙ Existing ⊙ Proposed
Curbing Proposed	=====	Existing Water Line	-----
Type 1	=====	Existing San. Sewer	-----
Type 3	=====	Existing San. Sewer Manhole	⊙
Type 5	=====	Guardrail-Existing	-----
Outline of Bodies of Water	=====	Guardrail-Proposed	-----
Exposed Bedrock	=====	Guardrail-Cable, Other	-----
Buildings	=====	Centerline-Existing	-----
Trees	⊙ Conifer ⊙ Deciduous	Centerline-Proposed	-----
Tree Line	-----	Travelway-Existing	-----
Clearing Limit Line	-----	Travelway-Proposed	-----
Railroad	=====		
Boring	⊙ HB-XXX-###	Probe	⊙ P-#. #X
Pavement Core	● PC-#	#, # = Depth	
Test Pit	⊙ TP-XXX-###	X = W (Weathered Rock)	
		R (Refusal)	
		NR (No Refusal)	

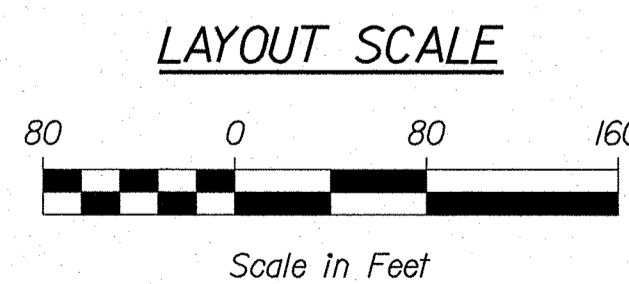


BIDDEFORD YORK COUNTY ROUTE 9 & WATER STREET STP-1857(400) PROJECT LENGTH : 0.13 MILES

INDEX OF SHEETS	
Description	Sheet No.
Title Sheet	1
Typical Sections	2-3
General Notes	4
Superelevation Table & Grading Plan	5
Construction Notes	6
General Plans	7-8
Profiles	9-10
Geometric Curb Layout	11-12
Traffic Signal Plans	13-15
Interconnect Plan	16
Cross Sections	17-27
Sign Summary	28
Signing and Striping Plans	29-30
Foundation & Boring Plans	31
Right of Way Map	32



TRAFFIC DATA	MAIN ST	WATER ST
Current (2018) AADT	18,720	6,240
Future (2038) AADT	20,590	6,860
DHV - % of AADT	9%	8%
Design Hour Volume	1,776	558
% Heavy Trucks (AADT)	3%	3%
% Heavy Trucks (DHV)	2%	2%
Directional Distribution (DHV)	54%	56%
18 kip Equivalent P 2.0	368	127
18 kip Equivalent P 2.5	351	121
Design Speed (mph)	25	25
Functional Class	Urban Collector	Local Road
Corridor Priority	2	6



PROJECT LOCATION:	LOCATED AT THE INTERSECTION OF MAIN STREET, WATER STREET, AND NORTH DAM MILL ENTRANCE
PROGRAM AREA:	MULTIMODAL PROGRAM
SCOPE OF WORK:	INTERSECTION IMPROVEMENTS WITH SIGNAL INCLUDING PAVEMENT, DRAINAGE, PEDESTRIAN AND SAFETY IMPROVEMENTS

ANTHONY GRANDE
 SIGNATURE
 P.E. NUMBER
 12023
 DATE
 1/6/2022

PROJECT INFORMATION	
PROGRAM	MULTIMODAL
PROJECT MANAGER	B. KEIZER
DESIGNER	T. GRANDE
CONSULTANT	VHB
PROJECT RESIDENT	
CONTRACTOR	
PROJECT COMPLETION DATE	

WIN 18574.00 STP-1857(400)
 BIDDEFORD
 STATE ROUTE 9
 TITLE SHEET

SHEET NUMBER
1

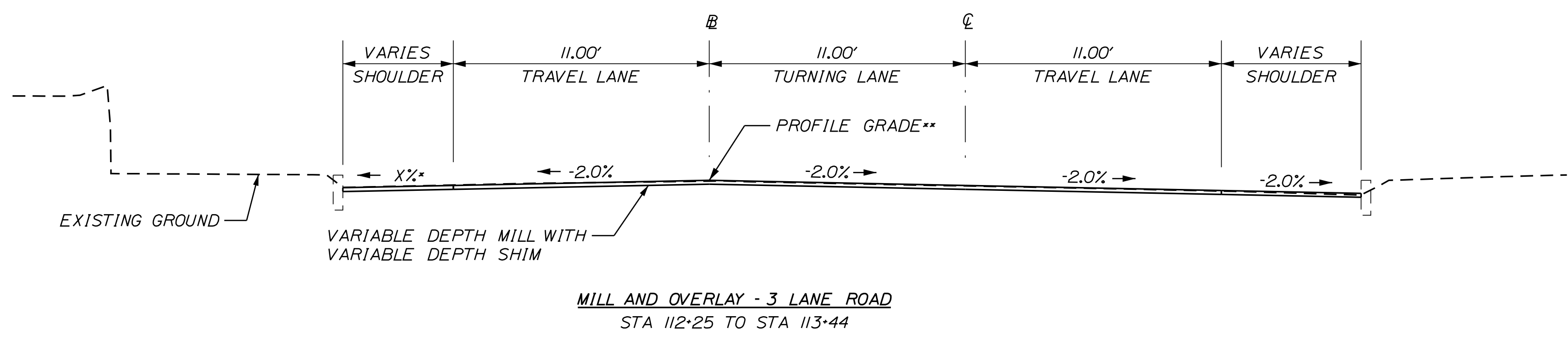
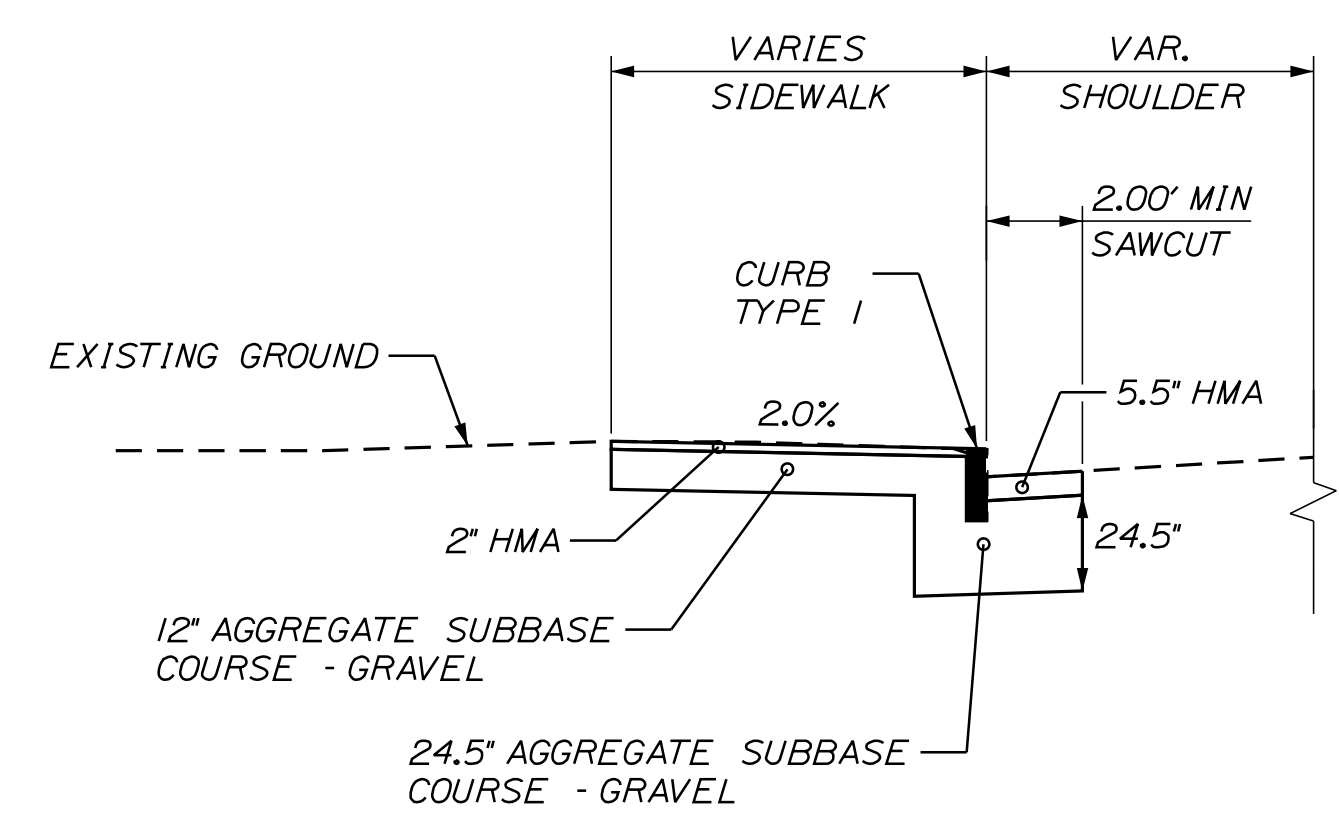
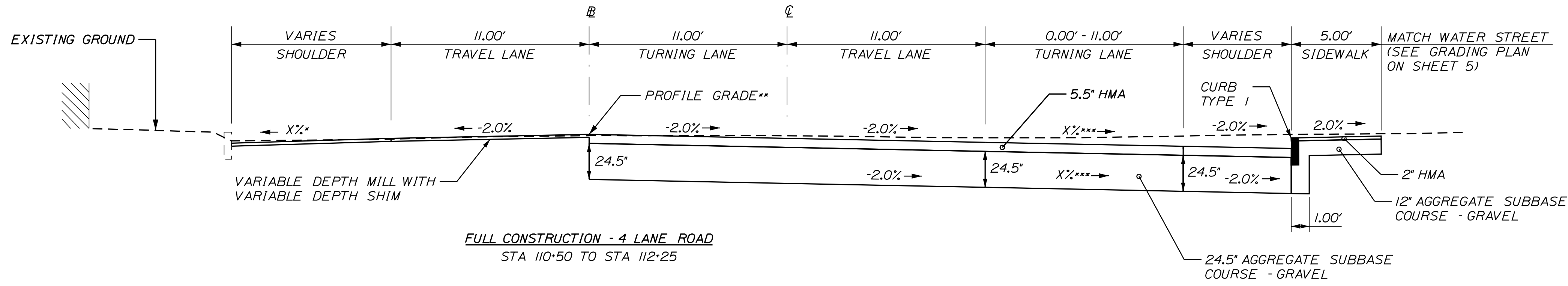
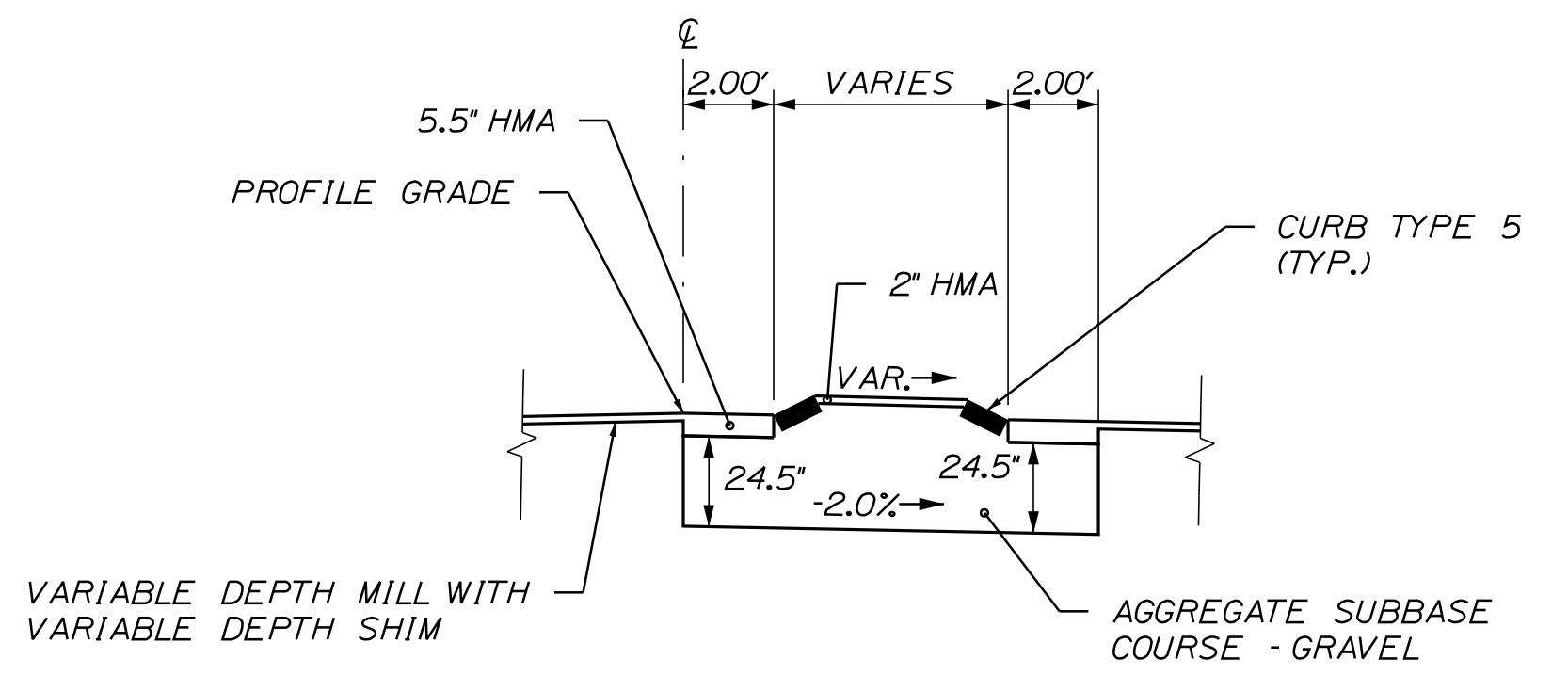
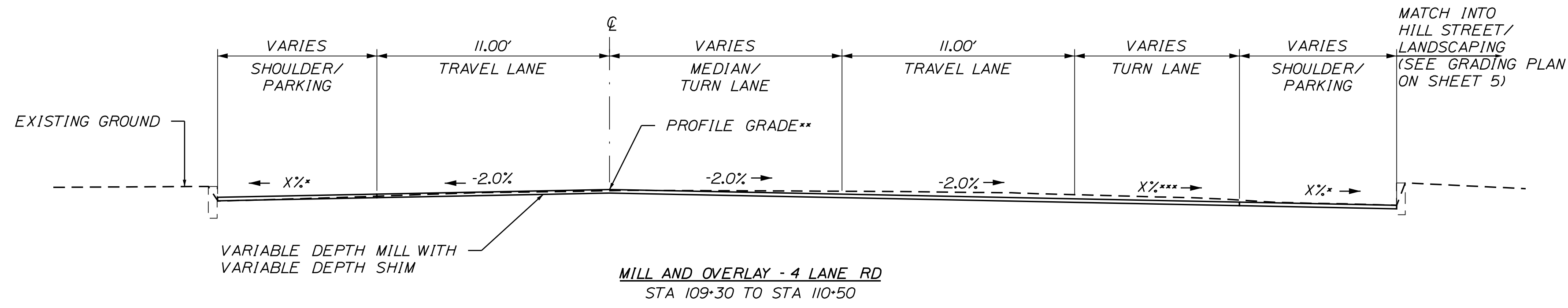
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Date: 1/6/2022

Username: jomedavis

Division: HIGHWAY

Filename: ... \MSTA\002_Typicals_MainSt.dgn



SIDEWALK RECONSTRUCTION
 STA 104+72 TO 104+98 LT.
 STA 106+70 TO 106+98 LT.
 STA 106+69 TO 106+93 RT.
 STA 107+18 TO 107+43 RT.
 STA 109+52 TO 109+73 RT.
 STA 109+75 TO 110+00 LT.
 STA 110+03 TO 110+50 RT.
 STA 111+70 TO 111+80 LT.
 STA 112+25 TO 112+83 RT.
 STA 112+56 TO 112+99 LT

- NOTES:**
1. THE PAVEMENT, BASE, AND SUBBASE DEPTHS AS SHOWN ON THE PLANS ARE INTENDED TO BE NOMINAL.
 2. CROWNS FOR BOTH NORMAL AND SUPERELEVATION SECTIONS FOR ALL COURSES OF SUBBASE AND PAVEMENT SHALL BE STRAIGHT.
 3. THE ALGEBRAIC DIFFERENCE BETWEEN THE SHOULDER AND TRAVELWAY CROSS SLOPES (ROLLOVER) SHALL NOT EXCEED 8%.
 4. THE STATIONING SHOWN UNDER EACH TYPICAL IS APPROXIMATE.
- * SEE SUPERELEVATION TABLE ON SHEET 5 FOR SLOPES.
 ** THE PROPOSED PROFILE GRADE IS BASED OFF OF THE MILLING DEPTHS SHOWN IN THE SUPERELEVATION TABLE ON SHEET 5.
 *** SEE CROSS SECTION AND CONTROL POINT ELEVATIONS FOR TURN LANE GRADING ON SHEET 5.

NOT TO SCALE



PROJ. MANAGER	B. KEEZER	DATE
DESIGN-DETAILED	ACC	12/21
CHECKED-REVIEWED	JRD	12/21
DESIGN-DETAILED	AG	
DESIGN-DETAILED		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

**BIDDEFORD
 STATE ROUTE 9
 TYPICAL SECTIONS**

SHEET NUMBER

2

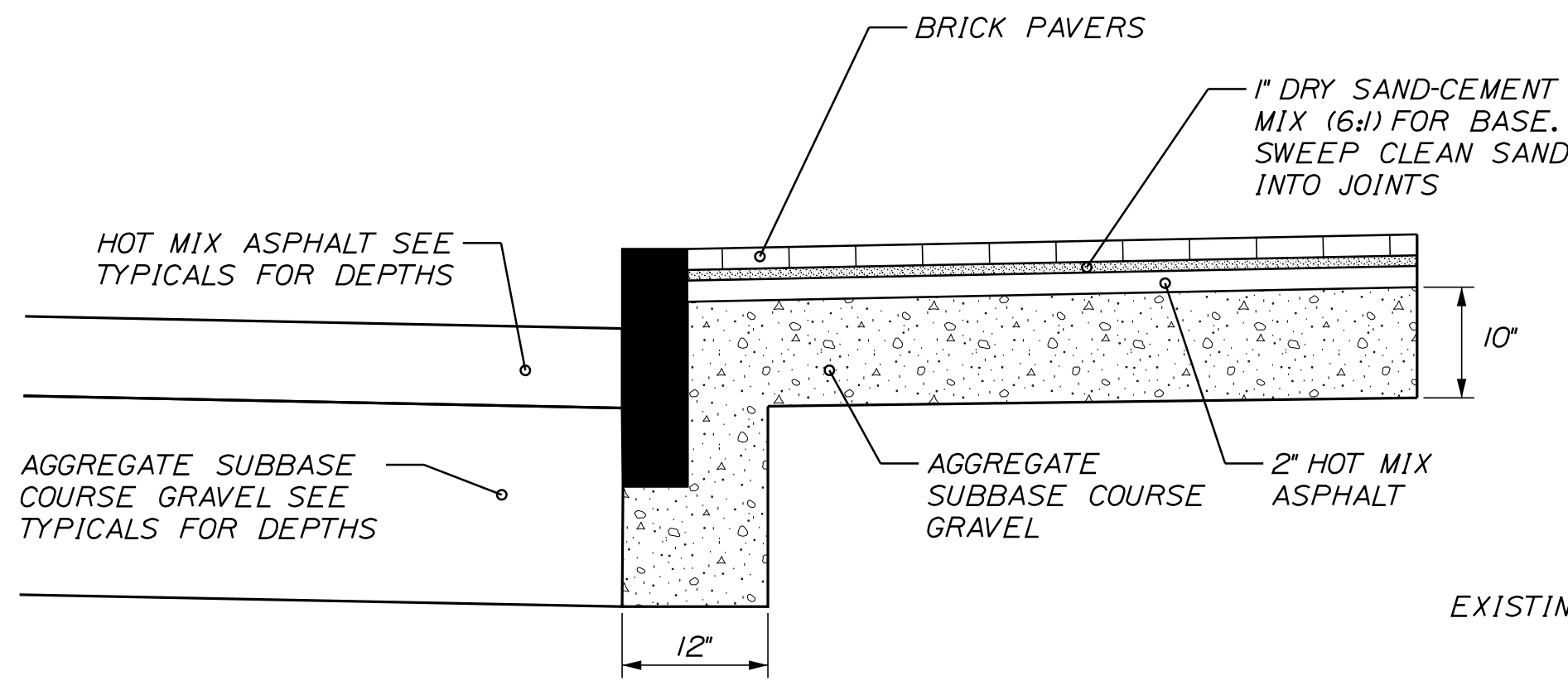
OF 32

Date: 1/6/2022

Username: jamesdavis

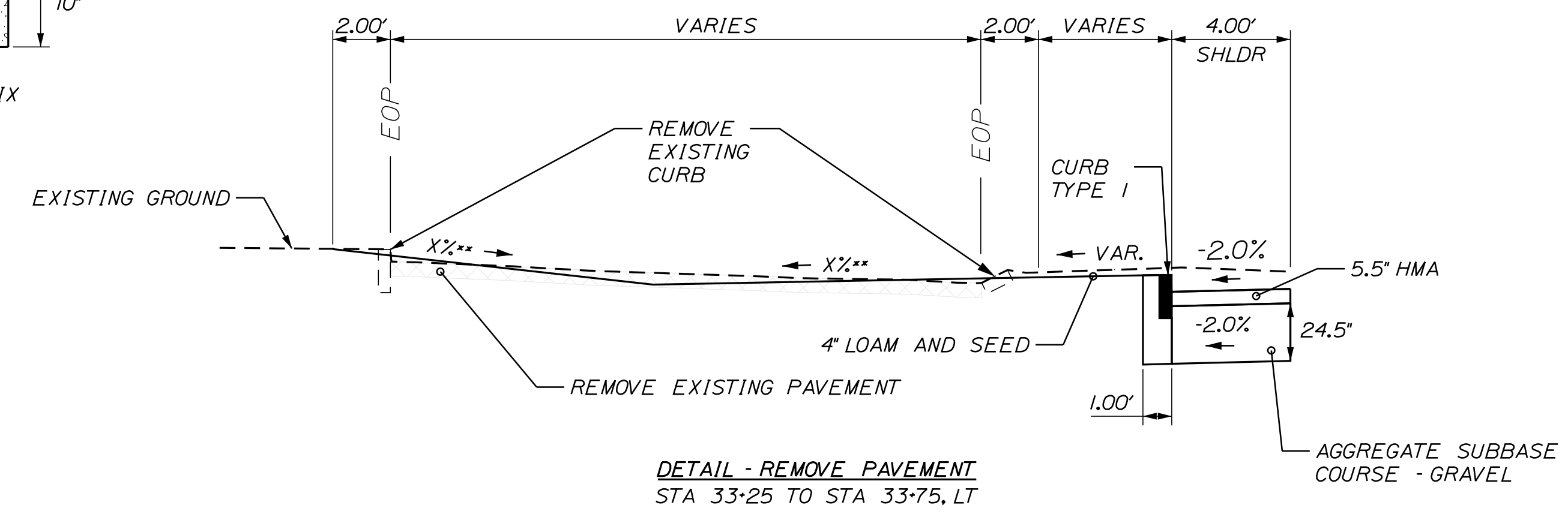
Division: HIGHWAY

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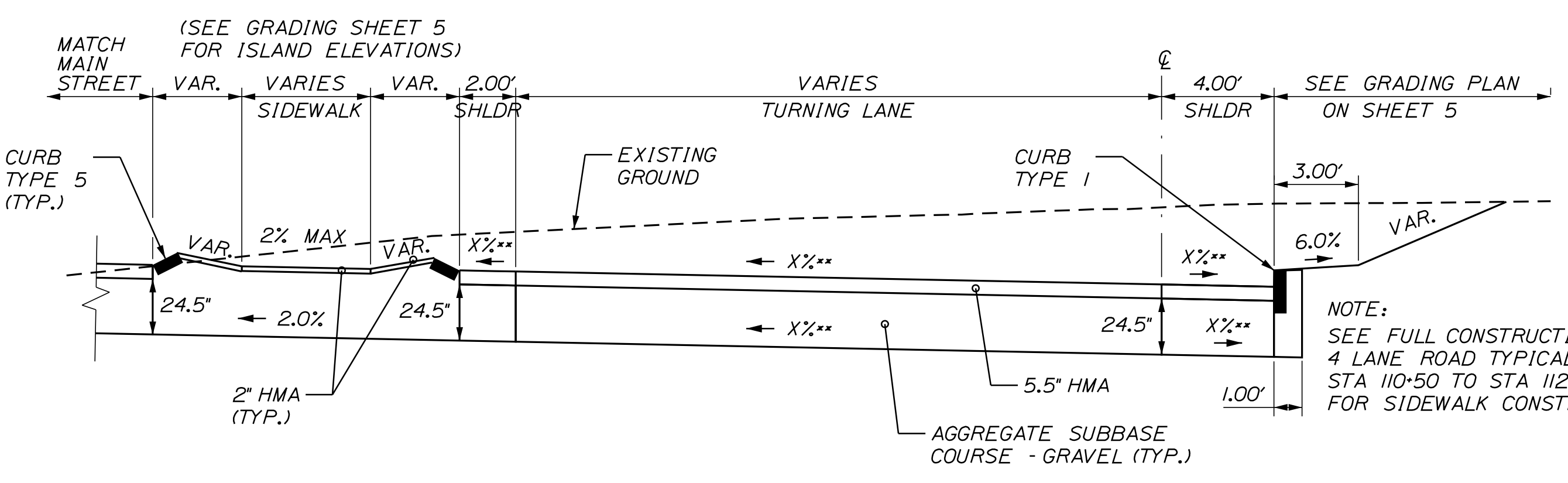
- NOTES:
1. INSTALL 4" WIDE X 8.5" HIGH PIECE OF FILTER FABRIC AT BACK OF CURB AT EACH CURB JOINT. PAYMENT WILL BE INCIDENTAL TO CURB.
 2. 1/2" PREFORMED EXPANSION JOINT FILLER WITH 5/8" BACK ROD AND JOINT SEALANT TYPICAL AT ALL WALL, STEP, SIDEWALK, AND BUILDING INTERFACES. PAYMENT WILL BE INCIDENTAL TO BRICK SIDEWALK WITH BITUMINOUS BASE, ITEM 608.10.
 3. ALL BRICKS SHALL BE CUT WITH PAVER SAW AND CUT-OFF WHEEL.
 4. ALL EXISTING BRICKS SHALL BE REMOVED AND REUSED.

