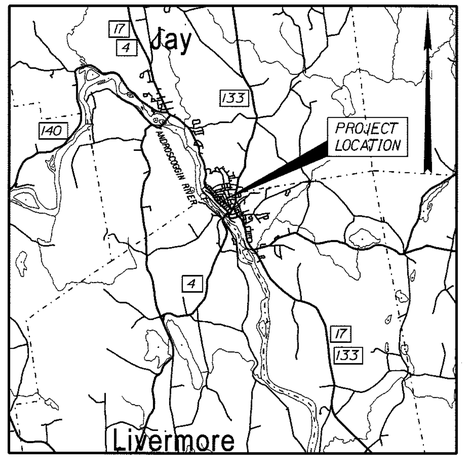
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION



LOCATION MAP

2 0 2 4

Scale in Kilometers

LIVERMORE FALLS - JAY

ANDROSCOGGIN COUNTY

ROUTE 4\17

NH-1001(800)E

PROJECT LENGTH : 1.86 KILOMETERS

RECONSTRUCTION WITH GRADING,
BASE, DRAINAGE, WATER, SEWER AND PAVEMENT

INDEX OF SHEETS

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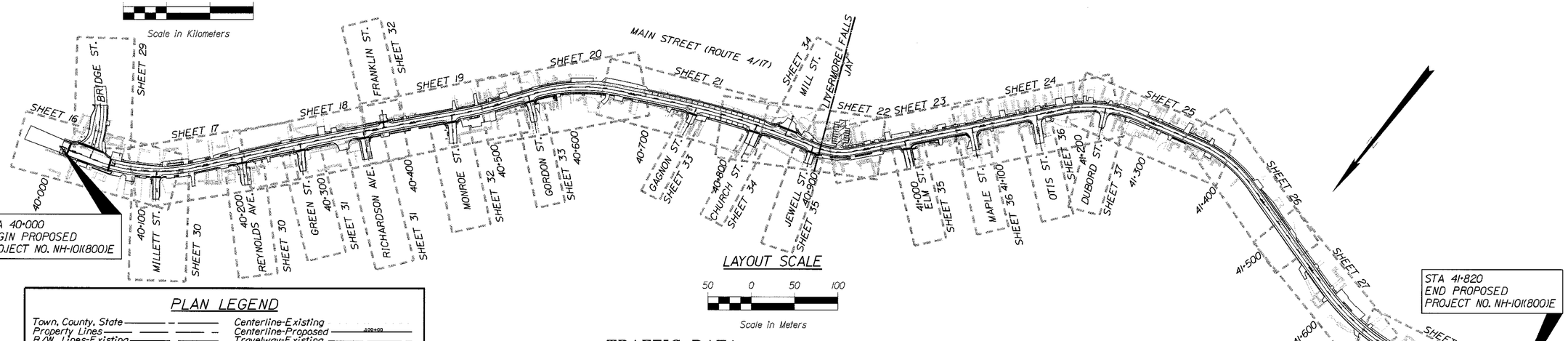


LAYOUT SCALE

50 0 50 100

Scale in Meters

PLAN LEGEND

- Town, County, State
- Property Lines
- R/W Lines-Existing
- R/W Lines-Proposed
- Culvert-Existing
- Culvert Proposed
- Curbing: Type 1, Type 3, Type 5 — Existing / Proposed
- Outline of Bodies of Water
- Ledge
- Buildings
- Trees: Conifer, Deciduous
- Tree Line
- Clearing Limit Line — CLL
- Centerline-Existing
- Centerline-Proposed 100+00
- Travelway-Existing
- Travelway-Proposed
- Railroad
- Catch Basins: Existing / Proposed
- Manholes: Existing / Proposed
- Proposed Underdrain
- Proposed Ditch
- Existing Ditch
- Utility Poles: Existing / Proposed
- Fire Hydrants: Existing / Proposed
- Existing Water Line
- Existing San. Sewer
- Existing San. Sewer Manhole
- Guardrail-Existing
- Guardrail-Proposed
- Guardrail-Cable, Other

TRAFFIC DATA

	SECTION 1 (N/O BRIDGE ST)	SECTION 2 (S/O PINEAU ST)
Current (2010) AADT	12,040	9,180
Future (2030) AADT	14,450	11,020
DHV - % of AADT	9%	10%
Design Hour Volume	1,300	1,102
% Heavy Trucks (AADT)	8%	8%
% Heavy Trucks (DHV)	6%	6%
Directional Distribution (DHV)	55%	55%
80 kN Equivalent P 2.0	922	725
80 kN Equivalent P 2.5	879	691
Design Speed (km/h)	40/60	60
Functional Class:	PRINCIPAL ARTERIAL	PRINCIPAL ARTERIAL

PROGRAM AREA: HIGHWAY IMPROVEMENTS RURAL ARTERIAL
SCOPE OF WORK: RECONSTRUCTION WITH GRADING,
BASE, DRAINAGE, WATER, SEWER AND PAVEMENT

PROFESSIONAL ENGINEER'S STAMP APPLIES
TO SHEETS 1 THROUGH 8 AND SHEETS 15 THROUGH 121

GP Gorrill-Palmer Consulting Engineers, Inc.
PO Box 1237 Traffic and Civil Engineering Services 207-657-6910
15 Shaker Road FAX: 207-657-6912
Gray, ME 04039 E-Mail: mailbox@gorrillpalmer.com

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

APPROVED

COMMISSIONER: [signature] DATE 2/1/11

CHIEF ENGINEER: [signature] DATE 2/1/11

STATE OF MAINE — RALPH C. NORWOOD, IV — No. 9899 — REGISTERED PROFESSIONAL ENGINEER

SIGNATURE [signature] DATE

P.E. NUMBER 9899 — 1-2-11

PROJECT INFORMATION		
PROGRAM	HIGHWAY	
PROJECT MANAGER	PAUL MACDONALD	
DESIGNER	RALPH NORWOOD	
CONSULTANT	GORRILL-PALMER	
PROJECT RESIDENT		
CONTRACTOR		
PROJECT COMPLETION DATE		

PIN 10018.00

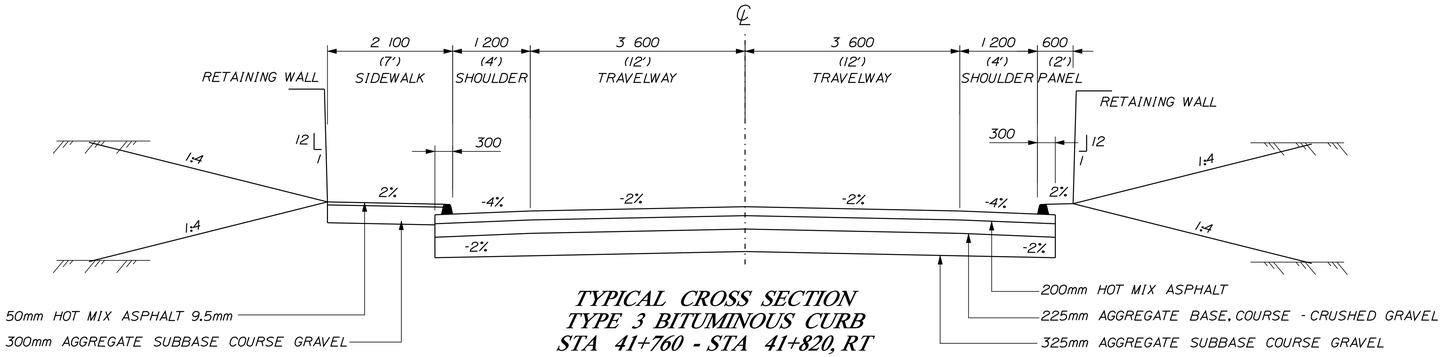
NH-1001(800)E

LIVERMORE FALLS - JAY
ROUTE 4\17

TITLE SHEET

SHEET NUMBER 1 OF 148

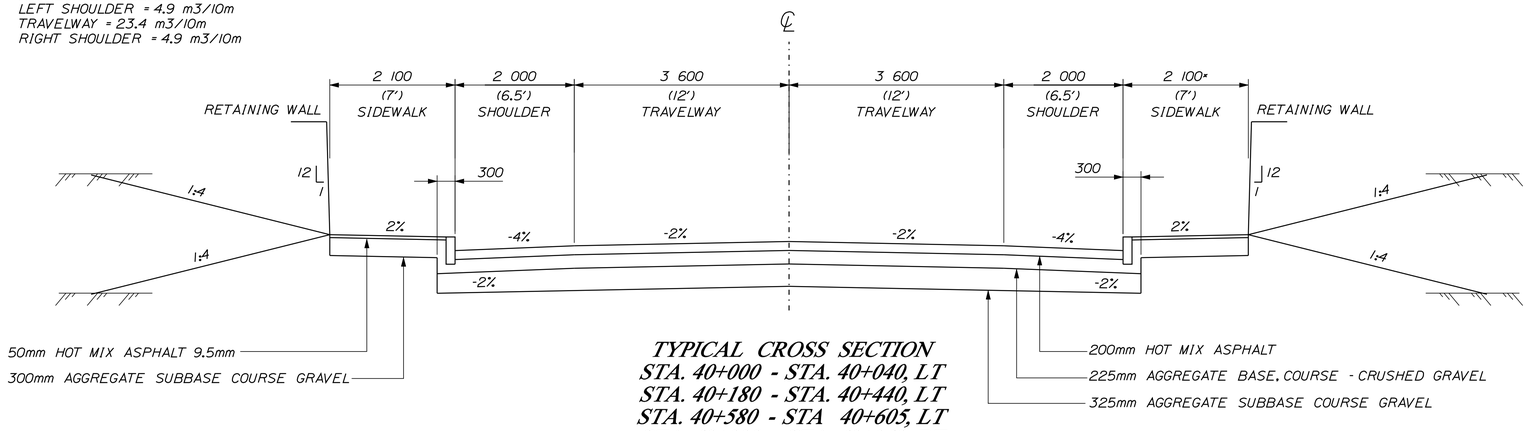
Filename: ...\DGN\HIGHWAY\MSTA\001_Title.dgn Username: DBurgess Division: HIGHWAY Date:1/27/2011



TYPICAL CROSS SECTION
TYPE 3 BITUMINOUS CURB
STA 41+760 - STA 41+820, RT

AGGREGATE BASE
LEFT SHOULDER = 3.4 m3/10m
TRAVELWAY = 16.2 m3/10m
RIGHT SHOULDER = 3.4 m3/10m

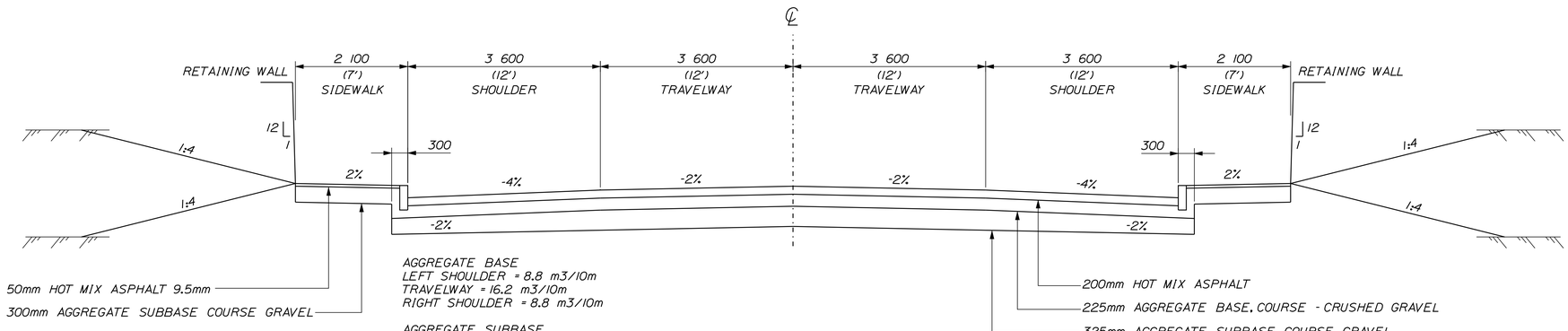
AGGREGATE SUBBASE
LEFT SHOULDER = 4.9 m3/10m
TRAVELWAY = 23.4 m3/10m
RIGHT SHOULDER = 4.9 m3/10m



TYPICAL CROSS SECTION
STA. 40+000 - STA. 40+040, LT
STA. 40+180 - STA. 40+440, LT
STA. 40+580 - STA 40+605, LT
STA. 40+000 - STA. 40+040, RT
STA. 40+180 - STA 40+440, RT
STA. 40+560 - STA 40+752, RT
TYPE 3 BITUMINOUS CURB
STA 41+780 - STA 41+820, LT

AGGREGATE BASE
LEFT SHOULDER = 5.2 m3/10m
TRAVELWAY = 16.2 m3/10m
RIGHT SHOULDER = 5.2 m3/10m

AGGREGATE SUBBASE
LEFT SHOULDER = 7.5 m3/10m
TRAVELWAY = 23.4 m3/10m
RIGHT SHOULDER = 7.5 m3/10m



AGGREGATE BASE
LEFT SHOULDER = 8.8 m3/10m
TRAVELWAY = 16.2 m3/10m
RIGHT SHOULDER = 8.8 m3/10m

AGGREGATE SUBBASE
LEFT SHOULDER = 12.7 m3/10m
TRAVELWAY = 23.4 m3/10m
RIGHT SHOULDER = 12.7 m3/10m

ON STREET PARKING
STA. 40+605 - STA. 40+830, LT
STA. 40+752 - STA. 40+820, RT

NOTES:

1. THE PAVEMENT, BASE AND SUBBASE DEPTHS AS SHOWN ON THE PLANS ARE INTENDED TO BE NOMINAL.

2. THE GRAVEL QUANTITY CALCULATION IS BASED ON A 2" LOAM OR DIRTY BORROW DEPTH. THE ACTUAL DEPTH MAY VARY. SEE THE GENERAL NOTES.

3. THE ALGEBRAIC DIFFERENCE BETWEEN SHOULDER AND TRAVEL LANE CROSS SLOPES "ROLLOVER" SHALL NOT EXCEED 8%.

4. THE STATIONING SHOWN UNDER EACH TYPICAL IS APPROXIMATE.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
PIN 10018.00

HIGHWAY PLANS

		DATE
PROJ. MANAGER	R. WEBSTER	
DESIGN-DETAILED	J.BARTLETT	01-22-09
CHECKED-REVIEWED	D.BURGESS	
DESIGN2-DETAILED2	R.NORWOOD	
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
MAIN STREET (ROUTE 4/17)

PLAN & PROFILE

SHEET NUMBER

2

OF 148

Division: HIGHWAY Username: common Date:2/9/2011

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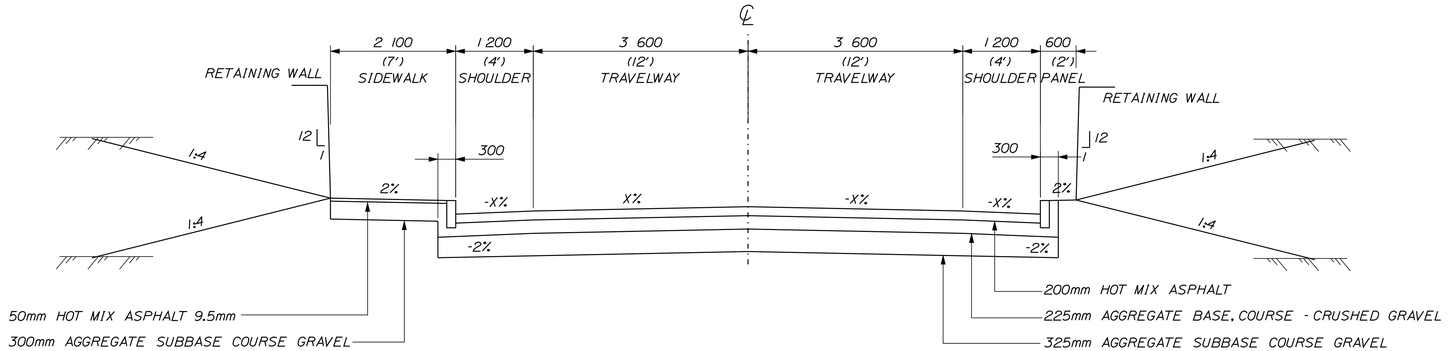
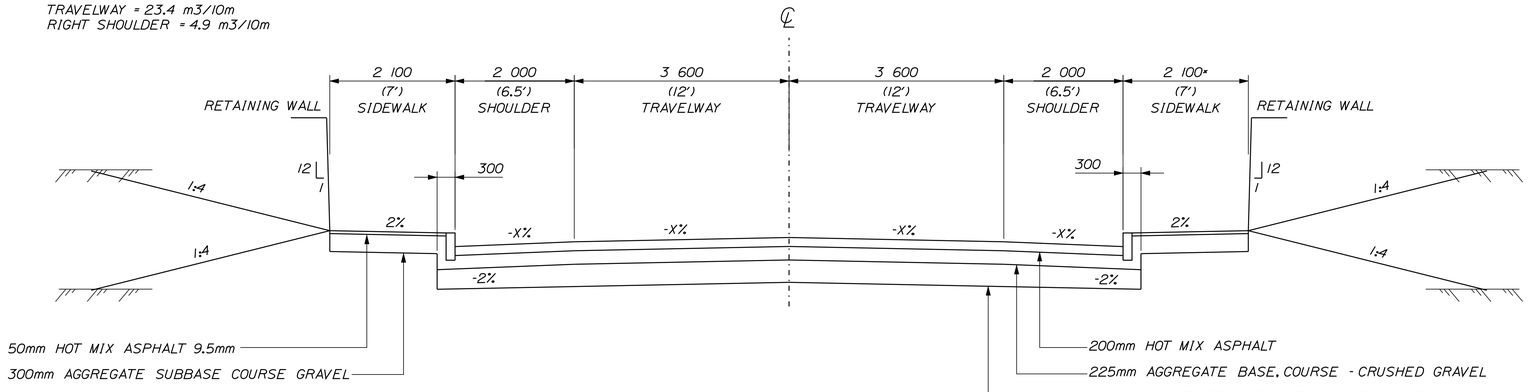


TYPICAL CROSS SECTION (SUPERELEVATED)
STA. 40+885 - STA. - 41+430, LT
STA. 40+490 - STA. 41+430 RT
TYPE 3 BITUMINOUS CURB
STA 41+512 - STA 41+760, RT

AGGREGATE BASE
LEFT SHOULDER = 3.4 m3/10m
TRAVELWAY = 16.2 m3/10m
RIGHT SHOULDER = 3.4 m3/10m

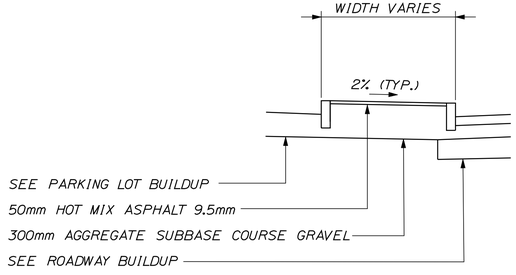
AGGREGATE SUBBASE
LEFT SHOULDER = 4.9 m3/10m
TRAVELWAY = 23.4 m3/10m
RIGHT SHOULDER = 4.9 m3/10m



TYPICAL CROSS SECTION (SUPERELEVATED)
STA. 40+040 - STA. 40+180, LT
STA. 40+440 - STA. 40+560, LT
STA. 40+830 - STA 40+885, LT
STA. 41+430 - STA 41+500, LT
STA. 41+500 - STA 41+820, LT
STA. 40+040 - STA. 40+180, RT
STA. 40+440 - STA. 40+560, RT
STA. 40+820 - STA. 40+900, RT
*STA. 41+430 - STA. 41+512, RT * NO SIDEWALK - 600 PANEL RT*

AGGREGATE BASE
LEFT SHOULDER = 5.2 m3/10m
TRAVELWAY = 16.2 m3/10m
RIGHT SHOULDER = 5.2 m3/10m

AGGREGATE SUBBASE
LEFT SHOULDER = 7.5 m3/10m
TRAVELWAY = 23.4 m3/10m
RIGHT SHOULDER = 7.5 m3/10m



RAISED ISLAND DUAL CURBED SIDEWALK
N.T.S

LT SHOULDER	LT TRAVELWAY	STATION	RT TRAVELWAY	RT SHOULDER
		START		
-4.0	-2.0	40+060	-2.0	-4.0
-4.0	-2.0	40+080	0.0	-4.0
-4.0	-2.0	40+100	2.0	-4.0
-4.0	-2.0	40+120	2.0	-4.0
-4.0	-2.0	40+140	1.0	-4.0
-4.0	-2.0	40+160	-1.0	-4.0
-4.0	-2.0	40+180	-2.0	-4.0
		END		

LT SHOULDER	LT TRAVELWAY	STATION	RT TRAVELWAY	RT SHOULDER
		START		
-4.0	-2.0	40+460	-2.0	-4.0
-4.0	-2.0	40+480	0.0	-4.0
-4.0	-2.0	40+500	2.0	-4.0
-4.0	-2.0	40+520	1.0	-4.0
-4.0	-2.0	40+540	-1.0	-4.0
-4.0	-2.0	40+560	-2.0	-4.0
		END		

LT SHOULDER	LT TRAVELWAY	STATION	RT TRAVELWAY	RT SHOULDER
		START		
-4.0	-2.0	40+840	-2.0	-4.0
-4.0	-2.0	40+860	-0.5	-4.0
-4.0	-2.0	40+880	1.5	-4.0
-4.0	-3.5	40+900	3.5	-4.0
-4.0	-4.0	40+920	4.0	-4.0
-4.0	-4.0	40+940	4.0	-4.0
-4.0	-2.0	40+960	2.0	-4.0
-4.0	-2.0	40+980	0.0	-4.0
-4.0	-2.0	41+000	-2.0	-4.0
-4.0	-2.0	41+020	-2.0	-4.0
-4.0	-2.0	41+040	-1.0	-4.0
-4.0	-2.0	41+060	1.0	-4.0
-4.0	-2.0	41+080	2.0	-4.0
-4.0	-2.0	41+100	1.0	-4.0
-4.0	-2.0	41+120	-1.0	-4.0
-4.0	-2.0	41+140	-2.0	-4.0
-4.0	-0.7	41+160	-2.0	-4.0
-4.0	0.7	41+180	-2.0	-4.0
-4.0	2.0	41+200	-2.0	-4.0
		TO		
-4.0	-2.0	41+520	-2.0	-4.0
-4.0	-2.0	41+540	-1.0	-4.0
-4.0	-2.0	41+560	0.3	-4.0
-4.0	-2.0	41+580	1.7	-4.0
-4.0	-2.0	41+600	2.0	-4.0
		TO		
-4.0	-2.0	41+700	2.0	-4.0
-4.0	-2.0	41+720	0.7	-4.0
-4.0	-2.0	41+740	-0.7	-4.0
-4.0	-2.0	41+760	-2.0	-4.0
		END		

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
PIN 10018.00

HIGHWAY PLANS

PROJ. MANAGER	R. WEBSTER		
DESIGN-DETAILED	J.BARTLETT	D.BURGESS	01-22-09
CHECKED-REVIEWED	R.NORWOOD		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
MAIN STREET (ROUTE 4/17)

PLAN & PROFILE

SHEET NUMBER

3

OF 148

Division: HIGHWAY Username: common Date:2/9/2011

Filename: ...\msto\003_typicol_002.dgn

ITEM	ITEM DESCRIPTION	UNIT	TOTAL
201.11	CLEARING	HA	0.1
201.23	REMOVING SINGLE TREE TOP ONLY	EA	10
201.24	REMOVING STUMP	EA	10
202.08	REMOVING BUILDING NO.1	LS	1
202.08	REMOVING BUILDING NO.2	LS	1
202.11	REM PORT CEM CONC PAVEMENT	M2	50
202.15	REM MANHOLE OR CATCH BASIN	EA	35
202.191	PIPE REMOVAL	LS	1
203.2	COMMON EXCAVATION	M3	23710
203.21	ROCK EXCAVATION	M3	500
203.213	FRACTURING EXISTING SUBGRADE LEDGE	M2	1000
203.214	EXPLORATORY DRILLING	HR	100
203.2312	HEALTH AND SAFETY PLAN	LS	1
203.2318	DISPOSAL OF SPECIAL WASTE	MG	1460
203.26	GRAVEL BORROW	M3	100
206.061	STR EARTH BELOW GRADE STR	M3	430
206.07	STR ROCK EXC - DR & MINOR STR	M3	400
304.09	AGGR BASE CRS - CRUSHED	M3	4960
304.1	AGGR SUBB COURSE - GRAVEL	M3	12030
403.207	HOT MIX ASPHALT 19.0 MM	MG	8370
403.208	HOT MIX ASPHALT 12.5 MM, SURFACE	MG	3080
403.209	HOT MIX ASPHALT 9.5 MM (INCID.)	MG	1770
409.15	BITUMINOUS TACK COAT APPLIED	L	3800
518.6	REPAIR OF VERTICAL SURFACES < 200 MM	M2	40
525.326	FIELD STONE RETAINING WALL	M2	25
603.155	300 MM RCP CLASS III	M	320
603.165	375 MM RCP CLASS III	M	110
603.175	450 MM RCP CLASS III	M	30
603.195	600 MM RCP CLASS III	M	130
603.205	750MM REIN CONC PIPE CLASS III	M	150
603.215	900 MM RCP CLASS III	M	80
604.072	CATCH BASIN TYPE A1-C	EA	61
604.077	1800 MM CATCH BASIN TYPE A1-C	EA	5
604.092	CATCH BASIN TYPE B1-C	EA	21
604.096	1500 MM CATCH BASIN TYPE B1-C	EA	4
604.15	MANHOLE	EA	10
604.153	1500 MM MANHOLE	EA	2
604.154	1800 MM MANHOLE	EA	1
604.246	CATCH BASIN TYPE F5	EA	3
605.09	150 MM UNDERDRAIN TYPE B	M	950
605.11	300 MM UNDERDRAIN TYPE C	M	840
605.12	375 MM UNDERDRAIN TYPE C	M	280
605.13	450 MM UNDERDRAIN TYPE C	M	250
605.15	600 MM UNDERDRAIN TYPE C	M	240
605.17	750 MM UNDERDRAIN TYPE C	M	90
605.18	900 MM UNDERDRAIN TYPE C	M	40
606.24	GR TY 3D - SINGLE RAIL	M	10
606.78	LOW VOLUME GUARDRAIL END - TYPE 3	EA	1
607.163	CHAIN LINK FNCE- 1.2 M PVC COATED	M	220
608.08	REINFORCED CONCRETE SIDEWALK	M2	120
608.26	CURB RAMP DETECTABLE WARNING FIELD	M2	30
609.11	VERT CURB TYPE 1	M	1960
609.113	VERT CURB TYPE 1 - 300 MM REVEAL	M	50
609.12	VERT CURB TYPE 1- CIRCULAR	M	430
609.234	TERMINAL CURB TYPE 1 - 1.2 M	EA	38
609.237	TERMINAL CURB TYPE 1 - 2.1 M	EA	227
609.31	CURB TYPE 3	M	700
610.08	PLAIN RIPRAP	M3	40
615.07	LOAM	M3	820
618.1301	SEEDING METHOD NUMBER 1 - PLAN QUANTIT	UN	82
619.1201	MULCH - PLAN QUANTITY	UN	82
620.54	STABILIZATION GEOTEXTILE	M2	1800
621.126	SMALL DECID. TREES 6' - 8' GROUP A	EA	5
621.138	SMALL DECID. TREES 1 ½ " - 2" CAL.	EA	5
621.268	LARGE DECID. TREES 1 ¾" - 2 " CAL.	EA	5
621.401	EVERGREEN SHRUBS 2' - 2 ½'	EA	36
621.523	DECIDUOUS SHRUBS 15" - 18"	EA	36
621.54	DECIDUOUS SHRUBS 18" - 24"	EA	31
621.8	TWO-YEAR MAINTENANCE ESTABLISHMENT PERIOD	LS	1

ITEM	ITEM DESCRIPTION	UNIT	TOTAL
626.11	PRECAST CONC JUNCTION BOX:___	EA	5
626.22	NON-METALLIC CONDUIT	M	190
626.31	450 MM FOUNDATION	EA	5
626.331	900 MM FOUNDATION	EA	2
626.35	CONTROLLER CABINET FOUNDATION	EA	1
627.733	WH OR YELL PAINT PVMT MRK LINE (PL QUA	M	6860
627.75	WHITE OR YELLOW PVMT AND CURB MARKING	M2	500
629.05	HAND LABOR, STRAIGHT TIME	HR	100
631.1	AIR COMPRESSOR (INC OPERATOR)	HR	50
631.11	AIR TOOL (INCLUDING OPERATOR)	HR	50
631.12	ALL-PURPOSE EXC (INC OPERATOR)	HR	50
631.14	GRADER (INCLUDING OPERATOR)	HR	50
631.172	TRUCK-LARGE (INC OPERATOR)	HR	50
631.22	FRONT END LOADER (INC OPER)	HR	50
636.29	RETAINING WALL STEPS	EA	65
635.32	WET CAST SMALL LANDSCAPE BLOCK WALL	M2	420
639.18	FIELD OFFICE TYPE A	EA	1
642.17	CAST-IN-PLACE CONCRETE STEPS	M3	10
643.8	TRAFFIC SIGNAL AT MAIN/BRIDGE	LS	1
643.83	VIDEO DETECTION SYSTEM	LS	1
645.292	REG,WARN,CONF,RT SIGNS TYPE II	M2	25
645.306	FLEXIBLE REFLECTORIZED DELINEATOR	EA	1
652.33	DRUM	EA	200
652.34	CONE	EA	200
652.35	CONSTRUCTION SIGNS	M2	100
652.36	MAINT OF TRAFFIC CONTR DEVICES	CD	400
652.38	FLAGGER	HR	15000
652.381	UNIFORM TRAFFIC OFFICERS	HR	50
652.41	PORTABLE - CHANGE MESSAGE SIGN	EA	3
656.75	TEMP. SOIL EROSION AND WATER POLLUTION	LS	1
659.1	MOBILIZATION	LS	1
660.21	OJT	HR	2000
801.17	200-mm PVC SANITARY SEWER	M	465
801.18	300-mm PVC SANITARY SEWER	M	795
801.19	375-mm PVC SANITARY SEWER	M	35
803.01	TEST PITS	EA	9
803.135	150-mm PVC SANITARY SERVICE LATERAL	M	1050
803.17	REMOVE/ABANDON MANHOLE	EA	27
803.173	1.2-m DIA. SEWER MANHOLE	EA	28
812.162	ADJUST FRAME/COVER TO GRADE	EA	19
822.33	150-mm DI WATER PIPE	M	180
822.331	150-mm NITRILE GASKETS	EA	2
822.34	200-mm DI WATER PIPE	M	905
822.340	200-mm NITRILE GASKETS	EA	6
822.36	300-mm DI WATER PIPE	M	1010
822.360	300-mm NITRILE GASKETS	EA	20
823.31	300-mm GATE VALVES	EA	14
823.325	200-mm GATE VALVES	EA	9
823.331	150-mm GATE VALVES	EA	11
824.3	HYDRANT ASSEMBLY	EA	12
825.311	19 mm CORPORATION	EA	90
825.312	19mm CURB STOPS	EA	90
825.32	50 mm CORPORATION	EA	1
825.3211	30 mm CORPORATION	EA	3
825.3212	40 mm CORPORATION	EA	1
825.322	50 mm CURB STOPS	EA	1
825.33	25 mm CORPORATION	EA	2
825.331	25 mm CURB STOPS	EA	2
825.3311	30 mm CURB STOPS	EA	3
825.3312	40 mm CURB STOPS	EA	1
825.41	19 mm WATER SERVICES	M	720
825.43	25 mm WATER SERVICES	M	20
825.435	30 mm WATER SERVICES	M	35
825.436	40 mm WATER SERVICES	M	10
825.437	50 mm WATER SERVICES	M	25
825.45	CONNECTIONS AND TIE-INS TO EXISTING MAINS	EA	6
827.31	REPLACEMENT OF UNSUITABLE MATERIAL ABOVE TREN	M3	150
827.311	REPLACEMENT OF UNSUITABLE MATERIAL BELOW TREI	M3	150
827.33	PIPE TRENCH INSULATION	M	105

COMMON EXCAVATION FOR ESTIMATE

COMMON EXCAVATION (FROM CROSS SECTIONS)	19,000	
EARTH FROM DRIVES, OLD ROAD, ETC.	4,000	
GRUBBING IN FILL	660	
CULVERT INLET AND OUTLET DITCHES	50	
TOTAL COMMON EXCAVATION		23,710

FILL FOR BORROW CALCULATIONS

COMMON FILL (FROM CROSS SECTIONS)	770	
GRUBBING IN FILL	660	
TOTAL FILL		1,430

ROCK EXCAVATION FOR ESTIMATE

ROCK EXCAVATION (FROM CROSS SECTIONS)	200	
TOTAL ROCK EXCAVATION		200

UNCLASSIFIED EXCAVATION FOR ESTIMATE

TOTAL COMMON EXCAVATION	23,710	
TOTAL ROCK EXCAVATION	200	
TOTAL UNCLASSIFIED EXCAVATION		23,910

AVAILABLE COMMON EXCAVATION FOR BORROW CALCULATIONS

(1) TOTAL COMMON EXCAVATION		23,710
DEDUCTIONS:		
GRUBBING IN FILL	660	
(2) TOTAL DEDUCTIONS		660
TOTAL AVAILABLE COMMON EXCAVATION (1) MINUS (2)		23,050
TOTAL AVAILABLE STRUCT. EXCAVATIONS (USUALLY UNDERDRAIN ONLY)		2,500
TOTAL AVAILABLE NON-ROCK EXCAVATION		25,550

COMPUTATION OF WASTE STORAGE & WASTE MATERIAL

TOTAL AVAIL. WASTE STORAGE AREA (FROM CROSS SECTIONS)		0
GRUBBING IN FILL	660	
TOTAL WASTE MATERIAL TO BE UTILIZED (LOWER OF TOTAL AVAILABLE WASTE STORAGE AREA OR TOTAL WASTE MATERIAL)		660
TOTAL WASTE MATERIAL TO BE WASTED (TOTAL WASTE MATERIAL MINUS TOTAL WASTE MATERIAL TO BE UTILIZED)		660

COMPUTATION OF GRANULAR BORROW FOR ESTIMATE

GRANULAR BORROW = 0 x 1.15= 0

COMPUTATION FOR COMMON BORROW FOR ESTIMATE

(3)TOTAL FILL 1,430

TOTAL AVAIL. NON-ROCK EXCAV.	25,550 x 0.85 =	21,718	
TOTAL AVAIL. ROCK EXCAV.	500 x 1.33 =	665	
TOTAL AVAIL. STR. ROCK EXCAV.	150 x 1.33 =	200	
TOTAL WASTE MATERIAL TO BE UTILIZED	0 x 1 =	0	
(4)TOTAL AVAILABLE EXCAVATION		=	22,582
BORROW NEEDED = TOTAL FILL MINUS TOTAL AVAILABLE EXCAVATION			-21,152

IF NO BORROW IS NEEDED, SURPLUS MATERIAL = AVAILABLE EXCAVATION MINUS TOTAL FILL, PLUS TOTAL WASTE MATERIAL TO BE WASTED 21,812

GRANULAR BORROW IN LOW WET AREAS		0
GRANULAR BORROW TO UPGRADE EXCAVATION		0
GRANULAR BORROW TO MAINTAIN TRAFFIC		0
TOTAL FILL MINUS REQUIRED GRAN. BORR. WITHIN FILL		-21,152
COMMON BORROW =	-21,152 x 1.15 =	-24,325

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
PIN 10018.00

HIGHWAY PLANS

	NAME	BY	DATE
PROJ. MANAGER	R. WEBSTER		
DESIGN-DETAILED	J.BARTLETT	D.BURGESS	01-22-09
CHECKED-REVIEWED	J.BARTLETT	R.NORWOOD	
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
MAIN STREET (ROUTE 4/17)

ESTIMATE SHEET

SHEET NUMBER
4
OF 148

Division: HIGHWAY Username: common Date:2/15/2011

Filename: ...\HIGHWAY\MSTA\004_Estimate.dgn

STATION	CULVERT PIPE											CATCH BASIN					PIPE ARCH			MH	UNDERDRAIN						ELBOWS, TEES, WYES AND INLET GRATE UNITS	REMARKS
	RCP			CMP		OPTION I		OPTION III													TYPE B		TYPE C					
								SMOOTHLINED		CORRUGATED										GAGE OR WALL THICKNESS	TYPE B	OUTLET	SMOOTHLINED		CORRUGATED		DESCRIPTIONS	
	SIZE	LENGTH	CLASS	SIZE	LENGTH	SIZE	LENGTH	SIZE	LENGTH	SIZE	LENGTH	A1-C	B1-C	Ø	E	F	SPAN	RISE	LENGTH		LENGTH	LENGTH	SIZE	LENGTH	SIZE	LENGTH		
ROADWAY CULVERTS																												
CBI TO EXISTING	300	21.3	III																									
CB3 TO EXISTING	450	17.2	III																									
CB2 TO CB3	450	34.6	III																									
CB4 TO CB2	450	17.0	III																									
CB20 TO CB4	450	13.8	III																									
CB2I TO CB20	450	54.8	III																									
CB22 TO CB23	375	74.2	III																									
CB21A TO DMHI	300	6.3	III																									
DMHI TO CB22	375	5.4	III																									
CB5 TO EXDMHI	900	2.5	III																									
CB23 TO CB5	900	9.4	III																									
CB6 TO CB5A	300	40.8	III																									
CB5A TO EXDMHI	300	72.5	III																									
CB24 TO CB23	750	25.5	III																									
CB23B TO CB23A	300	6.0	III																									
CB23A TO EXDMH	300	8.1	III																									
CB25 TO CB24	750	41.7	III																									
DMH3 TO CB25	600	16.0	III																									
CB25A TO DMH3	300	8.9	III																									
CB26 TO DMH3	600	8.1	III																									
CB27 TO CB26	600	50.0	III																									
DMH4 TO CB27	450	14.1	III																									
CB28A TO CB28	300	2.0	III																									
CB28 TO DMH4	450	6.2	III																									
CB29B TO CB29	300	2.2	III																									
CB29 TO DMH5	300	4.8	III																									
DMH5 TO CB30	300	13.8	III																									
CB3I TO DMH6	450	14.9	III																									
CB3IA TO CB3IB	300	6.0	III																									
DMH6 TO CB32	600	6.3	III																									
CB8B TO CB8	300	1.0	III																									
CB35 TO DMH7	750	6.5	III																									
CB35B TO CB35A	300	6.0	III																									
CB35A TO DMH7	300	6.5	III																									
DMH7 TO CB36	750	24.7	III																									
CB36 TO CBIO	900	11.8	III																									
CBIO TO 40+769.0, 13.6m LT	900	5.2	III																									
DMH8 TO CB37	900	5.8	III																									
CB37B TO CB37A	300	11.7	III																									
CB38 TO DMH8	900	18.2	III																									
CB39A TO CB39B	300	6.0	III																									
CB39B TO CB39C	300	7.1	III																									
CB39C TO CB39	750	11.7	III																									
CB40 TO CB39C	750	9.4	III																									
DMH9 TO CBI0A	450	36	III																									
CBI0B TO DMH9	300	15.3	III																									
DMH9A TO DMH9	450	17.7	III																									
CBII TO DMH9A	450	7.9	III																									
CB39 TO DMH9A	300	9.2	III																									
EXDMH TO DMHI0	300	6.1	III																									
DMHII TO CB4I	600	14.5	III																									
CB42 TO DMHII	600	7.1	III																									
DMHI2 TO CB43	375	6.3	III																									
CB43B TO CB43A	375	5.4	III																									
CB44 TO DMHI2	375	12.7	III																									
DMHI3 TO CB45	300	6.4	III																									
CB45B TO CB45A	300	7.2	III																									
CB47 TO CB48	300	21.2	III																									
CB47A TO CB47	300	0.6	III																									
CB49 TO CBI5	600	7.9	III																									
CB I5 TO 41+314.8, 15.6m LT	750	9.4	III																									
41+467.2, 11.5m RT TO CB50	375	5.6	III																									
CBI6A TO 41+533.3, 15.2m LT	750	9.4	III																									
CBI6 TO CB50	300	9.3	III																									
CB5I TO CBI7	600	9.3	III																									
CBI8A TO CBI8	300	1.9	III																									
41+778.2, 8.0m RT TO CB53	600	2.1	III																									
CB53 TO CBI9	750	9.3	III																									
CBI9 TO 418+03.0, 14.4m LT	900	26.1	III																									
418+10.3, 19.9m RT TO CB53A	300	14.7	III																									
CB53A TO 418+03.1, 12.4m LT	300	17.2	III																									
CATCH BASINS AND MANHOLES																												
CBI - 5+060.0, 6.1m LT												1		1.2														
CB2 - 5+025.7, 6.855m RT												1		1.2														
CB3 - 5+060.0, 6.855m RT												1		1.2														
CB4 - 40+049.6, 10.1m LT												1		1.2														
CB5 - 40+198.6, 5.255m LT												1.4		1.8														
CB5A - 40+276.0, 5.255m LT												1		1.2														
CB6 - 40+138.0, 5.255m LT												1		1.2														
CB6A - 40+395.7, 5.255m LT												1		1.2														
CB7 - 40+503.4, 5.255m LT												1.2		1.2														

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
PIN 10018.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	R. WEBSTER	
DESIGN-DETAILED	D.BURGESS	01-22-09
CHECKED-REVIEWED	J.BARTLETT	
DESIGN2-DETAILED2	R.NORWOOD	
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
MAIN STREET (ROUTE 4/17)

DRAINAGE SCHEDULE - 1

SHEET NUMBER

5

OF 148

Division: HIGHWAY Username: common Date:2/9/2011

Filename: ...\msta\005_Drainage_01.dgn

STATION	CULVERT PIPE											CATCH BASIN					PIPE ARCH				MH	UNDERDRAIN						ELBOWS, TEES, WYES AND INLET GRATE UNITS	REMARKS
	RCP			CMP		OPTION I		OPTION III														TYPE B		TYPE C					
								SMOOTHLINED		CORRUGATED										GAGE OR WALL THICKNESS		TYPE B	OUTLET	SMOOTHLINED		CORRUGATED			
	SIZE	LENGTH	CLASS	SIZE	LENGTH	SIZE	LENGTH	SIZE	LENGTH	SIZE	LENGTH	A1-C	B1-C	SIZE	E	F	SPAN	RISE	LENGTH			LENGTH	LENGTH	SIZE	LENGTH	SIZE	LENGTH	DESCRIPTIONS	
CATCH BASINS AND MANHOLES																													
CB8 - 40+593.8, 5.255m LT												1		1.2															
CB8A - 40+630.0, 6.855m LT													1	1.2															
CB9 - 40+719.8, 6.855m LT												1		1.2															
CB10 - 40+769.0, 6.855m LT												1.4		1.8															
CB10A - 40+830.0, 6.855m LT												1		1.2															
CB8B - 40+593.8, 7.5m LT																1													
CB10B - 40+866.3, 10.7m LT												1		1.2															
CB11 - 40+894.85, 4.555m LT												1		1.2															
CB12 - 40+975.0, 4.555m LT												1		1.2															
CB12A - 41+035.0, 4.555m LT												1.4		1.2															
CB13 - 41+093.4, 4.555m LT												1.2		1.2															
CB14 - 41+234.4, 4.6m LT												1		1.2															
CB15 - 41+314.8, 4.555m LT												1.2		1.2															
CB16 - 41+467.1, 5.255m LT												1		1.2															
CB16A - 41+533.3, 5.255m LT													1.2	1.5															
CB17 - 41+556.3, 5.255m LT													1	1.5														SHAPE 5	
CB18 - 41+602.9, 5.255m LT													1	1.2															
CB18A - 41+602.8, 9.0m LT																1													
CB18B - 41+660.0, 5.255m LT													1	1.2															
CB19 - 41+778.2, 5.255m LT													1.4	1.5															
CB20 - 40+050.2, 5.255m RT												1		1.2															
CB21 - 40+105.0, 5.255m RT													1	1.2															
CB21A - 2+012.6, 3.855m LT												1		1.2															
CB22 - 40+123.8, 5.255m RT												1		1.2															
CB23 - 40+198.6, 5.255m RT												1		1.8															
CB23A - 3+023.0, 3.555m LT												1		1.2															
CB23B - 3+023.0, 3.555m RT													1	1.2															
CB24 - 40+225.7, 5.255m RT												1		1.2															
CB25 - 40+268.6, 5.255m RT												1		1.2															
CB25A - 4+015.0, 3.222m RT												1		1.2															
CB26 - 40+295.0, 5.255m RT												1		1.2															
CB27 - 40+346.2, 5.255m RT												1		1.2															
CB27A - 6+015.0, 3.855m RT													1	1.2															
CB28 - 40+368.9, 5.255m RT												1		1.2															
CB28A 40+368.0, 8.6m RT												1		1.2															
CB29 - 40+450.0, 5.255m RT												1		1.2															
CB29A - 7+028.3, 4.155m RT													1	1.2															
CB29B - 40+449.2, 7.931m RT												1		1.2															
CB30 - 40+471.0, 5.255m RT													1	1.2															
CB31 - 40+540.0, 5.255m RT												1		1.2															
CB31A - 8+028.3, 3.555m RT													1	1.2															
CB31B - 8+028.3, 3.555m LT													1	1.2															
CB32 - 40+563.6, 5.255m RT												1		1.2															
CB33 - 40+610.3, 5.255m RT												1		1.2															
CB33A - 40+668.0, 5.255m RT												1		1.2															
CB34 - 40+719.8, 5.255m RT													1	1.2															
CB35 - 40+735.0, 5.255m RT												1		1.2															
CB35A - 9+014.5, 3.555m RT												1		1.2															
CB35B - 9+014.5, 3.555m LT													1	1.2															
CB36 - 40+769.0, 6.855m RT												1.2		1.8															
CB37 - 40+810.5, 6.855m RT												1.2		1.2															
CB37A - 10+015.0, 4.655m RT												1		1.2															
CB37B - 10+015.0, 6.355m LT												1.2		1.2															
CB38 - 40+837.3, 5.255m RT												1.1		1.2															
CB39 - 40+881.9, 5.255m RT												1		1.2															
CB39A - 11+013.0, 3.255m RT												1		1.2															
CB39B - 11+013.0, 3.855m LT												1		1.2															
CB39C - 40+894.9, 4.4m RT												1		1.2															
CB40 - 40+905.0, 4.6m RT													1	1.2															
CB41 - 40+988.0, 4.555m RT												1.2		1.2															
CB41A - 12+017.0, 3.555m LT												1		1.2															
CB42 - 41+012.0, 4.555m RT												1		1.2															
CB43 - 41+068.0, 4.555m RT												1		1.2															
CB43A - 13+022.7, 3.255m RT													1.4	1.2															
CB43B - 13+022.7, 3.255m LT													1.4	1.2															
CB44 - 41+089.4, 4.555m RT												1		1.2															
CB45 - 41+143.0, 4.555m RT												1		1.2															
CB45A - 14+029.3, 4.2m RT													1	1.2															
CB45B - 14+029.3, 4.2m LT													1	1.2															
CB46 - 41+175.0, 4.555m RT												1		1.2															
CB47 - 41+222.8, 4.555m RT												1		1.2															
CB47A - 41+222.8, 6.3m RT																1													
CB48 - 41+246.1, 4.555m RT												1		1.2															
CB49 - 41+314.8, 4.555m RT													1	1.2															
CB50 - 41+467.2, 5.255m RT												1		1.2														SHAPE 5	
CB51 - 41+556.3, 5.255m RT												1		1.2															
CB52 - 41+645.0, 5.255m RT													1	1.2															
CB53 - 41+778.2, 5.255m RT													1.2	1.2															
CB53A - 41+805.4, 5.3m RT													1	1.2															
DMH1 - 40+117.2, 5.255m RT																					1.2								
EXDMH1 - 40+202.0, 4.5m LT																												ALTER CB TO MH	
DMH2 - NOT USED																					1.2								

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
PIN 10018.00

HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER	R. WEBSTER		
DESIGN-DETAILED	J.BARTLETT	D.BURGESS	01-22-09
CHECKED-REVIEWED	R.NORWOOD		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
MAIN STREET (ROUTE 4/17)

DRAINAGE SCHEDULE - 2

SHEET NUMBER

6

OF 148

Division: HIGHWAY Username: common Date:2/9/2011

Filename: ...\mst\V006_Drainage_02.dgn

STATION	CULVERT PIPE											CATCH BASIN					PIPE ARCH				MH	UNDERDRAIN						ELBOWS, TEES, WYES AND INLET GRATE UNITS	REMARKS
	RCP			CMP		OPTION I		OPTION III														TYPE B		TYPE C					
								SMOOTHLINED		CORRUGATED										GAGE OR WALL THICKNESS		TYPE B	OUTLET	SMOOTHLINED		CORRUGATED		DESCRIPTIONS	
	SIZE	LENGTH	CLASS	SIZE	LENGTH	SIZE	LENGTH	SIZE	LENGTH	SIZE	LENGTH	A1-C	B1-C	SIZE	E	F	SPAN	RISE	LENGTH			LENGTH	LENGTH	SIZE	LENGTH	SIZE	LENGTH		
CATCH BASINS AND MANHOLES																													
DMH3 - 40+285.8, 5.255m RT																					1.2								
DMH4 - 40+361.4, 5.255m RT																					1.2								
DMH5 - 40+456.0, 5.255m RT																					1.2								
DMH6 - 40+556.1, 5.255m RT																					1.2								
DMH7 - 40+742.8, 5.7m RT																					1.6								
DMH8 - 40+817.8, 6.4m RT																					1.6								
DMH9 - 40+866.9, 4.3m LT																					1.2								
DMH9A - 40+885.8, 4.4m LT																					1.8								
DMH10 - 40+923.4, 4.5m RT																					1.2								
DMH11 - 41+003.7, 4.555m RT																					1.2								
DMH12 - 41+075.5, 4.555m RT																					1.2								
DMH13 - 41+149.6, 8.3m RT																					1.2								
UNDERDRAINS																													
CB6A TO CB6																								300	76.2				
CB27A TO DMH4																								300	8.5				
40+430.7, 5.3m RT TO CB28																						6.1.1							
40+430.3, 5.3m LT TO CB6A																						33.6							
40+431.7, 5.3m RT TO CB 29																						18.3							
40+431.3, 5.3m LT TO CB7																						71.2							
CB29A TO DMH5																								300	21.9				
CB30 TO CB31																								375	67.8				
CB32 TO CB33																								600	45.4				
CB7 TO CB8																								300	89.7				
CB8 TO CB8A																								375	36.1				
CB8A TO CB9																								375	89.5				
CB33 TO CB33A																								600	55.3				
CB34 TO CB35																								750	14.0				
CB9 TO CB10																								450	48.0				
CB37 TO CB36																								900	40.0				
CB39 TO CB38																								750	43.5				
CB10A TO CB10																								450	59.8				
CB12 TO CB11																								375	79.0				
DMH10 TO CB40																								600	18.3				
CB41 TO DMH10																								600	64.4				
CB41A TO DMH11																								300	11.3				
CB43 TO CB42																								450	54.8				
CB43A TO DMH12																								300	16.8				
CB13 TO CB12A																								300	57.2				
CB45 TO CB44																								300	52.4				
CB45A TO DMH13																								300	19.6				
41+152, 4.6m LT TO CB13																						57.2							
41+160.3, 4.6m LT TO CB14																						75.6							
41+160.0, 4.6m RT TO CB46																						14.4							
CB46 TO CB47																								300	46.6				
CB48 TO CB49																								300	67.5				
CB14 TO CB15																								300	80.5				
41+399.8, 4.6m LT TO CB15																						85.9							
41+399.8, 4.6m RT TO CB49																						85.9							
41+400.8, 4.6m RT TO CB50																						65.2							
41+400.8, 4.6m LT TO CB16																						67.5							
CB50 TO CB51																								450	86.4				
41+472.1, 5.3m LT TO CB16A																						64.2							
CB17 TO CB16A																								750	20.2				
CB52 TO CB51																								300	90.4				
CB18 TO CB17																								300	46.8				
41+729.1, 5.3m LT TO CB18B																						67.1							
41+729.1, 5.3m RT TO CB52																						84.9							
41+730.1, 5.3m LT TO CB19																						48.0							
41+730.1, 5.3m RT TO CB53																						48.3							
CB31B TO DMH6																								300	21.8				
CB37A TO DMH8																								300	6.8				
CB33A TO CB34																								600	50.6				
CB12A TO CB12																								300	58.8				
CB18 TO CB 18B																								300	54.7				

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
PIN 10018.00

HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER	R. WEBSTER		
DESIGN-DETAILED	J.BARTLETT	D.BURGESS	01-22-09
CHECKED-REVIEWED	R.NORWOOD	WOOD	
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
MAIN STREET (ROUTE 4/17)

DRAINAGE SCHEDULE - 3

SHEET NUMBER

7

OF 148

Division: HIGHWAY Username: common Date:2/9/2011

Filename: ...\msla\007_Drainage_03.dgn

GENERAL NOTES

1. THE UTILITIES INVOLVED IN THIS CONTRACT ARE AS FOLLOWS :

CENTRAL MAINE POWER
FAIRPOINT
TIMEWARNER CABLE
LIVERMORE FALLS WATER DISTRICT
TOWN OF JAY
LIVERMORE FALLS SEWER DISTRICT
JAY SEWER DISTRICT

2. ALL UTILITY FACILITES SHALL BE ADJUSTED BY THE RESPECTIVE UTILITIES UNLESS NOTED.

3. THE CLEARING AND SELECTIVE CLEARING AND THINNING LINES SHOWN ON THE PLANS ARE FOR ESTIMATING PURPOSES ONLY. THE ACTUAL LINES FOR CLEARING SHALL BE ESTABLISHED IN THE FIELD BY THE CONTRACTOR AND APPROVED BY THE RESIDENT.

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

5. IF FOUNDATION MATERIAL IS REQUIRED UNDER CULVERTS, IT SHALL MEET THE REQUIREMENTS FOR GRANULAR BORROW - UNDERWATER BACKFILL AND WILL BE PAID FOR AS GRANULAR BORROW.

6. GRANULAR BORROW USED TO BACKFILL MUCK EXCAVATION OR IN LOW WET AREAS TO 0.3 M ABOVE WATER LEVEL OR OLD GROUND SHALL MEET REQUIREMENTS FOR GRANULAR BORROW UNDERWATER BACKFILL.

7. RESIDENTIAL PAVED ENTRANCES SHALL BE CONSTRUCTED WITH: 50 MM HOT MIX ASPHALT - 9.5 MM AND 300 MM AGGREGATE SUBBASE COURSE-GRAVEL.

8. UNPAVED ENTRANCES SHALL BE CONSTRUCTED WITH: 275 MM AGGREGATE SUBBASE COURSE-GRAVEL & 75 MM UNTREATED AGGREGATE SURFACE COURSE.

9. A ONE METER PAVED LIP SHALL BE PLACED AT ALL GRAVEL ENTRANCES UNLESS OTHERWISE NOTED ON THE PLANS OR DIRECTED BY THE RESIDENT.

10. ALL PAVED WALKS TO BE CONSTRUCTED WITH: 50 MM HOT BITUMINOUS PAVEMENT AND 300 MM AGGREGATE SUBBASE COURSE-GRAVEL.

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

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

13. INLETS AND OUTLETS OF ALL CULVERTS SHALL BE RIPRAPPED 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.

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

16. A 1 M SQUARE RIPRAP PAD SHALL BE CONSTRUCTED AT U.D. OUTLETS.

17. REMOVAL OF ANY EXISTING CATCH BASIN OR MANHOLE IS TO BE PAID FOR UNDER ITEM 202.15, REMOVING MANHOLE OR CATCH BASIN.

18. CURB TYPE 3 SHALL BE SEALED WITH BITUMINOUS SEALING-BLACK, WHEN DIRECTED. MOLD 1 SHALL BE USED ADJACENT TO SIDEWALKS. MOLD 2 SHALL BE USED IN ALL OTHER LOCATIONS.

19. ALL CATCH BASINS TYPE A PLACED ON CIRCULAR CURB TYPE 1 SHALL HAVE THE CURB INLET CUT THE SAME RADIUS AS ADJACENT CIRCULAR CURB. PAYMENT SHALL BE INCIDENTAL TO ITEM 604.

20. THE 1.2 M OR 2.1 M OF CIRCULAR CURB TYPE 1 REQUIRED TO BE CUT FOR A TERMINAL CURB SECTION SHALL BE PAID FOR UNDER ITEM 609.234 OR ITEM 609.237, RESPECTIVELY.

21. LOAM HAS BEEN ESTIMATED FOR 100% OF THE DISTURBED SLOPE AREA. ACTUAL PLACEMENT OF THE LOAM SHALL BE AS DESIGNATED BY THE RESIDENT.

22. 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 NON-GUARDRAIL SLOPES SEEDING METHOD NO.3 SHALL BE UTILIZED ON ALL GUARDRAIL FILL SLOPES, SEEDING METHOD NO. 3 SHALL BE USED INSTEAD OF METHOD NO. 2 IF NOTED OR DIRECTED BY THE RESIDENT.

23. MULCH SHALL BE APPLIED IN AREAS SEEDED BY SEEDING METHOD NO. 1, SEEDING METHOD NO. 2 AND SEEDING METHOD NO. 3.

24. LOAM SHALL BE PLACED TO A NOMINAL DEPTH OF 100 MM IN LAWN AREAS AND 50 MM IN ALL OTHER AREAS UNLESS OTHERWISE NOTED OR DIRECTED BY THE RESIDENT.

25. ALL PEDESTRIAN RAMPS SHALL BE A MINIMUM OF 1.8 M WIDE.

26. 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.

27. THE FILL SHOWN ON THE CROSS SECTIONS INCLUDES THE WASTE STORAGE.

28. ESTIMATED QUANTITIES FOR REQUIRED STRUCTURAL EARTH EXCAVATION, DRAINAGE AND MINOR STRUCTURES ARE INFORMATIONAL ONLY AND REPRESENT THE APPROXIMATE MINIMUM QUANTITY REQUIRED TO INSTALL DRAINAGE STRUCTURES. ADDITIONAL EXCAVATION FOR THE CONTRACTOR'S CONVENIENCE OR TO COMPLY WITH BACKSLOPING REQUIREMENTS WILL NOT BE PAID FOR DIRECTLY BUT WILL BE CONSIDERED INCIDENTAL TO THE RELATED DRAINAGE ITEMS.

29. NO SEPARATE PAYMENT FOR SUPERINTENDENT OR FOREMAN WILL BE MADE FOR THE SUPERVISION OF EQUIPMENT BEING PAID FOR UNDER THE EQUIPMENT RENTAL ITEMS.

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

31. ANY NECESSARY CLEANING OF EXISTING PAVEMENT PRIOR TO PAVING SHALL BE INCIDENTAL TO THE RELATED PAVING ITEMS.

32. EXISTING CULVERTS AND CATCH BASINS WILL BE CLEANED AS DIRECTED BY THE CONSTRUCTION MANAGER UNDER THE APPROPRIATE PAY ITEMS.

33. REPLACE ALL EXISTING SINGLE MAILBOX POSTS CONSIDERED TO BE A HAZARD TO TRAFFIC WITH SINGLE WOOD POSTS AS DIRECTED BY THE RESIDENT.

34. ALL DITCHES THAT ARE REGRADED/EXCAVATED MUST RECEIVE EROSION CONTROL IMMEDIATELY, AS DIRECTED BY THE RESIDENT.

35. REQUIRED DITCH PROTECTION SHOWN ON THE PLANS OR IN THE CONSTRUCTION NOTES IS FOR ESTIMATING PURPOSES ONLY. THE ACTUAL TYPE AND LOCATION OF DITCH PROTECTION MAY BE ALTERED BY THE RESIDENT.

36. ANY AND ALL EROSION CONTROL ITEM QUANTITIES MAY BE ADJUSTED IN THE FIELD BY THE RESIDENT.

37. TRIM ALL TREE BRANCHES TO 6 METERS ABOVE THE PAVEMENT AND 6.4 METERS FROM THE CENTERLINE, AS WELL AS THE BRANCHES DAMAGED BY THE CONTRACTOR DURING CONSTRUCTION. PAYMENT SHALL BE MADE UNDER RENTAL ITEMS. IF A TREE SPECIALIST IS SUBCONTRACTED FOR THIS WORK, PAVEMENT SHALL BE MADE BY INVOICE PLUS 5%.

38. STATIONS REFERENCED IN THE CONSTRUCTION NOTES ARE APPROXIMATE.

39. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE MAINE DEPARTMENT OF TRANSPORTATION'S BEST MANAGEMENT PRACTICES FOR EROSION CONTROL & SEDIMENT CONTROL, FEBRUARY, 2008.

40. THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION (MDEP) HAS REPORTED SPILLS AND RELEASES INVOLVING PETROLEUM PRODUCTS ADJACENT TO THE PROJECT FROM STATION 40+000 TO STATION 40+320. BASED ON THE SCOPE OF WORK PRESENTED, AVAILABLE DATA SUGGESTS THAT THIS CONTAMINATION MAY ONLY BE ADJACENT TO THE IMMEDIATE AREAS OF ANY EXCAVATION PROPOSED BY THE MAINE DEPARTMENT OF TRANSPORTATION (MAINEDOT). HOWEVER, IN LIGHT OF MDEP'S FINDINGS, THE CONTRACTOR SHALL EMPLOY APPROPRIATE HEALTH AND SAFETY MEASURES TO PROTECT ITS WORKERS AGAINST HAZARDS ASSOCIATED WITH WORKING NEAR PETROLEUM-IMPACTED SOILS. FURTHERMORE, THE CONTRACTOR SHALL REMAIN ALERT FOR ANY ADDITIONAL EVIDENCE OF CONTAMINATION. IF THE CONTRACTOR ENCOUNTERS EVIDENCE OF SOIL OR GROUNDWATER CONTAMINATION, THE CONTRACTOR SHALL SECURE THE EXCAVATION, STOP WORK IN THE CONTAMINATED AREA, AND IMMEDIATELY NOTIFY THE ENGINEER. THE ENGINEER SHALL CONTACT THE HYDROGEOLOGIST IN MAINEDOT'S ENVIRONMENTAL OFFICE AT 207-624-3100 AND THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION (MDEP) AT 800-482-0777. WORK MAY ONLY CONTINUE WITH AUTHORIZATION FROM THE ENGINEER.

41. CATCH BASIN FRAMES SHALL BE 50 MM BELOW NORMAL GUTTER GRADES IN AREAS OF TYPE 1 CURB AND 25 MM BELOW NORMAL GUTTER GRADE IN AREAS OF TYPE 3 AND TYPE 5 CURB.

42. ALL SIDE STREETS EXCEPT BRIDGE STREET SHALL BE CONSTRUCTED WITH THE FOLLOWING BUILDUP:
35MM HOT MIX ASHPALT 12.5MM
65MM HOT MIX ASPHALT 19.0MM
450MM AGGREGATE SUBBASE COURSE GRAVEL
BRIDGE STREET SHALL BE CONSTRUCTED WITH THE SAME BUILD UP AS MAIN STREET.

43. COMMERCIAL PAVED ENTRANCES SHALL BE CONSTRUCTED WITH 75MM HOT MIX ASPHALT AND 275MM AGGREGATE SUBBASE COURSE GRAVEL.

44. ANY NECESSARY CUTTING OF EXISTING CATCH BASINS TO ALLOW FOR PROPOSED PIPE CONNECTIONS WILL NOT BE PAID FOR SEPARATELY AND WILL BE CONSIDERED INCIDENTAL TO ITEM 603 OR 605.

45. WHITE PAVEMENT/CURB MARKING (ITEM 627.75) SHALL BE APPLIED TO BITUMINOUS CURB ENDS AT DRIVEWAY OPENINGS AS DIRECTED BY THE RESIDENT.

46. RESIDENTIAL PAVED ENTRANCES SHALL BE CONSTRUCTED WITH 50mm OF HOT MIX ASPHALT AND 300mm OF AGGREGATE SUBBASE COURSE GRAVEL.

47. CONNECTION OF UNDERDRAIN ASSOCIATED WITH THE WALLS SHALL BE CONNECTED TO THE STORM DRAIN OR UNDERDRAIN IN THE STREET USING TEES. THE COST OF ALL LABOR, EQUIPMENT, AND MATERIALS INCLUDING BUT NOT LIMITED TO PIPE, FITTINGS, TEES, BACKFILL, ETC. SHALL BE INCIDENTAL TO THE WALL ITEMS.

48. HANDRAILS ASSOCIATED WITH RETAINING WALLS SHALL BE INCIDENTAL TO ITEM 636.29 - RETAINING WALL STEPS AND SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIALS INCLUDING BUT NOT LIMITED TO RAILS AND MOUNTING HARDWARE.

49. REMOVAL OF EXISTING RETAINING WALLS AND EXISTING STAIRS SHALL BE PAID FOR UNDER ITEM 203.2 - COMMON EXCAVATION.

FOR WATER AND SEWER NOTES SEE SHEET C-1

GEOTECHNICAL NOTES

GENERAL
1. THE PROJECT GEOTECHNICAL REPORT, SUBSURFACE INVESTIGATION FOR RECONSTRUCTION OF ROUTE 4/117 IN THE TOWNS OF LIVERMORE FALLS IN ANDROSCOGGIN COUNTY AND JAY IN FRANKLIN COUNTY, MAINEDOT SOILS REPORT NUMBER 2010-22, SEPTEMBER 1, 2010, MAY BE ACCESSED AT THE FOLLOWING WEB ADDRESS:

www.maine.gov/mdot/comprehensive-list-projects/project-information.php

2. GEOTECHNICAL INFORMATION FURNISHED OR REFERENCED IN THIS PLAN SET IS FOR THE BIDDERS' AND CONTRACTOR'S USE. NO ASSURANCE IS GIVEN THAT THE INFORMATION OR INTERPRETATIONS WILL BE REPRESENTATIVE OF ACTUAL SUBSURFACE CONDITIONS AT THE TIME OF CONSTRUCTION. THE DEPARTMENT SHALL NOT BE RESPONSIBLE FOR THE BIDDERS' AND CONTRACTOR'S INTERPRETATIONS OF, OR CONCLUSIONS DRAWN FROM, THE GEOTECHNICAL INFORMATION. THE BORING LOGS CONTAINED IN THE PLAN SET PRESENT INTERPRETIVE SUBSURFACE INFORMATION COLLECTED AT DISCRETE LOCATIONS. DATA PROVIDED MAY NOT BE REPRESENTATIVE OF THE SUBSURFACE CONDITIONS BETWEEN BORING LOCATIONS.

SLOPES

3. WHERE NEW EMBANKMENT FILLS ARE PLACED ON EXISTING SLOPES STEEPER THAN 2H:1V AND AS SHOWN ON THE PLANS, THE EXISTING SLOPES SHALL BE CONTINUOUSLY BENCHED AS PER STANDARD SPECIFICATION 203.09 AND OSHA REQUIREMENTS FOR EXCAVATIONS. BENCHING SHOWN ON THE CROSS SECTIONS IS FOR ESTIMATING PURPOSES ONLY.

SUBGRADE

4. DAMP TO WET SILTY SOILS WERE ENCOUNTERED NEAR SUBGRADE LEVEL AT STATIONS 40+520, 41+020 AND 41+800. A NON-WOVEN GEOTEXTILE MEETING THE REQUIREMENT OF STANDARD SPECIFICATION 722.01 MAY BE NEEDED TO SUPPORT SUBGRADE SOILS IN THESE AREAS. PAYMENT FOR STABILIZATION/REINFORCING GEOTEXTILE WILL BE MADE UNDER APPROPRIATE PROJECT PAY ITEMS.

BEDROCK

5. LIMITED BEDROCK INFORMATION IS AVAILABLE FOR THIS PROJECT. LEDGE LINES ARE NOT SHOWN ON THE PLANS FOR THIS REASON.

6. BEDROCK EXCAVATION IS ANTICIPATED IN AREAS FROM STATION 41+100 TO STATION 41+400. BEDROCK ENCOUNTERED AT SUBGRADE IN AREAS OF SILT SUBGRADE SOILS WILL BE SHATTERED TO A DEPTH OF 1.2 METERS BELOW SUBGRADE ACCORDING TO THE REQUIREMENTS OF SPECIAL PROVISION 203, DRILLING AND BLASTING OF SOLID ROCK SUBGRADE.

7. STRUCTURAL ROCK EXCAVATION FOR DRAINAGE AND MINOR STRUCTURES WILL ALSO BE NEEDED IN THIS AREA.

REUSE OF SOILS

8. EXCAVATED EXISTING SUBBASE AGGREGATE MAY NOT BE REUSED IN BASE OR SUBBASE AGGREGATE FOR NEW CONSTRUCTION ON THIS PROJECT. IT MAY BE USED AS FILL BELOW SUBGRADE ELEVATION.

9. EXCAVATED CLAY-SILT SOILS MAY NOT BE REUSED ON THIS PROJECT EXCEPT TO DRESS SIDE-SLOPES BELOW THE BOTTOM ELEVATION OF THE SHOULDER SUBGRADE.

RETAINING WALLS

10. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ARRANGE ACCESS TO ABUTTING PROPERTIES FOR ANY SHORING REQUIRED, AND TO MAINTAIN ACCESS FOR RESIDENTS OF ALL AFFECTED BUILDINGS. IF SHORING BECOMES NECESSARY OR IF STAIRS, LANDINGS, ETC. NEED TO BE REPLACED THEN PAYMENT WILL BE MADE BY FORCE ACCOUNT CONSISTENT WITH THE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, SECTION 109.7.5.

11. WHERE EXISTING CONCRETE WALLS WILL BE SHORTENED OR ALTERED, CONCRETE CUTTING WILL BE DONE IN A PROFESSIONAL MANNER. CONCRETE CUTTING WILL BE INCIDENTAL TO CONSTRUCTION OF THE NEW WALL. IF ANY PATCHING IS REQUIRED AS A RESULT CONTRACTOR'S CONCRETE CUTTING OPERATION, THIS PATCHING WILL BE INCIDENTAL TO THE NEW WALL CONSTRUCTION.

12. GEOGRID REINFORCEMENT MAY BE ADDED TO BACK OF THE EXISTING CONCRETE WALL FROM APPROXIMATELY STATION 41+141 TO STATION 41+144. IF NEEDED, IT WILL BE ATTACHED TO THE BACK OF THE EXISTING WALL BY STEEL BARS WITH ATTACHMENTS GROUTED INTO THE CONCRETE. THE NEED FOR THIS REINFORCEMENT WILL BE DETERMINED DURING CONSTRUCTION AND DESIGN WILL BE PROVIDED BY MDOT. THIS REINFORCEMENT WILL BE PAID AS FORCE ACCOUNT IF IT IS REQUIRED.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
PIN 10018.00

HIGHWAY PLANS

PROJ. MANAGER	R. WEBSTER		
DESIGN-DETAILED	J.BARTLETT	D.BURGESS	01-22-09
CHECKED-REVIEWED	J.BARTLETT	R.NORWOOD	
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
MAIN STREET (ROUTE 4/17)

GENERAL NOTES

SHEET NUMBER
8
OF 148

Division: HIGHWAY Username: common Date:2/9/2011

Filename: ...\mst\v008_GeneralNotes.dgn

METRIC
1. All dimensions are in millimeters unless otherwise noted.
2. All elevations and stations are in meters.

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	NH-10018(800)E	9	148

10018.00

Maine Department of Transportation — Soil/Rock Exploration Log — METRIC UNITS

Project: Route 4/17, Main Street
Location: Livermore Falls/Jay, Maine
Boring No.: HGT-1
PIN: 10018.00

Drillers:	Maine Test Boring	Elevation (m):	114.90	Auger ID/OD:	106/156 mm
Operator:	Mel Coffin	Datum:	NGVD	Sampler:	Standard Split Spoon
Logged By:	Brad Tirone/HAI	Rig Type:	Mobile Drill	Hammer Wt./Fall:	63.5 kg/760 mm
Date Start/Finish:	6/10/03-6/10/03	Drilling Method:	Hollow Stem Auger	Core Barrel:	N/A
Boring Location:	40+130, 3.0 Rt.	Casing ID/OD:	N/A	Water Level*:	Boring dry

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample attempt; U = Thin Wall Tube Sample; R = Rock Core Sample; V = Insitu Vane Shear Test; SSA = Solid Stem Auger
Definitions: S_{vf} = Insitu Field Vane Shear Strength (kPa); T_v = Pocket Torvane Shear Strength (kPa); q_u = Unconfined Compressive Strength (Pa); $S_{vf\,(lab)}$ = Lab Vane Shear Strength (kPa); WOH = weight of 64 kg hammer; WOR = weight of rods; WOC = weight of casing
Definitions: MC = water content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test

Sample Information

Depth (m)	Sample No.	Pen/Rec (cm)	Sample Depth (m)	Blows (150 mm) Shear Strength (kPa) or WOR (*)	N-value	Casing Blows	Elevation (m)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0						HSA	114.78		ASPHALT. 0.12	
	10	61.0/45.7	0.46 - 1.07	8/7/6/6	13		114.46		Brown SAND and GRAVEL. 0.46	
1.2									Brown-tan, dry to damp, medium dense, fine to medium SAND, trace silt.	GM176760 A-1-b, SM WC=3.8%
	20	61.0/55.9	1.52 - 2.13	7/8/8/11	16		113.38		1.52	
2.4									Tan, dry to damp, medium dense, very fine SAND and SILT.	GM176761 A-4, ML WC=18.5%
							112.31		Brown SAND and GRAVEL. 2.59	
3.6							111.85		Bottom of Exploration at 3.05 m below ground surface. No Refusal	
4.8										
6										
7.2										
8.4										
9.6										

Remarks:

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.
* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1
Boring No.: HGT-1

Maine Department of Transportation — Soil/Rock Exploration Log — METRIC UNITS

Project: Route 4/17, Main Street
Location: Livermore Falls/Jay, Maine
Boring No.: HGT-2
PIN: 10018.00

Drillers:	Maine Test Boring	Elevation (m):	115.20	Auger ID/OD:	106/156 mm
Operator:	Mel Coffin	Datum:	NGVD	Sampler:	Standard Split Spoon
Logged By:	Brad Tirone/HAI	Rig Type:	Mobile Drill	Hammer Wt./Fall:	63.5 kg/760 mm
Date Start/Finish:	6/10/03-6/10/03	Drilling Method:	Hollow Stem Auger	Core Barrel:	N/A
Boring Location:	40+160, 5.5 Rt.	Casing ID/OD:	N/A	Water Level*:	Boring dry

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample attempt; U = Thin Wall Tube Sample; R = Rock Core Sample; V = Insitu Vane Shear Test; SSA = Solid Stem Auger
Definitions: S_{vf} = Insitu Field Vane Shear Strength (kPa); T_v = Pocket Torvane Shear Strength (kPa); q_u = Unconfined Compressive Strength (Pa); $S_{vf\,(lab)}$ = Lab Vane Shear Strength (kPa); WOH = weight of 64 kg hammer; WOR = weight of rods; WOC = weight of casing
Definitions: MC = water content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test

Sample Information

Depth (m)	Sample No.	Pen/Rec (cm)	Sample Depth (m)	Blows (150 mm) Shear Strength (kPa) or WOR (*)	N-value	Casing Blows	Elevation (m)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0						HSA	115.08		ASPHALT. Two layers asphalt each 61 mm thick. 0.12	
							114.90		CONCRETE. 0.30	
1.2	10	61.0/40.6	0.46 - 1.07	6/5/5/8	10				Tan, dry to damp, medium dense, very fine SAND, trace silt, trace medium to coarse sand.	GM176762 A-2-4, SM WC=7.2%
									1.52	
2.4	20	61.0/61.0	1.52 - 2.13	10/9/8/10	17		113.68		Brown, damp, medium dense, fine SAND, trace silt.	
							113.07		Bottom of Exploration at 2.13 m below ground surface. No Refusal	
3.6									2.13	
4.8										
6										
7.2										
8.4										
9.6										

Remarks:

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.
* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1
Boring No.: HGT-2

Maine Department of Transportation — Soil/Rock Exploration Log — METRIC UNITS

Project: Route 4/17, Main Street
Location: Livermore Falls/Jay, Maine
Boring No.: HGT-3
PIN: 10018.00

Drillers:	Maine Test Boring	Elevation (m):	116.20	Auger ID/OD:	106/156 mm
Operator:	Mel Coffin	Datum:	NGVD	Sampler:	Standard Split Spoon
Logged By:	Brad Tirone/HAI	Rig Type:	Mobile Drill	Hammer Wt./Fall:	63.5 kg/760 mm
Date Start/Finish:	6/12/03-6/12/03	Drilling Method:	Hollow Stem Auger	Core Barrel:	N/A
Boring Location:	40+280, 3.5 Rt.	Casing ID/OD:	N/A	Water Level*:	Boring dry

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample attempt; U = Thin Wall Tube Sample; R = Rock Core Sample; V = Insitu Vane Shear Test; SSA = Solid Stem Auger
Definitions: S_{vf} = Insitu Field Vane Shear Strength (kPa); T_v = Pocket Torvane Shear Strength (kPa); q_u = Unconfined Compressive Strength (Pa); $S_{vf\,(lab)}$ = Lab Vane Shear Strength (kPa); WOH = weight of 64 kg hammer; WOR = weight of rods; WOC = weight of casing
Definitions: MC = water content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test

Sample Information

Depth (m)	Sample No.	Pen/Rec (cm)	Sample Depth (m)	Blows (150 mm) Shear Strength (kPa) or WOR (*)	N-value	Casing Blows	Elevation (m)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0						HSA	115.98		ASPHALT PAVEMENT. 0.24	
	10	21.6/17.8	0.24 - 0.46	36/13/16/1	---		115.74		Dense, dry, coarse to fine gravelly SAND. 0.46	
1.2	20	61.0/40.6	0.46 - 1.07	25/21/21/13	42		115.44		Light brown, dry, dense, gravelly coarse to fine SAND, trace silt, trace brick. 0.76	
									Brown, damp, medium dense, medium to fine SAND, little silt, trace gravel. 1.58	
2.4	30	61.0/53.3	1.52 - 2.13	21/55/42/35	97		114.61		Brown, dry, SILT, little fine sand. 1.68	
							114.52		Brown, dry, very dense, gravelly coarse to fine SAND. 2.13	
3.6							114.07		Brown, dry, medium to fine SAND, trace gravel.	
							113.15		3.05	
4.8									Bottom of Exploration at 3.05 m below ground surface. No Refusal	
6										
7.2										
8.4										
9.6										

Remarks:

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.
* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1
Boring No.: HGT-3

Maine Department of Transportation — Soil/Rock Exploration Log — METRIC UNITS

Project: Route 4/17, Main Street
Location: Livermore Falls/Jay, Maine
Boring No.: HGT-4
PIN: 10018.00

Drillers:	Maine Test Boring	Elevation (m):	118.20	Auger ID/OD:	106/156 mm
Operator:	Mel Coffin	Datum:	NGVD	Sampler:	Standard Split Spoon
Logged By:	Brad Tirone/HAI	Rig Type:	Mobile Drill	Hammer Wt./Fall:	63.5 kg/760 mm
Date Start/Finish:	6/12/03-6/12/03	Drilling Method:	Hollow Stem Auger	Core Barrel:	N/A
Boring Location:	40+380, 3.5 Rt.	Casing ID/OD:	N/A	Water Level*:	Boring dry

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample attempt; U = Thin Wall Tube Sample; R = Rock Core Sample; V = Insitu Vane Shear Test; SSA = Solid Stem Auger
Definitions: S_{vf} = Insitu Field Vane Shear Strength (kPa); T_v = Pocket Torvane Shear Strength (kPa); q_u = Unconfined Compressive Strength (Pa); $S_{vf\,(lab)}$ = Lab Vane Shear Strength (kPa); WOH = weight of 64 kg hammer; WOR = weight of rods; WOC = weight of casing
Definitions: MC = water content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test

Sample Information

Depth (m)	Sample No.	Pen/Rec (cm)	Sample Depth (m)	Blows (150 mm) Shear Strength (kPa) or WOR (*)	N-value	Casing Blows	Elevation (m)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0							118.08		ASPHALT PAVEMENT. 0.12	
	10	30.5/27.9	0.15 - 0.46	18/17	---				Light brown, dry, dense, coarse to fine SAND, little gravel. 0.46	
1.2	20	61.0/33.0	0.46 - 1.07	17/9/10/7	19		117.78		Brown, dry, medium dense, coarse to fine SAND. 1.07	
							117.18		Brown, damp, coarse to fine SAND. 1.37	
2.4							116.85		Bottom of Exploration at 1.37 m below ground surface. Refusal, Material UNKNOWN.	
3.6										
4.8										
6										
7.2										
8.4										
9.6										

Remarks:

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.
* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1
Boring No.: HGT-4

Maine Department of Transportation — Soil/Rock Exploration Log — METRIC UNITS

Project: Route 4/17, Main Street
Location: Livermore Falls/Jay, Maine
Boring No.: HGT-5
PIN: 10018.00

Drillers:	Maine Test Boring	Elevation (m):	119.20	Auger ID/OD:	106/156 mm
Operator:	Mel Coffin	Datum:	NGVD	Sampler:	Standard Split Spoon
Logged By:	Brad Tirone/HAI	Rig Type:	Mobile Drill	Hammer Wt./Fall:	63.5 kg/760 mm
Date Start/Finish:	6/13/03-6/13/03	Drilling Method:	Hollow Stem Auger	Core Barrel:	N/A
Boring Location:	40+440, 7.0 Lt.	Casing ID/OD:	N/A	Water Level*:	Boring dry

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample attempt; U = Thin Wall Tube Sample; R = Rock Core Sample; V = Insitu Vane Shear Test; SSA = Solid Stem Auger
Definitions: S_{vf} = Insitu Field Vane Shear Strength (kPa); T_v = Pocket Torvane Shear Strength (kPa); q_u = Unconfined Compressive Strength (Pa); $S_{vf\,(lab)}$ = Lab Vane Shear Strength (kPa); WOH = weight of 64 kg hammer; WOR = weight of rods; WOC = weight of casing
Definitions: MC = water content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test

Sample Information

Depth (m)	Sample No.	Pen/Rec (cm)	Sample Depth (m)	Blows (150 mm) Shear Strength (kPa) or WOR (*)	N-value	Casing Blows	Elevation (m)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0						HSA	119.08		ASPHALT PAVEMENT. 0.12	
	10	61.0/45.7	0.15 - 0.76	13/14/13/13	27		118.93		Brown, dry, medium dense, fine to medium SAND, little gravel, trace silt. 0.27	
1.2									Brown, dry, medium dense, coarse to fine SAND.	
	20	61.0/40.6	1.52 - 2.13	4/6/9/9	15		117.68		1.52	
2.4									Brown, moist, medium dense, coarse to fine SAND.	
							117.07		2.13	
3.6									Bottom of Exploration at 2.13 m below ground surface. No Refusal	
4.8										
6										
7.2										
8.4										
9.6										

Remarks:

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.
* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1
Boring No.: HGT-5

Maine Department of Transportation — Soil/Rock Exploration Log — METRIC UNITS

Project: Route 4/17, Main Street
Location: Livermore Falls/Jay, Maine
Boring No.: HGT-6
PIN: 10018.00

Drillers:	Maine Test Boring	Elevation (m):	116.40	Auger ID/OD:	106/156 mm
Operator:	Mel Coffin	Datum:	NGVD	Sampler:	Standard Split Spoon
Logged By:	Brad Tirone/HAI	Rig Type:	Mobile Drill	Hammer Wt./Fall:	63.5 kg/760 mm
Date Start/Finish:	6/13/03-6/13/03	Drilling Method:	Hollow Stem Auger	Core Barrel:	N/A
Boring Location:	40+520, 5.5 Rt.	Casing ID/OD:	N/A	Water Level*:	Boring dry

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample attempt; U = Thin Wall Tube Sample; R = Rock Core Sample; V = Insitu Vane Shear Test; SSA = Solid Stem Auger
Definitions: S_{vf} = Insitu Field Vane Shear Strength (kPa); T_v = Pocket Torvane Shear Strength (kPa); q_u = Unconfined Compressive Strength (Pa); $S_{vf\,(lab)}$ = Lab Vane Shear Strength (kPa); WOH = weight of 64 kg hammer; WOR = weight of rods; WOC = weight of casing
Definitions: MC = water content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test

Sample Information

Depth (m)	Sample No.	Pen/Rec (cm)	Sample Depth (m)	Blows (150 mm) Shear Strength (kPa) or WOR (*)	N-value	Casing Blows	Elevation (m)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0						HSA	116.34		ASPHALT PAVEMENT. 0.06	
	10	61.0/43.2	0.30 - 0.91	7/8/8/8	16		116.10		Brown, dry, fine to coarse SAND, some gravel, trace silt. 0.30	GM176764 A-1-b, SM WC=10.8%
1.2							115.49		Brown, damp, medium dense, fine to coarse SAND, some silt, trace gravel. 0.91	
									Brown, damp, SILT, trace fine sand. 1.52	
2.4	20	39.4/22.9	1.52 - 1.92	13/45/50(75)	---		114.88		Brown, dense, wet, SILT, some gravel. 2.68	
							114.72		Brown, moist SILT, same as above but, with trace clay. 2.92	
3.6							114.48			
							113.35		Bottom of Exploration at 3.05 m below ground surface. No Refusal 3.05	
4.8										
6										
7.2										
8.4										
9.6										

Remarks:

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.
* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1
Boring No.: HGT-6

Maine Department of Transportation — Soil/Rock Exploration Log — METRIC UNITS

Project: Route 4/17, Main Street
Location: Livermore Falls/Jay, Maine
Boring No.: HGT-7
PIN: 10018.00

Drillers:	Maine Test Boring	Elevation (m):	113.00	Auger ID/OD:	106/156 mm
Operator:	Mel Coffin	Datum:	NGVD	Sampler:	Standard Split Spoon
Logged By:	Brad Tirone/HAI	Rig Type:	Mobile Drill	Hammer Wt./Fall:	63.5 kg/760 mm
Date Start/Finish:	6/23/03-6/23/03	Drilling Method:	Hollow Stem Auger	Core Barrel:	N/A
Boring Location:	40+580, 3.1 Rt.	Casing ID/OD:	N/A	Water Level*:	Boring dry

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample attempt; U = Thin Wall Tube Sample; R = Rock Core Sample; V = Insitu Vane Shear Test; SSA = Solid Stem Auger
Definitions: S_{vf} = Insitu Field Vane Shear Strength (kPa); T_v = Pocket Torvane Shear Strength (kPa); q_u = Unconfined Compressive Strength (Pa); $S_{vf\,(lab)}$ = Lab Vane Shear Strength (kPa); WOH = weight of 64 kg hammer; WOR = weight of rods; WOC = weight of casing
Definitions: MC = water content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test

Sample Information

Depth (m)	Sample No.	Pen/Rec (cm)	Sample Depth (m)	Blows (150 mm) Shear Strength (kPa) or WOR (*)	N-value	Casing Blows	Elevation (m)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0						HSA	112.82		ASPHALT PAVEMENT. 0.18	
	10	61.0/45.7	0.46 - 1.07	27/22/17/28	39				Grey brown, dry, dense, coarse to fine SAND, some gravel.	
1.2							111.93		Brown, dry, coarse to fine SAND, little gravel. 1.07	
	MD	61.0/0.0	1.52 - 2.13	2/2/7/17	9				No Recovery	
2.4							110.87		2.13	
									Brown, moist, SILT, trace fine sand.	
3.6							109.91		Bottom of Exploration at 3.05 m below ground surface. No Refusal 3.05	
4.8										
6										
7.2										
8.4										
9.6										

Remarks:

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.
* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1
Boring No.: HGT-7

PROJECT DESIGN ENGINEER	BY	DATE
DESIGN-DETAILED	R. BARNES	01-22-09
CHECKED	D. BURGESS	------
REVISIONS	T. GORRILL	------
FIELD CHANGES	------	------

PLANS

Filename: ...\mstoV009_BORING LOGS1.dgn Division: HIGHWAY Username: common Date:2/9/2011

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BORING LOGS

LIVERMORE FALLS - JAY

ROUTE 4\17

SHEET 1 OF 6 AUGUSTA, MAINE

METRIC 1. All dimensions are in millimeters unless otherwise noted. 2. All elevations and stations are in meters.

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	NH-10018(800)E	10	148

10018.00

Maine Department of Transportation — Soil/Rock Exploration Log — METRIC UNITS

Project: Route 4/17, Main Street — Location: Livermore Falls/Jay, Maine — Boring No.: HGT-8 — PIN: 10018.00

Driller:	Maine Test Boring	Elevation (m):	112.20	Auger ID/OD:	106/156 mm
Operator:	Mel Coffin	Datum:	NGVD	Sampler:	Standard Split Spoon
Logged By:	Brad Tirone/HAI	Rig Type:	Mobile Drill	Hammer Wt./Fall:	63.5 kg/760 mm
Date Start/Finish:	6/23/03-6/23/03	Drilling Method:	Hollow Stem Auger	Core Barrel:	N/A
Boring Location:	40+610, 5.0 Rt.	Casing ID/OD:	N/A	Water Level*:	Boring dry

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample attempt; U = Thin Wall Tube Sample; R = Rock Core Sample; V = Insitu Vane Shear Test; SSA = Solid Stem Auger. Definitions: S_u = Insitu Field Vane Shear Strength (kPa); T_v = Pocket Torvane Shear Strength (kPa); q_u = Unconfined Compressive Strength (Psi); $S_{u(LAB)}$ = Lab Vane Shear Strength (kPa); WOH = weight of 64 kg hammer; WOR = weight of rods; WOC = weight of casing. Definitions: WC = water content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test.

Depth (m)	Sample No.	Pen/Rec (cm)	Sample Depth (m)	Blows (150 mm) Shear Strength (kPa) or RQD (%)	N-value	Casing Blows	Elevation (m)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0						HSA	112.20		ASPHALT PAVEMENT. 0.12	
	10	61.0/35.6	0.15 - 0.76	10/10/8/10	18				Brown, dry, medium dense, coarse to fine SAND, little gravel.	GM176765 A-1-b, SM-SW WC=3.4%
-1.2									1.37	
	20	49.0/45.7	1.37 - 1.86	21/40/39/30(25)	79		110.83		REFUSAL- moved to Sta. 40+609, augered to 1.37 m bgs. Brown, damp, SILT, little gravel.	GM176766 A-4, ML WC=14.2%
							110.34		.86	
-2.4									Bottom of Exploration at 1.86 m below ground surface. Refusal Notes: Concrete pieces in tip of spoon, could be storm drain.	
-3.6										
-4.8										
-6										
-7.2										
-8.4										
-9.6										

Remarks:

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

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

Page 1 of 1 — Boring No.: HGT-8

Maine Department of Transportation — Soil/Rock Exploration Log — METRIC UNITS

Project: Route 4/17, Main Street — Location: Livermore Falls/Jay, Maine — Boring No.: HGT-9 — PIN: 10018.00

Driller:	Maine Test Boring	Elevation (m):	112.00	Auger ID/OD:	106/156 mm
Operator:	Mel Coffin	Datum:	NGVD	Sampler:	Standard Split Spoon
Logged By:	Brad Tirone/HAI	Rig Type:	Mobile Drill	Hammer Wt./Fall:	63.5 kg/760 mm
Date Start/Finish:	6/24/03-6/24/03	Drilling Method:	Hollow Stem Auger	Core Barrel:	N/A
Boring Location:	40+630, 5.2 Rt.	Casing ID/OD:	N/A	Water Level*:	Boring dry

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample attempt; U = Thin Wall Tube Sample; R = Rock Core Sample; V = Insitu Vane Shear Test; SSA = Solid Stem Auger. Definitions: S_u = Insitu Field Vane Shear Strength (kPa); T_v = Pocket Torvane Shear Strength (kPa); q_u = Unconfined Compressive Strength (Psi); $S_{u(LAB)}$ = Lab Vane Shear Strength (kPa); WOH = weight of 64 kg hammer; WOR = weight of rods; WOC = weight of casing. Definitions: WC = water content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test.

Depth (m)	Sample No.	Pen/Rec (cm)	Sample Depth (m)	Blows (150 mm) Shear Strength (kPa) or RQD (%)	N-value	Casing Blows	Elevation (m)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0						HSA	111.94		ASPHALT PAVEMENT. 0.06	
	10	61.0/33.0	0.15 - 0.76	7/9/10/19	19				Brown, damp, medium dense, coarse to fine SAND, some gravel.	GM176767 A-1-b, SM WC=4.7%
-1.2									1.52	
	20	61.0/50.8	1.52 - 2.13	13/26/62/58	88		110.48		Brown, damp, very dense, silty coarse to fine SAND, some gravel.	
							109.87		2.13	
-2.4							109.44		Brown, dry, SILT, trace fine sand, trace gravel. 2.56	
-3.6									Bottom of Exploration at 2.56 m below ground surface. Refusal	
-4.8										
-6										
-7.2										
-8.4										
-9.6										

Remarks:

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

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

Page 1 of 1 — Boring No.: HGT-9

Maine Department of Transportation — Soil/Rock Exploration Log — METRIC UNITS

Project: Route 4/17, Main Street — Location: Livermore Falls/Jay, Maine — Boring No.: HGT-10 — PIN: 10018.00

Driller:	Maine Test Boring	Elevation (m):	112.20	Auger ID/OD:	106/156 mm
Operator:	Mel Coffin	Datum:	NGVD	Sampler:	Standard Split Spoon
Logged By:	Brad Tirone/HAI	Rig Type:	Mobile Drill	Hammer Wt./Fall:	63.5 kg/760 mm
Date Start/Finish:	6/24/03-6/24/03	Drilling Method:	Hollow Stem Auger	Core Barrel:	N/A
Boring Location:	40+680, CL	Casing ID/OD:	N/A	Water Level*:	Boring dry

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample attempt; U = Thin Wall Tube Sample; R = Rock Core Sample; V = Insitu Vane Shear Test; SSA = Solid Stem Auger. Definitions: S_u = Insitu Field Vane Shear Strength (kPa); T_v = Pocket Torvane Shear Strength (kPa); q_u = Unconfined Compressive Strength (Psi); $S_{u(LAB)}$ = Lab Vane Shear Strength (kPa); WOH = weight of 64 kg hammer; WOR = weight of rods; WOC = weight of casing. Definitions: WC = water content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test.

Depth (m)	Sample No.	Pen/Rec (cm)	Sample Depth (m)	Blows (150 mm) Shear Strength (kPa) or RQD (%)	N-value	Casing Blows	Elevation (m)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0						HSA	111.99		ASPHALT PAVEMENT.	
							111.78		Grey brown, dry, gravelly, coarse to fine SAND. 0.21	
	10	61.0/48.3	0.46 - 1.07	36/42/61/35	103				0.46 Light brown, damp, very dense, coarse to fine SAND, little gravel, trace silt.	GM176768 A-1-b, SM WC=7.8%
-1.2							111.13		1.07	
	20	61.0/40.6	1.52 - 2.13	2/1/2/2	3				Black, damp, coarse to fine SAND, little silt. 1.52	GM176769 A-1-b, SM WC=3.3%
							110.68		Brown, damp, very loose, coarse to fine SAND, trace gravel.	
-2.4							110.07		2.13	
-3.6									Bottom of Exploration at 2.13 m below ground surface. No Refusal	
-4.8										
-6										
-7.2										
-8.4										
-9.6										

Remarks:

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

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

Page 1 of 1 — Boring No.: HGT-10

Maine Department of Transportation — Soil/Rock Exploration Log — METRIC UNITS

Project: Route 4/17, Main Street — Location: Livermore Falls/Jay, Maine — Boring No.: HGT-11 — PIN: 10018.00

Driller:	Maine Test Boring	Elevation (m):	111.80	Auger ID/OD:	106/156 mm
Operator:	Mel Coffin	Datum:	NGVD	Sampler:	Standard Split Spoon
Logged By:	Brad Tirone/HAI	Rig Type:	Mobile Drill	Hammer Wt./Fall:	63.5 kg/760 mm
Date Start/Finish:	6/24/03-6/24/03	Drilling Method:	Hollow Stem Auger	Core Barrel:	N/A
Boring Location:	40+740, 7.6 Lt.	Casing ID/OD:	N/A	Water Level*:	Boring dry

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample attempt; U = Thin Wall Tube Sample; R = Rock Core Sample; V = Insitu Vane Shear Test; SSA = Solid Stem Auger. Definitions: S_u = Insitu Field Vane Shear Strength (kPa); T_v = Pocket Torvane Shear Strength (kPa); q_u = Unconfined Compressive Strength (Psi); $S_{u(LAB)}$ = Lab Vane Shear Strength (kPa); WOH = weight of 64 kg hammer; WOR = weight of rods; WOC = weight of casing. Definitions: WC = water content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test.

Depth (m)	Sample No.	Pen/Rec (cm)	Sample Depth (m)	Blows (150 mm) Shear Strength (kPa) or RQD (%)	N-value	Casing Blows	Elevation (m)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0						HSA			Brown, dry, very loose, coarse to fine SAND.	
	10	61.0/35.6	0.00 - 0.61	1/2/2/2	4		111.19		0.61 No description given.	GM176770 A-2-4, SM WC=8.3%
-1.2									1.52	
	20	61.0/53.3	1.52 - 2.13	2/2/3/5	5		110.28		Reddish brown, damp, loose, coarse to fine SAND.	
							109.67		2.13	
-2.4									Bottom of Exploration at 2.13 m below ground surface. No Refusal	
-3.6										
-4.8										
-6										
-7.2										
-8.4										
-9.6										

Remarks:

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

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

Page 1 of 1 — Boring No.: HGT-11

Maine Department of Transportation — Soil/Rock Exploration Log — METRIC UNITS

Project: Route 4/17, Main Street — Location: Livermore Falls/Jay, Maine — Boring No.: HGT-12 — PIN: 10018.00

Driller:	Maine Test Boring	Elevation (m):	112.20	Auger ID/OD:	106/156 mm
Operator:	Mel Coffin	Datum:	NGVD	Sampler:	Standard Split Spoon
Logged By:	Brad Tirone/HAI	Rig Type:	Mobile Drill	Hammer Wt./Fall:	63.5 kg/760 mm
Date Start/Finish:	6/24/03-6/24/03	Drilling Method:	Hollow Stem Auger	Core Barrel:	N/A
Boring Location:	40+810, 8.0 Rt.	Casing ID/OD:	N/A	Water Level*:	Boring dry

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample attempt; U = Thin Wall Tube Sample; R = Rock Core Sample; V = Insitu Vane Shear Test; SSA = Solid Stem Auger. Definitions: S_u = Insitu Field Vane Shear Strength (kPa); T_v = Pocket Torvane Shear Strength (kPa); q_u = Unconfined Compressive Strength (Psi); $S_{u(LAB)}$ = Lab Vane Shear Strength (kPa); WOH = weight of 64 kg hammer; WOR = weight of rods; WOC = weight of casing. Definitions: WC = water content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test.

Depth (m)	Sample No.	Pen/Rec (cm)	Sample Depth (m)	Blows (150 mm) Shear Strength (kPa) or RQD (%)	N-value	Casing Blows	Elevation (m)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0						HSA	112.17		ASPHALT PAVEMENT. 0.03	
	10	61.0/45.7	0.30 - 0.91	14/9/5/6	14		111.96		CONCRETE PAVEMENT. 0.24	
							111.80		Dark brown, dry, medium dense, coarse to fine SAND, some gravel. 0.40	
-1.2							111.29		Brown, dry, medium dense, coarse to fine SAND, trace silt. 0.91	
									Brown, damp, coarse to fine SAND.	
	20		1.52 - 2.13	5/39/30/40	69		110.68		1.52	
							110.43		Brown, damp, dense, coarse to fine SAND, some gravel, 1.77	
-2.4							110.07		Light brown, damp, stiff, SILT, trace fine to medium gravel, iron staining and inclusions. 2.13	
-3.6									Bottom of Exploration at 2.13 m below ground surface. No Refusal	
-4.8										
-6										
-7.2										
-8.4										
-9.6										

Remarks:

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

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

Page 1 of 1 — Boring No.: HGT-12

Maine Department of Transportation — Soil/Rock Exploration Log — METRIC UNITS

Project: Route 4/17, Main Street — Location: Livermore Falls/Jay, Maine — Boring No.: HGT-13 — PIN: 10018.00

Driller:	Maine Test Boring	Elevation (m):	112.20	Auger ID/OD:	106/156 mm
Operator:	Mel Coffin	Datum:	NGVD	Sampler:	Standard Split Spoon
Logged By:	Brad Tirone/HAI	Rig Type:	Mobile Drill	Hammer Wt./Fall:	63.5 kg/760 mm
Date Start/Finish:	6/25/03-6/25/03	Drilling Method:	Hollow Stem Auger	Core Barrel:	N/A
Boring Location:	40+880, 6.0 Rt.	Casing ID/OD:	N/A	Water Level*:	Boring dry

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample attempt; U = Thin Wall Tube Sample; R = Rock Core Sample; V = Insitu Vane Shear Test; SSA = Solid Stem Auger. Definitions: S_u = Insitu Field Vane Shear Strength (kPa); T_v = Pocket Torvane Shear Strength (kPa); q_u = Unconfined Compressive Strength (Psi); $S_{u(LAB)}$ = Lab Vane Shear Strength (kPa); WOH = weight of 64 kg hammer; WOR = weight of rods; WOC = weight of casing. Definitions: WC = water content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test.

Depth (m)	Sample No.	Pen/Rec (cm)	Sample Depth (m)	Blows (150 mm) Shear Strength (kPa) or RQD (%)	N-value	Casing Blows	Elevation (m)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0						HSA	112.14		ASPHALT PAVEMENT. 0.06	
	10	61.0/40.6	0.37 - 0.98	6/7/7/8	14		112.02		CONCRETE PAVEMENT. 0.18	GM176771 A-1-b, SP-SM WC=4.7%
							111.23		Brown, damp, medium dense, coarse to fine SAND. 0.98	
-1.2									Brown, damp, coarse to fine SAND.	
	20	61.0/48.3	1.52 - 2.13	11/13/15/19	28		110.68		1.52	
									Same as above but, Light brown.	
-2.4							110.07		2.13	
-3.6									Bottom of Exploration at 2.13 m below ground surface. No Refusal	
-4.8										
-6										
-7.2										
-8.4										
-9.6										

Remarks:

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

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

Page 1 of 1 — Boring No.: HGT-13

Maine Department of Transportation — Soil/Rock Exploration Log — METRIC UNITS

Project: Route 4/17, Main Street — Location: Livermore Falls/Jay, Maine — Boring No.: HGT-14 — PIN: 10018.00

Driller:	Maine Test Boring	Elevation (m):	112.60	Auger ID/OD:	106/156 mm
Operator:	Mel Coffin	Datum:	NGVD	Sampler:	Standard Split Spoon
Logged By:	Brad Tirone/HAI	Rig Type:	Mobile Drill	Hammer Wt./Fall:	63.5 kg/760 mm
Date Start/Finish:	6/25/03-6/25/03	Drilling Method:	Hollow Stem Auger	Core Barrel:	N/A
Boring Location:	40+930, 1.5 Rt.	Casing ID/OD:	N/A	Water Level*:	Boring dry

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample attempt; U = Thin Wall Tube Sample; R = Rock Core Sample; V = Insitu Vane Shear Test; SSA = Solid Stem Auger. Definitions: S_u = Insitu Field Vane Shear Strength (kPa); T_v = Pocket Torvane Shear Strength (kPa); q_u = Unconfined Compressive Strength (Psi); $S_{u(LAB)}$ = Lab Vane Shear Strength (kPa); WOH = weight of 64 kg hammer; WOR = weight of rods; WOC = weight of casing. Definitions: WC = water content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test.

Depth (m)	Sample No.	Pen/Rec (cm)	Sample Depth (m)	Blows (150 mm) Shear Strength (kPa) or RQD (%)	N-value	Casing Blows	Elevation (m)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0						HSA	112.45		ASPHALT PAVEMENT. 0.15	
	10	61.0/48.3	0.46 - 1.07	25/43/38/36	81				Grey-brown, dry, very dense, silty fine to medium SAND.	GM176772 A-2-4, SM WC=8.3%
-1.2							111.53		1.07 Black, coarse to fine SAND, trace ash.	
	20	61.0/53.3	1.52 - 2.13	7/11/12/12	23		110.86		1.62	
							110.71		Red-brown, damp, medium dense, coarse to fine SAND. 1.77	
							110.47		Light brown, damp, silty, fine SAND, some gravel. 4.89	
-2.4									Tan, damp, medium dense, silty fine SAND, INative Soils.	
									2.13	
-3.6									Bottom of Exploration at 2.13 m below ground surface. No Refusal	
-4.8										
-6										
-7.2										
-8.4										
-9.6										

Remarks:

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

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

Page 1 of 1 — Boring No.: HGT-14

PROJECT DESIGN ENGINEER — PLANS

	BY	DATE
DESIGN-DETAILED	R. BARNES	01-22-09
CHECKED	T. GORRILL	------
REVISIONS	------	------
FIELD CHANGES	------	------

Filename: ...\mstoV010_BORING LOGS2.dgn Division: HIGHWAY Username: common Date:2/9/2011

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BORING LOGS

LIVERMORE FALLS - JAY

ROUTE 4\17

SHEET 2 OF 6 AUGUSTA, MAINE

METRIC 1. All dimensions are in millimeters unless otherwise noted. 2. All elevations and stations are in meters.

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	NH-1001(800)E	11	148

10018.00

Maine Department of Transportation — Soil/Rock Exploration Log — METRIC UNITS

Project: Route 4/17, Main Street
Location: Livermore Falls/Jay, Maine
Boring No.: HGT-15
PIN: 10018.00

Driller:	Maine Test Boring	Elevation (m):	117.00	Auger ID/OD:	106/156 mm
Operator:	Mel Coffin	Datum:	NGVD	Sampler:	Standard Split Spoon
Logged By:	Brad Tirone/HAI	Rig Type:	Mobile Drill	Hammer Wt./Fall:	63.5 kg/760 mm
Date Start/Finish:	6/25/03-6/25/03	Drilling Method:	Hollow Stem Auger	Core Barrel:	N/A
Boring Location:	41+020, 1.8 Lt.	Casing ID/OD:	N/A	Water Level*:	Boring dry

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample attempt; U = Thin Wall Tube Sample; R = Rock Core Sample; V = Insitu Vane Shear Test; SSA = Solid Stem Auger

Definitions: S_u = Insitu Field Vane Shear Strength (kPa); T_v = Pocket Torvane Shear Strength (kPa); q_u = Unconfined Compressive Strength (Pa); $S_{u(LAB)}$ = Lab Vane Shear Strength (kPa); WOH = weight of 64 kg hammer; WOR = weight of rods; WOC = weight of casing

Definitions: MC = water content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test

Sample Information

Depth (m)	Sample No.	Pen/Rec (cm)	Sample Depth (m)	Blows (150 mm) Shear Strength (kPa) or RQD (%)	Water Level	Casing Blows	Elevation (m)	Graphic Log
0						HSA	116.76	
	10	61.0/30.5	0.15 - 0.76	76/19/19/16	38		116.24	
1.2							115.48	
	20	61.0/61.0	1.52 - 2.13	6/7/13/7	20		114.87	
2.4								
3.6								
4.8								
6								
7.2								
8.4								
9.6								

Visual Description and Remarks:
- ASPHALT PAVEMENT. — 0.24
- Brown, dry, dense, coarse to fine gravelly SAND. — 0.76
- Brown, moist, silty, coarse to fine SAND. — 1.52
- Light brown, damp, stiff, CLAYEY SILT. — 2.13
- Bottom of Exploration at 2.13 m below ground surface. No Refusal

Laboratory Testing Results/ AASHTO and Unified Class.: GM176773 A-4, CL-ML WC=26.9%

Remarks:

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

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

Page 1 of 1 — Boring No.: HGT-15

Maine Department of Transportation — Soil/Rock Exploration Log — METRIC UNITS

Project: Route 4/17, Main Street
Location: Livermore Falls/Jay, Maine
Boring No.: HGT-16
PIN: 10018.00

Driller:	Maine Test Boring	Elevation (m):	122.00	Auger ID/OD:	106/156 mm
Operator:	Mel Coffin	Datum:	NGVD	Sampler:	Standard Split Spoon
Logged By:	Brad Tirone/HAI	Rig Type:	Mobile Drill	Hammer Wt./Fall:	63.5 kg/760 mm
Date Start/Finish:	6/25/03-6/25/03	Drilling Method:	Hollow Stem Auger	Core Barrel:	N/A
Boring Location:	41+130, 1.4 Lt.	Casing ID/OD:	N/A	Water Level*:	Boring dry

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample attempt; U = Thin Wall Tube Sample; R = Rock Core Sample; V = Insitu Vane Shear Test; SSA = Solid Stem Auger

Definitions: S_u = Insitu Field Vane Shear Strength (kPa); T_v = Pocket Torvane Shear Strength (kPa); q_u = Unconfined Compressive Strength (Pa); $S_{u(LAB)}$ = Lab Vane Shear Strength (kPa); WOH = weight of 64 kg hammer; WOR = weight of rods; WOC = weight of casing

Definitions: MC = water content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test

Sample Information

Depth (m)	Sample No.	Pen/Rec (cm)	Sample Depth (m)	Blows (150 mm) Shear Strength (kPa) or RQD (%)	Water Level	Casing Blows	Elevation (m)	Graphic Log
0						HSA		
	10	15.2/15.2	0.46 - 0.61	69	---		121.54	
1.2							121.38	
							121.23	
2.4								
3.6								
4.8								
6								
7.2								
8.4								
9.6								

Visual Description and Remarks:
- No description given. — 0.46
- Grey brown, dry, dense, silty, coarse to fine SAND. — 0.61
- ROCK. — 0.79
- Bottom of Exploration at 0.79 m below ground surface. Refusal

Laboratory Testing Results/ AASHTO and Unified Class.:

Remarks:

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

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

Page 1 of 1 — Boring No.: HGT-16

Maine Department of Transportation — Soil/Rock Exploration Log — METRIC UNITS

Project: Route 4/17, Main Street
Location: Livermore Falls/Jay, Maine
Boring No.: HGT-16A
PIN: 10018.00

Driller:	Maine Test Boring	Elevation (m):	122.10	Auger ID/OD:	106/156 mm
Operator:	Mel Coffin	Datum:	NGVD	Sampler:	Standard Split Spoon
Logged By:	Brad Tirone/HAI	Rig Type:	Mobile Drill	Hammer Wt./Fall:	63.5 kg/760 mm
Date Start/Finish:	6/25/03-6/26/03	Drilling Method:	Hollow Stem Auger	Core Barrel:	N/A
Boring Location:	41+131.5, 1.0 Lt.	Casing ID/OD:	N/A	Water Level*:	Boring dry

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample attempt; U = Thin Wall Tube Sample; R = Rock Core Sample; V = Insitu Vane Shear Test; SSA = Solid Stem Auger

Definitions: S_u = Insitu Field Vane Shear Strength (kPa); T_v = Pocket Torvane Shear Strength (kPa); q_u = Unconfined Compressive Strength (Pa); $S_{u(LAB)}$ = Lab Vane Shear Strength (kPa); WOH = weight of 64 kg hammer; WOR = weight of rods; WOC = weight of casing

Definitions: MC = water content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test

Sample Information

Depth (m)	Sample No.	Pen/Rec (cm)	Sample Depth (m)	Blows (150 mm) Shear Strength (kPa) or RQD (%)	Water Level	Casing Blows	Elevation (m)	Graphic Log
0						HSA		
	10	61.0/38.1	0.46 - 1.07	28/40/61/91	---		121.68	
1.2							121.22	
							121.07	
2.4								
3.6								
4.8								
6								
7.2								
8.4								
9.6								

Visual Description and Remarks:
- ASPHALT PAVEMENT. — 0.46
- Grey-brown, dry, very dense, silty, coarse to fine SAND. — 0.85
- ROCK. — 0.98
- Bottom of Exploration at 0.98 m below ground surface. Refusal

Laboratory Testing Results/ AASHTO and Unified Class.: GM176774 A-1-b, GW WC=4.2%

Remarks:

Revised By K. Breskin/MDOT.

