

Department of Transportation

THE LATEST REVISIONS OF THE STANDARD SHEETS MAINTAINED BY THE DEPARTMENT, WHICH ARE CURRENT ON THE DATE OF ADVERTISEMENT FOR BIDS, SHALL BE CONSIDERED TO BE IN EFFECT. ALL PAY ITEMS AND WORK CONTAINED IN THE CONTRACT AND ANY ADDITIONAL PAY ITEMS AND WORK ENCOUNTERED DURING THE COURSE OF THE CONTRACT SHALL BE SUBJECT TO THE APPLICABLE STANDARD SHEET(S) UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS.

ALL WORK CONTEMPLATED UNDER THIS CONTRACT IS TO BE COVERED BY AND IN CONFORMITY WITH THE STANDARD SPECIFICATIONS (AS CUSTOMARY) REFERENCED IN THE CONTRACT PROJECT "PROPOSAL" EXCEPT AS MODIFIED BY THESE PLANS OR BY CHANGES SET FORTH IN THE CONTRACT PROJECT "PROPOSAL."

CONTRACT PLANS HAVE BEEN DESIGNED IN ACCORDANCE WITH NYS DOT POLICIES AND GUIDE LINES AND THE FINAL DESIGN REPORT APPROVED ON 04/21/2015.

ROUTE 10 - SH (1271), ROUTE 28 - SH (5659)
 ROUTE 28 - SH (5037), ROUTE 79 - SH (8209), ROUTE 166 - SH (8226)

CULVERT LOCATION TABLE						
SITE	CIN	ROUTE	TOWN	COUNTY	RM	SH
A	C940011	10	WALTON	DELAWARE	10 9301 1245	1271
B	C950058	28	EXETER	OTSEGO	28 9403 3309	5659
C	C950059	28	EXETER	OTSEGO	28 9403 3311	5037
D	124408	79	BARKER	BROOME	79 9103 1065	8209
E	C950119	166	MIDDLEFIELD	OTSEGO	166 9401 1103	8226

CONTRACT D262989

VARIOUS COUNTIES

CONTRACTOR'S NAME _____

AWARD DATE _____

COMPLETION DATE _____

FINAL ACCEPTANCE DATE _____

REGIONAL DIRECTOR _____

ENGINEER IN CHARGE _____

FINAL COST TOTAL _____

FISCAL SHARE	COST(S)

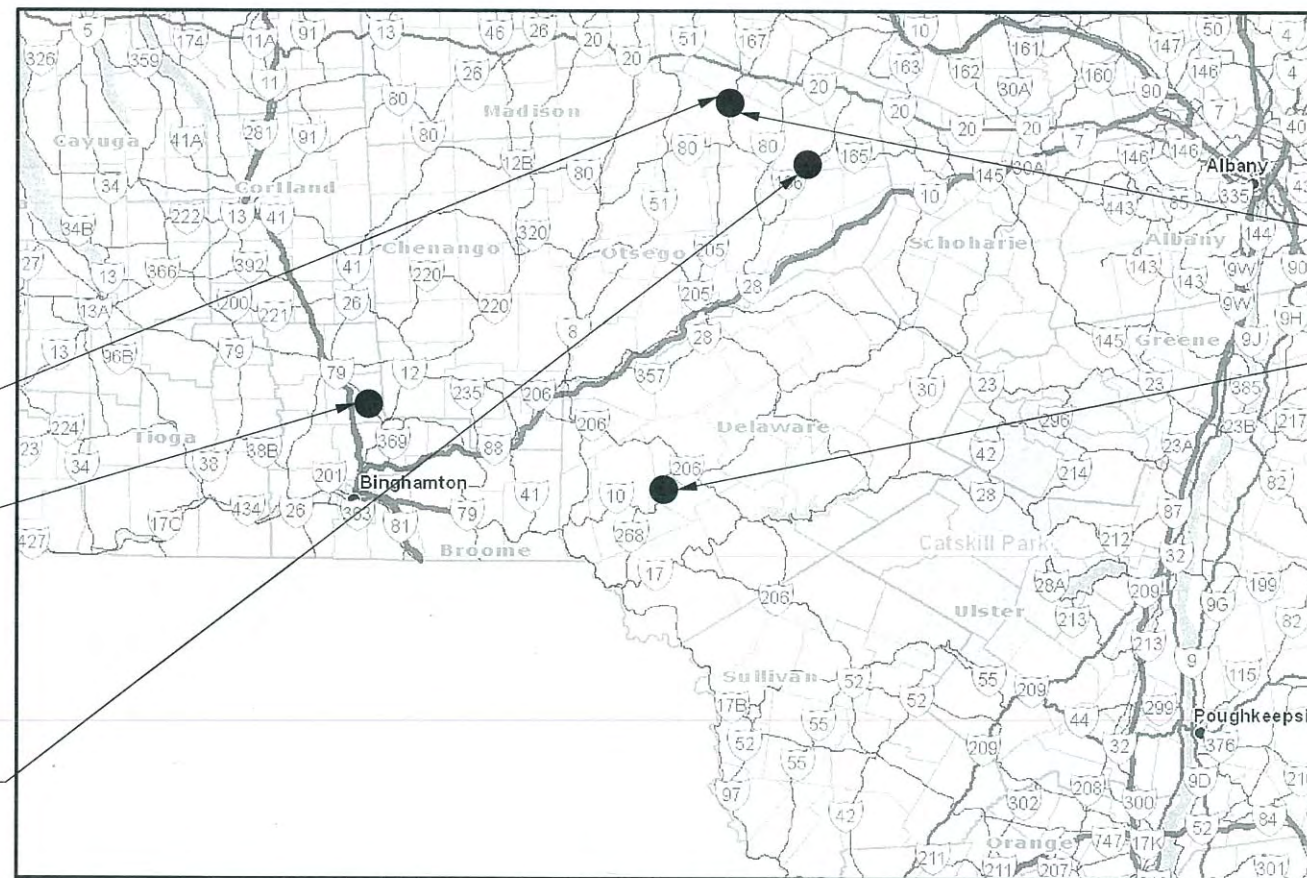
SITE C
 ROUTE 28
 C950059
 RM 28-9403-3311

SITE D
 ROUTE 79
 C124408
 RM 79-9103-1065

SITE E
 ROUTE 166
 C950119
 RM 166-9401-1103

SITE B
 ROUTE 28
 C950058
 RM 28-9403-3309

SITE A
 ROUTE 10
 C940011
 RM 10-9301-1244



PROJECT LOCATION

THIS PROJECT IS LOCATED IN BROOME, DELAWARE AND OTSEGO COUNTIES ON NUMEROUS STATE HIGHWAYS. SEE THE SITE SPECIFIC LOCATION MAPS FOR ADDITIONAL INFORMATION.

RECOMMENDED BY

Douglas Bickford 9/3/15
 REGIONAL DESIGN ENGINEER
 DOUGLAS BICKFORD

RECOMMENDED BY

Thomas Wiser 8-13-15
 REGIONAL CONSTRUCTION ENGINEER
 THOMAS WISER

RECOMMENDED BY

Andrew Stiles 8/13/15
 REGIONAL DIRECTOR OF OPERATIONS
 ANDREW STILES

RECOMMENDED BY

Anthony Signorelli 8/13/15
 REGIONAL TRAFFIC ENGINEER
 ANTHONY SIGNORELLI

APPROVED BY

Jack Williams 8/14/15
 REGIONAL DIRECTOR
 JACK WILLIAMS

MULTI CULVERT REPAIR AND REPLACEMENT PROJECT		
ROUTE 10 - SH (1271), ROUTE 28 - SH (5659)		
ROUTE 28 - SH (5037), ROUTE 79 - SH (8209)		
ROUTE 166 - SH (8226)		
COUNTY: VARIOUS		
FED. ROAD REG. NO.	STATE	SHEET NO.
1	N.Y.	1
CAPITAL PROJECT IDENTIFICATION NO. 9805.93		
INDEX ON SHEET NO. 2		

INDEX		
SHEET NUMBER	DESCRIPTION	DRAWING NUMBER
1	COVER SHEET	COV-01
2-3	INDEX AND ABBREVIATIONS	IND-01 TO IND-02
4-5	LEGEND, LINE AND POINT SYMBOLGY	LEG-01 TO LEG-02
6-7	TYPICAL SECTIONS AND DETAILS	TYP-01 TO TYP-02
8	GENERAL NOTES	GNN-01
9	GENERAL CULVERT NOTES	GCN-01
10-11	WORK ZONE TRAFFIC CONTROL NOTES	TCN-01 TO TCN-02
12	TRAFFIC CONTROL PLAN	TCP-01
13-18	GENERAL CULVERT DETAILS	GCD-01 TO GCD-06
19	LOCATION MAP SITE A ROUTE 10 TOWN OF WALTON	LOC-01-A
20-23	WORKZONE TRAFFIC CONTROL PLANS	WZTC-01-A TO WZTC-04-A
24-25	BASELINE TIE DIAGRAMS	BLT-01-A TO BLT-02-A
26	RIGHT OF WAY TABLES	RWT-01-A
27	MAINTENANCE JURISDICTION PLAN	MJP-01-A
28-29	HORIZONTAL CONTROL TABLES	HCT-01-A TO HCT-02-A
30	MISCELLANEOUS TABLES	MST-01-A
31-34	MISCELLANEOUS DETAILS	MSD-01-A TO MSD-04-A
35	EROSION CONTROL PLANS	ECP-01-A
36-37	GENERAL PLANS	GNP-01-A TO GNP-02-A
38-40	HIGHWAY, STREAM AND DETOUR PROFILES	PRO-01-A TO PRO-03-A
41-43	CULVERT DETAILS	CDT-01-A TO CDT-03-A
44	SIGN AND PAVEMENT MARKINGS SCHEMATIC/SIGN TEXT DATA	SGP-01-A
45	LOCATION MAP SITE B ROUTE 28 TOWN OF EXETER	LOC-01-B
46-53	WORKZONE TRAFFIC CONTROL PLANS	WZTC-01-B TO WZTC-08-B
54-55	BASELINE TIE DIAGRAMS	BLT-01-B TO BLT-02-B
56	RIGHT OF WAY TABLES	RWT-01-B
57	MAINTENANCE JURISDICTION PLAN	MJP-01-B
58	HORIZONTAL CONTROL TABLE	HCT-01-B
59	MISCELLANEOUS TABLES	MST-01-B
60-62	MISCELLANEOUS DETAILS	MSD-01-B TO MSD-03-B
63	GEOTECHNICAL DETAILS	GED-01-B
64	EROSION CONTROL PLANS	ECP-01-B
65	GENERAL PLANS	GNP-01-B
66-67	HIGHWAY AND STREAM PROFILES	PRO-01-B TO PRO-02-B
68-70	CULVERT DETAILS	CDT-01-B TO CDT-03-B
71	SIGN AND PAVEMENT MARKINGS SCHEMATIC/SIGN TEXT DATA	SGP-01-B
72	LOCATION MAP SITE C ROUTE 28 TOWN OF EXETER	LOC-01-C
73-80	WORK ZONE TRAFFIC CONTROL PLANS	WZTC-01-C TO WZTC-08-C
81-82	BASELINE TIE DIAGRAMS	BLT-01-C TO BLT-02-C
83	RIGHT OF WAY TABLES	RWT-01-C
84	MAINTENANCE JURISDICTION PLAN	MJP-01-C
85	HORIZONTAL CONTROL TABLE	HCT-01-C
86	DRAINAGE TABLE & PROFILE	DRT/PRO-01-C
87	MISCELLANEOUS TABLES	MST-01-C
88-89	MISCELLANEOUS DETAILS	MSD-01-C TO MSD-02-C
90	GEOTECHNICAL DETAILS	GED-01-C
91	EROSION CONTROL PLAN	ECP-01-C
92	GENERAL PLANS	GNP-01-C
93	LANDSCAPE PLAN	LAP-01-C
94-95	HIGHWAY AND STREAM PROFILES	PRO-01-C TO PRO-02-C
96-98	CULVERT DETAILS	CDT-01-C TO CDT-03-C
99	SIGN AND PAVEMENT MARKINGS SCHEMATIC/SIGN TEXT DATA	SGP-01-C

INDEX		
SHEET NUMBER	DESCRIPTION	DRAWING NUMBER
100	LOCATION MAP SITE D ROUTE 79 TOWN OF BARKER	LOC-01-D
101-108	WORKZONE TRAFFIC CONTROL PLANS	WZTC-01-D TO WZTC-08-D
109-110	BASELINE TIE DIAGRAMS	BLT-01-D TO BLT-02-D
111	RIGHT OF WAY TABLES	RWT-01-D
112	MAINTENANCE JURISDICTION PLAN	MJP-01-D
113	HORIZONTAL CONTROL TABLE	HCT-01-D
114	MISCELLANEOUS TABLES	MST-01-D
115-116	MISCELLANEOUS DETAILS	MSD-01-D TO MSD-02-D
117-118	GEOTECHNICAL DETAILS	GED-01-D TO GED-02-D
119-120	EROSION CONTROL PLANS	ECP-01-D TO ECP-02-D
121-122	GENERAL PLANS	GNP-01-D TO GNP-02-D
123-124	HIGHWAY AND STREAM PROFILES	PRO-01-D TO PRO-02-D
125-127	CULVERT DETAILS	CDT-01-D TO CDT-03-D
128	SIGN AND PAVEMENT MARKINGS SCHEMATIC/SIGN TEXT DATA	SGP-01-D
129	LOCATION MAP SITE E ROUTE 166 TOWN OF MIDDLEFIELD	LOC-01-E
130-135	WORKZONE TRAFFIC CONTROL PLANS	WZTC-01-E TO WZTC-06-E
136-137	BASELINE TIE DIAGRAMS	BLT-01-E TO BLT-02-E
138	RIGHT OF WAY TABLES	RWT-01-E
139	MAINTENANCE JURISDICTION PLAN	MJP-01-E
140	HORIZONTAL CONTROL TABLE	HCT-01-E
141	MISCELLANEOUS TABLES	MST-01-E
142-143	MISCELLANEOUS DETAILS	MSD-01-E TO MSD-02-E
144-145	GEOTECHNICAL DETAILS	GED-01-E TO GED-02-E
146	EROSION CONTROL PLAN	ECP-01-E
147-148	GENERAL PLANS	GNP-01-E TO GNP-02-E
149-150	HIGHWAY AND STREAM PROFILES	PRO-01-E TO PRO-02-E
151-153	CULVERT DETAILS	CDT-01-E TO CDT-03-E
154	SIGN AND PAVEMENT MARKINGS SCHEMATIC/SIGN TEXT DATA	SGP-01-E
155-157	ESTIMATE OF QUANTITIES	EQQ-01 TO EQQ-03

STANDARD SHEETS (COMPLETE INDEX OF SHEETS ISSUED THROUGH 05/03/2012)												
203-01	203-02	203-03	204-01	209-01	209-02	209-03	209-04	209-05	209-06	209-07	402-01	554-02
604-01	604-02	606-04	608-03	611-01	619-01	619-02	619-04	619-10	619-11	619-12	619-20	619-21
619-30	619-60	619-62	625-01	645-01	645-03	646-11	646-13	646-15	655-01	655-05	680-07	680-11
680-14	680-16	680-17	685-01									

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	MULTI CULVERT REPLACEMENT PROJECT	PIN 9805.93	BRIDGES	CULVERTS C940011 C950058 C950059 124408 C950119	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED INDEX AND LIST OF STANDARD SHEETS	CONTRACT NUMBER D262989	
	ROUTE 10 - SH 1271, ROUTE 28 - SH 5659, ROUTE 28 - SH 5037, ROUTE 79 - SH 8209, ROUTE 166 - SH 8226						UTILITY QUALITY LEVEL D
	TOWNS OF BARKER, EXETER, MIDDLEFIELD & WALTON						
	COUNTY: VARIOUS REGION: 09						
				DRAWING NO. IND-01 SHEET NO. 2			

ALIGNMENT		TOPOGRAPHY (MISCELLANEOUS)		UTILITIES	
ABBR.	DESCRIPTION	ABBR.	DESCRIPTION	ABBR.	DESCRIPTION
AH	AHEAD	ABUT	ABUTMENT	E	ELECTRIC
AZ	AZIMUTH	AOBE	AS ORDERED BY ENGINEER	EMH	ELECTRIC MANHOLE
BK	BACK	ASPH	ASPHALT	G	GAS
B	BASELINE	BDY	BOUNDARY	GP	GUY POLE
BRG	BEARING	BLDG	BUILDING	GSB	GAS SERVICE BOX (HOUSE LINE)
C	CENTERLINE	BM	BENCH MARK	GV	GAS VALVE (MAIN LINE)
CS	CURVE TO SPIRAL	CC	CENTER TO CENTER	HYD	HYDRANT
e	SUPERELEVATION RATE (CROSS SLOPE)	CONC	CONCRETE	LP	LIGHT POLE
EQ	EQUALITY	CONST	CONSTRUCTION	LPG	LOW PRESSURE GAS
EXT	EXTERNAL	CR	COUNTY ROAD	PP	POWER POLE
HCL	HORIZONTAL CONTROL LINE	D	DEED DISTANCE	SA	SANITARY SEWER
HSD	HEADLIGHT SIGHT DISTANCE	DM	DIRECT MEASUREMENT	SMH	SANITARY MANHOLE
L	LENGTH OF CIRCULAR CURVE	DWY	DRIVEWAY	ST	STORM SEWER
LS	LENGTH OF SPIRAL	EP	EDGE OF PAVEMENT	T	TELEPHONE
LVC	LENGTH OF VERTICAL CURVE	ES	EDGE OF SHOULDER	TCB	TRAFFIC CONTROL BOX
E	CENTER CORRECTION OF VERTICAL CURVE	FEE	FEE ACQUISITION	TELBOX	TELEPHONE BOX
M	MAIN LINE	FEE WO/A	FEE ACQUISITION WITHOUT ACCESS	TEL P	TELEPHONE POLE
PC	POINT OF CURVATURE	FP	FENCE POST	TMH	TELEPHONE MANHOLE
PI	POINT OF INTERSECTION	FD	FOUNDATION	CTV	CABLE TELEVISION
POL	POINT ON LINE	FL	FENCE LINE	W	WATER
PSD	PASSING SIGHT DISTANCE	GAR	GARAGE	WSB	WATER SERVICE BOX (HOUSE LINE)
PT	POINT OF TANGENT	GR	GRAVEL	WV	WATER VALVE (MAIN LINE)
PVC	POINT OF VERTICAL CURVE	HO	HOUSE	SUBSURFACE EXPLORATION	
PVI	POINT OF VERTICAL INTERSECTION	HWY	HIGHWAY		
PVT	POINT OF VERTICAL TANGENT	IP	IRON PIN OR IRON PIPE	ABBR.	DESCRIPTION
R	RADIUS	MB	MAILBOX	REPLACE ABBREVIATION "AB" WITH:	
SC	SPIRAL TO CURVE	MON	MONUMENT	AH	HAND AUGER
SSD	STOPPING SIGHT DISTANCE	N&W	NAIL AND WASHER	CP	CONE PENETROMETER
ST	SPIRAL TO TANGENT	OG	ORIGINAL GROUND	DA	2 1/4 INCHES CASED DRILL HOLE
STA	STATION	O/H	OVERHEAD	DM	DRILLING MUD
T	TANGENT LENGTH	P	PARCEL	DN	4 INCHES CASED DRILL HOLE
TGL	THEORETICAL GRADE LINE	PAV'T	PAVEMENT	FH	HOLLOW FLIGHT AUGER
TS	TANGENT TO SPIRAL	PE	PERMANENT EASEMENT	PA	POWER AUGER
VC	VERTICAL CURVE	PED POLE	PEDESTRIAN POLE	PH	PROBE
TOPOGRAPHY (DRAINAGE)		P	PROPERTY LINE	PT	PERCOLATION TEST HOLE
		POR	PORCH	RP	1 INCH SAMPLER (RETRACTABLE PLUG)
BB	BOTTOM OF BANK (STREAM)	RR	RAILROAD	SP	SEISMIC POINT
BC	BOTTOM OF CURB	RTE	ROUTE	TP	TEST PIT
BO	BOTTOM OF OPENING	ROW	RIGHT OF WAY	ABBREVIATION "C" IN CATEGORIES: DA, DM, DN, AND FH WITH:	
CAP	CORRUGATED ALUMINUM PIPE	RW	RETAINING WALL	B	BRIDGE
CB	CATCH BASIN	SH	STATE HIGHWAY	C	CUT
CIP	CAST IRON PIPE	SHLDR	SHOULDER	D	DAM
C STRM	CENTERLINE OF STREAM	SPK	SPIKE	F	FILL
CMP	CORRUGATED METAL PIPE	ST	STREET	K	CULVERT
CP	CONCRETE PIPE	STK	STAKE	W	WALL
CSP	CORRUGATED STEEL PIPE	STY	STORY	X	TO BE USED IF ONE OF THE ABOVE CANNOT BE DEFINED AT THE TIME THE EXPLORATION IS MADE
CULV	CULVERT	SW	SIDEWALK		
DIA	DIAMETER	TE	TEMPORARY EASEMENT		
DMH	DRAINAGE MANHOLE	TO	TEMPORARY OCCUPANCY		
DS	DRAINAGE STRUCTURE PIPE	U/G	UNDERGROUND		
D'XING	DITCH CROSSING	WW	WING WALL		
EHW	EXTREME HIGH WATER				
EL	ELEVATION				
ELEV	ELEVATION				
ELW	EXTREME LOW WATER				
ES	END SECTION				
HW	HEADWALL				
INV	INVERT				
MH	MANHOLE				
MHW	MEAN HIGH WATER				
OHW	ORDINARY HIGH WATER				
OLW	ORDINARY LOW WATER				
RCP	REINFORCED CONCRETE PIPE				
SICPP	SMOOTH INTERIOR CORRUGATED POLYETHYLENE PIPE				
TB	TOP OF BANK (STREAM)				
TC	TOP OF CURB				
TG	TOP OF GRATE				
VCP	VITRIFIED CLAY PIPE				

STANDARD SYMBOL (PLANS)	ITEM PAYMENT UNIT: ESTIMATE OF QUANTITIES SHEET	EQUIVALENT NOMENCLATURE: (SPECS/PROPOSAL)
"	-	INCHES
'	LF	LINEAR FEET
mi	MI	MILES
ft ²	SF	SQUARE FEET
YD ²	SY	SQUARE YARD
AC	AC	ACRES
YD ³	CY	CUBIC YARD
GAL	GAL	GALLON
lb	LB	POUND
TON	TON	TON

MULTI CULVERT REPLACEMENT PROJECT	PIN 9805.93	BRIDGES	CULVERTS C940011 C950058 C950059 C124408 C950119	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
ROUTE 10 - SH 1271, ROUTE 28 - SH 5658, ROUTE 28 - SH 5037, ROUTE 79 - SH 8209, ROUTE 166 - SH 8226	UTILITY QUALITY LEVEL D			ABBREVIATIONS	DRAWING NO. IND-02
TOWNS OF BARKER, EXETER, MIDDLEFIELD & WALTON					SHEET NO. 3
COUNTY: VARIOUS	REGION: 09				

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DESIGN SUPERVISOR R. WILDER

ALIGNMENT			LANDSCAPE			ROADWAY			TRAFFIC WORK ZONE			
STYLE	NAME	DESCRIPTION	STYLE	NAME	DESCRIPTION	STYLE	NAME	DESCRIPTION	STYLE	NAME	DESCRIPTION	
	AC	CONTROL (CENTERLINE)		LABL	AREA, BRUSH LINE		RCZ_P	CLEAR ZONE		TWZBT_P	BARRIER, TEMPORARY	
	AD_P	DETOUR		LAHR	AREA, HEDGE ROW		RG	GUIDE RAIL, MISCELLANEOUS		TWZBTWL_P	BARRIER, TEMPORARY, W/ WARNING LIGHTS	
	AT_P	TRANSITION CONTROL		LAPB	AREA, PLANTING BED		RGB	GUIDE RAIL, BOX BEAM		TWZCD_P	CHANNELIZING DEVICE	
BRIDGE				LAWA	AREA, WOODED AREA OUTLINE		RGBM	GUIDE RAIL, BOX BEAM, MEDIAN		TWZPMRC_P	PAVEMENT MARKING REMOVAL OR COVERING	
	BR	RAIL		LAWL	AREA, WATERS EDGE		RGC	GUIDE RAIL, CABLE	UTILITIES			
	BSHT	SHEET PILING		LCUT_P	CUT LIMIT		RGCB	GUIDE RAIL, CONCRETE BARRIER	STYLE	NAME	DESCRIPTION	
CONTROL				LFILL_P	FILL LIMIT		RGP_P	GUIDE POST		UC	CONDUIT, UNDERGROUND	
	CB	BASELINE		LFNC	FENCE		RGW	GUIDE RAIL, W BEAM		UCH	CONDUIT, HANGING	
	CBPR	BASELINE, PROJECTION		LTRC	TREE ROW, CONIFEROUS		RGWM	GUIDE RAIL, W BEAM, MEDIAN		UCO	CONDUIT, OVERHEAD	
DRAINAGE				LTRD	TREE ROW, DECIDUOUS		RPB	PARKING BUMPER		UE	ELECTRIC LINE, UNDERGROUND	
	DCP	CULVERT PIPE		LWHL	WALL, H PILE		RRC	RAIL ROAD, CATENARY		UEH	ELECTRIC LINE, HANGING	
	DCP_P	CULVERT PIPE (DIR)		LWR	WALL, RETAINING		RRER	RAIL ROAD, 3RD RAIL		UEO	ELECTRIC LINE, OVERHEAD	
	DDG_P	DITCH, GRASS LINED		LWS	WALL, STONE		RRPLS_P	RAIL, PHOTO, LARGE SCALE		UETO	ELECTRIC TRANSMISSION, OVERHEAD	
	DDP_P	DITCH, PAVED INVERT	ROW MAPPING				RRPSS	RAIL, PHOTO, SMALL SCALE		UESS	ELECTRIC, SUBSTATIONS	
	DDS_P	DITCH, STONE LINED		MDL	DEED LINE		RRS	RUMBLE STRIP		UFO	FIBER OPTIC, UNDERGROUND	
	DFL_P	FLOW LINE		MEE	EASEMENT, EXISTING		RRSLS_P	RAIL, SURVEY, LARGE SCALE		UFOH	FIBER OPTIC, HANGING	
	DSSD	SLOTTED DRAIN		MEP_P	EASEMENT, PERMANENT		RRSSS	RAIL, SURVEY, SMALL SCALE		UFOO	FIBER OPTIC, OVERHEAD	
	DUD_P	UNDERDRAIN		MEPA_P	EASEMENT, PERMANENT, APPROX.		SIGNS				UG	GAS, UNDERGROUND
ENVIRONMENTAL				MET_P	EASEMENT, TEMPORARY		SBLB	BILLBOARDS		UGH	GAS, HANGING	
	EBLHS	BALE, STRAW		META_P	EASEMENT, TEMPORARY, APPROX.		SM	MULTIPLE POST		UGO	GAS, OVERHEAD	
	ECT	CURTAIN, TURBIDITY		MF_P	FEE ACQUISITION, W/ ACCESS		SSO	STRUCTURE, OVERHEAD		UIC	INFORM CABLE, UNDERGROUND	
	EDMC	DAM, COFFER		MFA_P	FEE ACQUISITION, APPROXIMATE		SSOC	STRUCTURE, OVHD. CANTILEVER		UICH	INFORM CABLE, HANGING	
	EDMEC_P	DAM, EARTHEN CHECK		MFWOA_P	FEE ACQUISITION, W/O ACCESS		STRIPING				UO	OIL LINE, UNDERGROUND
	EDMGC_P	DAM, GRAVEL BAG/SAND BAG CHECK		MHA	HISTORICAL, ACQUISITION		STB*	BROKEN LINE		UOH	OIL LINE, HANGING	
	EDMPC_P	DAM, PREFABRICATED CHECK		MHB	HIGHWAY BOUNDARY		STDB*	DOUBLE BROKEN LINE		UPBP	POLE, BRACE, PUSH BRACE	
	EDMSC_P	DAM, STONE CHECK		MHBW	HWY BOUNDARY, FACE OF WALL		STDL*	DOTTED LINE LONG		UPGW	POLE, GUY WIRE	
	EFNS	FENCE, SILT		MHBWOA	HIGHWAY BOUNDARY, W/O ACCESS		STDS*	DOTTED LINE SHORT		USA	SANITARY SEWER, UNDERGROUND	
	EFNSV	FENCE, SILT & VEGETATION		MJC	JURISDICTION, CITY		STFB*	FULL BARRIER LINE		USAH	SANITARY SEWER, HANGING	
	EFNV	FENCE, VEGETATION		MJCY	JURISDICTION, COUNTY		STH*	HATCH LINE		USAF	SANITARY SEWER, FORCE MAIN, UGND	
	EWAA_P	WETLAND, ADJACENT AREA		MJHD	JURISDICTION, HISTORIC DISTRICT		STPB*	PARTIAL BARRIER LINE		USAFH	SANITARY SEWER, FORCE MAIN, HANG	
	EWF	WETLAND, FEDERAL		MJLL	JURIS., (GREAT, MILITARY) LOT LINE		STRCT	ROUNDAABOUT, CAT TRACKS		UT	TELEPHONE, UNDERGROUND	
	EWFS	WETLAND, FEDERAL AND STATE		MJN	JURISDICTION, NATION		STRYL	ROUNDAABOUT, YIELD LINE		UTH	TELEPHONE, HANGING	
	EWM	WETLAND, MITIGATION AREA		MJPB	JURISDICTION, PUBLIC LANDS		STSB	STOP BAR		UTO	TELEPHONE, OVERHEAD	
	EWS	WETLAND, STATE		MJS	JURISDICTION, STATE		STSE*	SOLID, EDGE		UTV	CABLE TV, UNDERGROUND	
				MJT	JURISDICTION, TOWN		STXL	X WALK, LADDER LINE		UTVH	CABLE TV, HANGING	
				MJV	JURISDICTION, VILLAGE		STXLB	X WALK, LADDER BAR LINE		UTVO	CABLE TV, OVERHEAD	
				MPL	PROPERTY LOT LINE		TRAFFIC CONTROL				UUU	UNKNOWN, UNDERGROUND
				MPLA	PROPERTY LOT LINE, APPROXIMATE		TCSW	SIGNAL, SPAN WIRE		UUH	UNKNOWN, HANGING	
				MSL	SUB LOT LINE						UUO	UNKNOWN, OVERHEAD
											UW	WATER LINE, UNDERGROUND
											UWH	WATER LINE, HANGING
											UWO	WATER LINE, OVERHEAD

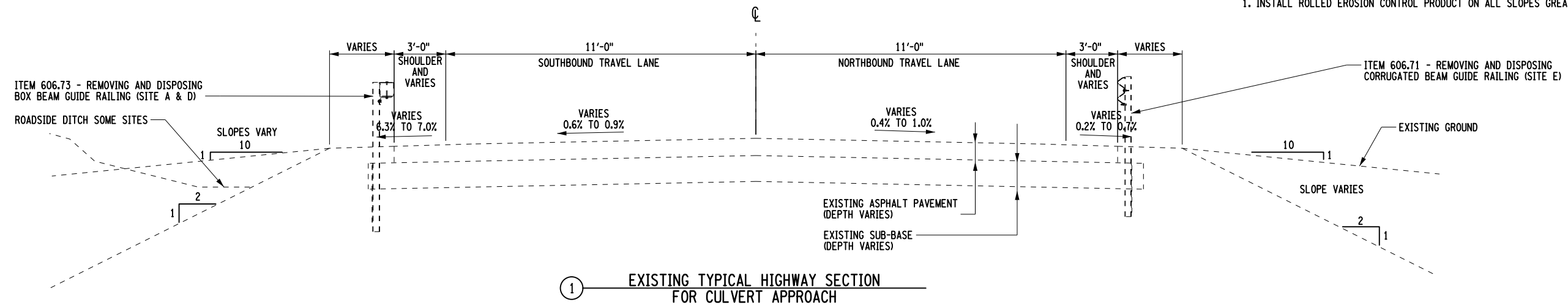
1. THE LEGEND ILLUSTRATES MAPPING FEATURES (EXISTING AND PROPOSED).
2. FEATURES ARE SHOWN AS EITHER LINEAR (ROADWAY GUIDERAIL, ROADWAY SIDEWALK, UTILITY LINES, ETC.) OR POINT (SIGN, UTILITY POLE, ETC.).
3. FEATURES SHOWN ON THE LEGEND AS EXISTING FEATURES ALSO HAVE CORRESPONDING PROPOSED FEATURES.
4. PROPOSED FEATURE SYMBOLOGY IS IDENTICAL TO EXISTING FEATURE SYMBOLOGY EXCLUDING LINE WEIGHT. LINE WEIGHT FOR PROPOSED FEATURES IS THICKER (0.015 in ON B SIZE DRAWINGS).
5. MAPPING FEATURES NOT INCLUDED ON THE LEGEND SHEET DO NOT HAVE A UNIQUE SYMBOLOGY (SUCH AS THE PAVEMENT EDGE, PAVEMENT EDGE OF TRAVEL WAY) AND SHOULD BE LABELED ON THE PLANS.
6. FEATURES SHOWN AT THE HEAVIER WEIGHT ARE PROPOSED ONLY AND DO NOT HAVE CORRESPONDING EXISTING FEATURES.

MULTI CULVERT REPLACEMENT PROJECT	PIN 9805.93	BRIDGES	CULVERTS C940011 C950058 C950059 124408 C950119	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
ROUTE 10 - SH 1271, ROUTE 28 - SH 5659, ROUTE 28 - SH 5037, ROUTE 79 - SH 8209, ROUTE 166 - SH 8226	UTILITY QUALITY LEVEL D			LINE SYMBOLOGY	DRAWING NO. LEG-01 SHEET NO. 4
TOWNS OF BARKER, EXETER, MIDDLEFIELD & WALTON	COUNTY: VARIOUS	REGION: 09			

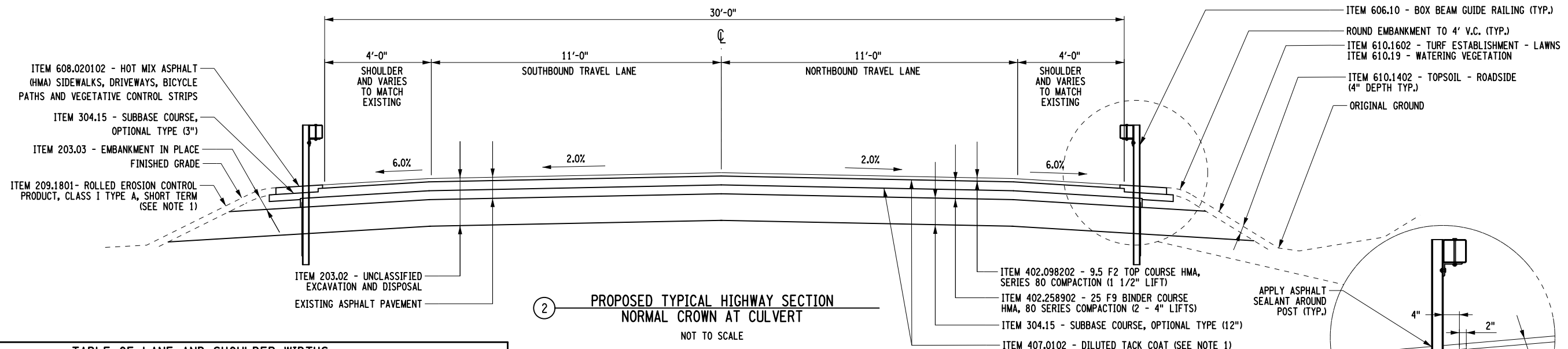
Department of Transportation

ALIGNMENT			DRAINAGE			ITS			ROW MAPPING			SIGNS			UTILITIES					
CELL	NAME	DESCRIPTION	CELL	NAME	DESCRIPTION	CELL	NAME	DESCRIPTION	CELL	NAME	DESCRIPTION	CELL	NAME	DESCRIPTION	CELL	NAME	DESCRIPTION			
⊗	ACC	CENTER OF CURVATURE	+	DINV	INVERT	⊕	IANT P	ANTENNAS	⊕	MDL1P	DEED LINE, TYPE 1	⊕	S	SINGLE POST	⊕	UEB	ELECTRIC, BOX			
+	ACOGO	COGO	▨	DS	STRUCTURE, RECTANGULAR	⊕	IASCTS	ACCOU. SPEED/COUNT SNSR.S	⊕	MDL2P	DEED LINE, TYPE 2	⊕	S.P	SINGLE POST, PROPOSED	⊕	UEM	ELECTRIC, METER			
⊙	ACS	CURVE TO SPIRAL	+	DSI	STRUCTURE, INVERT	⊕	ICABPAD	CABINET & PAD	⊕	MDL3P	DEED LINE, TYPE 3	⊕	SB.P	BACK TO BACK, PROPOSED	⊕	UEMH	ELECTRIC, MANHOLE			
△	ADPL.P	DETOUR, POINT OF INTERSECT.	⊗	DSM	STRUCTURE, MANHOLE	⊕	ICCTV	CCTV SITE	⊕	MDL4P	DEED LINE, TYPE 4	⊕	SDEL	DELINEATORS	⊕	UEPT	ELECTRIC, POLE, TRANS.			
○	ADPL.P	DETOUR, POINT ON LINE	⊗	DSMTXX.P	STRUCTURE, MANHOLE, TYPE "XX" "XX" = 48, 60, 72, 96	⊕	ICDPD	CDPD TRANSCEIVER	⊕	MDL5P	DEED LINE, TYPE 5	⊕	SPM	PARKING METER	⊕	UGM	GAS, METER			
○	AEQN	EQUATION	⊗	DSR	STRUCTURE, ROUND	⊕	ICELLT	CELL PHONE TOWER	⊕	MEEP	EASEMENT, EXISTING	⊕	SRM	REFERENCE MARKERS	⊕	UGMH	GAS, MANHOLE			
⊙	AEQNAHD	EQUATION AHEAD	⊗	DST"x"CB P	STRUCTURE, RECT., WITH CURB TYPE "X" "X" = F, G, N, O, P, R	⊕	ICJB	CONDUIT JACK OR BORING	⊕	MEPAP.P	EASEMENT, PERM., APPROX.	⊕	SRSC3	SHLD, CTY, 123 DIG.	⊕	UGLM	GAS, LINE MARKER			
⊙	AEQNBK	EQUATION BACK	⊗	DST"x" P	STRUCTURE, RECT., TYPE "X" "X" = I, K, L, M, O, P, U	⊕	ICNTLCAB	CONTROLLER CABINET	⊕	MEPP.P	EASEMENT, PERM., BACK LINE	⊕	SRSC4	SHLD, CTY, 4 DIG.	⊕	UGP	GAS/FUEL PUMP			
⊙	AEVT	EVENT STATION	ENVIRONMENTAL			⊕	ICPB	COMMUNICATION PULL BOX	⊕	MEPSP.P	EASEMENT, PERM., SHAPE	⊕	SRSCT2	SHLD, CTY TOUR, 1-2 DIG.	⊕	UGV	GAS, VALVE			
⊙	APC	POINT OF CURVATURE				⊕	ICTD	CONDUIT TURNING DOWN	⊕	MFAP.P	FEE ACQUISITION, APPROX.	⊕	SRSCT4	SHLD, CTY TOUR, 3-4 DIG.	⊕	UGVT	GAS, VENT	⊕	ULP	LIGHTING, POLE
⊙	APCC	POINT OF COMPOUND CURVATURE	⊕	ICVT	COMM. VEH. ROAD TRANSCEIVER	⊕	ICTU	CONDUIT TURNING UP	⊕	MFP.P	FEE ACQUISITION, BACK LINE	⊕	SRSI	SHLD, INTERSTATE	⊕	ULPM	LIGHTING, POLE, MEDIAN			
△	API	POINT OF INTERSECTION	⊕	IDFAULT	DEFAULT	⊕	ICVTRT	COMM. VEH. ROAD TRANSCEIVER	⊕	MFS.P	FEE ACQUISITION, SHAPE	⊕	SRSN2	SHLD, NATIONAL, 2 DIG.	⊕	ULPP	LIGHTING, POLE, PED.			
△	APOB	POINT OF BEGINNING	⊕	IEZR	E-ZPASS READER	⊕	IDEFAULT	DEFAULT	⊕	MHBAP	HIGHWAY BNDRY., APPROX.	⊕	SRSN3	SHLD, NATIONAL, 3 DIG.	⊕	UMFC	MISC. FILLER CAP			
○	APOC	POINT OF CURVATURE	⊕	IEZTR	TRANSMITTAL READER	⊕	IEZR	E-ZPASS READER	⊕	MHBCP	HISTORICAL, BLDG. CORNERS	⊕	SRSS2	SHLD, STATE, 2 DIG.	⊕	UOLM	OIL, LINE MARKER			
△	APOE	POINT OF END	⊕	IFOX	FIBER OPTIC X-CONNECT CABINET	⊕	IFUSSPL	FUSION SPLICE	⊕	MHBP	HIGHWAY BNDRY, PT.	⊕	SRSS3	SHLD, STATE, 3 DIG.	⊕	UP	POLE, WITH UTILITY			
○	APOL	POINT ON LINE	⊕	IMCSP	MECHANICAL SPLICE	⊕	IHARADV	HAR ADVISORY SIGN	⊕	MJCP	PT., JURIS. CITY	⊕	SRSS4	SHLD, STATE, 4 DIG.	⊕	UPD	POLE, DEAD (NO UTILITY)			
○	APOS	POINT ON SPIRAL	⊕	IMSCS	PORT. SPEED & COUNT SENSOR	⊕	IHARST	HAR SITE	⊕	MPBC	PT., BUILDING CORNER	TRAFFIC CONTROL			⊕	UPL	POLE, WITH LIGHT			
○	APOT	POINT ON TANGENT	⊕	IMSCS	PORT. SPEED & COUNT SENSOR	⊕	ILC	LOAD CENTER	⊕	MPC	PT., CROSS CUT				⊕	TCBJ	BOX, JUNCTION	⊕	USMH	SANITARY SEWER MANHOLE
△	APOVC	POINT ON VERTICAL CURVE	⊕	IMSCS	PORT. SPEED & COUNT SENSOR	⊕	ILC	LOAD CENTER	⊕	MPDH	PT., DRILL HOLE	⊕	TCBP	BOX, PULL BOX	⊕	UTB	TELEPHONE, BOOTH			
△	APOVT	POINT ON VERTICAL TANGENT	⊕	IMSCS	PORT. SPEED & COUNT SENSOR	⊕	IMECSPL	MECHANICAL SPLICE	⊕	MPF	PT., FENCE LOCATION	⊕	TCBS	BOX, SPLICE	⊕	UTLM	TELEPHONE, LINE MARKER			
Y	APORC	POINT ON REVERSE CURVE	⊕	IMSCS	PORT. SPEED & COUNT SENSOR	⊕	IMECSPL	MECHANICAL SPLICE	⊕	MPIP	PT., IRON PIPE	⊕	TCMC	MICROCOMPUTER CABINET	⊕	UTMH	TELEPHONE, MANHOLE			
⊙	APT	POINT OF TANGENCY	⊕	IMSCS	PORT. SPEED & COUNT SENSOR	⊕	IMCSP	MECHANICAL SPLICE	⊕	MPIR	PT., IRON ROD	⊕	TCPP	PED POLE	⊕	UTVLM	CABLE TV, LINE MARKER			
⊙	APVC	POINT OF VERTICAL CURVATURE	⊕	IMSCS	PORT. SPEED & COUNT SENSOR	⊕	IMCSP	MECHANICAL SPLICE	⊕	MPM	PT., MONUMENT	⊕	TCSH	SIGNAL HEADS	⊕	UTVPB	CABLE TV, PULL BOX			
△	APVCC	POINT OF VERT. CMPND CURVE	⊕	IMSCS	PORT. SPEED & COUNT SENSOR	⊕	IMCSP	MECHANICAL SPLICE	⊕	MPMM	PT., MONUMENT, MISC.	⊕	TCSP	SIGNAL POLE	⊕	UUB	UNKNOWN, BOX			
⊙	APVI	POINT OF VERT. INTERSECTION	GEOTECHNICAL			⊕	IMCSP	MECHANICAL SPLICE	⊕	MPN	PT., NAIL	TRAFFIC WORK ZONE			⊕	UUB	UNKNOWN, BOX			
△	APVRC	POINT OF VERT. REVERSE CURVE				⊕	IMCSP	PORT. SPEED & COUNT SENSOR	⊕	IMCSP	MECHANICAL SPLICE				⊕	MPS	PT., SPIKE	⊕	TWZAP.P	ARROW PANEL	⊕	UUMH	UNKNOWN, MANHOLE
⊙	APVT	POINT OF VERTICAL TANGENCY	LANDSCAPE			⊕	IPEDS	PEDESTRIAN SIGNAL HEAD	⊕	MPS	PT., SPIKE	⊕	TWZAP.P	ARROW PANEL, CAUTION MODE	⊕	UUPB	UNKNOWN, PULL BOX			
⊙	ASC	SPIRAL TO CURVE				⊕	IPEDS	PEDESTRIAN SIGNAL HEAD	⊕	IPSS	PAVEMENT SURFACE SENSOR	⊕	MPS	PT., SPIKE	⊕	TWZAP.P	ARROW PANEL, TRAILER OR SUPPORT	⊕	UUVL	UNKNOWN, VALVE
⊙	ASPI	SPIRAL POINT OF INTERSECTION	+	LELS	ELEVATION, SPOT	⊕	IPSS	PAVEMENT SURFACE SENSOR	⊕	MPTW	PT., TREE W/ WIRE	⊕	TWZB.P	BARRICADE (TYPE III)	⊕	UUVT	UNKNOWN, VENT			
○	ASTS	SPIRAL TO SPIRAL	⊕	LFP	FLAG POLE	⊕	IPSS	PAVEMENT SURFACE SENSOR	⊕	MPWL	PT., WALL LOCATION	⊕	TWZB.P	BARRICADE (TYPE III)	⊕	UUVT	UNKNOWN, VENT			
⊙	AST	SPIRAL TO TANGENT	⊕	LMB	MAILBOX	⊕	IPSS	PAVEMENT SURFACE SENSOR	⊕	ROW ACQUISITION			⊕	TWZB.P	BARRICADE (TYPE III)	⊕	UUVT	UNKNOWN, VENT		
⊙	ATS	TANGENT TO SPIRAL	⊕	LMB	MAILBOX	⊕	IPSS	PAVEMENT SURFACE SENSOR	⊕				MI.FE	MFS.P.T	FEE ACQUISITION	⊕	TWZB.P	BARRICADE (TYPE III)	⊕	UUVT	UNKNOWN, VENT
△	AVEVT	VERTICAL EVENT POINT	⊕	LPB	PAPER BOX	⊕	IPSS	PAVEMENT SURFACE SENSOR	⊕	MI.FE	MFS.P.T	FEE ACQUISITION	⊕	TWZB.P	BARRICADE (TYPE III)	⊕	UUVT	UNKNOWN, VENT		
○	AVHIGH	VERTICAL HIGH POINT	⊕	LPB	PAPER BOX	⊕	IPSS	PAVEMENT SURFACE SENSOR	⊕	MI.FE	MFS.P.T	FEE ACQUISITION	⊕	TWZB.P	BARRICADE (TYPE III)	⊕	UUVT	UNKNOWN, VENT		
○	AVLOW	VERTICAL LOW POINT	⊕	LPB	PAPER BOX	⊕	IPSS	PAVEMENT SURFACE SENSOR	⊕	MI.FE	MFS.P.T	FEE ACQUISITION	⊕	TWZB.P	BARRICADE (TYPE III)	⊕	UUVT	UNKNOWN, VENT		
BRIDGE			⊕	LPB	PAPER BOX	⊕	IPSS	PAVEMENT SURFACE SENSOR	⊕	MI.FE	MFS.P.T	FEE ACQUISITION	⊕	TWZB.P	BARRICADE (TYPE III)	⊕	UUVT	UNKNOWN, VENT		
□	BSC	BRIDGE, SCUPPER	⊕	LPB	PAPER BOX	⊕	IPSS	PAVEMENT SURFACE SENSOR	⊕	MI.FE	MFS.P.T	FEE ACQUISITION	⊕	TWZB.P	BARRICADE (TYPE III)	⊕	UUVT	UNKNOWN, VENT		
CONTROL			⊕	LPB	PAPER BOX	⊕	IPSS	PAVEMENT SURFACE SENSOR	⊕	MI.FE	MFS.P.T	FEE ACQUISITION	⊕	TWZB.P	BARRICADE (TYPE III)	⊕	UUVT	UNKNOWN, VENT		
△	CBP	BASELINE, POINT	⊕	LPB	PAPER BOX	⊕	IPSS	PAVEMENT SURFACE SENSOR	⊕	MI.FE	MFS.P.T	FEE ACQUISITION	⊕	TWZB.P	BARRICADE (TYPE III)	⊕	UUVT	UNKNOWN, VENT		
○	CBPOL	BASELINE, POINT ON LINE	⊕	LPB	PAPER BOX	⊕	IPSS	PAVEMENT SURFACE SENSOR	⊕	MI.FE	MFS.P.T	FEE ACQUISITION	⊕	TWZB.P	BARRICADE (TYPE III)	⊕	UUVT	UNKNOWN, VENT		
⊙	CBSP	BASELINE, SPUR POINT	⊕	LPB	PAPER BOX	⊕	IPSS	PAVEMENT SURFACE SENSOR	⊕	MI.FE	MFS.P.T	FEE ACQUISITION	⊕	TWZB.P	BARRICADE (TYPE III)	⊕	UUVT	UNKNOWN, VENT		
⊙	CBTP	BASELINE, TIE POINT	⊕	LPB	PAPER BOX	⊕	IPSS	PAVEMENT SURFACE SENSOR	⊕	MI.FE	MFS.P.T	FEE ACQUISITION	⊕	TWZB.P	BARRICADE (TYPE III)	⊕	UUVT	UNKNOWN, VENT		
□	CPBM	BENCHMARK	⊕	LPB	PAPER BOX	⊕	IPSS	PAVEMENT SURFACE SENSOR	⊕	MI.FE	MFS.P.T	FEE ACQUISITION	⊕	TWZB.P	BARRICADE (TYPE III)	⊕	UUVT	UNKNOWN, VENT		
⊕	CPH	POINT, HORIZ. PHOTOGRAMMETRY	⊕	LPB	PAPER BOX	⊕	IPSS	PAVEMENT SURFACE SENSOR	⊕	MI.FE	MFS.P.T	FEE ACQUISITION	⊕	TWZB.P	BARRICADE (TYPE III)	⊕	UUVT	UNKNOWN, VENT		
⊙	CPSM	POINT, SURVEY MARKER, PERM.	⊕	LPB	PAPER BOX	⊕	IPSS	PAVEMENT SURFACE SENSOR	⊕	MI.FE	MFS.P.T	FEE ACQUISITION	⊕	TWZB.P	BARRICADE (TYPE III)	⊕	UUVT	UNKNOWN, VENT		
⊕	CPSV	POINT, VERT., PHOTOGRAMMETRY	⊕	LPB	PAPER BOX	⊕	IPSS	PAVEMENT SURFACE SENSOR	⊕	MI.FE	MFS.P.T	FEE ACQUISITION	⊕	TWZB.P	BARRICADE (TYPE III)	⊕	UUVT	UNKNOWN, VENT		
1. THE LEGEND ILLUSTRATES MAPPING FEATURES (EXISTING AND PROPOSED). 2. FEATURES ARE SHOWN AS EITHER LINEAR (ROADWAY GUIDERAIL, ROADWAY SIDEWALK, UTILITY LINES, ETC.) OR POINT (SIGN, UTILITY POLE, ETC.). 3. FEATURES SHOWN ON THE LEGEND AS EXISTING FEATURES ALSO HAVE CORRESPONDING PROPOSED FEATURES. 4. PROPOSED FEATURE SYMBOLOGY IS IDENTICAL TO EXISTING FEATURE SYMBOLOGY EXCLUDING LINE WEIGHT. LINE WEIGHT FOR PROPOSED FEATURES IS THICKER (0.015 IN ON B SIZE DRAWINGS). 5. MAPPING FEATURES NOT INCLUDED ON THE LEGEND SHEET DO NOT HAVE A UNIQUE SYMBOLOGY (SUCH AS THE PAVEMENT EDGE, PAVEMENT EDGE OF TRAVEL WAY) AND SHOULD BE LABELED ON THE PLANS. 6. FEATURES SHOWN AT THE HEAVIER WEIGHT ARE PROPOSED ONLY AND DO NOT HAVE CORRESPONDING EXISTING FEATURES.			⊕	LUKP	UNKNOWN POINT	⊕	IWVRC	WIRELESS VIDEO RECEIVER	⊕	RES P	ELEVATION, SPOT	⊕	TWZV.P	WORK VEHICLE	⊕	UUVT	UNKNOWN, VENT			
			⊕	LUKP	UNKNOWN POINT	⊕	IWVRC	WIRELESS VIDEO RECEIVER	⊕	RES P	ELEVATION, SPOT	⊕	RGA	GUIDE RAIL, ANCHOR	⊕	TWZV.P	WORK VEHICLE	⊕	UUVT	UNKNOWN, VENT
			⊕	LUKP	UNKNOWN POINT	⊕	IWVRC	WIRELESS VIDEO RECEIVER	⊕	RES P	ELEVATION, SPOT	⊕	RGA	GUIDE RAIL, ANCHOR	⊕	TWZV.P	WORK VEHICLE	⊕	UUVT	UNKNOWN, VENT
			⊕	LUKP	UNKNOWN POINT	⊕	IWVRC	WIRELESS VIDEO RECEIVER	⊕	RES P	ELEVATION, SPOT	⊕	RGA	GUIDE RAIL, ANCHOR	⊕	TWZV.P	WORK VEHICLE	⊕	UUVT	UNKNOWN, VENT
			⊕	LUKP	UNKNOWN POINT	⊕	IWVRC	WIRELESS VIDEO RECEIVER	⊕	RES P	ELEVATION, SPOT	⊕	RGA	GUIDE RAIL, ANCHOR	⊕	TWZV.P	WORK VEHICLE	⊕	UUVT	UNKNOWN, VENT
			⊕	LUKP	UNKNOWN POINT	⊕	IWVRC	WIRELESS VIDEO RECEIVER	⊕	RES P	ELEVATION, SPOT	⊕	RGA	GUIDE RAIL, ANCHOR	⊕	TWZV.P	WORK VEHICLE	⊕	UUVT	UNKNOWN, VENT
MULTI CULVERT REPLACEMENT PROJECT ROUTE 10 - SH 1271, ROUTE 28 - SH 5659, ROUTE 28 - SH 5037, ROUTE 79 - SH 8209, ROUTE 166 - SH 8226 TOWNS OF BARKER, EXETER, MIDDLEFIELD & WALTON COUNTY: VARIOUS REGION: 09									PIN 9805.93 UTILITY QUALITY LEVEL D			BRIDGES CULVERTS C940011 C950058 C950059 124408 C950119			ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED POINT SYMBOLOGY			CONTRACT NUMBER D262989 DRAWING NO. LEG-02 SHEET NO. 5		

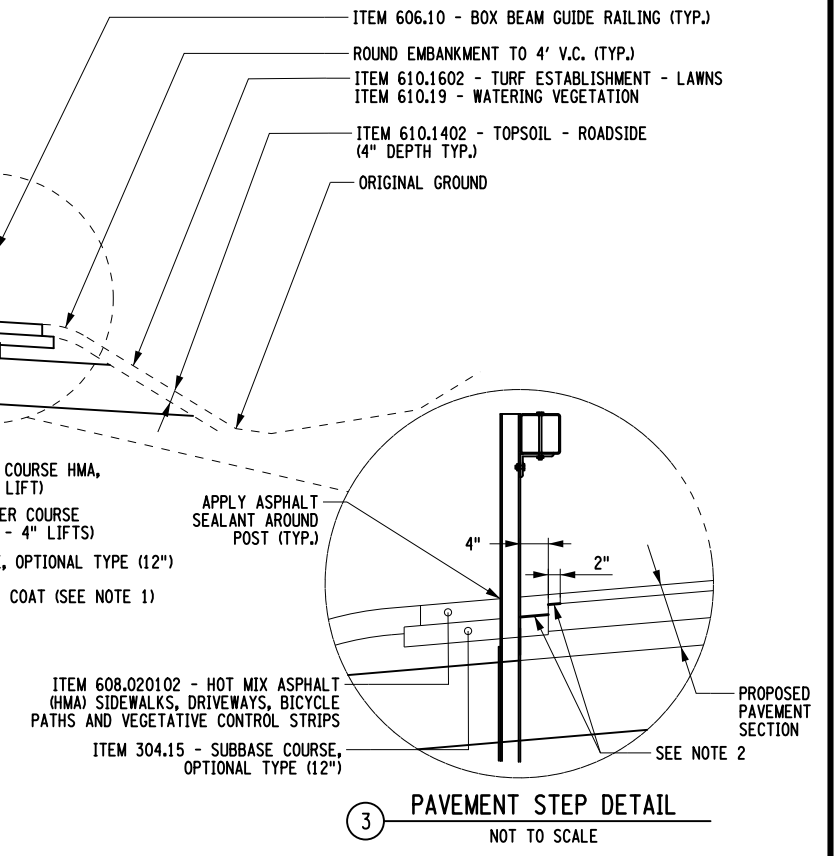
NOTES:
 1. INSTALL ROLLED EROSION CONTROL PRODUCT ON ALL SLOPES GREATER THAN 1:3



1 EXISTING TYPICAL HIGHWAY SECTION FOR CULVERT APPROACH
 NOT TO SCALE



2 PROPOSED TYPICAL HIGHWAY SECTION NORMAL CROWN AT CULVERT
 NOT TO SCALE



3 PAVEMENT STEP DETAIL
 NOT TO SCALE

TABLE OF LANE AND SHOULDER WIDTHS					
SITE	STATIONING	LANE WIDTH	SHOULDER WIDTH	PAVEMENT CROSS SLOPE	NOTES
A	5+82.00 TO 6+72.00	11'	4' AND VARIES TO MATCH EXISTING	MATCH EXISTING PAVEMENT	REALIGN DITCH N.E. QUADRANT
B	4+13.00 TO 4+63.00	11'	4' AND VARIES TO MATCH EXISTING	MATCH EXISTING PAVEMENT	RETAINING WALL N.E. QUADRANT
C	3+50.00 TO 4+05.00	11'	4' AND VARIES TO MATCH EXISTING	MATCH EXISTING PAVEMENT	REALIGN DITCH S.W. QUADRANT
D	5+89.00 TO 6+44.00	11'	4' AND VARIES TO MATCH EXISTING	MATCH EXISTING PAVEMENT	REALIGN DITCH N.W. QUADRANT
E	5+90.00 TO 7+00.00	11'	4' AND VARIES TO MATCH EXISTING	MATCH EXISTING PAVEMENT	

ITEM	DESCRIPTION	UNIT	ITEM	DESCRIPTION	UNIT	NOTES:
203.02	UNCLASSIFIED EXCAVATION AND DISPOSAL	CY	606.73	REMOVING AND DISPOSING BOX BEAM GUIDE RAILING	LF	1. TACK COAT SHALL BE APPLIED TO ALL SURFACES RECEIVING ASPHALT OVERLAY COURSES (EXCEPT SUBBASE COURSE) PRIOR TO PLACEMENT OF EACH ASPHALT LIFT.
203.03	EMBANKMENT IN PLACE	CY	608.020102	(HMA) SIDEWALKS, DRIVEWAYS, BICYCLE PATHS AND VEGETATIVE CONTROL STRIPS	TON	
304.15	SUBBASE COURSE, OPTIONAL TYPE	CY	610.1402	TOPSOIL - ROADSIDE	CY	2. FOR PAVEMENT LIFTS LESS THAN 2" STEP THE PAVEMENT LIFT BENEATH IT 2". FOR PAVEMENT LIFTS GREATER THAN 2" STEP THE PAVEMENT LIFT BENEATH IT 4".
209.1801	TEMPORARY ROLLED EROSION CONTROL PRODUCT, CLASS I TYPE A, SHORT TERM	SY	610.1602	TURF ESTABLISHMENT - LAWNS	SY	
402.098202	9.5 F2 TOP COURSE HMA, 80 SERIES COMPACTION	TON	610.19	WATERING VEGETATION	M GAL	
402.258902	25 F9 BINDER COURSE HMA, 80 SERIES COMPACTION	TON				
407.0102	DILUTED TACK COAT	GAL				
606.10	BOX BEAM GUIDE RAILING	LF				
606.71	REMOVING AND DISPOSING CORRUGATED BEAM GUIDE RAILING	LF				

AFFIX SEAL: ON: _____
 ALTERED BY: ON: _____



AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	MULTI CULVERT REPLACEMENT PROJECT	PIN 9805.90	BRIDGES	CULVERTS C940011 C950058 C950059 124408 C950119	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	ROUTE 10 - SH 1271, ROUTE 28 - SH 5659, ROUTE 28 - SH 5037, ROUTE 79 - SH 8209, ROUTE 166 - SH 8226	UTILITY QUALITY LEVEL D			EXISTING & PROPOSED TYPICAL SECTIONS	DRAWING NO. TYP-01
	TOWNS OF BARKER, EXETER, MIDDLEFIELD & WALTON					SHEET NO. 6
	COUNTY: VARIOUS	REGION: 09				

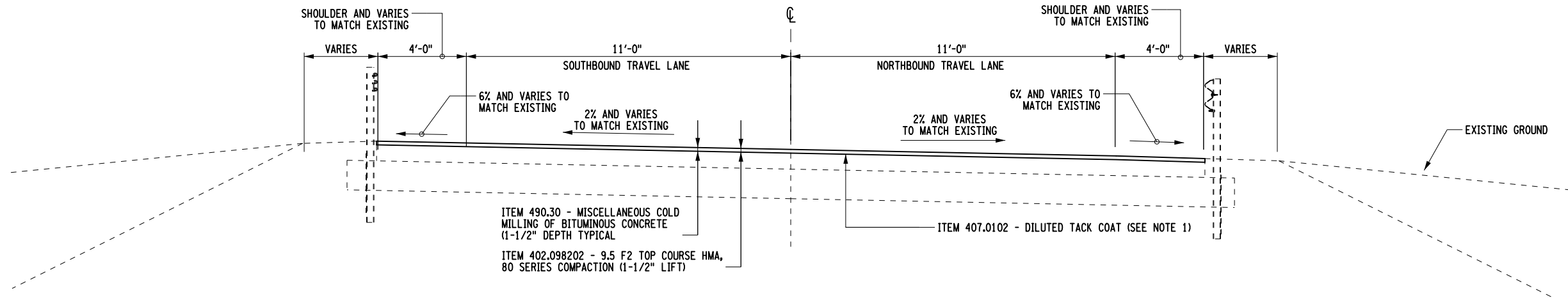
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



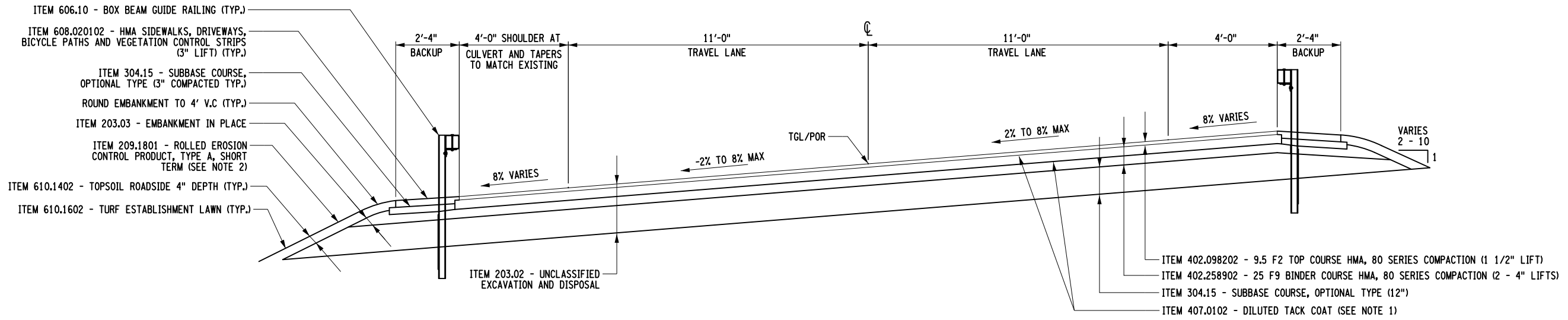
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PROJECT MANAGER G. WOJCIK
 CHECK J. L. PHILLIPS
 DRAFTING G. MEYER
 CHECK J. L. PHILLIPS
 DESIGN D. MELSZER
 JOB MANAGER J. L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER

PROJECT MANAGER G. WOJCIK
 CHECK J. L. PHILLIPS
 DRAFTING G. MEYER
 CHECK J. L. PHILLIPS
 DESIGN D. MELSZER
 JOB MANAGER J. L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER



1 PROPOSED MILL AND FILL SECTION SITE D
 NOT TO SCALE
 STA. C 3+26.00 TO STA. C 3+52.00
 STA. C 4+08.00 TO STA. C 4+60.00
 STA. D 5+70.00 TO STA. D 5+89.00
 STA. D 6+44.00 TO STA. D 6+60.00



2 TYPICAL RECONSTRUCTION SECTION - SUPERELEVATED
 NOT TO SCALE

ITEM	DESCRIPTION	UNIT	ITEM	DESCRIPTION	UNIT	NOTES:					
203.02	UNCLASSIFIED EXCAVATION AND DISPOSAL	CY	608.020102	HMA SIDEWALKS, DRIVEWAYS, BICYCLE PATHS AND VEGETATION CONTROL STRIPS	TON	1. TACK COAT SHALL BE APPLIED TO ALL SURFACES RECEIVING ASPHALT OVERLAY COURSES (EXCEPT SUBBASE COURSE) PRIOR TO PLACEMENT OF EACH ASPHALT LIFT. 2. PROVIDE ROLLED EROSION CONTROL ON SLOPES STEEPER THAN 1:3.					
203.03	EMBANKMENT IN PLACE	CY	610.1402	TOPSOIL - ROADSIDE	CY						
209.1801	ROLLED EROSION CONTROL PRODUCT, CLASS I TYPE A, SHORT TERM	SF	610.1602	TURF ESTABLISHMENT - LAWNS	SY						
304.15	SUBBASE COURSE, OPTIONAL TYPE	CY									
402.098202	9.5 F2 TOP COURSE HMA, 80 SERIES COMPACTION	TON									
402.258902	25 F9 BINDER COURSE HMA, 80 SERIES COMPACTION	TON									
407.0102	DILUTED TACK COAT	GAL									
490.30	COLD MILLING OF BITUMINOUS CONCRETE	SY									
606.10	BOX BEAM GUIDE RAILING	LF									
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:			MULTI CULVERT REPLACEMENT PROJECT ROUTE 10 - SH 1271, ROUTE 28 - SH 5659, ROUTE 28 - SH 5037, ROUTE 79 - SH 8209, ROUTE 166 - SH 8226 TOWNS OF BARKER, EXETER, MIDDLEFIELD & WALTON COUNTY: VARIOUS		PIN 9805.93 BRIDGES UTILITY QUALITY LEVEL D REGION: 09		ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED SUPERELEVATED RECONSTRUCTION AND MILL AND FILL TYPICAL SECTIONS		CONTRACT NUMBER D262989 DRAWING NO. TYP-02 SHEET NO. 7		
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.											



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STREAM RESTRICTION DATES

1. THE FOLLOWING STREAM RESTRICTION DATES APPLY TO THE SPECIFIC CULVERT LOCATIONS:

ROUTE 10, C940011	UNNAMED TRIBUTARY TO THE WEST BRANCH OF THE DELAWARE RIVER
ROUTE 28, C950058	SKROMKO ROAD CREEK INLET TO CANADARAGO LAKE
ROUTE 28, C950059	HYDER CREEK INLET TO CANADARAGO LAKE
ROUTE 79, 124408	UNNAMED TRIBUTARY TO THE TIOUGHNIOGA RIVER
ROUTE 166, C950119	INDIAN RUN RIVER TRIBUTARY TO THE CHERRY VALLEY CREEK

TREE CUTTING RESTRICTION DATES

1. TREE CUTTING IS ONLY ALLOWED DURING THE WINTER MONTHS BETWEEN THE DATES OF OCTOBER 31 TO MARCH 31. THESE RESTRICTIONS ONLY APPLY TO TREES 3" IN DIAMETER AT BREAST HEIGHT OR LARGER.

GENERAL NOTES FOR EROSION CONTROL

- THE CONTRACTOR SHALL COMPLY WITH ALL PROVISIONS OF ANY APPLICABLE FEDERAL OR STATE CERTIFICATIONS/PERMITS IDENTIFIED IN THE PROPOSAL.
- ALL CHANGES PROPOSED BY THE CONTRACTOR SHALL BE SUBMITTED TO THE E.I.C. PRIOR TO THE ANTICIPATED START OF WORK AND MUST BE APPROVED BY THE REVIEWING AGENCY AND THE ENGINEER, PRIOR TO START OF WORK. IT REMAINS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE NECESSARY PLANS, DETAILS, CALCULATIONS AND SO FORTH, NECESSARY TO SUBMIT COMPLETE APPLICATION PACKAGE TO THE REGULATORY AGENCIES INVOLVED. FAILURE TO OBTAIN NECESSARY PERMITS OR APPROVALS FROM REGULATORY AGENCIES SHALL NOT BE GROUNDS FOR CLAIMS AGAINST THE STATE DUE TO FAILURE TO COMPLETE WORK GOVERNED BY RESTRICTIVE DATES IN THE CONTRACT.
- THE CONTRACTOR SHALL DESIGNATE TO THE ENGINEER AN EROSION AND SEDIMENT CONTROL SUPERVISOR WITH ADEQUATE TRAINING, EXPERIENCE, AND AUTHORITY TO IMPLEMENT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES, AS PER THE REQUIREMENTS OF SECTION 209 AND ALL ASSOCIATED FEDERAL AND STATE LAWS AND REGULATIONS. THIS INDIVIDUAL WILL BE RESPONSIBLE FOR MONITORING IMPENDING WEATHER CONDITIONS THAT MAY HAVE AN AFFECT ON DAILY CONSTRUCTION OPERATIONS AND THE NEED TO PROVIDE THE REQUIRED EROSION AND SEDIMENT CONTROLS. THE CONTRACTOR WILL PROVIDE AN ON-SITE RAIN GAUGE TO COMPLY WITH SECTION 209-3.02, TO RECORD DAILY RAINFALL AND THE NEED TO INSPECT ALL TEMPORARY CONTROLS AFTER A RAINFALL OF 1/2" OR MORE WITHIN A 12 HOUR PERIOD.
- "STABILIZED" IS DEFINED AS A "NON-ERODIBLE SURFACE".
- THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE FACT THAT THROUGHOUT THE DURATION OF THE CONTRACT IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT ALL WATER COURSES FROM WATER BORNE SEDIMENT OR POLLUTANTS ORIGINATING FROM ANY WORK DONE, ON, OR IN SUPPORT OF THIS PROJECT. THE GENERAL NOTES FOR SOIL EROSION PREVENTION AND SEDIMENT CONTROL AND DETAILS SHOWN IN THESE DRAWINGS AND THOSE PROVIDED IN THE RESPECTIVE NYSDOT STANDARD SHEETS ARE NOT INTENDED TO BE ALL INCLUSIVE BUT TO SERVE AS A GUIDELINE FOR THE DEVELOPMENT OF THE CONTRACTOR'S EROSION CONTROL SCHEME REQUIRED UNDER SECTION 107-12 OF THE STANDARD SPECIFICATIONS.
- PRIOR TO THE START OF WORK, THE E.I.C. IN CONSULTATION WITH THE CONSTRUCTION ENVIRONMENTAL COORDINATOR SHALL APPROVE THE LOCATION(S) AND INSTALLATION OF THE PROPOSED EROSION CONTROL MEASURES AND TREE / VEGETATION PROTECTION BARRIER.
- CONSTRUCTION OPERATIONS SHALL BE CONDUCTED IN SUCH A MANNER AS TO PREVENT ANY DAMAGE TO WATER COURSES FROM POLLUTION BY DEBRIS, SEDIMENT, OR OTHER FOREIGN MATERIAL, OR FROM MANIPULATION OF EQUIPMENT AND/OR MATERIALS IN OR NEAR WATER COURSES. THE CONTRACTOR SHALL NOT RETURN DIRECTLY TO WATER COURSES, ANY WATER WHICH HAS BEEN USED FOR WASH PURPOSES OR OTHER SIMILAR OPERATIONS WHICH CAUSE THIS WATER TO BECOME POLLUTED WITH SAND, SILT, CEMENT, OIL OR OTHER IMPURITIES. IF THE CONTRACTOR USES WATER FROM WATER COURSES, THE CONTRACTOR SHALL CONSTRUCT AN INTAKE OR TEMPORARY DAM TO PROTECT AND MAINTAIN STREAM WATER QUALITY.
- ALL CONSTRUCTION EQUIPMENT TO BE OPERATED ON WORK PADS, HAUL ROADS OR OTHER AREAS WITHIN THE IMMEDIATE AREA OF ANY WATER COURSES SHALL BE INSPECTED DAILY TO ASSURE THAT ALL BELTS, HOSES AND HYDRAULIC LINES AND FITTINGS ARE IN GOOD CONDITION. ANY EQUIPMENT EXHIBITING SIGNS OF CRACKED OR WEATHERED HOSES OR PRESSURIZED LINES SHALL BE REPAIRED BEFORE USE IN THESE AREAS. VEHICLE TIRES THAT HAVE BEEN CALCIUM LOADED SHALL BE FREE OF CRACKS, OR DAMAGE AND / OR WEATHER CHECKING. THE CONTRACTOR SHALL PROVIDE AN ADEQUATE SUPPLY OF ABSORBENT PADS OR BLANKETS, AND/OR OTHER ABSORBENT MATERIALS TO CONTAIN AND CLEAN UP ANY ACCIDENTAL SPILLS THAT OCCUR WITHIN THE BANKS OF ANY WATER COURSES.
- THE CONTRACTOR AS PART OF THE WORK TO BE PERFORMED SHALL BE REQUIRED TO MAINTAIN THE EXISTING WATER FLOW IN THE STREAM. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR HIS/HER WRITTEN APPROVAL, PRIOR TO BEGINNING WORK ON THE CULVERT AND/OR STRUCTURE, THEIR PLAN FOR MAINTAINING THE WATERFLOW.
- ALL FILL MATERIAL TO BE PLACED WITHIN THE BANKS OF ANY WATERWAY SHALL BE WASHED AND RELATIVELY CLEAN OF DIRT AND FINE MATERIALS THAT COULD BE WASHED INTO THE STREAM.


GENERAL NOTES FOR EROSION CONTROL (CON'T.)

- INSPECTION OF SOIL EROSION PREVENTION & SEDIMENT CONTROL MEASURES SHALL BE DONE ON A WEEKLY BASIS AND AFTER EVERY STORM OF 1/2" OR GREATER OR A.O.B.E. REPAIRS SHALL BE MADE AS NEEDED AND SEDIMENT SHALL BE REMOVED WHEN THE STORAGE VOLUME OF AN EROSION CONTROL MEASURE IS APPROACHING ONE HALF OF ITS INTENDED CAPACITY OR A.O.B.E. THE COST OF CLEANING AND REMOVING TEMPORARY SOIL EROSION AND WATER POLLUTION DEVICES SHALL BE INCLUDED IN THE PRICE BID FOR THE INSTALLATION OF THAT ITEM. THE CONTRACTOR SHALL REPLACE OR REPAIR POLLUTION CONTROL STRUCTURES THAT FAIL BY CLOSE OF BUSINESS ON THE DAY FOLLOWING THE FAILURE.
- SILT FENCES SHALL BE MAINTAINED IN GOOD OPERATIVE CONDITION UNTIL DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED WITH TURF OR OTHER EROSION RESISTANT MATERIALS AS SPECIFIED IN THE CONTRACT DOCUMENTS. IF DITCH CLEANING OR RESHAPING IS SPECIFIED OR ORDERED, THE WORK SHALL BE STARTED AT THE MOST UP-GRADIENT LOCATION ALONG THE DITCH AND THE WORK SHALL BE PERFORMED IN A DOWN-GRADIENT DIRECTION. CHECK DAMS SHALL BE INSTALLED AS NEEDED AS WORK IS PROGRESSSED. CHECKED DAMS ON THE PLAN SHALL BE ADJUSTED A.O.B.E AS FIELD CONDITIONS DEMAND. IN AREAS WITH STEEP SLOPES THE CHECK DAMS SHALL BE ADJUSTED SO THEY ARE SPACED AT A 5' VERTICAL DIFFERENTIAL OR A.O.B.E.
- THE CONTRACTOR SHALL GRADE AND TRIM ALL SLOPES AS THE EXCAVATION PROGRESSES AND, AT A MINIMUM, MULCH ALL FINAL GRADED SLOPES WITHIN TWO DAYS OR AS ORDERED BY THE ENGINEER. THE CONTRACTOR SHALL HAVE A HYDROSEEDER AND/OR MULCHING MACHINE AVAILABLE FOR THE PROJECT AT ALL TIMES. ALL AREAS OF SOIL DISTURBANCE RESULTING FROM THIS PROJECT SHALL BE TRIMMED, TOPSOILED, MULCHED, SEEDED, AND/OR HAVE EROSION CONTROL BLANKETS APPLIED (WHERE NEEDED OR SPECIFIED) AS INDICATED IN THE CONTRACT DOCUMENTS. ITEM 209.1003 - SEED AND MULCH TEMPORARY SHALL BE USED FOR TEMPORARY STABILIZATION MEANS FOR EROSION CONTROL DURING CONSTRUCTION UNTIL PERMANENT METHODS CAN BE APPLIED.
- ANY PORTION OF AN AREA ON WHICH CLEARING AND GRUBBING, EXCAVATION, BORROW, FILL, OR OTHER WORK WITHIN THE R.O.W. HAS PERMANENTLY CEASED SHALL BE STABILIZED, BY EITHER TEMPORARY OR PERMANENT MEANS. THE CONTRACTOR WILL ALSO BE AWARE OF IMPENDING WEATHER CONDITIONS AND THE NEED TO APPLY MULCH ON AREAS THAT WORK IS PROGRESSING.
- THE CONTRACTOR MUST CONTINUALLY BE PREPARED TO REPAIR AND REMULCH DISTURBED SOIL AREAS TO PROVIDE NECESSARY COVERAGE TO LOCATIONS THAT HAVE BEEN DAMAGED BY STORMS OR EQUIPMENT. SHOULD THE ENGINEER DETERMINE THAT AT ANY TIME THAT THE MULCH HAS NOT STABILIZED THE PROJECT AREA, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMULCHING AND ALL ADDITIONAL WORK NECESSARY TO CORRECT THE PROBLEM SHALL BE AT THE CONTRACTOR'S EXPENSE. THIS WORK WILL BE REQUIRED FOR ALL AREAS ASSOCIATED WITH THE PROJECT AND WITHIN THE PROJECT LIMITS. THE CONTRACTOR WILL BE RESPONSIBLE TO MAINTAIN THE SAME STANDARDS FOR ALL OFF SITE AREAS ASSOCIATED WITH THE PROJECT. THE COST OF THAT WORK SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.
- IN ALL LOCATIONS WHERE ITEM 209.1801 ROLLED EROSION CONTROL FABRIC, CLASS 1, TYPE A, SHORT TERM IS BEING SPECIFIED, THE AREA WILL FIRST RECEIVE ITEM 610.1401 TOP SOIL - REUSE ON-SITE MATERIAL WHERE THE EXISTING TOPSOIL HAS BEEN REMOVED. ITEM 209.1801 WILL BE INSTALLED AND THEN THE AREA WILL BE SEEDED AND MULCHED UNDER 610.1601 TURF ESTABLISHMENT - ROADSIDE.
- IN ALL DISTURBED LOCATIONS NOT IN THE EXISTING STREAM OR STREAM REALIGNMENT CORRIDORS WHERE THE EXISTING VEGETATION HAS BEEN REMOVED BUT THE AREA DOES NOT CALL FOR ITEM 610.17 WILDFLOWER SEEDING, ITEM 610.1602 TURF ESTABLISHMENT - LAWNS WILL BE INSTALLED OR A.D.B.E.

UTILITY NOTES

- THE CONTRACTOR IS MADE AWARE THAT OVERHEAD UTILITIES EXIST AT CERTAIN CULVERT SITES AND IT IS ADVISED THAT THE CONTRACTOR VISIT EACH SITE PRIOR TO PLACING A BID TO DETERMINE THE IMPACTS, IF ANY, THAT THE EXISTING UTILITY LINES MAY HAVE DURING THE CONSTRUCTION PROCESS.
- THERE ARE EXISTING UTILITY POLES AT SITES B, C AND D WHICH MUST BE MOVED BEFORE CONSTRUCTION CAN PROCEED. THE EXISTING POLE AT SITE B IS LOCATED AT STATION B 4+48.55 RT. OFFSET 17.37'. THE EXISTING POLE AT SITE C IS LOCATED AT STATION C 3+82.55 LT. OFFSET 27.71'. THE EXISTING POLE AT SITE D IS LOCATED AT STATION D 6+01.80 LT. OFFSET 20.87'. THESE POLES WILL BE RELOCATED BY OTHERS AND NOT THE STATE'S CONTRACTOR FOR THIS PROJECT.

PROJECT MANAGER G. WOJCIK
CHECK J. L. PHILLIPS
DRAFTING G. MEYER
CHECK J. L. PHILLIPS
DESIGN MULTIPLE
JOB MANAGER J. L. PHILLIPS
DESIGN SUPERVISOR R. WILDER

AFFIX SEAL: ON:	ALTERED BY: ON:
	

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	MULTI CULVERT REPLACEMENT PROJECT	PIN 9805.93	BRIDGES	CULVERTS C940011 C950058 C950059 124408 C950119	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED GENERAL NOTES	CONTRACT NUMBER D262989
	ROUTE 10 - SH 1271, ROUTE 28 - SH 5659, ROUTE 28 - SH 5037, ROUTE 79 - SH 8209, ROUTE 166 - SH 8226	UTILITY QUALITY LEVEL D				DRAWING NO. GNN-01
	TOWNS OF BARKER, EXETER, MIDDLEFIELD & WALTON				SHEET NO. 8	
	COUNTY: VARIOUS REGION: 09					

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PRECAST CULVERT DESIGN NOTES:

UNDER THIS CONTRACT THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN, PRE-FABRICATION, AND INSTALLATION OF REINFORCED PRECAST CONCRETE BOX CULVERTS AT THE LOCATION SHOWN IN THE PLANS. THE CONTRACTOR MUST PROVIDE PRECAST CONCRETE BOX CULVERTS, HEADWALLS, CUTOFF WALLS, AND WINGWALLS UNLESS SPECIFICALLY SHOWN OTHERWISE IN THE PLANS. THE DESIGN AND FABRICATION FOR ALL COMPONENTS OF THE PRECAST CONCRETE UNITS IS THE RESPONSIBILITY OF THE CONTRACTOR. THE APPLICABLE PROVISIONS OF SECTIONS 704-03 PRECAST CONCRETE - GENERAL AND 706-17 PRECAST CONCRETE BOX CULVERTS OF THE STANDARD SPECIFICATIONS SHALL APPLY. SAMPLING AND TESTING WILL BE REQUIRED. ALL REINFORCED PRECAST CONCRETE PRODUCTS SHALL BE DESIGNED FOR THE HL-93 LIVE LOAD AND THE NYSDOT DESIGN PERMIT VEHICLE. THE DESIGN AND ANALYSIS METHOD USED SHALL BE IN ACCORDANCE WITH THE NYSDOT BRIDGE DESIGN SPECIFICATIONS.

THE FOLLOWING DESIGN REQUIREMENTS SHALL ALSO APPLY:

- THE DESIGN OF THE REINFORCED CONCRETE BOX CULVERTS, HEADWALLS AND CUT-OFF WALLS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 603.63XXYY15. THIS INCLUDES THE DESIGN AND DETAILING OF ALL NECESSARY STEEL REINFORCING. THE COMPLETE DESIGN DETAILS (INCLUDING CALCULATIONS) SHALL BE SUBMITTED TO THE DIRECTOR OF THE MATERIALS BUREAU FOR APPROVAL. NO RELATED CULVERT WORK MAY BE PROGRESSED BY THE CONTRACTOR UNTIL PRIOR WRITTEN APPROVAL IS RECEIVED FROM THE MATERIALS BUREAU. IF ACTUAL DIMENSIONS DIFFER, THE CONTRACTOR SHALL MAINTAIN PROPOSED PAVEMENT AND INVERT ELEVATIONS. ACTUAL WALL AND SLAB THICKNESS ALONG WITH REINFORCEMENT SIZE AND SPACINGS SHALL BE DETERMINED BY THE CONTRACTOR'S FABRICATOR.
- SHOP DRAWINGS AND DESIGN CALCULATIONS FOR THE CULVERT DESIGN SHALL BE STAMPED BY A PROFESSIONAL ENGINEER LICENSED, AND REGISTERED, TO PRACTICE IN NEW YORK STATE. THE DESIGN CALCULATIONS AND SHOP DRAWINGS REQUIRED SHALL BE IN ACCORDANCE WITH THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES FOR REINFORCED CONCRETE AND CANTILEVER SEMI GRAVITY WALLS. ALL NOTES, DIMENSIONS, ELEVATIONS AND DETAILS SHALL BE INCORPORATED INTO THE SHOP DRAWINGS AND ANY CHANGES SHALL REQUIRE PRIOR APPROVAL BY THE DEPUTY CHIEF ENGINEER FOR STRUCTURES DESIGN AND CONSTRUCTION (DCES). ALL SUBMITTALS ARE REQUIRED TO BE IN U.S. CUSTOMARY UNITS.
- 4" WEEPHOLES SHALL BE LOCATED WITH A MINIMUM OF 3 WEEPHOLES ON EACH SIDE OF THE PRECAST CONCRETE BOX CULVERT AND ONE WEEPHOLE SHALL BE LOCATED IN EACH WINGWALL.
- MECHANICAL CONNECTORS AND REINFORCING BARS USED IN THE CONNECTION PROCESS OF THE CULVERT HEADWALL AND CAST-IN-PLACE WING WALLS SHALL MEET THE REQUIREMENTS OF 709-10 (EPOXY COATED) OF THE STANDARD SPECIFICATIONS. THE FEMALE THREADED PORTION OF THE CONNECTOR IS CAST INTO THE PRECAST UNIT. THREADED INSERTS, WHERE DETAILED, SHALL BE DESIGNED FOR USE WITH 5/8" AND 3/4" REINFORCING STEEL. INSERTS SHALL BE NON-CORROSIVE AND, WHEN USED IN 5000 PSI CONCRETE, BE ABLE TO RESIST MINIMUM PULL OUT LOADS OF 11,000 FOOT POUNDS FOR #5 REINFORCING AND 16,000 FOOT POUNDS FOR #6 REINFORCING.
- ALL EDGES OF CONCRETE, INCLUDING THE EDGES OF EXPANSION, CONTRACTION AND CONSTRUCTION JOINTS, SHALL BE CHAMFERED 1" UNLESS OTHERWISE SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- DETAILS ON THE DRAWINGS LABELED AS "NOT TO SCALE" ARE INTENTIONALLY DRAWN NOT TO SCALE FOR VISUAL CLARITY. ALL OTHER DETAILS, FOR WHICH NO SCALE IS SPECIFIED, ARE DRAWN PROPORTIONAL AND ARE FULLY DIMENSIONED.
- REINFORCED PRECAST CONCRETE UNITS SHALL BE DESIGNED FOR THE FOLLOWING CONCRETE STRENGTHS: FOR PRECAST, FC = 5,000 PSI MINIMUM TO 7000 PSI MAXIMUM (IN INCREMENTS OF 500 PSI); FOR CAST-IN-PLACE, FC = 3,000 PSI.
- THE FOLLOWING CRITERIA SHALL BE USED FOR DETERMINING DEAD LOAD AND EARTH PRESSURES FOR DESIGN. SOIL WEIGHT - 120 PCF, CONCRETE WEIGHT - 150 PCF, LATERAL EARTH PRESSURE - 30 PCF MINIMUM AND 60 PCF MAXIMUM.
- THE MINIMUM REINFORCING BAR COVER REQUIREMENTS FOR CAST-IN-PLACE AND PRECAST CULVERTS SHALL BE AS INDICATED IN SECTION 15 OF THE BRIDGE MANUAL. THE MINIMUM BENDING RADIUS OF NEGATIVE MOMENT REINFORCING STEEL (OUTSIDE CORNERS, TOP AND BOTTOM SLABS) SHALL BE IN ACCORDANCE WITH AASHTO ARTICLE 8.23.2 MINIMUM BEND DIAMETERS, TOP AND BOTTOM SLAB, OUTSIDE-FACE, TRANSVERSE STEEL SHALL BE FULL-LENGTH BARS, UNLESS SPLICED TO TOP AND BOTTOM CORNER REINFORCING STEEL.
- ALL DESIGN SUBMISSIONS FROM THE CONTRACTOR SHALL INCLUDE A COMPLETE SET OF WORKING DRAWINGS AND A COMPLETE SET OF DESIGN CALCULATIONS. THE DRAWINGS AND THE DESIGN CALCULATIONS SHALL BE STAMPED BY A PROFESSIONAL ENGINEER LICENSED TO PRACTICE IN NEW YORK STATE. IF THE CULVERT PROGRAM (SECTION 19.6) IS USED TO DESIGN THE CULVERT, THE PROGRAM INPUT AND OUTPUT SHEETS SHALL BE SUBMITTED FOR THE DESIGN CALCULATIONS.
- IF A LONGITUDINAL SLOPE ON THE CULVERT IS NOT USED A 1% MINIMUM SLOPE PERPENDICULAR TO THE CENTERLINE OF THE CULVERT SHALL BE USED TO PROVIDE POSITIVE DRAINAGE OFF THE TOP OF THE CULVERT.

CULVERT CONSTRUCTION NOTES:

- THE CONTRACTORS ATTENTION IS DIRECTED TO THE FACT THAT OVERHEAD UTILITY LINES ARE PRESENT AT ALL OF THE CULVERT SITES EXCEPT SITE A. PRIOR TO BIDDING THE CONTRACTOR SHOULD FULLY EVALUATE THE CULVERT SITES TO UNDERSTAND THE POTENTIAL DIFFICULTIES THE OVERHEAD LINES MAY CAUSE WITH THE INSTALLATION OF THE PROPOSED CULVERTS.
- PRIOR TO PERFORMING ANY WORK THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ANY UNDERGROUND UTILITIES ADJACENT TO THE CULVERTS AT EACH CULVERT SITE.
- ALL PRECAST CONCRETE BOX CULVERT AND WING WALL SECTIONS SHALL BE ONSITE AND AVAILABLE FOR INSTALLATION BEFORE ANY LANE CLOSURES OR TRAFFIC DISRUPTIONS ARE ALLOWED.
- THE LENGTH OF EACH PRECAST CONCRETE CULVERT SEGMENT SHALL BE DETERMINED BY THE CONTRACTORS' FABRICATOR. THE LENGTH OF EACH SEGMENT SHALL TAKE INTO ACCOUNT WORK ZONE TRAFFIC CONTROL SCHEMES THAT MAY BE USED BY THE CONTRACTOR.
- A MEMBRANE WATERPROOFING SYSTEM, ITEM 595.50000018 SHALL BE INSTALLED ON ALL JOINTS OF THE PRECAST CONCRETE CULVERTS AS DETAILED IN THE DRAWINGS. THE CONTRACTOR SHALL SLIT OR CUT THE MEMBRANE WATERPROOFING AT ALL WEEPHOLE LOCATIONS COVERED BY THE WATERPROOFING MEMBRANE TO ALLOW THE WEEPHOLE TO DRAIN AS INTENDED IN CONJUNCTION WITH THE PREFABRICATED COMPOSITE STRUCTURAL DRAIN SYSTEM.
- THE COMPACTION METHOD USED FOR THE INSTALLATION OF THE SELECT GRANULAR FILL MATERIAL AND HIGHWAY EMBANKMENT ABOVE ALL PROPOSED CULVERTS SHALL BE APPROVED BY THE MANUFACTURER.
- WHILE PERFORMING WORK IN THE WATERWAY THE CONTRACTOR SHALL REMAIN WITHIN THE WORK LIMITS SHOWN ON THE PLANS AND KEEP THE AMOUNT OF DISTURBANCE TO THE EXISTING WATERWAY CHANNELS TO A MINIMUM.
- THE CONTRACTOR IS MADE AWARE THAT STREAM RESTRICTION DATES ARE IN EFFECT AND APPLY TO THIS CULVERT REPLACEMENT PROJECT. THE STREAM RESTRICTION DATES ARE LISTED ON DRAWING GNN-01.
- IF DRAWN CONNECTORS USED DURING THE INSTALLATION PROCESS ARE TO BE LEFT IN PLACE, THEY SHALL BE GALVANIZED IN ACCORDANCE WITH THE MATERIAL REQUIREMENTS OF SECTION 719-01 OF THE STANDARD SPECIFICATION.
- THE PRECAST JOINTS ON THE INTERIOR SIDE OF THE CULVERT SHALL BE MADE SMOOTH AND FLUSH WITH THE BOX CULVERT WALL SURFACE. THE MATERIAL USED TO PATCH THE JOINTS SHALL MEET THE REQUIREMENTS OF THE NYSDOT MATERIAL SPECIFICATION SECTION 701.08 - VERTICAL AND OVERHEAD PATCHING MATERIAL. THE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE PRECAST CULVERT ITEM NUMBER.
- THE PRECAST JOINTS ON THE EXTERIOR SIDE OF THE CULVERT SHALL BE MADE SMOOTH AND FLUSH WITH THE BOX CULVERT WALL SURFACE. THE MATERIAL USED TO PATCH THE JOINTS SHALL MEET THE REQUIREMENTS OF THE NYSDOT MATERIAL SPECIFICATION SECTION 701.08 - VERTICAL AND OVERHEAD PATCHING MATERIAL. THE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 595.50000018 - SHEET APPLIED WATERPROOFING MEMBRANE.
- PROVISIONS FOR POSITIVE DRAINAGE BEHIND THE WING WALLS INCLUDING THE PREFABRICATED COMPOSITE STRUCTURAL DRAINAGE MATERIAL SHALL BE PROVIDED.
- UNLESS SHOWN OTHERWISE IN THE PLANS THE FINAL GRADE OF THE STREAMS IN THE VICINITY OF THE NEW CULVERTS SHALL BE BROUGHT BACK TO THE ORIGINAL GRADE, STATE AND CHARACTER THAT IT WAS PRIOR TO CONSTRUCTION.
- WHEN INSTALLING CUTOFF WALLS THE CONTRACTOR HAS THE OPTION OF USING PRECAST UNITS OR USING CAST IN PLACE CONCRETE. REGARDLESS OF WHICH METHOD IS USED, THE COST OF THE CUTOFF WALL AND THE EXCAVATION SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE BOX CULVERT ITEM.

POSSIBLE SEQUENCE OF CONSTRUCTION:

SITE A - ROUTE 10:

CONSTRUCT THE TEMPORARY DETOUR ALIGNMENT AND INSTALL THE TEMPORARY ONE WAY SIGNAL AND THE ASSOCIATED WZTC SIGNS. WITH THE TEMPORARY ALIGNMENT IN PLACE SHIFT TRAFFIC ONTO THE DETOUR AND CLOSE ROUTE 10 TO TRAFFIC. DEMOLISH AS MUCH OF THE EXISTING CULVERT AS POSSIBLE AND BEGIN THE INSTALLATION OF THE NEW BOX CULVERT AND WING WALLS FROM THE DOWNSTREAM END UP AND INSTALL ENOUGH OF THE NEW CULVERT TO ALLOW TRAFFIC TO BE PUT BACK IN PLACE ON ROUTE 10 DURING PHASE II OF THE WZTC. ONCE ENOUGH OF THE DOWN STREAM END OF THE CULVERT IS COMPLETE AND THE ROADWAY SECTION HAS BEEN INSTALLED SHIFT TRAFFIC BACK OVER ONTO ROUTE 10, REMOVE THE DETOUR ALIGNMENT AND COMPLETE THE SECOND UPSTREAM HALF OF THE CULVERT AND WING WALLS.

SITE B - ROUTE 28:

INSTALL THE TEMPORARY PAVEMENT WIDENING ON THE WEST SIDE OF ROUTE 28 AND COMPLETE THE WZTC SIGNS INSTALLATION. SHIFT TRAFFIC OVER ONTO THE TEMPORARY ALIGNMENT AND THEN COMPLETE THE TEMPORARY SHEETING INSTALLATION. ONCE THE SHEETING IS INSTALLED DEMOLISH THE EXISTING CULVERT AND INSTALL AS MUCH OF THE NEW BOX CULVERT AS POSSIBLE. COMPLETE THE BACKFILL OF THE EAST SIDE OF THE CULVERT UTILIZING GRSS WALL TO SUPPORT THE NEW HIGHWAY EMBANKMENT AND PAVEMENT SECTION. THE TOP OF THE GRSS WALL SHOULD BE STOPPED AT THE MIDDLE OF THE SUB-BASE GRAVEL ELEVATION AND THEN SET THE TEMPORARY CONCRETE BARRIER. PAVE ONE 4" LIFT OF BINDER COURSE AGAINST THE BARRIER TO SUPPORT TRAFFIC. THE BALANCE OF THE BINDER AND TOP COURSE WILL BE COMPLETED AFTER THE ENTIRE CULVERT AS BEEN FINISHED. ONCE TRAFFIC IS IN PLACE ON THE EAST SIDE OF ROUTE 28 DEMOLISH THE REST OF THE EXISTING CULVERT AND REMOVE THE TEMPORARY SHEETING. COMPLETE THE INSTALLATION OF THE BALANCE OF THE BOX CULVERT AND WING WALLS AND BUILD THE HIGHWAY EMBANKMENT AND ROADWAY SECTION. COMPLETE THE GUIDE RAIL AND MISCELLANEOUS GRADING WORK AND OPEN ROUTE 28 TO TRAFFIC. DUE TO THE CLOSE PROXIMITY OF SITES B AND C SIMULTANEOUS WORK AT THESE SITES SHALL NOT BE ALLOWED.

SITE C - ROUTE 28:

THE CONSTRUCTION SEQUENCE FOR SITE C IS SIMILAR TO SITE B. DUE TO THE CLOSE PROXIMITY OF SITES B AND C SIMULTANEOUS WORK AT THESE SITES SHALL NOT BE ALLOWED. SEE THE SPECIAL NOTE IN THE PROPOSAL.

SITE D - ROUTE 79:

INSTALL THE TEMPORARY PIPE AND EMBANKMENT ON THE WEST SIDE OF ROUTE 79 AND SET UP THE ALTERNATING ONE WAY SIGNAL AND THE ASSOCIATED WZTC SIGNS. AFTER TRAFFIC IS IN PLACE OF THE TEMPORARY ALIGNMENT INSTALL THE SOLDIER PILE AND LAGGING WALLS AND THEN EXCAVATE AND DEMOLISH HALF OF THE EXISTING CULVERT ON THE EAST SIDE AND INSTALL AS MUCH OF THE NEW BOX CULVERT AND WING WALLS AS POSSIBLE. COMPLETE THE BACKFILL ON THE EAST SIDE OF THE CULVERT UTILIZING GRSS WALL TO SUPPORT THE NEW HIGHWAY EMBANKMENT AND REMOVE THE SOLDIER PILES. WITH THE FIRST LIFT OF BINDER IN PLACE ON THE EAST SIDE OF ROUTE 79 SHIFT TRAFFIC BACK OVER ONTO THE NEW PAVEMENT, THEN REMOVE THE TEMPORARY EMBANKMENT AND PIPE AND DEMOLISH THE REST OF THE EXISTING CULVERT TO THE WEST. NOW COMPLETE THE INSTALLATION OF THE BALANCE OF THE BOX CULVERT AND WING WALLS AND BUILD THE HIGHWAY EMBANKMENT AND ROADWAY SECTION ON THE WEST SIDE OF ROUTE 79. COMPLETE THE GUIDE RAIL AND MISCELLANEOUS GRADING WORK AND REOPEN ROUTE 79 TO TRAFFIC.

SITE E - ROUTE 166:


BUILD THE TEMPORARY ALIGNMENT ON THE NORTH SIDE OF ROUTE 166 AND INSTALL THE TEMPORARY ALTERNATING ONE WAY SIGNAL AND THE ASSOCIATED WZTC SIGNS. AFTER TRAFFIC IS IN PLACE OF THE TEMPORARY ALIGNMENT INSTALL THE SOLDIER PILE AND LAGGING WALLS AND THEN EXCAVATE AND DEMOLISH HALF OF THE EXISTING CULVERT ON THE SOUTH SIDE AND INSTALL AS MUCH OF THE NEW BOX CULVERT AND WING WALLS AS POSSIBLE. NEXT COMPLETE THE BACKFILL OF THE SOUTH SIDE OF THE CULVERT UTILIZING GRSS WALL TO SUPPORT THE NEW HIGHWAY EMBANKMENT AND REMOVE THE SOLDIER PILES. WITH THE FIRST LIFT OF BINDER IN PLACE ON THE SOUTH SIDE OF ROUTE 166 SHIFT TRAFFIC BACK OVER ONTO THE NEW PAVEMENT AND DEMOLISH THE REST OF THE EXISTING CULVERT TO THE NORTH. BUILD THE REST OF THE NEW BOX CULVERT AND WING WALLS AND COMPLETE THE BACKFILL AND PAVEMENT SECTION. COMPLETE THE GUIDE RAIL AND MISCELLANEOUS GRADING WORK AND REOPEN ROUTE 166 TO TRAFFIC.

TABLE OF CULVERT DESIGN DATA

CULVERT LOCATION	CULVERT SPAN & RISE	CULVERT LENGTH	CULVERT SLOPE	EMBEDDMENT DEPTH	HYDRAULIC OPENING	50 YEAR DESIGN FLOW RATE	OUTLET VELOCITY
SITE A	12' X 9'	39'-0"	4.6%	22"	+/- 7'	287 CFS	6.98 FT/S
SITE B	6' X 6'	33'-4"	5.7%	15"	+/- 5'	185 CFS	14.0 FT/S
SITE C	6' X 5'	52'-0"	5.0%	13"	+/- 4'	76 CFS	10.3 FT/S
SITE D	8' X 4'	38'-4"	6.0%	10"	+/- 3'	86 CFS	10.2 FT/S
SITE E	14' X 8'	33'-4"	4.0%	20"	+/- 6.5'	139 CFS	8.86 FT/S

AFFIX SEAL: ON: _____

ALTERED BY: ON: _____



AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	MULTI CULVERT REPLACEMENT PROJECT	PIN 9805.93	BRIDGES	CULVERTS C940011 C950058 C950059 124408 C950119	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	ROUTE 10 - SH 1271, ROUTE 28 - SH 5659, ROUTE 28 - SH 5037, ROUTE 79 - SH 8209, ROUTE 166 - SH 8226	UTILITY QUALITY LEVEL D			GENERAL CULVERT NOTES	DRAWING NO. GCN-01 SHEET NO. 9
	TOWNS OF BARKER, EXETER, MIDDLEFIELD & WALTON					
	COUNTY: VARIOUS REGION: 09					
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GENERAL NOTES FOR WORK ZONE TRAFFIC CONTROL (WZTC)

- THE CONTRACTOR SHALL BE AWARE THAT WORK ZONE TRAFFIC CONTROL IS A VERY CRITICAL ITEM OF THE CONTRACT AND SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 619 - WORK ZONE TRAFFIC CONTROL FROM THE NYS STANDARD SPECIFICATIONS, THE 619 STANDARD SHEETS, THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), THE NEW YORK STATE SUPPLEMENT TO THE MUTCD, AND ALL OTHER APPLICABLE PROVISIONS CONTAINED IN THIS CONTRACT.
- THE WORK ZONE TRAFFIC CONTROL PLANS ARE DESIGNED WITH A 30 MPH DESIGN SPEED.
- PRIOR TO THE START OF ANY WORK OPERATIONS, ALL RELATED WORK FOR PROPOSED TEMPORARY TRAFFIC CONTROL SHALL BE COMPLETE. THIS INCLUDES BUT IS NOT LIMITED TO ALL SIGNS, PAVEMENT MARKINGS, BARRIERS, DELINEATION (CONES, DRUMS, ETC.), FLAGGERS, PAVEMENT MODIFICATIONS, AND ANY OTHER RELATED WORK AS DIRECTED BY THE ENGINEER IN CHARGE.
- THE CONTRACTOR SHALL NOT OCCUPY OR WORK ON OPPOSITE SIDES OF THE ROADWAY IN ONE LOCATION WHILE TRAFFIC IS MAINTAINED ON THE ROADWAY.
- DURING WORK HOURS, NO CONSTRUCTION MATERIAL MAY BE STORED ON THE ROADWAY OR ROAD BED EXCEPT IN A PROTECTED WORK ZONE.
- NO WORK ZONE SHALL BE LEFT IN PLACE DURING NON-WORKING HOURS WITHOUT THE CONSENT OF THE ENGINEER.
- WHEN TWO OR MORE WORK AREAS ARE ADJACENT, OVERLAP, OR ARE IN CLOSE PROXIMITY AS DETERMINED BY THE ENGINEER, THE CONTRACTOR SHALL COORDINATE ALL CONTRACT WORK WITH ANY UTILITY WORK, SUBCONTRACTOR WORK, PUBLIC MAINTENANCE OPERATIONS OR OTHER CONSTRUCTION ACTIVITIES IN THE AREA TO ENSURE THAT THERE ARE NO WORK ZONE TRAFFIC CONTROL CONFLICTS.
- WEEDS, SHRUBBERY, CONSTRUCTION MATERIAL, EQUIPMENT, VEHICLES OR WORKERS SHALL NOT OBSCURE TRAFFIC CONTROL DEVICES OR OBSTRUCT TRAFFIC. THE CONTRACTOR WILL BE REQUIRED TO TRIM ANY FOLIAGE OBSTRUCTING THE VISIBILITY OF ANY TRAFFIC CONTROL DEVICES WHETHER PERMANENT OR TEMPORARY.
- PROPOSED REVISIONS TO THE TRAFFIC CONTROL PLAN SHALL BE SUBMITTED FOR THE REVIEW AND APPROVAL BY THE REGIONAL TRAFFIC ENGINEER 30 DAYS PRIOR TO THE PLANNED IMPLEMENTATION OF SUCH REVISIONS.

GENERAL SAFETY NOTES

- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE A SAFE WORK PLACE.
- THE CONTRACTOR'S ATTENTION IS DIRECTED TO ALL APPLICABLE SECTIONS OF THE MOST CURRENT EDITION OF CFR 29 PART 1926, CONSTRUCTION SAFETY AND HEALTH REGULATIONS.
- THE USE OF A TRUCK MOUNTED WORKER BASKET OR CONING TRUCK IS THE ONLY ACCEPTABLE METHOD FOR SETTING OUT OR PICKING UP TRAFFIC CONES. CONING OPERATIONS CONDUCTED DIRECTLY FROM THE BED OR TAILGATE OF A PICKUP TRUCK WILL NOT BE ALLOWED.

PORTABLE VARIABLE MESSAGE SIGN (PVMS) USAGE IN A WORK ZONE

PVMS USAGE WILL BE RESERVED FOR SPECIAL CIRCUMSTANCES IN THE WORK ZONE AS DETERMINED BY THE REGIONAL TRAFFIC ENGINEER IN ORDER TO REDUCE UNNECESSARY, INCONSISTENT OR CASUAL USAGE WHICH MAY LEAD TO DRIVERS IGNORING PVMS'S. REFER TO SPECIAL NOTE IN THE CONTRACT PROPOSAL.

WORK ZONE SIGNING

- ACTUAL FIELD CONDITIONS MAY REQUIRE OTHER SIGNS AND OTHER ARRANGEMENTS OF SIGNS. IF SUCH CONDITIONS WILL OCCUR, THE ADDITIONAL SIGNAGE REQUIRED SHALL BE AS ORDERED BY THE ENGINEER WITH APPROVAL BY THE REGIONAL TRAFFIC ENGINEER.
- DISTANCES SHALL BE ADAPTED TO PREVAILING CONDITIONS. SIGNS SHALL BE LOCATED TO PROVIDE OPTIMUM VISIBILITY.
- THE QUALITY OF WORK ZONE DEVICES SHALL NOT FALL BELOW "MARGINAL," AS DEFINED IN THE ATSSA PUBLICATION, "QUALITY GUIDELINES FOR WORK ZONE TRAFFIC CONTROL DEVICES."
- BLANK COVERS USED TO COVER PORTIONS OF EXISTING SIGNS SHALL BE OF A COLOR AND REFLECTORIZED MATERIAL MATCHING THAT OF THE SIGN BEING PARTIALLY COVERED.
- WHERE SHOULDER WIDTHS ARE LIMITED AND SIGNS CAN NOT BE ERECTED BEYOND THE SHOULDER, TEMPORARY SIGNS MAY NEED TO BE MOUNTED ON CONCRETE MEDIAN BARRIER OR BRIDGE PARAPETS, ETC. PRIOR TO ERECTING THOSE SIGNS THE CONTRACTOR SHALL PROVIDE MOUNTING DETAILS TO AND RECEIVE APPROVAL FROM THE ENGINEER. SIGNS SHALL NOT ENCRoACH MORE THAN 4 INCHES INTO SHOULDERS USED BY PEDESTRIANS OR BICYCLES.

WORK ZONE SIGNING (CONT.)

- SIGNS SHALL BE MOUNTED AT A MINIMUM HEIGHT OF 7 FEET MEASURED FROM THE BOTTOM OF THE LOWER SIGN PANEL TO THE NEAREST EDGE OF PAVEMENT OR TO THE GROUND DIRECTLY BELOW THE SIGN, WHICHEVER IS GREATER.
- ALL SIGNS NECESSARY FOR THE WORK ZONE TRAFFIC CONTROL AS NOTED IN THE PLANS, STANDARD SPECIFICATIONS, MUTCD, NEW YORK STATE SUPPLEMENT OR A.D.B.E. SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 619.01, BASIC WORK ZONE TRAFFIC CONTROL. EXISTING SIGNS SHALL BE RELOCATED OR REPLACED UNDER THEIR RESPECTIVE PAY ITEMS AS SHOWN IN THE PLANS.

DELINEATION DEVICES

- FIELD CONDITIONS MAY WARRANT OTHER ARRANGEMENTS OF DEVICES. THE CONTRACTOR SHALL BE PREPARED TO SUPPLY ADDITIONAL DEVICES (CONES, DRUMS, ETC.) AT NO ADDITIONAL COST TO THE STATE.
- DRUMS AND TYPE III BARRICADES SHALL NOT BE PLACED IN A LOCATION BLOCKING SIGHT DISTANCE OF THE TRAVELING PUBLIC.
- ALL CHANNELIZING DEVICES ARE TO BE PLACED SO AS TO PROVIDE A MINIMUM OF 2 FEET CLEARANCE TO THE TRAVELED WAY UNLESS OTHERWISE SHOWN ON THE PLANS. WHERE POSSIBLE A LATERAL BUFFER SPACE OF 2 FEET MIN. SHOULD BE PROVIDED BETWEEN THE WORK SPACE AND THE LINE OF DELINEATION DEVICES.
- LONGITUDINAL SPACING SHALL BE 40 FEET FOR POSTED SPEED LIMITS OVER 40 MPH AND 20 FEET FOR SPEED LIMITS 40 MPH. THROUGHOUT THE WORK ZONE, REDUCED SPACING MAY BE REQUIRED AS SHOWN IN THE PLANS, SPECIFICATIONS OR A.D.B.E. INTERSECTIONS AND DRIVEWAYS SHALL BE CHANNELIZED AT 5 FEET SPACING.
- WHEN CLOSING A ROADWAY, TYPE III BARRICADES SHALL BE PLACED CONTINUOUSLY FROM EDGE OF CURB/SHOULDER TO EDGE OF CURB/SHOULDER, COMPLETELY CLOSING THE ROADWAY. BARRICADES TO THE RIGHT OF THE ROADWAY CENTERLINE SHALL BE STRIPED DOWNWARD TO THE LEFT AND BARRICADES TO THE LEFT OF THE ROADWAY CENTERLINE SHALL BE STRIPED DOWNWARD TO THE RIGHT. FOR OVERNIGHT USE, EACH BARRICADE SHALL BE EQUIPPED WITH "TYPE A" LIGHTING. PVC BARRICADES SHALL HAVE THE BATTERY PACKS LOCATED AT GROUND LEVEL. WHEN CLOSING A ROADWAY TO THROUGH TRAFFIC, TYPE III BARRICADES SHALL BE STRIPED DOWNWARD TO THE SIDE LOCAL TRAFFIC IS TO PASS.
- DRUMS OR VERTICAL PANELS (8 IN x 36 IN OR 12 IN x 12 IN) SHALL BE USED DURING THE HOURS OF DARKNESS. "TYPE B" LIGHTS SHALL BE REQUIRED ON THE FIRST DEVICE AND ON THE FIRST DEVICE AFTER EACH INTERSECTION.
- THE COST OF ANY DELINEATION AND GUIDING DEVICES (CONES, DRUMS, ETC.) SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 619.01, BASIC WORK ZONE TRAFFIC CONTROL.

CONDITIONS RESULTING IN A TRAFFIC WIDTH RESTRICTION

- CONSTRUCTION ACTIVITIES MAY RESULT IN THE NEED TO RESTRICT THE WIDTH OF VEHICLES WHICH TRAVEL THROUGH THE WORK AREA. SEE DRAWING NO. TCN-02 FOR REQUIRED SIGNING. THESE ACTIVITIES SHALL BE MINIMIZED TO THE EXTENT POSSIBLE.
- TRAFFIC WIDTH RESTRICTIONS SHALL BE REPORTED TO THE REGIONAL TRAFFIC ENGINEER A MINIMUM OF TWO WEEKS IN ADVANCE OF THE RESTRICTION.

WINTER SHUTDOWN PERIODS

NO OVERNIGHT LANE CLOSURES WILL BE ALLOWED DURING WINTER MONTHS (NOVEMBER 20TH THROUGH MARCH 31ST), AND DAYTIME LANE CLOSURES WILL ONLY BE ALLOWED WHEN PAVEMENT IS DRY AND FREE FROM ICE AND FROST.

TEMPORARY CONCRETE BARRIER

BARRIER INTRODUCED TO APPROACHING TRAFFIC SHALL BE PLACED AT THE PROPER FLARE RATE AS DETERMINED FROM TABLE 619-4 OF THE STANDARD SPECIFICATIONS. FLARED BARRIER SHALL NOT BE DELINEATED WITH REFLECTORS, BUT PRECEDED WITH A TAPER FORMED OF DELINEATION DEVICES AS SHOWN ON THE PLANS.