DETAIL - BRICK SIDEWALK
STA 33+50 TO STA 34+25, RT

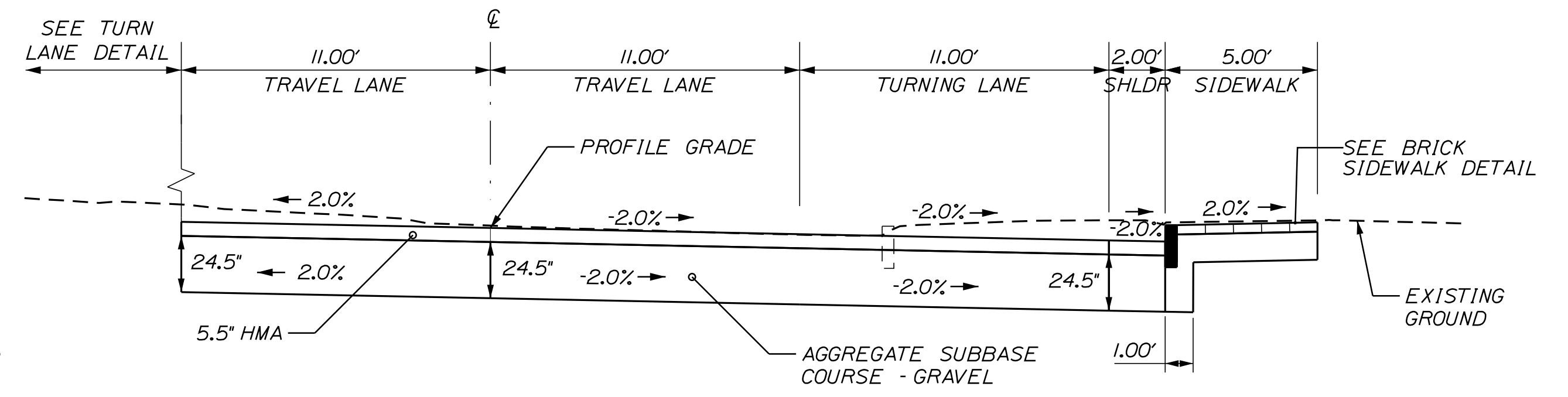


DETAIL - REMOVE PAVEMENT
STA 33+25 TO STA 33+75, LT

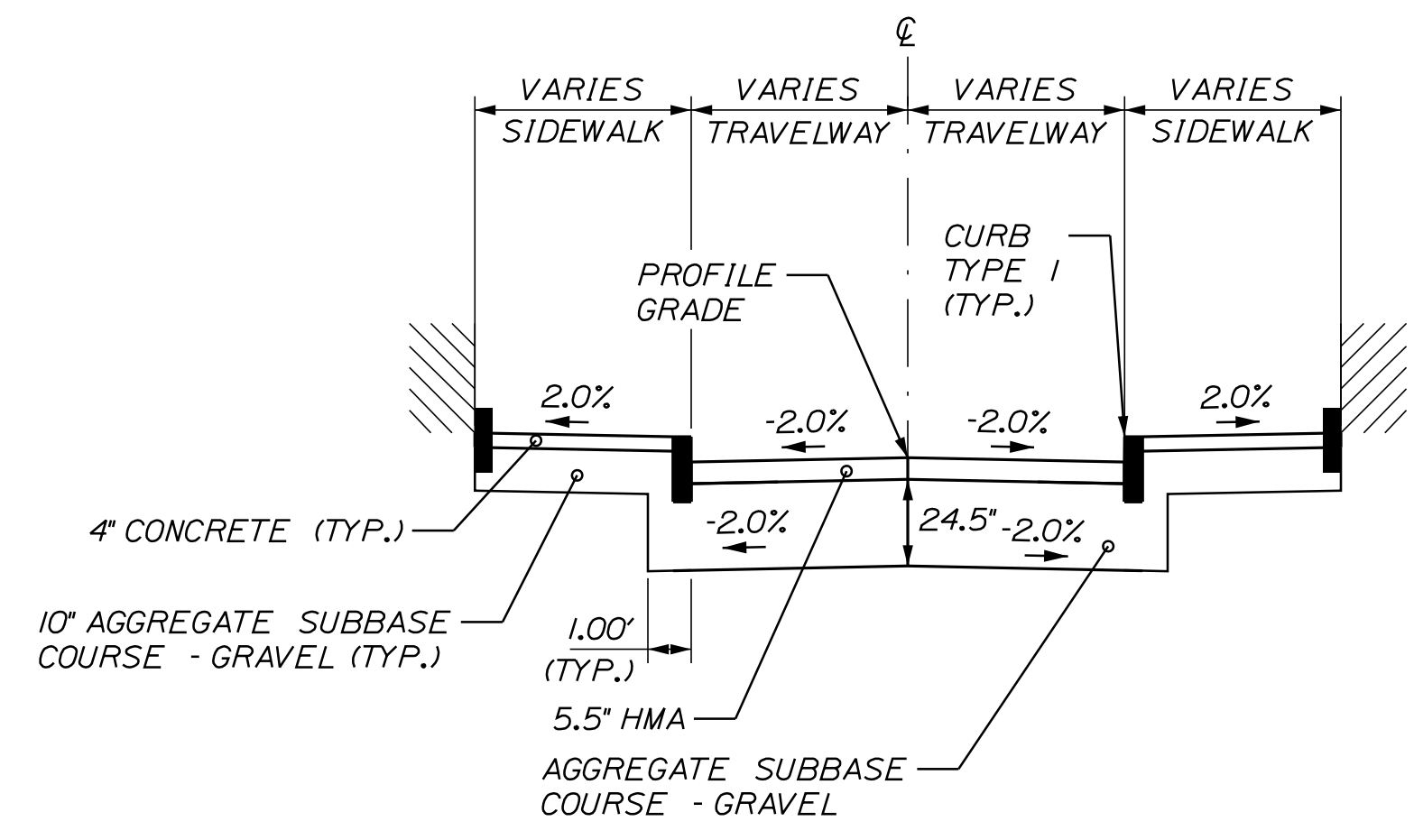
- NOTES:
1. THE PAVEMENT, BASE, AND SUBBASE DEPTHS AS SHOWN ON THE PLANS ARE INTENDED TO BE NOMINAL.
 2. CROWNS FOR BOTH NORMAL AND SUPERELEVATION SECTIONS FOR ALL COURSES OF SUBBASE AND PAVEMENT SHALL BE STRAIGHT.
 3. THE ALGEBRAIC DIFFERENCE BETWEEN THE SHOULDER AND TRAVELWAY CROSS SLOPES (ROLLOVER) SHALL NOT EXCEED 8%.
 4. THE STATIONING SHOWN UNDER EACH TYPICAL IS APPROXIMATE.
- * SEE SUPERELEVATION TABLE FOR SLOPES.
** SEE GRADING PLAN ON SHEET 5.



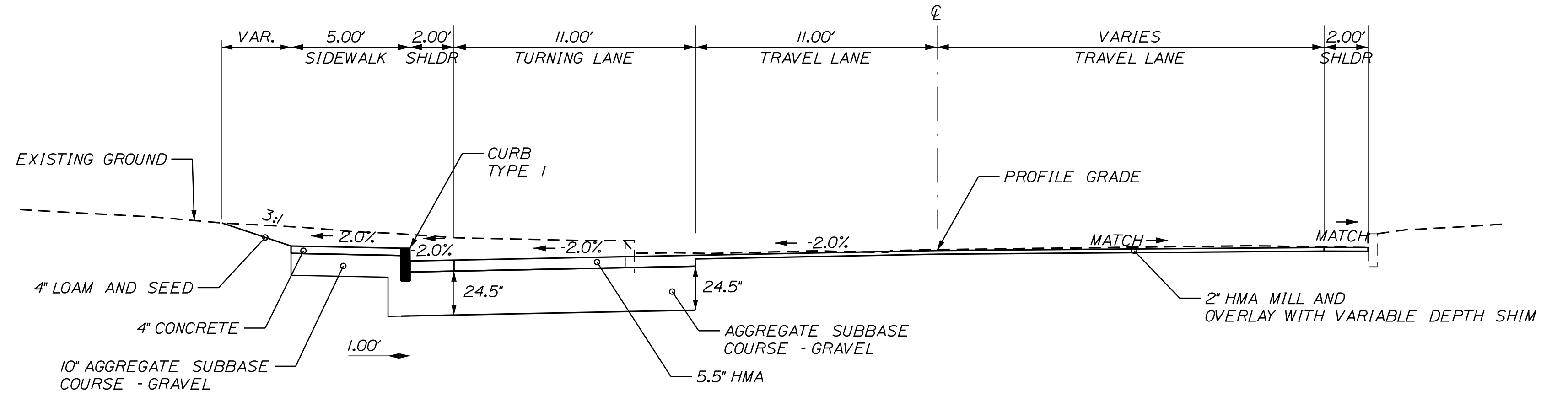
RIGHT TURN LANE DETAIL
FROM MAIN ST TO WATER ST



FULL CONSTRUCTION - 3 LANE ROAD
STA 33+44 TO STA 34+03

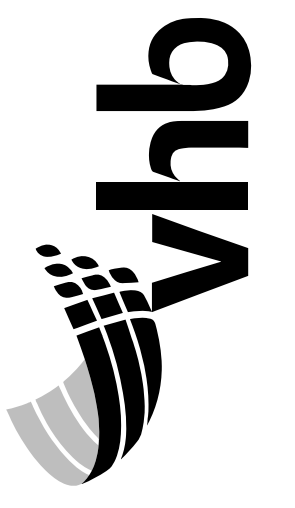


FULL CONSTRUCTION - 1 LANE ROAD
STA 10+53 TO STA 10+80



ROADWAY WIDENING - 3 LANE ROAD
STA 34+96 TO STA 35+98

NOT TO SCALE



PROJ. MANAGER	B. KEEZER	DATE
DESIGN-DETAILED	ACC	12/21
CHECKED-REVIEWED	ECF	12/21
DESIGN-DETAILED		
DESIGN-DETAILED		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

BIDDEFORD
STATE ROUTE 9
TYPICAL SECTIONS

SHEET NUMBER

3

OF 32

Date: 1/6/2022

Username: jamesdavis

Division: HIGHWAY

Filename: ... \MSTA\004_GenNotes_EstQty.dgn

GENERAL NOTES

1. THE UTILITIES INVOLVED IN THIS CONTRACT ARE NOTED IN SPECIAL PROVISION 104.
2. ALL UTILITIES FACILITIES SHALL BE ADJUSTED OR RELOCATED BY THE RESPECTIVE UTILITIES UNLESS OTHERWISE NOTED IN COORDINATION WITH THE WORK OF THE CONTRACTOR.
3. FOR EASEMENTS, CONSTRUCTION LIMITS, AND RIGHT OF WAY LINES, REFER TO RIGHT OF WAY PLANS.
4. FLAT TOPS FOR CATCH BASINS ARE NOT ALLOWED UNLESS NOTED ON THE PLANS OR DIRECTED BY THE RESIDENT.
5. THE PROJECT GEOTECHNICAL REPORT TITLED GEOTECHNICAL DESIGN REPORT MAST ARM STRUCTURES, SOILS REPORT 2018-43C, NOVEMBER 5, 2018 CAN BE ACCESSED AT THE MAINE DOT WEBSITE [HTTP://WWW.MAINE.GOV/MDOT/CONTRACTORS/](http://www.maine.gov/mdot/contractors/).
6. GEOTECHNICAL INFORMATION FURNISHED OR REFERRED TO IN THE BID DOCUMENTS IS FOR THE USE OF THE BIDDERS. NO ASSURANCE IS GIVEN THAT THE INFORMATION OR INTERPRETATIONS WILL BE REPRESENTATIVE OF THE ACTUAL SUBSURFACE CONDITIONS THROUGHOUT THE CONSTRUCTION SITE. MAINE DOT WILL NOT BE RESPONSIBLE FOR ANY INTERPRETATIONS OR CONCLUSION DRAWN FROM THE GEOTECHNICAL INFORMATION. THE BORING LOGS PROVIDED IN THE BID DOCUMENTS (IF ANY) PRESENT FACTUAL AND INTERPRETIVE SUBSURFACE INFORMATION COLLECTED AT DISCRETE LOCATIONS. DATA PROVIDED MAY NOT BE REPRESENTATIVE OF THE SUBSURFACE CONDITIONS BETWEEN BORING LOCATIONS.
7. THE CONTRACTOR IS RESPONSIBLE FOR FINDING EXACT LOCATIONS OF EXISTING UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTACT DIG-SAFE AND APPROPRIATE AUTHORITIES PRIOR TO ANY SUBSURFACE ACTIVITIES.
8. THE RESIDENT AND MAINE DOT SHALL HAVE THE RIGHT AND AUTHORITY TO DETERMINE THE ACCEPTABILITY OF WORK AND MATERIALS IN PROGRESS OR COMPLETED AND SHALL HAVE THE RIGHT TO REJECT ANY WORK OR MATERIALS WHICH DO NOT CONFORM, IN ITS SOLE OPINION, TO THE PLANS OR SPECIFICATIONS.
9. ALL SIGNING, SIGNAL AND STRIPING MATERIALS AND PLACEMENT SHALL CONFORM TO THE MAINE DOT STANDARD SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS AND STANDARD DETAILS AND WITH THE FEDERAL HIGHWAY ADMINISTRATION MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) DATED 2009, AS AMENDED.
10. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE MAINE DEPARTMENT OF TRANSPORTATION'S BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROL, FEBRUARY, 2008.
11. PAVEMENT CUT LINE SHALL BE NEAT, CLEAN AND STRAIGHT AS DIRECTED BY THE RESIDENT. PAYMENT FOR CUTTING OF EXISTING PAVEMENT SHALL BE INCIDENTAL TO 403 ITEMS.
12. REMOVAL OF EXISTING CURBING SHALL BE CONSIDERED INCIDENTAL TO ITEM 203.20 COMMON EXCAVATION, UNLESS OTHERWISE NOTED.
13. EXISTING CATCH BASINS WILL BE CLEANED AS DIRECTED BY THE RESIDENT UNDER THE APPROPRIATE PAY ITEMS.
14. THE CONTRACTOR SHALL CONSTRUCT ALL SIDEWALKS, RAMPS AND LANDINGS TO BE ADA COMPLIANT IN ACCORDANCE WITH THE MAINE DOT'S LATEST STANDARD DETAILS AND RELATED NOTES. THE CONTRACTOR SHALL VERIFY THAT ALL GRADES AND SLOPES ARE ADA COMPLIANT PRIOR TO PLACEMENT OF THE SURFACE MATERIAL AND SHALL COORDINATE WITH THE RESIDENT AND THE DEPARTMENT ON ANY NON-COMPLIANT LOCATIONS. FAILURE TO CONSTRUCT SIDEWALKS, LANDINGS AND RAMPS TO BE ADA COMPLIANT MAY RESULT IN REJECTION OF WORK BY THE RESIDENT AND/OR MAINE DOT. THE CONTRACTOR SHALL REBUILD ALL REJECTED WORK AREAS AT NO ADDITIONAL COST TO THE PROJECT. IF THERE IS A CONDITION THAT DOES NOT ALLOW FOR FULL ADA COMPLIANCE, THEN THE CONTRACTOR SHALL NOTIFY THE RESIDENT PRIOR TO PLACING SURFACE MATERIAL.
15. TEST PITS SHALL BE COMPLETED WHERE DIRECTED BY THE RESIDENT. PAYMENT FOR TEST PITS SHALL BE MADE UNDER ITEM 803.01 TEST PITS.
16. WHERE NOTED ON THE PLANS, THE CONTRACTOR SHALL REMOVE AND REPLACE EXISTING COBBLESTONES BEHIND NEW CURB OR SIDEWALK. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.
17. ALL WASTE MATERIAL NOT USED ON THE PROJECT SHALL BE DISPOSED OFF THE PROJECT IN ACCEPTABLE WASTE AREAS REVIEWED BY THE RESIDENT. GRADING, SEEDING AND MULCHING OF WASTE AREAS SHALL BE CONSIDERED INCIDENTAL.
18. ANY NECESSARY CLEANING OF EXISTING PAVEMENT PRIOR TO PAVING OR MILLING SHALL BE INCIDENTAL TO THE RELATED PAVING OR MILLING ITEMS. THIS INCLUDES KILLING AND REMOVAL OF ALL VEGETATIVE MATTER.
19. NO EXISTING DRAINAGE SHALL BE ABANDONED, REMOVED OR PLUGGED WITHOUT PRIOR APPROVAL OF THE RESIDENT.
20. ANY NECESSARY CUTTING OF EXISTING CATCH BASINS TO ALLOW FOR PROPOSED PIPE CONNECTIONS WILL NOT BE PAID FOR SEPARATELY AND WILL BE CONSIDERED INCIDENTAL TO ITEMS 603 OR 605.
21. THE CULVERT SIZES SHOWN ON THE PLANS AND CROSS SECTIONS ARE FOR SMOOTH LINED PIPES.
22. EXISTING ABANDONED WATER MAINS BROKEN BY THE CONTRACTOR DURING CONSTRUCTION SHALL HAVE THE ENDS PLUGGED WITH BRICK AND MORTAR. COST FOR ALL LABOR AND MATERIAL SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO DIRECT PAYMENT WILL BE MADE.
23. LOAM SHALL BE PLACED TO A NOMINAL DEPTH OF 4 INCHES UNLESS OTHERWISE NOTED OR DIRECTED.
24. UNLESS OTHERWISE NOTED SEEDING METHOD NO 1 SHALL BE UTILIZED ON ALL DISTURBED AREAS.
25. DURING CONSTRUCTION AT THE MAIN STREET AND WATER STREET INTERSECTION, WATER STREET MAY BE REDUCED TO RIGHT-IN AND RIGHT-OUT ONLY UNTIL THE TRAFFIC SIGNALS AT THIS LOCATION BECOME ACTIVE. THE CONTRACTOR SHALL ADDRESS THIS IN THEIR TRAFFIC CONTROL PLAN.
26. NO SEPARATE PAYMENT FOR SUPERINTENDENT OR FOREMAN WILL BE MADE FOR THE SUPERVISION OF EQUIPMENT AND LAYOUT OF WORK BEING PAID FOR UNDER THE EQUIPMENT RENTAL ITEMS.
27. "UNDETERMINED LOCATIONS" SHALL BE DETERMINED BY THE RESIDENT.
28. FINAL STRIPING FOR THE PROJECT SHALL BE DONE BY THE CONTRACTOR PER THE STRIPING PLANS. PAYMENT SHALL BE MADE UNDER THE APPROPRIATE CONTRACT ITEMS.
29. LIMITS OF FULL CONSTRUCTION SHOWN ON THE PLANS ARE OFFSET FROM ALIGNMENTS AND LANE LINES FOR CLARITY. SEE TYPICAL SECTIONS AND CROSS SECTIONS FOR ACTUAL WIDTHS.
30. ANY GRANITE CURB, COBBLESTONE, OR BRICK PAVERS THAT ARE NOT REUSED AND ARE IN GOOD CONDITION AS DETERMINED BY THE RESIDENT SHALL BECOME PROPERTY OF THE CITY OF BIDDEFORD. THE CONTRACTOR WILL DELIVER THESE MATERIALS TO THE PUBLIC WORKS GARAGE AT 371 HILL STREET AND NO ADDITIONAL PAYMENT WILL BE MADE FOR THE TEMPORARY STORAGE, LOADING, TRANSPORTATION, OR UNLOADING OF THESE MATERIALS.
31. THE CONTRACTOR SHALL REPLACE THE DETECTABLE WARNING FIELDS ON THE PEDESTRIAN RAMPS AT STATIONS 104+25 RT & 104+80 RT. NO OTHER RAMP IS REQUIRED AT THESE LOCATIONS AND THE CONTRACTOR IS NOT RESPONSIBLE FOR MAKING THESE LOCATIONS FULLY ADA COMPLIANT. ALL OTHER PEDESTRIAN RAMPS WHERE PROPOSED WORK IS SHOWN, SHALL BE MADE FULLY ADA COMPLIANT. IF THE CONTRACTOR BELIEVES THEY CAN NOT ACHIEVE THIS WITHIN THE WORK LIMITS SHOWN ON THE PLANS, THEN THE CONTRACTOR SHALL NOTIFY THE RESIDENT IMMEDIATELY BEFORE PROCEEDING.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
STP-1857(400)
WIN
18574.00
HIGHWAY PLANS



PROJ. MANAGER	B. KEEZER	BY	DATE
DESIGN-DETAILED	ACC	JRD	12/21
CHECKED-REVIEWED	ECF	AG	12/21
DESIGNS-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

BIDDEFORD
STATE ROUTE 9
GENERAL NOTES

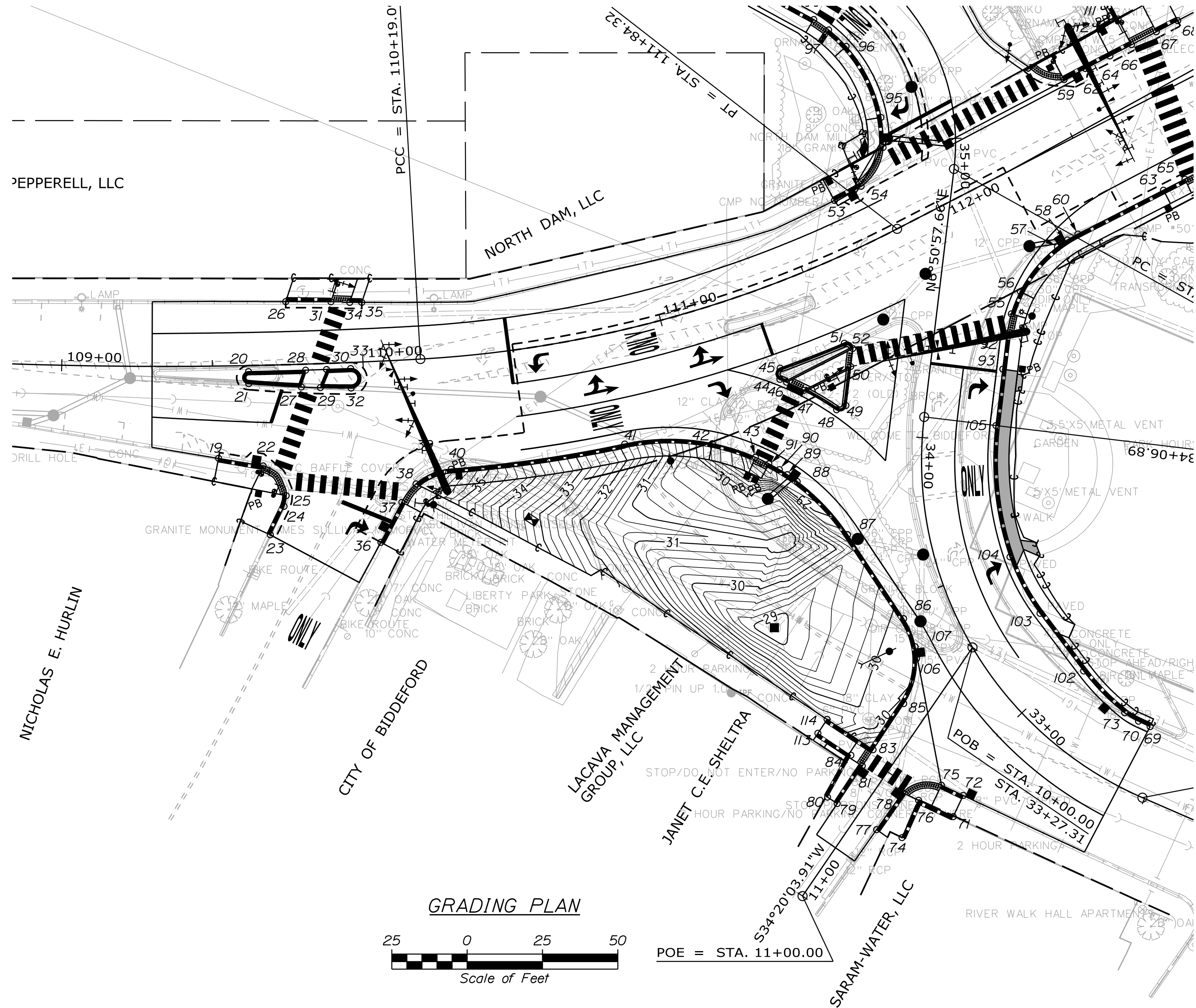
SHEET NUMBER
4
OF 32

MAIN STREET SUPERELEVATION TABLE						
Station	Left SH Slope (%)	Left TW Slope (%)	CL Mill Depth (in)	CL Elev. (ft)	Right TW Slope (%)	Right SH Slope (%)
109+30.00	MATCH	MATCH	2.00	43.10	MATCH	MATCH
109+50.00	-2.0	-2.0	1.00	41.85	-2.0	-5.8
109+75.00	-2.0	-2.0	1.00	39.97	-2.0	-2.8
110+00.00	-2.0	-2.0	1.00	38.09	-2.0	-2.0
110+25.00	-2.0	-2.0	1.00	36.16	-2.0	-2.0
110+50.00	-2.0	-2.0	1.00	34.17	-2.0	-2.0
110+75.00	-2.0	-2.0	1.00	32.40	-2.0	-2.0
111+00.00	-3.0	-2.0	1.00	30.81	-2.0	NOTE 2
111+25.00	-4.0	-2.0	1.00	29.66	-2.0	NOTE 2
111+50.00	-5.0	-2.0	1.00	28.80	-2.0	-2.0
111+75.00	-6.0	-2.0	1.00	28.29	-2.0	-2.0
112+00.00	-5.0	-2.0	1.00	28.03	-2.0	-2.0
112+25.00	-4.0	-2.0	1.00	27.92	-2.0	-2.0
112+50.00	-4.0	-2.0	1.00	28.01	-2.0	-3.0
112+75.00	-4.0	-2.0	1.00	28.00	-2.0	-2.0
113+00.00	-3.0	-2.0	1.00	27.97	-2.0	-2.0
113+19.34	-2.0	-2.0	1.00	28.01	-2.0	-2.0
113+25.00	-2.0	-2.0	1.23	28.00	-2.0	-2.0
113+44.34	MATCH	MATCH	2.00	28.03	MATCH	MATCH

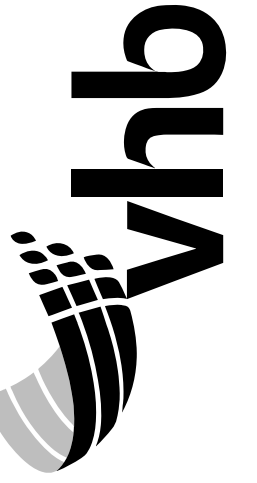
NOTES: 1. CROWN SHIFTS 3' LEFT FROM STA. 112+25.00 TO 113+44.34
2. SEE CROSS SECTIONS AND CONTROL POINT ELEVATIONS FOR TURN LANE ON GRADING PLAN.

WATER STREET SUPERELEVATION TABLE						
Station	Left SH Slope (%)	Left TW Slope (%)	CL Mill Depth (in)	CL Elev. (ft)	Right TW Slope (%)	Right SH Slope (%)
32+59.44	MATCH	MATCH	FC	30.13	MATCH	MATCH
32+75.00	-2.0	2.0	FC	29.98	-2.0	-2.0
33+00.00	-2.0	2.0	FC	29.73	-2.0	-2.0
33+25.00	-2.0	2.0	FC	29.48	-2.0	-2.0
33+50.00	-2.4	2.0	FC	29.23	-2.0	-2.0
33+75.00	NOTE 2	2.0	FC	28.95	-2.0	-2.0
34+00.00	2.0	2.0	FC	28.55	-2.0	-2.0
34+25.00	1.1	1.1	FC	28.00	-1.5	-1.5
34+50.00	-	-	FC	27.68	-0.5	-0.5
34+75.00	-	-	-	27.97	-	-
35+00.00	-2.0	-2.0	1.0	27.44	-	-
35+25.00	-2.0	-2.0	1.0	27.71	0.7	0.7
35+50.00	-2.0	-2.0	1.0	28.95	1.6	1.2
35+75.00	-2.0	-2.0	1.0	29.99	1.6	1.2
35+97.55	MATCH	MATCH	2.0	30.91	MATCH	MATCH

NOTES: 1. "FC" DENOTES FULL CONSTRUCTION.
2. SEE CROSS SECTIONS AND CONTROL POINT ELEVATIONS FOR TURN LANE ON GRADING PLAN.



CONTROL POINTS					
POINT	STATION	OFFSET	X. COORD.	Y. COORD.	ELEV.
40	110+26.51	37.1 RT.	964220.68	240270.80	35.30
41	110+79.73	37.1 RT.	964278.28	240279.11	31.29
42	111+05.34	44.0 RT.	964307.35	240279.25	28.98
43	111+16.40	52.5 RT.	964321.64	240274.72	28.26
44	111+30.79	30.5 RT.	964329.79	240300.58	28.86
45	111+32.03	27.0 RT.	964329.86	240304.32	28.68
46	111+32.43	32.1 RT.	964331.99	240299.66	28.80
47	111+36.53	36.6 RT.	964337.72	240296.97	28.68
48	111+43.63	46.5 RT.	964348.58	240290.50	28.57
49	111+46.69	46.3 RT.	964351.70	240291.91	28.82
50	111+52.44	35.0 RT.	964353.25	240304.86	28.44
51	111+53.43	27.0 RT.	964351.17	240312.61	28.07
52	111+55.17	29.7 RT.	964353.95	240310.83	28.24
83	33+18.24	46.2 LT.	964360.68	240177.64	29.06
85	33+23.69	29.2 LT.	964370.85	240192.94	29.34
86	33+44.87	16.3 LT.	964370.83	240221.16	29.47
87	33+72.10	26.6 LT.	964352.22	240249.08	28.72
88	33+87.15	41.4 LT.	964335.50	240266.67	28.05
89	33+88.93	44.6 LT.	964332.22	240268.97	28.06
90	33+90.17	47.2 LT.	964329.60	240270.61	28.07
91	33+91.60	50.7 LT.	964326.11	240272.57	28.13
106	33+32.72	18.1 LT.	964375.10	240207.86	29.47
107	33+35.99	16.6 LT.	964374.66	240211.83	29.46



PROJ. MANAGER	DATE	BY	REVISION
DESIGN-DETAILED	12/21	JRD	1
CHECKED-REVIEWED	12/21	AG	2
DESIGN-DETAILED			3
DESIGN-DETAILED			4
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

BIDDEFORD
STATE ROUTE 9
SUPERELEVATION & GRADING

SHEET NUMBER

5

Date:1/6/2022

Username: jomedavis

Division: HIGHWAY

Filename: ... \006_Construction_Notes.dgn

CONSTRUCTION NOTES

SIDEWALK - PAVED

Table with columns: LOCATION, OFFSET, QUANTITY (SY). Rows include MAIN ST 112-13 TO 112-88 RT (72), WATER ST 33-09 TO 33-44 RT (15), 34-28 TO 34-53 RT (14).

ITEM 202.202 - REMOVE PAVEMENT SURFACE

Table with columns: LOCATION, OFFSET, QUANTITY (SY). Rows include MAIN ST 109-30 TO 113-44 LT & RT (2000), WATER ST 33-18 TO 33-95 LT (600).

ITEM 603.159 - 12 INCH CULVERT PIPE OPT III

Table with columns: LOCATION, OFFSET, QUANTITY (LF). Rows include MAIN ST 111-72 TO 111-78 LT (4), 111-78 TO 35-01 LT (18), 112-12 TO 112-61 LT (45), 112-21 TO 112-31 RT (7).

Table with columns: LOCATION, OFFSET, QUANTITY (EA). Rows include WATER ST 33-83 TO 33-89 LT (12), 35-01 TO 112-12 LT (17).

ITEM 604.072 - CATCH BASIN TYPE A-C

Table with columns: LOCATION, OFFSET, QUANTITY (EA). Rows include MAIN ST 112-30.83 (28.4 RT, 1), WATER ST 33-88.63 (42.4 LT, 1).

ITEM 604.092 - CATCH BASIN TYPE B-C

Table with columns: LOCATION, OFFSET, QUANTITY (EA). Rows include MAIN ST 111-75.95 (16.8 LT, 1), 112-60.66 (17.6 LT, 1), WATER ST 35-01.00 (23.0 LT, 1).

ITEM 604.16 - ALTER CB TO MH

Table with columns: LOCATION, OFFSET, QUANTITY (EA). Rows include MAIN ST 111-67.49 (25.0 RT, 1), 112-20.79 (25.2 RT, 1), NORTH DAM MILL RD 35-21.18 (11.7 LT, 1).

ITEM 604.161 - ALTER CB

Table with columns: LOCATION, OFFSET, QUANTITY (EA). Rows include MAIN ST 112-12.30 (17.3 LT, 1), WATER ST 32-93.72 (30.4 LT, 1), 33-06.56 (48.7 LT, 1), 33-15.15 (53.4 LT, 1), 33-33.80 (15.9 LT, 1).

ITEM 604.164 - REBUILD CB

Table with columns: LOCATION, OFFSET, QUANTITY (EA). Row: WATER ST 32-78.98 (19.5 RT, 1).