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

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

Page 1 of 1 — Boring No.: HGT-16A

Maine Department of Transportation — Soil/Rock Exploration Log — METRIC UNITS

Project: Route 4/17, Main Street
Location: Livermore Falls/Jay, Maine
Boring No.: HGT-17
PIN: 10018.00

Driller:	Maine Test Boring	Elevation (m):	119.90	Auger ID/OD:	106/156 mm
Operator:	Mel Coffin	Datum:	NGVD	Sampler:	Standard Split Spoon
Logged By:	Brad Tirone/HAI	Rig Type:	Mobile Drill	Hammer Wt./Fall:	63.5 kg/760 mm
Date Start/Finish:	6/26/03-6/26/03	Drilling Method:	Hollow Stem Auger	Core Barrel:	N/A
Boring Location:	41+231.5, 5.0 Rt.	Casing ID/OD:	N/A	Water Level*:	Boring dry

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample attempt; U = Thin Wall Tube Sample; R = Rock Core Sample; V = Insitu Vane Shear Test; SSA = Solid Stem Auger

Definitions: S_u = Insitu Field Vane Shear Strength (kPa); T_v = Pocket Torvane Shear Strength (kPa); q_u = Unconfined Compressive Strength (Pa); $S_{u(LAB)}$ = Lab Vane Shear Strength (kPa); WOH = weight of 64 kg hammer; WOR = weight of rods; WOC = weight of casing

Definitions: MC = water content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test

Sample Information

Depth (m)	Sample No.	Pen/Rec (cm)	Sample Depth (m)	Blows (150 mm) Shear Strength (kPa) or RQD (%)	Water Level	Casing Blows	Elevation (m)	Graphic Log
0						HSA	119.72	
	10	61.0/48.3	0.46 - 1.07	12/12/13/8	25		119.26	
1.2							118.85	
	20	61.0/61.0	1.52 - 2.13	7/10/13/15	23		118.38	
2.4							117.77	
3.6								
4.8								
6								
7.2								
8.4								
9.6								

Visual Description and Remarks:
- ASPHALT PAVEMENT. — 0.18
- Brown, damp, medium dense, silty, medium to fine SAND, little gravel. — 0.61
- Brown, damp, medium to fine silty SAND. — 1.07
- Brown, damp, fine to medium SAND, little silt. — 1.52
- Light brown, damp, medium dense, fine to medium SAND. — 2.13
- Bottom of Exploration at 2.13 m below ground surface. No Refusal

Laboratory Testing Results/ AASHTO and Unified Class.: GM176775 A-2-4, SM WC=15.9%

Remarks:

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

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

Page 1 of 1 — Boring No.: HGT-17

Maine Department of Transportation — Soil/Rock Exploration Log — METRIC UNITS

Project: Route 4/17, Main Street
Location: Livermore Falls/Jay, Maine
Boring No.: HGT-18
PIN: 10018.00

Driller:	Maine Test Boring	Elevation (m):	119.50	Auger ID/OD:	106/156 mm
Operator:	Mel Coffin	Datum:	NGVD	Sampler:	Standard Split Spoon
Logged By:	Brad Tirone/HAI	Rig Type:	Mobile Drill	Hammer Wt./Fall:	63.5 kg/760 mm
Date Start/Finish:	6/26/03-6/26/03	Drilling Method:	Hollow Stem Auger	Core Barrel:	N/A
Boring Location:	41+320.5, 2.3 Lt.	Casing ID/OD:	N/A	Water Level*:	Boring dry

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample attempt; U = Thin Wall Tube Sample; R = Rock Core Sample; V = Insitu Vane Shear Test; SSA = Solid Stem Auger

Definitions: S_u = Insitu Field Vane Shear Strength (kPa); T_v = Pocket Torvane Shear Strength (kPa); q_u = Unconfined Compressive Strength (Pa); $S_{u(LAB)}$ = Lab Vane Shear Strength (kPa); WOH = weight of 64 kg hammer; WOR = weight of rods; WOC = weight of casing

Definitions: MC = water content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test

Sample Information

Depth (m)	Sample No.	Pen/Rec (cm)	Sample Depth (m)	Blows (150 mm) Shear Strength (kPa) or RQD (%)	Water Level	Casing Blows	Elevation (m)	Graphic Log
0						HSA	119.26	
	10	61.0/30.5	0.30 - 0.91	8/14/5/4	19		118.59	
1.2							117.67	
	20	61.0/30.5	0.91 - 1.52	2/3/1/6	6		117.37	
2.4								
	30	61.0/61.0	1.52 - 2.13	9/3/5/8	8			
3.6								
4.8								
6								
7.2								
8.4								
9.6								

Visual Description and Remarks:
- ASPHALT PAVEMENT. — 0.24
- Brown, damp, medium dense, coarse to fine SAND, some gravel. — 0.91
- Brown, moist, loose, coarse to fine SAND, little gravel. — 1.83
- Reddish orange, damp, loose, medium to fine SAND, trace silt. — 2.13
- Bottom of Exploration at 2.13 m below ground surface. No Refusal

Laboratory Testing Results/ AASHTO and Unified Class.: GM176776 A-1-b, SM WC=5.2%; GM176777 A-2-4, SM WC=16.8%

Remarks:

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

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

Page 1 of 1 — Boring No.: HGT-18

Maine Department of Transportation — Soil/Rock Exploration Log — METRIC UNITS

Project: Route 4/17, Main Street
Location: Livermore Falls/Jay, Maine
Boring No.: P-1
PIN: 10018.00

Driller:	Maine Test Boring	Elevation (m):	119.40	Auger ID/OD:	106 mm
Operator:	Mel Coffin	Datum:	NGVD	Sampler:	N/A
Logged By:	Brad Tirone/HAI	Rig Type:	Mobile Drill	Hammer Wt./Fall:	N/A
Date Start/Finish:	7/1/03-7/1/03	Drilling Method:	Solid Stem Auger	Core Barrel:	N/A
Boring Location:	41+340, 1.0 Rt.	Casing ID/OD:	N/A	Water Level*:	Boring dry

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample attempt; U = Thin Wall Tube Sample; R = Rock Core Sample; V = Insitu Vane Shear Test; SSA = Solid Stem Auger

Definitions: S_u = Insitu Field Vane Shear Strength (kPa); T_v = Pocket Torvane Shear Strength (kPa); q_u = Unconfined Compressive Strength (Pa); $S_{u(LAB)}$ = Lab Vane Shear Strength (kPa); WOH = weight of 64 kg hammer; WOR = weight of rods; WOC = weight of casing

Definitions: MC = water content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test

Sample Information

Depth (m)	Sample No.	Pen/Rec (cm)	Sample Depth (m)	Blows (150 mm) Shear Strength (kPa) or RQD (%)	Water Level	Casing Blows	Elevation (m)	Graphic Log
0						SSA	119.22	
							119.04	
1.2								
2.4							116.66	
3.6							115.59	
4.8								
6								
7.2								
8.4								
9.6								

Visual Description and Remarks:
- ASPHALT PAVEMENT. — 0.18
- Light brown, dry, gravelly SAND. — 2.74
- Reddish brown, medium to fine SAND, trace gravel, trace silt. — 3.81
- Bottom of Exploration at 3.81 m below ground surface. Refusal

Laboratory Testing Results/ AASHTO and Unified Class.:

Remarks:

Revised By K. Breskin/MDOT.

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

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

Page 1 of 1 — Boring No.: P-1

Maine Department of Transportation — Soil/Rock Exploration Log — METRIC UNITS

Project: Route 4/17, Main Street
Location: Livermore Falls/Jay, Maine
Boring No.: P-2
PIN: 10018.00

Driller:	Maine Test Boring	Elevation (m):	119.40	Auger ID/OD:	106 mm
Operator:	Mel Coffin	Datum:	NGVD	Sampler:	N/A
Logged By:	Brad Tirone/HAI	Rig Type:	Mobile Drill	Hammer Wt./Fall:	N/A
Date Start/Finish:	7/1/03-7/1/03	Drilling Method:	Solid Stem Auger	Core Barrel:	N/A
Boring Location:	41+350, 1.5 Rt.	Casing ID/OD:	N/A	Water Level*:	Boring dry

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample attempt; U = Thin Wall Tube Sample; R = Rock Core Sample; V = Insitu Vane Shear Test; SSA = Solid Stem Auger

Definitions: S_u = Insitu Field Vane Shear Strength (kPa); T_v = Pocket Torvane Shear Strength (kPa); q_u = Unconfined Compressive Strength (Pa); $S_{u(LAB)}$ = Lab Vane Shear Strength (kPa); WOH = weight of 64 kg hammer; WOR = weight of rods; WOC = weight of casing

Definitions: MC = water content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test

Sample Information

Depth (m)	Sample No.	Pen/Rec (cm)	Sample Depth (m)	Blows (150 mm) Shear Strength (kPa) or RQD (%)	Water Level	Casing Blows	Elevation (m)	Graphic Log
0						SSA	119.22	
							119.04	
1.2							117.88	
2.4							116.35	
3.6							115.22	
4.8								
6								
7.2								
8.4								
9.6								

Visual Description and Remarks:
- ASPHALT PAVEMENT. — 0.18
- Light brown, dry, medium to fine SAND, some gravel, trace silt. — 1.52
- Dark brown, medium to fine, silty SAND.
- Cobble at 2.59 m bgs. — 3.05
- Light brown, damp, medium to fine SAND, trace silt. — 4.18
- Bottom of Exploration at 4.18 m below ground surface. Bedrock Refusal

Laboratory Testing Results/ AASHTO and Unified Class.:

Remarks:

Revised By K. Breskin/MDOT.

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

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

Page 1 of 1 — Boring No.: P-2

PROJECT DESIGN ENGINEER — PLANS

	BY	DATE
DESIGN-DETAILED	R. BARNES	01-22-09
CHECKED	T. GORRILL	------
REVISIONS	------	------
FIELD CHANGES	------	------

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BORING LOGS

LIVERMORE FALLS - JAY

ROUTE 4\17

SHEET 3 OF 6 — AUGUSTA, MAINE

Filename: ...\mst01\011_BORING LOGS3.dgn Division: HIGHWAY Username: common Date:2/9/2011

METRIC 1. All dimensions are in millimeters unless otherwise noted. 2. All elevations and stations are in meters.

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	NH-1001(800)E	12	148

10018.00

Maine Department of Transportation — Soil/Rock Exploration Log — METRIC UNITS

Project: Route 4/17, Main Street
Location: Livermore Falls/Jay, Maine

Boring No.: P-3 PIN: 10018.00

Driller:	Maine Test Boring	Elevation (m):	119.70	Auger ID/OD:	106 mm
Operator:	Mel Coffin	Datum:	NGVD	Sampler:	N/A
Logged By:	Brad Tirone/HAI	Rig Type:	Mobile Drill	Hammer Wt./Fall:	N/A
Date Start/Finish:	7/1/03-7/1/03	Drilling Method:	Solid Stem Auger	Core Barrel:	N/A
Boring Location:	41+400, 2.0 Rt.	Casing ID/OD:	N/A	Water Level*:	Boring dry

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample attempt; U = Thin Wall Tube Sample; R = Rock Core Sample; V = Insitu Vane Shear Test; SSA = Solid Stem Auger

Definitions: S_u = Insitu Field Vane Shear Strength (kPa); T_v = Pocket Torvane Shear Strength (kPa); q_u = Unconfined Compressive Strength (Psi); $S_{u(LAB)}$ = Lab Vane Shear Strength (kPa); WOH = weight of 64 kg hammer; WOR = weight of rods; WOC = weight of casing

Definitions: MC = water content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test

Sample Information: Depth (m) | Sample No. | Pen/Rec (cm) | Sample Depth (m) | Blows (150 mm) Shear Strength (kPa) or RQD (%) | N-value | Casing Blows | Elevation (m) | Graphic Log

Depth (m)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	ASPHALT PAVEMENT.	
0.18	Brown, dry, silty SAND, some gravel.	
1.52	Brown, silty SAND.	
2.59	Light brown, medium to fine SAND, trace silt.	
3.05	Brown, damp, medium to fine SAND, little silt.	
4.57	Bottom of Exploration at 4.57 m below ground surface. No Refusal	

SSA: 119.52 / 118.18 / 117.11 / 116.65 / 115.13

Remarks: Revised By K. Breskin/MDOT.

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

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

Page 1 of 1 — Boring No.: P-3

Maine Department of Transportation — Soil/Rock Exploration Log — METRIC UNITS

Project: Route 4/17, Main Street
Location: Livermore Falls/Jay, Maine

Boring No.: P-4 PIN: 10018.00

Driller:	Maine Test Boring	Elevation (m):	119.80	Auger ID/OD:	106 mm
Operator:	Mel Coffin	Datum:	NGVD	Sampler:	N/A
Logged By:	Brad Tirone/HAI	Rig Type:	Mobile Drill	Hammer Wt./Fall:	N/A
Date Start/Finish:	7/1/03-7/1/03	Drilling Method:	Solid Stem Auger	Core Barrel:	N/A
Boring Location:	41+370, 2.0 Rt.	Casing ID/OD:	N/A	Water Level*:	Boring dry

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample attempt; U = Thin Wall Tube Sample; R = Rock Core Sample; V = Insitu Vane Shear Test; SSA = Solid Stem Auger

Definitions: S_u = Insitu Field Vane Shear Strength (kPa); T_v = Pocket Torvane Shear Strength (kPa); q_u = Unconfined Compressive Strength (Psi); $S_{u(LAB)}$ = Lab Vane Shear Strength (kPa); WOH = weight of 64 kg hammer; WOR = weight of rods; WOC = weight of casing

Definitions: MC = water content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test

Sample Information: Depth (m) | Sample No. | Pen/Rec (cm) | Sample Depth (m) | Blows (150 mm) Shear Strength (kPa) or RQD (%) | N-value | Casing Blows | Elevation (m) | Graphic Log

Depth (m)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	ASPHALT PAVEMENT.	
0.18	Light brown, gravelly, coarse to fine SAND.	
1.52	Brown, damp, medium to fine SAND, trace silt.	
4.36	Bottom of Exploration at 4.36 m below ground surface. Bedrock Refusal	

SSA: 119.62 / 118.28 / 115.66

Remarks: Revised By K. Breskin/MDOT.

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

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

Page 1 of 1 — Boring No.: P-4

Maine Department of Transportation — Soil/Rock Exploration Log — METRIC UNITS

Project: Route 4/17, Main Street
Location: Livermore Falls/Jay, Maine

Boring No.: P-5 PIN: 10018.00

Driller:	Maine Test Boring	Elevation (m):	119.90	Auger ID/OD:	106 mm
Operator:	Mel Coffin	Datum:	NGVD	Sampler:	N/A
Logged By:	Brad Tirone/HAI	Rig Type:	Mobile Drill	Hammer Wt./Fall:	N/A
Date Start/Finish:	6/30/03-6/30/03	Drilling Method:	Solid Stem Auger	Core Barrel:	N/A
Boring Location:	41+380, 2.0 Rt.	Casing ID/OD:	N/A	Water Level*:	Boring dry

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample attempt; U = Thin Wall Tube Sample; R = Rock Core Sample; V = Insitu Vane Shear Test; SSA = Solid Stem Auger

Definitions: S_u = Insitu Field Vane Shear Strength (kPa); T_v = Pocket Torvane Shear Strength (kPa); q_u = Unconfined Compressive Strength (Psi); $S_{u(LAB)}$ = Lab Vane Shear Strength (kPa); WOH = weight of 64 kg hammer; WOR = weight of rods; WOC = weight of casing

Definitions: MC = water content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test

Sample Information: Depth (m) | Sample No. | Pen/Rec (cm) | Sample Depth (m) | Blows (150 mm) Shear Strength (kPa) or RQD (%) | N-value | Casing Blows | Elevation (m) | Graphic Log

Depth (m)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	ASPHALT PAVEMENT.	
0.18	Brown, dry, SILT, some gravel.	
0.64	Bottom of Exploration at 0.64 m below ground surface. Bedrock Refusal	

SSA: 119.72 / 119.26

Remarks: Revised By K. Breskin/MDOT.

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

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

Page 1 of 1 — Boring No.: P-5

Maine Department of Transportation — Soil/Rock Exploration Log — METRIC UNITS

Project: Route 4/17, Main Street
Location: Livermore Falls/Jay, Maine

Boring No.: P-6 PIN: 10018.00

Driller:	Maine Test Boring	Elevation (m):	119.90	Auger ID/OD:	106 mm
Operator:	Mel Coffin	Datum:	NGVD	Sampler:	N/A
Logged By:	Brad Tirone/HAI	Rig Type:	Mobile Drill	Hammer Wt./Fall:	N/A
Date Start/Finish:	6/30/03-6/30/03	Drilling Method:	Solid Stem Auger	Core Barrel:	N/A
Boring Location:	41+390, 2.0 Rt.	Casing ID/OD:	N/A	Water Level*:	Boring dry

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample attempt; U = Thin Wall Tube Sample; R = Rock Core Sample; V = Insitu Vane Shear Test; SSA = Solid Stem Auger

Definitions: S_u = Insitu Field Vane Shear Strength (kPa); T_v = Pocket Torvane Shear Strength (kPa); q_u = Unconfined Compressive Strength (Psi); $S_{u(LAB)}$ = Lab Vane Shear Strength (kPa); WOH = weight of 64 kg hammer; WOR = weight of rods; WOC = weight of casing

Definitions: MC = water content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test

Sample Information: Depth (m) | Sample No. | Pen/Rec (cm) | Sample Depth (m) | Blows (150 mm) Shear Strength (kPa) or RQD (%) | N-value | Casing Blows | Elevation (m) | Graphic Log

Depth (m)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	ASPHALT PAVEMENT.	
0.15	Light reddish brown, gravelly SILT, some cobbles.	
1.22	Weathered ROCK.	
1.52	Bottom of Exploration at 1.52 m below ground surface. Bedrock Refusal	

SSA: 119.78 / 118.56 / 118.35

Remarks: Revised By K. Breskin/MDOT.

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

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

Page 1 of 1 — Boring No.: P-6

Maine Department of Transportation — Soil/Rock Exploration Log — METRIC UNITS

Project: Route 4/17, Main Street
Location: Livermore Falls/Jay, Maine

Boring No.: P-7 PIN: 10018.00

Driller:	Maine Test Boring	Elevation (m):	120.00	Auger ID/OD:	106 mm
Operator:	Mel Coffin	Datum:	NGVD	Sampler:	N/A
Logged By:	Brad Tirone/HAI	Rig Type:	Mobile Drill	Hammer Wt./Fall:	N/A
Date Start/Finish:	6/30/03-6/30/03	Drilling Method:	Solid Stem Auger	Core Barrel:	N/A
Boring Location:	41+400, 2.0 Rt.	Casing ID/OD:	N/A	Water Level*:	Boring dry

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample attempt; U = Thin Wall Tube Sample; R = Rock Core Sample; V = Insitu Vane Shear Test; SSA = Solid Stem Auger

Definitions: S_u = Insitu Field Vane Shear Strength (kPa); T_v = Pocket Torvane Shear Strength (kPa); q_u = Unconfined Compressive Strength (Psi); $S_{u(LAB)}$ = Lab Vane Shear Strength (kPa); WOH = weight of 64 kg hammer; WOR = weight of rods; WOC = weight of casing

Definitions: MC = water content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test

Sample Information: Depth (m) | Sample No. | Pen/Rec (cm) | Sample Depth (m) | Blows (150 mm) Shear Strength (kPa) or RQD (%) | N-value | Casing Blows | Elevation (m) | Graphic Log

Depth (m)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	ASPHALT PAVEMENT.	
0.18	Light brown, dry, silty SAND, some gravel.	
1.98	Same as above but, Brown.	
3.96	Cobble at 3.96 m bgs.	
4.21	Bottom of Exploration at 4.21 m below ground surface. Bedrock Refusal.	

SSA: 119.82 / 118.02 / 115.79

Remarks: Revised By K. Breskin/MDOT.

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

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

Page 1 of 1 — Boring No.: P-7

Maine Department of Transportation — Soil/Rock Exploration Log — METRIC UNITS

Project: Route 4/17, Main Street
Location: Livermore Falls/Jay, Maine

Boring No.: P-8 PIN: 10018.00

Driller:	Maine Test Boring	Elevation (m):	120.00	Auger ID/OD:	106 mm
Operator:	Mel Coffin	Datum:	NGVD	Sampler:	N/A
Logged By:	Brad Tirone/HAI	Rig Type:	Mobile Drill	Hammer Wt./Fall:	N/A
Date Start/Finish:	6/30/03-6/30/03	Drilling Method:	Solid Stem Auger	Core Barrel:	N/A
Boring Location:	41+410, 2.0 Rt.	Casing ID/OD:	N/A	Water Level*:	Boring dry

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample attempt; U = Thin Wall Tube Sample; R = Rock Core Sample; V = Insitu Vane Shear Test; SSA = Solid Stem Auger

Definitions: S_u = Insitu Field Vane Shear Strength (kPa); T_v = Pocket Torvane Shear Strength (kPa); q_u = Unconfined Compressive Strength (Psi); $S_{u(LAB)}$ = Lab Vane Shear Strength (kPa); WOH = weight of 64 kg hammer; WOR = weight of rods; WOC = weight of casing

Definitions: MC = water content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test

Sample Information: Depth (m) | Sample No. | Pen/Rec (cm) | Sample Depth (m) | Blows (150 mm) Shear Strength (kPa) or RQD (%) | N-value | Casing Blows | Elevation (m) | Graphic Log

Depth (m)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	ASPHALT PAVEMENT.	
0.18	Light brown, silty SAND, some gravel.	
1.89	Bottom of Exploration at 1.89 m below ground surface. Bedrock Refusal.	

SSA: 119.80 / 118.11

Remarks: Revised By K. Breskin/MDOT.

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

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

Page 1 of 1 — Boring No.: P-8

Maine Department of Transportation — Soil/Rock Exploration Log — METRIC UNITS

Project: Route 4/17, Main Street
Location: Livermore Falls/Jay, Maine

Boring No.: P-9 PIN: 10018.00

Driller:	Maine Test Boring	Elevation (m):	119.90	Auger ID/OD:	106 mm
Operator:	Mel Coffin	Datum:	NGVD	Sampler:	N/A
Logged By:	Brad Tirone/HAI	Rig Type:	Mobile Drill	Hammer Wt./Fall:	N/A
Date Start/Finish:	6/30/03-6/30/03	Drilling Method:	Solid Stem Auger	Core Barrel:	N/A
Boring Location:	41+420, 2.5 Rt.	Casing ID/OD:	N/A	Water Level*:	4.94 m bgs.

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample attempt; U = Thin Wall Tube Sample; R = Rock Core Sample; V = Insitu Vane Shear Test; SSA = Solid Stem Auger

Definitions: S_u = Insitu Field Vane Shear Strength (kPa); T_v = Pocket Torvane Shear Strength (kPa); q_u = Unconfined Compressive Strength (Psi); $S_{u(LAB)}$ = Lab Vane Shear Strength (kPa); WOH = weight of 64 kg hammer; WOR = weight of rods; WOC = weight of casing

Definitions: MC = water content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test

Sample Information: Depth (m) | Sample No. | Pen/Rec (cm) | Sample Depth (m) | Blows (150 mm) Shear Strength (kPa) or RQD (%) | N-value | Casing Blows | Elevation (m) | Graphic Log

Depth (m)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	ASPHALT PAVEMENT.	
0.18	Brown, silty SAND, some gravel.	
4.94	Same as above but, wet.	
6.10	Bottom of Exploration at 6.10 m below ground surface. No Refusal.	

SSA: 119.72 / 114.96 / 113.80

Remarks: Revised By K. Breskin/MDOT.

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

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

Page 1 of 1 — Boring No.: P-9

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BORING LOGS

LIVERMORE FALLS - JAY

ROUTE 4\17

SHEET 4 OF 6 AUGUSTA, MAINE

PROJECT DESIGN ENGINEER	BY	DATE
DESIGN-DETAILED	R. BARNES	01-22-09
CHECKED	T. GORRILL	------
REVISIONS	------	------
FIELD CHANGES	------	------

PLANS

Filename: ...\mst01012_BORING LOGS4.dgn Division: HIGHWAY Username: common Date:2/9/2011

METRIC

1. All dimensions are in millimeters unless otherwise noted.
2. All elevations and stations are in meters.

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	NH-1001(800)E	13	148

10018.00

Maine Department of Transportation — Soil/Rock Exploration Log — METRIC UNITS

Project: Route 4/17, Main Street
Location: Livermore Falls/Jay, Maine
Boring No.: P-10
PIN: 10018.00

Driller:	Maine Test Boring	Elevation (m): 119.90	Auger ID/OD: 106 mm
Operator:	Mel Coffin	Datum: NGVD	Sampler: N/A
Logged By:	Brad Tirone/HAI	Rig Type: Mobile Drill	Hammer Wt./Fall: N/A
Date Start/Finish:	6/30/03-6/30/03	Drilling Method: Solid Stem Auger	Core Barrel: N/A
Boring Location:	41+430, 2.0 Rt.	Casing ID/OD: N/A	Water Level*: Boring dry

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample attempt
U = Thin Wall Tube Sample
R = Rock Core Sample
V = Insitu Vane Shear Test
SSA = Solid Stem Auger

Definitions:
S_u = Insitu Field Vane Shear Strength (kPa)
T_v = Pocket Torvane Shear Strength (kPa)
q_u = Unconfined Compressive Strength (Psi)
$S_{u\ (LAB)}$ = Lab Vane Shear Strength (kPa)
WOH = weight of 64 kg hammer
WOR = weight of rods WOC = weight of casing

Definitions:
MC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Sample Information

Depth (m)	Sample No.	Pen/Rec (cm)	Sample Depth (m)	Blows (150 mm) Shear Strength (kPa) or RQD (%)	N-value	Casing Blows	Elevation (m)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0						SSA	119.72		ASPHALT PAVEMENT. 0.18	
									Light brown, silty SAND, some gravel.	
-1.2										
-2.4							117.64		Bottom of Exploration at 2.26 m below ground surface. Bedrock Refusal 2.26	
-3.6										
-4.8										
-6										
-7.2										
-8.4										
-9.6										

Remarks:
Revised By K. Breskin/MDOT.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.
* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1
Boring No.: P-10

Maine Department of Transportation — Soil/Rock Exploration Log — METRIC UNITS

Project: Route 4/17, Main Street
Location: Livermore Falls/Jay, Maine
Boring No.: P-11
PIN: 10018.00

Driller:	Maine Test Boring	Elevation (m): 119.70	Auger ID/OD: 106 mm
Operator:	Mel Coffin	Datum: NGVD	Sampler: N/A
Logged By:	Brad Tirone/HAI	Rig Type: Mobile Drill	Hammer Wt./Fall: N/A
Date Start/Finish:	7/1/03-7/1/03	Drilling Method: Solid Stem Auger	Core Barrel: N/A
Boring Location:	41+440, 2.5 Rt.	Casing ID/OD: N/A	Water Level*: Boring dry

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample attempt
U = Thin Wall Tube Sample
R = Rock Core Sample
V = Insitu Vane Shear Test
SSA = Solid Stem Auger

Definitions:
S_u = Insitu Field Vane Shear Strength (kPa)
T_v = Pocket Torvane Shear Strength (kPa)
q_u = Unconfined Compressive Strength (Psi)
$S_{u\ (LAB)}$ = Lab Vane Shear Strength (kPa)
WOH = weight of 64 kg hammer
WOR = weight of rods WOC = weight of casing

Definitions:
MC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Sample Information

Depth (m)	Sample No.	Pen/Rec (cm)	Sample Depth (m)	Blows (150 mm) Shear Strength (kPa) or RQD (%)	N-value	Casing Blows	Elevation (m)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0						SSA	119.52		ASPHALT PAVEMENT. 0.18	
									Light brown, dry, coarse to fine SAND, little silt, trace gravel.	
-1.2									Cobble at 0.91 m bgs.	
							118.18		Same as above but, with cobbles. 1.52	
-2.4							117.17		Bottom of Exploration at 2.53 m below ground surface. Bedrock Refusal 2.53	
-3.6										
-4.8										
-6										
-7.2										
-8.4										
-9.6										

Remarks:
Revised By K. Breskin/MDOT.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.
* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1
Boring No.: P-11

Maine Department of Transportation — Soil/Rock Exploration Log — METRIC UNITS

Project: Route 4/17, Main Street
Location: Livermore Falls/Jay, Maine
Boring No.: P-12
PIN: 10018.00

Driller:	Maine Test Boring	Elevation (m): 119.60	Auger ID/OD: 106 mm
Operator:	Mel Coffin	Datum: NGVD	Sampler: N/A
Logged By:	Brad Tirone/HAI	Rig Type: Mobile Drill	Hammer Wt./Fall: N/A
Date Start/Finish:	7/1/03-7/1/03	Drilling Method: Solid Stem Auger	Core Barrel: N/A
Boring Location:	41+450, 2.5 Rt.	Casing ID/OD: N/A	Water Level*: 11.3' bgs.

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample attempt
U = Thin Wall Tube Sample
R = Rock Core Sample
V = Insitu Vane Shear Test
SSA = Solid Stem Auger

Definitions:
S_u = Insitu Field Vane Shear Strength (kPa)
T_v = Pocket Torvane Shear Strength (kPa)
q_u = Unconfined Compressive Strength (Psi)
$S_{u\ (LAB)}$ = Lab Vane Shear Strength (kPa)
WOH = weight of 64 kg hammer
WOR = weight of rods WOC = weight of casing

Definitions:
MC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Sample Information

Depth (m)	Sample No.	Pen/Rec (cm)	Sample Depth (m)	Blows (150 mm) Shear Strength (kPa) or RQD (%)	N-value	Casing Blows	Elevation (m)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0						SSA	119.42		ASPHALT PAVEMENT. 0.18	
									Light reddish brown, gravelly, coarse to fine SAND, trace silt.	
-1.2									Brown, sandy SILT, some gravel. 1.52	
-2.4							118.08			
-3.6							115.64		Bottom of Exploration at 3.96 m below ground surface. Bedrock Refusal 3.96	
-4.8										
-6										
-7.2										
-8.4										
-9.6										

Remarks:
Revised By K. Breskin/MDOT.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.
* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1
Boring No.: P-12

Maine Department of Transportation — Soil/Rock Exploration Log — METRIC UNITS

Project: Route 4/17, Main Street
Location: Livermore Falls/Jay, Maine
Boring No.: P-13
PIN: 10018.00

Driller:	Maine Test Boring	Elevation (m): 119.50	Auger ID/OD: 106 mm
Operator:	Mel Coffin	Datum: NGVD	Sampler: N/A
Logged By:	Brad Tirone/HAI	Rig Type: Mobile Drill	Hammer Wt./Fall: N/A
Date Start/Finish:	7/1/03-7/1/03	Drilling Method: Solid Stem Auger	Core Barrel: N/A
Boring Location:	41+460, 2.5 Rt.	Casing ID/OD: N/A	Water Level*: 9.6' bgs.

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample attempt
U = Thin Wall Tube Sample
R = Rock Core Sample
V = Insitu Vane Shear Test
SSA = Solid Stem Auger

Definitions:
S_u = Insitu Field Vane Shear Strength (kPa)
T_v = Pocket Torvane Shear Strength (kPa)
q_u = Unconfined Compressive Strength (Psi)
$S_{u\ (LAB)}$ = Lab Vane Shear Strength (kPa)
WOH = weight of 64 kg hammer
WOR = weight of rods WOC = weight of casing

Definitions:
MC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Sample Information

Depth (m)	Sample No.	Pen/Rec (cm)	Sample Depth (m)	Blows (150 mm) Shear Strength (kPa) or RQD (%)	N-value	Casing Blows	Elevation (m)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0						SSA	119.32		ASPHALT PAVEMENT. 0.18	
									Light brown, silty, coarse to fine SAND, little gravel.	
-1.2										
-2.4										
-3.6							116.45		Brown, sandy SILT, little gravel. 3.05	
-4.8							115.63			
-6									Bottom of Exploration at 3.87 m below ground surface. Bedrock Refusal 3.87	
-7.2										
-8.4										
-9.6										

Remarks:
Revised By K. Breskin/MDOT.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.
* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1
Boring No.: P-13

Maine Department of Transportation — Soil/Rock Exploration Log — METRIC UNITS

Project: Route 4/17, Main Street
Location: Livermore Falls/Jay, Maine
Boring No.: P-14
PIN: 10018.00

Driller:	Maine Test Boring	Elevation (m): 119.30	Auger ID/OD: 106 mm
Operator:	Mel Coffin	Datum: NGVD	Sampler: N/A
Logged By:	Brad Tirone/HAI	Rig Type: Mobile Drill	Hammer Wt./Fall: N/A
Date Start/Finish:	7/1/03-7/1/03	Drilling Method: Solid Stem Auger	Core Barrel: N/A
Boring Location:	41+470, 2.5 Rt.	Casing ID/OD: N/A	Water Level*: Boring dry

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample attempt
U = Thin Wall Tube Sample
R = Rock Core Sample
V = Insitu Vane Shear Test
SSA = Solid Stem Auger

Definitions:
S_u = Insitu Field Vane Shear Strength (kPa)
T_v = Pocket Torvane Shear Strength (kPa)
q_u = Unconfined Compressive Strength (Psi)
$S_{u\ (LAB)}$ = Lab Vane Shear Strength (kPa)
WOH = weight of 64 kg hammer
WOR = weight of rods WOC = weight of casing

Definitions:
MC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Sample Information

Depth (m)	Sample No.	Pen/Rec (cm)	Sample Depth (m)	Blows (150 mm) Shear Strength (kPa) or RQD (%)	N-value	Casing Blows	Elevation (m)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0						SSA	119.12		ASPHALT PAVEMENT. 0.18	
									Brown, damp, silty, coarse to fine SAND.	
-1.2							117.78		Brown, damp, silty, coarse SAND, trace gravel. 1.52	
-2.4							117.04		Bottom of Exploration at 2.26 m below ground surface. Bedrock Refusal 2.26	
-3.6										
-4.8										
-6										
-7.2										
-8.4										
-9.6										

Remarks:
Revised By K. Breskin/MDOT.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.
* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1
Boring No.: P-14

Maine Department of Transportation — Soil/Rock Exploration Log — METRIC UNITS

Project: Route 4/17, Main Street
Location: Livermore Falls/Jay, Maine
Boring No.: HGT-19
PIN: 10018.00

Driller:	Maine Test Boring	Elevation (m): 119.50	Auger ID/OD: 106/156 mm
Operator:	Mel Coffin	Datum: NGVD	Sampler: Standard Split Spoon
Logged By:	Brad Tirone/HAI	Rig Type: Mobile Drill	Hammer Wt./Fall: 63.5 kg/760 mm
Date Start/Finish:	6/26/03-6/26/03	Drilling Method: Hollow Stem Auger	Core Barrel: N/A
Boring Location:	41+580, 4.5 Rt.	Casing ID/OD: N/A	Water Level*: Boring dry

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample attempt
U = Thin Wall Tube Sample
R = Rock Core Sample
V = Insitu Vane Shear Test
SSA = Solid Stem Auger

Definitions:
S_u = Insitu Field Vane Shear Strength (kPa)
T_v = Pocket Torvane Shear Strength (kPa)
q_u = Unconfined Compressive Strength (Psi)
$S_{u\ (LAB)}$ = Lab Vane Shear Strength (kPa)
WOH = weight of 64 kg hammer
WOR = weight of rods WOC = weight of casing

Definitions:
MC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Sample Information

Depth (m)	Sample No.	Pen/Rec (cm)	Sample Depth (m)	Blows (150 mm) Shear Strength (kPa) or RQD (%)	N-value	Casing Blows	Elevation (m)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	10	61.0/43.2	0.00 - 0.61	10/8/10/15	18	WSA	119.17		Black, dry, medium dense, coarse to fine SAND, ash? 0.34	
									Brown, moist, coarse to fine SAND.	
-1.2	20	61.0/53.3	0.91 - 1.52	8/8/10/47	18		118.59		Black, moist, medium dense, medium to fine SAND, trace gravel. 0.91	GM176778 A-2-4, SM WC=20.6%
							118.25		Grey, damp, hard, gravelly SILT. 1.25	
-2.4							117.98		Bottom of Exploration at 1.52 m below ground surface. No Refusal 1.52	
-3.6										
-4.8										
-6										
-7.2										
-8.4										
-9.6										

Remarks:

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.
* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1
Boring No.: HGT-19

Maine Department of Transportation — Soil/Rock Exploration Log — METRIC UNITS

Project: Route 4/17, Main Street
Location: Livermore Falls/Jay, Maine
Boring No.: HGT-20
PIN: 10018.00

Driller:	Maine Test Boring	Elevation (m): 119.40	Auger ID/OD: 106/156 mm
Operator:	Mel Coffin	Datum: NGVD	Sampler: Standard Split Spoon
Logged By:	Brad Tirone/HAI	Rig Type: Mobile Drill	Hammer Wt./Fall: 63.5 kg/760 mm
Date Start/Finish:	6/26/03-6/26/03	Drilling Method: Hollow Stem Auger	Core Barrel: N/A
Boring Location:	41+630, 1.7 Rt.	Casing ID/OD: N/A	Water Level*: 1.55 m bgs.

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample attempt
U = Thin Wall Tube Sample
R = Rock Core Sample
V = Insitu Vane Shear Test
SSA = Solid Stem Auger

Definitions:
S_u = Insitu Field Vane Shear Strength (kPa)
T_v = Pocket Torvane Shear Strength (kPa)
q_u = Unconfined Compressive Strength (Psi)
$S_{u\ (LAB)}$ = Lab Vane Shear Strength (kPa)
WOH = weight of 64 kg hammer
WOR = weight of rods WOC = weight of casing

Definitions:
MC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Sample Information

Depth (m)	Sample No.	Pen/Rec (cm)	Sample Depth (m)	Blows (150 mm) Shear Strength (kPa) or RQD (%)	N-value	Casing Blows	Elevation (m)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0						WSA	119.19		ASPHALT PAVEMENT. 0.21	
	10	61.0/50.8	0.46 - 1.07	18/21/10/6	31				Dark brown, damp, dense, coarse to fine gravelly SAND, some ash?	
-1.2							118.18		Dark brown, PEAT. 1.22	
	20	61.0/50.8	1.52 - 2.13	13/28/32/35	60		117.88		Brown, moist, very dense, silty, very fine SAND, some gravel. 1.52	GM176779 A-4-1, SM WC=13.3%
-2.4							117.27		Bottom of Exploration at 2.13 m below ground surface. No Refusal 2.13	
-3.6										
-4.8										
-6										
-7.2										
-8.4										
-9.6										

Remarks:

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.
* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1
Boring No.: HGT-20

PROJECT DESIGN ENGINEER	BY	DATE
DESIGN-DETAILED	R. BARNES	01-22-09
CHECKED	T. GORRILL	------
REVISIONS	------	------
FIELD CHANGES	------	------

PLANS

Filename: ...\msta\013_BORING LOGS.dgn Division: HIGHWAY Username: common Date:2/9/2011

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BORING LOGS

LIVERMORE FALLS - JAY

ROUTE 4\17

SHEET 5 OF 6 AUGUSTA, MAINE

METRIC
1. All dimensions are in millimeters unless otherwise noted.
2. All elevations and stations are in meters.

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	NH-1001(800)E	14	148
		10018.00		

Maine Department of Transportation
Soil/Rock Exploration Log
METRIC UNITS

Project: Route 4/17, Main Street
Location: Livermore Falls/Jay, Maine

Boring No.: HGT-21
PIN: 10018.00

Driller: Maine Test Boring	Elevation (m): 121.10	Auger ID/OD:	106/156 mm
Operator: Wes Coffin	Datum: NGVD	Sampler:	Standard Split Spoon
Logged By: Brad Tirone/MAI	Rig Type: Mobile Drill	Hammer Wt./Fall:	63.5 kg/760 mm
Date Start/Finish: 6/26/03-6/26/03	Drilling Methods: Hollow Stem Auger	Core Barrel:	N/A
Boring Location: 41+730, 2.5 Rt.	Casing ID/OD: N/A	Water Level*:	Boring dry

Definitions:
D = Split Spoon Sample
WO = Unsuccessful Split Spoon Sample attempt
U = Thin Wall Tube Sample
R = Rock Core Sample
V = Insitu Vane Shear Test
SSA = Solid Stem Auger
S_u = Insitu Field Vane Shear Strength (kPa)
T_v = Pocket Torvane Shear Strength (kPa)
q_u = Unconfined Compressive Strength (Psi)
$S_{u(lab)}$ = Lab Vane Shear Strength (kPa)
WOH = weight of 64 kg hammer
WOR = weight of rods, WOC = weight of casing
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (m)	Sample No.	Pen/Rec (cm)	Sample Depth (m)	Blows I 150 mm Shear Strength (kPa) or RQD (%)	N-value	Casing Blows	Elevation (m)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0						HSA	120.92		ASPHALT PAVEMENT. 0.18	
	MD	6.1/6.1	0.46 - 0.52	40(61)			120.58		Brown, dry, medium to fine SAND, trace silt, trace gravel. 0.52	
							120.49		ROCK. 0.61	
									Bottom of Exploration at 0.61 m below ground surface. Refusal	
1.2										
2.4										
3.6										
4.8										
6										
7.2										
8.4										
9.6										

Remarks:

Stratification lines represent approximate boundaries between soil types: transitions may be gradual.
* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1
Boring No.: HGT-21

Maine Department of Transportation
Soil/Rock Exploration Log
METRIC UNITS

Project: Route 4/17, Main Street
Location: Livermore Falls/Jay, Maine

Boring No.: HGT-21A
PIN: 10018.00

Driller: Maine Test Boring	Elevation (m): 121.10	Auger ID/OD:	106/156 mm
Operator: Wes Coffin	Datum: NGVD	Sampler:	Standard Split Spoon
Logged By: Brad Tirone/MAI	Rig Type: Mobile Drill	Hammer Wt./Fall:	63.5 kg/760 mm
Date Start/Finish: 6/26/03-6/26/03	Drilling Methods: Hollow Stem Auger	Core Barrel:	N/A
Boring Location: 41+731, 2.5 Rt.	Casing ID/OD: N/A	Water Level*:	Boring dry

Definitions:
D = Split Spoon Sample
WO = Unsuccessful Split Spoon Sample attempt
U = Thin Wall Tube Sample
R = Rock Core Sample
V = Insitu Vane Shear Test
SSA = Solid Stem Auger
S_u = Insitu Field Vane Shear Strength (kPa)
T_v = Pocket Torvane Shear Strength (kPa)
q_u = Unconfined Compressive Strength (Psi)
$S_{u(lab)}$ = Lab Vane Shear Strength (kPa)
WOH = weight of 64 kg hammer
WOR = weight of rods, WOC = weight of casing
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (m)	Sample No.	Pen/Rec (cm)	Sample Depth (m)	Blows I 150 mm Shear Strength (kPa) or RQD (%)	N-value	Casing Blows	Elevation (m)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0						HSA	120.92		ASPHALT PAVEMENT. 0.18	
	MD	15.2/12.7	0.46 - 0.61	60(152)			120.58		No description given. 0.61	
							120.49		Bottom of Exploration at 0.61 m below ground surface. Refusal	
1.2										
2.4										
3.6										
4.8										
6										
7.2										
8.4										
9.6										

Remarks:

Stratification lines represent approximate boundaries between soil types: transitions may be gradual.
* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1
Boring No.: HGT-21A

Maine Department of Transportation
Soil/Rock Exploration Log
METRIC UNITS

Project: Route 4/17, Main Street
Location: Livermore Falls/Jay, Maine

Boring No.: HGT-22
PIN: 10018.00

Driller: Maine Test Boring	Elevation (m): 119.40	Auger ID/OD:	106/156 mm
Operator: Wes Coffin	Datum: NGVD	Sampler:	Standard Split Spoon
Logged By: Brad Tirone/MAI	Rig Type: Mobile Drill	Hammer Wt./Fall:	63.5 kg/760 mm
Date Start/Finish: 6/27/03-6/27/03	Drilling Methods: Hollow Stem Auger	Core Barrel:	N/A
Boring Location: 41+801, 2.5 Lt.	Casing ID/OD: N/A	Water Level*:	Boring dry

Definitions:
D = Split Spoon Sample
WO = Unsuccessful Split Spoon Sample attempt
U = Thin Wall Tube Sample
R = Rock Core Sample
V = Insitu Vane Shear Test
SSA = Solid Stem Auger
S_u = Insitu Field Vane Shear Strength (kPa)
T_v = Pocket Torvane Shear Strength (kPa)
q_u = Unconfined Compressive Strength (Psi)
$S_{u(lab)}$ = Lab Vane Shear Strength (kPa)
WOH = weight of 64 kg hammer
WOR = weight of rods, WOC = weight of casing
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (m)	Sample No.	Pen/Rec (cm)	Sample Depth (m)	Blows I 150 mm Shear Strength (kPa) or RQD (%)	N-value	Casing Blows	Elevation (m)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0						HSA	119.13		ASPHALT PAVEMENT. 0.27	
	10	61.0/48.3	0.30 - 0.91	10/11/16/11	27				Dark brown, damp, medium dense, silty SAND, little gravel. 0.91	GMT76780 A-2-4, SM WC=10.1%
1.2							118.49		Dark brown, wet, sandy SILT. 1.52	
	20	61.0/61.0	1.52 - 2.13	1/3/2/3	5		117.88		Dark brown, moist, medium stiff, SILT, little fine sand, trace organics. (Bark) . 2.13	GMT76781 A-2-4, SM WC=46.5%
2.4							117.27		Bottom of Exploration at 2.13 m below ground surface. No Refusal	
3.6										
4.8										
6										
7.2										
8.4										
9.6										

Remarks:

Stratification lines represent approximate boundaries between soil types: transitions may be gradual.
* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1
Boring No.: HGT-22

PROJECT DESIGN ENGINEER		BY	DATE
PLANS	DESIGN-DETAILED	R. BARNES	01-22-09
	CHECKED	T. CORRILL	_____
	REVISIONS	_____	_____
	FIELD CHANGES	_____	_____

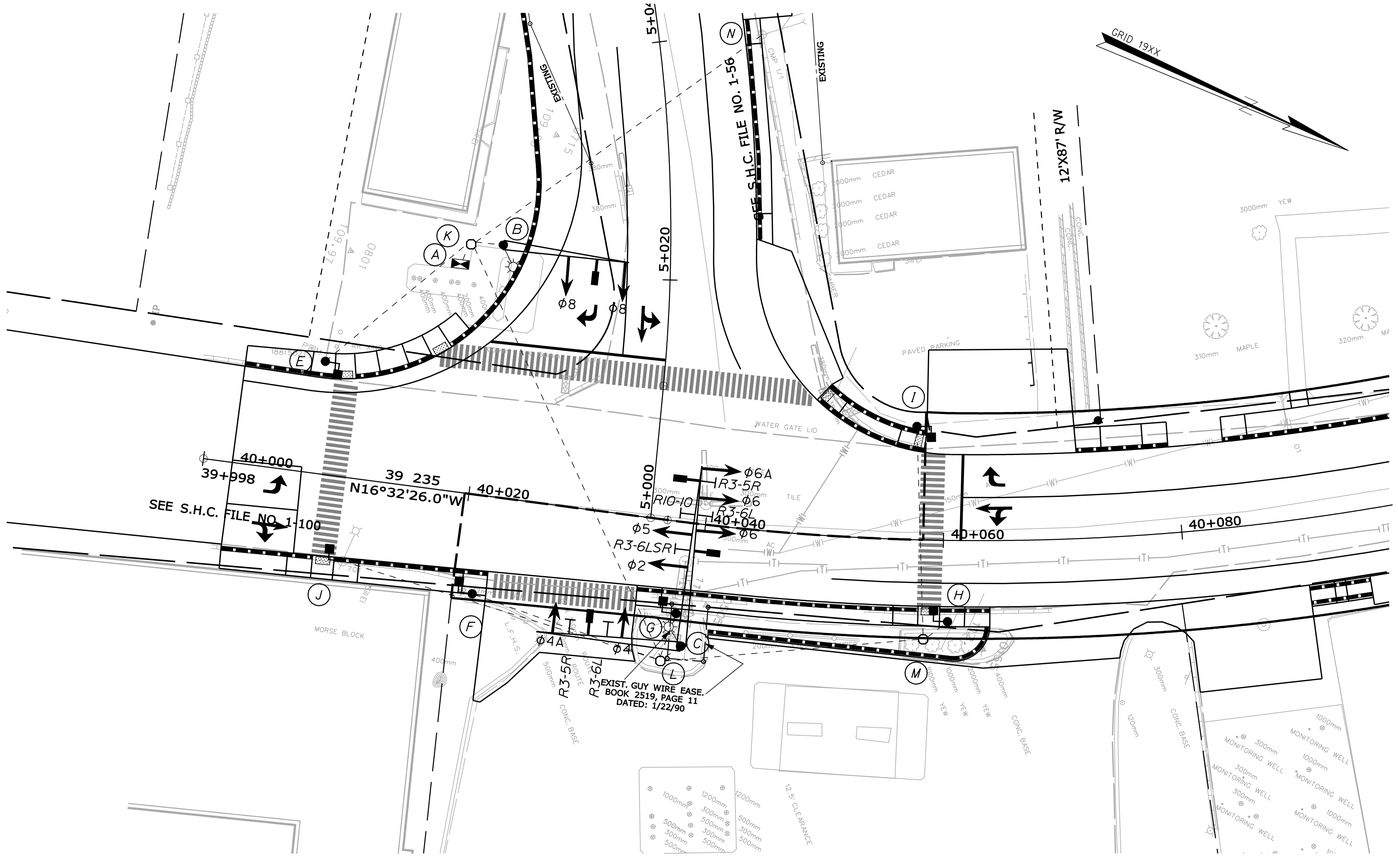
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BORING LOGS

LIVERMORE FALLS - JAY
ROUTE 4\17

SHEET 6 OF 6 AUGUSTA, MAINE

Filename: ...\msto\014_BORING LOGS6.dgn Division: HIGHWAY Username: common Date:2/9/2011



NOTES:

1. MAST POLES B AND C SHALL BE ON 900mm DIAMETER FOUNDATIONS.

2. PEDESTAL POLES E, F, G, H AND I SHALL BE ON 760mm DIAMTER FOUNDATIONS

3. THE CONTRACTOR MUST MEET ALL UTILITY REQUIREMENTS FOR THE SERVICE CONNECTION.

4. ALL SPLICES WILL BE MADE IN THE CABINETS OR POLES MEETING MAINEDOT SPECIFICATIONS.

5. THE BOTTOM OF THE HOUSING OF THE SIGNAL FACE SHALL BE AT LEAST 4.9m BUT NOT MORE THAN 6m ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY. IN THE CASE OF THE SIGNAL FACE MOUNTED ON MAST POLE B, THE SIGNAL FACE SHALL BE 5.8m ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.

6. ALL MATERIALS AND WORK COMPLETED UNDER THIS CONTRACT SHALL CONFORM TO THE MAINEDOT STANDARD SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS AND STANDARD DETAILS AND WITH THE FEDERAL HIGHWAY ADMINISTRATION "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".

7. TWO COPIES OF THE SIGNAL CONTROLLER MANUAL AND TWO COPIES OF AS-BUILT PLANS SHALL BE LEFT IN THE CONTROLLER CABINET. ONE ELECTRONIC COPY OF EACH SHALL BE PROVIDED TO THE TOWN ELECTRICIAN.

8. CONTRACTOR SHALL PROVIDE AND INSTALL ALL JUNCTION BOXES.

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

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

11. CONTRACTOR IS RESPONSIBLE FOR OBTAINING MAINEDOT AND TOWN OPENING PERMITS, IF NECESSARY.

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

13. THE PROPOSED TRAFFIC SIGNAL TIMING AND PHASING PLAN SHALL BE INPUT BY THE CONTRACTOR UNDER OBSERVATION BY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE 48 HOURS NOTICE TO THE ENGINEER.

14. ALL SIGNAL HEADS SHALL BE INSTALLED AS CLOSE AS PRACTICABLE TO THE CENTER OF THE APPROACHING LANE.

15. ALL PUSH BUTTONS SHALL BE LOCATED WITHIN 0.3m FROM THE EDGE OF THE SIDEWALK. IF PLACED GREATER THAN 0.3m FROM THE SIDEWALK, CONTRACTOR SHALL PAVE AN APRON TO THE BUTTON FOR A DISTANCE NOT TO EXCEED 1.5m

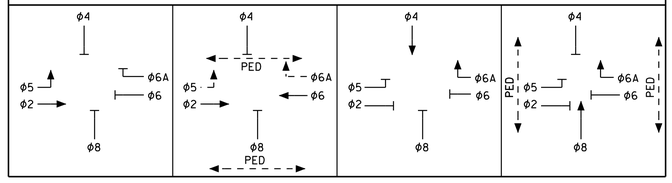
16. ALL MAST ARMS AND POLES SHALL BE GALVANIZED.

17. ALL TRAFFIC SIGNALS SHALL BE 300mm DIAMETER WITH L.E.D. LENSES AND SHALL HAVE 100mm BACK PLATES.

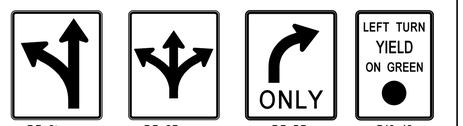
18. THE COST OF POLE RISERS AND OVERHEAD LANE USE SIGNS SHALL BE INCIDENTAL TO ITEM 643.80.

19. CONTROLLERS SHALL BE TS-2.

SIGNAL PHASING

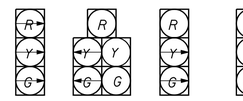


SIGN LEGEND



R3-6L 750x900 | R3-6R 750x900 | R3-5R 750x900 | R10-12 600x750

INDICATIONS

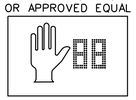


ϕ4A ϕ5 ϕ6A ϕ2,ϕ4,ϕ6,ϕ8

NOTE:
ALL INDICATIONS SHALL BE 300mm ALL INDICATIONS SHALL BE LIGHT EMITTING DIODES

PEDESTRIAN SIGNAL HEADS

ALL SIGNAL HEADS SHALL BE GELCORE MODEL NO. PS7-CFC9-01A OR TASSIMCO MODEL• PLS-160 OR APPROVED EQUAL



EQUIPMENT SCHEDULE

DESIGNATION	FATIGUE CATEGORY	ITEM	DESCRIPTION
A		CONTROLLER CABINET	CABINET WITH BASE EXTENSION AND METER ON CONCRETE FOUNDATION
B	II	9m MAST POLE WITH 10m MAST ARM	SIGNAL HEADS, PEDESTRIAN HEAD AND PUSH BUTTON, 250W LUMINAIRE WITH MONGOOSE LIGHT FIXTURE
C	III	9m MAST POLE WITH 15m & 11m MAST ARM	SIGNAL HEADS, LANE USE SIGNS, 250W LUMINAIRE WITH MONGOOSE LIGHT FIXTURE
D		NOT USED	
E, F, G, H, I		PEDESTAL POLE	PEDESTRIAN HEAD(S) AND PUSH BUTTON(S) AND SIGN(S)
J		EXISTING UTILITY POLE	ADD RISER, PEDESTRIAN HEAD AND PUSH BUTTON
K, L, M		JUNCTION BOX	PRECAST CONCRETE
N		EXISTING UTILITY POLE	ADD RISER

SIGNAL TIMING

PHASE	1	2	3	4	5	6	7	8
MINIMUM INITIAL	-	10	-	10	4	10	-	4
PASSAGE TIME	-	3	-	3	-	3	-	3
MAXIMUM GREEN	-	45	-	13	4	33	-	18
YELLOW	-	4	-	4	4	4	-	4
ALL RED	-	3	-	2	3	3	-	2
FLASH	-	Y	-	R	Y	Y	-	R
PHASE RECALL	-	SOFT	-	-	-	SOFT	-	-
WALK/DON'T WALK	-	4	-	4	-	4	-	4
PEDESTRIAN CLEARANCE	-	29	-	-	-	29	-	14
MEMORY	-	-	-	-	-	-	-	-
DETECTOR MODE	-	PR	-	PR	PR	PR	-	PR
DETECTOR DELAY	-	-	-	-	-	-	-	-

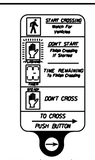
CONDUIT SCHEDULE

RUN	LENGTH (m)	COMMENTS
K-N	30	50mm PVC SCHEDULE 80
B-K	4	50mm PVC SCHEDULE 80
A-K	2	50mm PVC SCHEDULE 80
E-K	15	50mm PVC SCHEDULE 80
K-L	38	75mm PVC SCHEDULE 80
J-L	29	50mm PVC SCHEDULE 80
F-L	17	50mm PVC SCHEDULE 80
G-L	6	50mm PVC SCHEDULE 80
C-L	3	50mm PVC SCHEDULE 80
L-M	22	75mm PVC SCHEDULE 80
H-M	3	50mm PVC SCHEDULE 80
I-M	19	50mm PVC SCHEDULE 80

LEGEND

- CONTROLLER WITH CABINET
- POLE
- MAST ARM
- VEHICULAR HEAD
- OVERHEAD SIGN
- VIDEO DETECTION
- CONDUIT
- JUNCTION BOX
- LUMINAIRE
- PEDESTRIAN PUSH BUTTON

ACCESSIBLE PEDESTRIAN SIGNALS (APS)



CAMPBELL COMPANY ADVISOR APS A912 OR APPROVED EQUAL

PLAN

10 0 10 20

SCALE
(in meters)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
PIN 10018.00

HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER	R. WEBSTER		
DESIGN-DETAILED	J.BARTLETT	D.BURGESS	01-22-09
CHECKED-REVIEWED	R.NORWOOD		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
MAIN STREET (ROUTE 4/17)

TRAFFIC SIGNAL PLAN

SHEET NUMBER

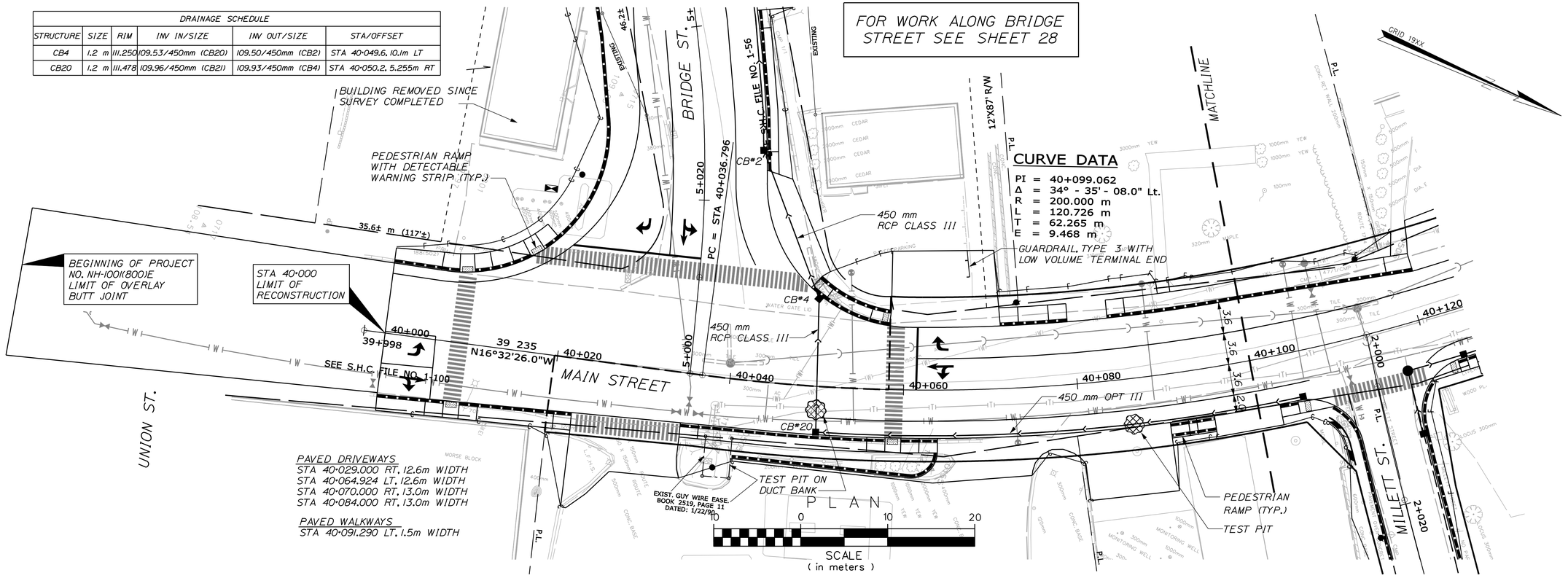
15

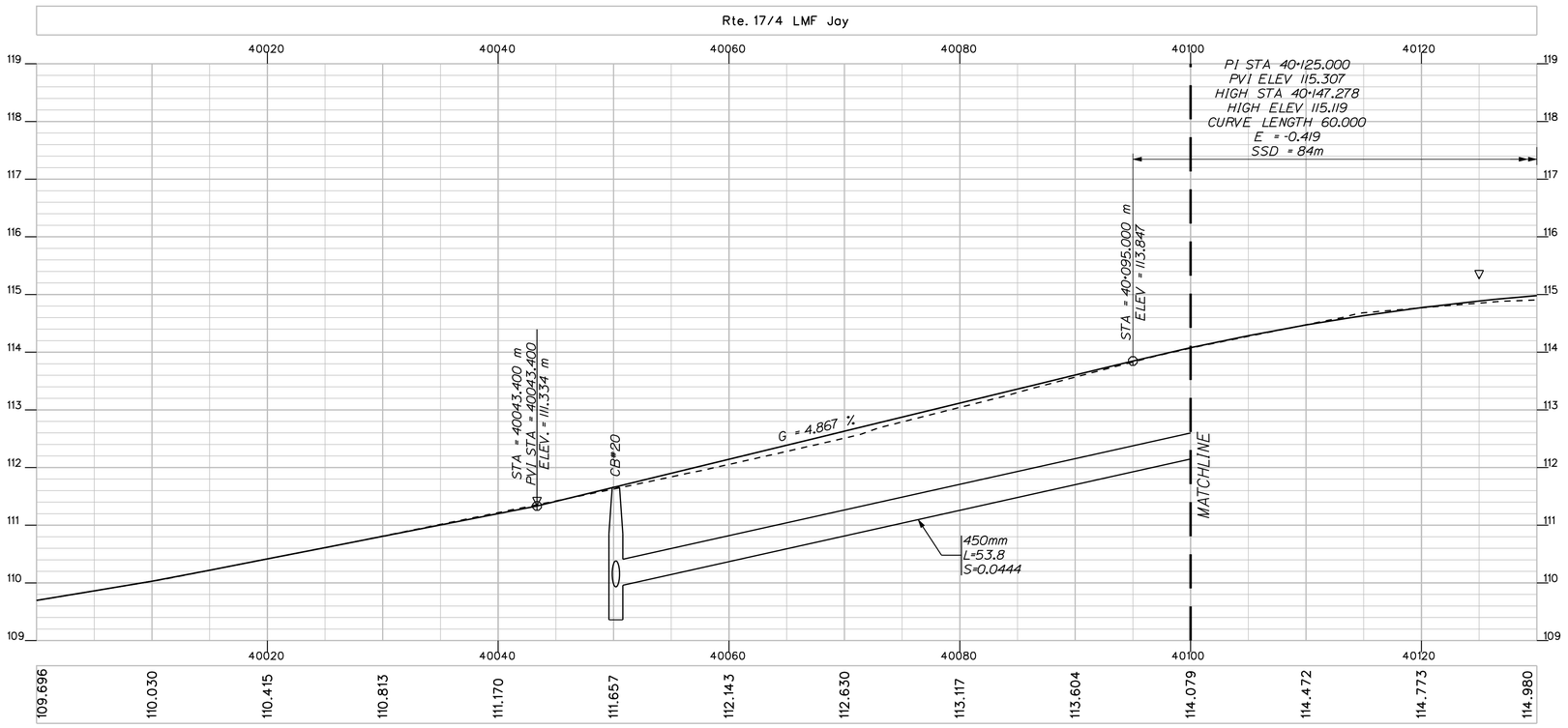
OF 148

Division: HIGHWAY Username: common Date:2/9/2011

Filename: ...\highway\mst01\015_Signal1.dgn

DRAINAGE SCHEDULE					
STRUCTURE	SIZE	RIM	INV IN/SIZE	INV OUT/SIZE	STA/OFFSET
CB4	1.2 m	111.250	109.53/450mm (CB20)	109.50/450mm (CB2)	STA 40+049.6, 10.1m LT
CB20	1.2 m	111.478	109.96/450mm (CB21)	109.93/450mm (CB4)	STA 40+050.2, 5.255m RT





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
PIN 10018.00

HIGHWAY PLANS

PROJ. MANAGER	R. WEBSTER		
DESIGN-DETAILED	R. NORWOOD	BY	D.BURGESS
CHECKED-REVIEWED	T. CORRELL	DATE	01-22-09
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
MAIN STREET (ROUTE 4/17)

PLAN & PROFILE

SHEET NUMBER
16
OF 148

Division: HIGHWAY Username: common Date:2/9/2011

Filename: ...\highway\mst4\016_HDPlan1.dgn

DRAINAGE SCHEDULE					
STRUCTURE	SIZE	RIM	INV IN/SIZE	INV OUT/SIZE	STA/OFFSET
CB2I	I.2 m	II4.235	-	II2.35/450mm (CB20)	STA 40+105.I, 5.255m RT
CB2IA	I.2 m	II5.044	-	II3.9I/300mm (DMHI)	STA 2+012.6, 3.855m LT
DMHI	I.2 m	II4.695	II3.73/300mm (CB2IA)	II3.45/375mm (CB22)	STA 40+II7.2, 5.255m RT
CB5	I.8 m	II4.639	II2.62/900mm (CB23)	III.62/900mm (EXCB)	STA 40+I98.6, 5.255m LT
CB22	I.2 m	II4.80I	II3.35/375mm (DMHI)	II3.30/375mm (CB23)	STA 40+I23.8, 5.255m RT
EXDMHI	EXIST.	II4.726	III.30/900mm (CB5) II3.22/300mm (CB5A) II0.30/I220mm (EX)	II0.30/I220mm (EX)	STA 40+202.3, 4.5m LT

DRAINAGE SCHEDULE					
STRUCTURE	SIZE	RIM	INV IN/SIZE	INV OUT/SIZE	STA/OFFSET
CB23	I.8 m	II4.639	II2.85/750mm (CB24) II3.00/375mm (CB22)	II2.75/900mm (CB5)	STA 40+I98.6, 5.255m RT
CB23A	I.2 m	II4.978	II3.23/300mm (CB23B)	II3.23/300mm (EXDMH)	STA 3+023.0, 3.555m RT
CB23B	I.2 m	II4.978	-	II3.36/300mm (CB23A)	STA 3+023.0, 3.555m LT
CB24	I.2 m	II4.839	II3.23/750mm (CB25)	II3.20/750mm (CB23)	STA 40+225.7, 5.255m RT
EXDMH2	EXIST.	II4.8I0	II0.93/I220mm (EXCB) II3.07/300mm (CB23A)	II0.93/I220mm (EX)	STA 3+0I4.20, 0.6m RT

PAVED DRIVEWAYS
STA 40+098.700 RT, 7.6m WIDTH
STA 40+129.500 RT, 9.0m WIDTH
STA 40+127.000 LT, II.6m WIDTH
STA 40+145.000 RT, I3.0m WIDTH
STA 40+146.000 LT, I3.0m WIDTH
STA 40+154.000 RT, 6.0m WIDTH
STA 40+I64.900 LT, I5.0m WIDTH
STA 40+I84.500 LT, II.6m WIDTH
STA 40+I9I.000 RT, I2.0m WIDTH
STA 40+206.000 LT, I4.0m WIDTH
STA 3+022.000 LT, 20.0m WIDTH

PAVED WALKWAYS
STA 40+227.8I0 RT, I.7m WIDTH
STA 40+235.730 RT, I.4m WIDTH

PLAN

SCALE (in meters)

REMOVE TREES
STA 40+I59.20, I2.25m RT
STA 40+I78.3I, 9.73m RT
STA 40+220.46, 7.27m LT

1.2m PVC COATED CHAIN LINK FENCE
STA 40+I08 TO STA 40+I09 RT
STA 2+008 TO STA 2+014 RT

RETAINING WALL
STA 40+I08 TO STA 40+I09 RT

Rte. 17/4 LMF Jay

PI STA 40+125.000
PVI ELEV II5.307
HIGH STA 40+I47.278
HIGH ELEV II5.II9
CURVE LENGTH 60.000
E = -0.4I9
SSD = 84m

PI STA 40+2I5.000
PVI ELEV II4.660
LOW STA 40+I98.597
LOW ELEV II4.827
CURVE LENGTH 60.000
E = -0.238
HLSD = I09M

STA = 40+095.000 m
ELEV = II3.847

STA = 40+I55.000 m
ELEV = II5.09I

STA = 40+I85.000 m
ELEV = II4.876

STA = 40+245.000 m
ELEV = II5.396

G = -0.7I9 %

G = 2.453 %

450mm
L=53.8
S=0.0444

375mm
L=5.4
S=0.0I85

375mm
L=74.2
S=0.0040

750mm
L=26.5
S=0.0I32

750mm
L=43.8
S=0.0I94

II3.604	II4.079	II4.472	II4.773	II4.980	II5.094	II5.II6	II5.055	II4.983	II4.9I2	II4.846	II4.827	II4.86I	II4.948	II5.087	II5.280	II5.5I9

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
PIN 10018.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	R. WEBSTER	
DESIGN-DETAILED	R. NORWOOD	D.BURGESS 01-22-09
CHECKED-REVIEWED	T. CORRILL	
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
MAIN STREET (ROUTE 4/17)

PLAN & PROFILE

SHEET NUMBER
17
OF 148

Date:2/9/2011
Username: common
Division: HIGHWAY
Filename: ...\highway\mst0\017_HDPlan2.dgn

Division: HIGHWAY Username: common Date:2/9/2011

Filename: ...\highway\rnsto\018_HDPlan3.dgn

PAVED DRIVEWAYS
STA 40+244.000 RT, 5.0m WIDTH
STA 40+267.200 LT, 10.0m WIDTH
STA 40+309.800 LT, 8.0m WIDTH
STA 40+324.500 LT, 7.0m WIDTH
STA 40+332.159 RT, 26.0m WIDTH
STA 40+340.500 LT, 5.0m WIDTH
STA 40+346.000 LT, 7.0m WIDTH
STA 6+018.000 LT, 12.0m WIDTH

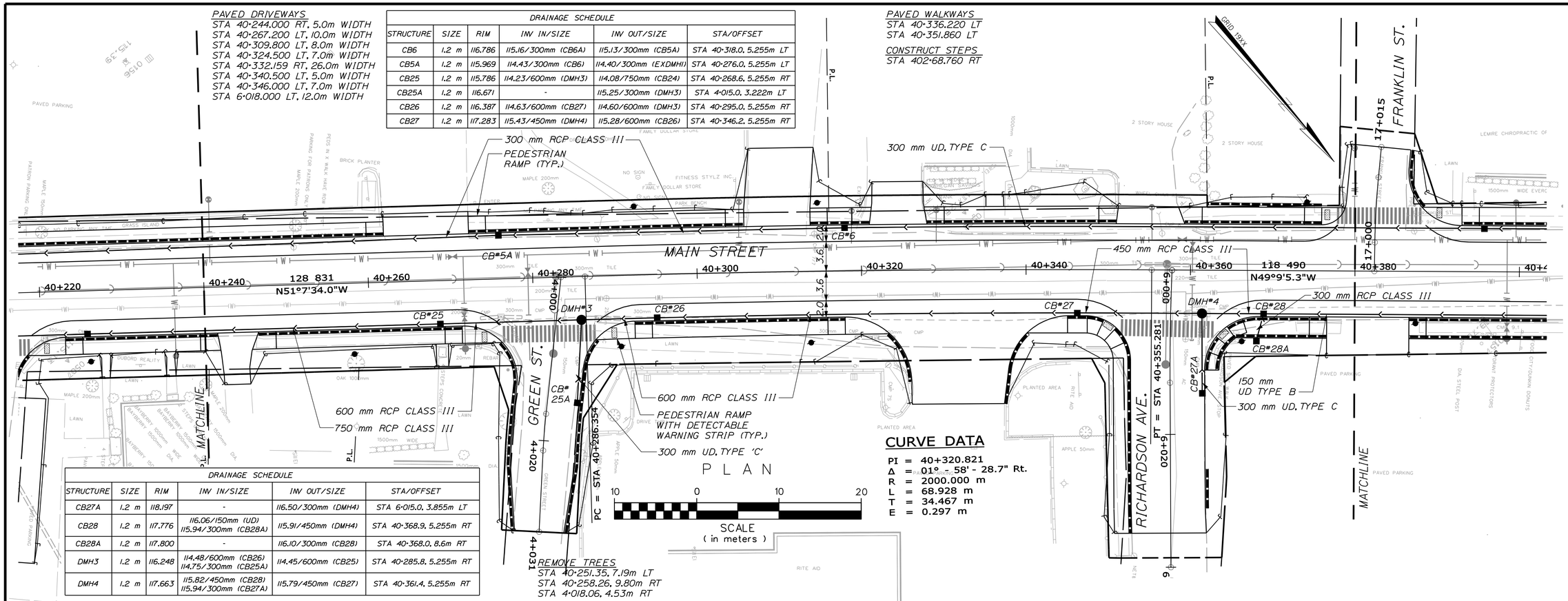
DRAINAGE SCHEDULE					
STRUCTURE	SIZE	RIM	INV IN/SIZE	INV OUT/SIZE	STA/OFFSET
CB6	1.2 m	116.786	115.16/300mm (CB6A)	115.13/300mm (CB5A)	STA 40+318.0, 5.255m LT
CB5A	1.2 m	115.969	114.43/300mm (CB6)	114.40/300mm (EXDMH1)	STA 40+276.0, 5.255m LT
CB25	1.2 m	115.786	114.23/600mm (DMH3)	114.08/750mm (CB24)	STA 40+268.6, 5.255m RT
CB25A	1.2 m	116.671	-	115.25/300mm (DMH3)	STA 4+015.0, 3.222m LT
CB26	1.2 m	116.387	114.63/600mm (CB27)	114.60/600mm (DMH3)	STA 40+295.0, 5.255m RT
CB27	1.2 m	117.283	115.43/450mm (DMH4)	115.28/600mm (CB26)	STA 40+346.2, 5.255m RT

PAVED WALKWAYS
STA 40+336.220 LT
STA 40+351.860 LT

CONSTRUCT STEPS
STA 402+68.760 RT

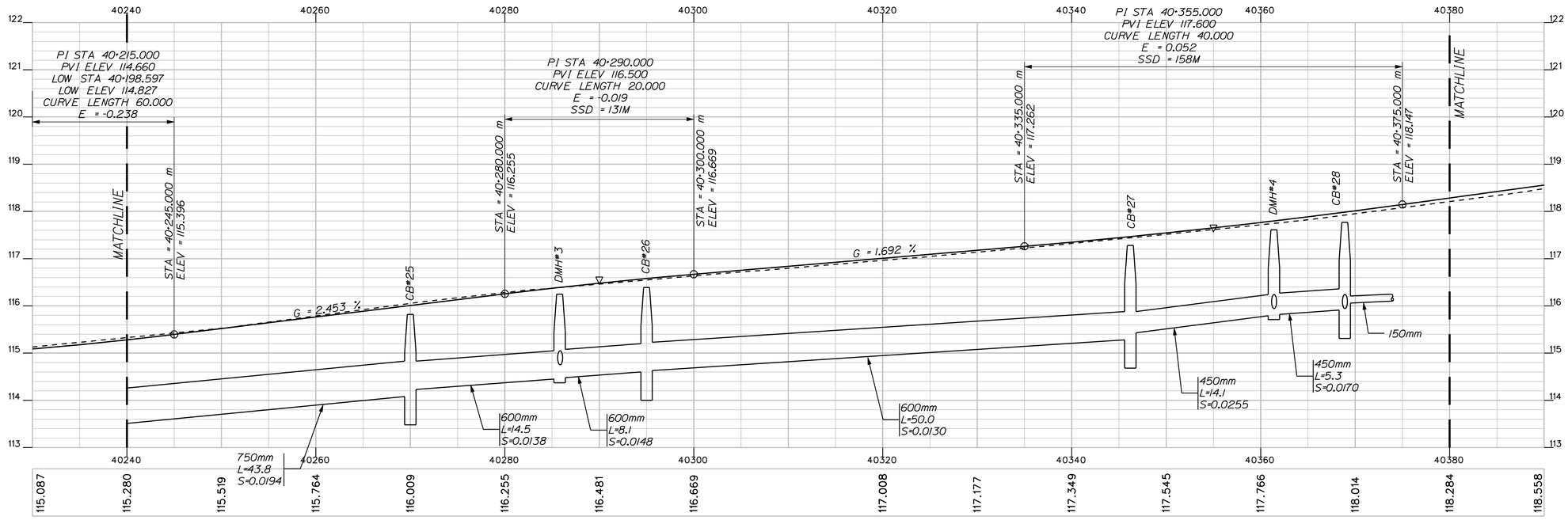
DRAINAGE SCHEDULE					
STRUCTURE	SIZE	RIM	INV IN/SIZE	INV OUT/SIZE	STA/OFFSET
CB27A	1.2 m	118.197	-	116.50/300mm (DMH4)	STA 6+015.0, 3.855m LT
CB28	1.2 m	117.776	116.06/150mm (UD) 115.94/300mm (CB28A)	115.91/450mm (DMH4)	STA 40+368.9, 5.255m RT
CB28A	1.2 m	117.800	-	116.10/300mm (CB28)	STA 40+368.0, 8.6m RT
DMH3	1.2 m	116.248	114.48/600mm (CB26) 114.75/300mm (CB25A)	114.45/600mm (CB25)	STA 40+285.8, 5.255m RT
DMH4	1.2 m	117.663	115.82/450mm (CB28) 115.94/300mm (CB27A)	115.79/450mm (CB27)	STA 40+361.4, 5.255m RT

REMOVE TREES
STA 40+251.35, 7.19m LT
STA 40+258.26, 9.80m RT
STA 4+018.06, 4.53m RT



CURVE DATA
PI = 40+320.821
Δ = 01° - 58' - 28.7" Rt.
R = 2000.000 m
L = 68.928 m
T = 34.467 m
E = 0.297 m

Rte. 17/4 LMF Jay



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
NH-1001(800)E
PIN
PIN 10018.00
HIGHWAY PLANS

PROJ. MANAGER	R. WEBSTER		
DESIGN-DETAILED	R. NORWOOD	D.BURGESS	01-22-09
CHECKED-REVIEWED	T. CORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

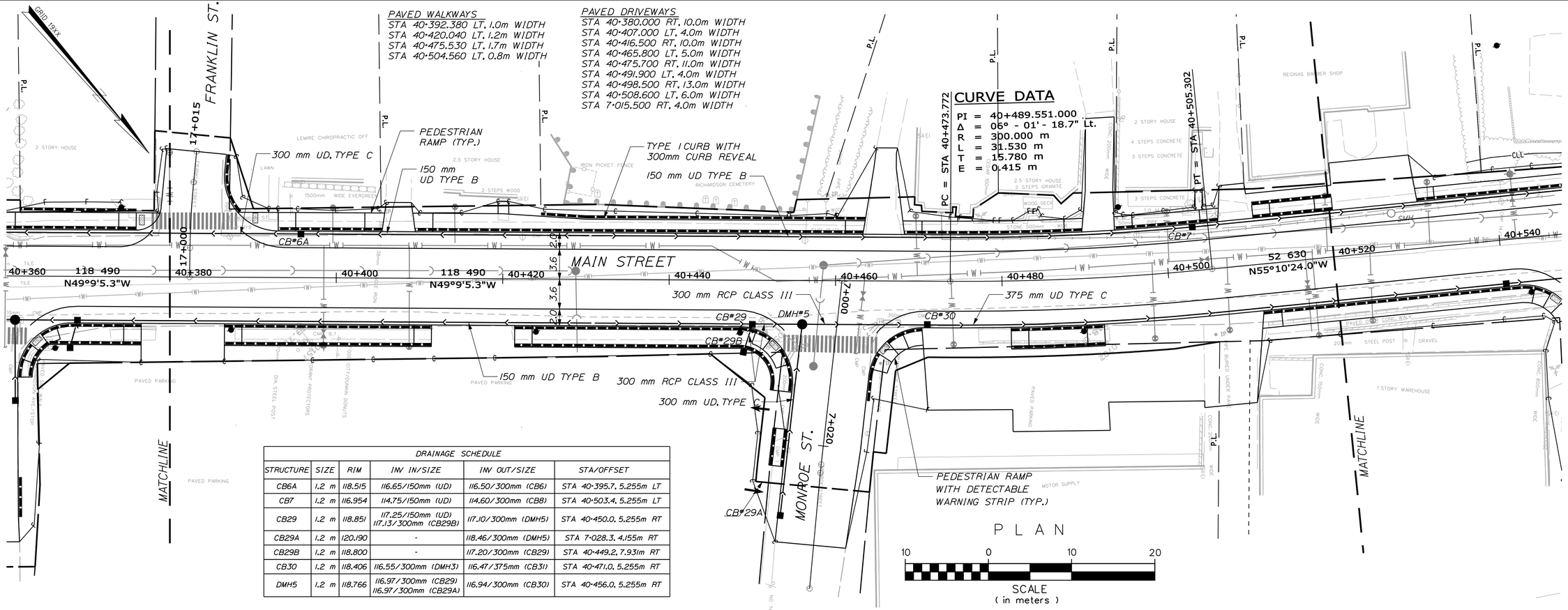
DATE

LIVERMORE FALLS - JAY
MAIN STREET (ROUTE 4/17)

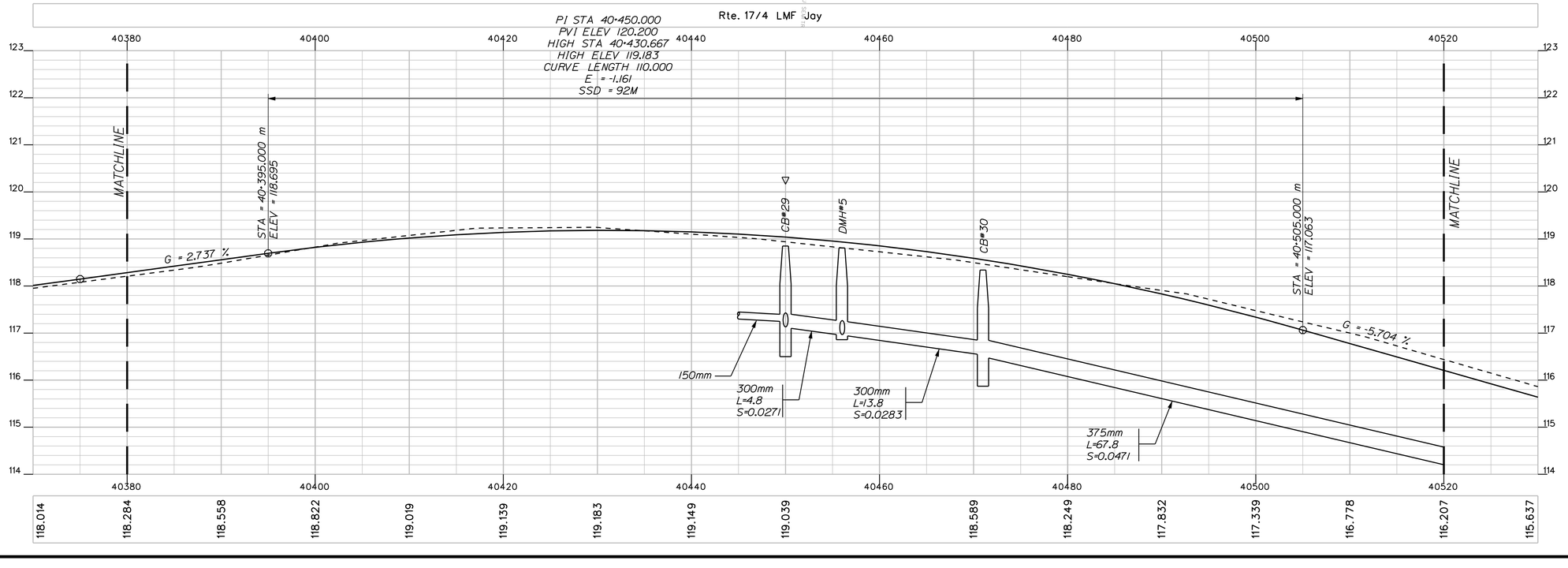
PLAN & PROFILE

SHEET NUMBER
18
OF 148

Date: 2/9/2011
Username: common
Division: HIGHWAY
Filename: ...\highway\ms1a\019_HDPlan4.dgn



DRAINAGE SCHEDULE					
STRUCTURE	SIZE	RIM	INV IN/SIZE	INV OUT/SIZE	STA/OFFSET
CB6A	1.2 m	118.515	116.65/150mm (UD)	116.50/300mm (CB6)	STA 40+395.7, 5.255m LT
CB7	1.2 m	116.954	114.75/150mm (UD)	114.60/300mm (CB8)	STA 40+503.4, 5.255m LT
CB29	1.2 m	118.851	117.25/150mm (UD) 117.13/300mm (CB29B)	117.10/300mm (DMH5)	STA 40+450.0, 5.255m RT
CB29A	1.2 m	120.190	-	118.46/300mm (DMH5)	STA 7+028.3, 4.155m RT
CB29B	1.2 m	118.800	-	117.20/300mm (CB29)	STA 40+449.2, 7.931m RT
CB30	1.2 m	118.406	116.55/300mm (DMH3)	116.47/375mm (CB31)	STA 40+471.0, 5.255m RT
DMH5	1.2 m	118.766	116.97/300mm (CB29) 116.97/300mm (CB29A)	116.94/300mm (CB30)	STA 40+456.0, 5.255m RT



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
PIN 10018.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	R. WEBSTER	
DESIGN-DETAILED	R. NORWOOD	D.BURGESS 01-22-09
CHECKED-REVIEWED	T. CORRILL	
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
MAIN STREET (ROUTE 4/17)

PLAN & PROFILE

SHEET NUMBER
19
OF 148

DRAINAGE SCHEDULE					
STRUCTURE	SIZE	RIM	INV IN/SIZE	INV OUT/SIZE	STA/OFFSET
CB8	1.2 m	112.644	110.70/300mm (CB7) 110.70/300mm (CB8B)	110.62/375mm (CB8A)	STA 40+593.8, 5.255m LT
CB8A	1.2 m	111.986	110.18/375mm (CB8)	110.15/375mm (CB9)	STA 40+630.0, 6.855m LT
CB8B	TYPE F6	112.750	-	111.25/300mm (CB8)	STA 40+593.8, 7.5m LT
CB31	1.2 m	114.914	113.28/375mm (CB30)	113.20/450mm (DMH6)	STA 40+540.3, 5.255m RT
CB31A	1.2 m	117.459	-	115.83/300mm (CB31B)	STA 8+028.3, 3.555m RT
CB31B	1.2 m	117.459	115.73/300mm (CB31A)	115.70/300mm (DMH6)	STA 8+028.3, 3.555m LT
CB32	1.2 m	113.695	111.88/600mm (DMH6)	111.85/600mm (CB33)	STA 40+563.6, 5.255m RT
CB33	1.2 m	112.286	110.57/600mm (CB32)	110.54/600mm (CB33A)	STA 40+610.3, 5.255m RT
DMH6	1.2 m	114.047	112.25/450mm (CB31) 112.37/300mm (CB31B)	112.22/450mm (CB32)	STA 40+556.1, 5.255m RT

PAVED DRIVEWAYS
STA 40+525.600 LT, 10.0m WIDTH
STA 40+563.500 LT, 9.0m WIDTH
STA 40+587.390 RT, 5.0m WIDTH
STA 40+615.400 LT, 25.0m WIDTH
STA 40+646.366 RT, 5.0m WIDTH
STA 40+660.000 RT, 10.0m WIDTH
STA 40+664.000 LT, 62.0m WIDTH

RETAINING WALL
STA 40+558 TO STA 40+583 RT
STA 40+583 TO STA 40+584 RT
STA 40+590 TO STA 40+602 RT
STA 40+605 TO STA 40+616 RT
STA 40+618 TO STA 40+644 RT

PAVED WALKWAYS
STA 40+577.630 LT, 1.4m WIDTH
STA 40+581.910 RT, 1.3m WIDTH

1.2m PVC COATED CHAIN LINK FENCE
STA 40+558 TO STA 40+583 RT
STA 40+583 TO STA 40+584 RT
STA 40+590 TO STA 40+602 RT
STA 40+605 TO STA 40+616 RT
STA 40+618 TO STA 40+644 RT

REMOVE TREE
STA 40+567.72, 8.38m RT
STA 40+614.61, 9.00m RT
STA 40+625.42, 9.00m RT

CURVE DATA

PI = 40+608.326
Δ = 28° - 17' - 05.9" Rt.
R = 200.000 m
L = 98.733 m
T = 50.394 m
E = 6.251 m

PLAN

10 0 10 20
SCALE
(in meters)

Rte. 17/4 LMF Jay
PI STA 40+585.000
PVI ELEV 112.50
CURVE LENGTH 90.000
E = 0.580
HLSD = 86m

STA = 40+540.000 m
ELEV = 115.067
CB#31
G = -5.704 %
DMH#6
CB#32
CB#33
STA = 40+630.000 m
ELEV = 112.252
G = -0.552 %
MATCHLINE
375mm L=67.8 S=0.0471
450mm L=14.9 S=0.0638
600mm L=5.7 S=0.0386
600mm L=44.8 S=0.0278
600mm L=55.3 S=0.0043

40520 40540 40560 40580 40600 40620 40640 40660
118 117 116 115 114 113 112 111 110 109
116.778 116.207 115.637 115.067 114.525 114.040 113.613 113.243 112.930 112.675 112.477 112.336 112.252 112.197 112.141 112.086 112.031

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
NH-1001(800)E
PIN
PIN 10018.00
HIGHWAY PLANS

PROJ. MANAGER	R. WEBSTER				
DESIGN-DETAILED	R. NORWOOD	D.BURGESS	01-22-09		
CHECKED-REVIEWED	T. CORRILL				
DESIGN2-DETAILED2					
DESIGN3-DETAILED3					
REVISIONS 1					
REVISIONS 2					
REVISIONS 3					
REVISIONS 4					
FIELD CHANGES					

SIGNATURE
P.E. NUMBER
DATE

LIVERMORE FALLS - JAY
MAIN STREET (ROUTE 4/17)

PLAN & PROFILE

SHEET NUMBER
20
OF 148

Division: HIGHWAY Username: common Date:2/9/2011
Filename: ...\highway\mst a\020_HDPlan5.dgn

DRAINAGE SCHEDULE					
STRUCTURE	SIZE	RIM	INV IN/SIZE	INV OUT/SIZE	STA/OFFSET
CB9	1.2 m	111.586	109.89/375mm (CB8A)	109.86/450mm (CB10)	STA 40+719.8, 6.855m LT
CB10	1.8 m	111.780	109.72/450mm (CB9) 109.27/900mm (CB36) 109.72/450mm (CB10A)	108.97/1200mm (EXISTING)	STA 40+769, 6.855m LT
CB33A	1.2 m	111.853	110.30/600mm (CB33)	110.27/600mm (CB34)	STA 40+668.0, 5.255m RT
CB34	1.2 m	111.644	110.01/600mm (CB33A)	109.86/750mm (CB35)	STA 40+719.8, 5.255m RT
CB35	1.2 m	111.685	109.79/750mm (CB34)	109.76/750mm (DMH7)	STA 40+735.0, 5.255m RT

DRAINAGE SCHEDULE					
STRUCTURE	SIZE	RIM	INV IN/SIZE	INV OUT/SIZE	STA/OFFSET
CB35A	1.2 m	112.57	110.28/300mm (CB35B)	110.25/300mm (DMH7)	STA 9+014.5, 3.555m RT
CB35B	1.2 m	112.57	-	110.38/300mm (CB35A)	STA 9+014.5, 3.555m LT
CB36	1.8 m	111.780	109.60/750mm (DMH7) 109.45/900mm (CB37)	109.42/900mm (CBIO)	STA 40+769.0, 6.855m RT
DMH7	1.5 m	111.740	109.73/750mm (CB35) 110.15/300mm (CB35A)	109.70/750mm (CB36)	STA 40+742.8, 5.7m RT

DRAINAGE HAS BEEN RECONSTRUCTED SINCE SURVEY. CONNECT 900 mm OPTION III PIPE TO EXISTING CB. CONTRACTOR TO DETERMINE INVERT IN FIELD WITH RESIDENT

MATCHLINE

375 mm UD TYPE C

PEDESTRIAN RAMP (TYP.)

REMOVE EXISTING STEPS

450 mm UD TYPE C

900 mm RCP CLASS III

LIVERMORE FALLS JAY

MATCHLINE

GRID 19XX

450 mm UD TYPE C

CB#9

ANDROSCOGGIN COUNTY RECORDS
VOLUME 4, PAGE 484
1905 VARIED WIDTHS
TOWN LINE BACK

CB#10

MAIN STREET

900 mm RCP CLASS III

40+640 40+660 40+680 40+700 40+720 40+740 40+760 40+780 40+800 40+820

64 431
N26°53'18.1"W

750 mm RCP CLASS III

750 mm RCP CLASS III

CB#34 CB#35 DMH#7 CB#36

TOWN LINE AHEAD

LIMITS OF WROUGHT PORTION

CB#33A

600 mm UD TYPE C

750 mm UD TYPE C

TYPE I CURB WITH 150mm REVEAL

PEDESTRIAN RAMP WITH DETECTABLE WARNING STRIP (TYP.)

300 mm RCP CLASS III

CB#35A

2-TEST PITS

CB#35B

900 mm UD TYPE C

PT = STA 40+656.665

PC = STA 40+721.095

GAGNON ST.

CHURCH ST.

P.L.

PAVED DRIVEWAYS
STA 40+680.000 RT. 7.0m WIDTH
STA 40+721.000 RT. 5.0m WIDTH
STA 40+758.131 RT. 7.0m WIDTH
STA 9+010.000 LT. 13.0m WIDTH

PAVED WALKWAYS
STA 40+730.170 RT. 1.7m WIDTH

CURVE DATA

PI = 40+807.852
Δ = 10° - 50' - 40.20" Rt.
R = 914.000 m
L = 172.995 m
T = 86.757 m
E = 4.108 m

PLAN

SCALE
(in meters)

Rte. 17/4 LMF Jay

PI STA 40+730.000
PVI ELEV 111.700
LOW STA 40+719.763
LOW ELEV 111.852
CURVE LENGTH 90.000
E = 0.161
HLSD = 250M

PI STA 40+820.000
PVI ELEV 112.489
HIGH STA 40+825.770
HIGH ELEV 112.317
CURVE LENGTH 90.000
E = -0.175
SSD = 195M

MATCHLINE CB#33A G = -0.552 % STA = 40+685.000 m ELEV = 111.948 CB#34 CB#35 DMH#7 CB#36 STA = 40+775.000 m ELEV = 112.094 G = 0.877 % MATCHLINE

600mm L=50.6 S=0.0051

750mm L=14.0 S=0.0050

750mm L=6.5 S=0.0046

750mm L=24.7 S=0.0041

900mm L=39.5 S=0.0066

40660 40680 40700 40720 40740 40760 40780 40800

116 115 114 113 112 111 110 109 108

112.141 112.086 112.031 111.923 111.883 111.860 111.861 111.885 111.925 111.981 112.053 112.136 112.207 112.260 112.296

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
PIN 10018.00

HIGHWAY PLANS

PROJ. MANAGER	R. WEBSTER							DATE	
DESIGN-DETAILED	R. NORWOOD	D.BURGESS	01-22-09					BY	
CHECKED-REVIEWED	T. CORRELL							SIGNATURE	
DESIGN2-DETAILED2									
DESIGN3-DETAILED3									
REVISIONS 1								P.E. NUMBER	
REVISIONS 2									
REVISIONS 3								DATE	
REVISIONS 4									
FIELD CHANGES									

LIVERMORE FALLS - JAY
MAIN STREET (ROUTE 4/17)

PLAN & PROFILE

SHEET NUMBER
21
OF 148

Filename: ...\highway\ms1o\021_HDPlan6.dgn Division: HIGHWAY Username: common Date:2/9/2011

Division: HIGHWAY Username: common Date:2/9/2011

Filename: ...\highway\mst0\022_HDPlan7.dgn

DRAINAGE SCHEDULE					
STRUCTURE	SIZE	RIM	INV IN/SIZE	INV OUT/SIZE	STA/OFFSET
CBIOA	1.2 m	112.049	110.06/450mm (DMH9)	110.03/450mm (CBIOA)	STA 40+830.0, 6.855m LT
CBIOB	1.2 m	111.820	-	110.53/300mm (DMH9)	STA 40+866.3, 10.7m LT
CBII	1.2 m	111.821	110.49/375mm (CBI2)	110.41/450mm (DMH9)	STA 40+894.9, 4.555m LT
CB37	1.2 m	112.046	109.74/900mm (DMH8)	109.71/900mm (CB36)	STA 40+810.5, 6.855m RT
CB37A	1.2 m	113.012	111.69/300mm (CB37B)	111.66/300mm (DMH8)	STA 10+015.0, 4.655m RT

DRAINAGE SCHEDULE					
STRUCTURE	SIZE	RIM	INV IN/SIZE	INV OUT/SIZE	STA/OFFSET
CB37B	1.2 m	112.942	-	111.79/300mm (CB37A)	STA 10+015.0, 6.355m LT
CB38	1.2 m	112.118	109.87/750mm (CB39)	109.84/900mm (DMH8)	STA 40+837.3, 5.255m RT
CB39	1.8 m	112.014	110.03/750mm (DMHIO)	110.00/750mm (CB38) 110.45/300mm (DMH9A)*	STA 40+881.9, 5.255m RT
CB39A	1.2 m	112.630	-	111.23/300mm (CB39B)	STA 11+013.0, 3.255m RT
CB39B	1.2 m	112.642	111.13/300mm (CB39A)	111.10/300mm (DMHIO)	STA 11+013.0, 3.855m LT
EXDMH	EXIST.	EXIST.	110.72/300mm (EXIST.)	110.71/300mm (DMHIO)	STA 40+923.3, 11.7m RT

DRAINAGE SCHEDULE					
STRUCTURE	SIZE	RIM	INV IN/SIZE	INV OUT/SIZE	STA/OFFSET
CB39C	1.2m	112.070	110.10/750mm (CB40) 110.52/300mm (CB39B)	110.07/750mm(CB39)	STA 40+894.9, 4.4m RT
CB40	1.2 m	112.117	110.27/600mm (CB39C)	110.13/750mm (CB39C)	STA 40+905.0, 4.6m RT
DMH8	1.5 m	112.126	109.79/900mm (CB38) 110.36/300mm (CB37A)	109.76/900 (CB37)	STA 40+817.8, 6.4m RT
DMH9	1.2 m	112.052	110.28/450mm (CBII) 110.43/300mm (CBIOB)	110.25/450mm (CBIOA)	STA 40+866.9, 4.3m LT
DMH9A**	1.8 m	111.937	110.41/450mm (CBII) TBD/510mm (EXIST)	110.38/450mm (CB9) TBD/510mm (EXIST)*	STA 40+885.8, 4.4m LT
DMHIO	1.2 m	112.415	110.65/300mm (EXDMH) 110.80/600mm (CB41)	110.62/600mm (CB40)	STA 40+923.4, 4.5m RT

NOTE:
LOCATION OF EXISTING DRAINAGE SYSTEM IS APPROXIMATE ONLY AND CONTRACTOR SHALL DETERMINE EXACT LOCATION.

*CAP OVERFLOW OUTLET PIPE

INSTALL FLEXIBLE REFLECTORIZED DELINEATOR (ITEM 645.306)

REMOVE EXISTING CONCRETE SIDEWALK

450 mm RCP CLASS III

300 mm RCP CLASS III

PEDESTRIAN RAMP WITH DETECTABLE WARNING STRIP (TYP.)

450 mm UD TYPE C

CB*10A

CB*10B

MILL ST.

1+020

1+000

40+780

40+800

40+820

40+840

40+860

40+880

40+900

40+920

40+940

40+960

900 mm RCP CLASS III

450 mm RCP CLASS III

300 mm RCP CLASS III

375 mm UD TYPE C

DMH*9

DMH*9A**

CB*11

FRANKLIN COUNTY RECORDS
VOLUME 6, PAGE 411
1897, 3 & 4 RODS
TOWN LINE AHEAD

CB*37

DMH*8

CB*38

MAIN STREET

CB*39

CB*39C

CB*40

DMH*10

600 mm UD TYPE C

750 mm RCP CLASS III

PEDESTRIAN RAMP (TYP.)

300 mm UD TYPE C

900 mm UD TYPE C

300 mm RCP CLASS III

CB*37A

CB*37B

MATCHLINE

REMOVE EXISTING RETAINING WALL

750 mm UD TYPE C

TYPE I CURB WITH 180mm CURB REVEAL

TYPE I CURB WITH 300mm CURB REVEAL

750 mm RCP CLASS III

2-TEST PITS

PATCH EXISTING RETAINING WALL

CB*39A

CB*39B

CHURCH ST.

JEWELL ST.