PAVEMENT EDGE DROPOFFS PROTECTION

EXCAVATIONS THAT PRODUCE DROPOFFS ON BOTH SIDES OF THE TRAVELED WAY WILL NOT BE PERMITTED.

LANE CLOSURE AND OTHER RESTRICTIONS (CLOSURES SHOWN ON WORK ZONE TRAFFIC CONTROL PLANS ARE EXEMPTED)

- NO LANE CLOSURES WILL BE ALLOWED DURING THE MAJOR HOLIDAYS LISTED IN THE FOLLOWING TABLE UNLESS APPROVED BY THE OFFICE OF TRAFFIC SAFETY AND MOBILITY:

NEW YEARS DAY - JANUARY 1ST
MEMORIAL DAY - LAST MONDAY IN MAY
INDEPENDENCE DAY - JULY 4TH
LABOR DAY - 1ST MONDAY IN SEPTEMBER
THANKSGIVING - 4TH THURSDAY IN NOVEMBER
CHRISTMAS DAY - DECEMBER 25TH
- CONSTRUCTION ACTIVITIES USING TEMPORARY LANE CLOSURES SHALL BE SUSPENDED TO MINIMIZE TRAVEL DELAYS ASSOCIATED WITH ROAD WORK FOR MAJOR HOLIDAYS AS FOLLOWS:

LANE CLOSURE AND OTHER RESTRICTIONS (CONT.)

- FRIDAY, SATURDAY, SUNDAY, AND MONDAY HOLIDAYS - BEGINNING 6:00 AM THE BUSINESS DAY BEFORE THE HOLIDAY AND ENDING 6:00 AM THE BUSINESS DAY FOLLOWING THE HOLIDAY.
- TUESDAY HOLIDAYS - BEGINNING 6:00 AM THE FRIDAY BEFORE THE HOLIDAY AND ENDING 6:00 AM THE NEXT BUSINESS DAY.
- WEDNESDAY HOLIDAYS - BEGINNING 6:00 AM THE TUESDAY BEFORE THE HOLIDAY AND ENDING 6:00 AM THE NEXT BUSINESS DAY.
- THURSDAY HOLIDAYS - BEGINNING 6:00 AM THE BUSINESS DAY BEFORE THE HOLIDAY AND ENDING 6:00 AM THE FOLLOWING MONDAY.
- ADDITIONAL LANE CLOSURES WILL ALSO NOT BE PERMITTED WHEN DIRECTED BY THE ENGINEER WITH TWO WEEKS NOTICE GIVEN TO THE CONTRACTOR.
- THE CONTRACTOR SHALL SCHEDULE WORK SO THAT ALL TRAVEL LANES IN EACH DIRECTION ARE OPEN WHEN THE CONTRACTOR'S OPERATIONS ARE CLOSED DOWN OR SUBSTANTIALLY CLOSED DOWN. THE MINIMUM WIDTH OF A TRAVEL LANE SHALL BE 12 FEET UNLESS OTHERWISE SHOWN IN THE PLANS, PROPOSAL OR AUTHORIZED BY THE ENGINEER.
- IF, IN THE OPINION OF THE ENGINEER LANE CLOSURES ARE CREATING SIGNIFICANT DELAYS TO TRAFFIC OR ARE CREATING A SAFETY CONCERN DUE TO SLOWED OR STOPPED TRAFFIC, AFFECTED LANE CLOSURES SHALL BE REMOVED AND THE ROADWAY OPENED TO TRAFFIC AS DIRECTED BY THE ENGINEER.

PUBLIC INGRESS AND EGRESS

- THE CONTRACTOR SHALL PROVIDE PROPERTY OWNERS WITH PROPER ACCESS AS SHOWN IN THE PLANS AND A.D.B.E. TO THEIR DRIVEWAYS AND SHALL MAINTAIN THEM THROUGH ALL PHASE WORK AREAS AND SHALL DELINEATE THEM BY MEANS OF SIGNS AND CHANNELIZING DEVICES A.D.B.E. THE COST FOR SIGNS AND OTHER WORK ZONE TRAFFIC CONTROL (CONES, DRUMS, ETC.) SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 619.01, BASIC WORK ZONE TRAFFIC CONTROL.
- WHERE DIRECT ACCESS TO DRIVEWAYS IS NOT POSSIBLE DUE TO NECESSARY CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL PLAN ALTERNATE MEANS OF ACCESS AND SUBMIT SUCH PLANS TO THE ENGINEER FOR APPROVAL. PROPERTY OWNERS/OCCUPANTS SHALL HAVE 24 HOUR NOTICE OF ANY CHANGES. COST OF THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 619.01, BASIC WORK ZONE TRAFFIC CONTROL.
- WHEN A SIDE ROAD OR DRIVEWAY INTERSECTS THE HIGHWAY WITHIN THE TEMPORARY TRAFFIC CONTROL ZONE, ADDITIONAL TRAFFIC CONTROL DEVICES SHALL BE ERECTED AND FLAGGERS POSTED AT APPROPRIATE LOCATIONS OR A.D.B.E. ALL COSTS INVOLVED SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 619.01, BASIC WORK ZONE TRAFFIC CONTROL.

CONSTRUCTION INGRESS AND EGRESS

- VEHICLES, MATERIALS AND/OR EQUIPMENT, INCLUDING OUT OF SERVICE SIGNS, SHALL NOT BE PARKED OR STORED WITHIN 33 FEET OF A ROADWAY USED BY THE GENERAL PUBLIC, OR ANY OTHER TRAVERSABLE AREAS IN WHICH AN ERRANT VEHICLE MAY STRIKE THE OBJECT.
- VEHICLES, MATERIALS AND/OR EQUIPMENT PARKED BEHIND GUIDE RAIL OR BARRIER SHALL BE PARKED BEYOND THE DEFLECTION DISTANCE AND WITHIN THE POINT OF NEED OF THE RAIL OR BARRIER SYSTEM.

EMERGENCY ACCESS

DURING WORK OPERATIONS ON OR NEAR SIDE ROADS AND DRIVEWAYS, THE CONTRACTOR SHALL MAINTAIN ACCESS TO THOSE SIDE ROADS AND DRIVEWAYS FOR EMERGENCY VEHICLES, A.D.B.E. EVEN WHEN THE FACILITY IS CLOSED TO NORMAL TRAFFIC.

PAVEMENT MARKINGS

- CONFLICTING PAVEMENT MARKINGS SHALL BE COVERED. THE COST FOR COVERING EXISTING PAVEMENT MARKING LINES SHALL BE PAID UNDER ITEM 619.0803. EXISTING LETTER/SYMBOL MARKING REMOVAL, IF APPLICABLE, SHALL BE PAID UNDER ITEM 619.0804.
- THE CONTRACTOR SHALL PROVIDE PAVEMENT MARKINGS AT ALL TIMES, ON ALL PAVEMENT, WHETHER EXISTING, TEMPORARY OR NEW, UNTIL PERMANENT MARKINGS ARE INSTALLED OR RESTORED. THIS SHALL INCLUDE AT ALL LOCATIONS, EDGE LINES, CENTERLINE, LANE LINES (SOLID OR BROKEN), CHANNELIZING LINES, DOTTED LINES, PLUS ANY MARKINGS ORDERED BY THE ENGINEER. ALL MARKINGS SHALL BE APPLIED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS AND THE MUTCD AND NEW YORK STATE SUPPLEMENT AND SHALL INDICATE ACTUAL CONDITIONS AT ALL TIMES. THESE MARKINGS SHALL BE PAID FOR AS SHOWN IN THE CONTRACT PLANS.
- PAVEMENT MARKINGS TO BE MAINTAINED OVER THE WINTER SHALL BE PERMANENT MARKINGS, PAID FOR UNDER ITEMS 685.XX EPOXY REFLECTORIZED MARKINGS.

PEDESTRIANS AND BICYCLES


- IN RURAL AREAS PEDESTRIAN TRAFFIC AND BICYCLES SHALL BE ACCOMMODATED THROUGH THE WORK SITE. TYPICAL ALTERNATING ONE-WAY SIGNALS WILL PROVIDE 12' LANES WITH 1' OFFSETS TO TEMPORARY CONCRETE BARRIER. PEDESTRIANS AND BICYCLES MAY USE THIS AREA BY FOLLOWING OTHER VEHICLES THROUGH THE WORK ZONE DURING THE APPROPRIATE GREEN PHASE. UNLESS SPECIFIC ITEMS ARE INCLUDED IN THE CONTRACT THE WORK AND MATERIALS REQUIRED TO MAINTAIN A PEDESTRIAN WALKWAY THROUGH THE WORK ZONE SHALL BE INCLUDED IN THE COST BID FOR ITEM 619.01.

PEDESTRIANS AND BICYCLES (CONT.)

- AVAILABLE TRAVEL LANES SHOULD BE A MINIMUM OF 12 FEET WIDE FOR VEHICLES TO PASS BICYCLES. IF EXISTING OR AVAILABLE TRAVEL LANES ARE LESS THAN 12 FEET IN WIDTH AND THE RIGHT SHOULDER IS CLOSED, THE FLAGGER SHOULD ADVISE THE BICYCLE TO ENTER THE WORK ZONE AS THE LAST VEHICLE, AND TO WALK ON THE LEFT SHOULDER IF HE/SHE ENCOUNTERS ON-COMING TRAFFIC.
- IN RURAL AREAS WHEN THE LEFT SHOULDER IS CLOSED (AS IS DURING FLAGGING OPERATIONS ON A TWO-LANE TWO-WAY ROADWAY), THE FLAGGER SHOULD ADVISE THE PEDESTRIAN TO WALK AS FAR AWAY FROM, OR EVEN STOP WHEN ON-COMING TRAFFIC APPROACHES THEM.
- IN URBAN AREAS, 4 FOOT WIDE SHOULDERS MAY BE USED WHEN NO SIDEWALKS ARE AVAILABLE. SIDEWALKS MUST BE PROVIDED FOR PEDESTRIAN TRAFFIC IF SHOULDERS OF AT LEAST 4 FOOT IN WIDTH ARE NOT AVAILABLE. IF ONLY ONE SHOULDER IS AVAILABLE AND TWO-WAY PEDESTRIAN TRAFFIC MUST BE MAINTAINED, THERE MUST BE A PHYSICAL SEPARATION BETWEEN THE PEDESTRIANS AND VEHICLES (CONES OR TUBULAR DELINEATORS SPACED AT 10 FOOT INTERVALS). THE WALKWAY CREATED IN THIS SITUATION SHOULD BE AT LEAST 5 FEET WIDE TO ALLOW PASSING. WHERE AN OBSTRUCTION EXISTS IN THE WALKWAY, THE WIDTH OR THE WALKWAY MAY BE REDUCED TO 3 FEET TO PASS AROUND THE OBSTRUCTION. THE CONTRACTOR MAY DELINEATE AN ALTERNATE PEDESTRIAN WALKWAY DURING TIMES THAT AN EXISTING SIDEWALK IS CLOSED, AND ROADWAY WIDTHS DO NOT ALLOW 4 FOOT WIDE SHOULDERS OR A 5 FOOT WALKWAY TO BE AVAILABLE TO PEDESTRIANS. ALL PEDESTRIAN WALKWAYS MUST HAVE A PAVED SURFACE AND BE FREE OF TRIPPING HAZARDS.
- ALL SIGNS TARGETED TOWARDS PEDESTRIANS SHALL BE MOUNTED ON TYPE III CONSTRUCTION BARRICADES.

TEMPORARY TRAFFIC SIGNAL NOTES

- THE TIMING, PHASING AND DETECTOR LOCATIONS ARE CONSIDERED START-UP AND MAY REQUIRE CHANGES DUE TO OBSERVED TRAFFIC CONDITIONS. THE REGIONAL TRAFFIC ENGINEER SHALL APPROVE ANY CHANGES OR ADDITIONS.
- REST IN RED FEATURE MAY BE SUBSTITUTED FOR AN ALL RED PHASE.
- EMERGENCY FLASH OPERATION IS CONSIDERED A MALFUNCTION. FLAGGERS ARE REQUIRED UNTIL A MALFUNCTION IS REPAIRED.
- EXISTING PAVEMENT MARKINGS BETWEEN THE STOP LINES ARE TO BE COVERED AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER.
- LOOPS WILL BE INSTALLED IN ACCORDANCE WITH STANDARD SHEET 680-14.
- MINIMUM CLEARANCE FROM PAVEMENT TO BOTTOM OF HEADS IS 16.5 FEET.
- ALL SIGNAL HEADS SHALL CONTAIN 12 INCH LENSES. ALL SIGNAL FACES SHALL HAVE MUTCD COMPLIANT BACKPLATES.
- POWER SOURCE TO BE DETERMINED BY THE CONTRACTOR AND THE POWER COMPANY.
- PROPER POLES TO SUPPORT THE 3-COLOR SIGNAL HEADS AND THE FLASHING BEACON SIGN ASSEMBLIES TO BE DETERMINED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.
- FLASHING BEACONS SHALL BE PLACED ON W3-3 SIGNS AND SHALL BE CONNECTED TO TRAFFIC SIGNAL POWER SOURCE THROUGH PROPERLY INSTALLED CONDUIT. FLASHING BEACONS SHALL MEET THE REQUIREMENTS OF SECTION 4.L. OF THE MUTCD AND SHALL BE PAID FOR UNDER ITEM 619.13NN, TEMPORARY TRAFFIC SIGNALS. REFER TO STANDARD SHEET 680-10 FOR INSTALLATION OF FLASHING BEACONS.
- A 6 SECOND DELAY SHALL BE PROVIDED FOR THE SIDE DRIVEWAY OR SIDE ROAD PRESENCE LOOP WHERE APPLICABLE.
- ALL SPAN WIRE, INDUCTANCE LOOP WIRE, SHIELDED LEAD-IN CABLE, TRAFFIC SIGNAL CABLE AND OTHER WIRE USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE NEW MATERIAL MEETING THE APPLICABLE REQUIREMENTS OF SUBSECTION 680-2 OF THE STANDARD SPECIFICATIONS.
- ALL OTHER EQUIPMENT FOR TEMPORARY TRAFFIC SIGNALS SHALL MEET THE REQUIREMENTS OF SUBSECTION 680-2 OF THE STANDARD SPECIFICATIONS EXCEPT FOR THE FOLLOWING MODIFICATIONS:
 - USED EQUIPMENT IN GOOD OPERATING CONDITION MAY BE FURNISHED TO PROVIDE THE REQUIRED OPERATION OF THE SIGNALS.
 - MANUFACTURER'S CERTIFICATION OF COMPLIANCE WILL NOT BE REQUIRED.
 - THE SIGNAL CONTROLLER MAY BE EITHER SOLID STATE OR MICROPROCESSOR BASED.
 - THE MATERIAL AND PAINTING REQUIREMENT OF SECTION 724.04, TRAFFIC SIGNAL HEADS, OF THE STANDARD SPECIFICATIONS SHALL NOT APPLY EXCEPT THAT THE SIGNAL HEAD HOUSING SHALL BE MADE OF POLYCARBONATE AND SHALL BE DARK GREEN IN COLOR.
 - THE TRAFFIC SIGNAL CONTROLLER CABINET SHALL BE EQUIPPED WITH A CONFLICT MONITOR.
- IF FOR ANY REASON A SIGNAL IS NOT FUNCTIONING AS REQUIRED THE CONTRACTOR SHALL COMMENCE REPAIR WORK ON THIS SIGNAL WITHIN TWO HOURS AFTER HE/SHE HAS BEEN NOTIFIED OF A MALFUNCTION. THE CONTRACTOR HAS AN 8 HOUR TIME LIMIT TO MAKE REPAIRS. IF REPAIRS REMAIN UNCOMPLETED AFTER THIS TIME, LIQUIDATED DAMAGES OF ONE DAY WILL BE ASSESSED FOR EACH DAY THE SIGNAL IS MALFUNCTIONING, UNTIL IT IS REPAIRED.

AFFIX SEAL:
On: 

ALTERED BY:
On:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	MULTI CULVERT REPLACEMENT PROJECT	PIN 9805.93	BRIDGES	CULVERTS C940011 C950058 C950059 124408 C950119	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED TRAFFIC CONTROL NOTES	CONTRACT NUMBER D262989
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	COUNTY: VARIOUS REGION: 09					

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TEMPORARY TRAFFIC SIGNAL NOTES (CONT.)

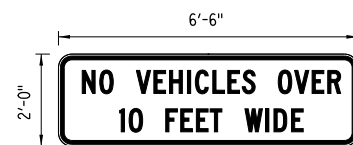
- THE CONTRACTOR SHALL PROVIDE A FLAGGER AT EACH MALFUNCTIONING TRAFFIC SIGNAL DURING REPAIR WORK. THE FLAGGER CONTROL SHALL BE PROVIDED UNTIL THE TEMPORARY TRAFFIC SIGNAL IS RESTORED TO PROPER OPERATION.
- MICROWAVE OR PUSH BUTTON DETECTION SHOULD BE USED WHERE DRIVEWAYS NEED DETECTION AS PART OF THE TEMPORARY SIGNAL. FIELD CONDITIONS SHOULD BE CONSIDERED IN DETERMINING WHICH TYPE TO USE. LOOPS SHOULD NOT BE CUT INTO A DRIVEWAY UNLESS IT IS TO BE RESURFACED LATER.
- OTHER TYPES OF VEHICLE DETECTION EQUIPMENT MAY BE USED IF PRIOR APPROVAL IS OBTAINED FROM THE TRAFFIC SAFETY AND MOBILITY GROUP ON A LOCATION BY LOCATION BASIS. REQUESTS BY THE CONTRACTOR TO USE ALTERNATIVES TO THOSE SHOWN IN THE PLANS SHALL BE ACCOMPANIED BY DETAILED PLANS AND SPECIFICATIONS.

GUIDE RAIL AND BRIDGE RAIL

- THE CONTRACTOR SHALL MAINTAIN EXISTING GUIDE RAIL AND BRIDGE RAIL. WHEN OPERATIONS REQUIRE THE REMOVAL OF BRIDGE RAIL OR GUIDE RAIL THE CONTRACTOR SHALL SCHEDULE OPERATIONS TO MINIMIZE THE TIME PERIOD THAT RAIL IS NOT INSTALLED. UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS, GUIDE RAIL SHALL BE REPLACED OR THE LOCATION OTHERWISE PROTECTED WITHIN TWO (2) CALENDAR DAYS.
- BRIDGE RAIL SHALL BE MAINTAINED IN SERVICE AT ALL TIMES UNLESS A TEMPORARY BARRIER IS INSTALLED.
- GUIDE RAIL ON ALL CULVERTS SHALL BE MAINTAINED IN SERVICE AT ALL TIMES UNLESS A TEMPORARY BARRIER IS INSTALLED.
- THE INSTALLATION OF END ASSEMBLIES SHALL BE COORDINATED WITH THE REMOVAL OF EXISTING IMPACT ATTENUATORS OR END ASSEMBLIES AND THE INSTALLATION OF GUIDE RAILING SO AS TO MINIMIZE THE EXPOSURE TO THE SHIELDED OBJECT, UNPROTECTED ENDS OF BARRIERS, ETC. UNLESS MODIFIED IN THE CONTRACT DOCUMENTS, MINIMIZATION SHALL MEAN TWO (2) OR FEWER CALENDAR DAYS.

REQUIRED SIGNING SERIES FOR WIDTH RESTRICTIONS ON PUBLIC HIGHWAYS

- WORK ZONE TRAFFIC CONTROL DETAILS SHOWN IN THESE PLANS WILL CREATE TRAFFIC WIDTH RESTRICTION AT ALL SITES.
- PRIOR TO PLACING ANY TRAFFIC CONTROL DEVICES RESTRICTING THE WIDTH OF THE ROADWAY, THE CONTRACTOR SHALL CONSULT WITH THE ENGINEER TO DETERMINE IF A TRAFFIC WIDTH RESTRICTION SHOULD BE FILED WITH THE REGIONAL PERMIT OFFICE.
- THE FOLLOWING GUIDELINES SHALL APPLY WHEN DETERMINING IF A TRAFFIC WIDTH RESTRICTION IS NECESSARY.
- LEGAL VEHICLE WIDTH IS 8 FEET ON CONVENTIONAL HIGHWAYS AND 8 FEET 6 INCHES ON DESIGNATED QUALIFYING AND ACCESS HIGHWAYS. MINIMUM LANE REQUIREMENTS OF 10 FEET AND 11 FEET RESPECTIVELY SHALL BE PROVIDED TO ACCOMMODATE THIS TRAFFIC AT ALL TIMES.
- OVERWIDTH VEHICLES UP TO 12 FEET IN WIDTH MAY TRAVEL ON STATE HIGHWAYS BY ANNUAL PERMIT. GENERALLY A 14' WIDE PHYSICAL OPENING IS NEEDED FOR THEIR PASSAGE IN THE WORK ZONE.
- IF A PHYSICAL OPENING OF LESS THAN 14 FEET EXISTS ALONG THE TRAVELED WAY THROUGH THE WORK ZONE, SPECIAL WORK ZONE WIDTH RESTRICTION SIGNING SHALL BE REQUIRED. SEE NOTES 8. AND 9. FOR FURTHER DETAILS.
- PHYSICAL OPENINGS OF LESS THAN 16 FEET REQUIRE A WIDTH RESTRICTION TO BE FILED WITH THE REGIONAL PERMIT OFFICE. CONTACT THE REGIONAL TRAFFIC AND SAFETY OFFICE FOR ADDITIONAL INFORMATION AND GUIDANCE.

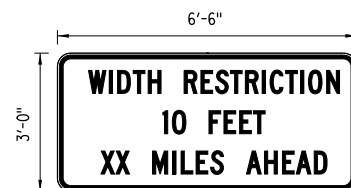


EXAMPLE SIGN FACE (MODIFIED R11 BLACK ON ORANGE SHOWN) FOR PLACEMENT IN THE WORK ZONE AT A SUITABLE LOCATION NEAR THE RESTRICTION AS ORDERED BY THE ENGINEER. A SIGN FACE LAYOUT WILL BE PROVIDED.

WIDTH RESTRICTION EQUALS THE WIDTH OF THE WORK ZONE RESTRICTION MINUS 2' AND SHOULD MATCH THE RESTRICTION FILED WITH THE REGIONAL PERMIT ENGINEER.

THIS SIGN MAY BE DELETED IF THE ADVANCE POSTING SIGN IS CLOSE TO THE RESTRICTION OR THERE ARE NO SIGNIFICANT DRIVEWAYS OR INTERSECTING LOCAL ROADS BETWEEN THE ADVANCE POSTING SIGN AND THE WORK ZONE WIDTH RESTRICTION.

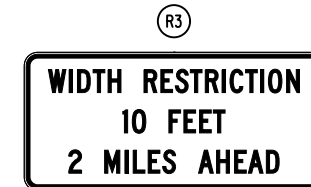
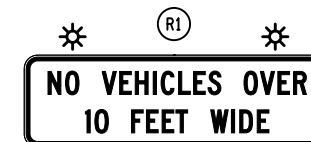
REQUIRED SIGNING SERIES FOR WIDTH RESTRICTIONS ON PUBLIC HIGHWAYS (CONT.)



EXAMPLE SIGN FACE (MODIFIED R11 BLACK ON ORANGE SHOWN) FOR PLACEMENT IN ADVANCE OF THE WORK ZONE. A SIGN FACE LAYOUT WILL BE PROVIDED.

"XX" SHALL BE REPLACED WITH THE ACTUAL ADVANCE POSTING DISTANCE RESULTING FROM THE SELECTED LOCATION. MILEAGE DISTANCES LESS THAN 500 FEET SHOULD BE STATED TO THE NEAREST 100 FEET. DISTANCES BETWEEN 500 AND 1700 FEET SHOULD BE STATED TO THE NEAREST 500 FEET. DISTANCES OVER 1700 FEET BUT LESS THAN ONE MILE SHOULD BE STATED TO THE NEAREST QUARTER MILE. DISTANCES BETWEEN ONE AND THREE MILES SHOULD BE STATED TO THE NEAREST ONE HALF MILE. DISTANCES OVER THREE MILES SHOULD BE STATED TO THE NEAREST WHOLE MILE.

- CULVERT SITES B, C, D AND E WILL REQUIRE WIDTH RESTRICTION SIGNAGE AS DESCRIBED ABOVE. THE TENTATIVE SIGNS REQUIRED ARE DEPICTED TO THE RIGHT ON THIS SHEET. SIGN FACE LAYOUTS WILL BE PROVIDED. THE TENTATIVE LOCATIONS FOR THESE SIGNS IS DEPICTED ON DRAWING NO. TCP-01. WIDTH RESTRICTION SIGNAGE SHALL BE SUBMITTED FOR REVIEW AND APPROVAL TO THE REGIONAL TRAFFIC AND SAFETY OFFICE.
- AS PREVIOUSLY STATED ON DRAWING TCN-01 AND IN THE SPECIFICATION FOR ITEM 619.01 - BASIC WORK ZONE TRAFFIC CONTROL, THE COST OF WIDTH RESTRICTION SIGNAGE AS WELL AS ALL WORK ZONE SIGNAGE SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 619.01 - BASIC WORK ZONE TRAFFIC CONTROL.



LEGEND	
(X)	SIGN LOCATION BUBBLE
☀	LIGHTING FOR SIGN (SEE NOTE)

NOTE: LIGHTING FOR SIGNS, WHERE INDICATED ON THE PLANS, SHALL BE TYPE A AS PER SECTION 729-18 OF THE STANDARD SPECIFICATIONS. THE COST OF THE LIGHTING DEVICES, INCLUDING INSTALLATION, MAINTENANCE AND REMOVAL, SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 619.01.

AFFIX SEAL: ON: ALTERED BY: ON:



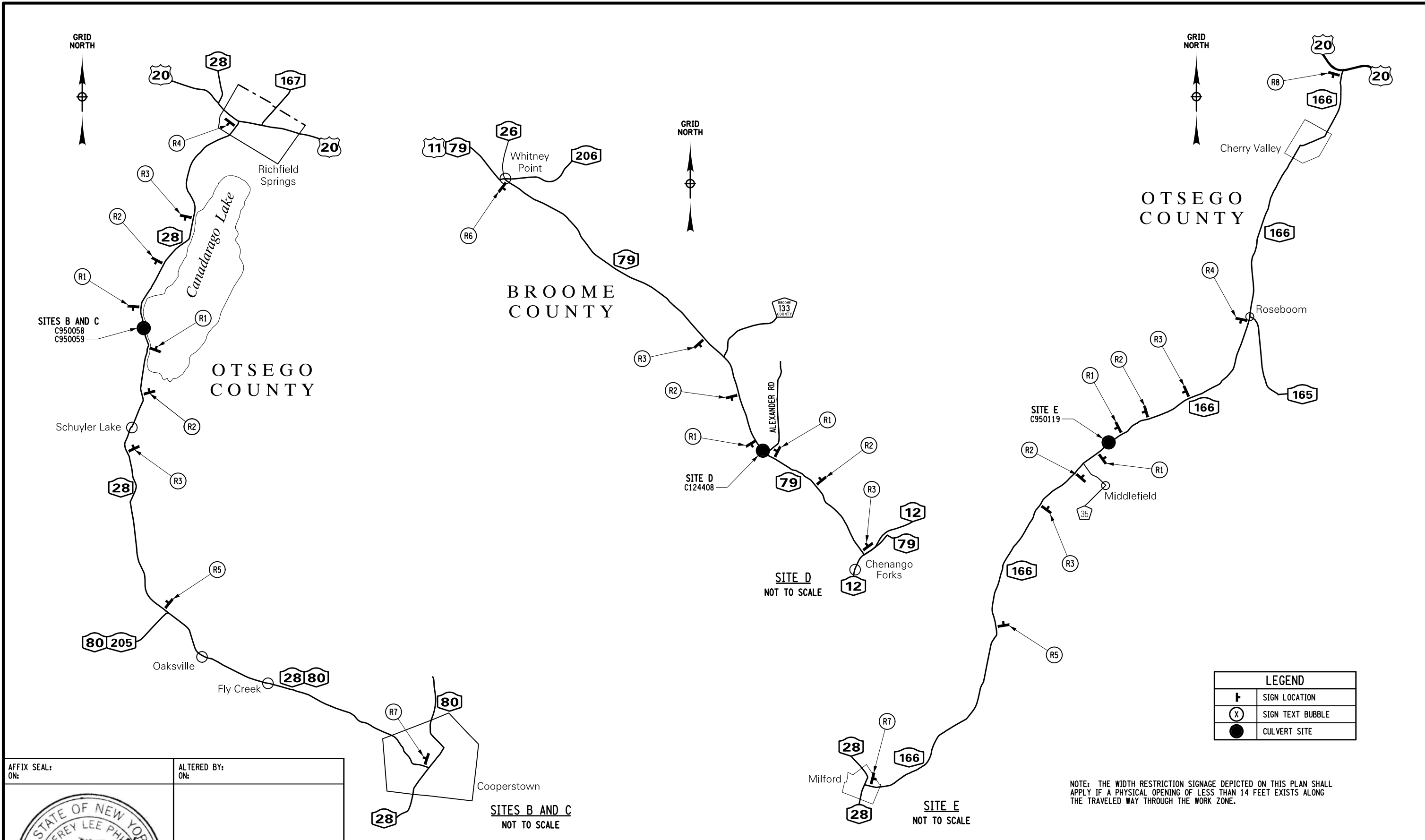
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	ROUTE 10 - SH 1271, ROUTE 28 - SH 5659, ROUTE 28 - SH 5037, ROUTE 79 - SH 8209, ROUTE 166 - SH 8226	UTILITY QUALITY LEVEL D				TRAFFIC CONTROL NOTES
	TOWNS OF BARKER, EXETER, MIDDLEFIELD & WALTON					SHEET NO. 11
	COUNTY: VARIOUS REGION: 09					

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



FILE NAME = 980593_cph_top_01.dgn
 DATE/TIME = 28-JUL-2015 12:50
 USER = jphillips

DESIGN SUPERVISOR R. WILDER
 JOB MANAGER J. L. PHILLIPS
 DESIGN W. GRIFFITHS
 DRAFTING W. GRIFFITHS
 CHECK J. L. PHILLIPS
 PROJECT MANAGER G. WOJCIK



AFFIX SEAL:
ON:

ALTERED BY:
ON:



AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	MULTI CULVERT REPLACEMENT PROJECT	PIN 9805.93	BRIDGES	CULVERTS C940011 C950058 C950059 124408	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	ROUTE 10 - SH 1271, ROUTE 28 - SH 5659, ROUTE 28 - SH 5037, ROUTE 79 - SH 8209, ROUTE 166 - SH 8226	UTILITY QUALITY LEVEL D			TRAFFIC CONTROL PLAN WIDTH RESTRICTION SIGN LOCATION PLAN	DRAWING NO. TCP-01
	TOWNS OF BARKER, EXETER, MIDDLEFIELD & WALTON					SHEET NO. 12
	COUNTY: VARIOUS					


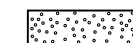

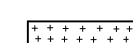
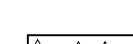
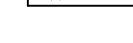
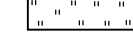

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NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 09
 DOCUMENT NAME: 980593_cph_top_01.dgn

FILE NAME = 980593_cph_gcd_01.dgn
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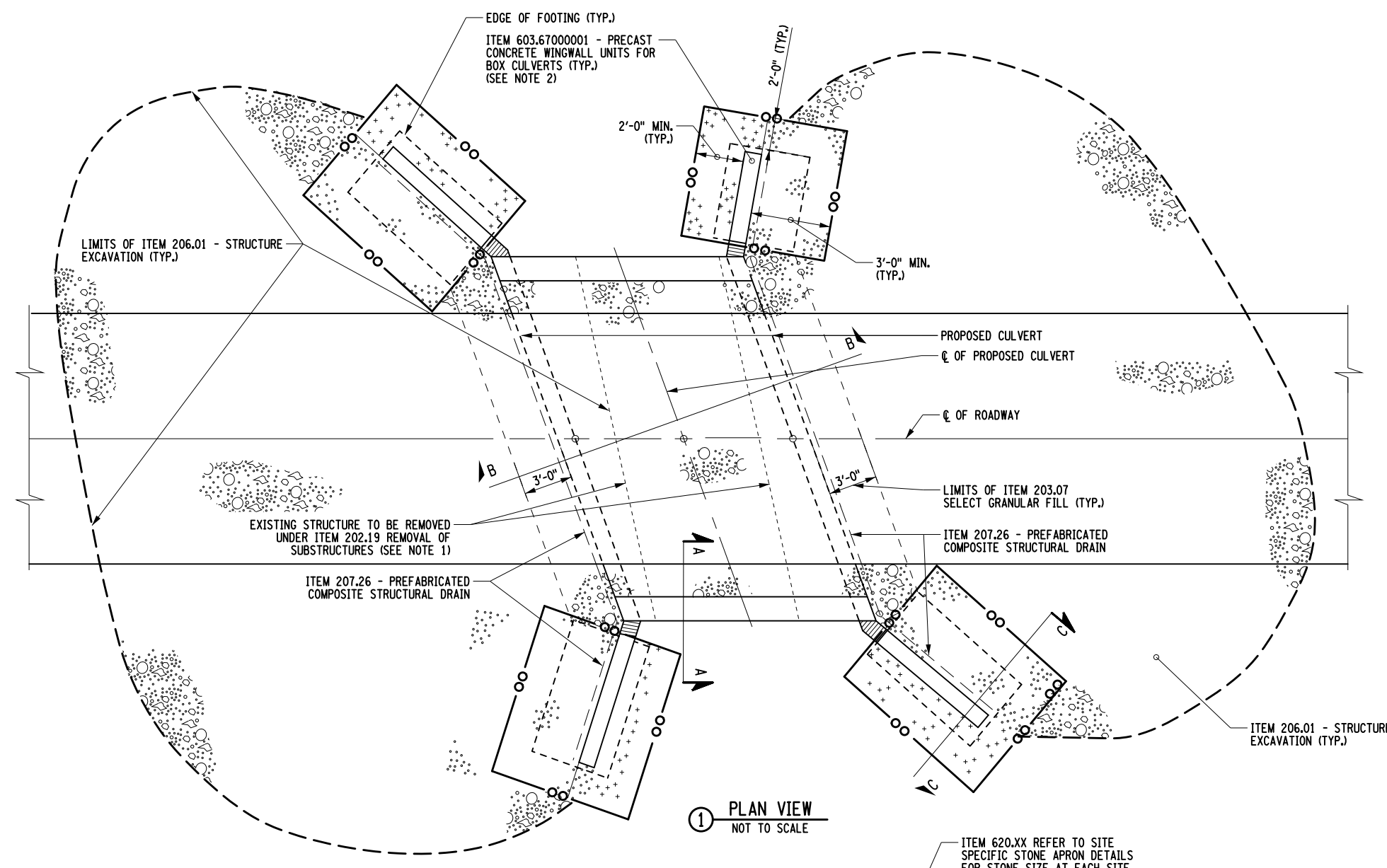
DESIGN SUPERVISOR R. WILDER
 JOB MANAGER J. L. PHILLIPS
 DESIGN MULTIPLE
 DRAFTING K. M. LORE
 CHECK J. L. PHILLIPS
 PROJECT MANAGER G. WOLCICK

LEGEND

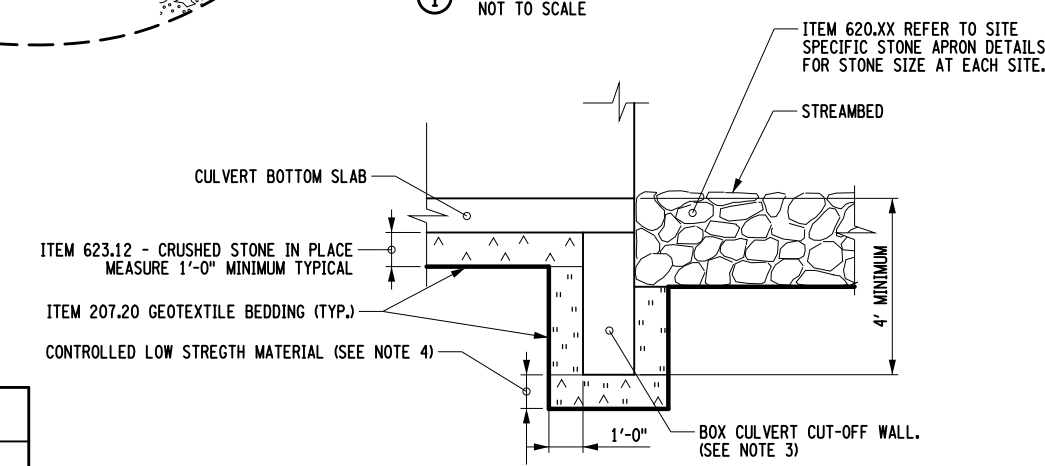
-  EXISTING GROUND SURFACE
-  SELECT GRANULAR FILL (ITEM 203.07) COMPACTED TO 95% OF STANDARD PROCTOR MAXIMUM DENSITY.
-  HIGHWAY EMBANKMENT MATERIAL (HIGHWAY ESTIMATE)
-  BACKFILL WITH SUITABLE EXCAVATED MATERIAL AS PROVIDED FOR UNDER ITEM 206.01, STRUCTURE EXCAVATION (BRIDGE ESTIMATE) OR 206.0201 (TRENCH & CULVERT EXCAVATION)
-  CRUSHED MATERIAL MEETING THE REQUIREMENTS OF MATERIAL DESIGNATION 703-0201, 703-0202 OR 703-0204 WITH A PRIMARY SIZE DESIGNATION OF 2
-  CONTROLLED LOW STRENGTH MATERIAL (CLSM) MEETING THE REQUIREMENTS OF SECTION 204. CLSM SHALL BE DESIGNED SO THAT IT FLOWS INTO THE VOIDS OF THE CRUSHED MATERIAL AND SETS UP SUFFICIENTLY WITHIN 24 HOURS TO ALLOW PLACEMENT OF ADDITIONAL MATERIAL. COST TO BE INCLUDED IN PRECAST ITEMS.
-  AREA ENCLOSED WITHIN THESE LINES DESIGNATES PAYMENT LINES FOR STRUCTURE EXCAVATION ITEM 206.01
-  EXCAVATION AND BACKFILL WITHIN THESE LINES ARE PAID FOR UNDER ITEM 603.67000001 PRECAST CONCRETE WINGWALL UNITS FOR BOX CULVERTS. BACKFILL MATERIAL USED SHALL BE IN ACCORDANCE WITH ITEM 203.07 SELECT GRANULAR FILL AND ITEM 203.03 EMBANKMENT IN PLACE SPECIFICATION SECTION 203-1.08.

NOTES:

1. LIMITS FOR ITEM 202.19 - REMOVAL OF SUBSTRUCTURES, INCLUDES THE REMOVAL OF THE EXISTING CULVERT, CUT-OFF WALLS, WING WALLS, HEAD WALLS AND FOOTINGS.
2. THE COST OF THE EXCAVATION FOR THE PRECAST WING WALLS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 603.67000001
3. THE COST FOR THE CUT-OFF WALL AND ITS EXCAVATION SHALL BE INCLUDED THE UNIT PRICE BID FOR THE BOX CULVERT ITEM 603.63XXYY15.
4. PRECAST CUT-OFF WALLS AND WING WALLS SHALL BE PLACED ON A LEVELING BED OF ITEM 623.12 - CRUSHED STONE (IN-PLACE MEASURE), WHICH MEETS THE REQUIREMENTS OF MATERIAL DESIGNATION 703-0201, 703-0202 OR 703-0204 WITH A PRIMARY SIZE DESIGNATION OF 2. AFTER PLACING AND LEVELING THE PRECAST UNITS, THE AREAS BENEATH AND BEHIND THE CUT-OFF WALLS AND THE AREAS BENEATH THE WING WALLS SHALL BE GROUTED WITH CONTROLLED LOW STRENGTH MATERIAL MEETING THE REQUIREMENTS OF THE STANDARD SPECIFICATION SECTION 204.



① PLAN VIEW
NOT TO SCALE



② SECTION A-A
(PRECAST CUT-OFF WALL SECTION)
NOT TO SCALE

AFFIX SEAL: ON: ALTERED BY: ON:

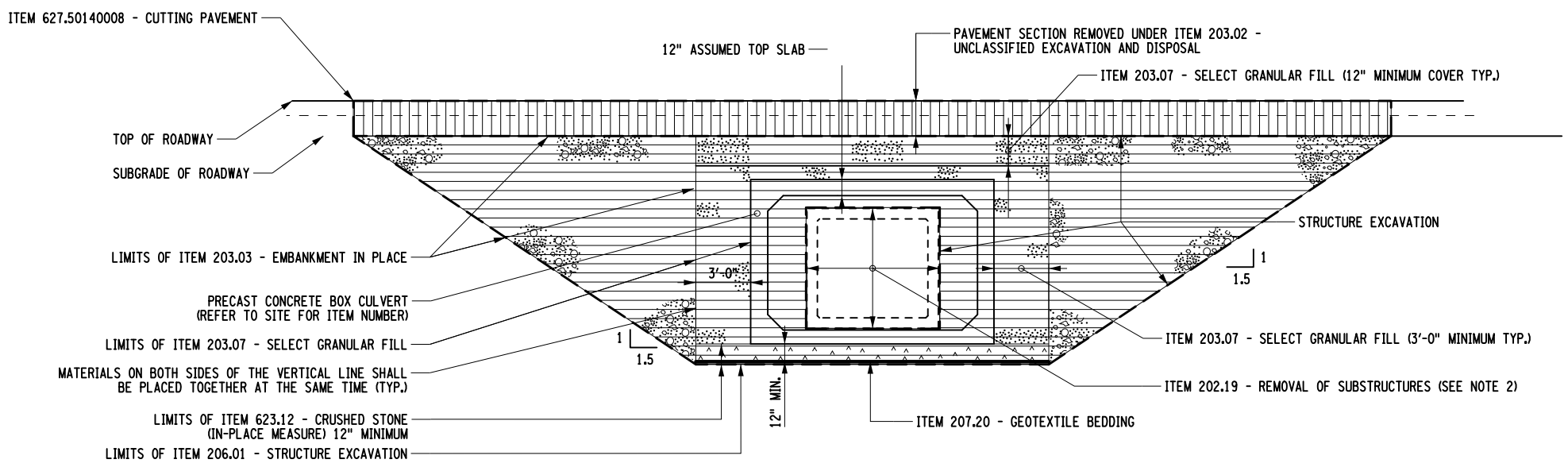


AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	MULTI CULVERT REPLACEMENT PROJECT	PIN 9805.93	BRIDGES	CULVERTS C940011 C950058 C950059 124408 C950119	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	ROUTE 10 - SH 1271, ROUTE 28 - SH 5659, ROUTE 28 - SH 5037, ROUTE 79 - SH 8209, ROUTE 166 - SH 8226	UTILITY QUALITY LEVEL D			GENERAL CULVERT DETAILS	DRAWING NO. GCD-01
	TOWNS OF BARKER, EXETER, MIDDLEFIELD & WALTON					SHEET NO. 13
	COUNTY: VARIOUS	REGION: 09				

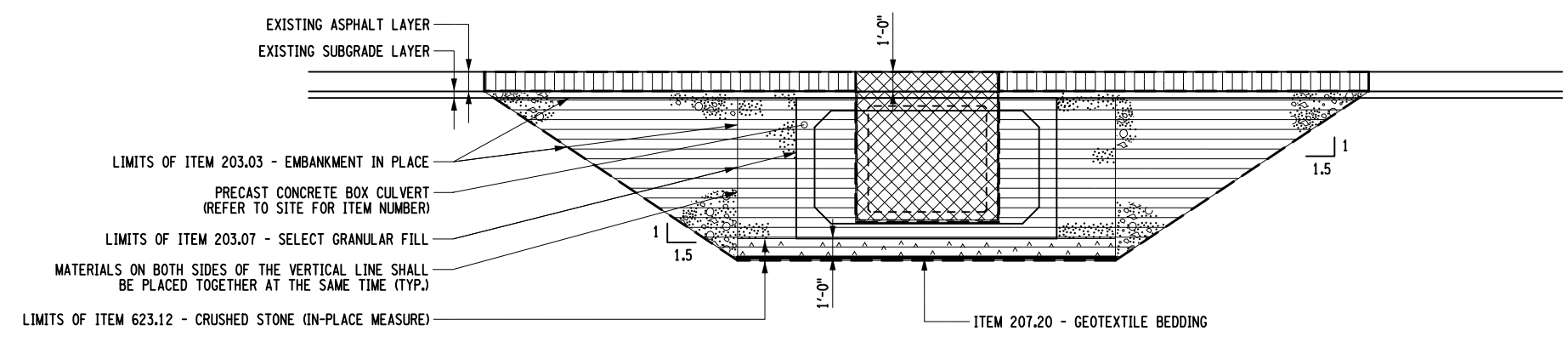
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



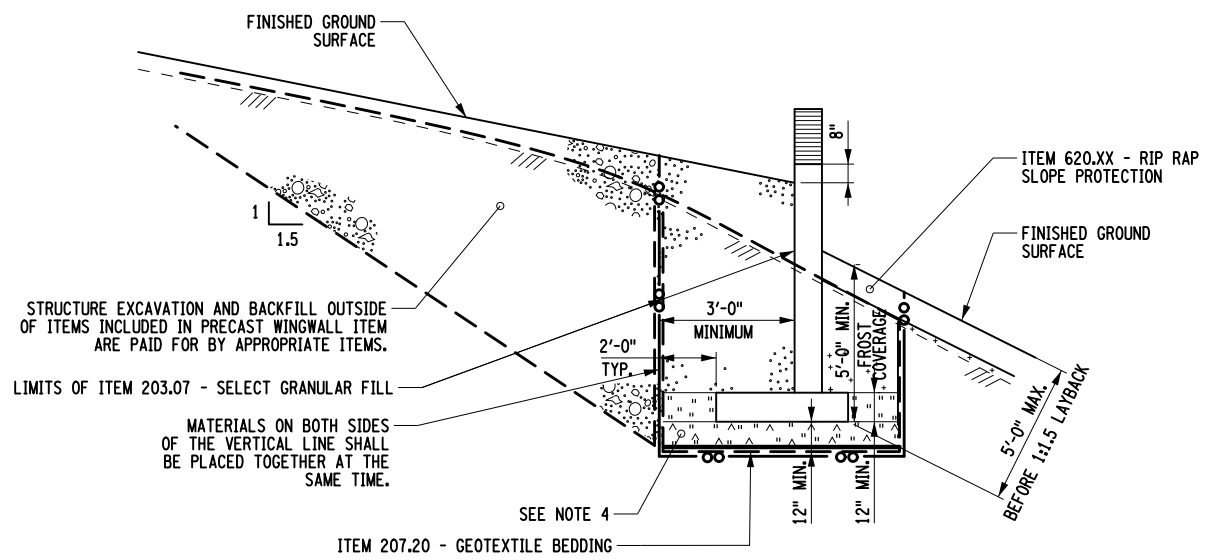
PROJECT MANAGER G. WOJCIK
 CHECK J. L. PHILLIPS
 DRAFTING K. MALORE
 CHECK J. L. PHILLIPS
 DESIGN MULTIPLE
 JOB MANAGER J. L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER



① SECTION B-B ASPHALT PAVEMENT SECTION ON TOP OF GRAVEL SUB-BASE
NOT TO SCALE

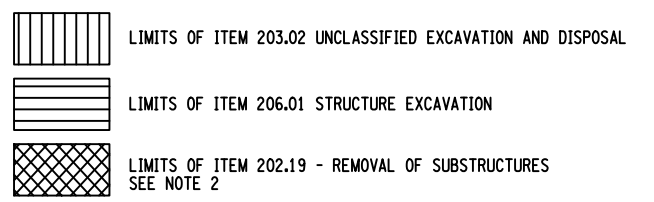


② SECTION B-B ASPHALT PAVEMENT SECTION ON TOP OF EXISTING CULVERT
NOT TO SCALE



③ SECTION C-C
(PRECAST CANTILEVER WINGWALL ON SOIL SECTION)
NOT TO SCALE

- NOTES:
1. DETAILS ON THE DRAWINGS LABELED AS "NOT TO SCALE" ARE INTENTIONALLY DRAWN NOT TO SCALE FOR VISUAL CLARITY. ALL OTHER DETAILS, FOR WHICH NO SCALE IS SPECIFIED, ARE DRAWN PROPORTIONAL AND ARE FULLY DIMENSIONED.
 2. LIMITS FOR ITEM 202.19 - REMOVAL OF SUBSTRUCTURES, INCLUDES THE REMOVAL OF THE EXISTING BOX CULVERT, CUT-OFF WALLS, HEADWALLS, WINGWALLS, AND FOOTINGS. FOR VERY SHALLOW CULVERTS WITH ASPHALT DIRECTLY ADHERED TO THE CULVERT THAT PAVEMENT IS ALSO INCLUDED IN THE COST FOR REMOVAL OF SUBSTRUCTURES.
 3. PLACE THE BOX CULVERT ON A 1 FOOT THICK PAD OF COMPACTED CRUSHED STONE, ITEM 623.12 CONSISTING OF A MIXTURE OF STONE SIZE DESIGNATION 1 AND STONE SIZE DESIGNATION 2.
 4. PLACE THE PRECAST WINGWALL FOOTINGS ON A 1 FOOT THICK LEVELING PAD OF CRUSHED MATERIAL MEETING THE REQUIREMENTS OF MATERIAL DESIGNATION 703-0201, 703-0202, OR 703-0204 WITH A SIZE DESIGNATION OF 2. AFTER PLACING AND LEVELING THE WINGWALL UNITS, THE AREAS BENEATH THE UNITS SHALL BE GROUTED WITH CONTROLLED LOW STRENGTH MATERIAL MEETING THE REQUIREMENTS OF SECTION 204. THE BACKFILL BEHIND THE WINGWALLS SHALL BE WITH THE APPROPRIATE BACKFILL ITEM.
 5. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF THE PRECAST WINGWALL FOOTINGS. THEIR DESIGN IS TO BE BASED UPON THE INFORMATION FOUND IN THE TABLE OF PRECAST CANTILEVER WINGWALL SOIL PARAMETERS AND RESISTANCE FACTORS FOR EACH INDIVIDUAL SITE.



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 USER = jphillips

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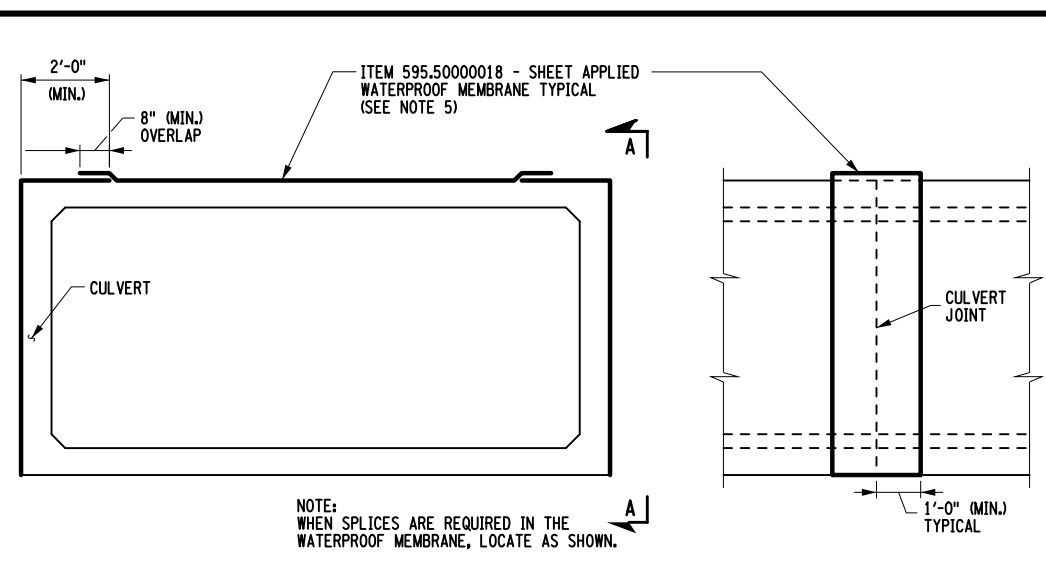
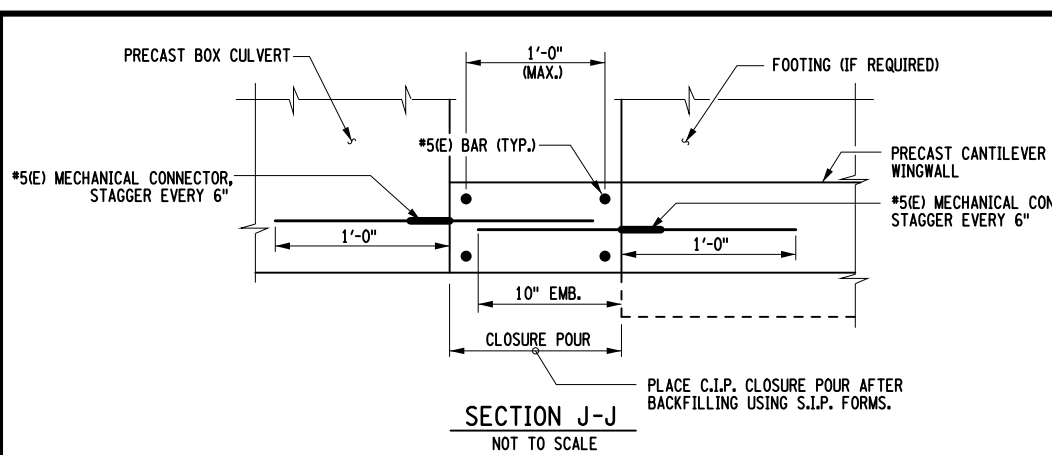
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AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	MULTI CULVERT REPLACEMENT PROJECT	PIN 9805.93	BRIDGES	CULVERTS C940011 C950058 C950059 124408 C950119	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED GENERAL CULVERT DETAILS	CONTRACT NUMBER D262989
	ROUTE 10 - SH 1271, ROUTE 28 - SH 5659, ROUTE 28 - SH 5037, ROUTE 79 - SH 8209, ROUTE 166 - SH 8226	UTILITY QUALITY LEVEL D				DRAWING NO. GCD-02
	TOWNS OF BARKER, EXETER, MIDDLEFIELD & WALTON				SHEET NO. 14	
	COUNTY: VARIOUS REGION: 09					

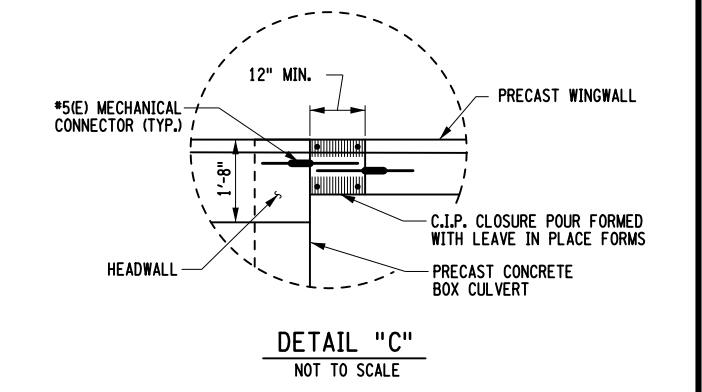
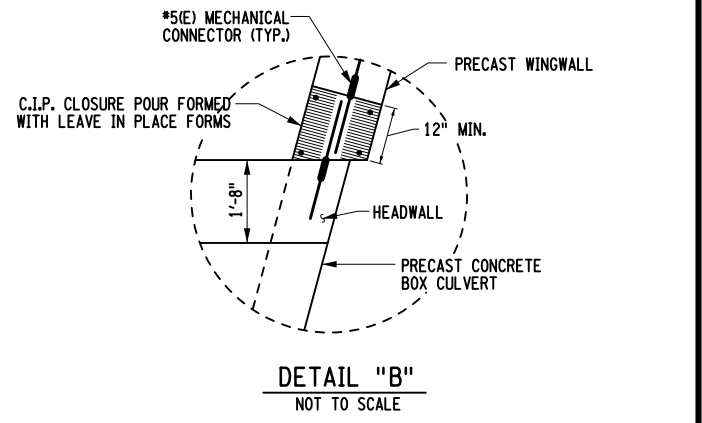
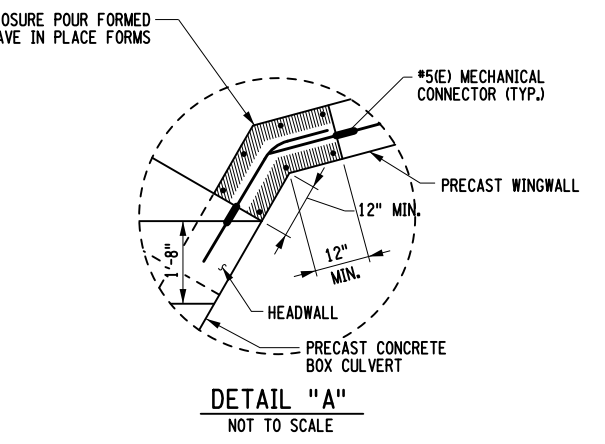
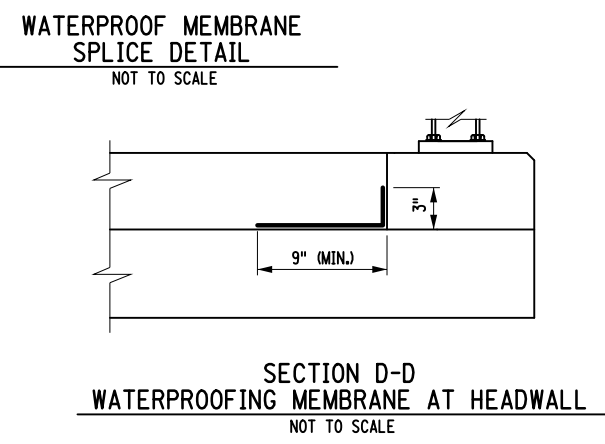
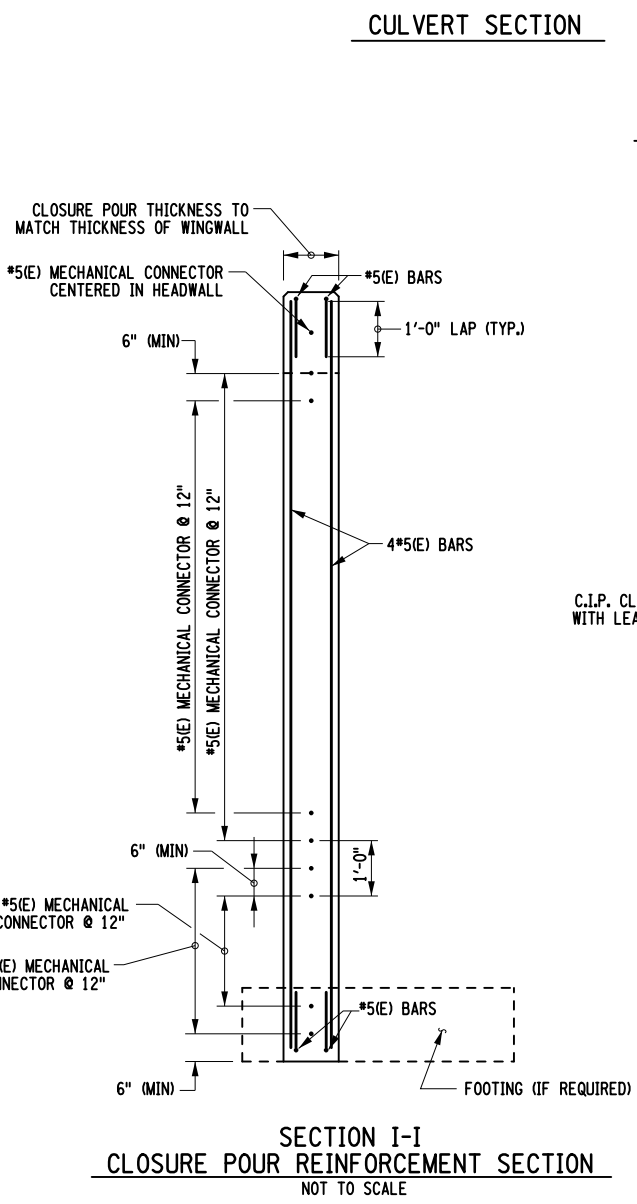
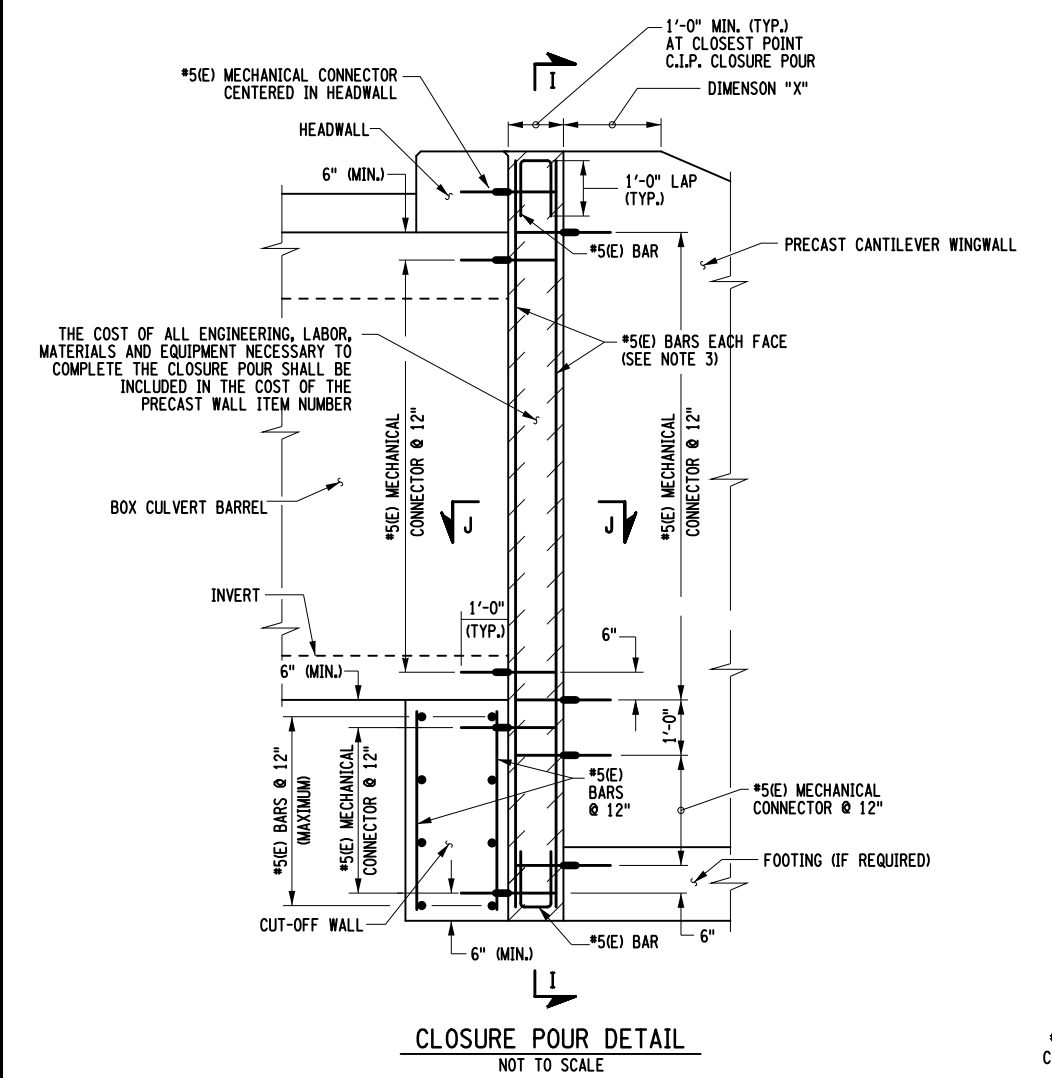
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



PROJECT MANAGER G. WOJCIK
 CHECK J. L. PHILLIPS
 DRAFTING K. MALORE
 CHECK J. L. PHILLIPS
 DESIGN MULTIPLE
 JOB MANAGER J. L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER



- NOTES:
1. ALL REINFORCEMENT USED IN PRECAST BOX CULVERT AND WINGWALLS SHALL BE EPOXY COATED.
 2. THE ACTUAL WALL AND SLAB THICKNESS AND THE REINFORCEMENT SIZE AND SPACINGS REQUIRED SHALL BE DETERMINED BY FABRICATOR'S ENGINEER.
 3. ALL REINFORCEMENT COVER ON CAST IN PLACE CONCRETE SHALL BE 2" UNLESS OTHERWISE NOTED.
 4. ALL REINFORCEMENT COVER ON PRECAST UNITS SHALL BE 2" UNLESS OTHERWISE NOTED.
 5. LARGER SPAN BOX CULVERTS WHERE THE LENGTH OF THE PRECAST SECTIONS ARE SHORTER THAN 4' SHALL BE COMPLETELY COVERED WITH WATERPROOF MEMBRANE.
 6. DETAILS ON THE DRAWINGS LABELED AS "NOT TO SCALE" ARE INTENTIONALLY DRAWN NOT TO SCALE FOR VISUAL CLARITY. ALL OTHER DETAILS, FOR WHICH NO SCALE IS SHOWN, ARE DRAWN PROPORTIONAL AND ARE FULLY DIMENSIONED.



AFFIX SEAL: ON: _____

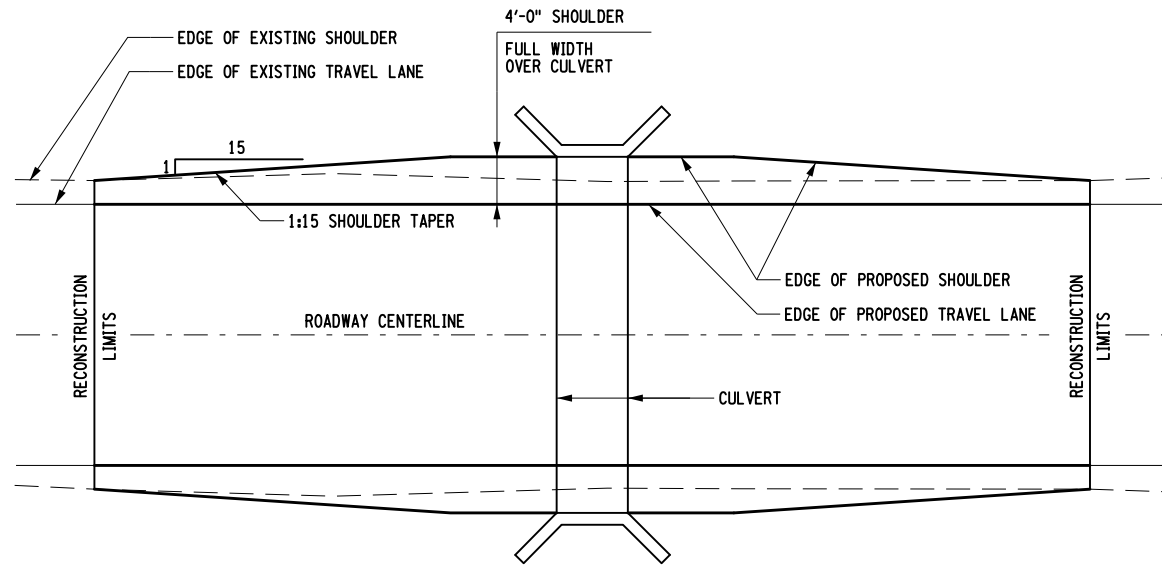
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AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	MULTI CULVERT REPLACEMENT PROJECT	PIN 9805.93	BRIDGES	CULVERTS C940011 C950058 C950059 124408 C950119	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED CLOSURE POUR & WATERPROOFING DETAILS	CONTRACT NUMBER D262989
	ROUTE 10 - SH 1271, ROUTE 28 - SH 5659, ROUTE 28 - SH 5037, ROUTE 79 - SH 8209, ROUTE 166 - SH 8226	UTILITY QUALITY LEVEL D				DRAWING NO. GCD-03
	TOWNS OF BARKER, EXETER, MIDDLEFIELD & WALTON				SHEET NO. 15	
	COUNTY: VARIOUS REGION: 09					

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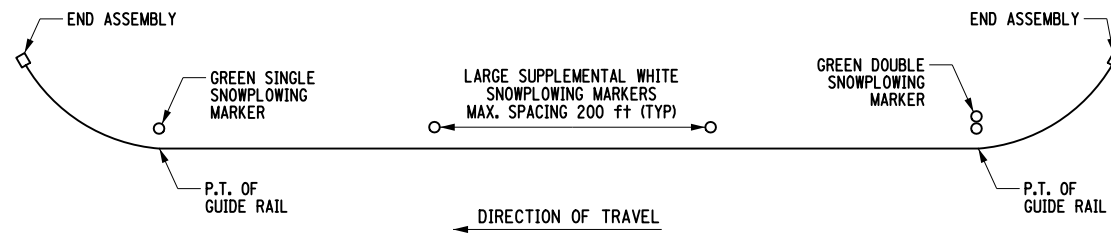
NEW YORK STATE OF OPPORTUNITY
Department of Transportation

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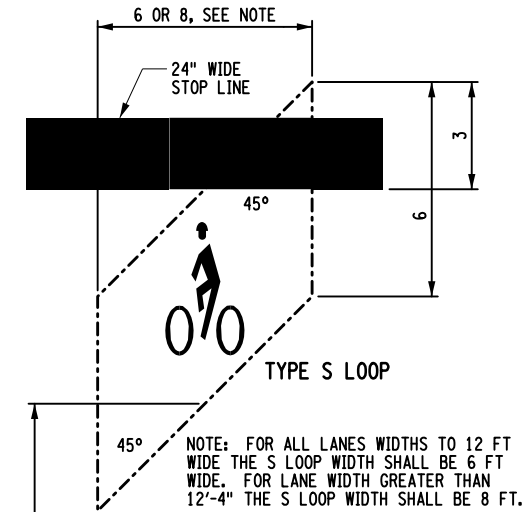
CONSTRUCTION NOTE: STARTING AT THE FULL DEPTH RECONSTRUCTION LIMITS EXTEND THE PROPOSED SHOULDER AT A 1:15 TAPER TO A POINT WHERE THE 4' FULL WIDTH SHOULDER IS DEVELOPED ACROSS THE NEW CULVERT.

1 TYPICAL CULVERT PAVEMENT LAYOUT PLAN
NOT TO SCALE

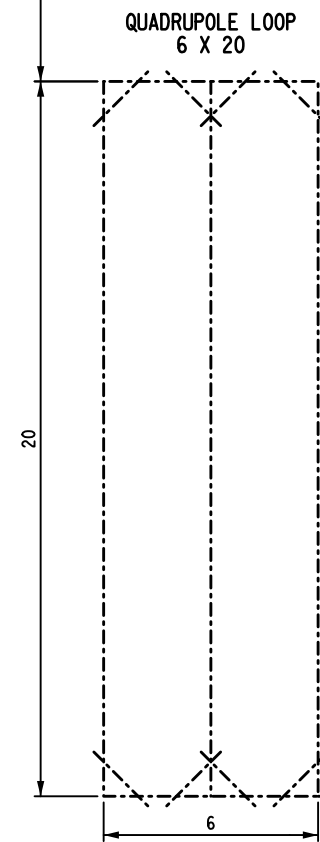
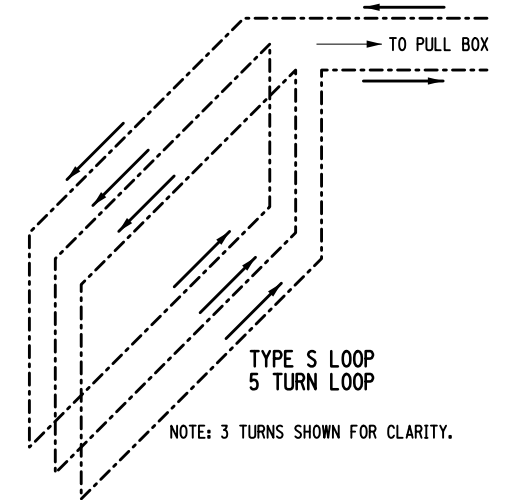


2 SNOWPLOW MARKERS TYPICAL
NOT TO SCALE

ITEM 619.21 TEMPORARY SAND BARREL MODULE	
LENGTH	MODULE ARRAY DETAIL
17	



NOTE: FOR ALL LANES WIDTHS TO 12 FT WIDE THE S LOOP WIDTH SHALL BE 6 FT WIDE. FOR LANE WIDTH GREATER THAN 12'-4" THE S LOOP WIDTH SHALL BE 8 FT.



SAW CUT DETAIL



WINDING DETAIL

3 DETECTOR CONFIGURATION
TYPE S LOOP WITH QUADRUPOLE LOOP
NOT TO SCALE

AFFIX SEAL: ON: ALTERED BY: ON:



AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	MULTI CULVERT REPLACEMENT PROJECT	PIN 9805.93	BRIDGES	CULVERTS C940011 C950058 C950059 124408 C950119	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	ROUTE 10 - SH 1271, ROUTE 28 - SH 5659, ROUTE 28 - SH 5037, ROUTE 79 - SH 8209, ROUTE 166 - SH 8226				GENERAL CULVERT DETAILS	DRAWING NO. GCD-04
	TOWNS OF BARKER, EXETER, MIDDLEFIELD & WALTON				TEMPORARY SAND BARREL MODULE AND LOOP DETECTOR DETAILS	SHEET NO. 16
	COUNTY: VARIOUS	REGION: 09				

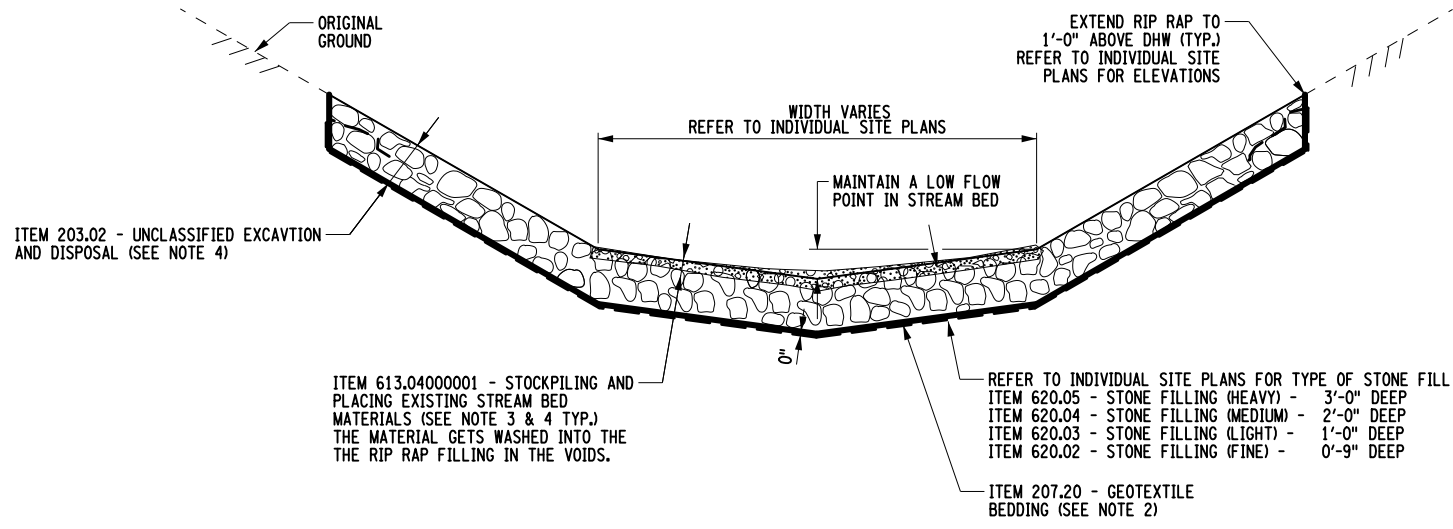
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



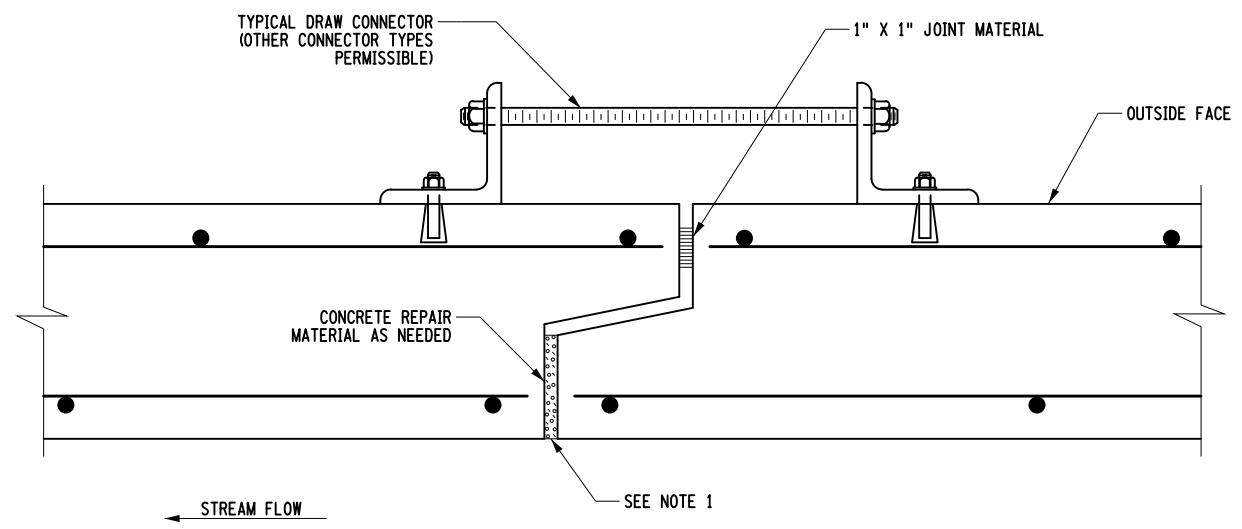
PROJECT MANAGER G. WOJCIK
 CHECK J.L. PHILLIPS
 DRAFTING G. MEYER
 CHECK J.L. PHILLIPS
 DESIGN D. MESZER
 JOB MANAGER J.L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER

NOTES:

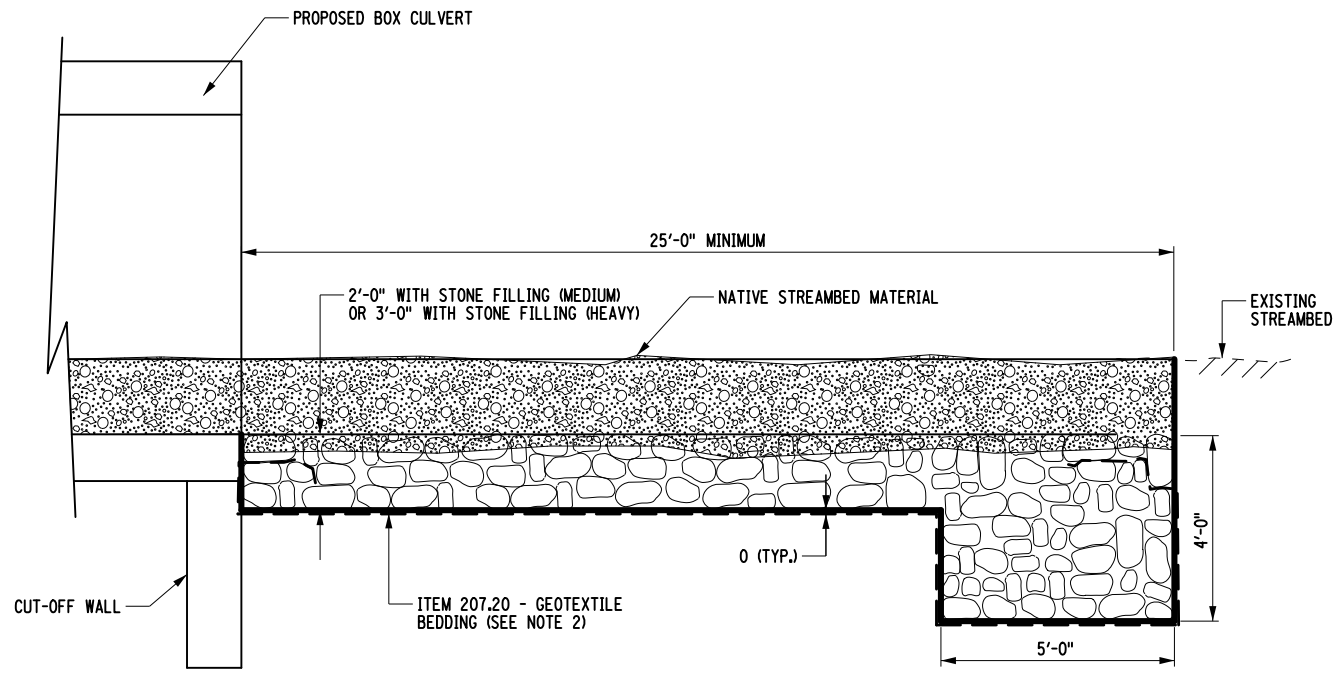
1. THE PRECAST JOINTS ON THE INTERIOR SIDE OF THE CULVERT SHALL BE MADE SMOOTH AND FLUSH WITH THE INTERIOR WALL SURFACE. THE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE PRECAST CULVERT ITEM NUMBER.
2. GEOTEXTILE BEDDING ITEM 207.20 SHALL BE SECURED BY BURYING THE FABRIC ENDS INTO THE STONE FILLING. THE GEOTEXTILE BEDDING SHALL MEET THE REQUIREMENTS OF SPECIFICATION TABLE 737-01A CLASS 1.
3. EXCAVATED AND STOCKPILED NATIVE STREAM BED MATERIAL SHALL BE MIXED WITH THE HEAVY STONE FILL DURING CONSTRUCTION OF THE SCOUR PROTECTION APRONS UPSTREAM AND DOWNSTREAM OF THE CULVERT IN ORDER TO FILL IN VOID SPACES. THE FILLING OF THE VOID SPACES IS NECESSARY TO PREVENT THE STREAM FLOW FROM PERCOLATING BELOW THE STREAM BED GRADE DURING LOW FLOWS. THE STONE FILL IN THE LOWER PORTIONS OF THE APRONS SHALL BE MIXED WITH STOCKPILED NATIVE MATERIAL SOURCED FROM THE DEEPER STREAM BED LAYER. THE SURFACE OF THE NEWLY CONSTRUCTED APRONS (OR LAYERS THEREOF IF PLACED IN MULTIPLE LIFTS) SHALL BE SPRAYED SUFFICIENTLY WITH WATER TO WASH FINER PARTICLES DOWN INTO THE DEEPER VOID SPACES. IF THE NATIVE STREAM BED MATERIAL DOES NOT CONTAIN ENOUGH PARTICLES OF FINE SAND SIZE OR SMALLER TO COMPRISE APPROXIMATELY 5-10% PROPORTION OF THE VOLUME OF THE APRON MATERIAL, ENOUGH OF THIS FINE MATERIAL SHALL BE ADDED TO ACHIEVE THIS APPROXIMATE PROPORTION OF FINES IN THE LOWER 75% OF THE DEPTH OF THE APRON. ANY WASH WATER COLLECTING IN OR FLOWING FROM THE BASE OF THE STONE FILL SHALL BE ALLOWED TO PERCOLATE INTO THE GROUND (PREFERRED), OR IF NECESSARY, DISCHARGED TO A SETTLING BASIN, FILTER SOCK, OR SIMILAR SEDIMENT CONTROL MECHANISM APPROVED BY THE ENGINEER IN CHARGE. THE PLACEMENT OF NATIVE STREAM BED MATERIAL SHALL BE PAID FOR UNDER ITEM 613.04000001.
4. THE EXCAVATION FOR THE RIP-RAP WILL BE PAID FOR UNDER ITEM 203.02 - UNCLASSIFIED EXCAVATION AND DISPOSAL. PRIOR TO THIS EXCAVATION THE USABLE STREAM BED MATERIAL SHALL BE EXCAVATED AND STORED USING 613.04000001 - STOCKPILING AND PLACING EXISTING STREAMBED MATERIALS.



1 TYPICAL STONE APRON CROSS SECTION
NOT TO SCALE



3 BOX CULVERT JOINT DETAIL
NOT TO SCALE



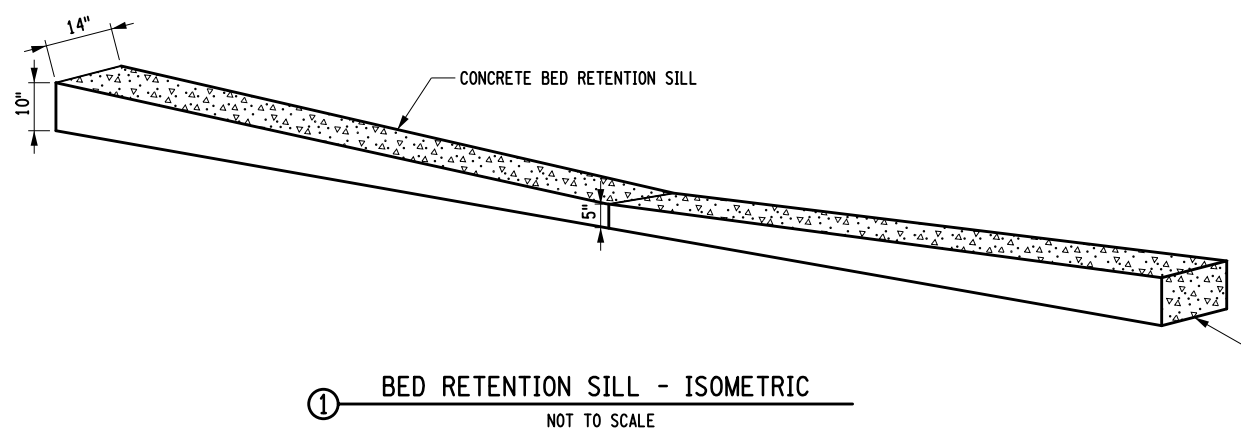
2 CULVERTS WITH CUT-OFF WALL PROTECTION
NOT TO SCALE

AFFIX SEAL: ON:	ALTERED BY: ON:

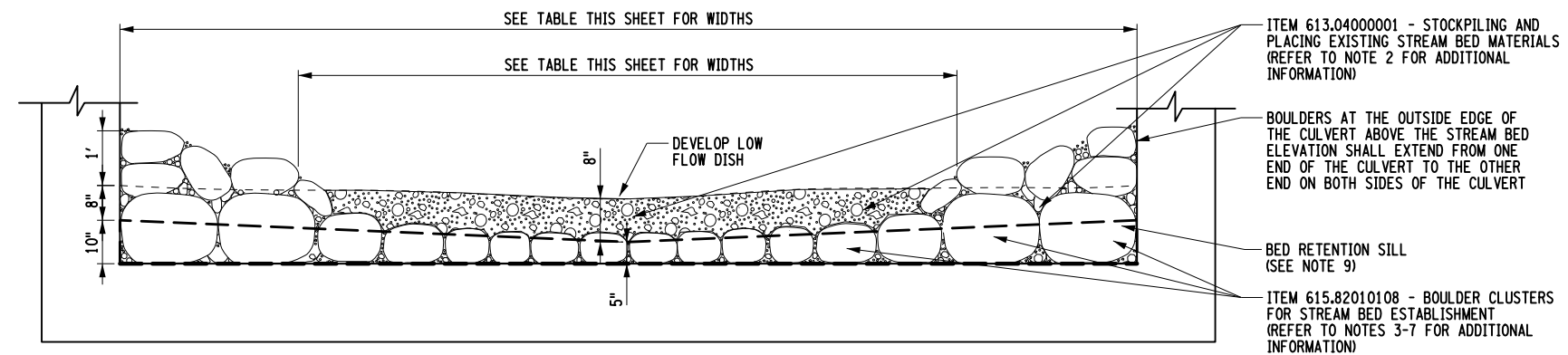
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	MULTI CULVERT REPLACEMENT PROJECT	PIN 9805.93	BRIDGES	CULVERTS C940011 C950058 C950059 124408 C950119	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED TYPICAL STONE APRON DETAILS JOINT DETAIL	CONTRACT NUMBER 262989
	ROUTE 10 - SH 1271, ROUTE 28 - SH 5669, ROUTE 28 - 5037, ROUTE 79 - SH 8209, ROUTE 166 - SH 8209					DRAWING NO. GCD-05
	TOWNS OF BARKER, EXETER, MIDDLEFIELD & WALTON					SHEET NO. 17
	COUNTY: OTSEGO	REGION: 09				
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.						Department of Transportation

FILE NAME = 980593_cph_gcd_05.dgn
 DATE/TIME = 28-JUL-2015 12:50
 USER = jphillips

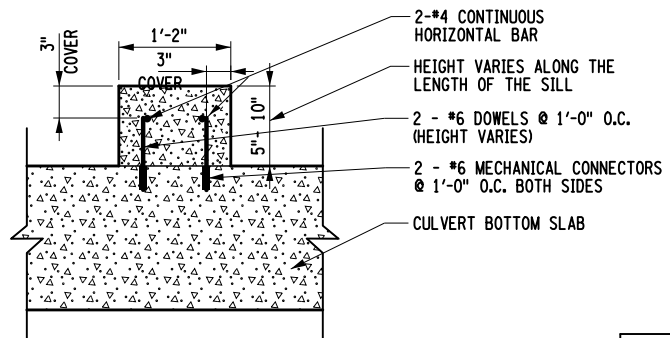
PROJECT MANAGER G.WOJCIK
 CHECK J.L.PHILLIPS
 DRAFTING G.MEYER
 CHECK J.L.PHILLIPS
 DESIGN D.MESZER
 JOB MANAGER J.L.PHILLIPS
 DESIGN SUPERVISOR R.WILDER



① **BED RETENTION SILL - ISOMETRIC**
NOT TO SCALE

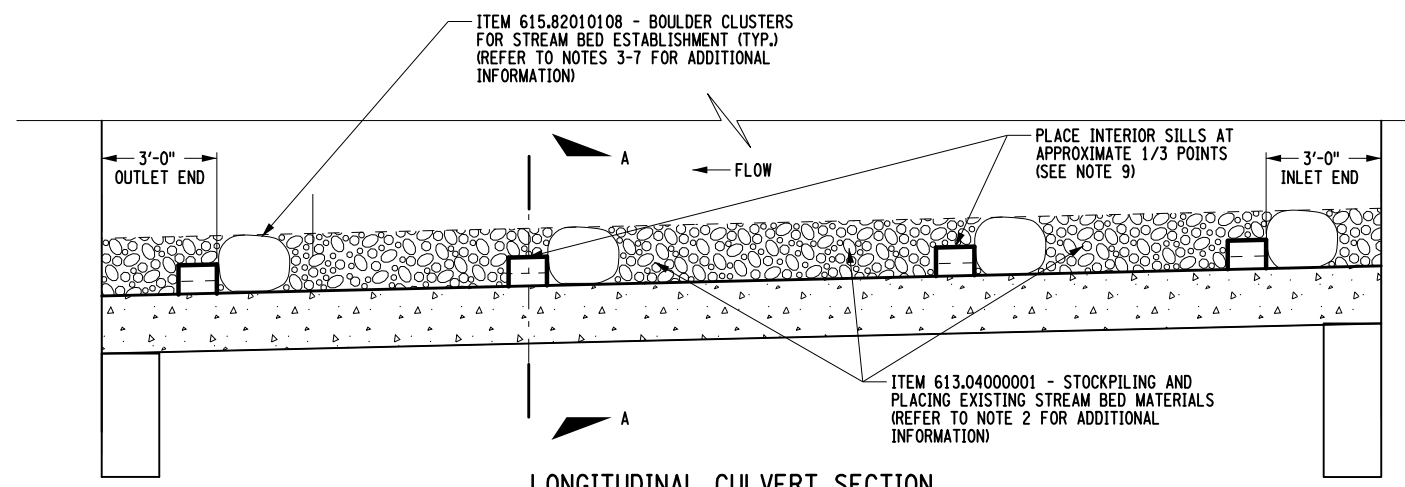


② **BED RETENTION SILL - SECTION A-A / ELEVATION SITES A, B, C AND E**
NOT TO SCALE



③ **CAST IN PLACE BED RETENTION SILL CONNECTION DETAIL**
NOT TO SCALE

TABLE OF CULVERT AND STREAM WIDTHS		
SITE	CULVERT WIDTH	STREAM CHANNEL WIDTH
A	12'	9'
B	6'	4.5'
C	6'	4.5'
E	14'	10.5'



④ **LONGITUDINAL CULVERT SECTION SHOWING BED RETENTION SILLS SITES A, B, C AND E**
NOT TO SCALE

NOTES:

- EXCAVATED AND STOCKPILED NATIVE STREAM BED MATERIAL SHALL BE USED FOR THE EMBEDMENT MATERIAL TO FILL IN THE VOID SPACES. FILLING OF THE VOID SPACES IS NECESSARY TO PREVENT STREAM FLOW FROM PERCOLATING BELOW STREAM BED GRADE DURING LOW FLOWS. THE STONE FILL IN THE LOWER PORTIONS OF THE APRONS SHALL BE MIXED WITH STOCKPILED NATIVE MATERIAL SOURCED FROM THE DEEPER STREAM BED LAYER. THE SURFACE OF THE NEWLY CONSTRUCTED APRONS (OR LAYERS THEREOF IF PLACED IN MULTIPLE LIFTS) SHALL BE SPRAYED SUFFICIENTLY WITH WATER TO WASH FINER PARTICLES DOWN INTO THE DEEPER VOID SPACES. IF THE NATIVE STREAM BED MATERIAL DOES NOT CONTAIN ENOUGH SMALLER PARTICLES AND FINE SAND TO COMPRISE APPROXIMATELY 5-10% PROPORTION OF THE VOLUME OF THE EMBEDMENT MATERIAL, THEN ADDITIONAL MATERIAL CAN BE ADDED TO EACH LIFT TO ACHIEVE THIS APPROXIMATE PROPORTION OF FINES IN THE LOWER 75% OF THE STREAM BED MATERIAL. ANY WASH WATER PONDING IN OR FLOWING FROM THE BASE OF THE STONE FILL SHALL BE ALLOWED TO PERCOLATE INTO THE GROUND (PREFERRED), OR IF NECESSARY, DISCHARGED TO A SETTLING BASIN, FILTER SOCK, OR SIMILAR SEDIMENT CONTROL MECHANISM APPROVED BY THE ENGINEER IN CHARGE. THE PLACEMENT OF NATIVE STREAM BED MATERIAL SHALL BE PAID FOR UNDER ITEM 613.04000001.
- WHILE PLACING THE EMBEDMENT MATERIAL IN THE CULVERT A LOW FLOW CHANNEL SHALL BE FORMED IN THE MATERIAL IN THE CENTER OF THE CULVERT. LARGER STONES SHALL BE PLACED AT THE EDGES OF THE CULVERT BUILDING UP THE SIDES AS SHOWN IN DETAIL 2 ON THIS SHEET.
- BOULDERS SHALL BE PLACED ON THE UPSTREAM SIDE OF EACH BED RETENTION SILL ON THE CULVERT BOTTOM TO RETAIN NATIVE STREAM BED MATERIAL THAT MAY BE PRONE TO WASHING OUT OF THE CULVERT DURING HIGH STREAMFLOWS, WHILE AT THE SAME TIME ALLOWING WATER TO FLOW THROUGH THE PORES OF THE STREAM BED MATERIAL BELOW THE SURFACE OF THE STREAM BED.
- THE STREAM BED RETENTION BOULDERS WILL BE PLACED IN A SINGLE ROW ALONG THE UPSTREAM EDGE OF EACH BED RETENTION SILL. THE BOULDERS SHALL BE APPROXIMATELY 12 INCHES ON LONG-AXIS AND SUB-ROUNDED OR ANGULAR, NOT FLAT AND NOT CRUSHED. THEY SHALL BE PLACED BEFORE THE OTHER NATIVE STREAM BED MATERIAL IS PLACED. DUE TO THE SIZE AND CHARACTER OF THE NATIVE STREAM BED MATERIAL IT IS ANTICIPATED THAT THESE BOULDERS WILL NEED TO BE BROUGHT IN FROM OFFSITE. APPROPRIATE BOULDERS DISCOVERED ONSITE DURING THE COURSE OF PERMITTED WORK ACTIVITIES WILL BE ACCEPTABLE FOR USE. THIS INCLUDE BOULDERS AND ROCKS FOUND DURING THE EXCAVATION PROCESS NEEDED TO INSTALL THE CULVERT AND WING WALLS AND OTHER MISCELLANEOUS STREAM WORK. NATIVE BOULDERS MAY NOT BE OBTAINED FROM OUTSIDE OF THE DESIGNED GRADING LIMITS. IN ORDER TO PREVENT IMPORTATION OF INVASIVE SPECIES SUCH AS DIDYMO ("ROCK SNOT"), BOULDERS FROM OFF-SITE SHALL BE CLEANED AND WASHED OF ANY PLANT, ALGAE OR ORGANIC MATERIAL BEFORE BEING BROUGHT INTO THE WORK AREA.
- THE STREAM BED RETENTION BOULDERS SHALL BE PLACED WITH ONE FACE OR EDGE AGAINST THE UPSTREAM FACE OF THE CONCRETE SILLS, ONE NEXT TO THE OTHER, AND BE TIGHTLY FITTED TO REDUCE GAPS BETWEEN ADJACENT BOULDERS. IF THERE IS NOT SUFFICIENT SPACE TO PLACE THE LAST BOULDER OF A ROW SO IT TOUCHES THE UPSTREAM EDGE OF THE CONCRETE SILL, PLACE THE LAST BOULDER SO IT TOUCHES BOTH THE CULVERT WALL AND THE ADJACENT BOULDER, AS CLOSE TO THE SILL AS POSSIBLE. THE GAP BETWEEN THIS BOULDER AND THE SILL SHALL BE FILLED IN LATER WITH SMALLER SIZED NATIVE STREAM BED MATERIAL.
- THE STREAM BED RETENTION BOULDERS SHALL NOT PROTRUDE MORE THAN 2 INCHES ABOVE THE FINAL GRADE OF THE LOW-FLOW CHANNEL, BOULDERS ON THE SMALLER END OF THE SPECIFIED SIZE RANGE SHOULD BE PLACED IN THE CENTER PORTION OF THE CULVERT WHERE THE BED RETENTION SILLS ARE THE LOWEST.
- PLACEMENT OF THE BOULDERS SHALL BE APPROVED BY THE EIC. THE BOULDERS AND PLACEMENT SHALL BE PAID FOR UNDER ITEM 615.82010108.
- THE CONTRACTOR HAS THE OPTION OF PROVIDING CONCRETE BED RETENTION SILLS EITHER PRECAST IN THE BOX CULVERT OR CAST IN PLACE. (SEE DETAIL 3 ON THIS SHEET FOR THE CAST IN PLACE OPTION)
- THE LOCATION OF THE BED RETENTION SILLS MAY VARY DEPENDING ON THE FINAL SIZE OF THE PRECAST CULVERT SECTIONS. THERE SHALL BE ONE BED RETENTION SILL LOCATED AT EACH END OF THE CULVERT WITH A MINIMUM DISTANCE OF 3' FROM THE END OF THE CULVERT. TWO MORE BED RETENTION SILLS SHALL BE INSTALLED AT THE APPROXIMATE THIRD POINTS ALONG THE LENGTH OF THE CULVERT. DEPENDING ON THE WHERE THE PRECAST JOINTS LAND ALL OF THE BED RETENTION SILLS SHOULD BE LOCATED SYMMETRICALLY ALONG THE LENGTH OF THE CULVERT. THE COST OF THE BED RETENTION SILLS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 603.63XXYY15.

AFFIX SEAL: ON: _____
 ALTERED BY: ON: _____



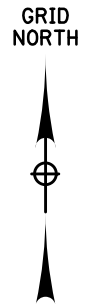
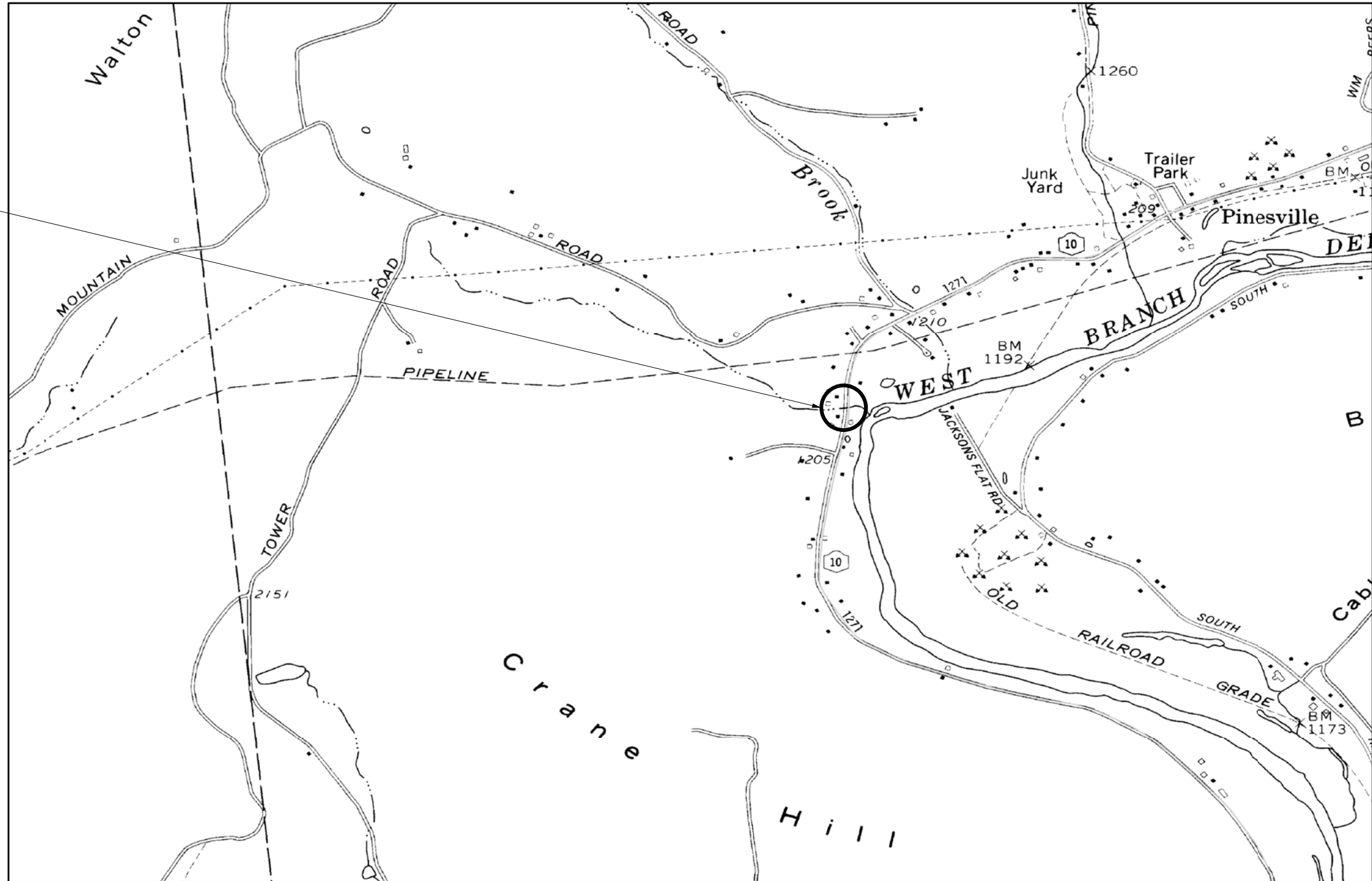
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	MULTI CULVERT REPLACEMENT PROJECT	PIN 9805.93	BRIDGES	CULVERTS C940011 C950058 C950059 124408	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED BED RETENTION SILL DETAILS	CONTRACT NUMBER 262989
	ROUTE 10 - SH 1271, ROUTE 28 - SH 5669, ROUTE 28 - 5037, ROUTE 79 - SH 8209, ROUTE 166 - SH 8209					DRAWING NO. GCD-06
	TOWNS OF BARKER, EXETER, MIDDLEFIELD & WALTON					SHEET NO. 18
	COUNTY: OTSEGO	REGION: 09				

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FILE NAME = 980593_cph_gcd_06.dgn
 DATE/TIME = 28-JUL-2015 12:50
 USER = jphillips

PROJECT SITE A
 C940011
 ROUTE 10
 RM 10-9301-1245



SITE A LOCATION MAP
 NYS ROUTE 10 RM 10-9301-1245
 TOWN OF WALTON
 NOT TO SCALE

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 10 - SH 1271	PIN 9805.93 ROUTE 10 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS C940011	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	ROCK RIFT - COLCHESTER					DRAWING NO. LOC-01-A SHEET NO. 19
	CULVERT REPLACEMENT & REPAIR PROJECT				LOCATION MAP	
	TOWN OF WALTON				SITE A	
	COUNTY: DELAWARE REGION: 09					

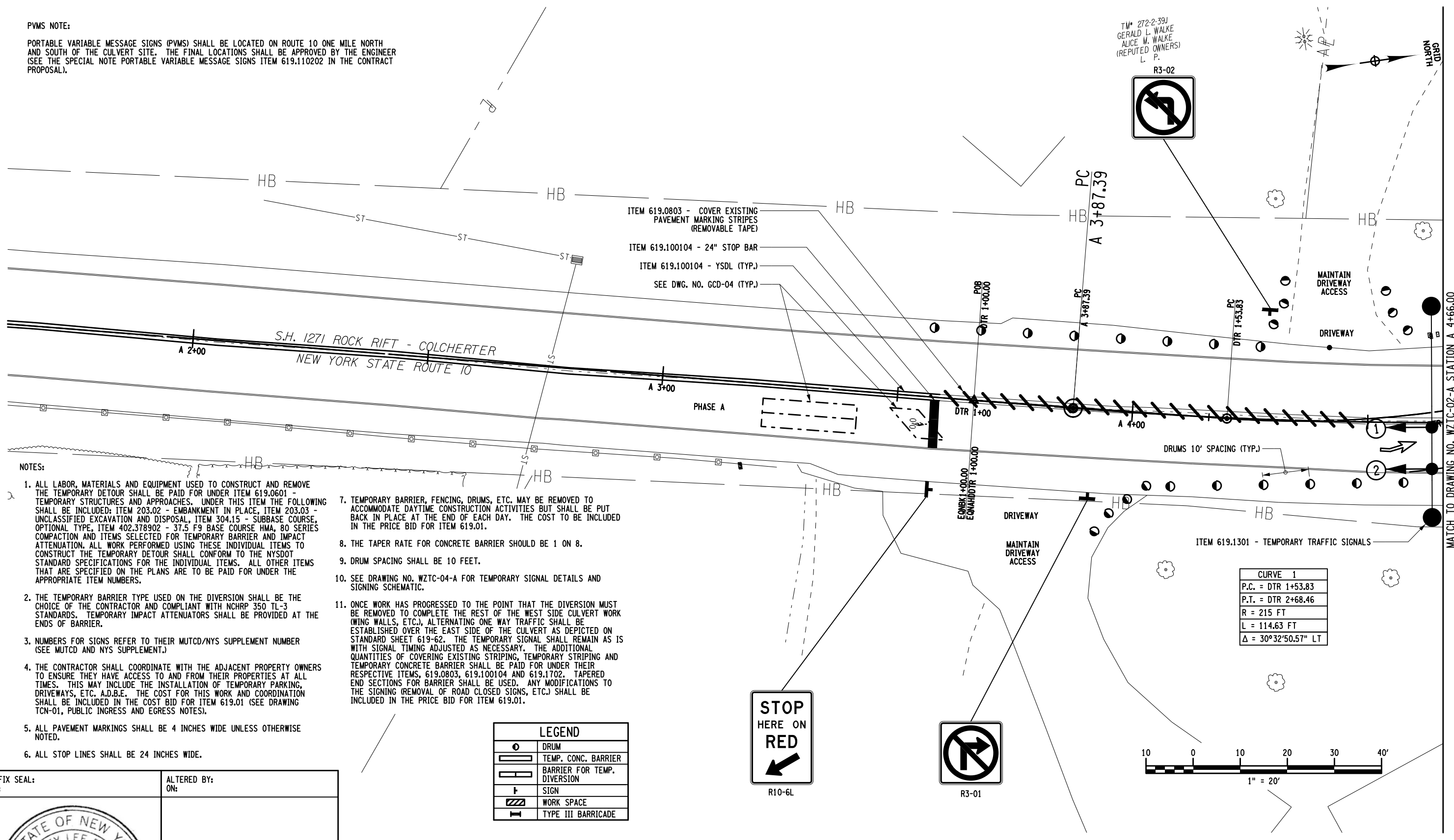


PVMS NOTE:

PORTABLE VARIABLE MESSAGE SIGNS (PVMS) SHALL BE LOCATED ON ROUTE 10 ONE MILE NORTH AND SOUTH OF THE CULVERT SITE. THE FINAL LOCATIONS SHALL BE APPROVED BY THE ENGINEER (SEE THE SPECIAL NOTE PORTABLE VARIABLE MESSAGE SIGNS ITEM 619.110202 IN THE CONTRACT PROPOSAL).

TW# 272-2-39J
GERALD L. WALKER
ALICE M. WALKER
(REPUTED OWNERS)
L.P.
R3-02

PROJECT MANAGER G. WOJCIK
CHECK J.L. PHILLIPS
DRAFTING W. C. GRIFFITHS
CHECK J. L. PHILLIPS
DESIGN D. MELSZER
JOB MANAGER J. L. PHILLIPS
DESIGN SUPERVISOR R. WILDER



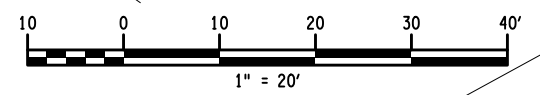
NOTES:

- ALL LABOR, MATERIALS AND EQUIPMENT USED TO CONSTRUCT AND REMOVE THE TEMPORARY DETOUR SHALL BE PAID FOR UNDER ITEM 619.0601 - TEMPORARY STRUCTURES AND APPROACHES. UNDER THIS ITEM THE FOLLOWING SHALL BE INCLUDED: ITEM 203.02 - EMBANKMENT IN PLACE, ITEM 203.03 - UNCLASSIFIED EXCAVATION AND DISPOSAL, ITEM 304.15 - SUBBASE COURSE, OPTIONAL TYPE, ITEM 402.378902 - 37.5 F9 BASE COURSE HMA, 80 SERIES COMPACTION AND ITEMS SELECTED FOR TEMPORARY BARRIER AND IMPACT ATTENUATION. ALL WORK PERFORMED USING THESE INDIVIDUAL ITEMS TO CONSTRUCT THE TEMPORARY DETOUR SHALL CONFORM TO THE NYS DOT STANDARD SPECIFICATIONS FOR THE INDIVIDUAL ITEMS. ALL OTHER ITEMS THAT ARE SPECIFIED ON THE PLANS ARE TO BE PAID FOR UNDER THE APPROPRIATE ITEM NUMBERS.
- THE TEMPORARY BARRIER TYPE USED ON THE DIVERSION SHALL BE THE CHOICE OF THE CONTRACTOR AND COMPLIANT WITH NCHRP 350 TL-3 STANDARDS. TEMPORARY IMPACT ATTENUATORS SHALL BE PROVIDED AT THE ENDS OF BARRIER.
- NUMBERS FOR SIGNS REFER TO THEIR MUTCD/NYS SUPPLEMENT NUMBER (SEE MUTCD AND NYS SUPPLEMENT.)
- THE CONTRACTOR SHALL COORDINATE WITH THE ADJACENT PROPERTY OWNERS TO ENSURE THEY HAVE ACCESS TO AND FROM THEIR PROPERTIES AT ALL TIMES. THIS MAY INCLUDE THE INSTALLATION OF TEMPORARY PARKING, DRIVEWAYS, ETC. A.D.B.E. THE COST FOR THIS WORK AND COORDINATION SHALL BE INCLUDED IN THE COST BID FOR ITEM 619.01 (SEE DRAWING TCN-01, PUBLIC INGRESS AND EGRESS NOTES).
- ALL PAVEMENT MARKINGS SHALL BE 4 INCHES WIDE UNLESS OTHERWISE NOTED.
- ALL STOP LINES SHALL BE 24 INCHES WIDE.
- TEMPORARY BARRIER, FENCING, DRUMS, ETC. MAY BE REMOVED TO ACCOMMODATE DAYTIME CONSTRUCTION ACTIVITIES BUT SHALL BE PUT BACK IN PLACE AT THE END OF EACH DAY. THE COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 619.01.
- THE TAPER RATE FOR CONCRETE BARRIER SHOULD BE 1 ON 8.
- DRUM SPACING SHALL BE 10 FEET.
- SEE DRAWING NO. WZTC-04-A FOR TEMPORARY SIGNAL DETAILS AND SIGNING SCHEMATIC.
- ONCE WORK HAS PROGRESSED TO THE POINT THAT THE DIVERSION MUST BE REMOVED TO COMPLETE THE WEST SIDE CULVERT WORK (WING WALLS, ETC.), ALTERNATING ONE WAY TRAFFIC SHALL BE ESTABLISHED OVER THE EAST SIDE OF THE CULVERT AS DEPICTED ON STANDARD SHEET 619-62. THE TEMPORARY SIGNAL SHALL REMAIN AS IS WITH SIGNAL TIMING ADJUSTED AS NECESSARY. THE ADDITIONAL QUANTITIES OF COVERING EXISTING STRIPING, TEMPORARY STRIPING AND TEMPORARY CONCRETE BARRIER SHALL BE PAID FOR UNDER THEIR RESPECTIVE ITEMS, 619.0803, 619.100104 AND 619.1702. TAPERED END SECTIONS FOR BARRIER SHALL BE USED. ANY MODIFICATIONS TO THE SIGNING (REMOVAL OF ROAD CLOSED SIGNS, ETC.) SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 619.01.

