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	W
Trees	Conifer Deciduous	Existing San. Sewer	
Tree Line		Existing San. Sewer Manhole	
Clearing Limit Line	CLL	Guardrail-Existing	
		Guardrail-Proposed	
		Guardrail-Cable, Other	

ORONO

PENOBSCOT COUNTY

STILLWATER\FOREST AVE.

STP-1726(100)X

PROJECT LENGTH : 0.37 MILE

INDEX OF SHEETS

Description	Sheet No.
Title Sheet	1
Typical Sections	2-4
Estimated Quantities/Earthwork Summary	5
Drainage Sheet	6
General Notes	7
Construction Notes	8
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Geotechnical Information Sheets	11-13
Lighting Plan	14
Signing Plans	15-17
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Grading Plans	21-23
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Plans	27-30
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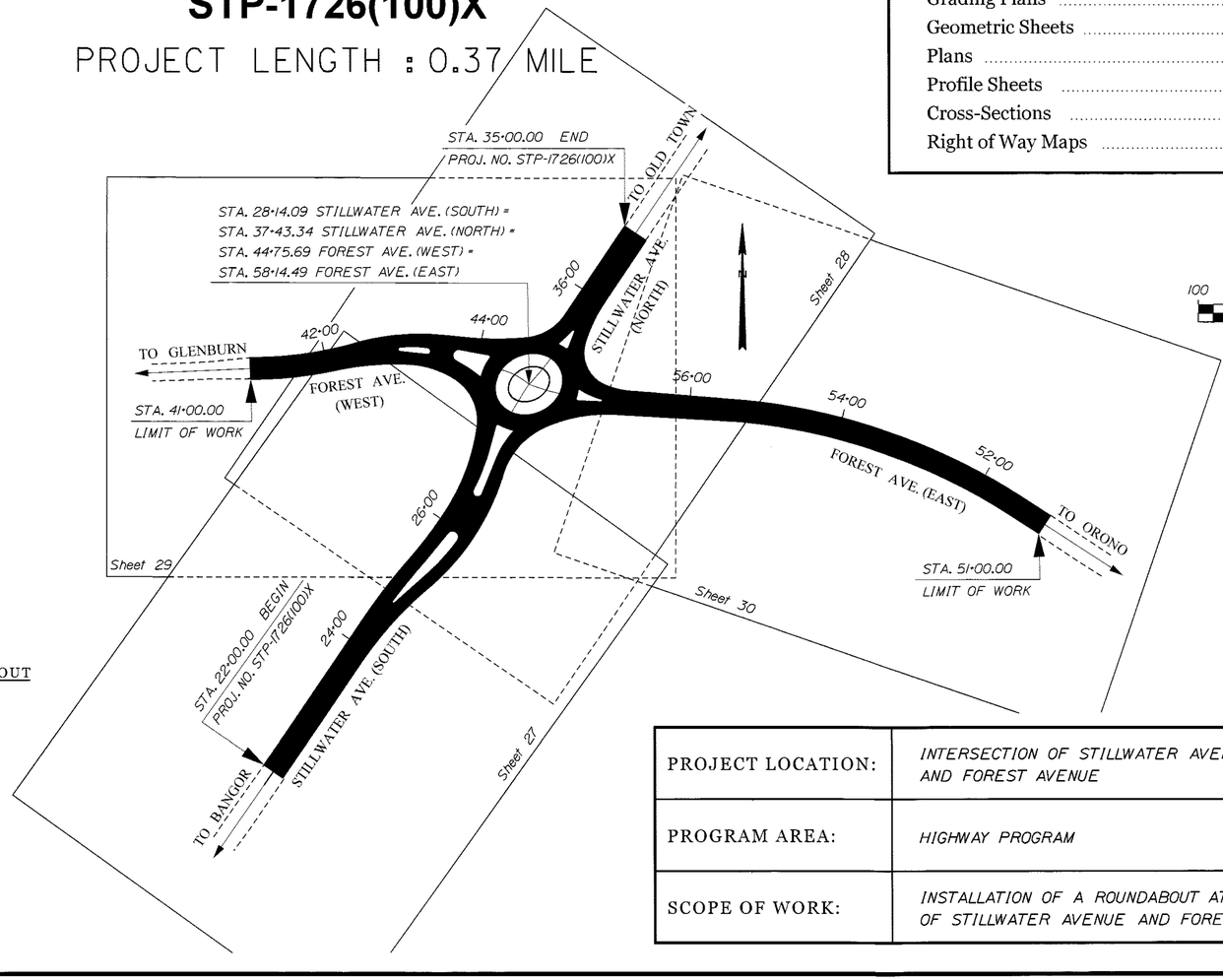
Right of Way Maps	63-65



LAYOUT SCALE

100 0 100 200

Scale in Feet

TRAFFIC DATA	STILLWATER AVE. NE/O FOREST AVE.	FOREST AVE. E/O STILLWATER AVE.
Current (2012) AADT	4810	1430
Future (2032) AADT	5770	1720
DHV - % of AADT	11%	12%
Design Hour Volume	643	200
% Heavy Trucks (AADT)	3%	4%
% Heavy Trucks (DHV)	1%	1%
Directional Distribution (DHV)	57%	55%
18 kip Equivalent P 2.0	109	38
18 kip Equivalent P 2.5	104	38
Design Speed (mph)	25	25
Functional Class:	Major Collector	Minor Collector

TRAFFIC DATA	STILLWATER AVE. SW/O FOREST AVE.	FOREST AVE. W/O STILLWATER AVE.	ROUNDABOUT
Current (2012) AADT	4050	2650	3235
Future (2032) AADT	4860	3180	3883
DHV - % of AADT	12%	12%	14%
Design Hour Volume	581	372	526
% Heavy Trucks (AADT)	2%	4%	3%
% Heavy Trucks (DHV)	1%	1%	1%
Directional Distribution (DHV)	64%	62%	100%
18 kip Equivalent P 2.0	67	80	147
18 kip Equivalent P 2.5	64	76	140
Design Speed (mph)	25	25	15-16
Functional Class:	Major Collector	Minor Collector	N/A

PROJECT LOCATION:	INTERSECTION OF STILLWATER AVENUE AND FOREST AVENUE
PROGRAM AREA:	HIGHWAY PROGRAM
SCOPE OF WORK:	INSTALLATION OF A ROUNDABOUT AT THE INTERSECTION OF STILLWATER AVENUE AND FOREST AVENUE

WIN 17261.00 STP-1726(100)X

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

APPROVED — DATE 7/13/12

COMMISSIONER: David A. Cole

CHIEF ENGINEER: Angus Gal Sayh 6-28-12

STATE OF MAINE — Heath Caywood — 9961 — REGISTERED PROFESSIONAL ENGINEER

SIGNATURE — 7/27/12 DATE

P.E. NUMBER 9701

PROJECT INFORMATION

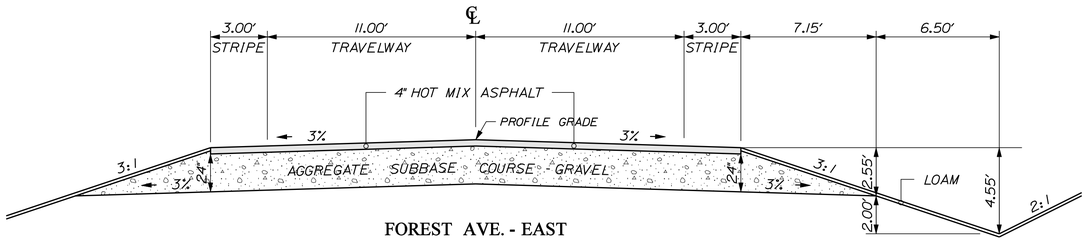
PROGRAM	HIGHWAY
PROJECT MANAGER	P. MACDONALD
DESIGNER	J. FRENCH E.I.T.
CONSULTANT	
PROJECT RESIDENT	
CONTRACTOR	
PROJECT COMPLETION DATE	

ORONO
STILLWATER/FOREST AVE.

TITLE SHEET

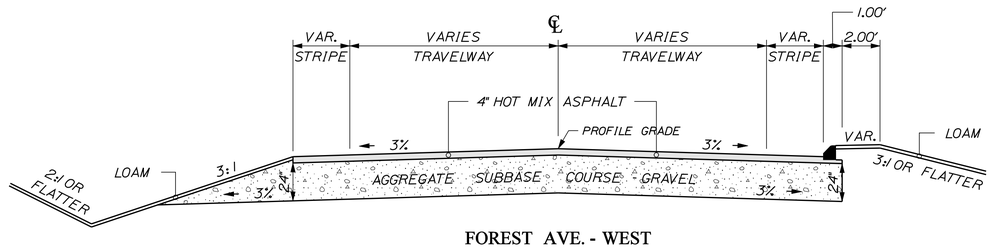
SHEET NUMBER 1 OF 65

Date:6/26/2012 Username: bt.tran Division: HIGHWAY Filename: ...\00\HIGHWAY\MSTA\001_Title.dgn



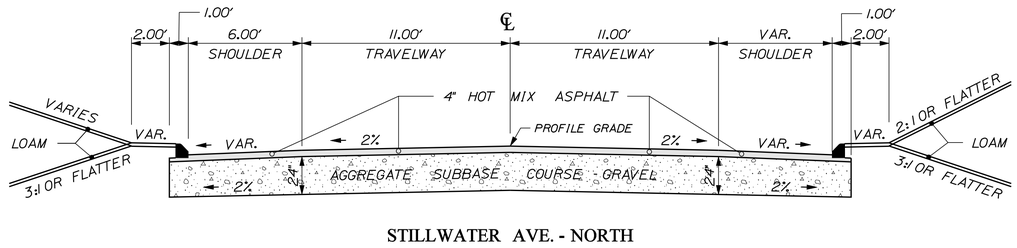
FOREST AVE. - EAST

SLOPE 24" A. S. C. G. = 28.7 CY/100 LF	14' - 14' TRAVEL LANES 24" A. S. C. G. = 207.4 CY/100 LF	DITCH 24" A. S. C. G. = 28.7 CY/100 LF
STATION TO STATION	STATION TO STATION	STATION TO STATION
52+00.00 TO 55+37.08 LT.	51+75.00 TO 55+37.08	51+75.00 TO 52+00.00 LT. 51+75.00 TO 55+37.08 RT.



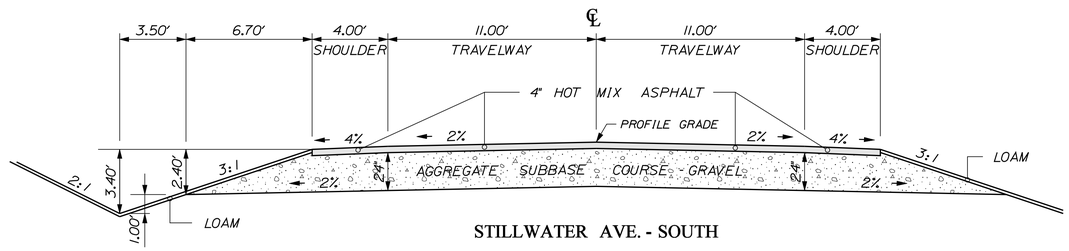
FOREST AVE. - WEST

DITCH 24" A. S. C. G. = 28.7 CY/100 LF	TRAVEL LANES 24" A. S. C. G. = 7.4 CY/100 LF/FT OF WIDTH	CURB
STATION TO STATION	STATION TO STATION	STATION TO STATION
41+00.00 TO 42+04.76 RT. 41+25.00 TO 42+09.28 LT.	41+00.00 TO 42+09.28	42+04.76 TO 42+09.28 RT.



STILLWATER AVE. - NORTH

CURB SHOULDER LT.	11' - 11' TRAVEL LANES 24" A. S. C. G. = 163 CY/100 LF	CURB SHOULDER RT.
STATION TO STATION	STATION TO STATION	STATION TO STATION
35+00.00 TO 35+98.04 LT.	35+00.00 TO 35+98.04	35+00.00 TO 35+98.04 RT.



STILLWATER AVE. - SOUTH

DITCH SHOULDER LT. 24" A. S. C. G. = 54.8 CY/100 LF	11' - 11' TRAVEL LANES 24" A. S. C. G. = 163 CY/100 LF	SHOULDER RT. 24" A. S. C. G. = 54.8 CY/100 LF
STATION TO STATION	STATION TO STATION	STATION TO STATION
22+50.00 TO 23+81.72 LT.	22+50.00 TO 23+81.72	22+50.00 TO 23+81.72 RT.

CURB TYPE (SHEET 9)
: CONCRETE SLIPFORM CURB - VERTICAL
: CONCRETE SLIPFORM CURB - SLOPED
: CONCRETE SLIPFORM CURB *
: CURB TYPE 5 - TRUCK APRON
* TO BE PLACED ON 2" BASE HMA.
STATIONING
STA. 20+00 : STILLWATER AVE. - SOUTH
STA. 30+00 : STILLWATER AVE. - NORTH
STA. 40+00 : FOREST AVE. - WEST
STA. 50+00 : FOREST AVE. - EAST

NOTE:

1. THE PAVEMENT, BASE AND SUBBASE DEPTHS AS SHOWN ON THE PLANS ARE INTENDED TO BE NOMINAL.
2. THE ALGEBRAIC DIFFERENCE BETWEEN THE SHOULDER AND TRAVEWAY CROSS SLOPES "ROLLOVER" SHALL NOT EXCEED 8%.
3. THE STATIONING SHOWN UNDER EACH TYPICAL IS APPROXIMATE.
4. IN AREAS THAT ARE TO BE CONSTRUCTED WITH EXISTING PAVEMENT, THE EXISTING PAVEMENT WILL BE REMOVED AND REMOVAL WILL BE PAID FOR AS ITEM# 203.20.

NOT TO SCALE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN
17261.00

HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER	P. MACDONALD		
DESIGN-DETAILED	J. FRENCH	BT TRAN	JULY 2012
CHECKED-REVIEWED	-----	-----	-----
DESIGN2-DETAILED2	-----	-----	-----
DESIGN3-DETAILED3	-----	-----	-----
REVISIONS 1	-----	-----	-----
REVISIONS 2	-----	-----	-----
REVISIONS 3	-----	-----	-----
REVISIONS 4	-----	-----	-----
FIELD CHANGES	-----	-----	-----

SIGNATURE

P.E. NUMBER

DATE

ORONO
STILLWATER\FOREST AVE.

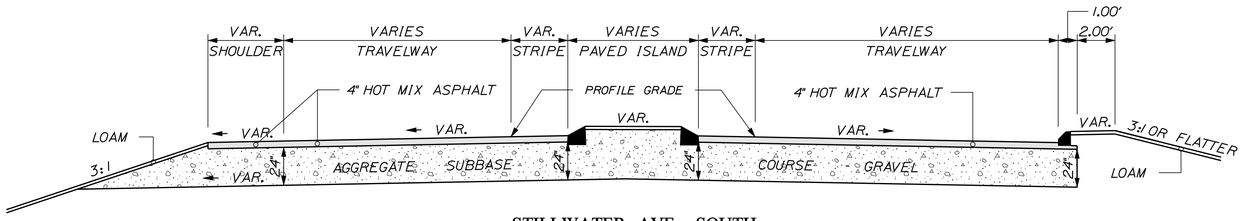
TYPICAL SECTIONS

SHEET NUMBER

2

OF 65

Filename: ...\mslo\002_Typical01.dgn Username: jonathon.french Date:7/5/2012 Division: HIGHWAY

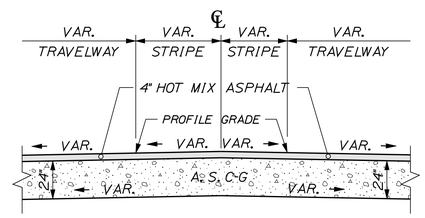


NOTE: THE LOCATION OF THE SUBGRADE CROWN POINT WILL VARY FROM CL. EXTEND BOTH SUBGRADE SLOPES UNTIL THEY MEET TO CREATE THE CROWN POINT.

STILLWATER AVE. - SOUTH
STILLWATER AVE. - NORTH
FOREST AVE. - WEST
FOREST AVE. - EAST

PAVED ISLAND :
1" COLORED HMA (TOP LAYER) &
1" HMA (BOTTOM LAYER)

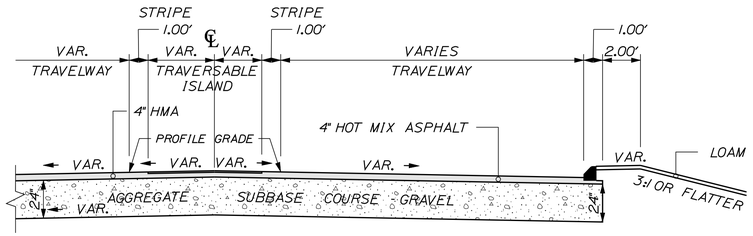
SHOULDER	TRAVELWAY	PAVED ISLAND	TRAVELWAY W/CURB
STATION TO STATION	STATION TO STATION	STATION TO STATION	STATION TO STATION
24+71.81 TO 25+96.73 LT. 24+71.81 TO 25+80.51 RT.	24+71.81 TO 25+96.73 LT. & RT.	24+71.81 TO 25+96.73 26+50.41 TO 27+50.67 36+50.75 TO 36+77.86 42+95.66 TO 43+38.22 43+67.26 TO 44+15.86 57+15.62 TO 57+50.39	26+50.41 TO 27+50.67 LT. & RT. 36+50.75 TO 36+77.86 LT. & RT. 42+95.66 TO 43+38.22 LT. & RT. 43+67.26 TO 44+15.86 LT. & RT. 57+15.62 TO 57+50.39 LT. & RT.



NOTE: THE LOCATION OF THE FINSHED SURFACE AND SUBGRADE CROWN POINTS WILL VARY FROM CL. EXTEND BOTH FINISHED SURFACE AND SUBGRADE SLOPES UNTIL THEY MEET TO CREATE THE CROWN POINT.

STILLWATER AVE. - SOUTH
STILLWATER AVE. - NORTH
FOREST AVE. - WEST
FOREST AVE. - EAST

TRANSITION TO ISLAND
STATION TO STATION
23+81.72 TO 24+71.81
25+96.73 TO 25+98.74
26+48.48 TO 26+50.41
35+98.04 TO 36+50.75
42+09.28 TO 42+95.66
43+38.22 TO 43+40.38
43+65.33 TO 43+67.26
55+37.08 TO 57+15.62



NOTE: THE LOCATION OF THE FINSHED SURFACE AND SUBGRADE CROWN POINTS WILL VARY FROM CL. EXTEND BOTH FINISHED SURFACE AND SUBGRADE SLOPES UNTIL THEY MEET TO CREATE THE CROWN POINT.

TRAVERSABLE ISLAND :
1" COLORED HMA (TOP LAYER) &
3" HMA (BOTTOM LAYER)

STILLWATER AVE. - SOUTH
FOREST AVE. - WEST

TRAVELWAY	TRAVERSABLE ISLAND	TRAVELWAY W/CURB
STATION TO STATION	STATION TO STATION	STATION TO STATION
25+98.74 TO 26+35.62 LT. & RT.	25+98.74 TO 26+48.44 43+40.38 TO 43+65.33	26+35.62 TO 26+48.44 LT. & RT. 43+40.38 TO 43+65.33 LT. & RT.

NOTE:

1. THE PAVEMENT, BASE AND SUBBASE DEPTHS AS SHOWN ON THE PLANS ARE INTENDED TO BE NOMINAL.
2. THE ALGEBRAIC DIFFERENCE BETWEEN THE SHOULDER AND TRAVEWAY CROSS SLOPES "ROLLOVER" SHALL NOT EXCEED 8%.
3. THE STATIONING SHOWN UNDER EACH TYPICAL IS APPROXIMATE.
4. IN AREAS THAT ARE TO BE CONSTRUCTED WITH EXISTING PAVEMENT, THE EXISTING PAVEMENT WILL BE REMOVED AND REMOVAL WILL BE PAID FOR AS ITEM* 203.20.

CURB TYPE (SHEET 9)
: CONCRETE SLIPFORM CURB - VERTICAL
: CONCRETE SLIPFORM CURB - SLOPED
: CONCRETE SLIPFORM CURB *
: CURB TYPE 5 - TRUCK APRON
* TO BE PLACED ON 2" BASE HMA.
STATIONING
STA. 20+00 : STILLWATER AVE. - SOUTH
STA. 30+00 : STILLWATER AVE. - NORTH
STA. 40+00 : FOREST AVE. - WEST
STA. 50+00 : FOREST AVE. - EAST

NOT TO SCALE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN
17261.00

HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER	P. MACDONALD		
DESIGN-DETAILED	J. FRENCH	BT TRAN	JULY 2012
CHECKED-REVIEWED	-----	-----	-----
DESIGN2-DETAILED2	-----	-----	-----
DESIGN3-DETAILED3	-----	-----	-----
REVISIONS 1	-----	-----	-----
REVISIONS 2	-----	-----	-----
REVISIONS 3	-----	-----	-----
REVISIONS 4	-----	-----	-----
FIELD CHANGES	-----	-----	-----

SIGNATURE

P.E. NUMBER

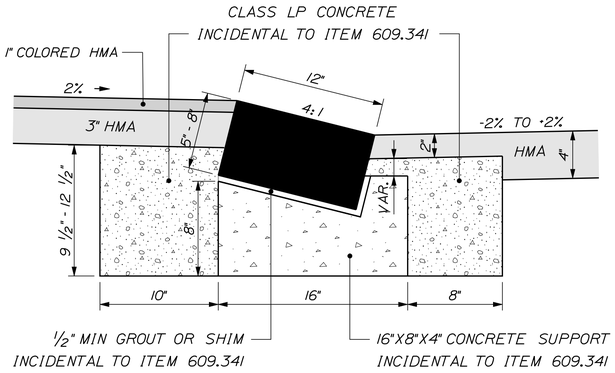
DATE

ORONO
STILLWATER\FOREST AVE.

TYPICAL SECTIONS

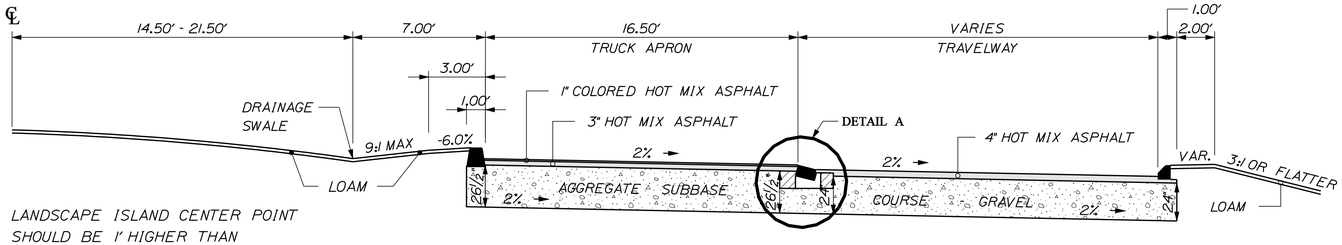
SHEET NUMBER
3
OF 65

Username: jonathon.french Date:6/22/2012
Division: HIGHWAY
Filename: ...\MSTA\003_Typical 02.dgn



CURB TYPE 5 - TRUCK APRON
DETAIL A

SCALE 1:7.5

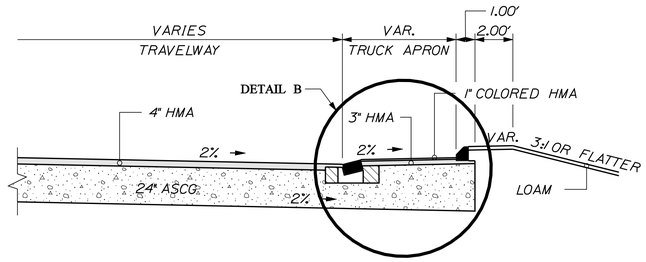


LANDSCAPE ISLAND CENTER POINT SHOULD BE 1' HIGHER THAN LANDSCAPE ISLAND PERIMETER HIGH POINT.

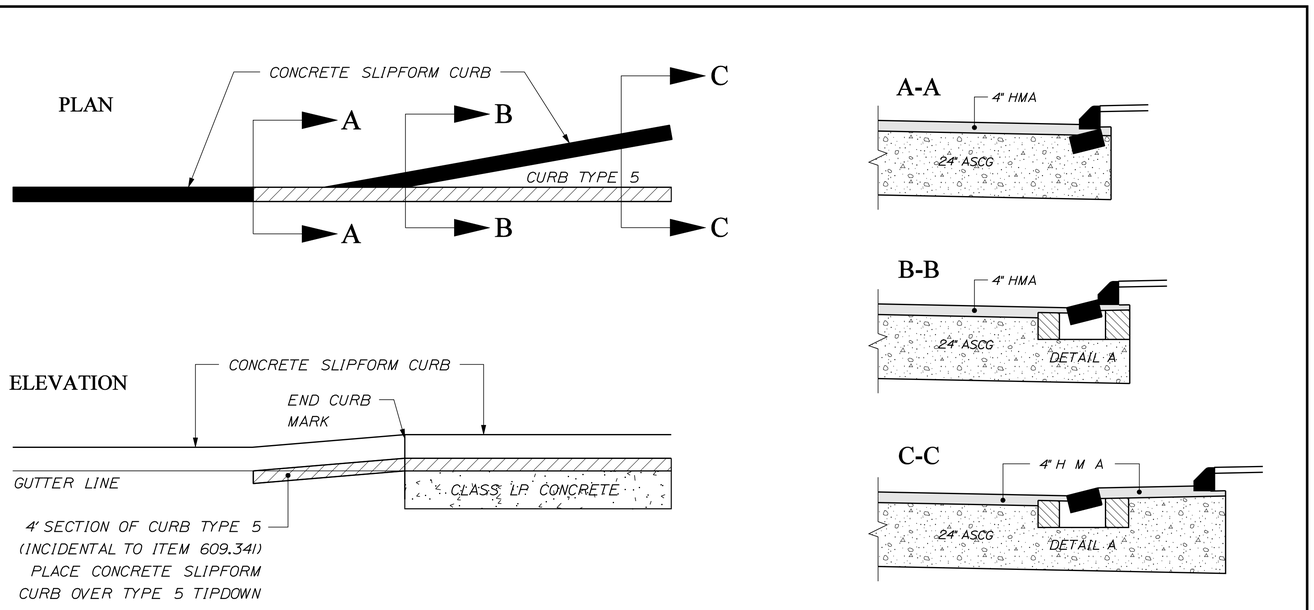
ROUNDABOUT

16.5' TRUCK APRON	TRAVELWAY
26½" A. S. C. G. = 143.1 CY/100 LF	24" A. S. C. G. = 7.4 CY/100 LF/FT OF WIDTH

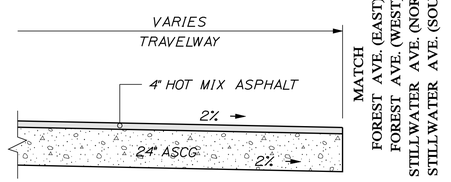
CURB TYPE (SHEET 9)
: CONCRETE SLIPFORM CURB - VERTICAL
: CONCRETE SLIPFORM CURB - SLOPED
: CONCRETE SLIPFORM CURB *
: CURB TYPE 5 - TRUCK APRON
* TO BE PLACED ON 2" BASE HMA.



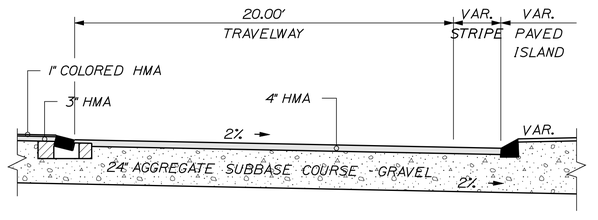
ROUNDABOUT WITH SIDE TRUCK APRON



CURB TYPE 5 - SIDE TRUCK APRON TRANSITION DETAIL
DETAIL B



ROUNDABOUT WITHOUT CURB



ROUNDABOUT WITH PAVED ISLAND

PAVED ISLAND :
1" COLORED HMA (TOP LAYER) &
1" HMA (BOTTOM LAYER)

NOT TO SCALE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN 17261.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	P. MACDONALD	
DESIGN-DETAILED	J. FRENCH	JULY 2012
CHECKED-REVIEWED	BT TRAN	
DESIGN2-DETAILED2	-----	-----
DESIGN3-DETAILED3	-----	-----
REVISIONS 1	-----	-----
REVISIONS 2	-----	-----
REVISIONS 3	-----	-----
REVISIONS 4	-----	-----
FIELD CHANGES	-----	-----

SIGNATURE

P.E. NUMBER

DATE

ORONO
STILLWATER\FOREST AVE.

TYPICAL SECTIONS

SHEET NUMBER

4

OF 65

Filename: ...\MSTA\004_Typical03.dgn Username: jonathon.french Division: HIGHWAY Date:7/5/2012

Filename: ...\HIGHWAY\MSTA\005_Estimate.dgn Username: jonathon.french Date:7/18/2012 Division: HIGHWAY

ESTIMATED QUANTITIES

ITEM NO.	DESCRIPTION	QUANTITY	UNIT
201.11	CLEARING	1	AC
201.23	REMOVING SINGLE TREE TOP ONLY	1	EA
201.24	REMOVING STUMP	1	EA
202.15	REMOVING MANHOLE OR CATCH BASIN	5	EA
202.20	REMOVING BITUMINOUS CONCRETE PAVEMENT	705	SY
203.20	COMMON EXCAVATION	6375	CY
203.24	COMMON BORROW	2420	CY
203.25	GRANULAR BORROW	1540	CY
304.10	AGGREGATE SUBBASE COURSE - GRAVEL	6750	CY
403.208	HOT MIX ASPHALT 12.5 MM HMA SURFACE	750	T
403.209	HOT MIX ASPHALT 9.5 MM HMA (SIDEWALKS, DRIVES, INCIDENTALS)	60	T
403.213	HOT MIX ASPHALT 12.5 MM BASE	855	T
404.70	COLORED HMA 9.5 MM SURFACE	32	T
404.72	COLORED HMA 9.5 MM (ISLANDS, SIDEWALKS, INCIDENTALS)	30	T
409.15	BITUMINOUS TACK COAT - APPLIED	205	G
603.16	15 INCH CULVERT PIPE OPTION I	190	LF
603.169	15 INCH CULVERT PIPE OPTION III	24	LF
603.17	18 INCH CULVERT PIPE OPTION I	35	LF
603.1770	18 INCH POLYPROPYLENE PIPE	54	LF
603.179	18 INCH CULVERT PIPE OPTION III	48	LF
603.19	24 INCH CULVERT PIPE OPTION I	20	LF
603.1970	24 INCH POLYPROPYLENE PIPE	115	LF
603.2093	30 INCH POLYPROPYLENE PIPE	62	LF
603.2194	36 INCH POLYPROPYLENE PIPE	65	LF
604.092	CATCH BASIN TYPE BI-C	8	EA
604.11	CATCH BASIN TYPE CI	1	EA
604.15	MANHOLE	1	EA
605.09	6 INCH UNDERDRAIN TYPE B	610	LF
605.10	6 INCH UNDERDRAIN OUTLET	115	LF
605.12	15 INCH UNDERDRAIN TYPE C	340	LF
605.13	18 INCH UNDERDRAIN TYPE C	380	LF
606.356	UNDERDRAIN DELINEATOR POST	4	EA
609.16	CONCRETE SLIPFORM CURB - SLOPED	880	LF
609.161	CONCRETE SLIPFORM CURB - VERTICAL	160	LF
609.21	CONCRETE SLIPFORM CURB	1140	LF
609.214	TERMINAL CURB - CONCRETE SLIPFORM CURB - 4 FOOT	11	EA
609.341	CURB TYPE 5 - TRUCK APRON	407	LF
610.08	PLAIN RIPRAP	70	CY
613.319	EROSION CONTROL BLANKET	560	SY
615.07	LOAM	665	CY
618.1301	SEEDING METHOD NUMBER 1 - PLAN QUANTITY	29	UN
618.1401	SEEDING METHOD NUMBER 2 - PLAN QUANTITY	52	UN
619.12	MULCH	81	UN
620.54	STABILIZATION GEOTEXTILE	500	SY
620.58	EROSION CONTROL GEOTEXTILE	150	SY
621.033	EVERGREEN TREES (4 FOOT - 5 FOOT) GROUP C	3	EA
621.039	EVERGREEN TREES (5 FOOT - 6 FOOT) GROUP C	3	EA
621.045	EVERGREEN TREES (6 FOOT - 8 FOOT) GROUP C	1	EA
621.048	EVERGREEN TR (8' - 9') GP C	1	EA
621.255	LARGE DECIDUOUS TREES (8 FOOT - 10 FOOT) GROUP A	3	EA
621.388	DWARF EVERGREENS (12 INCH - 15 INCH)	200	EA
621.389	DWARF EVERGREENS (15 INCH - 18 INCH) GROUP A	240	EA
621.397	DWARF EVERGREENS (18 INCH - 24 INCH) GROUP C	24	EA
621.80	ESTABLISHMENT PERIOD	1	LS
626.11	PRECAST CONCRETE JUNCTION BOX	1	EA
626.21	METALLIC CONDUIT	95	LF
626.22	NON-METALLIC CONDUIT	1490	LF
626.32	24 INCH FOUNDATION	9	EA
626.35	CONTROLLER CABINET FOUNDATION	1	EA
627.76	TEMPORARY PVMT. MARK LINE, W OR YELLOW	1	LS
629.05	HAND LABOR, STRAIGHT TIME	20	HR
631.12	ALL PURPOSE EXCAVATOR (INCLUDING OPERATOR)	15	HR
631.172	TRUCK - LARGE (INCLUDING OPERATOR)	15	HR
631.18	CHAIN SAW RENTAL (INCLUDING OPERATOR)	10	HR
631.20	STUMP CHIPPER (INCLUDING OPERATOR)	10	HR
634.16	HIGHWAY LIGHTING	1	LS
634.2042	LED LUMINARIES	11	EA
634.21	CONVENTIONAL LIGHT STANDARD	8	EA
639.19	FIELD OFFICE TYPE B	1	EA
645.106	DEMOUNT REG, WRN, CONFIRM AND RTE MARKER ASSEMBLY SIGN	3	EA
645.116	REINSTALL REG, WRN, CONFIRM AND RTE MARKER ASSEMBLY SIGN	3	EA
645.161	BREAKAWAY DEVICES SINGLE POLE	1	EA
645.251	ROADSIDE GUIDE SIGNS	44	SF
645.271	REG, WRN, CONFIRM AND RTE MARKER ASSEMBLY SIGNS, TYPE 1	246	SF
645.289	STEEL H-BEAM POLES	500	LB
645.55	RADAR SPEED SIGN - SOLAR POWERED	1	EA
652.31	TYPE 1 BARRICADE	15	EA
652.33	DRUM	60	EA
652.34	CONE	75	EA
652.342	42 INCH CONE	20	EA
652.35	CONSTRUCTION SIGNS	750	SF
652.361	MAINTENANCE OF TRAFFIC CONTROL DEVICES	1	LS
652.38	FLAGGER	5800	HR
656.75	TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	1	LS
659.10	MOBILIZATION	1	LS

EARTHWORK SUMMARY

COMMON EXCAVATION FOR ESTIMATE

COMMON EXCAVATION (FROM CROSS SECTIONS)	4,430	
GRUBBING IN FILL	406	
UNDERCUT	1,339	
PAVEMENT SALVAGE IN FILL	200	
TOTAL COMMON EXCAVATION		6,375

FILL FOR BORROW CALCULATIONS

COMMON FILL (FROM CROSS SECTIONS)	4,765	
FILL FOR DRIVES	440	
GRUBBING IN FILL	406	
UNDERCUT	1,339	
PAVEMENT SALVAGE IN FILL	200	
TOTAL FILL		7,150

ROCK EXCAVATION FOR ESTIMATE

ROCK EXCAVATION (FROM CROSS SECTIONS)	0	
TOTAL ROCK EXCAVATION		0

AVAILABLE COMMON EXCAVATION FOR BORROW CALCULATIONS

(1) TOTAL COMMON EXCAVATION		6,375
DEDUCTIONS:		
GRUBBING IN CUT	18	
GRUBBING IN FILL	406	
UNDERCUT	1,339	
PAVEMENT SALVAGE (CUT & FILL)	935	
(2) TOTAL DEDUCTIONS		2,698
TOTAL AVAILABLE COMMON EXCAVATION (1) MINUS (2)		3,677
TOTAL AVAILABLE STRUCT. EXCAVATIONS (USUALLY UNDERDRAIN ONLY)		190
TOTAL AVAILABLE NON-ROCK EXCAVATION		3,867

COMPUTATION OF WASTE STORAGE & WASTE MATERIAL

TOTAL AVAIL. WASTE STORAGE AREA (FROM CROSS SECTIONS)		420
GRUBBING IN CUT	18	
GRUBBING IN FILL	406	
UNDERCUT	1,339	
TOTAL WASTE MATERIAL		1,763
TOTAL WASTE MATERIAL TO BE UTILIZED (LOWER OF TOTAL AVAILABLE WASTE STORAGE AREA OR TOTAL WASTE MATERIAL)		420
TOTAL WASTE MATERIAL TO BE WASTED (TOTAL WASTE MATERIAL MINUS TOTAL WASTE MATERIAL TO BE UTILIZED)		1,343

COMPUTATION OF GRANULAR BORROW FOR ESTIMATE

GRANULAR BORROW FOR UNDERCUTTING	1,339		
GRANULAR BORROW =	1,339	x 1.15=	1,540

COMPUTATION FOR COMMON BORROW FOR ESTIMATE

(3)TOTAL FILL				7,150
TOTAL AVAIL. NON-ROCK EXCAV.	3,867	x 0.85 =	3,287	
TOTAL AVAIL. ROCK EXCAV.	0	x 1.33 =	0	
TOTAL AVAIL. STR. ROCK EXCAV.	0	x 1.33 =	0	
TOTAL WASTE MATERIAL TO BE UTILIZED	420	x 1 =	420	
(4)TOTAL AVAILABLE EXCAVATION			=	3,707
BORROW NEEDED = TOTAL FILL MINUS TOTAL AVAILABLE EXCAVATION				3,443
GRANULAR BORROW FOR UNDERCUTTING				1,339
TOTAL FILL MINUS REQUIRED GRAN. BORR. WITHIN FILL				2,104
COMMON BORROW =	2,104	x 1.15 =		2,420

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN 17261.00

HIGHWAY PLANS

PROJ. MANAGER	P. MACDONALD	DATE	
DESIGN-DETAILED	J. FRENCH	BY	J. FRENCH
CHECKED-REVIEWED	-----	DATE	JULY 2012
DESIGN2-DETAILED2	-----	SIGNATURE	-----
DESIGN3-DETAILED3	-----	P.E. NUMBER	-----
REVISIONS 1	-----	DATE	-----
REVISIONS 2	-----		-----
REVISIONS 3	-----		-----
REVISIONS 4	-----		-----
FIELD CHANGES	-----		-----

ORONO
STILLWATER\FOREST AVE.

ESTIMATED QUANTITIES

SHEET NUMBER

5

OF 65

STATION	CULVERT PIPE								CATCH BASIN		MH	UNDERDRAIN						ELBOWS, TEES, WYES AND INLET GRATE UNITS	REMARKS
	PPP		OPTION I		OPTION III							TYPE B		TYPE C					
					SMOOTHLINED		CORRUGATED					TYPE B	OUTLET	SMOOTHLINED		CORRUGATED		DESCRIPTIONS	
	SIZE	LENGTH	SIZE	LENGTH	SIZE	LENGTH	SIZE	LENGTH	B1-C	C1		LENGTH	LENGTH	SIZE	LENGTH	SIZE	LENGTH		
CATCH BASIN & MANHOLE																			
STA. 27+94.56, 11.6' LT. (STILLWATER AVE. - SOUTH) (CB #1)										1									SEE SHEET #10 FOR CROSS SECTION
STA. 36+10.00, 16' RT. (STILLWATER AVE. - NORTH) (CB #2)									1										
STA. 36+70.00, 22.5' RT. (STILLWATER AVE. - NORTH) (CB #3)									1										
STA. 36+70.00, 29.6' LT. (STILLWATER AVE. - NORTH) (CB #4)									1										
STA. 42+80.23, 13' RT. (FOREST AVE. - WEST) (CB #5)									1⅛										
STA. 42+91.46, 22' LT. (FOREST AVE. - WEST) (CB #6)									1										
STA. 43+60.46, 19.5' RT. (FOREST AVE. - WEST) (CB #7)									1										
STA. 43+98.27, 14.5' LT. (FOREST AVE. - WEST) (CB #8)									1										
STA. 44+12.50, 47' RT. (FOREST AVE. - WEST)											1								SEE SHEET #10 FOR CROSS SECTION
ROADWAY CULVERT																			
STA. 22+51.83 LT.			15"	24'															
STA. 23+68.19 LT.			15"	30'															
STA. 24+93.43, 31.9' RT. TO STA. 25+05.49, 32.0' LT.	36"	65'																	
STA. 26+06.48, 71.7' RT. TO STA. 26+48.81, 48.3' RT.			15"	54'															
STA. 26+30.67, 150.5' RT. TO STA. 26+43.90, 158.5' RT.			24"	20'															TO BE INSTALLED AS DIRECTED BY THE RESIDENT
STA. 36+68.29, 52.9' LT. TO CB#4 LT.					15"	22.5'	18"	22.5'											
STA. 41+10.00 RT.			15"	24'															
STA. 42+36.01, 45.3' LT. TO CB#6 LT.	24"	63'																	
STA. 42+76.76, 41.8' RT. TO CB#5 RT.	30"	28'																	
STA. 42+89.44, 37.5' LT. TO CB#6 LT.			15"	14.5'															
CB#5 RT. TO CB#6 LT.	30"	33'																	
STA. 43+64.39 LT.			15"	40'															
MH LT. TO CB#1 LT.					18"	48'	21"	48'											SEE SHEET #10 FOR CROSS SECTION
STA. 52+88.17, 26.3' LT. TO STA. 52+95.36, 26.2' RT.	18"	53'																	
STA. 55+55.00, 26.5' LT TO STA. 55+55.00, 25.5' RT.	24"	52'																	
STA. 55+99.51 RT.			18"	34'															
UNDERDRAIN																			
STA. 25+71.38, 45.9' RT. TO STA. 25+90.75 RT.													30'					45° ELBOW	
STA. 25+90.75 TO STA. 27+77.65 RT.												194'							
STA. 25+98.88, 34' LT. TO STA. 26+10.37 LT.													15'					45° ELBOW	
STA. 26+10.37 TO STA. 27+60.63 LT.												152'							
STA. 35+00.00 TO CB#4 LT.														15"	170.5'	18"	170.5'		CONNECT TO EXISTING U.D.
STA. 35+00.00 TO CB#2 RT.														15"	108.5'	18"	108.5'		CONNECT TO EXISTING U.D.
CB#2 TO CB#3 RT.														15"	58.5'	18"	58.5'		
STA. 42+05.01 TO CB#5 RT.												71.5'							
CB#5 TO CB#7 RT.														18"	74.5'	21"	74.5'		
CB#6 TO CB#8 LT.														18"	110'	21"	110'		
CB#7 TO MH RT.														18"	57'	21"	57'		
CB#8 LT. TO CB#3 RT.														18"	89.5'	21"	89.5'		
MH RT. TO CB#1 LT. (STILLWATER AVE. - SOUTH)														18"	45'	21"	45'		
STA. 56+67.68, 43.2' LT. TO STA. STA. 56+95.70 LT.													39'					45° ELBOW	
STA. 56+67.97, 26.2' RT. TO STA. 56+81.31 RT.													19'					45° ELBOW	
STA. 56+81.31 RT. TO STA. 36+74.45 LT. (STILLWATER AVE. - NORTH)												88'							
STA. 56+95.70 LT. TO STA. 27+77.65 RT. (STILLWATER AVE. - SOUTH)												95'							

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN
17261.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	P. MACDONALD	
DESIGN-DETAILED	J. FRENCH	JULY 2012
CHECKED-REVIEWED	-----	-----
DESIGN2-DETAILED2	-----	-----
DESIGN3-DETAILED3	-----	-----
REVISIONS 1	BT TRAN	-----
REVISIONS 2	-----	-----
REVISIONS 3	-----	-----
REVISIONS 4	-----	-----
FIELD CHANGES	-----	-----

SIGNATURE

P.E. NUMBER

DATE

ORONO
STILLWATER\FOREST AVE.

DRAINAGE SHEET

SHEET NUMBER

6

OF 65

Filename: ...\highway\msta\006_Drainage.dgn Division: HIGHWAY Username: jonathon.french Date:6/22/2012

Filename: ...\MSTA\007_GeneralNotes.dgn Division: HIGHWAY Username: jonathon.french Date:7/13/2012

GENERAL NOTES:

1. ALL UTILITY FACILITIES SHALL BE ADJUSTED BY THE RESPECTIVE UTILITIES UNLESS OTHERWISE NOTED.
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. STUMPS HAVE BEEN ESTIMATED TO BE REMOVED UNDER ITEM 201.24 REMOVE STUMP. HOWEVER, WHERE DIRECTED BY THE RESIDENT, ITEM 631.20 STUMP CHIPPER RENTAL, MAY BE USED TO REMOVE STUMPS.
4. GRUBBING IN FILL AREAS HAS BEEN SHOWN ON THE CROSS SECTIONS AND THE QUANTITIES NOTED. THESE LIMITS ARE APPROXIMATE AND HAVE BEEN USED FOR ESTIMATING PURPOSES ONLY. ACTUAL GRUBBING LIMITS MAY VARY BASED ON FIELD CONDITIONS AS DIRECTED BY THE RESIDENT. ESTIMATED GRUBBING DEPTHS ARE 9 INCHES IN FIELD AREAS AND 15 INCHES IN WOODED AREAS.
5. 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.
6. ALL WASTE MATERIAL NOT USED ON THE PROJECT IN WASTE STORAGE AREAS SHALL BE DISPOSED OF OFF THE PROJECT IN APPROVED WASTE AREAS.
7. IF FOUNDATION MATERIAL IS REQUIRED UNDER CULVERTS, IT SHALL MEET THE REQUIREMENTS FOR GRANULAR BORROW - UNDERWATER BACKFILL AND WILL PAID FOR AS GRANULAR BORROW.
8. GRANULAR BORROW USED TO BACKFILL UNDERCUT AREAS SHALL MEET REQUIREMENTS FOR GRANULAR BORROW UNDERWATER BACKFILL.
9. ALL PAVED ENTRANCES SHALL BE CONSTRUCTED WITH: 2" HOT MIX ASPHALT AND 12" AGGREGATE SUBBASE COURSE GRAVEL. UNPAVED ENTRANCES SHALL BE CONSTRUCTED WITH 12" AGGREGATE SUBBASE COURSE GRAVEL
10. A 3' PAVED LIP SHALL BE PLACED AT ALL GRAVEL ENTRANCES UNLESS OTHERWISE NOTED IN THE PLANS OR DIRECTED BY THE RESIDENT.
11. ALL EXISTING DRAINAGE PIPES SHALL BE REMOVED OR ABANDONED AS DIRECTED BY THE RESIDENT. REMOVAL OF EXISTING PIPES WILL BE PAID FOR AS ITEM #203.20
12. ALL DRAINAGE PIPES TO BE ABANDONED SHALL HAVE THE ENDS PLUGGED WITH FLOWABLE CONCRETE. COST FOR ALL LABOR AND MATERIAL WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO DIRECT PAYMENT WILL BE MADE FOR THIS WORK.
13. INLETS AND OUTLETS OF ALL CULVERTS SHALL HAVE RIPRAP CULVERT END PROTECTION UNLESS OTHERWISE NOTED ON THE PLANS OR DIRECTED BY THE RESIDENT.
14. THE CULVERT SIZES SHOWN ON THE PLANS AND CROSS SECTIONS ARE FOR SMOOTHLINED PIPES. FOR COMPARABLE CORRUGATED SIZES SEE THE DRAINAGE TABULATION.
15. ANY CUTTING OF EXISTING U.D. PIPE AND OR CONNECTORS NECESSARY TO CONNECT NEW U.D. TO EXISTING U.D. PIPE SHALL BE INCIDENTAL TO THE 605 ITEMS.
16. A 3 FT. X 3 FT. SQUARE RIPRAP PAD SHALL BE CONSTRUCTED AT TYPE B U.D. OUTLETS.
17. AN UNDERDRAIN DELINEATOR POST (ITEM #606.356) SHALL BE INSTALLED AT EACH TYPE B U.D. OUTLET.
18. LOAM HAS BEEN ESTIMATED FOR ALL DISTURBED AREAS. ACTUAL PLACEMENT OF THE LOAM SHALL BE AS NOTED ON THE PLANS OR DESIGNATED BY THE RESIDENT.
19. 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 SLOPES.
20. 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.
21. 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 627.76.
22. THE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTAINING ALL EXISTING MAILBOXES TO ENSURE THAT THE MAIL WILL BE DELIVERABLE. NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK; IT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
23. THE CONTRACTOR IS RESPONSIBLE FOR THE CAREFUL SIDE STAKING OF EXISTING CENTERLINE AS PER STANDARD SPECIFICATION 105.6.2. SIDE STAKES SHALL BE PLACED SAFELY OUTSIDE OF THE CONSTRUCTION LIMITS AND THE EXISTING CENTERLINE GRADES SHALL BE TRANSFERRED TO THESE STAKES. THESE STAKES AND GRADES WILL BE USED TO LAYOUT CENTERLINE AND DETERMINE NEW CONSTRUCTION FINISH GRADES FROM DIFFERENTIAL ELEVATION SHEETS FURNISHED BY MAINEDOT. ALL LAYOUT, STAKES, AND GRADES WILL BE CHECKED AND MUST BE ACCEPTABLE TO THE RESIDENT.
24. 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.
25. A COPY OF THE SOILS REPORT FOR THIS PROJECT IS AVAILABLE BY CONTACTING THE PROJECT MANAGER, PAUL MACDONALD AT 207-624-3330.
26. UNSUITABLE MATERIAL TO BE UNDERCUT IS EXPECTED TO BE ENCOUNTERED IN THE FOLLOWING AREAS: STA. 25+00 TO STA. 26+75 RT. AND STA. 56+00 TO STA. 58+14 LT. THE DEPTH OF UNDERCUT HAS BEEN ESTIMATED AT 4 FEET WITH A VARIABLE WIDTH. HOWEVER THE DIMENSIONS MAY BE ADJUSTED BY THE RESIDENT DEPENDING ON SOIL CONDITIONS IN THE FIELD.
27. AREAS REQUIRING FILL ON THE PROJECT WILL COME FROM SUITABLE EXCAVATION FROM EXCAVATION AREAS.
28. NO SEPARATE PAYMENT FOR SUPERINTENDENT OR FOREMAN WILL BE MADE FOR THE SUPERVISION OF EQUIPMENT BEING PAID FOR UNDER THE EQUIPMENT RENTAL ITEMS.
29. "UNDETERMINED LOCATIONS" SHALL BE DETERMINED BY THE RESIDENT.
30. STATIONS REFERENCED ARE APPROXIMATE.
31. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE MAINE DEPARTMENT OF TRANSPORTATION'S BEST MANAGEMENT PRACTICES FOR EROSION CONTROL & SEDIMENT CONTROL, FEBRUARY, 2008.
32. MAINEDOT WILL FINAL STRIPE THE PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR TRANSFERRING THE EXISTING STRIPING PATTERN TO THE SURFACE COURSE.
33. PAVEMENT REMOVAL IN AREAS MARKED "EXCAVATE, LOAM AND SEED" ON THE PLANS WILL BE PAID FOR UNDER ITEM #202.20.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN
17261.00

HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER	P. MACDONALD		
DESIGN-DETAILED	J. FRENCH	J. FRENCH	JULY 2012
CHECKED-REVIEWED	-----	-----	-----
DESIGN2-DETAILED2	-----	-----	-----
DESIGN3-DETAILED3	-----	-----	-----
REVISIONS 1	-----	-----	-----
REVISIONS 2	-----	-----	-----
REVISIONS 3	-----	-----	-----
REVISIONS 4	-----	-----	-----
FIELD CHANGES	-----	-----	-----

SIGNATURE

P.E. NUMBER

DATE

ORONO
STILLWATER\FOREST AVE.

GENERAL NOTES

SHEET NUMBER

7

OF 65

Filename: ...\mstoV008_Const. Notes.dgn Division: HIGHWAY Username: jonathon.french Date:6/26/2012

DRIVES AND ENTRANCES

				OPENING
STA.	22+54.0	LT.	GRAVEL DR.	25 FT
STA.	23+69.0	LT.	GRAVEL DR.	25 FT
STA.	26+23.0	RT.	GRAVEL DR.	55 FT
STA.	26+24.0	LT.	FIELD ENT.	
STA.	35+77.0	LT.	PAVED DR.	26 FT
STA.	35+95.0	RT.	PAVED DR.	22 FT
STA.	41+10.0	RT.	FIELD ENT.	
STA.	42+62.0	LT.	GRAVEL DR.	53 FT
STA.	43+66.0	LT.	GRAVEL DR.	64 FT
STA.	56+00.0	RT.	PAVED DR.	22 FT
STA.	81+00.0	CONTINUED FROM 26+23.0 RT.		

GRUBBING IN FILL

STA. 24+00.0 — STA. 27+25.0 RT.
STA. 27+00.0 — STA. 27+25.0 LT.
STA. 41+75.0 — STA. 44+00.0 LT.
STA. 43+98.3 — STA. 44+00.0 RT.
STA. 52+00.0 — STA. 53+25.0 LT.
STA. 54+50.0 — STA. 56+00.0 LT.
STA. 56+00.0 — STA. 57+25.0 RT.

