STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

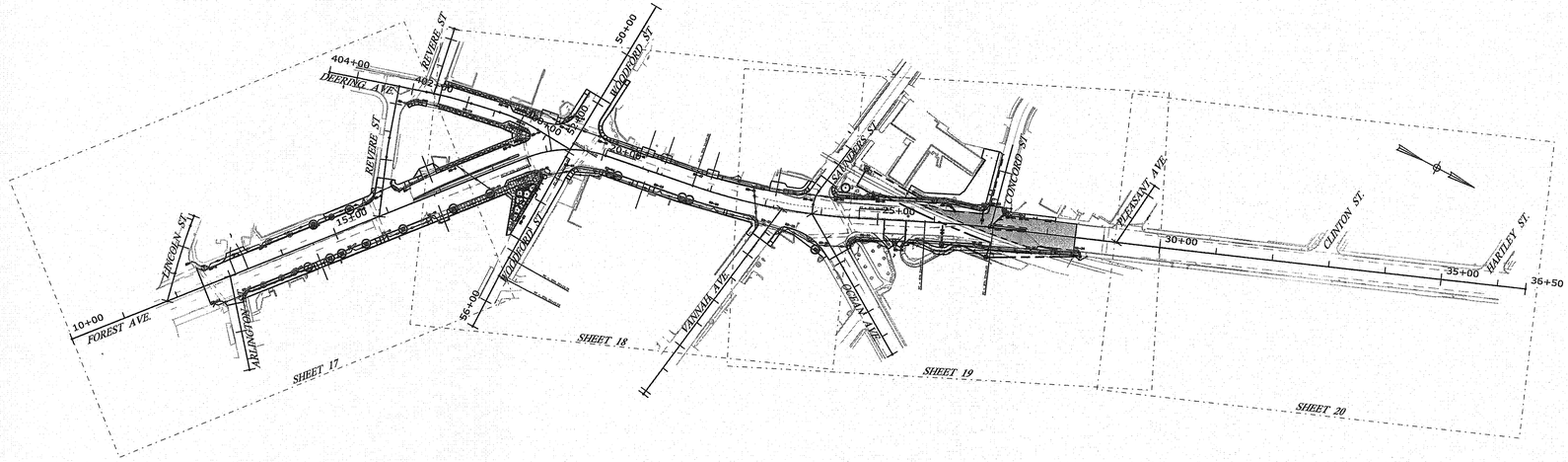
PLAN LEGEND

Town, County, State		Centerline-Existing	
Property Lines		Centerline-Proposed	10+00
R/W Lines-Existing		Travelway-Existing	
R/W Lines-Proposed		Travelway-Proposed	
Culvert-Existing		Railroad	
Culvert Proposed		Catch Basins	Existing ■ Proposed
Curbing	Existing Proposed	Manholes	Existing ● Proposed
Type 1		Proposed Underdrain	
Type 3		Proposed Ditch	
Type 5		Existing Ditch	
Outline of Bodies of Water		Utlity Poles	Existing ♦ Proposed
Ledge		Fire Hydrants	Existing ◆ Proposed
Buildings		Existing Water Line	
Trees	Conifer Deciduous	Existing San. Sewer	
Tree Line		Existing San. Sewer Manhole	
Clearing Limit Line	CLL CLL	Guardrail-Existing	
		Guardrail-Proposed	
		Guardrail-Cable, Other	

PORTLAND
CUMBERLAND COUNTY
FOREST AVENUE (ROUTE 302)

FEDERAL PROJECT NO. STP-2054(300)
MAINEDOT WIN 020543.00

PROJECT LENGTH : 0.430 MILES



INDEX OF SHEETS

TRAFFIC DATA

Current (2017) AADT	24230
Future (2037) AADT	27860
DHV - % of AADT	9%
Design Hour Volume	2507
% Heavy Trucks (AADT)	4%
% Heavy Trucks (DHV)	4%
Directional Distribution (DHV)	53%
18 kip Equivalent P 2.0	444
18 kip Equivalent P 2.5	424
Design Speed (mph)	25
Functional Class:	OTHER PRINCIPAL ARTERIAL

LAYOUT SCALE

1500 0 1500 3000

Scale in Feet

PROJECT LOCATION:	BEGINNING AT LINCOLN STREET CONTINUING NORTH ALONG FOREST AVENUE FOR 0.430 MILES TO HARTLEY STREET.
PROGRAM AREA:	MULTIMODAL
SCOPE OF WORK:	PEDESTRIAN/BICYCLE/ROADWAY IMPROVEMENTS

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

APPROVED

COMMISSIONER: [signature] DATE 5/30/17

CHIEF ENGINEER: [signature] DATE 5-25-17

STATE OF MAINE ROLAND A LAVALLEE No. 9662 REGISTERED PROFESSIONAL ENGINEER

[signature] SIGNATURE

9662 P.E. NUMBER

4/26/17 DATE

PROJECT INFORMATION

PROGRAM	MULTIMODAL
PROJECT MANAGER	AURELE GORNEAU, II
DESIGNER	DALE MITCHELL P.E.
CONSULTANT	HNTB
PROJECT RESIDENT	
CONTRACTOR	
PROJECT COMPLETION DATE	

PORTLAND
FOREST AVENUE

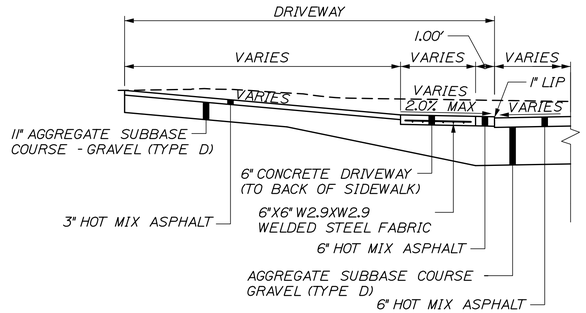
TITLE SHEET

SHEET NUMBER 1

OF 67

WIN 20543.00 FEDERAL STP-2054(300)

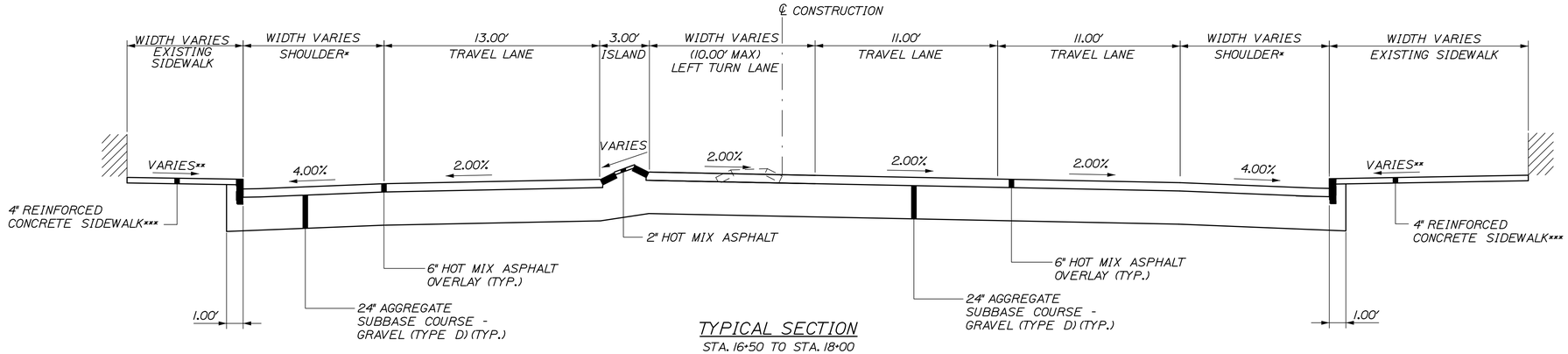
Date:4/26/2017 Username: Division: Filename: 001_Title.dgn



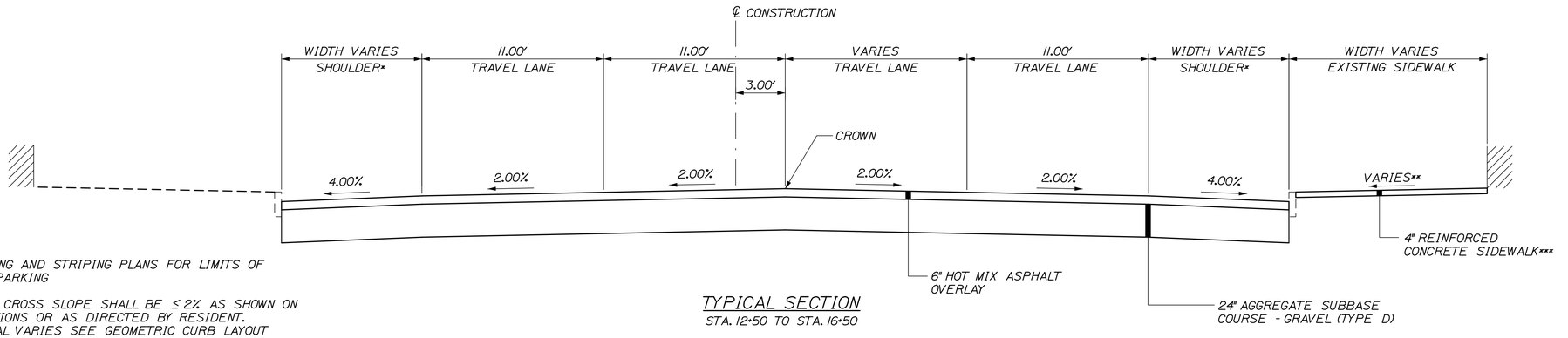
TYPICAL CONCRETE DRIVEWAY SECTION

NOTES:

1. THE CONTRACTOR SHALL NOTE THE PRESENCE OF THE EXISTING CONCRETE SLAB UNDER FOREST AVENUE OF UNKNOWN LENGTH, WIDTH, AND DEPTH. THE CONTRACTOR SHALL REMOVE THE EXISTING CONCRETE SLAB LOCATED UNDER FOREST AVENUE. REMOVAL OF THE EXISTING CONCRETE SLAB WILL BE PAID FOR UNDER ITEM 202.11 REMOVING PORTLAND CEMENT CONCRETE PAVEMENT.



TYPICAL SECTION
STA. 16+50 TO STA. 18+00



TYPICAL SECTION
STA. 12+50 TO STA. 16+50

* SEE SIGNING AND STRIPING PLANS FOR LIMITS OF ON-STREET PARKING

** SIDEWALK CROSS SLOPE SHALL BE ≤ 2% AS SHOWN ON CROSS SECTIONS OR AS DIRECTED BY RESIDENT. CURB REVEAL VARIES SEE GEOMETRIC CURB LAYOUT SHEETS.

*** SEE HIGHWAY PLANS FOR LIMITS OF REGRADE AND CONSTRUCT SIDEWALK.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN 20543.00

WIN 20543.00 HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER	ABIELE GORNEAU, II		
DESIGN-DETAILED	D.MITCHELL	D.BURGESS	03\10\17
CHECKED-REVIEWED	-	-	-
DESIGN2-DETAILED2	-	-	-
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

SIGNATURE

P.E. NUMBER

DATE

PORTLAND
FOREST AVENUE

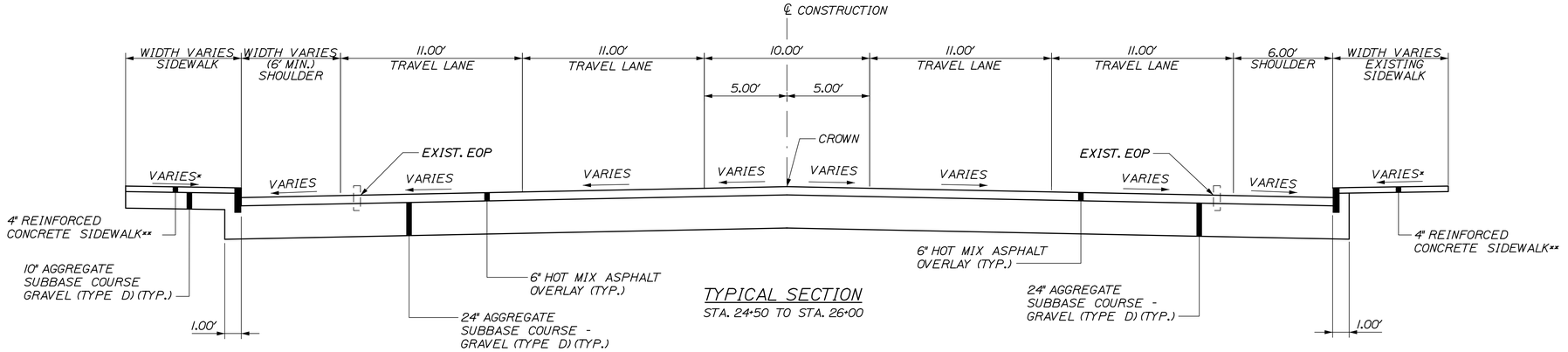
TYPICAL SECTIONS

SHEET NUMBER

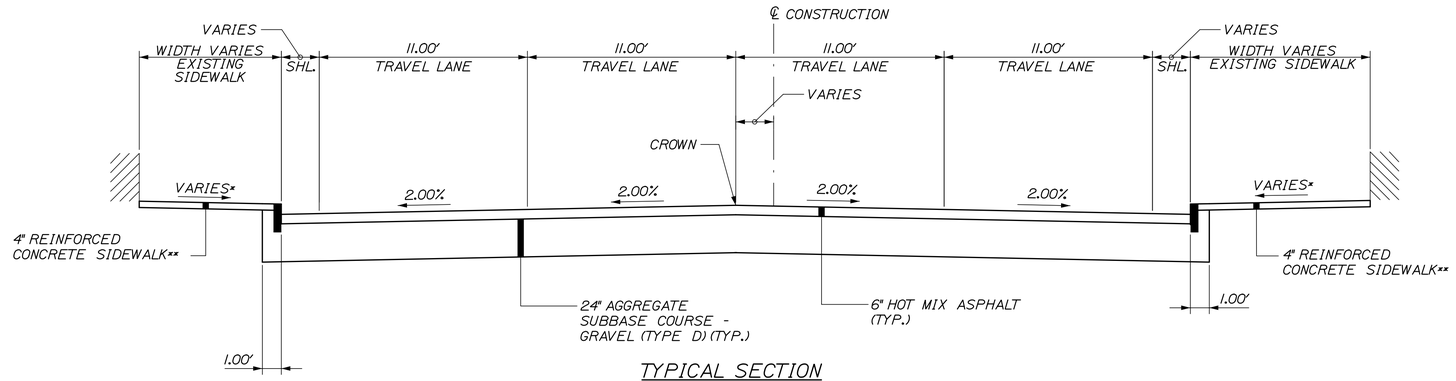
2

OF 67

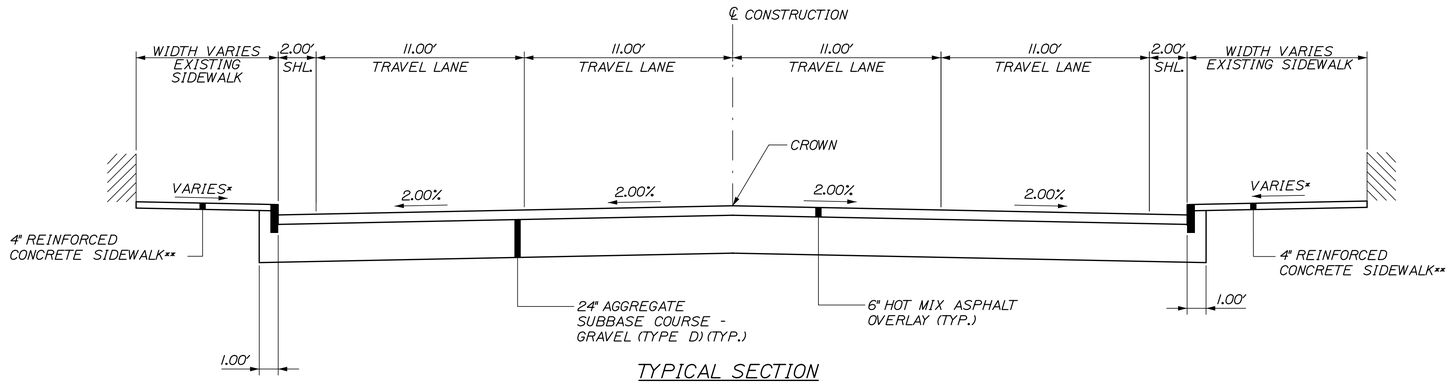
Filename: 002_Typical_01.dgn Division: Username: Date:4/27/2017



TYPICAL SECTION
STA. 24+50 TO STA. 26+00



TYPICAL SECTION
STA. 21+50 TO STA. 24+50



TYPICAL SECTION
STA. 20+00 TO STA. 21+50

* SIDEWALK CROSS SLOPE SHALL BE ≤ 2% AS SHOWN ON CROSS SECTIONS OR AS DIRECTED BY RESIDENT. CURB REVEAL VARIES SEE GEOMETRIC CURB LAYOUT SHEETS.

** SEE HIGHWAY PLANS FOR LIMITS OF REGRADE AND CONSTRUCT SIDEWALK.

NOTES:

1. THE CONTRACTOR SHALL NOTE THE PRESENCE OF THE EXISTING CONCRETE SLAB UNDER FOREST AVENUE OF UNKNOWN LENGTH, WIDTH, AND DEPTH. THE CONTRACTOR SHALL REMOVE THE EXISTING CONCRETE SLAB LOCATED UNDER FOREST AVENUE. REMOVAL OF THE EXISTING CONCRETE SLAB WILL BE PAID FOR UNDER ITEM 202.11 REMOVING PORTLAND CEMENT CONCRETE PAVEMENT.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN 20543.00

WIN 20543.00 HIGHWAY PLANS

PROJ. MANAGER	ABIELE GORNEAU, II	BY	DATE
DESIGN-DETAILED	D.MITCHELL	D.BURGESS	03\10\17
CHECKED-REVIEWED	-	-	-
DESIGN2-DETAILED2	-	-	-
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

SIGNATURE

P.E. NUMBER

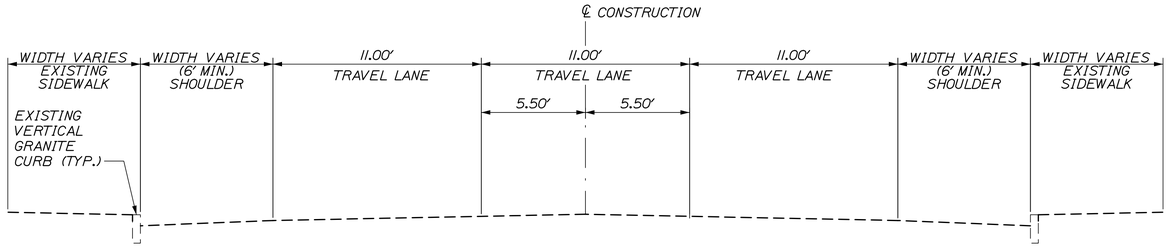
DATE

PORTLAND
FOREST AVENUE

TYPICAL SECTIONS

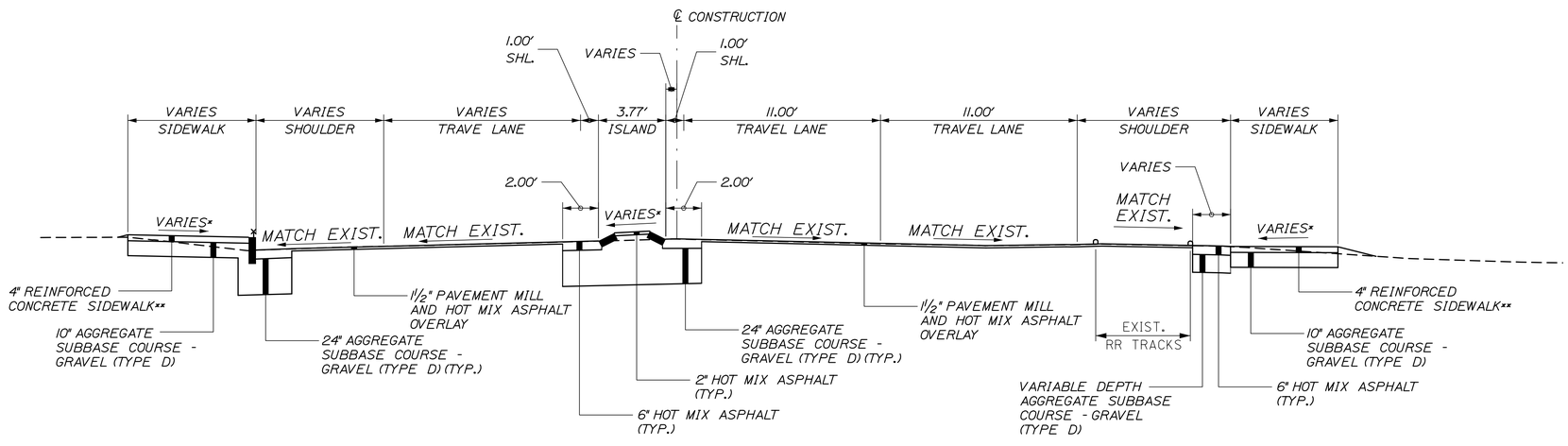
SHEET NUMBER
3
OF 67

Username:
Division:
Filename: 003_Typical_02.dgn
Date:4/27/2017



TYPICAL SECTION

STA. 28+50 TO STA. 33+50
STRIPING ONLY



TYPICAL SECTION

STA. 26+00 TO STA. 28+50

* SIDEWALK CROSS SLOPE SHALL BE ≤ 2% AS SHOWN ON CROSS SECTIONS OR AS DIRECTED BY RESIDENT. CURB REVEAL VARIES SEE GEOMETRIC CURB LAYOUT SHEETS.

** SEE HIGHWAY PLANS FOR LIMITS OF REGRADE AND CONSTRUCT SIDEWALK.

PROJ. MANAGER AMBELE CORNEAU, II		BY	DATE
DESIGN-DETAILED	D.MITCHELL	D.BURGESS	03\10\17
CHECKED-REVIEWED	-	-	-
DESIGN2-DETAILED2	-	-	-
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

SIGNATURE

P.E. NUMBER

DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN 20543.00

WIN
20543.00
HIGHWAY PLANS

PORTLAND
FOREST AVENUE

TYPICAL SECTIONS

SHEET NUMBER

4

OF 67

Username:

Date:4/27/2017

Division:

Filename: 004_Typical_03.dgn

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
202.11	REMOVING PORTLAND CEMENT CONCRETE PAVEMENT	SY	5050
202.20	REMOVING BITUMINOUS CONCRETE PAVEMENT	SY	6800
202.202	REMOVING PAVEMENT SURFACE	SY	950
202.203	PAVEMENT BUTT JOINTS	SY	50
203.20	COMMON EXCAVATION	CY	8050
203.21	ROCK EXCAVATION	CY	10
206.061	STRUCT. EARTH EXC. - DRAINAGE AND MINOR STRUCTURES BELOW GRADE	CY	20
206.07	STRUCT. ROCK EXC. - DRAINAGE AND MINOR	CY	10
304.10	AGGREGATE SUBBASE COURSE-GRAVEL	CY	5550
403.207	HOT MIX ASPHALT, 19.0 MM NOMINAL MAXIMUM SIZE	TON	990
403.2081	HOT MIX ASPHALT, 12.5 MM NOMINAL MAXIMUM SIZE (POLYMER MODIFIED)	TON	390
403.209	HOT MIX ASPHALT, 9.5 MM NOMINAL MAXIMUM SIZE (SIDEWALKS, DRIVES, ISLANDS, AND INCIDENTALS)	TON	210
403.213	HOT MIX ASPHALT, 12.5 MM NOMINAL MAXIMUM SIZE (BASE AND INTERMEDIATE BASE COURSE)	TON	260
409.15	BITUMINOUS TACK COAT, APPLIED	GAL	640
502.341	STRUCTURAL CONCRETE, ROADWAY MEDIAN	CY	65
603.159	12 IN CULVERT PIPE OPTION III	LF	40
604.071	CATCH BASIN TYPE A1-P	EA	2
604.16	ALTERING CATCH BASIN TO MANHOLE	EA	2
604.164	REBUILDING CATCH BASIN	EA	1
607.163	CHAIN LINK FENCE - 4 FT - PVC COATED	LF	170
607.35	BRACING ASSEMBLY CHAIN LINK FENCE - PVC COATED	EA	10
608.08	REINFORCED CONCRETE SIDEWALK	SY	3100
608.081	REINFORCED CONCRETE DRIVEWAY	SY	340
608.26	CURB RAMP DETECTABLE WARNING FIELD	SF	400
608.282	GRANITE PAVERS WITH CONCRETE BASE	SY	54
608.2831	GRANITE MEDALLION WITH CONCRETE BASE	LS	1
608.46	REGRADING SIDEWALK	SY	1350
609.11	VERTICAL CURB TYPE 1	LF	1200
609.12	VERTICAL CURB TYPE 1 - CIRCULAR	LF	130
609.234	TERMINAL CURB TYPE 1 - 4 FOOT	EA	4
609.238	TERMINAL CURB TYPE 1, 8 FOOT	EA	53
609.2381	TERMINAL CURB TYPE 1, 8 FOOT - CIRCULAR	EA	25
609.34	CURB TYPE 5	LF	500
609.35	CURB TYPE 5 - CIRCULAR	LF	35
609.38	RESET CURB TYPE 1	LF	1400
613.319	EROSION CONTROL BLANKET	SY	50
615.07	LOAM	CY	51
618.13	SEEDING - METHOD NO. 1	UN	3
619.12	MULCH	UN	3
619.13	BARK MULCH	CY	21
621.132	SMALL DECIDUOUS TREES (1800 MM - 2400 MM) 1.5" - 2", CONTAINER. GROUP A	EA	7
621.180	MEDIUM DECIDUOUS TREES (1800 MM - 2400 MM) 6-8' CLUMP. GROUP C	EA	7
621.273	LARGE DECIDUOUS TREES (50 MM - 65MM CAL.) 2"-2.5" CAL., GROUP A, B&B,	EA	8
621.511	DECIDUOUS SHRUBS (450 MM - 600MM) 18"-24" GROUP A, CONTAINER	EA	50
626.11	PRECAST CONCRETE JUNCTION BOX	EA	55
626.22	NON-METALLIC CONDUIT	LF	5000
626.31	18 IN DIAMETER FOUNDATION	EA	14
626.332	30 INCH DIAMETER, GREATER THAN 8-FT LONG, AND ALL 36 INCH AND 42 INCH DIAMETER FOUNDATIONS	CY	3
626.333	48 INCH DIAMETER, 54 INCH DIAMETER, 60 INCH DIAMETER FOUNDATIONS	CY	60
626.35	CONTROLLER CABINET FOUNDATION	EA	1
627.4075	TEMPORARY WHITE PAVEMENT MARKING SYMBOL	SF	10400
627.733	4" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE	LF	8500
627.744	6" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE	LF	1900
627.75	WHITE OR YELLOW PAVEMENT AND CURB MARKING	SF	5200
627.77	REMOVING EXISTING PAVEMENT MARKINGS	SF	1300
627.78	TEMPORARY PAVEMENT MARKING LINE WHITE OR YELLOW	LF	18600
629.05	HAND LABOR, STRAIGHT TIME	HR	20
631.10	AIR COMPRESSOR (INC OPERATOR)	HR	10
631.11	AIR TOOL (INCL OPERATOR)	HR	10
631.12	ALL-PURPOSE EXC (INC OPERATOR)	HR	10
631.172	TRUCK-LARGE (INC OPERATOR)	HR	10
631.18	CHAIN SAW RENTAL (INC OPERATOR)	HR	5
631.32	CULVERT CLEANER (INC OPERATOR)	HR	10
634.801	DECORATIVE LIGHT CLUSTER (INSTALL ONLY)	LS	1
639.18	FIELD OFFICE TYPE A	EA	1

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
641.13	FLAT BENCH	EA	3
641.22	TREE GRATE	EA	10
641.352	REMOVE AND RESET FLAG POLE	LS	1
643.71	TRAFFIC SIGNAL MODIFICATIONS: FOREST AVENUE WITH REVERE STREET	LS	1
643.71	TRAFFIC SIGNAL MODIFICATIONS: FOREST AVENUE WITH WOODFORD STREET AND DEERING AVENUE	LS	1
643.71	TRAFFIC SIGNAL MODIFICATIONS: FOREST AVENUE WITH OCEAN AVENUE, VANNAH AVENUE, AND SAUNDERS STREET	LS	1
643.83	VIDEO DETECTION SYSTEM FOREST W/ REVERE	LS	1
643.83	VIDEO DETECTION SYSTEM FOREST W/ WOODFORD & DEERING	LS	1
643.83	VIDEO DETECTION SYSTEM FOREST W/ OCEAN, VANNAH & SAUDERS	LS	1
643.91	MAST ARM POLE W/ 25FT MAST ARM	EA	1
643.91	MAST ARM POLE W/ 30FT MAST ARM	EA	2
643.91	MAST ARM POLE W/ 40FT MAST ARM	EA	1
643.91	MAST ARM POLE W/ 50FT MAST ARM	EA	2
643.92	PEDESTAL POLE	EA	6
643.922	REMOVE AND RESET PEDESTAL POLE	EA	8
645.106	DEMOUNT REGULATORY, WARNING, CONFIRMATION AND ROUTE MARKER ASSEMBLY SIGN	EA	98
645.108	DEMOUNT POLE	EA	39
645.116	REINSTALL REGULATORY, WARNING, CONFIRMATION AND ROUTE MARKER ASSEMBLY SIGN	EA	96
645.118	REINSTALL POLE	EA	39
645.251	ROADSIDE GUIDE SIGNS, TYPE 1	SF	4
645.271	REGULATORY, WARNING, CONFIRMATION, AND ROUTE MARKER ASSEMBLY SIGNS, TYPE I	SF	100
652.30	FLASHING ARROW BOARD	EA	2
652.312	TYPE III BARRICADES	EA	16
652.33	DRUMS	EA	50
652.34	CONE	EA	220
652.35	CONSTRUCTION SIGNS	SF	1050
652.36	MAINTENANCE OF TRAFFIC CONTROL DEVICES	CD	320
652.38	FLAGGERS	HR	9700
652.381	TRAFFIC OFFICERS	HR	450
652.41	PORTABLE CHANGEABLE MESSAGE SIGN	EA	5
656.75	TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	LS	1
659.10	MOBILIZATION	LS	1
673.10	WET CAST SMALL LANDSCAPE BLOCK WALL	SF	780
841.4712	STEEL BOLLARD - 6 INCH	EA	23

Filename: 005_Estimated Qtys.dgn Username: Division: Date:5/19/2017

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP 2054(300)

WIN 20543.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	A. GORNEAU, II	
DESIGN-DETAILED	D.MITHCELL	D.BURGESS 03\10\17
CHECKED-REVIEWED	-	-
DESIGN2-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

SIGNATURE

P.E. NUMBER

DATE

PORTLAND
FOREST AVENUE

ESTIMATED QUANTITIES

SHEET NUMBER

5

OF 67

1. A TEMPORARY RAMP SHALL BE CONSTRUCTED WITH HMA AT THE ENDS OF THE ROADWAY SECTION PAVED OR MILLED EACH DAY. THE USES OF MILLINGS OR RAP WILL NOT BE ALLOWED, BUT COLD PATCH MAY BE TEMPORARILY UTILIZED UNTIL HMA PLANTS ARE OPEN FOR THE SEASON.

TEMPORARY RAMPS SHALL BE CONSTRUCTED AT A LENGTH OF FOUR FEET PER INCH OF TRANSITION DEPTH.

MATERIALS, PLACEMENT, MAINTENANCE, AND REMOVAL SHALL BE INCIDENTAL TO CONTRACT ITEMS.

2. CLEARING LIMITS SHALL BE 5' BEYOND AND PARALLEL TO THE CONSTRUCTION SLOPE LINES OR AS SHOWN ON THE PLANS UNLESS OTHERWISE AUTHORIZED BY THE RESIDENT.

3. ALL CLEARING SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO SEPARATE PAYMENT WILL BE MADE. THE ACTUAL LINES FOR CLEARING SHALL BE ESTABLISHED IN THE FIELD BY THE CONTRACTOR AS INDICATED ON THE PLANS AND APPROVED BY THE RESIDENT.

4. THE CONTRACTOR SHALL PLAN AND CONDUCT THEIR WORK ACCORDINGLY SO THAT UPON FINAL COMPLETION OF THE PROJECT THERE IS NO DROP-OFF FROM THE EDGE OF SHOULDER PAVEMENT.

5. DRIVEWAY FILL SIDE SLOPES SHALL BE THE SAME AS THE NON-GUARDRAIL FILL SLOPES UNLESS OTHERWISE NOTED ON THE PLANS.

6. ALL WASTE MATERIAL NOT USED ON THE PROJECT SHALL BE DISPOSED OF OFF THE PROJECT IN ACCEPTABLE WASTE AREAS REVIEWED BY THE RESIDENT. GRADING, SEEDING AND MULCHING OF WASTE AREAS SHALL BE CONSIDERED INCIDENTAL.

7. IF FOUNDATION MATERIAL IS REQUIRED UNDER CULVERTS, IT SHALL MEET THE REQUIREMENTS FOR GRANULAR BORROW MATERIAL FOR UNDERWATER BACKFILL AS SPECIFIED IN STANDARD SPECIFICATION 703.19 AND WILL PAID FOR AS GRANULAR BORROW.

8. GRANULAR BORROW USED TO BACKFILL MUCK EXCAVATION OR IN LOW WET AREAS TO 1' ABOVE WATER LEVEL OR OLD GROUND SHALL MEET REQUIREMENTS FOR GRANULAR BORROW MATERIAL FOR UNDERWATER BACKFILL AS SPECIFIED IN STANDARD SPECIFICATION 703.19.

9. RESIDENTIAL PAVED ENTRANCES SHALL BE CONSTRUCTED WITH: 2" HOT MIX ASPHALT AND 12" AGGREGATE SUBBASE COURSE GRAVEL.

10. COMMERCIAL PAVED ENTRANCES SHALL BE CONSTRUCTED WITH: 3" HOT MIX ASPHALT AND 11" AGGREGATE SUBBASE COURSE GRAVEL.

11. GRAVEL ENTRANCES SHALL BE CONSTRUCTED WITH 14" AGGREGATE SUBBASE COURSE GRAVEL OR 11" AGGREGATE SUBBASE COURSE GRAVEL AND 3" UNTREATED AGGREGATE SURFACE COURSE UNLESS OTHERWISE NOTED IN THE PLANS OR DIRECTED BY THE RESIDENT.

12. A 3' PAVED LIP SHALL BE PLACED AT ALL UNPAVED ENTRANCES UNLESS OTHERWISE NOTED IN THE PLANS OR DIRECTED BY THE RESIDENT.

13. 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.

14. GRANULAR BORROW USED UNDER PIPES SHALL MEET THE REQUIREMENTS FOR MATERIAL FOR UNDERWATER BACKFILL AS SPECIFIED IN STANDARD SPECIFICATION 703.19.

15. WHEN SUPER ELEVATION EXCEEDS THE SLOPE OF THE LOW SIDE SHOULDER, THE SHOULDER PAVEMENT WILL HAVE SAME SLOPE AS TRAVELED WAY.

16. PRIOR TO SURFACE PAVING, EXISTING CULVERTS TO REMAIN SHALL BE CLEANED AS DIRECTED BY THE RESIDENT. PAYMENT WILL BE MADE UNDER ITEM 631.32 CULVERT CLEANER (INCLUDING OPERATOR).

17. EXISTING CULVERTS AND CATCH BASINS WILL BE CLEANED AS DIRECTED BY THE RESIDENT UNDER THE APPROPRIATE PAY ITEMS.

18. NO EXISTING DRAINAGE SHALL BE ABANDONED, REMOVED OR PLUGGED WITHOUT PRIOR APPROVAL OF THE RESIDENT.

19. ACRYLIC LATEX COLOR FINISH GREEN (ITEM 658.20) SHALL BE PLACED ON ALL PAVED ISLANDS.

20. FLAT TOPS FOR CATCH BASINS ARE NOT ALLOWED UNLESS NOTED ON THE PLANS OR DIRECTED BY THE RESIDENT.

21. ANY NECESSARY CUTTING OF EXISTING PIPES TO FIT IN AREAS OF PROPOSED CATCH BASINS WILL NOT BE PAID FOR SEPARATELY AND WILL BE CONSIDERED INCIDENTAL TO ITEM 604.

22. 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 ITEM 603 OR 605.

23. A 3 FT. X 3 FT. SQUARE RIPRAP PAD SHALL BE CONSTRUCTED AT UNDERDRAIN OUTLETS.

24. 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 WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO DIRECT PAYMENT WILL BE MADE.

25. EXISTING GUARDRAIL TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR. REMOVAL AND DISPOSAL SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

26. A DELINEATOR POST (ITEM 606.356) WILL BE INSTALLED AT EACH UNDERDRAIN OUTLET.

27. ALL CATCH BASINS TYPE A PLACED ON CIRCULAR CURB TYPE I SHALL HAVE THE CURB INLET CUT THE SAME RADIUS AS ADJACENT CIRCULAR CURB. PAYMENT SHALL BE INCIDENTAL TO ITEM 604.

28. UNLESS OTHERWISE NOTED SEEDING METHOD NO. 1 SHALL BE UTILIZED ON ALL LAWNS AND DEVELOPED AREAS; SEEDING METHOD NO. 2 SHALL BE UTILIZED ON ALL OTHER AREAS.

29. LOAM SHALL BE PLACED TO A NOMINAL DEPTH OF 4 INCHES IN LAWN AREAS AND 2 INCHES IN ALL OTHER AREAS UNLESS OTHERWISE NOTED OR DIRECTED.

30. WHITE PAVEMENT/CURB MARKING (ITEM 627.75) SHALL BE APPLIED TO ALL ISLAND TAPERED ENDS.

31. ANY BASE PAVEMENT NOT SURFACED BEFORE WINTER WILL REQUIRE TEMPORARY PAVEMENT MARKINGS OF PAINT, BOTH YELLOW CENTERLINE AND WHITE EDGE LINES AND WILL BE CONSIDERED PART OF ITEM 627.78 OR ITEM 627.4075.

32. A COPY OF THE GEOTECHNICAL REPORT FOR THIS PROJECT IS AVAILABLE AT HTTP://WWW.MAINE.GOV/MDOT/CONTRACTORS/. ALL COMPUTATION METHODS AND QUANTITIES USED FOR THE ENGINEER'S ESTIMATE FOR PLAN QUANTITY ITEMS ONLY ARE AVAILABLE BY CONTACTING PROJECT MANAGER AURELE GORNEAU AT (207) 624-3553.

33. THE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTAINING ALL EXISTING MAILBOXES TO ENSURE THAT THE MAIL WILL BE DELIVERABLE. PAYMENT FOR THIS WORK WILL BE MADE UNDER THE APPROPRIATE RENTAL ITEMS.

34. ANY DAMAGE TO THE SLOPES CAUSED BY THE CONTRACTOR'S EQUIPMENT, PERSONNEL, OR OPERATION 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.

35. 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.

36. "UNDETERMINED LOCATIONS" SHALL BE DETERMINED BY THE RESIDENT.

37. FINAL STRIPING FOR THE PROJECT SHALL BE DONE BY THE CONTRACTOR PER THE STRIPING LAYOUT IN THE CONTRACT DOCUMENTS OR AS PROVIDED BY THE DEPARTMENT. PAYMENT SHALL BE MADE UNDER APPROPRIATE CONTRACT ITEMS.

38. EXCLUDING WATER AND GAS GATE VALVES, ALL HMA FOR PATCHING AROUND ADJUSTED, ALTERED, OR REBUILT UTILITY STRUCTURES SHALL MEET THE GRADATION REQUIREMENTS OF A 9.5 MM OR 12.5 MM MIXTURE. THE CONTRACTOR SHALL SAW CUT THE EXISTING PAVEMENT FOR THE PATCH AT LEAST TWO FEET AWAY FROM THE NEAREST EDGE OF THE STRUCTURE. THE CONTRACTOR SHALL PLACE HMA IN LIFTS OF 3" OR LESS, AS DIRECTED BY THE RESIDENT, AND COMPACT THE HMA USING A MINIMUM OF A 150 POUND PLATE COMPACTOR. HMA FOR PATCHING AROUND ADJUSTED, ALTERED, OR REBUILT UTILITY STRUCTURES IS CONSIDERED INCIDENTAL TO THE RESPECTIVE PAY ITEM FOR ADJUST, ALTER, OR REBUILD UTILITY STRUCTURE. ALL EDGES SHALL BE THOROUGHLY CLEANED AND TACKED PRIOR TO PAVING.

39. THE CONTRACTOR WILL PLACE APPROPRIATELY MARKED STAKES AT THE FOLLOWING LOCATIONS ON THE PROJECT: STRIPING PATTERN CHANGES, CROSS-SLOPE CHANGES, AND EVERY 500' FOR STATIONING. THE CONTRACTOR WILL PAINT EVERY FULL STATION (100') ON THE EXISTING ROADWAY AND WILL TRANSFER THE PAINTED STATIONING THROUGH ALL INTERMEDIATE LIFTS (NOT SURFACE). APPROPRIATELY SIZED STRIPING PATTERN CHANGES WILL BE PAINTED ON SURFACE. STATIONING CONTROL MUST BE PLACED BEFORE WORK CAN COMMENCE. CROSS-SLOPE AND STRIPING CHANGE CONTROLS MUST BE PLACED BEFORE PAVING CAN COMMENCE.

40. CONTRACTOR SHALL NOTIFY THE RESIDENT 4 WEEKS PRIOR, AND AGAIN AT 2 WEEKS PRIOR, TO THE PLACEMENT OF CONCRETE FOR DRIVEWAYS. THE DRIVEWAY CONCRETE SHALL BE PLACED FOR A MAXIMUM 50% OF THE AVAILABLE DRIVEWAY WIDTH UNLESS OTHERWISE DIRECTED BY THE RESIDENT. ACCESS THROUGH THE REMAINING DRIVEWAY AREA SHALL BE MAINTAINED AS A TRAVERSABLE DRIVEWAY. COMPLETE DRIVEWAY CLOSURES SHALL BE COORDINATED WITH THE RESIDENT AND SHALL BE LIMITED IN DURATION TO ACTIVE CONSTRUCTION, CONCRETE PLACEMENT, AND CURING TIME ONLY. WEEKEND CLOSURES WILL NOT BE PERMITTED UNLESS SPECIFICALLY APPROVED BY THE RESIDENT.

41. EXISTING UNDERGROUND UTILITIES ARE PARTIALLY SHOWN ON THE ROADWAY PLANS. NO PROPOSED UNDERGROUND UTILITIES ARE SHOWN ON THE ROADWAY PLANS. SEE APPENDIX FOR SPECIFICS ON EXISTING AND PROPOSED UNDERGROUND UTILITIES. THE CONTRACTOR SHALL PLAN THEIR WORK ACCORDINGLY.

42. EARTHWORK QUANTITY CALCULATIONS ASSUME NO LOAM SALVAGE, HOWEVER, IN ACCORDANCE WITH THE GENERAL CONDITIONS, SECTION 104.3.13, THE DEPARTMENT WILL APPROVE THE CONTRACTOR TO PROCESS SUITABLE EXCAVATED MATERIAL AS SHOWN ON THE PLANS FOR REUSE AS LOAM ON THE PROJECT. PAYMENT SHALL BE MADE UNDER COMMON EXCAVATION AND LOAM. NO ADDITIONAL PAYMENT WILL BE MADE FOR PROCESSING OR HANDLING OF THE MATERIAL. AS THIS WOULD BE A REDUCTION IN THE WASTE, THE CONTRACTOR WILL NOT BE REQUIRED TO REPLACE THE EXCAVATED MATERIAL SALVAGED FOR LOAM. THE CONTRACTOR MAY ELECT TO SALVAGE LOAM IN FILL BEYOND THE GRUBBING LIMITS SHOWN ON THE PLANS. EXCAVATION FOR SUCH SALVAGING LOAM IN FILL SHALL NOT BE PAID FOR. THE CONTRACTOR SHALL REPLACE SUCH EXCAVATED MATERIAL WITH OTHER APPROVED MATERIAL AND PROPERLY COMPACT IT AT NO COST TO THE DEPARTMENT.

43. ALL WASTE MATERIAL NOT USED ON THE PROJECT SHALL BE DISPOSED OF OFF THE PROJECT IN APPROVED WASTE AREAS.

44. EXISTING GRANITE CURB SUITABLE FOR REUSE ON THE PROJECT SHALL BE REUSED AT LOCATIONS OF PROPOSED STRAIGHT AND CIRCULAR CURB. IF REUSED, PAYMENT WILL BE MADE UNDER THE RESET CURB ITEM. RESIDENT SHALL APPROVE LOCATIONS. CONTRACTOR SHALL PLAN HIS WORK ACCORDINGLY AND COORDINATE WORK WITH RESIDENT.

45. THE CONTRACTOR SHALL RESTORE ALL AREAS DISTURBED OR DAMAGED BY CONSTRUCTION ACTIVITIES TO ORIGINAL FINISH SURFACE (LAWN, PAVEMENT, GRAVEL, ETC.) UNLESS NOTED OTHERWISE ON PLANS. RESTORATION OF PAVED SURFACES, GRAVEL SURFACES, DRIVEWAYS, WALKWAYS, LAWNS AND OTHER AREAS SHALL BE INCIDENTAL TO THE PROJECT. ALL CURB DAMAGED BY CONSTRUCTION ACTIVITIES SHALL BE REPLACED IN KIND AND SHALL CONFORM TO CITY OF PORTLAND AND MAINEDOT STANDARDS. COST SHALL BE INCIDENTAL TO THE PROJECT.

46. AREAS REQUIRING FILL ON THE PROJECT WILL COME FROM SUITABLE EXCAVATION FROM EXCAVATION, DITCH AND INSLOPE OR EQUIPMENT RENTAL AREAS.

47. PAYMENT FOR REMOVAL OF EXISTING COBBLE STONE LOCATED OVER CONCRETE PAVMENT THAT IS ALSO DESIGNATED TO BE REMOVED SHALL BE INCLUDED IN ITEM 202.11 - REMOVING PORTLAND CEMENT CONCRETE PAVEMENT AND NO ADDITIONAL PAYMENT WILL BE MADE.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP 2054(300)

WIN
20543.00

HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER	A. GORNEAU, II		
DESIGN-DETAILED	D.MITHCELL	D.BURGESS	03\10\17
CHECKED-REVIEWED		-	-
DESIGN2-DETAILED2		-	-
DESIGN3-DETAILED3		-	-
REVISIONS 1		-	-
REVISIONS 2		-	-
REVISIONS 3		-	-
REVISIONS 4		-	-
FIELD CHANGES		-	-

SIGNATURE

P.E. NUMBER

DATE

PORTLAND
FOREST AVENUE

GENERAL NOTES

SHEET NUMBER

6

OF 67

Date:4/27/2017

Username:

Division:

Filename: 006_GeneralNotes.dgn

DRIVES AND ENTRANCES

LOCATION		DESCRIPTION	OPENING
13+10	LT	PAVED - COMMERCIAL	22 FT.
13+34	LT	PAVED - COMMERCIAL	20 FT.
14+57	RT	PAVED - COMMERCIAL	18 FT.
16+87	RT	PAVED - COMMERCIAL	28 FT.
16+92	LT	PAVED - COMMERCIAL	26 FT.
19+02	LT	PAVED - COMMERCIAL	30 FT.
20+74	LT	PAVED - COMMERCIAL	23 FT.
20+85	RT	PAVED - COMMERCIAL	23 FT.
21+09	LT	PAVED - COMMERCIAL	16 FT.
21+95	LT	PAVED - COMMERCIAL	20 FT.
23+15	LT	PAVED - COMMERCIAL	25 FT.
25+12	RT	PAVED - COMMERCIAL	17 FT.
25+50	RT	PAVED - COMMERCIAL	15 FT.
700+40	LT	PAVED - COMMERCIAL	15 FT.
800+90	LT	PAVED - COMMERCIAL	66 FT.

CLEARING (INCIDENTAL TO THE CONTRACT)

STATION		TO	STATION
26+67	RT	TO	27+25 RT

ITEM NO. 608.081 - REINFORCED CONCRETE DRIVEWAY

STATION		QUANTITY (SY)
13+20	LT	25.46
14+56	RT	16.48
16+86	RT	26.70
16+92	LT	20.26
19+08	LT	47.41
20+73	LT	16.97
20+85	RT	25.46
21+09	LT	11.25
21+94	LT	14.27
23+15	LT	16.25
25+14	RT	9.49
25+49	RT	9.21
801+10	LT	52.70

ITEM NO.603.159 - 12 IN CULVERT PIPE OPTION III

STATION		TO	STATION		LENGTH
26+26	LT	TO	26+34	LT	12 LF
27+92	RT	TO	28+20	RT	28 LF

ITEM NO.604.071 - CATCH BASIN TYPE A1-P

LOCATION		UN
26+26	LT	1 EA
28+20	RT	1 EA

ITEM 604.16 - ALTERING CATCH BASIN TO CATCH BASIN WITH SOLID COVER (PAID FOR UNDER ITEM NO.604.16 - ALTERING CATCH BASIN TO MANHOLE)

LOCATION		UN
26+26	LT	1 EA
28+20	RT	1 EA

ITEM 604.164 - REBUILDING CATCH BASIN

LOCATION		UN
16+32	LT	1 EA

ITEM NO. 607.163 - CHAIN LINK FENCE - 4 FT - PVC COATED

STATION		TO	STATION		LENGTH
25+60	LT	TO	26+73	LT	118 LF
26+03	RT	TO	26+50	RT	49 LF

ITEM NO. 608.08 - REINFORCED CONCRETE SIDEWALK

STATION		TO	STATION		QUANTITY (SY)
13+06.06	RT	TO	14+50.86	RT	176.82
14+62.96	RT	TO	16+77.06	RT	269.07
14+92.76	LT	TO	15+94.92	LT	130.59
16+21.88	LT	TO	16+79.00	LT	70.73
16+96.65	RT	TO	54.81.09	RT	394.76
17+05.02	LT	TO	18+50.00	LT	120.57
401+71.53	LT	TO	402+47.35	LT	212.69
400+72.89	RT	TO	402+46.96	RT	187.36
402+70.52	RT	TO	403+04.47	RT	28.69
19+31.57	RT	TO	20+73.66	RT	125.73
51+38.00	LT	TO	20+62.00	LT	150.44
20+85.00	LT	TO	21.01.00	LT	13.15
20+96.76	LT	TO	500+71.72	LT	237.29
21+17.06	LT	TO	21+84.56	LT	52.93
22+05.43	LT	TO	23+01.72	LT	79.57
23+16.77	RT	TO	24+17.86	RT	138.94
23+27.69	LT	TO	23+82.21	LT	47.53
24+15.85	LT	TO	25+00.00	LT	63.35
24+51.15	RT	TO	25+10.47	RT	46.44
25+20.83	RT	TO	25+42.41	RT	10.73
25+00.00	LT	TO	25+94.65	LT	63.36
25+51.00	RT	TO	28+59.79	RT	206.28
25+94.65	LT	TO	801+32.07	LT	88.76
27+18.72	LT	TO	27+57.18	LT	31.75
27+57.18	LT	TO	28+12.16	LT	42.51
51+88.83	RT	TO	52+70.32	RT	76.08

ITEM NO. 608.26 - CURB RAMP DETECTABLE WARNING FIELDS

STATION		QUANTITY (SF)
13+10	RT	12.00
15+72	LT	12.00
15+72	RT	50.66
16+24	LT	12.00
18+69	LT	12.00
18+71	RT	12.00
18+78	LT	12.00
18+81	RT	12.00
18+88	LT	12.00
19+44	RT	12.00
19+38	LT	12.00
19+85	LT	12.00
20+07	LT	12.00
20+07	RT	12.00
22+88	RT	35.49
22+89	LT	12.00
23+31	RT	12.00
23+73	LT	12.00
23+88	RT	12.00
24+16	LT	12.00
24+60	RT	30.99
24+59	LT	12.00
26+88	LT	12.00
27+21	LT	12.00

ITEM NO.608.282 - GRANITE PAVERS WITH CONCRETE BASE

STATION		TO	STATION		QUANTITY (SY)
18+25.26	RT	TO	18+53.26	RT	10.46
18+51.39	LT	TO	18+65.95	LT	6.21
18+61.80	LT	TO	18+65.80	LT	3.14
53+79.64	RT	TO	54+01.78	RT	13.33
400+89.84	LT	TO	401+19.12	LT	10.67
400+96.60	RT	TO	401+17.52	RT	9.55

ITEM NO.608.46 - REGRADING SIDEWALK

STATION		TO	STATION		QUANTITY (SY)
13+06.06	RT	TO	14+50.86	RT	176.82
14+62.96	RT	TO	16+77.06	RT	269.07
14+92.76	LT	TO	15+94.92	LT	130.27
16+96.70	RT	TO	18+00.00	RT	131.31
17+05.00	LT	TO	18+00.00	LT	78.09
27+57.18	LT	TO	28+12.16	LT	42.52
51+38.00	LT	TO	21+84.56	LT	216.52
51+88.83	RT	TO	52+50.00	RT	51.82
401+30.00	RT	TO	402+46.96	RT	96.81
401+30.00	LT	TO	402+47.35	LT	98.44
402+70.52	LT	TO	403+04.46	LT	28.69

ITEM NO. 626.11 - PRECAST CONCRETE JUNCTION BOX

ID	STATION	OFFSET		UN
EB-1	12+46.51	48.74	LT	1 EA
EB-2	12+71.14	29.10	LT	1 EA
EB-3	13+71.14	29.29	LT	1 EA
EB-4	14+76.10	29.65	LT	1 EA
EB-5	15+57.98	29.62	LT	1 EA
EB-6	15+84.89	35.55	LT	1 EA
EB-7	16+39.73	29.83	LT	1 EA
EB-8	17+39.75	34.87	LT	1 EA
EB-9	18+39.75	34.52	LT	1 EA
EB-10	18+78.95	34.45	LT	1 EA
EB-11	18+70.42	55.35	LT	1 EA
EB-12	17+90.87	112.94	LT	1 EA
EB-13	17+03.69	163.70	LT	1 EA
EB-14	12+56.83	36.01	RT	1 EA
EB-15	13+21.25	35.95	RT	1 EA
EB-16	14+14.03	36.07	RT	1 EA
EB-17	15+17.74	36.16	RT	1 EA
EB-18	15+82.46	36.21	RT	1 EA
EB-19	16+68.16	36.10	RT	1 EA
EB-20	17+87.46	36.17	RT	1 EA
EB-21	18+76.33	31.98	RT	1 EA
EB-22	19+09.08	95.13	RT	1 EA
EB-23	19+51.67	33.32	RT	1 EA
EB-24	20+14.02	27.10	RT	1 EA
EB-25	21+16.13	27.52	RT	1 EA
EB-26	22+14.79	25.79	RT	1 EA
EB-27	22+90.68	28.62	RT	1 EA
EB-28	23+47.52	32.58	RT	1 EA
EB-29	23+99.71	53.40	RT	1 EA
EB-30	24+72.22	35.08	RT	1 EA
EB-31	25+72.22	35.08	RT	1 EA
EB-32	26+73.78	34.02	RT	1 EA
EB-33	27+74.36	31.77	RT	1 EA
EB-34	28+74.11	26.49	RT	1 EA
EB-41	17+83.14	168.03	LT	1 EA
EB-42	18+58.24	107.39	LT	1 EA
EB-43	19+28.05	46.35	LT	1 EA
EB-44	19+45.87	60.04	LT	1 EA
EB-45	19+99.99	27.32	LT	1 EA
EB-46	20+56.12	26.10	LT	1 EA
EB-47	21+68.82	26.29	LT	1 EA
EB-48	22+71.36	28.20	LT	1 EA
EB-49	23+60.86	32.34	LT	1 EA
EB-50	24+26.33	34.78	LT	1 EA
EB-51	24+96.33	36.54	LT	1 EA
EB-52	26+21.10	36.79	LT	1 EA
EB-53	26+91.77	41.00	LT	1 EA
EB-54	27+33.17	25.62	LT	1 EA
EB-55	28+23.63	26.04	LT	1 EA
EB-56	25+34.19	40.55	RT	1 EA

ITEM NO. 626.22 - NON-METALLIC CONDUIT

STATION	TO	STATION	LENGTH
EB-1	TO	EB-2	32 FT
EB-2	TO	EB-3	102 FT
EB-3	TO	EB-4	107 FT
EB-4	TO	EB-5	84 FT
EB-5	TO	EB-6	28 FT
EB-6	TO	EB-7	61 FT
EB-7	TO	EB-8	101 FT
EB-8	TO	EB-9	101 FT
EB-9	TO	EB-10	42 FT
EB-10	TO	EB-11	24 FT
EB-11	TO	EB-12	102 FT
EB-12	TO	EB-13	103 FT
EB-14	TO	EB-15	67 FT
EB-15	TO	EB-16	95 FT
EB-16	TO	EB-17	106 FT
EB-17	TO	EB-18	67 FT
EB-18	TO	EB-19	88 FT
EB-19	TO	EB-20	121 FT
EB-20	TO	EB-21	90 FT
EB-21	TO	EB-22	93 FT
EB-21	TO	EB-23	66 FT
EB-23	TO	EB-24	54 FT
EB-24	TO	EB-25	104 FT
EB-25	TO	EB-26	102 FT
EB-26	TO	EB-27	79 FT
EB-27	TO	EB-28	62 FT
EB-28	TO	EB-29	58 FT
EB-29	TO	EB-30	84 FT
EB-30	TO	EB-31	101 FT
EB-31	TO	EB-32	101 FT
EB-32	TO	EB-33	101 FT
EB-33	TO	EB-34	101 FT
EB-34	TO	EB-35	101 FT
EB-35	TO	EB-36	101 FT
EB-36	TO	EB-37	114 FT
EB-37	TO	EB-38	101 FT
EB-38	TO	EB-39	101 FT
EB-39	TO	EB-40	101 FT
EB-41	TO	EB-42	97 FT
EB-42	TO	EB-43	112 FT
EB-43	TO	EB-44	26 FT
EB-43	TO	EB-45	86 FT
EB-45	TO	EB-46	57 FT
EB-46	TO	EB-47	113 FT
EB-47	TO	EB-48	101 FT
EB-48	TO	EB-49	87 FT
EB-49	TO	EB-50	63 FT
EB-50	TO	EB-51	69 FT
EB-51	TO	EB-52	126 FT
EB-52	TO	EB-53	78 FT
EB-53	TO	EB-54	46 FT
EB-8	TO	EB-20	85 FT
EB-48	TO	EB-27	60 FT
EXIST. LIGHT	TO	EB-56	8 FT
EXIST. JB	TO	EB-57	67 FT

ITEM NO.641.13 - FLAT BENCH

STATION	TO	STATION	UN
LS437	TO	LS424	1 EA
LS426	TO	LS427	1 EA
LS429	TO	LS430	1 EA

ITEM NO. 658.20 - ACRYLIC LATEX COLOR FINISH

STATION	TO	STATION	QUANTITY (SY)
16+50 LT	TO	18+33 LT	6.75
26+98 LT	TO	27+63 LT	3.56

ITEM NO. 841.4712 - STEEL BOLLARD - 6 INCH

STATION	OFFSET		UN
18+21.95	28.75	RT	1 EA
18+26.95	28.75	RT	1 EA
18+31.95	28.75	RT	1 EA
18+36.95	28.75	RT	1 EA
18+41.95	28.75	RT	1 EA
18+46.95	28.75	RT	1 EA
18+51.95	28.75	RT	1 EA
18+56.98	29.15	RT	1 EA
18+61.98	29.73	RT	1 EA
18+51.64	31.34	LT	1 EA
18+57.39	31.34	LT	1 EA
18+62.39	31.34	LT	1 EA
401+19.09	12.76	LT	1 EA
401+13.87	12.91	LT	1 EA
401+08.65	12.97	LT	1 EA
401+03.42	12.94	LT	1 EA
400+98.20	12.82	LT	1 EA
400+92.98	12.62	LT	1 EA
401+17.51	13.17	RT	1 EA
401+12.73	13.47	RT	1 EA
401+07.96	13.84	RT	1 EA
401+03.20	14.30	RT	1 EA
400+98.46	14.84	RT	1 EA

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP 2054(300)

WIN
20543.00

HIGHWAY PLANS

PROJ. MANAGER	A. GORNEAU, II			
DESIGN-DETAILED	D.MITHCELL	D.BURGESS	03\10\17	DATE
CHECKED-REVIEWED	-	-	-	SIGNATURE
DESIGN2-DETAILED2	-	-	-	
DESIGN3-DETAILED3	-	-	-	P.E. NUMBER
REVISIONS 1	-	-	-	
REVISIONS 2	-	-	-	DATE
REVISIONS 3	-	-	-	
REVISIONS 4	-	-	-	
FIELD CHANGES	-	-	-	

PORTLAND
FOREST AVENUE

CONSTRUCTION NOTES

SHEET NUMBER

7

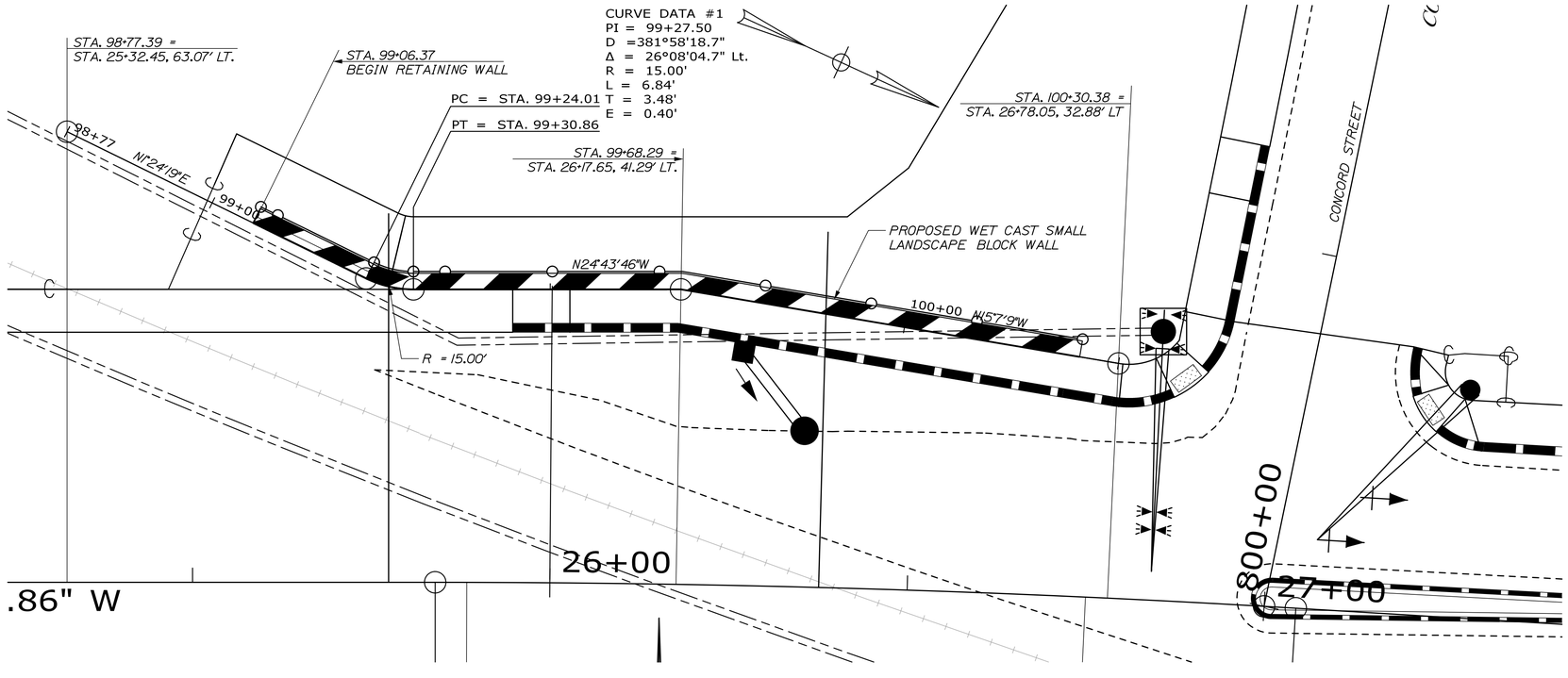
OF 67

Date:4/27/2017

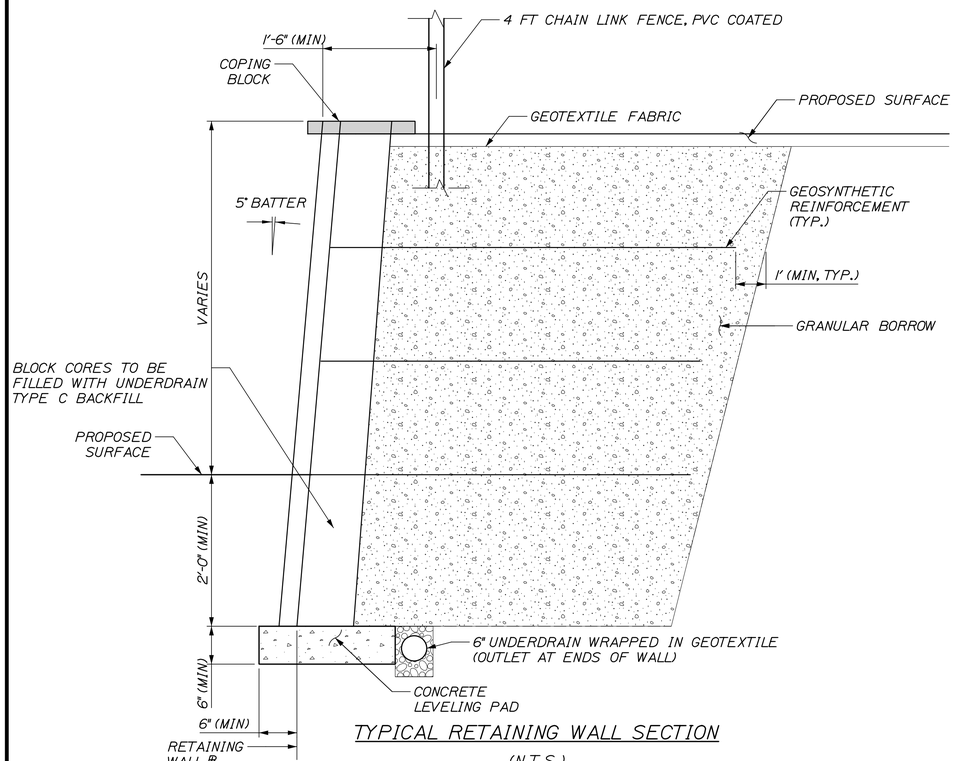
Username:

Division:

Filename: 007_Construction Notes.dgn



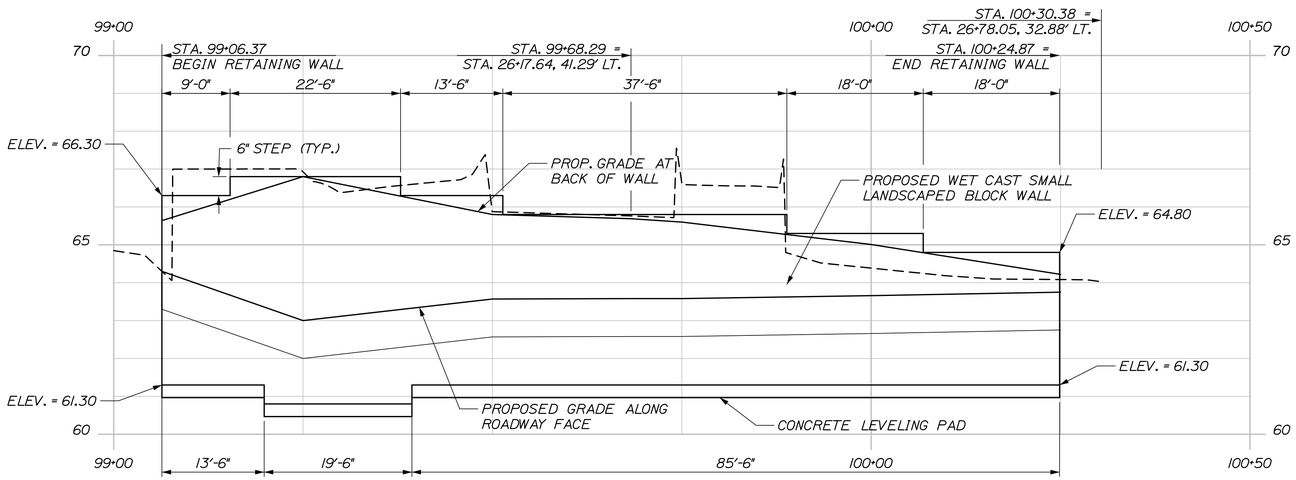
PLAN
1"=10'



TYPICAL RETAINING WALL SECTION
(N.T.S.)

NOTES:

1. THE CONTRACTOR SHALL PROVIDE A WET CAST SMALL LANDSCAPE BLOCK WALL IN ACCORDANCE WITH STANDARD SPECIFICATION SECTION 673. THE WALL DESIGN SHALL MEET THE REQUIREMENTS OF THE STANDARD SPECIFICATION AND SHALL BE STAMPED BY A LICENSED PROFESSIONAL ENGINEER. THE DESIGN COMPUTATIONS AND SHOP DRAWINGS SHALL BE SUBMITTED TO THE RESIDENT FOR REVIEW. PLAN DETAILS ARE SHOWN FOR ESTIMATING PURPOSES ONLY.
2. BACKFILL AND FOUNDATION SOIL PARAMETERS FOR USE IN THE SUBMITTED DESIGN SHALL BE IN ACCORDANCE WITH THE STANDARD PROVISION 673.
3. THE PROPOSED RETAINING WALL SHALL BE DESIGNED IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 7TH EDITION.
4. AT THE SERVICE LIMIT STATE THE FACTORED BEARING PRESSURE SHALL NOT EXCEED THE FACTORED BEARING RESISTANCE OF 5 KSF. AT THE STRENGTH LIMIT STATE THE FACTORED BEARING PRESSURE SHALL NOT EXCEED THE FACTORED BEARING RESISTANCE OF 3.5 KSF.
5. ALL BLOCKS AT THE ENDS OF THE WALL(S) MUST BE FINISHED ON THREE SIDES: THE FRONT, THE TOP AND THE EXPOSED END. BLOCKS WITH EXPOSED SURFACES AT THE ENDS AND TOP OF THE WALL MUST BE MANUFACTURED FOR THIS PURPOSE AND MUST BE FINISHED TO MATCH THE FACE OF THE BLOCKS.
6. PIPED DRAINAGE SHALL BE INCLUDED IN THE DESIGN OF THE WALLS. WALL DRAINAGE WILL BE INCIDENTAL TO CONSTRUCTION OF THE WALL.
7. A MINIMUM EMBEDMENT DEPTH OF 2 FEET IS REQUIRED IN THE DESIGN AND CONSTRUCTION OF THE WET CAST SMALL LANDSCAPE BLOCK WALL MEASURED TO THE BOTTOM OF THE CAST-IN-PLACE LEVELING PAD.
8. THE FACE QUANTITY OF THE PROPOSED WALL SHALL BE APPROVED BY THE RESIDENT.
9. LAYOUT AND WALL STEPS SHOWN ARE BASED ON THE BLOCK SIZE OF 1'-6" LONG AND 6" HIGH.
10. UNDERDRAIN CULVERT WILL TIE INTO CB OR AS ORDERED BY THE RESIDENT.
11. THE MINIMUM LIMIT OF THE EXCAVATION AND GRANULAR BORROW BACKFILL SHALL BE 1 FOOT BEHIND THE REINFORCING LAYERS. EXCAVATION AND GRANULAR BORROW BACKFILL ARE INCIDENTAL TO THE CONSTRUCTION OF THE WALL.
12. ACTUAL WALL ALIGNMENT AND LIMITS TO BE DETERMINED IN THE FIELD BASED ON THE DESIGN. DETAILS SHOWN ARE FOR ESTIMATING PURPOSES ONLY.
13. PLAN VIEW WALL BATTER NOT SHOWN.
14. FENCE POSTS SHALL NOT BE DRIVEN THROUGH THE WALL REINFORCING. IF FENCE POSTS IMPACT THE REINFORCEMENT THEN THE INSTALLATION OF THE FENCE SHALL BE ADDRESSED IN THE WALL DESIGN SUBMITTAL.
15. THE CONTRACTOR SHALL COORDINATE THE CONSTRUCTION OF THE WALLS WITH UTILITY COMPANIES IN AN EFFORT TO AVOID UTILITY IMPACTS.



PROFILE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP 2054(300)

WIN 20543.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	A. CORNEAU II	
DESIGN-DETAILED	D.MITHCELL	03\10\17
CHECKED-REVIEWED	D.BURGESS	-
DESIGN2-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

SIGNATURE

P.E. NUMBER

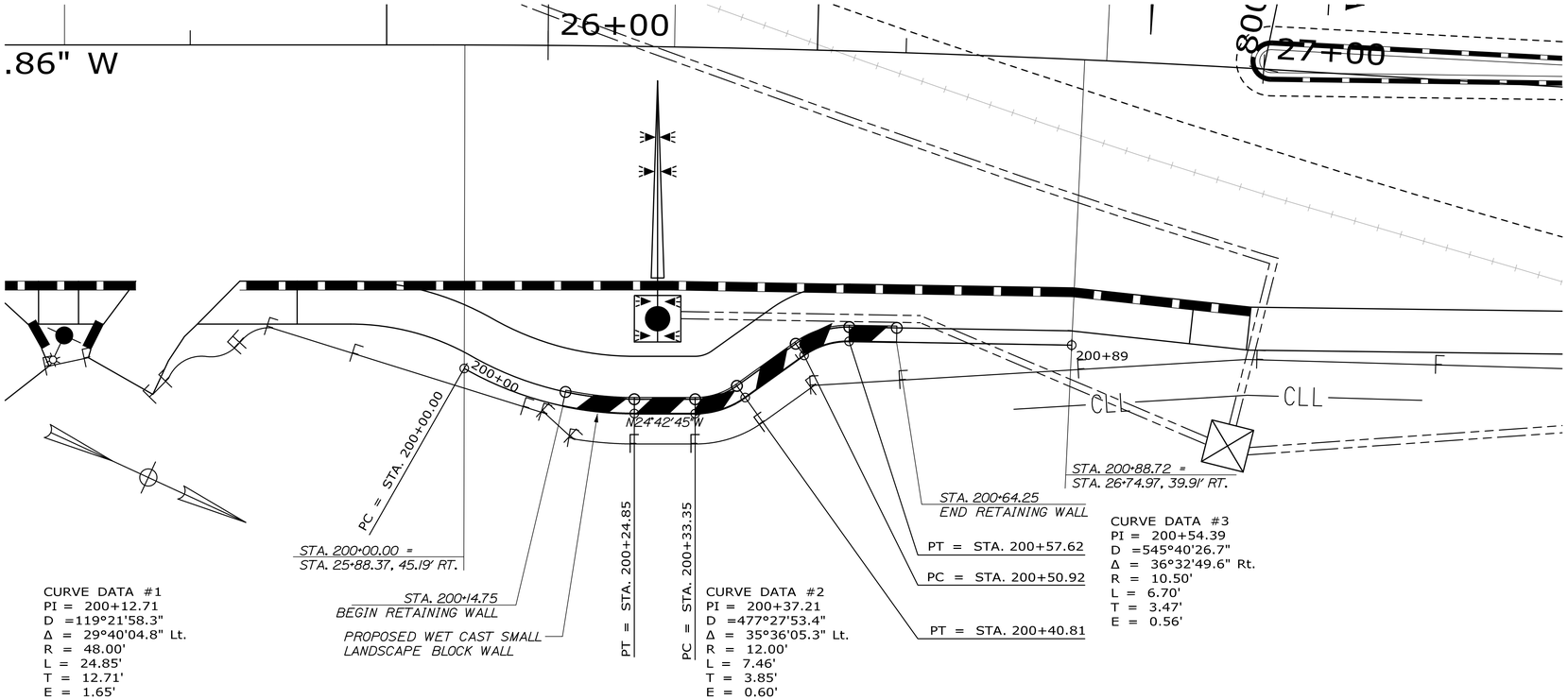
DATE

PORTLAND
FORESTAVENUE

SPECIAL DETAILS
RETAINING WALL NO. 1

SHEET NUMBER
8
OF 67

Date:4/27/2017
Username:
Division:
Filename: 008_Retaining_Wall-1.dgn

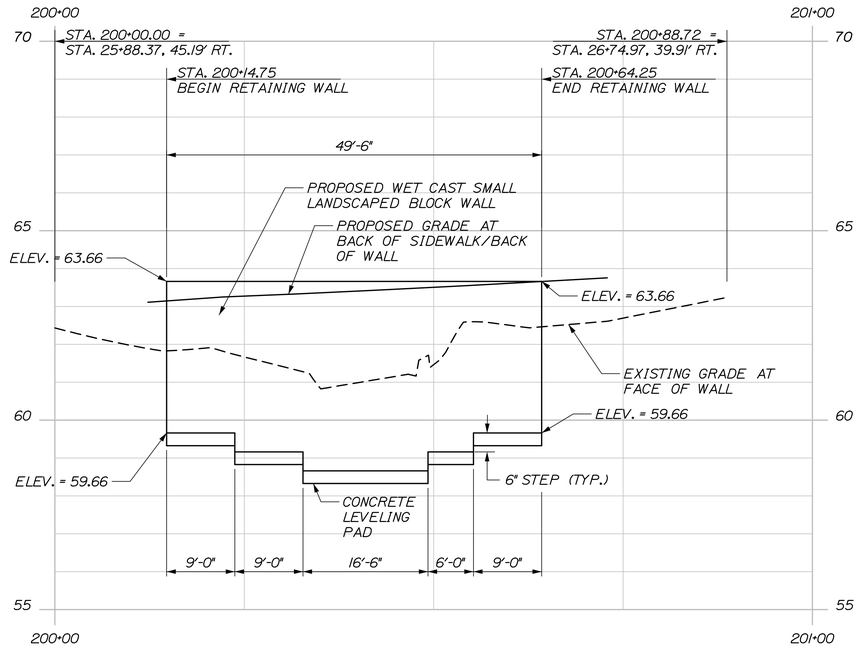


CURVE DATA #1
PI = 200+12.71
D =119°21'58.3"
Δ = 29°40'04.8" Lt.
R = 48.00'
L = 24.85'
T = 12.71'
E = 1.65'

CURVE DATA #2
PI = 200+37.21
D =477°27'53.4"
Δ = 35°36'05.3" Lt.
R = 12.00'
L = 7.46'
T = 3.85'
E = 0.60'

CURVE DATA #3
PI = 200+54.39
D =545°40'26.7"
Δ = 36°32'49.6" Rt.
R = 10.50'
L = 6.70'
T = 3.47'
E = 0.56'

PLAN
1"=10'



PROFILE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP 2054(300)

WIN
20543.00

HIGHWAY PLANS

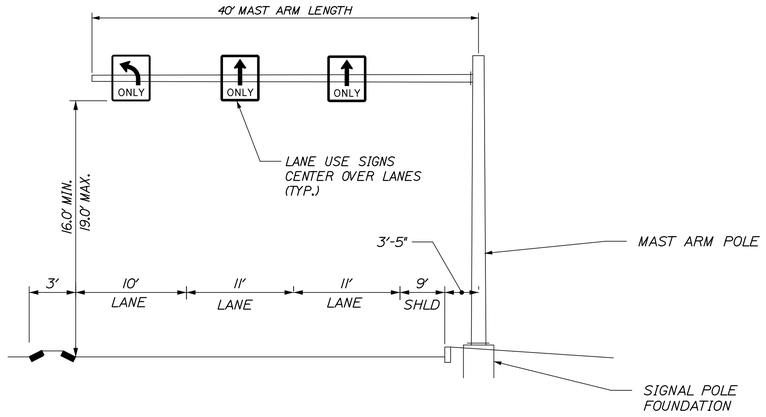
PROJ. MANAGER	A. GORNEAU, II	BY	DATE	SIGNATURE	
DESIGN-DETAILED	D.MITHCELL	D.BURGESS	03\10\17	-	
CHECKED-REVIEWED	-	-	-	-	
DESIGN2-DETAILED2	-	-	-	-	P.E. NUMBER
DESIGN3-DETAILED3	-	-	-	-	
REVISIONS 1	-	-	-	-	DATE
REVISIONS 2	-	-	-	-	
REVISIONS 3	-	-	-	-	
REVISIONS 4	-	-	-	-	
FIELD CHANGES	-	-	-	-	

PORTLAND
FORESTAVENUE

SPECIAL DETAILS
RETAINING WALL NO.2

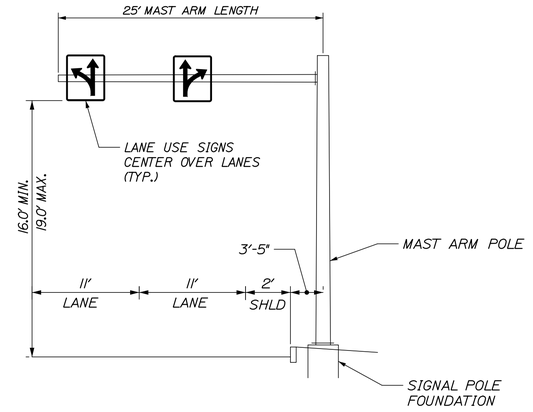
SHEET NUMBER
9
OF 67

Filename: 009_Retaining_Wall-2.dgn Division: Username: Date:4/27/2017



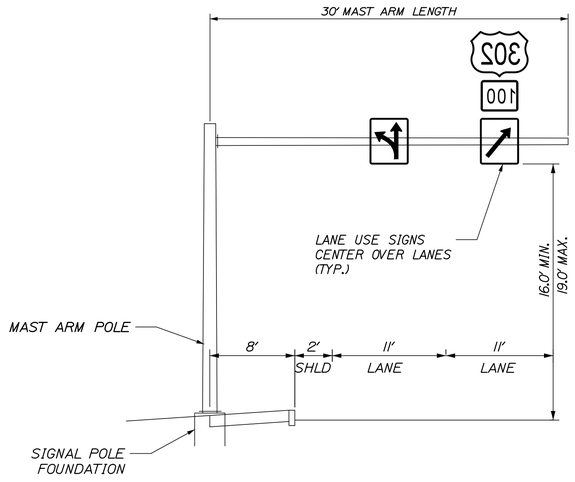
MAST ARM ASSEMBLY WITH LANE USE SIGNS
AT STA. 17+56 RT

Not to Scale



MAST ARM ASSEMBLY WITH LANE USE SIGNS
AT STA. 21+38 RT

Not to Scale



MAST ARM ASSEMBLY WITH LANE USE SIGNS
AT STA. 22+42 LT

Not to Scale

Filename: 010_OH_Sign_Details.dgn Division: Username: Date:4/27/2017

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP 2054(300)

WIN
20543.00

HIGHWAY PLANS

PROJ. MANAGER	A. GORNEAU, II	BY	DATE
DESIGN-DETAILED	D.MITHCELL	D.BURGESS	03\10\17
CHECKED-REVIEWED	D.MITHCELL	-	-
DESIGN2-DETAILED2	-	-	-
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

SIGNATURE

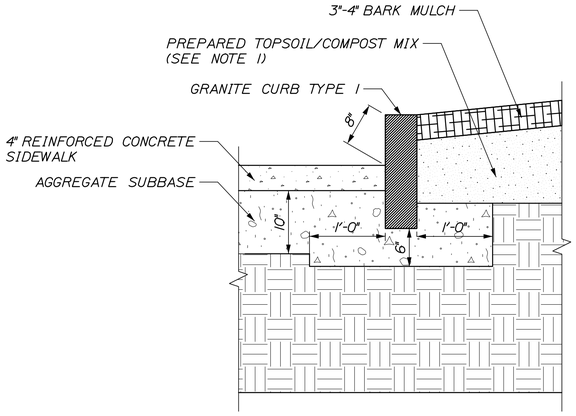
P.E. NUMBER

DATE

PORTLAND
FORESTAVENUE

SPECIAL DETAILS
OVERHEAD SIGNING DETAILS

SHEET NUMBER
10
OF 67



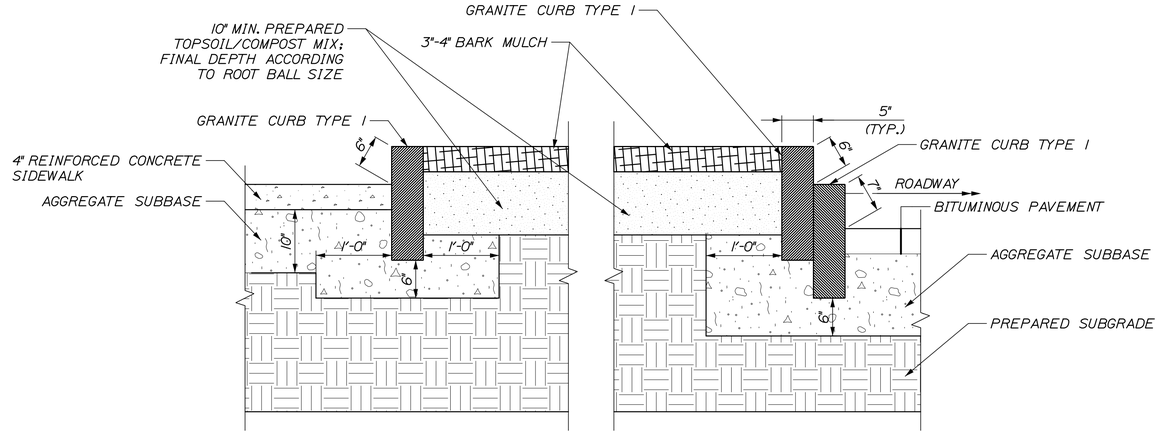
SECTION VIEW

NOTES:

1. LOAM INSIDE THE RAISED PLANTING AREA SHALL BE MOUNDED A MINIMUM OF 12" FROM INSIDE FACE OF CURB TO THE CENTER OF THE PLANTING AREA WITH ACCOMMODATIONS FOR LEVEL TREE PIT SOIL SAUCERS. FINAL ELEVATIONS TO BE APPROVED BY THE LANDSCAPE ARCHITECT.