LEGEND	
	DRUM
	TEMP. CONC. BARRIER
	BARRIER FOR TEMP. DIVERSION
	SIGN
	WORK SPACE
	TYPE III BARRICADE



CURVE 1	
P.C.	= DTR 1+53.83
P.T.	= DTR 2+68.46
R	= 215 FT
L	= 114.63 FT
Δ	= 30°32'50.57" LT



AFFIX SEAL: ON: _____

ALTERED BY: ON: _____

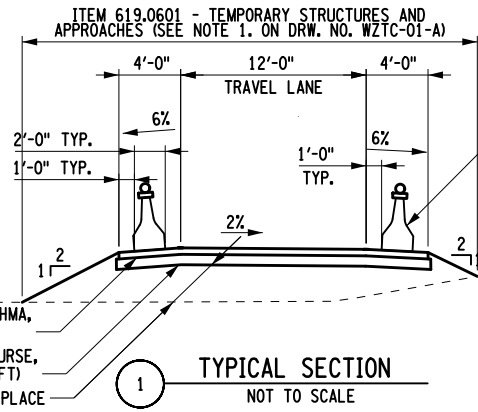
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 10 - SH 1271	PIN 9805.93	BRIDGES	CULVERTS C940011	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED WORK ZONE TRAFFIC CONTROL PLAN	CONTRACT NUMBER D262989
	ROCK RIFT - COLCHESTER	ROUTE 10	UTILITY QUALITY LEVEL D			DRAWING NO. WZTC-01-A
	CULVERT REPLACEMENT & REPAIR PROJECT	TOWN OF WALTON			SITE A	SHEET NO. 20
		COUNTY: DELAWARE	REGION: 09			

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FILE NAME = 980593_C940011_RT110_cph_wztc_02_A.dgn
 DATE/TIME = 13-AUG-2015 11:48
 USER = dmelzszer

PROJECT MANAGER G. WOJCIK
 CHECK J.L. PHILLIPS
 DRAFTING W. C. GRIFFITHS
 CHECK J. L. PHILLIPS
 DESIGN D. MELSZER
 JOB MANAGER J. L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER

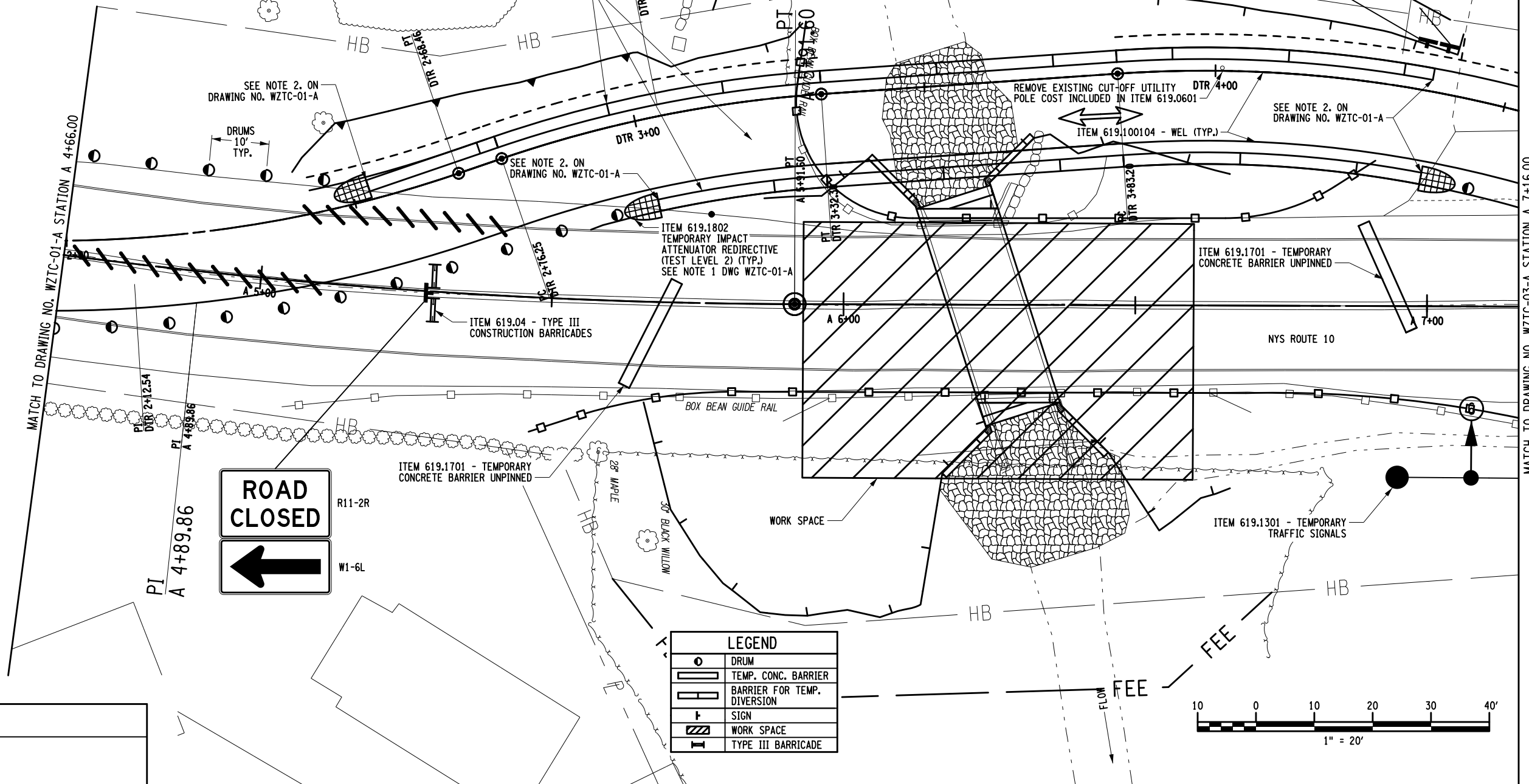


ITEM 402.378902 - 37.5 F9 BASE COURSE HMA, 80 SERIES COMPACTION, 5" (ONE LIFT)
 ITEM 304.15 - SUBBASE COURSE, OPTIONAL TYPE, 8" (ONE LIFT)
 ITEM 203.02 - EMBANKMENT IN PLACE
 NOTE: ABOVE ITEMS INCLUDED IN THE PRICE BID FOR ITEM 619.0601.

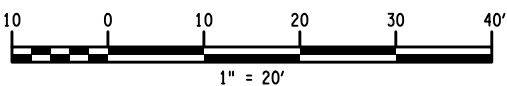
CURVE 1	
P.C. =	DTR 1+53.83
P.T. =	DTR 2+68.46
R =	215 FT
L =	114.63 FT
Δ =	30°32'50.57" LT
CURVE 2	
P.C. =	DTR 2+76.25
P.T. =	DTR 3+32.30
R =	215 FT
L =	56.04 FT
Δ =	14°56'0.750" RT
CURVE 3	
P.C. =	DTR 3+83.20
P.T. =	DTR 4+32.18
R =	215 FT
L =	96.31 FT
Δ =	25°39'57.50" RT

MATCH TO DRAWING NO. WZTC-01-A STATION A 4+66.00

MATCH TO DRAWING NO. WZTC-03-A STATION A 7+16.00



LEGEND	
	DRUM
	TEMP. CONC. BARRIER
	BARRIER FOR TEMP. DIVERSION
	SIGN
	WORK SPACE
	TYPE III BARRICADE



AFFIX SEAL: ON: _____
 ALTERED BY: ON: _____



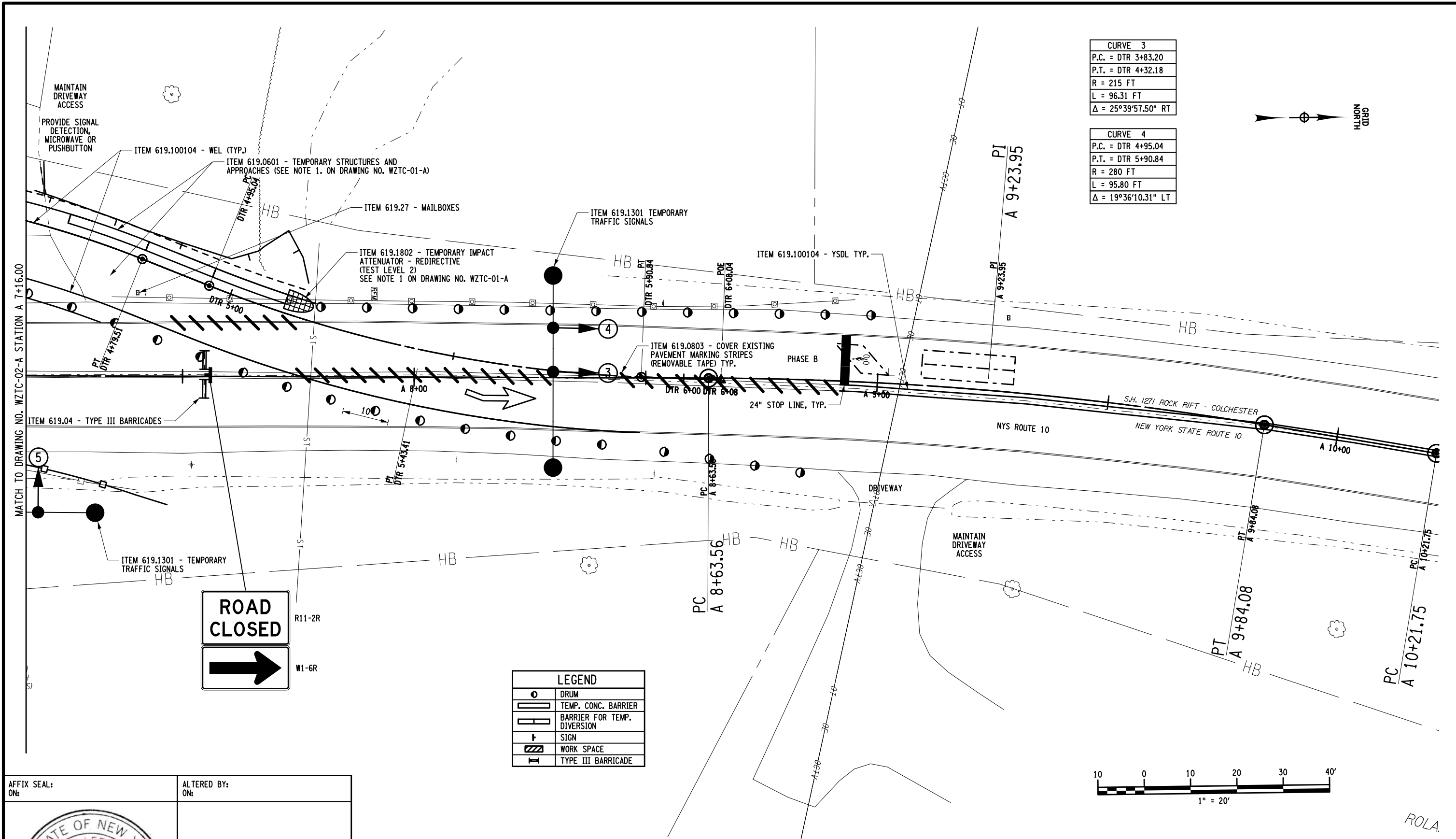
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 10 - SH 1271	PIN 9805.93	BRIDGES	CULVERTS C940011	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	ROCK RIFT - COLCHESTER	ROUTE 10			WORK ZONE TRAFFIC CONTROL PLAN	DRAWING NO. WZTC-02-A
	CULVERT REPLACEMENT & REPAIR PROJECT	UTILITY QUALITY LEVEL D				SHEET NO. 21
	TOWN OF WALTON					
	COUNTY: DELAWARE	REGION: 09				

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FILE NAME = 980593_C940011_RT110_cph_wztc_03_A.dgn
 DATE/TIME = 13-AUG-2015 11:49
 USER = dmelszer

PROJECT MANAGER G. WOJCIK
 CHECK J.L. PHILLIPS
 DRAFTING W. C. GRIFFITHS
 CHECK J. L. PHILLIPS
 DESIGN D. MELSZER
 JOB MANAGER J. L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER

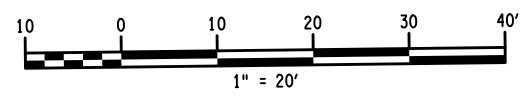


CURVE 3	
P.C. =	DTR 3+83.20
P.T. =	DTR 4+32.18
R =	215 FT
L =	96.31 FT
Δ =	25°39'57.50" RT

CURVE 4	
P.C. =	DTR 4+95.04
P.T. =	DTR 5+90.84
R =	280 FT
L =	95.80 FT
Δ =	19°36'10.31" LT



LEGEND	
	DRUM
	TEMP. CONC. BARRIER
	BARRIER FOR TEMP. DIVERSION
	SIGN
	WORK SPACE
	TYPE III BARRICADE



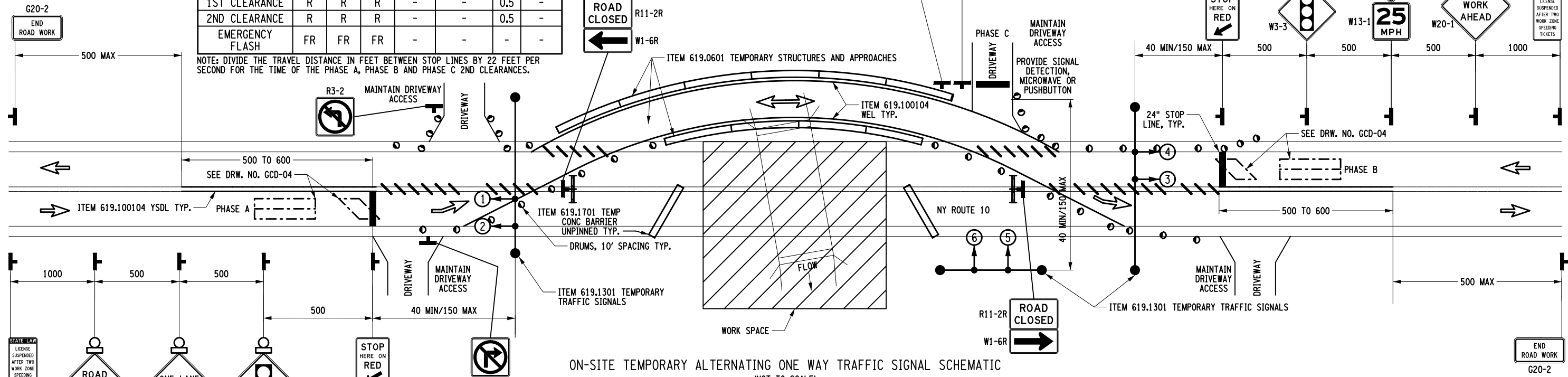
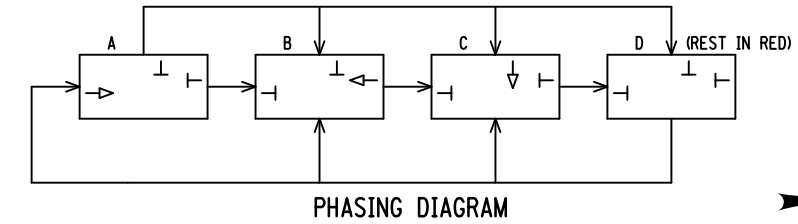
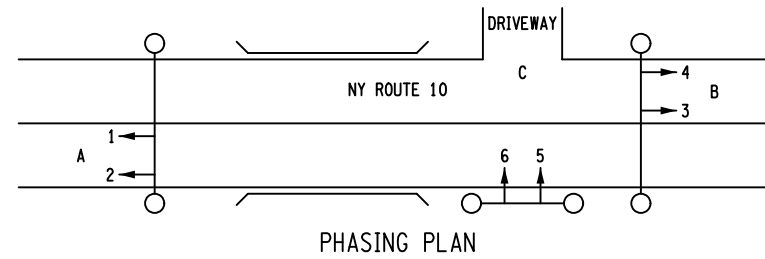
AFFIX SEAL: ON:	ALTERED BY: ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 10 - SH 1271	PIN 9805.93	BRIDGES	CULVERTS C940011	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED WORK ZONE TRAFFIC CONTROL PLAN	CONTRACT NUMBER D262989
	ROCK RIFT - COLCHESTER	ROUTE 10	UTILITY QUALITY LEVEL D			DRAWING NO. WZTC-03-A
	CULVERT REPLACEMENT & REPAIR PROJECT	TOWN OF WALTON			SITE A	SHEET NO. 22
		COUNTY: DELAWARE	REGION: 09			
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.						

ROLA

PHASING TABLE													
PHASE	FACE	1, 2			3, 4			5, 6					
		INITIAL	EXTENSION	TIME	RECALL	INITIAL	EXTENSION	TIME	RECALL	INITIAL	EXTENSION	TIME	RECALL
A	G	R	R	R	8	6	32	NO					
1ST CLEARANCE	Y	R	R	R	-	-	3.5	-					
2ND CLEARANCE	R	R	R	R	-	-	SEE NOTE	-					
B	R	G	R	R	8	6	32	NO					
1ST CLEARANCE	R	Y	R	R	-	-	3.5	-					
2ND CLEARANCE	R	R	R	R	-	-	SEE NOTE	-					
C	R	R	G	R	8	6	14	NO					
1ST CLEARANCE	R	R	Y	R	-	-	3.5	-					
2ND CLEARANCE	R	R	R	R	-	-	SEE NOTE	-					
D (REST IN RED)	R	R	R	R	-	-	1.0	YES					
1ST CLEARANCE	R	R	R	R	-	-	0.5	-					
2ND CLEARANCE	R	R	R	R	-	-	0.5	-					
EMERGENCY FLASH	FR	FR	FR	FR	-	-	-	-					

NOTE: DIVIDE THE TRAVEL DISTANCE IN FEET BETWEEN STOP LINES BY 22 FEET PER SECOND FOR THE TIME OF THE PHASE A, PHASE B AND PHASE C 2ND CLEARANCES.



NOTES:

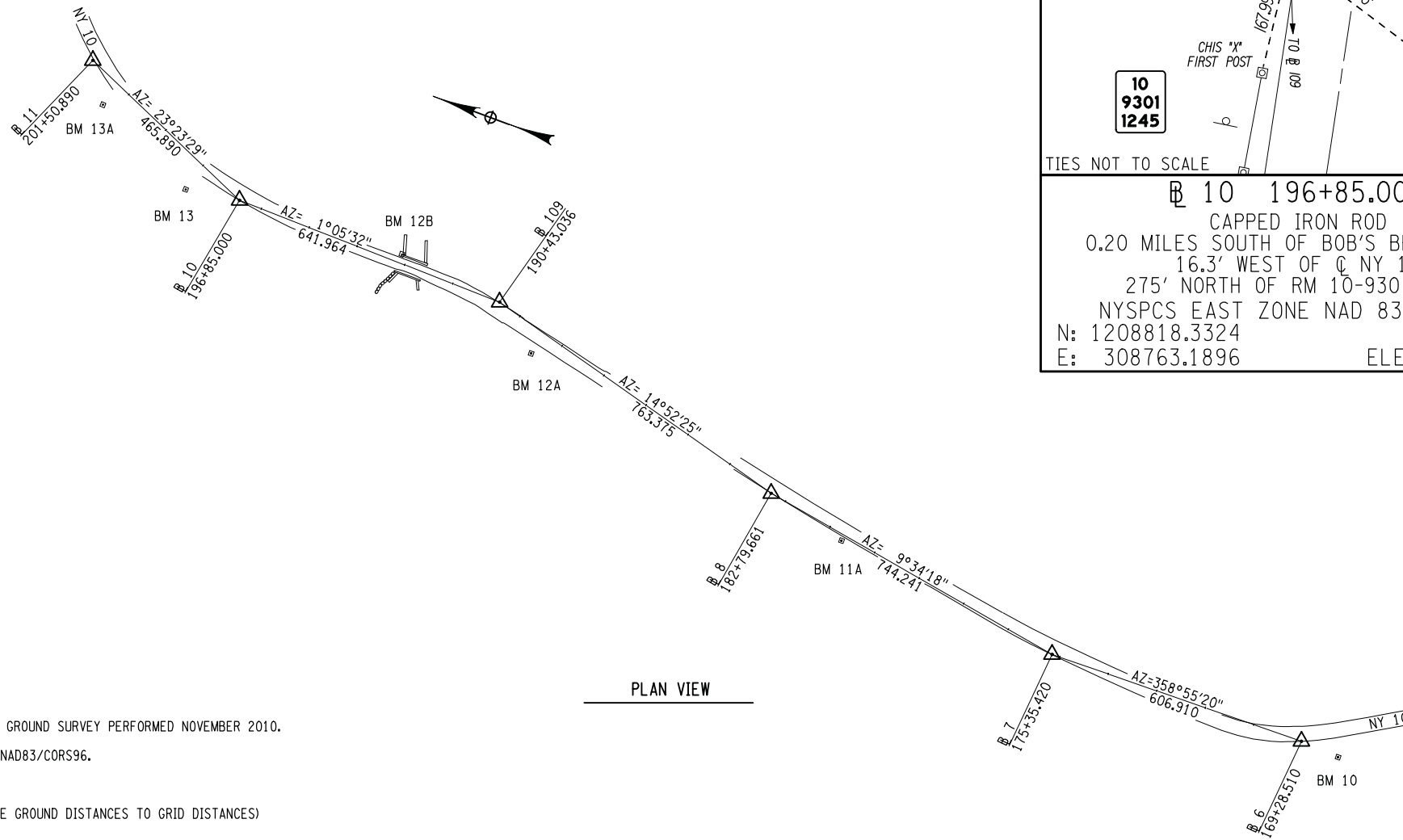
- REFER ALSO TO THE MUTCD AND APPLICABLE 619 STANDARD SHEETS.
- THE SIGNAL LOCATION SHALL BE FIELD DETERMINED AS DIRECTED BY THE ENGINEER.
- ADJUSTMENTS IN THE LOCATION OF ADVANCED WARNING SIGNS SHALL BE MADE TO ACCOMMODATE THE HORIZONTAL AND VERTICAL ALIGNMENT OF THE ROADWAY, RECOGNIZING THAT THE DISTANCES SHOWN FOR SIGN SPACING ARE MINIMUMS.
- FLASHING WARNING LIGHTS ARE REQUIRED ON THE SIGNAL AHEAD SIGNS (W3-3). FLASHING WARNING LIGHTS SHALL ALSO BE REQUIRED ON THE ROAD WORK AHEAD SIGNS (W20-1) AND ONE LANE ROAD AHEAD SIGNS (W20-4).
- THE TIMING, PHASING AND DETECTOR LOCATIONS ARE TO BE VERIFIED BY THE REGIONAL TRAFFIC ENGINEER AT LEAST 2 WEEKS PRIOR TO START UP. THE REGIONAL TRAFFIC ENGINEER SHALL APPROVE ANY CHANGES OR ADDITIONS REQUIRED DUE TO OBSERVED TRAFFIC CONDITIONS.
- DETECTORS SHALL BE INSTALLED ON ALL APPROACH LANES AND ALL PHASES SHALL BE ACTUATED. DURATION OF RED CLEARANCE INTERVALS SHALL BE ADEQUATE TO CLEAR THE ONE-LANE SECTION OF CONFLICTING TRAFFIC.
- LOOPS SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD SHEET 680-14.
- OTHER TYPES OF VEHICLE DETECTION EQUIPMENT MAY BE USED IF PRIOR APPROVAL IS OBTAINED FROM THE REGIONAL TRAFFIC ENGINEERING AND SAFETY GROUP. REQUESTS BY THE CONTRACTOR TO USE SUCH ALTERNATIVES SHALL BE ACCOMPANIED BY DETAILED PLANS AND SPECIFICATIONS.
- THE TRAFFIC SIGNAL SHALL REST IN RED. WHEN THE SIGNAL IS CHANGED TO THE FLASHING MODE, EITHER MANUALLY OR AUTOMATICALLY, RED SIGNAL INDICATIONS SHALL BE FLASHED TO ALL APPROACHES.
- REST IN RED FEATURE MAY BE SUBSTITUTED FOR PHASE D.
- EMERGENCY FLASH OPERATION IS CONSIDERED A MALFUNCTION. FLAGGERS ARE REQUIRED UNTIL THE MALFUNCTION IS REPAIRED.
- THE CONTRACTOR SHALL COMMENCE REPAIR WORK ON THIS SIGNAL WITHIN TWO HOURS AFTER HE/SHE HAS BEEN NOTIFIED OF A MALFUNCTION. THE CONTRACTOR HAS AN EIGHT HOUR TIME LIMIT TO MAKE REPAIRS. FLAGGER CONTROL SHALL BE PROVIDED AT THE CONTRACTOR'S EXPENSE UNTIL THE TEMPORARY SIGNAL IS RESTORED TO PROPER OPERATION. IF THE REPAIRS REMAIN UNCOMPLETED AFTER THIS TIME, LIQUIDATED DAMAGES OF ONE DAY WILL BE ASSESSED FOR EACH DAY THE SIGNAL IS MALFUNCTIONING UNTIL IT IS REPAIRED.
- TEMPORARY STOP LINES, CROSSWALKS AND LANE MARKINGS SHALL BE INSTALLED USING ITEM 619.100104, INTERIM PAVEMENT MARKING STRIPES, REMOVABLE WET REFLECTIVE TAPE. EXISTING CONFLICTING PAVEMENT MARKINGS BETWEEN THE ACTIVITY AREA AND THE STOP LINE SHALL BE COVERED USING ITEM 619.0803, COVER EXISTING PAVEMENT MARKING STRIPES (REMOVABLE TAPE).
- MINIMUM CLEARANCE FROM PAVEMENT TO BOTTOM OF SIGNAL HEADS IS 16'-6".
- ALL SIGNAL HEADS SHALL CONTAIN 12" LENSES.

- POWER SOURCE TO BE DETERMINED BY CONTRACTOR AND POWER COMPANY.
- PROPER POLES TO SUPPORT THE 3-COLOR SIGNAL HEADS TO BE DETERMINED BY THE CONTRACTOR.
- ALL SPAN WIRE, INDUCTANCE LOOP WIRE, SHIELDED LEAD-IN CABLE, TRAFFIC SIGNAL CABLE AND OTHER WIRE USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE NEW MATERIAL MEETING THE APPLICABLE REQUIREMENTS OF SUBSECTION 680-2 OF THE STANDARD SPECIFICATIONS.
- ALL OTHER EQUIPMENT FOR TEMPORARY TRAFFIC SIGNALS SHALL MEET THE REQUIREMENTS OF SUBSECTION 680-2 OF THE STANDARD SPECIFICATIONS EXCEPT FOR THE FOLLOWING MODIFICATIONS:
 - USED EQUIPMENT IN GOOD OPERATING CONDITION MAY BE FURNISHED TO PROVIDE THE REQUIRED OPERATION OF THE SIGNAL.
 - MANUFACTURER'S CERTIFICATION OF COMPLIANCE WILL NOT BE REQUIRED.
 - THE SIGNAL CONTROLLER MAY BE EITHER SOLID STATE OR MICRO-PROCESSOR BASED.
 - THE MATERIAL AND PAINTING REQUIREMENTS OF SECTION 724-04, TRAFFIC SIGNAL HEADS, OF THE STANDARD SPECIFICATIONS SHALL NOT APPLY EXCEPT THAT THE SIGNAL HEAD HOUSING SHALL BE MADE OF ALUMINUM OR POLYCARBONATE AND SHALL BE DARK GREEN IN COLOR.
- THE DIRECTIONAL TRAVEL ARROWS SHOWN HERE AND ON OTHER WZTC DRAWINGS ARE NOT PAVEMENT MARKINGS.

AFFIX SEAL: ON:

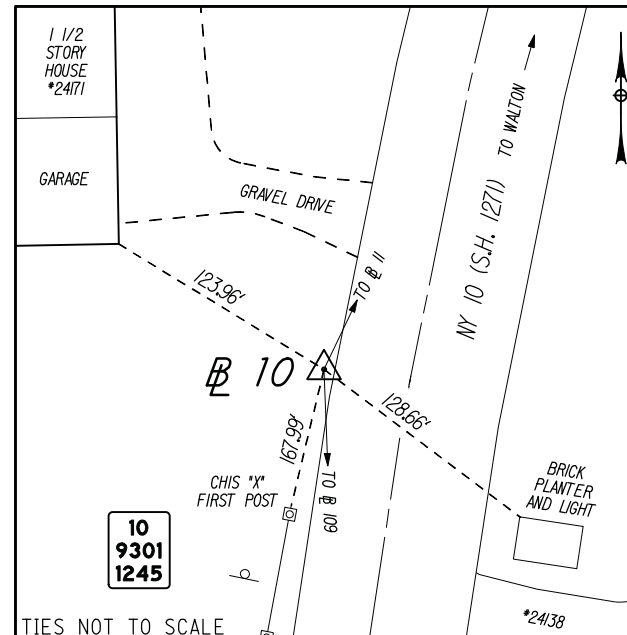
ALTERED BY: ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 10 - SH 1271 ROCK RIFT - COLCHESTER CULVERT REPLACEMENT & REPAIR PROJECT TOWN OF WALTON COUNTY: DELAWARE	PIN 9805.93 ROUTE 10 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS C940011	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED WORK ZONE TRAFFIC CONTROL	CONTRACT NUMBER D262989
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.					SITE A	DRAWING NO. WZTC-04-A SHEET NO. 23

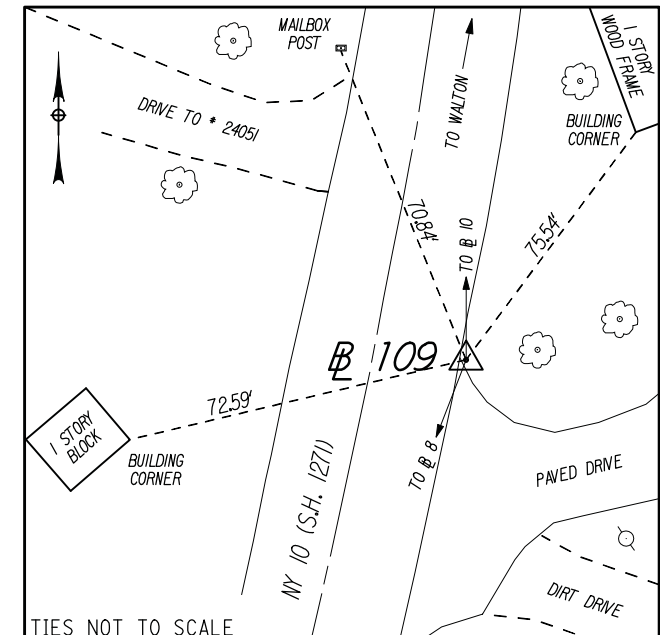


SURVEY NOTES:

BASE MAPPING OF THIS PROJECT IS FROM GROUND SURVEY PERFORMED NOVEMBER 2010.
 HORIZONTAL DATUM: NAD83, EAST ZONE, NAD83/CORS96.
 VERTICAL DATUM: NAVD88.
 COMBINED FACTOR: 0.99988550 (TO REDUCE GROUND DISTANCES TO GRID DISTANCES)



B 10 196+85.000
 CAPPED IRON ROD
 0.20 MILES SOUTH OF BOB'S BROOK ROAD
 16.3' WEST OF C NY 10
 275' NORTH OF RM 10-9301-1245
 NAD83/CORS96
 N: 1208818.3324 NAVD88
 E: 308763.1896 ELEV: 1209.285



B 109 STA. 190+43.036
 ALUMINUM CAPPED IRON ROD
 0.33 MILES SOUTH OF BOB'S BROOK ROAD
 85' NORTH OF RM 10-9301-1244
 19.3' EAST OF C NY 10
 NAD83/CORS96
 N: 1207438.6870 NAVD88
 E: 308555.0058 ELEV: 1202.210

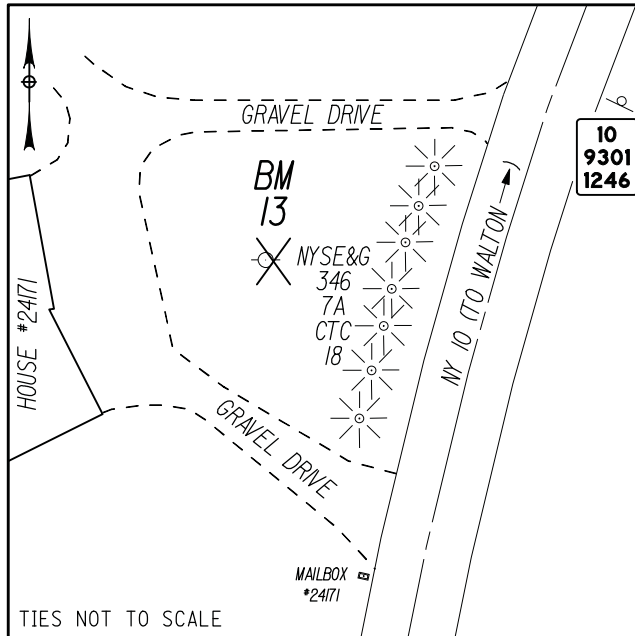
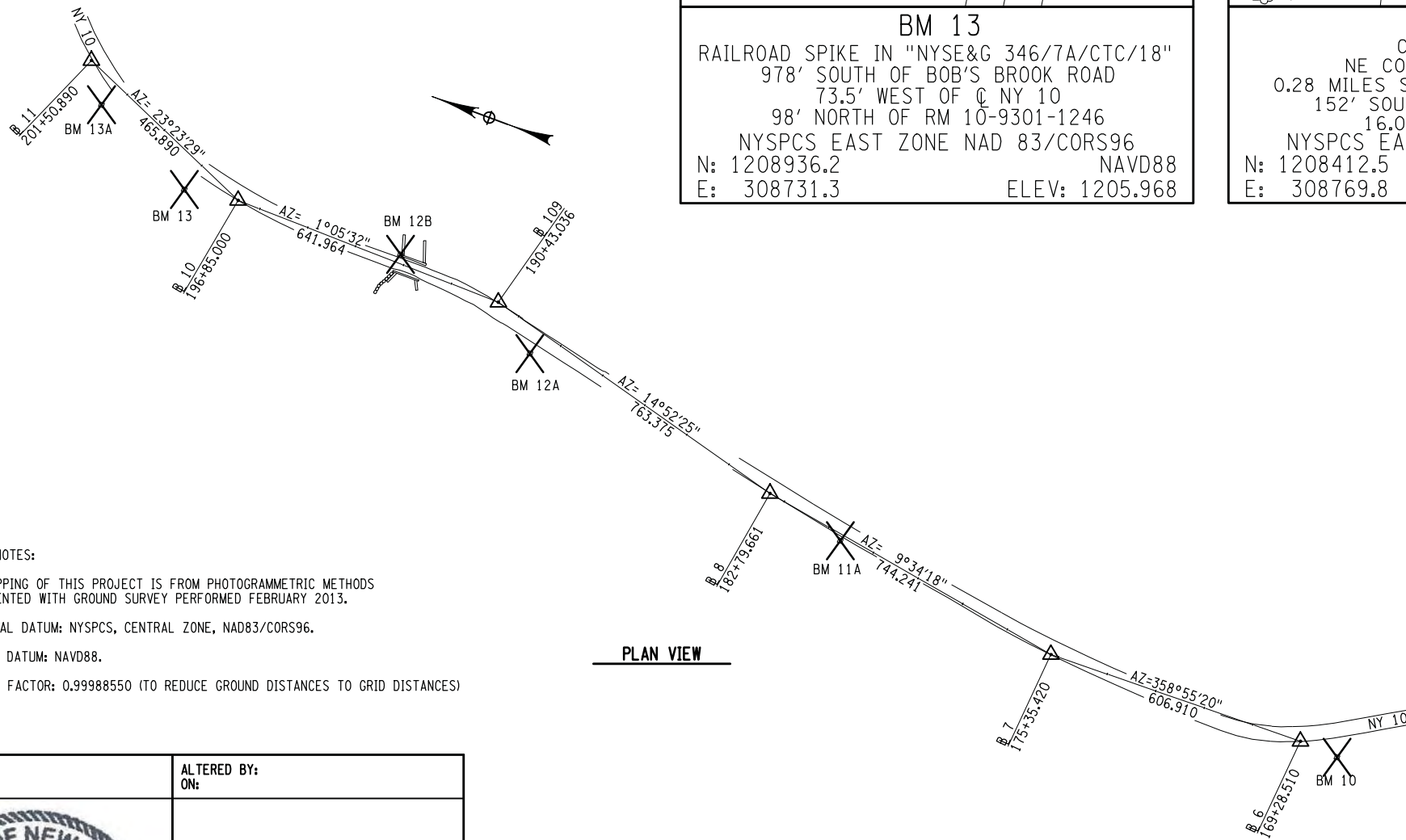
AFFIX SEAL:
 ON:

ALTERED BY:
 ON:

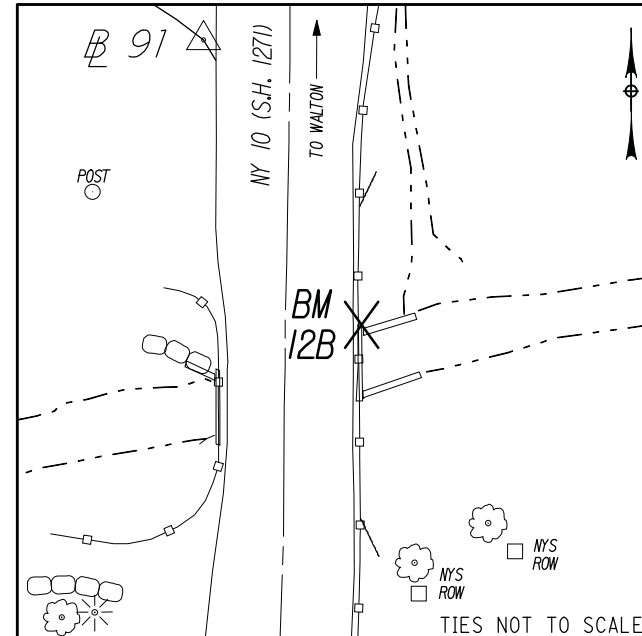


AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 10, SH 1271	PIN 9805.93 RT 10 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS C940011	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED BASELINE TIE DIAGRAMS SITE A	CONTRACT NUMBER D262989
	ROCK RIFT - COLCHESTER					DRAWING NO. BLT-01-A
	CULVERT REPLACEMENT & REPAIR PROJECT					SHEET NO. 24
	TOWN OF WALTON					
COUNTY: DELAWARE	REGION: 09					

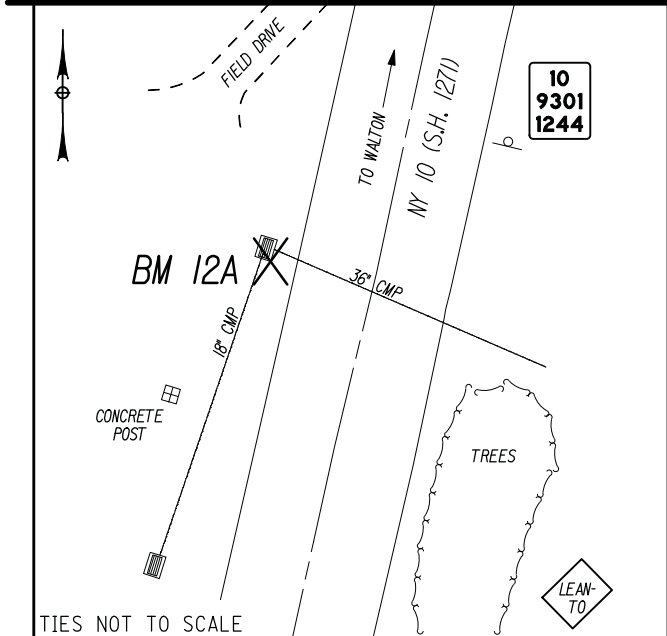
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BM 13
 RAILROAD SPIKE IN "NYSE&G 346/7A/CTC/18"
 978' SOUTH OF BOB'S BROOK ROAD
 73.5' WEST OF C NY 10
 98' NORTH OF RM 10-9301-1246
 NYSPCS EAST ZONE NAD 83/CORS96
 N: 1208936.2 NAVD88
 E: 308731.3 ELEV: 1205.968



BM 12B
 CHISELED SQUARE
 NE CORNER EAST HEADWALL
 0.28 MILES SOUTH OF BOB'S BROOK ROAD
 152' SOUTH OF RM 10-9301-1245
 16.0' EAST OF C NY 10
 NYSPCS EAST ZONE NAD 83/CORS96
 N: 1208412.5 NAVD88
 E: 308769.8 ELEV: 1200.724



BM 12A
 CHISELED SQUARE
 SE CORNER CONCRETE DRAINAGE STRUCTURE
 0.35 MILES SOUTH OF BOB'S BROOK ROAD
 42' SOUTH OF RM 10-9301-1244
 21.8' WEST OF C NY 10
 NYSPCS EAST ZONE NAD 83/CORS96
 N: 1208062.0 NAVD88
 E: 308684.3 ELEV: 1202.984

SURVEY NOTES:
 BASE MAPPING OF THIS PROJECT IS FROM PHOTOGAMMETRIC METHODS
 SUPPLEMENTED WITH GROUND SURVEY PERFORMED FEBRUARY 2013.
 HORIZONTAL DATUM: NYSPCS, CENTRAL ZONE, NAD83/CORS96.
 VERTICAL DATUM: NAVD88.
 COMBINED FACTOR: 0.99988550 (TO REDUCE GROUND DISTANCES TO GRID DISTANCES)

AFFIX SEAL: ON:	ALTERED BY: ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 10 - SH 1271	PIN 9805.93 RT 10 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS C940011	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989	
	ROCK RIFT - COLCHESTER					BENCHMARK DIAGRAMS	
	CULVERT REPLACEMENT & REPAIR PROJECT						DRAWING NO. BLT-02-A
	TOWN OF WALTON						SHEET NO. 25
COUNTY: DELAWARE	REGION: 09	SITE A					

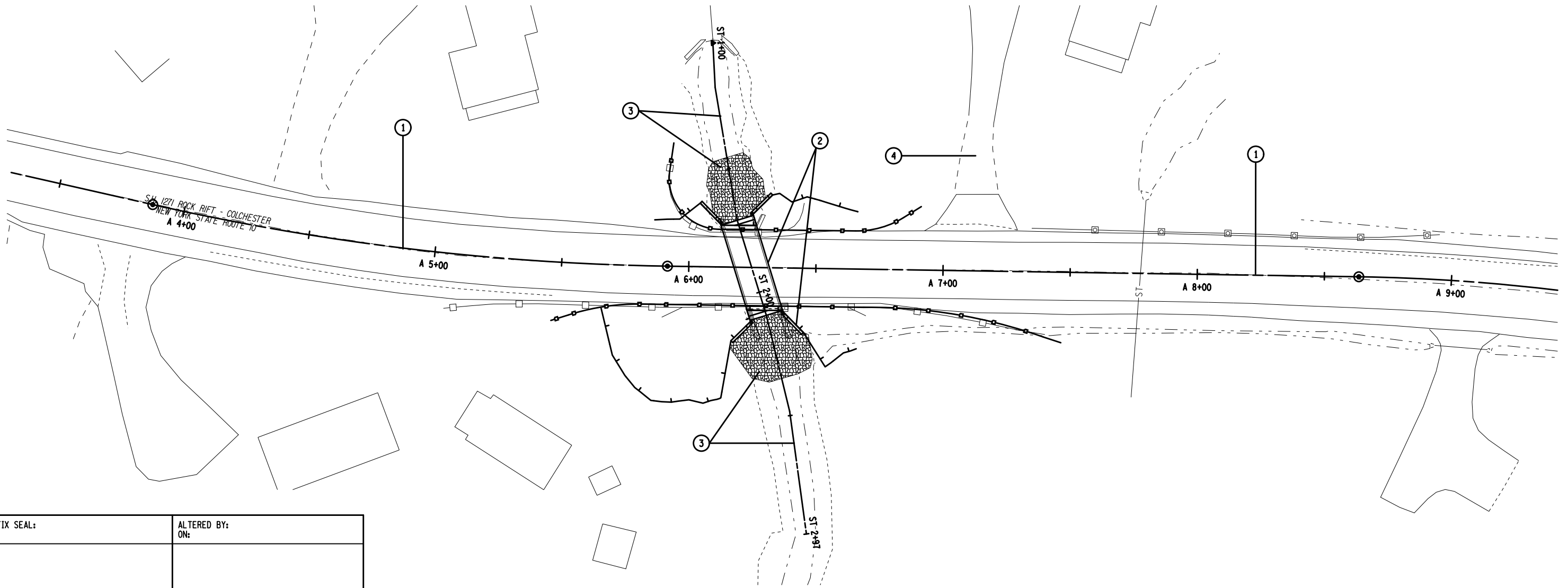
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TABLE OF MAINTENANCE JURISDICTION SITE A

PART NO.	HIGHWAY/LOCATION	LIMITS STATIONING	FEATURES TO BE MAINTAINED	Q miles	LANE miles	AGENCY	AUTHORITY TO MAINTAIN
①	N.Y. ROUTE 10 ROCK RIFT - COLCHESTER S.H. 1271	PROJECT LIMITS MAINLINE STATIONING A 5+82.00 TO A 6+71.00	ALL OF STATE HIGHWAY (PAVEMENT, GUIDERAIL, DRAINAGE DITCHES, CULVERTS, PAVEMENT MARKINGS, SIGNS, SNOW AND ICE CONTROL)	0.02	0.04	NEW YORK STATE	HIGHWAY LAW SECTION 12
②	PROPOSED 12 X 9 PRECAST BOX CULVERT - 940011 AND WING WALLS	STREAM STATIONING ST 1+70.00 TO ST 2+10.00	PROPOSED CONCRETE BOX CULVERT AND WING WALLS	0.012 ALONG Q STREAM	N/A	NEW YORK STATE	HIGHWAY LAW SECTIONS 230
③	UNNAMED TRIBUTARY TO THE WEST BRANCH OF THE DELAWARE RIVER	ST 1+30.00 TO ST 2+50.00	STREAM CHANNEL, BANKS AND STONE FILLING WITHIN R.O.W. AND PE TAKING LINES	0.023 ALONG Q STREAM	N/A	NEW YORK STATE	HIGHWAY LAW SECTIONS 12
④	LOCAL DRIVEWAYS ADJACENT TO N.Y. ROUTE 10	A 6+92 TO A 7+29, 16' LT	DRIVEWAY SURFACE SNOW AND ICE CONTROL	0.007 ALONG M	N/A	PROPERTY OWNER (SEE NOTE 3)	HIGHWAY LAW 54(a) (SEE NOTE 3)

NOTES:

1. THIS TABLE INDICATES THE DIVISION OF RESPONSIBILITY FOR MAINTENANCE FOR THIS CONTRACT UPON COMPLETION UNLESS STATED OTHERWISE. IT IN NO WAY RELIEVES THE CONTRACTOR OR REPRESENTATIVE OF THEIR RESPONSIBILITIES AS COVERED BY SECTION 619 OF THE STANDARD SPECIFICATION.
2. ALL EXISTING SANITARY SEWERS AND OTHER SEWERS NOT DEEMED TO BE PART OF THE PROJECT BY THE COMMISSIONER, WATERMANS, HYDRANTS, AND OTHER MUNICIPALLY OR PRIVATELY OWNED FACILITIES WITHIN THE LIMITS OF THE HIGHWAY RIGHT-OF-WAY WHICH REMAIN IN SERVICE UNCHANGED, AND ALL SUCH FACILITIES RELOCATED OR PROTECTED AS PART OF THE WORK PERFORMED UNDER THIS PROJECT, WHETHER CROSSING, LOCATED WITHIN OR ADJACENT TO THE RIGHT-OF-WAY, SHALL BE MAINTAINED AS THE CASE MAY BE, BY THE MUNICIPALITY OR BY THE AGENCY OR UNIT OWNING OR HAVING CONTROL AND JURISDICTION THEREOF AT NO COST OR EXPENSE TO THE STATE.
3. THE PORTION OF A DRIVEWAY OR PRIVATE ROAD, CONSTRUCTED OR ADJUSTED UNDER THE PROPOSED PROJECT BETWEEN THE EDGE OF PAVEMENT AND THE OUTSIDE EDGE OF SHOULDER SHALL BE MAINTAINED BY THE STATE UNDER SECTION 10, SUBDIVISION 25 OF THE HIGHWAY LAW. THE REMAINING PORTION OF THE ADJUSTED DRIVEWAY OR PRIVATE ROAD BEYOND THE OUTSIDE EDGE OF SHOULDER SHALL BE MAINTAINED BY THE OWNER(S) UNDER SECTION 54(a) OF THE HIGHWAY LAW. ALSO, ENTRANCE STAIRS AND WALKS SHALL BE MAINTAINED BY THE OWNER(S) UNDER SECTION 54(a) OF THE HIGHWAY LAW.
4. INTERSECTING PUBLIC HIGHWAYS - OTHER THAN STATE HIGHWAYS, BEYOND THE OUTSIDE EDGE OF THE SHOULDER OR PAVEMENT EDGE OF THE STATE HIGHWAY SHALL BE MAINTAINED BY THE LOCAL UNIT OF GOVERNMENT HAVING JURISDICTION.



AFFIX SEAL: ON:	ALTERED BY: ON:
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	

NYS ROUTE 10 - SH 1271	PIN 9805.93	BRIDGES	CULVERTS C940011	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
ROCK RIFT - COLCHESTER	ROUTE 10			MAINTENANCE JURISDICTION PLAN	DRAWING NO. MJP-01-A SHEET NO. 27
CULVERT REPLACEMENT & REPAIR PROJECT	UTILITY QUALITY LEVEL D				
TOWN OF WALTON					
COUNTY: DELAWARE	REGION: 09			SITE A	

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



FILE NAME = 980593_C940011_RT10_oph_mjp_01_A.dgn
DATE/TIME = 28-JUL-2015 16:39
USER = jphillips

PROJECT MANAGER G. WOJCIK
CHECK J. L. PHILLIPS
DRAFTING P. F. BLOW
CHECK J. L. PHILLIPS
DESIGN D. WELSZER
JOB MANAGER J. L. PHILLIPS
DESIGN SUPERVISOR R. WILDER

**HORIZONTAL CONTROL TABLE
(STREAM) - C940011**

PROJECT NAME: 980590 C940011
DESCRIPTION: C940011
HORIZONTAL ALIGNMENT NAME: TRIB AC P
DESCRIPTION: PROPOSED STREAM ALIGNMENT
STYLE: AC P

**HORIZONTAL CONTROL TABLE
(ROUTE 10) - C940011**

PROJECT NAME: 980590 C940011
DESCRIPTION: C940011
HORIZONTAL ALIGNMENT NAME: 980593_C940011_RT10_FEA_RWY_MAIN_LINE
DESCRIPTION: NYS 10 MAIN LINE - USED IN CIVIL 3D
STYLE: AC P


	STATION	NORTHING	EASTING
ELEMENT: LINEAR			
POB (	23)	ST 1+00.00	1208384.3448 308665.5898
EQNBK (	)	1+00.00	1208384.3448 308665.5898
EQNAHD (	)	ST 1+00.00	1208384.3448 308665.5898
PI (	17)	ST 1+17.47	1208385.2308 308683.0395
TANGENT DIRECTION: 87°05'35.7535"			
TANGENT LENGTH: 17.4721			
ELEMENT: LINEAR			
PI (	17)	ST 1+17.47	1208385.2308 308683.0395
PI (	24)	ST 1+44.43	1208389.6721 308709.6311
TANGENT DIRECTION: 80°31'05.1306"			
TANGENT LENGTH: 26.9599			
ELEMENT: LINEAR			
PI (	24)	ST 1+44.43	1208389.6721 308709.6311
PI (	25)	ST 1+70.43	1208393.9168 308735.2764
TANGENT DIRECTION: 80°36'06.8266"			
TANGENT LENGTH: 25.9943			
ELEMENT: LINEAR			
PI (	25)	ST 1+70.43	1208393.9168 308735.2764
PI (	29)	ST 2+09.51	1208405.3665 308772.6487
TANGENT DIRECTION: 72°57'59.7062"			
TANGENT LENGTH: 39.0869			
ELEMENT: LINEAR			
PI (	29)	ST 2+09.51	1208405.3665 308772.6487
PI (	30)	ST 2+48.30	1208414.5258 308810.3346
TANGENT DIRECTION: 76°20'22.0628"			
TANGENT LENGTH: 38.7829			
ELEMENT: LINEAR			
PI (	30)	ST 2+48.30	1208414.5258 308810.3346
POE (	31)	ST 2+97.00	1208421.1287 308858.5850
TANGENT DIRECTION: 82°12'27.4717"			
TANGENT LENGTH: 48.7002			

	STATION	NORTHING	EASTING
PROJECT NAME: 980590 C940011			
DESCRIPTION: C940011			
HORIZONTAL ALIGNMENT NAME: 980593 C940011 RT10 FEA RWY MAIN LINE			
DESCRIPTION: ROUTE 10 MAIN LINE - USED IN CIVIL 3D			
STYLE: AC P			
ELEMENT: LINEAR			
POB (	)	A 1+00.00	1207883.8045 308665.6456
EQNBK (	)	1+00.00	1207883.8045 308665.6456
EQNAHD (	)	A 1+00.00	1207883.8045 308665.6456
PC (	)	A 3+89.92	1208166.5692 308729.6784
TANGENT DIRECTION: 12°45'34.4617"			
TANGENT LENGTH: 289.9243			
CURVE #1:			
ELEMENT: CIRCULAR			
PC (	)	A 3+89.92	1208166.5692 308729.6784
PI (	)	A 4+90.52	1208264.6782 308751.8954
CC (	)		1208378.6868 307792.9803
PT (	)	A 5+90.38	1208365.2614 308753.3016
RADIUS: 960.4151			
DELTA: 11°57'31.0396" LEFT			
DEGREE OF CURVATURE(ARC): 5°57'56.6315"			
LENGTH: 200.4553			
TANGENT: 100.5931			
CHORD: 200.0916			
MIDDLE ORDINATE: 5.2251			
EXTERNAL: 5.2536			
TANGENT DIRECTION: 12°45'34.4617"			
RADIAL DIRECTION: 102°45'34.4617"			
CHORD DIRECTION: 6°46'48.9419"			
RADIAL DIRECTION: 90°48'03.4221"			
TANGENT DIRECTION: 0°48'03.4221"			
ELEMENT: LINEAR			
PT (	)	A 5+90.38	1208365.2614 308753.3016
PC (	)	A 8+13.96	1208588.8230 308756.4270
TANGENT DIRECTION: 0°48'03.4221"			
TANGENT LENGTH: 223.5834			
CURVE #2:			
ELEMENT: CIRCULAR			
PC (	)	A 8+13.96	1208588.8230 308756.4270
PI (	)	A 9+66.16	1208741.0021 308758.5545
CC (	)		1208570.2156 310087.4203
PT (	)	A 11+17.03	1208888.7736 308794.9768
RADIUS: 1331.1234			
DELTA: 13°02'42.6336" RIGHT			
DEGREE OF CURVATURE(ARC): 4°18'15.5433"			
LENGTH: 303.0719			
TANGENT: 152.1940			
CHORD: 302.4177			
MIDDLE ORDINATE: 8.6162			
EXTERNAL: 8.6723			
TANGENT DIRECTION: 0°48'03.4221"			
RADIAL DIRECTION: 90°48'03.4221"			
CHORD DIRECTION: 7°19'24.7390"			
RADIAL DIRECTION: 103°50'46.0558"			
TANGENT DIRECTION: 13°50'46.0558"			
ELEMENT: LINEAR			
PT (	)	A 11+17.03	1208888.7736 308794.9768
PC (	)	A 12+60.89	1209028.4514 308829.4042
TANGENT DIRECTION: 13°50'46.0558"			
TANGENT LENGTH: 143.8580			

	STATION	NORTHING	EASTING
CURVE #3:			
ELEMENT: CIRCULAR			
PC (	)	A 12+60.89	1209028.4514 308829.4042
PI (	)	A 14+78.98	1209240.2029 308881.5962
CC (	)		1208908.2043 309317.2671
PT (	)	A 16+72.41	1209346.6941 309071.9178
RADIUS: 502.4635			
DELTA: 46°55'31.5725" RIGHT			
DEGREE OF CURVATURE(ARC): 11°24'10.7019"			
LENGTH: 411.5193			
TANGENT: 218.0887			
CHORD: 400.1140			
MIDDLE ORDINATE: 41.5440			
EXTERNAL: 45.2885			
TANGENT DIRECTION: 13°50'46.0558"			
RADIAL DIRECTION: 103°50'46.0558"			
CHORD DIRECTION: 37°18'31.8420"			
RADIAL DIRECTION: 150°46'17.6282"			
TANGENT DIRECTION: 60°46'17.6282"			
ELEMENT: LINEAR			
PT (	)	A 16+72.41	1209346.6941 309071.9178
POE (	)	A 20+71.00	1209541.3207 309419.7557
TANGENT DIRECTION: 60°46'17.6282"			
TANGENT LENGTH: 398.5859			

PROJECT MANAGER G. WOJCIK
CHECK J.L. PHILLIPS
DRAFTING G. MEYER
CHECK J.L. PHILLIPS
DESIGN D. MELSZER
JOB MANAGER J.L. PHILLIPS
DESIGN SUPERVISOR R. WILDER

FILE NAME = 980593_C940011_RT10_oph_hct_01_A.dgn
DATE/TIME = 28-JUL-2015 16:39
USER = jphillips

AFFIX SEAL: ON:	ALTERED BY: ON:
	

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 10 - SH 1271	PIN 9805.93 RT 10 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS C940011	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	ROCK RIFT - COLCHESTER					
	CULVERT REPLACEMENT AND REPAIR PROJECT					
	TOWN OF WALTON					
COUNTY: DELAWARE	REGION: 09	HORIZONTAL CONTROL TABLES ROUTE 10 AND STREAM		DRAWING NO. HCT-01-A SHEET NO. 28		


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**HORIZONTAL CONTROL TABLE
(DETOUR) - C940011**

PROJECT NAME: 980590 C940011
 DESCRIPTION: C940011
 HORIZONTAL ALIGNMENT NAME: 980593 C940011 ROUTE10 ONSITE BRIDGE DETOUR
 DESCRIPTION: CURRENT ONSITE DETOUR ALIGNMENT
 STYLE: AC P

	STATION	NORTHING	EASTING		STATION	NORTHING	EASTING				
				ELEMENT: LINEAR							
POB (	8)	DTR 1+00.00	1208143.4524	308724.4370	PT (	14)	DTR 3+32.30	1208371.4802	308717.3486
EQNBK (	)	1+00.00	1208143.4524	308724.4370	PC (	15)	DTR 3+83.20	1208422.3011	308714.4552
EQNAHD (	)	DTR 1+00.00	1208143.4524	308724.4370			TANGENT DIRECTION:	356°44'29.2628"		
PC (	9)	DTR 1+53.83	1208196.0393	308735.9541			TANGENT LENGTH:	50.9032		
		TANGENT DIRECTION:	12°21'12.3369"				ELEMENT: CIRCULAR				
		TANGENT LENGTH:	53.8333				PC (15)	DTR 3+83.20	1208422.3011	308714.4552
		ELEMENT: CIRCULAR					PI ()	DTR 4+32.18	1208471.1989	308711.6712
PC (	9)	DTR 1+53.83	1208196.0393	308735.9541	CC (	16)		1208434.5220	308929.1076
PI (	)	DTR 2+12.54	1208253.3911	308748.5149	PT (	17)	DTR 4+79.51	1208516.4779	308730.3408
CC (	10)		1208242.0367	308525.9321			RADIUS:	215.0000		
PT (	11)	DTR 2+68.46	1208309.1671	308730.1832			DELTA:	25°39'57.4992" RIGHT		
		RADIUS:	215.0000				DEGREE OF CURVATURE(ARC):	26°38'57.1192"			
		DELTA:	30°32'50.5665" LEFT				LENGTH:	96.3105			
		DEGREE OF CURVATURE(ARC):	26°38'57.1192"				TANGENT:	48.9770			
		LENGTH:	114.6278				CHORD:	95.5072			
		TANGENT:	58.7112				MIDDLE ORDINATE:	5.3703			
		CHORD:	113.2749				EXTERNAL:	5.5079			
		MIDDLE ORDINATE:	7.5941				TANGENT DIRECTION:	356°44'29.2628"			
		EXTERNAL:	7.8722				RADIAL DIRECTION:	86°44'29.2628"			
		TANGENT DIRECTION:	12°21'12.3369"				CHORD DIRECTION:	9°34'28.0124"			
		RADIAL DIRECTION:	102°21'12.3369"				RADIAL DIRECTION:	112°24'26.7620"			
		CHORD DIRECTION:	357°04'47.0537"				TANGENT DIRECTION:	22°24'26.7620"			
		RADIAL DIRECTION:	71°48'21.7704"								
		TANGENT DIRECTION:	341°48'21.7704"								
		ELEMENT: LINEAR					ELEMENT: LINEAR				
PT (	11)	DTR 2+68.46	1208309.1671	308730.1832	PT (	17)	DTR 4+79.51	1208516.4779	308730.3408
PC (	12)	DTR 2+76.25	1208316.5707	308727.7499	PC (	18)	DTR 4+95.04	1208530.8324	308736.2594
		TANGENT DIRECTION:	341°48'21.7704"				TANGENT DIRECTION:	22°24'26.7620"			
		TANGENT LENGTH:	7.7932				TANGENT LENGTH:	15.5268			
		ELEMENT: CIRCULAR					ELEMENT: CIRCULAR				
PC (	12)	DTR 2+76.25	1208316.5707	308727.7499	PC (	18)	DTR 4+95.04	1208530.8324	308736.2594
PI (	)	DTR 3+04.44	1208343.3437	308718.9505	PI (	)	DTR 5+43.41	1208575.5518	308754.6982
CC (	13)		1208383.7011	308932.0010	CC (	19)		1208637.5657	308477.4004
PT (	14)	DTR 3+32.30	1208371.4802	308717.3486	PT (	20)	DTR 5+90.84	1208623.8654	308757.0650
		RADIUS:	215.0000				RADIUS:	280.0000			
		DELTA:	14°56'07.4924" RIGHT				DELTA:	19°36'10.3089" LEFT			
		DEGREE OF CURVATURE(ARC):	26°38'57.1192"				DEGREE OF CURVATURE(ARC):	20°27'46.0022"			
		LENGTH:	56.0445				LENGTH:	95.7977			
		TANGENT:	28.1820				TANGENT:	48.3716			
		CHORD:	55.8860				CHORD:	95.3311			
		MIDDLE ORDINATE:	1.8236				MIDDLE ORDINATE:	4.0870			
		EXTERNAL:	1.8392				EXTERNAL:	4.1475			
		TANGENT DIRECTION:	341°48'21.7704"				TANGENT DIRECTION:	22°24'26.7620"			
		RADIAL DIRECTION:	71°48'21.7704"				RADIAL DIRECTION:	112°24'26.7620"			
		CHORD DIRECTION:	349°16'25.5166"				CHORD DIRECTION:	12°36'21.6076"			
		RADIAL DIRECTION:	86°44'29.2628"				RADIAL DIRECTION:	92°48'16.4531"			
		TANGENT DIRECTION:	356°44'29.2628"				TANGENT DIRECTION:	2°48'16.4531"			
		ELEMENT: LINEAR					ELEMENT: LINEAR				
PT (	20)	DTR 5+90.84	1208623.8654	308757.0650	PT (	20)	DTR 5+90.84	1208623.8654	308757.0650
POE (	21)	DTR 6+08.04	1208641.0458	308757.9067	POE (	21)	DTR 6+08.04	1208641.0458	308757.9067
		TANGENT DIRECTION:	2°48'16.4531"				TANGENT DIRECTION:	2°48'16.4531"			
		TANGENT LENGTH:	17.2010				TANGENT LENGTH:	17.2010			

AFFIX SEAL: ON:	ALTERED BY: ON:
	


AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 10 - SH 1271	PIN 9805.93	BRIDGES	CULVERTS C940011	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	ROCK RIFT - COLCHESTER	RT 10				DRAWING NO. HCT-02-A SHEET NO. 29
	CULVERT REPLACEMENT & REPAIR PROJECT	UTILITY QUALITY LEVEL D				
	TOWN OF WALTON					
COUNTY: DELAWARE	REGION: 09					
HORIZONTAL CONTROL TABLES TEMPORARY DETOUR SITE A						
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.						 Department of Transportation

TABLE OF GUIDE RAILING - INSTALLATION											
STATION TO STATION	SIDE	OFFSET	POST SPACING (FT)	FACTOR	ITEM 568.50 - STEEL BRIDGE RAILING (L-F)	ITEM 568.70 - TRANSITION BRIDGE RAILING (L-F)	ITEM 606.110 - BOX BEAM GUIDE RAILING (L-F)	ITEM 606.120/01 (EACH) BOX BEAM END PIECE	ITEM 606.120/02 (EACH) BEAM GUIDE RAILING ASSEMBLY, TYPE I	ITEM 606.100/02 - BOX BEAM OR SHOP MITERED	COMMENTS EG., RADIUS = XX FEET
FROM A 5+93.5 TO A 5+91.6	LT	48.5									1
FROM A 5+91.6 TO A 6+12.5	LT	37.4	VARIES		32						RADIUS = 20 FT.
FROM A 6+12.5 TO A 6+27.3	LT	14.8	2	14							
FROM A 6+27.3 TO A 6+59.2	LT	14.8	6		32						
FROM A 6+59.2 TO A 6+67.4	LT	15.3	6			9					
FROM A 6+67.4 TO A 6+85.0	LT	15.4	6							18	RADIUS = 35 FT.
FROM A 6+85.0 TO A 6+91.1	LT	21.0	6								1
FROM A 5+49.5 TO A 5+54.2	RT	21.6	2		6						TYPE O END TERMINAL, SEE STANDARD SHEET 606-04 SHEET 1-4 FOR DETAILS (MEASURED 3', TOTAL LENGTH = 6')
FROM A 5+54.2 TO A 5+82.5	RT	20.2	6							29	RADIUS = 87 FT.
FROM A 5+82.5 TO A 5+90.2	RT	15.5	6			8					
FROM A 5+90.2 TO A 6+22.2	RT	15.6	6		32						
FROM A 6+22.2 TO A 6+37.0	RT	15.2	2	14							
FROM A 6+37.0 TO A 6+69.0	RT	15.2			32						
FROM A 6+69.0 TO A 7+46.4	RT	14.7									1
TOTAL		27.9			28 LF	128 LF	23 LF	2 EA	1 EA	47 LF	

NOTES: STATION TO STATION DISTANCE MAY NOT EQUAL TRUE DISTANCE DUE TO RADIUS.

TABLE OF CLEAR ZONE WIDTHS		
STATION TO STATION	WIDTH	NOTES
A 5+81.75 TO A 7+40.43	22	PER CHAPTER 10 IN HDM, TABLE 10-1

NOTE: MINIMUM CLEARZONE WIDTH FOR THIS SECTION OF ROUTE 10 WITH 1:4 SLOPES IS 22 FEET

TABLE OF ITEM 608.020102 - HOT MIX ASPHALT (HMA) SIDEWALKS, DRIVEWAY, BICYCLE PATHS & VEGETATIVE CONTROL STRIPS								
STATION	OFFSET	TO	STATION	OFFSET	SIDE	LENGTH (FT)	WIDTH (FT)	AREA (SF)
A 5+93.44	48.48		A 6+12.45	14.80	LT	47	1.75	83
A 6+27.29	14.82		A 6+91.10	24.81	LT	66	1.75	116
A 5+49.48	21.60		A 6+22.22	15.20	RT	75	1.75	132
A 6+36.96	15.20		A 7+40.43	25.87	RT	104	1.75	182
TOTAL							513 SF	

NOTES: STATION TO STATION DISTANCE MAY NOT EQUAL TRUE DISTANCE DUE TO RADIUS.

TABLE OF DRIVEWAYS												
DRIVEWAY #	DRIVEWAY CENTERLINE RT 10 STATION	EXISTING MATERIAL		PROPOSED MATERIAL		CLASS	WIDTH	CORNER ANGLE	PL	TL	ENTRANCE TYPE	COMMENT
		APRON	BEYOND PL	APRON	BEYOND PL							
DW1	A 7+12.15	ASPHALT	GRAVEL	ASPHALT	GRAVEL	RESIDENTIAL	38	90	15	18	TYPE 1	RECONSTRUCT AFTER TEMPORARY ONSITE DETOUR IS REMOVED

AFFIX SEAL: ON: ALTERED BY: ON:



- NOTES:
- SEE THE STANDARD SHEETS 608-03 FOR ADDITIONAL DETAILS.
 - TRANSITION LENGTH ("TL") IS ONLY APPLICABLE TO NON-PAVEMENT (STONE, GRAVEL, GRASS, OR DIRT) DRIVEWAYS EXTENDED BEYOND THE PAVEMENT LENGTH ("PL").

- NOTES: (CONT.)
- THE LENGTH OF ANY GRADING TRANSITION TO EXISTING DRIVEWAY PAVEMENT IS INCLUDED AS PART OF THE PAVEMENT LENGTH ("PL") (SEE "TIE-IN TO EXISTING PAVED DRIVEWAYS" ON STANDARD SHEET "DRIVEWAY DESIGN GUIDELINES").
 - ALL FILL UNDERNEATH ITEM 608.020102 REQUIRED TO COMPLETE DRIVEWAYS SHALL BE ITEM 304.12.

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	ROUTE 10 - SH 1271 ROCK RIFT - COLCHESTER CULVERT REPLACEMENT & REPAIR PROJECT TOWN OF WALTON COUNTY: DELAWARE	PIN 9805.93 ROUTE 10 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS C940011	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
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IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

TABLE OF EXISTING GUIDE RAILING - REMOVAL							
STATION/ LOCATION	SIDE	OFFSET (FEET)	ITEM 606.73 (L-F) REMOVING & DISPOSING BOX BEAM GUIDE RAILING	ITEM 606.79/20 (EACH) REMOVING & DISPOSING BOX BEAM GUIDE RAIL END ASSEMBLY	ITEM 587.01 (L-F) REMOVING & DISPOSING BRIDGE RAILING	ITEM 606.79 (EACH) ANCHORAGE UNITS FOR CABLE GUIDE RAILING	COMMENTS
A 5-93.44	LT	48.48					1
TO A 5+91.65	LT	36.01					
A 5+91.65	LT	36.01	32 LF				REMOVAL OF EXISTING TRANSITION RAILING
TO A 6+12.45	LT	14.80				15 LF	
A 6+12.45	LT	14.80					
TO A 6+27.29	LT	14.82	32 LF				REMOVAL OF EXISTING TRANSITION RAILING
A 6+27.29	LT	14.82					
TO A 6+45.00	LT	25.50					
A 5+05.51	RT	21.60					1
TO A 5+51.24	RT	16.43					
A 5+51.24	RT	16.43	39 LF				
TO A 5+89.64	RT	16.16					
A 5+89.64	RT	16.16	32 LF				REMOVAL OF EXISTING TRANSITION RAILING
TO A 6+21.99	RT	15.55					
A 6+21.99	RT	15.55				15 LF	
TO A 6+37.88	RT	15.12					
A 6+37.88	RT	15.12	32 LF				REMOVAL OF EXISTING TRANSITION RAILING
TO A 6+70.28	RT	15.00					
A 6+70.28	RT	15.00					1
TO A 7+40.41	RT	24.79					
A 6+70.28	RT	15.00					1
TO A 7+40.41	RT	24.79					REMOVED DUE TO ONSITE DETOUR
TOTAL			167 LF	3 EA	30 LF	1 EA	

NOTES: STATION TO STATION DISTANCE MAY NOT EQUAL TRUE DISTANCE DUE TO RADIUS.

TABLE OF SOIL BORING LOCATIONS					
BORING #	BASELINE STA.	BASELINE OFFSET	NORTHING	EASTING	
FH-K-5	BL 74+92.66	5.30	RT	1208394.510	308760.880
FH-K-6	BL 74.91.93	11.22	RT	1208393.680	308766.790

TABLE OF EXISTING GUIDE RAILING - RESETTING							
STATION/ LOCATION	SIDE	OFFSET (FEET)	ITEM 606.50/48 (L-F) RESETTING CABLE GUIDE RAILING (NEW POSTS)	ITEM 606.59/01 (EACH) RESETTING ANCHORAGE UNITS FOR CABLE G.R. OR MEDIAN BARRIER	ITEM 606.02/01 (EACH) ANCHORAGE UNITS FOR CABLE G.R. OR MEDIAN BARRIER		COMMENTS
FROM A 7+34.65	LT	16.9					1
TO A 7+39.40	LT	16.9					
FROM A 7+39.40	LT	18.5	151				NEW ANCHOR UNIT
TO A 8+89.41	LT	18.5					
FROM A 8+89.41	LT	18.5				1	RESET EXISTING ANCHOR UNIT
TO A 8+94.06	LT	19.1					
TOTAL			151 LF	1	1		

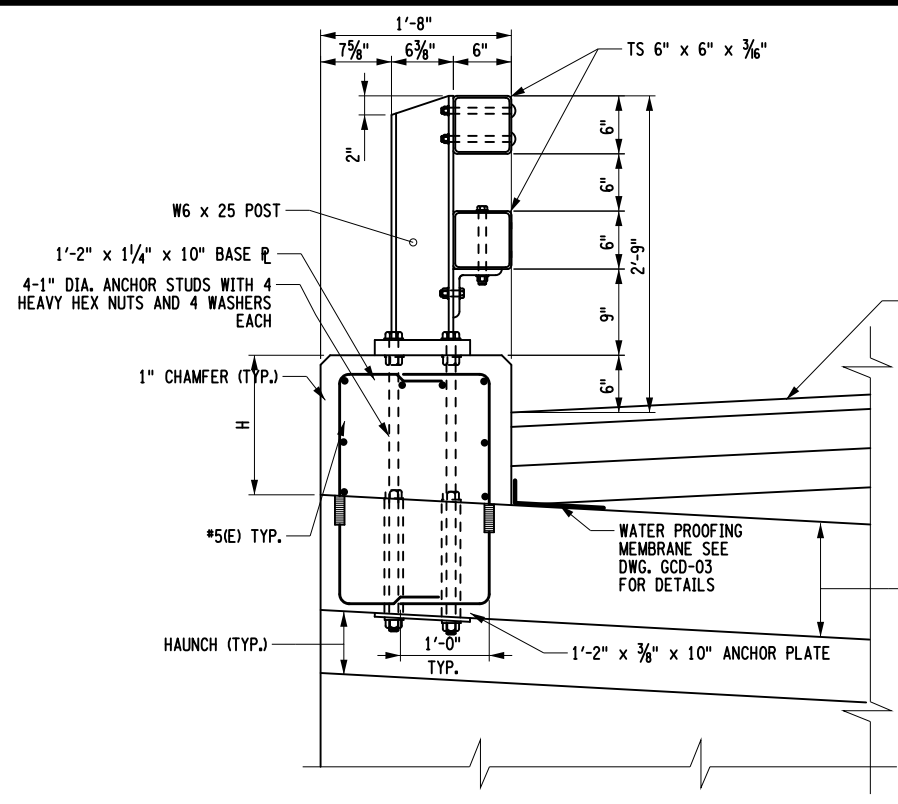
NOTES: STATION TO STATION DISTANCE MAY NOT EQUAL TRUE DISTANCE DUE TO RADIUS.

TABLE OF PAVEMENT CUTTING - ITEM 627.50140008 (LF)		
LOCATION	LENGTH	REMARKS
A 5+82.00 15' LT TO A 5+82.00 15' RT	30'	FULL WIDTH (SHOULDER TO SHOULDER) AT FULL DEPTH
A 6+71.00 15' LT TO A 6+71.00 15' RT	30'	

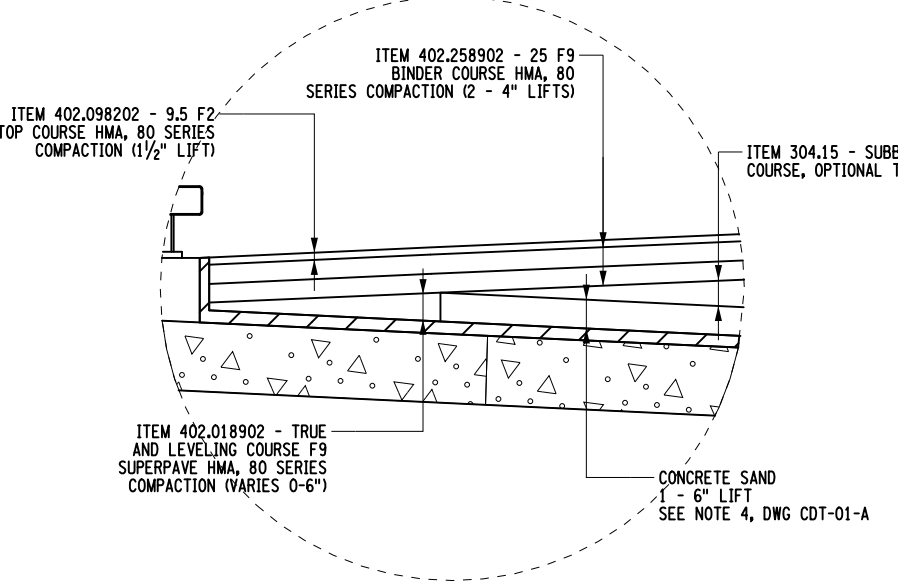
ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	MISCELLANEOUS TABLES	CONTRACT NUMBER D262989
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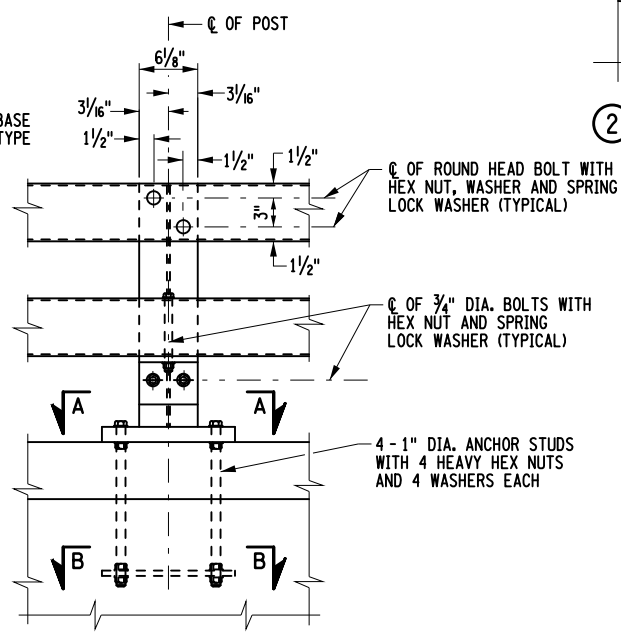
PROJECT MANAGER W. BAGLEY
 CHECK J. L. PHILLIPS
 DRAFTING D. MELTZER
 CHECK J. L. PHILLIPS
 DESIGN D. MELTZER
 JOB MANAGER J. L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER



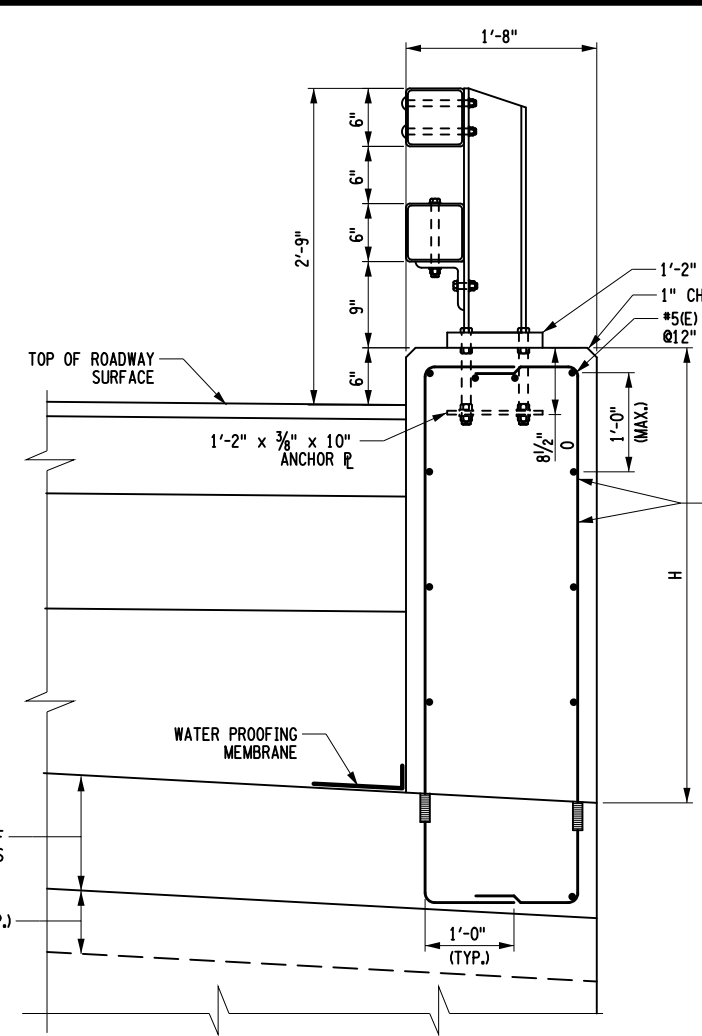
1 TWO RAIL ANCHORAGE DETAILS - INLET
 9" < HEAD WALL (H) < 1'-0"
 NOT TO SCALE



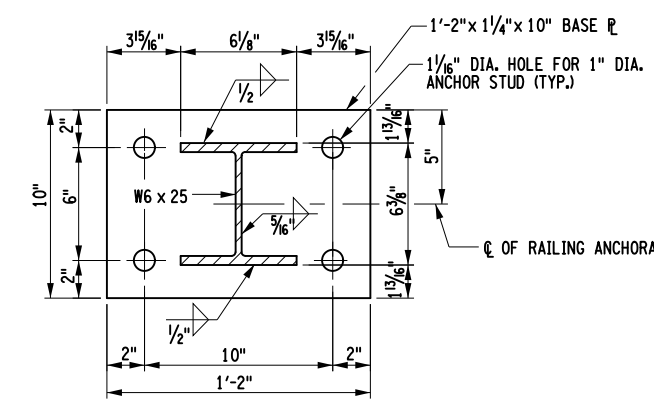
4 ASPHALT SHIM COURSE DETAIL
 NOT TO SCALE



5 STEEL BRIDGE RAILING (TWO - RAIL)
 ELEVATION
 NOT TO SCALE

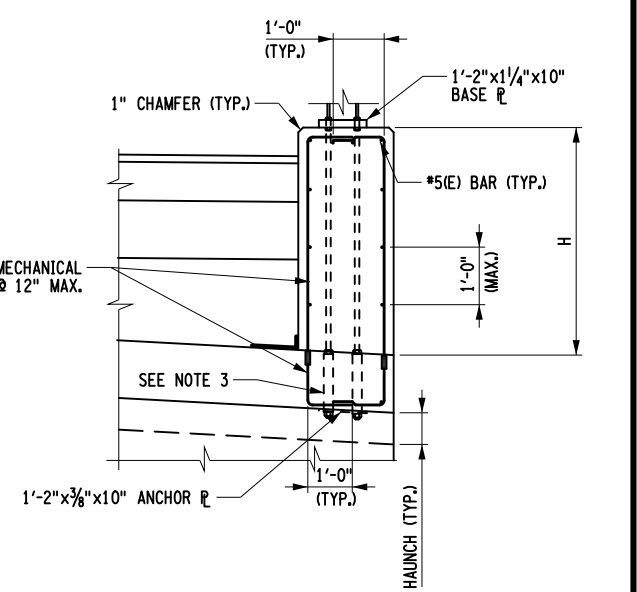


2 TWO RAIL ANCHORAGE DETAILS - OUTLET
 1'-0" < HEAD WALLS (H) ≤ 6'-0"
 NOT TO SCALE

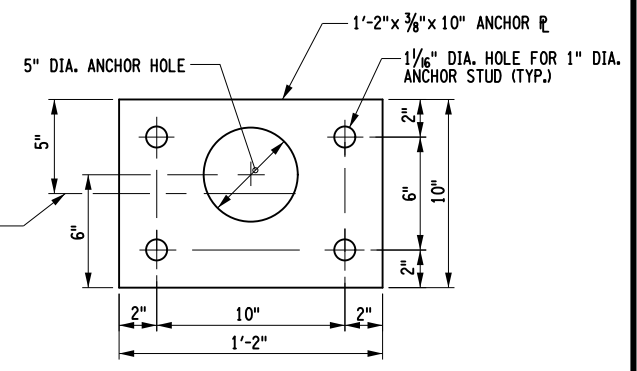


6 SECTION A-A
 NOT TO SCALE

- NOTES:
1. ALL COVER SHALL BE 2" UNLESS OTHERWISE NOTED.
 2. DETAILS ON THE DRAWINGS LABELED "NOT TO SCALE" ARE INTENTIONALLY DRAWN NOT TO SCALE FOR VISUAL CLARITY. ALL OTHER DETAILS, FOR WHICH NO SCALE IS SHOWN, ARE DRAWN PROPORTIONAL AND ARE FULLY DIMENSIONED.
 3. ANCHOR RODS SHALL BE GROUTED INTO 1-1/2" DIAMETER HOLES FORMED WITH SLEEVES OR MADE WITH A CORE DRILL. THE GROUT SHALL MEET THE REQUIREMENTS OF THE NYS DOT STANDARD SPECIFICATION SECTION 701-05, CONCRETE GROUTING MATERIALS, AND APPEAR ON THE DEPARTMENTS APPROVED LIST.



3 ALTERNATE ANCHORAGE DETAIL
 HEAD WALLS (H) ≥ 1'-0"
 NOT TO SCALE



7 SECTION B-B
 NOT TO SCALE

AFFIX SEAL: ON: _____
 ALTERED BY: ON: _____



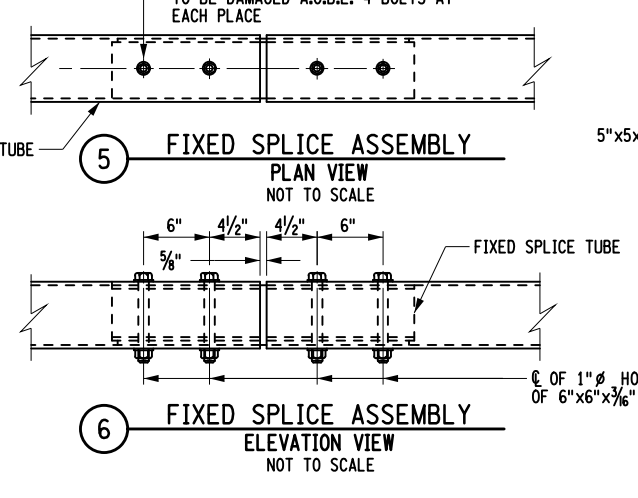
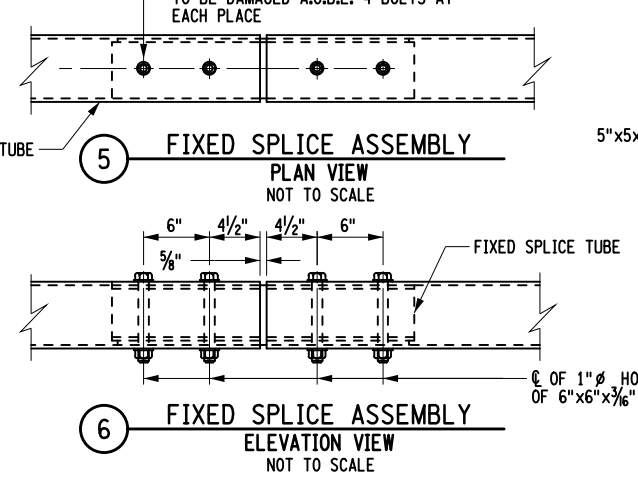
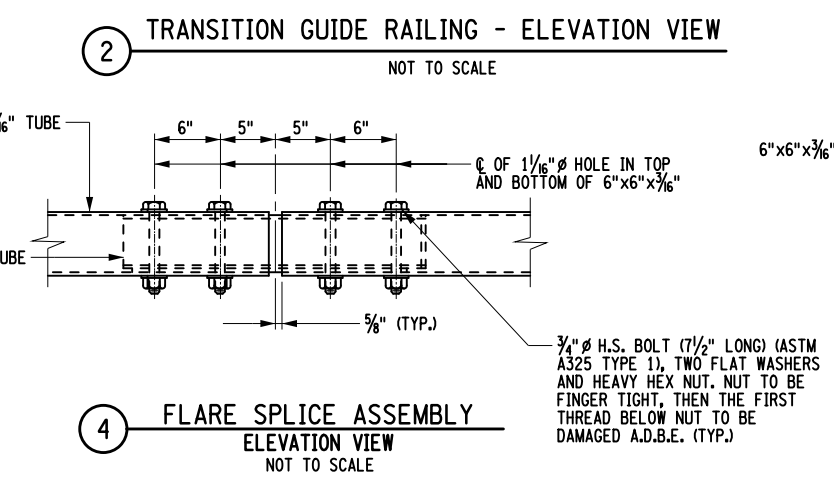
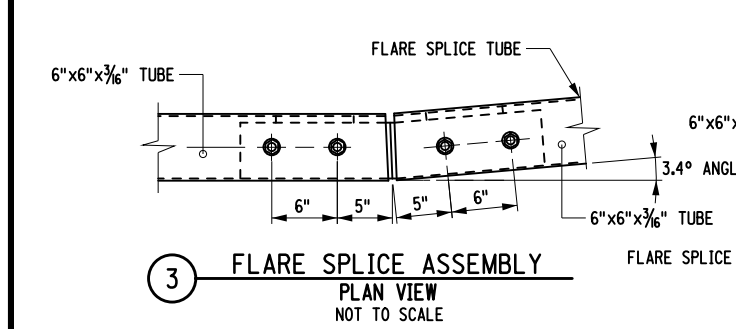
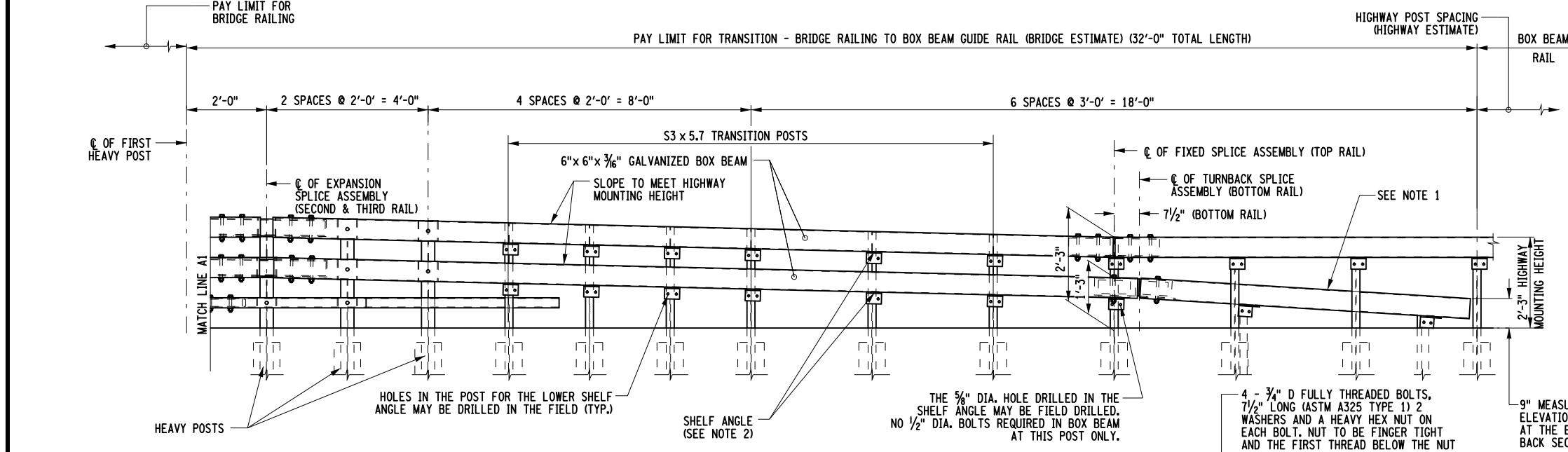
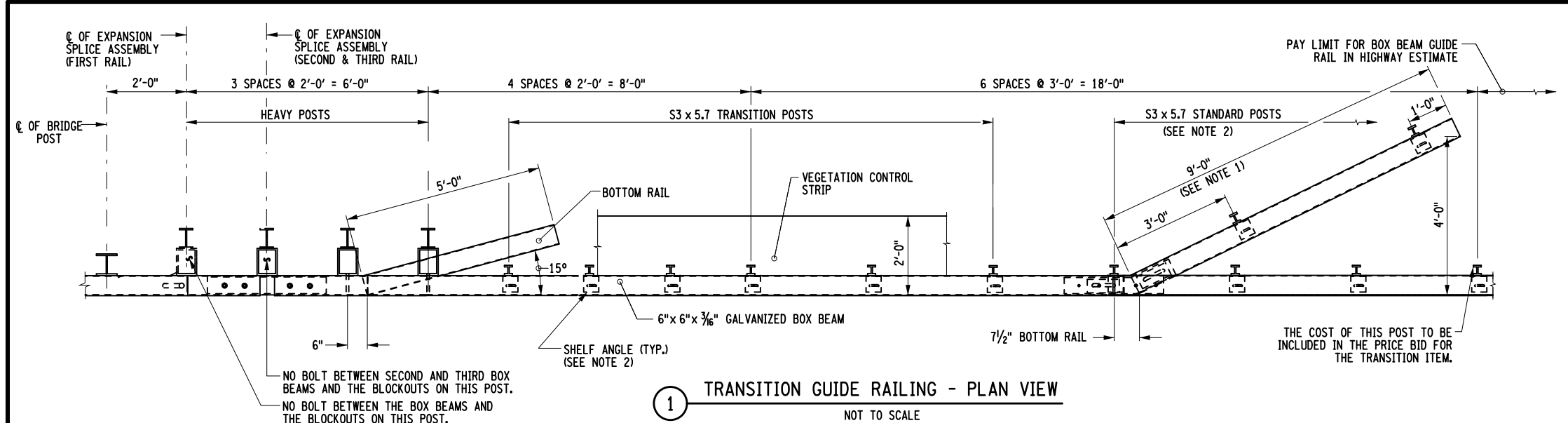
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	ROCKRIFT - COLCHESTER	ROUTE 10			BRIDGE RAIL DETAILS	DRAWING NO. MSD-01-A SHEET NO. 31
	CULVERT REPLACEMENT & REPAIR PROJECT	UTILITY QUALITY LEVEL D				
	TOWN OF WALTON					
	COUNTY: DELAWARE	REGION: 09			SITE A	

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

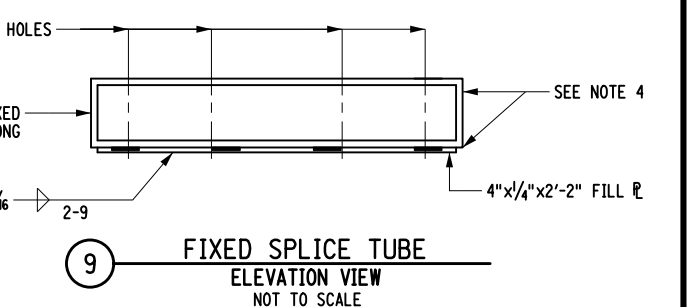
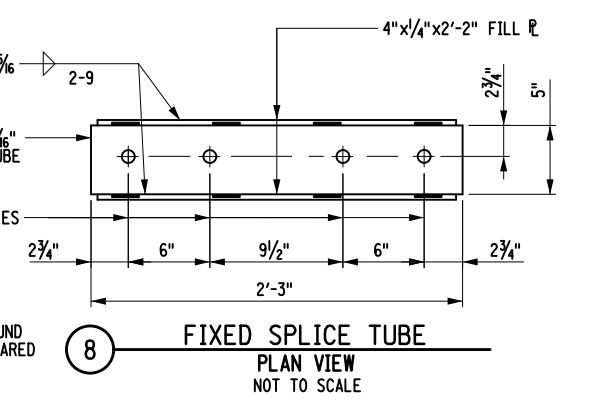
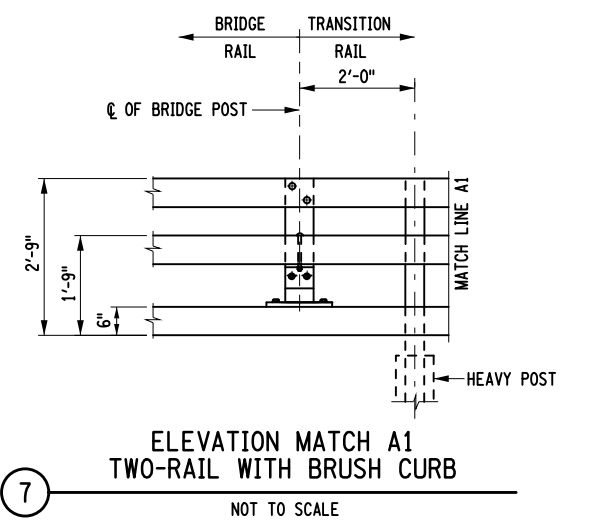


PROJECT MANAGER: W.BAGLEY
 CHECK: J.L.PHILLIPS
 DRAFTING: D.MELTZER
 CHECK: J.L.PHILLIPS
 DESIGN: D.MELTZER
 JOB MANAGER: J.L.PHILLIPS
 DESIGN SUPERVISOR: R.WILDER

FILE NAME = 980593_C940011_RT10_oph_msd_02_A.dgn
 DATE/TIME = 28-JUL-2015 16:39
 USER = jphillips



- NOTES:
1. THE COST OF THE POSTS, SPLICE TUBE AND RAIL FOR THE LOWER TUBE FLARE SECTION IS INCLUDED IN THE PRICE BID FOR THE TRANSITION ITEM.
 2. SEE TYPICAL RAIL TO POST CONNECTION DETAIL ON CURRENT HIGHWAY STANDARD SHEET TITLED "BOX BEAM GUIDE RAIL".
 3. DETAILS ON THE DRAWINGS LABELED AS "NOT TO SCALE" ARE INTENTIONALLY DRAWN NOT TO SCALE FOR VISUAL CLARITY. ALL OTHER DETAILS, FOR WHICH NO SCALE IS SHOWN, ARE DRAWN PROPORTIONAL AND ARE FULLY DIMENSIONED.
 4. PROTRUSIONS CAUSED BY WELDING OR GALVANIZING ARE NOT PERMITTED ON THE ADJOINING SURFACES OF THE BOX BEAM RAILS, SPLICE TUBES AND FILL PLATES.



AFFIX SEAL: ON: _____

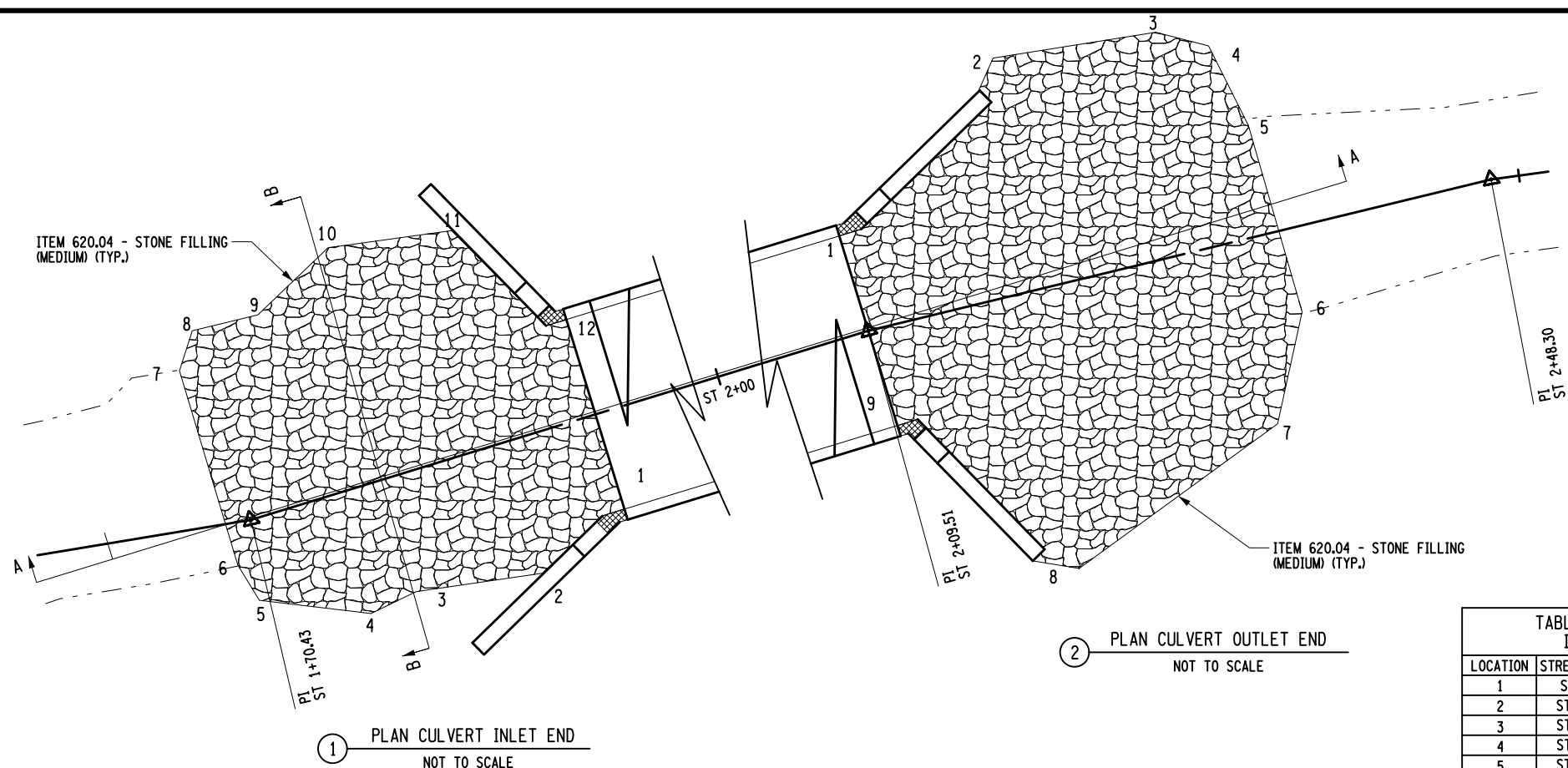
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AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 10 - SH 1271 ROCKRIFT - COLCHESTER CULVERT RELACEMENT AND REPAIR PROJECT TOWN OF WALTON COUNTY: DELAWARE	PIN 9805.93 ROUTE 10 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS C940011	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
BRIDGE RAIL DETAILS					DRAWING NO. MSD-02-A SHEET NO. 32	
SITE A					Department of Transportation	

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

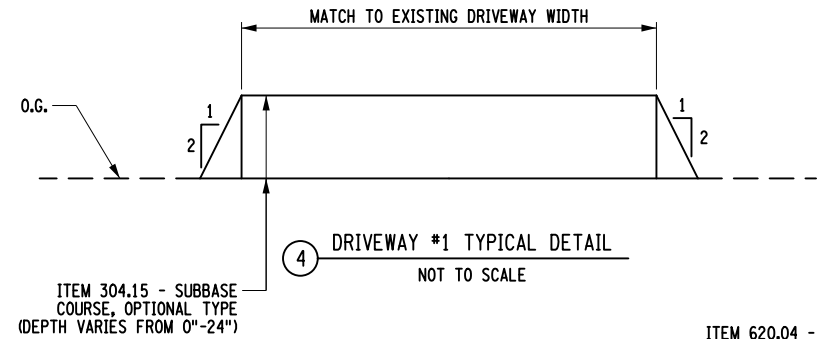
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 USER = jphillips

DESIGN SUPERVISOR R. WILDER
 JOB MANAGER J. L. PHILLIPS
 DESIGN D. MELSZER
 CHECK J. L. PHILLIPS
 DRAFTING D. MELSZER
 CHECK J. L. PHILLIPS
 PROJECT MANAGER G. WOJCIK

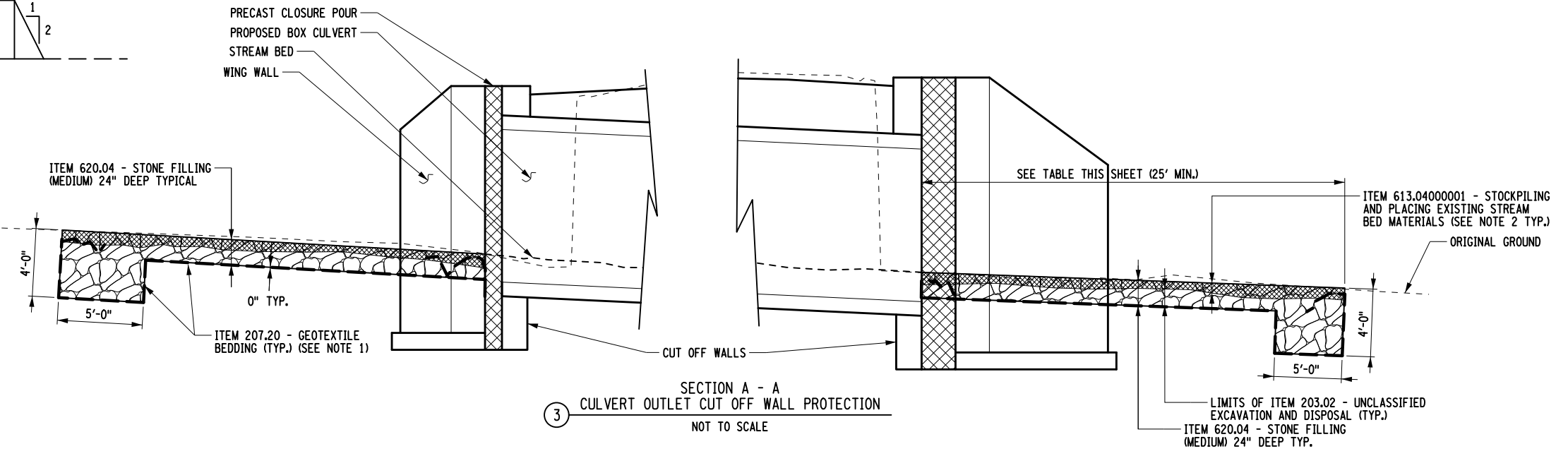


1 PLAN CULVERT INLET END
NOT TO SCALE

2 PLAN CULVERT OUTLET END
NOT TO SCALE



4 DRIVEWAY #1 TYPICAL DETAIL
NOT TO SCALE



3 SECTION A - A
CULVERT OUTLET CUT OFF WALL PROTECTION
NOT TO SCALE

- NOTES:
1. GEOTEXTILE BEDDING ITEM 207.20 SHALL BE SECURED BY BURYING THE FABRIC ENDS INTO THE STONE A DISTANCE EQUAL TO THE FULL HEIGHT OF DEPTH OF THE STONE FILLING. THE GEOTEXTILE BEDDING SHALL MEET THE REQUIREMENTS OF SPECIFICATION TABLE 737-01A CLASS 1.
 2. EXCAVATED AND STOCKPILED NATIVE STREAM BED MATERIAL SHALL BE MIXED WITH THE HEAVY STONE FILL DURING CONSTRUCTION OF THE SCOUR PROTECTION APRONS UPSTREAM AND DOWNSTREAM OF THE CULVERT IN ORDER TO FILL IN VOID SPACES. THE FILLING OF THE VOID SPACES IS NECESSARY TO PREVENT THE STREAM FLOW FROM PERCOLATING BELOW THE STREAM BED GRADE DURING LOW FLOWS. THE STONE FILL IN THE LOWER PORTIONS OF THE APRONS SHALL BE MIXED WITH STOCKPILED NATIVE MATERIAL SOURCED FROM THE DEEPER STREAM BED LAYER. THE SURFACE OF THE NEWLY CONSTRUCTED APRONS (OR LAYERS THEREOF IF PLACED IN MULTIPLE LIFTS) SHALL BE SPRAYED SUFFICIENTLY WITH WATER TO WASH FINER PARTICLES DOWN INTO THE DEEPER VOID SPACES. IF THE NATIVE STREAM BED MATERIAL DOES NOT CONTAIN ENOUGH PARTICLES OF FINE SAND SIZE OR SMALLER TO COMPRISE APPROXIMATELY 5-10% PROPORTION OF THE VOLUME OF THE APRON MATERIAL, ENOUGH OF THIS FINE MATERIAL SHALL BE ADDED TO ACHIEVE THIS APPROXIMATE PROPORTION OF FINES IN THE LOWER 75% OF THE DEPTH OF THE APRON. ANY WASH WATER COLLECTING IN OR FLOWING FROM THE BASE OF THE STONE FILL SHALL BE ALLOWED TO PERCOLATE INTO THE GROUND (PREFERRED), OR IF NECESSARY, DISCHARGED TO A SETTLING BASIN, FILTER SOCK, OR SIMILAR SEDIMENT CONTROL MECHANISM APPROVED BY THE ENGINEER IN CHARGE. THE PLACEMENT OF NATIVE STREAM BED MATERIAL SHALL BE PAID FOR UNDER ITEM 613.04000001.
 3. THE EXCAVATION FOR THE RIP-RAP WILL BE PAID FOR UNDER ITEM 203.02 - UNCLASSIFIED EXCAVATION AND DISPOSAL. PRIOR TO THIS EXCAVATION THE USABLE STREAM BED MATERIAL SHALL BE EXCAVATED AND STORED USING 613.04000001 - STOCKPILING AND PLACING EXISTING STREAMBED MATERIALS.