ITEM 604.166 - REBUILD MH

Table with columns: LOCATION, OFFSET, QUANTITY (EA). Rows include WATER ST 33-42.17 (11.5 LT, 1), 33-61.69 (3.4 LT, 1), 33-54.00 (57.6 LT, 1), 33-70.43 (23.5 LT, 1), 33-83.41 (51.5 LT, 1).

ITEM 604.18 - ADJUST CB OR MH TO GRADE

Table with columns: LOCATION, OFFSET, QUANTITY (EA). Rows include MAIN ST 106-82.42 (16.6 LT, 1), 106-93.10 (26.7 RT, 1), 109-64.02 (31.4 RT, 1), 110-04.40 (54.9 RT, 1), 110-56.65 (16.6 RT, 1), 111-85.85 (17.6 RT, 1).

WATER ST

Table with columns: LOCATION, OFFSET, QUANTITY (EA). Rows include 33-73.39 (47.4 LT, 1), 34-58.92 (33.5 RT, 1).

ITEM 608.08 - REINFORCED CONCRETE SIDEWALK

Table with columns: LOCATION, OFFSET, QUANTITY (SY). Rows include MAIN ST 104-72 TO 104-98 LT (22), 106-68 TO 106-91 RT (33), 106-70 TO 107-00 LT (23), 107-16 TO 107-42 RT (22), 109-50 TO 109-74 RT (36), 109-75 TO 110-05 LT (22), 110-05 TO 111-20 RT (89), 112-50 TO 113-00 LT (64).

Table with columns: LOCATION, OFFSET, QUANTITY (EA). Rows include WATER ST 32-95 TO 33-05 LT (25), 33-15 TO 33-30 LT (23).

Table with columns: LOCATION, OFFSET, QUANTITY (EA). Row: NORTH DAM MILL RD 34-78 TO 36-00 LT (58).

ITEM 608.10 - BRICK SIDEWALK (REMOVE AND REBUILD)

Table with columns: LOCATION, OFFSET, QUANTITY (SY). Row: WATER ST 33-47 TO 34-25 RT (39).

ITEM 608.26 - CURB RAMP DETECTABLE WARNING FIELD

Table with columns: LOCATION, OFFSET, QUANTITY (SF). Rows include MAIN ST 104-25 (RT, 9), 104-80 (RT, 28), 104-80 (LT, 12), 106-85 (RT, 26), 106-85 (LT, 12), 107-30 (RT, 20), 109-75 (RT, 25), 109-90 (LT, 12), 110-10 (RT, 15), 111-90 (LT, 28), 112-50 (LT, 22), 112-75 (RT, 12), 112-80 (LT, 20).

Table with columns: LOCATION, OFFSET, QUANTITY (EA). Rows include WATER ST 33-00 (LT, 25), 33-20 (LT, 13), 33-90 (LT, 10), 34-10 (LT, 12), 34-20 (LT, 10), 34-45 (RT, 13).

Table with columns: LOCATION, OFFSET, QUANTITY (EA). Rows include NORTH DAM MILL RD 35-75 (LT, 12), 35-98 (LT, 10).

STATE OF MAINE DEPARTMENT OF TRANSPORTATION STP-1857(400) WIN 18574.00 HIGHWAY PLANS



Table with columns: PROJ. MANAGER, B. KEEZER, ACC, JRD, AG, DATE, 12/21, 12/21. Includes rows for DESIGN-DETAILED, CHECKED-REVIEWED, DESIGN-DETAILED, REVISIONS 1-4, FIELD CHANGES.

BIDDEFORD STATE ROUTE 9 CONSTRUCTION NOTES

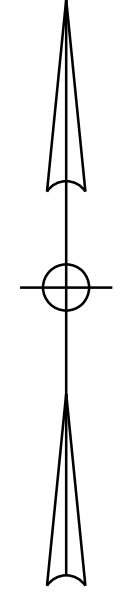
SHEET NUMBER 6 OF 32

Date: 1/6/2022

Username: jamesdavis

Division: HIGHWAY

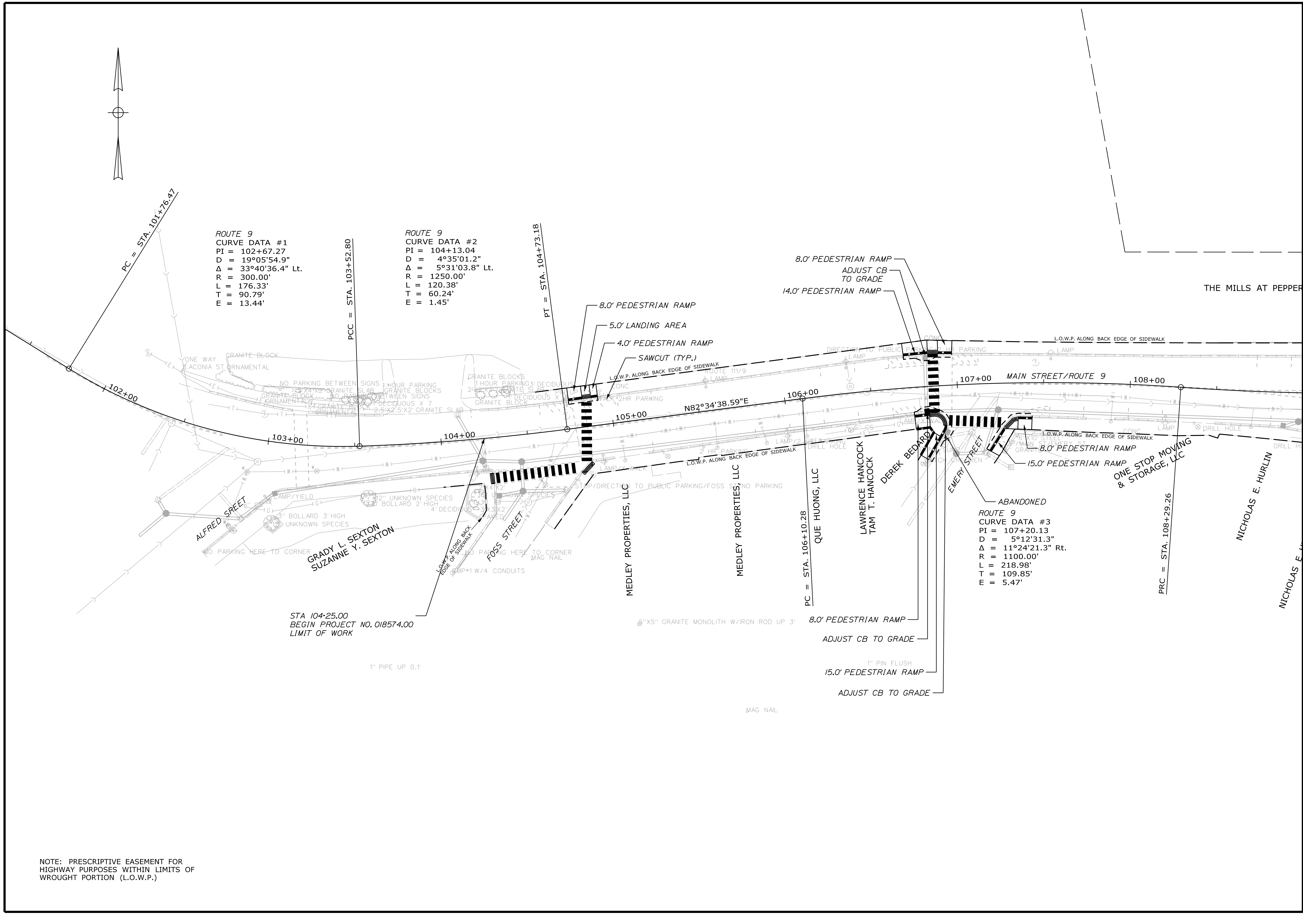
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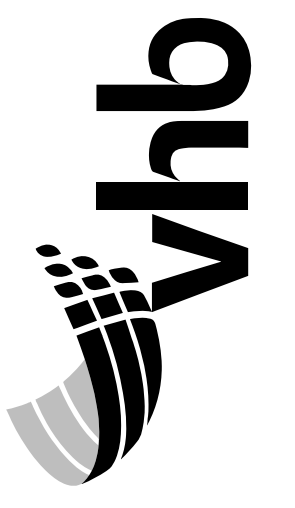
ROUTE 9
 CURVE DATA #1
 PI = 102+67.27
 D = 19°05'54.9"
 Δ = 33°40'36.4" Lt.
 R = 300.00'
 L = 176.33'
 T = 90.79'
 E = 13.44'

ROUTE 9
 CURVE DATA #2
 PI = 104+13.04
 D = 4°35'01.2"
 Δ = 5°31'03.8" Lt.
 R = 1250.00'
 L = 120.38'
 T = 60.24'
 E = 1.45'

ROUTE 9
 CURVE DATA #3
 PI = 107+20.13
 D = 5°12'31.3"
 Δ = 11°24'21.3" Rt.
 R = 1100.00'
 L = 218.98'
 T = 109.85'
 E = 5.47'



STATE OF MAINE
 DEPARTMENT OF TRANSPORTATION
 STP-1857(400)
 WIN
 18574.00
 HIGHWAY PLANS



PROJ. MANAGER	DATE	BY
DESIGN-DETAILED	12/21	JRD
CHECKED-REVIEWED	12/21	AG
DESIGN-DETAILED		
DESIGN-DETAILED		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

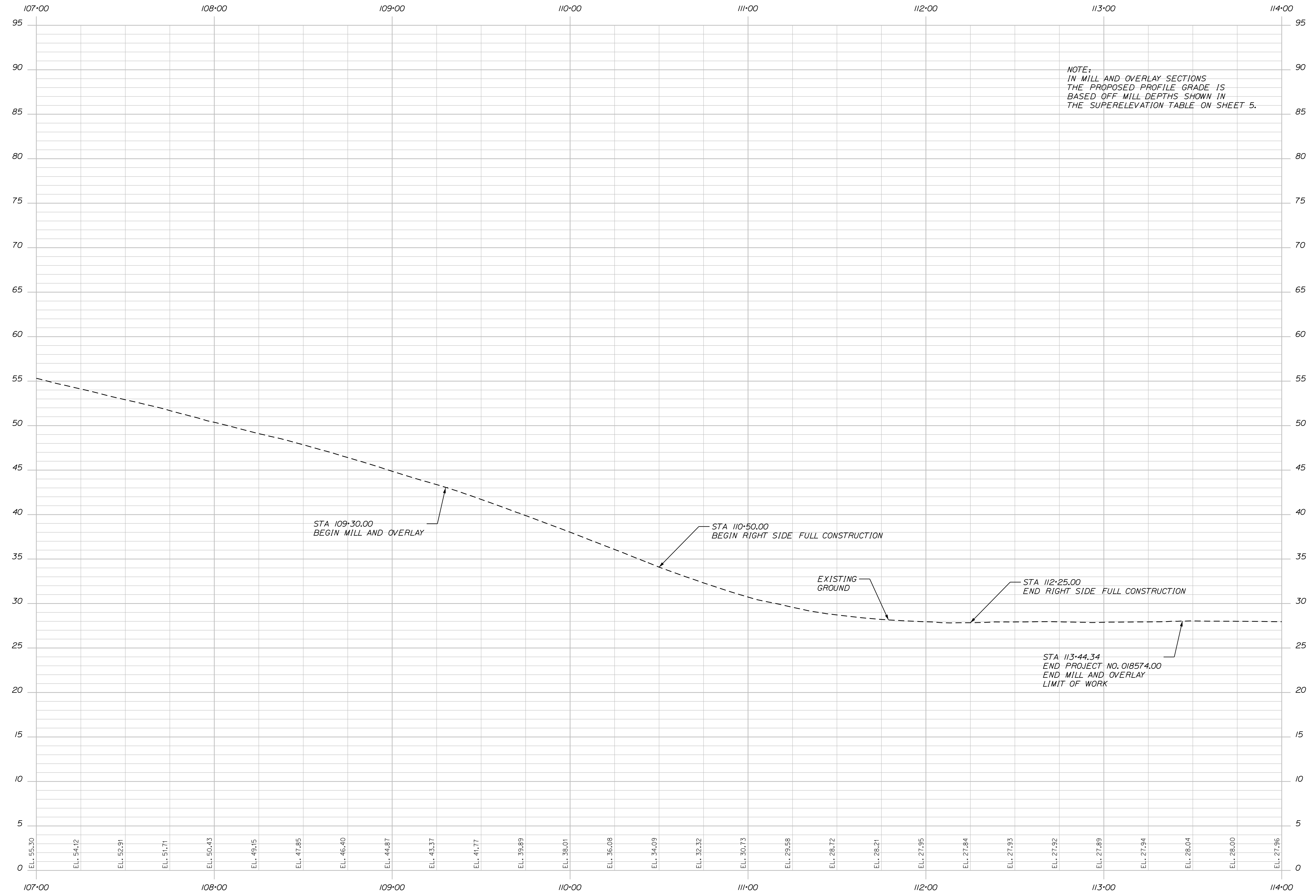
BIDDEFORD
 STATE ROUTE 9
 GENERAL PLANS (1 OF 2)

SHEET NUMBER

7

OF 32

NOTE: PRESCRIPTIVE EASEMENT FOR
 HIGHWAY PURPOSES WITHIN LIMITS OF
 WROUGHT PORTION (L.O.W.P.)



NOTE:
 IN MILL AND OVERLAY SECTIONS
 THE PROPOSED PROFILE GRADE IS
 BASED OFF MILL DEPTHS SHOWN IN
 THE SUPERELEVATION TABLE ON SHEET 5.

STATE OF MAINE
 DEPARTMENT OF TRANSPORTATION
 STP-1857(400)
 WIN
 18574.00
 HIGHWAY PLANS

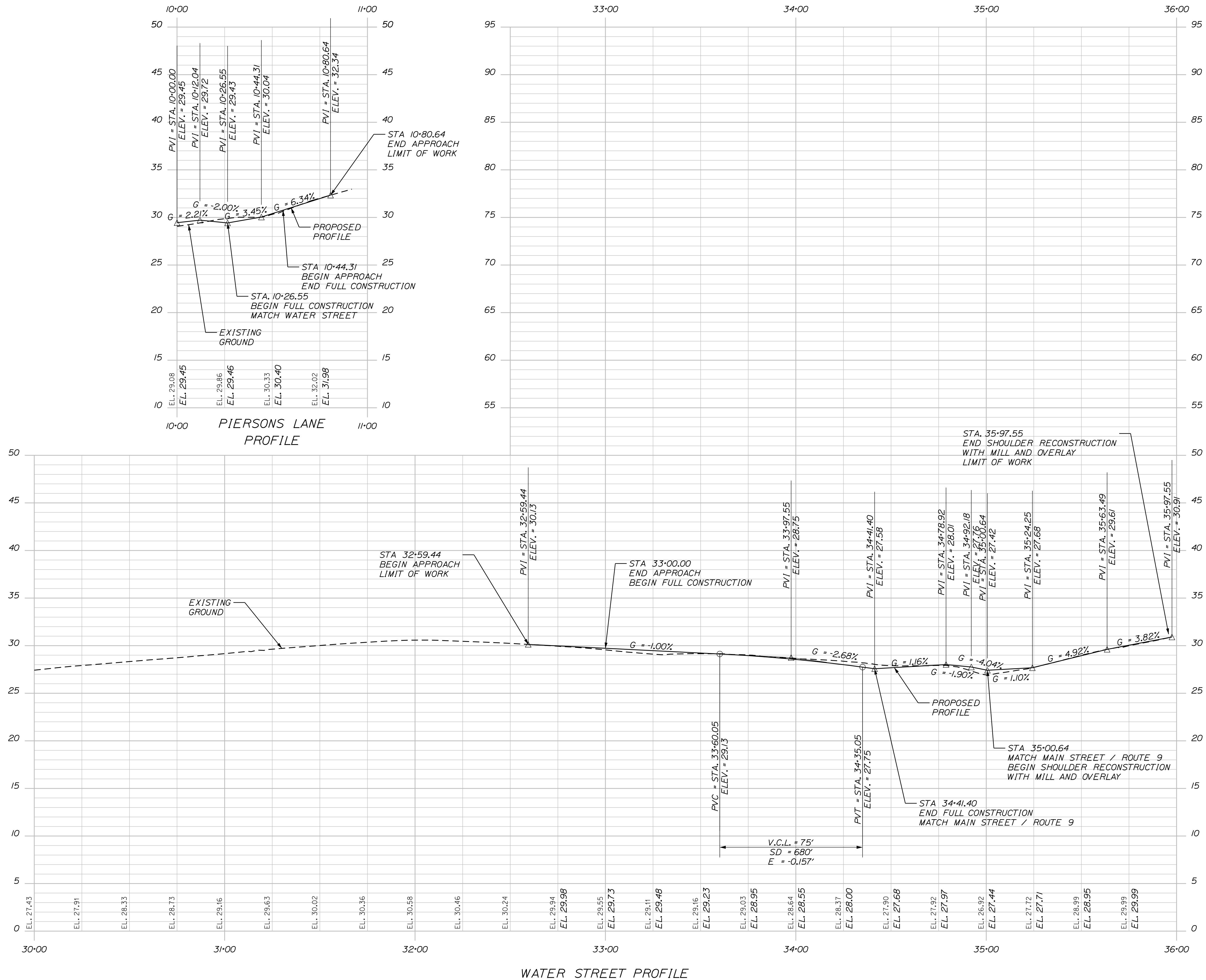


PROJ. MANAGER	B. KEEZER	BY	DATE
DESIGN-DETAILED	ACC	JRD	12/21
CHECKED-REVIEWED	ECF	AG	12/21
DESIGN-DETAILED			
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

BIDDEFORD
 STATE ROUTE 9
 PROFILE

SHEET NUMBER
 9
 OF 32

PROFILE



PROJ. MANAGER	B. KEEZER	BY	DATE
DESIGN-DETAILED	ACC	JRD	12/21
CHECKED-REVIEWED	ECF	AG	12/21
DESIGN-DETAILED			
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

BIDDEFORD
WATER ST/PIERSON'S LN
PROFILE

SHEET NUMBER

10

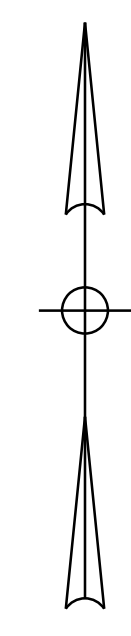
OF 32

Date: 1/6/2022

Username: jomedavis

Division: HIGHWAY

Filename: ... \MSTA\012_Curb_Geometry_01.dgn

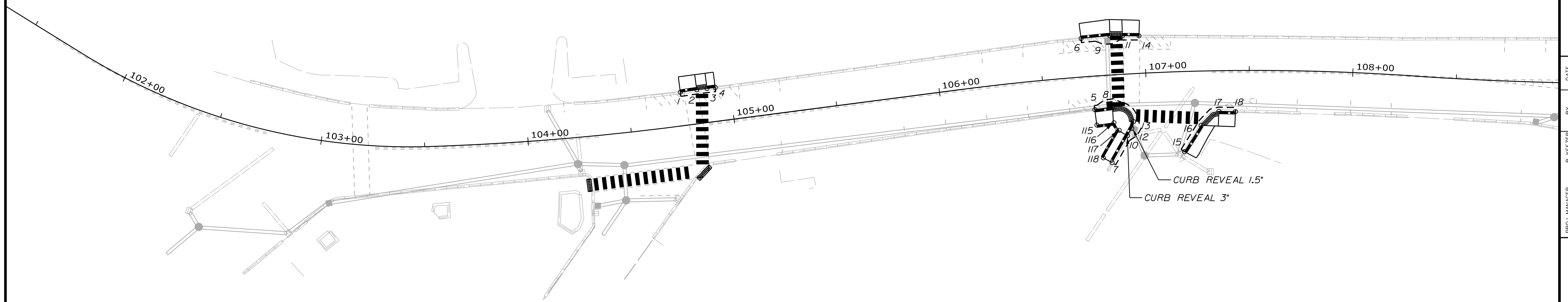


CONTROL POINTS				
POINT	STATION	OFFSET	X. COORD.	Y. COORD.
1	104+75.96	16.2 LT.	963666.96	240300.65
2	104+83.96	16.3 LT.	963674.88	240301.81
3	104+88.96	16.3 LT.	963679.83	240302.46
4	104+92.96	16.3 LT.	963683.80	240302.98
5	106+74.24	16.2 RT.	963867.02	240292.26
6	106+70.14	18.6 LT.	963860.38	240326.61
7	106+80.97	42.3 RT.	963875.35	240266.65
8	106+82.97	15.6 RT.	963875.57	240293.39
9	106+83.89	18.9 LT.	963874.32	240327.89
10	106+89.44	29.7 RT.	963882.75	240279.69
11	106+89.79	18.5 LT.	963880.32	240327.88
12	106+91.73	26.2 RT.	963884.78	240283.29
13	106+92.84	23.1 RT.	963885.69	240286.50
14	106+97.64	18.1 LT.	963888.32	240327.87
15	107+17.51	38.7 RT.	963910.32	240271.99
16	107+26.08	26.2 RT.	963918.28	240284.70
17	107+35.00	19.6 RT.	963926.88	240291.46
18	107+43.14	19.9 RT.	963934.88	240291.28
115	106+74.71	23.6 RT.	963868.02	240248.83
116	106+83.18	23.1 RT.	963876.25	240285.95
117	106+85.53	26.9 RT.	963878.78	240282.29
118	106+76.79	39.6 RT.	963871.15	240269.01

ITEM 609.221 - TERMINAL CURB TYPE 1		
PT. TO PT.	RADIUS	LENGTH
1 TO 2	-	8.0'
3 TO 4	-	4.0'
5 TO 8	-	8.0'
6 TO 9	-	14.0'
7 TO 10	-	15.0'
11 TO 14	-	8.0'
15 TO 16	-	15.0'
17 TO 18	-	8.0'
10 TO 12	-	4.1'

ITEM 609.222 - TERMINAL CURB TYPE 1 - CIRCULAR		
PT. TO PT.	RADIUS	LENGTH
12 TO 13	7.0'	3.4'

ITEM 609.11 - VERTICAL CURB TYPE 1		
PT. TO PT.	RADIUS	LENGTH
115 TO 116	-	8.3'
116 TO 117	-	3.7'
117 TO 118	-	15.3'



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
STP-1857(400)
WIN
18574.00
HIGHWAY PLANS



PROJ. MANAGER	B. KEEZER	BY	DATE
DESIGN-DETAILED	ACC	JRD	12/21
CHECKED-REVIEWED	ECF	AG	12/21
DESIGN-DETAILED			
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

BIDDEFORD
STATE ROUTE 9
GEOMETRIC PLANS (1 OF 2)

SHEET NUMBER
11
OF 32

Date: 1/6/2022

Username: jamesdavis

Division: HIGHWAY

Filename: ... \MSTA\013_Curb_Geometry_02.dgn

ITEM 609.12 - VERTICAL CURB TYPE 1 - CIRCULAR		
PT. TO PT.	RADIUS	LENGTH
39 TO 40	20.0'	4.9'
56 TO 57	44.0'	19.4'
58 TO 60	44.0'	4.0'
70 TO 73	23.0'	5.4'
85 TO 106	25.5'	15.8'
95 TO 96	48.0'	26.6'
107 TO 86	25.5'	10.1'

ITEM 609.11 - VERTICAL CURB TYPE 1		
PT. TO PT.	RADIUS	LENGTH
40 TO 41	-	58.2'
41 TO 42	71.0'	29.3'
60 TO 63	-	31.9'
62 TO 64	-	9.2'
69 TO 70	-	4.3'
71 TO 76	-	12.7'
73 TO 102	75.6'	19.5'
102 TO 103	-	24.0'
103 TO 104	67.6'	21.3'
104 TO 105	98.0'	44.2'
105 TO 93	-	18.9'
74 TO 76	-	13.6'
80 TO 84	-	15.4'
83 TO 85	-	18.4'
86 TO 87	-	33.6'
87 TO 88	71.0'	24.4'
89 TO 90	-	3.1'
99 TO 100	-	2.9'
108 TO 109	-	10.4'
110 TO 111	-	12.6'
111 TO 112	-	7.0'
113 TO 84	-	13.1'
114 TO 83	-	18.3'

CURB INLET		
PT. TO PT.	RADIUS	LENGTH
57 TO 58	44.0'	4.0'
88 TO 89	-	4.0'
106 TO 107	-	4.0'

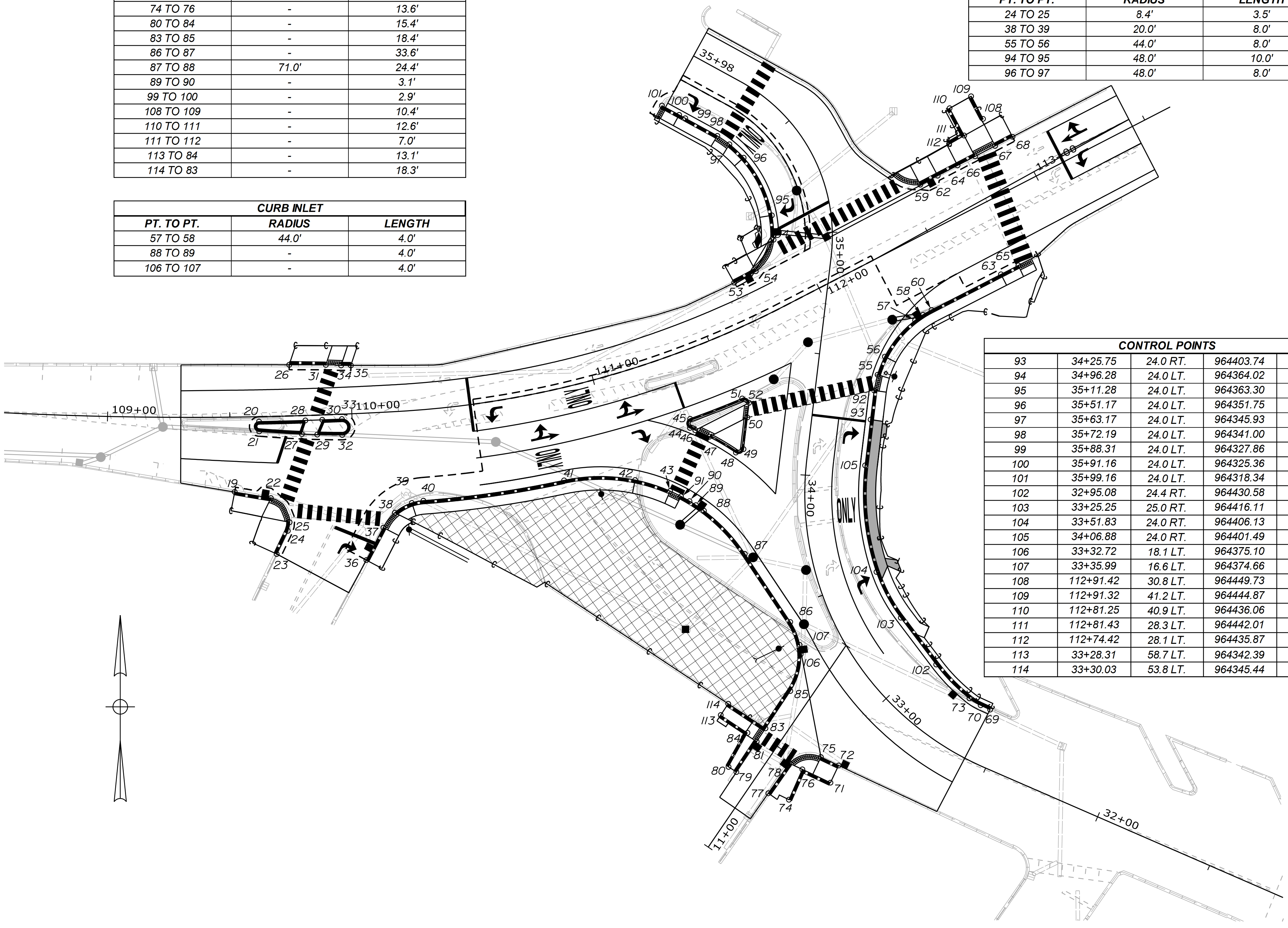
ITEM 609.34 - CURB TYPE 5		
PT. TO PT.	RADIUS	LENGTH
20 TO 28	-	19.0'
21 TO 27	-	17.9'
27 TO 28	-	5.8'
29 TO 30	-	6.4'
29 TO 32	-	10.2'
30 TO 33	-	8.0'
44 TO 46	98.0'	2.4'
45 TO 51	421.0'	22.9'
47 TO 48	98.0'	12.6'
49 TO 50	-	13.0'

ITEM 609.35 - CURB TYPE 5 - CIRCULAR		
PT. TO PT.	RADIUS	LENGTH
20 TO 21	2.0'	6.3'
32 TO 33	3.3'	10.3'
44 TO 45	2.0'	4.8'
48 TO 49	2.0'	4.1'
51 TO 52	2.0'	3.9'

ITEM 609.221 - TERMINAL CURB TYPE 1		
PT. TO PT.	RADIUS	LENGTH
19 TO 22	-	15.0'
23 TO 24	-	10.5'
26 TO 31	-	15.0'
34 TO 35	-	4.0'
36 TO 37	-	15.0'
42 TO 43	71.0'	15.0'
53 TO 54	-	10.0'
59 TO 62	-	8.0'
63 TO 65	-	8.0'
64 TO 66	-	8.0'
67 TO 68	-	8.0'
72 TO 75	-	8.0'
77 TO 78	-	15.0'
79 TO 81	-	15.0'
90 TO 91	71.0'	4.0'
93 TO 92	-	12.0'
98 TO 99	-	15.0'
100 TO 101	-	8.0'

ITEM 609.222 - TERMINAL CURB TYPE 1 - CIRCULAR		
PT. TO PT.	RADIUS	LENGTH
24 TO 25	8.4'	3.5'
38 TO 39	20.0'	8.0'
55 TO 56	44.0'	8.0'
94 TO 95	48.0'	10.0'
96 TO 97	48.0'	8.0'