ITEM 201.11 CLEARING

STA. 24+20.0 — STA. 26+54.2 RT.
STA. 42+09.4 — STA. 42+37.4 LT.
STA. 42+53.6 — STA. 43+53.2 LT.
STA. 42+66.9 — STA. 42+71.4 LT.
STA. 50+95.0 — STA. 53+63.2 RT.
STA. 50+95.0 — STA. 52+18.1 LT.
STA. 52+35.0 — STA. 57+46.3 LT.

ITEM 201.23 REMOVING SINGLE TREE - TOP ONLY

ITEM 201.24 REMOVING STUMP

STA. 44+39.4 69.9' LT. 20" ASH TWIN

ITEM 202.15 REMOVING MANHOLE OR CATCH BASIN

STA. 36+55.0 LT.
STA. 36+94.0 RT.
STA. 55+43.0 RT.
STA. 55+44.0 RT.
STA. 55+84.0 RT.

ITEM 609.16 CONCRETE SLIPFORM CURB - SLOPED

SEE GEOMETRIC SHEETS

ITEM 609.161 CONCRETE SLIPFORM CURB - VERTICAL

SEE GEOMETRIC SHEETS

ITEM 609.21 CONCRETE SLIPFORM CURB

SEE GEOMETRIC SHEETS

ITEM 609.214 TERMINAL CURB - CONCRETE SLIPFORM - 4 FOOT

SEE GEOMETRIC SHEETS

ITEM 609.341 CURB TYPE 5 - TRUCK APRON

SEE GEOMETRIC SHEETS

ITEM 610.08 PLAIN RIPRAP

CROSS CULVERTS	RIPRAP PAD INLET	RIPRAP PAD OUTLET
STA. 24+93.4, 31.9' RT.		9' X 17'
TO STA. 25+05.5, 32.0' LT.	9' X 17'	
STA. 36+68.3, 52.9' LT. TO CB#4 LT.		6' X 7.5'
STA. 42+36.0, 45.3' LT. TO CB#6 LT.	6' X 11'	
STA. 42+89.4, 37.5' LT. TO CB#6 LT.	6' X 4'	
STA. 42+76.8, 41.8' RT. TO CB#5 RT.		7.5' X 11.25'
STA. 52+88.2, 26.3' LT.		6' X 9'
TO STA. 52+95.4, 26.2' RT.	6' X 4.5'	
STA. 55+55.0, 26.5' LT.		6' X 11'
TO STA. 55+55.0, 25.5' RT.	4' X 6'	

UNDERDRAIN OUTLETS	RIPRAP PAD
STA. 25+71.4, 45.9' RT. — STA. 25+90.8 RT.	3' X 3'
STA. 25+98.9, 34.0' LT. — STA. 26+10.4 LT.	3' X 3'
STA. 56+67.7, 43.2' LT. — STA. 56+95.7 LT.	3' X 3'
STA. 56+68.0, 26.2' RT. — STA. 56+81.3 RT.	3' X 3'

DOWNSPOUTS

STA. 25+93.9 RT.
STA. 26+12.4 LT.
STA. 56+81.3 RT.
STA. 56+96.1 LT.

ITEM 613.319 EROSION CONTROL BLANKET

STA. 22+00.0 — STA. 22+39.0 LT.
STA. 22+64.0 — STA. 23+53.0 LT.
STA. 23+83.0 — STA. 25+02.0 LT.
STA. 41+00.0 — STA. 42+35.0 LT.
STA. 41+25.0 — STA. 42+75.0 RT.
STA. 51+00.0 — STA. 51+91.0 LT.
STA. 51+00.0 — STA. 55+54.0 RT.
STA. 55+56.0 — STA. 55+82.0 RT.
STA. 56+17.0 — STA. 57+26.0 RT.

STATE OF MAINE
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STP-1726(100)X

WIN 17261.00

HIGHWAY PLANS

					DATE
PROJ. MANAGER	P. MACDONALD	BY			
DESIGN-DETAILED	J. FRENCH	BT TRAN	JULY 2012	SIGNATURE	
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REVISIONS 2	-----	-----	-----	-----	-----
REVISIONS 3	-----	-----	-----	-----	-----
REVISIONS 4	-----	-----	-----	-----	-----
FIELD CHANGES	-----	-----	-----	-----	-----

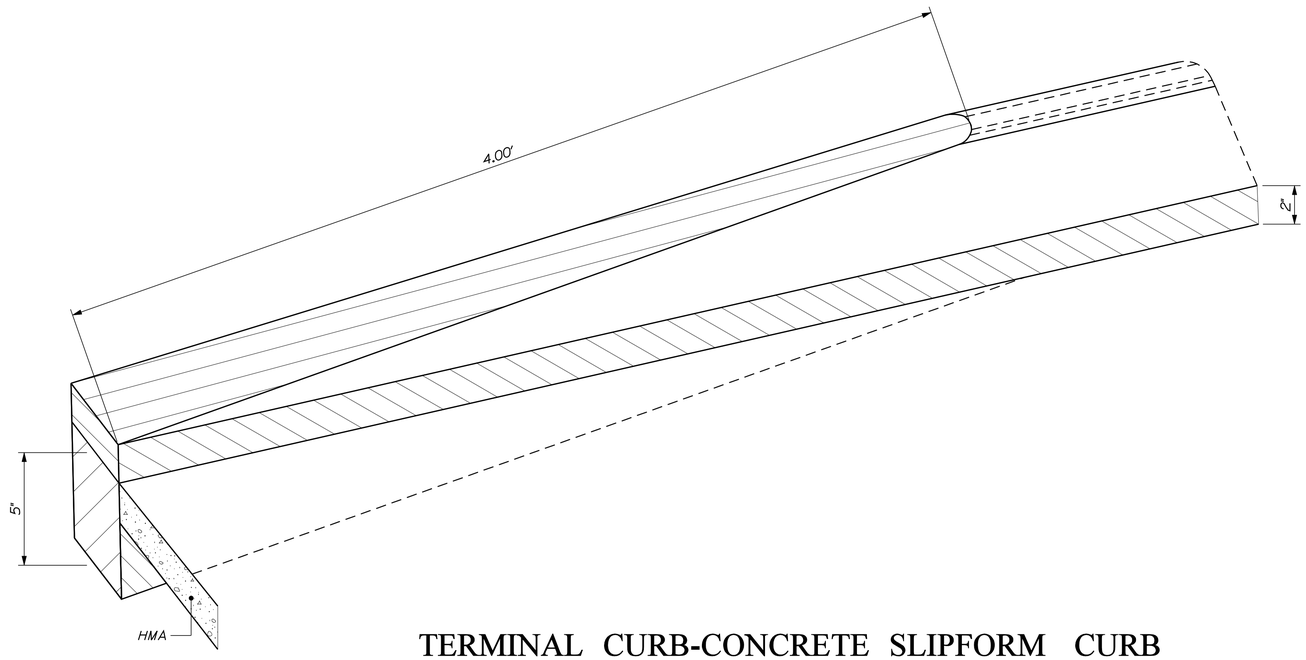
ORONO
STILLWATER\FOREST AVE.

CONSTRUCTION NOTES

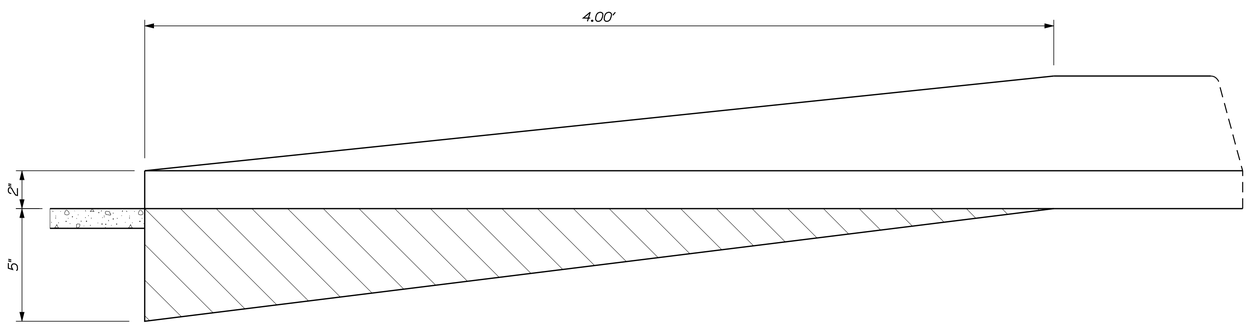
SHEET NUMBER

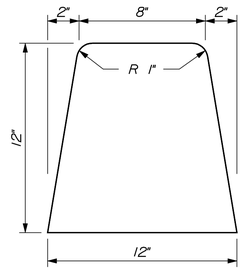
8

OF 65

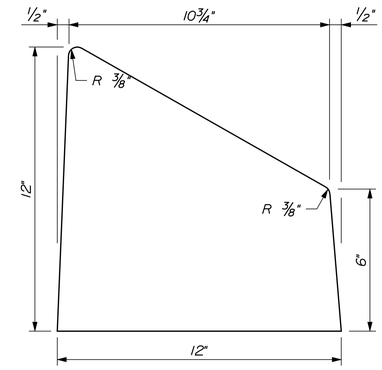


TERMINAL CURB-CONCRETE SLIPFORM CURB
4 FOOT (ITEM 609.214)
TIP DOWN DETAIL

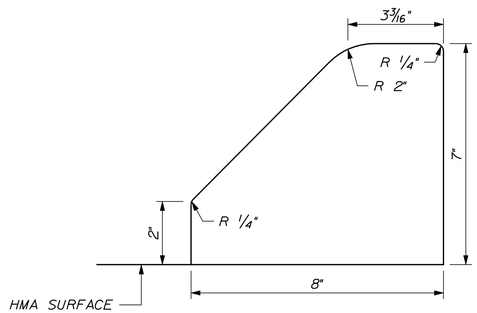




VERTICAL SLIPFORM
CONCRETE CURB
SCALE 1:10



SLOPED SLIPFORM
CONCRETE CURB
SCALE 1:5



SLIPFORM
CONCRETE CURB
SCALE 1:20

NOT TO SCALE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

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HIGHWAY PLANS

PROJ. MANAGER	P. MACDONALD	BY	DATE
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REVISIONS 4	-----	-----	-----
FIELD CHANGES	-----	-----	-----

SIGNATURE

P.E. NUMBER

DATE

ORONO
STILLWATER\FOREST AVE.

SPECIAL DETAILS

SHEET NUMBER

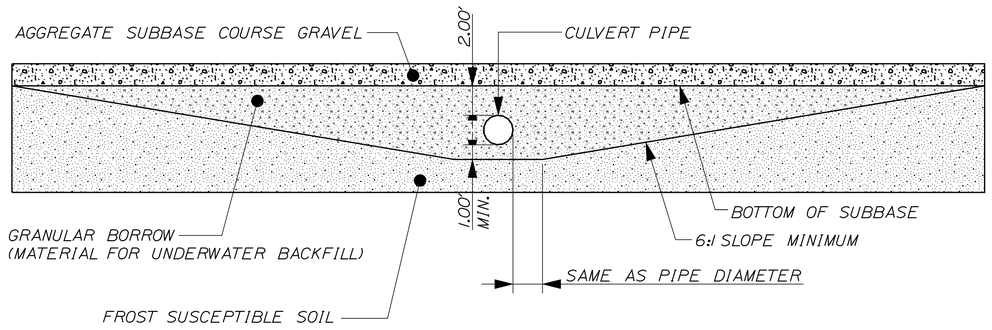
9

OF 65

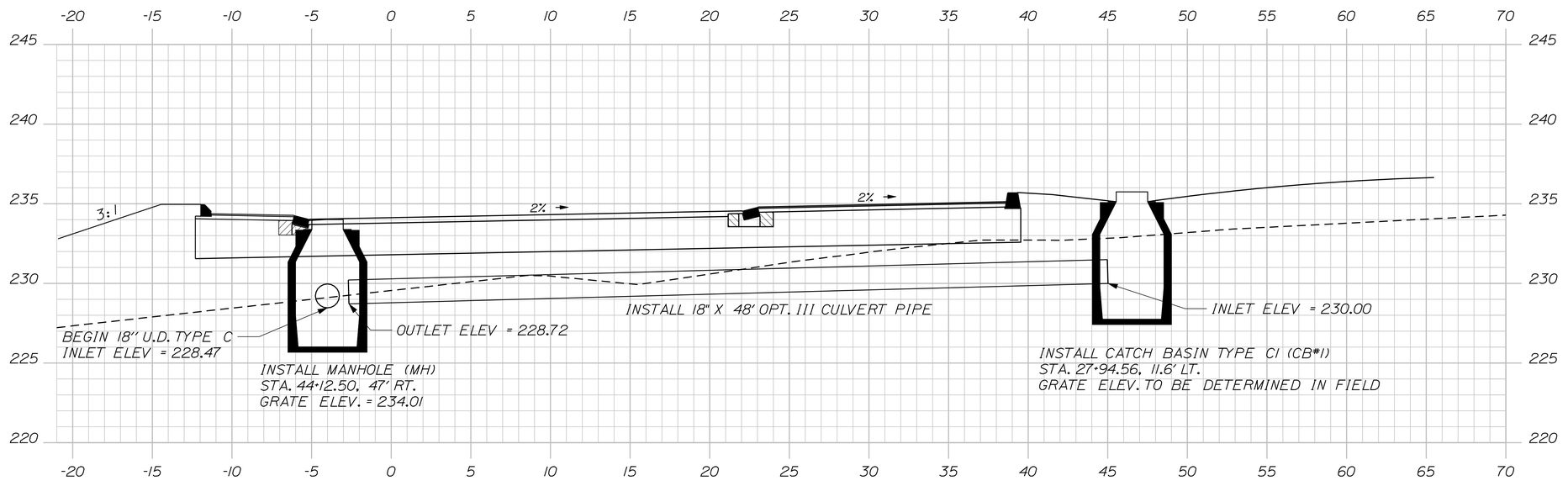
Filename: ...\mslo\009_Special Detail 01.dgn Division: HIGHWAY Username: jonathon.french Date:6/22/2012

Usermame: jonathon.french Date:7/6/2012
Division: HIGHWAY
Filename: ...\MSTA\010_Special Detail 02.dgn

CROSS CULVERT IN FROST SUSCEPTIBLE SOILS



MANHOLE AND CATCHBASIN ON ROUNDABOUT



NOT TO SCALE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN 17261.00

HIGHWAY PLANS

PROJ. MANAGER	P. MACDONALD	BY	DATE
DESIGN-DETAILED	J. FRENCH	J. FRENCH	JULY 2012
CHECKED-REVIEWED	-----	-----	-----
DESIGN2-DETAILED2	-----	-----	-----
DESIGN3-DETAILED3	-----	-----	-----
REVISIONS 1	-----	-----	-----
REVISIONS 2	-----	-----	-----
REVISIONS 3	-----	-----	-----
REVISIONS 4	-----	-----	-----
FIELD CHANGES	-----	-----	-----

SIGNATURE

P.E. NUMBER

DATE

ORONO
STILLWATER\FOREST AVE.

SPECIAL DETAILS

SHEET NUMBER

10

OF 65

Username: jonathon.french Date:6/22/2012

Filename: ...\MSTA\011_BORING LOGS1.dgn Division: HIGHWAY

Maine Department of Transportation — Boring No.: HB-ORO-101

Soil/Rock Exploration Log — US CUSTOMARY UNITS

Project: Stillwater & Forest Avenues — Location: Orono, Maine — WIN: 17261.00

Driller:	Northern Test Boring, Inc.	Elevation (ft.):	Auger ID/OD: 5" Dia.
Operator:	Nick/Mike	Datum: NAVD 88	Sampler: Standard Split Spoon
Logged By:	B. Wilder	Rig Type: Diedrich D-50	Hammer Wt./Fall: 140#/30"
Date Start/Finish:	10/25/10-10/25/10	Drilling Methods: Solid Stem Auger	Core Barrel: N/A
Boring Location:	21+00, 7.6 ft Lt.	Casing ID/OD: N/A	Water Level(*): None Observed
Hammer Efficiency Factor: 0.611		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 = Vane Shear Test, PP = Pocket Penetrometer
MV = Unsuccessful 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 = Weight of rods or casing
WOP = Weight of one person
q_u = Unconfined Compressive Strength (tsf)
N_{UNC} = Uncorrected = Raw Field SPT Revalue
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
S_u = Insitu Field Vane Shear Strength (psf)
S_r = Pocket Torvane Shear Strength (psf)
$S_{u(LAB)}$ = Lab Vane Shear Strength (psf)
MC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
D = Grain Size Analysis
C = Consolidation Test

Sample Information

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows/6 in. Strength or RQD (%)	Uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0							SSA	+0.45		PAVEMENT. 0.45	
	1D/A	24/15	1.00 - 3.00	12/15/16/14	31	32				1D (1.0-2.5 ft) Brown, damp, dense, gravelly, fine to coarse SAND, trace silt.	G#240093 A-1-a, GW-GM WC=2.9%
								-2.50		2.50	
	2D	24/18	3.00 - 5.00	13/8/8/7	16	16				1D/A (2.5-3.0 ft) Brown, moist, dense, fine to coarse SAND, some gravel, some silt. Similar to 1D/A, except medium dense.	G#240094 A-2-4, SM WC=9.4%
5								-5.00		5.00	
										Bottom of Exploration at 5.00 feet below ground surface.	
										NO REFUSAL	
10											
15											
20											

Remarks:
Auto Hammer #149

Stratification lines represent approximate boundaries between soil typeset 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-ORO-101

Maine Department of Transportation — Boring No.: HB-ORO-102

Soil/Rock Exploration Log — US CUSTOMARY UNITS

Project: Stillwater & Forest Avenues — Location: Orono, Maine — WIN: 17261.00

Driller:	Northern Test Boring, Inc.	Elevation (ft.):	Auger ID/OD: 5" Dia.
Operator:	Nick/Mike	Datum: NAVD 88	Sampler: Standard Split Spoon
Logged By:	B. Wilder	Rig Type: Diedrich D-50	Hammer Wt./Fall: 140#/30"
Date Start/Finish:	10/25/10-10/25/10	Drilling Methods: Solid Stem Auger	Core Barrel: N/A
Boring Location:	23+00, 7.9 ft Lt.	Casing ID/OD: N/A	Water Level(*): None Observed
Hammer Efficiency Factor: 0.611		Hammer Type: Automatic ☒ Hydraulic ☐ Rope & Cathead ☐	

Definitions: (same as HB-ORO-101)

Sample Information

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows/6 in. Strength or RQD (%)	Uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0							SSA	+0.45		PAVEMENT. 0.45	
	1D/A	24/15	1.00 - 3.00	1/15/5/5	20	20				1D (1.0-2.2 ft) Dark brown, damp, medium dense, gravelly, fine to coarse SAND, trace silt.	G#240095 A-1-a, SW-SM WC=5.0%
								-2.20		2.20	
	2D	24/20	3.00 - 5.00	5/6/6/6	12	12				1D/A (2.2-3.0 ft) Olive brown, moist, stiff, SILT, little fine sand, trace clay, Similar to above.	G#240096 A-4, CL-ML WC=10.1%
5								-5.00		5.00	
										Bottom of Exploration at 5.00 feet below ground surface.	
										NO REFUSAL	
10											
15											
20											

Remarks:
Auto Hammer #149

Stratification lines represent approximate boundaries between soil typeset 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-ORO-102

Maine Department of Transportation — Boring No.: HB-ORO-103

Soil/Rock Exploration Log — US CUSTOMARY UNITS

Project: Stillwater & Forest Avenues — Location: Orono, Maine — WIN: 17261.00

Driller:	Northern Test Boring, Inc.	Elevation (ft.):	Auger ID/OD: 5" Dia.
Operator:	Nick/Mike	Datum: NAVD 88	Sampler: Standard Split Spoon
Logged By:	B. Wilder	Rig Type: Diedrich D-50	Hammer Wt./Fall: 140#/30"
Date Start/Finish:	10/25/10-10/25/10	Drilling Methods: Solid Stem Auger	Core Barrel: N/A
Boring Location:	24+88, 14.6 ft Lt.	Casing ID/OD: N/A	Water Level(*): None Observed
Hammer Efficiency Factor: 0.611		Hammer Type: Automatic ☒ Hydraulic ☐ Rope & Cathead ☐	

Definitions: (same as HB-ORO-101)

Sample Information

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows/6 in. Strength or RQD (%)	Uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0							SSA	+0.40		PAVEMENT. 0.40	
	1D	24/18	1.00 - 3.00	15/15/13/15	28	29				Brown, damp, medium dense, fine to coarse SAND, some gravel, trace silt.	G#240097 A-1-b, SW-SM WC=6.4%
								-3.00		3.00	
	2D	24/20	5.00 - 7.00	3/5/8/12	13	13				Grey-brown, wet, stiff, clayey SILT, trace fine sand.	G#240098 A-4, CL WC=22.1% LL=31 PL=22 PI=9
								-7.50		7.50	
	3D	24/17	8.00 - 10.00	14/15/16/14	31	32				Brown, wet, dense, fine to coarse SAND, some silt, some gravel, (Till).	G#240099 A-2-4, SM WC=7.2%
10								-10.00		10.00	
										Bottom of Exploration at 10.00 feet below ground surface.	
										NO REFUSAL	
15											
20											

Remarks:
Auto Hammer #149

Stratification lines represent approximate boundaries between soil typeset 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-ORO-103

Maine Department of Transportation — Boring No.: HB-ORO-104

Soil/Rock Exploration Log — US CUSTOMARY UNITS

Project: Stillwater & Forest Avenues — Location: Orono, Maine — WIN: 17261.00

Driller:	Northern Test Boring, Inc.	Elevation (ft.):	Auger ID/OD: 5" Dia.
Operator:	Nick/Mike	Datum: NAVD 88	Sampler: Standard Split Spoon
Logged By:	B. Wilder	Rig Type: Diedrich D-50	Hammer Wt./Fall: 140#/30"
Date Start/Finish:	10/25/10-10/25/10	Drilling Methods: Solid Stem Auger	Core Barrel: N/A
Boring Location:	24+85, 26.8 ft Lt.	Casing ID/OD: N/A	Water Level(*): None Observed
Hammer Efficiency Factor: 0.611		Hammer Type: Automatic ☒ Hydraulic ☐ Rope & Cathead ☐	

Definitions: (same as HB-ORO-101)

Sample Information

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows/6 in. Strength or RQD (%)	Uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0							SSA	-0.40		0.40	
	1D	24/6	1.00 - 3.00	4/5/5/5	10	10				Brown, moist, loose, fine to coarse SAND, some gravel, trace silt.	
								-3.00		3.00	
	2D	24/18	5.00 - 7.00	4/6/5/7	11	11				Grey-brown, wet, stiff, clayey SILT, trace fine sand, Similar to 1D3/20.	
	3D	24/16	8.00 - 10.00	4/12/30/28	42	43		-8.00		8.00	
10								-10.00		Light brown, moist, dense, fine to coarse SAND, some silt, some gravel, (Till), Similar to 1D3/30.	
										10.00	
										Bottom of Exploration at 10.00 feet below ground surface.	
										NO REFUSAL	
15											
20											

Remarks:
Auto Hammer #149

Stratification lines represent approximate boundaries between soil typeset 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-ORO-104

Maine Department of Transportation — Boring No.: HB-ORO-105

Soil/Rock Exploration Log — US CUSTOMARY UNITS

Project: Stillwater & Forest Avenues — Location: Orono, Maine — WIN: 17261.00

Driller:	Northern Test Boring, Inc.	Elevation (ft.):	Auger ID/OD: 5" Dia.
Operator:	Nick/Mike	Datum: NAVD 88	Sampler: Standard Split Spoon
Logged By:	B. Wilder	Rig Type: Diedrich D-50	Hammer Wt./Fall: 140#/30"
Date Start/Finish:	10/25/10-10/25/10	Drilling Methods: Solid Stem Auger	Core Barrel: N/A
Boring Location:	26+01, 30.9 ft Lt.	Casing ID/OD: N/A	Water Level(*): None Observed
Hammer Efficiency Factor: 0.611		Hammer Type: Automatic ☒ Hydraulic ☐ Rope & Cathead ☐	

Definitions: (same as HB-ORO-101)

Sample Information

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows/6 in. Strength or RQD (%)	Uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0							SSA	+0.45		PAVEMENT. 0.45	
	1D	24/17	1.00 - 3.00	18/25/29/29	54	55				Brown, damp, very dense, gravelly, fine to coarse SAND, trace silt.	G#240100 A-1-a, GM WC=2.9%
								-2.80		2.80	
	2D	24/15	3.00 - 5.00	19/13/11/9	24	24		-3.00		Old Pavement. 3.00	G#240026 A-2-4, SM WC=12.0%
5	3D	24/16	5.00 - 7.00	6/5/6/7	11	11		-5.00		Grey, moist, medium dense, silty, fine to coarse SAND. 5.00	
								-7.00		Grey, moist, medium dense, silty, fine SAND, trace clay. 7.00	G#240027 A-4, CL-ML WC=14.5%
										Bottom of Exploration at 7.00 feet below ground surface.	
										NO REFUSAL	
10											
15											
20											

Remarks:
Auto Hammer #149

Stratification lines represent approximate boundaries between soil typeset 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-ORO-105

Maine Department of Transportation — Boring No.: HB-ORO-106

Soil/Rock Exploration Log — US CUSTOMARY UNITS

Project: Stillwater & Forest Avenues — Location: Orono, Maine — WIN: 17261.00

Driller:	Northern Test Boring, Inc.	Elevation (ft.):	Auger ID/OD: 5" Dia.
Operator:	Nick/Mike	Datum: NAVD 88	Sampler: Standard Split Spoon
Logged By:	B. Wilder	Rig Type: Diedrich D-50	Hammer Wt./Fall: 140#/30"
Date Start/Finish:	10/25/10-10/25/10	Drilling Methods: Solid Stem Auger	Core Barrel: N/A
Boring Location:	26+00, 40.8 ft Lt.	Casing ID/OD: N/A	Water Level(*): None Observed
Hammer Efficiency Factor: 0.611		Hammer Type: Automatic ☒ Hydraulic ☐ Rope & Cathead ☐	

Definitions: (same as HB-ORO-101)

Sample Information

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows/6 in. Strength or RQD (%)	Uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0											
	1D	24/14	1.00 - 3.00	7/6/6/8	12	12		-2.80		Brown, moist, medium dense, fine to coarse SAND, some gravel, trace silt. 2.80	G#240028 A-1-b, SW-SM WC=8.4%
	2D	24/12	3.00 - 5.00	5/2/4/3	6	6		-3.00		Old Pavement. 3.00	W240029 Not enough material
5	3D	24/20	5.00 - 7.00	3/5/8/9	13	13				Grey, wet, medium stiff, fine sandy SILT, trace clay.	
								-6.00		Grey brown, moist, medium dense, silty fine SAND. 6.00	G#240030 A-4, CL-ML WC=17.1%
								-7.00		7.00	
										Bottom of Exploration at 7.00 feet below ground surface.	
										NO REFUSAL	
10											
15											
20											

Remarks:
Auto Hammer #149

Stratification lines represent approximate boundaries between soil typeset 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-ORO-106

Maine Department of Transportation — Boring No.: HB-ORO-107

Soil/Rock Exploration Log — US CUSTOMARY UNITS

Project: Stillwater & Forest Avenues — Location: Orono, Maine — WIN: 17261.00

Driller:	Northern Test Boring, Inc.	Elevation (ft.):	Auger ID/OD: 5" Dia.
Operator:	Nick/Mike	Datum: NAVD 88	Sampler: Standard Split Spoon
Logged By:	B. Wilder	Rig Type: Diedrich D-50	Hammer Wt./Fall: 140#/30"
Date Start/Finish:	10/25/10-10/25/10	Drilling Methods: Solid Stem Auger	Core Barrel: N/A
Boring Location:	25+98, 57.7 ft Lt.	Casing ID/OD: N/A	Water Level(*): None Observed
Hammer Efficiency Factor: 0.611		Hammer Type: Automatic ☒ Hydraulic ☐ Rope & Cathead ☐	

Definitions: (same as HB-ORO-101)

Sample Information

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows/6 in. Strength or RQD (%)	Uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0							SSA	+0.30		Grass and Sod. 0.30	
	1D	24/6	1.00 - 3.00	7/10/9/11	19	19				Grey-brown, wet, medium dense, silty fine SAND, trace clay, Similar to 1D7/20.	
	2D	24/18	3.00 - 5.00	8/9/10/10	19	19				Similar to above.	G#240031 A-4, CL-ML WC=21.6%
5								-5.00		5.00	
										Bottom of Exploration at 5.00 feet below ground surface.	
										NO REFUSAL	
10											
15											
20											

Remarks:
Auto Hammer #149

Stratification lines represent approximate boundaries between soil typeset 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-ORO-107

Maine Department of Transportation — Boring No.: HB-ORO-108

Soil/Rock Exploration Log — US CUSTOMARY UNITS

Project: Stillwater & Forest Avenues — Location: Orono, Maine — WIN: 17261.00

Driller:	Northern Test Boring, Inc.	Elevation (ft.):	Auger ID/OD: 5" Dia.
Operator:	Nick/Mike	Datum: NAVD 88	Sampler: Standard Split Spoon
Logged By:	B. Wilder	Rig Type: Diedrich D-50	Hammer Wt./Fall: 140#/30"
Date Start/Finish:	10/25/10-10/25/10	Drilling Methods: Solid Stem Auger	Core Barrel: N/A
Boring Location:	27+13, 47.1 ft Lt.	Casing ID/OD: N/A	Water Level(*): None Observed
Hammer Efficiency Factor: 0.611		Hammer Type: Automatic ☒ Hydraulic ☐ Rope & Cathead ☐	

Definitions: (same as HB-ORO-101)

Sample Information

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows/6 in. Strength or RQD (%)	Uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0							SSA	-0.30		0.30	
	1D	24/13	1.00 - 3.00	1/1/1/1	2	2				Brown, wet, very loose, silty, fine to medium SAND.	G#240033 A-4, SM WC=32.6%
								-3.00		3.00	
	2D	24/17	3.00 - 5.00	1/2/5/8	7	7				Grey, wet, loose, silty, fine to medium SAND.	G#240032 A-4, ML WC=17.0%
5								-5.00		5.00	
										Bottom of Exploration at 5.00 feet below ground surface.	
										NO REFUSAL	
10											
15											
20											

Remarks:
Auto Hammer #149

Stratification lines represent approximate boundaries between soil typeset 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-ORO-108

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

PIN 17261.00

HIGHWAY PLANS

PROJ. MANAGER	J. FERGUSON	S.HAYDEN	BY
DESIGN-DETAILED	S.HAYDEN	T. WHITE	JUNE 2012
CHECKED-REVIEWED	T. WHITE		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

DATE

SIGNATURE

P.E. NUMBER

ORONO
STILLWATER & FOREST AVE.

BORING LOGS

SHEET NUMBER 11 OF 65

Username: jonathon.french Date:6/22/2012

Filename: ...\MSTA\012_BORING LOGS2.dgn Division: HIGHWAY

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

Project: Stillwater & Forest Avenues — Location: Orono, Maine — Boring No.: HB-ORO-109 — WIN: 17261.00

Driller:	Northern Test Boring, Inc.	Elevation (ft.)	Auger ID/OD: 5" Dia.
Operator:	Nick/Mike	Datum: NAVD 88	Sampler: Standard Split Spoon
Logged By:	B. Wilder	Rig Type: Diedrich D-50	Hammer Wt./Fall: 140#/30"
Date Start/Finish:	10/25/10-10/25/10	Drilling Method: Solid Stem Auger	Core Barrel: N/A
Boring Location:	28+10, 12.4 ft Lt.	Casing ID/OD: N/A	Water Level(*): None Observed
Hammer Efficiency Factor: 0.611		Hammer Type: Automatic ☒ Hydraulic ☐ Rope & Cathead ☐	

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample attempt; U = Thin Wall Tube Sample; WU = Unsuccessful Thin Wall Tube Sample attempt; V = Vane Shear Test; WV = Unsuccessful 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 = weight of rods or casing; WOP = Weight of one person; S_u = Insitu Field Vane Shear Strength (psf); S_r = Pocket Torvane Shear Strength (psf); q_u = Unconfined Compressive Strength (ksf); Nuncorrected = Raw Field SPT Nvalue; Hammer Efficiency Factor = Annual Calibration Value; N_{60} = SPT-Nuncorrected corrected for hammer efficiency; $S_{ul\,(lab)}$ = 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. Strength (psf) or RQD (%)	Nuncorrected	N60	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0							SSA	-0.40		PAVEMENT. 0.40	
	10	24/15	1.00 - 3.00	15/18/19/17	37	38				Brown, damp, dense, fine to coarse SAND, some gravel, trace silt. Similar to 103/10.	
	20	24/16	3.00 - 5.00	24/25/26/26	51	52				Similar to above, except very dense.	
5								-5.00		Bottom of Exploration at 5.00 feet below ground surface. 5.00	
										NO REFUSAL	

Remarks: Auto Hammer #149

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

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Page 1 of 1 — Boring No.: HB-ORO-109

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

Project: Stillwater & Forest Avenues — Location: Orono, Maine — Boring No.: HB-ORO-110 — WIN: 17261.00

Driller:	Northern Test Boring, Inc.	Elevation (ft.)	Auger ID/OD: 5" Dia.
Operator:	Nick/Mike	Datum: NAVD 88	Sampler: Standard Split Spoon
Logged By:	B. Wilder	Rig Type: Diedrich D-50	Hammer Wt./Fall: 140#/30"
Date Start/Finish:	10/25/10-10/25/10	Drilling Method: Solid Stem Auger	Core Barrel: N/A
Boring Location:	41+70, 10.0 ft Rt.	Casing ID/OD: N/A	Water Level(*): None Observed
Hammer Efficiency Factor: 0.611		Hammer Type: Automatic ☒ Hydraulic ☐ Rope & Cathead ☐	

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample attempt; U = Thin Wall Tube Sample; WU = Unsuccessful Thin Wall Tube Sample attempt; V = Vane Shear Test; WV = Unsuccessful 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 = weight of rods or casing; WOP = Weight of one person; S_u = Insitu Field Vane Shear Strength (psf); S_r = Pocket Torvane Shear Strength (psf); q_u = Unconfined Compressive Strength (ksf); Nuncorrected = Raw Field SPT Nvalue; Hammer Efficiency Factor = Annual Calibration Value; N_{60} = SPT-Nuncorrected corrected for hammer efficiency; $S_{ul\,(lab)}$ = 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. Strength (psf) or RQD (%)	Nuncorrected	N60	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0							SSA	-0.40		PAVEMENT. 0.40	
	10	24/10	1.00 - 3.00	13/10/6/6	16	16				Brown, damp, medium dense, fine to coarse SAND, some gravel, trace silt. Similar to 111/10.	
	20	24/18	3.00 - 5.00	3/5/6/7	11	11		-3.20		Grey, moist, stiff, SILT, some clay, trace fine sand 3.20	GM240034 A-6, CL WC=20.4%
5								-5.00		Bottom of Exploration at 5.00 feet below ground surface. 5.00	
										NO REFUSAL	

Remarks: Auto Hammer #149

Stratification lines represent approximate boundaries between soil typest 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-ORO-110

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

Project: Stillwater & Forest Avenues — Location: Orono, Maine — Boring No.: HB-ORO-111 — WIN: 17261.00

Driller:	Northern Test Boring, Inc.	Elevation (ft.)	Auger ID/OD: 5" Dia.
Operator:	Nick/Mike	Datum: NAVD 88	Sampler: Standard Split Spoon
Logged By:	B. Wilder	Rig Type: Diedrich D-50	Hammer Wt./Fall: 140#/30"
Date Start/Finish:	10/25/10-10/25/10	Drilling Method: Solid Stem Auger	Core Barrel: N/A
Boring Location:	43+74, 9.1 ft Rt.	Casing ID/OD: N/A	Water Level(*): None Observed
Hammer Efficiency Factor: 0.611		Hammer Type: Automatic ☒ Hydraulic ☐ Rope & Cathead ☐	

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample attempt; U = Thin Wall Tube Sample; WU = Unsuccessful Thin Wall Tube Sample attempt; V = Vane Shear Test; WV = Unsuccessful 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 = weight of rods or casing; WOP = Weight of one person; S_u = Insitu Field Vane Shear Strength (psf); S_r = Pocket Torvane Shear Strength (psf); q_u = Unconfined Compressive Strength (ksf); Nuncorrected = Raw Field SPT Nvalue; Hammer Efficiency Factor = Annual Calibration Value; N_{60} = SPT-Nuncorrected corrected for hammer efficiency; $S_{ul\,(lab)}$ = 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. Strength (psf) or RQD (%)	Nuncorrected	N60	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0							SSA	-0.40		PAVEMENT. 0.40	
	10	24/18	1.00 - 3.00	12/16/18/18	34	35				Brown, damp, dense, fine to coarse SAND, some gravel, trace silt.	GM240035 A-1-b, SP-SM WC=3.9%
	20	24/12	3.00 - 5.00	7/16/21/15	37	38		-3.20		Old Pavement. 3.20	GM240036 A-1-b, SM WC=7.7%
5								-3.30 -5.00		Grey, moist, dense, fine to coarse SAND, some silt, trace gravel, (fill). Bottom of Exploration at 5.00 feet below ground surface. 5.00	
										NO REFUSAL	

Remarks: Auto Hammer #149

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

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Page 1 of 1 — Boring No.: HB-ORO-111

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

Project: Stillwater & Forest Avenues — Location: Orono, Maine — Boring No.: HB-ORO-112 — WIN: 17261.00

Driller:	Northern Test Boring, Inc.	Elevation (ft.)	Auger ID/OD: 5" Dia.
Operator:	Nick/Mike	Datum: NAVD 88	Sampler: Standard Split Spoon
Logged By:	B. Wilder	Rig Type: Diedrich D-50	Hammer Wt./Fall: 140#/30"
Date Start/Finish:	10/25/10-10/25/10	Drilling Method: Solid Stem Auger	Core Barrel: N/A
Boring Location:	56+95, 9.2 ft Lt.	Casing ID/OD: N/A	Water Level(*): None Observed
Hammer Efficiency Factor: 0.611		Hammer Type: Automatic ☒ Hydraulic ☐ Rope & Cathead ☐	

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample attempt; U = Thin Wall Tube Sample; WU = Unsuccessful Thin Wall Tube Sample attempt; V = Vane Shear Test; WV = Unsuccessful 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 = weight of rods or casing; WOP = Weight of one person; S_u = Insitu Field Vane Shear Strength (psf); S_r = Pocket Torvane Shear Strength (psf); q_u = Unconfined Compressive Strength (ksf); Nuncorrected = Raw Field SPT Nvalue; Hammer Efficiency Factor = Annual Calibration Value; N_{60} = SPT-Nuncorrected corrected for hammer efficiency; $S_{ul\,(lab)}$ = 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. Strength (psf) or RQD (%)	Nuncorrected	N60	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0							SSA	-0.30		Sod. 0.30	
	10	24/18	1.00 - 3.00	1/2/5/7	7	7				Grey brown, wet, loose, silty, fine SAND, trace clay.	GM240037 A-4, CL-ML WC=66.6%
	20	24/20	3.00 - 5.00	5/7/9/6	16	16		-3.00		3.00	
5								-5.00		Grey, wet, medium dense, silty, fine to medium SAND. Similar to 113/20. Bottom of Exploration at 5.00 feet below ground surface. 5.00	
										NO REFUSAL	

Remarks: Auto Hammer #149

Stratification lines represent approximate boundaries between soil typest 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-ORO-112

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

Project: Stillwater & Forest Avenues — Location: Orono, Maine — Boring No.: HB-ORO-113 — WIN: 17261.00

Driller:	Northern Test Boring, Inc.	Elevation (ft.)	Auger ID/OD: 5" Dia.
Operator:	Nick/Mike	Datum: NAVD 88	Sampler: Standard Split Spoon
Logged By:	B. Wilder	Rig Type: Diedrich D-50	Hammer Wt./Fall: 140#/30"
Date Start/Finish:	10/25/10-10/25/10	Drilling Method: Solid Stem Auger	Core Barrel: N/A
Boring Location:	56+95, 3.8 ft Rt.	Casing ID/OD: N/A	Water Level(*): None Observed
Hammer Efficiency Factor: 0.611		Hammer Type: Automatic ☒ Hydraulic ☐ Rope & Cathead ☐	

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample attempt; U = Thin Wall Tube Sample; WU = Unsuccessful Thin Wall Tube Sample attempt; V = Vane Shear Test; WV = Unsuccessful 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 = weight of rods or casing; WOP = Weight of one person; S_u = Insitu Field Vane Shear Strength (psf); S_r = Pocket Torvane Shear Strength (psf); q_u = Unconfined Compressive Strength (ksf); Nuncorrected = Raw Field SPT Nvalue; Hammer Efficiency Factor = Annual Calibration Value; N_{60} = SPT-Nuncorrected corrected for hammer efficiency; $S_{ul\,(lab)}$ = 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. Strength (psf) or RQD (%)	Nuncorrected	N60	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0							SSA	-0.30		Sod. 0.30	
	10	24/14	1.00 - 3.00	1/1/1/3	2	2				Grey brown, wet, very soft, clayey-SILT, trace fine sand.	GM240038 A-6, CL WC=39.7%
	20	24/19	3.00 - 5.00	4/9/8/7	17	17		-3.50		Grey, moist, medium dense, silty, fine to medium SAND. 3.50	GM240039 A-6, CL WC=16.8%
5								-5.00		Bottom of Exploration at 5.00 feet below ground surface. 5.00	
										NO REFUSAL	

Remarks: Auto Hammer #149

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

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Page 1 of 1 — Boring No.: HB-ORO-113

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

Project: Stillwater & Forest Avenues — Location: Orono, Maine — Boring No.: HB-ORO-114 — WIN: 17261.00

Driller:	Northern Test Boring, Inc.	Elevation (ft.)	Auger ID/OD: 5" Dia.
Operator:	Nick/Mike	Datum: NAVD 88	Sampler: Standard Split Spoon
Logged By:	B. Wilder	Rig Type: Diedrich D-50	Hammer Wt./Fall: 140#/30"
Date Start/Finish:	10/25/10-10/25/10	Drilling Method: Solid Stem Auger	Core Barrel: N/A
Boring Location:	54+96, 3.6 ft Rt.	Casing ID/OD: N/A	Water Level(*): None Observed
Hammer Efficiency Factor: 0.611		Hammer Type: Automatic ☒ Hydraulic ☐ Rope & Cathead ☐	

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample attempt; U = Thin Wall Tube Sample; WU = Unsuccessful Thin Wall Tube Sample attempt; V = Vane Shear Test; WV = Unsuccessful 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 = weight of rods or casing; WOP = Weight of one person; S_u = Insitu Field Vane Shear Strength (psf); S_r = Pocket Torvane Shear Strength (psf); q_u = Unconfined Compressive Strength (ksf); Nuncorrected = Raw Field SPT Nvalue; Hammer Efficiency Factor = Annual Calibration Value; N_{60} = SPT-Nuncorrected corrected for hammer efficiency; $S_{ul\,(lab)}$ = 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. Strength (psf) or RQD (%)	Nuncorrected	N60	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0							SSA	-0.40		Sod. 0.40	
	10	24/16	1.00 - 3.00	1/3/2/1	5	5				Grey-brown, moist, medium stiff, SILT, some fine to medium sand.	GM240040 A-4, ML WC=16.0%
	20	24/18	3.00 - 5.00	1/1/3/4	4	4				Similar to above.	
	30	24/22	5.00 - 7.00	15/16/22/20	38	39		-5.00		Grey, moist, dense, fine to medium SAND, some silt. Similar to 113/20. 5.00	
5								-7.00		Bottom of Exploration at 7.00 feet below ground surface. 7.00	
										NO REFUSAL	

Remarks: Auto Hammer #149

Stratification lines represent approximate boundaries between soil typest 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-ORO-114

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

Project: Stillwater & Forest Avenues — Location: Orono, Maine — Boring No.: HB-ORO-115 — WIN: 17261.00

Driller:	Northern Test Boring, Inc.	Elevation (ft.)	Auger ID/OD: 5" Dia.
Operator:	Nick/Mike	Datum: NAVD 88	Sampler: Standard Split Spoon
Logged By:	B. Wilder	Rig Type: Diedrich D-50	Hammer Wt./Fall: 140#/30"
Date Start/Finish:	10/25/10-10/25/10	Drilling Method: Solid Stem Auger	Core Barrel: N/A
Boring Location:	53+98, 3.4 ft Lt.	Casing ID/OD: N/A	Water Level(*): None Observed
Hammer Efficiency Factor: 0.611		Hammer Type: Automatic ☒ Hydraulic ☐ Rope & Cathead ☐	

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample attempt; U = Thin Wall Tube Sample; WU = Unsuccessful Thin Wall Tube Sample attempt; V = Vane Shear Test; WV = Unsuccessful 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 = weight of rods or casing; WOP = Weight of one person; S_u = Insitu Field Vane Shear Strength (psf); S_r = Pocket Torvane Shear Strength (psf); q_u = Unconfined Compressive Strength (ksf); Nuncorrected = Raw Field SPT Nvalue; Hammer Efficiency Factor = Annual Calibration Value; N_{60} = SPT-Nuncorrected corrected for hammer efficiency; $S_{ul\,(lab)}$ = 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. Strength (psf) or RQD (%)	Nuncorrected	N60	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0							SSA	-0.40		Sod. 0.40	
	10	24/18	1.00 - 3.00	2/3/3/6	6	6				Brown, moist, loose, silty, fine to medium SAND.	GM240041 A-4, SM WC=16.3%
	20	24/20	3.00 - 5.00	3/5/8/8	13	13		-3.50		3.50	GM240042 A-4, SM WC=16.3%
5								-5.00		Grey-brown, moist, medium dense, fine to coarse SAND, some silt, some gravel. Bottom of Exploration at 5.00 feet below ground surface. 5.00	
										NO REFUSAL	

Remarks: Auto Hammer #149

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

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Page 1 of 1 — Boring No.: HB-ORO-115

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

Project: Stillwater & Forest Avenues — Location: Orono, Maine — Boring No.: HB-ORO-116 — WIN: 17261.00

Driller:	Northern Test Boring, Inc.	Elevation (ft.)	Auger ID/OD: 5" Dia.
Operator:	Nick/Mike	Datum: NAVD 88	Sampler: Standard Split Spoon
Logged By:	B. Wilder	Rig Type: Diedrich D-50	Hammer Wt./Fall: 140#/30"
Date Start/Finish:	10/25/10-10/25/10	Drilling Method: Solid Stem Auger	Core Barrel: N/A
Boring Location:	51+50, 6.0 ft Lt.	Casing ID/OD: N/A	Water Level(*): None Observed
Hammer Efficiency Factor: 0.611		Hammer Type: Automatic ☒ Hydraulic ☐ Rope & Cathead ☐	

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample attempt; U = Thin Wall Tube Sample; WU = Unsuccessful Thin Wall Tube Sample attempt; V = Vane Shear Test; WV = Unsuccessful 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 = weight of rods or casing; WOP = Weight of one person; S_u = Insitu Field Vane Shear Strength (psf); S_r = Pocket Torvane Shear Strength (psf); q_u = Unconfined Compressive Strength (ksf); Nuncorrected = Raw Field SPT Nvalue; Hammer Efficiency Factor = Annual Calibration Value; N_{60} = SPT-Nuncorrected corrected for hammer efficiency; $S_{ul\,(lab)}$ = 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. Strength (psf) or RQD (%)	Nuncorrected	N60	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0							SSA	-0.45		PAVEMENT. 0.45	
	10	24/14	1.00 - 3.00	9/8/4/3	12	12				Brown, damp, medium dense, fine to coarse SAND, some gravel, trace silt.	GM240043 A-1-b, SM WC=7.0%
	20	24/19	3.00 - 5.00	3/5/15/15	20	20		-3.00 -5.00		3.00 Light brown, moist, medium dense, silty, fine to medium SAND, trace gravel. Bottom of Exploration at 5.00 feet below ground surface. 5.00	GM240044 A-6, ML WC=10.65
5										NO REFUSAL	

Remarks: Auto Hammer #149

Stratification lines represent approximate boundaries between soil typest 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-ORO-116

PROJ. MANAGER	J. FERGUSON	BY	DATE
DESIGN-DETAILED	S.HAYDEN	T. WHITE	JUNE 2012
CHECKED-REVIEWED	-----	-----	SIGNATURE
DESIGN2-DETAILED2	-----	-----	-----
DESIGN3-DETAILED3	-----	-----	-----
REVISIONS 1	-----	-----	-----
REVISIONS 2	-----	-----	-----
REVISIONS 3	-----	-----	-----
REVISIONS 4	-----	-----	-----
FIELD CHANGES	-----	-----	-----

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

PIN 17261.00

HIGHWAY PLANS

P.E. NUMBER

DATE

ORONO
STILLWATER & FOREST AVE.