600 mm UD TYPE C

300 mm RCP CLASS III

EXDMH

REMOVE EXISTING CATCH BASIN AND STORM DRAIN

PLUG EXISTING STORM DRAIN. REMOVE EXISTING OUTLET PIPE FROM MANHOLE, PLUG EXISTING INVERT OUT

RETAINING WALL
STA 40+883 TO STA 40+889 RT

CORE EXISTING MANHOLE TO ALLOW OUTLET PIPE TO DMH*10

**TEST PIT TO DETERMINE EXACTLOCATION AND ELEVATION OF EXISTING STORM DRAIN

REMOVE BUILDING #2

REMOVE BUILDING #1

244 796
N50°0'11.3"W

CURVE DATA

PI = 40+918.518
Δ = 33°57'33.4"
R = 80.000 m
L = 47.416 m
T = 24.427 m
E = 3.646 m

PRC = STA 40+894.090

CURVE DATA

PI = 40+807.852
Δ = 10° - 50' - 40.20" Rt.
R = 914.000 m
L = 172.995 m
T = 86.757 m
E = 4.108 m

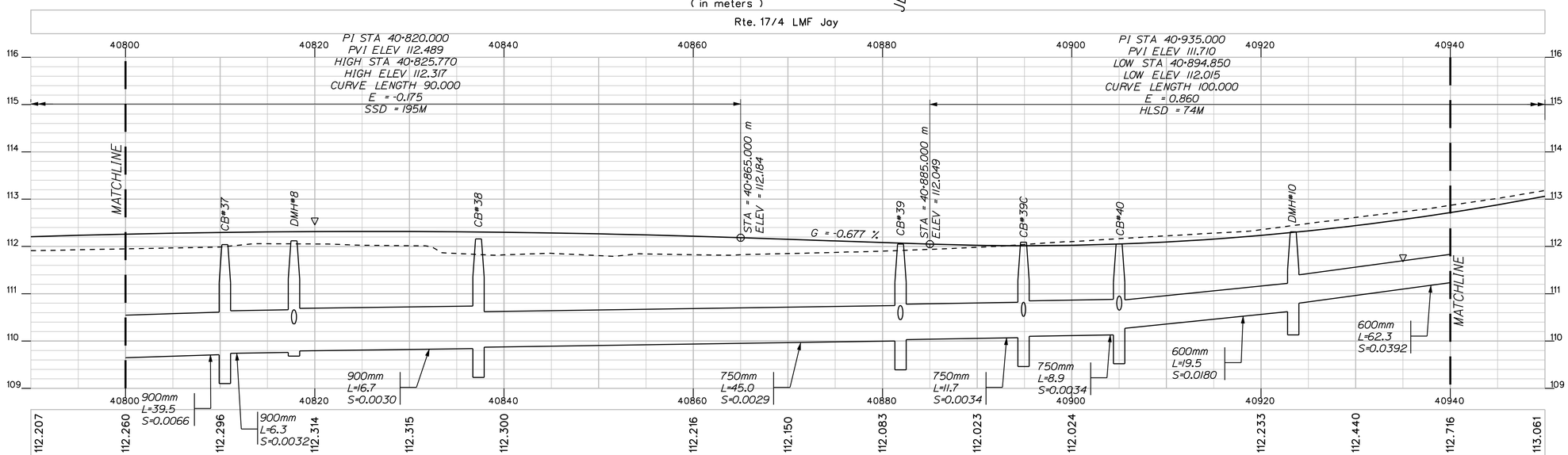
PAVED DRIVEWAYS
STA 40+872.800 LT. 12.0m WIDTH
STA 40+908.900 RT. 10.0m WIDTH
STA 40+916.000 LT. 3.0m WIDTH
STA 40+925.000 RT. 13.0m WIDTH
STA 40+929.200 LT. 4.0m WIDTH
STA 40+938.200 RT. 5.0m WIDTH

PLAN

10 0 10 20

SCALE
(in meters)

Rte. 17/4 LMF Joy



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
PIN 10018.00

HIGHWAY PLANS

PROJ. MANAGER	R. WEBSTER	BY	DATE	
DESIGN-DETAILED	R. NORWOOD	D.BURGESS	01-22-09	
CHECKED-REVIEWED	T. CORRILL			SIGNATURE
DESIGN2-DETAILED2				
DESIGN3-DETAILED3				P.E. NUMBER
REVISIONS 1				
REVISIONS 2				
REVISIONS 3				DATE
REVISIONS 4				
FIELD CHANGES				

LIVERMORE FALLS - JAY
MAIN STREET (ROUTE 4/17)

PLAN & PROFILE

SHEET NUMBER
22
OF 148

Date:2/9/2011
Username: common
Division: HIGHWAY
Filename: ...\highway\mst0\023_HDPlan8.dgn

DRAINAGE SCHEDULE					
STRUCTURE	SIZE	RIM	INV IN/SIZE	INV OUT/SIZE	STA/OFFSET
CBI2	1.2 m	114.073	112.24/300mm (CBI2A)	112.17/375mm (CBII)	STA 40+975.0, 4.555m LT
CBI2A	1.2 m	117.683	115.07/300mm (CBI3)	115.04/300mm (CBI2)	STA 41+035.0, 4.555m LT
CB4I	1.2 m	114.882	113.24/600mm (DMHII)	112.52/600mm (CB40)	STA 40+988.0, 4.555m RT
CB4IA	1.2 m	117.248	-	115.70/300mm (DMHII)	STA 12+017.0, 3.555m LT
CB42	1.2 m	116.324	114.79/450mm (CB43)	114.64/600mm (DMHII)	STA 41+012.0, 4.555m RT

DRAINAGE SCHEDULE					
STRUCTURE	SIZE	RIM	INV IN/SIZE	INV OUT/SIZE	STA/OFFSET
CB43	1.2 m	119.383	117.72/375mm (DMHI2)	117.64/450mm (CB42)	STA 41+068.0, 4.555m RT
CB43A	1.2 m	122.070	120.04/300mm (CB43B)	120.01/300mm (DMHI2)	STA 13+022.7, 3.255m RT
CB43B	1.2 m	122.070	-	120.24/300mm (CB43A)	STA 13+022.7, 3.255m LT
DMHII	1.2 m	112.859	114.17/600mm (CB42) 114.44/300mm (CB4IA)	114.14/600mm (CB4I)	STA 41+003.7, 4.555m RT
DMHI2	1.2 m	119.791	118.07/375mm (CB44) 118.12/300mm (CB43A)	118.04/375mm (CB43)	STA 41+075.5, 4.555m RT

PAVED WALKWAYS
STA 41+011.390 LT, 0.8m WIDTH
STA 41+018.870 RT, 1.0m WIDTH
STA 41+028.200 RT, 1.0m WIDTH
STA 41+038.790 LT, 1.0m WIDTH
STA 41+060.830 LT, 0.8m WIDTH
STA 12+022.780 LT, 1.0m WIDTH

PAVED DRIVEWAYS
STA 40+942.000 LT, 4.0m WIDTH
STA 40+955.400 LT, 3.0m WIDTH
STA 40+966.400 RT, 13.0m WIDTH
STA 40+968.500 LT, 4.0m WIDTH
STA 40+982.000 LT, 6.0m WIDTH
STA 40+996.500 LT, 22.0m WIDTH
STA 41+023.900 LT, 6.0m WIDTH
STA 41+047.000 RT, 6.0m WIDTH
STA 41+047.000 LT, 17.0m WIDTH
STA 41+069.200 LT, 7.0m WIDTH

RETAINING WALL
STA 41+006 TO STA 41+038 RT

1.2m PVC COATED CHAIN LINK FENCE
STA 41+006 TO STA 41+038 RT
STA 41+058 TO STA 41+074 RT

PLAN
SCALE (in meters)

Rte. 17/4 LMF Joy

PI STA 40+935.000
PVI ELEV 111.710
LOW STA 40+894.850
LOW ELEV 112.015
CURVE LENGTH 100.000
E = 0.860
HLSD = 74

PI STA 41+035.000
PVI ELEV 117.910
CURVE LENGTH 30.000
E = -0.061
SSD = 110M

STA = 40+985.000 m
ELEV = 114.810

STA = 41+020.000 m
ELEV = 116.980

STA = 41+050.000 m
ELEV = 118.597

G = 6.200 %

G = 4.580 %

600mm
L=62.3
S=0.0392

600mm
L=14.5
S=0.0600

600mm
L=7.1
S=0.0662

450mm
L=54.8
S=0.0520

375mm
L=6.3
S=0.0508

112.440 112.716 113.061 113.475 113.957 114.509 115.120 115.740 116.360 116.980 117.573 118.112 118.597 119.055 119.513 119.971 120.429

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
PIN 10018.00

HIGHWAY PLANS

PROJ. MANAGER	R. WEBSTER		
DESIGN-DETAILED	R. NORWOOD	01-22-09	D.BURGESS
CHECKED-REVIEWED	T. CORRELL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
MAIN STREET (ROUTE 4/17)

PLAN & PROFILE

SHEET NUMBER
23
OF 148

Date:2/9/2011
Username: common
Division: HIGHWAY
Filename: ...\highway\rms\to\024_HDPlan9.dgn

PAVED DRIVEWAYS
STA 41+088.300 LT. 4.0m WIDTH
STA 41+101.000 RT. 4.0m WIDTH
STA 41+116.800 LT. 6.0m WIDTH
STA 41+134.500 LT. 4.0m WIDTH
STA 41+145.900 LT. 3.0m WIDTH
STA 41+158.000 LT. 6.0m WIDTH
STA 41+167.400 RT. 7.0m WIDTH
STA 41+184.200 LT. 10.0m WIDTH
STA 41+194.900 LT. 10.0m WIDTH
STA 41+212.000 LT. 4.0m WIDTH
STA 41+217.500 LT. 6.0m WIDTH
STA 13+018.000 RT. 8.0m WIDTH

PAVED WALKWAYS
STA 41+095.350 LT. 2.3m WIDTH
STA 41+152.860 LT. 1.0m WIDTH
STA 41+168.100 LT. 2.1m WIDTH

MATCHLINE
MAPLE ST.
MAIN STREET
OTIS ST.
DUBORD ST.
300 mm UD TYPE C
RECONSTRUCT STEP
375 RCP CLASS III
CB#44
CB#13
CB#45
CB#45A
CB#45B
CB#46
DMH#13
300 mm RCP CLASS III
150 mm UD TYPE B
PEDESTRIAN RAMP (TYP.)
REBUILD CORNER OF WALL TO NEW RADIUS. MATCH EXISTING WALL USING SIMILAR STONES.
FENCE (TYP.)
CONNECT TO EXISTING WALL
300 mm UD TYPE C
RETAINING WALL 'GI'
FENCE (TYP.)
MAINTAIN EXISTING WALL
300 mm UD TYPE C
CONSTRUCT STEPS
STA 13+020.44 LT. 1.0m WIDTH
150 mm UD TYPE B
REMOVE TREE
STA 41+78.76, 9.00' LT
RETAINING WALL
STA 41+084 TO STA 41+088 RT
1.2m PVC COATED CHAIN LINK FENCE
STA 41+084 TO STA 41+088 RT
2-TEST PITS
300 mm RCP CLASS III
PC = STA 41+186.302
300 mm UD TYPE
REMOVE EXISTING RETAINING WALL
N50°0'11.3"W
244 796
N41°53'29.7"E
27 870

DRAINAGE SCHEDULE

STRUCTURE	SIZE	RIM	INV IN/SIZE	INV OUT/SIZE	STA/OFFSET
CBI3	1.2 m	120.315	118.07/150mm (UD)	117.92/300mm (CBI2A)	STA 41+093.4, 4.555m LT
CB44	1.2 m	120.367	118.70/300mm (CB45)	118.62/375mm (DMHI2)	STA 41+089.4, 4.555m RT
CB45	1.2 m	122.138	120.35/300mm (DMHI3)	120.32/300mm (CB44)	STA 41+143.0, 4.555m RT
CB45A	1.2 m	125.346	123.14/300mm (CB45B)	123.11/300mm (DMHI3)	STA 14+029.3, 4.2m RT
CB45B	1.2 m	125.346	-	123.24/300mm (CB45A)	STA 14+029.3, 4.2m LT
CB46	1.2 m	122.021	120.68/150mm (UD)	120.53/300mm (CB47)	STA 41+175.0, 4.555m RT
DMHI3	1.2 m	122.260	120.92/300mm (CB45A)	120.82/300mm (CB45)	STA 41+149.6, 8.3m RT

CURVE DATA
PI = 41+232.818
Δ = 34° - 27' - 28.2" Rt.
R = 150.000 m
L = 90.210 m
T = 46.516 m
E = 7.047 m

PLAN
10 0 10 20
SCALE
(in meters)

Rte. 17/4 LMF Joy

PI STA 41+152.500
PVI ELEV 123.292
HIGH STA 41+155.433
HIGH ELEV 122.386
CURVE LENGTH 85.000
E = -0.910
SSD = 80M

PI STA 41+225.000
PVI ELEV 120.400
CURVE LENGTH 60.000
E = 0.198
SSD = 122M

MATCHLINE
CB#44
G = 4.580 %
STA = 41+110.000 m
ELEV = 121.345
CB#45
DMH#13
CB#46
G = -3.989 %
STA = 41+195.000 m
ELEV = 121.597
375mm L=11.3 S=0.0487
300mm L=53.8 S=0.0301
375mm L=6.7 S=0.0701
150mm
300mm L=46.6 S=0.0388

41080	41100	41120	41140	41160	41180	41200	41220
119.513	119.971	120.429	120.887	121.345	121.753	122.060	122.266
122.371	122.375	122.279	122.082	121.784	121.403	121.048	120.737	120.470

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
NH-1001(800)E
PIN
PIN 10018.00
HIGHWAY PLANS

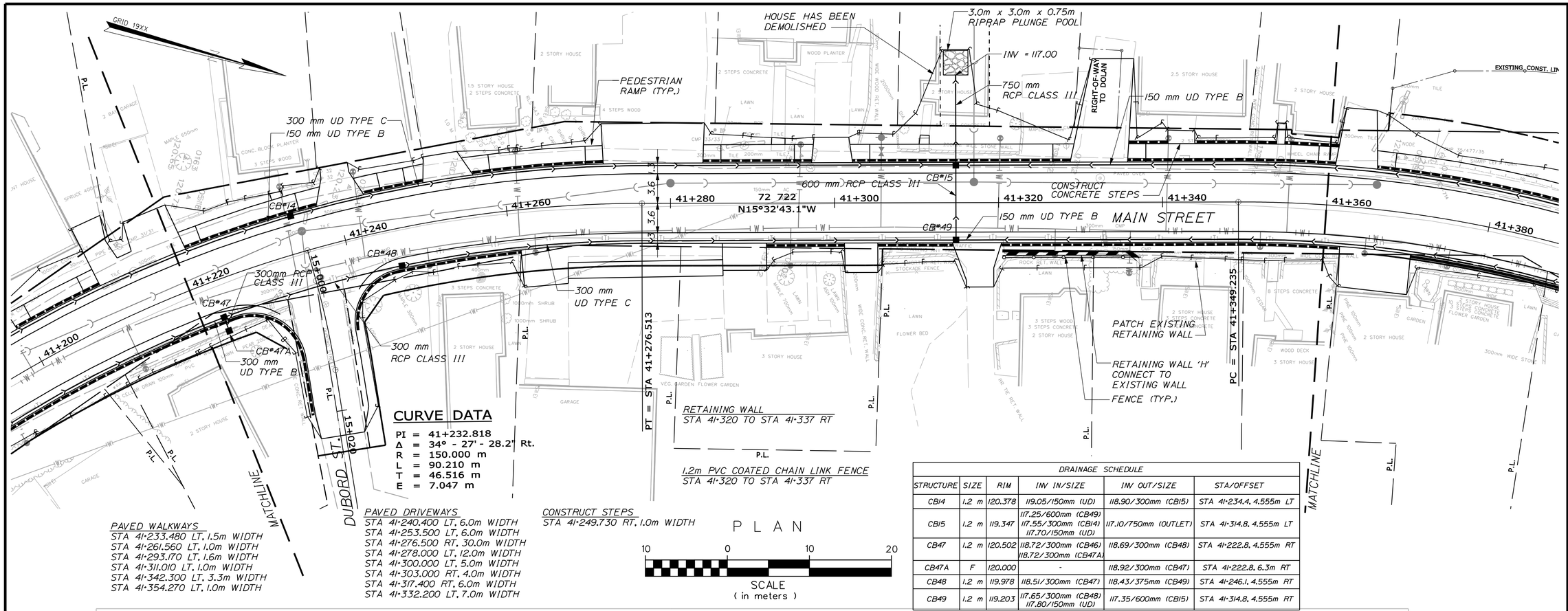
	BY	DATE
PROJ. MANAGER	R. WEBSTER	
DESIGN-DETAILED	R. NORWOOD	D.BURGESS 01-22-09
CHECKED-REVIEWED	T. CORRILL	
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE
P.E. NUMBER
DATE

LIVERMORE FALLS - JAY
MAIN STREET (ROUTE 4/17)

PLAN & PROFILE

SHEET NUMBER
24
OF 148



CURVE DATA

PI = 41+232.818
Δ = 34° - 27' - 28.2" Rt.
R = 150.000 m
L = 90.210 m
T = 46.516 m
E = 7.047 m

PAVED WALKWAYS
STA 41+233.480 LT. 1.5m WIDTH
STA 41+261.560 LT. 1.0m WIDTH
STA 41+293.170 LT. 1.6m WIDTH
STA 41+311.010 LT. 1.0m WIDTH
STA 41+342.300 LT. 3.3m WIDTH
STA 41+354.270 LT. 1.0m WIDTH

PAVED DRIVEWAYS
STA 41+240.400 LT. 6.0m WIDTH
STA 41+253.500 LT. 6.0m WIDTH
STA 41+276.500 RT. 30.0m WIDTH
STA 41+278.000 LT. 12.0m WIDTH
STA 41+300.000 LT. 5.0m WIDTH
STA 41+303.000 RT. 4.0m WIDTH
STA 41+317.400 RT. 6.0m WIDTH
STA 41+332.200 LT. 7.0m WIDTH

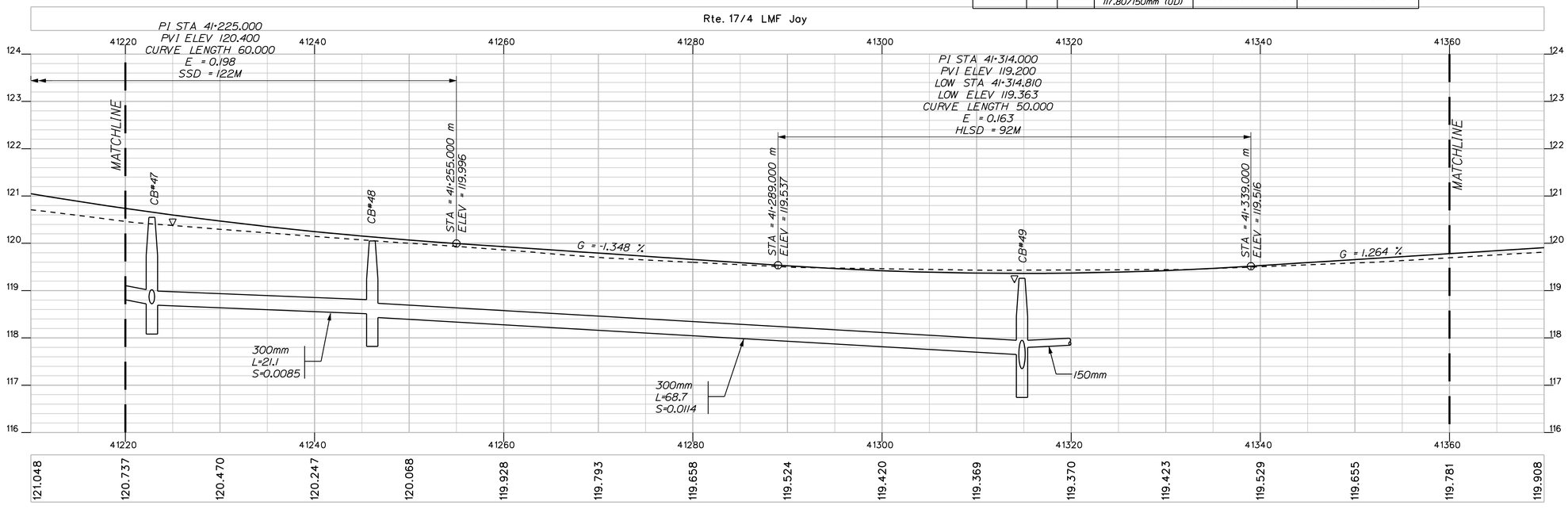
CONSTRUCT STEPS
STA 41+249.730 RT. 1.0m WIDTH

PLAN

10 0 10 20
SCALE
(in meters)

DRAINAGE SCHEDULE

STRUCTURE	SIZE	RIM	INV IN/SIZE	INV OUT/SIZE	STA/OFFSET
CB14	1.2 m	120.378	119.05/150mm (UD)	118.90/300mm (CB15)	STA 41+234.4, 4.555m LT
CB15	1.2 m	119.347	117.25/600mm (CB49) 117.55/300mm (CB14) 117.70/150mm (UD)	117.10/750mm (OUTLET)	STA 41+314.8, 4.555m LT
CB47	1.2 m	120.502	118.72/300mm (CB46) 118.72/300mm (CB47A)	118.69/300mm (CB48)	STA 41+222.8, 4.555m RT
CB47A	F	120.000	-	118.92/300mm (CB47)	STA 41+222.8, 6.3m RT
CB48	1.2 m	119.978	118.51/300mm (CB47)	118.43/375mm (CB49)	STA 41+246.1, 4.555m RT
CB49	1.2 m	119.203	117.65/300mm (CB48) 117.80/150mm (UD)	117.35/600mm (CB15)	STA 41+314.8, 4.555m RT



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
PIN 10018.00

HIGHWAY PLANS

	BY	DATE
SIGNATURE		
P.E. NUMBER		
DATE		

PROJ. MANAGER	R. WEBSTER	
DESIGN-DETAILED	R. WEBSTER	01-22-09
CHECKED-REVIEWED	R. NORWOOD	D.BURGESS
DESIGN2-DETAILED2	T. CORRILL	
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

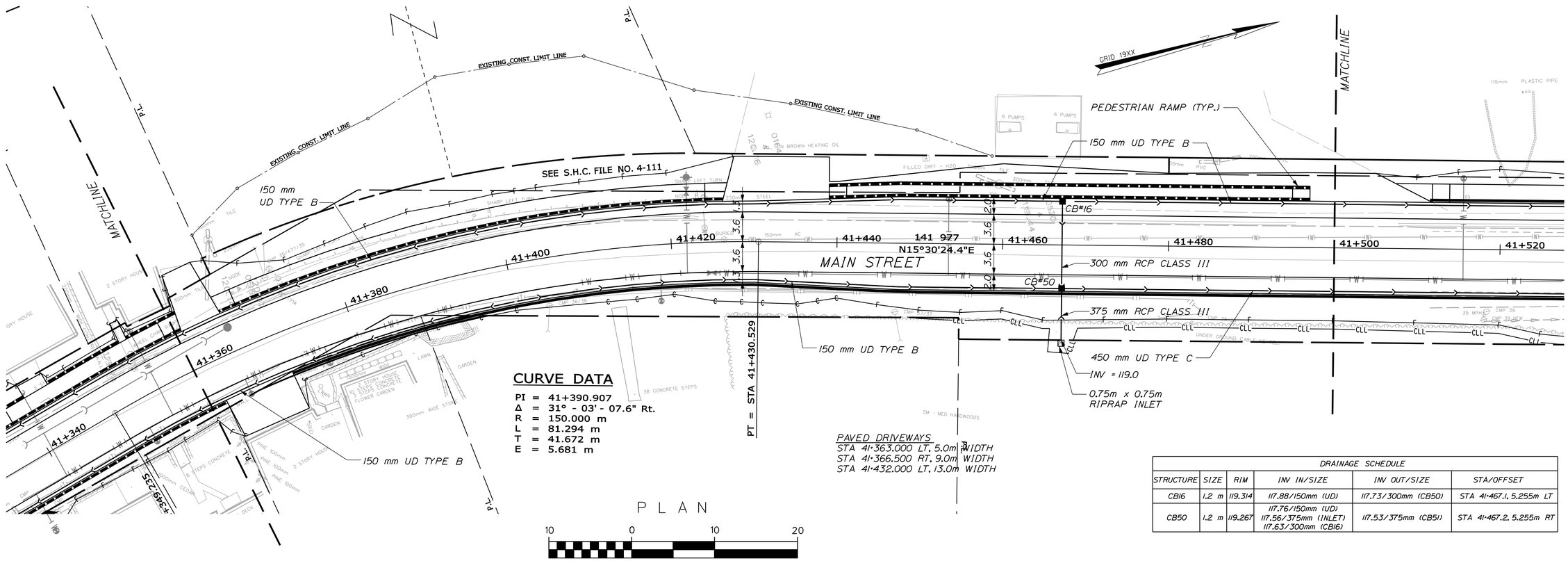
LIVERMORE FALLS - JAY
MAIN STREET (ROUTE 4/17)

PLAN & PROFILE

SHEET NUMBER
25
OF 148

Filename: ...\highway\msto\025_HDPlan10.dgn
Division: HIGHWAY Username: common Date:2/9/2011

Division: HIGHWAY Username: common Date:2/9/2011



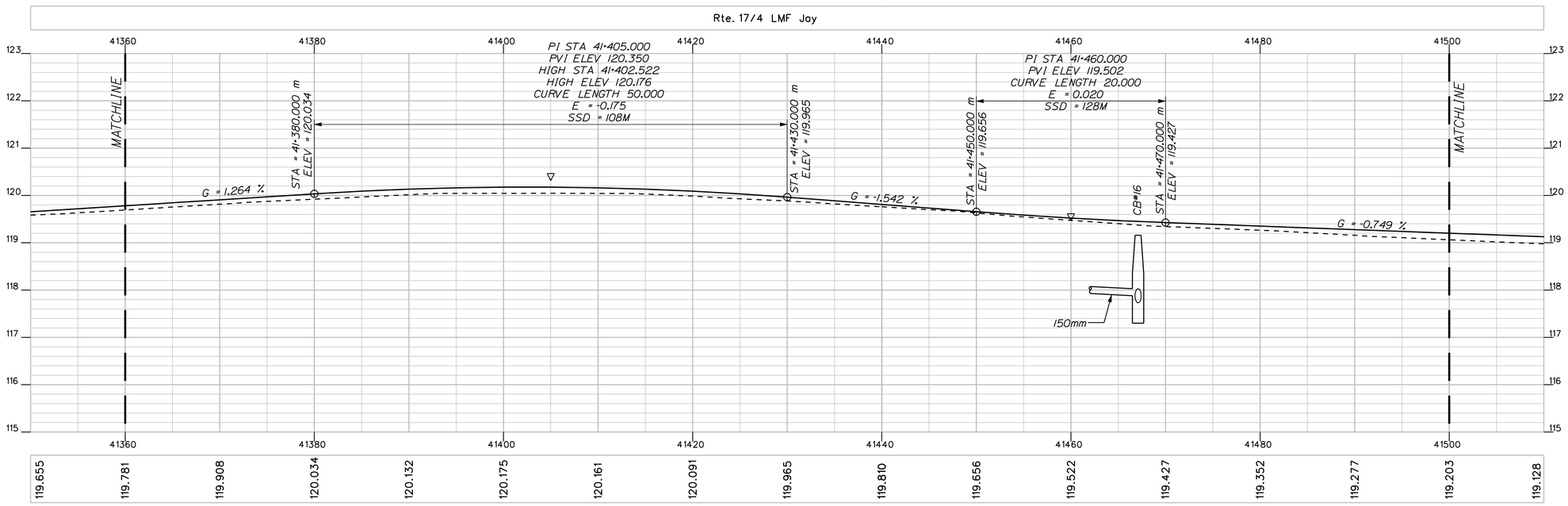
CURVE DATA

PI = 41+390.907
Δ = 31° - 03' - 07.6" Rt.
R = 150.000 m
L = 81.294 m
T = 41.672 m
E = 5.681 m

P L A N

10 0 10 20
SCALE
(in meters)

DRAINAGE SCHEDULE					
STRUCTURE	SIZE	RIM	INV IN/SIZE	INV OUT/SIZE	STA/OFFSET
CBI6	1.2 m	119.314	117.88/150mm (UD)	117.73/300mm (CB50)	STA 41+467.1, 5.255m LT
CB50	1.2 m	119.267	117.76/150mm (UD) 117.56/375mm (INLET) 117.63/300mm (CBI6)	117.53/375mm (CB51)	STA 41+467.2, 5.255m RT



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
PIN 10018.00

HIGHWAY PLANS

PROJ. MANAGER	R. WEBSTER		
DESIGN-DETAILED	R. NORWOOD	01-22-09	D.BURGESS
CHECKED-REVIEWED	T. CORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
MAIN STREET (ROUTE 4/17)

PLAN & PROFILE

SHEET NUMBER
26
OF 148

Filename: ...\highway\mst0\026_HDPlan11.dgn

Date:2/9/2011
Username: common
Division: HIGHWAY
Filename: ...\highway\msto\027_HDPlan12.dgn

GRID 19XX

CURVE DATA

PI = 41+653.165
Δ = 33° - 150' - 55.3" Lt.
R = 270.000 m
L = 156.759 m
T = 80.658 m
E = 11.790 m

PC = STA 41+572.507

3.0m x 3.0m x 0.75m RIPRAP PLUNGE POOL
750 mm RCP CLASS III
INV = 116.20
PEDESTRIAN RAMP (TYP.)
150 mm UD TYPE B
750 mm UD TYPE C
300 mm UD TYPE C
300 mm RCP CLASS III
300 mm UD TYPE B
CB#16A
CB#17
CB#18A
CB#18
CB#18B
CB#52
CB#51
600 mm RCP CLASS III
150 mm UD TYPE B
450mm UD TYPE C
DOUBLE TYPE I CURB WITH CONCRETE BETWEEN
MAIN STREET
41+500
41+520
41+540 141 977
N15°30'24.4"E
41+560
41+580
41+600
41+620
41+640
41+660
FRANKLIN COUNTY RECORDS
VOLUME 6, PAGE 368
1896, 4 RODS
MATCHLINE
MATCHLINE
P.I.
P.L.
3.6
2.0

PAVED DRIVEWAYS
STA 41+504.800 LT, 15.0m WIDTH
STA 41+541.500 RT, 9.0m WIDTH
STA 41+548.500 LT, 15.0m WIDTH
STA 41+549.000 RT, 7.0m WIDTH
STA 41+579.379 LT, 4.0m WIDTH
STA 41+585.097 RT, 6.0m WIDTH
STA 41+594.000 LT, 13.0m WIDTH
STA 41+622.000 LT, 13.0m WIDTH
STA 41+635.000 RT, 8.0m WIDTH

PLAN

10 0 10 20
SCALE
(in meters)

DRAINAGE SCHEDULE

STRUCTURE	SIZE	RIM	INV IN/SIZE	INV OUT/SIZE	STA/OFFSET
CBI6A	1.5 m	118.765	116.33/750mm (CBI7) 116.78/150mm (UD)	116.30/750mm (OUTLET)	STA 41+533.3, 5.255 LT
CBI7 (SHAPE 5)	1.5 m	118.663	116.75/600mm (CB51) 116.98/300mm (CBI8)	116.60/750mm (CBI6A)	STA 41+556.3, 5.255m LT
CBI8	1.2 m	118.966	117.23/300mm (CBI8A) 117.23/300mm (CBI8B)	117.20/300mm (CBI7)	STA 41+602.9, 5.255m LT
CBI8A	TYPE F5	119.000	-	117.80/300mm (CBI8)	STA 41+602.8, 9.0m LT
CBI8B	1.2 m	119.744	118.00/150mm(UD)	117.85/300mm (CBI8)	STA 41+660.0, 5.255m LT
CB5I (SHAPE 5)	1.2 m	118.735	117.08/375mm (CB50) 117.15/300mm (CB52)	116.85/600mm (CBI7)	STA 41+556.3, 5.255m RT
CB52	1.2 m	119.589	117.73/150mm (UD)	117.58/300mm (CB51)	STA 41+645.0, 5.255 m RT

Rte. 17/4 LMF Joy

PI STA 41+557.500
PVI ELEV 118.772
LOW STA 41+556.322
LOW ELEV 118.851
CURVE LENGTH 40.000
E = 0.080
HLSD = 114M

PI STA 41+640.000
PVI ELEV 119.467
CURVE LENGTH 40.000
E = 0.074
SSD = 133M

STA = 41+537.500 m
ELEV = 118.922
STA = 41+577.500 m
ELEV = 118.940
STA = 41+620.000 m
ELEV = 119.299
STA = 41+660.000 m
ELEV = 119.932

G = 0.749 %
G = 0.842 %
G = 2.326 %

150mm
750mm L=21.7 S=0.0124
300mm L=45.3 S=0.0049
300mm L=54.7 S=0.0113
150mm

41500 41520 41540 41560 41580 41600 41620 41640 41660
124 123 122 121 120 119 118 117 116 115

119.277 119.203 119.128 119.053 118.978 118.904 118.859 118.854 118.888 118.962 119.046 119.130 119.214 119.299 119.401 119.541 119.718 119.932 120.165

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
PIN 10018.00

HIGHWAY PLANS

P.E. NUMBER

DATE

SIGNATURE

	BY	DATE
PROJ. MANAGER	R. WEBSTER	
DESIGN-DETAILED	R. NORWOOD	D.BURGESS 01-22-09
CHECKED-REVIEWED	T. GORRILL	
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

LIVERMORE FALLS - JAY
MAIN STREET (ROUTE 4/17)

PLAN & PROFILE

SHEET NUMBER
27
OF 148

Filename: ...\highway\rnsto\028_HDPlan13.dgn
Division: HIGHWAY Username: common Date:2/9/2011

CURVE DATA

PI = 41+653.165
Δ = 33° - 150' - 55.3" Lt.
R = 270.000 m
L = 156.759 m
T = 80.658 m
E = 11.790 m

PT = STA 41+729.266

GRID 19XX

PEDESTRIAN RAMP (TYP.)

150 mm UD TYPE B

MAIN STREET

41+640 41+660 41+680 41+700 41+720 41+740 41+760 41+780 41+800 41+820

66 456
N17°45'30.9"W

750 mm RCP CLASS III

600 mm RCP CLASS III

900 mm RCP CLASS III

300 mm RCP CLASS III

3.6m x 3.6m x 0.9m RIPRAP PLUNGE POOL
INV = 117.00
INV = 117.50

RIPRAP DOWNSPOUT

STA 41+820
END PROPOSED PROJECT
NO. NH-1001(800)E

CB#19 CB#53 CB#53A

INV = 119.60
1.2m x 1.2m RIPRAP INLET

PC = STA 41+795.722

16+000 16+020 16+040 16+047

PINEAU ST.

MATCHLINE

PAVED DRIVEWAYS

STA 41+643.000 LT, 5.0m WIDTH
STA 41+691.000 RT, 7.0m WIDTH
STA 41+702.000 LT, 7.0m WIDTH
STA 41+730.000 LT, 6.0m WIDTH
STA 41+739.000 RT, 11.0m WIDTH
STA 41+771.000 LT, 6.0m WIDTH
STA 16+020.000 LT, 10.0m WIDTH
STA 41+676.800.6 LT, 6.0m WIDTH

P L A N

10 0 10 20
SCALE
(in meters)

DRAINAGE SCHEDULE

STRUCTURE	SIZE	RIM	INV IN/SIZE	INV OUT/SIZE	STA/OFFSET
CB19	1.5 m	120.092	117.29/750mm (CB53) 118.01/150mm (UD)	117.26/900mm (OUTLET)	STA 41+778.2, 5.255 m LT
CB53	1.2 m	120.092	117.69/600mm (INLET) 118.14/150mm (UD)	117.54/750mm (CB19)	STA 41+778.2, 5.255 m RT
CB53A	1.2 m	119.176	117.68/300mm (INLET)	117.65/300mm (OUTLET)	STA 41+805.4, 5.3 m RT

CURVE DATA

PI = 41+818.053
Δ = 08° - 30' - 49.7" Rt.
R = 300.000 m
L = 44.578 m
T = 22.330 m
E = 0.830 m

Rte. 17/4 LMF Joy

PI STA 41+736.00
PVI ELEV 121.700
HIGH STA 41+729.608
HIGH ELEV 121.2191
CURVE LENGTH 70.000
E = -0.498
SSD = 89M

STA = 41+701.000 m
ELEV = 120.886

STA = 41+771.000 m
ELEV = 120.522

STA = 41820.000 m
PVI STA = 41820.000
ELEV. = 118.873 m

G = 2.326 %
G = -3.365 %

CB#18A MATCHLINE CB#19 CB#53A

150mm
150mm
900mm
L=26.1
S=0.0100

41660	41680	41700	41720	41740	41760	41780	41800	41820
119.718	119.932	120.165	120.397	120.630	120.863	121.062	121.181	121.219	121.175	121.050	120.843	120.555	120.219	119.546	119.210	118.873

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
PIN 10018.00

HIGHWAY PLANS

PROJ. MANAGER	R. WEBSTER		
DESIGN-DETAILED	R. NORWOOD	D.BURGESS	01-22-09
CHECKED-REVIEWED	T. CORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

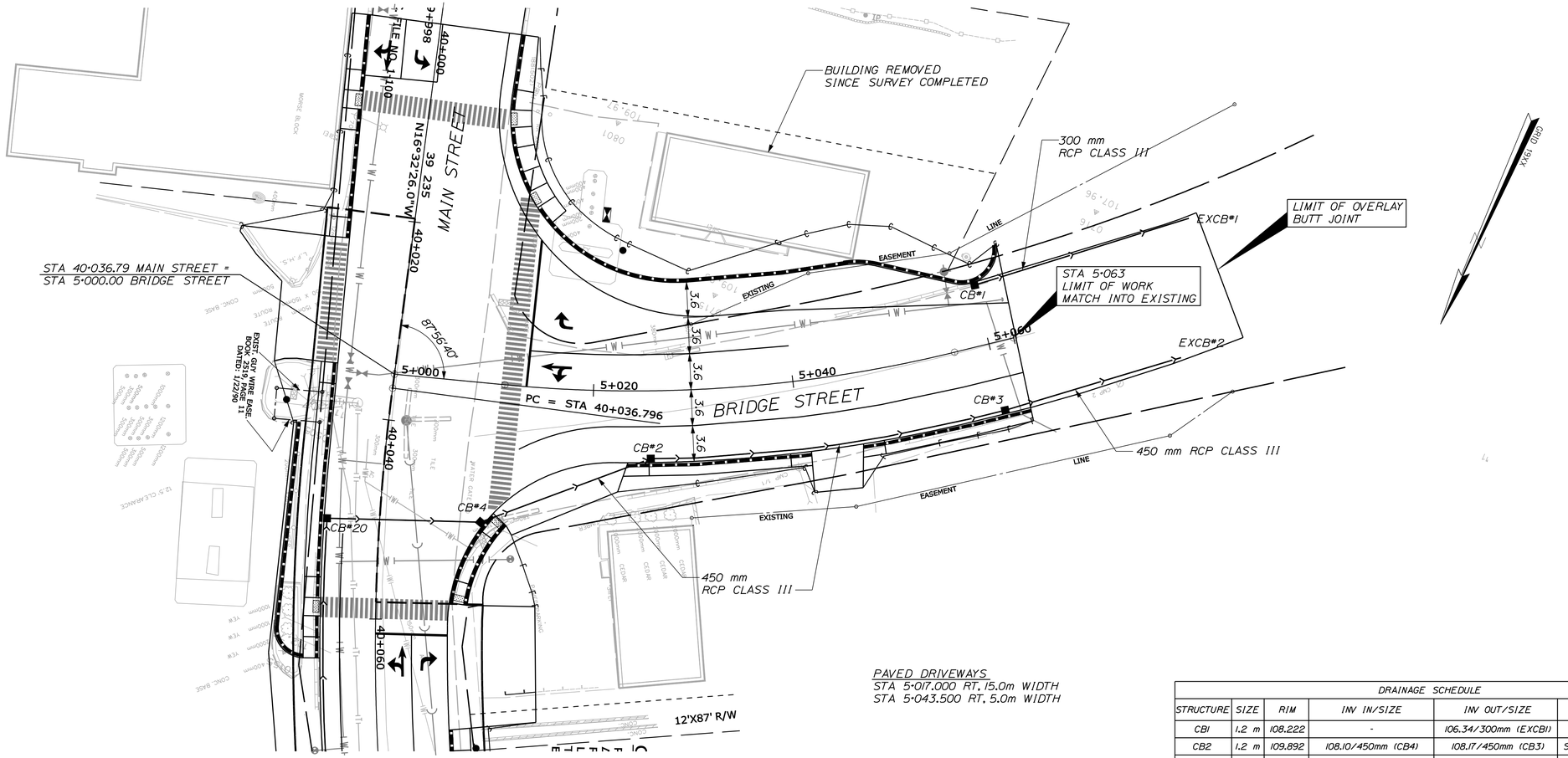
P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
MAIN STREET (ROUTE 4/17)

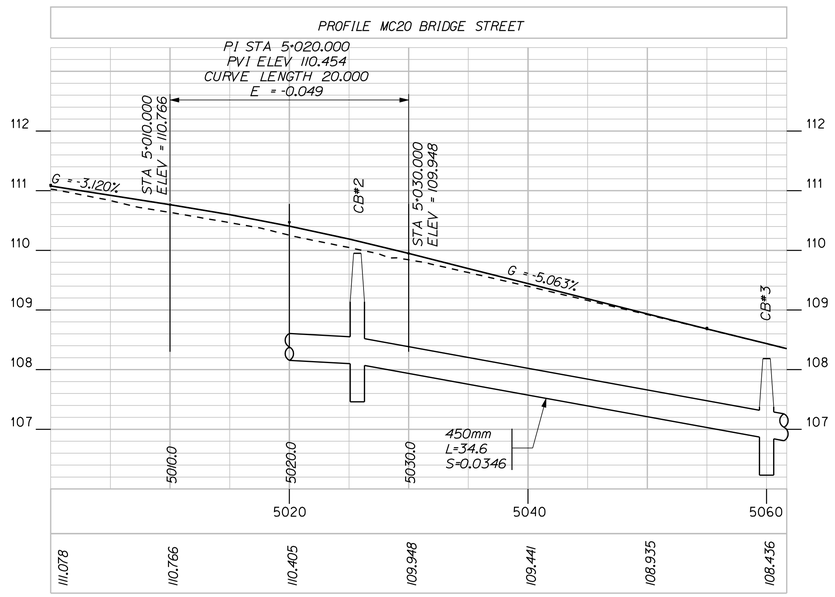
PLAN & PROFILE

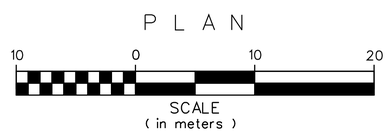
SHEET NUMBER
28
OF 148



PAVED DRIVEWAYS
STA 5+017.000 RT, 15.0m WIDTH
STA 5+043.500 RT, 5.0m WIDTH

DRAINAGE SCHEDULE					
STRUCTURE	SIZE	RIM	INV IN/SIZE	INV OUT/SIZE	STA/OFFSET
CBI	1.2 m	108.222	-	106.34/300mm (EXCBI)	STA 5+060.0, 6.1m LT
CB2	1.2 m	109.892	108.10/450mm (CB4)	108.17/450mm (CB3)	STA 5+025.7, 6.855m RT
CB3	1.2 m	108.183	106.87/450mm (CB2)	106.84/450mm (EXCB2)	STA 5+060.0, 6.855m RT
EXCBI	1.2 m	107.29	106.17/300mm (CBI)	EXISTING	
EXCB2	1.2 m	107.50	106.22/600mm (CB3)	EXISTING	





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
PIN 10018.00

HIGHWAY PLANS

PROJ. MANAGER	R. WEBSTER		
DESIGN-DETAILED	R. NORWOOD	D.BURGESS	01-22-09
CHECKED-REVIEWED	T. CORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
MAIN STREET (ROUTE 4/17)

PLAN & PROFILE

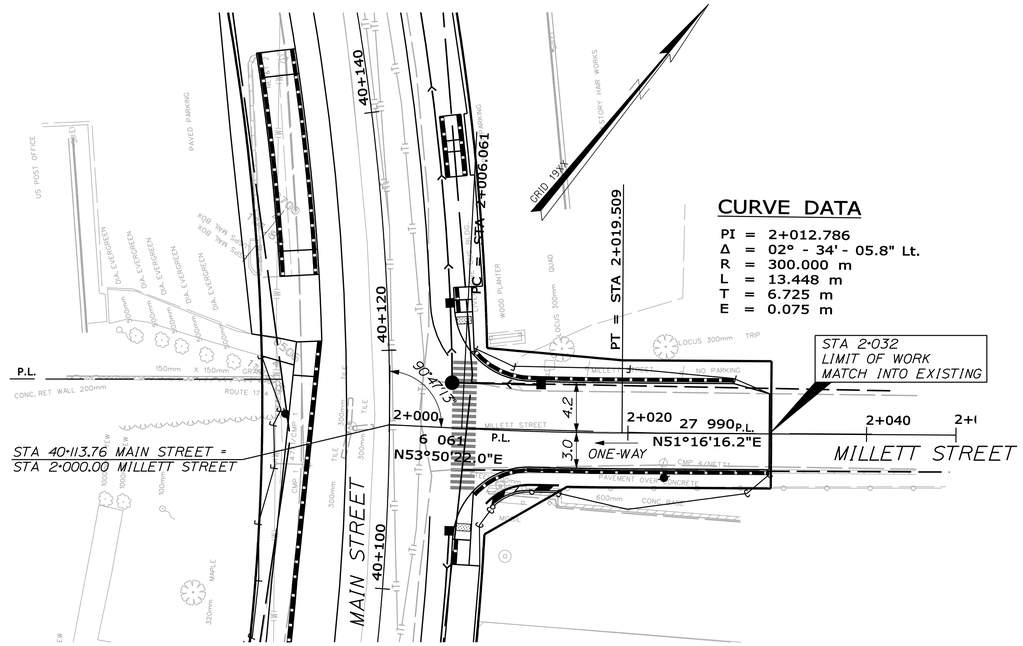
SHEET NUMBER

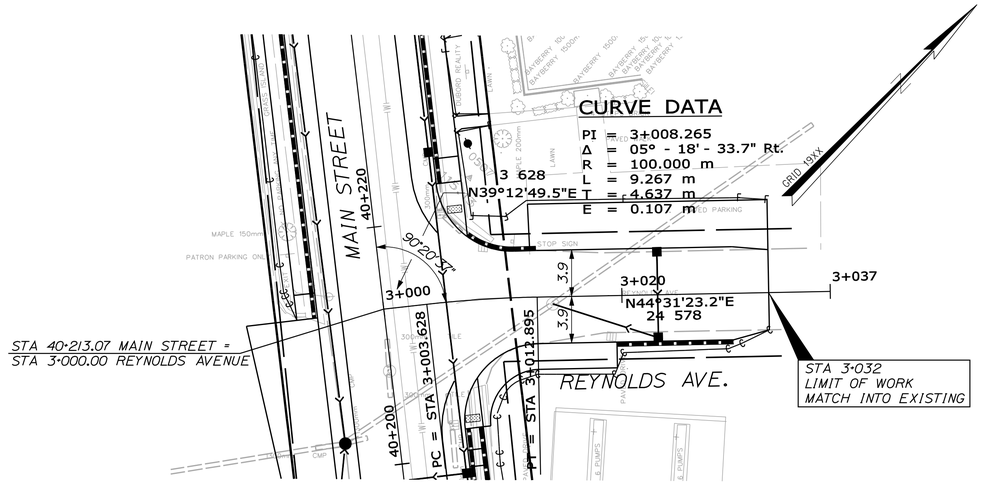
29

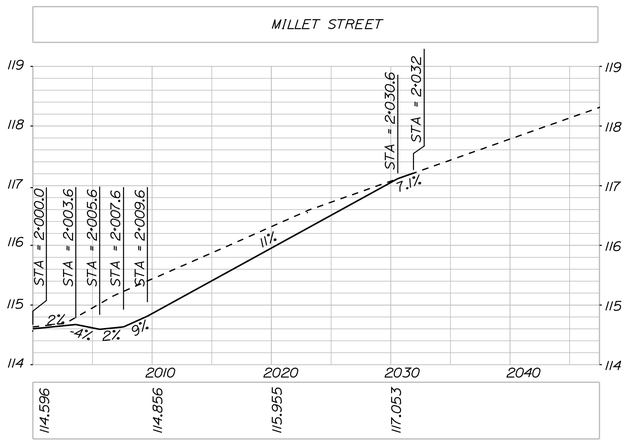
OF 148

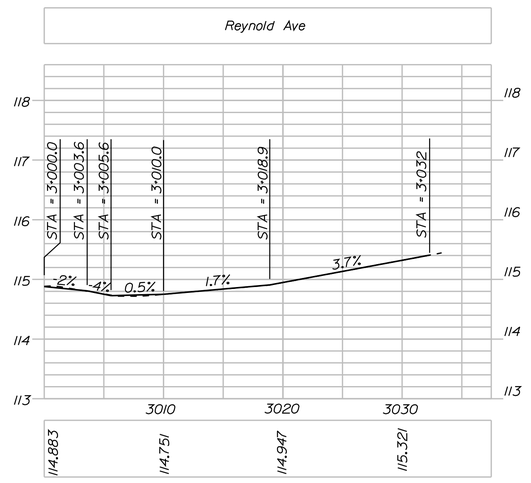
Division: HIGHWAY Username: common Date:2/9/2011

Filename: ...\highway\mstol029_HDPlan14.dgn









PLAN

10 0 10 20

SCALE
(in meters)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
PIN 10018.00

HIGHWAY PLANS

PROJ. MANAGER	R. WEBSTER	BY	DATE
DESIGN-DETAILED	R. NORWOOD	D.BURGESS	01-22-09
CHECKED-REVIEWED	T. CORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
MAIN STREET (ROUTE 4/17)

PLAN & PROFILE

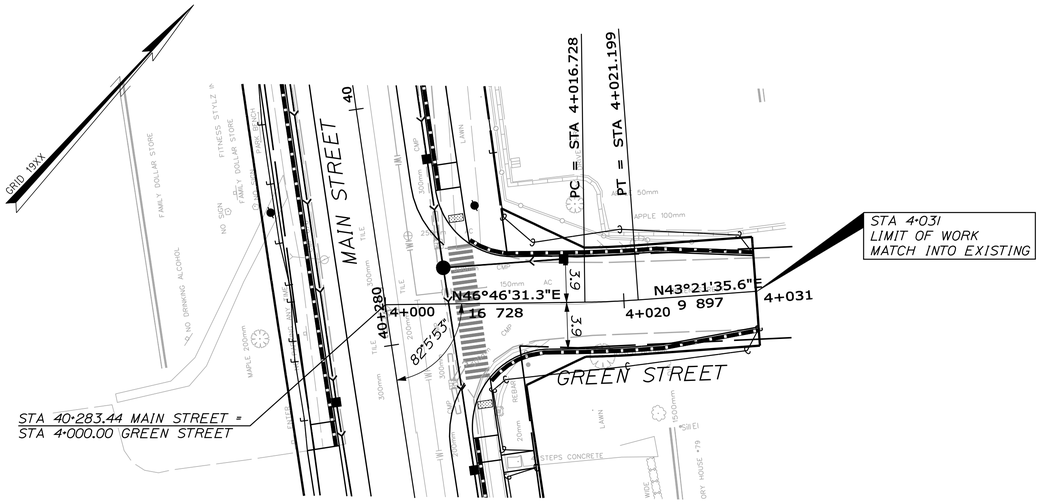
SHEET NUMBER

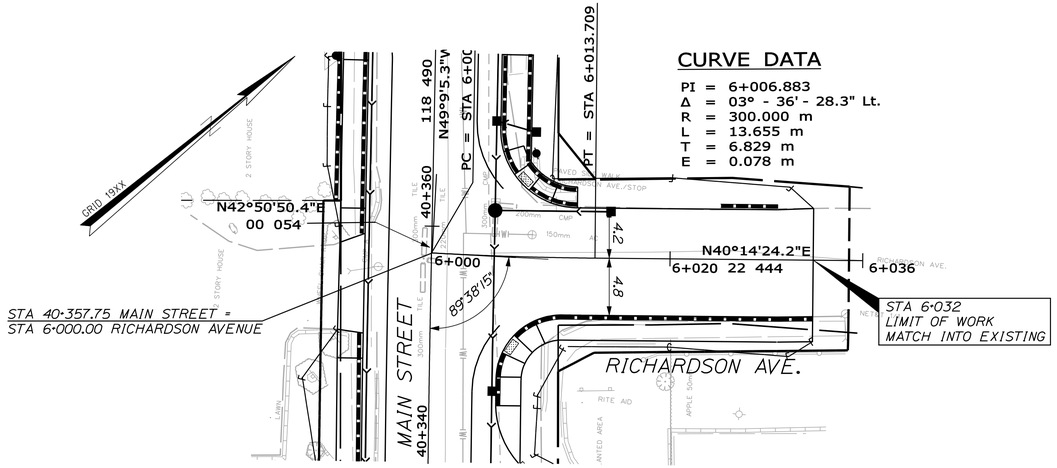
30

OF 148

Division: HIGHWAY Username: common Date:2/9/2011

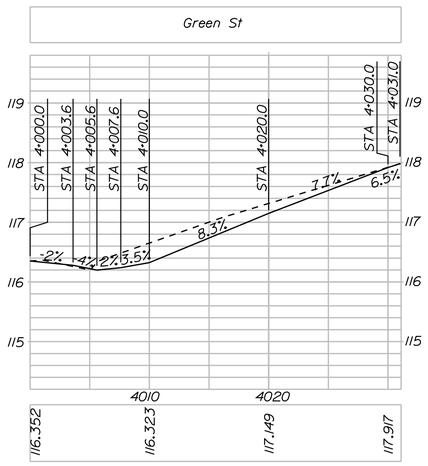
Filename: ...\highway\msta\030_HDPlan15.dgn

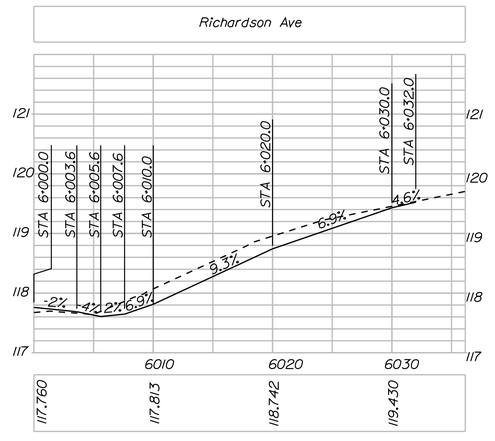




CURVE DATA

PI = 6+006.883
Δ = 03° - 36' - 28.3" Lt.
R = 300.000 m
L = 13.655 m
T = 6.829 m
E = 0.078 m





PLAN

10 0 10 20

SCALE
(in meters)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
PIN 10018.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	R. WEBSTER	
DESIGN-DETAILED	R. NORWOOD	D.BURGESS	01-22-09
CHECKED-REVIEWED	T. CORRILL	
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
MAIN STREET (ROUTE 4/17)

PLAN & PROFILE

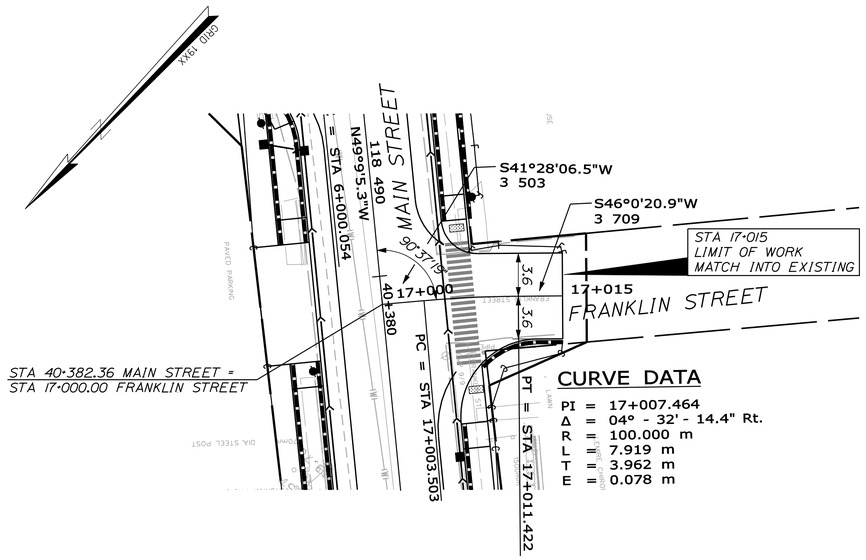
SHEET NUMBER

31

OF 148

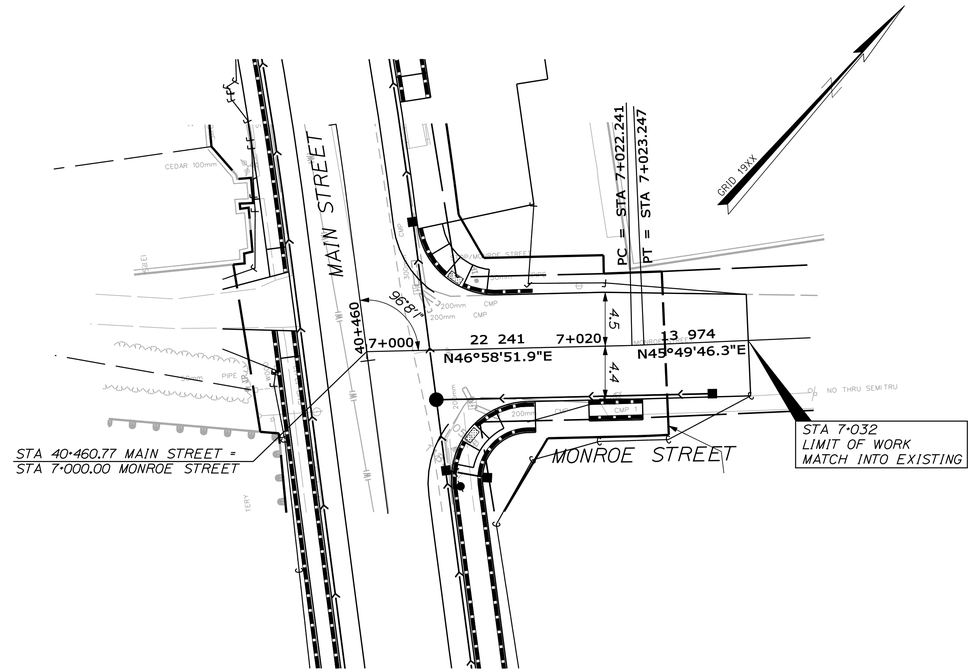
Division: HIGHWAY Username: common Date:2/9/2011

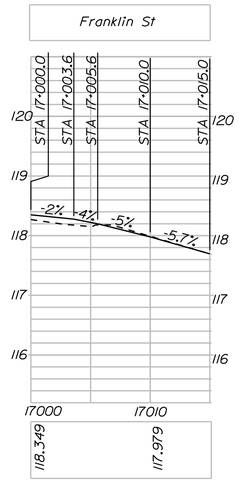
Filename: ...\highway\rnsto\031_HDPlan16.dgn

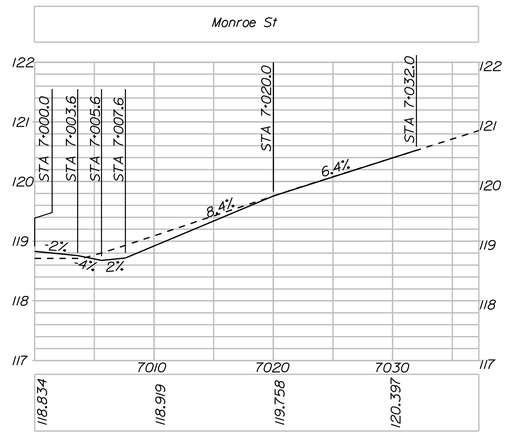


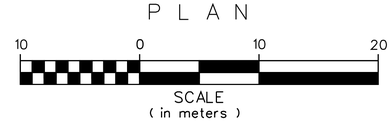
CURVE DATA

PI = 17+007.464
Δ = 04° - 32' - 14.4" Rt.
R = 100.000 m
L = 7.919 m
T = 3.962 m
E = 0.078 m









STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
PIN 10018.00

HIGHWAY PLANS

PROJ. MANAGER	R. WEBSTER	BY	DATE
DESIGN-DETAILED	R. NORWOOD	D.BURGESS	01-22-09
CHECKED-REVIEWED	T. CORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
MAIN STREET (ROUTE 4/17)

PLAN & PROFILE

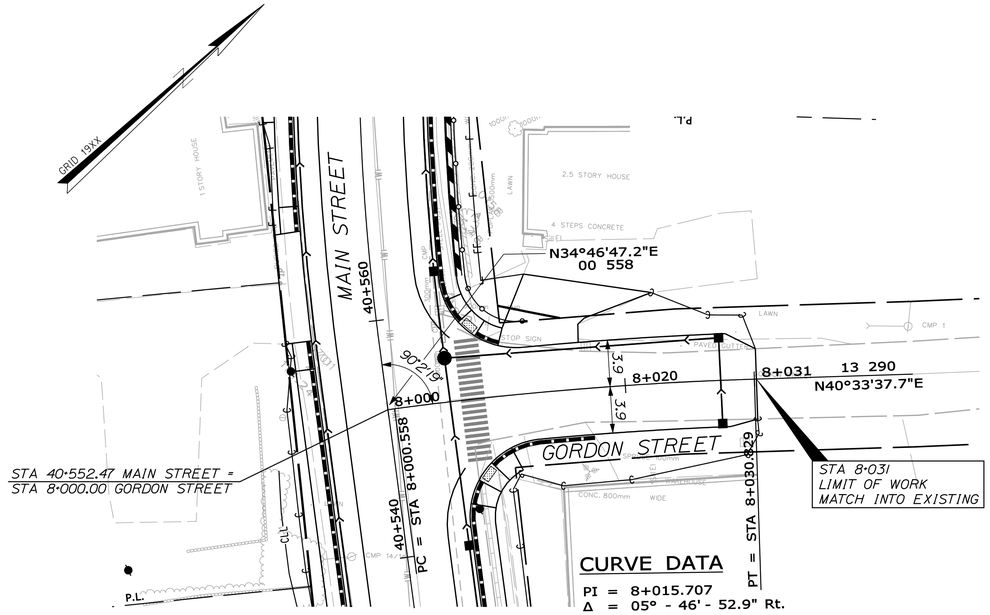
SHEET NUMBER

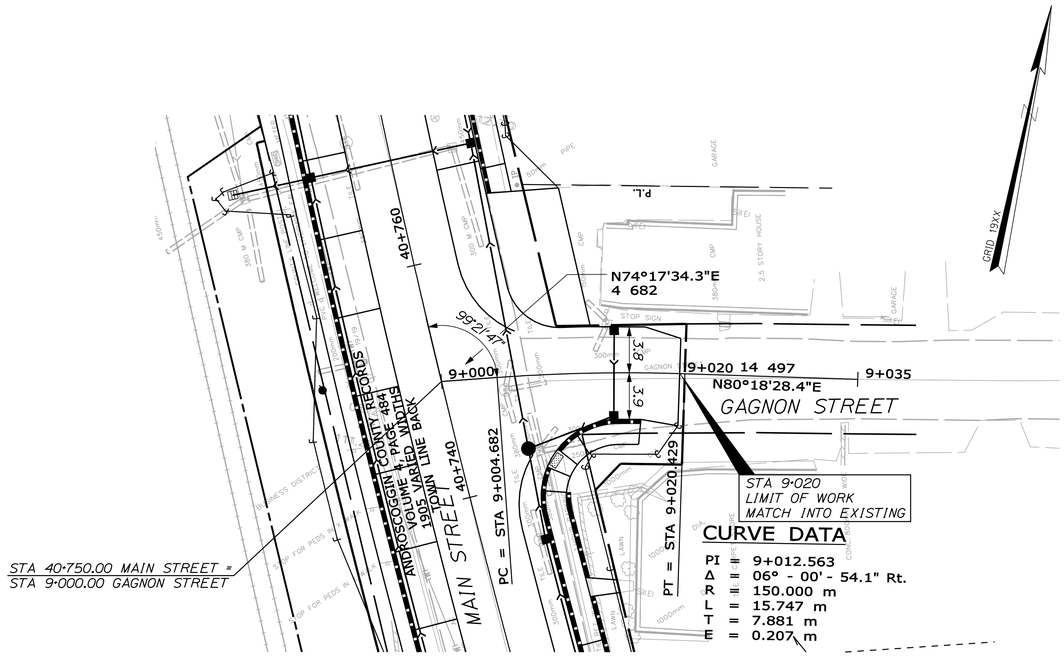
32

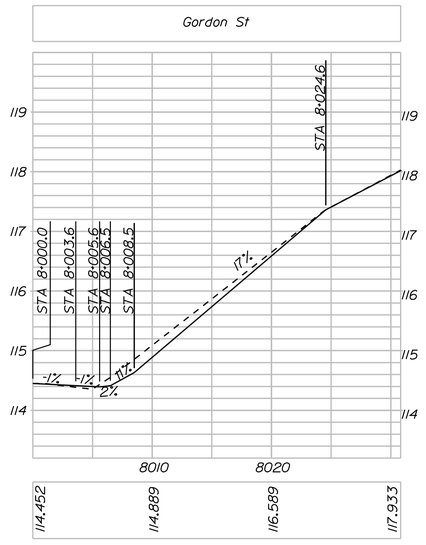
OF 148

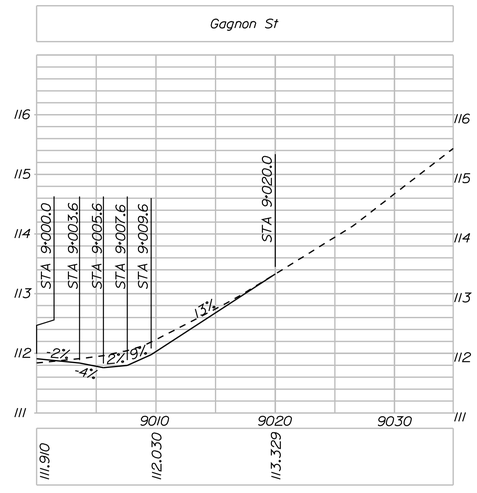
Division: HIGHWAY Username: common Date:2/9/2011

Filename: ...\highway\rnsto\032_HDPlan17.dgn









PLAN

10 0 10 20

SCALE
(in meters)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
PIN 10018.00

HIGHWAY PLANS

PROJ. MANAGER	R. WEBSTER	BY	DATE
DESIGN-DETAILED	R. NORWOOD	D.BURGESS	01-22-09
CHECKED-REVIEWED	T. CORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
MAIN STREET (ROUTE 4/17)

PLAN & PROFILE

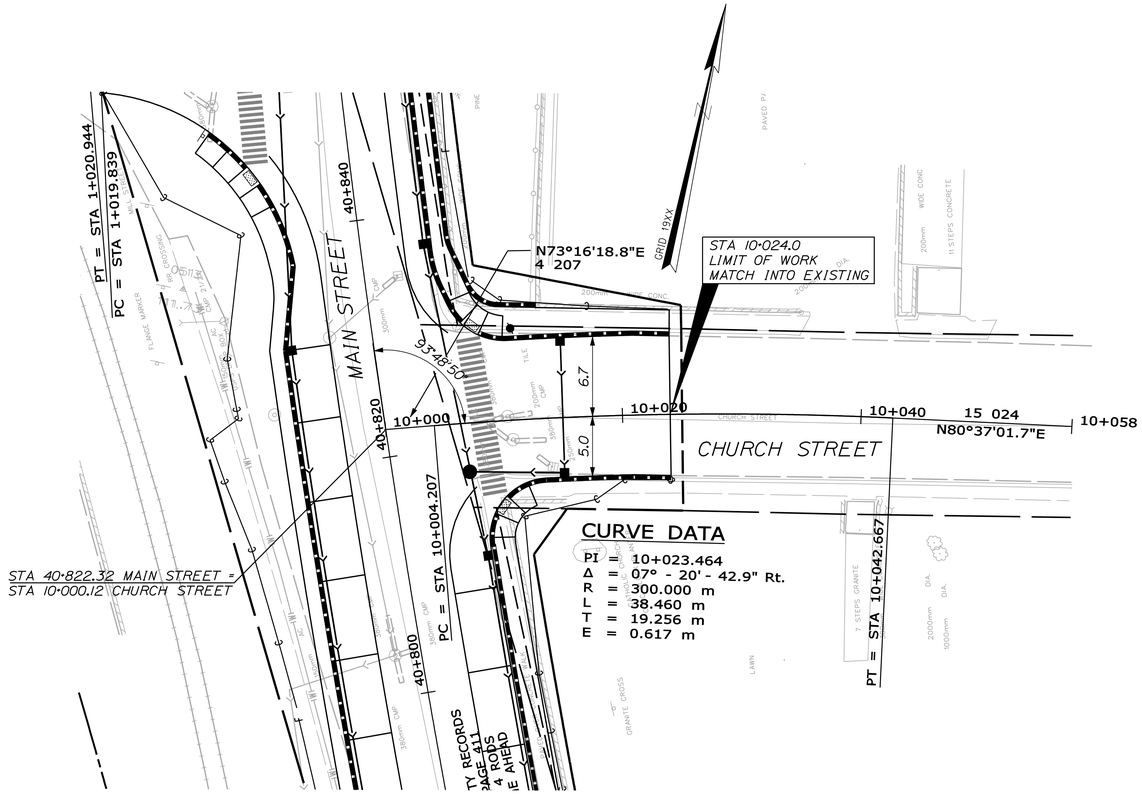
SHEET NUMBER

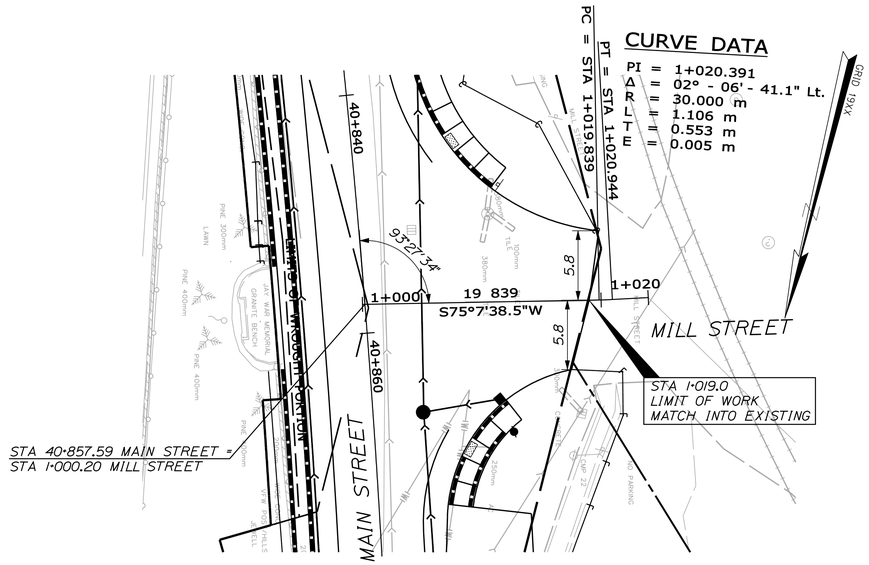
33

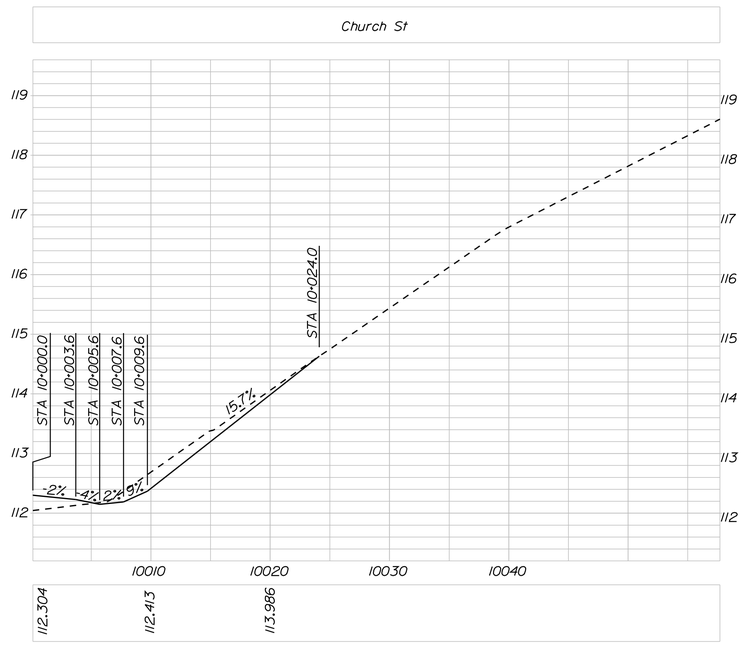
OF 148

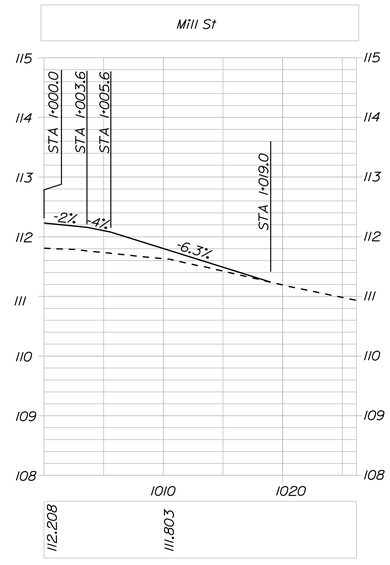
Division: HIGHWAY Username: common Date:2/9/2011

Filename: ...\highway\msta\033_HDPlan18.dgn









PLAN

10 0 10 20

SCALE
(in meters)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
PIN 10018.00

HIGHWAY PLANS

PROJ. MANAGER	R. WEBSTER	BY	DATE
DESIGN-DETAILED	R. NORWOOD	D.BURGESS	01-22-09
CHECKED-REVIEWED	T. CORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
MAIN STREET (ROUTE 4/17)

PLAN & PROFILE

SHEET NUMBER

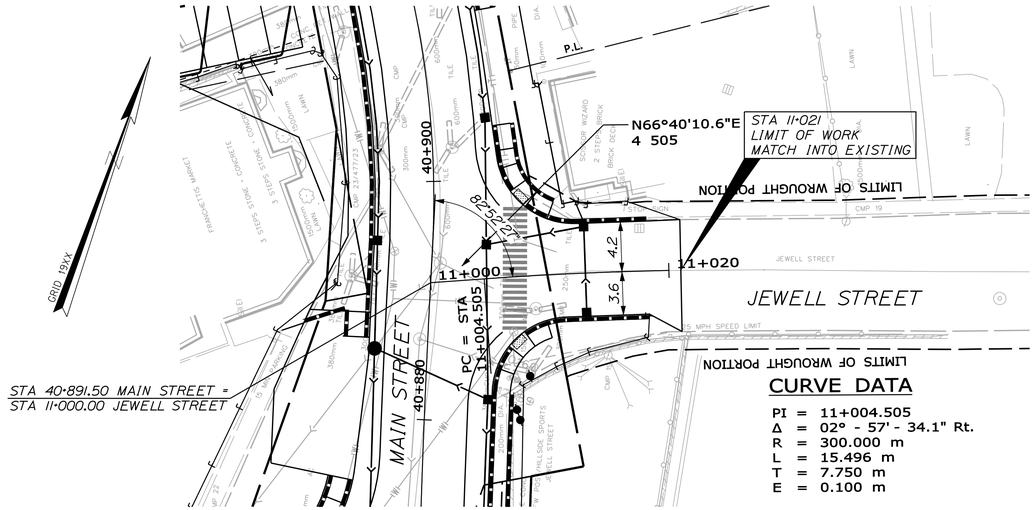
34

OF 148

Division: HIGHWAY Username: common Date:2/9/2011

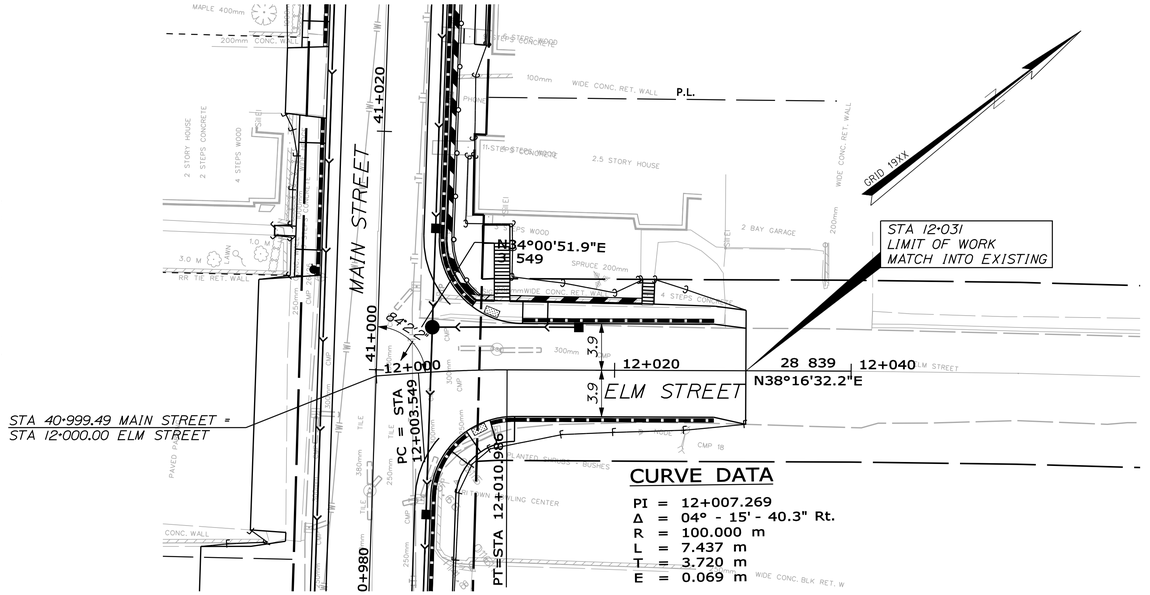
Filename: ...\highway\mst0\034_HDPlan19.dgn

Division: HIGHWAY Username: common Date:2/9/2011



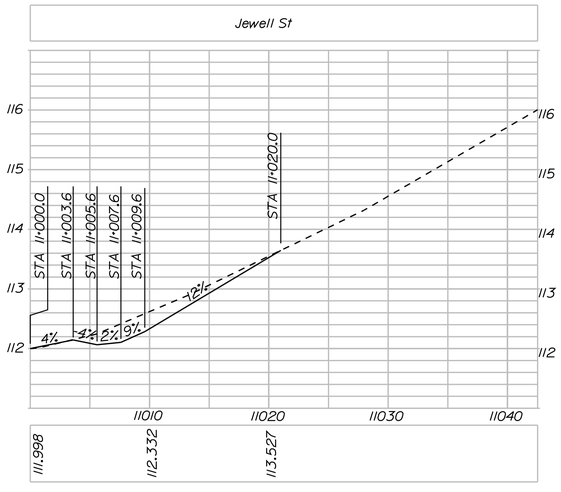
CURVE DATA

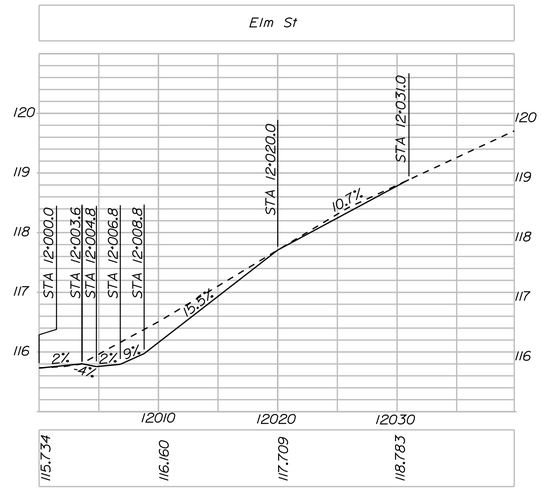
PI = 11+004.505
Δ = 02° - 57' - 34.1" Rt.
R = 300.000 m
L = 15.496 m
T = 7.750 m
E = 0.100 m



CURVE DATA

PI = 12+007.269
Δ = 04° - 15' - 40.3" Rt.
R = 100.000 m
L = 7.437 m
T = 3.720 m
E = 0.069 m





PLAN

10 0 10 20

SCALE
(in meters)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
PIN 10018.00

HIGHWAY PLANS

PROJ. MANAGER	R. WEBSTER	BY	DATE
DESIGN-DETAILED	R. NORWOOD	D.BURGESS	01-22-09
CHECKED-REVIEWED	T. CORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
MAIN STREET (ROUTE 4/17)

PLAN & PROFILE

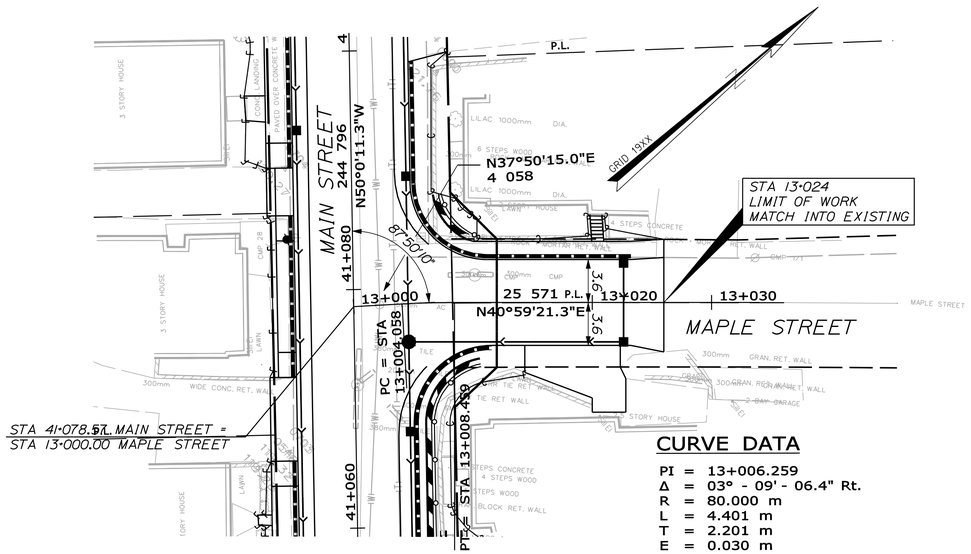
SHEET NUMBER

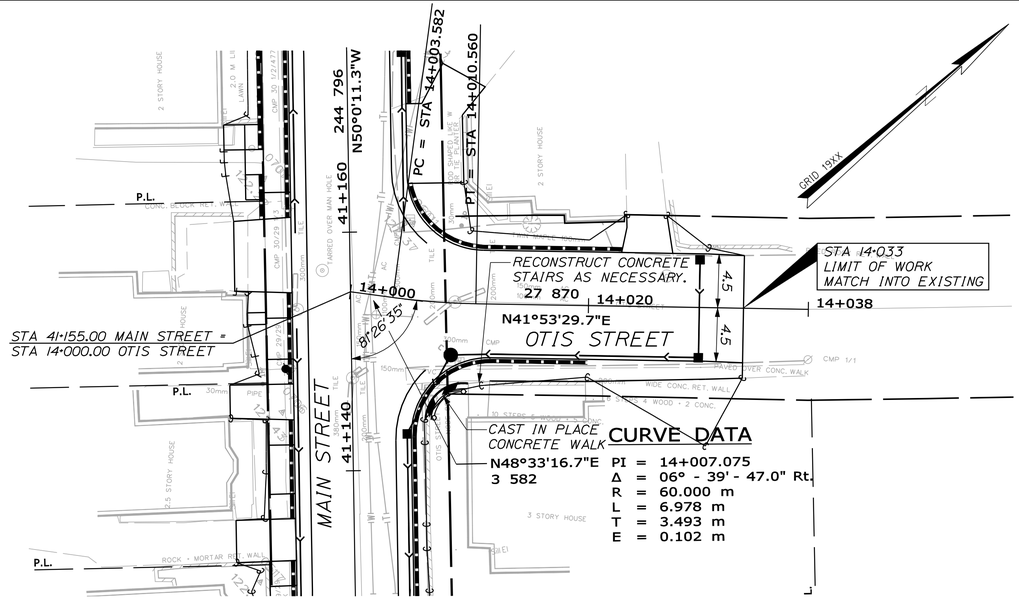
35

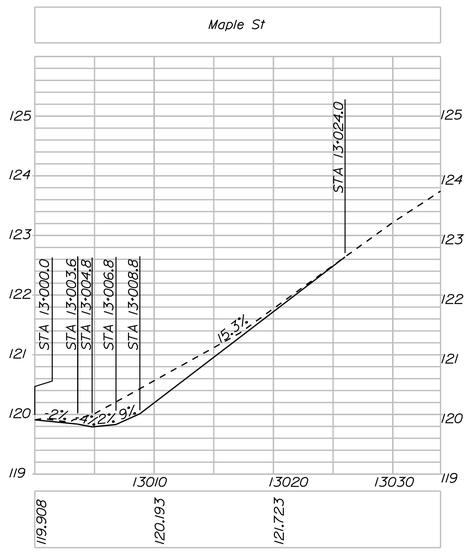
OF 148

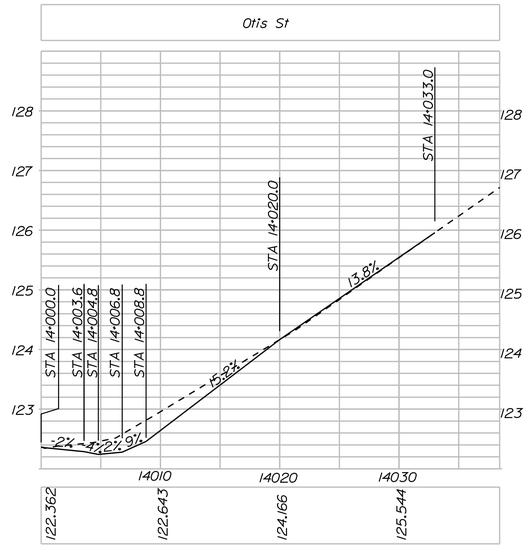
Filename: ...\highway\msta\035_HDPlan20.dgn

Division: HIGHWAY Username: common Date:2/9/2011









PLAN

10 0 10 20

SCALE
(in meters)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
PIN 10018.00

HIGHWAY PLANS

PROJ. MANAGER	R. WEBSTER	
DESIGN-DETAILED	R. NORWOOD	01-22-09
CHECKED-REVIEWED	T. CORRILL	
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

BY | DATE

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
MAIN STREET (ROUTE 4/17)

PLAN & PROFILE

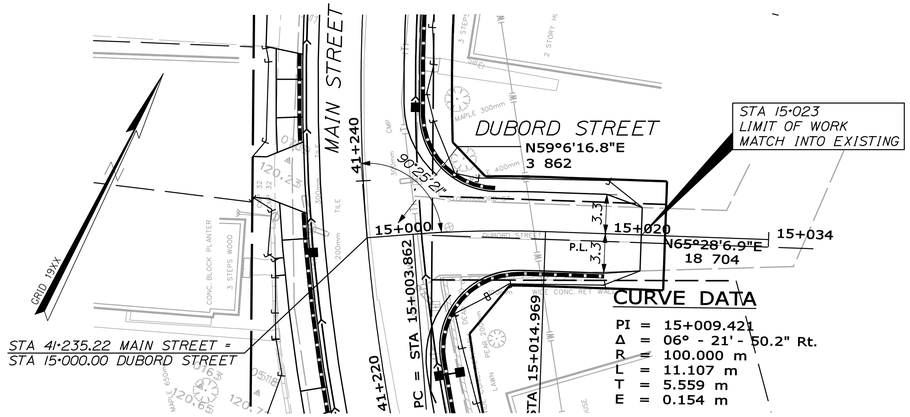
SHEET NUMBER

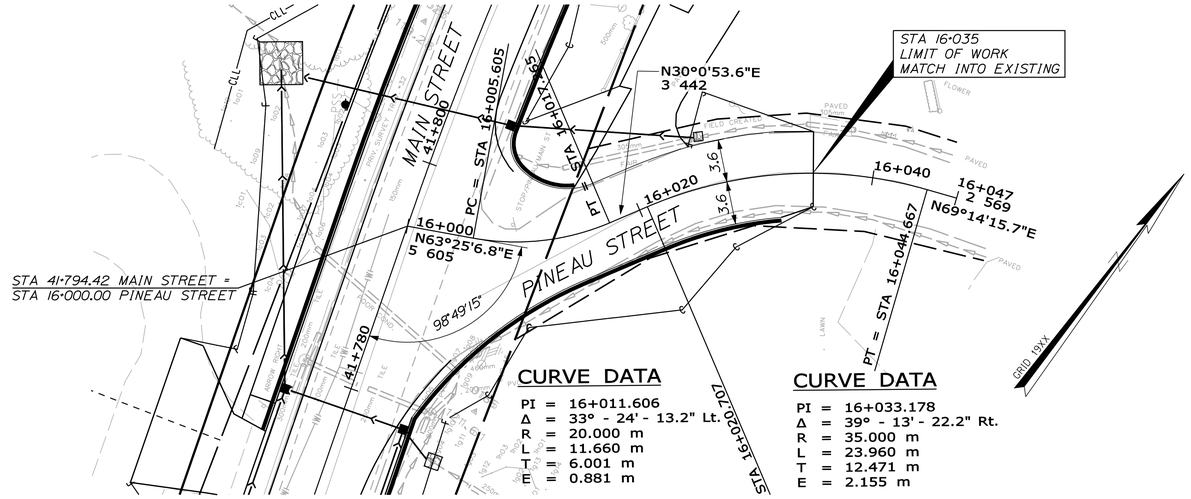
36

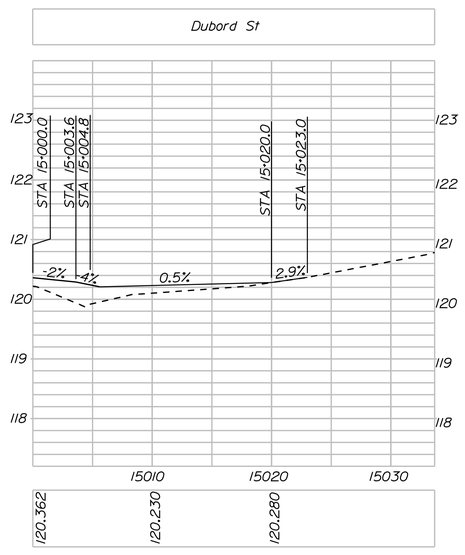
OF 148

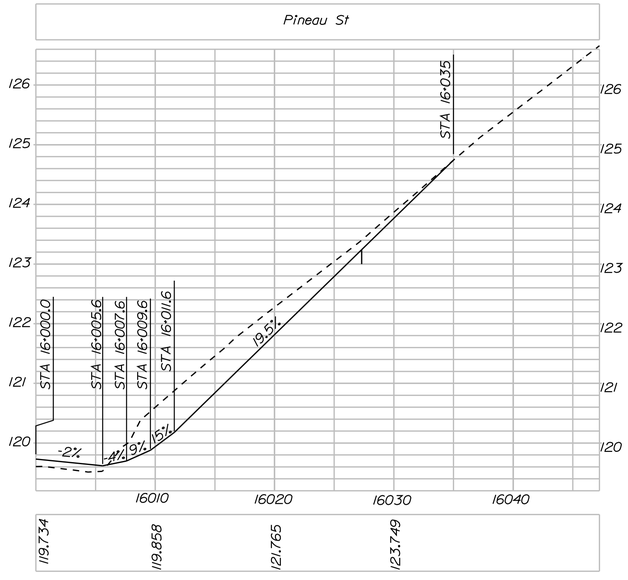
Filename: ...\highway\mslo\036_HDPlan21.dgn

Division: HIGHWAY Username: common Date:2/9/2011









PLAN

10 0 10 20

SCALE
(in meters)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
PIN 10018.00

HIGHWAY PLANS

PROJ. MANAGER	R. WEBSTER	
DESIGN-DETAILED	R. NORWOOD	D.BURGESS
CHECKED-REVIEWED	T. CORRILL	
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

BY | DATE
D.BURGESS | 01-22-09

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
MAIN STREET (ROUTE 4/17)

PLAN & PROFILE

SHEET NUMBER

37

OF 148

Filename: ...\highway\rnsto\037_HDPlan22.dgn

NOTE: RIGHTS TAKEN TO RAZE OR REMOVE BUILDING AT STA. 4+920.0 LT.

3021± S.F.

P.L.

P.L.

P.L.

CONST. & MAINT.

255± S.F.

270± S.F.

REMOVE BUILDING #1

REMOVE BUILDING #2

3 STORY HOUSE

2.5 STORY HOUSE

FRANCHETTIS MARKET

3 STEPS STONE + CONCRETE

15 MIN PARKING

LAWN

CMP 23/477/23

CMP 24/24

111.21

111.30

111.35

111.6

111.70

111.8

112.0

112.2

112.4

112.06

112.08

112.00

112.28

112.28

244 796

N50°0'11

40+880

40+900

40+920

40+940

11+000

PLAN

SCALE
METRIC (1:100)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
PIN 10018.00

HIGHWAY PLANS

PROJ. MANAGER	R. WEBSTER	BY	DATE
DESIGN-DETAILED	R. NORWOOD	D.BURGESS	01-22-09
CHECKED-REVIEWED	T. CORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
MAIN STREET (ROUTE 4/17)

PUBLIC PARKING LOT

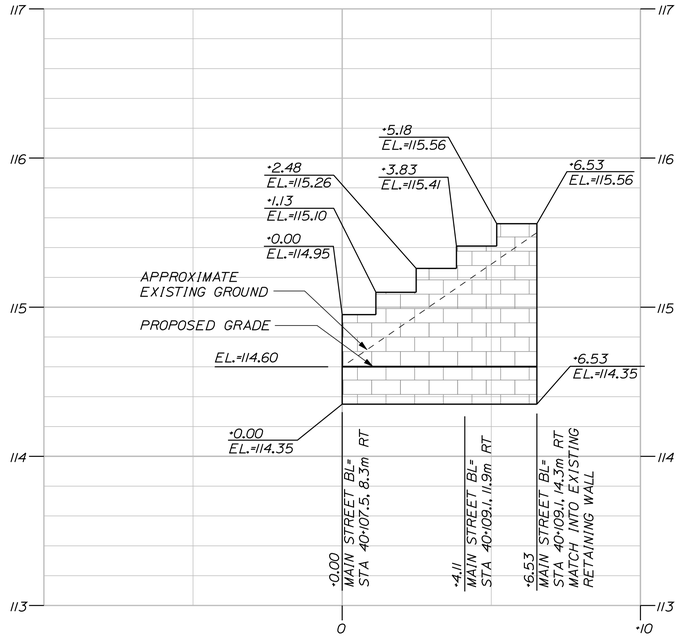
SHEET NUMBER

38

OF 148

Division: HIGHWAY Username: common Date:2/9/2011

Filename: ...\038_HDPlan_PublicParking.dgn



RETAINING WALL 'A' PROFILE

(WET CAST SMALL LANDSCAPE BLOCK WALL - ITEM 635.32)

RETAINING WALL 'B' PROFILE (OMITTED)

PROFILE

HORIZ. 5 0 5 10

VERT. 1 0 1 2

SCALE
(in meters)

Division: HIGHWAY Username: common Date:2/9/2011

Filename: ...\mst\v039_RWProfA-B_01.dgn

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
PIN 10018.00

HIGHWAY PLANS

PROJ. MANAGER	R. WEBSTER		
DESIGN-DETAILED	R. NORWOOD	BY	DATE
CHECKED-REVIEWED	T. CORRILL	D.BURGESS	01-22-09
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
MAIN STREET (ROUTE 4/17)

RETAINING WALL 'A' & 'B'
PROFILES

SHEET NUMBER

39

OF 148

Division: HIGHWAY Username: common Date:2/9/2011

CONTRACTOR SHALL EXTEND WALL INTO THE STAIRCASE BASED ON THE MANUFACTURES RECOMMENDATION FOR LENGTH AND DEPTH OF INSTALLATION

APPROXIMATE EXISTING GROUND

PROPOSED GRADE

·0.00 EL.=114.60

·0.00 EL.=114.15

·3.09 EL.=113.70

·10.11 EL.=113.25

·20.64 EL.=112.80

·32.34 EL.=112.80

·35.83 EL.=114.44

·35.83 EL.=113.25

·35.85 MAIN STREET BL= STA 40-585.2, 13.9m RT

EL.=115.10
EL.=114.93
EL.=114.75
EL.=114.58
EL.=114.40
EL.=114.05
EL.=114.23
EL.=113.88
EL.=113.70
EL.=113.53
EL.=114.35

·0.00 MAIN STREET BL= STA 40-557.7, 12.3m RT

·8.19 MAIN STREET BL= STA 40-563.0, 7.1m RT

·25.79 MAIN STREET BL= STA 40-581.2, 7.1m RT

·27.09 MAIN STREET BL= STA 40-582.6, 7.1m RT

·29.09 MAIN STREET BL= STA 40-584.7, 7.1m RT

116 115 114 113 112 111

0 ·10 ·20 ·30 ·40 ·50

RETAINING WALL 'C' PROFILE

(WET CAST SMALL LANDSCAPE BLOCK WALL - ITEM 635.32)

PROFILE

HORIZ. 5 0 5 10

VERT. 1 0 1 2

SCALE (in meters)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
PIN 10018.00

HIGHWAY PLANS

SIGNATURE

P.E. NUMBER

DATE

PROJ. MANAGER	R. WEBSTER		
DESIGN-DETAILED	R. NORWOOD	BY	D.BURGESS
CHECKED-REVIEWED	T. CORRILL	DATE	01-22-09
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

LIVERMORE FALLS - JAY
MAIN STREET (ROUTE 4/17)

RETAINING WALL 'C' PROFILE

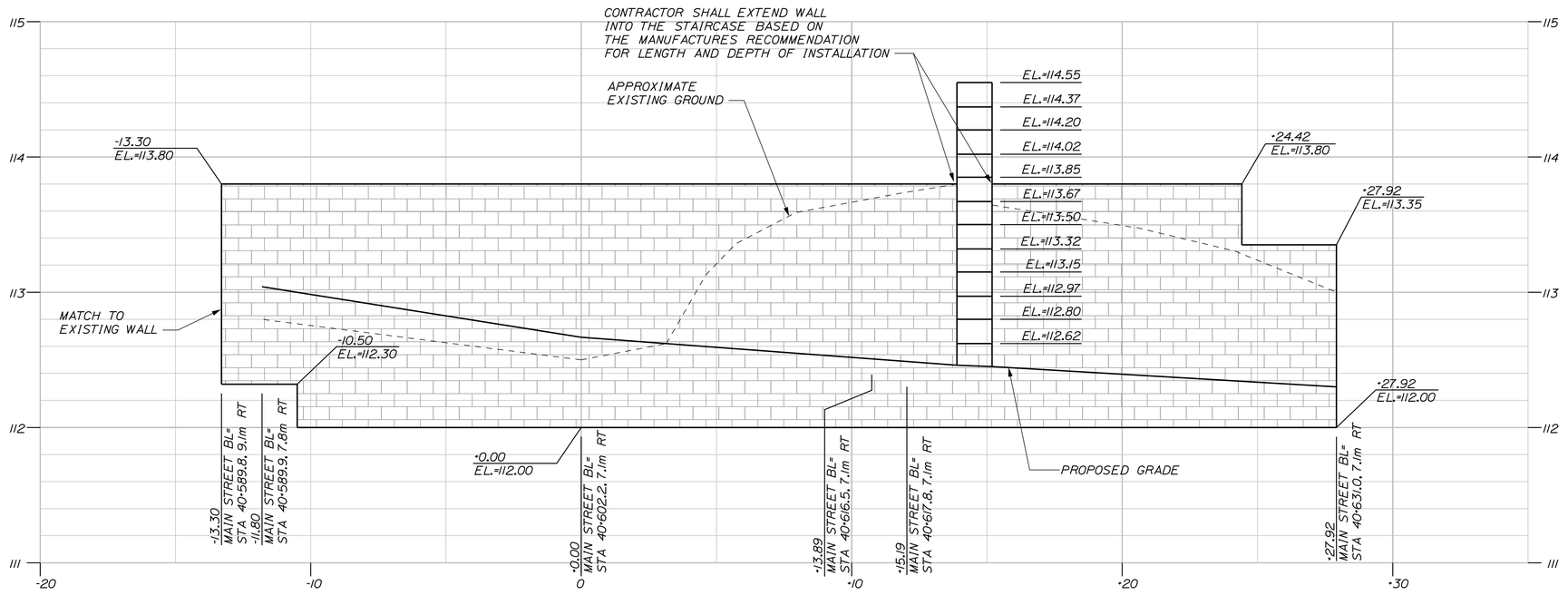
SHEET NUMBER

40

OF 148

Filename: ...\mstoV040_RWProfC_02.dgn

Division: HIGHWAY Username: common Date:2/9/2011



RETAINING WALL 'D' PROFILE

(WET CAST SMALL LANDSCAPE BLOCK WALL - ITEM 635.32)

RETAINING WALL 'E' PROFILE - OMITTED

PROFILE

HORIZ. 5 0 5 10

VERT. 1 0 1 2

SCALE (in meters)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
PIN 10018.00

HIGHWAY PLANS

PROJ. MANAGER	R. WEBSTER		
DESIGN-DETAILED	R. NORWOOD	BY	D.BURGESS
CHECKED-REVIEWED	T. CORRILL	DATE	01-22-09
DESIGN2-DETAILED2			
DESIGN3-DETAILED3		SIGNATURE	
REVISIONS 1			
REVISIONS 2		P.E. NUMBER	
REVISIONS 3			
REVISIONS 4		DATE	
FIELD CHANGES			

LIVERMORE FALLS - JAY
MAIN STREET (ROUTE 4/17)

RETAINING WALL 'D' &'E' PROFILES

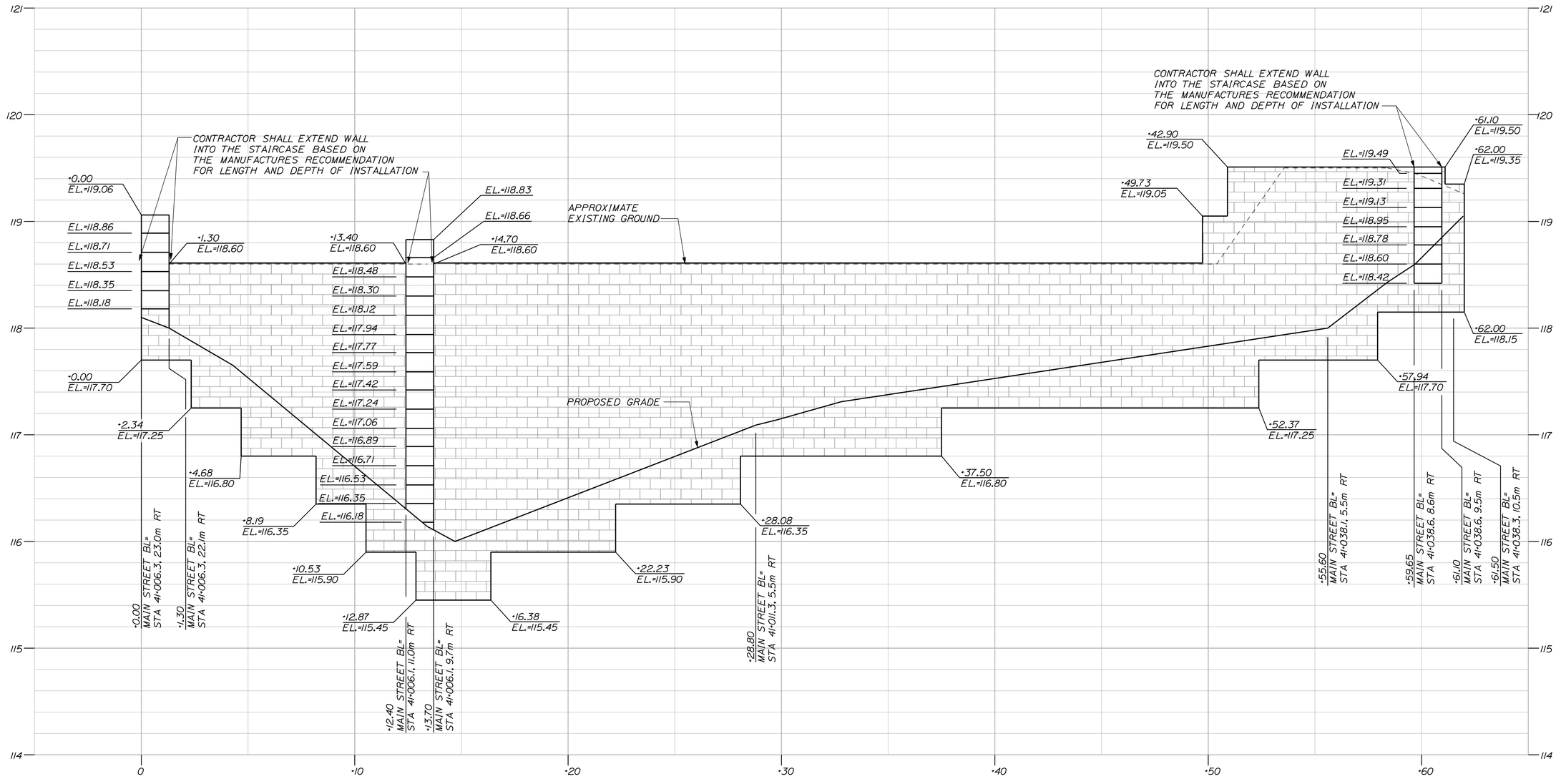
SHEET NUMBER

41

OF 148

Filename: ...\mst0\041_RWProf0-E_03.dgn

Division: HIGHWAY Username: common Date:2/9/2011



RETAINING WALL 'F' PROFILE

(WET CAST SMALL LANDSCAPE BLOCK WALL - ITEM 635.32)

PROFILE

HORIZ. 5 0 5 10

VERT. 1 0 1 2

SCALE (in meters)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
PIN 10018.00

HIGHWAY PLANS

			DATE
PROJ. MANAGER	R. WEBSTER		
DESIGN-DETAILED	R. NORWOOD	D.BURGESS	01-22-09
CHECKED-REVIEWED	T. CORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
MAIN STREET (ROUTE 4/17)

RETAINING WALL 'F' PROFILE

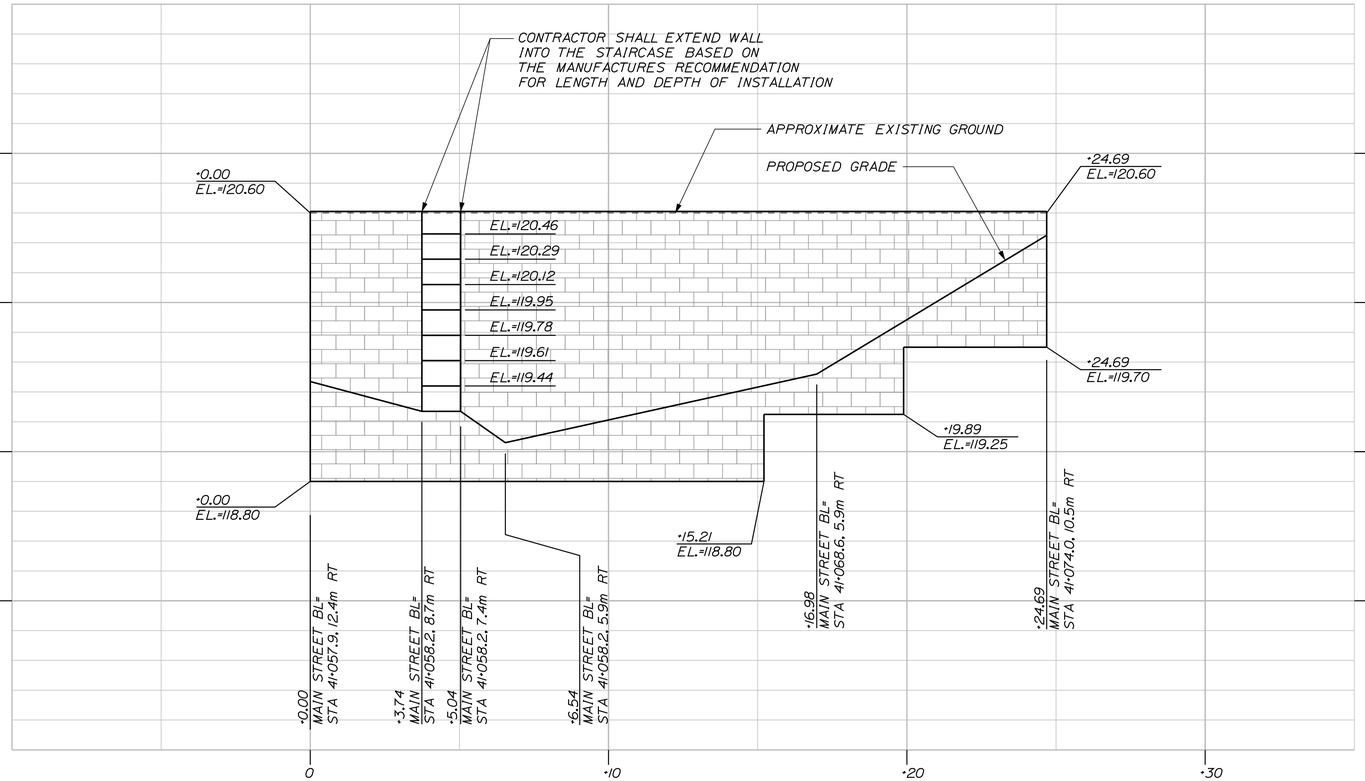
SHEET NUMBER

42

OF 148

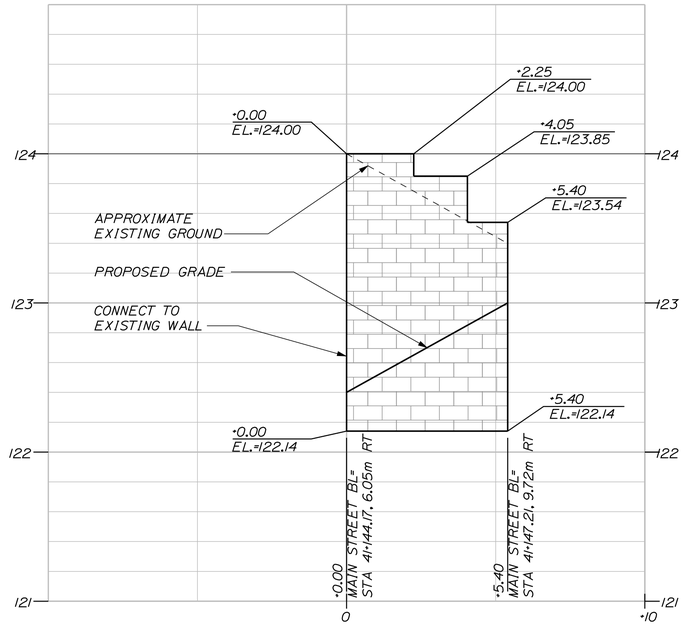
Filename: ...\msta\042_RWProlF_04.dgn

Division: HIGHWAY Username: common Date:2/9/2011



RETAINING WALL 'G' PROFILE

(WET CAST SMALL LANDSCAPE BLOCK WALL - ITEM 635.32)



RETAINING WALL 'G1' PROFILE

(WET CAST SMALL LANDSCAPE BLOCK WALL - ITEM 635.32)

PROFILE

HORIZ. 5 0 5 10

VERT. 1 0 1 2

SCALE (in meters)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
PIN 10018.00

HIGHWAY PLANS

PROJ. MANAGER	R. WEBSTER		
DESIGN-DETAILED	R. NORWOOD	D.BURGESS	01-22-09
CHECKED-REVIEWED	T. CORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
MAIN STREET (ROUTE 4/17)

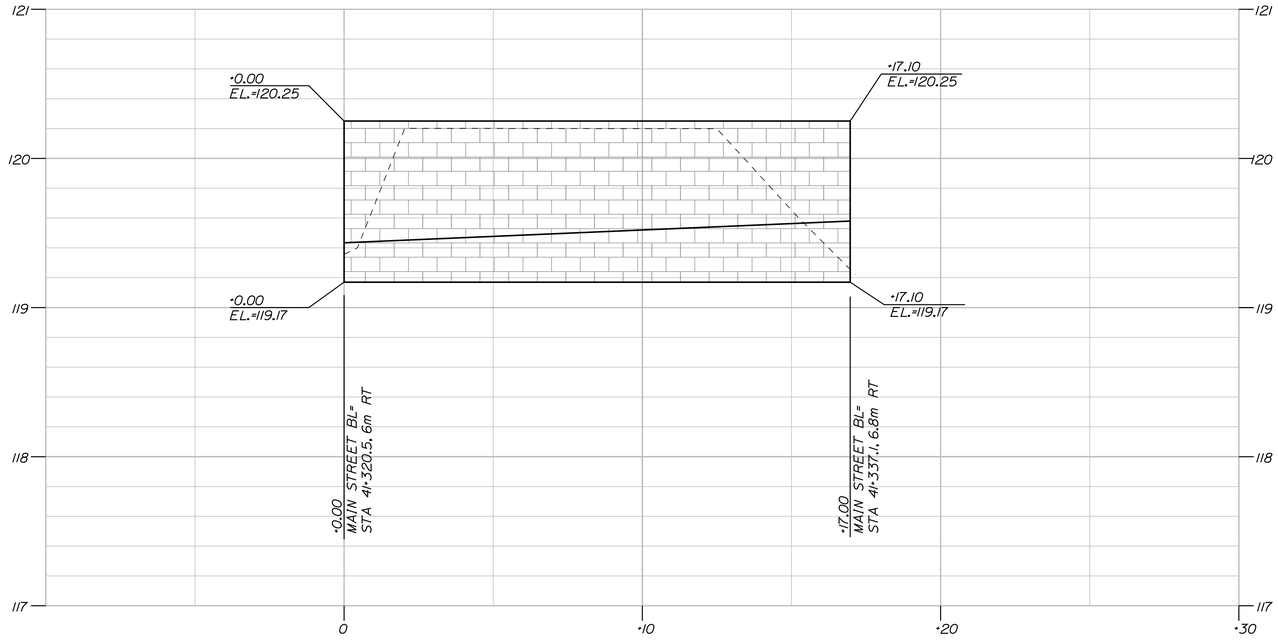
RETAINING WALL 'G' PROFILE

SHEET NUMBER

43

OF 148

Filename: ...\msto\043_RWProfG_05.dgn



RETAINING WALL 'H' PROFILE

(WET CAST SMALL LANDSCAPE BLOCK WALL - ITEM 635.32)

PROFILE

HORIZ. 5 0 5 10

VERT. 1 0 1 2

SCALE
(in meters)

Division: HIGHWAY Username: common Date:2/9/2011

Filename: ...\mstoV044_RWProfH_06.dgn

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
PIN 10018.00

HIGHWAY PLANS

PROJ. MANAGER	R. WEBSTER	BY	DATE
DESIGN-DETAILED	R. NORWOOD	D.BURGESS	01-22-09
CHECKED-REVIEWED	T. CORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
MAIN STREET (ROUTE 4/17)

RETAINING WALL 'H' PROFILE

SHEET NUMBER

44

OF 148

Control Points for GG31				
Point	Station	Offset	X-Coord	Y-Coord
1	40+000.0	8.1 LT	314709.9	182262.1
2	40+005.9	8.0 LT	314708.3	182267.8
3	5+030.1	10.8 LT	314684.5	182278.7
4	5+040.2	10.8 LT	314676.3	182273.4
5	5+047.0	10.8 LT	314671.0	182262.0
6	5+050.6	10.1 LT	314667.9	182268.7
7	5+058.0	6.7 LT	314660.2	182267.2
8	5+062.5	9.5 LT	314657.9	182261.9
AB	40+006.2	24.5 LT	314692.4	182263.4

CURVE DATA for GG31		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG31		
2 TO 3	16.5 m	29.7 m
5 TO 6	9.0 m	3.4 m
7 TO 8	3.0 m	6.8 m

Control Points for GG3C				
Point	Station	Offset	X-Coord	Y-Coord
1	40+152.52	7.7 LT	314639.9	182389.4
2	40+157.52	7.7 LT	314636.2	182392.5

CURVE DATA for GG3C		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG3C		
1 TO 2	192.9 m	4.8 m

Control Points for GG35				
Point	Station	Offset	X-Coord	Y-Coord
1	40+120.9	5.6 LT	314663.0	182369.4
2	40+157.6	5.6 LT	314637.5	182394.2

Control Points for GG32				
Point	Station	Offset	X-Coord	Y-Coord
1	5+062.5	7.2 RT	314648.1	182275.4
2	5+056.8	7.2 RT	314652.7	182278.9
3	5+022.2	7.2 RT	314684.0	182297.5
4	40+060.6	7.2 LT	314692.5	182319.2
5	40+100.0	7.2 LT	314674.1	182352.4
6	40+120.9	5.6 LT	314663.0	182369.4
AE	40+060.5	23.7 LT	314677.4	182312.6

CURVE DATA for GG32		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG32		
2 TO 3	145.0 m	36.5 m
3 TO 4	16.5 m	25.9 m
4 TO 5	196.0 m	38.0 m

Control Points for GG2J				
Point	Station	Offset	X-Coord	Y-Coord
1	40+049.8	12.7 LT	314691.2	182307.7
2	40+058.4	9.1 LT	314691.6	182316.5

CURVE DATA for GG2J		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG2J		
1 TO 2	14.7 m	9.0 m

CURVE DATA for GG35		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG35		
1 TO 2	195.0 m	35.7 m

Control Points for GG3B				
Point	Station	Offset	X-Coord	Y-Coord
1	40+126.7	8.9 LT	314656.9	182371.4
2	40+146.4	8.9 LT	314643.6	182384.7

CURVE DATA for GG3B		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG3B		
1 TO 2	191.1 m	6.3 m

ITEM NO. 609.237 TERMINAL CURB TYPE 1

Station	Offset	X-Coord	Y-Coord
40+007.6	8.1m LT	314707.8	182269.4
40+009.4	8.3m LT	314707.1	182271.0
40+015.5	10.9m LT	314702.8	182276.2
40+017.0	12.0m LT	314701.4	182277.3
5+011.2	12.9m RT	314692.9	182307.0
5+023.5	7.2m RT	314682.7	182296.9
5+041.0	7.2m RT	314666.4	182288.4
5+046.0	7.2m RT	314661.9	182285.6
40+058.2	7.3m LT	314693.3	182317.0
40+058.4	9.1m LT	314691.6	182316.5
5+012.5	14.1m RT	314691.2	182307.7
40+071.4	7.2m LT	314668.1	182328.7
40+079.4	7.2m LT	314684.5	182335.5
40+084.2	7.2m LT	314682.3	182339.5
40+120.9	5.6m LT	314663.0	182369.4
40+128.9	5.6m LT	314659.3	182373.6
40+144.1	5.6m LT	314645.9	182387.0
40+128.9	8.9m LT	314656.9	182371.4
40+144.2	8.9m LT	314643.6	182384.7
40+152.2	5.6m LT	314655.1	182378.1
40+157.6	5.6m LT	314637.5	182394.2
40+152.2	7.7m LT	314639.9	182389.4
40+157.5	7.7m LT	314636.2	182392.5

CURVE DATA
PI = 40+099.062
Δ = 34° - 35' - 08.0" Lt.
R = 200.000 m
L = 120.726 m
T = 62.265 m
E = 9.468 m

Driveway Openings

	Station	Offset	to	Station	Offset
D1A	5+046.0,	7.2 RT		5+041.0,	7.2 RT
D1	5+023.5,	7.2 RT		40+048.6,	11.3 LT
D2	40+058.2,	7.3 LT		40+071.4,	7.2 LT
D2A	40+079.4,	7.2 LT		40+084.2,	7.2 LT
D3	40+120.9,	5.6 LT		40+126.7,	5.6 LT
D4	40+146.3,	5.6 RT		40+152.2,	5.6 LT
D5	40+022.4,	6.3 RT		40+035.0,	5.8 RT
D6	40+063.9,	5.6 RT		40+090.0,	5.6 RT
D7	40+095.0,	5.6 RT		40+102.4,	5.6 RT
D8	40+125.0,	5.6 RT		40+134.0,	5.6 RT
D9	40+139.0,	5.6 RT		40+156.4,	5.6 RT

Control Points for GG45				
Point	Station	Offset	X-Coord	Y-Coord
1	40+000.0	7.1 RT	314724.5	182266.5
2	40+044.6	5.6 RT	314710.1	182308.9

Control Points for GG3K				
Point	Station	Offset	X-Coord	Y-Coord
1	40+041.2	9.1 RT	314714.6	182306.7
2	40+060.7	10.1 RT	314708.4	182326.2
3	40+063.9	7.2 RT	314704.4	182328.0

CURVE DATA for GG3K		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG3K		
2 TO 3	3.0m	4.9 m

Control Points for GG3N				
Point	Station	Offset	X-Coord	Y-Coord
1	40+090.0	7.4 RT	314691.8	182352.0
2	40+095.0	7.4 RT	314689.0	182356.4

CURVE DATA for GG3N		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG3N		
1 TO 2	207.4m	5.2 m

Control Points for GG46				
Point	Station	Offset	X-Coord	Y-Coord
1	40+044.6	5.6 RT	314710.1	182308.9
2	40+104.5	5.6 RT	314682.0	182363.4
3	2+012.0	3.0 RT	314683.3	182372.2
4	2+019.5	3.0 RT	314689.3	182376.9
5	2+031.9	3.0 RT	314698.9	182384.6
DB	2+012.0	9.4 RT	314687.2	182367.2

CURVE DATA for GG46		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG46		
1 TO 2	205.6 m	61.6 m
2 TO 3	6.4 m	9.9 m
3 TO 4	303.0 m	7.6 m

CURVE DATA for GG47		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG47		
2 TO 3	295.8 m	7.9 m
3 TO 4	6.5 m	9.7 m
4 TO 5	205.6 m	35.0 m

Control Points for GG47				
Point	Station	Offset	X-Coord	Y-Coord
1	2+028.9	4.2 LT	314692.1	182388.4
2	2+019.6	4.2 LT	314684.8	182382.6
3	2+011.6	4.2 LT	314678.6	182377.8
4	40+123.4	5.6 RT	314669.8	182378.6
5	40+157.5	5.6 RT	314644.6	182402.8
CW	2+011.6	10.7 LT	314674.7	182382.9

Control Points for GG30				
Point	Station	Offset	X-Coord	Y-Coord
1	40+134.0	7.4 RT	314663.7	182387.8
2	40+139.0	7.4 RT	314660.1	182391.5

CURVE DATA for GG30		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG30		
1 TO 2	207.4m	5.2 m

* SHORTER LENGTHS OF CURB MAY BE NECESSARY TO ACHIEVE CORRECT RAMP SLOPES.