8" RAISED GRANITE CURB PLANTING AREA DETAIL

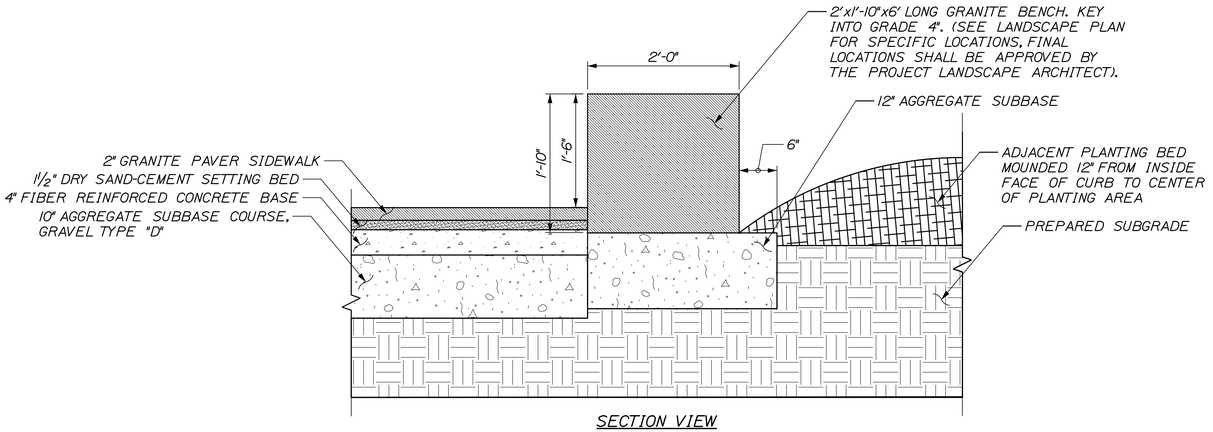
1" = 1'-0"



SECTION VIEW

6" RAISED GRANITE CURB PLANTER TREE DETAIL

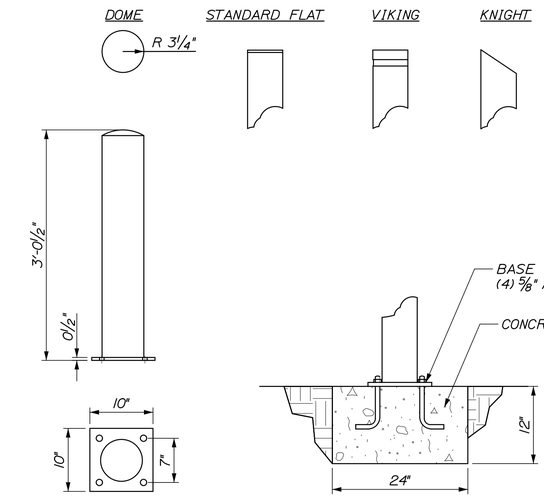
1" = 1'-0"



SECTION VIEW

GRANITE BENCH DETAIL

1" = 1'-0"

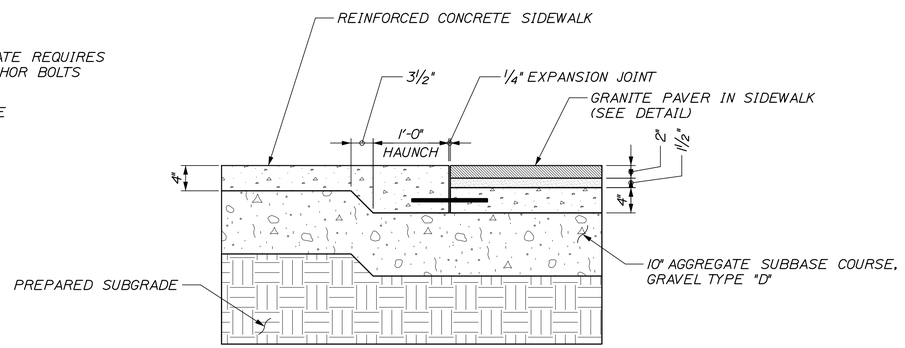


PLAN VIEW - BASE PLATE

END VIEW - FOUNDATION

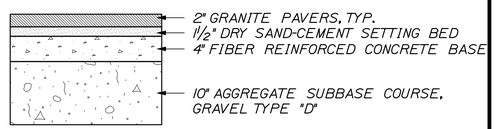
BOLLARD DETAILS

N.T.S.



GRANITE PAVER AND CONCRETE SIDEWALK DETAIL

1" = 1'-0"



NOTES:

1. DRY SAND-CEMENT SHALL BE SIX (6) PARTS OF WASHED MORTAR SAND TO ONE (1) PART PORTLAND CEMENT.

2. DRY SAND-CEMENT SHALL BE PLACED AND SWEPT INTO THE JOINTS TO WITHIN ¼" TO ½" OF PAVER SURFACE.

3. ALL SURPLUS SHALL BE SWEPT FROM GRANITE PAVER SURFACE.

4. A FINAL APPLICATION OF SAND ONLY SHALL BE SPREAD ON THE GRANITE PAVER SURFACE.

GRANITE PAVER IN SIDEWALK DETAIL

1" = 1'-0"

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP 2054(300)

WIN 20543.00

HIGHWAY PLANS

			DATE
PROJ. MANAGER	A. GORNE-AU, II	BY	
DESIGN-DETAILED	D.MITHCELL	D.BURGESS	03\10\17
CHECKED-REVIEWED	-	-	-
DESIGN2-DETAILED2	-	-	-
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

SIGNATURE

P.E. NUMBER

DATE

PORTLAND
FOREST AVENUE

SPECIAL DETAILS
LANDSCAPING

SHEET NUMBER

11

OF 67

Date:4/27/2017

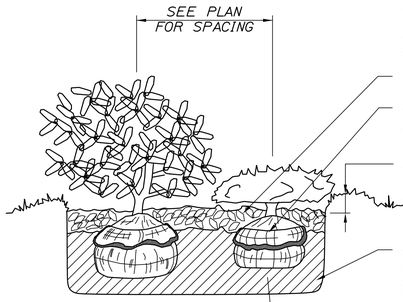
Username:

Division:

Filename: 011_Landscaping_Details.dgn

NOTES: SCARIFY ROOTBALL USING A SHARP BLADE EVERY SIX INCHES AROUND THE CIRCUMFERENCE AND TO A DEPTH OF TWO INCHES.

REMOVE ALL LABELS, TAGS AND OTHER FOREIGN MATERIAL FROM LIMBS.



3"-4" BARK MULCH

REMOVE TOP 1/3 OF BURLAP FROM ROOT BALL (TYP.)

3"-4" RIM

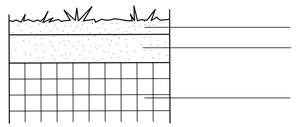
FINISHED GRADE

PREPARED SOIL MIX- BACKFILL WITH 3 PARTS CLEAN LOAM TO ONE PART PEAT. MUST BE FREE OF UNDESIRABLE MATERIALS. WATER TO REMOVE AIR POCKETS.

SLOW RELEASE FERTILIZER PACKET 6-8" DEPTH, 1 PACKETS REQUIRED

SHRUB PLANTING DETAIL

NOT TO SCALE



GRASS SEED - SEEDING METHOD 1

6" PREPARED TOPSOIL / COMPOST MIX- NO STONES OVER 3/4" DIA.

PREPARED SUBGRADE- LOOSEN SURFACE & TILL TOPSOIL/COMPOST MIX TO A DEPTH OF 6"

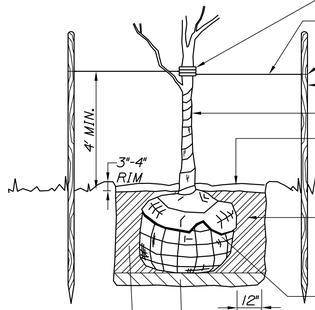
LAWN PLANTING DETAIL

NOT TO SCALE

NOTES: REMOVE ALL LABELS, TAGS AND OTHER FOREIGN MATERIAL FROM LIMBS.

TREES UNDER 8' DO NOT REQUIRE STAKING.

PLANT SO THAT TRUNK FLARE IS VISIBLE AND ABOVE FINISHED GRADE.



RUBBER HOSE PROTECTIVE GUARD PER WIRE

NO. 10 WIRE

NOTCH IN STAKE FOR WIRE

2" x 2" STAKE

REMOVE CREPE PAPER WRAP IF PRESENT

3"-4" BARK MULCH RING - 6' DIA. MIN. OR AS SHOWN ON PLAN

FINISHED GRADE

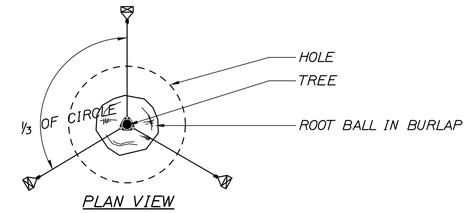
PREPARED SOIL MIX- BACKFILL WITH 3 PARTS CLEAN LOAM TO ONE PART PEAT. MUST BE FREE OF UNDESIRABLE MATERIALS. WATER TO REMOVE AIR POCKETS.

BURLAP, TYING MATERIAL, & WIRE BASKET SHALL BE CAREFULLY REMOVED OR CUT BACK TO THE BOTTOM OF THE PLANTING HOLE.

UNDISTURBED EXISTING SOIL NO SCARIFICATION BELOW ROOTBALL

SLOW RELEASE FERTILIZER PACKET 6-8" DEPTH, 3 PACKETS REQUIRED

SECTION VIEW



HOLE

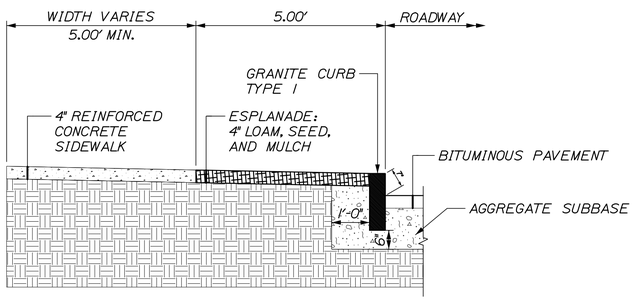
TREE

ROOT BALL IN BURLAP

PLAN VIEW

TREE PLANTING DETAIL

NOT TO SCALE



ESPLANADE DETAIL

N.T.S.

PLANTING NOTES

1. CONTRACTOR SHALL BEGIN MAINTENANCE IMMEDIATELY AFTER PLANTING AND SHALL CONTINUE UNTIL FINAL ACCEPTANCE. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MEANS AND METHODS OF WATERING AND MAINTENANCE.
2. CONTRACTOR SHALL SUPPLY PLANTS IN QUANTITIES SUFFICIENT TO COMPLETE WORK SHOWN ON THE PLAN. ANY DISCREPANCY BETWEEN THE QUANTITIES SHOWN IN THE PLANT SCHEDULE AND THOSE REQUIRED ON THE PLAN SHALL NOT ENTITLE THE CONTRACTOR TO ADDITIONAL RENUMERATION. ANY DISCREPANCIES SHALL BE CLARIFIED WITH THE LANDSCAPE ARCHITECT PRIOR TO ORDERING PLANT MATERIAL.
3. ALL MATERIALS SHALL CONFORM TO SPECIFICATIONS OF THE AMERICAN STANDARDS FOR NURSERY STOCK (LATEST EDITION) AS SET FORTH BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
4. ALL PLANTS SHALL BEAR THE SAME RELATIONSHIP TO FINISH GRADE AS THE ORIGINAL GRADES BEFORE DIGGING.
5. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIALS FOR ONE (1) FULL YEAR FROM DATE OF SUBSTANTIAL COMPLETION.
6. ALL PLANT MATERIALS ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT AT THE NURSERY AND AT THE SITE.
7. ALL PLANT BEDS SHALL MEET MINIMUM TOPSOIL REQUIREMENTS (SEE SPECIFICATIONS).
8. NO PLANT MATERIAL SHALL BE INSTALLED UNTIL GRUBBING, BED PREPARATION, AND FINISH GRADING HAS BEEN COMPLETED IN THE IMMEDIATE AREA.
9. ALL PLANTS BEDS AND TREE WELLS SHALL HAVE A MINIMUM OF 3" OF UNIFORMLY DISTRIBUTED, DARK, SHREDDED BARK MULCH.
10. CONTRACTOR SHALL SUBMIT SOIL SAMPLE AND TEST OF TOPSOIL TO LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. SOIL ADMIXTURE SHALL BE ADDED TO EXISTING SOIL (BY CONTRACTOR) IF DEEMED NECESSARY BY SOIL TEST RESULTS.
11. ROUGH GRADING AND BED PREPARATION SHALL BE APPROVED BY LANDSCAPE ARCHITECT PRIOR TO PLANT INSTALLATION. CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT 48 HOURS PRIOR TO REQUIRED SITE VISIT.
12. ALL PLANTS SHALL BE BALLED AND WRAPPED OR CONTAINER GROWN AS SPECIFIED. ALL ROOT WRAPPING AND CONTAINER MATERIAL MADE OF SYNTHETICS OR PLASTICS SHALL BE REMOVED AT THE TIME OF PLANTING.
13. ALL BROAD LEAF EVERGREEN PLANTS SHALL BE SPRAYED WITH AN ANTI-DESSICANT AT THE BEGINNING OF THEIR FIRST WINTER.
14. ALL PLANTS SHALL BE INSTALLED AS PER DETAILS AND THE CONTRACT SPECIFICATIONS. THE LANDSCAPE CONTRACTOR SHALL REFER TO THE CONTRACT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
15. CONTRACTOR SHALL STAKE TREES IF DEEMED NECESSARY BY LANDSCAPE ARCHITECT.
16. THE LANDSCAPE CONTRACTOR SHALL PROVIDE LOAM FILL AS PER THE CONTRACT SPECIFICATIONS.
17. ALL PLANTS SHALL THEN BE WATERED BY THE CONTRACTOR, AS NECESSARY TO INSURE HEALTH UNTIL FINAL ACCEPTANCE.
18. THE LANDSCAPE CONTRACTOR SHALL REFER TO THE PLANT LIST AND PLANTING SPECIFICATIONS FOR SEASONAL REQUIREMENTS AND OTHER RESTRICTIONS RELATED TO THE TIME AND SEASON OF PLANTING.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP 2054(300)

WIN 20543.00

HIGHWAY PLANS

PROJ. MANAGER	A. GORNEAU, II	BY	DATE
DESIGN-DETAILED	D.MITHCELL	D.BURGESS	03\10\17
CHECKED-REVIEWED	-	-	-
DESIGN2-DETAILED2	-	-	-
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

SIGNATURE

P.E. NUMBER

DATE

PORTLAND
FOREST AVENUE

SPECIAL DETAILS
PLANTINGS

SHEET NUMBER

12

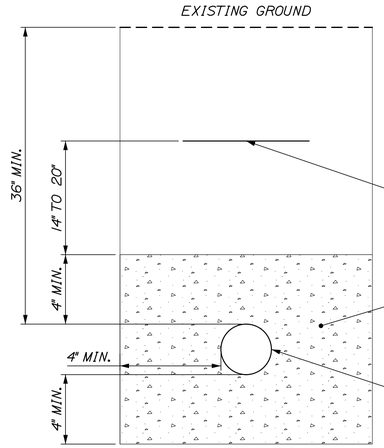
OF 67

Date:4/27/2017

Username:

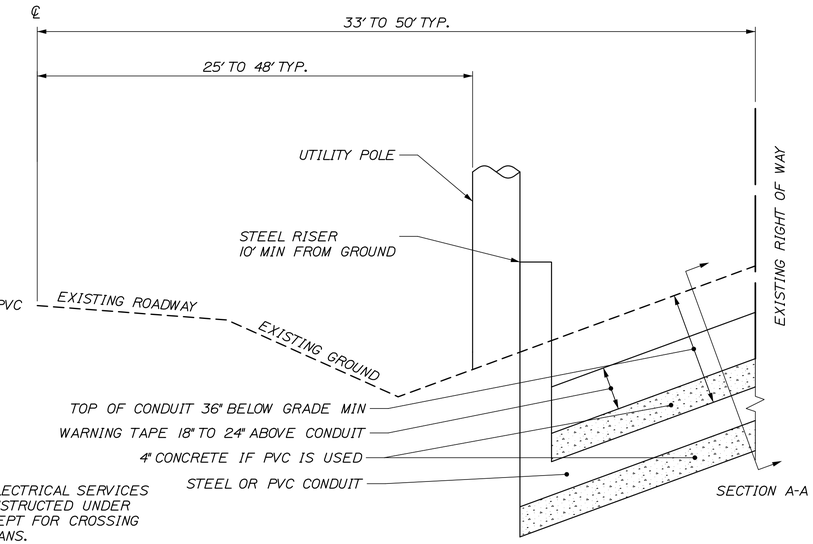
Division:

Filename: 012_Planting_Details.dgn



SECTION A-A

CROSS SECTION OF TRENCH (NTS)



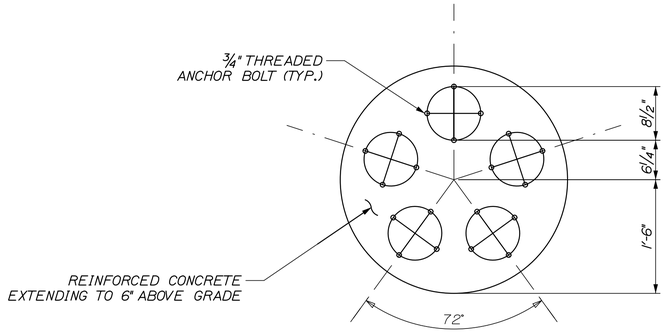
NOTES:

1. UNDERGROUND ELECTRICAL SERVICES SHALL NOT BE CONSTRUCTED UNDER THE HIGHWAY EXCEPT FOR CROSSING NOTED ON THE PLANS.

2. UNLESS VERTICAL CLEARANCES AND THE LOCAL TERRAIN DICTATE OTHERWISE, ALL SERVICE POLES (NOT SHOWN) USED TO EXCLUSIVELY PROVIDE SERVICE TO A CUSTOMER SHALL BE INSTALLED AT OR BEYOND THE HIGHWAY RIGHT-OF-WAY LIMITS.

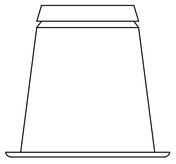
UNDERGROUND ELECTRIC LINES FOR LIGHT POLE

NTS



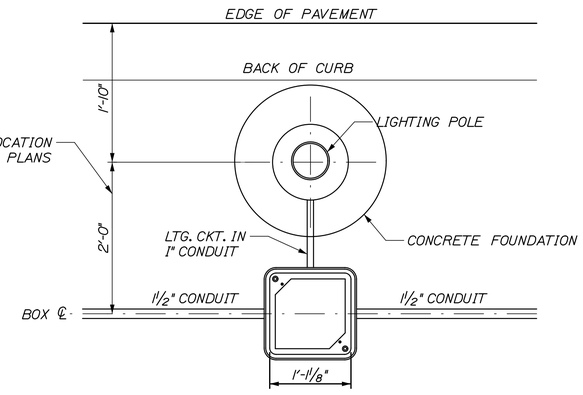
FOUNDATION DETAIL

1/2"=1'



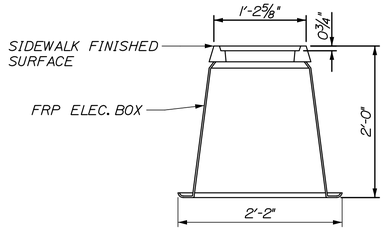
END VIEW

1/2"=1'



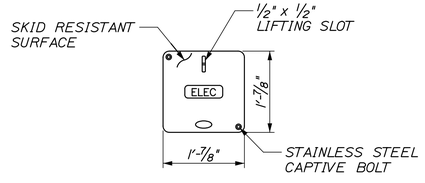
BOX PLAN VIEW

1/2"=1'



BOX AND COVER SECTION VIEW

1/2"=1'



COVER

1/2"=1'

ELECTRICAL JUNCTION BOX DETAIL FOR FUTURE SIDEWALK LIGHTING

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP 2054(300)

PIN 20543.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	A. GORNEAU, II	-
DESIGN-DETAILED	D.BURGESS	03\10\17
CHECKED-REVIEWED	D.MITHCELL	-
DESIGN2-DETAILED2		-
DESIGN3-DETAILED3		-
REVISIONS 1		-
REVISIONS 2		-
REVISIONS 3		-
REVISIONS 4		-
FIELD CHANGES		-

SIGNATURE

P.E. NUMBER

DATE

PORTLAND
FORESTAVENUE

SPECIAL DETAILS
LIGHTING

SHEET NUMBER

13

OF 67

Filename: 013_LightFixture_Details.dgn Division: Username: Date:4/27/2017

Filename: ...\013_BLP & BORING LOGS1.dgn Division: GEOTECH Username: Kate.Maguire Date:4/26/2017

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Woodfords Corner
Location: Portland, Maine

Boring No.: HB-PORT-201
WIN: 20543.00

Driller:	MaineDOT	Elevation (ft.)	51.5	Auger ID/OD:	5" Solid Stem
Operator:	Travis/Austin	Datum:	NAVD88	Sampler:	Standard Split Spoon
Logged By:	B. Wilder	Rig Type:	CME 45C	Hammer Wt./Fall:	140#/30"
Date Start/Finish:	6/19/2016; 1:30-16:30	Drilling Method:	Cased Wash Boring	Core Barrel:	NQ-2"
Boring Location:	17+30, 21.2 ft Rt.	Casing ID/OD:	NW	Water Level*:	None Observed
Hammer Efficiency Factor: 0.908		Hammer Type:	Automatic ☒ Hydraulic ☐ Rope & Cathead ☐		

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample attempt
V = Insitu Vane Shear Test. PP = Pocket Penetrometer
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOR/C = weight of rods or casing
WOH = weight of 140lb. hammer
WOP = Weight of one person
S_v = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

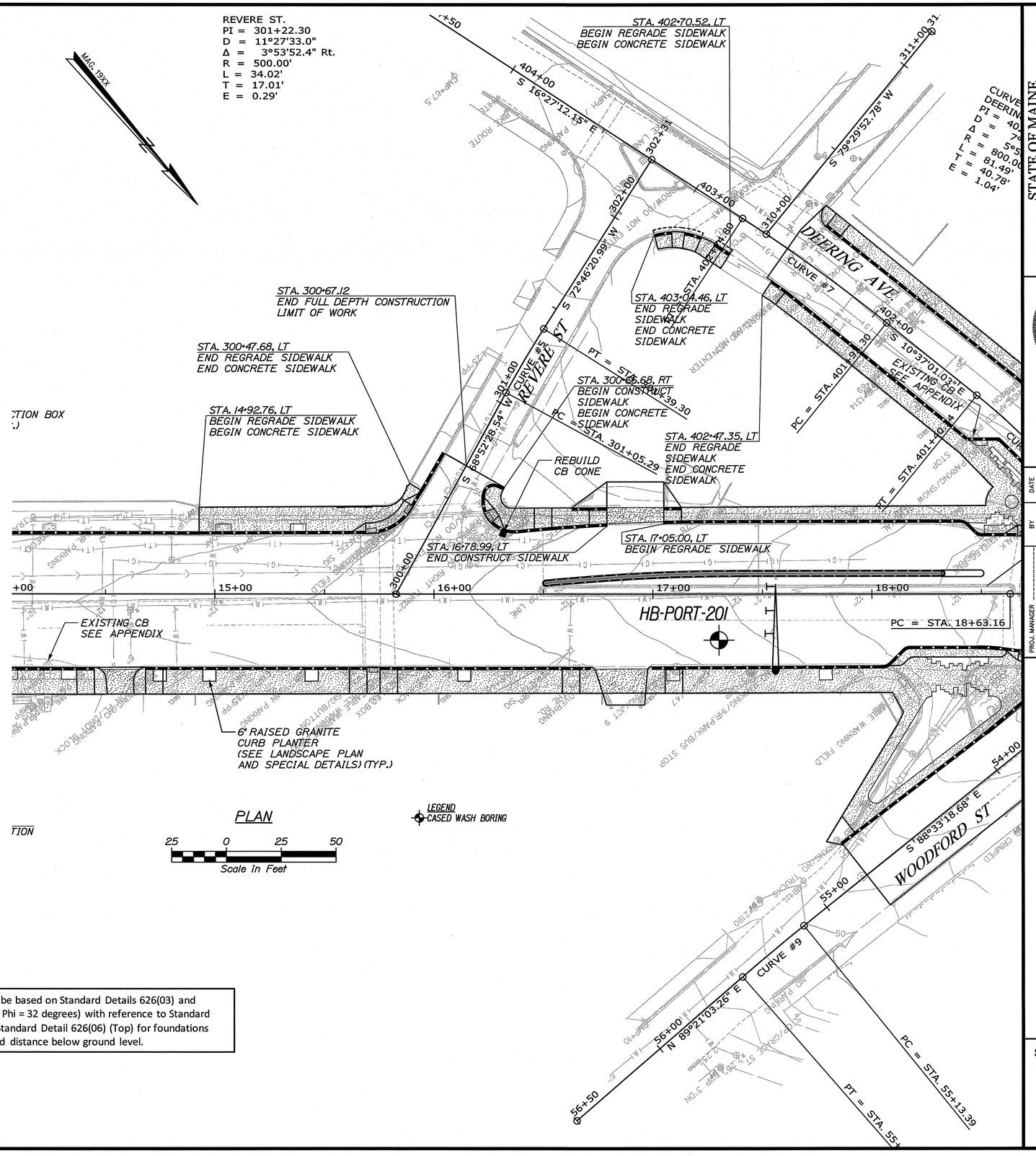
Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows t/6 in. Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0							SSA	51.08		5" PAVEMENT — 0.42	
								50.75		4" Cobble Stone layer. — 0.75	
								50.50		3" CONCRETE — 1.00	
	1D	24/14	2.00 - 4.00	7/8/7/26	15	23				Brown, wet, medium dense, Gravelly fine to coarse SAND, trace silt.	GM270904 A-1-a, SW-SM WC=11.6%
								47.50		— 4.00	
5	2D	24/22	5.00 - 7.00	3/5/7/11	12	18	13			Olive, wet, stiff, SILT, some clay, some fine to coarse sand, trace gravel.	GM270905 A-4, CL WC=21.4%
							18				
							75				
	R1	60/60	8.30 - 13.30	RQD = 33%			050 NQ-2	43.20		050 blows for 0.3 ft. — 8.30	
10										Top of Bedrock at Elev. 43.2 ft. R1:Bedrock: Weathered, fine grained, medium grey, quartz-plagioclase -biotite PHYLLITE, with interlayered dark grey phyllite. (Eliot Formation). R1:Core Times (minisec) 8.3-9.3 ft (2:26) 9.3-10.3 ft (3:01) 10.3-11.3 ft (2:48) 11.3-12.3 ft (2:50) 12.3-13.3 ft (3:05) 100% Recovery	
								38.20		Bottom of Exploration at 13.30 feet below ground surface. — 13.30	
15											
20											
25											

Remarks:

Stratification lines represent approximate boundaries between soil types: transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1
Boring No.: HB-PORT-201



Design of the Foundations for the Mast Arm Poles shall be based on Standard Details 626(03) and 626(04) using Charts P32-1, P32-2 and P32-3 (Soils with Phi = 32 degrees) with reference to Standard Specification Section 626.034 for shallow bedrock and Standard Detail 626(06) (Top) for foundations where solid rock is encountered at less than the required distance below ground level.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2054(300)

WIN 020543.00

HIGHWAY PLANS

STATE OF MAINE — Kathleen Maguire — 7120 — REGISTERED PROFESSIONAL ENGINEER

SIGNATURE

P.E. NUMBER

4/26/2017
DATE

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED	T.WHITE	OCT 2016
DESIGNS-DETAILED2	K.MAGUIRE	
DESIGNS-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

PORTLAND
WOODFORDS CORNER

BORING LOCATION PLAN & BORING LOGS

SHEET NUMBER
14
OF 67

Filename: ...\014_BLP & BORING LOGS2.dgn   Division: GEOTECH   Username: Kate.Maguire   Date:4/26/2017

Maine Department of Transportation — Soil/Rock Exploration Log — US CUSTOMARY UNITS

Project: Woodfords Corner		Location: Portland, Maine		Boring No.:	HB-PORT-102
				WIN:	20543.00
Driller:	MaineDOT	Elevation (ft.)	59.5	Auger ID/OD:	5" Solid Stem
Operator:	Giles/Doggett/Giles	Datum:	NAVD88	Sampler:	Standard Split Spoon
Logged By:	B. Wilder	Rig Type:	CME 45C	Hammer Wt./Fall:	140#/30"
Date Start/Finish:	10/19/2014; 10:30-13:00	Drilling Method:	Cased Wash Boring	Core Barrel:	NQ-2"
Boring Location:	53+74.9, 15.4 ft Lt.	Casing ID/OD:	NW	Water Level*:	None Observed
Hammer Efficiency Factor: 0.908		Hammer Type:	Automatic ☒ Hydraulic ☐ Rope & Cathead ☐		

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample attempt; U = Thin Wall Tube Sample; MU = Unsuccessful Thin Wall Tube Sample attempt; V = Insitu Vane Shear Test; PP = Pocket Penetrometer; MV = Unsuccessful Insitu Vane Shear Test attempt; R = Rock Core Sample; SSA = Solid Stem Auger; HSA = Hollow Stem Auger; RC = Roller Cone; WOH = weight of 140lb. hammer; WOR/C = weight of rods or casing; WO1P = Weight of one person; S_u = Insitu Field Vane Shear Strength (psf); T_v = Pocket Torvane Shear Strength (psf); q_p = Unconfined Compressive Strength (ksf); N-uncorrected = Raw field SPT N-value; Hammer Efficiency Factor = Annual Calibration Value; N_{60} = SPT N-uncorrected corrected for hammer efficiency; N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected; $S_{u(lab)}$ = Lab Vane Shear Strength (psf); WC = water content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test

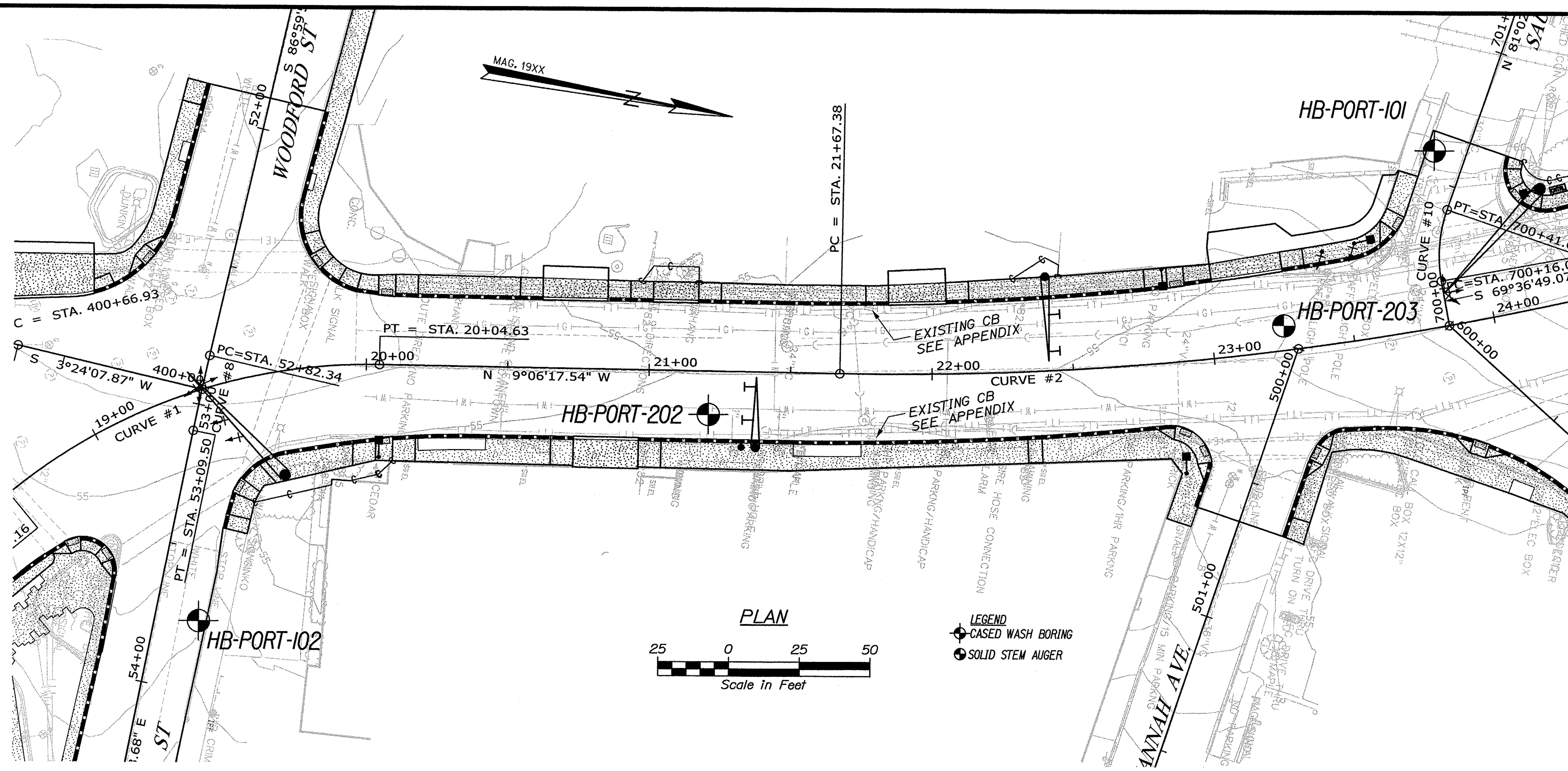
Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0							SSA	59.21	3.5" PAVEMENT (0.29)	
								57.50	Brown, damp, fine to coarse SAND, some gravel, trace silt. (2.00)	
5	1D	24/20	4.50 - 6.50	2/14/17/19	31	47			Brown, moist, dense, Silty fine to coarse SAND, little gravel.	
							36			
							87			
	R1	60/57	7.30 - 12.30	RQD = 57%			a50 NQ-2	52.20	a50 blows for 0.3 ft. (7.30)	
10								47.20	Top of Bedrock at Elev. 52.2 ft. R1:Bedrock: Hard, fresh to slightly weathered, aphanitic to fine grained, light grey and white, arenaceous and mica-rich PHYLLITE with moderately dipping relic bedding. Bottom 0.3 ft calcareous pelitic PHYLLITE. Close, moderately dipping breaks: undulating, rough, fresh to discolored, and open, with limited mud infilling. (Eliot Formation). R1:Core Times (min:sec) 7.3-8.3 ft (2:55) 8.3-9.3 ft (3:00) 9.3-10.3 ft (3:15) 10.3-11.3 ft (3:07) 11.3-12.3 ft (4:45) 95% Recovery (12.30)	
									Bottom of Exploration at 12.30 feet below ground surface.	
15										
20										
25										

Remarks:

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1   Boring No.: HB-PORT-102



Maine Department of Transportation — Soil/Rock Exploration Log — US CUSTOMARY UNITS

Project: Woodfords Corner		Location: Portland, Maine		Boring No.:	HB-PORT-202
				WIN:	20543.00
Driller:	MaineDOT	Elevation (ft.)	54.5	Auger ID/OD:	5" Solid Stem
Operator:	Travis/Austin	Datum:	NAVD88	Sampler:	Standard Split Spoon
Logged By:	B. Wilder	Rig Type:	CME 45C	Hammer Wt./Fall:	140#/30"
Date Start/Finish:	6/19/2016; 09:30-11:30	Drilling Method:	Cased Wash Boring	Core Barrel:	NQ-2"
Boring Location:	21+21, 15.3 ft Rt.	Casing ID/OD:	NW	Water Level*:	None Observed
Hammer Efficiency Factor: 0.908		Hammer Type:	Automatic ☒ Hydraulic ☐ Rope & Cathead ☐		

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample attempt; U = Thin Wall Tube Sample; MU = Unsuccessful Thin Wall Tube Sample attempt; V = Insitu Vane Shear Test; PP = Pocket Penetrometer; MV = Unsuccessful Insitu Vane Shear Test attempt; R = Rock Core Sample; SSA = Solid Stem Auger; HSA = Hollow Stem Auger; RC = Roller Cone; WOH = weight of 140lb. hammer; WOR/C = weight of rods or casing; WO1P = Weight of one person; S_u = Insitu Field Vane Shear Strength (psf); T_v = Pocket Torvane Shear Strength (psf); q_p = Unconfined Compressive Strength (ksf); N-uncorrected = Raw field SPT N-value; Hammer Efficiency Factor = Annual Calibration Value; N_{60} = SPT N-uncorrected corrected for hammer efficiency; N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected; $S_{u(lab)}$ = Lab Vane Shear Strength (psf); WC = water content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0							SSA	54.08	5" PAVEMENT (0.42)	
								53.75	4" Cobble Stone layer. (0.75)	
								53.58	2" CONCRETE (0.92)	
	1D	24/15	1.30 - 3.30	11/16/11/12	27	41			Brown, moist, medium dense, fine to coarse SAND, some gravel, little silt.	G#270906 A-1-b, SM WC=6.8%
								50.50	(4.00)	
5	2D	24/14	5.00 - 7.00	4/3/4/4	7	11	22		Olive, wet, medium stiff, Sandy SILT, trace clay.	G#270907 A-4, CL WC=20.9%
							28			
							30			
							36	46.00	(8.50)	
10	3D R1	9.6/7 60/60	9.00 - 9.80 9.80 - 14.80	6/40(3.6") RQD = 48%	—		a60 NQ-2	44.70	a60 blows for 0.8 ft. Olive, wet, SILT, some sand, little clay, little gravel. (9.80)	G#270908 A-4, CL WC=12.4%
									Top of Bedrock at Elev. 44.7 ft. R1:Bedrock:Weathered, fine grained, medium grey, quartz-plagioclase -biotite PHYLLITE, with interlayered dark grey phyllite. (Eliot Formation). R1:Core Times (min:sec) 9.8-10.8 ft (2:35) 10.8-11.8 ft (2:15) 11.8-12.8 ft (2:22) 12.8-13.8 ft (2:36) 13.8-14.8 ft (2:40) 100% Recovery	
15								39.70	(14.80) Bottom of Exploration at 14.80 feet below ground surface.	
20										
25										

Remarks:

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1   Boring No.: HB-PORT-202

Maine Department of Transportation — Soil/Rock Exploration Log — US CUSTOMARY UNITS

Project: Woodfords Corner		Location: Portland, Maine		Boring No.:	HB-PORT-203
				WIN:	20543.00
Driller:	MaineDOT	Elevation (ft.)	55.7	Auger ID/OD:	5" Dia.
Operator:	Travis/Austin	Datum:	NAVD88	Sampler:	N/A
Logged By:	B. Wilder	Rig Type:	CME 45C	Hammer Wt./Fall:	N/A
Date Start/Finish:	6/19/2016; 12:00-13:00	Drilling Method:	Solid Stem Auger	Core Barrel:	N/A
Boring Location:	23+26, 8.7 ft Lt.	Casing ID/OD:	N/A	Water Level*:	None Observed

Definitions: D = Split Spoon Sample; S = Sample off Auger Flight; MD = Unsuccessful Split Spoon Sample attempt; U = Thin Wall Tube Sample; R = Rock Core Sample; V = Insitu Vane Shear Test; SSA = Solid Stem Auger; B = Bucket Sample off Auger Flight; S_u = Insitu Field Vane Shear Strength (psf); T_v = Pocket Torvane Shear Strength (psf); q_p = Unconfined Compressive Strength (ksf); $S_{u(lab)}$ = Lab Vane Shear Strength (psf); WOH = weight of 140lb. hammer; WOR = weight of rods; WOC = weight of casing; WC = water content, percent; T = Similar or Equal too; LL = Liquid Limit; RC = Roller Cone ahead; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-value	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0						SSA	55.28	5" PAVEMENT (0.42)	
							54.95	4" Cobble Stone layer. (0.75)	
							54.45	6" CONCRETE (1.25)	
								Bottom of Exploration at 1.25 feet below ground surface. Stopped Boring, too near utilities.	
5									
10									
15									
20									
25									

Remarks:

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1   Boring No.: HB-PORT-203

Maine Department of Transportation — Soil/Rock Exploration Log — US CUSTOMARY UNITS

Project: Woodfords Corner		Location: Portland, Maine		Boring No.:	HB-PORT-101
				WIN:	20543.00
Driller:	MaineDOT	Elevation (ft.)	53.4	Auger ID/OD:	5" Solid Stem
Operator:	Giles/Doggett/Giles	Datum:	NAVD88	Sampler:	Standard Split Spoon
Logged By:	B. Wilder	Rig Type:	CME 45C	Hammer Wt./Fall:	140#/30"
Date Start/Finish:	10/19/2014; 08:00-10:30	Drilling Method:	Cased Wash Boring	Core Barrel:	NQ-2"
Boring Location:	700+59.8, 11.1 ft Lt.	Casing ID/OD:	NW	Water Level*:	None Observed
Hammer Efficiency Factor: 0.908		Hammer Type:	Automatic ☒ Hydraulic ☐ Rope & Cathead ☐		

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample attempt; U = Thin Wall Tube Sample; MU = Unsuccessful Thin Wall Tube Sample attempt; V = Insitu Vane Shear Test; PP = Pocket Penetrometer; MV = Unsuccessful Insitu Vane Shear Test attempt; R = Rock Core Sample; SSA = Solid Stem Auger; HSA = Hollow Stem Auger; RC = Roller Cone; WOH = weight of 140lb. hammer; WOR/C = weight of rods or casing; WO1P = Weight of one person; S_u = Insitu Field Vane Shear Strength (psf); T_v = Pocket Torvane Shear Strength (psf); q_p = Unconfined Compressive Strength (ksf); N-uncorrected = Raw field SPT N-value; Hammer Efficiency Factor = Annual Calibration Value; N_{60} = SPT N-uncorrected corrected for hammer efficiency; N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected; $S_{u(lab)}$ = Lab Vane Shear Strength (psf); WC = water content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0							SSA	53.15	3" PAVEMENT (0.25)	
								51.40	Brown, damp, fine to coarse SAND, some gravel. (2.00)	
5	1D	18/13	4.50 - 6.00	8/26/50	76	115		47.40	Brown, damp, very dense, Silty fine to coarse SAND, some gravel. (6.00)	
	R1	60/60	6.50 - 11.50	RQD = 17%			NQ-2		Top of Bedrock at Elev. 47.4 ft. Roller Coned ahead to 6.5 ft bgs. R1:Bedrock: Hard, slightly weathered, aphanitic to fine grained, light grey and white, arenaceous and mica-rich PHYLLITE with moderately dipping relic bedding. Very close to close, typically moderately dipping breaks: undulating, rough, typically discolored and open, with limited mud infilling. (Eliot Formation). R1:Core Times (min:sec) 6.5-7.5 ft (4:30) 7.5-8.5 ft (4:30) 8.5-9.5 ft (3:27) 1" seam at 8.7 ft. 9.5-10.5 ft (3:18) 10.5-11.5 ft (4:40) 100% Recovery No water return.	
10								41.90	(11.50) Bottom of Exploration at 11.50 feet below ground surface.	
15										
20										
25										

Remarks:

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1   Boring No.: HB-PORT-101

Design of the Foundations for the Mast Arm Poles shall be based on Standard Details 626(03) and 626(04) using Charts P32-1, P32-2 and P32-3 (Soils with Phi = 32 degrees) with reference to Standard Specification Section 626.034 for shallow bedrock and Standard Detail 626(06) (Top) for foundations where solid rock is encountered at less than the required distance below ground level.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2054(300)

WIN 020543.00   HIGHWAY PLANS

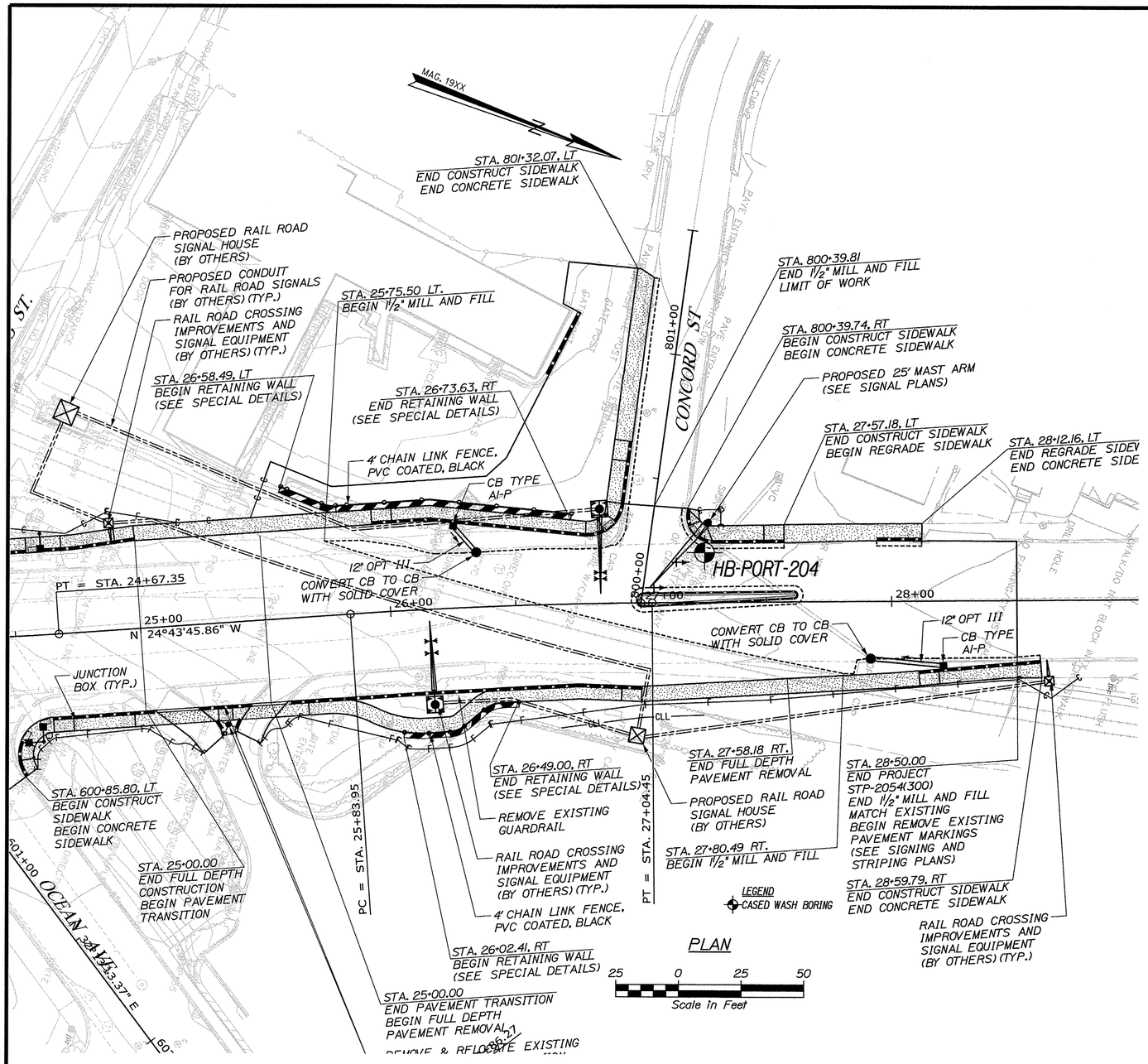
STATE OF MAINE — Kathleen Maguire — 7120 — LICENSED PROFESSIONAL ENGINEER

SIGNATURE: 7120
P.E. NUMBER
DATE: 4/26/2017

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED	K.MAGUIRE	
DESIGN2-DETAILED2	T.WHITE	OCT 2016
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

PORTLAND WOODFORDS CORNER

BORING LOCATION PLAN & BORING LOGS



Maine Department of Transportation
Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Woodfords Corner
Location: Portland, Maine

Boring No.: HB-PORT-204
WIN: 20543.00

Driller:	MaineDOT	Elevation (ft.)	63.4	Auger ID/OD:	5" Solid Stem
Operator:	Travis/Austin	Datum:	NAVD88	Sampler:	Standard Split Spoon
Logged By:	B. Wilder	Rig Type:	CME 45C	Hammer Wt./Fall:	140#/30"
Date Start/Finish:	6/19/2016: 08:00-09:30	Drilling Method:	Cased Wash Boring	Core Barrel:	NQ-2"
Boring Location:	27+25, 19.9 ft Lt.	Casing ID/OD:	NW	Water Level*:	None Observed
Hammer Efficiency Factor: 0.908		Hammer Type:	Automatic ☒ Hydraulic ☐ Rope & Cathead ☐		

Definitions:
D = Split Spoon Sample
SD = Unsuccessful Split Spoon Sample attempt
U = Thin Wall Tube Sample
WU = Unsuccessful Thin Wall Tube Sample attempt
V = Insitu Vane Shear Test, PP = Pocket Penetrometer
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR/C = weight of rods or casing
WOP = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60)(N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in. Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0							SSA	62.82		7" PAVEMENT — 0.58	
	1D	24/18	1.50 - 3.50	8/9/7/6	16	24				Brown, moist, medium dense, fine to coarse SAND, little gravel, trace silt.	GM270909 A-1-b, SW-SM WC=5.1%
	R1	60/60	4.30 - 9.30	RQD = 53%			050 NQ-2	59.10		050 blows for 0.3 ft. — 4.30	
5										Top of Bedrock at Elev. 59.1 ft. R1:Bedrock:Weathered, fine grained, medium grey, quartz-plagioclase -biotite PHYLLITE, with interlayered dark grey phyllite. (Elliot Formation). R1:Core Times (min:sec) 4.3-5.3 ft (2:20) 5.3-6.3 ft (2:30) 6.3-7.3 ft (2:36) 7.3-8.3 ft (2:28) 8.3-9.3 ft (2:46) 100% Recovery	
10								54.10		Bottom of Exploration at 9.30 feet below ground surface. — 9.30	
15											
20											
25											

Remarks:

Stratification lines represent approximate boundaries between soil types: transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1
Boring No.: HB-PORT-204

Design of the Foundations for the Mast Arm Poles shall be based on Standard Details 626(03) and 626(04) using Charts P32-1, P32-2 and P32-3 (Soils with Phi = 32 degrees) with reference to Standard Specification Section 626.034 for shallow bedrock and Standard Detail 626(06) (Top) for foundations where solid rock is encountered at less than the required distance below ground level.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2054(300)

WIN
020543.00

HIGHWAY PLANS

STATE OF MAINE · Kathleen Maguire · 7120 · LICENSED PROFESSIONAL ENGINEER

SIGNATURE
4/20/2017
DATE
P.E. NUMBER

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED	T. WHITE	OCT 2016
DESIGN2-DETAILED2	K.MAGUIRE	
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

PORTLAND
WOODFORDS CORNER

BORING LOCATION PLAN
& BORING LOGS

SHEET NUMBER
16
OF 67

Filename: ...\015_BLP & BORING LOGS3.dgn Username: Kate.Maguire Division: GEOTECH Date:4/26/2017

Filename: 017_HDPlan_01.dgn Division: Username: Date:4/27/2017

STA. 13+00.00
END PAVEMENT TRANSITION
BEGIN PROJECT No. STP-2054(300)
BEGIN FULL DEPTH CONSTRUCTION

LINCOLN ST.

101+00

101+57

100+00

JUNCTION BOX (TYP.)

EB-1

EB-2

EB-3

EB-4

EB-5

EB-6

EB-7

EB-8

STA. 16+78.99, LT
END CONSTRUCT SIDEWALK

STA. 17+05.00, LT
BEGIN REGRADE SIDEWALK

REBUILD CB CONE

STA. 402+47.35, LT
END REGRADE SIDEWALK
END CONCRETE SIDEWALK

STA. 300+66.68, RT
BEGIN CONSTRUCT SIDEWALK
BEGIN CONCRETE SIDEWALK

S 88°52'28.54" W

301+00

REVERE ST.

S 72°46'20.99" W

302+00

302+31

300+00

STA. 300+67.12
END FULL DEPTH CONSTRUCTION
LIMIT OF WORK

STA. 300+47.68, LT
END REGRADE SIDEWALK
END CONCRETE SIDEWALK

STA. 14+92.76, LT
BEGIN REGRADE SIDEWALK
BEGIN CONCRETE SIDEWALK

STA. 403+04.46, LT
END REGRADE SIDEWALK
END CONCRETE SIDEWALK

403+00

404+00

S 16°27'12.15" E

404+50

STA. 402+70.52, LT
BEGIN REGRADE SIDEWALK
BEGIN CONCRETE SIDEWALK

DEERING AVE.

10+00 11+00 12+00 13+00 N 49°38'01.85" W 14+00 15+00 16+00 17+00

FOREST AVE.

EXISTING CB (SEE APPENDIX)

EXISTING CB (SEE APPENDIX)

5' WIDE ESPLANADE

REMOVE

EB-14 EB-15 EB-16 EB-17 EB-18 EB-19

200+00

STA. 12+50.00
BEGIN PAVEMENT TRANSITION
LIMIT OF WORK

ARLINGTON ST.

201+00

201+69

STA. 13+06.06, RT
BEGIN REGRADE SIDEWALK
BEGIN CONCRETE SIDEWALK

STA. 200+50.00
END FULL DEPTH CONSTRUCTION
LIMIT OF WORK

56+00
N 89°21'03.26" E

PLAN

25 0 25 50
Scale of Feet

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN 20543.00

WIN 20543.00

HIGHWAY PLANS

BY	DATE	SIGNATURE
D.BURGESS	03\10\17	
D.MITCHELL	-	P.E. NUMBER
ABELE GORNEAU, II	-	

PROJ. MANAGER	-
DESIGN-DETAILED	-
CHECKED-REVIEWED	-
DESIGN2-DETAILED2	-
DESIGN3-DETAILED3	-
REVISIONS 1	-
REVISIONS 2	-
REVISIONS 3	-
REVISIONS 4	-
FIELD CHANGES	-

DATE

PORTLAND
FOREST AVENUE

HIGHWAY PLAN

SHEET NUMBER
17
OF 67

Username:

Division:

Filename: 018_HDPlan_02.dgn

Date:4/27/2017

REVERE ST.

S 79°29'52.78" W

STA. 402+50.00
END PAVEMENT TRANSITION
LIMIT OF WORK

STA. 402+46.96, RT
END REGRADE SIDEWALK
END CONCRETE SIDEWALK

STA. 402+00.00
END FULL DEPTH CONSTRUCTION
BEGIN PAVEMENT TRANSITION

STA. 401+30.00, RT
END CONSTRUCT SIDEWALK
BEGIN REGRADE SIDEWALK

STA. 51+88.83
END FULL DEPTH
CONSTRUCTION

STA. 51+88.83, RT
BEGIN REGRADE SIDEWALK
BEGIN CONCRETE SIDEWALK

STA. 52+50.00, RT
END REGRADE SIDEWALK
BEGIN CONSTRUCT SIDEWALK

DEERING AVE.

S 10°37'01.03" E

EXISTING CB
SEE APPENDIX

STA. 401+30.00, LT
END CONSTRUCT
SIDEWALK
BEGIN REGRADE
SIDEWALK

STA. 18+00.00, LT
END REGRADE
SIDEWALK
BEGIN
CONSTRUCT
SIDEWALK

STA. 402+47.35, LT
END REGRADE
SIDEWALK
END CONCRETE
SIDEWALK

STA. 17+05.00, LT
BEGIN REGRADE SIDEWALK

FOREST AVE.

REMOVE

INSTALL 40'
MAST ARM
AND LANE
USE SIGNS
(SEE SPECIAL
DETAILS)

RELOCATE
HYDRANT
(BY OTHERS)

STA. 18+00.00, RT
END REGRADE
SIDEWALK
BEGIN CONSTRUCT
SIDEWALK

8" RAISED GRANITE
CURB PLANTING AREA
(SEE LANDSCAPE PLANS
AND SPECIAL DETAILS)

STA. 54+81.16, RT
END CONSTRUCT SIDEWALK
END CONCRETE SIDEWALK

S 3°24'07.87" W

CURVE #1

PC=STA. 52+82.34

PT = STA. 53+89.50

CURVE #8

PROPOSED 50' MAST ARM
(SEE SIGNAL PLANS)

INSTALL 25' MAST ARM
AND LANE USE SIGNS
(SEE SPECIAL DETAILS)

STA. 53+41.21, LT
BEGIN CONSTRUCT SIDEWALK
BEGIN CONCRETE SIDEWALK

S 88°33'18.68" E

WOODFORD ST.

CURVE #9

PC = STA. 55+13.39

PT = STA. 55+49.93

STA. 54+76.42
END FULL DEPTH CONSTRUCTION
LIMIT OF WORK

N 89°21'03.26" E

S 86°59'56.14" E

STA. 51+38.00, LT
BEGIN REGRADE SIDEWALK
BEGIN CONCRETE SIDEWALK
LIMIT OF WORK

INSTALL 30' MAST ARM
AND LANE USE SIGNS
(SEE SPECIAL DETAILS)

STA. 22+05.43, LT
BEGIN CONSTRUCT SIDEWALK

STA. 21+84.56, LT
END REGRADE SIDEWALK

JUNCTION BOX
(TYP.)

PC = STA. 21+67.38

PT = STA. 20+04.63

N 9°06'17.54" W

EXISTING CB
SEE APPENDIX

EXISTING CB
SEE APPENDIX

6" RAISED GRANITE
CURB PLANTER
(SEE LANDSCAPE PLAN
AND DETAILS) (TYP.)

STA. 500+71.74, RT
END CONSTRUCT SIDEWALK
END CONCRETE SIDEWALK

STA. 700+66.56
END FULL DEPTH CONSTRUCTION
LIMIT OF WORK

STA. 700+49.25, LT
END CONSTRUCT SIDEWALK
END CONCRETE SIDEWALK

SAUNDERS ST.

N 81°02'30.80" W

CURVE #2

FOREST AVE.

VANNAH AVE.

OCEAN AVE

STA. 500+64.83, LT
BEGIN CONSTRUCT SIDEWALK
BEGIN CONCRETE SIDEWALK

STA. 600+78.05, RT
END CONSTRUCT SIDEWALK
END CONCRETE SIDEWALK

STA. 600+85.80
END FULL DEPTH CONSTRUCTION
LIMIT OF WORK

STA. 500+64.55
END FULL DEPTH CONSTRUCTION
LIMIT OF WORK

EB-1 EB-4 EB-42 EB-44 EB-43 EB-45 EB-12 EB-11 EB-10 EB-9 EB-46 EB-47 EB-48 EB-49 EB-50 EB-23 EB-24 EB-25 EB-26 EB-27 EB-28 EB-29 EB-8 EB-20 EB-57 EB-21 EB-22 EB-19

CURVE DATA #1
FOREST AVE
PI = 19+37.00
D = 28°38'52.4"
Δ = 40°31'44.3" Rt.
R = 200.00'
L = 141.47'
T = 73.84'
E = 13.20'

CURVE DATA #9
WOODFORD ST
PI = 55+31.66
D = 5°43'46.5"
Δ = 2°05'38.1" Lt.
R = 1000.00'
L = 36.55'
T = 18.27'
E = 0.17'

CURVE DATA #8
WOODFORD ST
PI = 52+95.92
D = 5°43'46.5"
Δ = 1°33'22.5" Lt.
R = 1000.00'
L = 27.16'
T = 13.58'
E = 0.09'

CURVE DATA #2
FOREST AVE
PI = 23+18.30
D = 5°12'31.3"
Δ = 15°37'28.3" Lt.
R = 1100.00'
L = 299.97'
T = 150.92'
E = 10.31'

PLAN

25 0 25 50
Scale of Feet

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN 20543.00

WIN 20543.00

HIGHWAY PLANS

PROJ. MANAGER	ABELE CORNEAU, II			
	BY	DATE	SIGNATURE	
DESIGN-DETAILED	D.MITCHELL	03\10\17	-	-
CHECKED-REVIEWED	D.BURGESS	-	-	-
DESIGN2-DETAILED2	-	-	-	-
DESIGN3-DETAILED3	-	-	-	-
REVISIONS 1	-	-	P.E. NUMBER	-
REVISIONS 2	-	-	-	-
REVISIONS 3	-	-	DATE	-
REVISIONS 4	-	-	-	-
FIELD CHANGES	-	-	-	-

PORTLAND
FOREST AVENUE

HIGHWAY PLAN

SHEET NUMBER

18

OF 67

STA. 700+66.56
END FULL DEPTH CONSTRUCTION
LIMIT OF WORK

STA. 700+49.25, LT
END CONSTRUCT SIDEWALK
END CONCRETE SIDEWALK

STA. 700+66.56, RT
BEGIN CONSTRUCT SIDEWALK
BEGIN CONCRETE SIDEWALK

PROPOSED 50' MAST ARM
(SEE SIGNAL PLANS)

PROPOSED RAIL ROAD
SIGNAL HOUSE
(BY OTHERS)

PROPOSED CONDUIT
FOR RAIL ROAD SIGNALS
(BY OTHERS) (TYP.)

RAIL ROAD CROSSING
IMPROVEMENTS AND
SIGNAL EQUIPMENT
(BY OTHERS) (TYP.)

STA. 26+58.49, LT
BEGIN RETAINING WALL
(SEE SPECIAL DETAILS)

STA. 25+75.50 LT.
BEGIN 1½" MILL AND FILL

STA. 26+73.63, RT
END RETAINING WALL
(SEE SPECIAL DETAILS)

4' CHAIN LINK FENCE,
PVC COATED, BLACK

CB TYPE
Al-P

12" OPT III

CONVERT CB TO CB
WITH SOLID COVER

STA. 801+32.07, LT
END CONSTRUCT SIDEWALK
END CONCRETE SIDEWALK
LIMIT OF WORK

STA. 800+39.81
END 1½" MILL AND FILL

STA. 800+39.74, RT
BEGIN CONSTRUCT SIDEWALK
BEGIN CONCRETE SIDEWALK

PROPOSED 30' MAST ARM
(SEE SIGNAL PLANS)

STA. 27+57.18, LT
END CONSTRUCT SIDEWALK
BEGIN REGRADE SIDEWALK

STA. 28+12.16, LT
END REGRADE SIDEWALK
END CONCRETE SIDEWALK

SAUNDERS ST.
701+00
N 81°02'30.80" W
701+35

CONCORD ST.
801+00

PLEASANT AVE.
901+00
901+20
N 84°00'43.98" W
900+00

FOREST AVE.
500+00
23+00
24+00
25+00
N 24°43'45.86" W
26+00
27+00
28+00
29+00
600+00
700+00
800+00

PT = STA. 24+67.35

JUNCTION
BOX (TYP.)

33.00'
33.00'

VANNAH AVE.
501+00

OCEAN AVE.
601+00
602+00
602+86

EB-27
EB-28
EB-29
EB-30
EB-31
EB-32
EB-33
EB-34
EB-48
EB-49
EB-50
EB-51
EB-52
EB-53
EB-54
EB-55
EB-56

STA. 500+64.83, LT
BEGIN CONSTRUCT SIDEWALK
BEGIN CONCRETE SIDEWALK

STA. 600+78.05, RT
END CONSTRUCT SIDEWALK
END CONCRETE SIDEWALK

STA. 600+85.80
END FULL DEPTH CONSTRUCTION
LIMIT OF WORK

STA. 500+64.55
END FULL DEPTH CONSTRUCTION
LIMIT OF WORK

STA. 600+85.80, LT
BEGIN CONSTRUCT
SIDEWALK
BEGIN CONCRETE
SIDEWALK

STA. 25+00.00
END FULL DEPTH
CONSTRUCTION
BEGIN PAVEMENT
TRANSITION

PC = STA. 25+83.95

STA. 25+50.00
END PAVEMENT TRANSITION
BEGIN FULL DEPTH
PAVEMENT REMOVAL

REMOVE & RELOCATE EXISTING
LIGHT POLE AND FOUNDATION
BASE TO GRASS AREA
BETWEEN SIDE WALK AND CURB.
EXTEND EXISTING CONDUIT AND
WIRING AS NECESSARY.

STA. 26+49.00, RT
END RETAINING WALL
(SEE SPECIAL DETAILS)

REMOVE EXISTING
GUARDRAIL

RAIL ROAD CROSSING
IMPROVEMENTS AND
SIGNAL EQUIPMENT
(BY OTHERS) (TYP.)

4' CHAIN LINK FENCE,
PVC COATED, BLACK

STA. 26+02.41, RT
BEGIN RETAINING WALL
(SEE SPECIAL DETAILS)

PT = STA. 27+04.45

STA. 27+58.18 RT.
END FULL DEPTH
PAVEMENT REMOVAL

PROPOSED RAIL ROAD
SIGNAL HOUSE
(BY OTHERS)

STA. 27+80.49 RT.
BEGIN 1½" MILL AND FILL

STA. 28+50.00
END PROJECT No.
STP-2054(300)
END 1½" MILL AND FILL
MATCH EXISTING
BEGIN REMOVE EXISTING
AND INSTALL NEW
PAVEMENT MARKINGS
(SEE SIGNING AND
STRIPING PLANS)

STA. 28+59.79, RT
END CONSTRUCT SIDEWALK
END CONCRETE SIDEWALK

RAIL ROAD CROSSING
IMPROVEMENTS AND
SIGNAL EQUIPMENT
(BY OTHERS) (TYP.)

CURVE DATA #3
FOREST AVE
PI = 26+44.22
D = 2°51'53.2"
Δ = 3°27'06.5" Rt.
R = 2000.00'
L = 120.49'
T = 60.26'
E = 0.91'

1½" MILL AND FILL

PLAN
25 0 25 50
Scale of Feet

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN 20543.00

WIN 20543.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	AURELE GONEAU II	-
DESIGN-DETAILED	D.BURGESS	03\10\17
CHECKED-REVIEWED	D.MITCHELL	-
DESIGN2-DETAILED2		-
DESIGN3-DETAILED3		-
REVISIONS 1		-
REVISIONS 2		-
REVISIONS 3		-
REVISIONS 4		-
FIELD CHANGES		-

SIGNATURE

P.E. NUMBER

DATE

PORTLAND
FOREST AVENUE

HIGHWAY PLAN

SHEET NUMBER
19
OF 67

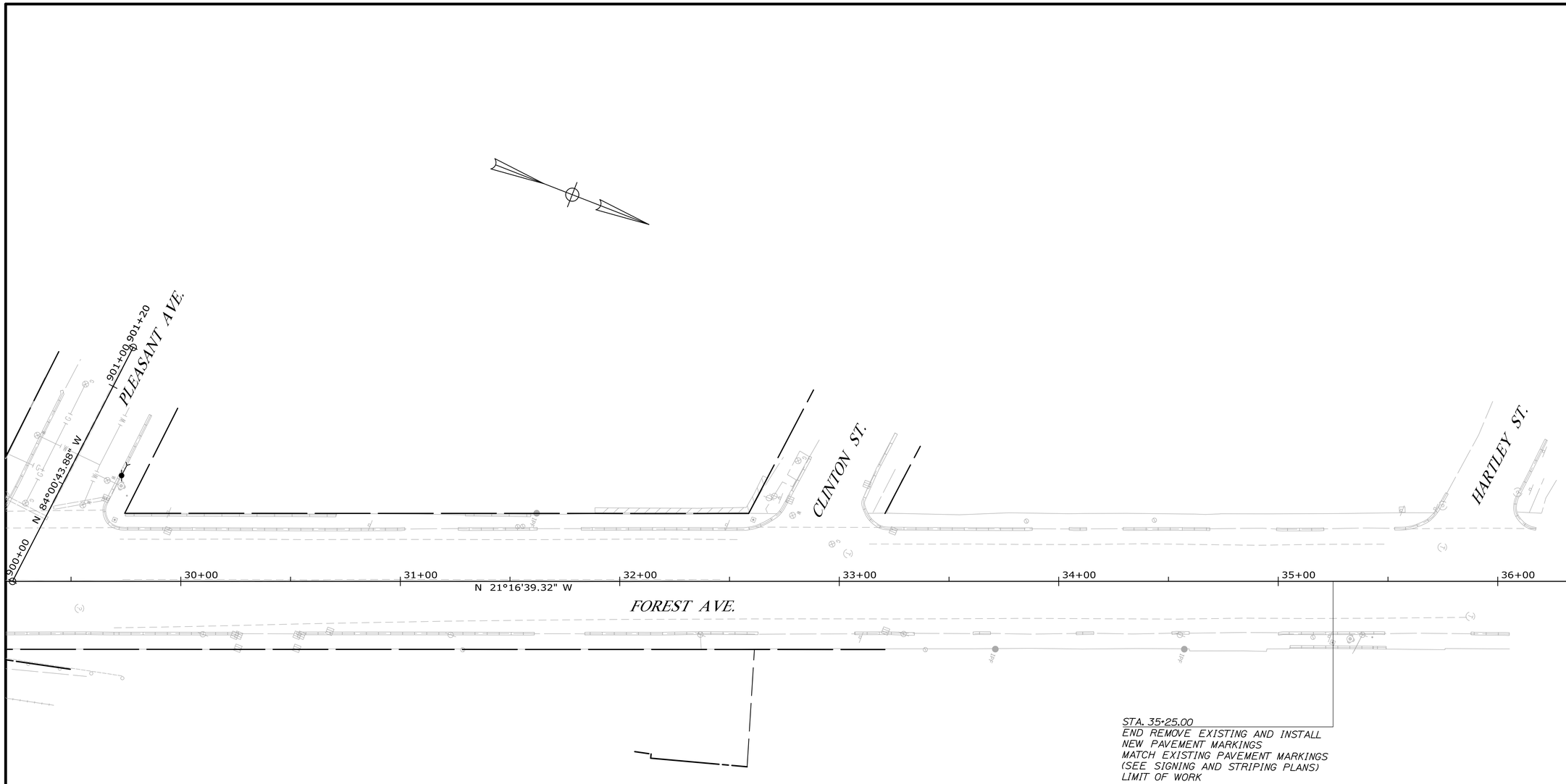
Filename: 019_HDPlan_03.dgn Division: Username: Date:4/27/2017

Date:4/27/2017

Username:

Division:

Filename: 020_HDPlan_04.dgn



PLAN

25 0 25 50

Scale of Feet

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN 20543.00

WIN
20543.00

HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER	ABELE GORMEAU, II		
DESIGN-DETAILED	D.MITCHELL	D.BURGESS	03\10\17
CHECKED-REVIEWED		-	-
DESIGN2-DETAILED2		-	-
DESIGN3-DETAILED3		-	-
REVISIONS 1		-	-
REVISIONS 2		-	-
REVISIONS 3		-	-
REVISIONS 4		-	-
FIELD CHANGES		-	-

SIGNATURE

P.E. NUMBER

DATE

PORTLAND
FOREST AVENUE

HIGHWAY PLAN

SHEET NUMBER

20

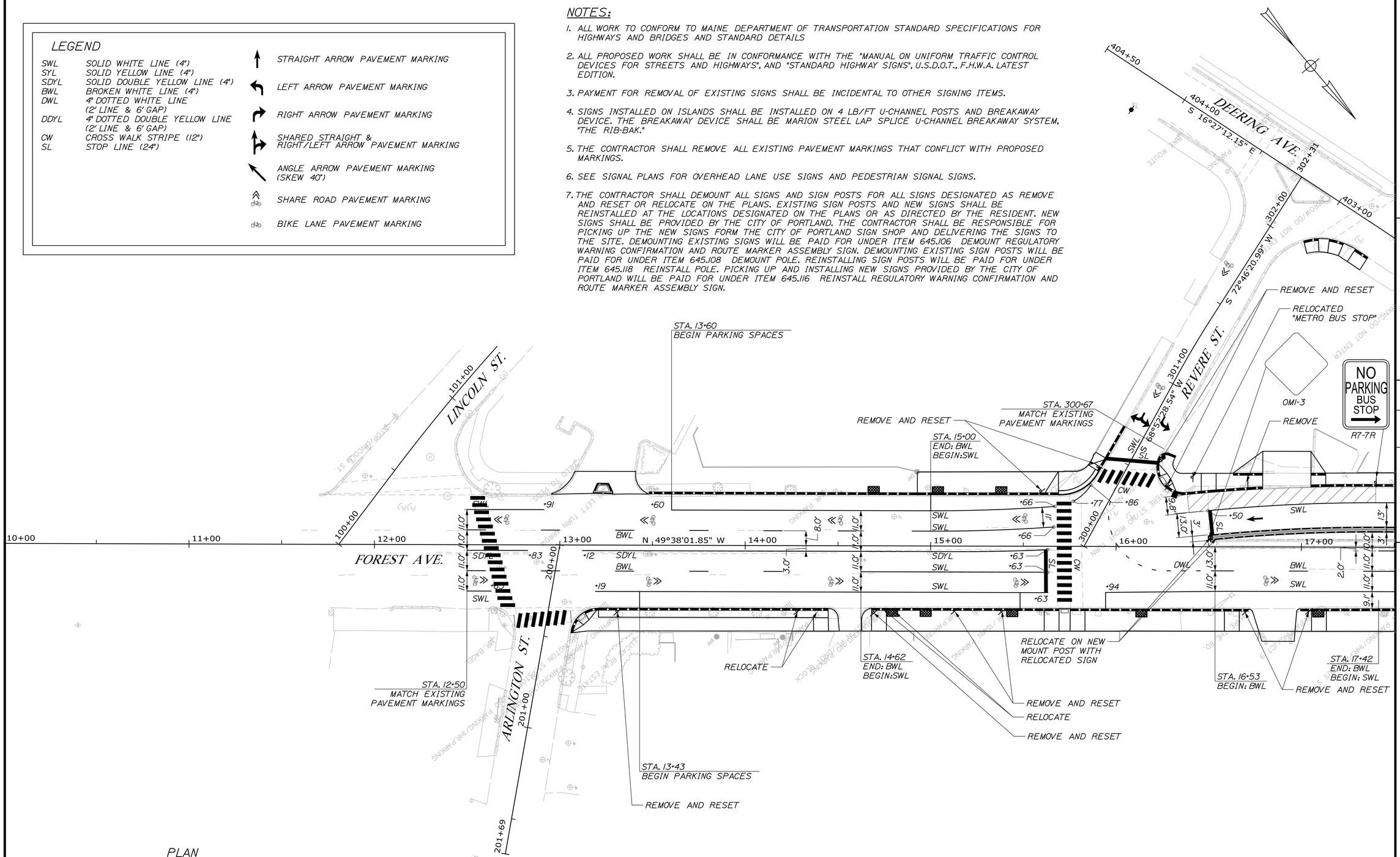
OF 67

LEGEND

SWL	SOLID WHITE LINE (4")	STRAIGHT ARROW PAVEMENT MARKING
SYL	SOLID YELLOW LINE (4")	
SDYL	SOLID DOUBLE YELLOW LINE (4")	LEFT ARROW PAVEMENT MARKING
BWL	BROKEN WHITE LINE (4")	
DWL	4" DOTTED WHITE LINE (2' LINE & 6' GAP)	RIGHT ARROW PAVEMENT MARKING
DDYL	4" DOTTED DOUBLE YELLOW LINE (2' LINE & 6' GAP)	SHARED STRAIGHT & RIGHT/LEFT ARROW PAVEMENT MARKING
CW	CROSS WALK STRIPE (12")	
SL	STOP LINE (24")	ANGLE ARROW PAVEMENT MARKING (SKEW 40°)
		SHARE ROAD PAVEMENT MARKING
		BIKE LANE PAVEMENT MARKING

NOTES:

1. ALL WORK TO CONFORM TO MAINE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES AND STANDARD DETAILS
2. ALL PROPOSED WORK SHALL BE IN CONFORMANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS", AND "STANDARD HIGHWAY SIGNS", U.S.D.O.T., F.H.W.A. LATEST EDITION.
3. PAYMENT FOR REMOVAL OF EXISTING SIGNS SHALL BE INCIDENTAL TO OTHER SIGNING ITEMS.
4. SIGNS INSTALLED ON ISLANDS SHALL BE INSTALLED ON 4 LB/FT U-CHANNEL POSTS AND BREAKAWAY DEVICE. THE BREAKAWAY DEVICE SHALL BE MARION STEEL LAP SPLICE U-CHANNEL BREAKAWAY SYSTEM, "THE RIB-BAK."
5. THE CONTRACTOR SHALL REMOVE ALL EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH PROPOSED MARKINGS.
6. SEE SIGNAL PLANS FOR OVERHEAD LANE USE SIGNS AND PEDESTRIAN SIGNAL SIGNS.
7. THE CONTRACTOR SHALL DEMOUNT ALL SIGNS AND SIGN POSTS FOR ALL SIGNS DESIGNATED AS REMOVE AND RESET OR RELOCATE ON THE PLANS. EXISTING SIGN POSTS AND NEW SIGNS SHALL BE REINSTALLED AT THE LOCATIONS DESIGNATED ON THE PLANS OR AS DIRECTED BY THE RESIDENT. NEW SIGNS SHALL BE PROVIDED BY THE CITY OF PORTLAND. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PICKING UP THE NEW SIGNS FORM THE CITY OF PORTLAND SIGN SHOP AND DELIVERING THE SIGNS TO THE SITE. DEMOUNTING EXISTING SIGNS WILL BE PAID FOR UNDER ITEM 645.106 DEMOUNT REGULATORY WARNING CONFIRMATION AND ROUTE MARKER ASSEMBLY SIGN. DEMOUNTING EXISTING SIGN POSTS WILL BE PAID FOR UNDER ITEM 645.108 DEMOUNT POLE. REINSTALLING SIGN POSTS WILL BE PAID FOR UNDER ITEM 645.118 REINSTALL POLE. PICKING UP AND INSTALLING NEW SIGNS PROVIDED BY THE CITY OF PORTLAND WILL BE PAID FOR UNDER ITEM 645.116 REINSTALL REGULATORY WARNING CONFIRMATION AND ROUTE MARKER ASSEMBLY SIGN.



PLAN

25 0 25 50

Scale of Feet

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN 20543.00

WIN 20543.00 HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	AUREL GORNEAU II	
DESIGN-DETAILED	D.BURGESS	03\10\17
CHECKED-REVIEWED	D.MITCHELL	-
DESIGN2-DETAILED2		-
DESIGN3-DETAILED3		-
REVISIONS 1		-
REVISIONS 2		-
REVISIONS 3		-
REVISIONS 4		-
FIELD CHANGES		-

SIGNATURE

P.E. NUMBER

DATE

PORTLAND
FOREST AVENUE

SIGNING AND STRIPING PLAN

SHEET NUMBER

21

OF 67

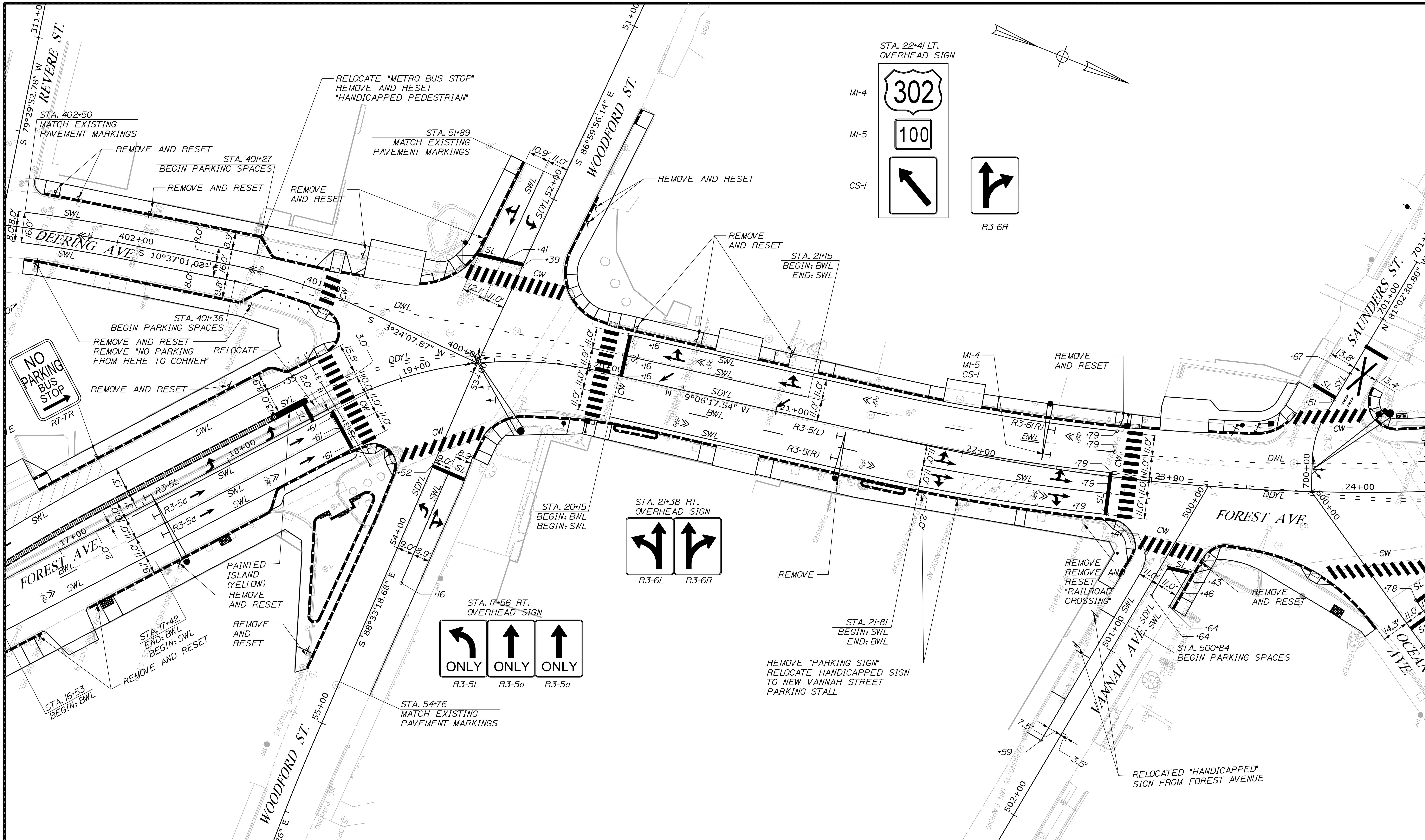
Date:4/27/2017

Username:

Division:

Filename: 021_SSPlan_01.dgn

Date:4/27/2017
Username:
Division:
Filename: 022_SSPlan_02.dgn



NOTES:

1. THE CONTRACTOR SHALL DEMOUNT ALL SIGNS AND SIGN POSTS FOR ALL SIGNS DESIGNATED AS REMOVE AND RESET OR RELOCATE ON THE PLANS. EXISTING SIGN POSTS AND NEW SIGNS SHALL BE REINSTALLED AT THE LOCATIONS DESIGNATED ON THE PLANS OR AS DIRECTED BY THE RESIDENT. NEW SIGNS SHALL BE PROVIDED BY THE CITY OF PORTLAND. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PICKING UP THE NEW SIGNS FORM THE CITY OF PORTLAND SIGN SHOP AND DELIVERING THE SIGNS TO THE SITE. DEMOUNTING EXISTING SIGNS WILL BE PAID FOR UNDER ITEM 645.106 DEMOUNT REGULATORY WARNING CONFIRMATION AND ROUTE MARKER ASSEMBLY SIGN. DEMOUNTING EXISTING SIGN POSTS WILL BE PAID FOR UNDER ITEM 645.108 DEMOUNT POLE. REINSTALLING SIGN POSTS WILL BE PAID FOR UNDER ITEM 645.118 REINSTALL POLE. PICKING UP AND INSTALLING NEW SIGNS PROVIDED BY THE CITY OF PORTLAND WILL BE PAID FOR UNDER ITEM 645.116 REINSTALL REGULATORY WARNING CONFIRMATION AND ROUTE MARKER ASSEMBLY SIGN.

PLAN

25 0 25 50
Scale of Feet

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN 20543.00

WIN 20543.00
HIGHWAY PLANS

	BY	DATE	SIGNATURE
PROJ. MANAGER	AURELE GORNEAULT		
DESIGN-DETAILED	D.MITCHELL	D.BURGESS	03/XX/17
CHECKED-REVIEWED			P.E. NUMBER
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			DATE
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

PORTLAND
FOREST AVENUE

SIGNING AND STRIPING PLAN

SHEET NUMBER
22
OF 67

Username:

Division:

Date:4/27/2017

Filename: 023_SSPlan_03.dgn

BUSINESS SIGN TO BE RELOCATED BY OWNER CONTRACTORS TO WORK AROUND AS NECESSARY

RELOCATE

D3-1 FOREST AV

STOP

R1-1

SAUNDERS ST.

701+00

701+35

N 81°02'30.80" W

STA. 24+67
BEGIN: SWL

REMOVE AND RESET

STA. 25+67
END: SWL

REMOVE AND RESET

REMOVE AND RESET

CONCORD ST.

801+00

REMOVE "WRONG WAY"
RELOCATE "CONCORD ST."

REMOVE AND RESET

STA. 28+75
END: SYL
BEGIN SDYL

PLEASANT AVE.

901+00

901+20

N 84°00'43.86" W

700+00

600+00

500+00

23+00

24+00

25+00

N 24°43'45.86" W

26+00

27+00

28+00

29+00

FOREST AVE.

REMOVE AND RESET "RAILROAD CROSSING"

REMOVE AND RESET

501+00

VANNAH AVE.

STA. 500+84
BEGIN PARKING SPACES

RELOCATED "HANDICAPPED" SIGN FROM FOREST AVENUE

601+00

OCEAN AVE.