CONTROL POINTS				
POINT	STATION	OFFSET	X. COORD.	Y. COORD.
19	109+51.70	30.6 RT.	964143.48	240274.38
20	109+61.95	2.0 RT.	964153.41	240303.18
21	109+61.96	6.0 RT.	964153.49	240299.18
22	109+66.13	33.4 RT.	964158.27	240271.88
23	109+67.94	56.3 RT.	964160.65	240248.98
24	109+72.58	47.0 RT.	964165.21	240258.45
25	109+73.36	43.5 RT.	964165.93	240261.97
26	109+74.92	20.9 LT.	964165.75	240326.40
27	109+79.29	7.5 RT.	964170.93	240298.07
28	109+80.90	2.0 RT.	964172.38	240303.66
29	109+85.57	8.0 RT.	964177.25	240297.85
30	109+87.83	2.0 RT.	964179.31	240303.89
31	109+90.12	20.4 LT.	964180.75	240326.37
32	109+95.71	8.5 RT.	964187.47	240297.70
33	109+95.85	2.0 RT.	964187.33	240304.20
34	109+96.44	20.0 LT.	964187.00	240326.15
35	110+00.49	19.8 LT.	964191.00	240326.15
36	110+03.16	60.1 RT.	964197.34	240246.50
37	110+10.51	47.2 RT.	964204.31	240259.79
38	110+15.38	41.3 RT.	964209.01	240265.89
39	110+22.14	37.8 RT.	964215.96	240269.85
40	110+26.51	37.1 RT.	964220.68	240270.80
41	110+79.73	37.1 RT.	964278.28	240279.11
42	111+05.34	44.0 RT.	964307.35	240279.25
43	111+16.40	52.5 RT.	964321.64	240274.72
44	111+30.79	30.5 RT.	964329.79	240300.58
45	111+32.03	27.0 RT.	964329.86	240304.32
46	111+32.43	32.1 RT.	964331.99	240299.66
47	111+36.53	36.6 RT.	964337.72	240296.97
48	111+43.63	46.5 RT.	964348.58	240290.50
49	111+46.69	46.3 RT.	964351.70	240291.91
50	111+52.44	35.0 RT.	964353.25	240304.86
51	111+53.43	27.0 RT.	964351.17	240312.61
52	111+55.17	29.7 RT.	964353.95	240310.83
53	111+69.50	17.7 LT.	964347.88	240360.03
54	111+79.97	18.0 LT.	964356.72	240364.70
55	34+44.32	24.7 RT.	964406.60	240322.34
56	34+52.03	26.7 RT.	964409.58	240329.76
57	112+28.88	29.7 RT.	964421.92	240344.57
58	112+32.84	29.2 RT.	964425.20	240346.86
59	112+56.26	18.6 LT.	964424.07	240400.11
60	34+73.26	43.4 RT.	964428.67	240348.85
62	112+64.26	18.7 LT.	964431.17	240403.80
63	112+68.77	29.1 RT.	964457.09	240363.41
64	112+73.41	18.6 LT.	964439.31	240407.99
65	112+76.77	29.2 RT.	964464.21	240367.06
66	112+81.50	18.7 LT.	964446.48	240411.71
67	112+90.76	18.7 LT.	964454.70	240416.00
68	112+98.80	18.7 LT.	964461.82	240419.73
69	32+59.43	22.4 RT.	964452.65	240185.31
70	32+64.64	22.1 RT.	964448.77	240187.10
71	32+92.96	40.5 LT.	964387.28	240155.42
72	32+94.85	33.1 LT.	964390.61	240162.46
73	32+71.19	22.1 RT.	964444.20	240189.90
74	32+98.11	57.4 LT.	964370.29	240148.45
75	33+00.70	35.9 LT.	964383.38	240165.88
76	33+01.80	44.9 LT.	964375.79	240160.85
77	33+03.27	61.7 LT.	964361.86	240151.09
78	33+05.68	47.1 LT.	964370.53	240163.33
79	33+13.11	66.3 LT.	964348.79	240159.76
80	33+15.46	67.6 LT.	964345.57	240161.88
81	33+16.57	52.2 LT.	964357.10	240172.25
83	33+18.24	46.2 LT.	964360.68	240177.64
84	33+20.10	53.3 LT.	964353.34	240175.81
85	33+23.69	29.2 LT.	964370.85	240192.94
86	33+44.87	16.3 LT.	964370.83	240221.16
87	33+72.10	26.6 LT.	964352.22	240249.08
88	33+87.15	41.4 LT.	964335.50	240266.67
89	33+88.93	44.6 LT.	964332.22	240268.97
90	33+90.17	47.2 LT.	964329.60	240270.61
91	33+91.60	50.7 LT.	964326.11	240272.57
92	34+37.76	24.0 RT.	964405.18	240315.91




CONTROL POINTS				
93	34+25.75	24.0 RT.	964403.74	240303.99
94	34+96.28	24.0 LT.	964364.02	240377.62
95	35+11.28	24.0 LT.	964363.30	240387.57
96	35+51.17	24.0 LT.	964351.75	240411.15
97	35+63.17	24.0 LT.	964345.93	240216.62
98	35+72.19	24.0 LT.	964341.00	240420.06
99	35+88.31	24.0 LT.	964327.86	240427.30
100	35+91.16	24.0 LT.	964325.36	240428.66
101	35+99.16	24.0 LT.	964318.34	240432.50
102	32+95.08	24.4 RT.	964430.58	240203.77
103	33+25.25	25.0 RT.	964416.11	240222.92
104	33+51.83	24.0 RT.	964406.13	240241.65
105	34+06.88	24.0 RT.	964401.49	240285.25
106	33+32.72	18.1 LT.	964375.10	240207.86
107	33+35.99	16.6 LT.	964374.66	240211.83
108	112+91.42	30.8 LT.	964449.73	240427.05
109	112+91.32	41.2 LT.	964444.87	240436.27
110	112+81.25	40.9 LT.	964436.06	240431.37
111	112+81.43	28.3 LT.	964442.01	240420.24
112	112+74.42	28.1 LT.	964435.87	240416.84
113	33+28.31	58.7 LT.	964342.39	240183.08
114	33+30.03	53.8 LT.	964345.44	240187.70

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1857(400)

WIN
18574.00
HIGHWAY PLANS

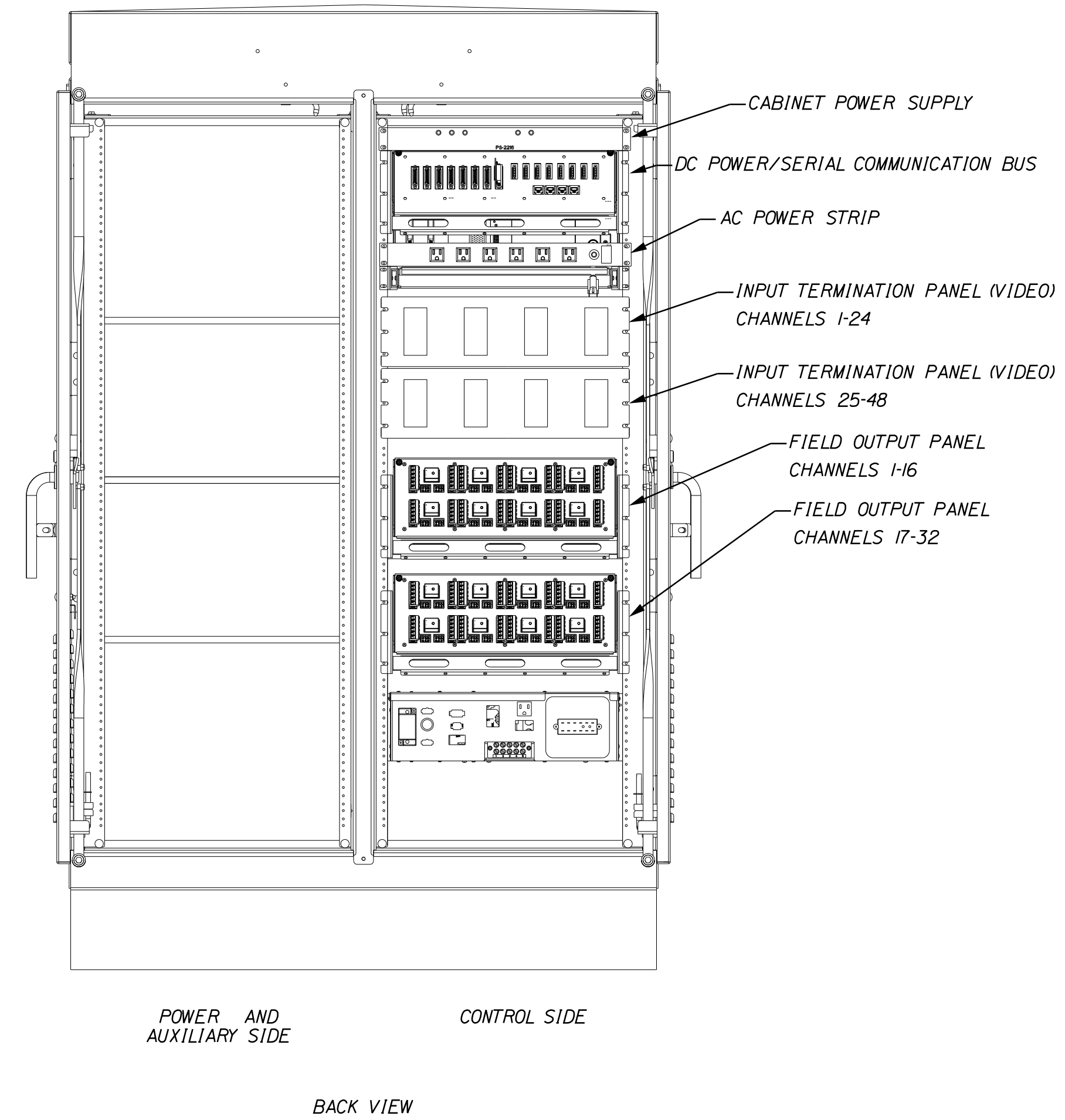
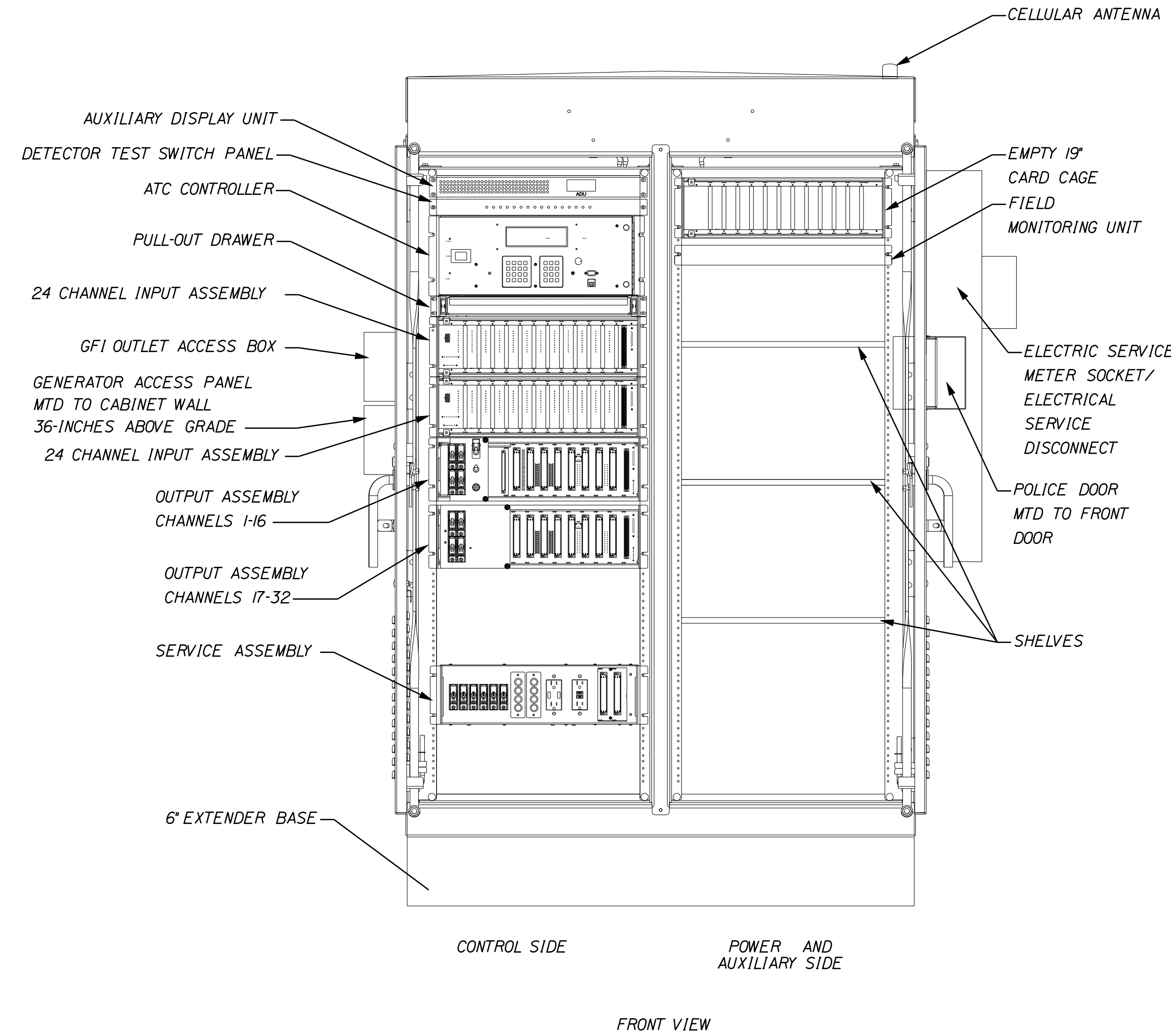


PROJ. MANAGER	B. KEEZER	BY	DATE
DESIGN-DETAILED	ACC	JRD	12/21
CHECKED-REVIEWED	ECF	AG	12/21
DESIGNS-DETAILED			
DESIGNS-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

BIDDEFORD
STATE ROUTE 9

GEOMETRIC PLANS (2 OF 2)

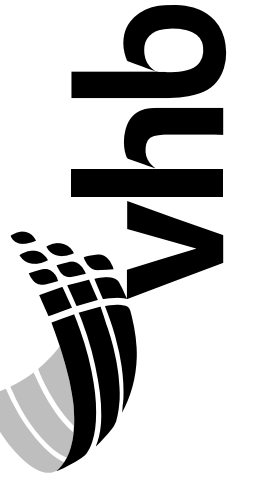
SHEET NUMBER
12
OF 32



MaineDOT 32/48 ATC CABINET
NOT TO SCALE

- NOTES:
- DRAWING SHOWN IS A SCHEMATIC REPRESENTATION OF THE ATC CABINET DEPICTING THE RELATIVE LOCATION OF VARIOUS IN-CABINET DEVICES AND SUBASSEMBLIES. THE EXACT SIZE OF VARIOUS ELEMENTS MAY VARY PER MANUFACTURER.
 - INPUT TERMINATION PANEL SHOWN IS FOR VIDEO BASED INPUTS.
 - DRAWING DEPICTS TWO INPUT PANELS AND TWO OUTPUT PANELS. THIS QUANTITY MAY BE REDUCED DEPENDING ON APPLICATION; SEE SPECIAL PROVISIONS FOR NUMBER OF PANELS TO BE SUPPLIED.
 - FAN AND THERMOSTAT SHALL BE INSTALLED ON CABINET FRAME ABOVE THE DOOR.
 - LED LIGHT STRIPS SHALL BE INSTALLED ON CABINET FRAME ABOVE THE DOOR AND ON THE UNDERSIDE OF THE LOWER SHELF.
 - THE SIZE OF THE METER SOCKET WILL VARY BASED ON THE LOCAL ELECTRIC UTILITY COMPANY REQUIREMENT.
 - THE METER SHALL BE INSTALLED SUCH THAT THE BOTTOM OF THE METER IS AT LEAST 48 INCHES ABOVE FINAL GRADE.
 - THE LOAD SIDE CABLE SHALL BE ROUTED THROUGH THE INTERIOR OF THE CABINET SUCH THAT IT DOES NOT BLOCK OR ENTER INTO AVAILABLE RACK SPACE. THE CABLE SHALL BE ROUTED BETWEEN THE EDGE OF THE RACK SYSTEM AND THE CABINET SIDE WALL, ALONG THE BOTTOM OF THE CABINET AND BELOW THE BOTTOM OPENING OF THE DOORS.

NOMINAL TERMINAL PANEL SIZE
PER 24 INPUT RACK:
LOOP = 6U HIGH (10.5")
VIDEO = 3U HIGH (5.25")



PROJ. MANAGER	B. KEEZER	BY	DATE
DESIGN-DETAILED	MJC	JAR	12/21
CHECKED-REVIEWED	CMR	AG	12/21
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

BIDDEFORD
STATE ROUTE 9

TRAFFIC SIGNAL PLAN

SHEET NUMBER

13

OF 32

LIST OF WORK ITEMS

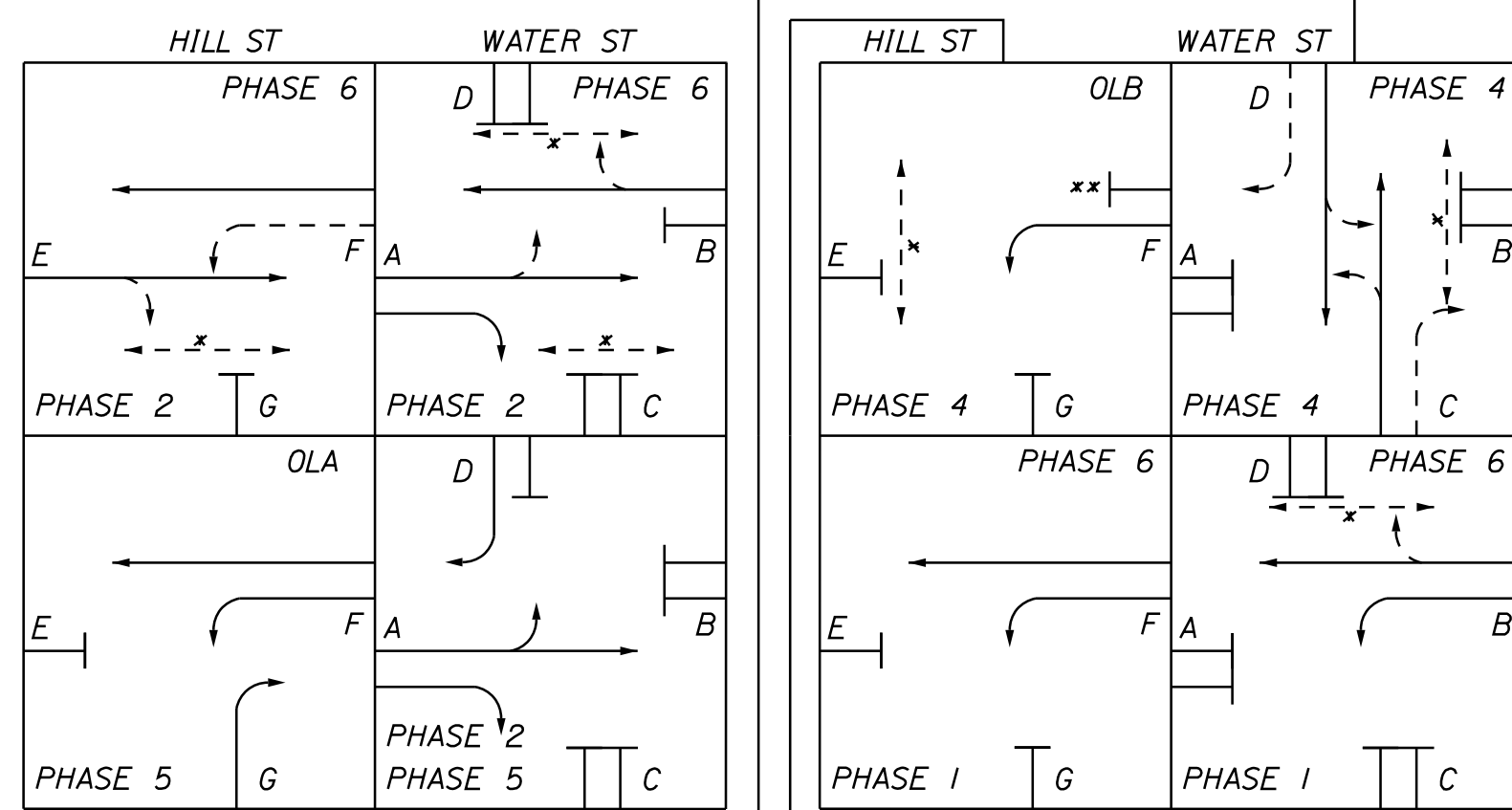
EQUIPMENT AND WORK ITEMS 643.80	QUANTITY
FURNISH AND INSTALL NEW ATCC MAINEDOT 32/48 SPEC GROUND MOUNT CABINET AND ATC CONTROLLER COMPLETE WITH ALL ANCILLARY EQUIPMENT AND WIRING INCLUDING CELL MODEM/FIELD MONITORING UNIT	1
FURNISH AND INSTALL ONE-WAY 3-SECTION 12-INCH TRAFFIC SIGNAL HEADS, WITH LED MODULES, TUNNEL VISORS, AND 5-INCH LOUVERED BACK PLATE WITH 3-INCH RETROREFLECTIVITY MOUNTED ON MAST ARMS WITH ASTRO-BRACKETS	10
FURNISH AND INSTALL ONE-WAY 5-SECTION 12-INCH TRAFFIC SIGNAL HEADS, WITH LED MODULES, TUNNEL VISORS, AND 5-INCH LOUVERED BACK PLATE WITH 3-INCH RETROREFLECTIVITY MOUNTED ON MAST ARMS WITH ASTRO-BRACKETS	2
FURNISH AND INSTALL ONE-WAY 3-SECTION 12-INCH TRAFFIC SIGNAL HEADS, WITH LED MODULES, TUNNEL VISORS, AND 5-INCH LOUVERED BACK PLATE WITH 3-INCH RETROREFLECTIVITY MOUNTED ON MAST ARM UPRIGHTS WITH BRACKETS	3
FURNISH AND INSTALL ONE-WAY 3-SECTION 12-INCH TRAFFIC SIGNAL HEADS, WITH LED MODULES, TUNNEL VISORS, AND 5-INCH LOUVERED BACK PLATE WITH 3-INCH RETROREFLECTIVITY MOUNTED ON PEDESTAL POLES WITH BRACKETS	5
FURNISH AND INSTALL ONE-WAY, 16X18-INCH LED SIDE OF POLE MOUNTED COUNTDOWN PEDESTRIAN SIGNAL HEAD	5
FURNISH AND INSTALL ONE-WAY, 16X18-INCH LED TOP OF POST MOUNTED COUNTDOWN PEDESTRIAN SIGNAL HEAD	5
FURNISH AND INSTALL ADA COMPLIANT ACCESSIBLE PEDESTRIAN SIGNAL (APS) BUTTON WITH 9'X15' RIO-3E INFORMATIONAL SIGN	10
FURNISH AND INSTALL 4-CHANNEL PREEMPTION PHASE SELECTOR	2
FURNISH AND INSTALL LIGHT-BASED PREEMPTION RECEIVERS WITH DETECTOR CABLE	6
FURNISH AND INSTALL PREEMPTION CONFIRMATION RED STROBE WITH CABLE	3
FURNISH AND INSTALL 19-INCH 1RU FIBER OPTIC 12-POSITION PATCH PANEL WITH PIGTAILS	1
FURNISH AND INSTALL ENVIRONMENTALLY HARDENED FIBER OPTIC ETHERNET SWITCH	1
FURNISH AND INSTALL MAST ARM MOUNTED SIGNS	14
FURNISH AND INSTALL NEW SIGNAL CABLE	-
IMPLEMENT LOCAL AND SYSTEM SIGNAL TIMINGS	-

THE LISTED QUANTITIES ARE APPROXIMATE AND ARE FURNISHED FOR INFORMATION ONLY.

DETECTOR SCHEDULE

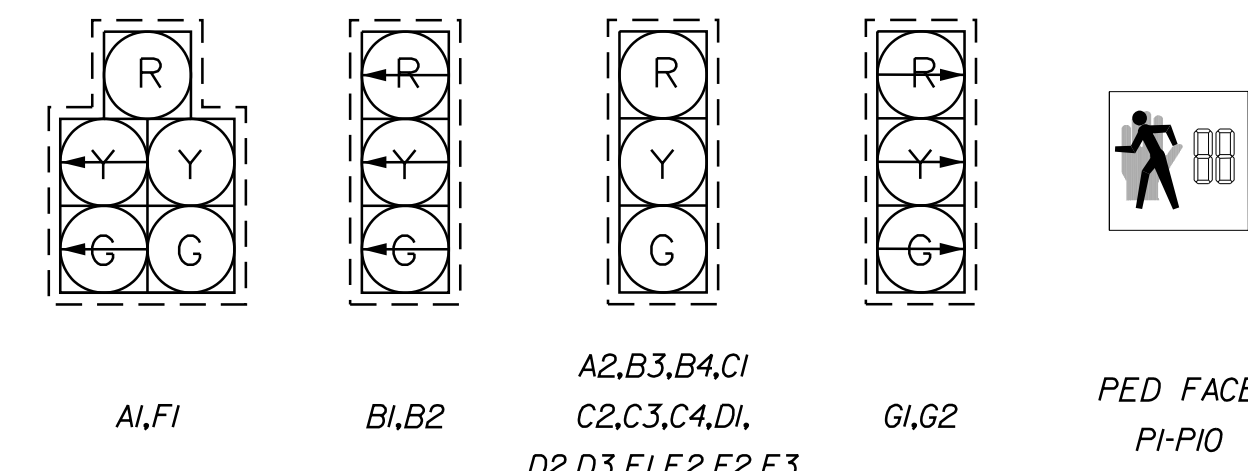
DETECTOR ZONE NO.	LOCATION	φ CALLED	φ EXT.	MODE A-ADVANCE B-STOPLINE	DELAY TIME	EXT. TIME
①	MAIN ST WB LEFT	1	1	B	-	-
②	MAIN ST WB THRU-RIGHT	6	6	B	-	-
③	MAIN ST WB LEFT	6	6	B	-	-
④	MAIN ST WB THRU	6	6	B	-	-
⑤	MAIN ST EB THRU-RIGHT	2	2	B	-	-
⑥	MAIN ST EB LEFT-THRU	5	5	B	-	-
⑦	WATER ST NB LEFT-THRU	4	4	B	-	-
⑧	WATER ST NB RIGHT	4	4	B	5	-
⑨	MILL DRIVE SB LEFT-THRU	4	4	B	-	-
⑩	MILL DRIVE SB RIGHT	4	4	B	5	-
⑪	HILL ST NB RIGHT	5	5	B	5	-

PHASE DIAGRAM

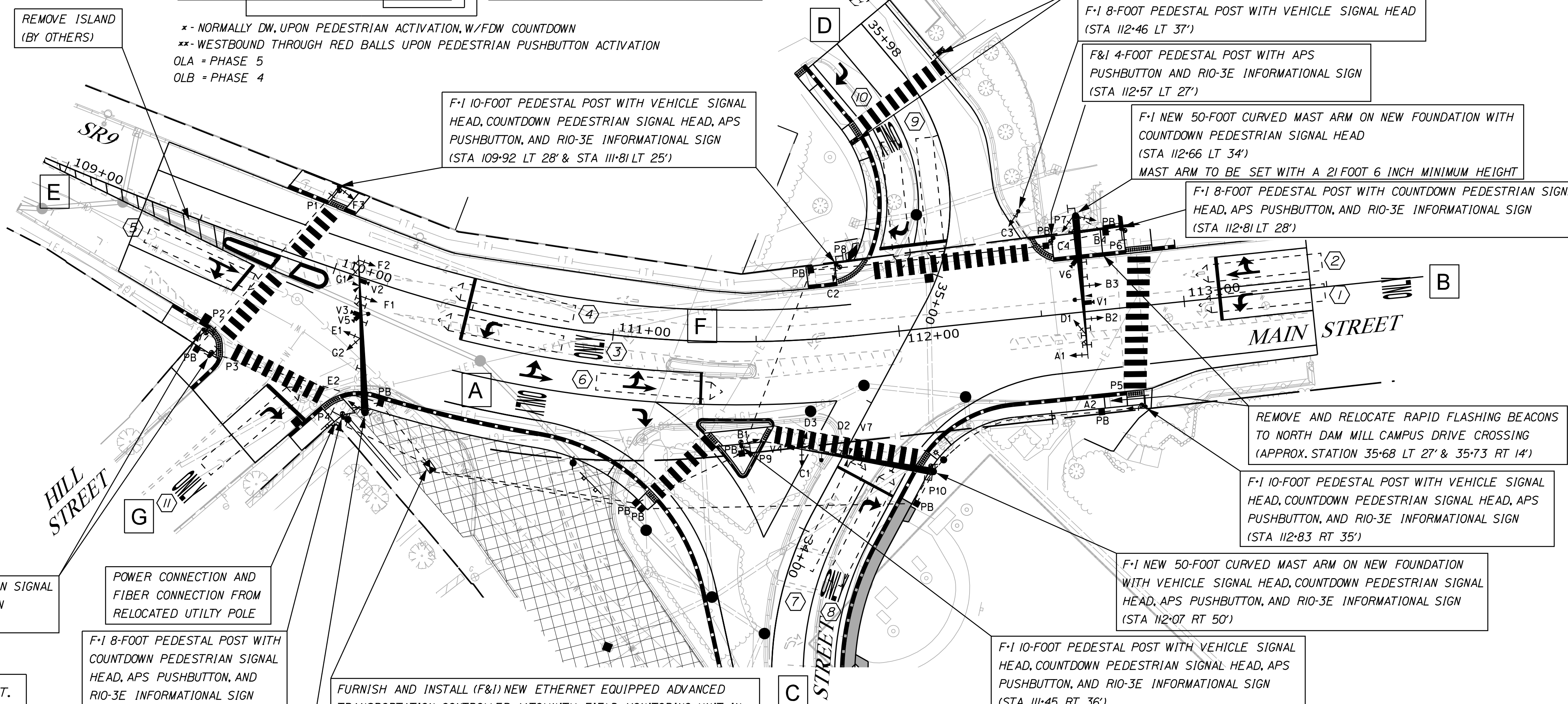


* - NORMALLY DW, UPON PEDESTRIAN ACTIVATION, W/FDW COUNTDOWN
 ** - WESTBOUND THROUGH RED BALLS UPON PEDESTRIAN PUSHBUTTON ACTIVATION
 OLA = PHASE 5
 OLB = PHASE 4