SCALE (in meters) Item 609.237 TERMINAL CURB TYPE 1			
Station	Offset	X-Coord	Y-Coord
40+007.7	6.8m RT	314722.1	182273.7
40+009.5	6.7m RT	314721.5	182275.5
40+022.4	6.3m RT	314717.3	182287.7
40+035.0	5.8m RT	314713.3	182299.6
40+058.0	5.6m RT	314705.3	182321.8
40+059.8	5.6m RT	314704.6	182323.5
40+063.9	5.6m RT	314702.9	182327.4
40+090.0	5.6m RT	314690.3	182351.0
40+095.0	5.6m RT	314687.5	182355.4
40+102.4*	5.6m RT	314683.2	182361.7
40+104.5*	5.6m RT	314682.0	182363.4
40+108.5	7.2m RT	314680.8	182367.6
40+119.4	7.2m RT	314673.7	182376.5
40+123.0*	5.6m RT	314670.2	182378.3
40+125.0*	5.6m RT	314668.8	182379.8
40+134.0	5.6m RT	314662.5	182386.6
40+139.0	5.6m RT	314658.8	182390.2
40+156.5	5.6m RT	314645.4	182402.2
40+063.9	7.2m RT	314704.4	182328.0
40+090.0	7.4m RT	314691.8	182352.0
40+095.0	7.4m RT	314689.0	182356.4
2+031.9	3.0m RT	314698.9	182384.6
2+028.9	4.2m LT	314692.1	182388.4
40+134.0	7.4m RT	314663.7	182387.8
40+139.0	7.4m RT	314660.1	182391.5

PLAN

SCALE (in meters)

10 CW 0 10 20

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
PIN 10018.00

HIGHWAY PLANS

PROJ. MANAGER	R. WEBSTER		
DESIGN-DETAILED	R. NORWOOD	D.BURGESS	01-22-09
CHECKED-REVIEWED	T. GORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
MAIN STREET (ROUTE 4/17)

CURB GEOMETRICS PLAN

SHEET NUMBER

45

OF 148

Date:2/9/2011
Username: common
Division: HIGHWAY
Filename: ...\highway\rmsto\045_Geometry1.dgn

Division: HIGHWAY Username: common Date:2/9/2011

Control Points for GG35				
Point	Station	Offset	X-Coord	Y-Coord
3	40+286.4	5.6 LT	314537.2	182475.0

CURVE DATA for GG35		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG35		
3 TO 4	2005.6 m	69.1 m

Control Points for GG3D				
Point	Station	Offset	X-Coord	Y-Coord
1	40+172.1	7.7 LT	314624.9	182401.6
2	40+178.4	7.7 LT	314620.0	182405.5

Control Points for GG3E				
Point	Station	Offset	X-Coord	Y-Coord
1	40+190.0	7.7 LT	314610.9	182412.9
2	40+199.0	7.7 LT	314603.9	182418.5

Item 609.237 TERMINAL CURB TYPE 1

Station	Offset	X-Coord	Y-Coord
40+172.1	5.6m LT	314626.2	182403.2
40+172.1	7.7m LT	314624.9	182401.6
40+178.4	5.6m LT	314621.3	182407.2
40+178.4	7.7m LT	314620.0	182405.5
40+190.6	5.6m LT	314612.2	182414.5
40+190.6	7.7m LT	314610.9	182412.9
40+199.0	5.6m LT	314605.2	182420.2
40+199.0	7.7m LT	314603.9	182418.5
40+213.0	5.6m LT	314594.3	182428.9
40+262.0	5.6m LT	314556.2	182459.7
40+272.4	5.6m LT	314548.1	182466.2
40+305.8	5.6m LT	314522.1	182487.3
40+313.8	5.6m LT	314515.9	182492.4
40+321.0	5.6m LT	314510.4	182497.0
40+328.0	5.6m LT	314505.0	182501.5

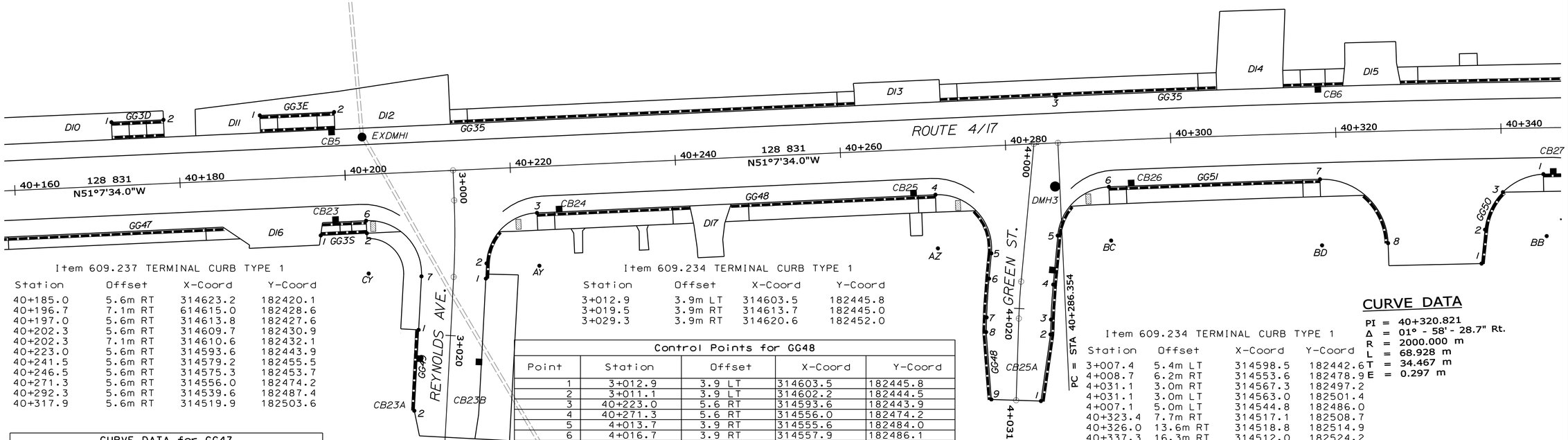
Driveway Openings

	Station	Offset	to Station	Offset
D10	40+157.5.	5.6 LT	40+172.0.	5.6 LT
D11	40+178.4.	5.6 LT	40+190.0.	5.6 LT
D12	40+199.0.	5.6 LT	40+213.0.	5.6 LT
D13	40+262.0.	5.6 LT	40+272.4.	5.6 LT
D14	40+305.8.	5.6 LT	40+313.8.	5.6 LT
D15	40+321.0.	5.6 LT	40+328.0.	5.6 LT
D16	40+185.0.	5.6 RT	40+197.0.	5.6 RT
D17	40+241.5.	5.6 RT	40+246.5.	5.6 RT

PLAN

10 0 10 20

SCALE
(in meters)



Item 609.237 TERMINAL CURB TYPE 1

Station	Offset	X-Coord	Y-Coord
40+185.0	5.6m RT	314623.2	182420.1
40+196.7	7.1m RT	614615.0	182428.6
40+197.0	5.6m RT	314613.8	182427.6
40+202.3	5.6m RT	314609.7	182430.9
40+202.3	7.1m RT	314610.6	182432.1
40+223.0	5.6m RT	314593.6	182443.9
40+241.5	5.6m RT	314579.2	182455.5
40+246.5	5.6m RT	314575.3	182453.7
40+271.3	5.6m RT	314556.0	182474.2
40+292.3	5.6m RT	314539.6	182487.4
40+317.9	5.6m RT	314519.9	182503.6

Item 609.234 TERMINAL CURB TYPE 1

Station	Offset	X-Coord	Y-Coord
3+012.9	3.9m LT	314603.5	182445.8
3+019.5	3.9m RT	314613.7	182445.0
3+029.3	3.9m RT	314620.6	182452.0

Item 609.234 TERMINAL CURB TYPE 1

Station	Offset	X-Coord	Y-Coord
3+007.4	5.4m LT	314598.5	182442.6
4+008.7	6.2m RT	314553.6	182478.9
4+031.1	3.0m RT	314567.3	182497.2
4+031.1	3.0m LT	314563.0	182501.4
4+007.1	5.0m LT	314544.8	182486.0
40+323.4	7.7m RT	314517.1	182508.7
40+326.0	13.6m RT	314518.8	182514.9
40+337.3	16.3m RT	314512.0	182524.2
40+340.1	7.7m RT	314504.4	182519.5

CURVE DATA

PI = 40+320.821
Δ = 01° - 58' - 28.7" Rt.
R = 2000.000 m
L = 68.928 m
T = 34.467 m
E = 0.297 m

CURVE DATA for GG47		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG47		
6 TO 7	6.4 m	10.7 m

Control Points for GG47				
Point	Station	Offset	X-Coord	Y-Coord
6	40+202.3	5.6 RT	314609.7	182430.9
7	3+013.0	3.9 RT	314609.1	182440.4
CY	3+013.0	10.3 RT	314613.7	182435.9

Control Points for GG3S				
Point	Station	Offset	X-Coord	Y-Coord
1	40+196.7	7.1 RT	314615.0	182428.6
2	40+202.3	7.1 RT	314610.6	182432.1

Control Points for GG49				
Point	Station	Offset	X-Coord	Y-Coord
1	3+019.5	3.9 RT	314613.7	182445.0
2	3+029.3	3.9 RT	314620.6	182452.0

Control Points for GG48				
Point	Station	Offset	X-Coord	Y-Coord
1	3+012.9	3.9 LT	314603.5	182445.8
2	3+011.1	3.9 LT	314602.2	182444.5
3	40+223.0	5.6 RT	314593.6	182443.9
4	40+271.3	5.6 RT	314556.0	182474.2
5	4+013.7	3.9 RT	314555.6	182484.0
6	4+016.7	3.9 RT	314557.9	182486.1
7	4+021.2	3.9 RT	314561.2	182489.4
8	4+023.0	3.9 RT	314562.4	182490.7
9	4+031.1	3.0 RT	314567.3	182497.2
AY	3+011.2	10.3 LT	314597.6	182448.9
AZ	4+013.7	10.4 RT	314560.1	182479.3

CURVE DATA for GG48		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG48		
2 TO 3	6.4 m	9.4 m
4 TO 5	6.5 m	11.2 m
6 TO 7	79.0 m	4.7 m

Control Points for GG50				
Point	Station	Offset	X-Coord	Y-Coord
1	40+337.3	16.3 RT	314512.0	182524.2
2	40+337.8	12.2 RT	314509.0	182521.4
3	40+340.1	7.7 RT	314504.4	182519.5
BB	40+345.3	13.1 RT	314503.9	182527.0

CURVE DATA for GG50		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG50		
2 TO 3	7.5 m	5.1 m

Control Points for GG51				
Point	Station	Offset	X-Coord	Y-Coord
1	4+031.1	3.0 LT	314563.0	182501.4
2	4+023.0	3.9 LT	314556.8	182496.1
3	4+021.2	3.9 LT	314555.5	182494.8
4	4+016.7	3.9 LT	314542.5	182481.8
5	4+010.8	3.9 RT	314548.2	182487.7
6	40+292.3	5.6 RT	314539.6	182487.4
7	40+317.9	5.6 RT	314519.9	182503.6
8	40+326.0	13.6 RT	314518.8	182514.9
BC	4+010.8	10.4 LT	314543.7	182492.5
BD	40+317.9	13.6 RT	314525.0	182509.8

CURVE DATA for GG51		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG51		
3 TO 4	71.1 m	4.2 m
5 TO 6	6.5 m	9.4 m
6 TO 7	1994.4 m	25.5 m
7 TO 8	8.0 m	12.5 m

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
PIN 10018.00

HIGHWAY PLANS

	DATE	BY
PROJ. MANAGER		R. WEBSTER
DESIGN-DETAILED	01-22-09	R. NORWOOD
CHECKED-REVIEWED		T. GORRILL
DESIGN2-DETAILED2		D.BURGESS
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
MAIN STREET (ROUTE 4/17)

CURB GEOMETRICS PLAN

SHEET NUMBER

46

OF 148

Filename: ...\highway\msto\046_Geometry2.dgn

Control Points for GG35				
Point	Station	Offset	X-Coord	Y-Coord
4	40+355.3	5.6 LT	314484.2	182519.3
5	40+372.7	5.6 LT	314471.0	182530.7
6	17+011.2	3.6 LT	314462.2	182530.4
AL	17+011.2	10.1 LT	314466.7	182525.8

CURVE DATA for GG35		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG35		
5 TO 6	6.5 m	9.7 m

Control Points for GG3F				
Point	Station	Offset	X-Coord	Y-Coord
1	40+362.0	7.8 LT	314477.6	182522.0
2	40+373.8	7.8 LT	314468.7	182529.7

Control Points for GG3H				
Point	Station	Offset	X-Coord	Y-Coord
1	40+510.8	7.2 LT	314364.7	182617.6
2	40+520.4	7.2 LT	314356.8	182623.0

Item 609.234 TERMINAL CURB TYPE 1

Station	Offset	X-Coord	Y-Coord
17+008.1	5.6m RT	314457.9	182539.1
17+015.1	3.6m RT	314454.4	182532.9

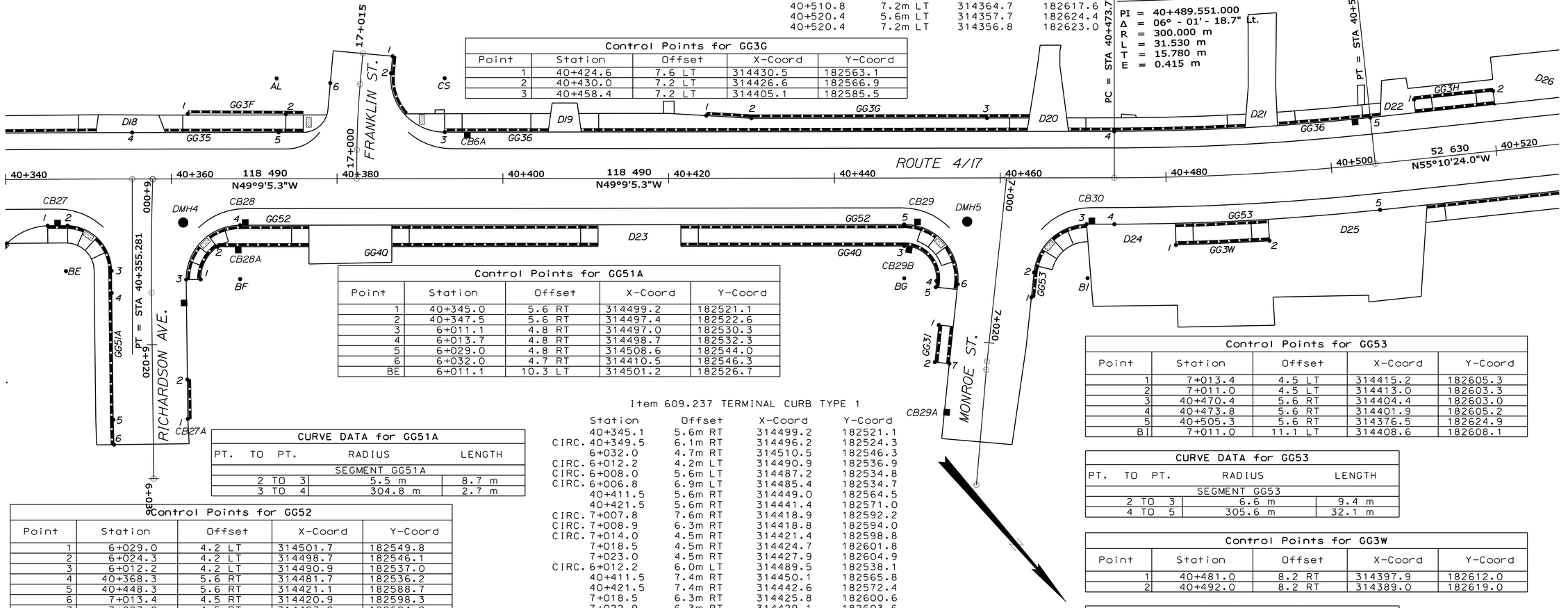
Item 609.237 TERMINAL CURB TYPE 1

Station	Offset	X-Coord	Y-Coord
40+350.9	5.6m LT	314487.5	182516.4
40+359.3	5.6m LT	314481.1	182521.9
40+362.0	7.8m LT	314477.6	182522.0
4+0375.9	5.6m LT	314468.6	182532.8
4+0375.9	7.8m LT	314467.1	182531.1
40+393.0	5.6m LT	314455.7	182543.9
40+405.5	5.6m LT	314446.2	182552.1
40+409.5	5.6m LT	314443.2	182554.7
40+424.6	7.6m LT	314430.5	182563.1
40+458.4	7.2m LT	314405.1	182585.5
40+463.3	5.6m LT	314402.5	182589.9
40+468.3	5.6m LT	314398.7	182593.2
40+489.9	5.6m LT	314382.3	182606.8
40+493.9	5.6m LT	314379.2	182609.1
40+506.5	5.6m LT	314369.1	182616.4
40+510.8	5.6m LT	314365.6	182618.9
40+510.8	7.2m LT	314364.7	182617.6
40+520.4	5.6m LT	314357.7	182624.4
40+520.4	7.2m LT	314356.8	182623.0

Control Points for GG36				
Point	Station	Offset	X-Coord	Y-Coord
1	17+015.1	3.6 RT	314454.4	182532.9
2	17+013.1	3.6 RT	314455.9	182534.3
3	40+393.0	5.6 LT	314455.6	182543.9
4	40+473.8	5.6 LT	314394.5	182596.8
5	40+505.3	5.6 LT	314370.1	182615.7
CS	17+013.0	10.1 RT	314451.4	182539.0

CURVE DATA for GG36		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG36		
2 TO 3	6.5 m	10.8 m
4 TO 5	294.4 m	30.9 m

Control Points for GG3G				
Point	Station	Offset	X-Coord	Y-Coord
1	40+424.6	7.6 LT	314430.5	182563.1
2	40+430.0	7.2 LT	314426.6	182566.9
3	40+458.4	7.2 LT	314405.1	182585.5



Control Points for GG51A				
Point	Station	Offset	X-Coord	Y-Coord
1	40+345.0	5.6 RT	314499.2	182521.1
2	40+347.5	5.6 RT	314497.4	182522.6
3	6+011.1	4.8 RT	314497.0	182530.3
4	6+013.7	4.8 RT	314498.7	182532.3
5	6+029.0	4.8 RT	314508.6	182544.0
6	6+032.0	4.7 RT	314410.5	182546.3
BE	6+011.1	10.3 LT	314501.2	182526.7

CURVE DATA for GG51A		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG51A		
2 TO 3	5.5 m	8.7 m
3 TO 4	304.8 m	2.7 m

Control Points for GG52				
Point	Station	Offset	X-Coord	Y-Coord
1	6+029.0	4.2 LT	314501.7	182549.8
2	6+024.3	4.2 LT	314498.7	182546.1
3	6+012.2	4.2 LT	314490.9	182537.0
4	40+368.3	5.6 RT	314481.7	182536.2
5	40+448.3	5.6 RT	314421.1	182588.7
6	7+013.4	4.5 RT	314420.9	182598.3
7	7+023.0	4.5 RT	314427.9	182604.9
BF	6+012.2	10.7 LT	314485.9	182541.2
BG	7+013.4	11.0 RT	314425.3	182593.6

CURVE DATA for GG52		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG52		
3 TO 4	6.5 m	10.3 m
BG 5 TO 6	6.5 m	10.9 m

Control Points for GG31				
Point	Station	Offset	X-Coord	Y-Coord
1	7+018.5	6.3 RT	314425.8	182600.6
2	7+022.9	6.3 RT	314429.1	182603.6

Item 609.234 TERMINAL CURB TYPE 1

Station	Offset	X-Coord	Y-Coord
6+029.0	4.2m LT	314501.7	182549.8
6+024.3	4.2m LT	314498.7	182546.1
7+020.0	4.5m LT	314419.6	182609.4

Item 609.237 TERMINAL CURB TYPE 1

Station	Offset	X-Coord	Y-Coord
40+345.1	5.6m RT	314499.2	182521.1
CIRC. 40+349.5	6.1m RT	314496.2	182524.3
6+032.0	4.7m RT	314510.5	182546.3
CIRC. 6+012.2	4.2m LT	314490.9	182536.9
CIRC. 6+008.0	5.6m LT	314487.2	182534.8
CIRC. 6+006.8	6.9m LT	314485.4	182534.7
40+411.5	5.6m RT	314449.0	182564.5
40+421.5	5.6m RT	314441.4	182571.0
CIRC. 7+007.8	7.6m RT	314418.9	182592.2
CIRC. 7+008.9	6.3m RT	314418.8	182594.0
CIRC. 7+014.0	4.5m RT	314421.4	182598.8
7+018.5	4.5m RT	314424.7	182601.8
7+023.0	4.5m RT	314427.9	182604.9
CIRC. 6+012.2	6.0m LT	314489.5	182538.1
40+411.5	7.4m RT	314450.1	182565.8
40+421.5	7.4m RT	314442.6	182572.4
7+018.5	6.3m RT	314425.8	182600.6
7+022.9	6.3m RT	314429.1	182603.6
CIRC. 7+008.1	5.2m LT	314410.5	182601.8
CIRC. 7+006.7	6.1m LT	314408.8	182601.6
7+014.0	7.1m RT	314423.1	182596.9
CIRC. 40+470.4	5.6m RT	314404.4	182603.0
40+481.0	5.6m RT	314396.2	182610.0
40+481.0	7.4m RT	314397.4	182611.4
40+492.0	5.6m RT	314387.5	182616.9
40+492.0	7.4m RT	314388.6	182618.4
40+511.0	5.6m RT	314371.8	182628.2

Driveway Openings

	Station	Offset to	Station	Offset
D18	40+350.9,	5.6 LT	40+359.3,	5.6 LT
D19	40+405.5,	5.6 LT	40+409.5,	5.6 LT
D20	40+463.3,	5.6 LT	40+468.3,	5.6 LT
D21	40+489.9,	5.6 LT	40+493.9,	5.6 LT
D22	40+506.5,	5.6 LT	40+510.8,	5.6 LT
D23	40+411.5,	5.6 RT	40+421.5,	5.6 RT
D24	40+470.4,	5.6 RT	40+481.0,	5.6 RT
D25	40+492.0,	5.6 RT	40+511.0,	5.6 RT

PLAN

10 0 10 20

SCALE
(in meters)

Control Points for GG53				
Point	Station	Offset	X-Coord	Y-Coord
1	7+013.4	4.5 LT	314415.2	182605.3
2	7+011.0	4.5 LT	314413.0	182603.3
3	40+470.4	5.6 RT	314404.4	182603.0
4	40+473.8	5.6 RT	314401.9	182605.2
5	40+505.3	5.6 RT	314376.5	182624.9
BI	7+011.0	11.1 LT	314408.6	182608.1

CURVE DATA for GG53		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG53		
2 TO 3	6.6 m	9.4 m
4 TO 5	305.6 m	32.1 m

Control Points for GG3W				
Point	Station	Offset	X-Coord	Y-Coord
1	40+481.0	8.2 RT	314397.9	182612.0
2	40+492.0	8.2 RT	314389.0	182619.0

CURVE DATA for GG3W		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG3W		
1 TO 2	308.2 m	11.3 m

Control Points for GG40				
Point	Station	Offset	X-Coord	Y-Coord
1	6+012.2	6.0 RT	314489.5	182538.1
2	40+365.6	8.2 RT	314485.4	182536.4
3	40+448.4	8.2 RT	314422.8	182590.6
4	7+013.3	7.1 RT	314422.6	182596.3
5	7+014.0	7.1 RT	314423.1	182596.9

CURVE DATA for GG40		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG40		
1 TO 2	4.8 m	4.6 m
3 TO 4	3.9 m	6.4 m

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
PIN 10018.00

HIGHWAY PLANS

PROJ. MANAGER	R. WEBSTER		
DESIGN-DETAILED	R. NORWOOD	D.BURGESS	01-22-09
CHECKED-REVIEWED	T. CORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
MAIN STREET (ROUTE 4/17)

CURB GEOMETRICS PLAN

SHEET NUMBER

47

OF 148

Date:2/9/2011
Username: common
Division: HIGHWAY
Filename: ...\highway\msto\047_Geometry3.dgn

Control Points for GG36				
Point	Station	Offset	X-Coord	Y-Coord
6	40+557.9	5.6 LT	314326.9	182645.8
7	40+603.4	5.6 LT	314291.9	182676.6

CURVE DATA for GG36		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG36		
6 TO 7	205.6 m	46.8 m

Control Points for GG38				
Point	Station	Offset	X-Coord	Y-Coord
1	40+603.4	5.6 LT	314291.9	182676.6
2	40+630.0	7.2 LT	314273.6	182697.1
3	40+656.7	7.2 LT	314259.5	182720.9

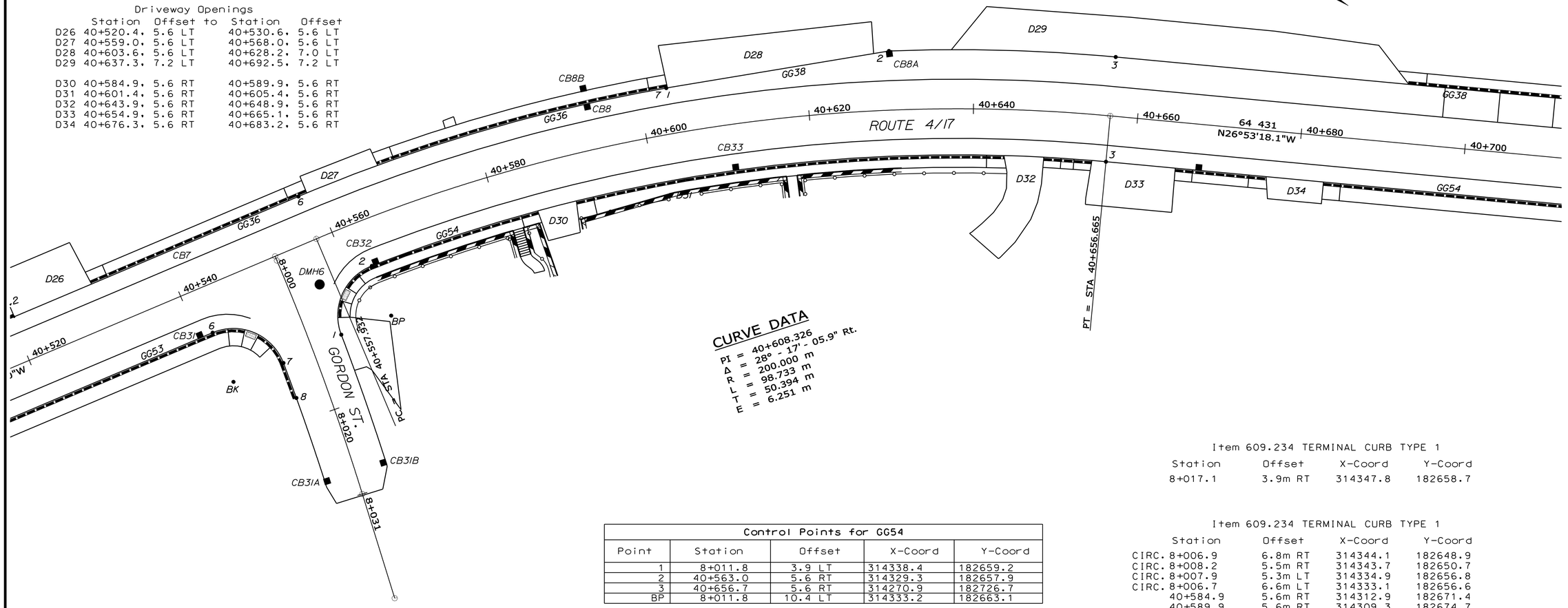
CURVE DATA for GG38		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG38		
2 TO 3	207.2 m	27.6 m

Item 609.237 TERMINAL CURB TYPE 1

Station	Offset	X-Coord	Y-Coord
40+530.6	5.6m LT	314349.4	182630.2
40+559.0	5.6m LT	314326.0	182646.4
40+568.0	5.6m LT	314318.6	182651.9
40+603.1	5.6m LT	314291.9	182676.6
40+692.5	7.2m LT	314243.3	182752.8

Driveway Openings

	Station	Offset to	Station	Offset
D26	40+520.4.	5.6 LT	40+530.6.	5.6 LT
D27	40+559.0.	5.6 LT	40+568.0.	5.6 LT
D28	40+603.6.	5.6 LT	40+628.2.	7.0 LT
D29	40+637.3.	7.2 LT	40+692.5.	7.2 LT
D30	40+584.9.	5.6 RT	40+589.9.	5.6 RT
D31	40+601.4.	5.6 RT	40+605.4.	5.6 RT
D32	40+643.9.	5.6 RT	40+648.9.	5.6 RT
D33	40+654.9.	5.6 RT	40+665.1.	5.6 RT
D34	40+676.3.	5.6 RT	40+683.2.	5.6 RT



CURVE DATA

PI = 40+608.326
Δ = 28° - 17' - 05.9" Rt.
R = 200.000 m
T = 98.733 m
L = 50.394 m
E = 6.251 m

Control Points for GG53				
Point	Station	Offset	X-Coord	Y-Coord
6	40+541.9	5.6 RT	314346.5	182645.8
7	8+012.5	3.9 RT	314345.0	182655.1
8	8+017.1	3.9 RT	314347.8	182658.7
BK	8+012.5	10.4 RT	314350.2	182651.1

CURVE DATA for GG53		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG53		
6 TO 7	6.5 m	10.5 m
7 TO 8	296.1 m	4.5 m

Control Points for GG54				
Point	Station	Offset	X-Coord	Y-Coord
1	8+011.8	3.9 LT	314338.4	182659.2
2	40+563.0	5.6 RT	314329.3	182657.9
3	40+656.7	5.6 RT	314270.9	182726.7
BP	8+011.8	10.4 LT	314333.2	182663.1

CURVE DATA for GG54		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG54		
1 TO 2	6.5 m	10.2 m
2 TO 3	194.4 m	91.0 m

Item 609.234 TERMINAL CURB TYPE 1

Station	Offset	X-Coord	Y-Coord
8+017.1	3.9m RT	314347.8	182658.7

Item 609.234 TERMINAL CURB TYPE 1

	Station	Offset	X-Coord	Y-Coord
CIRC.	8+006.9	6.8m RT	314344.1	182648.9
CIRC.	8+008.2	5.5m RT	314343.7	182650.7
CIRC.	8+007.9	5.3m LT	314334.9	182656.8
CIRC.	8+006.7	6.6m LT	314333.1	182656.6
	40+584.9	5.6m RT	314312.9	182671.4
	40+589.9	5.6m RT	314309.3	182674.7
	40+601.4	5.6m RT	314301.5	182682.7
	40+605.4	5.6m RT	314298.9	182685.5
	40+643.9	5.6m RT	314276.9	182715.7
	40+648.9	5.6m RT	314274.5	182720.0
	40+654.9	5.6m RT	314271.7	182725.1
	40+665.1	5.6m RT	314267.1	182734.2
	40+676.2	5.6m RT	314262.1	182744.1
	40+683.2	5.6m RT	314258.9	182750.3

PLAN

10 0 10 20

SCALE
(in meters)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
PIN 10018.00

HIGHWAY PLANS

PROJ. MANAGER	R. WEBSTER		
DESIGN-DETAILED	R. NORWOOD	D.BURGESS	01-22-09
CHECKED-REVIEWED	T. CORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
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REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

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LIVERMORE FALLS - JAY
MAIN STREET (ROUTE 4/17)

CURB GEOMETRICS PLAN

SHEET NUMBER

48

OF 148

Date:2/9/2011
Username: common
Division: HIGHWAY
Filename: ...\highway\mst0\048_Geometry4.dgn

Control Points for GG38				
Point	Station	Offset	X-Coord	Y-Coord
4	40+721.1	7.2 LT	314230.4	182778.3
5	40+830.0	7.2 LT	314186.7	182878.9
6	40+836.9	5.6 LT	314185.8	182886.0
7	1+019.9	5.8 LT	314166.8	182896.8
AO	1+023.0	23.6 LT	314169.3	182879.0

CURVE DATA for GG38		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG38		
4 TO 5	921.2 m	109.8 m
6 TO 7	18.0 m	26.3 m

Item 609.237 TERMINAL CURB TYPE 1

Station	Offset	X-Coord	Y-Coord
40+716.2	5.6m RT	314244.0	182779.7
40+723.5	5.6m RT	314240.7	182786.2
40+722.7	7.7m RT	314243.0	182786.5
CIRC. 40+740.9	6.9m RT	314234.3	182802.3
CIRC. 40+742.2	8.1m RT	314234.8	182804.0
09+016.8	3.9m RT	314241.2	182807.8
09+016.6	6.0m RT	314241.4	182805.7
40+764.6	7.2m RT	314224.7	182823.8
CIRC. 40+814.0	8.0m RT	314206.6	182869.3
CIRC. 40+815.3	9.2m RT	314207.2	182870.9
CIRC. 40+829.1	8.8m RT	314202.0	182883.6
CIRC. 40+830.3	7.4m RT	314200.3	182884.3
CIRC. 40+886.5	6.8m RT	314182.3	182937.0
CIRC. 40+887.8	8.1m RT	314183.1	182938.6
10+024.0	6.6m LT	314241.4	182805.7

Control Points for GG41				
Point	Station	Offset	X-Coord	Y-Coord
1	1+017.4	5.8 RT	314166.3	182908.6
2	40+875.8	5.7 LT	314173.4	182923.1
AP	1+019.8	18.6 RT	314160.7	182920.4

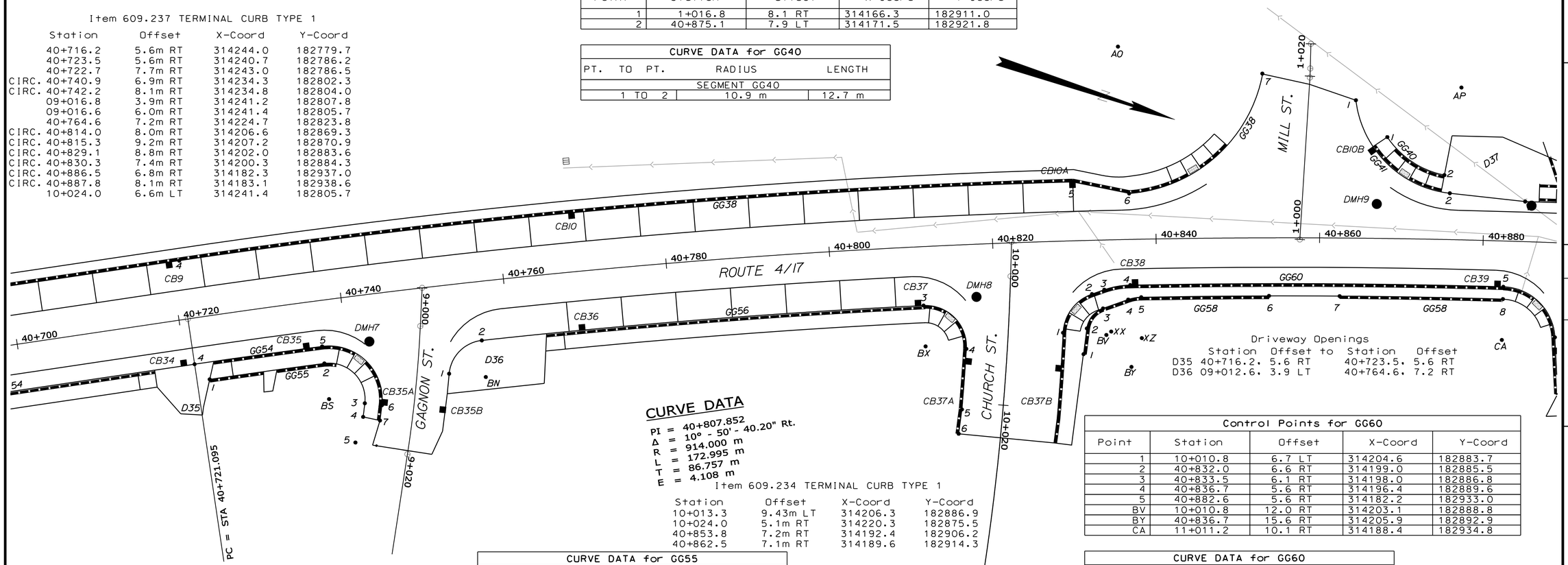
CURVE DATA for GG41		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG41		
1 TO 2	13.0 m	17.4 m

Control Points for GG40				
Point	Station	Offset	X-Coord	Y-Coord
1	1+016.8	8.1 RT	314166.3	182911.0
2	40+875.1	7.9 LT	314171.5	182921.8

CURVE DATA for GG40		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG40		
1 TO 2	10.9 m	12.7 m

Item 609.237 TERMINAL CURB TYPE 1

Station	Offset	X-Coord	Y-Coord
CIRC. 40+844.1	7.6m LT	314181.5	182892.1
CIRC. 40+845.6	8.6m LT	314180.1	182893.3
CIRC. 40+869.3	8.2m LT	314173.0	182916.1
CIRC. 40+869.2	11.0m LT	314170.3	182915.2
CIRC. 40+870.8	7.2m LT	314173.5	182917.9
CIRC. 40+874.7	5.8m LT	314173.6	182922.1
CIRC. 40+875.1	7.9m LT	314171.5	182921.8
CIRC. 1+007.9	12.6m LT	314180.1	182893.3
CIRC. 1+010.9	9.6m LT	314176.5	182895.5
CIRC. 1+011.9	8.2m RT	314171.0	182912.4



CURVE DATA

PI = 40+807.852
Δ = 10° - 50' - 40.20" Rt.
R = 914.000 m
L = 172.995 m
T = 86.757 m
E = 4.108 m

Item 609.234 TERMINAL CURB TYPE 1

Station	Offset	X-Coord	Y-Coord
10+013.3	9.43m LT	314206.3	182886.9
10+024.0	5.1m RT	314220.3	182875.5
40+853.8	7.2m RT	314192.4	182906.2
40+862.5	7.1m RT	314189.6	182914.3

Driveway Openings

	Station	Offset	to Station	Offset
D35	40+716.2.	5.6 RT	40+723.5.	5.6 RT
D36	09+012.6.	3.9 LT	40+764.6.	7.2 RT

Control Points for GG54				
Point	Station	Offset	X-Coord	Y-Coord
4	40+721.1	5.6 RT	314241.8	182784.1
5	40+736.9	5.6 RT	314234.8	182798.2
6	9+014.8	3.9 RT	314239.3	182807.4
7	9+016.8	3.9 RT	314241.2	182807.8
BS	9+014.8	10.4 RT	314240.7	182801.1

CURVE DATA for GG54		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG54		
4 TO 5	908.4 m	15.8 m
5 TO 6	6.5 m	11.8 m
6 TO 7	146.1 m	1.9 m

Control Points for GG55				
Point	Station	Offset	X-Coord	Y-Coord
1	40+722.7	7.7 RT	314243.0	182786.5
2	40+736.9	7.7 RT	314236.7	182799.1
3	9+014.8	6.0 RT	314239.8	182805.4
4	9+016.3	6.0 RT	314241.4	182805.7
5	9+020.0	6.5 RT	314244.7	182805.8

CURVE DATA for GG55		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG55		
1 TO 2	906.3 m	14.2 m
2 TO 3	4.4 m	8.0 m
3 TO 4	144.0 m	1.7 m

Control Points for GG56				
Point	Station	Offset	X-Coord	Y-Coord
1	9+010.3	3.9 LT	314233.1	182814.0
2	40+756.6	7.2 RT	314227.9	182816.5
3	40+811.1	7.2 RT	314206.8	182866.3
4	10+013.4	5.0 RT	314210.2	182873.1
5	10+021.0	5.0 RT	314217.4	182874.9
6	10+024.0	5.1 RT	314220.3	182875.5
BN	9+010.2	8.4 LT	314232.0	182818.4
BX	10+013.4	10.0 RT	314211.5	182868.2

CURVE DATA for GG56		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG56		
1 TO 2	4.5 m	6.2 m
2 TO 3	906.8 m	54.2 m
3 TO 4	5.0 m	8.4 m
4 TO 5	295.0 m	7.4 m

PLAN

10 0 10 20

SCALE
(in meters)

Control Points for GG60				
Point	Station	Offset	X-Coord	Y-Coord
1	10+010.8	6.7 LT	314204.6	182883.7
2	40+832.0	6.6 RT	314199.0	182885.5
3	40+833.5	6.1 RT	314198.0	182886.8
4	40+836.7	5.6 RT	314196.4	182889.6
5	40+882.6	5.6 RT	314182.2	182933.0
BV	10+010.8	12.0 RT	314203.1	182888.8
BY	40+836.7	15.6 RT	314205.9	182892.9
CA	11+011.2	10.1 RT	314188.4	182934.8

CURVE DATA for GG60		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG60		
1 TO 2	5.3 m	6.3 m
3 TO 4	10.0 m	3.2 m
4 TO 5	908.4 m	45.6 m
5 TO 6	6.5 m	9.7 m

Control Points for GG58				
Point	Station	Offset	X-Coord	Y-Coord
1	10+013.2	9.4 LT	314206.3	182886.9
2	10+010.1	9.6 LT	314203.1	182886.3
3	40+833.3	8.4 RT	314200.2	182887.4
4	40+836.4	7.3 RT	314198.2	182889.9
5	40+838.0	7.1 RT	314197.4	182891.4
6	40+853.8	7.1 RT	314192.3	182906.1
7	40+862.5	7.1 RT	314189.6	182914.3
8	40+882.6	7.1 RT	314183.6	182933.4
XX	40+834.2	11.2 RT	314202.6	182889.2
XZ	40+838.0	12.1 RT	314202.1	182893.0

CURVE DATA for GG58		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG58		
2 TO 3	3.0 m	3.3 m
4 TO 5	5.0 m	1.6 m
5 TO 8	906.9 m	44.2 m

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
PIN 10018.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	R. WEBSTER	
DESIGN-DETAILED	R. NORWOOD	01-22-09
CHECKED-REVIEWED	D.BURGESS	
DESIGN2-DETAILED2	T. CORRILL	
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
MAIN STREET (ROUTE 4/17)

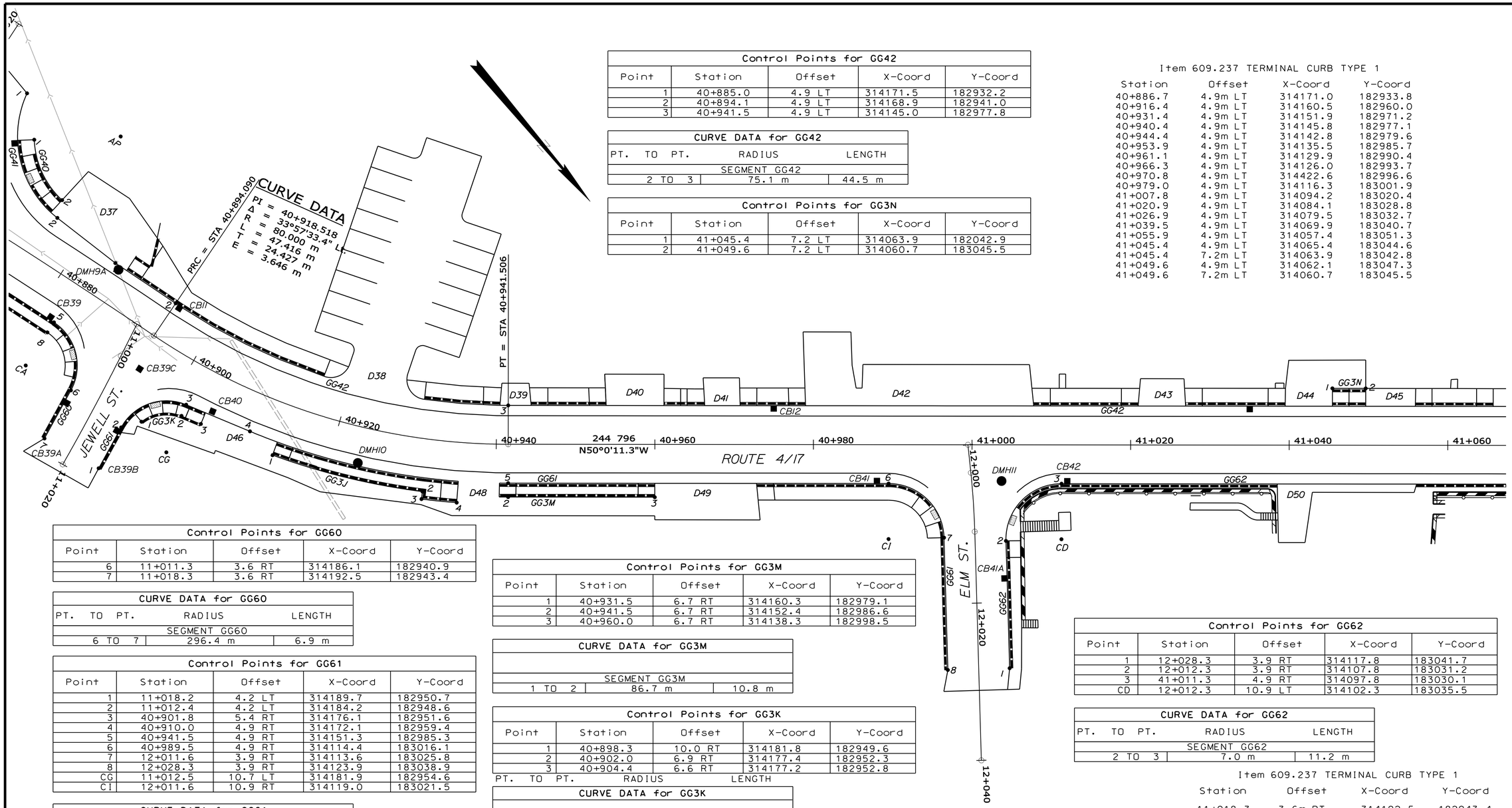
CURB GEOMETRICS PLAN

SHEET NUMBER

49

OF 148

Filename: ...\highway\nsta\049_Geometry5.dgn
Division: HIGHWAY Username: common Date:2/9/2011



Control Points for GG42				
Point	Station	Offset	X-Coord	Y-Coord
1	40+885.0	4.9 LT	314171.5	182932.2
2	40+894.1	4.9 LT	314168.9	182941.0
3	40+941.5	4.9 LT	314145.0	182977.8

CURVE DATA for GG42		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG42		
2 TO 3	75.1 m	44.5 m

Control Points for GG3N				
Point	Station	Offset	X-Coord	Y-Coord
1	41+045.4	7.2 LT	314063.9	182042.9
2	41+049.6	7.2 LT	314060.7	183045.5

Item 609.237 TERMINAL CURB TYPE 1

Station	Offset	X-Coord	Y-Coord
40+886.7	4.9m LT	314171.0	182933.8
40+916.4	4.9m LT	314160.5	182960.0
40+931.4	4.9m LT	314151.9	182971.2
40+940.4	4.9m LT	314145.8	182977.1
40+944.4	4.9m LT	314142.8	182979.6
40+953.9	4.9m LT	314135.5	182985.7
40+961.1	4.9m LT	314129.9	182990.4
40+966.3	4.9m LT	314126.0	182993.7
40+970.8	4.9m LT	314422.6	182996.6
40+979.0	4.9m LT	314116.3	183001.9
41+007.8	4.9m LT	314094.2	183020.4
41+020.9	4.9m LT	314084.1	183028.8
41+026.9	4.9m LT	314079.5	183032.7
41+039.5	4.9m LT	314069.9	183040.7
41+055.9	4.9m LT	314057.4	183051.3
41+045.4	4.9m LT	314065.4	183044.6
41+045.4	7.2m LT	314063.9	183042.8
41+049.6	4.9m LT	314062.1	183047.3
41+049.6	7.2m LT	314060.7	183045.5

Control Points for GG60				
Point	Station	Offset	X-Coord	Y-Coord
6	11+011.3	3.6 RT	314186.1	182940.9
7	11+018.3	3.6 RT	314192.5	182943.4

CURVE DATA for GG60		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG60		
6 TO 7	296.4 m	6.9 m

Control Points for GG61				
Point	Station	Offset	X-Coord	Y-Coord
1	11+018.2	4.2 LT	314189.7	182950.7
2	11+012.4	4.2 LT	314184.2	182948.6
3	40+901.8	5.4 RT	314176.1	182951.6
4	40+910.0	4.9 RT	314172.1	182959.4
5	40+941.5	4.9 RT	314151.3	182985.3
6	40+989.5	4.9 RT	314114.4	183016.1
7	12+011.6	3.9 RT	314113.6	183025.8
8	12+028.3	3.9 RT	314123.9	183038.9
CG	11+012.5	10.7 LT	314181.9	182954.6
CI	12+011.6	10.9 RT	314119.0	183021.5

CURVE DATA for GG61		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG61		
1 TO 2	4.2 m	5.9 m
2 TO 3	6.5 m	9.5 m
4 TO 5	84.9 m	33.4 m
6 TO 7	7.0 m	10.8 m

Control Points for GG3J				
Point	Station	Offset	X-Coord	Y-Coord
1	40+913.5	6.7 RT	314171.8	182963.5
2	40+931.5	6.7 RT	314160.3	182979.1
3	40+931.5	7.6 RT	314161.0	182979.8
4	40+935.6	7.6 RT	314157.8	182983.0

CURVE DATA for GG3J		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG3J		
1 TO 2	86.6 m	19.5 m
3 TO 4	87.6 m	4.5 m

Control Points for GG3M				
Point	Station	Offset	X-Coord	Y-Coord
1	40+931.5	6.7 RT	314160.3	182979.1
2	40+941.5	6.7 RT	314152.4	182986.6
3	40+960.0	6.7 RT	314138.3	182998.5

CURVE DATA for GG3M		
SEGMENT GG3M		
1 TO 2	86.7 m	10.8 m

Control Points for GG3K				
Point	Station	Offset	X-Coord	Y-Coord
1	40+898.3	10.0 RT	314181.8	182949.6
2	40+902.0	6.9 RT	314177.4	182952.3
3	40+904.4	6.6 RT	314177.2	182952.8

CURVE DATA for GG3K		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG3M		
1 TO 2	5.0 m	5.4 m

Driveway Openings

	Station	Offset to	Station	Offset
D37	40+874.7.	5.8 LT	40+886.7.	4.9 LT
D38	40+916.4.	4.9 LT	40+930.2.	4.9 LT
D39	40+940.4.	4.9 LT	40+944.4.	4.9 LT
D40	40+953.9.	4.9 LT	40+961.1.	4.9 LT
D41	40+966.3.	4.9 LT	40+970.8.	4.9 LT
D42	40+979.0.	4.9 LT	41+007.8.	4.9 LT
D43	41+020.9.	4.9 LT	41+026.9.	4.9 LT
D44	41+039.5.	4.9 LT	41+045.4.	4.9 LT
D45	41+049.6.	4.9 LT	41+055.9.	4.9 LT
D46	40+904.3.	5.1 RT	40+913.5.	4.9 RT
D47	NOT USED			
D48	40+935.6.	4.9 RT	40+940.5.	4.9 RT
D49	40+960.0.	4.9 RT	40+972.8.	4.9 RT
D50	41+038.5.	4.9 RT	40+956.1.	4.9 RT

Item 609.234 TERMINAL CURB TYPE 1

Station	Offset	X-Coord	Y-Coord
11+018.2	4.2m LT	314189.7	182950.7
40+904.3	5.1m RT	314174.9	182954.0
12+028.3	3.9m RT	314123.9	183038.9
12+028.3	3.9m LT	314117.8	183043.7
41+005.6	7.8m RT	314104.1	183028.7
41+038.5	4.9m RT	314077.0	183047.6
41+056.1	4.9m RT	314063.5	183058.9

PLAN

10 0 10 20

SCALE
(in meters)

Control Points for GG62				
Point	Station	Offset	X-Coord	Y-Coord
1	12+028.3	3.9 RT	314117.8	183041.7
2	12+012.3	3.9 RT	314107.8	183031.2
3	41+011.3	4.9 RT	314097.8	183030.1
CD	12+012.3	10.9 LT	314102.3	183035.5

CURVE DATA for GG62		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG62		
2 TO 3	7.0 m	11.2 m

Item 609.237 TERMINAL CURB TYPE 1

Station	Offset	X-Coord	Y-Coord
11+018.3	3.6m RT	314192.5	182943.4
40+897.0	9.5m RT	314181.8	182948.1
40+898.3	10.0m LT	314181.8	182949.6
40+899.1	6.4m RT	314178.1	182949.3
40+899.9	7.6m RT	314179.0	182950.5
40+902.3	5.3m RT	314175.8	182952.1
40+902.5	6.8m RT	314177.2	182952.8
40+913.5	4.9m RT	314170.3	182962.6
40+913.5	6.7m RT	314171.8	182963.5
40+931.5	4.9m RT	314159.0	182978.0
40+931.5	6.7m RT	314160.3	182979.1
40+935.7	4.9m RT	314156.0	182981.0
40+935.6	7.6m RT	314157.8	182983.0
40+940.7	4.9m RT	314152.1	182984.6
40+940.7	6.7m RT	314153.3	182985.9
40+960.0	4.9m RT	314137.1	182997.2
40+960.0	6.7m RT	314138.2	182998.5
40+972.8	4.9m RT	314127.3	183005.4
12+007.4	5.1m RT	314112.0	183021.9
12+009.5	5.2m RT	314112.5	183024.0
12+012.3	3.9m LT	314107.8	183031.1

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
PIN 10018.00

HIGHWAY PLANS

PROJ. MANAGER	R. WEBSTER		
DESIGN-DETAILED	R. NORWOOD	D.BURGESS	01-22-09
CHECKED-REVIEWED	T. CORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
MAIN STREET (ROUTE 4/17)

CURB GEOMETRICS PLAN

SHEET NUMBER

50

OF 148

Filename: ...\highway\msta\050_Geometry6.dgn
Division: HIGHWAY Username: common Date:2/9/2011

Driveway Openings

	Station	Offset	to Station	Offset
D51	41+065.7,	4.9 LT	41+072.7,	4.9 LT
D52	41+086.3,	4.9 LT	41+090.3,	4.9 LT
D53	41+113.7,	4.9 LT	41+119.9,	4.9 LT
D54	41+132.6,	4.9 LT	41+136.1,	4.9 LT
D55	41+144.4,	4.9 LT	41+147.4,	4.9 LT
D56	41+155.0,	4.9 LT	41+161.3,	4.9 LT
D57	41+179.2,	4.9 LT	41+199.4,	4.9 LT
D58	41+210.4,	4.9 LT	41+221.4,	4.9 LT
D59	41+237.6,	4.9 LT	41+243.4,	4.9 LT
D63	14+022.7,	4.5 LT	14+027.0,	4.5 LT
D60	41+099.0,	4.9 RT	41+103.0,	4.9 RT
D61	41+164.0,	5.0 RT	41+170.7,	4.9 RT
D62	13+014.4,	3.6 RT	13+022.3,	3.6 RT

Item 609.234 TERMINAL CURB TYPE 1

Station	Offset	X-Coord	Y-Coord
41+177.1	7.1m LT	313963.0	183127.5

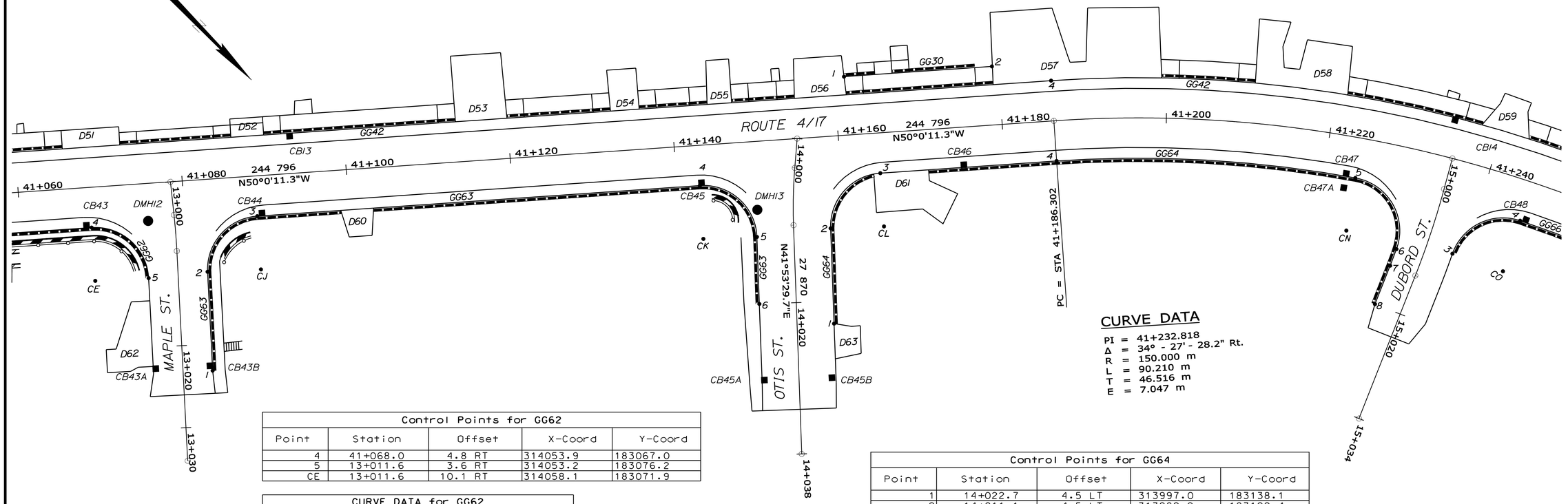
Control Points for GG42				
Point	Station	Offset	X-Coord	Y-Coord
4	41+186.3	4.9 LT	313957.5	183135.1

CURVE DATA for GG42		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG42		
4 TO 5	154.9 m	93.1 m

Control Points for GG30				
Point	Station	Offset	X-Coord	Y-Coord
1	41+161.2	7.1 LT	313975.3	183117.3
2	41+179.2	7.1 LT	313961.4	183128.9

Item 609.237 TERMINAL CURB TYPE 1

Station	Offset	X-Coord	Y-Coord
41+065.7	4.9m LT	314049.8	183057.6
41+072.7	4.9m LT	314044.5	183062.1
41+086.3	4.9m LT	314034.8	183070.8
41+090.3	4.9m LT	314031.0	183073.4
41+113.7	4.9m LT	314013.1	183088.4
41+119.9	4.9m LT	314008.3	183092.5
41+132.6	4.9m LT	313998.6	183100.6
41+136.1	4.9m LT	313995.9	183102.8
41+144.4	4.9m LT	313989.6	183108.1
41+147.4	4.9m LT	313987.3	183110.1
41+155.0	4.9m LT	313981.4	183115.0
41+161.3	4.9m LT	313976.6	183119.1
41+161.2	7.1m LT	313975.3	183117.3
41+165.0	7.1m LT	313972.4	183119.7
41+167.0	7.1m LT	313970.8	183121.0
41+179.2	4.9m LT	313962.9	183130.6
41+199.4	4.9m LT	313947.5	183144.2
41+210.4	4.9m LT	313939.8	183152.6
41+221.4	4.9m LT	313932.7	183161.4
41+237.6	4.9m LT	313923.4	183175.4
41+243.4	4.9m LT	313920.5	183180.6



CURVE DATA

PI = 41+232.818
Δ = 34° - 27' - 28.2" Rt.
R = 150.000 m
L = 90.210 m
T = 46.516 m
E = 7.047 m

Control Points for GG62				
Point	Station	Offset	X-Coord	Y-Coord
4	41+068.0	4.8 RT	314053.9	183067.0
5	13+011.6	3.6 RT	314053.2	183076.2
CE	13+011.6	10.1 RT	314058.1	183071.9

CURVE DATA for GG62		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG62		
4 TO 5	6.5 m	10.3 m

Control Points for GG63				
Point	Station	Offset	X-Coord	Y-Coord
1	13+023.2	3.6 LT	314055.4	183089.7
2	13+011.2	3.6 LT	314047.5	183080.6
3	41+088.8	4.9 RT	314038.4	183080.0
4	41+142.8	4.9 RT	313997.1	183114.6
5	14+011.8	4.5 RT	313996.4	183124.0
6	14+020.0	4.5 RT	314001.9	183130.0
CJ	13+011.2	10.1 LT	314042.6	183084.9
CK	14+011.8	11.0 RT	314001.3	183119.6

CURVE DATA for GG63		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG63		
2 TO 3	6.5 m	10.1 m
4 TO 5	6.5 m	10.4 m

Control Points for GG64				
Point	Station	Offset	X-Coord	Y-Coord
1	14+022.7	4.5 LT	313997.0	183138.1
2	14+011.1	4.5 LT	313989.2	183129.4
3	41+164.8	4.9 RT	313980.2	183128.8
4	41+186.3	4.9 RT	313963.8	183142.6
5	41+224.0	4.9 RT	313939.0	183169.3
6	15+012.7	3.3 RT	313941.4	183179.0
7	15+015.0	3.3 RT	313943.4	183179.9
8	15+020.0	3.3 RT	313948.0	183182.0
CL	14+011.1	11.0 LT	313984.4	183133.8
CN	15+012.7	9.8 RT	313944.3	183173.2

CURVE DATA for GG64		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG64		
2 TO 3	6.5 m	10.0 m
4 TO 5	145.1 m	36.5 m
5 TO 6	6.5 m	11.4 m
6 TO 7	96.7 m	2.2 m

PLAN

10 0 10 20

SCALE
(in meters)

Item 609.234 TERMINAL CURB TYPE 1

Station	Offset	X-Coord	Y-Coord
13+011.6	3.6m RT	314053.2	183076.2
13+023.2	3.6m LT	314055.4	183089.7
14+020.0	4.5m RT	314001.9	183130.0
15+020.0	3.3m RT	313948.0	183182.0
15+020.0	3.3m LT	313945.2	183188.0
41+099.0	4.9m RT	314030.6	183086.5
41+103.0	4.9m RT	314027.6	183089.1
14+022.7	4.5m LT	313997.0	183138.1
41+164.0	5.0m RT	313980.9	183128.3
41+170.7	4.9m RT	313975.7	183132.6
41+177.1	7.3m LT	313962.9	183127.4

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
PIN 10018.00

HIGHWAY PLANS

			DATE
PROJ. MANAGER	R. WEBSTER		
DESIGN-DETAILED	R. NORWOOD	D.BURGESS	01-22-09
CHECKED-REVIEWED	T. CORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
MAIN STREET (ROUTE 4/17)

CURB GEOMETRICS PLAN

SHEET NUMBER

51

OF 148

Division: HIGHWAY Username: common Date:2/9/2011

Filename: ...\highway\msta\051_Geometry7.dgn

Driveway Openings

	Station	Offset	to	Station	Offset
D64	41+250.5,	4.9	LT	41+256.5,	4.9 LT
D65	41+272.0,	4.9	LT	41+284.0,	4.9 LT
D66	41+297.2,	4.9	LT	41+302.2,	4.9 LT
D67	41+328.7,	4.9	LT	41+335.7,	4.9 LT
D68	41+360.7,	4.9	LT	41+365.7,	4.9 LT
D69	41+261.2,	4.9	RT	41+291.7,	4.9 RT
D70	41+301.2,	4.9	RT	41+305.3,	4.9 RT
D71	41+314.4,	4.9	RT	41+320.4,	4.9 RT
D72	41+362.0,	4.9	RT	41+371.0,	4.9 RT

Control Points for GG42

Point	Station	Offset	X-Coord	Y-Coord
5	41+276.5	4.9 LT	313907.8	183212.3
6	41+349.2	4.9 LT	313888.3	183282.3

CURVE DATA for GG42

PT. TO PT.	RADIUS	LENGTH
SEGMENT GG42		
6 TO 7	154.9 m	79.5 m

Control Points for GG3P

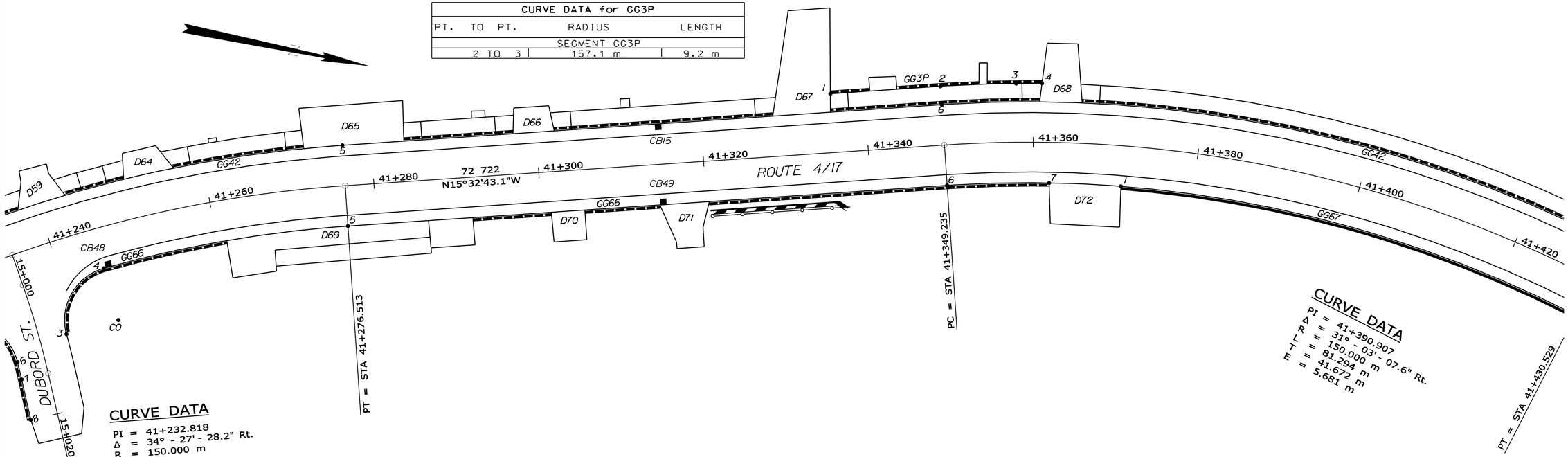
Point	Station	Offset	X-Coord	Y-Coord
1	41+335.9	7.1 LT	313889.7	183268.9
2	41+349.2	7.1 LT	313886.1	183281.7
3	41+358.0	7.1 LT	313884.0	183290.6
4	41+361.0	7.1 LT	313883.3	183293.7

CURVE DATA for GG3P

PT. TO PT.	RADIUS	LENGTH
SEGMENT GG3P		
2 TO 3	157.1 m	9.2 m

Item 609.237 TERMINAL CURB TYPE 1

Station	Offset	X-Coord	Y-Coord
41+250.5	4.9m LT	313917.2	183187.1
41+256.5	4.9m LT	313914.6	183192.8
41+272.0	4.9m LT	313909.1	183207.7
41+284.0	4.9m LT	313905.8	183219.4
41+297.2	4.9m LT	313902.2	183232.2
41+302.2	4.9m LT	313900.9	183237.0
41+328.7	4.9m LT	313893.8	183262.6
41+335.7	4.9m LT	313891.9	183269.3
41+335.9	7.1m LT	313889.7	183268.9
41+340.7	7.1m LT	313888.4	183273.5
41+343.9	7.1m LT	313887.6	183276.6
41+353.7	7.1m LT	313885.0	183286.3
41+354.7	7.1m LT	313884.7	183287.2
41+360.7	4.9m LT	313885.6	183293.9
41+361.0	7.1m LT	313883.3	183293.7
41+365.7	4.9m LT	313884.6	183298.9



CURVE DATA

PI = 41+232.818
Δ = 34° - 27' - 28.2" Rt.
R = 150.000 m
L = 90.210 m
T = 46.516 m
E = 7.047 m

CURVE DATA

PI = 41+390.907
Δ = 31° - 03' - 07.6" Rt.
R = 150.000 m
L = 81.294 m
T = 41.672 m
E = 5.681 m

Control Points for GG66

Point	Station	Offset	X-Coord	Y-Coord
1	NOT USED			
2	NOT USED			
3	15+011.0	3.3 LT	313936.9	183184.2
4	41+245.5	4.9 RT	313928.2	183187.0
5	41+276.5	4.9 RT	313917.2	183214.9
6	41+349.2	4.9 RT	313897.7	183284.9
7	41+462.0	4.9 RT	313895.0	183297.0
CO	15+011.0	9.8 LT	313934.0	183190.0

CURVE DATA for GG66

PT. TO PT.	RADIUS	LENGTH
SEGMENT GG66		
3 TO 4	6.5 m	10.2 m
4 TO 5	145.1 m	30.0 m
6 TO 7	145.1 m	12.4 m

Control Points for GG67 Bituminous Curb

Point	Station	Offset	X-Coord	Y-Coord
1	41+371.0	4.9 RT	313893.6	183305.6

CURVE DATA for GG67

PT. TO PT.	RADIUS	LENGTH
SEGMENT GG67		
1 TO 2	145.1 m	57.6 m

Item 609.234 TERMINAL CURB TYPE 1

Station	Offset	X-Coord	Y-Coord
15+011.0	3.3m LT	313936.9	183184.2
41+261.3	4.9m RT	313921.9	183200.9
41+291.7	4.9m RT	313913.2	183229.5
41+301.2	4.9m RT	313910.6	183238.7
41+305.3	4.9m RT	313909.5	183242.6
41+314.4	4.9m RT	313907.1	183251.3
41+320.4	4.9m RT	313905.5	183257.1
41+362.0	4.9m RT	313895.0	183297.0

PLAN

10 0 10 20

SCALE
(in meters)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
PIN 10018.00

HIGHWAY PLANS

			DATE
PROJ. MANAGER	R. WEBSTER	BY	
DESIGN-DETAILED	R. NORWOOD	D.BURGESS	01-22-09
CHECKED-REVIEWED	T. CORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
MAIN STREET (ROUTE 4/17)

CURB GEOMETRICS PLAN

SHEET NUMBER

52

OF 148

Filename: ...\highway\mst0\052_Geometry8.dgn
Division: HIGHWAY Username: common Date:2/9/2011

Control Points for GG42				
Point	Station	Offset	X-Coord	Y-Coord
7	41+430.5	4.9 LT	313888.2	183365.2

Control Points for GG43				
Point	Station	Offset	X-Coord	Y-Coord
1	41+430.5	4.9 LT	313888.2	183365.2
2	41+447.5	5.6 LT	313892.1	183381.8
3	41+497.0	5.6 LT	313905.4	183429.5

Control Points for GG3A				
Point	Station	Offset	X-Coord	Y-Coord
1	41+439.0	7.1 LT	313888.4	183374.0
2	41+447.5	7.4 LT	313890.4	183382.2
3	41+497.0	7.4 LT	313903.6	183430.0

Control Points for GG44 Bituminous Curb				
Point	Station	Offset	X-Coord	Y-Coord
1	41+511.8	5.6 LT	313909.3	183443.7
2	41+572.5	5.6 LT	313925.6	183503.2
3	41+588.1	5.6 LT	313929.2	183517.1

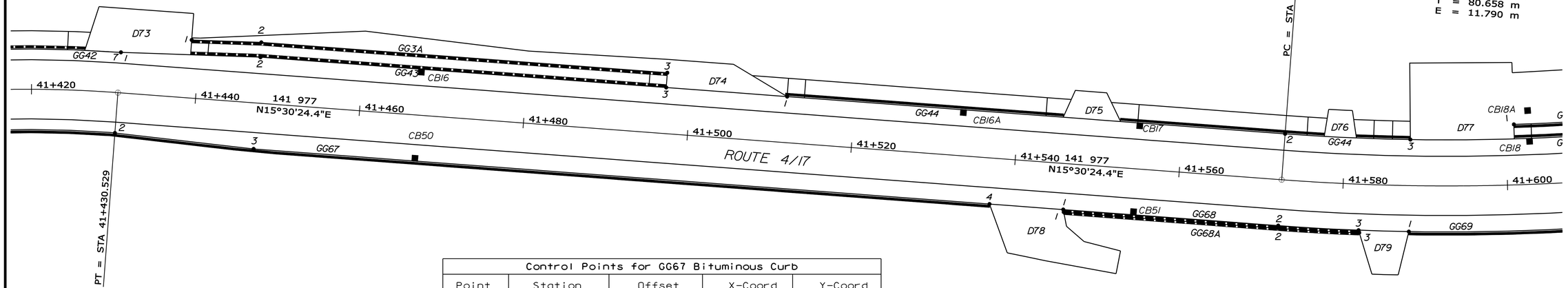
CURVE DATA for GG44		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG44		
2 TO 3	264.4 m	15.3 m

Item 609.237 TERMINAL CURB TYPE 1

Station	Offset	X-Coord	Y-Coord
41+426.3	4.9m LT	313887.2	183361.0
41+439.0	5.3m LT	313890.2	183373.5
41+439.0	7.1m LT	313888.5	183374.0
41+497.0	5.6m LT	313905.4	183429.5
41+497.0	7.4m LT	313903.6	183430.0

Driveway Openings

	Station	Offset	to Station	Offset
D73	41+426.3,	4.9 LT	41+439.0,	5.3 LT
D74	41+497.0,	5.6 LT	41+511.8,	5.6 LT
D75	41+545.4,	5.6 LT	41+552.4,	5.6 LT
D76	41+577.4,	5.6 LT	41+581.4,	5.6 LT
D77	41+588.1,	5.6 LT	41+601.0,	5.6 LT
D78	41+537.3,	5.6 RT	41+546.3,	5.6 LT
D79	41+582.1,	5.6 RT	41+588.1,	5.6 LT



CURVE DATA

PI = 41+653.165
Δ = 33° - 150' - 55.3"
R = 270.000 m
L = 156.759 m
T = 80.658 m
E = 11.790 m

Control Points for GG67 Bituminous Curb				
Point	Station	Offset	X-Coord	Y-Coord
2	41+430.5	4.9 RT	313897.7	183362.6
3	41+447.5	5.6 RT	313902.9	183378.8
4	41+537.3	5.6 RT	313926.9	183465.3

Control Points for GG68 Double Curb				
Point	Station	Offset	X-Coord	Y-Coord
1	41+546.3	5.6 RT	313929.3	183474.0
2	41+572.5	5.6 RT	313936.3	183499.2
3	41+582.1	5.6 RT	313938.8	183508.7

CURVE DATA for GG68		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG68		
2 TO 3	275.6 m	9.8 m

Control Points for GG69 Bituminous Curb				
Point	Station	Offset	X-Coord	Y-Coord
1	41+588.1	5.6 RT	313940.1	183514.7

Item 609.234 TERMINAL CURB TYPE 1

Station	Offset	X-Coord	Y-Coord
41+546.3	5.6m RT	313929.3	183474.0
41+546.4	5.9m RT	313929.7	183474.0
41+582.1	5.6m RT	313938.8	183508.7
41+582.2	5.9m RT	313939.1	183508.7

Control Points for GG68A Double Curb				
Point	Station	Offset	X-Coord	Y-Coord
1	41+546.4	5.9 RT	313929.7	183474.0
2	41+572.5	5.9 RT	313936.6	183499.2
3	41+582.2	5.9 RT	313939.1	183508.7

CURVE DATA for GG68A		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG68A		
2 TO 3	275.9 m	9.8 m

PLAN

10 0 10 20

SCALE
(in meters)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
PIN 10018.00

HIGHWAY PLANS

		SIGNATURE	P.E. NUMBER	DATE
PROJ. MANAGER	R. WEBSTER			
DESIGN-DETAILED	R. NORWOOD	D.BURGESS	01-22-09	
CHECKED-REVIEWED	T. CORRILL			
DESIGN2-DETAILED2				
DESIGN3-DETAILED3				
REVISIONS 1				
REVISIONS 2				
REVISIONS 3				
REVISIONS 4				
FIELD CHANGES				

LIVERMORE FALLS - JAY
MAIN STREET (ROUTE 4/17)

CURB GEOMETRICS PLAN

SHEET NUMBER

53

OF 148

Division: HIGHWAY Username: common Date:2/9/2011

Filename: ...\highway\msto\053_Geometry9.dgn

Division: HIGHWAY Username: common Date:2/9/2011

Filename: ...\mslo\054_Geometry10.dgn

Driveway Openings

	Station	Offset to	Station	Offset
D80	41+615.5,	5.6 LT	41+629.1,	5.6 LT
D81	41+640.8,	5.6 LT	41+646.8,	5.6 LT
D82a	41+673.7,	5.6 LT	41+679.9,	5.6 LT
D82	41+698.9,	5.6 LT	41+705.9,	5.6 LT
D83	41+726.6,	5.6 LT	41+732.6,	5.6 LT
D84	41+631.0,	5.6 RT	41+639.0,	5.6 RT
D85	41+687.5,	5.6 RT	41+694.5,	5.6 RT
D86	41+733.8,	5.6 RT	41+744.8,	5.6 RT

CURVE DATA
PI = 41+653.165
Δ = 33° - 150' - 55.3" Lt.
R = 270.000 m
L = 156.759 m
T = 80.658 m
E = 11.790 m

Control Points for GG44 Bituminous Curb

Point	Station	Offset	X-Coord	Y-Coord
4	41+729.3	5.6 LT	313922.6	183653.6

CURVE DATA for GG44

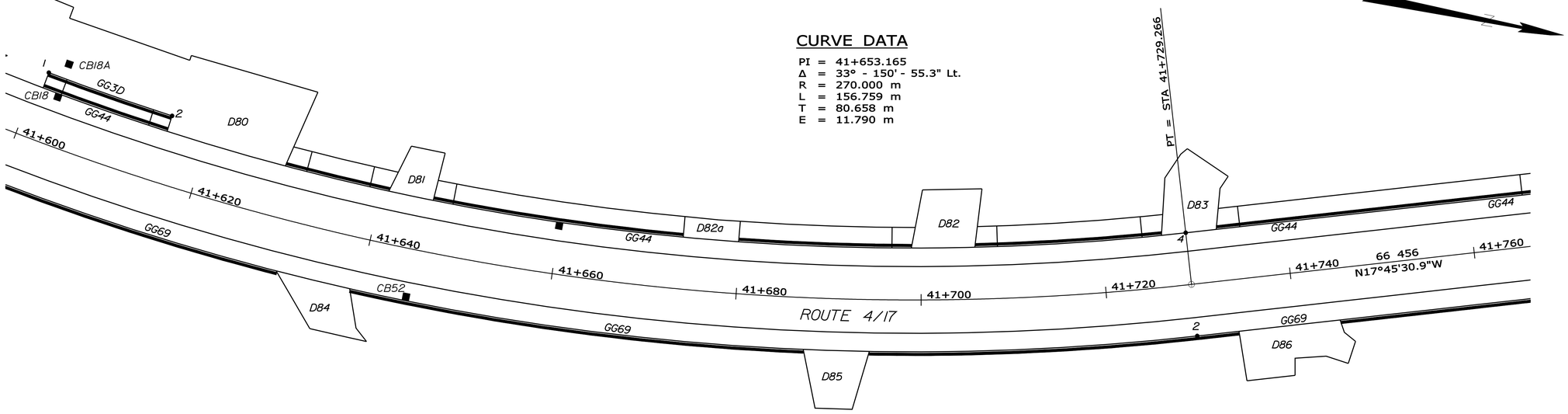
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG44		
3 TO 4	264.4 m	138.3 m

Control Points for GG3D Bituminous Curb

Point	Station	Offset	X-Coord	Y-Coord
1	41+601.0	7.4 LT	313929.8	183529.8
2	41+615.5	7.4 LT	313931.8	183543.7

CURVE DATA for GG3D

PT. TO PT.	RADIUS	LENGTH
SEGMENT GG3D		
1 TO 2	262.6 m	14.1 m



Control Points for GG69 Bituminous Curb

Point	Station	Offset	X-Coord	Y-Coord
2	41+729.3	5.6 LT	313933.2	183657.0

CURVE DATA for GG69

PT. TO PT.	RADIUS	LENGTH
SEGMENT GG69		
1 TO 2	275.6 m	144.1 m

PLAN

10 0 10 20

SCALE
(in meters)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
PIN 10018.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	R. WEBSTER	
DESIGN-DETAILED	R. NORWOOD	01-22-09
CHECKED-REVIEWED	T. CORRILL	
DESIGN2-DETAILED2	ED2	
DESIGN3-DETAILED3	ED3	
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
MAIN STREET (ROUTE 4/17)

CURB GEOMETRICS PLAN

SHEET NUMBER

54

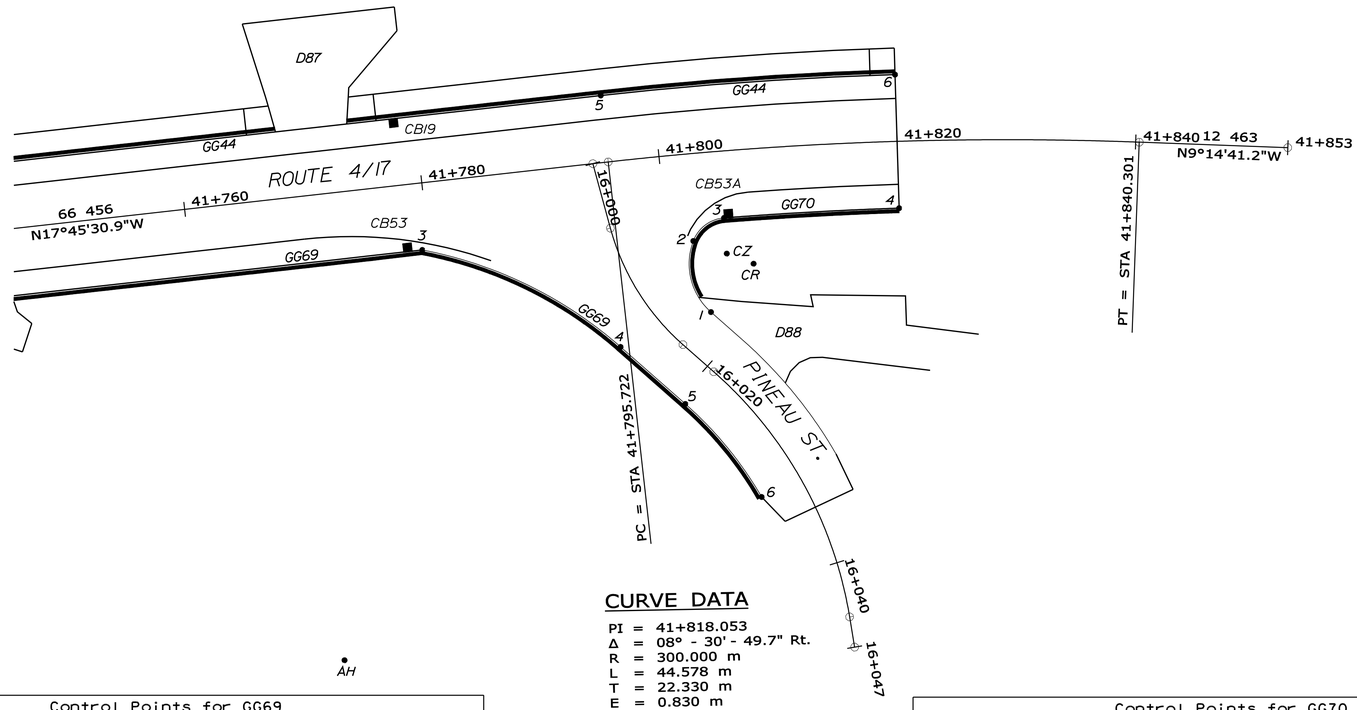
OF 148

Driveway Openings

	Station	Offset	to	Station	Offset
D87	41+768.3,	5.6 LT		41+774.3,	5.6 LT
D88	16+015.3,	3.8 LT		16+024.4,	3.6 LT

Control Points for GG44				
Point	Station	Offset	X-Coord	Y-Coord
5	41+795.7	5.6 LT	313902.3	183716.9
6	41+820.0	5.6 LT	313895.7	183740.7

CURVE DATA for GG44		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG44		
5 TO 6	305.6 m	24.7 m



CURVE DATA

PI = 41+818.053
Δ = 08° - 30' - 49.7" Rt.
R = 300.000 m
L = 44.578 m
T = 22.330 m
E = 0.830 m

Control Points for GG69				
Point	Station	Offset	X-Coord	Y-Coord
3	41+779.4	5.6 RT	313918.0	183704.7
4	16+014.1	3.9 RT	313922.6	183722.6
5	16+020.7	3.6 RT	313926.3	183728.9
6	16+032.0	3.6 RT	313932.6	183736.7
AH	16+016.0	38.7 RT	313952.9	183705.1

CURVE DATA for GG69		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG69		
3 TO 4	35.0 m	18.7 m
5 TO 6	31.4 m	10.1 m

PLAN

10 0 10 20

SCALE
(in meters)

Control Points for GG70				
Point	Station	Offset	X-Coord	Y-Coord
1	16+017.2	3.6 LT	313918.3	183729.5
2	16+009.8	6.1 LT	313912.7	183726.9
3	41+805.0	5.6 RT	313910.3	183729.0
4	41+820.0	5.6 RT	313906.6	183743.2
CZ	16+013.5	7.9 RT	313913.2	183729.8
CR	16+017.2	9.0 LT	313913.6	183732.2

CURVE DATA for GG70		
PT. TO PT.	RADIUS	LENGTH
SEGMENT GG70		
1 TO 2	5.4 m	6.5 m
2 TO 3	3.0 m	3.4 m
3 TO 4	294.4 m	14.7 m

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
PIN 10018.00

HIGHWAY PLANS

PROJ. MANAGER	R. WEBSTER		
DESIGN-DETAILED	R. NORWOOD	D.BURGESS	01-22-09
CHECKED-REVIEWED	T. CORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
MAIN STREET (ROUTE 4/17)

CURB GEOMETRICS PLAN

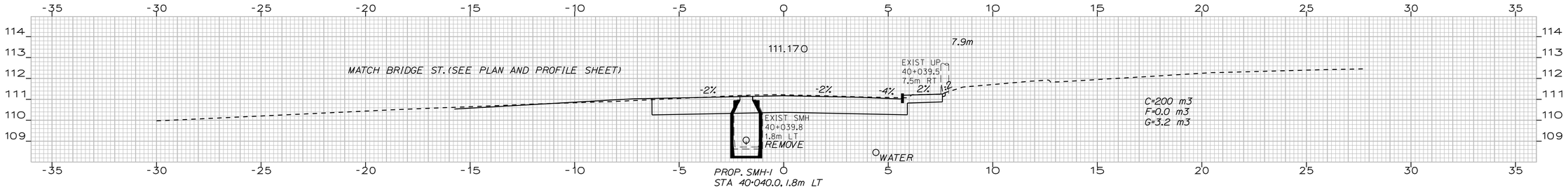
SHEET NUMBER

55

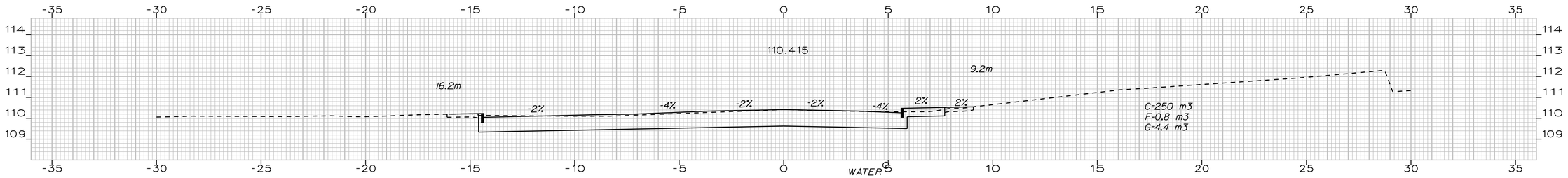
OF 148

Division: HIGHWAY Username: common Date:2/9/2011

Filename: ...\mst0\055_Geometry11.dgn

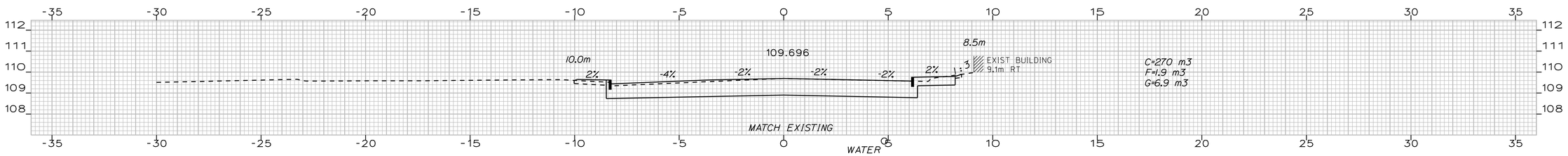


40+040.000



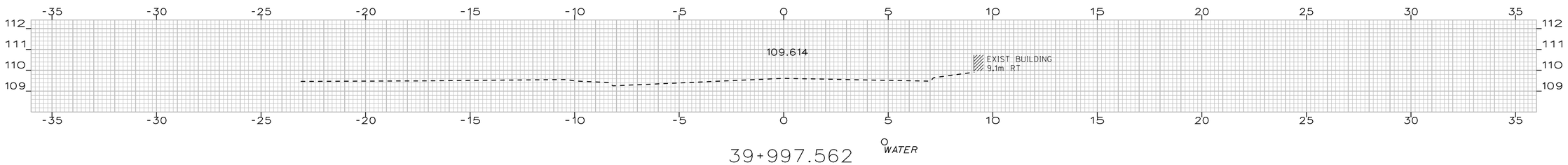
INSTALL CURB TYPE I

40+020.000



40+000.000

STA 40+000
BEGIN PROPOSED PROJECT NO. NH-1011(800)E



39+997.562

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

PROJ. MANAGER	R.WEBSTER		
DESIGN-DETAILED	R.NORWOOD	D.BURGESS	02-05-09
CHECKED-REVIEWED	T.CORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
ROUTE 4\17

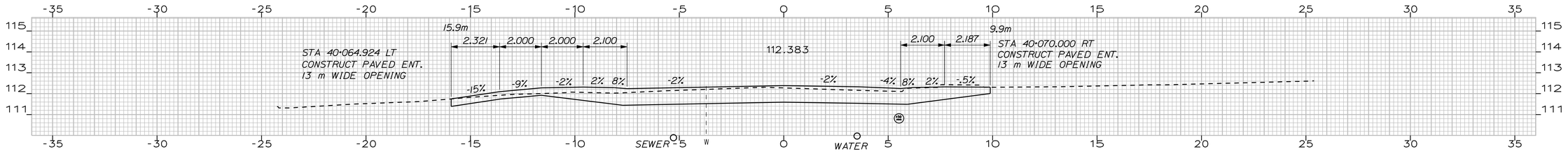
CROSS SECTIONS

SHEET NUMBER

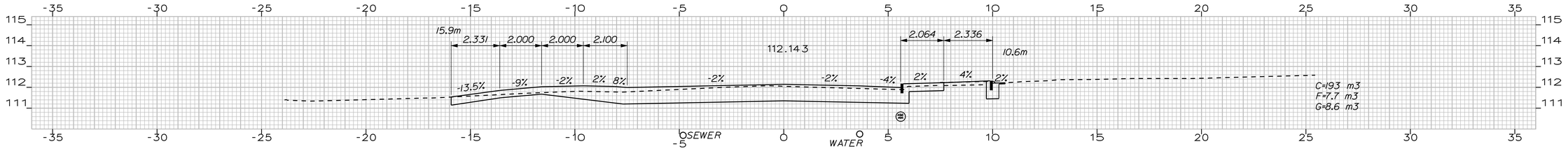
56

OF 148

Filename: ...\msto\056_XSMC30-NEW_dr_001.dgn Division: HIGHWAY Username: common Date:2/9/2011



40+064.924



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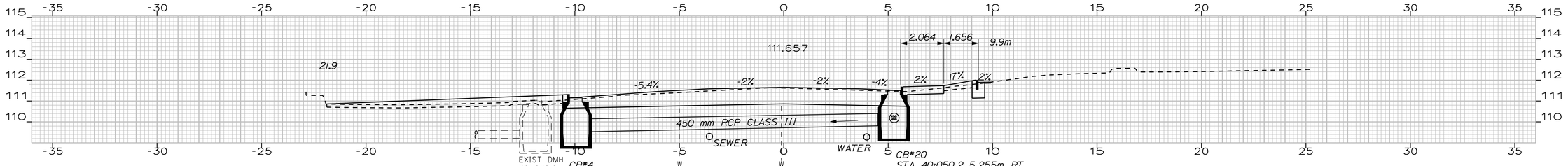
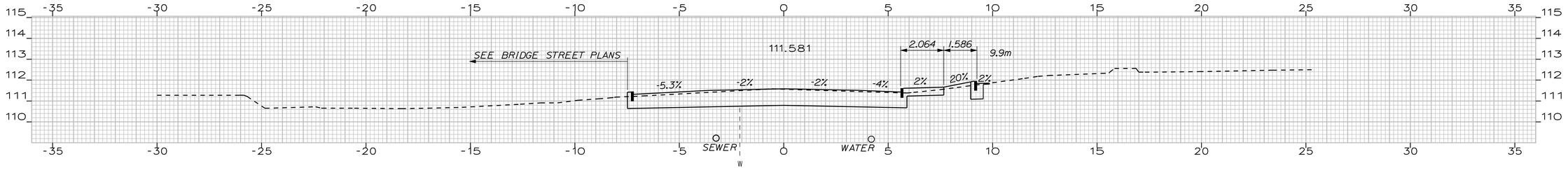


40+050.000



40+048.439

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

PROJ. MANAGER	R.WEBSTER		
DESIGN-DETAILED	R.NORWOOD	BY	D.BURGESS
CHECKED-REVIEWED	T.GORRILL	DATE	02-05-09
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
ROUTE 4\17

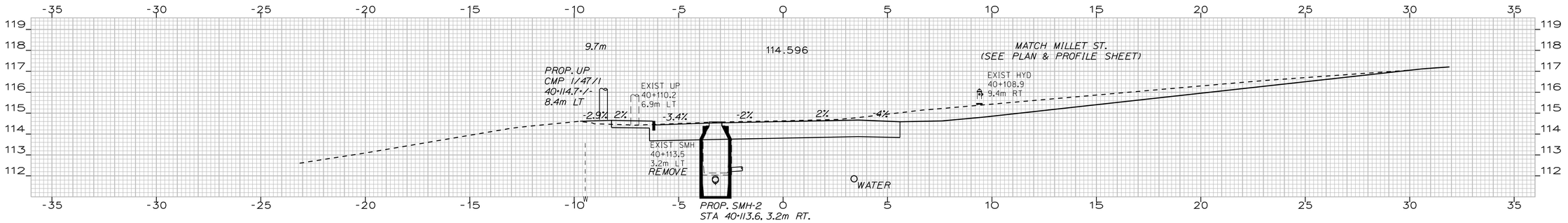
CROSS SECTIONS

SHEET NUMBER

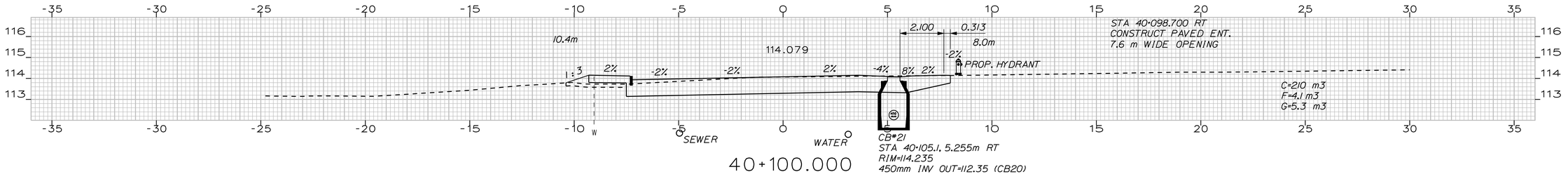
57

OF 148

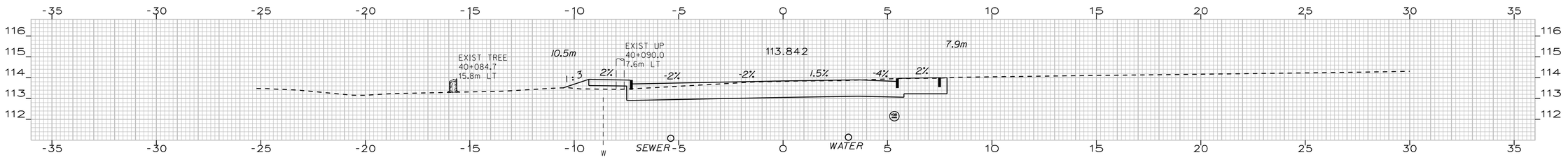
Filename: ...\msto\057_XSMC30-NEW_dr_002.dgn Division: HIGHWAY Username: common Date:2/9/2011



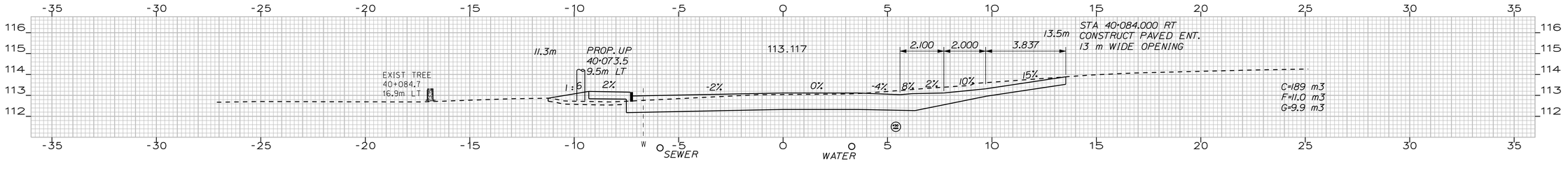
40+113.763



40+100.000



40+094.901



40+080.000

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

PROJ. MANAGER	R.WEBSTER		
DESIGN-DETAILED	R.NORWOOD	D.BURGESS	02-05-09
CHECKED-REVIEWED	T.CORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
ROUTE 4\17

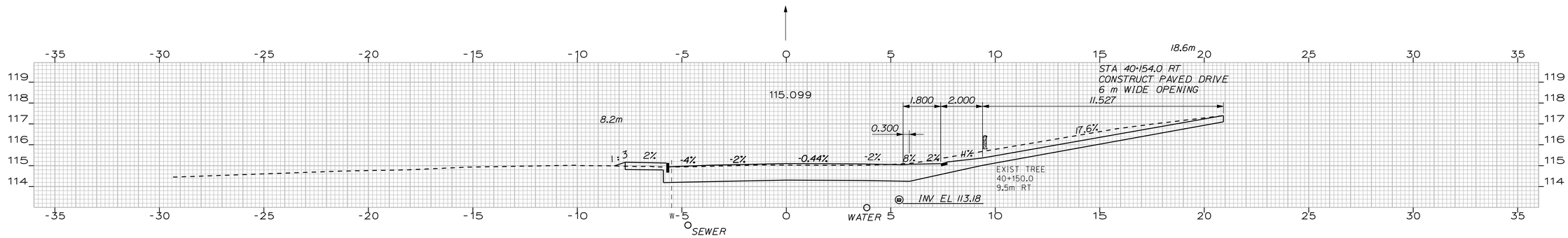
CROSS SECTIONS

SHEET NUMBER

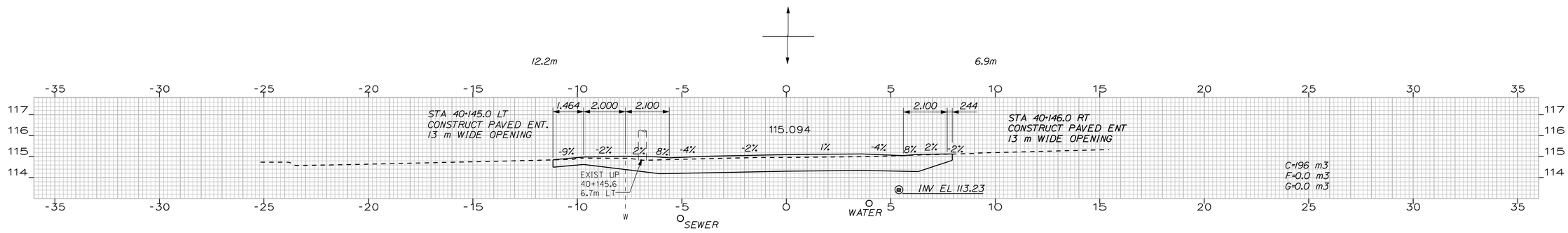
58

OF 148

Filename: ...\msto\058_XSMC30-NEW_dr_003.dgn Division: HIGHWAY Username: common Date:2/9/2011



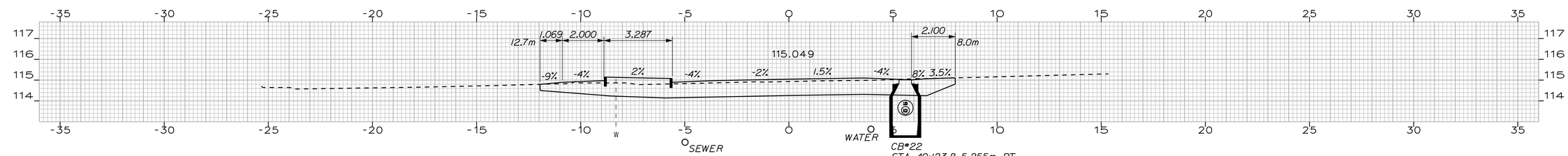
40+153.857



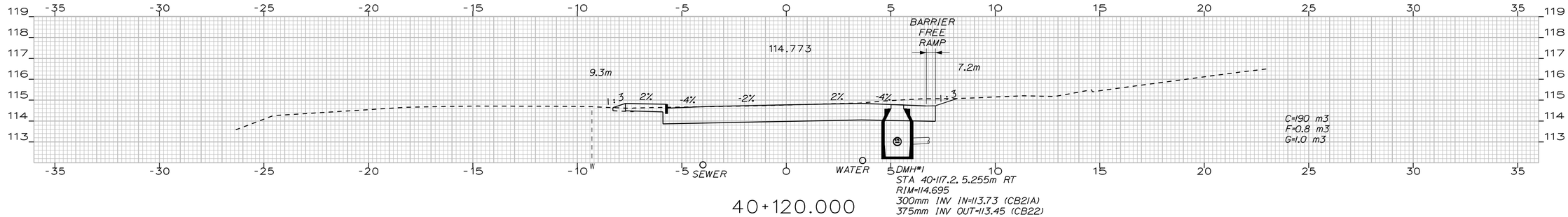
40+140.000

STA 40+127.0 LT
CONSTRUCT PAVED ENTRANCE
11.6m WIDE OPENING

STA 40+129.5 RT
CONSTRUCT PAVED ENTRANCE
9.0m WIDE OPENING



40+133.000



40+120.000

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

PROJ. MANAGER	R.WEBSTER		
DESIGN-DETAILED	R.NORWOOD	D.BURGESS	02-05-09
CHECKED-REVIEWED	T.GORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
ROUTE 4\17

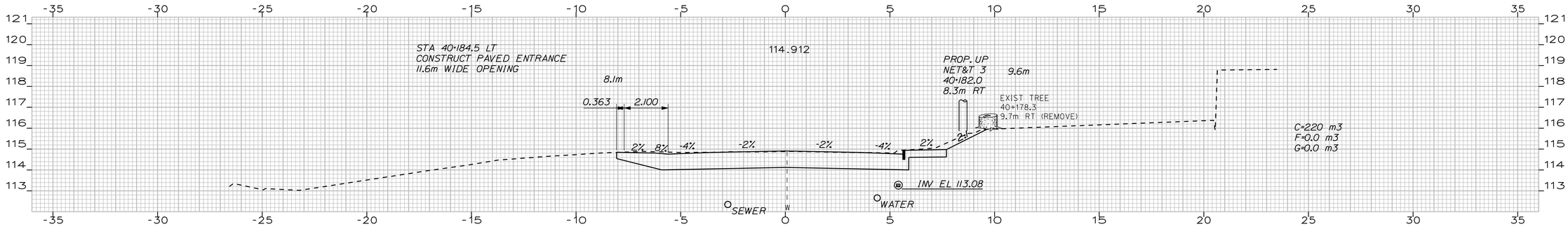
CROSS SECTIONS

SHEET NUMBER

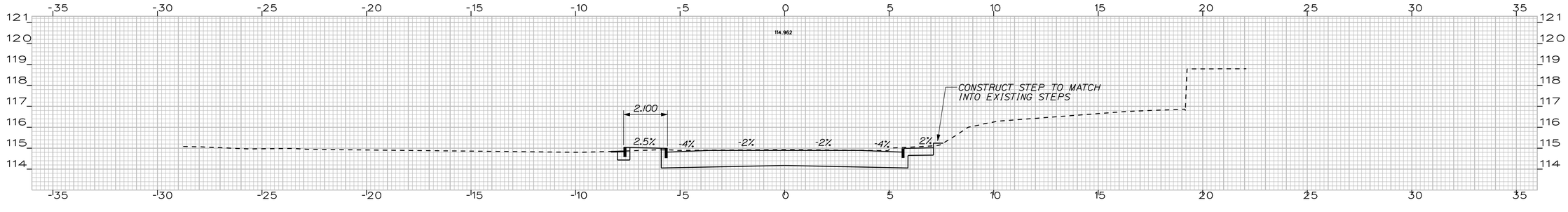
59

OF 148

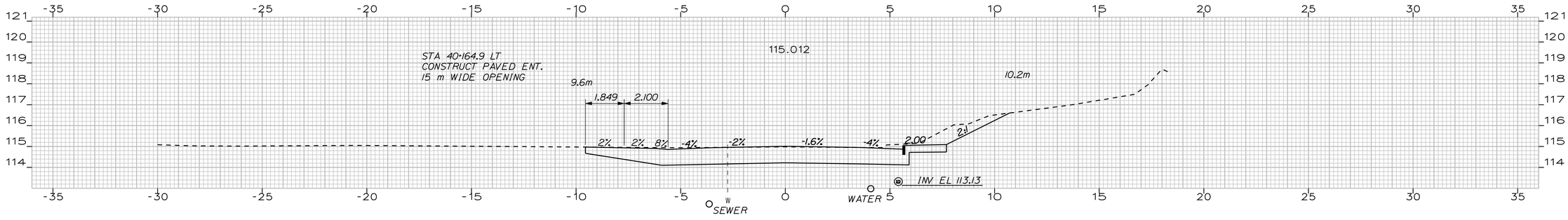
Filename: ...\mslo\059_XSMC30-NEW_dr_004.dgn Division: HIGHWAY Username: common Date:2/9/2011



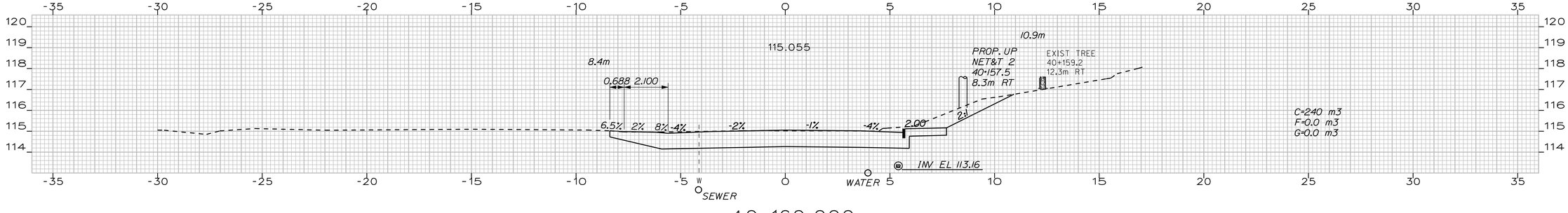
40+180.000



40+173.000



40+166.014



40+160.000

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

PROJ. MANAGER	R.WEBSTER		
DESIGN-DETAILED	R.NORWOOD	D.BURGESS	02-05-09
CHECKED-REVIEWED	T.CORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
ROUTE 4\17

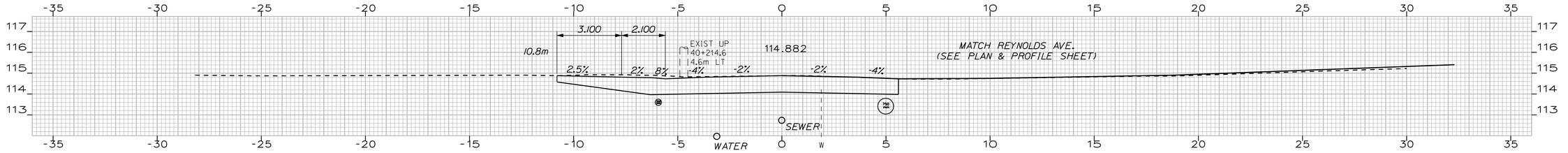
CROSS SECTIONS

SHEET NUMBER

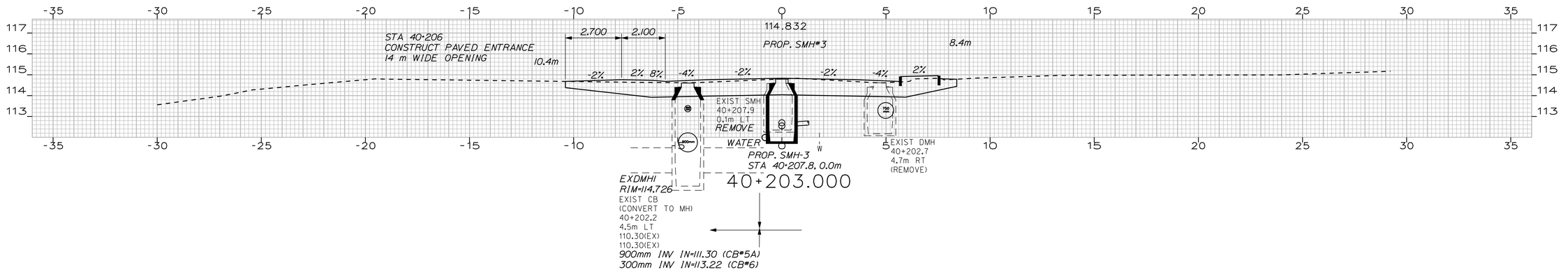
60

OF 148

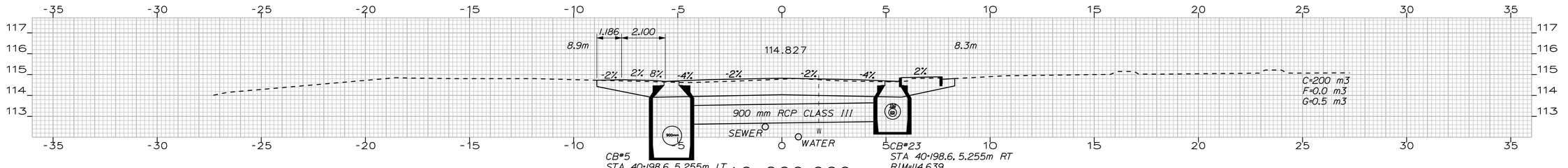
Filename: ...\mslo\060_XSMC30-NEW_dr_005.dgn Division: HIGHWAY Username: common Date:2/9/2011



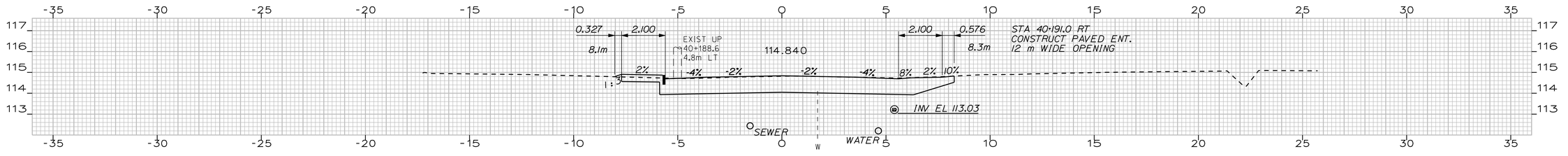
40+213.000



40+203.000



40+200.000



40+191.461

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER	R.WEBSTER		
DESIGN-DETAILED	R.NORWOOD	D.BURGESS	02-05-09
CHECKED-REVIEWED	T.GORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
ROUTE 4\17

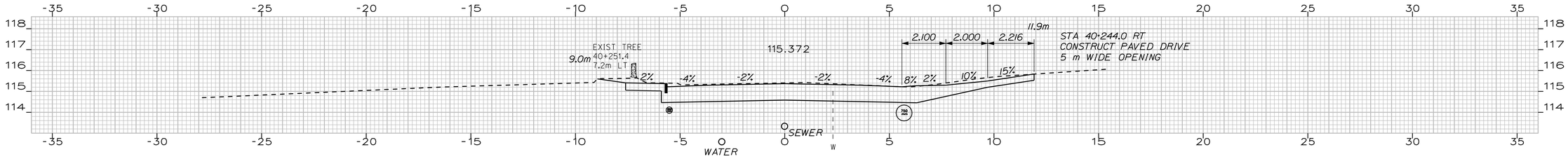
CROSS SECTIONS

SHEET NUMBER

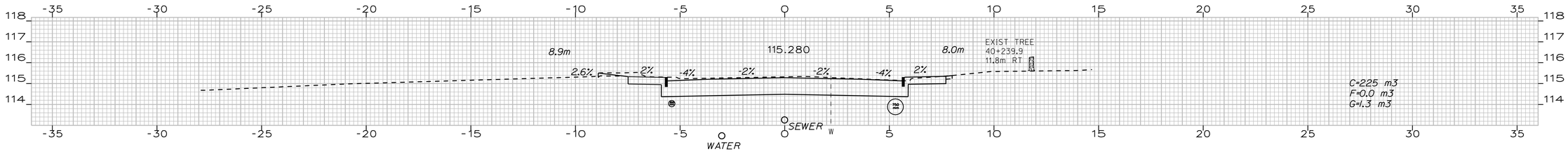
61

OF 148

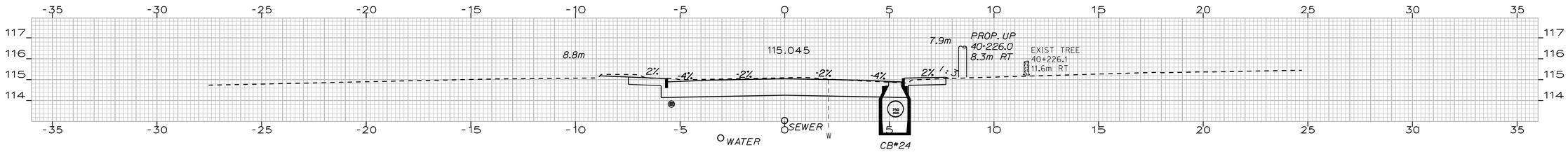
Filename: ...\msto\061_XSMC30-NEW_dr_006.dgn Division: HIGHWAY Username: common Date:2/9/2011