TABLE OF STONE FILLING (MEDIUM) ITEM 620.04 - OUTLET END			
LOCATION	STREAM STATION	OFFSET (FT)	ELEVATION
1	ST 2+09.51	6.00 LT	1189.5
2	ST 2+20.09	13.40 LT	1195.0
3	ST 2+30.68	13.44 LT	1194.0
4	ST 2+33.59	11.89 LT	1192.0
5	ST 2+34.79	6.65 LT	1188.5
6	ST 2+35.42	5.09 RT	1188.5
7	ST 2+32.25	11.32 RT	1194.0
8	ST 2+17.20	16.44 RT	1195.0
9	ST 2+09.87	6.00 RT	1189.5

TABLE OF STONE FILLING (MEDIUM) ITEM 620.04 - INLET END			
LOCATION	STREAM STATION	OFFSET (FT)	ELEVATION
1	ST 1+70.43	6.00 LT	1193.5
2	ST 1+65.71	9.00 LT	1196.0
3	ST 1+57.97	8.82 LT	1196.0
4	ST 1+55.06	9.68 LT	1196.0
5	ST 1+48.52	7.78 LT	1196.0
6	ST 1+46.10	5.62 LT	1193.0
7	ST 1+44.54	6.52 RT	1193.0
8	ST 1+47.18	8.97 RT	1196.0
9	ST 1+51.26	9.28 RT	1196.0
10	ST 1+56.11	12.59 RT	1196.0
11	ST 1+63.72	12.41 RT	1196.0
12	ST 1+69.63	5.95 RT	1193.5

AFFIX SEAL: ON:

ALTERED BY: ON:

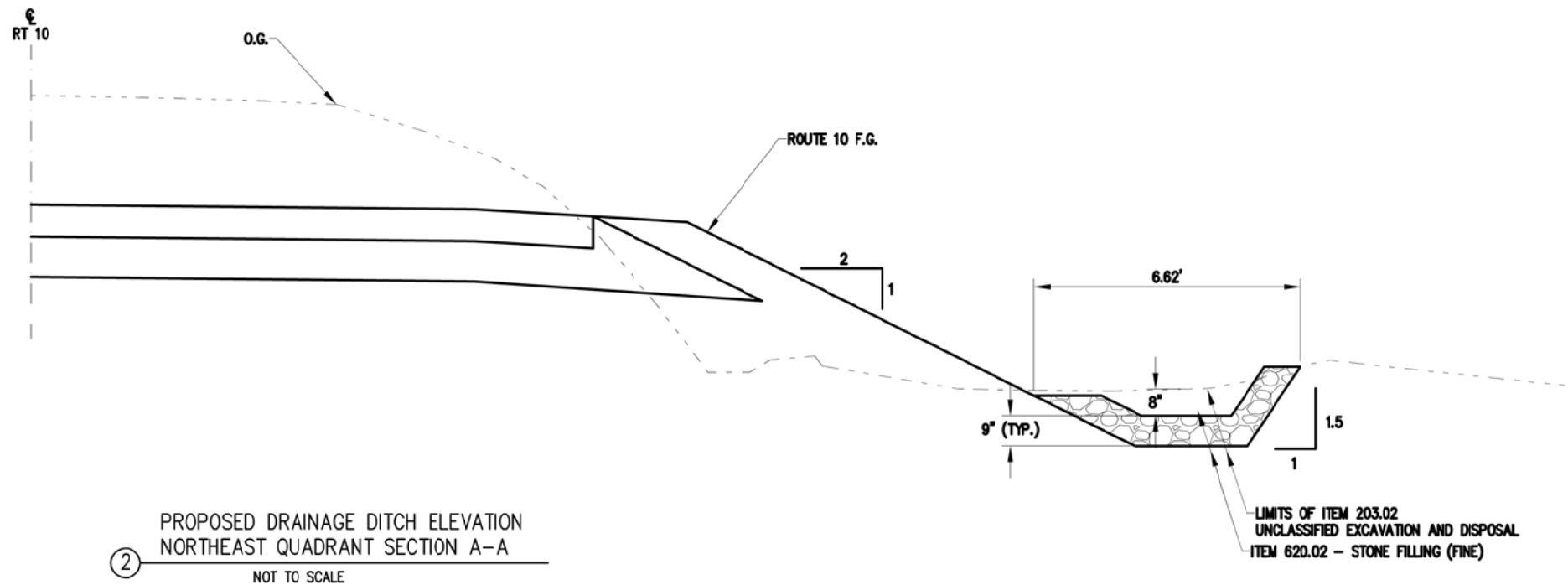
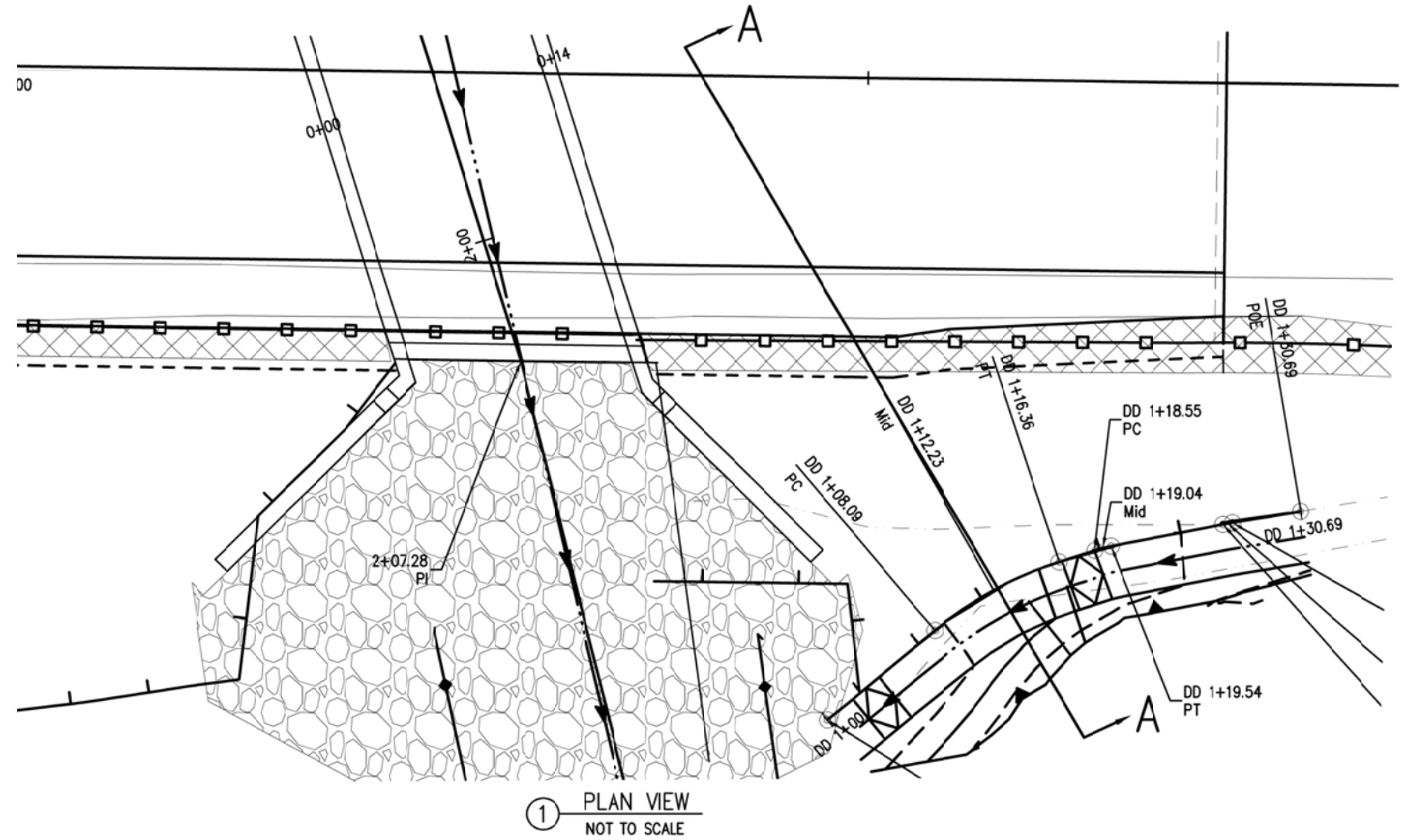
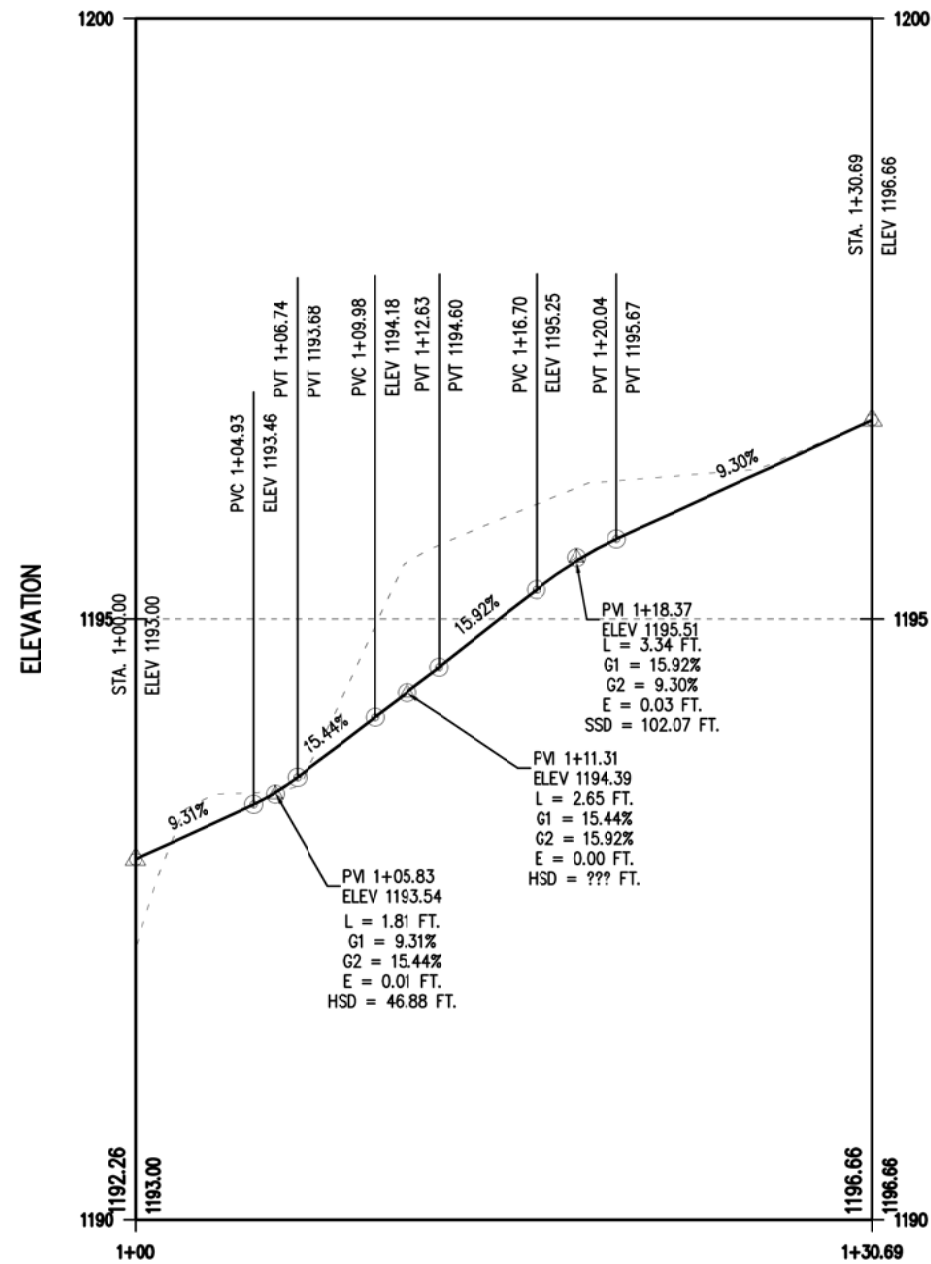
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 10 - SH 1271	PIN 9805.93 ROUTE 10 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS C940011	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989	
	ROCK RIFT - COLCHESTER					STONE APRON DETAILS	
	CULVERT REPLACEMENT & REPAIR PROJECT						DRAWING NO. MSD-03-A SHEET NO. 33
	TOWN OF WALTON						
COUNTY: DELAWARE	REGION: 09	SITE A			Department of Transportation		

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 USER = dmelszr

DESIGN SUPERVISOR J. L. PHILLIPS
 JOB MANAGER R. WILDER
 DESIGN D. MELSZER
 CHECK J. L. PHILLIPS
 DRAFTING D. MELSZER
 CHECK J. L. PHILLIPS
 PROJECT MANAGER G. WOJCIK

D262989_980593_R09_SITE_A_NORTHEAST_DITCH PROPOSED VERTICAL ALIGNMENT



AFFIX SEAL ON: _____
 ALTERED BY: _____
 ON: _____



AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 10 - SH 1271 ROCK RIFT - COLCHESTER CULVERT REPLACEMENT & REPAIR PROJECT TOWN OF WALTON COUNTY: DELEWARE
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PIN 9805.93 ROUTE 10 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS C940011
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ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
DRAINAGE DITCH DETAILS SITE A	DRAWING NO. MSD-04-A SHEET NO. 34

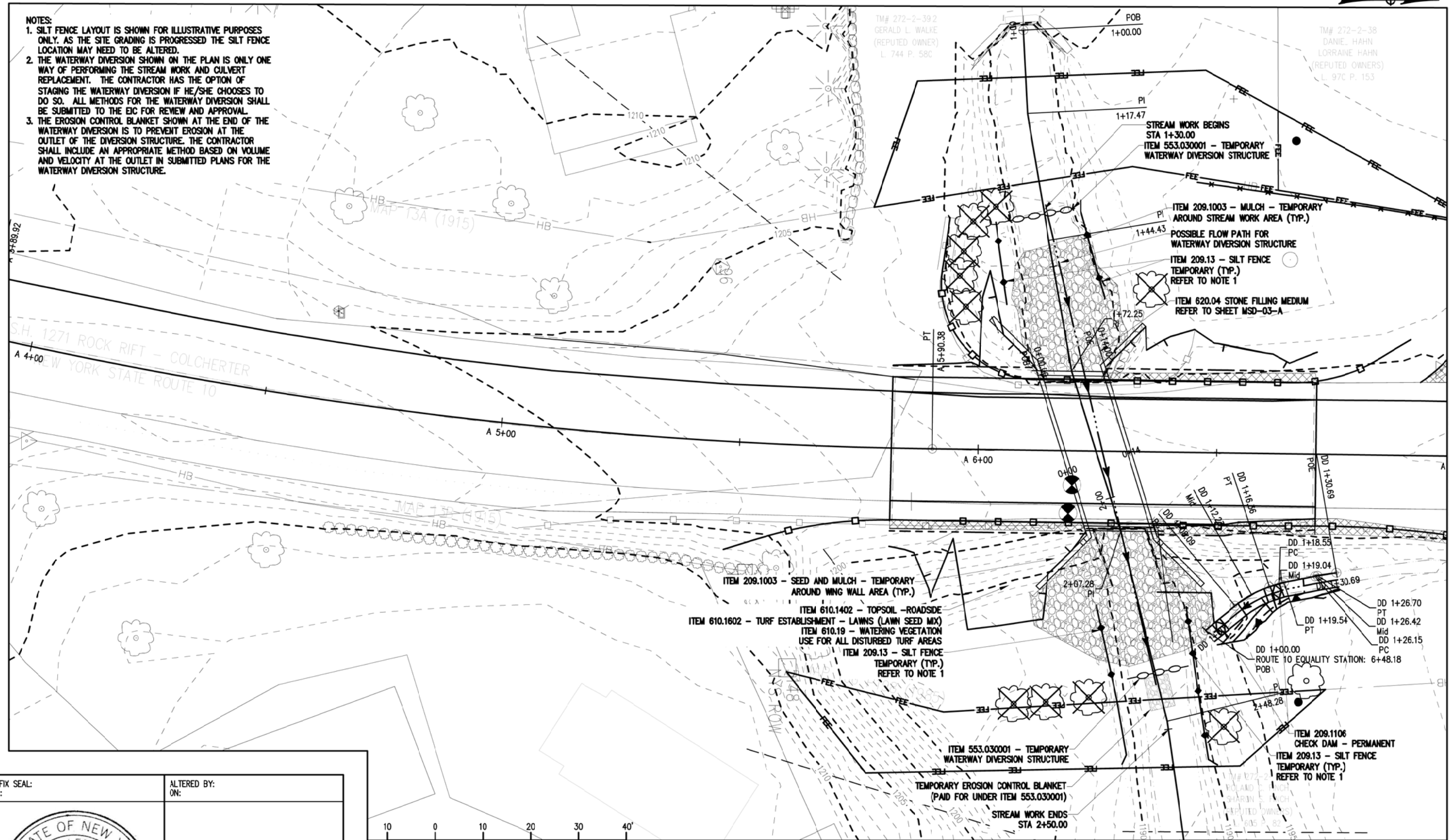
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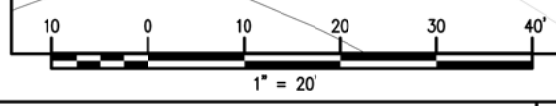
DESIGN SUPERVISOR J. L. PHILLIPS
 JOB MANAGER R. WILDER
 DESIGN K. M. LORF
 CHECK J. L. PHILLIPS
 DRAFTING K. M. LORF
 CHECK J. L. PHILLIPS
 PROJECT MANAGER G. WOJCIK

- NOTES:
1. SILT FENCE LAYOUT IS SHOWN FOR ILLUSTRATIVE PURPOSES ONLY. AS THE SITE GRADING IS PROGRESSED THE SILT FENCE LOCATION MAY NEED TO BE ALTERED.
 2. THE WATERWAY DIVERSION SHOWN ON THE PLAN IS ONLY ONE WAY OF PERFORMING THE STREAM WORK AND CULVERT REPLACEMENT. THE CONTRACTOR HAS THE OPTION OF STAGING THE WATERWAY DIVERSION IF HE/SHE CHOOSES TO DO SO. ALL METHODS FOR THE WATERWAY DIVERSION SHALL BE SUBMITTED TO THE EIC FOR REVIEW AND APPROVAL.
 3. THE EROSION CONTROL BLANKET SHOWN AT THE END OF THE WATERWAY DIVERSION IS TO PREVENT EROSION AT THE OUTLET OF THE DIVERSION STRUCTURE. THE CONTRACTOR SHALL INCLUDE AN APPROPRIATE METHOD BASED ON VOLUME AND VELOCITY AT THE OUTLET IN SUBMITTED PLANS FOR THE WATERWAY DIVERSION STRUCTURE.



AFFIX SEAL:
ON:

ALTERED BY:
ON:



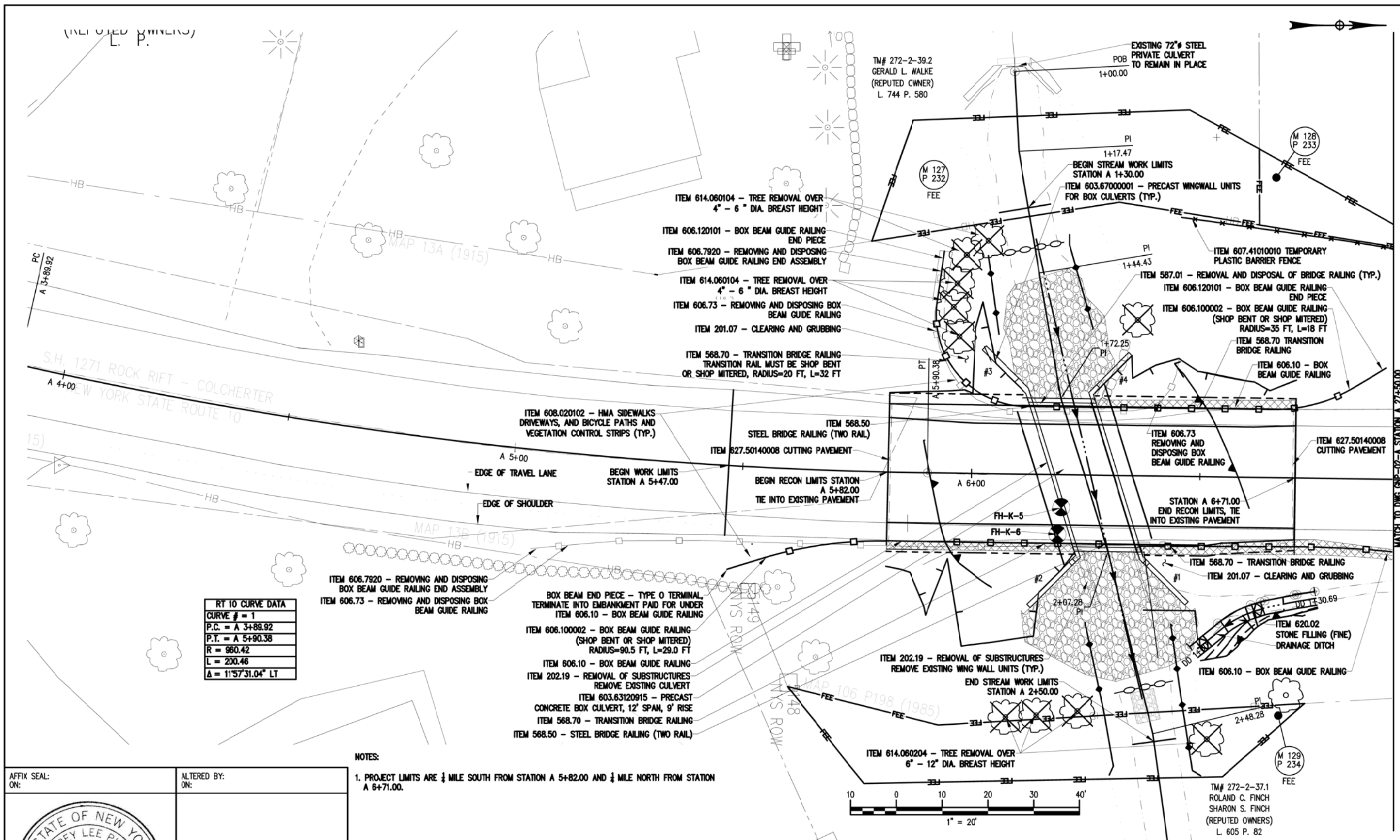
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	ROCK RIFT - COLCHESTER	ROUTE 10				EROSION CONTROL PLANS SITE A
	CULVERT REPLACEMENT & REPAIR PROJECT	TOWN OF WALTON	UTILITY QUALITY LEVEL D			
		COUNTY: DELEWARE				

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 USER = dmelsz

PROJECT MANAGER G. WOJCIK
 CHECK J. L. PHILLIPS
 DRAFTING D. MELSZER
 DESIGN D. MELSZER
 JOB MANAGER R. WILDER
 DESIGN SUPERVISOR J. L. PHILLIPS



RT 10 CURVE DATA	
CURVE #	= 1
P.C.	= A 3+89.92
P.T.	= A 5+90.38
R	= 980.42
L	= 200.46
Δ	= 11°57'31.04" LT

NOTES:
 1. PROJECT LIMITS ARE ¼ MILE SOUTH FROM STATION A 5+82.00 AND ¼ MILE NORTH FROM STATION A 6+71.00.

AFFIX SEAL ON:

ALTERED BY ON:

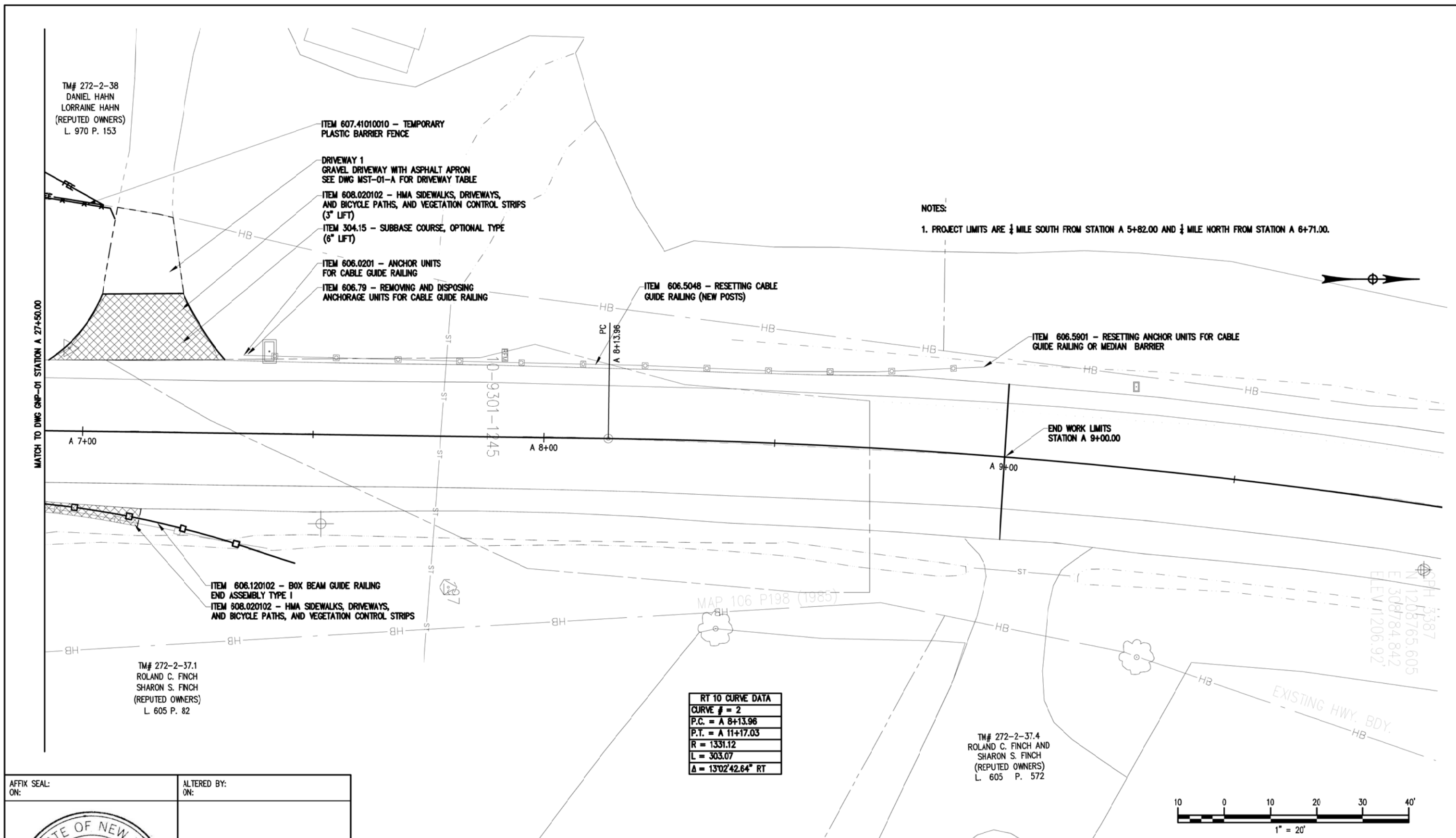
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	ROCK RIFT - COLCHESTER	ROUTE 10				GENERAL PLANS SITE A
	CULVERT REPLACEMENT & REPAIR PROJECT	TOWN OF WALTON	UTILITY QUALITY LEVEL D			SHEET NO. 36
	TOWN OF WALTON	COUNTY: DELEWARE				

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NEW YORK STATE OF OPPORTUNITY
 Department of Transportation

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 USER = dmelszr

PROJECT MANAGER G.WOJCIK
 CHECK J. L. PHILLIPS
 DRAFTING D. MELSZER
 CHECK J. L. PHILLIPS
 DESIGN D. MELSZER
 JOB MANAGER R. WILDER
 DESIGN SUPERVISOR J. L. PHILLIPS



AFFIX SEAL ON:

ALTERED BY: ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 10 - SH 1271	PIN 9805.93	BRIDGES	CULVERTS C940011	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED GENERAL PLANS SITE A	CONTRACT NUMBER D262989
	ROCK RIFT - COLCHESTER	ROUTE 10				DRAWING NO. GNP-02-A SHEET NO. 37
	CULVERT REPLACEMENT & REPAIR PROJECT	UTILITY QUALITY LEVEL D				
	TOWN OF WALTON					
	COUNTY: DELEWARE					

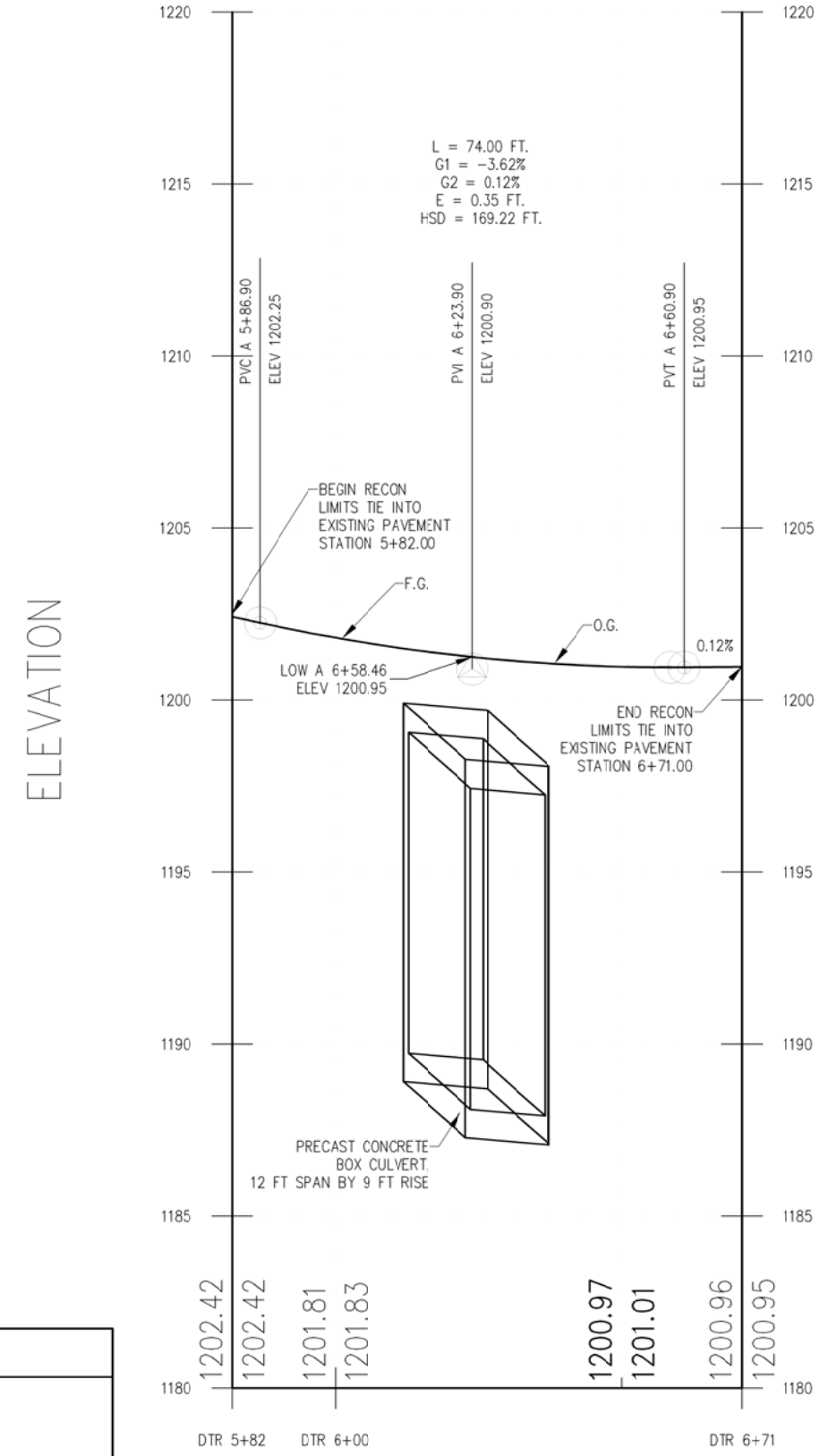
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NEW YORK STATE OF OPPORTUNITY
 Department of Transportation

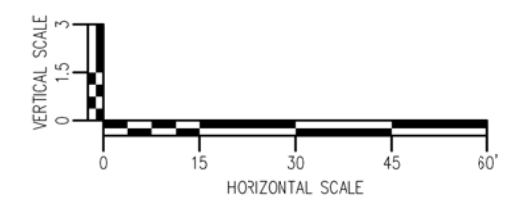
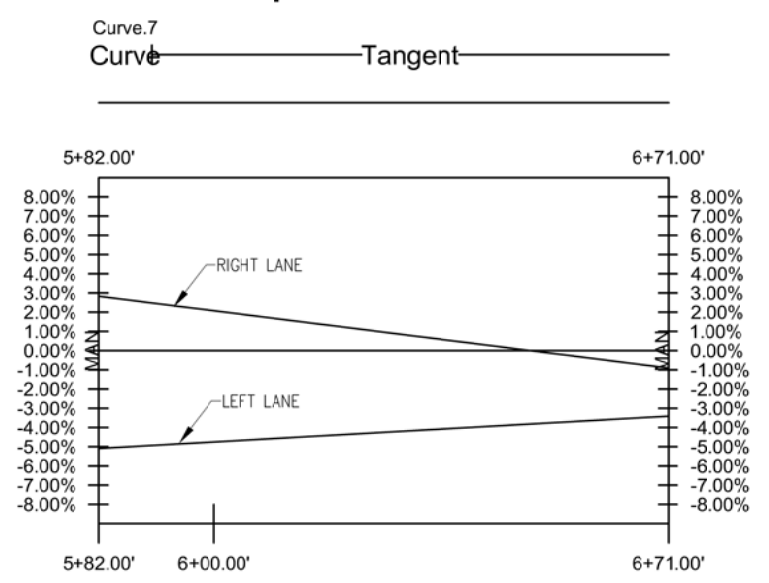
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DESIGN SUPERVISOR R. WILDER
 JOB MANAGER J. L. PHILLIPS
 DESIGN D. MELSZER
 CHECK J. L. PHILLIPS
 DRAFTING D. MELSZER
 CHECK J. L. PHILLIPS
 PROJECT MANAGER G. WOJCIK

PROPOSED ROUTE 10 PROFILE



Superelevation



AFFIX SEAL ON: _____
 ALTERED BY ON: _____



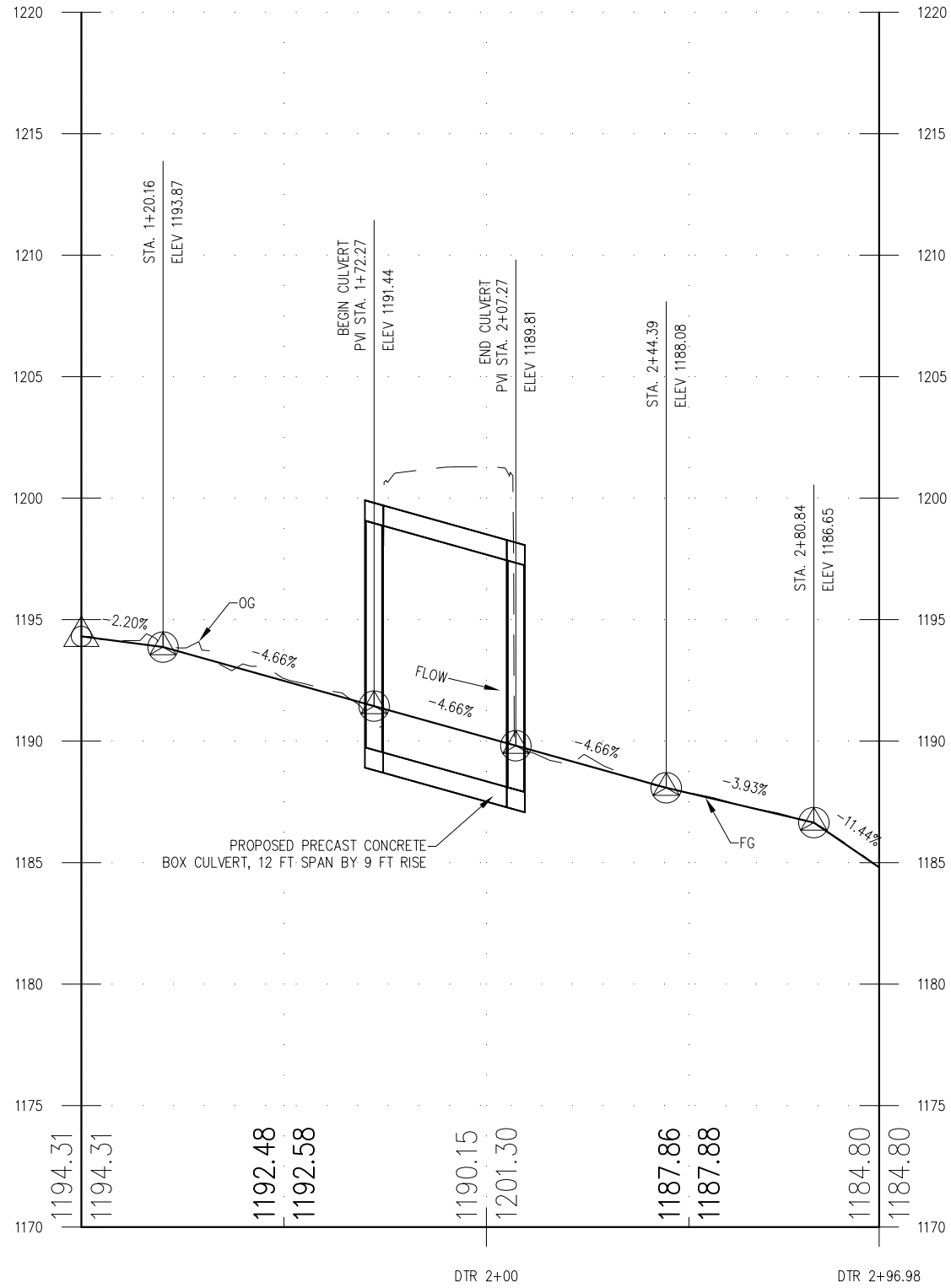
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	ROCK RIFT - COLCHESTER	ROUTE 10					DRAWING NO. PRO-01-A
	CULVERT REPLACEMENT AND REPAIR PROJECT	UTILITY QUALITY LEVEL D					SHEET NO. 38
	TOWN OF WALTON						
	COUNTY: DELAWARE						

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



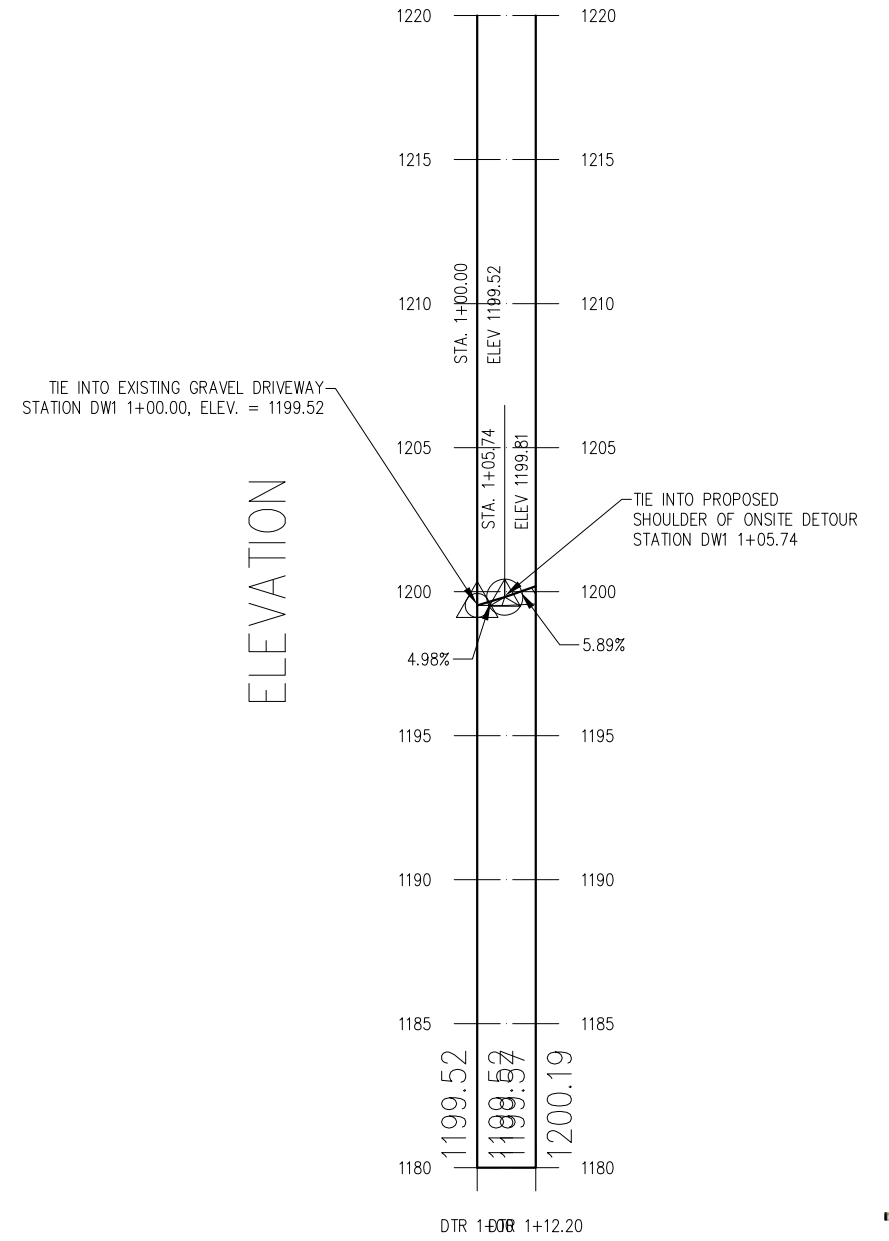
PROPOSED STREAM PROFILE

ELEVATION



PROPOSED DRIVEWAY #1 PROFILE

ELEVATION



AFFIX SEAL ON: ALTERED BY: ON:



AS-BUILT REVISIONS
 DESCRIPTION OF ALTERATIONS:

NYS ROUTE 10 - SH 1271 - SH 1271
 ROCK RIFT - COLCHESTER
 CULVERT REPLACEMENT AND REPAIR PROJECT
 TOWN OF WALTON
 COUNTY: DELAWARE

PIN 9805.93
 ROUTE 10
 UTILITY QUALITY LEVEL D

BRIDGES

CULVERTS
 C940011

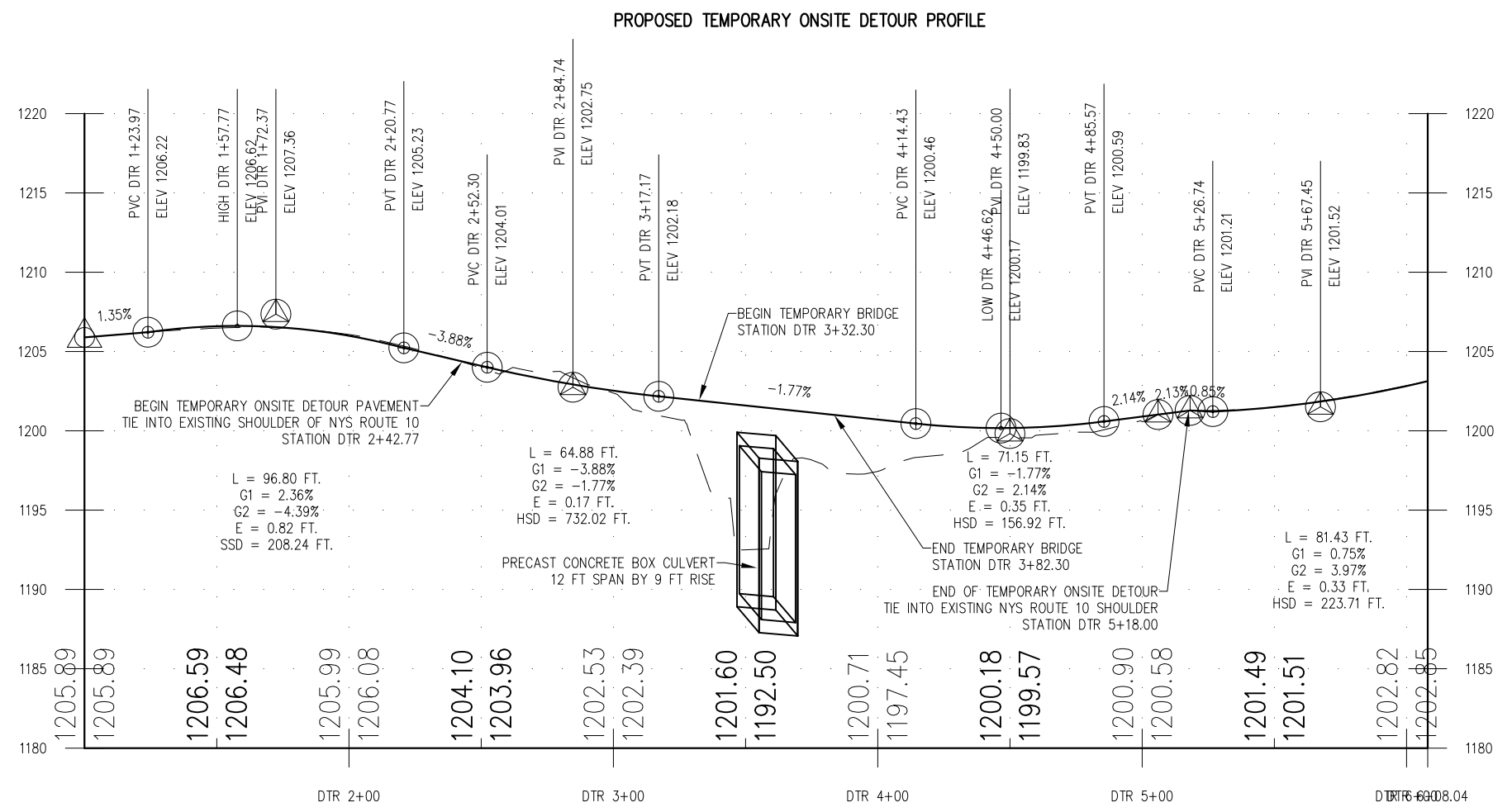
ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED
 STREAM PROFILE
 DRIVEWAY #1 PROFILE
 SITE A

CONTRACT NUMBER
 D262989
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 SHEET NO. 39

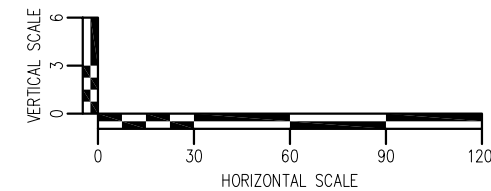
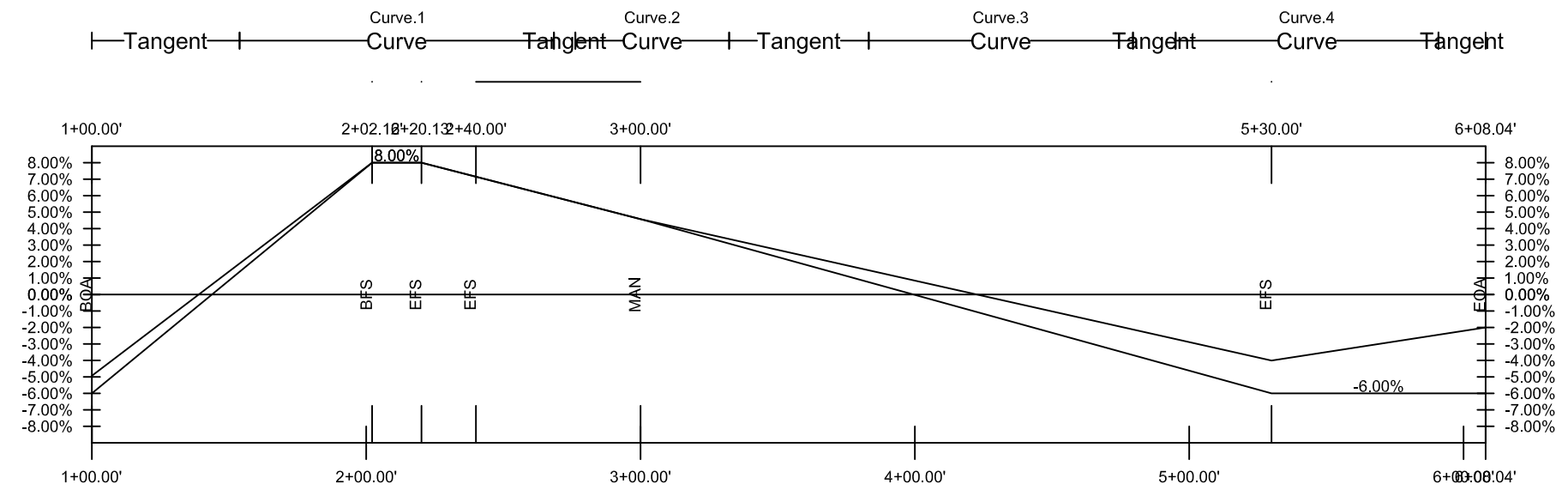
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



ELEVATION



Superelevation



AFFIX SEAL ON:

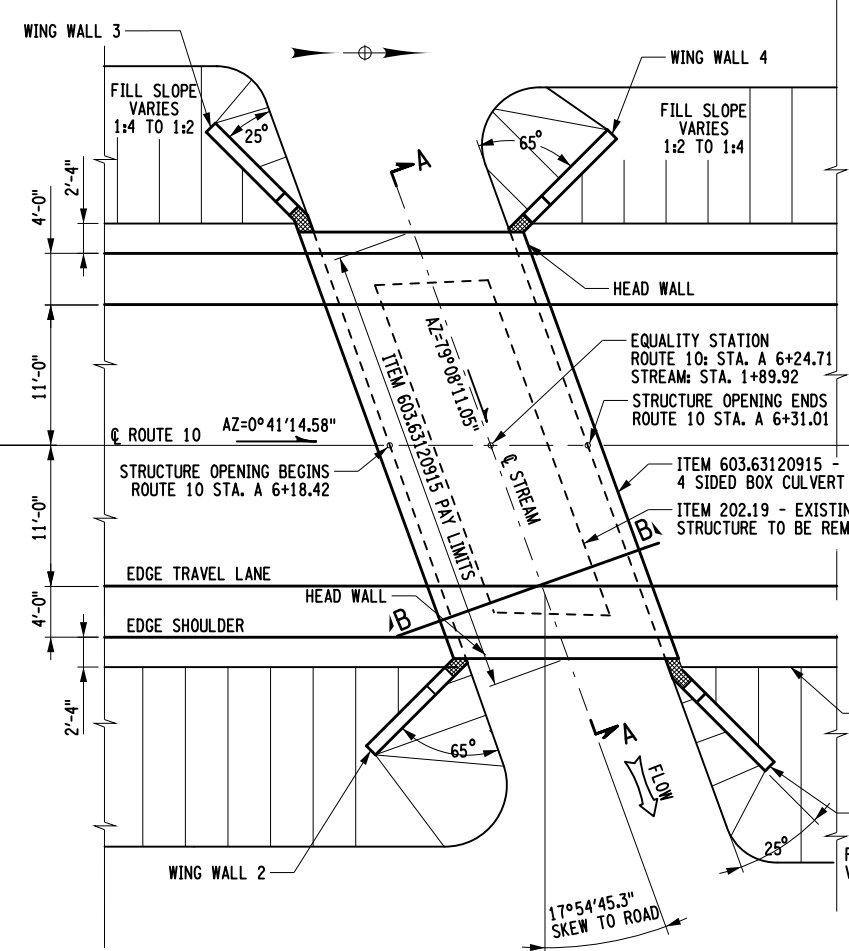
ALTERED BY ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 10 - SH 1271 - SH 1271	PIN 9805.93	BRIDGES	CULVERTS C940011	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED TEMPORARY ONSITE DETOUR PROFILE	CONTRACT NUMBER D262989
	ROCK RIFY - COLCHESTER	ROUTE 10				DRAWING NO. PRO-03-A
	CULVERT REPLACEMENT AND REPAIR PROJECT	UTILITY QUALITY LEVEL D			SITE A	SHEET NO. 40
	TOWN OF WALTON					
	COUNTY: DELAWARE					

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

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 DATE/TIME = 28-JUL-2015 16:39
 USER = jphillips

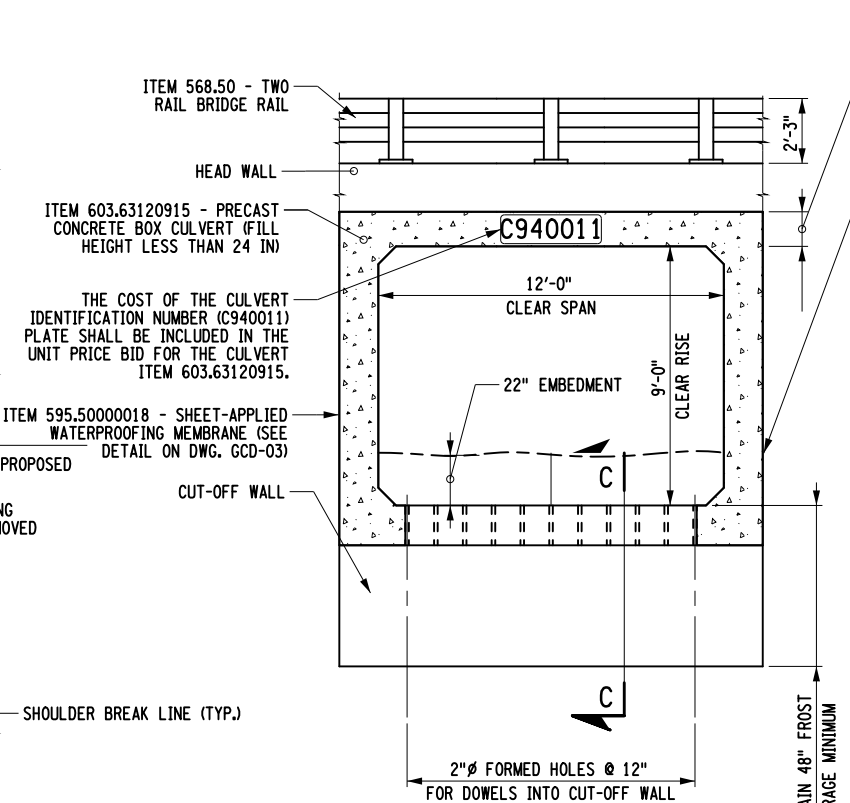
PROJECT MANAGER G. WOJCIK
 CHECK J. L. PHILLIPS
 DRAFTING D. MELSZER
 CHECK J. L. PHILLIPS
 DESIGN D. MELSZER
 JOB MANAGER J. L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER



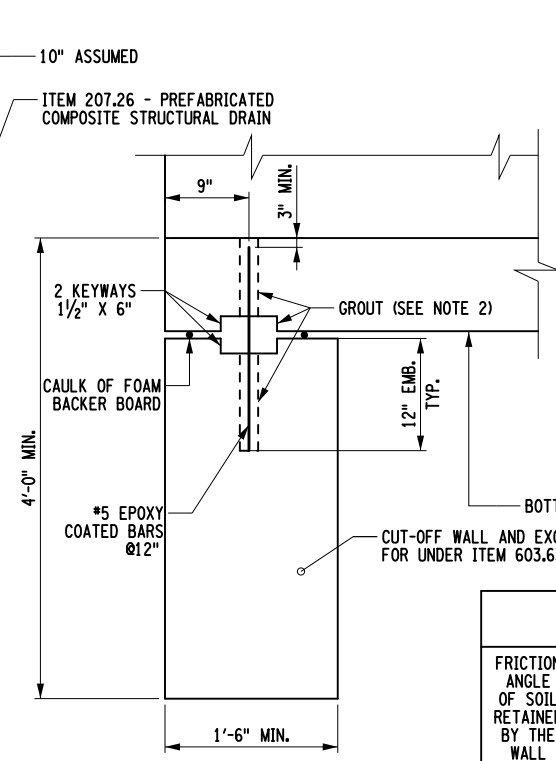
1 CULVERT PLAN VIEW
NOT TO SCALE

BOX CULVERT DESIGN DATA	
CLEAR SPAN, ft.	12'-0"
CLEAR RISE, ft.	9'-0"
MIN. FILL HEIGHT, ft.	0' - 0"
MAX. FILL HEIGHT, ft.	2' - 0"
(SKEW) SKEW ANGLE 1 TO C OF ROADWAY, DEG.	17°54'45.3"
LIVE LOAD	HL-93
RAILING / BARRIER TEST LEVEL	TL-4

BASED ON ASSUMED TOP SLAB THICKNESS OF 10".
 FABRICATOR SHALL ADJUST BASED ON ACTUAL TOP SLAB THICKNESS.



2 CULVERT SECTION B-B
NOT TO SCALE

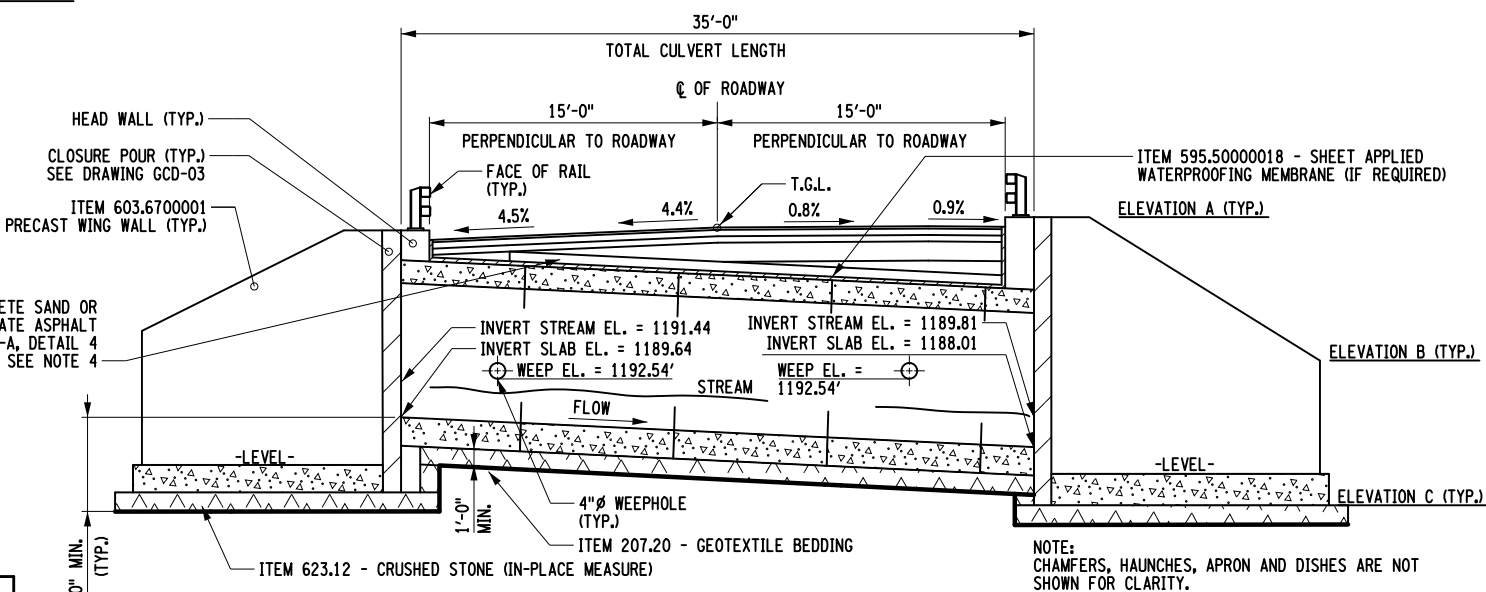


3 CULVERT SECTION C-C
NOT TO SCALE

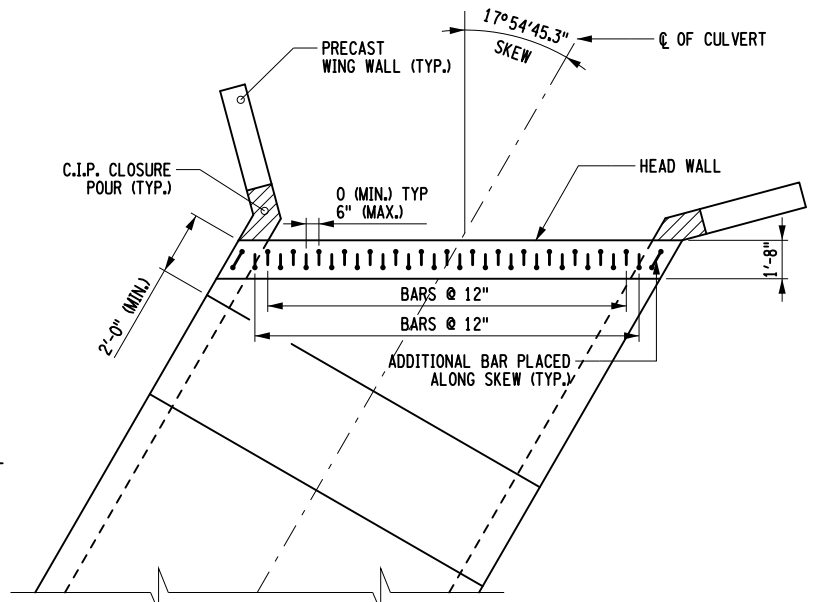
- NOTES:
1. WEEP HOLE ELEVATION = INLET ELEVATION (1191.44') + THE NORMAL DEPTH FOR THE 2 YEAR STORM (0.6') + PLUS AN ADDITIONAL 6" FROM THE NYS DOT BRIDGE MANUAL GUIDANCE = 1192.54'.
 2. DOWEL BARS USED TO ATTACH THE CUT-OFF WALL TO THE BOX CULVERT SHALL BE DRILLED AND GROUTED PER THE REQUIREMENTS OF STANDARD SPECIFICATION SECTION 586 EXCEPT THE GROUT SHALL MEET THE REQUIREMENTS OF § 701-06. THE KEYWAY SHALL BE GROUTED WITH THE SAME MATERIAL AS THE DOWELS. WHEN THE GRADE OF THE BOX EXCEEDS 5%, THE TOP OF THE CUT-OFF WALL SHOULD BE BEVELED TO MATCH THE GRADE. PLACE A BEAD OF CAULK, CLOSED CELL FOAM OR OTHER SUITABLE MATERIAL ON BOTH SIDES OF THE KEYWAY TO CONTAIN THE GROUT. THE COST OF THE GROUT AND REBAR SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 603.63120915.
 3. PRECAST CUT-OFF WALLS AND WING WALLS SHALL BE PLACED ON A LEVELING BED OF ITEM 623.12 - CRUSHED STONE (IN-PLACE MEASURE), AND MEET THE REQUIREMENTS OF MATERIAL DESIGNATION 703-0201, 703-0202 OR 703-0204 WITH A PRIMARY SIZE DESIGNATION OF 2. AFTER PLACING AND LEVELING THE PRECAST UNITS, THE AREAS BENEATH AND BEHIND THE UNITS SHALL BE GROUTED WITH CONTROLLED LOW STRENGTH MATERIAL MEETING THE REQUIREMENTS OF SECTION 204 OF THE NYS DOT STANDRAD SPECIFICATION.
 4. REFER TO THE SPECIAL SPECIFICATION 595.5000018 IN THE PROPOSAL FOR ADDITIONAL INFORMATION ON THE PROPER INSTALLATION AND PROTECTION OF THE ASPHALT MEMBRANE.

GEOTECHNICAL PRECAST CANTILEVER WING WALL SOIL PARAMETERS AND RESISTANCE FACTORS						
FRICITION ANGLE OF SOIL RETAINED BY THE WALL (DEGREES).	FRICITION ANGLE OF FOUNDATION SOIL (DEGREES)	TOTAL ³ SOIL UNIT WEIGHT (LBS/FT ³)	MAXIMUM SERVICE LIMIT STATE BEARING RESISTANCE (LBS/FT ²)	NOMINAL COEFFICIENT OF FRICTION FOR SLIDING	STRENGTH LIMIT STATE RESISTANCE FACTOR FOR SLIDING	STRENGTH LIMIT STATE RESISTANCE FACTOR FOR BEARING
34	33	120	2.5	0.52	0.90	0.45

- NOTES:
1. FOR THE SLIDING AND ECCENTRICITY ANALYSIS, ASSUME A GROUNDWATER ELEVATION OF 1193 FEET.
 2. FOR THE BEARING ANALYSIS, ASSUME A GROUNDWATER ELEVATION OF 1188 FEET.
 3. USE SUBMERGED UNIT WEIGHTS BELOW THE GROUNDWATER ELEVATIONS PROVIDED.
 4. ASSUME A SURCHARGE LOAD OF 250 POUNDS PER SQUARE FOOT.



4 LONGITUDINAL ELEVATION A-A
NOT TO SCALE



5 HEADWALL ON SKEWED CULVERT
NOT TO SCALE

AFFIX SEAL: ON: _____
 ALTERED BY: ON: _____



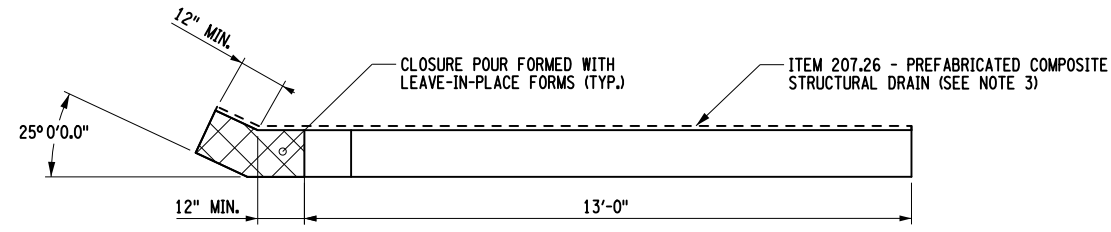
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 10 - SH 1271	PIN 9805.93 ROUTE 10 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS C940011	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	ROCKRIFT - COLCHESTER					
	CULVERT REPLACEMENT & REPAIR PROJECT					
	TOWN OF WALTON					
COUNTY: DELAWARE	REGION: 09	DRAWING NO. CDT-01-A SHEET NO. 41				

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

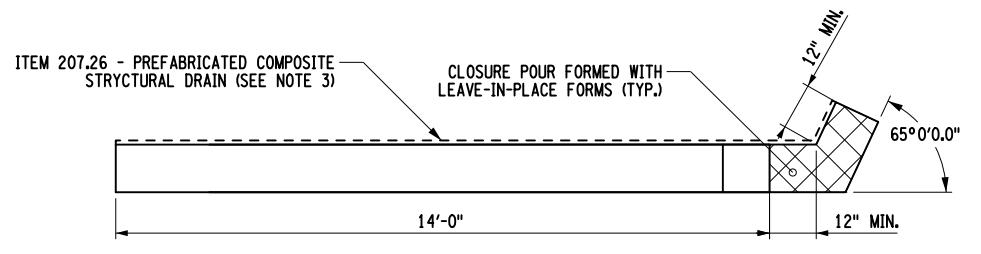


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 DATE/TIME = 06-AUG-2015 09:10
 USER = jphillips

PROJECT MANAGER G. WOJCIK
 CHECK J. L. PHILLIPS
 DRAFTING D. MELSZER
 CHECK J. L. PHILLIPS
 DESIGN D. MELSZER
 JOB MANAGER J. L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER

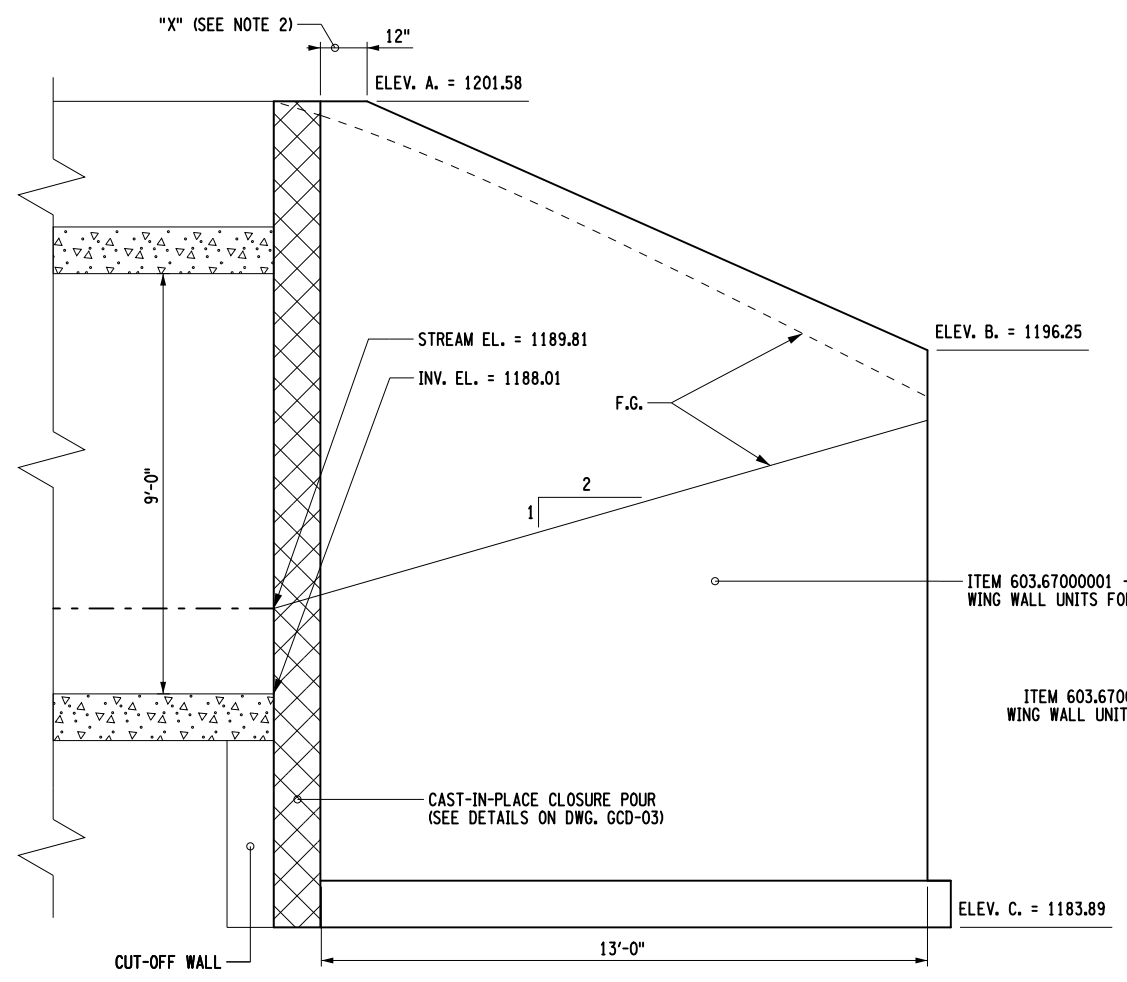


① WING WALL 1 - PLAN VIEW
NOT TO SCALE

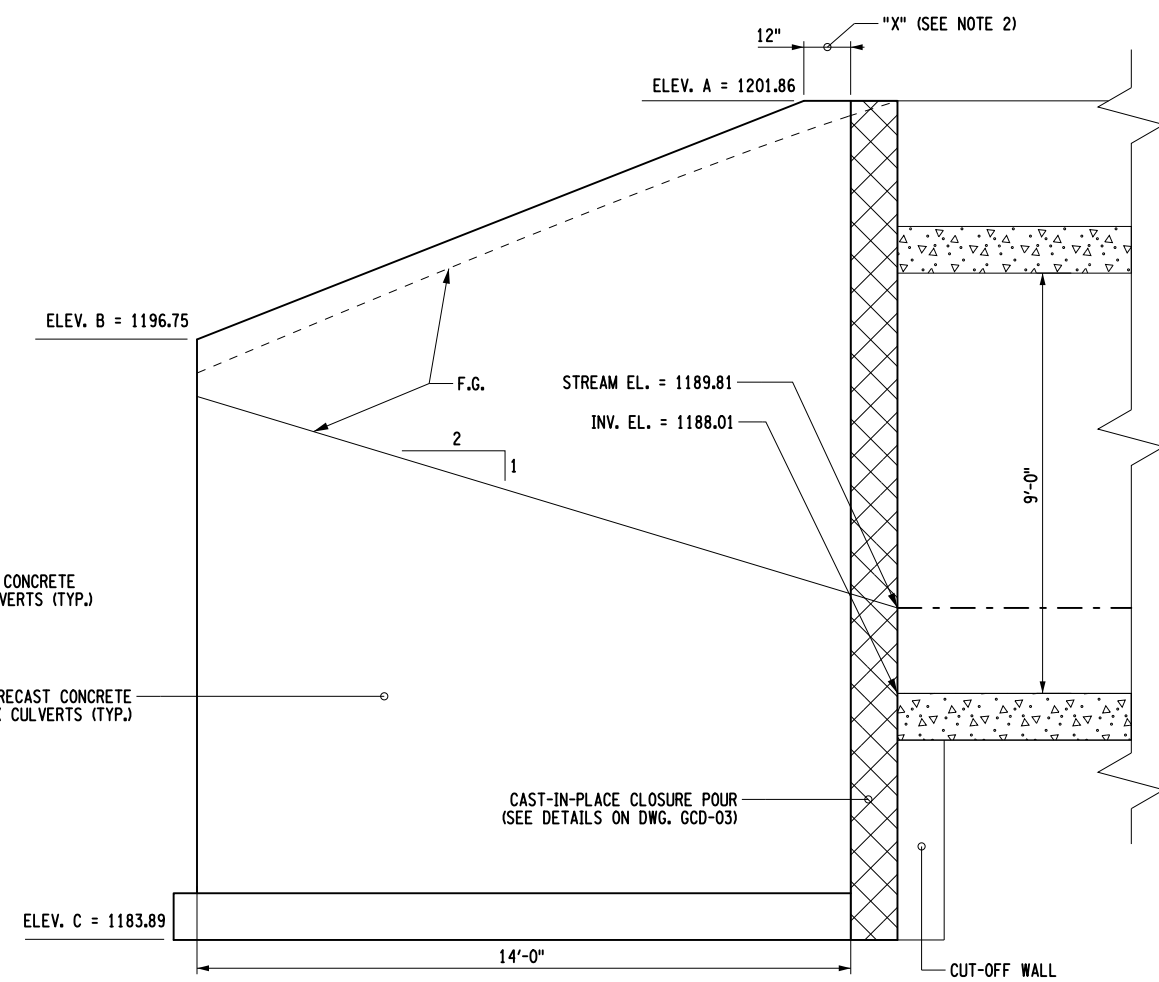


③ WING WALL 2 - PLAN VIEW
NOT TO SCALE

- NOTES:
1. WING WALLS, CULVERT TOP SLABS AND CULVERT BOTTOM SLABS ARE DRAWN AND ASSUMED TO BE 12" THICK. FINAL SIZE AND CONFIGURATION SHALL BE DETERMINED BY THE CONTRACTOR'S PRECAST FABRICATOR.
 2. DIMENSION "X" IS THE LEVEL DISTANCE ACROSS THE TOP OF THE WING WALL AND IS MEASURED ALONG THE FRONT FACE OF THE WALL.
 3. PROVIDE PREFABRICATED COMPOSITE STRUCTURAL DRAIN ON THE BACKSIDE OF ALL WING WALLS. PLACE THE DRAIN OVER THE LEAVE-IN-PLACE FORMS PRIOR TO BACKFILLING.



② WING WALL 1 - ELEVATION VIEW
NOT TO SCALE



④ WING WALL 2 - ELEVATION VIEW
NOT TO SCALE

AFFIX SEAL: ON: _____
 ALTERED BY: ON: _____



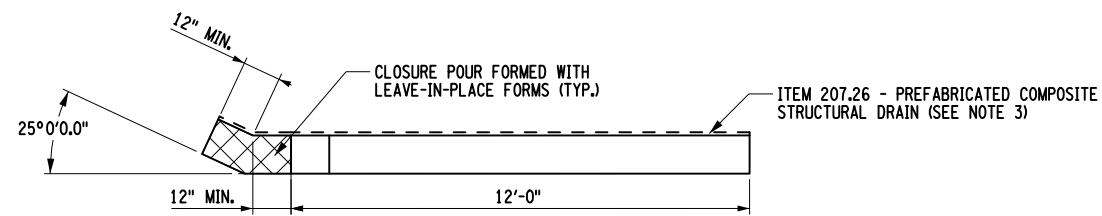
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 10 - SH 1271	PIN 9805.93	BRIDGES	CULVERTS C940011	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED WING WALLS 1 & 2	CONTRACT NUMBER D262989
	ROCKRIFT - COLCHESTER	ROUTE 10				DRAWING NO. CDT-02-A
	CULVERT REPLACEMENT & REPAIR PROJECT	TOWN OF WALTON	UTILITY QUALITY LEVEL D			SHEET NO. 42
	COUNTY: DELAWARE	REGION: 09			SITE A	

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

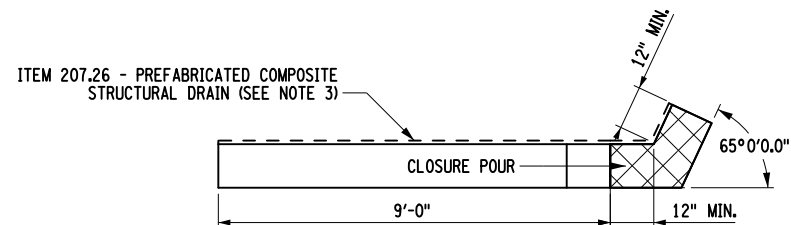


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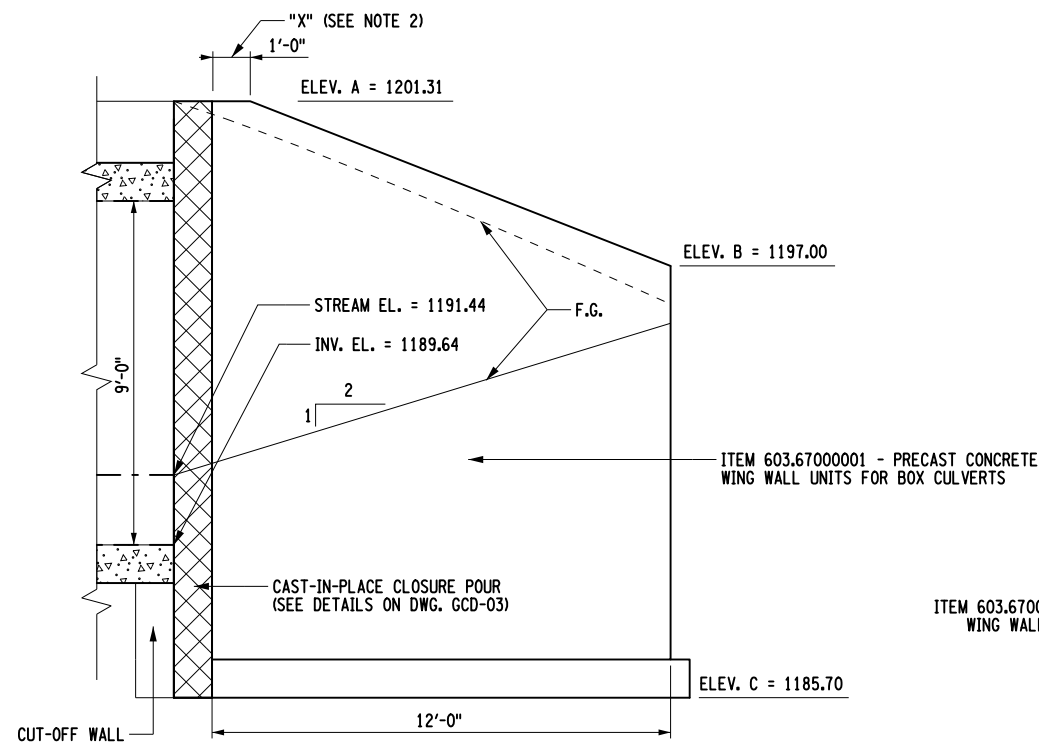
PROJECT MANAGER G. WOJCIK
 CHECK J. L. PHILLIPS
 DRAFTING D. MELSZER
 CHECK J. L. PHILLIPS
 DESIGN D. MELSZER
 JOB MANAGER J. L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER



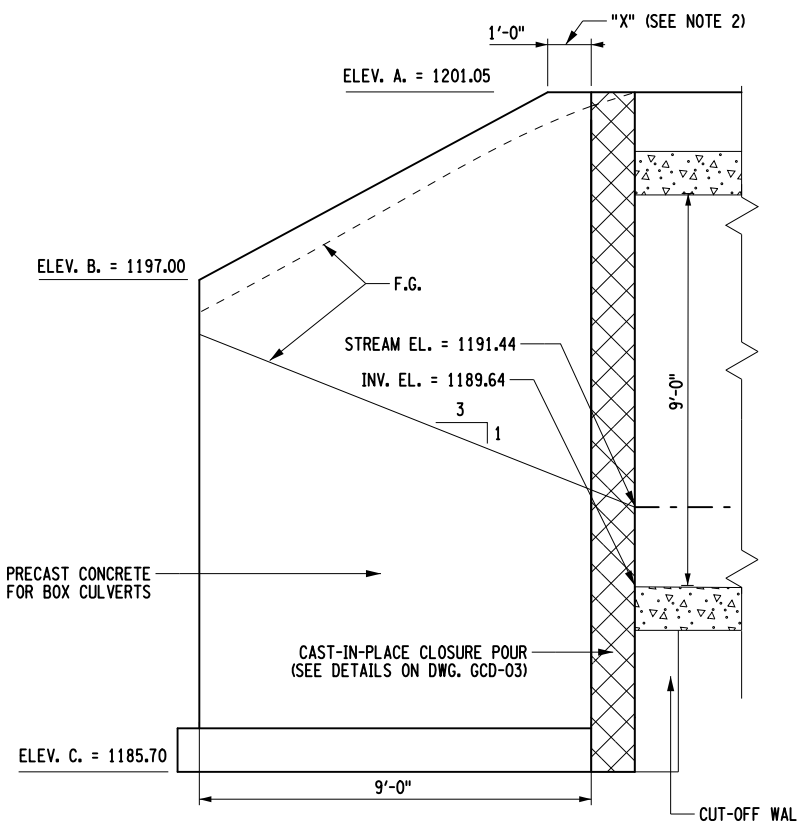
① WING WALL 3 - PLAN VIEW
 NOT TO SCALE



③ WING WALL 4 - PLAN VIEW
 NOT TO SCALE



② WING WALL 3 - ELEVATION VIEW
 NOT TO SCALE



④ WING WALL 4 - ELEVATION VIEW
 NOT TO SCALE

NOTES:

1. WING WALLS, CULVERT TOP SLABS AND CULVERT BOTTOM SLABS ARE DRAWN AND ASSUMED TO BE 12" THICK. FINAL SIZE AND CONFIGURATION SHALL BE DETERMINED BY THE CONTRACTOR'S PRECAST FABRICATOR.
2. DIMENSION "X" IS THE LEVEL DISTANCE ACROSS THE TOP OF THE WING WALL AND IS MEASURED ALONG THE FRONT FACE OF THE WALL.
3. PROVIDE PREFABRICATED COMPOSITE STRUCTURAL DRAIN ON THE BACKSIDE OF ALL WING WALLS. PLACE THE DRAIN OVER THE LEAVE-IN-PLACE FORMS PRIOR TO BACKFILLING.

AFFIX SEAL: ON:	ALTERED BY: ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 10 - SH 1271	PIN 9805.93	BRIDGES	CULVERTS C940011	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	ROCKRIFT - COLCHESTER	ROUTE 10			WING WALLS 3 & 4	DRAWING NO. CDT-03-A
	CULVERT REPLACEMENT & REPAIR PROJECT	UTILITY QUALITY LEVEL D			SITE A	SHEET NO. 43
	TOWN OF WALTON					
	COUNTY: DELAWARE	REGION: 09				

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



FILE NAME = 980593_C940011_RT10_oph_spp_01_A.dgn
 DATE/TIME = 28-JUL-2015 16:39
 USER = jphillips

DESIGN SUPERVISOR R.WILDER

DESIGN D.MELSZER

CHECK J.L.PHILLIPS

DRAFTING G.MEYER

CHECK J.L.PHILLIPS

PROJECT MANAGER G.WOJCIK

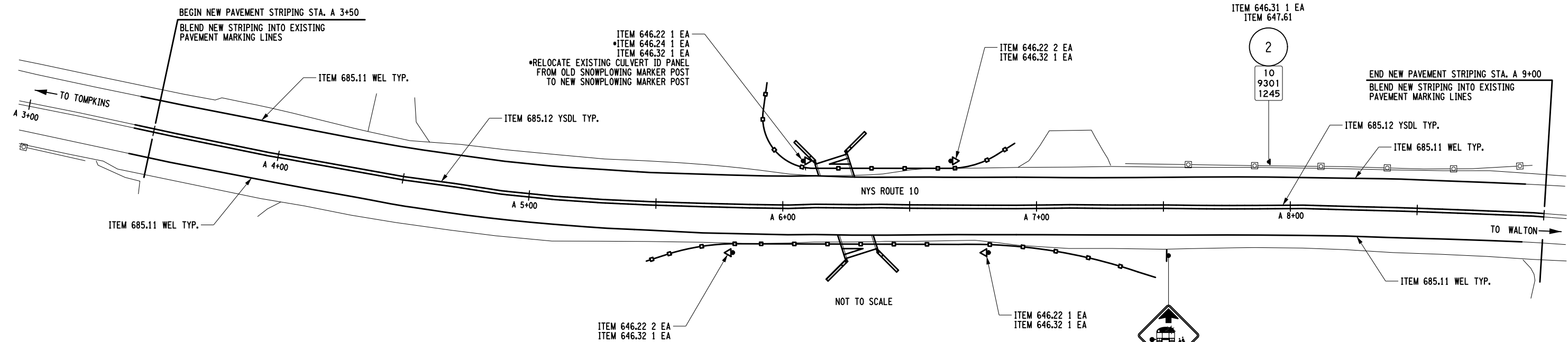
SIGN AND PAVEMENT MARKING ITEM SUMMARY TABLE ROUTE 10 SITE A C940011			
ITEM NUMBER	DESCRIPTION	UNIT	QUANTITY
645.03040011	HIGH VISIBILITY GROUND-MOUNTED SIGN PANELS LESS THAN OR EQUAL TO 30 SF WITH Z-BARS	SF	9.0
645.81	TYPE A SIGN POSTS	EA	2
646.21	REFERENCE MARKER PANEL	EA	1
646.22	DELINEATOR, SNOWPLOWING MARKER, SUPPLEMENTARY SNOW PLOWING MARKER PANELS	EA	6
646.24	DELINEATOR, SNOWPLOWING MARKER, SUPPLEMENTARY SNOW PLOWING MARKER PANELS RELOCATION	EA	1
646.31	STEEL POST, 1.1 LB/FT	EA	1
646.32	STEEL POST, 2.0 LB/FT	EA	4
647.61	REMOVE AND DISPOSE SIGNS, GROUND MOUNTED TYPE A	EA	2
685.11	WHITE EPOXY REFLECTORIZED PAVEMENT STRIPES - 20 MILS	FT	1100
685.12	YELLOW EPOXY REFLECTORIZED PAVEMENT STRIPES - 20 MILS	FT	1100

DESIGNATION & COLOR (SEE NOTE 2)	LOCATION	TEXT	ITEM	SIZE	PAYMENT AREA (SEE NOTE 3)
				AREA (SEE NOTE 3)	TOTAL PAYMENT AREA
S3-1	1		645.03040011	36 X 36	9.0 SF
				9.0 SF	9.0 SF
N/A	2		646.21	8 X 10	N/A
				0.6 SF	N/A

SIGNING NOTES:

- SIGN LOCATIONS AS SHOWN ON PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL INSTALL NEW SIGNS AND RELOCATE EXISTING SIGNS IN ACCORDANCE WITH THE MUTCD AND NYS SUPPLEMENT.
- THE COLOR IS ONLY SHOWN WHEN THERE IS AN OPTION THAT MUST BE SPECIFIED.
- SIGN SIZE IS IN INCHES. THE AREA AND PAYMENT AREA FOR SIGNS ARE FROM THE APPLICABLE STANDARD SHEETS OR SIGN FACE LAYOUTS.

RELOCATE EXISTING CULVERT ID PANEL FROM OLD SNOWPLOWING MARKER POST TO NEW SNOWPLOWING MARKER POST



AFFIX SEAL: ON:	ALTERED BY: ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 10 - SH 1271 ROCK FIFT - COLCHESTER CULVERT REPLACEMENT AND REPAIR PROJECT TOWN OF WALTON COUNTY: DELAWARE	PIN 9805.93 RT 10 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS C940011	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED SIGN DATA SHEET AND SIGN AND PAVEMENT MARKING SCHEMATIC SITE A	CONTRACT NUMBER D262989 DRAWING NO. SGP-01-A SHEET NO. 44
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.						Department of Transportation

LEGEND	
	NEW SIGN LOCATION NUMBER

FILE NAME = 980593_C950058_RT28_cph_loc.01_B.dgn
 DATE/TIME = 31-JUL-2015 10:22
 USER = gmeyer

DESIGN SUPERVISOR R. WILDER

JOB MANAGER J. L. PHILLIPS

DESIGN D. MELSZER

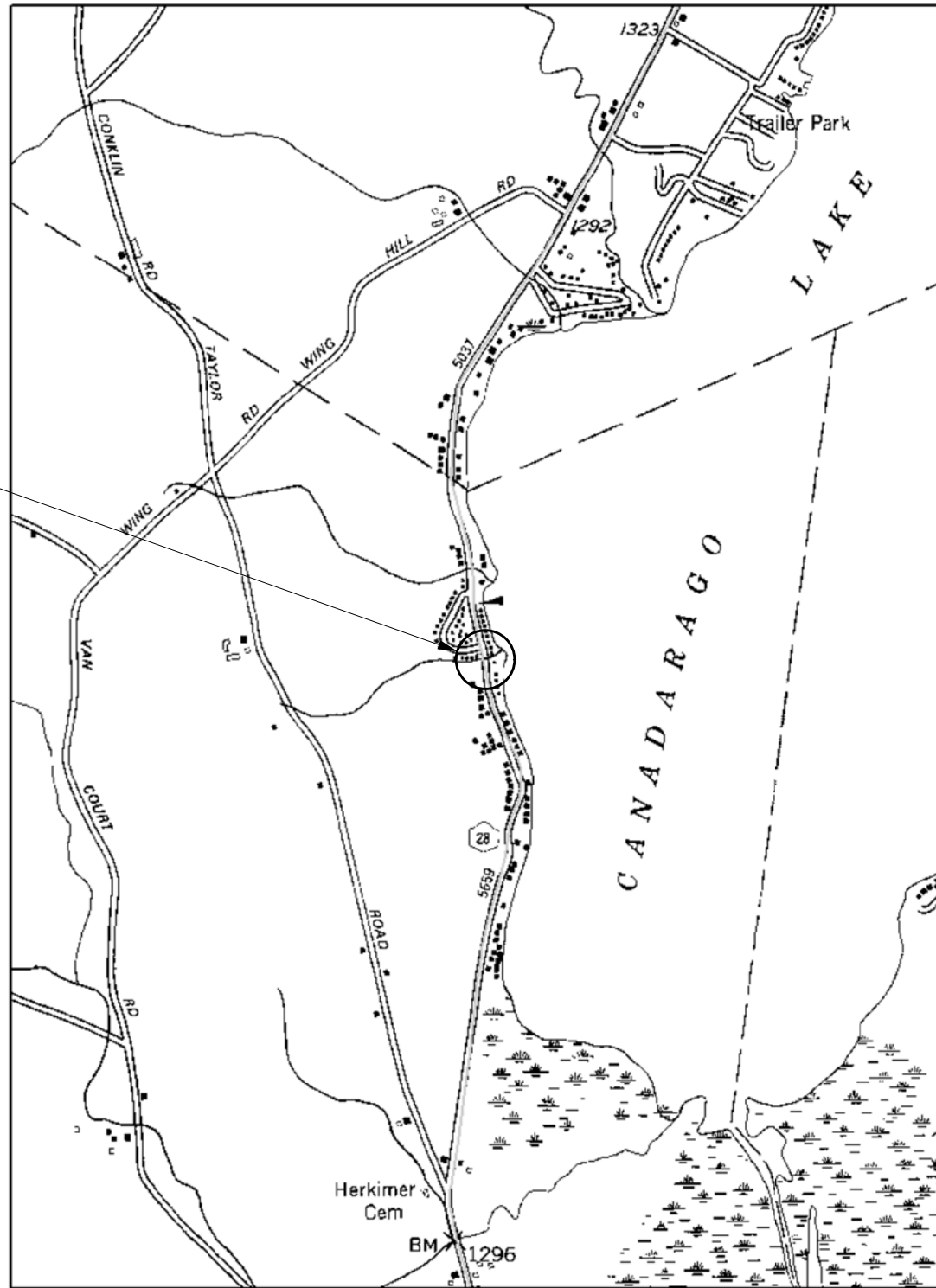
CHECK J. L. PHILLIPS

DRAFTING J. L. PHILLIPS

CHECK P. BLOW

PROJECT MANAGER G. WOJCIK

PROJECT SITE B
 C950058
 ROUTE 28
 RM28 9403 3309

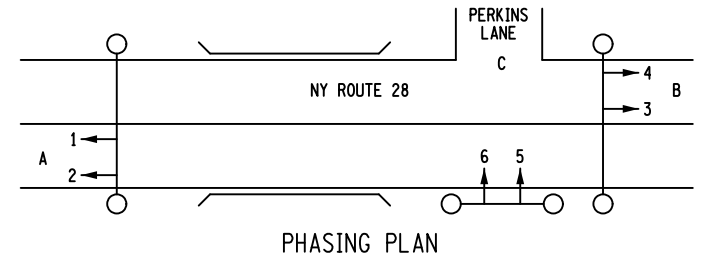
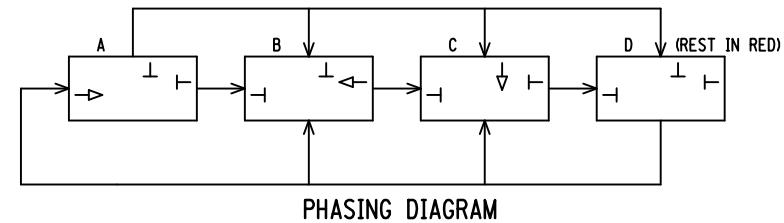


SITE B LOCATION MAP
 NYS ROUTE 28 RM 28 9403 3309
 TOWN OF EXETER
 NOT TO SCALE

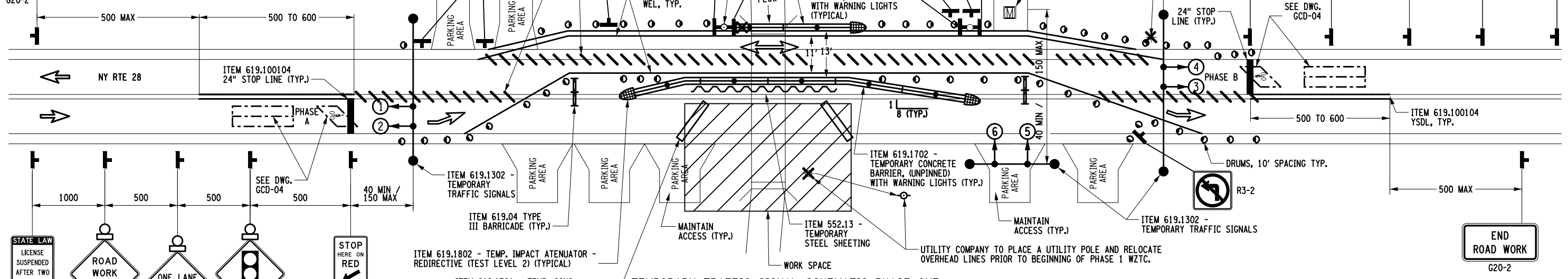
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 28 - SH 5659	PIN 9805.93 ROUTE 28 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS C950058	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	RICHFIELD SPRINGS - SCHUYLER LAKE, PART 2					DRAWING NO. LOC-01-B SHEET NO. 45
	MULTI-CULVERT REPLACEMENT & REPAIR PROJECT				LOCATION MAP	
	TOWN OF EXETER				SITE B	
	COUNTY: OTSEGO	REGION: 09				

PHASING TABLE													
PHASE	FACE	1, 2			3, 4			5, 6					
		INITIAL	EXTENSION	TIME	RECALL	INITIAL	EXTENSION	TIME	RECALL	INITIAL	EXTENSION	TIME	RECALL
A	G	R	R	R	8	6	32	NO					
1ST CLEARANCE	Y	R	R	R	-	-	3.5	-					
2ND CLEARANCE	R	R	R	R	-	-	SEE NOTE	-					
B	R	G	R	R	8	6	32	NO					
1ST CLEARANCE	R	Y	R	R	-	-	3.5	-					
2ND CLEARANCE	R	R	R	R	-	-	SEE NOTE	-					
C	R	R	G	R	8	6	14	NO					
1ST CLEARANCE	R	R	Y	R	-	-	3.5	-					
2ND CLEARANCE	R	R	R	R	-	-	SEE NOTE	-					
D (REST IN RED)	R	R	R	R	-	-	1.0	YES					
1ST CLEARANCE	R	R	R	R	-	-	0.5	-					
2ND CLEARANCE	R	R	R	R	-	-	0.5	-					
EMERGENCY FLASH	FR	FR	FR	FR	-	-	-	-					

NOTE: DIVIDE THE TRAVEL DISTANCE IN FEET BETWEEN STOP LINES BY 22 FEET PER SECOND FOR THE TIME OF THE PHASE A, PHASE B AND PHASE C 2ND CLEARANCES.



END ROAD WORK
G20-2



END ROAD WORK
G20-2

NOTES:

- REFER ALSO TO THE MUTCD AND APPLICABLE 619 STANDARD SHEETS.
- THE SIGNAL LOCATION SHALL BE FIELD DETERMINED AS DIRECTED BY THE ENGINEER.
- ADJUSTMENTS IN THE LOCATION OF ADVANCED WARNING SIGNS SHALL BE MADE TO ACCOMMODATE THE HORIZONTAL AND VERTICAL ALIGNMENT OF THE ROADWAY, RECOGNIZING THAT THE DISTANCES SHOWN FOR SIGN SPACING ARE MINIMUMS.
- FLASHING WARNING LIGHTS ARE REQUIRED ON THE SIGNAL AHEAD SIGNS (W3-3). FLASHING WARNING LIGHTS SHALL ALSO BE REQUIRED ON THE ROAD WORK AHEAD SIGNS (W20-1) AND ONE LANE ROAD AHEAD SIGNS (W20-4).
- THE TIMING, PHASING AND DETECTOR LOCATIONS ARE TO BE VERIFIED BY THE REGIONAL TRAFFIC ENGINEER AT LEAST 2 WEEKS PRIOR TO START UP. THE REGIONAL TRAFFIC ENGINEER SHALL APPROVE ANY CHANGES OR ADDITIONS REQUIRED DUE TO OBSERVED TRAFFIC CONDITIONS.
- DETECTORS SHALL BE INSTALLED ON ALL APPROACH LANES AND ALL PHASES SHALL BE ACTUATED. DURATION OF RED CLEARANCE INTERVALS SHALL BE ADEQUATE TO CLEAR THE ONE-LANE SECTION OF CONFLICTING TRAFFIC.
- LOOPS SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD SHEET 680-14.
- OTHER TYPES OF VEHICLE DETECTION EQUIPMENT MAY BE USED IF PRIOR APPROVAL IS OBTAINED FROM THE REGIONAL TRAFFIC ENGINEERING AND SAFETY GROUP. REQUESTS BY THE CONTRACTOR TO USE SUCH ALTERNATIVES SHALL BE ACCOMPANIED BY DETAILED PLANS AND SPECIFICATIONS.
- THE TRAFFIC SIGNAL SHALL REST IN RED. WHEN THE SIGNAL IS CHANGED TO THE FLASHING MODE, EITHER MANUALLY OR AUTOMATICALLY, RED SIGNAL INDICATIONS SHALL BE FLASHED TO ALL APPROACHES.
- REST IN RED FEATURE MAY BE SUBSTITUTED FOR PHASE D.
- EMERGENCY FLASH OPERATION IS CONSIDERED A MALFUNCTION. FLAGGERS ARE REQUIRED UNTIL THE MALFUNCTION IS REPAIRED.
- THE CONTRACTOR SHALL COMMENCE REPAIR WORK ON THIS SIGNAL WITHIN TWO HOURS AFTER HE/SHE HAS BEEN NOTIFIED OF A MALFUNCTION. THE CONTRACTOR HAS AN EIGHT HOUR TIME LIMIT TO MAKE REPAIRS. FLAGGER CONTROL SHALL BE PROVIDED AT THE CONTRACTOR'S EXPENSE UNTIL THE TEMPORARY SIGNAL IS RESTORED TO PROPER OPERATION. IF THE REPAIRS REMAIN UNCOMPLETED AFTER THIS TIME, LIQUIDATED DAMAGES OF ONE DAY WILL BE ASSESSED FOR EACH DAY THE SIGNAL IS MALFUNCTIONING UNTIL IT IS REPAIRED.
- TEMPORARY STOP LINES, CROSSWALKS AND LANE MARKINGS SHALL BE INSTALLED USING ITEM 619.100104, INTERIM PAVEMENT MARKING STRIPES, REMOVABLE WET REFLECTIVE TAPE. EXISTING CONFLICTING PAVEMENT MARKINGS BETWEEN THE ACTIVITY AREA AND THE STOP LINE SHALL BE COVERED USING ITEM 619.0803, COVER EXISTING PAVEMENT MARKING STRIPES (REMOVABLE TAPE).
- MINIMUM CLEARANCE FROM PAVEMENT TO BOTTOM OF SIGNAL HEADS IS 16'-6".
- ALL SIGNAL HEADS SHALL CONTAIN 12" LENSES. ALL SIGNAL FACES SHALL HAVE MUTCD COMPLIANT BACKPLATES.
- POWER SOURCE TO BE DETERMINED BY CONTRACTOR AND POWER COMPANY.
- PROPER POLES TO SUPPORT THE 3-COLOR SIGNAL HEADS TO BE DETERMINED BY THE CONTRACTOR.
- ALL SPAN WIRE, INDUCTANCE LOOP WIRE, SHIELDED LEAD-IN CABLE, TRAFFIC SIGNAL CABLE AND OTHER WIRE USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE NEW MATERIAL MEETING THE APPLICABLE REQUIREMENTS OF SUBSECTION 680-2 OF THE STANDARD SPECIFICATIONS.
- ALL OTHER EQUIPMENT FOR TEMPORARY TRAFFIC SIGNALS SHALL MEET THE REQUIREMENTS OF SUBSECTION 680-2 OF THE STANDARD SPECIFICATIONS EXCEPT FOR THE FOLLOWING MODIFICATIONS:
 - USED EQUIPMENT IN GOOD OPERATING CONDITION MAY BE FURNISHED TO PROVIDE THE REQUIRED OPERATION OF THE SIGNAL.
 - MANUFACTURER'S CERTIFICATION OF COMPLIANCE WILL NOT BE REQUIRED.
 - THE SIGNAL CONTROLLER MAY BE EITHER SOLID STATE OR MICRO-PROCESSOR BASED.
 - THE MATERIAL AND PAINTING REQUIREMENTS OF SECTION 724-04, TRAFFIC SIGNAL HEADS, OF THE STANDARD SPECIFICATIONS SHALL NOT APPLY EXCEPT THAT THE SIGNAL HEAD HOUSING SHALL BE MADE OF ALUMINUM OR POLYCARBONATE AND SHALL BE DARK GREEN IN COLOR.
- THE DIRECTIONAL TRAVEL ARROWS SHOWN HERE AND ON OTHER WZTC DRAWINGS ARE NOT PAVEMENT MARKINGS.

AFFIX SEAL: ON: ALTERED BY: ON:



AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 28 - SH 5659 RICHFIELD SPRINGS - SCHUYLER LAKE, PART 2 CULVERT REPLACEMENT & REPAIR PROJECT TOWN OF EXETER COUNTY: OTSEGO	PIN 9805.93 ROUTE 28 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS C950058	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED WORK ZONE TRAFFIC CONTROL PHASE 1 SITE B	CONTRACT NUMBER D262989 DRAWING NO. WZTC-01-B SHEET NO. 46
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IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



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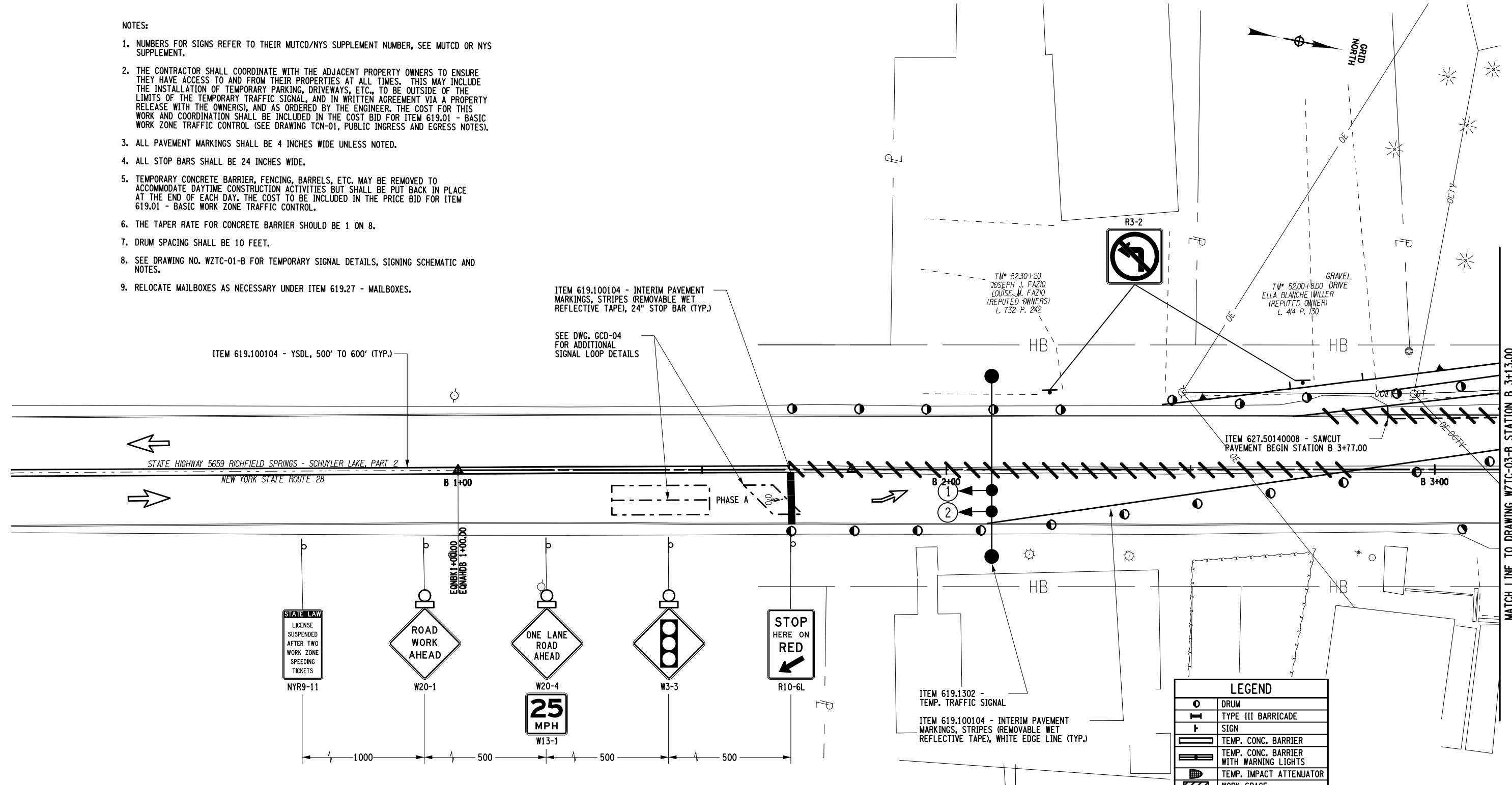
PROJECT MANAGER G. WOJCIK
CHECK W. C. GRIFFITHS
DRAFTING P. F. BLOW
CHECK J. L. PHILLIPS
DESIGN P. F. BLOW
JOB MANAGER J. L. PHILLIPS
DESIGN SUPERVISOR R. WILDER

NOTES:

1. NUMBERS FOR SIGNS REFER TO THEIR MUTCD/NYS SUPPLEMENT NUMBER, SEE MUTCD OR NYS SUPPLEMENT.
2. THE CONTRACTOR SHALL COORDINATE WITH THE ADJACENT PROPERTY OWNERS TO ENSURE THEY HAVE ACCESS TO AND FROM THEIR PROPERTIES AT ALL TIMES. THIS MAY INCLUDE THE INSTALLATION OF TEMPORARY PARKING, DRIVEWAYS, ETC., TO BE OUTSIDE OF THE LIMITS OF THE TEMPORARY TRAFFIC SIGNAL, AND IN WRITTEN AGREEMENT VIA A PROPERTY RELEASE WITH THE OWNER(S), AND AS ORDERED BY THE ENGINEER. THE COST FOR THIS WORK AND COORDINATION SHALL BE INCLUDED IN THE COST BID FOR ITEM 619.01 - BASIC WORK ZONE TRAFFIC CONTROL (SEE DRAWING TCN-01, PUBLIC INGRESS AND EGRESS NOTES).
3. ALL PAVEMENT MARKINGS SHALL BE 4 INCHES WIDE UNLESS NOTED.
4. ALL STOP BARS SHALL BE 24 INCHES WIDE.
5. TEMPORARY CONCRETE BARRIER, FENCING, BARRELS, ETC. MAY BE REMOVED TO ACCOMMODATE DAYTIME CONSTRUCTION ACTIVITIES BUT SHALL BE PUT BACK IN PLACE AT THE END OF EACH DAY. THE COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 619.01 - BASIC WORK ZONE TRAFFIC CONTROL.
6. THE TAPER RATE FOR CONCRETE BARRIER SHOULD BE 1 ON 8.
7. DRUM SPACING SHALL BE 10 FEET.
8. SEE DRAWING NO. WZTC-01-B FOR TEMPORARY SIGNAL DETAILS, SIGNING SCHEMATIC AND NOTES.
9. RELOCATE MAILBOXES AS NECESSARY UNDER ITEM 619.27 - MAILBOXES.

PROJECT MANAGER G. WOJCIK
 CHECK W. C. GRIFFITHS
 DRAFTING P. F. BLOW
 CHECK J. L. PHILLIPS
 DESIGN P. F. BLOW
 JOB MANAGER J. L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER

FILE NAME = 980593_C950058_RT28_oph_wztc_02_B.dgn
 DATE/TIME = 29-JUL-2015 13:47
 USER = jphillips



ITEM 619.100104 - INTERIM PAVEMENT MARKINGS, STRIPES (REMOVABLE WET REFLECTIVE TAPE), 24" STOP BAR (TYP.)

SEE DWG. GCD-04 FOR ADDITIONAL SIGNAL LOOP DETAILS

ITEM 619.100104 - YSDL, 500' TO 600' (TYP.)

TM# 52.304-20
JOSEPH J. FAZIO
LOUISE M. FAZIO
(REPUTED OWNERS)
L. 732 P. 242

TM# 52.001-8.00
ELLA BLANCHE MILLER
(REPUTED OWNER)
L. 414 P. 130

ITEM 627.50140008 - SAWCUT PAVEMENT BEGIN STATION B 3+77.00

STATE LAW
LICENSE SUSPENDED
AFTER TWO
WORK ZONE
SPEEDING
TICKETS
NYR9-11

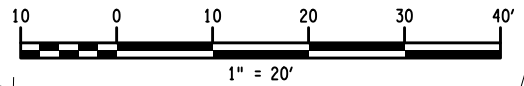
ROAD WORK AHEAD
W20-1

ONE LANE ROAD AHEAD
W20-4
25 MPH
W13-1

STOP HERE ON RED
R10-6L

ITEM 619.1302 - TEMP. TRAFFIC SIGNAL
ITEM 619.100104 - INTERIM PAVEMENT MARKINGS, STRIPES (REMOVABLE WET REFLECTIVE TAPE), WHITE EDGE LINE (TYP.)

LEGEND	
	DRUM
	TYPE III BARRICADE
	SIGN
	TEMP. CONC. BARRIER
	TEMP. CONC. BARRIER WITH WARNING LIGHTS
	TEMP. IMPACT ATTENUATOR
	WORK SPACE



PVMS NOTE:

PORTABLE VARIABLE MESSAGE SIGNS (PVMS) SHALL BE LOCATED ON ROUTE 28 ONE MILE NORTH AND SOUTH OF THE CULVERT SITE. THE FINAL LOCATIONS SHALL BE APPROVED BY THE ENGINEER (SEE THE SPECIAL NOTE PORTABLE VARIABLE MESSAGE SIGNS ITEM 619.110202 IN THE CONTRACT PROPOSAL).