BORING LOGS

SHEET NUMBER 12 OF 65

Username: jonathon.french Date:6/22/2012
Division: HIGHWAY
Filename: ...\MSTA\013_BORING LOGS3.dgn

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

Project: Stillwater & Forest Avenues | Location: Orono, Maine | Boring No.: HB-ORO-117 | WIN: 17261.00

Driller:	Northern Test Boring, Inc.	Elevation (ft.)		Auger ID/OD:	5" Dia.
Operator:	Nick/Mike	Datum:	NAVD 88	Sampler:	Standard Split Spoon
Logged By:	B. Wilder	Rig Type:	Diedrich D-50	Hammer Wt./Fall:	140#/30"
Date Start/Finish:	10/25/10-10/25/10	Drilling Method:	Solid Stem Auger	Core Barrel:	N/A
Boring Location:	57+96, 1.6 ft Rt.	Casing ID/OD:	N/A	Water Level*:	None Observed
Hammer Efficiency Factor: 0.611		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 = weight of rods or casing; WOP = Weight of one person; S_{uv} = Insitu Field Vane Shear Strength (psf); T_v = Pocket Torvane Shear Strength (psf); q_p = Unconfined Compressive Strength (ksf); Nuncorrected = Raw Field SPT N-value; Hammer Efficiency Factor = Annual Calibration Value; N_{60} = SPT Nuncorrected corrected for hammer efficiency; N_{60} = Hammer Efficiency Factor/60%*Nuncorrected; $S_{u(lab)}$ = 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. Sheer Strength (psf) or RQD (%)	Nuncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0							SSA	-0.40		PAVEMENT. 0.40	
	10	24/22	1.00 - 3.00	22/24/22/20	46	47				Brown, moist, dense, fine to coarse SAND, some gravel, trace silt.	GM240045 A-1-b, SM WC=4.9%
										Similar to above.	
	20	24/18	3.00 - 5.00	26/22/25/26	47	48					
5								-5.00		Bottom of Exploration at 5.00 Feet below ground surface. 5.00	
										NO REFUSAL	
10											
15											
20											
25											

Remarks: Auto Hammer #149

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

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Page 1 of 1 — Boring No.: HB-ORO-117

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

Project: Stillwater & Forest Avenues | Location: Orono, Maine | Boring No.: HB-ORO-118 | WIN: 17261.00

Driller:	Northern Test Boring, Inc.	Elevation (ft.)		Auger ID/OD:	5" Dia.
Operator:	Nick/Mike	Datum:	NAVD 88	Sampler:	Standard Split Spoon
Logged By:	B. Wilder	Rig Type:	Diedrich D-50	Hammer Wt./Fall:	140#/30"
Date Start/Finish:	10/25/10-10/25/10	Drilling Method:	Solid Stem Auger	Core Barrel:	N/A
Boring Location:	33+00, 7.0 ft Rt.	Casing ID/OD:	N/A	Water Level*:	None Observed
Hammer Efficiency Factor: 0.611		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 = weight of rods or casing; WOP = Weight of one person; S_{uv} = Insitu Field Vane Shear Strength (psf); T_v = Pocket Torvane Shear Strength (psf); q_p = Unconfined Compressive Strength (ksf); Nuncorrected = Raw Field SPT N-value; Hammer Efficiency Factor = Annual Calibration Value; N_{60} = SPT Nuncorrected corrected for hammer efficiency; N_{60} = Hammer Efficiency Factor/60%*Nuncorrected; $S_{u(lab)}$ = 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. Sheer Strength (psf) or RQD (%)	Nuncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0							SSA	-0.45		PAVEMENT. 0.45	
	10	24/18	1.00 - 3.00	15/16/16/20	32	33				Brown, damp, dense, fine to coarse SAND, some gravel, trace silt.	GM240045 A-1-b, SM-SW WC=2.4%
										Similar to above, except very dense.	
	20	24/3	3.00 - 5.00	22/28/36/32	64	65					
5								-5.00		Bottom of Exploration at 5.00 Feet below ground surface. 5.00	
										NO REFUSAL	
10											
15											
20											
25											

Remarks: Auto Hammer #149

Stratification lines represent approximate boundaries between soil typesst 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-ORO-118

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

Project: Stillwater & Forest Avenues | Location: Orono, Maine | Boring No.: HB-ORO-119 | WIN: 17261.00

Driller:	Northern Test Boring, Inc.	Elevation (ft.)		Auger ID/OD:	5" Dia.
Operator:	Nick/Mike	Datum:	NAVD 88	Sampler:	N/A
Logged By:	B. Wilder	Rig Type:	Diedrich D-50	Hammer Wt./Fall:	N/A
Date Start/Finish:	10/25/10-10/25/10	Drilling Method:	Solid Stem Auger	Core Barrel:	N/A
Boring Location:	37+00, 4.0 ft Lt.	Casing ID/OD:	N/A	Water Level*:	None Observed
Hammer Efficiency Factor:		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 = weight of rods or casing; WOP = Weight of one person; S_{uv} = Insitu Field Vane Shear Strength (psf); T_v = Pocket Torvane Shear Strength (psf); q_p = Unconfined Compressive Strength (ksf); Nuncorrected = Raw Field SPT N-value; Hammer Efficiency Factor = Annual Calibration Value; N_{60} = SPT Nuncorrected corrected for hammer efficiency; N_{60} = Hammer Efficiency Factor/60%*Nuncorrected; $S_{u(lab)}$ = 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. Sheer Strength (psf) or RQD (%)	Nuncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0							SSA	-0.45		PAVEMENT. 0.45	
										Brown, damp, dense, fine to coarse SAND, some gravel, trace silt. Similar to 118/10	
										Similar to above.	
5								-5.00		Bottom of Exploration at 5.00 Feet below ground surface. 5.00	
										NO REFUSAL	
10											
15											
20											
25											

Remarks:

Stratification lines represent approximate boundaries between soil typesst 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-ORO-119

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

Project: Stillwater & Forest Avenues | Location: Orono, Maine | Boring No.: HB-ORO-120 | WIN: 17261.00

Driller:	Northern Test Boring, Inc.	Elevation (ft.)		Auger ID/OD:	5" Dia.
Operator:	Nick/Mike	Datum:	NAVD 88	Sampler:	N/A
Logged By:	B. Wilder	Rig Type:	Diedrich D-50	Hammer Wt./Fall:	N/A
Date Start/Finish:	10/25/10-10/25/10	Drilling Method:	Solid Stem Auger	Core Barrel:	N/A
Boring Location:	33+00, 7.0 ft Lt.	Casing ID/OD:	N/A	Water Level*:	None Observed
Hammer Efficiency Factor:		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 = weight of rods or casing; WOP = Weight of one person; S_{uv} = Insitu Field Vane Shear Strength (psf); T_v = Pocket Torvane Shear Strength (psf); q_p = Unconfined Compressive Strength (ksf); Nuncorrected = Raw Field SPT N-value; Hammer Efficiency Factor = Annual Calibration Value; N_{60} = SPT Nuncorrected corrected for hammer efficiency; N_{60} = Hammer Efficiency Factor/60%*Nuncorrected; $S_{u(lab)}$ = 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. Sheer Strength (psf) or RQD (%)	Nuncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0							SSA	-0.45		PAVEMENT. 0.45	
										Brown, damp, dense, fine to coarse SAND, some gravel, trace silt, Similar to 118/10	
										Similar to above.	
5								-5.00		Bottom of Exploration at 5.00 feet below ground surface. 5.00	
										NO REFUSAL	
10											
15											
20											
25											

Remarks:

Stratification lines represent approximate boundaries between soil typesst 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-ORO-120

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

Project: Stillwater & Forest Avenues | Location: Orono, Maine | Boring No.: HB-ORO-121 | WIN: 17261.00

Driller:	Northern Test Boring, Inc.	Elevation (ft.)		Auger ID/OD:	5" Dia.
Operator:	Nick/Mike	Datum:	NAVD 88	Sampler:	N/A
Logged By:	B. Wilder	Rig Type:	Diedrich D-50	Hammer Wt./Fall:	N/A
Date Start/Finish:	10/25/10-10/25/10	Drilling Method:	Solid Stem Auger	Core Barrel:	N/A
Boring Location:	31+00, 7.0 ft Rt.	Casing ID/OD:	N/A	Water Level*:	None Observed
Hammer Efficiency Factor:		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 = weight of rods or casing; WOP = Weight of one person; S_{uv} = Insitu Field Vane Shear Strength (psf); T_v = Pocket Torvane Shear Strength (psf); q_p = Unconfined Compressive Strength (ksf); Nuncorrected = Raw Field SPT N-value; Hammer Efficiency Factor = Annual Calibration Value; N_{60} = SPT Nuncorrected corrected for hammer efficiency; N_{60} = Hammer Efficiency Factor/60%*Nuncorrected; $S_{u(lab)}$ = 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. Sheer Strength (psf) or RQD (%)	Nuncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class
0							SSA	-0.45		PAVEMENT. 0.45	
										Brown, damp, dense, fine to coarse SAND, some gravel, trace silt. Similar to 118/10	
5											
10								-8.00		Bottom of Exploration at 8.00 feet below ground surface. 8.00	
										NO REFUSAL	
15											
20											
25											

Remarks:

Stratification lines represent approximate boundaries between soil typesst 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-ORO-121

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

PIN 17261.00 — HIGHWAY PLANS

PROJ. MANAGER	J. FERGUSON	BY	DATE
DESIGN-DETAILED	S.HAYDEN	T. WHITE	JUNE 2012
CHECKED-REVIEWED	-----	-----	SIGNATURE
DESIGN2-DETAILED2	-----	-----	-----
DESIGN3-DETAILED3	-----	-----	-----
REVISIONS 1	-----	-----	P.E. NUMBER
REVISIONS 2	-----	-----	-----
REVISIONS 3	-----	-----	-----
REVISIONS 4	-----	-----	DATE
FIELD CHANGES	-----	-----	-----

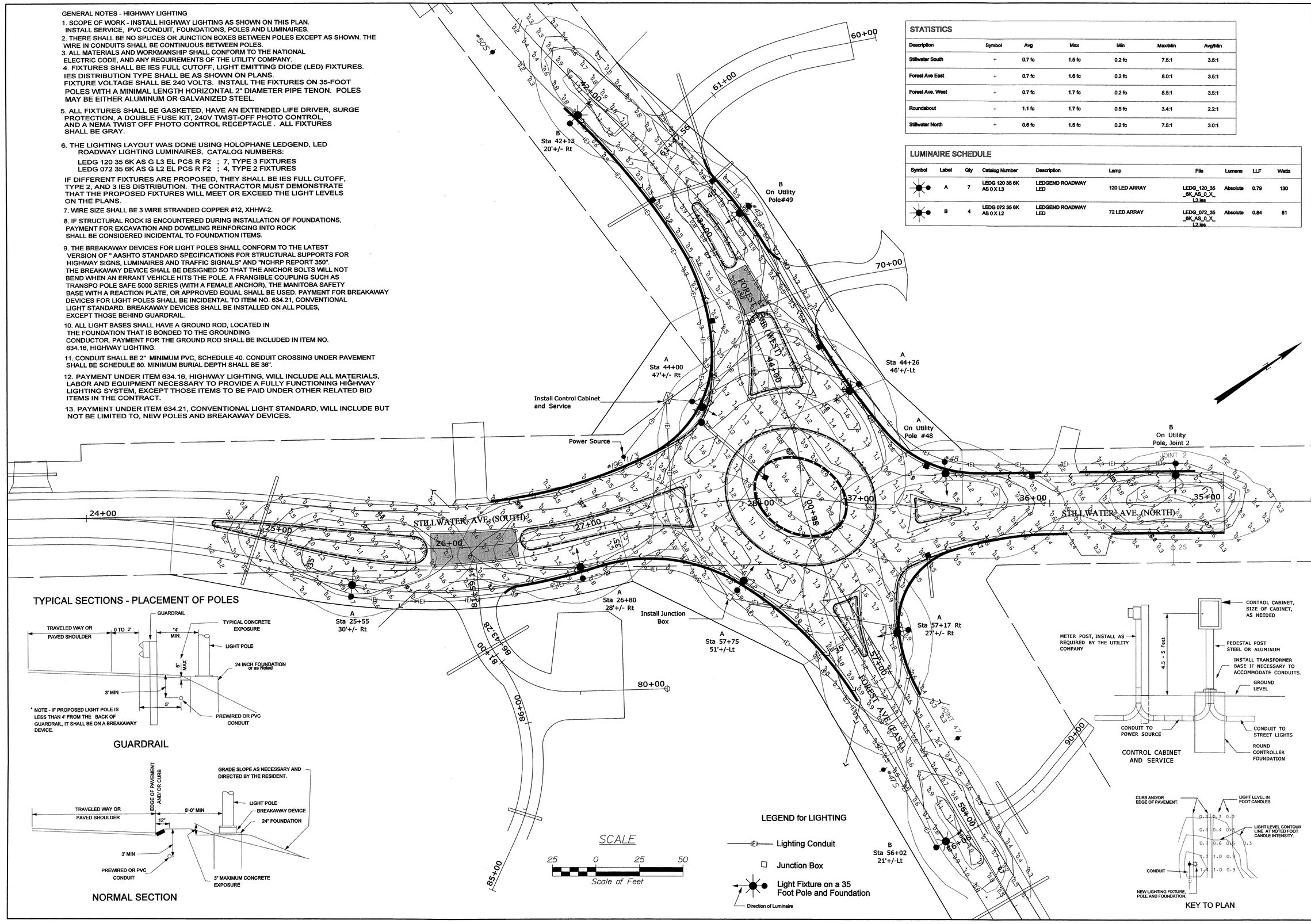
ORONO
STILLWATER & FOREST AVE.

BORING LOGS

SHEET NUMBER
13
OF 65

GENERAL NOTES - HIGHWAY LIGHTING

1. SCOPE OF WORK - INSTALL HIGHWAY LIGHTING AS SHOWN ON THIS PLAN. INSTALL SERVICE, PVC CONDUIT, FOUNDATIONS, POLES AND LUMINAIRES.
2. THERE SHALL BE NO SPLICES OR JUNCTION BOXES BETWEEN POLES EXCEPT AS SHOWN. THE WIRE IN CONDUITS SHALL BE CONTINUOUS BETWEEN POLES.
3. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRIC CODE, AND ANY REQUIREMENTS OF THE UTILITY COMPANY.
4. FIXTURES SHALL BE IES FULL CUTOFF, LIGHT EMITTING DIODE (LED) FIXTURES. IES DISTRIBUTION TYPE SHALL BE AS SHOWN ON PLANS. FIXTURE VOLTAGE SHALL BE 240 VOLTS. INSTALL THE FIXTURES ON 35-FOOT POLES WITH A MINIMAL LENGTH HORIZONTAL 2" DIAMETER PIPE TENON. POLES MAY BE EITHER ALUMINUM OR GALVANIZED STEEL.
5. ALL FIXTURES SHALL BE GASKETED, HAVE AN EXTENDED LIFE DRIVER, SURGE PROTECTION, A DOUBLE FUSE KIT, 240V TWIST-OFF PHOTO CONTROL, AND A NEMA TWIST OFF PHOTO CONTROL RECEPTACLE . ALL FIXTURES SHALL BE GRAY.
6. THE LIGHTING LAYOUT WAS DONE USING HOLOPHANE LEDGEND, LED ROADWAY LIGHTING LUMINAIRES, CATALOG NUMBERS:
   LEDG 120 35 6K AS G L3 EL PCS R F2 ; 7, TYPE 3 FIXTURES
   LEDG 072 35 6K AS G L2 EL PCS R F2 ; 4, TYPE 2 FIXTURES
   IF DIFFERENT FIXTURES ARE PROPOSED, THEY SHALL BE IES FULL CUTOFF, TYPE 2, AND 3 IES DISTRIBUTION. THE CONTRACTOR MUST DEMONSTRATE THAT THE PROPOSED FIXTURES WILL MEET OR EXCEED THE LIGHT LEVELS ON THE PLANS.
7. WIRE SIZE SHALL BE 3 WIRE STRANDED COPPER #12, XHHW-2.
8. IF STRUCTURAL ROCK IS ENCOUNTERED DURING INSTALLATION OF FOUNDATIONS, PAYMENT FOR EXCAVATION AND DOWELING REINFORCING INTO ROCK SHALL BE CONSIDERED INCIDENTAL TO FOUNDATION ITEMS.
9. THE BREAKAWAY DEVICES FOR LIGHT POLES SHALL CONFORM TO THE LATEST VERSION OF " AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS" AND "NCHRP REPORT 350". THE BREAKAWAY DEVICE SHALL BE DESIGNED SO THAT THE ANCHOR BOLTS WILL NOT BEND WHEN AN ERRANT VEHICLE HITS THE POLE. A FRANGIBLE COUPLING SUCH AS TRANSPO POLE SAFE 5000 SERIES (WITH A FEMALE ANCHOR), THE MANITOBA SAFETY BASE WITH A REACTION PLATE, OR APPROVED EQUAL SHALL BE USED. PAYMENT FOR BREAKAWAY DEVICES FOR LIGHT POLES SHALL BE INCIDENTAL TO ITEM NO. 634.21, CONVENTIONAL LIGHT STANDARD. BREAKAWAY DEVICES SHALL BE INSTALLED ON ALL POLES, EXCEPT THOSE BEHIND GUARDRAIL.
10. ALL LIGHT BASES SHALL HAVE A GROUND ROD, LOCATED IN THE FOUNDATION THAT IS BONDED TO THE GROUNDING CONDUCTOR. PAYMENT FOR THE GROUND ROD SHALL BE INCLUDED IN ITEM NO. 634.16, HIGHWAY LIGHTING.
11. CONDUIT SHALL BE 2" MINIMUM PVC, SCHEDULE 40. CONDUIT CROSSING UNDER PAVEMENT SHALL BE SCHEDULE 80. MINIMUM BURIAL DEPTH SHALL BE 36".
12. PAYMENT UNDER ITEM 634.16, HIGHWAY LIGHTING, WILL INCLUDE ALL MATERIALS, LABOR AND EQUIPMENT NECESSARY TO PROVIDE A FULLY FUNCTIONING HIGHWAY LIGHTING SYSTEM, EXCEPT THOSE ITEMS TO BE PAID UNDER OTHER RELATED BID ITEMS IN THE CONTRACT.
13. PAYMENT UNDER ITEM 634.21, CONVENTIONAL LIGHT STANDARD, WILL INCLUDE BUT NOT BE LIMITED TO, NEW POLES AND BREAKAWAY DEVICES.



STATISTICS

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Stillwater South	+	0.7 fc	1.5 fc	0.2 fc	7.5:1	3.5:1
Forest Ave East	+	0.7 fc	1.8 fc	0.2 fc	8.0:1	3.5:1
Forest Ave. West	+	0.7 fc	1.7 fc	0.2 fc	8.5:1	3.5:1
Roundabout	+	1.1 fc	1.7 fc	0.5 fc	3.4:1	2.2:1
Stillwater North	+	0.6 fc	1.5 fc	0.2 fc	7.5:1	3.0:1

LUMINAIRE SCHEDULE

Symbol	Label	Qty	Catalog Number	Description	Lamp	File	Lumens	LLF	Watts
	A	7	LEDG 120 35 6K AS 0 X L3	LEDGEND ROADWAY LED	120 LED ARRAY	LEDG_120_35_6K_AS_0_X_L3.ies	Absolute	0.79	130
	B	4	LEDG 072 35 6K AS 0 X L2	LEDGEND ROADWAY LED	72 LED ARRAY	LEDG_072_35_6K_AS_0_X_L2.ies	Absolute	0.84	81

TYPICAL SECTIONS - PLACEMENT OF POLES

GUARDRAIL

NORMAL SECTION

SCALE

25 0 25 50

Scale of Feet

LEGEND for LIGHTING

- Lighting Conduit
- Junction Box
- Light Fixture on a 35 Foot Pole and Foundation
- Direction of Luminaire

CONTROL CABINET AND SERVICE

KEY TO PLAN

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN
17261.00

HIGHWAY PLANS

STATE OF MAINE
ALBERT L. GODFREY
No. 4226
REGISTERED PROFESSIONAL ENGINEER

SIGNATURE
4226
P.E. NUMBER
6/11/12
DATE

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

ORONO ROUNDABOUT
STILLWATER & FOREST AVE

HIGHWAY LIGHTING PLAN

SHEET NUMBER
14
OF 65

Filename: ...\MSTA\Lighting\LightPlan.dgn Division: HIGHWAY Username: jeason Date:6/11/2012

NOTES:

1. ALL UNITS ARE IN INCHES.
2. GUIDE SIGNS ARE WHITE ON GREEN BACKGROUND WITH WHITE BORDER.
3. SHEETING SHALL BE ASTM TYPE III "HIGH INTENSITY" RETROREFLECTIVITY OR BETTER.
4. SIGN POSTS WITHIN SAFETY CLEAR ZONE SHALL INCLUDE THE BREAKAWAY SUPPORT SYSTEM DESIGNATED FOR THE APPLICABLE SIGN, IF INDICATED.
5. PAYMENT FOR REMOVAL OF EXISTING SIGNS NOT DESIGNATED TO BE RELOCATED SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. ALL EXISTING SIGNAGE CONFLICTING WITH THE NEW TRAFFIC PATTERN SHALL BE REMOVED.

R1-2 36"X36"	R4-7 24"X30"	R6-1R 36"X12" / R6-4a 48"X24"	W3-2 30"X30"	W2-6 36"X36" / W13-1P 24"X24"	W11-5L - MOD 36" X 36" / 24"X48"
A	B	C	D	E	F

YIELD AHEAD
STA. 42+50.0, 22.0' RT.

KEEP RIGHT
STA. 43+00.0, 5.8' LT.

YIELD
STA. 44+05.0, 7.5' RT.
STA. 43+89.5, 41.0' RT.

STA. 44+38.0, 16.5' RT.
REMOVE STOP AND
STREET SIGNS

STA. 44+61.5, 18.0' RT.
ONE WAY

GUIDE SIGN #1

STA. 24+84.0, 0.8' LT.
KEEP RIGHT

GUIDE SIGN #4

STA. 37+26.0, 6.0' RT.
ONE WAY

STA. 36+95.0, 27.5' RT.
REMOVE STOP SIGN

YIELD
STA. 36+50.0, 26.0' RT.
STA. 36+69.5, 2.0' LT.

YIELD AHEAD
STA. 35+18.0, 24.0' RT.

GUIDE SIGN #3

STA. 57+95.5, 13.5' RT.
ONE WAY

GUIDE SIGN #2

KEEP RIGHT
STA. 36+55.0, 4.0' LT.

STA. 57+22.0, 66.0' RT
REMOVE STOP SIGN
AND STREET SIGN

YIELD
STA. 57+43.5, 5.0' RT.
STA. 57+25.5, 34.0' RT.

YIELD AHEAD
STA. 25+90.0, 33.0' RT.

YIELD
STA. 27+45.5, 5.5' RT.
STA. 27+38.5, 38.0' RT.

ONE WAY
STA. 27+99.5, 8.0' RT.

KEEP RIGHT
STA. 57+22.0, 1.0' LT.

TRUCK CIRCULATION
STA. 56+40.0, 22.0' RT.

DEMOUNT RADAR SIGN
AND RELOCATE TO
STA. 56+00.0, 23.0' RT.

YIELD AHEAD
STA. 55+70.0, 22.0' RT.

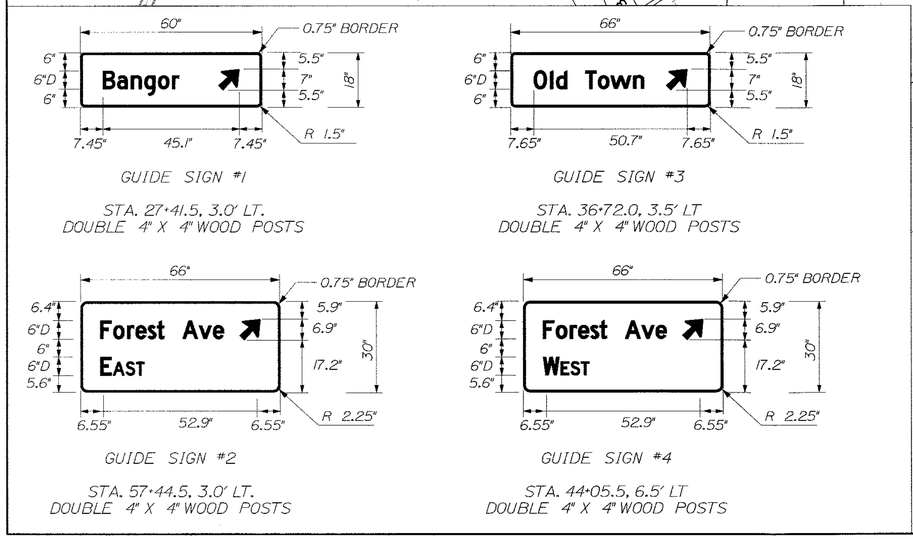
STILLWATER AVE. (SOUTH)

STILLWATER AVE. (NORTH)

FOREST AVE. (WEST)

FOREST AVE. (EAST)

42+00 · 61+00 · 61+47.56 · 70+00 · 71+00 · 44+00 · 25+00 · 26+00 · 27+00 · 28+00 · 37+00 · 34+00 · 35+00 · 36+00 · 57+00 · 90+00 · 56+00 · 66+06 · 81+59.14



GUIDE SIGN #1

STA. 27+41.5, 3.0' LT.
DOUBLE 4" X 4" WOOD POSTS

GUIDE SIGN #3

STA. 36+72.0, 3.5' LT
DOUBLE 4" X 4" WOOD POSTS

GUIDE SIGN #2

STA. 57+44.5, 3.0' LT.
DOUBLE 4" X 4" WOOD POSTS

GUIDE SIGN #4

STA. 44+05.5, 6.5' LT
DOUBLE 4" X 4" WOOD POSTS

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN
17261.00

HIGHWAY PLANS

STATE OF MAINE
JAMES L. EASON
No. 7960
REGISTERED PROFESSIONAL ENGINEER

SIGNATURE
7960
P.E. NUMBER
6/11/12
DATE

	DATE	BY
PROJ. MANAGER PAUL MACDONALD		
DESIGN-DETAILED JLE	6-12	JLE
CHECKED-REVIEWED AJO	6-12	AJO
DESIGN2-DETAILED2 JLE		
DESIGN3-DETAILED3		
REVISION 1	7-3-12	REV. SIGN F PLAQUE
REVISION 2		
REVISION 3		
REVISION 4		
FIELD CHANGES		

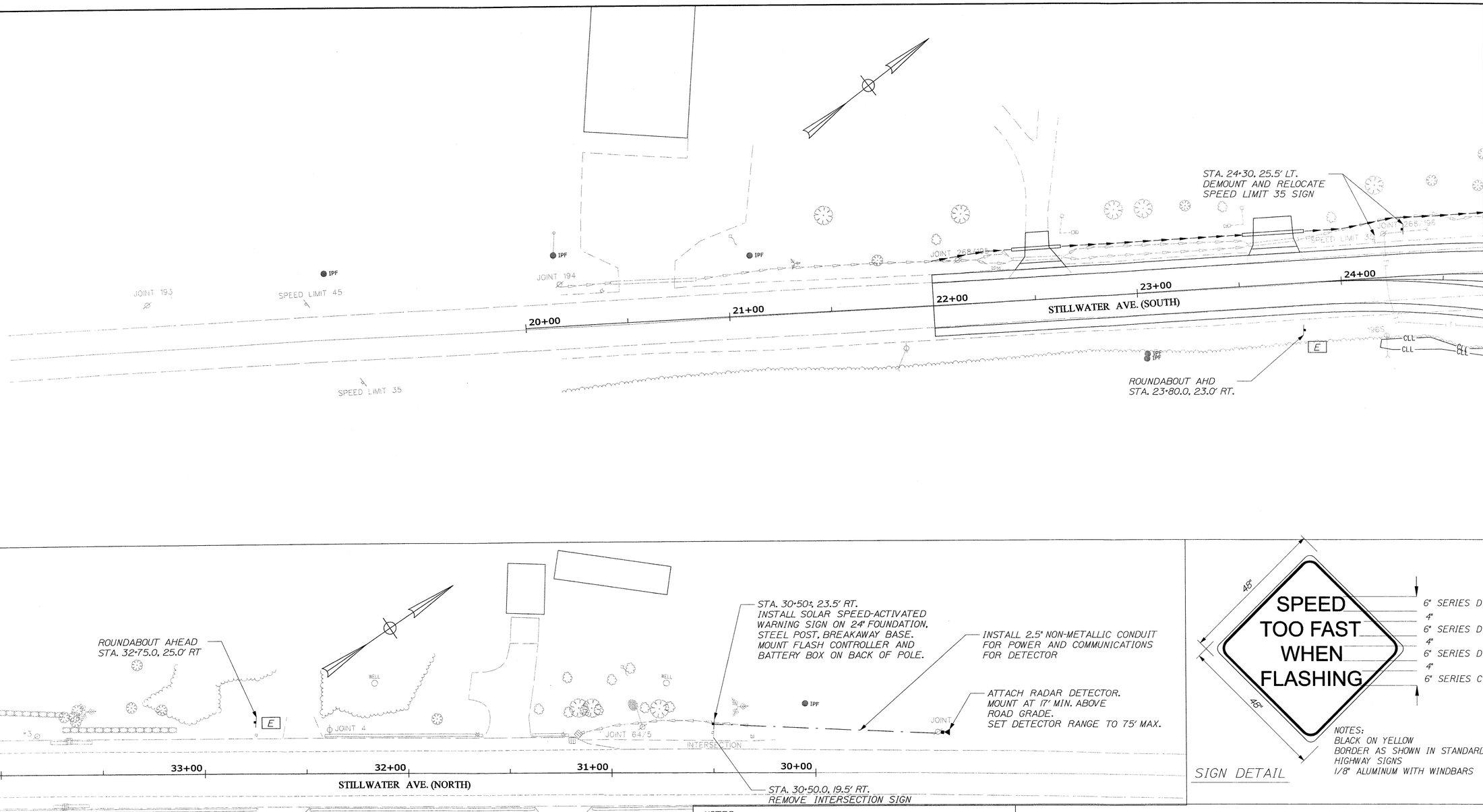
ORONO
STILLWATER AVENUE

SIGNING PLANS

SHEET NUMBER
15
OF 65

Filename: ...\MSTA\015_SignPlan_01.dgn Division: HIGHWAY Username: jeason Date:7/3/2012

Filename: ...\MST A\016_SignPlan_02.dgn Username: jeason Division: HIGHWAY Date:6/12/2012

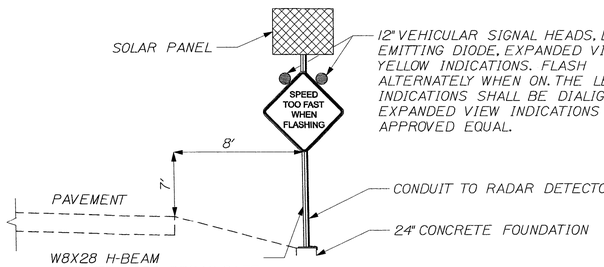


NOTES:
BLACK ON YELLOW
BORDER AS SHOWN IN STANDARD
HIGHWAY SIGNS
1/8" ALUMINUM WITH WINDBARS

SIGN DETAIL

NOTES:

1. WARNING SIGN SHALL HAVE ASTM D-4956 TYPE IX "DIAMOND GRADE" SHEETING.
2. FLASH DURATION SHALL BE 5 SECONDS AFTER ACTIVATION.
3. RADAR DETECTOR SHALL BE WAVETRONIX "SMART SENSOR ADVANCE" OR APPROVED EQUAL. SET MINIMUM DETECTION SPEED AT 35 MPH.
4. INSTALL SOLAR PANEL WITH 12" NOMINAL CLEARANCE FROM BOTTOM OF PANEL TO TOP OF WARNING SIGN.
5. SOLAR PANEL SHALL BE INSTALLED POINTED TRUE SOUTH AT 70° TILT ANGLE.
6. SOLAR PANEL SHALL BE RATED FOR 12 VDC NOMINAL OUTPUT WITH 12% MINIMUM EFFICIENCY.
7. WARNING SYSTEM SHALL HAVE TWO 100 AMP-HOUR GEL CELL BATTERIES.
8. CABINET SHALL MEET REQUIREMENTS OF SECTION 718.08.
9. PAYMENT UNDER ITEM 645.55 SHALL INCLUDE ALL WORK AND MATERIALS NECESSARY TO PROVIDE A SOLAR SPEED ACTIVATED WARNING SIGN SYSTEM, INCLUDING FLASH CONTROLLER, TWO LED SIGNAL MODULES, SUPPORT POST, RADAR DETECTOR, BATTERIES, BATTERY BOX AND CONTROL CABINET AND ALL INCIDENTALS NOT SPECIFICALLY PAID UNDER OTHER CONTRACT ITEMS.



INSTALLATION OF SPEED ACTIVATED
WARNING SIGN
(NTS)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN 17261.00

HIGHWAY PLANS

STATE OF MAINE
JAMES L. JEASON
No. 7960
REGISTERED PROFESSIONAL ENGINEER

SIGNATURE	
P.E. NUMBER	7960
DATE	6/11/12

PROJ. MANAGER PAUL MACDONALD	
DESIGN-DETAILED	JLE
CHECKED-REVIEWED	ALG
DESIGN2-DETAILED2	ALG
DESIGN3-DETAILED3	

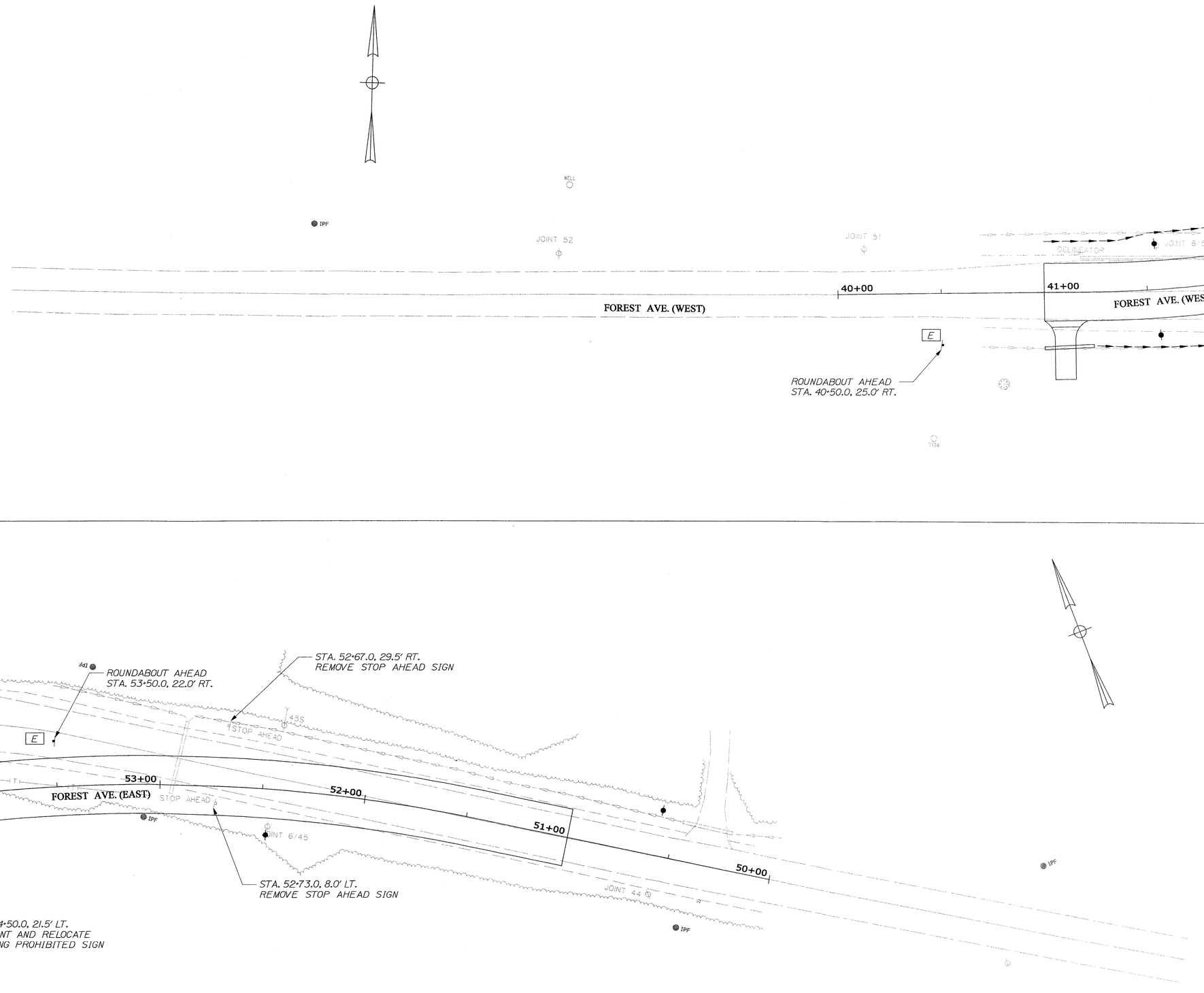
	BY	DATE
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES	JLE	6-12
	JLE	6-12
	JLE	6-12

ORONO
STILLWATER AVENUE

SIGNING PLANS

SHEET NUMBER
16
OF 65

Filename: ...\MSTA\013_SignPlan_03.dgn Division: HIGHWAY Username: jeason Date:6/11/2012



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN 17261.00

HIGHWAY PLANS

STATE OF MAINE JAMES L. JEASON No. 7960 LICENSED PROFESSIONAL ENGINEER

JAMES L. JEASON
SIGNATURE

7960
P.E. NUMBER

6/11/12
DATE

	BY	DATE
PROJ. MANAGER PAUL MACDONALD		
DESIGN-DETAILED	JLE	6-12
CHECKED-REVIEWED	ALG	6-12
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

ORONO
STILLWATER AVENUE

SIGNING PLANS

SHEET NUMBER

17

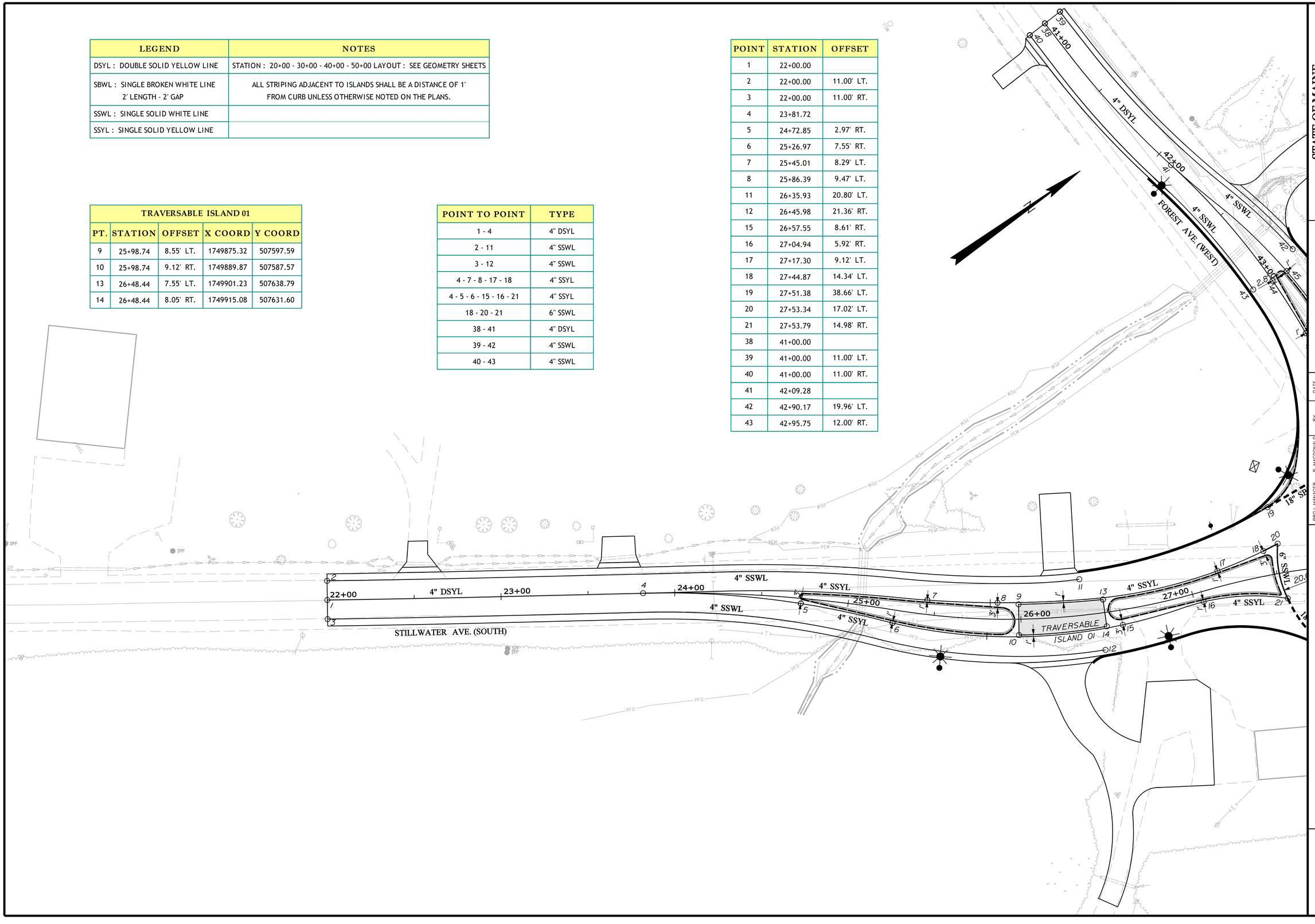
OF 65

LEGEND	NOTES
DSYL : DOUBLE SOLID YELLOW LINE	STATION : 20+00 - 30+00 - 40+00 - 50+00 LAYOUT : SEE GEOMETRY SHEETS
SBWL : SINGLE BROKEN WHITE LINE 2' LENGTH - 2' GAP	ALL STRIPING ADJACENT TO ISLANDS SHALL BE A DISTANCE OF 1' FROM CURB UNLESS OTHERWISE NOTED ON THE PLANS.
SSWL : SINGLE SOLID WHITE LINE	
SSYL : SINGLE SOLID YELLOW LINE	

TRAVERSABLE ISLAND 01				
PT.	STATION	OFFSET	X COORD	Y COORD
9	25+98.74	8.55' LT.	1749875.32	507597.59
10	25+98.74	9.12' RT.	1749889.87	507587.57
13	26+48.44	7.55' LT.	1749901.23	507638.79
14	26+48.44	8.05' RT.	1749915.08	507631.60

POINT TO POINT	TYPE
1 - 4	4" DSYL
2 - 11	4" SSWL
3 - 12	4" SSWL
4 - 7 - 8 - 17 - 18	4" SSYL
4 - 5 - 6 - 15 - 16 - 21	4" SSYL
18 - 20 - 21	6" SSWL
38 - 41	4" DSYL
39 - 42	4" SSWL
40 - 43	4" SSWL

POINT	STATION	OFFSET
1	22+00.00	
2	22+00.00	11.00' LT.
3	22+00.00	11.00' RT.
4	23+81.72	
5	24+72.85	2.97' RT.
6	25+26.97	7.55' RT.
7	25+45.01	8.29' LT.
8	25+86.39	9.47' LT.
11	26+35.93	20.80' LT.
12	26+45.98	21.36' RT.
15	26+57.55	8.61' RT.
16	27+04.94	5.92' RT.
17	27+17.30	9.12' LT.
18	27+44.87	14.34' LT.
19	27+51.38	38.66' LT.
20	27+53.34	17.02' LT.
21	27+53.79	14.98' RT.
38	41+00.00	
39	41+00.00	11.00' LT.
40	41+00.00	11.00' RT.
41	42+09.28	
42	42+90.17	19.96' LT.
43	42+95.75	12.00' RT.



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN 17261.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	P. MACDONALD	
DESIGN-DETAILED	J. FRENCH	JULY 2012
CHECKED-REVIEWED	BT TRAN	
DESIGN2-DETAILED2	-----	-----
DESIGN3-DETAILED3	-----	-----
REVISIONS 1	-----	-----
REVISIONS 2	-----	-----
REVISIONS 3	-----	-----
REVISIONS 4	-----	-----
FIELD CHANGES	-----	-----

SIGNATURE

P.E. NUMBER

DATE

ORONO
STILLWATER\FOREST AVE.

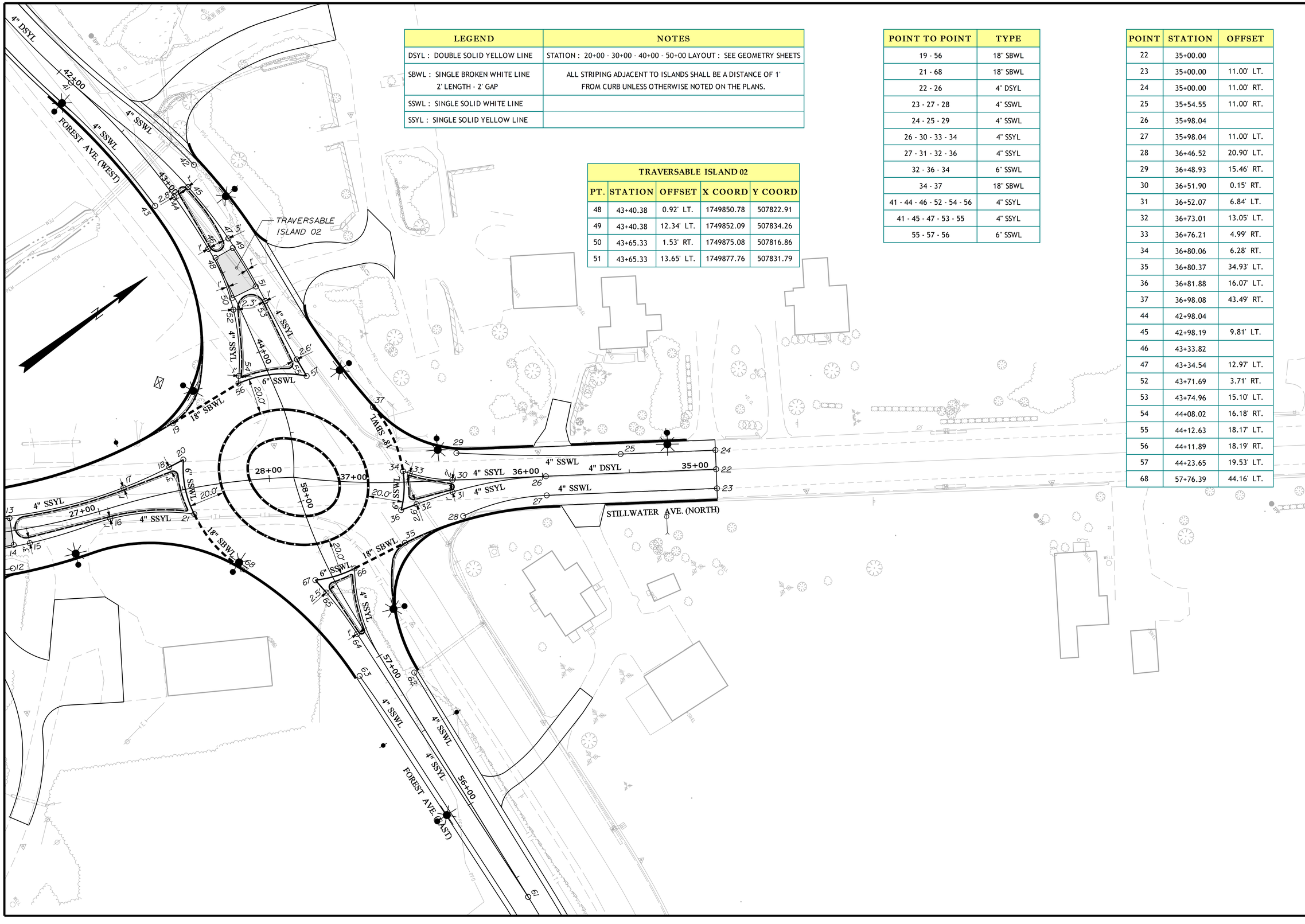
STRIPING PLANS

SHEET NUMBER

18

OF 65

Filename: ...\mst0\018_Striping_Plan 01.dgn Division: HIGHWAY Username: jonathon.french Date:7/12/2012



LEGEND	NOTES
DSYL : DOUBLE SOLID YELLOW LINE	STATION : 20+00 - 30+00 - 40+00 - 50+00 LAYOUT : SEE GEOMETRY SHEETS
SBWL : SINGLE BROKEN WHITE LINE 2' LENGTH - 2' GAP	ALL STRIPING ADJACENT TO ISLANDS SHALL BE A DISTANCE OF 1' FROM CURB UNLESS OTHERWISE NOTED ON THE PLANS.
SSWL : SINGLE SOLID WHITE LINE	
SSYL : SINGLE SOLID YELLOW LINE	

TRAVERSABLE ISLAND 02				
PT.	STATION	OFFSET	X COORD	Y COORD
48	43+40.38	0.92' LT.	1749850.78	507822.91
49	43+40.38	12.34' LT.	1749852.09	507834.26
50	43+65.33	1.53' RT.	1749875.08	507816.86
51	43+65.33	13.65' LT.	1749877.76	507831.79

POINT TO POINT	TYPE
19 - 56	18" SBWL
21 - 68	18" SBWL
22 - 26	4" DSYL
23 - 27 - 28	4" SSWL
24 - 25 - 29	4" SSWL
26 - 30 - 33 - 34	4" SSYL
27 - 31 - 32 - 36	4" SSYL
32 - 36 - 34	6" SSWL
34 - 37	18" SBWL
41 - 44 - 46 - 52 - 54 - 56	4" SSYL
41 - 45 - 47 - 53 - 55	4" SSYL
55 - 57 - 56	6" SSWL

POINT	STATION	OFFSET
22	35+00.00	
23	35+00.00	11.00' LT.
24	35+00.00	11.00' RT.
25	35+54.55	11.00' RT.
26	35+98.04	
27	35+98.04	11.00' LT.
28	36+46.52	20.90' LT.
29	36+48.93	15.46' RT.
30	36+51.90	0.15' RT.
31	36+52.07	6.84' LT.
32	36+73.01	13.05' LT.
33	36+76.21	4.99' RT.
34	36+80.06	6.28' RT.
35	36+80.37	34.93' LT.
36	36+81.88	16.07' LT.
37	36+98.08	43.49' RT.
44	42+98.04	
45	42+98.19	9.81' LT.
46	43+33.82	
47	43+34.54	12.97' LT.
52	43+71.69	3.71' RT.
53	43+74.96	15.10' LT.
54	44+08.02	16.18' RT.
55	44+12.63	18.17' LT.
56	44+11.89	18.19' RT.
57	44+23.65	19.53' LT.
68	57+76.39	44.16' LT.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN
17261.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	P. MACDONALD	
DESIGN-DETAILED	J. FRENCH	JULY 2012
CHECKED-REVIEWED	BT TRAN	
DESIGN2-DETAILED2	-----	-----
DESIGN3-DETAILED3	-----	-----
REVISIONS 1	-----	-----
REVISIONS 2	-----	-----
REVISIONS 3	-----	-----
REVISIONS 4	-----	-----
FIELD CHANGES	-----	-----

SIGNATURE

P.E. NUMBER

DATE

ORONO
STILLWATER\FOREST AVE.

STRIPING PLANS

SHEET NUMBER

19

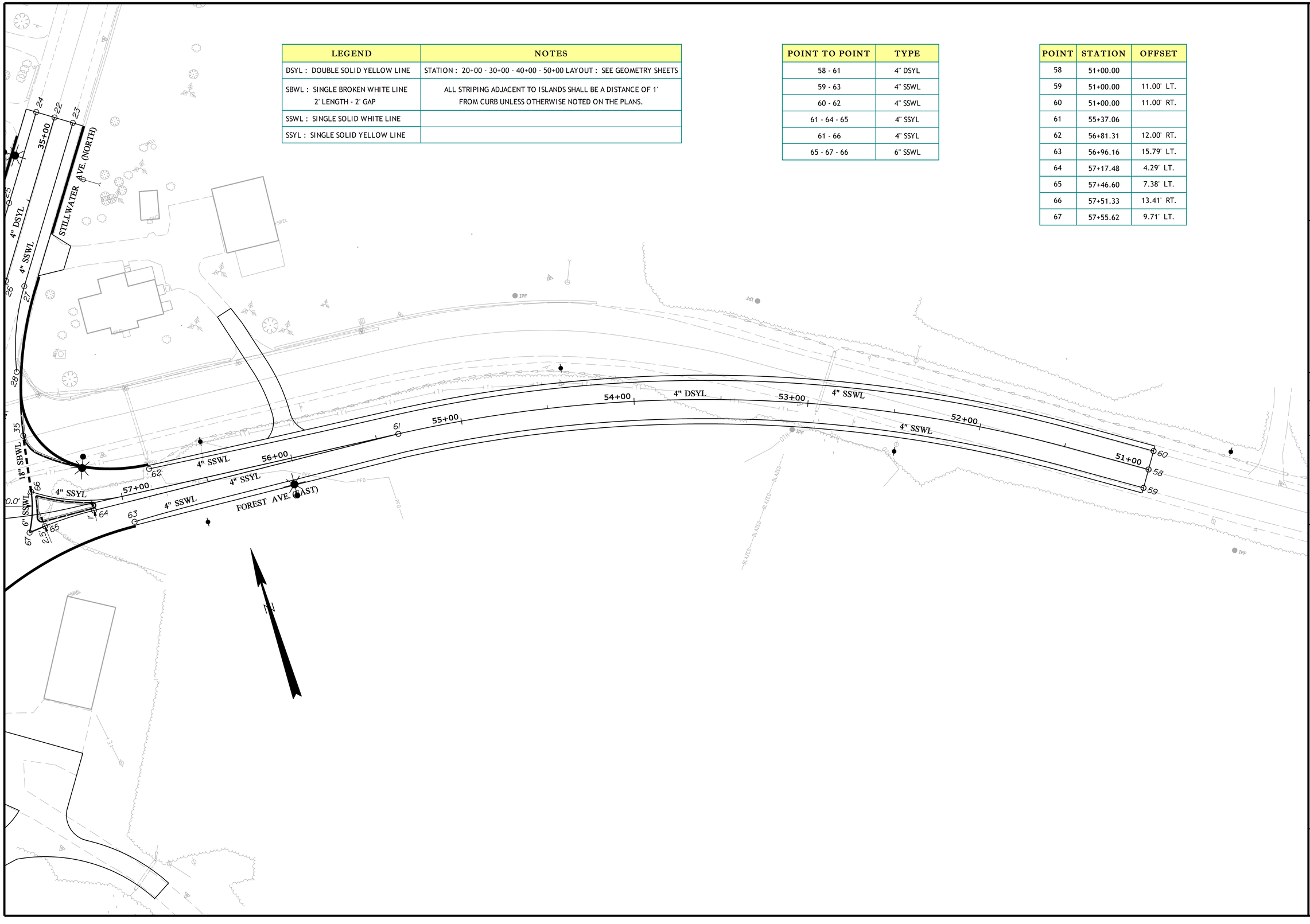
OF 65

Filename: ...\mst0\019_Striping_Plan 02.dgn Username: jonathon.french Date:7/12/2012 Division: HIGHWAY

LEGEND	NOTES
DSYL : DOUBLE SOLID YELLOW LINE	STATION : 20+00 - 30+00 - 40+00 - 50+00 LAYOUT : SEE GEOMETRY SHEETS
SBWL : SINGLE BROKEN WHITE LINE 2' LENGTH - 2' GAP	ALL STRIPING ADJACENT TO ISLANDS SHALL BE A DISTANCE OF 1' FROM CURB UNLESS OTHERWISE NOTED ON THE PLANS.
SSWL : SINGLE SOLID WHITE LINE	
SSYL : SINGLE SOLID YELLOW LINE	

POINT TO POINT	TYPE
58 - 61	4" DSYL
59 - 63	4" SSWL
60 - 62	4" SSWL
61 - 64 - 65	4" SSYL
61 - 66	4" SSYL
65 - 67 - 66	6" SSWL

POINT	STATION	OFFSET
58	51+00.00	
59	51+00.00	11.00' LT.
60	51+00.00	11.00' RT.
61	55+37.06	
62	56+81.31	12.00' RT.
63	56+96.16	15.79' LT.
64	57+17.48	4.29' LT.
65	57+46.60	7.38' LT.
66	57+51.33	13.41' RT.
67	57+55.62	9.71' LT.



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN 17261.00

HIGHWAY PLANS

PROJ. MANAGER	P. MACDONALD	BY	DATE
DESIGN-DETAILED	J. FRENCH	BT TRAN	JULY 2012
CHECKED-REVIEWED	-----	-----	-----
DESIGN2-DETAILED2	-----	-----	-----
DESIGN3-DETAILED3	-----	-----	-----
REVISIONS 1	-----	-----	-----
REVISIONS 2	-----	-----	-----
REVISIONS 3	-----	-----	-----
REVISIONS 4	-----	-----	-----
FIELD CHANGES	-----	-----	-----

SIGNATURE

P.E. NUMBER

DATE

ORONO
STILLWATER\FOREST AVE.