602+00

602+86

RELOCATE

RELOCATE BUSINESS SIGN LOCATION TO BE DETERMINED BY OWNER

STA. 25+67
END: SDYL
BEGIN: SYL

RELOCATE

RELOCATE

RELOCATE

MEDIAN CROSSHATCH PAVEMENT MARKING 8" WIDE LINE AT 45°SKEW WITH A SPACING OF 4'

R4-7

OMI-3

RELOCATE

PLAN

25 0 25 50

Scale of Feet

NOTES:

1. THE CONTRACTOR SHALL DEMOUNT ALL SIGNS AND SIGN POSTS FOR ALL SIGNS DESIGNATED AS REMOVE AND RESET OR RELOCATE ON THE PLANS. EXISTING SIGN POSTS AND NEW SIGNS SHALL BE REINSTALLED AT THE LOCATIONS DESIGNATED ON THE PLANS OR AS DIRECTED BY THE RESIDENT. NEW SIGNS SHALL BE PROVIDED BY THE CITY OF PORTLAND. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PICKING UP THE NEW SIGNS FORM THE CITY OF PORTLAND SIGN SHOP AND DELIVERING THE SIGNS TO THE SITE. DEMOUNTING EXISTING SIGNS WILL BE PAID FOR UNDER ITEM 645.106 DEMOUNT REGULATORY WARNING CONFIRMATION AND ROUTE MARKER ASSEMBLY SIGN. DEMOUNTING EXISTING SIGN POSTS WILL BE PAID FOR UNDER ITEM 645.108 DEMOUNT POLE. REINSTALLING SIGN POSTS WILL BE PAID FOR UNDER ITEM 645.118 REINSTALL POLE. PICKING UP AND INSTALLING NEW SIGNS PROVIDED BY THE CITY OF PORTLAND WILL BE PAID FOR UNDER ITEM 645.116 REINSTALL REGULATORY WARNING CONFIRMATION AND ROUTE MARKER ASSEMBLY SIGN.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN 20543.00

WIN 20543.00 HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER AMBELE GORNEAU, II		
DESIGN-DETAILED	D.MITCHELL	03\10\17
CHECKED-REVIEWED	-	-
DESIGN2-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

SIGNATURE

P.E. NUMBER

DATE

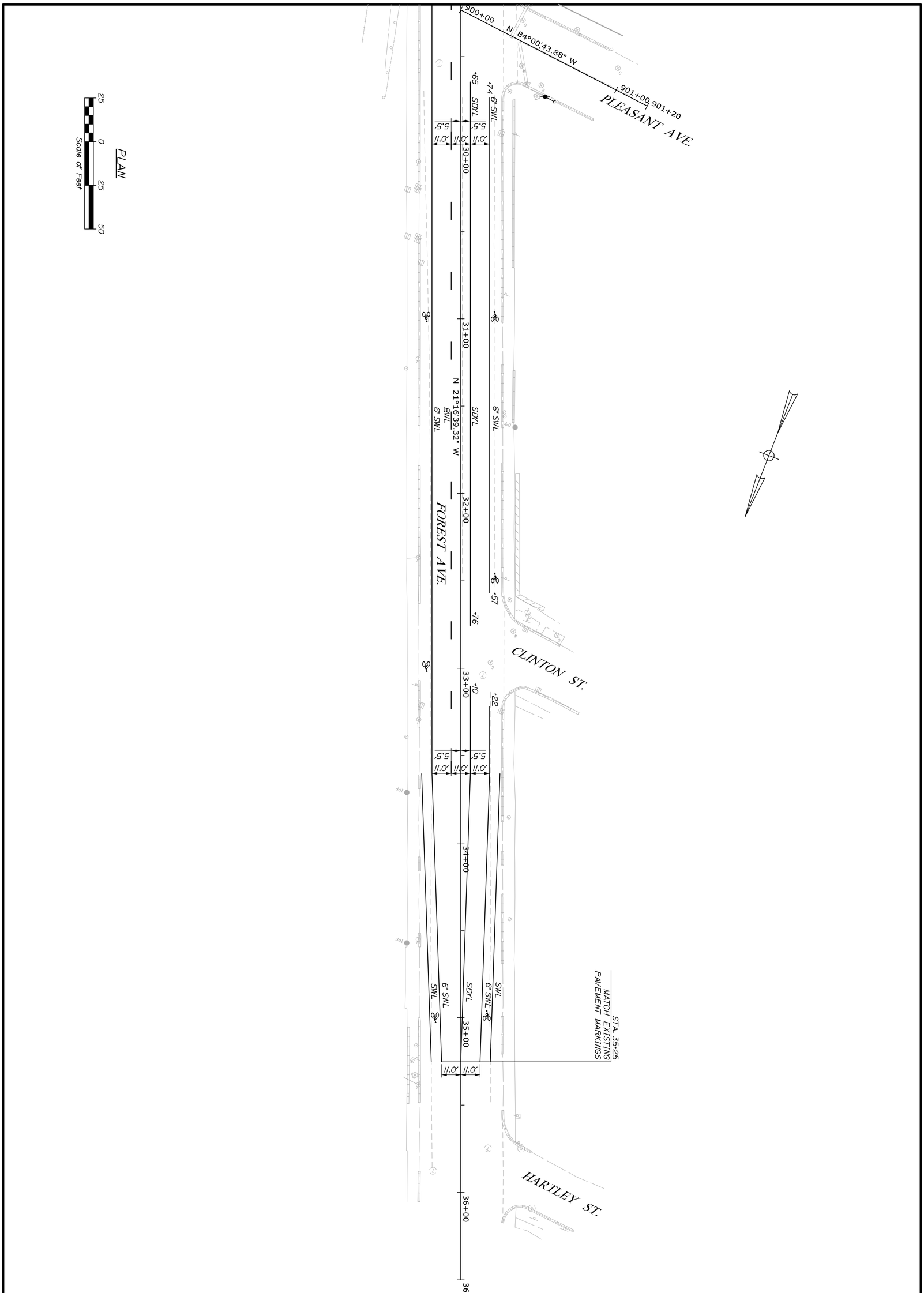
PORTLAND
FOREST AVENUE

SIGNING AND STRIPING PLAN

SHEET NUMBER

23

OF 67



PROJ. MANAGER AURELE GORNEAU, II		BY	DATE
DESIGN-DETAILED	D.MITCHELL	D.BURGESS	03\10\17
CHECKED-REVIEWED	-	-	-
DESIGN2-DETAILED2	-	-	-
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	-		-
REVISIONS 2	-		-
REVISIONS 3	-		-
REVISIONS 4	-		-
FIELD CHANGES	-		-

SIGNATURE

P.E. NUMBER

DATE

SHEET NUMBER 24 OF 67

PORTLAND
FOREST AVENUE

SIGNING AND STRIPING PLAN

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN 20543.00

WIN 20543.00 HIGHWAY PLANS

PROPOSED SIGN SUMMARY

ITEM NUMBER	IDENTIFICATION NUMBER	SIZE OF SIGN WIDTH	SIZE OF SIGN HEIGHT	TEXT	TEXT DIMENSIONS (INCHES) LETTER HEIGHT	TEXT DIMENSIONS (INCHES) VERTICAL SPACING	TEXT DIMENSIONS (INCHES) ARROW RTE. MKR.	NUMBER OF SIGNS REQUIRED	COLOR BACKGROUND	COLOR LEGEND BORDER	TOTAL AREA IN SQUARE FEET	POST
645.271	CS-1	30"	36"					1	WHITE	BLACK	7.50 (7.50)	MAST ARM
643.71								1			7.50 (7.50)	SIGNAL MAST ARM
645.251	D3-1	48"	12"		TEXT DIMENSIONS SHALL CONFORM TO "STANDARD HIGHWAY SIGNS"			1	COLORS SHALL CONFORM TO "STANDARD HIGHWAY SIGNS"		4.00 (4.00)	MOUNT ABOVE R1-1
645.271	M1-4	30"	24"					1			5.00 (5.00)	MAST ARM
645.271	M1-5	30"	24"					1			5.00 (5.00)	MAST ARM
645.271	OM1-3	18"	18"					3			2.25 (6.75)	MOUNT BELOW R4-7
645.271	R1-1	30"	30"					1			6.25 (6.25)	METAL POST
645.271	R3-5L	30"	36"					1			7.50 (7.50)	MAST ARM
643.71								1			7.50 (7.50)	SIGNAL MAST ARM
645.271	R3-5R	30"	36"					1			7.50 (7.50)	MAST ARM
643.71								1			7.50 (7.50)	SIGNAL MAST ARM
645.271	R3-5a	30"	36"					2			7.50 (14.00)	MAST ARM
643.71								2			7.50 (14.00)	SIGNAL MAST ARM
645.271	R3-6R	30"	36"					2			7.50 (14.00)	MAST ARM
643.71								2			7.50 (14.00)	SIGNAL MAST ARM
645.271	R3-6L	30"	36"					1			7.50 (7.50)	MAST ARM
643.71								2			7.50 (7.50)	SIGNAL MAST ARM
645.271	R4-7	24"	30"					2			5.00 (10.00)	METAL POST
645.271	R7-7	12"	18"					1			0.75 (1.50)	METAL POST

ITEM NUMBER	IDENTIFICATION NUMBER	SIZE OF SIGN WIDTH	SIZE OF SIGN HEIGHT	TEXT	TEXT DIMENSIONS (INCHES) LETTER HEIGHT	TEXT DIMENSIONS (INCHES) VERTICAL SPACING	TEXT DIMENSIONS (INCHES) ARROW RTE. MKR.	NUMBER OF SIGNS REQUIRED	COLOR BACKGROUND	COLOR LEGEND BORDER	TOTAL AREA IN SQUARE FEET	POST
643.71	R10-3eR	9"	15"		TEXT DIMENSIONS SHALL CONFORM TO "STANDARD HIGHWAY SIGNS"			13	COLORS SHALL CONFORM TO "STANDARD HIGHWAY SIGNS"		0.94 (12.22)	MOUNT ABOVE APS PUSH BUTTON
643.71	R10-3eL	9"	15"					11			0.94 (10.34)	MOUNT ABOVE APS PUSH BUTTON
643.71	R10-12	30"	36"					1			7.50 (7.50)	MAST ARM
643.71	R10-15R	30"	30"					7			7.50 (52.50)	MAST ARM

SIGN SUMMARY NOTES:

1. PROPOSED SIGN LOCATIONS ARE APPROXIMATE. THE FINAL LOCATION OF THE SIGNS SHALL BE FIELD LOCATED AND APPROVED BY THE RESIDENT.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP 2054(300)

WIN 20543.00

HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER	A. GORNEAU, II		
DESIGN-DETAILED	D.MITHCELL	D.BURGESS	03\10\17
CHECKED-REVIEWED	-	-	-
DESIGN2-DETAILED2	-	-	-
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

SIGNATURE

P.E. NUMBER

DATE

PORTLAND
FOREST AVENUE

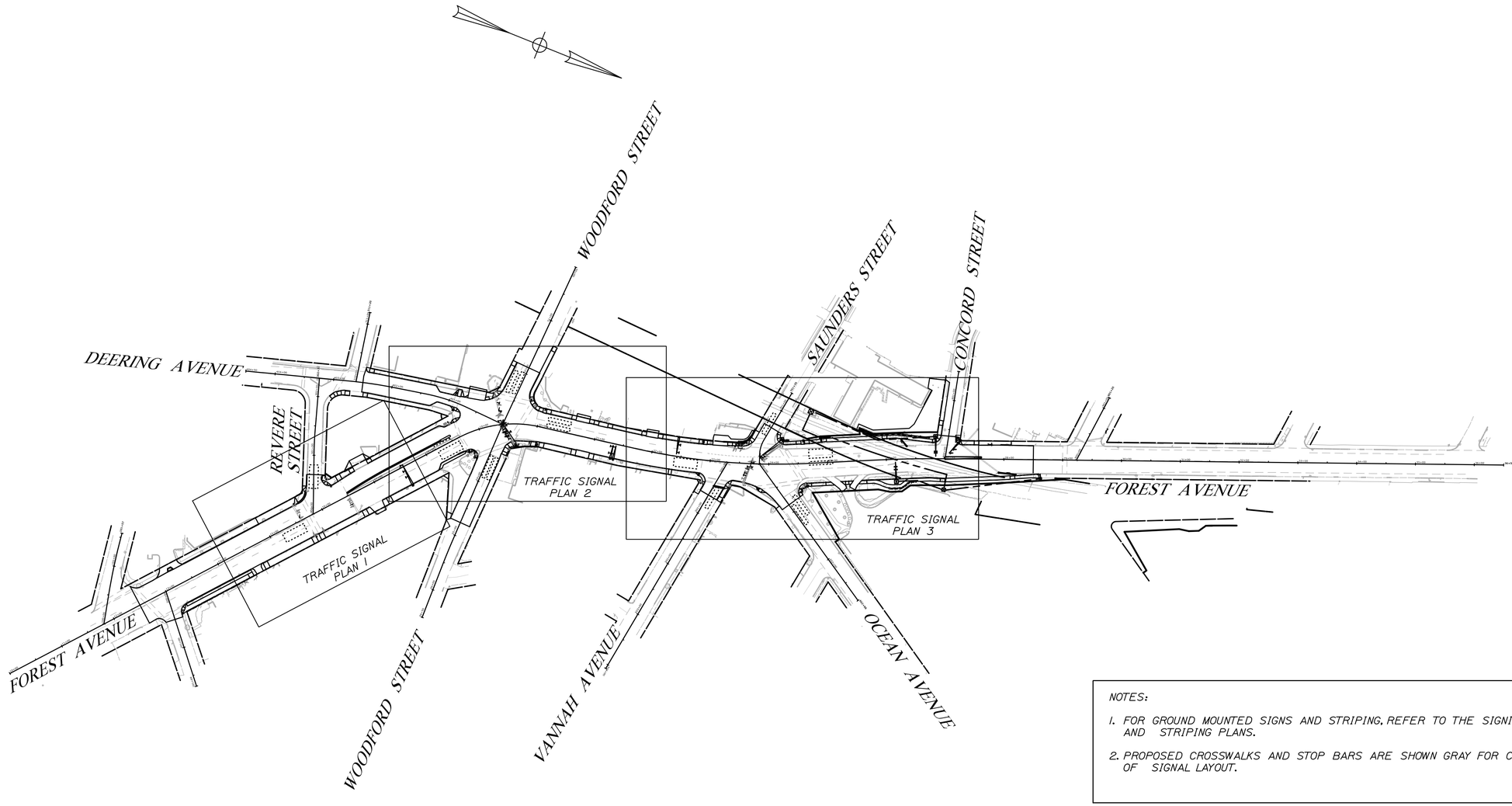
SIGN SUMMARY

SHEET NUMBER

25

OF 67

Filename: 025_Sign Summary.dgn Division: Username: Date:4/27/2017



NOTES:

1. FOR GROUND MOUNTED SIGNS AND STRIPING, REFER TO THE SIGNING AND STRIPING PLANS.
2. PROPOSED CROSSWALKS AND STOP BARS ARE SHOWN GRAY FOR CLARITY OF SIGNAL LAYOUT.

PLAN LEGEND

	EXISTING	PROPOSED
MAST ARM & STEEL POLE ON FOUNDATION		
MAST ARM, LUMINAIRE, & STEEL POLE ON FOUNDATION		
LUMINAIRE & POLE ON FOUNDATION		
PEDESTAL POLE & FOUNDATION		
VEHICULAR SIGNAL HEAD		
PEDESTRIAN SIGNAL HEAD		
PEDESTRIAN PUSH BUTTON & SIGN R10-3e		
CONTROL BOX & FOUNDATION		
JUNCTION BOX		
MAST ARM OR SPAN WIRE MOUNTED SIGN		
VIDEO DETECTOR		
3" UNDERGROUND CONDUIT, PVC SCHEDULE 80		
6' X 40' VIDEO DETECTION ZONE		

PLAN

100 0 100 200

Scale of Feet

PROJ. MANAGER	AMBELE CORNEAU, II	BY	DATE
DESIGN-DETAILED	D.MITCHELL	D.BURGESS	03\10\17
CHECKED-REVIEWED	-	-	-
DESIGN2-DETAILED2	-	-	-
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

SIGNATURE

P.E. NUMBER

DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN 20543.00

WIN
20543.00
HIGHWAY PLANS

PORTLAND
FOREST AVENUE

TRAFFIC SIGNAL
LOCATION PLAN

SHEET NUMBER

26

OF 67

Filename: 026_TRAFFIC LOCATION PLAN.dgn Division: Username: Date:4/27/2017

Filename: 027_TRAFFIC NOTES.dgn Username: Division: Date:4/27/2017

GENERAL SIGNAL NOTES

1. ALL MATERIALS AND WORK SHALL CONFORM TO THE CITY OF PORTLAND AND MAINE DOT STANDARD SPECIFICATIONS AND BE IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS", U.S.D.O.T., F.H.W.A., LATEST EDITION.

2. IT IS THE INTENT OF THIS WORK TO HAVE A COMPLETE OPERATIONAL, TESTED AND ACCEPTED TRAFFIC SIGNAL AT EACH LOCATION UPON COMPLETION OF THIS CONTRACT.

3. TRAFFIC SIGNAL WORK SHALL BE COMPLETED IN A MANNER AND ORDER THAT WILL CAUSE THE MINIMUM DISRUPTION TO TRAFFIC.

4. THE RESIDENT, CITY OF PORTLAND, 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.

5. ALL SIGNAL AND SIGNAL RELATED EQUIPMENT SHALL MEET OR EXCEED THE CITY OF PORTLAND TRAFFIC SIGNAL STANDARDS.

6. CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY TRAFFIC SIGNALS AND ASSOCIATED WORK IF REQUIRED. CONTRACTOR SHALL REMOVE THE TEMPORARY TRAFFIC SIGNAL ONCE NEW SIGNAL IS OPERATIONAL. ALL COSTS ASSOCIATED WITH TEMPORARY SIGNALS SHALL BE INCIDENTAL TO THE 643 ITEMS.

7. THE LOCATIONS OF STRAIN POLES, MAST ARMS, AND PEDESTAL POLES INCLUDING THE MOUNTED TRAFFIC DEVICES AND SIGNS ARE APPROXIMATE. FINAL LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE RESIDENT OR CITY REPRESENTATIVE.

8. THE PROPOSED TRAFFIC SIGNAL TIMING AND PHASING PLAN SHALL BE INPUT BY THE CONTRACTOR UNDER OBSERVATIONS BY THE RESIDENT OR CITY REPRESENTATIVE. THE CONTRACTOR SHALL PROVIDE 48 HOURS NOTICE TO THE RESIDENT.

9. CONTRACTOR IS RESPONSIBLE FOR FIELD ADJUSTING TIMING FOR EACH TIMING PLAN UNDER THE DIRECTION OF THE RESIDENT AND CITY REPRESENTATIVE.

10. TWO COPIES OF AS-BUILT PLANS, SIGNAL TIMING, AND CONTROLLER MANUALS SHALL BE LEFT IN THE CONTROLLER CABINET. ONE ELECTRONIC COPY OF EACH SHALL BE PROVIDED TO THE CITY TRAFFIC ENGINEER.

11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING RED-LINE AS-BUILT DRAWINGS OF THE FINAL WORK TO THE RESIDENT. THOSE DRAWINGS SHALL BE A CLEAN SET OF PLANS SHOWING ALL CHANGES, MODIFICATIONS, AND ELEVATIONS TO THE BID PLANS.

12. THE CONTRACTOR SHALL PROVIDE THE RESIDENT, MAINE DOT AND THE CITY OF PORTLAND WITH A SCHEDULE OF WORK FOR CONSTRUCTING THE TRAFFIC IMPROVEMENTS.

13. CONTRACTOR SHALL PROVIDE AND INSTALL ALL JUNCTION BOXES PER CITY OF PORTLAND AND THE MAINE DOT STANDARDS AT A MINIMUM.

14. THE CONTRACTOR SHALL PREPARE A MATERIAL SCHEDULE BASED UPON THEIR PLAN REVIEW. ALL SCHEDULES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO ORDERING MATERIALS OR PERFORMING WORK.

15. ALL TRAFFIC SIGNAL EQUIPMENT REMOVED AND NOT REUSED SHALL BE RETURNED TO THE CITY OF PORTLAND. THIS INCLUDES BUT IS NOT LIMITED TO SIGNAL HEADS, MAST ARMS, POLES, SIGNAL CABINETS, AND PUSH BUTTONS.

16. UTILITIES THAT HAVE FACILITIES IN THE GENERAL PROJECT ARE LISTED IN SPECIAL PROVISION 104.

17. UTILITY LOCATIONS SHOWN ARE APPROXIMATE ONLY AND THE CONTRACTOR IS RESPONSIBLE FOR FINDING EXACT LOCATIONS OF UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL CONTACT DIG SAFE AT 1-888-DIG-SAFE AND APPROPRIATE AUTHORITIES PRIOR TO ANY SUBSURFACE ACTIVITIES.

18. THE CONTRACTOR SHALL MEET ALL REQUIREMENTS OF THE UTILITY COMPANIES WHEN MODIFIYING THE EXISTING SERVICE CONNECTIONS AND WHEN INSTALLING EQUIPMENT ON THEIR POLES OR NEAR THEIR WIRES.

19. CONTRACTOR SHALL CONTACT AND COORDINATE WITH UTILITIES UPON AWARD OF THE CONTRACT. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES SO THAT THE TRAFFIC SIGNAL INSTALLATION IS DONE AFTER THE UTILITIES HAVE BEEN RELOCATED BY THE RESPECTIVE UTILITY COMPANIES.

20. THE CONTRACTOR IS RESPONSIBLE FOR THE RELOCATION AND/OR INSTALLATION OF POWER METERS IF REQUIRED AND ASSURING THE POWER METER LOCATION AND INSTALLATION CONFORMS TO THE LOCAL UTILITY REQUIREMENTS. THIS WORK WILL BE INCIDENTAL TO ITEM 643.71.

21. ALL CONDUIT CROSSING AREAS OF OVERLAY OR EXISTING PAVEMENT SHALL BE INSTALLED USING TRENCHLESS TECHNOLOGIES.

22. ALL NEW SIGNAL SECTIONS SHALL HAVE LED LENSES 12 INCHES IN DIAMETER.

23. ALL SIGNAL EQUIPMENT/STRUCTURES SHALL BE CONSISTENT WITH THE EXISTING COMPONENTS.

24. ALL SPLICES WILL BE MADE IN THE CABINETS OR POLES MEETING MAINE DOT SPECIFICATIONS.

25. THE BOTTOM OF THE HOUSING OF NEW SIGNAL FACES SHALL BE AT LEAST 16 FEET BUT NOT MORE THAN 19 FEET ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.

26. ALL OVERHEAD ILLUMINATION SHALL BE FULL CUT-OFF LUMINAIRES.

27. THE CONTRACTOR SHALL PROVIDE MAST ARM DESIGN IN ACCORDANCE WITH SECTION 643.023. MAST ARMS 40' AND OVER IN LENGTH SHALL BE CATEGORY II. ALL OTHER LENGTHS SHALL BE CATEGORY III.

28. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FINAL STRUCTURAL DESIGN OF THE SIGNAL SUPPORT STRUCTURES AND THE CONNECTION OF THE SUPPORT STRUCTURES TO THEIR FOUNDATIONS. ALL DESIGNS SHALL BE PREPARED AND STAMPED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF MAINE. DESIGN COMPUTATIONS, INCLUDING DESIGN LOADS (OVERTURNING MOMENT, TORSION, SHEAR FORCE, AND AXIAL LOAD) AT THE TOP OF THE FOUNDATIONS, AND SHOP DRAWINGS SHALL BE SUBMITTED FOR APPROVAL BY THE DEPARTMENT. NO MATERIALS SHALL BE ORDERED OR FABRICATED UNTIL THE DESIGN HAS BEEN APPROVED.

29. FOUNDATIONS SHALL CONSIST OF CAST-IN-PLACE REINFORCED CONCRETE DRILLED SHAFTS; ONE NEW DRILLED SHAFT PER MAST ARM OR DUAL PURPOSE POLE AS SET FORTH IN SPECIAL PROVISION 643. FOUNDATION SIZES SHALL BE SELECTED BY THE CONTRACTOR BASED UPON ACTUAL COMPUTED BENDING MOMENTS AND TORSION IN ACCORDANCE WITH SPECIAL PROVISION 643. ACTUAL DESIGN LOADS AT THE TOP OF THE FOUNDATION THAT ARE PROVIDED BY THE CONTRACTOR AS PART OF THEIR STRUCTURAL SUBMITTAL WILL BE USED BY THE DEPARTMENT TO CHECK THE SPECIFIED SIZE OF THE DRILLED SHAFTS. DRILLED SHAFTS SHALL NOT BE PERMANENTLY CASED, EXCEPT FOR THE TOP 3 FEET; CONCRETE SHALL BE CAST DIRECTLY AGAINST THE SURROUNDING SOIL. PRECAST FOUNDATIONS WILL NOT BE ACCEPTED.

30. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DRILLING TEST BORINGS FOR ALL NEW AND RELOCATED MAST ARM STRUCTURES AND FOR FINAL STRUCTURAL DESIGN OF MAST ARM FOUNDATIONS. IF SOIL OR GROUNDWATER CONDITIONS ARE SUSPECT (SUCH AS VERY SOFT GRAY SILT-CLAY, ORGANIC SOILS/PEAT, OR GROUNDWATER LESS THAN 5 FEET BELOW THE GROUND SURFACE) THE CONTRACTOR SHALL STOP WORK ON THAT FOUNDATION AND CONTACT THE RESIDENT ENGINEER.

31. ANY DAMAGE TO SLOPES OR PAVEMENT RESULTING FROM INSTALLATION OF MAST ARM OR DUAL PURPOSE POLES AND FOUNDATIONS SHALL BE REPAIRED BY THE CONTRACTOR AS DIRECTED BY THE RESIDENT. COSTS OF REPAIRS SHALL BE INCIDENTAL TO PAYMENT UNDER SECTION 643.

32. PAYMENT FOR MAST ARM OR DUAL PURPOSE POLES AND FOUNDATIONS FOR SIGNALS WILL BE IN ACCORDANCE WITH SECTION 643, AND WILL BE FULL COMPENSATION FOR ALL LABOR, EQUIPMENT AND MATERIALS FOR THE ACCEPTED COMPLETE SIGNAL INSTALLATION INCLUDING, BUT NOT LIMITED TO, SIGNALS, SUPPORT STRUCTURES AND FOUNDATIONS, EXCAVATION, EXCAVATION STABILIZATION, BACKFILL, REPLACEMENT OF SUBBASE GRAVEL, REPLACEMENT OR REPAIR OF HIGHWAY AND SIDEWALK PAVEMENT, SLOPE REGRADING, AND PLACEMENT OF LOAM, SEED AND MULCH ON DISTURBED SLOPES. PAYMENT FOR CONSTRUCTION TRAFFIC CONTROL WILL BE MADE UNDER APPLICABLE PAY ITEMS OF SECTION 652.

33. ALL PUSH BUTTONS SHALL BE LOCATED WITHIN 1.0' FROM THE EDGE OF THE SIDEWALK. IF PLACED GREATER THAN 1.0' FROM THE SIDEWALK, THE CONTRACTOR SHALL PAVE AN APRON TO THE BUTTON NOT TO EXCEED 5.0'.

34. ALL PUSH BUTTONS SHALL BE MOUNTED 42 INCHES ABOVE SIDEWALK ELEVATION.

35. COUNTDOWN PEDESTRIAN HEADS AND PEDESTRIAN PUSH-BUTTON ASSEMBLIES SHALL HAVE AUDIBLE/TACTILE FEATURES AND SHALL BE INCIDENTAL TO ITEM 643.71.

36. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY NECESSARY STREET/SIDEWALK OCCUPANCY OR OPENING PERMITS.

37. LUMINAIRES SHALL BE INSTALLED 2 TO 4 FEET ABOVE MAST ARM OR AS DIRECTED BY THE RESIDENT.

38. SIGNAL EQUIPMENT:
- SIGNAL HOUSINGS SHALL BE MCCAIN MODEL MTSTA OR MTSTP SERIES ONLY
- LED MODULES FOR VEHICLE INDICATIONS SHALL BE GELCORE MODEL DR6 SERIES ONLY
- LED MODULES FOR PEDESTRIAN INDICATIONS SHALL BE GELCORE MODEL PS7 SERIES ONLY
- ACCESSIBLE PEDESTRIAN SIGNALS SHALL BE CAMPBELL ADVISOR SERIES ONLY

39. TRAFFIC STRUCTURES:
- MAST ARMS SHALL BE VALMONT SM16 OR CB16 SERIES ONLY
- STRAIN POLES SHALL BE VALMONT SW56 SERIES ONLY.
- PEDESTAL POLES SHALL BE ONE PIECE.

40. RESET AND PROPOSED SIGNS INSTALLED ON SIGNAL MAST ARMS OR POLES AND PEDESTAL POLES SHALL BE INCIDENTAL TO ITEM 643.71 TRAFFIC SIGNAL MODIFICATION.

41. ALL EXISTING AND PROPOSED VEHICLE SIGNALS SHALL BE EQUIPPED WITH 5" LOUVERED BACKPLATES WITH 2" YELLOW RETROREFLECTIVE BORDERS.

VIDEO DETECTION

1. EXISTING VIDEO DETECTION SHALL BE REMOVED AND REPLACED, AS NOTED ON THE PLANS.

2. THE CONTRACTOR SHALL REPROGRAM ALL VIDEO DETECTION ZONES WITHIN PROJECT LIMITS.

3. THE RESIDENT RESERVES THE RIGHT TO DIRECT THE CONTRACTOR TO FIELD ADJUST THE HEIGHT, EITHER HIGHER OR LOWER, OF THE VIDEO DETECTION FOR LOCAL CONDITIONS IDENTIFIED DURING OR AFTER CONSTRUCTION. NO ADDITIONAL COST WILL BE ALLOWED FOR FIELD ADJUSTING THE VIDEO DETECTION.

INTERCONNECT

1. EXISITNG TRAFFIC SIGNAL INTERCONNECT SHALL BE RETAINED.

2. CONTRACTOR SHALL RECONNECT EXISTING INTERCONNECT AT ALL LOCATIONS WHERE EXISTNG TRAFFIC CONTROL CABINETS ARE TO BE RELOCATED. ALL WORK AND MATERIALS TO RECONNECT THE EXISTING INTERCONNECT SHALL BE INCIDENTAL TO ITEM 643.71.

DAILY AND WEEKLY COORDINATION SCHEDULE

	DAY OF WEEK						
	SUN	MON	TUE	WED	THU	FRI	SAT
DAY PLAN	3	1	1	1	1	1	2

EVENT	TIME			TIME PLAN
	HOUR	MIN.	SEC.	
DAY PLAN 1				
1	00	00	00	54*
2	06	00	00	1
3	06	45	00	3
4	08	45	00	2
5	10	30	00	2
6	11	45	00	5
7	13	05	00	3
8	14	45	00	4
9	18	00	00	2
10	19	00	00	1
11	20	00	00	54*
DAY PLAN 2				
1	00	00	00	54*
2	10	00	00	2
3	11	15	00	3
4	15	30	00	2
5	18	00	00	1
6	19	00	00	54*
DAY PLAN 3				
1	00	00	00	54*
2	10	00	00	2
3	11	15	00	2
4	15	30	00	2
5	18	30	00	54*

* TIME PLAN 54 IS FREE OPERATION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN 20543.00

WIN 20543.00 HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER AURELE GONNEAU, II		
DESIGN-DETAILED	D.MITCHELL	03\10\17
CHECKED-REVIEWED	-	-
DESIGN2-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

SIGNATURE

P.E. NUMBER

DATE

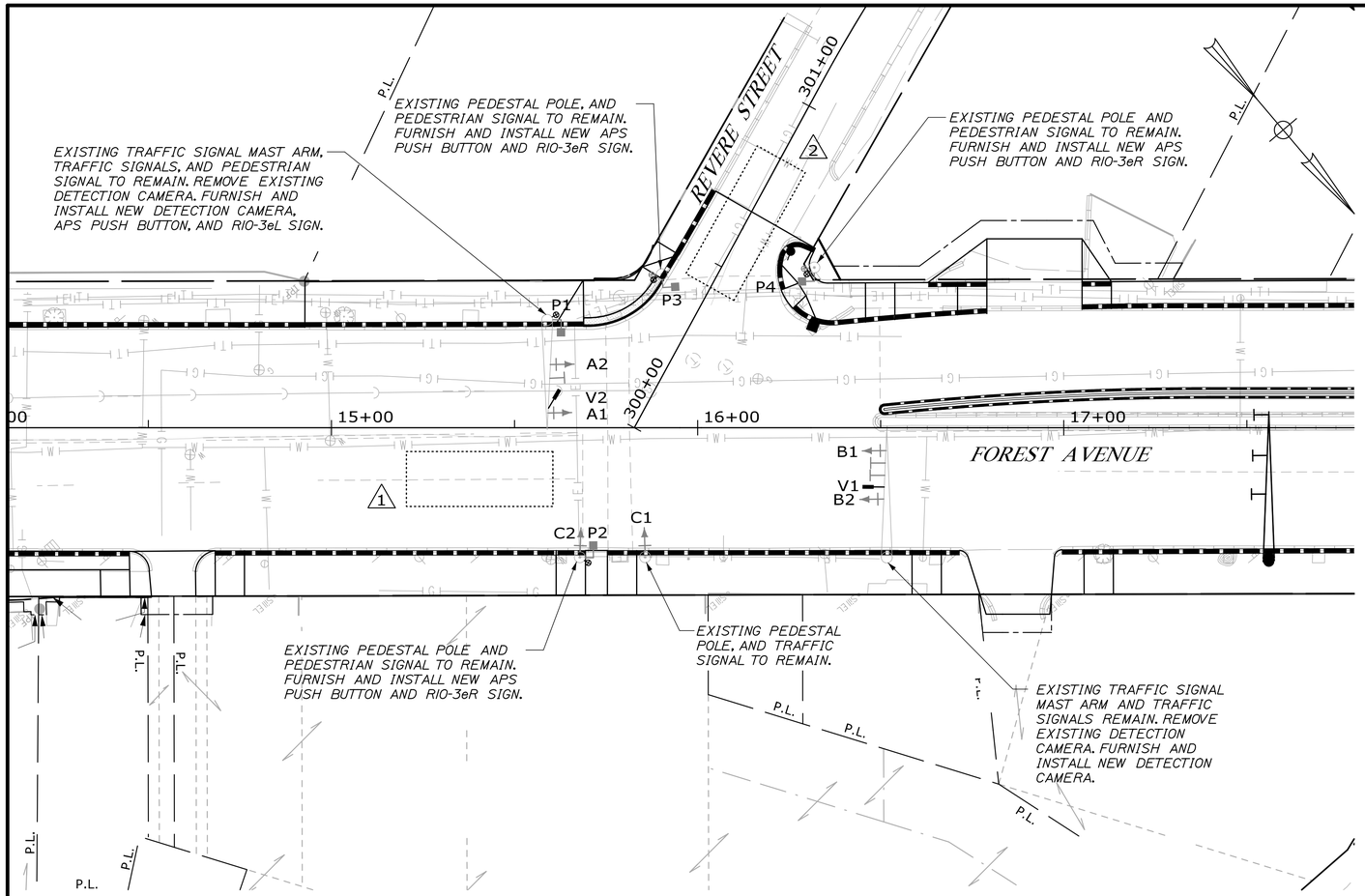
PORTLAND
FOREST AVENUE

TRAFFIC SIGNAL NOTES

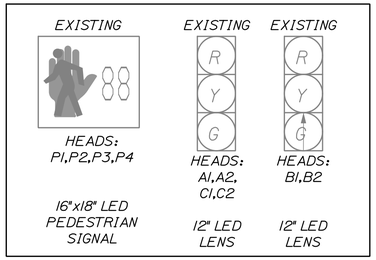
SHEET NUMBER

27

OF 67



SIGNAL HEAD DATA



NOTE:
1. FURNISH AND INSTALL LOUVERED BACKPLATES WITH RETRORELECTIVE BORDERS ON SIGNAL HEADS A1, A2, B1, B2, C1, AND C2.

NOTES:

1. INTERSECTION PHASING AND TIMING CONTROLLED BY FOREST AVENUE AT WOODFORD STREET/DEERING AVENUE TRAFFIC SIGNAL CONTROLLER, SEE TRAFFIC SIGNAL PLAN 2 FOR SIGNAL TIMINGS.

2. RETAIN EXISTING JUNCTION BOXES AND ADJUST FRAME AND COVER TO GRADE, UNLESS OTHERWISE NOTED.

3. REMOVE, SALVAGE, AND REPLACE ALL EXISTING PEDESTRIAN PUSH BUTTONS WITH NEW APS PUSH BUTTONS.

LIST OF MAJOR ITEMS

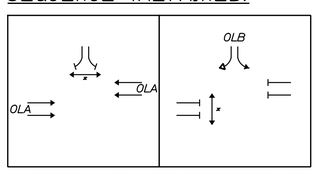
EQUIPMENT AND WORK ITEMS	QUANTITY
FURNISH AND INSTALL ADA COMPLIANT ASSESSIBLE PEDESTRIAN (APS) PUSH BUTTON.	4
FURNISH AND INSTALL LOUVERED BACKPLATES WITH RETRORELECTIVE BORDER.	6
FURNISH AND INSTALL FLIR TRAFISENSE VIDEO DETECTION SYSTEM.	1
REPROGRAM DETECTION ZONES.	AS NEEDED

DECTECTOR SCHEDULE

DETECTOR						DETECTOR CARD IN VEHICLE DETECTION RACK			
CAMERA ID	PLAN ID	STREET	DIRECTION	LANE	PHASE	TYPE	SLOT NO.	DETECTOR NO.	CHANNEL
CAMERA V1	1	FOREST	NORTHBOUND	THRU	2	FLIR TRAFFISENSE	-	1/1	1
CAMERA V2	2	REVERE	EASTBOUND	LEFT-RIGHT	8	FLIR TRAFFISENSE	-	2/1	1

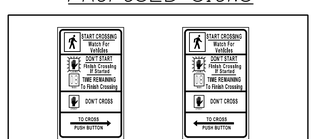
NOTE:
1. DETECTOR PHASES ARE IN REFERENCE TO THE FOREST/WOODFORD/DEERING TRAFFIC SIGNAL CONTROLLER.

EXISTING SIGNAL PHASING SEQUENCE (RETAINED)



x = NORMALLY DW, UPON PEDESTRIAN ACTUATION, WITH FDW COUNTDOWN
EXISTING OLA = ϕ2 + ϕ5 + ϕ6
EXISTING OLB = ϕ3 + ϕ4 + ϕ7 + ϕ8

PROPOSED SIGNS



R10-3eR
9"x15"
2 PROPOSED

R10-3eL
9"x15"
2 PROPOSED

SEE TRAFFIC SIGNAL NOTES SHEET FOR ADDITIONAL REQUIREMENTS AND TRAFFIC SIGNAL LOCATION PLAN FOR LEGEND

PLAN

20 0 20 40
Scale of Feet

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN 20543.00

WIN 20543.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER AURELE GORNEAU, II		
DESIGN-DETAILED	D.MITCHELL	03\10\17
CHECKED-REVIEWED	-	-
DESIGN2-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

SIGNATURE

P.E. NUMBER

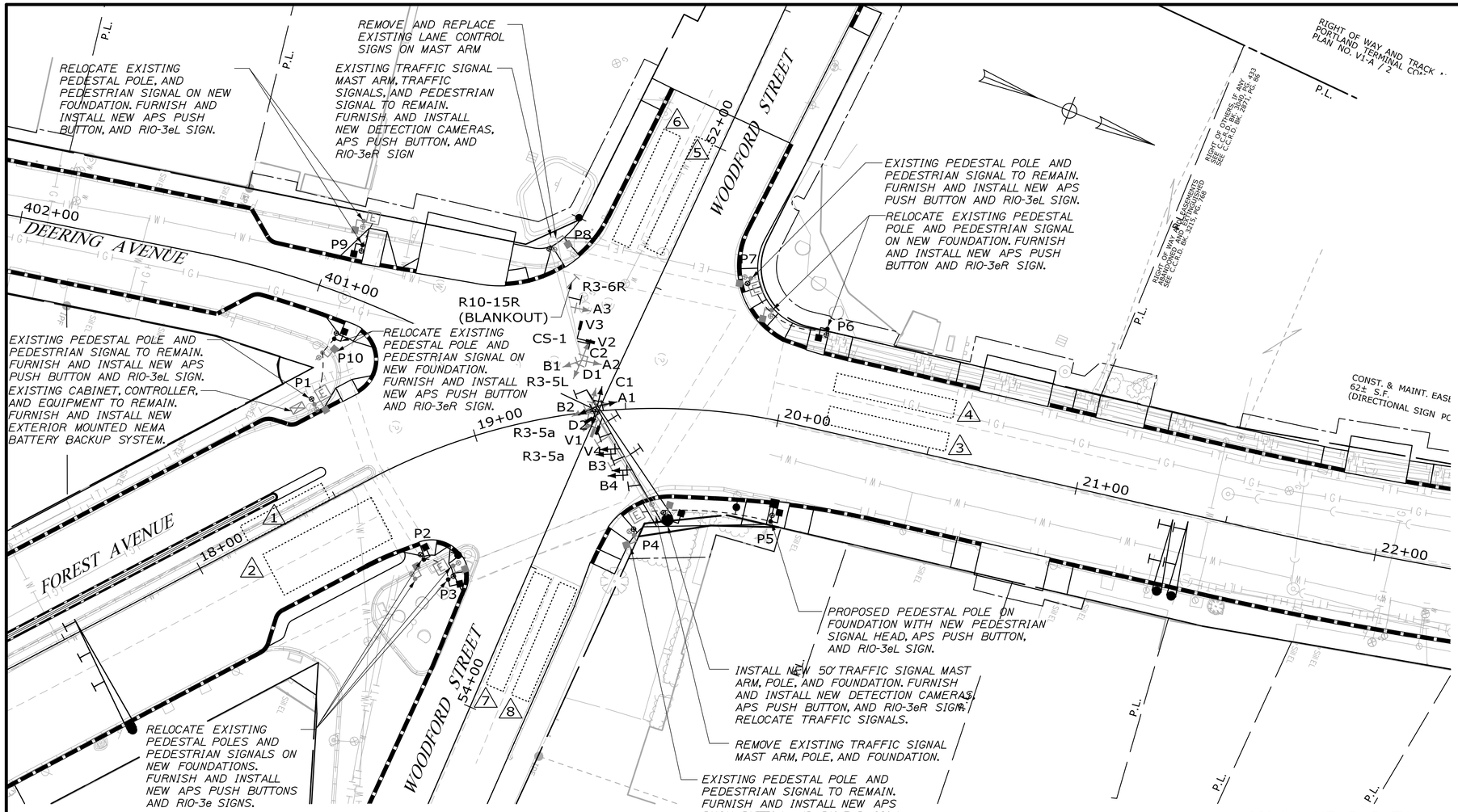
DATE

PORTLAND
FOREST AVENUE

TRAFFIC SIGNAL PLAN 1

SHEET NUMBER
28
OF 67

Date:4/27/2017
Username:
Division:
Filename: 028_TRAFFIC PLAN_01.dgn



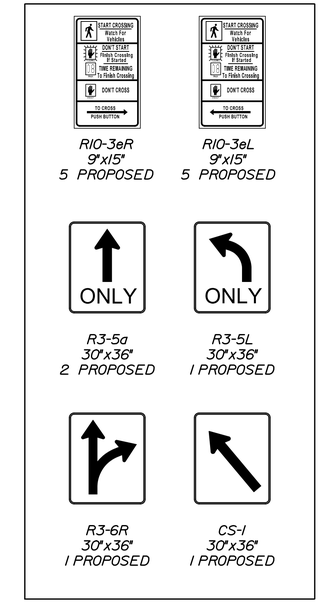
NOTES:
1. RETAIN EXISTING JUNCTION BOXES AND ADJUST FRAME AND COVER TO GRADE, UNLESS OTHERWISE NOTED. MODIFY JUNCTION BOXES TO RECEIVE PROPOSED CONDUIT. PLUG HOLES IN JUNCTION BOXES AS DIRECTED BY THE RESIDENT.

2. RETAIN EXISTING TRAFFIC SIGNAL CONDUIT. EXTEND EXISTING CONDUIT AS REQUIRED TO PROPOSED SIGNAL LOCATION. REPLACE EXISTING CONDUIT AS DIRECTED BY THE RESIDENT.

3. REMOVE, SALVAGE, AND REPLACE ALL EXISTING PEDESTRIAN PUSH BUTTONS WITH NEW APS PUSH BUTTONS.

4. RELOCATE OVERHEAD SIGNS ON NEW SIGNAL MAST ARM TO ALLOW PLACEMENT OF NEW LANE DESIGNATION SIGNS. REMOVE "DO NOT BLOCK INTERSECTION" SIGN FROM NEW MAST ARM.

PROPOSED SIGNS



RIO-3eR 9"x15" 5 PROPOSED

RIO-3eL 9"x15" 5 PROPOSED

R3-5a 30"x36" 2 PROPOSED

R3-5L 30"x36" 1 PROPOSED

R3-6R 30"x36" 1 PROPOSED

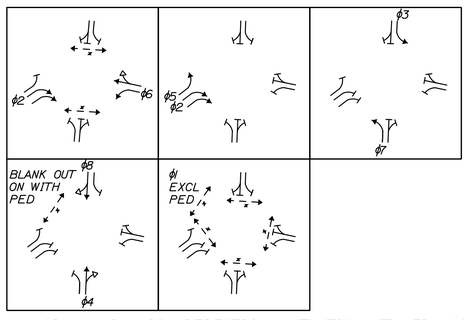
CS-1 30"x36" 1 PROPOSED

SIGNAL TIMING SCHEDULE

	PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6	PHASE 7	PHASE 8
MINIMUM INITIAL	5	10	5	5	5	10	5	5
PASSAGE TIME	1	3	2	3	2	3	2	3
MAXIMUM I	20	90	18	20	25	90	25	20
MAXIMUM II	20	90	18	20	25	90	25	20
YELLOW	3	4	4	4	4	4	4	4
ALL RED	0	2	2	2	2	2	2	2
PEDESTRIAN WALK	4	7		4		7		4
PEDESTRIAN CLEARANCE (FDW)	16	17		6		17		6
PEDESTRIAN CLEARANCE (DW)	3	3		3		3		3
RECALL	0	S	0	0	0	S	0	0
DETECTOR OPERATION	PED	PR	PR	PR	PR	PR	PR	PR
PREEMPTION PRIORITY			C			1		C
FLASH	D	R	R	R	R	R	R	R
DUAL ENTRY	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF

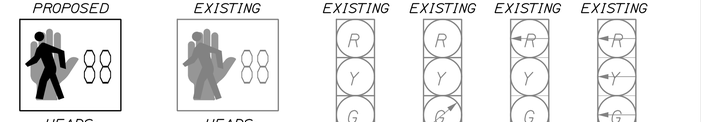
NOTES:
S = SOFT RECALL
0 = RECALL OFF
PR = PRESENCE
MAX 1 = FREE OPERATION
MAX 2 = UNDER COORDINATION
Y = YELLOW
R = RED
D = DARK
C = CLEAR
FDW = FLASHING DON'T WALK
DW = DON'T WALK

EXISTING SIGNAL PHASING SEQUENCE (RETAINED)



x = NORMALLY DW, UPON PEDESTRIAN ACTUATION, WITH FDW COUNTDOWN
ϕ5 LAGS, ϕ1 OMITS ϕ6

SIGNAL HEAD DATA



HEADS: P5 — 16"x18" LED PEDESTRIAN SIGNAL

HEADS: P1, P2, P3, P4, P6, P7, P8, P9, P10 — 16"x18" LED PEDESTRIAN SIGNAL

HEADS: A1, A2, A3, C2, D2 — 12" LED LENS

HEADS: B3, B4 — 12" LED LENS

HEADS: C1, D1 — 12" LED LENS

HEADS: B1, B2 — 12" LED LENS

NOTE:
1. FURNISH AND INSTALL LOUVERED BACKPLATES WITH RETRORELECTIVE BORDERS ON SIGNAL HEADS A1, A2, A3, B1, B2, B3, B4, C1, C2, D1, AND D2.

SEE TRAFFIC SIGNAL NOTES SHEET FOR ADDITIONAL REQUIREMENTS AND TRAFFIC SIGNAL LOCATION PLAN FOR LEGEND

PLAN

20 0 20 40
Scale of Feet

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN 20543.00

WIN 20543.00 HIGHWAY PLANS

PROJ. MANAGER	AMBELE GORNEAU, II		
DESIGN-DETAILED	D.MITCHELL	D.BURGESS	03\10\17
CHECKED-REVIEWED	-	-	-
DESIGN2-DETAILED2	-	-	-
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

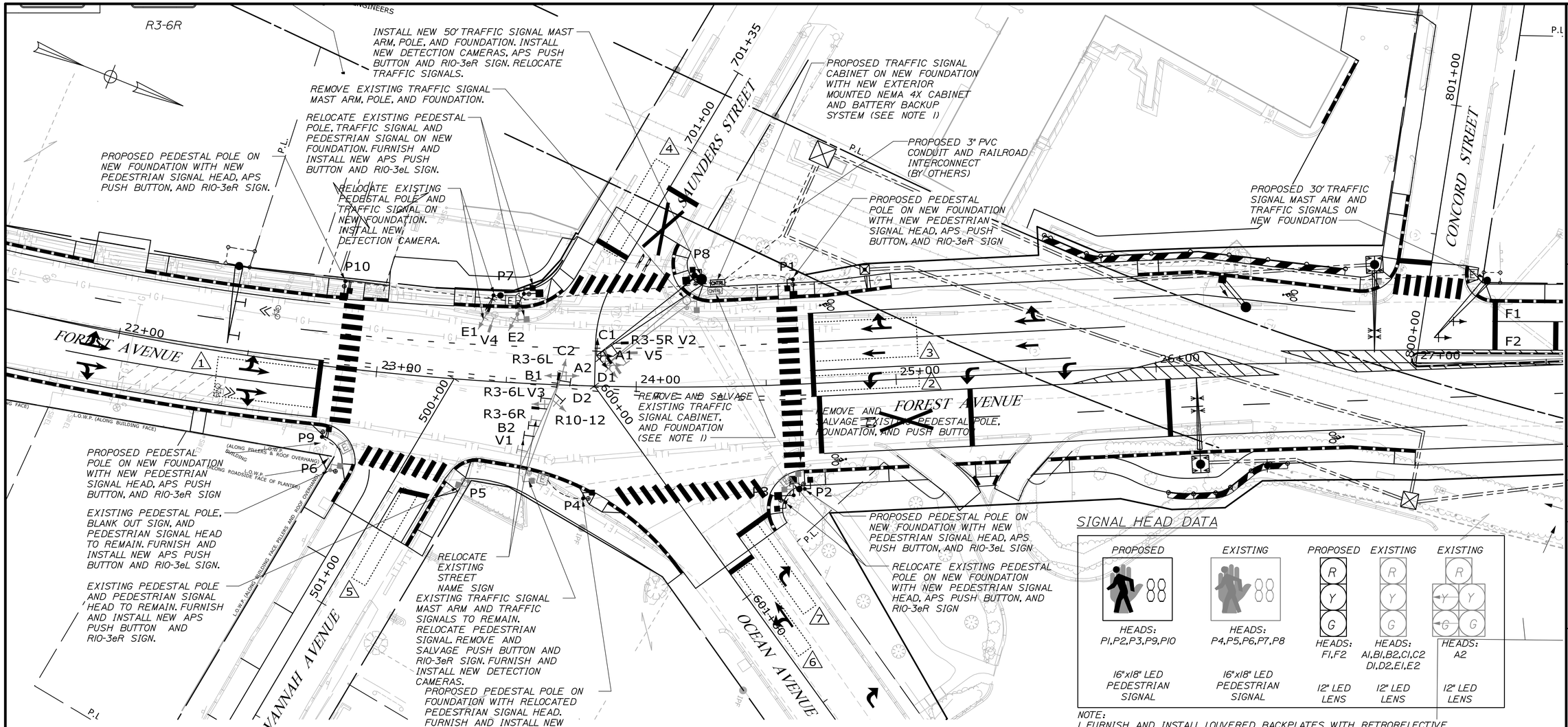
BY | DATE | SIGNATURE | P.E. NUMBER | DATE

PORTLAND
FOREST AVENUE

TRAFFIC SIGNAL PLAN 2

SHEET NUMBER
29
OF 67

Username:
Division:
Date:4/27/2017
Filename: 029_TRAFFIC PLAN_02.dgn



SIGNAL HEAD DATA

NOTE:
1. FURNISH AND INSTALL LOUVERED BACKPLATES WITH RETRORELECTIVE BORDERS ON SIGNAL HEADS A1, A2, B1, B2, C1, C2, D1, D2, E1, E2, F1, AND F2.

SIGNAL TIMING SCHEDULE

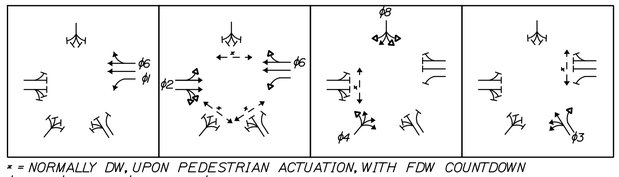
	PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6	PHASE 7	PHASE 8
MINIMUM INITIAL	5	10	7	5		10		5
PASSAGE TIME	2	3	2	2		3		2
MAXIMUM GREEN I	20	90	35	35		90		35
MAXIMUM GREEN II	15	90	25	20		90		20
YELLOW	4	4	4	4		4		4
ALL RED	2	2	2	2		2		2
PEDESTRIAN WALK		7	4	4		7		4
PEDESTRIAN CLEARANCE (FDW)		19	19	15		19		15
PEDESTRIAN CLEARANCE (DW)		3	3	3		3		3
RECALL	0	S	0	0		S		0
DETECTOR OPERATION	PR	PR	PR	PR		PR		PR
PREEMPTION PRIORITY			1			C		C
FLASH	R	R	R	R		R		R
DUAL ENTRY	OFF	OFF	OFF	OFF		OFF		OFF

NOTES:
S = SOFT RECALL
0 = RECALL OFF
PR = PRESENCE
MAX 1 = FREE OPERATION
MAX 2 = UNDER COORDINATION

Y = YELLOW
R = RED
D = DARK
C = CLEAR
FDW = FLASHING DON'T WALK
DW = DON'T WALK

NOTE:
1. SIGNAL HEADS F1 AND F2 SHALL REST IN GREEN, UNLESS IN PREEMPT MODE. SEE RAILROAD PREEMPTION PLAN FOR DETAILS.

EXISTING SIGNAL PHASING SEQUENCE (RETAINED)



* = NORMALLY DW. UPON PEDESTRIAN ACTUATION, WITH FDW COUNTDOWN ϕ1 AND ϕ4 LEAD, ϕ3 OMITS ϕ8

NOTES:
1. SALVAGE AND REINSTALL EXISTING NAZTEC NEMA TS2, TYPE 2, ETHERNET EQUIPPED CONTROLLER WITH POWER SUPPLY, CONFLICT MONITOR/MALFUNCTION MANAGEMENT UNIT (MMU), VIDEO COMMUNICATIONS BOARD, AND DSL MODEM. EXTEND CONDUIT FROM EXISTING TRAFFIC SIGNAL CABINET TO PROPOSED TRAFFIC SIGNAL CABINET. CONTRACTOR SHALL VERIFY AND COORDINATE SERVICE CONNECTIONS WITH THE UTILITY COMPANY AND THE RAILROAD.

2. RETAIN EXISTING JUNCTION BOXES AND ADJUST FRAME AND COVER TO GRADE. UNLESS OTHERWISE NOTED, MODIFY JUNCTION BOXES TO RECEIVE PROPOSED CONDUIT. PLUG HOLES IN JUNCTION BOXES AS DIRECTED BY THE RESIDENT.

3. RETAIN EXISTING TRAFFIC SIGNAL CONDUIT. EXTEND EXISTING CONDUIT AS REQUIRED TO PROPOSED SIGNAL LOCATION. REPLACE EXISTING CONDUIT AS DIRECTED BY THE RESIDENT.

4. REMOVE, SALVAGE, AND REPLACE ALL EXISTING PEDESTRIAN PUSH BUTTONS WITH NEW APS PUSH BUTTONS.

PROPOSED SIGNS

RIO-3eR 9"x15" 6 PROPOSED

RIO-3eL 9"x15" 4 PROPOSED

R3-6L 30"x36" 2 PROPOSED

R3-6R 30"x36" 1 PROPOSED

R3-5R 30"x36" 1 PROPOSED

LEFT TURN YIELD ON GREEN

RIO-12 30"x36" 1 PROPOSED

SEE TRAFFIC SIGNAL NOTES SHEET FOR ADDITIONAL REQUIREMENTS AND TRAFFIC SIGNAL LOCATION PLAN FOR LEGEND

PLAN

20 0 20 40
Scale of Feet

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN 20543.00

WIN 20543.00 HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER AURELE GONNEVILLE		
DESIGN-DETAILED D.MITCHELL	D.BURGESS	03\10\17
CHECKED-REVIEWED	-	-
DESIGN2-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

SIGNATURE

P.E. NUMBER

DATE

PORTLAND
FOREST AVENUE

TRAFFIC SIGNAL PLAN 3

SHEET NUMBER
30
OF 67

Filename: 030_TRAFFIC PLAN_03.dgn Division: Username: Date:4/27/2017

FOREST AVE. AT WOODFORD ST.

LIST OF MAJOR ITEMS

EQUIPMENT AND WORK ITEMS	QUANTITY
FURNISH AND INSTALL (8-FOOT) PEDESTAL POLE	1
FURNISH AND INSTALL 18-INCH FOUNDATION	6
FURNISH AND INSTALL ONE-WAY, 16X8 INCH LED POST MOUNTED COUNTDOWN PEDESTRIAN SIGNAL HEAD	1
FURNISH AND INSTALL ADA COMPLIANT ASSESSIBLE PEDESTRIAN (APS) PUSH BUTTON	10
FURNISH AND INSTALL LOUVERED BACKPLATES WITH REFLECTIVE BORDER	11
FURNISH AND INSTALL NEW NEMA 4X CABINET, EXTERIOR MOUNTED TO EXISTING CABINET	1
FURNISH AND INSTALL (50-FOOT) MAST ARM	1
FURNISH AND INSTALL MAST ARM FOUNDATION	1
FURNISH AND INSTALL BATTERY BACKUP SYSTEM	1
FURNISH AND INSTALL PVC SIGNAL CONDUIT	100 FT
FURNISH AND INSTALL NEW SIGNAL CABLE	AS NEEDED
IMPLEMENT LOCAL AND SYSTEM TIMING	AS NEEDED
FURNISH AND INSTALL NEW VIDEO DETECTION SYSTEM	1
IMPLEMENT RAILROAD PREEMPTION PROGRAMMING	AS NEEDED

COORDINATION/SPLIT/OFFSET SCHEDULE

TIME PLAN	PLAN 1	PLAN2	PLAN3	PLAN4	PLAN5	
CYCLE LENGTH	90	100	110	120	120	COORDINATION MODE SET TO FIXED FORCE-OFF
OFFSET (end YELLOW)	57	85	13	1	1	
COORDINATED PHASE	2	6	6	6	6	
SPLIT TIME PHASE 1	15	20	23	23	23	
SPLIT TIME PHASE 2	37	40	54	64	64	
SPLIT TIME PHASE 3	12	13	11	11	11	
SPLIT TIME PHASE 4	26	27	22	22	22	
SPLIT TIME PHASE 5	13	15	11	20	20	
SPLIT TIME PHASE 6	24	25	43	44	44	
SPLIT TIME PHASE 7	12	13	16	14	14	
SPLIT TIME PHASE 8	26	27	17	19	19	

COODINATION NOTES:
1. OFFSET IS REFERENCED TO THE END OF THE COORDINATION PHASE.
2. COODINATION TO OPERATE BY TIME-OF-DAY.
3. TRAFFIC SIGNAL CONTROLLER SHALL BE SET FOR STOP TIME IN WALK TO ON.

DECTECTOR SCHEDULE

DETECTOR						DETECTOR CARD IN VEHICLE DETECTION RACK			
CAMERA ID	PLAN ID	STREET	DIRECTION	LANE	PHASE	TYPE	SLOT NO.	DETECTOR NO.	CHANNEL
CAMERA V1	1	FOREST	NORTHBOUND	LEFT	5	FLIR TRAFISENSE	-	1/1	1
	2	FOREST	NORTHBOUND	THRU-RIGHT	2	FLIR TRAFISENSE	-	1/2	2
CAMERA V2	3	FOREST	SOUTHBOUND	LEFT	6	FLIR TRAFISENSE	-	2/1	1
	4	FOREST	SOUTHBOUND	THRU-RIGHT	6	FLIR TRAFISENSE	-	2/2	2
CAMERA V3	5	WOODFORD	EASTBOUND	LEFT	3	FLIR TRAFISENSE	-	3/1	1
	6	WOODFORD	EASTBOUND	THRU-RIGHT	8	FLIR TRAFISENSE	-	3/2	2
CAMERA V4	7	WOODFORD	WESTBOUND	LEFT	7	FLIR TRAFISENSE	-	4/1	1
	8	WOODFORD	WESTBOUND	THRU-RIGHT	4	FLIR TRAFISENSE	-	4/2	2

FOREST AVE. AT OCEAN AVE./VANNAH AVE. AND SAUNDERS ST.

LIST OF MAJOR ITEMS

EQUIPMENT AND WORK ITEMS	QUANTITY
FURNISH AND INSTALL NEW P-44 BASE MOUNTED NEMA TS2, TYPE 1 MAINEDOT SPEC CABINET COMPLETE WITH FOUNDATION AND ALL ANCILLARY EQUIPMENT, PANELS, AND WIRING	1
SALVAGE AND REINSTALL EXISTING NAZTEC NEMA TS2, TYPE 2 ETHERNET EQUIPPED CONTROLLER WITH POWER SUPPLY, CONFLICT MONITOR/MALFUNCTION MANAGEMENT UNIT (MMU), VIDEO COMMUNICATIONS BOARD, AND DSL MODEM	1
FURNISH AND INSTALL (30-FOOT) MAST ARM	1
FURNISH AND INSTALL (50-FOOT) MAST ARM	1
FURNISH AND INSTALL MAST ARM FOUNDATION	2
FURNISH AND INSTALL ONE-WAY, 3-SECTION, 12-INCH TRAFIC SIGNAL HEAD WITH VISORS, AND MAST ARM MOUNTED	2
FURNISH AND INSTALL (8-FOOT) PEDESTAL POLE	5
FURNISH AND INSTALL 18-INCH FOUNDATION	8
FURNISH AND INSTALL ONE-WAY, 16X8 INCH LED POST MOUNTED COUNTDOWN PEDESTRIAN SIGNAL HEAD	4
FURNISH AND INSTALL ADA COMPLIANT ASSESSIBLE PEDESTRIAN (APS) PUSH BUTTON	10
FURNISH AND INSTALL LOUVERED BACKPLATES WITH REFLECTIVE BORDER	12
FURNISH AND INSTALL NEW NEMA 4X CABINET, EXTERIOR MOUNTED TO EXISTING CABINET	1
FURNISH AND INSTALL BATTERY BACKUP SYSTEM	1
FURNISH AND INSTALL PVC SIGNAL CONDUIT	550 FT
FURNISH AND INSTALL NEW SIGNAL CABLE	AS NEEDED
IMPLEMENT LOCAL AND SYSTEM TIMING	AS NEEDED
FURNISH AND INSTALL NEW VIDEO DETECTION SYSTEM.	1
IMPLEMENT RAILROAD PREEMPTION PROGRAMMING	AS NEEDED

COORDINATION/SPLIT/OFFSET SCHEDULE

TIME PLAN	PLAN 1	PLAN2	PLAN3	PLAN4	PLAN5	
CYCLE LENGTH	90	100	110	120	120	COORDINATION MODE SET TO FIXED FORCE-OFF
OFFSET (end YELLOW)	48	4	8	10	10	
COORDINATED PHASE	2	2	2	2	2	
SPLIT TIME PHASE 1	14	5	11	11	11	
SPLIT TIME PHASE 2	35	43	45	54	54	
SPLIT TIME PHASE 3	26	26	29	25	25	
SPLIT TIME PHASE 4	15	16	25	30	30	
SPLIT TIME PHASE 5	0	0	0	0	0	
SPLIT TIME PHASE 6	49	58	56	65	65	
SPLIT TIME PHASE 7	0	0	0	0	0	
SPLIT TIME PHASE 8	41	42	54	55	55	

COODINATION NOTES:
1. OFFSET IS REFERENCED TO THE END OF THE COORDINATION PHASE.
2. COODINATION TO OPERATE BY TIME-OF-DAY.
3. TRAFFIC SIGNAL CONTROLLER SHALL BE SET FOR STOP TIME IN WALK TO ON.

DECTECTOR SCHEDULE

DETECTOR						DETECTOR CARD IN VEHICLE DETECTION RACK			
CAMERA ID	PLAN ID	STREET	DIRECTION	LANE	PHASE	TYPE	SLOT NO.	DETECTOR NO.	CHANNEL
CAMERA V1	1	FOREST	NORTHBOUND	LEFT-THRU-RIGHT	2	FLIR TRAFISENSE	-	1/1	1
CAMERA V2	2	FOREST	SOUTHBOUND	LEFT	1	FLIR TRAFISENSE	-	2/1	1
	3	FOREST	SOUTHBOUND	THRU-RIGHT	6	FLIR TRAFISENSE	-	2/2	2
CAMERA V3	4	SAUNDERS	EASTBOUND	LEFT-THRU-RIGHT	8	FLIR TRAFISENSE	-	3/1	1
CAMERA V4	5	VANNAH	WESTBOUND	LEFT-THRU-RIGHT	4	FLIR TRAFISENSE	-	4/1	1
CAMERA V5	6	OCEAN	WESTBOUND	THRU-LEFT	3	FLIR TRAFISENSE	-	5/1	1
	7	OCEAN	WESTBOUND	RIGHT	3	FLIR TRAFISENSE	-	5/2	2

BLANK OUT SIGN SCHEDULE

M-F (7AM - 9AM) ON
M-F (3PM - 6PM) ON
ALL OTHER TIMES OFF

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN 20543.00

WIN 20543.00

HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER	AMBELE GORNEAU, II		
DESIGN-DETAILED	D.MITCHELL	D.BURGESS	03\10\17
CHECKED-REVIEWED	-	-	-
DESIGN2-DETAILED2	-	-	-
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

SIGNATURE

P.E. NUMBER

DATE

PORTLAND
FOREST AVENUE

TRAFFIC SIGNAL SCHEDULES

SHEET NUMBER

31

OF 67

Date:4/27/2017

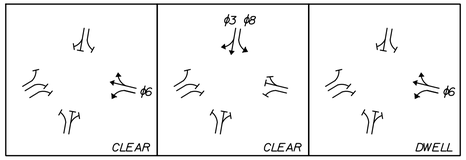
Username:

Division:

Filename: 031_TRAFFIC PLAN_04.dgn

FOREST AVE./WOODFORD ST./DEERING AVE.

RAILROAD PRE-EMPTION PROGRAM

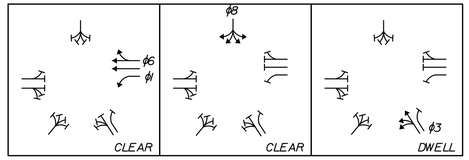


PRE-EMPTION NOTES:

1. RAILROAD PREEMPTION SHALL BE ACTUATED BY SIGNAL RECEIVED FROM RAILROAD SIGNAL CONTROLLER.
2. IN RESPONSE TO A PREEMPTION SIGNAL RECEIVED FROM A RAILROAD SIGNAL CONTROLLER, THE TRAFFIC SIGNAL CONTROLLER SHALL TIME THE MINIMUM GREEN TIMES AND CLEARANCE INTERVALS OF THE ACTIVE PHASE PRIOR TO TRANSITIONING TO THE PREEMPT PHASES. NORMAL CLEARANCE INTERVALS SHALL BE PROVIDED ON PHASES THAT ARE TERMINATED BY PREEMPTION DEMAND.
3. PREEMPT PHASING SHALL PROVIDE A 21 SECOND GREEN CLEAR TIME FOR PHASE 6, FOLLOWED BY 23 SECOND GREEN CLEAR TIME FOR PHASES 3 AND 8, FOLLOWED BY A DWELL IN PHASE 6. NORMAL CLEARANCE INTERVALS SHALL BE PROVIDED ON ALL PREEMPTION PHASES.
4. THE SIGNAL SHALL EXIT PREEMPTION TO PHASES 2 AND 6.
5. EXISITNG RAILROAD PREEMPTION WARNING AND ADVANCED WARNING TIME IS TO BE RETAINED, BUT MAY BE ADJUSTED IN THE FIELD IN COORDINATION WITH THE RAILROAD AS DIRECTED BY THE RESIDENT.
6. THE CONTRACTOR IS RESPONSIBLE FOR FIELD ADJUSTING PRE-EMPTION TIMING AT THE DIRECTION OF THE MAINE DOT'S OR CITY OF PORTLAND'S TRAFFIC ENGINEER. NO ADDITIONAL COST WILL BE ALLOWED FOR FIELD ADJUSTMENTS TO THE PRE-EMPTION TIMING.

FOREST AVE./OCEAN AVE./VANNAH AVE./SAUNDER ST.

RAILROAD PRE-EMPTION PROGRAM



PRE-EMPTION NOTES:

1. RAILROAD PREEMPTION SHALL BE ACTUATED BY SIGNAL RECEIVED FROM RAILROAD SIGNAL CONTROLLER.
2. IN RESPONSE TO A PREEMPTION SIGNAL RECEIVED FROM A RAILROAD SIGNAL CONTROLLER, THE TRAFFIC SIGNAL CONTROLLER SHALL TIME THE MINIMUM GREEN TIMES AND CLEARANCE INTERVALS OF THE ACTIVE PHASE PRIOR TO TRANSITIONING TO THE PREEMPT PHASES. NORMAL CLEARANCE INTERVALS SHALL BE PROVIDED ON PHASES THAT ARE TERMINATED BY PREEMPTION DEMAND.
3. PREEMPT PHASING SHALL PROVIDE A 24 SECOND GREEN CLEAR TIME FOR PHASE 6, FOLLOWED BY 18 SECOND GREEN CLEAR TIME FOR PHASE 8, FOLLOWED BY A DWELL IN PHASE 3. NORMAL CLEARANCE INTERVALS SHALL BE PROVIDED ON ALL PREEMPTION PHASES.
4. THE SIGNAL SHALL EXIT PREEMPTION TO PHASES 2 AND 6.
5. EXISITNG RAILROAD PREEMPTION WARNING AND ADVANCED WARNING TIME IS TO BE RETAINED, BUT MAY BE ADJUSTED IN THE FIELD IN COORDINATION WITH THE RAILROAD AS DIRECTED BY THE RESIDENT.
6. THE CONTRACTOR IS RESPONSIBLE FOR FIELD ADJUSTING PRE-EMPTION TIMING AT THE DIRECTION OF THE MAINE DOT'S OR CITY OF PORTLAND'S TRAFFIC ENGINEER. NO ADDITIONAL COST WILL BE ALLOWED FOR FIELD ADJUSTMENTS TO THE PRE-EMPTION TIMING.

GENERAL RAILROAD PRE-EMPTION NOTES:

1. AT NO POINT SHALL A TRAFFIC SIGNAL CONTROLLER THAT PRESENTLY PROVIDES RAILROAD PRE-EMPTION BE LEFT IN A STATE WITHOUT RAILROAD PRE-EMPTION DURING CONSTRUCTION.
2. THE CONTRACTOR SHALL NOT MAKE ANY FIELD CHANGES TO THE RAILROAD PREEMPTION OR RAILROAD PREEMPTION TIMINGS WITHOUT PRIOR APPROVAL FROM THE RAILROAD.
3. THE CONTRACTOR IS RESPONSIBLE FOR FIELD ADJUSTING PRE-EMPTION TIMING AT THE DIRECTION OF THE MAINE DOT'S OR CITY OF PORTLAND'S TRAFFIC ENGINEER. PAYMENT SHALL BE INCIDENTAL TO ITEM 643.71 - TRAFFIC SIGNAL MODIFICATIONS: FOREST AVENUE WITH OCEAN AVENUE, VANNAH AVENUE, AND SAUNDERS STREET. NO ADDITIONAL COST WILL BE ALLOWED FOR FIELD ADJUSTMENTS TO THE PRE-EMPTION TIMING.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN 20543.00

WIN 20543.00

HIGHWAY PLANS

PROJ. MANAGER	AURELE GONNEAU, II			
DESIGN-DETAILED	D.MITCHELL	-	-	-
CHECKED-REVIEWED	-	-	-	-
DESIGN2-DETAILED2	-	-	-	-
DESIGN3-DETAILED3	-	-	-	-
REVISIONS 1	-	-	-	-
REVISIONS 2	-	-	-	-
REVISIONS 3	-	-	-	-
REVISIONS 4	-	-	-	-
FIELD CHANGES	-	-	-	-

BY | DATE

SIGNATURE

P.E. NUMBER

DATE

PORTLAND
FOREST AVENUE

TRAFFIC SIGNAL
RAILROAD PRE-EMPTION PLAN

SHEET NUMBER

32

OF 67

Filename: 032_TRAFFIC RR_01.dgn Division: Username: Date:4/27/2017

Filename: 033_Geometry_01.dgn Username: Division: Date:4/27/2017

ITEM 609.11 VERTICAL CURB TYPE 1

POINT	LENGTH (FT)	RADIUS (FT)
1A TO 1	144.78	–
1 TO 2	68.14	–
7 TO 7G	20.04	–
7D TO 7F	115.84	–
9 TO 10	85.11	–
13 TO 14	75.19	–

ITEM 609.238 TERMINAL CURB TYPE 1 – 8 FOOT

POINT	LENGTH (FT)	RADIUS (FT)
2 TO 3	8.00	–
6 TO 7	8.00	–
7E TO 7F	8.00	–
8 TO 9	8.00	–
10 TO 11	8.00	–
12 TO 13	8.00	–
14 TO 15	8.00	–

ITEM 609.11 VERTICAL CURB TYPE 1 – FLUSH

POINT	LENGTH (FT)	RADIUS (FT)
3 TO 4	6.00	–
5 TO 6	6.00	–
7B to 7C	6.00	–
11 TO 12	6.00	–
15 TO 16	6.00	–

ITEM 609.34 CURB TYPE 5

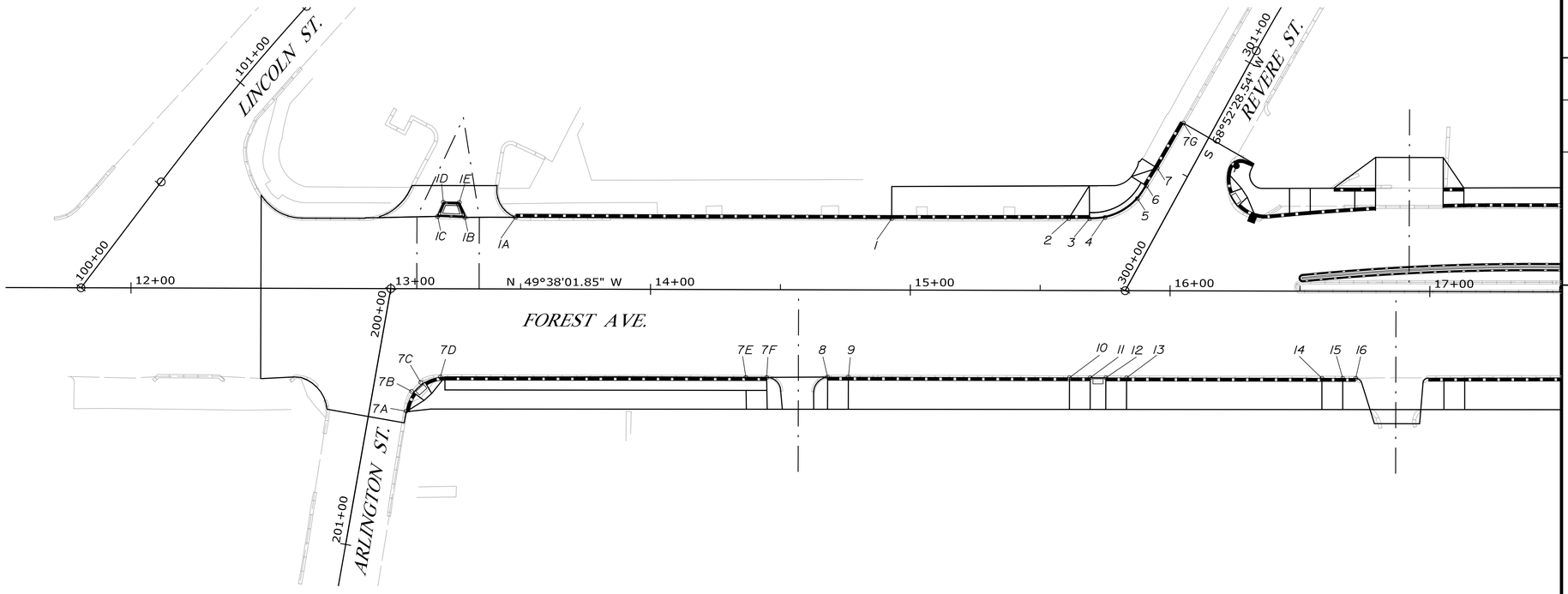
POINT	LENGTH (FT)	RADIUS (FT)
1B TO 1C	10.48	–
1C TO 1D	5.88	–
1D TO 1E	6.16	–
1E TO 1B	6.16	–

ITEM 609.35 CURB TYPE 5 – CIRCULAR – FLUSH

POINT	LENGTH (FT)	RADIUS (FT)
4 TO 5	14.68	23.00

ITEM 609.2381 TERMINAL CURB TYPE 1 – 8 FOOT CIRCULAR

POINT	LENGTH (FT)	RADIUS (FT)
7A TO 7B	8.00	15.00
7C TO 7D	8.00	15.00



PLAN

25 0 25 50

Scale of Feet

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN 20543.00

WIN 20543.00 HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER AIMEE GORNEAU, II	D.MITCHELL	03\10\17
DESIGN-DETAILED	D.BURGESS	-
CHECKED-REVIEWED	-	-
DESIGN2-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

SIGNATURE

P.E. NUMBER

DATE

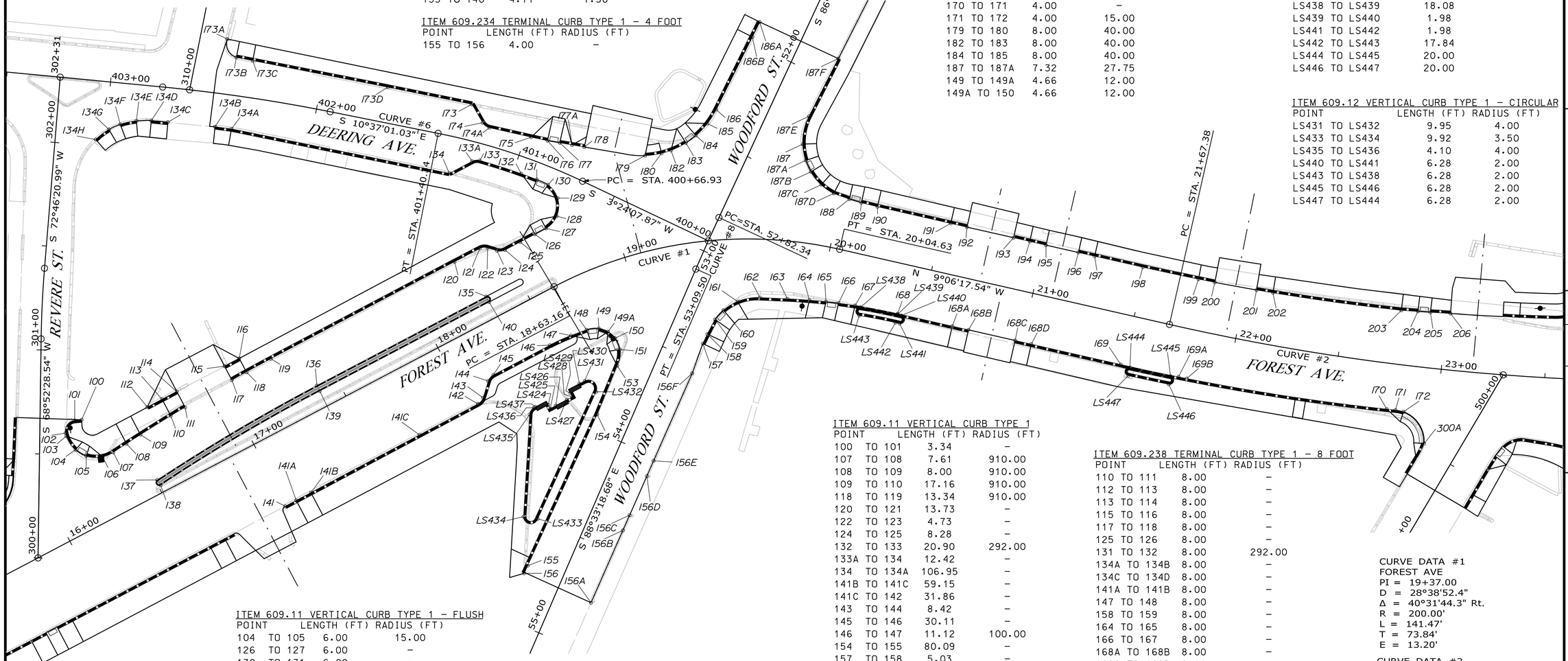
PORTLAND
FOREST AVENUE

GEOMETRIC CURB LAYOUT - 1

SHEET NUMBER

33

OF 67



ITEM 609.34 CURB TYPE 5

POINT	LENGTH (FT)	RADIUS (FT)
135 TO 136	92.00	–
136 TO 137	89.23	887.00
138 TO 139	88.96	884.00
139 TO 140	92.00	–

ITEM 609.35 CURB TYPE 5 – CIRCULAR

POINT	LENGTH (FT)	RADIUS (FT)
137 TO 138	4.71	1.50
135 to 140	4.71	1.50

ITEM 609.234 TERMINAL CURB TYPE 1 – 4 FOOT

POINT	LENGTH (FT)	RADIUS (FT)
155 TO 156	4.00	–

CURVE DATA #6
DEERING AVE.
PI = 401+03.82
D = 19°05'54.9"
Δ = 14°01'08.9" Lt.
R = 300.00'
L = 73.40'
T = 36.89'
E = 2.26'

ITEM 609.2381 TERMINAL CURB TYPE 1 – 8 FOOT CIRCULAR

POINT	LENGTH (FT)	RADIUS (FT)
103 TO 104	8.00	15.00
105 TO 106	8.00	15.00
127 TO 128	8.00	12.50
129 TO 130	8.00	12.50
134E TO 134F	8.00	30.00
134G TO 134H	8.00	30.00
151 TO 153	8.00	12.00
160 TO 161	8.00	25.00
170 TO 171	4.00	–
171 TO 172	4.00	15.00
179 TO 180	8.00	40.00
182 TO 183	8.00	40.00
184 TO 185	8.00	40.00
187 TO 187A	7.32	27.75
149 TO 149A	4.66	12.00
149A TO 150	4.66	12.00

ITEM 609.11 VERTICAL CURB TYPE 1

POINT	LENGTH (FT)
LS424 TO LS425	2.00
LS425 TO LS426	3.00
LS427 TO LS428	3.00
LS428 TO LS429	2.00
LS430 TO LS431	2.83
LS432 TO LS433	67.21
LS434 TO LS435	49.17
LS436 TO LS437	0.70
LS438 TO LS439	18.08
LS439 TO LS440	1.98
LS441 TO LS442	1.98
LS442 TO LS443	17.84
LS444 TO LS445	20.00
LS446 TO LS447	20.00

ITEM 609.12 VERTICAL CURB TYPE 1 – CIRCULAR

POINT	LENGTH (FT)	RADIUS (FT)
LS431 TO LS432	9.95	4.00
LS433 TO LS434	9.92	3.50
LS435 TO LS436	4.10	4.00
LS440 TO LS441	6.28	2.00
LS443 TO LS438	6.28	2.00
LS445 TO LS446	6.28	2.00
LS447 TO LS444	6.28	2.00

ITEM 609.11 VERTICAL CURB TYPE 1

POINT	LENGTH (FT)	RADIUS (FT)
100 TO 101	3.34	–
107 TO 108	7.61	910.00
108 TO 109	8.00	910.00
109 TO 110	17.16	910.00
118 TO 119	13.34	910.00
120 TO 121	13.73	–
122 TO 123	4.73	–
124 TO 125	8.28	–
132 TO 133	20.90	292.00
133A TO 134	12.42	–
134 TO 134A	106.95	–
141B TO 141C	59.15	–
141C TO 142	31.86	–
143 TO 144	8.42	–
145 TO 146	30.11	–
146 TO 147	11.12	100.00
154 TO 155	80.09	–
157 TO 158	5.03	–
162 TO 163	13.26	–
163 TO 164	10.59	300.00
167 TO 168	20.87	300.00
168 TO 168A	27.98	–
168D TO 169	44.14	–
169 TO 169A	28.40	1124.00
169B TO 170	97.43	1124.00
173C TO 173D	66.29	–
173D TO 173	41.28	–
173 TO 174	10.27	–
174A TO 175	20.65	–
186 TO 186B	30.02	–
187E TO 187F	31.12	–
190 TO 191	36.15	–
197 TO 198	23.81	–
198 TO 199	27.37	1076.00
202 TO 203	62.35	1076.00

ITEM 609.238 TERMINAL CURB TYPE 1 – 8 FOOT

POINT	LENGTH (FT)	RADIUS (FT)
110 TO 111	8.00	–
112 TO 113	8.00	–
113 TO 114	8.00	–
115 TO 116	8.00	–
117 TO 118	8.00	–
125 TO 126	8.00	–
131 TO 132	8.00	292.00
134A TO 134B	8.00	–
134C TO 134D	8.00	–
141A TO 141B	8.00	–
147 TO 148	8.00	–
158 TO 159	8.00	–
164 TO 165	8.00	–
166 TO 167	8.00	–
168A TO 168B	8.00	–
168C TO 168D	8.00	–
173B TO 173C	8.00	–
175 TO 176	8.00	–
177 TO 177A	6.00	–
177A TO 178	6.00	–
186B TO 186A	8.00	–
187D TO 188	8.00	–
189 TO 190	8.00	–
191 TO 192	8.00	–
193 TO 194	8.00	–
194 TO 195	8.00	–
196 TO 197	8.00	–
199 TO 200	8.00	1076.00
201 TO 202	8.00	1076.00
203 TO 204	8.00	–