AFFIX SEAL: ON:

ALTERED BY: ON:

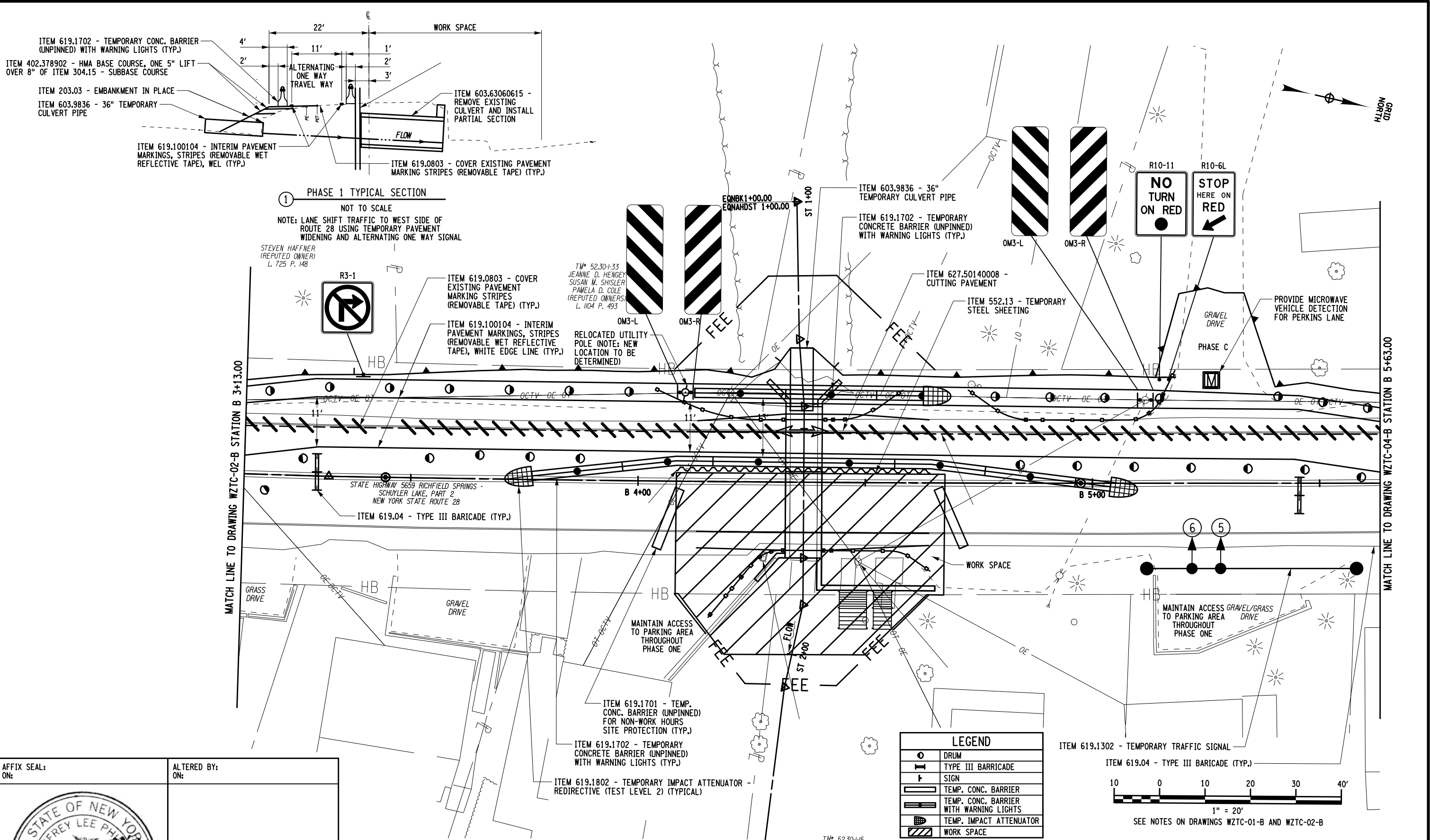
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 28 - SH 5659	PIN 9805.93 ROUTE 28 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS C950058	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED WORK ZONE TRAFFIC CONTROL PHASE 1 SITE B	CONTRACT NUMBER D262989 DRAWING NO. WZTC-02-B SHEET NO. 47
	RICHFIELD SPRINGS - SCHUYLER LAKE, PART 2					
	MULTI-CULVERT REPLACEMENT & REPAIR PROJECT					
	TOWN OF EXETER					
COUNTY: OTSEGO	REGION: 09	Department of Transportation				

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

MATCH LINE TO DRAWING WZTC-03-B STATION B 3+13.00

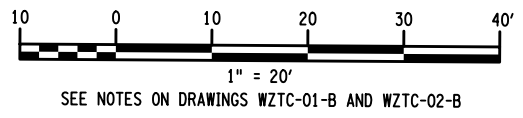
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 USER = dmeiszer

PROJECT MANAGER G. WOJCIK
 CHECK W. C. GRIFFITHS
 DRAFTING P. F. BLOW
 CHECK J. L. PHILLIPS
 DESIGN P. F. BLOW
 JOB MANAGER J. L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER



① PHASE 1 TYPICAL SECTION
 NOT TO SCALE
 NOTE: LANE SHIFT TRAFFIC TO WEST SIDE OF ROUTE 28 USING TEMPORARY PAVEMENT WIDENING AND ALTERNATING ONE WAY SIGNAL

LEGEND	
	DRUM
	TYPE III BARRICADE
	SIGN
	TEMP. CONC. BARRIER
	TEMP. CONC. BARRIER WITH WARNING LIGHTS
	TEMP. IMPACT ATTENUATOR
	WORK SPACE



AFFIX SEAL: ON: _____
 ALTERED BY: ON: _____



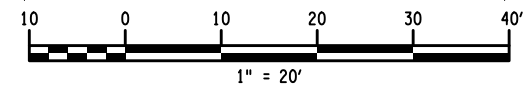
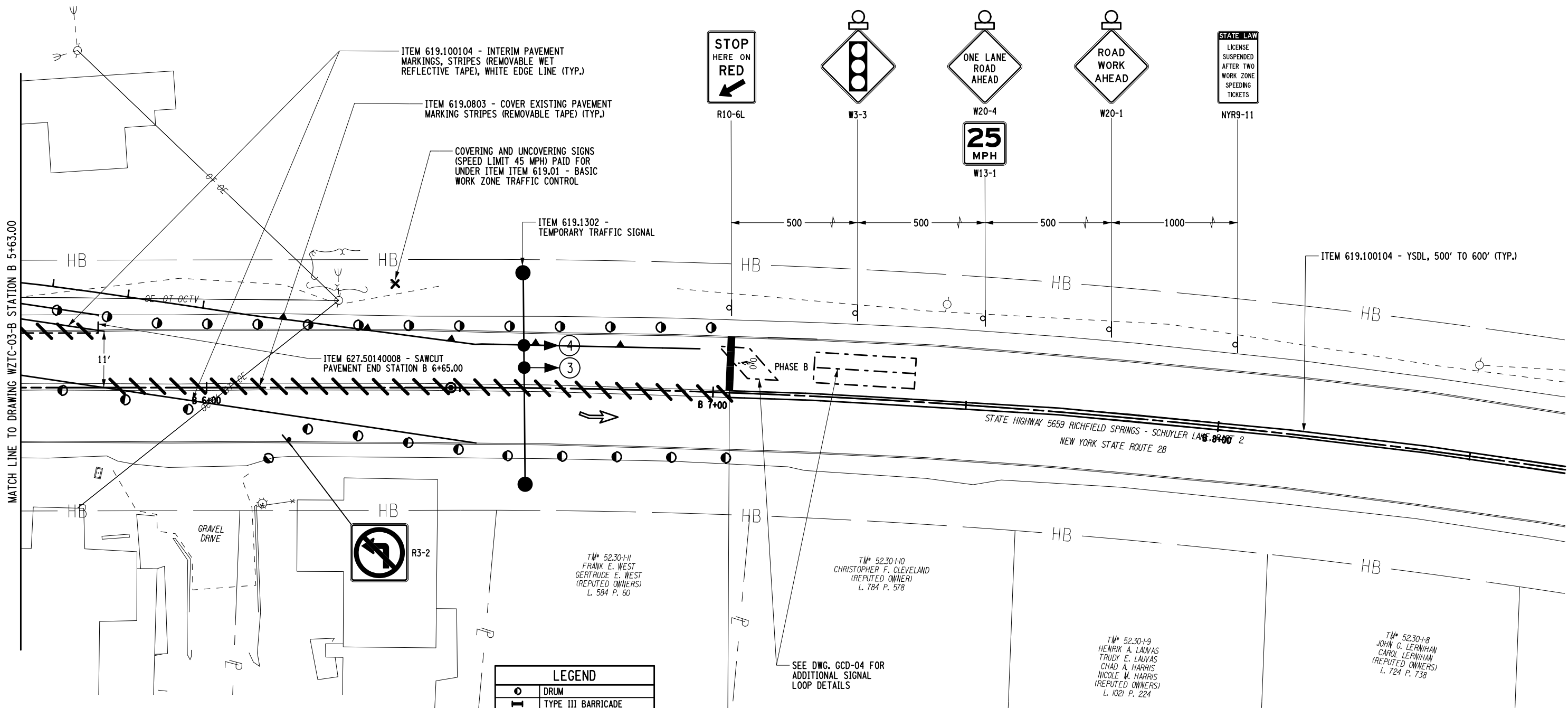
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 28 - SH 5659	PIN 9805.93	BRIDGES	CULVERTS C950058	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	RICHFIELD SPRINGS - SCHUYLER LAKE, PART 2	ROUTE 28			WORK ZONE TRAFFIC CONTROL PHASE 1	DRAWING NO. WZTC-03-B
	MULTI-CULVERT REPLACEMENT & REPAIR PROJECT	UTILITY QUALITY LEVEL D			SITE B	SHEET NO. 48
	TOWN OF EXETER	REGION: 09				
	COUNTY: OTSEGO					

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DESIGN SUPERVISOR R. WILDER
 JOB MANAGER J. L. PHILLIPS
 DESIGN P. F. BLOW
 CHECK J. L. PHILLIPS
 DRAFTING P. F. BLOW
 CHECK W. C. GRIFFITHS
 PROJECT MANAGER G. WOJCIK



SEE NOTES ON DRAWINGS WZTC-01-B AND WZTC-02-B

AFFIX SEAL: ON:	ALTERED BY: ON:

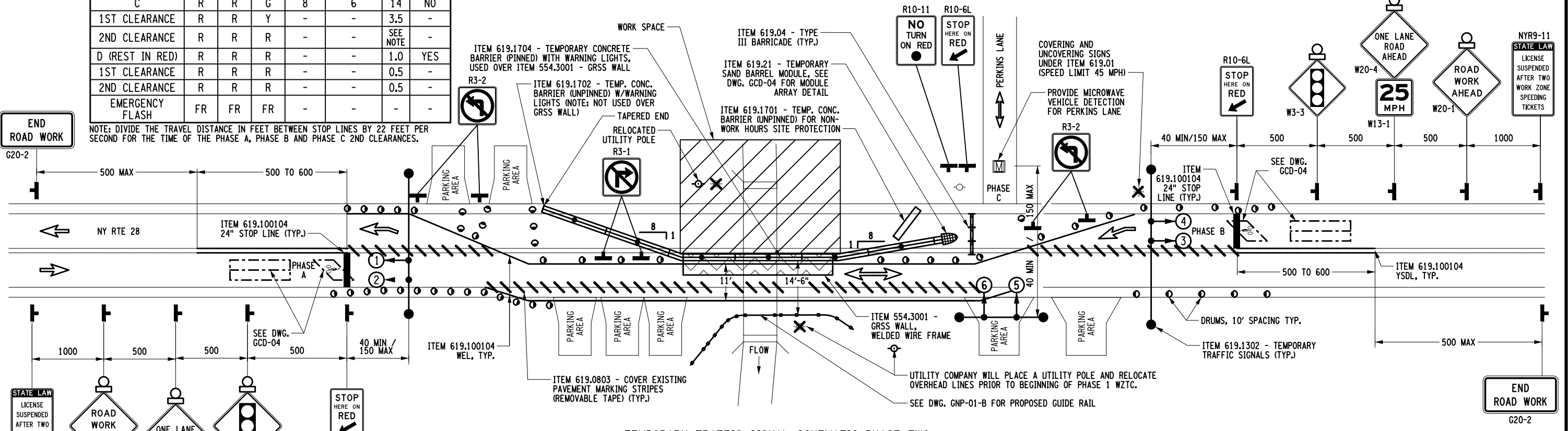
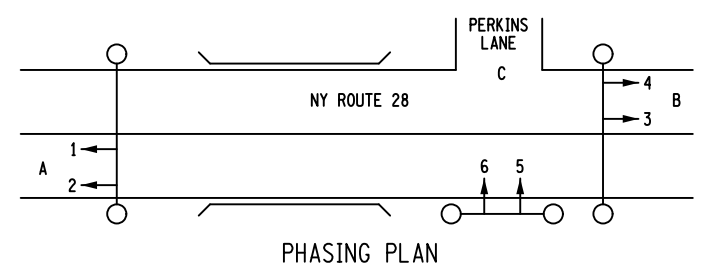
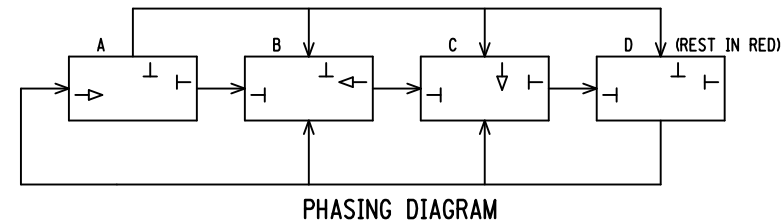
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 28 - SH 5659	PIN 9805.93 ROUTE 28 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS C950058	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	RICHFIELD SPRINGS - SCHUYLER LAKE, PART 2					
	MULTI-CULVERT REPLACEMENT & REPAIR PROJECT					
	TOWN OF EXETER					
COUNTY: OTSEGO	REGION: 09	WORK ZONE TRAFFIC CONTROL PHASE 1		DRAWING NO. WZTC-04-B		
SITE B						SHEET NO. 49

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



PHASING TABLE												
PHASE	FACE	1, 2			3, 4			5, 6			TIMING (SEC)	
		1	2	3	4	5	6	INITIAL	EXTENSION	TIME	RECALL	
A	G	R	R	R	R	R	8	6	32	NO		
1ST CLEARANCE	Y	R	R	R	R	R	-	-	3.5	-		
2ND CLEARANCE	R	R	R	R	R	R	-	-	SEE NOTE	-		
B	R	G	R	R	R	R	8	6	32	NO		
1ST CLEARANCE	R	Y	R	R	R	R	-	-	3.5	-		
2ND CLEARANCE	R	R	R	R	R	R	-	-	SEE NOTE	-		
C	R	R	G	R	R	R	8	6	14	NO		
1ST CLEARANCE	R	R	Y	R	R	R	-	-	3.5	-		
2ND CLEARANCE	R	R	R	R	R	R	-	-	SEE NOTE	-		
D (REST IN RED)	R	R	R	R	R	R	-	-	1.0	YES		
1ST CLEARANCE	R	R	R	R	R	R	-	-	0.5	-		
2ND CLEARANCE	R	R	R	R	R	R	-	-	0.5	-		
EMERGENCY FLASH	FR	FR	FR	FR	FR	FR	-	-	-	-		

NOTE: DIVIDE THE TRAVEL DISTANCE IN FEET BETWEEN STOP LINES BY 22 FEET PER SECOND FOR THE TIME OF THE PHASE A, PHASE B AND PHASE C 2ND CLEARANCES.



TEMPORARY TRAFFIC SIGNAL SCHEMATIC PHASE TWO (NOT TO SCALE)

NOTES:

- REFER ALSO TO THE MUTCD AND APPLICABLE 619 STANDARD SHEETS.
- THE SIGNAL LOCATION SHALL BE FIELD DETERMINED AS DIRECTED BY THE ENGINEER.
- ADJUSTMENTS IN THE LOCATION OF ADVANCED WARNING SIGNS SHALL BE MADE TO ACCOMMODATE THE HORIZONTAL AND VERTICAL ALIGNMENT OF THE ROADWAY, RECOGNIZING THAT THE DISTANCES SHOWN FOR SIGN SPACING ARE MINIMUMS.
- FLASHING WARNING LIGHTS ARE REQUIRED ON THE SIGNAL AHEAD SIGNS (W3-3). FLASHING WARNING LIGHTS SHALL ALSO BE REQUIRED ON THE ROAD WORK AHEAD SIGNS (W20-1) AND ONE LANE ROAD AHEAD SIGNS (W20-4).
- THE TIMING, PHASING AND DETECTOR LOCATIONS ARE TO BE VERIFIED BY THE REGIONAL TRAFFIC ENGINEER AT LEAST 2 WEEKS PRIOR TO START UP. THE REGIONAL TRAFFIC ENGINEER SHALL APPROVE ANY CHANGES OR ADDITIONS REQUIRED DUE TO OBSERVED TRAFFIC CONDITIONS.
- DETECTORS SHALL BE INSTALLED ON ALL APPROACH LANES AND ALL PHASES SHALL BE ACTUATED. DURATION OF RED CLEARANCE INTERVALS SHALL BE ADEQUATE TO CLEAR THE ONE-LANE SECTION OF CONFLICTING TRAFFIC.
- LOOPS SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD SHEET 680-14.
- OTHER TYPES OF VEHICLE DETECTION EQUIPMENT MAY BE USED IF PRIOR APPROVAL IS OBTAINED FROM THE REGIONAL TRAFFIC ENGINEERING AND SAFETY GROUP. REQUESTS BY THE CONTRACTOR TO USE SUCH ALTERNATIVES SHALL BE ACCOMPANIED BY DETAILED PLANS AND SPECIFICATIONS.
- THE TRAFFIC SIGNAL SHALL REST IN RED. WHEN THE SIGNAL IS CHANGED TO THE FLASHING MODE, EITHER MANUALLY OR AUTOMATICALLY, RED SIGNAL INDICATIONS SHALL BE FLASHED TO ALL APPROACHES.
- REST IN RED FEATURE MAY BE SUBSTITUTED FOR PHASE D.
- EMERGENCY FLASH OPERATION IS CONSIDERED A MALFUNCTION. FLAGGERS ARE REQUIRED UNTIL THE MALFUNCTION IS REPAIRED.
- THE CONTRACTOR SHALL COMMENCE REPAIR WORK ON THIS SIGNAL WITHIN TWO HOURS AFTER HE/SHE HAS BEEN NOTIFIED OF A MALFUNCTION. THE CONTRACTOR HAS AN EIGHT HOUR TIME LIMIT TO MAKE REPAIRS. FLAGGER CONTROL SHALL BE PROVIDED AT THE CONTRACTOR'S EXPENSE UNTIL THE TEMPORARY SIGNAL IS RESTORED TO PROPER OPERATION. IF THE REPAIRS REMAIN UNCOMPLETED AFTER THIS TIME, LIQUIDATED DAMAGES OF ONE DAY WILL BE ASSESSED FOR EACH DAY THE SIGNAL IS MALFUNCTIONING UNTIL IT IS REPAIRED.
- TEMPORARY STOP LINES, CROSSWALKS AND LANE MARKINGS SHALL BE INSTALLED USING ITEM 619.100104, INTERIM PAVEMENT MARKING STRIPES, REMOVABLE WET REFLECTIVE TAPE. EXISTING CONFLICTING PAVEMENT MARKINGS BETWEEN THE ACTIVITY AREA AND THE STOP LINE SHALL BE COVERED USING ITEM 619.0803, COVER EXISTING PAVEMENT MARKING STRIPES (REMOVABLE TAPE).
- MINIMUM CLEARANCE FROM PAVEMENT TO BOTTOM OF SIGNAL HEADS IS 16'-6".
- ALL SIGNAL HEADS SHALL CONTAIN 12" LENSES. ALL SIGNAL FACES SHALL HAVE MUTCD COMPLIANT BACKPLATES.
- POWER SOURCE TO BE DETERMINED BY CONTRACTOR AND POWER COMPANY.
- PROPER POLES TO SUPPORT THE 3-COLOR SIGNAL HEADS TO BE DETERMINED BY THE CONTRACTOR.
- ALL SPAN WIRE, INDUCTANCE LOOP WIRE, SHIELDED LEAD-IN CABLE, TRAFFIC SIGNAL CABLE AND OTHER WIRE USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE NEW MATERIAL MEETING THE APPLICABLE REQUIREMENTS OF SUBSECTION 680-2 OF THE STANDARD SPECIFICATIONS.
- ALL OTHER EQUIPMENT FOR TEMPORARY TRAFFIC SIGNALS SHALL MEET THE REQUIREMENTS OF SUBSECTION 680-2 OF THE STANDARD SPECIFICATIONS EXCEPT FOR THE FOLLOWING MODIFICATIONS:
 - USED EQUIPMENT IN GOOD OPERATING CONDITION MAY BE FURNISHED TO PROVIDE THE REQUIRED OPERATION OF THE SIGNAL.
 - MANUFACTURER'S CERTIFICATION OF COMPLIANCE WILL NOT BE REQUIRED.
 - THE SIGNAL CONTROLLER MAY BE EITHER SOLID STATE OR MICRO-PROCESSOR BASED.
 - THE MATERIAL AND PAINTING REQUIREMENTS OF SECTION 724-04, TRAFFIC SIGNAL HEADS, OF THE STANDARD SPECIFICATIONS SHALL NOT APPLY EXCEPT THAT THE SIGNAL HEAD HOUSING SHALL BE MADE OF ALUMINUM OR POLYCARBONATE AND SHALL BE DARK GREEN IN COLOR.
- THE DIRECTIONAL TRAVEL ARROWS SHOWN HERE AND ON OTHER WZTC DRAWINGS ARE NOT PAVEMENT MARKINGS.

AFFIX SEAL: ON: ALTERED BY: ON:



AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 28 - SH 5659 RICHFIELD SPRINGS - SCHUYLER LAKE, PART 2 CULVERT REPLACEMENT & REPAIR PROJECT TOWN OF EXETER COUNTY: OTSEGO	PIN 9805.93 ROUTE 28 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS C950058	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED WORK ZONE TRAFFIC CONTROL PHASE 2 SITE B	CONTRACT NUMBER D262989 DRAWING NO. WZTC-05-B SHEET NO. 50
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IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



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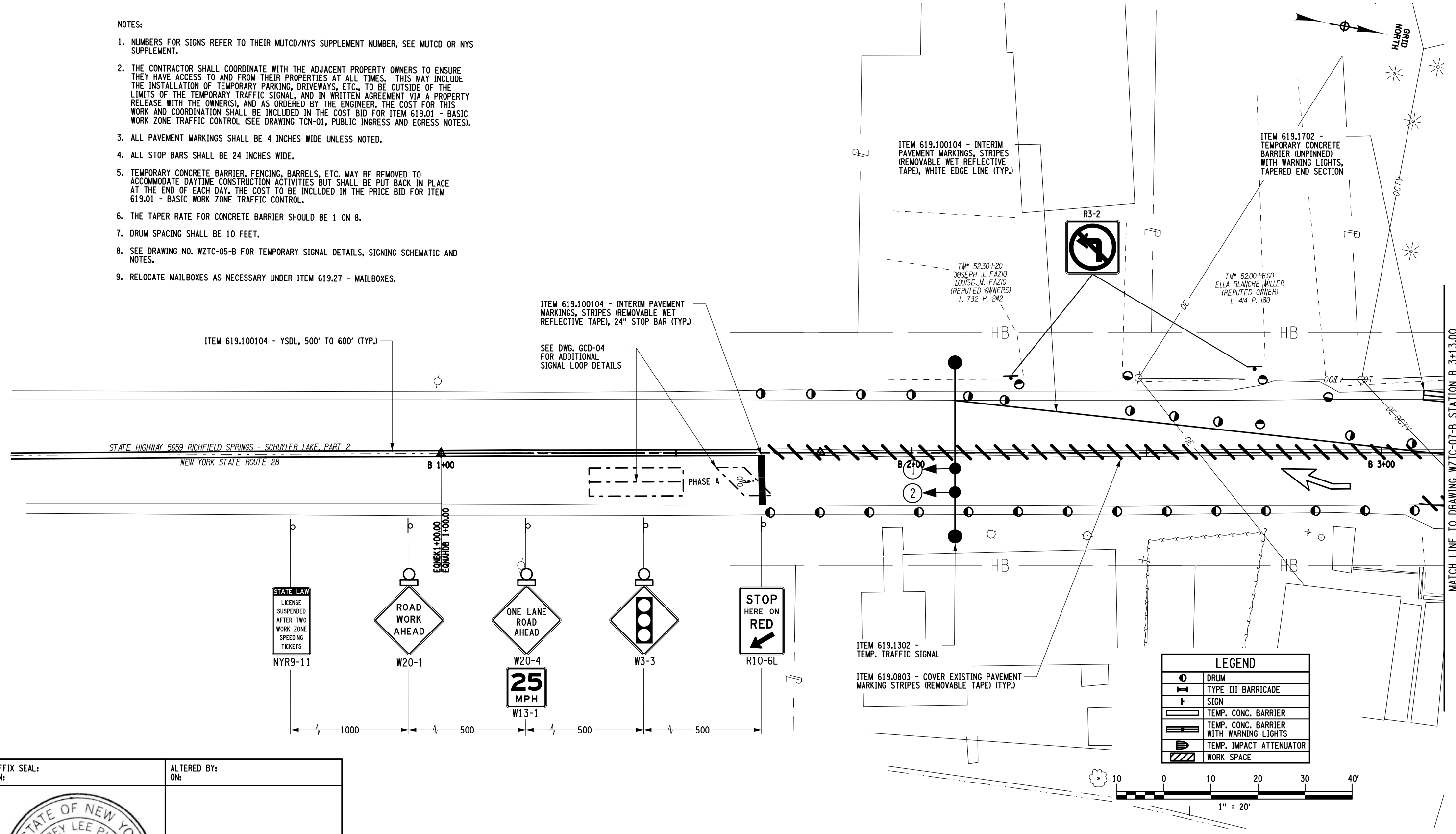
PROJECT MANAGER G. WOJCIK
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DRAFTING P. F. BLOW
CHECK J. L. PHILLIPS
DESIGN P. F. BLOW
JOB MANAGER J. L. PHILLIPS
DESIGN SUPERVISOR R. WILDER

NOTES:

1. NUMBERS FOR SIGNS REFER TO THEIR MUTCD/NYS SUPPLEMENT NUMBER, SEE MUTCD OR NYS SUPPLEMENT.
2. THE CONTRACTOR SHALL COORDINATE WITH THE ADJACENT PROPERTY OWNERS TO ENSURE THEY HAVE ACCESS TO AND FROM THEIR PROPERTIES AT ALL TIMES. THIS MAY INCLUDE THE INSTALLATION OF TEMPORARY PARKING, DRIVEWAYS, ETC., TO BE OUTSIDE OF THE LIMITS OF THE TEMPORARY TRAFFIC SIGNAL, AND IN WRITTEN AGREEMENT VIA A PROPERTY RELEASE WITH THE OWNER(S), AND AS ORDERED BY THE ENGINEER. THE COST FOR THIS WORK AND COORDINATION SHALL BE INCLUDED IN THE COST BID FOR ITEM 619.01 - BASIC WORK ZONE TRAFFIC CONTROL (SEE DRAWING TCN-01, PUBLIC INGRESS AND EGRESS NOTES).
3. ALL PAVEMENT MARKINGS SHALL BE 4 INCHES WIDE UNLESS NOTED.
4. ALL STOP BARS SHALL BE 24 INCHES WIDE.
5. TEMPORARY CONCRETE BARRIER, FENCING, BARRELS, ETC. MAY BE REMOVED TO ACCOMMODATE DAYTIME CONSTRUCTION ACTIVITIES BUT SHALL BE PUT BACK IN PLACE AT THE END OF EACH DAY. THE COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 619.01 - BASIC WORK ZONE TRAFFIC CONTROL.
6. THE TAPER RATE FOR CONCRETE BARRIER SHOULD BE 1 ON 8.
7. DRUM SPACING SHALL BE 10 FEET.
8. SEE DRAWING NO. WZTC-05-B FOR TEMPORARY SIGNAL DETAILS, SIGNING SCHEMATIC AND NOTES.
9. RELOCATE MAILBOXES AS NECESSARY UNDER ITEM 619.27 - MAILBOXES.

PROJECT MANAGER G. WOJCIK
 CHECK W. C. GRIFFITHS
 DRAFTING P. F. BLOW
 CHECK J. L. PHILLIPS
 DESIGN P. F. BLOW
 JOB MANAGER J. L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER

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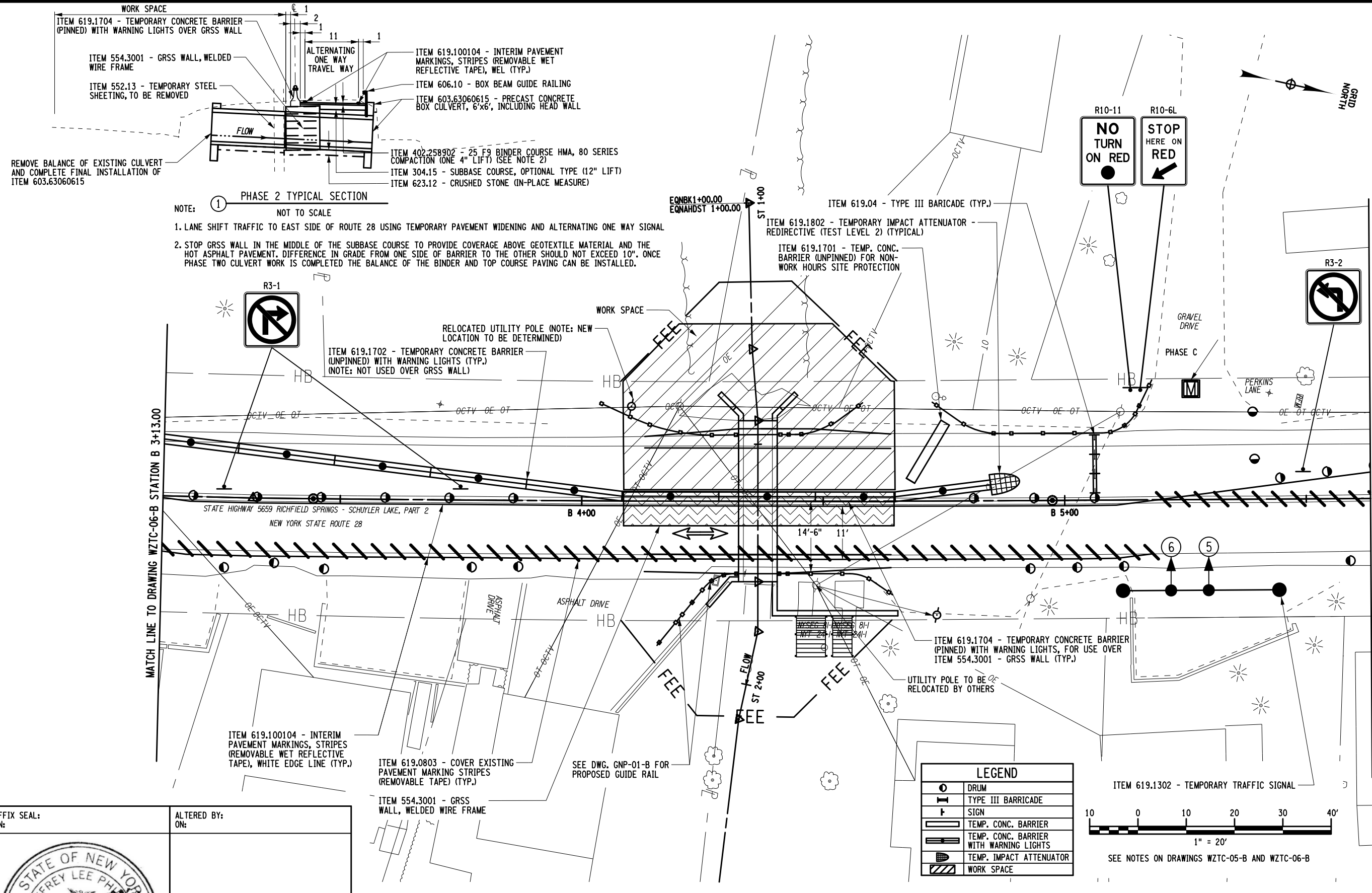
AFFIX SEAL: ON:	ALTERED BY: ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 28 - SH 5659	PIN 9805.93	BRIDGES	CULVERTS C950058	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989	
	RICHFIELD SPRINGS - SCHUYLER LAKE, PART 2	ROUTE 28				WORK ZONE TRAFFIC CONTROL PHASE 2	DRAWING NO. WZTC-06-B
	MULTI-CULVERT REPLACEMENT & REPAIR PROJECT	TOWN OF EXETER	UTILITY QUALITY LEVEL D			SITE B	SHEET NO. 51
	COUNTY: OTSEGO	REGION: 09					
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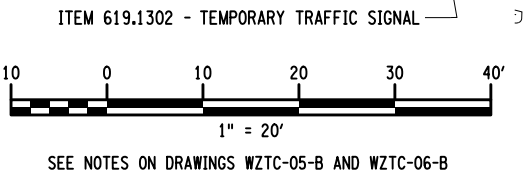
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PROJECT MANAGER G. WOJCIK
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 CHECK J. L. PHILLIPS
 DESIGN P. F. BLOW
 CHECK J. L. PHILLIPS
 JOB MANAGER J. L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER



PHASE 2 TYPICAL SECTION
 NOTE: ① NOT TO SCALE
 1. LANE SHIFT TRAFFIC TO EAST SIDE OF ROUTE 28 USING TEMPORARY PAVEMENT WIDENING AND ALTERNATING ONE WAY SIGNAL
 2. STOP GRSS WALL IN THE MIDDLE OF THE SUBBASE COURSE TO PROVIDE COVERAGE ABOVE GEOTEXTILE MATERIAL AND THE HOT ASPHALT PAVEMENT. DIFFERENCE IN GRADE FROM ONE SIDE OF BARRIER TO THE OTHER SHOULD NOT EXCEED 10". ONCE PHASE TWO CULVERT WORK IS COMPLETED THE BALANCE OF THE BINDER AND TOP COURSE PAVING CAN BE INSTALLED.

LEGEND	
	DRUM
	TYPE III BARRICADE
	SIGN
	TEMP. CONC. BARRIER
	TEMP. CONC. BARRIER WITH WARNING LIGHTS
	TEMP. IMPACT ATTENUATOR
	WORK SPACE



AFFIX SEAL: ON: _____
 ALTERED BY: ON: _____



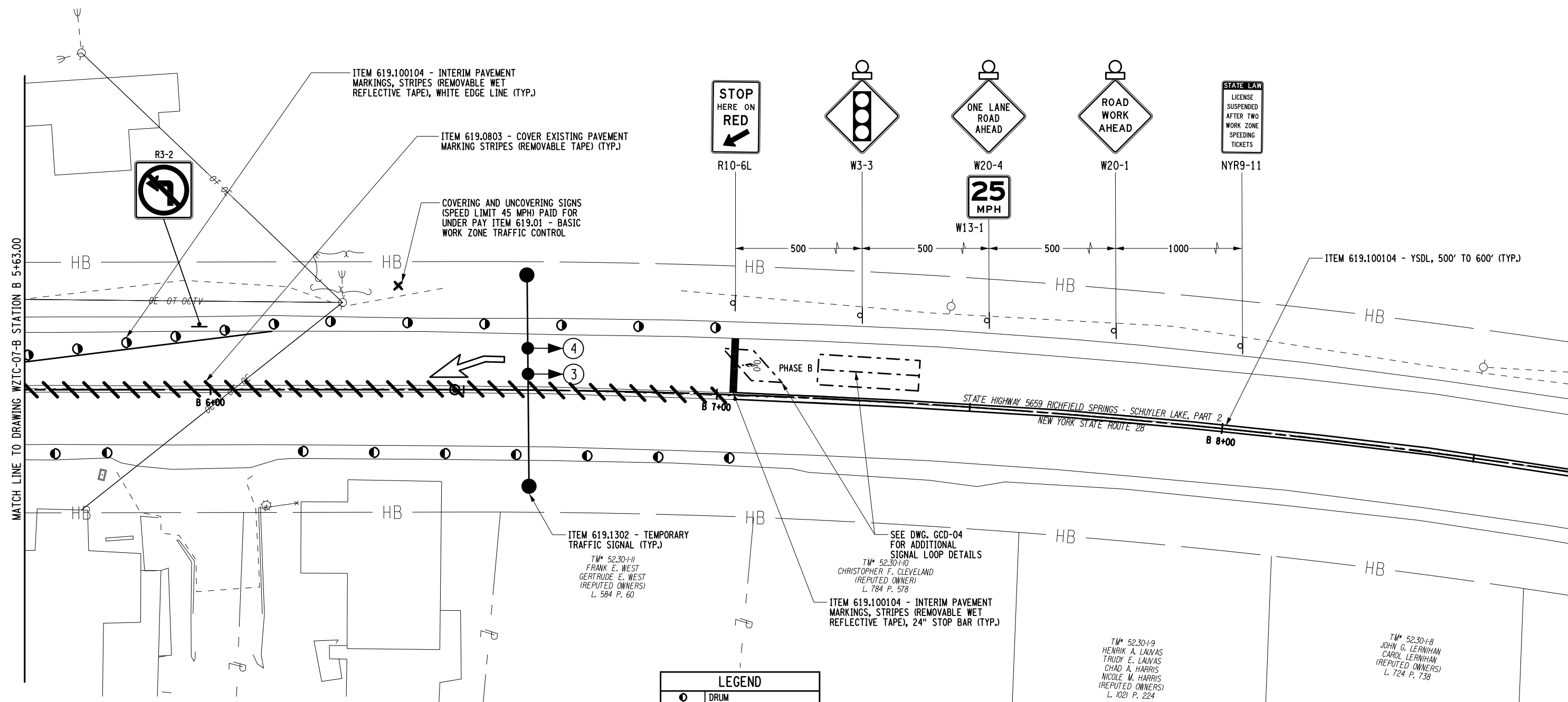
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 28 - SH 5659	PIN 9805.93	BRIDGES	CULVERTS C950058	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	RICHFIELD SPRINGS - SCHUYLER LAKE, PART 2	ROUTE 28			WORK ZONE TRAFFIC CONTROL PHASE 2	DRAWING NO. WZTC-07-B
	MULTI-CULVERT REPLACEMENT & REPAIR PROJECT	UTILITY QUALITY LEVEL D			SITE B	SHEET NO. 52
	TOWN OF EXETER	REGION: 09				
	COUNTY: OTSEGO					

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

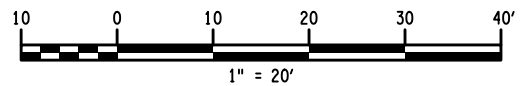


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 DATE/TIME = 29-JUL-2015 13:47
 USER = jphillips

DESIGN SUPERVISOR R. WILDER
 JOB MANAGER J. L. PHILLIPS
 DESIGN P. F. BLOW
 CHECK J. L. PHILLIPS
 DRAFTING P. F. BLOW
 CHECK W. C. GRIFFITHS
 PROJECT MANAGER G. WOJCIK



LEGEND	
	DRUM
	TYPE III BARRICADE
	SIGN
	TEMP. CONC. BARRIER
	TEMP. CONC. BARRIER WITH WARNING LIGHTS
	TEMP. IMPACT ATTENUATOR
	WORK SPACE



SEE NOTES ON DRAWINGS WZTC-05-B AND WZTC-06-B

AFFIX SEAL:
ON:

ALTERED BY:
ON:



AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

NYS ROUTE 28 - SH 5659
 RICHFIELD SPRINGS - SCHUYLER LAKE, PART 2
 MULTI-CULVERT REPLACEMENT & REPAIR PROJECT
 TOWN OF EXETER
 COUNTY: OTSEGO REGION: 09

PIN 9805.93
 ROUTE 28
 UTILITY QUALITY LEVEL D

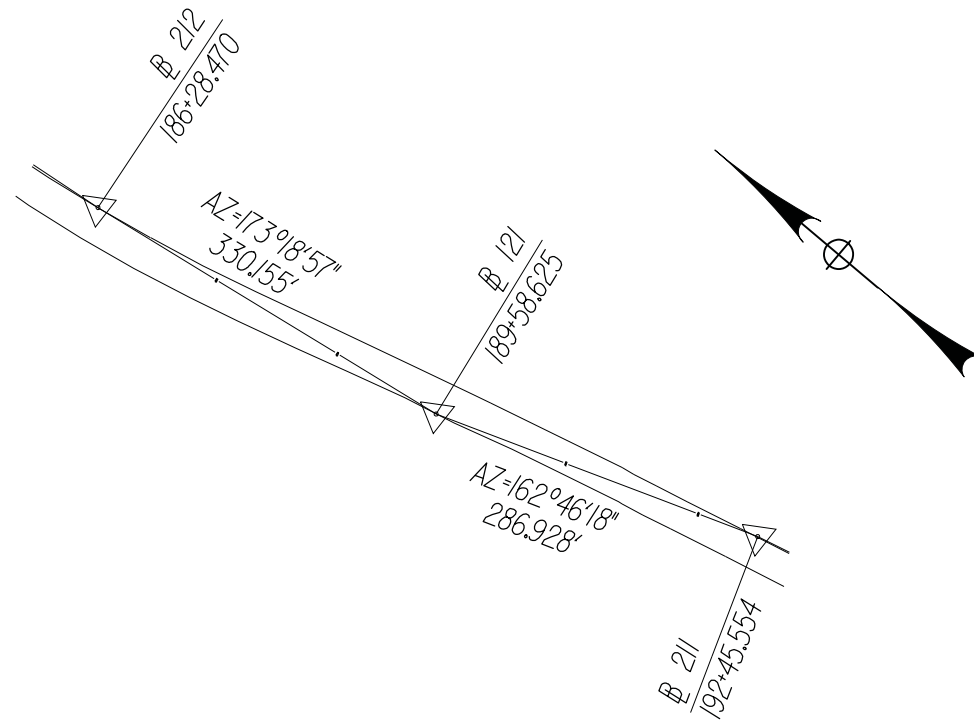
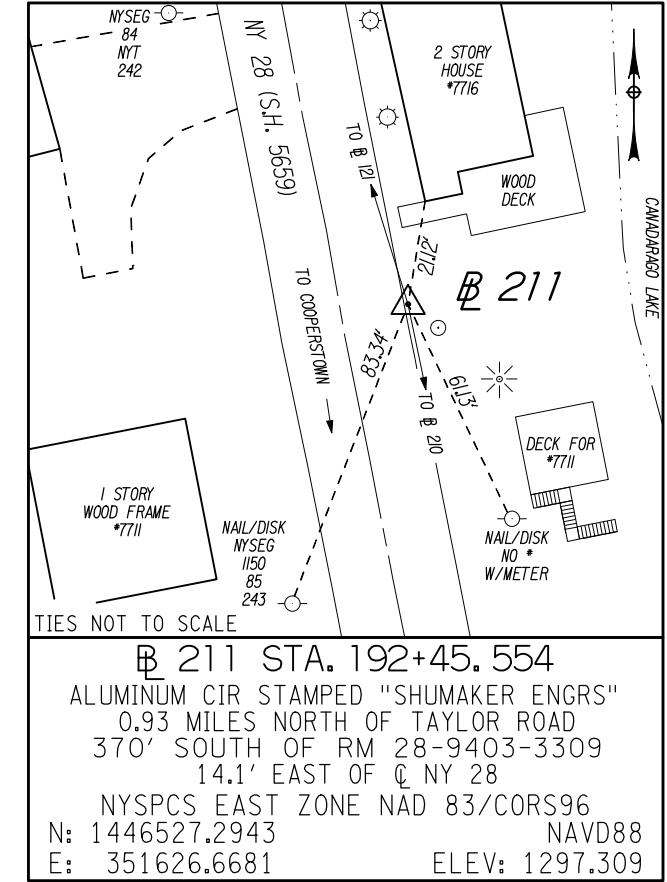
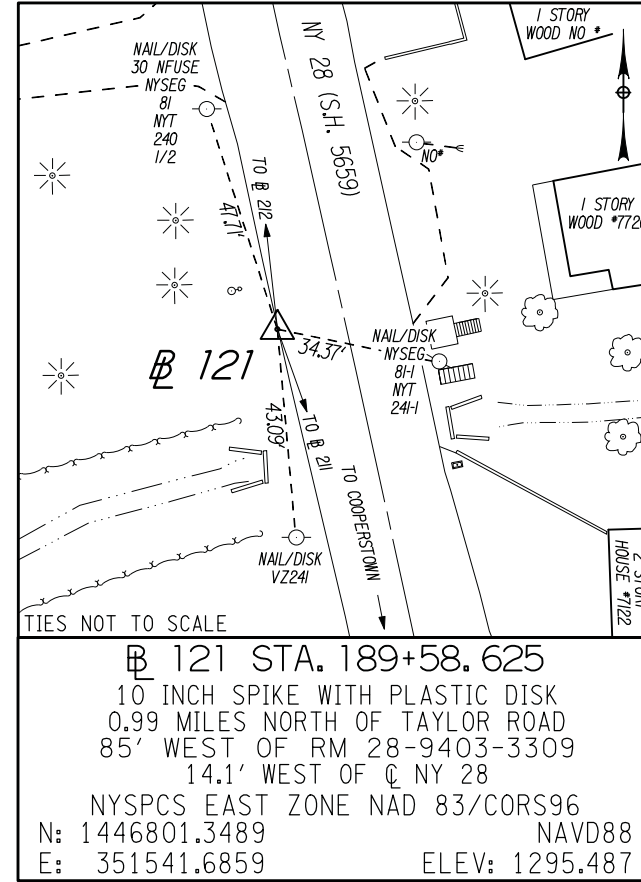
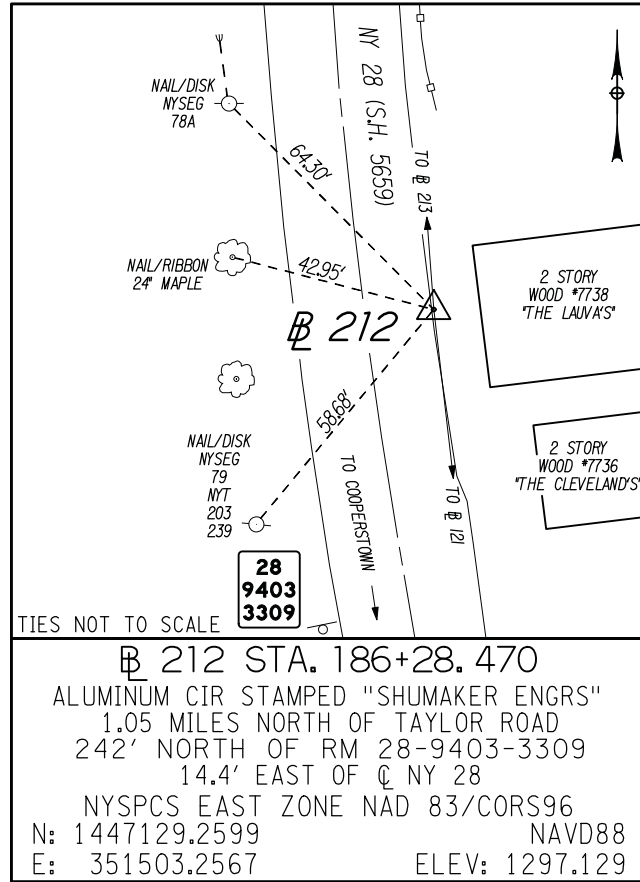
BRIDGES
 CULVERTS
 C950058

ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED
 WORK ZONE TRAFFIC CONTROL
 PHASE 2
 SITE B

CONTRACT NUMBER
 D262989
 DRAWING NO. WZTC-08-B
 SHEET NO. 53

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



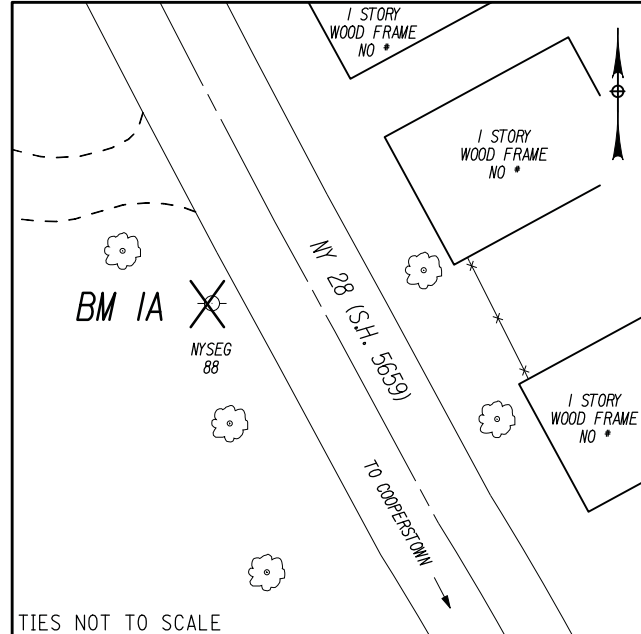


AFFIX SEAL: ON:	ALTERED BY: ON:

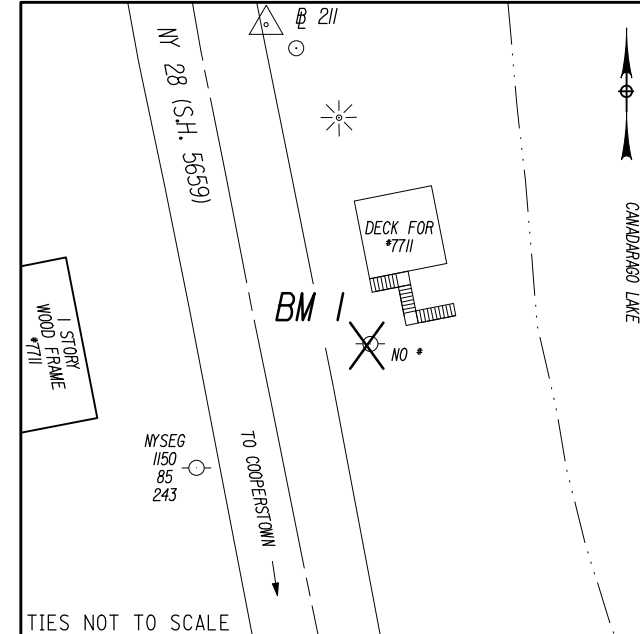
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 28, SH 5659	PIN 9805.93 ROUTE 28 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS C950058	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED BASELINE TIE DIAGRAMS	CONTRACT NUMBER D262989
	RICHFIELD SPRINGS - SCHUYLER LAKE, PART 2					DRAWING NO. BLT-01-B SHEET NO. 54
	CULVERT REPLACEMENT PROJECT				SITE B	
	TOWN OF EXETER					
	COUNTY: OTSEGO	REGION: 09				
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.						Department of Transportation

FILE NAME = 980593_C950058_RT28_cph_bif_02_B.dgn
 DATE/TIME = 22-JUL-2015 09:59
 USER = gmeyer

DESIGN SUPERVISOR R. WILDER
 JOB MANAGER J.L. PHILLIPS
 DESIGN D.MELSZER
 DRAFTING D.MELSZER
 CHECK J.L. PHILLIPS
 PROJECT MANAGER W.BAGLEY



BM 1A
 RAILROAD SPIKE IN POLE NYSEG/88
 0.83 MILES NORTH OF TAYLOR ROAD
 160' NORTH OF RM 28-9403-3307
 20.4' WEST OF C NY 28
 NYSPCS EAST ZONE NAD 83/CORS96
 N: 1445986.8 NAVD88
 E: 351781.7 ELEV: 1297.286



BM 1
 RAILROAD SPIKE IN POLE WITH METER & NO #
 0.88 MILES NORTH OF TAYLOR ROAD
 433' SOUTH OF RM 28-9403-3309
 23.4' EAST OF C NY 28
 NYSPCS EAST ZONE NAD 83/CORS96
 N: 1446469.6 NAVD88
 E: 351647.5 ELEV: 1295.891

SURVEY NOTES:

BASE MAPPING OF THIS PROJECT IS FROM GROUND SURVEY PERFORMED SEPTEMBER 2008, AND AUGUST 2012.

HORIZONTAL DATUM: NYSPCS, EAST ZONE, NAD83/CORS96.

VERTICAL DATUM: NAVD88.

COMBINED FACTOR: 0.999865435 (TO REDUCE GROUND DISTANCES TO GRID DISTANCES)

AFFIX SEAL:
ON:

ALTERED BY:
ON:



AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 28 - SH 5659
	RICHFIELD SPRINGS - SCHUYLER LAKE, PART 2
	MULTI CULVERT REPLACEMENT & REPAIR PROJECT
	TOWN OF EXTER

COUNTY: OTSEGO	REGION: 09
----------------	------------

PIN 9805.93
ROUTE 28

BRIDGES

CULVERTS
950058

ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED
BENCHMARK DIAGRAMS

CONTRACT NUMBER
D262989

DRAWING NO. BLT-02-B
SHEET NO. 55

SITE B

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

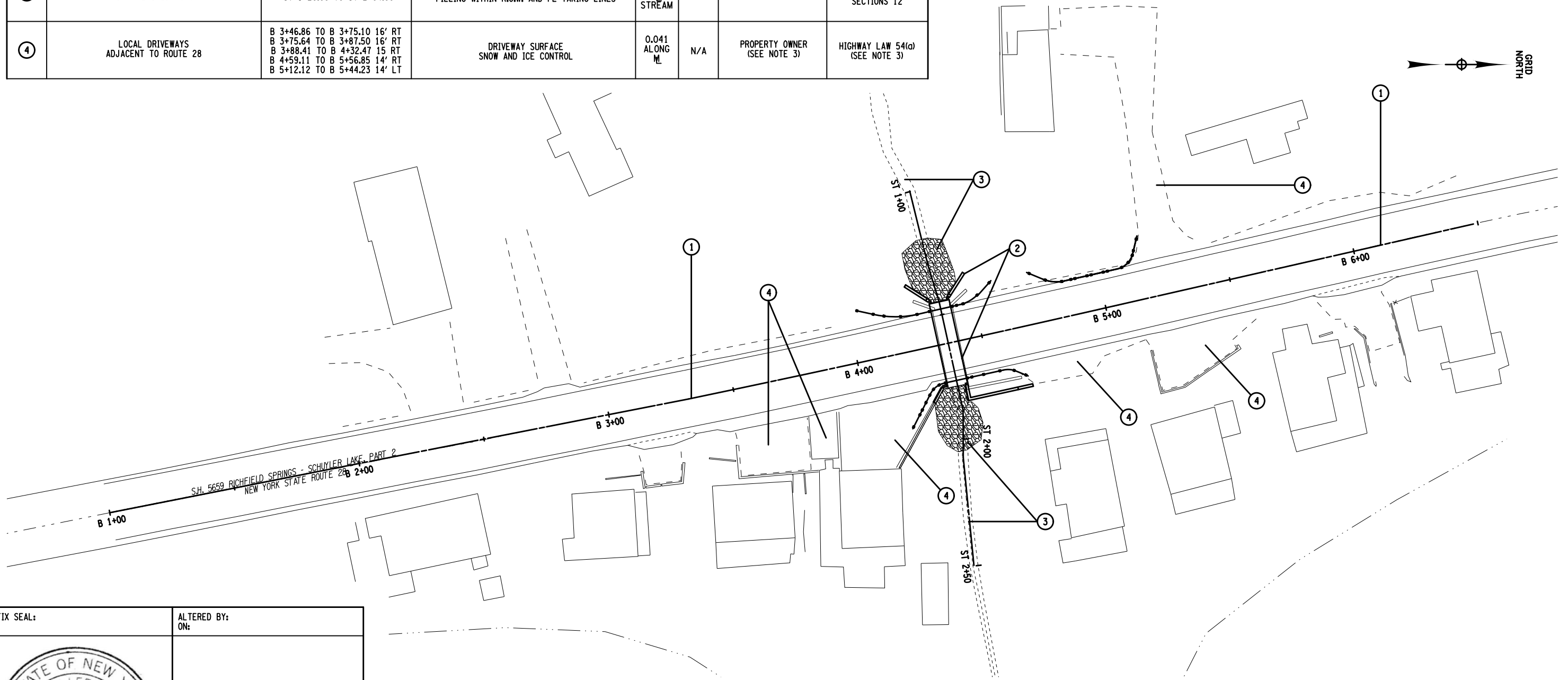


TABLE OF MAINTENANCE JURISDICTION SITE B

PART NO.	HIGHWAY/LOCATION	LIMITS STATIONING	FEATURES TO BE MAINTAINED	Q miles	LANE miles	AGENCY	AUTHORITY TO MAINTAIN
①	N.Y. ROUTE 28 RICHFIELD SPRINGS - SCHUYLER LAKE, PART 2 S.H. 5659	PROJECT LIMITS MAINLINE STATIONING B 4+13.00 TO B 4+74.00	ALL OF STATE HIGHWAY (PAVEMENT, GUIDERAIL, DRAINAGE DITCHES, CULVERTS, PAVEMENT MARKINGS, SIGNS, SNOW AND ICE CONTROL)	0.011	0.022	NEW YORK STATE	HIGHWAY LAW SECTIONS 12
②	PROPOSED 6 X 6 PRECAST BOX CULVERT - C950058 AND WING WALLS	PROPOSED CULVERT STREAM STATIONING ST 1+45.13 TO ST 1+78.46	PROPOSED CONCRETE BOX CULVERT AND WING WALLS	0.006 ALONG Q STREAM	N/A	NEW YORK STATE	HIGHWAY LAW SECTIONS 230
③	SKROMKO ROAD CREEK UNDER N.Y. ROUTE 28 AND WATERSHED RUNOFF	STREAM STATIONING ST 1+20.00 TO ST 2+04.00	STREAM CHANNEL, BANKS AND STONE FILLING WITHIN R.O.W. AND PE TAKING LINES	0.016 ALONG Q STREAM	N/A	NEW YORK STATE	HIGHWAY LAW SECTIONS 12
④	LOCAL DRIVEWAYS ADJACENT TO ROUTE 28	B 3+46.86 TO B 3+75.10 16' RT B 3+75.64 TO B 3+87.50 16' RT B 3+88.41 TO B 4+32.47 15 RT B 4+59.11 TO B 5+56.85 14' RT B 5+12.12 TO B 5+44.23 14' LT	DRIVEWAY SURFACE SNOW AND ICE CONTROL	0.041 ALONG M	N/A	PROPERTY OWNER (SEE NOTE 3)	HIGHWAY LAW 54(a) (SEE NOTE 3)

NOTES:

- THIS TABLE INDICATES THE DIVISION OF RESPONSIBILITY FOR MAINTENANCE FOR THIS CONTRACT UPON COMPLETION UNLESS STATED OTHERWISE. IT IN NO WAY RELIEVES THE CONTRACTOR OR REPRESENTATIVE OF THEIR RESPONSIBILITIES AS COVERED BY SECTION 619 OF THE STANDARD SPECIFICATION.
- ALL EXISTING SANITARY SEWERS AND OTHER SEWERS NOT DEEMED TO BE PART OF THE PROJECT BY THE COMMISSIONER, WATERMANS, HYDRANTS, AND OTHER MUNICIPALLY OR PRIVATELY OWNED FACILITIES WITHIN THE LIMITS OF THE HIGHWAY RIGHT-OF-WAY WHICH REMAIN IN SERVICE UNCHANGED, AND ALL SUCH FACILITIES RELOCATED OR PROTECTED AS PART OF THE WORK PERFORMED UNDER THIS PROJECT, WHETHER CROSSING, LOCATED WITHIN OR ADJACENT TO THE RIGHT-OF-WAY, SHALL BE MAINTAINED AS THE CASE MAY BE, BY THE MUNICIPALITY OR BY THE AGENCY OR UNIT OWNING OR HAVING CONTROL AND JURISDICTION THEREOF AT NO COST OR EXPENSE TO THE STATE.
- THE PORTION OF A DRIVEWAY OR PRIVATE ROAD, CONSTRUCTED OR ADJUSTED UNDER THE PROPOSED PROJECT BETWEEN THE EDGE OF PAVEMENT AND THE OUTSIDE EDGE OF SHOULDER SHALL BE MAINTAINED BY THE STATE UNDER SECTION 10, SUBDIVISION 25 OF THE HIGHWAY LAW. THE REMAINING PORTION OF THE ADJUSTED DRIVEWAY OR PRIVATE ROAD BEYOND THE OUTSIDE EDGE OF SHOULDER SHALL BE MAINTAINED BY THE OWNER(S) UNDER SECTION 54(a) OF THE HIGHWAY LAW. ALSO, ENTRANCE STAIRS AND WALKS SHALL BE MAINTAINED BY THE OWNER(S) UNDER SECTION 54(a) OF THE HIGHWAY LAW.
- INTERSECTING PUBLIC HIGHWAYS - OTHER THAN STATE HIGHWAYS, BEYOND THE OUTSIDE EDGE OF THE SHOULDER OR PAVEMENT EDGE OF THE STATE HIGHWAY SHALL BE MAINTAINED BY THE LOCAL UNIT OF GOVERNMENT HAVING JURISDICTION.



AFFIX SEAL: ON:	ALTERED BY: ON:
	AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:
	NYS ROUTE 28 - SH 5659 RICHFIELD SPRINGS - SCHUYLER LAKE, PART 2 CULVERT REPLACEMENT & REPAIR PROJECT TOWN OF EXETER COUNTY: OTSEGO REGION: 09

PIN 9805.93 ROUTE 28 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS C950058	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
MAINTENANCE JURISDICTION PLAN			DRAWING NO. MJP-01-B SHEET NO. 57	
SITE B			Department of Transportation	

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FILE NAME = 980593_C950058_RT28_oph.mp.01_B.dgn
DATE/TIME = 29-JUL-2015 13:47
USER = jphillips

PROJECT MANAGER G. WOJCIK
CHECK J.L. PHILLIPS
DRAFTING D. MELSZER
CHECK J.L. PHILLIPS
DESIGN D. MELSZER
JOB MANAGER J. L. PHILLIPS
DESIGN SUPERVISOR R. WILDER

**HORIZONTAL CONTROL TABLE
(STREAM) - C950058**

PROJECT NAME: C950058
DESCRIPTION: RTE 28 SOUTHERN CULVERT
HORIZONTAL ALIGNMENT NAME: STREAM58 CL P
DESCRIPTION: C950058 CENTERLINE
STYLE: AC P

	STATION	NORTHING	EASTING
ELEMENT: LINEAR			
POB (	22)	ST 1+00.00	1446762.8144 351501.4305
EQNBK (	)	1+00.00	1446762.8144 351501.4305
EQNAHD (	)	ST 1+00.00	1446762.8144 351501.4305
PI (	25)	ST 1+30.27	1446770.0426 351530.8203
TANGENT DIRECTION: 76°10'57.7786"			
TANGENT LENGTH: 30.2657			
ELEMENT: LINEAR			
PI (	25)	ST 1+30.27	1446770.0426 351530.8203
PI (	26)	ST 1+45.13	1446774.3943 351545.0331
TANGENT DIRECTION: 72°58'34.7238"			
TANGENT LENGTH: 14.8640			
ELEMENT: LINEAR			
PI (	26)	ST 1+45.13	1446774.3943 351545.0331
PI (	27)	ST 1+78.46	1446781.5860 351577.5819
TANGENT DIRECTION: 77°32'26.0551"			
TANGENT LENGTH: 33.3339			
ELEMENT: LINEAR			
PI (	27)	ST 1+78.46	1446781.5860 351577.5819
PI (	28)	ST 1+88.77	1446783.8097 351587.6461
TANGENT DIRECTION: 77°32'26.0551"			
TANGENT LENGTH: 10.3069			
ELEMENT: LINEAR			
PI (	28)	ST 1+88.77	1446783.8097 351587.6461
PI (	45)	ST 2+07.34	1446783.8763 351606.2183
TANGENT DIRECTION: 89°47'40.7843"			
TANGENT LENGTH: 18.5723			
ELEMENT: LINEAR			
PI (	45)	ST 2+07.34	1446783.8763 351606.2183
POE (	29)	ST 2+50.00	1446788.0784 351648.6719
TANGENT DIRECTION: 84°20'50.2071"			
TANGENT LENGTH: 42.6611			

NOTE: BASE LINE EQUALITY STATION MATCHING ST 1+00.00 IS @ 189+83.51.

**HORIZONTAL CONTROL TABLE
(ROUTE 28) - C950058**


PROJECT NAME: C950058
DESCRIPTION: RTE 28 SOUTHERN CULVERT
HORIZONTAL ALIGNMENT NAME: RTE28 CL P
DESCRIPTION: CENTERLINE OF RTE 28
STYLE: AC P

	STATION	NORTHING	EASTING
ELEMENT: LINEAR			
POB (	2)	B 1+00.00	1446448.2038 351627.9589
EQNBK (	)	1+00.00	1446448.2038 351627.9589
EQNAHD (	)	B 1+00.00	1446448.2038 351627.9589
PI (	10)	B 1+80.66	1446527.3292 351612.3163
TANGENT DIRECTION: 348°49'01.9448"			
TANGENT LENGTH: 80.6568			
ELEMENT: LINEAR			
PI (	10)	B 1+80.66	1446527.3292 351612.3163
PI (	1)	B 3+31.94	1446675.8008 351583.2616
TANGENT DIRECTION: 348°55'39.2893"			
TANGENT LENGTH: 151.2878			
ELEMENT: LINEAR			
PI (	1)	B 3+31.94	1446675.8008 351583.2616
PC (	3)	B 3+44.43	1446688.0167 351580.6950
TANGENT DIRECTION: 348°08'05.5457"			
TANGENT LENGTH: 12.4826			
ELEMENT: CIRCULAR			
PC (	3)	B 3+44.43	1446688.0167 351580.6950
PI (	)	B 4+20.93	1446762.8895 351564.9645
CC (	8)		1444837.5396 342772.9862
PT (	9)	B 4+97.44	1446837.4840 351547.9633
RADIUS: 9000.0000			
DESIGN SPEED(MPH): 45.0000			
SUPERELEVATION: NC			
DELTA: 0°58'26.7568" LEFT			
DEGREE OF CURVATURE(ARC): 0°38'11.8312"			
LENGTH: 153.0111			
TANGENT: 76.5074			
CHORD: 153.0093			
MIDDLE ORDINATE: 0.3252			
EXTERNAL: 0.3252			
TANGENT DIRECTION: 348°08'05.5457"			
RADIAL DIRECTION: 78°08'05.5457"			
CHORD DIRECTION: 347°38'52.1673"			
RADIAL DIRECTION: 77°09'38.7889"			
TANGENT DIRECTION: 347°09'38.7889"			
ELEMENT: LINEAR			
PT (	9)	B 4+97.44	1446837.4840 351547.9633
PC (	4)	B 6+48.23	1446984.5093 351514.4541
TANGENT DIRECTION: 347°09'38.7889"			
TANGENT LENGTH: 150.7956			
ELEMENT: CIRCULAR			
PC (	4)	B 6+48.23	1446984.5093 351514.4541
PI (	)	B 7+99.45	1447131.9474 351480.8508
CC (	5)		1447317.8334 352976.9503
PT (	6)	B 9+49.65	1447283.1258 351477.3518
RADIUS: 1500.0000			
DESIGN SPEED(MPH): 60.0000			
SUPERELEVATION: 7.800%			
DELTA: 11°30'48.1507" RIGHT			
DEGREE OF CURVATURE(ARC): 3°49'10.9871"			
LENGTH: 301.4195			
TANGENT: 151.2189			
CHORD: 300.9126			
MIDDLE ORDINATE: 7.5648			
EXTERNAL: 7.6031			
TANGENT DIRECTION: 347°09'38.7889"			
RADIAL DIRECTION: 77°09'38.7889"			
CHORD DIRECTION: 352°55'02.8642"			
RADIAL DIRECTION: 88°40'26.9395"			
TANGENT DIRECTION: 358°40'26.9395"			
ELEMENT: LINEAR			
PT (	6)	B 9+49.65	1447283.1258 351477.3518
POE (	7)	B 9+77.63	1447311.0991 351476.7044
TANGENT DIRECTION: 358°40'26.9395"			
TANGENT LENGTH: 27.9808			

NOTE: BASE LINE EQUALITY STATION MATCHING B 1+00.00 IS @ 193+23.24

PROJECT MANAGER G. WOJCIK
CHECK J.L. PHILLIPS
DRAFTING G. MEYER
CHECK J.L. PHILLIPS
DESIGN D. MELSZER
JOB MANAGER J.L. PHILLIPS
DESIGN SUPERVISOR R. WILDER

FILE NAME = 980593_C950058_RT28_cph_hct_01_b.dgn
DATE/TIME = 29-JUL-2015 13:48
USER = jphillips

AFFIX SEAL: ON:	ALTERED BY: ON:
	


AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 28 - SH 5659	PIN 9805.93	BRIDGES	CULVERTS C950058	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	RICHFIELD SPRINGS - SCHUYLER LAKE, PART 2	RT 28			HORIZONTAL CONTROL TABLES	DRAWING NO. HCT-01-B
	MULTI-CULVERT REPLACEMENT & REPAIR PROJECT	UTILITY QUALITY LEVEL D				SHEET NO. 58
	TOWN OF EXETER				SITE B	
COUNTY: OTSEGO	REGION: 09					
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						 Department of Transportation

TABLE OF GUIDE RAILING - INSTALLATION										
STATION TO STATION	SIDE	OFFSET	POST SPACING (FT)	FACTOR	ITEM 606.10 - BOX BEAM GUIDE RAILING (LF)	ITEM 606.10010004 (LF) BOX BEAM REINFORCED DOUBLE OR SHOP MITERED	ITEM 606.100002 (LF) BOX BEAM END PIECE	ITEM 606.120101 (EACH) BOX BEAM END ASSEMBLY TYPE IIA	COMMENTS	
B 4+06.45 TO B 4+13.46	LT	17.3								1
B 4+13.46 TO B 4+26.81	LT	15.4	3	1.3	18.0				RADIUS = 50 FT. LENGTH = 13.5 FT.	
B 4+26.81 TO B 4+38.38	LT	13.7	6		12.0					
B 4+38.38 TO B 4+44.73	LT	13.8	3	1.3	9.0				RADIUS = 10 FT. LENGTH = 6.90 FT.	
B 4+44.73 TO B 4+48.43	LT	17.3			5.0					
B 4+48.43 TO B 4+54.01	LT	19.2					1			
B 4+54.01 TO B 4+69.12	LT	22						1	LENGTH = 7 FT. RADIUS = 35 FT. LENGTH = 18 FT.	
B 4+69.12 TO B 4+75.31	LT	18.8								
B 4+75.31 TO B 4+92.70	LT	18.8	6							
B 4+92.70 TO B 5+07.80	LT	14	6		15.0					
B 5+07.80 TO B 5+15.00	LT	14	6			9.0			RADIUS = 8 FT. LENGTH = 9 FT.	
B 5+15.00 TO B 5+18.15	LT	18.5					1			
B 4+14.64 TO B 4+19.37	RT	31.2					1			
B 4+19.37 TO B 4+26.46	RT	25.7	6		11.0					
B 4+26.46 TO B 4+34.00	RT	17.5	6			9.0			RADIUS = 10 FT. LENGTH = 8.6 FT.	
B 4+34.00 TO B 4+41.64	RT	14	6		8.0					
B 4+41.64 TO B 4+55.39	RT	14	6			14.0			RADIUS = 40 FT. LENGTH = 14 FT.	
B 4+55.39 TO B 4+62.23	RT	16.5					1			
TOTAL					51.0 LF	59.0 LF	5	1		

NOTES: STATION TO STATION DISTANCE MAY NOT EQUAL TRUE DISTANCE DUE TO RADIUS.
 B PREFIX STATIONING IS FOR ROUTE 28

TABLE OF UTILITY POLE RELOCATIONS			
ROUTE 28 STATION	SIDE	OFFSET	QUANTITY
B 4+48.55	RIGHT	17.37'	1

TABLE OF SOIL BORING LOCATIONS				
BORING #	BASELINE STA.	BASELINE OFFSET	NORTHING	EASTING
FH-K-1	B 189+78.60	2.16'	LT	1446781.630 351545.540
FH-K-2	B 189+82.42	18.75'	RT	1446784.170 351566.640

NOTES: BASELINE ALIGNMENT DIRECTION IS NORTH TO SOUTH
 (OPPOSITE DIRECTION OF THE ROAD ALIGNMENT)

STEEL SHEETING DESIGN PARAMETERS				
ELEVATION (FT.)	UNIT WEIGHT (LBS/CF)	FRICTION ANGLE (DEGREES)	COHESION (LBS/SF)	WALL FRICTION (DEGREES)
O.G.S TO 1266.5	120	33	0	0
1266.5 TO 1250.0	120	35	0	0

TABLE OF CLEAR ZONE WIDTHS		
STATION TO STATION	WIDTH	NOTES
B 4+08.00 TO B 4+03.66 L	23	PER HDM SECTION 10.2.1, TABLE 10-1


NOTE: MINIMUM CLEARZONE WIDTH FOR THIS SECTION OF ROUTE 28 WITH 1:4 SLOPES IS 23 FEET

TABLE OF PAVEMENT CUTTING - ITEM 627.50140008 (LF)		
LOCATION	LENGTH	REMARKS
B 4+08.00 14' LT TO B 4+08.00 16' RT	30'	FULL WIDTH (SHOULDER TO SHOULDER) AT FULL DEPTH
B 4+08.00 16' RT TO B 4+16.00 33' RT	18'	FOR DRIVEWAY RECONSTRUCTION
B 4+74.00 14' LT TO B 4+74.00 14' RT	28'	FULL WIDTH (SHOULDER TO SHOULDER) AT FULL DEPTH
TOTAL	66 LF	


TABLE OF ITEM 608.020102 - HOT MIX ASPHALT (HMA) SIDEWALKS, DRIVEWAY, BICYCLE PATHS & VEGETATIVE CONTROL STRIPS								
STATION	OFFSET	TO	STATION	OFFSET	SIDE	LENGTH (FT)	WIDTH (FT)	AREA (SF)
B 4+06.19	16.3		B 4+22.41	15.0	LT	16	2	32
B 4+40.54	15.0		B 4+54.68	23.0	LT	16.5	2	33
B 4+07.25	44.0		B 4+63.31	22.7	RT	VARIES	VARIES	496
B 4+40.48	15.1		B 4+58.41	15.1	RT	VARIES	VARIES	137
B 4+58.41	15.1		B 4+65.70	15.3	RT	VARIES	VARIES	33

NOTES: STATION TO STATION DISTANCE MAY NOT EQUAL TRUE DISTANCE DUE TO RADIUS.
 B PREFIX STATIONING IS FOR ROUTE 28

TABLE OF SILT FENCE TEMPORARY - ITEM 209.13			
RT. 28 STATION	SIDE	OFFSET	LINEAR FEET
B 3+92.72	LT	23.80	31
TO B 4+23.06	LT	24.70	
B 4+29.64	LT	22.8	8
TO B 4+27.35	LT	30.00	
B 4+27.35	LT	30.00	14
TO B 4+28.63	LT	43.40	
B 4+43.77	LT	22.44	3
TO B 4+44.17	LT	25.04	
B 4+44.17	LT	25.04	17
TO B 4+42.79	LT	41.50	
B 4+33.66	RT	18.70	6
TO B 4+29.63	RT	22.80	
B 4+29.63	RT	22.80	8
TO B 4+25.07	RT	29.30	
B 4+25.07	RT	29.30	2
TO B 4+23.63	RT	30.00	
TOTAL			89 LF

AFFIX SEAL: ON: 

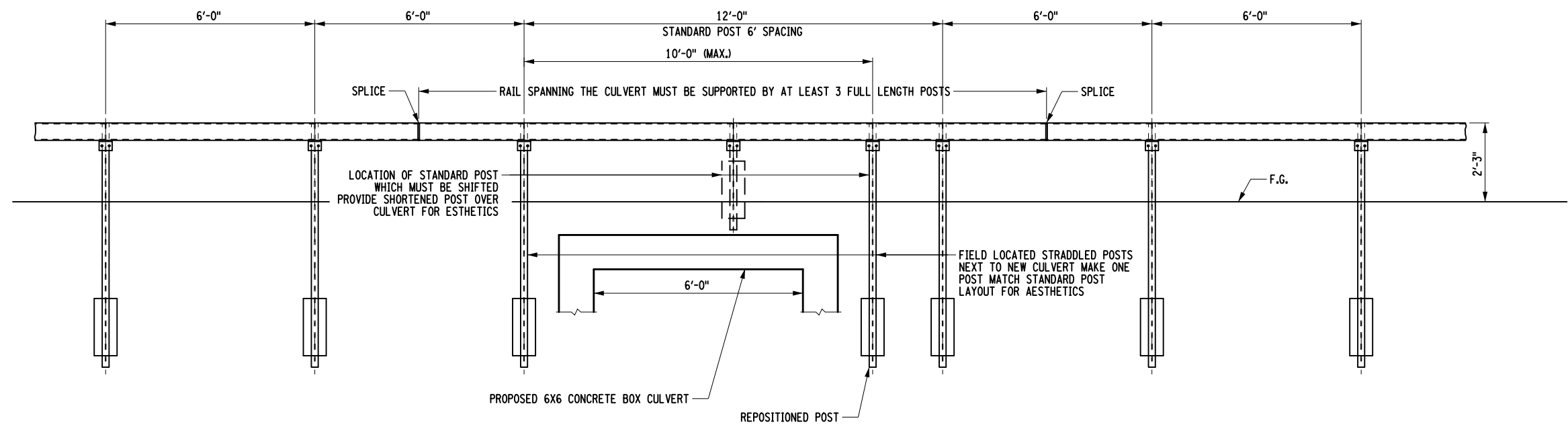
ALTERED BY: ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 28 - SH5659 RICHFIELD SPRINGS - SCHUYLER LAKE, PART 2 CULVERT REPLACEMENT & REPAIR PROJECT TOWN EXETER COUNTY: OTSEGO REGION: 09	PIN 9805.93 ROUTE 28 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS C950058	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED MISCELLANEOUS TABLES	CONTRACT NUMBER D262989 DRAWING NO. MST-01-B SHEET NO. 59
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.					SITE B	 Department of Transportation

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 DATE/TIME = 29-JUL-2015 13:48
 USER = jphillips

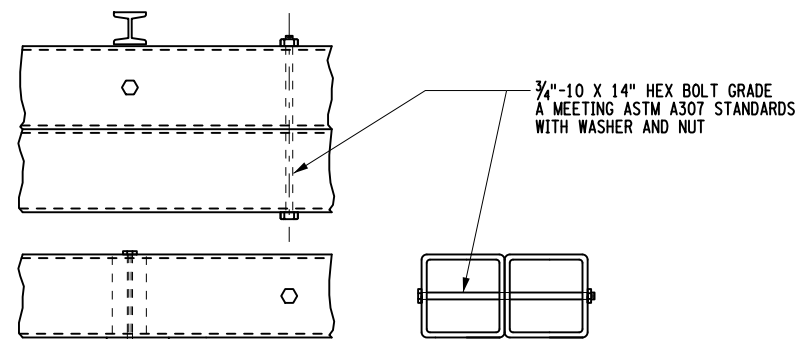
DESIGN SUPERVISOR: R. WILDER
 JOB MANAGER: J.L. PHILLIPS
 DESIGN: D. MELSZER
 DRAFTING: D. MELSZER
 CHECK: J.L. PHILLIPS
 PROJECT MANAGER: G. WOJCIK

- NOTES:
- SEE STANDARD SHEET 606-04 SHEETS 1 AND 2 FOR ADDITIONAL INFORMATION ON BOX BEAM GUIDE RAILING INSTALLION.
 - WHERE BOX BEAM SPANS EXCEED 10 FT., THE SPANNED LENGTH SHALL BE SUPPORTED BY FASTENING AN ADDITIONAL BOX BEAM TO THE BACK SIDE OF THE PRIMARY RAIL. THE TOTAL NUMBER OF FULL LENGTH POSTS SHALL BE UNCHANGED FROM THE NORMAL COUNT. THE BACKUP RAIL SHALL BE SUPPORTED BY AT LEAST 3 FULL LENGTH POSTS.
 - PROTRUSIONS CAUSED BY WELDING OR GALVANIZING ARE NOT PERMITTED ON THE ADJOINING SURFACES OF THE BOX BEAM RAILS, SPLICE TUBES AND FILL PLATES.

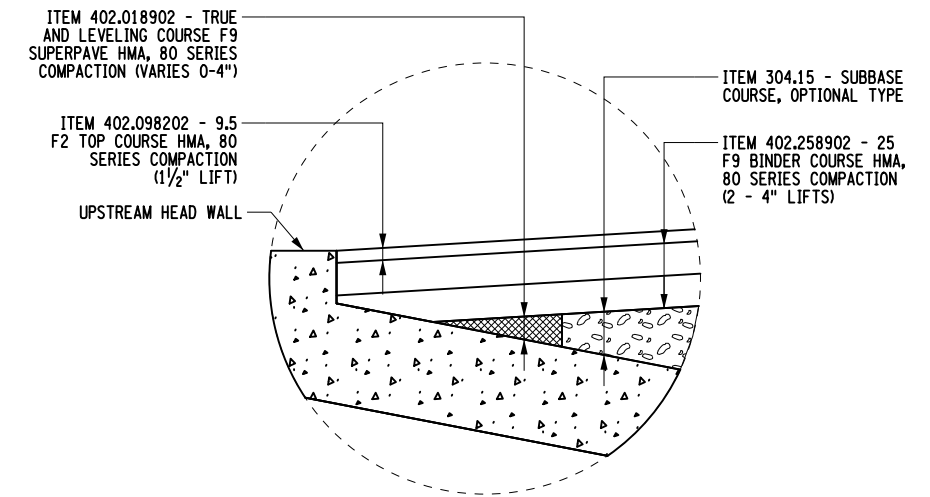


2 SUPPORT OF GUIDE RAIL OVER SHALLOW OBSTRUCTION DETAIL

ELEVATION VIEW - OUTLET END
 NOT TO SCALE



3 DETAIL B - RAIL
 PLAN VIEW
 NOT TO SCALE



4 ASPHALT SHIM COURSE DETAIL
 NOT TO SCALE

AFFIX SEAL: ON: _____

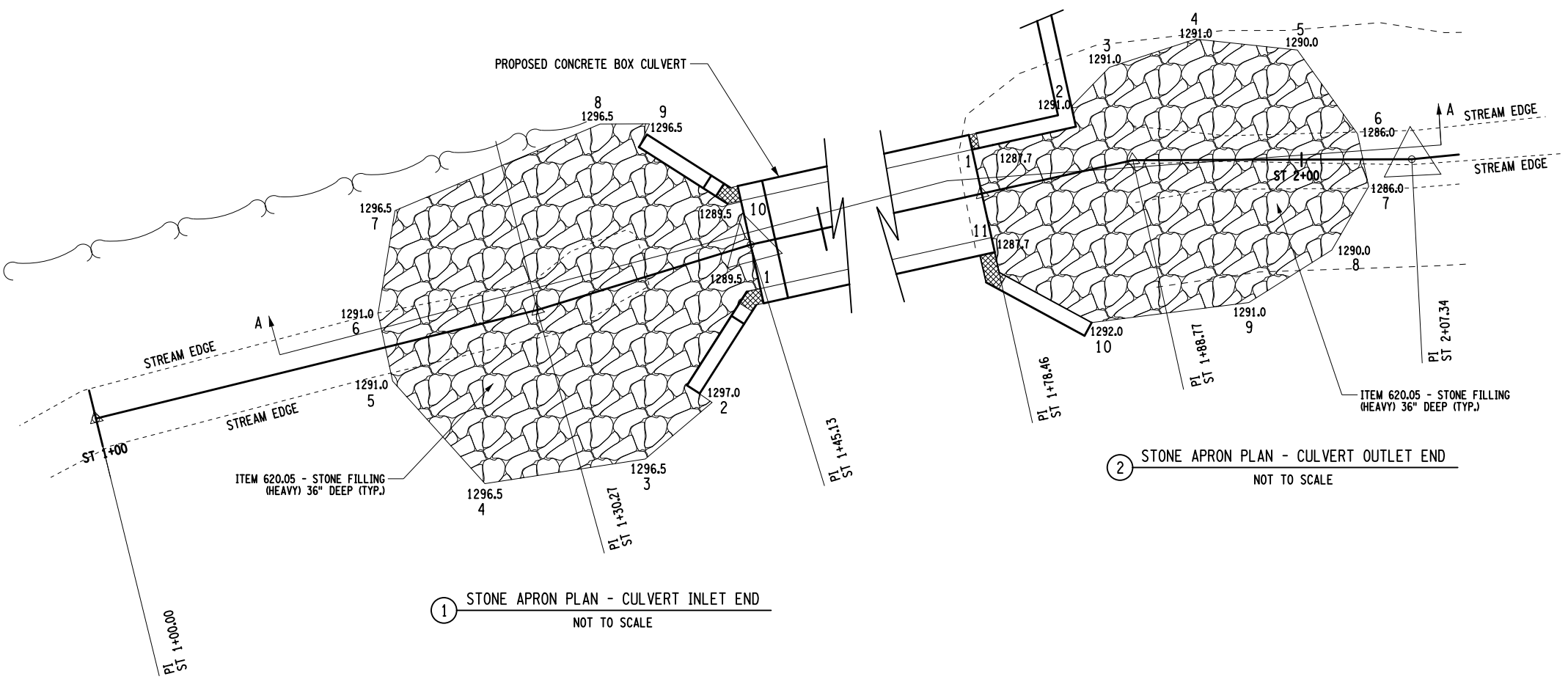
ALTERED BY: ON: _____

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 28 - SH 5659	PIN 9805.93 ROUTE 28 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS C950058	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	GUIDE RAIL DETAIL	CONTRACT NUMBER D262989
	RICHFIELD SPRINGS - SCHUYLER LAKE, PART 2						DRAWING NO. MSD-01-B
	CULVERT REPLACEMENT & REPAIR PROJECT						SHEET NO. 60
	TOWN OF EXETER						
COUNTY: OTSEGO	REGION: 09				SITE B		

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

FILE NAME = 980593_C950058_RT28_oph_msd.02_b.dgn
 DATE/TIME = 29-JUL-2015 13:48
 USER = jphillips

DESIGN SUPERVISOR: R.WILDER
 JOB MANAGER: J.L. PHILLIPS
 DESIGN: D.MELSZER
 CHECK: J.L. PHILLIPS
 DRAFTING: D.MELSZER
 CHECK: J.L. PHILLIPS
 PROJECT MANAGER: G. WOJCIK



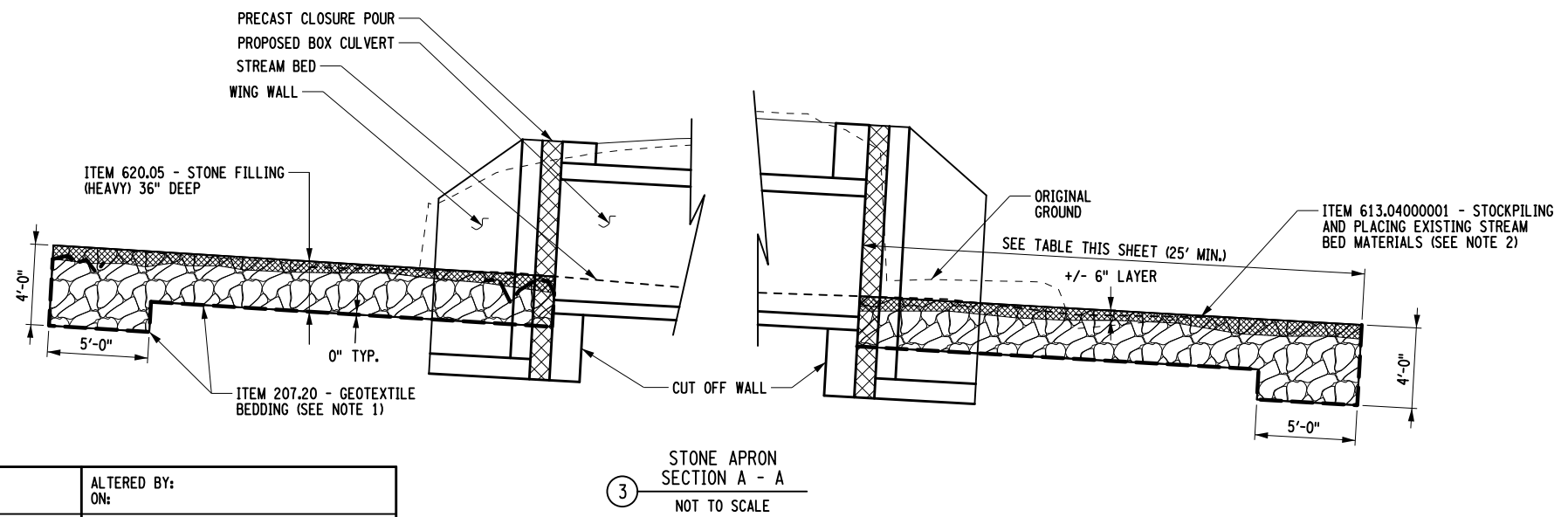
- NOTES:
1. GEOTEXTILE BEDDING ITEM 207.20 SHALL BE SECURED BY BURYING THE FABRIC ENDS INTO THE STONE A DISTANCE EQUAL TO THE FULL HEIGHT OF DEPTH OF THE STONE FILLING. THE GEOTEXTILE BEDDING SHALL MEET THE REQUIREMENTS OF SPECIFICATION TABLE 737-01A CLASS 1.
 2. EXCAVATED AND STOCKPILED NATIVE STREAM BED MATERIAL SHALL BE MIXED WITH THE HEAVY STONE FILL DURING CONSTRUCTION OF THE SCOUR PROTECTION APRONS UPSTREAM AND DOWNSTREAM OF THE CULVERT IN ORDER TO FILL IN VOID SPACES. THE FILLING OF THE VOID SPACES IS NECESSARY TO PREVENT THE STREAM FLOW FROM PERCOLATING BELOW THE STREAM BED GRADE DURING LOW FLOWS. THE STONE FILL IN THE LOWER PORTIONS OF THE APRONS SHALL BE MIXED WITH STOCKPILED NATIVE MATERIAL SOURCED FROM THE DEEPER STREAM BED LAYER. THE SURFACE OF THE NEWLY CONSTRUCTED APRONS (IF PLACED IN MULTIPLE LIFTS) SHALL BE SPRAYED SUFFICIENTLY WITH WATER TO WASH FINER PARTICLES DOWN INTO THE DEEPER VOID SPACES. IF THE NATIVE STREAM BED MATERIAL DOES NOT CONTAIN ENOUGH PARTICLES OF FINE SAND SIZE OR SMALLER TO COMPRISE APPROXIMATELY 5-10% PROPORTION OF THE VOLUME OF THE APRON MATERIAL, ENOUGH OF THIS FINE MATERIAL SHALL BE ADDED TO ACHIEVE THIS APPROXIMATE PROPORTION OF FINES IN THE LOWER 75% OF THE DEPTH OF THE APRON. ANY WASH WATER COLLECTING IN OR FLOWING FROM THE BASE OF THE STONE FILL SHALL BE ALLOWED TO PERCOLATE INTO THE GROUND (PREFERRED), OR IF NECESSARY, DISCHARGED TO A SETTLING BASIN, FILTER SOCK, OR SIMILAR SEDIMENT CONTROL MECHANISM APPROVED BY THE ENGINEER IN CHARGE. THE PLACEMENT OF NATIVE STREAM BED MATERIAL SHALL BE PAID FOR UNDER ITEM 613.04000001.

TABLE OF STONE FILLING (HEAVY)
 ITEM 620.05 - INLET END

LOCATION	STREAM STATION	OFFSET (FT)	ELEVATION
1	ST 1+43.98	2.92 LT	1289.5
2	ST 1+39.60	9.30 LT	1297.0
3	ST 1+34.24	11.60 LT	1296.5
4	ST 1+24.12	10.40 LT	1296.5
5	ST 1+19.78	2.31 LT	1291.0
6	ST 1+19.91	2.30 RT	1291.0
7	ST 1+22.65	8.69 RT	1296.5
8	ST 1+37.90	10.62 RT	1296.5
9	ST 1+41.05	9.67 RT	1296.5
10	ST 1+44.46	3.06 RT	1289.5

TABLE OF STONE FILLING (HEAVY)
 ITEM 620.05 - OUTLET END

LOCATION	STREAM STATION	OFFSET (FT)	ELEVATION
1	ST 1+78.46	3.00 LT	1287.7
2	ST 1+85.61	4.42 LT	1291.0
3	ST 1+88.59	6.38 LT	1291.0
4	ST 1+92.98	8.06 LT	1291.0
5	ST 1+99.75	7.30 LT	1290.0
6	ST 2+03.74	1.70 LT	1286.0
7	ST 2+04.47	1.81 RT	1286.0
8	ST 2+02.00	6.03 RT	1290.0
9	ST 1+96.46	9.51 RT	1291.0
10	ST 1+83.75	9.97 RT	1292.0
11	ST 1+78.47	5.38 RT	1287.7



AFFIX SEAL: ON: _____
 ALTERED BY: ON: _____

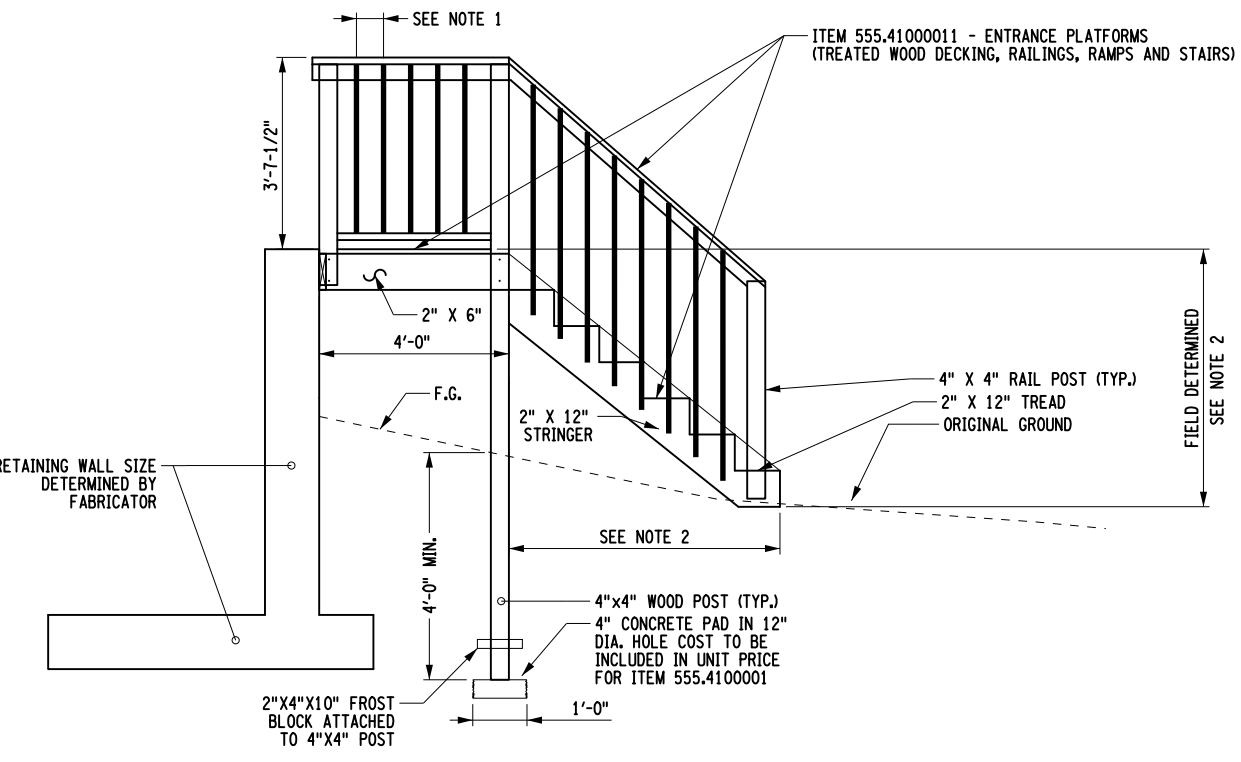
3 STONE APRON SECTION A - A
 NOT TO SCALE

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 28 - SH 5659	PIN 9805.93	BRIDGES	CULVERTS C950058	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	RICHFIELD SPRINGS - SCHUYLER LAKE, PART 2	ROUTE 28			STONE APRON DETAILS	DRAWING NO. MSD-02-B
	CULVERT REPLACEMENT & REPAIR PROJECT	UTILITY QUALITY LEVEL D				SHEET NO. 61
	TOWN OF EXETER				SITE B	
	COUNTY: OTSEGO	REGION: 09				

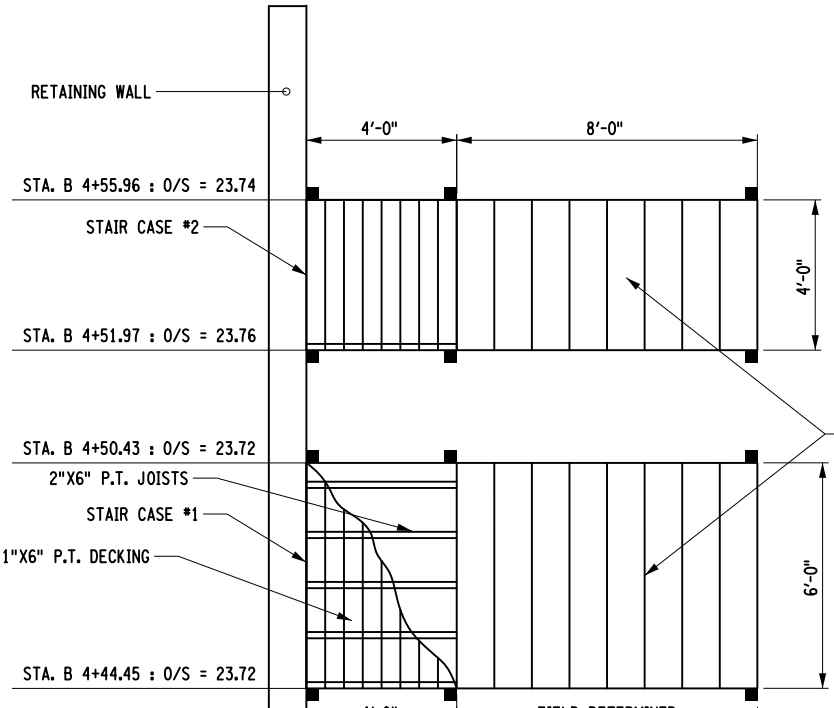
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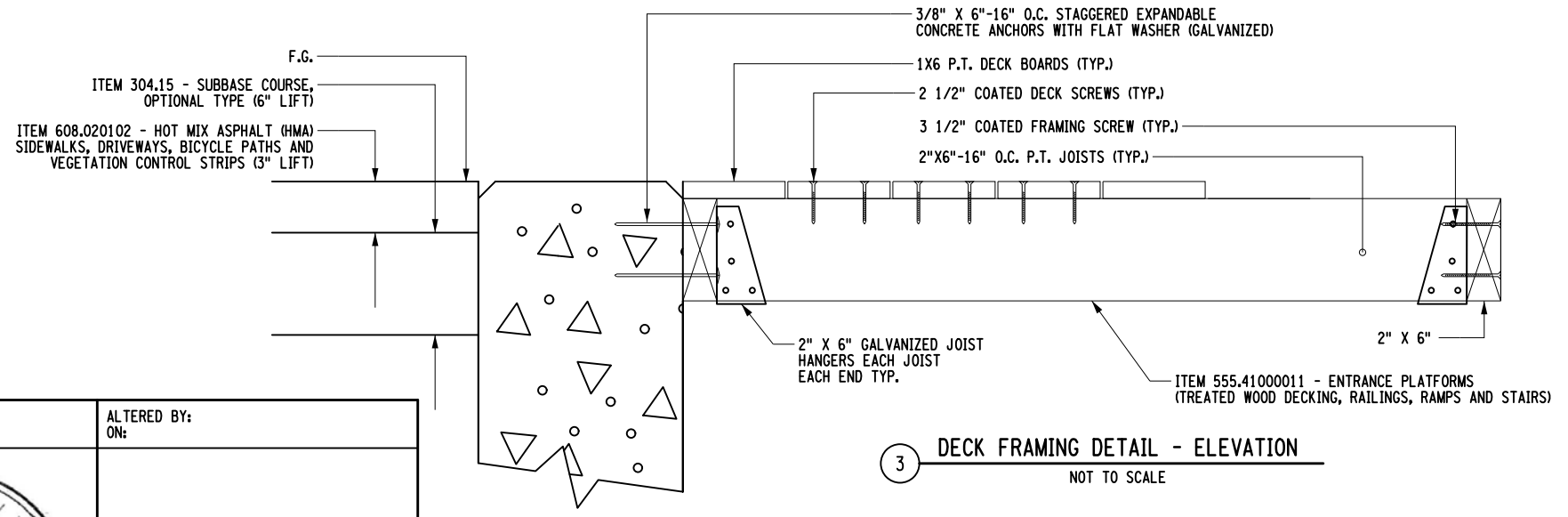
PROJECT MANAGER G. WOJCIK
 CHECK J.L. PHILLIPS
 DRAFTING D. MELSZER
 CHECK J.L. PHILLIPS
 DESIGN D. MELSZER
 JOB MANAGER J.L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER



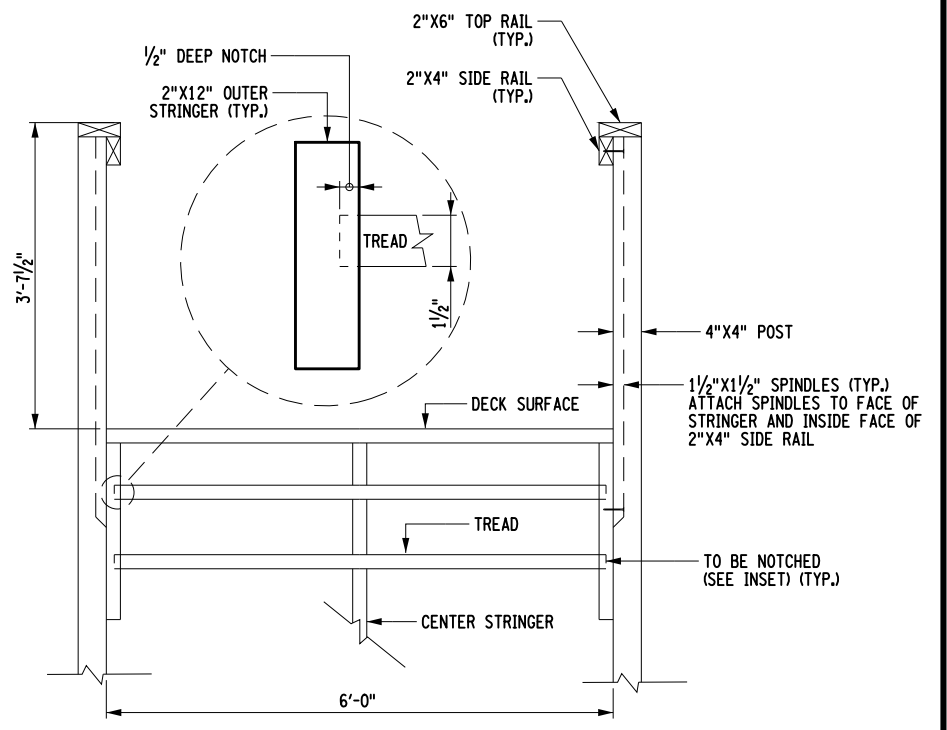
1 STAIR DETAIL - ELEVATION VIEW
 NOT TO SCALE



2 STAIR DETAIL - PLAN VIEW
 NOT TO SCALE



3 DECK FRAMING DETAIL - ELEVATION
 NOT TO SCALE



4 STAIR DETAIL - ELEVATION VIEW
 NOT TO SCALE

- NOTES:
1. SPACE DECK RAILING AND STAIR SPINDLES 5.5" O.C. SUCH THAT A 4-3/8" SPHERE CAN NOT PASS THRU THE SPINDLES AT ANY LOCATION.
 2. THE NUMBER OF RISERS AND TREAD RUNS SHALL BE FIELD DETERMINED BASED ON FINAL GRADING CONDITIONS. TREADS MAY VARY 10" MINIMUM TO 12" MAXIMUM AND RISERS MAY VARY 6" MINIMUM TO 8" MAXIMUM.
 3. ALL PRESSURE TREATED LUMBER SHALL BE #2 GRADE OR BETTER WITH A MINIMUM AMOUNT OF KNOTS AND CHECKS IN THE WOOD.
 4. ALL FRAMING FASTNERS USED SHALL BE GALVANIZED STEEL AND ALL FINISHED HARDWARE USED FOR STAIRS, DECKING AND SPINDLE CONNECTIONS SHALL BE COATED SCREW FASTNERS. MINIMUM PENETRATION REQUIRED FOR FRAMING CONNECTORS IS 2" AND 1.5" FOR FINISHED HARDWARE CONNECTORS.

AFFIX SEAL: ON: _____
 ALTERED BY: ON: _____

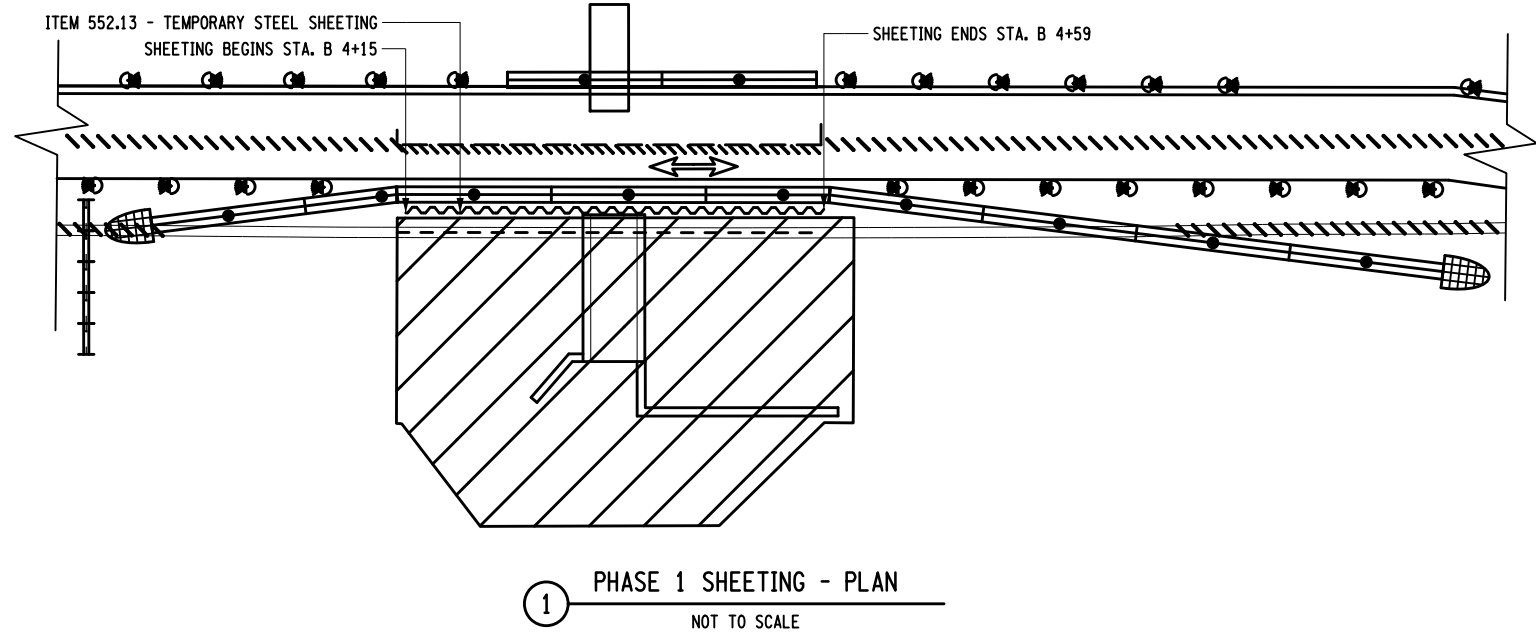


AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 28 - SH 5659	PIN 9805.93	BRIDGES	CULVERTS C950058	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	RICHFIELD SPRINGS - SCHUYLER LAKE, PART 2	ROUTE 28			STAIR DETAILS	DRAWING NO. MSD-03-B
	CULVERT REPLACEMENT & REPAIR PROJECT	UTILITY QUALITY LEVEL D			SITE B	SHEET NO. 62
	TOWN OF EXETER					
	COUNTY: OTSEGO	REGION: 09				

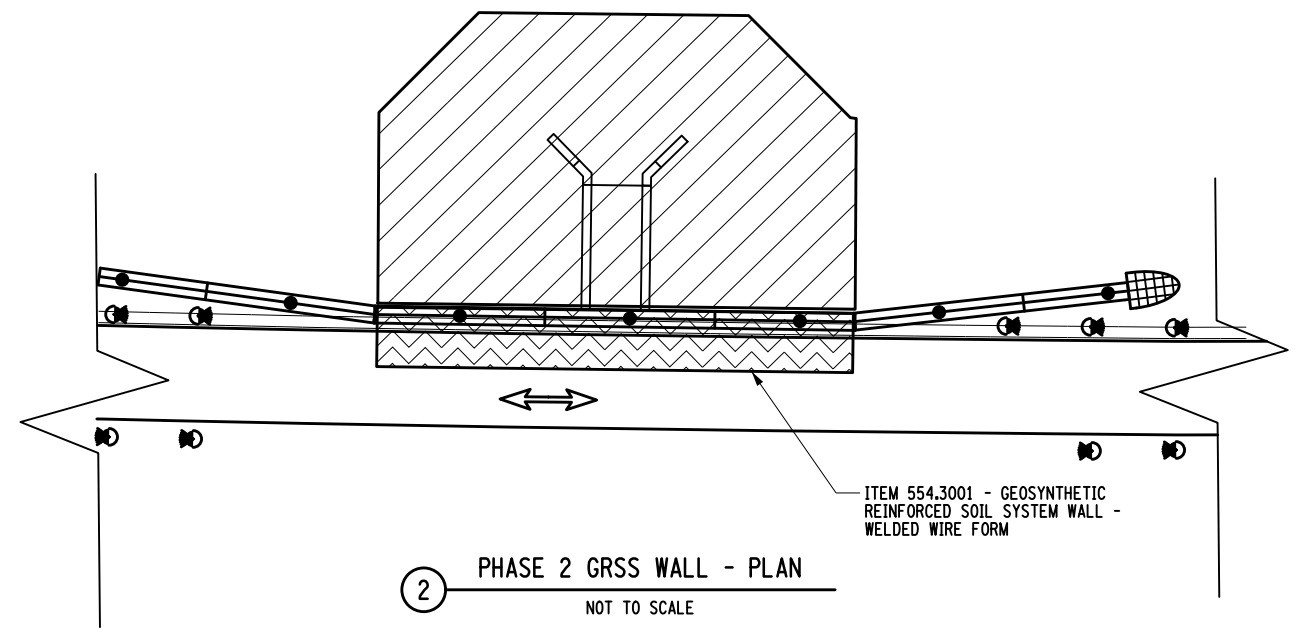
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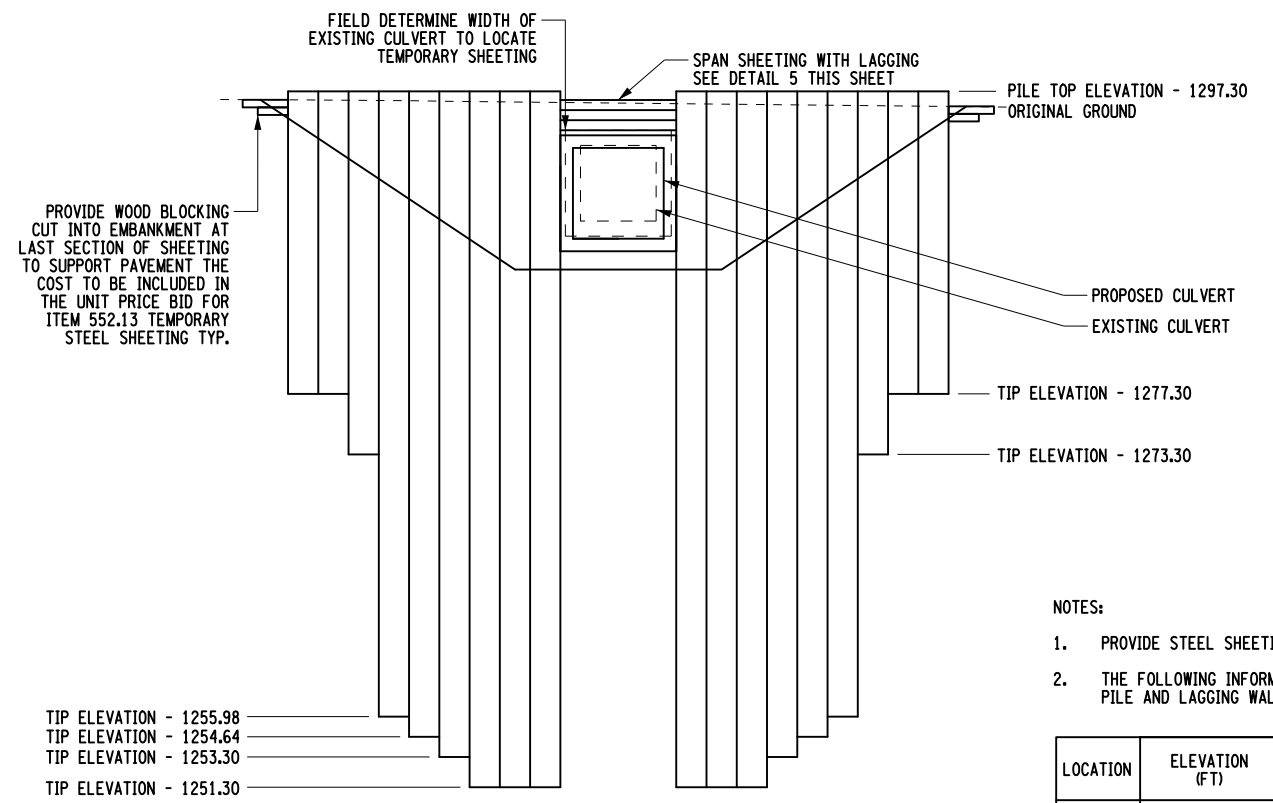
PROJECT MANAGER G. WOJCIK
 CHECK J.L. PHILLIPS
 DRAFTING D. MELSZER
 CHECK J.L. PHILLIPS
 DESIGN D. MELSZER
 JOB MANAGER J.L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER



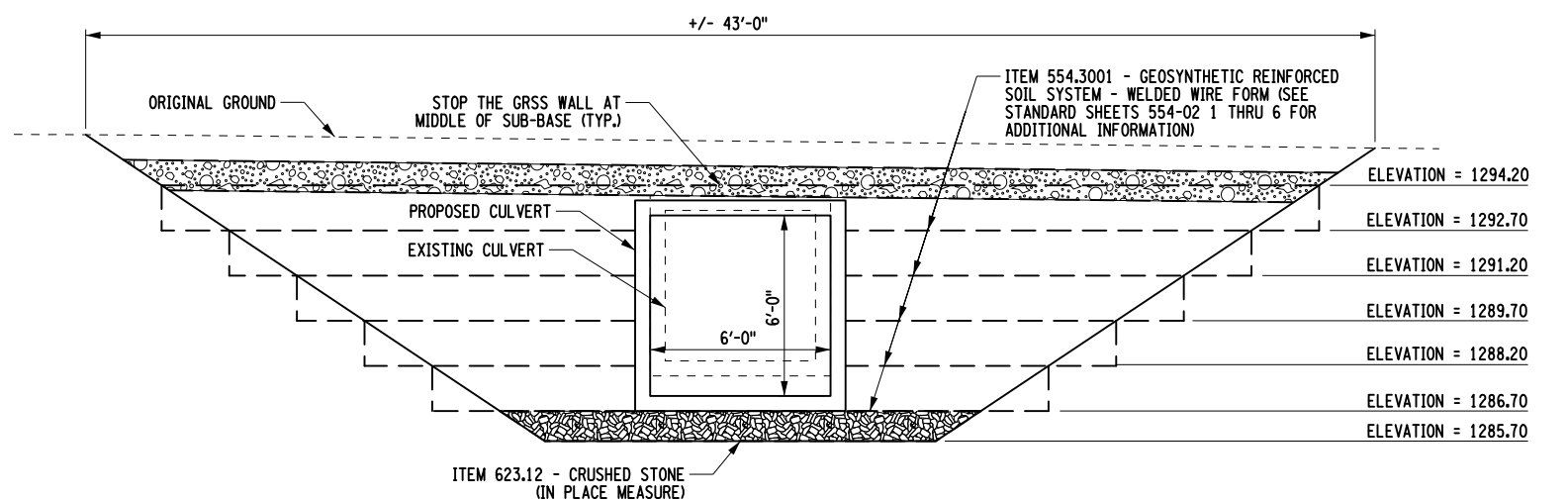
1 PHASE 1 SHEETING - PLAN
NOT TO SCALE



2 PHASE 2 GRSS WALL - PLAN
NOT TO SCALE



3 PHASE 1 - TEMPORARY SHEETING ELEVATION
NOT TO SCALE

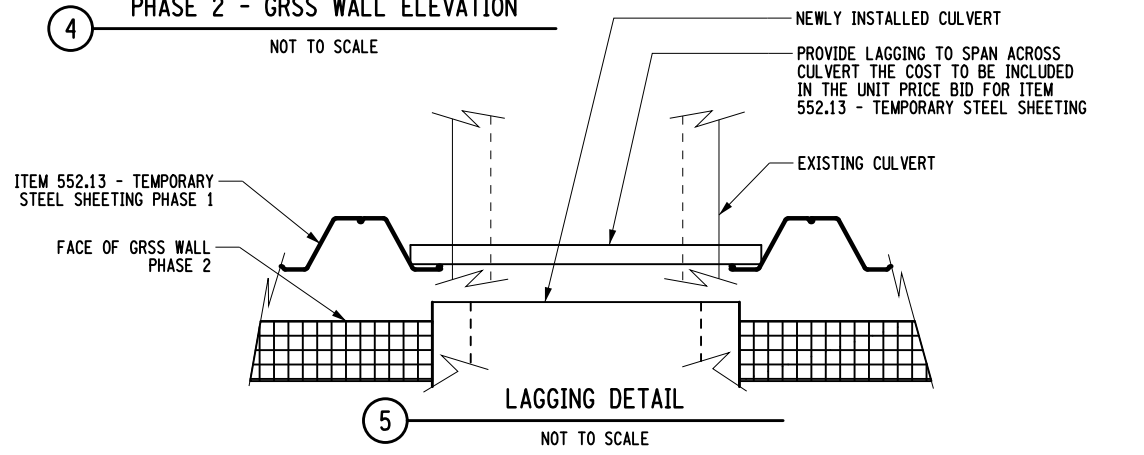


4 PHASE 2 - GRSS WALL ELEVATION
NOT TO SCALE

- NOTES:
1. PROVIDE STEEL SHEETING MEETING THE REQUIREMENTS OF ASTM A328.
 2. THE FOLLOWING INFORMATION WAS USED IN THE DESIGN OF THE SOLDIER PILE AND LAGGING WALL:

LOCATION	ELEVATION (FT)	UNIT WEIGHT (LBS/FT ³)	FRICTION ANGLE (DEGREES)	COHESION (LBS/FT ²)	WALL FRICTION (DEGREES)
C950058	O.G.S. TO 1265.5	120	33	0	0
	1265.5 TO 1250.0	120	35	0	0

- A. DIVIDE THE PASSIVE EARTH PRESSURE COEFFICIENT (K_p) BY 1.25.
- B. GROUNDWATER IS ASSUMED AT ELEVATION 1290.0 FEET.
- C. A SURCHARGE LOAD OF 250 POUNDS PER SQUARE FOOT IS ASSUMED AT THE TOP OF THE WALL.