STRIPING PLANS

SHEET NUMBER

20

OF 65

Filename: ...\mst0\020_Striping_Plan 03.dgn Division: HIGHWAY Username: jonathon.french Date:7/12/2012

LEGEND	
STATION	ALIGNMENT
10+00.00	MG01
100+00.00	MG02
200+00.00	MG03
300+00.00	MG04
400+00.00	MG05
500+00.00	MG06
600+00.00	MG07
700+00.00	MG08
800+00.00	MG09
900+00.00	MG10
1000+00.00	MG11
2000+00.00	MG12
3000+00.00	MG13
4000+00.00	MG14
5000+00.00	MG15
6000+00.00	MG16
7000+00.00	MG17
SEE GEOMETRY SHEET FOR	
CONTROL POINTS	
STATIONS 20+00.00, 30+00.00	
40+00.00 AND 50+00.00	

ALIGNMENT DATA FOR MG02				
		STATION	X COORD	Y COORD
CURVE				
PC		100+00.00	1749945.27	507665.88
PI		100+46.55	1749958.83	507710.41
CC			1750040.94	507636.76
PT		100+87.13	1750001.62	507728.71
R	100.00'			
Δ	49°-55'-10" RT.			
D	60°-00'-00"			
L	87.13'			
T	46.55'			
E	10.30'			

ALIGNMENT DATA FOR MG03				
		STATION	X COORD	Y COORD
CURVE				
PC		200+00.00	1749744.78	507425.28
PI		200+69.83	1749783.81	507483.18
CC			1750159.37	507145.80
PRC		201+38.76	1749837.22	507528.18
R	500.00'			
Δ	15°-54'-05" RT.			
D	11°-27'-33"			
L	138.76'			
T	69.83'			
E	4.85'			
CURVE				
PRC		201+38.76	1749837.22	507528.18
PI		202+29.39	1749906.52	507586.57
CC			1749643.92	507757.60
PRC		203+14.79	1749931.91	507673.56
R	300.00'			
Δ	33°-37'-04" LT.			
D	19°-05'-55"			
L	176.02'			
T	90.63'			
E	13.39'			
CURVE				
PRC		203+14.79	1749931.91	507673.56
PI		203+69.20	1749947.15	507725.80
CC			1750051.91	507638.55
PT		204+17.43	1749995.77	507750.23
R	125.00'			
Δ	47°-02'-47" RT.			
D	45°-50'-12"			
L	102.64'			
T	54.41'			
E	11.33'			

ALIGNMENT DATA FOR MG04				
		STATION	X COORD	Y COORD
TANGENT				
POB		300+00.00	1749744.78	507425.28
PC		300+46.56	1749770.80	507463.88
BEARING	N 33°-59'-04" E			
L	46.56'			
CURVE				
PC		300+46.56	1749770.80	507463.88
PI		300+96.69	1749798.83	507505.46
CC			1750434.15	507016.71
PRC		301+46.70	1749831.82	507543.21
R	800.00'			
Δ	7°-10'-20" RT.			
D	7°-09'-43"			
L	100.14'			
T	50.14'			
E	1.57'			
CURVE				
PRC		301+46.70	1749831.82	507543.21
PI		302+03.44	1749869.17	507585.92
CC			1749380.08	507938.08
PCC		302+59.84	1749897.84	507634.89
R	600.00'			
Δ	10°-48'-16" LT.			
D	9°-32'-57"			
L	113.14'			
T	56.74'			
E	2.68'			
CURVE				
PCC		302+59.84	1749897.84	507634.89
PI		303+36.72	1749936.69	507701.23
CC			1749660.53	507773.85
PT		304+09.78	1749935.50	507778.10
R	275.00'			
Δ	31°-14'-18" LT.			
D	20°-50'-05"			
L	149.93'			
T	76.88'			
E	10.54'			

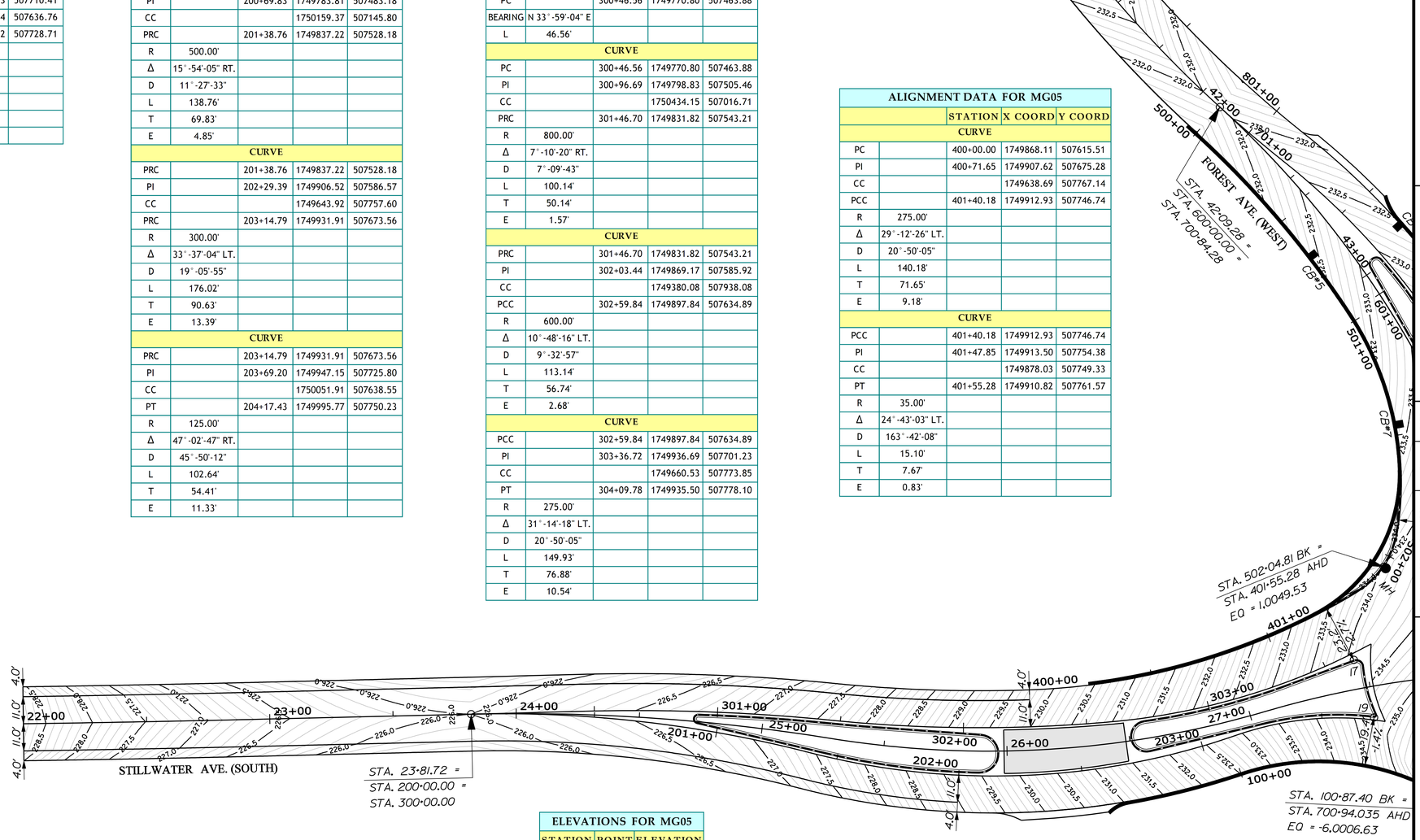
ALIGNMENT DATA FOR MG05				
		STATION	X COORD	Y COORD
CURVE				
PC		400+00.00	1749868.11	507615.51
PI		400+71.65	1749907.62	507675.28
CC			1749638.69	507767.14
PCC		401+40.18	1749912.93	507746.74
R	275.00'			
Δ	29°-12'-26" LT.			
D	20°-50'-05"			
L	140.18'			
T	71.65'			
E	9.18'			
CURVE				
PCC		401+40.18	1749912.93	507746.74
PI		401+47.85	1749913.50	507754.38
CC			1749878.03	507749.33
PT		401+55.28	1749910.82	507761.57
R	35.00'			
Δ	24°-43'-03" LT.			
D	163°-42'-08"			
L	15.10'			
T	7.67'			
E	0.83'			

ELEVATIONS FOR MG03					
STATION	POINT	ELEVATION	STATION	POINT	ELEVATION
200+00.00		226.00	201+90.00		228.87
200+10.00		226.08	202+00.00		229.20
200+20.00		226.15	202+10.00		229.52
200+30.00		226.23	202+20.00		229.85
200+40.00		226.30	202+30.00		230.17
200+50.00		226.38	202+40.00		230.50
200+60.00		226.45	202+50.00		230.82
200+70.00		226.53	202+60.00		231.15
200+80.00		226.60	202+70.00		231.47
200+90.00		226.68	202+80.00		231.80
201+00.00		226.79	202+90.00		232.12
201+10.00		226.92	203+00.00		232.45
201+20.00		227.08	203+10.00		232.77
201+30.00		227.26	203+14.79		232.93
201+38.76		227.44	203+20.00		233.10
201+40.00		227.47	203+30.00		233.42
201+50.00		227.70	203+40.00		233.75
201+60.00		227.96	203+50.00		234.07
201+70.00		228.24	203+60.00		234.40
201+80.00		228.55	203+70.00		234.72

ELEVATIONS FOR MG04					
STATION	POINT	ELEVATION	STATION	POINT	ELEVATION
300+00.00		226.00	301+90.00		228.88
300+10.00		226.07	302+00.00		229.18
300+20.00		226.15	302+10.00		229.48
300+30.00		226.22	302+20.00		229.78
300+40.00		226.30	302+30.00		230.08
300+46.56		226.35	302+40.00		230.38
300+50.00		226.37	302+50.00		230.68
300+60.00		226.45	302+59.84		230.98
300+70.00		226.52	302+60.00		230.98
300+80.00		226.60	302+70.00		231.29
300+90.00		226.68	302+80.00		231.59
301+00.00		226.79	302+90.00		231.89
301+10.00		226.93	303+00.00		232.19
301+20.00		227.09	303+10.00		232.49
301+30.00		227.27	303+20.00		232.79
301+40.00		227.48	303+30.00		233.09
301+46.70		227.64	303+40.00		233.39
301+50.00		227.72	303+50.00		233.69
301+60.00		227.99	303+60.00		233.99
301+70.00		228.28	303+70.00		234.26
301+80.00		228.58			

ELEVATIONS FOR MG02		
STATION	POINT	ELEVATION
100+00.00	13	232.52
100+10.00		232.91
100+20.00		233.29
100+30.00		233.68
100+40.00		234.06
100+50.00		234.45
100+60.00		234.83
100+70.00		235.22
100+80.00		235.61
100+87.13		235.88

ELEVATIONS FOR MG05		
STATION	POINT	ELEVATION
400+00.00		229.70
400+10.00		230.00
400+20.00		230.30
400+30.00		230.60
400+40.00		230.90
400+50.00		231.20
400+60.00		231.50
400+70.00		231.80
400+80.00		232.10
400+90.00		232.40
401+00.00		232.70
401+10.00		233.00
401+20.00		233.30
401+30.00		233.58
401+40.00		233.80
401+40.18	21	233.80
401+50.00		233.96
401+55.28		234.04



STATE OF MAINE DEPARTMENT OF TRANSPORTATION	STP-1726(100)X	WIN 17261.00	HIGHWAY PLANS

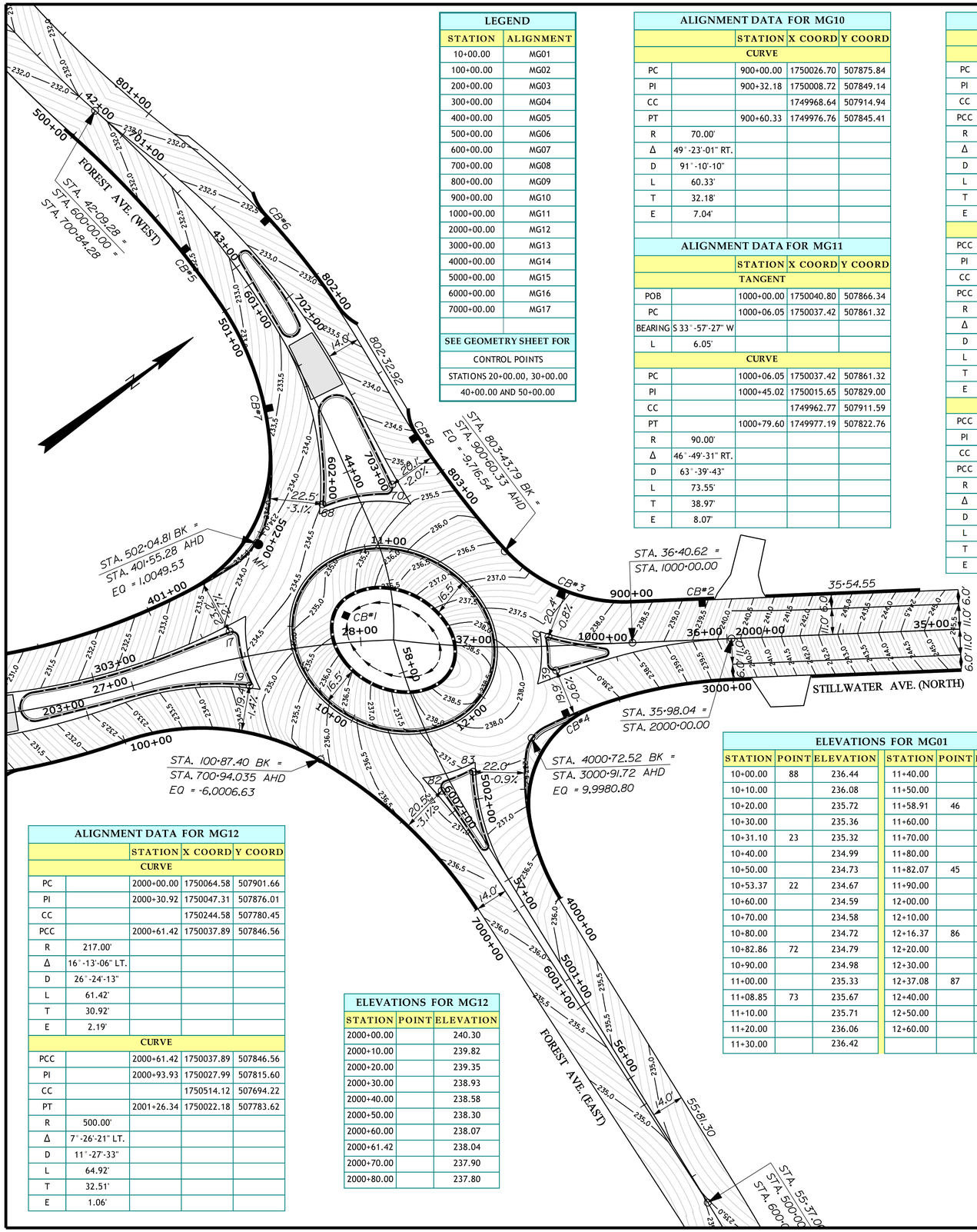
PROJ. MANAGER	P. MACDONALD	BY	DATE	SIGNATURE	P.E. NUMBER	DATE
DESIGN-DETAILED	J. FRENCH	BT TRAN	JULY 2012			
CHECKED-REVIEWED	-----	-----	-----	-----	-----	-----
DESIGN2-DETAILED2	-----	-----	-----	-----	-----	-----
DESIGN3-DETAILED3	-----	-----	-----	-----	-----	-----
REVISIONS 1	-----	-----	-----	-----	-----	-----
REVISIONS 2	-----	-----	-----	-----	-----	-----
REVISIONS 3	-----	-----	-----	-----	-----	-----
REVISIONS 4	-----	-----	-----	-----	-----	-----
FIELD CHANGES	-----	-----	-----	-----	-----	-----

ORONO
STILLWATER\FOREST AVE.

GRADING PLANS

SHEET NUMBER
21
OF 65

Filename: ...\mst0\021_Grading_Plan 01.dgn Division: HIGHWAY Username: jonathon.french Date:7/12/2012



LEGEND	
STATION	ALIGNMENT
10+00.00	MG01
100+00.00	MG02
200+00.00	MG03
300+00.00	MG04
400+00.00	MG05
500+00.00	MG06
600+00.00	MG07
700+00.00	MG08
800+00.00	MG09
900+00.00	MG10
1000+00.00	MG11
2000+00.00	MG12
3000+00.00	MG13
4000+00.00	MG14
5000+00.00	MG15
6000+00.00	MG16
7000+00.00	MG17
SEE GEOMETRY SHEET FOR	
CONTROL POINTS	
STATIONS 20+00.00, 30+00.00	
40+00.00 AND 50+00.00	

ALIGNMENT DATA FOR MG10

		STATION	X COORD	Y COORD
CURVE				
PC		900+00.00	1750026.70	507875.84
PI		900+32.18	1750008.72	507849.14
CC			1749968.64	507914.94
PT		900+60.33	1749976.76	507845.41
R	70.00'			
Δ	49°-23'-01" RT.			
D	91°-10'-10"			
L	60.33'			
T	32.18'			
E	7.04'			

ALIGNMENT DATA FOR MG11

		STATION	X COORD	Y COORD
TANGENT				
POB		1000+00.00	1750040.80	507866.34
PC		1000+06.05	1750037.42	507861.32
BEARING	S 33°-57'-27" W			
L	6.05'			
CURVE				
PC		1000+06.05	1750037.42	507861.32
PI		1000+45.02	1750015.65	507829.00
CC			1749962.77	507911.59
PT		1000+79.60	1749977.19	507822.76
R	90.00'			
Δ	46°-49'-31" RT.			
D	63°-39'-43"			
L	73.55'			
T	38.97'			
E	8.07'			

ALIGNMENT DATA FOR MG01

		STATION	X COORD	Y COORD
CURVE				
PC		10+00.00	1749996.05	507750.38
PI		10+16.07	1749981.74	507743.07
CC			1749973.31	507794.91
PCC		10+31.10	1749965.85	507745.47
R	50.00'			
Δ	35°-38'-11" RT.			
D	114°-35'-30"			
L	31.10'			
T	16.07'			
E	2.52'			
CURVE				
PCC		10+31.10	1749965.85	507745.47
PI		10+42.57	1749954.51	507747.18
CC			1749971.52	507783.04
PCC		10+53.37	1749946.01	507754.88
R	38.00'			
Δ	33°-35'-14" RT.			
D	150°-46'-42"			
L	22.28'			
T	11.47'			
E	1.69'			
CURVE				
PCC		10+53.37	1749946.01	507754.88
PI		10+69.26	1749934.24	507765.55
CC			1749967.49	507778.60
PCC		10+82.86	1749935.61	507781.37
R	32.00'			
Δ	52°-48'-00" RT.			
D	179°-02'-58"			
L	29.49'			
T	15.88'			
E	3.73'			

		STATION	X COORD	Y COORD
CURVE				
PCC		10+82.86	1749935.61	507781.37
PI		10+96.27	1749936.78	507794.73
CC			1749978.45	507777.64
PCC		11+08.85	1749945.32	507805.06
R	43.00'			
Δ	34°-37'-56" RT.			
D	133°-14'-46"			
L	25.99'			
T	13.41'			
E	2.04'			
CURVE				
PCC		11+08.85	1749945.32	507805.06
PI		11+36.01	1749962.64	507825.98
CC			1749985.39	507771.90
PCC		11+58.91	1749989.70	507823.72
R	52.00'			
Δ	55°-09'-03" RT.			
D	110°-11'-03"			
L	50.05'			
T	27.16'			
E	6.66'			
CURVE				
PCC		11+58.91	1749989.70	507823.72
PI		11+70.86	1750001.61	507822.73
CC			1749986.55	507785.86
PCC		11+82.07	1750010.81	507815.10
R	38.00'			
Δ	34°-55'-24" RT.			
D	150°-46'-42"			
L	23.16'			
T	11.95'			
E	1.84'			

		STATION	X COORD	Y COORD
CURVE				
PCC		11+82.07	1750010.81	507815.10
PI		12+00.95	1750025.34	507803.04
CC			1749989.74	507789.70
PCC		12+16.37	1750022.31	507784.40
R	33.00'			
Δ	59°-33'-30" RT.			
D	173°-37'-25"			
L	34.30'			
T	18.88'			
E	5.02'			
CURVE				
PCC		12+16.37	1750022.31	507784.40
PI		12+26.93	1750020.62	507773.98
CC			1749979.87	507791.31
PCC		12+37.08	1750014.29	507765.53
R	43.00'			
Δ	27°-35'-33" RT.			
D	133°-14'-46"			
L	20.71'			
T	10.56'			
E	1.28'			
CURVE				
PCC		12+37.08	1750014.29	507765.53
PI		12+49.13	1750007.07	507755.89
CC			1749973.47	507796.11
PT		12+60.74	1749996.30	507750.50
R	51.00'			
Δ	26°-34'-30" RT.			
D	122°-20'-41"			
L	23.65'			
T	12.04'			
E	1.40'			

ALIGNMENT DATA FOR MG12

		STATION	X COORD	Y COORD
CURVE				
PC		2000+00.00	1750064.58	507901.66
PI		2000+30.92	1750047.31	507876.01
CC			1750244.58	507780.45
PCC		2000+61.42	1750037.89	507846.56
R	217.00'			
Δ	16°-13'-06" LT.			
D	26°-24'-13"			
L	61.42'			
T	30.92'			
E	2.19'			
CURVE				
PCC		2000+61.42	1750037.89	507846.56
PI		2000+93.93	1750027.99	507815.60
CC			1750514.12	507694.22
PT		2001+26.34	1750022.18	507783.62
R	500.00'			
Δ	7°-26'-21" LT.			
D	11°-27'-33"			
L	64.92'			
T	32.51'			
E	1.06'			

ELEVATIONS FOR MG01

STATION	POINT	ELEVATION	STATION	POINT	ELEVATION
10+00.00	88	236.44	11+40.00		236.77
10+10.00		236.08	11+50.00		237.13
10+20.00		235.72	11+58.91	46	237.45
10+30.00		235.36	11+60.00		237.49
10+31.10	23	235.32	11+70.00		237.87
10+40.00		234.99	11+80.00		238.14
10+50.00		234.73	11+82.07	45	238.18
10+53.37	22	234.67	11+90.00		238.28
10+60.00		234.59	12+00.00		238.29
10+70.00		234.58	12+10.00		238.17
10+80.00		234.72	12+16.37	86	238.01
10+82.86	72	234.79	12+20.00		237.91
10+90.00		234.98	12+30.00		237.56
11+00.00		235.33	12+37.08	87	237.29
11+08.85	73	235.67	12+40.00		237.18
11+10.00		235.71	12+50.00		236.83
11+20.00		236.06	12+60.00		236.47
11+30.00		236.42			

ELEVATIONS FOR MG09

STATION	POINT	ELEVATION	STATION	POINT	ELEVATION
800+90.00		231.59	802+30.00		233.37
801+00.00		231.71	802+32.86		233.43
801+10.00		231.83	802+40.00		233.56
801+14.98		231.89	802+50.00		233.77
801+20.00		231.95	802+60.00		234.01
801+30.00		232.08	802+65.53		234.15
801+40.00		232.20	802+70.00		234.26
801+50.00		232.32	802+80.00		234.54
801+60.00		232.44	802+90.00		234.84
801+70.00		232.56	803+00.00		235.16
801+80.00		232.69	803+10.00		235.49
801+90.00		232.81	803+20.00		235.83
802+00.00		232.93	803+30.00		236.17
802+10.00		233.06	803+40.00		236.51
802+20.00		233.20	803+43.79	44	236.64

ELEVATIONS FOR MG10

STATION	POINT	ELEVATION
900+00.00	34	238.19
900+10.00		237.93
900+20.00		237.68
900+30.00		237.42
900+40.00		237.16
900+50.00		236.91
900+60.00		236.65
900+60.33	44	236.64

ELEVATIONS FOR MG11

STATION	POINT	ELEVATION
1000+00.00		238.53
1000+06.05		238.38
1000+10.00		238.28
1000+20.00		238.02
1000+30.00		237.77

ELEVATIONS FOR MG12

STATION	POINT	ELEVATION
2000+00.00		240.30
2000+10.00		239.82
2000+20.00		239.35
2000+30.00		238.93
2000+40.00		238.58
2000+50.00		238.30
2000+60.00		238.07
2000+61.42		238.04
2000+70.00		237.90
2000+80.00		237.80

ALIGNMENT DATA FOR MG09

		STATION	X COORD	Y COORD
CURVE				
PC		800+00.00	1749636.21	507818.84
PI		800+57.76	1749693.91	507821.39
CC			1749614.80	508304.37
PRC		801+14.98	1749749.41	507837.39
R	486.00'			
Δ	13°-33'-18" LT.			
D	11°-47'-21"			
L	114.98'			
T	57.76'			
E	3.42'			
CURVE				
PRC		801+14.98	1749749.41	507837.39
PI		801+74.62	1749806.72	507853.91
CC			1749836.38	507535.67
PT		802+32.86	1749866.09	507848.26
R	314.00'			
Δ	21°-30'-35" RT.			
D	18°-14'-49"			
L	117.88'			
T	59.64'			
E	5.61'			
TANGENT				
PT		802+32.86	1749866.09	507848.26
PC		802+65.53	1749898.62	507845.17
BEARING	S 84°-34'-13" E			
L	32.68'			
CURVE				
PC		802+65.53	1749898.62	507845.17
PI		803+04.79	1749937.70	507841.46
CC			1749936.47	508243.37
PT		803+43.79	1749976.76	507845.41
R	400.00'			
Δ	11°-12'-35" LT.			
D	14°-19'-26"			
L	78.26'			
T	39.26'			
E	1.92'			

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN
17261.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	P. MACDONALD	
DESIGN-DETAILED	J. FRENCH	JULY 2012
CHECKED-REVIEWED	BT TRAN	
DESIGN2-DETAILED2	-----	-----
DESIGN3-DETAILED3	-----	-----
REVISIONS 1	-----	-----
REVISIONS 2	-----	-----
REVISIONS 3	-----	-----
REVISIONS 4	-----	-----
FIELD CHANGES	-----	-----

SIGNATURE

P.E. NUMBER

DATE

ORONO
STILLWATER\FOREST AVE.

GRADING PLANS

SHEET NUMBER

22

OF 65

Filename: ...\mst0\022_Grading_Plan 02.dgn Division: HIGHWAY Username: jonathon.french Date:7/12/2012

LEGEND	
STATION	ALIGNMENT
10+00.00	MG01
100+00.00	MG02
200+00.00	MG03
300+00.00	MG04
400+00.00	MG05
500+00.00	MG06
600+00.00	MG07
700+00.00	MG08
800+00.00	MG09
900+00.00	MG10
1000+00.00	MG11
2000+00.00	MG12
3000+00.00	MG13
4000+00.00	MG14
5000+00.00	MG15
6000+00.00	MG16
7000+00.00	MG17
SEE GEOMETRY SHEET FOR	
CONTROL POINTS	
STATIONS 20+00.00, 30+00.00	
40+00.00 AND 50+00.00	

ALIGNMENT DATA FOR MG07				
		STATION	X COORD	Y COORD
CURVE				
PC		600+00.00	1749720.32	507815.63
PI		600+63.37	1749782.26	507829.01
CC			1749804.73	507424.64
PCC		601+25.70	1749845.31	507822.58
R	400.00'			
Δ	18°-00'-19" RT.			
D	14°-19'-26"			
L	125.70'			
T	63.37'			
E	4.99'			
CURVE				
PCC		601+25.70	1749845.31	507822.58
PI		601+88.55	1749907.83	507816.20
CC			1749832.63	507698.22
PT		602+42.17	1749940.01	507762.21
R	125.00'			
Δ	52°-23'-07" RT.			
D	45°-50'-12"			
L	116.47'			
T	62.85'			
E	14.91'			

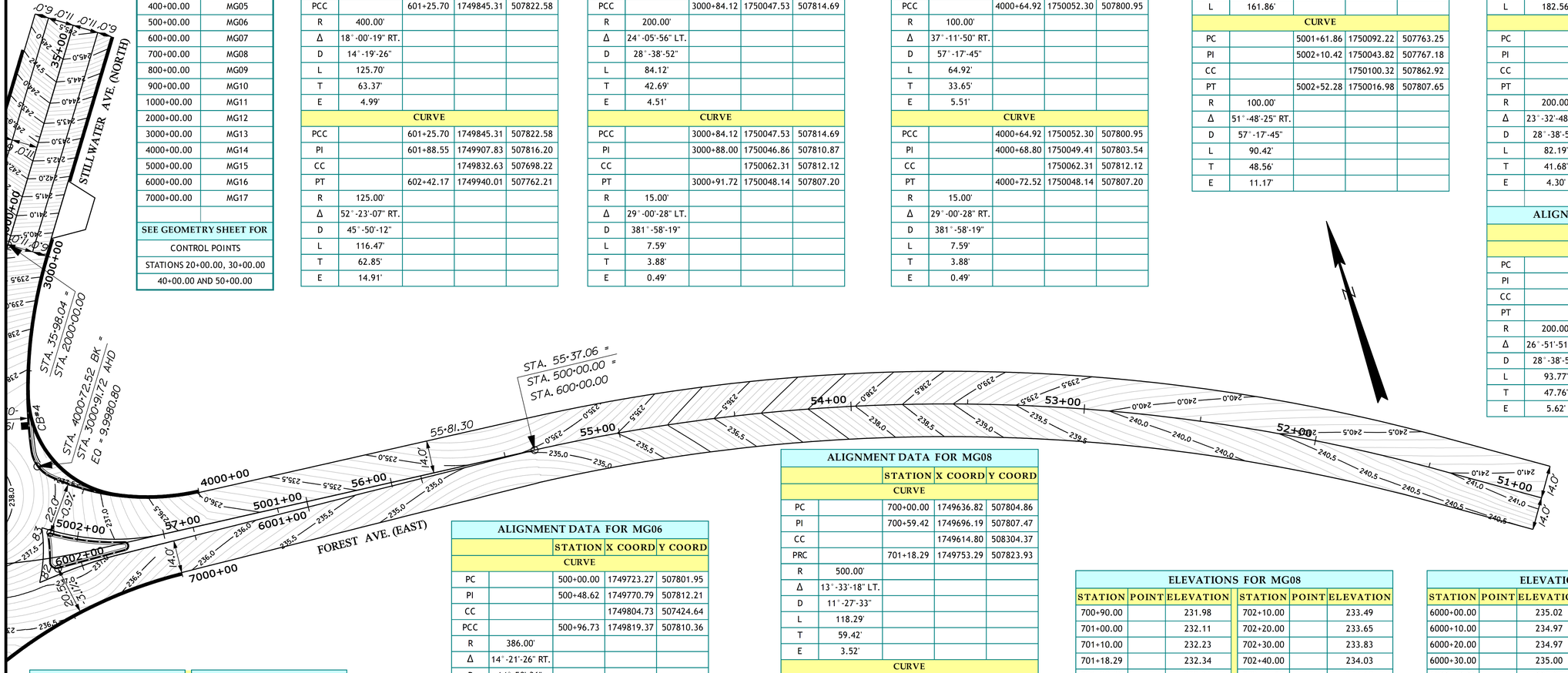
ALIGNMENT DATA FOR MG13				
		STATION	X COORD	Y COORD
CURVE				
PC		3000+00.00	1750078.69	507892.16
PI		3000+42.69	1750054.84	507856.75
CC			1750244.58	507780.45
PCC		3000+84.12	1750047.53	507814.69
R	200.00'			
Δ	24°-05'-56" LT.			
D	28°-38'-52"			
L	84.12'			
T	42.69'			
E	4.51'			
CURVE				
PCC		3000+84.12	1750047.53	507814.69
PI		3000+88.00	1750046.86	507810.87
CC			1750062.31	507812.12
PT		3000+91.72	1750048.14	507807.20
R	15.00'			
Δ	29°-00'-28" LT.			
D	381°-58'-19"			
L	7.59'			
T	3.88'			
E	0.49'			

ALIGNMENT DATA FOR MG14				
		STATION	X COORD	Y COORD
CURVE				
PC		4000+00.00	1750110.91	507775.77
PI		4000+33.65	1750077.37	507778.50
CC			1750119.01	507875.44
PCC		4000+64.92	1750052.30	507800.95
R	100.00'			
Δ	37°-11'-50" RT.			
D	57°-17'-45"			
L	64.92'			
T	33.65'			
E	5.51'			
CURVE				
PCC		4000+64.92	1750052.30	507800.95
PI		4000+68.80	1750049.41	507803.54
CC			1750062.31	507812.12
PT		4000+72.52	1750048.14	507807.20
R	15.00'			
Δ	29°-00'-28" RT.			
D	381°-58'-19"			
L	7.59'			
T	3.88'			
E	0.49'			

ALIGNMENT DATA FOR MG15				
		STATION	X COORD	Y COORD
TANGENT				
POB		5000+00.00	1750253.55	507750.14
PC		5001+61.86	1750092.22	507763.25
BEARING	N 85°-21'-15" W			
L	161.86'			
CURVE				
PC		5001+61.86	1750092.22	507763.25
PI		5002+10.42	1750043.82	507767.18
CC			1750100.32	507862.92
PT		5002+52.28	1750016.98	507807.65
R	100.00'			
Δ	51°-48'-25" RT.			
D	57°-17'-45"			
L	90.42'			
T	48.56'			
E	11.17'			

ALIGNMENT DATA FOR MG16				
		STATION	X COORD	Y COORD
TANGENT				
POB		6000+00.00	1750253.55	507750.14
PC		6001+82.56	1750071.29	507760.59
BEARING	N 86°-42'-59" W			
L	182.56'			
CURVE				
PC		6001+82.56	1750071.29	507760.59
PI		6002+24.25	1750029.67	507762.98
CC			1750059.83	507560.92
PT		6002+64.75	1749990.56	507748.54
R	200.00'			
Δ	23°-32'-48" LT.			
D	28°-38'-52"			
L	82.19'			
T	41.68'			
E	4.30'			

ALIGNMENT DATA FOR MG17				
		STATION	X COORD	Y COORD
CURVE				
PC		7000+00.00	1750093.58	507745.29
PI		7000+47.76	1750045.89	507748.03
CC			1750082.12	507545.62
PT		7000+93.77	1750002.12	507728.92
R	200.00'			
Δ	26°-51'-51" LT.			
D	28°-38'-52"			
L	93.77'			
T	47.76'			
E	5.62'			



ALIGNMENT DATA FOR MG06				
		STATION	X COORD	Y COORD
CURVE				
PC		500+00.00	1749723.27	507801.95
PI		500+48.62	1749770.79	507812.21
CC			1749804.73	507424.64
PCC		500+96.73	1749819.37	507810.36
R	386.00'			
Δ	14°-21'-26" RT.			
D	14°-50'-36"			
L	96.73'			
T	48.62'			
E	3.05'			
CURVE				
PCC		500+96.73	1749819.37	507810.36
PI		501+45.47	1749868.09	507808.51
CC			1749814.63	507685.45
PCC		501+89.68	1749902.69	507774.18
R	125.00'			
Δ	42°-36'-32" RT.			
D	45°-50'-12"			
L	92.96'			
T	48.75'			
E	9.17'			
CURVE				
PCC		501+89.68	1749902.69	507774.18
PI		501+97.36	1749908.14	507768.77
CC			1749878.03	507749.33
PT		502+04.81	1749910.82	507761.57
R	35.00'			
Δ	24°-45'-20" RT.			
D	163°-42'-08"			
L	15.12'			
T	7.68'			
E	0.83'			

ALIGNMENT DATA FOR MG08				
		STATION	X COORD	Y COORD
CURVE				
PC		700+00.00	1749636.82	507804.86
PI		700+59.42	1749696.19	507807.47
CC			1749614.80	508304.37
PRC		701+18.29	1749753.29	507823.93
R	500.00'			
Δ	13°-33'-18" LT.			
D	11°-27'-33"			
L	118.29'			
T	59.42'			
E	3.52'			
CURVE				
PRC		701+18.29	1749753.29	507823.93
PI		701+83.44	1749815.88	507841.98
CC			1749836.38	507535.67
PT		702+46.59	1749880.33	507832.43
R	300.00'			
Δ	24°-30'-13" RT.			
D	19°-05'-55"			
L	128.30'			
T	65.15'			
E	6.99'			
TANGENT				
PT		702+46.59	1749880.33	507832.43
PC		702+77.33	1749910.73	507827.93
BEARING	S 81°-34'-35" E			
L	30.74'			
CURVE				
PC		702+77.33	1749910.73	507827.93
PI		703+13.70	1749946.72	507822.60
CC			1749969.33	508223.62
PT		703+49.88	1749983.07	507823.85
R	400.00'			
Δ	10°-23'-33" LT.			
D	14°-19'-26"			
L	72.55'			
T	36.38'			
E	1.65'			

ELEVATIONS FOR MG06		
STATION	POINT	ELEVATION
500+00.00	50	231.49
500+10.00		231.62
500+20.00		231.75
500+30.00		231.89
500+40.00		232.02
500+50.00		232.15
500+60.00		232.28
500+70.00		232.41
500+80.00		232.54
500+90.00		232.67
500+96.73	55	232.75
501+00.00		232.79
501+10.00		232.91
501+20.00		233.04
501+30.00		233.16
501+40.00		233.28
501+50.00		233.40
501+60.00		233.51
501+70.00		233.63
501+80.00		233.75
501+89.68		233.86
501+90.00		233.87
502+00.00		233.98

ELEVATIONS FOR MG07		
STATION	POINT	ELEVATION
600+00.00		231.91
600+10.00		232.04
600+20.00		232.17
600+30.00		232.29
600+40.00		232.42
600+50.00		232.55
600+60.00		232.68
600+70.00		232.80
600+80.00		232.93
600+90.00		233.06
601+00.00		233.19
601+10.00		233.31
601+20.00		233.44
601+25.70		233.51
601+30.00		233.57
601+40.00		233.70
601+50.00		233.82
601+60.00		233.95
601+70.00		234.08
601+80.00		234.21
601+90.00		234.33
602+00.00		234.46

ELEVATIONS FOR MG08					
STATION	POINT	ELEVATION	STATION	POINT	ELEVATION
700+90.00		231.98	702+10.00		233.49
701+00.00		232.11	702+20.00		233.65
701+10.00		232.23	702+30.00		233.83
701+18.29		232.34	702+40.00		234.03
701+20.00		232.36	702+46.59		234.18
701+30.00		232.48	702+50.00		234.26
701+40.00		232.61	702+60.00		234.50
701+50.00		232.73	702+70.00		234.74
701+60.00		232.86	702+77.33		234.92
701+70.00		232.98	702+80.00		234.98
701+80.00		233.11	702+90.00		235.22
701+90.00		233.24	703+00.00		235.47
702+00.00		233.36			

ELEVATIONS FOR MG13		
STATION	POINT	ELEVATION
3000+00.00	32	239.96
3000+10.00		239.47
3000+20.00		238.99
3000+30.00		238.58
3000+40.00		238.24
3000+50.00		237.99
3000+60.00		237.82
3000+70.00		237.73
3000+80.00		237.72
3000+84.12	43	237.72
3000+90.00		237.72
3000+91.72		237.72

ELEVATIONS FOR MG14		
STATION	POINT	ELEVATION
4000+00.00	76	235.98
4000+10.00		236.22
4000+20.00		236.46
4000+30.00		236.70
4000+40.00		236.94
4000+50.00		237.18
4000+60.00		237.42
4000+64.92	81	237.54
4000+70.00		237.66

ELEVATIONS FOR MG16					
STATION	POINT	ELEVATION	STATION	POINT	ELEVATION
6000+00.00		235.02	6001+20.00		235.96
6000+10.00		234.97	6001+30.00		236.08
6000+20.00		234.97	6001+40.00		236.21
6000+30.00		235.00	6001+50.00		236.35
6000+40.00		235.07	6001+60.00		236.50
6000+50.00		235.17	6001+70.00		236.66
6000+60.00		235.28	6001+80.00		236.83
6000+70.00		235.40	6001+82.56		236.88
6000+80.00		235.51	6001+90.00		237.00
6000+90.00		235.62	6002+00.00		237.11
6001+00.00		235.74	6002+10.00		237.13
6001+10.00		235.85			

ELEVATIONS FOR MG15		
STATION	POINT	ELEVATION
5001+50.00		236.38
5001+60.00		236.56
5001+61.86		236.60
5001+70.00		236.74
5001+80.00		236.92
5001+90.00		237.11
5002+00.00		237.29
5002+10.00		237.49

ELEVATIONS FOR MG17		
STATION	POINT	ELEVATION
7000+00.00	77	236.07
7000+10.00		236.23
7000+20.00		236.39
7000+30.00		236.55
7000+40.00		236.60
7000+50.00		236.53
7000+60.00		236.46
7000+70.00		236.38
7000+80.00		236.23
7000+90.00		235.99
7000+93.77		235.89

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN
17261.00

HIGHWAY PLANS

PROJ. MANAGER	P. MACDONALD	BY		DATE
DESIGN-DETAILED	J. FRENCH	BT TRAN		JULY 2012
CHECKED-REVIEWED	-----	-----	SIGNATURE	-----
DESIGN2-DETAILED2	-----	-----	-----	-----
DESIGN3-DETAILED3	-----	-----	P.E. NUMBER	-----
REVISIONS 1	-----	-----	-----	-----
REVISIONS 2	-----	-----	-----	-----
REVISIONS 3	-----	-----	DATE	-----
REVISIONS 4	-----	-----	-----	-----
FIELD CHANGES	-----	-----	-----	-----

ORONO
STILLWATER\FOREST AVE.

GRADING PLANS

SHEET NUMBER

23

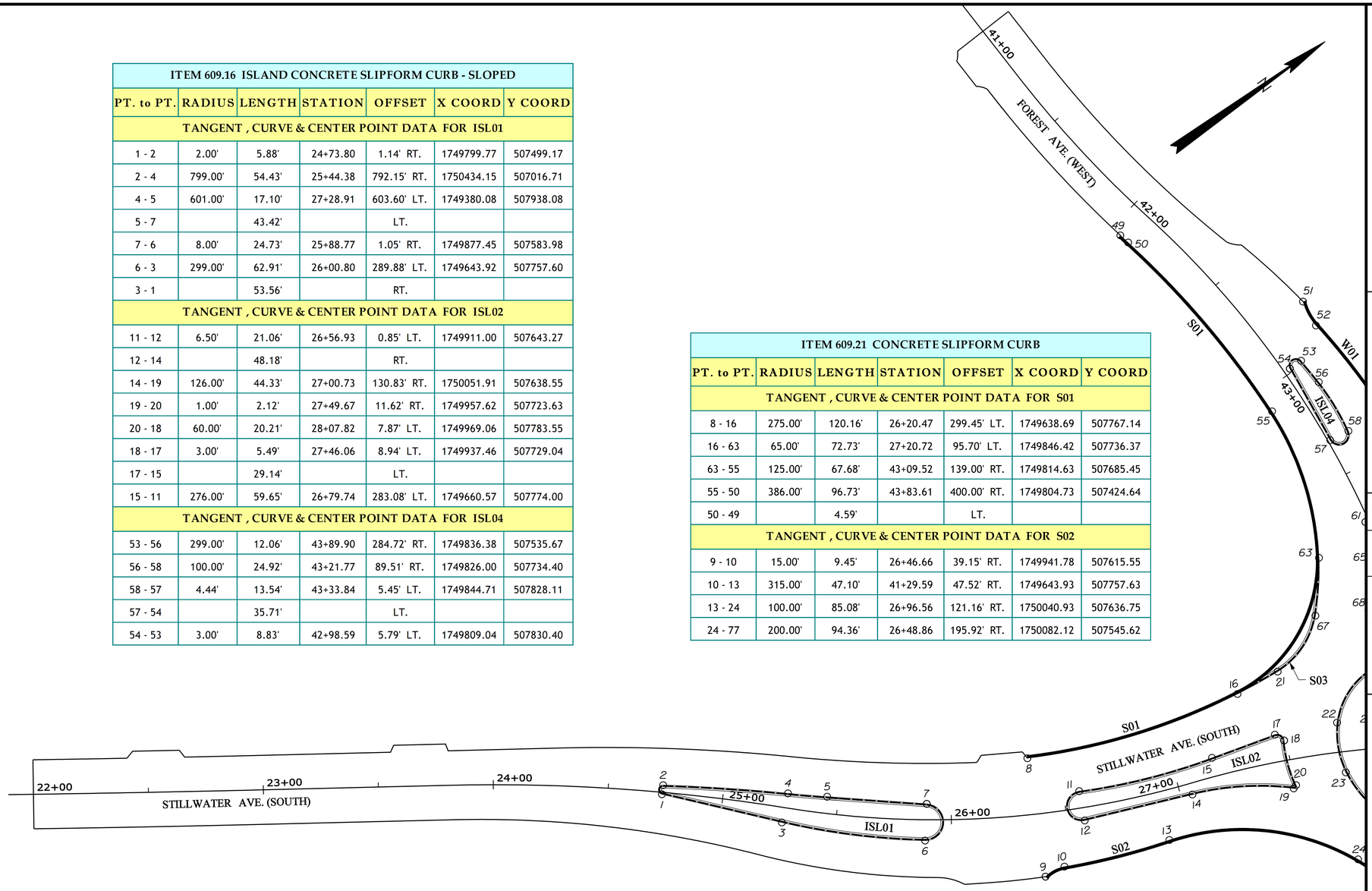
OF 65

Filename: ...\msta\023_Grading_Plan 03.dgn Division: HIGHWAY Username: jonathon.french Date:7/12/2012

PT.	STATION	OFFSET	X COORD	Y COORD
CONTROL POINTS FOR ISL01				
1	24+73.52	0.85' RT.	1749801.09	507497.67
2	24+73.69	3.13' LT.	1749798.18	507500.38
3	25+27.04	6.57' RT.	1749841.32	507533.03
4	25+27.70	6.34' LT.	1749832.58	507542.55
5	25+45.04	7.28' LT.	1749843.64	507555.58
6	25+88.68	9.05' RT.	1749883.87	507579.20
7	25+89.27	6.94' LT.	1749871.28	507589.07
CONTROL POINTS FOR S01				
8	26+35.82	24.55' LT.	1749880.52	507636.20
16	27+33.88	32.51' LT.	1749910.72	507726.84
63	43+78.81	26.28' RT.	1749883.07	507790.06
55	43+09.52	14.00' RT.	1749819.37	507810.36
50	42+09.28	14.00' RT.	1749723.27	507801.95
49	42+04.86	14.00' RT.	507801.01	1749718.82
CONTROL POINTS FOR S02				
9	26+37.96	27.48' RT.	1749927.03	507612.79
10	26+46.12	24.16' RT.	1749928.24	507622.01
13	26+90.59	21.40' RT.	1749945.27	507665.87
24	27+74.40	47.25' RT.	1749999.75	507727.87
77	56+96.11	17.79' LT.	1750093.58	507745.29
CONTROL POINTS FOR ISL02				
11	26+57.08	7.35' LT.	1749905.23	507646.27
12	26+57.41	5.63' RT.	1749917.03	507640.84
14	27+04.99	4.92' RT.	1749935.00	507685.55
15	27+17.39	8.13' LT.	1749926.93	507701.71
17	27+45.58	11.90' LT.	1749934.56	507729.83
18	27+48.99	8.67' LT.	1749938.96	507731.64
19	27+49.37	12.58' RT.	1749958.36	507722.96
20	27+50.67	11.37' RT.	1749957.81	507724.61
CONTROL POINTS FOR S03				
16	27+33.88	32.51' LT.	1749910.72	507726.84
21	27+51.38	38.66' LT.	1749912.93	507746.74
67	44+01.77	37.45' RT.	1749902.69	507774.18
63	43+78.81	26.28' RT.	1749883.07	507790.06
CONTROL POINTS FOR ISL04				
53	42+98.28	8.77' LT.	1749808.76	507833.39
54	42+98.31	2.80' LT.	1749808.72	507827.42
57	43+33.82	1.01' LT.	1749844.24	507823.70
58	43+34.27	9.86' LT.	1749845.58	507832.47
56	43+10.01	9.94' LT.	1749820.79	507834.26

ITEM 609.16 ISLAND CONCRETE SLIPFORM CURB - SLOPED						
PT. to PT.	RADIUS	LENGTH	STATION	OFFSET	X COORD	Y COORD
TANGENT , CURVE & CENTER POINT DATA FOR ISL01						
1 - 2	2.00'	5.88'	24+73.80	1.14' RT.	1749799.77	507499.17
2 - 4	799.00'	54.43'	25+44.38	792.15' RT.	1750434.15	507016.71
4 - 5	601.00'	17.10'	27+28.91	603.60' LT.	1749380.08	507938.08
5 - 7		43.42'		LT.		
7 - 6	8.00'	24.73'	25+88.77	1.05' RT.	1749877.45	507583.98
6 - 3	299.00'	62.91'	26+00.80	289.88' LT.	1749643.92	507757.60
3 - 1		53.56'		RT.		
TANGENT , CURVE & CENTER POINT DATA FOR ISL02						
11 - 12	6.50'	21.06'	26+56.93	0.85' LT.	1749911.00	507643.27
12 - 14		48.18'		RT.		
14 - 19	126.00'	44.33'	27+00.73	130.83' RT.	1750051.91	507638.55
19 - 20	1.00'	2.12'	27+49.67	11.62' RT.	1749957.62	507723.63
20 - 18	60.00'	20.21'	28+07.82	7.87' LT.	1749969.06	507783.55
18 - 17	3.00'	5.49'	27+46.06	8.94' LT.	1749937.46	507729.04
17 - 15		29.14'		LT.		
15 - 11	276.00'	59.65'	26+79.74	283.08' LT.	1749660.57	507774.00
TANGENT , CURVE & CENTER POINT DATA FOR ISL04						
53 - 56	299.00'	12.06'	43+89.90	284.72' RT.	1749836.38	507535.67
56 - 58	100.00'	24.92'	43+21.77	89.51' RT.	1749826.00	507734.40
58 - 57	4.44'	13.54'	43+33.84	5.45' LT.	1749844.71	507828.11
57 - 54		35.71'		LT.		
54 - 53	3.00'	8.83'	42+98.59	5.79' LT.	1749809.04	507830.40

ITEM 609.21 CONCRETE SLIPFORM CURB						
PT. to PT.	RADIUS	LENGTH	STATION	OFFSET	X COORD	Y COORD
TANGENT , CURVE & CENTER POINT DATA FOR S01						
8 - 16	275.00'	120.16'	26+20.47	299.45' LT.	1749638.69	507767.14
16 - 63	65.00'	72.73'	27+20.72	95.70' LT.	1749846.42	507736.37
63 - 55	125.00'	67.68'	43+09.52	139.00' RT.	1749814.63	507685.45
55 - 50	386.00'	96.73'	43+83.61	400.00' RT.	1749804.73	507424.64
50 - 49		4.59'		LT.		
TANGENT , CURVE & CENTER POINT DATA FOR S02						
9 - 10	15.00'	9.45'	26+46.66	39.15' RT.	1749941.78	507615.55
10 - 13	315.00'	47.10'	41+29.59	47.52' RT.	1749643.93	507757.63
13 - 24	100.00'	85.08'	26+96.56	121.16' RT.	1750040.93	507636.75
24 - 77	200.00'	94.36'	26+48.86	195.92' RT.	1750082.12	507545.62



ITEM 609.214 TERMINAL CURB-CONCRETE SLIPFORM CURB - 4 FOOT		
END POINTS		
8	9	28
29	30	31
33	49	51
60	64	

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN
17261.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	P. MACDONALD	
DESIGN-DETAILED	J. FRENCH	BT TRAN JULY 2012
CHECKED-REVIEWED	-----	-----
DESIGN2-DETAILED2	-----	-----
DESIGN3-DETAILED3	-----	-----
REVISIONS 1	-----	-----
REVISIONS 2	-----	-----
REVISIONS 3	-----	-----
REVISIONS 4	-----	-----
FIELD CHANGES	-----	-----

SIGNATURE

P.E. NUMBER

DATE

ORONO
STILLWATER\FOREST AVE.