ITEM 609.11 VERTICAL CURB TYPE 1 – FLUSH

POINT	LENGTH (FT)	RADIUS (FT)
104 TO 105	6.00	15.00
126 TO 127	6.00	–
130 TO 131	6.00	–
134D TO 134E	6.00	–
134F TO 134G	6.00	31.67
141 TO 141A	6.00	–
148 TO 149	6.00	12.00
150 TO 151	6.00	12.00
159 TO 160	6.00	25.00
165 TO 166	6.00	300.00
173A TO 173B	11.00	6.79
176 TO 177	5.00	–
183 TO 184	6.00	–
187A TO 187B	6.00	27.75
188 TO 189	6.00	–
204 TO 205	6.00	–
205 TO 206	9.71	–
172 TO 300A	19.51	15.00

ITEM 609.12 VERTICAL CURB TYPE 1 – CIRCULAR

POINT	LENGTH (FT)	RADIUS (FT)
101 TO 102	8.46	5.00
102 TO 103	1.50	15.00
106 TO 107	5.56	15.00
121 TO 122	3.91	5.00
123 TO 124	3.92	5.00
128 TO 129	8.89	12.50
133 TO 133A	3.79	5.00
142 TO 143	3.91	5.00
144 TO 145	3.93	5.00
161 TO 162	11.01	25.00
174 TO 174A	4.13	5.00
180 TO 182	4.76	40.00
185 TO 186	7.93	40.00
187E TO 187	13.82	27.75
187 TO 187A	7.32	27.75
187C TO 187D	7.32	27.75

CURVE DATA #1
FOREST AVE
PI = 19+37.00
D = 28°38'52.4"
Δ = 40°31'44.3" Rt.
R = 200.00'
L = 141.47'
T = 73.84'
E = 13.20'

CURVE DATA #2
FOREST AVE
PI = 23+18.30
D = 5°12'31.3"
Δ = 15°37'28.3" Lt.
R = 1100.00'
L = 299.97'
T = 150.92'
E = 10.31'

CURVE DATA #8
WOODFORD ST
PI = 52+95.92
D = 5°43'46.5"
Δ = 1°33'22.5" Lt.
R = 1000.00'
L = 27.16'
T = 13.58'
E = 0.09'

PLAN

25 0 25 50
Scale of Feet

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN 20543.00

WIN 20543.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER ABELE CORNEAU, II		
DESIGN-DETAILED	D.MITCHELL	03\10\17
CHECKED-REVIEWED	-	-
DESIGN2-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

SIGNATURE

P.E. NUMBER

DATE

PORTLAND
FOREST AVENUE

GEOMETRIC CURB LAYOUT - 2

SHEET NUMBER

34

OF 67

Filename: 034_Geometry_02.dgn Division: Username: Date:4/27/2017

ITEM 609.11 VERTICAL CURB TYPE 1

POINT			LENGTH (FT)	RADIUS (FT)
300B	TO	300G	8.39	100.00
300H	TO	300C	21.00	–
300I	TO	300	12.47	–
300	TO	301	26.06	100.00
304	TO	305	27.81	100.00
311	TO	312	24.45	–
315	TO	316	5.59	–
323	TO	324	52.40	–
324	TO	325	55.93	–
325	TO	326	17.05	–
329A	TO	330	36.75	–
332	TO	333	17.00	600.00
341	TO	342	17.42	–
345	TO	346	4.66	–
346	TO	347	17.08	–
350	TO	351	15.04	–
351	TO	351A	7.61	–
351B	TO	352	49.97	–
356	TO	357	17.00	–
359	TO	360	27.92	–
364	TO	365	19.82	–
366B	TO	366C	10.00	–

ITEM 609.238 TERMINAL CURB TYPE 1 – 8 FOOT

POINT			LENGTH (FT)	RADIUS (FT)
300A	TO	300B	8.00	–
300C	TO	300D	8.00	–
301	TO	302	8.00	100.00
303	TO	304	8.00	100.00
310	TO	311	8.00	–
312	TO	313	8.00	–
314	TO	315	8.00	–
316	TO	317	8.00	–
322	TO	323	8.00	–
326	TO	327	8.00	–
328	TO	329	8.00	–
331	TO	332	8.00	600.00
342	TO	343	8.00	–
344	TO	345	8.00	–
347	TO	348	8.00	–
349	TO	350	8.00	–
357	TO	358	8.00	–
365	TO	366	8.00	–
366A	TO	366B	8.00	–

ITEM 609.34 CURB TYPE 5

POINT			LENGTH (FT)	RADIUS (FT)
367	TO	368	60.00	–
369	TO	370	60.06	–

ITEM 609.35 CURB TYPE 5 – CIRCULAR

POINT			LENGTH (FT)	RADIUS (FT)
368	TO	369	5.17	1.67
370	TO	367	9.02	2.85

ITEM 609.2381 TERMINAL CURB TYPE 1 – 8 FOOT CIRCULAR

POINT			LENGTH (FT)	RADIUS (FT)
300E	TO	300F	8.00	12.00
308	TO	309	8.00	15.00
334	TO	335	8.00	25.00
337	TO	338	8.00	15.00
339	TO	340	8.00	15.00
353	TO	354	8.00	15.00
355	TO	356	8.00	15.00
361	TO	362	8.00	11.00
363	TO	364	8.00	11.00

CURVE DATA #2
FOREST AVE
PI = 23+18.30
D = 5°12'31.3"
Δ = 15°37'28.3" Lt.
R = 1100.00'
L = 299.97'
T = 150.92'
E = 10.31'

CURVE DATA #3
FOREST AVE
PI = 26+44.22
D = 2°51'53.2"
Δ = 3°27'06.5" Rt.
R = 2000.00'
L = 120.49'
T = 60.26'
E = 0.91'

ITEM 609.12 VERTICAL CURB TYPE 1 – CIRCULAR

POINT			LENGTH (FT)	RADIUS (FT)
300F	TO	300I	3.54	12.00
307	TO	308	7.10	15.00
333	TO	334	10.90	25.00
336	TO	337	4.63	15.00
340	TO	341	5.83	15.00
352	TO	353	1.03	15.00

ITEM 609.11 VERTICAL CURB TYPE 1 – FLUSH

POINT			LENGTH (FT)	RADIUS (FT)
302	TO	303	6.00	100.00
309	TO	310	17.00	15.00
338	TO	339	6.00	15.00
343	TO	344	6.00	–
354	TO	355	6.00	15.00
362	TO	363	6.00	11.00

ITEM 609.234 TERMINAL CURB TYPE 1 – 4 FOOT

POINT			LENGTH (FT)	RADIUS (FT)
305	TO	306	4.00	–
318	TO	319	4.00	–
320	TO	321	4.00	–

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN 20543.00

WIN 20543.00 HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER AUBELE GORNEAU, II		
DESIGN-DETAILED	D.BURGESS	03\10\17
CHECKED-REVIEWED	-	-
DESIGN2-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

SIGNATURE

P.E. NUMBER

DATE

PORTLAND
FOREST AVENUE

GEOMETRIC CURB LAYOUT - 3

SHEET NUMBER
35
OF 67

Date:4/27/2017
Username:
Division:
Filename: 035_Geometry_03.dgn

Filename: 036_Geometry_04.dgn Username: Division: Date:4/27/2017

GEOMETRIC CURB LAYOUT - 1

CONTROL POINTS FOR CURBING				
POINT	STATION	OFFSET	NORTHING	EASTING
1C	13+17.99	27.87 LT	304832.211	1008671.407
1B	13+28.47	27.49 LT	304839.279	1008663.668
1A	13+47.98	27.59 LT	304851.840	1008648.733
1	14+92.76	27.49 LT	304945.685	1008538.489
2	15+60.89	27.67 LT	304989.681	1008486.463
3	15+68.89	27.69 LT	304994.847	1008480.354
4	15+74.86	28.20 LT	304998.327	1008475.477
5	15+87.33	35.48 LT	305000.848	1008461.265
6	15+90.74	40.40 LT	304999.312	1008455.474
7	15+94.92	47.22 LT	304996.820	1008447.872
7G	16+04.94	64.58 LT	304990.088	1008428.992

CONTROL POINTS FOR CURBING				
POINT	STATION	OFFSET	NORTHING	EASTING
7A	13+06.06	47.17 LT	304881.650	1008729.098
7B	13+08.10	39.53 LT	304877.153	1008722.599
7C	13+11.62	36.03 LT	304876.765	1008717.647
7D	13+19.19	33.94 LT	304880.073	1008710.525

CONTROL POINTS FOR CURBING				
POINT	STATION	OFFSET	NORTHING	EASTING
7E	14+36.79	33.79 LT	304956.133	1008620.822
7F	14+44.80	33.78 LT	304961.308	1008614.719

CONTROL POINTS FOR CURBING				
POINT	STATION	OFFSET	NORTHING	EASTING
8	14+68.25	33.58 RT	304976.349	1008596.718
9	14+76.25	33.58 RT	304981.528	1008590.621
10	15+61.36	33.55 RT	305036.623	1008525.755
11	15+69.36	33.54 RT	305041.802	1008519.658
12	15+75.36	33.54 RT	305045.686	1008515.085
13	15+83.36	33.54 RT	305050.865	1008508.987
14	16+58.55	33.54 RT	305099.566	1008451.696
15	16+66.55	33.52 RT	305104.731	1008445.587
16	16+71.55	33.50 RT	305107.959	1008441.769

GEOMETRIC CURB LAYOUT - 2

CONTROL POINTS FOR CURBING				
POINT	STATION	OFFSET	NORTHING	EASTING
100	16+32.14	49.03 LT	305019.549	1008418.344
101	16+29.05	50.29 LT	305016.586	1008419.886
102	16+22.34	46.97 LT	305014.770	1008427.146
103	16+22.02	45.51 LT	305015.677	1008428.338
104	16+22.81	37.64 LT	305022.185	1008432.827
105	16+26.01	32.62 LT	305028.089	1008433.642
106	16+32.81	28.57 LT	305035.569	1008431.084
107	16+38.31	28.10 LT	305039.492	1008427.192
108	16+45.88	28.84 LT	305043.838	1008420.950
109	16+53.88	29.54 LT	305048.483	1008414.401
110	16+71.00	30.81 LT	305058.604	1008400.539
111	16+79.00	31.18 LT	305063.503	1008394.203
112	16+63.00	39.73 LT	305046.619	1008400.850
113	16+71.00	39.73 LT	305051.800	1008394.755
114	16+79.00	39.80 LT	305056.930	1008388.616
115	17+05.00	39.87 LT	305073.717	1008368.761
116	17+11.00	39.87 LT	305077.603	1008364.190
117	17+05.00	32.36 LT	305079.440	1008373.626
118	17+13.00	32.36 LT	305084.621	1008367.531
119	17+26.34	32.69 LT	305093.010	1008357.158
120	18+26.27	32.91 LT	305157.562	1008280.875
121	18+40.00	32.87 LT	305166.489	1008270.438
122	18+43.52	31.40 LT	305169.885	1008268.705
123	18+46.87	28.06 LT	305174.600	1008268.323
124	18+50.40	26.59 LT	305178.006	1008266.577
125	18+58.68	26.59 LT	305183.369	1008260.268
126	18+66.27	26.62 LT	305188.551	1008254.172
127	18+71.56	26.79 LT	305192.437	1008249.601
128	18+77.84	30.02 LT	305195.055	1008242.181
129	400+74.64	12.37 LT	305192.194	1008233.959
130	400+81.63	8.34 LT	305185.531	1008229.781

CONTROL POINTS FOR CURBING				
POINT	STATION	OFFSET	NORTHING	EASTING
131	400+87.77	8.00 LT	305179.560	1008229.437
132	400+96.00	8.00 LT	305171.560	1008229.628
133	401+17.47	8.00 LT	305150.720	1008231.158
133A	401+21.02	9.35 LT	305147.452	1008232.893
134	401+30.71	17.63 LT	305139.417	1008242.361

CONTROL POINTS FOR CURBING				
POINT	STATION	OFFSET	NORTHING	EASTING
135	18+32.00	11.00 LT	305177.969	1008290.697
136	17+40.00	11.00 LT	305118.383	1008360.793
137	16+50.92	6.52 LT	305064.103	1008431.573
138	16+51.19	3.53 LT	305066.555	1008433.302
139	17+40.00	8.00 LT	305120.669	1008362.736
140	18+32.00	8.00 LT	305180.255	1008292.640

CONTROL POINTS FOR CURBING				
POINT	STATION	OFFSET	NORTHING	EASTING
141	16+99.52	33.32 RT	305125.937	1008420.338
141A	17+05.52	33.31 RT	305129.815	1008415.759
141B	17+13.52	33.30 RT	305134.985	1008409.655
141C	17+72.67	32.99 RT	305173.059	1008364.394
142	18+04.52	32.88 RT	305193.608	1008340.052
143	18+08.04	31.42 RT	305194.771	1008336.423
144	18+14.00	25.46 RT	305194.091	1008328.032
145	18+17.53	24.00 RT	305195.265	1008324.389
146	18+48.30	24.00 RT	305215.194	1008300.944
147	18+59.40	24.60 RT	305222.843	1008292.875
148	18+67.95	25.58 RT	305228.768	1008287.499
149	18+74.41	27.56 RT	305234.016	1008284.721
149A	18+78.35	30.75 RT	305243.045	1008284.524
150	18+80.71	34.94 RT	305243.006	1008286.096
151	53+59.51	18.20 RT	305247.183	1008290.316
153	53+67.17	16.35 RT	305248.840	1008298.021
154	53+92.44	15.88 RT	305248.672	1008323.302
155	54+72.51	17.71 RT	305244.824	1008403.298
156	54+76.51	17.80 RT	305244.632	1008407.294

CONTROL POINTS FOR CURBING				
POINT	STATION	OFFSET	NORTHING	EASTING
156A	54+76.74	17.32 LT	305279.738	1008408.408
156B	54+38.74	17.62 LT	305280.998	1008370.429
156C	54+30.74	17.69 LT	305281.264	1008362.433
156D	54+10.18	17.85 LT	305281.946	1008341.878
156E	54+02.18	17.91 LT	305282.212	1008333.882
156F	53+56.22	18.28 LT	305283.737	1008287.953
157	53+41.06	17.30 LT	305283.136	1008272.768
158	53+36.03	17.46 LT	305283.427	1008267.742
159	53+28.06	18.10 LT	305284.269	1008259.800
160	53+22.40	20.03 LT	305286.338	1008254.183
161	53+15.86	24.58 LT	305291.050	1008247.760
162	19+66.85	28.07 RT	305300.315	1008241.981
163	19+82.26	27.70 RT	305312.825	1008237.590
164	19+94.48	26.85 RT	305322.880	1008234.259
165	20+03.73	26.03 RT	305330.614	1008231.962
166	20+09.85	25.39 RT	305336.437	1008230.380
167	20+17.85	24.73 RT	305344.231	1008228.457
168	20+38.70	24.00 RT	305364.702	1008224.442
168A	20+65.67	24.00 RT	305391.338	1008220.173
168B	20+73.67	24.00 RT	305399.237	1008218.907
168C	20+96.67	24.00 RT	305421.947	1008215.268
168D	21+04.67	24.00 RT	305429.847	1008214.002
169	21+48.81	24.00 RT	305473.428	1008207.017
169A	21+77.00	23.68 RT	305501.410	1008202.169
169B	21+80.92	23.62 RT	305505.341	1008201.430
170	22+76.52	22.01 RT	305600.310	1008179.080
171	22+80.48	21.94 RT	305604.198	1008177.976
172	22+84.37	22.31 RT	305608.124	1008177.301

CONTROL POINTS FOR CURBING				
POINT	STATION	OFFSET	NORTHING	EASTING
173	401+28.44	17.14 RT	305136.480	1008207.643
174	401+20.96	9.86 RT	305145.197	1008213.816
174A	401+17.32	8.42 RT	305149.084	1008214.818
175	400+97.36	10.19 RT	305169.471	1008211.510
176	400+89.71	11.28 RT	305177.361	1008210.185
177	400+84.05	12.50 RT	305183.234	1008208.919
177A	400+78.45	13.84 RT	305189.098	1008207.648
178	400+72.89	15.29 RT	305194.962	1008206.378

CONTROL POINTS FOR CURBING				
POINT	STATION	OFFSET	NORTHING	EASTING
179	400+45.00	24.00 RT	305223.631	1008199.297
180	400+38.33	28.40 RT	305230.545	1008195.299
182	52+62.77	34.53 RT	305234.234	1008192.292
183	52+56.53	29.54 RT	305239.545	1008186.327
184	52+51.27	26.67 RT	305242.691	1008181.224
185	52+43.70	24.11 RT	305245.634	1008173.799
186	52+35.85	23.12 RT	305247.038	1008166.011
186B	51+96.85	22.07 RT	305250.127	1008127.114
186A	51+88.83	21.86 RT	305250.762	1008119.118

CONTROL POINTS FOR CURBING				
POINT	STATION	OFFSET	NORTHING	EASTING
187F	51+88.83	19.91 LT	305292.468	1008121.304
187E	52.19.92	18.08 LT	305289.731	1008152.299
187	19+81.54	47.05 LT	305291.983	1008165.802
187A	19+83.41	39.41 LT	305296.207	1008172.564
187B	19+86.06	34.31 LT	305300.547	1008176.690
187C	19+19.11	28.89 LT	305307.512	1008180.568
187D	19+96.90	25.73 LT	305314.611	1008182.276
188	20+03.94	24.58 LT	305322.605	1008181.988
189	20+09.85	24.17 LT	305328.595	1008181.444
190	20+17.85	24.00 LT	305336.519	1008180.346
191	20+54.00	24.00 LT	305372.215	1008174.625
192	20+62.00	24.00 LT	305380.115	1008173.359
193	20+85.00	24.00 LT	305402.825	1008169.720
194	20+93.00	24.00 LT	305410.724	1008168.454
195	21+01.00	24.00 LT	305418.623	1008167.188

CONTROL POINTS FOR CURBING				
POINT	STATION	OFFSET	NORTHING	EASTING
196	21+17.00	24.00 LT	305434.422	1008164.656
197	21+25.00	24.00 LT	305442.321	1008163.390
198	21+48.81	24.00 LT	305465.832	1008159.622
199	21+76.38	24.27 LT	305492.804	1008154.985
200	21+84.56	24.45 LT	305500.656	1008153.453
201	22+05.43	24.80 LT	305520.657	1008149.372
202	22+13.62	24.94 LT	305528.474	1008147.671
203	22+77.44	26.01 LT	305588.923	1008132.417
204	22+85.64	26.46 LT	305596.534	1008129.907
205	22+91.79	26.70 LT	305602.256	1008128.080
206	23+01.72	27.16 LT	305611.456	1008124.990

CONTROL POINTS FOR CURBING				
POINT	STATION	OFFSET	NORTHING	EASTING
LS424	18+34.26	49.01 LT	305225.154	1008327.844
LS425	18+34.26	51.01 LT	305226.680	1008329.137
LS426	18+37.26	51.01 LT	305228.620	1008326.849
LS427	18+43.26	51.00 LT	305232.499	1008322.271
LS428	18+46.26	50.99 LT	305234.438	1008319.982
LS429	18+46.26	48.99 LT	305232.912	1008318.689
LS430	18+52.25	46.98 LT	305235.265	1008312.819
LS431	18+55.08	46.98 LT	305237.094	1008310.662
LS432	18+57.53	54.15 LT	305244.141	1008313.440
LS433	18+04.28	95.17 LT	305240.911	1008380.576
LS434	17+98.70	91.04 LT	305234.148	1008382.151
LS435	18+24.14	48.95 LT	305218.557	1008335.514
LS436	18+27.56	47.02 LT	305219.299	1008331.661
LS437	18+28.25	47.01 LT	305219.744	1008331.124

CONTROL POINTS FOR CURBING				
POINT	STATION	OFFSET	NORTHING	EASTING
LS438	20+20.63	24.96 RT	305347.017	1008228.250
LS439	20+38.70	24.42 RT	305364.768	1008224.853
LS440	20+40.68	24.42 RT	305366.724	1008224.540
LS441	20+40.68	28.42 RT	305367.357	1008228.489
LS442	20+38.70	28.42 RT	305365.401	1008228.803
LS443	20+20.87	28.95 RT	305347.887	1008232.154

CONTROL POINTS FOR CURBING				
POINT	STATION	OFFSET	NORTHING	EASTING
LS444	21+53.46	24.41 RT	305478.078	1008206.684
LS445	21+73.25	24.16 RT	305497.714	1008203.275
LS446	21+73.32	28.16 RT	305498.433	1008207.210
LS447	21+53.47	28.41 RT	305478.728	1008210.631

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN 20543.00

WIN 20543.00 HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER AURELE GONNEAU, II		
DESIGN-DETAILED	D.MITCHELL	03\10\17
CHECKED-REVIEWED	-	-
DESIGN2-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

SIGNATURE

P.E. NUMBER

DATE

PORTLAND
FOREST AVENUE

GEOMETRIC CURB LAYOUT TABLES

SHEET NUMBER

36

OF 67

GEOMETRIC CURB LAYOUT - 3

CONTROL POINTS FOR CURBING					
POINT	STATION	OFFSET		NORTHING	EASTING
300A	500+47.81	15.98	RT	305622.979	1008187.756
300B	500+56.16	15.47	RT	305622.217	1008196.084
300G	500+64.55	15.53	RT	305620.893	1008204.365

CONTROL POINTS FOR CURBING					
POINT	STATION	OFFSET		NORTHING	EASTING
300C	500+43.54	16.22	LT	305655.447	1008188.403
300D	500+35.54	16.41	LT	305656.854	1008180.527
300E	500+29.61	17.27	LT	305658.601	1008174.787
300F	500+22.99	21.51	LT	305663.786	1008168.890

CONTROL POINTS FOR CURBING					
POINT	STATION	OFFSET		NORTHING	EASTING
300	23+54.03	31.23	RT	305678.953	1008164.946
301	23+78.42	37.71	RT	305704.836	1008162.675
302	23+85.42	41.09	RT	305712.807	1008163.337
303	600+39.07	21.37	RT	305718.736	1008164.250
304	600+46.61	18.70	RT	305726.536	1008166.017
305	600+73.97	14.27	RT	305752.051	1008176.859
306	600+77.97	14.19	RT	305755.480	1008178.920

CONTROL POINTS FOR CURBING					
POINT	STATION	OFFSET		NORTHING	EASTING
307	600+85.80	23.24	LT	305782.061	1008151.428
308	600+78.98	24.94	LT	305777.196	1008146.353
309	600+73.18	30.32	LT	305775.155	1008138.715
310	24+63.08	33.01	RT	305783.880	1008125.174
311	24+70.96	33.00	RT	305791.146	1008121.828
312	24+95.41	33.00	RT	305813.355	1008111.599
313	25+03.41	33.00	RT	305820.621	1008108.252

CONTROL POINTS FOR CURBING					
POINT	STATION	OFFSET		NORTHING	EASTING
314	25+20.83	33.00	RT	305836.443	1008100.965
315	25+28.83	33.00	RT	305843.710	1008097.618
316	25+34.41	33.00	RT	305848.782	1008095.282
317	25+42.41	33.00	RT	305856.048	1008091.936
318	25+27.32	39.00	RT	305844.847	1008103.700
319	25+29.28	42.48	RT	305848.090	1008106.040
320	25+36.11	42.58	RT	305854.330	1008103.270
321	25+37.91	39.00	RT	305854.468	1008099.269

CONTROL POINTS FOR CURBING					
POINT	STATION	OFFSET		NORTHING	EASTING
322	25+56.93	33.00	RT	305869.237	1008085.861
323	25+64.93	33.00	RT	305876.503	1008082.515
324	26+17.88	32.72	RT	305924.096	1008060.599
325	26+74.73	31.91	RT	305975.285	1008038.053
326	26+92.04	32.91	RT	305991.452	1008032.633
327	27+00.16	33.33	RT	305999.038	1008030.091
328	28+10.63	27.73	RT	306099.876	1007984.814
329	28+18.60	27.09	RT	306107.073	1007981.321
329A	28+22.59	26.77	RT	306110.671	1007979.575
330	28+59.22	23.81	RT	306143.735	1007963.528

CONTROL POINTS FOR CURBING					
POINT	STATION	OFFSET		NORTHING	EASTING
331	23+27.68	27.95	LT	305635.454	1008116.927
332	23+35.89	28.06	LT	305643.043	1008114.394
333	23+53.33	28.62	LT	305658.995	1008108.518
334	23+64.10	31.29	LT	305668.026	1008102.576
335	23+70.79	35.91	LT	305672.596	1008096.051

CONTROL POINTS FOR CURBING					
POINT	STATION	OFFSET		NORTHING	EASTING
331	23+27.68	27.95	LT	305635.454	1008116.927
332	23+35.89	28.06	LT	305643.043	1008114.394
333	23+53.33	28.62	LT	305658.995	1008108.518
334	23+64.10	31.29	LT	305668.026	1008102.576
335	23+70.79	35.91	LT	305672.596	1008096.051

CONTROL POINTS FOR CURBING					
POINT	STATION	OFFSET		NORTHING	EASTING
336	700+66.56	13.44	RT	305706.099	1008062.589
337	700+62.00	14.12	RT	305706.067	1008067.204
338	700+55.34	18.39	RT	305709.247	1008074.441
339	24+17.24	37.83	LT	305713.844	1008078.235
340	24+23.92	33.29	LT	305721.553	1008079.987
341	24+29.82	32.38	LT	305727.179	1008078.625
342	24+47.76	32.83	LT	305742.998	1008071.339
343	24+56.01	32.94	LT	305750.265	1008067.993
344	24+62.19	32.99	LT	305755.714	1008065.483
345	24+70.35	33.00	LT	305762.981	1008062.136
346	24+75.00	33.00	LT	305767.209	1008060.189
347	24+92.03	34.36	LT	305782.103	1008051.829
348	25+00.00	35.00	LT	305789.079	1008047.914
349	25+94.62	35.03	LT	305875.192	1008008.253
350	26+02.48	35.09	LT	305882.458	1008004.906
351	26+17.26	35.28	LT	305896.116	1007998.616
351A	26+24.67	34.15	LT	305903.474	1007996.628
351B	26+28.55	33.57	LT	305907.327	1007995.587
352	26+77.34	26.93	LT	305955.564	1007982.554
353	26+78.35	26.83	LT	305956.556	1007982.263
354	26+85.97	28.54	LT	305963.078	1007977.792
355	26+90.51	32.32	LT	305965.960	1007972.575
356	26+93.64	39.55	LT	305966.262	1007964.675
357	26+96.03	56.36	LT	305962.363	1007948.146
358	26+97.14	64.27	LT	305960.527	1007940.360

CONTROL POINTS FOR CURBING					
POINT	STATION	OFFSET		NORTHING	EASTING
359	26+65.43	91.52	LT	305919.783	1007927.399
360	26+78.17	116.01	LT	305922.931	1007899.656
361	27+18.72	37.51	LT	305990.559	1007957.367
362	27+19.05	30.62	LT	305993.365	1007963.668
363	27+22.56	25.85	LT	305998.369	1007966.843
364	27+29.36	23.51	LT	306005.552	1007966.560
365	27+49.18	23.52	LT	306024.017	1007959.349
366	27+57.18	23.53	LT	306031.469	1007956.439

CONTROL POINTS FOR CURBING					
POINT	STATION	OFFSET		NORTHING	EASTING
366A	27+94.17	24.16	LT	306065.707	1007942.435
366B	28+02.17	24.11	LT	306073.179	1007939.577
366C	28+12.16	23.92	LT	306082.559	1007936.122

CONTROL POINTS FOR CURBING					
POINT	STATION	OFFSET		NORTHING	EASTING
367	27+00.97	4.02	LT	305986.171	1007995.027
368	27+60.97	4.47	LT	306041.913	1007972.828
369	27+61.06	1.14	LT	306043.207	1007975.899
370	27+01.06	1.68	RT	305988.325	1008000.301

Username:

Division:

Date:4/27/2017

Filename: 037_Geometry_05.dgn

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN 20543.00

WIN
20543.00

HIGHWAY PLANS

PROJ. MANAGER	ABRELE GORNEAU, II	BY	DATE
DESIGN-DETAILED	D.MITCHELL	D.BURGESS	03\10\17
CHECKED-REVIEWED	-	-	-
DESIGN2-DETAILED2	-	-	-
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

SIGNATURE

P.E. NUMBER

DATE

PORTLAND
FOREST AVENUE

GEOMETRIC CURB LAYOUT TABLES

SHEET NUMBER

37

OF 67

CURB REVEAL						
LEFT			STATION	RIGHT		
REVEAL	TOP OF CURB	GUTTERLINE		GUTTERLINE	TOP OF CURB	REVEAL
			12+50	45.51	46.10	7.08
			12+60	45.63	46.22	7.08
			12+70	45.75	46.34	7.08
			12+80	45.83	46.41	6.96
			12+90	45.85	46.44	7.08
		45.90	13+00	45.88	46.46	6.96
		45.92	13+10	45.91	45.91	0.00
		45.94	13+20	45.94	46.52	6.96
		46.00	13+30	45.98	46.57	7.08
		46.06	13+40	46.05	46.63	6.96
6.96	46.71	46.13	13+50	46.12	46.70	6.96
7.08	46.79	46.20	13+60	46.19	46.61	5.04
6.96	46.86	46.28	13+70	46.27	46.69	5.04
7.08	46.95	46.36	13+80	46.35	46.77	5.04
6.96	47.03	46.45	13+90	46.44	46.85	4.92
6.96	47.13	46.55	14+00	46.54	47.00	5.52
6.96	47.23	46.65	14+10	46.64	47.11	5.64
7.08	47.34	46.75	14+20	46.74	47.22	5.76
7.08	47.45	46.86	14+30	46.85	47.20	4.20
6.96	47.56	46.98	14+40	46.97	47.18	2.52
6.96	47.68	47.10	14+50	47.09		
8.16	47.80	47.12	14+60	47.21		
6.96	47.91	47.33	14+70	47.33	47.46	1.52
6.96	48.03	47.45	14+80	47.45	48.03	6.96
8.04	48.24	47.57	14+90	47.57	48.15	6.96
6.96	48.27	47.69	15+00	47.69	48.27	6.96
6.96	48.39	47.81	15+10	47.81	48.40	7.08
7.08	48.52	47.93	15+20	47.93	48.53	7.20
7.08	48.65	48.06	15+30	48.05	48.63	6.96
6.96	48.78	48.20	15+40	48.17	48.75	6.96
6.84	48.91	48.34	15+50	48.29	48.77	5.76
6.84	49.06	48.49	15+60	48.41	48.91	6.00
0.00	48.64	48.64	15+70	48.53	48.53	0.00
0.00	48.78	48.78	15+80	48.65	48.99	4.04
0.00	48.92	48.92	15+90	48.77	49.35	6.96
6.36	49.60	49.07	16+00	48.89	49.48	7.08
		49.23	16+10	49.01	49.60	7.08
		49.39	16+20	49.13	49.72	7.08
4.49	49.81	49.44	16+30	49.25	49.84	7.08
7.20	49.97	49.37	16+40	49.39	49.97	6.96
7.08	50.15	49.56	16+50	49.53	50.12	7.08
7.08	50.37	49.78	16+60	49.69	50.17	5.80
7.08	50.57	49.98	16+70	49.87	49.87	0.00
		50.25	16+80	50.06		
		50.51	16+90	50.26		
		50.78	17+00	50.48	50.48	0.00
4.35	51.40	51.04	17+10	50.71	51.07	4.36
6.96	51.57	50.99	17+20	50.95	51.60	7.80
6.96	51.78	51.20	17+30	51.21	51.82	7.32
6.96	52.02	51.44	17+40	51.48	52.06	6.96
6.96	52.21	51.63	17+50	51.75	52.33	6.96
6.96	52.40	51.82	17+60	51.93	52.51	6.96
6.96	52.60	52.02	17+70	52.12	52.70	6.96
6.96	52.91	52.33	17+80	52.30	52.88	6.96
6.96	53.27	52.69	17+90	52.49	53.07	6.96
6.96	53.62	53.04	18+00	52.67	53.25	6.96
6.96	53.70	53.12	18+10	52.88	53.46	6.96
6.96	53.84	53.26	18+20	53.10	53.68	6.96
6.96	54.11	53.53	18+30	53.29	53.87	6.96
6.96	54.41	53.83	18+40	53.47	54.05	6.96
6.96	54.65	54.07	18+50	53.66	54.24	6.96
5.81	54.65	54.17	18+60	53.84	54.42	6.96
0.00	54.27	54.27	18+70	54.01	54.01	0.00
6.96	55.16	54.58	18+80	54.17	54.76	7.08
			18+90			
			19+00			

CURB REVEAL						
LEFT			STATION	RIGHT		
REVEAL	TOP OF CURB	GUTTERLINE		GUTTERLINE	TOP OF CURB	REVEAL
			19+10			
0.72	56.32	56.26	19+20			
7.08	56.91	56.32	19+30			
0.00	56.40	56.40	19+40	55.13	55.13	0.00
			19+50	55.26	55.46	2.40
			19+60	55.36	55.77	4.92
			19+70	55.42	55.96	6.48
			19+80	55.45	55.79	4.08
5.72	56.89	56.41	19+90	55.45	55.78	4.00
3.85	56.72	56.40	20+00	55.41	55.55	1.63
0.11	56.24	56.23	20+10	55.34	55.35	0.06
3.96	56.36	56.03	20+20	55.22	55.57	4.20
5.64	56.31	55.84	20+30	55.09	55.45	4.32
5.40	56.10	55.65	20+40	54.97	55.37	4.80
4.92	55.88	55.47	20+50	54.84	55.25	4.92
1.23	55.39	55.29	20+60	54.72	55.09	4.44
		55.11	20+70	54.59	54.76	2.04
		54.93	20+80	54.46		
4.38	55.11	54.75	20+90	54.34		
0.88	54.63	54.56	21+00	54.21	54.43	2.64
		54.38	21+10	54.09	54.62	6.36
3.24	54.49	54.22	21+20	53.98	54.56	6.96
8.64	54.85	54.13	21+30	53.89	54.47	6.96
9.12	54.81	54.05	21+40	53.81	54.40	7.08
9.36	54.78	54.00	21+50	53.76	54.34	6.96
9.60	54.69	53.89	21+60	53.72	54.28	6.72
8.76	54.55	53.82	21+70	53.70	54.26	6.72
4.89	54.24	53.83	21+80	53.71	54.26	6.60
		53.85	21+90	53.73	54.31	6.96
		53.89	22+00	53.77	54.35	6.96
3.94	54.28	53.95	22+10	53.83	54.41	6.96
7.08	54.61	54.02	22+20	53.90	54.49	7.08
7.08	54.71	54.12	22+30	54.00	54.60	7.20
5.76	54.72	54.24	22+40	54.12	54.71	7.08
6.96	54.96	54.38	22+50	54.26	54.84	6.96
6.96	55.11	54.53	22+60	54.41	54.99	6.96
7.08	55.27	54.68	22+70	54.56	55.15	7.08
4.88	55.25	54.84	22+80	54.72	55.05	3.92
0.00	55.02	55.02	22+90	54.87	54.87	0.00
0.00	55.20	55.20	23+00	55.03		
		55.35	23+10	55.19		
		55.63	23+20	55.34		
1.59	56.05	55.92	23+30	55.50	55.50	0.00
5.64	56.68	56.21	23+40	55.66	55.99	4.00
6.12	57.01	56.50	23+50	55.82	56.34	6.24
6.96	57.35	56.77	23+60	55.98	56.28	3.60
0.93	57.13	57.05	23+70	56.15	56.70	6.60
		57.35	23+80	56.34	56.77	5.12
		57.67	23+90	56.54	56.54	0.00
		58.01	24+00	56.76	57.35	7.08
		58.10	24+10	57.00	57.58	6.96
3.18	58.47	58.21	24+20	57.25		
6.96	58.92	58.34	24+30	57.52		
6.96	59.07	58.49	24+40	57.80		
5.08	59.07	58.65	24+50	58.10	58.10	0.00
0.00	59.10	59.10	24+60	58.42	58.42	0.00
6.66	60.10	59.55	24+70	58.74	59.04	3.59
6.96	60.57	59.99	24+80	59.08	59.42	4.08
6.96	61.02	60.44	24+90	59.41	60.00	7.08
6.96	61.47	60.89	25+00	59.75	60.00	3.02

Filename: 038_Geometry_06.dgn Division: Username: Date:4/27/2017

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN 20543.00

WIN 20543.00 HIGHWAY PLANS

PROJ. MANAGER	AUREL GORNEAU II	-	-
DESIGN-DETAILED	D.BURGESS	03\10\17	SIGNATURE
CHECKED-REVIEWED	D.MITCHELL	-	-
DESIGN2-DETAILED2	-	-	-
DESIGN3-DETAILED3	-	-	P.E. NUMBER
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	DATE
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

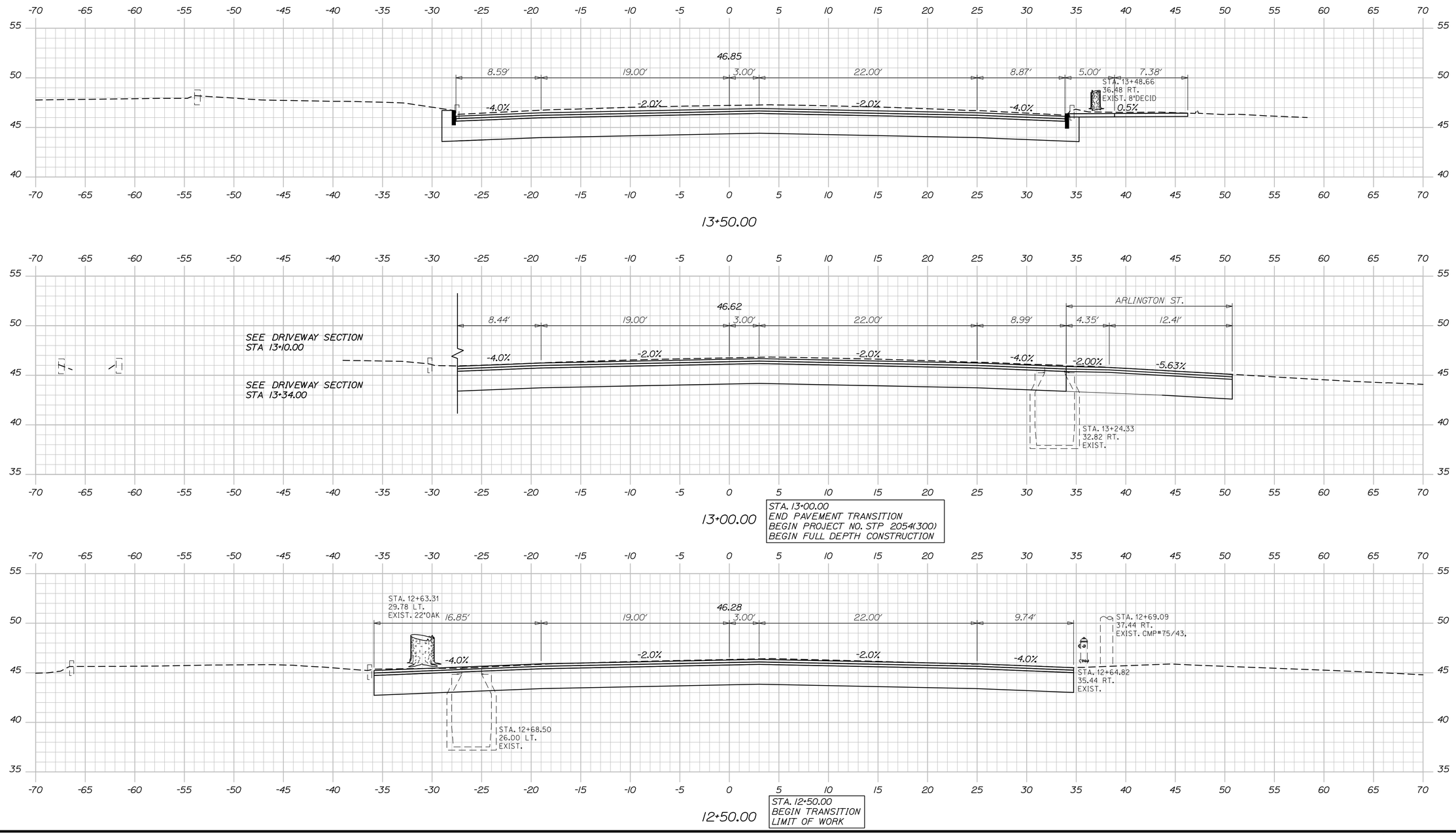
PORTLAND
FOREST AVENUE

GEOMETRIC CURB LAYOUT TABLES

SHEET NUMBER

38

OF 67



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP 2054(300)

PIN
20543.00

HIGHWAY PLANS

PROJ. MANAGER	A. GORNEAU, II	
DESIGN-DETAILED	D.MITHCELL	
CHECKED-REVIEWED	-	
DESIGN2-DETAILED2	-	
DESIGN3-DETAILED3	-	
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

	BY	DATE
	D.BURGESS	03\10\17
	-	-
	-	-
	-	-

SIGNATURE

P.E. NUMBER

DATE

PORTLAND
FOREST AVENUE

CROSS SECTIONS

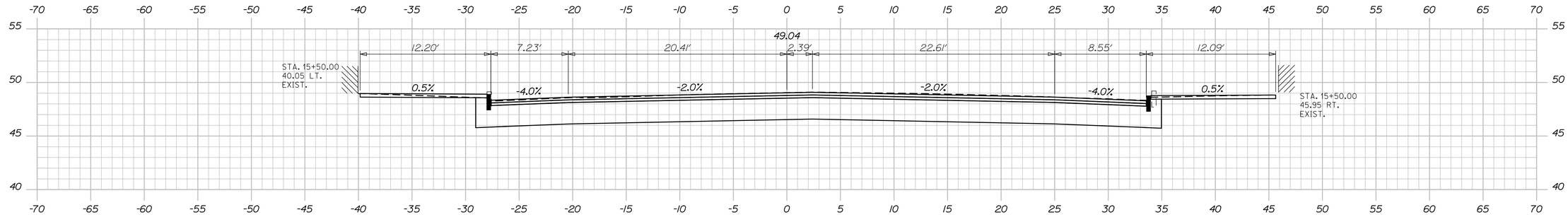
SHEET NUMBER

39

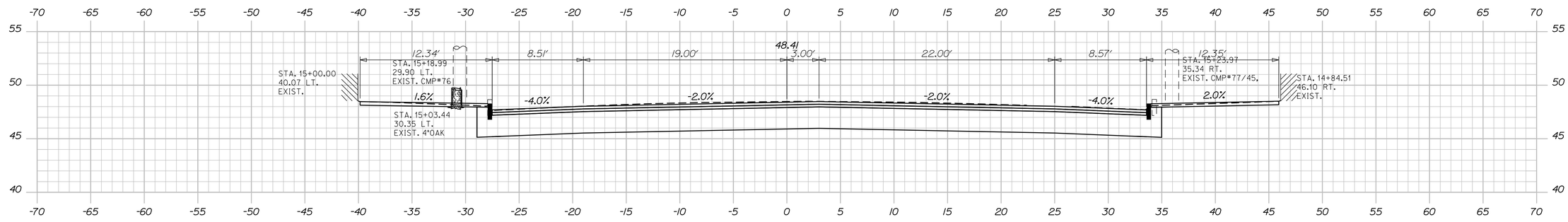
OF 67

Sta. 12+50.00 to Sta. 13+50.00

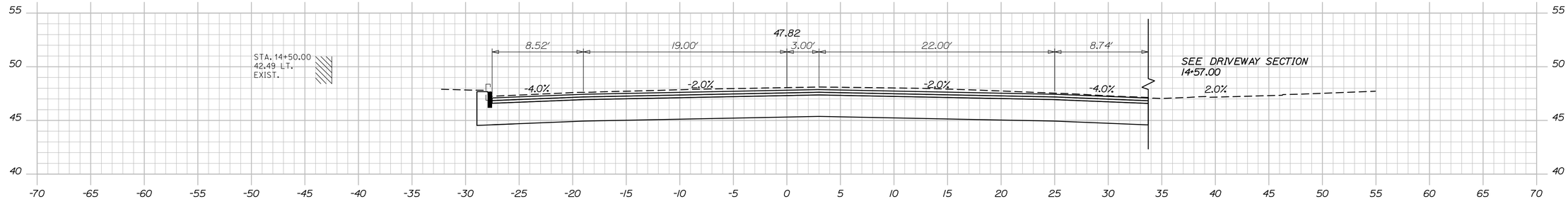
Filename: Xsect.dgn Division: Username: Date:4/27/2017



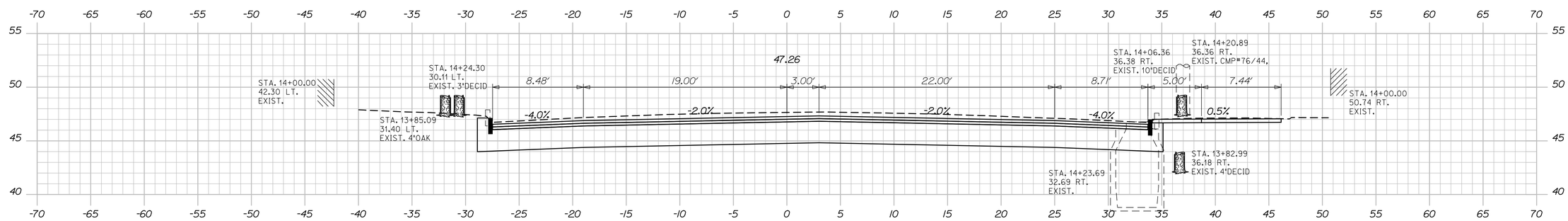
15+50.00



15+00.00



14+50.00



14+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP 2054(300)

PIN
20543.00

HIGHWAY PLANS

PROJ. MANAGER	A. GORNE-AU, II		
DESIGN-DETAILED	D.MITHCELL	D.BURGESS	03\10\17
CHECKED-REVIEWED	-	-	-
DESIGN2-DETAILED2	-	-	-
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

SIGNATURE

P.E. NUMBER

DATE

PORTLAND
FOREST AVENUE

CROSS SECTIONS

SHEET NUMBER

40

OF 67

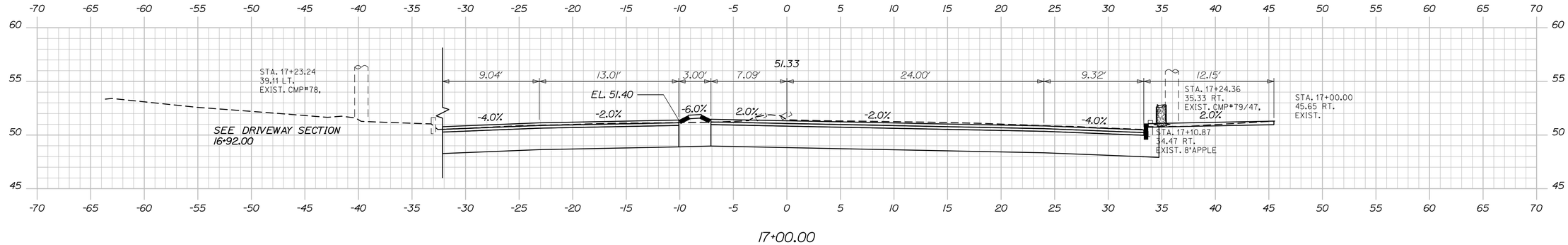
Sta. 14+00.00 to Sta. 15+50.00

Username:

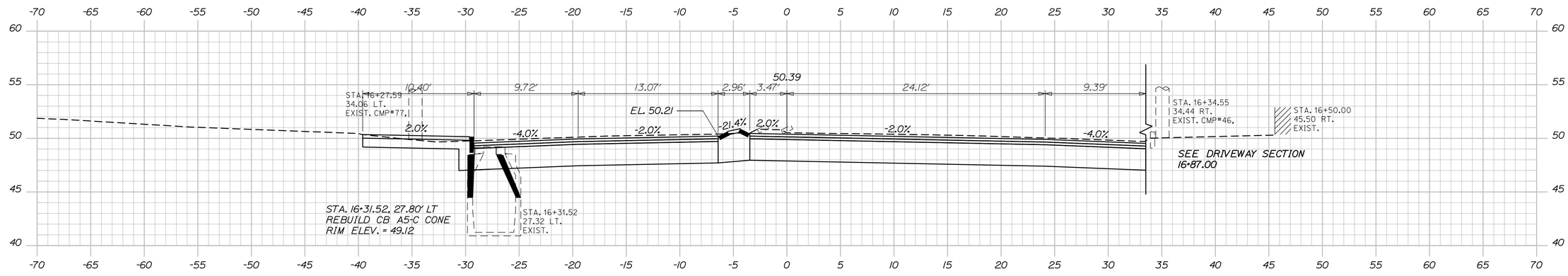
Division:

Filename: Xsect.dgn

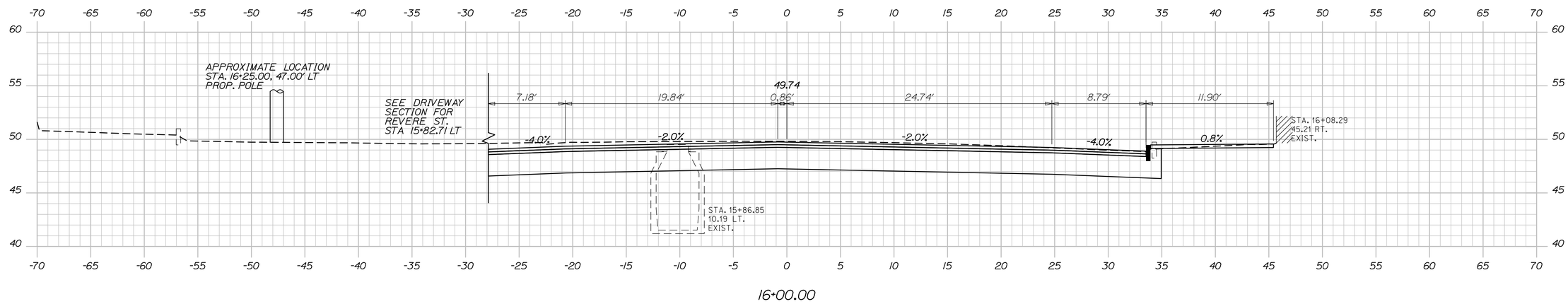
Date:4/27/2017



17+00.00



16+50.00



16+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP 2054(300)

PIN
20543.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	A. GORNEAU, II	
DESIGN-DETAILED	D.MITHCELL	
CHECKED-REVIEWED	D.BURGESS	03\10\17
DESIGN2-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

SIGNATURE

P.E. NUMBER

DATE

PORTLAND
FOREST AVENUE

CROSS SECTIONS

SHEET NUMBER

41

OF 67

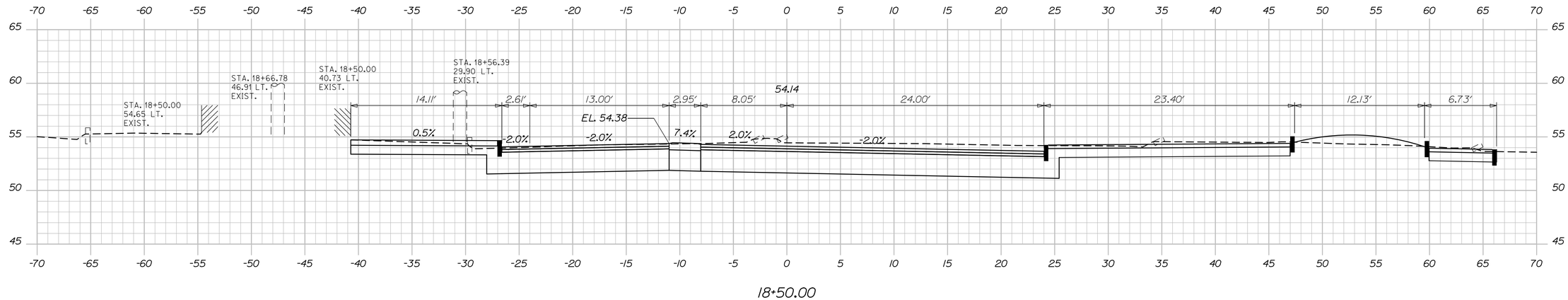
Sta. 16+00.00 to Sta. 17+00.00

Date:4/27/2017

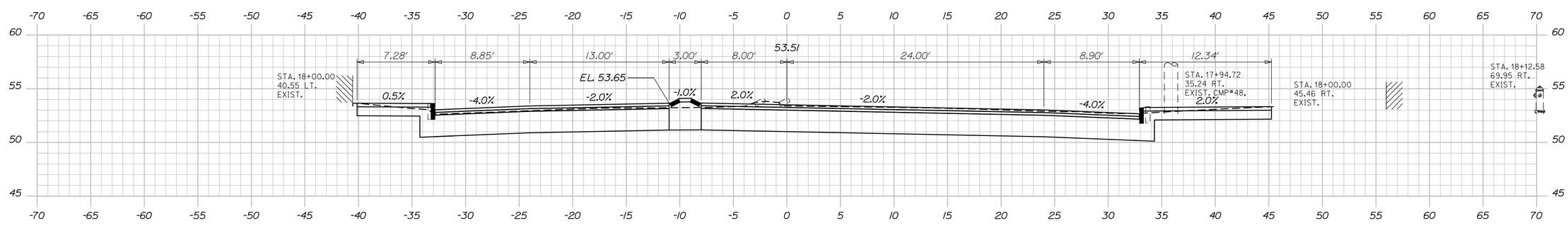
Username:

Division:

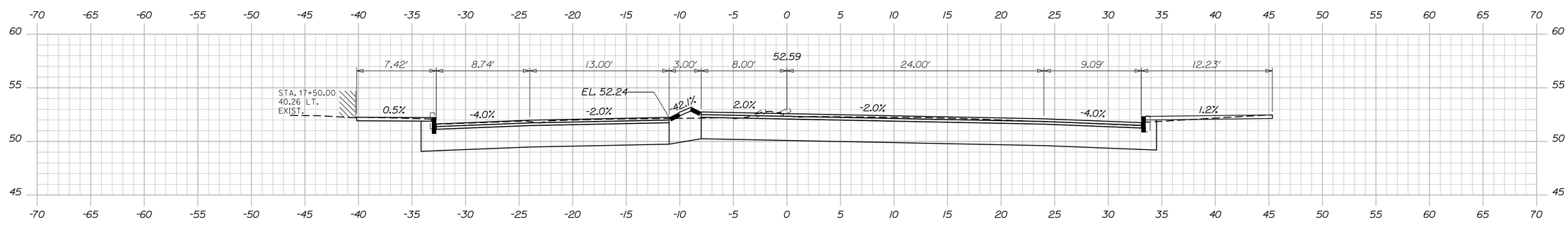
Filename: Xsect.dgn



18+50.00



18+00.00



17+50.00

Sta. 17+50.00 to Sta. 18+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP 2054(300)

PIN
20543.00

HIGHWAY PLANS

PROJ. MANAGER	A. GORNE-AU, II	BY	DATE
DESIGN-DETAILED	D.MITHCELL	D.BURGESS	03\10\17
CHECKED-REVIEWED	-	-	-
DESIGN2-DETAILED2	-	-	-
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

SIGNATURE

P.E. NUMBER

DATE

PORTLAND
FOREST AVENUE

CROSS SECTIONS

SHEET NUMBER

42

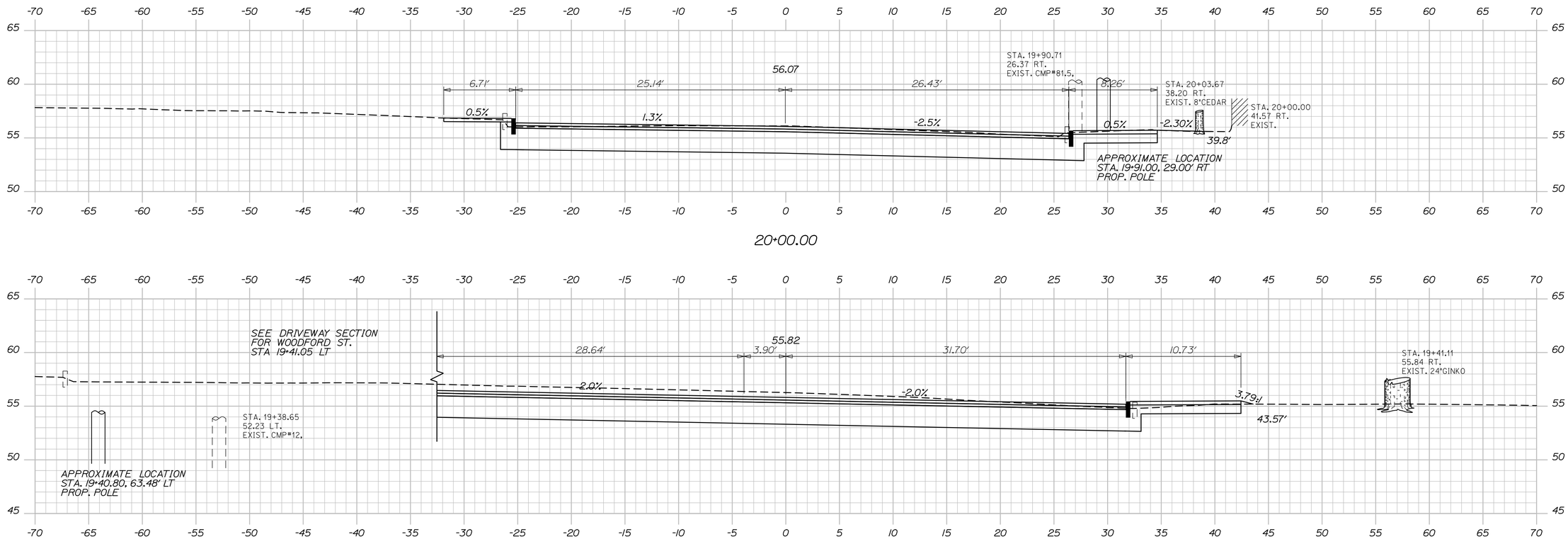
OF 67

Username:

Division:

Date:4/27/2017

Filename: Xsect.dgn



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP 2054(300)

PIN
20543.00

HIGHWAY PLANS

PROJ. MANAGER	A. GORNEAU, II	BY	DATE
DESIGN-DETAILED	D.MITHCELL	D.BURGESS	03\10\17
CHECKED-REVIEWED	-	-	-
DESIGN2-DETAILED2	-	-	-
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

SIGNATURE

P.E. NUMBER

DATE

PORTLAND
FOREST AVENUE

CROSS SECTIONS

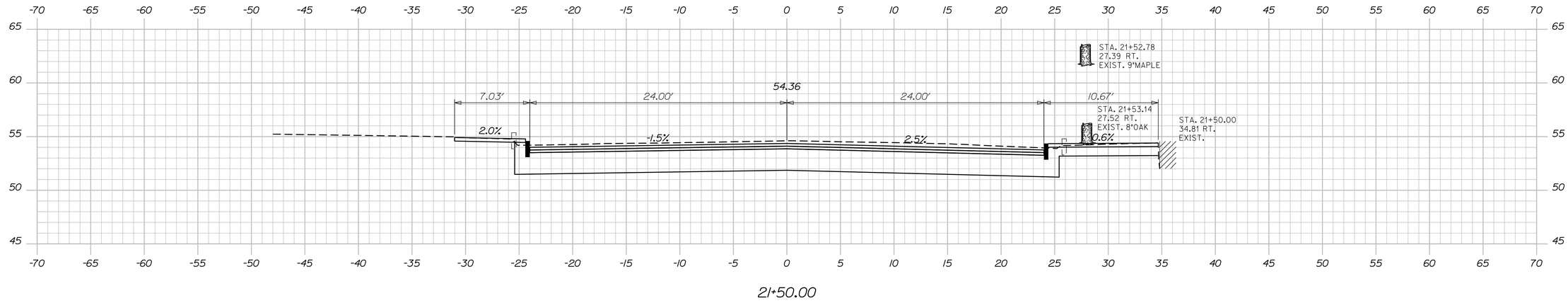
SHEET NUMBER

43

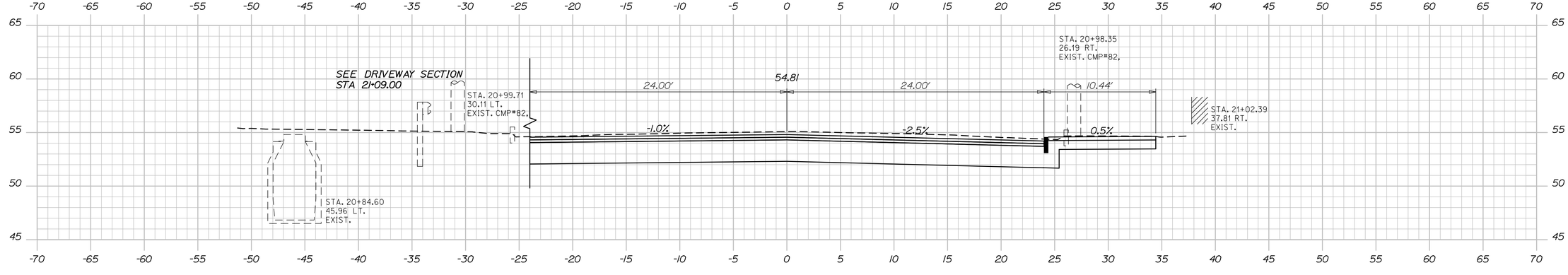
OF 67

Sta. 19+00.00 to Sta. 20+00.00

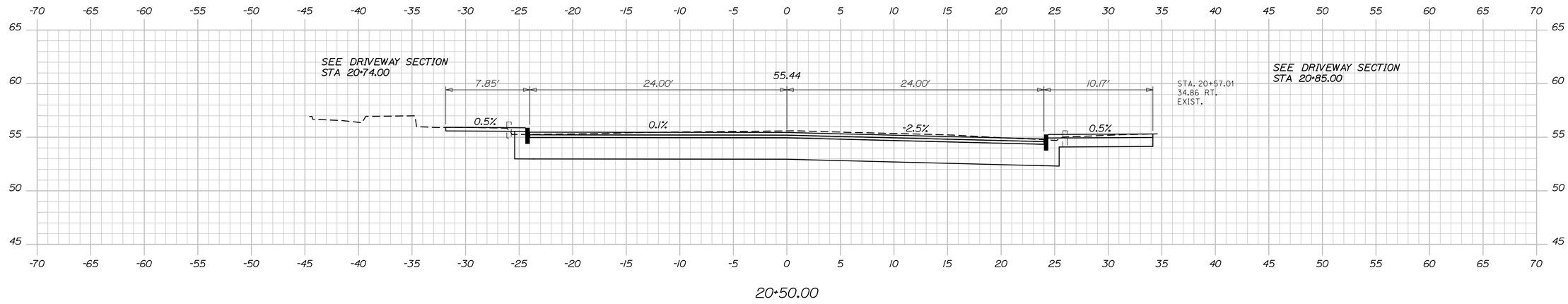
Filename: Xsect.dgn Division: Username: Date:4/27/2017



21+50.00



21+00.00



20+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP 2054(300)

PIN
20543.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	A. GORNEAU, II	
DESIGN-DETAILED	D.MITHCELL	03\10\17
CHECKED-REVIEWED	D.BURGESS	-
DESIGN2-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

SIGNATURE

P.E. NUMBER

DATE

PORTLAND
FOREST AVENUE

CROSS SECTIONS

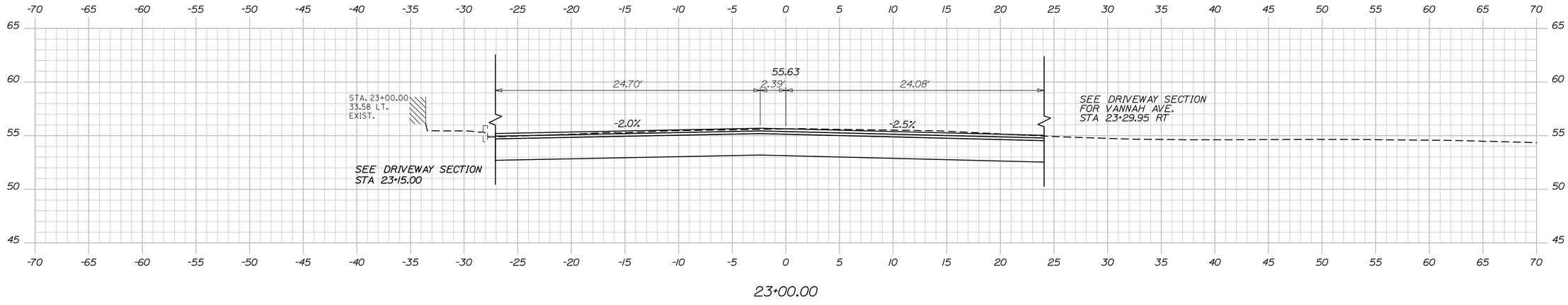
SHEET NUMBER

44

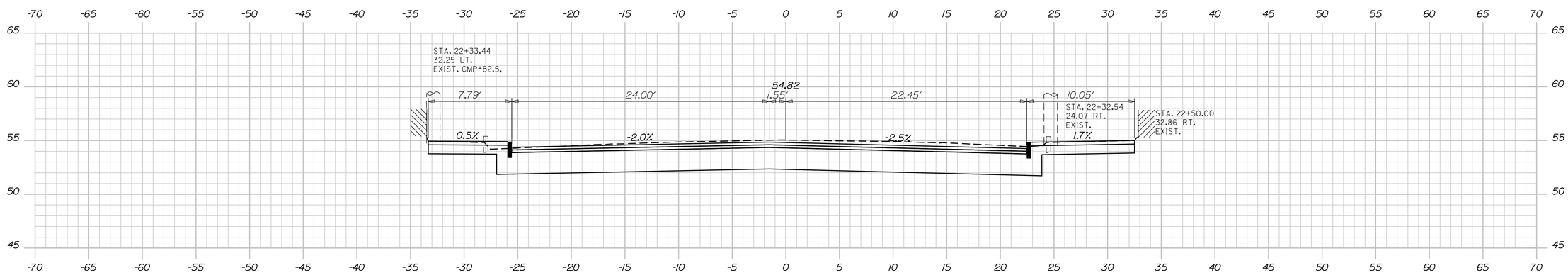
OF 67

Sta. 20+50.00 to Sta. 21+50.00

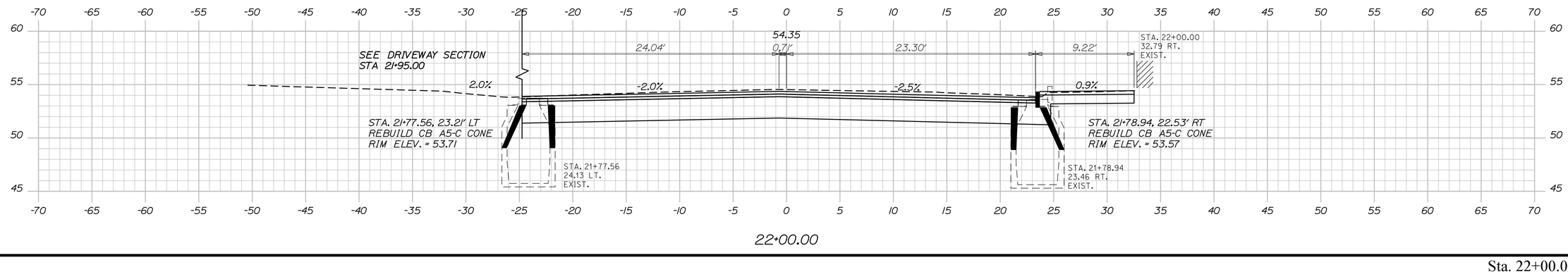
Filename: Xsect.dgn
Division:
Username:
Date:4/27/2017



23+00.00



22+50.00



22+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP 2054(300)

PIN
20543.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	A. GORNEAU, II	-
DESIGN-DETAILED	D.MITHCELL	-
CHECKED-REVIEWED	D.BURGESS	03\10\17
DESIGN2-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

SIGNATURE

P.E. NUMBER

DATE

PORTLAND
FOREST AVENUE

CROSS SECTIONS

SHEET NUMBER

45

OF 67

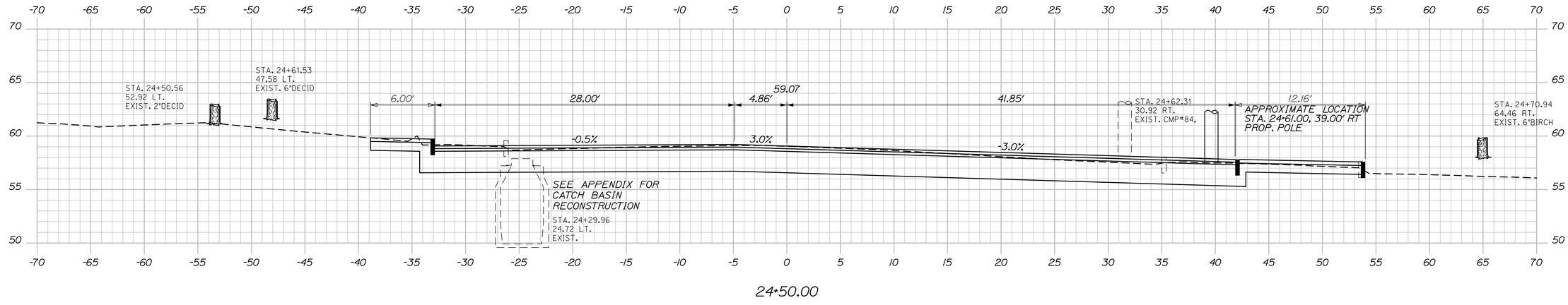
Date:4/27/2017

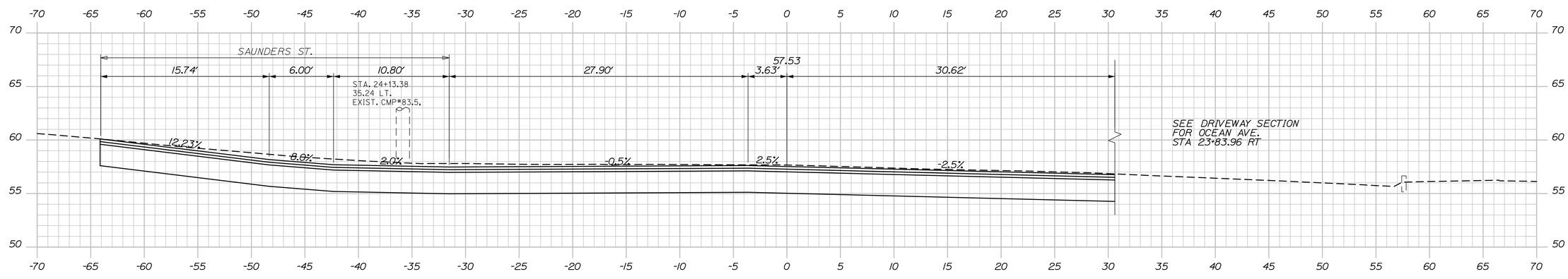
Username:

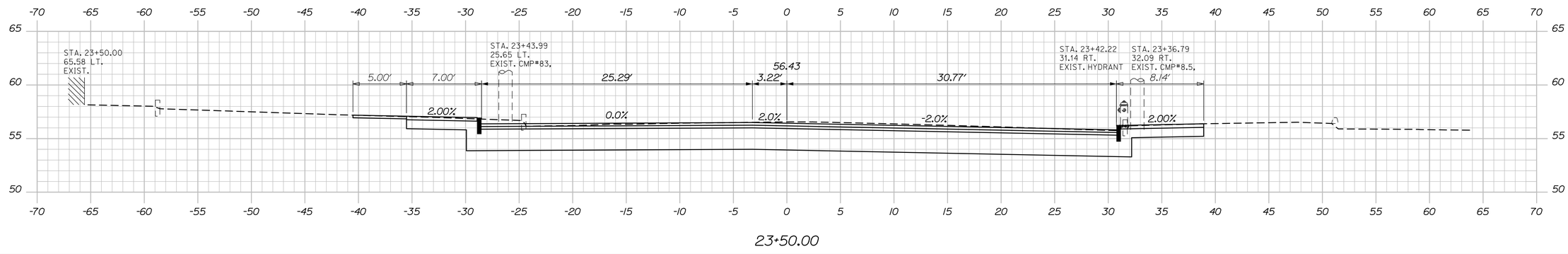
Division:

Filename: Xsect.dgn

Sta. 22+00.00 to Sta. 23+00.00







STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP 2054(300)

PIN
20543.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	A. GORNEAU, II	-
DESIGN-DETAILED	D.BURGESS	03\10\17
CHECKED-REVIEWED	D.MITHCELL	-
DESIGN2-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

SIGNATURE

P.E. NUMBER

DATE

PORTLAND
FOREST AVENUE

CROSS SECTIONS

SHEET NUMBER

46

OF 67

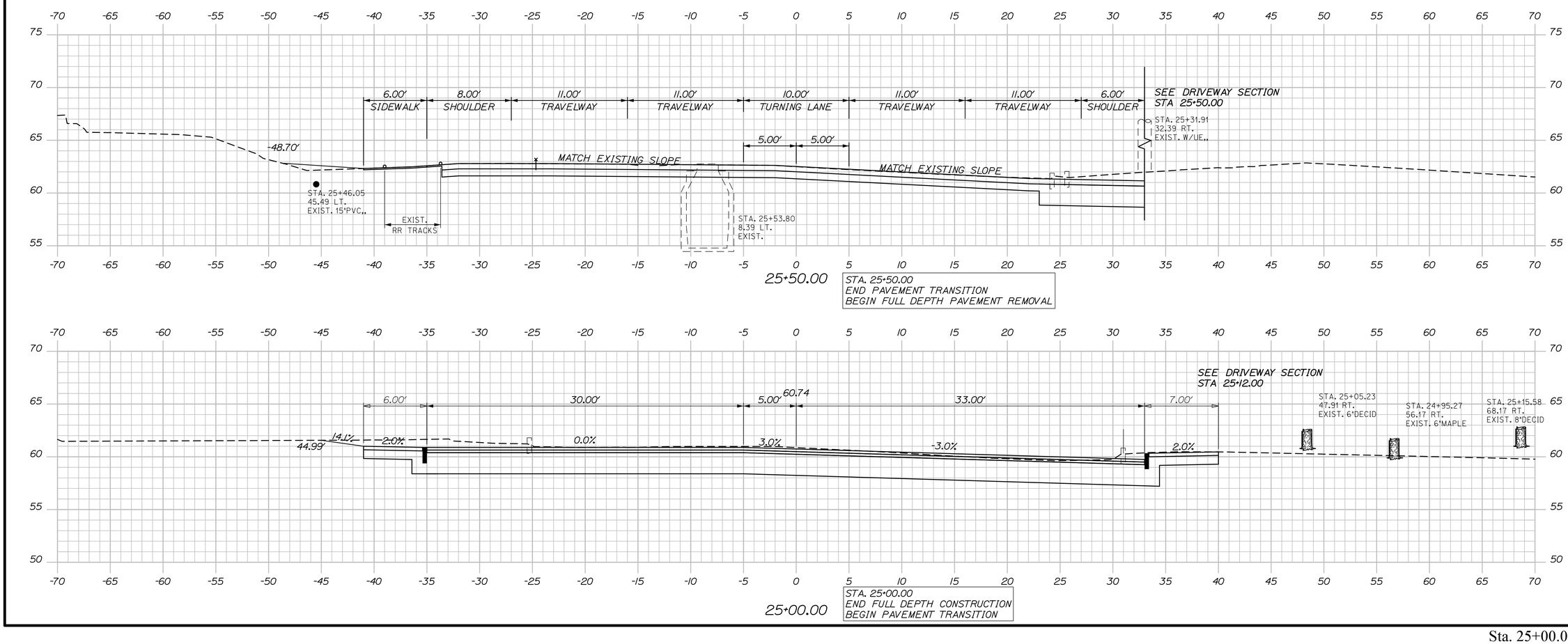
Date:4/27/2017

Username:

Division:

Filename: Xsect.dgn

Sta. 23+50.00 to Sta. 24+50.00



Date:4/27/2017

Username:

Division:

Filename: Xsect.dgn

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP 2054(300)

PIN
20543.00

HIGHWAY PLANS

PROJ. MANAGER	A. GORNEAU, II		
DESIGN-DETAILED	D.MITHCELL	D.BURGESS	03\10\17
CHECKED-REVIEWED	-	-	-
DESIGN2-DETAILED2	-	-	-
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

SIGNATURE

P.E. NUMBER

DATE

PORTLAND
FOREST AVENUE

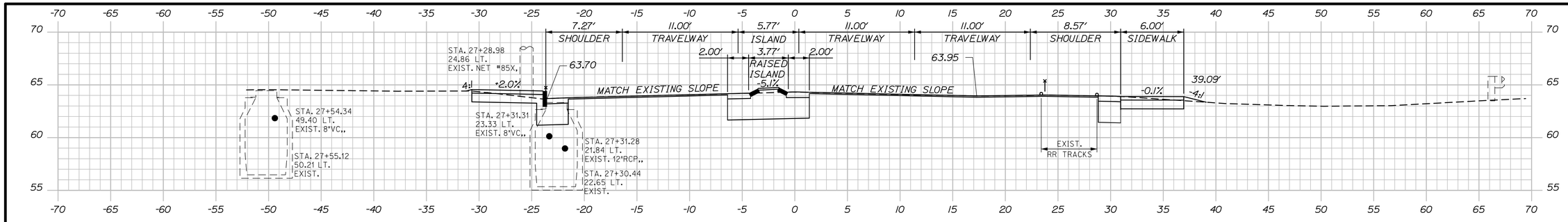
CROSS SECTIONS

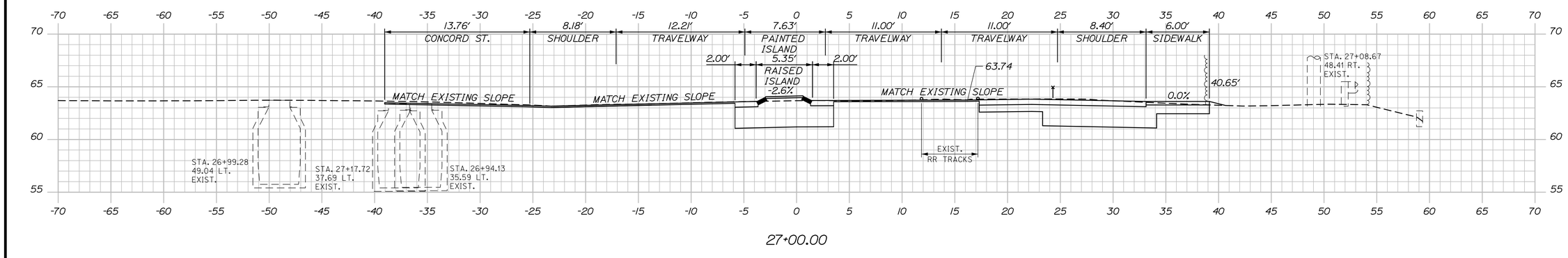
SHEET NUMBER

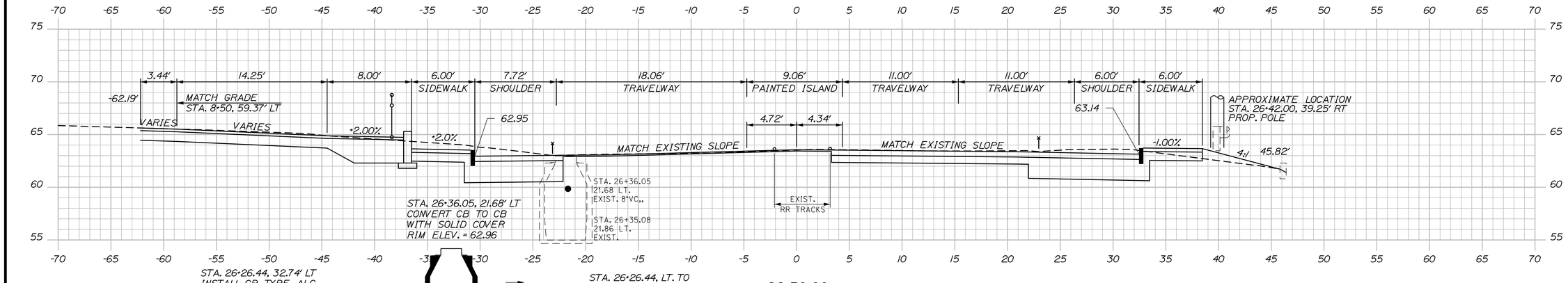
47

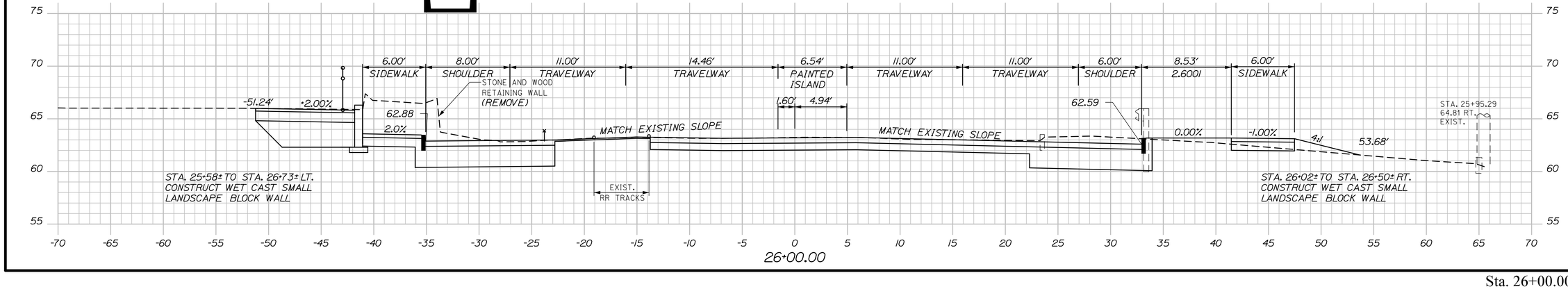
OF 67

Sta. 25+00.00 to Sta. 25+50.00









STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2054(300)

WIN
20543.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	ABELE GORNEAU II	-
DESIGN-DETAILED	D.BURGESS	03/09/24
CHECKED-REVIEWED	D.MITCHELL	-
DESIGN2-DETAILED2		-
DESIGN3-DETAILED3		-
REVISIONS 1		-
REVISIONS 2		-
REVISIONS 3		-
REVISIONS 4		-
FIELD CHANGES		-

SIGNATURE

P.E. NUMBER

DATE

PORTLAND
FOREST AVENUE

CROSS SECTIONS

SHEET NUMBER

48

OF 67

Sta. 26+00.00 to Sta. 27+50.00

Date:4/27/2017

Username:

Division:

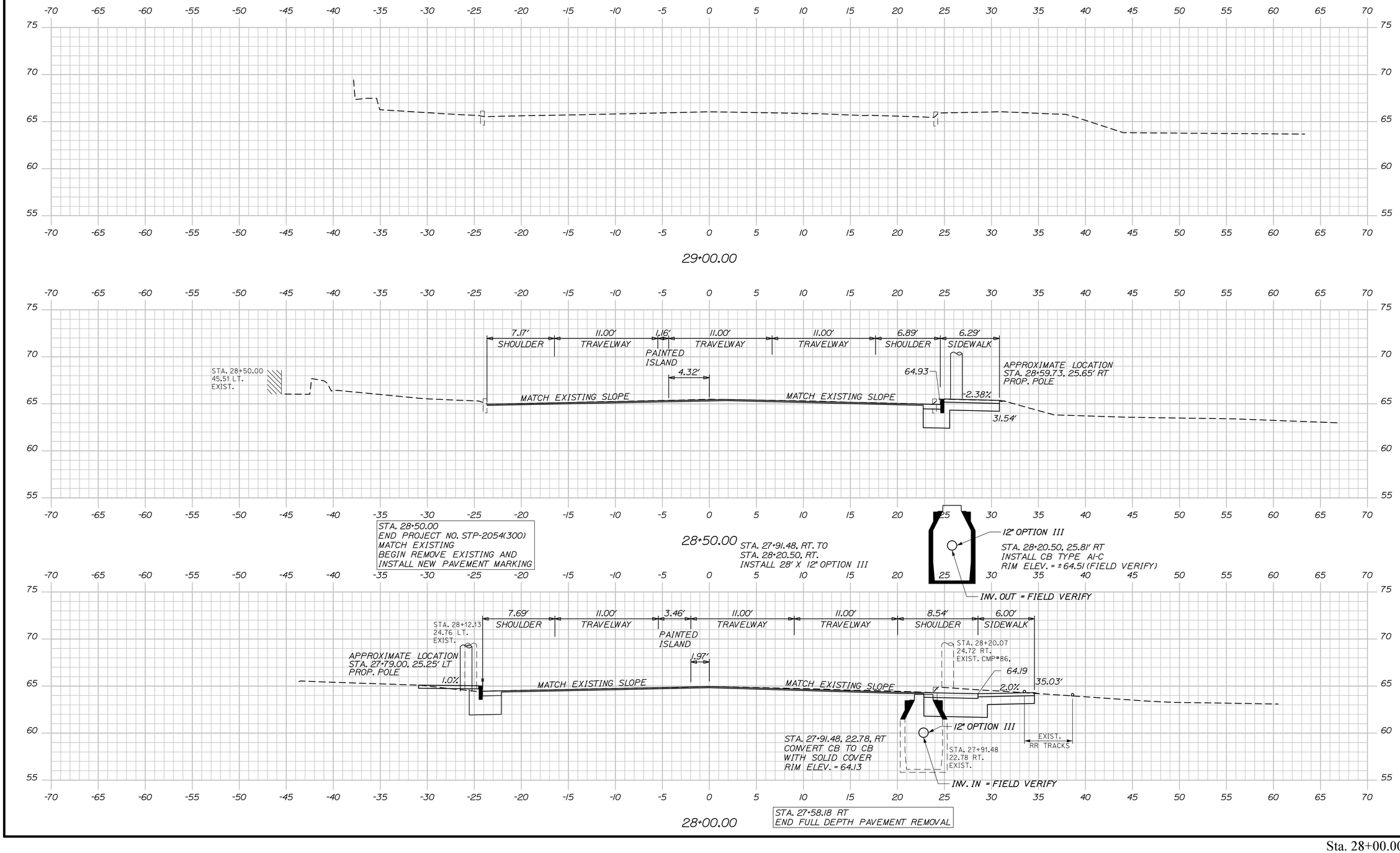
Filename: Xsect.dgn

Date:4/27/2017

Username:

Division:

Filename: Xsect.dgn



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2054(300)

WIN
20543.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER: AIMEE GORNEAU, II	D.BURGESS	03\10\17
DESIGN-DETAILED	D.MITCHELL	-
CHECKED-REVIEWED	-	-
DESIGN2-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

SIGNATURE

P.E. NUMBER

DATE

PORTLAND
FOREST AVENUE

CROSS SECTIONS

SHEET NUMBER

49

OF 67

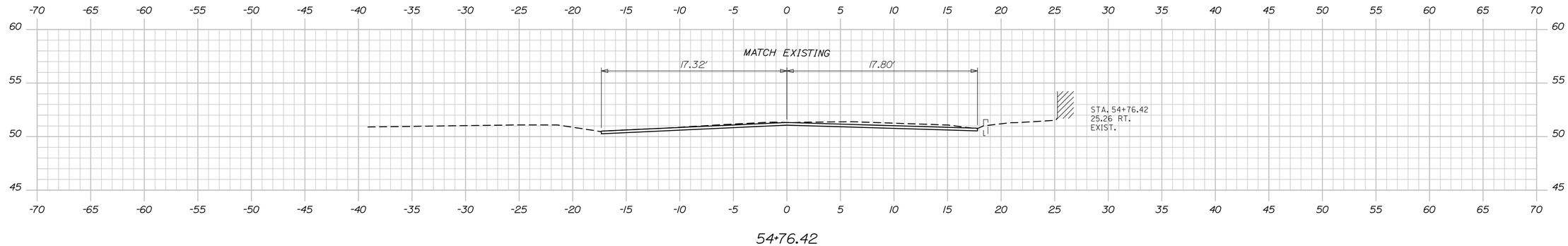
Sta. 28+00.00 to Sta. 29+00.00

Username:

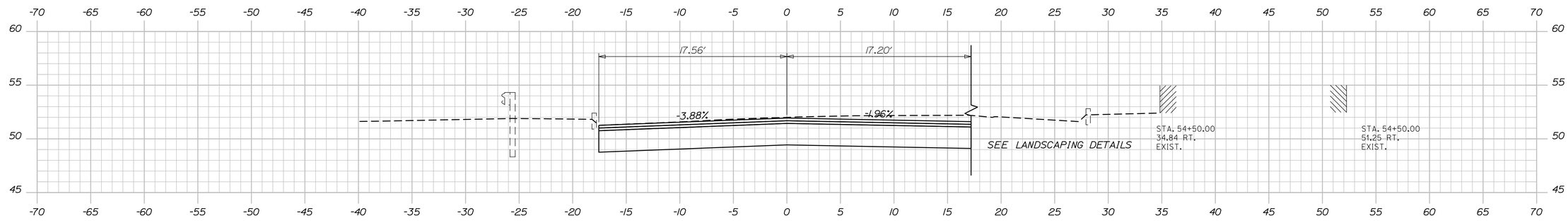
Division:

Filename: Xsect.dgn

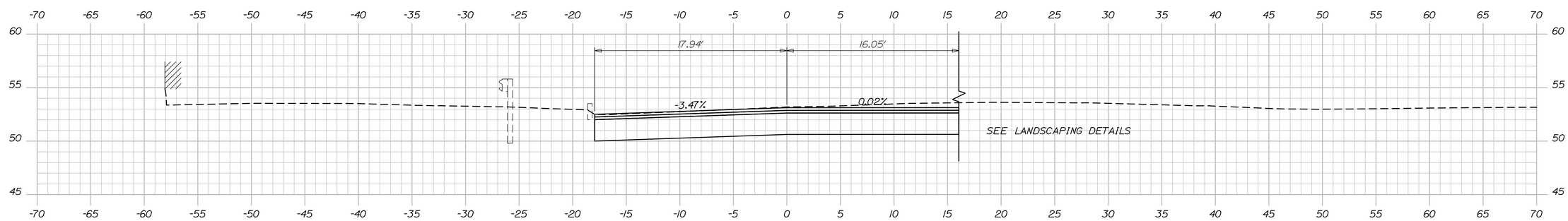
Date:4/27/2017



54+76.42



54+50.00



54+00.00

Sta. 54+00.00 to Sta. 54+76.42

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP 2054(300)

PIN
20543.00

HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER	A. GORNEAU, II		
DESIGN-DETAILED	D.MITHCELL	D.BURGESS	03\10\17
CHECKED-REVIEWED	-	-	-
DESIGN2-DETAILED2	-	-	-
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

SIGNATURE

P.E. NUMBER

DATE

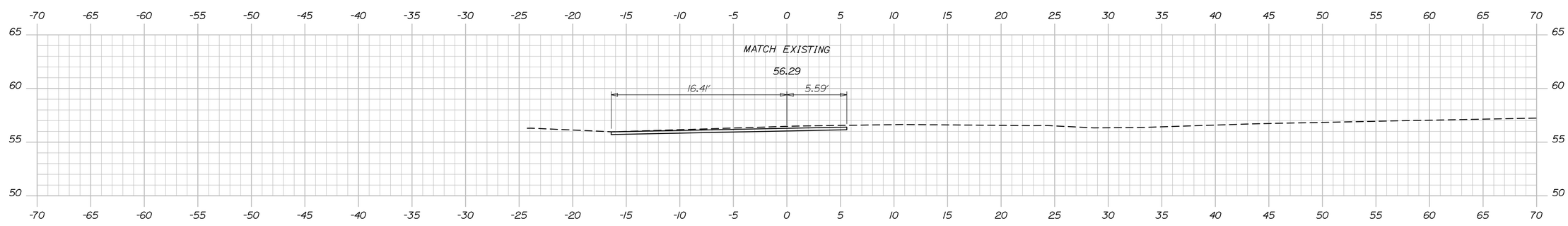
PORTLAND
FOREST AVENUE

WOODFORD STREET
CROSS SECTIONS

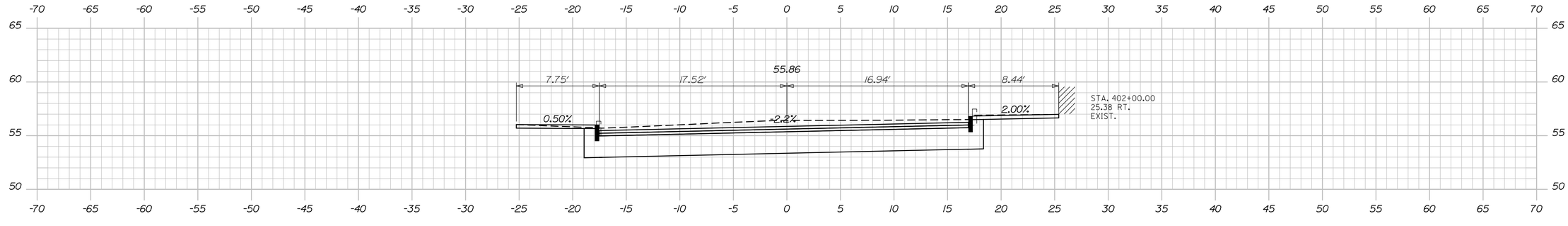
SHEET NUMBER

50

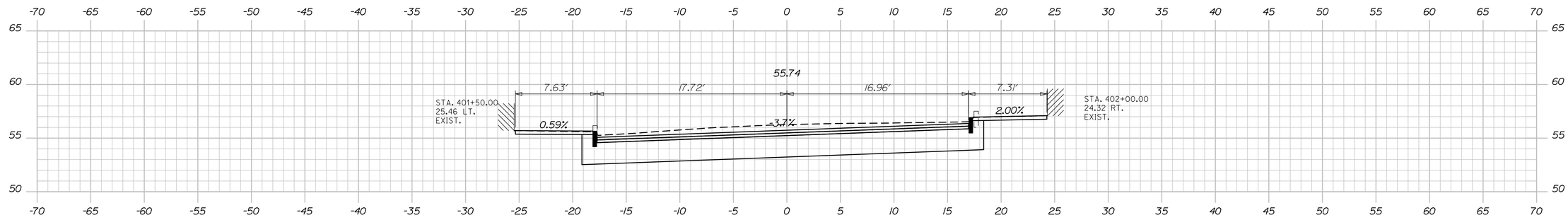
OF 67



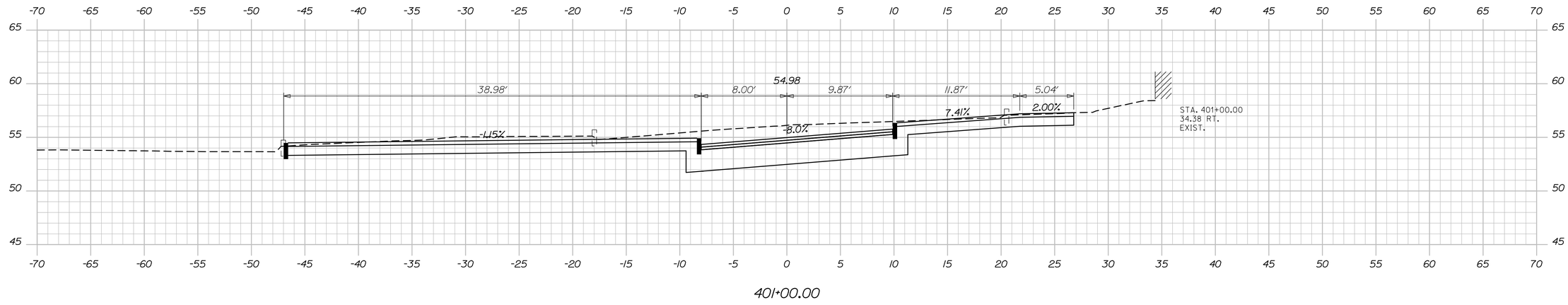
402+50.00



402+00.00



401+50.00



401+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP 2054(300)

PIN 20543.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	A. GORNEAU, II	-
DESIGN-DETAILED	D.BURGESS	03\10\17
CHECKED-REVIEWED	D.MITHCELL	-
DESIGN2-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

SIGNATURE

P.E. NUMBER

DATE

PORTLAND
FOREST AVENUE

DEERING AVENUE
CROSS SECTIONS

SHEET NUMBER

51

OF 67

Sta. 401+00.00 to Sta. 402+50.00

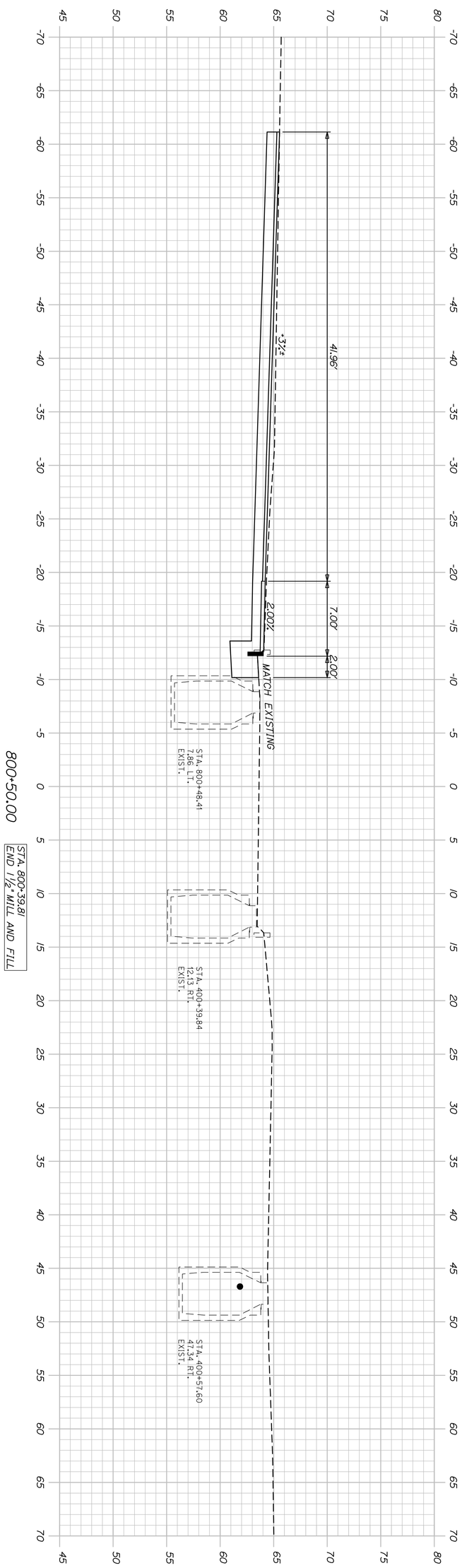
Date:4/27/2017

Username:

Division:

Filename: Xsect.dgn

Filename: Xsect.dgn Division: Username: Date:4/27/2017



Sta. 800+00.00 to Sta. 800+50.00

SHEET NUMBER 52 OF 67

PORTLAND
FOREST AVENUE
CONCORD STREET
CROSS SECTIONS

PROJ. MANAGER	A. GORNEAU, II	BY	DATE
DESIGN-DETAILED	D.MITHCELL	D.BURGESS	03\10\17
CHECKED-REVIEWED	-	-	-
DESIGN2-DETAILED2	-	-	-
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	-		-
REVISIONS 2	-		-
REVISIONS 3	-		-
REVISIONS 4	-		-
FIELD CHANGES	-		-

SIGNATURE

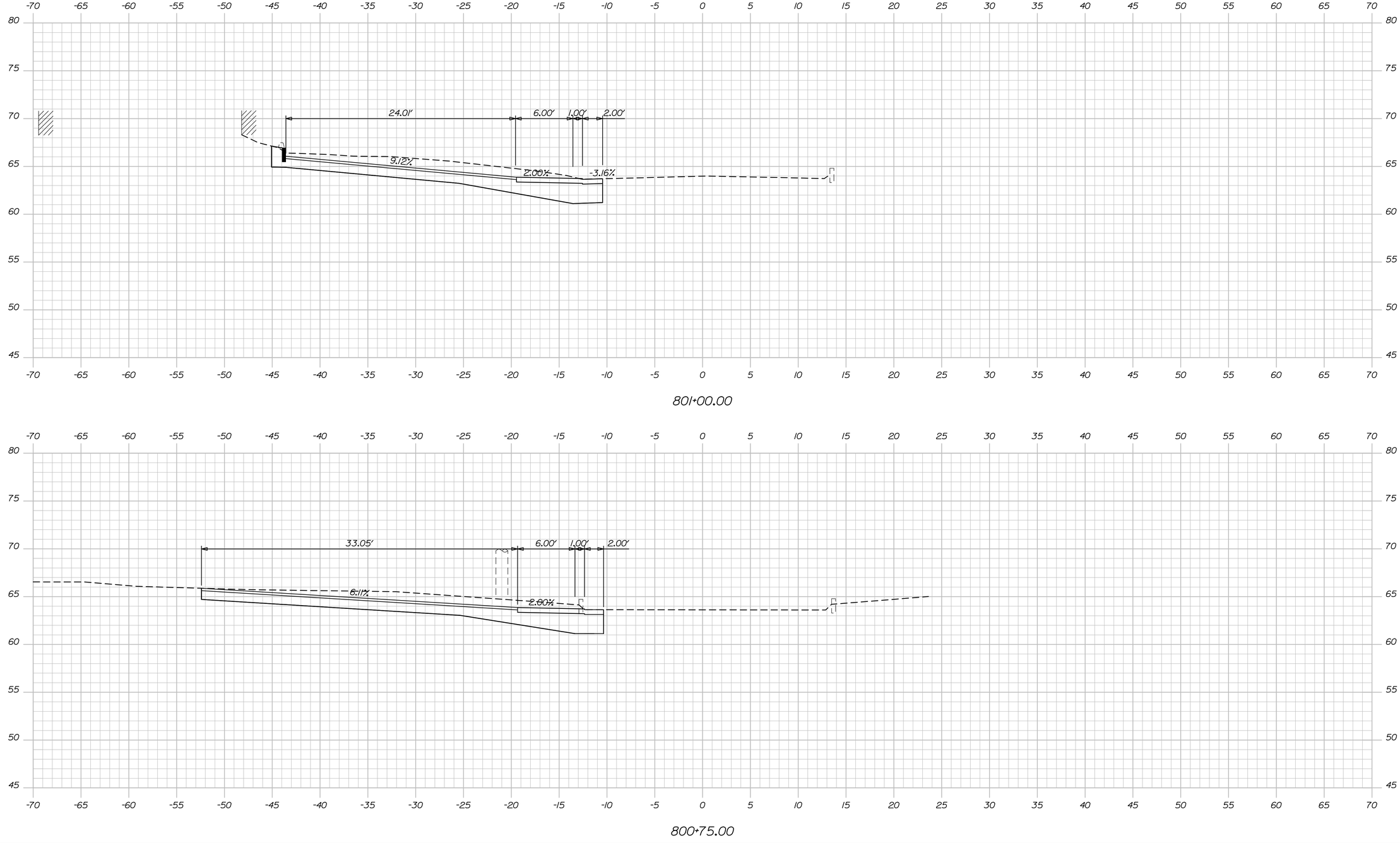
P.E. NUMBER

DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP 2054(300)

PIN 20543.00 HIGHWAY PLANS



Sta. 800+75.00 to Sta. 801+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP 2054(300)

PIN
20543.00

HIGHWAY PLANS

PROJ. MANAGER	A. GORNEAU, II		
DESIGN-DETAILED	D.MITHCELL	D.BURGESS	03\10\17
CHECKED-REVIEWED	-	-	-
DESIGN2-DETAILED2	-	-	-
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

SIGNATURE

P.E. NUMBER

DATE

PORTLAND
FOREST AVENUE

CONCORD STREET
CROSS SECTIONS

SHEET NUMBER

53

OF 67

Date:4/27/2017

Username:

Division:

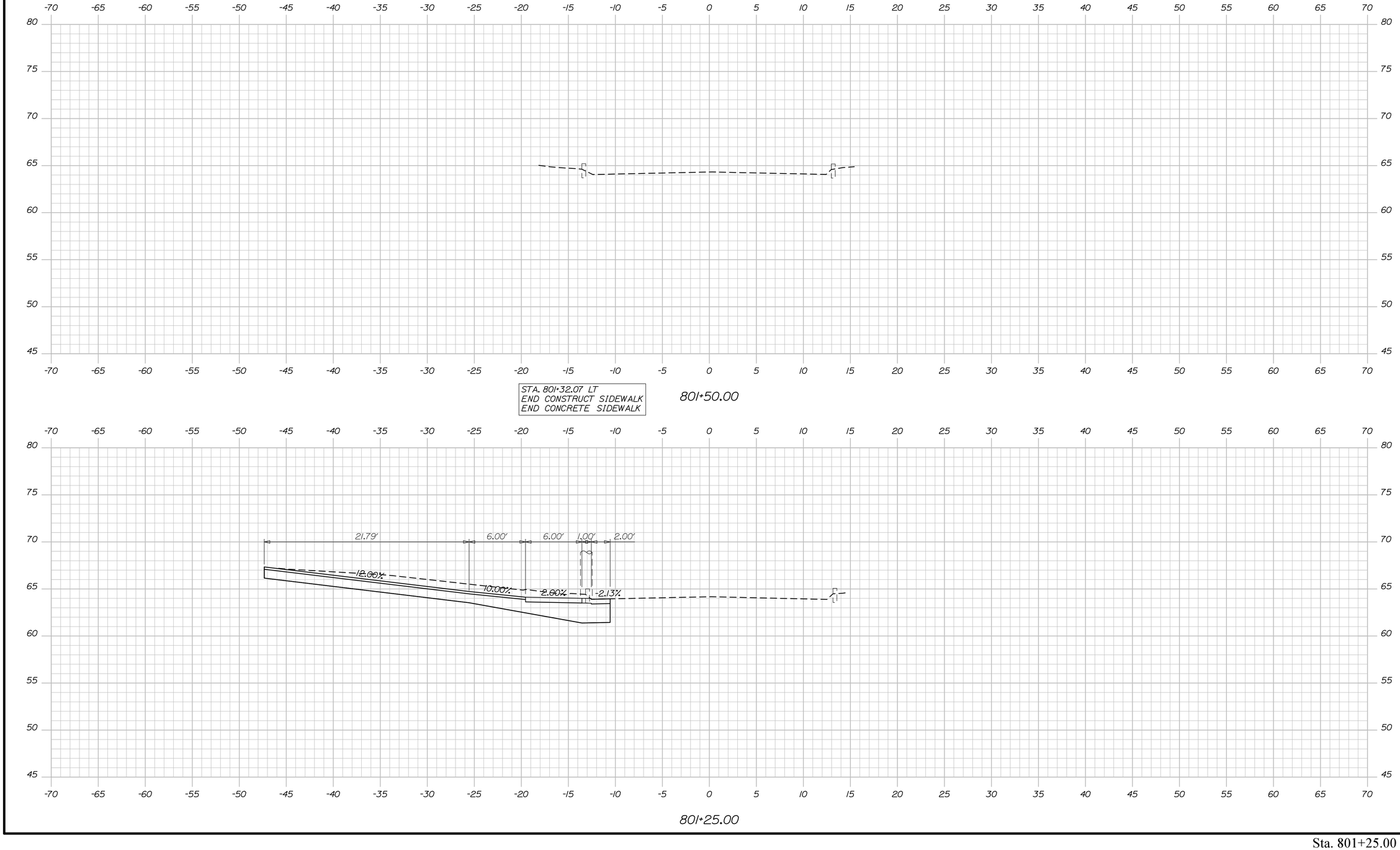
Filename: Xsect.dgn

Username:

Division:

Filename: Xsect.dgn

Date:4/27/2017



Sta. 801+25.00 to Sta. 801+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP 2054(300)

PIN
20543.00

HIGHWAY PLANS

PROJ. MANAGER	A. GORNEAU, II	BY	DATE
DESIGN-DETAILED	D.MITHCELL	D.BURGESS	03\10\17
CHECKED-REVIEWED	-	-	-
DESIGN2-DETAILED2	-	-	-
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

SIGNATURE

P.E. NUMBER

DATE

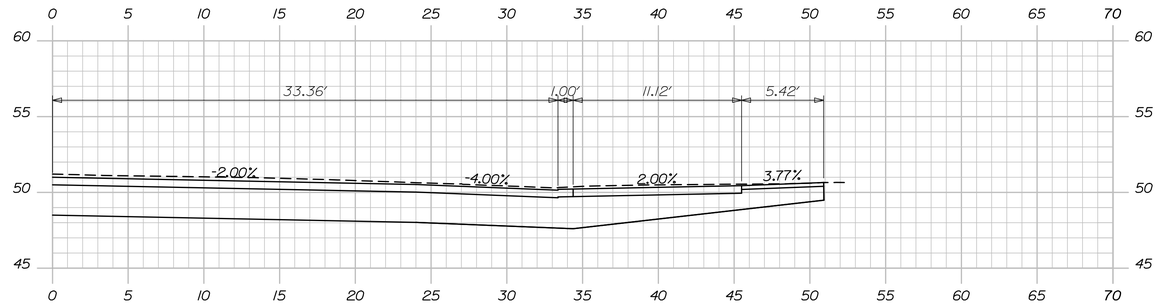
PORTLAND
FOREST AVENUE

CONCORD STREET
CROSS SECTIONS

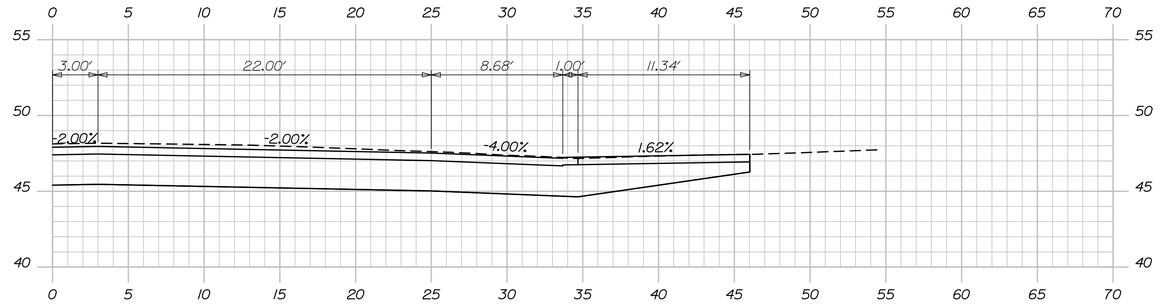
SHEET NUMBER

54

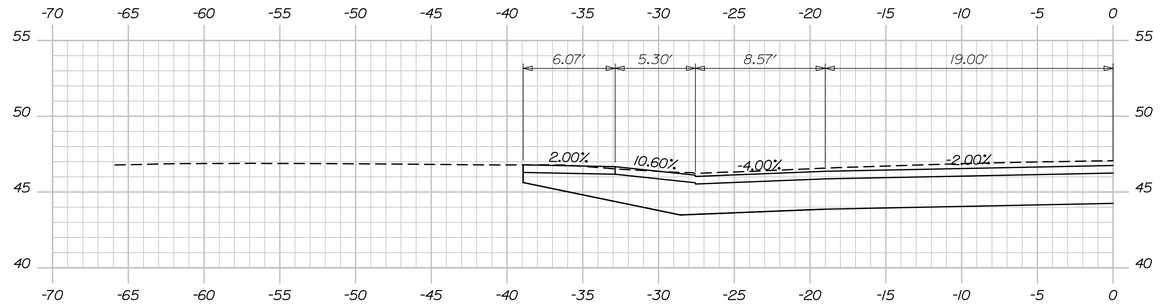
OF 67



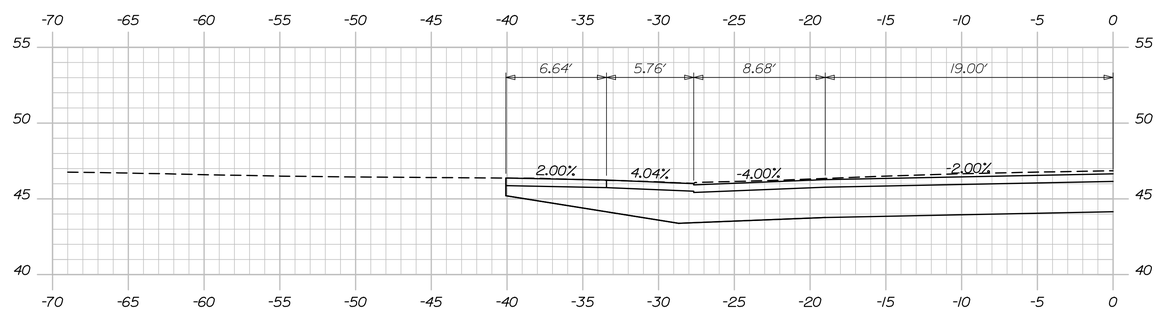
16+87.00



14+57.00



13+34.00



13+10.00

Sta. 13+10.00 to Sta. 16+86.97

Username:

Division:

Filename: Xsect.dgn

Date:4/27/2017

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP 2054(300)

PIN
20543.00

HIGHWAY PLANS

PROJ. MANAGER	A. GORNEAU, II	BY	DATE
DESIGN-DETAILED	D.MITHCELL	D.BURGESS	03\10\17
CHECKED-REVIEWED	-	-	-
DESIGN2-DETAILED2	-	-	-
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

SIGNATURE

P.E. NUMBER

DATE

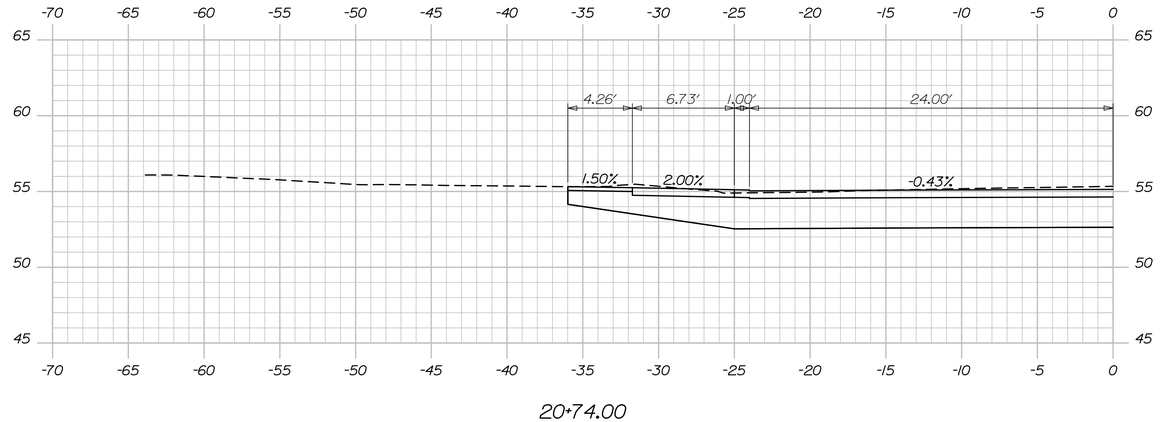
PORTLAND
FOREST AVENUE

DRIVEWAY
CROSS SECTIONS

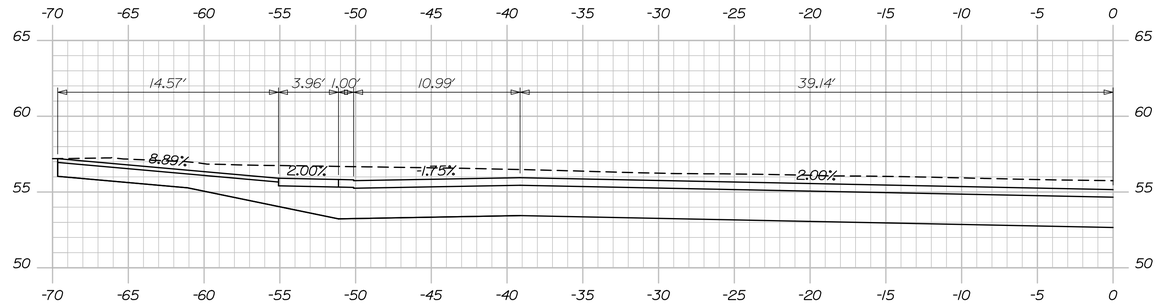
SHEET NUMBER

55

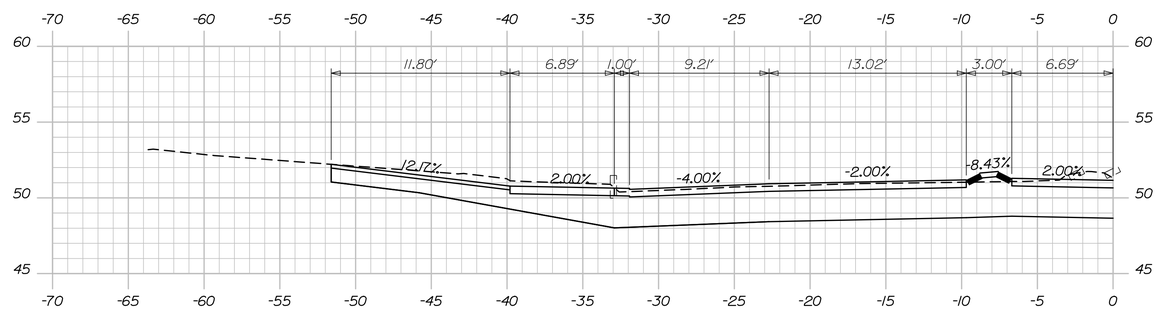
OF 67



20+74.00



19+08.00



16+92.00

Sta. 16+92.00 to Sta. 20+74.00

Username:

Division:

Filename: Xsect.dgn

Date:4/27/2017

PROJ. MANAGER	A. GORNEAU, II	BY	DATE
DESIGN-DETAILED	D.MITHCELL	D.BURGESS	03\10\17
CHECKED-REVIEWED	-	-	-
DESIGN2-DETAILED2	-	-	-
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP 2054(300)

PIN
20543.00

HIGHWAY PLANS

SIGNATURE

P.E. NUMBER

DATE

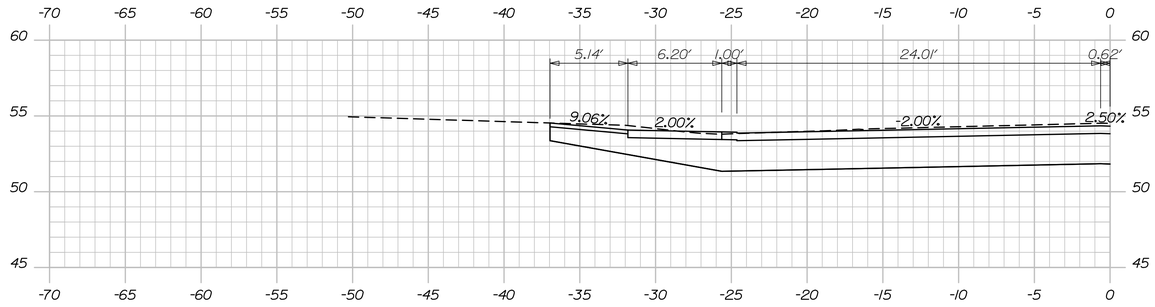
PORTLAND
FOREST AVENUE

DRIVEWAY
CROSS SECTIONS

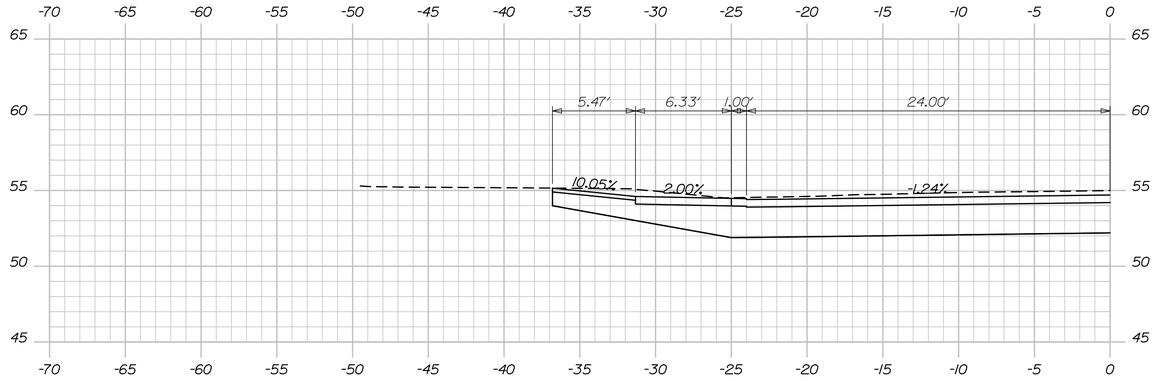
SHEET NUMBER

56

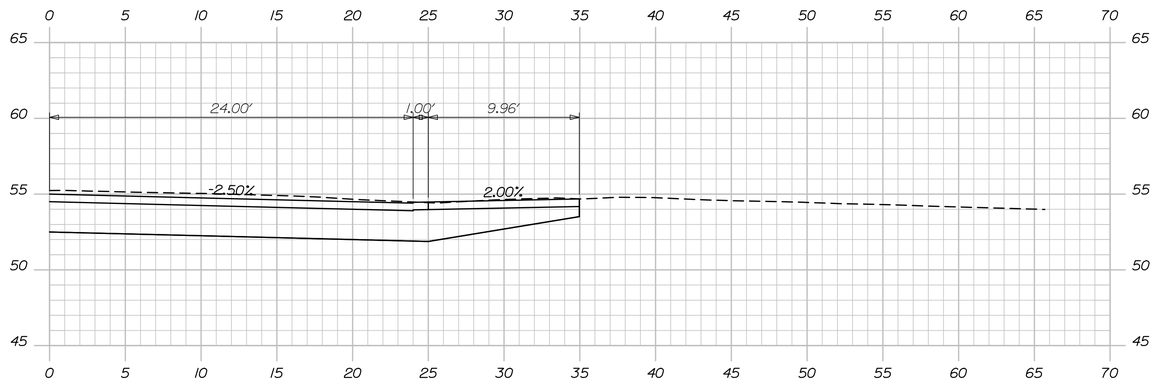
OF 67



21+95.00



21+09.00



20+85.00

Sta. 20+85.17 to Sta. 21+95.00

Username:
Division:
Filename: Xsect.dgn
Date:4/27/2017

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP 2054(300)

PIN
20543.00

HIGHWAY PLANS

PROJ. MANAGER	A. GORNEAU, II	BY	DATE
DESIGN-DETAILED	D.MITHCELL	D.BURGESS	03\10\17
CHECKED-REVIEWED	D.MITHCELL	-	-
DESIGN2-DETAILED2	-	-	-
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

SIGNATURE

P.E. NUMBER

DATE

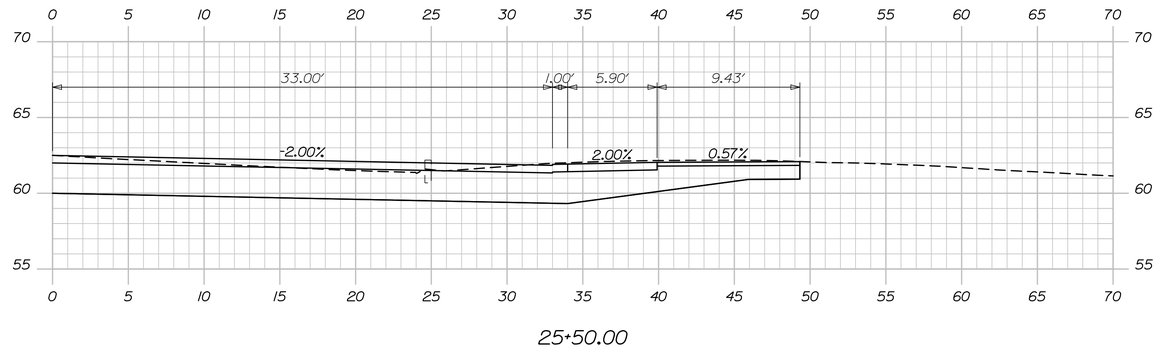
PORTLAND
FORESTAVENUE

DRIVEWAY
CROSS SECTIONS

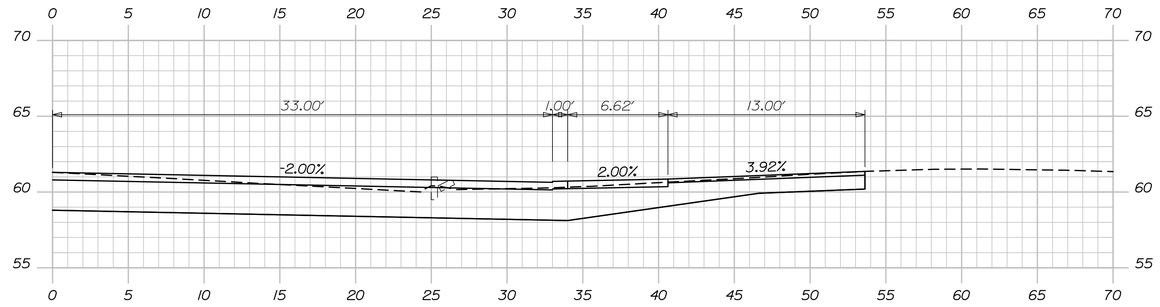
SHEET NUMBER

57

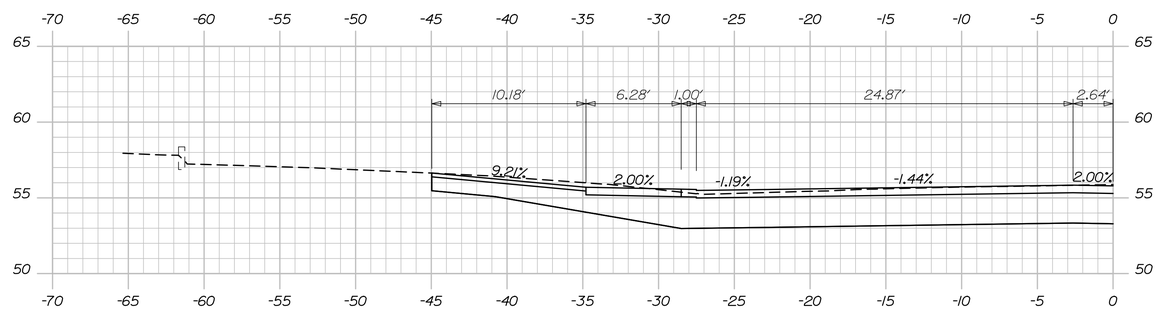
OF 67



25+50.00



25+12.00



23+15.00

Sta. 23+15.00 to Sta. 25+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP 2054(300)

PIN
20543.00

HIGHWAY PLANS

PROJ. MANAGER	A. GORNEAU, II	BY	DATE
DESIGN-DETAILED	D.MITHCELL	D.BURGESS	03\10\17
CHECKED-REVIEWED	-	-	-
DESIGN2-DETAILED2	-	-	-
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

SIGNATURE

P.E. NUMBER

DATE

PORTLAND
FOREST AVENUE

DRIVEWAY
CROSS SECTIONS

SHEET NUMBER

58

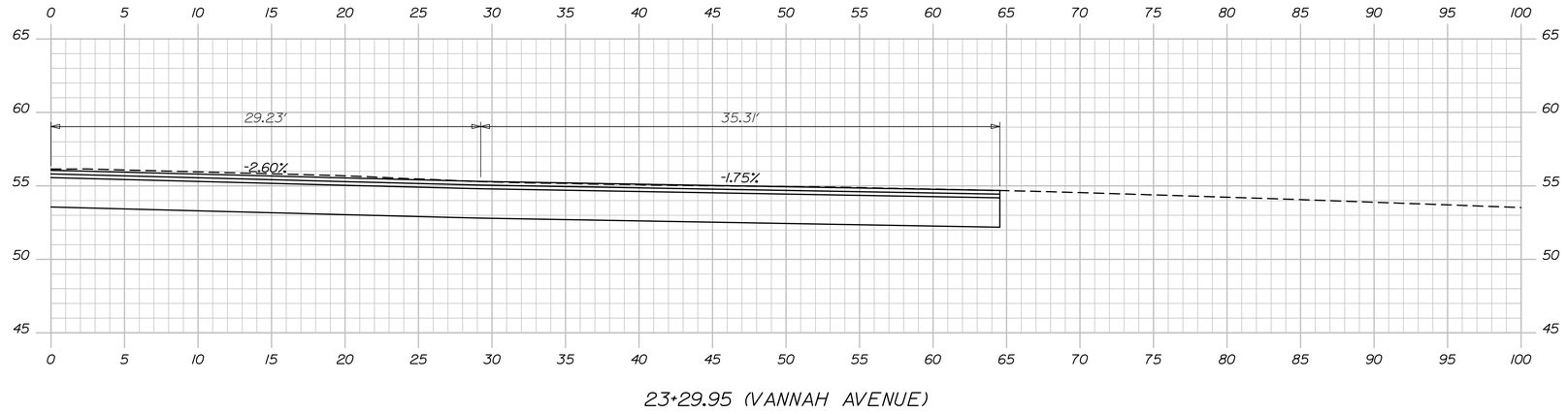
OF 67

Username:

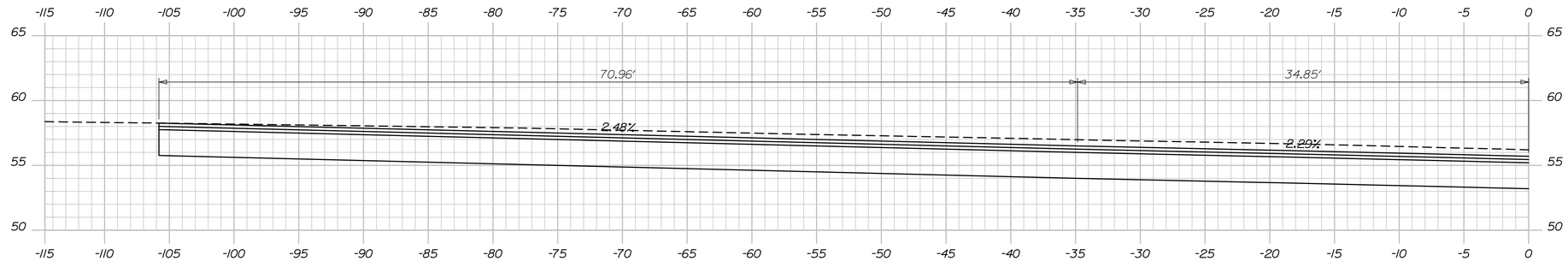
Division:

Filename: Xsect.dgn

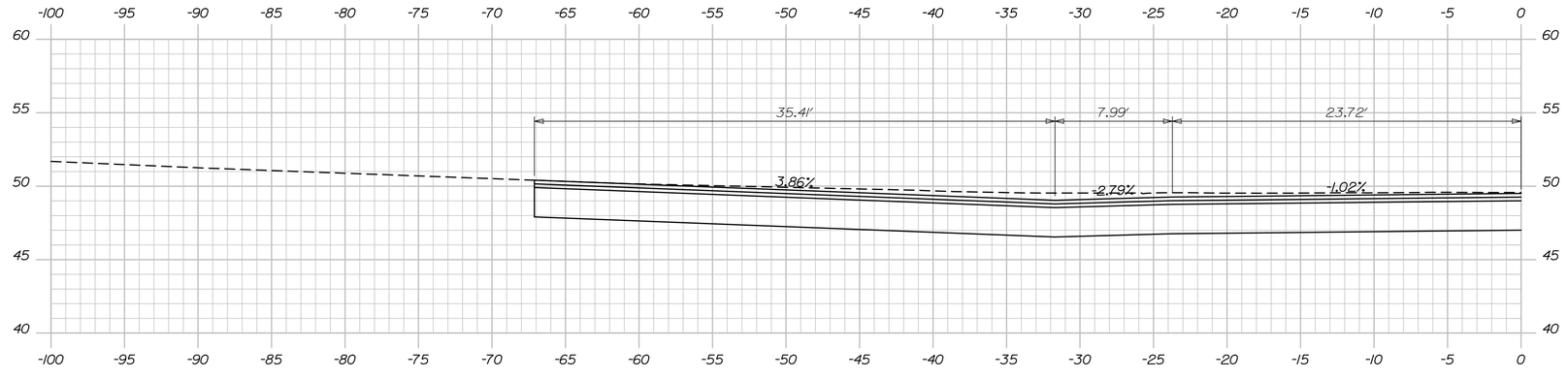
Date:4/27/2017



23+29.95 (VANNAH AVENUE)



19+41.05 (WOODFORD STREET)



15+82.71 (REVERE STREET)

Sta. 15+82.71 to Sta. 23+29.95

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP 2054(300)

PIN
20543.00

HIGHWAY PLANS

PROJ. MANAGER	A. GORNEAU, II	BY	DATE	
DESIGN-DETAILED	D.MITHCELL	D.BURGESS	03\10\17	SIGNATURE
CHECKED-REVIEWED	D.MITHCELL	-	-	-
DESIGN2-DETAILED2	-	-	-	P.E. NUMBER
DESIGN3-DETAILED3	-	-	-	-
REVISIONS 1	-	-	-	-
REVISIONS 2	-	-	-	-
REVISIONS 3	-	-	-	DATE
REVISIONS 4	-	-	-	-
FIELD CHANGES	-	-	-	-

PORTLAND
FOREST AVENUE

SIDE ROAD
CROSS SECTIONS

SHEET NUMBER

59

OF 67

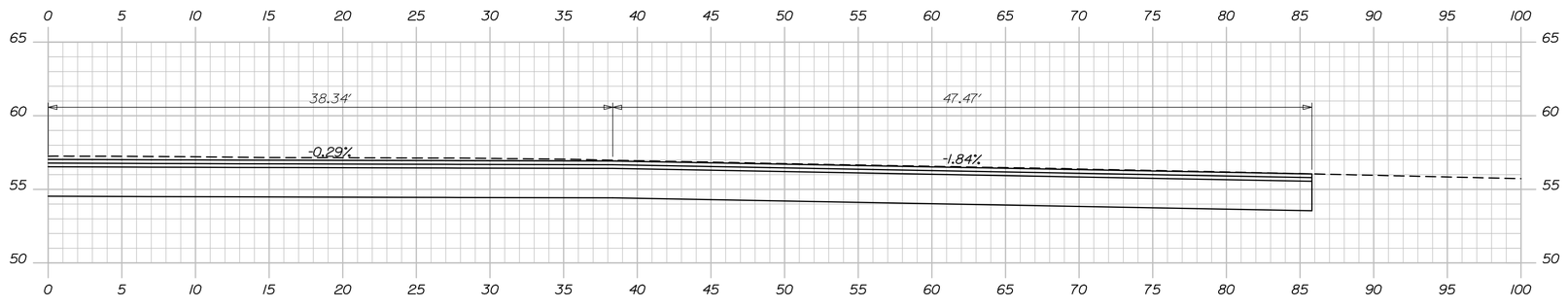
Date:4/27/2017

Username:

Division:

Filename: Xsect.dgn

Filename: Xsect.dgn Division: Username: Date:4/27/2017



23+83.96 (OCEAN AVENUE)

PROJ. MANAGER	A. GORNEAU, II	BY	DATE
DESIGN-DETAILED	D.MITHCELL	D.BURGESS	03\10\17
CHECKED-REVIEWED	-	-	-
DESIGN2-DETAILED2	-	-	-
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP 2054(300)

PIN
20543.00

HIGHWAY PLANS

PORTLAND
FOREST AVENUE

SIDE ROAD
CROSS SECTIONS

SIGNATURE

P.E. NUMBER

DATE

SHEET NUMBER

60

OF 67

Sta. 23+83.96 to Sta. 23+83.96

Date:4/27/2017
Username:
Division:
Filename: 061_LSPlan_01.dgn

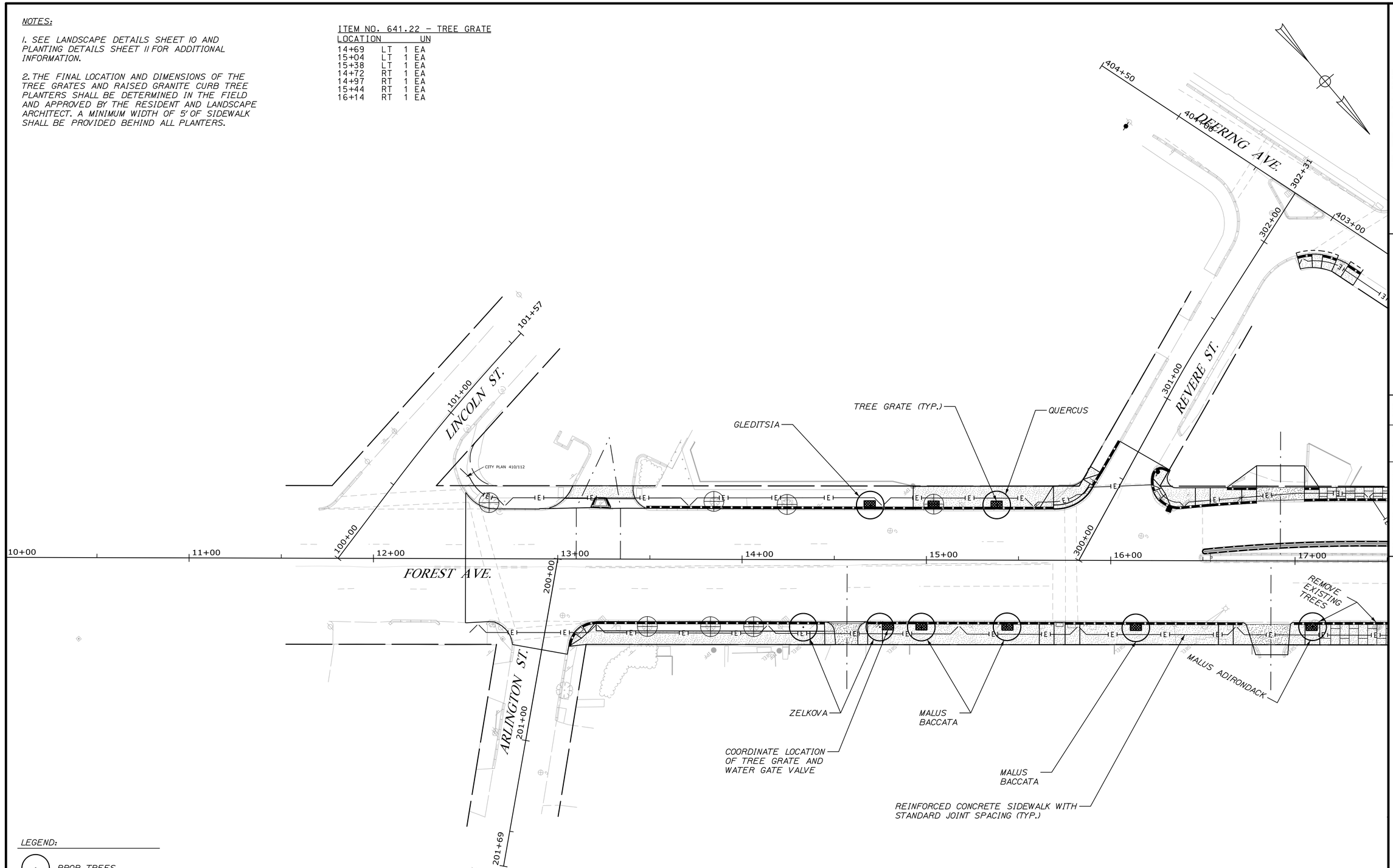
NOTES:

1. SEE LANDSCAPE DETAILS SHEET 10 AND PLANTING DETAILS SHEET 11 FOR ADDITIONAL INFORMATION.

2. THE FINAL LOCATION AND DIMENSIONS OF THE TREE GRATES AND RAISED GRANITE CURB TREE PLANTERS SHALL BE DETERMINED IN THE FIELD AND APPROVED BY THE RESIDENT AND LANDSCAPE ARCHITECT. A MINIMUM WIDTH OF 5' OF SIDEWALK SHALL BE PROVIDED BEHIND ALL PLANTERS.

ITEM NO. 641.22 - TREE GRATE

LOCATION		UN
14+69	LT	1 EA
15+04	LT	1 EA
15+38	LT	1 EA
14+72	RT	1 EA
14+97	RT	1 EA
15+44	RT	1 EA
16+14	RT	1 EA



LEGEND:

- PROP TREES
- EX TREES TO REMAIN
- GC = 6" RAISED GRANITE CURB TREE PLANTER
- PROP TREE GRATE

PLAN

25 0 25 50

Scale of Feet

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN 20543.00

WIN 20543.00 HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER: ANGELE GORMEAU, II		
DESIGN-DETAILED	D.MITCHELL	03\10\17
CHECKED-REVIEWED	D.BURGESS	-
DESIGN2-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

SIGNATURE

P.E. NUMBER

DATE

PORTLAND
FOREST AVENUE

LANDSCAPING PLAN

SHEET NUMBER

61

OF 67

Date:4/27/2017

Username:

Division:

Filename: 062_LSPlan_02.dgn

ITEM NO. 641.22 - TREE GRATE		
LOCATION		UN
17+09	RT	1 EA
17+79	RT	1 EA
23+98	RT	1 EA

NOTES:

1. SEE LANDSCAPE DETAILS SHEET 10 AND PLANTING DETAILS SHEET 11 FOR ADDITIONAL INFORMATION.

2. STA. 402+50 RT AND LT TO WOODFORDS INTERSECTION, AND STA. 17+00 RT AND LT TO WOODFORDS INTERSECTION; CONCRETE SIDEWALK SHALL HAVE ALTERNATE JOINT SPACING AND PATTERNS, SEE DETAILS.

REVERE ST.

DEERING AVE.

WOODFORD ST.

SAUNDERS ST.

FOREST AVE.

VANNAH AVE.

OCEAN AVE.

REINFORCED CONCRETE SIDEWALK WITH SPECIAL JOINT SPACING (TYP.)

SEE SHEET 63

SEE SHEET 64

MALUS SPRING

4'x24' GC TREE PLANTER

REMOVE EXISTING TREES

ZELKOVA

MALUS ADIRONDACK

ACER

TREE GRATE (TYP.)

LEGEND:

- PROP TREES
- EX TREES TO REMAIN
- GC = 6" RAISED GRANITE CURB TREE PLANTER
- PROP TREE GRATE

PLAN

25 0 25 50

Scale of Feet

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN 20543.00

WIN 20543.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER ANGELE GORNEAU, II		
DESIGN-DETAILED	D.MITCHELL	03\10\17
CHECKED-REVIEWED	D.BURGESS	-
DESIGN2-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

SIGNATURE

P.E. NUMBER

DATE

PORTLAND
FOREST AVENUE

LANDSCAPING PLAN

SHEET NUMBER

62

OF 67

Username:

Division:

Filename: 063_LSPlan_03.dgn

Date:4/27/2017

NOTES:

1. SEE CONSTRUCTION NOTES SHEET FOR BOLLARD LOCATIONS.

2. SEE GEOMETRIC CURB LAYOUT SEETS FOR CURBING LAYOUT.

5.00' (TYP.)

2' MIN. WIDTH EDGE TO JOINT (TYP.)

GRANITE PAVER AND CONCRETE SIDEWALK INTERFACE (SEE LANDSCAPE DETAILS)

BOLLARD (TYP.) (SEE LANDSCAPE DETAILS)

401+00

3' RADIUS BY 1' WIDE GRANITE PAVER BAND (9 EQUAL SEGMENTS)

2' RADIUS GRANITE MEDALLION

11.39'

6.00'

5.00' (TYP.)

1'x1' GRANITE PAVER (TYP.)

2'x1' GRANITE PAVER (TYP.)

LEGEND:

PROPOSED TREE

GC = 6" RAISED GRANITE CURB TREE PLANTER

18+00

PLAN

5 0 5 10

Scale of Feet

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN 20543.00

WIN 20543.00 HIGHWAY PLANS

PROJ. MANAGER	AMBELE GORNEAU, II	BY	DATE
DESIGN-DETAILED	D.MITCHELL	D.BURGESS	03\10\17
CHECKED-REVIEWED	-	-	-
DESIGN2-DETAILED2	-	-	-
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

SIGNATURE

P.E. NUMBER

DATE

PORTLAND
FOREST AVENUE

LANDSCAPING DETAILS

SHEET NUMBER

63

OF 67

NOTES:

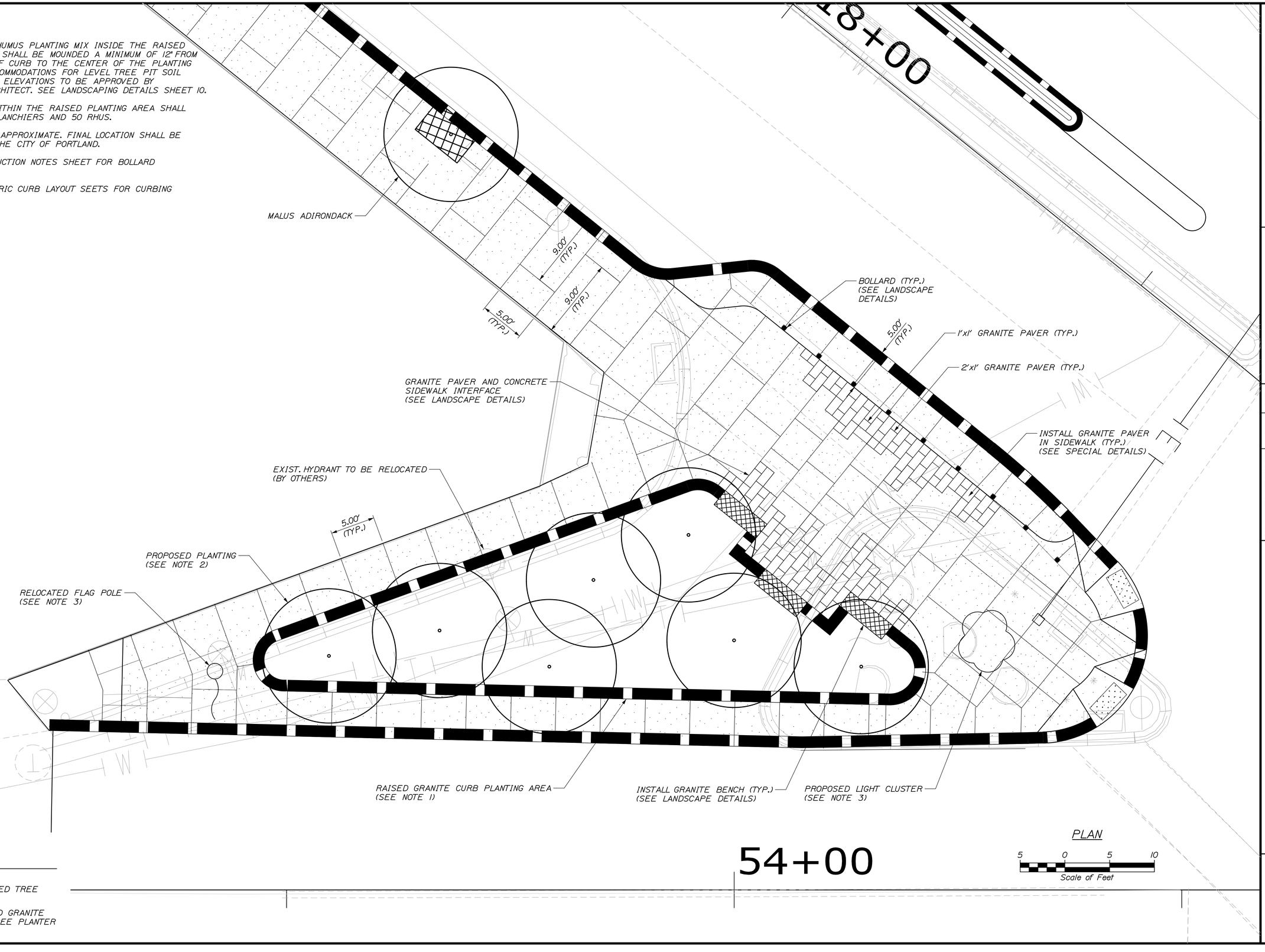
1. 60/40 SUPERHUMUS PLANTING MIX INSIDE THE RAISED PLANTING AREA SHALL BE MOUNDED A MINIMUM OF 12" FROM INSIDE FACE OF CURB TO THE CENTER OF THE PLANTING AREA WITH ACCOMMODATIONS FOR LEVEL TREE PIT SOIL SAUCERS. FINAL ELEVATIONS TO BE APPROVED BY LANDSCAPE ARCHITECT. SEE LANDSCAPING DETAILS SHEET 10.

2. PLANTINGS WITHIN THE RAISED PLANTING AREA SHALL INCLUDE 7 AMELANCHIERS AND 50 RHUS.

3. LOCATION IS APPROXIMATE. FINAL LOCATION SHALL BE APPROVED BY THE CITY OF PORTLAND.

4. SEE CONSTRUCTION NOTES SHEET FOR BOLLARD LOCATIONS.

5. SEE GEOMETRIC CURB LAYOUT SEETS FOR CURBING LAYOUT.



PLAN

5 0 5 10

Scale of Feet

LEGEND:

PROPOSED TREE

GC = 6" RAISED GRANITE CURB TREE PLANTER

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WIN 20543.00

WIN 20543.00 HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER ABELE GORNEAU, II		
DESIGN-DETAILED	D.BURGESS	03\10\17
CHECKED-REVIEWED	D.MITCHELL	-
DESIGN2-DETAILED2		-
DESIGN3-DETAILED3		-
REVISIONS 1		-
REVISIONS 2		-
REVISIONS 3		-
REVISIONS 4		-
FIELD CHANGES		-

SIGNATURE

P.E. NUMBER

DATE

PORTLAND
FOREST AVENUE

LANDSCAPING DETAILS

SHEET NUMBER

64

OF 67

Filename: 064_LSPlan_04.dgn Division: Username: Date:4/27/2017

Filename: ...\00\ROW\MSTA\065_RWPLAN1.dgn   Division: ROW   Username: Guy.Ladd   Date:5/18/2017

PLAN LEGEND

Town, County, State; Approx. Property Lines (P.L.); Existing Right of Way; Limits of Wrought Portion (L.O.W.P.); Control Of Access (C.O.A.); New Right of Way; New Easement; New Temporary Rights; New R/W Within Existing R/W

New R/W Along Existing R/W; Building; Clearing Limit Line (CLL); Trees (Conifer, Deciduous); Tree Line; Bush Line; Water Edge; Ledge; Rock/Boulder; Flag Pole; Fence (Chain Link, Barb Wire, Stockade); Sign; Well; Mailbox

	Existing	Proposed
Sanitary Sewer		
Telephone Line	T	T
Electric Line	E	E
Water Line	W	W
Underdrain Line		
Gas Line	G	G
Guardrail		
Culvert		

	Existing	Proposed
Traveled Way		
Ditch		
Catch Basin		
Manhole		
Sewer Manhole		
Utility Pole		
Fire Hydrant		
Curbing		

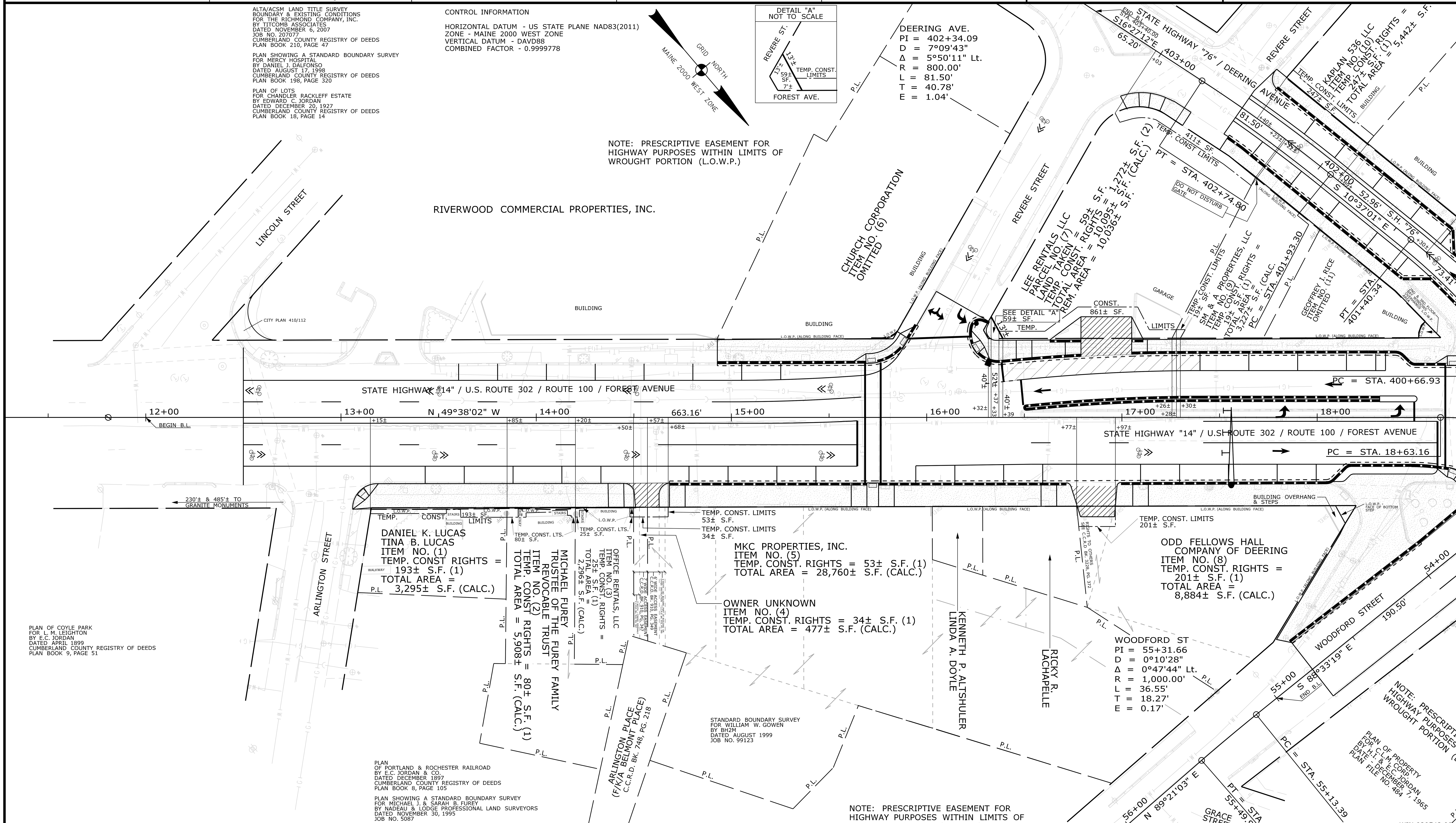
Cut Line (C); Fill Line (F); Stonewall; Retaining Wall; Baseline (10+00, 11+00, 12+00); Monument; Traverse Point; Iron Rod Found (IRF); Pipe Found (IPF); Replacement Pin Set; State Highway = S.H.; State Aid Highway = S.A.H.

STATE OF MAINE
REGISTRY OF DEEDS

COUNTY ____
RECEIVED ____,
at ____h____m____M and recorded in
Plan Book ____, Page ____
Attest: ____
REGISTER

THIS PLAN WAS PREPARED IN CONNECTION WITH THE DEPARTMENT'S ACQUISITION OF REAL PROPERTY FOR TRANSPORTATION PURPOSES. IT CANNOT BE USED TO ESTABLISH LEGAL BOUNDARIES BETWEEN ABUTTING PROPERTY OWNERS.

25 0 25 50 75 100



ALTA/ACSM LAND TITLE SURVEY
BOUNDARY & EXISTING CONDITIONS
FOR THE RICHMOND COMPANY, INC.
BY TITCOMB ASSOCIATES
DATED NOVEMBER 6, 2007
JOB NO. 207077
CUMBERLAND COUNTY REGISTRY OF DEEDS
PLAN BOOK 210, PAGE 47
PLAN SHOWING A STANDARD BOUNDARY SURVEY
FOR MERCY HOSPITAL
BY DANIEL J. DALFONSO
DATED AUGUST 17, 1998
CUMBERLAND COUNTY REGISTRY OF DEEDS
PLAN BOOK 198, PAGE 320
PLAN OF LOTS
FOR CHANDLER RACKLEFF ESTATE
BY EDWARD C. JORDAN
DATED DECEMBER 20, 1927
CUMBERLAND COUNTY REGISTRY OF DEEDS
PLAN BOOK 18, PAGE 14
CONTROL INFORMATION
HORIZONTAL DATUM - US STATE PLANE NAD83(2011)
ZONE - MAINE 2000 WEST ZONE
VERTICAL DATUM - DAVD88
COMBINED FACTOR - 0.9999778
GRID NORTH
MAINE 2000 WEST ZONE
DETAIL "A"
NOT TO SCALE
REVERE ST.
13±
59± SF.
7±
TEMP. CONST. LIMITS
FOREST AVE.
DEERING AVE.
PI = 402+34.09
D = 7°09'43"
Δ = 5°50'11" Lt.
R = 800.00'
L = 81.50'
T = 40.78'
E = 1.04'
NOTE: PRESCRIPTIVE EASEMENT FOR HIGHWAY PURPOSES WITHIN LIMITS OF WROUGHT PORTION (L.O.W.P.)
RIVERWOOD COMMERCIAL PROPERTIES, INC.
LINCOLN STREET
CHURCH CORPORATION
ITEM NO. (6)
OMITTED
REVERE STREET
STATE HIGHWAY "76" / DEERING AVENUE
REVERE STREET
KAPLAN 536 LLC
ITEM NO. (10)
TEMP. CONST. RIGHTS =
247± S.F. (1)
TOTAL AREA = 5,442± S.F.
TEMP. CONST. LIMITS
247± S.F.
S16°21'12"E
65.20'
403+00
81.50'
411± SF.
TEMP. CONST. LIMITS
PT = STA. 402+74.80
DO NOT DISTURB GATE
402+00
52.96' S.H. "76"
S 10°37'01" E
73.41'
LEE RENTALS LLC
PARCEL NO. (7)
LAND TAKEN = 59± S.F.
TEMP. CONST. RIGHTS = 1,272± S.F. (2)
TOTAL AREA = 10,095± S.F. (CALC.)
REM. AREA = 10,036± S.F.
SM & NG PROPERTIES, LLC
ITEM NO. (9)
TEMP. CONST. RIGHTS =
19± S.F. (1)
TOTAL AREA =
3,227± S.F. (CALC.)
TEMP. CONST. LIMITS
19± SF.
PC = STA. 401+93.30
GEOFFREY J. RICE
ITEM NO. (11)
OMITTED
PT = STA. 401+40.34
GARAGE
BUILDING
SEE DETAIL "A"
59± SF.
TEMP.
CONST.
861± SF.
LIMITS
CITY PLAN 410/112
BUILDING
L.O.W.P. (ALONG BUILDING FACE)
STATE HIGHWAY "14" / U.S. ROUTE 302 / ROUTE 100 / FOREST AVENUE
12+00
BEGIN B.L.
13+00
N 49°38'02" W
14+00
663.16'
15+00
16+00
17+00
18+00
PC = STA. 400+66.93
PC = STA. 18+63.16
230'± & 485'± TO GRANITE MONUMENTS
ARLINGTON STREET
DANIEL K. LUCAS
TINA B. LUCAS
ITEM NO. (1)
TEMP. CONST RIGHTS =
193± S.F. (1)
TOTAL AREA =
3,295± S.F. (CALC.)
TEMP. CONST. 193± SF. LIMITS
MICHAEL FUREY
TRUSTEE OF THE FUREY FAMILY
REVOCABLE TRUST
ITEM NO. (2)
TEMP. CONST RIGHTS = 80± S.F. (1)
TOTAL AREA = 5,908± S.F. (CALC.)
TEMP. CONST. LTS. 80± S.F.
OFFICE RENTALS, LLC
ITEM NO. (3)
TEMP. CONST. RIGHTS =
25± S.F. (1)
TOTAL AREA =
2,296± S.F. (CALC.)
TEMP. CONST. LTS. 25± S.F.
TEMP. CONST. LIMITS
53± S.F.
TEMP. CONST. LIMITS
34± S.F.
MKC PROPERTIES, INC.
ITEM NO. (5)
TEMP. CONST. RIGHTS = 53± S.F. (1)
TOTAL AREA = 28,760± S.F. (CALC.)
OWNER UNKNOWN
ITEM NO. (4)
TEMP. CONST. RIGHTS = 34± S.F. (1)
TOTAL AREA = 477± S.F. (CALC.)
KENNETH P. ALTSHULER
LINDA A. DOYLE
RICKY R. LACHAPELLE
TEMP. CONST. LIMITS
201± S.F.
ODD FELLOWS HALL
COMPANY OF DEERING
ITEM NO. (8)
TEMP. CONST. RIGHTS =
201± S.F. (1)
TOTAL AREA =
8,884± S.F. (CALC.)
BUILDING OVERHANG & STEPS
WOODFORD STREET
54+00
190.50'
WOODFORD ST
PI = 55+31.66
D = 0°10'28"
Δ = 0°47'44" Lt.
R = 1,000.00'
L = 36.55'
T = 18.27'
E = 0.17'
S 88°33'19" E
55+00
END B.L.
PC = STA. 55+13.39
PT = STA. 55+49.93
56+00
N 89°21'03" E
GRACE STREET
NOTE: PRESCRIPTIVE EASEMENT FOR HIGHWAY PURPOSES WITHIN LIMITS OF WROUGHT PORTION (L.O.W.P.)
PLAN OF PROPERTY
FOR C.H. M CO.
BY E.C. JORDAN
DATE: DECEMBER 1, 1965
PLAN FILE NO. 484
PLAN OF COYLE PARK
FOR L. M. LEIGHTON
BY E.C. JORDAN
DATED APRIL 1899
CUMBERLAND COUNTY REGISTRY OF DEEDS
PLAN BOOK 9, PAGE 51
ARLINGTON PLACE
(F/K/A BELMONT PLACE)
C.C.R.D. BK. 748, PG. 218
STANDARD BOUNDARY SURVEY
FOR WILLIAM W. GOWEN
BY BH2M
DATED AUGUST 1999
JOB NO. 99123
PLAN
OF PORTLAND & ROCHESTER RAILROAD
BY E.C. JORDAN & CO.
DATED DECEMBER 1897
CUMBERLAND COUNTY REGISTRY OF DEEDS
PLAN BOOK 8, PAGE 105
PLAN SHOWING A STANDARD BOUNDARY SURVEY
FOR MICHAEL J. & SARAH B. FUREY
BY NADEAU & LODGE PROFESSIONAL LAND SURVEYORS
DATED NOVEMBER 30, 1995
JOB NO. 5087
NOTE: PRESCRIPTIVE EASEMENT FOR HIGHWAY PURPOSES WITHIN LIMITS OF WROUGHT PORTION (L.O.W.P.)
P.L.
WIN 020543.00

ITEM	TECH	CHECKED
EXISTING CONDITION PLAN	G.L.L.	C.W.K.
FINAL RIGHT OF WAY	G.L.L.	G.L.L.
AREAS	G.L.L.	

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016 - 207-624-3460
PORTLAND
RIGHT OF WAY MAP

NO.	DATE	REVISIONS DESCRIPTION	BY

PLAN FILED IN PLAN BOOK		PAGE	COUNTY RECORD			
NO.	GRANTOR		INSTRUMENT	DATE	BOOK	PAGE
			COND.	4/24/17	33958	256

DAVID BERNHARDT
COMMISSIONER
JOYCE NOEL TAYLOR
CHIEF ENGINEER
DATE

STATE HIGHWAY "14"
U.S. ROUTE 302 / FOREST AVENUE
PORTLAND CUMBERLAND COUNTY
FEDERAL AID PROJECT NO. STP-2054(300)

FEBRUARY 2017 | SCALE 1" = 25' | RIGHT-OF-WAY MAP SHEET 1 OF 3 | D.O.T. FILE NO. 3-618

SHEET NUMBER
65
OF 67

Date:5/18/2017 Username: Guy.Ladd Division: ROW Filename: ...\00\ROW\MSTA\066_RWPLAN2.dgn

PLAN LEGEND

Town, County, State — P.L. | Approx. Property Lines | Existing Right of Way | Limits of Wrought Portion — L.O.W.P. | Control Of Access — C.O.A. | New Right of Way | New Easement | New Temporary Rights | New R/W Within Existing R/W

New R/W Along Existing R/W | Building | Clearing Limit Line — CLL | Trees: Conifer, Deciduous | Tree Line | Bush Line | Water Edge | Ledge | Rock/Boulder | Flag Pole | Fence: Chain Link, Barb Wire, Stockade | Sign | Well | Mailbox

	Existing	Proposed
Sanitary Sewer		
Telephone Line	T	T
Electric Line	E	E
Water Line	W	W
Underdrain Line		
Gas Line	G	G
Guardrail		
Culvert		

	Existing	Proposed
Traveled Way		
Ditch		
Catch Basin		
Manhole		
Sewer Manhole		
Utlity Pole		
Fire Hydrant		
Curbing		

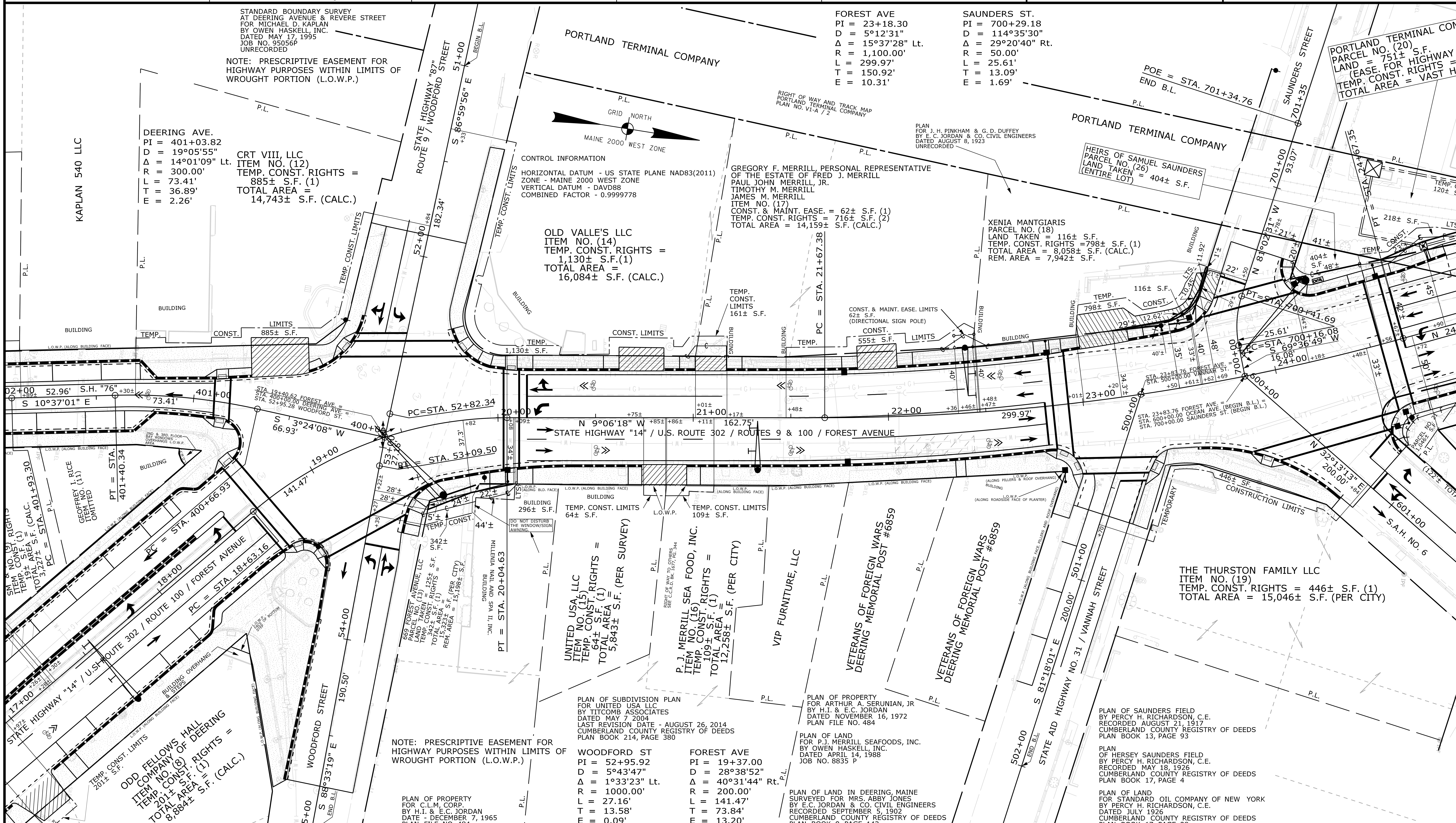
Cut Line — C | Fill Line — F | Stonewall | Retaining Wall | Baseline 10+00, 11+00, 12+00 | Monument | Traverse Point | Iron Rod Found ● IRF | Pipe Found ● IPF | Replacement Pin Set | State Highway = S.H. | State Aid Highway = S.A.H.

STATE OF MAINE
REGISTRY OF DEEDS

COUNTY ______
RECEIVED ______
at ____h____m____M and recorded in
Plan Book ______, Page ______
Attest: ______
REGISTER

THIS PLAN WAS PREPARED IN CONNECTION WITH THE DEPARTMENT'S ACQUISITION OF REAL PROPERTY FOR TRANSPORTATION PURPOSES. IT CANNOT BE USED TO ESTABLISH LEGAL BOUNDARIES BETWEEN ABUTTING PROPERTY OWNERS.