40+244.000

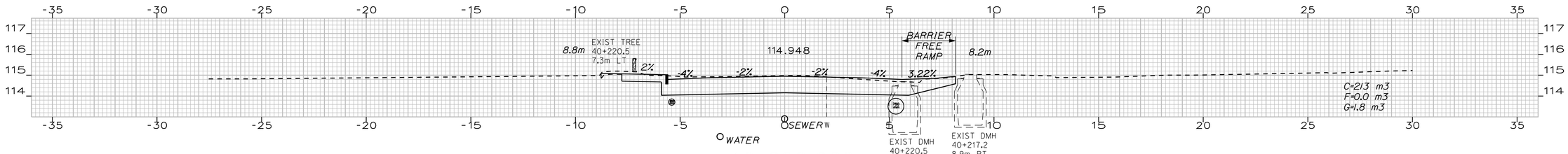


40+240.000



CB#24
STA 40+225.7, 5.255m RT
RIM=114.839
750mm INV IN=113.23 (CB25)
750mm INV OUT=113.20 (CB23)

40+227.351



40+220.000

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

PROJ. MANAGER	R.WEBSTER	DATE	
DESIGN-DETAILED	R.NORWOOD	BY	D.BURGESS
CHECKED-REVIEWED	T.CORRILL	DATE	02-05-09
DESIGN2-DETAILED2		SIGNATURE	
DESIGN3-DETAILED3		P.E. NUMBER	
REVISIONS 1		DATE	
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

LIVERMORE FALLS - JAY
ROUTE 4\17

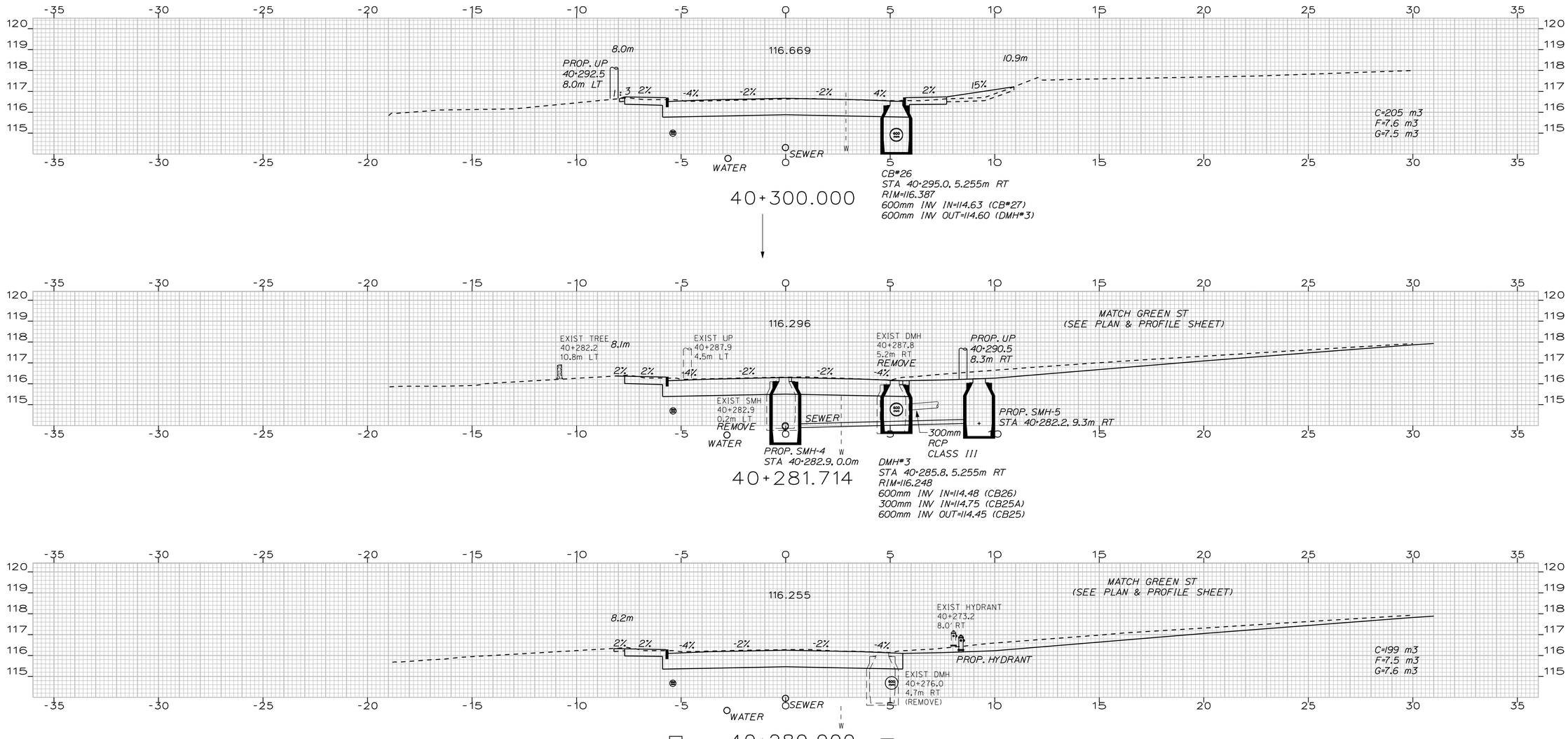
CROSS SECTIONS

SHEET NUMBER

62

OF 148

Filename: ...\msto\062_XSMC30-NEW_dr_007.dgn Division: HIGHWAY Username: common Date:2/9/2011



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

PROJ. MANAGER	R.WEBSTER		
DESIGN-DETAILED	R.NORWOOD	D.BURGESS	02-05-09
CHECKED-REVIEWED	T.CORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
ROUTE 4\17

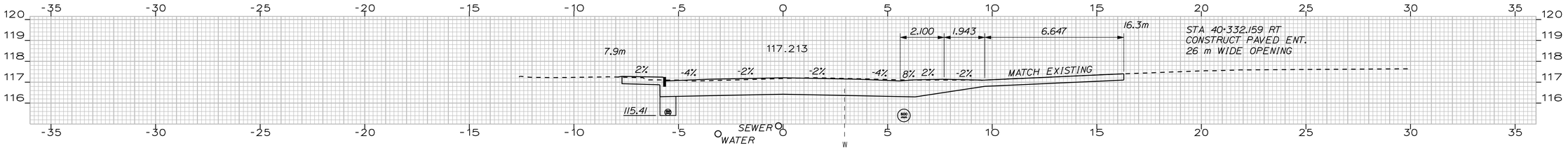
CROSS SECTIONS

SHEET NUMBER

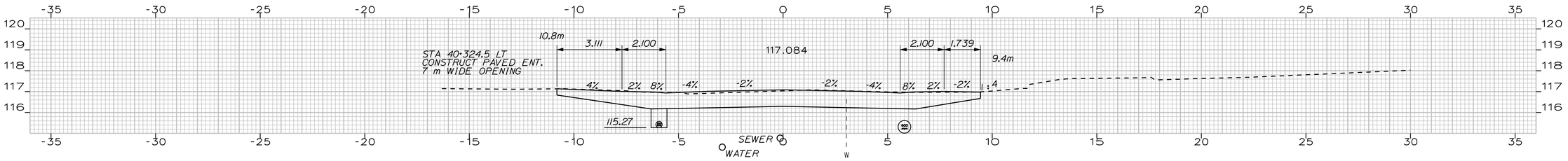
63

OF 148

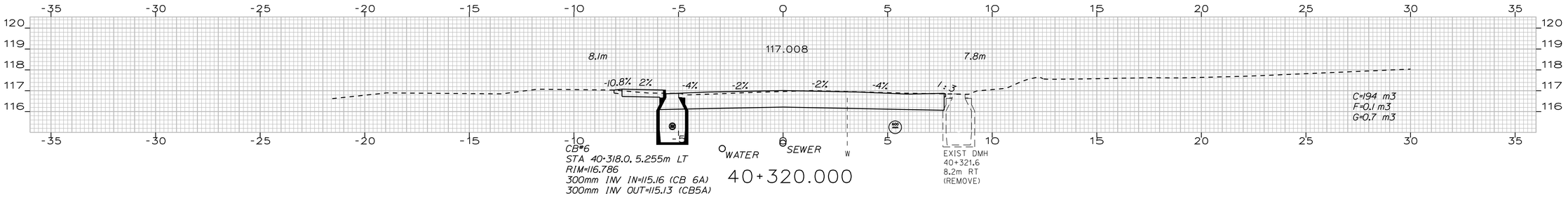
Filename: ...\mst0\063_XSMC30-NEW_dr_008.dgn Division: HIGHWAY Username: common Date:2/9/2011



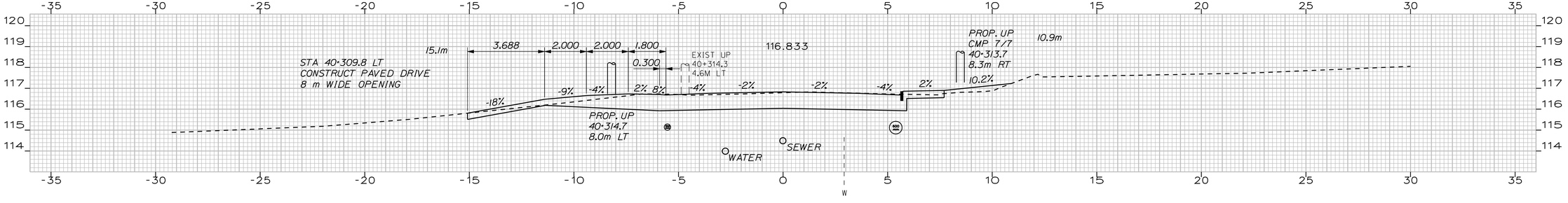
40+332.159



40+324.500



40+320.000



40+309.660

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

PROJ. MANAGER	R.WEBSTER		
DESIGN-DETAILED	R.WEBSTER	BY	DATE
CHECKED-REVIEWED	R.NORWOOD	D.BURGESS	02-05-09
DESIGN2-DETAILED2	T.GORRILL		
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
ROUTE 4\17

CROSS SECTIONS

SHEET NUMBER

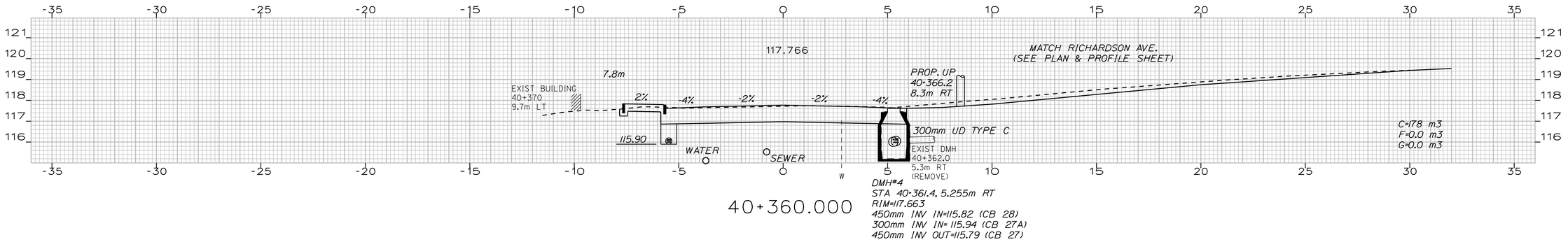
64

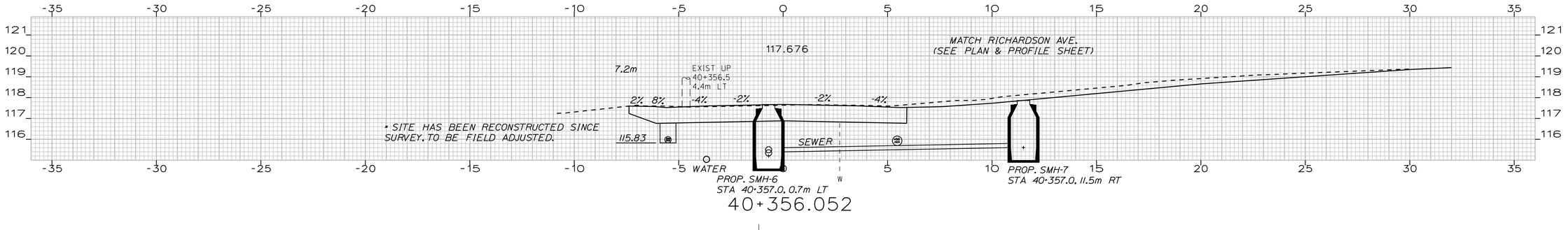
OF 148

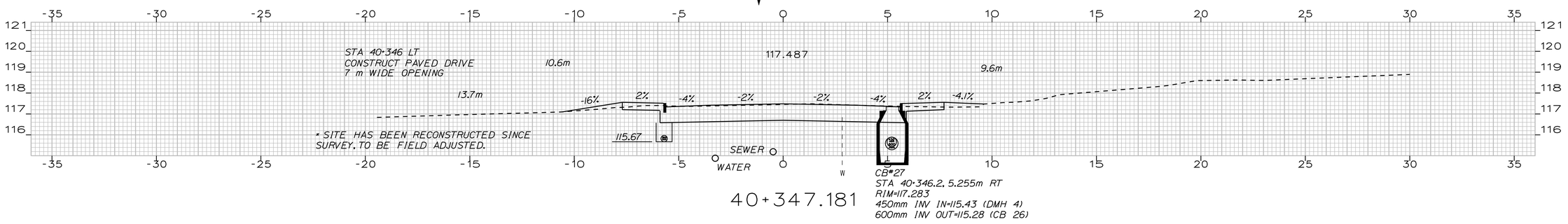
Date:2/9/2011

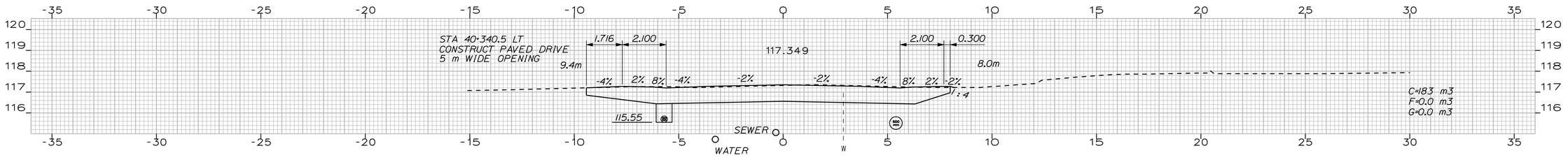
Username: common

Filename: ...\mst0\064_XSMC30-NEW_dr_009.dgn Division: HIGHWAY









STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

PROJ. MANAGER	R.WEBSTER	DATE	
DESIGN-DETAILED	R.NORWOOD	BY	D.BURGESS
CHECKED-REVIEWED	T.CORRILL	DATE	02-05-09
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
ROUTE 4\17

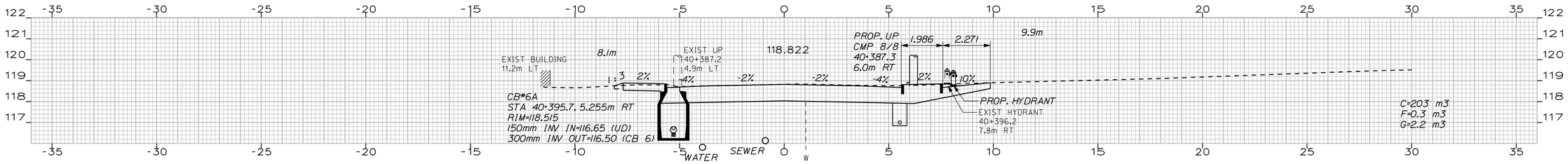
CROSS SECTIONS

SHEET NUMBER

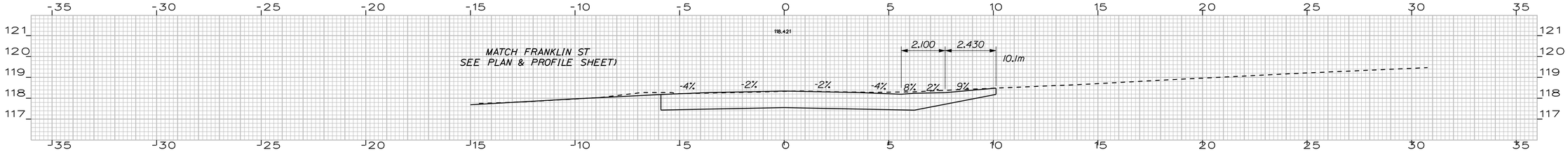
65

OF 148

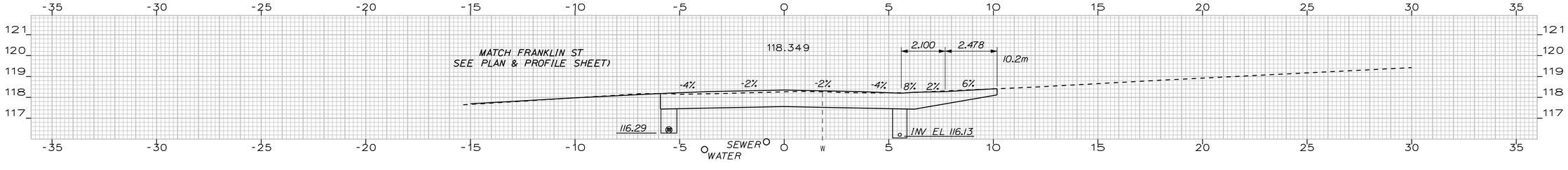
Filename: ...\msto\065_XSMC30-NEW_dr_010.dgn Division: HIGHWAY Username: common Date:2/9/2011



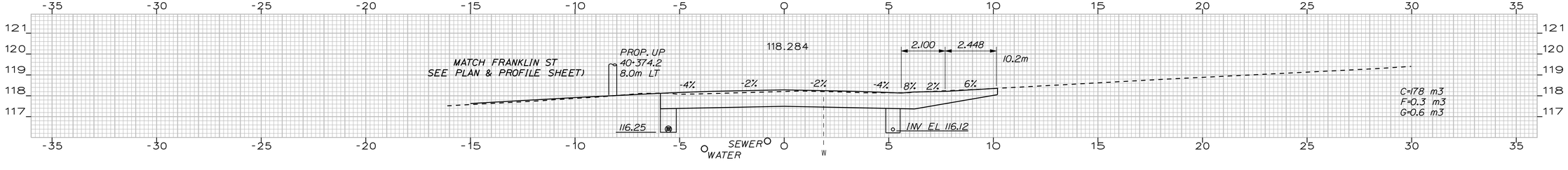
40+400.000



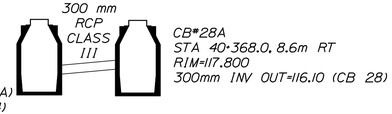
40+385.000



40+382.360



40+380.000



CB*28
STA 40+368.9, 5.255m RT
RIM=117.776
150mm INV IN=116.06 (UD)
300mm INV IN=115.94 (CB 28A)
450mm INV OUT=115.91 (DMH 4)

CB*28A
STA 40+368.0, 8.6m RT
RIM=117.800
300mm INV OUT=116.10 (CB 28)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

PROJ. MANAGER	R.WEBSTER		
DESIGN-DETAILED	R.NORWOOD	D.BURGESS	02-05-09
CHECKED-REVIEWED	T.CORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
ROUTE 4\17

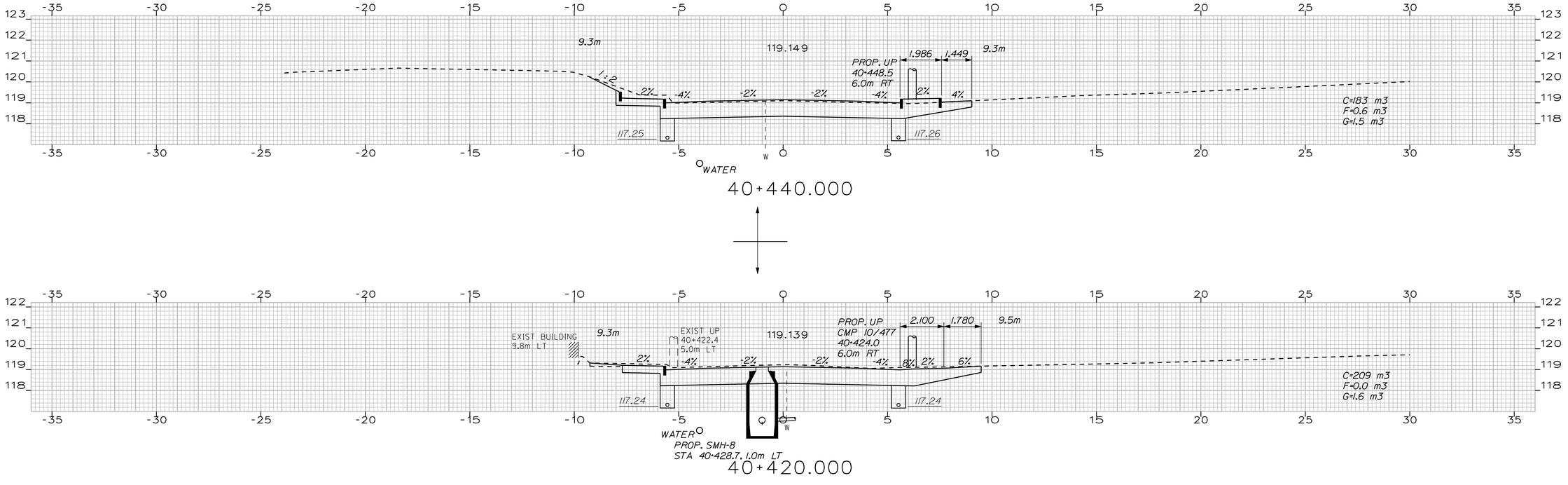
CROSS SECTIONS

SHEET NUMBER

66

OF 148

Filename: ...\mst0\066_XSMC30-NEW_dr_011.dgn Username: common Division: HIGHWAY Date:2/9/2011



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

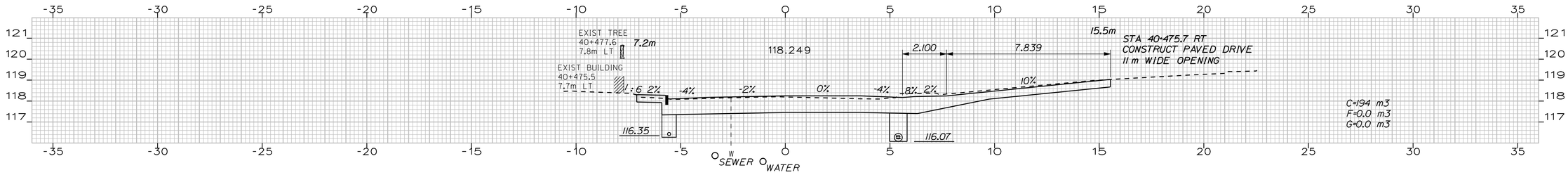
PROJ. MANAGER	R.WEBSTER		
DESIGN-DETAILED	R.NORWOOD	BY	D.BURGESS
CHECKED-REVIEWED	T.GORRILL	DATE	02-05-09
DESIGN2-DETAILED2		SIGNATURE	
DESIGN3-DETAILED3		P.E. NUMBER	
REVISIONS 1		DATE	
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

LIVERMORE FALLS - JAY
ROUTE 4\17

CROSS SECTIONS

SHEET NUMBER
67
OF 148

Filename: ...\msto\067_XSMC30-NEW_dr_012.dgn Division: HIGHWAY Username: common Date:2/9/2011



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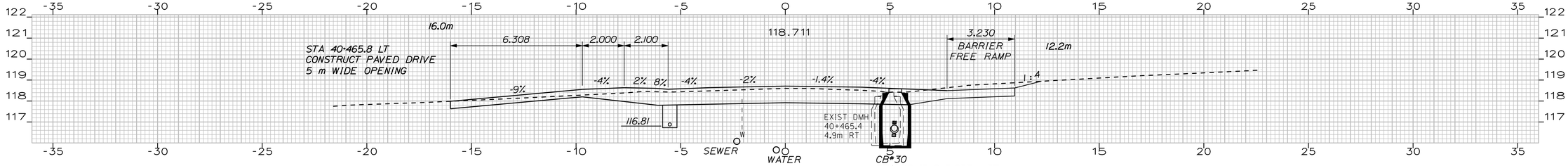
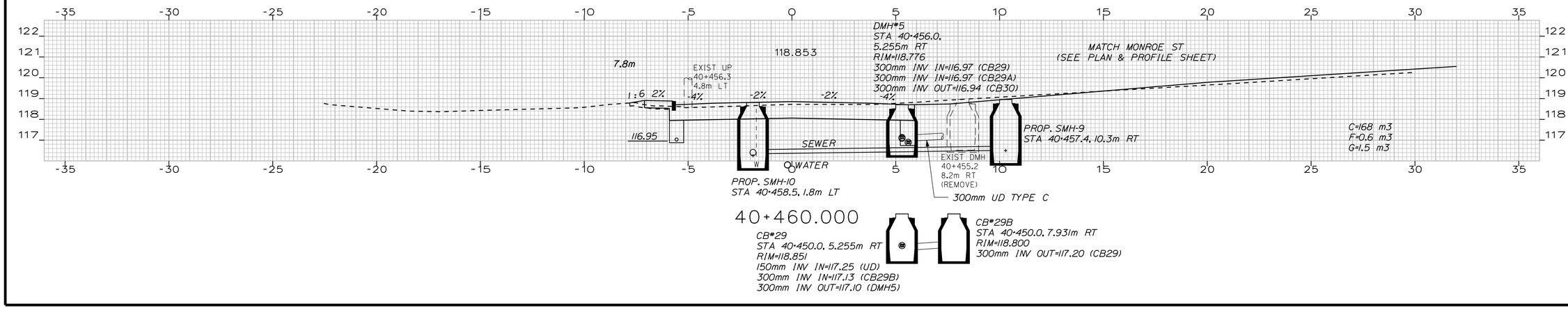


40+465.748

CB*30
STA 40+471.0, 5.255m RT
RIM=118.406
300mm INV IN=116.55 (DMH3)
375mm INV OUT=116.47 (CB31)



40+460.000

CB*29
STA 40+450.0, 5.255m RT
RIM=118.851
150mm INV IN=117.25 (UD)
300mm INV IN=117.13 (CB29B)
300mm INV OUT=117.10 (DMH5)

CB*29B
STA 40+450.0, 7.931m RT
RIM=118.800
300mm INV OUT=117.20 (CB29)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

PROJ. MANAGER	R.WEBSTER			
DESIGN-DETAILED	R.NORWOOD	D.BURGESS	02-05-09	
CHECKED-REVIEWED	T.CORRILL			
DESIGN2-DETAILED2				
DESIGN3-DETAILED3				
REVISIONS 1				
REVISIONS 2				
REVISIONS 3				
REVISIONS 4				
FIELD CHANGES				

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
ROUTE 4\17

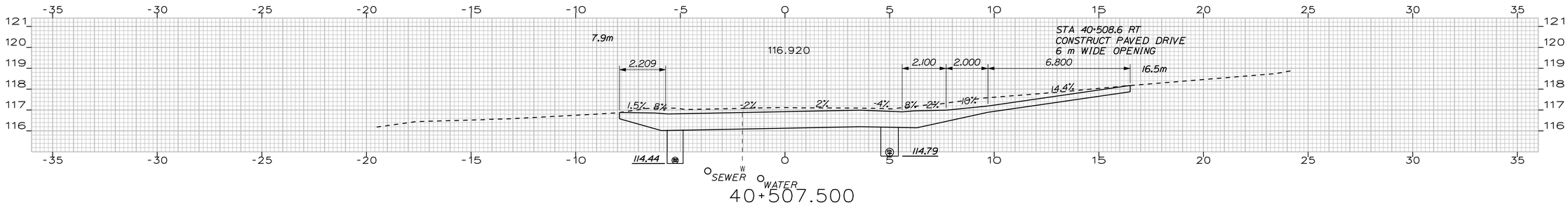
CROSS SECTIONS

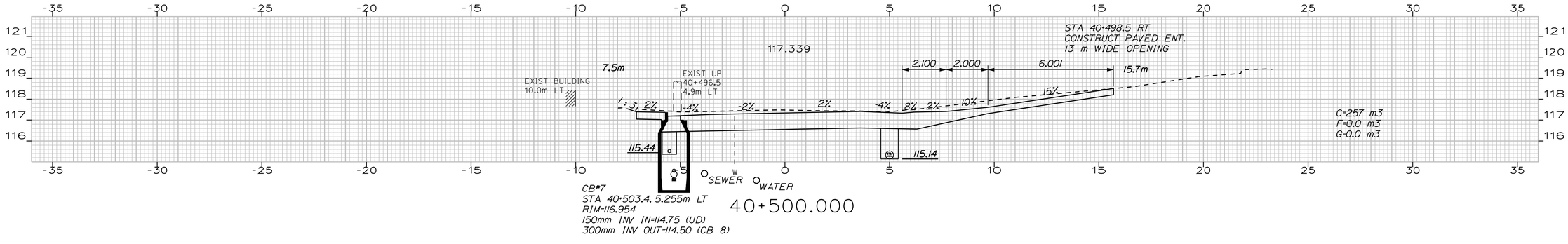
SHEET NUMBER

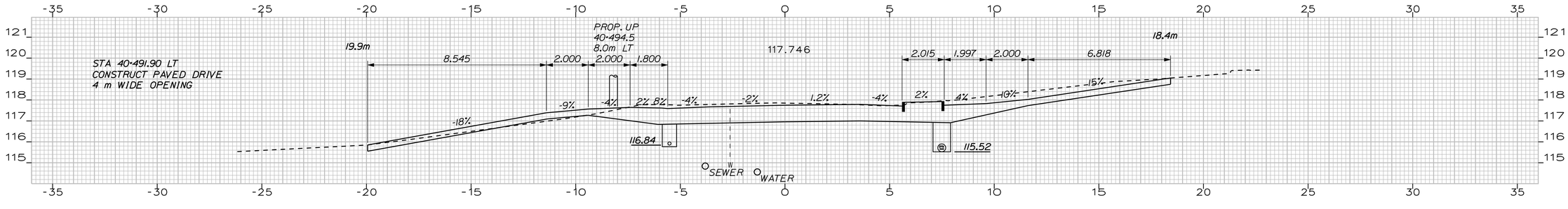
68

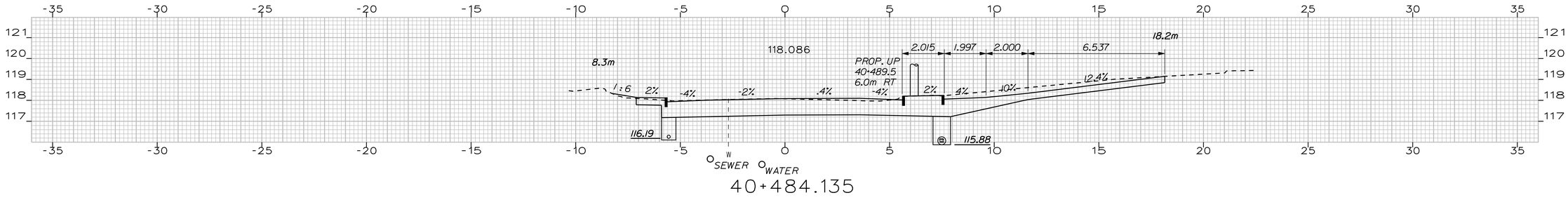
OF 148

Filename: ...\ms1o\068_XSMC30-NEW_dr_013.dgn Date/Time: 2/9/2009 Division HIGHWAY









STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

PROJ. MANAGER	R.WEBSTER		
DESIGN-DETAILED	R.NORWOOD	D.BURGESS	02-05-09
CHECKED-REVIEWED	T.CORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

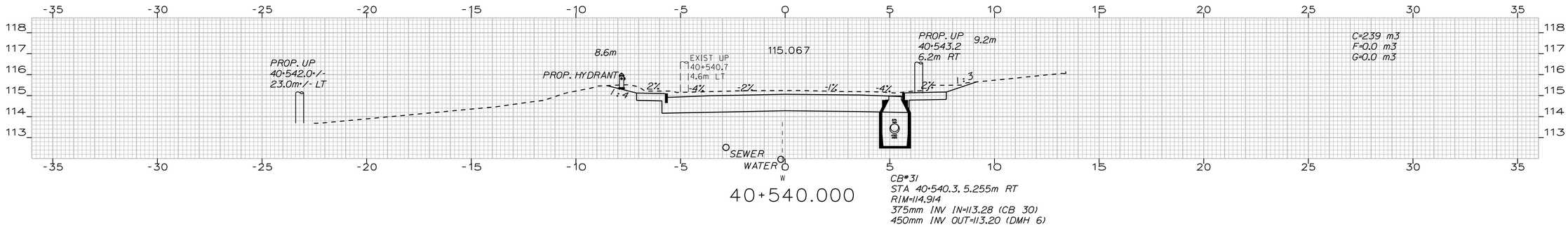
DATE

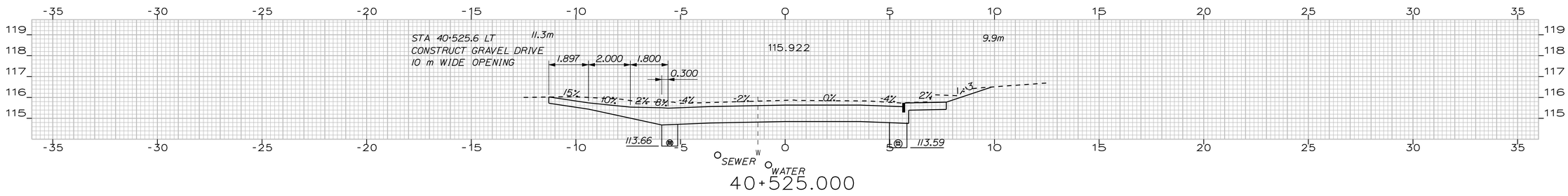
LIVERMORE FALLS - JAY
ROUTE 4\17

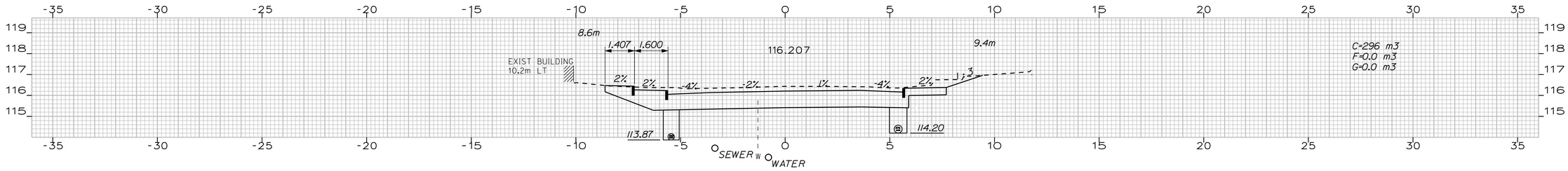
CROSS SECTIONS

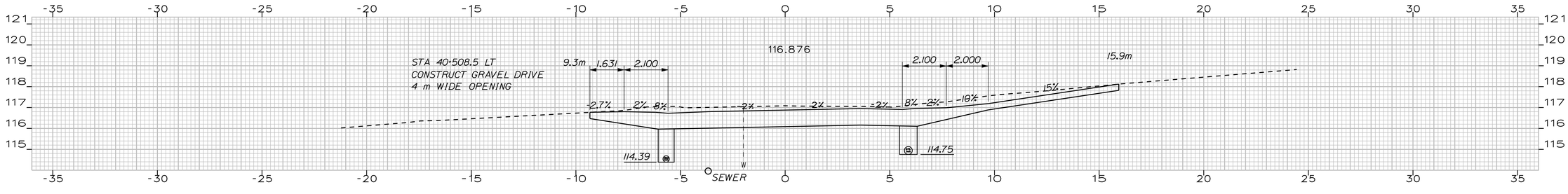
SHEET NUMBER
69
OF 148

Filename: ...\mst0\069_XSMC30-NEW_dr_014.dgn Division: HIGHWAY Username: common Date:2/9/2011









STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

PROJ. MANAGER	R.WEBSTER		
DESIGN-DETAILED	R.NORWOOD	D.BURGESS	02-05-09
CHECKED-REVIEWED	T.CORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
ROUTE 4\17

CROSS SECTIONS

SHEET NUMBER

70

OF 148

Filename: ...\msto\070_XSMC30-NEW_dr_015.dgn Division: HIGHWAY Username: common Date:2/9/2011

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

PROJ. MANAGER	R.WEBSTER	BY	DATE
DESIGN-DETAILED	R.NORWOOD	D.BURGESS	02-05-09
CHECKED-REVIEWED	T.GORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
ROUTE 4\17

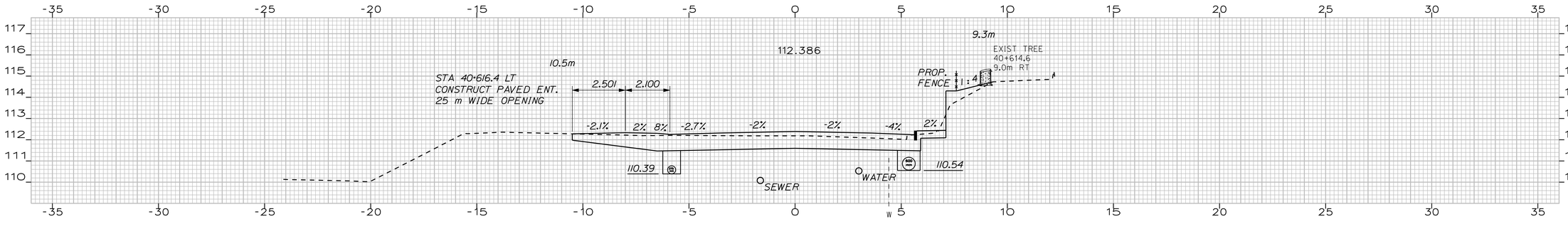
CROSS SECTIONS

SHEET NUMBER

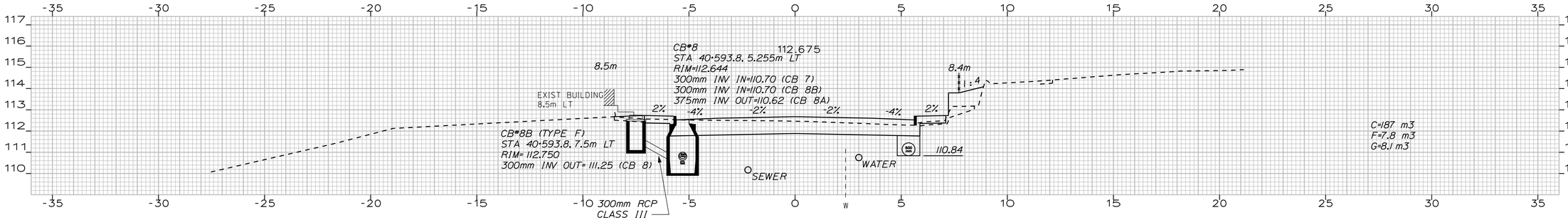
71

OF 148

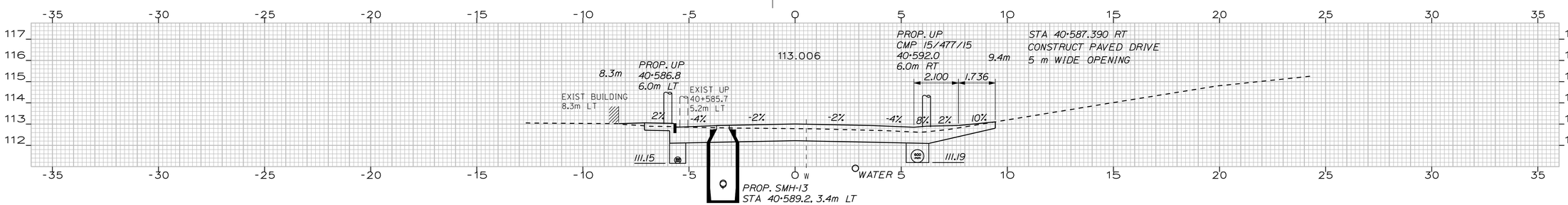
Filename: ...\msto\071_XSMC30-NEW_dr_016.dgn Division: HIGHWAY Username: common Date:2/9/2011



40+615.922



40+600.000



40+587.390

Filename: ...\msto\072_XSMC30-NEW_dr_017.dgn Division: HIGHWAY Username: common Date:2/9/2011

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER R.WEBSTER		
DESIGN-DETAILED R.NORWOOD	D.BURGESS	02-05-09
CHECKED-REVIEWED T.CORRILL		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

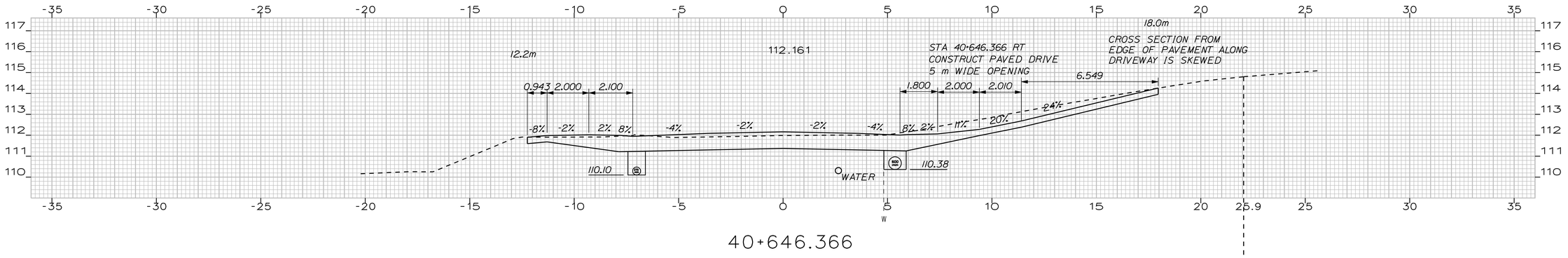
P.E. NUMBER

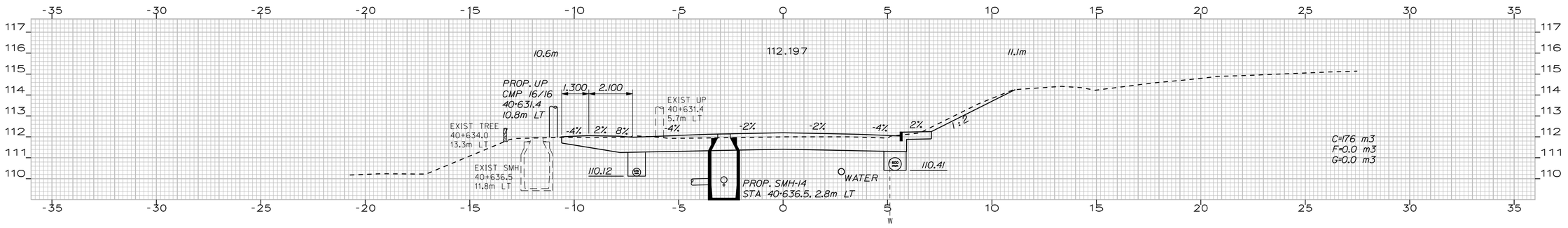
DATE

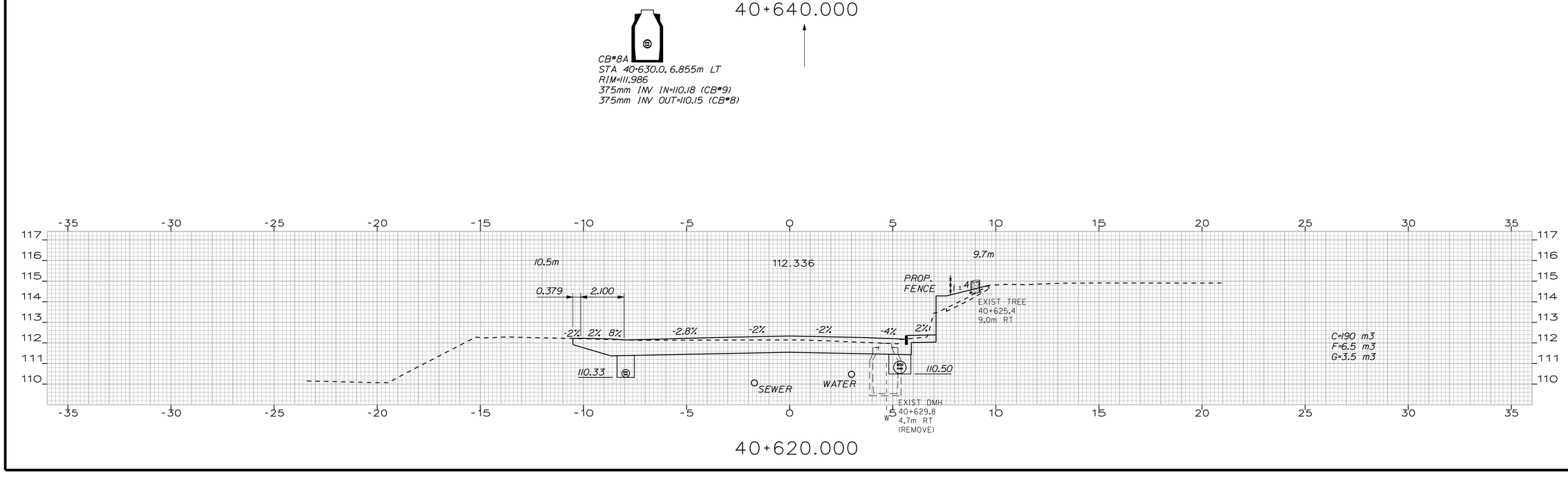
LIVERMORE FALLS - JAY
ROUTE 4\17

CROSS SECTIONS

SHEET NUMBER
72
OF 148







STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER R.WEBSTER		
DESIGN-DETAILED R.WOOD	D.BURGESS	02-05-09
CHECKED-REVIEWED T.GORRILL		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
ROUTE 4\17

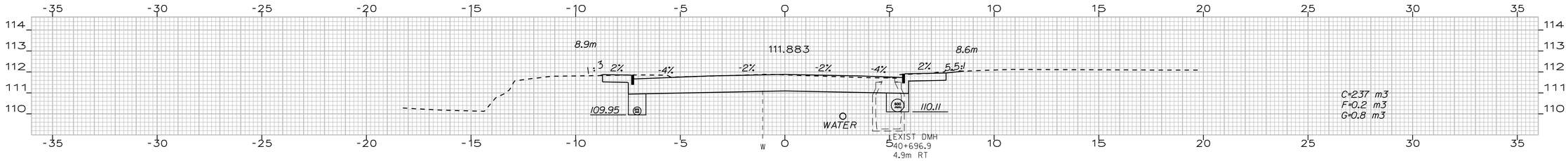
CROSS SECTIONS

SHEET NUMBER

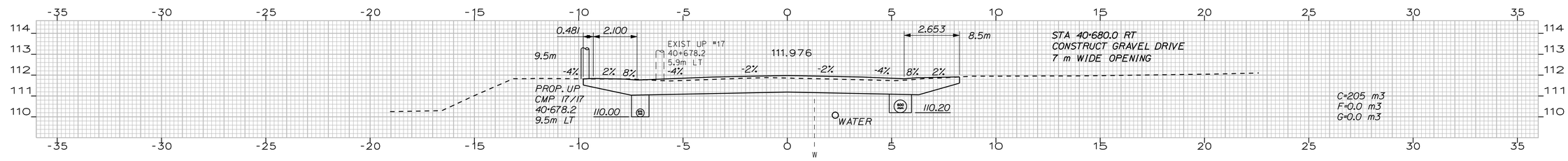
73

OF 148

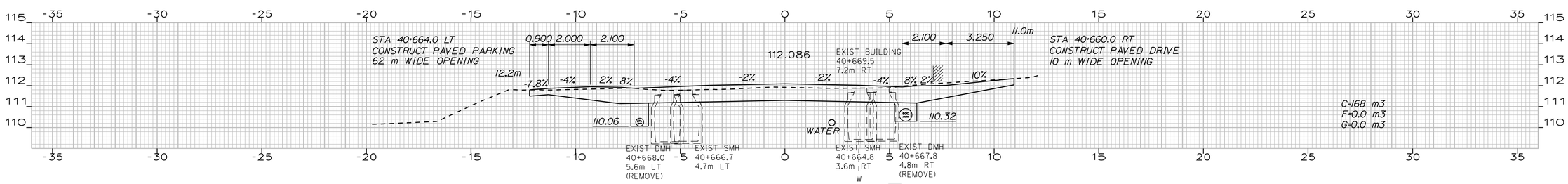
Filename: ...\mslo\073_XSMC30-NEW_dr_018.dgn Division: HIGHWAY Username: common Date:2/9/2011



40+700.000



40+680.000



40+660.000

CB*33A
STA 40+666.0, 5.255m RT
RIM=111.853
600mm INV IN=110.30 (CB*33)
600mm INV OUT=110.27 (CB*34)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	R.WEBSTER	
DESIGN-DETAILED	R.NORWOOD	02-05-09
CHECKED-REVIEWED	T.CORRILL	
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
ROUTE 4\17

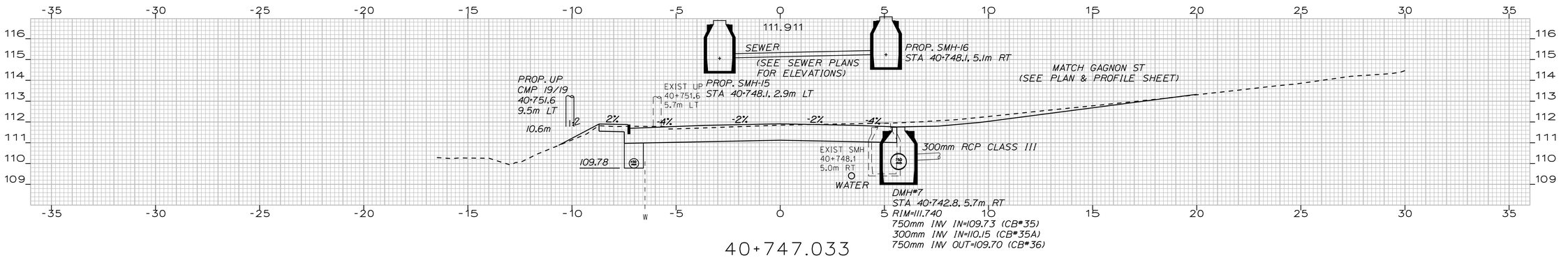
CROSS SECTIONS

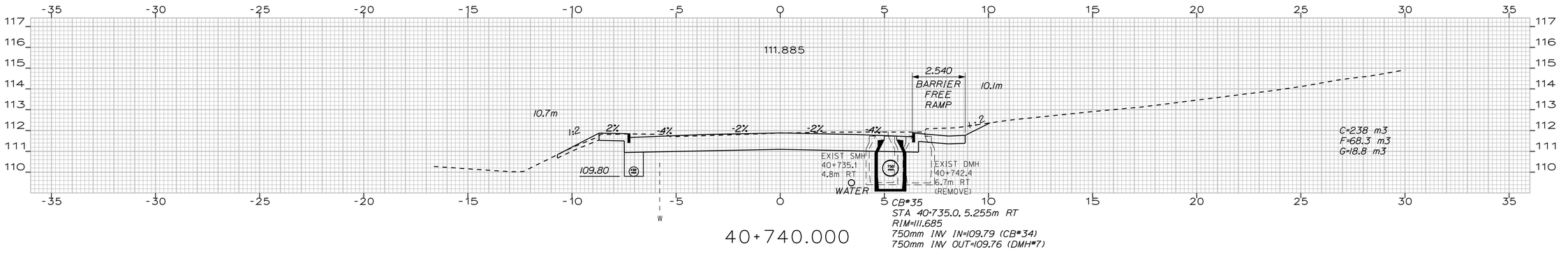
SHEET NUMBER

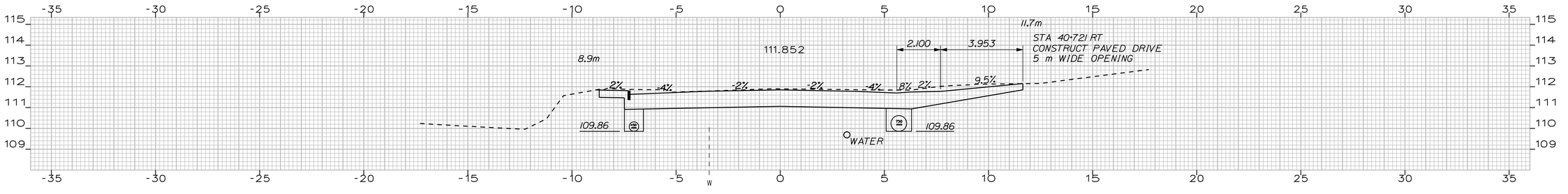
74

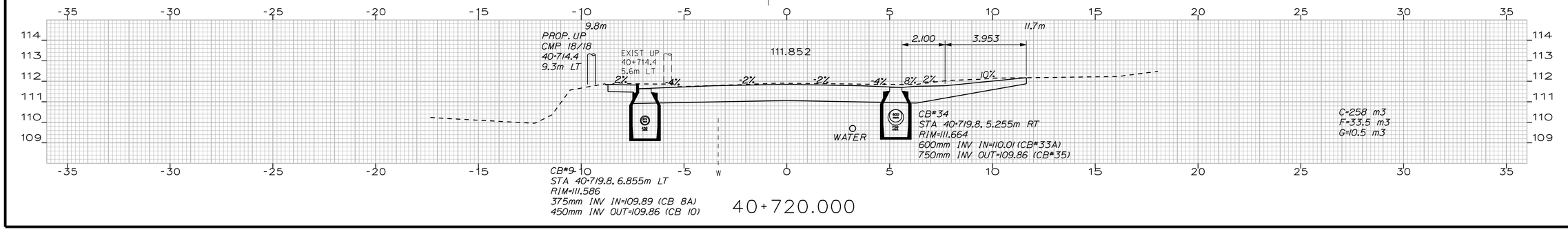
OF 148

Filename: ...\mst0\074_XSMC30-NEW_dr_019.dgn Division: HIGHWAY Username: common Date:2/9/2011









STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

PROJ. MANAGER	R.WEBSTER		
DESIGN-DETAILED	R.NORWOOD	D.BURGESS	02-05-09
CHECKED-REVIEWED	T.GORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

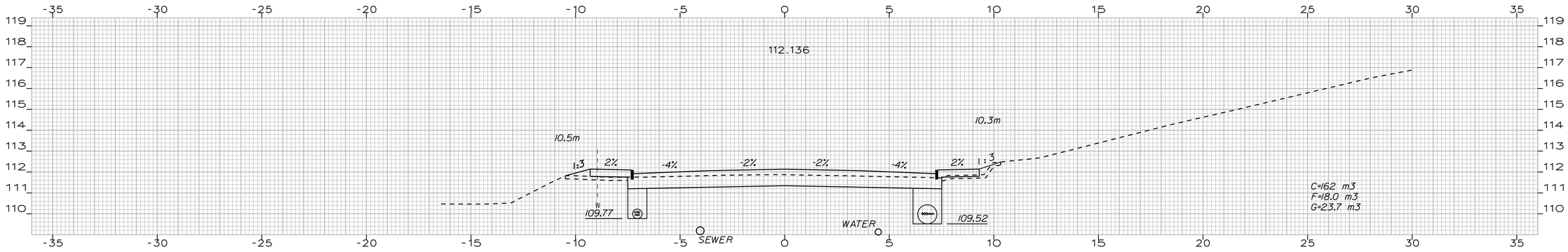
DATE

LIVERMORE FALLS - JAY
ROUTE 4\17

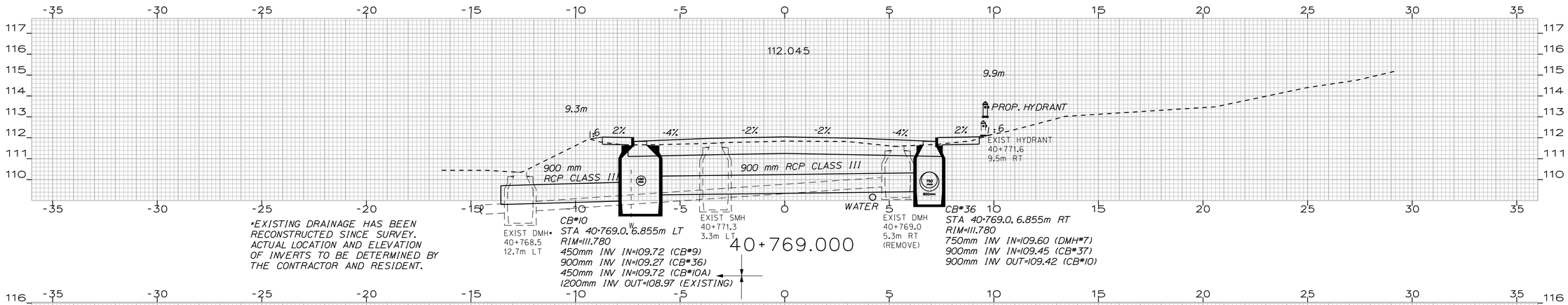
CROSS SECTIONS

SHEET NUMBER
75
OF 148

Filename: ...\mst0\075_XSMC30-NEW_dr_020.dgn Division: HIGHWAY Username: common Date:2/9/2011

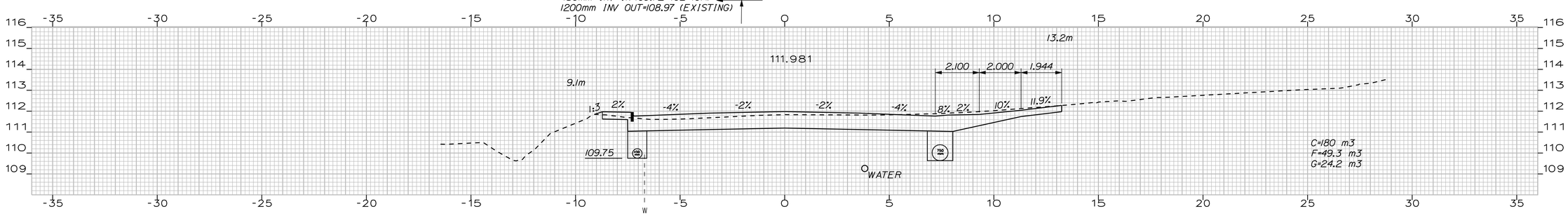


40+780.000



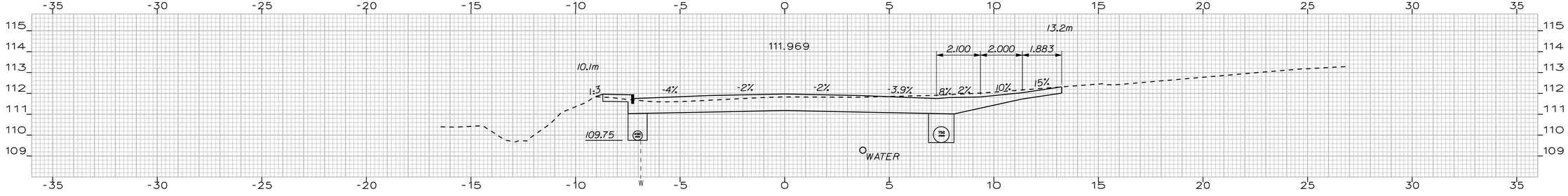
•EXISTING DRAINAGE HAS BEEN RECONSTRUCTED SINCE SURVEY. ACTUAL LOCATION AND ELEVATION OF INVERTS TO BE DETERMINED BY THE CONTRACTOR AND RESIDENT.

40+769.000



40+760.000

STA 40+758.131 RT
CONSTRUCT PAVED DRIVE
7 m WIDE OPENING



40+758.131

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	R.WEBSTER	
DESIGN-DETAILED	R.NORWOOD	02-05-09
CHECKED-REVIEWED	D.BURGESS	
DESIGN2-DETAILED2	T.GORRILL	
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
ROUTE 4\17

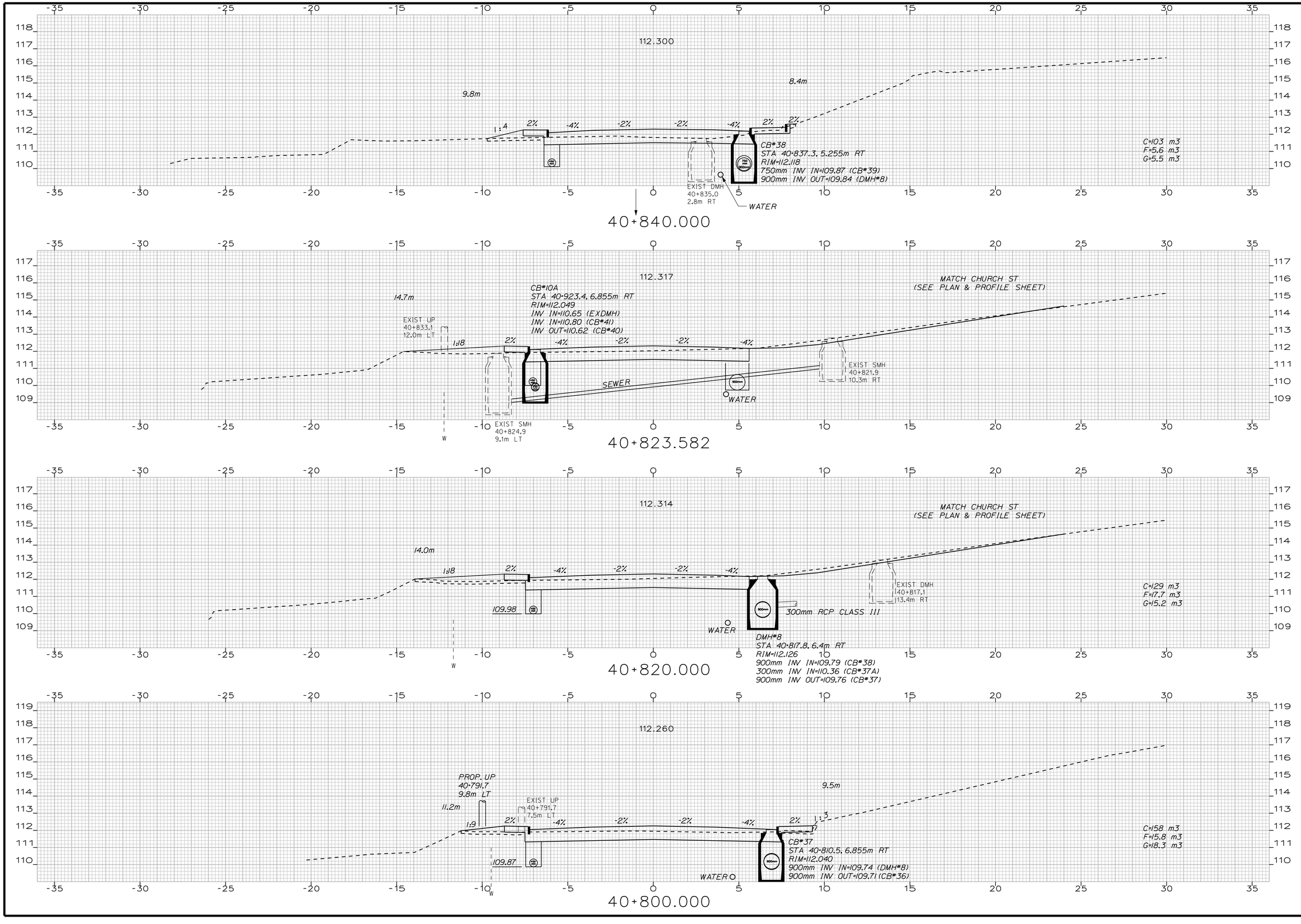
CROSS SECTIONS

SHEET NUMBER

76

OF 148

Filename: ...\msto\076_XSMC30-NEW_dr_021.dgn Division: HIGHWAY Username: common Date:2/9/2011



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	R.WEBSTER	
DESIGN-DETAILED	D.NORWOOD	02-05-09
CHECKED-REVIEWED	T.CORRILL	
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

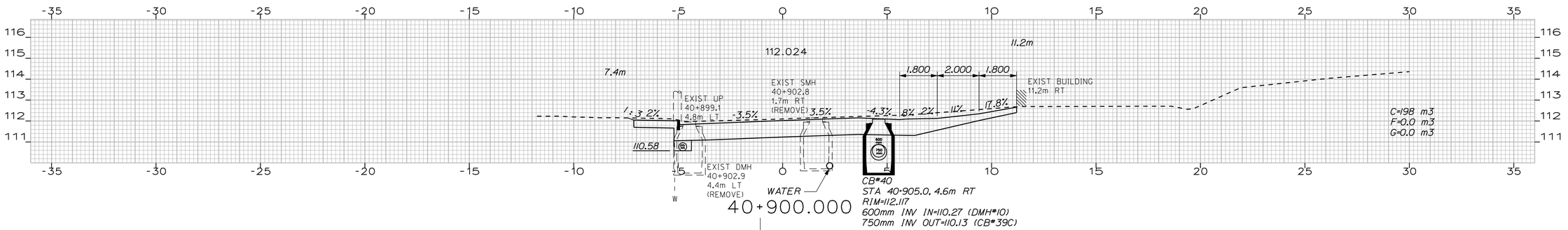
DATE

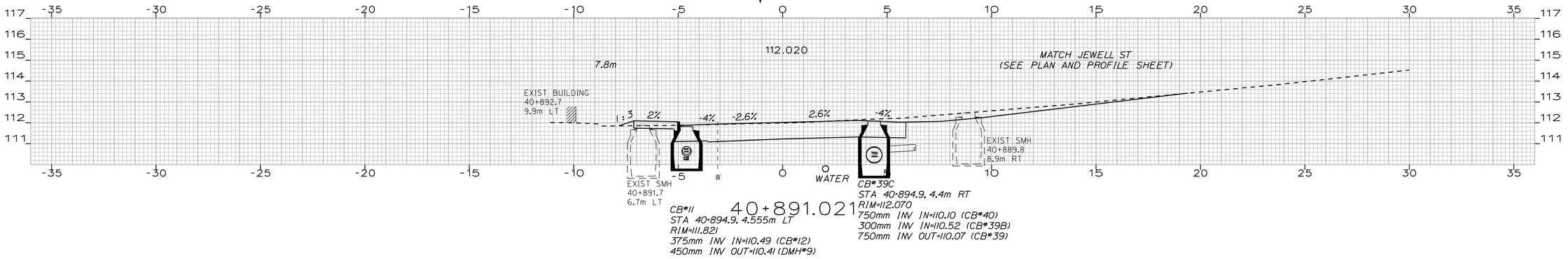
LIVERMORE FALLS - JAY
ROUTE 4\17

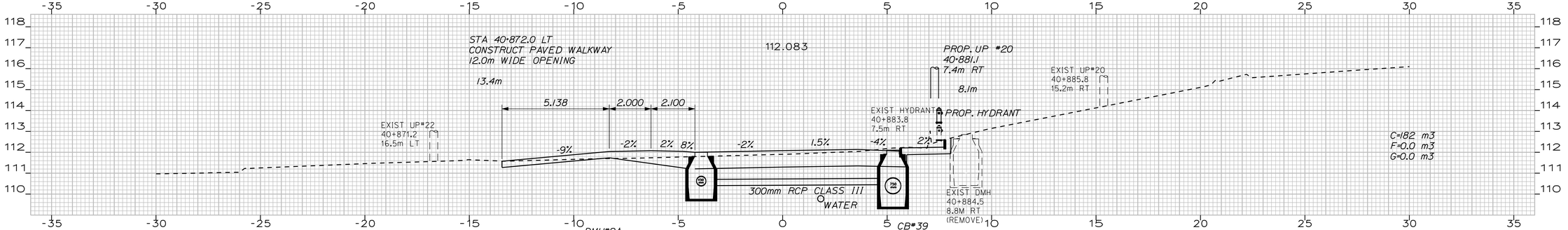
CROSS SECTIONS

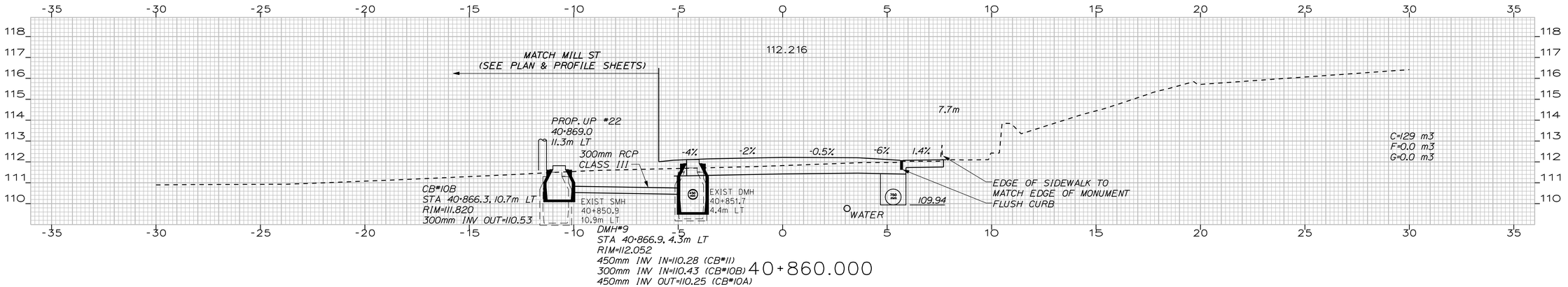
SHEET NUMBER
77
OF 148

Filename: ...\mst0\077_XSMC30-NEW_dr_022.dgn Division: HIGHWAY Username: common Date:2/9/2011









STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	R.WEBSTER	
DESIGN-DETAILED	R.NORWOOD	D.BURGESS 02-05-09
CHECKED-REVIEWED	T.GORRILL	
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

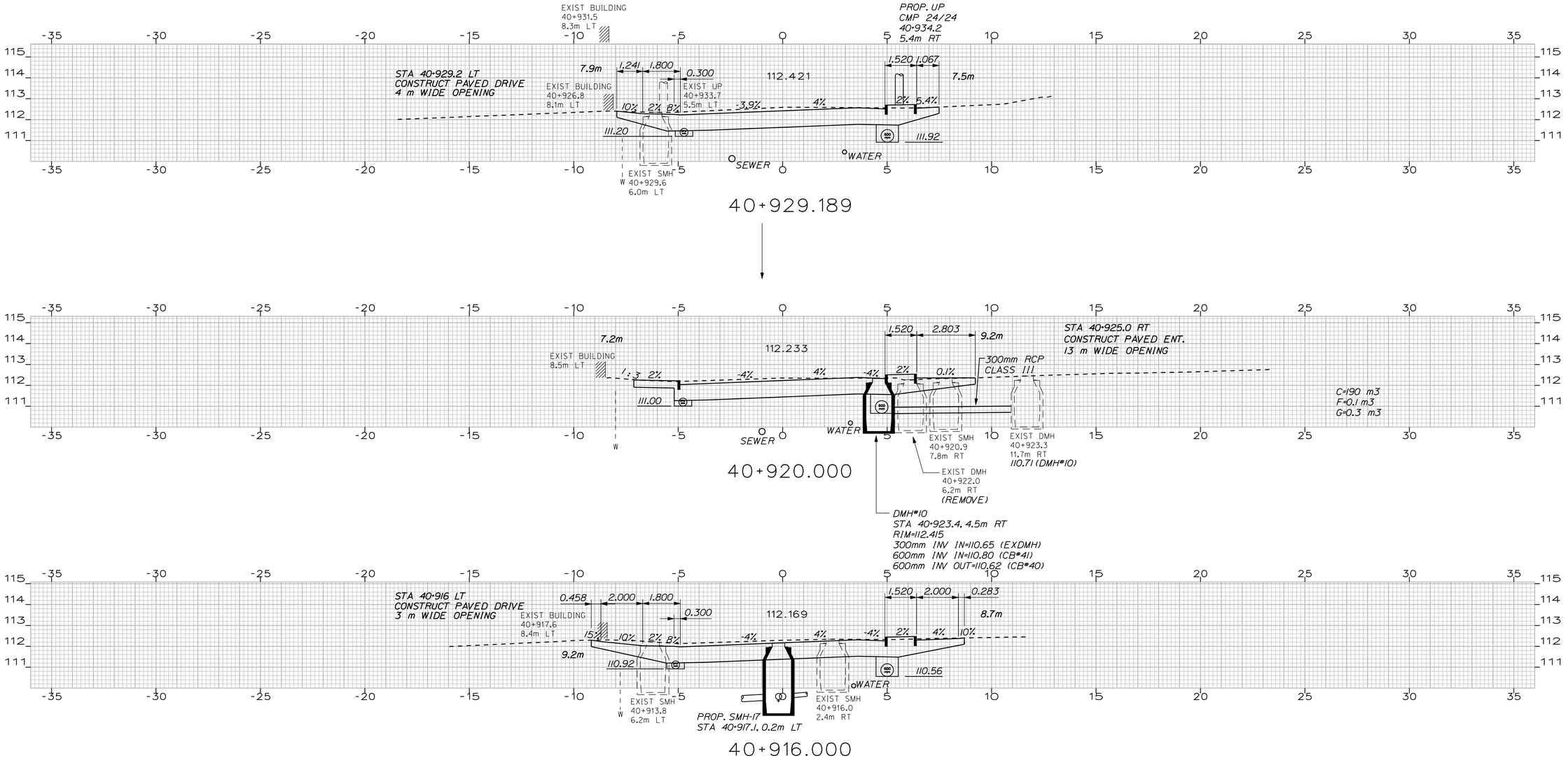
DATE

LIVERMORE FALLS - JAY
ROUTE 4\17

CROSS SECTIONS

SHEET NUMBER
78
OF 148

Filename: ...\mslo\078_XSMC30-NEW_dr_023.dgn Division: HIGHWAY Username: common Date:2/9/2011



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

			DATE
PROJ. MANAGER	R.WEBSTER	BY	02-05-09
DESIGN-DETAILED	R.NORWOOD	D.BURGESS	
CHECKED-REVIEWED	T.CORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
ROUTE 4\17

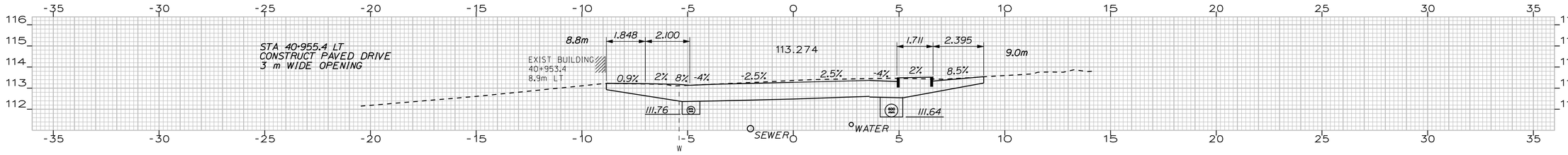
CROSS SECTIONS

SHEET NUMBER

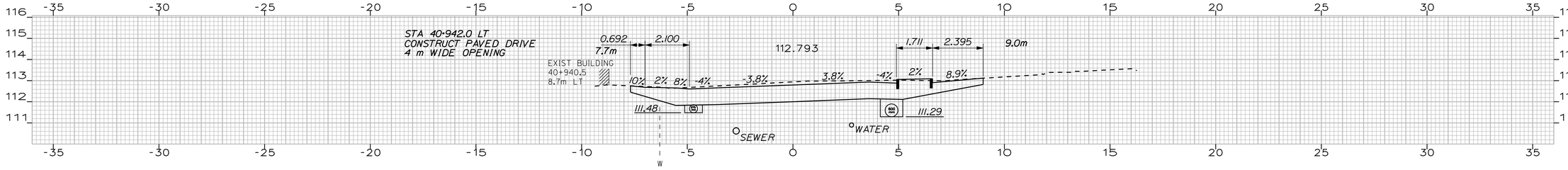
79

OF 148

Filename: ...\msto\079_XSMC30-NEW_dr_024.dgn Division: HIGHWAY Username: common Date:2/9/2011

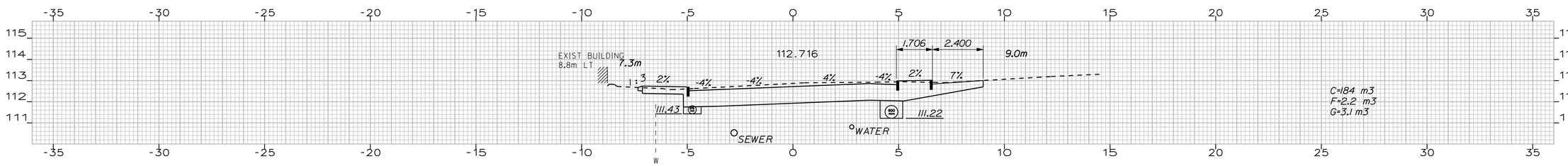


40+955.354



40+942.403

STA 40+938.2 LT
CONSTRUCT PAVED ENTRANCE
5.0m WIDE OPENING



C=184 m3
F=2.2 m3
G=3.1 m3

40+940.000

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	R.WEBSTER	
DESIGN-DETAILED	R.NORWOOD	02-05-09
CHECKED-REVIEWED	T.CORRILL	
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
ROUTE 4\17

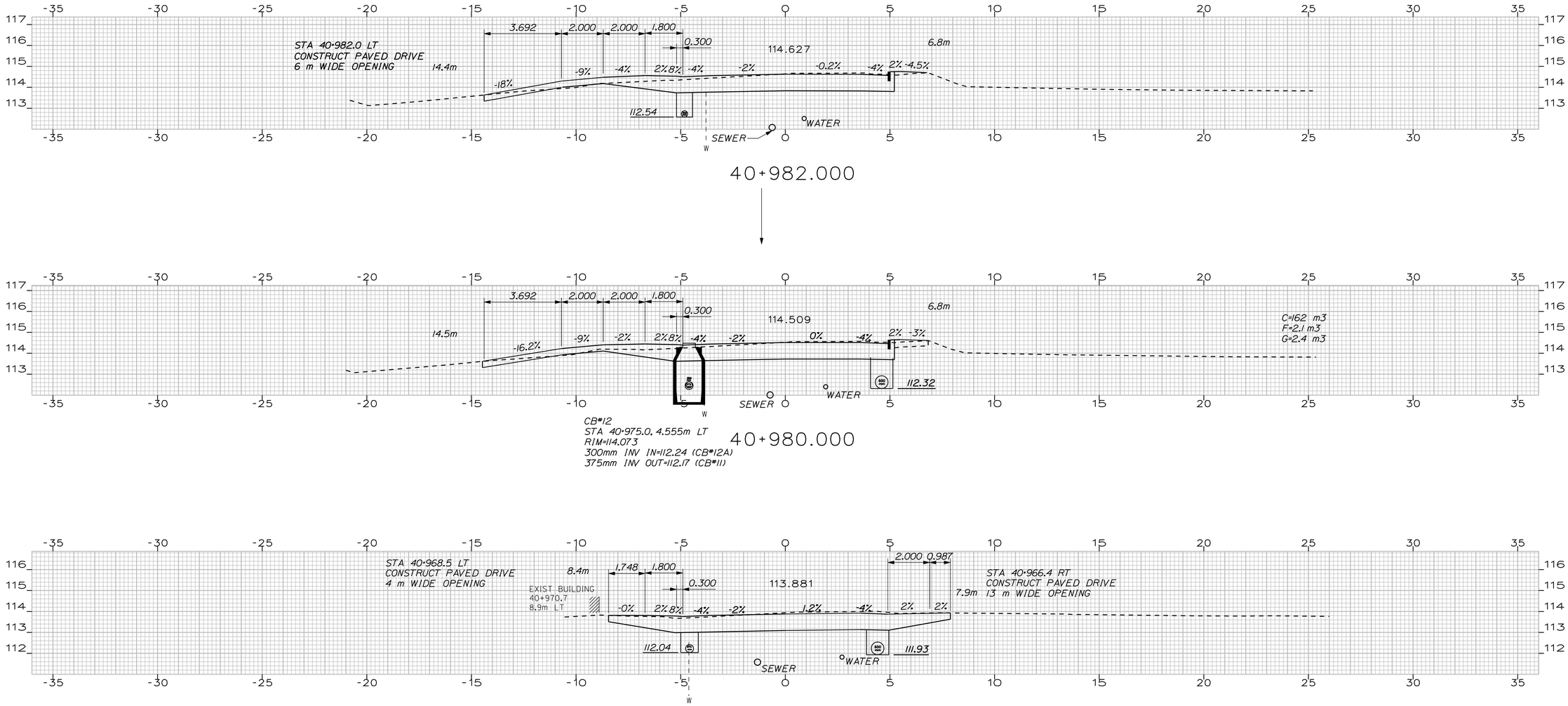
CROSS SECTIONS

SHEET NUMBER

80

OF 148

Filename: ...\mst0\080_XSMC30-NEW_dr_025.dgn Division: HIGHWAY Username: common Date:2/9/2011



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

PROJ. MANAGER	R.WEBSTER		
DESIGN-DETAILED	R.NORWOOD	D.BURGESS	02-05-09
CHECKED-REVIEWED	T.CORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
ROUTE 4\17

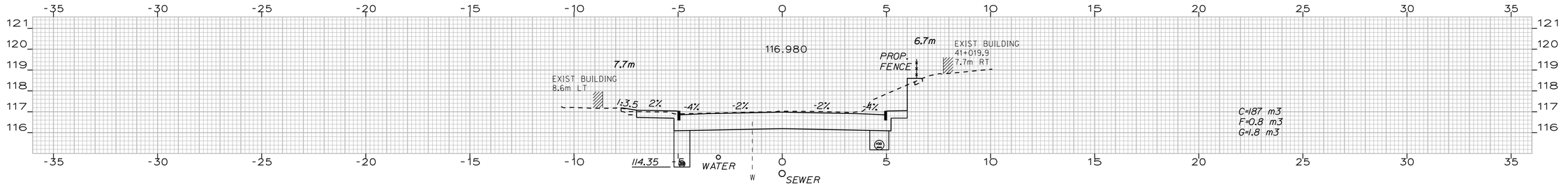
CROSS SECTIONS

SHEET NUMBER

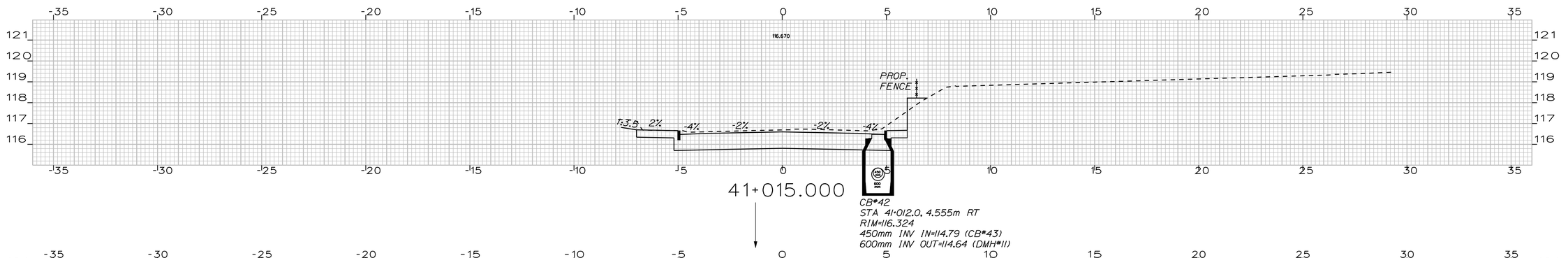
81

OF 148

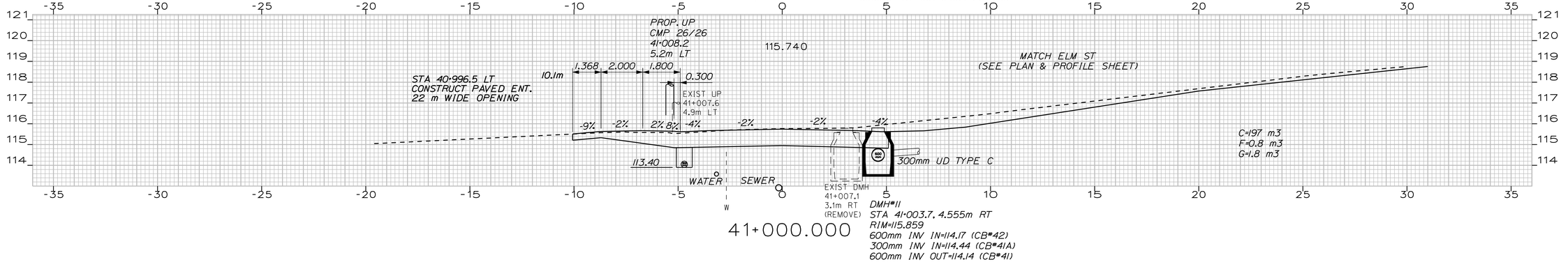
Filename: ...\msto\081_XSMC30-NEW_dr_026.dgn Division: HIGHWAY Username: common Date:2/9/2011



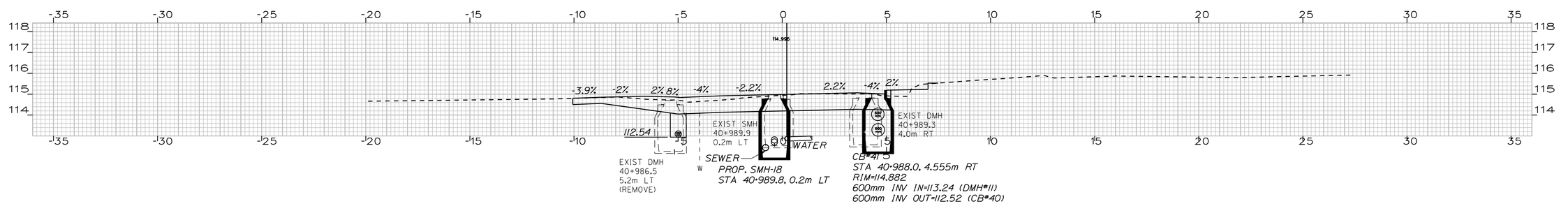
41+020.000



41+015.000



41+000.000



40+988.000

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	R.WEBSTER	
DESIGN-DETAILED	R.NORWOOD	D.BURGESS 02-05-09
CHECKED-REVIEWED	T.CORRILL	
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
ROUTE 4\17

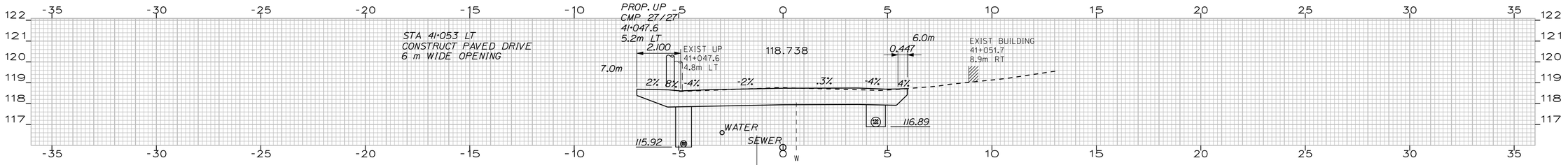
CROSS SECTIONS

SHEET NUMBER

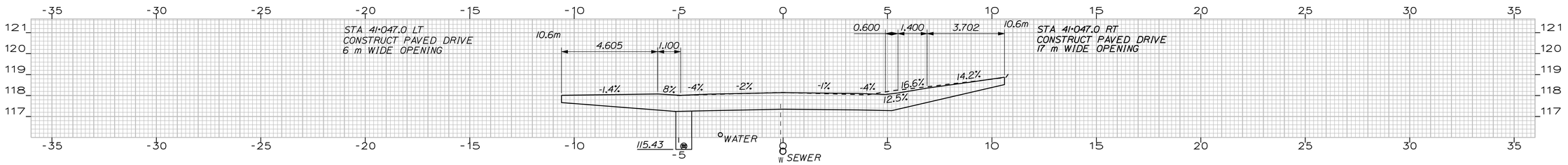
82

OF 148

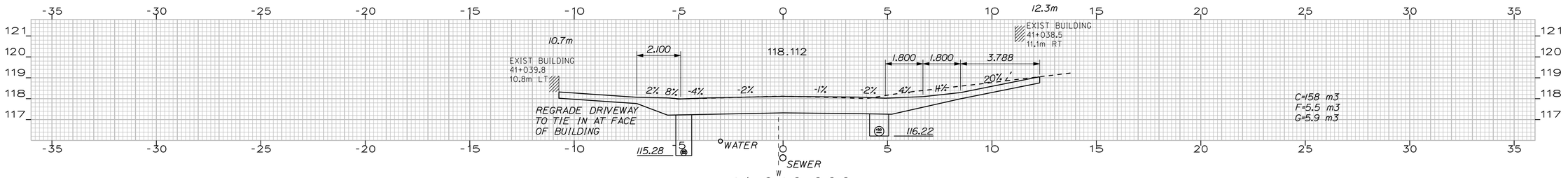
Filename: ...\msto\082_XSMC30-NEW_dr_027.dgn Division: HIGHWAY Username: common Date:2/9/2011



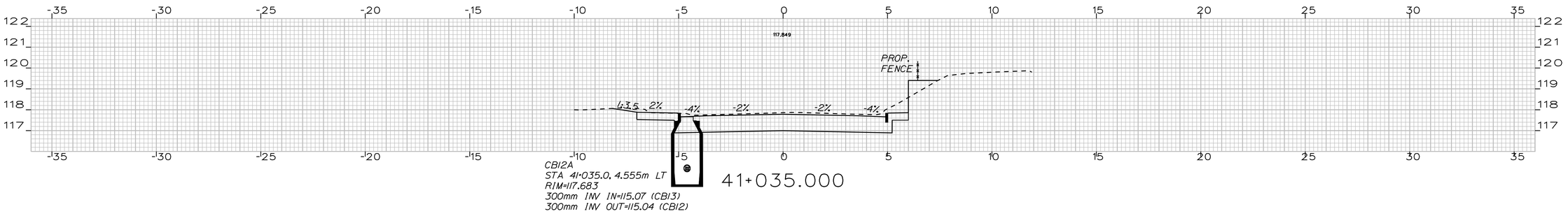
41+053.067



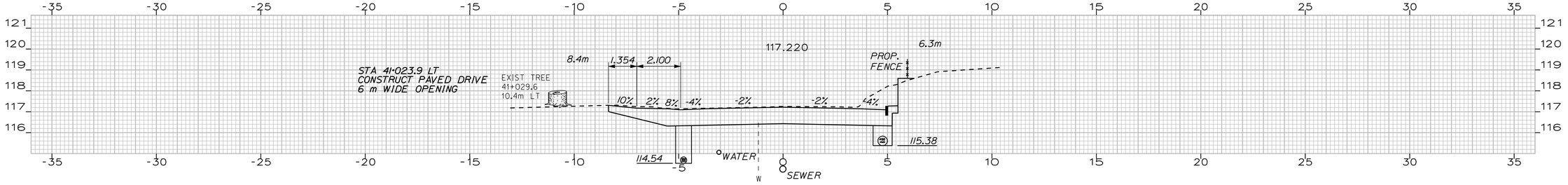
41+043.000



41+040.000



41+035.000



41+023.936

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

	NAME	DATE
PROJ. MANAGER	R.WEBSTER	
DESIGN-DETAILED	R.NORWOOD	D.BURGESS 02-05-09
CHECKED-REVIEWED	T.GORRILL	
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

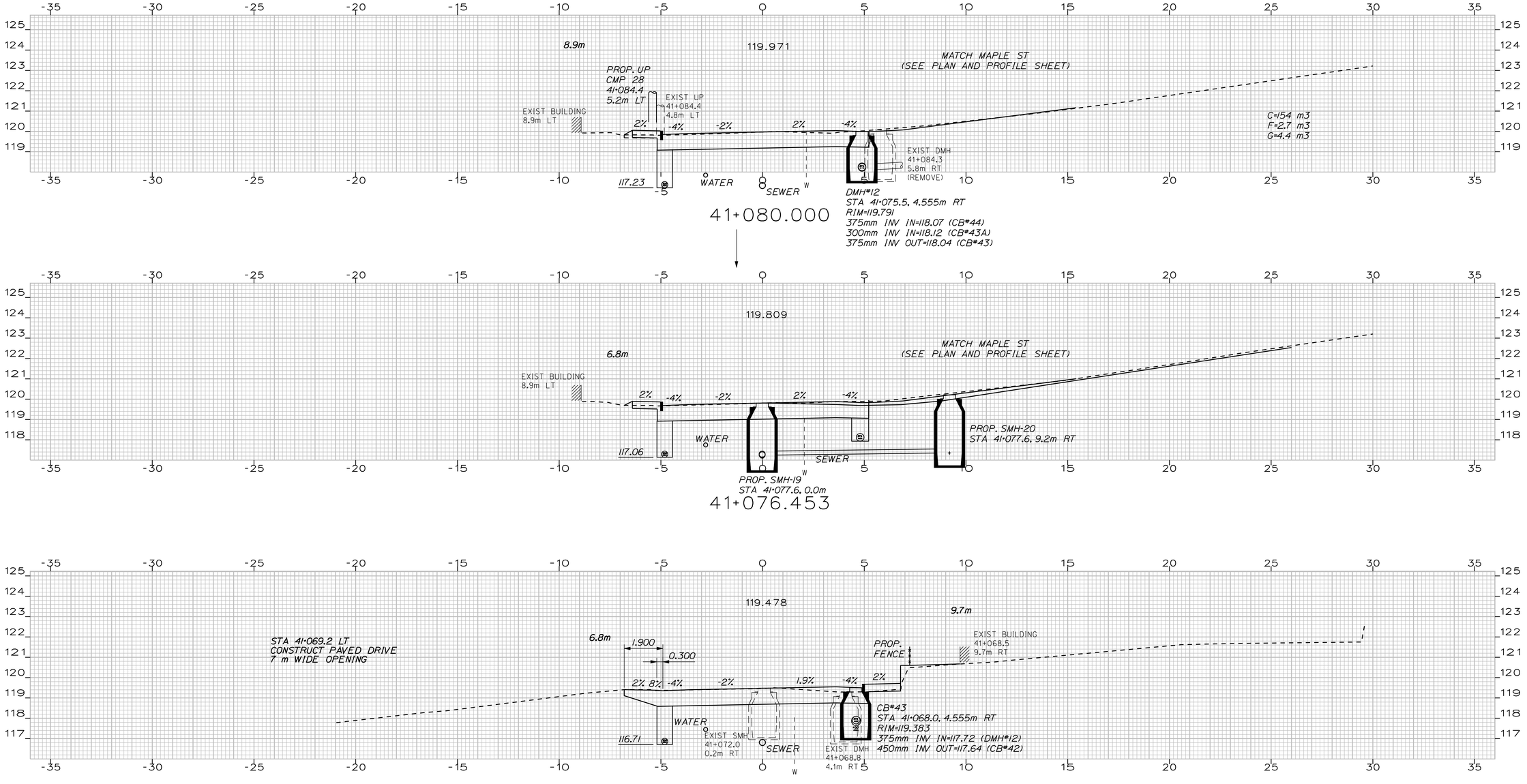
DATE

LIVERMORE FALLS - JAY
ROUTE 4\17

CROSS SECTIONS

SHEET NUMBER
83
OF 148

Filename: ...\mslo\083_XSMC30-NEW_dr_028.dgn Division: HIGHWAY Username: common Date:2/9/2011



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

PROJ. MANAGER	R.WEBSTER		
DESIGN-DETAILED	R.NORWOOD	D.BURGESS	02-05-09
CHECKED-REVIEWED	T.GORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
ROUTE 4\17

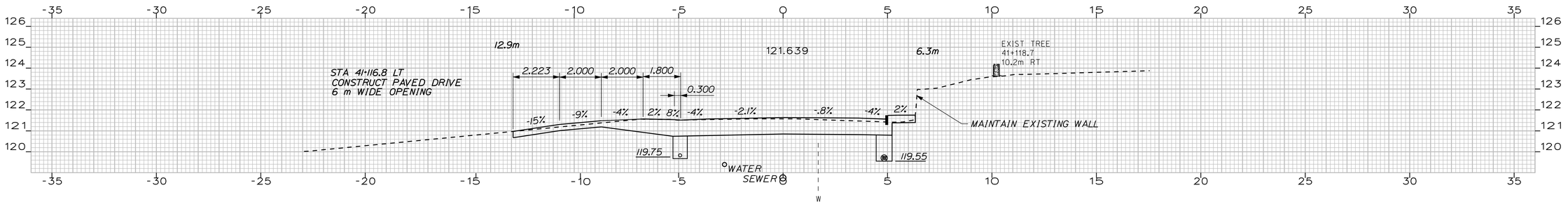
CROSS SECTIONS

SHEET NUMBER

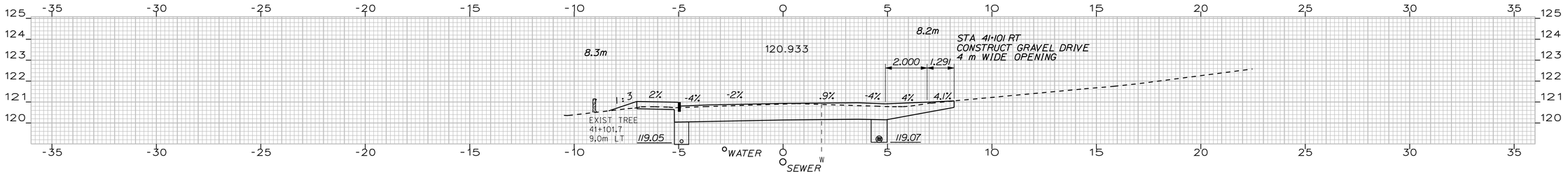
84

OF 148

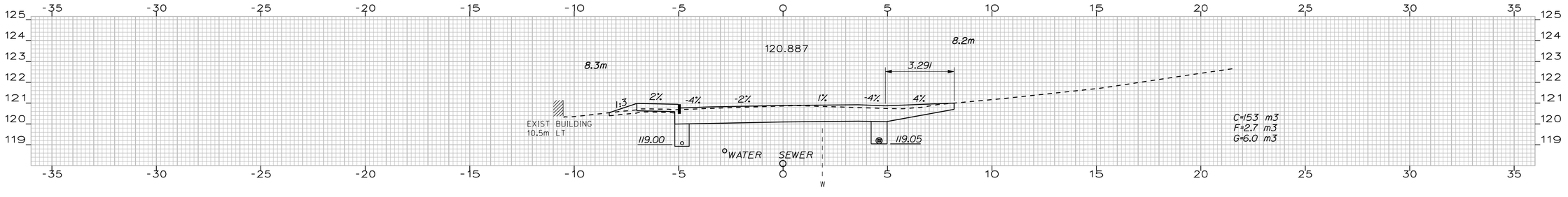
Filename: ...\msto\084_XSMC30-NEW_dr_029.dgn Division: HIGHWAY Username: common Date:2/9/2011



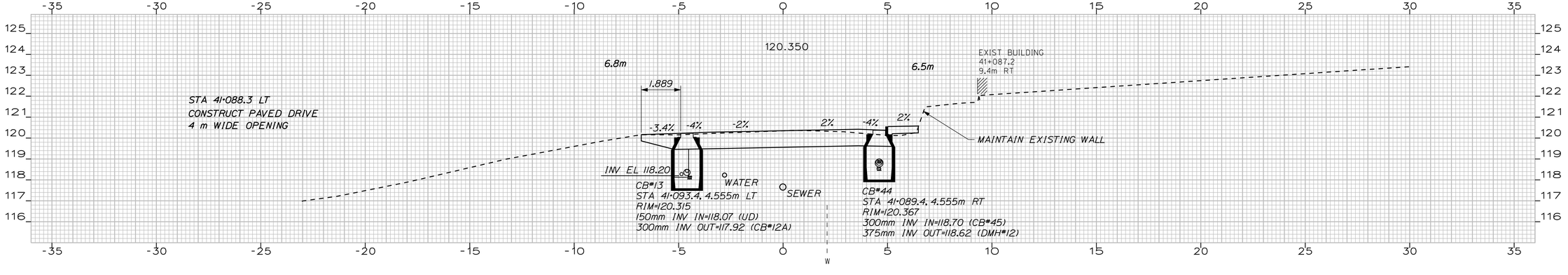
41+116.945



41+101.000



41+100.000



41+088.274

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN 10018.00

HIGHWAY PLANS

		DATE
PROJ. MANAGER	R.WEBSTER	
DESIGN-DETAILED	R.NORWOOD	D.BURGESS 02-05-09
CHECKED-REVIEWED	T.CORRILL	
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
ROUTE 4\17

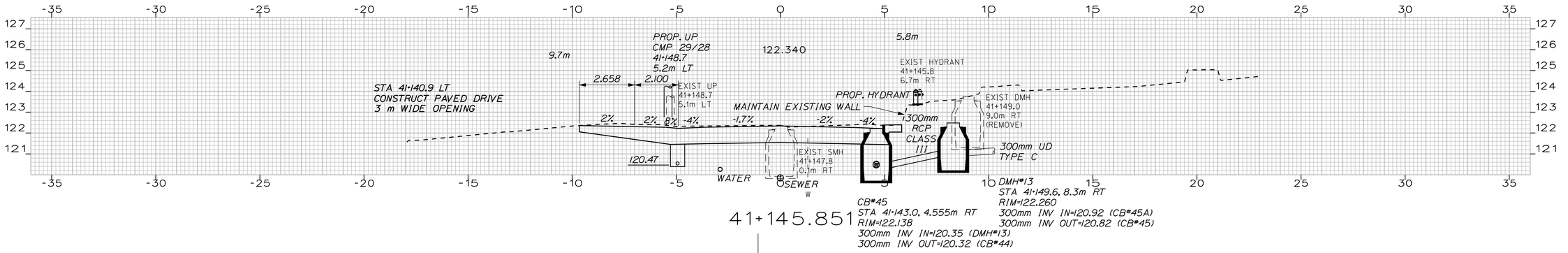
CROSS SECTIONS

SHEET NUMBER

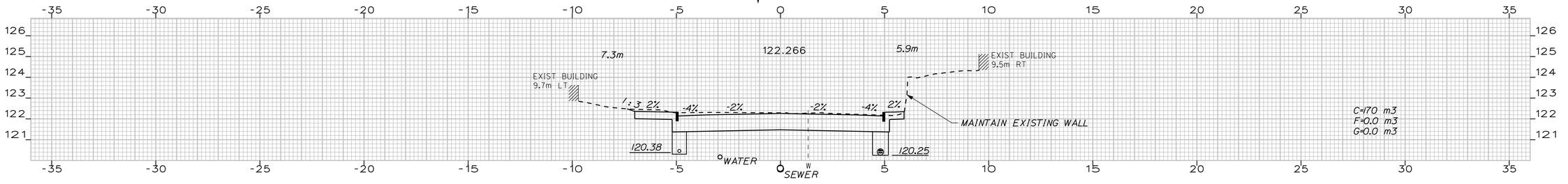
85

OF 148

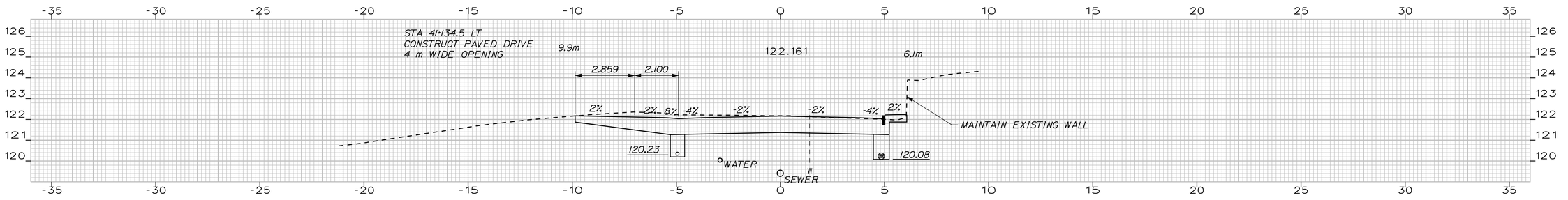
Filename: ...\mst0\085_XSMC30-NEW_dr_030.dgn Username: common Division: HIGHWAY Date:2/9/2011



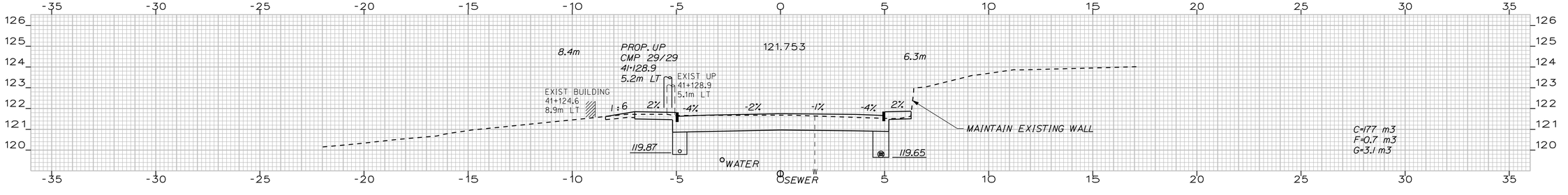
41+145.851



41+140.000



41+134.316



41+120.000

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

PROJ. MANAGER	R.WEBSTER		
DESIGN-DETAILED	R.NORWOOD	D.BURGESS	02-05-09
CHECKED-REVIEWED	T.GORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
ROUTE 4\17

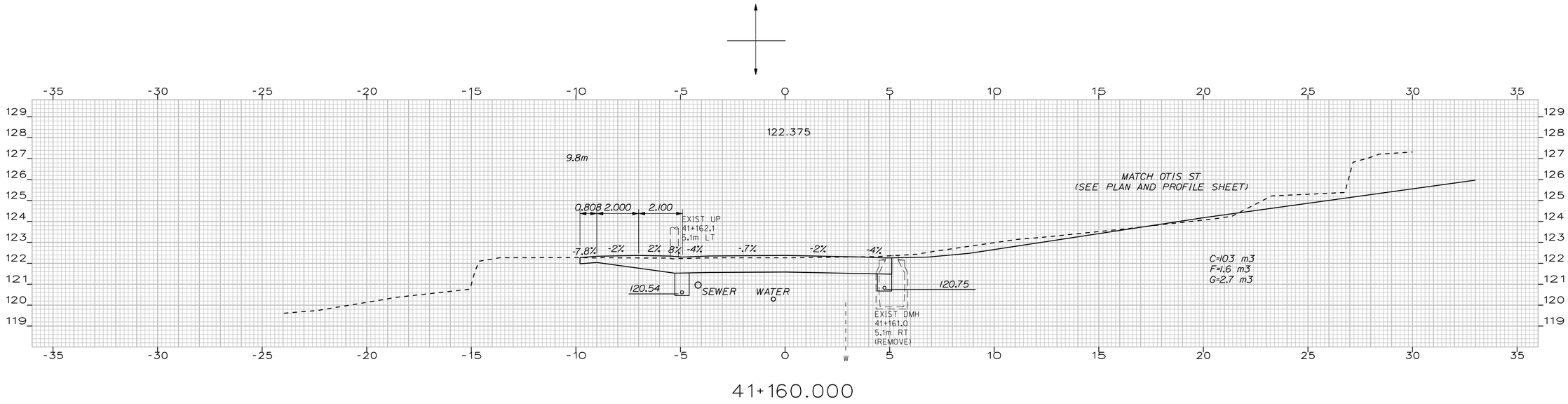
CROSS SECTIONS

SHEET NUMBER

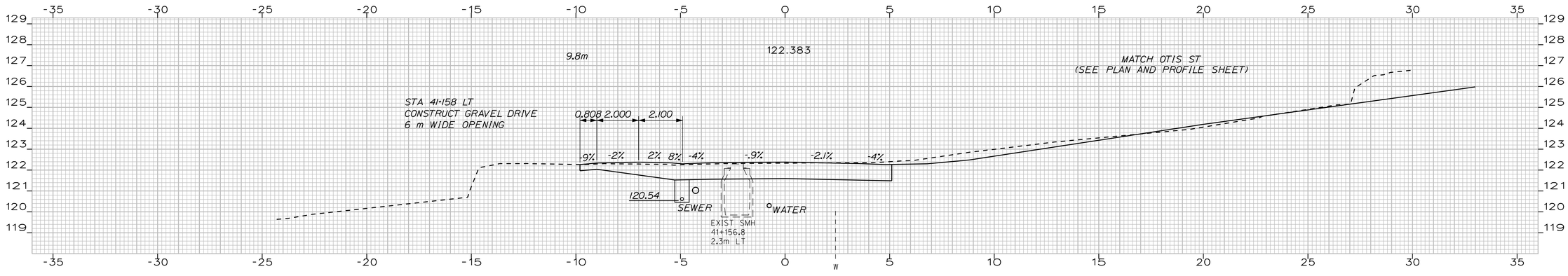
86

OF 148

Filename: ...\msto\086_XSMC30-NEW_dr_031.dgn Division: HIGHWAY Username: common Date:2/9/2011



41+160.000



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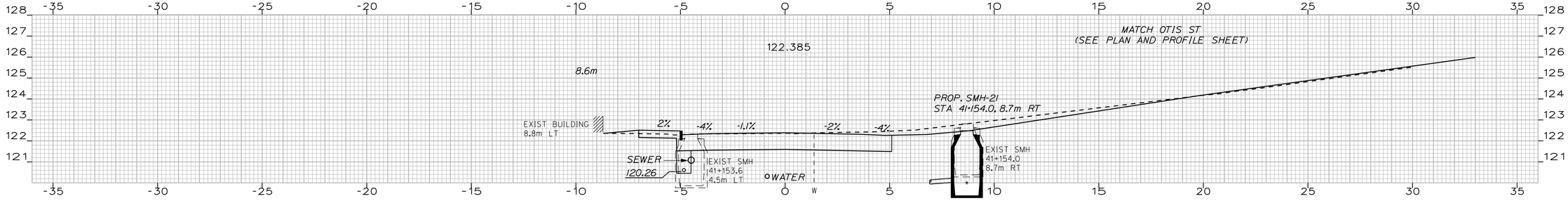


41+154.219

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

PROJ. MANAGER	R.WEBSTER	BY	DATE
DESIGN-DETAILED	R.NORWOOD	D.BURGESS	02-05-09
CHECKED-REVIEWED	T.CORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
ROUTE 4\17

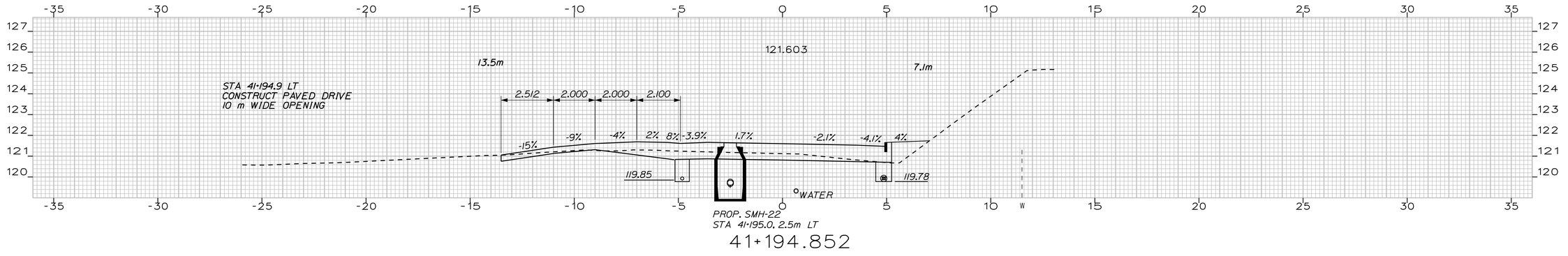
CROSS SECTIONS

SHEET NUMBER

87

OF 148

Filename: ...\msto\087_XSMC30-NEW_dr_032.dgn Division: HIGHWAY Username: common Date:2/9/2011



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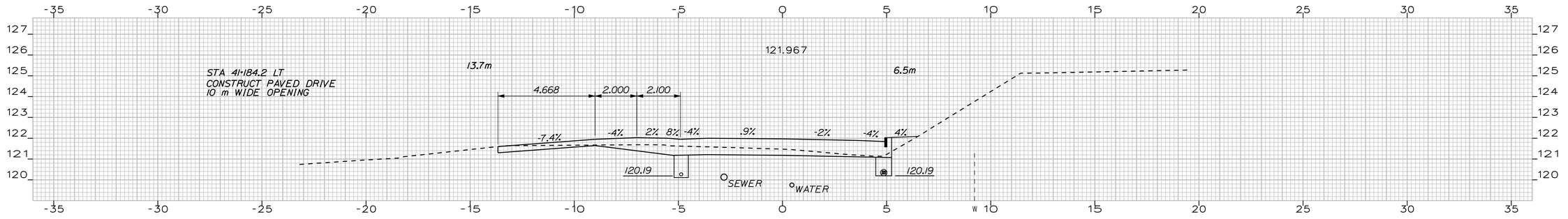