PROPOSED INDICATIONS



NOTE: ALL INDICATIONS SHALL BE 12' LIGHT EMITTING DIODES (LED'S) WITH 5" LOUVERED RETROREFLECTIVE BACKPLATES



F-1 8-FOOT PEDESTAL POST WITH COUNTDOWN PEDESTRIAN SIGNAL HEAD, APS PUSHBUTTON, AND RIO-3E INFORMATIONAL SIGN (STA 109+64 RT 36' & STA 109+69 RT 43')

POWER CONNECTION AND FIBER CONNECTION FROM RELOCATED UTILITY POLE

F-1 8-FOOT PEDESTAL POST WITH COUNTDOWN PEDESTRIAN SIGNAL HEAD, APS PUSHBUTTON, AND RIO-3E INFORMATIONAL SIGN (STA 110+19 RT 48') PLACE ADJACENT TO RELOCATED UTILITY POLE

F-1 NEW 55-FOOT CURVED MAST ARM ON NEW FOUNDATION (STA 110+49 RT 57') MAST ARM TO BE SET WITH A 21 FOOT 6 INCH MINIMUM HEIGHT

FURNISH AND INSTALL (F&I) NEW ETHERNET EQUIPPED ADVANCED TRANSPORTATION CONTROLLER (ATC) WITH FIELD MONITORING UNIT IN NEW ATC EXTENDED BASE MOUNT CABINET (ATCC). NEW CABINET TO BE INSTALLED ON A NEW CONCRETE FOUNDATION WITHIN THE EXISTING RIGHT-OF-WAY. ELECTRIC METER AND DISCONNECT SHALL BE MOUNTED ON THE POWER SIDE OF THE ATCC CABINET. IMPLEMENT LOCAL TIMINGS. (STA 110+49 RT 57')

RELOCATE RAPID FLASHING BEACONS TO NORTH DAM MILL CAMPUS DRIVE CROSSING (APPROX. STATION 35+68 LT 27' & 35+73 RT 14')

F-1 8-FOOT PEDESTAL POST WITH VEHICLE SIGNAL HEAD (STA 112+46 LT 37')

F&I 4-FOOT PEDESTAL POST WITH APS PUSHBUTTON AND RIO-3E INFORMATIONAL SIGN (STA 112+57 LT 27')

F-1 NEW 50-FOOT CURVED MAST ARM ON NEW FOUNDATION WITH COUNTDOWN PEDESTRIAN SIGNAL HEAD (STA 112+66 LT 34') MAST ARM TO BE SET WITH A 21 FOOT 6 INCH MINIMUM HEIGHT

F-1 8-FOOT PEDESTAL POST WITH COUNTDOWN PEDESTRIAN SIGNAL HEAD, APS PUSHBUTTON, AND RIO-3E INFORMATIONAL SIGN (STA 112+81 LT 28')

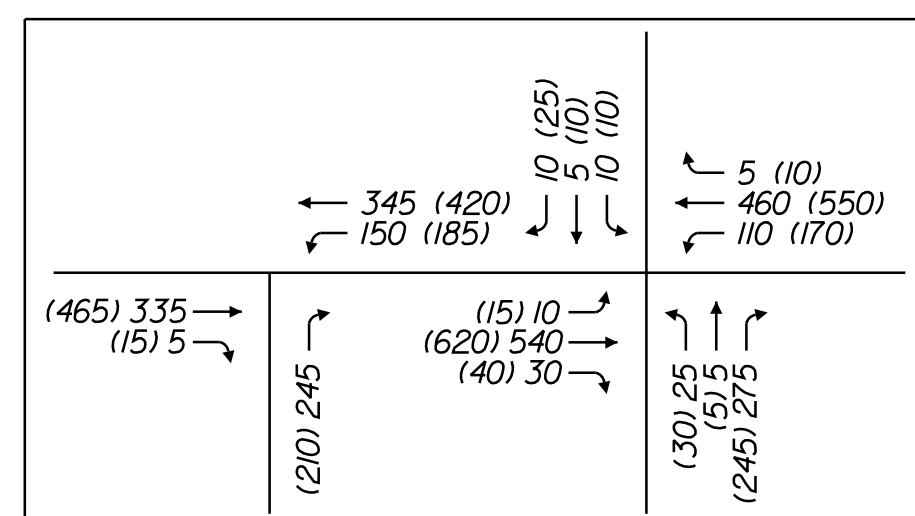
REMOVE AND RELOCATE RAPID FLASHING BEACONS TO NORTH DAM MILL CAMPUS DRIVE CROSSING (APPROX. STATION 35+68 LT 27' & 35+73 RT 14')

F-1 10-FOOT PEDESTAL POST WITH VEHICLE SIGNAL HEAD, COUNTDOWN PEDESTRIAN SIGNAL HEAD, APS PUSHBUTTON, AND RIO-3E INFORMATIONAL SIGN (STA 112+83 RT 35')

F-1 NEW 50-FOOT CURVED MAST ARM ON NEW FOUNDATION WITH VEHICLE SIGNAL HEAD, COUNTDOWN PEDESTRIAN SIGNAL HEAD, APS PUSHBUTTON, AND RIO-3E INFORMATIONAL SIGN (STA 112+07 RT 50')

F-1 10-FOOT PEDESTAL POST WITH VEHICLE SIGNAL HEAD, COUNTDOWN PEDESTRIAN SIGNAL HEAD, APS PUSHBUTTON, AND RIO-3E INFORMATIONAL SIGN (STA 111+45 RT 36')

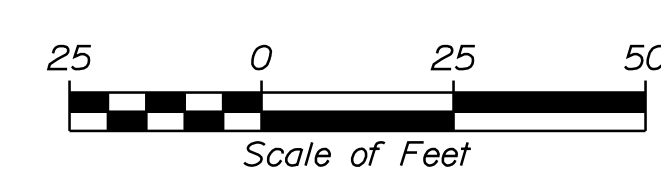
2017 SYSTEM DESIGN VOLUMES AM (PM)



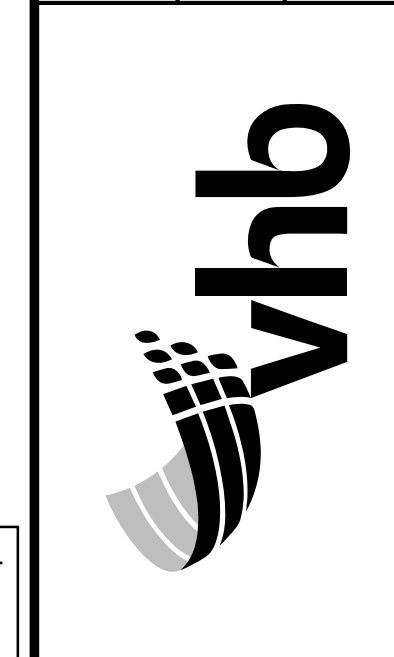
LEGEND

- ☒ BASE MOUNTED TS2-1 CABINET WITH CONTROLLER
- ➔ PROPOSED VEHICULAR HEAD (BLACK)
- ⊥ OVERHEAD SIGN
- ┆ MAST ARM POLE
- ALUMINUM PEDESTAL POLE
- ▲ PREEMPTION RECEIVER
- CONFIRMATION STROBE
- ☒ PEDESTRIAN SIGNAL HEAD (BLACK) WITH APS PUSH BUTTON AND INFORMATIONAL SIGN
- UNDERGROUND CONDUIT
- VIDEO DETECTION CAMERA
- ▭ VIDEO DETECTION ZONE
- PB ■ PULL BOX

PLAN



STATE OF MAINE
 DEPARTMENT OF TRANSPORTATION
 STP-1857(400)



PROJ. MANAGER	B. KEEZER	DATE
DESIGN-DETAILED	MJC	12/21
CHECKED-REVIEWED	JAR	12/21
DESIGN-DETAILED	AG	
DESIGN-DETAILED		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

BIDDEFORD
 STATE ROUTE 9
 TRAFFIC SIGNAL PLAN

SHEET NUMBER
 14
 OF 32

LIST OF WORK ITEMS

EQUIPMENT AND WORK ITEMS xxx.yyyz	QUANTITY
FURNISH AND INSTALL PRECAST CONCRETE JUNCTION BOX (ITEM 626.11)	10 EA
FURNISH AND INSTALL (3-INCH) NON-METALLIC CONDUIT (ITEM 626.22)	435 LF
FURNISH AND INSTALL NON-METALLIC UNDER PAVEMENT CONDUIT (SCHEDULE 80 OR GREATER) (ITEM 626.251)	455 LF
FURNISH AND INSTALL NON-METALLIC CONDUIT, CONCRETE ENCASED (ITEM 626.221)	40 LF
FURNISH AND INSTALL CONTROLLER CABINET FOUNDATION (ITEM 626.35)	1 EA
FURNISH AND INSTALL 24-INCH DIAMETER FOUNDATION (ITEM 626.421)	84 LF
FURNISH AND INSTALL 60-IN DIAMETER FOUNDATIONS (ITEM 626.48)	37 LF
FURNISH AND INSTALL TRAFFIC CONTROL SYSTEM (ITEM 643.81)	1 LS
FURNISH AND INSTALL VIDEO DETECTION SYSTEM FOR 7 APPROACHES, COMPLETE (ITEM 643.83)	1 LS
FURNISH AND INSTALL 50' CURVED MAST ARM POLE (ITEM 643.91)	2 EA
FURNISH AND INSTALL 55' CURVED MAST ARM POLE (ITEM 643.91)	1 EA
FURNISH AND INSTALL 4-FOOT PEDESTAL POLE (ITEM 643.92)	1 EA
FURNISH AND INSTALL 8-FOOT PEDESTAL POLE (ITEM 643.92)	4 EA
FURNISH AND INSTALL 10-FOOT PEDESTAL POLE (ITEM 643.92)	5 EA
FURNISH AND INSTALL 15-FOOT PEDESTAL POLE (RRFB) (ITEM 643.92)	2 EA
FURNISH AND INSTALL LED BLANK OUT SIGN (ITEM 645.512)	2 EA

THE LISTED QUANTITIES ARE APPROXIMATE AND ARE FURNISHED FOR INFORMATION ONLY.

STRUCTURE LIST

STRUCTURE	DESCRIPTION	FOUNDATION
(A-C)	CONTROLLER CABINET	L48"xW36"xH48"
(A-M)	50' MAST ARM	TBD
(A-PI)	10' PEDESTAL POLE	24" DIAMETER
(B-M)	50' MAST ARM	TBD
(B-PI)	8' PEDESTAL POLE	24" DIAMETER
(B-P2)	10' PEDESTAL POLE	24" DIAMETER
(B-P3)	4' PEDESTAL POLE	24" DIAMETER
(B-P4)	PEDESTAL POLE (RELOCATED/NEW)	24" DIAMETER
(C-PI)	10' PEDESTAL POLE	24" DIAMETER
(C-P2)	PEDESTAL POLE (RELOCATED/NEW)	24" DIAMETER
(D-PI)	10' PEDESTAL POLE	24" DIAMETER
(E-M)	55' MAST ARM	TBD
(E-PI)	8' PEDESTAL POLE	24" DIAMETER
(G-PI)	10' PEDESTAL POLE	24" DIAMETER
(H-PI)	8' PEDESTAL POLE	24" DIAMETER
(H-P2)	8' PEDESTAL POLE	24" DIAMETER

SIGNAL TIMING SCHEDULE

NEMA RING AND BARRIER DIAGRAM

ITEM / PHASE	NEMA RING AND BARRIER DIAGRAM					
	1	2	4	6	5	3
MOVEMENT	B (LT)	A, E	-	C, D	F, G	B, F
MINIMUM INITIAL	5	7	-	5	5	7
PASSAGE TIME	3.0	3.0	-	3.0	3.0	3.0
MAXIMUM 1	30	50	-	25	20	50
MAXIMUM 2	-	-	-	-	-	-
YELLOW	3.5	3.5	-	3.5	3.5	3.5
ALL RED	3.0	3.0	-	2.5	3.0	3.0
PED WALK	-	5.0	-	5.0	-	5.0
PED CLEAR	-	14.0	-	15.0	-	14.0
RECALL	OFF	SOFT	-	OFF	OFF	SOFT
DETECTOR	PR	PR	-	PR	PR	PR
PRE-EMPT PRIORITY	3	4	-	6	5	3
FLASH	FR	FY	-	FR	FR	FY
DUAL ENTRY	OFF	ON	-	OFF	OFF	ON

NOTES: S = SOFT RECALL Y = YELLOW
O = RECALL OFF R = RED
PR = PRESENCE D = DARK

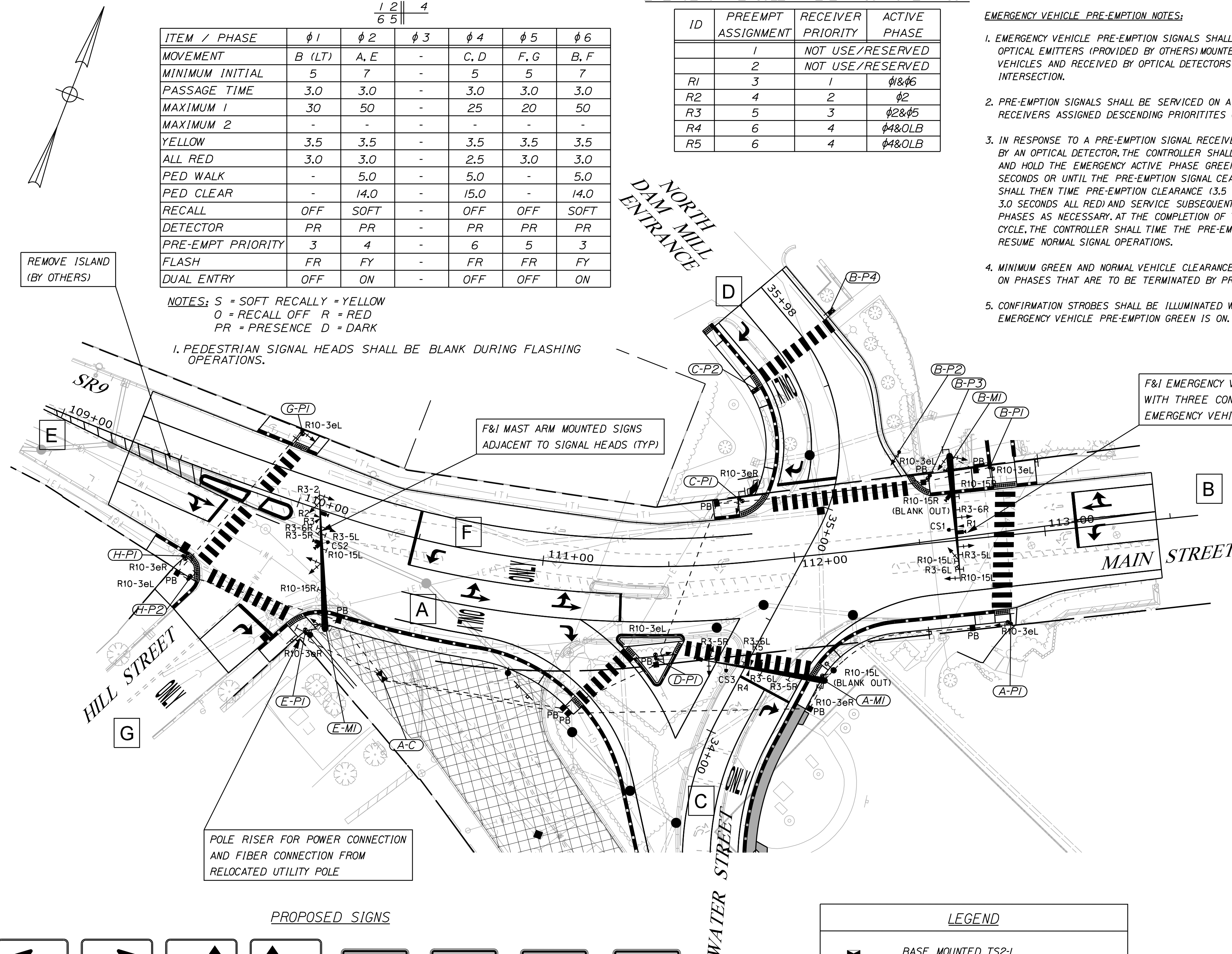
1. PEDESTRIAN SIGNAL HEADS SHALL BE BLANK DURING FLASHING OPERATIONS.

EMERGENCY VEHICLE PRE-EMPTION OPERATION

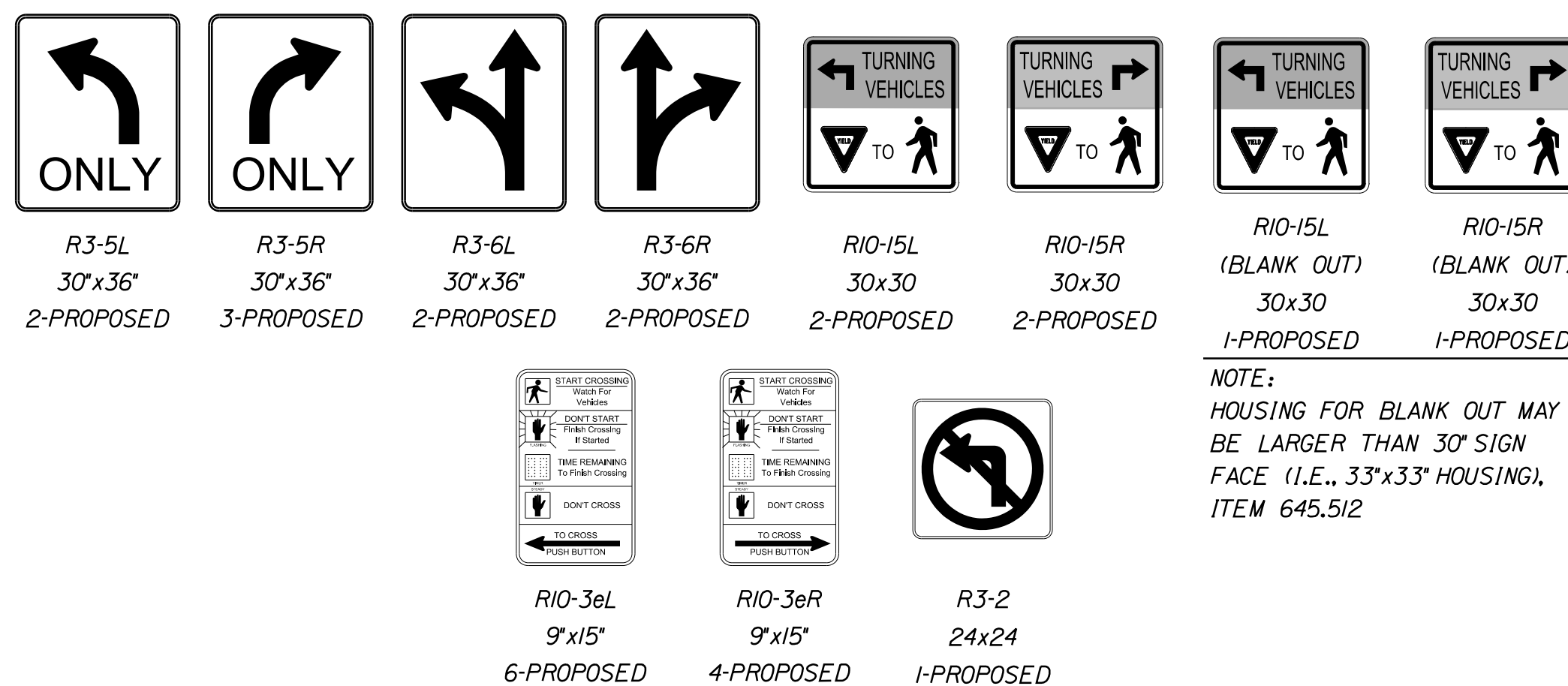
ID	PREEMPT ASSIGNMENT	RECEIVER PRIORITY	ACTIVE PHASE
	1	NOT USE/RESERVED	
	2	NOT USE/RESERVED	
R1	3	1	φ1&φ6
R2	4	2	φ2
R3	5	3	φ2&φ5
R4	6	4	φ4&OLB
R5	6	4	φ4&OLB

EMERGENCY VEHICLE PRE-EMPTION NOTES:

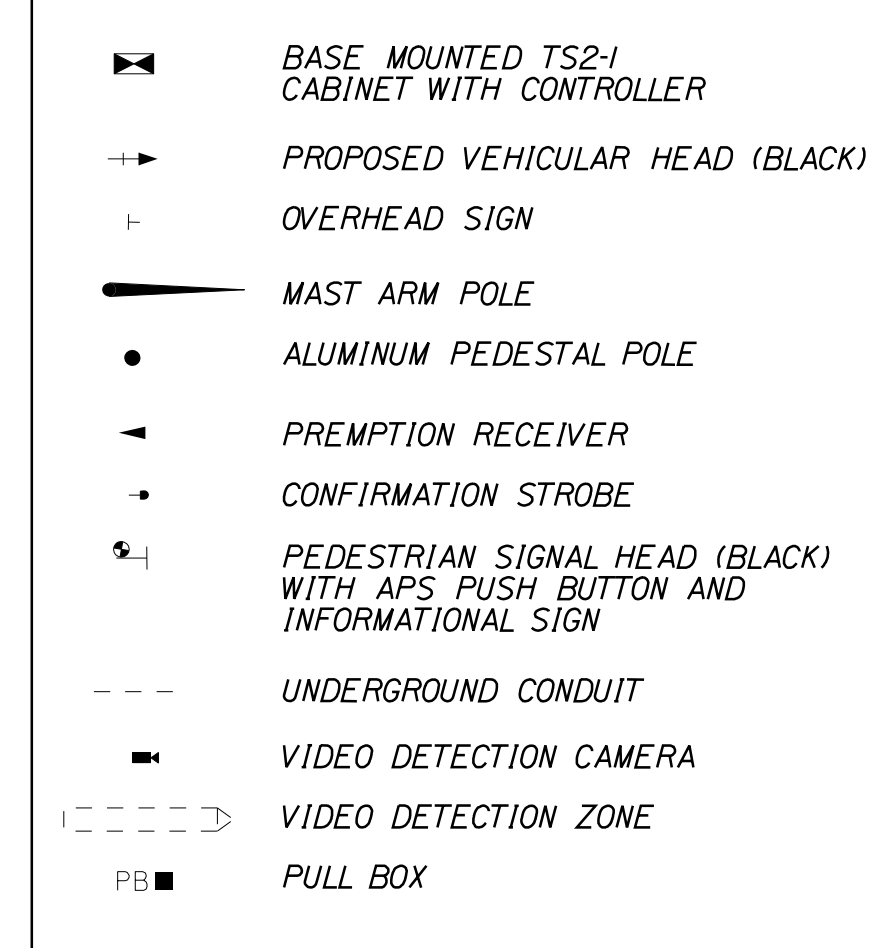
- EMERGENCY VEHICLE PRE-EMPTION SIGNALS SHALL BE TRANSMITTED BY OPTICAL EMITTERS (PROVIDED BY OTHERS) MOUNTED IN EMERGENCY VEHICLES AND RECEIVED BY OPTICAL DETECTORS LOCATED AT THE INTERSECTION.
- PRE-EMPTION SIGNALS SHALL BE SERVICED ON A PRIORITY BASIS WITH RECEIVERS ASSIGNED DESCENDING PRIORITIES (3-HIGHEST, 7-LOWEST)
- IN RESPONSE TO A PRE-EMPTION SIGNAL RECEIVED AT AN INTERSECTION BY AN OPTICAL DETECTOR, THE CONTROLLER SHALL HOLD OR ADVANCE TO AND HOLD THE EMERGENCY ACTIVE PHASE GREEN FOR A MINIMUM OF 10 SECONDS OR UNTIL THE PRE-EMPTION SIGNAL CEASES. THE CONTROLLER SHALL THEN TIME PRE-EMPTION CLEARANCE (3.5 SECONDS YELLOW AND 3.0 SECONDS ALL RED) AND SERVICE SUBSEQUENT EMERGENCY ACTIVE PHASES AS NECESSARY. AT THE COMPLETION OF THE PRE-EMPTION CYCLE, THE CONTROLLER SHALL TIME THE PRE-EMPTION CLEARANCE AND RESUME NORMAL SIGNAL OPERATIONS.
- MINIMUM GREEN AND NORMAL VEHICLE CLEARANCE SHALL BE PROVIDED ON PHASES THAT ARE TO BE TERMINATED BY PRE-EMPTION DEMAND.
- CONFIRMATION STROBES SHALL BE ILLUMINATED WHENEVER ANY EMERGENCY VEHICLE PRE-EMPTION GREEN IS ON.



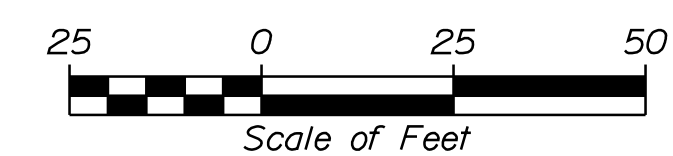
PROPOSED SIGNS



LEGEND



PLAN



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
STP-1857(400)
WIN 18574.00
HIGHWAY PLANS

vhb

PROJ. MANAGER	B. KEEZER	DATE	DATE
DESIGN DETAILED	MJC	JAR	12/21
CHECKED/REVIEWED	CMB	AG	12/21
DESIGN DETAILED			
DESIGN DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

BIDDEFORD
STATE ROUTE 9
TRAFFIC SIGNAL PLAN

SHEET NUMBER
15
OF 32

Filename: ... \HIGHWAY\MSTA\016_Signal_03.dgn
Division: HIGHWAY
Username: jamesdavis
Date: 1/6/2022

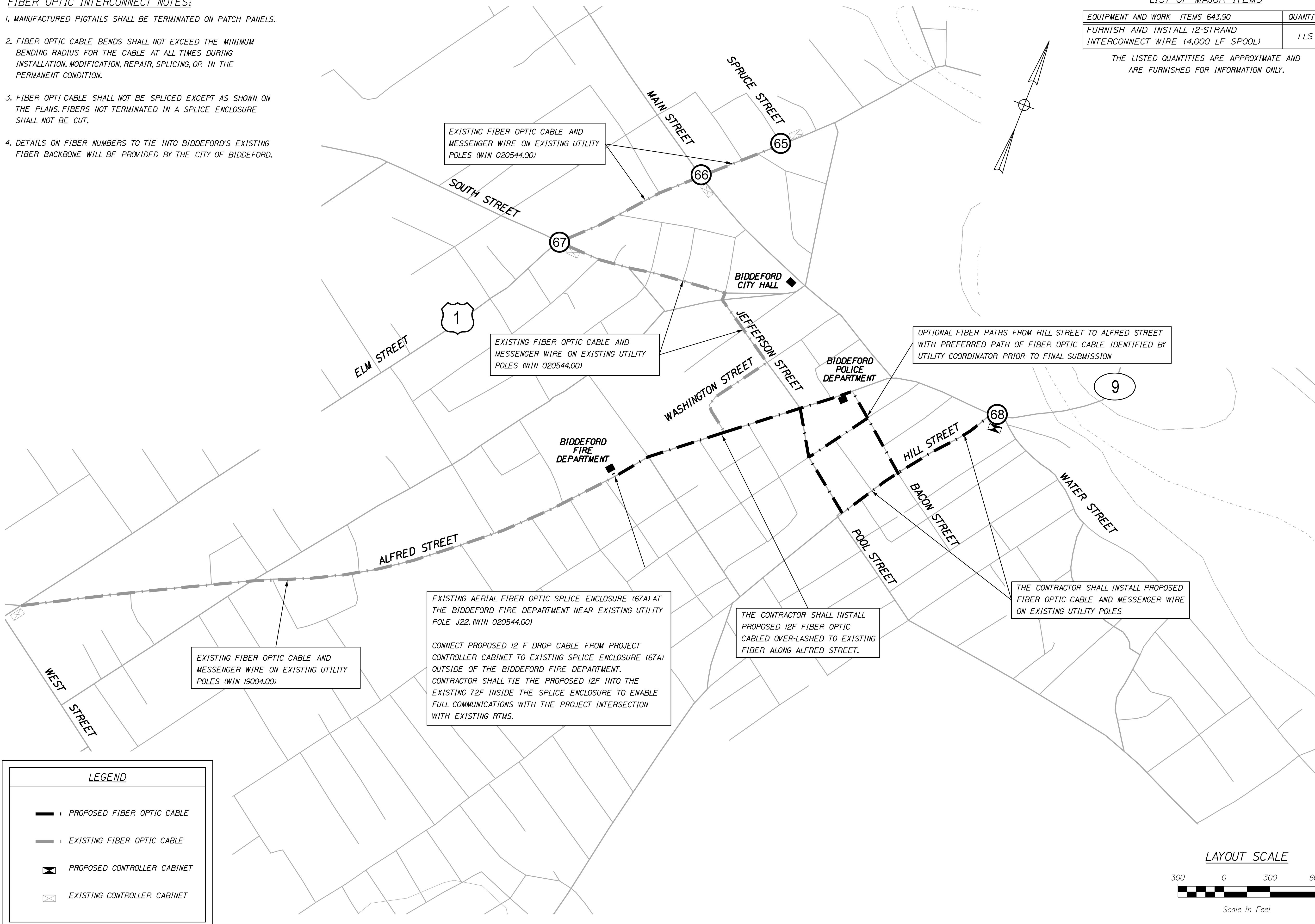
FIBER OPTIC INTERCONNECT NOTES:

1. MANUFACTURED PIGTAILS SHALL BE TERMINATED ON PATCH PANELS.
2. FIBER OPTIC CABLE BENDS SHALL NOT EXCEED THE MINIMUM BENDING RADIUS FOR THE CABLE AT ALL TIMES DURING INSTALLATION, MODIFICATION, REPAIR, SPLICING, OR IN THE PERMANENT CONDITION.
3. FIBER OPTIC CABLE SHALL NOT BE SPLICED EXCEPT AS SHOWN ON THE PLANS. FIBERS NOT TERMINATED IN A SPLICE ENCLOSURE SHALL NOT BE CUT.
4. DETAILS ON FIBER NUMBERS TO TIE INTO BIDDEFORD'S EXISTING FIBER BACKBONE WILL BE PROVIDED BY THE CITY OF BIDDEFORD.