Scale: 25 0 25 50 75 100



STANDARD BOUNDARY SURVEY
AT DEERING AVENUE & REVERE STREET
FOR MICHAEL D. KAPLAN
BY OWEN HASKELL, INC.
DATED MAY 17, 1995
JOB NO. 95056P
UNRECORDED
NOTE: PRESCRIPTIVE EASEMENT FOR HIGHWAY PURPOSES WITHIN LIMITS OF WROUGHT PORTION (L.O.W.P.)
PORTLAND TERMINAL COMPANY
KAPLAN 540 LLC
DEERING AVE.
PI = 401+03.82
D = 19°05'55"
Δ = 14°01'09" Lt.
R = 300.00'
L = 73.41'
T = 36.89'
E = 2.26'
CRT VIII, LLC
ITEM NO. (12)
TEMP. CONST. RIGHTS = 885± S.F. (1)
TOTAL AREA = 14,743± S.F. (CALC.)
STATE HIGHWAY "87" ROUTE 9 / WOODFORD STREET
S 86°59'56" E
GRID NORTH
MAINE 2000 WEST ZONE
CONTROL INFORMATION
HORIZONTAL DATUM - US STATE PLANE NAD83(2011)
ZONE - MAINE 2000 WEST ZONE
VERTICAL DATUM - DAVD88
COMBINED FACTOR - 0.9999778
OLD VALLE'S LLC
ITEM NO. (14)
TEMP. CONST. RIGHTS = 1,130± S.F.(1)
TOTAL AREA = 16,084± S.F. (CALC.)
RIGHT OF WAY AND TRACK MAP PORTLAND TERMINAL COMPANY PLAN NO. V1-A / 2
GREGORY F. MERRILL, PERSONAL REPRESENTATIVE OF THE ESTATE OF FRED J. MERRILL
PAUL JOHN MERRILL, JR.
TIMOTHY M. MERRILL
JAMES M. MERRILL
ITEM NO. (17)
CONST. & MAINT. EASE. = 62± S.F. (1)
TEMP. CONST. RIGHTS = 716± S.F. (2)
TOTAL AREA = 14,159± S.F. (CALC.)
FOREST AVE
PI = 23+18.30
D = 5°12'31"
Δ = 15°37'28" Lt.
R = 1,100.00'
L = 299.97'
T = 150.92'
E = 10.31'
SAUNDERS ST.
PI = 700+29.18
D = 114°35'30"
Δ = 29°20'40" Rt.
R = 50.00'
L = 25.61'
T = 13.09'
E = 1.69'
PLAN FOR J. H. PINKHAM & G. D. DUFFEY BY E. C. JORDAN & CO. CIVIL ENGINEERS DATED AUGUST 8, 1923 UNRECORDED
POE = STA. 701+34.76
END B.L.
PORTLAND TERMINAL COMPANY
HEIRS OF SAMUEL SAUNDERS
PARCEL NO. (26)
LAND TAKEN = 404± S.F. (ENTIRE LOT)
XENIA MANTGIARIS
PARCEL NO. (18)
LAND TAKEN = 116± S.F.
TEMP. CONST. RIGHTS =798± S.F. (1)
TOTAL AREA = 8,058± S.F. (CALC.)
REM. AREA = 7,942± S.F.
SAUNDERS STREET
PORTLAND TERMINAL COMPANY
PARCEL NO. (20)
LAND = 751± S.F.
(EASE. FOR HIGHWAY PU...
TEMP. CONST. RIGHTS = ...
TOTAL AREA = VAST HOL...
CONST. & MAINT. EASE. LIMITS 62± S.F. (DIRECTIONAL SIGN POLE)
PC = STA. 21+67.38
PC=STA. 52+82.34
PT = STA. 53+09.50
N 9°06'18" W
162.75'
299.97'
STATE HIGHWAY "14" / U.S. ROUTE 302 / ROUTES 9 & 100 / FOREST AVENUE
S 10°37'01" E
52.96'
73.41'
S 3°24'08" W
66.93'
141.47
PC=STA 700+16.08
S 69°36'49" W
PT=STA 700+41.69
N 81°02'31" W
N 24°4...
N 32°13'13" E
200.00'
STA. 23+83.76 FOREST AVE. = STA. 500+00.00 VANNAH ST.
STA. 23+83.76 FOREST AVE. = STA. 600+00.00 OCEAN AVE. (BEGIN B.L.) = STA. 700+00.00 SAUNDERS ST. (BEGIN B.L.)
S.A.H. NO. 6
PT = STA. 401+40.34
PC = STA. 400+66.93
GEOFFREY I. RICE ITEM NO. (11) OMITTED
PC = STA. 18+63.16
STATE HIGHWAY "14" / U.S. ROUTE 302 / ROUTE 100 / FOREST AVENUE
PT = STA. 20+04.63
WOODFORD STREET
190.50'
S 88°33'19" E
ODD FELLOWS HALL COMPANY OF DEERING
ITEM NO. (8)
TEMP. CONST. RIGHTS = 201± S.F. (1)
TOTAL AREA = 8,884± S.F. (CALC.)
669 FOREST AVENUE, LLC
PARCEL NO. (13)
LAND TAKEN = 125± S.F.
TEMP. CONST. RIGHTS = 342± S.F. (1)
TOTAL AREA = 15,323± S.F. (PER CITY)
REM. AREA = 15,198± S.F.
MILLENIA NAIL AND SPA II, INC.
TEMP. CONST. LIMITS 64± S.F.
TEMP. CONST. LIMITS 109± S.F.
UNITED USA, LLC
ITEM NO. (15)
TEMP. CONST. RIGHTS = 64± S.F. (1)
TOTAL AREA = 5,843± S.F. (PER SURVEY)
P. J. MERRILL SEA FOOD, INC.
ITEM NO. (16)
TEMP. CONST. RIGHTS = 109± S.F. (1)
TOTAL AREA = 12,258± S.F. (PER CITY)
VIP FURNITURE, LLC
VETERANS OF FOREIGN WARS DEERING MEMORIAL POST #6859
VETERANS OF FOREIGN WARS DEERING MEMORIAL POST #6859
S 81°18'01" E
200.00'
STATE AID HIGHWAY NO. 31 / VANNAH STREET
THE THURSTON FAMILY LLC
ITEM NO. (19)
TEMP. CONST. RIGHTS = 446± S.F. (1)
TOTAL AREA = 15,046± S.F. (PER CITY)
PLAN OF SUBDIVISION PLAN FOR UNITED USA LLC BY TITCOMB ASSOCIATES DATED MAY 7 2004 LAST REVISION DATE - AUGUST 26, 2014 CUMBERLAND COUNTY REGISTRY OF DEEDS PLAN BOOK 214, PAGE 380
PLAN OF PROPERTY FOR ARTHUR A. SERUNIAN, JR BY H.I. & E.C. JORDAN DATED NOVEMBER 16, 1972 PLAN FILE NO. 484
PLAN OF LAND FOR P.J. MERRILL SEAFOODS, INC. BY OWEN HASKELL, INC. DATED APRIL 14, 1988 JOB NO. 8835 P
PLAN OF LAND IN DEERING, MAINE SURVEYED FOR MRS. ABBY JONES BY E.C. JORDAN & CO. CIVIL ENGINEERS RECORDED SEPTEMBER 5, 1902 CUMBERLAND COUNTY REGISTRY OF DEEDS PLAN BOOK 9, PAGE 143
NOTE: PRESCRIPTIVE EASEMENT FOR HIGHWAY PURPOSES WITHIN LIMITS OF WROUGHT PORTION (L.O.W.P.)
PLAN OF PROPERTY FOR C.L.M, CORP. BY H.I. & E.C. JORDAN DATE - DECEMBER 7, 1965 PLAN FILE NO. 484
WOODFORD ST
PI = 52+95.92
D = 5°43'47"
Δ = 1°33'23" Lt.
R = 1000.00'
L = 27.16'
T = 13.58'
E = 0.09'
FOREST AVE
PI = 19+37.00
D = 28°38'52"
Δ = 40°31'44" Rt.
R = 200.00'
L = 141.47'
T = 73.84'
E = 13.20'
PLAN OF SAUNDERS FIELD BY PERCY H. RICHARDSON, C.E. RECORDED AUGUST 21, 1917 CUMBERLAND COUNTY REGISTRY OF DEEDS PLAN BOOK 13, PAGE 93
PLAN OF HERSEY SAUNDERS FIELD BY PERCY H. RICHARDSON, C.E. RECORDED MAY 18, 1926 CUMBERLAND COUNTY REGISTRY OF DEEDS PLAN BOOK 17, PAGE 4
PLAN OF LAND FOR STANDARD OIL COMPANY OF NEW YORK BY PERCY H. RICHARDSON, C.E. DATED JULY 1926 CUMBERLAND COUNTY REGISTRY OF DEEDS PLAN BOOK 17, PAGE 28
WIN 020543.00

ITEM	TECH	CHECKED
EXISTING CONDITION PLAN	G.L.L.	C.W.K.
FINAL RIGHT OF WAY	G.L.L.	G.L.L.
AREAS	G.L.L.	G.L.L.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016 - 207-624-3460
PORTLAND
RIGHT OF WAY MAP

REVISIONS			
NO.	DATE	DESCRIPTION	BY

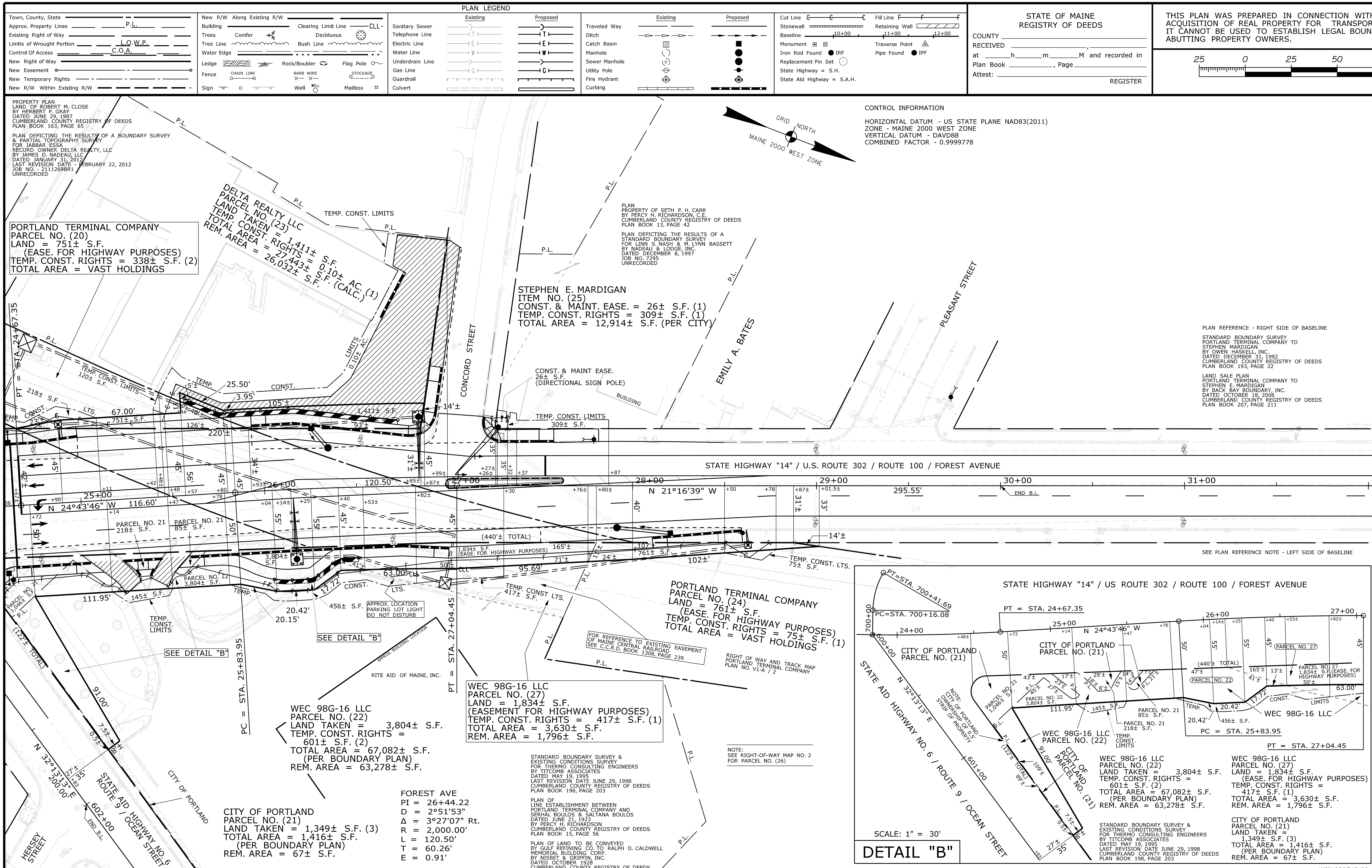
PLAN FILED IN PLAN BOOK		PAGE	COUNTY RECORD			
NO.	GRANTOR		INSTRUMENT	DATE	BOOK	PAGE
			COND.	4/24/17	33958	256

DAVID BERNHARDT
COMMISSIONER
JOYCE NOEL TAYLOR
CHIEF ENGINEER
DATE

STATE HIGHWAY "14"
U.S. ROUTE 302 / FOREST AVENUE
PORTLAND CUMBERLAND COUNTY
FEDERAL AID PROJECT NO. STP-2054(300)

FEBRUARY 2017 | RIGHT-OF-WAY MAP | D.O.T. FILE NO. 3-618
SCALE 1" = 25' | SHEET 2 OF 3

SHEET NUMBER
66
OF 67



REVISIONS			
NO.	DATE	DESCRIPTION	BY

PLAN FILED IN PLAN BOOK PAGE

COUNTY RECORD					
NO.	GRANTOR	INSTRUMENT	DATE	BOOK	PAGE
		COND.	4/24/17	33958	256

DAVID BERNHARDT
COMMISSIONER
JOYCE NOEL TAYLOR
CHIEF ENGINEER
DATE

STATE HIGHWAY "14"
U.S. ROUTE 302 / FOREST AVENUE
PORTLAND CUMBERLAND COUNTY
FEDERAL AID PROJECT NO. STP-2054(300)

FEBRUARY 2017 | SCALE 1" = 25' | RIGHT-OF-WAY MAP SHEET 3 OF 3 | D.O.T. FILE NO. 3-618

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016 - 207-624-3460
PORTLAND
RIGHT OF WAY MAP

ITEM	TECH	CHECKED
EXISTING CONDITION PLAN	G.L.L.	C.W.K.
FINAL RIGHT OF WAY	G.L.L.	G.L.L.
AREAS	G.L.L.	

SHEET NUMBER
67
OF 67

Filename: ...\00\ROW\MSTA\067_RWPLAN3.dgn Division: ROW Username: Guy.Ladd Date:5/18/2017

CITY OF PORTLAND
PUBLIC WORKS DEPARTMENT

CONTRACT DRAWINGS

FOREST AVENUE - WOODFORD CORNER
CSO SEPARATION PROJECT

IN CONJUNCTION WITH:

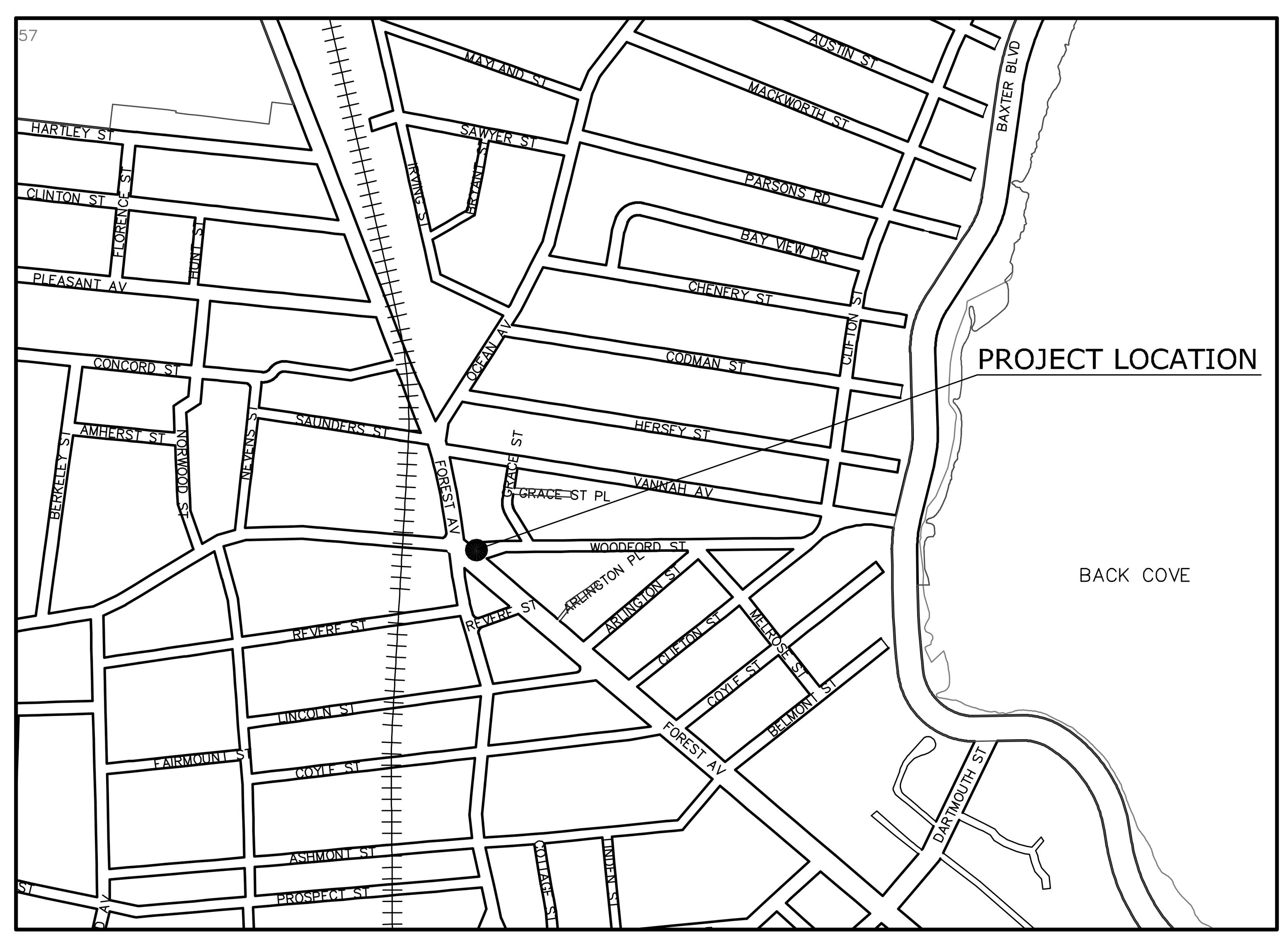
STATE WIN 20543.00
FEDERAL WIN STP-2054(300)

ISSUED FOR BID
APRIL 21, 2017

YEAR
APPROVED
2017

KATHERINE EARLY DATE
CITY ENGINEER/ENGINEER MANAGER

BRAD ROLAND DATE
CITY PROJECT MANAGER

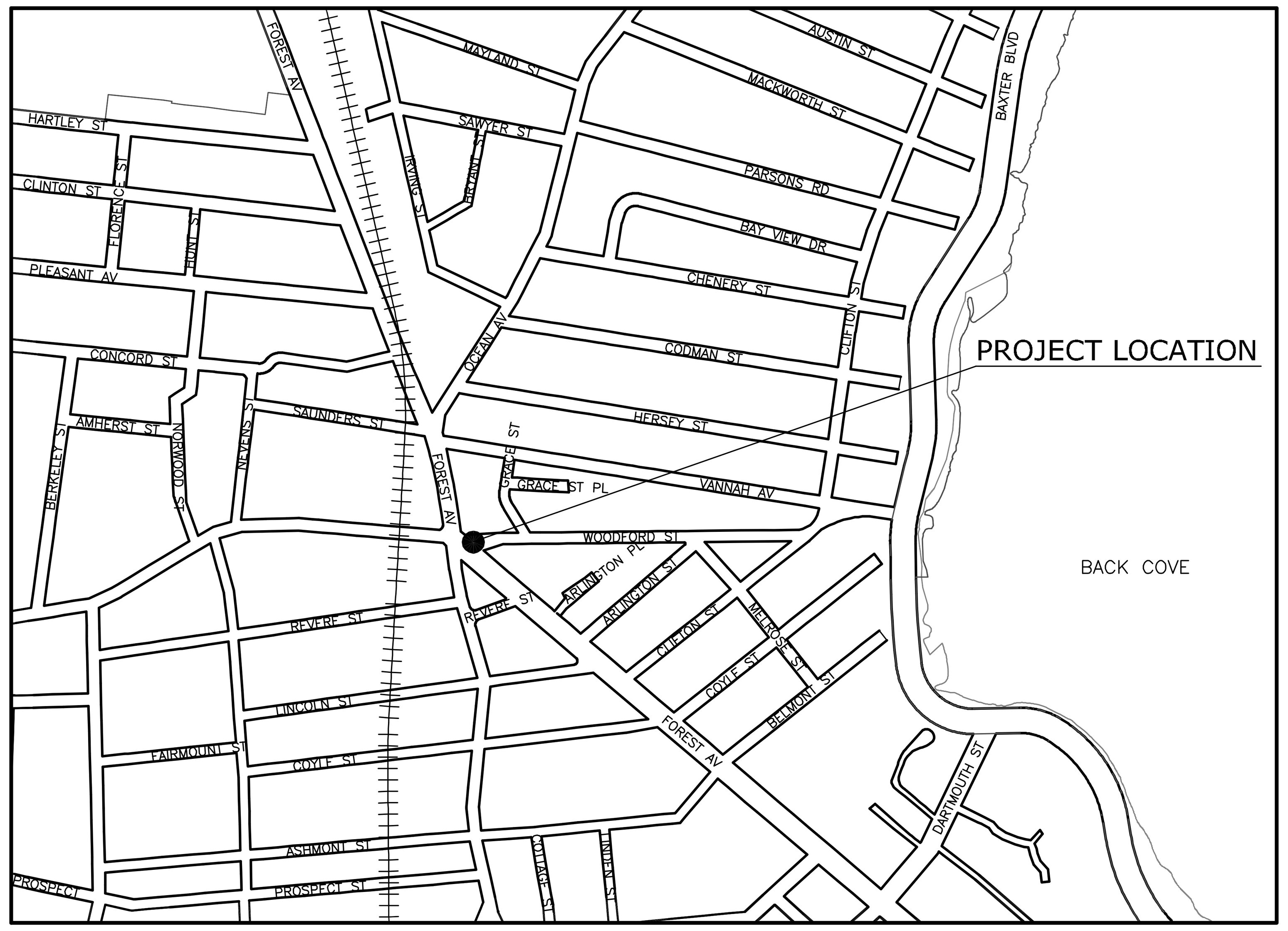


INDEX OF PLANS

SHEET NO.	SHEET TITLE
1	COVER SHEET
2	GENERAL NOTES AND LEGEND
3	EROSION CONTROL NOTES AND PORTLAND WATER DISTRICT NOTES
4	DEMOLITION PLAN FOREST AVENUE
5	DEMOLITION PLAN FOREST AVENUE
6	DEMOLITION PLAN FOREST AVENUE
7	FOREST AVENUE TEMPORARY WATER
8	FOREST AVENUE TEMPORARY WATER
9	FOREST AVENUE TEMPORARY WATER
10	PLAN & PROFILE – WOODFORD STREET STA. 15+50 TO STA. 19+00
11	PLAN – FOREST AVENUE STA. 12+00 TO STA. 18+00
12	PLAN & PROFILE – FOREST AVENUE STA. 18+00 TO STA. 22+75
13	PLAN & PROFILE – FOREST AVENUE STA. 22+75 TO STA. 25+50
14	PLAN & PROFILE – DEERING AVENUE
15	STANDARD CONSTRUCTION DETAILS
16	STANDARD CONSTRUCTION DETAILS
17	PORTLAND WATER DISTRICT DETAILS
18	PORTLAND WATER DISTRICT DETAILS

STATE OF MAINE DANIEL L. RILEY PROFESSIONAL ENGINEER

APRIL 21, 2017



LOCATION MAP

NOT TO SCALE

LEGEND

GENERAL LINE TYPE

- CENTERLINE
- EDGE OF PAVEMENT
- LEDGE PROFILE
- STREET LINE
- SURVEY BASE LINE

EXISTING SYMBOLS		PROPOSED SYMBOLS
UD	UNDERDRAIN	UD
D	STORM DRAIN	
S	SANITARY SEWER	S
CS	COMBINED SEWER	CS
S	HOUSE LATERAL	S
G	GAS LINE	G
W	WATER LINE	W
	CURB	
x	CHAIN LINK FENCE	x
	GUARD RAIL	
	WOOD RAIL FENCE	
	STOCKADE FENCE	
	HYDRAULIC LINE	HL

EXISITING SYMBOLS	PROPOSED SYMBOLS
CATCH BASIN	CATCH BASIN
SEWER MANHOLE	SEWER MANHOLE
DRAIN MANHOLE	DRAIN MANHOLE
UTILITY POLE	UTILITY POLE
LIGHT POLE	LIGHT POLE
WATER GATE OR VALVE	
WATER SHUT OFF	
HYDRANT	HYDRANT
GAS VALVE	
HANDICAP	HANDICAP
HEDGE	HEDGE
SHRUB OR BUSH	SHRUB OR BUSH
DECIDUOUS TREE	DECIDUOUS TREE
CONIFER TREE	CONIFER TREE
PK FOUND	PK SET
DRILL HOLE FOUND	DRILL HOLE SET
MONUMENT FOUND	PROPOSED MONUMENT
HUB FOUND	HUB SET
TEST PIT	
BORING TEST	
S1 = TRAFFIC STOP SIGN	

GENERAL NOTES

1. LOCATIONS OF UTILITIES ARE APPROXIMATE AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO HAVE ALL THE UTILITIES LOCATE THEIR SERVICES PRIOR TO THE START OF CONSTRUCTION. THE LOCATION, TYPE AND SIZE OF EXISTING PIPES, DUCTS, CONDUITS AND OTHER UNDERGROUND UTILITIES AND STRUCTURES SHOWN ON THE DRAWINGS ARE NOT WARRANTED TO BE EXACT NOR IS IT WARRANTED THAT ALL UNDERGROUND UTILITIES AND STRUCTURES ARE SHOWN. INFORMATION SHOWN IS CONSIDERED APPROXIMATE BOTH AS TO SIZE AND LOCATION AND IS INDICATED ON THE DRAWINGS TO GIVE BIDDERS A GENERAL IDEA OF EXISTING CONDITIONS. IT IS UNDERSTOOD AND AGREED THAT THE CONTRACTOR SHALL NOT RELY UPON THESE DRAWINGS FOR SUCH INFORMATION AND SHALL MAKE EXAMINATIONS IN THE FIELD BY VARIOUS AVAILABLE METHODS AND SHALL OBTAIN INFORMATION FROM UTILITY CORPORATIONS AND INDIVIDUALS AS TO THE LOCATION OF ALL SUBSURFACE STRUCTURES, BOTH PUBLIC AND PRIVATE PRIOR TO COMMENCEMENT OF CONSTRUCTION. DEPTH OF SERVICES ARE UNKNOWN AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR. EXCAVATING TEST PITS AS NECESSARY TO VERIFY UTILITY LOCATIONS AND DEPTHS SHALL BE INCIDENTAL TO THIS PROJECT.
2. PRIOR TO THE BEGINNING OF CONSTRUCTION, THE CONTRACTOR SHALL SECURE A STREET OPENING PERMIT FROM THE PORTLAND PUBLIC WORKS DEPARTMENT. NO FEE WILL BE CHARGED FOR THIS PERMIT.
3. PROPERTY MARKERS AND STREET LINE MONUMENTS SHALL BE PROPERLY PROTECTED AND SHALL NOT BE DISTURBED. IF DISTURBED, THEY SHALL BE REPLACED BY A LICENSED SURVEYOR AT THE CONTRACTOR'S EXPENSE.
4. DEMOLITION SHALL BE COMPLETED IN COORDINATION WITH NEW INFRASTRUCTURE.
5. ALL EXISTING CATCH BASINS, MANHOLES, CONNECTIONS, CONDUIT AND PIPING SHALL BE CLEANED AND LEFT IN SATISFACTORY OPERATING CONDITION AFTER CONSTRUCTION HAS BEEN COMPLETED. NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK.
6. ALL LAWN AREAS, WALKWAYS, AND DRIVEWAYS OUTSIDE THE WORK AREA, DAMAGED BY THE CONTRACTOR, SHALL BE REPAIRED BY THE CONTRACTOR AT NO EXPENSE TO THE CITY.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PRESERVATION OF ALL TREES AND SHRUBS ON THE PROJECT WHICH ARE NOT TO BE REMOVED.
8. EXISTING PAVEMENT SHALL BE SAW CUT AND BUTTED TO THE NEW PAVEMENT. NO FEATHERING OF PAVEMENT WILL BE PERMITTED. DRIVEWAY BUTT JOINTS ARE INCIDENTAL TO THE CONTRACT AND SHALL NOT REQUIRE MEASUREMENT.
9. EXISTING DRAINAGE STRUCTURES SHALL NOT BE DISTURBED UNLESS OTHERWISE NOTED IN THE DRAWINGS OR BY THE CITY REPRESENATIVE.
10. BEFORE CONNECTING NEW PIPES TO AN EXISTING SEWER LINE, THE CONTRACTOR SHALL NOTIFY THE SEWER MAINTENANCE DIVISION OR THE CITY OF PORTLAND PUBLIC WORKS DEPARTMENT. NO WORK SHALL BE DONE WITHOUT THEIR APPROVAL.
11. NO ADDITIONAL PAYMENT WILL BE MADE FOR GRADING SIDE SLOPES OF DRIVEWAYS.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY TRENCH PAVEMENT THAT HAS EXPERIENCED EXCESSIVE SETTLEMENT, CRACKING, OR OPENING OF JOINTS. REPAIRS MAY INCLUDE OVERLAY, REMOVAL OF UNACCEPTABLE MATERIALS, COMPLETE REPLACEMENT, JOINT SEALING, OR REBUTTING PAVEMENT AS REQUIRED. THIS WORK MAY BE NECESSARY AFTER THE FINAL ACCEPTANCE OF WORK OR PRIOR TO THE END OF THE ONE YEAR GUARANTEE. THIS WORK SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.
13. THE FINISHED PAVEMENT SURFACE GRADE SHALL MATCH EXISTING GRADE UNLESS NOTED OTHERWISE.
14. ALL MANHOLE FRAMES SHALL BE SUPPLIED WITH H-20 LOADING AND SOLID MANHOLE COVERS. THE RIM ELEVATION OF PROPOSED STORM AND SEWER MANHOLES SHALL BE SET AT FINISHED PAVEMENT SURFACE GRADE. WINTERIZATION WILL BE REQUIRED. SEE STANDARD DETAIL.
15. NEW CATCH BASINS SHALL BE INSTALLED WITH A TYPE A-4 CATCH BASIN INLET STONE INCIDENTAL TO PAY ITEM 604.131. RIM ELEVATIONS FOR CATCH BASINS ARE GIVEN AT THE FACE OF CURB AND TAKE INTO ACCOUNT THE 3" DEPRESSION FROM THE NORMAL GUTTER LINE GRADE AS SHOWN IN THE DETAILS.
16. ON ALL "REMOVE" STRUCTURES, THE CONTRACTOR SHALL REMOVE THE STRUCTURE ENTIRELY. ALL EXISTING GRANITE CATCH BASIN STONES, MANHOLE FRAMES AND COVERS TO BE REMOVED SHALL BE DELIVERED TO THE CITY STOCK YARD AS DIRECTED. REMOVAL OF EXISTING STRUCTURAL CONCRETE, CONCRETE, EXCAVATED STRUCTURES, MANHOLES, CATCH BASINS, MORTARED STONE MASONRY, CONCRETE MASONRY, WOODEN TIMBERS/PILES AND ANY OTHER STRUCTURAL ELEMENTS ENCOUNTERED DURING CONSTRUCTION ARE INCIDENTAL TO THE ASSOCIATED PIPE PAY ITEMS. NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK.
17. REMOVAL OF EXISTING STORM DRAINS, SEWER PIPES OR OTHER PIPE STRUCTURES, BACKFILLING AND ALL ASSOCIATED WORK SHALL BE CONSIDERED INCIDENTAL TO THE COSTS OF CONSTRUCTION. NO EXTRA PAYMENT WILL BE MADE
18. ALL TERMINAL MANHOLES SHALL HAVE BRICK CHANNELS CONSTRUCTED STRAIGHT THROUGH THE MANHOLE.
19. THE CONTRACTOR SHALL PROVIDE ALL LABOR, EQUIPMENT AND MATERIALS AS REQUIRED TO PERFORM THE WORK AS INDICATED ON THE DRAWINGS AND IN THE SPECIFICATIONS. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE APPLICABLE FEDERAL, STATE AND LOCAL CODES.
20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LAYOUT OF ALL PROPOSED WORK AS SHOWN ON THE DRAWINGS (STATIONS AND OFFSETS FOR MANHOLES AND OTHER STRUCTURES ARE SHOWN ON THE DRAWINGS TO THE CENTER OF EACH). ADDITIONALLY, THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL "AS-BUILT" INFORMATION AS REQUIRED IN THE SPECIFICATION
21. THE QUANTITY OF HOUSE AND STORM DRAIN LATERALS INCLUDES A QUANTITY FOR EVERY HOUSE WITHIN PROJECT LIMITS EVEN THOUGH NOT ALL ARE SHOWN ON THE PLANS. THE FINAL DETERMINATION OF HOW MANY ARE INSTALLED WILL BE DETERMINED IN THE FIELD BY ENGINEER.
22. THE EXISTING COLLECTION SYSTEM INCLUDING GRAVITY SEWERS AND STORM DRAINS SHALL REMAIN FULLY OPERATIONAL DURING CONSTRUCTION UNTIL PROJECT IS COMPLETED AND ACCEPTED BY OWNER. THE CONTRACTOR SHALL FULLY COORDINATE CONSTRUCTION ACTIVITIES WITH THE OWNER'S OPERATIONS TO MINIMIZE ADVERSE IMPACTS ON THEIR EXISTING OPERATIONS. THE COST OF ADDITIONAL WORK REQUIRED TO MAINTAIN EXISTING OPERATIONS THROUGHOUT CONSTRUCTION OPERATIONS WILL NOT BE ELIGIBLE FOR PAYMENT AS AN EXTRA UNDER A CHANGE ORDER; RATHER, THESE COSTS WILL BE CONSIDERED AS "INCIDENTAL" TO THE BIDS SUBMITTED FOR THIS CONTRACT. ALSO, THE NECESSITY TO COORDINATE CONSTRUCTION ACTIVITIES WITH OWNER OPERATIONS WILL NOT BE CONSIDERED A VALID OR MERITORIOUS REASON FOR A DELAY CLAIM OR TIME EXTENSION ON THIS PROJECT.
23. THERE MAY BE ONE OR MORE CONTRACTORS PERFORMING WORK IN THE PROJECT AREA. COORDINATION BETWEEN CONTRACTORS IS A PRIMARY RESPONSIBILITY OF EACH CONTRACTOR WITH THE INTENT TO AVOID DELAYS, COMPLICATIONS AND UNDO DISRUPTION OF CONSTRUCTION ACTIVITY.
24. THE CONTRACTOR SHALL MAINTAIN TRAFFIC IN A SAFE MANNER AT ALL TIMES DURING CONSTRUCTION. THE MOST CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) MANUAL FOR BOTH WORK ZONE AND TRAFFIC CONTROL REQUIREMENTS SHALL APPLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CREATING A TRAFFIC CONTROL PLAN IN ACCORDANCE WITH SECTION 652 (PAY ITEM 652.39).
25. EXISTING FACILITIES AND IMPROVEMENTS (I.E. LIGHT POLES, SIGNS, ETC.) SHALL BE REMOVED AND REPLACED OR PROTECTED AS REQUIRED DURING CONSTRUCTION AND SHALL BE CONSIDERED INCIDENTAL TO THE RELATED PAY ITEMS. BRACING OF UTILITY POLES, WHERE REQUIRED, SHALL BE INCIDENTAL TO THE PROJECT.
26. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PRESERVATION OF ALL TREES ON THE PROJECT WHICH ARE NOT CALLED TO BE REMOVED. EQUIPMENT AND MATERIALS SHALL NOT BE STORED OVER THE ROOT ZONE WHICH SHALL BE DEFINED AS THE AREA ENCOMPASSED BY THE DRIPLINE. WHENEVER POSSIBLE, OTHER PLANTINGS SHALL BE PRESERVED BY WHATEVER METHOD NECESSARY INCLUDING TRANSPLANTING AND/OR TEMPORARY RELOCATION. THE ASSOCIATED COSTS ARE INCIDENTAL TO THE PROJECT. ANY TREES DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED USING APPROVED TREE DRESSING OR PAINT IN ACCORDANCE WITH THE APPROPRIATE PROVISIONS OF SECTION 201 OF THE STANDARD SPECIFICATIONS. ANY TREE DAMAGED BY THE CONTRACTOR SHALL RESULT IN A FINANCIAL PENALTY OF $1,500 FOR EACH INCIDENCE. DAMAGE SHALL INCLUDE ANY AND ALL IMPACTS TO TREES TO INCLUDE BUT NOT LIMITED TO LIMB/TREE BREAKAGE, DAMAGE TO TREE TRUNKS, ROOTS STRUCTURE AND ANY INCIDENTAL IMPACTS.
27. ALL CONNECTIONS OF PIPING TO EXISTING FACILITIES SHALL BE CONSIDERED INCIDENTAL. THIS INCLUDES ALL WORK REQUIRED TO CORE HOLE, INSTALLATION OF WATERTIGHT CONNECTIONS, AND ALL ASSOCIATED WORK.
28. DELIVERED WITHIN TEN (10) CALENDAR DAYS OF THE CONTRACT SIGNING, THE CONTRACTOR SHALL SUBMIT THREE (3) COPIES OF A CONSTRUCTION OPERATIONS PLAN TO THE ENGINEER, AND CITY OF PORTLAND. THE COST OF THE OPERATIONS PLAN SHALL BE INCIDENTAL.
29. ALL PIPE TRENCH EXCAVATIONS SHALL BE BACKFILLED AND "CLOSED" DURING CONTRACTOR NON-WORKING HOURS INCLUDING NIGHTS, HOLIDAYS AND WEEKENDS. THE CONTRACTOR MAY REQUEST IN WRITING TO THE ENGINEER AND OWNER TO SECURE OPEN EXCAVATION IN LIEU OF BACKFILLED AND "CLOSED." NOT ALLOWING A SECURE OPEN EXCAVATION SHALL NOT BE A BASIS FOR CLAIMS AGAINST THE OWNER.
30. BORINGS WERE COMPLETED IN OCTOBER 2016. REFERENCE APPENDIX OF THE SPECIFICATIONS.
31. TEST PITS SHALL BE EXCAVATED AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL OBTAIN THE LOCATION OF THE UTILITY/STRUCTURE IN QUESTION WITH TIES TO SURROUNDING FEATURES AND THE ELEVATION OF BOTH THE TOP AND BOTTOM OF THE UTILITY/STRUCTURE. COSTS FOR TEST PITS WILL BE PAID THROUGH THE BID ITEM 203.28.
32. ANY EXCAVATION BY CONTRACTOR THAT UNCOVERS AN HISTORICAL OR ARCHAEOLOGICAL ARTIFACT SHALL BE IMMEDIATELY REPORTED TO OWNER AND A REPRESENTATIVE OF AGENCY. CONSTRUCTION SHALL BE TEMPORARILY HALTED PENDING THE NOTIFICATION PROCESS AND FURTHER DIRECTIONS ISSUED BY AGENCY AFTER CONSULTATION WITH THE STATE HISTORIC PRESERVATION OFFICER (SHPO). CONTRACTOR SHALL NOT BE ENTITLED TO PAY COMPENSATION DUE TO DELAY ASSOCIATED WITH THIS ITEM. COST SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.
33. ANY REQUIRED PROJECT WORK NOT IDENTIFIED UNDER A PAY ITEM OR RELATED TO A PAY ITEM SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. NO EXTRA PAYMENT WILL BE MADE.
34. IF WORK IS NECESSARY BEYOND THE SAW CUT LINES SHOWN ON CONTRACT PLANS TO ACCOMMODATE PROJECT CONSTRUCTION, COSTS SHALL BE CONSIDERED INCIDENTAL TO COSTS OF CONSTRUCTION AND NO EXTRA PAYMENT WILL MADE. ALL REQUIRED PROJECT WORK ASSOCIATED WITH CONTRACT DRAWINGS, DETAILS, GENERAL CONDITIONS AND SPECIFICATIONS SHALL BE CONSIDERED INCIDENTAL TO THE RELATED PAYS ITEMS. NO EXTRA PAYMENT WILL BE MADE FOR ANY DIRECT OR INCIDENTAL WORK REQUIRED TO COMPLETE THE PROJECT IN ITS ENTIRETY AND READY FOR OWNER ACCEPTANCE.
35. EXISTING CONDITIONS GROUND SURFACE FEATURES SHOWN ON THIS PLAN ARE BASED ON SURVEYS BY THE MAINE DEPARTMENT OF TRANSPORTATION AND ARE SHOWN ON THE CITY OF PORTLAND'S PLANS FOR REFERENCE ONLY.

STATE OF MAINE — DANIEL L RILEY — LICENSED PROFESSIONAL ENGINEER

APRIL 21, 2017

REFERENCES:

PROJECT FIELD BOOK:

OTHER FIELD BOOKS USED:

VAULT PLANS:

PWD PLANS:
TELEPHONE PLANS:
UNITIL (GAS) PLANS:
WORKING PLANS:

Civil 3D 2013 Drawing Name:
16067 N.dwg, TAB:NOTES-1F
Civil 3D 2013 Survey Database:

CMM ADJUSTMENT:
BENCHMARK CARDS:

CITY PROPERTY PLAN BOOK SHEETS:
I & I SHEETS:
STREET RECORDS:
TAX MAPS:

SURVEY CREW: SPP
DRAWN BY: BRF
CHECKED BY: DLR
SCALE: AS NOTED
DATE: APRIL 21, 2017

FOREST AVENUE - WOODFORD CORNER CSO SEPARATION PROJECT

GENERAL NOTES AND LEGEND

CITY OF PORTLAND, MAINE
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

RESURGAM — CITY OF PORTLAND, MAINE

SHEET # 2 OF 18

PLAN NUMBER

EROSION CONTROL NOTES

THIS PLAN HAS BEEN DEVELOPED TO PROVIDE A STRATEGY FOR DEALING WITH SOIL EROSION AND SEDIMENTATION DURING AND AFTER THE STREET RECONSTRUCTION AND SEWER SEPARATION PROJECT. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH "MAINE EROSION AND SEDIMENTATION CONTROL HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES" PUBLISHED BY THE CUMBERLAND COUNTY SOIL AND WATER DISTRICT AND MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, LATEST EDITION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO POSSES A COPY OF THE EROSION CONTROL PLAN AT ALL TIMES.

PRE-CONSTRUCTION PHASE

1. PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, SEDIMENT BARRIERS WILL BE STAKED/INSTALLED ACROSS THE SLOPE(S), ON THE CONTOUR AT OR JUST BELOW THE LIMITS OF CLEARING OR GRUBBING, AND/OR JUST ABOVE ANY ADJACENT PROPERTY LINE OR WATERCOURSE TO PROTECT AGAINST CONSTRUCTION RELATED EROSION. THE PLACEMENT OF SEDIMENT BARRIERS SHALL BE COMPLETED IN ACCORDANCE WITH GUIDELINES ESTABLISHED IN BEST MANAGEMENT PRACTICES AND IN ACCORDANCE WITH THIS EROSION CONTROL PLAN AND DETAILS IN THIS PLAN SET. THIS NETWORK IS TO BE MAINTAINED BY THE CONTRACTOR UNTIL ALL EXPOSED SLOPES HAVE AT LEAST 85%-90% VIGOROUS PERENNIAL VEGETATIVE COVER TO PREVENT EROSION. TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER PERMANENT STABILIZATION IS ATTAINED.

2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PREPARE A DETAILED SCHEDULE AND MARKED UP PLAN INDICATING AREAS AND COMPONENTS OF THE WORK AND KEY DATES SHOWING DATE OF DISTURBANCE AND COMPLETION OF THE WORK. THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE MUNICIPAL STAFF. THREE COPIES OF THE SCHEDULE AND MARKED UP PLAN SHALL BE PROVIDED TO THE MUNICIPALITY THREE DAYS PRIOR TO THE SCHEDULED PRE-CONSTRUCTION MEETING. SPECIAL ATTENTION SHALL BE GIVEN TO THE 14 DAY LIMIT OF DISTURBANCE IN THE SCHEDULE ADDRESSING TEMPORARY AND PERMANENT VEGETATION MEASURES.

CONSTRUCTION AND POST-CONSTRUCTION PHASE

1. IN ORDER TO PROTECT THE NATURAL RESOURCES IN THE PROJECT AREA, ONLY DISTURB THOSE AREAS NECESSARY TO CONSTRUCT THE ROAD, INSTALL LANDSCAPING, SIDEWALKS AND SPECIFIED PIPING.

2. AREAS UNDERGOING ACTUAL CONSTRUCTION SHALL ONLY EXPOSE THAT AMOUNT OF MINERAL SOIL NECESSARY FOR PROGRESSIVE AND EFFICIENT CONSTRUCTION. AN AREA CONSIDERED OPEN IS ANY AREA NOT STABILIZED WITH PAVEMENT, VEGETATION, MULCHING, EROSION CONTROL MATS, RIPRAP OR GRAVEL BASE ON A ROAD . OPEN AREAS SHALL BE ANCHORED WITH TEMPORARY EROSION CONTROL AS SHOWN ON THE DESIGN PLANS AND AS DESCRIBED WITHIN THIS EROSION CONTROL PLAN WITHIN 14-DAYS OF DISTURBANCE. AREAS LOCATED WITHIN 100' OF NATURAL RESOURCES SHALL BE ANCHORED WITH TEMPORARY EROSION CONTROL WITHIN SEVEN (7) DAYS. REFER TO WINTER EROSION CONTROL NOTES FOR THE TREATMENT OF OPEN AREAS AFTER OCTOBER 1ST OF THE CONSTRUCTION YEAR.

3. THOSE AREAS UNDERGOING ACTUAL CONSTRUCTION WILL BE LEFT IN AN UNTREATED OR UNVEGETATED CONDITION FOR A MAXIMUM OF 14 DAYS FROM FINAL GRADING OF THE LOAM. LOAM WILL BE STOCKPILED FOR FUTURE USE AND PROTECTED FROM EROSION LOSSES BY MULCH AND FILTER FABRIC/HAY BALE BARRIERS.

4. PRIOR TO ANY CLEARING OR GRUBBING, A STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE CONSTRUCTED AT THE INTERSECTION OF THE PROPOSED ENTRANCES AND EXISTING ROADWAY TO AVOID TRACKING OF MUD, DUST AND DEBRIS FROM THE SITE.

5. PRIOR TO CLEARING AND GRUBBING THE SITE, STORMDRAIN INLET PROTECTION SHALL BE INSTALLED AT ALL CATCH BASINS.

6. PRIOR TO CLEARING AND GRUBBING, SEDIMENT BARRIERS WILL BE INSTALLED ACROSS THE SLOPES, ON THE CONTOUR, AT OR JUST BELOW THE LIMITS OF CONSTRUCTION AND/OR JUST ABOVE ANY DOWNSLOPE ADJACENT PROPERTY OR WETLAND TO PROTECT AGAINST CONSTRUCTION RELATED EROSION.

7. THE CONTRACTOR MUST INSTALL ANY ADDED MEASURES WHICH MAY BE NECESSARY TO CONTROL EROSION/SEDIMENTATION FROM THE SITE DEPENDENT UPON THE ACTUAL SITE AND WEATHER CONDITIONS. CONTINUATION OF EARTHWORK OPERATIONS ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED, IN ORDER TO MINIMIZE AREAS WITHOUT EROSION CONTROL PROTECTION

8. DURING THE CONSTRUCTION PHASE, INTERCEPTED SEDIMENT WILL BE RETURNED TO THE SITE AND REGRADED ONTO OPEN AREAS. THE DISPOSAL OF POST SEEDING SEDIMENT, IF ANY SHALL, BE THE RESPONSIBILITY OF THE CONTRACTOR.

9. WHEN WORK IS IMMEDIATELY ADJACENT TO THE NATURAL RESOURCES, INCLUDING COASTAL WETLANDS, STREAMS AND HABITATS, CONSTRUCTION SITE MUST BE STABILIZED PRIOR TO THE END OF THE WORK DAY OR PRIOR TO ANY STORM EVENT. SEDIMENT BARRIERS SHALL BE PLACED BETWEEN ANY NATURAL RESOURCE AND THE DISTURBED AREA.

EROSION CONTROL APPLICATIONS & MEASURES

THE PLACEMENT OF EROSION CONTROL MEASURES SHALL BE COMPLETED IN ACCORDANCE WITH GUIDELINES ESTABLISHED IN BEST MANAGEMENT PRACTICES, THE EROSION CONTROL PLAN AND DETAILS IN THE PLAN SET.

1. STABILIZED CONSTRUCTION ENTRANCE/EXIT:

   PRIOR TO CLEARING AND/OR GRUBBING THE SITE A STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE CONSTRUCTED WHEREVER TRAFFIC WILL EXIT THE CONSTRUCTION SITE ONTO A PAVED ROADWAY IN ORDER TO MINIMIZE THE TRACKING OF SEDIMENT AND DEBRIS FROM THE CONSTRUCTION SITE ONTO PUBLIC ROADWAYS. THE ENTRANCES AND ADJACENT ROADWAY AREAS SHALL BE PERIODICALLY SWEPT OR WASHED TO FURTHER MINIMIZE THE TRACKING OF MUD, DUST OR DEBRIS FROM THE CONSTRUCTION AREA. STABILIZED CONSTRUCTION EXITS SHALL BE CONSTRUCTED IN AREAS SPECIFIED ON THE PLANS AND AS DETAILED ON THE PLANS. PAYSON PARK ACCESS DRIVES SHALL NOT BE USED FOR CONSTRUCTION ACCESS.

2. TEMPORARY VEGETATION AND MULCH:

   IF FINAL SEEDING OF THE DISTURBED AREAS IS NOT COMPLETED BY SEPTEMBER 15TH OF THE YEAR OF CONSTRUCTION, THEN ON THAT DATE THESE AREAS WILL BE GRADED AND SMOOTHED, THEN SEEDED TO A WINTER COVER CROP OF RYE AT THE RATE OF 112 LBS/ACRE OR 3 LBS/1,000 SQUARE FEET AND MULCHED AT A RATE OF 70LBS./1000 SQUARE FEET. THE RYE SEEDING WILL PROCEED BY AN APPLICATION OF 3 TONS OF LIME AND 1000 LBS. OF 10-10-10 FERTILIZER PER ACRE, OR ITS EQUIVALENT. IF THE RYE SEEDING DOES NOT MAKE ADEQUATE GROWTH TO PROVE AT LEAST 75% VEGETATIVE COVER BY NOVEMBER 15TH, THEN ON THAT DATE, A TEMPORARY MULCH OF HAY WILL BE APPLIED TO THE AREA AT A RATE OF 150LBS./1000 SQUARE FEET. AREAS STABILIZED WITH RYE AND MULCH WILL BE TILLED AND RESEEDED USING THE VEGETATION PLAN FOR PERMANENT SEEDING THE FOLLOWING SPRING. FINAL VEGETATION OF THE SITE SHALL NOT BE CONSIDERED COMPLETE UNTIL EACH DISTURBED AREA NOT TO BE PAVED OR TREATED WITH RIPRAP HAS A VEGETATIVE COVER OVER AT LEAST 90% OF ITS SURFACE.

   ALL AREAS SEEDED DURING THE WINTER MONTHS WILL BE INSPECTED IN THE SPRING FOR ADEQUATE CATCH. ALL AREAS SUFFICIENTLY VEGETATED (LESS THAN 75 PERCENT CATCH) SHALL BE REVEGETATED BY REPLACING LOAM, SEED AND MULCH. IF DORMANT SEEDING IS NOT USED FOR THE SITE, ALL DISTURBED AREAS SHALL BE REVEGETATED IN THE SPRING.

   TEMPORARY MULCH WILL BE APPLIED TO ALL EXPOSED SOIL SURFACES WITHIN SEVEN (7) DAYS OR PRIOR TO ANY STORM EVENT.

3. SOIL STOCKPILES:

   STOCKPILES OF SOIL OR SUBSOIL SHALL BE MULCHED WITH HAY AT A RATE OF 75 LBS/1,000 S.F. (1.5 TONS PER ACRE) OR WITH A FOUR-INCH LAYER OF WOOD WASTE EROSION CONTROL MIX. THIS WILL BE DONE WITHIN 24 HOURS OF STOCKING AND REESTABLISHED PRIOR TO ANY RAINFALL. ANY SOIL STOCKPILE WILL NOT BE PLACED (EVEN COVERED WITH HAY OR STRAW) WITHIN 100 FEET FROM ANY NATURAL RESOURCES.

4. SEDIMENT BARRIERS:

   PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, SILT FENCING SHALL BE STAKED ACROSS THE SLOPE(S), ON THE CONTOUR AT OR JUST BELOW THE LIMITS OF CLEARING OR GRUBBING, AND/OR JUST ABOVE ANY ADJACENT WATERCOURSE TO PROTECT AGAINST CONSTRUCTION RELATED EROSION. MAXIMUM STAKE SPACING OF 6 FEET SHALL BE USED, UNLESS THE FENCE IS SUPPORTED BY WIRE FENCE REINFORCEMENT OF MINIMUM 14 GAUGE AND WITH A MAXIMUM MESH SPACING OF 6 INCHES, IN WHICH CASE STAKES MAY BE SPACED A MAXIMUM OF 10 FEET APART. SILT FENCING WITH A THE BOTTOM OF THE FENCE SHOULD BE PROPERLY ANCHORED A MINIMUM OF 6" PER THE PLAN DETAIL AND BACKFILLED.

   ALL SILT FENCE SHALL BE INSPECTED, REPLACED, AND/OR REPAIRED WEEKLY, AS WELL AS IMMEDIATELY FOLLOWING ANY SIGNIFICANT RAINFALL, OR WHEN SEDIMENT REACHES 1/3 THE BARRIER HEIGHT. ALL HAY BALE, FILTER FABRIC BARRIERS SHALL REMAIN IN PLACE UNTIL SEEDINGS HAVE BECOME 75% ESTABLISHED AND THEN REMOVED WITH IN 10 DAYS.

   ANY SILT FENCE IDENTIFIED BY THE OWNER OR REVIEWING AGENCIES AS NOT BEING PROPERLY INSTALLED DURING CONSTRUCTION SHALL BE IMMEDIATELY REPAIRED IN ACCORDANCE WITH THE INSTALLATION DETAILS.

5. STORMDRAIN INLET PROTECTION:

   SILT SACKS SHALL BE PLACED AROUND A STORMDRAIN DROP INLET OR CURB INLET PRIOR TO PERMANENT STABILIZATION OF THE IMMEDIATE AND UPSTREAM DISTURBED AREAS. THEY SHALL BE CONSTRUCTED IN A MANNER THAT WILL FACILITATE CLEAN-OUT AND DISPOSAL OF TRAPPED SEDIMENTS AND MINIMIZE INTERFERENCE WITH CONSTRUCTION ACTIVITIES. ANY RESULTANT PONDING OF WATER FROM THE PROTECTION METHOD MUST NOT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT AREAS OR STRUCTURES. INSTALL SILT SACKS IN ACCORDANCE WITH THE DETAIL AND PER MANUFACTURER'S RECOMMENDATIONS.

6. DUST CONTROL:

   DUST CONTROL DURING CONSTRUCTION SHALL BE ACHIEVED BY THE USE OF A WATERING TRUCK TO PERIODICALLY SPRINKLE THE EXPOSED ROADWAY AREAS AS NECESSARY TO REDUCE DUST DURING THE DRY MONTHS. APPLYING OTHER DUST CONTROL PRODUCTS SUCH AS CALCIUM CHLORIDE OR OTHER MANUFACTURED PRODUCTS ARE ALLOWED IF AUTHORIZED BY THE PROPER LOCAL, STATE AND/OR FEDERAL REGULATING AGENCIES. HOWEVER, IT IS THE CONTRACTOR'S ULTIMATE RESPONSIBILITY TO MITIGATE DUST AND SOIL LOSS FROM THE SITE.

7. PERMANENT VEGETATION:

   REVEGETATION MEASURES SHALL COMMENCE IMMEDIATELY UPON COMPLETION OF FINAL GRADING OF AREAS TO BE LOAMED AND SEEDED. PERMANENT REVEGETATION MEASURES INCLUDING LOAM, SEED AND MULCH SHALL MEET SECTION 615 OF THE SPECIFICATIONS.

TRENCH DEWATERING:

1. EXCAVATION AND INSTALLATION OF CONDUIT STORAGE, STORM DRAINS AND ASSOCIATED STRUCTURES WILL REQUIRE CONTINUOUS DEWATERING THROUGHOUT CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR PREPARING AND IMPLEMENTING A DEWATERING PLAN MEETING ENVIRONMENTAL REGULATIONS AND REQUIREMENTS STIPULATED WITHIN THE CONTRACT DOCUMENTS AND PLANS. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT A WRITTEN DEWATERING PLAN AND SHALL MEET WITH CITY REPRESENTATIVES TO REVIEW THE DEWATERING PLAN. THE CONTRACTOR SHALL MAKE ADJUSTMENTS TO THE DEWATERING PLAN AS REQUIRED BY THE CITY OR OTHER AGENCIES. ANY REQUIRED CHANGES SHALL BE CONSIDERED INCIDENTAL TO THE COST OF DEWATERING AND NO EXTRA PAYMENT WILL BE MADE. ALL DEWATERING SHALL BE RUN THROUGH A PUMPED SEDIMENT REMOVAL SYSTEM EQUAL TO "DIRT BAG" OR ALTERNATIVE METHODS AS APPROVED BY THE ENGINEER. IT IS ANTICIPATED THAT HIGH VOLUMES OF PUMPING WILL BE REQUIRED FOR THE PROJECT. DISCHARGE LOCATIONS SHALL BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK AND COSTS ASSOCIATED WITH DEWATERING THE JOBSITE INCLUDING ANY CHANGES, MODIFICATIONS OR SPECIAL DEWATERING SYSTEMS/REQUIREMENTS TO ENSURE THE SITE IS DEWATERED. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE RELATED PAY ITEMS. WATER FROM CONSTRUCTION TRENCH DEWATERING WILL PASS FIRST THROUGH A SEDIMENTATION COLLECTION BAG PRIOR TO DISCHARGE. THE DISCHARGE SITE SHALL BE SELECTED TO AVOID FLOODING AND SEDIMENT DISCHARGES TO A PROTECTED RESOURCE. IN NO CASE SHALL THE SEDIMENTATION COLLECTION BAG BE LOCATED WITHIN 100 FEET OF A PROTECTED NATURAL RESOURCE UNLESS OTHERWISE APPROVED BY THE ENGINEER.

MONITORING:

1. MAINTENANCE MEASURES WILL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION CYCLE. WEEKLY AND AFTER EACH RAINFALL, A VISUAL INSPECTION WILL BE MADE OF ALL INSTALLED EROSION CONTROL MEASURES AND REPAIRS WILL BE MADE AS NEEDED TO INSURE THEIR CONTINUING FUNCTION AS DESIGNED. FOLLOWING THE FINAL SEEDINGS, THE SITE WILL BE INSPECTED EVERY FIFTEEN DAYS UNTIL THE SEEDINGS HAVE BEEN ESTABLISHED. ESTABLISHED MEANS A MINIMUM OF 75% OF AREA VEGETATED WITH VIGOROUS GROWTH. RESEEDING WILL BE CARRIED OUT, WITH FOLLOW UP INSPECTIONS, IN THE EVENT OF ANY FAILURES. ALL EROSION CONTROL MEASURES WILL BE REMOVED WITHIN 10 DAYS WHEN VEGETATION IS ADEQUATELY ESTABLISHED.

DEMOLITION NOTES

1. DEMOLITION OF EXISTING SEWER AND STORMDRAIN PIPE TO BE INCIDENTAL TO PIPE INSTALLATION.
2. EACH EXISTING DRAINAGE STRUCTURE OR SEWER STRUCTURE TO BE ABANDONED OR REMOVED WILL BE INCIDENTAL TO THE INSTALLATION OF NEW STRUCTURES.
3. DEMOLITION SHALL BE COMPLETED IN COORDINATION WITH NEW INFRASTRUCTURE. CONTRACTOR SHALL ENSURE EXISTING ROAD SURFACE DRAINAGE IS MAINTAINED DURING CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR TEMPORARY DRAINAGE PROVISIONS. COSTS FOR TEMPORARY DRAINAGE PROVISIONS SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

PORTLAND WATER DISTRICT NOTES

1. CONTRACTOR SHALL DISPOSE OF ALL EXCAVATED PIPING AND APPURTENANCES.
2. ALL MAINS AND SERVICES SHALL BE INSTALLED WITH 5.5' OF COVER MEASURED FROM PROPOSED ROAD GRADE UNLESS OTHERWISE APPROVED BY A PWD REPRESENTATIVE.
3. THE PORTLAND WATER DISTRICT WILL NOTIFY CUSTOMERS FOR ALL WORK INVOLVING TEMPORARY SHUT DOWN OF SERVICE. CUSTOMERS MUST RECEIVE AT LEAST 48 HOURS NOTIFICATION PRIOR TO ANY SHUT DOWN. THE DISTRICT MUST RECEIVE NOTICE FROM THE CONTRACTOR OF THE SHUT DOWN AT LEAST 48 HOURS PRIOR TO CUSTOMER NOTIFICATION.
4. ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE POLYWRAPPED PER SPECIFICATIONS.
5. THE COST OF PROVIDING TEMPORARY WATER SERVICE TO THE BUILDINGS INDICATED ON THE PLAN SHALL BE LUMP SUM PAY ITEM. IF PROPERTIES REQUIRING A TEMPORARY WATER CONNECTION HAVE MALFUNCTIONING SILLCOCKS OR NO EXTERIOR PLUMBING, IT MAY BE NECESSARY TO EXCAVATE AND CONNECT INTO THE EXISTING SERVICE LINE BEHIND THE EXISTING SHUT-OFF VALVE TO PROVIDE TEMPORARY SERVICE.
6. PROVIDE TEMPORARY MAIN CONNECTION TO HYDRANT USING LL BRASS OR 304SS ADAPTER, 304SS NPT TO HDPE TRANSITION, AND FLANGED HDPE PIPING TO BRING PIPING ELEVATION FROM HYDRANT PORT TO GRADE. PROVIDING PIPING SUPPORTS/BLOCKING AT FITTINGS. HDPE SHALL BE AWWA C906, SDR11 WITH IPS FLANGE ADAPTERS AN DI BACKUP RINGS, DIMENSIONS PER AWWA C207. ALL PIPING AND FITTING SHALL BE NSF 61. PROVIDE FLANGED LL DOUBLE CHECK VALVE BACKFLOW DEVICE, SAME NOMINAL SIZE AS TEMP MAIN, AT EACH HYDRANT CONNECTED TO A TEMPORARY MAIN. PROVIDE FLANGED RESILIENT SEATED GATE VALVES FOR ISOLATION AND PROVIDE UPSTREAM AND DOWNSTREAM TAPS. REMOVE BACKFLOW ONLY UPON OWNER'S REQUEST AND PROVIDE FLANGED HDPE REPLACEMENT SPOOL PIECE. HDPE SHALL BE AWWA C906, SDR11, WITH IPS FLANGE ADAPTERS AND DI BACKUP RINGS. FLANGE DIMENSIONS PER AWWA C207. ALL PIPING AND FITTINGS SHALL BE NSF61. PROVIDE DOCUMENTATION OF ANNUAL INSPECTION BY A PERSON CERTIFIED BY THE NEW ENGLAND WATER WORKS ASSOCIATION OR AMERICAN BACKFLOW PREVENTION ASSOCIATION.
7. INSTALL 4" TEMPORARY FIRE DEPT CONNECTION (TYP.), 4" GATE VALVE, 90' ELBOW, RISER PIPE, 90' ELBOW, AND 4-1/2" NPT STEAMER PORT CONNECTION WITH CAP. ALL JOINTS TO BE RESTRAINED. STEAMER PORT, RISER AND TEE TO BE ANCHORED TO THE GROUND. OUTLET TO BE BETWEEN 1' AND 2' OFF THE GROUND.
8. REMOVE ALL OLD PIPING NOT EXPLICITLY CALLED OUT FOR ABANDONMENT.
9. TEMPORARY WATER SYSTEM SHALL ONLY BE ACTIVE BETWEEN APRIL 15TH AND OCTOBER 15TH. ALL WATER MAIN, EITHER EXISTING OR NEWLY INSTALLED, MUST BE ACTIVE, BETWEEN OCTOBER 16TH AND APRIL 14TH.
10. CONTRACTOR MUST ALLOW OWNERS SUFFICIENT TIME TO TRANSFER WATER SERVICES FROM EXISTING WATER MAIN TO TEMPORARY WATER SERVICES INSTALLED BY CONTRACTOR AND TO TRANSFER SERVICE TO NEW WATER MAIN/SERVICE LINE UPON SUCCESSFUL TESTING OF SAMPLE FOR ABSENCE OF BACTERIA. THE CONTRACTOR SHALL NOT CLAIM ANY DELAY-RELATED COSTS OR TIME RELATED TO THIS WORK.
11. REPLACE ALL SERVICES FROM MAIN TO STREET LINE, WITH 1" COPPER PIPING, UNLESS CALLED OUT TO BE REPLACED DIFFERENTLY.
12. VARIABLE MESSAGE BOARDS ARE TO BE PROVIDED AT EACH END OF THE PROJECT, IN PLACE AND ACTIVE AT LEAST ONE WEEK BEFORE CONSTRUCTION STARTS, AND SHALL REMAIN ACTIVE UNTIL THE WORK IS COMPLETE.
13. SIDEWALKS MUST REMAIN OPEN AT ALL TIMES OR MEASURABLE DETOURS PROVIDED.
14. LOCATIONS OF UTILITIES OTHER THAN WATER ARE APPROXIMATE, AND NOT ALL UTILITIES ARE SHOWN. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING, SUPPORTING AND PROTECTING ALL UTILITIES DURING INSTALLATION OF THE WATER MAIN.
15. HYDRANTS TO BE REMOVED SHALL BE SALVAGED FOR PORTLAND WATER DISTRICT USE & DELIVERED TO THEIR OFFICE AS PART OF CONTRACT.

PORTLAND WATER DISTRICT SEQUENCE OF CONSTRUCTION NOTES:

PWD PHASE 1 - WOODFORD STREET SOUTH

TEMPORARY WATER (INCLUDING SERVICES) SHALL BE ACTIVE ALONG FOREST AVENUE FROM 609 FOREST TO 669 FOREST AVENUE AND ALONG ARLINGTON PLACE. TEMPORARY WATER SHALL CONNECT TO AN EXISTING HYDRANT LOCATED ON FOREST AVENUE AS WELL AS A 2-INCH TAP ON ARLINGTON PLACE. REPLACEMENT WORK (MAIN, SERVICES, APPURTENANCES, ETC.) TO BE INSTALLED WITHIN PROJECT LIMITS INCLUSIVE OF TWO 8-INCH WATER MAIN TIE -INS, TWO HYDRANT REPLACEMENTS AND 260-FOOT MAIN REPLACEMENT ON WOODFORD STREET, AS WELL AS A 16-INCH TIE-IN AND 250-FOOT REPLACEMENT ON DEERING AVENUE, INCLUDING A WATER SERVICE RENEWAL FOR 540 DEERING AVENUE. WATER MAIN SHALL BE PRESSURE/LEAK TESTED, DISINFECTED AND HAVE A SUCCESSFUL TESTING SAMPLE FOR ABSENCE OF BACTERIA BEFORE PHASE 2 MAY COMMENCE. LAYOUT OF TEMPORARY WATER (INCLUDING SERVICES) FOR PHASE 2 CAN OCCUR CONCURRENTLY WITH PHASE 1 WATER MAIN REPLACEMENT WORK.

PWD PHASE 2 - WOODFORD STREET NORTH

TEMPORARY WATER (INCLUDING SERVICES) SHALL BE ACTIVE ALONG FOREST AVENUE FROM 621 FOREST AVENUE TO 699 FOREST AVENUE. TEMPORARY WATER SHALL CONNECT TO NEW HYDRANTS INSTALLED AS PART OF PHASE 1 LOCATED ON WOODFORD STREET. REPLACEMENT WORK (MAIN, SERVICES, APPURTENANCES, ETC.) TO BE INSTALLED WITHIN PROJECT LIMITS INCLUSIVE OF AN 8-INCH WATER MAIN TIE -IN AND HYDRANT INSTALLATION ON VANNAH AVENUE AT FOREST AVENUE AND A 12-INCH WATER MAIN TIE-IN AND 50-FOOT MAIN REPLACEMENT ON OCEAN AVENUE. WATER MAIN SHALL BE PRESSURE/LEAK TESTED, DISINFECTED AND HAVE A SUCCESSFUL TESTING SAMPLE FOR ABSENCE OF BACTERIA BEFORE REMOVAL OF TEMPORARY WATER.

STATE OF MAINE
DANIEL L. RILEY
PROFESSIONAL ENGINEER
APRIL 21, 2017

Civil 3D 2013 Drawing Name: 18067_N.dwg, TAB-NOTES-2F
Civil 3D 2013 Survey Database:
CMM ADJUSTMENT:
BENCHMARK CARDS:
CITY PROPERTY PLAN BOOK SHEETS:
I & I SHEETS:
STREET RECORDS:
TAX MAPS:

REFERENCES:
PROJECT FIELD BOOK:
VAULT PLANS:
OTHER FIELD BOOKS USED:
PWD PLANS:
TELEPHONE PLANS:
UNITIL (GAS) PLANS:
WORKING PLANS:

SURVEY CREW: SPP
DRAWN BY: BRF
CHECKED BY: DLR
SCALE: AS NOTED
DATE: APRIL 21, 2017

FOREST AVENUE - WOODFORD CORNER CSO SEPARATION PROJECT

EROSION CONTROL NOTES AND PORTLAND WATER DISTRICT NOTES

CITY OF PORTLAND, MAINE
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

RESURGAM
CITY OF PORTLAND MAINE

SHEET #
3 OF 18
PLAN NUMBER


LINCOLN ST
REVERE ST
FOREST AVENUE
ARLINGTON STREET
ARLINGTON PLACE
GRACE ST
MATCH LINE SEE SHEET 5
CITY PLAN 410/112
SERVICES TO BE RETIRED
REMOVE WATERMAIN & ASSOCIATED APPURTENANCES IN FOREST AVE, AND REVERE STREET, SEE DESIGN DRAWINGS FOR REPLACEMENT, COORDINATE REMOVAL WITH PORTLAND WATER DISTRICT, TEMPORARY SERVICE REQUIRED
LIMIT OF WORK PER MDOT PLANS
LIMIT OF WORK PER MDOT PLANS
REMOVE WATERMAIN & ASSOCIATED APPURTENANCES IN FOREST AVE, SEE DESIGN DRAWINGS FOR REPLACEMENT, COORDINATE REMOVAL WITH PORTLAND WATER DISTRICT, TEMPORARY SERVICE REQUIRED
HYDRANT TO BE REMOVED
POST OFFICE MAIL BOX TO BE RELOCATED. SEE MDOT PLANS
#616 FOREST AVENUE
#626 FOREST AVENUE
N/F SM & A PROPERTIES LLC BOOK 25221/PAGE 63 TAX MAP 125 – BLOCK M – LOT 3 #646 FOREST AVE
N/F DANIEL K. LUCAS & TIME B. LUCAS FOREST AVE.
N/F MICHAEL FUREY TRUSTEE OF THE FUREY FAMILY REVOCABLE TRUST FOREST AVE.
N/F JAMES S. ANDREWS & NATALIE P. ANDREWS FOREST AVE.
N/F SHEKINAH REALTY, LLC FOREST AVE.
N/F SHEKINAH REALTY, LLC FOREST AVE.
N/F KENNETH & LINDA A FOREST AVE.
N/F RICKY R. FOREST AVE.
N/F ODD FELLOWS HALL CO OF DEERING TAX MAP 125 – BLOCK N – LOT 8 #128-134 WOODFORD ST
N/F MKC PROPERTIES INC BOOK 32954/PAGE 148 TAX MAP 125 – BLOCK N – LOT 5 #120-124 WOODFORD ST
#3 ARLINGTON PLACE
#7 ARLINGTON PLACE
#6 ARLINGTON PLACE
#11 ARLINGTON PLACE
N/F SULAN CHAU BOOK 7732/PAGE 258 TAX MAP 125 – BLOCK N – LOT 13 #112 WOODFORD STREET
N/F WOODFORD PROPERTIES LLC BOOK 32496/PAGE 16 TAX MAP 125 – BLOCK N – LOT 18 #110 WOODFORD STREET
N/F BLIND FAITH LLC BOOK 25941/PAGE 200 TAX MAP 125 – BLOCK N – LOT 19 #106 WOODFORD STREET

PLAN
SCALE: 1"=20'

NOTES:

1. ANY REMOVAL OF EXISTING PIPES AND STRUCTURES, INCLUDING SEWER AND WATER SERVICES WILL BE INCIDENTAL TO PAY SECTIONS 603 & 604, AND PORTLAND WATER DISTRICT PAY ITEMS.
2. DISTURBANCE LIMITS SHALL NOT EXTEND OUTSIDE THE CITY RIGHT-OF-WAY.
3. PROTECT EXISTING UTILITY INFRASTRUCTURE, CURB AND SIDEWALKS NOT CALLED FOR REMOVAL.

STATE OF MAINE – DANIEL L. RILEY – PROFESSIONAL ENGINEER – APRIL 21, 2017

REFERENCES:

VAULT PLANS: 16067 forest lo.dwg, TAB:FOREST AVENUE 12+00-18-
Civil 3D 2013 Drawing Name:
Civil 3D 2013 Survey Database:
PROJECT FIELD BOOK:
CMM ADJUSTMENT:
BENCHMARK CARDS:
OTHER FIELD BOOKS USED:
PWD PLANS:
TELEPHONE PLANS:
UNITIL (GAS) PLANS:
WORKING PLANS:
CITY PROPERTY PLAN BOOK SHEETS:
I & I SHEETS:
STREET RECORDS:
TAX MAPS:

SURVEY CREW:	SPP
DRAWN BY:	BRF
CHECKED BY:	DLR
SCALE:	1" = 20'
DATE:	APRIL 21, 2017

FOREST AVENUE - WOODFORD CORNER CSO SEPARATION PROJECT

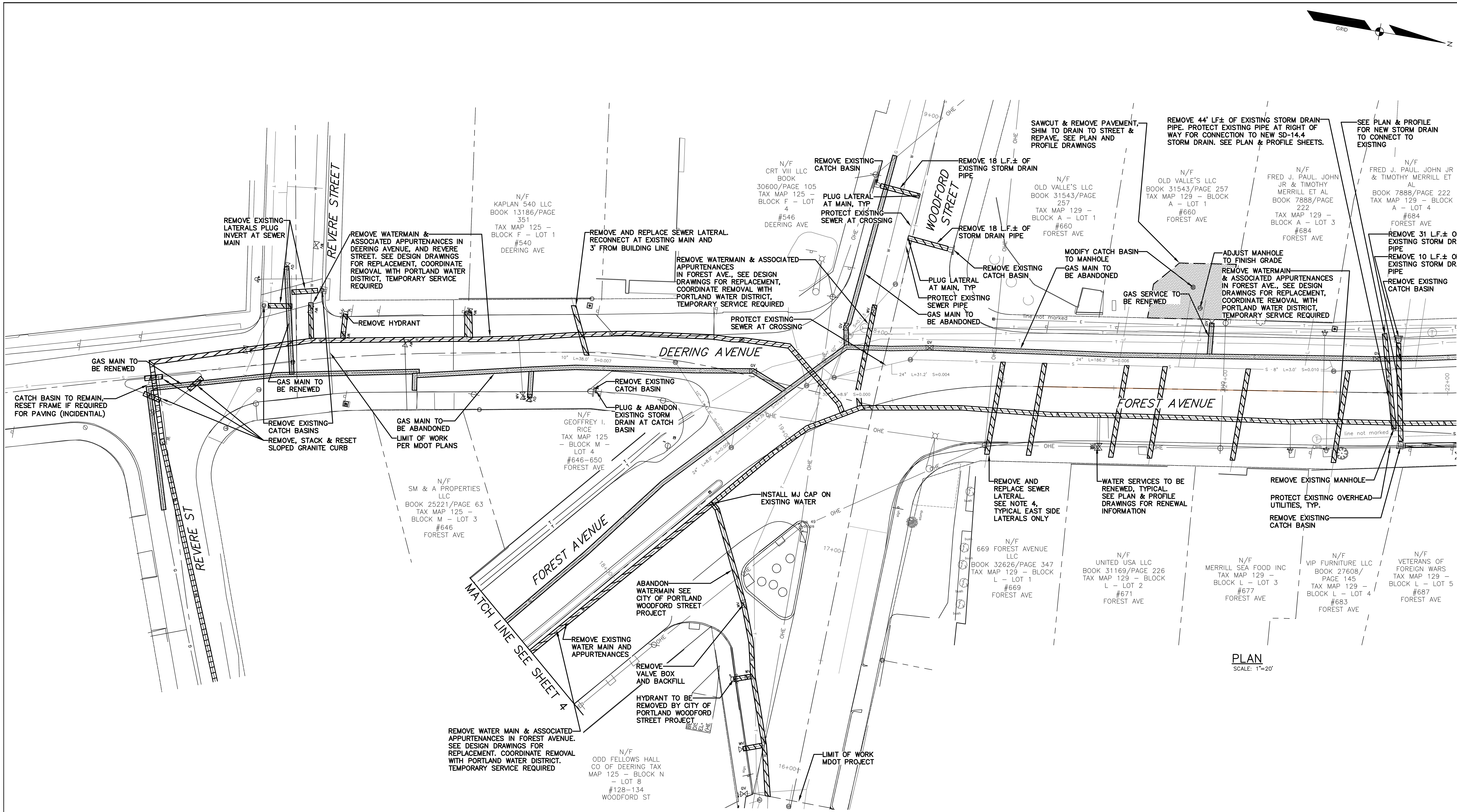
DEMOLITION PLAN FOREST AVENUE

CITY OF PORTLAND, MAINE
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

RESURGAM – CITY OF PORTLAND, MAINE

SHEET # 4 OF 18

PLAN NUMBER



NOTES:

1. ANY REMOVAL OF EXISTING PIPES AND STRUCTURES, INCLUDING SEWER AND WATER SERVICES WILL BE INCIDENTAL TO PAY SECTIONS 603 & 604, AND PORTLAND WATER DISTRICT PAY ITEMS.
2. DISTURBANCE LIMITS SHALL NOT EXTEND OUTSIDE THE CITY RIGHT-OF-WAY.
3. PROTECT EXISTING UTILITY INFRASTRUCTURE, CURB AND SIDEWALKS NOT CALLED FOR REMOVAL.
4. REMOVE AND REPLACE SEWER LATERALS ON THE EAST SIDE OF FOREST AVENUE FROM STA 19+50 TO 23+00. RECONNECT TO EXISTING LATERAL 3' FROM BUILDING LINE. RECONNECT TO EXISTING SEWER MAIN WITH INSERT-A-TEE CONNECTION. REMOVE EXISTING 90° ELBOWS AT CONNECTION. INSERT-A-TEE CONNECTIONS ARE INCIDENTAL TO NEW LATERAL PIPE ITEM 633.07.

STATE OF MAINE – DANIEL RILEY – PROFESSIONAL ENGINEER – APRIL 21, 2017

REFERENCES:

VAULT PLANS: Civil 3D 2013 Drawing Name: 16067 forest lo.dwg, TAB:FOREST AVENUE18+00-22+75; Civil 3D 2013 Survey Database:
PROJECT FIELD BOOK:
OTHER FIELD BOOKS USED:
CMM ADJUSTMENT:
BENCHMARK CARDS:
PWD PLANS:
TELEPHONE PLANS:
UNITIL (GAS) PLANS:
WORKING PLANS:
CITY PROPERTY PLAN BOOK SHEETS:
I & I SHEETS:
STREET RECORDS:
TAX MAPS:

SURVEY CREW:	SPP
DRAWN BY:	BRF
CHECKED BY:	DLR
SCALE:	1" = 20'
DATE:	APRIL 21, 2017

FOREST AVENUE - WOODFORD CORNER CSO SEPARATION PROJECT

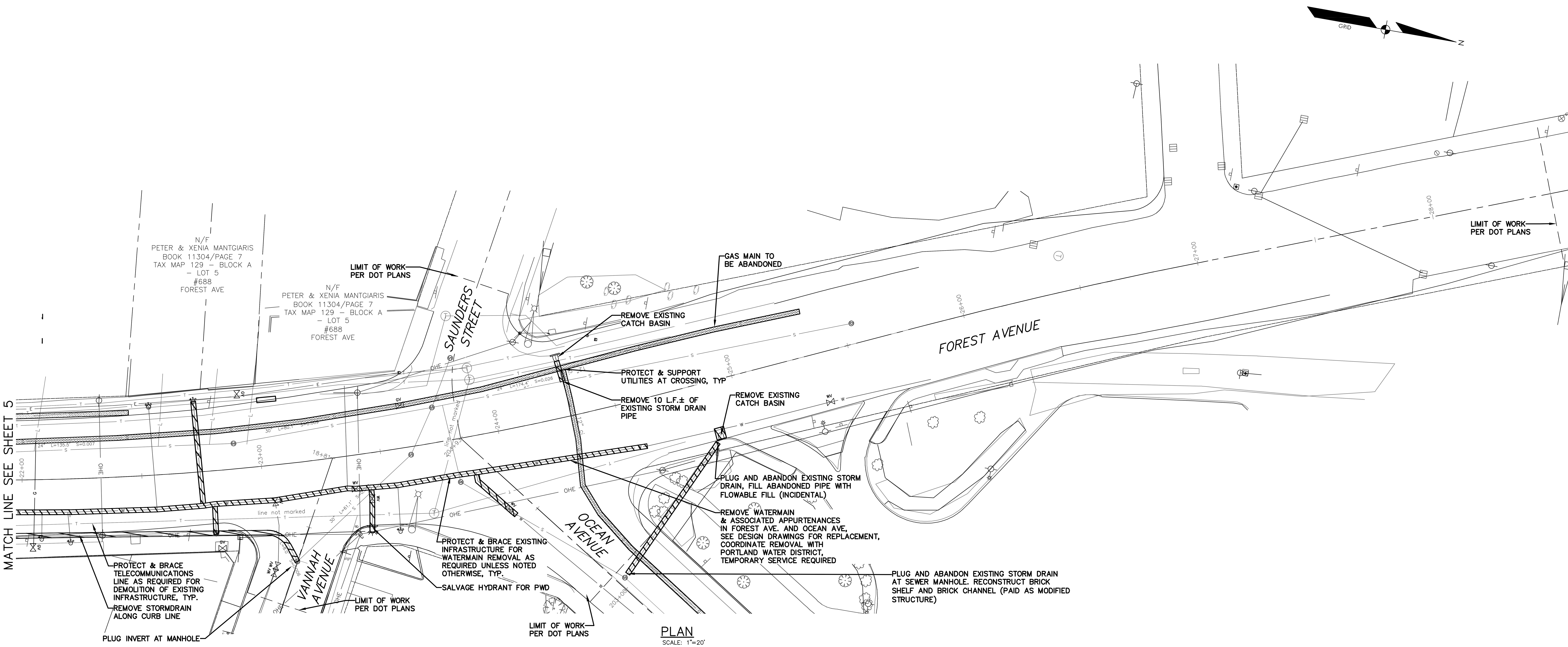
DEMOLITION PLAN FOREST AVENUE

CITY OF PORTLAND, MAINE
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

RESURGAM – CITY OF PORTLAND, MAINE

SHEET # 5 OF 18

PLAN NUMBER



PLAN
SCALE: 1"=20'

NOTES:

1. DISTURBANCE LIMITS SHALL NOT EXTEND OUTSIDE THE CITY RIGHT-OF-WAY.
2. PROTECT EXISTING UTILITY INFRASTRUCTURE, CURB AND SIDEWALKS NOT CALLED FOR REMOVAL. REFER TO MDOT PLANS FOR SIDEWALK RELATED WORK.
3. REMOVE AND REPLACE SEWER LATERALS ON THE EAST SIDE OF FOREST AVENUE FROM STA 19+50 TO 23+00. RECONNECT TO EXISTING LATERAL 3' FROM BUILDING LINE. RECONNECT TO EXISTING SEWER MAIN WITH INSERT-A-TEE CONNECTION. REMOVE EXISTING 90° ELBOWS AT CONNECTIONS. INSERT-A-TEE CONNECTIONS ARE INCIDENTAL TO NEW LATERAL PIPE ITEM 633.07.