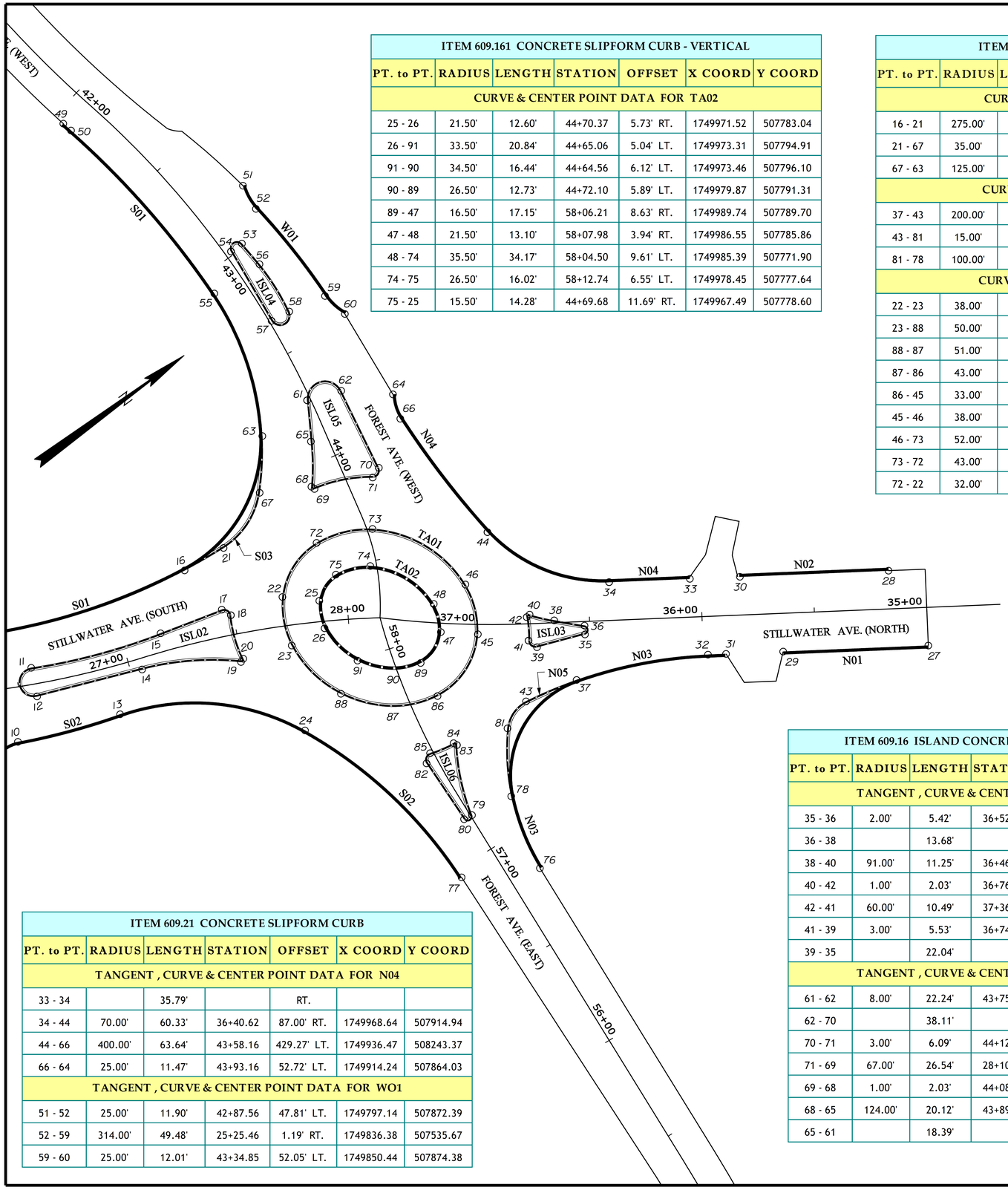
GEOMETRIC PLANS

SHEET NUMBER

24

OF 65

Filename: ...\msto\024_Geometry 01.dgn Username: jonathon.french Date:7/12/2012 Division: HIGHWAY



ITEM 609.161 CONCRETE SLIPFORM CURB - VERTICAL						
PT. to PT.	RADIUS	LENGTH	STATION	OFFSET	X COORD	Y COORD
CURVE & CENTER POINT DATA FOR TA02						
25 - 26	21.50'	12.60'	44+70.37	5.73' RT.	1749971.52	507783.04
26 - 91	33.50'	20.84'	44+65.06	5.04' LT.	1749973.31	507794.91
91 - 90	34.50'	16.44'	44+64.56	6.12' LT.	1749973.46	507796.10
90 - 89	26.50'	12.73'	44+72.10	5.89' LT.	1749979.87	507791.31
89 - 47	16.50'	17.15'	58+06.21	8.63' RT.	1749989.74	507789.70
47 - 48	21.50'	13.10'	58+07.98	3.94' RT.	1749986.55	507785.86
48 - 74	35.50'	34.17'	58+04.50	9.61' LT.	1749985.39	507771.90
74 - 75	26.50'	16.02'	58+12.74	6.55' LT.	1749978.45	507777.64
75 - 25	15.50'	14.28'	44+69.68	11.69' RT.	1749967.49	507778.60

ITEM 609.341 CURB TYPE 5 - TRUCK APRON						
PT. to PT.	RADIUS	LENGTH	STATION	OFFSET	X COORD	Y COORD
CURVE & CENTER POINT DATA FOR S03						
16 - 21	275.00'	20.02'	26+79.15	283.06' LT.	1749660.52	507773.83
21 - 67	35.00'	30.22'	27+40.63	71.46' LT.	1749878.03	507749.33
67 - 63	125.00'	25.28'	43+83.15	67.14' RT.	1749878.03	507749.33
CURVE & CENTER POINT DATA FOR N05						
37 - 43	200.00'	24.41'	55+48.45	29.48' RT.	1750244.58	507780.45
43 - 81	15.00'	15.18'	36+73.58	48.12' LT.	1750062.31	507812.12
81 - 78	100.00'	30.33'	35+89.38	59.79' LT.	1750119.01	507875.44
CURVE & CENTER POINT DATA FOR TA01						
22 - 23	38.00'	22.28'	44+70.37	5.73' RT.	1749971.52	507783.04
23 - 88	50.00'	31.10'	44+65.06	5.04' LT.	1749973.31	507794.91
88 - 87	51.00'	23.95'	44+64.56	6.12' LT.	1749973.47	507796.10
87 - 86	43.00'	20.69'	44+72.10	5.89' LT.	1749979.87	507791.31
86 - 45	33.00'	34.30'	58+06.21	8.63' RT.	1749989.74	507789.70
45 - 46	38.00'	23.16'	58+07.98	3.94' RT.	1749986.55	507785.86
46 - 73	52.00'	50.05'	58+04.50	9.61' LT.	1749985.39	507771.90
73 - 72	43.00'	25.99'	58+12.74	6.55' LT.	1749978.45	507777.64
72 - 22	32.00'	29.49'	44+69.68	11.69' RT.	1749967.49	507778.60

PT.	STATION	OFFSET	X COORD	Y COORD
CONTROL POINTS FOR TA01				
22	27+72.29	12.86' LT.	1749946.01	507754.88
23	27+73.49	9.07' RT.	1749965.85	507745.47
88	57+88.83	26.96' LT.	1749996.05	507750.38
87	57+75.78	7.65' RT.	1750014.30	507765.55
86	57+72.22	12.54' RT.	1750022.31	507784.40
45	36+99.64	4.36' LT.	1750010.81	507815.10
46	37+05.77	17.63' RT.	1749989.70	507823.72
73	44+36.36	2.35' LT.	1749945.32	507805.06
72	44+33.19	23.09' RT.	1749935.61	507781.37
CONTROL POINTS FOR TA02				
25	27+87.96	9.26' LT.	1749957.09	507767.11
26	27+89.12	3.11' RT.	1749968.31	507761.78
91	57+99.54	15.09' LT.	1749988.55	507765.07
90	57+90.85	1.47' LT.	1750001.10	507775.45
89	57+89.33	11.05' RT.	1750006.03	507787.05
47	37+15.97	3.96' LT.	1750000.28	507802.40
48	37+19.87	8.35' RT.	1749988.33	507807.28
74	44+52.08	2.84' RT.	1749958.04	507794.54
75	44+53.28	18.57' RT.	1749952.05	507779.94
CONTROL POINTS FOR N04				
33	36+04.69	17.00' RT.	1750046.77	507905.64
34	36+40.62	17.00' RT.	1750026.70	507875.84
44	36+95.61	41.07' RT.	1749976.76	507845.41
66	43+96.53	33.01' LT.	1749913.16	507844.05
64	43+85.33	34.32' LT.	1749902.53	507847.81
CONTROL POINTS FOR ISL03				
35	36+52.31	5.76' LT.	1750039.04	507853.42
36	36+52.33	1.85' LT.	1750035.79	507855.59
38	36+65.71	1.01' RT.	1750025.94	507846.09
40	36+76.54	4.04' RT.	1750017.39	507838.81
42	36+77.86	2.97' RT.	1750017.53	507837.11
41	36+77.48	7.49' LT.	1750026.43	507831.58
39	36+73.83	10.57' LT.	1750031.02	507832.89
CONTROL POINTS FOR W01				
51	42+78.87	24.68' LT.	1749788.31	507849.00
52	42+89.87	22.94' LT.	1749800.01	507847.56
59	43+36.25	27.10' LT.	1749849.40	507849.40
60	43+46.80	30.81' LT.	1749861.07	507851.75
CONTROL POINTS FOR ISL05				
61	43+72.47	1.54' RT.	1749882.07	507815.52
62	43+74.97	13.99' LT.	1749887.62	507830.25
70	44+12.74	15.55' LT.	1749925.11	507823.43
71	44+15.62	11.34' LT.	1749926.99	507818.70
69	44+09.95	14.41' RT.	1749915.76	507794.84
68	44+08.49	15.28' RT.	1749914.15	507794.31
65	43+89.98	7.46' RT.	1749897.82	507806.04

ITEM 609.16 ISLAND CONCRETE SLIPFORM CURB - SLOPED						
PT. to PT.	RADIUS	LENGTH	STATION	OFFSET	X COORD	Y COORD
TANGENT , CURVE & CENTER POINT DATA FOR ISL03						
35 - 36	2.00'	5.42'	36+52.75	3.80' LT.	1750037.18	507854.15
36 - 38		13.68'		LT. & RT.		
38 - 40	91.00'	11.25'	36+46.67	90.00' RT.	1749962.77	507911.59
40 - 42	1.00'	2.03'	36+76.86	3.10' RT.	1750017.99	507838.01
42 - 41	60.00'	10.49'	37+36.32	8.82' LT.	1749990.41	507783.60
41 - 39	3.00'	5.53'	36+74.48	7.65' LT.	1750028.23	507833.98
39 - 35		22.04'		LT.		
TANGENT , CURVE & CENTER POINT DATA FOR ISL05						
61 - 62	8.00'	22.24'	43+75.14	5.99' LT.	1749886.19	507822.38
62 - 70		38.11'		LT.		
70 - 71	3.00'	6.09'	44+12.87	12.55' LT.	1749924.58	507820.48
71 - 69	67.00'	26.54'	28+10.40	4.55' LT.	1749980.82	507778.80
69 - 68	1.00'	2.03'	44+08.95	14.39' LT.	1749914.79	507795.08
68 - 65	124.00'	20.12'	43+89.78	284.73' LT.	1749836.26	507535.69
65 - 61		18.39'		RT.		

ITEM 609.21 CONCRETE SLIPFORM CURB						
PT. to PT.	RADIUS	LENGTH	STATION	OFFSET	X COORD	Y COORD
TANGENT , CURVE & CENTER POINT DATA FOR N04						
33 - 34		35.79'		RT.		
34 - 44	70.00'	60.33'	36+40.62	87.00' RT.	1749968.64	507914.94
44 - 66	400.00'	63.64'	43+58.16	429.27' LT.	1749936.47	508243.37
66 - 64	25.00'	11.47'	43+93.16	52.72' LT.	1749914.24	507864.03
TANGENT , CURVE & CENTER POINT DATA FOR WO1						
51 - 52	25.00'	11.90'	42+87.56	47.81' LT.	1749797.14	507872.39
52 - 59	314.00'	49.48'	25+25.46	1.19' RT.	1749836.38	507535.67
59 - 60	25.00'	12.01'	43+34.85	52.05' LT.	1749850.44	507874.38

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN
17261.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	P. MACDONALD	
DESIGN-DETAILED	J. FRENCH	JULY 2012
CHECKED-REVIEWED	BT TRAN	
DESIGN2-DETAILED2	-----	-----
DESIGN3-DETAILED3	-----	-----
REVISIONS 1	-----	-----
REVISIONS 2	-----	-----
REVISIONS 3	-----	-----
REVISIONS 4	-----	-----
FIELD CHANGES	-----	-----

SIGNATURE

P.E. NUMBER

DATE

ORONO
STILLWATER\FOREST AVE.

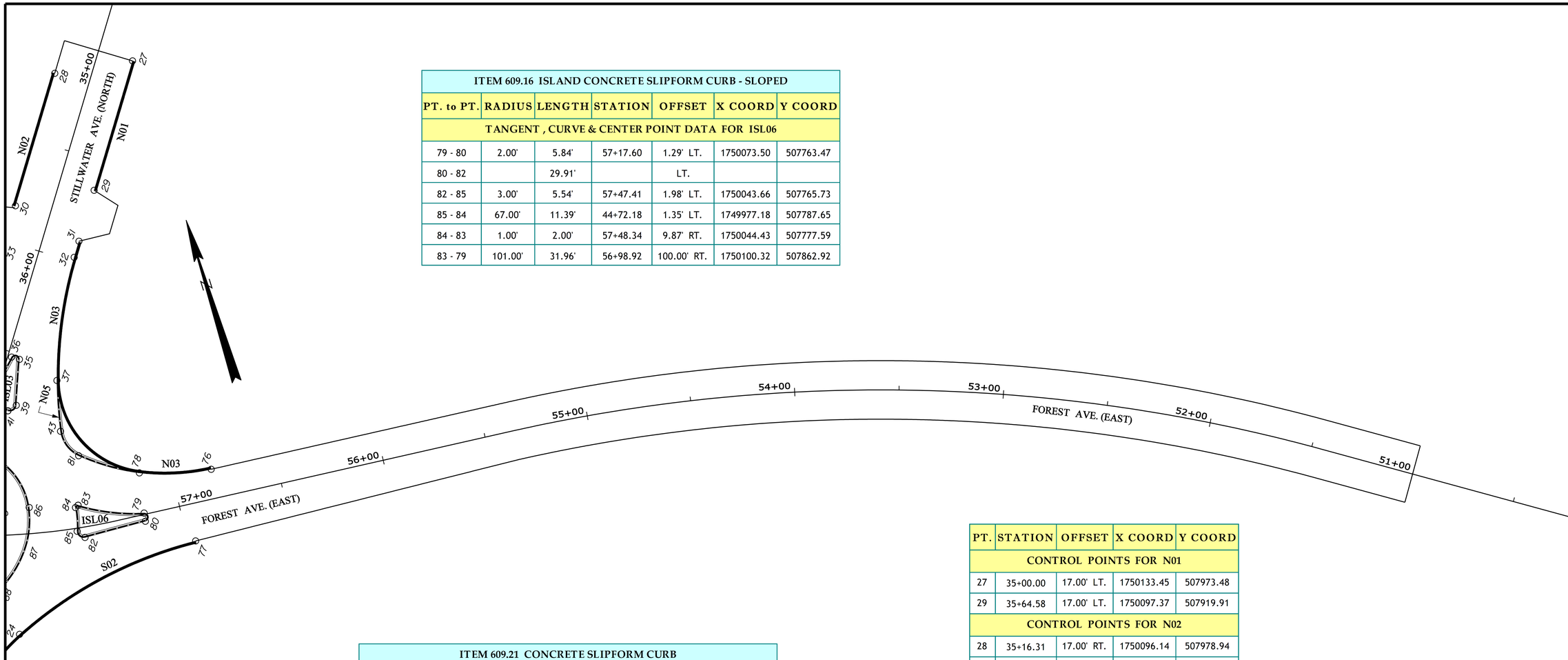
GEOMETRIC PLANS

SHEET NUMBER

25

OF 65

Filename: ...\msta\025_Geometry 02.dgn Division: HIGHWAY Username: jonathon.french Date:7/12/2012



ITEM 609.16 ISLAND CONCRETE SLIPFORM CURB - SLOPED						
PT. to PT.	RADIUS	LENGTH	STATION	OFFSET	X COORD	Y COORD
TANGENT , CURVE & CENTER POINT DATA FOR ISL06						
79 - 80	2.00'	5.84'	57+17.60	1.29' LT.	1750073.50	507763.47
80 - 82		29.91'		LT.		
82 - 85	3.00'	5.54'	57+47.41	1.98' LT.	1750043.66	507765.73
85 - 84	67.00'	11.39'	44+72.18	1.35' LT.	1749977.18	507787.65
84 - 83	1.00'	2.00'	57+48.34	9.87' RT.	1750044.43	507777.59
83 - 79	101.00'	31.96'	56+98.92	100.00' RT.	1750100.32	507862.92

ITEM 609.21 CONCRETE SLIPFORM CURB						
PT. to PT.	RADIUS	LENGTH	STATION	OFFSET	X COORD	Y COORD
TANGENT DATA FOR N01						
27 - 29		64.43'		LT.		
TANGENT DATA FOR N02						
28 - 30		66.31'		RT.		
TANGENT , CURVE & CENTER POINT DATA FOR N03						
31 - 32		7.65'		LT.		
32 - 37	200.00'	59.71'	55+48.45	29.48' RT.	1750244.58	507780.45
37 - 78	45.00'	64.71'	36+43.63	68.86' LT.	1750096.23	507825.38
78 - 76	100.00'	34.59'	35+89.38	59.79' LT.	1750119.01	507875.44

PT.	STATION	OFFSET	X COORD	Y COORD
CONTROL POINTS FOR N01				
27	35+00.00	17.00' LT.	1750133.45	507973.48
29	35+64.58	17.00' LT.	1750097.37	507919.91
CONTROL POINTS FOR N02				
28	35+16.31	17.00' RT.	1750096.14	507978.94
30	35+82.45	17.00' RT.	1750059.19	507924.08
CONTROL POINTS FOR N03				
31	35+90.01	17.00' LT.	1750083.17	507898.82
32	35+98.04	17.00' LT.	1750078.69	507892.16
37	36+56.86	25.85' LT.	1750053.17	507838.43
78	57+15.21	19.92' RT.	1750077.60	507784.42
76	56+81.30	14.00' RT.	1750110.91	507775.77
CONTROL POINTS FOR N05				
37	36+56.86	25.85' LT.	1750053.17	507838.43
43	36+79.53	34.44' LT.	1750047.53	507814.69
81	57+43.31	34.07' RT.	1750052.30	507800.95
78	57+15.21	19.92' RT.	1750077.60	507784.42
CONTROL POINTS FOR ISL06				
79	57+17.23	0.68' RT.	1750074.02	507765.40
80	57+17.52	3.29' LT.	1750073.41	507761.47
82	57+47.12	4.97' LT.	1750043.53	507762.74
85	57+50.35	1.47' LT.	1750040.81	507766.67
84	57+49.37	9.87' RT.	1750043.44	507777.74
83	57+47.90	10.77' RT.	1750044.98	507778.43

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN
17261.00

HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER	P. MACDONALD		
DESIGN-DETAILED	J. FRENCH	BT TRAN	JULY 2012
CHECKED-REVIEWED	-----	-----	-----
DESIGN2-DETAILED2	-----	-----	-----
DESIGN3-DETAILED3	-----	-----	-----
REVISIONS 1	-----	-----	-----
REVISIONS 2	-----	-----	-----
REVISIONS 3	-----	-----	-----
REVISIONS 4	-----	-----	-----
FIELD CHANGES	-----	-----	-----

SIGNATURE

P.E. NUMBER

DATE

ORONO
STILLWATER\FOREST AVE.

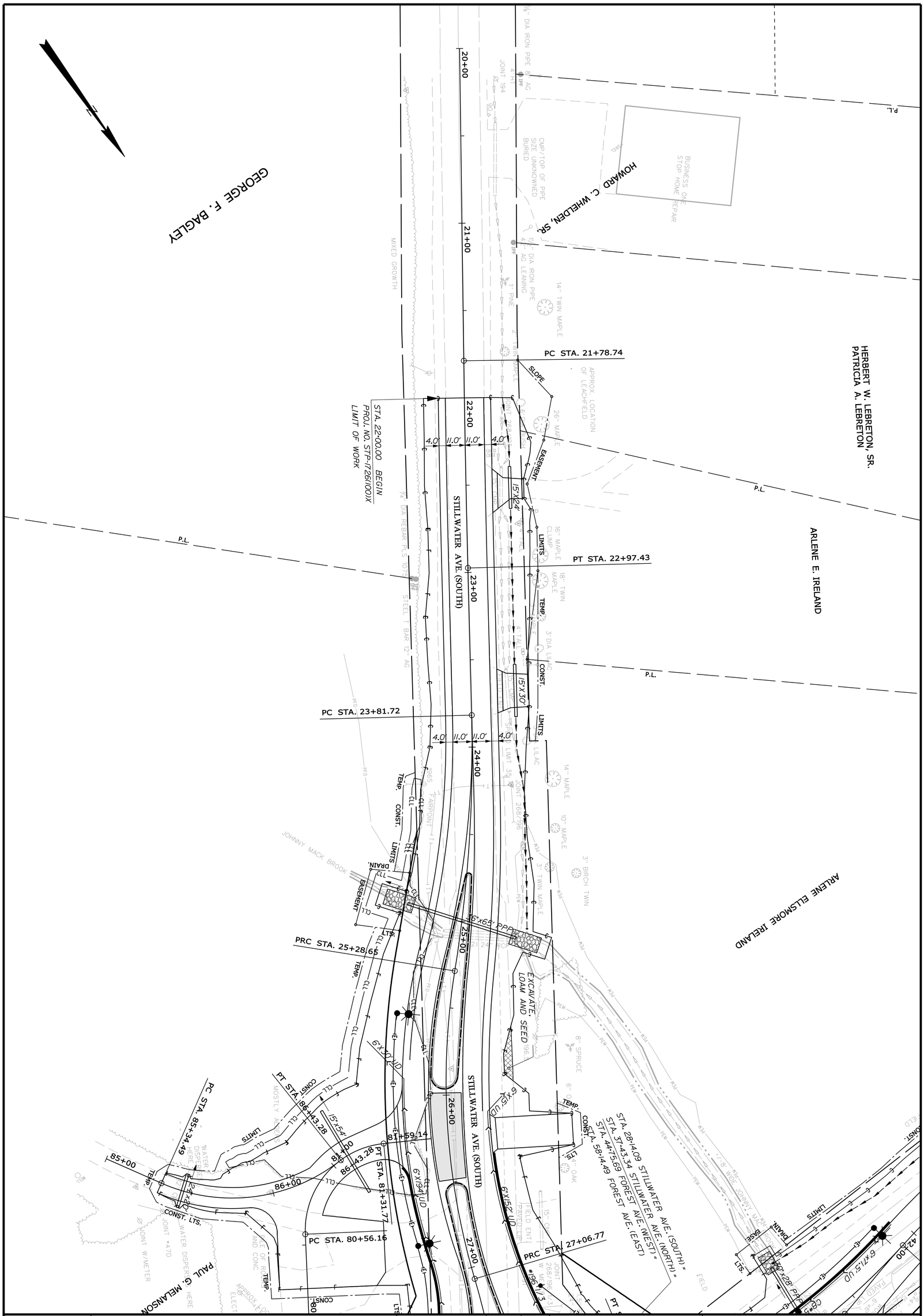
GEOMETRIC PLANS

SHEET NUMBER

26

OF 65

Filename: ...\mstoV026_Geometry 03.dgn Division: HIGHWAY Username: jonathon.french Date:7/12/2012



PROJ. MANAGER	P. MACDONALD	BY	DATE
DESIGN-DETAILED	J. FRENCH	BT TRAN	JULY 2012
CHECKED-REVIEWED			
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

SHEET NUMBER 27 OF 65

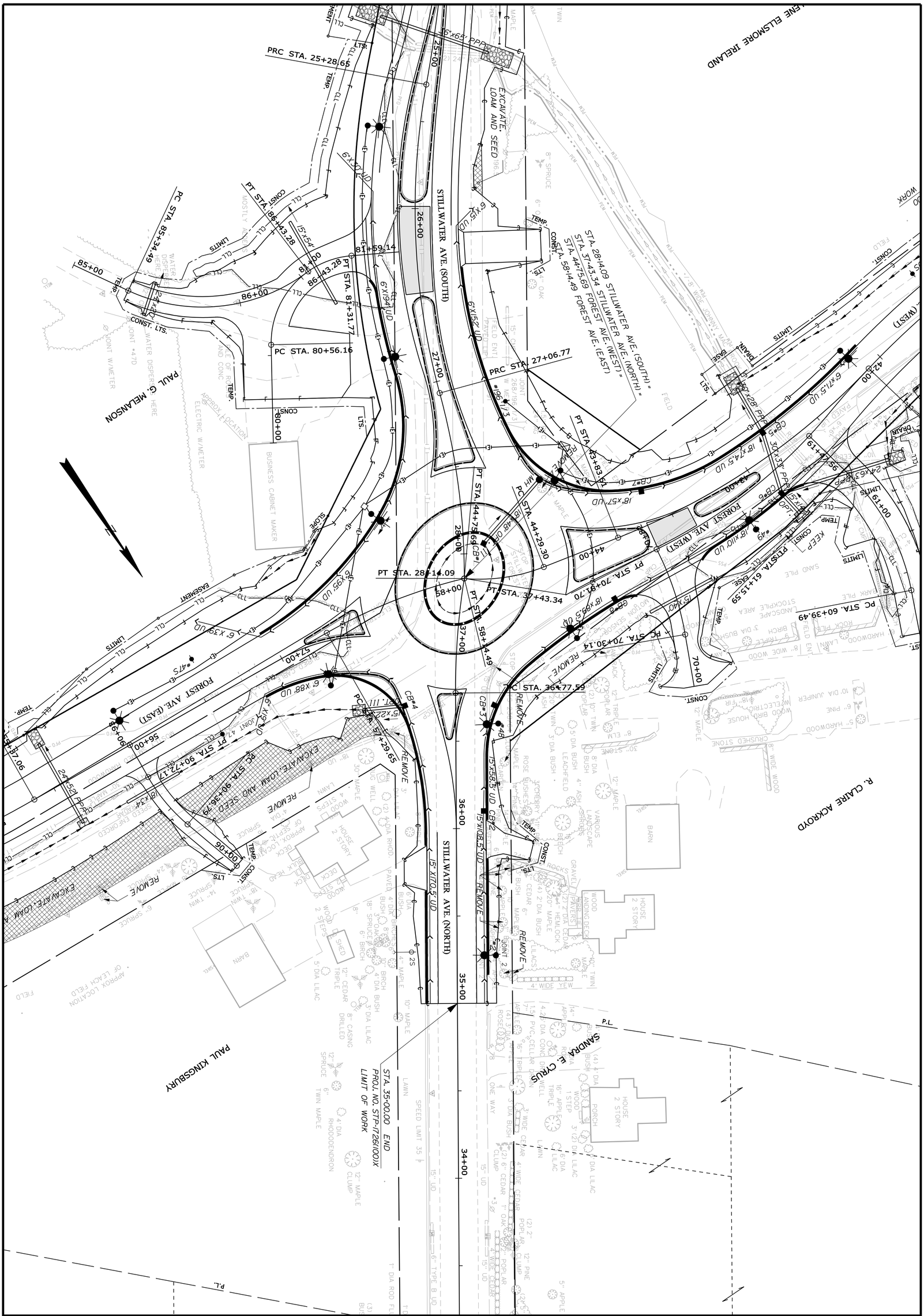
ORONO
STILLWATER\FOREST AVE.

PLANS

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN 17261.00 HIGHWAY PLANS

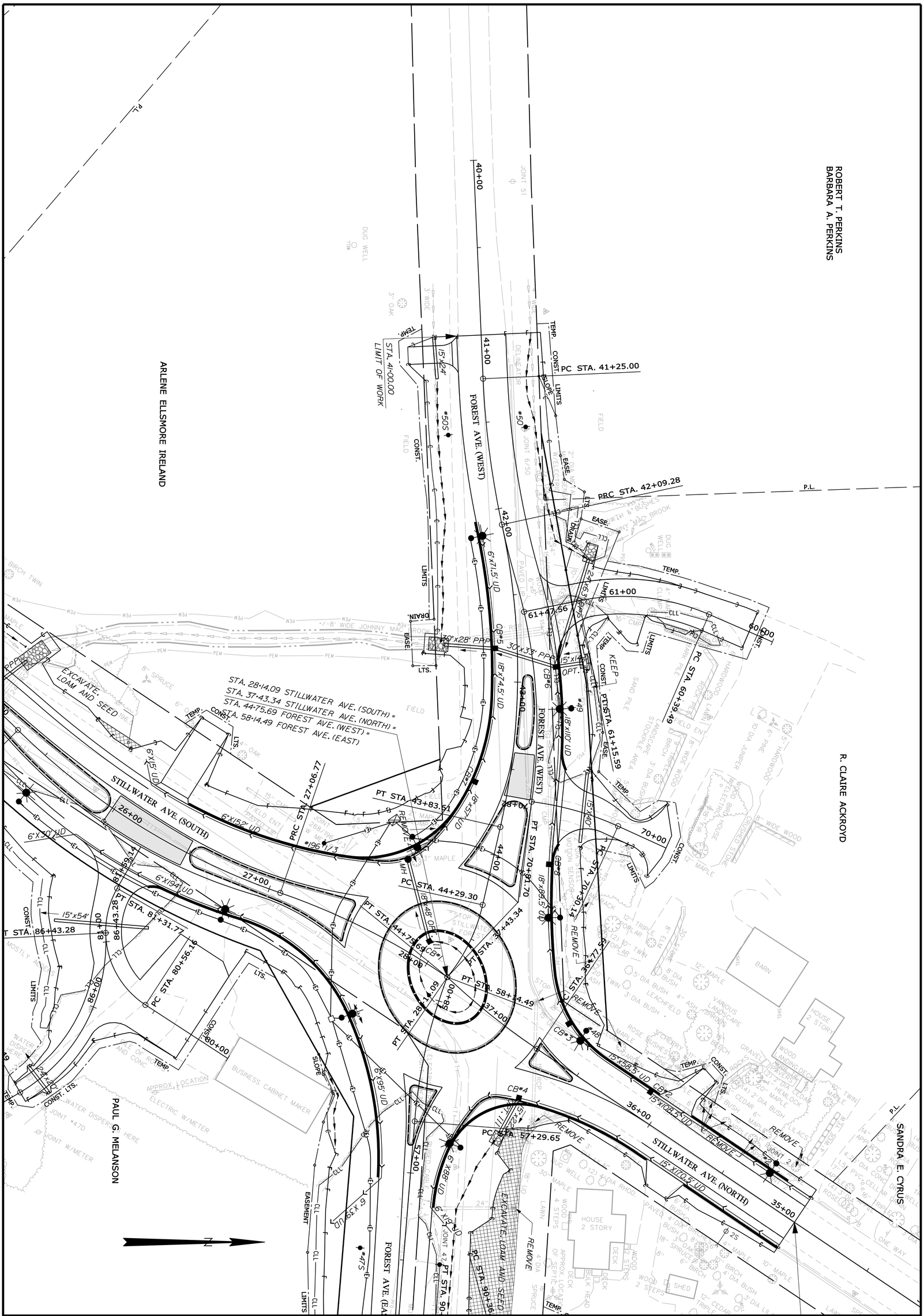


SHEET NUMBER 28 OF 65	ORONO STILLWATER\FOREST AVE.	PROJ. MANAGER P. MACDONALD	BY	DATE
		DESIGN-DETAILED J. FRENCH	BT TRAN	JULY 2012
		CHECKED-REVIEWED _____	_____	_____
		DESIGN2-DETAILED2 _____	_____	_____
		DESIGN3-DETAILED3 _____	_____	_____
		REVISIONS 1 _____		_____
		REVISIONS 2 _____		_____
		REVISIONS 3 _____		_____
		REVISIONS 4 _____		_____
		FIELD CHANGES _____		_____
	PLANS	SIGNATURE		
		P.E. NUMBER		
		DATE		

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN 17261.00 HIGHWAY PLANS



PROJ. MANAGER	P. MACDONALD	BY	DATE
DESIGN-DETAILED	J. FRENCH	BT TRAN	JULY 2012
CHECKED-REVIEWED	_____	_____	_____
DESIGN2-DETAILED2	_____	_____	_____
DESIGN3-DETAILED3	_____	_____	_____
REVISIONS 1	_____		_____
REVISIONS 2	_____		_____
REVISIONS 3	_____		_____
REVISIONS 4	_____		_____
FIELD CHANGES	_____		_____

SIGNATURE

P.E. NUMBER

DATE

SHEET NUMBER 29 OF 65

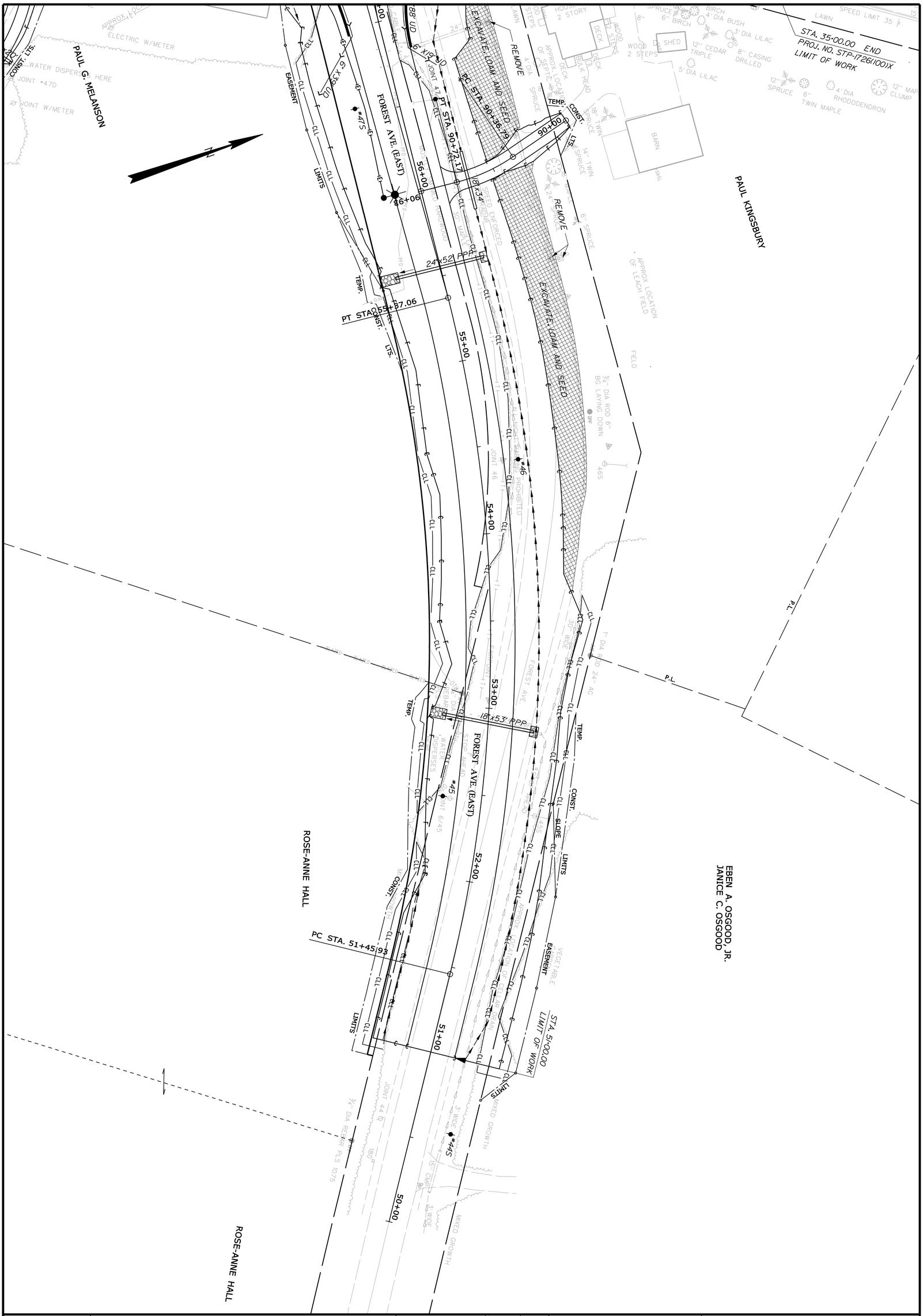
ORONO
STILLWATER\FOREST AVE.

PLANS

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

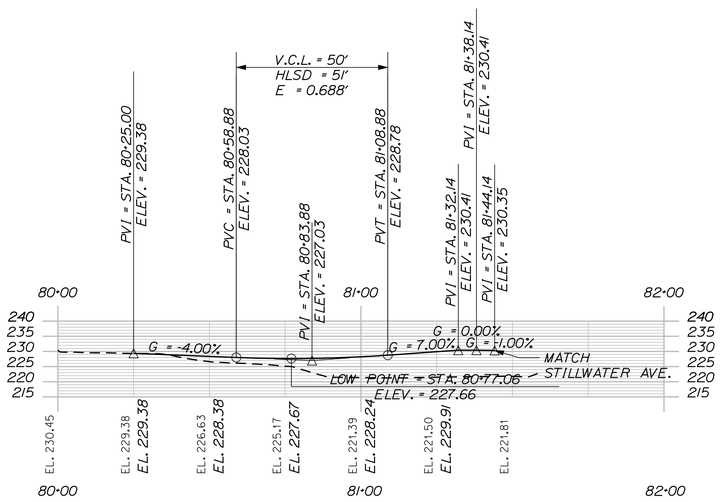
STP-1726(100)X

WIN 17261.00 HIGHWAY PLANS

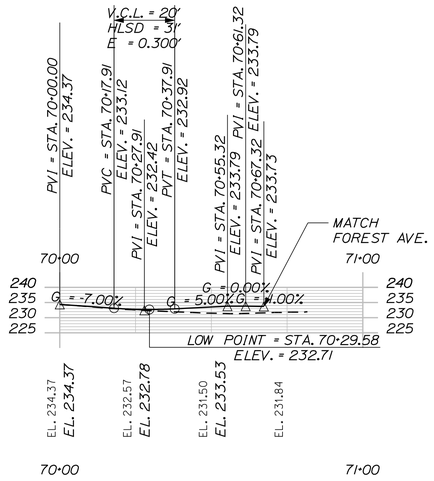


SHEET NUMBER 30 OF 65	ORONO STILLWATER\FOREST AVE. PLANS	PROJ. MANAGER P. MACDONALD / BY / DATE DESIGN-DETAILED J. FRENCH / BT TRAN / JULY 2012 CHECKED-REVIEWED / DESIGN2-DETAILED2 / DESIGN3-DETAILED3 REVISIONS 1 / REVISIONS 2 / REVISIONS 3 / REVISIONS 4 / FIELD CHANGES SIGNATURE P.E. NUMBER DATE	STATE OF MAINE DEPARTMENT OF TRANSPORTATION STP-1726(100)X WIN 17261.00 HIGHWAY PLANS

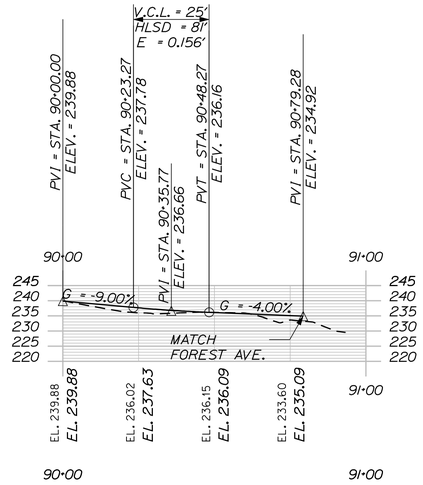
EXAGGERATION = 1V:1H FOR ALL DRIVES



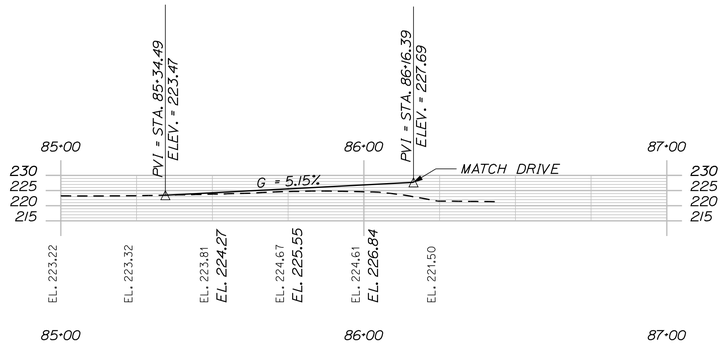
GRAVEL DRIVE STA. 26+23 RT.



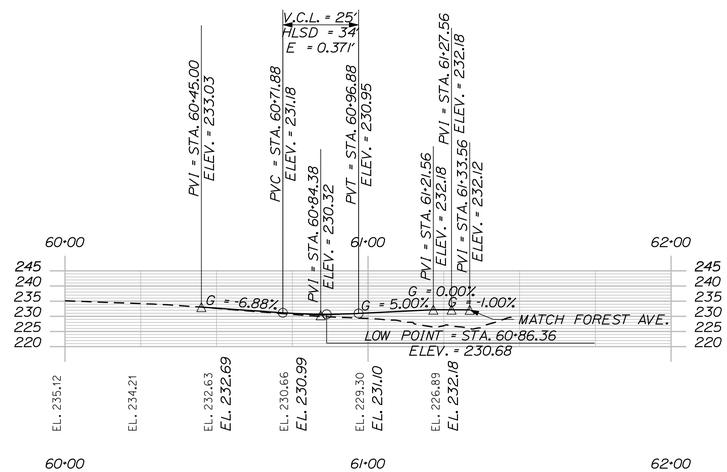
GRAVEL DRIVE STA. 43+66 LT.



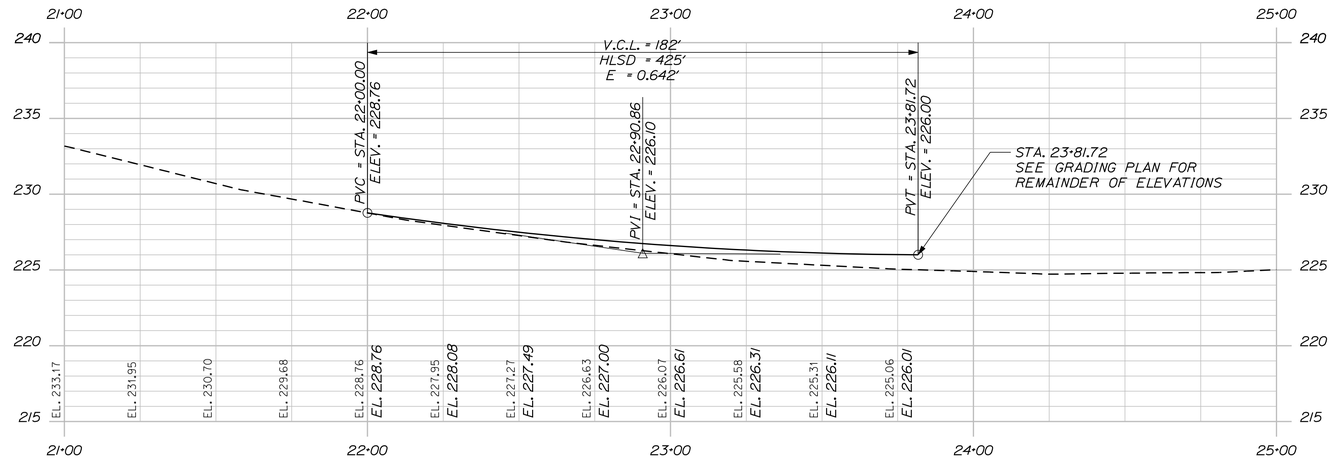
PAVED DRIVE STA. 56+00 RT.



GRAVEL DRIVE STA. 81+05 LT.



GRAVEL DRIVE STA. 42+62 LT.



STILLWATER AVE SOUTH

EXAGGERATION = 5 V:1 H

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN 17261.00

HIGHWAY PLANS

PROJ. MANAGER	P. MACDONALD	BY	DATE
DESIGN-DETAILED	J. FRENCH	J. FRENCH	JULY 2012
CHECKED-REVIEWED	-----	-----	-----
DESIGN2-DETAILED2	-----	-----	-----
DESIGN3-DETAILED3	-----	-----	-----
REVISIONS 1	-----	-----	-----
REVISIONS 2	-----	-----	-----
REVISIONS 3	-----	-----	-----
REVISIONS 4	-----	-----	-----
FIELD CHANGES	-----	-----	-----

SIGNATURE

P.E. NUMBER

DATE

ORONO
STILLWATER\FOREST AVE.

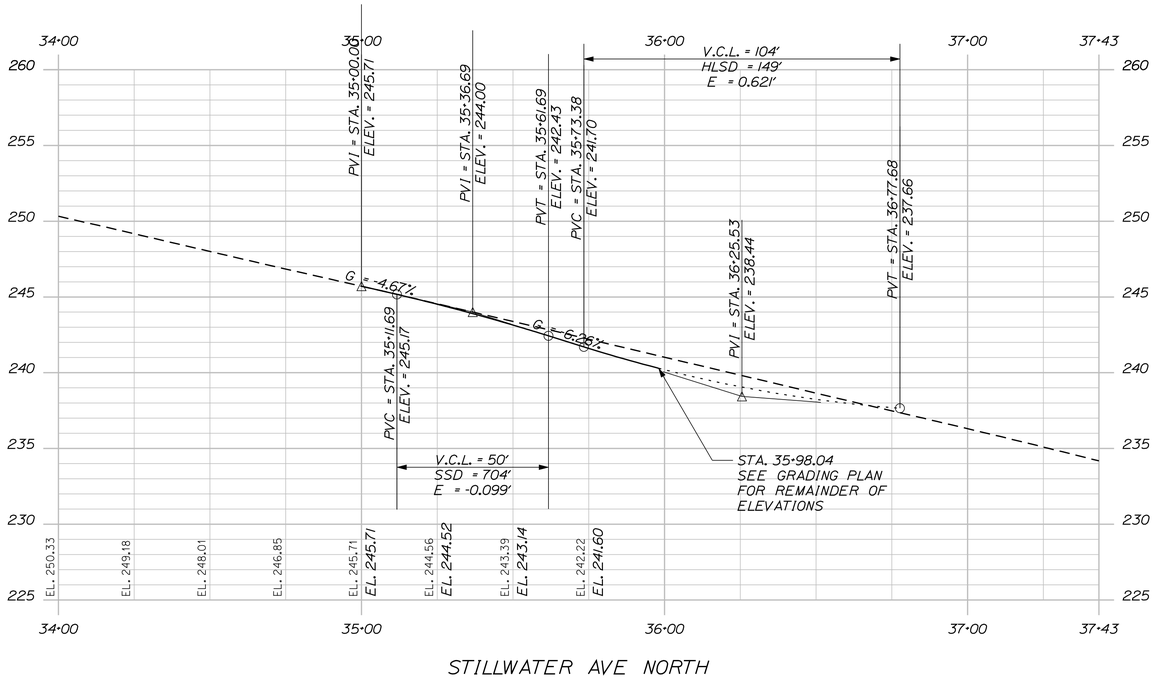
PROFILE

SHEET NUMBER

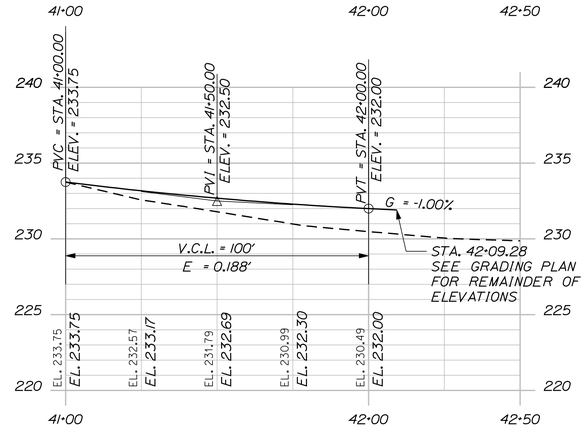
31

OF 65

Filename: ...\msto\031_Profile 01.dgn Division: HIGHWAY Username: jonathon.french Date:6/22/2012



STILLWATER AVE NORTH



FOREST AVE WEST

FOREST AVE EAST

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN
17261.00

HIGHWAY PLANS

PROJ. MANAGER	P. MACDONALD	BY	DATE
DESIGN-DETAILED	J. FRENCH	J. FRENCH	JULY 2012
CHECKED-REVIEWED	-----	-----	-----
DESIGN2-DETAILED2	-----	-----	-----
DESIGN3-DETAILED3	-----	-----	-----
REVISIONS 1	-----	-----	-----
REVISIONS 2	-----	-----	-----
REVISIONS 3	-----	-----	-----
REVISIONS 4	-----	-----	-----
FIELD CHANGES	-----	-----	-----

SIGNATURE

P.E. NUMBER

DATE

ORONO
STILLWATER\FOREST AVE.