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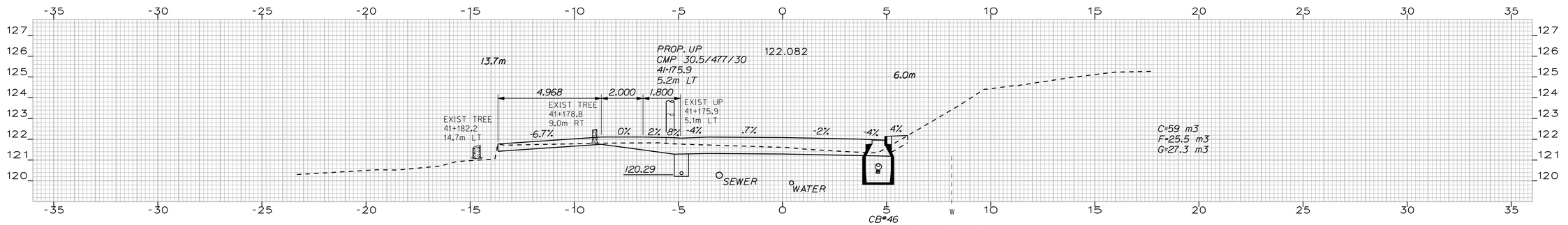

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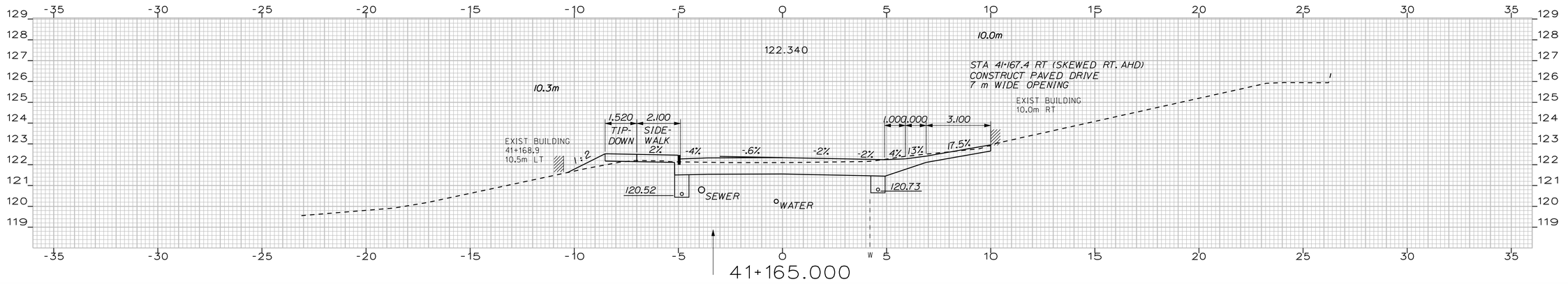


41+165.000

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

PROJ. MANAGER	R.WEBSTER		
DESIGN-DETAILED	R.NORWOOD	D.BURGESS	02-05-09
CHECKED-REVIEWED	T.GORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
ROUTE 4\17

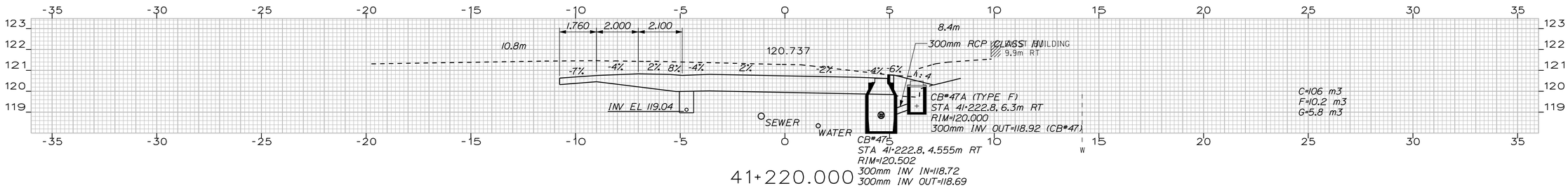
CROSS SECTIONS

SHEET NUMBER

88

OF 148

Filename: ...\mslo\088_XSMC30-NEW_dr_033.dgn Division: HIGHWAY Username: common Date:2/9/2011



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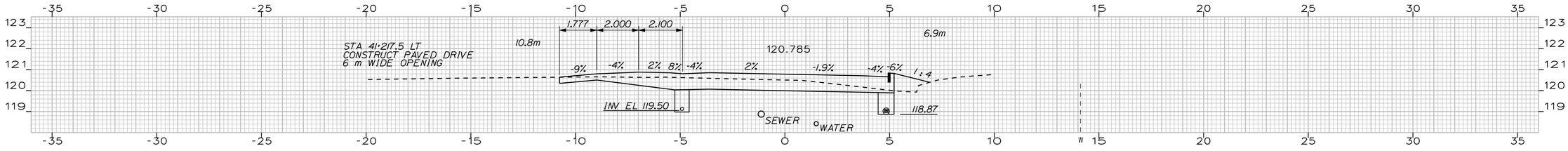

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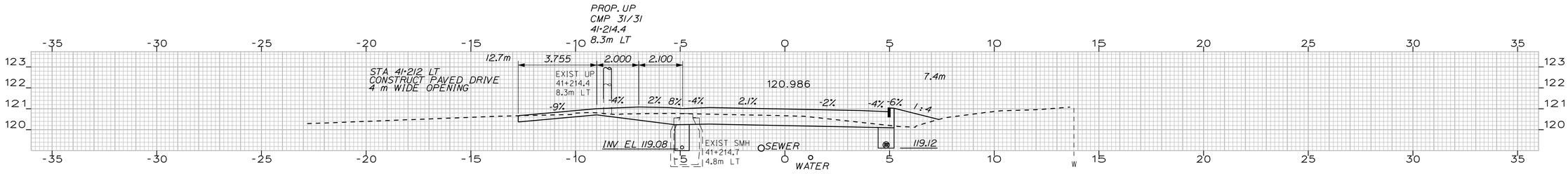

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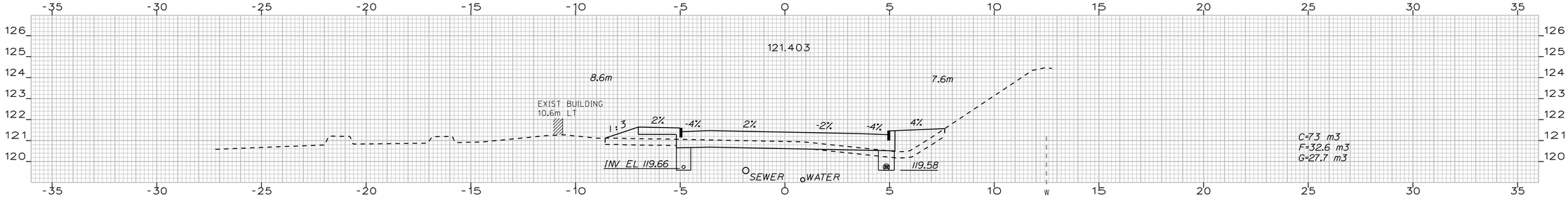


41+200.000

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

PROJ. MANAGER	R.WEBSTER		
DESIGN-DETAILED	R.NORWOOD	D.BURGESS	02-05-09
CHECKED-REVIEWED	T.GORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
ROUTE 4\17

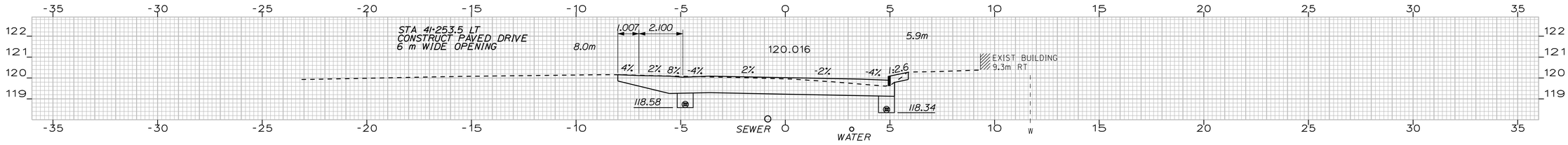
CROSS SECTIONS

SHEET NUMBER

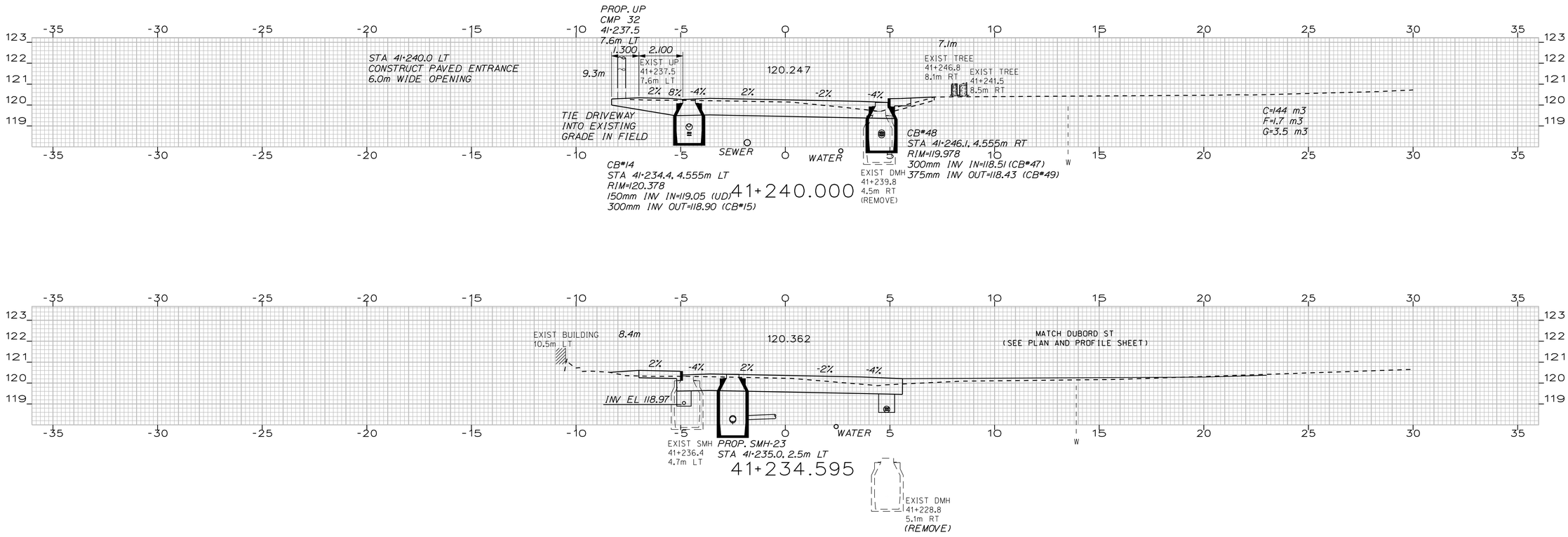
89

OF 148

Filename: ...\mslo\089_XSMC30-NEW_dr_034.dgn Division: HIGHWAY Username: common Date:2/9/2011



41+253.519



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

PROJ. MANAGER	R.WEBSTER		
DESIGN-DETAILED	R.NORWOOD	BY	D.BURGESS
CHECKED-REVIEWED	T.GORRILL	DATE	02-05-09
DESIGN2-DETAILED2		SIGNATURE	
DESIGN3-DETAILED3		P.E. NUMBER	
REVISIONS 1		DATE	
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

LIVERMORE FALLS - JAY
ROUTE 4\17

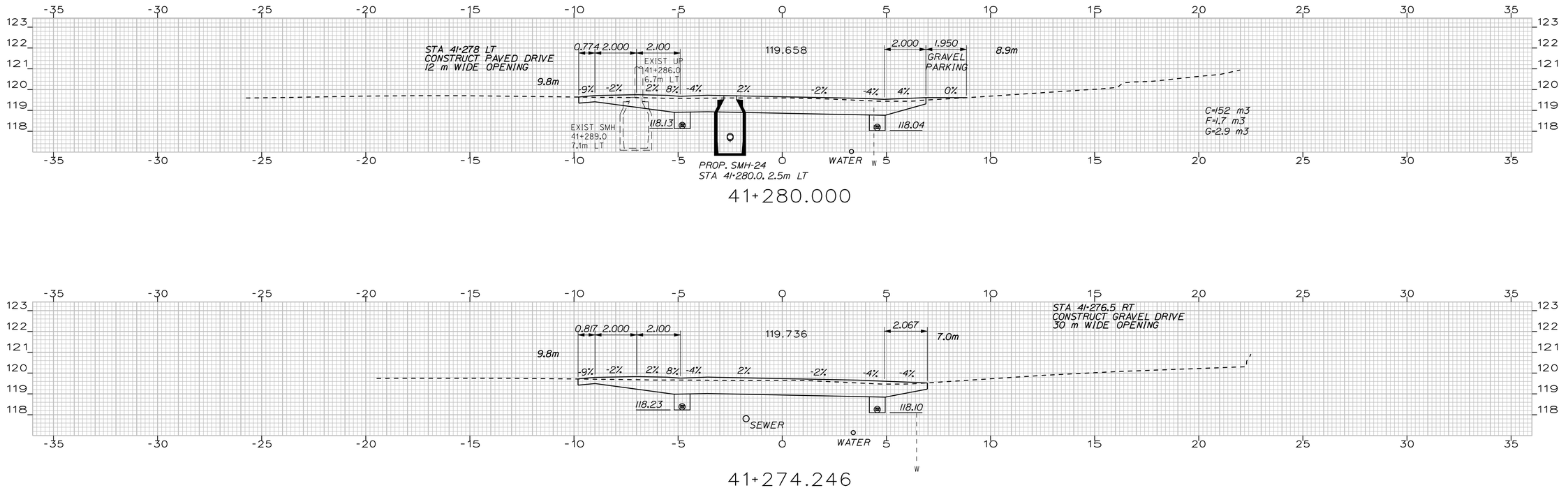
CROSS SECTIONS

SHEET NUMBER

90

OF 148

Filename: ...\msto\090_XSMC30-NEW_dr_035.dgn Division: HIGHWAY Username: common Date:2/9/2011



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

PROJ. MANAGER	R.WEBSTER		
DESIGN-DETAILED	R.NORWOOD	D.BURGESS	02-05-09
CHECKED-REVIEWED	T.CORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
ROUTE 4\17

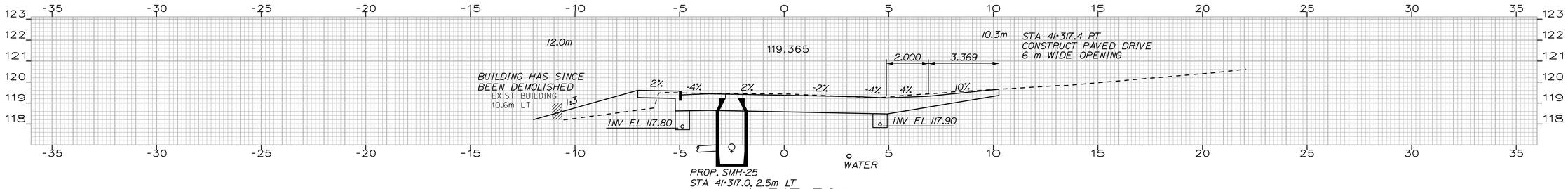
CROSS SECTIONS

SHEET NUMBER

91

OF 148

Filename: ...\msto\091_XSMC30-NEW_dr_036.dgn Division: HIGHWAY Username: common Date:2/9/2011



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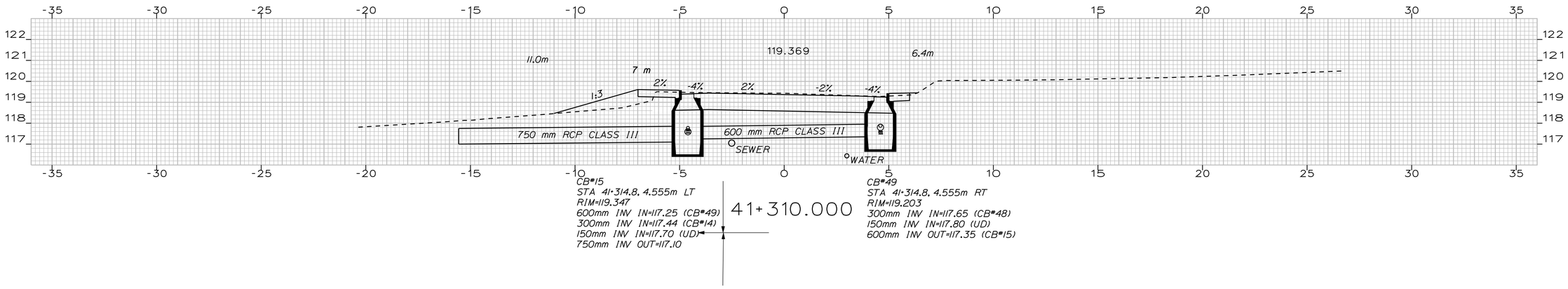

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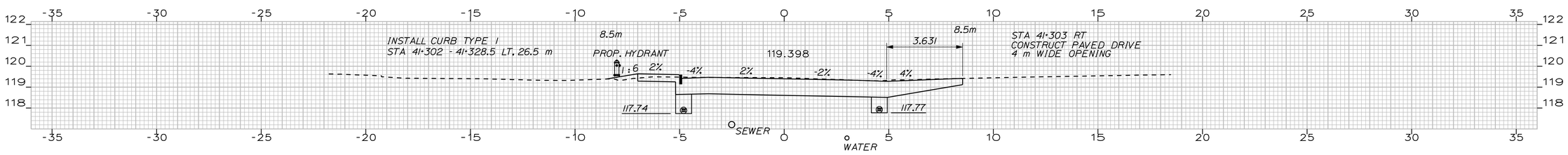
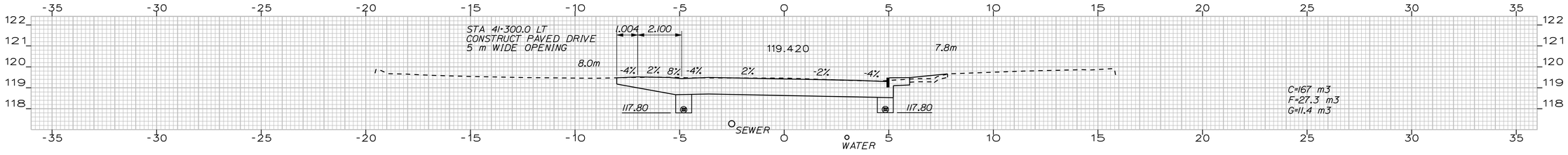


41+303.198



41+300.000

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

PROJ. MANAGER	R.WEBSTER		
DESIGN-DETAILED	R.NORWOOD	D.BURGESS	02-05-09
CHECKED-REVIEWED	T.GORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
ROUTE 4\17

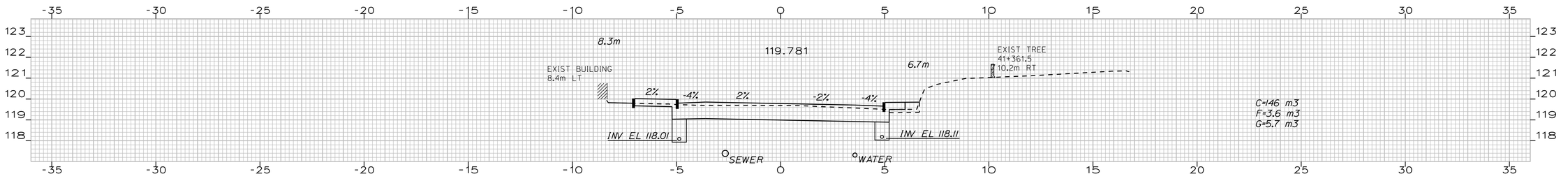
CROSS SECTIONS

SHEET NUMBER

92

OF 148

Filename: ...\msto\092_XSMC30-NEW_dr_037.dgn Division: HIGHWAY Username: common Date:2/9/2011



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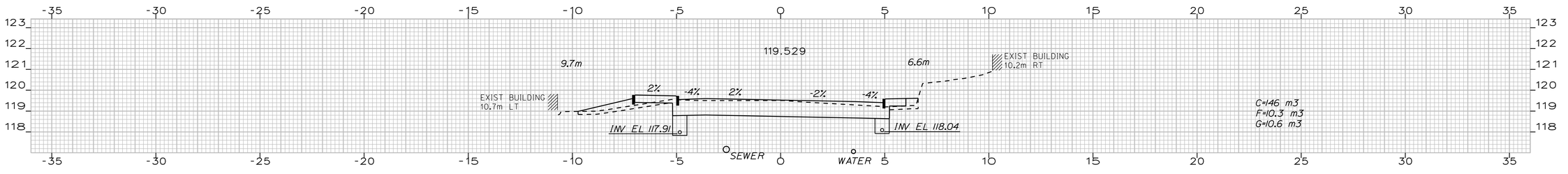
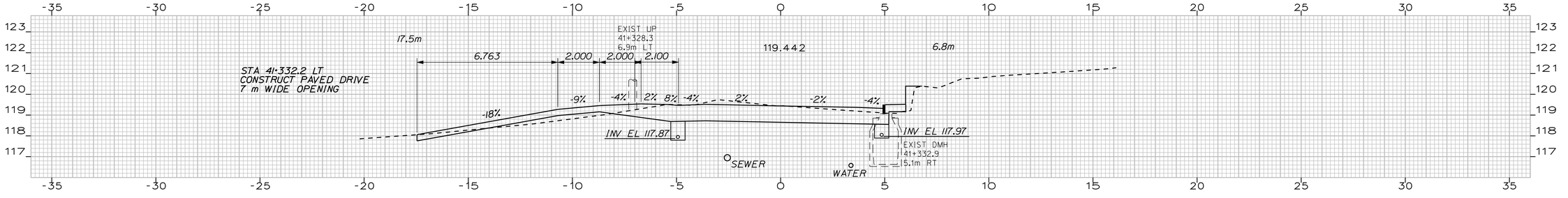
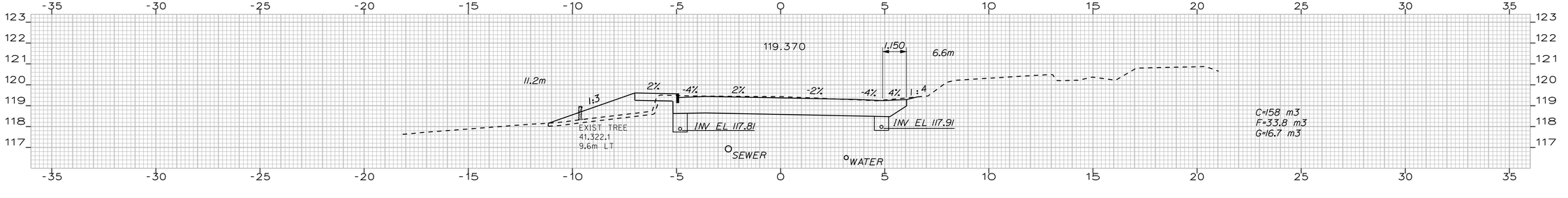


41+340.000



41+332.236



41+320.000

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

PROJ. MANAGER	R.WEBSTER		
DESIGN-DETAILED	R.NORWOOD	D.BURGESS	02-05-09
CHECKED-REVIEWED	T.CORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
ROUTE 4\17

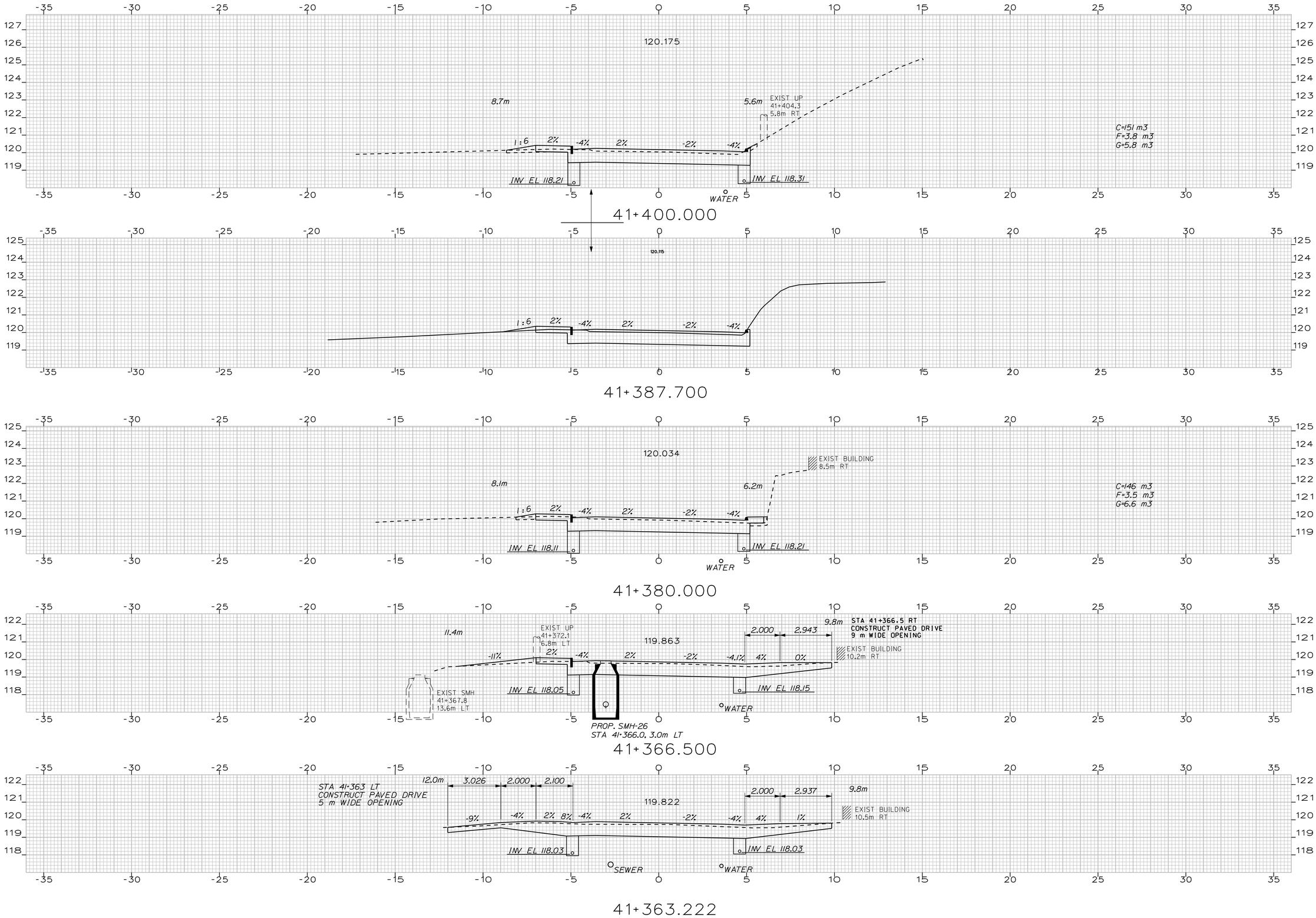
CROSS SECTIONS

SHEET NUMBER

93

OF 148

Filename: ...\mslo\093_XSMC30-NEW_dr_038.dgn Division: HIGHWAY Username: common Date:2/9/2011



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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

SIGNATURE

P.E. NUMBER

DATE

	BY	DATE
PROJ. MANAGER	R.WEBSTER	
DESIGN-DETAILED	R.NORWOOD	02-05-09
CHECKED-REVIEWED	T.GORRILL	
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1	D.BURGESS	
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

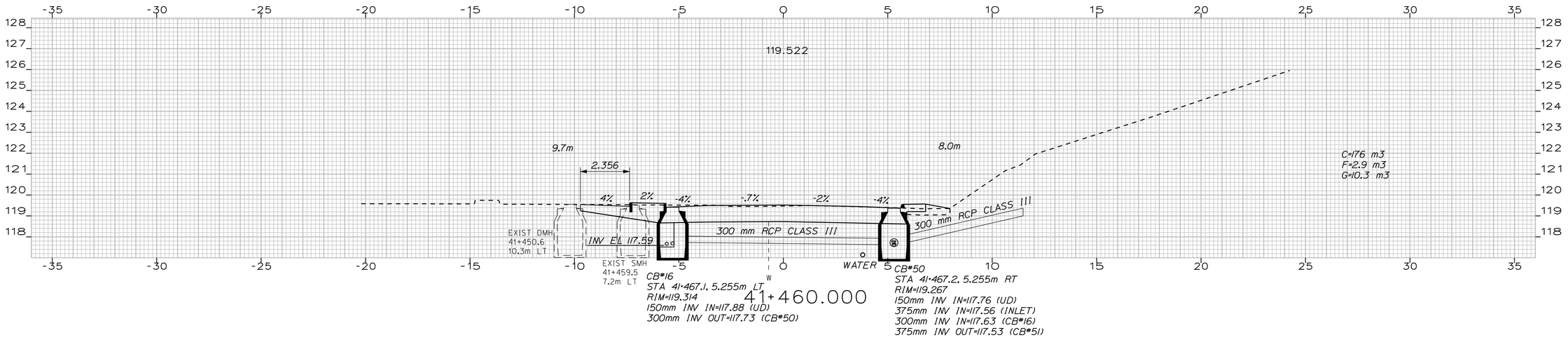
LIVERMORE FALLS - JAY
ROUTE 4\17

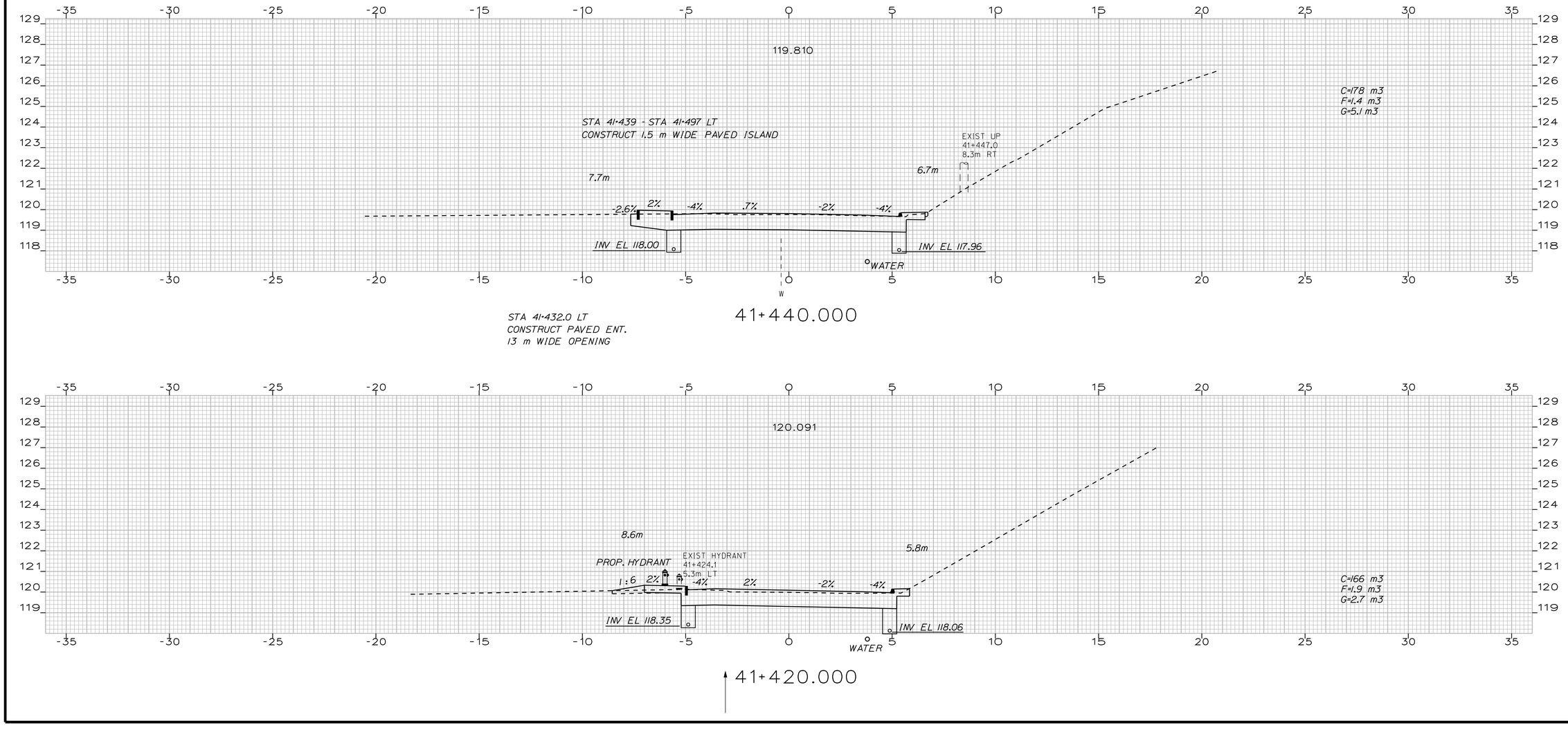
CROSS SECTIONS

SHEET NUMBER

94

OF 148





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

PROJ. MANAGER	R.WEBSTER		
DESIGN-DETAILED	R.NORWOOD	D.BURGESS	02-05-09
CHECKED-REVIEWED	T.CORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

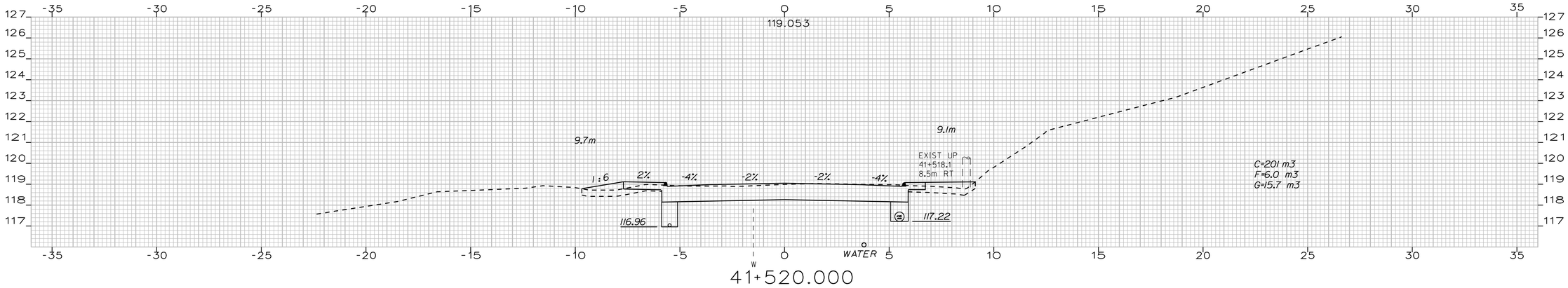
DATE

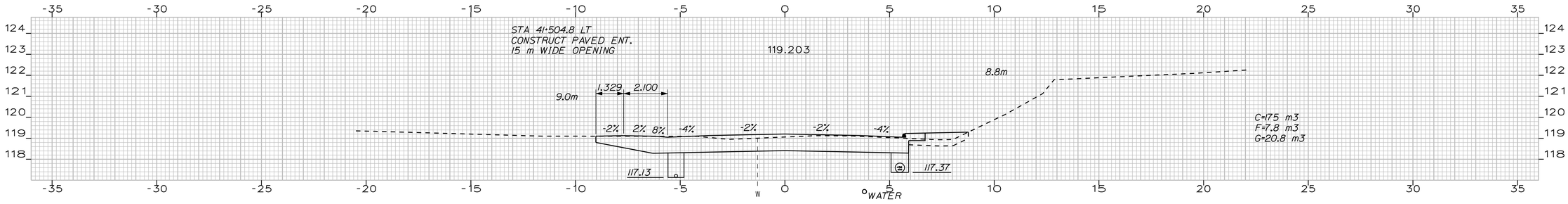
LIVERMORE FALLS - JAY
ROUTE 4\17

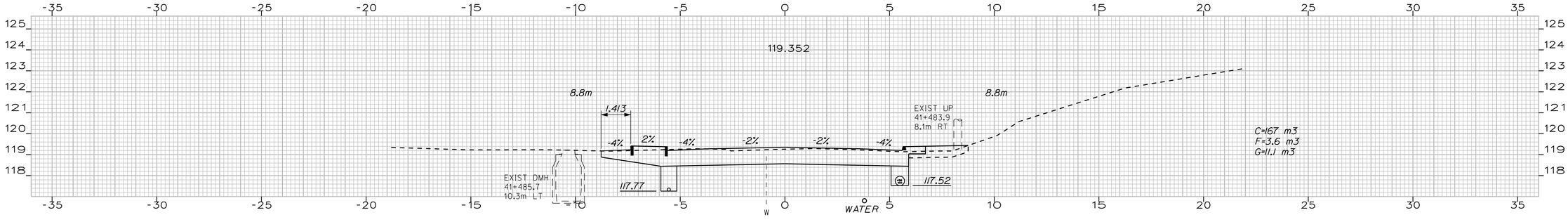
CROSS SECTIONS

SHEET NUMBER
95
OF 148

Filename: ...\mslo\095_XSMC30-NEW_dr_040.dgn Division: HIGHWAY Username: common Date:2/9/2011







STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

PROJ. MANAGER	R.WEBSTER		
DESIGN-DETAILED	R.NORWOOD	D.BURGESS	02-05-09
CHECKED-REVIEWED	T.GORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
ROUTE 4\17

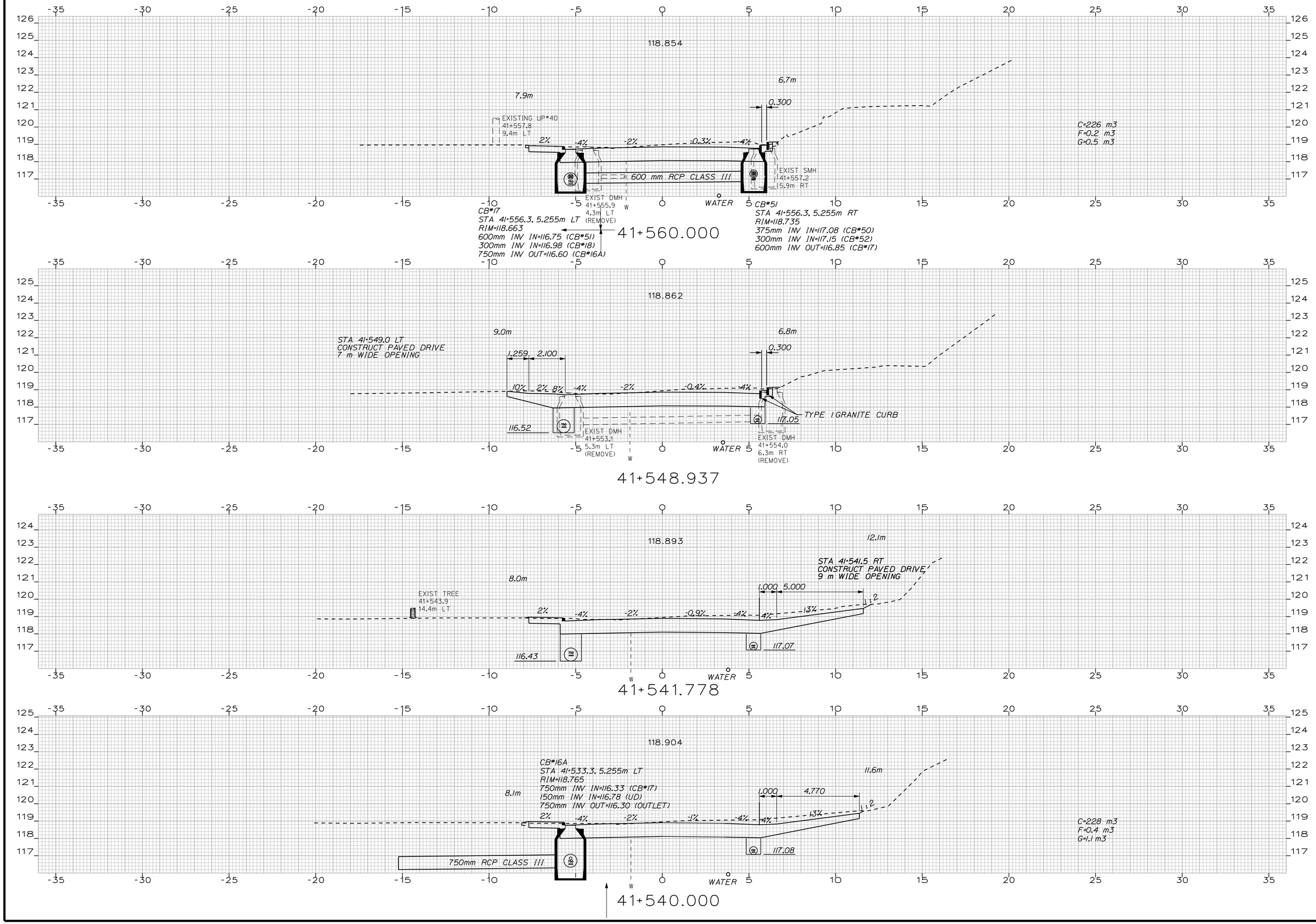
CROSS SECTIONS

SHEET NUMBER

96

OF 148

Filename: ...\msto\096_XSMC30-NEW_dr_041.dgn Division: HIGHWAY Username: common Date:2/9/2011



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

PROJ. MANAGER	R.WEBSTER		
DESIGN-DETAILED	R.NORWOOD	DATE	02-05-09
CHECKED-REVIEWED	T.CORRILL	BY	D.BURGESS
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

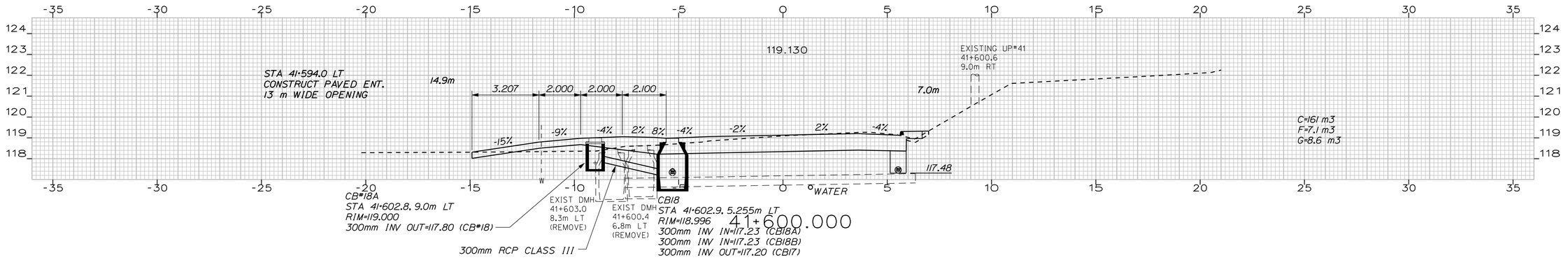
LIVERMORE FALLS - JAY
ROUTE 4\17

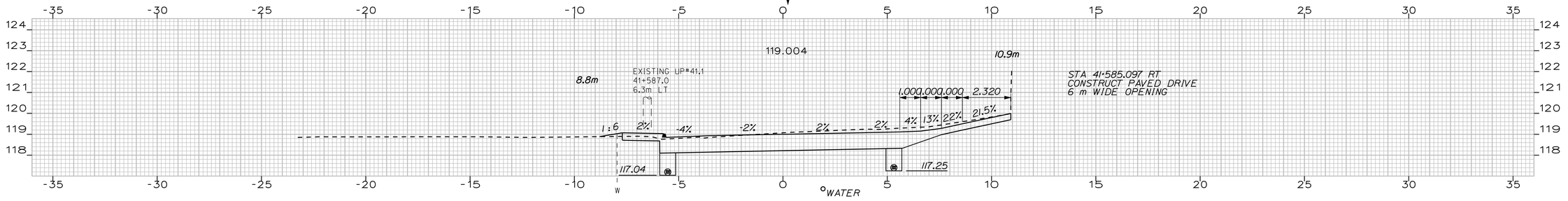
CROSS SECTIONS

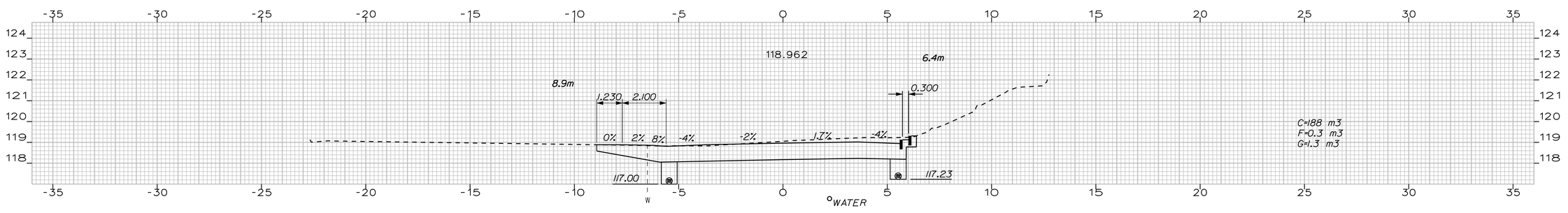
SHEET NUMBER
97
OF 148

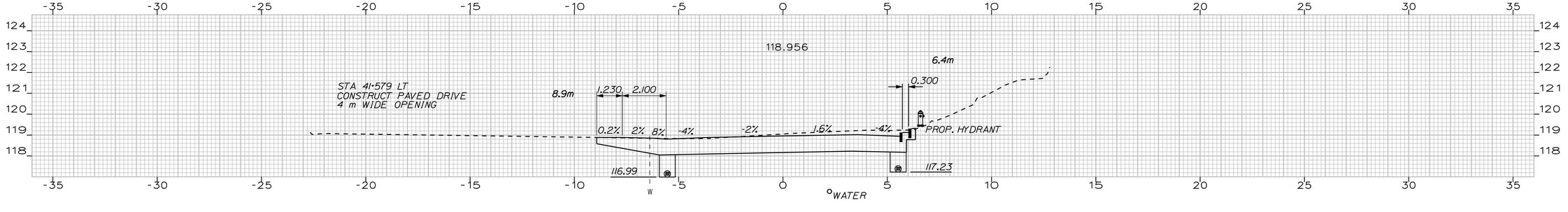
Filename: ...\msto\097_XSMC30-NEW_dr_042.dgn Division: HIGHWAY Username: common Date:2/9/2011

Filename: ...\msto\098_XSMC30-NEW_dr_043.dgn Division: HIGHWAY Username: common Date:2/9/2011









STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

PROJ. MANAGER	R.WEBSTER		
DESIGN-DETAILED	R.NORWOOD	D.BURGESS	02-05-09
CHECKED-REVIEWED	T.GORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

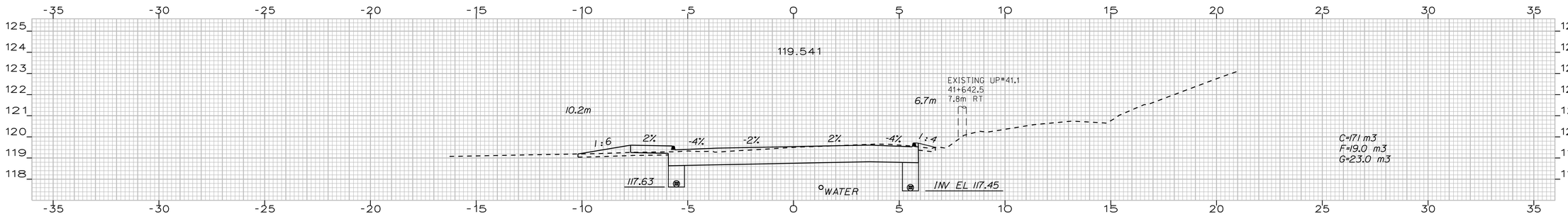
LIVERMORE FALLS - JAY
ROUTE 4\17

CROSS SECTIONS

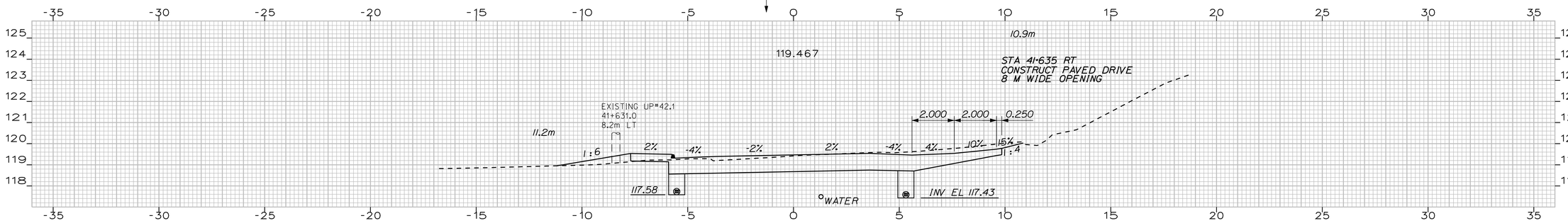
SHEET NUMBER

98

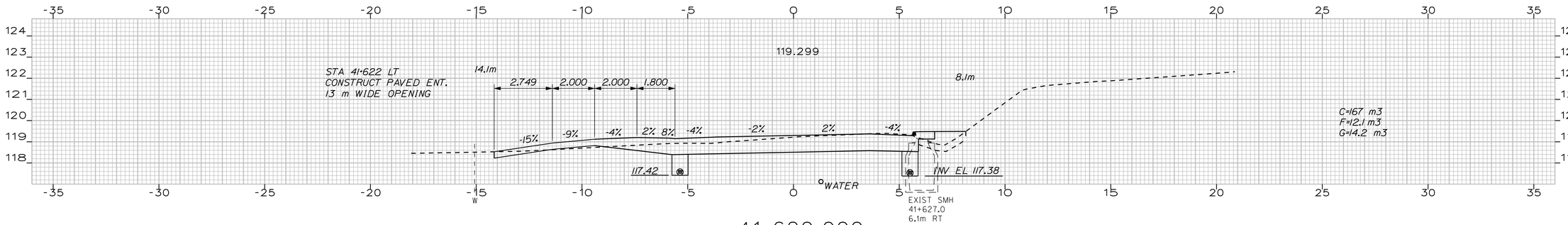
OF 148



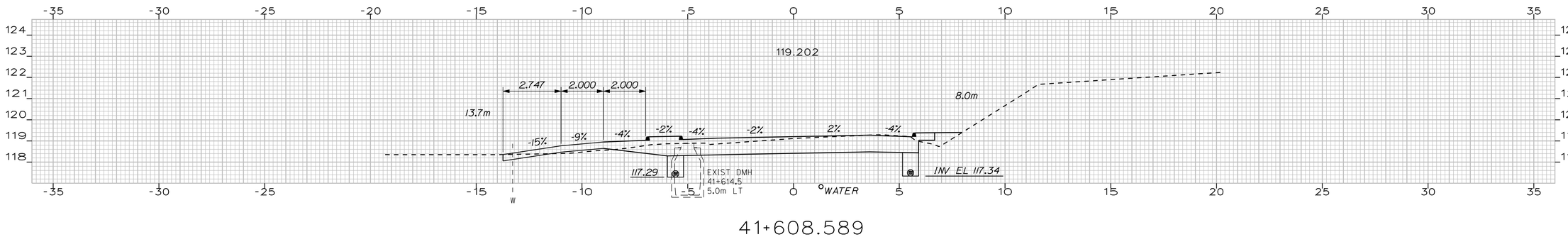
41+640.000



41+635.000



41+620.000



41+608.589

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

PROJ. MANAGER	R.WEBSTER		
DESIGN-DETAILED	R.NORWOOD	BY	D.BURGESS
CHECKED-REVIEWED	T.CORRILL	DATE	02-05-09
DESIGN2-DETAILED2		SIGNATURE	
DESIGN3-DETAILED3		P.E. NUMBER	
REVISIONS 1		DATE	
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

LIVERMORE FALLS - JAY
ROUTE 4\17

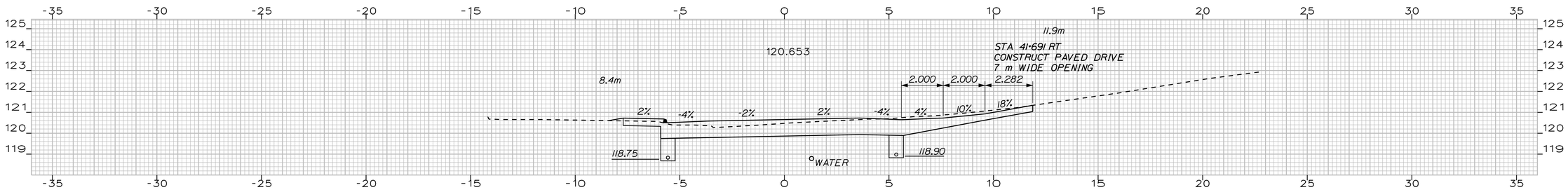
CROSS SECTIONS

SHEET NUMBER

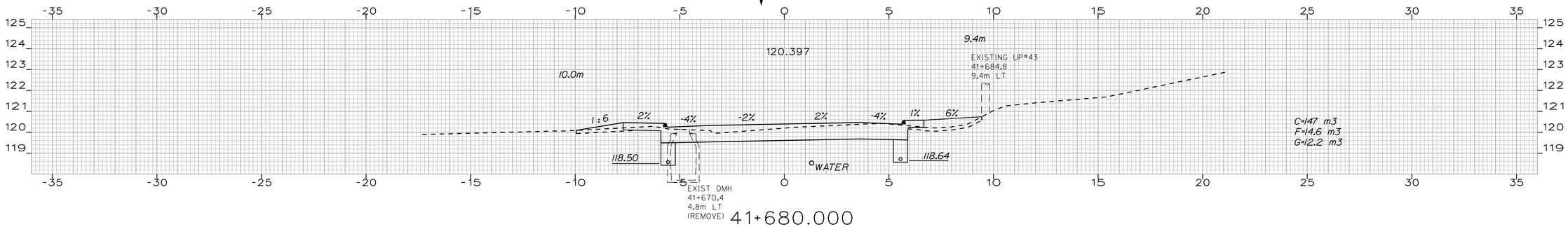
99

OF 148

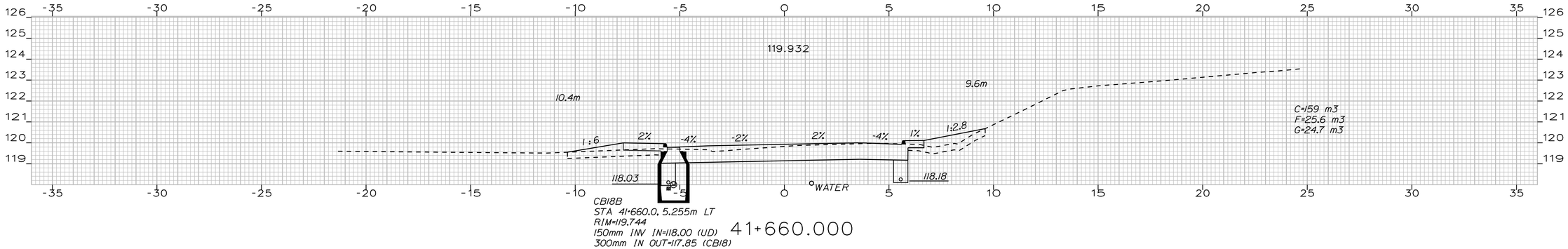
Filename: ...\msto\099_XSMC30-NEW_dr_044.dgn Division: HIGHWAY Username: common Date:2/9/2011



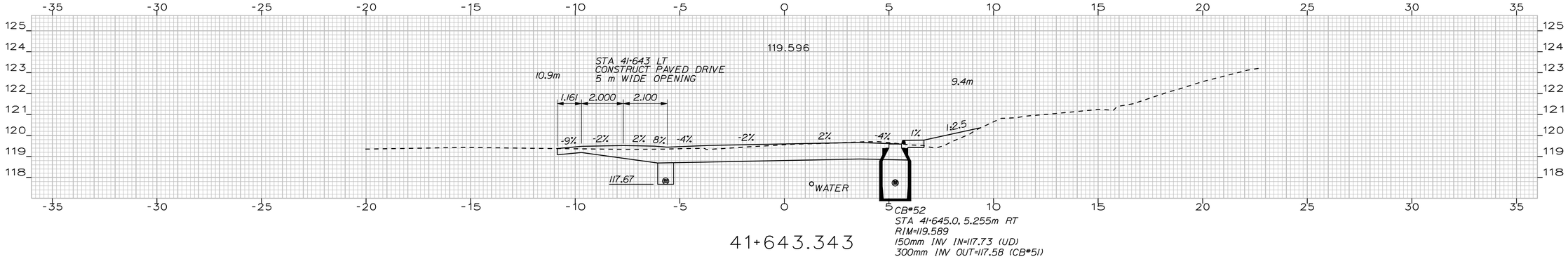
41+691.000



41+680.000



41+660.000



41+643.343

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

PROJ. MANAGER	R.WEBSTER		
DESIGN-DETAILED	R.NORWOOD	D.BURGESS	02-05-09
CHECKED-REVIEWED	T.CORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
ROUTE 4\17

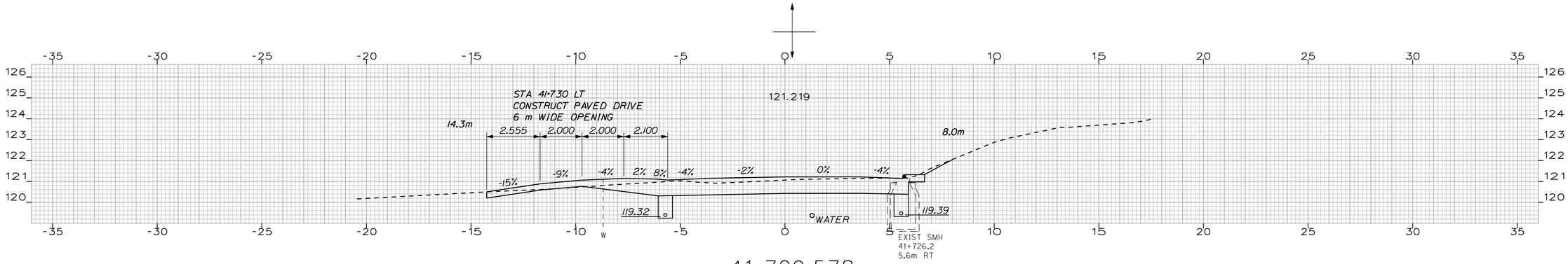
CROSS SECTIONS

SHEET NUMBER

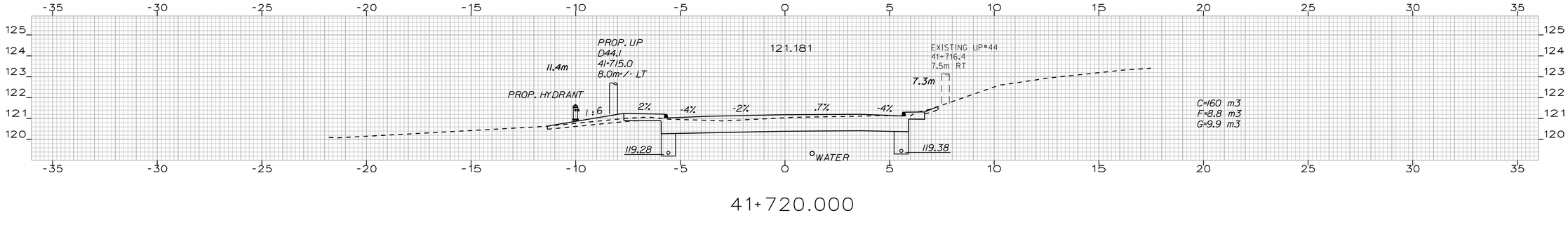
100

OF 148

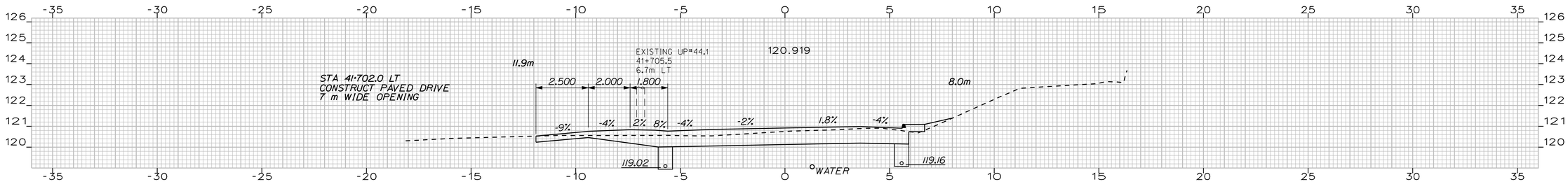
Filename: ...\mslo\100_XSMC30-NEW_dr_045.dgn Username: common Division: HIGHWAY Date:2/9/2011



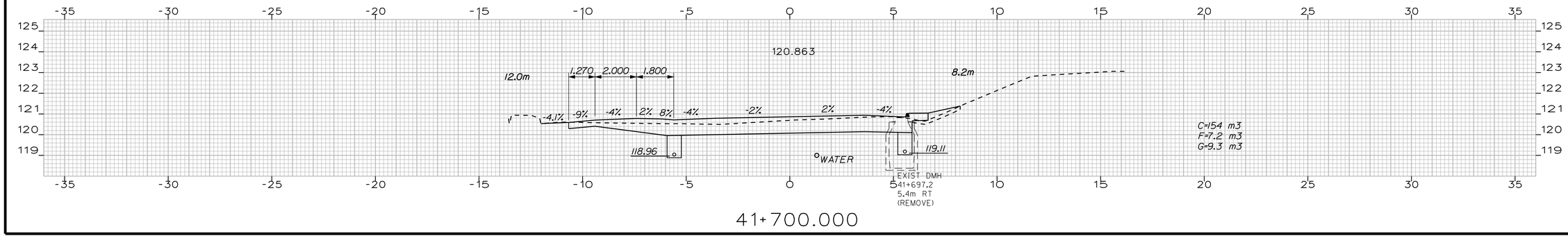
41+729.578



41+720.000



41+702.439



41+700.000

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

PROJ. MANAGER	R.WEBSTER		
DESIGN-DETAILED	R.NORWOOD	D.BURGESS	02-05-09
CHECKED-REVIEWED	T.GORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
ROUTE 4\17

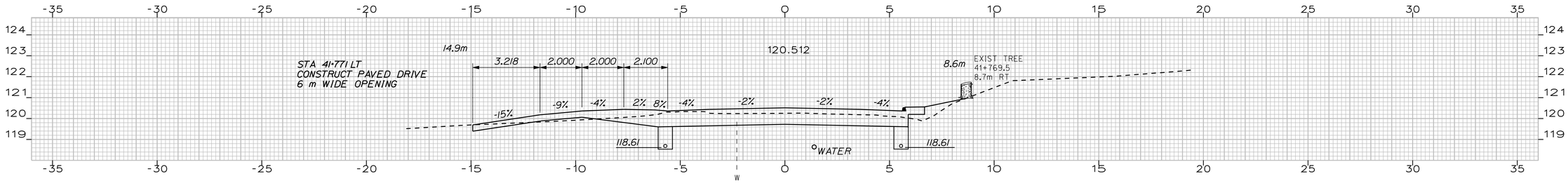
CROSS SECTIONS

SHEET NUMBER

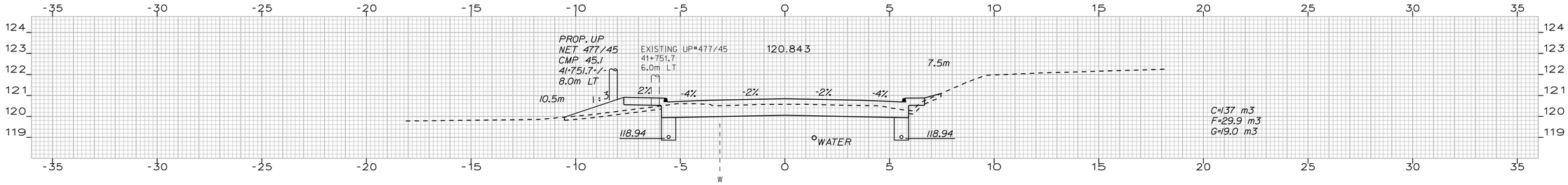
101

OF 148

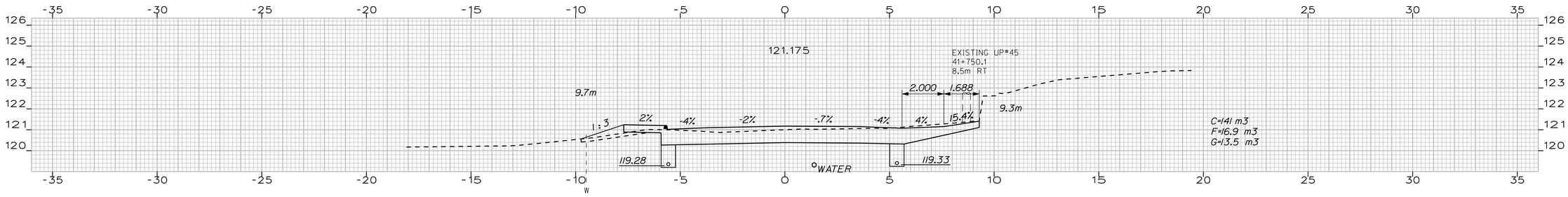
Filename: ...\msto\101_XSMC30-NEW_dr_046.dgn Division: HIGHWAY Username: common Date:2/9/2011



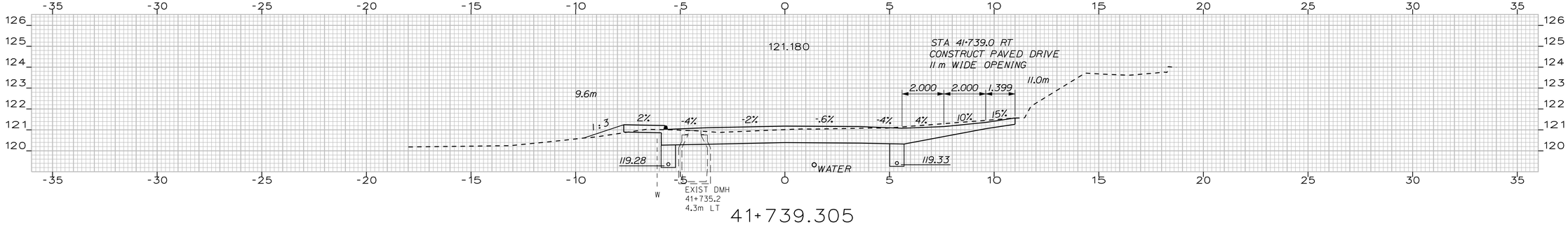
41+771.291



41+760.000



41+740.000



41+739.305

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	R.WEBSTER	
DESIGN-DETAILED	R.NORWOOD	D.BURGESS 02-05-09
CHECKED-REVIEWED	T.CORRILL	
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

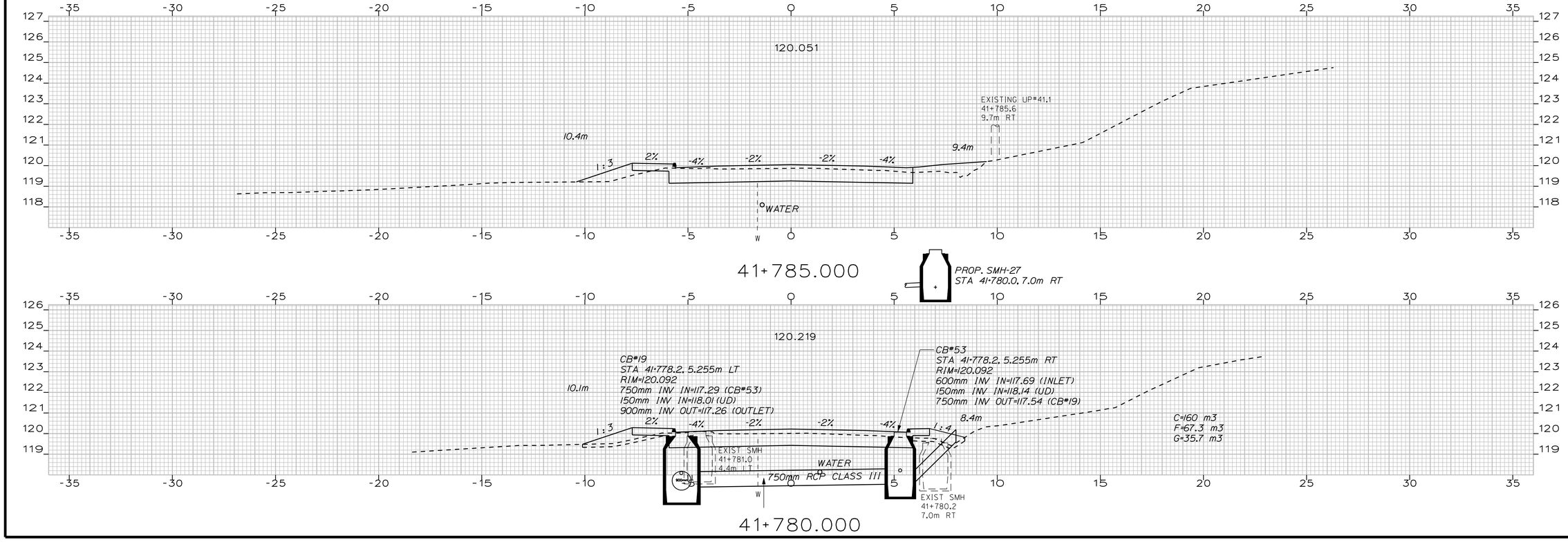
DATE

LIVERMORE FALLS - JAY
ROUTE 4\17

CROSS SECTIONS

SHEET NUMBER
102
OF 148

Filename: ...\mslo\102_XSMC30-NEW_dr_047.dgn Division: HIGHWAY Username: common Date:2/9/2011



PROJ. MANAGER	R.WEBSTER	BY	DATE
DESIGN-DETAILED	R.NORWOOD	D.BURGESS	02-05-09
CHECKED-REVIEWED	T.GORRILL		
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

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

LIVERMORE FALLS - JAY
ROUTE 4\17

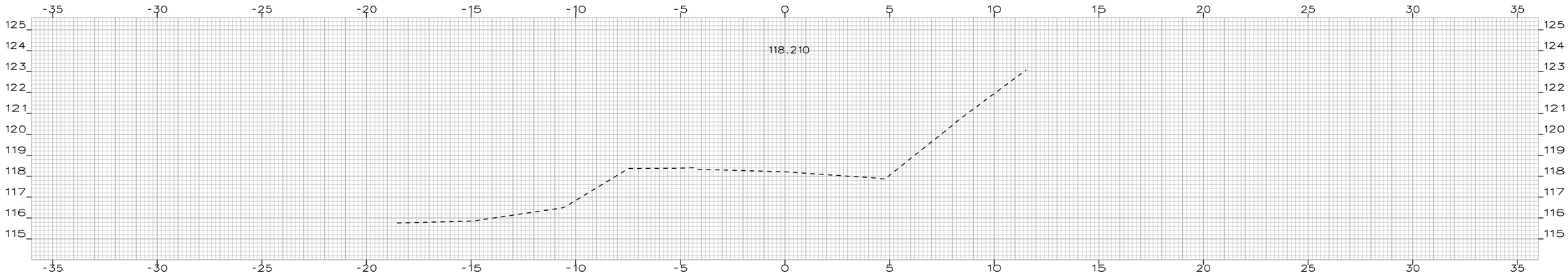
CROSS SECTIONS

SHEET NUMBER

103

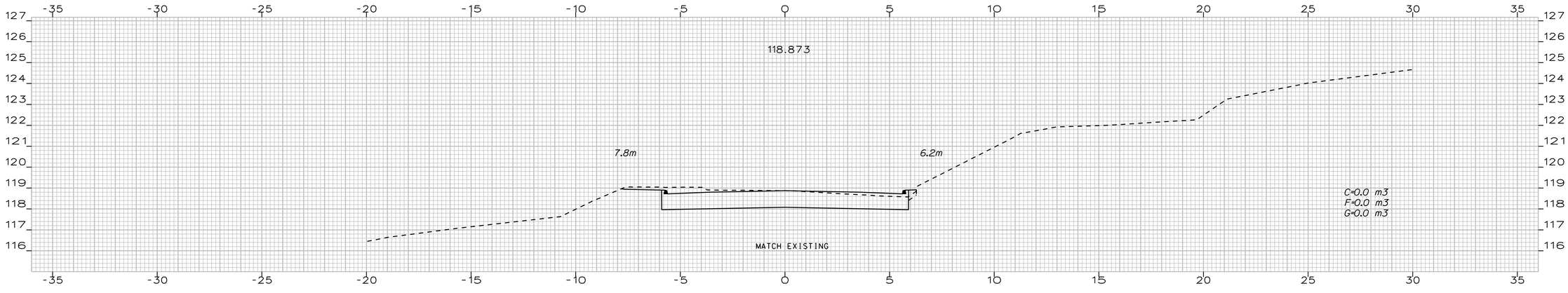
OF 148

Filename: ...\mslo\103_XSMC30-NEW_dr_048.dgn Division: HIGHWAY Username: common Date:2/9/2011

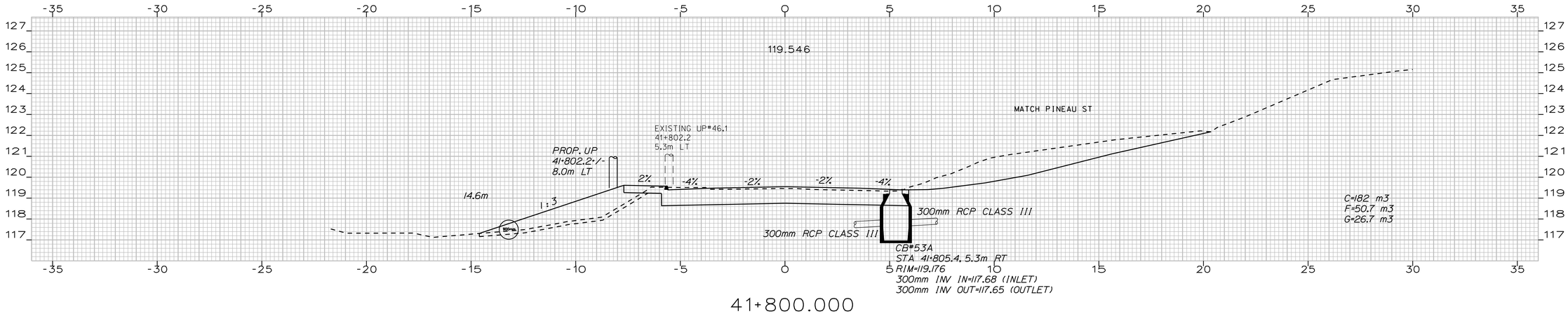


41+840.000

STA 41-820
END PROPOSED PROJECT NO. NH-101(800)E



41+820.000



41+800.000

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

PROJ. MANAGER	R. WEBSTER		
DESIGN-DETAILED	R.NORWOOD	D.BURGESS	02-05-09
CHECKED-REVIEWED	T.GORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
ROUTE 4\17

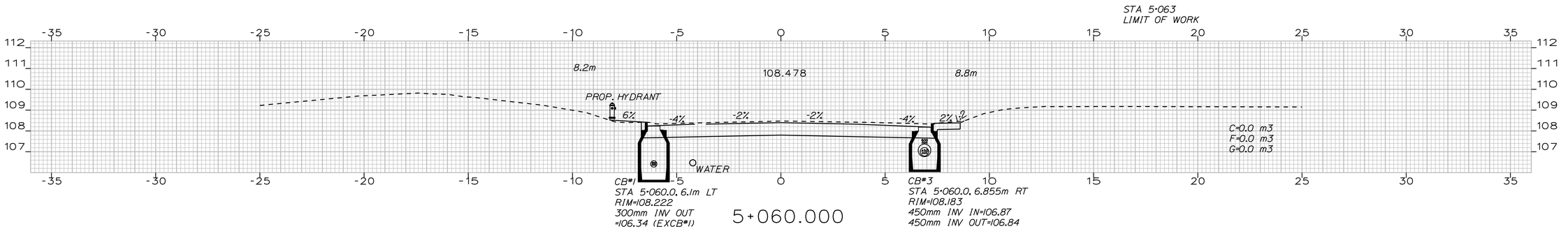
CROSS SECTIONS

SHEET NUMBER

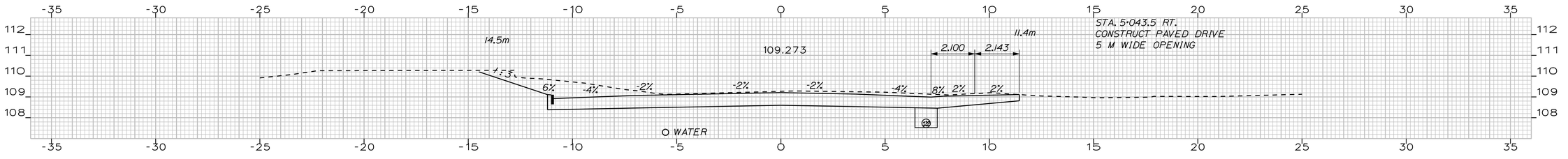
104

OF 148

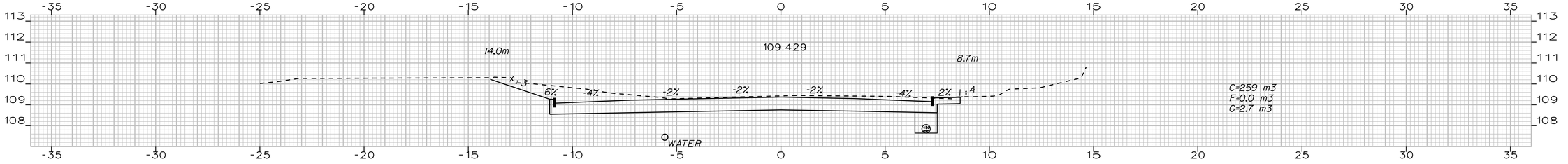
Filename: ...\mst0\104_XSMC30-NEW_dr_049.dgn Division: HIGHWAY Username: common Date:2/9/2011



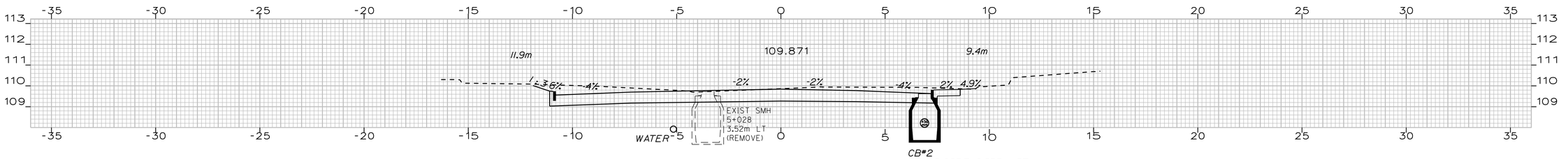
5+060.000



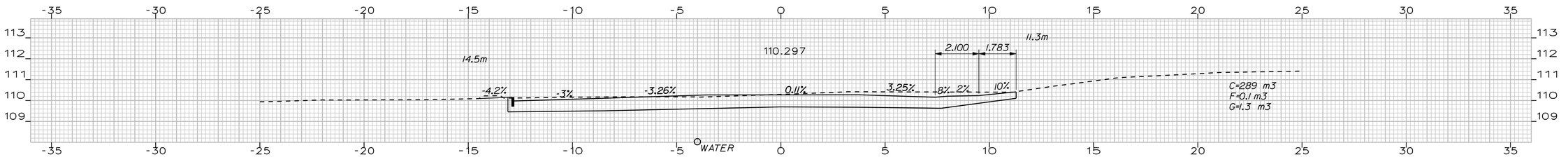
5+043.472



5+040.192



5+030.000



5+020.000

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

PROJ. MANAGER	R.WEBSTER		
DESIGN-DETAILED	R.NORWOOD	02-05-09	D.BURGESS
CHECKED-REVIEWED	T.GORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

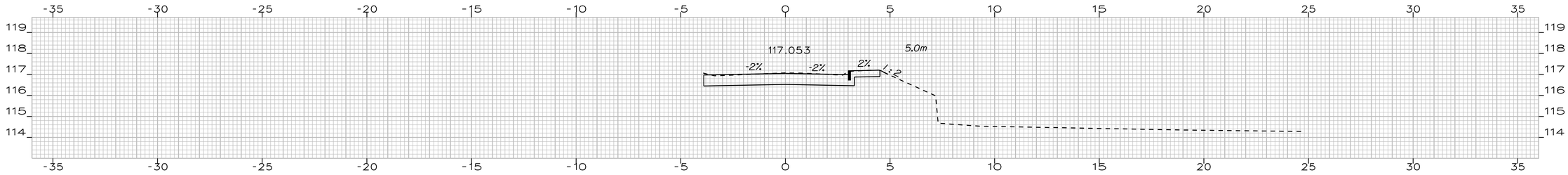
LIVERMORE FALLS - JAY
ROUTE 4\17

CROSS SECTIONS

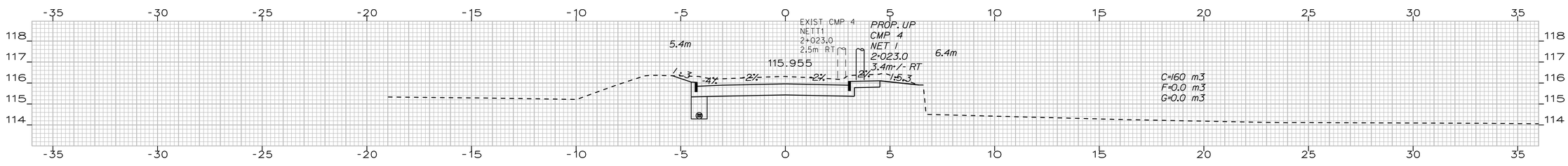
SHEET NUMBER
105
OF 148

Filename: ...\105_XSMC20BRIDGE_dr_001.dgn Division: HIGHWAY Username: common Date:2/9/2011

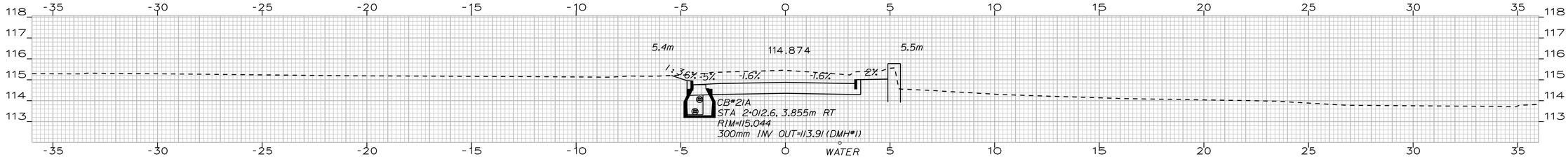
STA 2+032
LIMIT OF WORK



2+030.000



2+020.000



2+010.163

MILLETT STREET

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

PROJ. MANAGER	R.WEBSTER		
DESIGN-DETAILED	R.NORWOOD	D.BURGESS	02-05-09
CHECKED-REVIEWED	T.CORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
ROUTE 4\17

CROSS SECTIONS

SHEET NUMBER

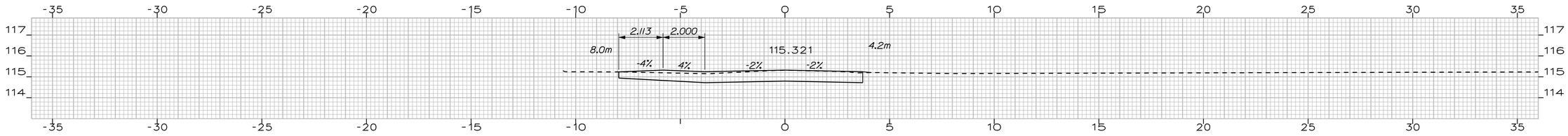
106

OF 148

Filename: ...\106_XSMCBMILLETT_dr_001.dgn Division: HIGHWAY Date:2/9/2011 User name:

Filename: ...\107_XSMCC\REYNOLDS_dr_001.dgn Username: common Division: HIGHWAY Date:2/9/2011

STA 3+032
LIMIT OF WORK

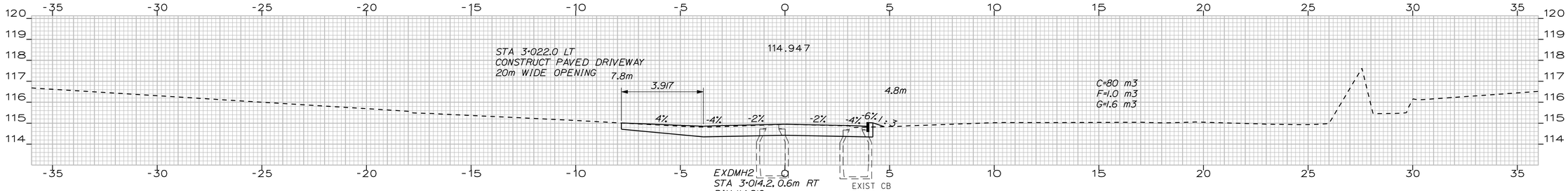


3+030.000

CB*23B
STA 3+023.0, 3.555m LT
RIM=114.978
300mm INV OUT=113.36 (CB*23A)

300mm RCP
CLASS III

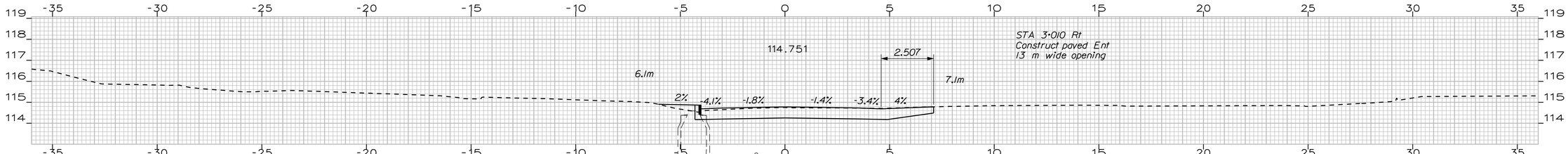
CB*23A
STA 3+023.0, 3.555m RT
RIM=114.978
300mm INV IN=113.26 (CB*23B)
300mm INV OUT=113.23 (EXDMH)



EXDMH2
STA 3+014.2, 0.6m RT
RIM=114.810
INV IN=110.93 (EXCB)
INV IN=113.07 (CB*23A)
INV OUT=113.52 (EXIST)

EXIST CB
3+019.1
3.4m RT
(REMOVE)

3+020.048



EXIST CB
3+008.63
4.35m LT
(REMOVE)

WATER

3+010.000

REYNOLDS AVENUE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

SIGNATURE

P.E. NUMBER

DATE

PROJ. MANAGER	R.WEBSTER	
DESIGN-DETAILED	R.NORWOOD	02-05-09
CHECKED-REVIEWED	T.GORRILL	D.BURGESS
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

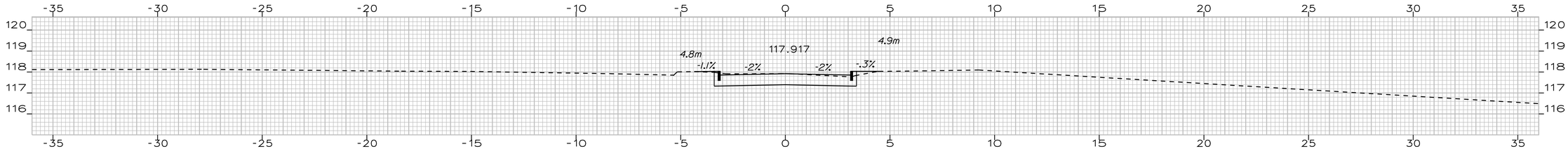
LIVERMORE FALLS - JAY
ROUTE 4\17

CROSS SECTIONS

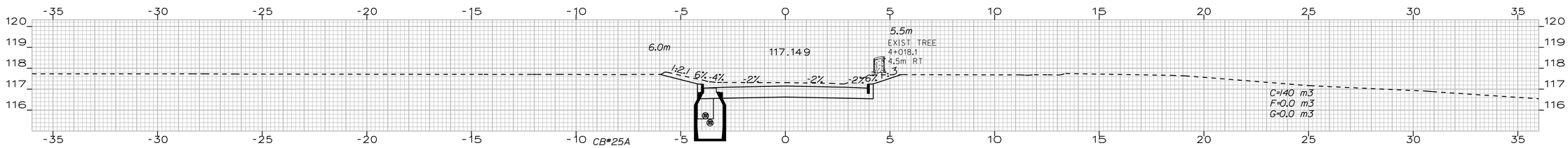
SHEET NUMBER
107
OF 148

Filename: ...\108_XSMCD\GREEN_dr_001.dgn Division: HIGHWAY Username: common Date: 2/9/2011

STA 4+031
LIMIT OF WORK

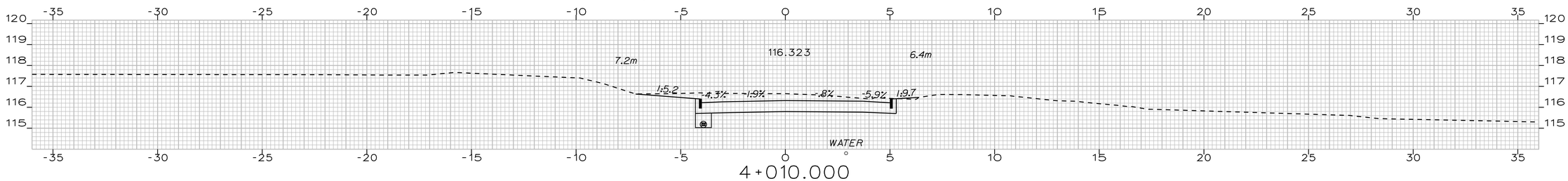


4+030.000



CB#25A
STA 4+015.0, 3.222m LT
RIM=116.671
300mm INV OUT=115.25 (DMH#3)

4+020.000



4+010.000

GREEN STREET

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	R.WEBSTER	
DESIGN-DETAILED	D.BURGESS	02-05-09
CHECKED-REVIEWED	R.NORWOOD	
DESIGN2-DETAILED2	T.GORRILL	
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

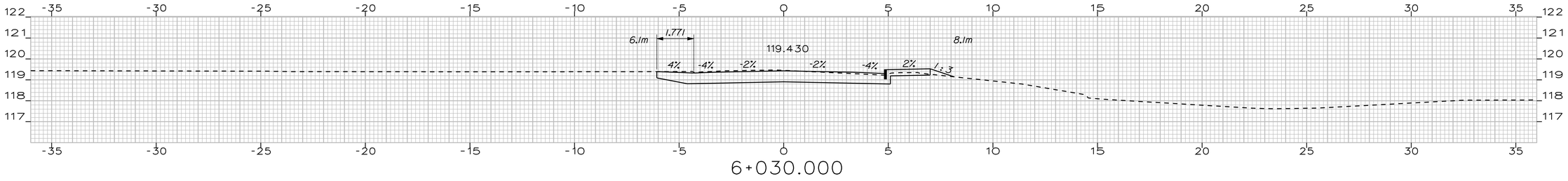
P.E. NUMBER

DATE

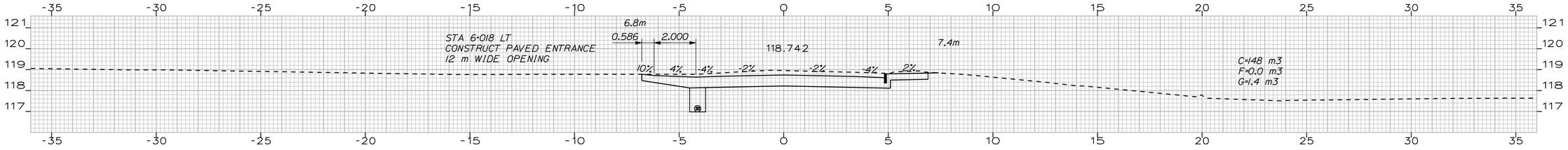
LIVERMORE FALLS - JAY
ROUTE 4\17

CROSS SECTIONS

SHEET NUMBER
108
OF 148

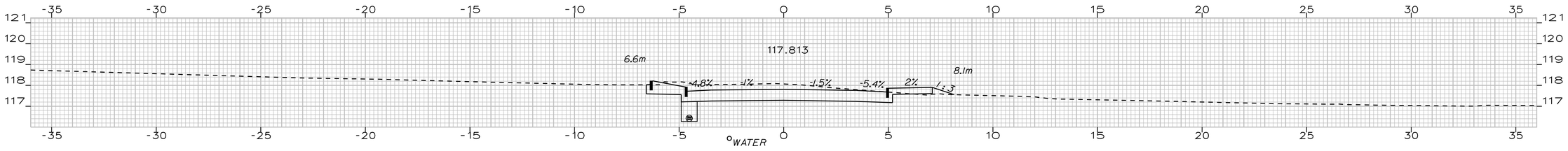


6+030.000



6+020.000

CB#27A
STA 6+015.0, 3.855m LT
RIM=118.197
300mm INV OUT=116.50 (DMH#4)



6+010.000

RICHARDSON AVENUE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

PROJ. MANAGER	R.WEBSTER		
DESIGN-DETAILED	R.NORWOOD	02-05-09	
CHECKED-REVIEWED	T.GORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
ROUTE 4\17

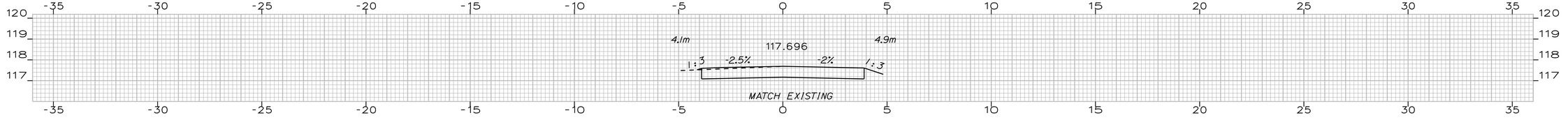
CROSS SECTIONS

SHEET NUMBER
109
OF 148

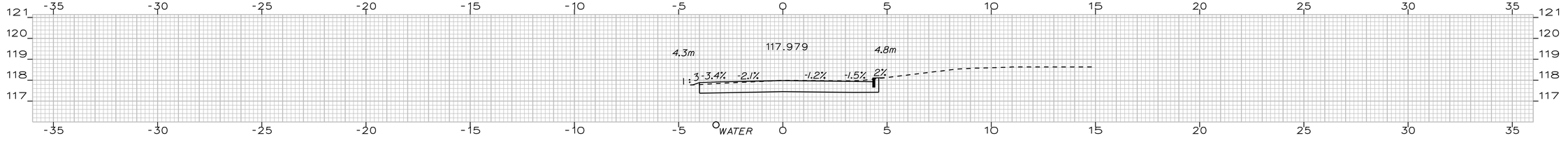
Filename: ...\109_XSMCEIRICHARDS_dr_001.dgn Division: HIGHWAY Username: common Date:2/9/2011

Filename: ...\110_XSMCPFRANKLIN_dr_001.dgn Division: HIGHWAY Username: common Date:2/9/2011

STA 17+015
LIMIT OF WORK



17+015.000



17+010.000

FRANKLIN STREET

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

PROJ. MANAGER	R.WEBSTER		
DESIGN-DETAILED	R.NORWOOD	D.BURGESS	02-05-09
CHECKED-REVIEWED	T.GORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

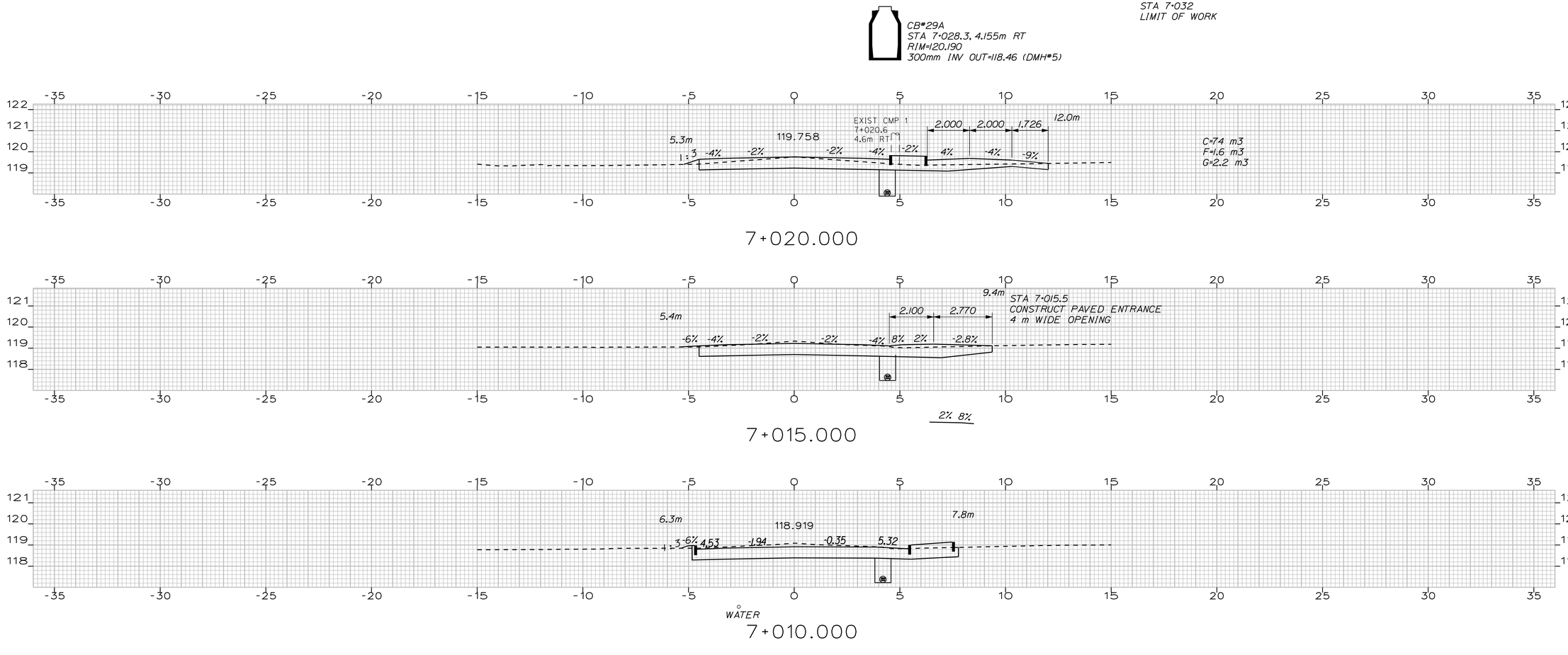
LIVERMORE FALLS - JAY
ROUTE 4\17

CROSS SECTIONS

SHEET NUMBER

110

OF 148



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER	R.WEBSTER		
DESIGN-DETAILED	R.NORWOOD	D.BURGESS	02-05-09
CHECKED-REVIEWED	T.GORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
ROUTE 4\17

CROSS SECTIONS

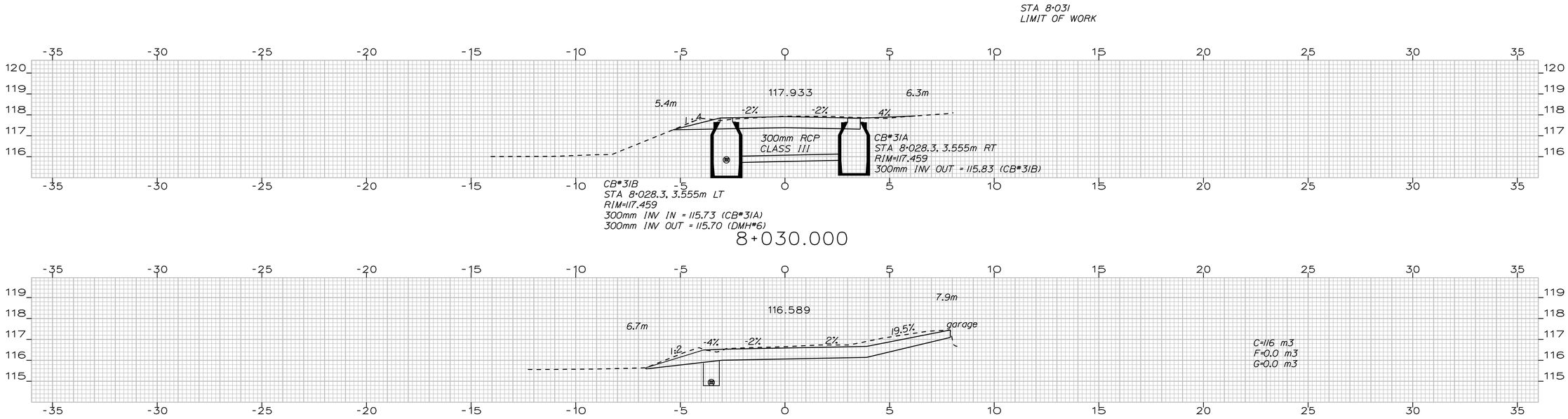
SHEET NUMBER

111

OF 148

Filename: ...\111_XSMCF\MONROE_dr_001.dgn Username: common Date:2/9/2011 Division: HIGHWAY

Filename: ...\112_XSMCGTGORDON_dr_001.dgn Division: HIGHWAY Username: common Date:2/9/2011



GORDON STREET

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

PROJ. MANAGER	R.WEBSTER		
DESIGN-DETAILED	R.NORWOOD	D.BURGESS	02-05-09
CHECKED-REVIEWED	T.CORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
ROUTE 4\17

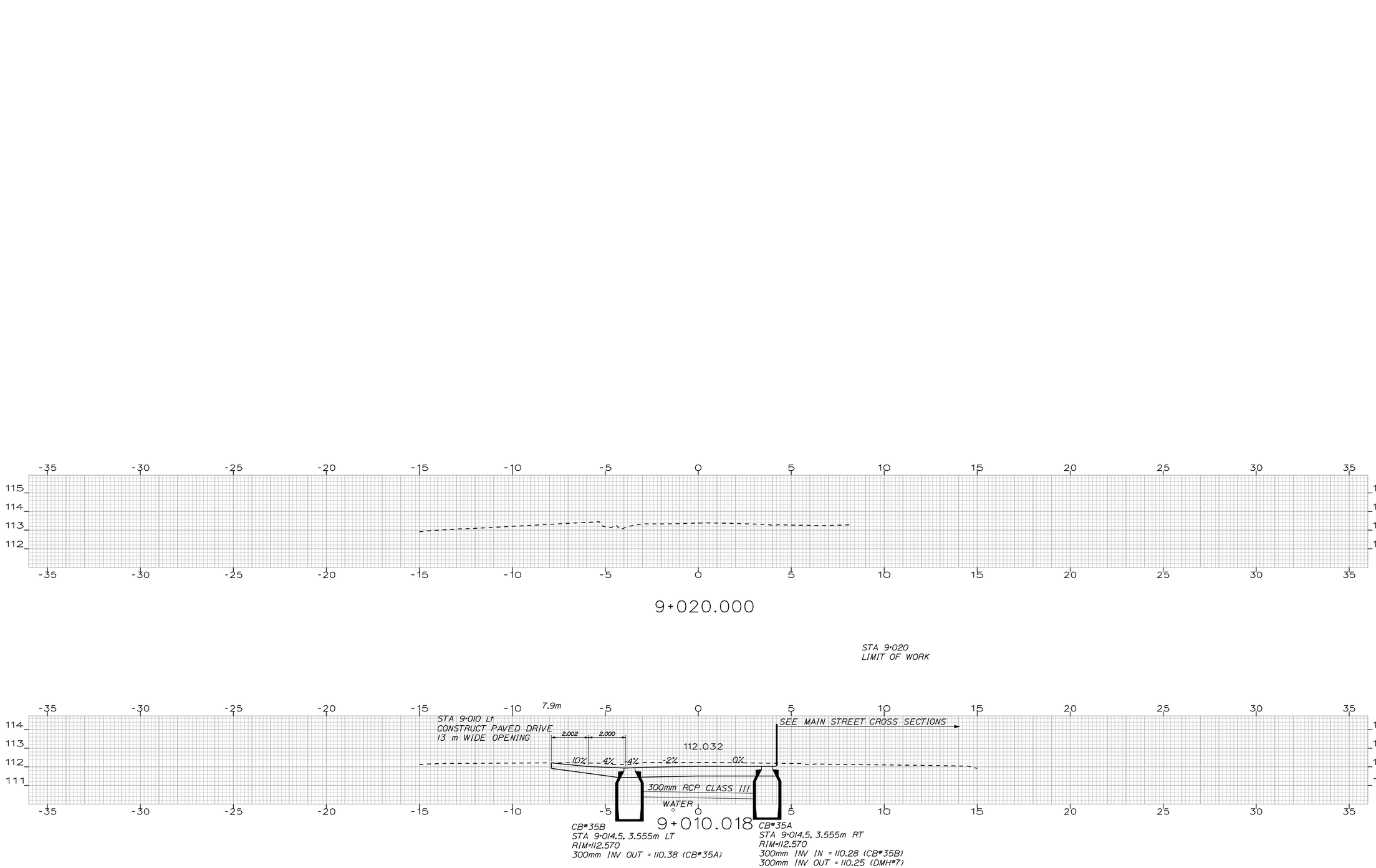
CROSS SECTIONS

SHEET NUMBER

112

OF 148

Filename: ...\113_XSMCHIGAGNON_dr_001.dgn Division: HIGHWAY Username: common Date:2/9/2011



GAGNON STREET

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	R.WEBSTER	
DESIGN-DETAILED	R.NORWOOD	02-05-09
CHECKED-REVIEWED	T.GORRILL	
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES	D.BURGESS	02-05-09

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
ROUTE 4\17

CROSS SECTIONS

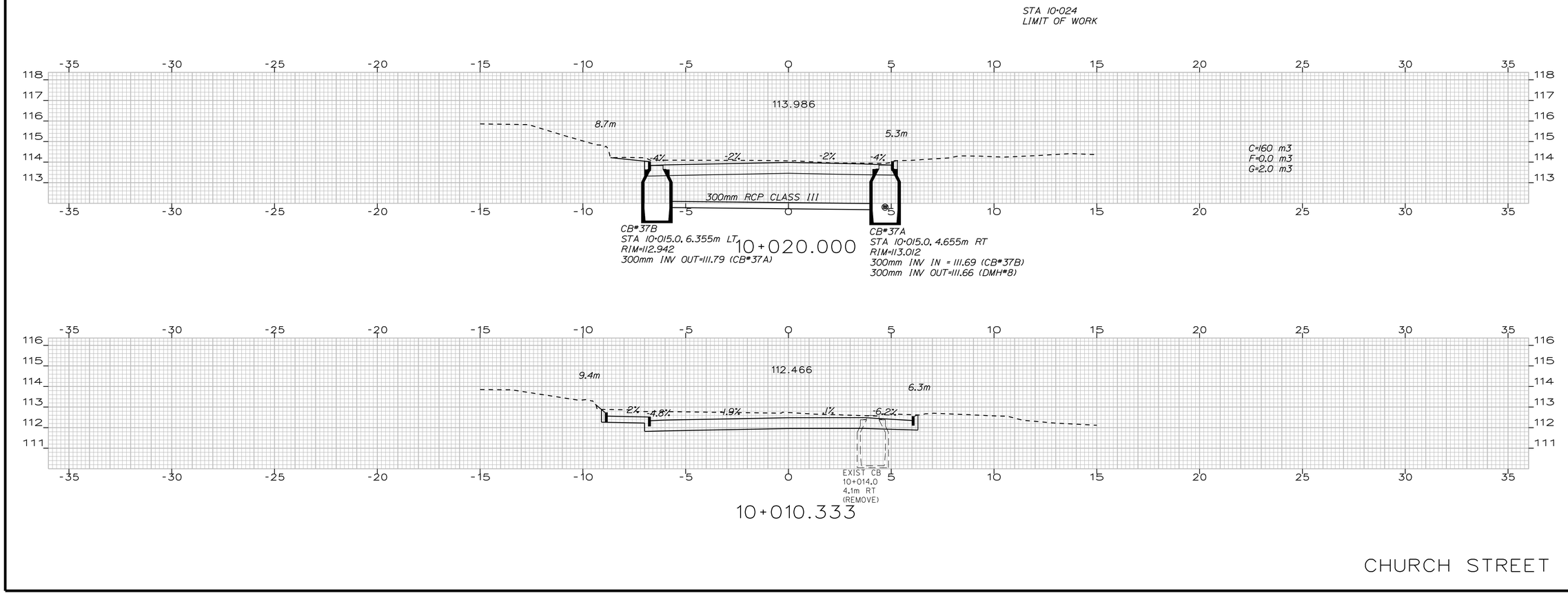
SHEET NUMBER

113

OF 148

Username: common Date:2/9/2011
Division: HIGHWAY
Filename: ...\114_XSMC1CHURCH_dr_001.dgn

STA 10+024
LIMIT OF WORK



CHURCH STREET

PROJ. MANAGER	R.WEBSTER	BY	DATE
DESIGN-DETAILED	R.NORWOOD	D.BURGESS	02-05-09
CHECKED-REVIEWED	T.CORRILL		
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

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

LIVERMORE FALLS - JAY
ROUTE 4\17

CROSS SECTIONS

SHEET NUMBER

114

OF 148

Filename: ...\mst0\115_XCMCAMILL_dr_001.dgn Division: HIGHWAY Username: common Date:2/9/2011

MILL STREET

PROJ. MANAGER	R.WEBSTER	BY	DATE
DESIGN-DETAILED	R.NORWOOD	D.BURGESS	02-05-09
CHECKED-REVIEWED	T.CORRILL		
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

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

LIVERMORE FALLS - JAY
ROUTE 4\17

CROSS SECTIONS

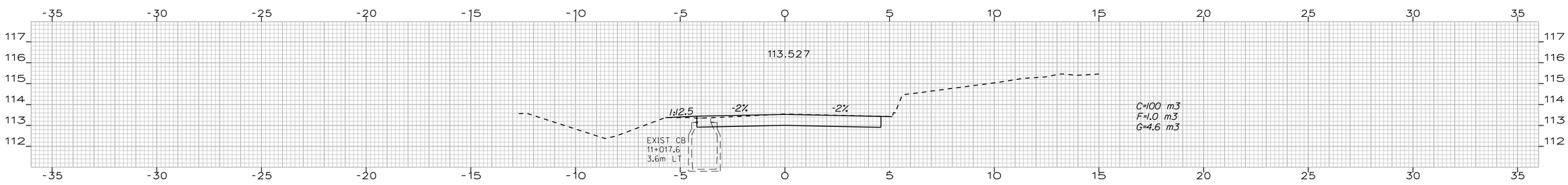
SHEET NUMBER

115

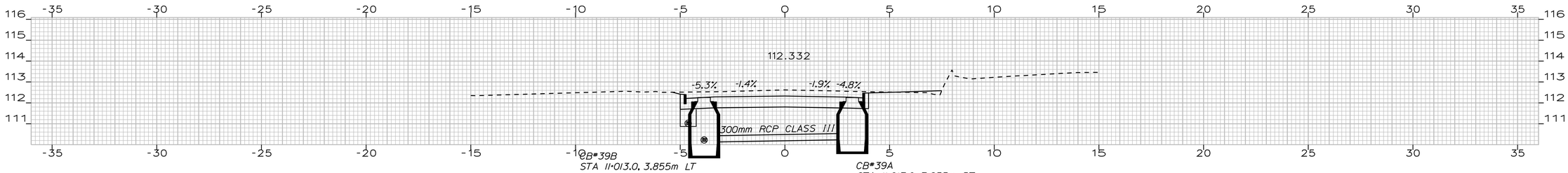
OF 148

Filename: ...\116_XSMCJJEWELL_dr_001.dgn Division: HIGHWAY Username: common Date:2/9/2011

STA 11+021
LIMIT OF WORK



11+020.000



CB*39B
STA 11+013.0, 3.855m LT
RIM=112.642
300mm INV IN = 111.13 (CB*39A)
300mm INV OUT=111.03 (DMH*10)

11+010.000

CB*39A
STA 11+013.0, 3.255m RT
RIM=112.630
300mm INV OUT=111.23 (CB*39B)

JEWELL STREET

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER	R.WEBSTER		
DESIGN-DETAILED	R.NORWOOD	D.BURGESS	02-05-09
CHECKED-REVIEWED	T.CORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