STATE OF MAINE
DANIEL L. RILEY
PROFESSIONAL ENGINEER
APRIL 21, 2017

REFERENCES:
VAULT PLANS: 16067 forest lo.dwg
Civil 3D 2013 Drawing Name: TAB:FOREST AVENUE22+75-25+00
Civil 3D 2013 Survey Database:
PROJECT FIELD BOOK:
CMM ADJUSTMENT:
BENCHMARK CARDS:
OTHER FIELD BOOKS USED:
PWD PLANS:
TELEPHONE PLANS:
UNITIL (GAS) PLANS:
WORKING PLANS:
CITY PROPERTY PLAN BOOK SHEETS:
I & I SHEETS:
STREET RECORDS:
TAX MAPS:

SURVEY CREW: SPP
DRAWN BY: BRF
CHECKED BY: DLR
SCALE: 1" = 20'
DATE: APRIL 21, 2017

FOREST AVENUE - WOODFORD CORNER CSO SEPARATION PROJECT

DEMOLITION PLAN FOREST AVENUE

CITY OF PORTLAND, MAINE
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

RESURGAM · CITY OF PORTLAND, MAINE

SHEET #
6 OF 18

PLAN NUMBER


MATCH LINE SEE SHEET 8
GRID
N
LINCOLN ST
CITY PLAN 410/112
4" TEMP WATER
4" TEMP VALVE
#616 FOREST AVENUE
#626 FOREST AVENUE
CONNECT TEMP TO FIRE SERVICE AND DOMESTIC
LIMIT OF WORK PER DOT PLANS
4" TEMP VALVE
2" TEMP VALVE
REVERE ST
#634 FOREST AVE
#646 FOREST AVE
2" TEMP MAIN
2" TEMP BLOWOFF
LIMIT OF WORK PER MDOT PLANS
FOREST AVENUE
4" TEMP VALVE
4" TEMP MAIN
PAVEMENT FOR BASE, SUBBASE AND HOT BITUMINOUS PAVEMENT FOR TRENCH REPAIR IS PAID UNDER UNIT PRICE ITEMS
4"X4" TEMP TEE
6"X2" TAPPING SADDLE
2" TEMP BLOWOFF
#609 FOREST AVE.
NEEDS TEMP WATER
#611 FOREST AVE.
#615 FOREST AVE.
#617 FOREST AVE.
#621 FOREST AVE.
#635 FOREST AVE.
#637 FOREST AVE.
#128-134 WOODFORD ST
PROVIDE TEMPORARY WATER TO 3-11 ARLINGTON PLACE
#3 ARLINGTON PLACE
#120-124 WOODFORD ST
ARLINGTON STREET
ARLINGTON PLACE
#7 ARLINGTON PLACE
#112 WOODFORD STREET
#110 WOODFORD STREET
#6 ARLINGTON PLACE
#11 ARLINGTON PLACE
#106 WOODFORD STREET
GRACE ST

PLAN
SCALE: 1"=20'

MATCH LINE SEE SHEET 8

NOTES:

1. TEMPORARY WATER IS TO BE BURIED BELOW EXISTING GRADE AT ROAD AND DRIVEWAY CROSSINGS (INCIDENTAL TO TEMPORARY WATER)

STATE OF MAINE
DANIEL L. RILEY
LICENSED PROFESSIONAL ENGINEER
APRIL 21, 2017

Civil 3D 2013 Drawing Name: 16067 forest lo.dwg, TAB:FOREST AVENUE TEMP (1)
Civil 3D 2013 Survey Database:
CMM ADJUSTMENT:
BENCHMARK CARDS:
CITY PROPERTY PLAN BOOK SHEETS:
I & I SHEETS:
STREET RECORDS:
TAX MAPS:
VAULT PLANS:
PWD PLANS:
TELEPHONE PLANS:
UNITIL (GAS) PLANS:
WORKING PLANS:

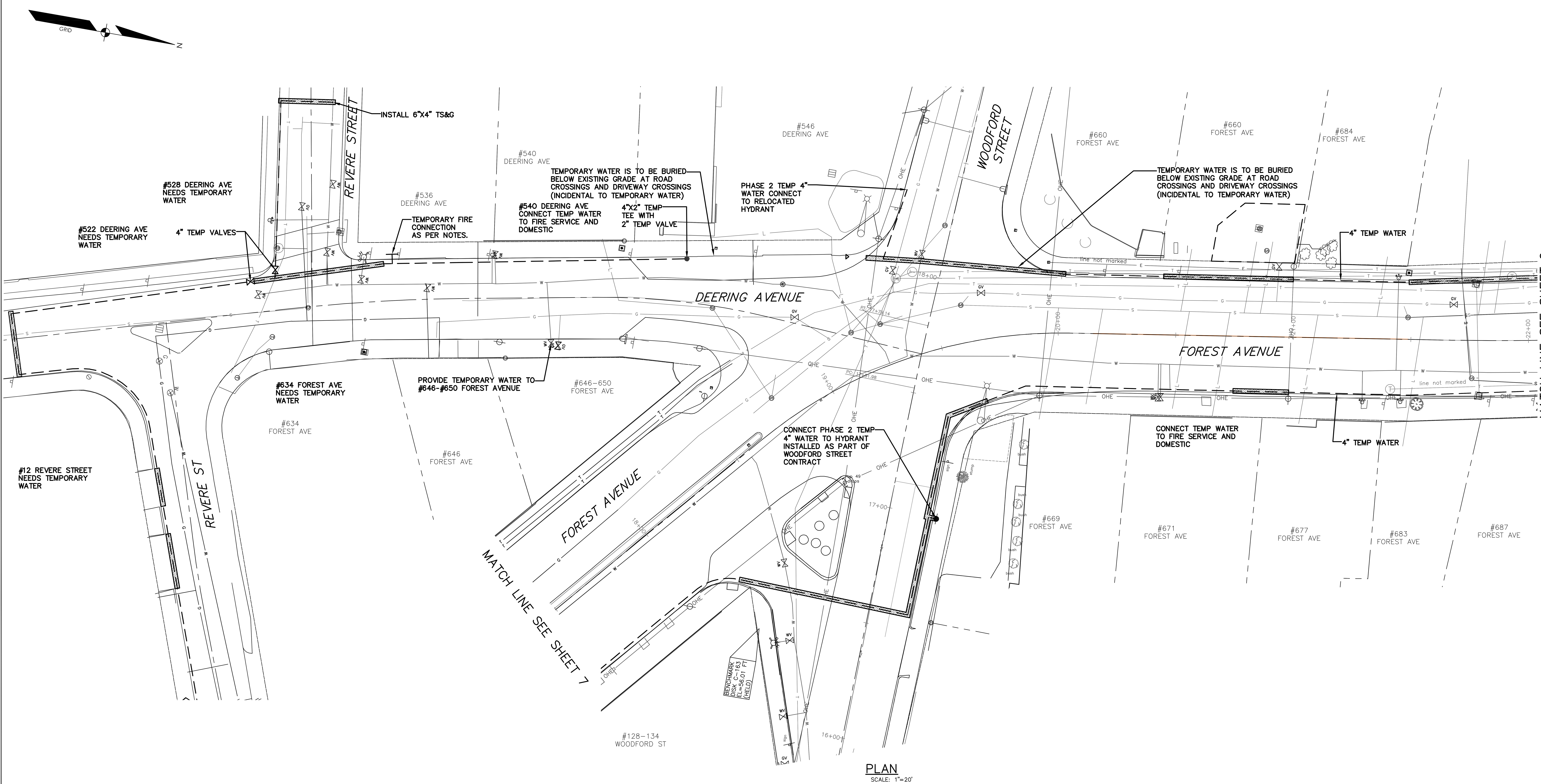
REFERENCES:
PROJECT FIELD BOOK:
OTHER FIELD BOOKS USED:

SURVEY CREW:	SPP
DRAWN BY:	BRF
CHECKED BY:	DLR
SCALE:	1" = 20'
DATE:	APRIL 21, 2017

FOREST AVENUE - WOODFORD CORNER CSO SEPARATION PROJECT
FOREST AVENUE TEMPORARY WATER

CITY OF PORTLAND, MAINE
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

SHEET #
7 OF 18
PLAN NUMBER



PLAN

SCALE: 1"=20'

NOTES:

1. TEMPORARY WATER IS TO BE BURIED BELOW EXISTING GRADE AT ROAD AND DRIVEWAY CROSSINGS (INCIDENTAL TO TEMPORARY WATER)

STATE OF MAINE — DANIEL L. RILEY — PROFESSIONAL ENGINEER — APRIL 21, 2017

REFERENCES:

VAULT PLANS: Civil 3D 2013 Drawing Name: 16067 forest_lo.dwg, TAB FOREST AVENUE TEMP (2); Civil 3D 2013 Survey Database:
CMM ADJUSTMENT:
BENCHMARK CARDS:
CITY PROPERTY PLAN BOOK SHEETS:
I & I SHEETS:
STREET RECORDS:
TAX MAPS:
PROJECT FIELD BOOK:
OTHER FIELD BOOKS USED:
PWD PLANS:
TELEPHONE PLANS:
UNITIL (GAS) PLANS:
WORKING PLANS:

SURVEY CREW: SPP
DRAWN BY: BRF
CHECKED BY: DLR
SCALE: 1" = 20'
DATE: APRIL 21, 2017

FOREST AVENUE - WOODFORD CORNER CSO SEPARATION PROJECT

FOREST AVENUE TEMPORARY WATER

CITY OF PORTLAND, MAINE
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

SHEET # 8 OF 18

PLAN NUMBER

PLAN
SCALE: 1"=20'

NOTES:

1. ANY REMOVAL OF EXISTING PIPES AND STRUCTURES, INCLUDING SEWER AND WATER SERVICES WILL BE INCIDENTAL TO PAY SECTIONS 603 & 604, AND PORTLAND WATER DISTRICT PAY ITEMS.
2. DISTURBANCE LIMITS SHALL NOT EXTEND OUTSIDE THE CITY RIGHT-OF-WAY.
3. PROTECT EXISTING UTILITY INFRASTRUCTURE, CURB AND SIDEWALKS NOT CALLED FOR REMOVAL.
4. TEMPORARY WATER TO BE BURIED BELOW EXISTING GRADE AT ROAD CROSSINGS AND DRIVEWAY CROSSINGS (INCIDENTAL TO TEMPORARY WATER)

STATE OF MAINE
DANIEL L. RILEY
PROFESSIONAL ENGINEER
APRIL 21, 2017

Civil 3D 2013 Drawing Name:
16067 forest lo.dwg, TAB:FOREST AVENUE TEMP (3)
Civil 3D 2013 Survey Database:
CMM ADJUSTMENT:
BENCHMARK CARDS:
CITY PROPERTY PLAN BOOK SHEETS:
I & I SHEETS:
STREET RECORDS:
TAX MAPS:
VAULT PLANS:
PWD PLANS:
TELEPHONE PLANS:
UNITIL (GAS) PLANS:
WORKING PLANS:

REFERENCES:
PROJECT FIELD BOOK:
OTHER FIELD BOOKS USED:

SURVEY CREW: SPP
DRAWN BY: BRF
CHECKED BY: DLR
SCALE: 1" = 20'
DATE: APRIL 21, 2017

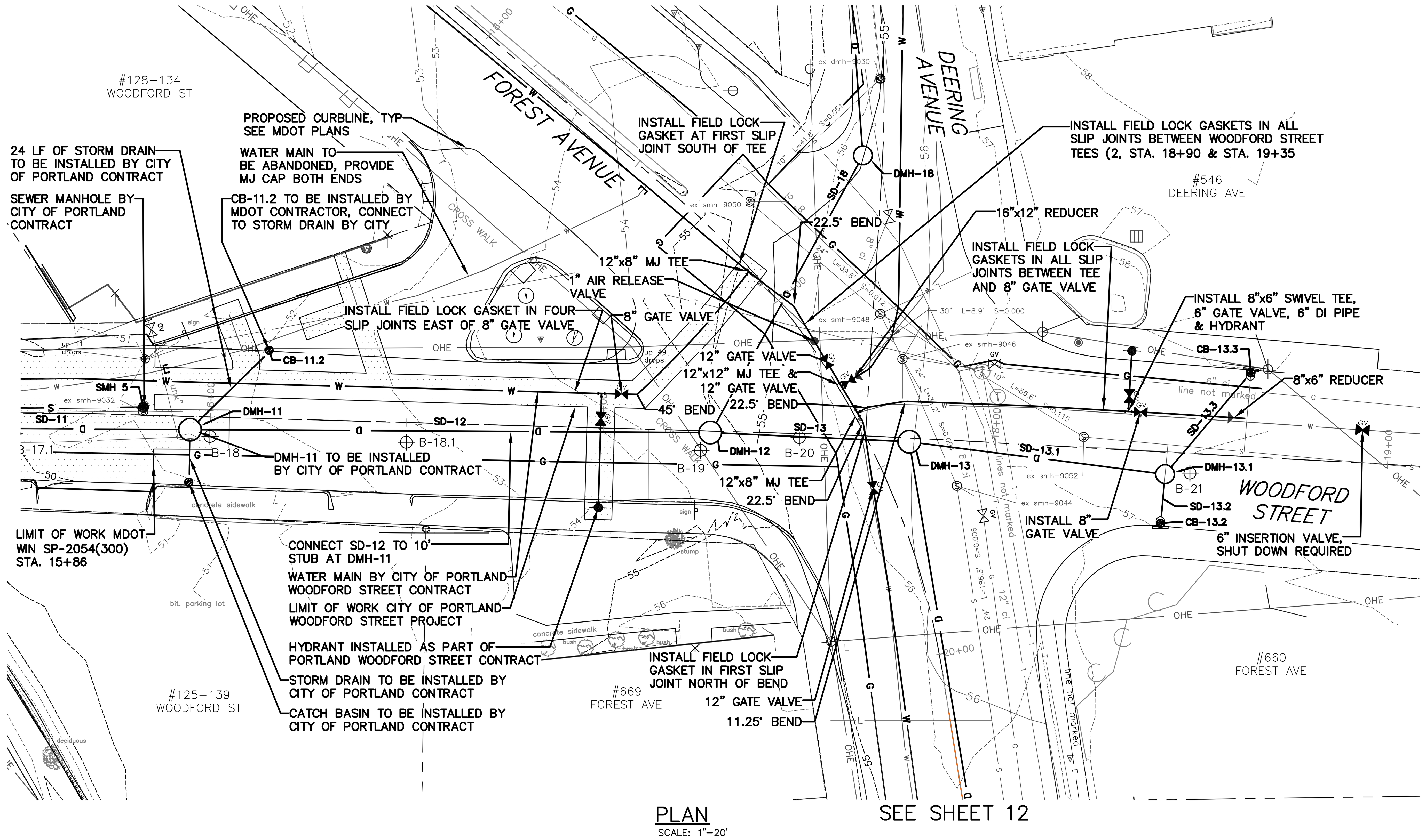
FOREST AVENUE - WOODFORD CORNER CSO SEPARATION PROJECT

FOREST AVENUE TEMPORARY WATER

CITY OF PORTLAND, MAINE
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

SHEET #
9 OF 18

PLAN NUMBER

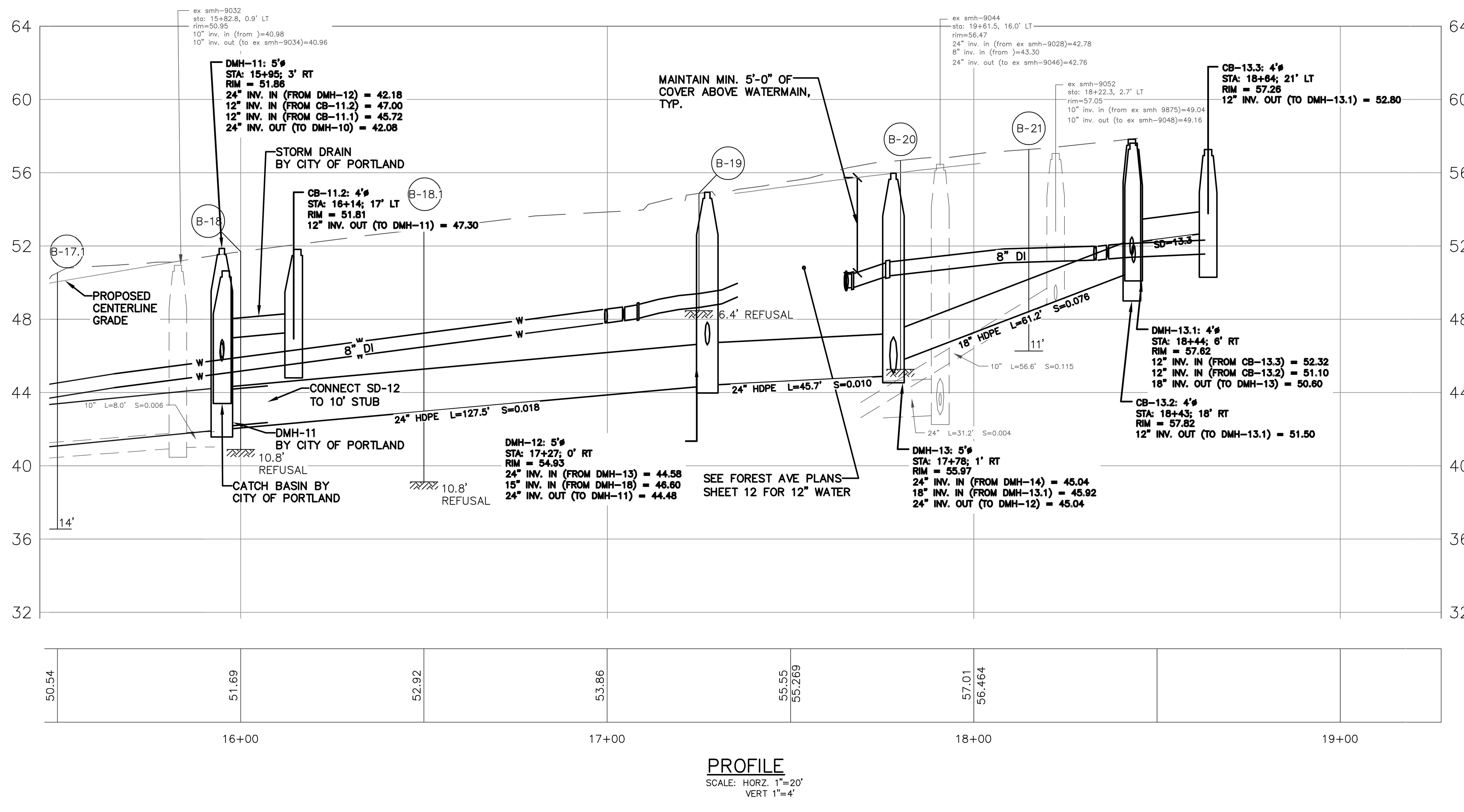


PLAN
SCALE: 1"=20'

Pipe Table				
NAME	SIZE	LENGTH	SLOPE	MATERIAL
SD-13	24"	45.7'	1.01%	HDPE
SD-14	24"	223.7'	0.59%	HDPE
SD-13.1	18"	61.2'	7.65%	HDPE
SD-13.3	12"	29.8'	1.58%	HDPE
SD-13.2	12"	8.6'	4.65%	PVC
SD-12	24"	127.5'	1.80%	HDPE

NOTES:

1. IMPROVEMENT WORK WITHIN THE PROJECT AREA INVOLVES COORDINATION WITH MULTIPLE UTILITIES AND WORK WITHIN CLOSE PROXIMITY TO UTILITIES. CONTRACTOR SHALL COORDINATE ALL WORK WITH UTILITY AGENCIES, COMPLY WITH UTILITY AGENCY REQUIREMENTS AND SHALL SUPPORT AND PROTECT EXISTING UTILITIES THROUGHOUT CONSTRUCTION. WORK SHALL BE CONSIDERED INCIDENTAL TO THE RELATED PAY ITEMS.
2. CATCH BASIN OFFSETS WITHIN ROADWAY ARE TO THE EDGE OF CURB AND CATCH BASIN OFFSETS OUTSIDE ROADWAY ARE TO CENTER OF GRATE. DRAIN AND SEWER MANHOLE OFFSETS ARE TO CENTER OF COVER. COORDINATE LOCATIONS AND RIM ELEVATIONS WITH PLANS BY MDOT.
3. RENEW WATER SERVICES FROM WATER MAIN TO PROPERTY LINE.
4. LIMIT OF WORK CITY OF PORTLAND WOODFORD STREET PROJECT.
5. PROPOSED GAS MAIN LOCATIONS ARE PROVIDED FOR COORDINATION PURPOSES ONLY BASED ON INFORMATION PROVIDED BY UNITIL. CONTRACTOR SHALL PROVIDE EXCAVATION, BACK FILL AND TRENCH REPAIR OF GAS MAIN TRENCH PER UNITIL'S TYPICAL TRENCH REQUIREMENTS. EXCAVATION, BACK FILL AND TRENCH REPAIR SHALL BE PAID AT CONTRACT UNIT PRICES.
6. REFER TO MDOT PLANS TO CONFIRM FINISHED PAVEMENT GRADES. ALL PROPOSED ROAD GRADES SHOWN ON THE CITY OF PORTLAND PLANS ARE FOR REFERENCE ONLY AND SHALL COORDINATED BY THE CONTRACTOR PRIOR TO ORDERING DRAINAGE STRUCTURES.



PROFILE
SCALE: HORZ. 1"=20'
VERT 1"=4'

FOREST AVENUE - WOODFORD CORNER CSO SEPARATION PROJECT

PLAN & PROFILE - WOODFORD STREET STA. 15+50 TO STA. 19+00

CITY OF PORTLAND, MAINE
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

SURVEY CREW: SPP
DRAWN BY: BRF
CHECKED BY: DLR
SCALE: 1" = 20'
DATE: APRIL 21, 2017

SHEET # 10 OF 18

PLAN NUMBER

GRID
N
SEE SHEET 14
DMH-20
REPAIR STREET AT TEMPORARY WATER TRENCH LOCATION
APPROXIMATE LOCATION OF EXISTING 6" WATER MAIN
LINCOLN STREET
CITY PLAN 410/112
SV279870 616 FOREST AVE. RENEW 2" COPPER
#616 FOREST AVENUE
RETIRE SERVICES SV2721661 SV2721662 REMOVE VALVE BOXES
RESET CURB RECONSTRUCT CONCRETE SIDEWALK
SV2715637 626 FOREST AVE. RENEW 6" FS INSTALL 12"x6" SWIVEL TEE, 6" GATE VALVE, 45'± 6" DI PIPE AND 6" SLEEVE
#626 FOREST AVENUE
SV27279222 626 FOREST AVENUE RENEW 1.5" COPPER
LIMIT OF WORK PER DOT PLANS
REVERE ST
#634 FOREST AVE
#646 FOREST AVE
SV2711910 646 FOREST AVE. RENEW 2" COPPER
INSTALL 8" DI
INSTALL FIELD LOCK GASKET IN FIRST SLIP JOINT WEST OF BEND
INSTALL 22.5° BEND
INSTALL FIELD LOCK GASKET IN ALL SLIP JOINTS BETWEEN TEE & BEND
INSTALL 8" GATE VALVE
INSTALL FIELD LOCK GASKETS IN ALL SLIP JOINTS BETWEEN STA. 12+82 & STA. 14+00
APPROXIMATE LOCATION OF EXISTING 12" WATER MAIN
CAP EXISTING HYDRANT BRANCH
CAP PIPES
FOREST AVENUE
12" DI
INSTALL 12" SLEEVE
INSTALL 12" INSERTION VALVE
TRENCH REPAIR, SEE MDOT PLANS FOR TYP. SECTION
LIMIT OF WORK PER DOT PLANS
8" DI
INSTALL 12"x8" SWIVEL TEE
INSTALL 12" GATE VALVE
INSTALL 12"x6" SWIVEL TEE
6" DI
ALL EXISTING CI PIPE TO BE REMOVED
REMOVE HYDRANT, SALVAGE FOR PWD
INSTALL 8" SLEEVE
INSTALL 12"x6" SWIVEL TEE, 6" GATE VALVE, 6" DI PIPE & HYDRANT ASSEMBLY
RELOCATE MAILBOX SEE MDOT PLANS
SV2715073 611 FOREST AVE. RENEW
INSTALL 6" SLEEVE
INSTALL 10' OF 6" DI
INSTALL 6" CUT-IN VALVE
INSTALL 6"X2" TAPPING SADDLE
SV2711570 617 FOREST AVE. RENEW
SV2711645 621 FOREST AVE. RENEW 1.5" COPPER
SV2713740 635 FOREST AVE. RENEW
SV2711982 637 FOREST AVE. RENEW
#609 FOREST AVE.
#611 FOREST AVE.
#615 FOREST AVE.
#617 FOREST AVE.
#621 FOREST AVE.
#635 FOREST AVE.
#637 FOREST AVE.
#128-134 WOODFORD ST
#120-124 WOODFORD ST
INSTALL 8" CUT IN VALVE, SHUT DOWN REQUIRED
#609 FOREST AVE NEEDS TEMP WATER
#3 ARLINGTON PLACE
ARLINGTON PLACE
ARLINGTON STREET
#112 WOODFORD STREET
#7 ARLINGTON PLACE
#110 WOODFORD STREET
#6 ARLINGTON PLACE
#11 ARLINGTON PLACE
#106 WOODFORD STREET
MATCH LINE SEE SHEET 9

PLAN
SCALE: 1"=20'

NOTES:
1. LOCATIONS OF DEPICTED UTILITIES OBTAINED FROM PORTLAND WATER DISTRICT ASSET MANAGEMENT & PLANNING DEPARTMENT. CONTRACTOR IS CAUTIONED THAT UTILITIES MAY BE ENCOUNTERED WHICH MAY NOT BE DEPICTED.
2. PROPOSED GAS MAIN LOCATIONS ARE PROVIDED FOR COORDINATION PURPOSES ONLY BASED ON INFORMATION PROVIDED BY UNITIL. CONTRACTOR SHALL PROVIDE EXCAVATION, BACK FILL AND TRENCH REPAIR OF GAS MAIN TRENCH PER UNITIL'S TYPICAL TRENCH REQUIREMENTS. EXCAVATION, BACK FILL AND TRENCH REPAIR SHALL BE PAID AT CONTRACT UNIT PRICES.

STATE OF MAINE — DANIEL L. RILEY — PROFESSIONAL ENGINEER — APRIL 21, 2017

Civil 3D 2013 Drawing Name: 18067 forest pp.dwg, TAB:FOREST PP
Civil 3D 2013 Survey Database:
CMM ADJUSTMENT:
BENCHMARK CARDS:
CITY PROPERTY PLAN BOOK SHEETS:
I & I SHEETS:
STREET RECORDS:
TAX MAPS:
VAULT PLANS:
PWD PLANS:
TELEPHONE PLANS:
UNITIL (GAS) PLANS:
WORKING PLANS:

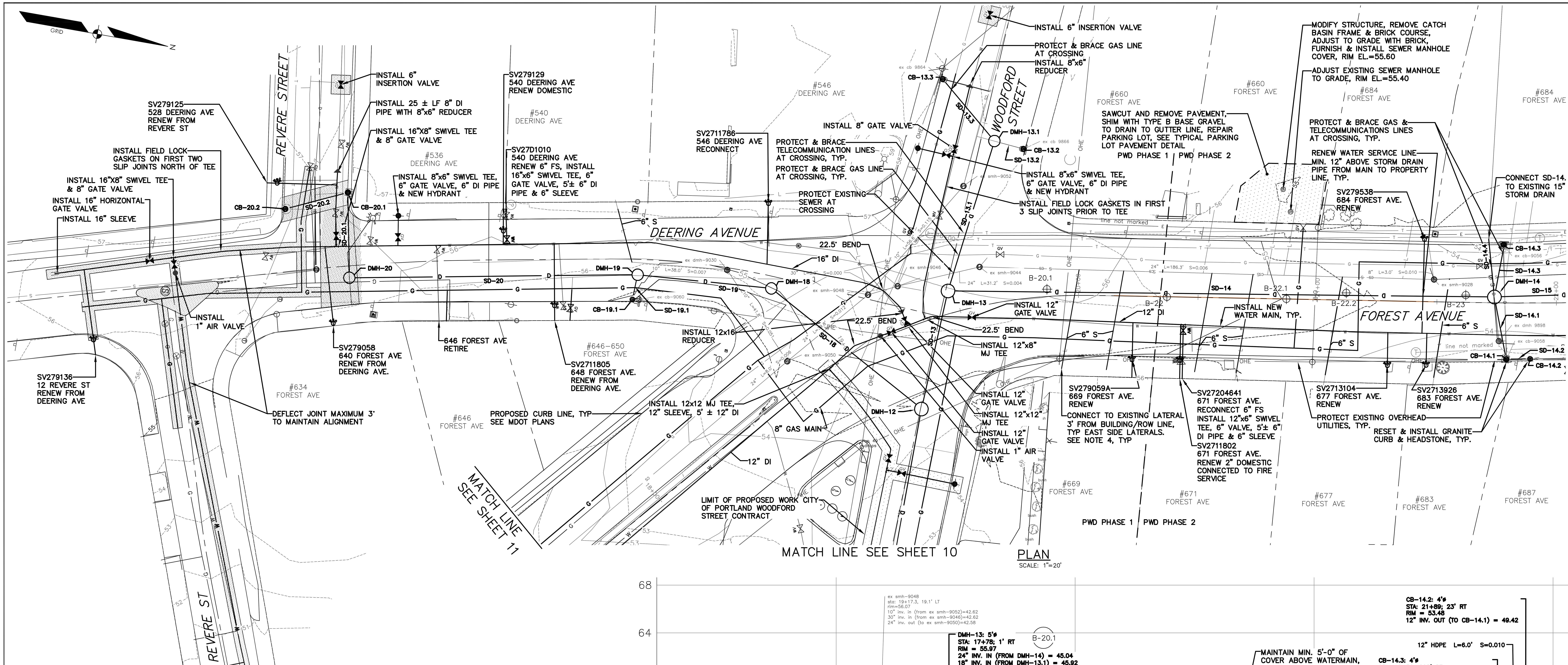
REFERENCES:
PROJECT FIELD BOOK:
OTHER FIELD BOOKS USED:

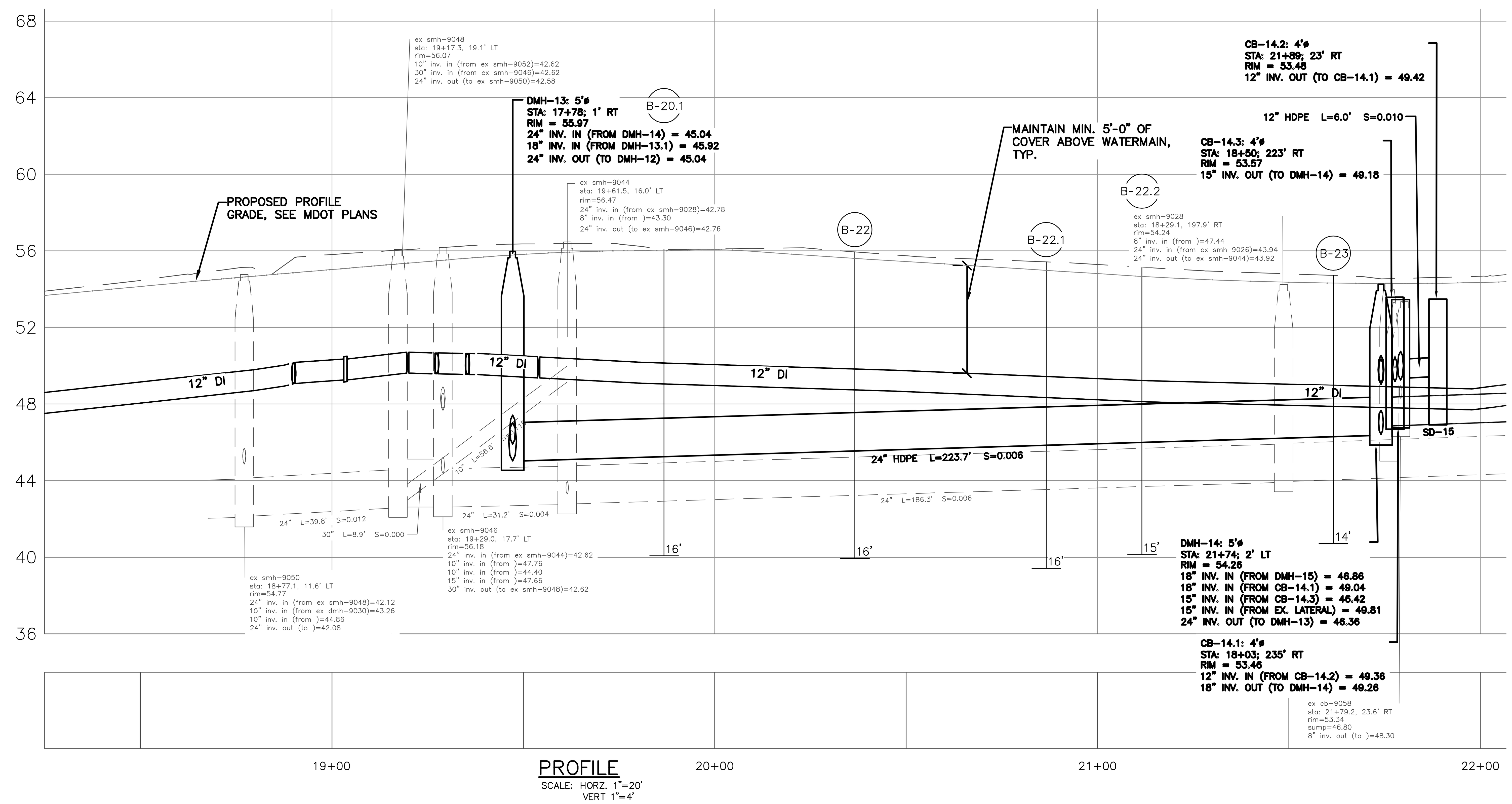
SURVEY CREW: SPP
DRAWN BY: BRF
CHECKED BY: DLR
SCALE: 1" = 20'
DATE: APRIL 21, 2017

FOREST AVENUE - WOODFORD CORNER CSO SEPARATION PROJECT
PLAN - FOREST AVENUE STA. 12+00 TO STA. 18+00

PORTLAND WATER DISTRICT
225 DOUGLAS STREET
PORTLAND, MAINE

SHEET # 11 OF 18
PLAN NUMBER





NOTES:

1. FOREST AVENUE IMPROVEMENTS TO BE CONSTRUCTED UNDER MDOT WIN SP-2054 (300) CONTRACT.
2. IMPROVEMENT WORK WITHIN FOREST AVENUE INVOLVES COORDINATION WITH MULTIPLE UTILITIES AND WORK WITHIN CLOSE PROXIMITY TO UTILITIES. CONTRACTOR SHALL COORDINATE ALL WORK WITH UTILITY AGENCIES, COMPLY WITH UTILITY AGENCY REQUIREMENTS AND SHALL SUPPORT AND PROTECT EXISTING UTILITIES THROUGHOUT CONSTRUCTION. WORK SHALL BE CONSIDERED INCIDENTAL TO THE RELATED PAY ITEMS.
3. CATCH BASIN OFFSETS WITHIN ROADWAY ARE TO THE EDGE OF CURB AND CATCH BASIN OFFSETS OUTSIDE ROADWAY ARE TO CENTER OF GRATE. DRAIN AND SEWER MANHOLE OFFSETS ARE TO CENTER OF COVER. REFER TO MDOT PLANS AND COORDINATE STRUCTURE RIM ELEVATIONS AND OFFSETS.
4. REMOVE AND REPLACE SEWER LATERALS ON THE EAST SIDE OF FOREST AVENUE FROM STA 19+50 TO 23+00. RECONNECT TO EXISTING LATERAL 3' FROM BUILDING LINE. RECONNECT TO EXISTING SEWER MAIN WITH INSERT-A-TEE CONNECTION. REMOVE EXISTING 90' ELBOWS AT CONNECTION. INSERT-A-TEE CONNECTIONS ARE INCIDENTAL TO NEW LATERAL PIPE ITEM 633.07.
5. LIMIT OF WORK CITY OF PORTLAND WOODFORD STREET PROJECT.
6. TRENCH REPAIR OUTSIDE OF MDOT PAVING LIMITS
7. PROPOSED GAS MAIN LOCATIONS ARE PROVIDED FOR COORDINATION PURPOSES ONLY BASED ON INFORMATION PROVIDED BY UNITIL. CONTRACTOR SHALL PROVIDE EXCAVATION, BACK FILL AND TRENCH REPAIR OF GAS MAIN TRENCH PER UNITIL'S TYPICAL TRENCH REQUIREMENTS. EXCAVATION, BACK FILL AND TRENCH REPAIR SHALL BE PAID AT CONTRACT UNIT PRICE.
8. REFER TO MDOT PLANS TO CONFIRM FINISHED PAVEMENT GRADES. ALL PROPOSED ROAD GRADES SHOWN ON THE CITY OF PORTLAND PLANS ARE FOR REFERENCE ONLY AND SHALL COORDINATED BY THE CONTRACTOR PRIOR TO ORDERING DRAINAGE STRUCTURES.

Pipe Table

NAME	SIZE	LENGTH	SLOPE	MATERIAL
SD-13	24"	45.7'	1.01%	HDPE
SD-15	18"	145.0'	0.70%	HDPE
SD-14	24"	223.7'	0.59%	HDPE
SD-13.1	18"	61.2'	7.65%	HDPE
SD-14.1	18"	22.0'	1.00%	HDPE
SD-14.3	15"	17.7'	15.54%	HDPE
SD-14.2	12"	6.0'	1.00%	HDPE
SD-13.3	12"	29.8'	1.58%	HDPE
SD-13.2	12"	8.6'	4.65%	PVC
SD-19.1	12"	6.6'	3.17%	HDPE
SD-18	15"	76.1'	0.56%	HDPE
SD-14.4	15"	21.8'	2.94%	HDPE
SD-19	15"	52.3'	0.67%	HDPE

STATE OF MAINE — DANIEL L. RILEY — PROFESSIONAL ENGINEER — APRIL 21, 2017

Civil 3D 2013 Drawing Name: 16067 forest pp.dwg, TAB:Forest PP 1
Civil 3D 2013 Survey Database:
CMM ADJUSTMENT:
BENCHMARK CARDS:
CITY PROPERTY PLAN BOOK SHEETS:
I & I SHEETS:
STREET RECORDS:
TAX MAPS:
VAULT PLANS:
PWD PLANS:
TELEPHONE PLANS:
UNITIL (GAS) PLANS:
WORKING PLANS:

REFERENCES:
PROJECT FIELD BOOK:
OTHER FIELD BOOKS USED:

SURVEY CREW: SPP
DRAWN BY: BRF
CHECKED BY: DLR
SCALE: 1" = 20'
DATE: APRIL 21, 2017

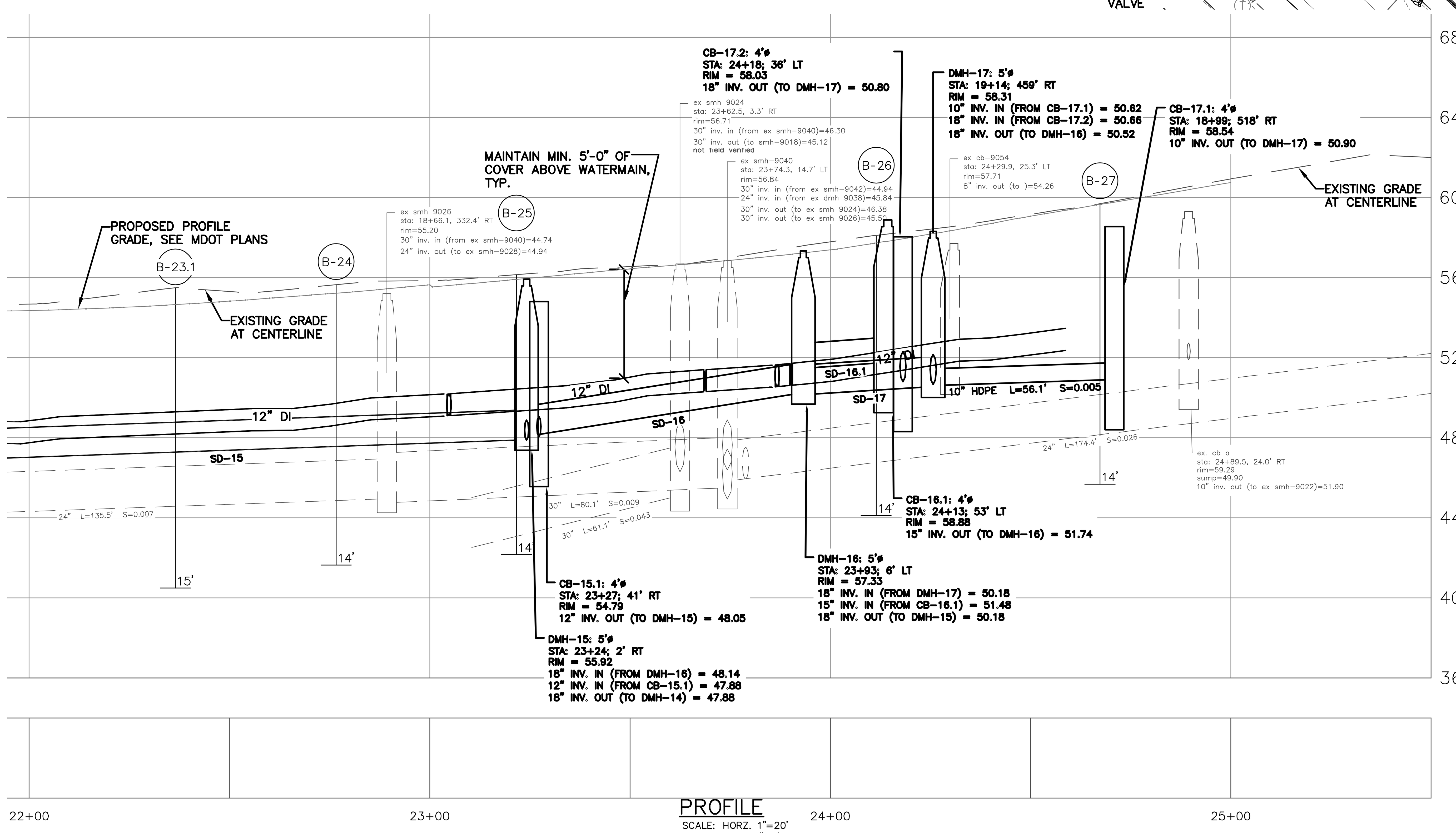
FOREST AVENUE - WOODFORD CORNER CSO SEPARATION PROJECT
PLAN & PROFILE - FOREST AVENUE STA. 18+00 TO STA. 22+75

CITY OF PORTLAND, MAINE
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

RESURGAM — CITY OF PORTLAND MAINE

SHEET # 12 OF 18
PLAN NUMBER

PLAN
SCALE: 1"=20'



PROFILE
SCALE: HORZ. 1"=20'
VERT 1"=4'

NOTES:

1. FOREST AVENUE STREET AND SIDEWALK IMPROVEMENTS TO BE CONSTRUCTED UNDER MDOT WIN SP-2054 (300) CONTRACT.

2. IMPROVEMENT WORK WITHIN FOREST AVENUE INVOLVES COORDINATION WITH MULTIPLE UTILITIES AND WORK WITHIN CLOSE PROXIMITY TO UTILITIES. CONTRACTOR SHALL COORDINATE ALL WORK WITH UTILITY AGENCIES, COMPLY WITH UTILITY AGENCY REQUIREMENTS AND SHALL SUPPORT AND PROTECT EXISTING UTILITIES THROUGHOUT CONSTRUCTION. WORK SHALL BE CONSIDERED INCIDENTAL TO THE RELATED PAY ITEMS.

3. CATCH BASIN OFFSETS WITHIN ROADWAY ARE TO THE EDGE OF CURB AND CATCH BASIN OFFSETS OUTSIDE ROADWAY ARE TO CENTER OF GRATE. DRAIN AND SEWER MANHOLE OFFSETS ARE TO CENTER OF COVER. REFER TO MDOT PLANS AND COORDINATE STRUCTURE RIM ELEVATIONS AND OFFSETS.

4. REMOVE AND REPLACE SEWER LATERALS ON THE EAST SIDE OF FOREST AVENUE FROM STA 19+50 TO 23+00. RECONNECT TO EXISTING LATERAL 3' FROM BUILDING LINE. RECONNECT TO EXISTING SEWER MAIN WITH INSERT-A-TEE CONNECTION. REMOVE EXISTING 90° ELBOWS AT CONNECTION. INSERT-A-TEE CONNECTIONS ARE INCIDENTAL TO NEW LATERAL PIPE ITEM 633.07.

5. PROPOSED GAS MAIN LOCATIONS ARE PROVIDED FOR COORDINATION PURPOSES ONLY BASED ON INFORMATION PROVIDED BY UNITIL. CONTRACTOR SHALL PROVIDE EXCAVATION, BACK FILL AND TRENCH REPAIR OF GAS MAIN TRENCH PER UNITIL'S TYPICAL TRENCH REQUIREMENTS. EXCAVATION, BACK FILL AND TRENCH REPAIR SHALL BE PAID AT CONTRACT UNIT PRICE.

6. REFER TO MDOT PLANS TO CONFIRM FINISHED PAVEMENT GRADES. ALL PROPOSED ROAD GRADES SHOWN ON THE CITY OF PORTLAND PLANS ARE FOR REFERENCE ONLY AND SHALL COORDINATED BY THE CONTRACTOR PRIOR TO ORDERING DRAINAGE STRUCTURES.

Pipe Table

NAME	SIZE	LENGTH	SLOPE	MATERIAL
SD-17.2	18"	26.9'	0.52%	HDPE
SD-17	18"	27.3'	1.25%	HDPE
SD-15	18"	145.0'	0.70%	HDPE
SD-15.1	12"	34.6'	0.50%	PVC
SD-17.1	10"	56.1'	0.50%	PVC
SD-16	18"	64.4'	3.15%	HDPE
SD-16.1	15"	46.6'	0.58%	HDPE

STATE OF MAINE DANIEL L RILEY No. PROFESSIONAL ENGINEER
APRIL 21, 2017

Civil 3D 2013 Drawing Name: 16067 forest pp.dwg, TAB:Forest PP 2
Civil 3D 2013 Survey Database:
CMM ADJUSTMENT:
BENCHMARK CARDS:
CITY PROPERTY PLAN BOOK SHEETS:
I & I SHEETS:
STREET RECORDS:
TAX MAPS:
VAULT PLANS:
PWD PLANS:
TELEPHONE PLANS:
UNITIL (GAS) PLANS:
WORKING PLANS:

REFERENCES:
PROJECT FIELD BOOK:
OTHER FIELD BOOKS USED:

SURVEY CREW:	DRAWN BY:	CHECKED BY:	SCALE:	DATE:
SPP	BRF	DLR	1" = 20'	APRIL 21, 2017

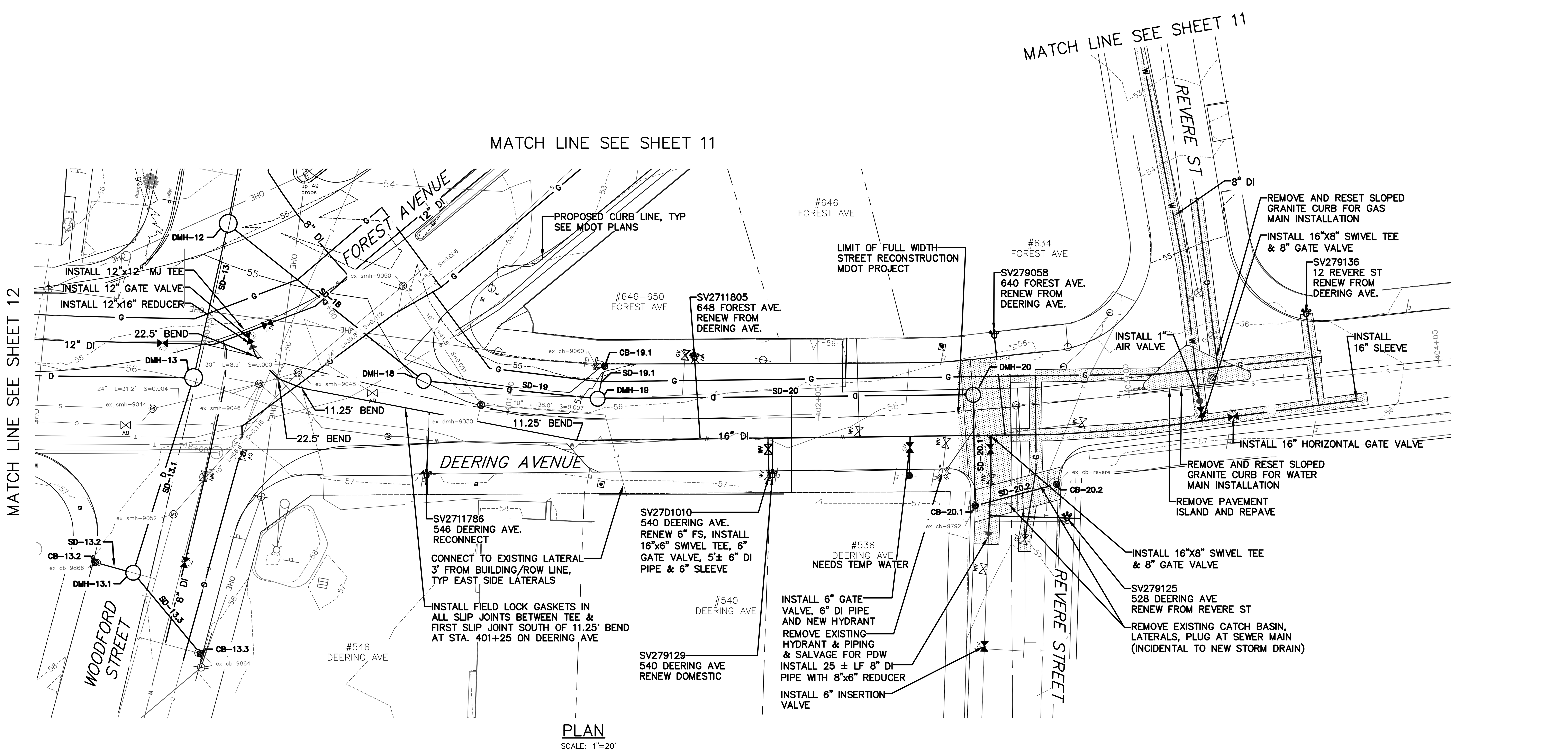
FOREST AVENUE - WOODFORD CORNER CSO SEPARATION PROJECT

PLAN & PROFILE - FOREST AVENUE
STA. 22+75 TO STA. 25+50

CITY OF PORTLAND, MAINE
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

SHEET # 13 OF 18

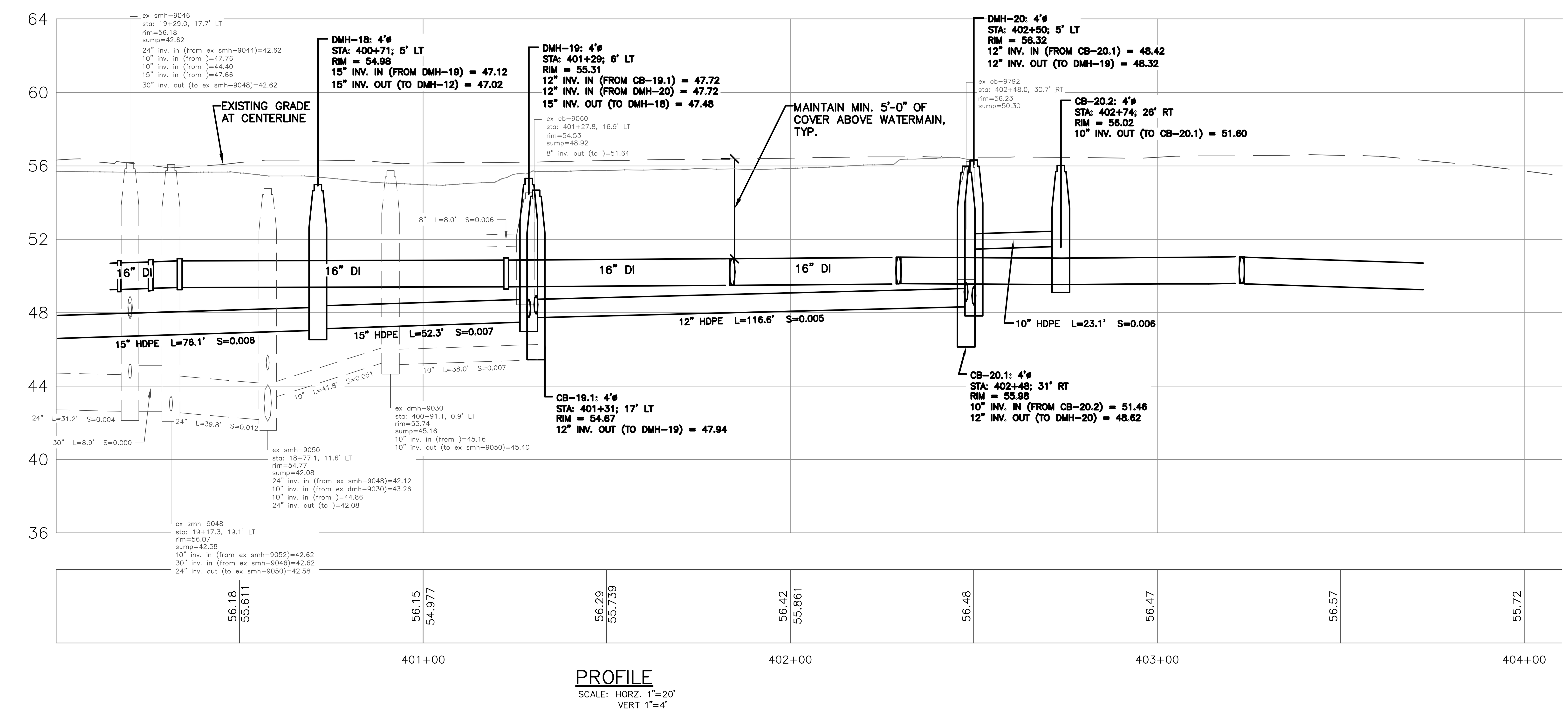
PLAN NUMBER



Pipe Table				
NAME	SIZE	LENGTH	SLOPE	MATERIAL
SD-19.1	12"	6.6'	3.17%	HDPE
SD-18	15"	76.1'	0.56%	HDPE
SD-19	15"	52.3'	0.67%	HDPE
SD-20.2	10"	23.1'	0.61%	HDPE
SD-20.1	12"	31.7'	0.63%	HDPE
SD-20	12"	116.6'	0.51%	HDPE

NOTES:

1. FOREST AVENUE IMPROVEMENTS TO BE CONSTRUCTED UNDER MDOT WIN SP-2054 (300) CONTRACT.
2. IMPROVEMENT WORK WITHIN FOREST AVENUE INVOLVES COORDINATION WITH MULTIPLE UTILITIES AND WORK WITHIN CLOSE PROXIMITY TO UTILITIES. CONTRACTOR SHALL COORDINATE ALL WORK WITH UTILITY AGENCIES, COMPLY WITH UTILITY AGENCY REQUIREMENTS AND SHALL SUPPORT AND PROTECT EXISTING UTILITIES THROUGHOUT CONSTRUCTION. WORK SHALL BE CONSIDERED INCIDENTAL TO THE RELATED PAY ITEMS.
3. CATCH BASIN OFFSETS WITHIN ROADWAY ARE TO THE EDGE OF CURB AND CATCH BASIN OFFSETS OUTSIDE ROADWAY ARE TO CENTER OF GRATE. DRAIN AND SEWER MANHOLE OFFSETS ARE TO CENTER OF COVER. REFER TO MDOT PLANS AND COORDINATE STRUCTURE RIM ELEVATIONS AND OFFSETS.
4. REMOVE AND REPLACE SEWER LATERALS ON THE EAST SIDE OF FOREST AVENUE FROM STA 19+50 TO 23+00. RECONNECT TO EXISTING LATERAL 3' FROM BUILDING LINE. RECONNECT TO EXISTING SEWER MAIN WITH INSERT-A-TEE CONNECTION. REMOVE EXISTING 90° ELBOWS AT CONNECTION. INSERT-A-TEE CONNECTIONS ARE INCIDENTAL TO NEW LATERAL PIPE ITEM 633.07.
5. TRENCH REPAIR OUTSIDE OF MDOT PAVING LIMITS.
6. PROPOSED GAS MAIN LOCATIONS ARE PROVIDED FOR COORDINATION PURPOSES ONLY BASED ON INFORMATION PROVIDED BY UNITIL. CONTRACTOR SHALL PROVIDE EXCAVATION, BACK FILL AND TRENCH REPAIR OF GAS MAIN TRENCH PER UNITIL'S TYPICAL TRENCH REQUIREMENTS. EXCAVATION, BACK FILL AND TRENCH REPAIR SHALL BE PAID AT CONTRACT UNIT PRICE.
7. REFER TO MDOT PLANS TO CONFIRM FINISHED PAVEMENT GRADES. ALL PROPOSED ROAD GRADES SHOWN ON THE CITY OF PORTLAND PLANS ARE FOR REFERENCE ONLY AND SHALL COORDINATED BY THE CONTRACTOR PRIOR TO ORDERING DRAINAGE STRUCTURES.



STATE OF MAINE DANIEL L. RILEY No. PROFESSIONAL ENGINEER APRIL 21, 2017

Civil 3D 2013 Drawing Name: 16067 deering pp.dwg, TAB:deering pp
Civil 3D 2013 Survey Database:
CMM ADJUSTMENT:
BENCHMARK CARDS:
CITY PROPERTY PLAN BOOK SHEETS:
I & I SHEETS:
STREET RECORDS:
TAX MAPS:
VAULT PLANS:
PWD PLANS:
TELEPHONE PLANS:
UNITIL (GAS) PLANS:
WORKING PLANS:

REFERENCES:
PROJECT FIELD BOOK:
OTHER FIELD BOOKS USED:

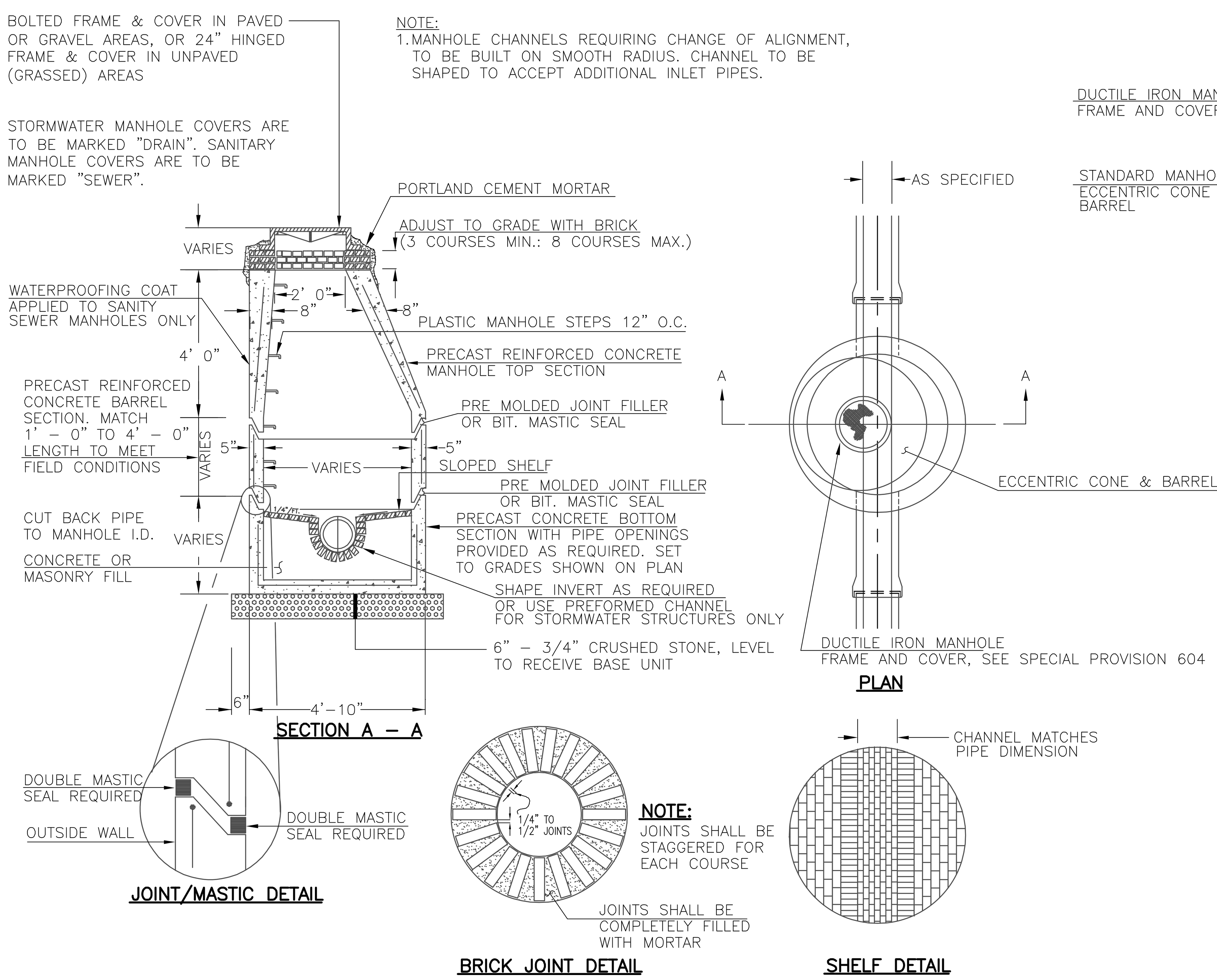
SURVEY CREW: SPP
DRAWN BY: BRF
CHECKED BY: DLR
SCALE: 1" = 20'
DATE: APRIL 21, 2017

FOREST AVENUE - WOODFORD CORNER CSO SEPARATION PROJECT
PLAN & PROFILE - DEERING AVENUE

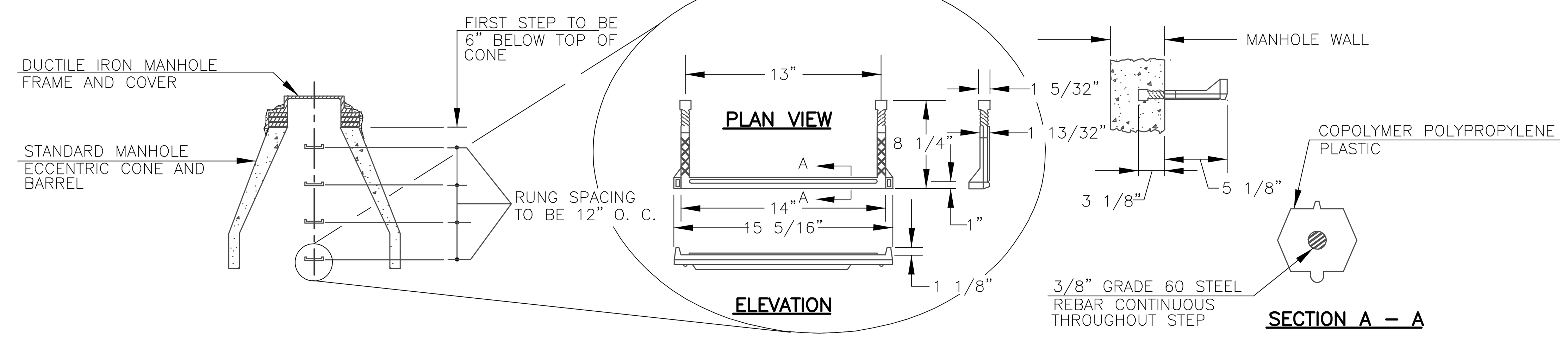
CITY OF PORTLAND, MAINE
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

RESURGAM CITY OF PORTLAND MAINE

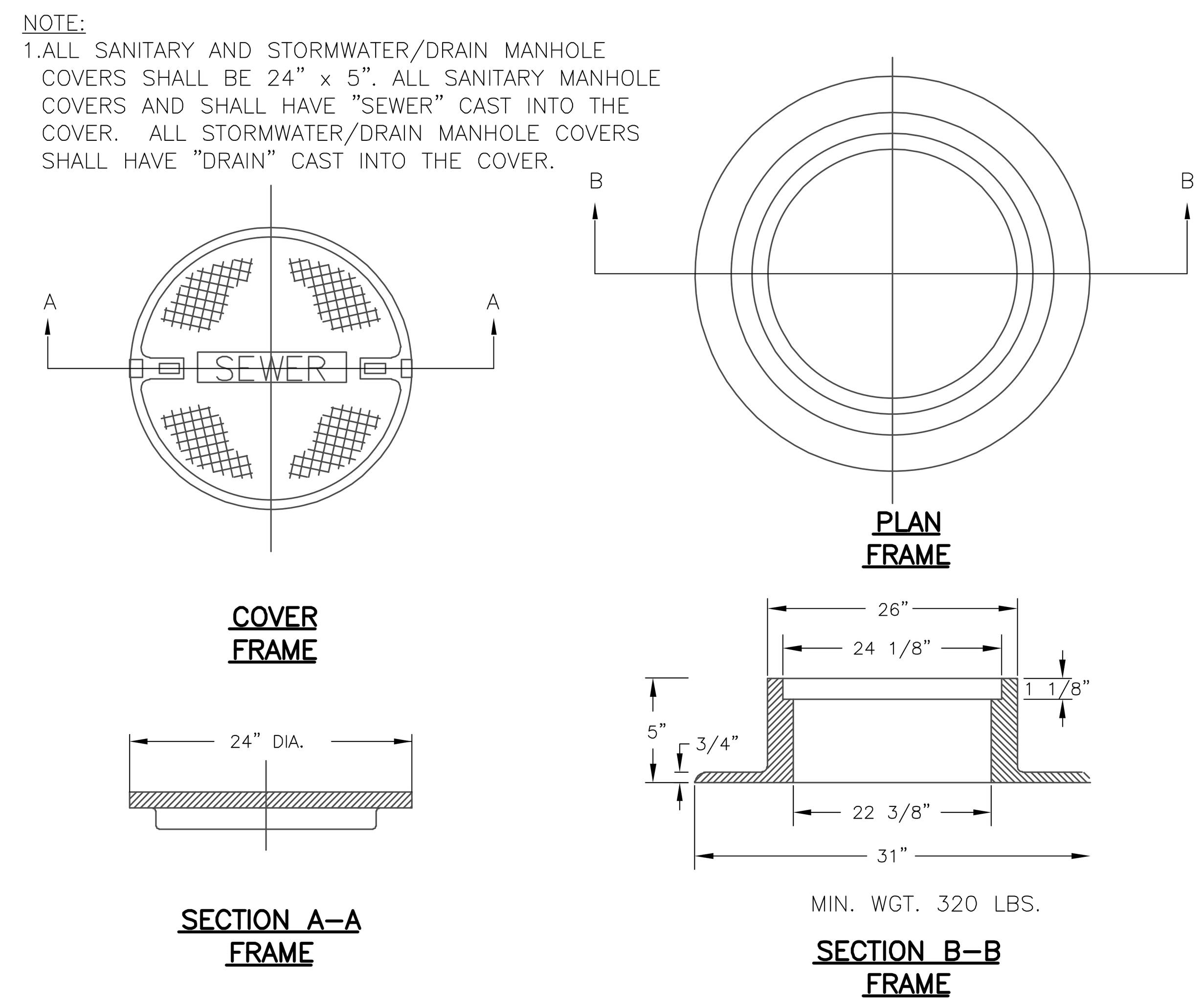
SHEET # 14 OF 18
PLAN NUMBER



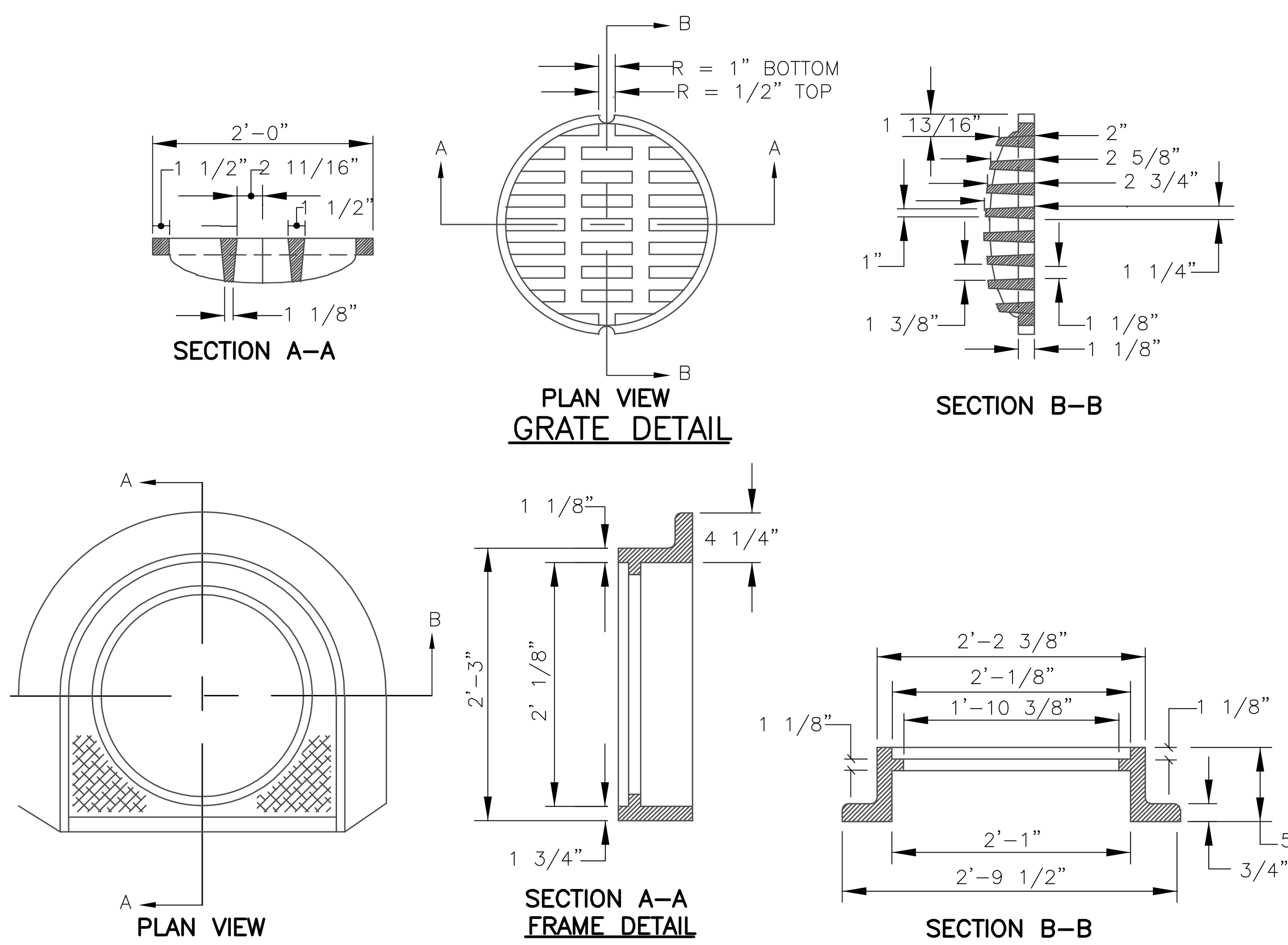
PRECAST CONCRETE MANHOLE TYPE "A"
NOT TO SCALE



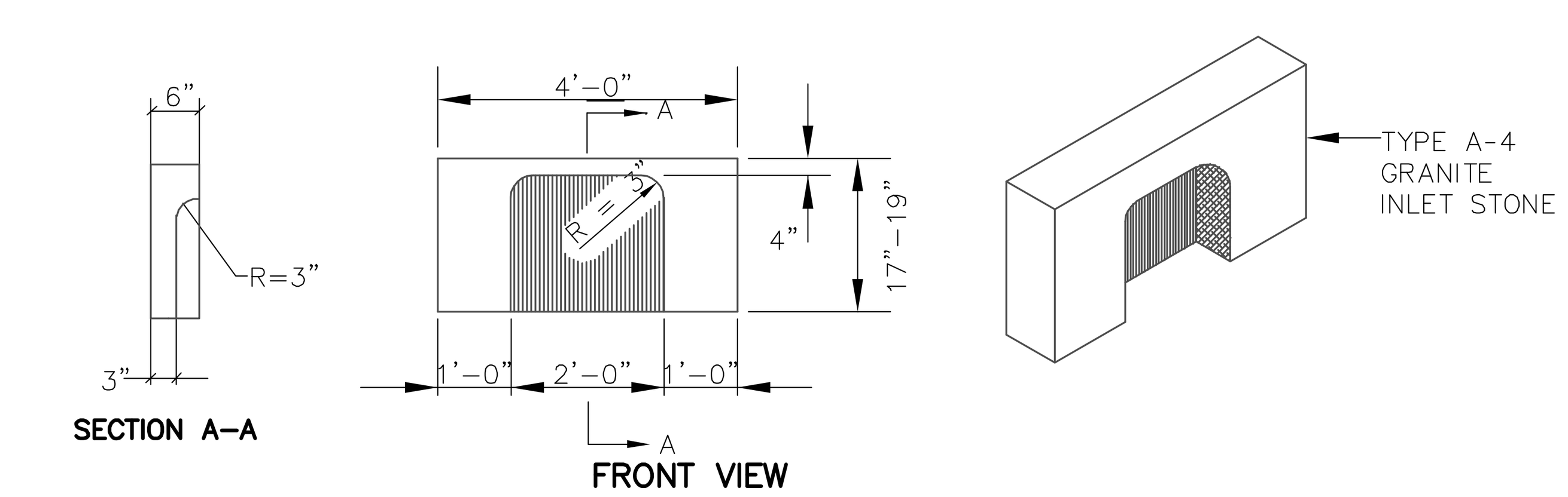
PLASTIC MANHOLE STEPS
NOT TO SCALE



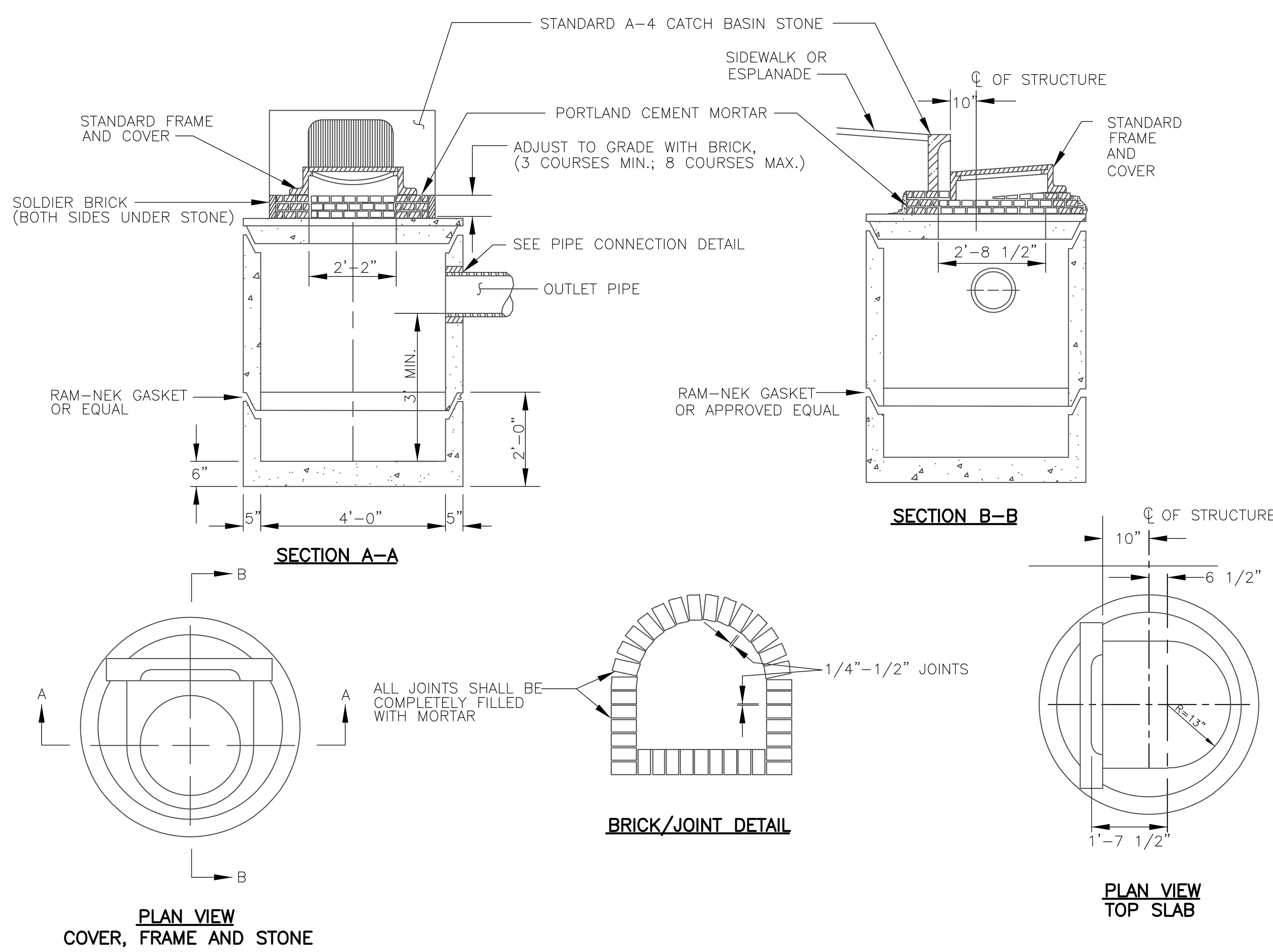
CAST IRON MANHOLE FRAME AND COVER
NOT TO SCALE



CATCH BASIN TYPE "D" – FRAME & COVER DETAIL
NOT TO SCALE



TYPE A–4 GRANITE CATCH BASIN INLET STONE DETAIL
NOT TO SCALE



PRECAST CONCRETE CATCH BASIN – TYPE E
NOT TO SCALE

GENERAL NOTES FOR MANHOLES & CATCH BASINS

1. ALL CONCRETE SHALL BE CLASS "A" AND HAVE A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 4000 lbs. PER SQ. INCH AT THE END OF 28 DAYS, UNLESS OTHERWISE NOTED.
2. PRECAST REINFORCED CONE BARREL MANUFACTURED PER ASTM SPEC. C–478–67
3. SEWER BRICK SHALL CONFORM TO ASTM SPEC. DESIGNATE ON C–32–63, GRADE MA AND SA.
4. SANITARY SEWER MANHOLES SHALL HAVE A BITUMINOUS WATERPROOFING APPLIED TO THE EXTERIOR SURFACE. IF CONSTRUCTED OF BRICK MASONRY, SURFACE SHALL BE PLASTERED WITH A SMOOTH MORTAR FINISH 3/8" THICK. AFTER THE MORTAR HAS SET, THE SURFACE SHALL BE WATERPROOFED AS REQUIRED BY SUPPLEMENTAL SPECIFICATIONS SECTION 604.
5. MANHOLES MAY BE CONSTRUCTED OF MASONRY, PRECAST REINFORCED CONCRETE, OR CAST IN PLACE.
6. ALL PRECAST MANHOLES AND CATCH BASINS SHALL BE IDENTIFIED BY STATION AND OFFSET, PAINTED ON THE SIDE OF THE STRUCTURE BY THE MANUFACTURER.
7. EXISTING FRAMES, AND COVERS SHALL BE SALVAGED BY THE CONTRACTOR, AND SHALL REMAIN THE PROPERTY OF THE CITY OF PORTLAND. CONTRACTOR SHALL DELIVER TO CITY STOCKYARD AT NO COST.
8. EXISTING GRANITE COBBLE STONE AND PAVERS SHALL BE STOCKPILE BY THE CONTRACTOR, AND REUSED FOR CONSTRUCTION OF NEW COBBLE STONE GUTTER. GRANITE NOT USED SHALL REMAIN THE PROPERTY OF THE CITY OF PORTLAND.

STATE OF MAINE – DANIEL L. RILEY – PROFESSIONAL ENGINEER – APRIL 21, 2017

Civil 3D 2013 Drawing Name: 16067_D.dwg, TAB:d1
Civil 3D 2013 Survey Database:
CMM ADJUSTMENT:
BENCHMARK CARDS:
CITY PROPERTY PLAN BOOK SHEETS:
I & I SHEETS:
STREET RECORDS:
TAX MAPS:
VAULT PLANS:
PWD PLANS:
TELEPHONE PLANS:
UNITIL (GAS) PLANS:
WORKING PLANS:

REFERENCES:
PROJECT FIELD BOOK:
OTHER FIELD BOOKS USED:

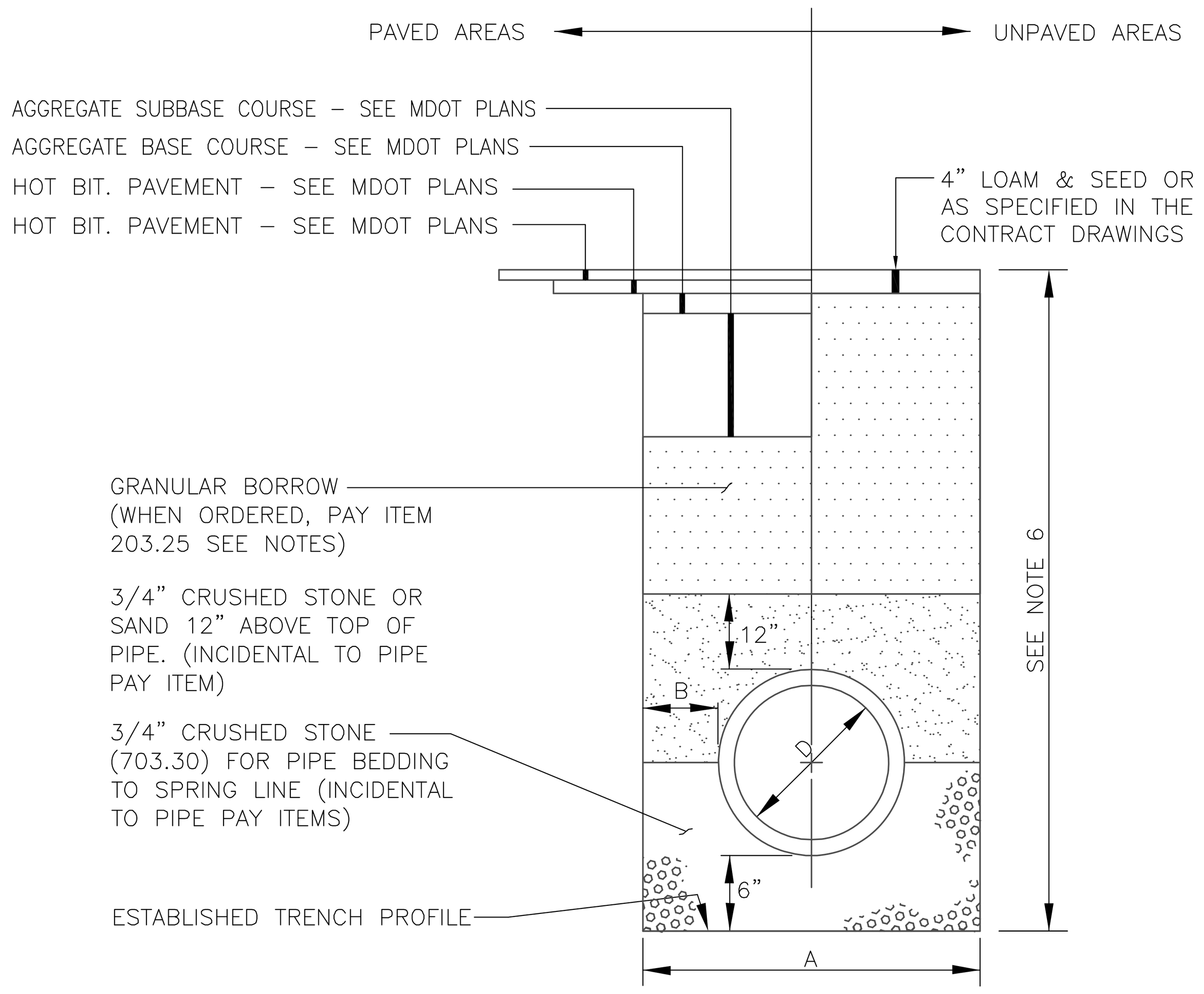
SURVEY CREW: SPP
DRAWN BY: BRF
CHECKED BY: DLR
SCALE: AS NOTED
DATE: APRIL 21, 2017

FOREST AVENUE - WOODFORD CORNER CSO SEPARATION PROJECT
STANDARD CONSTRUCTION DETAILS

CITY OF PORTLAND, MAINE
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

RESURGAM – CITY OF PORTLAND, MAINE

SHEET # 15 OF 18
PLAN NUMBER



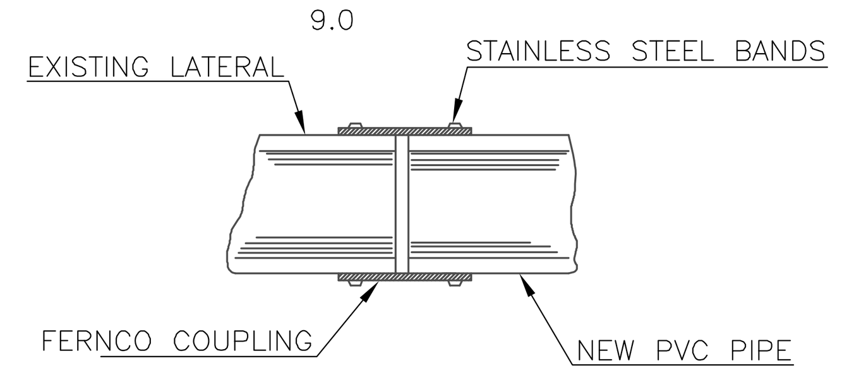
TYPICAL PIPE INSTALLATION DETAIL

NOT TO SCALE

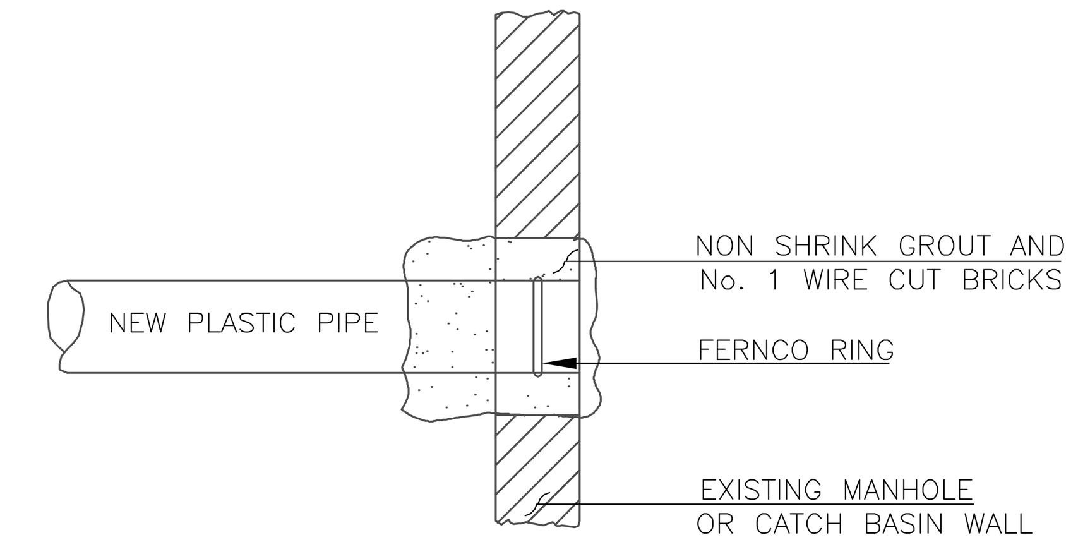
NOTES

1. ALTERNATIVE TRENCH METHODS CONSTRUCTION METHODS OR PAYMENT METHODS SHALL BE APPROVED IN ADVANCE BY THE CITY OF PORTLAND PUBLIC WORKS DEPARTMENT.
2. IN PAVED AREAS REFER TO BITUMINOUS PAVEMENT SECTION FOR DEPTHS OF GRAVEL AND HOT MIX ASPHALT PAVEMENT BASED ON THE CORRESPONDING STREET CLASSIFICATION.
3. DIMENSION "B" SHALL BE SUFFICIENT TO ALLOW CRUSHED STONE BEDDING TO BE PLACED AND COMPACTED UNDER THE HAUNCHES OF THE PIPE; BUT IN ALL CASES "B" SHALL BE AT LEAST 9".
4. DIMENSION "A" IS THE MAXIMUM WIDTH ALLOWED FOR CALCULATING PAY QUANTITIES UNDER GRANULAR BORROW, CRUSHED STONE, STRUCTURAL EARTH EXCAVATION, AND STRUCTURAL ROCK EXCAVATION. DIMENSION "A" SHALL BE BASED ON PIPE DIAMETER "D", AS SET FORTH IN THE FOLLOWING TABLE.
5. EXCAVATION BELOW ESTABLISHED TRENCH PROFILE (IF ORDERED). PAY ITEM 206.061.
6. EXCAVATION INCIDENTAL TO PIPE PAY ITEMS (PAVED AND SEEDED AREAS)
7. DEPTH OF BITUMINOUS PAVEMENT AND AGGREGATE COURSES SHALL BE DETERMINED BY STREET CLASSIFICATION.
8. BACKFILLING WITH SUITABLE EXCAVATED TRENCH MATERIAL IS INCIDENTAL TO THE COST OF THE PIPE. FURNISHING AND INSTALLING GRANULAR BORROW FOR TRENCH BACKFILL, WHEN DIRECTED BY THE RESIDENT, WILL BE PAID BY THE CUBIC YARD UNDER ITEM 203.25 GRANULAR BORROW.
9. INSTALL TRENCH INSULATION WHERE SPECIFIED ON DRAWINGS OR WHERE LESS THAN 4' OF COVER IS PROVIDED.