5 LAGGING DETAIL
NOT TO SCALE

AFFIX SEAL: ON: ALTERED BY: ON:



AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

NYS ROUTE 28 - SH 5659
 RICHFIELD SPRINGS - SCHUYLER LAKE, PART 2
 CULVERT REPLACEMENT AND REPAIR PROJECT
 TOWN OF EXETER
 COUNTY: OTSEGO

PIN 9805.93
 ROUTE 28
 UTILITY QUALITY LEVEL D

BRIDGES
 CULVERTS
 C950058

ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED
 TEMPORARY SHEETING DETAILS
 SITE B

CONTRACT NUMBER
 D262989
 DRAWING NO. GED-01-B
 SHEET NO. 63

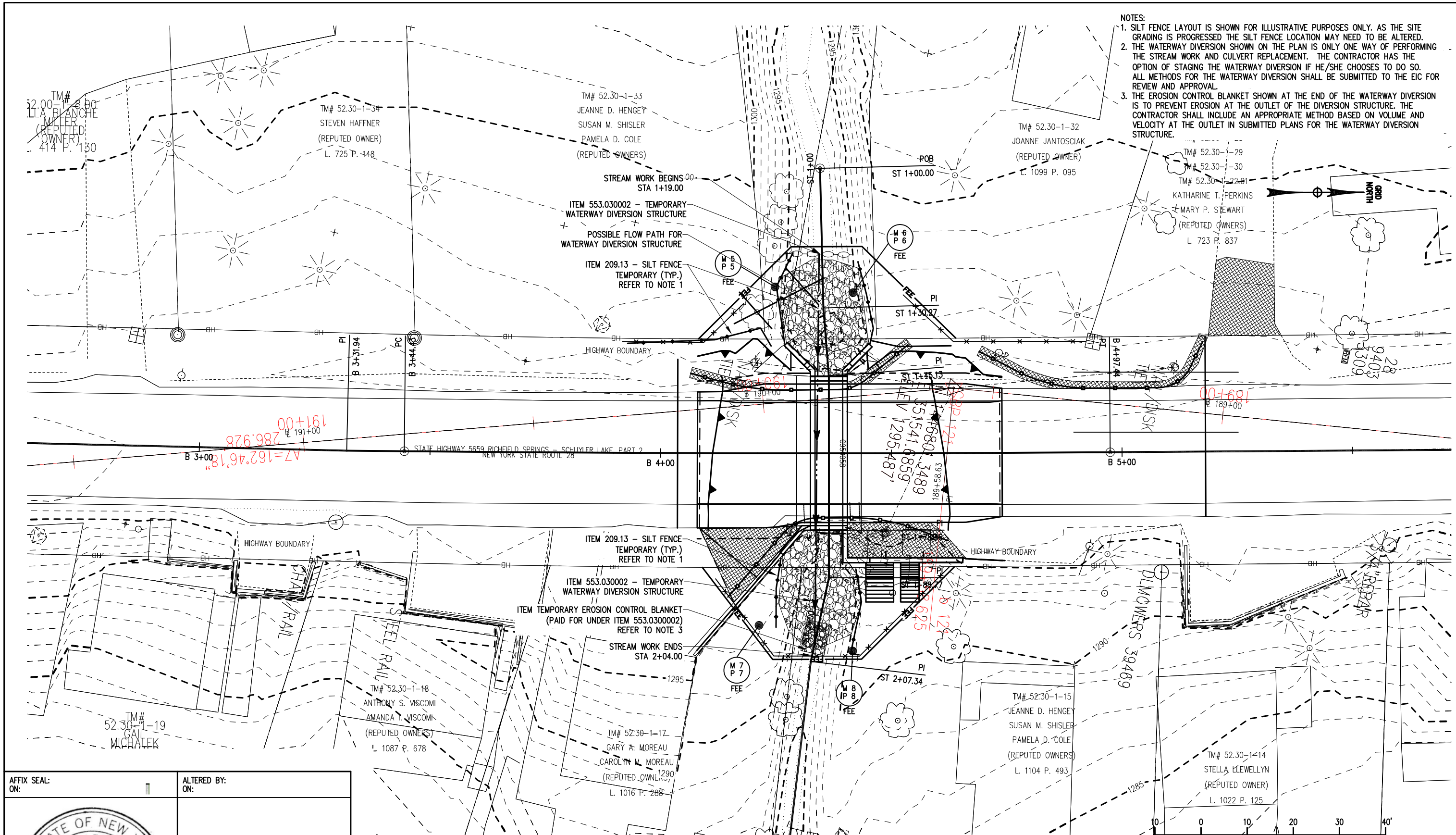
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NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 09
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 USER = jphillips

FILE NAME = D262989_980593_R09_Site_B_RT28_fec_rwy_Feature_File.dwg
 DATE/TIME = 8/6/2015 4:17:03 PM
 USER = dmelsz

DESIGN SUPERVISOR R. WILDER
 JOB MANAGER J. L. PHILLIPS
 DESIGN K. M. LORE
 CHECK J. L. PHILLIPS
 DRAFTING K. M. LORE
 CHECK J. L. PHILLIPS
 PROJECT MANAGER G. WOJCIK



- NOTES:
1. SILT FENCE LAYOUT IS SHOWN FOR ILLUSTRATIVE PURPOSES ONLY. AS THE SITE GRADING IS PROGRESSED THE SILT FENCE LOCATION MAY NEED TO BE ALTERED.
 2. THE WATERWAY DIVERSION SHOWN ON THE PLAN IS ONLY ONE WAY OF PERFORMING THE STREAM WORK AND CULVERT REPLACEMENT. THE CONTRACTOR HAS THE OPTION OF STAGING THE WATERWAY DIVERSION IF HE/SHE CHOOSES TO DO SO. ALL METHODS FOR THE WATERWAY DIVERSION SHALL BE SUBMITTED TO THE EIC FOR REVIEW AND APPROVAL.
 3. THE EROSION CONTROL BLANKET SHOWN AT THE END OF THE WATERWAY DIVERSION IS TO PREVENT EROSION AT THE OUTLET OF THE DIVERSION STRUCTURE. THE CONTRACTOR SHALL INCLUDE AN APPROPRIATE METHOD BASED ON VOLUME AND VELOCITY AT THE OUTLET IN SUBMITTED PLANS FOR THE WATERWAY DIVERSION STRUCTURE.

AFFIX SEAL:
ON: _____

ALTERED BY:
ON: _____



AS-BUILT REVISIONS
 DESCRIPTION OF ALTERATIONS:

NYS ROUTE 28 - SH 5659
 RICHFIELD SPRINGS - SCHUYLER LAKE, PART 2
 MULTI-CULVERT REPLACEMENT & REPAIR PROJECT
 TOWN OF EXETER
 COUNTY: OTSEGO

PIN 9805.93
 NYS ROUTE 28
 UTILITY QUALITY LEVEL D

BRIDGES

CULVERTS
 C950058

ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED
 EROSION CONTROL PLANS
 SITE B

CONTRACT NUMBER
 D262989
 DRAWING NO. ECP-01-B
 SHEET NO. 64

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



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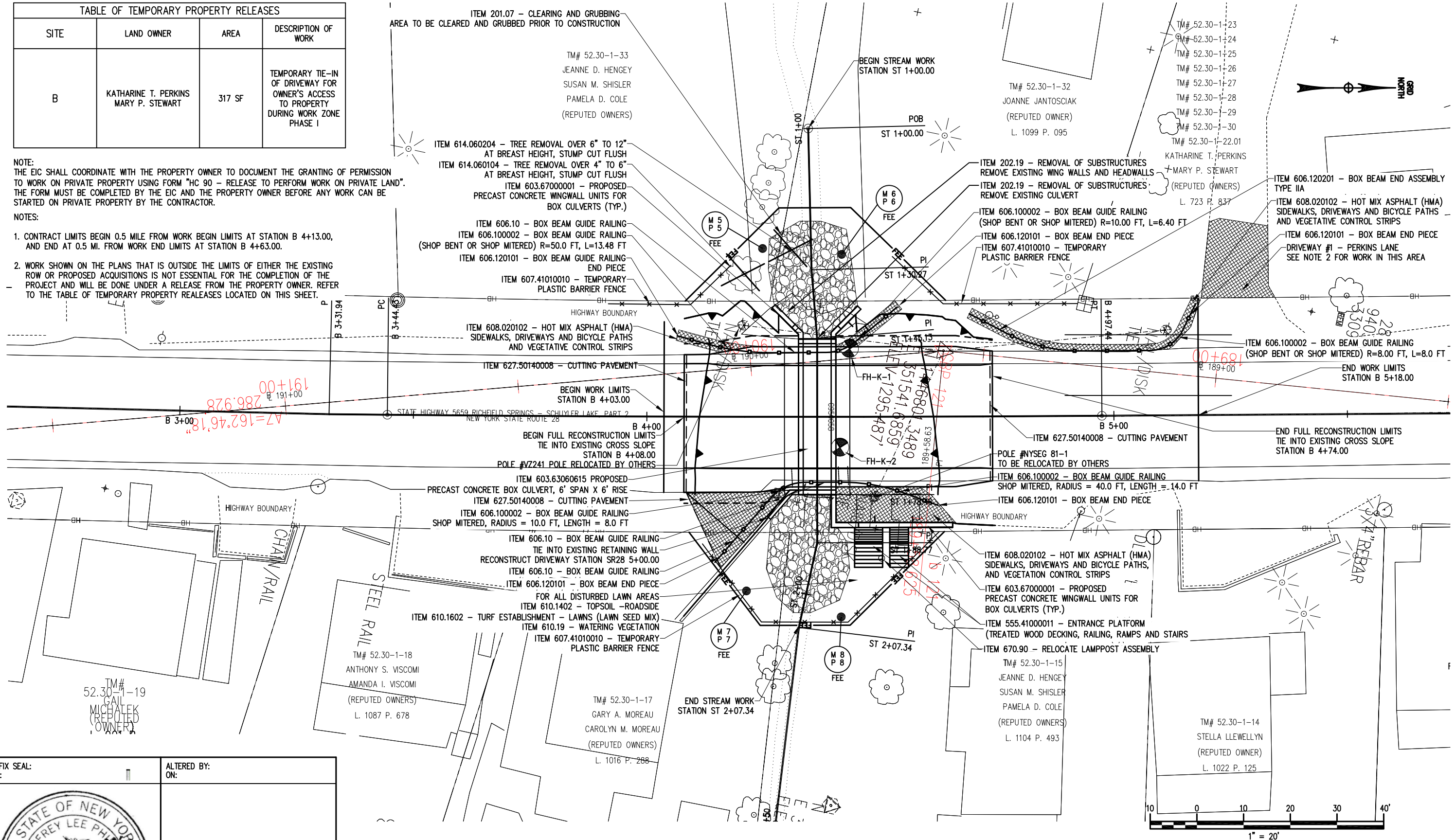
PROJECT MANAGER G. WOLCICK
 CHECK J. L. PHILLIPS
 DRAFTING D. MELSZER
 CHECK J. L. PHILLIPS
 DESIGN D. MELSZER
 JOB MANAGER J. L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER

TABLE OF TEMPORARY PROPERTY RELEASES			
SITE	LAND OWNER	AREA	DESCRIPTION OF WORK
B	KATHARINE T. PERKINS MARY P. STEWART	317 SF	TEMPORARY TIE-IN OF DRIVEWAY FOR OWNER'S ACCESS TO PROPERTY DURING WORK ZONE PHASE I

NOTE:
 THE EIC SHALL COORDINATE WITH THE PROPERTY OWNER TO DOCUMENT THE GRANTING OF PERMISSION TO WORK ON PRIVATE PROPERTY USING FORM "HC 90 - RELEASE TO PERFORM WORK ON PRIVATE LAND". THE FORM MUST BE COMPLETED BY THE EIC AND THE PROPERTY OWNER BEFORE ANY WORK CAN BE STARTED ON PRIVATE PROPERTY BY THE CONTRACTOR.

NOTES:

- CONTRACT LIMITS BEGIN 0.5 MILE FROM WORK BEGIN LIMITS AT STATION B 4+13.00, AND END AT 0.5 MI. FROM WORK END LIMITS AT STATION B 4+63.00.
- WORK SHOWN ON THE PLANS THAT IS OUTSIDE THE LIMITS OF EITHER THE EXISTING ROW OR PROPOSED ACQUISITIONS IS NOT ESSENTIAL FOR THE COMPLETION OF THE PROJECT AND WILL BE DONE UNDER A RELEASE FROM THE PROPERTY OWNER. REFER TO THE TABLE OF TEMPORARY PROPERTY RELEASES LOCATED ON THIS SHEET.



AFFIX SEAL ON:

ALTERED BY ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 28 - SH 5659	PIN 9805.93	BRIDGES	CULVERTS C950058	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	RICHFIELD SPRINGS - SCHUYLER LAKE, PART 2	NYS ROUTE 28				GENERAL PLANS SITE B	DRAWING NO. GNP-01-B
	MULTI-CULVERT REPLACEMENT & REPAIR PROJECT	UTILITY QUALITY LEVEL D				SHEET NO. 65
	TOWN OF EXETER					
	COUNTY: OTSEGO					

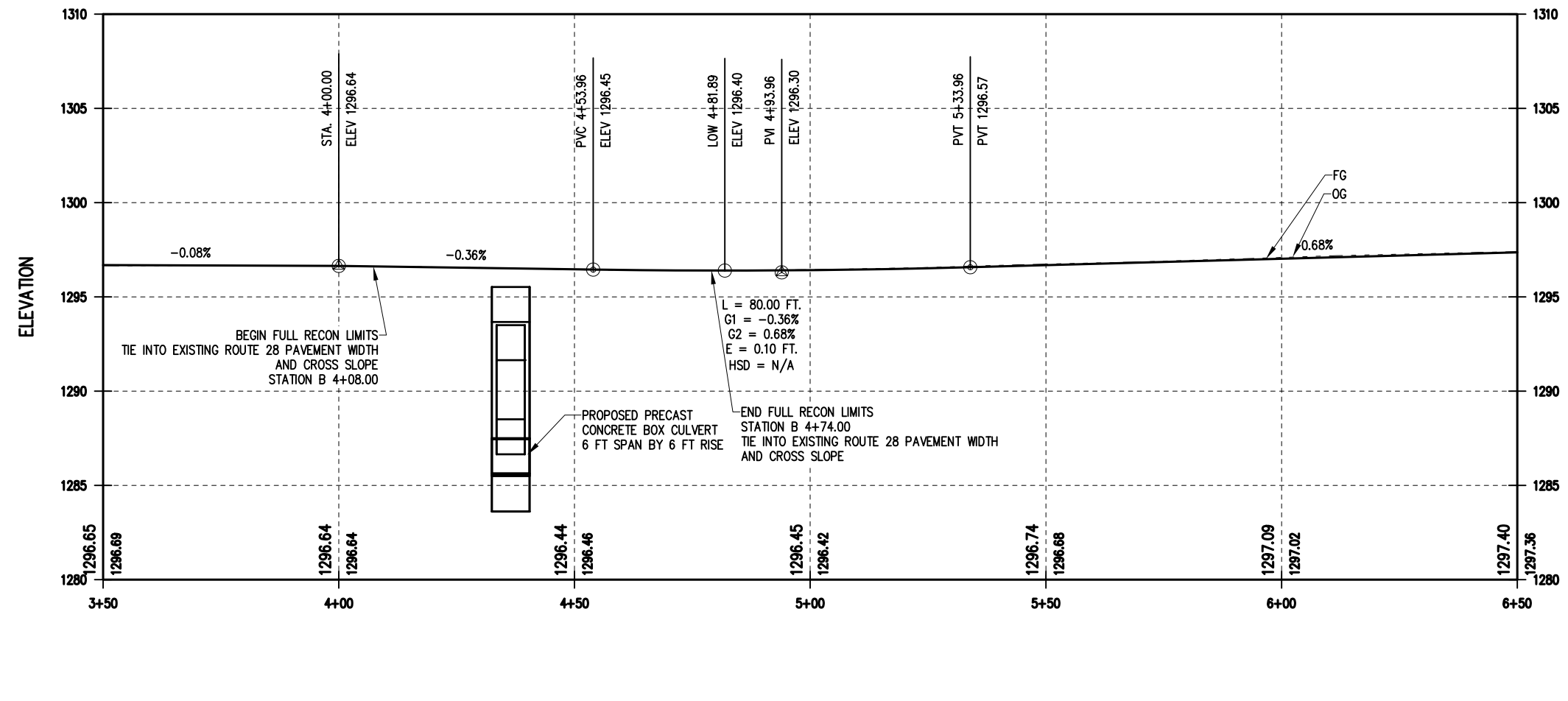
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NEW YORK STATE OF OPPORTUNITY
 Department of Transportation

FILE NAME = D262989_980593_R09_Site_B_RT28_fec_rwy_Feature_File.dwg
 DATE/TIME = 8/14/2015 9:34:18 AM
 USER = dmelsz

JOB MANAGER J. L. PHILLIPS
 DESIGN D. MELSZER
 CHECK J. L. PHILLIPS
 DRAFTING D. MELSZER
 CHECK J. L. PHILLIPS
 PROJECT MANAGER G. WOJCIK

PROPOSED ROUTE 28 PROFILE



AFFIX SEAL:
ON:

ALTERED BY:
ON:

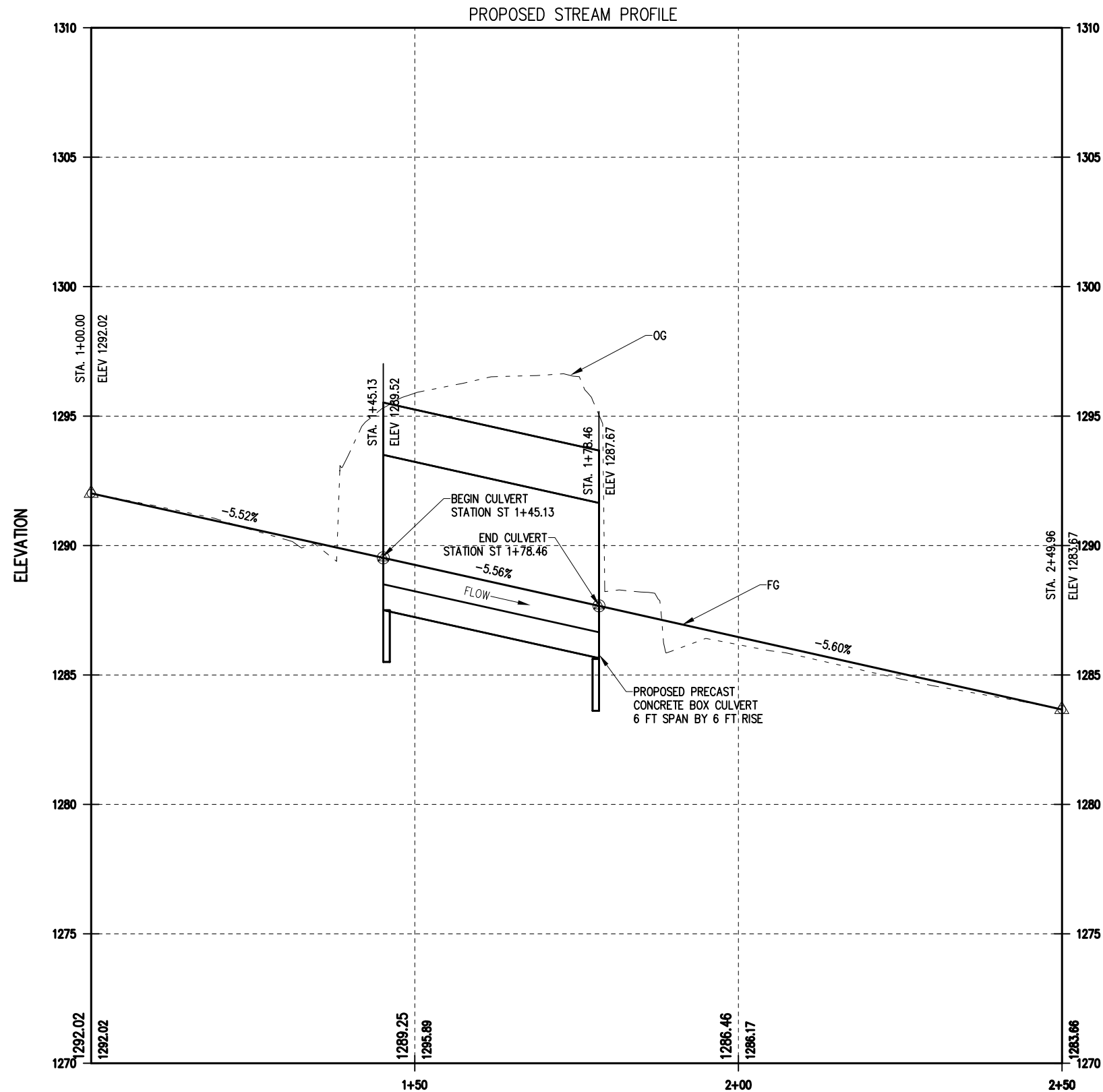
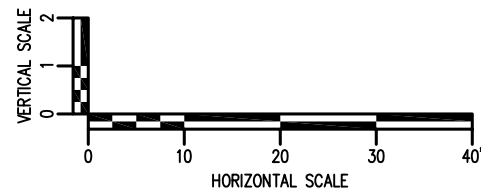
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 28 - SH 5659	PIN 9805.93 NYS ROUTE 28 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS C950058	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED	ROUTE 28 PROFILE SITE B	CONTRACT NUMBER D262989
	RICHFIELD SPRINGS - SCHUYLER LAKE, PART 2						DRAWING NO. PRO-01-B
	MULTI-CULVERT REPLACEMENT & REPAIR PROJECT						SHEET NO. 66
	TOWN OF EXETER						
	COUNTY: OTSEGO						

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



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 DATE/TIME = 7/30/2015 2:02:08 PM
 USER = dmelsz

DESIGN SUPERVISOR R. WILDER
 JOB MANAGER J. L. PHILLIPS
 DESIGN D. MELSZER
 CHECK J. L. PHILLIPS
 DRAFTING D. MELSZER
 CHECK J. L. PHILLIPS
 PROJECT MANAGER G. WOJCIK



AFFIX SEAL:
ON:

ALTERED BY:
ON:



AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

NYS ROUTE 28 - SH 5659
 RICHFIELD SPRINGS - SCHUYLER LAKE, PART 2
 MULTI-CULVERT REPLACEMENT & REPAIR PROJECT
 TOWN OF EXETER
 COUNTY: OTSEGO

PIN 9805.93
 NYS ROUTE 28
 UTILITY QUALITY LEVEL D

BRIDGES

CULVERTS
C950058

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

STREAM PROFILES
SITE B

CONTRACT NUMBER
D262989

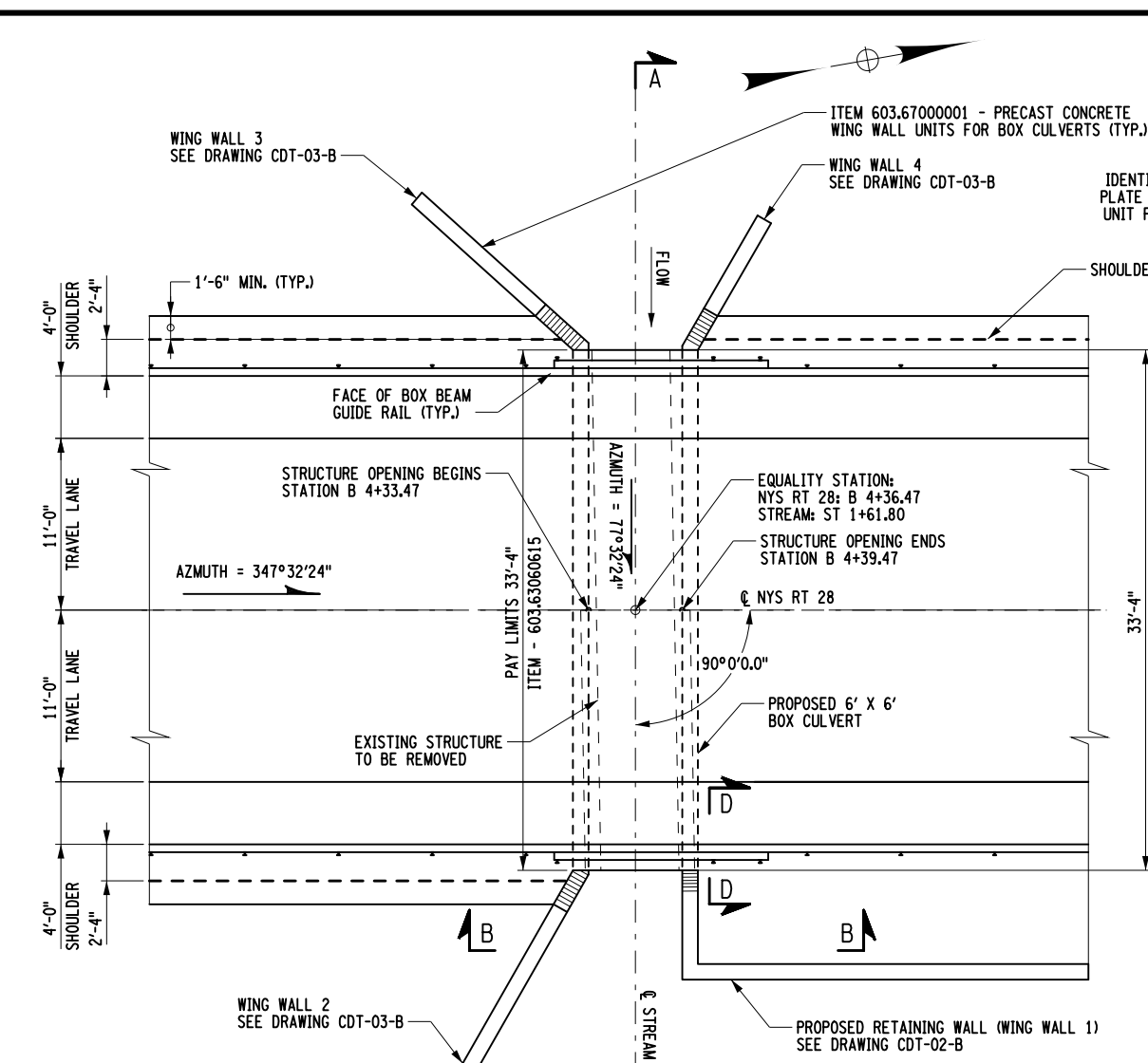
DRAWING NO. PRO-02-B
 SHEET NO. 67

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

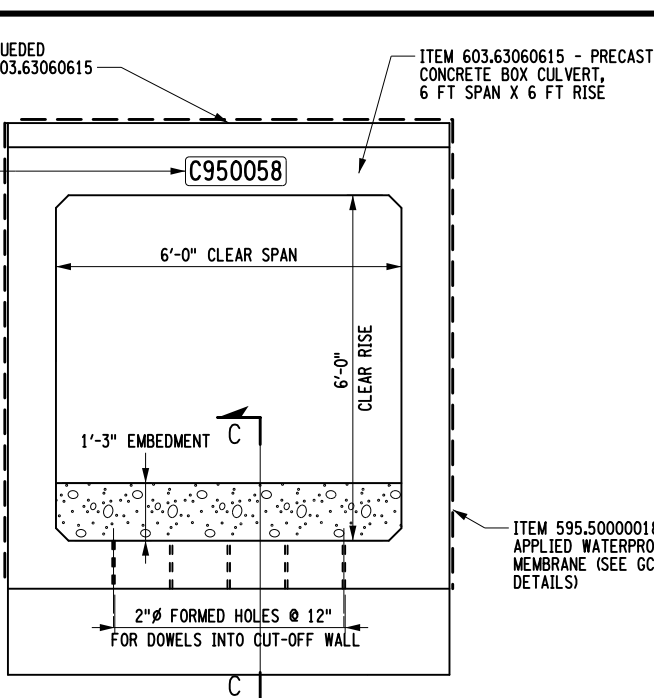


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 DATE/TIME = 14-AUG-2015 10:35
 USER = dmelszer

PROJECT MANAGER G. WOJCIK
 CHECK J.L. PHILLIPS
 DRAFTING D. MELSZER
 CHECK J.L. PHILLIPS
 DESIGN D. MELSZER
 DESIGN J.L. PHILLIPS
 JOB MANAGER R. WILDER
 DESIGN SUPERVISOR R. WILDER

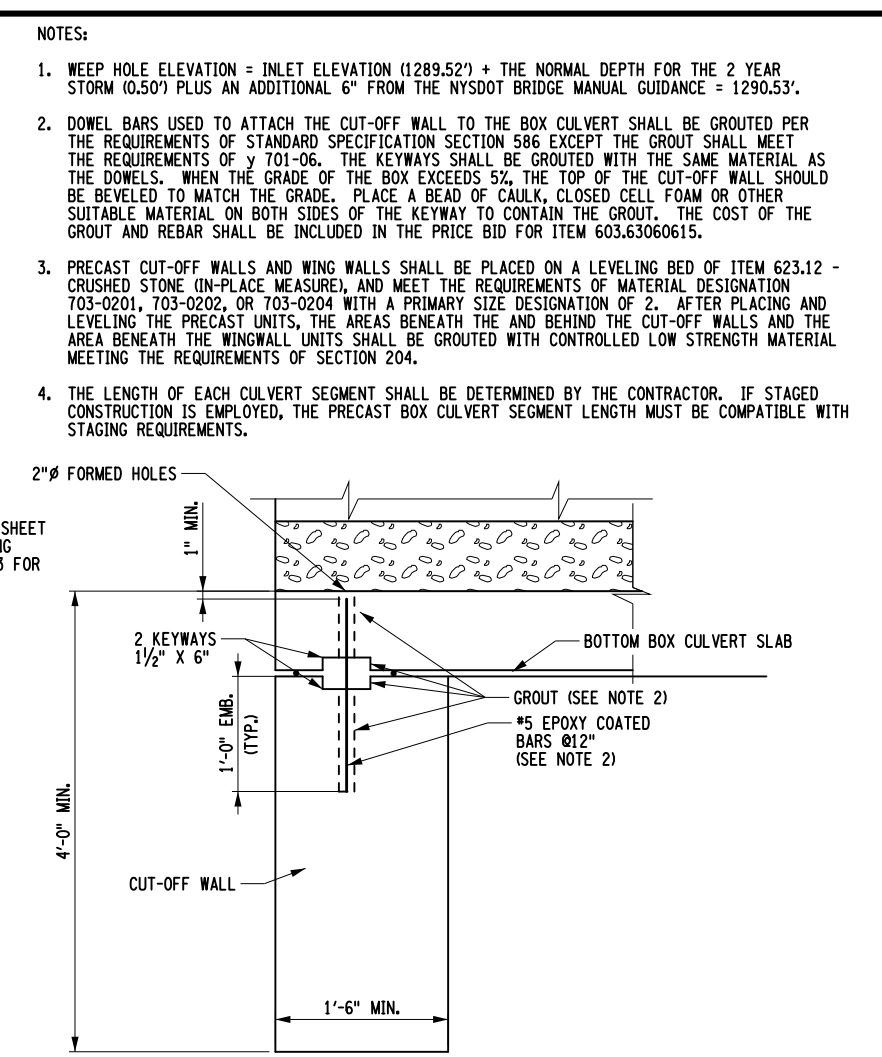


1 CULVERT PLAN VIEW
 NOT TO SCALE



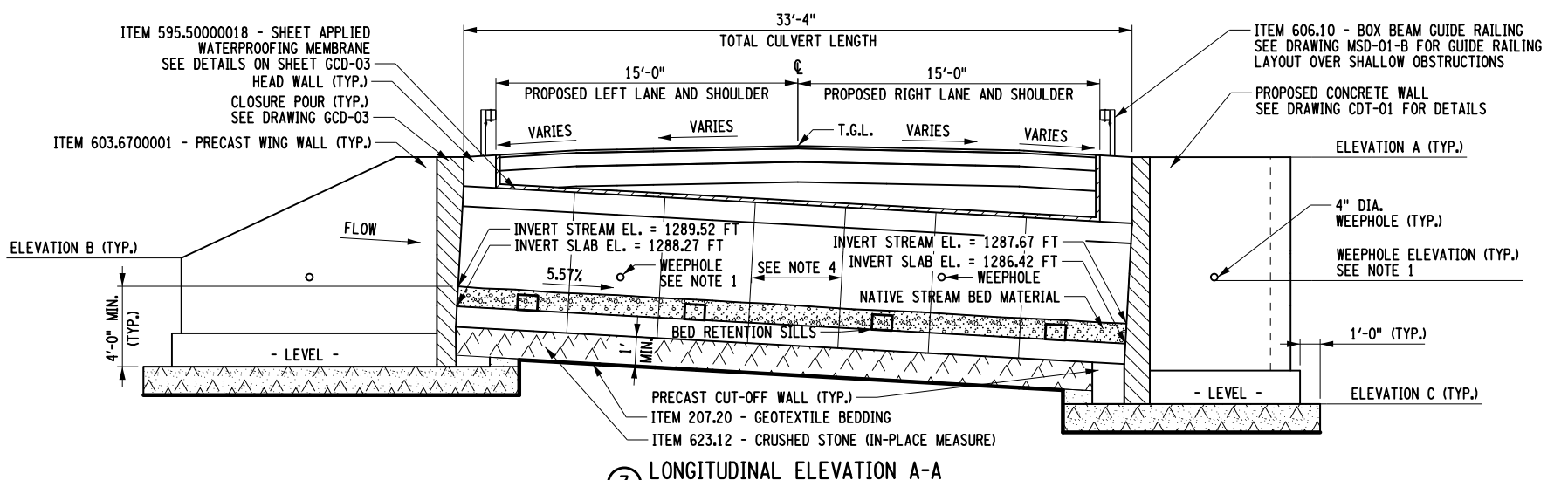
BOX CULVERT DESIGN DATA	
CLEAR SPAN, ft.	6'-0"
STRUCTURE RISE, ft.	6'-0"
* MIN. FILL HEIGHT, ft.	0'-0"
* MAX. FILL HEIGHT, ft.	2'-0"
(SKEW) SKEW ANGLE \perp TO ϕ OF ROADWAY, DEG.	0 DEGREES
LIVE LOAD	HL93 AND NYS PERMIT VEHICLE
RAILING / BARRIER TEST LEVEL	TL-3

* BASED ON ASSUMED TOP SLAB THICKNESS OF 10". FABRICATOR SHALL ADJUST BASED ON ACTUAL TOP SLAB THICKNESS.



NOTES:

1. WEEP HOLE ELEVATION = INLET ELEVATION (1289.52') + THE NORMAL DEPTH FOR THE 2 YEAR STORM (0.50') PLUS AN ADDITIONAL 6" FROM THE NYS DOT BRIDGE MANUAL GUIDANCE = 1290.53'.
2. DOWEL BARS USED TO ATTACH THE CUT-OFF WALL TO THE BOX CULVERT SHALL BE GROUDED PER THE REQUIREMENTS OF STANDARD SPECIFICATION SECTION 586 EXCEPT THE GROUT SHALL MEET THE REQUIREMENTS OF γ 701-06. THE KEYWAYS SHALL BE GROUDED WITH THE SAME MATERIAL AS THE DOWELS. WHEN THE GRADE OF THE BOX EXCEEDS 5%, THE TOP OF THE CUT-OFF WALL SHOULD BE BEVELED TO MATCH THE GRADE. PLACE A BEAD OF CAULK, CLOSED CELL FOAM OR OTHER SUITABLE MATERIAL ON BOTH SIDES OF THE KEYWAY TO CONTAIN THE GROUT. THE COST OF THE GROUT AND REBAR SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 603.63060615.
3. PRECAST CUT-OFF WALLS AND WING WALLS SHALL BE PLACED ON A LEVELING BED OF ITEM 623.12 - CRUSHED STONE (IN-PLACE MEASURE), AND MEET THE REQUIREMENTS OF MATERIAL DESIGNATION 703-0201, 703-0202, OR 703-0204 WITH A PRIMARY SIZE DESIGNATION OF 2. AFTER PLACING AND LEVELING THE PRECAST UNITS, THE AREAS BENEATH THE AND BEHIND THE CUT-OFF WALLS AND THE AREA BENEATH THE WINGWALL UNITS SHALL BE GROUDED WITH CONTROLLED LOW STRENGTH MATERIAL MEETING THE REQUIREMENTS OF SECTION 204.
4. THE LENGTH OF EACH CULVERT SEGMENT SHALL BE DETERMINED BY THE CONTRACTOR. IF STAGED CONSTRUCTION IS EMPLOYED, THE PRECAST BOX CULVERT SEGMENT LENGTH MUST BE COMPATIBLE WITH STAGING REQUIREMENTS.



GEOTECHNICAL WING WALL DESIGN DATA						
FRICTION ANGLE OF SOIL RETAINED BY THE WALL (DEGREES)	FRICTION ANGLE OF FOUNDATION SOIL (DEGREES)	TOTAL SOIL UNIT WEIGHT (lb/ft ³)	MAXIMUM SERVICE LIMIT STATE BEARING RESISTANCE (lb/ft ²)	NOMINAL COEFFICIENT OF FRICTION FOR SLIDING	STRENGTH LIMIT STATE RESISTANCE FACTOR FOR SLIDING	STRENGTH LIMIT STATE RESISTANCE FACTOR FOR BEARING
33	30	120	2.0	0.46	0.90	0.45

AFFIX SEAL: ON: _____
 ALTERED BY: ON: _____

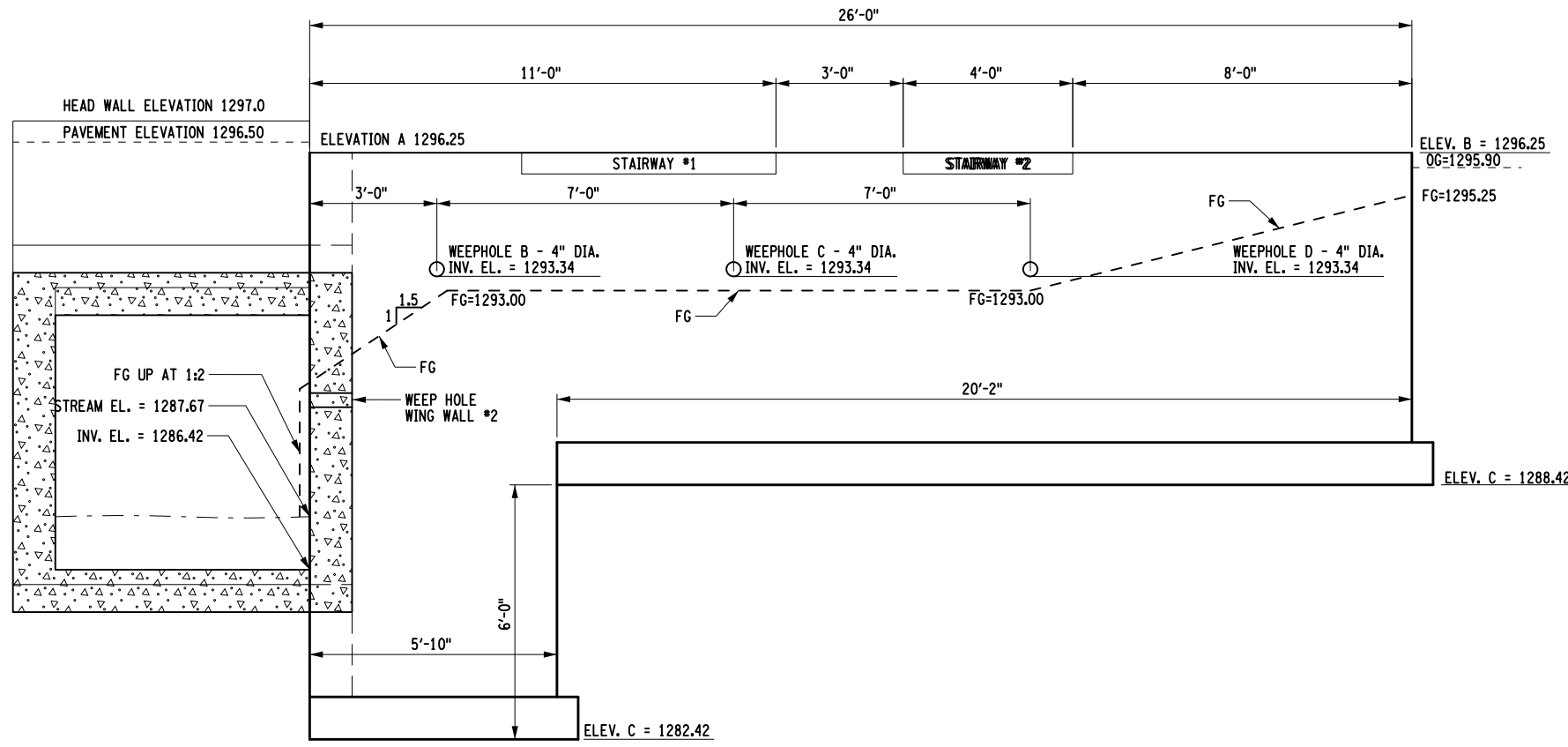
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 28 - SH 5659	PIN 9805.93	BRIDGES	CULVERTS C950058	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	RICHFIELD SPRINGS - SCHUYLER LAKE, PART 2	ROUTE 28			CULVERT PLAN AND SECTION	DRAWING NO. CDT-01-B
	CULVERT REPLACEMENT & REPAIR PROJECT	UTILITY QUALITY LEVEL D			SITE B	SHEET NO. 68
	TOWN OF EXETER	REGION: 09				
	COUNTY: OTSEGO					

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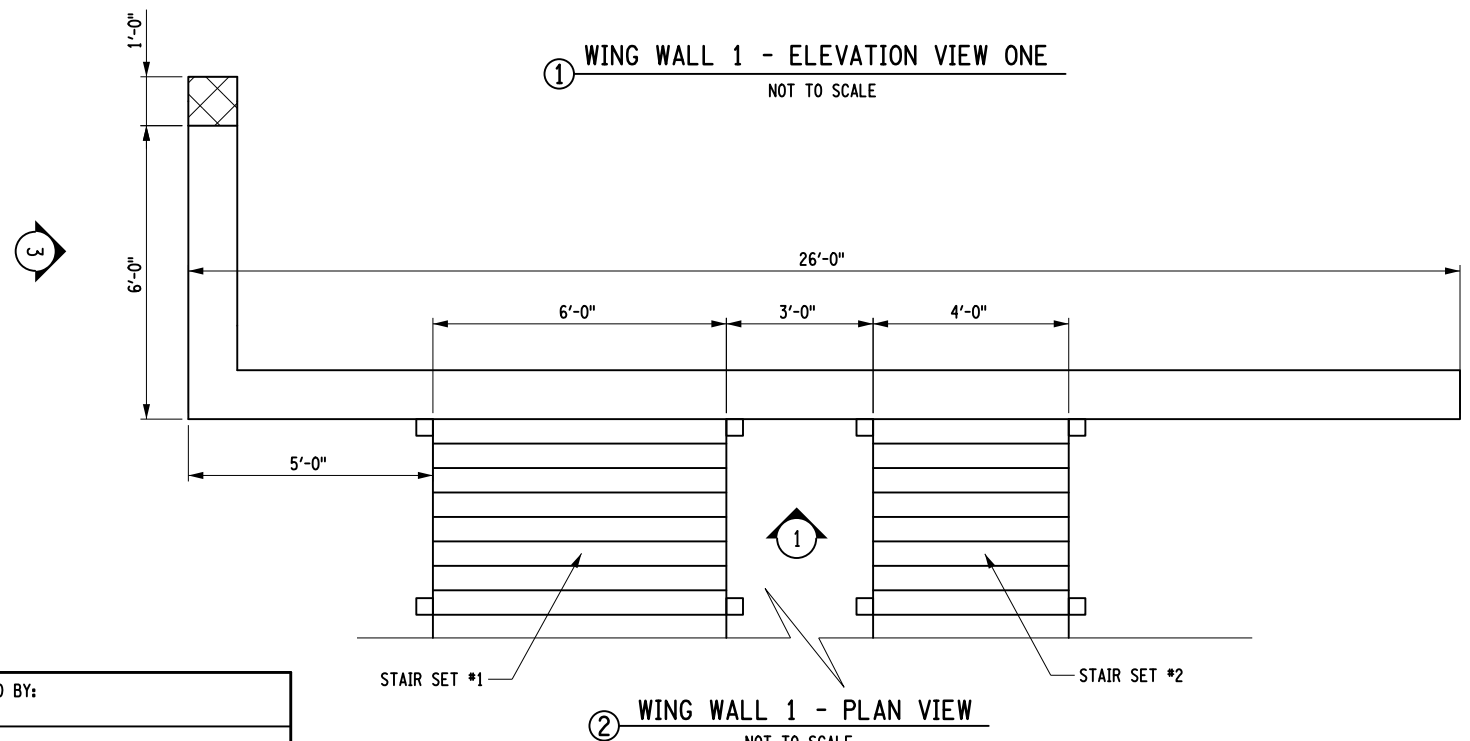


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 DATE/TIME = 06-AUG-2015 09:06
 USER = jphillips

DESIGN SUPERVISOR R. WILDER
 JOB MANAGER J. L. PHILLIPS
 DESIGN D. MELSZER
 CHECK J. L. PHILLIPS
 DRAFTING D. MELSZER
 CHECK J. L. PHILLIPS
 PROJECT MANAGER G. WOJCIK

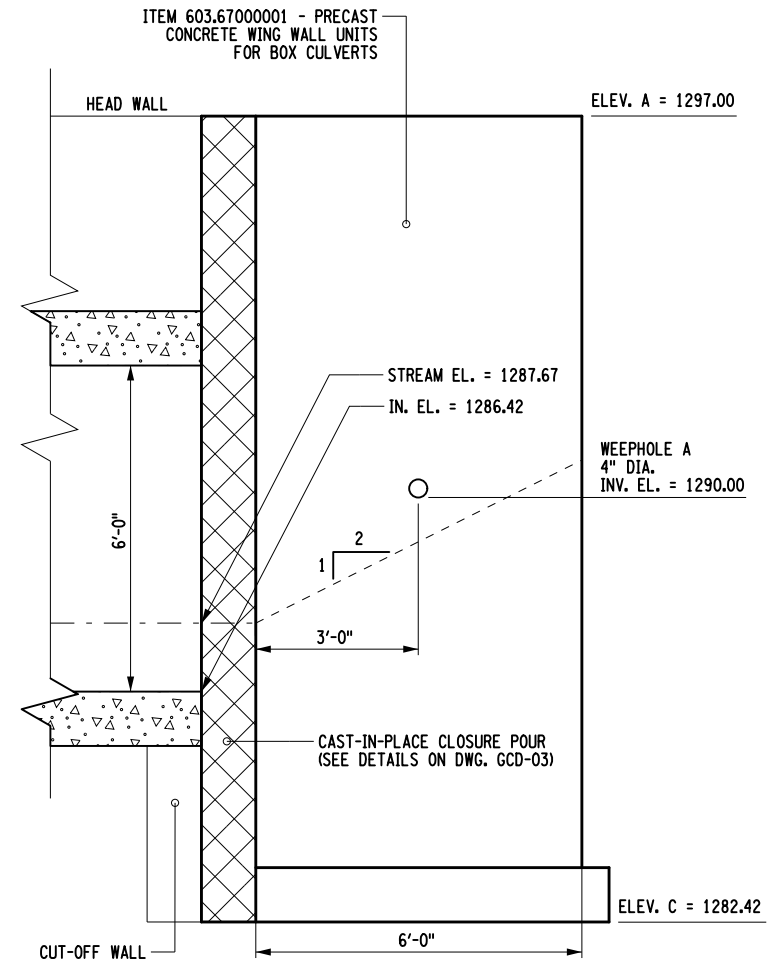


① WING WALL 1 - ELEVATION VIEW ONE
 NOT TO SCALE



② WING WALL 1 - PLAN VIEW
 NOT TO SCALE

- NOTES:
1. WING WALLS, CULVERT TOP SLABS AND CULVERT BOTTOM SLABS ARE DRAWN AND ASSUMED TO BE 12" THICK. FINAL SIZE AND CONFIGURATION SHALL BE DETERMINED BY THE CONTRACTOR'S PRECAST FABRICATOR.
 2. DIMENSION "X" IS THE LEVEL DISTANCE ACROSS THE TOP OF THE WING WALL AND IS MEASURED ALONG THE FRONT FACE OF THE WALL.
 3. WEEP HOLE ELEVATION = INLET ELEVATION (1289.52') + THE NORMAL DEPTH FOR THE 2 YEAR STORM (0.50') PLUS AN ADDITIONAL 6" FROM THE NYSOT BRIDGE MANUAL GUIDANCE = 1290.53'.



③ WING WALL 1 - ELEVATION VIEW TWO
 NOT TO SCALE

AFFIX SEAL: ON: _____
 ALTERED BY: ON: _____



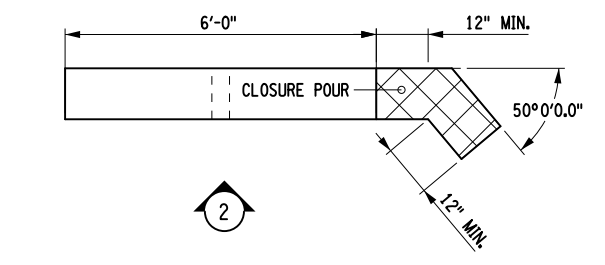
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 28 - SH 5659	PIN 9805.93	BRIDGES	CULVERTS C950058	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	RICHFIELD SPRINGS - SCHUYLER LAKE, PART 2	ROUTE 28				
	CULVERT REPLACEMENT & REPAIR PROJECT	UTILITY QUALITY LEVEL D				
	TOWN OF EXETER					
	COUNTY: OTSEGO	REGION: 09			WING WALL 1 DETAILS	DRAWING NO. CDT-02-B
					SITE B	SHEET NO. 69

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

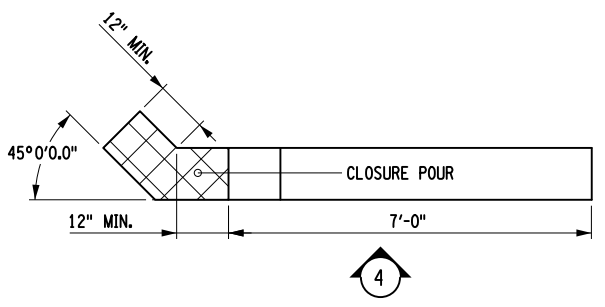


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 USER = jphillips

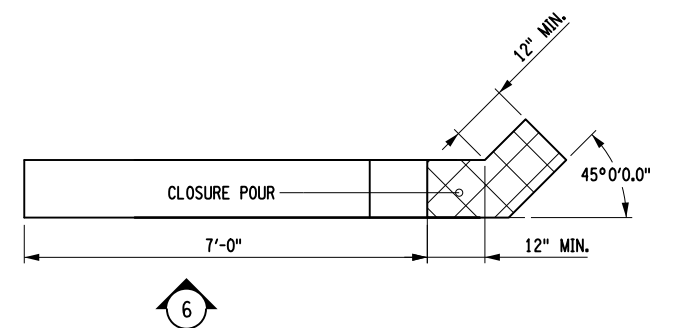
PROJECT MANAGER G. WOJCIK
 CHECK J. L. PHILLIPS
 DRAFTING D. MELSZER
 CHECK J. L. PHILLIPS
 DESIGN D. MELSZER
 JOB MANAGER J. L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER



① WING WALL 2 - PLAN VIEW
 NOT TO SCALE

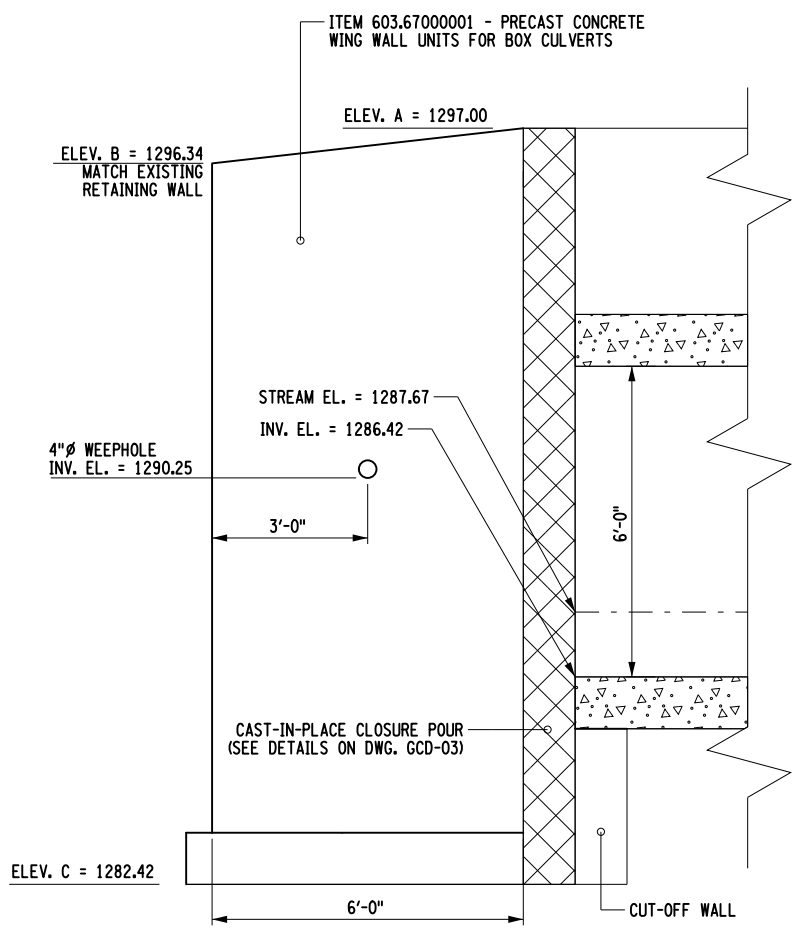


③ WING WALL 3 - PLAN VIEW
 NOT TO SCALE

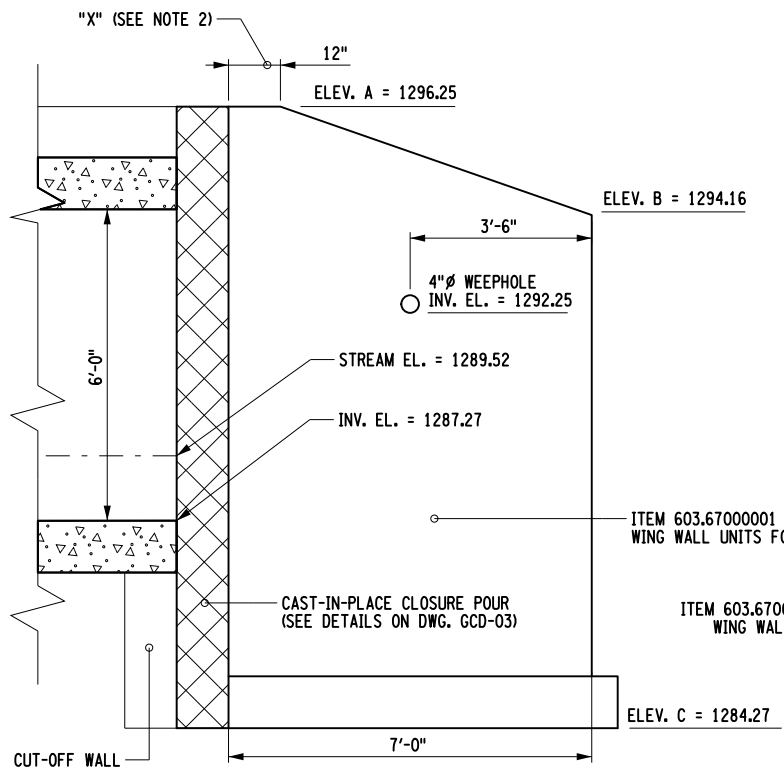


⑤ WING WALL 4 - PLAN VIEW
 NOT TO SCALE

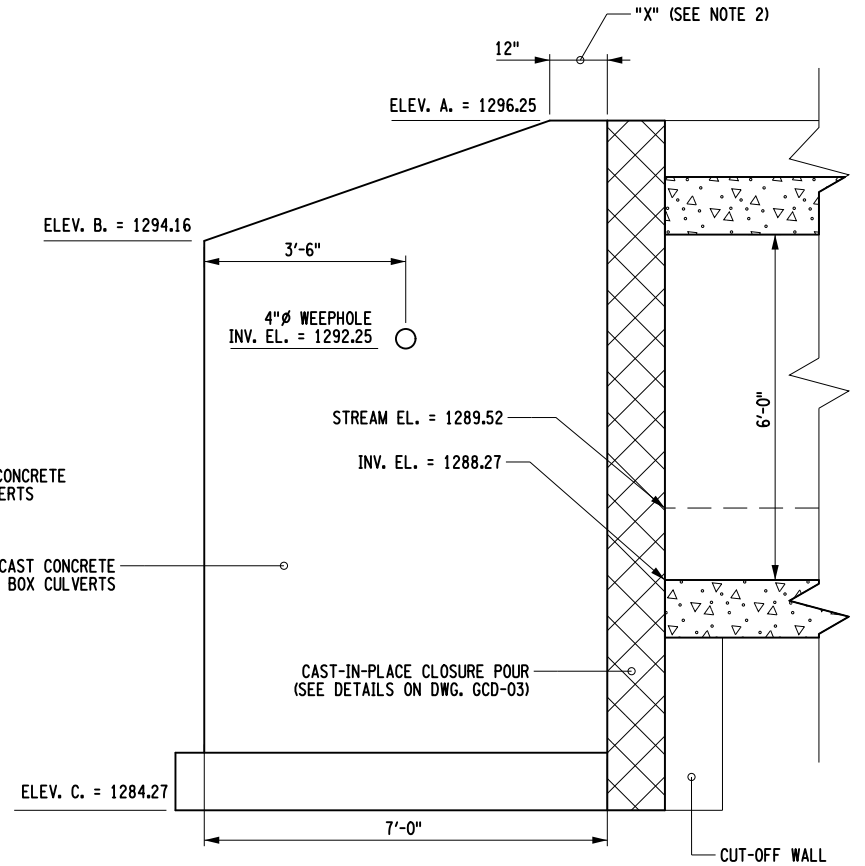
- NOTES:
1. WING WALLS, CULVERT TOP SLABS AND CULVERT BOTTOM SLABS ARE DRAWN AND ASSUMED TO BE 12" THICK. FINAL SIZE AND CONFIGURATION SHALL BE DETERMINED BY THE CONTRACTOR'S PRECAST FABRICATOR.
 2. DIMENSION "X" IS THE LEVEL DISTANCE ACROSS THE TOP OF THE WING WALL AND IS MEASURED ALONG THE FRONT FACE OF THE WALL.



② WING WALL 2 - ELEVATION VIEW
 NOT TO SCALE



④ WING WALL 3 - ELEVATION VIEW
 NOT TO SCALE



⑥ WING WALL 4 - ELEVATION VIEW
 NOT TO SCALE

AFFIX SEAL: ON: _____
 ALTERED BY: ON: _____



AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 28 - SH 5659	PIN 9805.93	BRIDGES	CULVERTS C950058	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	RICHFIELD SPRINGS - SCHUYLER LAKE, PART 2	ROUTE 28			WING WALL 2, 3 & 4 DETAILS	DRAWING NO. CDT-03-B
	CULVERT REPLACEMENT & REPAIR PROJECT	UTILITY QUALITY LEVEL D				SHEET NO. 70
	TOWN OF EXETER					
	COUNTY: OTSEGO	REGION: 09			SITE B	

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

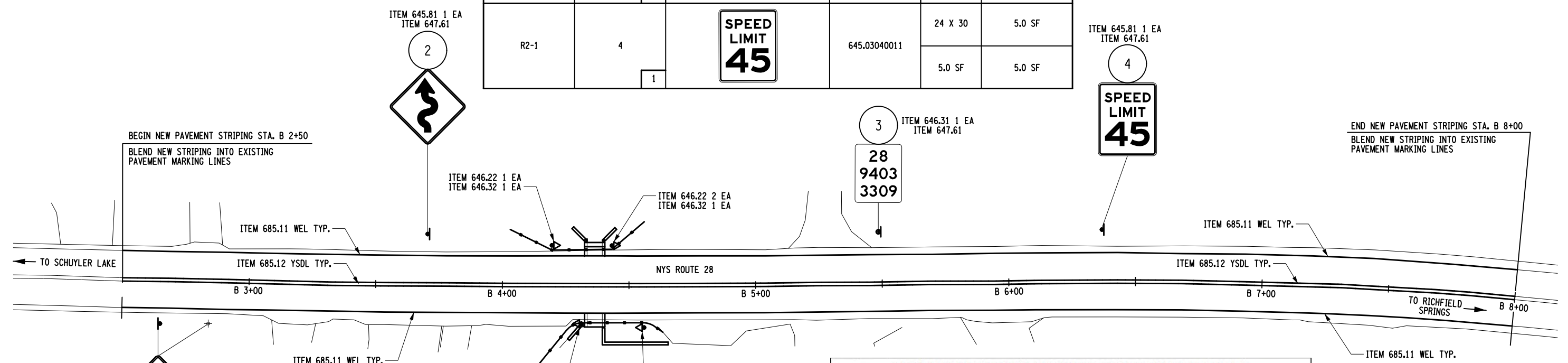


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 DATE/TIME = 29-JUL-2015 13:48
 USER = jphillips

PROJECT MANAGER G. WOJCIK
 CHECK J.L. PHILLIPS
 DRAFTING G. MEYER
 CHECK J.L. PHILLIPS
 DESIGN D. MELSZER
 JOB MANAGER J.L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER

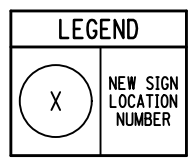
DESIGNATION & COLOR (SEE NOTE 2)	LOCATION	TEXT	ITEM	SIZE	PAYMENT AREA (SEE NOTE 3)
				AREA (SEE NOTE 3)	TOTAL PAYMENT AREA
W11-2L BLACK LEGEND AND BORDER FLUORESCENT YELLOW-GREEN BACKGROUND	1		645.03040011	30 X 30	6.3 SF
				6.3 SF	6.3 SF
W1-5L	2		645.03040011	30 X 30	6.3 SF
				6.3 SF	6.3 SF
N/A	3	28 9403 3309	646.21	8 X 10	N/A
				0.6 SF	N/A
R2-1	4	SPEED LIMIT 45	645.03040011	24 X 30	5.0 SF
				5.0 SF	5.0 SF

- SIGNING NOTES:**
- SIGN LOCATIONS AS SHOWN ON PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL INSTALL NEW SIGNS AND RELOCATE EXISTING SIGNS IN ACCORDANCE WITH THE MUTCD AND NYS SUPPLEMENT.
 - THE COLOR IS ONLY SHOWN WHEN THERE IS AN OPTION THAT MUST BE SPECIFIED.
 - SIGN SIZE IS IN INCHES. THE AREA AND PAYMENT AREA FOR SIGNS ARE FROM THE APPLICABLE STANDARD SHEETS OR SIGN FACE LAYOUTS.



SIGN AND PAVEMENT MARKING ITEM SUMMARY TABLE
ROUTE 28 SITE B C950058

ITEM NUMBER	DESCRIPTION	UNIT	QUANTITY
645.03040011	HIGH VISIBILITY GROUND-MOUNTED SIGN PANELS LESS THAN OR EQUAL TO 30 SF WITH Z-BARS	SF	17.6
645.81	TYPE A SIGN POSTS	EA	3
646.21	REFERENCE MARKER PANEL	EA	1
646.22	DELINEATOR, SNOWPLOWING MARKER, SUPPLEMENTARY SNOW PLOWING MARKER PANELS	EA	6
646.31	STEEL POST, 1.1 LB/FT	EA	1
646.32	STEEL POST, 2.0 LB/FT	EA	4
647.61	REMOVE AND DISPOSE SIGNS, GROUND MOUNTED TYPE A SIGN SUPPORTS AND FOUNDATIONS - SIZE 1 (UNDER 30 SF)	EA	4
685.11	WHITE EPOXY REFLECTORIZED PAVEMENT STRIPES - 20 MILS	FT	1100
685.12	YELLOW EPOXY REFLECTORIZED PAVEMENT STRIPES - 20 MILS	FT	1100



AFFIX SEAL:
ON:

ALTERED BY:
ON:

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

NYS ROUTE 28 - SH 5659	PIN 9805.93	BRIDGES	CULVERTS C950058	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
RICHFIELD SPRINGS - SCHUYLER LAKE, PART 2	RT 28			SIGN SHEET AND SIGN AND PAVEMENT MARKING SCHEMATIC	DRAWING NO. SGP-01-B SHEET NO. 71
MULTI-CULVERT REPLACEMENT AND REPAIR PROJECT	UTILITY QUALITY LEVEL D				
TOWN OF EXETER	REGION: 09				
COUNTY: OTSEGO				SITE B	

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

FILE NAME = 980593_C950059_RT28_cph_loc.01_c.dgn
 DATE/TIME = 31-JUL-2015 10:26
 USER = gmeyer

DESIGN SUPERVISOR R. WILDER

JOB MANAGER J. L. PHILLIPS

DESIGN D. MELSZER

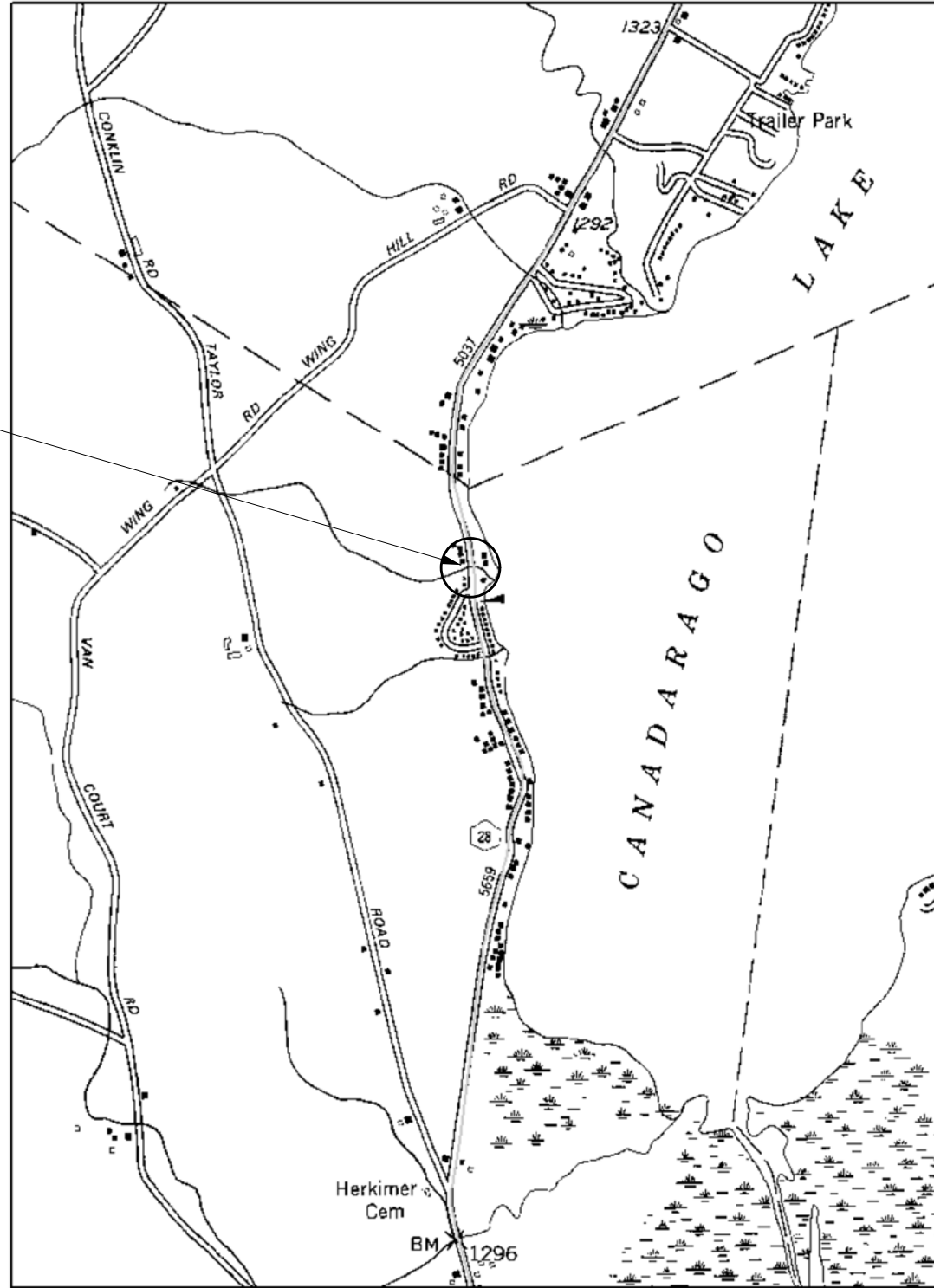
CHECK J. L. PHILLIPS

DRAFTING P. BLOW


CHECK D. MELSZER

PROJECT MANAGER G. WOJCIK

PROJECT SITE C
 C950059
 ROUTE 28
 RM 28 9403 3311



SITE C LOCATION MAP
 NYS ROUTE 28 RM 28 9403 3311
 TOWN OF EXETER
 NOT TO SCALE

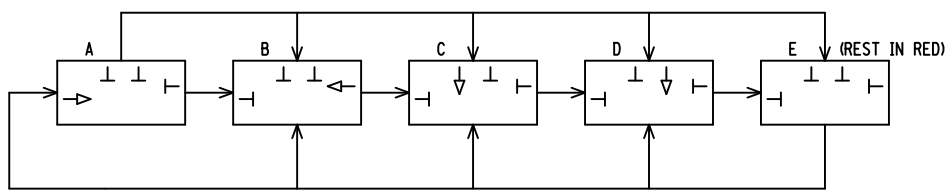
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	RICHFIELD SPRINGS - SCHUYLER LAKE					
	MULTI-CULVERT REPLACEMENT & REPAIR PROJECT				LOCATION MAP	DRAWING NO. LOC-01-C
	TOWN EXETER				SITE C	SHEET NO. 72
	COUNTY: OTSEGO	REGION: 09				 Department of Transportation

FILE NAME = 980593.C950059.RT28.opn_wztc.01.C.dgn
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 USER = jphillips

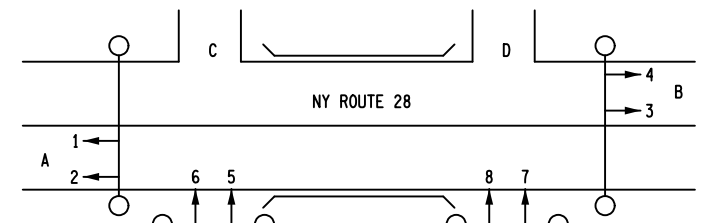
DESIGN SUPERVISOR R. WILDER
 DESIGN MANAGER J. L. PHILLIPS
 CHECK J. L. PHILLIPS
 DRAFTING P. F. BLOW
 CHECK W. C. GRIFFITHS
 PROJECT MANAGER G. WOJCIK

PHASING TABLE									
PHASE	FACE	TIMING (SEC)				INITIAL	EXTENSION	TIME	RECALL
		1, 2	3, 4	5, 6	7, 8				
A	G	R	R	R	8	6	32	NO	
1ST CLEARANCE		Y	R	R	-	-	3.5	-	
2ND CLEARANCE		R	R	R	-	-	SEE NOTE	-	
B	R	G	R	R	8	6	32	NO	
1ST CLEARANCE		R	Y	R	-	-	3.5	-	
2ND CLEARANCE		R	R	R	-	-	SEE NOTE	-	
C	R	R	G	R	8	6	14	NO	
1ST CLEARANCE		R	R	Y	-	-	3.5	-	
2ND CLEARANCE		R	R	R	-	-	SEE NOTE	-	
D	R	R	R	G	8	6	14	NO	
1ST CLEARANCE		R	R	R	Y	-	3.5	-	
2ND CLEARANCE		R	R	R	-	-	SEE NOTE	-	
E (REST IN RED)	R	R	R	R	-	-	1.0	YES	
1ST CLEARANCE		R	R	R	-	-	0.5	-	
2ND CLEARANCE		R	R	R	-	-	0.5	-	
EMERGENCY FLASH	FR	FR	FR	FR	-	-	-	-	

NOTE: DIVIDE THE TRAVEL DISTANCE IN FEET BETWEEN STOP LINES BY 22 FEET PER SECOND FOR THE TIME OF THE PHASE A, PHASE B, PHASE C AND PHASE D 2ND CLEARANCES.

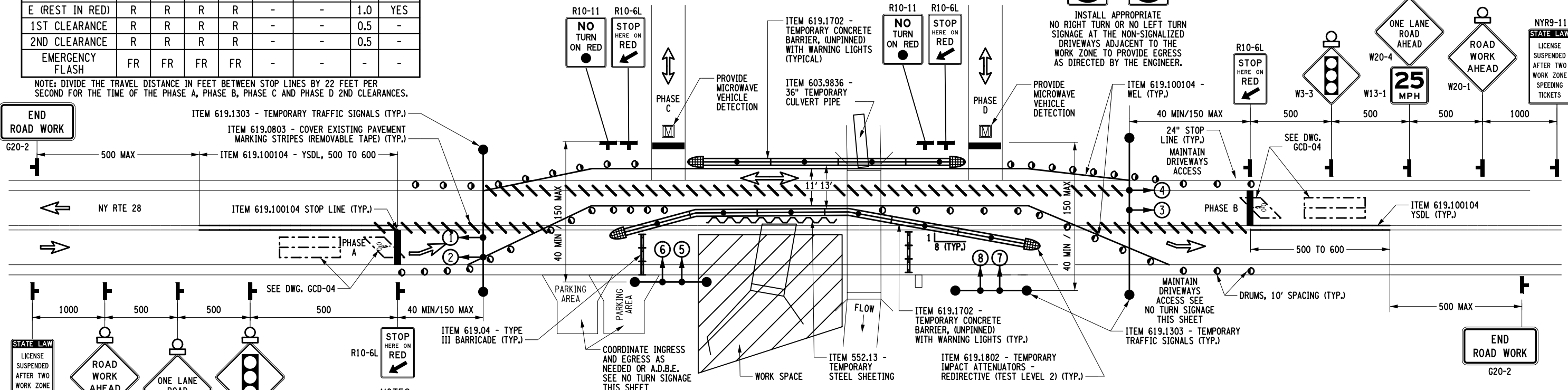


PHASING DIAGRAM



PHASING PLAN

TEMPORARY TRAFFIC SIGNAL SCHEMATIC PHASE ONE (NOT TO SCALE)



NOTES:

- REFER ALSO TO THE MUTCD AND APPLICABLE 619 STANDARD SHEETS.
- THE SIGNAL LOCATION SHALL BE FIELD DETERMINED AS DIRECTED BY THE ENGINEER.
- ADJUSTMENTS IN THE LOCATION OF ADVANCED WARNING SIGNS SHALL BE MADE TO ACCOMMODATE THE HORIZONTAL AND VERTICAL ALIGNMENT OF THE ROADWAY, RECOGNIZING THAT THE DISTANCES SHOWN FOR SIGN SPACING ARE MINIMUMS.
- FLASHING WARNING LIGHTS ARE REQUIRED ON THE SIGNAL AHEAD SIGNS (W3-3). FLASHING WARNING LIGHTS SHALL ALSO BE REQUIRED ON THE ROAD WORK AHEAD SIGNS (W20-1) AND ONE LANE ROAD AHEAD SIGNS (W20-4).
- THE TIMING, PHASING AND DETECTOR LOCATIONS ARE TO BE VERIFIED BY THE REGIONAL TRAFFIC ENGINEER AT LEAST 2 WEEKS PRIOR TO START UP. THE REGIONAL TRAFFIC ENGINEER SHALL APPROVE ANY CHANGES OR ADDITIONS REQUIRED DUE TO OBSERVED TRAFFIC CONDITIONS.
- DETECTORS SHALL BE INSTALLED ON ALL APPROACH LANES AND ALL PHASES SHALL BE ACTUATED. DURATION OF RED CLEARANCE INTERVALS SHALL BE ADEQUATE TO CLEAR THE ONE-LANE SECTION OF CONFLICTING TRAFFIC.
- LOOPS SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD SHEET 680-14.
- OTHER TYPES OF VEHICLE DETECTION EQUIPMENT MAY BE USED IF PRIOR APPROVAL IS OBTAINED FROM THE REGIONAL TRAFFIC ENGINEERING AND SAFETY GROUP. REQUESTS BY THE CONTRACTOR TO USE SUCH ALTERNATIVES SHALL BE ACCOMPANIED BY DETAILED PLANS AND SPECIFICATIONS.
- THE TRAFFIC SIGNAL SHALL REST IN RED. WHEN THE SIGNAL IS CHANGED TO THE FLASHING MODE, EITHER MANUALLY OR AUTOMATICALLY, RED SIGNAL INDICATIONS SHALL BE FLASHED TO ALL APPROACHES.
- REST IN RED FEATURE MAY BE SUBSTITUTED FOR PHASE E.
- EMERGENCY FLASH OPERATION IS CONSIDERED A MALFUNCTION. FLAGGERS ARE REQUIRED UNTIL THE MALFUNCTION IS REPAIRED.
- THE CONTRACTOR SHALL COMMENCE REPAIR WORK ON THIS SIGNAL WITHIN TWO HOURS AFTER HE/SHE HAS BEEN NOTIFIED OF A MALFUNCTION. THE CONTRACTOR HAS AN EIGHT HOUR TIME LIMIT TO MAKE REPAIRS. FLAGGER CONTROL SHALL BE PROVIDED AT THE CONTRACTOR'S EXPENSE UNTIL THE TEMPORARY SIGNAL IS RESTORED TO PROPER OPERATION. IF THE REPAIRS REMAIN UNCOMPLETED AFTER THIS TIME, LIQUIDATED DAMAGES OF ONE DAY WILL BE ASSESSED FOR EACH DAY THE SIGNAL IS MALFUNCTIONING UNTIL IT IS REPAIRED.
- TEMPORARY STOP LINES, CROSSWALKS AND LANE MARKINGS SHALL BE INSTALLED USING ITEM 619.100104, INTERIM PAVEMENT MARKING STRIPES, REMOVABLE WET REFLECTIVE TAPE. EXISTING CONFLICTING PAVEMENT MARKINGS BETWEEN THE ACTIVITY AREA AND THE STOP LINE SHALL BE COVERED USING ITEM 619.0803, COVER EXISTING PAVEMENT MARKING STRIPES (REMOVABLE TAPE).
- MINIMUM CLEARANCE FROM PAVEMENT TO BOTTOM OF SIGNAL HEADS IS 16'-6".
- ALL SIGNAL HEADS SHALL CONTAIN 12" LENSES. ALL SIGNAL FACES SHALL HAVE MUTCD COMPLIANT BACKPLATES.
- POWER SOURCE TO BE DETERMINED BY CONTRACTOR AND POWER COMPANY.
- PROPER POLES TO SUPPORT THE 3-COLOR SIGNAL HEADS TO BE DETERMINED BY THE CONTRACTOR.
- ALL SPAN WIRE, INDUCTANCE LOOP WIRE, SHIELDED LEAD-IN CABLE, TRAFFIC SIGNAL CABLE AND OTHER WIRE USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE NEW MATERIAL MEETING THE APPLICABLE REQUIREMENTS OF SUBSECTION 680-2 OF THE STANDARD SPECIFICATIONS.
- ALL OTHER EQUIPMENT FOR TEMPORARY TRAFFIC SIGNALS SHALL MEET THE REQUIREMENTS OF SUBSECTION 680-2 OF THE STANDARD SPECIFICATIONS EXCEPT FOR THE FOLLOWING MODIFICATIONS:
 - USED EQUIPMENT IN GOOD OPERATING CONDITION MAY BE FURNISHED TO PROVIDE THE REQUIRED OPERATION OF THE SIGNAL.
 - MANUFACTURER'S CERTIFICATION OF COMPLIANCE WILL NOT BE REQUIRED.
 - THE SIGNAL CONTROLLER MAY BE EITHER SOLID STATE OR MICRO-PROCESSOR BASED.
 - THE MATERIAL AND PAINTING REQUIREMENTS OF SECTION 724-04, TRAFFIC SIGNAL HEADS, OF THE STANDARD SPECIFICATIONS SHALL NOT APPLY EXCEPT THAT THE SIGNAL HEAD HOUSING SHALL BE MADE OF ALUMINUM OR POLYCARBONATE AND SHALL BE DARK GREEN IN COLOR.
- THE DIRECTIONAL TRAVEL ARROWS SHOWN HERE AND ON OTHER WZTC DRAWINGS ARE NOT PAVEMENT MARKINGS.

AFFIX SEAL: ON: _____
 ALTERED BY: ON: _____



AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 28 - SH 5037 RICHFIELD SPRINGS - SCHUYLER LAKE MULTI-CULVERT REPLACEMENT & REPAIR PROJECT TOWN OF EXETER COUNTY: OTSEGO	PIN 9805.93 ROUTE 28 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS C950059	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED WORK ZONE TRAFFIC CONTROL PHASE 1 SITE C	CONTRACT NUMBER D262989 DRAWING NO. WZTC-01-C SHEET NO. 73
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IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



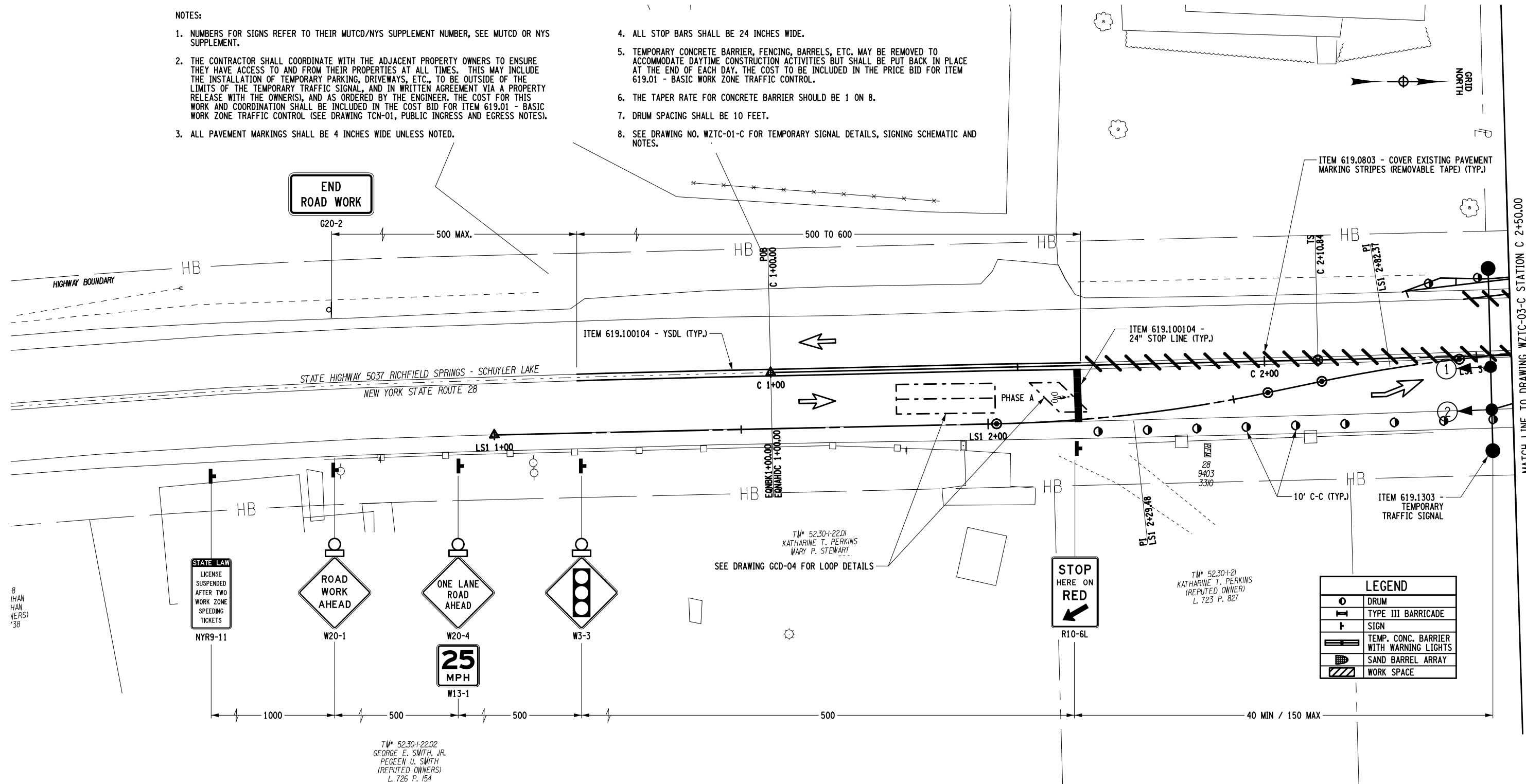
FILE NAME = 980593.C950059_RT28_oph_wztc.02.C.dgn
 DATE/TIME = 30-JUL-2015 13:13
 USER = jphillips

PROJECT MANAGER G. WOJCIK
 CHECK W. C. GRIFFITHS
 DRAFTING P. F. BLOW
 CHECK J. L. PHILLIPS
 DESIGN P. F. BLOW
 JOB MANAGER J. L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER

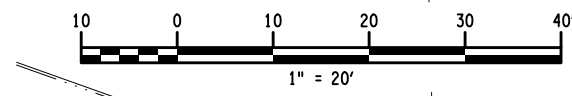
NOTES:

1. NUMBERS FOR SIGNS REFER TO THEIR MUTCD/NYS SUPPLEMENT NUMBER, SEE MUTCD OR NYS SUPPLEMENT.
2. THE CONTRACTOR SHALL COORDINATE WITH THE ADJACENT PROPERTY OWNERS TO ENSURE THEY HAVE ACCESS TO AND FROM THEIR PROPERTIES AT ALL TIMES. THIS MAY INCLUDE THE INSTALLATION OF TEMPORARY PARKING, DRIVEWAYS, ETC., TO BE OUTSIDE OF THE LIMITS OF THE TEMPORARY TRAFFIC SIGNAL, AND IN WRITTEN AGREEMENT VIA A PROPERTY RELEASE WITH THE OWNER(S), AND AS ORDERED BY THE ENGINEER. THE COST FOR THIS WORK AND COORDINATION SHALL BE INCLUDED IN THE COST BID FOR ITEM 619.01 - BASIC WORK ZONE TRAFFIC CONTROL (SEE DRAWING TCN-01, PUBLIC INGRESS AND EGRESS NOTES).
3. ALL PAVEMENT MARKINGS SHALL BE 4 INCHES WIDE UNLESS NOTED.

4. ALL STOP BARS SHALL BE 24 INCHES WIDE.
5. TEMPORARY CONCRETE BARRIER, FENCING, BARRELS, ETC. MAY BE REMOVED TO ACCOMMODATE DAYTIME CONSTRUCTION ACTIVITIES BUT SHALL BE PUT BACK IN PLACE AT THE END OF EACH DAY. THE COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 619.01 - BASIC WORK ZONE TRAFFIC CONTROL.
6. THE TAPER RATE FOR CONCRETE BARRIER SHOULD BE 1 ON 8.
7. DRUM SPACING SHALL BE 10 FEET.
8. SEE DRAWING NO. WZTC-01-C FOR TEMPORARY SIGNAL DETAILS, SIGNING SCHEMATIC AND NOTES.



LEGEND	
	DRUM
	TYPE III BARRICADE
	SIGN
	TEMP. CONC. BARRIER WITH WARNING LIGHTS
	SAND BARREL ARRAY
	WORK SPACE



TW* 52.30+22.02
 GEORGE E. SMITH, JR.
 PEGEEN U. SMITH
 (REPUTED OWNERS)
 L. 726 P. 154

TW* 52.30+21
 KATHARINE T. PERKINS
 (REPUTED OWNER)
 L. 723 P. 827

TW* 52.30+22.01
 KATHARINE T. PERKINS
 MARY P. STEWART

STATE LAW
 LICENSE
 SUSPENDED
 AFTER TWO
 WORK ZONE
 SPEEDING
 TICKETS
 NYR9-11

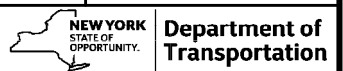
8
 IHAN
 HAN
 VERS)
 '38

AFFIX SEAL: ON:	ALTERED BY: ON:

PVMS NOTE:
 PORTABLE VARIABLE MESSAGE SIGNS (PVMS) SHALL BE LOCATED ON ROUTE 28 ONE MILE NORTH AND SOUTH OF THE CULVERT SITE. THE FINAL LOCATIONS SHALL BE APPROVED BY THE ENGINEER (SEE THE SPECIAL NOTE PORTABLE VARIABLE MESSAGE SIGNS ITEM 619.110202 IN THE CONTRACT PROPOSAL).

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 28 - SH 5037 RICHFIELD SPRINGS - SCHUYLER LAKE MULTI-CULVERT REPLACEMENT & REPAIR PROJECT TOWN OF EXETER COUNTY: OTSEGO REGION: 09	PIN 9805.93 ROUTE 28 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS C950059	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED WORK ZONE TRAFFIC CONTROL PLAN PHASE 1 SITE C	CONTRACT NUMBER D262989 DRAWING NO. WZTC-02-C SHEET NO. 74
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IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



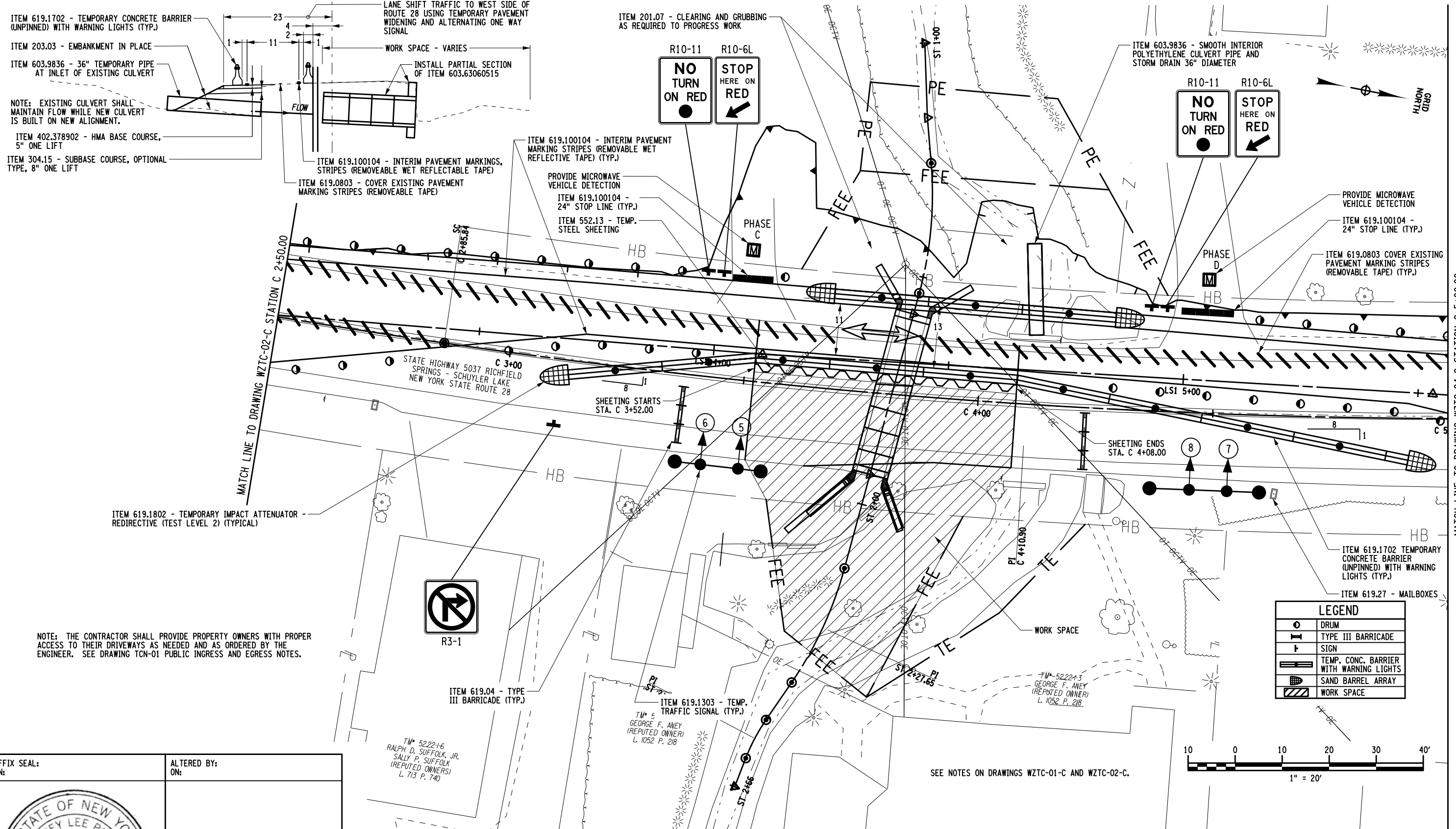
MATCH LINE TO DRAWING WZTC-03-C STATION C 2+50.00

FILE NAME = 980593.C950059.RT28.opn_wztc.03.C.dgn
 DATE/TIME = 30-JUL-2015 13:13
 USER = jphillips

PROJECT MANAGER G. WODJICK
 CHECK W. C. GRIFFITHS
 DRAFTING P. F. BLOW
 CHECK J. L. PHILLIPS
 DESIGN P. F. BLOW
 JOB MANAGER J. L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER

PHASE 1 - TYPICAL SECTION

NOT TO SCALE



AFFIX SEAL: ON: _____

ALTERED BY: ON: _____



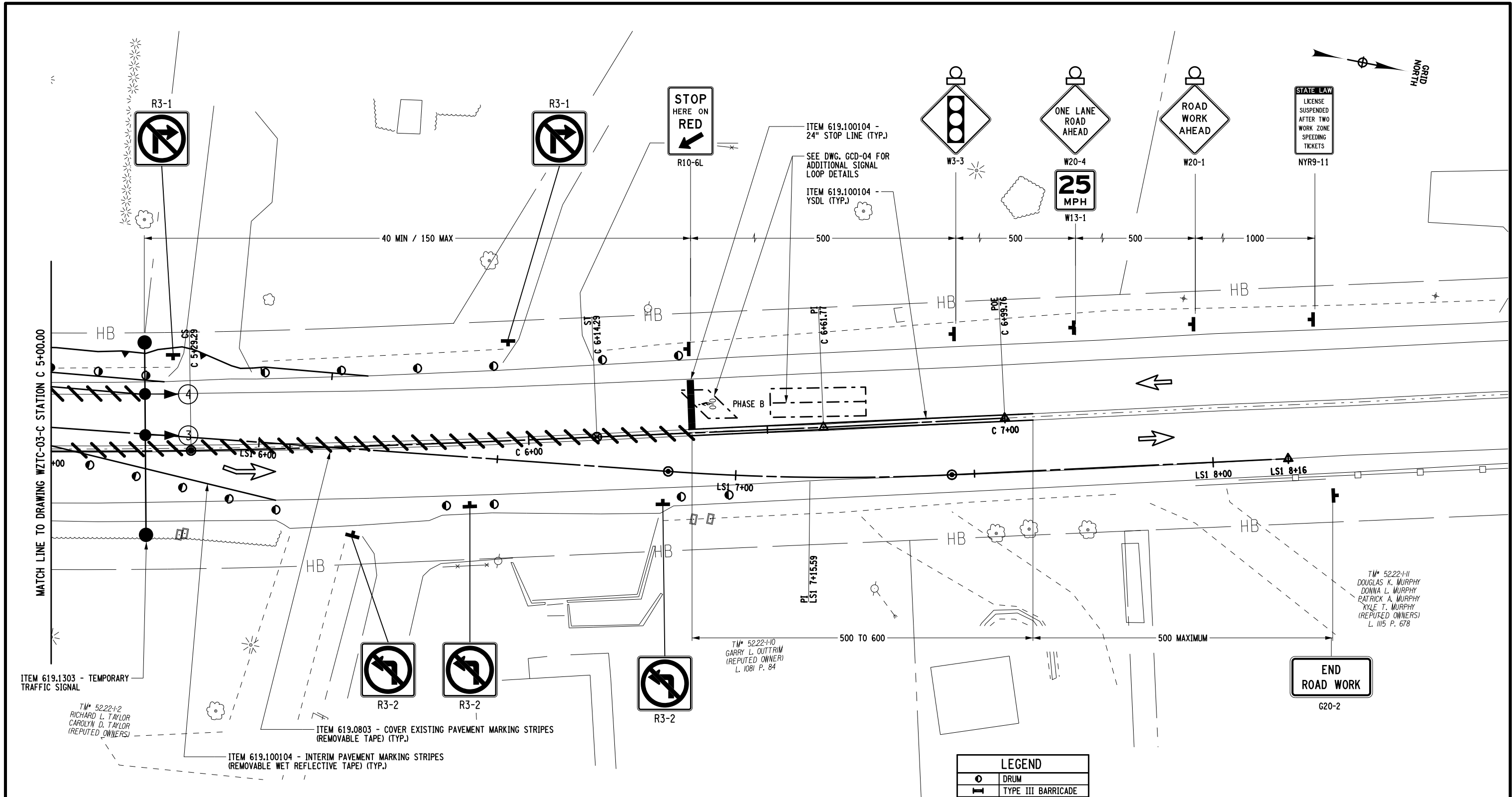
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 28 - SH 5037	PIN 9805.93	BRIDGES	CULVERTS C950059	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	RICHFIELD SPRINGS - SCHUYLER LAKE	ROUTE 28			WORK ZONE TRAFFIC CONTROL PLAN PHASE 1 SITE C	DRAWING NO. WZTC-03-C
	MULTI-CULVERT REPLACEMENT & REPAIR PROJECT	UTILITY QUALITY LEVEL D				SHEET NO. 75
	TOWN OF EXETER	REGION: 09				
COUNTY: OTSEGO						

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



FILE NAME = 980593_C950059_RT28_oph_wztc_04.C.dgn
 DATE/TIME = 30-JUL-2015 13:13
 USER = jphillips

DESIGN SUPERVISOR R. WILDER
 JOB MANAGER J. L. PHILLIPS
 DESIGN P. F. BLOW
 CHECK J. L. PHILLIPS
 DRAFTING P. F. BLOW
 CHECK W. C. GRIFFITHS
 PROJECT MANAGER G. WOJCIK



AFFIX SEAL: ON:

ALTERED BY: ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 28 - SH 5037	PIN 9805.93 ROUTE 28 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS C950059	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989	
	RICHFIELD SPRINGS - SCHUYLER LAKE					WORK ZONE TRAFFIC CONTROL PLAN PHASE 1	
	MULTI-CULVERT REPLACEMENT & REPAIR PROJECT						DRAWING NO. WZTC-04-C SHEET NO. 76
	TOWN OF EXETER						
COUNTY: OTSEGO	REGION: 09	SITE C		Department of Transportation			

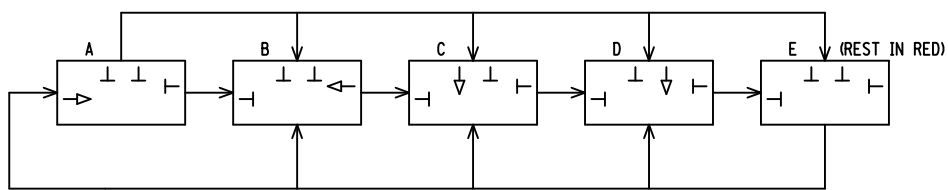
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

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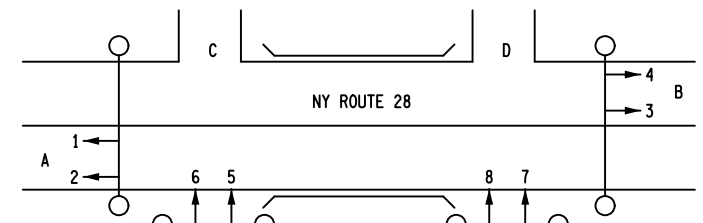
PROJECT MANAGER G. WOJCIK
 CHECK W. C. GRIFFITHS
 DRAFTING P. F. BLOW
 DESIGN J. L. PHILLIPS
 DESIGN P. F. BLOW
 JOB MANAGER J. L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER

PHASING TABLE									
PHASE	FACE	1, 2				TIMING (SEC)			
		3, 4	5, 6	7, 8	INITIAL	EXTENSION	TIME	RECALL	
A	G	R	R	R	8	6	32	NO	
1ST CLEARANCE	Y	R	R	R	-	-	3.5	-	
2ND CLEARANCE	R	R	R	R	-	-	SEE NOTE	-	
B	R	G	R	R	8	6	32	NO	
1ST CLEARANCE	R	Y	R	R	-	-	3.5	-	
2ND CLEARANCE	R	R	R	R	-	-	SEE NOTE	-	
C	R	R	G	R	8	6	14	NO	
1ST CLEARANCE	R	R	Y	R	-	-	3.5	-	
2ND CLEARANCE	R	R	R	R	-	-	SEE NOTE	-	
D	R	R	R	G	8	6	14	NO	
1ST CLEARANCE	R	R	R	Y	-	-	3.5	-	
2ND CLEARANCE	R	R	R	R	-	-	SEE NOTE	-	
E (REST IN RED)	R	R	R	R	-	-	1.0	YES	
1ST CLEARANCE	R	R	R	R	-	-	0.5	-	
2ND CLEARANCE	R	R	R	R	-	-	0.5	-	
EMERGENCY FLASH	FR	FR	FR	FR	-	-	-	-	

NOTE: DIVIDE THE TRAVEL DISTANCE IN FEET BETWEEN STOP LINES BY 22 FEET PER SECOND FOR THE TIME OF THE PHASE A, PHASE B, PHASE C AND PHASE D 2ND CLEARANCES.

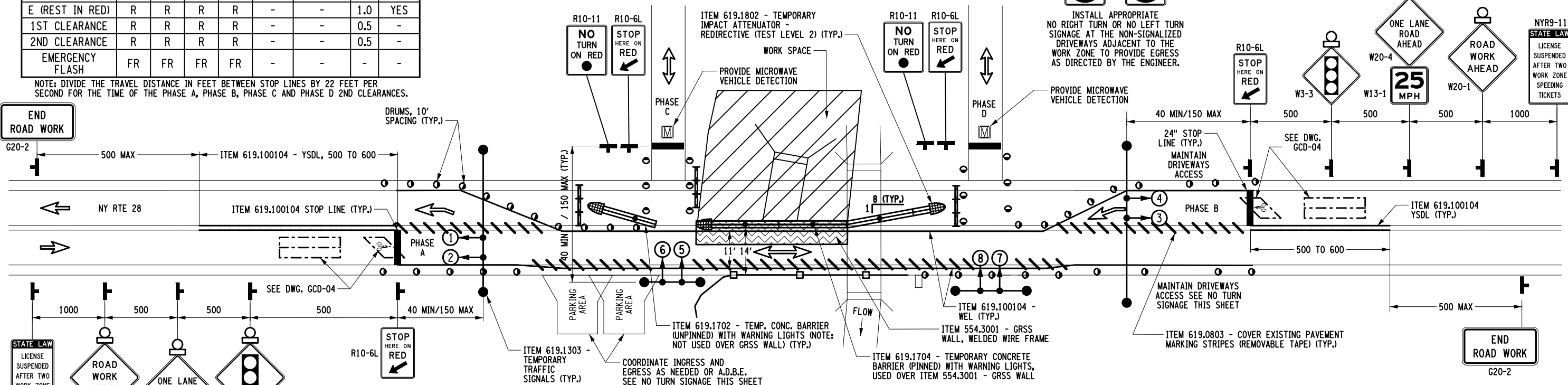


PHASING DIAGRAM



PHASING PLAN

TEMPORARY TRAFFIC SIGNAL SCHEMATIC PHASE TWO (NOT TO SCALE)



NO TURN SIGNAGE



INSTALL APPROPRIATE NO RIGHT TURN OR NO LEFT TURN SIGNAGE AT THE NON-SIGNALIZED DRIVEWAYS ADJACENT TO THE WORK ZONE TO PROVIDE EGRESS AS DIRECTED BY THE ENGINEER.

NOTES:

- REFER ALSO TO THE MUTCD AND APPLICABLE 619 STANDARD SHEETS.
- THE SIGNAL LOCATION SHALL BE FIELD DETERMINED AS DIRECTED BY THE ENGINEER.
- ADJUSTMENTS IN THE LOCATION OF ADVANCED WARNING SIGNS SHALL BE MADE TO ACCOMMODATE THE HORIZONTAL AND VERTICAL ALIGNMENT OF THE ROADWAY, RECOGNIZING THAT THE DISTANCES SHOWN FOR SIGN SPACING ARE MINIMUMS.
- FLASHING WARNING LIGHTS ARE REQUIRED ON THE SIGNAL AHEAD SIGNS (W3-3). FLASHING WARNING LIGHTS SHALL ALSO BE REQUIRED ON THE ROAD WORK AHEAD SIGNS (W20-1) AND ONE LANE ROAD AHEAD SIGNS (W20-4).
- THE TIMING, PHASING AND DETECTOR LOCATIONS ARE TO BE VERIFIED BY THE REGIONAL TRAFFIC ENGINEER AT LEAST 2 WEEKS PRIOR TO START UP. THE REGIONAL TRAFFIC ENGINEER SHALL APPROVE ANY CHANGES OR ADDITIONS REQUIRED DUE TO OBSERVED TRAFFIC CONDITIONS.
- DETECTORS SHALL BE INSTALLED ON ALL APPROACH LANES AND ALL PHASES SHALL BE ACTUATED. DURATION OF RED CLEARANCE INTERVALS SHALL BE ADEQUATE TO CLEAR THE ONE-LANE SECTION OF CONFLICTING TRAFFIC.
- LOOPS SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD SHEET 680-14.
- OTHER TYPES OF VEHICLE DETECTION EQUIPMENT MAY BE USED IF PRIOR APPROVAL IS OBTAINED FROM THE REGIONAL TRAFFIC ENGINEERING AND SAFETY GROUP. REQUESTS BY THE CONTRACTOR TO USE SUCH ALTERNATIVES SHALL BE ACCOMPANIED BY DETAILED PLANS AND SPECIFICATIONS.
- THE TRAFFIC SIGNAL SHALL REST IN RED. WHEN THE SIGNAL IS CHANGED TO THE FLASHING MODE, EITHER MANUALLY OR AUTOMATICALLY, RED SIGNAL INDICATIONS SHALL BE FLASHED TO ALL APPROACHES.
- REST IN RED FEATURE MAY BE SUBSTITUTED FOR PHASE E.
- EMERGENCY FLASH OPERATION IS CONSIDERED A MALFUNCTION. FLAGGERS ARE REQUIRED UNTIL THE MALFUNCTION IS REPAIRED.
- THE CONTRACTOR SHALL COMMENCE REPAIR WORK ON THIS SIGNAL WITHIN TWO HOURS AFTER HE/SHE HAS BEEN NOTIFIED OF A MALFUNCTION. THE CONTRACTOR HAS AN EIGHT HOUR TIME LIMIT TO MAKE REPAIRS. FLAGGER CONTROL SHALL BE PROVIDED AT THE CONTRACTOR'S EXPENSE UNTIL THE TEMPORARY SIGNAL IS RESTORED TO PROPER OPERATION. IF THE REPAIRS REMAIN UNCOMPLETED AFTER THIS TIME, LIQUIDATED DAMAGES OF ONE DAY WILL BE ASSESSED FOR EACH DAY THE SIGNAL IS MALFUNCTIONING UNTIL IT IS REPAIRED.
- TEMPORARY STOP LINES, CROSSWALKS AND LANE MARKINGS SHALL BE INSTALLED USING ITEM 619.100104, INTERIM PAVEMENT MARKING STRIPES, REMOVABLE WET REFLECTIVE TAPE. EXISTING CONFLICTING PAVEMENT MARKINGS BETWEEN THE ACTIVITY AREA AND THE STOP LINE SHALL BE COVERED USING ITEM 619.0803, COVER EXISTING PAVEMENT MARKING STRIPES (REMOVABLE TAPE).
- MINIMUM CLEARANCE FROM PAVEMENT TO BOTTOM OF SIGNAL HEADS IS 16'-6".
- ALL SIGNAL HEADS SHALL CONTAIN 12" LENSES. ALL SIGNAL FACES SHALL HAVE MUTCD COMPLIANT BACKPLATES.
- POWER SOURCE TO BE DETERMINED BY CONTRACTOR AND POWER COMPANY.
- PROPER POLES TO SUPPORT THE 3-COLOR SIGNAL HEADS TO BE DETERMINED BY THE CONTRACTOR.
- ALL SPAN WIRE, INDUCTANCE LOOP WIRE, SHIELDED LEAD-IN CABLE, TRAFFIC SIGNAL CABLE AND OTHER WIRE USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE NEW MATERIAL MEETING THE APPLICABLE REQUIREMENTS OF SUBSECTION 680-2 OF THE STANDARD SPECIFICATIONS.
- ALL OTHER EQUIPMENT FOR TEMPORARY TRAFFIC SIGNALS SHALL MEET THE REQUIREMENTS OF SUBSECTION 680-2 OF THE STANDARD SPECIFICATIONS EXCEPT FOR THE FOLLOWING MODIFICATIONS:
 - USED EQUIPMENT IN GOOD OPERATING CONDITION MAY BE FURNISHED TO PROVIDE THE REQUIRED OPERATION OF THE SIGNAL.
 - MANUFACTURER'S CERTIFICATION OF COMPLIANCE WILL NOT BE REQUIRED.
 - THE SIGNAL CONTROLLER MAY BE EITHER SOLID STATE OR MICRO-PROCESSOR BASED.
 - THE MATERIAL AND PAINTING REQUIREMENTS OF SECTION 724-04, TRAFFIC SIGNAL HEADS, OF THE STANDARD SPECIFICATIONS SHALL NOT APPLY EXCEPT THAT THE SIGNAL HEAD HOUSING SHALL BE MADE OF ALUMINUM OR POLYCARBONATE AND SHALL BE DARK GREEN IN COLOR.
- THE DIRECTIONAL TRAVEL ARROWS SHOWN HERE AND ON OTHER WZTC DRAWINGS ARE NOT PAVEMENT MARKINGS.

AFFIX SEAL: ON: _____
 ALTERED BY: ON: _____



AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 28 - SH 5037 RICHFIELD SPRINGS - SCHUYLER LAKE MULTI-CULVERT REPLACEMENT & REPAIR PROJECT TOWN OF EXETER COUNTY: OTSEGO	PIN 9805.93 ROUTE 28 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS C950059	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED WORK ZONE TRAFFIC CONTROL PHASE 2 SITE C	CONTRACT NUMBER D262989 DRAWING NO. WZTC-05-C SHEET NO. 77
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IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

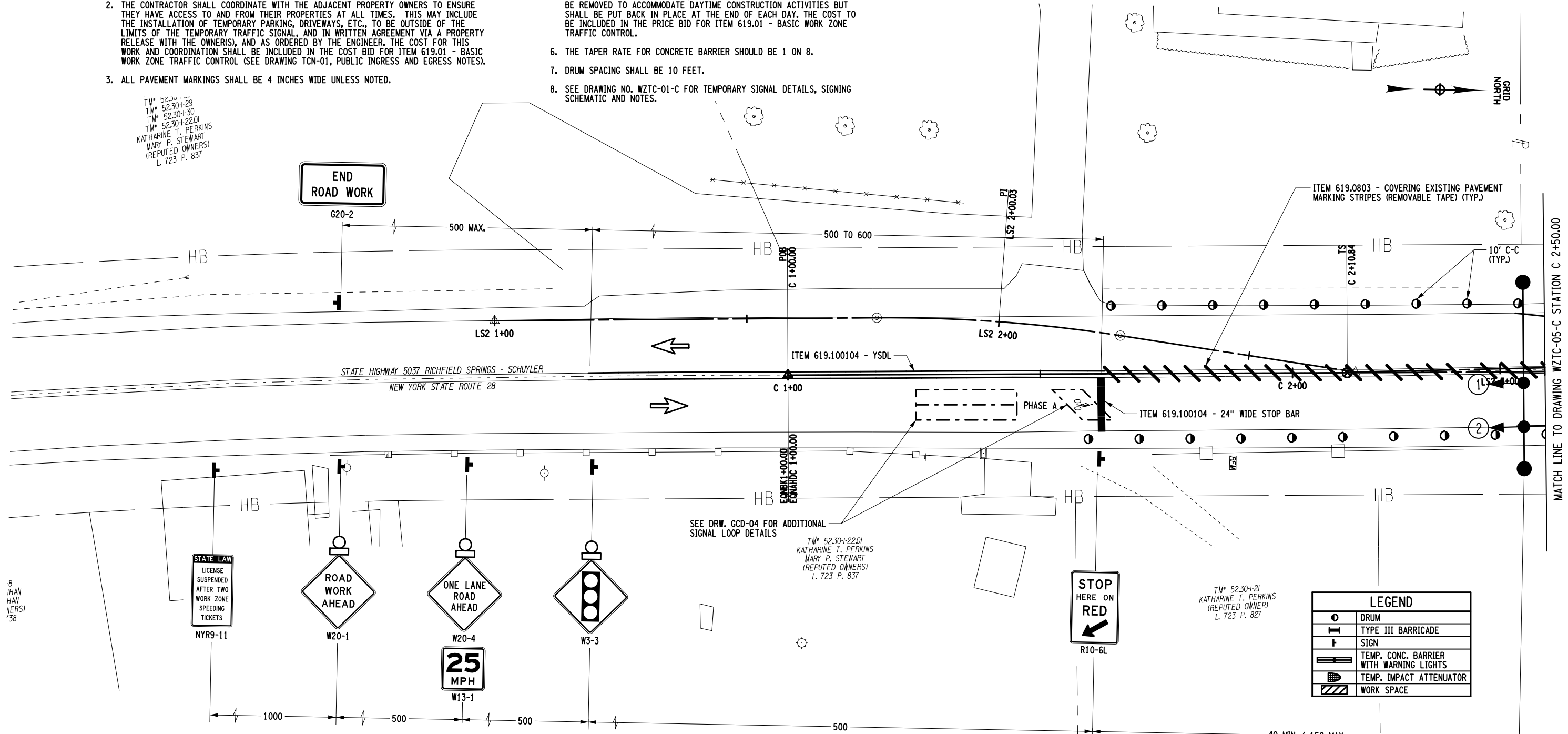


NOTES:

- NUMBERS FOR SIGNS REFER TO THEIR MUTCD/NYS SUPPLEMENT NUMBER, SEE MUTCD OR NYS SUPPLEMENT.
- THE CONTRACTOR SHALL COORDINATE WITH THE ADJACENT PROPERTY OWNERS TO ENSURE THEY HAVE ACCESS TO AND FROM THEIR PROPERTIES AT ALL TIMES. THIS MAY INCLUDE THE INSTALLATION OF TEMPORARY PARKING, DRIVEWAYS, ETC., TO BE OUTSIDE OF THE LIMITS OF THE TEMPORARY TRAFFIC SIGNAL, AND IN WRITTEN AGREEMENT VIA A PROPERTY RELEASE WITH THE OWNER(S), AND AS ORDERED BY THE ENGINEER. THE COST FOR THIS WORK AND COORDINATION SHALL BE INCLUDED IN THE COST BID FOR ITEM 619.01 - BASIC WORK ZONE TRAFFIC CONTROL (SEE DRAWING TCN-01, PUBLIC INGRESS AND EGRESS NOTES).
- ALL PAVEMENT MARKINGS SHALL BE 4 INCHES WIDE UNLESS NOTED.
- ALL STOP BARS SHALL BE 24 INCHES WIDE.
- TEMPORARY CONCRETE BARRIER, FENCING, IMPACT ATTENUATORS, ETC. MAY BE REMOVED TO ACCOMMODATE DAYTIME CONSTRUCTION ACTIVITIES BUT SHALL BE PUT BACK IN PLACE AT THE END OF EACH DAY. THE COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 619.01 - BASIC WORK ZONE TRAFFIC CONTROL.
- THE TAPER RATE FOR CONCRETE BARRIER SHOULD BE 1 ON 8.
- DRUM SPACING SHALL BE 10 FEET.
- SEE DRAWING NO. WZTC-01-C FOR TEMPORARY SIGNAL DETAILS, SIGNING SCHEMATIC AND NOTES.