LIST OF MAJOR ITEMS

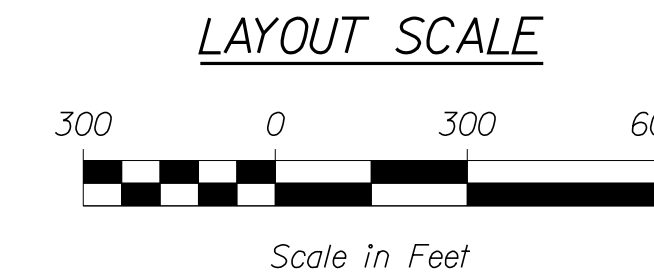
EQUIPMENT AND WORK ITEMS	QUANTITY
643.90 FURNISH AND INSTALL 12-STRAND INTERCONNECT WIRE (4,000 LF SPOOL)	1 LS

THE LISTED QUANTITIES ARE APPROXIMATE AND ARE FURNISHED FOR INFORMATION ONLY.



LEGEND

- PROPOSED FIBER OPTIC CABLE
- EXISTING FIBER OPTIC CABLE
- PROPOSED CONTROLLER CABINET
- EXISTING CONTROLLER CABINET



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
STP-1857(400)



PROJ. MANAGER	B. KEEZER	DATE
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DESIGN-DETAILED		
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REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

BIDDEFORD
STATE ROUTE 9
INTERCONNECT PLAN

SHEET NUMBER
16
OF 32

Filename: ... \HIGHWAY\MSTA\017_Signal_04.dgn Division: HIGHWAY Username: jamesdavis Date: 1/6/2022

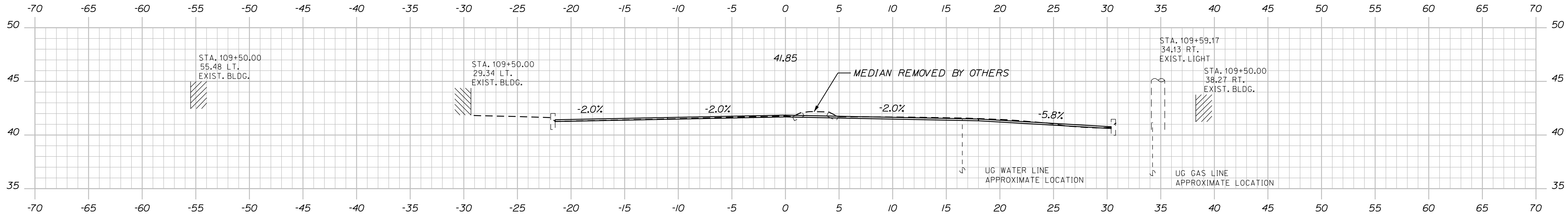
HIGHWAY PLANS
WIN
18574.00

Date: 1/6/2022

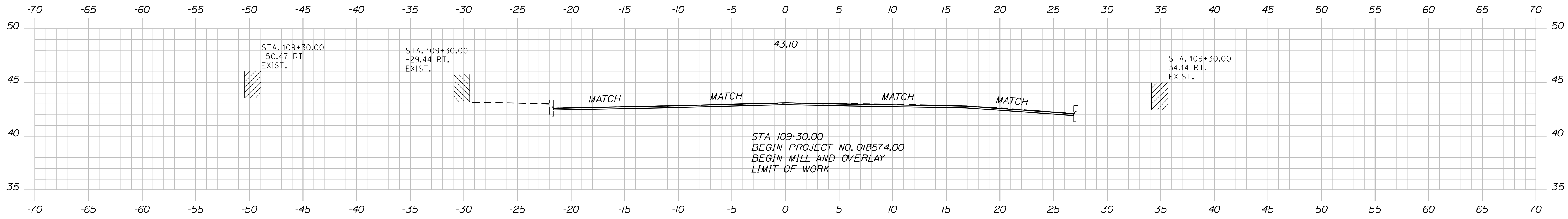
Username: jomedavis

Division: HIGHWAY

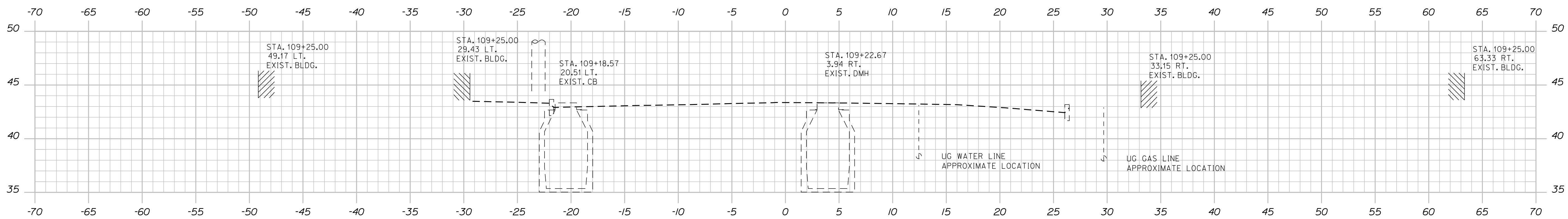
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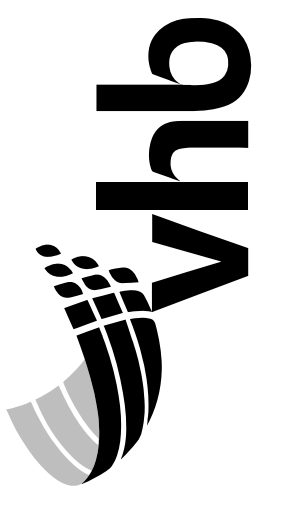
109+50.00



109+30.00



109+25.00



PROJ. MANAGER	B. KEEZER	DATE
DESIGN DETAILED	ACC	12/21
CHECKED-REVIEWED	JRD	12/21
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DESIGN DETAILED		
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REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

BIDDEFORD
STATE ROUTE 9
CROSS SECTIONS

SHEET NUMBER

17

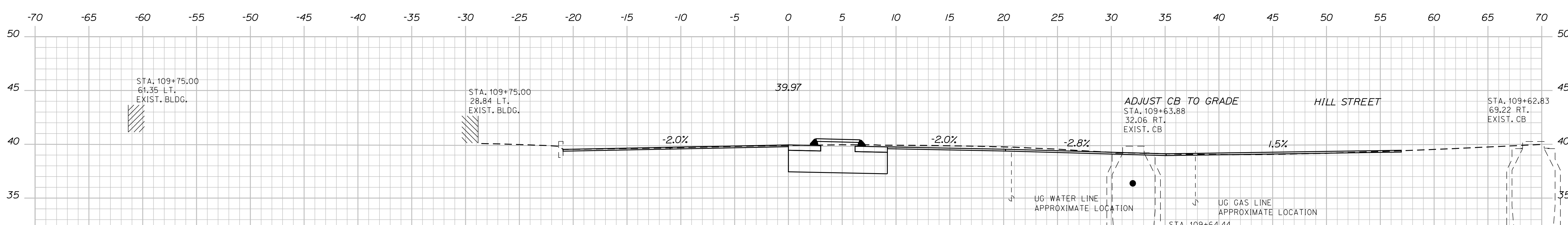
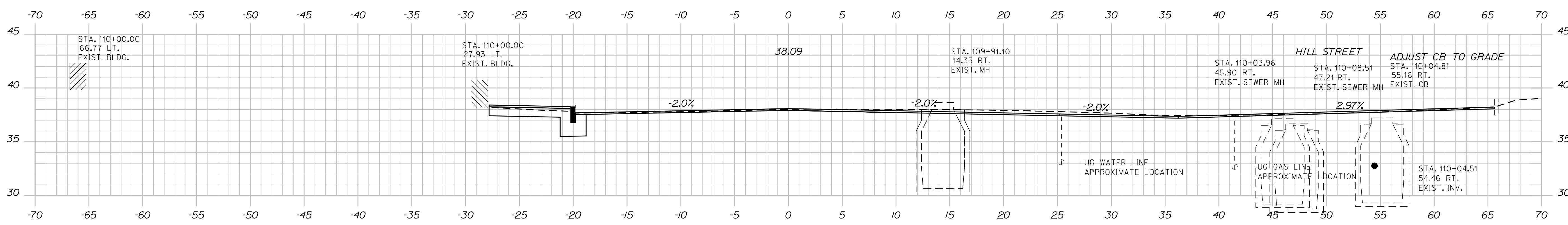
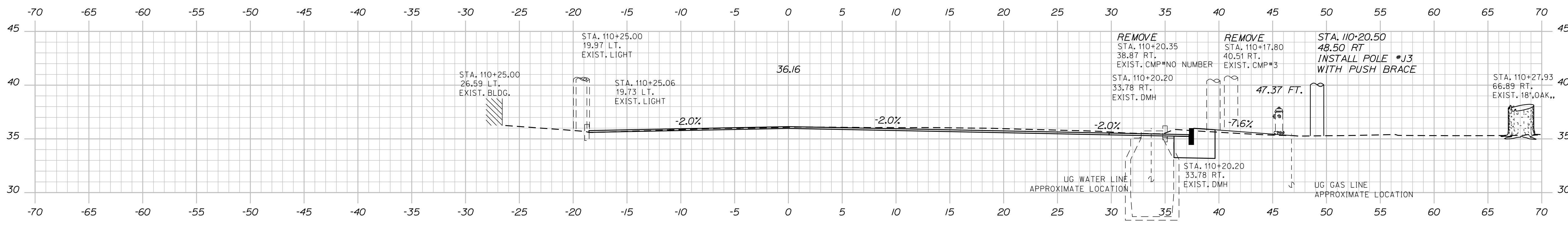
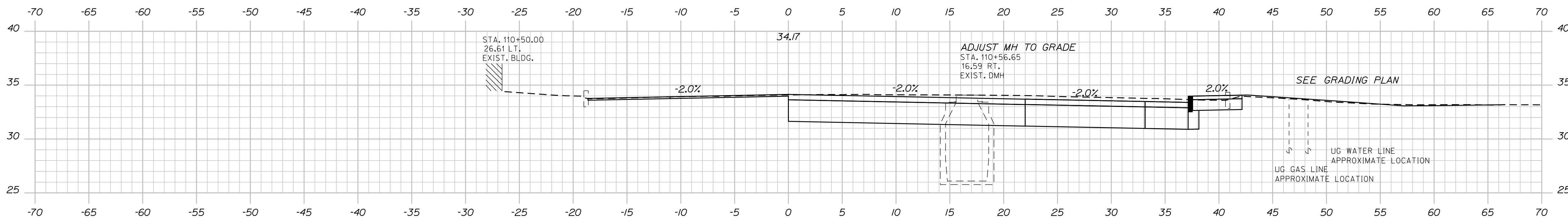
OF 32

Date: 1/6/2022

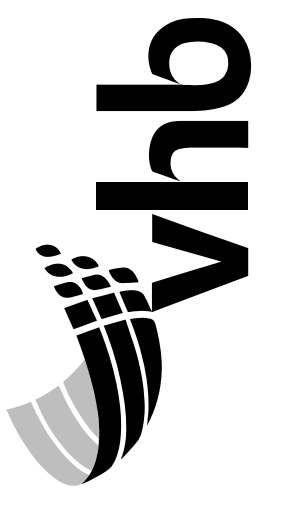
Username: jamesdavis

Division: HIGHWAY

Filename: ... \HIGHWAY\MSTA\Xsect_Main_St.dgn



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
STP-1857(400)
WIN
18574.00
HIGHWAY PLANS



PROJ. MANAGER	B. KEEZER	DATE
DESIGN-DETAILED	ACC	12/21
CHECKED-REVIEWED	JRD	12/21
DESIGN-DETAILED	AG	
DESIGN-DETAILED		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

BIDDEFORD
STATE ROUTE 9
CROSS SECTIONS

SHEET NUMBER
18
OF 32

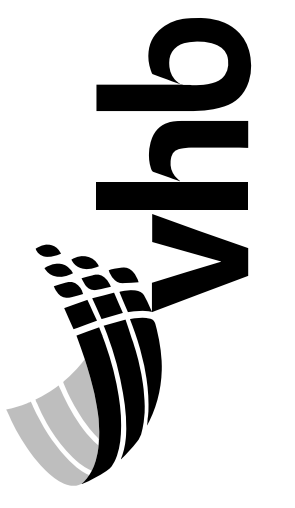
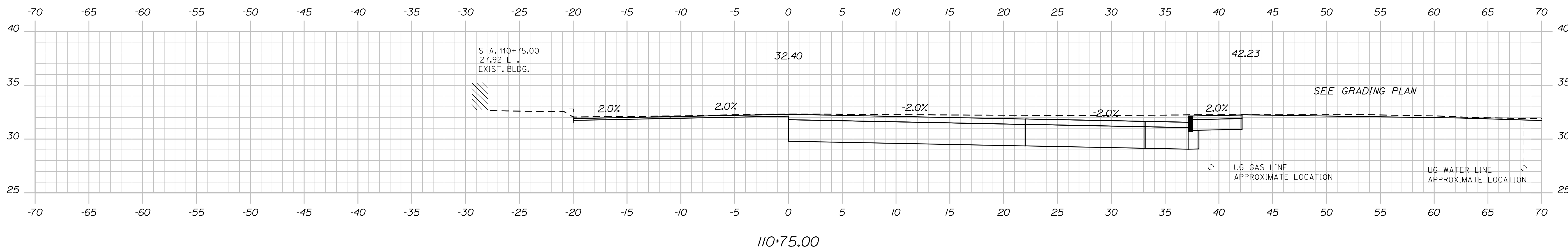
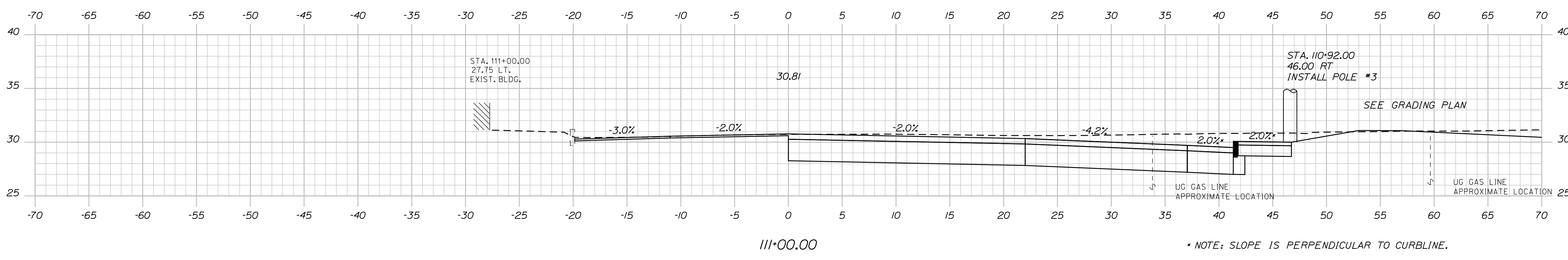
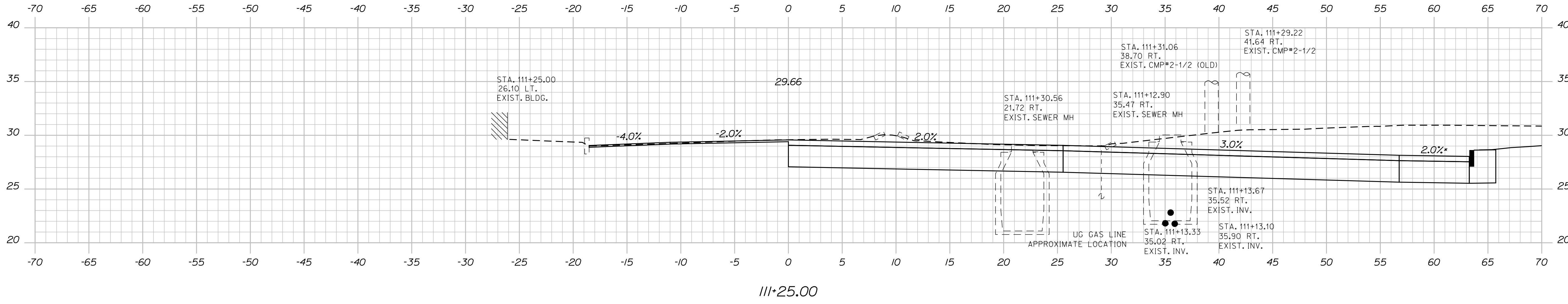
Sta. 109+75.00 to Sta. 110+50.00

Date: 1/6/2022

Username: jamesdavis

Division: HIGHWAY

Filename: ... \HIGHWAY\MSTA\Xsect_Main_St.dgn



PROJ. MANAGER	DATE	BY	B. KEIZER
DESIGN-DETAILED	12/21	JRD	
CHECKED-REVIEWED	12/21	AG	
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DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

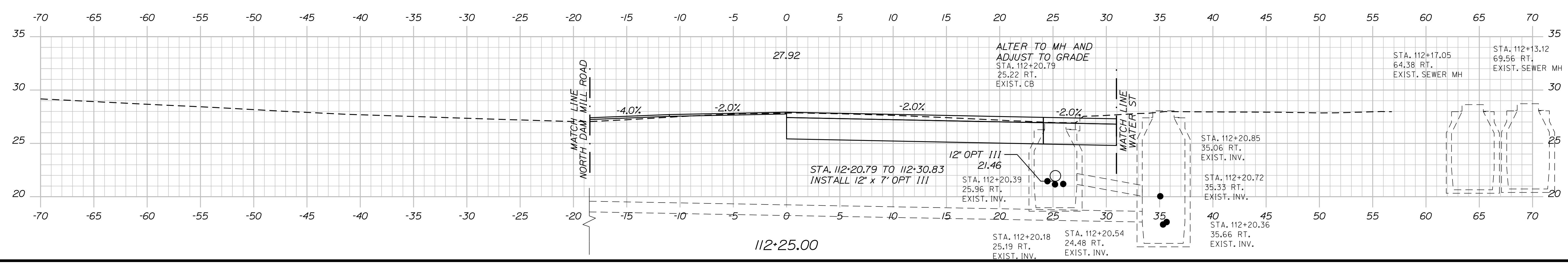
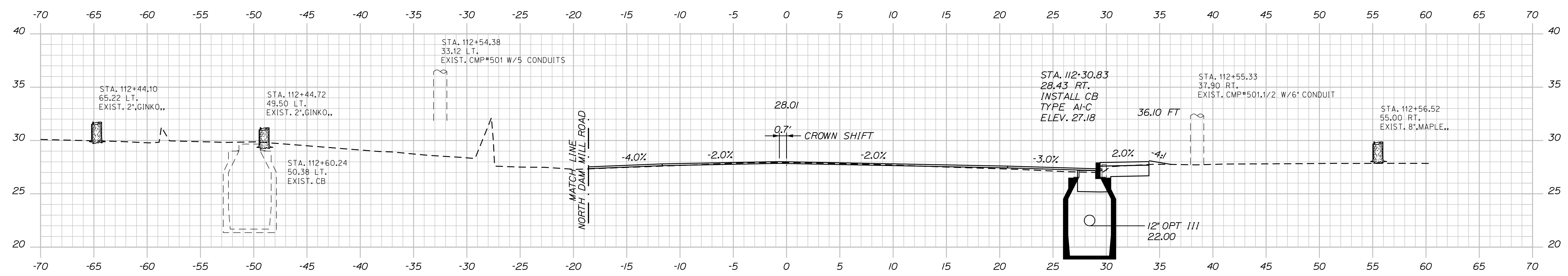
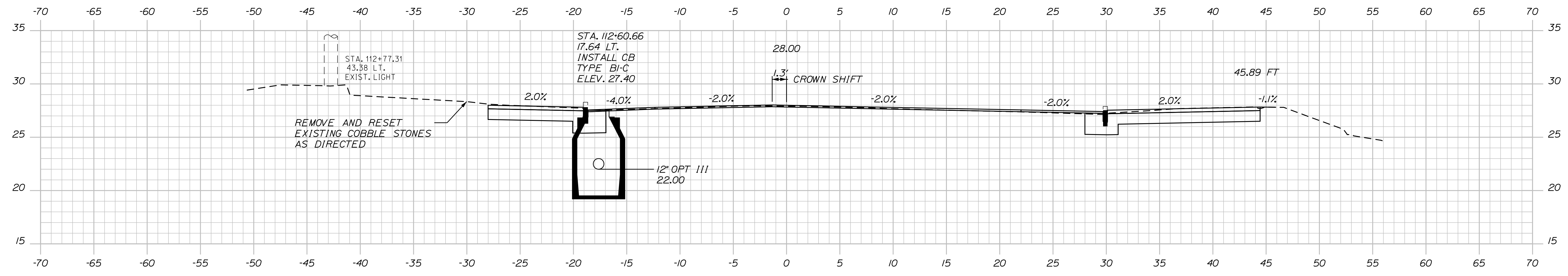
BIDDEFORD
STATE ROUTE 9
CROSS SECTIONS

Date: 1/6/2022

Username: jomedavis

Division: HIGHWAY

Filename: ... \HIGHWAY\MSTA\Xsect_Main_St.dgn



Sta. 112+25.00 to Sta. 112+75.00



PROJ. MANAGER	DATE
ACC	12/21
ECF	12/21
DESIGN DETAILED	
DESIGN REVIEWED	
DESIGN APPROVED	
REVISIONS 1	
REVISIONS 2	
REVISIONS 3	
REVISIONS 4	
FIELD CHANGES	

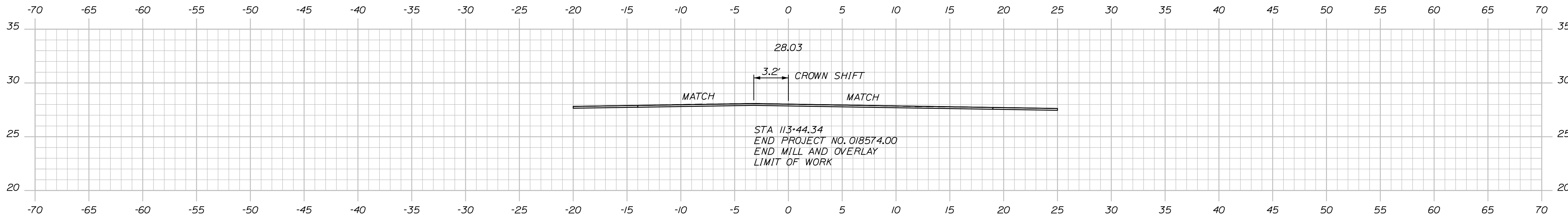
BIDDEFORD
STATE ROUTE 9
CROSS SECTIONS

Date: 1/6/2022

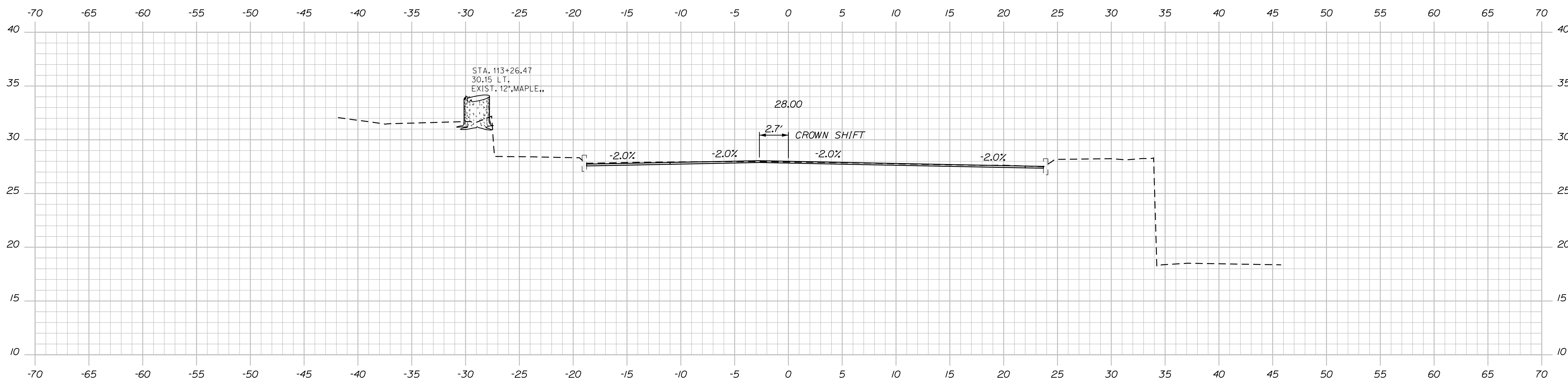
Username: jomedavis

Division: HIGHWAY

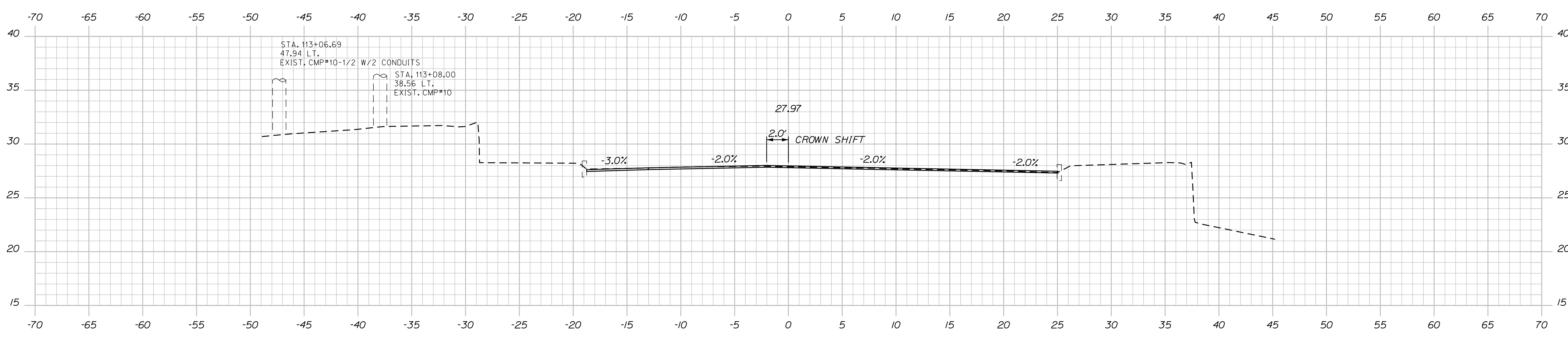
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113+44.34

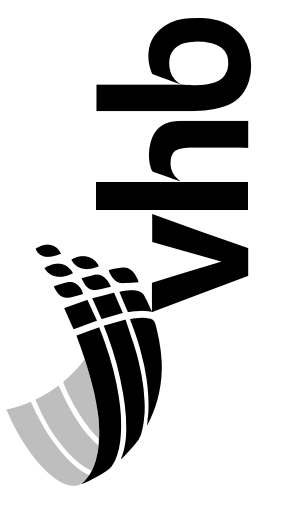


113+25.00



113+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
STP-1857(400)
WIN
18574.00
HIGHWAY PLANS



PROJ. MANAGER	DATE	BY
B. KEIZER	12/21	AK
DESIGN DETAILED	12/21	AG
CHECKED-REVIEWED		
DESIGN DETAILED		
DESIGN DETAILED		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