PROFILE

SHEET NUMBER

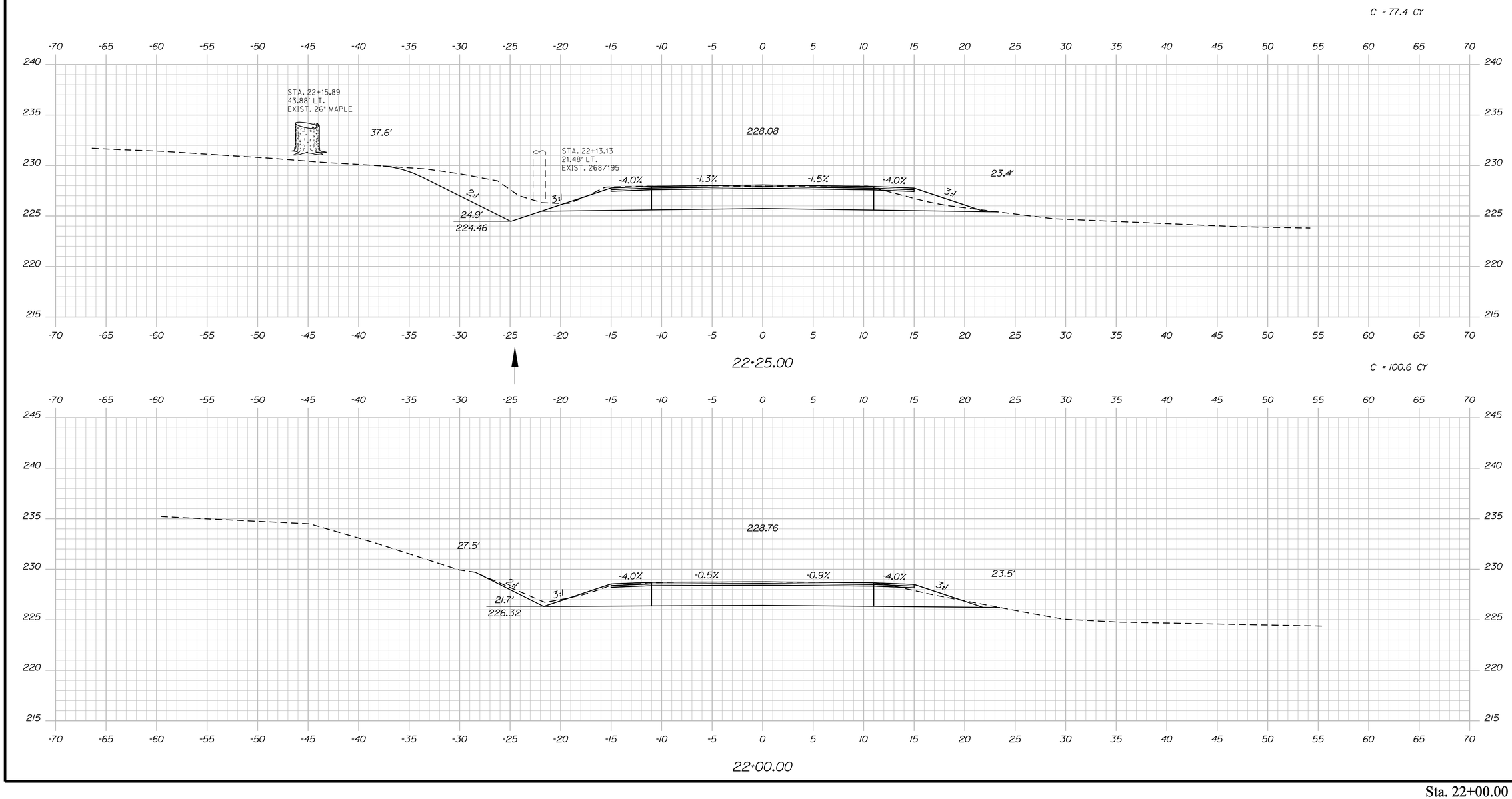
32

OF 65

Username: jonathon.french Date:6/28/2012

Division: HIGHWAY

Filename: ...\MSTA\032_Profile 02.dgn



Sta. 22+00.00 to Sta. 22+25.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN
17261.00

HIGHWAY PLANS

PROJ. MANAGER	P. MACDONALD		
DESIGN-DETAILED	J. FRENCH	BT TRAN	JULY 2012
CHECKED-REVIEWED	-----	-----	-----
DESIGN2-DETAILED2	-----	-----	-----
DESIGN3-DETAILED3	-----	-----	-----
REVISIONS 1	-----	-----	-----
REVISIONS 2	-----	-----	-----
REVISIONS 3	-----	-----	-----
REVISIONS 4	-----	-----	-----
FIELD CHANGES	-----	-----	-----

SIGNATURE

P.E. NUMBER

DATE

ORONO
STILLWATER AVE. SOUTH

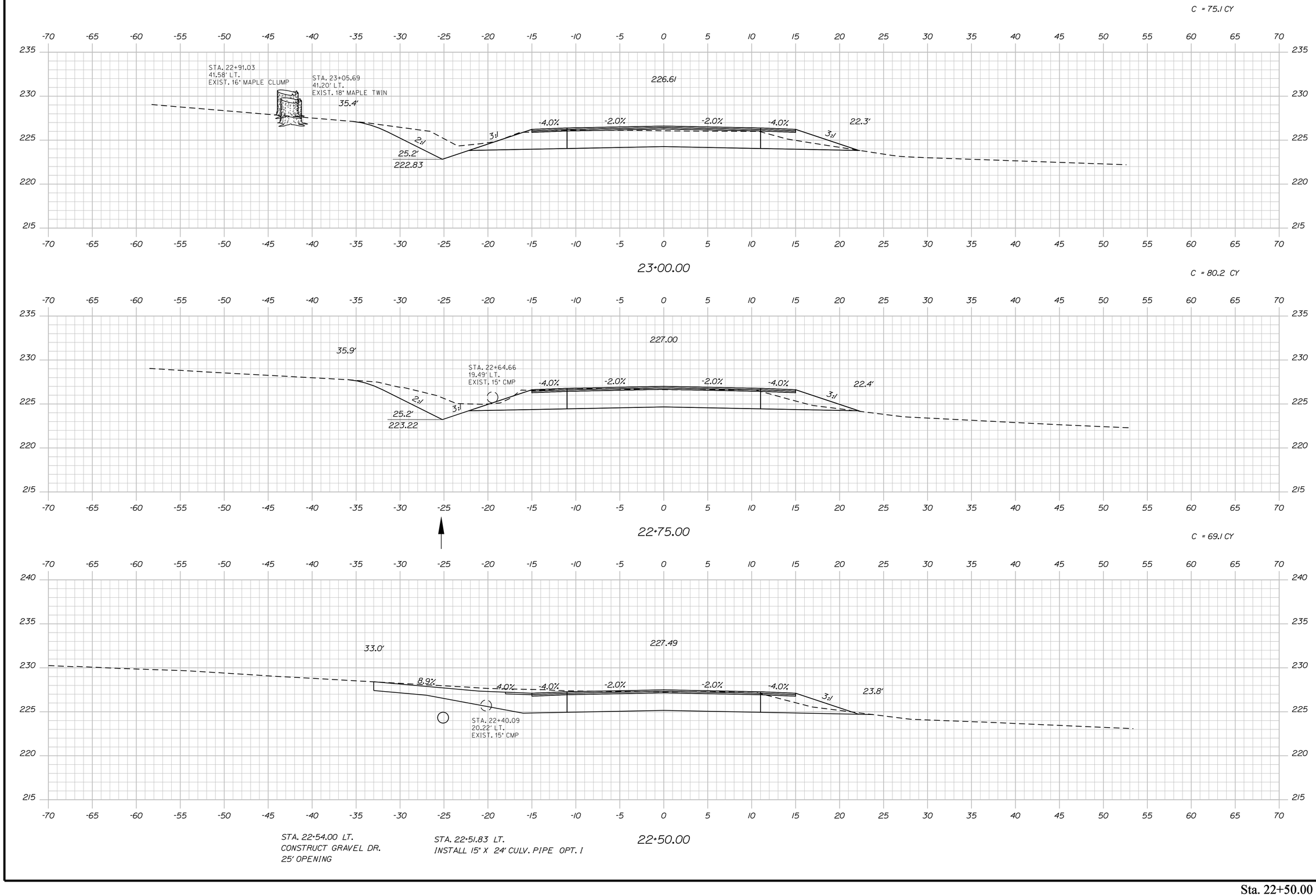
CROSS SECTIONS

SHEET NUMBER

33

OF 65

Filename: ...\033_Xsect_Stillwater_S_22+00_001.dgn Division: HIGHWAY Username: jonathon.french Date:6/22/2012



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN
17261.00

HIGHWAY PLANS

PROJ. MANAGER	P. MACDONALD		
DESIGN-DETAILED	J. FRENCH	BT TRAN	JULY 2012
CHECKED-REVIEWED	-----	-----	-----
DESIGN2-DETAILED2	-----	-----	-----
DESIGN3-DETAILED3	-----	-----	-----
REVISIONS 1	-----	-----	-----
REVISIONS 2	-----	-----	-----
REVISIONS 3	-----	-----	-----
REVISIONS 4	-----	-----	-----
FIELD CHANGES	-----	-----	-----

SIGNATURE

P.E. NUMBER

DATE

ORONO
STILLWATER AVE. SOUTH

CROSS SECTIONS

SHEET NUMBER

34

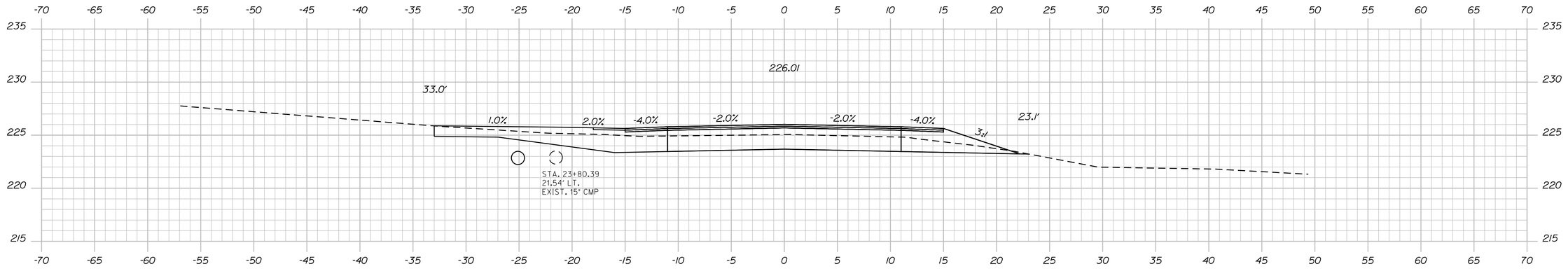
OF 65

Sta. 22+50.00 to Sta. 23+00.00

Filename: ...\034_Xsect_Stillwater_S_22+50_002.dgn Division: HIGHWAY Username: jonathon.french Date:6/22/2012

Filename: ...\035_Xsect_Stillwater_S_23+25_003.dgn Division: HIGHWAY Username: jonathon.french Date:6/22/2012

C = 42.1 CY
F = 0.2 CY
G = 0.6 CY

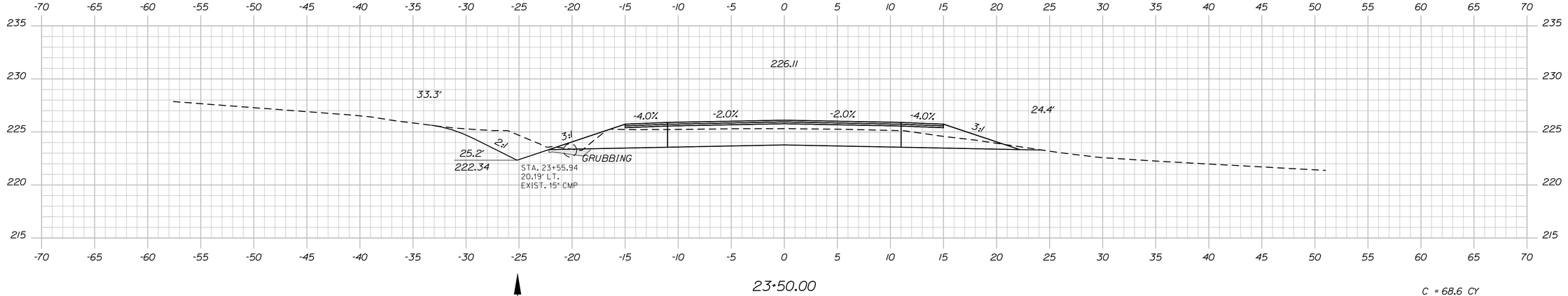


STA. 23+69.00 LT.
CONSTRUCT GRAVEL DR.
25' OPENING

STA. 23+68.19 LT.
INSTALL 15" X 30" CULV. PIPE OPT. 1

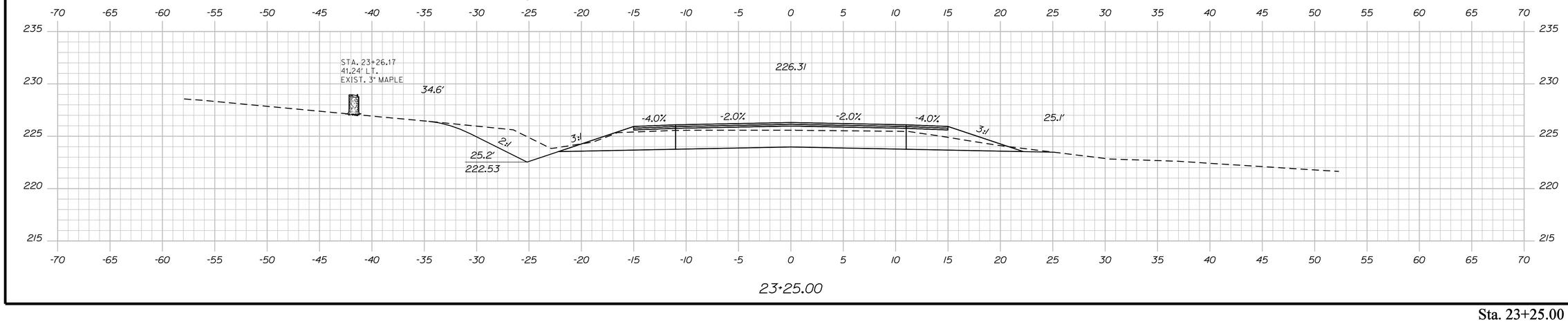
23+75.00

C = 53.8 CY



23+50.00

C = 68.6 CY



23+25.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN
17261.00

HIGHWAY PLANS

PROJ. MANAGER	P. MACDONALD	BY	DATE
DESIGN-DETAILED	J. FRENCH	BT TRAN	JULY 2012
CHECKED-REVIEWED	-----	-----	-----
DESIGN2-DETAILED2	-----	-----	-----
DESIGN3-DETAILED3	-----	-----	-----
REVISIONS 1	-----	-----	-----
REVISIONS 2	-----	-----	-----
REVISIONS 3	-----	-----	-----
REVISIONS 4	-----	-----	-----
FIELD CHANGES	-----	-----	-----

SIGNATURE

P.E. NUMBER

DATE

ORONO
STILLWATER AVE. SOUTH

CROSS SECTIONS

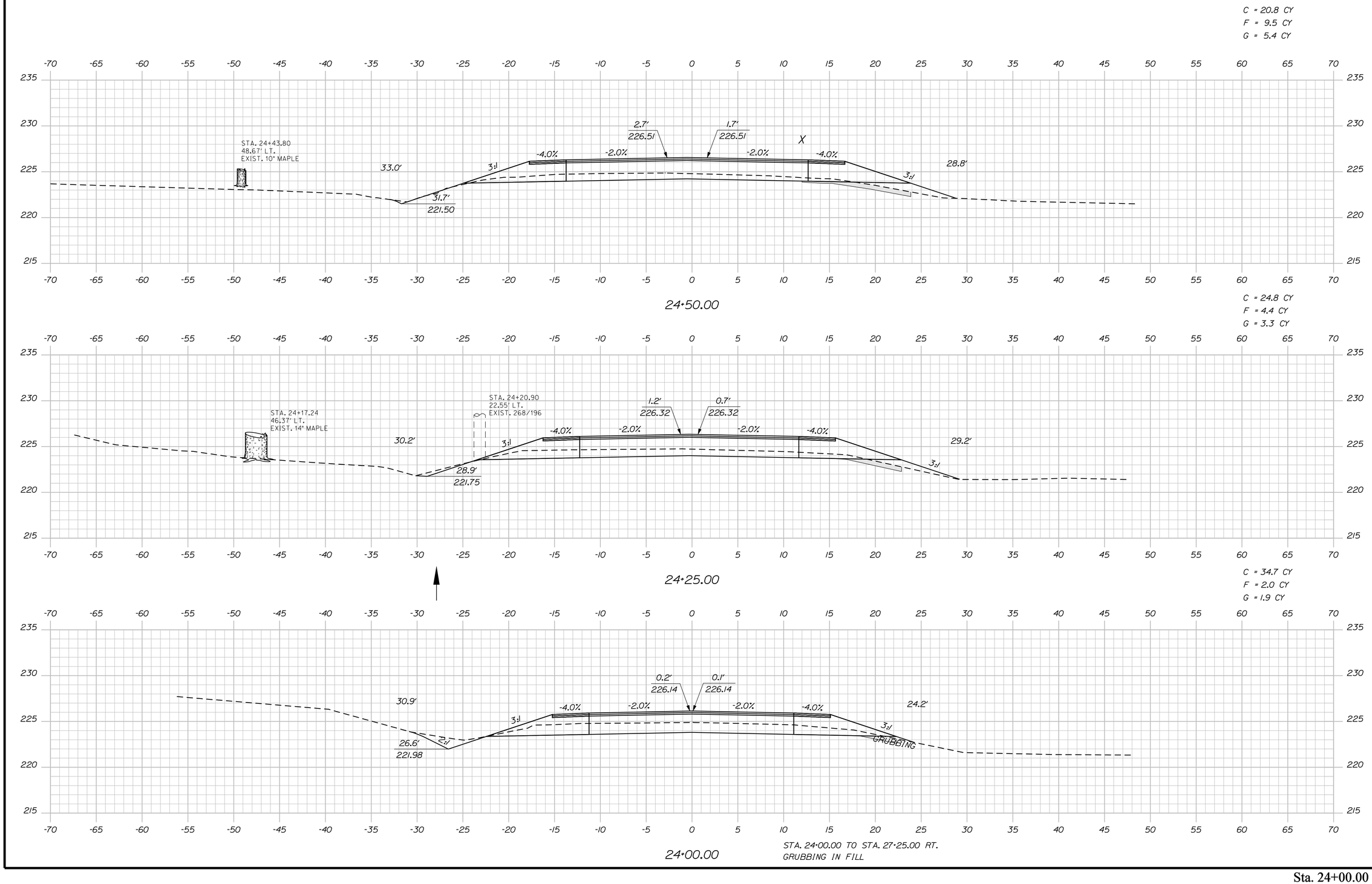
SHEET NUMBER

35

OF 65

Sta. 23+25.00 to Sta. 23+75.00

Filename: ...\036_Xsect_Stillwater_S_24+00_004.dgn Division: HIGHWAY Username: jonathon.french Date:6/28/2012



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN 17261.00

HIGHWAY PLANS

PROJ. MANAGER	P. MACDONALD	BY	DATE
DESIGN-DETAILED	J. FRENCH	BT TRAN	JULY 2012
CHECKED-REVIEWED	WEO	-----	-----
DESIGN2-DETAILED2	ED2	-----	-----
DESIGN3-DETAILED3	ED3	-----	-----
REVISIONS 1		-----	-----
REVISIONS 2		-----	-----
REVISIONS 3		-----	-----
REVISIONS 4		-----	-----
FIELD CHANGES		-----	-----

SIGNATURE

P.E. NUMBER

DATE

ORONO
STILLWATER AVE. SOUTH

CROSS SECTIONS

SHEET NUMBER

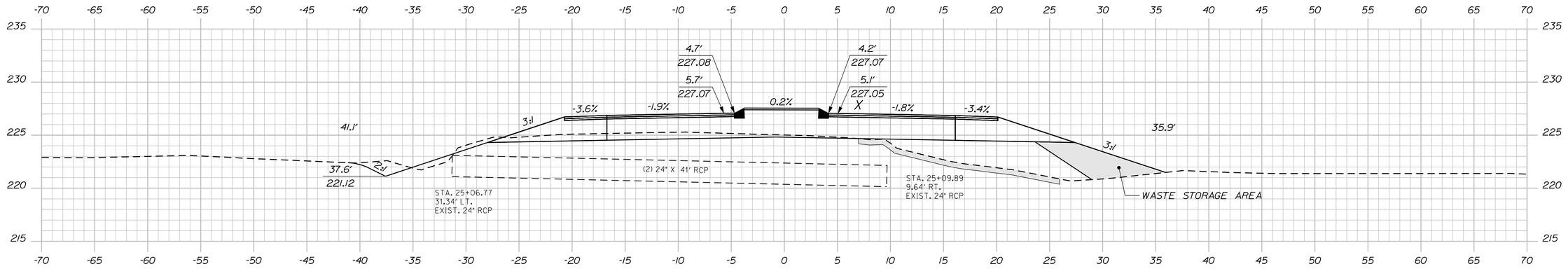
36

OF 65

Sta. 24+00.00 to Sta. 24+50.00

Filename: ...\037_Xsect_Stillwater_S_24+75_005.dgn Division: HIGHWAY Username: jonathon.french Date:6/22/2012

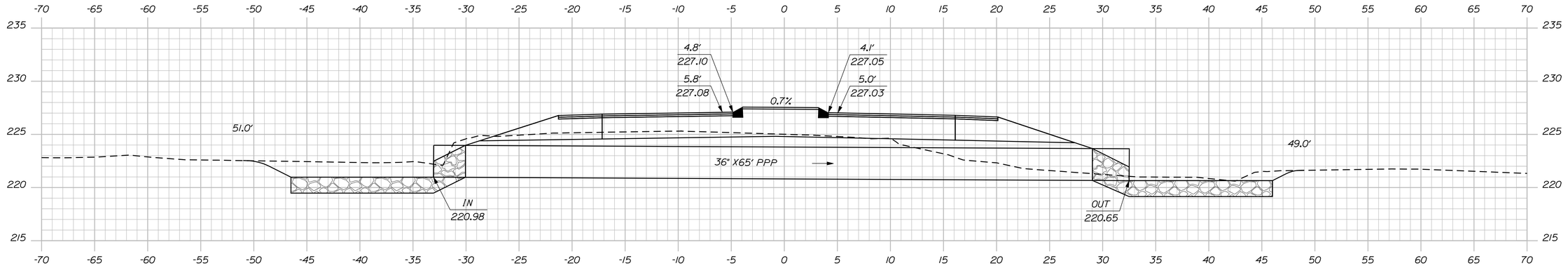
C = 14.7 CY
F = 69.5 CY
G = 10.6 CY
WS = 12.8 CY



25+00.00

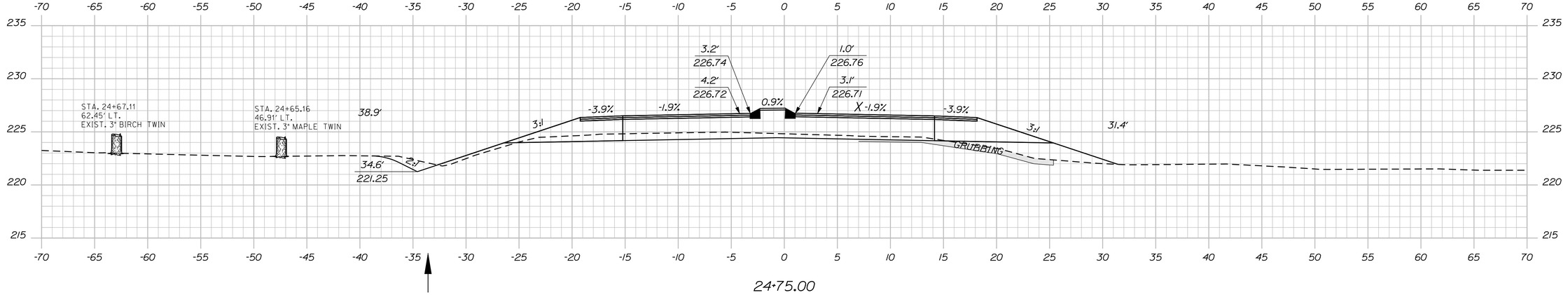
STA. 25+10.00 TO STA. 26+00.00 RT.
WASTE STORAGE

C = 19.4 CY
F = 33.6 CY
G = 7.8 CY



24+99.78 (SKEW)

STA. 24+93.43, 31.9' RT.
TO STA. 25+05.49, 32.0' LT.
INSTALL 36" X 65' PPP



24+75.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN
17261.00

HIGHWAY PLANS

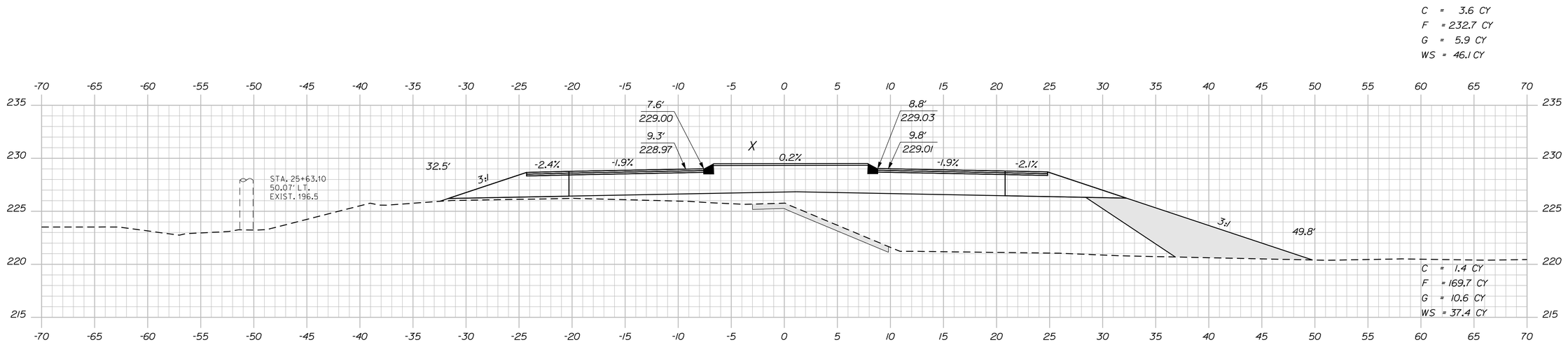
	BY	DATE	SIGNATURE
PROJ. MANAGER	P. MACDONALD		
DESIGN-DETAILED	J. FRENCH	JULY 2012	
CHECKED-REVIEWED	BT TRAN		
DESIGN2-DETAILED2			P.E. NUMBER
DESIGN3-DETAILED3			
REVISIONS 1			DATE
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

ORONO
STILLWATER AVE. SOUTH

CROSS SECTIONS

SHEET NUMBER
37
OF 65

Sta. 24+75.00 to Sta. 25+00.00



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN
17261.00

HIGHWAY PLANS

SIGNATURE

P.E. NUMBER

DATE

PROJ. MANAGER	P. MACDONALD	BY	DATE
DESIGN-DETAILED	J. FRENCH	BT TRAN	JULY 2012
CHECKED-REVIEWED	-----	-----	-----
DESIGN2-DETAILED2	-----	-----	-----
DESIGN3-DETAILED3	-----	-----	-----
REVISIONS 1	-----	-----	-----
REVISIONS 2	-----	-----	-----
REVISIONS 3	-----	-----	-----
REVISIONS 4	-----	-----	-----
FIELD CHANGES	-----	-----	-----

ORONO
STILLWATER AVE. SOUTH

CROSS SECTIONS

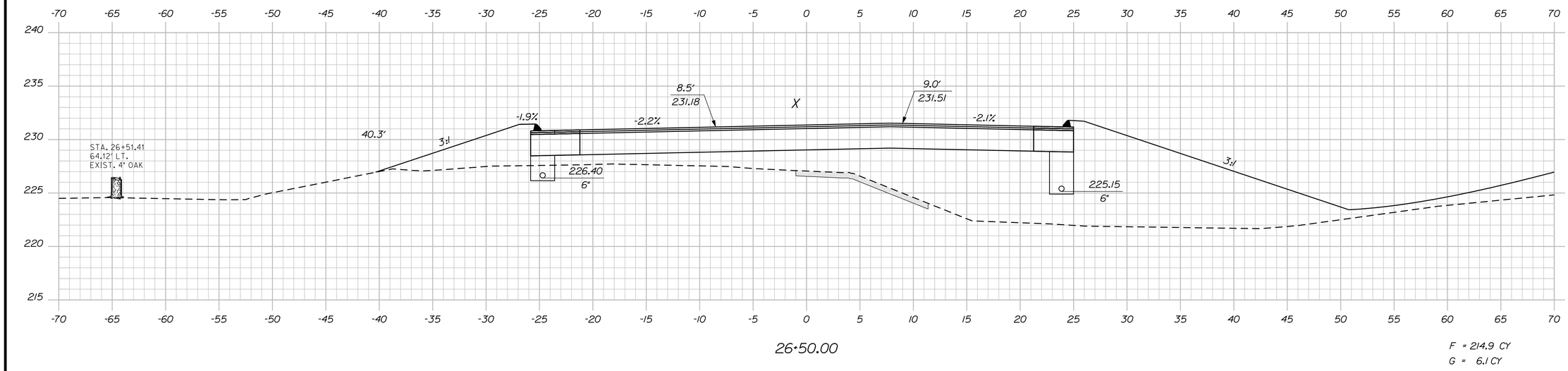
SHEET NUMBER

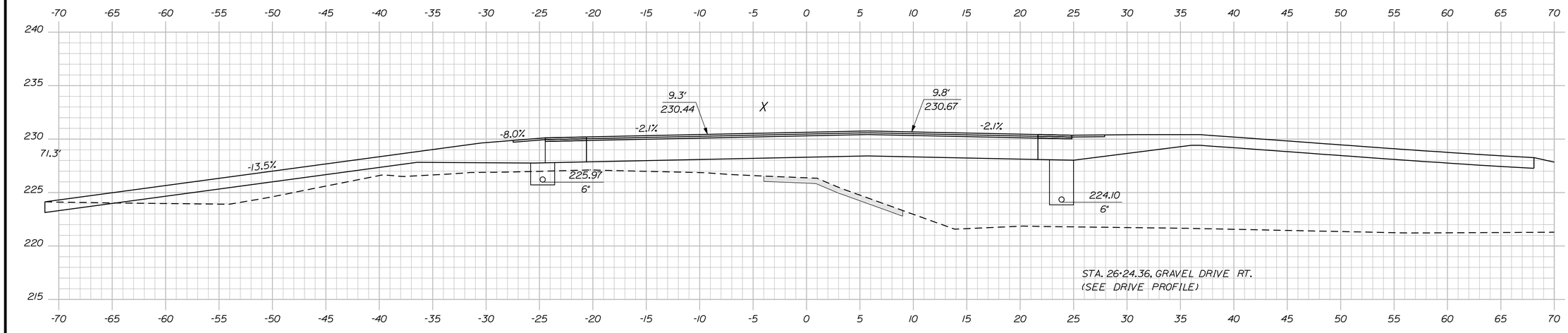
38

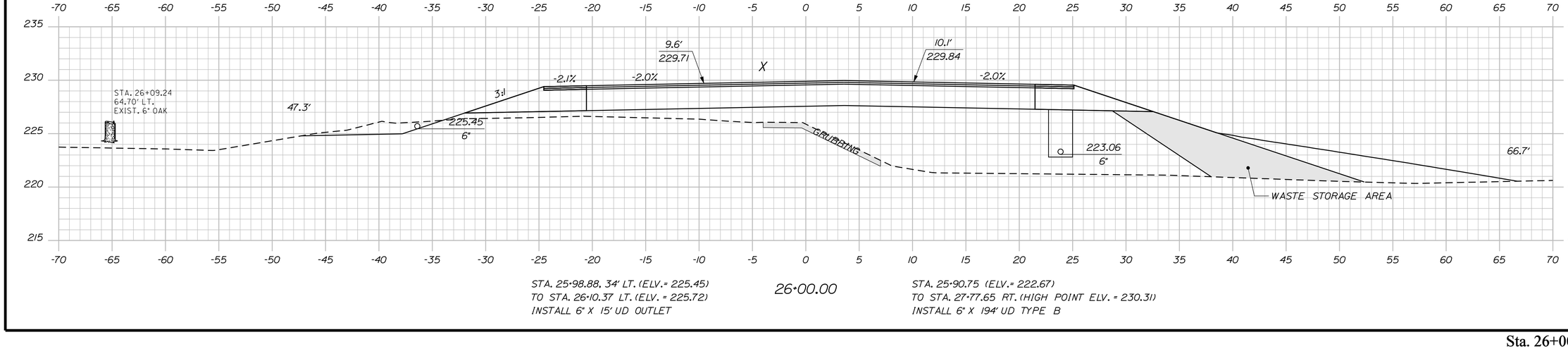
OF 65

Sta. 25+25.00 to Sta. 25+75.00

Filename: ...\038_Xsect_Stillwater_S_25+25_006.dgn Division: HIGHWAY Username: jonathon.french Date:6/22/2012







STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN
17261.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	P. MACDONALD	
DESIGN-DETAILED	J. FRENCH	JULY 2012
CHECKED-REVIEWED	BT TRAN	-----
DESIGN2-DETAILED2	-----	-----
DESIGN3-DETAILED3	-----	-----
REVISIONS 1	-----	-----
REVISIONS 2	-----	-----
REVISIONS 3	-----	-----
REVISIONS 4	-----	-----
FIELD CHANGES	-----	-----

SIGNATURE

P.E. NUMBER

DATE

ORONO
STILLWATER AVE. SOUTH

CROSS SECTIONS

SHEET NUMBER

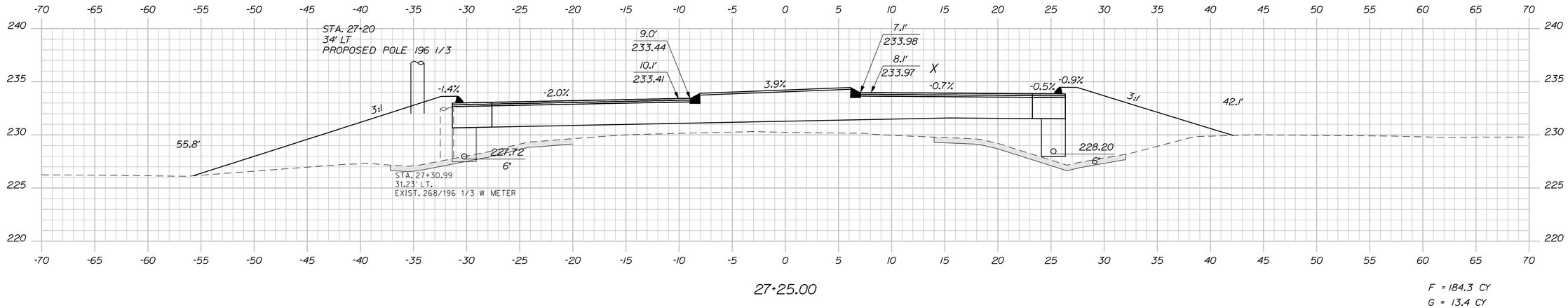
39

OF 65

Sta. 26+00.00 to Sta. 26+50.00

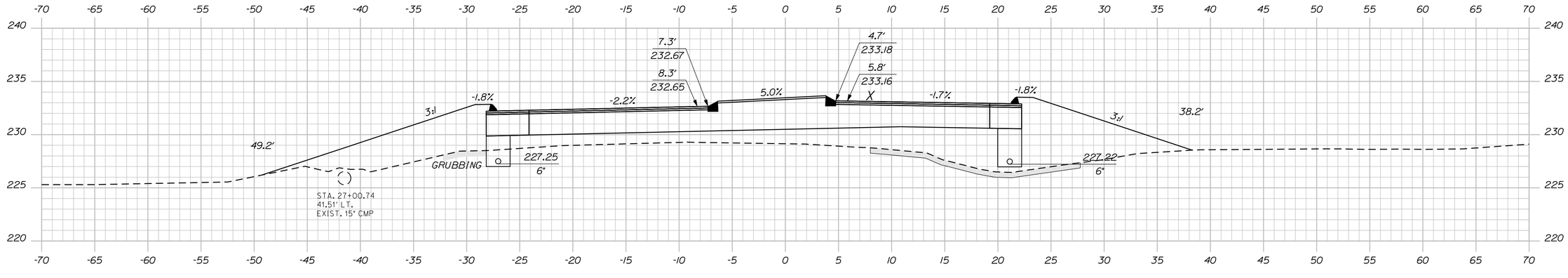
Filename: ...\039_Xsect_Stillwater_S_26+00_007.dgn Username: jonathon.french Date:6/22/2012
Division: HIGHWAY

Filename: ...\040_Xsect_Stillwater_S_26+75_008.dgn Division: HIGHWAY Username: jonathon.french Date:6/22/2012



27+25.00

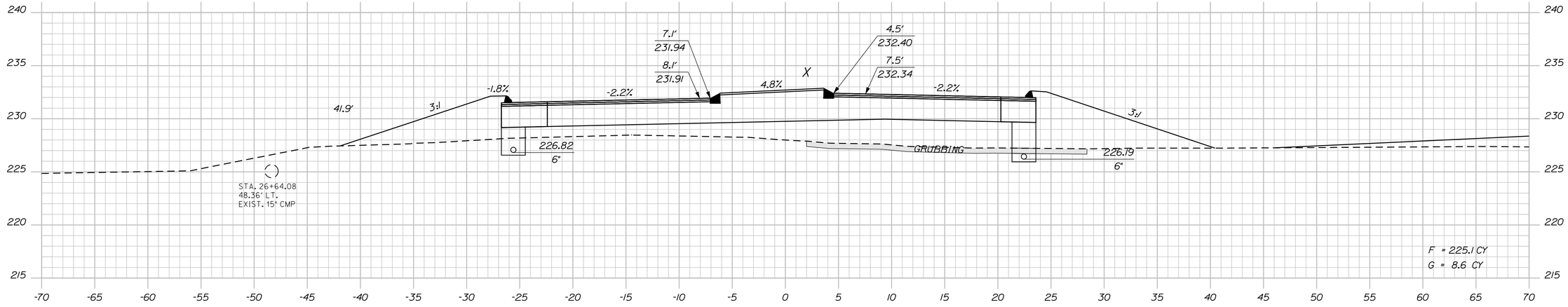
F = 184.3 CY
G = 13.4 CY



STA. 27+00.00 TO STA. 27+25.00 LT.
GRUBBING IN FILL

27+00.00

F = 159.9 CY
G = 11.2 CY



26+75.00

F = 225.1 CY
G = 8.6 CY

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN
17261.00

HIGHWAY PLANS

PROJ. MANAGER	P. MACDONALD	BY	DATE
DESIGN-DETAILED	J. FRENCH	BT TRAN	JULY 2012
CHECKED-REVIEWED	-----	-----	-----
DESIGN2-DETAILED2	-----	-----	-----
DESIGN3-DETAILED3	-----	-----	-----
REVISIONS 1	-----	-----	-----
REVISIONS 2	-----	-----	-----
REVISIONS 3	-----	-----	-----
REVISIONS 4	-----	-----	-----
FIELD CHANGES	-----	-----	-----

SIGNATURE

P.E. NUMBER

DATE

ORONO
STILLWATER AVE. SOUTH

CROSS SECTIONS

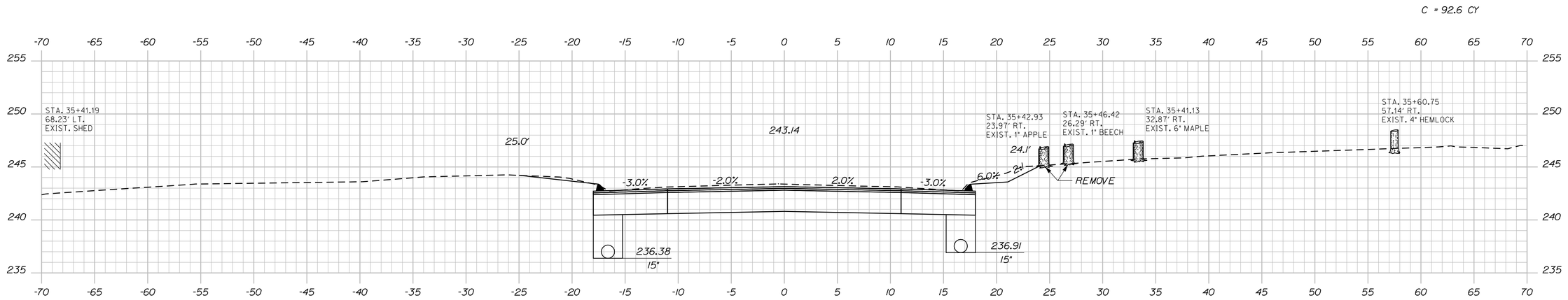
SHEET NUMBER

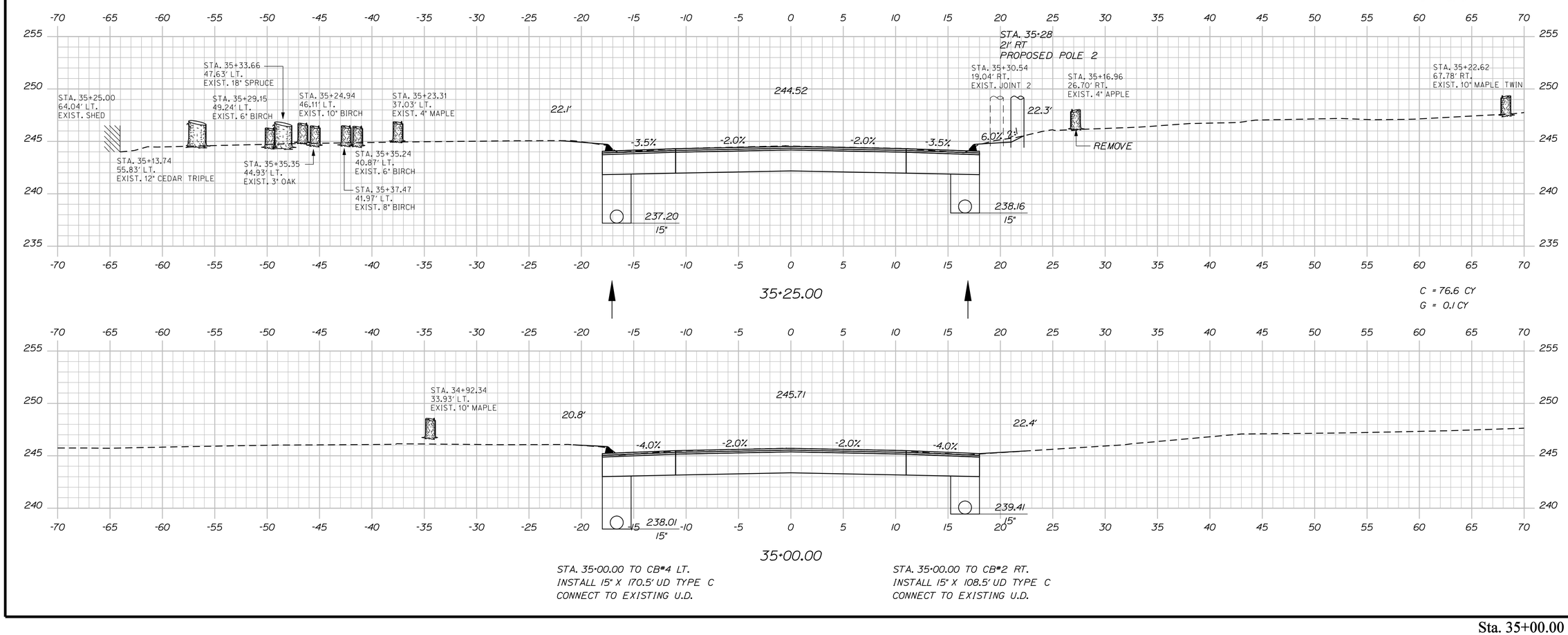
40

OF 65

Sta. 26+75.00 to Sta. 27+25.00

Filename: ...\041_Xsect_Stillwater_N_35+00_001.dgn Username: jonathon.french Date:6/22/2012
Division: HIGHWAY





STA. 35+00.00 TO CB#4 LT.
INSTALL 15" X 170.5' UD TYPE C
CONNECT TO EXISTING U.D.

STA. 35+00.00 TO CB#2 RT.
INSTALL 15" X 108.5' UD TYPE C
CONNECT TO EXISTING U.D.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN
17261.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	P. MACDONALD	
DESIGN-DETAILED	J. FRENCH	JULY 2012
CHECKED-REVIEWED	BT TRAN	
DESIGN2-DETAILED2	-----	-----
DESIGN3-DETAILED3	-----	-----
REVISIONS 1	-----	-----
REVISIONS 2	-----	-----
REVISIONS 3	-----	-----
REVISIONS 4	-----	-----
FIELD CHANGES	-----	-----

SIGNATURE

P.E. NUMBER

DATE

ORONO
STILLWATER AVE. NORTH

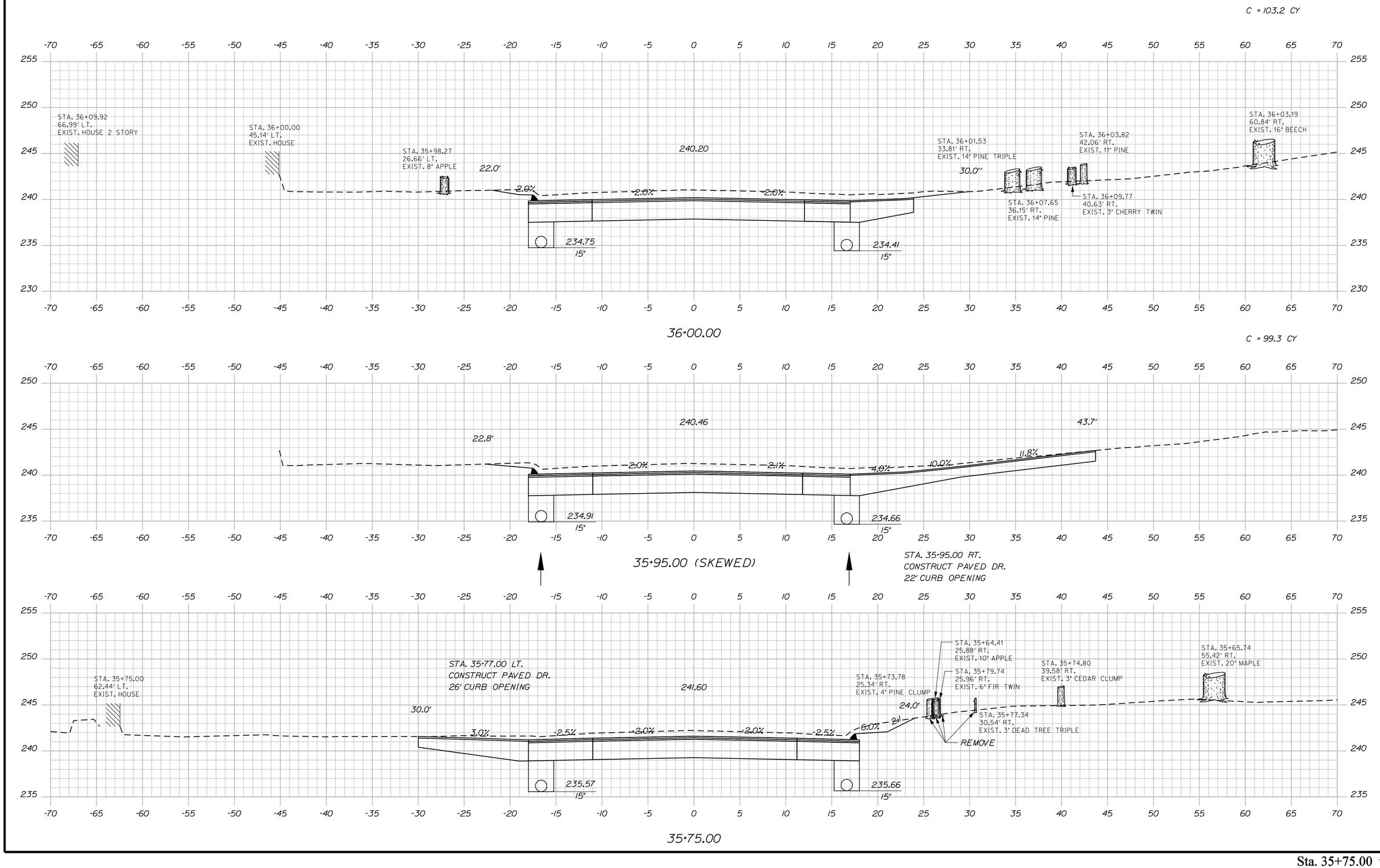
CROSS SECTIONS

SHEET NUMBER

41

OF 65

Sta. 35+00.00 to Sta. 35+50.00



Sta. 35+75.00 to Sta. 36+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN
17261.00

HIGHWAY PLANS

PROJ. MANAGER	P. MACDONALD	BY	DATE
DESIGN-DETAILED	J. FRENCH	BT TRAN	JULY 2012
CHECKED-REVIEWED	-----	-----	-----
DESIGN2-DETAILED2	-----	-----	-----
DESIGN3-DETAILED3	-----	-----	-----
REVISIONS 1	-----	-----	-----
REVISIONS 2	-----	-----	-----
REVISIONS 3	-----	-----	-----
REVISIONS 4	-----	-----	-----
FIELD CHANGES	-----	-----	-----

SIGNATURE

P.E. NUMBER

DATE

ORONO
STILLWATER AVE. NORTH

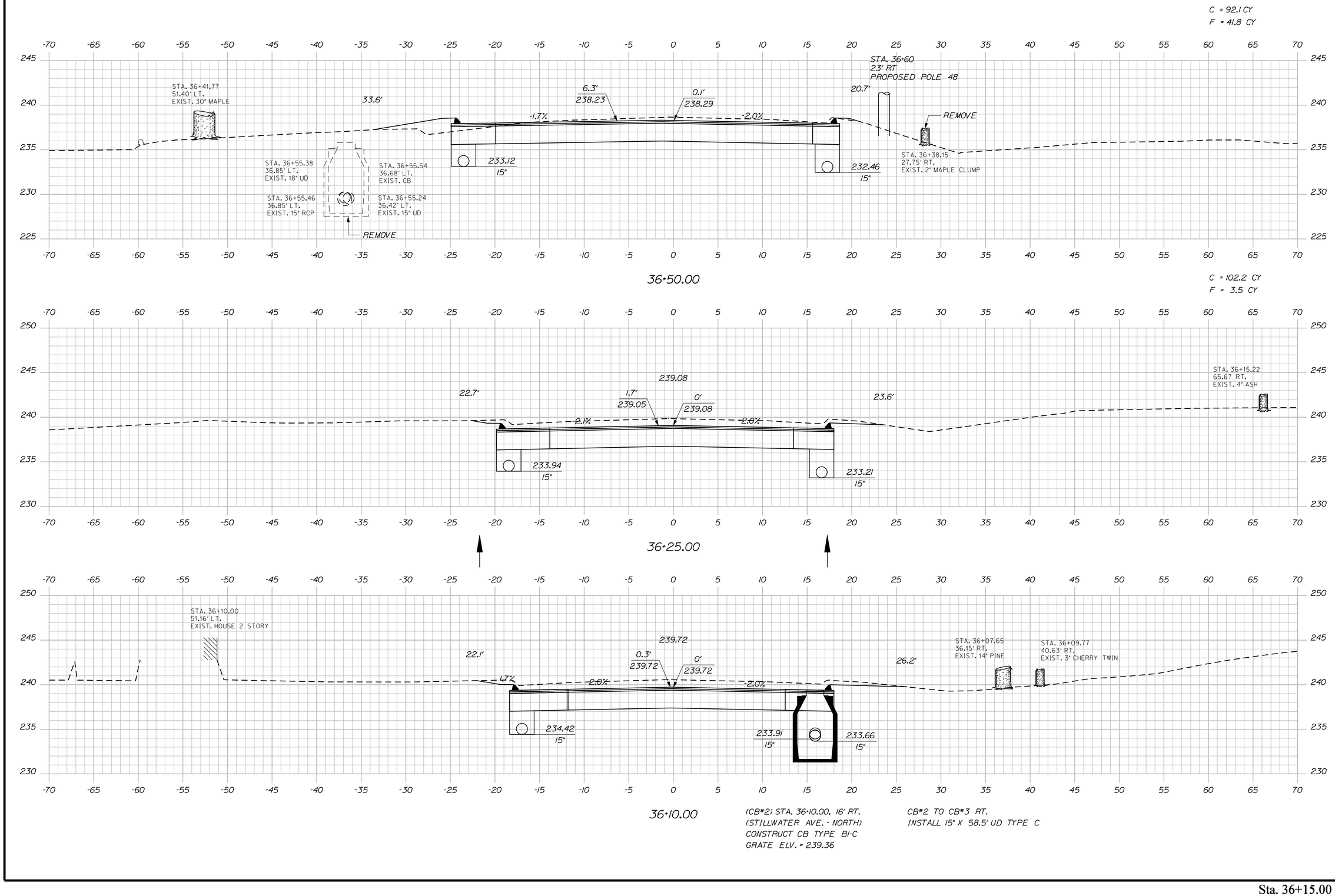
CROSS SECTIONS

SHEET NUMBER

42

OF 65

Filename: ...\042_Xsect_Stillwater_N_35+75_002.dgn Division: HIGHWAY Username: jonathon.french Date:6/22/2012



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN
17261.00

HIGHWAY PLANS

PROJ. MANAGER	P. MACDONALD		
DESIGN-DETAILED	J. FRENCH	BT TRAN	JULY 2012
CHECKED-REVIEWED	-----	-----	-----
DESIGN2-DETAILED2	-----	-----	-----
DESIGN3-DETAILED3	-----	-----	-----
REVISIONS 1	-----	-----	-----
REVISIONS 2	-----	-----	-----
REVISIONS 3	-----	-----	-----
REVISIONS 4	-----	-----	-----
FIELD CHANGES	-----	-----	-----

SIGNATURE

P.E. NUMBER

DATE

ORONO
STILLWATER AVE. NORTH

CROSS SECTIONS

SHEET NUMBER

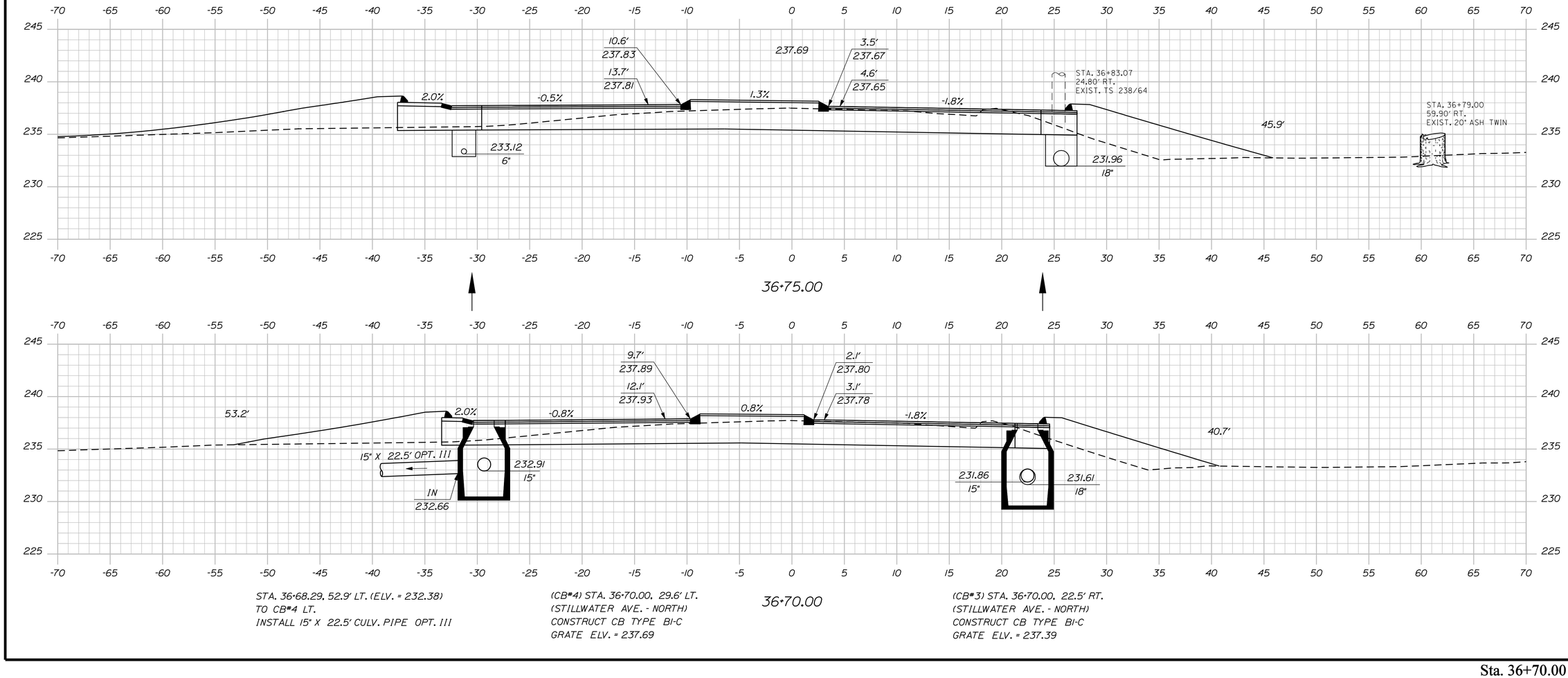
43

OF 65

Sta. 36+15.00 to Sta. 36+50.00

Filename: ...\043_Xsect_Stillwater_N_36+15_003.dgn Division: HIGHWAY Username: jonathon.french Date:6/22/2012

Filename: ...\044_Xsect_Stillwater_N_36+70_004.dgn Username: jonathon.french Division: HIGHWAY Date:6/22/2012



STA. 36+68.29, 52.9' LT. (ELV. = 232.38)
TO CB#4 LT.
INSTALL 15" X 22.5' CULV. PIPE OPT. III

(CB#4) STA. 36+70.00, 29.6' LT.
(STILLWATER AVE. - NORTH)
CONSTRUCT CB TYPE BI-C
GRATE ELV. = 237.69

(CB#3) STA. 36+70.00, 22.5' RT.
(STILLWATER AVE. - NORTH)
CONSTRUCT CB TYPE BI-C
GRATE ELV. = 237.39

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN
17261.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	P. MACDONALD	
DESIGN-DETAILED	BT TRAN	JULY 2012
CHECKED-REVIEWED	J. FRENCH	-----
DESIGN2-DETAILED2	-----	-----
DESIGN3-DETAILED3	-----	-----
REVISIONS 1	-----	-----
REVISIONS 2	-----	-----
REVISIONS 3	-----	-----
REVISIONS 4	-----	-----
FIELD CHANGES	-----	-----