TM# 52.30-1-29
 TM# 52.30-1-30
 TM# 52.30-1-22.01
 KATHARINE T. PERKINS
 MARY P. STEWART
 (REPUTED OWNERS)
 L. 723 P. 837

END ROAD WORK
 G20-2



STATE LAW
 LICENSE SUSPENDED AFTER TWO WORK ZONE SPEEDING TICKETS
 NYR9-11

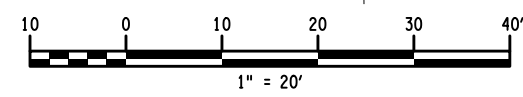
ROAD WORK AHEAD
 W20-1

ONE LANE ROAD AHEAD
 W20-4

25 MPH
 W13-1

STOP HERE ON RED
 R10-6L

LEGEND	
	DRUM
	TYPE III BARRICADE
	SIGN
	TEMP. CONC. BARRIER WITH WARNING LIGHTS
	TEMP. IMPACT ATTENUATOR
	WORK SPACE



TM# 52.30-1-22.02
 ORGE E. SMITH, JR.
 EUGENE U. SMITH
 (REPUTED OWNERS)
 L. 726 P. 154

AFFIX SEAL:
 ON:

ALTERED BY:
 ON:

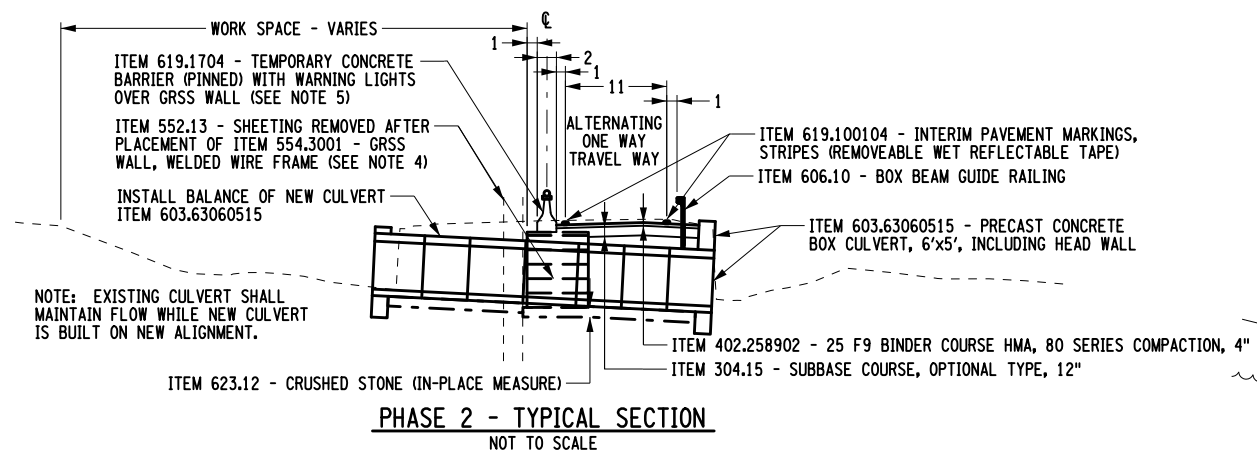


AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 28 - SH 5037	PIN 9805.93	BRIDGES	CULVERTS C950059	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	RICHFIELD SPRINGS - SCHUYLER LAKE	ROUTE 28			WORK ZONE TRAFFIC CONTROL PLAN PHASE 2	DRAWING NO. WZTC-06-C
	MULTI-CULVERT REPLACEMENT & REPAIR PROJECT	UTILITY QUALITY LEVEL D			SITE C	SHEET NO. 78
	TOWN OF EXETER					
	COUNTY: OTSEGO	REGION: 09				

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

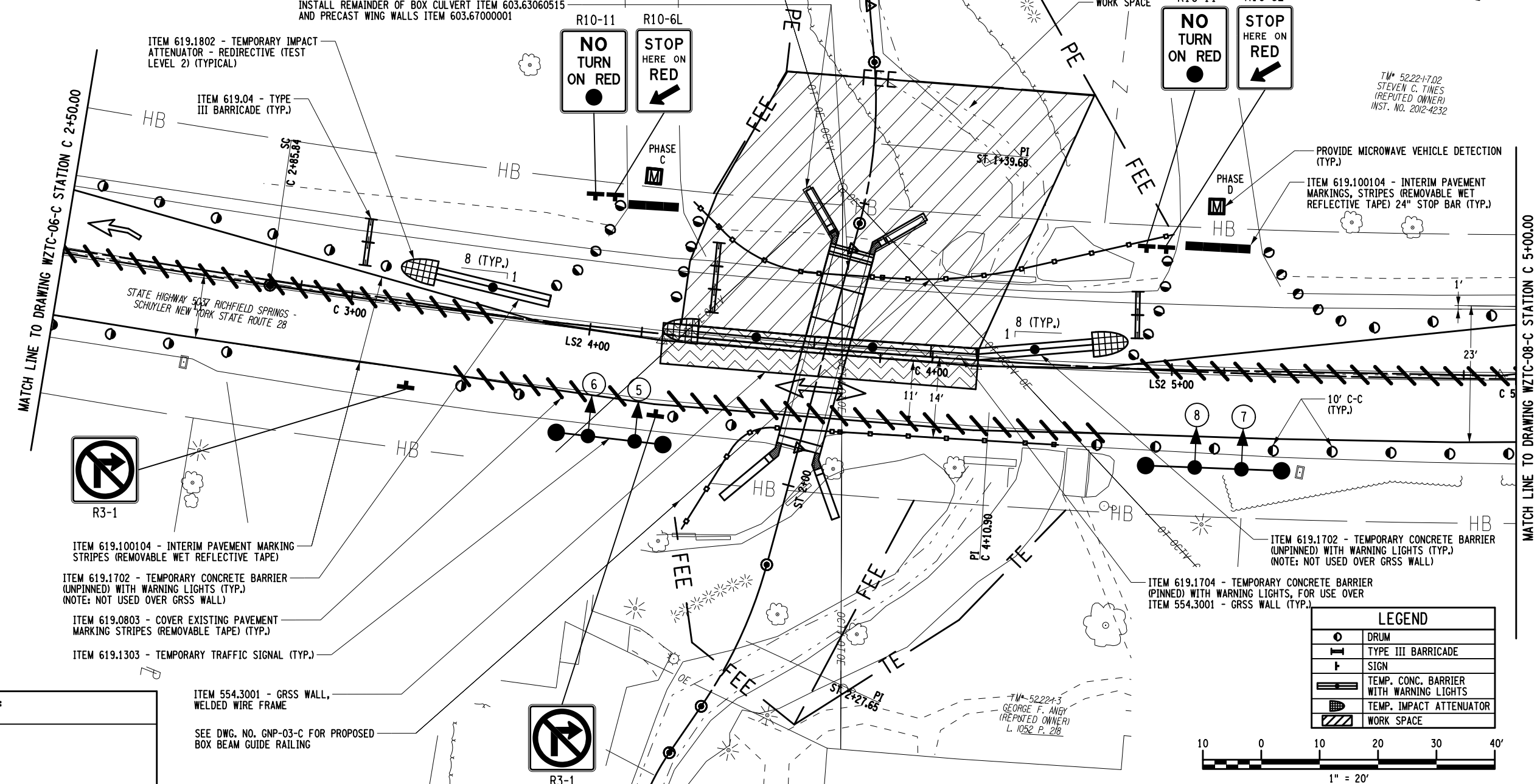
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 USER = jphillips

PROJECT MANAGER G. WOJCIK
 CHECK W. C. GRIFFITHS
 DRAFTING P. F. BLOW
 CHECK J. L. PHILLIPS
 DESIGN P. F. BLOW
 JOB MANAGER J. L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER

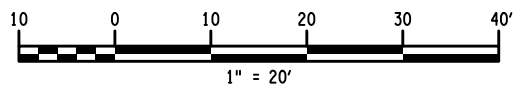


NOTES:

1. REFER TO DRAWING TCN-01 FOR ADDITIONAL INFORMATION CONCERNING WZTC OPERATIONS AND CONSTRUCTION PROCEDURES.
2. REFER TO STANDARD SHEET 619.62 FOR ADDITIONAL INFORMATION ON SET UP AND OPERATION FOR WZTC.
3. SEE NOTES ON DRAWINGS WZTC-05-C AND WZTC-06-C.
4. SHIFT TRAFFIC BACK TO EAST SIDE OF ROUTE 28 AFTER FIRST HALF OF CULVERT AND PAVEMENT SECTION ARE CONSTRUCTED.
5. STOP GRSS WALL IN THE MIDDLE OF THE SUBBASE COURSE TO PROVIDE COVERAGE ABOVE GEOTEXTILE MATERIAL AND THE HOT ASPHALT. DIFFERENCE IN IN GRADE FROM ONE SIDE OF PINNED BARRIER TO THE OTHER SIDE SHALL NOT EXCEED 10". ONCE PHASE TWO CULVERT WORK IS COMPLETED THE BALANCE OF THE BINDER AND TP COURSE CAN BE INSTALLED.



LEGEND	
	DRUM
	TYPE III BARRICADE
	SIGN
	TEMP. CONC. BARRIER WITH WARNING LIGHTS
	TEMP. IMPACT ATTENUATOR
	WORK SPACE



AFFIX SEAL: ON: _____
 ALTERED BY: ON: _____



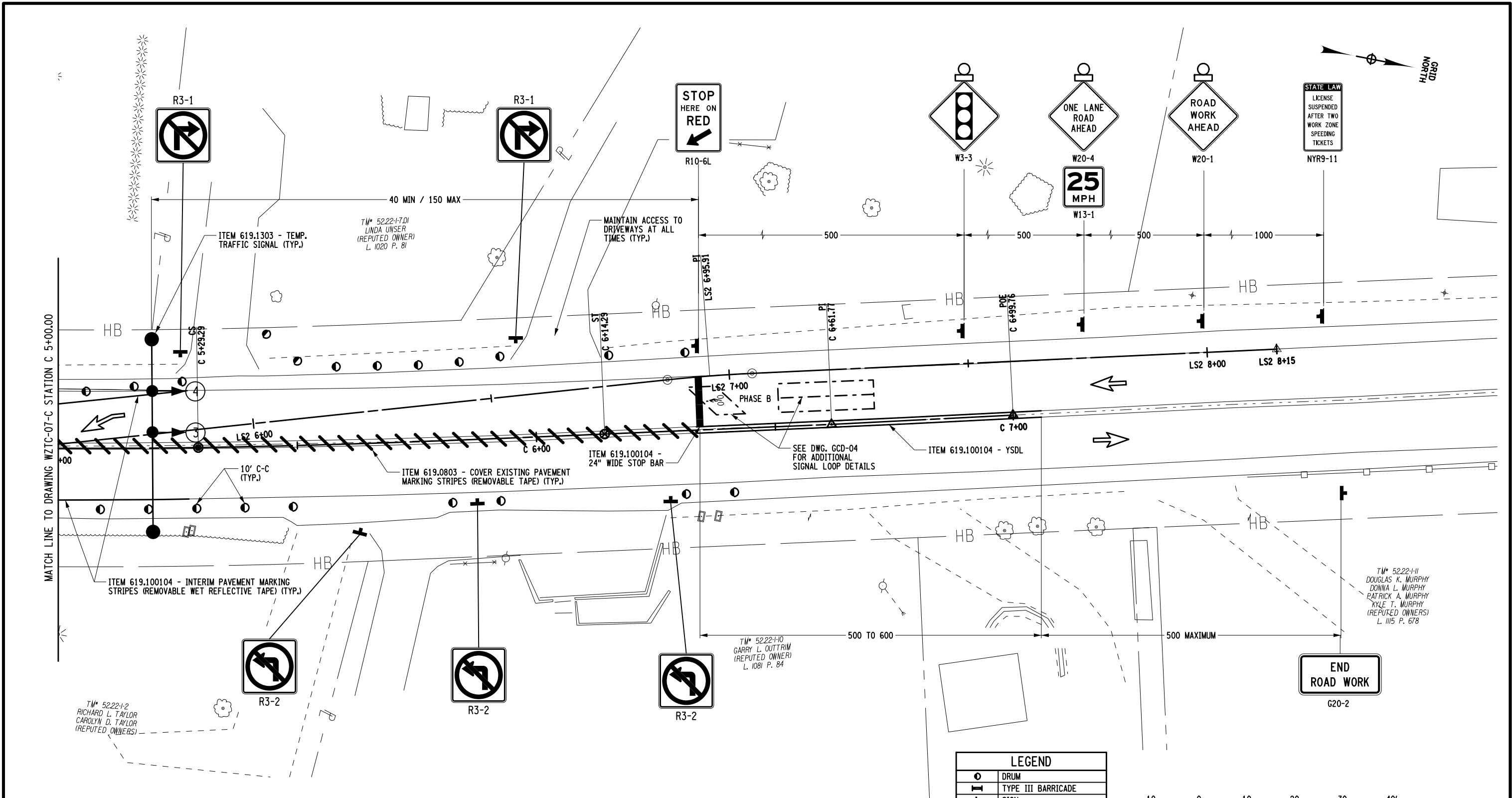
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 28 - SH 5037 RICHFIELD SPRINGS - SCHUYLER LAKE MULTI-CULVERT REPLACEMENT & REPAIR PROJECT TOWN OF EXETER COUNTY: OTSEGO REGION: 09	PIN 9805.93 ROUTE 28 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS C950059	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED WORK ZONE TRAFFIC CONTROL PLAN PHASE 2 SITE C	CONTRACT NUMBER D262989 DRAWING NO. WZTC-07-C SHEET NO. 79
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IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

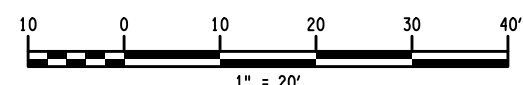


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 USER = jphillips

DESIGN SUPERVISOR R. WILDER
 JOB MANAGER J. L. PHILLIPS
 DESIGN P. F. BLOW
 CHECK J. L. PHILLIPS
 DRAFTING P. F. BLOW
 CHECK W. C. GRIFFITHS
 PROJECT MANAGER G. WOJCIK



LEGEND	
	DRUM
	TYPE III BARRICADE
	SIGN
	TEMP. CONC. BARRIER WITH WARNING LIGHTS
	TEMP. IMPACT ATTENUATOR
	WORK SPACE



SEE NOTES ON DRAWINGS WZTC-05-C AND WZTC-06-C

AFFIX SEAL: ON:	ALTERED BY: ON:

AS-BUILT REVISIONS
 DESCRIPTION OF ALTERATIONS:

NYS ROUTE 28 - SH 5037
 RICHFIELD SPRINGS - SCHUYLER LAKE
 MULTI-CULVERT REPLACEMENT & REPAIR PROJECT
 TOWN OF EXETER
 COUNTY: OTSEGO REGION: 09

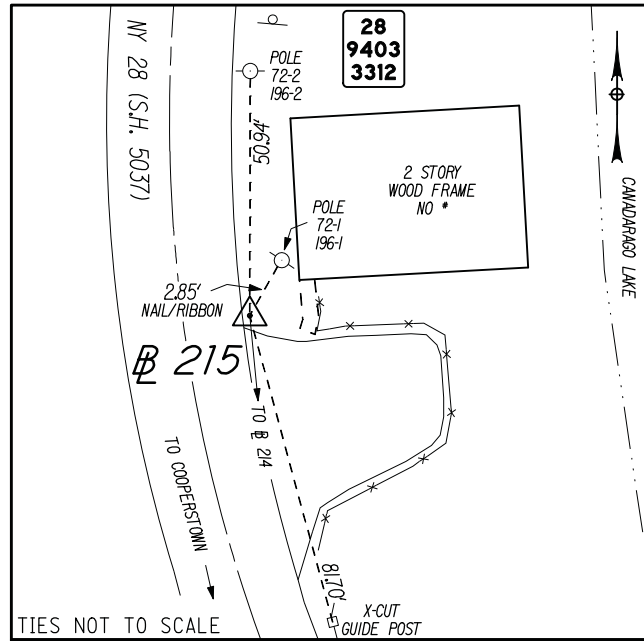
PIN 9805.93
 ROUTE 28
 UTILITY QUALITY LEVEL D

BRIDGES
 CULVERTS C950059
 ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED
 WORK ZONE TRAFFIC CONTROL PLAN
 PHASE 2

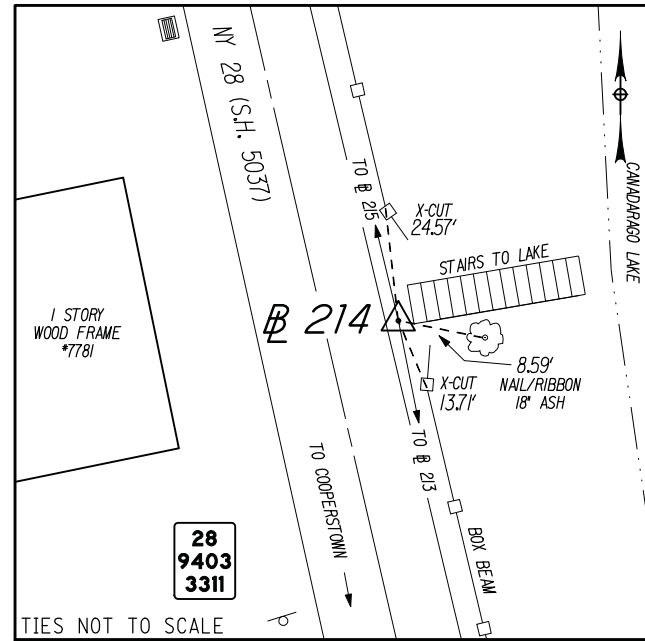
CONTRACT NUMBER
 D262989
 DRAWING NO. WZTC-08-C
 SHEET NO. 80

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

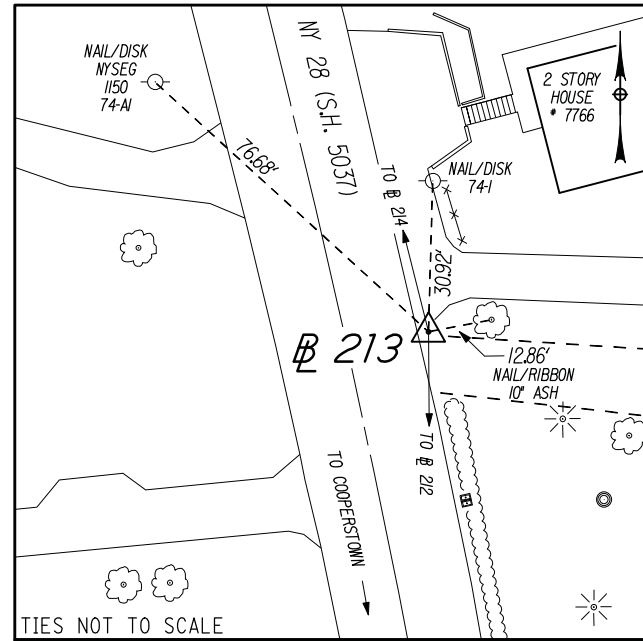




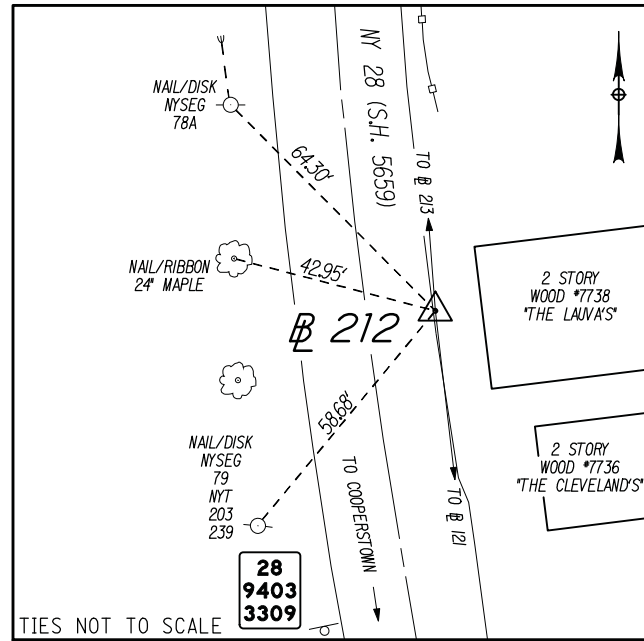
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 ALUMINUM CIR STAMPED "SHUMAKER ENGRS"
 1.30 MILES NORTH OF TAYLOR ROAD
 520' SOUTH OF RM 28-9403-3313
 13.6' EAST OF C NY 28
 NYSPCS EAST ZONE NAD 83/CORS96
 N: 1448436.9473 NAVD88
 E: 351294.4906 ELEV: 1299.675



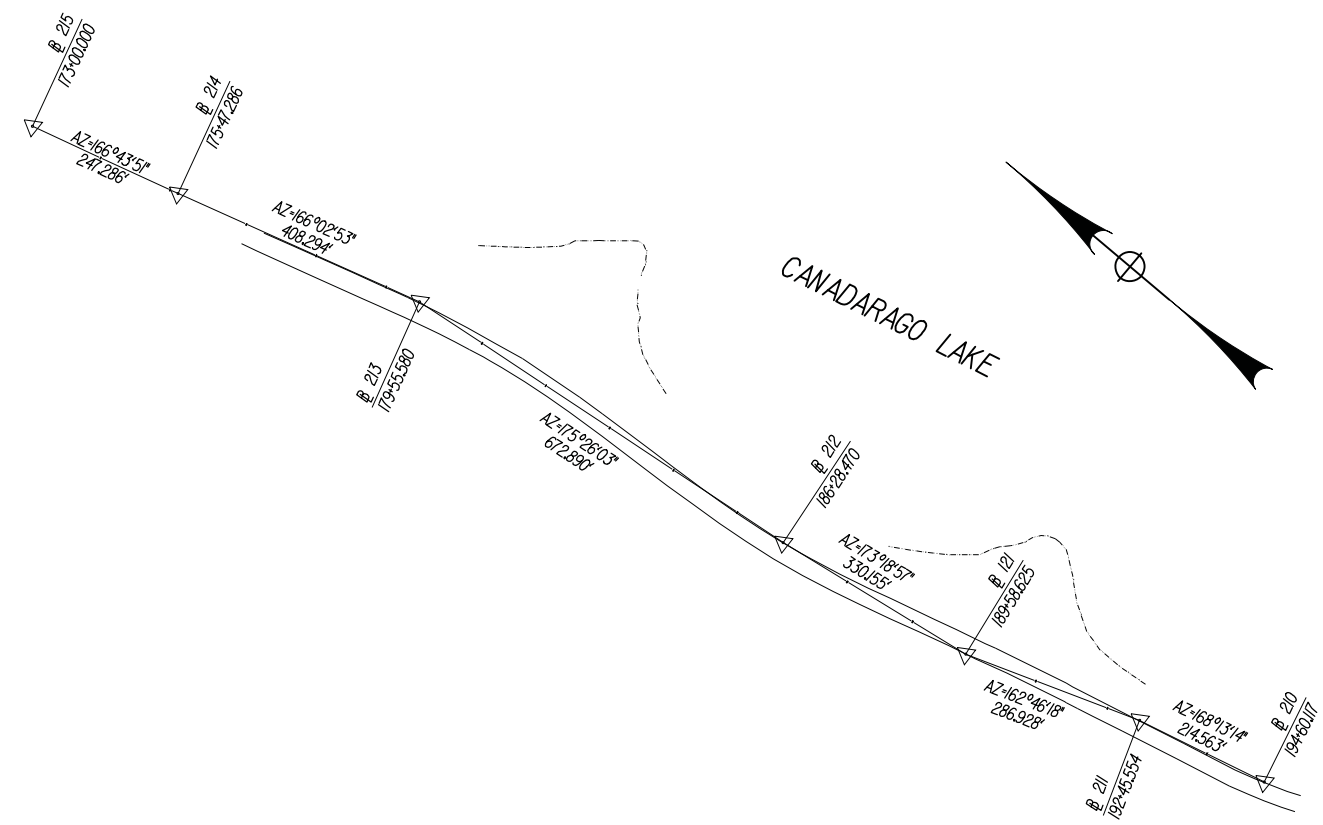
B 214 STA. 175+47.286
 ALUMINUM CIR STAMPED "SHUMAKER ENGRS"
 1.25 MILES NORTH OF TAYLOR ROAD
 0.15 MILES NORTH OF RM 28-9403-3310
 13.2' EAST OF C NY 28
 NYSPCS EAST ZONE NAD 83/CORS96
 N: 1448196.2632 NAVD88
 E: 351351.2487 ELEV: 1297.255



B 213 STA. 179+55.580
 ALUMINUM CIR STAMPED "SHUMAKER ENGRS"
 1.18 MILES NORTH OF TAYLOR ROAD
 375' NORTH OF RM 28-9403-3310
 17.3' EAST OF C NY 28
 NYSPCS EAST ZONE NAD 83/CORS96
 N: 1447800.0148 NAVD88
 E: 351449.6921 ELEV: 1296.121



B 212 STA. 186+28.470
 ALUMINUM CIR STAMPED "SHUMAKER ENGRS"
 1.05 MILES NORTH OF TAYLOR ROAD
 242' NORTH OF RM 28-9403-3309
 14.4' EAST OF C NY 28
 NYSPCS EAST ZONE NAD 83/CORS96
 N: 1447129.2599 NAVD88
 E: 351503.2567 ELEV: 1297.129



SURVEY NOTES:

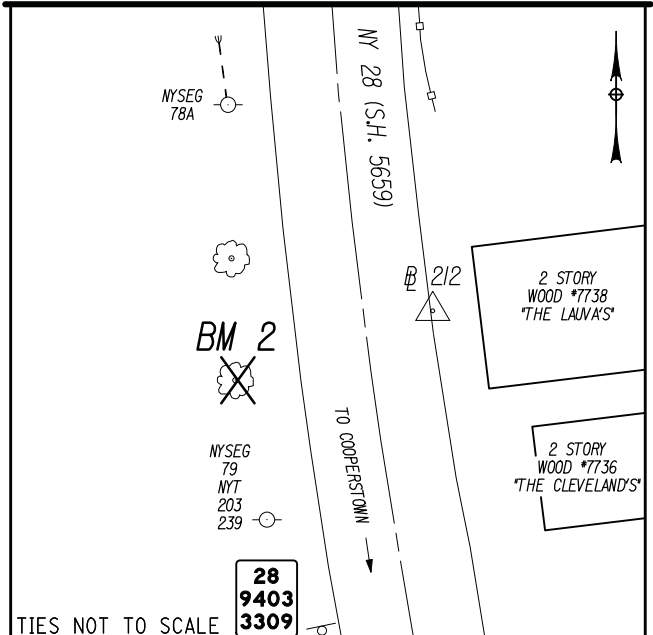
BASE MAPPING OF THIS PROJECT IS FROM PHOTOGAMMETRIC METHODS SUPPLEMENTED WITH GROUND SURVEY PERFORMED SEPTEMBER 2008, FEBRUARY 2014, AND APRIL 2014.
 HORIZONTAL DATUM: NYSPCS, CENTRAL ZONE, NAD83/CORS96.
 VERTICAL DATUM: NAVD88.
 COMBINED FACTOR: 0.999865435 (TO REDUCE GROUND DISTANCES TO GRID DISTANCES)

AFFIX SEAL: ON:	ALTERED BY: ON:

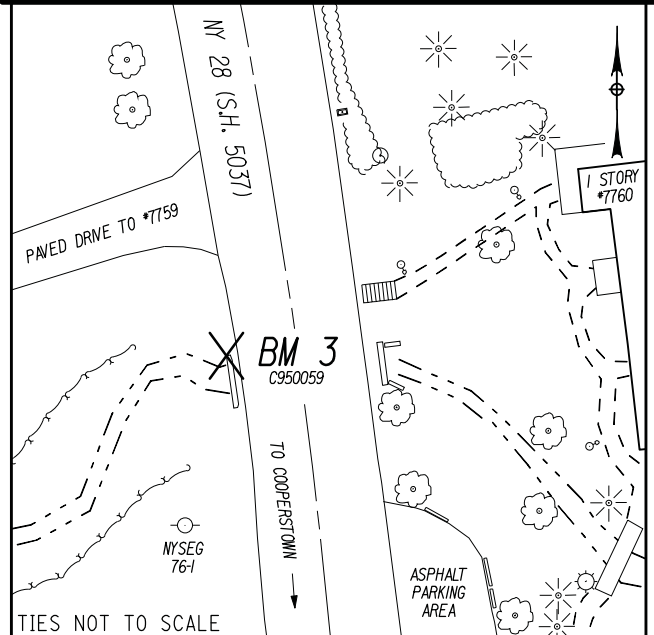
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 28 - SH 5037	PIN 9805.93 ROUTE 28 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS C950059	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED BASELINE TIE DIAGRAMS	CONTRACT NUMBER D262989
	RICHFIELD SPRINGS - SCHUYLER LAKE					DRAWING NO. BLT-01-C
	MULTI-CULVERT REPLACEMENT & REPAIR PROJECT					SHEET NO. 81
	TOWN OF EXETER					
COUNTY: OTSEGO	REGION: 09			SITE C		 Department of Transportation
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.						

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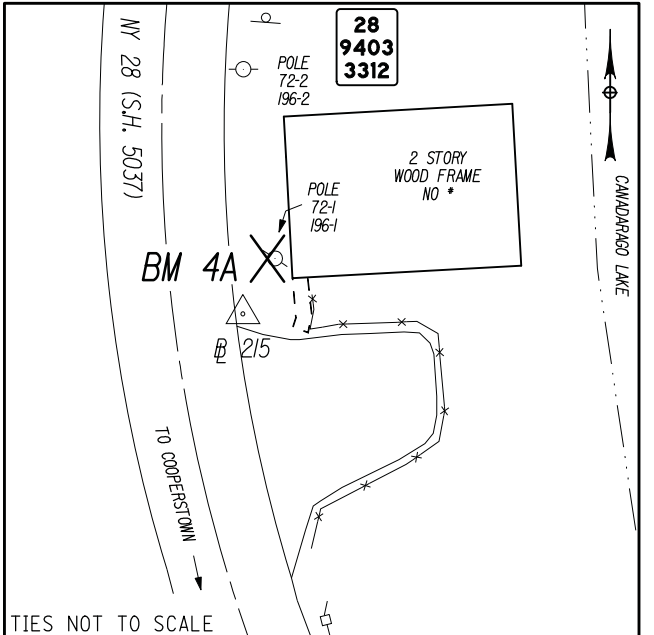
PROJECT MANAGER W.BAGLEY
 CHECK J.L.PHILLIPS
 DRAFTING D.MELSZER
 CHECK J.L.PHILLIPS
 DESIGN D.MELSZER
 JOB MANAGER J.L.PHILLIPS
 DESIGN SUPERVISOR R.WILDER



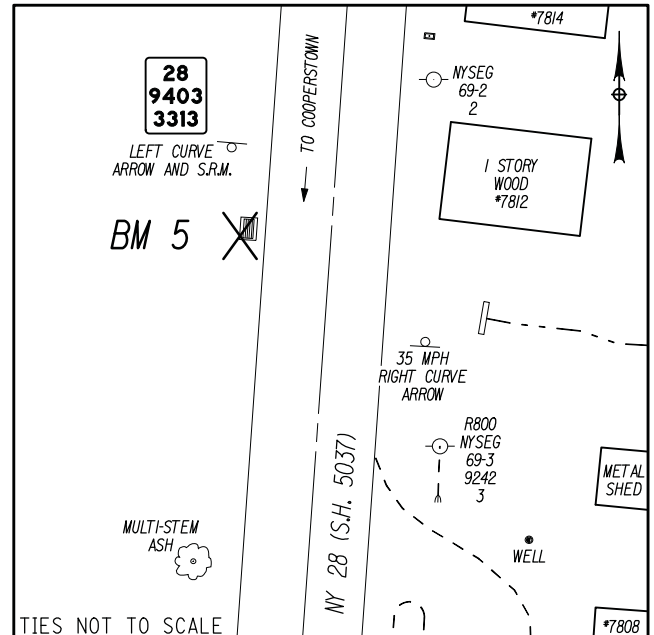
BM 2
 RAILROAD SPIKE IN 24" MAPLE
 1.05 MILES NORTH OF TAYLOR ROAD
 240' NORTH OF RM 28-9403-3309
 24.5' WEST OF C NY 28
 NYSPCS EAST ZONE NAD 83/CORS96
 N: 1447117.7 NAVD88
 E: 351465.6 ELEV: 1301.015



BM 3
 CHISELED SQUARE NORTHWEST CORNER
 CONCRETE HEADWALL
 1.15 MILES NORTH OF TAYLOR ROAD
 228' NORTH OF RM 28-9403-3310
 14.9' WEST OF C NY 28
 NYSPCS EAST ZONE NAD 83/CORS96
 N: 1447651.1 NAVD88
 E: 351444.7 ELEV: 1295.823



BM 4A
 RAILROAD SPIKE IN POLE 72-1/196-1
 1.30 MILES NORTH OF TAYLOR ROAD
 520' SOUTH OF RM 28-9403-3313
 14.5' WEST OF C NY 28
 NYSPCS EAST ZONE NAD 83/CORS96
 N: 1448439.6 NAVD88
 E: 351295.0 ELEV: 1300.523



BM 5
 CHISELED SQUARE SOUTHWEST CORNER
 CONCRETE DRAINAGE STRUCTURE
 1.40 MILES NORTH OF TAYLOR ROAD
 19' SOUTH OF RM 28-9403-3313
 18.9' WEST OF C NY 28
 NYSPCS EAST ZONE NAD 83/CORS96
 N: 1448938.5 NAVD88
 E: 351274.1 ELEV: 1297.864

SURVEY NOTES:
 BASE MAPPING OF THIS PROJECT IS FROM PHOTOGRAMMETRIC METHODS
 SUPPLEMENTED WITH GROUND SURVEY PERFORMED SEPTEMBER 2008,
 FEBRUARY 2014, AND APRIL 2014.
 HORIZONTAL DATUM: NYSPCS, CENTRAL ZONE, NAD83/CORS96.
 VERTICAL DATUM: NAVD88.
 COMBINED FACTOR: 0.999865435 (TO REDUCE GROUND DISTANCES TO GRID DISTANCES)

AFFIX SEAL: ON:	ALTERED BY: ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 28 - SH 5037	PIN 9805.93 ROUTE 28 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS C950059	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED BENCHMARK DIAGRAMS	CONTRACT NUMBER D262989
	RICHFIELD SPRING - SCHUYLER LAKE					DRAWING NO. BLT-02-C
	MULTI-CULVERT REPLACEMENT & REPAIR PROJECT					SHEET NO. 82
	TOWN OF EXETER					
COUNTY: OTSEGO	REGION: 09					

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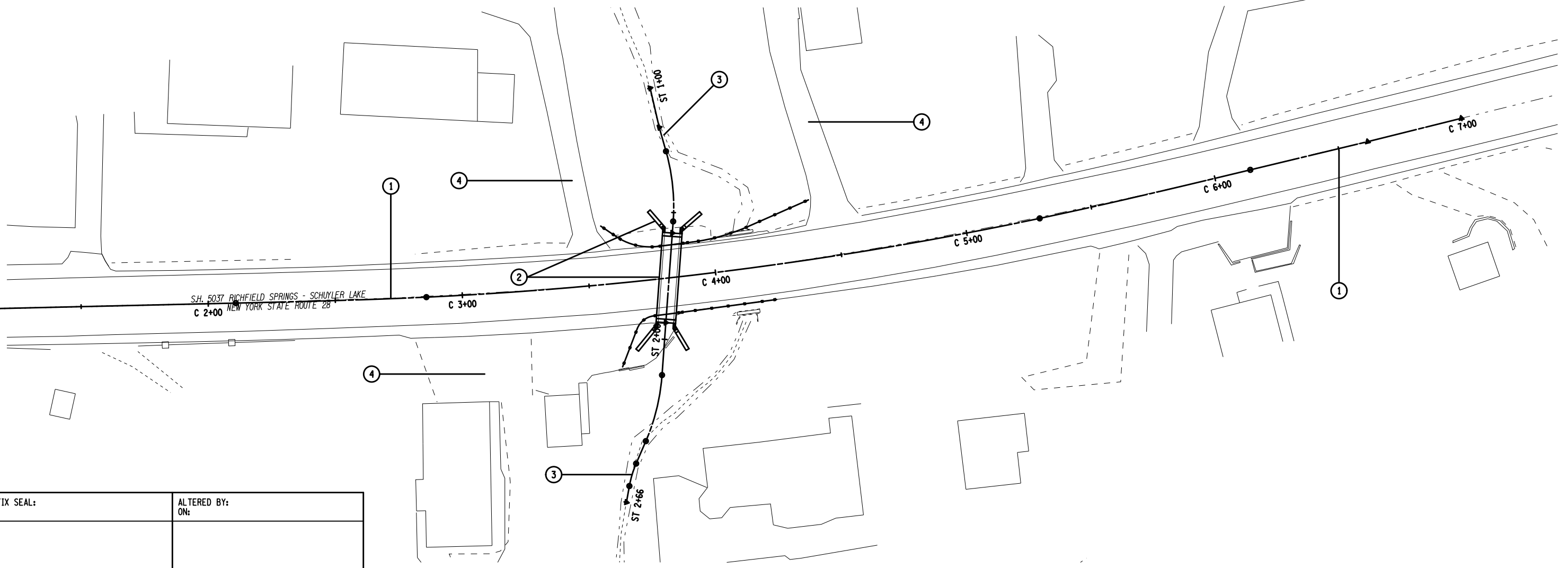
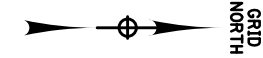


TABLE OF MAINTENANCE JURISDICTION - SITE C - C950059

PART NO.	HIGHWAY/LOCATION	LIMITS STATIONING	FEATURES TO BE MAINTAINED	C miles	LANE miles	AGENCY	AUTHORITY TO MAINTAIN
①	N.Y. ROUTE 28 RICHFIELD SPRINGS - SCHUYLER LAKE S.H. 5037	PROJECT LIMITS MAINLINE STATIONING C 3+26.00 TO C 4+60.00	ALL OF STATE HIGHWAY PAVEMENT, GUIDERAIL, DRAINAGE DITCHES, CULVERTS, PAVEMENT MARKINGS, SIGNS, SNOW AND ICE CONTROL	0.025	0.050	NEW YORK STATE	HIGHWAY LAW SECTIONS 12
②	PROPOSED 6 X 5 PRECAST BOX CULVERT - C950059 AND WING WALLS	STREAM STATIONING ST 1+09.00 TO ST 2+39.00	PROPOSED CONCRETE BOX CULVERT AND WING WALLS	0.025 ALONG C STREAM	N/A	NEW YORK STATE	HIGHWAY LAW SECTION 230
③	HYDER CREEK AND WATERSHED RUNOFF INLET TO CANADARAGO LAKE	STREAM STATIONING ST 1+00.00 TO ST 2+39.00	RELOCATED STREAM CHANNEL AND BANKS WITHIN R.O.W. AND PE TAKING LINES	0.025 ALONG C STREAM	N/A	NEW YORK STATE	HIGHWAY LAW SECTION 12
④	LOCAL DRIVEWAYS ADJACENT TO N.Y. ROUTE 28	C 2+80.41 TO C 3+26.53 16' RT C 3+41.00 TO C 3+60.11 13' LT C 4+38.0 TO C 4+60.08 14' LT	DRIVEWAY SURFACE SNOW AND ICE CONTROL	0.016 ALONG M	N/A	PROPERTY OWNER (SEE NOTE 3)	HIGHWAY LAW (54a) (SEE NOTE 3)

NOTES:

- THIS TABLE INDICATES THE DIVISION OF RESPONSIBILITY FOR MAINTENANCE FOR THIS CONTRACT UPON COMPLETION UNLESS STATED OTHERWISE. IT IN NO WAY RELIEVES THE CONTRACTOR OR REPRESENTATIVE OF THEIR RESPONSIBILITIES AS COVERED BY SECTION 619 OF THE STANDARD SPECIFICATION.
- ALL EXISTING SANITARY SEWERS AND OTHER SEWERS NOT DEEMED TO BE PART OF THE PROJECT BY THE COMMISSIONER, WATERMANS, HYDRANTS, AND OTHER MUNICIPALLY OR PRIVATELY OWNED FACILITIES WITHIN THE LIMITS OF THE HIGHWAY RIGHT-OF-WAY WHICH REMAIN IN SERVICE UNCHANGED, AND ALL SUCH FACILITIES RELOCATED OR PROTECTED AS PART OF THE WORK PERFORMED UNDER THIS PROJECT, WHETHER CROSSING, LOCATED WITHIN OR ADJACENT TO THE RIGHT-OF-WAY, SHALL BE MAINTAINED AS THE CASE MAY BE, BY THE MUNICIPALITY OR BY THE AGENCY OR UNIT OWNING OR HAVING CONTROL AND JURISDICTION THEREOF AT NO COST OR EXPENSE TO THE STATE.
- THE PORTION OF A DRIVEWAY OR PRIVATE ROAD, CONSTRUCTED OR ADJUSTED UNDER THE PROPOSED PROJECT BETWEEN THE EDGE OF PAVEMENT AND THE OUTSIDE EDGE OF SHOULDER SHALL BE MAINTAINED BY THE STATE UNDER SECTION 10, SUBDIVISION 25 OF THE HIGHWAY LAW. THE REMAINING PORTION OF THE ADJUSTED DRIVEWAY OR PRIVATE ROAD BEYOND THE OUTSIDE EDGE OF SHOULDER SHALL BE MAINTAINED BY THE OWNER(S) UNDER SECTION 54(a) OF THE HIGHWAY LAW. ALSO, ENTRANCE STAIRS AND WALKS SHALL BE MAINTAINED BY THE OWNER(S) UNDER SECTION 54(a) OF THE HIGHWAY LAW.
- INTERSECTING PUBLIC HIGHWAYS - OTHER THAN STATE HIGHWAYS, BEYOND THE OUTSIDE EDGE OF THE SHOULDER OR PAVEMENT EDGE OF THE STATE HIGHWAY SHALL BE MAINTAINED BY THE LOCAL UNIT OF GOVERNMENT HAVING JURISDICTION.



AFFIX SEAL: ON:	ALTERED BY: ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 28, SH 5037	PIN 9805.93 ROUTE 28 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS C950059	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	RICHFIELD SPRINGS - SCHUYLER LAKE					
	MULTI-CULVERT REPLACEMENT & REPAIR PROJECT					
	TOWN OF EXETER					
COUNTY: OTSEGO	REGION: 09	MAINTENANCE JURISDICTION PLAN		DRAWING NO. MJP-01-C SHEET NO. 84		
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.						Department of Transportation

FILE NAME = 980593_C950059_RT28_oph.mpl_01_C.dgn
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USER = jphillips

PROJECT MANAGER G. WOJCIK
CHECK J.L. PHILLIPS
DRAFTING G. MEYER
CHECK J.L. PHILLIPS
DESIGN D. MEISZNER
JOB MANAGER J. L. PHILLIPS
DESIGN SUPERVISOR R. WILDER

HORIZONTAL CONTROL TABLE
(STREAM) - C950059

PROJECT NAME: 980593 C950059 FEA RTE28.ALG
DESCRIPTION: 980593 C950059 FEA RTE28 JEM.ALG
HORIZONTAL ALIGNMENT NAME: STREAM 3 59 CL P
DESCRIPTION: DESIGN RELOCATED HORIZONTAL ALIGNMENT
STYLE: AC P

HORIZONTAL CONTROL TABLE
(ROUTE 28) - C950059


PROJECT NAME: 980593 C950059 FEA RTE28.ALG
DESCRIPTION: 980593 C950059 FEA RTE28 JEM.ALG
HORIZONTAL ALIGNMENT NAME: RTE28 CL P
DESCRIPTION: CENTERLINE OF RTE 28
STYLE: AC P


STATION	NORTHING	EASTING	STATION	NORTHING	EASTING
<p>ELEMENT: LINEAR</p> <p>POB (23) ST 1+00.00 1447610.7050 351388.9999</p> <p>EQNBK () ST 1+00.00 1447610.7050 351388.9999</p> <p>EQNAHD () ST 1+00.00 1447610.7050 351388.9999</p> <p>PI (36) ST 1+15.90 1447614.2898 351404.4868</p> <p>TANGENT DIRECTION: 76°58'01.5821"</p> <p>TANGENT LENGTH: 15.8964</p>			<p>ELEMENT: LINEAR</p> <p>PT (55) ST 2+40.95 1447609.0186 351527.8371</p> <p>PC (56) ST 2+50.59 1447605.1935 351536.6841</p> <p>TANGENT DIRECTION: 113°22'54.2193"</p> <p>TANGENT LENGTH: 9.6385</p>		
<p>ELEMENT: LINEAR</p> <p>PI (36) ST 1+15.90 1447614.2898 351404.4868</p> <p>PC (33) ST 1+25.60 1447616.9358 351413.8206</p> <p>TANGENT DIRECTION: 74°10'20.2001"</p> <p>TANGENT LENGTH: 9.7016</p>			<p>ELEMENT: CIRCULAR</p> <p>PC (56) ST 2+50.59 1447605.1935 351536.6841</p> <p>PI () ST 2+55.23 1447603.3525 351540.9422</p> <p>CC (58) ST 2+59.83 1447641.9087 351552.5583</p> <p>PT (59) ST 2+59.83 1447602.5349 351545.5085</p> <p>RADIUS: 40.0000</p> <p>DELTA: 13°13'50.0418" LEFT</p> <p>DEGREE OF CURVATURE(ARC): 143°14'22.0156"</p> <p>LENGTH: 9.2367</p> <p>TANGENT: 4.6390</p> <p>CHORD: 9.2162</p> <p>MIDDLE ORDINATE: 0.2663</p> <p>EXTERNAL: 0.2681</p> <p>TANGENT DIRECTION: 113°22'54.2193"</p> <p>RADIAL DIRECTION: 203°22'54.2193"</p> <p>CHORD DIRECTION: 106°45'59.1984"</p> <p>RADIAL DIRECTION: 190°09'04.1775"</p> <p>TANGENT DIRECTION: 100°09'04.1775"</p>		
<p>ELEMENT: CIRCULAR</p> <p>PC (33) ST 1+25.60 1447616.9358 351413.8206</p> <p>PI () ST 1+39.68 1447620.7779 351427.3731</p> <p>CC (51) ST 1+53.49 1447619.7597 351441.4229</p> <p>PT (53) ST 1+53.49 1447619.7597 351441.4229</p> <p>RADIUS: 80.0000</p> <p>DELTA: 19°58'22.2114" RIGHT</p> <p>DEGREE OF CURVATURE(ARC): 71°37'11.0078"</p> <p>LENGTH: 27.8873</p> <p>TANGENT: 14.0866</p> <p>CHORD: 27.7464</p> <p>MIDDLE ORDINATE: 1.2121</p> <p>EXTERNAL: 1.2307</p> <p>TANGENT DIRECTION: 74°10'20.2001"</p> <p>RADIAL DIRECTION: 164°10'20.2001"</p> <p>CHORD DIRECTION: 84°09'31.3058"</p> <p>RADIAL DIRECTION: 184°08'42.4115"</p> <p>TANGENT DIRECTION: 94°08'42.4115"</p>			<p>ELEMENT: LINEAR</p> <p>PT (59) ST 2+59.83 1447602.5349 351545.5085</p> <p>POE (60) ST 2+66.35 1447601.3851 351551.9302</p> <p>TANGENT DIRECTION: 100°09'04.1775"</p> <p>TANGENT LENGTH: 6.5238</p>		
<p>ELEMENT: LINEAR</p> <p>PT (53) ST 1+53.49 1447619.7597 351441.4229</p> <p>PI (52) ST 1+58.07 1447619.4280 351445.9994</p> <p>TANGENT DIRECTION: 94°08'42.4115"</p> <p>TANGENT LENGTH: 4.5885</p>					
<p>ELEMENT: LINEAR</p> <p>PI (52) ST 1+58.07 1447619.4280 351445.9994</p> <p>PI (57) ST 1+93.41 1447616.8739 351481.2418</p> <p>TANGENT DIRECTION: 94°08'42.4115"</p> <p>TANGENT LENGTH: 35.3348</p>					
<p>ELEMENT: LINEAR</p> <p>PI (57) ST 1+93.41 1447616.8739 351481.2418</p> <p>PC (50) ST 2+14.09 1447615.3788 351501.8713</p> <p>TANGENT DIRECTION: 94°08'42.4115"</p> <p>TANGENT LENGTH: 20.6837</p>					
<p>ELEMENT: CIRCULAR</p> <p>PC (50) ST 2+14.09 1447615.3788 351501.8713</p> <p>PI () ST 2+27.65 1447614.3989 351515.3932</p> <p>CC (54) ST 2+40.95 1447609.0186 351527.8371</p> <p>PT (55) ST 2+40.95 1447609.0186 351527.8371</p> <p>RADIUS: 80.0000</p> <p>DELTA: 19°14'11.8078" RIGHT</p> <p>DEGREE OF CURVATURE(ARC): 71°37'11.0078"</p> <p>LENGTH: 26.8594</p> <p>TANGENT: 13.5573</p> <p>CHORD: 26.7334</p> <p>MIDDLE ORDINATE: 1.1246</p> <p>EXTERNAL: 1.1406</p> <p>TANGENT DIRECTION: 94°08'42.4115"</p> <p>RADIAL DIRECTION: 184°08'42.4115"</p> <p>CHORD DIRECTION: 103°45'48.3154"</p> <p>RADIAL DIRECTION: 203°22'54.2193"</p> <p>TANGENT DIRECTION: 113°22'54.2193"</p>					

STATION	NORTHING	EASTING	STATION	NORTHING	EASTING
<p>ELEMENT: LINEAR</p> <p>POB (1) C 1+00.00 1447336.9245 351476.1005</p> <p>EQNBK () C 1+00.00 1447336.9245 351476.1005</p> <p>EQNAHD () C 1+00.00 1447336.9245 351476.1005</p> <p>TS (2) C 2+10.84 1447447.7346 351473.5522</p> <p>TANGENT DIRECTION: 358°40'57.2467"</p> <p>TANGENT LENGTH: 110.8393</p>			<p>ELEMENT: LINEAR</p> <p>ST (22) C 6+14.29 1447846.7303 351421.1441</p> <p>PI (3) C 6+61.77 1447892.8965 351410.0523</p> <p>TANGENT DIRECTION: 346°29'24.9940"</p> <p>TANGENT LENGTH: 47.4800</p>		
<p>ELEMENT: CLOTHOID</p> <p>TS (2) C 2+10.84 1447447.7346 351473.5522</p> <p>SPI (5) C 2+60.84 1447497.7230 351472.4026</p> <p>SC (6) C 2+85.84 1447522.6960 351471.2113</p> <p>ENTRANCE RADIUS: 0.0000</p> <p>EXIT RADIUS: 1520.0000</p> <p>LENGTH: 75.0000</p> <p>ANGLE: 1°24'48.7699" LEFT</p> <p>CONSTANT: 337.6389</p> <p>LONG TANGENT: 50.0016</p> <p>SHORT TANGENT: 25.0014</p> <p>LONG CHORD: 74.9980</p> <p>XS: 74.9954</p> <p>YS: 0.6167</p> <p>P: 0.1542</p> <p>K: 37.4992</p> <p>TANGENT DIRECTION: 358°40'57.2467"</p> <p>RADIAL DIRECTION: 88°40'57.2467"</p> <p>CHORD DIRECTION: 358°12'40.9990"</p> <p>RADIAL DIRECTION: 87°16'08.4768"</p> <p>TANGENT DIRECTION: 357°16'08.4768"</p>			<p>ELEMENT: LINEAR</p> <p>PI (3) C 6+61.77 1447892.8965 351410.0523</p> <p>POE (4) C 6+99.76 1447929.7556 351400.8661</p> <p>TANGENT DIRECTION: 346°00'20.2223"</p> <p>TANGENT LENGTH: 37.9866</p>		
<p>ELEMENT: CIRCULAR</p> <p>SC (6) C 2+85.84 1447522.6960 351471.2113</p> <p>PI () C 4+07.82 1447644.5430 351465.3991</p> <p>CC (7) C 4+45.02 1447450.2733 349952.9376</p> <p>CS (8) C 5+29.29 1447763.9036 351440.2292</p> <p>RADIUS: 1520.0000</p> <p>DELTA: 9°10'36.2103" LEFT</p> <p>DEGREE OF CURVATURE(ARC): 3°46'10.0530"</p> <p>LENGTH: 243.4494</p> <p>TANGENT: 121.9856</p> <p>CHORD: 243.1893</p> <p>MIDDLE ORDINATE: 4.8714</p> <p>EXTERNAL: 4.8870</p> <p>TANGENT DIRECTION: 357°16'08.4768"</p> <p>RADIAL DIRECTION: 87°16'08.4768"</p> <p>CHORD DIRECTION: 352°40'50.3717"</p> <p>RADIAL DIRECTION: 78°05'32.2665"</p> <p>TANGENT DIRECTION: 348°05'32.2665"</p>			<p>ELEMENT: CLOTHOID</p> <p>CS (8) C 5+29.29 1447763.9036 351440.2292</p> <p>SPI (9) C 5+57.62 1447791.6293 351434.3825</p> <p>ST (22) C 6+14.29 1447846.7303 351421.1441</p> <p>ENTRANCE RADIUS: 1520.0000</p> <p>EXIT RADIUS: 0.0000</p> <p>LENGTH: 85.0000</p> <p>ANGLE: 1°36'07.2725" LEFT</p> <p>CONSTANT: 359.4440</p> <p>LONG TANGENT: 56.6690</p> <p>SHORT TANGENT: 28.3354</p> <p>LONG CHORD: 84.9970</p> <p>XS: 84.9934</p> <p>YS: 0.7922</p> <p>P: 0.1980</p> <p>K: 42.4989</p> <p>TANGENT DIRECTION: 348°05'32.2665"</p> <p>RADIAL DIRECTION: 78°05'32.2665"</p> <p>CHORD DIRECTION: 347°01'27.4051"</p> <p>RADIAL DIRECTION: 76°29'24.9940"</p> <p>TANGENT DIRECTION: 346°29'24.9940"</p>		
<p>ELEMENT: CLOTHOID</p> <p>CS (8) C 5+29.29 1447763.9036 351440.2292</p> <p>SPI (9) C 5+57.62 1447791.6293 351434.3825</p> <p>ST (22) C 6+14.29 1447846.7303 351421.1441</p> <p>ENTRANCE RADIUS: 1520.0000</p> <p>EXIT RADIUS: 0.0000</p> <p>LENGTH: 85.0000</p> <p>ANGLE: 1°36'07.2725" LEFT</p> <p>CONSTANT: 359.4440</p> <p>LONG TANGENT: 56.6690</p> <p>SHORT TANGENT: 28.3354</p> <p>LONG CHORD: 84.9970</p> <p>XS: 84.9934</p> <p>YS: 0.7922</p> <p>P: 0.1980</p> <p>K: 42.4989</p> <p>TANGENT DIRECTION: 348°05'32.2665"</p> <p>RADIAL DIRECTION: 78°05'32.2665"</p> <p>CHORD DIRECTION: 347°01'27.4051"</p> <p>RADIAL DIRECTION: 76°29'24.9940"</p> <p>TANGENT DIRECTION: 346°29'24.9940"</p>			<p>ELEMENT: LINEAR</p> <p>ST (22) C 6+14.29 1447846.7303 351421.1441</p> <p>PI (3) C 6+61.77 1447892.8965 351410.0523</p> <p>TANGENT DIRECTION: 346°29'24.9940"</p> <p>TANGENT LENGTH: 47.4800</p>		
<p>ELEMENT: LINEAR</p> <p>PI (57) ST 1+93.41 1447616.8739 351481.2418</p> <p>PC (50) ST 2+14.09 1447615.3788 351501.8713</p> <p>TANGENT DIRECTION: 94°08'42.4115"</p> <p>TANGENT LENGTH: 20.6837</p>			<p>ELEMENT: LINEAR</p> <p>PI (3) C 6+61.77 1447892.8965 351410.0523</p> <p>POE (4) C 6+99.76 1447929.7556 351400.8661</p> <p>TANGENT DIRECTION: 346°00'20.2223"</p> <p>TANGENT LENGTH: 37.9866</p>		

FILE NAME = 980593_C950059_RT28_cph.hct.01_c.dgn
DATE/TIME = 30-JUL-2015 13:13
USER = jphillips

PROJECT MANAGER G. WOJCIK
CHECK J.L. PHILLIPS
DRAFTING D. MELSZER
CHECK J.L. PHILLIPS
DESIGN D. MELSZER
JOB MANAGER J.L. PHILLIPS
DESIGN SUPERVISOR R. WILDER

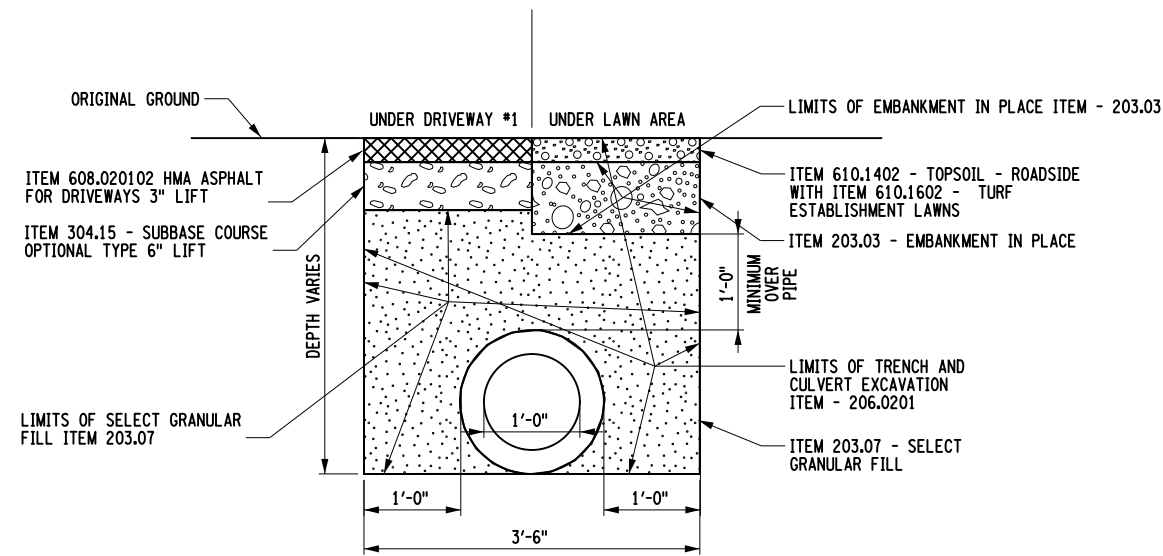
AFFIX SEAL: ON:	ALTERED BY: ON:
	

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 29 - SH 5037 RICHFIELD SPRINGS - SCHUYLER LAKE MULTI-CULVERT REPLACEMENT AND REPAIR PROJECT TOWN OF EXTER COUNTY: OTSEGO	PIN 9805.93 RT 28 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS C950059	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED HORIZONTAL CONTROL TABLES	CONTRACT NUMBER D262989
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.					SITE C	DRAWING NO. HCT-01-C SHEET NO. 85
						

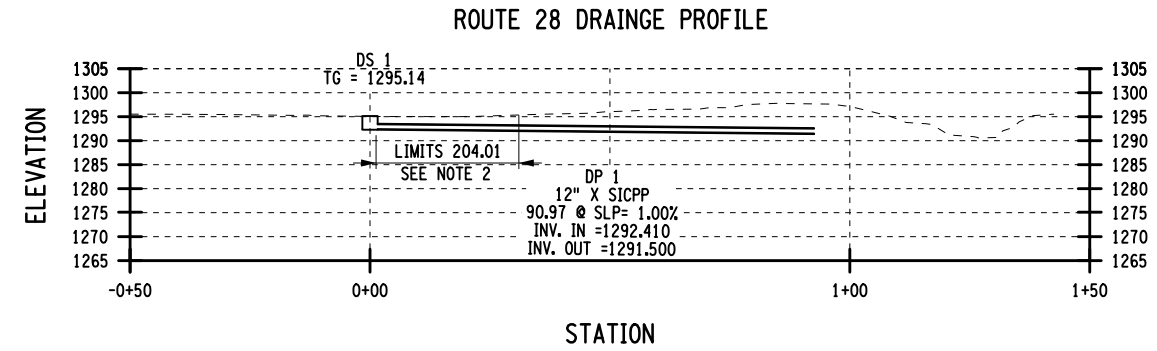
NOTES:

- SEE STANDARD SHEET 203-05 FOR ADDITIONAL INFORMATION ON DRAINAGE PIPE INSTALLATIONS.
- BACKFILL FIRST 30' OF PLASTIC PIPE WITH ITEM 204.01 CONTROLLED LOW STRENGTH MATERIAL.

PROJECT MANAGER G. WOJCIK
 CHECK J. L. PHILLIPS
 DRAFTING K. BLUMBERGS
 CHECK J. L. PHILLIPS
 DESIGN K. BLUMBERGS
 JOB MANAGER J. L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER



1 CLOSED DRAINAGE TRENCH DETAIL
NOT TO SCALE



DRAINAGE TABLE										
DRAINAGE STRUCTURE	STATION / OFFSET (FT)	DESCRIPTION OF WORK	PROP T.G. ELEV.	PIPE ENTRIES				PIPE 603.9812 (FT)	STRUCTURES	
				SIDE 1 PIPE SIZE (IN) ELEV (FT)	SIDE 2 PIPE SIZE (IN) ELEV (FT)	SIDE 3 PIPE SIZE (IN) ELEV (FT)	OUTLET PIPE SIZE (IN) ELEV (FT)		604.302122 (LF)	655.1022 (EA)
DS-1	RT28 2+85.50 15.65' LT	INSTALL TYPE U RECTANGULAR DRAINAGE STRUCTURE WITH #22 WELDED FRAME & RECTANGULAR GRATE. INSTALL 91.2 FT. OF 12 INCH SICPP AND OUTLET PIPE DP-1 THROUGH WINGWALL NUMBER 3 AT ELEVATION 1291.5	1295.14				12 1292.41	91.2	3.4	1
SHEET TOTALS								91.2	3.4	1

AFFIX SEAL: ON:	ALTERED BY: ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 28 - SH 5037 RICHFIELD SPRINGS - SCHUYLER LAKE MULTI-CULVERT REPLACEMENT & REPAIR PROJECT TOWN OF EXETER COUNTY: OTSEGO	PIN 9805.93 ROUTE 28 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS C950059	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED ROUTE 28 DRAINAGE TABLE & PROFILE	CONTRACT NUMBER D262989	DRAWING NO. DRT-01-C SHEET NO. 86
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 09 DOCUMENT NAME: 980593_C950059_RT28_cph.drt_pro.01.c.dgn		

FILE NAME = 980593_C950059_RT28_oph_mst_01_c.dgn
 DATE/TIME = 30-JUL-2015 13:14
 USER = jphillips

PROJECT MANAGER G. WOJCIK
 CHECK J.L. PHILLIPS
 DRAFTING D. WELSZER
 CHECK J.L. PHILLIPS
 DESIGN D. WELSZER
 JOB MANAGER J.L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER

TABLE OF GUIDE RAILING - INSTALLATION										
STATION TO STATION	SIDE	OFFSET	POST SPACING (FT)	FACTOR	ITEM 606-10 - BOX BEAM GUIDE RAILING (LF)	ITEM 606-120101 BOX BEAM END PIECE	ITEM 606-100002 (LF)	ITEM 606-120201 (EACH)	ITEM 606-120201 (EACH) BOX BEAM END PIECE TYPE IIA	COMMENTS
C 3+62.64 TO C 3+67.21	RT	22 16.5	6		1					
C 3+67.21 TO C 3+70.93	RT	16.5 14.3	6			4.5				RADIUS = 5.14 FEET
C 3+70.93 TO C 4+15.20	RT	14.3 13.7	6	44.68						
C 4+15.20 TO C 4+22.34	RT	13.7 13.0	6		1					
C 3+56.75 TO C 3+62.38	LT	23.0 18.4	6		1					
C 3+62.38 TO C 3+75.78	LT	18.4 12.7	6			14.7				RADIUS = 22.7 FEET
C 3+75.78 TO C 4+10.87	LT	12.7 13.0	6	34.92						
C 4+10.87 TO C 4+35.18	LT	12.7 21.1	6					1		
TOTALS				79.60	3	19.2 LF	1			

NOTES: STATION TO STATION DISTANCE MAY NOT EQUAL TRUE DISTANCE DUE TO RADIUS.
 C PREFIX STATIONING IS FOR ROUTE 28 CULVERT C950059

TABLE OF ITEM 608.020102 - HOT MIX ASPHALT (HMA) SIDEWALKS, DRIVEWAY, BICYCLE PATHS & VEGETATIVE CONTROL STRIPS									
STATION	OFFSET	TO	STATION	OFFSET	SIDE	LENGTH (FT)	WIDTH (FT)	AREA	TONS
C 3+54.44	24.87		C 3+66.12	17.06	LT	-		41	0.8
C 3+99.07	14.04		C 4+37.32	21.48	LT	34	1.75	62	1.21
C 4+00.96	14.58		C 4+24.34	14.62	RT	17	1.75	52	1.01
C 3+34.85			C 3+66.67		LT	DRIVEWAY #1		230	4.49
C 3+52.20			C 3+74.48		RT			202	3.94
TOTAL								11.45	

NOTES: STATION TO STATION DISTANCE MAY NOT EQUAL TRUE DISTANCE DUE TO RADIUS.
 C PREFIX STATIONING IS FOR ROUTE 28 CULVERT C950059

TABLE OF SOIL BORING LOCATIONS				
BORING #	BASELINE STA.	BASELINE OFFSET	NORTHING	EASTING
FH-K-3	4+15.32	17.16'	LT	1447649.340 351442.540
FH-K-4	3+95.46	15.94'	RT	1447633.810 351447.870

TABLE OF SILT FENCE TEMPORARY - ITEM 209.13			
RT. 28 STATION	SIDE	OFFSET	LINEAR FEET
C 3+75.85	RT	55.4	28.5
TO C 3+86.23	RT	29.5	
C 3+74.40	LT	28.8	34.8
TO C 3+77.58	LT	63.3	
C 3+97.52	LT	23.8	43.0
TO C 3+86.19	LT	65.3	
TOTALS			106.3 LF


TABLE OF PAVEMENT CUTTING - ITEM 627.50140008 (LF)		
LOCATION	LENGTH	REMARKS
C 3+35.00 12' LT TO C 3+52.00 12' LT	17'	FOR DRIVEWAY RECONSTRUCTION
C 3+52.00 14' LT TO C 3+52.00 14' RT	28'	FULL WIDTH (SHOULDER TO SHOULDER) AT FULL DEPTH
C 3+52.00 14' RT TO C 3+52.00 23' RT	9'	FOR DRIVEWAY RECONSTRUCTION
C 3+52.00 23' RT TO C 3+58.00 23' RT	6'	FOR DRIVEWAY RECONSTRUCTION
C 3+58.00 23' RT TO C 3+62.00 30' RT	7'	FOR DRIVEWAY RECONSTRUCTION
C 4+08.00 13' LT TO C 4+08.00 13' RT	26'	FULL WIDTH (SHOULDER TO SHOULDER) AT FULL DEPTH
TOTALS	93 LF	

TABLE OF CLEAR ZONE WIDTHS		
STATION TO STATION	WIDTH	NOTES
C 3+26.00 TO C 3+62.63 R	10	
C 3+26.00 TO C 3+56.75 L	10	

NOTE: MINIMUM CLEARZONE WIDTH FOR THIS SECTION OF ROUTE 28 WITH 1:4 SLOPES IS 10 FEET
 AREAS NOT SHOWN IN TABLE ARE PROTECTED BY GUIDERAIL

TABLE OF TREE PLANTINGS ITEM 611.0151			
LOCATION	OFFSET	SIDE	REMARKS
STA C 3+95.58	55.3	L	ACER RUBRUM
STA C 4+04.10	38.5	L	QUERCUS RUBRA
STA C 4+04.45	22.6	L	ACER RUBRUM
STA C 3+88.46	42	R	QUERCUS RUBRA
STA C 3+93.62	25.6	R	QUERCUS RUBRA
STA C 4+16.19	24.4	R	ACER RUBRUM

TABLE OF TREE REMOVALS			
LOCATION	OFFSET	SIDE	REMARKS
ITEM 614.060204			
STA C 3+28.92	29.61	R	STUMPS GRUBBED
STA C 3+77.35	45.97	R	STUMPS GRUBBED
STA C 3+90.57	48.13	R	STUMPS GRUBBED
STA C 4+05.05	18.68	R	STUMPS GRUBBED
ITEM 614.060304			
STA C 3+84.60	20.38	R	STUMPS GRUBBED

AFFIX SEAL: ON: 

ALTERED BY: ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 28, SH 5037 RICHFIELD SPRINGS - SCHUYLER LAKE MULTI-CULVERT REPLACEMENT & REPAIR PROJECT TOWN OF EXETER COUNTY: REGION: 09	PIN 9805.93 RT 28 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS C950059	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED MISCELLANEOUS TABLES SITE C	CONTRACT NUMBER D262989 DRAWING NO. MST-01-C SHEET NO. 87
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.						

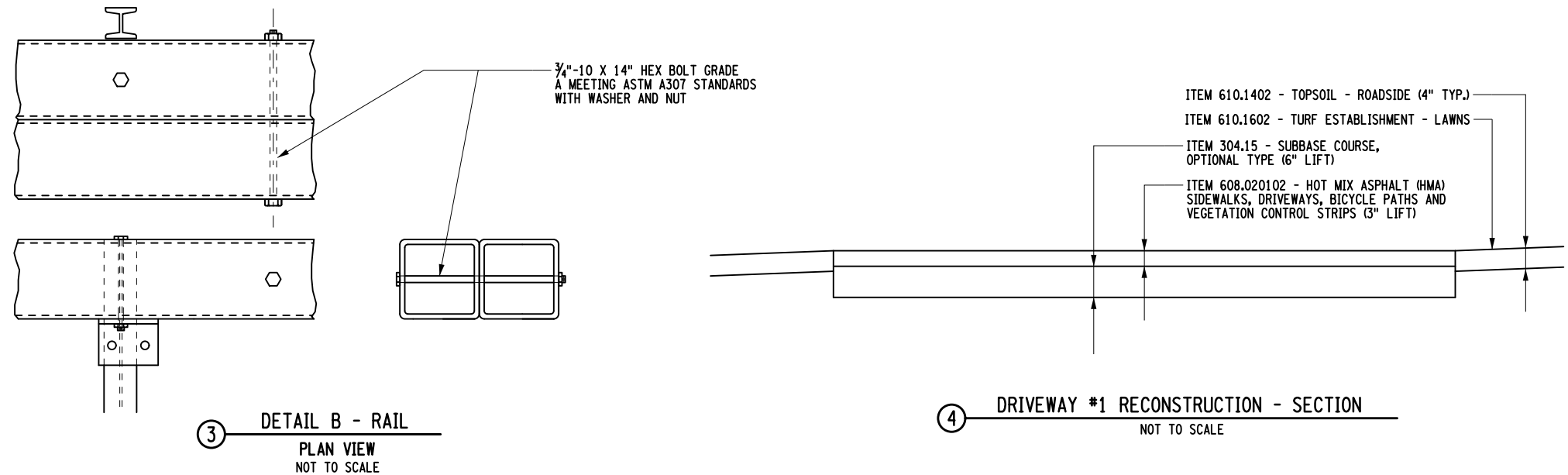
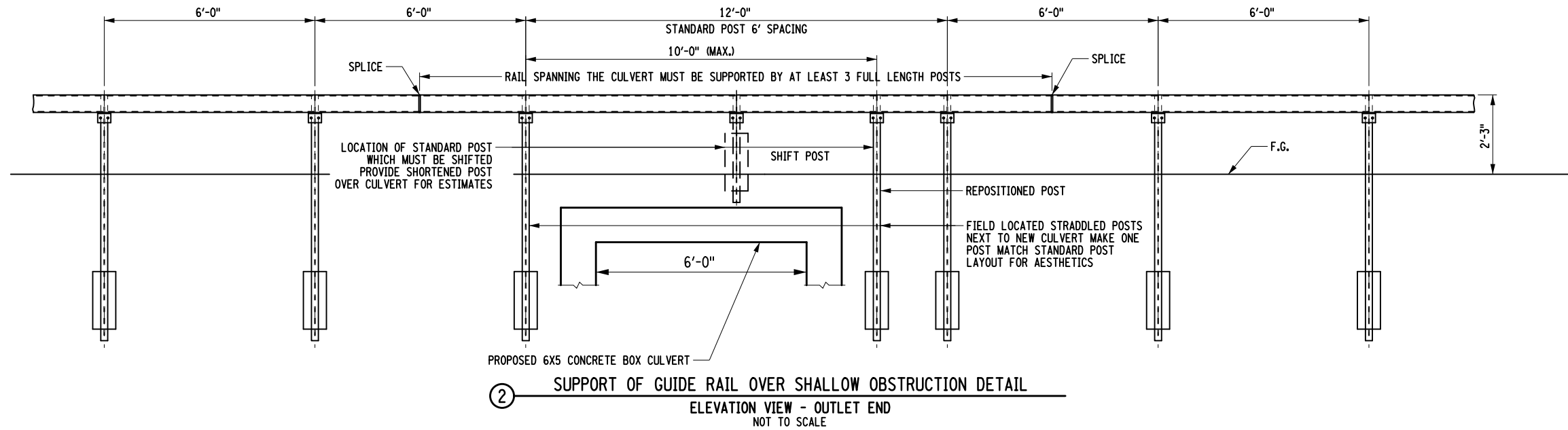


FILE NAME = 980593_C950059_RT28_oph_msd.01_c.dgn
 DATE/TIME = 30-JUL-2015 13:14
 USER = jphillips

DESIGN SUPERVISOR R.WILDER
 JOB MANAGER J.L.PHILLIPS
 DESIGN D.MELSZER
 CHECK J.L.PHILLIPS
 DRAFTING D.MELSZER
 CHECK J.L.PHILLIPS
 PROJECT MANAGER G.WOJCIK

NOTES:

- SEE STANDARD SHEET 606-04 SHEETS 1 AND 2 FOR ADDITIONAL INFORMATION ON BOX BEAM GUIDE RAILING INSTALLATION.
- WHERE BOX BEAM SPANS EXCEED 10 FT., THE SPANNED LENGTH SHALL BE SUPPORTED BY FASTENING AN ADDITIONAL BOX BEAM TO THE BACK SIDE OF THE PRIMARY RAIL. THE TOTAL NUMBER OF FULL LENGTH POSTS SHALL BE UNCHANGED FROM THE NORMAL COUNT. THE BACKUP RAIL SHALL BE SUPPORTED BY AT LEAST 3 FULL LENGTH POSTS.
- PROTRUSIONS CAUSED BY WELDING OR GALVANIZING ARE NOT PERMITTED ON THE ADJOINING SURFACES OF THE BOX BEAM RAILS, SPLICE TUBES AND FILL PLATES.



AFFIX SEAL: ON:	ALTERED BY: ON:

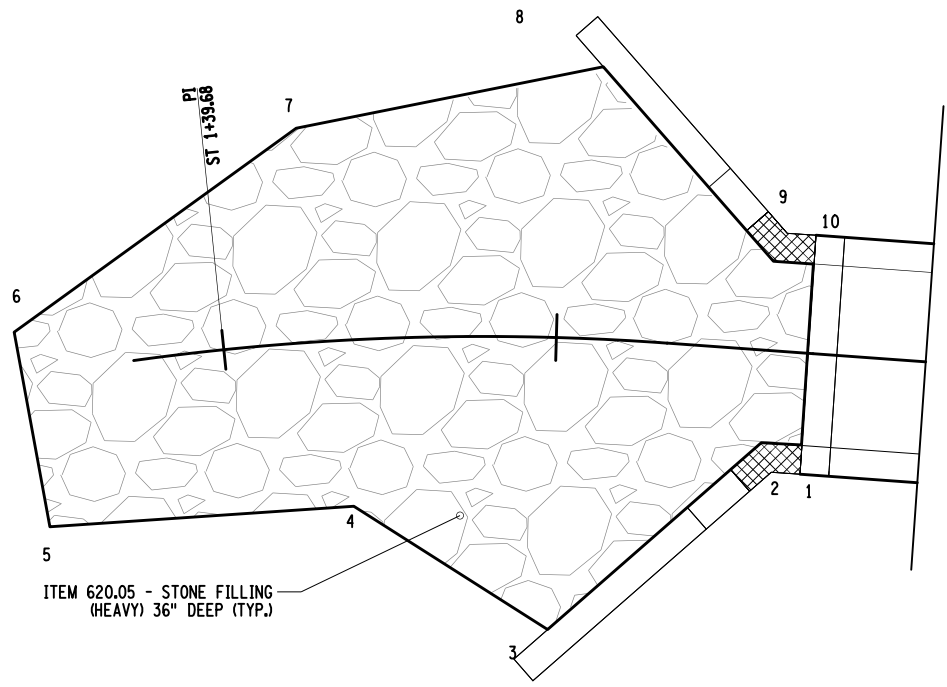
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 28 - SH 5037	PIN 9805.93 ROUTE 28 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS C950059	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	RICHFIELD SPRINGS - SCHUYLER LAKE					MISCELLANEOUS DETAILS
	MULTI-CULVERT REPLACEMENT & REPAIR PROJECT					DRAWING NO. MSD-01-C SHEET NO. 88
	TOWN OF EXETER					
	COUNTY: OTSEGO	REGION: 09			SITE C	
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.						 Department of Transportation

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 USER = jphillips

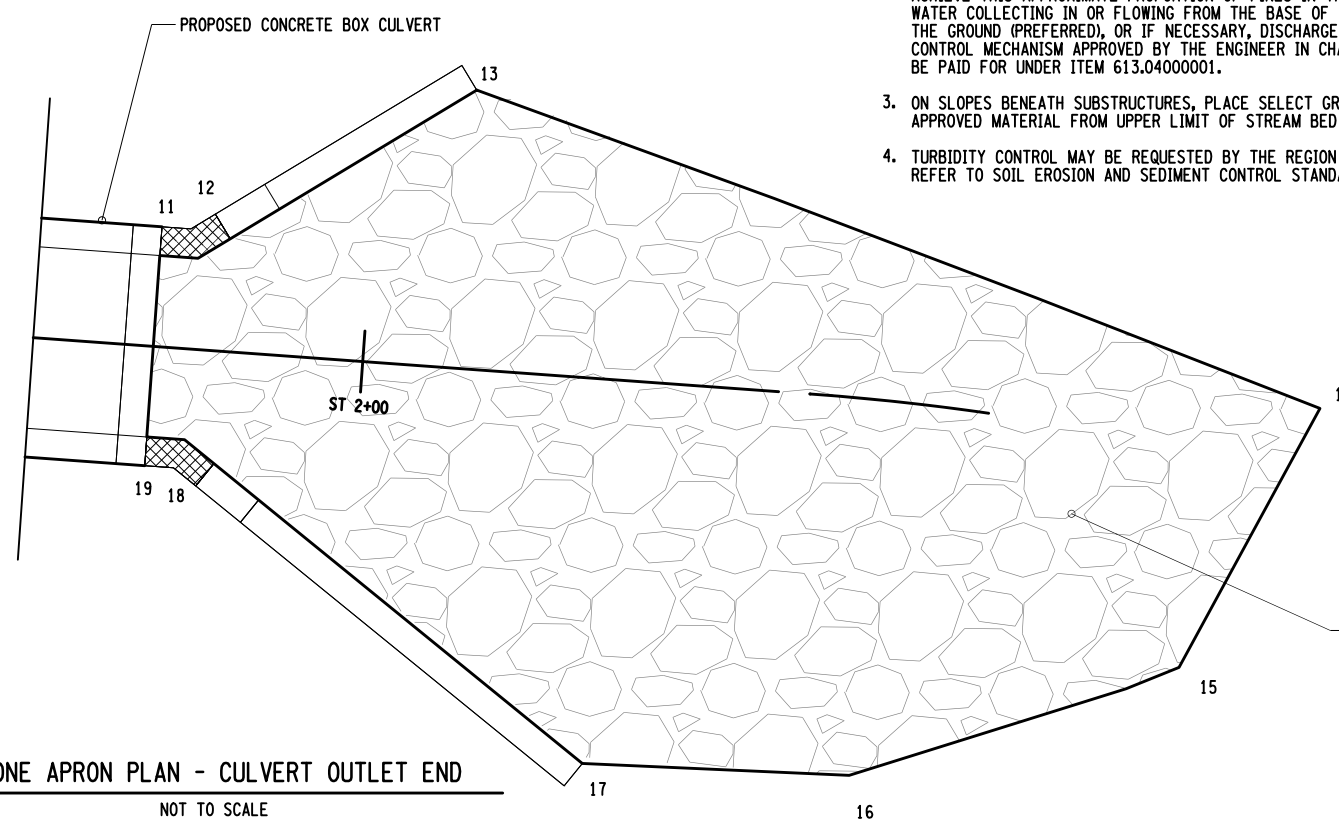
PROJECT MANAGER G. WOJCIK
 CHECK D. MELSZER
 DRAFTING G. MEYER
 CHECK W.C. GRIFFITHS
 DESIGN D. MELSZER
 JOB MANAGER J.L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER

NOTES:

1. GEOTEXTILE BEDDING ITEM 207.20 SHALL BE SECURED BY "WRAPPING" ENDS INTO STONE A DISTANCE EQUAL TO THE FULL HEIGHT OF DEPTH OF STONE. GEOTEXTILE BEDDING SHALL MEET THE REQUIREMENTS OF SPECIFICATION TABLE 737-01A CLASS 1.
2. EXCAVATED AND STOCKPILED NATIVE STREAMBED MATERIAL SHALL BE MIXED WITH THE HEAVY STONE FILL DURING CONSTRUCTION OF THE SCOUR PROTECTION APRONS UPSTREAM AND DOWNSTREAM OF THE CULVERT, IN ORDER TO FILL IN VOID SPACES. FILLING OF THE VOID SPACES IS NECESSARY TO PREVENT STREAM FLOW FROM PERCOLATING BELOW STREAMBED GRADE DURING LOW FLOWS. THE STONE FILL IN THE LOWER PORTIONS OF THE APRONS SHALL BE MIXED WITH STOCKPILED NATIVE MATERIAL SOURCED FROM THE DEEPER STREAMBED LAYER. THE SURFACE OF THE NEWLY CONSTRUCTED APRONS (OR LAYERS THEREOF IF PLACED IN MULTIPLE LIFTS) SHALL BE SPRAYED SUFFICIENTLY WITH WATER TO WASH FINER PARTICLES DOWN INTO THE DEEPER VOID SPACES. IF THE NATIVE STREAMBED MATERIAL DOES NOT CONTAIN ENOUGH PARTICLES OF FINE SAND SIZE OR SMALLER TO COMPRISE APPROXIMATELY 5-10% PROPORTION OF THE VOLUME OF THE APRON MATERIAL, ENOUGH OF THIS FINE MATERIAL SHALL BE ADDED TO EACH LIFT TO ACHIEVE THIS APPROXIMATE PROPORTION OF FINES IN THE LOWER 75% OF THE DEPTH OF THE APRON. ANY WASH WATER COLLECTING IN OR FLOWING FROM THE BASE OF THE STONE FILL SHALL BE ALLOWED TO PERCOLATE INTO THE GROUND (PREFERRED), OR IF NECESSARY, DISCHARGED TO A SETTLING BASIN, FILTER SOCK, OR SIMILAR SEDIMENT CONTROL MECHANISM APPROVED BY THE ENGINEER IN CHARGE. THE PLACEMENT OF NATIVE STREAMBED MATERIAL SHALL BE PAID FOR UNDER ITEM 613.04000001.
3. ON SLOPES BENEATH SUBSTRUCTURES, PLACE SELECT GRANULAR FILL SLOPE PROTECTION (STRUCTURAL) OR OTHER APPROVED MATERIAL FROM UPPER LIMIT OF STREAM BED PROTECTION TO FACE OF SUBSTRUCTURE.
4. TURBIDITY CONTROL MAY BE REQUESTED BY THE REGION TO SATISFY PERMIT CONDITIONS. FOR GUIDANCE AND DETAILS REFER TO SOIL EROSION AND SEDIMENT CONTROL STANDARD SHEETS.



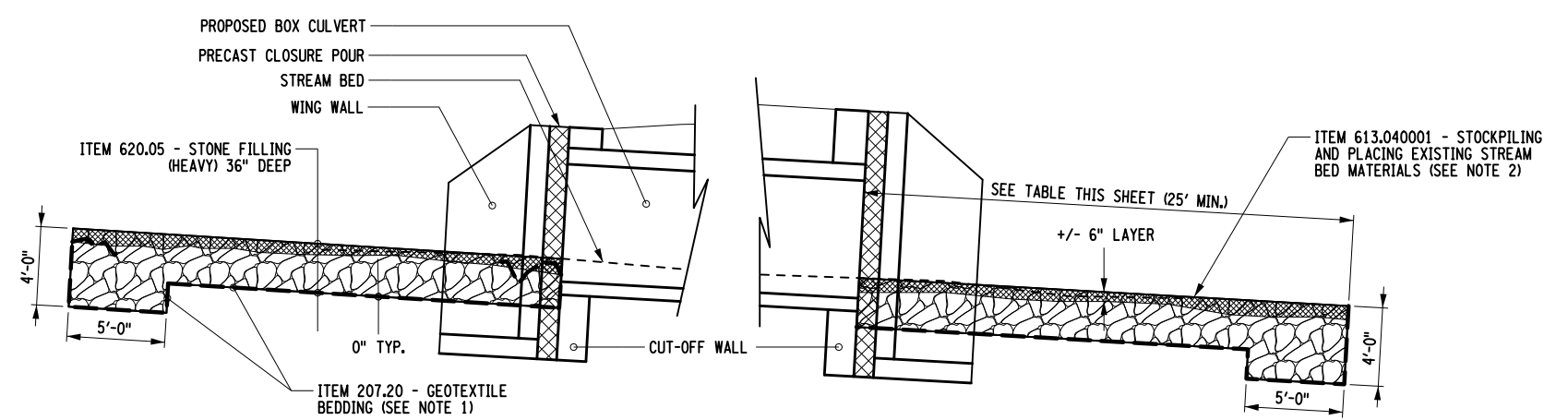
1 STONE APRON PLAN - CULVERT INLET END
 NOT TO SCALE



2 STONE APRON PLAN - CULVERT OUTLET END
 NOT TO SCALE

TABLE OF HEAVY STONE FILLING ITEM 620.05 - INLET END			
LOCATION	STREAM STATION	OFFSET (FT)	ELEVATION
1	ST 1+57.96	3.1 RT	1291.7
2	ST 1+56.56	3.1 RT	1291.8
3	ST 1+48.97	9.95 RT	1294.5
4	ST 1+41.59	6.0 RT	1294.0
5	ST 1+30.56	4.6 RT	1294.0
6	ST 1+31.02	2.6 LT	1293.0
7	ST 1+41.11	7.9 LT	1293.4
8	ST 1+49.66	10.5 LT	1294.5
9	ST 1+56.62	3.1 LT	1291.9
10	ST 1+58.00	3.0 LT	1291.8

TABLE OF HEAVY STONE FILLING ITEM 620.05 - OUTLET END			
LOCATION	STREAM STATION	OFFSET (FT)	ELEVATION
11	ST 1+93.58	3.00 LT	1289.9
12	ST 1+95.03	2.9 LT	1289.9
13	ST 2+04.19	9.6 LT	1293.0
14	ST 2+33.23	3.5 LT	1287.6
15	ST 2+31.34	6.5 RT	1289.3
16	ST 2+19.48	12.5 RT	1294.0
17	ST 2+09.55	13.3 RT	1295.2
18	ST 1+95.05	3.0 RT	1298.9
19	ST 1+93.63	3.0 RT	1298.8



3 STONE APRON SECTION A - A
 NOT TO SCALE

AFFIX SEAL: ON:

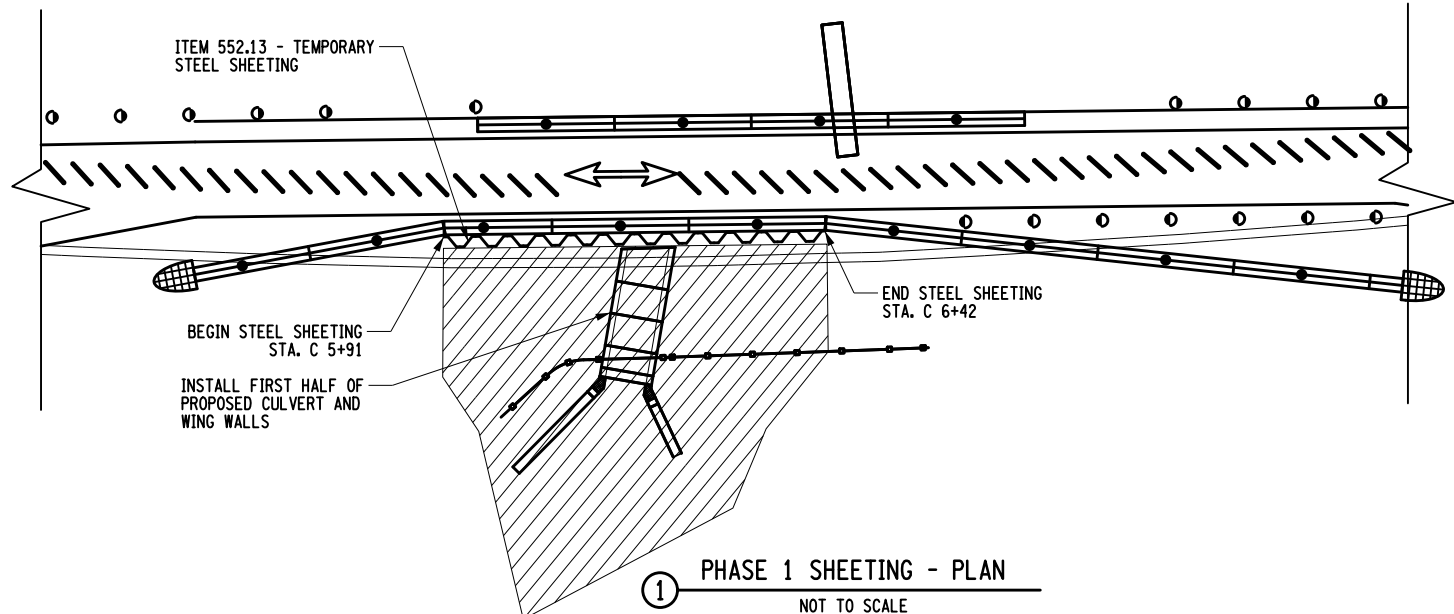
ALTERED BY: ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	ROUTE 28 - SH 5659	PIN 9805.93	BRIDGES	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER
	RICHFIELD SPRINGS - SCHUYLER LAKE	ROUTE 28	CULVERTS C950058		
	MULTI-CULVERT REPLACEMENT & REPAIR PROJECT	UTILITY QUALITY LEVEL D			
	TOWN OF EXETER				
COUNTY: OTSEGO					
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.					NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 09 DOCUMENT NAME: 980593_C950059_RT28_cph_msd_02_c.dgn

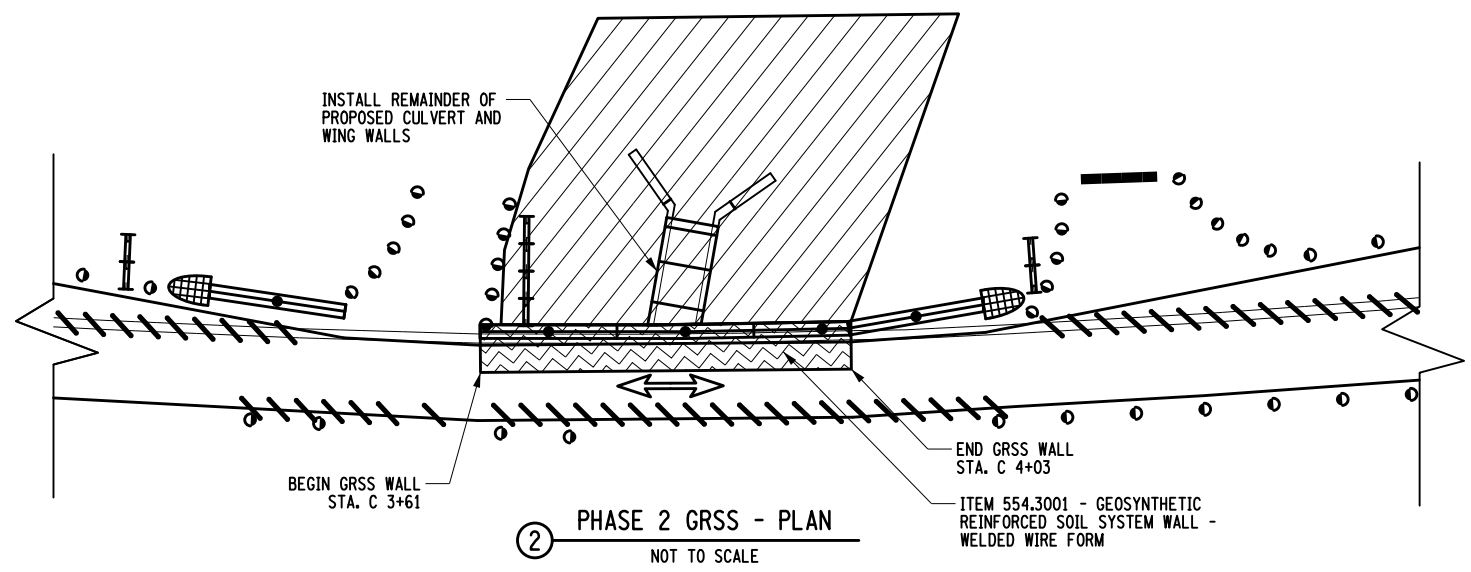
STONE APRON DETAILS		DRAWING NO. MSD-02-C
SITE C		SHEET NO. 89

PROJECT MANAGER G. WOJCIK
 CHECK J.L. PHILLIPS
 DRAFTING D. MELSZER
 CHECK J.L. PHILLIPS
 DESIGN D. MELSZER
 JOB MANAGER J.L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER

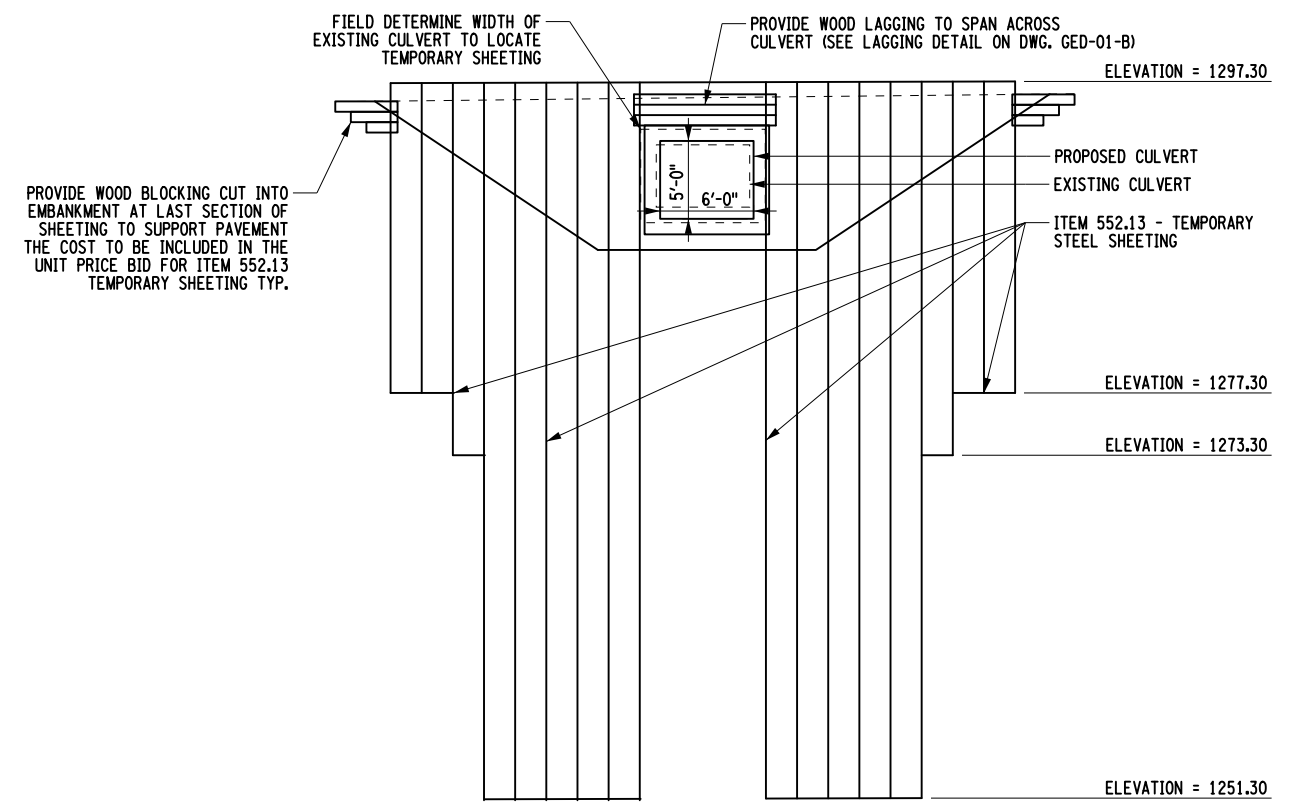
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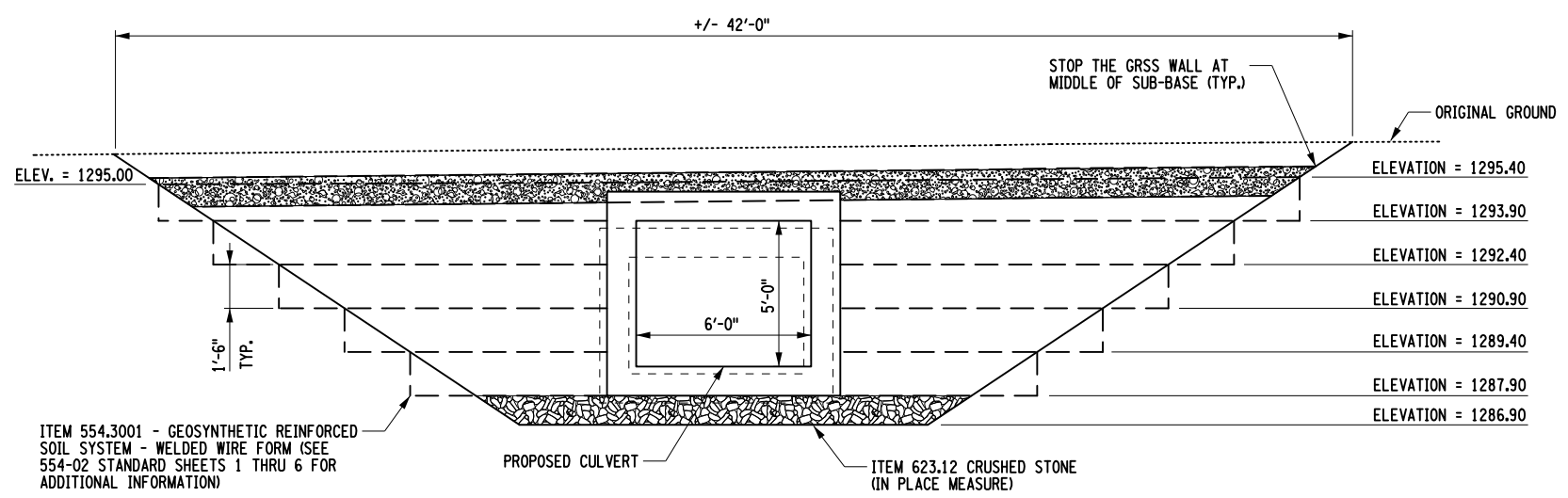
① PHASE 1 SHEETING - PLAN
NOT TO SCALE



② PHASE 2 GRSS - PLAN
NOT TO SCALE



③ PHASE 1 - TEMPORARY SHEETING ELEVATION
NOT TO SCALE



④ PHASE 2 - GRSS WALL ELEVATION
NOT TO SCALE

NOTES:

1. PROVIDE STEEL SHEETING MEETING THE REQUIREMENTS OF ASTM A328.
2. THE FOLLOWING INFORMATION WAS USED IN THE DESIGN OF THE SOLDIER PILE AND LAGGING WALL:

LOCATION	ELEVATION (FT)	UNIT WEIGHT (LBS/FT ³)	FRICTION ANGLE (DEGREES)	COHESION (LBS/FT ²)	WALL FRICTION (DEGREES)
C950059	O.G.S. TO 1271.5	120	33	0	0
	1271.5 TO 1260.5	120	35	0	0

- A. DIVIDE THE PASSIVE EARTH PRESSURE COEFFICIENT (Kp) BY 1.25.
- B. GROUNDWATER IS ASSUMED AT ELEVATION 1291.5 FEET.
- C. A SURCHARGE LOAD OF 250 POUNDS PER SQUARE FOOT IS ASSUMED AT THE TOP OF THE WALL.

AFFIX SEAL: ON:

ALTERED BY: ON:

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

NYS ROUTE 28 - SH 5037
 RICHFIELD SPRINGS - SCHUYLER LAKE
 MULTI - CULVERT REPLACEMENT AND REPAIR PROJECT
 TOWN OF EXETER
 COUNTY: OTSEGO REGION: 09

PIN 9805.93
 ROUTE 28
 UTILITY QUALITY LEVEL D

BRIDGES
 CULVERTS
 C950059

ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED
 TEMPORARY SHEETING DETAILS
 SITE C

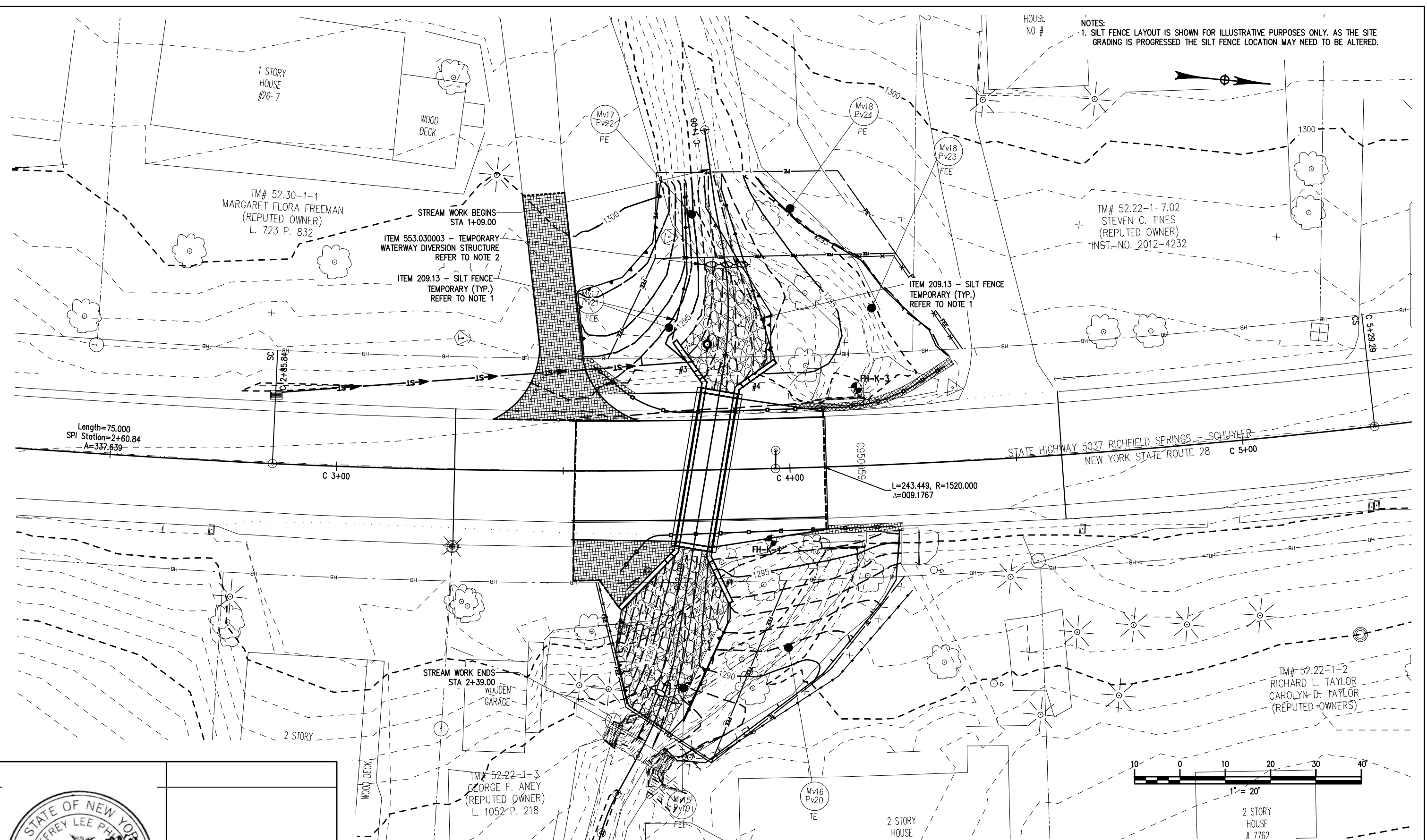
CONTRACT NUMBER
 D262989
 DRAWING NO. GED-01-C
 SHEET NO. 90

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

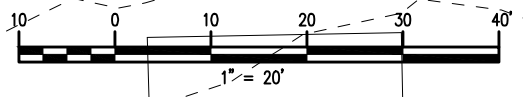


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 USER = klorf

PROJECT MANAGER G. WOJCIK
 CHECK J. L. PHILLIPS
 DRAFTING K.M. LORE
 CHECK J. L. PHILLIPS
 DESIGN K.M. LORE
 JOB MANAGER J. L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER



NOTES:
 1. SILT FENCE LAYOUT IS SHOWN FOR ILLUSTRATIVE PURPOSES ONLY. AS THE SITE GRADING IS PROGRESSED THE SILT FENCE LOCATION MAY NEED TO BE ALTERED.



AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 28 - SH 5659	PIN 9805.93	BRIDGES	CULVERTS C950059	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	RICHFIELD SPRINGS - SCHUYLER LAKE	ROUTE 28				DRAWING NO. ECP-01-C
	MULTI-CULVERT REPLACEMENT AND REPAIR PROJECT	UTILITY QUALITY LEVEL D			GENERAL PLANS	SHEET NO. 91
	TOWN OF EXETER				SITE C	
	COUNTY: OTSEGO					

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- NOTES:
- PROJECT LIMITS BEGIN 1/4 MILE FROM STATION C 3+26.00 AND END 1/4 MILE FROM STATION C 4+60.00
 - EXISTING STREAM BED TO BE FILLED IN WITH A COMBINATION OF ONSITE MATERIAL FROM NEW STREAM CHANNEL EXCAVATION SUPPLEMENTED WITH ITEM 203.02 - EMBANKMENT IN PLACE.
 - WORK SHOWN ON THE PLANS THAT IS OUTSIDE THE LIMITS OF EITHER THE EXISTING ROW OR PROPOSED ACQUISITIONS IS NOT ESSENTIAL FOR THE COMPLETION OF THE PROJECT AND WILL BE DONE UNDER A RELEASE FROM THE PROPERTY OWNER. REFER TO THE TABLE OF TEMPORARY PROPERTY RELEASES LOCATED ON THIS SHEET.

- ITEM 201.07 - CLEARING AND GRUBBING AREA TO BE CLEARED AND GRUBBED PRIOR TO CONSTRUCTION
- ITEM 203.02 UNCLASSIFIED EXCAVATION AND DISPOSAL AREA TO BE DUG OUT FOR NEW STREAM CORRIDOR
- RELOCATE POLE NYSEG 76-1 BY OTHERS
- SEE NOTE 3 FOR WORK IN THIS AREA
- ITEM 603.67000001 - PRECAST CONCRETE WINGWALL UNITS FOR BOX CULVERTS (TYP.)
- ITEM 627.50140008 - CUTTING PAVEMENT
- ITEM 603.63060515 - PRECAST CONCRETE BOX CULVERT, 6' SPAN, 5' RISE
- ITEM 606.100002 - BOX BEAM GUIDE RAILING (SHOP BENT OR SHOP MITERED) RADIUS = 22.7 FT, LENGTH = 14.7 FT
- ITEM 606.120101 - BOX BEAM END PIECE
- ITEM 608.020102 - HOT MIX ASPHALT (HMA) SIDEWALKS, DRIVEWAYS, BICYCLE PATHS AND VEGETATION CONTROL STRIPS
- REPLACE DRIVEWAY ENTRANCE REFER TO DETAIL SHEET MSD-01-D
- END MILL AND PAVE SECTION BEGIN FULL RECON SECTION STATION C 3+52.00

- ITEM 203.03 - EMBANKMENT IN PLACE - REFER TO NOTE 2
- ITEM 606.10 - BOX BEAM GUIDE RAIL
- ITEM 607.41010010 - TEMPORARY PLASTIC BARRIER FENCE
- ITEM 202.19 - REMOVAL OF SUBSTRUCTURES REMOVE EXISTING HEADWALLS TO A MINIMUM OF 12" BELOW FINISHED GRADE (TYP.)
- ITEM 608.020102 - HOT MIX ASPHALT (HMA) SIDEWALKS, DRIVEWAYS AND BICYCLE PATHS, AND VEGETATIVE CONTROL STRIPS (TYP.)

TM# 52.22-1-7.02
 STEVEN C. TINES
 (REPUTED OWNER)
 INST. NO. 2012-4232

ITEM 606.120201 - BOX BEAM GUIDE RAIL END ASSEMBLY, TYPE IIA
 END WORK LIMITS
 END MILL AND PAVE SECTION TIE INTO EXISTING PAVEMENT WIDTH AND CROSS SLOPE STATION C 4+60.00

ITEM 627.50140008 - CUTTING PAVEMENT

STATE HIGHWAY 5037 RICHFIELD SPRINGS - SCHUYLER
 NEW YORK STATE ROUTE 28 C 5+00

L=243.449, R=1520.000
 Δ=009.1767

END FULL RECON SECTION BEGIN MILL AND PAVE SECTION STATION C 4+08.00

ITEM 608.020102 - HOT MIX ASPHALT (HMA) SIDEWALKS, DRIVEWAYS AND BICYCLE PATHS, AND VEGETATIVE CONTROL STRIPS (TYP.)

ITEM 606.120101 - BOX BEAM END PIECE

ITEM 204.01 - CONTROLLED LOW STRENGTH MATERIAL (CLSM) FILL IN EXISTING CULVERT

ITEM 202.19 - REMOVAL OF SUBSTRUCTURES REMOVE EXISTING WING WALLS AND HEADWALLS TO A MINIMUM OF 12" BELOW FINISHED GRADE (TYP.)

ITEM 606.10 - BOX BEAM GUIDE RAIL

ITEM 606.100002 - BOX BEAM GUIDE RAILING (SHOP CURVED OR SHOP MITERED) RADIUS = 5.14 FT, LENGTH = 4.5 FT.

ITEM 606.120101 - BOX BEAM END PIECE

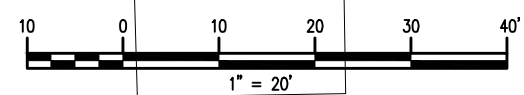
ITEM 607.41010010 - TEMPORARY PLASTIC BARRIER FENCE

TM# 52.22-1-2
 RICHARD L. TAYLOR
 CAROLYN D. TAYLOR
 (REPUTED OWNERS)

TM# 52.22-1-3
 GEORGE F. ANEY
 (REPUTED OWNER)
 L. 1052 P. 218

2 STORY HOUSE # 7762

2 STORY HOUSE # 7759



ITEM 603.9812 SMOOTH INTERIOR CORRUGATED POLYETHYLENE CULVERT AND STORM DRAIN 12 INCH DIAMETER.

ITEM 604.302122 - RECTANGULAR DRAINAGE STRUCTURE TYPE U FOR #22 WELDED FRAME
 ITEM 655.1022 - WELDED FRAME AND RECTANGULAR GRATE 22

Length=75.000
 SPI Station=2+60.84
 A=337.639

BEGIN MILL AND PAVE SECTION TIE INTO EXISTING PAVEMENT WIDTH AND CROSS SLOPE STATION C 3+26.00

TABLE OF TEMPORARY PROPERTY RELEASES

SITE	LAND OWNER	AREA	DESCRIPTION OF WORK
C	MARGARET FLORA FREEMAN	870 SF	TEMPORARY TIE-IN OF DRIVEWAY FOR OWNER'S ACCESS TO PROPERTY DURING WORK ZONE PHASE 1 AND GRADING OF FRONT YARD.
C	GEORGE F. ANEY	135 SF	

NOTE: THE EIC SHALL COORDINATE WITH THE PROPERTY OWNER TO DOCUMENT THE GRANTING OF PERMISSION TO WORK ON PRIVATE PROPERTY USING FORM "HC 90 - RELEASE TO PERFORM WORK ON PRIVATE LAND". THE FORM MUST BE COMPLETED BY THE EIC AND THE PROPERTY OWNER BEFORE ANY WORK CAN BE STARTED ON PRIVATE PROPERTY BY THE CONTRACTOR.