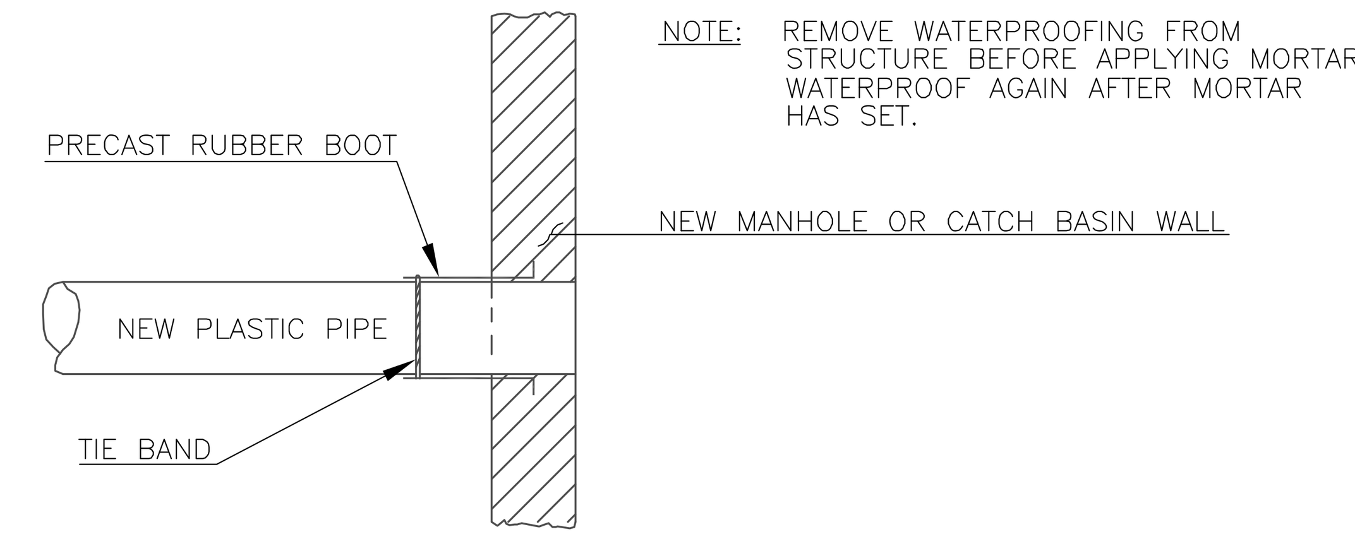
PIPE DIAMETER, "D" (INCHES)	MAX. TRENCH WIDTH, "A" (FEET)
4	4.0
6	4.0
8	4.0
10	4.0
12	4.0
15	4.0
18	5.0
21	5.0
24	5.5
27	6.0
30	6.0
36	7.0
42	8.0
48	8.0
54	8.5
60	9.0



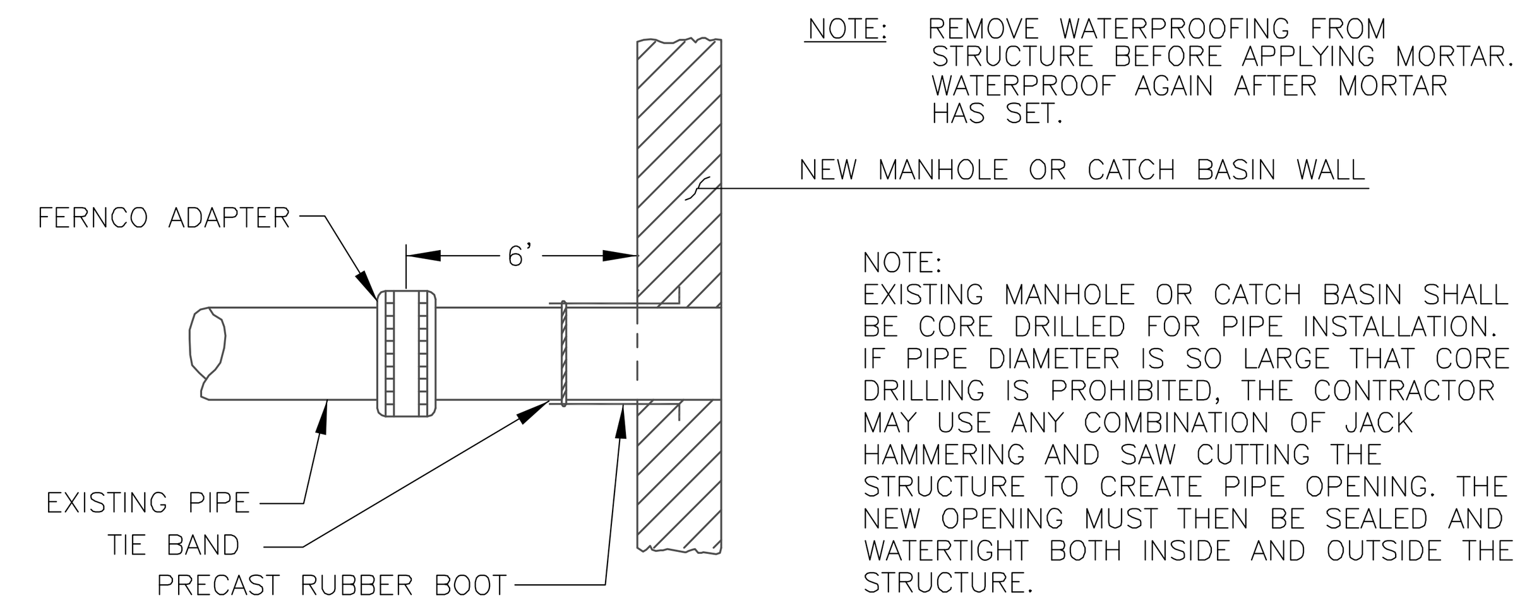
FERNCO COUPLING FOR REPAIR OR REPLACEMENT



METHOD 3 – NEW PIPE INTO EXISTING STRUCTURE



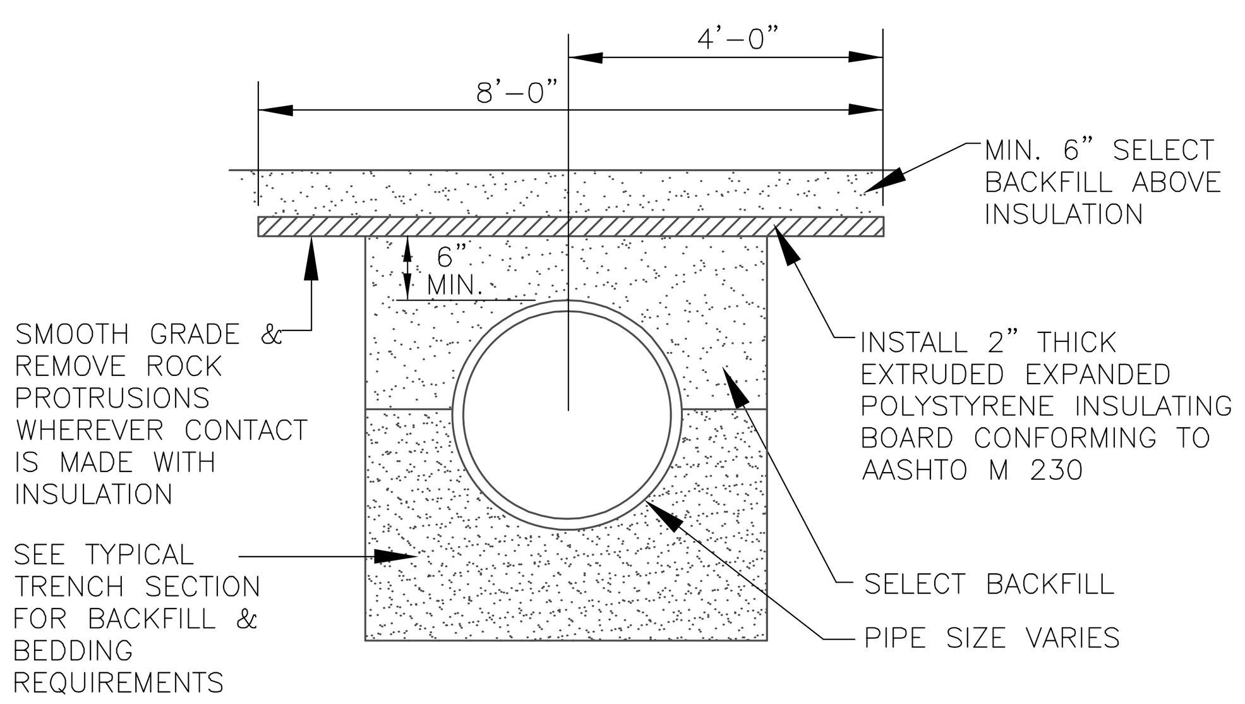
METHOD 2 – NEW CONSTRUCTION



METHOD 1 – EXISTING PIPE INTO NEW STRUCTURE

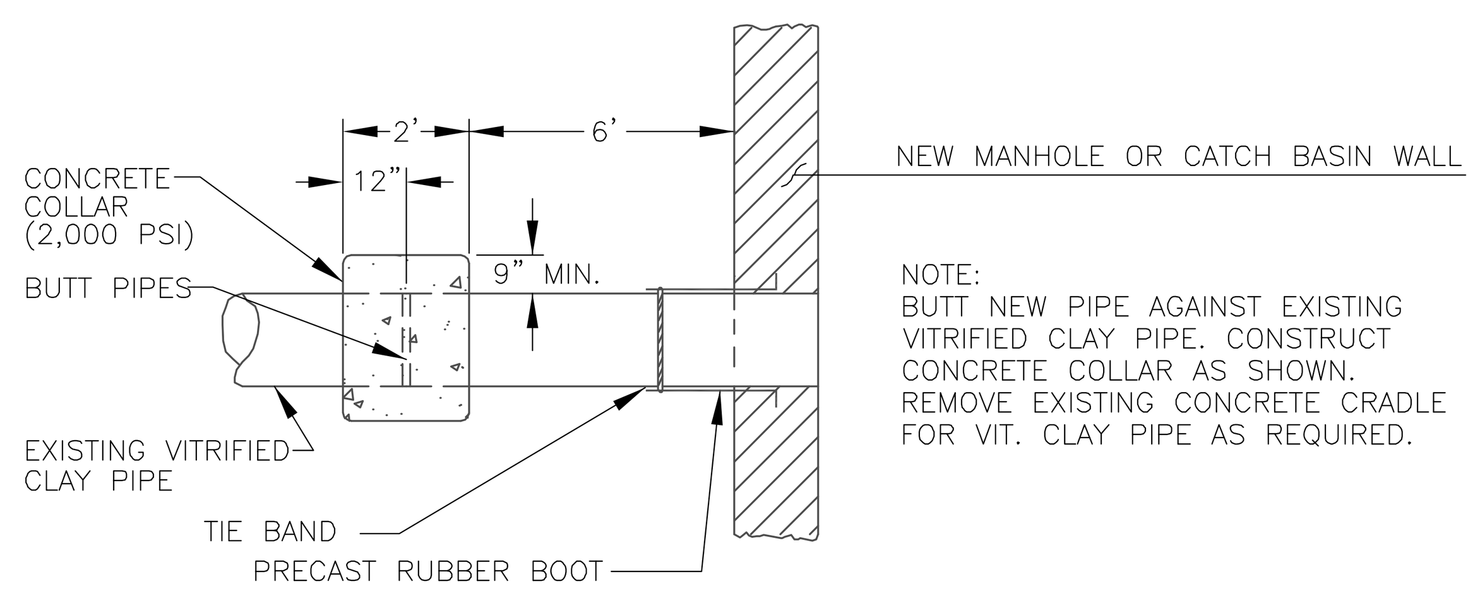
PLASTIC PIPE CONNECTION DETAIL

NOT TO SCALE



PIPE INSULATION DETAIL

NOT TO SCALE

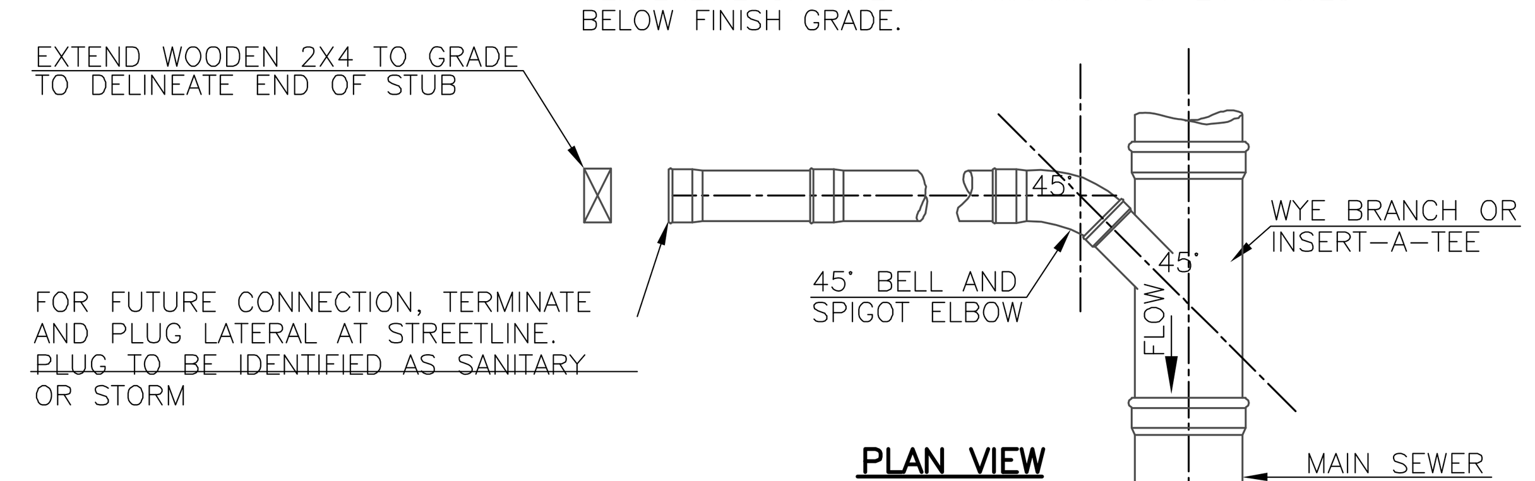


EXISTING VITRIFIED CLAY PIPE INTO NEW STRUCTURE

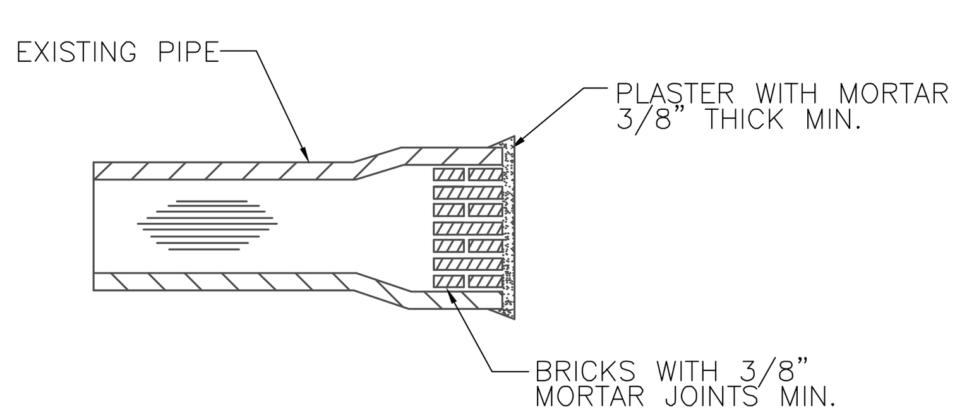
NOT TO SCALE

NOTE

LOCATION / WARNING TAPE SHALL BE INSTALLED OVER CENTERLINE OF PIPE AT A MAXIMUM OF 24 INCHES BELOW FINISH GRADE.



PLAN VIEW

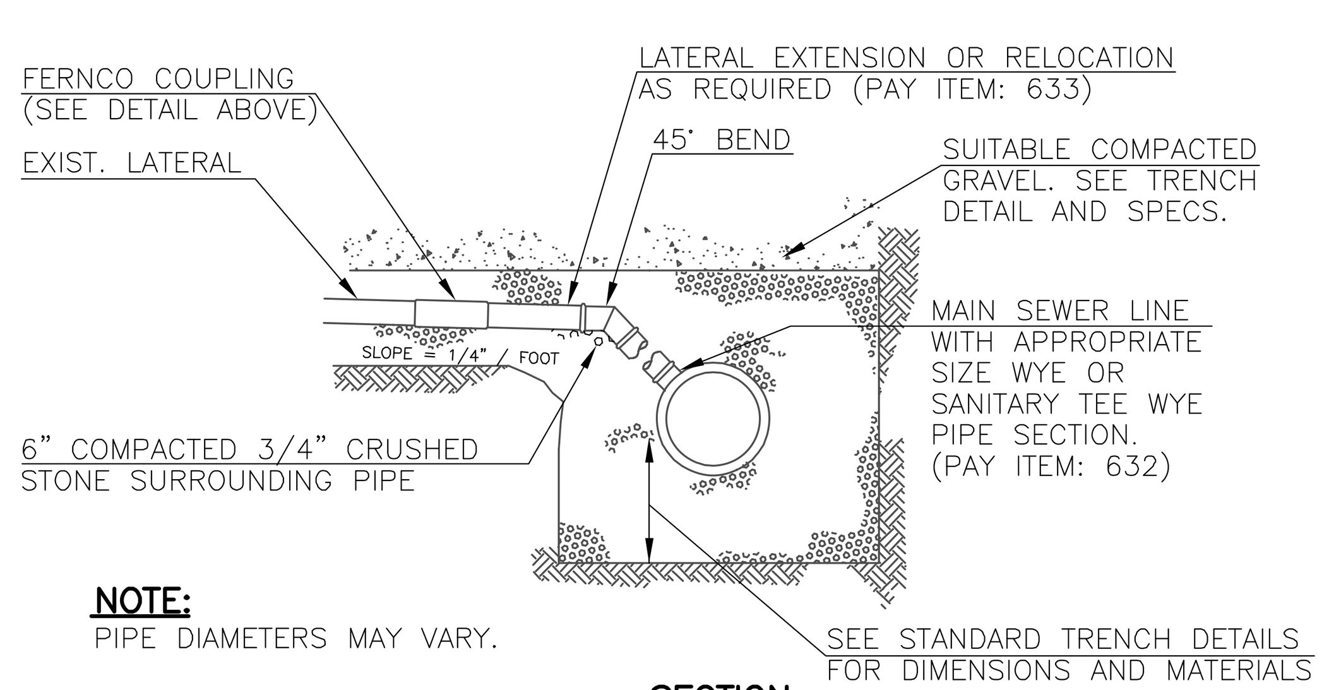


NOTE:

1. USE CAP OR PLUG FOR PVC PIPE

MASONRY PLUG DETAIL

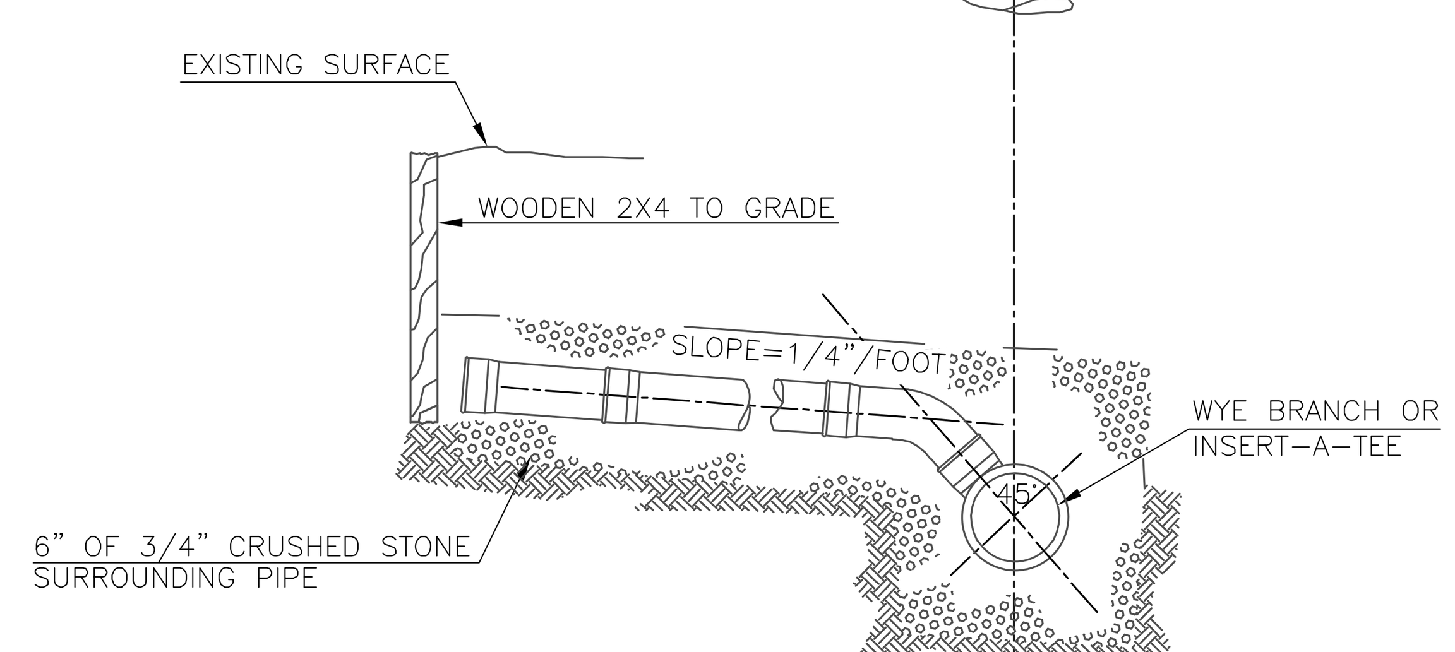
NOT TO SCALE



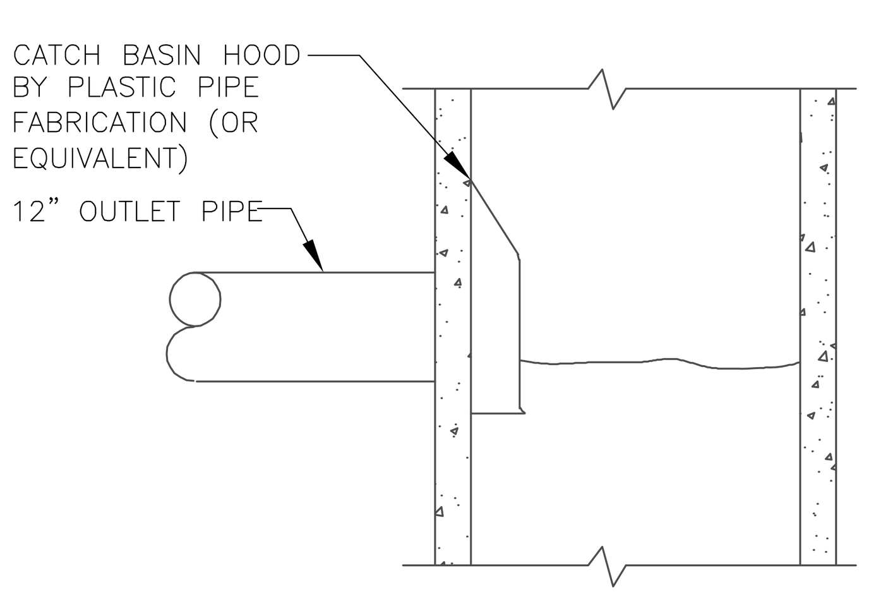
NOTE:

PIPE DIAMETERS MAY VARY.

SECTION



ELEVATION VIEW



PPF CATCH BASIN HOOD

NOT TO SCALE

NOTE:

1. LOCATIONS AND ELEVATIONS OF STUBS SHOWN ON THE PLANS ARE TO BE CONSIDERED AS APPROXIMATE AND MAY BE ADJUSTED AS DIRECTED TO SUIT FIELD CONDITIONS.

2. HOUSE CONNECTIONS AND CATCH BASINS CONNECTIONS TO THE MAIN LINE OF THE SEWER, SHALL CONSIST OF AN APPROPRIATE "Y" BRANCH CONNECTION AS SHOWN ON THE PLANS, OR AS DIRECTED. ACTUAL "Y" LOCATIONS FOR HOUSE CONNECTIONS AND CATCH BASIN CONNECTIONS SHALL BE DETERMINED DURING CONSTRUCTION. THE CONTRACTOR SHALL KEEP A COMPLETE RECORD OF "Y" LOCATIONS WHICH SHALL BE GIVEN TO THE CITY OF PORTLAND UPON COMPLETION OF THE CONTRACT.

3. LOCATION / WARNING TAPE SHALL BE INSTALLED OVER CENTERLINE OF PIPE AT A MAXIMUM OF 24 INCHES BELOW FINISH GRADE.

TYPICAL EXISTING SEWER LATERAL CONNECTION DETAILS

NOT TO SCALE

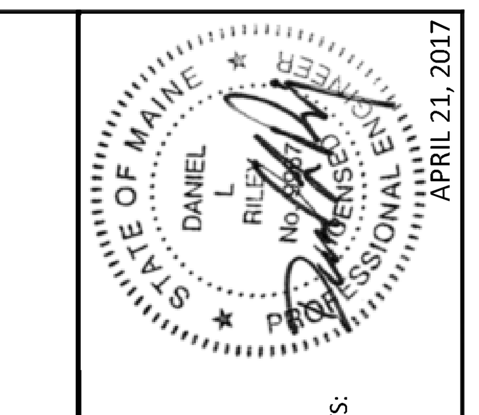
NOTE:

1. LOCATIONS AND ELEVATIONS OF STUBS SHOWN ON THE PLANS ARE TO BE CONSIDERED AS APPROXIMATE AND MAY BE ADJUSTED AS DIRECTED TO SUIT FIELD CONDITIONS.

2. HOUSE CONNECTIONS AND CATCH BASINS CONNECTIONS TO THE MAIN LINE OF THE STORM DRAIN, SHALL CONSIST OF AN APPROPRIATE "Y" BRANCH OR INSERT–A–TEE CONNECTION AS SHOWN ON THE PLANS, OR AS DIRECTED. ACTUAL CONNECTION LOCATIONS FOR HOUSE SERVICES AND CATCH BASIN CONNECTIONS SHALL BE DETERMINED DURING CONSTRUCTION. THE CONTRACTOR SHALL KEEP A COMPLETE RECORD OF THESE LOCATIONS WHICH SHALL BE GIVEN TO THE CITY OF PORTLAND UPON COMPLETION OF THE CONTRACT.

TYPICAL EXISTING STORM DRAIN LATERAL CONNECTION DETAILS

NOT TO SCALE



Civil 3D 2013 Drawing Name: 16067 D.dwg, TAB(F)62
Civil 3D 2013 Survey Database:
CMM ADJUSTMENT:
BENCHMARK CARDS:
CITY PROPERTY PLAN BOOK SHEETS:
I & I SHEETS:
STREET RECORDS:
TAX MAPS:
VAULT PLANS:
PWD PLANS:
TELEPHONE PLANS:
UNITIL (GAS) PLANS:
WORKING PLANS:

REFERENCES:
PROJECT FIELD BOOK:
OTHER FIELD BOOKS USED:

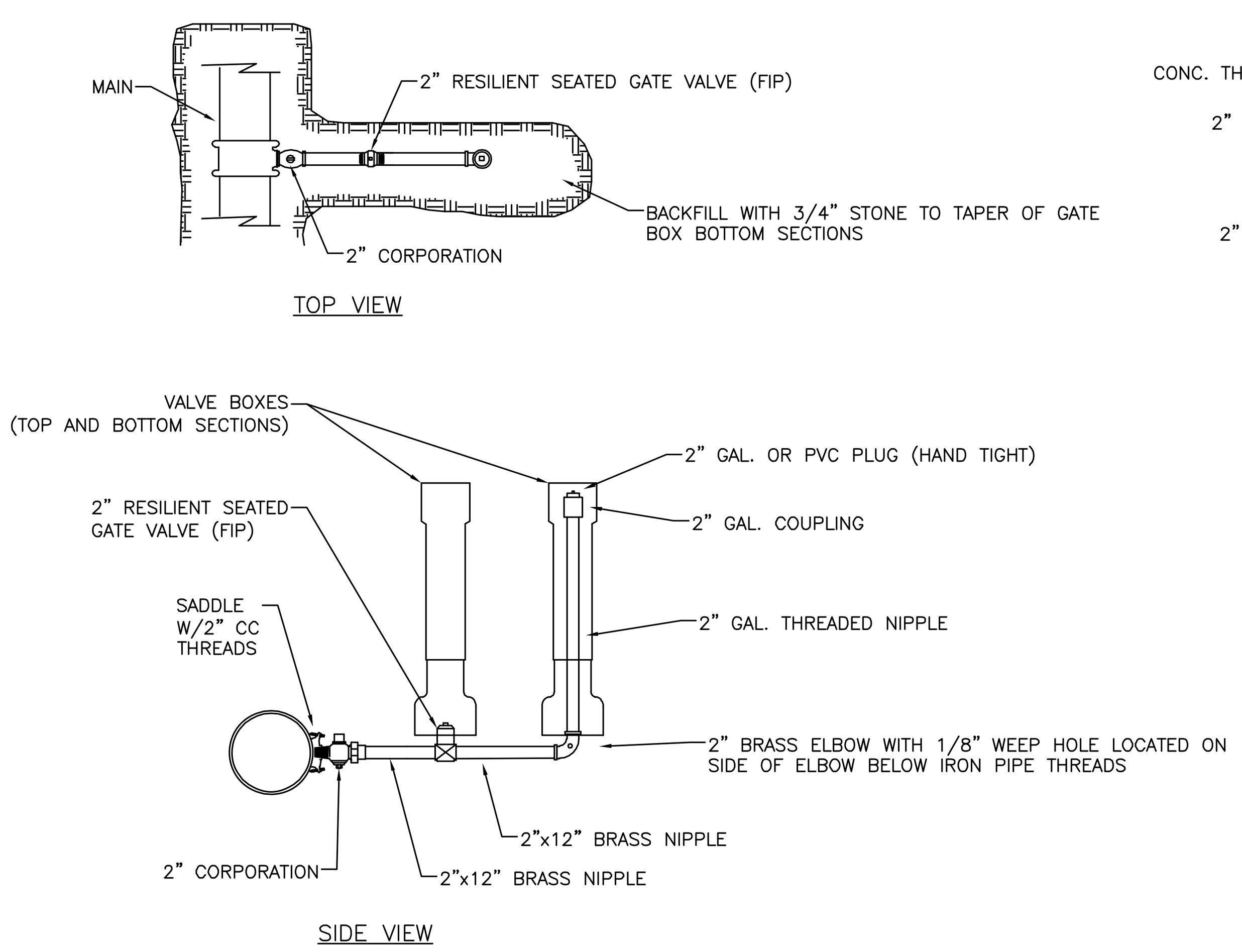
SURVEY CREW: SPP
DRAWN BY: BRF
CHECKED BY: DLR
SCALE: AS NOTED
DATE: APRIL 21, 2017

FOREST AVENUE - WOODFORD CORNER CSO SEPARATION PROJECT

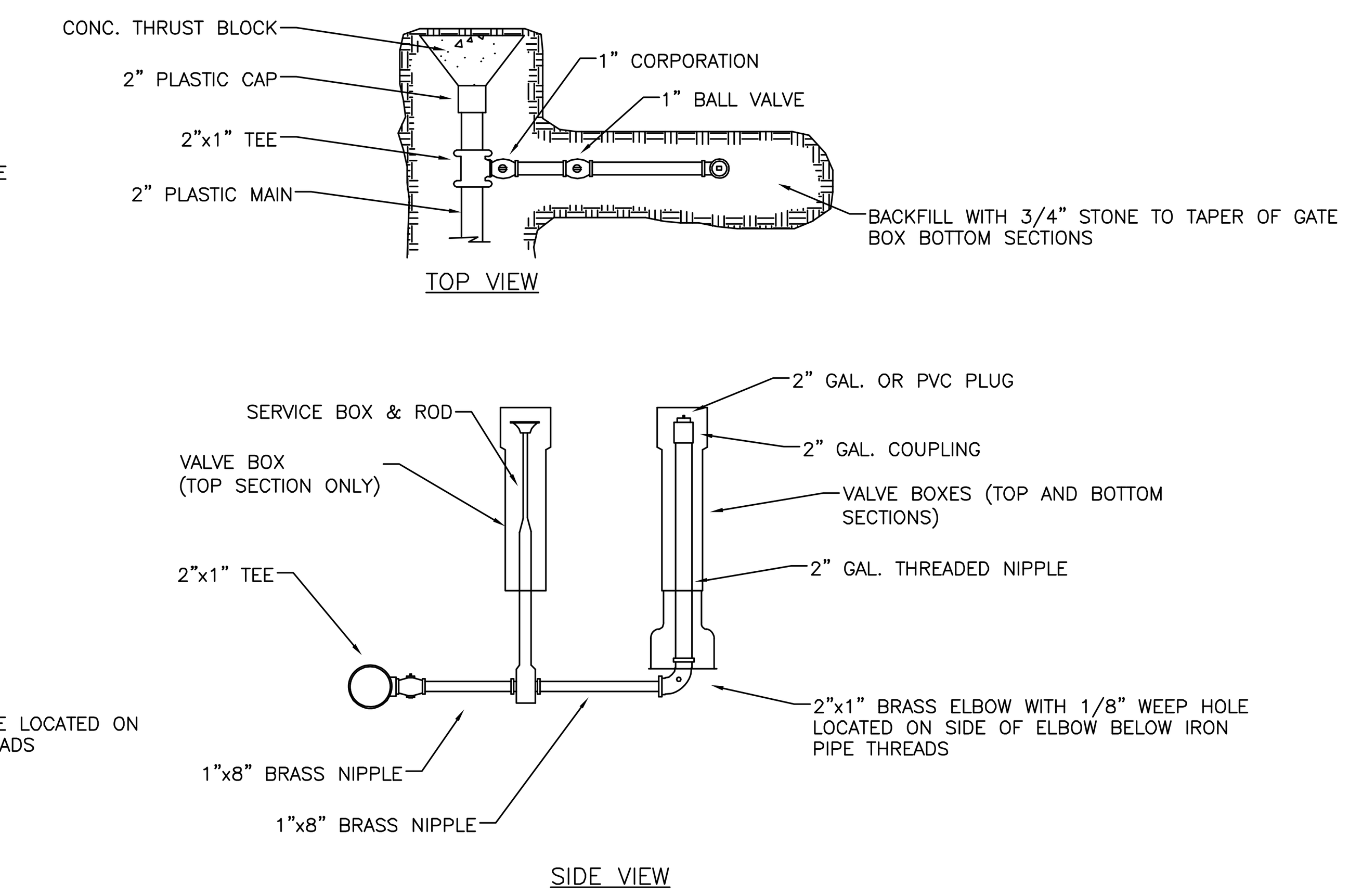
STANDARD CONSTRUCTION DETAILS

CITY OF PORTLAND, MAINE
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

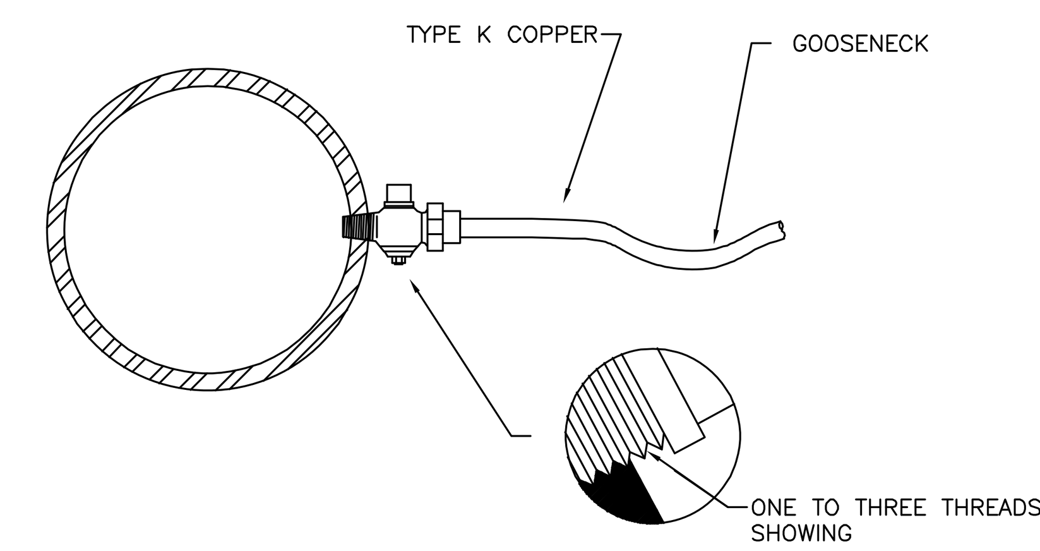
SHEET #
16 OF 18
PLAN NUMBER



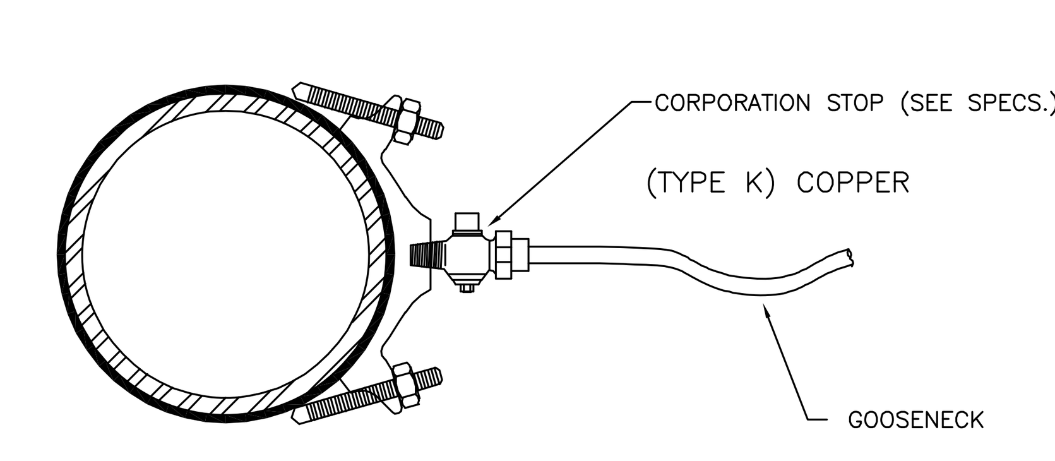
SIDE–ARM BLOW–OFF
4" & LARGER MAINS



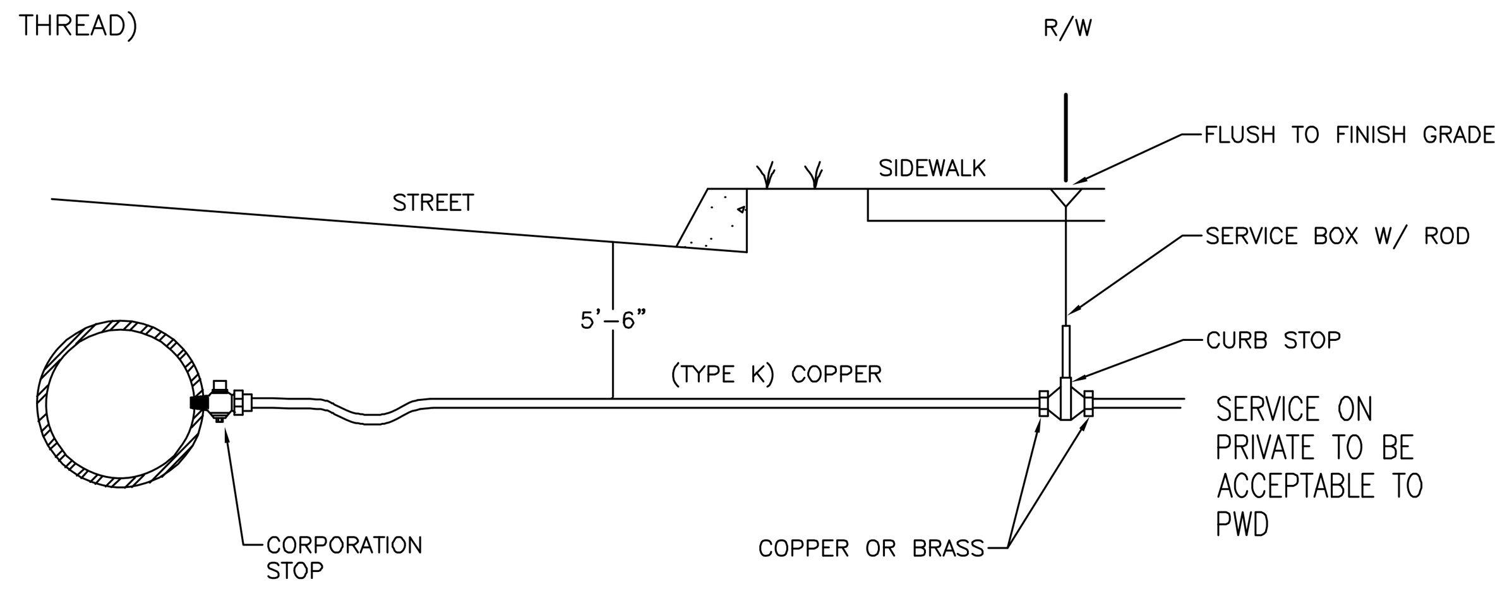
SIDE–ARM BLOW–OFF
2" MAIN



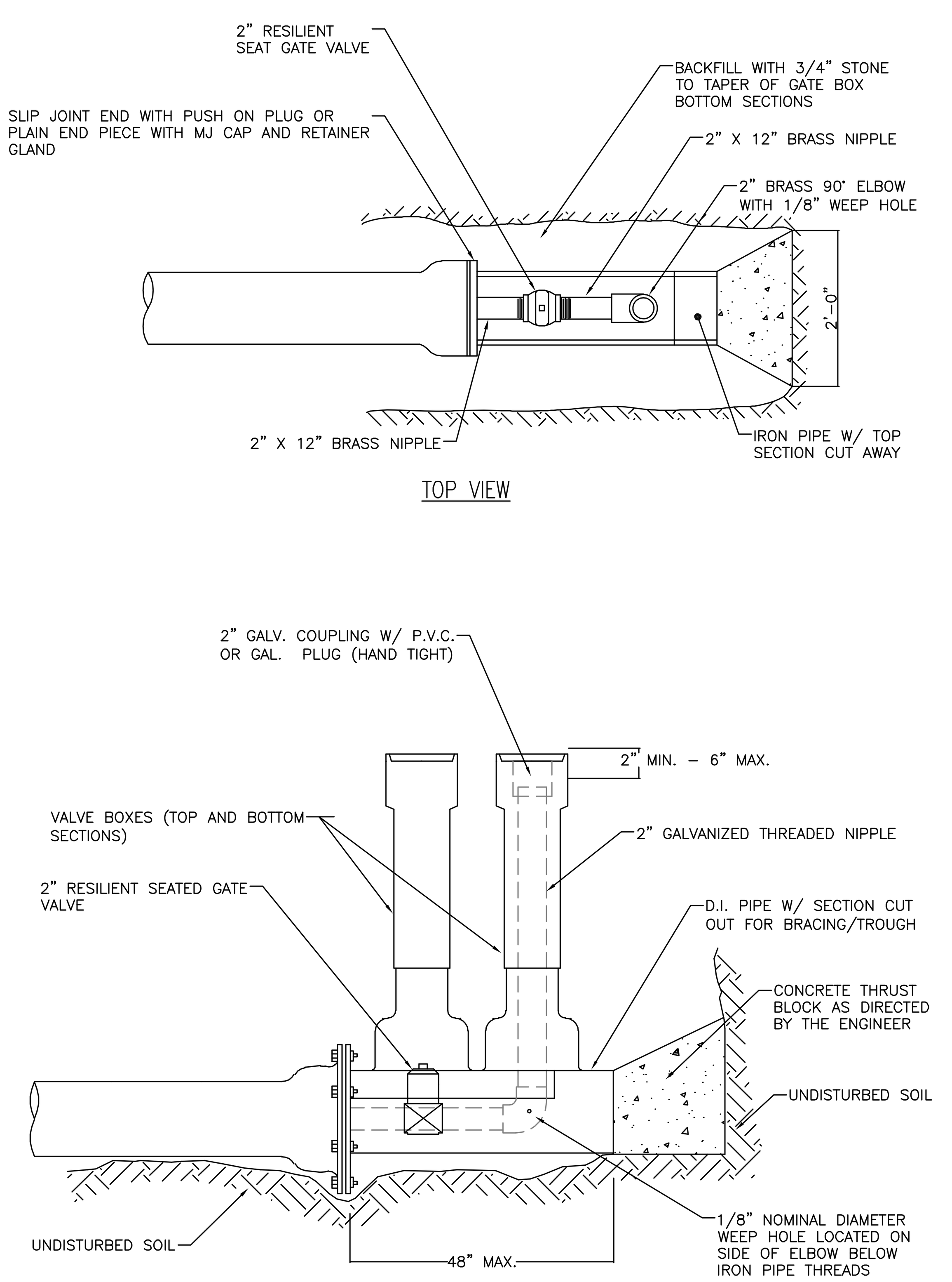
SERVICE TAP
(3/4" AND 1" C.C. THREAD)



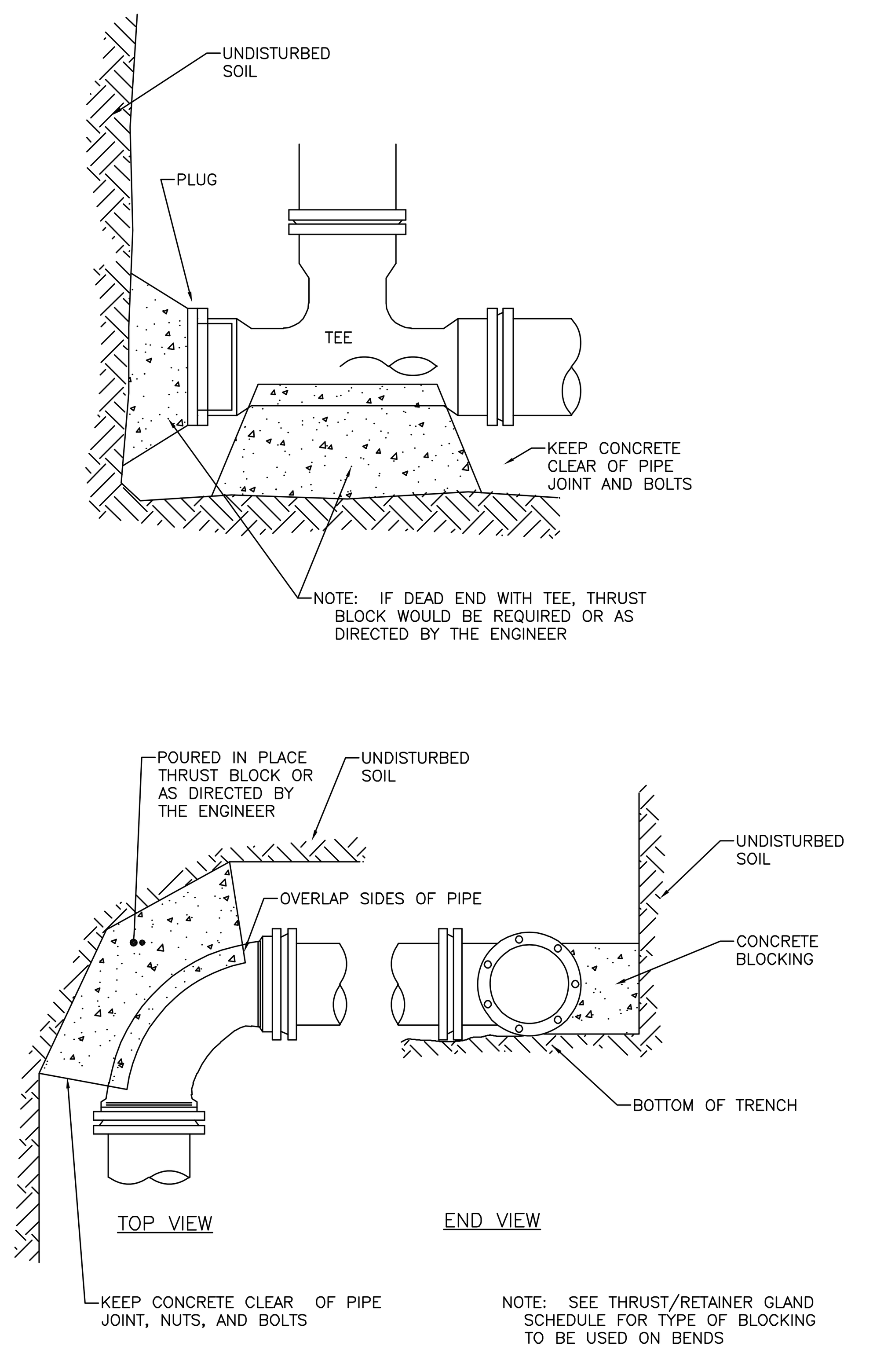
SERVICE SADDLE
(1–1/2" AND 2" C.C. THREAD)



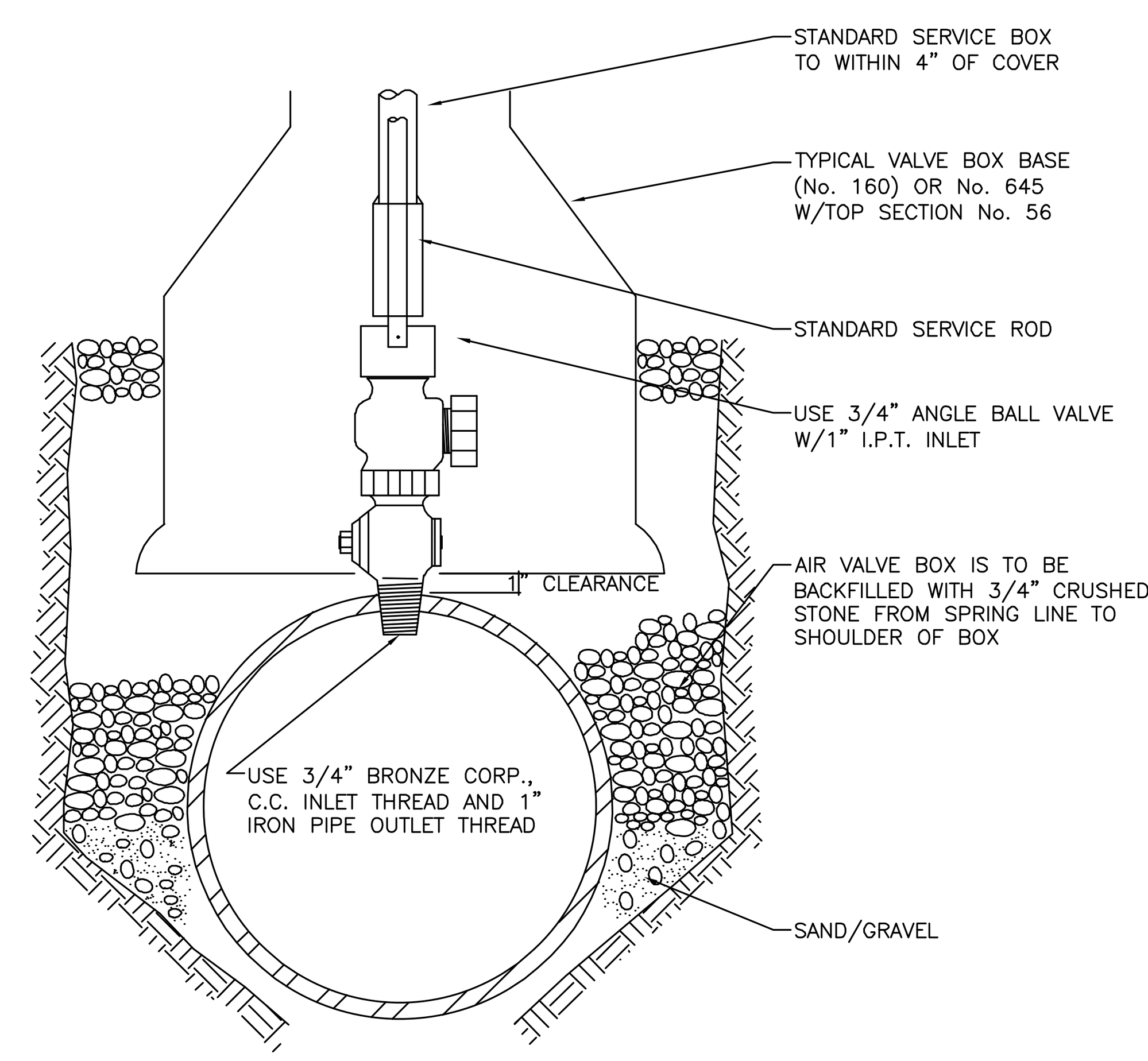
TYPICAL SERVICE CONNECTION



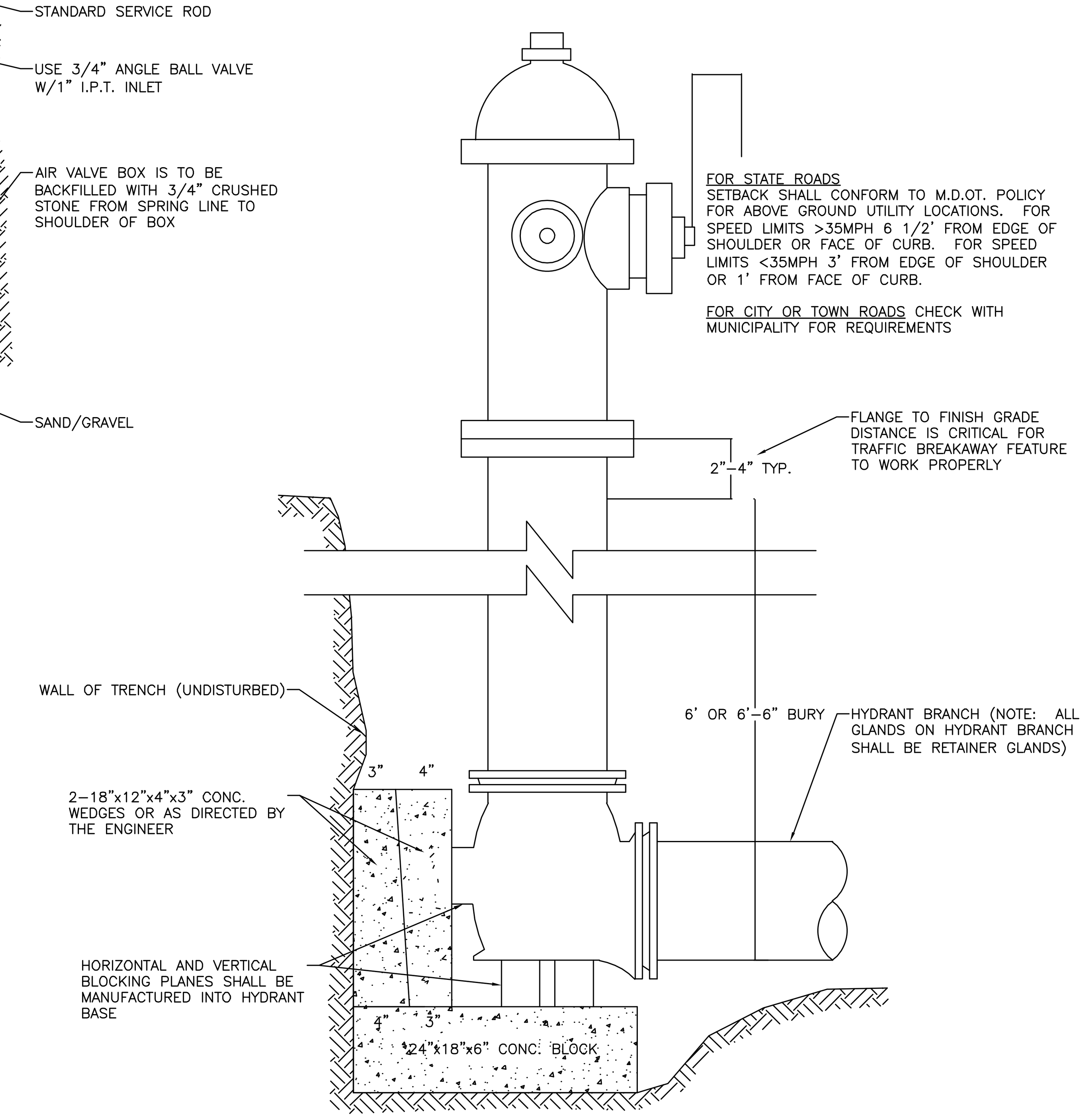
STANDARD 2" BLOW OFF



STANDARD BEND BLOCKING



TYPICAL AIR VALVE (1")



TYPICAL HYDRANT
INSTALLATION DETAIL

STATE OF MAINE — DANIEL L. RILEY — No. — PROFESSIONAL ENGINEER
APRIL 21, 2017

Civil 3D 2013 Drawing Name: 16067 D.dwg, TABFd3
Civil 3D 2013 Survey Database:
CMM ADJUSTMENT:
BENCHMARK CARDS:
CITY PROPERTY PLAN BOOK SHEETS:
I & I SHEETS:
STREET RECORDS:
TAX MAPS:

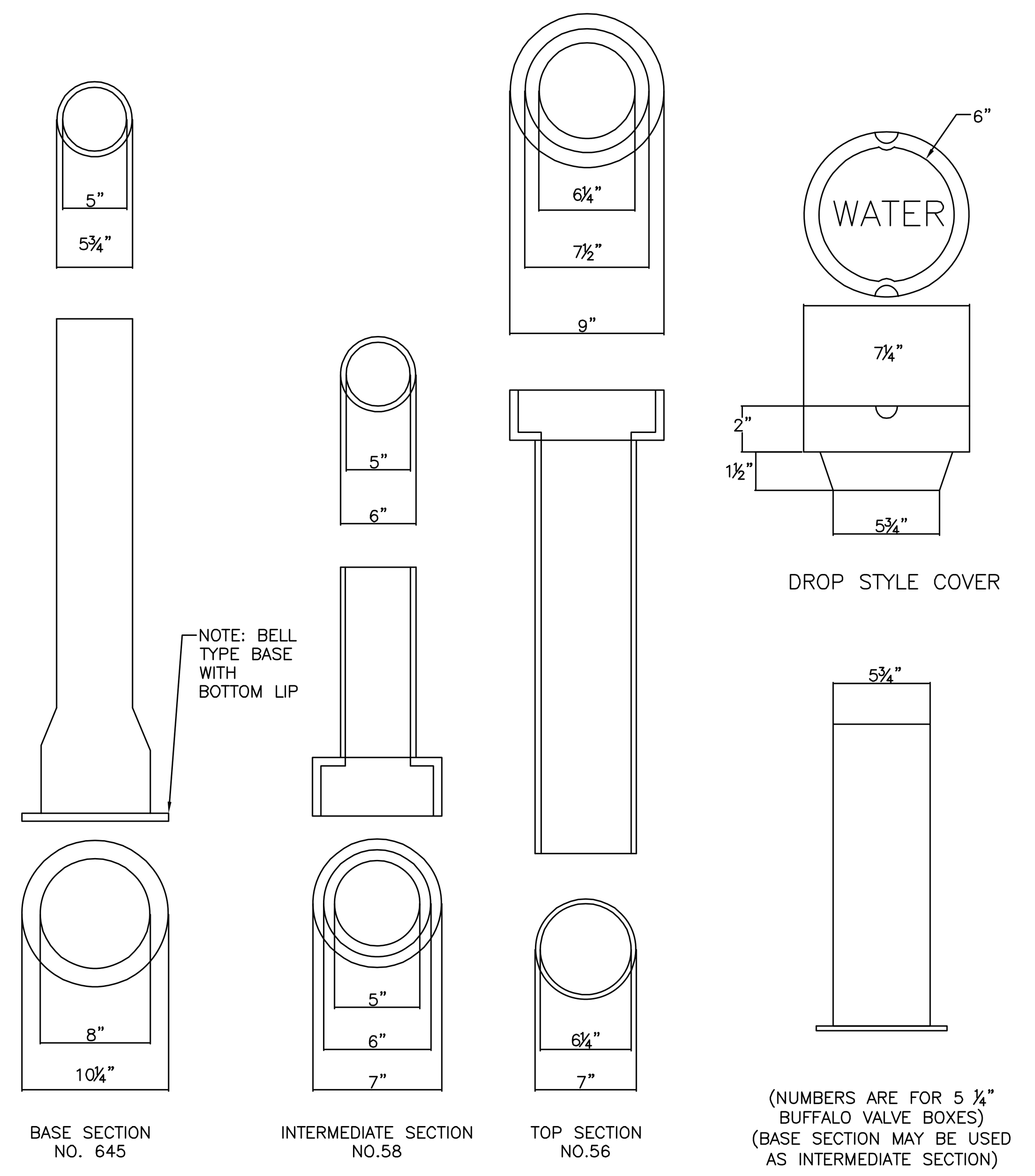
REFERENCES:
PROJECT FIELD BOOK:
OTHER FIELD BOOKS USED:
VAULT PLANS:
PWD PLANS:
TELEPHONE PLANS:
UNITIL (GAS) PLANS:
WORKING PLANS:

SURVEY CREW: SPP
DRAWN BY: BRF
CHECKED BY: DLR
SCALE: AS NOTED
DATE: APRIL 21, 2017

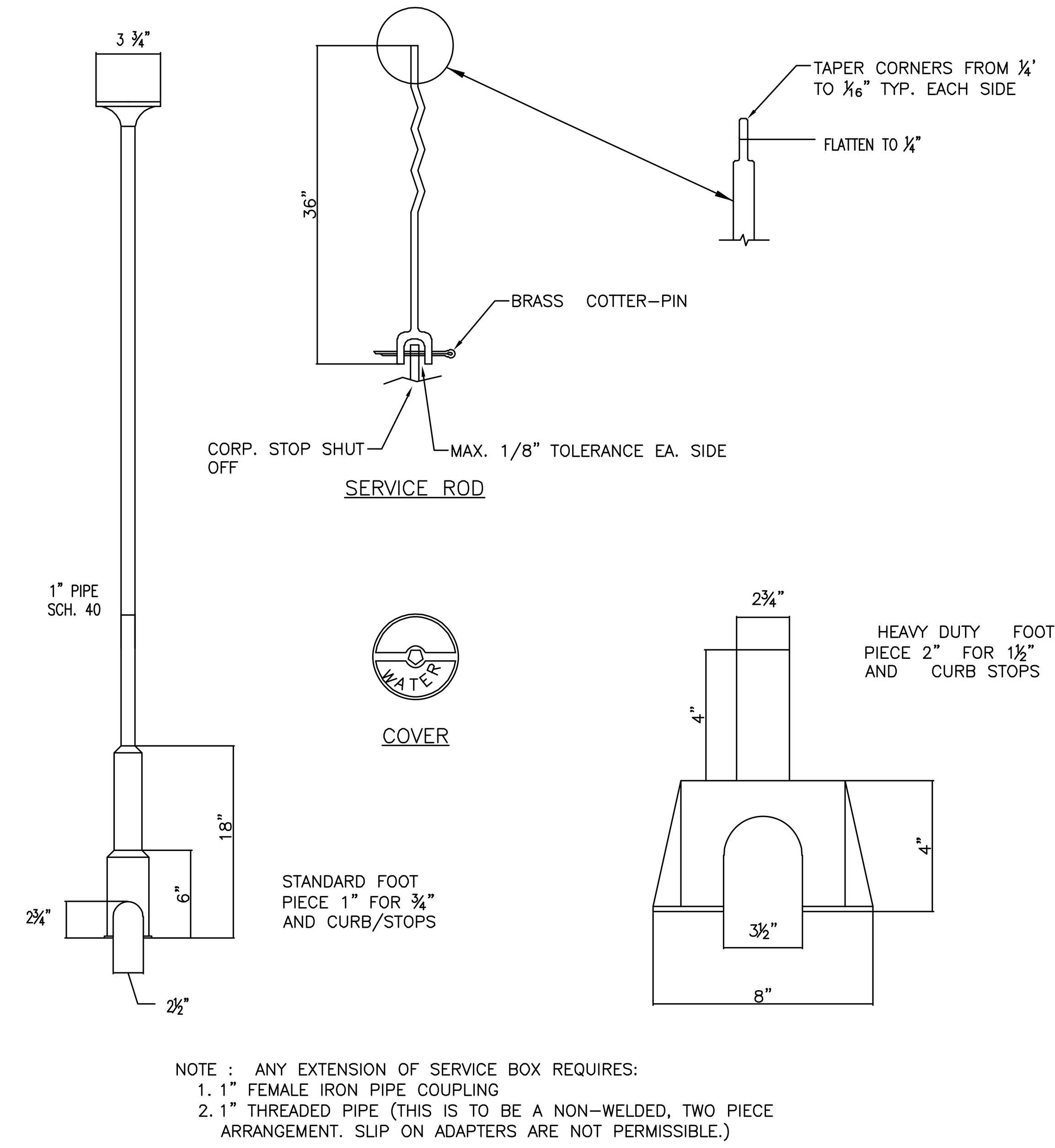
FOREST AVENUE - WOODFORD CORNER CSO SEPARATION PROJECT
PORTLAND WATER DISTRICT DETAILS

CITY OF PORTLAND, MAINE
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

SHEET #
17 OF 18
PLAN NUMBER



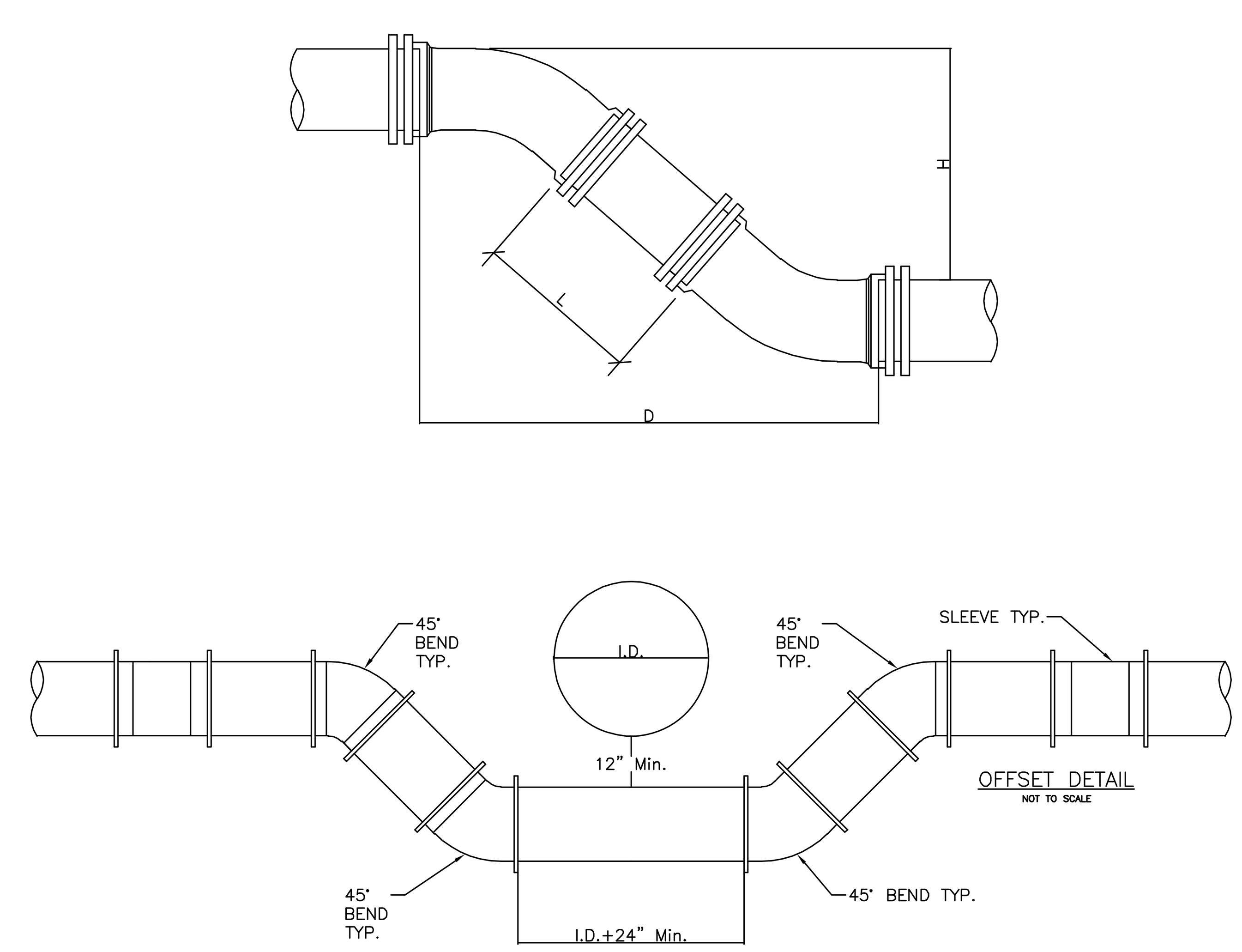
VALVE BOX & COVER



NOTE : ANY EXTENSION OF SERVICE BOX REQUIRES:
1. 1" FEMALE IRON PIPE COUPLING
2. 1" THREADED PIPE (THIS IS TO BE A NON-WELDED, TWO PIECE ARRANGEMENT. SLIP ON ADAPTERS ARE NOT PERMISSIBLE.)

SERVICE BOX

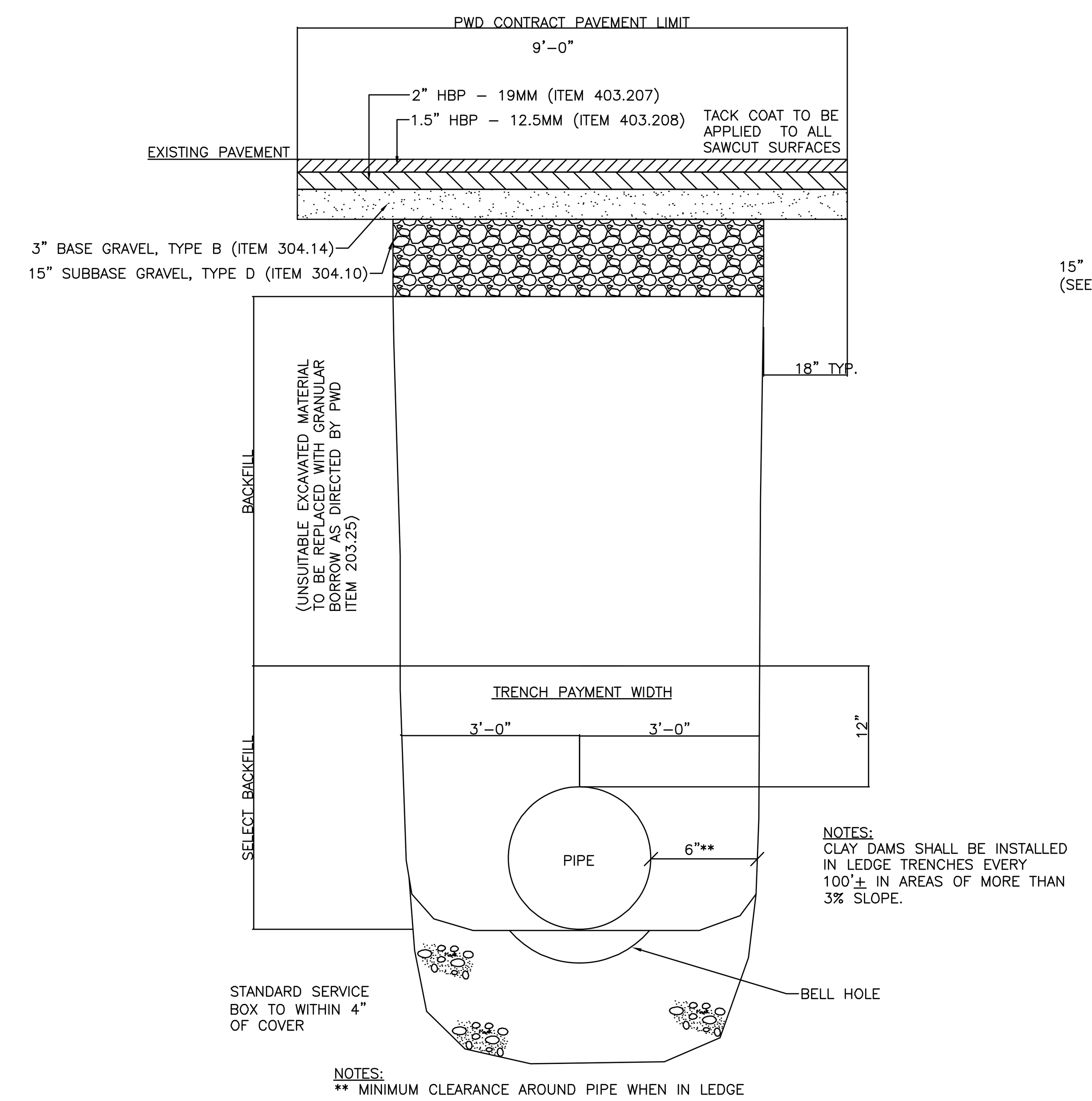
FOOT PIECE



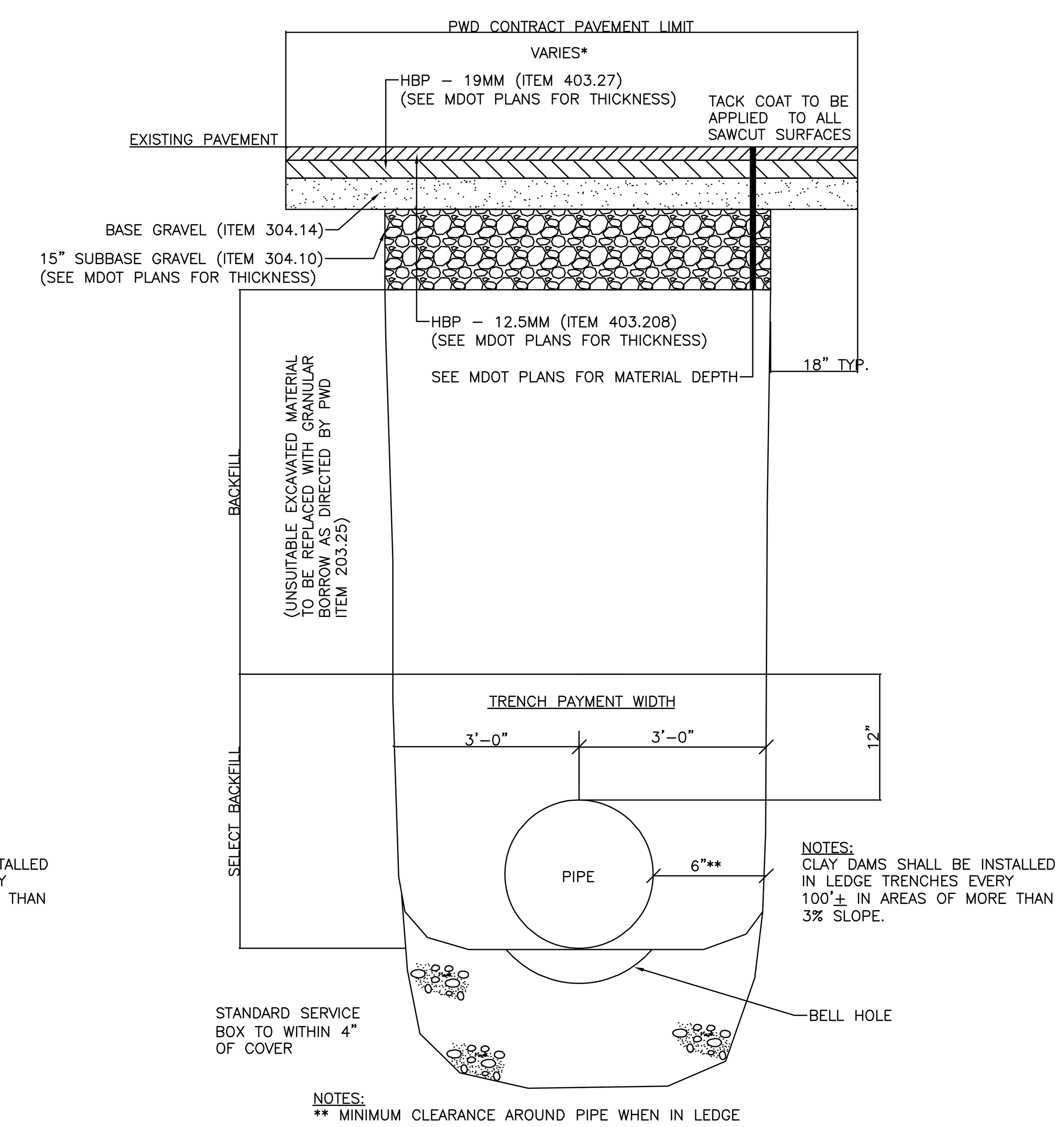
NOTE:
DIMENSIONS APPLICABLE FOR SIGMA COMPACT BENDS. FOR TYLER COMPACT BENDS, ADD 1/2" TO "D" DIMENSION AND SUBTRACT 1/2" FROM "L" DIMENSION. FOR OTHER FITTINGS REFER TO MANUFACTURER'S RECOMMENDATIONS.

	6" PIPE		8" PIPE		12" PIPE	
H	D	L	D	L	D	L
12"	1' 6-1/2"	0' 10-1/2"	1' 7-1/2"	0' 9-1/2"	1' 11-1/2"	0' 5-1/2"
13"	1' 7-1/2"	0' 11-7/8"	1' 8-1/2"	0' 10-7/8"	2' 0-1/2"	0' 6-7/8"
14"	1' 8-1/2"	1' 1-5/16"	1' 9-1/2"	1' 0-5/16"	2' 1-1/2"	0' 8-5/16"
15"	1' 9-1/2"	1' 2-11/16"	1' 10-1/2"	1' 1-11/16"	2' 2-1/2"	0' 9-11/16"
16"	1' 10-1/2"	1' 4-1/8"	1' 11-1/2"	1' 3-1/8"	2' 3-1/2"	0' 11-1/8"
17"	1' 11-1/2"	1' 5-9/16"	2' 0-1/2"	1' 4-9/16"	2' 4-1/2"	1' 0-9/16"
18"	2' 0-1/2"	1' 6-15/16"	2' 1-1/2"	1' 5-15/16"	2' 5-1/2"	1' 1-15/16"
19"	2' 1-1/2"	1' 8-3/8"	2' 2-1/2"	1' 7-3/8"	2' 6-1/2"	1' 3-3/8"
20"	2' 2-1/2"	1' 9-13/16"	2' 3-1/2"	1' 8-13/16"	2' 7-1/2"	1' 4-13/16"
21"	2' 3-1/2"	1' 11-3/16"	2' 4-1/2"	1' 10-3/16"	2' 8-1/2"	1' 6-3/16"
22"	2' 4-1/2"	2' 0-5/8"	2' 5-1/2"	1' 11-5/8"	2' 9-1/2"	1' 7-5/8"
23"	2' 5-1/2"	2' 2"	2' 6-1/2"	2' 1"	2' 10-1/2"	1' 9"
24"	2' 6-1/2"	2' 3-7/16"	2' 7-1/2"	2' 2-7/16"	2' 11-1/2"	1' 10-7/16"
25"	2' 7-1/2"	2' 4-7/8"	2' 8-1/2"	2' 3-7/8"	3' 0-1/2"	1' 11-7/8"
26"	2' 8-1/2"	2' 6-1/4"	2' 9-1/2"	2' 5-1/4"	3' 1-1/2"	2' 1-1/4"
27"	2' 9-1/2"	2' 7-11/16"	2' 10-1/2"	2' 6-11/16"	3' 2-1/2"	2' 2-11/16"
28"	2' 10-1/2"	2' 9-1/8"	2' 11-1/2"	2' 8-1/8"	3' 3-1/2"	2' 4-1/8"
29"	2' 11-1/2"	2' 10-1/2"	3' 0-1/2"	2' 9-1/2"	3' 4-1/2"	2' 5-1/2"
30"	3' 0-1/2"	2' 11-15/16"	3' 1-1/2"	2' 10-15/16"	3' 5-1/2"	2' 6-15/16"
31"	3' 1-1/2"	3' 1-5/16"	3' 2-1/2"	3' 0-5/16"	3' 6-1/2"	2' 8-5/16"
32"	3' 2-1/2"	3' 2-3/4"	3' 3-1/2"	3' 1-3/4"	3' 7-1/2"	2' 9-3/4"
33"	3' 3-1/2"	3' 4-3/16"	3' 4-1/2"	3' 3-3/16"	3' 8-1/2"	2' 11-3/16"
34"	3' 4-1/2"	3' 5-9/16"	3' 5-1/2"	3' 4-9/16"	3' 9-1/2"	3' 0-9/16"
35"	3' 5-1/2"	3' 7"	3' 6-1/2"	3' 6"	3' 10-1/2"	3' 2"
36"	3' 6-1/2"	3' 8-7/16"	3' 7-1/2"	3' 7-7/16"	3' 11-1/2"	3' 3-7/16"
37"	3' 7-1/2"	3' 9-13/16"	3' 8-1/2"	3' 8-13/16"	4' 0-1/2"	3' 4-13/16"
38"	3' 8-1/2"	3' 11-1/4"	3' 9-1/2"	3' 10-1/4"	4' 1-1/2"	3' 6-1/4"
39"	3' 9-1/2"	4' 0-11/16"	3' 10-1/2"	3' 11-11/16"	4' 2-1/2"	3' 7-11/16"
40"	3' 10-1/2"	4' 2-1/16"	3' 11-1/2"	4' 1-1/16"	4' 3-1/2"	3' 9-1/16"
41"	3' 11-1/2"	4' 3-1/2"	4' 0-1/2"	4' 2-1/2"	4' 4-1/2"	3' 10-1/2"
42"	4' 0-1/2"	4' 4-7/8"	4' 1-1/2"	4' 3-7/8"	4' 5-1/2"	3' 11-7/8"
43"	4' 1-1/2"	4' 6-5/16"	4' 2-1/2"	4' 5-5/16"	4' 6-1/2"	4' 1-5/16"
44"	4' 2-1/2"	4' 7-3/4"	4' 3-1/2"	4' 6-3/4"	4' 7-1/2"	4' 2-3/4"
45"	4' 3-1/2"	4' 9-1/8"	4' 4-1/2"	4' 8-1/8"	4' 8-1/2"	4' 4-1/8"
46"	4' 4-1/2"	4' 10-9/16"	4' 5-1/2"	4' 9-9/16"	4' 9-1/2"	4' 5-9/16"
47"	4' 5-1/2"	4' 11-15/16"	4' 6-1/2"	4' 10-15/16"	4' 10-1/2"	4' 6-15/16"
48"	4' 6-1/2"	5' 1-3/8"	4' 7-1/2"	5' 0-3/8"	4' 11-1/2"	4' 8-3/8"
49"	4' 7-1/2"	5' 2-13/16"	4' 8-1/2"	5' 1-13/16"	5' 0-1/2"	4' 9-13/16"
50"	4' 8-1/2"	5' 4-3/16"	4' 9-1/2"	5' 3-3/16"	5' 1-1/2"	4' 11-3/16"
51"	4' 9-1/2"	5' 5-5/8"	4' 10-1/2"	5' 4-5/8"	5' 2-1/2"	5' 0-5/8"
52"	4' 10-1/2"	5' 7-1/16"	4' 11-1/2"	5' 6-1/16"	5' 3-1/2"	5' 2-1/16"
53"	4' 11-1/2"	5' 8-7/16"	5' 0-1/2"	5' 7-7/16"	5' 4-1/2"	5' 3-7/16"
54"	5' 0-1/2"	5' 9-7/8"	5' 1-1/2"	5' 8-7/8"	5' 5-1/2"	5' 4-7/8"
55"	5' 1-1/2"	5' 11-5/16"	5' 2-1/2"	5' 10-5/16"	5' 6-1/2"	5' 6-5/16"

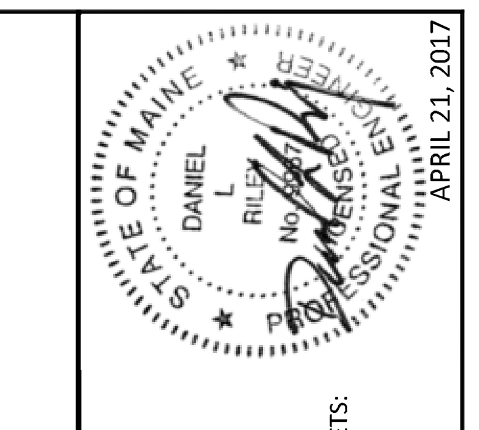
TYPICAL MAIN OFFSET



SECTION THRU EARTH TRENCH PERMANENT TRENCH REPAIR OUTSIDE OF MDOT FULL WIDTH REPAVING LIMITS
N.T.S.



SECTION THRU EARTH TRENCH ROAD REPAVE WOODFORD STREET AND FOREST AVENUE WITHIN MDOT FULL WIDTH REPAVING LIMITS
N.T.S.



Civil 3D 2013 Drawing Name: 16067_D.dwg, TAB:Fd4
Civil 3D 2013 Survey Database:
CMM ADJUSTMENT:
BENCHMARK CARDS:
CITY PROPERTY PLAN BOOK SHEETS:
I & I SHEETS:
STREET RECORDS:
TAX MAPS:

REFERENCES:
PROJECT FIELD BOOK:
OTHER FIELD BOOKS USED:
VAULT PLANS:
PWD PLANS:
TELEPHONE PLANS:
UNITIL (GAS) PLANS:
WORKING PLANS:

SURVEY CREW: SPP
DRAWN BY: BRF
CHECKED BY: DLR
SCALE: AS NOTED
DATE: APRIL 21, 2017

FOREST AVENUE - WOODFORD CORNER CSO SEPARATION PROJECT

PORTLAND WATER DISTRICT DETAILS

CITY OF PORTLAND, MAINE
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

SHEET #
18 OF 18
PLAN NUMBER