SIGNATURE

P.E. NUMBER

DATE

ORONO
STILLWATER AVE. NORTH

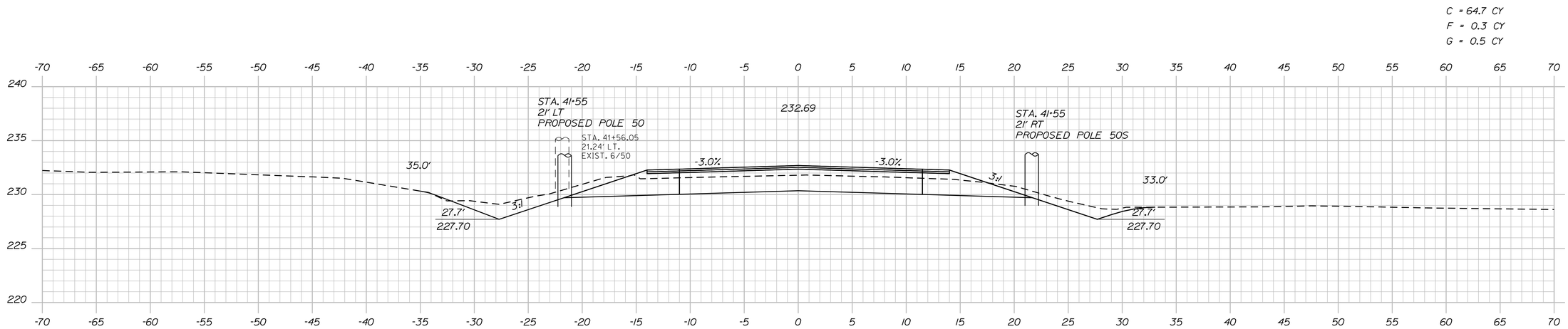
CROSS SECTIONS

SHEET NUMBER

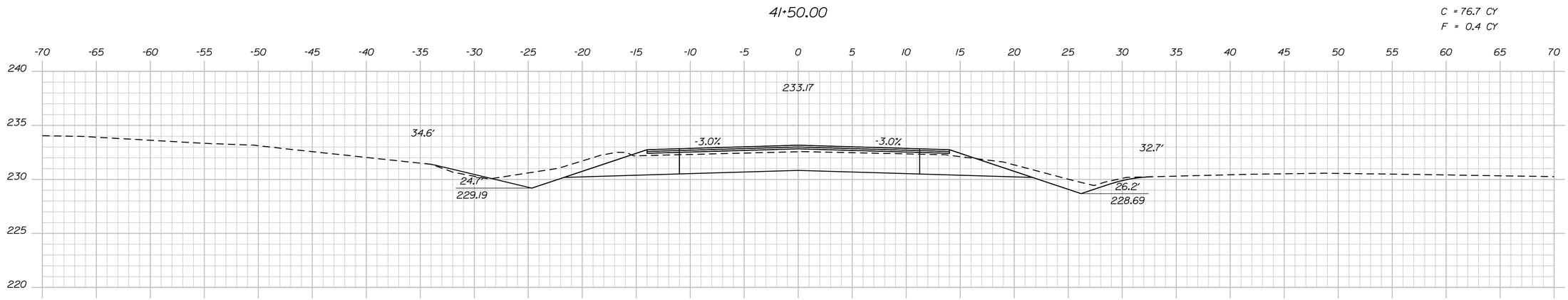
44

OF 65

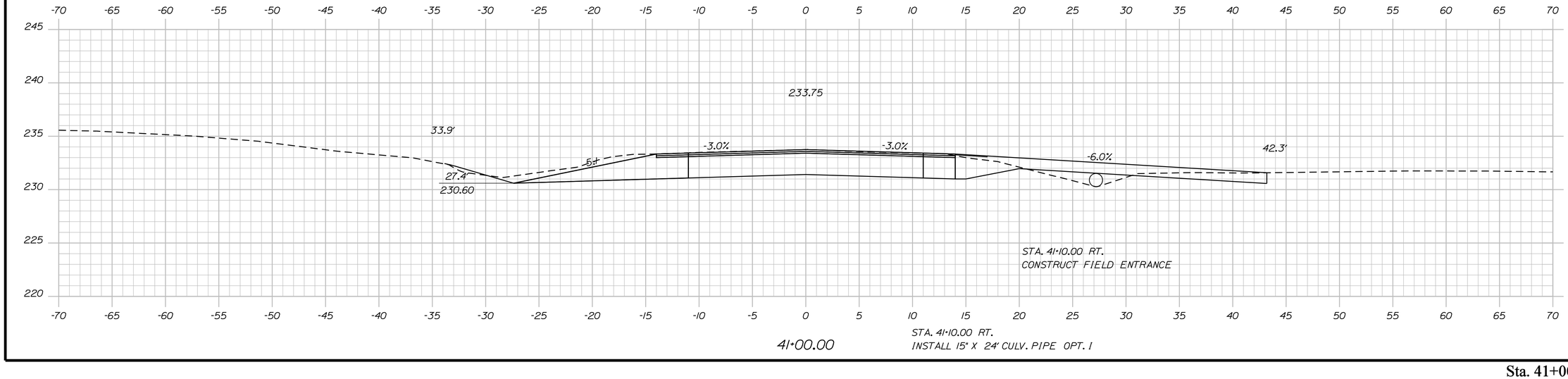
Sta. 36+70.00 to Sta. 36+75.00



41+50.00



41+25.00



41+00.00

STA. 41+10.00 RT.
INSTALL 15" X 24' CULV. PIPE OPT. 1

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN
17261.00

HIGHWAY PLANS

PROJ. MANAGER	P. MACDONALD	BY	DATE
DESIGN-DETAILED	J. FRENCH	BT TRAN	JULY 2012
CHECKED-REVIEWED	-----	-----	-----
DESIGN2-DETAILED2	-----	-----	-----
DESIGN3-DETAILED3	-----	-----	-----
REVISIONS 1	-----	-----	-----
REVISIONS 2	-----	-----	-----
REVISIONS 3	-----	-----	-----
REVISIONS 4	-----	-----	-----
FIELD CHANGES	-----	-----	-----

SIGNATURE

P.E. NUMBER

DATE

ORONO
FOREST AVE. WEST

CROSS SECTIONS

SHEET NUMBER

45

OF 65

Sta. 41+00.00 to Sta. 41+50.00

Filename: ...\045_Xsect_Forest Ave_W_41+00_001.dgn Username: jonathon.french Date:6/22/2012
Division: HIGHWAY

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN
17261.00

HIGHWAY PLANS

PROJ. MANAGER	P. MACDONALD	BY	DATE
DESIGN-DETAILED	J. FRENCH	BT TRAN	JULY 2012
CHECKED-REVIEWED	-----	-----	-----
DESIGN2-DETAILED2	-----	-----	-----
DESIGN3-DETAILED3	-----	-----	-----
REVISIONS 1	-----	-----	-----
REVISIONS 2	-----	-----	-----
REVISIONS 3	-----	-----	-----
REVISIONS 4	-----	-----	-----
FIELD CHANGES	-----	-----	-----

SIGNATURE

P.E. NUMBER

DATE

ORONO
FOREST AVE. WEST

CROSS SECTIONS

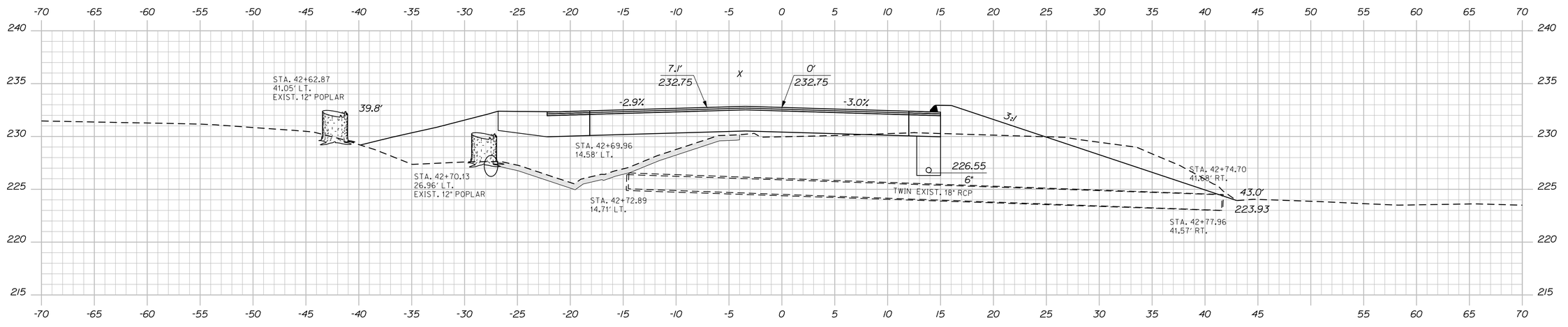
SHEET NUMBER

46

OF 65

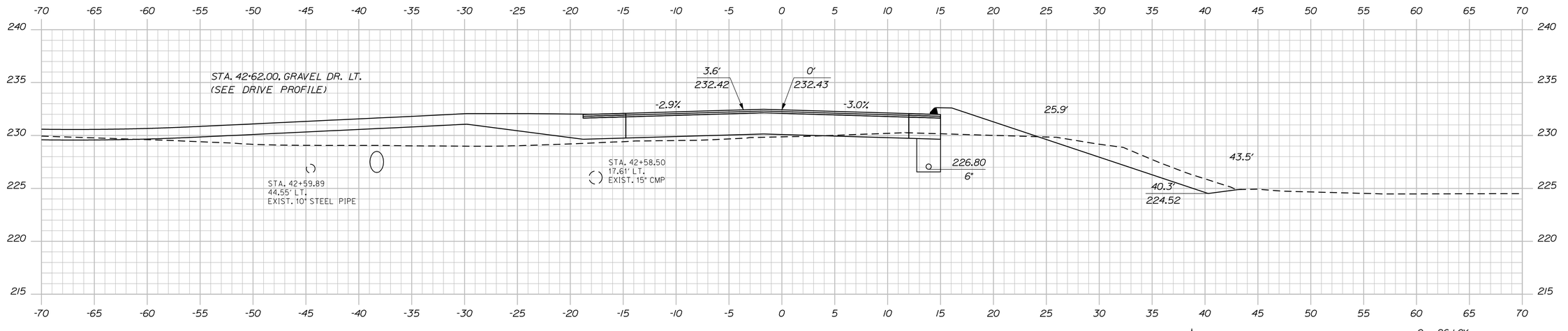
Sta. 41+75.00 to Sta. 42+00.00

Filename: ...\046_Xsect_Forest Ave_W_41+75_002.dgn Username: jonathon.french Date:6/28/2012 Division: HIGHWAY



42+75.00

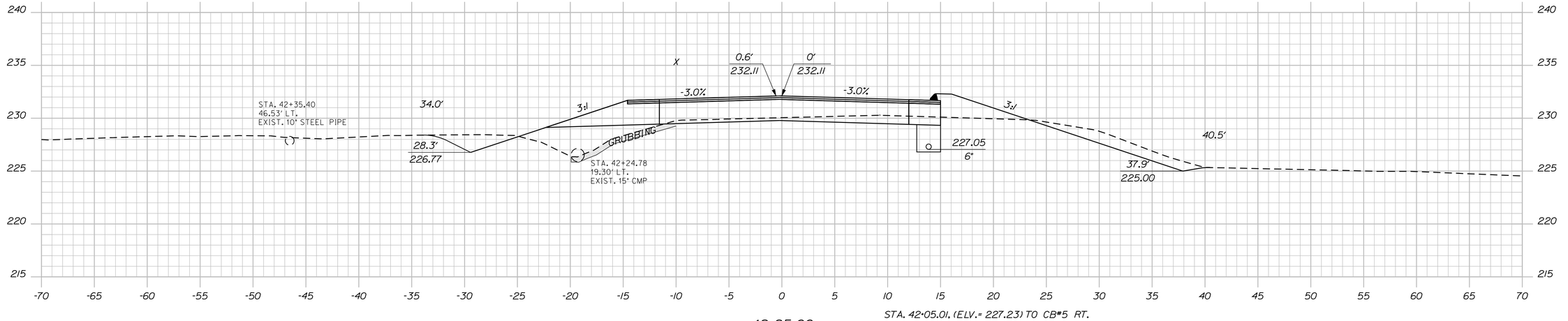
C = 21.4 CY
F = 38.1 CY
G = 5.5 CY



STA. 42+36.01, 45.3' LT. TO CB#6 LT.
INSTALL 24" X 63' PPP CULVERT

42+50.00

C = 26.1 CY
F = 22.9 CY
G = 2.2 CY



42+25.00

STA. 42+05.01, (ELV.= 227.23) TO CB#5 RT.
INSTALL 6" X 71.5' UD TYPE B

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN
17261.00

HIGHWAY PLANS

PROJ. MANAGER	P. MACDONALD	BY	DATE
DESIGN-DETAILED	J. FRENCH	BT TRAN	JULY 2012
CHECKED-REVIEWED	-----	-----	-----
DESIGN2-DETAILED2	-----	-----	-----
DESIGN3-DETAILED3	-----	-----	-----
REVISIONS 1	-----	-----	-----
REVISIONS 2	-----	-----	-----
REVISIONS 3	-----	-----	-----
REVISIONS 4	-----	-----	-----
FIELD CHANGES	-----	-----	-----

SIGNATURE

P.E. NUMBER

DATE

ORONO
FOREST AVE. WEST

CROSS SECTIONS

SHEET NUMBER

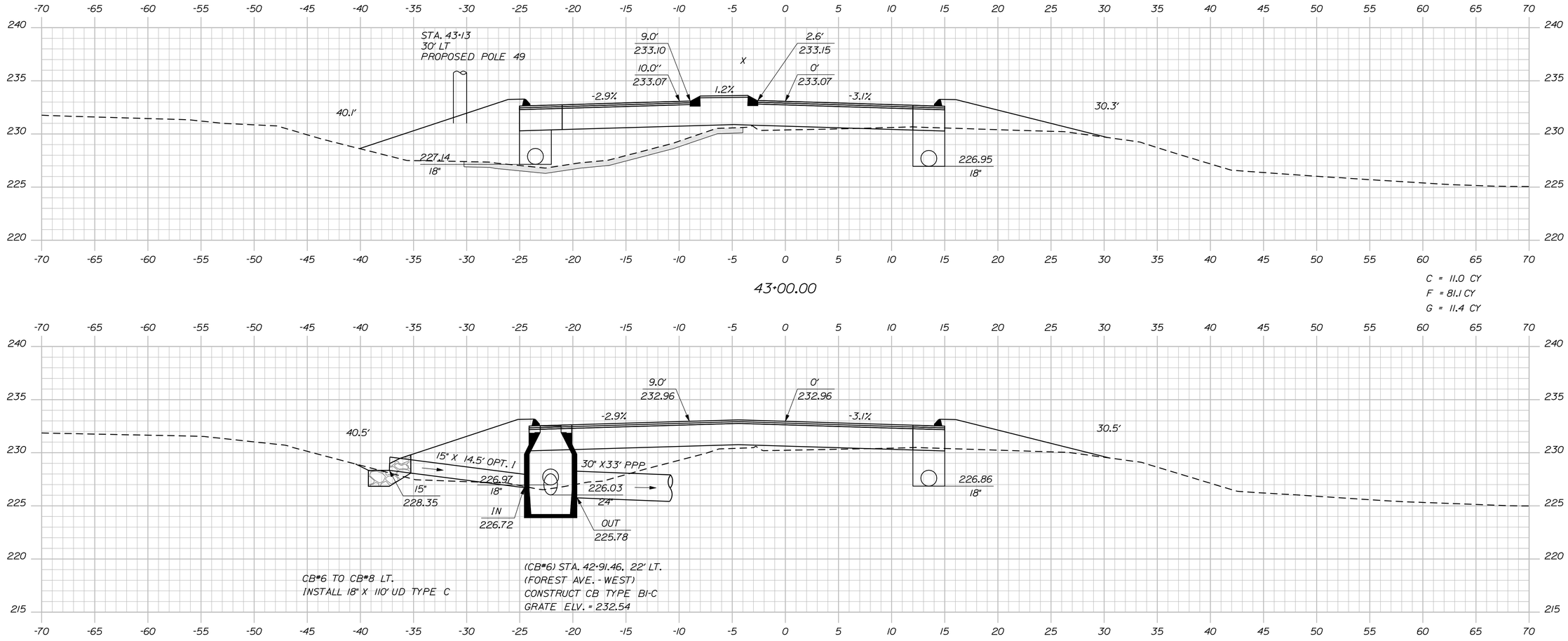
47

OF 65

Sta. 42+25.00 to Sta. 42+75.00

Filename: ...\047_Xsect_Forest Ave_W_42+25_00 to 75.dgn Username: jonathon.french Date:6/22/2012

Division: HIGHWAY



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN
17261.00

HIGHWAY PLANS

PROJ. MANAGER	P. MACDONALD	BY	DATE	
DESIGN-DETAILED	J. FRENCH	BT TRAN	JULY 2012	
CHECKED-REVIEWED	-----	-----	-----	SIGNATURE
DESIGN2-DETAILED2	-----	-----	-----	
DESIGN3-DETAILED3	-----	-----	-----	P.E. NUMBER
REVISIONS 1	-----	-----	-----	
REVISIONS 2	-----	-----	-----	
REVISIONS 3	-----	-----	-----	DATE
REVISIONS 4	-----	-----	-----	
FIELD CHANGES	-----	-----	-----	

ORONO
FOREST AVE. WEST

CROSS SECTIONS

SHEET NUMBER

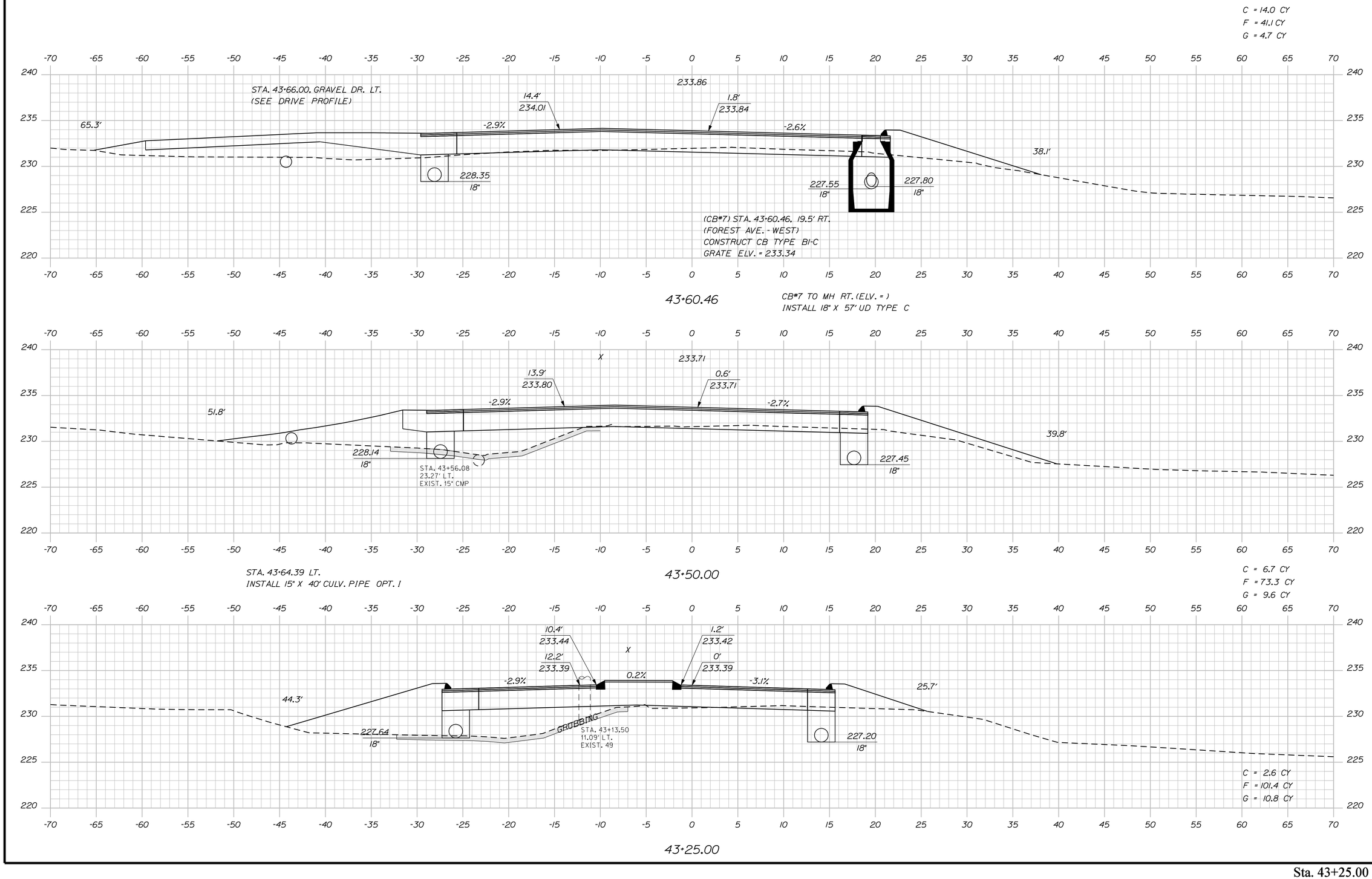
48

OF 65

Sta. 42+80.23 to Sta. 43+00.00

Filename: ...\048_Xsect_Forest Ave_W_42+80_00400.dgn Username: jonathon.french Date:6/22/2012 Design: HIGHWAY

Filename: ...\049_Xsect_Forest Ave_W_43+25_00500.dgn Username: jonathon.french Date:6/22/2012
Division: HIGHWAY



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN
17261.00

HIGHWAY PLANS

PROJ. MANAGER	P. MACDONALD		
DESIGN-DETAILED	J. FRENCH	BT TRAN	JULY 2012
CHECKED-REVIEWED	-----	-----	-----
DESIGN2-DETAILED2	-----	-----	-----
DESIGN3-DETAILED3	-----	-----	-----
REVISIONS 1	-----	-----	-----
REVISIONS 2	-----	-----	-----
REVISIONS 3	-----	-----	-----
REVISIONS 4	-----	-----	-----
FIELD CHANGES	-----	-----	-----

SIGNATURE

P.E. NUMBER

DATE

ORONO
FOREST AVE. WEST

CROSS SECTIONS

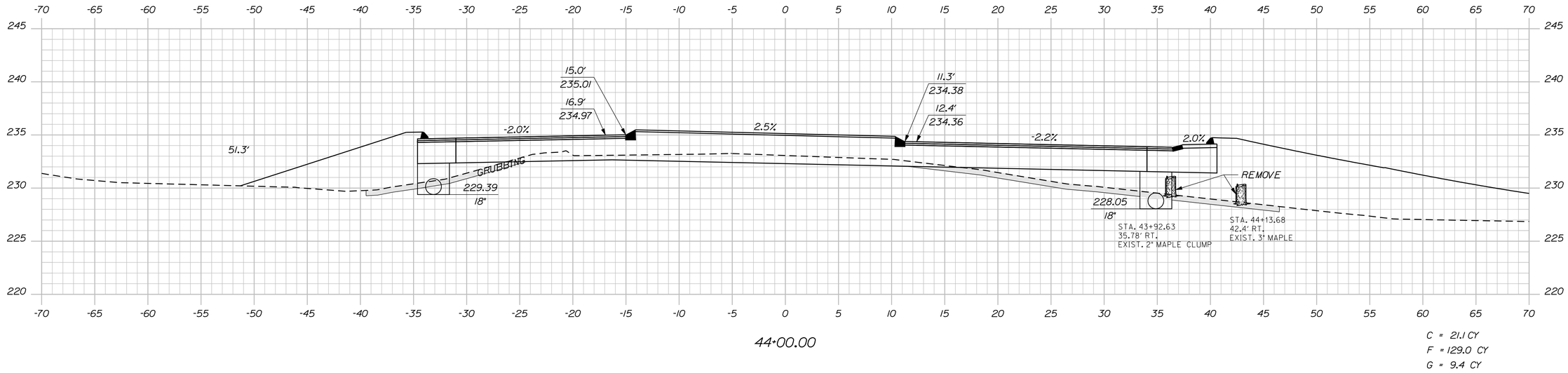
SHEET NUMBER

49

OF 65

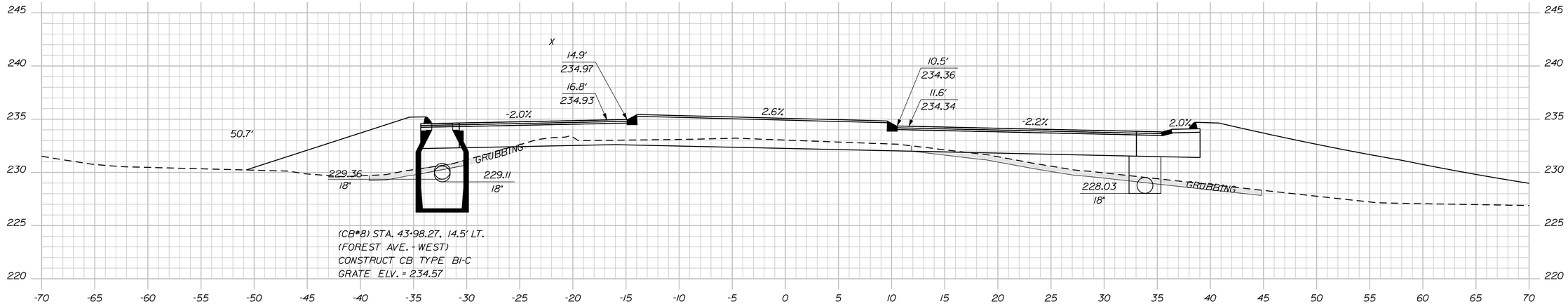
Sta. 43+25.00 to Sta. 43+60.46

Filename: ...\050_Xsect_Forest Ave_W_43+75_00.dgn Username: jonathon.french Date:6/22/2012
Division: HIGHWAY



44+00.00

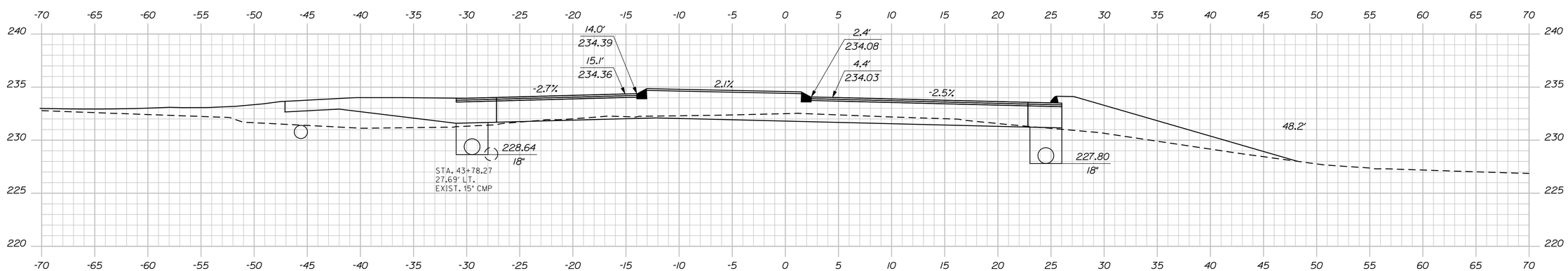
C = 21.1 CY
F = 129.0 CY
G = 9.4 CY



CB#8 LT. TO CB#3 RT.
INSTALL 18" X 89.5' UD TYPE C

43+98.27

STA. 43+98.27 TO STA. 44+00.00 RT.
GRUBBING IN FILL



43+75.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN
17261.00

HIGHWAY PLANS

PROJ. MANAGER	P. MACDONALD		
DESIGN-DETAILED	J. FRENCH	BT TRAN	JULY 2012
CHECKED-REVIEWED	-----	-----	-----
DESIGN2-DETAILED2	-----	-----	-----
DESIGN3-DETAILED3	-----	-----	-----
REVISIONS 1	-----	-----	-----
REVISIONS 2	-----	-----	-----
REVISIONS 3	-----	-----	-----
REVISIONS 4	-----	-----	-----
FIELD CHANGES	-----	-----	-----

SIGNATURE

P.E. NUMBER

DATE

ORONO
FOREST AVE. WEST

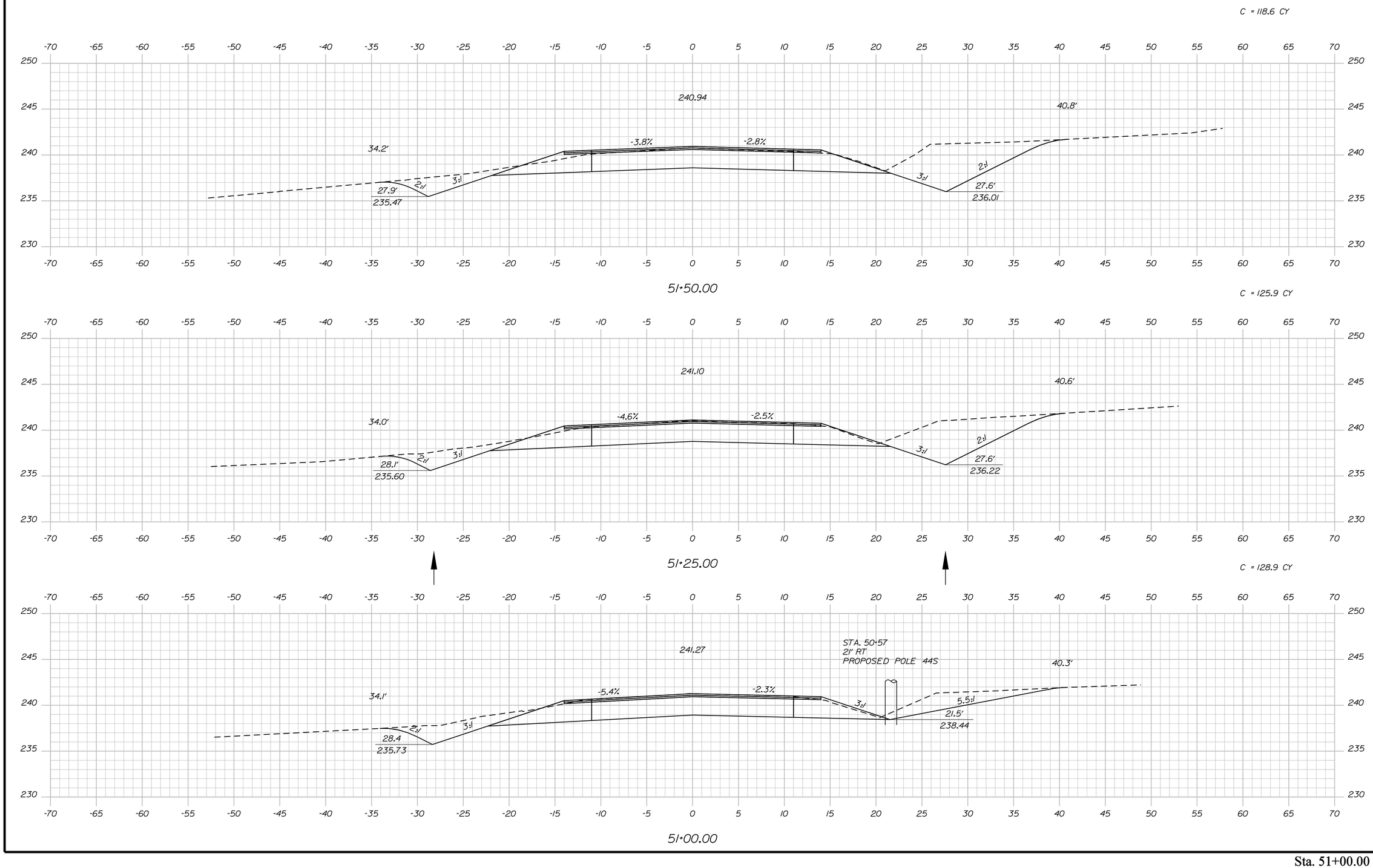
CROSS SECTIONS

SHEET NUMBER

50

OF 65

Sta. 43+75.00 to Sta. 44+00.00



Sta. 51+00.00 to Sta. 51+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN
17261.00

HIGHWAY PLANS

PROJ. MANAGER	P. MACDONALD	BY	DATE
DESIGN-DETAILED	J. FRENCH	BT TRAN	JULY 2012
CHECKED-REVIEWED	-----	-----	-----
DESIGN2-DETAILED2	-----	-----	-----
DESIGN3-DETAILED3	-----	-----	-----
REVISIONS 1	-----	-----	-----
REVISIONS 2	-----	-----	-----
REVISIONS 3	-----	-----	-----
REVISIONS 4	-----	-----	-----
FIELD CHANGES	-----	-----	-----

SIGNATURE

P.E. NUMBER

DATE

ORONO
FOREST AVE. EAST

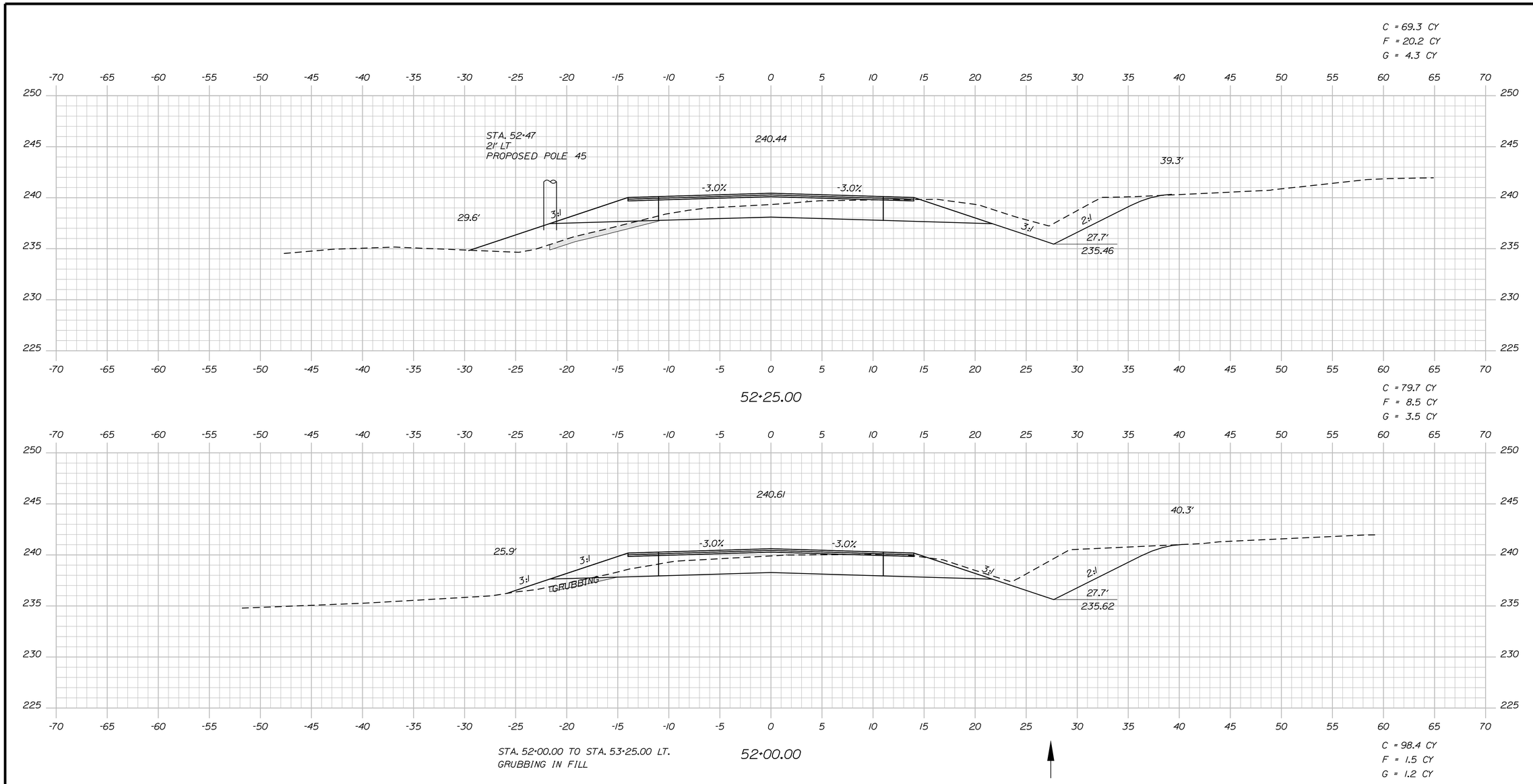
CROSS SECTIONS

SHEET NUMBER

51

OF 65

Filename: ...\051_Xsect_Forest Ave_E_51+00_001.dgn Division: HIGHWAY Username: jonathon.french Date:6/22/2012



Filename: ...\052_Xsect_Forest Ave_E_51+75_002.dgn Username: jonathon.french Date:6/22/2012

Division: HIGHWAY

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN
17261.00

HIGHWAY PLANS

PROJ. MANAGER	P. MACDONALD		
DESIGN-DETAILED	J. FRENCH	BY	DATE
CHECKED-REVIEWED	-----	BT TRAN	JULY 2012
DESIGN2-DETAILED2	-----	-----	-----
DESIGN3-DETAILED3	-----	-----	-----
REVISIONS 1	-----	-----	-----
REVISIONS 2	-----	-----	-----
REVISIONS 3	-----	-----	-----
REVISIONS 4	-----	-----	-----
FIELD CHANGES	-----	-----	-----

SIGNATURE

P.E. NUMBER

DATE

ORONO
FOREST AVE. EAST

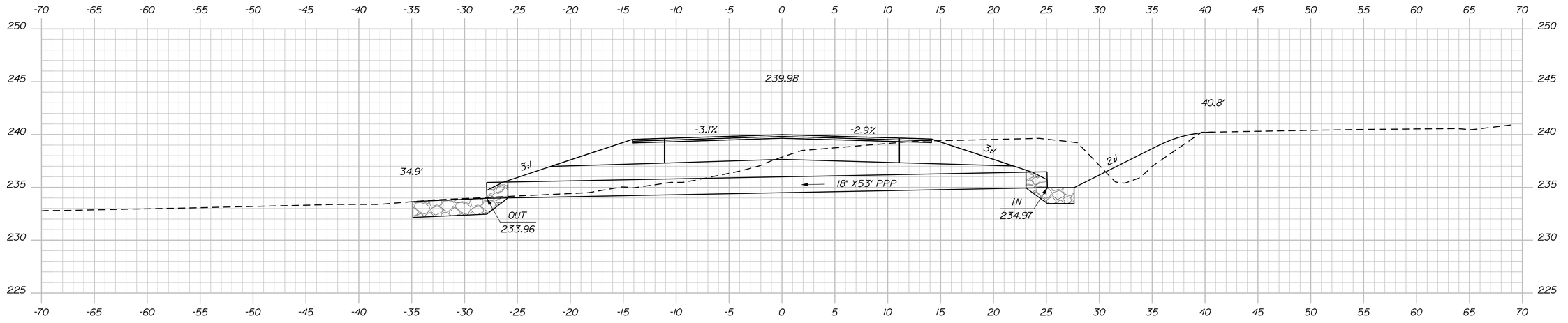
CROSS SECTIONS

SHEET NUMBER

52

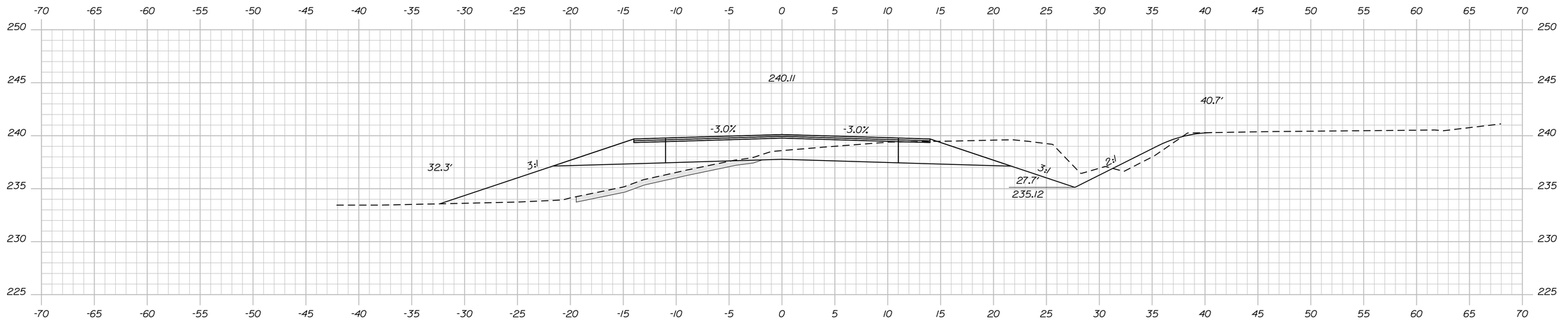
OF 65

Sta. 51+75.00 to Sta. 52+25.00



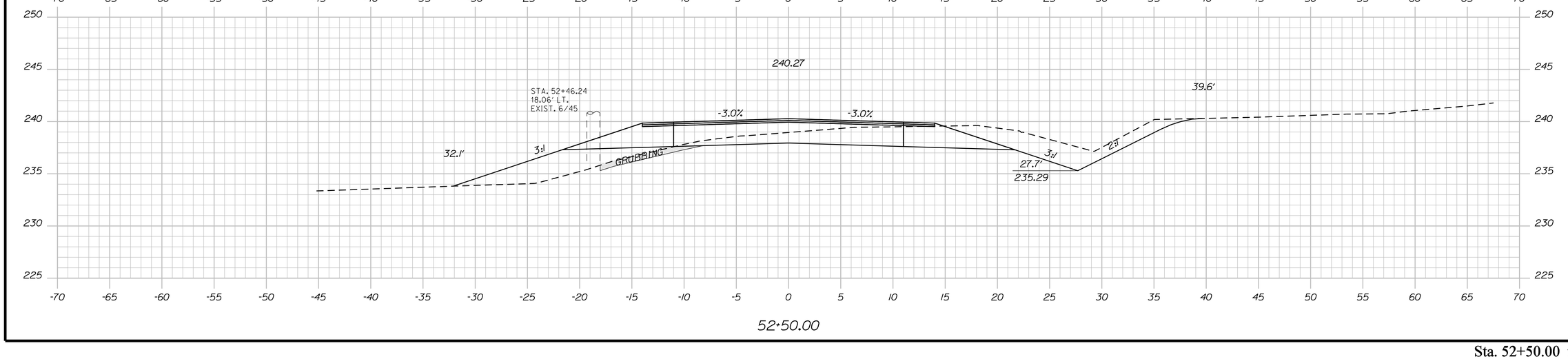
52+91.65 (SKEW)

STA. 52+88.17, 26.3' LT.
TO STA. 52+95.36, 26.2' RT.
INSTALL 18" X53' PPP



52+75.00

C = 60.7 CY
F = 35.3 CY
G = 5.9 CY



52+50.00

Sta. 52+50.00 to Sta. 52+91.65

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN
17261.00

HIGHWAY PLANS

PROJ. MANAGER	P. MACDONALD	BY	DATE	
DESIGN-DETAILED	J. FRENCH	BT TRAN	JULY 2012	
CHECKED-REVIEWED	-----	-----	-----	SIGNATURE
DESIGN2-DETAILED2	-----	-----	-----	
DESIGN3-DETAILED3	-----	-----	-----	P.E. NUMBER
REVISIONS 1	-----	-----	-----	
REVISIONS 2	-----	-----	-----	
REVISIONS 3	-----	-----	-----	DATE
REVISIONS 4	-----	-----	-----	
FIELD CHANGES	-----	-----	-----	

ORONO
FOREST AVE. EAST

CROSS SECTIONS

SHEET NUMBER

53

OF 65

Filename: ...\053_Xsect_Forest Ave_E_52+50_003.dgn Division: HIGHWAY Username: jonathon.french Date:6/22/2012

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN
17261.00

HIGHWAY PLANS

PROJ. MANAGER	P. MACDONALD		
DESIGN-DETAILED	J. FRENCH	BT TRAN	JULY 2012
CHECKED-REVIEWED	-----	-----	-----
DESIGN2-DETAILED2	-----	-----	-----
DESIGN3-DETAILED3	-----	-----	-----
REVISIONS 1	-----	-----	-----
REVISIONS 2	-----	-----	-----
REVISIONS 3	-----	-----	-----
REVISIONS 4	-----	-----	-----
FIELD CHANGES	-----	-----	-----

SIGNATURE

P.E. NUMBER

DATE

ORONO
FOREST AVE. EAST

CROSS SECTIONS

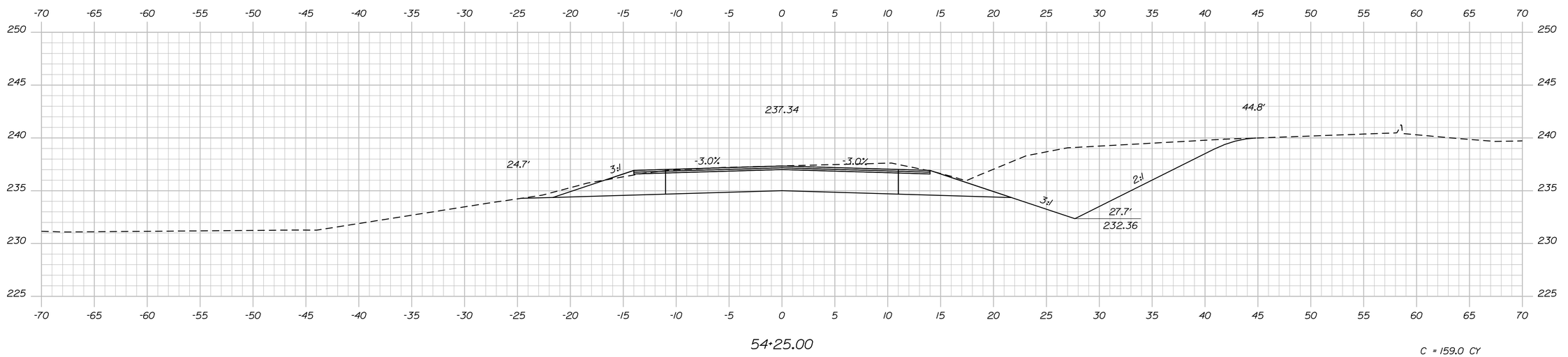
SHEET NUMBER

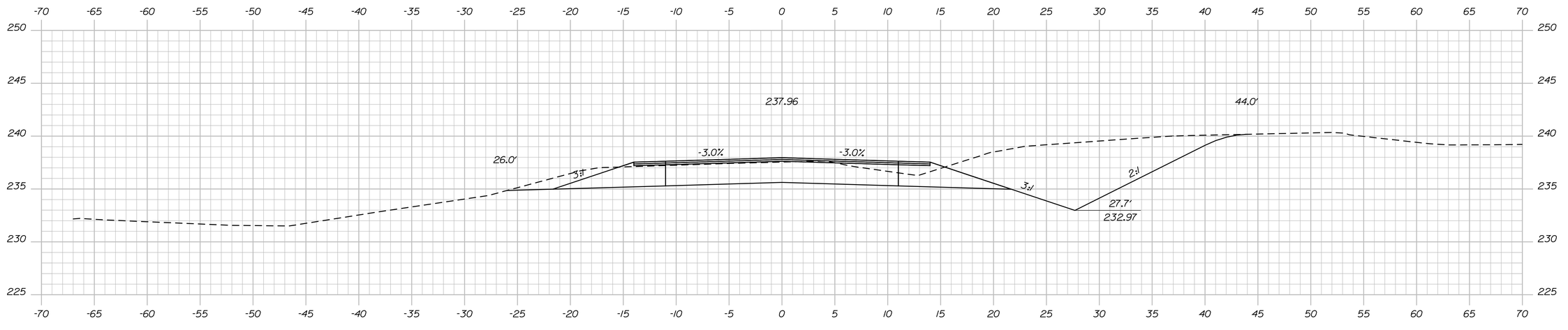
54

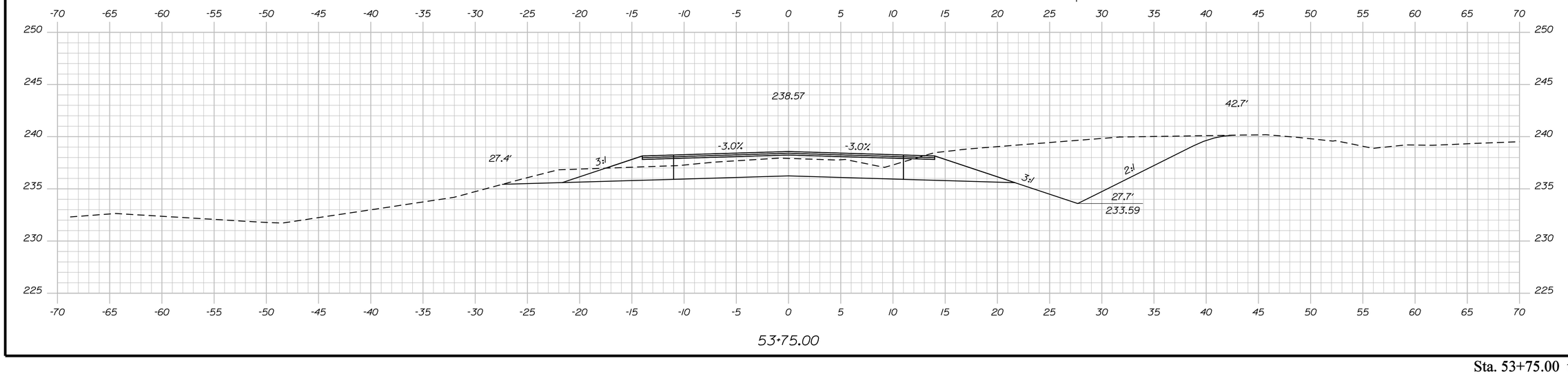
OF 65

Sta. 53+00.00 to Sta. 53+50.00

Filename: ...\054_Xsect_Forest Ave_E_53+00_0040.dgn Division: HIGHWAY Username: jonathon.french Date:6/22/2012







STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN
17261.00

HIGHWAY PLANS

PROJ. MANAGER	P. MACDONALD		
DESIGN-DETAILED	J. FRENCH	BT TRAN	JULY 2012
CHECKED-REVIEWED	-----	-----	-----
DESIGN2-DETAILED2	-----	-----	-----
DESIGN3-DETAILED3	-----	-----	-----
REVISIONS 1	-----	-----	-----
REVISIONS 2	-----	-----	-----
REVISIONS 3	-----	-----	-----
REVISIONS 4	-----	-----	-----
FIELD CHANGES	-----	-----	-----

SIGNATURE

P.E. NUMBER

DATE

ORONO
FOREST AVE. EAST

CROSS SECTIONS

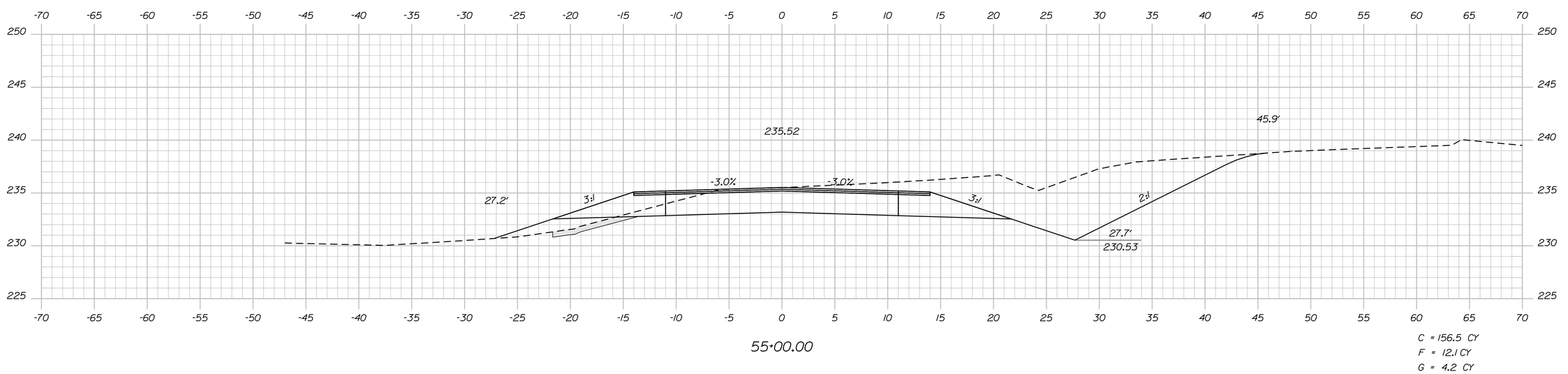
SHEET NUMBER

55

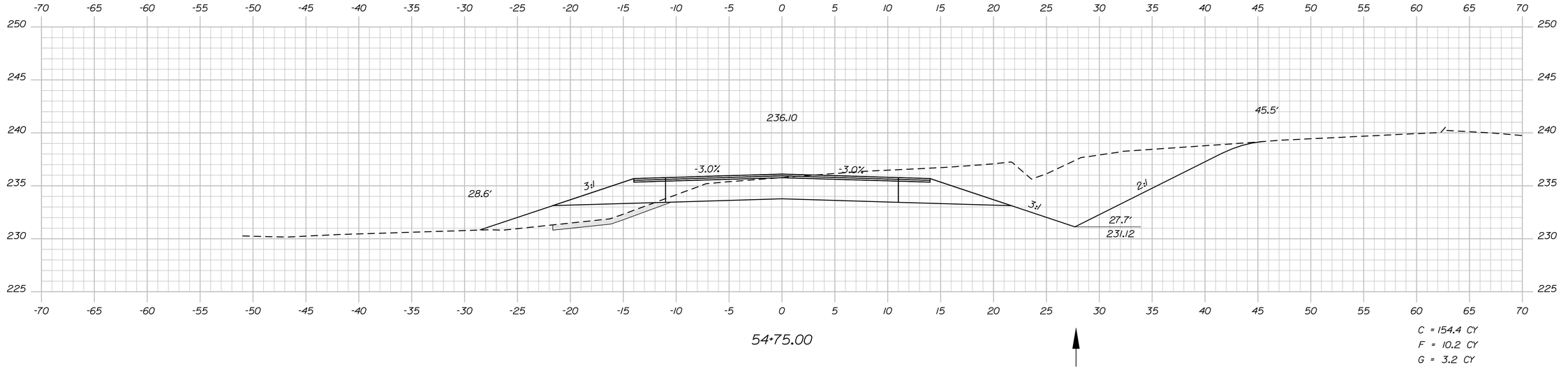
OF 65

Sta. 53+75.00 to Sta. 54+25.00

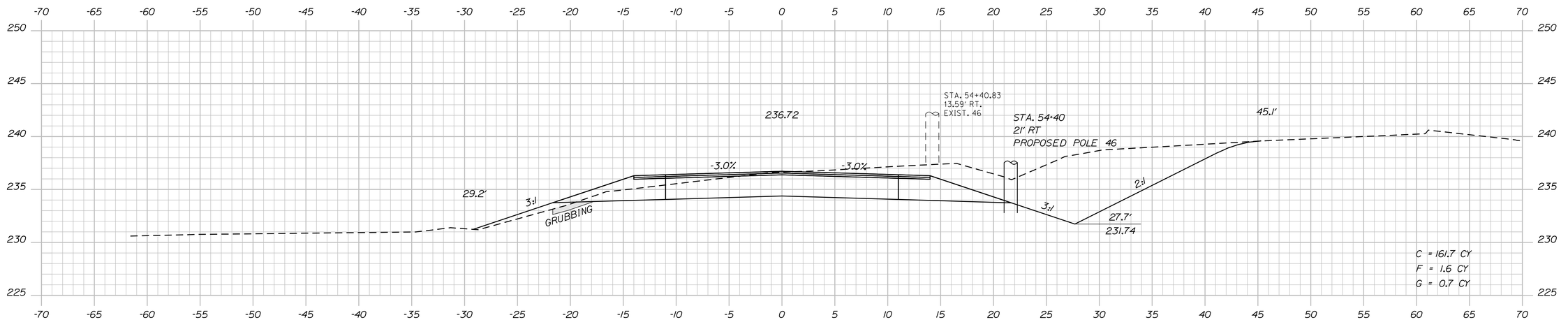
Filename: ...\055_Xsect_Forest Ave_E_53+75_005.dgn Username: jonathon.french Date:6/22/2012
Division: HIGHWAY