BIDDEFORD
STATE ROUTE 9
CROSS SECTIONS

SHEET NUMBER
22
OF 32

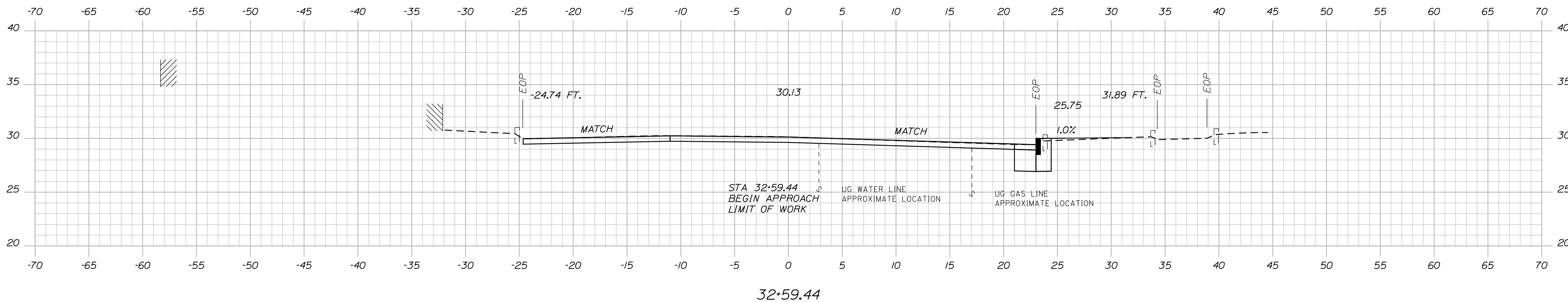
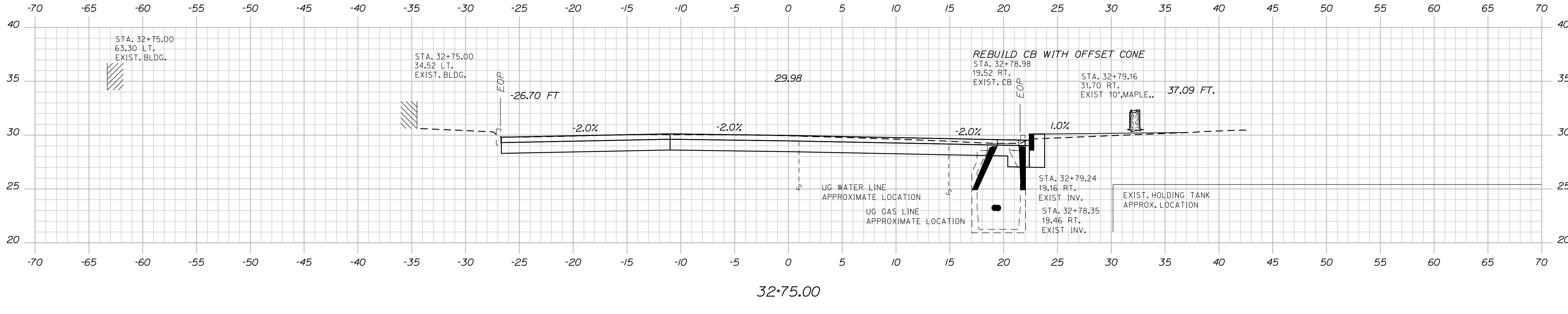
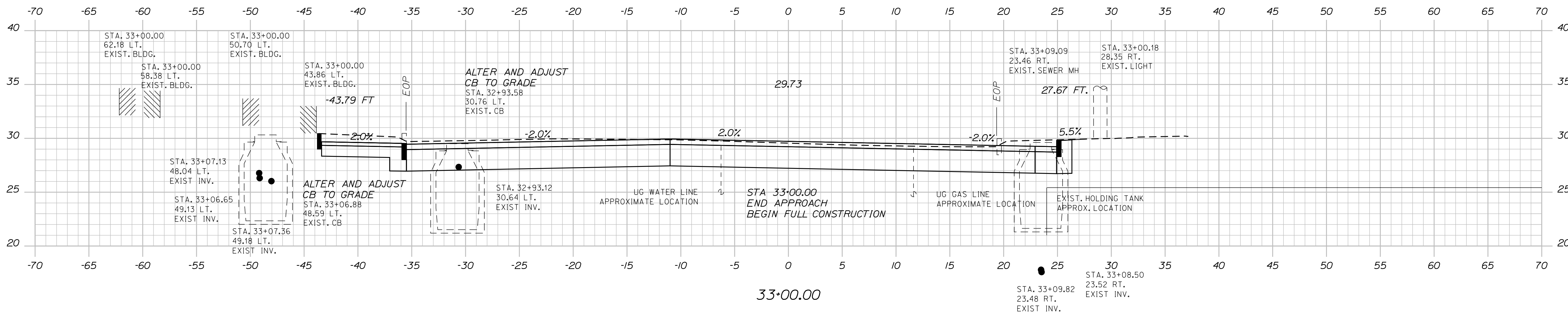
Sta. 113+00.00 to Sta. 113+50.00

Date: 1/6/2022

Username: jomedavis

Division: HIGHWAY

Filename: ... \HIGHWAY\MSTA\Xsect_WaterSt.dgn



PROJ. MANAGER	BY	DATE
B. KEIZER	AGC	12/20
DESIGN DETAILED	ECF	
CHECKED-REVIEWED	AG	
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DESIGN DETAILED		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

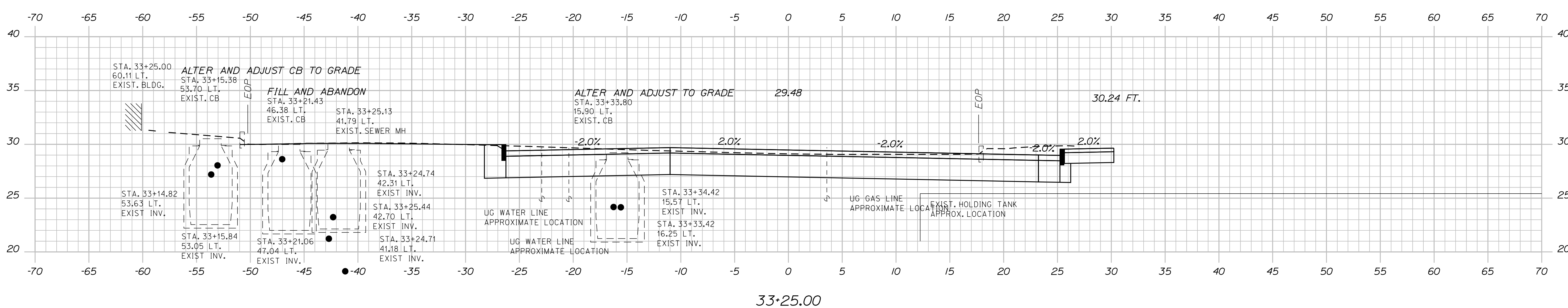
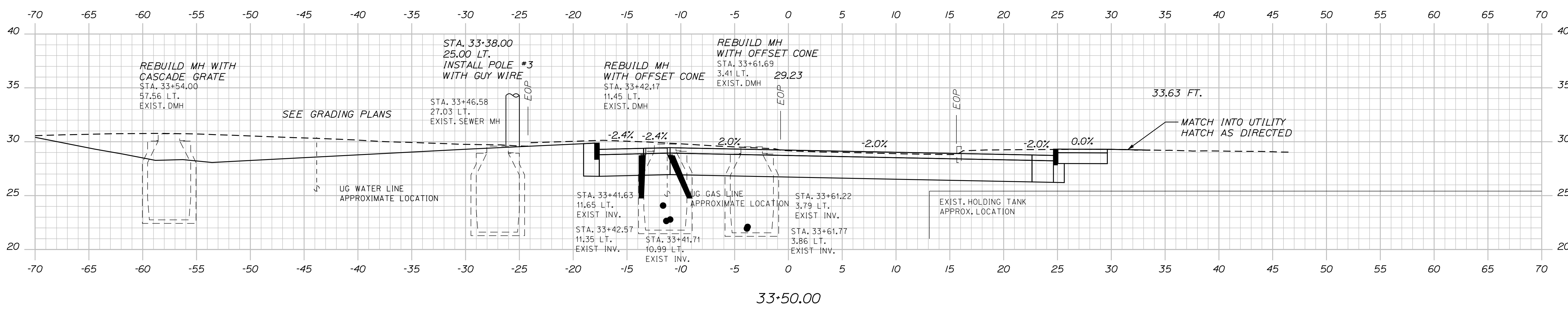
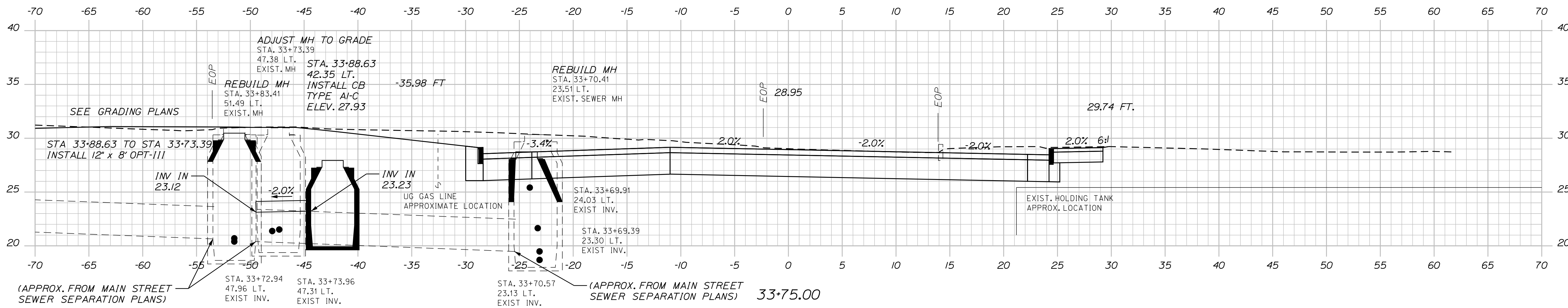
BIDDEFORD
WATER STREET
CROSS SECTIONS

Date: 1/6/2022

Username: jomedavis

Division: HIGHWAY

Filename: ... \HIGHWAY\MSTA\Xsect_WaterSt.dgn



PROJ. MANAGER	B. KEEZER	DATE
DESIGN-DETAILED	ECF	12/20
CHECKED-REVIEWED	AGC	
DESIGN-DETAILED		
DESIGN-DETAILED		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

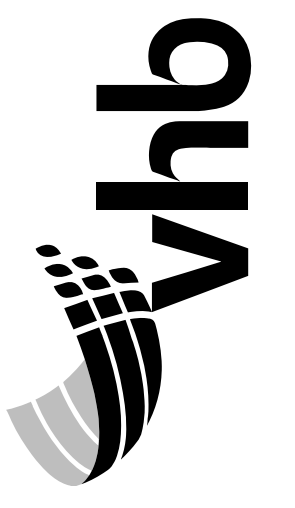
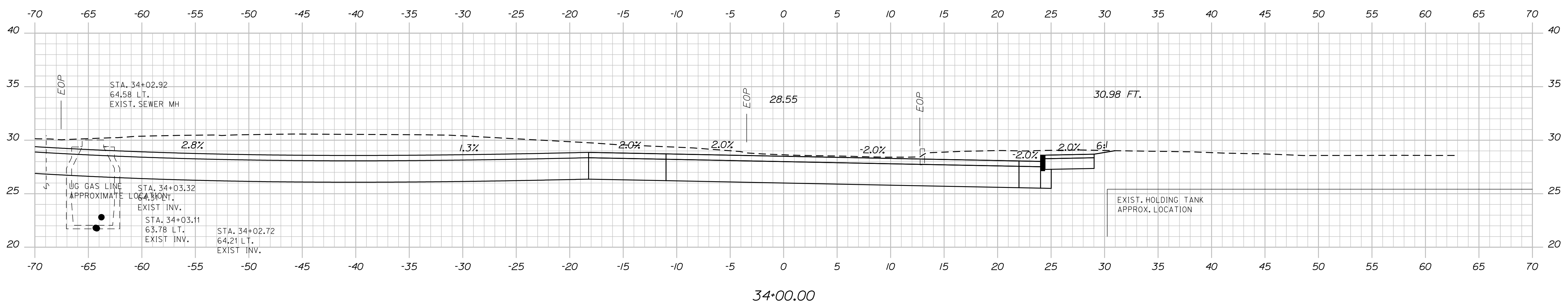
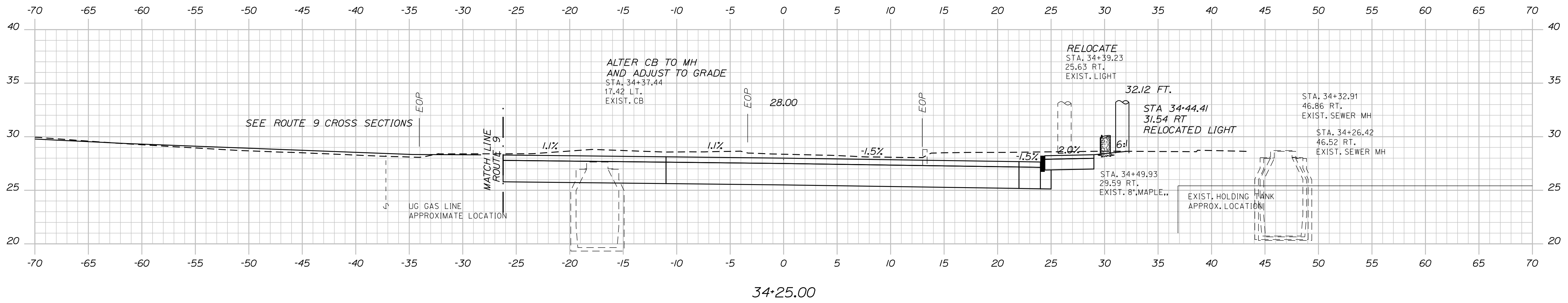
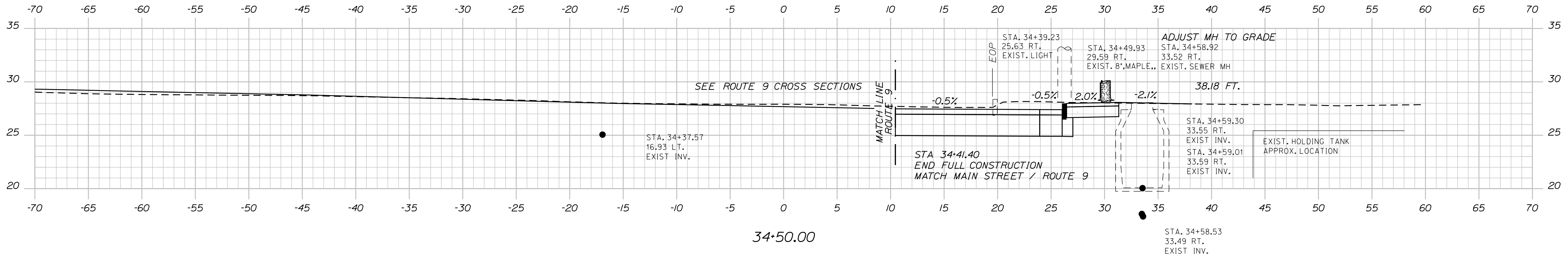
BIDDEFORD
WATER STREET
CROSS SECTIONS

Date: 1/6/2022

Username: jamesdavis

Division: HIGHWAY

Filename: ... \HIGHWAY\MSTA\Xsect_WaterSt.dgn



PROJ. MANAGER	DATE
B. KEIZER	12/20
DESIGN-DETAILED	
CHECKED-REVIEWED	
DESIGN-DETAILED	
REVISIONS 1	
REVISIONS 2	
REVISIONS 3	
REVISIONS 4	
FIELD CHANGES	

BIDDEFORD
WATER STREET
CROSS SECTIONS

SHEET NUMBER

25

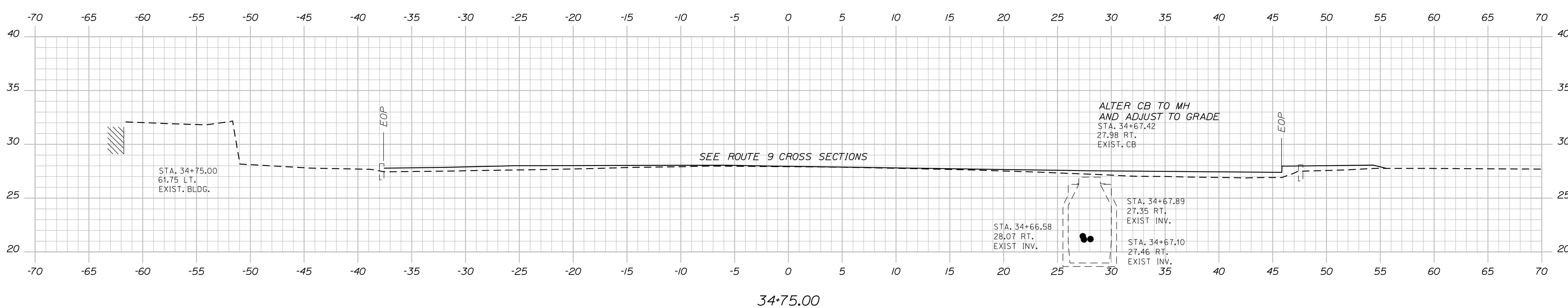
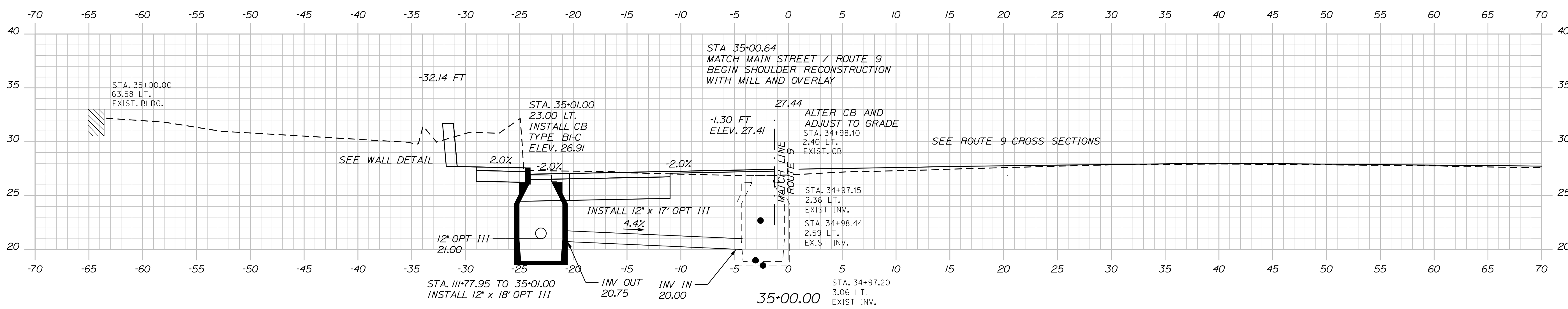
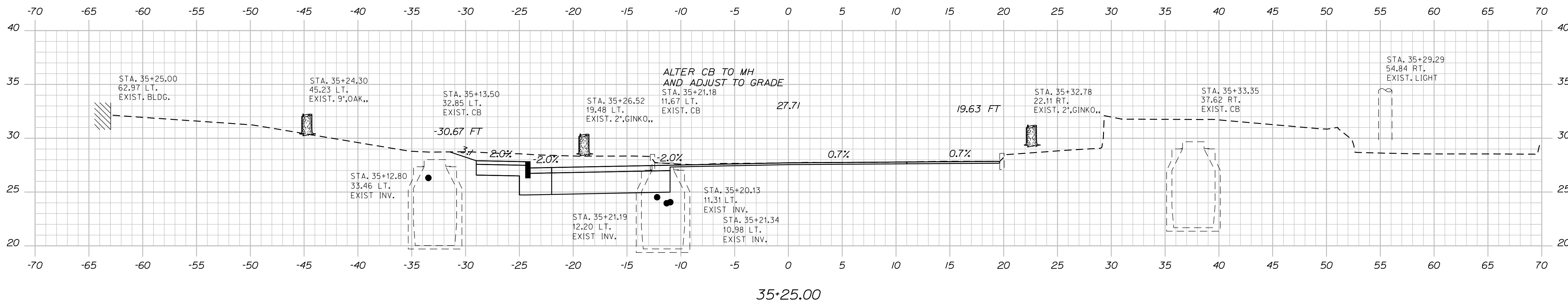
OF 39

Date: 1/6/2022

Username: jamesdavis

Division: HIGHWAY

Filename: ... \HIGHWAY\MSTA\Xsect_WaterSt.dgn



PROJ. MANAGER	DATE
B. KEIZER <td>12/20</td>	12/20
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CHECKED-REVIEWED <td>ACG</td>	ACG
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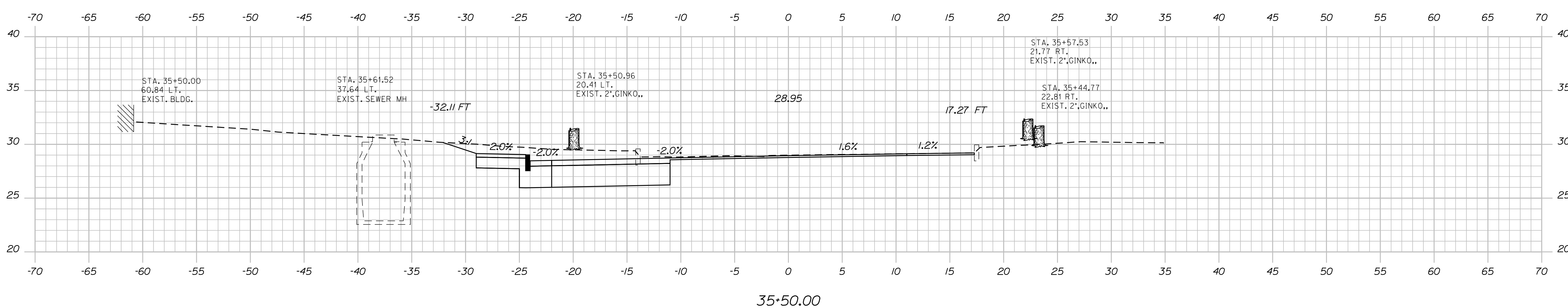
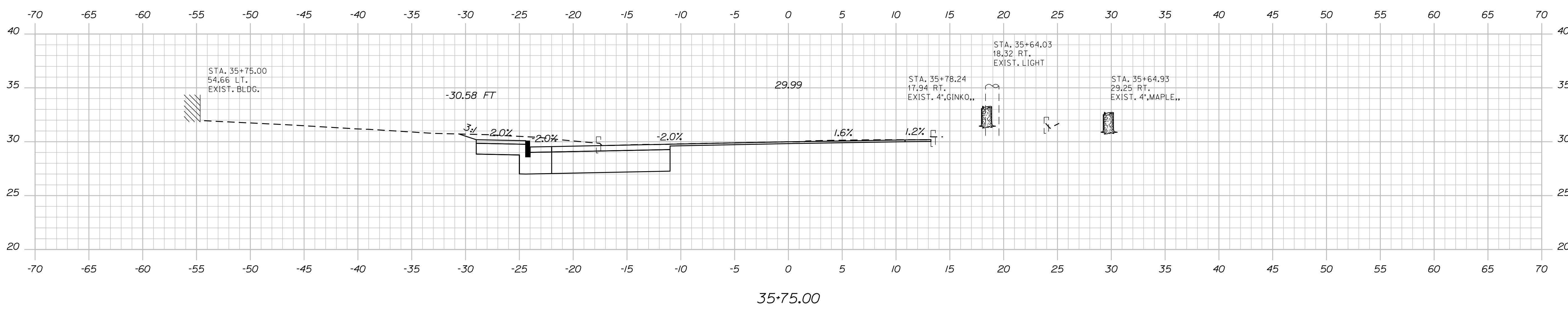
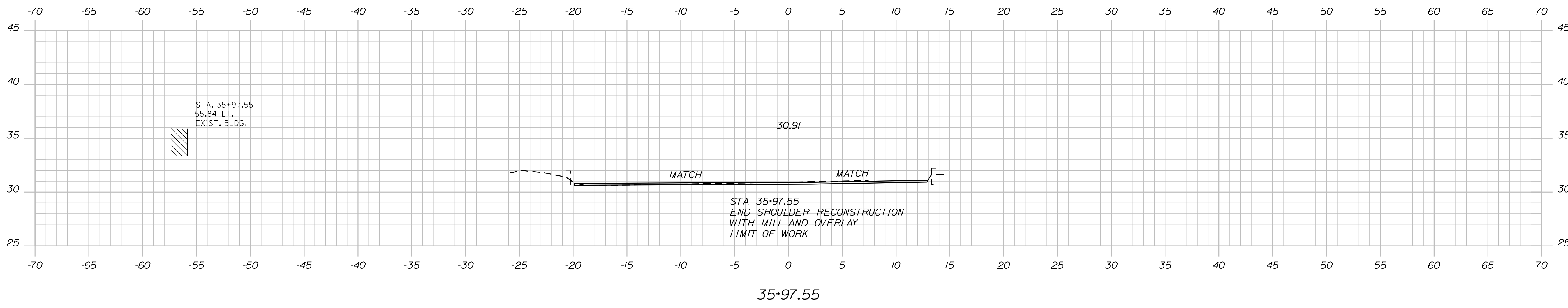
BIDDEFORD
WATER STREET
CROSS SECTIONS

Date: 1/6/2022

Username: jamesdavis

Division: HIGHWAY

Filename: ... \HIGHWAY\MSTA\Xsect_WaterSt.dgn



PROJ. MANAGER	B. KEEZER	BY	DATE
DESIGN DETAILED	LCF	AGC	12/20
CHECKED-REVIEWED	AG		
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DESIGN DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

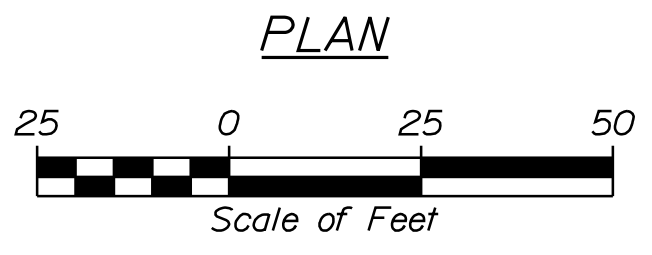
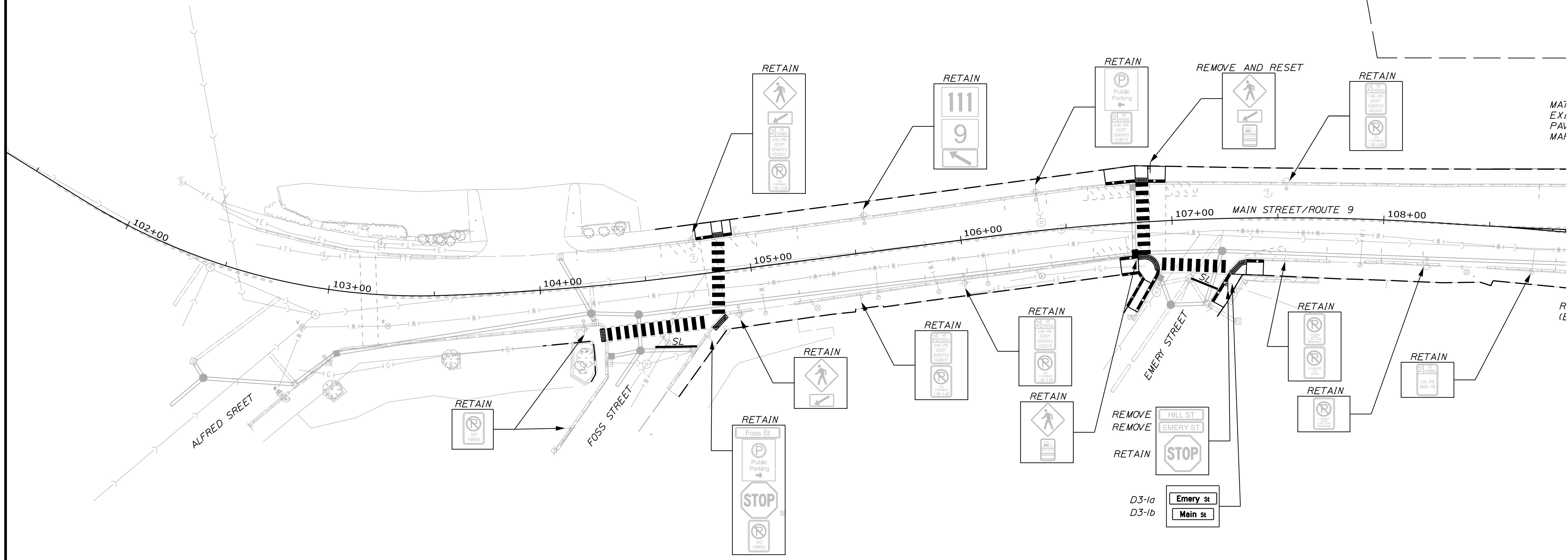
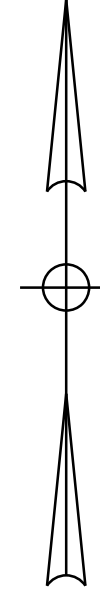
BIDDEFORD
WATER STREET
CROSS SECTIONS

Date: 1/6/2022

Username: jomesdavis

Division: HIGHWAY

Filename: ... \HIGHWAY\MSTA\036_SSP\plan1.dgn



SIGNING AND PAVEMENT MARKING LEGEND

- SWSL - SINGLE WHITE SOLID LINE
- SWBL - SINGLE WHITE BROKEN LINE (10' LINE 30' SPACE)
- SYSL - SINGLE YELLOW SOLID LINE
- 2SYSL - DOUBLE YELLOW SOLID LINE
- SL - SINGLE SOLID LINE - STOPLINE (12')
- DWLL - DOTTED WHITE LANE LINE WITH TAPE (3' LINE 9' SPACE)
- ☐ - WHITE PAVEMENT MARKING SYMBOLS (SEE NOTE 5)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
STP-1857(400)
WIN
18574.00
HIGHWAY PLANS



PROJ. MANAGER	B. KEIZER	DATE
DESIGN DETAILED	ACC	12/21
CHECKED/REVIEWED	ECF	12/21
DESIGN DETAILED	AG	
DESIGN DETAILED		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