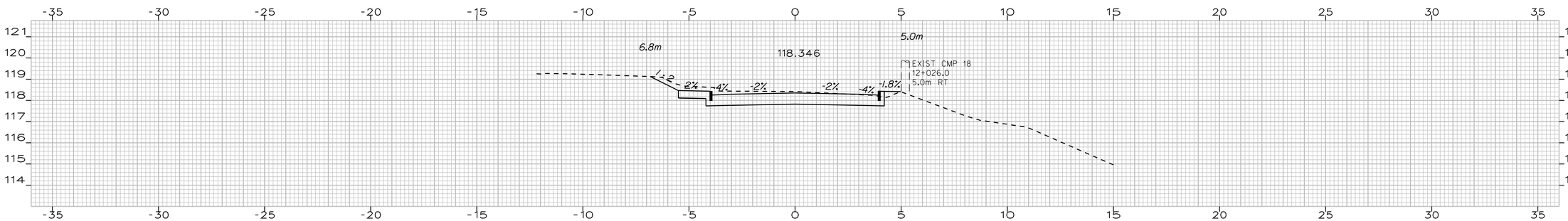
LIVERMORE FALLS - JAY
ROUTE 4\17

CROSS SECTIONS

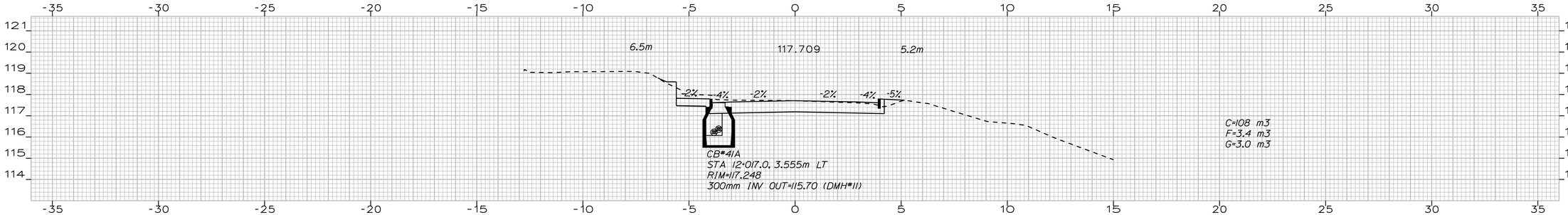
SHEET NUMBER
116
OF 148

Filename: ...\msto\117_XSMCKIELM_dr_001.dgn Division: HIGHWAY Username: common Date:2/9/2011

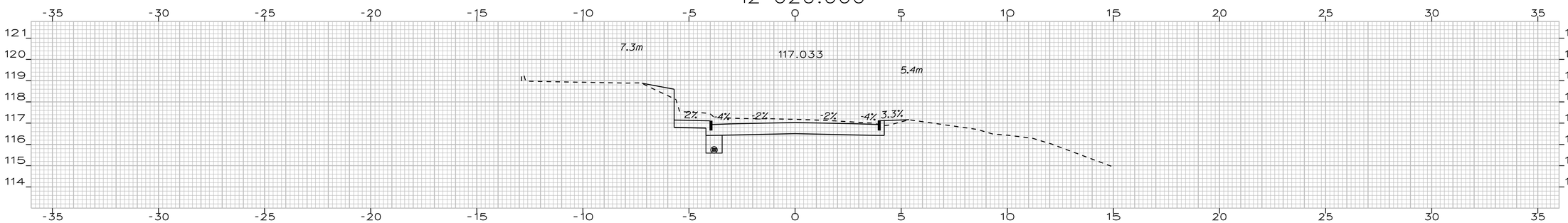
STA 12+031
LIMIT OF WORK



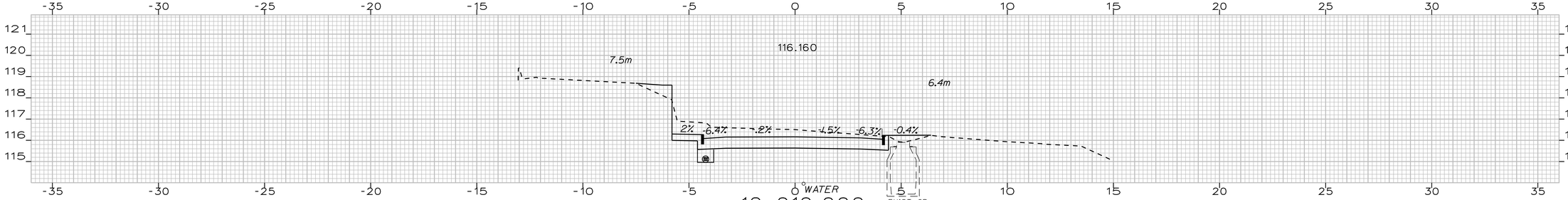
12+025.933



12+020.000



12+015.638



12+010.000

ELM STREET

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

PROJ. MANAGER	R.WEBSTER		
DESIGN-DETAILED	R.WEBSTER	DATE	02-05-09
CHECKED-REVIEWED	R.NORWOOD	BY	D.BURGESS
DESIGN2-DETAILED2	T.CORRILL		
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

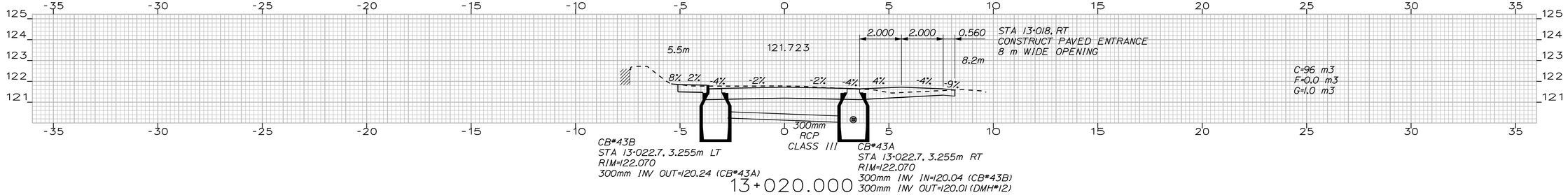
LIVERMORE FALLS - JAY
ROUTE 4\17

CROSS SECTIONS

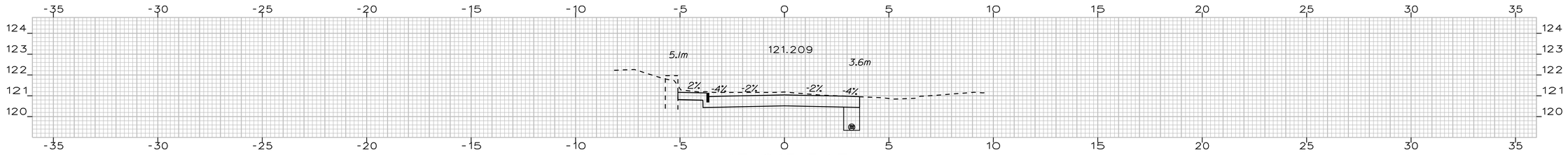
SHEET NUMBER
117
OF 148

Filename: ...\118_XSMCL1MAPLE_dr_001.dgn Division: HIGHWAY Username: common Date:2/9/2011

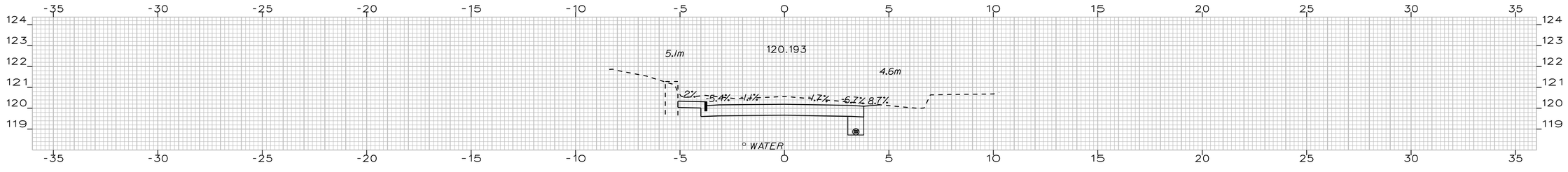
STA 13+026
LIMIT OF WORK



13+020.000



13+015.547



13+010.000

MAPLE STREET

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	R.WEBSTER	
DESIGN-DETAILED	R.NORWOOD	02-05-09
CHECKED-REVIEWED	T.GORRILL	
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

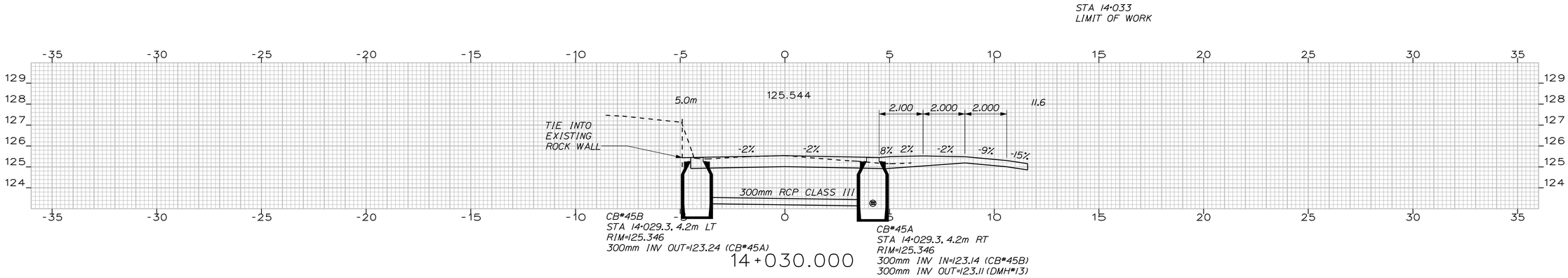
LIVERMORE FALLS - JAY
ROUTE 4\17

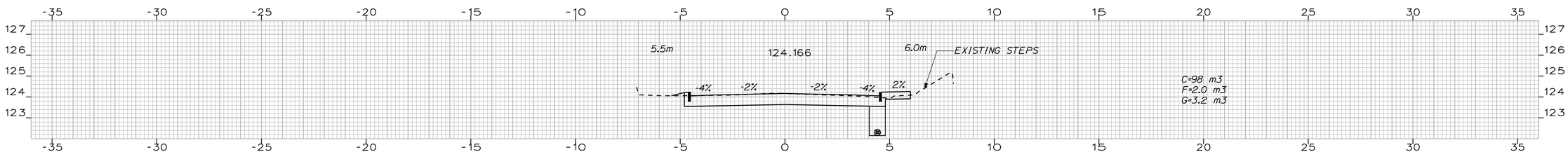
CROSS SECTIONS

SHEET NUMBER

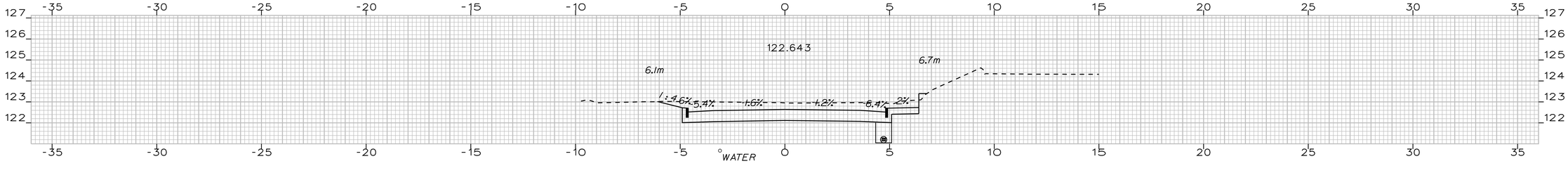
118

OF 148





14+020.000



14+010.000

OTIS STREET

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

PROJ. MANAGER	R.WEBSTER		
DESIGN-DETAILED	R.NORWOOD	D.BURGESS	02-05-09
CHECKED-REVIEWED	T.GORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

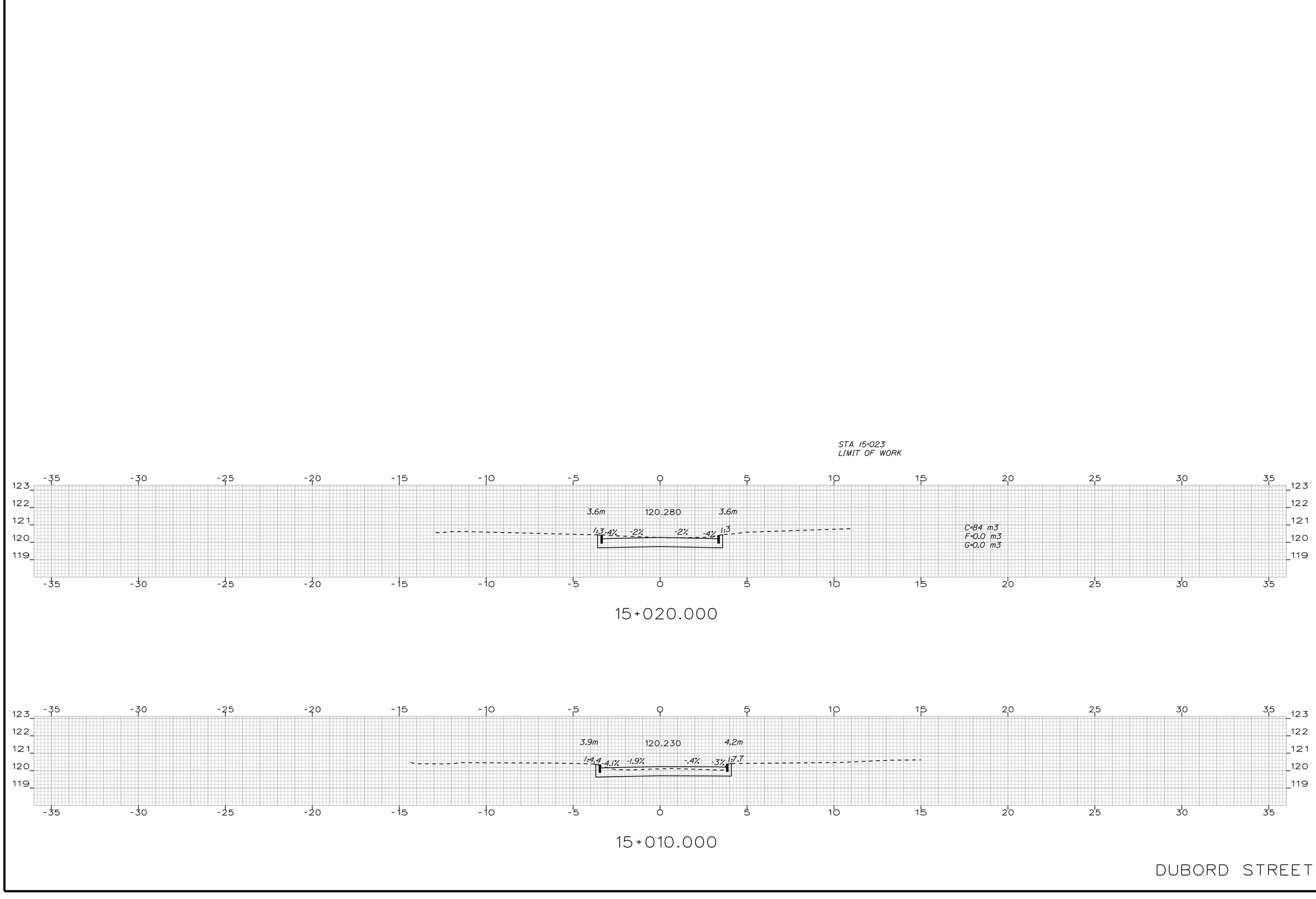
LIVERMORE FALLS - JAY
ROUTE 4\17

CROSS SECTIONS

SHEET NUMBER
119
OF 148

Filename: ...\mst01\119_XSMCM10TIS_dr_001.dgn Division: HIGHWAY Username: common Date:2/9/2011

Username: common Date:2/9/2011
Division: HIGHWAY
Filename: ...\120_XSMCN1DUBORD_dr_001.dgn



PROJ. MANAGER	R.WEBSTER	BY	DATE
DESIGN-DETAILED	R.NORWOOD	D.BURGESS	02-05-09
CHECKED-REVIEWED	T.GORRILL		
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

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

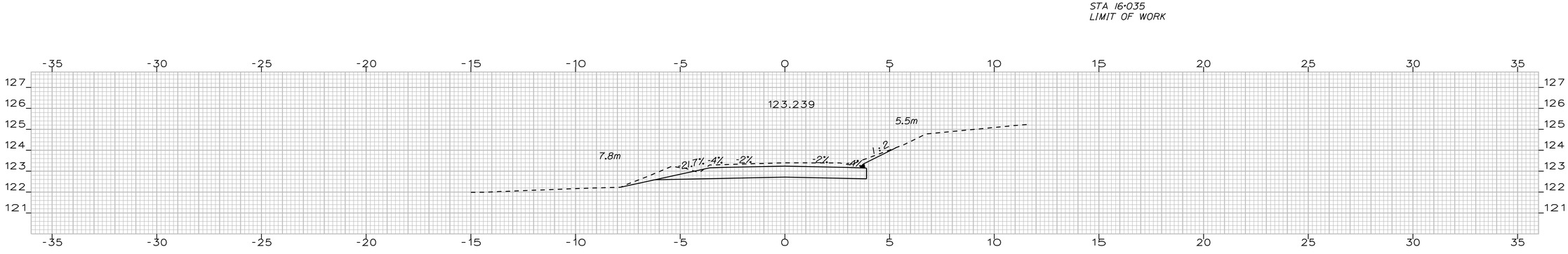
LIVERMORE FALLS - JAY
ROUTE 4\17

CROSS SECTIONS

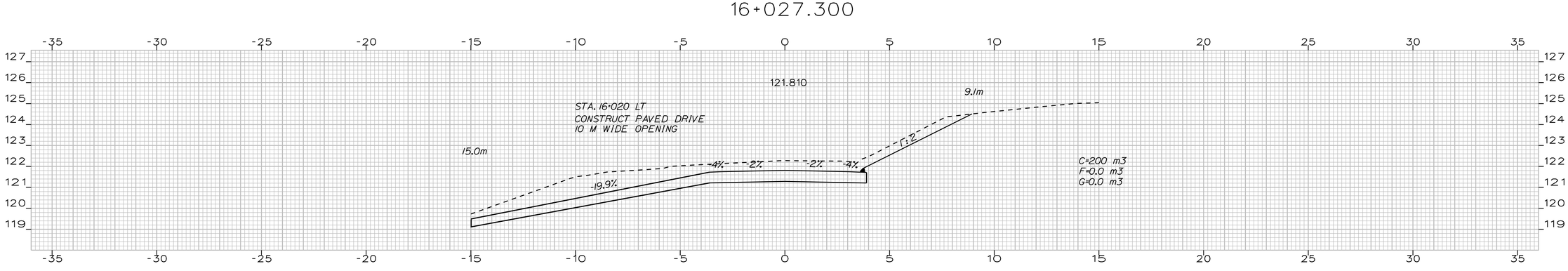
SHEET NUMBER

120

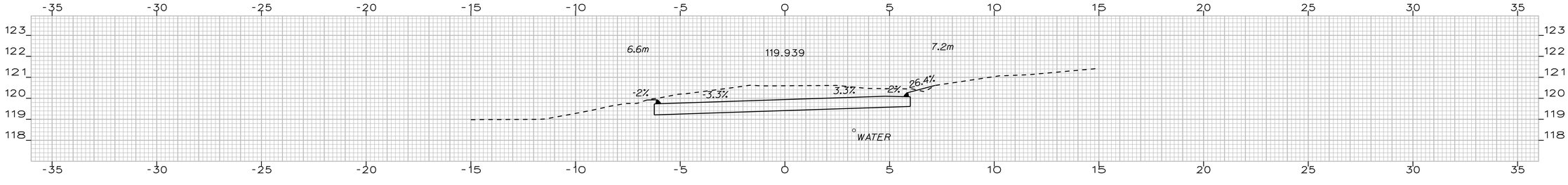
OF 148



16+027.300



16+020.000



16+010.000

PINEAU STREET

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NH-1001(800)E

PIN
10018.00

HIGHWAY PLANS

PROJ. MANAGER	R.WEBSTER		
DESIGN-DETAILED	R.NORWOOD	D.BURGESS	02-05-09
CHECKED-REVIEWED	T.GORRILL		
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

LIVERMORE FALLS - JAY
ROUTE 4\17

CROSS SECTIONS

SHEET NUMBER

121

OF 148

Filename: ...\121_XSMC01PINEAU_dr_001.dgn Division: HIGHWAY Username: common Date:2/9/2011

ITEM	TECH	CHECKED
BASE MAP		
EXIST. R/W		
PROP. LINES		
AREAS		

REVISIONS		
NO.	DATE	DESCRIPTION

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

METRIC	F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
	1	MAINE	NH-1001(800)E	122	148

CURVE DATA

PI = 5+033.997
Δ = 19° - 14' - 30.2" Lt.
R = 135.000 m
L = 45.337 m
T = 22.884 m
E = 1.926 m

CURVE DATA (BRIDGE ST.)
P.I. STA.5+033.997 m
Δ =19°-14'-30.2" LT.
T = 22.884 m
L = 45.337 m
E = 1.926 m
R = 135.000 m

G. & O. ENTERPRISES, INC.
F/K/A
GENE DUBORD'S
INSURANCE STORE, INC.
PARCEL NO. (1E)
LAND TAKEN = 0.37± AC. (ENTIRE LOT)
BUILDINGS (1)

NOTE: BUILDING & TANKS REMOVED 10-02-2006

P.L. 27.4± m (90'±)
P.L. 51.0± m (167'±)
1 1/4" X 2" ANGLE IRON
STONE RETAINING WALL
EASEMENT
GRISED
46.2± m (152±)
PT = STA 5+056.450
5+060 S 52° 09' 37.8" W
END B.L. STA. 5+060.00
3.550m
5+040
5+020
PC = STA 40+036.796
BRIDGE STREET 45.337 m
5+000
40+040
40+020
40+000
39+980
BEGIN B.L. STA 39+980
N 16° 32' 26.0" W 56.796 m TO LIVERMORE
SEE S.H.C. FILE NO. 1-100
35.6± m (117'±)
PC = STA 5+011.113
11.113 m
S 71° 24' 08.0 W
17.2± m (56'±)
61.5± m (202'±)
1690± S.F.
8.1±m(27'±)
1.0± m (3'±)
CONST. & MAINT. EASE. LIMITS 110± S.F.
EXIST. GUY WIRE EASE. CONST. BOOK 2519, PAGE 11 DATED: 1/22/90
TEMP.
P.L.
ROUTE 4
STA. 5+000.000 (BRIDGE STREET) =
STA . 40+039.379 (ROUTE 4)
STATE HIGHWAY "21"
8.230 m (27.00')
21.4± m (70'±)
35'± (10.8±m)
10.668 m(35.00')
+018.0
+047.7±
+058.2±
+073.6±
+073.8±
+079.6±
+080.0±
+091.0
+105.0
+117.6±
+139.4±
+148.8±
+153.6±
+165.0
+178.2±
+990.4±
+997.6
+1015.4±
+1018.2±
+1038.0±
+1058.2±
+1078.4±
+1098.6±
+1118.8±
+1139.0±
+1159.2±
+1179.4±
+1199.6±
+1219.8±
+1240.0±
+1260.2±
+1280.4±
+1300.6±
+1320.8±
+1341.0±
+1361.2±
+1381.4±
+1401.6±
+1421.8±
+1442.0±
+1462.2±
+1482.4±
+1502.6±
+1522.8±
+1543.0±
+1563.2±
+1583.4±
+1603.6±
+1623.8±
+1644.0±
+1664.2±
+1684.4±
+1704.6±
+1724.8±
+1745.0±
+1765.2±
+1785.4±
+1805.6±
+1825.8±

ITEM	TECH	CHECKED
BASE MAP		
EXIST. R/W		
PROP. LINES		
AREAS		

REVISIONS			
NO.	DATE	DESCRIPTION	BY

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

METRIC	F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
	1	MAINE	NH-1001(800)E	123	148

RONALD BENVIE
PARCEL NO. (9)
LAND TAKEN = 287± S.F. (1)
TOTAL AREA = 0.50± AC. (PER OWNER)
REM. AREA = 0.49± AC.

KENNETH JACQUES
PETRAH A. JACQUES
PARCEL NO. (10)
LAND TAKEN = 341± S.F. (1)
TOTAL AREA = 0.25± AC.
REM. AREA = 0.24± AC.

PEACHEY PROPERTIES, LLC
PARCEL NO. (12)
LAND TAKEN = 1434± S.F.(1)
TEMP. CONST. RIGHTS = 1640± S.F. (2)
TOTAL AREA = 2.47± AC. (PER TOWN)
REM. AREA = 2.44± AC.

PARCEL NO. (17) OMITTED

DELPHI HOLDINGS VIII, LLC
PARCEL NO. (18)
LAND TAKEN = 875± S.F.(1)
TEMP. CONST. RIGHTS = 620± S.F. (2)
TOTAL AREA = 0.65± AC. (PER TOWN)
REM. AREA = 0.64± AC.

PT = STA 40+157.523

CURVE DATA
PI = 3+008.265
Δ = 05° - 18' - 33.7" Rt.
R = 100.000 m
L = 9.267 m
T = 4.637 m
E = 0.107 m

PC = STA 3+003.628
PT = STA 3+012.895

VERSO ANDROSCOGGIN LLC
PARCEL NO. (8)
LAND TAKEN = 823± S.F (1)
TEMP. CONST. RIGHTS = 1875± S.F. (1)
TOTAL AREA = 0.78± AC.
REM. AREA = 0.76± AC. (PER TOWN)

IOCMA, INC.
PARCEL NO. (11)
LAND TAKEN = 317± S.F. (1)
CONST. & MAINT. EASE. = 315± S.F. (1)
TOTAL AREA = 5338± S.F.
REM. AREA = 5021± S.F.

END B.L.
STA 3+035.0

REYNOLDS AVE.
35' WIDE
PER TOWN OFFICIALS

KRISTEN DUBORD
MATTHEW FRIEDMAN
PARCEL NO. (13)
LAND TAKEN = 205± S.F. (1)
TEMP. CONST. RIGHTS = 1255± S.F. (2)
TOTAL AREA = 0.30± AC. (CALC.)
REM. AREA = 0.29± AC.

DANIELLE L. BETTS
PARCEL NO. (14)
LAND TAKEN = 103± S.F. (1)
TEMP. CONST. RIGHTS = 240± S.F. (1)
TOTAL AREA = 0.22±AC. (PER SURVEY)
REM. AREA = 0.21±AC.

SEE PLAN OF LAND
MADE FOR LIONEL D. DUBORD, INC.
BY: MAIN-LAND DEVELOPMENT CONSULTANTS, INC.
LIVERMORE FALLS, ME

STEVEN BLANCHARD
CHINLIN BLANCHARD
PARCEL NO. (15)
LAND TAKEN = 274± S.F. (1)
TEMP. CONST. RIGHTS= 350± S.F. (1)
TOTAL AREA = 0.26± AC. (PER SURVEY)
REM. AREA = 0.25± AC.

GREEN STREET
PER TOWN OFFICIALS
25' WIDE

END B.L.
STA. 4+035.0

CURVE DATA
PI = 4+018.964
Δ = 03° - 24' - 55.7" Lt.
R = 75.000 m
L = 4.471 m
T = 2.236 m
E = 0.033 m

K.P. AND THE GUMMER
PARCEL NO. (16)
LAND TAKEN = 875± S.F. (2)
TEMP. CONST. RIGHTS = 2210± (3)
TOTAL AREA = 1.38± AC. (PER DEED)
REM. AREA = 1.36± AC.

PC = STA 4+016.728
PT = STA 4+021.199

CURVE DATA
PI = 40+320.821
Δ = 01° - 58' - 28.7" Rt.
R = 2000.000 m
L = 68.928 m
T = 34.467 m
E = 0.297 m

RICHARDSON AVENUE
PER TOWN OFFICIALS
40' WIDE

END B.L.
STA 6+035.0

P.I.N. 010018.00

PLAN FILED IN PLAN BOOK	PAGE

NO.	GRANTOR	COUNTY RECORD INSTRUMENT	DATE	BOOK	PAGE
	PART IV	COND.	1/25/11	8102	62

SYMBOLS

- IP or IPF (IRON PIPE or PIN)
- S.T. (SEPTIC TANK)
- WATER LINE
- GAS LINE
- ELECTRIC LINE
- TELEPHONE LINE
- SEWER LINE
- PROPERTY LINE
- LIMITS OF WROUGHT PORTION
- EXISTING RIGHT OF WAY
- NEW RIGHT OF WAY
- NEW RIGHT OF WAY WITHIN EXISTING RIGHT OF WAY
- CONTROL OF ACCESS

○ - RAILROAD SPIKE △ - CONTROL MONUMENTS

MAINE DEPARTMENT OF TRANSPORTATION - CENTERLINE CONTROL

MAINE STATE COORDINATE SYSTEM - ZONE

CENTERLINE CONTROL MONUMENTS			TRAVERSE CONTROL POINTS		
STATION	NORTH	EAST	NUMBER	NORTH	EAST

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

STATE HIGHWAY "21" (ROUTE 4)
LIVERMORE FALLS ANDROSCOGGIN COUNTY
FEDERAL AID PROJECT NO. NH- 1001(800)E PART IV

DATE: JUNE 2010
SCALE: 1 = 250
SHEET NO. 2 OF 10 SHEETS
D.O.T. FILE NO. 1-275

DAVID A. COLE
COMMISSIONER

KENNETH L. SWEENEY
CHIEF ENGINEER

Filename: ...\00\row\mslo\002250_row_sht_02.dgn Date: 2/10/2011 Username: rhobe.moulton

ITEM	TECH	CHECKED
BASE MAP		
EXIST. R/W		
PROP. LINES		
AREAS		

REVISIONS			
NO.	DATE	DESCRIPTION	BY

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

METRIC

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	NH-1001(800)E	124	148

DELPHI HOLDINGS VIII, LLC
PARCEL NO. (18)
LAND TAKEN = 875± S.F.(1)
TEMP. CONST. RIGHTS = 620± S.F. (2)
TOTAL AREA = 0.65± AC. (PER TOWN)
REM. AREA = 0.64± AC.

DELPHI HOLDINGS III, LLC
PARCEL NO. (19)
TEMP. CONST. RIGHTS = 160± S.F. (1)
TOTAL AREA = 3025± S.F.(CALC.)

JOSEPH KNAPP
MICHELE KNAPP
PARCEL NO. (21)
LAND TAKEN = 87± S.F. (1)
TEMP. CONST. RIGHTS = 355± S.F. (1)
TOTAL AREA = 0.75± AC. (PER OWNER)
REM. AREA = 0.75± AC.

DAVID L. IVERSON
DOROTHY J. IVERSON
ITEM NO. (22)
TEMP. CONST. RIGHTS = 230± S.F. (2)
TOTAL AREA = 4770± S.F. (CALC.)

RICHARD A. MASON
ITEM NO. (24)
TEMP. CONST. RIGHTS = 640± S.F. (1)
TOTAL AREA = 6567± S.F. (CALC.)

RICHARD CARSON
ITEM NO. (25)
TEMP. CONST. RIGHTS = 500± S.F. (1)
TOTAL AREA = 7870± S.F. (CALC.)

RITA L. DUGUAY
ITEM NO. (26)
TEMP. CONST. RIGHTS =195± S.F. (2)
TOTAL AREA = 3000± S.F. (CALC.)

REGINA TARDIF
ITEM NO. (27)
TEMP. CONST. RIGHTS = 830± S.F. (1)
TOTAL AREA = 10960± S.F. (CALC.)

RONDELL C. DEERING
ITEM NO. (29)
TEMP. CONST. RIGHTS = 680± S.F. (1)
TOTAL AREA = 0.25± AC. (PER OWNER)

FRANKLIN STREET
PER TOWN OFFICIALS
30' WIDE

CEMETERY

CURVE DATA
PI = 17+007.464
Δ = 04° - 32' - 14.4" Rt.
R = 100.000 m
L = 7.919
T = 3.962
E = 0.078

CURVE DATA
PI = 6+006.883
Δ = 03° - 36' - 28.3" Lt.
R = 300.000 m
L = 13.655 m
T = 6.829 m
E = 0.078 m

CURVE DATA
PI = 7+022.744
Δ = 01° - 09' - 08.5" Lt.
R = 50.000 m
L = 1.006 m
T = 0.503 m
E = 0.003 m

CURVE DATA
PI = 40+489.551.000
Δ = 06° - 01' - 18.7"
R = 300.000 m
L = 31.530 m
T = 15.780 m
E = 0.415 m

CURVE DATA
PI = 8+015.707
Δ = 05° - 46' - 52.9" Rt.
R = 300.000 m
L = 30.271 m
T = 15.148 m
E = 0.382 m

RICHARDSON AVENUE
PER TOWN OFFICIALS
40' WIDE

MANHATTAN BRIDGE CORPORATION
PARCEL NO. (20)
LAND TAKEN = 528± S.F. (2)
TEMP. CONST. RIGHTS = 1620± S.F. (2)
TOTAL AREA = 1.24± AC. (PER TOWN)
REM. AREA = 1.23± AC.

MONROE STREET
PER TOWN OFFICIALS
40' WIDE

JANET L. DIAZ
SPINNAKER TRUST
CO-TRUSTEES OF THE
JOSE W. DIAZ FAMILY TRUST
PARCEL NO. (23)
LAND TAKEN = 653± S.F. (1)
TEMP. CONST. RIGHTS =0.09± (1)
TOTAL AREA = 13500± S.F. (CALC.)
REM. AREA =12847± S.F.

GREGG P. RICHARDS
ITEM NO. (28)
CONST. & MAINT. EASE. = 160± S.F. (1)
TEMP. CONST. RIGHTS = 1395± S.F. (1)
TOTAL AREA = 0.26± AC. (PER OWNER)

P.I.N. 010018.00

SYMBOLS

- IP or IPF (IRON PIPE or PIN)
- S.T. (SEPTIC TANK)
- WATER LINE
- GAS LINE
- ELECTRIC LINE
- TELEPHONE LINE
- SEWER LINE
- PROPERTY LINE
- LIMITS OF WROUGHT PORTION
- EXISTING RIGHT OF WAY
- NEW RIGHT OF WAY
- NEW RIGHT OF WAY WITHIN EXISTING RIGHT OF WAY
- CONTROL OF ACCESS

○ - RAILROAD SPIKE △ - CONTROL MONUMENTS

MAINE DEPARTMENT OF TRANSPORTATION - CENTERLINE CONTROL

MAINE STATE COORDINATE SYSTEM - ZONE

CENTERLINE CONTROL MONUMENTS			TRAVERSE CONTROL POINTS		
STATION	NORTH	EAST	NUMBER	NORTH	EAST

PLAN FILED IN PLAN BOOK PAGE

COUNTY RECORD

NO.	GRANTOR	INSTRUMENT	DATE	BOOK	PAGE
	PART IV	COND.	1/25/11	8102	62

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

STATE HIGHWAY "21" (ROUTE 4)
LIVERMORE FALLS ANDROSCOGGIN COUNTY
FEDERAL AID PROJECT NO. NH- 1001(800)E PART IV

DATE: JUNE 2010
SCALE: 1 = 250
SHEET NO. 3 OF 10 SHEETS
D.O.T. FILE NO. 1-275

DAVID A. COLE
COMMISSIONER

KENNETH L. SWEENEY
CHIEF ENGINEER

Filename: ...\00\rowmsla\00315WAY Date: 2/10/2011 Username: rhobe.moulton

ITEM	TECH	CHECKED	REVISIONS			
			NO.	DATE	DESCRIPTION	BY
BASE MAP						
EXIST. R/W						
PROP. LINES						
AREAS						

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METRIC	F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
	1	MAINE	NH-1001(800)E	125	148

MAINE CENTRAL RAILROAD

RONDELL C. DEERING
ITEM NO. (29)
TEMP. CONST. RIGHTS =
TOTAL AREA = 0.25± AC. = 680± S.F. (1)
(PER OWNER)

PATRICIA V. KNOWLTON
WAYNE KNOWLTON
ITEM NO. (31)
TEMP. CONST. RIGHTS =
100± S.F. (1)
TOTAL AREA = 0.25± AC.
(PER OWNER)

FREDERICO FRANCHETTI, JR.

DIANA R. RICHARD
PARCEL NO. (34)
LAND TAKEN = 515± S.F. (1)
TEMP. CONST. RIGHTS =1560± S.F. (3)
TOTAL AREA = 10,800± S.F. (PER SURVEY)
REM. AREA = 10,285± S.F.

STA. 40+552.475 (ROUTE 4) =
STA. 8+000.000 (GORDON STREET)

PC = STA 8+000.558

PT = STA 8+080.829

PT = STA 40+656.665

PT = STA 9+0

CURVE DATA
PI = 8+015.707
Δ = 05° - 46' - 52.9" Rt.
D = 300.000 m
L = 30.271 m
T = 15.148 m
R = 0.382 m

CURVE DATA
PI = 40+608.326
Δ = 28° - 17' - 05.9" Rt.
D = 200.000 m
L = 98.733 m
T = 50.394 m
R = 6.251 m

CURVE DATA
PI = 40+
Δ = 15°
D = 300.
L = 157.
T = 79.8
R = 10.5
PC = STA 9+0
PT = STA 9+1

GREGG P. RICHARDS
ITEM NO. (28)
CONST. & MAINT. EASE. = 160± S.F. (1)
TEMP. CONST. RIGHTS = 1395± S.F. (1)
TOTAL AREA = 0.26± AC. (PER OWNER)

PAUL M. ROUX
PARCEL NO. (30)
LAND TAKEN = 39± S.F. (1)
TEMP. CONST. RIGHTS = 790± S.F. (1)
TOTAL AREA = 5445± S.F. (CALC.)
REM. AREA = 5406± S.F.

TRACY A. ELLIS
PARCEL NO. (32)
LAND TAKEN = 21± S.F. (1)
TEMP. CONST. RIGHTS = 365± S.F. (1)
TOTAL AREA = 4851± S.F. (CALC.)
REM. AREA = 4830± S.F.

DAVID J. BLAIS
~~TORI LYNN BOLDUC~~
PARCEL NO. (33)
LAND TAKEN = 699± S.F.(PRESC. EASE.)(1)
LAND TAKEN = 1368± S.F.(OTHER)(1)
TOTAL LAND TAKEN = 2067± S.F. (2)
TEMP. CONST. RIGHTS = 1635± S.F. (1)
TOTAL AREA = 0.57± AC. (PER OWNER)
REM. AREA = 0.52± AC.

DIANA R. RICHARD
ITEM NO. (36)
TEMP. CONST. RIGHTS =
545± S.F. (1)
TOTAL AREA =
6930± S.F. (CALC.)

DIANA R. RICHARD
ITEM NO. (35)
TEMP. CONST. RIGHTS = 270± S.F. (1)
TOTAL AREA =777± S.F. (CALC.)

ROBERT L. BLAIS

ROBERT L. BLAIS
ITEM NO. (37)
TEMP. CONST. RIGHTS =
500± S.F. (1)
TOTAL AREA =
7000± S.F. (CALC.)

ROBERT L. BLAIS
PARCEL NO. (38)
LAND TAKEN =
255± S.F.(1)
TEMP. CONST. RIGHTS =
15± S.F.(1)
TOTAL AREA = 6000± S.F.
(PER OWNER)
REM. AREA = 5745± S.F.

GORDON STREET
LIVERMORE FALLS TOWN RECORDS
VOL 4, PAGE 529 & 530
40' WIDE

END B.L.
STA. 8+035.0

333.2± m (1093'±)
91.2± m (299'±)
64.430 m
61.5± m (202'±)
55.9± m (183'±)
58.0± m (190'±)
98.733 m
52.630 m
22.8± m (75'±)
67.4± m (221'±)
54.4± m (175'±)
15.1± m (50'±)
11.6± m (5'±)
5.5± m (18'±)
5.7± m (19'±)
0.7± m (2'±)
4.7± m (15'±)
1.4± m (5'±)
6.0± m (20'±)
6.2± m (20'±)
2.2± m
5.0± m (16'±)
4.171 m
N40°33'37.7"E
N34°46'47.2"E
N 26°-53'-18.1" W

TEMP. CONST. LIMITS 180± S.F.
TEMP. CONST. 850± S.F.
TEMP. 500± S.F.
TEMP. 790± S.F.
TEMP. 1635± S.F.
CONST. 1368± S.F.
CONST. 699± S.F.
CONST. 1395± S.F.
CONST. & MAINT. EASE. 160± S.F.
545± S.F.
2067± S.F.
2705± S.F.
1635± S.F.
1368± S.F.
699± S.F.
160± S.F.
1395± S.F.
790± S.F.
500± S.F.
850± S.F.
180± S.F.
15± S.F.
10,668 m (35.00')
10,668 m (35.00')
10,668 m (35.00')
10.0± m (33'±)
10.4± m (34'±)
10.4± m (34'±)
10.4± m (34

ITEM	TECH	CHECKED	REVISIONS			
			NO.	DATE	DESCRIPTION	BY
BASE MAP						
EXIST. R/W						
PROP. LINES						
AREAS						

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

METRIC	F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
	1	MAINE	NH-1001(800)E	126	148

ANDROSCOGGIN
FRANKLIN
COUNTY LINE

GRID 19YX

DIANA R. RICHARD
PARCEL NO. (34)
LAND TAKEN = 515± S.F. (1)
TEMP. CONST. RIGHTS =1560± S.F. (3)
TOTAL AREA = 10,800± S.F.
(PER SURVEY)
REM. AREA = 10,285± S.F.

MAINE CENTRAL RAILROAD

67.4± m (221'±)
54.4± m (175'±)
TEMP. CONST. 530± S.F. LIMITS 515± S.F.
68.8± m (225'±)
0.8± m (3'±)
119.8± m (393'±)

ANDROSCOGGIN COUNTY RECORDS
VOLUME 4, PAGE 484
1905 VARIED WIDTHS STA. 40+750.001 (ROUTE 4) = STA. 9+000.000 (GAGNON STREET)
TOWN LINE BACK

STA. 40+822.326 (ROUTE 4) = STA. 10+000.000 (CHURCH STREET)

FRANKLIN COUNTY RECORDS
VOLUME 6, PAGE 411
1897, 3 & 4 RODS
TOWN LINE AHEAD

STA. 40+857.590 (ROUTE 4) = STA. 1+000.000 (MILL STREET)

PC = STA 9+004.682
PT = STA 9+020.429
PC = STA 10+004.207
PC = STA 1+019.839
PT = STA 1+020.944
PC = STA 11+004.505

CURVE DATA
PI = 9+012.553
Δ = 90° - 00' - 54.1" Rt.
R = 15.000 m
L = 23.562 m
T = 15.000 m
E = 6.747 m

CURVE DATA
PI = 10+023.464
Δ = 10° - 20' - 42.9" Rt.
R = 190.000 m
L = 35.496 m
T = 17.817 m
E = 0.829 m

CURVE DATA
PI = 1+020.391
Δ = 02° - 06' - 40.1" Lt.
R = 300.000 m
L = 11.106 m
T = 5.553 m
E = 0.051 m

CURVE DATA
PI = 40+807.852
Δ = 10° - 50' - 40.20" Rt.
R = 914.000 m
L = 172.995 m
T = 86.757 m
E = 4.108 m

CURVE DATA
PI = 40+807.852
Δ = 10° - 50' - 40.20" Rt.
R = 914.000 m
L = 172.995 m
T = 86.757 m
E = 4.108 m

CURVE DATA
PI = 11+004.505
Δ = 02° - 57' - 34.1" Rt.
R = 300.000 m
L = 15.496 m
T = 7.750 m
E = 0.100 m

CURVE DATA
PI = 40+918.518
Δ = 33° - 57' - 33.4" Lt.
R = 80.000 m
L = 47.416 m
T = 24.427 m
E = 3.646 m

NOTE: RIGHTS TAKEN TO RAZE OR REMOVE BUILDING AT STA. 4+920.0 LT.

ROBERT L. BLAIS
PARCEL NO. (38)
LAND TAKEN = 255± S.F.(1)
TEMP. CONST. RIGHTS = 15± S.F.(1)
TOTAL AREA = 6000± S.F.
(PER OWNER)
REM. AREA = 5745± S.F.

CAROL ANN CHILDS
F/K/A CAROL A. BLAIS
ITEM NO. (39)
TEMP. CONST. RIGHTS = 630± S.F. (1)
TOTAL AREA = 3234± S.F.
(PER OWNER)

GAGNON STREET
30' WIDE
PER TOWN OFFICIALS

ROMAN CATHOLIC
BISHOP OF PORTLAND
PARCEL NO. (40)
LAND TAKEN = 246± S.F. (1)(PRESC. EASE.)
LAND TAKEN = 690± S.F. (1)(OTHER)
TOTAL LAND TAKEN = 936± S.F. (2)
TEMP. CONST. RIGHTS = 245± S.F.(1)
TOTAL AREA = 1± AC. (PER OWNER)
REM. AREA = 0.98± AC.

ROMAN CATHOLIC
BISHOP OF PORTLAND
PARCEL NO. (41)
LAND TAKEN = 2141± S.F. (1)(PRESC. EASE.)
LAND TAKEN = 1611± S.F. (1)(OTHER)
TOTAL LAND TAKEN = 3752± S.F. (2)
TOTAL AREA = 13,934± S.F. (PER DEED)
REM. AREA =10,182± S.F.

FREDERICO FRANCHETTI, JR.
PARCEL NO. (42)
LAND TAKEN = 270± S.F. (1)
TEMP. CONST. RIGHTS = 1975± S.F. (2)
TOTAL AREA = 8232± S.F.
REM. AREA = 7962± S.F.

FREDERICO FRANCHETTI, JR.
PARCEL NO. (43)
LAND TAKEN = 3021± S.F. (1)
BUILDING-= (1)
TEMP. CONST. RIGHTS = 941± S.F. (1)
TOTAL AREA = 3962± S.F. (CALC.)
REM AREA = 941± S.F.

MICHAEL E. BIBEAU
PARCEL NO. (48)
LAND TAKEN = 3413± S.F. (2)
(ENTIRE LOT) (CALC.)
BUILDINGS = (1)

CORINNA BALSAMO, TRUSTEE OF THE CORINNA BALSAMO LIVING TRUST
ITEM NO. (45)
TEMP. CONST. RIGHTS = 415± S.F. (1)
TOTAL AREA = 4725± S.F. (CALC.)

JERRY S. MARSTALLER
DARLENE A. MARSTALLER
ITEM NO. (44)
TEMP. CONST. RIGHTS = 405± S.F. (1)
TOTAL AREA = 1350± S.F.
(PER TOWN)

BEGIN B.L. PART III
END B.L. STA. 11+020.0

CHURCH STREET
ARTICLE 24 FEB. 6, 1905
3 RODS WIDE

LIVERMORE FALLS
JAY
TOWN LINE

P.I.N. 010018.00

PLAN FILED IN PLAN BOOK PAGE					
		COUNTY RECORD			
NO.	GRANTOR	INSTRUMENT	DATE	BOOK	PAGE
	PCL NOS. 43 & 48	COND.	10/25/10	3290	170
	PART IV ANDROSCOGGIN COUNTY	COND.	1/25/11	8102	62
	PART IV FRANKLIN COUNTY	COND.	1/24/11	3318	1

SYMBOLS

- IP or IPF (IRON PIPE or PIN)
- S.T. (SEPTIC TANK)
- WATER LINE
- GAS LINE
- ELECTRIC LINE
- TELEPHONE LINE
- SEWER LINE
- PROPERTY LINE
- LIMITS OF WROUGHT PORTION
- EXISTING RIGHT OF WAY
- NEW RIGHT OF WAY
- NEW RIGHT OF WAY WITHIN EXISTING RIGHT OF WAY
- CONTROL OF ACCESS

○ - RAILROAD SPIKE △ - CONTROL MONUMENTS

MAINE DEPARTMENT OF TRANSPORTATION - CENTERLINE CONTROL

MAINE STATE COORDINATE SYSTEM - ZONE

CENTERLINE CONTROL MONUMENTS			TRAVERSE CONTROL POINTS		
STATION	NORTH	EAST	NUMBER	NORTH	EAST

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016

RIGHT OF WAY MAP

STATE HIGHWAY "21" (ROUTE 4)
LIVERMORE FALLS - JAY ANDROSCOGGIN & FRANKLIN COUNTY
FEDERAL AID PROJECT NO. NH- 1001(800)E PART III & IV

DATE: JUNE 2010
SCALE: 1 = 250
SHEET NO. 5 OF 10 SHEETS

DAVID A. COLE
COMMISSIONER

KENNETH L. SWEENEY
CHIEF ENGINEER

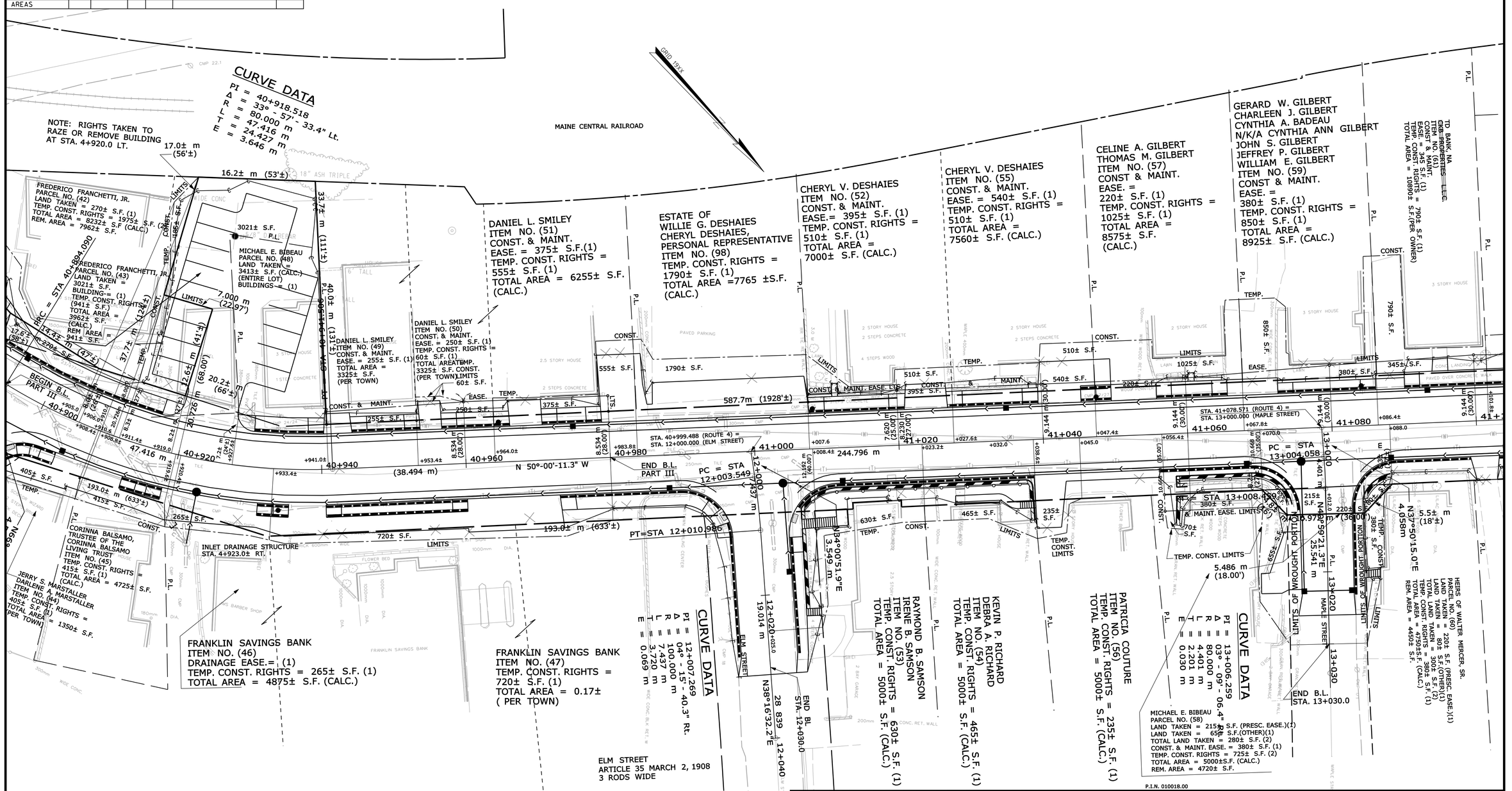
D.O.T. FILE NO1-275 & 4-235

Filename: ...\00\rowx\mrlo\005.DWG Plotted: 5:08 PM - 11-Feb-2011 Username: rhobe.moulton Date: 2/10/2011

ITEM	TECH	CHECKED	REVISIONS			
			NO.	DATE	DESCRIPTION	BY
BASE MAP						
EXIST. R/W						
PROP. LINES						
AREAS						

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

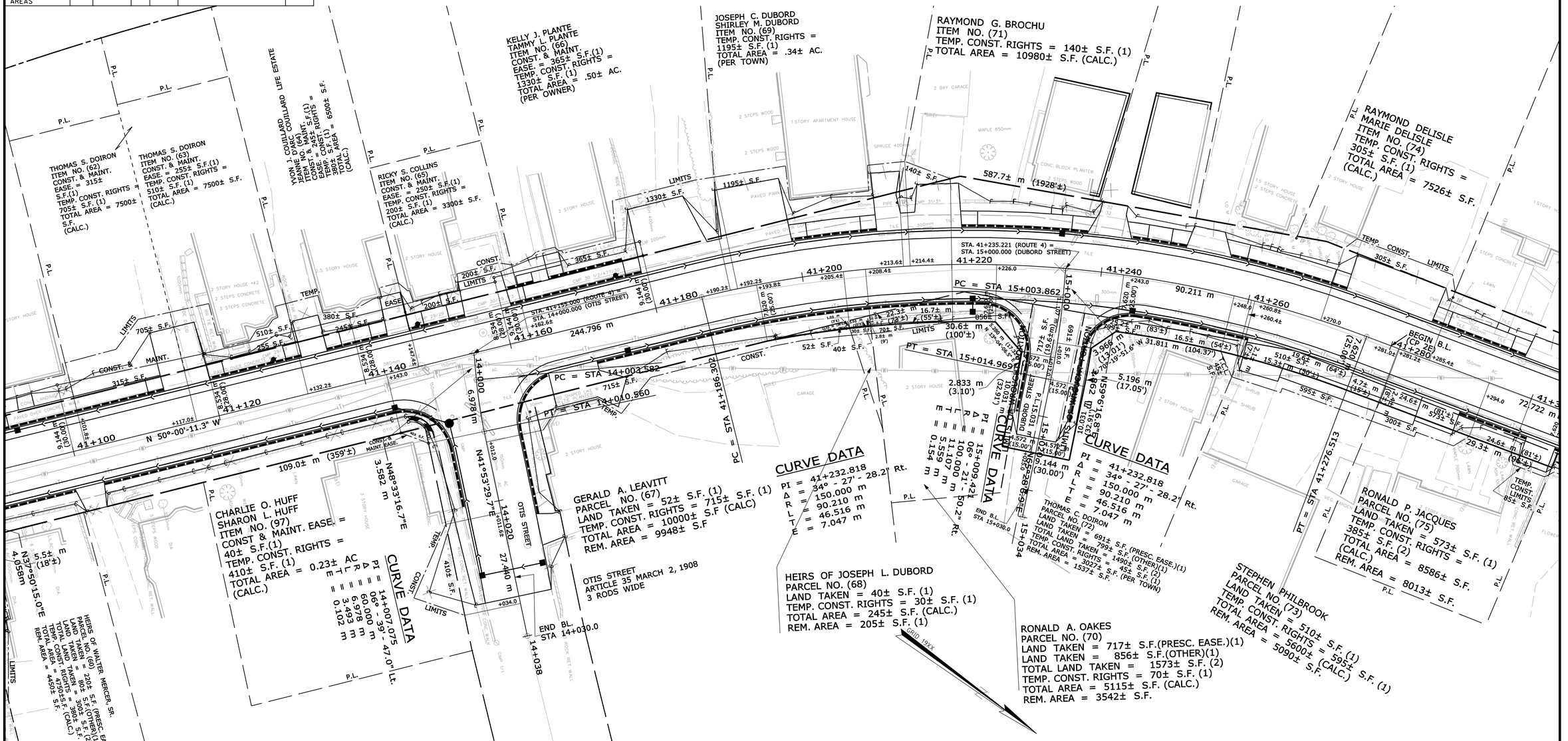
METRIC	F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
	1	MAINE	NH-1001(800)E	127	148


CURVE DATA
PI = 40+918.518
Δ = 33° - 57' - 33.4" Lt.
R = 80.000 m
L = 47.416 m
T = 24.427 m
E = 3.646 m
NOTE: RIGHTS TAKEN TO RAZE OR REMOVE BUILDING AT STA. 4+920.0 LT.
MAINE CENTRAL RAILROAD
GRID 19XX
FREDERICO FRANCHETTI, JR. PARCEL NO. (42) LAND TAKEN = 270± S.F. (1) TEMP. CONST. RIGHTS = 1975± S.F. (1) TOTAL AREA = 8232± S.F. (CALC.) REM. AREA = 7962± S.F.
FREDERICO FRANCHETTI, JR. PARCEL NO. (43) LAND TAKEN = 3021± S.F. BUILDING = (1) TEMP. CONST. RIGHTS = (941± S.F.) TOTAL AREA = 3962± S.F. (CALC.) REM AREA = 941± S.F.
3021± S.F.
MICHAEL E. BIBEAU PARCEL NO. (48) LAND TAKEN = 3413± S.F. (CALC.) (ENTIRE LOT) BUILDINGS = (1)
DANIEL L. SMILEY ITEM NO. (49) CONST. & MAINT. EASE. = 255± S.F. (1) TOTAL AREA = 3325± S.F. (PER TOWN)
DANIEL L. SMILEY ITEM NO. (50) CONST. & MAINT. EASE. = 250± S.F. (1) TEMP. CONST. RIGHTS = 60± S.F. (1) TOTAL AREA = 3325± S.F. CONST. (PER TOWN)
DANIEL L. SMILEY ITEM NO. (51) CONST. & MAINT. EASE. = 375± S.F.(1) TEMP. CONST. RIGHTS = 555± S.F. (1) TOTAL AREA = 6255± S.F. (CALC.)
ESTATE OF WILLIE G. DESHAIES CHERYL DESHAIES, PERSONAL REPRESENTATIVE ITEM NO. (98) TEMP. CONST. RIGHTS = 1790± S.F. (1) TOTAL AREA =7765 ±S.F. (CALC.)
CHERYL V. DESHAIES ITEM NO. (52) CONST. & MAINT. EASE.= 395± S.F. (1) TEMP. CONST. RIGHTS = 510± S.F. (1) TOTAL AREA = 7000± S.F. (CALC.)
CHERYL V. DESHAIES ITEM NO. (55) CONST. & MAINT. EASE. = 540± S.F. (1) TEMP. CONST. RIGHTS = 510± S.F. (1) TOTAL AREA = 7560± S.F. (CALC.)
CELINE A. GILBERT THOMAS M. GILBERT ITEM NO. (57) CONST & MAINT. EASE. = 220± S.F. (1) TEMP. CONST. RIGHTS = 1025± S.F. (1) TOTAL AREA = 8575± S.F. (CALC.)
GERARD W. GILBERT CHARLEEN J. GILBERT CYNTHIA A. BADEAU N/K/A CYNTHIA ANN GILBERT JOHN S. GILBERT JEFFREY P. GILBERT WILLIAM E. GILBERT ITEM NO. (59) CONST & MAINT. EASE. = 380± S.F. (1) TEMP. CONST. RIGHTS = 850± S.F. (1) TOTAL AREA = 8925± S.F. (CALC.)
TD BANK, NA SUCCESSOR BY MERGER TO TD BANKNORTH, NA ITEM NO. (61) CONST & MAINT. EASE. = 345 S.F. (1) TEMP. CONST. RIGHTS = 790± S.F. (1) TOTAL AREA = 10890± S.F.(PER OWNER)
CORINNA BALSAMO, TRUSTEE OF THE CORINNA BALSAMO LIVING TRUST ITEM NO. (45) TEMP. CONST. RIGHTS = 415± S.F. (1) TOTAL AREA = 4725± S.F. (CALC.)
JERRY S. MARSTALLER DARLENE A. MARSTALLER ITEM NO. (44) TEMP. CONST. RIGHTS = 405± S.F. (1) TOTAL AREA = 1350± S.F. (PER TOWN)
FRANKLIN SAVINGS BANK ITEM NO. (46) DRAINAGE EASE.= (1) TEMP. CONST. RIGHTS = 265± S.F. (1) TOTAL AREA = 4875± S.F. (CALC.)
FRANKLIN SAVINGS BANK ITEM NO. (47) TEMP. CONST. RIGHTS = 720± S.F. (1) TOTAL AREA = 0.17± (PER TOWN)
INLET DRAINAGE STRUCTURE STA. 4+923.0± RT.
ELM STREET ARTICLE 35 MARCH 2, 1908 3 RODS WIDE
CURVE DATA
PI = 12+007.269
Δ = 04° - 15' - 40.3" Rt.
R = 100.000 m
L = 7.437 m
T = 3.720 m
E = 0.069 m
RAYMOND B. SAMSON IRENE B. SAMSON ITEM NO. (53) TEMP. CONST. RIGHTS = 630± S.F. (1) TOTAL AREA = 5000± S.F. (CALC.)
KEVIN P. RICHARD DEBRA A. RICHARD ITEM NO. (54) TEMP. CONST. RIGHTS = 465± S.F. (1) TOTAL AREA = 5000± S.F. (CALC.)
PATRICIA COUTURE ITEM NO. (56) TEMP. CONST. RIGHTS = 235± S.F. (1) TOTAL AREA = 5000± S.F. (CALC.)
CURVE DATA
PI = 13+006.259
Δ = 03° - 09' - 06.4"
R = 80.000 m
L = 4.401 m
T = 2.201 m
E = 0.030 m
MICHAEL E. BIBEAU PARCEL NO. (58) LAND TAKEN = 215± S.F. (PRESC. EASE.)(1) LAND TAKEN = 65± S.F.(OTHER)(1) TOTAL LAND TAKEN = 280± S.F. (2) CONST. & MAINT. EASE. = 380± S.F. (1) TEMP. CONST. RIGHTS = 725± S.F. (2) TOTAL AREA = 5000±S.F. (CALC.) REM. AREA = 4720± S.F.
HEIRS OF WALTER MERCER, SR. PARCEL NO. (60) LAND TAKEN = 220± S.F. (PRESC. EASE.)(1) LAND TAKEN = 80± S.F.(OTHER)(1) TOTAL LAND TAKEN = 300± S.F. (2) TEMP. CONST. RIGHTS = 380± S.F. (1) TOTAL AREA = 4750±S.F. (CALC.) REM. AREA = 4450± S.F.
BEGIN B.L. PART III 40+900
END B.L. PART III
PC = STA 12+003.549
PT=STA 12+010.986
END BL STA. 12+030.0
PC = STA 13+004.058
END B.L. STA. 13+030.0
STA. 40+999.488 (ROUTE 4) = STA. 12+000.000 (ELM STREET)
STA. 41+078.571 (ROUTE 4) = STA. 13+000.000 (MAPLE STREET)
N 50°-00'-11.3" W (38.494 m)
N38°16'32.2"E 28.839 m
N37°50'15.0"E 4.958m
N48°59'21.3"E 25.541 m
N16°59'01.9"E 3.549 m
N16°59'01.9"E 19.014 m
N16°59'01.9"E 244.796 m
N16°59'01.9"E 5.486 m (18.00')
N16°59'01.9"E 5.5± m (18'±)
N16°59'01.9"E 4.401 m
N16°59'01.9"E 5.486 m (18.00')

ITEM	TECH	CHECKED	REVISIONS			
			NO.	DATE	DESCRIPTION	BY
BASE MAP						
EXIST. R/W						
PROP. LINES						
AREAS						

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

METRIC	F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
	1	MAINE	NH-1001(800)E	128	148



PLAN FILED IN PLAN BOOK PAGE					
		COUNTY RECORD			
NO.	GRANTOR	INSTRUMENT	DATE	BOOK	PAGE
	PART IV	COND.	1/24/11	3318	1

P.I.N. 010018.00

SYMBOLS

- IP or ● IPF (IRON PIPE or PIN)
- □ S.T. (SEPTIC TANK)
- WATER LINE
- GAS LINE
- ELECTRIC LINE
- TELEPHONE LINE
- SEWER LINE
- PROPERTY LINE
- LIMITS OF WROUGHT PORTION
- EXISTING RIGHT OF WAY
- NEW RIGHT OF WAY
- NEW RIGHT OF WAY WITHIN EXISTING RIGHT OF WAY
- CONTROL OF ACCESS

○ - RAILROAD SPIKE △ - CONTROL MONUMENTS

MAINE DEPARTMENT OF TRANSPORTATION - CENTERLINE CONTROL

MAINE STATE COORDINATE SYSTEM - ZONE

CENTERLINE CONTROL MONUMENTS			TRAVERSE CONTROL POINTS		
STATION	NORTH	EAST	NUMBER	NORTH	EAST

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016

RIGHT OF WAY MAP

STATE HIGHWAY "21" (ROUTE 4)

JAY FRANKLIN COUNTY

FEDERAL AID PROJECT NO. NH- 1001(800)E PART IV

DATE: JUNE 2010

SCALE: 1 = 250

SHEET NO. 7 OF 10 SHEETS

D.O.T. FILE NO. 4-235

DAVID A. COLE
COMMISSIONER

KENNETH L. SWEENEY
CHIEF ENGINEER

Filename: ...\DOT\ven\mstc\007 DRAWING\Plan Right WAY
Username: rhobe.moulton
Date: 2/10/2011

ITEM	TECH	CHECKED	REVISIONS			
			NO.	DATE	DESCRIPTION	BY
BASE MAP						
EXIST. R/W						
PROP. LINES						
AREAS						

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

METRIC	F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
	1	MAINE	NH-1001(800)E	129	148

V5
47

MAINE CENTRAL RAILROAD

23.2± m (76'±)
APPROX. LOCATION OF 20' WIDE PERMANENT SEWER EASEMENT TO THE TOWN OF JAY SEE BOOK 492 PAGE 340

EDWARD N. DOIRON, JR.
DOROTHEA M. DOIRON
THOMAS S. DOIRON
ITEM NO. (77)
TEMP. CONST. RIGHTS = 850± S.F. (1)
TOTAL AREA = 9590± S.F. (CALC.)

CHRISTOPHER BUNNELL
ITEM NO. (80)
TEMP. CONST. RIGHTS = 355± S.F. (2)
TOTAL AREA = 5985± S.F. (CALC.)

MARLENE WALKER

SUSAN L. DOLAN
F/K/A SUSAN L. BROWN
PARCEL NO. (2E)
LAND TAKEN = 0.24± AC. (ENTIRE LOT)
BUILDINGS = (1)

0.56± AC.

42.7± m (140'±)
52.1± m (171'±)
42.4± m (139'±)
51.4± m (169'±)
130'
DRAINAGE LIMITS
EASE.
P.L.
CONST. TEMP.
RIGHT-OF-WAY TO DOLAN
850± S.F.
T.C.L. 60± S.F.
T.C.L. 295± S.F.
LIMITS

LOT LINE

SEE SURVEY BY
PICKETT LAND SURVEYING, INC.
OAKLAND, MAINE
JOHN M. PICKET PLS 351

C.N. BROWN COMPANY
PARCEL NO. (83)
LAND TAKEN = 1380± S.F. (1)
DRAINAGE EASE. = 1120± S.F. (1)
TOTAL AREA = 1.60± AC. (PER SURVEY)
REM. AREA = 1.57± AC.

EXISTING CONST. LIMIT LINE
587.7± m (1928'±)
SEE S.H.C. FILE NO. 4-111

BEGIN B.L. (CP 28) 41+280 +285.4 +281.2 +281.0±
STATE HIGHWAY "21" N 15°-32'-43.1" W
72.722 m
41+300 +305.8± +307.7± +308.7± +312.0
41+320 +319.0 +329.3± +331.6±
ROUTE 4
FRANKLIN COUNTY RECORDS VOLUME 6, PAGE 368 1896, 3 RODS WIDE
41+340 +346.0 +349.8± +352.0 +355.4
END B.L.
41+360 +361.0± +366.4±
81.294 m
41+380 +388.5± +389.0+
63.486 m (208.00')
21.3± m (70'±)
1.9± m (6'±)
21± S.F.
41+400 +396.2± +408.2±
7.4± m (24'±)
32± S.F.
20.7± m (94'±)
LIMITS OF WROUGHT PORTION
41+420
455± S.F.
280± S.F. CONST.
59.8± m (196'±)
345± S.F. TEMP.
550± S.F. TEMP. CONST. LIMITS
21.8± m (72'±)
7.8± m (26'±)
41+440
451.8± m (1482'±)
41+460 +464.0 +470.0 +480.0±
N 15°-30'-24.5" E
141.978 m
205± S.F. TEMP. CONST. LTS.
170± S.F. TEMP. CONST. LIMITS
DRAIN. EASE. LIMITS 145± S.F.
INLET DRAINAGE STRUCTURE
STA. 41+466.0 TO
STA. 41+470.0 RT.
LOUISE O'QUINN
ARLENE D'SART
MARIE ELIZABETH MULLINS
JEANNINE WILKINS
ITEM NO. (96)
DRAIN. EASE. = 145± S.F. (1)
TEMP. CONST. RIGHTS = 415± S.F. (2)
TOTAL AREA = 1.03± AC. (CALC.)

600± S.F.
405± S.F. CONST. & MAINT.
285± S.F. EASE. LTS
2.0± m (7'±) TEMP.
24.6± m (81'±)
573± S.F.
29.3± m (96'±)
TEMP. CONST. LIMITS 85± S.F.
4.7± m (15'±)
300± S.F.
LTS.

CURVE DATA
PI = 41+390.907
Δ = 31° - 03' - 07.6" Rt.
R = 150.000 m
L = 81.294 m
T = 41.672 m
E = 5.681 m
PT = STA 41+430.529

NORMAND L. BONNEVIE
PARCEL NO. (81)
LAND TAKEN = 211± S.F. (PRESC. EASE.)(1)
LAND TAKEN = 127± S.F.(OTHER)(1)
TOTAL LAND TAKEN = 338± S.F. (2)
TEMP. CONST. RIGHTS = 455± S.F. (1)
TOTAL AREA = 7590± S.F. (CALC.)
REM. AREA = 7252± S.F.

YVON J. BOURGAULT
MARY BETH BOURGAULT
PARCEL NO. (82)
LAND TAKEN = 37± S.F.(PRESC. EASE.)(1)
LAND TAKEN = 37± S.F. (OTHER)(1)
TOTAL LAND TAKEN = 74± S.F. (2)
TEMP. CONST. RIGHTS = 755± S.F. (2)
TOTAL AREA = 0.75± AC. (PER OWNER)
REM. AREA = 0.74± AC.

RONALD P. JACQUES
PARCEL NO. (75)
LAND TAKEN = 573± S.F. (1)
TEMP. CONST. RIGHTS = 385± S.F. (2)
TOTAL AREA = 8586± S.F. (CALC.)
REM. AREA = 8013± S.F.
PT = STA 41+276.513

JOSEPHINE E. RIDLON
ITEM NO. (76)
CONST. & MAINT. EASE. = 405± S.F. (1)
CONST. RIGHTS = 600± S.F. (CALC.)
TEMP. CONST. RIGHTS = 8000± S.F.
TOTAL AREA =

MICHAEL C. MITCHELL
ITEM NO. (78)
CONST. & MAINT EASE. = 285± S.F. (1)
CONST. RIGHTS = 345± S.F. (PER OWNER)
TEMP. CONST. RIGHTS = 6600± S.F.
TOTAL AREA =

PC = STA 41+349.235

KYLE P. ELLIS
STEPHANI M. ELLIS
ITEM NO. (79)
CONST. RIGHTS = 280± S.F. (1)
TEMP. CONST. RIGHTS = 6050± S.F. (CALC.)
TOTAL AREA =

STEPHEN PHILBROOK
PARCEL NO. (73)
LAND TAKEN = 510± S.F. (1)
TEMP. CONST. RIGHTS = 595± S.F. (1)
TOTAL AREA = 5600± (CALC.)
REM. AREA = 5090± S.F.

P.I.N. 010018.00

PLAN FILED IN PLAN BOOK PAGE

NO.	GRANTOR	COUNTY RECORD INSTRUMENT	DATE	BOOK	PAGE
2E	SUSAN L. DOLAN	COND.	9/10/07	2949	81
	PART IV	COND.	1/24/11	3318	1

SYMBOLS

- IP or ● IPF (IRON PIPE or PIN)
- S.T. (SEPTIC TANK)
- WATER LINE
- GAS LINE
- ELECTRIC LINE
- TELEPHONE LINE
- SEWER LINE
- PROPERTY LINE
- LIMITS OF WROUGHT PORTION
- EXISTING RIGHT OF WAY
- NEW RIGHT OF WAY
- NEW RIGHT OF WAY WITHIN EXISTING RIGHT OF WAY
- CONTROL OF ACCESS

○ - RAILROAD SPIKE △ - CONTROL MONUMENTS

MAINE DEPARTMENT OF TRANSPORTATION - CENTERLINE CONTROL

MAINE STATE COORDINATE SYSTEM - ZONE

CENTERLINE CONTROL MONUMENTS			TRAVERSE CONTROL POINTS		
STATION	NORTH	EAST	NUMBER	NORTH	EAST

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016

RIGHT OF WAY MAP

STATE HIGHWAY "21" (ROUTE 4)

JAY FRANKLIN COUNTY

FEDERAL AID PROJECT NO. NH- 1001(800)E PART IV

DATE: JUNE 2010

SCALE: 1 = 250

SHEET NO. 8 OF 10 SHEETS

D.O.T. FILE NO. 4-235

DAVID A. COLE
COMMISSIONER

KENNETH L. SWEENEY
CHIEF ENGINEER

Filename: ...\DOT\ken.rnsto\008\DWG\Sheet8.dgn Username: rhobe.moulton Date: 2/10/2011

ITEM	TECH	CHECKED
BASE MAP		
EXIST. R/W		
PROP. LINES		
AREAS		

REVISIONS		
NO.	DATE	DESCRIPTION

BY

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

METRIC	F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
	1	MAINE	NH-1001(800)E	130	148

SEE SURVEY BY
PICKETT LAND SURVEYING, INC.
OAKLAND, MAINE
JOHN M. PICKET PLS 351

GRID 19XX

ANTOINE A. ST. PIERRE
PARCEL NO. (84)
LAND TAKEN = 414± S.F. (1)
TOTAL AREA = 0.49± AC. (CALC.)
REM. AREA = 0.48± AC.

REAL ROBERT COTURE
ANTOINE A. ST. PIERRE (BY OCCUPATION)
PARCEL NO. (99)
LAND TAKEN = 457± S.F. (1)
TEMP. CONST. RIGHTS =195± S.F.(1)
TOTAL AREA = 0.90± AC. (CALC.)
REM. AREA = 0.89± AC.

ANTOINE ST. PIERRE
PARCEL NO. (86)
LAND TAKEN = 390± S.F. (1)
TEMP. CONST. RIGHTS =0.06± AC.(1)
TOTAL AREA = 2± AC. (PER OWNER)
REM. AREA = 1.99± AC.

ANTON ENTERPRISE, LLC
PARCEL NO. (87)
LAND TAKEN = 769± S.F. (1)
TEMP. CONST. RIGHTS = 565± S.F. (1)
TOTAL AREA = 0.77± AC. (PER DEED)
REM. AREA = 0.75± AC.

C.N. BROWN COMPANY
PARCEL NO. (83)
LAND TAKEN = 1380± S.F. (1)
DRAINAGE EASE. = 1120± S.F. (1)
TOTAL AREA = 1.60± AC. (PER SURVEY)
REM. AREA = 1.57± AC.

CURVE DATA

PI = 41+653.165
Δ = 33° - 150' - 55.3" Lt.
R = 270.000 m
L = 156.759 m
T = 80.658 m
E = 11.790 m

OUTLET DRAINAGE STRUCTURE
STA. 41+527.0 TO STA. 41+538.4 LT.

EASE.
CLL
DRAIN.
1120± S.F.
SLIMIT
PC = STA 41+572.507
P.I.
P.T.
P.L.
TEMP.
CONST.
LIMITS
0.06± AC.
195± S.F.
565± S.F.
769± S.F.
720± S.F.
390± S.F.
850± S.F.
640± S.F.
245± S.F.
170± S.F.
TEMP. CONST. LIMITS
DRAIN. EASE. LIMITS 145± S.F.
TEMP. CONST. LIMITS 40± S.F.

92.5± m (303'±)
1380± S.F.
63.8± m (209'±)
65.0± m (213'±)
2.2± m (7'±)
414± S.F.
28.7± m (84'±)
41.8± m (137'±)
457± S.F.
14.1± m (46'±)
2.2± m (7'±)
390± S.F.
43.4± m (142'±)
150.565 m (493.98')
32.6± m (107'±)
0.2± m (0.7'±)
59.8± m (165'±)
40.0± m (131'±)
451.8± m (1482'±)

10.7± m (35'±)
10.668 m (35.00')
19.812 m (65.00')
13.716 m (45.00')

41+480
41+500
41+520
41+540
41+560
41+580
41+600
41+620
41+640
41+660
156.759 m

+470.0
+480.0±
+484.0
+524.0
+527.0
+538.4±
+543.8±
+564.0±
+565.0±
+581.2
+582.4±
+586.4±
+587.0±
+587.4±
+621.2±
+633.0±
+633.7±
+645.0
+673.4±

N 15°-30'-24.5" E
141.978 m

FRANKLIN COUNTY RECORDS
VOLUME 6, PAGE 368
1896.4 RODS

INLET DRAINAGE STRUCTURE
STA. 41+466.0 TO
STA. 41+470.0 RT.

LOUISE O'QUINN
ARLENE DYSART
~~MARY ELIZABETH MULLINS~~
JEANNINE WILKINS
ITEM NO. (96)
DRAIN. EASE. = 145± S.F. (1)
TEMP. CONST. RIGHTS = 415± S.F. (2)
TOTAL AREA = 1.0± AC. (CALC)

DENISE ANN ROEBUCK
ITEM NO. (88)
TEMP. CONST. RIGHTS = 390± S.F. (1)
TOTAL AREA = 0.80 AC. (PER OWNER)

MARIAN R. SHANK
ITEM NO. (85)
TEMP. CONST. RIGHTS = 1530± S.F. (3)
TOTAL AREA = 2.5± AC. (PER OWNER)

P.I.N. 010018.00

PLAN FILED IN PLAN BOOK PAGE

NO.	GRANTOR	COUNTY RECORD INSTRUMENT	DATE	BOOK	PAGE
	PART IV	COND.	1/24/11	3318	1

SYMBOLS

- IP or IPF (IRON PIPE or PIN)
- S.T. (SEPTIC TANK)
- WATER LINE
- GAS LINE
- ELECTRIC LINE
- TELEPHONE LINE
- SEWER LINE
- PROPERTY LINE
- LIMITS OF WROUGHT PORTION
- EXISTING RIGHT OF WAY
- NEW RIGHT OF WAY
- NEW RIGHT OF WAY WITHIN EXISTING RIGHT OF WAY
- CONTROL OF ACCESS

○ - RAILROAD SPIKE △ - CONTROL MONUMENTS

MAINE DEPARTMENT OF TRANSPORTATION - CENTERLINE CONTROL

MAINE STATE COORDINATE SYSTEM - ZONE

CENTERLINE CONTROL MONUMENTS			TRAVERSE CONTROL POINTS		
STATION	NORTH	EAST	NUMBER	NORTH	EAST

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

STATE HIGHWAY "21" (ROUTE 4)
JAY FRANKLIN COUNTY
FEDERAL AID PROJECT NO. NH- 1001(800)E PART IV

DATE: JUNE 2010
SCALE: 1 = 250
SHEET NO. 9 OF 10 SHEETS
D.O.T. FILE NO. 4-235

DAVID A. COLE
COMMISSIONER
KENNETH L. SWEENEY
CHIEF ENGINEER

Filename: ...\00\rowmsto\009\DRAWINGS\HIGHWAY
Username: rhobe.moulton
Date: 2/10/2011

ITEM	TECH	CHECKED	REVISIONS			
			NO.	DATE	DESCRIPTION	BY
BASE MAP						
EXIST. R/W						
PROP. LINES						
AREAS						

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

METRIC

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	NH-1001(800)E	131	148

ANTON ENTERPRISE, LLC
PARCEL NO. (87)
LAND TAKEN = 769± S.F. (1)
TEMP. CONST. RIGHTS = 565± S.F. (1)
TOTAL AREA = 0.77± AC. (PER DEED)
REM. AREA = 0.75± AC.

BRUCE E. SPENCER
DORIS D. SPENCER
PARCEL NO. (90)
LAND TAKEN = 720± S.F. (1)
TEMP. CONST. RIGHTS = 330± S.F. (1)
TOTAL AREA = 0.81± AC. (CALC.)
REM. AREA = 0.80± AC.

JEFFREY L. BOIVIN
PARCEL NO. (91)
LAND TAKEN = 542± S.F. (1)
TEMP. CONST. RIGHTS = 0.05± AC. (1)
TOTAL AREA = 1.18± AC. (CALC.)
REM. AREA = 1.17± AC.

JEFFREY L. BOIVIN
PARCEL NO. (93)
LAND TAKEN = 1463± S.F. (1)
DRAINAGE EASE = 0.06± AC.(1)
TEMP. CONST. RIGHTS = 990± S.F. (1)
TOTAL AREA = 0.89± AC. (CALC.)
REM. AREA = 0.86± AC.

OUTLET DRAINAGE STRUCTURES
STA. 41+787.0 TO
STA 41+815.0 LT.

GRID 19XX

CURVE DATA

PI = 41+653.165
Δ = 33° - 150' - 55.3" Lt.
R = 270.000 m
L = 156.759 m
T = 80.658 m
E = 11.790 m

PT = STA 41+729.266

150.565 m (493.98')
66.456 m (218.03')
156.759 m
451.8± m (1482'±)
64.1± m (210'±)
43.1± m (141'±)
37.8± m (124'±)
51.0± m (200'±)
23.3± m (76'±)
20.9± m (69'±)
32.8± m (108'±)
33.5± m (110'±)
50.2± m (165'±)
40.0± m (131'±)
1.7± m (6'±)
0.5± m (1.6'±)
1.4± m (5'±)
9.3± m (31'±)
8.1± m (27'±)
10.668 m (35.00')
22.860 m (75.00')
18.288 m (60.00')
9.144 m (30.00')
11.660 m
19.293 m
44.579 m
N 17°-45'-30.8" W
N 69°-25'-56.8"E
N 69°14'15.7"E
N 53°-09'-53.6"E

0.05± AC.
0.06± AC.
565± S.F.
769± S.F.
720± S.F.
990± S.F.
1463± S.F.
542± S.F.
330± S.F.
265± S.F.
290± S.F.
1060± S.F.
1895± S.F.

LIMITS
TEMP. CONST.
EASE.
DRAIN.
CLL
P.L.
SLOPE
WROUGHT PORTION
CONST.
OF

41+660 41+680 41+700 41+720 41+740 41+760 41+780 41+800 41+820 41+840 41+853

+673.4± +684.0 +690.0 +698.0 +707.5± +707.8± +748.0 +772.4± +772.6± +787.0 +815.0 +830.0 +832.3± +832.2±

STA. 41+794.425 (ROUTE 4) =
STA. 16+000.000 (PINEAU STREET)

PC = STA 16+005.605

STA 16+017.165

DRAINAGE STRUCTURE
STA. 16+024.0±
STA. 41+805.0±
PINEAU ST LT. TO ROUTE 4 RT.

PINEAU STREET 16+020

PC = STA 16+695.722

PT = STA 16+044.667

END B.L. PT STA 41+840.301

PT = STA 41+840.301

CURVE DATA

PI = 41+818.053
Δ = 08° - 30' - 49.7" Rt.
R = 300.000 m
L = 44.578 m
T = 22.330 m
E = 0.830 m

CURVE DATA

PI = 16+011.606
Δ = 33° 24' - 13.2" Lt.
R = 20.000 m
L = 11.660 m
T = 6.001 m
E = 0.861 m

CURVE DATA

PI = 16+033.178
Δ = 39° 13' - 22.2" Rt.
R = 55.000 m
L = 23.960 m
T = 12.471 m
E = 2.155 m

NORMAND R. LECLAIR
ITEM NO. (89)
TEMP. CONST. RIGHTS = 265± S.F. (1)
TOTAL AREA = 1.03 AC. (CALC.)

NURIA C. KOSS
ITEM NO. (92)
TEMP. CONST. RIGHTS = 290± S.F. (1)
TOTAL AREA = 1.42± AC. (PER OWNER)

GARY B. MEDRANO
JAMIE L. MEDRANO
ITEM NO. (94)
SLOPE EASE. = 1060± S.F. (1)
TOTAL AREA = 0.52± AC.
(PER TOWN)

TOMMY E. MOORE
ROBYN MOORE
ITEM NO. (95)
DRAIN. EASE. = (1)
TEMP. CONST. RIGHTS = 1895± S.F. (1)
TOTAL AREA = 13,500± S.F.

ITEM NO. (96) SEE SHEET 8
ITEM NO. (97) SEE SHEET 7
ITEM NO. (98) SEE SHEET 6
PARCEL NO. (99) SEE SHEET 9

NOTE: PRESCRIPTIVE EASEMENT FOR HIGHWAY PURPOSES WITHIN LIMITS OF WROUGHT PORTION

P.I.N. 010018.00

SYMBOLS

- IP or IPF (IRON PIPE or PIN)
- S.T. (SEPTIC TANK)
- WATER LINE
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○ - RAILROAD SPIKE △ - CONTROL MONUMENTS

MAINE DEPARTMENT OF TRANSPORTATION - CENTERLINE CONTROL

MAINE STATE COORDINATE SYSTEM - ZONE

CENTERLINE CONTROL MONUMENTS			TRAVERSE CONTROL POINTS		
STATION	NORTH	EAST	NUMBER	NORTH	EAST

PLAN FILED IN PLAN BOOK PAGE

COUNTY RECORD

NO.	GRANTOR	INSTRUMENT	DATE	BOOK	PAGE
	PART IV	COND.	1/24/11	3318	1

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

STATE HIGHWAY "21" (ROUTE 4)
JAY FRANKLIN COUNTY
FEDERAL AID PROJECT NO. NH- 1001(800)E PART IV

DATE: JUNE 2010
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SHEET NO. 10 OF 10 SHEETS

DAVID A. COLE
COMMISSIONER

KENNETH L. SWEENEY
CHIEF ENGINEER

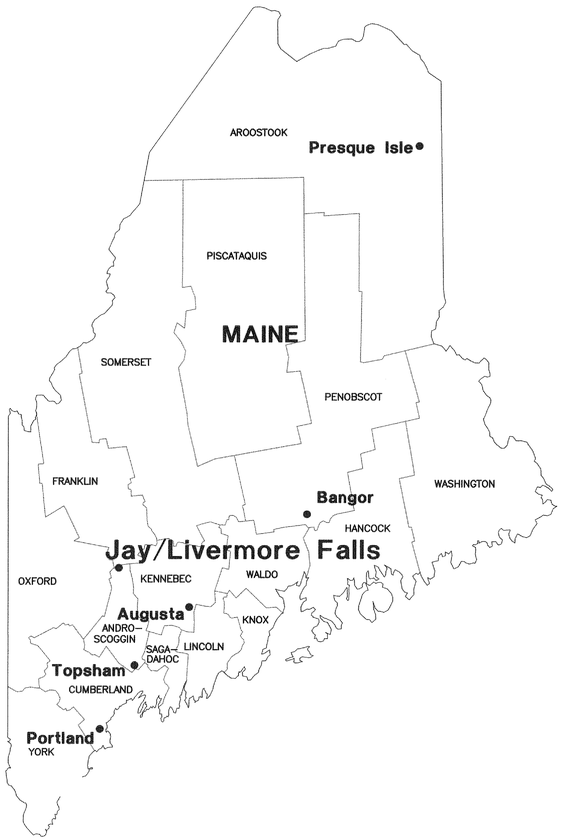
D.O.T. FILE NO. 4-235

Filename: ...\DGV\rowkmsta\010_JAY\ROW\MAY
Username: rhobe.moulton Date: 2/10/2011

JAY/LIVERMORE FALLS, MAINE

TOWNS OF JAY AND LIVERMORE FALLS
LIVERMORE FALLS WATER DISTRICT
ROUTE 4 UTILITIES
IMPROVEMENT PROJECT PIN 10018.00

DECEMBER 2010



DRAWING INDEX

SHEET NO.	DRAWING	TITLE
1	–	COVER SHEET
2	C–1	GENERAL NOTES, LEGEND & ABBREVIATIONS
3	C–2	DRAWING INDEX PLAN
4	C–3	PLAN AND PROFILE: STA. 39+940 TO STA. 40+120
5	C–4	PLAN AND PROFILE: STA. 50+000 TO STA. 50+060 (BRIDGE ST.)
6	C–5	PLAN AND PROFILE: STA. 40+120 TO STA. 40+300
7	C–6	PLAN AND PROFILE: STA. 40+300 TO STA. 40+480
8	C–7	PLAN AND PROFILE: STA. 40+480 TO STA. 40+660
9	C–8	PLAN AND PROFILE: STA. 40+660 TO STA. 40+840
10	C–9	PLAN AND PROFILE: STA. 40+840 TO STA. 41+010
11	C–10	PLAN AND PROFILE: STA. 41+010 TO STA. 41+180
12	C–11	PLAN AND PROFILE: STA. 41+180 TO STA. 41+340
13	C–12	PLAN AND PROFILE: STA. 41+340 TO STA. 41+520
14	C–13	PLAN AND PROFILE: STA. 41+520 TO STA. 41+680
15	C–14	PLAN AND PROFILE: STA. 41+680 TO STA. 41+853
16	C–15	WATER MAIN PHASING AND CONNECTION DETAILS
17	C–16	CIVIL DETAILS
18	C–17	CIVIL DETAILS

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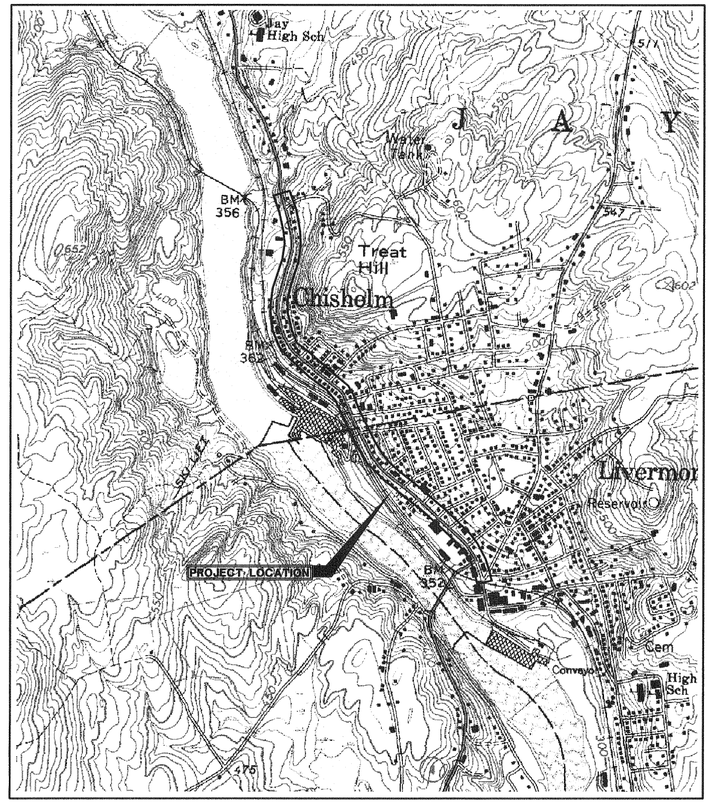
STATE OF MAINE
JEFFREY D. PREBLE
No. 6890
REGISTERED PROFESSIONAL ENGINEER
12-17



LOCATION PLAN
SCALE: 1" = 750'

FOR REVIEW _____
FOR BIDDING –
WP PROJECT NO. 11444-11446A

LAST SAVED BY: RXB 1/7/2011 9:54 AM
G:\DWGS\11444-11446-ROUTE 4 UTILITY IMPROVEMENTS\11444-11446A-FD\CIVIL\11444-11446AC-1.DWG | 11444-11446oC-1 | 1:1 | ---- | 1/12/2011 7:57:56 AM | RXB

GENERAL NOTES

1. THE CONTRACTOR IS REFERRED TO THE SPECIFICATIONS REGARDING COORDINATION WITH OTHERS, INCLUDING RESPONSIBILITIES AND RELATED COSTS.
2. REFER TO THE MDOT SPECIFICATIONS FOR UTILITY CONTRACT INFORMATION. THE CONTRACTOR SHALL ASCERTAIN THE LOCATION AND SIZE OF EXISTING WATER AND SEWER UTILITIES IN THE FIELD WITH THE RESPECTIVE UTILITY COMPANY REPRESENTATIVE.
3. WATER AND SEWER IMPROVEMENTS ARE SLATED TO BE CONSTRUCTED IN CONJUNCTION WITH THE ROUTE 4 IMPROVEMENTS PROJECT BY THE MAINE DEPARTMENT OF TRANSPORTATION.
4. ALL EXISTING SEWER AND WATER LINES ENCOUNTERED DURING CONSTRUCTION ARE TO REMAIN IN SERVICE. ANY EXISTING SEWERS OR WATER LINES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO AND TO THE SATIFACTION OF THE OWNER.
5. ALL STRUCTURES AND PIPELINES LOCATED ADJACENT TO THE TRENCH EXCAVATION SHALL BE PROTECTED AND FIRMLY SUPPORTED BY THE CONTRACTOR UNTIL THE TRENCH IS BACKFILLED. INJURY TO ANY SUCH STRUCTURES CAUSED BY, OR RESULTING FROM, THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. ALL UTILITIES REQUIRING REPAIR, RELOCATION OR ADJUSTMENT AS A RESULT OF THE PROJECT SHALL BE COORDINATED THROUGH THE RESPECTIVE UTILITY.
6. IN THOSE INSTANCES WHERE POWER OR TELEPHONE POLE SUPPORT IS REQUIRED, THE CONTRACTOR SHALL PROVIDE A MINIMUM 48-HOUR NOTIFICATION TO THE RESPECTIVE UTILITY COMPANY. NO ADDITIONAL PAYMENT WILL BE PROVIDED FOR TEMPORARY BRACING OF UTILITIES.
7. DO NOT SCALE DRAWINGS UNLESS OTHERWISE NOTED. WRITTEN DIMENSIONS AND STATIONING SHALL PREVAIL. REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.
8. REFER TO THE MAINE DEPARTMENT OF TRANSPORTATION REQUIREMENTS CONTAINED IN THE MDOT PROJECT MANUAL FOR MAINTAINING TRAFFIC FLOW SECTION 652.
9. THE OWNER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY RIGHTS OF WAY AND EASEMENTS. THE CONTRACTOR SHALL VERIFY THAT THE NECESSARY EASEMENTS HAVE BEEN SECURED BY THE OWNER. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BE FAMILIAR WITH THE APPLICABLE PROVISIONS OF EACH EASEMENT AS THEY APPLY TO THE WORK PRIOR TO BIDDING AND ABIDE BY THOSE PROVISIONS DURING CONSTRUCTION.
10. COMPACTION TESTS SHALL BE PERFORMED IN ACCORDANCE WITH SPECIFICATION SECTION 02200.
11. ALL ROAD, PARKING, AND PATH AREA SURFACES OUTSIDE OF THE MDOT WORK AREA SHALL PITCH 1/4 INCH PER FOOT MINIMUM UNLESS OTHERWISE NOTED.
12. THE CONTRACTOR SHALL NOTIFY RESIDENTS IN PERSON OR IN WRITING 24 HOURS IN ADVANCE OF WORKING ON WATER OR SEWER UTILITIES IN AN AREA.
13. ANY PAVEMENT TO BE REMOVED OUTSIDE OF MDOT WORK AREA SHALL BE SAWCUT PRIOR TO REMOVAL.
14. THE CONTRACTOR SHALL REGRADE ALL DISTURBED AREAS OUTSIDE OF THE MDOT WORK AREA AS NECESSARY FOR POSITIVE DRAINAGE.
15. ALL TEST PITS SHALL BE EXCAVATED PRIOR TO CONSTRUCTION LAYOUT AND RESULTS REPORTED TO ENGINEER FOR REVIEW FOR CONFORMANCE WITH PLANS. TEST PITS ARE REQUIRED AS NEEDED TO DETERMINE EXISTING UTILITY LOCATION AND AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LAYOUT OF ALL PROPOSED LINES AND STRUCTURES AS SHOWN ON THE DRAWINGS. THE LAYOUT PLAN SHALL BE REVIEWED BY THE ENGINEER PRIOR TO CONSTRUCTION.
16. CONTRACTOR SHALL REMOVE AND REPLACE, OR REPAIR, ALL CURBS, SIDEWALKS, PAVEMENT AND OTHER ITEMS DAMAGED BY HIS CONSTRUCTION ACTIVITIES TO AT LEAST THEIR ORIGINAL CONDITION, AND TO THE SATISFACTION OF THE OWNER AND ENGINEER FOR WORK OUTSIDE OF THE MDOT PROJECT AREA.
17. WHERE EXISTING PAVEMENT IS REMOVED AND REPLACED OUTSIDE OF MDOT PROJECT AREA, MATCH EXISTING GRADES TO THE EXTENT POSSIBLE. COORDINATE FINAL GRADING WITH THE ENGINEER AND MDOT.
18. THE CONTRACTOR SHALL COORDINATE THE PAVING OF THE ROADS WITH THE OWNER AND MDOT. THE CONTRACTOR SHALL ADJUST EXISTING MANHOLES AND VALVE BOXES (WATER) TO GRADE PRIOR TO PLACEMENT OF FINAL PAVEMENT.
19. AREAS DISTURBED BY THE CONTRACTOR OUTSIDE OF THE MDOT WORK LIMITS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AT NO ADDITIONAL EXPENSE TO THE OWNER.
20. EXISTING AND PROPOSED STORM DRAINS SHOWN FOR REFERENCE ONLY, REFER TO MDOT ROADWAY PLANS FOR FURTHER INFORMATION.
21. EXISTING SEWER MANHOLE AT STATION 40+770 +/- SHALL NOT BE DISTURBED DURING CONSTRUCTION. THE FLOW METER IN THIS MANHOLE SHALL REMAIN OPERATIONAL AT ALL TIMES DURING THE WORK. ANY INTERRUPTION OF SERVICES SHALL BE COORDINATED WITH THE LIVERMORE FALLS AND JAY SEWER DEPARTMENTS.
22. MINIMUM SEWER SERVICE SIZE WITHIN MDOT RIGHT-OF-WAY SHALL BE 100mm. PROVIDE FITTINGS AS REQUIRED TO CONNECT TO EXISTING SERVICE.

LAYOUT NOTES

1. PLAN AND PROFILE INFORMATION SHOWN ON THE UTILITY DRAWINGS ARE BASED ON INFORMATION PROVIDED BY MDOT AND GORRILL-PALMER CONSULTING ENGINEERS.
2. FOR HORIZONTAL AND VERTICAL CONTROL REFER TO THE MDOT ROADWAY PROJECT PLANS.

WATER MAIN PIPELINE GENERAL NOTES

1. WHERE NEW PIPING IS TO BE CONNECTED TO EXISTING PIPING, THE CONTRACTOR SHALL FURNISH AND INSTALL ALL ADAPTERS, FITTINGS, AND ADDITIONAL PIPE AS REQUIRED TO COMPLETE THE CONNECTION. CONTRACTOR SHALL VERIFY LOCATION, ELEVATION, ORIENTATION AND MATERIAL OF CONSTRUCTION. TEST PITS SHALL BE USED AS REQUIRED.
2. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH OTHERS. REFER TO SPECIFICATIONS, SECTION 01050.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LAYOUT OF THE NEW WATER MAIN. LAYOUT SHALL BE REVIEWED AND ACCEPTED BY OWNER AND ENGINEER. THE NEW WATER MAIN MUST BE LOCATED WITHIN THE RIGHTS-OF-WAY SHOWN ON THE DRAWINGS. THE EXISTING MAIN SHALL REMAIN OPERATIONAL WHILE THE NEW MAIN IS CONSTRUCTED.
4. MINIMUM DEPTH OF COVER SHALL BE 1.5M (5'-0") AND MAXIMUM DEPTH OF COVER SHALL BE 2.1M (7'-0") UNLESS SHOWN OTHERWISE ON THE DRAWINGS. THE NEW MAIN SHALL GENERALLY FOLLOW THE GROUND CONTOUR, HOWEVER, ABRUPT CHANGES IN GRADE SHALL BE AVOIDED. AT LOCAL HIGH POINTS OR WHERE AIR RELEASE VALVES ARE SHOWN, THE CONTRACTOR SHALL SLOPE NEW MAIN AS NEEDED TO MAINTAIN HIGH POINT AT AIR RELEASE VALVE. IF LEDGE IS ENCOUNTERED THE MINIMUM DEPTH OF COVER WILL BE 1.5M (5'-0"). DUE TO UTILITY CONFLICTS THE DEPTH OF COVER SHALL NOT BE LESS THAN 1.2M (4'-0") AND 50mm (2") RIGID BOARD INSULATION SHALL BE USED AS DETAILED. RIGID BOARD INSULATION SHALL BE 40PSI COMPRESSIVE STRENGTH, DOW STYROFOAM HIGHLOAD 40, CERTIFOAM 40 OR EQUAL.
5. NEW HYDRANTS SHALL BE FIELD LOCATED AND INSPECTED BY THE LIVERMORE FALLS WATER DISTRICT.
6. ALL BENDS, TEES, REDUCERS, HYDRANTS AND PLUGS SHALL BE RESTRAINED BY USING CONCRETE THRUST BLOCKS AND GRIP-RINGS OR OTHER METHOD AS SHOWN ON THE DRAWINGS. ANCHOR TEES SHALL BE USED FOR ALL HYDRANT BRANCHES.
7. TEST PRESSURES FOR THE COMBINATION PRESSURE AND LEAKAGE TESTS SHALL BE 150 PSI. TEST DURATION SHALL BE TWO HOURS.
8. TRENCHES SHALL NOT BE LEFT OPEN DURING NON-WORKING HOURS. ALL OPEN PIPES SHALL BE SECURED WITH A WATER-TIGHT PLUG WHEN THE PIPE IS TEMPORARILY BACKFILLED AND WHEN PIPE LAYING IS NOT IN PROGRESS.
9. CONNECTIONS TO EXISTING WATER MAIN SHALL BE COORDINATED WITH THE LIVERMORE FALLS WATER DISTRICT.
10. ALL WATER MAINS THAT ARE TO BE LEFT IN PLACE SHALL BE CAPPED WITH A M.J. CAP OR PLUG.
11. CONTINUOUS WATER SERVICE MUST BE MAINTAINED DURING CONSTRUCTION. THE CONTRACTOR WILL PROVIDE TEMPORARY PIPING AND SERVICES SUITABLE FOR AN OPERATING PRESSURE OF 100psi. ACCESS TO ROAD AND DRIVEWAYS WILL ALSO BE MAINTAINED.
12. ALL EXISTING WATER SERVICES ARE TO BE CONNECTED TO THE NEW MAIN. SERVICES, AS SHOWN ON THE DRAWINGS, ARE FOR THE CONTRACTOR'S CONVENIENCE. THE CONTRACTOR SHALL VERIFY LOCATION, SIZE AND TYPE OF ALL SERVICES. IF NOT LABELED ON THE PLAN, THE SERVICE SHALL BE ASSUMED TO BE THE DISTRICTS MINIMUM SERVICE SIZE OF 25mm (1-INCH).
13. EXISTING HYDRANTS TO BE STACKED AT AN OWNER APPROVED LOCATION AND REMAIN PROPERTY OF THE DISTRICT.

ABBREVIATIONS

CB	CATCH BASIN
CI	CAST IRON PIPE
CMP	CORRUGATED METAL PIPE
DI	DUCTILE IRON PIPE
FM	FORCE MAIN
CPE	CORRUGATED POLYETHYLENE
INV	INVERT ELEVATION
OHE	OVERHEAD ELECTRICAL
P.C.	POINT OF CURVATURE
RCP	REINFORCED CONCRETE PIPE
S	SEWER
SD	STORM DRAIN
SMH	SEWER MANHOLE
TYP	TYPICAL
UGE	UNDERGROUND ELECTRIC
W	WATER
MDOT	MAINE DEPARTMENT OF TRANSPORTATION
LF	LIVERMORE FALLS
LFWD	LIVERMORE FALLS WATER DISTRICT
UD	UNDERDRAIN

LEGEND

EXISTING		PROPOSED
	PROPERTY/ROW LINE	
	SETBACK LINE	
	EASEMENT LINE	
	CENTERLINE	
	EDGE OF PAVEMENT	
	CURBING	
	EDGE OF GRAVEL	
	EDGE OF CONCRETE	
122	CONTOUR	124
	BUILDING	
	STONEWALL	
	TREELINE	
	CHAIN LINK FENCE	
	STOCKADE FENCE	
	BARB WIRE FENCE	
	RETAINING WALL	
	GUARDRAIL	
8" S	SEWER	8"S
4" FM	SEWER FORCE MAIN	4"FM
4" G	GAS	4"G
8" W	WATER	8"W
15" SD	STORM DRAIN	15"SD
6" UD	UNDERDRAIN	6"UD
12" CMP	CULVERT	12" CMP
UGE	UNDERGROUND ELECTRIC	UGE
OHE	OVERHEAD ELECTRIC	OHE
	IRON PIPE/REBAR	
	DRILLHOLE	
	MONUMENT	
	SURVEY CONTROL POINT	
x 124.6	SPOT ELEVATION	x 132.5
SMH	SEWER MANHOLE	SMH
DMH	DRAINAGE MANHOLE	DMH
CB CB	CATCH BASIN	CB CB
EMH	ELECTRIC MANHOLE	EMH
TMH	TELEPHONE MANHOLE	TMH
	SHUTOFF VALVE	
	WATER SERVICE SHUTOFF	
	HYDRANT	
	UTILITY POLE	
	UTILITY POLE W/ GUY	
	UTILITY POLE W/ LIGHT	
	LIGHT POLE	
	BOLLARD	
	CONIFEROUS TREE	
	DECIDUOUS TREE	
	SHRUB	
	EDGE OF WATER	
	STREAM	
	EDGE OF WETLANDS	
	WETLANDS	
	DRAINAGE FLOW	
	DRAINAGE SWALE	
	PAVEMENT MARKINGS	
	SIGN	
MB	MAILBOX	
	TEMPORARY BENCH MARK	
TP-2	TEST PIT	
B-3	TEST BORING	
P-4	TEST PROBE	
MW-5	MONITORING WELL	
	LIMIT OF WORK	
	SILT FENCE	
	RIPRAP	
	RAILROAD	
	MATCHLINE	
	ROCK OUTCROP	

NO	SUBMISSIONS/REVISIONS	APP'D	DATE
1			
2			
3			
4			
5			

DRAWN BY RXB
CHECKED BY JDP
DATE 12-23-10
APPROVED BY JDP
DATE 12-23-10
BOOK NO.
PROJECT NO. 11444-11446
SCALE AS NOTED

STATE OF MAINE — JEFFREY D. PIERCE — No. 6580 — REGISTERED PROFESSIONAL ENGINEER

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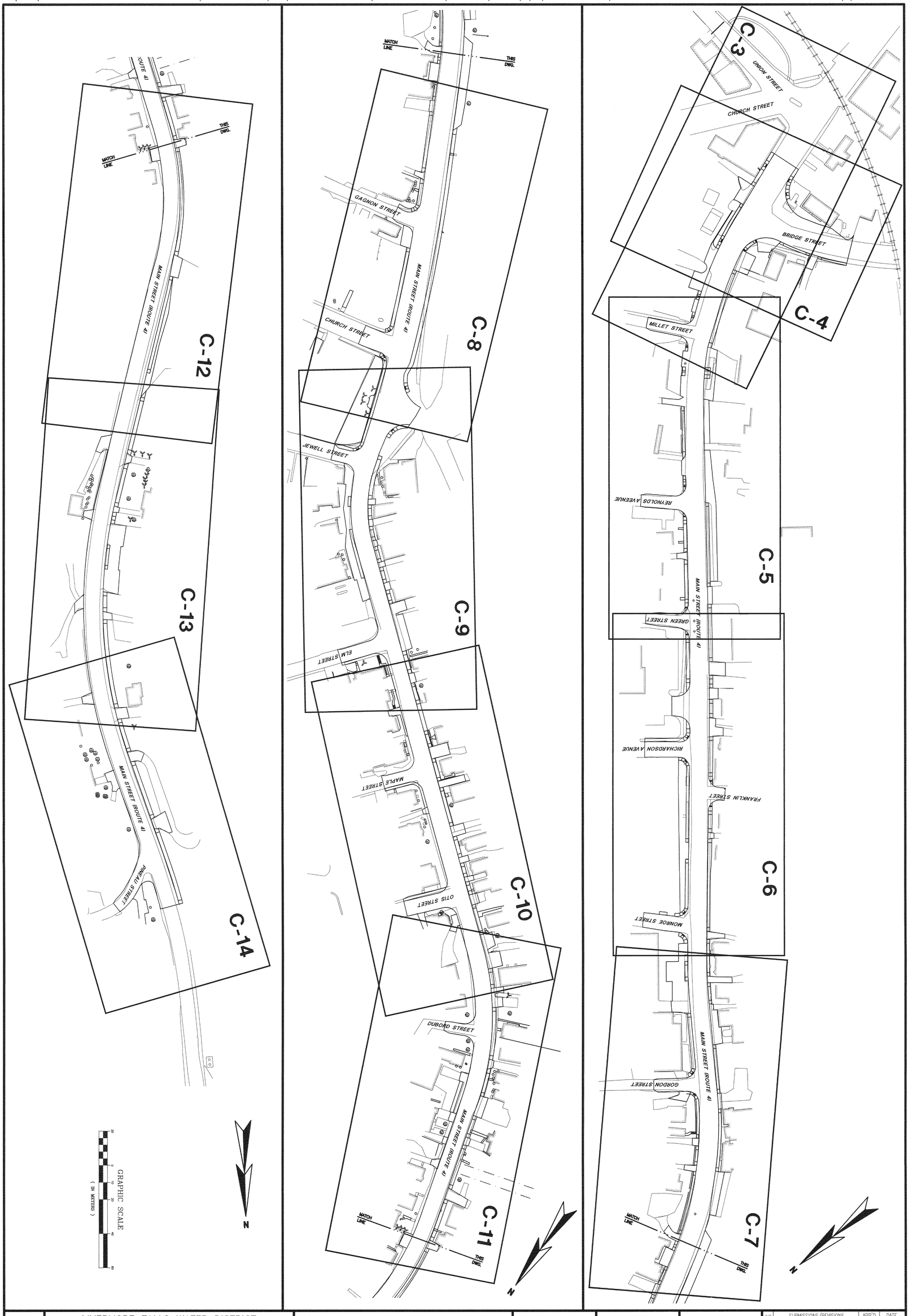
LIVERMORE FALLS WATER DISTRICT
LIVERMORE FALLS & JAY SEWER DEPARTMENTS
ROUTE 4
UTILITIES IMPROVEMENT

GENERAL NOTES, ABBREVIATIONS AND LEGEND

DRAWING
C-1



DRAWING C-2

LIVERMORE FALLS WATER DISTRICT
LIVERMORE FALLS & JAY SEWER DEPARTMENTS
ROUTE 4
UTILITIES IMPROVEMENT

INDEX PLAN

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STATE OF MAINE
JEFFREY D. PREBLE
No. 8886
PROFESSIONAL ENGINEER
12-11

DRAWN BY	RXB
CHECKED BY	JDP
DATE	12-23-10
APPROVED BY	JDP
DATE	12-23-10
BOOK NO.	
PROJECT NO.	11444-11446
SCALE	

NO	SUBMISSIONS/REVISIONS	APP'D	DATE
1			
2			
3			
4			

NOTES:
1. SEE NOTE 31 ON DWG C-1 FOR STORMWATER AND UNDERDRAIN INFORMATION. REFER TO MDOT PLANS.
2. ALL SEWER SERVICE CONNECTIONS TO BE FIELD LOCATED AND REPLACED FROM THE MAIN TO THE RIGHT-OF-WAY.