55+00.00



54+75.00



STA. 54+50.00 TO STA. 56+00.00 LT.
GRUBBING IN FILL

54+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN
17261.00

HIGHWAY PLANS

PROJ. MANAGER	P. MACDONALD		
DESIGN-DETAILED	J. FRENCH	BT TRAN	JULY 2012
CHECKED-REVIEWED	-----	-----	-----
DESIGN2-DETAILED2	-----	-----	-----
DESIGN3-DETAILED3	-----	-----	-----
REVISIONS 1	-----	-----	-----
REVISIONS 2	-----	-----	-----
REVISIONS 3	-----	-----	-----
REVISIONS 4	-----	-----	-----
FIELD CHANGES	-----	-----	-----

SIGNATURE

P.E. NUMBER

DATE

ORONO
FOREST AVE. EAST

CROSS SECTIONS

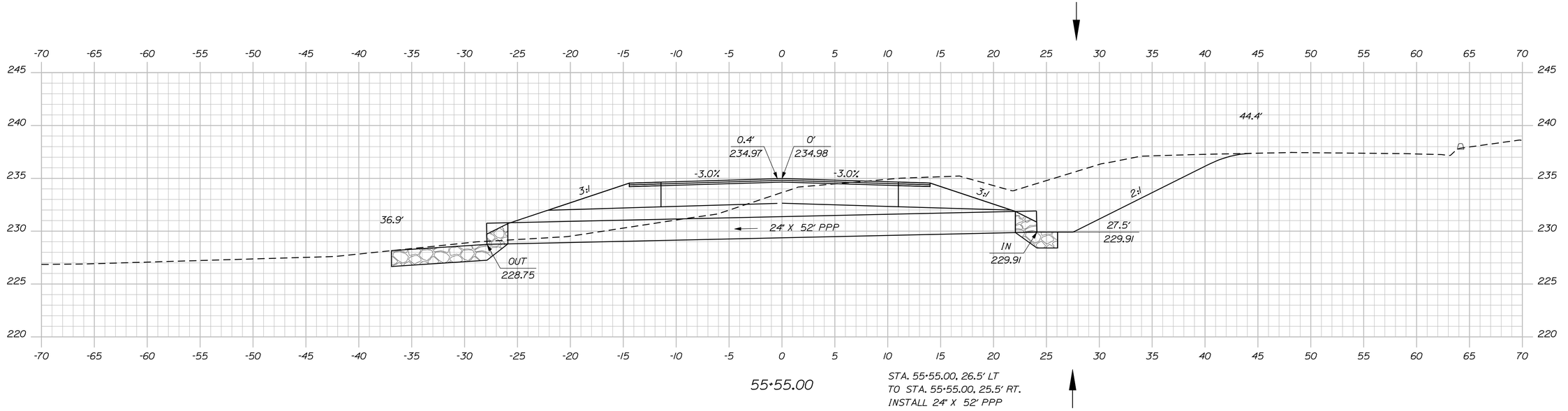
SHEET NUMBER

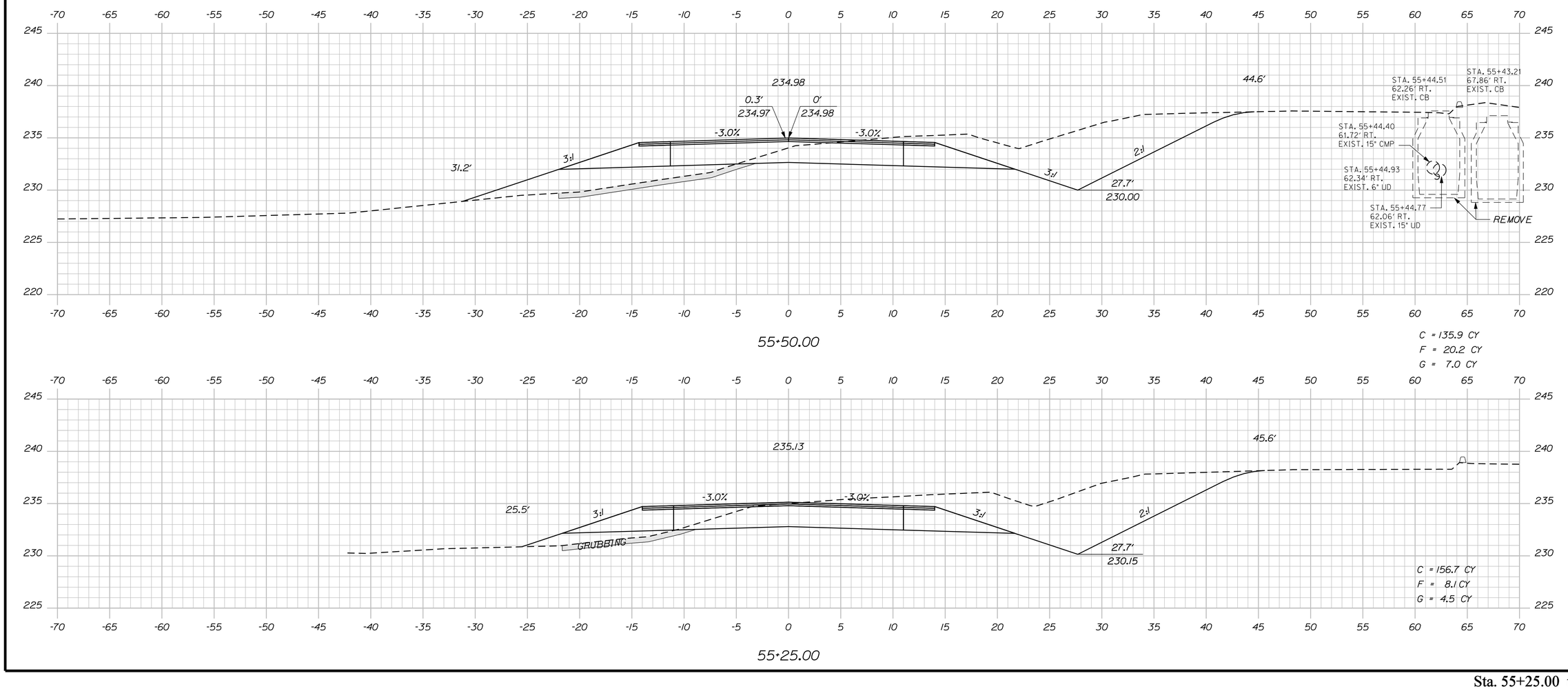
56

OF 65

Sta. 54+50.00 to Sta. 55+00.00

Filename: ...\056_Xsect_Forest Ave_E_54+50_006.dgn Username: jonathon.french Date:6/28/2012
Division: HIGHWAY





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN
17261.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	P. MACDONALD	
DESIGN-DETAILED	J. FRENCH	JULY 2012
CHECKED-REVIEWED	BT TRAN	
DESIGN2-DETAILED2	-----	-----
DESIGN3-DETAILED3	-----	-----
REVISIONS 1	-----	-----
REVISIONS 2	-----	-----
REVISIONS 3	-----	-----
REVISIONS 4	-----	-----
FIELD CHANGES	-----	-----

SIGNATURE

P.E. NUMBER

DATE

ORONO
FOREST AVE. EAST

CROSS SECTIONS

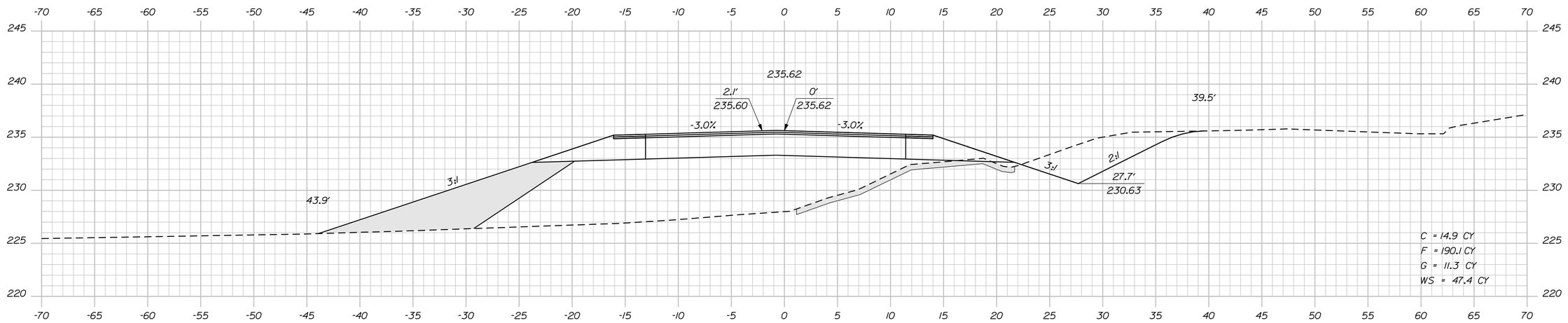
SHEET NUMBER

57

OF 65

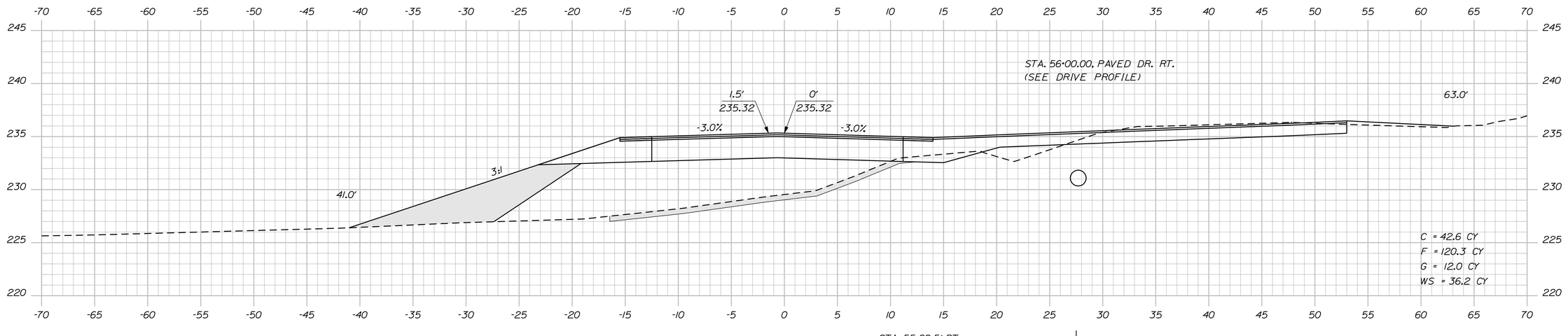
Filename: ...\057_Xsect_Forest Ave_E_55+25_007.dgn Username: jonathon.french Date:6/22/2012
Division: HIGHWAY

Sta. 55+25.00 to Sta. 55+55.00



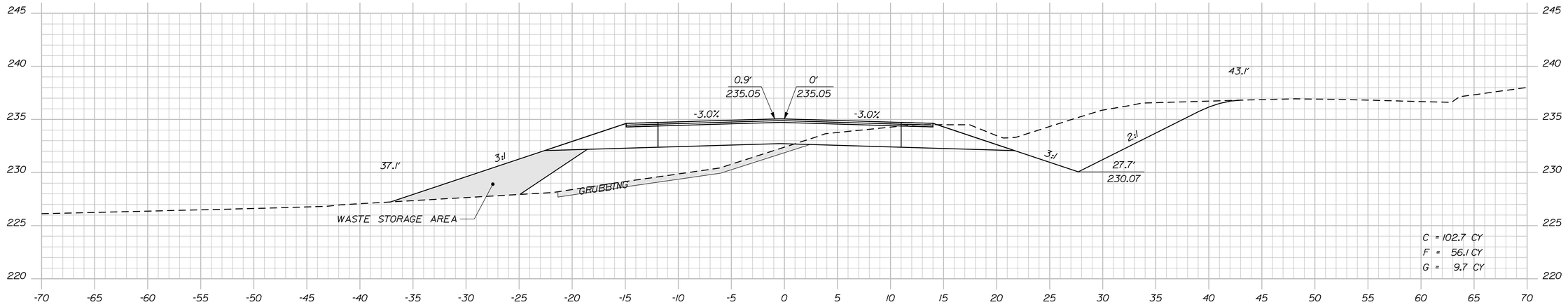
56+25.00

STA. 56+00.00 TO STA. 57+25.00 LT.
GRUBBING IN FILL



56+00.00

STA. 55+99.51 RT.
INSTALL 18" X 34' CULV. PIPE OPT. 1



STA. 55+75.00 TO 56+60.00 LT.
WASTE STORAGE

55+75.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN
17261.00

HIGHWAY PLANS

	BY	DATE	SIGNATURE
PROJ. MANAGER	P. MACDONALD		
DESIGN-DETAILED	J. FRENCH	JULY 2012	
CHECKED-REVIEWED	BT TRAN		
DESIGN2-DETAILED2			P.E. NUMBER
DESIGN3-DETAILED3			
REVISIONS 1			DATE
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

ORONO
FOREST AVE. EAST

CROSS SECTIONS

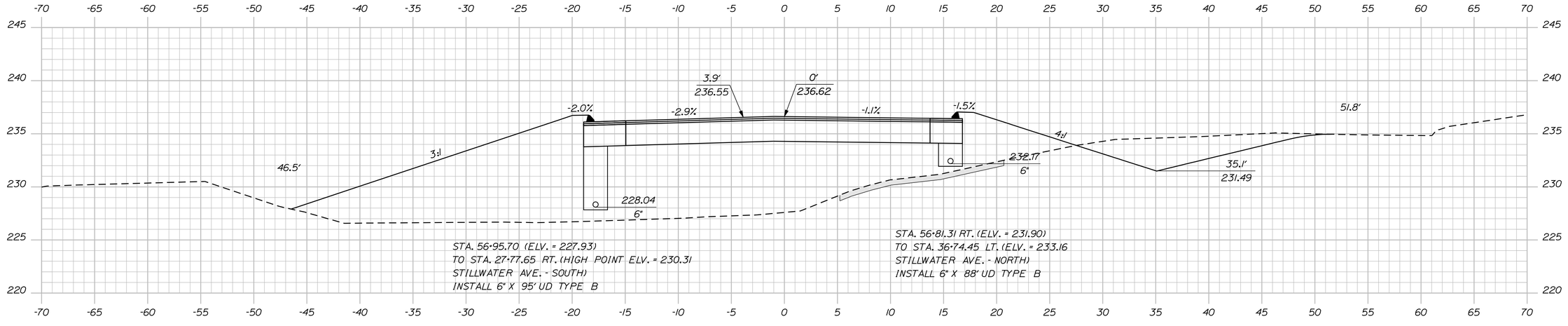
SHEET NUMBER

58

OF 65

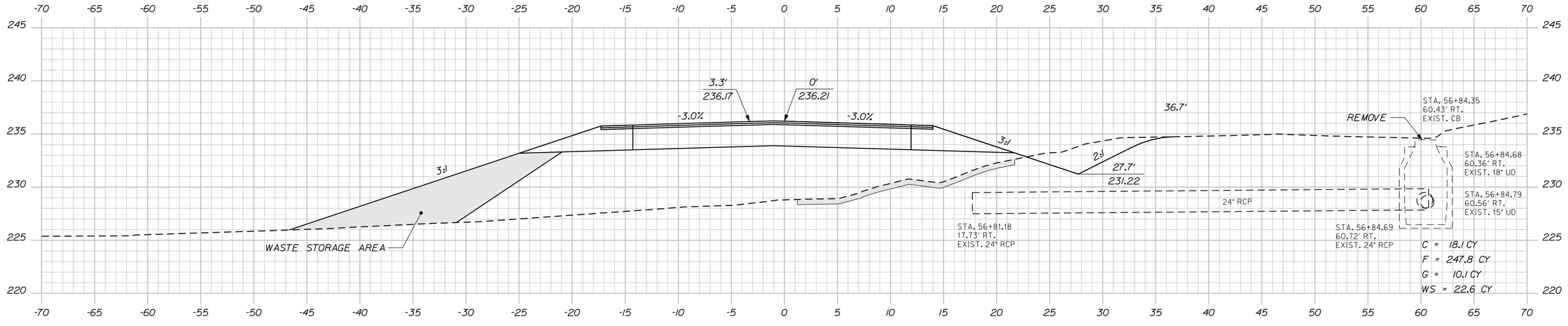
Sta. 55+75.00 to Sta. 56+25.00

Filename: ...\058_Xsect_Forest Ave_E_55+75_008.dgn Division: HIGHWAY Username: jonathon.french Date:6/22/2012

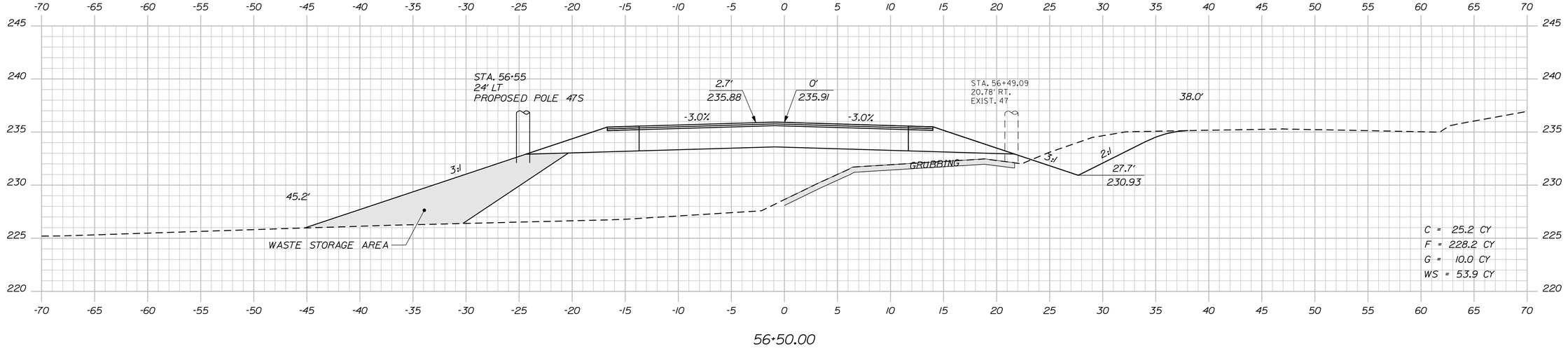


57+00.00

C = 24.7 CY
F = 302.7 CY
G = 8.4 CY



56+75.00



56+50.00

Sta. 56+50.00 to Sta. 57+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN
17261.00

HIGHWAY PLANS

	BY	DATE
P. MACDONALD	BT TRAN	JULY 2012
J. FRENCH	WED	-----
PROJ. MANAGER	ED2	-----
DESIGN-DETAILED	ED3	-----
CHECKED-REVIEWED		-----
DESIGN2-DETAILED2		-----
DESIGN3-DETAILED3		-----
REVISIONS 1		-----
REVISIONS 2		-----
REVISIONS 3		-----
REVISIONS 4		-----
FIELD CHANGES		-----

SIGNATURE

P.E. NUMBER

DATE

ORONO
FOREST AVE. EAST

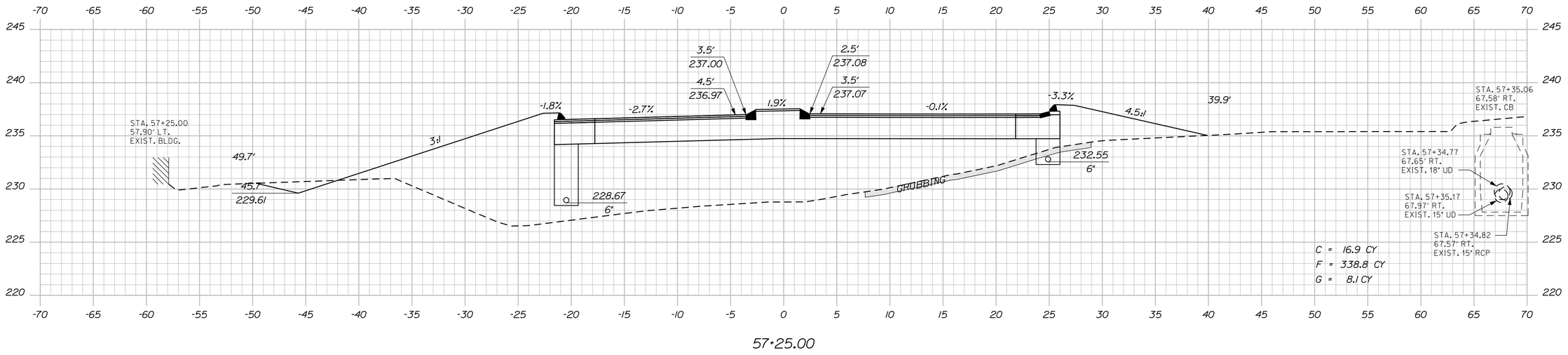
CROSS SECTIONS

SHEET NUMBER

59

OF 65

Filename: ...\059_Xsect_Forest Ave_E_56+50_009.dgn Division: HIGHWAY Date:6/22/2012 Username: jonathon.french



Sta. 57+25.00 to Sta. 57+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN
17261.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	P. MACDONALD	
DESIGN-DETAILED	J. FRENCH	JULY 2012
CHECKED-REVIEWED	BT TRAN	-----
DESIGN2-DETAILED2	-----	-----
DESIGN3-DETAILED3	-----	-----
REVISIONS 1	-----	-----
REVISIONS 2	-----	-----
REVISIONS 3	-----	-----
REVISIONS 4	-----	-----
FIELD CHANGES	-----	-----

SIGNATURE

P.E. NUMBER

DATE

ORONO
FOREST AVE. EAST

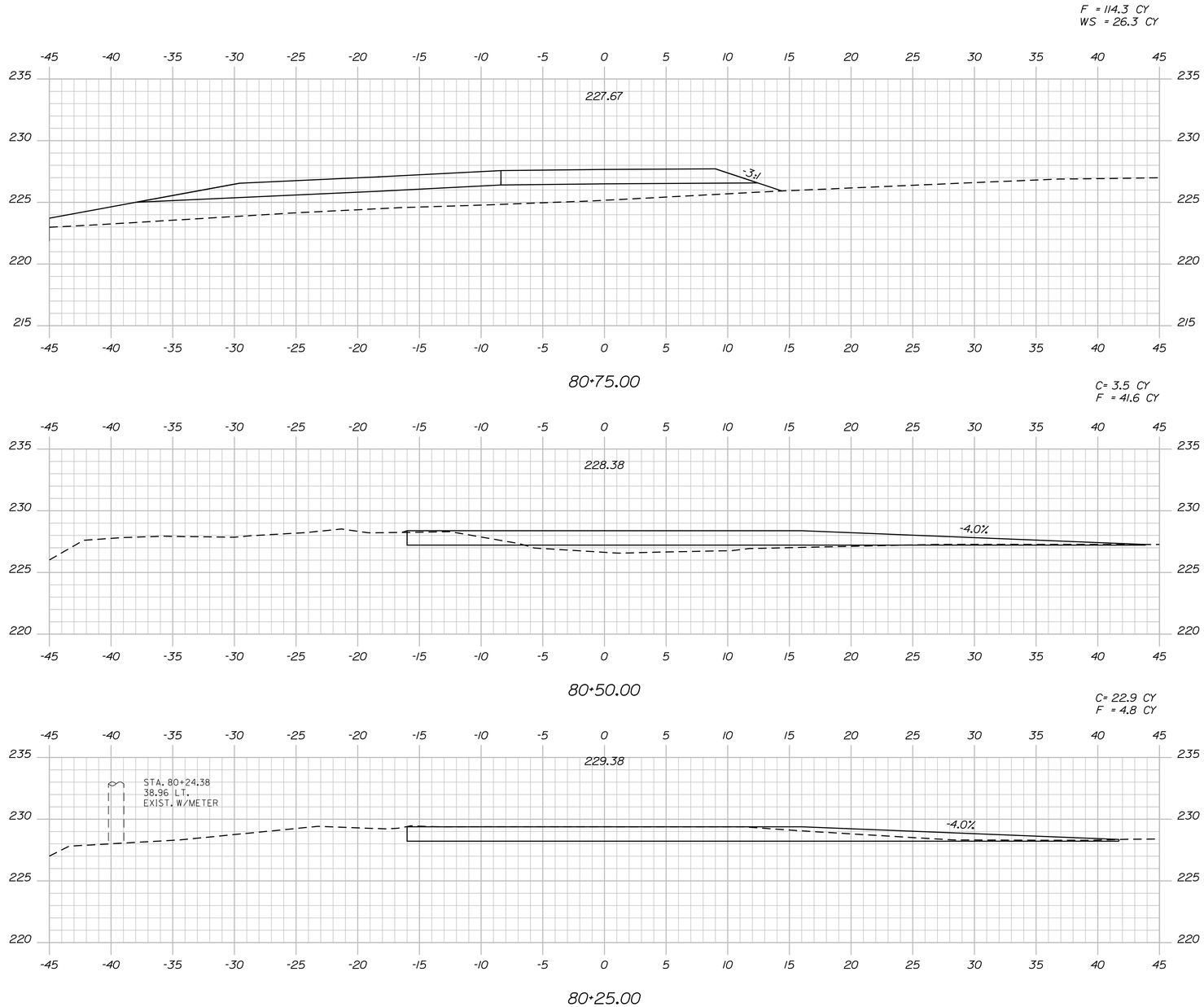
CROSS SECTIONS

SHEET NUMBER

60

OF 65

Filename: ...\060_Xsect_Forest Ave_E_57+25_010.dgn Division: HIGHWAY Username: jonathon.french Date:6/22/2012



Sta. 80+25.00 to Sta. 80+75.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN
17261.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	P. MACDONALD	
DESIGN-DETAILED	J. FRENCH	JULY 2012
CHECKED-REVIEWED	-----	-----
DESIGN2-DETAILED2	-----	-----
DESIGN3-DETAILED3	-----	-----
REVISIONS 1	-----	-----
REVISIONS 2	-----	-----
REVISIONS 3	-----	-----
REVISIONS 4	-----	-----
FIELD CHANGES	-----	-----

SIGNATURE

P.E. NUMBER

DATE

ORONO
DRIVE AT STA. 26+23 RT.

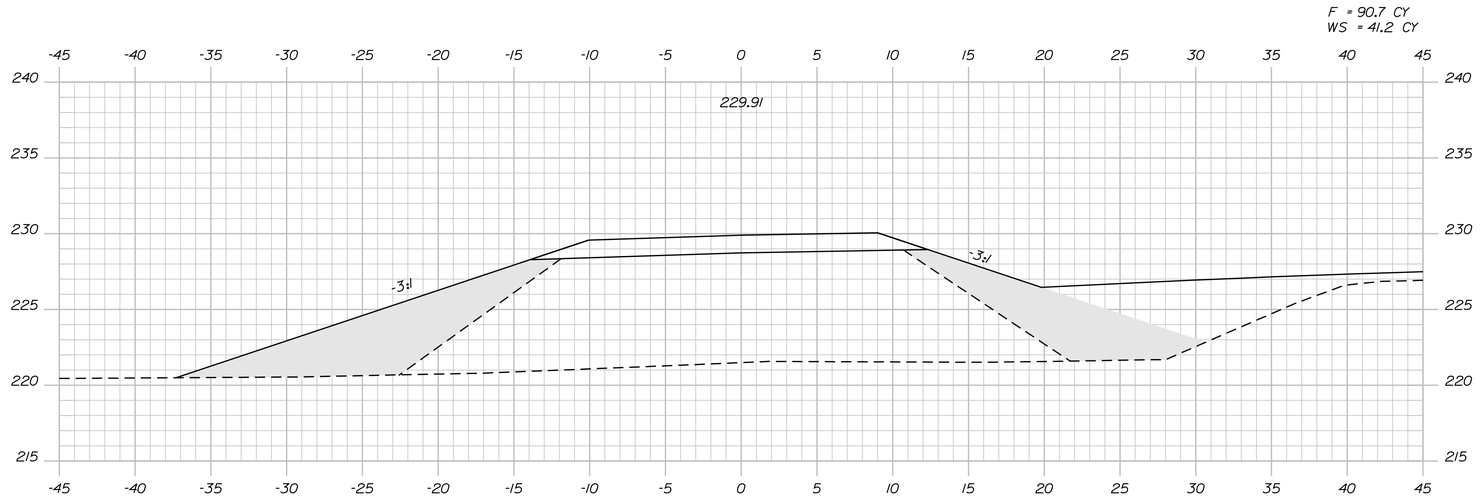
CROSS SECTIONS

SHEET NUMBER

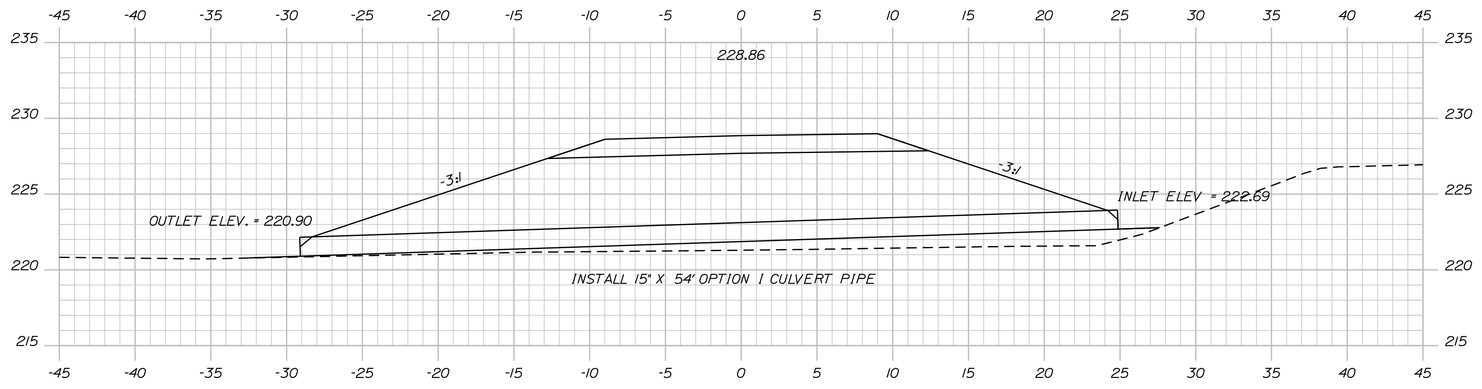
61

OF 65

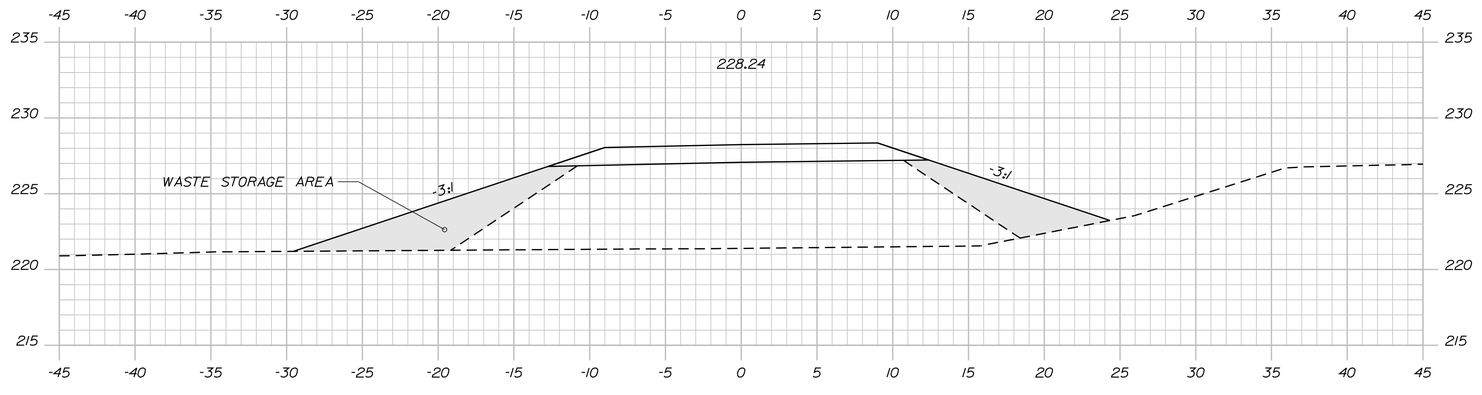
Filename: ...\061_Xsect_Drive_80+25_001.dgn Division: HIGHWAY Username: jonathon.french Date:6/28/2012



81+25.00



81+10.00



81+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1726(100)X

WIN
17261.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	P. MACDONALD	
DESIGN-DETAILED	J. FRENCH	JULY 2012
CHECKED-REVIEWED	-----	-----
DESIGN2-DETAILED2	-----	-----
DESIGN3-DETAILED3	-----	-----
REVISIONS 1	-----	-----
REVISIONS 2	-----	-----
REVISIONS 3	-----	-----
REVISIONS 4	-----	-----
FIELD CHANGES	-----	-----

SIGNATURE

P.E. NUMBER

DATE

ORONO
DRIVE AT STA. 26+23 RT.

CROSS SECTIONS

SHEET NUMBER

62

OF 65

Sta. 81+00.00 to Sta. 81+25.00

Filename: ...\062_Xsect_Drive_81+00_002.dgn Division: HIGHWAY Username: jonathon.french Date:6/22/2012

Filename: ...\00\ROW\MSTA\001_RWPLAN1.dgn Division: HIGHWAY Username: jonathon.french Date:6/22/2012

GRID 19XX ZONE

S.A.H. NO. 6 (WEST)
P.I. STA. 41+67.24
D = 11°-27'33"
Δ = 9°-39'-30" LT.
T = 42.24'
L = 84.28'
E = 1.78'
R = 500.00'

ROBERT T. PERKINS
BARBARA A. PERKINS
PARCEL NO. (1)
LAND TAKEN = 101± S.F.
SLOPE EASEMENT = 595± S.F.(1)
TEMP. CONST. RIGHTS = 305± S.F.(1)
TOTAL AREA = 3± AC.(OWNER)
REM. AREA = 2.99± AC.

R. CLAIRE ACKROYD
PARCEL NO. (3)
LAND TAKEN = 0.13± AC.
SLOPE EASEMENTS = 875± S.F.(2)
DRAINAGE EASEMENTS = 995± S.F.(2)
TEMP. CONST. RIGHTS = 0.14± AC.(3)
TOTAL AREA = 4.26± AC.(SURVEY)
REM. AREA = 4.13± AC.

SEE SURVEY:
SURVEY PLAN
FOR CLAIRE ACKROYD
BY PLISGA & DAY LAND SURVEYORS
OCTOBER 6, 1980
NOT RECORDED

SANDRA E. CYRUS

STATE OF MAINE
REGISTRY OF DEEDS
COUNTY _____
RECEIVED _____, _____
at _____h_____m_____M and recorded in
Plan Book _____, Page _____
Attest: _____
REGISTER

PAUL KINGSBURY
ITEM NO. (5)
TEMP. CONST. RIGHTS = 255± S.F.(1)
TOTAL AREA = 1.6± AC.
(D.O.T. FILE NO. 10-365)

S.A.H. NO. 4 (NORTH)
P.I. STA. 37+10.54
D = 14°-19'-26"
Δ = 9°-25'-06" RT.
T = 32.95'
L = 65.75'
E = 1.35'
R = 400.00'

STILLWATER AVENUE
S.A.H. NO. 4 NORTH
TO OLD TOWN

BEGIN B.L. STA. 35+00.00

S.39°-57'-27"W.
177.59'

P.C. STA. 36+77.59
199'±
287'±
(TOTAL = 325'±)

INLET DRAINAGE STRUCTURE STA. 42+15 TO STA. 42+75 LT.

INLET DRAINAGE STRUCTURE STA. 42+90± LT..

TOE OF SLOPE DITCH STA. 42+90 TO STA. 43+45 LT.

P.R.C. STA. 42+09.28

P.C. STA. 41+25.00

0.09± AC.
0.13± AC.
1835± S.F.
495± S.F.
995± S.F.
101± S.F.
380± S.F.
305± S.F.
595± S.F.
345± S.F.
255± S.F.

BEGIN B.L. STA. 40+75.00
N.87°-28'-30"E.
84.28'
50.00'
TO GLENBURN

FOREST AVENUE S.A.H. NO. 6 WEST

174.33'
S.77°-12'-45"E.
45.66'
P.T. STA. 43+83.61

P.C. STA. 57+29.65
FOREST AVENUE
S.A.H. NO. 6 EAST
SPEED ENFORCED BY RADAR

P.T. STA. 28+14.09 S.A.H. NO.4 (SOUTH)=
P.T. STA. 37+43.34 S.A.H. NO. 4 (NORTH)=
P.T. STA. 44+75.69 S.A.H. NO. 6 (WEST) =
P.T. STA. 58+14.49 S.A.H. NO. 6 (EAST)

(TOTAL = 678'±)

EXISTING DRAIN. EASE. STORM SEWER OUTLET ACQ. UNDER F.A.P. NO. STP-5664(00)X

192.59'
N.85°-21'-15"W.
464'±
391.13'
374.02'

0.57± AC.
0.07± AC.
400± S.F.

EASEMENT
LIMITS
TEMP.
CONST.
LTS.

S.A.H. NO. 6 (WEST)
P.I. STA. 44+52.92
D = 57°-17'-45"
Δ = 26°-35'-01" RT.
T = 23.62'
L = 46.39'
E = 2.75'
R = 100.00'

OUTLET DRAINAGE STRUCTURE STA. 42+60 TO STA. 42+90 RT.

S.A.H. NO. 6 (WEST)
P.I. STA. 42+97.86
D = 14°19'26"
Δ = 24°-58'-15" RT.
T = 88.57'
L = 174.33'
E = 9.69'
R = 400.00'

EXISTING DRAIN. EASE. HIGHWAY DITCH DRAINAGE ACQ. UNDER F.A.P. NO. STP-5664(00)X

P.R.C. STA. 27+06.77
P.C. STA. 44+29.30
107.32'
193.71'
178.12'
(TOTAL = 619'±)

ARLENE E. IRELAND
PARCEL NO. (2)
LAND TAKEN = 1638± S.F.
DRAINAGE EASEMENT = 350± S.F.(1)
TEMP. CONST. RIGHTS = 1220± S.F.(3)
TOTAL AREA = 2.5± AC.(D.O.T. FILE NO. 10-365)
REM. AREA = 2.46± AC.

S.A.H. NO. 4 (SOUTH)
P.I. STA. 26+19..21
D = 14°-19'26"
Δ = 25°-30'-51" LT.
T = 90.56'
L = 178.12'
E = 10.12'
R = 400.00'

EXISTING R/W
STILLWATER AVENUE
PENOBSCOT COUNTY RECORDS
VOLUME 3, PAGE 304
1844 4 RODS
FOREST AVENUE
PENOBSCOT COUNTY RECORDS
VOLUME 4, PAGE 82
1847, 4 RODS
ALSO SEE D.O.T. FILE NO. 10-365

1638± S.F.
350± S.F.
230± S.F.
0.29± AC.

STILLWATER AVENUE S.A.H. NO. 4 SOUTH

N.60°-34'-51"E.
108.76'

TOE OF SLOPE DITCH STA. 27+80 RT. (S.A.H. NO. 4) TO STA. 56+75 LT. (S.A.H. NO.6)

OUTLET DRAINAGE STRUCTURE STA. 56+74± LT.

OUTLET DRAINAGE STRUCTURE STA. 55+55 LT.

P.T. STA. 55+37.06

S.A.H. NO. 6 (EAST)
P.I. STA. 57+72.35
D = 19°-05'-55"
Δ = 16°-12'-15" RT.
T = 42.71'
L = 84.84'
E = 3.02'
R = 300.00'

S.A.H. NO. 4 (SOUTH)
P.I. STA. 27+60.75
D = 14°-19'-26"
Δ = 15°-22'-16" RT.
T = 53.98'
L = 107.32'
E = 3.63'
R = 400.00'

DRAINAGE OUTLET STA. 56+75± LT.

PAUL G. MELANSON
PARCEL NO. (4)
LAND TAKEN = 0.57± AC.
SLOPE EASEMENT = 0.07± AC.(1)
DRAINAGE EASEMENTS = 790± S.F.(5)
TEMP. CONST. RIGHTS = 0.31± AC.(3)
TOTAL AREA = 6.18± AC.(SURVEY)
REM. AREA = 5.61± AC.

SEE SURVEY:
DIVISION PLAN
FOR BRADFORD A. HALL & ROSE-MAINE HALL
BY MAINE LAND SERVICES
APRIL 30, 1999
RECORDED IN THE PENOBSCOT REGISTRY OF DEEDS
PLAN BOOK 1999, PAGE 75

WIN 17261.00

SYMBOLS
- ● IP or ⊕ PIPE (IRON PIPE or PIN FOUND)
- ST. (SEPTIC TANK)
- ⊞ (ROW MONUMENT)
- ⊿BM (TRAVERSE POINT)
- ○WELL (WELL)
- GRADING LIMIT LINE
- CONSTRUCTION LIMIT LINE
- PROPERTY LINE, P.L.
- LIMITS OF "RIGHT-PORTION (LOW-P.)
- EXISTING RIGHT OF WAY
- NEW RIGHT OF WAY
- NEW ROW WITHIN EXIST. ROW
- CONTROL OF ACCESS
- W WATER LINE
- G GAS LINE
- E ELECTRIC LINE
- T TELEPHONE LINE
- SEWER LINE

ITEM	TECH	CHECKED
BASE MAP		
EXIST. R/W	BDM	
PROP. LINES	T.L.B.	
AREAS	T.L.B.	T.J.K.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016
ORONO
RIGHT OF WAY MAP

REVISIONS

NO.	DATE	DESCRIPTION	BY

PLAN FILED IN PLAN BOOK				PAGE	COUNTY RECORD	
NO.	GRANTOR	INSTRUMENT	DATE	BOOK	PAGE	

DAVID BERNHARDT
COMMISSIONER
KENNETH L. SWEENEY
CHIEF ENGINEER
DATE

STATE OF MAINE · PETER A. BELANGER 1341 · PROFESSIONAL LAND SURVEYOR

STATE AID HIGHWAY NOS. 4 & 6
STILLWATER AVENUE/FOREST AVENUE
ORONO PENOBSCOT COUNTY
FEDERAL AID PROJECT NO. STP-1726(100)X

MARCH 2012	RIGHT-OF-WAY MAP	D.O.T. FILE NO. 10-474
SCALE 1" = 25'	SHEET 1 OF 3	

SHEET NUMBER
63
OF 65

PAUL KINGSBURY
ITEM NO. (5)
TEMP. CONST. RIGHTS =
TOTAL AREA = 1.6± AC.
(D.O.T. FILE NO. 10-365)

EBEN A. OSGOOD, JR.
JANICE C. OSGOOD
ITEM NO. (6)
SLOPE EASEMENT = 0.05± AC.(1)
TEMP. CONST. RIGHTS = 485± S.F.(1)
TOTAL AREA = 4.93± AC.(TOWN)

GLORIA H. ALLEN
KENNETH W. ALLEN

PAUL MELANSON
PARCEL NO. (4)
LAND TAKEN = 0.57± AC.
SLOPE EASEMENT = 0.07± AC.(1)
DRAINAGE EASEMENTS = 790± S.F.(5)
TEMP. CONST. RIGHTS =
TOTAL AREA = 6.18± AC.(SURVEY)
REM. AREA = 5.61± AC.

ROSE-ANNE HALL
PARCEL NO. (7)
LAND TAKEN = 1549± S.F.
DRAINAGE EASEMENT = (1)
TEMP. CONST. RIGHTS = 1515± S.F.(1)
TOTAL AREA = 5.00± AC.(SURVEY)
REM. AREA = 4.96± AC.

S.A.H. NO. 6 (EAST)
P.I. STA. 53+45.48
D = 7°-09'-43"
Δ = 28°-00'-46" LT.
T = 199.56'
L = 391.13'
E = 24.51'
R = 800.00'

SEE SURVEY:
DIVISION PLAN
FOR BRADFORD A. HALL &
ROSE-ANNE HALL
BY MAINE LAND SERVICES
APRIL 30, 1999
RECORDED IN THE
PENOBSCOT REGISTRY OF DEEDS
PLAN BOOK 1999, PAGE 75

EXISTING R/W
FOREST AVENUE
PENOBSCOT COUNTY RECORDS
VOLUME 4, PAGE 82
1847, 4 RODS
ALSO SEE D.O.T. FILE NO. 10-365

FOREST AVENUE
S.A.H. NO. 6 EAST

TEMP. CONST. LIMITS 485± S.F.
SLOPE EASEMENT 0.05± AC.
(TOTAL = 678'±)
1549± S.F.
1515± S.F.
400± S.F. TEMP. CONST. LTS.
464'±
391.13'
374.02'
213'±
214'±
161'±
120'±
145.93'
N.57°-20'-29"W.
55.93'
32'±
3'±
BEGIN B.L. STA. 50+00.00
TO U.S. ROUTE 2
DRAINAGE OUTLET STA. 52+97± LT.
P.C. STA. 51+45.93
OUTLET DRAINAGE STRUCTURE STA. 55+55 LT.
P.T. STA. 55+37.30
APPROX. LOCATION OF CELLAR DRAIN
VEGETABLE GARDEN
FIELD
MIXED GROWTH
30" WIDE
3' WIDE
15" CMP
1" DIA ROD 24" AG
¾" DIA ROD 6" BG LAYING DOWN
¾" DIA ROD 12" AG
¾" DIA REBAR PLS 1075
ALL NIGHT PARKING PROHIBITED
STOP AHEAD
JOINT 6/45
JOINT 46
JOINT 44
JOINT 43
LOT 1
LOT 2
LOT 3
50' 50' 60' 35' 35'
+50 +14± +80 +90

SYMBOLS
- ○WELL (WELL)
- GRADING LIMIT LINE
- CONSTRUCTION LIMIT LINE
- PROPERTY LINE - PL -
- LIMITS OF "RIGHT-OF-WAY" PORTION (LOW P.)
- EXISTING Right-of-WAY
- NEW RIGHT OF WAY
- NEW ROW WITHIN EXIST. ROW
- CONTROL OF ACCESS
- ● IP or ●IPF (IRON PIPE or PIN FOUND)
- S.T. (SEPTIC TANK)
- (ROW MONUMENT)
- ⚓BM (TRAVERSE POINT)
- W WATER LINE
- G GAS LINE
- E ELECTRIC LINE
- T TELEPHONE LINE
- SEWER LINE

ITEM	TECH	CHECKED
BASE MAP		
EXIST. R/W	BDM	T.L.B.
PROP. LINES	T.L.B.	T.L.B.
AREAS	T.L.B.	T.J.K.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016
ORONO
RIGHT OF WAY MAP

STATE OF MAINE
REGISTRY OF DEEDS
COUNTY _____
RECEIVED _____, _____
at _____h _____m _____M and recorded in
Plan Book _____, Page _____
Attest: _____
REGISTER

WIN 17261.00

REVISIONS

NO.	DATE	DESCRIPTION	BY

PLAN FILED IN PLAN BOOK				PAGE	COUNTY RECORD		
NO.	GRANTOR	INSTRUMENT	DATE	BOOK	PAGE		

DAVID BERNHARDT
COMMISSIONER
KENNETH L. SWEENEY
CHIEF ENGINEER
DATE

STATE OF MAINE
PETER A BELANGER 1341
PROFESSIONAL LAND SURVEYOR

STATE AID HIGHWAY NO. 6
FOREST AVENUE
ORONO PENOBSCOT COUNTY
FEDERAL AID PROJECT NO. STP-1726(100)X

MARCH 2012	RIGHT-OF-WAY MAP	D.O.T. FILE NO. 10-474
SCALE 1" = 25'	SHEET 2 OF 3	

SHEET NUMBER
64
OF 65

Filename: ...\00\ROW\MSTA\002_RWPLAN2.dgn Division: HIGHWAY Username: jonathon.french Date:6/22/2012

Filename: ...\00\ROW\MSTA\003_RWPLAN3.dgn Username: jonathon.french Division: HIGHWAY Date:6/22/2012

ARLENE E. IRELAND
PARCEL NO. (2)
LAND TAKEN = 1638± S.F.
DRAINAGE EASEMENT = 350± S.F.(1)
TEMP. CONST. RIGHTS = 1220± S.F.(3)
TOTAL AREA = 2.5± AC.(D.O.T. FILE NO. 10-365)
REM. AREA = 2.46± AC.

S.A.H. NO. 4 (SOUTH)
P.I. STA. 26+19..21
D = 14°-19'26"
Δ = 25°-30'-51" LT.
T = 90.56'
L = 178.12'
E = 10.12'
R = 400.00'

ARLENE E. IRELAND
ITEM NO. (8)
SLOPE EASEMENT = 785± S.F.(1)
TEMP. CONST. RIGHTS = 160± S.F.(1)
TOTAL AREA = 1.10± AC.(CALC.)

S.A.H. NO. 4 (SOUTH)
P.I. STA. 22+38.08
D = 0°-34'-23"
Δ = 0°-40'-48" LT.
T = 59.34'
L = 118.69'
E = 0.18'
R = 10,000.00'

HERBERT W. LEBRETON, SR.
PATRICIA A. LEBRETON
ITEM NO. (9)
SLOPE EASEMENT = 540± S.F.(1)
TOTAL AREA = 2.10± AC.(CALC.)

HOWARD C. WHELDEN, SR.

OUTLET DRAINAGE STRUCTURE
STA. 25+80± RT.

OUTLET DRAINAGE STRUCTURE
STA. 24+75 TO
STA. 25+10 RT.

PAUL G. MELANSON
PARCEL NO. (4)
LAND TAKEN = 0.57± AC.
SLOPE EASEMENT = 0.07± AC.(1)
DRAINAGE EASEMENTS = 790± S.F.(5)
TEMP. CONST. RIGHTS = 0.31± AC.(3)
TOTAL AREA = 6.18± AC.(SURVEY)
REM. AREA = 5.61± AC.

S.A.H. NO. 4 (SOUTH)
P.I. STA. 24+55.39
D = 7°-09'-43"
Δ = 10°-31'-24" RT.
T = 73.67'
L = 146.93'
E = 3.39'
R = 800.00'

P.T. STA. 22+97.43
P.C. STA. 23+81.72
P.R.C. STA. 25+28.65
P.C. STA. 21+78.74
N.34°-03'-57"E.
S.A.H. NO. 4 (SOUTH)
STILLWATER AVENUE
118.69'
84.29'
193.71'
146.93'
178.12'
TO BANGOR
BEGIN B.L.
SLOPE
EASEMENT
LIMITS
CONST.
TEMP.
LIMITS DRAIN.
0.29± AC.
760± S.F.
790± S.F.
540± S.F.
160± S.F.
785± S.F.
455± S.F.
240± S.F.

EXISTING R/W
STILLWATER AVENUE
PENOBSCOT COUNTY RECORDS
VOLUME 3, PAGE 304
1844 4 RODS
ALSO SEE D.O.T. FILE NO. 10-365

STATE OF MAINE
REGISTRY OF DEEDS
COUNTY _____
RECEIVED _____, _____
at _____h_____m_____M and recorded in
Plan Book _____, Page _____
Attest: _____
REGISTER

WIN 17261.00

SYMBOLS
- IP or ● #/PF (IRON PIPE or PIN FOUND)
- S.T. (SEPTIC TANK)
- (ROW MONUMENT)
- ⚓BM (TRAVERSE POINT)
- (WELL)
- BASELINE OF SURVEY
- CONSTRUCTION/PROPERTY LINE
- LIMITS OF TRIAL RIGHT-PORTION (LOW-P.)
- EXISTING RIGHT OF WAY
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- SEWER LINE

ITEM	TECH	CHECKED
BASE MAP		
EXIST. R/W	BDM	
PROP. LINES	T.L.B.	
AREAS	T.L.B.	T.J.K.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016
ORONO
RIGHT OF WAY MAP

REVISIONS

NO.	DATE	DESCRIPTION	BY

PLAN FILED IN PLAN BOOK				PAGE	COUNTY RECORD		
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DAVID BERNHARDT
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DATE

STATE OF MAINE
PETER A BELANGER
1341
PROFESSIONAL LAND SURVEYOR

STATE AID HIGHWAY NO. 4
STILLWATER AVENUE
ORONO PENOBSCOT COUNTY
FEDERAL AID PROJECT NO. STP-1726(100)X

MAY 2012	RIGHT-OF-WAY MAP	D.O.T. FILE NO. 10-474
SCALE 1" = 25'	SHEET 3 OF 3	

SHEET NUMBER
65
OF 65