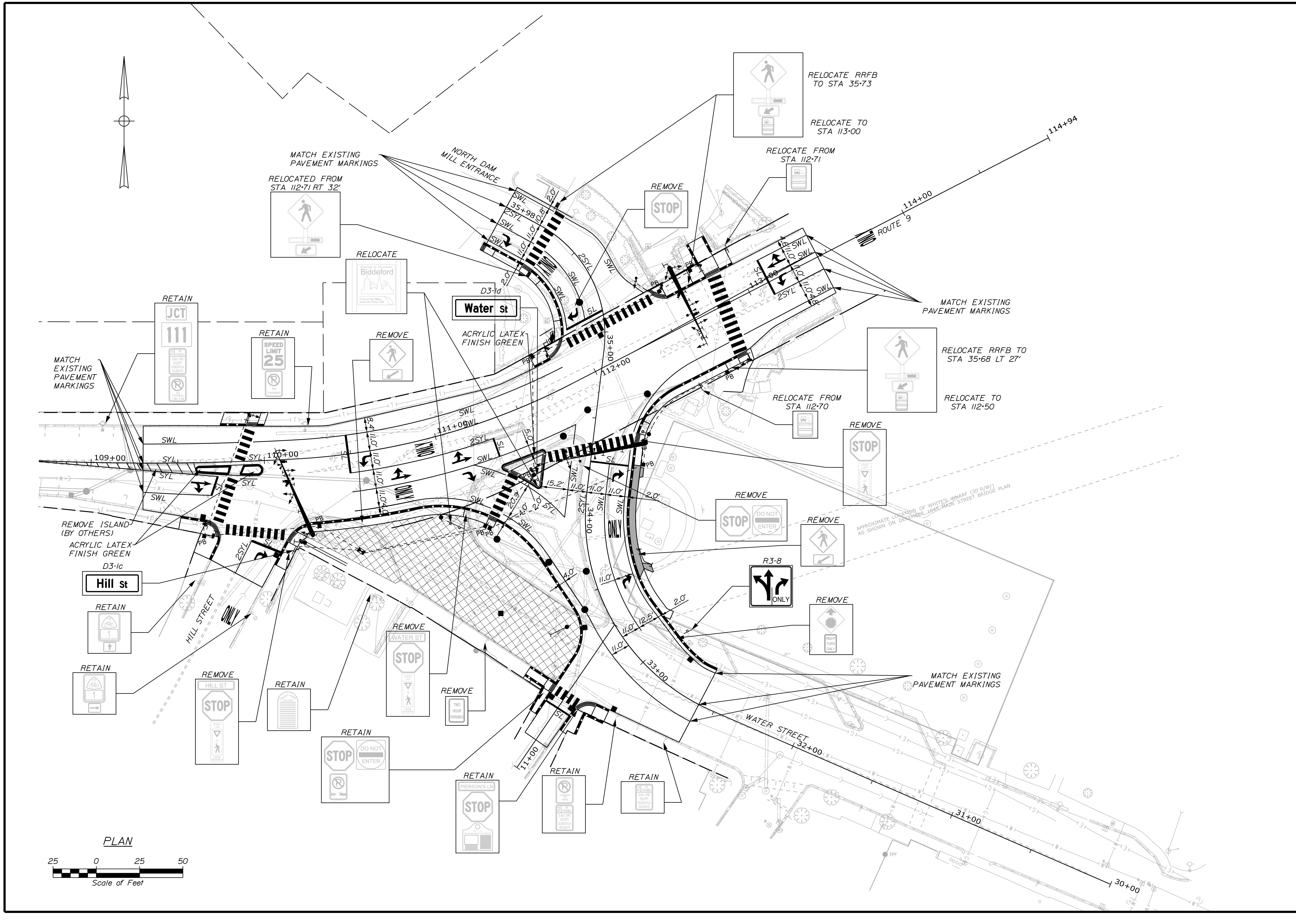
**BIDDEFORD
STATE ROUTE 9
SIGNING AND STRIPING
PLANS (1 OF 2)**

SHEET NUMBER

29

OF 32

Filename: ... \HIGHWAY\MSTA037_SSPlan2.dgn Division: HIGHWAY Username: jamesdavis Date: 1/6/2022



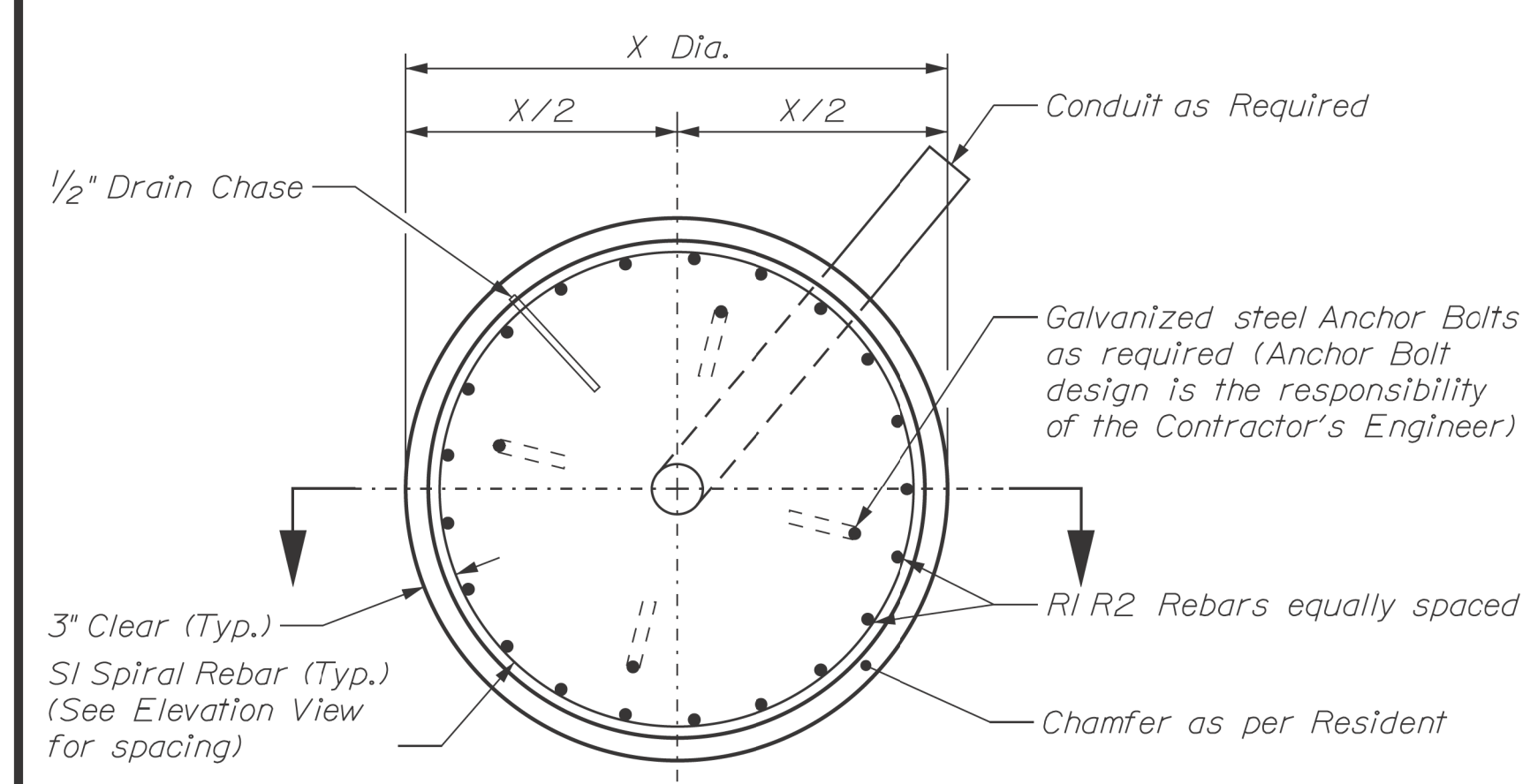
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
STP-1857(400)
WIN
18574.00
HIGHWAY PLANS



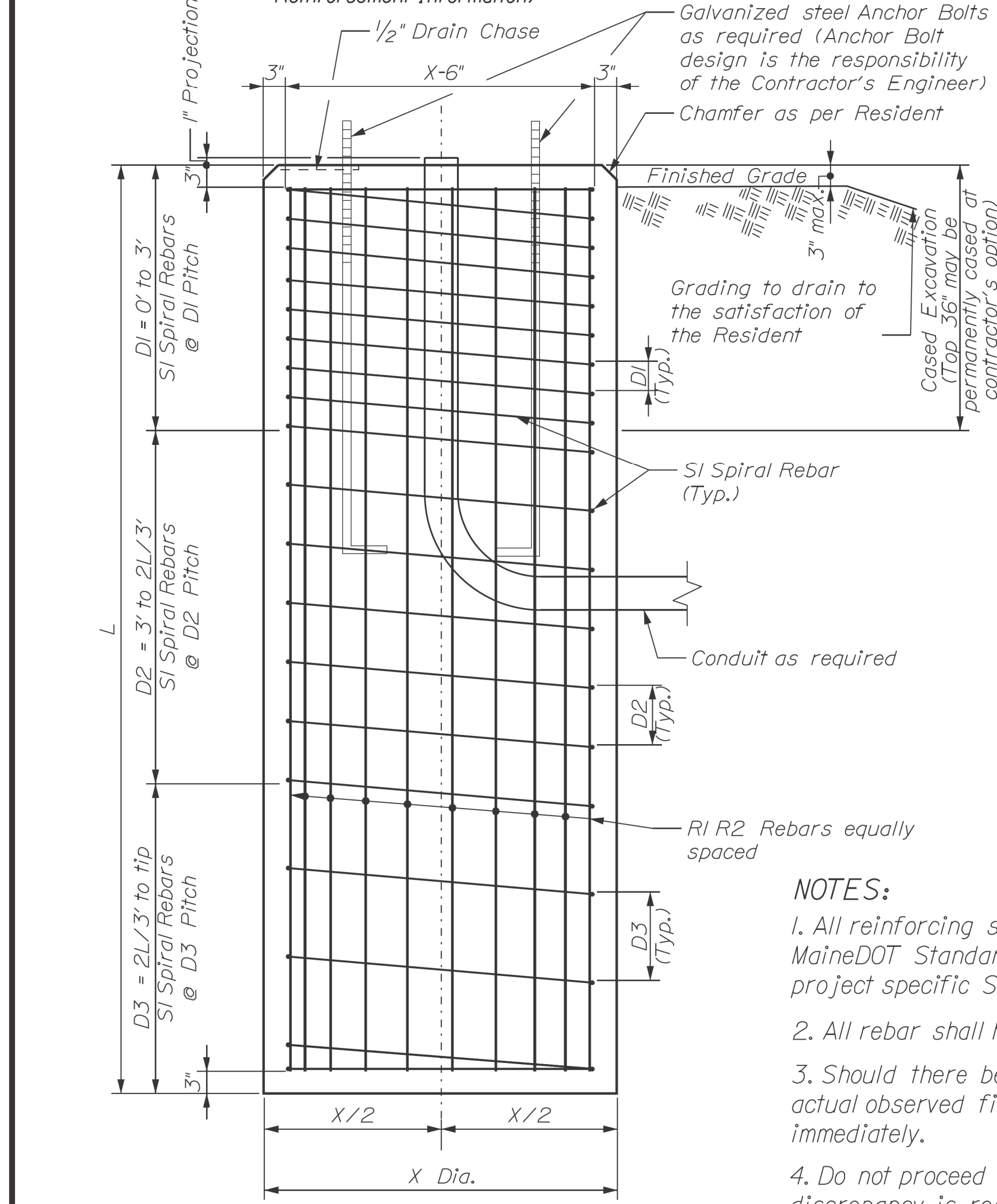
PROJ. MANAGER	DATE	BY	DATE
DESIGN DETAILED	12/21	JRD	12/21
CHECKED/REVIEWED		AG	
DESIGN DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

BIDDEFORD
STATE ROUTE 9
SIGNING AND STRIPING
PLANS (2 OF 2)

SHEET NUMBER
30
OF 32



Drilled Shaft Plan View
Not to Scale (See Table for Drilled Shaft & Reinforcement Information)



Drilled Shaft Elevation View
Not to Scale (See Table for Drilled Shaft & Reinforcement Information)

MAST ARMS A-MI, B-MI & C-MI

(A-MI) Sta.
(B-MI) Sta.
(C-MI) Sta.

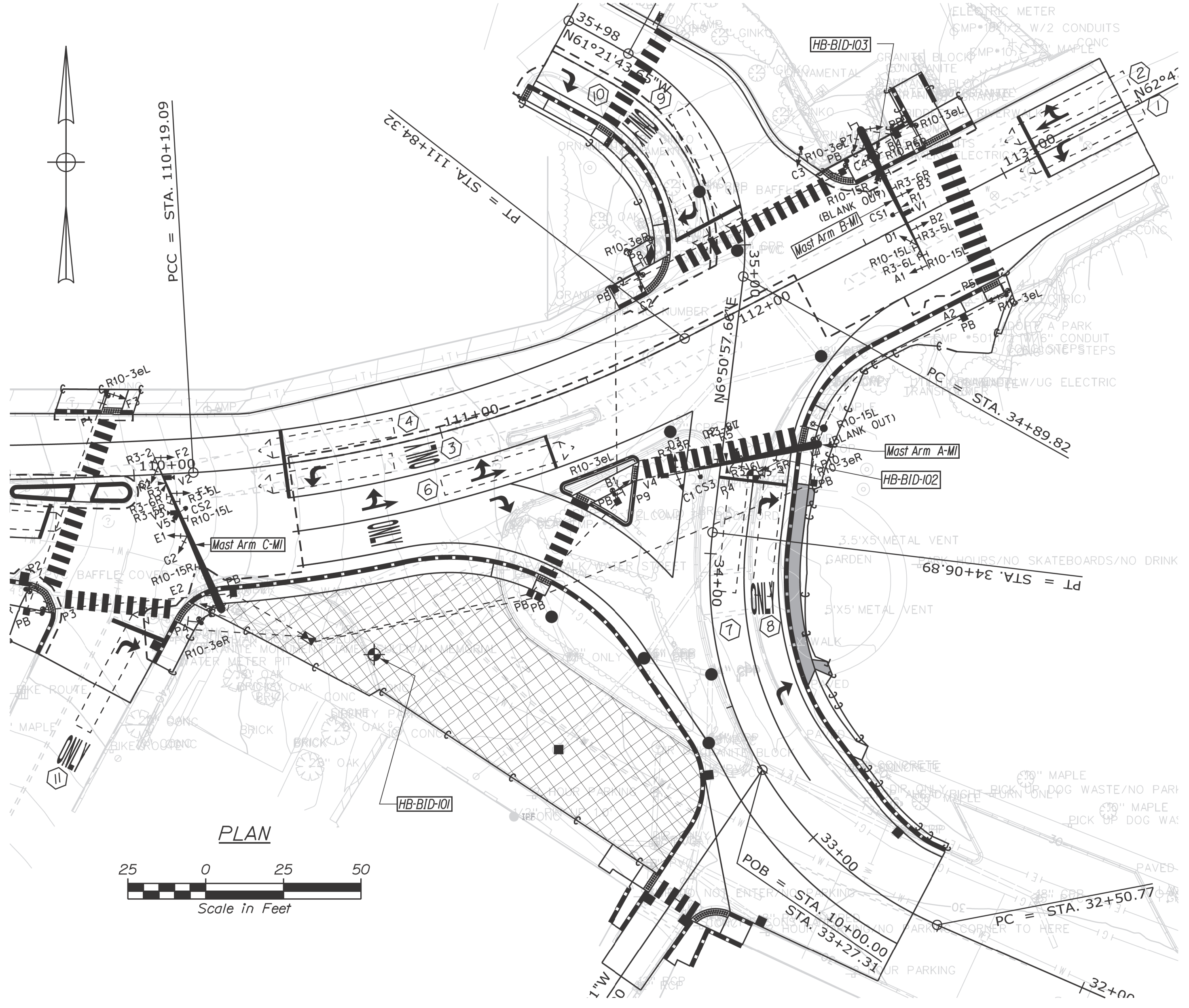
Mast Arm	Location	X Diameter (feet)	L Length (feet)	Spiral Bar Spacing			R1 Longitudinal Rebars Quantity	R2 Longitudinal Rebars Size	S1 Spiral Rebars Size
				D1 (in)	D2 (in)	D3 (in)			
A-M1	Water Street	5.0	15.0	27	#10	#5	4	12	12
B-M1	Main Street	5.0	11.5	27	#10	#5	4	12	12
C-M1	Route 9	5.0	10.5	27	#10	#5	4	12	12

- NOTES:**
- All reinforcing steel is to be grade 60 and conform to MaineDOT Standard Specification requirements along with any project specific Supplementals or Special Provisions.
 - All rebar shall have 3" cover unless otherwise noted.
 - Should there be a discrepancy between these Details and actual observed field conditions report it to the Resident immediately.
 - Do not proceed with dependent work until any such discrepancy is resolved to the satisfaction of the Resident.
 - Concrete to be Class LP with f'c = 5,000 PSI.

Maine Department of Transportation Soil/Borehole Exploration Log US CUSTOMER UNITS				Project: Route 9 and Water Street Intersection Improvements Location: Biddeford, Maine				Boring No.: HB-BID-101 WIN: 18574.00												
Driller:	MaineDOT	Elevation (ft.):	32.0	Auger ID (in):	5" Dia.	Sampler:	Standard Split Spoon	Driller:	MaineDOT	Elevation (ft.):	28.1	Auger ID (in):	5" Dia.	Sampler:	Standard Split Spoon					
Operator:	Daggett/Nilles	Date:	NA/08	Operator:	Daggett/Nilles	Date:	NA/08	Operator:	Daggett/Nilles	Date:	NA/08	Operator:	Daggett/Nilles	Date:	NA/08					
Logged By:	B. Wilbur	Log Type:	DM-03	Logged By:	B. Wilbur	Log Type:	DM-03	Logged By:	B. Wilbur	Log Type:	DM-03	Logged By:	B. Wilbur	Log Type:	DM-03					
Date Start/Finish:	11/28/2018 - 09:00-10:00	Drilling Method:	Soil/Stem Auger	Date Start/Finish:	11/28/2018 - 10:00-11:00	Drilling Method:	Soil/Stem Auger	Date Start/Finish:	11/28/2018 - 10:00-11:00	Drilling Method:	Soil/Stem Auger	Date Start/Finish:	11/28/2018 - 10:00-11:00	Drilling Method:	Soil/Stem Auger					
Boring Location:	11046.2 + 65.1 + 4 ft.	Casing ID (in):	N/A	Boring Location:	3426.6 + 10.7 + 4 ft.	Casing ID (in):	N/A	Boring Location:	11745.1 + 24.0 + 4 ft.	Casing ID (in):	N/A	Boring Location:	11745.1 + 24.0 + 4 ft.	Casing ID (in):	N/A					
Water Level:	3.5 + 4 top.	Water Level:	None Observed	Water Level:	None Observed	Water Level:	None Observed	Water Level:	None Observed	Water Level:	None Observed	Water Level:	None Observed	Water Level:	None Observed					
Hammer Efficiency Factor:	0.928	Hammer Type:	Automatic	Hammer Efficiency Factor:	0.928	Hammer Type:	Automatic	Hammer Efficiency Factor:	0.928	Hammer Type:	Automatic	Hammer Efficiency Factor:	0.928	Hammer Type:	Automatic					
Notes:	P = Rock Core Sample S = Soil Sample W = Water Sample G = Gas Sample L = Liquid Sample M = Moisture Sample T = Temperature Sample C = Consolidation Test R = Rock Compressive Strength Test U = Unconfined Compressive Strength Test V = Vane Shear Test F = Field Test H = Hammer Efficiency Factor Test S = Soil Swell Test A = Atterberg Limits Test P = Plasticity Index Test C = Consolidation Test R = Rock Core Sample S = Soil Sample W = Water Sample G = Gas Sample L = Liquid Sample M = Moisture Sample T = Temperature Sample C = Consolidation Test R = Rock Compressive Strength Test U = Unconfined Compressive Strength Test V = Vane Shear Test F = Field Test H = Hammer Efficiency Factor Test S = Soil Swell Test A = Atterberg Limits Test P = Plasticity Index Test C = Consolidation Test																			
Sample No.	10	24/10	1.00 - 3.00	9/45/5/5	50	17	54	27.1	1.5" HMA.	0.1	10	24/10	1.00 - 3.00	10/10/8/8	18	28	54	27.1	4.5" HMA.	0.4
Sample No.	20	24/15	5.00 - 7.00	1/1/2/3	3	5	5	20.1	Olives, wet, very loose, fine to coarse SAND, some gravel, some silt.	0.5	20	24/15	5.00 - 7.00	2/3/2/2	5	8	11	20.1	Similar to above, except loose, (F111).	0.5
Sample No.	30	24/24	10.00 - 12.00	3/4/4/6	8	12	12	20.1	Grey, wet, medium stiff, Clayey SILT, little fine sand.	0.5	30	24/24	10.00 - 12.00	2/2/3/2	5	8	12	20.1	Brown, moist, loose, fine to coarse SAND, some gravel, trace silt.	0.5
Sample No.	40	24/24	10.00 - 12.00	3/4/4/6	8	12	12	20.1	Bottom of Exploration at 12.0 feet below ground surface. NO REFUSAL.	0.0	40	24/24	10.00 - 12.00	3/3/5/4	8	12	12	20.1	Grey, moist, medium stiff, Clayey SILT, some fine sand, trace gravel.	0.5

Maine Department of Transportation Soil/Borehole Exploration Log US CUSTOMER UNITS				Project: Route 9 and Water Street Intersection Improvements Location: Biddeford, Maine				Boring No.: HB-BID-102 WIN: 18574.00												
Driller:	MaineDOT	Elevation (ft.):	28.1	Auger ID (in):	5" Dia.	Sampler:	Standard Split Spoon	Driller:	MaineDOT	Elevation (ft.):	28.0	Auger ID (in):	5" Dia.	Sampler:	Standard Split Spoon					
Operator:	Daggett/Nilles	Date:	NA/08	Operator:	Daggett/Nilles	Date:	NA/08	Operator:	Daggett/Nilles	Date:	NA/08	Operator:	Daggett/Nilles	Date:	NA/08					
Logged By:	B. Wilbur	Log Type:	DM-03	Logged By:	B. Wilbur	Log Type:	DM-03	Logged By:	B. Wilbur	Log Type:	DM-03	Logged By:	B. Wilbur	Log Type:	DM-03					
Date Start/Finish:	11/28/2018 - 10:00-11:00	Drilling Method:	Soil/Stem Auger	Date Start/Finish:	11/28/2018 - 10:00-11:00	Drilling Method:	Soil/Stem Auger	Date Start/Finish:	11/28/2018 - 10:00-11:00	Drilling Method:	Soil/Stem Auger	Date Start/Finish:	11/28/2018 - 10:00-11:00	Drilling Method:	Soil/Stem Auger					
Boring Location:	3426.6 + 10.7 + 4 ft.	Casing ID (in):	N/A	Boring Location:	11745.1 + 24.0 + 4 ft.	Casing ID (in):	N/A	Boring Location:	11745.1 + 24.0 + 4 ft.	Casing ID (in):	N/A	Boring Location:	11745.1 + 24.0 + 4 ft.	Casing ID (in):	N/A					
Water Level:	None Observed	Water Level:	None Observed	Water Level:	None Observed	Water Level:	None Observed	Water Level:	None Observed	Water Level:	None Observed	Water Level:	None Observed	Water Level:	None Observed					
Hammer Efficiency Factor:	0.928	Hammer Type:	Automatic	Hammer Efficiency Factor:	0.928	Hammer Type:	Automatic	Hammer Efficiency Factor:	0.928	Hammer Type:	Automatic	Hammer Efficiency Factor:	0.928	Hammer Type:	Automatic					
Notes:	P = Rock Core Sample S = Soil Sample W = Water Sample G = Gas Sample L = Liquid Sample M = Moisture Sample T = Temperature Sample C = Consolidation Test R = Rock Compressive Strength Test U = Unconfined Compressive Strength Test V = Vane Shear Test F = Field Test H = Hammer Efficiency Factor Test S = Soil Swell Test A = Atterberg Limits Test P = Plasticity Index Test C = Consolidation Test R = Rock Core Sample S = Soil Sample W = Water Sample G = Gas Sample L = Liquid Sample M = Moisture Sample T = Temperature Sample C = Consolidation Test R = Rock Compressive Strength Test U = Unconfined Compressive Strength Test V = Vane Shear Test F = Field Test H = Hammer Efficiency Factor Test S = Soil Swell Test A = Atterberg Limits Test P = Plasticity Index Test C = Consolidation Test																			
Sample No.	10	24/10	1.00 - 3.00	10/10/8/8	18	28	54	27.1	4.5" HMA.	0.4	10	24/10	1.00 - 3.00	4/3/2/2	5	8	11	27.1	Light brown, moist, medium dense, fine to medium SAND, trace gravel, trace silt, (F111).	0.4
Sample No.	20	24/15	5.00 - 7.00	2/3/2/2	5	8	11	20.1	Similar to above, except loose, (F111).	0.5	20	24/15	5.00 - 7.00	2/3/4/4	7	11	20.1	Similar to above, (F111).	0.5	
Sample No.	30	24/24	10.00 - 12.00	2/2/3/2	5	8	12	20.1	Brown, moist, loose, fine to coarse SAND, some gravel, trace silt.	0.5	30	24/24	10.00 - 12.00	3/3/5/4	8	12	20.1	Grey, moist, medium stiff, Clayey SILT, some fine sand, trace gravel.	0.5	
Sample No.	40	24/24	10.00 - 12.00	3/3/5/4	8	12	12	20.1	Bottom of Exploration at 12.0 feet below ground surface. NO REFUSAL.	0.0	40	24/24	10.00 - 12.00	3/3/5/4	8	12	20.1	Grey, moist, medium stiff, Clayey SILT, some fine sand, trace gravel.	0.5	

Maine Department of Transportation Soil/Borehole Exploration Log US CUSTOMER UNITS				Project: Route 9 and Water Street Intersection Improvements Location: Biddeford, Maine				Boring No.: HB-BID-103 WIN: 18574.00												
Driller:	MaineDOT	Elevation (ft.):	28.0	Auger ID (in):	5" Dia.	Sampler:	Standard Split Spoon	Driller:	MaineDOT	Elevation (ft.):	28.0	Auger ID (in):	5" Dia.	Sampler:	Standard Split Spoon					
Operator:	Daggett/Nilles	Date:	NA/08	Operator:	Daggett/Nilles	Date:	NA/08	Operator:	Daggett/Nilles	Date:	NA/08	Operator:	Daggett/Nilles	Date:	NA/08					
Logged By:	B. Wilbur	Log Type:	DM-03	Logged By:	B. Wilbur	Log Type:	DM-03	Logged By:	B. Wilbur	Log Type:	DM-03	Logged By:	B. Wilbur	Log Type:	DM-03					
Date Start/Finish:	11/28/2018 - 11:00-12:00	Drilling Method:	Soil/Stem Auger	Date Start/Finish:	11/28/2018 - 11:00-12:00	Drilling Method:	Soil/Stem Auger	Date Start/Finish:	11/28/2018 - 11:00-12:00	Drilling Method:	Soil/Stem Auger	Date Start/Finish:	11/28/2018 - 11:00-12:00	Drilling Method:	Soil/Stem Auger					
Boring Location:	11745.1 + 24.0 + 4 ft.	Casing ID (in):	N/A	Boring Location:	11745.1 + 24.0 + 4 ft.	Casing ID (in):	N/A	Boring Location:	11745.1 + 24.0 + 4 ft.	Casing ID (in):	N/A	Boring Location:	11745.1 + 24.0 + 4 ft.	Casing ID (in):	N/A					
Water Level:	None Observed	Water Level:	None Observed	Water Level:	None Observed	Water Level:	None Observed	Water Level:	None Observed	Water Level:	None Observed	Water Level:	None Observed	Water Level:	None Observed					
Hammer Efficiency Factor:	0.928	Hammer Type:	Automatic	Hammer Efficiency Factor:	0.928	Hammer Type:	Automatic	Hammer Efficiency Factor:	0.928	Hammer Type:	Automatic	Hammer Efficiency Factor:	0.928	Hammer Type:	Automatic					
Notes:	P = Rock Core Sample S = Soil Sample W = Water Sample G = Gas Sample L = Liquid Sample M = Moisture Sample T = Temperature Sample C = Consolidation Test R = Rock Compressive Strength Test U = Unconfined Compressive Strength Test V = Vane Shear Test F = Field Test H = Hammer Efficiency Factor Test S = Soil Swell Test A = Atterberg Limits Test P = Plasticity Index Test C = Consolidation Test R = Rock Core Sample S = Soil Sample W = Water Sample G = Gas Sample L = Liquid Sample M = Moisture Sample T = Temperature Sample C = Consolidation Test R = Rock Compressive Strength Test U = Unconfined Compressive Strength Test V = Vane Shear Test F = Field Test H = Hammer Efficiency Factor Test S = Soil Swell Test A = Atterberg Limits Test P = Plasticity Index Test C = Consolidation Test																			
Sample No.	10	24/10	1.00 - 3.00	4/3/2/2	5	8	11	27.1	4.5" HMA.	0.4	10	24/10	1.00 - 3.00	4/3/2/2	5	8	11	27.1	Brown, moist, loose, fine to coarse SAND, little gravel, little silt, (F111).	0.4
Sample No.	20	24/15	5.00 - 7.00	2/3/4/4	7	11	20.1	20.1	Similar to above, (F111).	0.5	20	24/15	5.00 - 7.00	2/3/4/4	7	11	20.1	Similar to above, (F111).	0.5	
Sample No.	30	24/24	10.00 - 12.00	3/3/5/4	8	12	12	20.1	Grey, moist, medium stiff, Clayey SILT, some fine sand, trace gravel.	0.5	30	24/24	10.00 - 12.00	3/3/5/4	8	12	20.1	Grey, moist, medium stiff, Clayey SILT, some fine sand, trace gravel.	0.5	
Sample No.	40	24/24	10.00 - 12.00	3/3/5/4	8	12	12	20.1	Bottom of Exploration at 12.0 feet below ground surface. NO REFUSAL.	0.0	40	24/24	10.00 - 12.00	3/3/5/4	8	12	20.1	Grey, moist, medium stiff, Clayey SILT, some fine sand, trace gravel.	0.5	



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1857(400)
WIN 18574.00

STATE OF MAINE
Kathleen Maguire
7120
REGISTERED PROFESSIONAL ENGINEER

PROJ. MANAGER	DATE	BY	SIGNATURE
CHECKED-DETAILED	APR 2021	T. WHITE	[Signature]
DESIGNED-DETAILED	APR 2021	K. MAGUIRE	[Signature]
DESIGNED-DETAILED	APR 2021	T. WHITE	[Signature]
REVISIONS 1	5/14/2021		
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

BIDDEFORD
ROUTE 9 & WATER STREET
MAST ARM FOUNDATION & BORING LOCATION PLAN WITH BORING LOGS

SHEET NUMBER
31
OF 32