N

SEE DETAILS FOR PAVEMENT RESTORATION OUTSIDE OF MDOT PROJECT LIMITS

EXIST. 300mmx300mmx300mm VA TEE AND SOLID SLEEVE COUPLINGS

MATCH LINE

DWG. NO. C-4
DWG. NO. C-3

CONNECT INTO EXIST. 300mm WATER MAIN COORDINATE TIE-IN WITH LFWD

CAP EXIST. 300mm WATER MAIN

EXIST. SEWER TO REMAIN

39+940 | 39+960 | 39+980 | 40+000 | 40+020 | 40+040 | 40+060 | 40+080 | 40+100 | 40+120

300mmx300mm x150mm TEE

PROVIDE 150mm GATE VALVE

11 1/4° BEND

STA. 40+040.0 1.8M LT. REMOVE EXIST. SMH INSTALL NEW SMH-1

SMH-1

ABANDON EXISTING WATER MAIN

BRIDGE STREET

CB-2

CB-4

CB-20

CB-21

CB-22

MAIN STREET

MILLET STREET

UNION STREET

STA. 40+109 13.0M LT. 300mmx300mmx150mm VA TEE AND 150mm GATE VALVE HYDRANT ASSEMBLY

STA. 40+113.6 3.2M RT. REMOVE EXIST. SMH INSTALL NEW SMH-2

CONNECT 200mm PVC SEWER TO EXISTING SEWER ON MILLET

SEE DWG NO. C-3 ON DWG NO. C-4

30mm WATER SERVICE CONNECTION

25mm WATER SERVICE CONNECTION

REMOVE AND REPLACE SEWER WITH 300mm PVC

SMH-2

DMH-1

300mmx300mmx150mm TEE AND 150mm GATE VALVE AND CAP END

CUT AND CAP EXISTING HYDRANT LATERAL REMOVE EXISTING HYDRANT

EXIST. 300mm GATE VALVE

NEW 300mm DI W/2-45° BENDS AND 300mm GATE VALVE

REMOVE AND REPLACE WATER WITH 300mm DI

LIMIT OF MDOT PROJECT

ABANDONED WATER LINES

EXISTING 150mm SPRINKLER FOR WESTERN AUTO

300mmx300mm x300mm TEE W/ THREE 300mm GATE VALVES

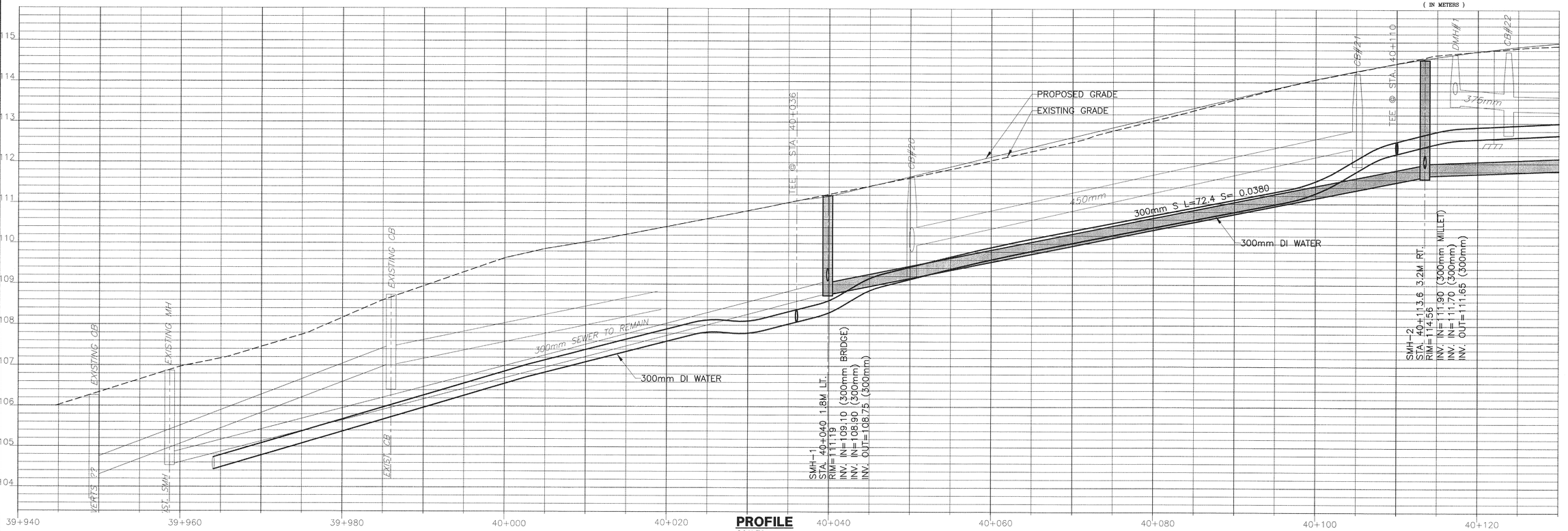
TYPICAL WATER SERVICE CONNECTION SEE DETAIL ON DWG 17

TEST PIT REQUIRED TO DETERMINE LOCATION AND ELEVATION OF EXISTING SEWER LINE

INSTALL 300mm DI WATER MAIN

PLAN
SCALE: 1:250

GRAPHIC SCALE
10 0 5 10 20
(IN METERS)



PROFILE
SCALES:
VERT: 1:50
HORIZ:1:250

NO	SUBMISSIONS/REVISIONS	APP'D	DATE
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5			

DRAWN BY: RXB
CHECKED BY: JDP
DATE: 12-23-10
APPROVED BY: JDP
DATE: 12-23-10
BOOK NO.:
PROJECT NO. 11444-11446
SCALE: AS NOTED

STATE OF MAINE
JEFFREY D. PREBLE
No. 9360
REGISTERED PROFESSIONAL ENGINEER

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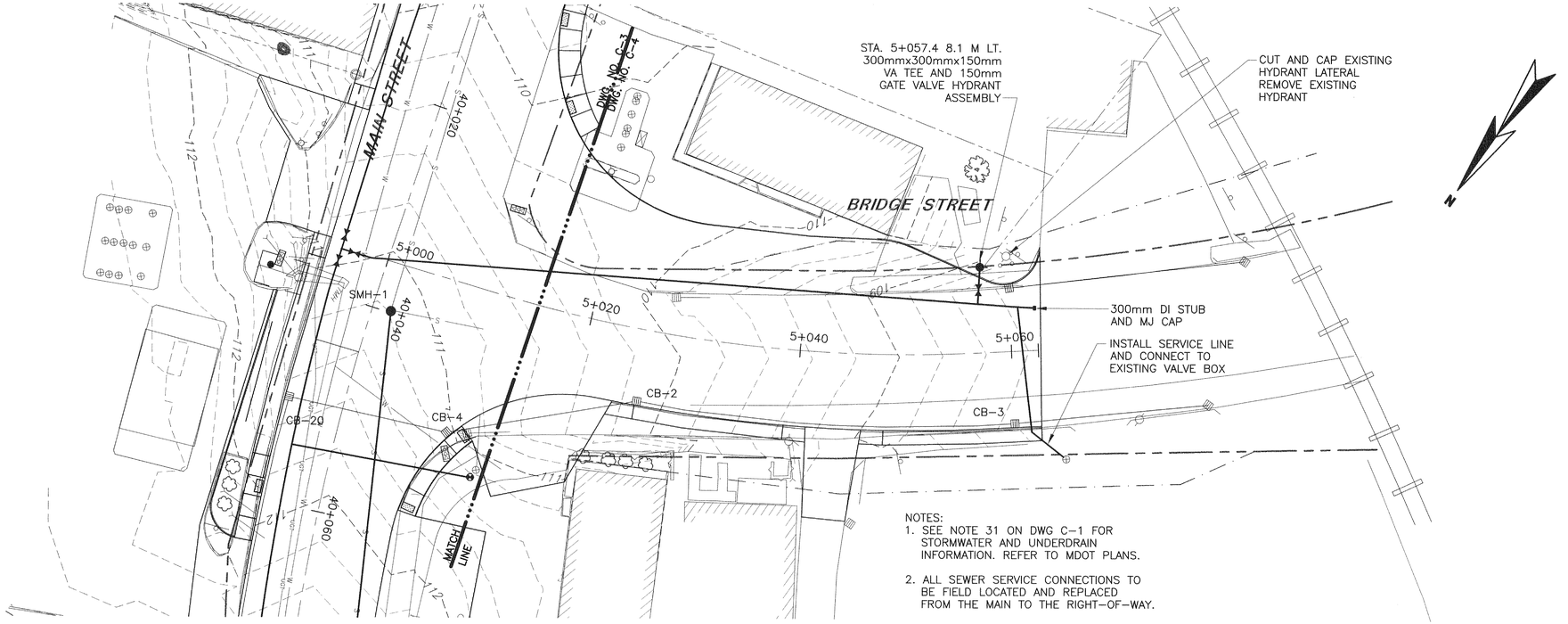
LIVERMORE FALLS WATER DISTRICT
LIVERMORE FALLS & JAY SEWER DEPARTMENTS
ROUTE 4
UTILITIES IMPROVEMENT

MAIN STREET PLAN AND PROFILE
STA. 39+940 TO 40+120

DRAWING
C-3

LAST SAVED BY: RXB 1/7/2011 10:10 AM

G:_DWGS_11444-11446-ROUTE 4 UTILITY IMPROVEMENTS_11444-11446A-FD_CIVIL_11444-11446AC-3.DWG | 11444-11446aC-3 | 1:1 | ---- | 1/12/2011 7:58:18 AM | RXB



NOTES:
1. SEE NOTE 31 ON DWG C-1 FOR STORMWATER AND UNDERDRAIN INFORMATION. REFER TO MDOT PLANS.
2. ALL SEWER SERVICE CONNECTIONS TO BE FIELD LOCATED AND REPLACED FROM THE MAIN TO THE RIGHT-OF-WAY.

PLAN
SCALE: 1:250

GRAPHIC SCALE
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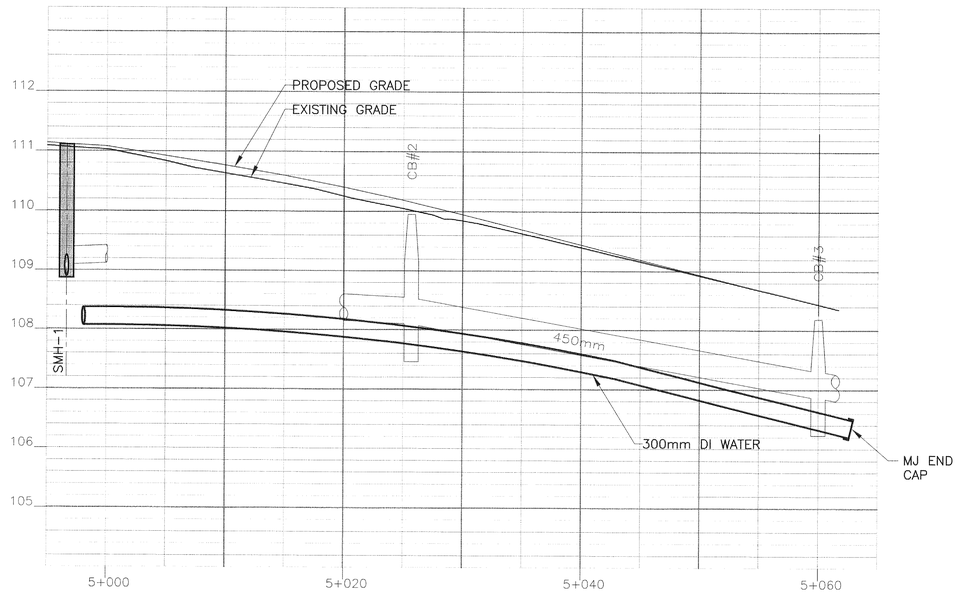
(IN METERS)



PROFILE
SCALES:
VERT: 1:50
HORIZ:1:250

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CHECKED BY JDP
DATE 12-23-10
APPROVED BY JDP
DATE 12-23-10
BOOK NO. —
PROJECT NO. 11444-11446
SCALE AS NOTED

STATE OF MAINE
JEFFREY D. FREEL
No. 9290
REGISTERED PROFESSIONAL ENGINEER

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LIVERMORE FALLS WATER DISTRICT
LIVERMORE FALLS & JAY SEWER DEPARTMENTS
ROUTE 4
UTILITIES IMPROVEMENT

BRIDGE STREET PLAN AND PROFILE
STA. 50+000 TO 50+060

DRAWING
C-4

LAST SAVED BY: RXB 1/7/2011 10:11 AM
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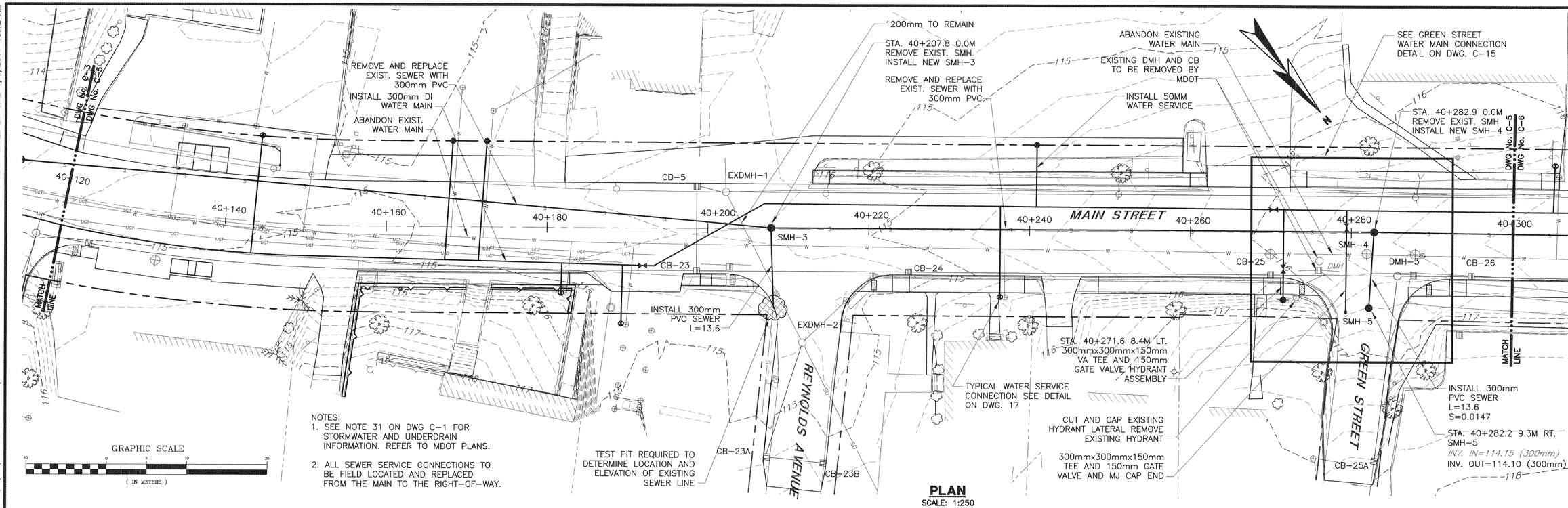

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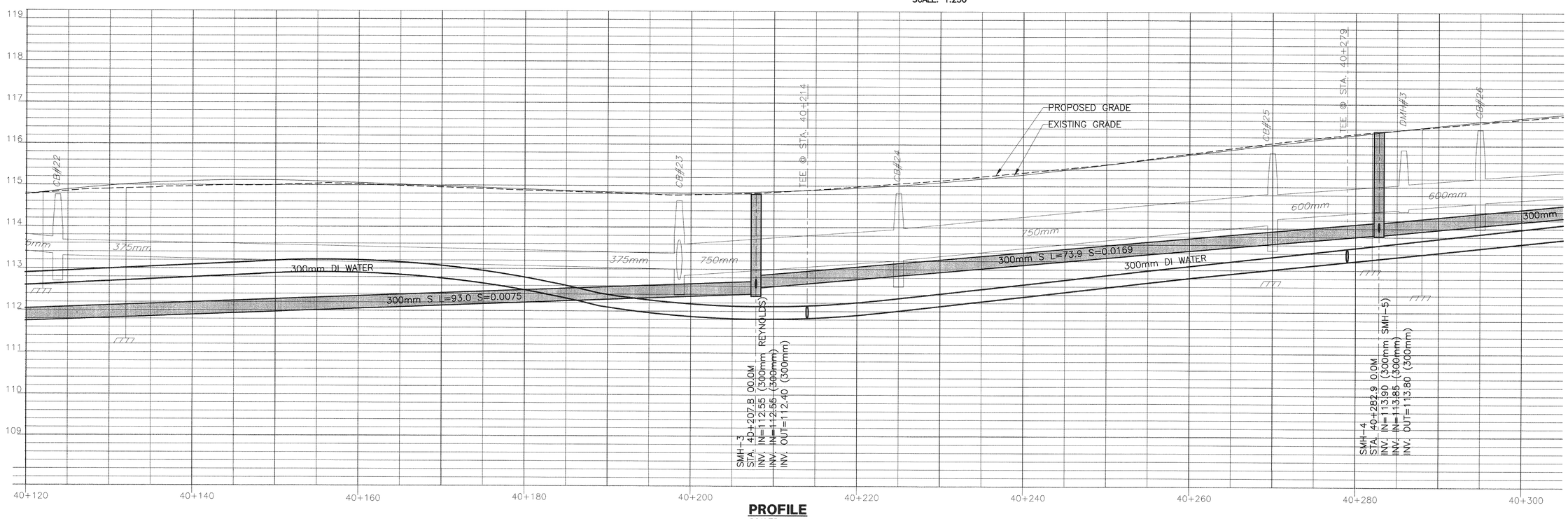

PROFILE
SCALES:
VERT: 1:50
HORIZ:1:250

NO	SUBMISSIONS/REVISIONS	APP'D	DATE
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DRAWN BY RXB
CHECKED BY JDP
DATE 12-23-10
APPROVED BY JDP
DATE 12-23-10
BOOK NO. 11444-11446
PROJECT NO.
SCALE AS NOTED

STATE OF MAINE
JEFFREY D. PIERCE
No. 6760
REGISTERED PROFESSIONAL ENGINEER

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LIVERMORE FALLS WATER DISTRICT
LIVERMORE FALLS & JAY SEWER DEPARTMENTS
ROUTE 4
UTILITIES IMPROVEMENT

MAIN STREET PLAN AND PROFILE
STA. 40+120 TO 40+300

DRAWING
C-5

LAST SAVED BY: RXB 1/7/2011 10:12 AM
1:1 | ---- | 1/12/2011 7:58:40 AM | RXB
G:\DWGS\11444-11446-ROUTE 4 UTILITY IMPROVEMENTS\11444-11446A-FD\CIVIL\11444-11446AC-5.DWG | 11444-11446aC-5 | 1:1 | ----

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STA. 40+357.0 0.7M LT.
REMOVE EXIST. SMH
INSTALL NEW SMH-6

REMOVE AND REPLACE EXIST. SEWER WITH 300mm PVC

INSTALL 30mm WATER SERVICE AND CURB STOP (TIE INTO EXISTING WATER)

INSTALL 300mm DI WATER MAIN

FRANKLIN STREET

ABANDON EXISTING WATER MAIN

STA. 40+428.7 1.0M LT.
REMOVE EXIST. SMH
INSTALL NEW SMH-8

REMOVE AND REPLACE EXIST. SEWER WITH 300mm PVC

150mm UNDERDRAIN
UNDERDRAIN HIGHPOINT
STA. 40+458.5 1.8M LT.
REMOVE EXIST. SMH
INSTALL NEW SMH-10
150mm UNDERDRAIN

300mmx300mmx150mm TEE AND 150mm GATE VALVE AND MJ CAP END

TYPICAL WATER SERVICE CONNECTION SEE DETAIL ON DWG. 17

REMOVE AND REPLACE EXIST. SEWER WITH 300mm PVC

DWG No. C-5
DWG No. C-6
DWG No. C-7

CB-6
40+300
40+320
40+340
SMH-6
40+360
40+380
CB-6A
40+400
40+420
SMH-8
40+440
SMH-10
40+460
40+480
MAIN STREET
DMH-4
CB-28
CB-27
CB-28A
CUT AND CAP EXISTING HYDRANT LATERAL
30° BENDS
CB-29
DMH-5
CB-30
CB-29B
SMH-7
150mm UNDERDRAIN
RICHARDSON AVENUE
MATCH LINE
MATCH LINE
SMH-9
MONMOUTH STREET
CB-29A
CB-27A

INSTALL 200mm PVC SEWER L=11.0 S=0.0150

STA. 40+357.0 11.5M RT.
REMOVE EXIST. SMH
INSTALL NEW SMH-7
INV. IN=115.65 (200mm)
INV. OUT=115.60 (200mm)

REMOVE EXISTING HYDRANT

STA. 40+398.5 8.1M RT.
300mmx300mmx150mm VA TEE AND 150mm GATE VALVE HYDRANT ASSEMBLY

300mmx300mmx200mm TEE AND 150mm W/ DIVIDER GATE AND MJ CAP END

INSTALL 150mm PVC SEWER, CONNECT INTO EXISTING 150mm SEWER

CAP AND ABANDONED EXISTING SEWER

INSTALL 200mm PVC SEWER L=11.0 S=0.0136

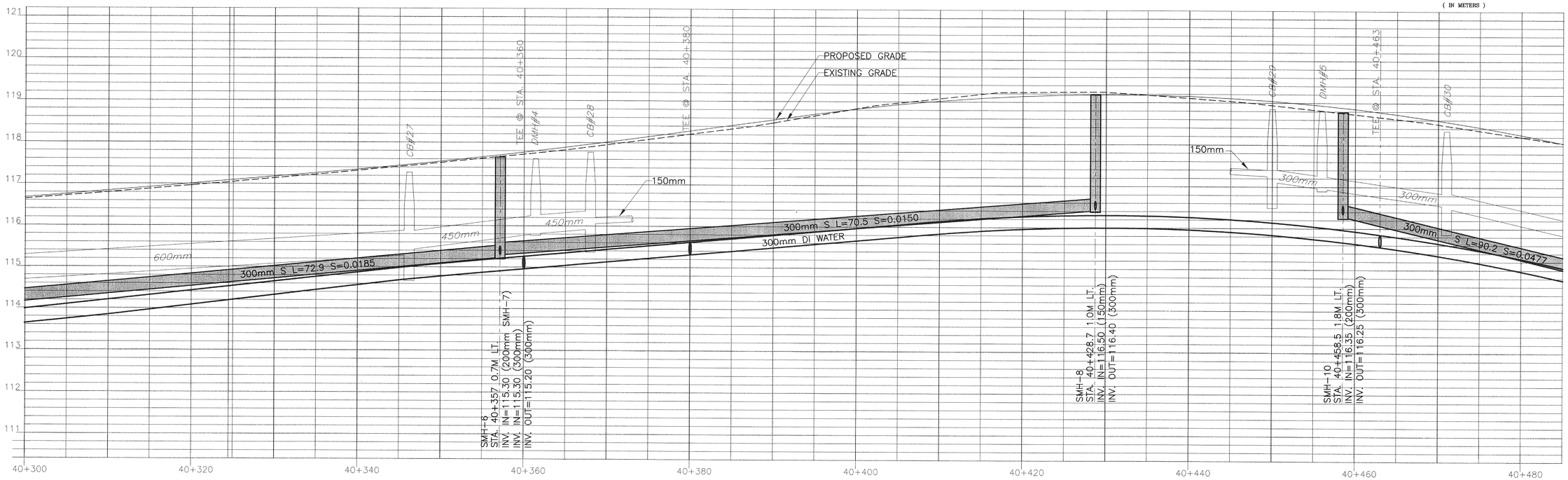
STA. 40+457.4 10.3M RT.
INSTALL NEW SMH-9
INV. IN=116.55 (200mm)
INV. OUT=116.50 (200mm)

TEST PIT REQUIRED TO DETERMINE LOCATION AND ELEVATION OF EXISTING SEWER LINE

NOTES:
1. SEE NOTE 31 ON DWG C-1 FOR STORMWATER AND UNDERDRAIN INFORMATION. REFER TO MDOT PLANS.
2. ALL SEWER SERVICE CONNECTIONS TO BE FIELD LOCATED AND REPLACED FROM THE MAIN TO THE RIGHT-OF-WAY.

GRAPHIC SCALE
(IN METERS)

PLAN
SCALE: 1:250



PROFILE
SCALES:
VERT: 1:50
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CHECKED BY JDP
DATE 12-23-10
APPROVED BY JDP
DATE 12-23-10
BOOK NO.
PROJECT NO. 11444-11446
SCALE AS NOTED

STATE OF MAINE
JEFFREY D. PARKE
No. 5390
REGISTERED PROFESSIONAL ENGINEER
11-23-11

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LIVERMORE FALLS WATER DISTRICT
LIVERMORE FALLS & JAY SEWER DEPARTMENTS
ROUTE 4
UTILITIES IMPROVEMENT

MAIN STREET PLAN AND PROFILE
STA. 40+300 TO 40+480

DRAWING
C-6

LAST SAVED BY: RXB 1/7/2011 10:22 AM
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INSTALL 300mm PVC SEWER

ABANDON EXIST. SEWER LINE AND RECONNECT HOUSE SERVICES TO NEW MAIN. WHEN HOUSE SERVICES TO NEW MAIN HAS BEEN INSTALLED CAP EXIST. SEWER MAIN LINE TYP.

EXISTING MANHOLE TO BE REMOVED

STA. 40+542.0 7.8M LT.
300mmx300mmx150mm VA TEE AND 150mm GATE VALVE HYDRANT ASSEMBLY

300mm UNDERDRAIN

150mm UNDERDRAIN

STA. 40+549.9 2.6 M LT.
INSTALL SMH-11

EXISTING MANHOLE TO BE REMOVED (EXTEND EXIST. SEWER SERVICE TO NEW SEWER MAIN)

CAP AND ABANDON EXISTING SEWER

INSTALL 300mm PVC SEWER L=7.8 S=0.0150

375mm UNDERDRAIN

STA. 40+636.5 11.8M LT.
EXISTING SMH TO REMAIN
INV. IN=109.60 (300mm)

EXISTING SEWER TO REMAIN

STA. 40+636.5 2.8M LT.
REMOVE EXIST. SMH
INSTALL NEW SMH-14

INSTALL 300mm PVC SEWER

DWG No. C-6
DWG No. C-7

MATCH LINE

INSTALL 200mm PVC SEWER L=11.1 S=0.0135

STA. 40+550.7 9.6M RT.
INSTALL SMH-12
INV. IN=112.20 (200mm)
INV. OUT=112.15 (200mm)

INSTALL 150mm SPRINKLER AND GATE VALVE

CAP AND ABANDON EXISTING 150mm SPRINKLER

REMOVE EXIST. HYDRANT

CUT AND CAP EXISTING HYDRANT LATERAL

STA. 40+589.2 3.4M LT.
REMOVE EXIST. SMH
INSTALL NEW SMH-13

ABANDON EXISTING WATER MAIN

INSTALL 300mm DI WATER MAIN TYP.

TYPICAL WATER SERVICE CONNECTION SEE DETAIL ON DWG. 17

INSTALL 300mm PVC SEWER

MAIN STREET

GORDON STREET

SMH-11 SMH-12 SMH-13 SMH-14 DMH-6 CB-7 CB-8 CB-8A CB-8B CB-31 CB-31A CB-31B CB-32 CB-33 R/W

40+480 40+500 40+520 40+540 40+560 40+580 40+600 40+620 40+640 40+660

NOTES:
1. SEE NOTE 31 ON DWG C-1 FOR STORMWATER AND UNDERDRAIN INFORMATION. REFER TO MDOT PLANS.
2. ALL SEWER SERVICE CONNECTIONS TO BE FIELD LOCATED AND REPLACED FROM THE MAIN TO THE RIGHT-OF-WAY.

PLAN
SCALE: 1:250

GRAPHIC SCALE
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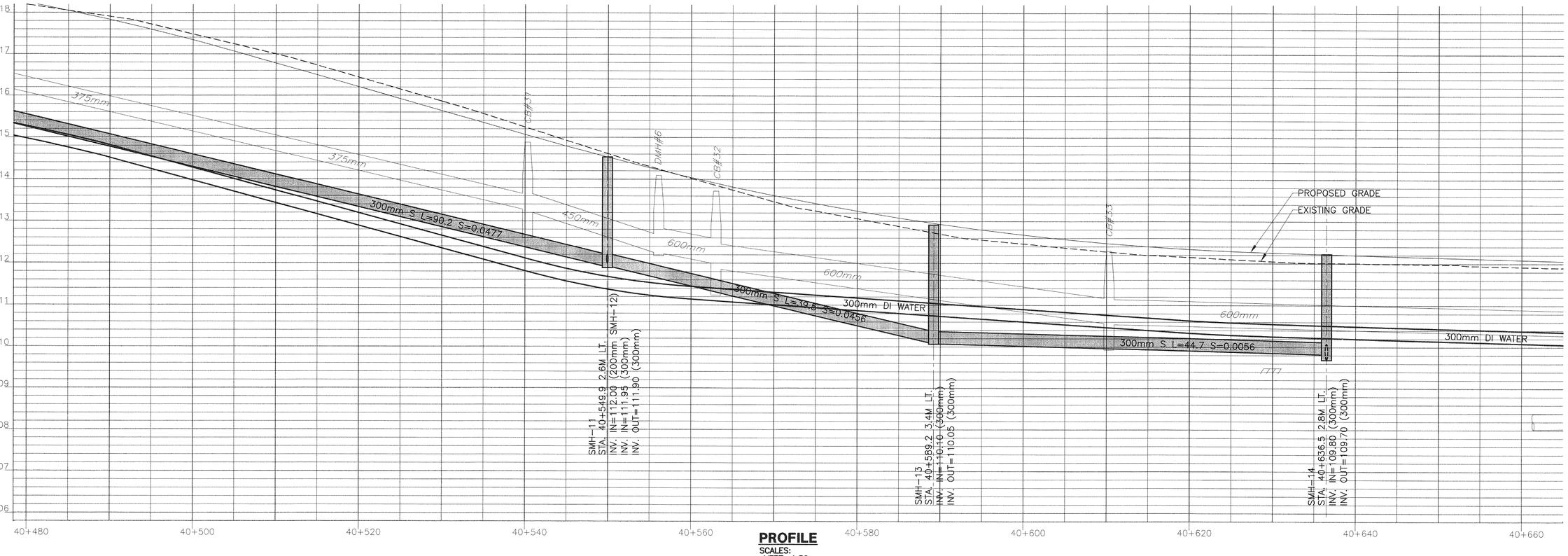
(IN METERS)



PROFILE
SCALES:
VERT: 1:50
HORIZ:1:250

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CHECKED BY JDP
DATE 12-23-10
APPROVED BY JDP
DATE 12-23-10
BOOK NO. --
PROJECT NO. 11444-11446
SCALE AS NOTED

STATE OF MAINE
JEFFREY D. PREBLE
No. 6380
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LIVERMORE FALLS WATER DISTRICT
LIVERMORE FALLS & JAY SEWER DEPARTMENTS
ROUTE 4
UTILITIES IMPROVEMENT

MAIN STREET PLAN AND PROFILE
STA. 40+480 TO 40+660

DRAWING
C-7

LAST SAVED BY: RXB 1/7/2011 10:23 AM
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STA. 40+666.7 4.6 M LT.
EXISTING SMH TO REMAIN

INSTALL 150mm SEWER SERVICE

TYPICAL WATER SERVICE CONNECTION SEE DETAIL ON DWG. 17

375mm UNDERDRAIN

ABANDON EXISTING WATER MAIN

POWER SUPPLY AND METER FOR FLOW METER ASSEMBLY TO BE RESET TO NEW POLE LOCATION. MATCH EXISTING WIRE AND CONDUIT SIZE

STA. 40+748.1 2.9M LT.
INSTALL NEW SMH-15

ABANDON EXISTING WATER MAIN

450mm UNDERDRAIN

LIVERMORE FALLS JAY

STA. 40+771.3 3.3M LT.
EXISTING SMH TO REMAIN.
EXISTING POWER AND CONTROL WIRING FOR FLOW METER ASSEMBLY SHALL BE SPLICED AND EXTENDED TO NEW POLE LOCATION. REMOVE BOOT AND ENLARGE OPENING FOR NEW INVERT IN. GROUT NEW SEWER PIPE IN PLACE WATER TIGHT.

REMOVE AND REPLACE EXISTING SEWER WITH 375mm PVC.

STA. 40+798.0 6.0M LT.
INSTALL NEW SMH-15A

450mm UNDERDRAIN

STA. 40+824.9 9.0M LT.
EXISTING SMH TO REMAIN

DWG No. C-7
DWG No. C-8

DWG No. C-8
DWG No. C-9

CB-9

CB-10

CB-10A

MAIN STREET

40+660 40+680 40+700 40+720 40+740 40+760 40+780 40+800 40+820 40+840

SMH-15

INSTALL 300mm DI WATER MAIN TYP.

CB-34 CB-35 DMH-7 SMH-16 CB-35A CB-35B CB-36 CB-37 DMH-8 CB-38

MATCH LINE

INSTALL 300mm DI WATER MAIN TYP.

EXISTING MANHOLE TO BE REMOVED AND CAP ALL SEWER LINES AS NECESSARY

INSTALL 200mm PVC SEWER L=6.8 S=0.1617

STA. 40+748.1 5.1M RT.
REMOVE EXIST. SMH AND REPLACE WITH SMH-16
INV. IN=110.75 (200mm)
INV. OUT=109.50 (200mm)

TEST PIT REQUIRED TO DETERMINE LOCATION AND ELEVATION OF EXISTING SEWER LINE

EXISTING MANHOLE TO BE REMOVED AND CAP ALL SEWER LINES AS NECESSARY

GAGNON STREET

CHURCH STREET

STA. 40+771.6 9.6M RT.
300mmx300mmx150mm VA TEE AND 150mm GATE VALVE HYDRANT ASSEMBLY

REMOVE EXIST. HYDRANT
CUT AND CAP EXISTING HYDRANT LATERAL

INSTALL 200mm PVC SEWER L=18.4 S=0.0075

STA. 40+821.9 10.3M RT.
EXISTING SMH TO REMAIN
(MATCH EXISTING INVERTS)

CB-37A CB-37B

11 1/4° BEND

300mmx300mmx200mm VA TEE AND 200mm GATE VALVE TIE INTO EXISTING WATER LINE WITH SOLID SLEEVE COUPLING

NOTES:
1. SEE NOTE 31 ON DWG C-1 FOR STORMWATER AND UNDERDRAIN INFORMATION. REFER TO MDOT PLANS.
2. ALL SEWER SERVICE CONNECTIONS TO BE FIELD LOCATED AND REPLACED FROM THE MAIN TO THE RIGHT-OF-WAY.

PLAN
SCALE: 1:250

GRAPHIC SCALE
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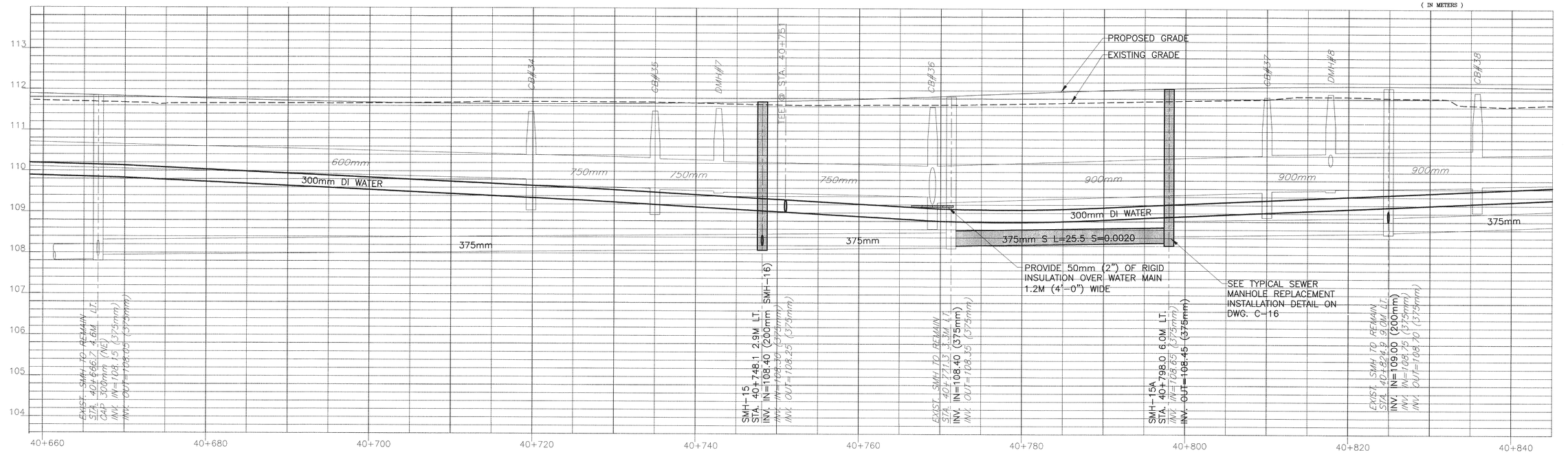
(IN METERS)



PROFILE
SCALES:
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HORIZ:1:250

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DATE 12-23-10
BOOK NO.
PROJECT NO. 11444-11446
SCALE AS NOTED

STATE OF MAINE
JEFFREY R. EBBELE
No. 8160
REGISTERED PROFESSIONAL ENGINEER

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LIVERMORE FALLS WATER DISTRICT
LIVERMORE FALLS & JAY SEWER DEPARTMENTS
ROUTE 4
UTILITIES IMPROVEMENT

MAIN STREET PLAN AND PROFILE
STA. 40+660 TO 40+840

DRAWING
C-8

LAST SAVED BY: RXB 1/7/2011 10:25 AM
1:1 | ---- | 1/12/2011 7:59:40 AM | RXB
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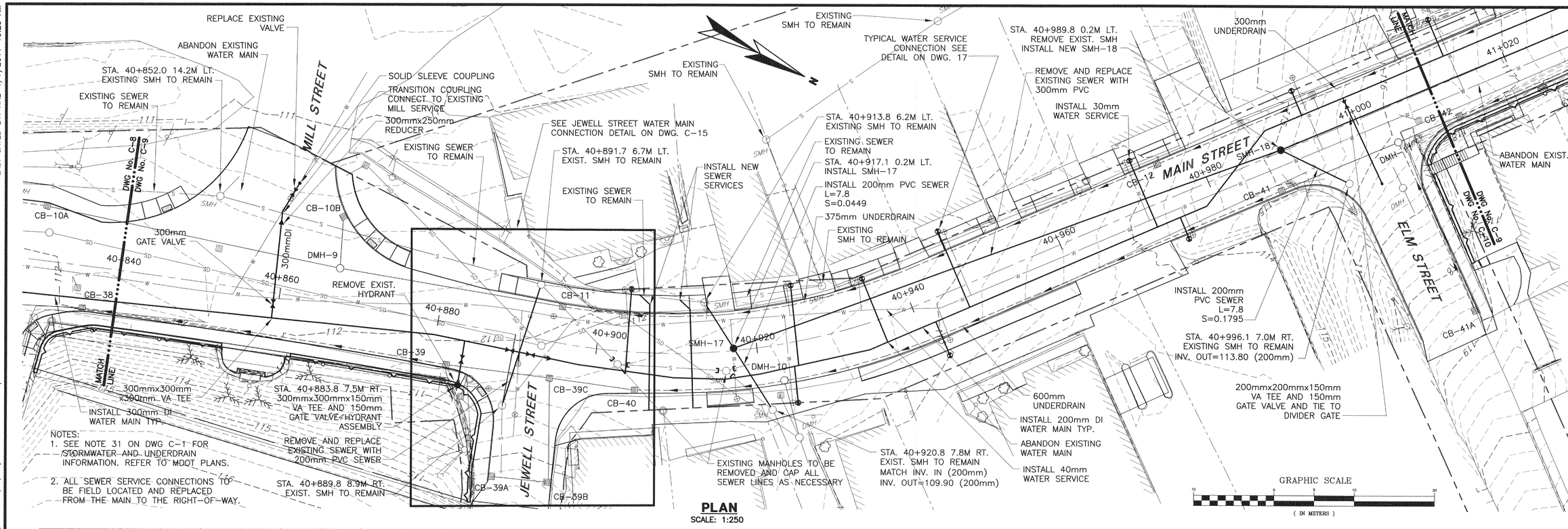
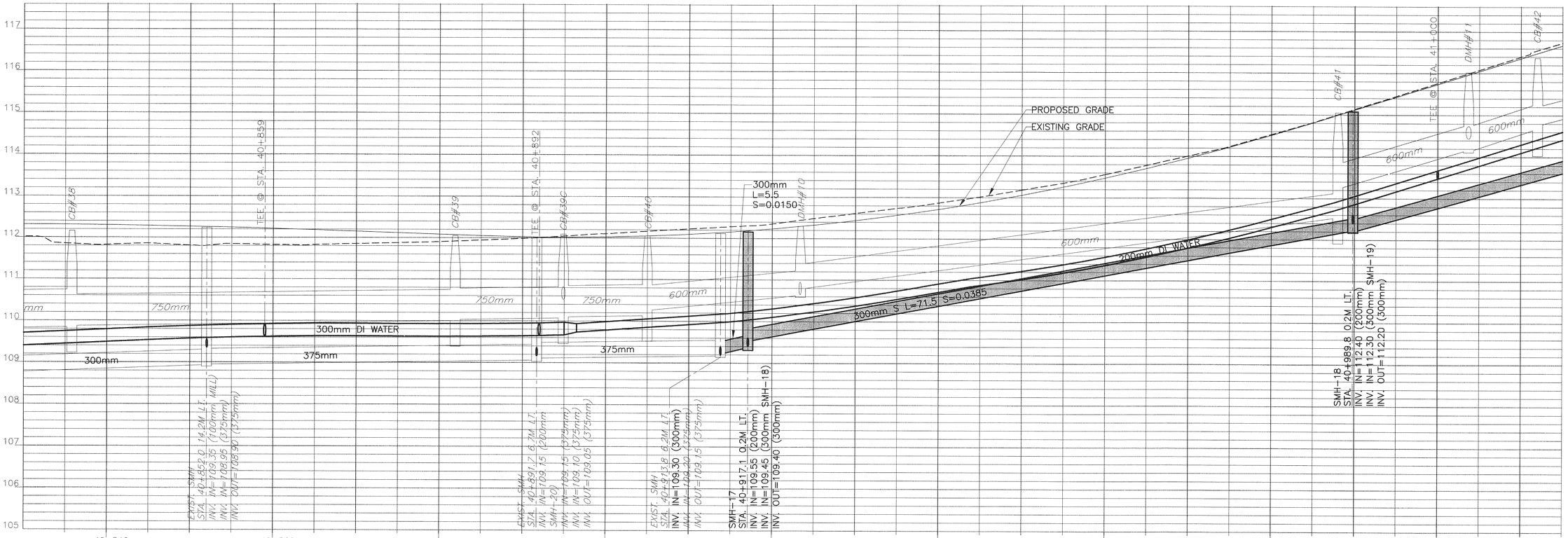


NOTES:
1. SEE NOTE 31 ON DWG C-1 FOR STORMWATER AND UNDERDRAIN INFORMATION. REFER TO MDOT PLANS.
2. ALL SEWER SERVICE CONNECTIONS TO BE FIELD LOCATED AND REPLACED FROM THE MAIN TO THE RIGHT-OF-WAY.

PLAN
SCALE: 1:250



PROFILE
SCALES:
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HORIZ:1:250

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CHECKED BY: JDP
DATE: 12-23-10
APPROVED BY: JDP
DATE: 12-23-10
BOOK NO.:
PROJECT NO. 11444-11446
SCALE: AS NOTED

STATE OF MAINE
JEFFREY D. PREBLE
No. 12580
REGISTERED PROFESSIONAL ENGINEER

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LIVERMORE FALLS WATER DISTRICT
LIVERMORE FALLS & JAY SEWER DEPARTMENTS
ROUTE 4
UTILITIES IMPROVEMENT

MAIN STREET PLAN AND PROFILE
STA. 40+840 TO 41+010

DRAWING
C-9

LAST SAVED BY: RXB 1/7/2011 10:29 AM
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REMOVE AND REPLACE EXISTING SEWER WITH 300mm PVC

STA. 41+077.6 0.0M
REMOVE EXIST. SMH
INSTALL NEW SMH-19

EXISTING MANHOLE TO BE REMOVED AND CAP ALL SEWER LINES AS NECESSARY

TYPICAL WATER SERVICE CONNECTION SEE DETAIL ON DWG. 17

300mm UNDERDRAIN

150mm UNDERDRAIN

REMOVE AND REPLACE EXISTING SEWER WITH 200mm PVC

ABANDON EXISTING WATER MAIN

INSTALL 200mm DI WATER MAIN TYP.

STA. 41+147.8 0.0M LT.
EXISTING SMH TO REMAIN

STA. 41+153.6 4.5M LT.
EXISTING SMH TO REMAIN

25mm WATER SERVICE

150mm UNDERDRAIN

REMOVE AND REPLACE EXISTING SEWER WITH 200mm PVC

DWG No. C-9
DWG No. C-10
DWG No. C-11

MAIN STREET

41+020 41+040 41+060 41+080 41+100 41+120 41+140 41+160 41+180

SMH-19 SMH-20 SMH-21

DMH-12 DMH-13

CB-43 CB-43A CB-43B CB-44 CB-45 CB-45A CB-45B CB-46

MAPLE STREET

OTIS STREET

MATCH LINE

UNDERDRAIN HIGHPOINT

ABANDON EXISTING WATER MAIN

INSTALL 200mm DI WATER MAIN TYP.

NOTES:
1. SEE NOTE 31 ON DWG C-1 FOR STORMWATER AND UNDERDRAIN INFORMATION. REFER TO MDOT PLANS.
2. ALL SEWER SERVICE CONNECTIONS TO BE FIELD LOCATED AND REPLACED FROM THE MAIN TO THE RIGHT-OF-WAY.

INSTALL 200mm PVC SEWER L=7.8 S=0.0128

STA. 41+077.6 9.2M RT.
REMOVE EXIST. SMH AND INSTALL SMH-20
INV. IN=117.40 (200mm)
INV. OUT=117.35 (200mm)

200mmx200mmx150mm VA TEE AND 150mm GATE VALVE AND CONNECT TO EXIST. MAIN

SEE MAPLE STREET WATER MAIN CONNECTION DETAIL ON DWG. C-15

STA. 41+140.0 5.6M RT.
200mmx200mmx150mm VA TEE AND 150mm GATE VALVE HYDRANT ASSEMBLY

INSTALL 200mm PVC SEWER L=9.5 S=0.0200

STA. 41+154 8.7M RT.
REMOVE EXIST. SMH AND INSTALL SMH-21
INV. IN=122.00 (200mm)
INV. OUT=120.00 (200mm)

200mmx200mmx150mm VA TEE AND 150mm GATE VALVE AND CONNECT TO EXIST. MAIN

PLAN
SCALE: 1:250

GRAPHIC SCALE
10 0 5 10 20
(IN METERS)

PROPOSED GRADE
EXISTING GRADE

CB#42 CB#43 CB#44 CB#45 CB#46

DMH#12 DMH#13

600mm 450mm 375mm 300mm 200mm DI WATER

300mm S L=86.6 S=0.0554

200mm S L=69.0 S=0.0377

200mm S L=40.2 S=0.0336

150mm

SMH-19
STA. 41+077.6 0.0M
INV. IN=117.25 (200mm SMH-20)
INV. IN=117.15 (300mm)
INV. OUT=117.10 (300mm)

TEE @ STA. 41+081

EXIST. SMH
STA. 41+147.8 0.0M
INV. IN=119.80 (200mm SMH-21)
INV. OUT=119.75 (200mm)

TEE @ STA. 41+157

EXIST. SMH
STA. 41+153.6 4.5M LT.
INV. OUT=120.95+/- (200mm)

124 123 122 121 120 119 118 117 116 115 114 113 112

41+020 41+040 41+060 41+080 41+100 41+120 41+140 41+160 41+180

PROFILE
SCALES:
VERT: 1:50
HORIZ:1:250

NO.	SUBMISSIONS/REVISIONS	APP'D	DATE
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DRAWN BY: RXB
CHECKED BY: JDP
DATE: 12-23-10
APPROVED BY: JDP
DATE: 12-23-10
BOOK NO.
PROJECT NO. 11444-11446
SCALE: AS NOTED

STATE OF MAINE
JEFFREY D. PREBLE
No. 8890
REGISTERED PROFESSIONAL ENGINEER

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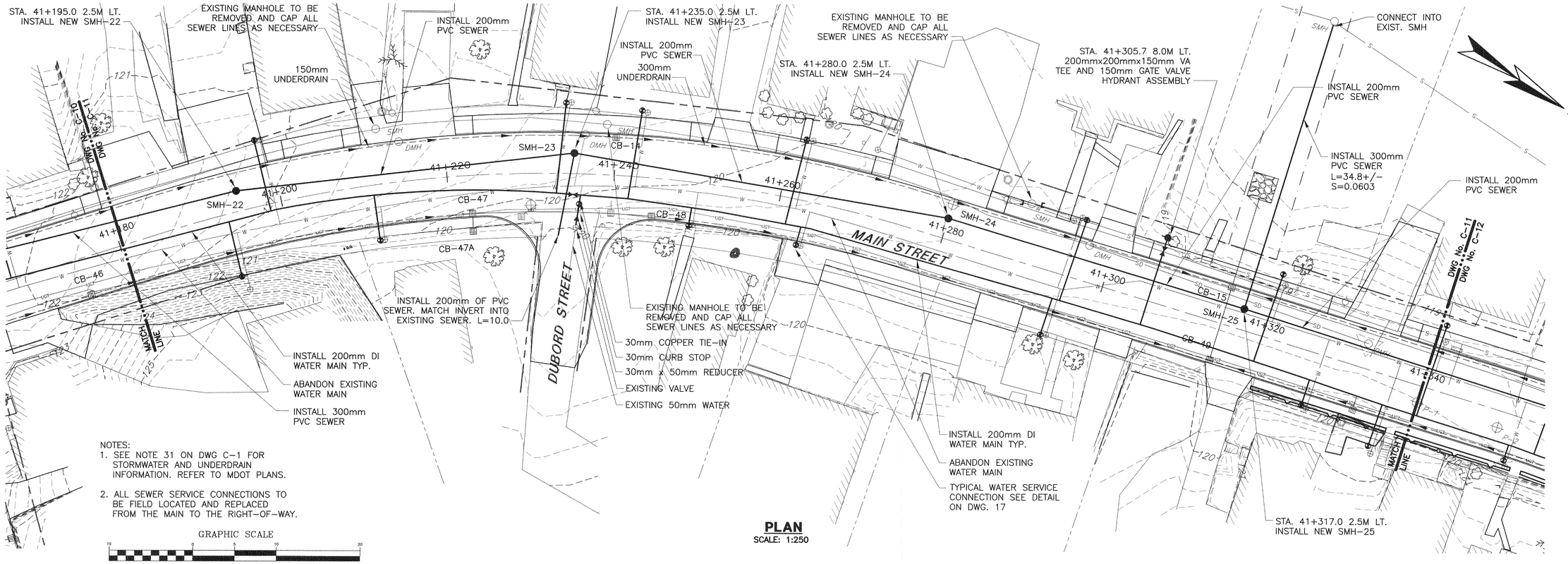
LIVERMORE FALLS WATER DISTRICT
LIVERMORE FALLS & JAY SEWER DEPARTMENTS
ROUTE 4
UTILITIES IMPROVEMENT

MAIN STREET PLAN AND PROFILE
STA. 41+010 TO 41+180

DRAWING
C-10

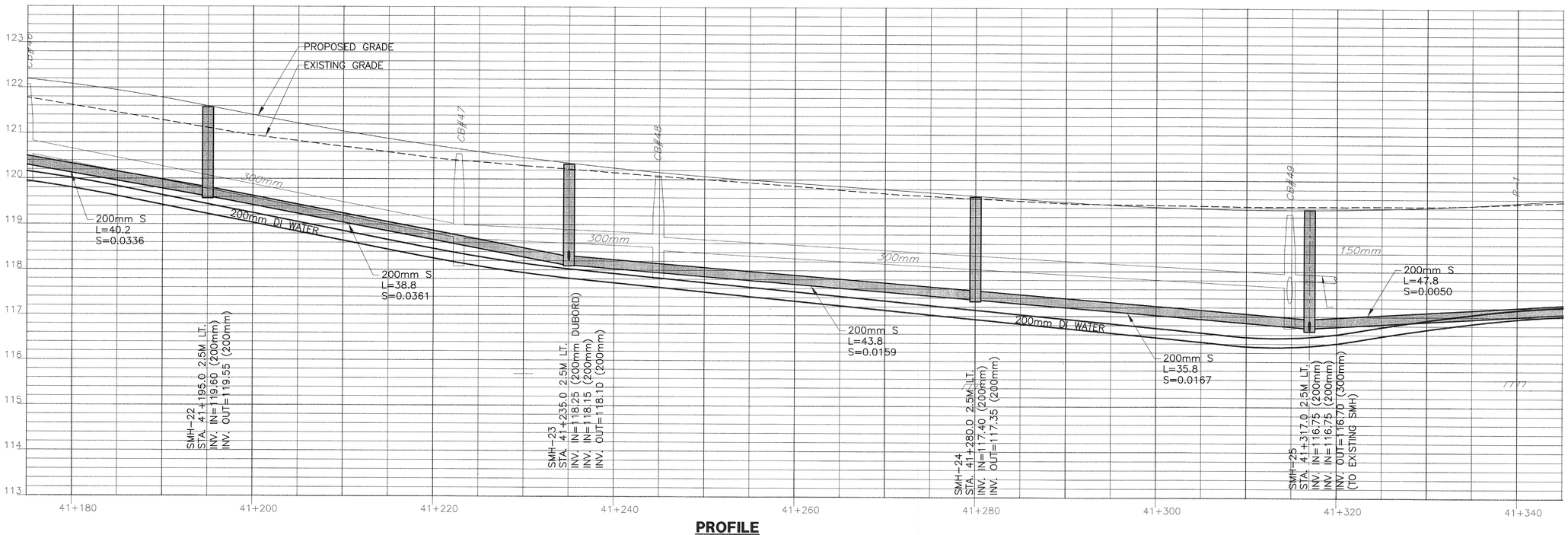
LAST SAVED BY: RXB 1/7/2011 10:30 AM

G:\DWGS\11444-11446-ROUTE 4 UTILITY IMPROVEMENTS\11444-11446A-FD\CIVIL\11444-11446AC-11.DWG | 11444-11446aC-11 | 1:1 | ---- | 1/12/2011 8:00:11 AM | RXB



NOTES:
1. SEE NOTE 31 ON DWG C-1 FOR STORMWATER AND UNDERDRAIN INFORMATION. REFER TO MDOT PLANS.
2. ALL SEWER SERVICE CONNECTIONS TO BE FIELD LOCATED AND REPLACED FROM THE MAIN TO THE RIGHT-OF-WAY.

PLAN
SCALE: 1:250



PROFILE
SCALES:
VERT: 1:50
HORIZ:1:250

NO	SUBMISSIONS/REVISIONS	APP'D	DATE
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CHECKED BY
DATE 12-23-10
APPROVED BY
DATE 12-23-10
BOOK NO.
PROJECT NO. 11444-11446
SCALE AS NOTED

STATE OF MAINE JEFFREY D. PIERCE No. 9999 REGISTERED PROFESSIONAL ENGINEER

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LIVERMORE FALLS WATER DISTRICT
LIVERMORE FALLS & JAY SEWER DEPARTMENTS
ROUTE 4
UTILITIES IMPROVEMENT

MAIN STREET PLAN AND PROFILE
STA. 41+180 TO 41+340

DRAWING
C-11

LAST SAVED BY: RXB 1/7/2011 10:31 AM
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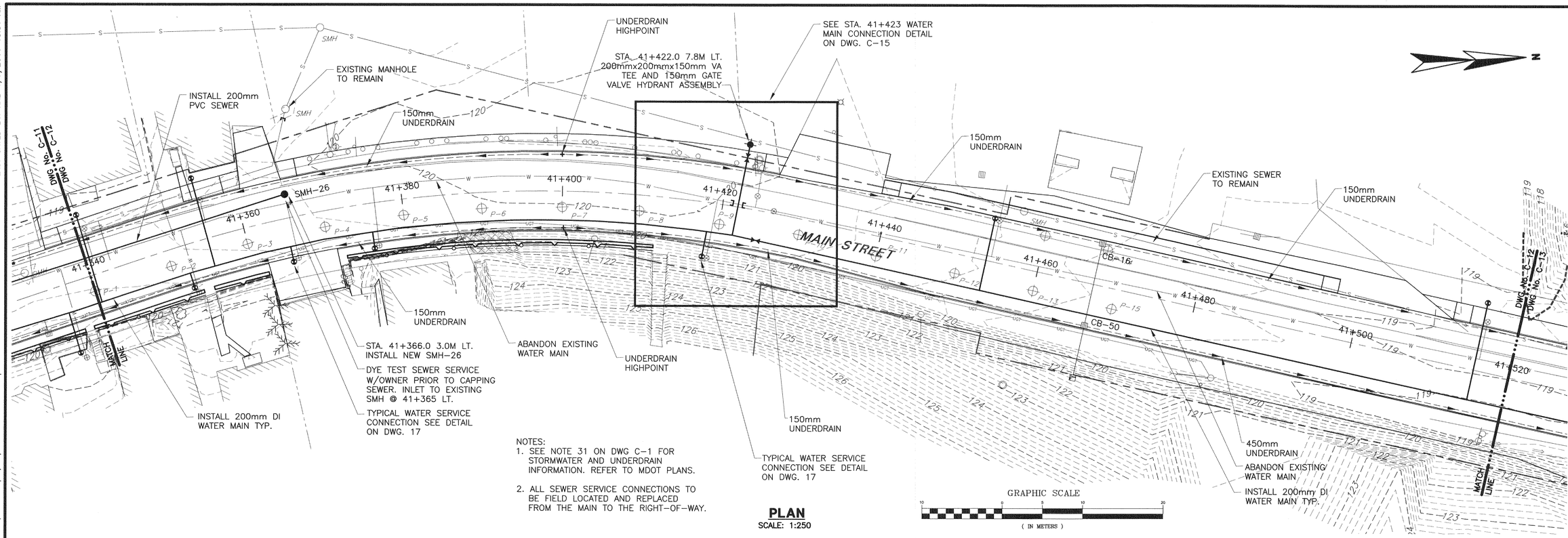

NOTES:
1. SEE NOTE 31 ON DWG C-1 FOR STORMWATER AND UNDERDRAIN INFORMATION. REFER TO MDOT PLANS.
2. ALL SEWER SERVICE CONNECTIONS TO BE FIELD LOCATED AND REPLACED FROM THE MAIN TO THE RIGHT-OF-WAY.

PLAN
SCALE: 1:250

GRAPHIC SCALE
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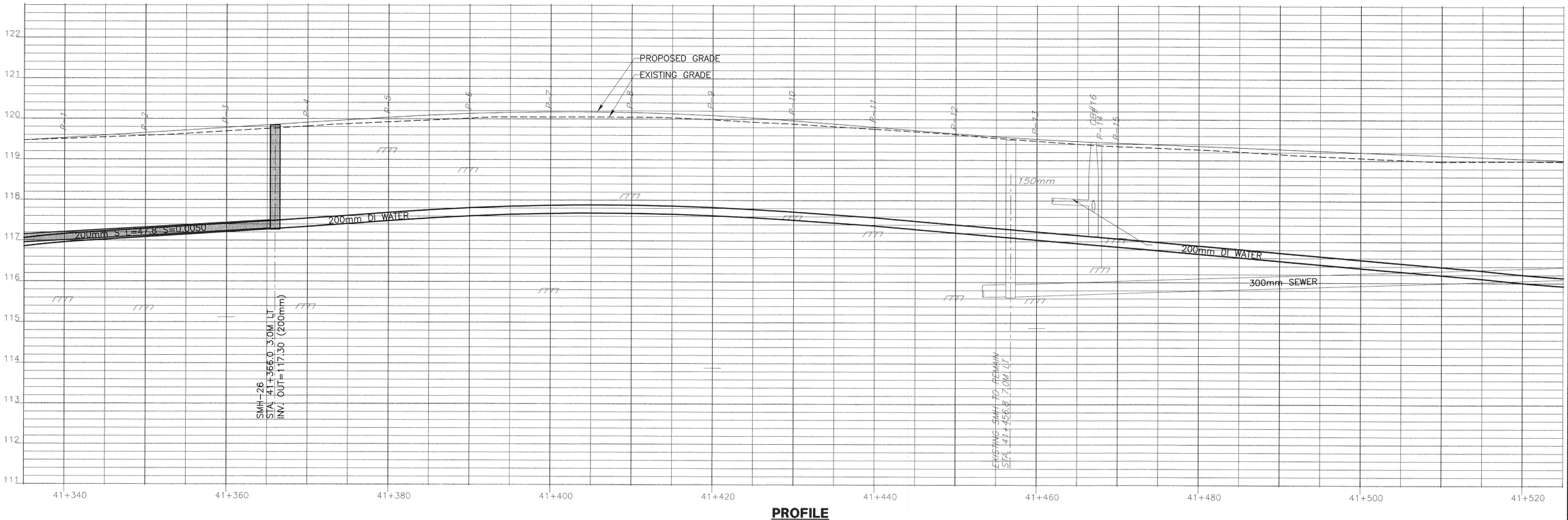
(IN METERS)



PROFILE
SCALES:
VERT: 1:50
HORIZ:1:250

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DRAWN BY RXB
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DATE 12-23-10
BOOK NO.
PROJECT NO. 11444-11446
SCALE AS NOTED

STATE OF MAINE JEFFREY D. PRESTLE No. 13309 REGISTERED PROFESSIONAL ENGINEER

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LIVERMORE FALLS WATER DISTRICT
LIVERMORE FALLS & JAY SEWER DEPARTMENTS
ROUTE 4
UTILITIES IMPROVEMENT

MAIN STREET PLAN AND PROFILE
STA. 41+340 TO 41+520

DRAWING
C-12

LAST SAVED BY: RXB 1/7/2011 10:32 AM

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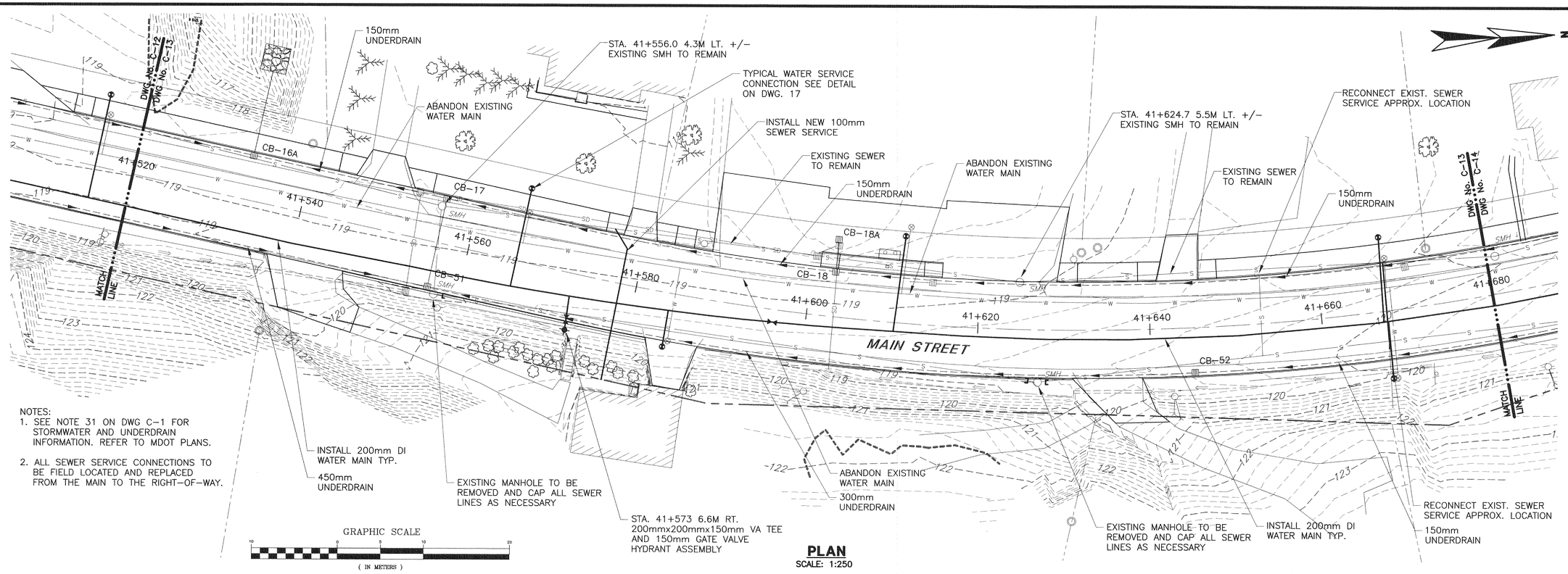
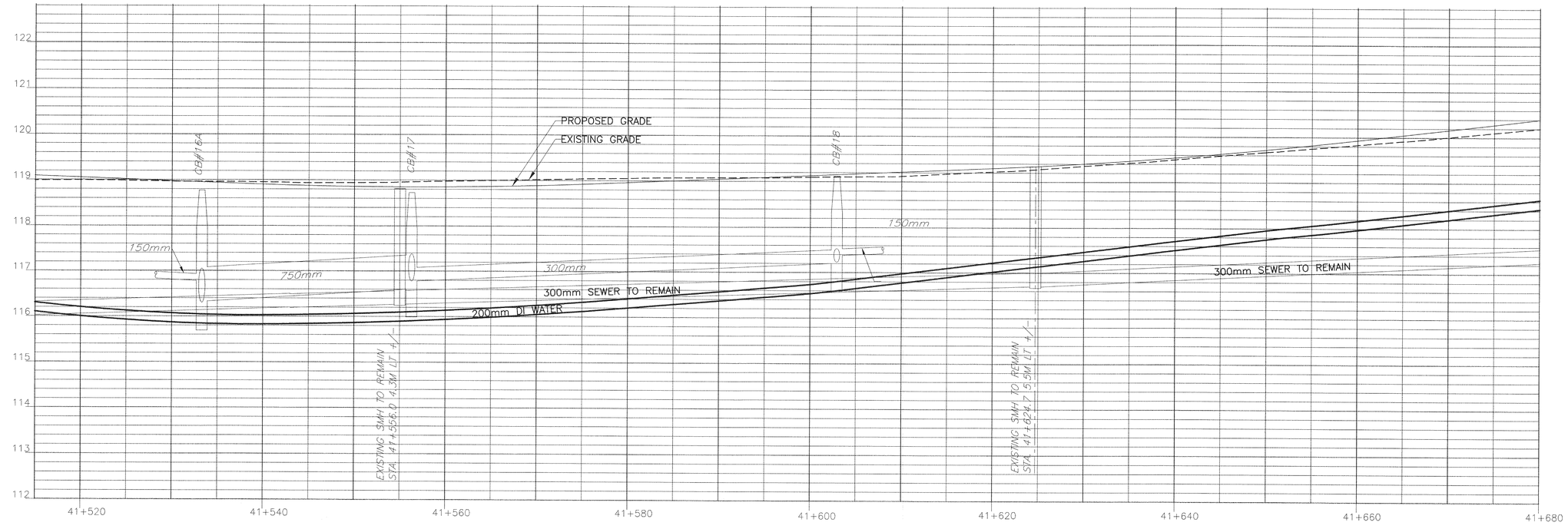


PLAN
SCALE: 1:250

NOTES:
1. SEE NOTE 31 ON DWG C-1 FOR STORMWATER AND UNDERDRAIN INFORMATION. REFER TO MDOT PLANS.
2. ALL SEWER SERVICE CONNECTIONS TO BE FIELD LOCATED AND REPLACED FROM THE MAIN TO THE RIGHT-OF-WAY.



PROFILE
SCALES:
VERT: 1:50
HORIZ:1:250

NO	SUBMISSIONS/REVISIONS	APP'D	DATE
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CHECKED BY
DATE 12-23-10
APPROVED BY
DATE 12-23-10
BOOK NO.
PROJECT NO. 11444-11446
SCALE AS NOTED

STATE OF MAINE JEFFREY D. PRINCE No. 13539 REGISTERED PROFESSIONAL ENGINEER

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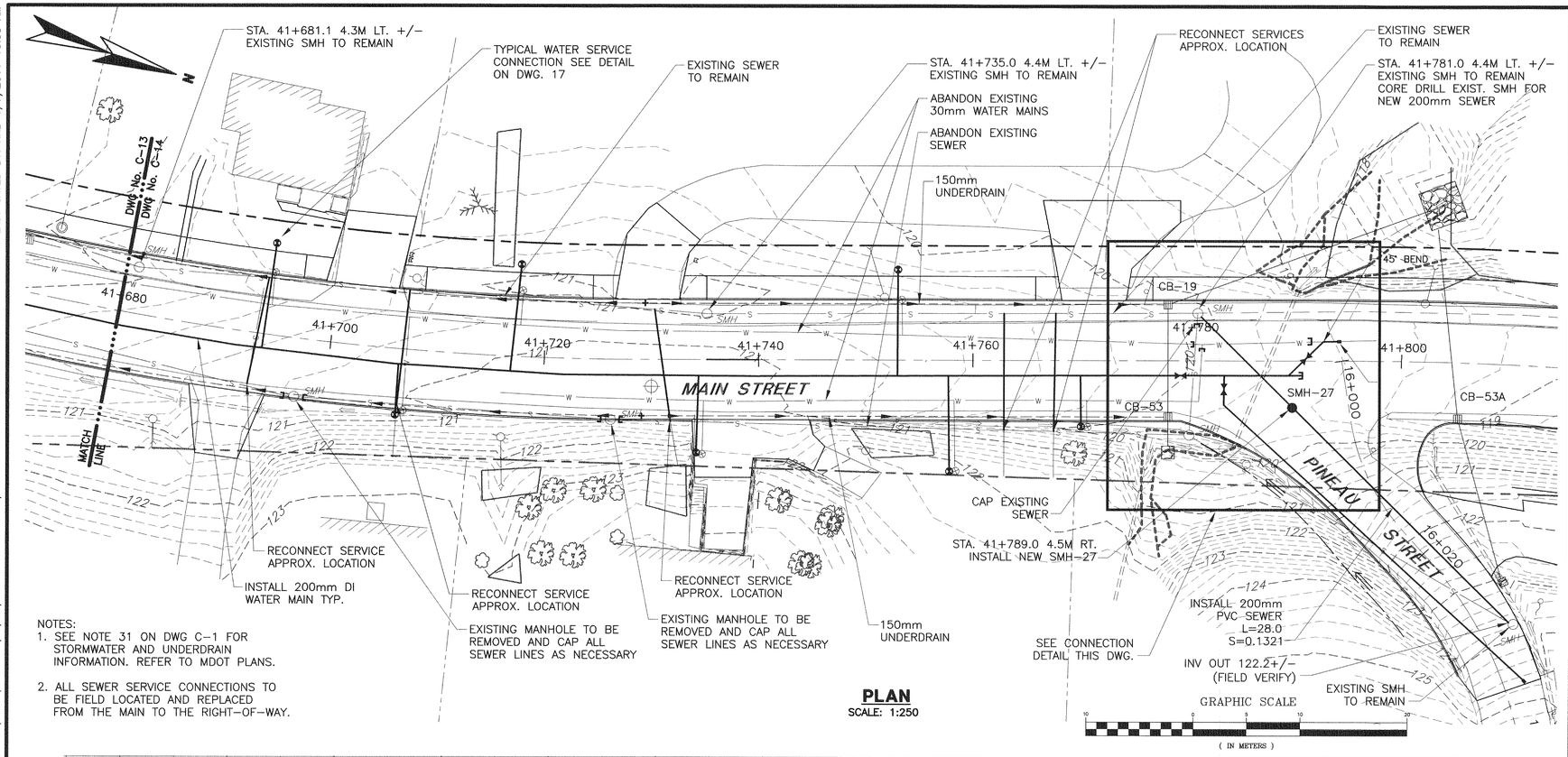
LIVERMORE FALLS WATER DISTRICT
LIVERMORE FALLS & JAY SEWER DEPARTMENTS
ROUTE 4
UTILITIES IMPROVEMENT

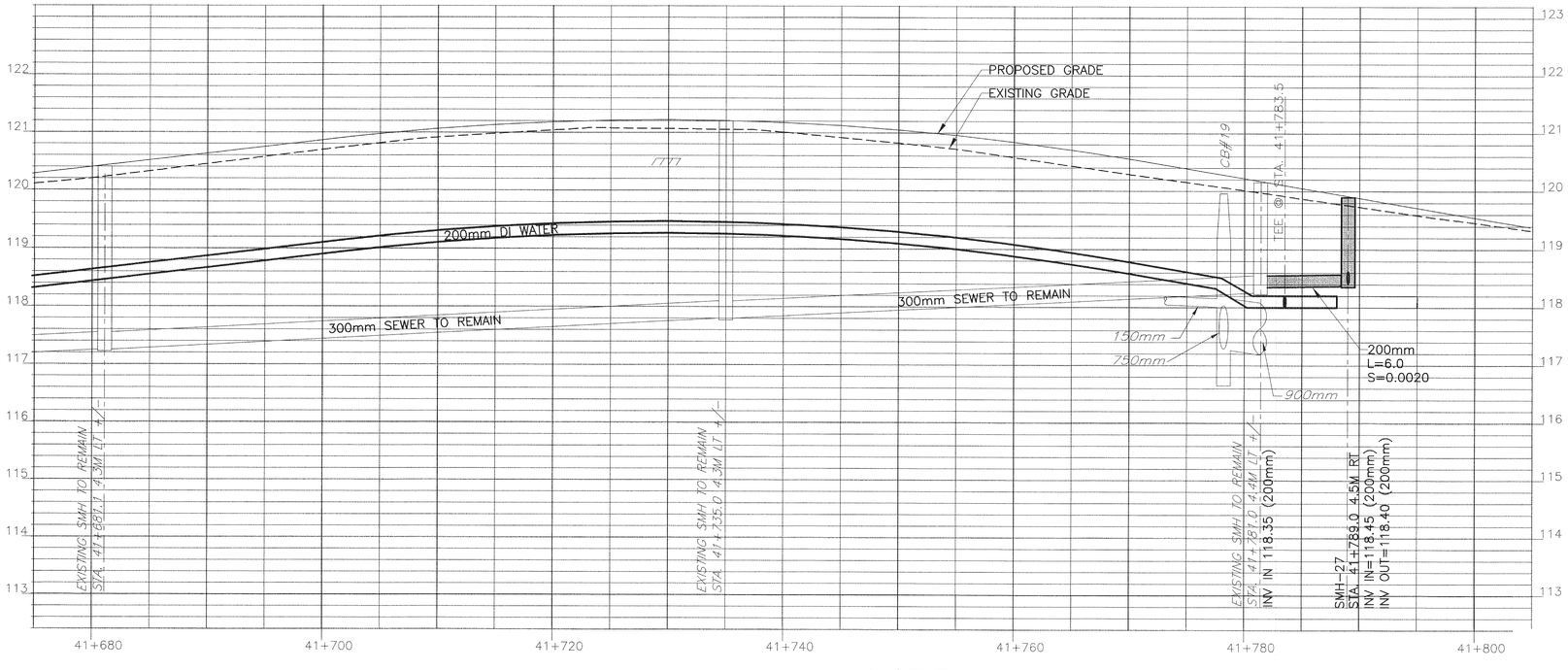
MAIN STREET PLAN AND PROFILE
STA. 41+520 TO 41+680

DRAWING
C-13

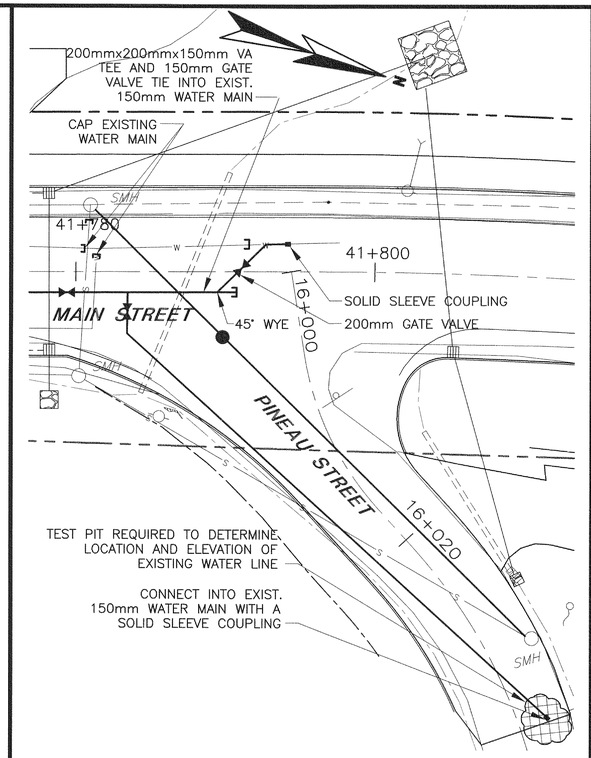


NOTES:
1. SEE NOTE 31 ON DWG C-1 FOR STORMWATER AND UNDERDRAIN INFORMATION. REFER TO MDOT PLANS.
2. ALL SEWER SERVICE CONNECTIONS TO BE FIELD LOCATED AND REPLACED FROM THE MAIN TO THE RIGHT-OF-WAY.

PLAN
SCALE: 1:250



PROFILE
SCALES:
VERT: 1:50
HORIZ:1:250



PINEAU STREET WATER MAIN CONNECTION DETAIL
SCALE: 1:100

NOTES
1. CONNECTION AT PINEAU STREET SHALL BE COORDINATED WITH THE LIVERMORE FALLS WATER DISTRICT.
2. SEE NOTE 31 ON DRAWING C-1 FOR STORMWATER AND UNDERDRAIN INFORMATION REFER TO MDOT PLANS.

NO	SUBMISSIONS/REVISIONS	APP'D	DATE
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DATE 12-23-10
APPROVED BY
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BOOK NO.
PROJECT NO. 11444-11446
SCALE AS NOTED

STATE OF MAINE
JEFFREY D. PRIEST
No. 6359
REGISTERED PROFESSIONAL ENGINEER

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LIVERMORE FALLS WATER DISTRICT
LIVERMORE FALLS & JAY SEWER DEPARTMENTS
ROUTE 4
UTILITIES IMPROVEMENT

MAIN STREET PLAN AND PROFILE
STA. 41+680 TO 41+853

DRAWING
C-14

LAST SAVED BY: RXB 1/7/2011 10:33 AM
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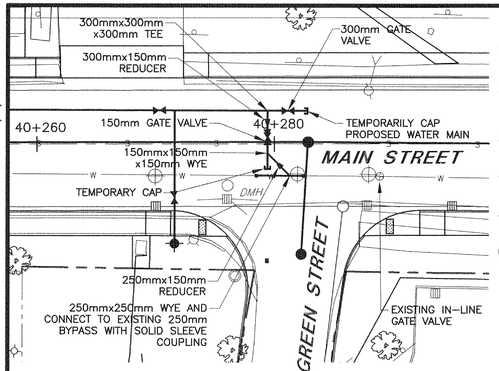
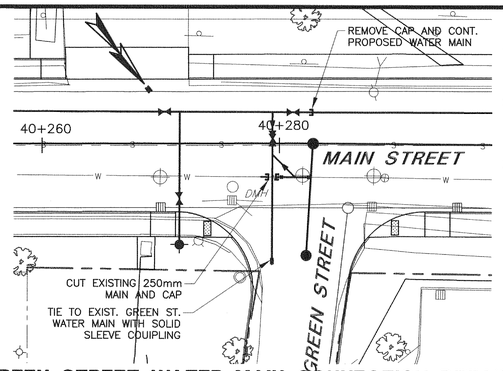


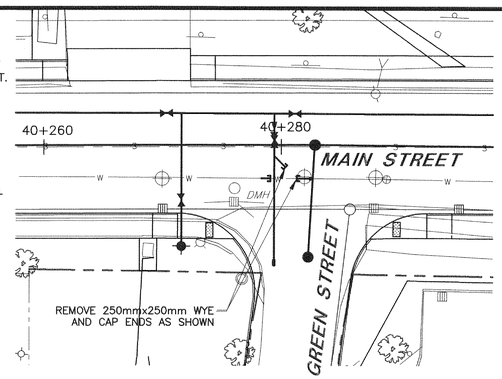
STEP 1

1. CONSTRUCT NEW 300mm WATER MAIN TO GREEN STREET.
2. COORDINATE TIE-IN TO EXISTING EXISTING WATER MAIN WITH LIVERMORE FALLS WATER DISTRICT.
3. CONNECT TO EXISTING MAIN WITH WYE AND SOLID SLEEVE COUPLINGS.
4. FILL, TEST AND DISINFECT NEW MAIN AND THEN CLOSE 150mm GATE VALVE.
5. EXISTING WATER MAIN TO REMAIN IN SERVICE.
6. AFTER TESTING AND DISINFECTION ARE SATISFACTORILY COMPLETED BEGIN TIE-OVER OF SERVICES TO NEW 300mm WATER MAIN.



STEP 2

1. FOLLOWING COMPLETION OF SERVICE TIE-OVERS TO NEW 300mm WATER MAIN, CUT AND CAP EXISTING MAIN AT GREEN STREET.
2. NEW 300mm WATER MAIN IS NOW ACTIVE FROM UNION TO GREEN STREET, AND EXISTING MAIN NORTH OF GREEN STREET IS ACTIVE.
3. 300mm GATE VALVE ON NORTH SIDE OF TEE REMAINS CLOSED WHILE NEW MAIN CONSTRUCTION CONTINUES TO THE JEWELL STREET INTERSECTION.

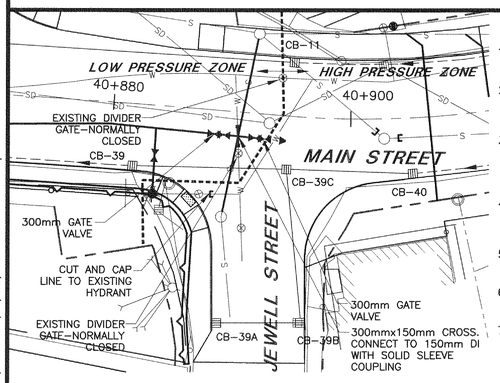


STEP 3

1. FOLLOWING COMPLETION OF THE CONNECTIONS AT JEWELL STREET, TESTING AND DISINFECTING THE NEW 300mm MAIN FROM GREEN TO JEWELL STREET AND TIE-OVER OF SERVICE CONNECTIONS, THE CONNECTION OF THE NEW 300mm MAIN TO THE EXISTING AT GREEN STREET CAN BE REMOVED AND CAPPED.

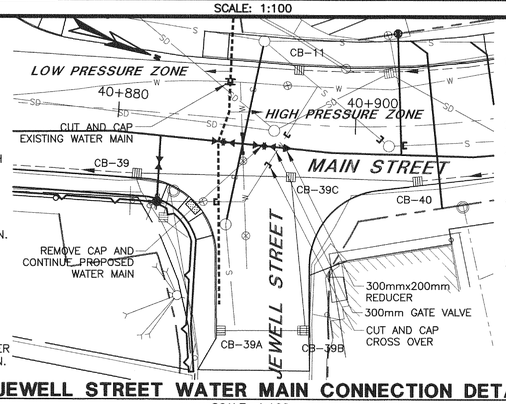
GREEN STREET WATER MAIN CONNECTION DETAIL

SCALE: 1:100



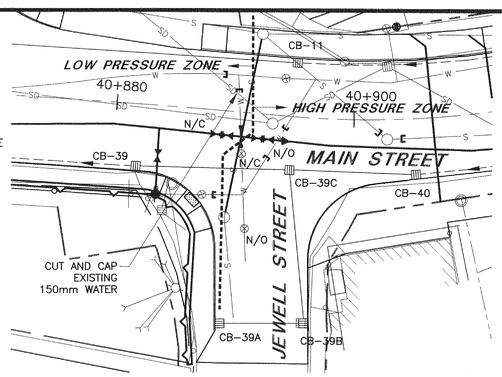
STEP 1

1. CONSTRUCT NEW 300mm WATER MAIN TO JEWELL STREET.
2. COORDINATE TIE-IN TO LOW PRESSURE SIDE OF JEWELL STREET CONNECTION WITH LIVERMORE FALLS WATER DISTRICT.
3. CONNECT TO LOW PRESSURE SIDE OF EXISTING JEWELL STREET WATER MAIN WITH 300mm CROSS AND SOLID SLEEVE COUPLINGS.
4. CUT AND CAP EXISTING CONNECTION TO HIGH PRESSURE HYDRANT AND INSTALL NEW LOW PRESSURE HYDRANT CONNECTION.
5. FILL, TEST AND DISINFECT NEW MAIN AND THEN CLOSE NEW 300mm GATE VALVE.
6. EXISTING WATER MAINS TO REMAIN IN SERVICE.
7. AFTER TESTING AND DISINFECTION ARE SATISFACTORILY COMPLETED BEGIN TIE-OVER OF SERVICES TO NEW 300mm WATER MAIN.



STEP 2

1. FOLLOWING COMPLETION OF SERVICE TIE-OVERS TO NEW 300mm WATER MAIN, CUT AND CAP LOW PRESSURE SIDE OF EXISTING MAIN.
2. NEW 300mm GATES TO REMAIN CLOSED.
3. EXISTING DIVIDER GATE VALVES THAT WERE NORMALLY CLOSED SHALL BE OPENED TO MAINTAIN HIGH PRESSURE SERVICE.
4. NEW 300mm WATER MAIN IS NOW ACTIVE FROM GREEN TO JEWELL STREETS, AND EXISTING HIGH PRESSURE MAIN NORTH OF JEWELL IS ACTIVE.
5. CONTINUE CONSTRUCTION OF 200mm NORTH TO MAPLE STREET.

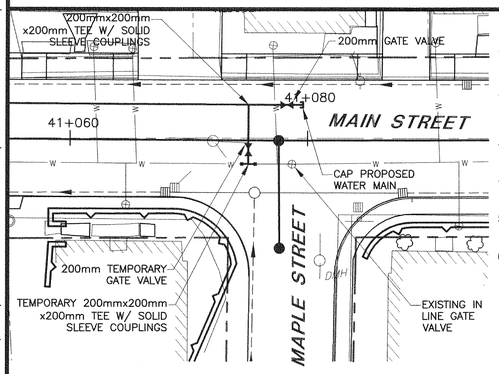


STEP 3

1. FOLLOWING COMPLETION OF THE CONNECTIONS AT MAPLE STREET, TESTING AND DISINFECTING THE NEW 200mm MAIN FROM JEWELL TO MAPLE STREET AND TIE-OVER OF SERVICE CONNECTIONS, THE CONNECTION OF THE NEW 300mm MAIN TO THE EXISTING AT JEWELL STREET CAN BE ABANDONED.
2. COORDINATE VALVE POSITIONS WITH LIVERMORE FALLS WATER DISTRICT ON VALVES NORMALLY OPEN OR NORMALLY CLOSED.
3. N/O NORMALLY OPEN
   N/C NORMALLY CLOSED

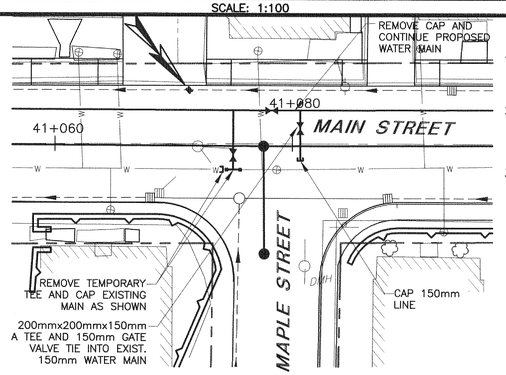
JEWELL STREET WATER MAIN CONNECTION DETAIL

SCALE: 1:100



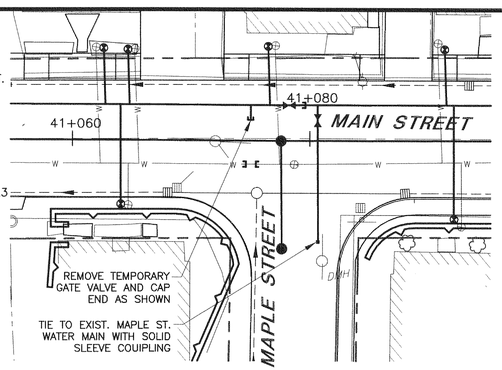
STEP 1

1. CONSTRUCT NEW 300mm WATER MAIN TO MAPLE STREET.
2. COORDINATE TIE-IN TO EXISTING EXISTING WATER MAIN WITH LIVERMORE FALLS WATER DISTRICT.
3. CONNECT TO EXISTING MAIN WITH TEE AND SOLID SLEEVE COUPLINGS.
4. FILL, TEST AND DISINFECT NEW MAIN AND THEN CLOSE 150mm GATE VALVE.
5. EXISTING WATER MAIN TO REMAIN IN SERVICE.
6. AFTER TESTING AND DISINFECTION ARE SATISFACTORILY COMPLETED BEGIN TIE-OVER OF SERVICES TO NEW 300mm WATER MAIN.



STEP 2

1. FOLLOWING COMPLETION OF SERVICE TIE-OVERS TO NEW 200mm WATER MAIN, CUT AND CAP EXISTING MAIN AT MAPLE STREET.
2. NEW 200mm WATER MAIN IS NOW ACTIVE FROM MAPLE TO MAPLE STREET, AND EXISTING MAIN NORTH OF MAPLE STREET IS ACTIVE.
3. 200mm GATE VALVE ON SOUTH SIDE OF TEE REMAINS CLOSED WHILE NEW MAIN CONSTRUCTION CONTINUES TO STA. 41+423 CONNECTION AREA.

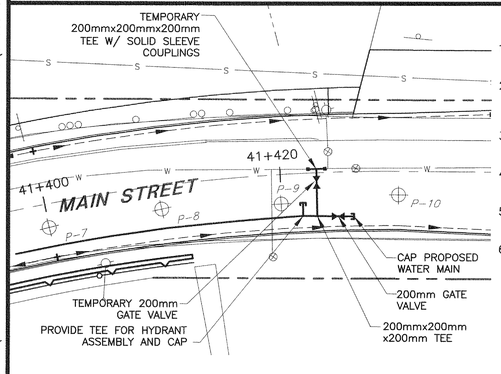


STEP 3

1. FOLLOWING COMPLETION OF THE CONNECTIONS AT MAPLE STREET, TESTING AND DISINFECTING THE NEW 200mm MAIN FROM MAPLE TO STA. 41+423 AND TIE-OVER OF SERVICE CONNECTIONS, THE CONNECTION OF THE NEW 200mm MAIN TO THE EXISTING AT MAPLE STREET CAN BE REMOVED AND CAPPED.
2. COORDINATE TIE-IN TO EXISTING MAPLE STREET WATER MAIN AT SAME TIME AS EXISTING WATER MAIN IS ABANDONED.

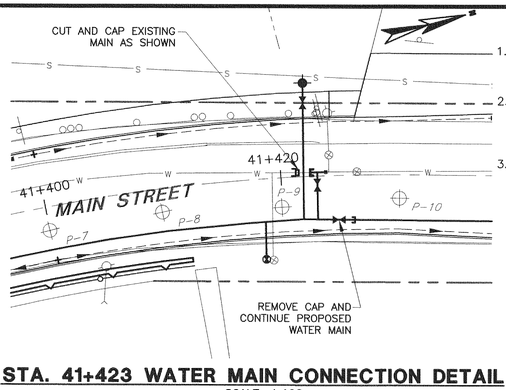
MAPLE STREET WATER MAIN CONNECTION DETAIL

SCALE: 1:100



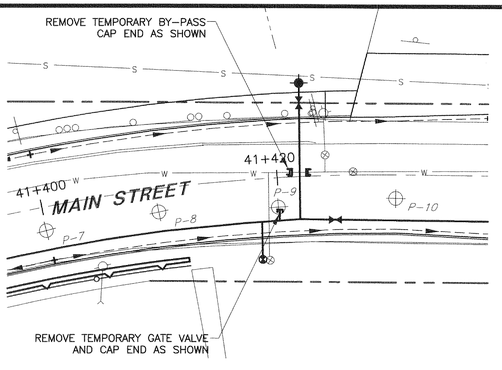
STEP 1

1. CONSTRUCT NEW 200mm WATER MAIN TO STA. 41+423.
2. COORDINATE TIE-IN TO EXISTING EXISTING WATER MAIN WITH LIVERMORE FALLS WATER DISTRICT.
3. CONNECT TO EXISTING MAIN WITH TEE AND SOLID SLEEVE COUPLINGS.
4. FILL, TEST AND DISINFECT NEW MAIN AND THEN CLOSE 150mm GATE VALVE.
5. EXISTING WATER MAIN TO REMAIN IN SERVICE.
6. AFTER TESTING AND DISINFECTION ARE SATISFACTORILY COMPLETED BEGIN TIE-OVER OF SERVICES TO NEW 300mm WATER MAIN.



STEP 2

1. FOLLOWING COMPLETION OF SERVICE TIE-OVERS TO NEW 200mm WATER MAIN, CUT AND CAP EXISTING MAIN AT STA. 41+423
2. NEW 200mm WATER MAIN IS NOW ACTIVE FROM MAPLE TO STA. 41+423, AND EXISTING MAIN NORTH OF STA. 41+423 STREET IS ACTIVE.
3. 200mm GATE VALVE ON NORTH SIDE OF TEE REMAINS CLOSED WHILE NEW MAIN CONSTRUCTION CONTINUES TO PINEAU STREET CONNECTION AREA.



STEP 3

1. FOLLOWING COMPLETION OF THE CONNECTIONS AT MAPLE STREET, TESTING AND DISINFECTING THE NEW 200mm MAIN FROM STA. 41+423 TO PINEAU STREET AND TIE-OVER OF SERVICE CONNECTIONS, THE CONNECTION OF THE NEW 200mm MAIN TO THE EXISTING AT STA. 41+423 CAN BE REMOVED AND CAPPED.
2. SALVAGE 200mm GATE VALVE AND FITTINGS FOR RE-USE.

STA. 41+423 WATER MAIN CONNECTION DETAIL

SCALE: 1:100

NO	SUBMISSIONS/REVISIONS	APP'D	DATE
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DRAWN BY: RJB
CHECKED BY:
DATE: 12-23-10
APPROVED BY:
DATE: 12-23-10
BOOK NO.:
PROJECT NO. 11444-11446
SCALE: AS NOTED

JEFFREY D. PREBLE No. 8380 STATE OF MAINE REGISTERED PROFESSIONAL ENGINEER

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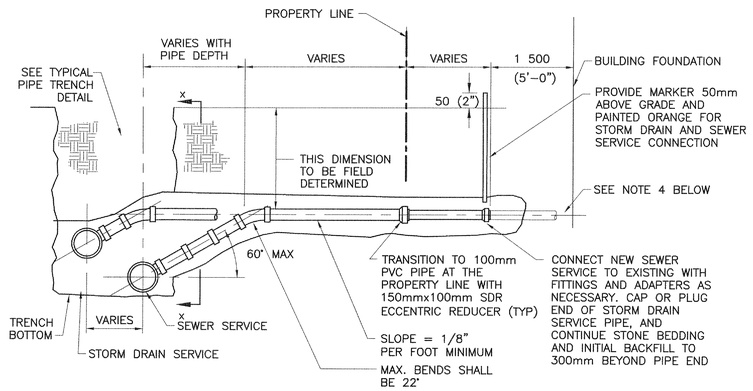
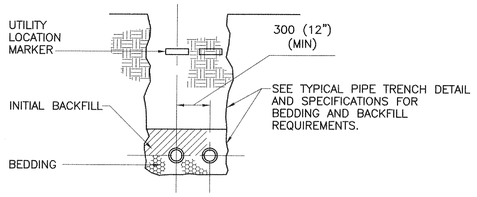
LIVERMORE FALLS WATER DISTRICT
LIVERMORE FALLS & JAY SEWER DEPARTMENTS
ROUTE 4
UTILITIES IMPROVEMENT

WATER MAIN PHASING AND CONNECTION DETAILS

DRAWING
C-15

G:\DWGS\11444-11446-ROUTE 4 UTILITY IMPROVEMENTS\11444-11446A-FD\CIVIL\11444-11446AC-15.DWG | 11444-11446aC-15 | 1:1 | ---- | 1/12/2011 8:01:27 AM | RXB





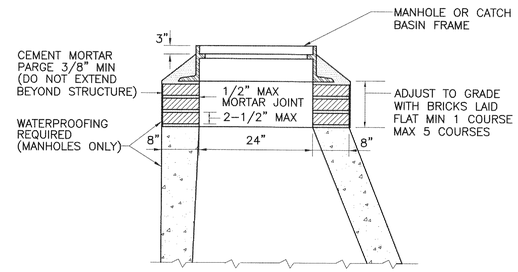
SECTION X-X

NOTES:

1. ALL SEWER SERVICES SHALL BE INSTALLED TO 1.50M (5') OUTSIDE THE FOUNDATION AND CONNECT TO EXISTING SERVICE.
2. SEWER SERVICE CONNECTIONS SHALL BE INSTALLED IN THE SAME TRENCH WHEREVER POSSIBLE.
3. CONTRACTOR TO NOTE THE ELEVATIONS OF THE EXISTING SEWER SERVICE DIFFER FROM HOUSE TO HOUSE. EXISTING SEWERS ENTER THROUGH FOUNDATION WALL OR BENEATH/THRU FOUNDATION SLAB. WHERE POSSIBLE, STORM DRAIN SERVICE ELEVATIONS SHALL MATCH EXISTING SEWER SERVICE ELEVATIONS, COORDINATE WITH ENGINEER.

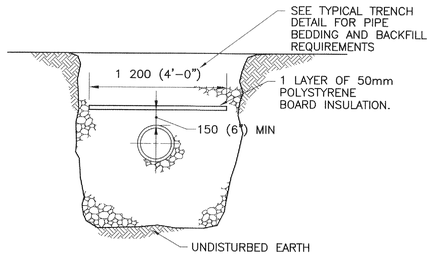
SEWER / STORM DRAIN SERVICE CONNECTION DETAIL

NTS



MANHOLE OR CATCH BASIN FRAME INSTALLATION

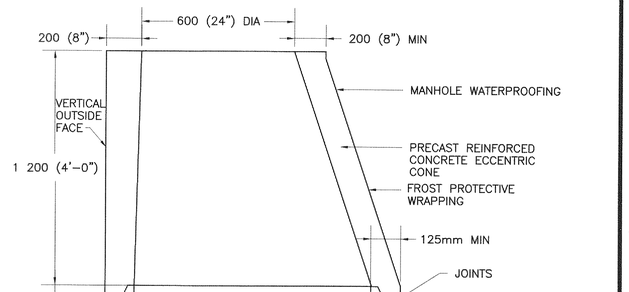
NTS



NOTE: TRENCH PIPE INSULATION TO BE USED WHERE DEPTH OF COVER IS LESS THAN 1.50M (5 FT.) OR AS DIRECTED BY THE ENGINEER.

TRENCH PIPE INSULATION DETAIL

NTS

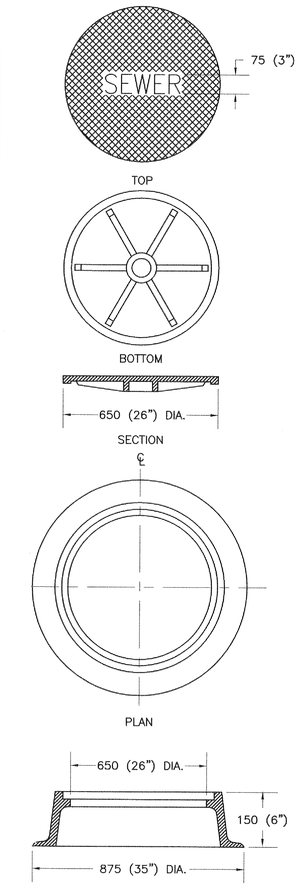


NOTES:

1. MANHOLE CHANNELS REQUIRING CHANGE IN ALIGNMENT ARE TO BE BUILT ON A SMOOTH RADIUS. IF SIDE PIPES ENTER CHANNEL, SHAPE TO RECEIVE ADDED SIDE FLOW.
2. USE FLAT SLAB TOP MANHOLE WHEN THE DIFFERENCE BETWEEN INVERT AND RIM IS LESS THAN 1.80M (6') AND WHEN MANHOLE DIAMETER IS GREATER THAN 1.20M (4').
3. RUBBERIZED SEAL TO ALSO BE PROVIDED ON EXTERIOR OF FRAME AND BRICKWORK AS SPECIFIED FOR SEWER MANHOLES WITH CONE SECTIONS AND FLAT SLAB TOP SECTIONS. SEAL IS NOT TO BE PROVIDED ON CATCH BASINS OR DRAIN MANHOLES.
4. WHERE APPROVED BY OWNER AND ENGINEER INVERT CHANNEL MAY BE CONSTRUCTED WITH PVC PIPE WITH TOP CUT OFF AND CAST IN PLACE CONCRETE SHELF (MIN. 3" THICK).

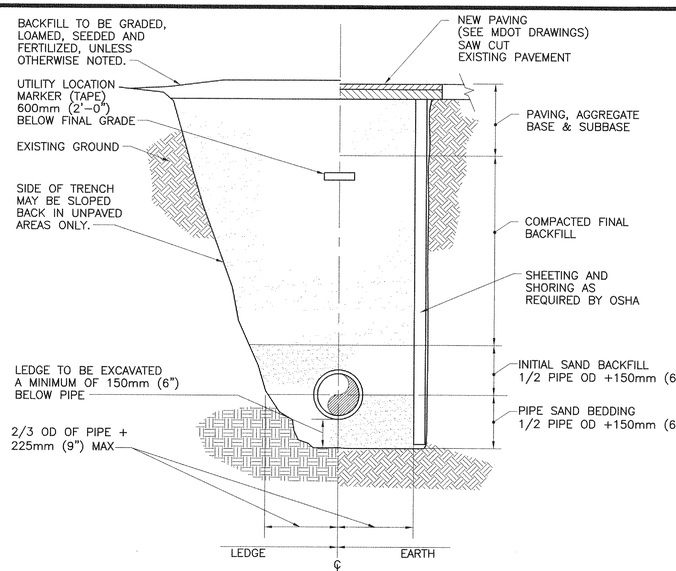
TYPICAL 1.20M SEWER MANHOLE

NTS



MANHOLE COVER & FRAME

NTS

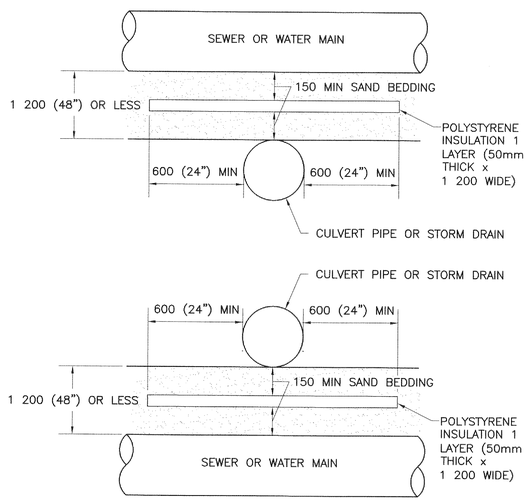


NOTES:

1. ALL EXCAVATION MUST MEET OSHA STANDARDS
2. INSTALL 900mm (3 FOOT) LONG IMPERVIOUS MATERIAL DAM IN BEDDING/INITIAL BACKFILL MATERIAL EVERY 330.0M (100') TO PREVENT TRENCH GROUND WATER FROM BEING CHANNELED ALONG BEDDING/INITIAL BACKFILL.
3. SEE SPECIFICATIONS FOR BEDDING AND BACKFILL REQUIREMENTS.
4. STONE BEDDING AND INITIAL BACKFILL MAY BE USED IN WET AREAS AS APPROVED BY THE OWNER AND ENGINEER.

TRENCH DETAIL

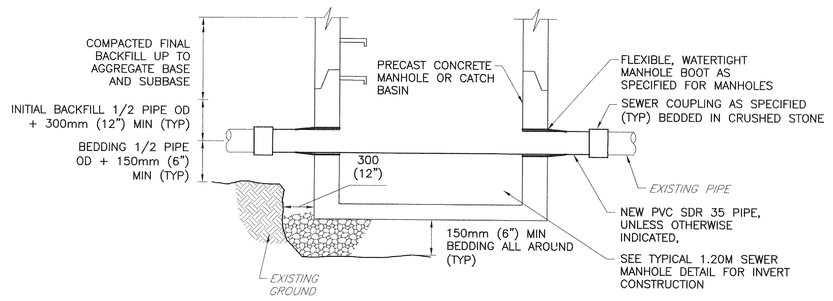
NTS



NOTE: INSULATION TO BE USED WHERE PIPE SEPARATION IS 1.20M (4') OR LESS.

STORM DRAIN CROSSING DETAIL

NTS



NOTES:

1. ALL EXCAVATION MUST MEET OSHA STANDARDS.
2. SEE SPECIFICATIONS FOR BEDDING AND BACKFILL REQUIREMENTS.
3. ADDITIONAL PIPE EXTENSIONS AND APPURTENANCES MAY BE REQUIRED TO ACCOMMODATE OTHER PIPELINES AND/ OR SERVICES ENTERING MANHOLES.

TYPICAL SEWER MANHOLE REPLACEMENT INSTALLATION

NTS

NO	SUBMISSIONS/REVISIONS	APP'D	DATE
1			
2			
3			
4			

DRAWN BY: RJB
CHECKED BY:
DATE: 12-23-10
APPROVED BY:
DATE: 12-23-10
BOOK NO.
PROJECT NO: 11444-11446
SCALE: AS NOTED

JEFFREY D. PREBLE No. 8390 — STATE OF MAINE — REGISTERED PROFESSIONAL ENGINEER

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LIVERMORE FALLS WATER DISTRICT
LIVERMORE FALLS & JAY SEWER DEPARTMENTS
ROUTE 4
UTILITIES IMPROVEMENT

CIVIL DETAILS I

DRAWING C-16

LAST SAVED BY: RXB 1/7/2011 10:35 AM | 1/12/2011 8:01:32 AM | RXB | ---- | 1:1 | 1:1 | G:\DWGS\11444-11446-ROUTE 4 UTILITY IMPROVEMENTS\11444-11446A-FD\CIVIL\11444-11446AC-16.DWG | 11444-11446aC-16

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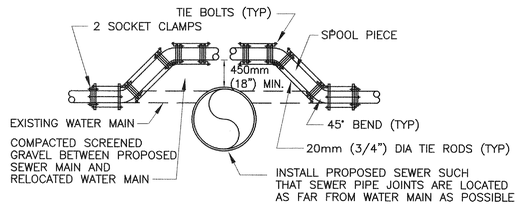
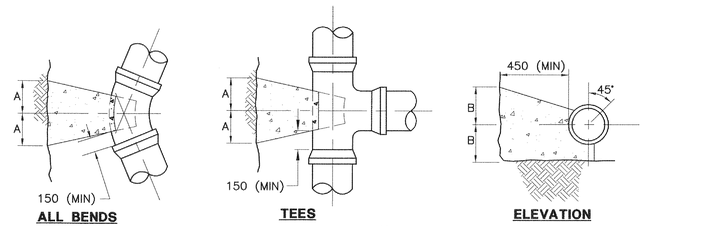


NOTES:
1. WATER MAIN MATERIALS TO BE CLASS 52 DUCTILE IRON. JOINT RESTRAINT TO BE BY MECHANICAL JOINT WITH RETAINER GLANDS, OR WITH TIE BOLTS AS SHOWN.
2. TIE RODS, TIE BOLTS, SOCKET CLAMPS AND BRIDLES SHALL BE COATED WITH A BITUMINOUS PAINT AFTER ASSEMBLY OR IF NECESSARY PROIR TO ASSEMBLY.
3. TIE RODS: 250mm (10") DIA WATER MAIN OR LARGER – 4 REQUIRED.
   200mm (8") DIA WATER MAIN OR SMALLER – 2 REQUIRED.
4. EXISTING WATER MAINS TO BE RELOCATED OVER NEW SEWERS WHEREVER SUFFICIENT GROUND COVER EXISTS (1.5M (5') MINIMUM COVER).

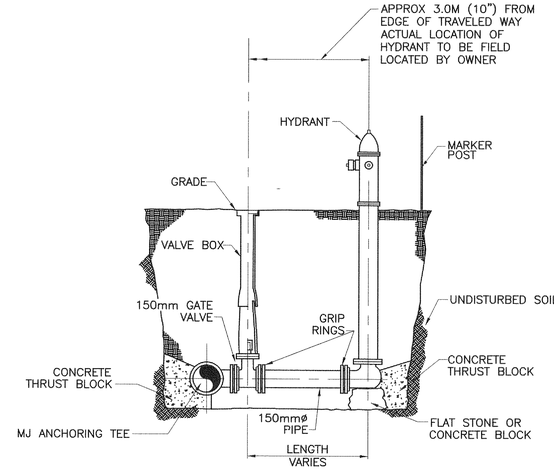
WATER MAIN RELOCATION DETAIL
NTS



NOTES
1. THRUST BLOCK SIZES SHOWN ARE BASED ON A SOIL BEARING CAPACITY OF 9765 kgs/M² (2000 PSF) AND TEST PRESSURES OF 126,560 kgs/M² (180 PSI).
2. PRECAST CONCRETE THRUST BLOCKS MAY BE USED IN PLACE OF CAST IN PLACE PROVIDED THAT EQUIVALENT VOLUMES AND DIMENSIONS ARE USED, AS SHOWN ABOVE, AND THE THRUST BLOCK IS CONTOURED TO THE FITTINGS USED.
3. POLYETHYLENE (6 mil) SHALL BE PLACED AROUND FITTINGS PRIOR TO CONCRETE PLACEMENT

PIPE SIZE	90° BEND		45° BEND		22 1/2° BEND		11 1/4° BEND		TEE		VERTICAL BEND (DOWN)	
	A	B	A	B	A	B	A	B	A	B	A	B
150mm	375	300	300	225	225	150	150	150	300	300	600	525
200mm	500	375	350	300	225	225	225	150	450	300	825	600
250mm	525	525	450	375	375	225	225	225	500	450	1 000	675
300mm	675	600	575	375	375	300	300	225	625	450	1 200	750

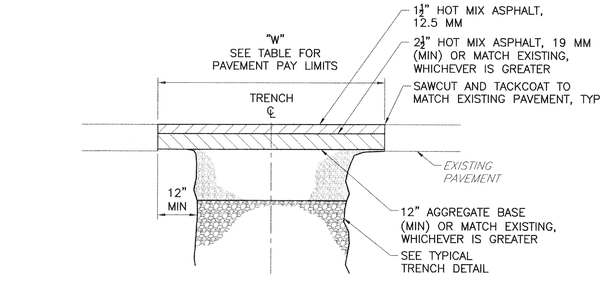
THRUST BLOCK DETAIL
NTS



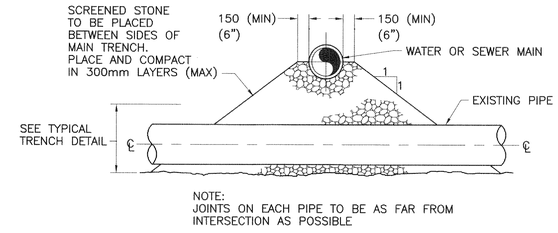
TYPICAL HYDRANT CONNECTION
SCALE: NTS

NOTE: HYDRANTS SHALL OPEN IN A CLOCKWISE DIRECTION.

WATER SERVICE CONNECTION
NTS



VALVE BOX DETAIL
NTS

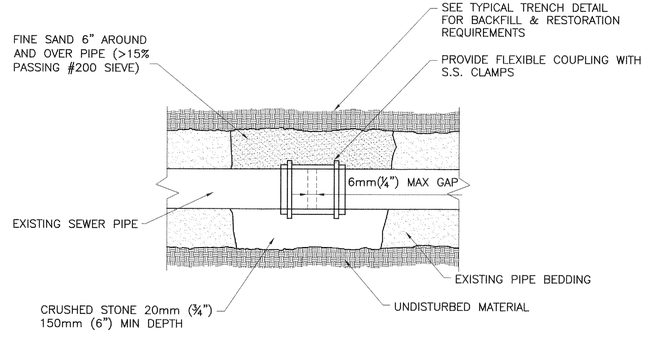


NOTE:
JOINTS ON EACH PIPE TO BE AS FAR FROM INTERSECTION AS POSSIBLE

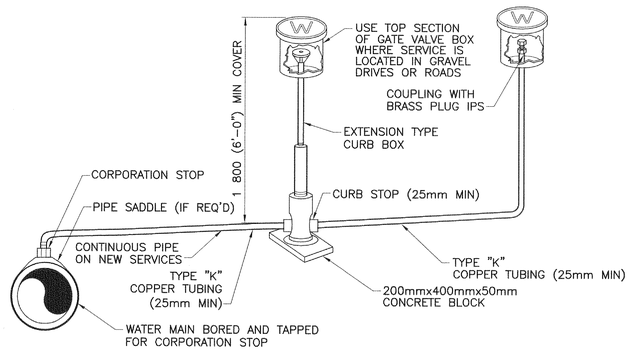
PIPE CROSSING DETAIL

NOTE: INITIAL TRENCH PAVING MAY BE USED AS THE BASE COURSE FOR FINAL PAVING IF IN GOOD REPAIR.

FINAL TRENCH PAVING (WITHOUT OVERLAY)
NTS



PIPE REPAIR BOOT
NTS



NOTE: TO BE PLACED AT HIGH SPOTS IN WATER MAIN. FIELD LOCATE AS SHOWN ON DRAWINGS AND AS REQUIRED TO PREVENT AIR BINDING.

MANUAL AIR RELEASE ASSEMBLY
NTS

NO	SUBMISSIONS/REVISIONS	APP'D	DATE
1	AS NOTED		

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LIVERMORE FALLS WATER DISTRICT
LIVERMORE FALLS & JAY SEWER DEPARTMENTS
ROUTE 4
UTILITIES IMPROVEMENT

CIVIL DETAILS II

DRAWING
C–17