AS-BUILT REVISIONS
 DESCRIPTION OF ALTERATIONS:

NYS ROUTE 28 - SH 5659
 RICHFIELD SPRINGS - SCHUYLER LAKE
 MULTI-CULVERT REPLACEMENT AND REPAIR PROJECT
 TOWN OF EXETER
 COUNTY: OTSEGO

PIN 9805.93
 ROUTE 28
 UTILITY QUALITY LEVEL D

BRIDGES

CULVERTS
 C950059

ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED

GENERAL PLANS

SITE C

CONTRACT NUMBER
 D262989

DRAWING NO. GNP-01-C
 SHEET NO. 92

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



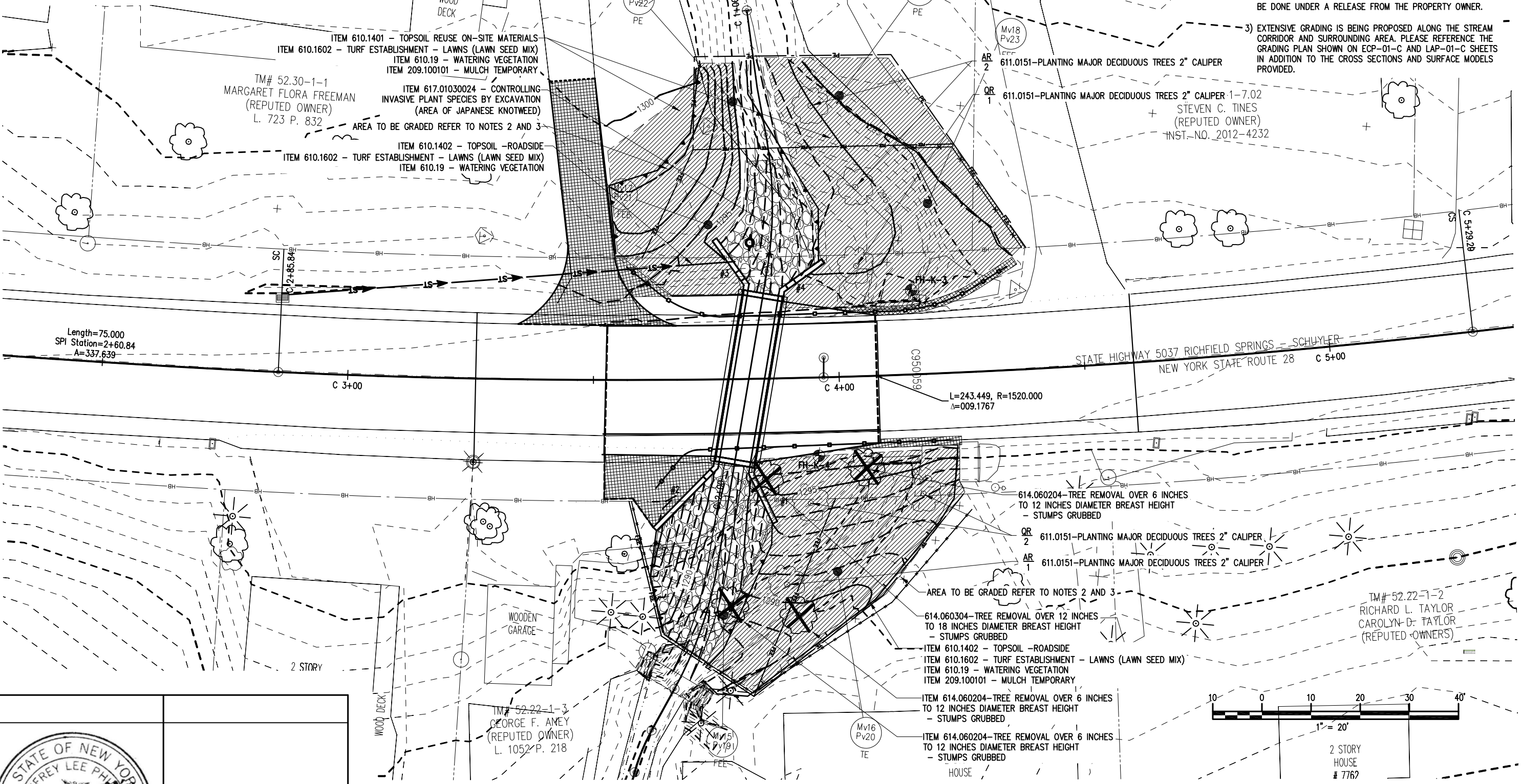
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 USER = gmeyer

PROJECT MANAGER G. WOJCIK
 CHECK J. L. PHILLIPS
 DRAFTING K.M. LORE
 CHECK J. L. PHILLIPS
 DESIGN K.M. LORE
 JOB MANAGER J. L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER

PLANT LIST

ITEM NUMBER	SYM.	QTY.	GENUS & SPECIES	NOTES
611.0151	AR	3	ACER RUBRUM RED MAPLE	2" CALIPER STREET TREE FORM
611.0151	QR	3	QUERCUS RUBRA RED OAK	2" CALIPER STREET TREE FORM

- NOTES:
- ITEM 610.1101 - MULCH FOR PLANTING TYPE A, B & D - WOOD CHIPS SHREDDED BARK
ADD A 3-FOOT DIAMETER MULCH BED 3" THICK AROUND EACH TREE TO BE PLANTED
 - WORK SHOWN ON THE PLANS THAT IS OUTSIDE THE LIMITS OF EITHER THE EXISTING ROW OR PROPOSED ACQUISITIONS IS NOT ESSENTIAL FOR THE COMPLETION OF THE PROJECT AND WILL BE DONE UNDER A RELEASE FROM THE PROPERTY OWNER.
 - EXTENSIVE GRADING IS BEING PROPOSED ALONG THE STREAM CORRIDOR AND SURROUNDING AREA. PLEASE REFERENCE THE GRADING PLAN SHOWN ON ECP-01-C AND LAP-01-C SHEETS IN ADDITION TO THE CROSS SECTIONS AND SURFACE MODELS PROVIDED.



AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 28 - SH 5659	PIN 9805.93	BRIDGES	CULVERTS C950059	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	RICHFIELD SPRINGS - SCHUYLER LAKE	ROUTE 28				DRAWING NO. LAP-01-C
	MULTI-CULVERT REPLACEMENT AND REPAIR PROJECT	UTILITY QUALITY LEVEL D			LANDSCAPE PLANS	SHEET NO. 93
	TOWN OF EXETER					SITE C
	COUNTY: OTSEGO					

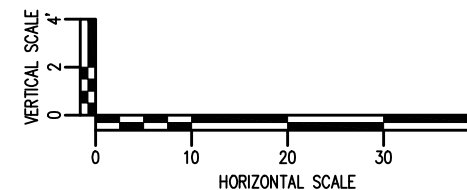
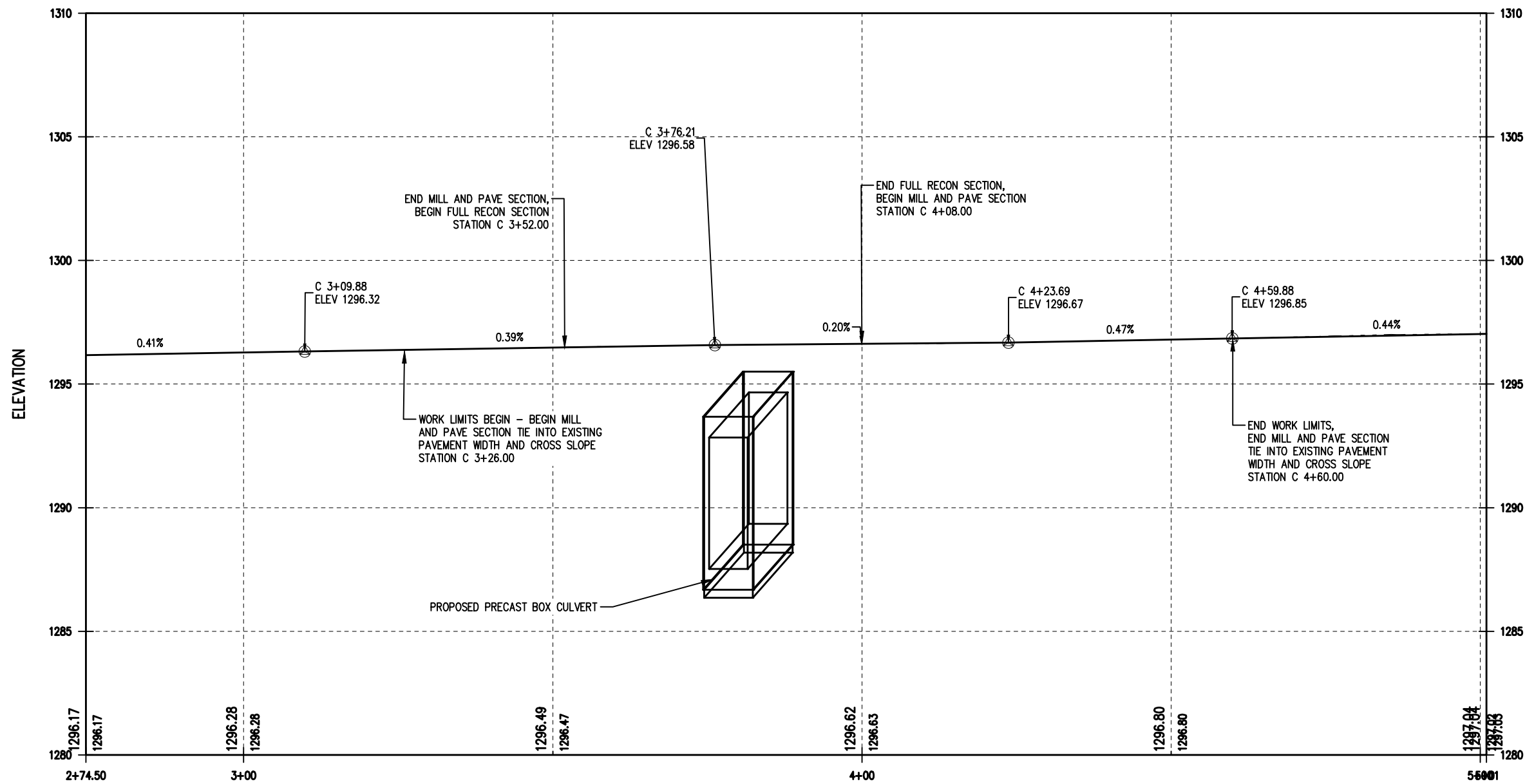
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DESIGN SUPERVISOR R. WILDER
 JOB MANAGER J. L. PHILLIPS
 DESIGN K.M. LORE
 DRAFTING K.M. LORE
 CHECK J. L. PHILLIPS
 PROJECT MANAGER G. WOJCIK

PROPOSED ROUTE 28 PROFILE



AFFIX SEAL:
ON:

ALTERED BY:
ON:



AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

NYS ROUTE 28 - SH 5659
 RICHFIELD SPRINGS - SCHUYLER LAKE
 MULTI-CULVERT REPLACEMENT AND REPAIR PROJECT
 TOWN OF EXETER
 COUNTY: OTSEGO

PIN 9805.93
 ROUTE 28
 UTILITY QUALITY LEVEL D

BRIDGES

CULVERTS
C950059

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

ROUTE 28 PROFILES

SITE C

CONTRACT NUMBER
D262989

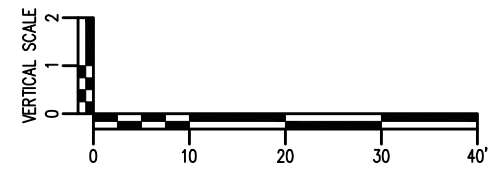
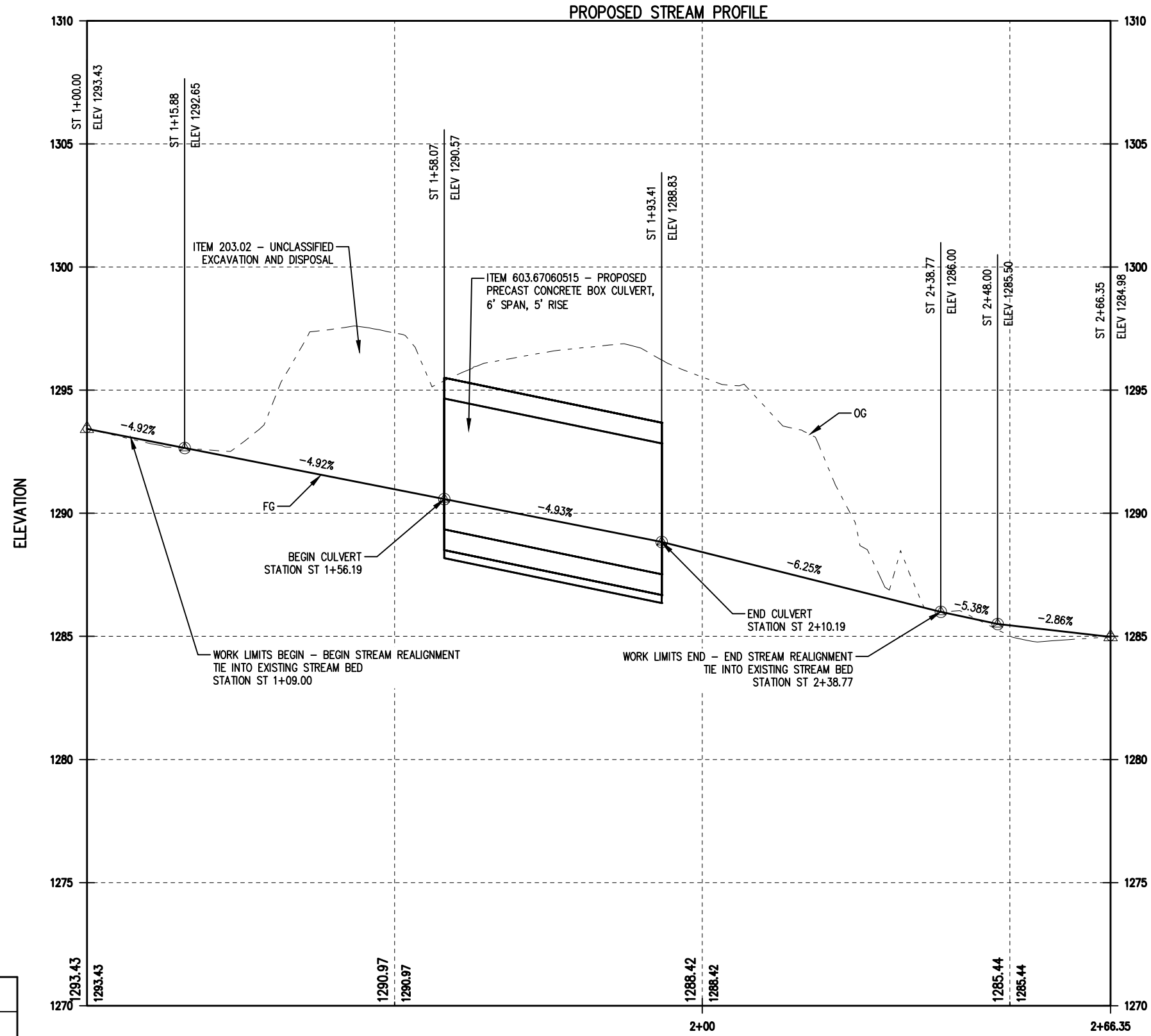
DRAWING NO. PRO-01-C
 SHEET NO. 94

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



FILE NAME = 980593_C950059_R1728_fec_wy_Fecture_File.dwg
 DATE/TIME = 8/13/2015 10:43:51 AM
 USER = klorf

DESIGN SUPERVISOR R. WILDER
 JOB MANAGER J. L. PHILLIPS
 DESIGN K.M. LORE
 DRAFTING K.M. LORE
 CHECK J. L. PHILLIPS
 PROJECT MANAGER G. WOJCIK



AFFIX SEAL:
ON:

ALTERED BY:
ON:



AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

NYS ROUTE 28 - SH 5659
 RICHFIELD SPRINGS - SCHUYLER LAKE
 MULTI-CULVERT REPLACEMENT & REPAIR PROJECT
 TOWN OF EXETER
 COUNTY: OTSEGO

PIN 9805.93
 ROUTE 28
 UTILITY QUALITY LEVEL D

BRIDGES

CULVERTS
C950059

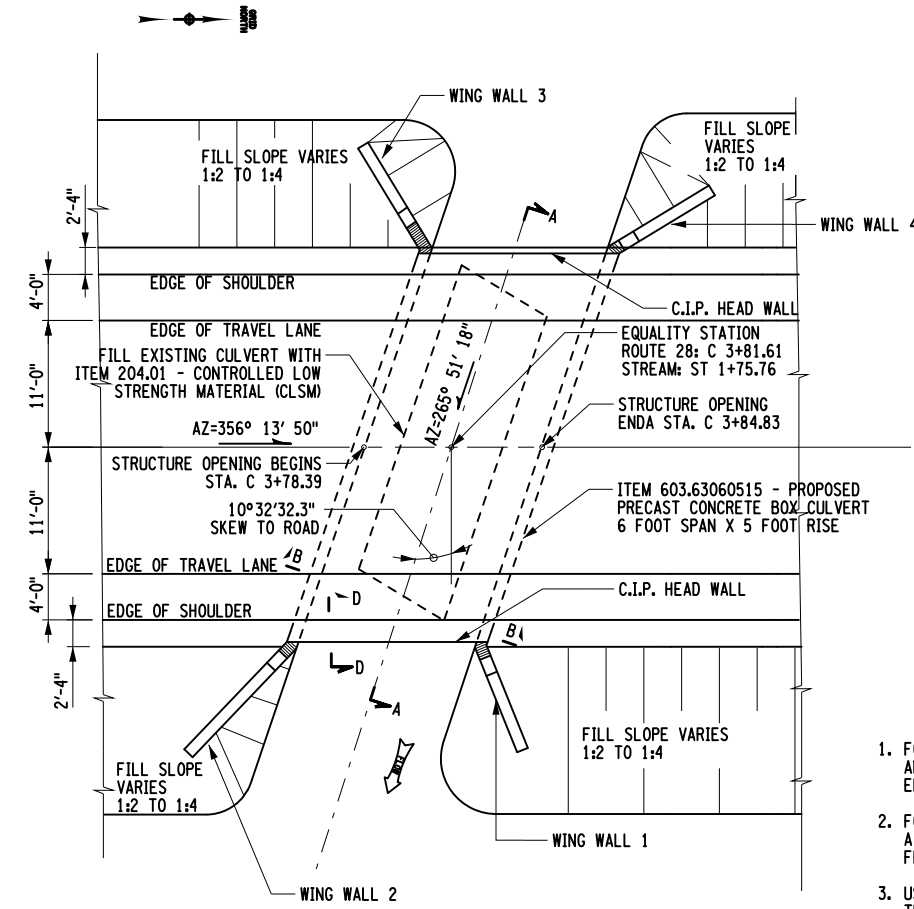
ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED
 STREAM PROFILES
 SITE C

CONTRACT NUMBER
D262989
 DRAWING NO. PRO-02-C
 SHEET NO. 95

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



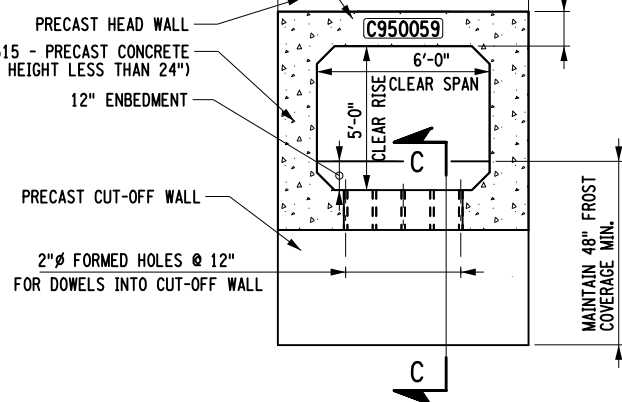
PROJECT MANAGER G. WOJCIK
 CHECK J. L. PHILLIPS
 DRAFTING K. BLUMBERGS
 CHECK J. L. PHILLIPS
 DESIGN K. BLUMBERGS
 JOB MANAGER J. L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER



1 CULVERT PLAN VIEW
NOT TO SCALE

THE COST OF THE CULVERT IDENTIFICATION NUMBER (C950059) SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE CULVERT ITEM 606.63060515

ITEM 603.63060515 - PRECAST CONCRETE BOX CULVERT (FILL HEIGHT LESS THAN 24")
12" EMBEDMENT



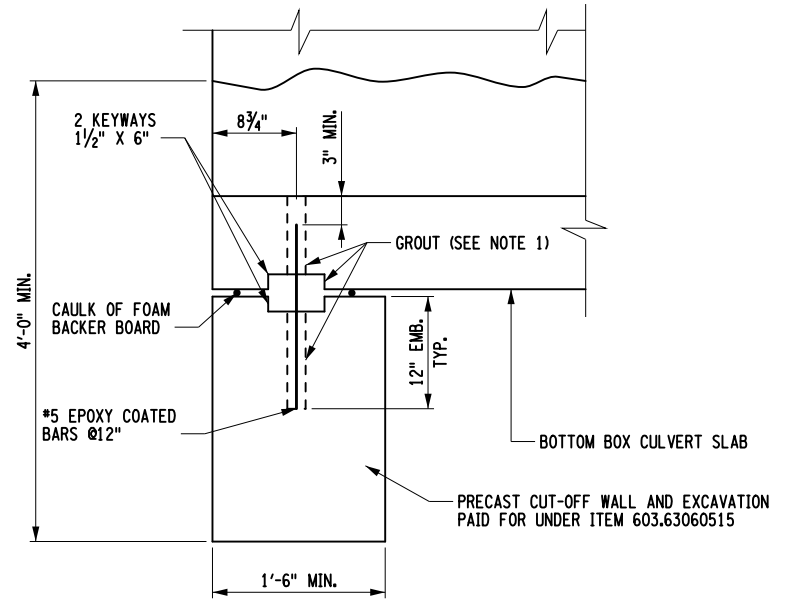
2 CULVERT ELEVATION VIEW
LOOKING UPSTREAM
NOT TO SCALE

- FOR THE SLIDING AND ECCENTRICITY ANALYSES, ASSUME A GROUND WATER ELEVATION OF 1292 FEET.
- FOR THE BEARING ANALYSES, ASSUME A GROUND WATER ELEVATION OF 1288 FEET.
- USE SUBMERGED UNIT WEIGHTS BELOW THE GROUND WATER ELEVATIONS PROVIDED.
- ASSUME A SURCHARGE LOAD OF 250 POUNDS PER SQUARE FOOT.

GEOTECHNICAL WING WALL DESIGN DATA						
FRICITION ANGLE OF SOIL RETAINED BY THE WALL (DEGREES)	FRICITION ANGLE OF FOUNDATION SOIL (DEGREES)	TOTAL SOIL UNIT WEIGHT (lb/ft ³)	MAXIMUM SERVICE LIMIT STATE BEARING RESISTANCE (lb/ft ²)	NOMINAL COEFFICIENT OF FRICTION FOR SLIDING	STRENGTH LIMIT STATE RESISTANCE FACTOR FOR SLIDING	STRENGTH LIMIT STATE RESISTANCE FACTOR FOR BEARING
33	30	120	2.0	0.46	0.90	0.45

NOTES:

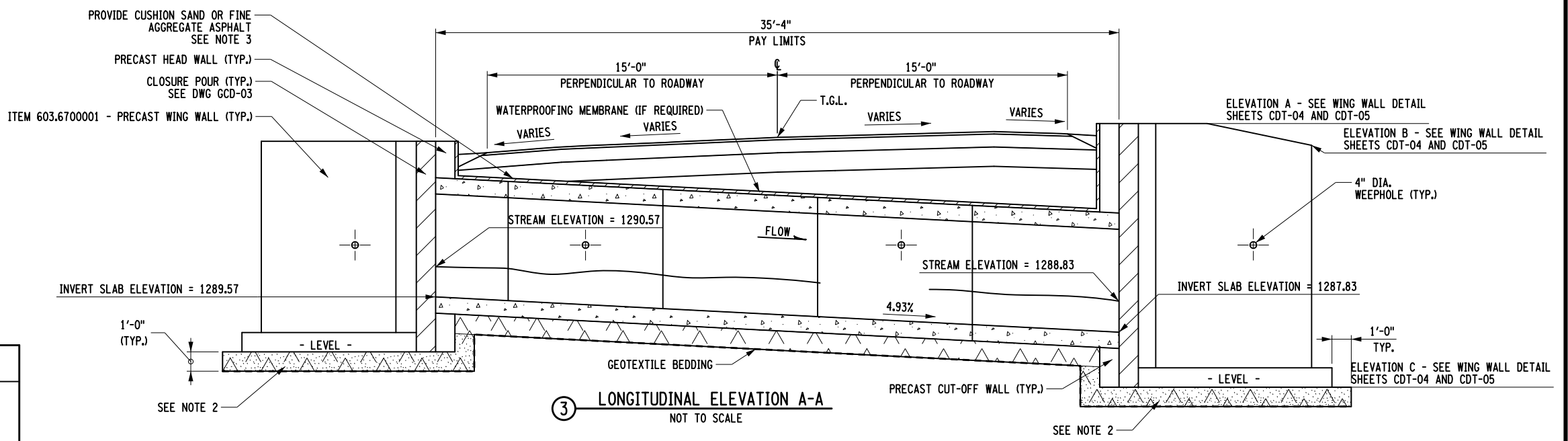
- DOWEL BARS USED TO ATTACH THE CUT-OFF WALL TO THE BOX CULVERT SHALL BE DRILLED AND GROUTED PER THE REQUIREMENTS OF STANDARD SPECIFICATION SECTION 586 EXCEPT THE GROUT SHALL MEET THE REQUIREMENTS OF SECTION 701-06. THE KEYWAYS SHALL BE GROUTED WITH THE SAME MATERIAL AS THE DOWELS. WHEN THE GRADE OF THE BOX EXCEEDS 5%, THE TOP OF THE CUT-OFF WALL SHOULD BE BEVELED TO MATCH THE GRADE. PLACE A BEAD OF CAULK, CLOSED CELL FOAM OR OTHER SUITABLE MATERIAL ON BOTH SIDES OF THE KEYWAY TO CONTAIN THE GROUT. THE COST OF THE GROUT AND REBAR SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 603.63060515.
- PRECAST CUT-OFF WALLS AND WING WALLS SHALL BE PLACED ON A LEVELING BED OF ITEM 623.12 - CRUSHED STONE (IN-PLACE MEASURE), AND MEET THE REQUIREMENTS OF MATERIAL DESIGNATION 703-0201, 703-0202, OR 703-0204 WITH A PRIMARY SIZE DESIGNATION OF 2. AFTER PLACING AND LEVELING THE PRECAST UNITS, THE AREAS BENEATH AND BEHIND THE UNITS SHALL BE GROUTED WITH CONTROLLED LOW STRENGTH MATERIAL MEETING THE REQUIREMENTS OF SECTION 204.
- REFER TO THE SPECIAL SPECIFICATION 595.50000018 IN THE PROPOSAL FOR ADDITIONAL INFORMATION ON THE PROPER INSTALLATION AND PROTECTION OF ASPHALT MEMBRANE.



4 SECTION VIEW C-C
NOT TO SCALE

BOX CULVERT DESIGN DATA	
CLEAR SPAN, ft.	6'-0"
CLEAR RISE, ft.	5'-0"
MIN. FILL HEIGHT, ft.	0'-0"
MAX. FILL HEIGHT, ft.	2'-0"
(CSKEW) SKEW ANGLE \perp TO \odot OF ROADWAY, DEG.	10.5 DEGREES
LIVE LOAD	HL93
RAILING / BARRIER TEST LEVEL	TL-3

BASED ON ASSUMED TOP SLAB THICKNESS OF 12". FABRICATOR SHALL ADJUST BASED ON ACTUAL TOP SLAB THICKNESS. (DESIGNER TO FILL IN VALUE)



3 LONGITUDINAL ELEVATION A-A
NOT TO SCALE

AFFIX SEAL: ON: _____
ALTERED BY: ON: _____



AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 28 - SH 5037	PIN 9805.93 ROUTE 28 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS C950059	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	RICHFIELD SPRINGS - SCHUYLER LAKE					
	MULTI-CULVERT REPLACEMENT & REPAIR PROJECT					
	TOWN OF EXETER					
COUNTY: OTSEGO	REGION: 09	CULVERT DETAILS		DRAWING NO. CDT-01-C SHEET NO. 96		

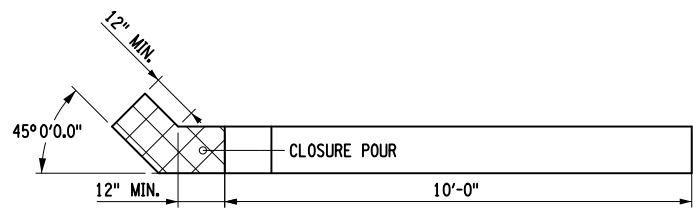
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



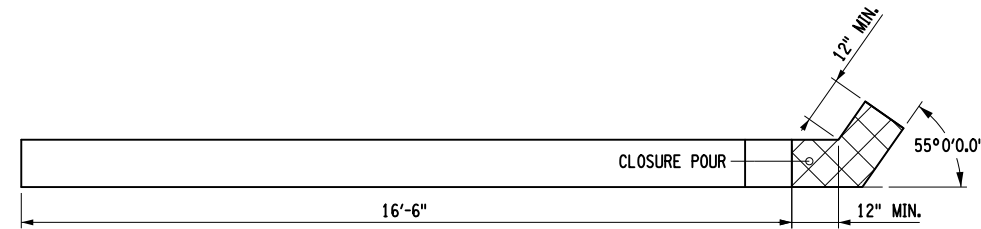
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 USER = jphillips

FILE NAME = 980593_C950059_RT28_cph_cdf_02_c.dgn
 DATE/TIME = 06-AUG-2015 09:27
 USER = jphillips

PROJECT MANAGER G. WOJCIK
 CHECK J. L. PHILLIPS
 DRAFTING D. MELSZER
 CHECK J. L. PHILLIPS
 DESIGN D. MELSZER
 JOB MANAGER J. L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER

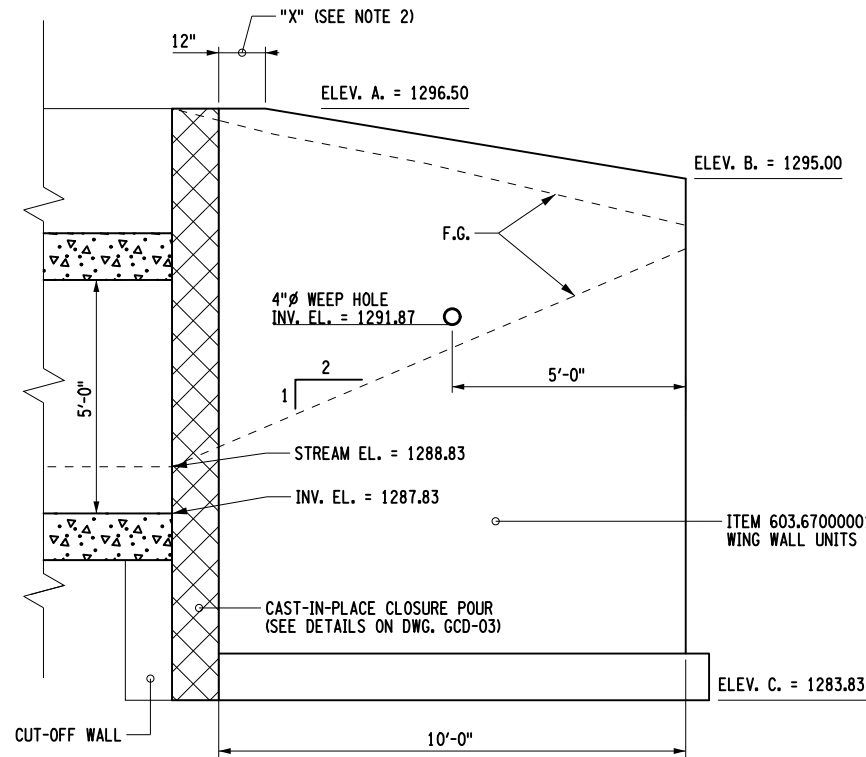


① WING WALL 1 - PLAN VIEW
NOT TO SCALE

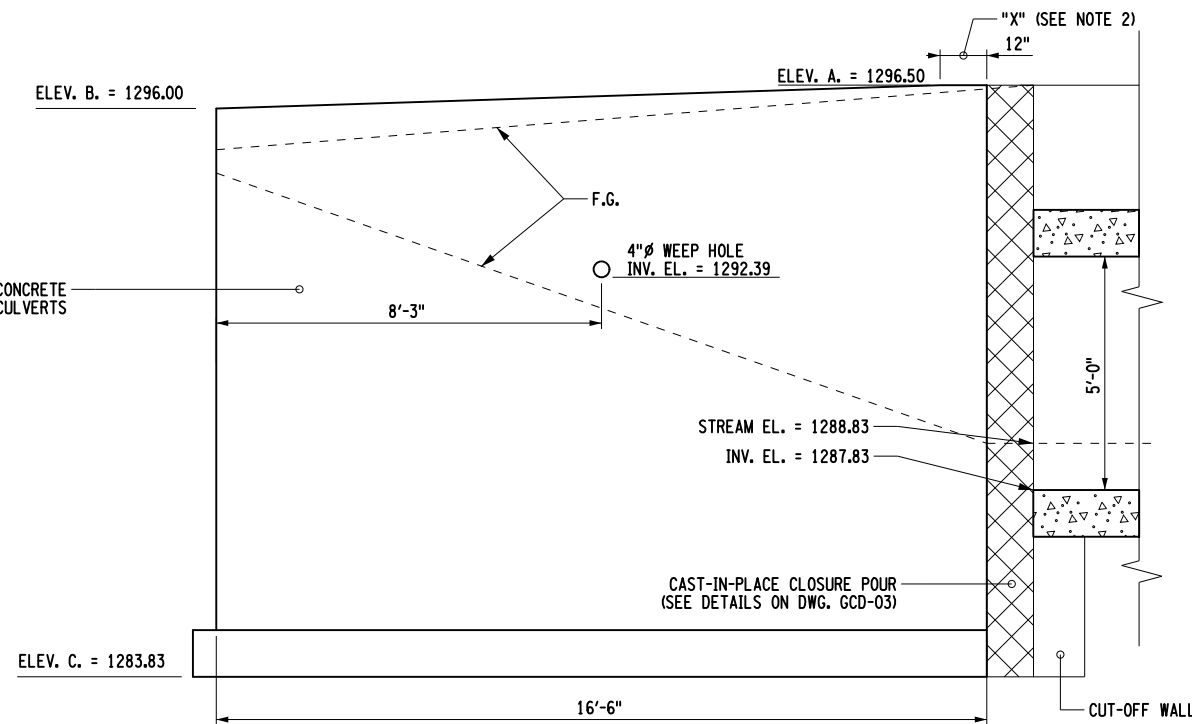


③ WING WALL 2 - PLAN VIEW
NOT TO SCALE

- NOTES:
1. WING WALLS, CULVERT TOP SLABS AND CULVERT BOTTOM SLABS ARE DRAWN AND ASSUMED TO BE 12" THICK. FINAL SIZE AND CONFIGURATION SHALL BE DETERMINED BY THE CONTRACTOR'S PRECAST FABRICATOR.
 2. DIMENSION "X" IS THE LEVEL DISTANCE ACROSS THE TOP OF THE WING WALL AND IS MEASURED ALONG THE FRONT FACE OF THE WALL.



② WING WALL 1 - ELEVATION VIEW
NOT TO SCALE



④ WING WALL 2 - ELEVATION VIEW
NOT TO SCALE

AFFIX SEAL: ON:	ALTERED BY: ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 28 - SH 5037	PIN 9805.93	BRIDGES	CULVERTS C950059	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED WING WALL 1 & 2 DETAILS SITE C	CONTRACT NUMBER D262989
	RICHFIELD SPRINGS - SCHUYLER LAKE	ROUTE 28	UTILITY QUALITY LEVEL D			DRAWING NO. CDT-02-C SHEET NO. 97
	MULTI-CULVERT REPLACEMENT & REPAIR PROJECT	TOWN OF EXETER				
	COUNTY: OTSEGO	REGION: 09				

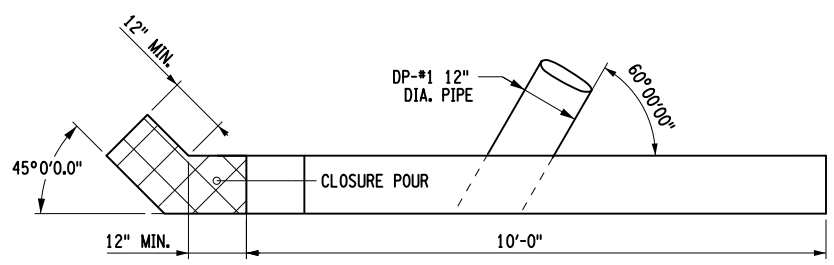
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



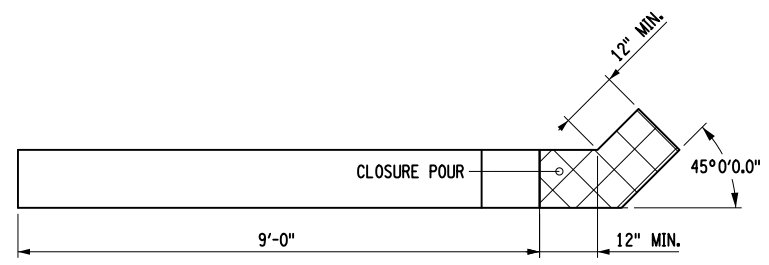
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 USER = jphillips

PROJECT MANAGER G. WOJCIK
 CHECK J. L. PHILLIPS
 DRAFTING D. MELSZER
 CHECK J. L. PHILLIPS
 DESIGN D. MELSZER
 JOB MANAGER J. L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER

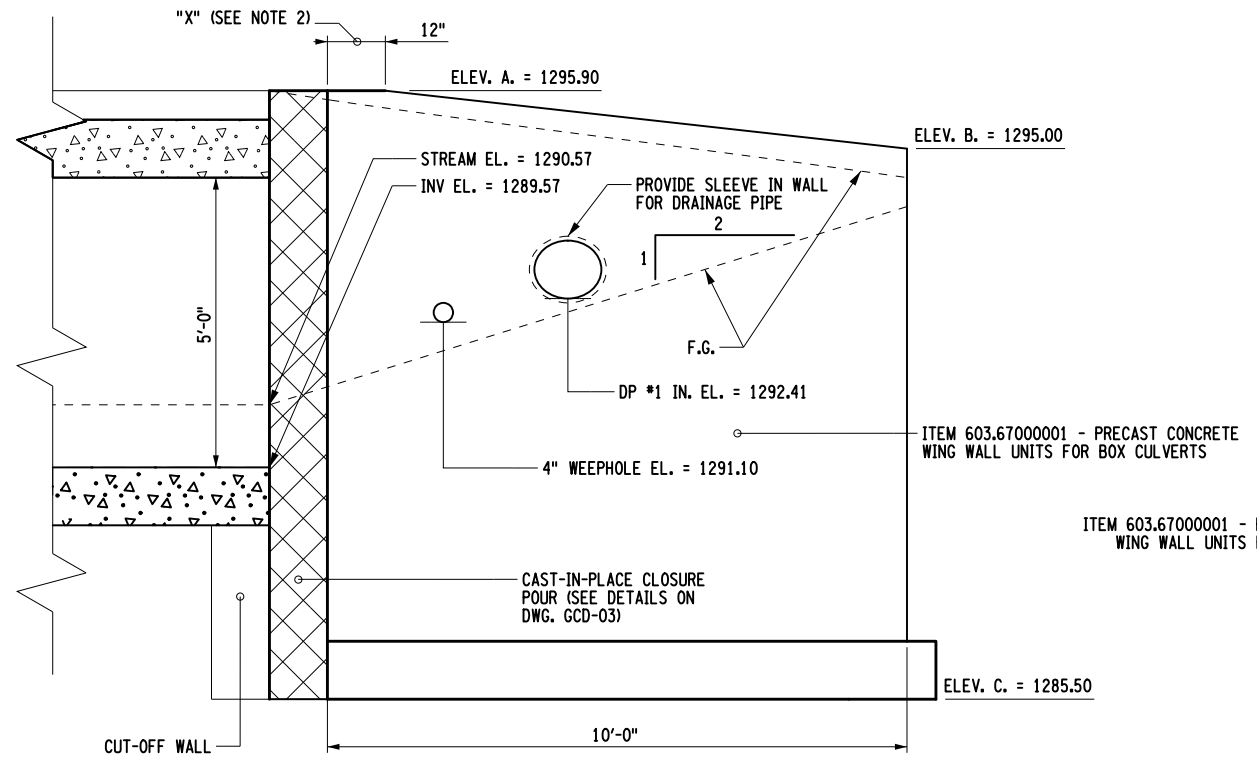
- NOTES:
1. WING WALLS, CULVERT TOP SLABS AND CULVERT BOTTOM SLABS ARE DRAWN AND ASSUMED TO BE 12" THICK. FINAL SIZE AND CONFIGURATION SHALL BE DETERMINED BY THE CONTRACTOR'S PRECAST FABRICATOR.
 2. DIMENSION "X" IS THE LEVEL DISTANCE ACROSS THE TOP OF THE WING WALL AND IS MEASURED ALONG THE FRONT FACE OF THE WALL.



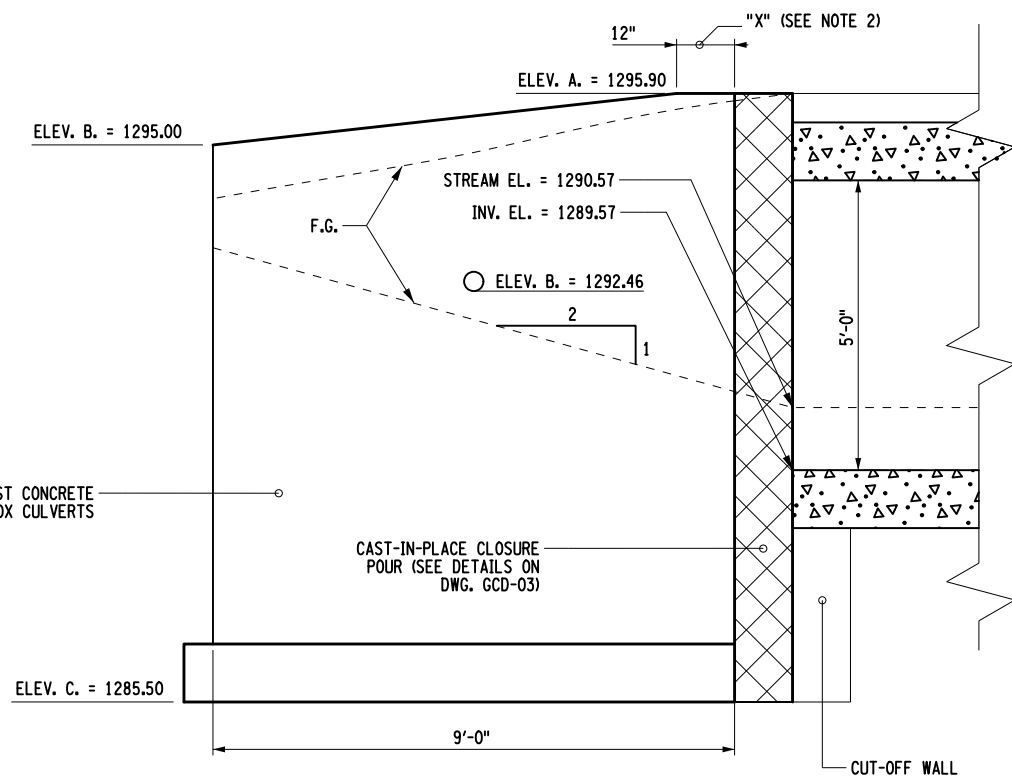
① WING WALL 3 - PLAN VIEW
 NOT TO SCALE



③ WING WALL 4 - PLAN VIEW
 NOT TO SCALE



② WING WALL 3 - ELEVATION VIEW
 NOT TO SCALE



④ WING WALL 4 - ELEVATION VIEW
 NOT TO SCALE

AFFIX SEAL: ON:	ALTERED BY: ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 28 - SH 5037	PIN 9805.93	BRIDGES	CULVERTS C950059	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED WING WALL 3 & 4 DETAILS	CONTRACT NUMBER D262989
	RICHFIELD SPRINGS - SCHUYLER LAKE	ROUTE 28				DRAWING NO. CDT-03-C
	MULTI-CULVERT REPLACEMENT & REPAIR PROJECT	TOWN OF EXETER	UTILITY QUALITY LEVEL D			SHEET NO. 98
	COUNTY: OTSEGO	REGION: 09			SITE C	
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.						 Department of Transportation

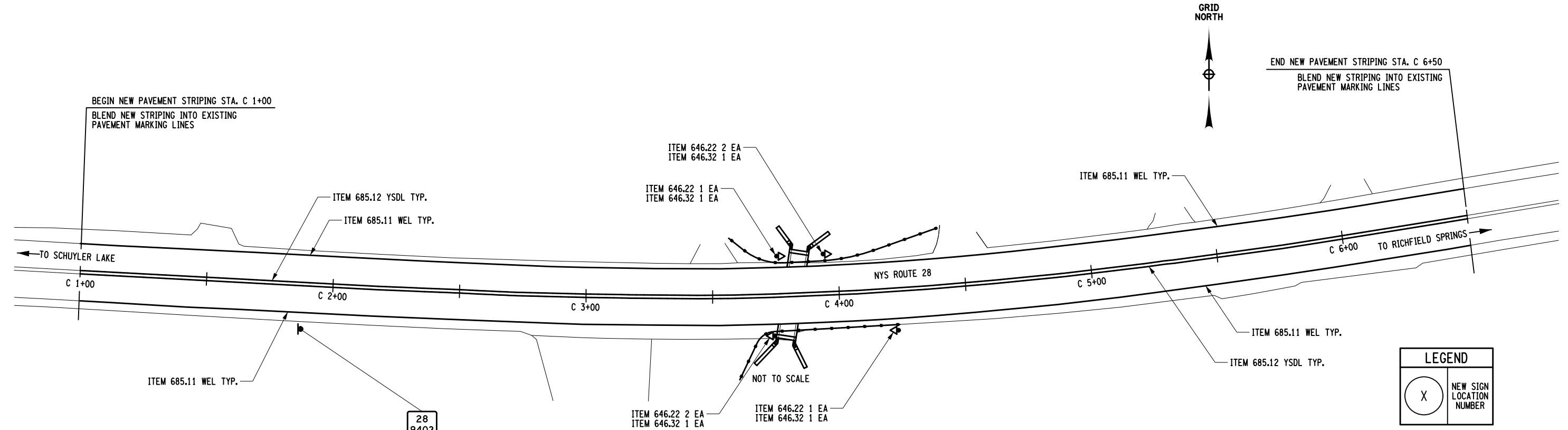
PROJECT MANAGER G. WOJCIK
 CHECK J.L. PHILLIPS
 DRAFTING G. MEYER
 CHECK J.L. PHILLIPS
 DESIGN D. MELTZER
 JOB MANAGER J.L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER

FILE NAME = 980593_C950059_RT28_sph_sop_01_C.dgn
 DATE/TIME = 30-JUL-2015 13:14
 USER = jphillips

SIGN AND PAVEMENT MARKING ITEM SUMMARY TABLE ROUTE 28 SITE C C950059			
ITEM NUMBER	DESCRIPTION	UNIT	QUANTITY
646.21	REFERENCE MARKER PANEL	EA	1
646.22	DELINEATOR, SNOWPLOWING MARKER, SUPPLEMENTARY SNOW PLOWING MARKER PANELS	EA	6
646.31	STEEL POST, 1.1 LB/FT	EA	1
646.32	STEEL POST, 2.0 LB/FT	EA	4
647.61	REMOVE AND DISPOSE SIGNS, GROUND MOUNTED TYPE A	EA	1
685.11	WHITE EPOXY REFLECTORIZED PAVEMENT STRIPES - 20 MILS	FT	1100
685.12	YELLOW EPOXY REFLECTORIZED PAVEMENT STRIPES - 20 MILS	FT	1100

DESIGNATION & COLOR (SEE NOTE 2)	LOCATION	TEXT	ITEM	SIZE	PAYMENT AREA (SEE NOTE 3)
				AREA (SEE NOTE 3)	TOTAL PAYMENT AREA
N/A	1	28 9403 3310	646.21	8 X 10	N/A
	1			0.6 SF	N/A

- SIGNING NOTES:**
- SIGN LOCATIONS AS SHOWN ON PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL INSTALL NEW SIGNS AND RELOCATE EXISTING SIGNS IN ACCORDANCE WITH THE MUTCD AND NYS SUPPLEMENT.
 - THE COLOR IS ONLY SHOWN WHEN THERE IS AN OPTION THAT MUST BE SPECIFIED.
 - SIGN SIZE IS IN INCHES. THE AREA AND PAYMENT AREA FOR SIGNS ARE FROM THE APPLICABLE STANDARD SHEETS OR SIGN FACE LAYOUTS.



AFFIX SEAL: ON:

ALTERED BY: ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:		NYS ROUTE 28 - SH 5037 RICHFIELD SPRINGS - SCHUYLER LAKE MULTI- CULVERT REPLACEMENT AND REPAIR PROJECT TOWN OF EXETER COUNTY: OTSEGO	PIN 9805.93 RT 28 UTILITY QUALITY LEVEL D	BRIDGES CULVERTS C950059	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED SIGN DATA SHEET AND SIGN AND PAVEMENT MARKING SCHEMATIC SITE C	CONTRACT NUMBER D262989 DRAWING NO. SGP-01-C SHEET NO. 99
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.						



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 USER = jphillips

DESIGN SUPERVISOR R. WILDER

JOB MANAGER J.L. PHILLIPS

DESIGN K.LORF

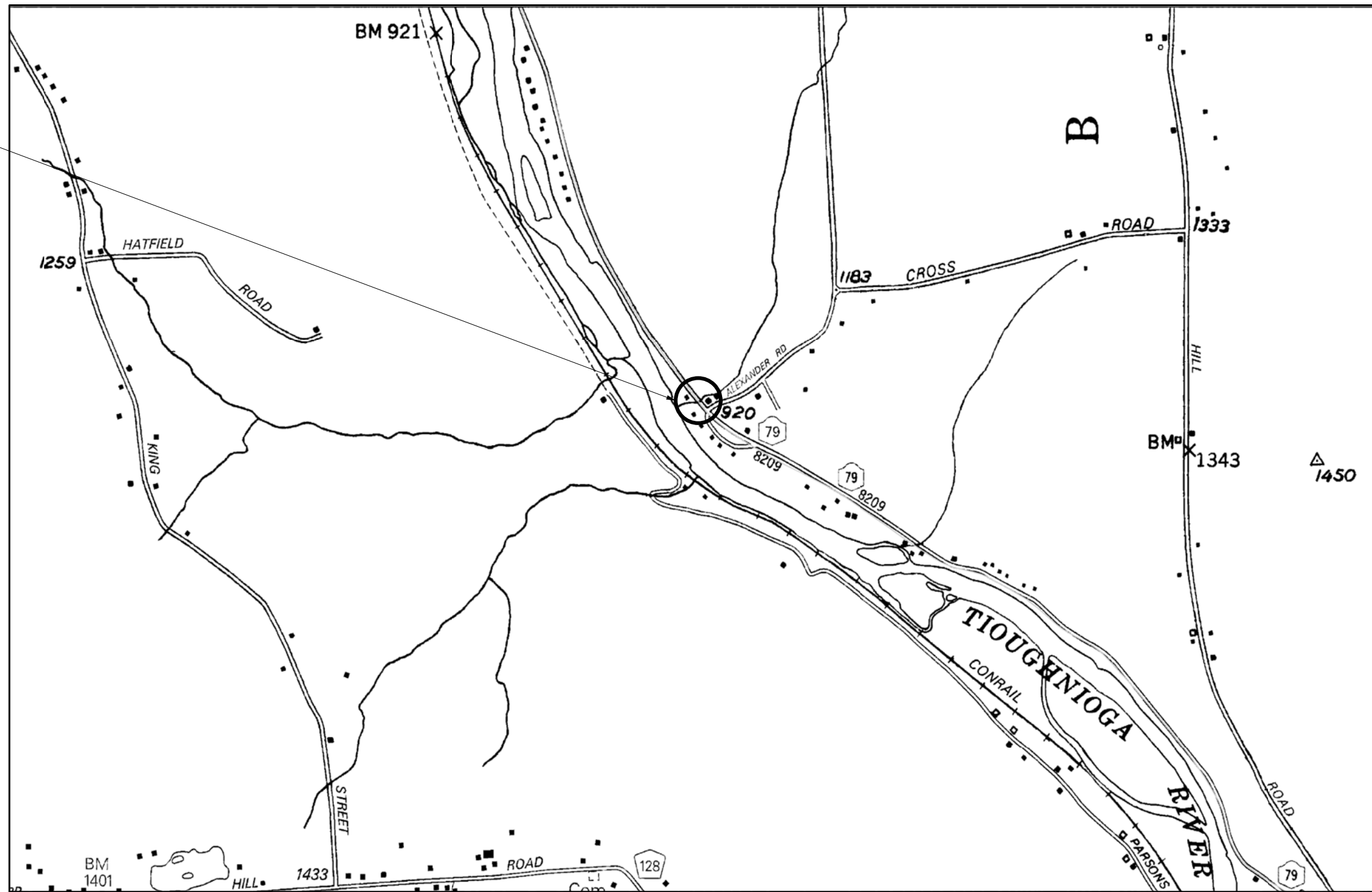
CHECK J.L. PHILLIPS

DRAFTING G. MEYER

CHECK J.L. PHILLIPS

PROJECT MANAGER G. WOJCIK

PROJECT SITE D
 124408
 ROUTE 79
 RM 79-9103-1065



SITE D LOCATION MAP
 NYS ROUTE 79 RM 79-9103-1065
 NOT TO SCALE

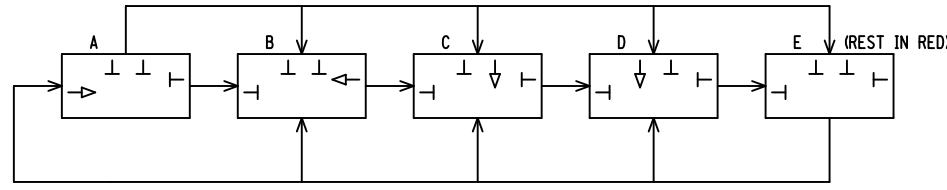
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	CHENANGO FORKS - WHITNEY POINT, PARTS 1 & 2					DRAWING NO. LOC-01-D SHEET NO. 100
	CULVERT REPLACEMENT BROOME, DELAWARE, OTSEGO COUNTIES				SITE D	
	TOWN OF BARKER					
	COUNTY: BROOME REGION: 09					



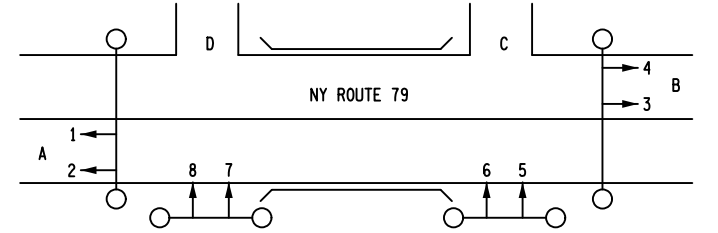
PROJECT MANAGER G. WOJCIK
 CHECK W. C. GRIFFITHS
 DRAFTING P. F. BLOW
 CHECK J. L. PHILLIPS
 DESIGN P. F. BLOW
 JOB MANAGER J. L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER

PHASING TABLE						TIMING (SEC)			
PHASE	FACE	1, 2	3, 4	5, 6	7, 8	INITIAL	EXTENSION	TIME	RECALL
A	G	R	R	R	R	8	6	32	NO
1ST CLEARANCE		Y	R	R	R	-	-	3.5	-
2ND CLEARANCE		R	R	R	R	-	-	SEE NOTE	-
B	R	G	R	R	R	8	6	32	NO
1ST CLEARANCE		R	Y	R	R	-	-	3.5	-
2ND CLEARANCE		R	R	R	R	-	-	SEE NOTE	-
C	R	R	G	R	R	8	6	32	NO
1ST CLEARANCE		R	R	Y	R	-	-	3.5	-
2ND CLEARANCE		R	R	R	R	-	-	SEE NOTE	-
D	R	R	R	G	R	8	6	14	NO
1ST CLEARANCE		R	R	R	Y	-	-	3.5	-
2ND CLEARANCE		R	R	R	R	-	-	SEE NOTE	-
E (REST IN RED)	R	R	R	R	R	-	-	1.0	YES
1ST CLEARANCE		R	R	R	R	-	-	0.5	-
2ND CLEARANCE		R	R	R	R	-	-	0.5	-
EMERGENCY FLASH		FR	FR	FR	FR	-	-	-	-

NOTE: DIVIDE THE TRAVEL DISTANCE IN FEET BETWEEN STOP LINES BY 22 FEET PER SECOND FOR THE TIME OF THE PHASE A, PHASE B, PHASE C AND PHASE D 2ND CLEARANCES.

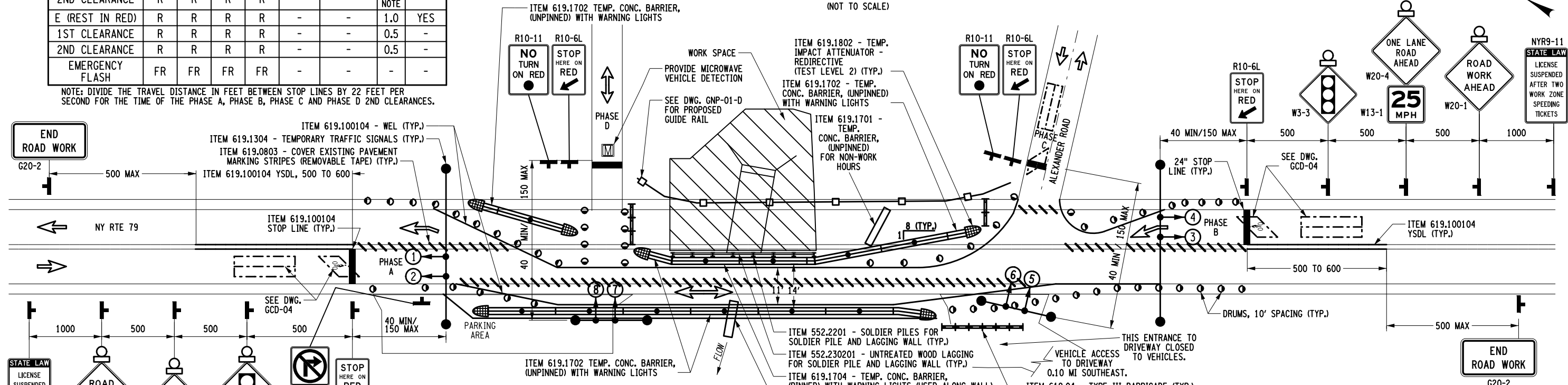


PHASING DIAGRAM



PHASING PLAN

TEMPORARY TRAFFIC SIGNAL SCHEMATIC PHASE ONE (NOT TO SCALE)



NOTES:

- REFER ALSO TO THE MUTCD AND APPLICABLE 619 STANDARD SHEETS.
- THE SIGNAL LOCATION SHALL BE FIELD DETERMINED AS DIRECTED BY THE ENGINEER.
- ADJUSTMENTS IN THE LOCATION OF ADVANCED WARNING SIGNS SHALL BE MADE TO ACCOMMODATE THE HORIZONTAL AND VERTICAL ALIGNMENT OF THE ROADWAY, RECOGNIZING THAT THE DISTANCES SHOWN FOR SIGN SPACING ARE MINIMUMS.
- FLASHING WARNING LIGHTS ARE REQUIRED ON THE SIGNAL AHEAD SIGNS (W3-3). FLASHING WARNING LIGHTS SHALL ALSO BE REQUIRED ON THE ROAD WORK AHEAD SIGNS (W20-1) AND ONE LANE ROAD AHEAD SIGNS (W20-4).
- THE TIMING, PHASING AND DETECTOR LOCATIONS ARE TO BE VERIFIED BY THE REGIONAL TRAFFIC ENGINEER AT LEAST 2 WEEKS PRIOR TO START UP. THE REGIONAL TRAFFIC ENGINEER SHALL APPROVE ANY CHANGES OR ADDITIONS REQUIRED DUE TO OBSERVED TRAFFIC CONDITIONS.
- DETECTORS SHALL BE INSTALLED ON ALL APPROACH LANES AND ALL PHASES SHALL BE ACTUATED. DURATION OF RED CLEARANCE INTERVALS SHALL BE ADEQUATE TO CLEAR THE ONE-LANE SECTION OF CONFLICTING TRAFFIC.
- LOOPS SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD SHEET 680-14.
- OTHER TYPES OF VEHICLE DETECTION EQUIPMENT MAY BE USED IF PRIOR APPROVAL IS OBTAINED FROM THE REGIONAL TRAFFIC ENGINEERING AND SAFETY GROUP. REQUESTS BY THE CONTRACTOR TO USE SUCH ALTERNATIVES SHALL BE ACCOMPANIED BY DETAILED PLANS AND SPECIFICATIONS.
- THE TRAFFIC SIGNAL SHALL REST IN RED. WHEN THE SIGNAL IS CHANGED TO THE FLASHING MODE, EITHER MANUALLY OR AUTOMATICALLY, RED SIGNAL INDICATIONS SHALL BE FLASHED TO ALL APPROACHES.
- REST IN RED FEATURE MAY BE SUBSTITUTED FOR PHASE E.
- EMERGENCY FLASH OPERATION IS CONSIDERED A MALFUNCTION. FLAGGERS ARE REQUIRED UNTIL THE MALFUNCTION IS REPAIRED.
- THE CONTRACTOR SHALL COMMENCE REPAIR WORK ON THIS SIGNAL WITHIN TWO HOURS AFTER HE/SHE HAS BEEN NOTIFIED OF A MALFUNCTION. THE CONTRACTOR HAS AN EIGHT HOUR TIME LIMIT TO MAKE REPAIRS. FLAGGER CONTROL SHALL BE PROVIDED AT THE CONTRACTOR'S EXPENSE UNTIL THE TEMPORARY SIGNAL IS RESTORED TO PROPER OPERATION. IF THE REPAIRS REMAIN UNCOMPLETED AFTER THIS TIME, LIQUIDATED DAMAGES OF ONE DAY WILL BE ASSESSED FOR EACH DAY THE SIGNAL IS MALFUNCTIONING UNTIL IT IS REPAIRED.
- TEMPORARY STOP LINES, CROSSWALKS AND LANE MARKINGS SHALL BE INSTALLED USING ITEM 619.100104, INTERIM PAVEMENT MARKING STRIPES, REMOVABLE WET REFLECTIVE TAPE. EXISTING CONFLICTING PAVEMENT MARKINGS BETWEEN THE ACTIVITY AREA AND THE STOP LINE SHALL BE COVERED USING ITEM 619.0803, COVER EXISTING PAVEMENT MARKING STRIPES (REMOVABLE TAPE).
- MINIMUM CLEARANCE FROM PAVEMENT TO BOTTOM OF SIGNAL HEADS IS 16'-6".
- ALL SIGNAL HEADS SHALL CONTAIN 12" LENSES. ALL SIGNAL FACES SHALL HAVE MUTCD COMPLIANT BACKPLATES.
- POWER SOURCE TO BE DETERMINED BY CONTRACTOR AND POWER COMPANY.
- PROPER POLES TO SUPPORT THE 3-COLOR SIGNAL HEADS TO BE DETERMINED BY THE CONTRACTOR.
- ALL SPAN WIRE, INDUCTANCE LOOP WIRE, SHIELDED LEAD-IN CABLE, TRAFFIC SIGNAL CABLE AND OTHER WIRE USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE NEW MATERIAL MEETING THE APPLICABLE REQUIREMENTS OF SUBSECTION 680-2 OF THE STANDARD SPECIFICATIONS.
- ALL OTHER EQUIPMENT FOR TEMPORARY TRAFFIC SIGNALS SHALL MEET THE REQUIREMENTS OF SUBSECTION 680-2 OF THE STANDARD SPECIFICATIONS EXCEPT FOR THE FOLLOWING MODIFICATIONS:
 - A. USED EQUIPMENT IN GOOD OPERATING CONDITION MAY BE FURNISHED TO PROVIDE THE REQUIRED OPERATION OF THE SIGNAL.
 - B. MANUFACTURER'S CERTIFICATION OF COMPLIANCE WILL NOT BE REQUIRED.
 - C. THE SIGNAL CONTROLLER MAY BE EITHER SOLID STATE OR MICRO-PROCESSOR BASED.
 - D. THE MATERIAL AND PAINTING REQUIREMENTS OF SECTION 724-04, TRAFFIC SIGNAL HEADS, OF THE STANDARD SPECIFICATIONS SHALL NOT APPLY EXCEPT THAT THE SIGNAL HEAD HOUSING SHALL BE MADE OF ALUMINUM OR POLYCARBONATE AND SHALL BE DARK GREEN IN COLOR.
- THE DIRECTIONAL TRAVEL ARROWS SHOWN HERE AND ON OTHER WZTC DRAWINGS ARE NOT PAVEMENT MARKINGS.

AFFIX SEAL: On: _____
 ALTERED BY: On: _____



AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 79 - SH 8209	PIN 9805.93	BRIDGES	CULVERTS 124408	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	CHENANGO FORKS - WHITNEY POINT, PARTS 1 & 2	ROUTE 79			WORK ZONE TRAFFIC CONTROL PHASE 1	DRAWING NO. WZTC-01-D
	MULTI-CULVERT REPLACEMENT & REPAIR PROJECT	UTILITY QUALITY LEVEL D			SITE D	SHEET NO. 101
	TOWN OF BARKER					
	COUNTY: BROOME	REGION: 09				

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



FILE NAME = 980593.124408.RT79_cph.wztc.01_D.dgn
 DATE/TIME = 30-JUL-2015 13:53
 USER = jphillips

PROJECT MANAGER G. WOJCIK
 CHECK W. C. GRIFFITHS
 DRAFTING P. F. BLOW
 CHECK W. C. GRIFFITHS
 DESIGN P. F. BLOW
 JOB MANAGER J. L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER

NOTES:

- NUMBERS FOR SIGNS REFER TO THEIR MUTCD/NYS SUPPLEMENT NUMBER, SEE MUTCD OR NYS SUPPLEMENT.
- THE CONTRACTOR SHALL COORDINATE WITH THE ADJACENT PROPERTY OWNERS TO ENSURE THEY HAVE ACCESS TO AND FROM THEIR PROPERTIES AT ALL TIMES. THIS MAY INCLUDE THE INSTALLATION OF TEMPORARY PARKING, DRIVEWAYS, ETC., TO BE OUTSIDE OF THE LIMITS OF THE TEMPORARY TRAFFIC SIGNAL, AND IN WRITTEN AGREEMENT VIA A PROPERTY RELEASE WITH THE OWNER(S), AND AS ORDERED BY THE ENGINEER. THE COST FOR THIS WORK AND COORDINATION SHALL BE INCLUDED IN THE COST BID FOR ITEM 619.01 - BASIC WORK ZONE TRAFFIC CONTROL (SEE DRAWING TCN-01, PUBLIC INGRESS AND EGRESS NOTES).
- ALL PAVEMENT MARKINGS SHALL BE 4 INCHES WIDE UNLESS NOTED.

- ALL STOP BARS SHALL BE 24 INCHES WIDE.
- TEMPORARY CONCRETE BARRIER, FENCING, BARRELS, ETC. MAY BE REMOVED TO ACCOMMODATE DAYTIME CONSTRUCTION ACTIVITIES BUT SHALL BE PUT BACK IN PLACE AT THE END OF EACH DAY. THE COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 619.01 - BASIC WORK ZONE TRAFFIC CONTROL.
- THE TAPER RATE FOR CONCRETE BARRIER SHOULD BE 1 ON 8.
- DRUM SPACING SHALL BE 10 FEET.
- SEE DRAWING NO. WZTC-01-D FOR TEMPORARY SIGNAL DETAILS, SIGNING SCHEMATIC AND NOTES.

PVMS NOTE:

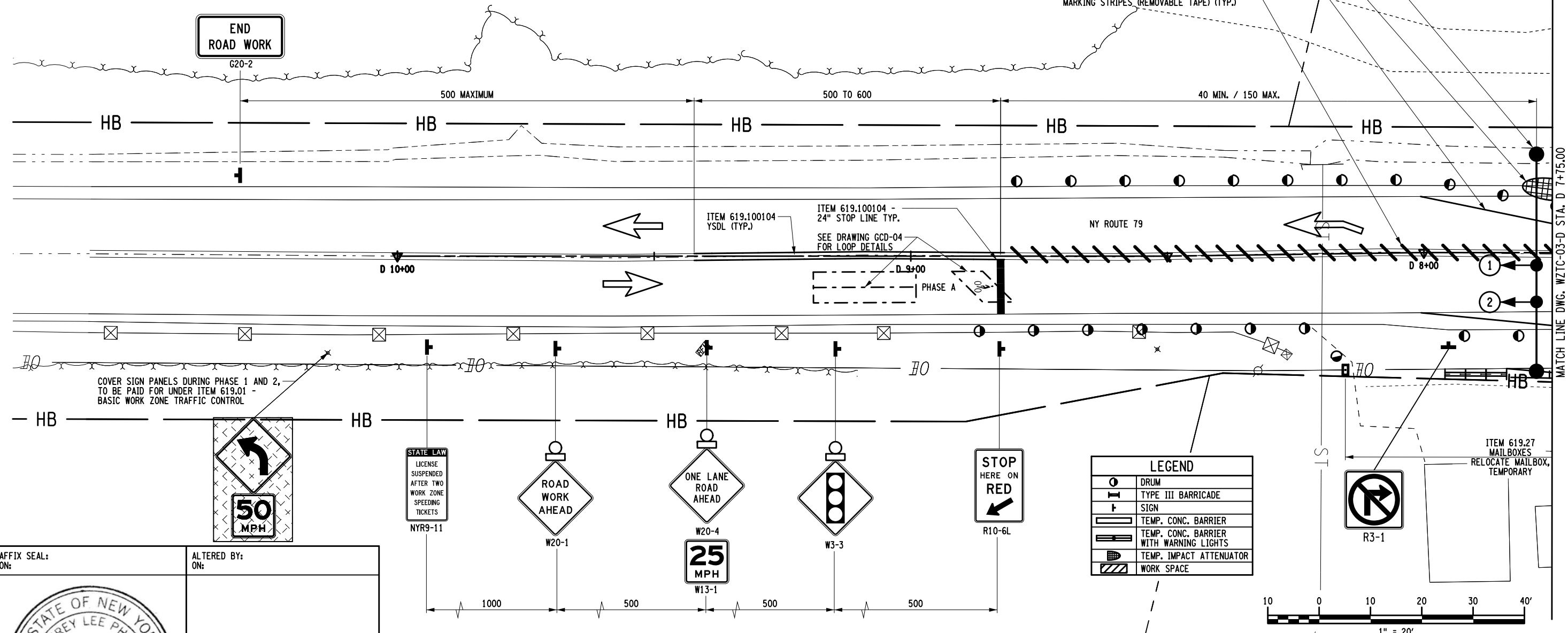
PORTABLE VARIABLE MESSAGE SIGNS (PVMS) SHALL BE LOCATED ON ROUTE 79 ONE MILE EAST AND WEST OF THE CULVERT SITE. THE FINAL LOCATIONS SHALL BE APPROVED BY THE ENGINEER (SEE THE SPECIAL NOTE PORTABLE VARIABLE MESSAGE SIGNS ITEM 619.110202 IN THE CONTRACT PROPOSAL).

ITEM 619.1304 - TEMPORARY TRAFFIC SIGNAL

ITEM 619.1802 - TEMPORARY IMPACT ATTENUATOR - REDIRECTIVE (TEST LEVEL 2)

ITEM 619.100104 - INTERIM PAVEMENT MARKING STRIPES (REMOVABLE WET REFLECTIVE TAPE) (TYP.)

ITEM 619.0803 - COVER EXISTING PAVEMENT MARKING STRIPES (REMOVABLE TAPE) (TYP.)



LEGEND	
	DRUM
	TYPE III BARRICADE
	SIGN
	TEMP. CONC. BARRIER
	TEMP. CONC. BARRIER WITH WARNING LIGHTS
	TEMP. IMPACT ATTENUATOR
	WORK SPACE

AFFIX SEAL: ON: _____
 ALTERED BY: ON: _____



AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 79 - SH 8209 CHENANGO FORKS - WHITNEY POINT, PARTS 1 & 2 CULVERT REPLACEMENT BROOME, DELAWARE, OTSEGO COUNTIES TOWN OF BARKER COUNTY: BROOME REGION: 09	PIN 9805.93 NYS RTE 79 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS 124408	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED WORK ZONE TRAFFIC CONTROL PLAN PHASE 1 SITE D	CONTRACT NUMBER D262989 DRAWING NO. WZTC-02-D SHEET NO. 102
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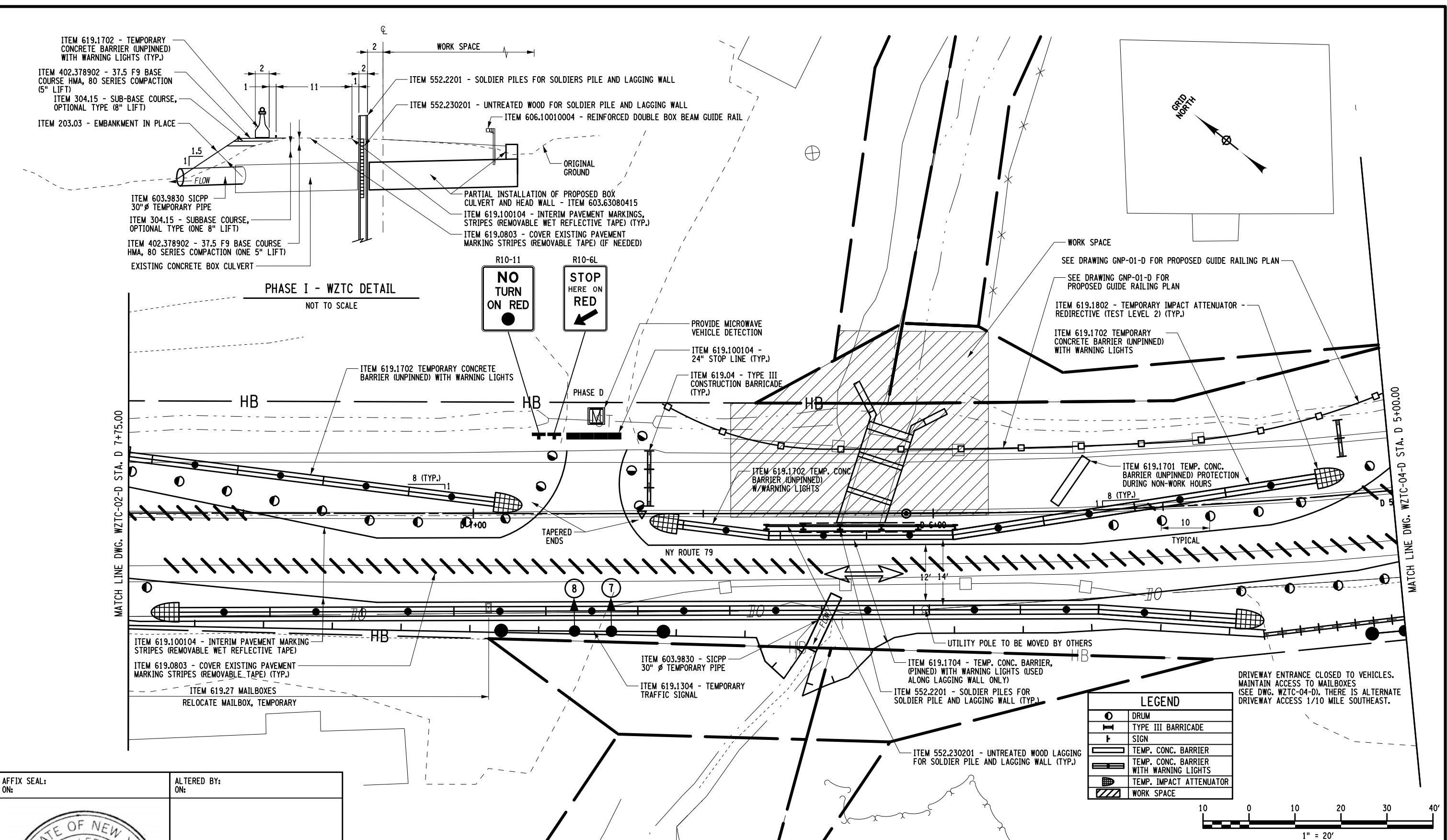
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 DATE/TIME = 30-JUL-2015 13:53
 USER = jphillips

FILE NAME = 980593.124408.RT79_cph.wztc.03.D.dgn
 DATE/TIME = 06-AUG-2015 10:19
 USER = jphulips

PROJECT MANAGER G. WOJCIK
 CHECK W. C. GRIFFITHS
 DRAFTING P. F. BLOW
 DESIGN P. F. BLOW
 CHECK W. C. GRIFFITHS
 DESIGN P. F. BLOW
 JOB MANAGER J. L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER



AFFIX SEAL: ON: _____
 ALTERED BY: ON: _____



AS-BUILT REVISIONS
 DESCRIPTION OF ALTERATIONS:

NYS ROUTE 79 - SH 8209
CHENANGO FORKS - WHITNEY POINT, PARTS 1 & 2
CULVERT REPLACEMENT BROOME, DELAWARE, OTSEGO COUNTIES
TOWN OF BARKER
COUNTY: BROOME REGION: 09

PIN 9805.93	BRIDGES
NYS RTE 79	CULVERTS 124408
UTILITY QUALITY LEVEL D	

ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
WORK ZONE TRAFFIC CONTROL PLAN PHASE 1	DRAWING NO. WZTC-03-D
SITE D	SHEET NO. 103

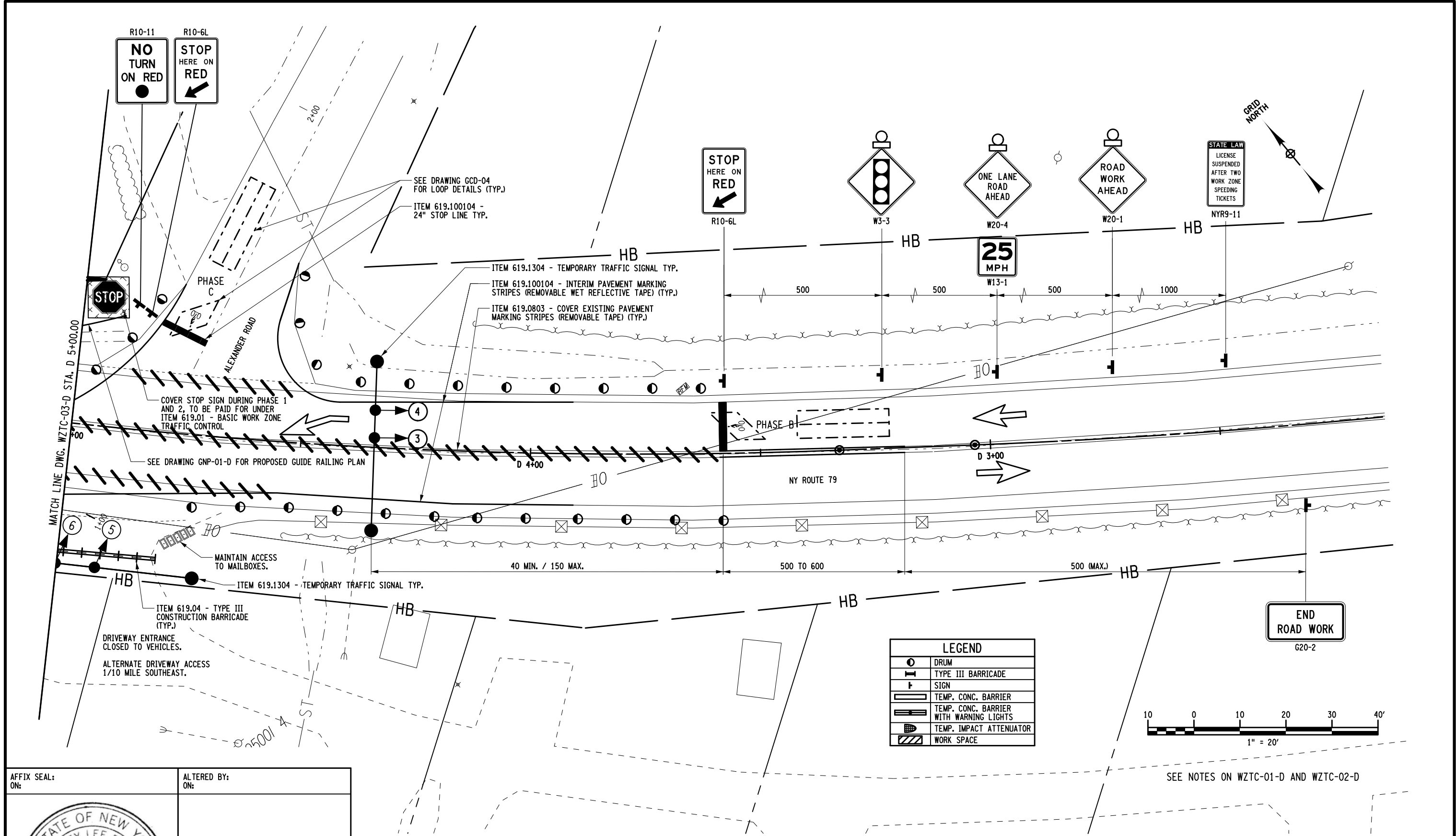
SEE NOTES ON WZTC-01-D AND WZTC-02-D

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 DATE/TIME = 30-JUL-2015 13:53
 USER = jphillips

DESIGN SUPERVISOR R. WILDER
 JOB MANAGER J. L. PHILLIPS
 DESIGN P. F. BLOW
 CHECK W. C. GRIFFITHS
 DRAFTING P. F. BLOW
 CHECK W. C. GRIFFITHS
 PROJECT MANAGER G. WOJCIK



AFFIX SEAL: ON: _____
 ALTERED BY: ON: _____

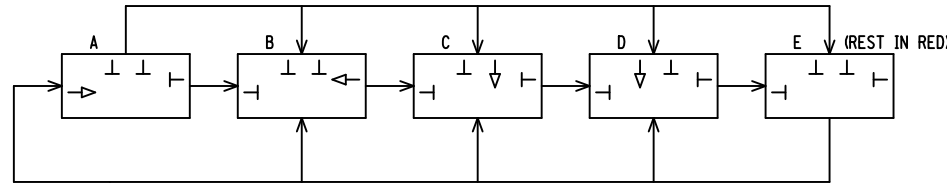
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 79 - SH 8209	PIN 9805.93	BRIDGES	CULVERTS 124408	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED WORK ZONE TRAFFIC CONTROL PLAN PHASE 1 SITE D	CONTRACT NUMBER D262989
	CHENANGO FORKS - WHITNEY POINT, PARTS 1 & 2	NYS RTE 79 UTILITY QUALITY LEVEL D				DRAWING NO. WZTC-04-D SHEET NO. 104
	CULVERT REPLACEMENT BROOME, DELAWARE, OTSEGO COUNTIES					
	TOWN OF BARKER					
	COUNTY: BROOME	REGION: 09				

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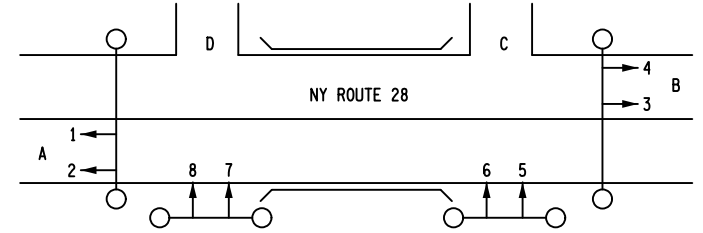
NEW YORK STATE OF OPPORTUNITY
 Department of Transportation

PHASING TABLE		FACE				TIMING (SEC)			
PHASE	1, 2	3, 4	5, 6	7, 8	INITIAL	EXTENSION	TIME	RECALL	
A	G	R	R	R	8	6	32	NO	
1ST CLEARANCE	Y	R	R	R	-	-	3.5	-	
2ND CLEARANCE	R	R	R	R	-	-	SEE NOTE	-	
B	R	G	R	R	8	6	32	NO	
1ST CLEARANCE	R	Y	R	R	-	-	3.5	-	
2ND CLEARANCE	R	R	R	R	-	-	SEE NOTE	-	
C	R	R	G	R	8	6	32	NO	
1ST CLEARANCE	R	R	Y	R	-	-	3.5	-	
2ND CLEARANCE	R	R	R	R	-	-	SEE NOTE	-	
D	R	R	R	G	8	6	14	NO	
1ST CLEARANCE	R	R	R	Y	-	-	3.5	-	
2ND CLEARANCE	R	R	R	R	-	-	SEE NOTE	-	
E (REST IN RED)	R	R	R	R	-	-	1.0	YES	
1ST CLEARANCE	R	R	R	R	-	-	0.5	-	
2ND CLEARANCE	R	R	R	R	-	-	0.5	-	
EMERGENCY FLASH	FR	FR	FR	FR	-	-	-	-	

NOTE: DIVIDE THE TRAVEL DISTANCE IN FEET BETWEEN STOP LINES BY 22 FEET PER SECOND FOR THE TIME OF THE PHASE A, PHASE B, PHASE C AND PHASE D 2ND CLEARANCES.

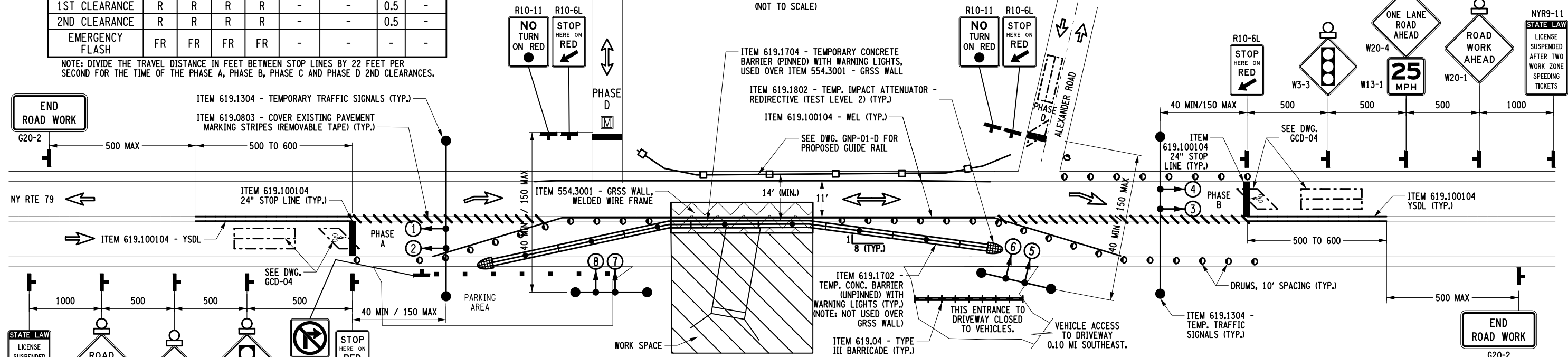


PHASING DIAGRAM



PHASING PLAN

TEMPORARY TRAFFIC SIGNAL SCHEMATIC PHASE ONE (NOT TO SCALE)



NOTES:

- REFER ALSO TO THE MUTCD AND APPLICABLE 619 STANDARD SHEETS.
- THE SIGNAL LOCATION SHALL BE FIELD DETERMINED AS DIRECTED BY THE ENGINEER.
- ADJUSTMENTS IN THE LOCATION OF ADVANCED WARNING SIGNS SHALL BE MADE TO ACCOMMODATE THE HORIZONTAL AND VERTICAL ALIGNMENT OF THE ROADWAY, RECOGNIZING THAT THE DISTANCES SHOWN FOR SIGN SPACING ARE MINIMUMS.
- FLASHING WARNING LIGHTS ARE REQUIRED ON THE SIGNAL AHEAD SIGNS (W3-3). FLASHING WARNING LIGHTS SHALL ALSO BE REQUIRED ON THE ROAD WORK AHEAD SIGNS (W20-1) AND ONE LANE ROAD AHEAD SIGNS (W20-4).
- THE TIMING, PHASING AND DETECTOR LOCATIONS ARE TO BE VERIFIED BY THE REGIONAL TRAFFIC ENGINEER AT LEAST 2 WEEKS PRIOR TO START UP. THE REGIONAL TRAFFIC ENGINEER SHALL APPROVE ANY CHANGES OR ADDITIONS REQUIRED DUE TO OBSERVED TRAFFIC CONDITIONS.
- DETECTORS SHALL BE INSTALLED ON ALL APPROACH LANES AND ALL PHASES SHALL BE ACTUATED. DURATION OF RED CLEARANCE INTERVALS SHALL BE ADEQUATE TO CLEAR THE ONE-LANE SECTION OF CONFLICTING TRAFFIC.
- LOOPS SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD SHEET 680-14.
- OTHER TYPES OF VEHICLE DETECTION EQUIPMENT MAY BE USED IF PRIOR APPROVAL IS OBTAINED FROM THE REGIONAL TRAFFIC ENGINEERING AND SAFETY GROUP. REQUESTS BY THE CONTRACTOR TO USE SUCH ALTERNATIVES SHALL BE ACCOMPANIED BY DETAILED PLANS AND SPECIFICATIONS.
- THE TRAFFIC SIGNAL SHALL REST IN RED. WHEN THE SIGNAL IS CHANGED TO THE FLASHING MODE, EITHER MANUALLY OR AUTOMATICALLY, RED SIGNAL INDICATIONS SHALL BE FLASHED TO ALL APPROACHES.
- REST IN RED FEATURE MAY BE SUBSTITUTED FOR PHASE E.
- EMERGENCY FLASH OPERATION IS CONSIDERED A MALFUNCTION. FLAGGERS ARE REQUIRED UNTIL THE MALFUNCTION IS REPAIRED.
- THE CONTRACTOR SHALL COMMENCE REPAIR WORK ON THIS SIGNAL WITHIN TWO HOURS AFTER HE/SHE HAS BEEN NOTIFIED OF A MALFUNCTION. THE CONTRACTOR HAS AN EIGHT HOUR TIME LIMIT TO MAKE REPAIRS. FLAGGER CONTROL SHALL BE PROVIDED AT THE CONTRACTOR'S EXPENSE UNTIL THE TEMPORARY SIGNAL IS RESTORED TO PROPER OPERATION. IF THE REPAIRS REMAIN UNCOMPLETED AFTER THIS TIME, LIQUIDATED DAMAGES OF ONE DAY WILL BE ASSESSED FOR EACH DAY THE SIGNAL IS MALFUNCTIONING UNTIL IT IS REPAIRED.
- TEMPORARY STOP LINES, CROSSWALKS AND LANE MARKINGS SHALL BE INSTALLED USING ITEM 619.100104, INTERIM PAVEMENT MARKING STRIPES, REMOVABLE WET REFLECTIVE TAPE. EXISTING CONFLICTING PAVEMENT MARKINGS BETWEEN THE ACTIVITY AREA AND THE STOP LINE SHALL BE COVERED USING ITEM 619.0803, COVER EXISTING PAVEMENT MARKING STRIPES (REMOVABLE TAPE).
- MINIMUM CLEARANCE FROM PAVEMENT TO BOTTOM OF SIGNAL HEADS IS 16'-6".
- ALL SIGNAL HEADS SHALL CONTAIN 12" LENSES. ALL SIGNAL FACES SHALL HAVE MUTCD COMPLIANT BACKPLATES.
- POWER SOURCE TO BE DETERMINED BY CONTRACTOR AND POWER COMPANY.
- PROPER POLES TO SUPPORT THE 3-COLOR SIGNAL HEADS TO BE DETERMINED BY THE CONTRACTOR.
- ALL SPAN WIRE, INDUCTANCE LOOP WIRE, SHIELDED LEAD-IN CABLE, TRAFFIC SIGNAL CABLE AND OTHER WIRE USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE NEW MATERIAL MEETING THE APPLICABLE REQUIREMENTS OF SUBSECTION 680-2 OF THE STANDARD SPECIFICATIONS.
- ALL OTHER EQUIPMENT FOR TEMPORARY TRAFFIC SIGNALS SHALL MEET THE REQUIREMENTS OF SUBSECTION 680-2 OF THE STANDARD SPECIFICATIONS EXCEPT FOR THE FOLLOWING MODIFICATIONS:
 - USED EQUIPMENT IN GOOD OPERATING CONDITION MAY BE FURNISHED TO PROVIDE THE REQUIRED OPERATION OF THE SIGNAL.
 - MANUFACTURER'S CERTIFICATION OF COMPLIANCE WILL NOT BE REQUIRED.
 - THE SIGNAL CONTROLLER MAY BE EITHER SOLID STATE OR MICRO-PROCESSOR BASED.
 - THE MATERIAL AND PAINTING REQUIREMENTS OF SECTION 724-04, TRAFFIC SIGNAL HEADS, OF THE STANDARD SPECIFICATIONS SHALL NOT APPLY EXCEPT THAT THE SIGNAL HEAD HOUSING SHALL BE MADE OF ALUMINUM OR POLYCARBONATE AND SHALL BE DARK GREEN IN COLOR.
- THE DIRECTIONAL TRAVEL ARROWS SHOWN HERE AND ON OTHER WZTC DRAWINGS ARE NOT PAVEMENT MARKINGS.

AFFIX SEAL: ON:

ALTERED BY: ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 79 - SH 8209	PIN 9805.93	BRIDGES	CULVERTS 124408	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	CHENANGO FORKS - WHITNEY POINT, PARTS 1 & 2	ROUTE 79			WORK ZONE TRAFFIC CONTROL PHASE 2	DRAWING NO. WZTC-05-D
	MULTI-CULVERT REPLACEMENT & REPAIR PROJECT	UTILITY QUALITY LEVEL D			SITE D	SHEET NO. 105
	TOWN OF BARKER					
	COUNTY: BROOME	REGION: 09				

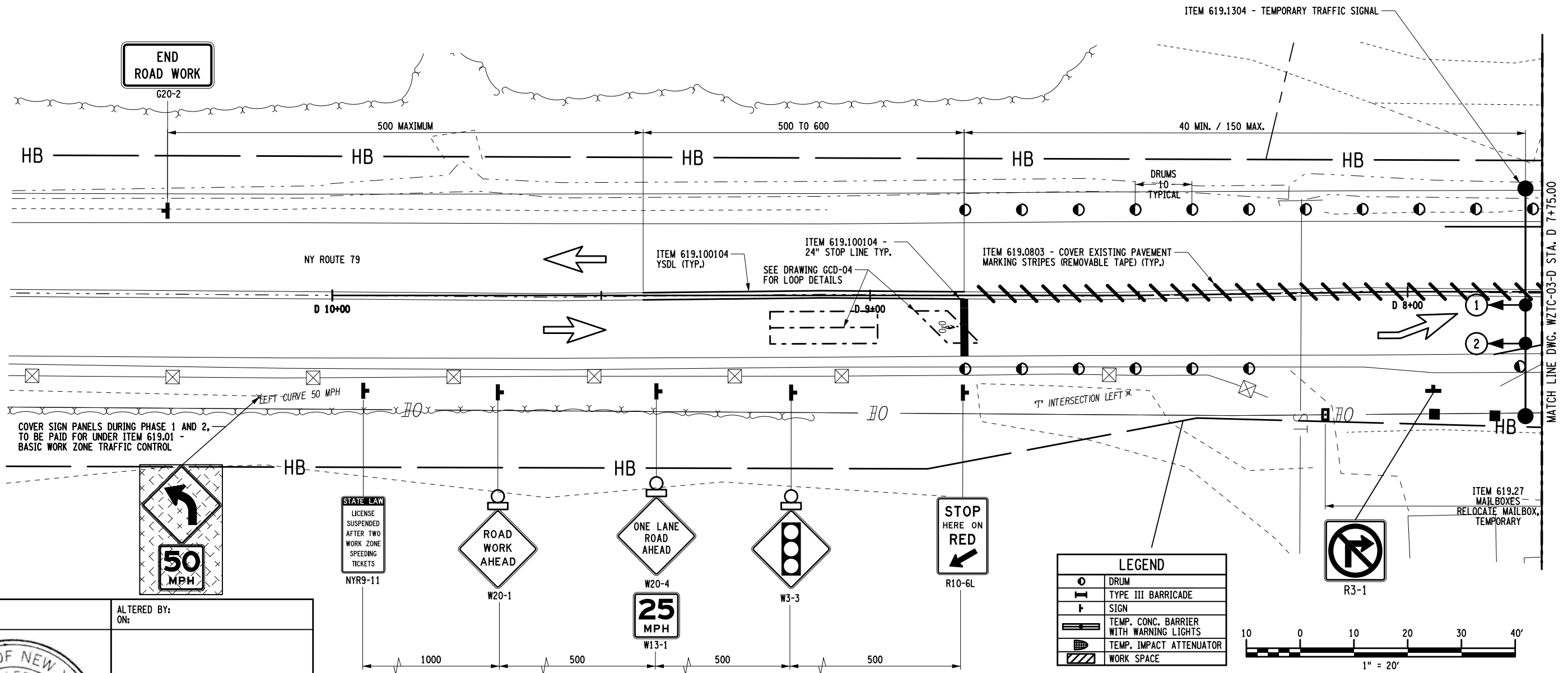
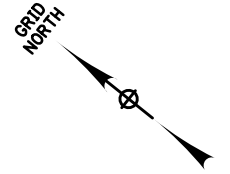
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PROJECT MANAGER G. WOJCIK
 CHECK W. C. GRIFFITHS
 DRAFTING P. F. BLOW
 CHECK W. C. GRIFFITHS
 DESIGN P. F. BLOW
 JOB MANAGER J. L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER

NOTES:

- NUMBERS FOR SIGNS REFER TO THEIR MUTCD/NYS SUPPLEMENT NUMBER, SEE MUTCD OR NYS SUPPLEMENT.
- THE CONTRACTOR SHALL COORDINATE WITH THE ADJACENT PROPERTY OWNERS TO ENSURE THEY HAVE ACCESS TO AND FROM THEIR PROPERTIES AT ALL TIMES. THIS MAY INCLUDE THE INSTALLATION OF TEMPORARY PARKING, DRIVEWAYS, ETC., TO BE OUTSIDE OF THE LIMITS OF THE TEMPORARY TRAFFIC SIGNAL, AND IN WRITTEN AGREEMENT VIA A PROPERTY RELEASE WITH THE OWNER(S), AND AS ORDERED BY THE ENGINEER. THE COST FOR THIS WORK AND COORDINATION SHALL BE INCLUDED IN THE COST BID FOR ITEM 619.01 - BASIC WORK ZONE TRAFFIC CONTROL (SEE DRAWING TCN-01, PUBLIC INGRESS AND EGRESS NOTES).
- ALL PAVEMENT MARKINGS SHALL BE 4 INCHES WIDE UNLESS NOTED.
- ALL STOP BARS SHALL BE 24 INCHES WIDE.
- TEMPORARY CONCRETE BARRIER, FENCING, BARRELS, ETC. MAY BE REMOVED TO ACCOMMODATE DAYTIME CONSTRUCTION ACTIVITIES BUT SHALL BE PUT BACK IN PLACE AT THE END OF EACH DAY. THE COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 619.01 - BASIC WORK ZONE TRAFFIC CONTROL.
- THE TAPER RATE FOR CONCRETE BARRIER SHOULD BE 1 ON 8.
- DRUM SPACING SHALL BE 10 FEET.
- SEE DRAWING NO. WZTC-01-D FOR TEMPORARY SIGNAL DETAILS, SIGNING SCHEMATIC AND NOTES.



AFFIX SEAL: ON: _____
 ALTERED BY: ON: _____



AS-BUILT REVISIONS
 DESCRIPTION OF ALTERATIONS:

NYS ROUTE 79 - SH 8209
CHENANGO FORKS - WHITNEY POINT, PARTS 1 & 2
CULVERT REPLACEMENT BROOME, DELAWARE, OTSEGO COUNTIES
TOWN OF BARKER
COUNTY: BROOME REGION: 09

PIN 9805.93
 NYS RTE 79
 UTILITY QUALITY LEVEL D

BRIDGES
 CULVERTS
 124408

ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED

WORK ZONE TRAFFIC CONTROL PLAN
 PHASE 2

SITE D

CONTRACT NUMBER
 D262989

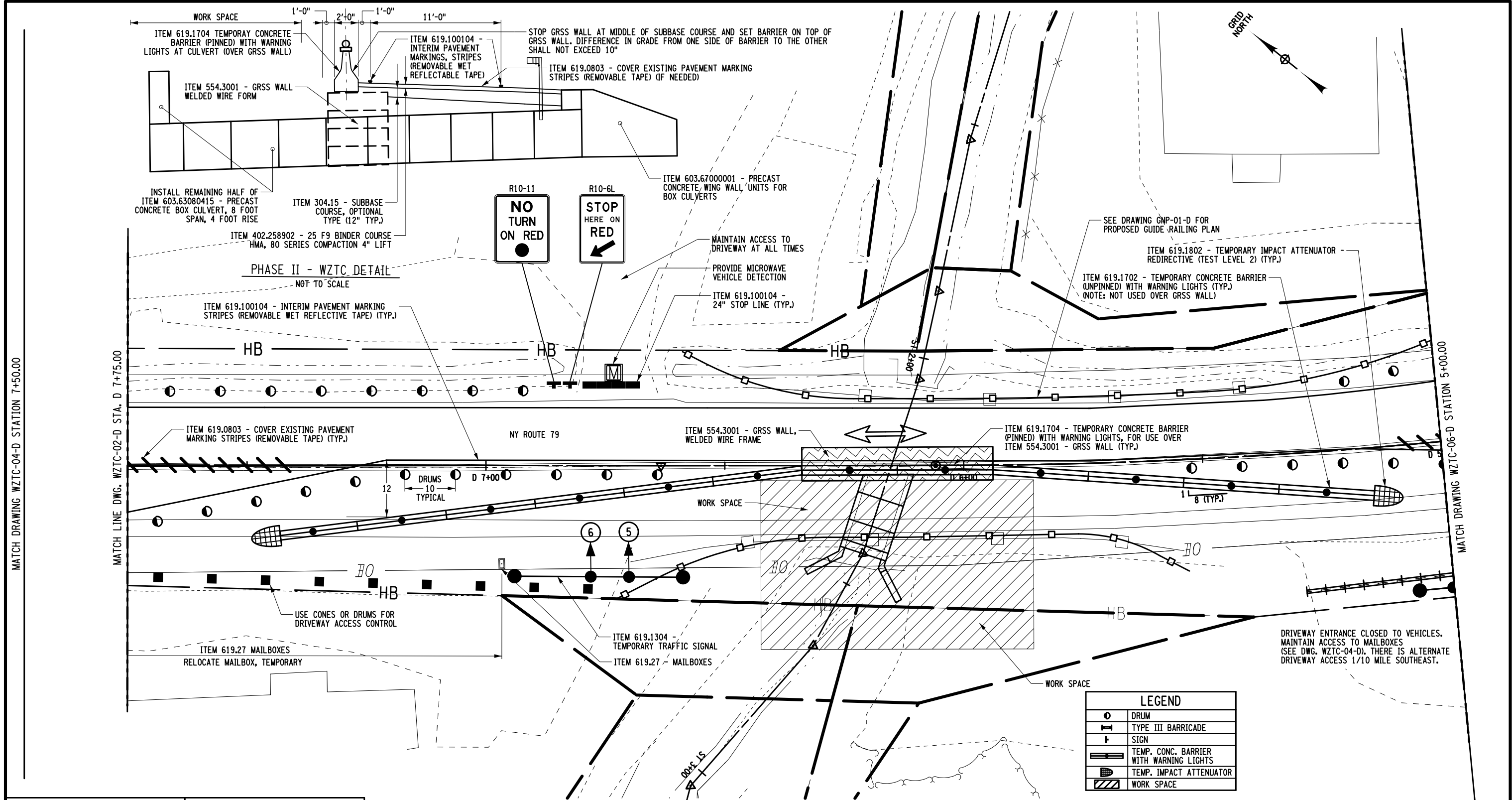
DRAWING NO. WZTC-06-D
 SHEET NO. 106

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



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 DATE/TIME = 30-JUL-2015 13:53
 USER = jphillips

PROJECT MANAGER G. WOJCIK
 CHECK W. C. GRIFFITHS
 DRAFTING P. F. BLOW
 DESIGN P. F. BLOW
 JOB MANAGER J. L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER



AFFIX SEAL: ON: _____

ALTERED BY: ON: _____

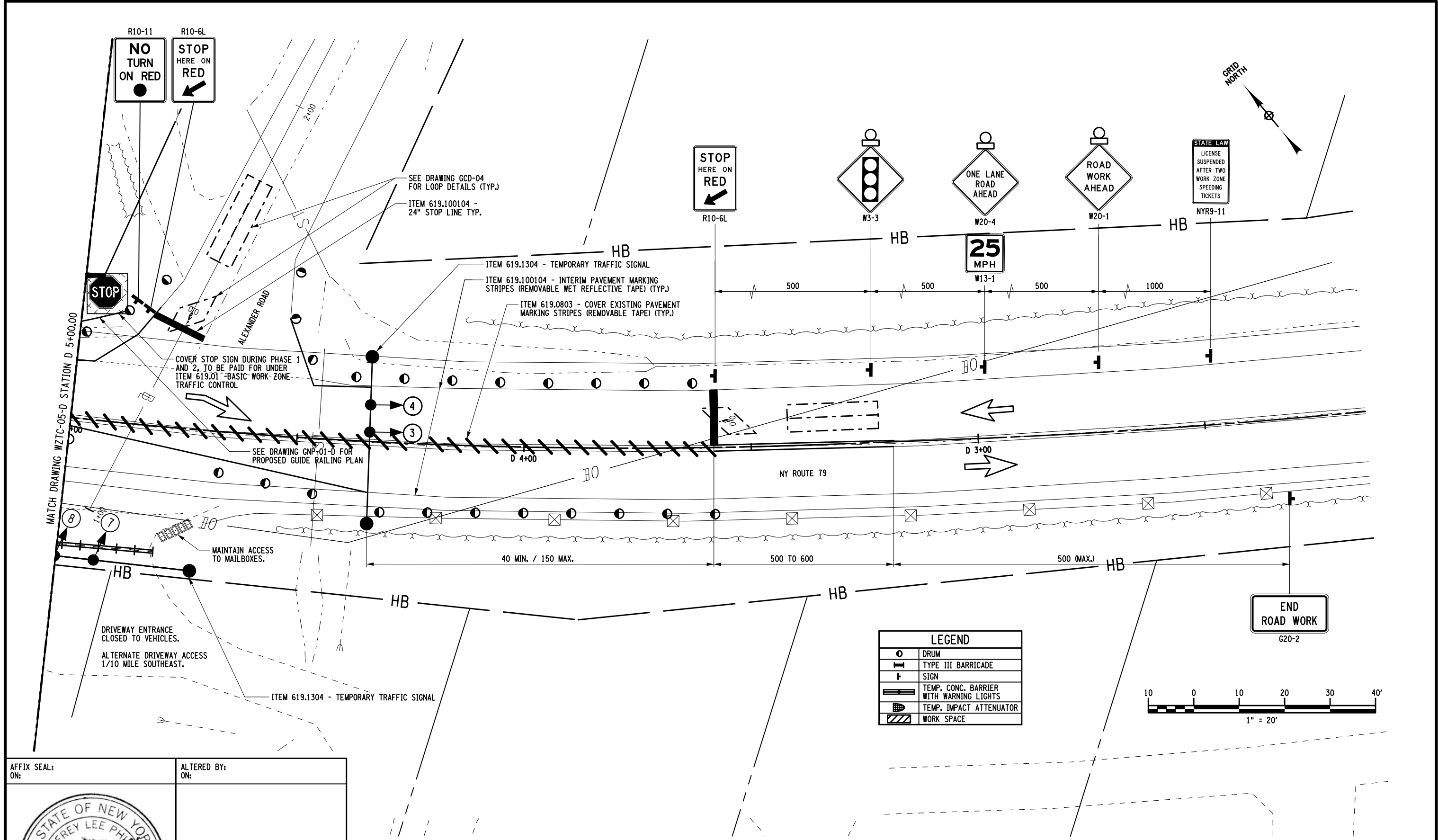
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 79 - SH 8209	PIN 9805.93	BRIDGES	CULVERTS 124408	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED WORK ZONE TRAFFIC CONTROL PLAN PHASE 2 SITE D	CONTRACT NUMBER D262989
	CHENANGO FORKS - WHITNEY POINT, PARTS 1 & 2	NYS RTE 79 UTILITY QUALITY LEVEL D				DRAWING NO. WZTC-07-D SHEET NO. 107
	CULVERT REPLACEMENT BROOME, DELAWARE, OTSEGO COUNTIES					
	TOWN OF BARKER					
	COUNTY: BROOME REGION: 09					

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NEW YORK STATE OF OPPORTUNITY
 Department of Transportation

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DESIGN SUPERVISOR R. WILDER
 JOB MANAGER J. L. PHILLIPS
 DESIGN P. F. BLOW
 CHECK W. C. GRIFFITHS
 DRAFTING P. F. BLOW
 CHECK W. C. GRIFFITHS
 PROJECT MANAGER G. WOJCIK



AFFIX SEAL: ON: _____
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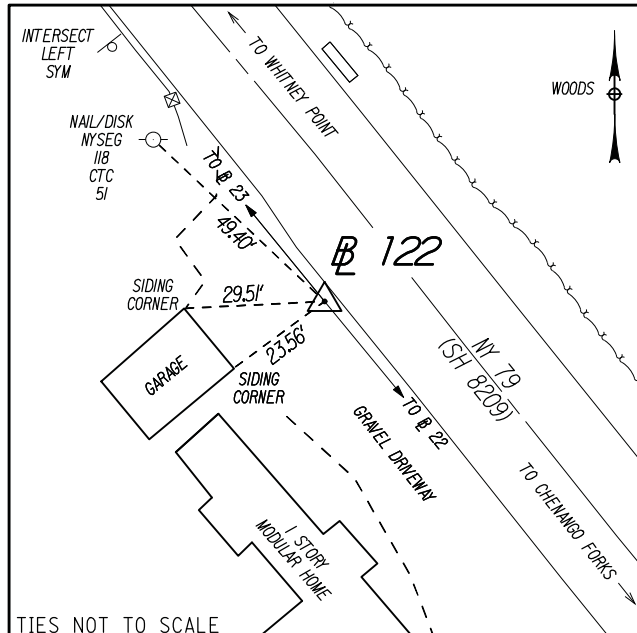


AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 79 - SH 8209	PIN 9805.93	BRIDGES	CULVERTS 124408	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED WORK ZONE TRAFFIC CONTROL PLAN PHASE 2 SITE D	CONTRACT NUMBER D262989 DRAWING NO. WZTC-08-D SHEET NO. 108
	CHENANGO FORKS - WHITNEY POINT, PARTS 1 & 2	NYS RTE 79 UTILITY QUALITY LEVEL D				
	CULVERT REPLACEMENT BROOME, DELAWARE, OTSEGO COUNTIES					
	TOWN OF BARKER					
	COUNTY: BROOME	REGION: 09				

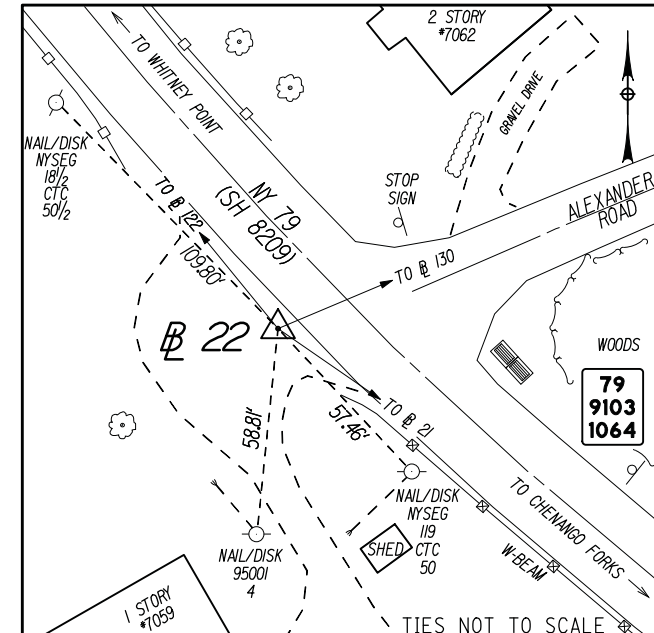
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NEW YORK STATE OF OPPORTUNITY
 Department of Transportation

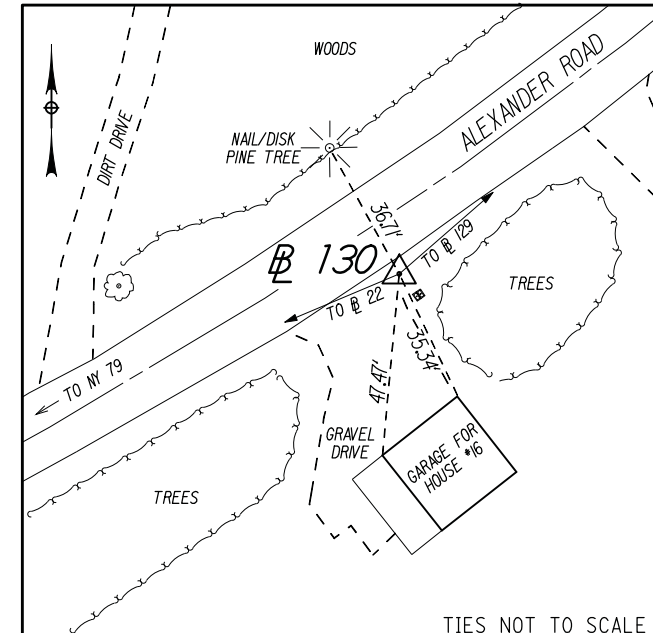
PROJECT MANAGER W. BAGLEY
 CHECK J.L. PHILLIPS
 DRAFTING P.F. BLOW
 CHECK J. L. PHILLIPS
 DESIGN K. LORE
 JOB MANAGER J. L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER



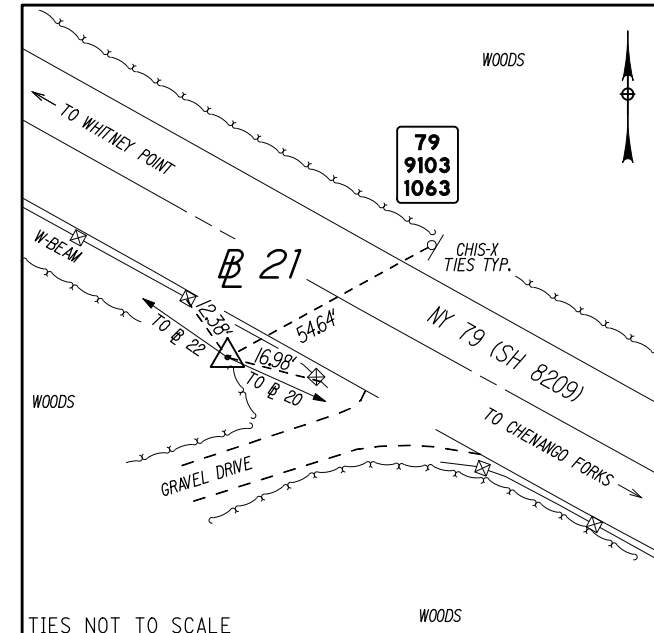
B 122 STA. 133+41.634
 ALUMINUM CAPPED IRON ROD
 0.06 MILES NORTHWEST OF ALEXANDER ROAD
 158' SOUTHEAST OF RM 79-9103-1065
 17.4' SOUTHWEST OF C NY 79
 NYSPCS CENTRAL ZONE NAD 83/CORS96
 N: 825736.1750 NAVD88
 E: 1010878.1986 ELEV: 918.269



B 22 STA. 130+50.845
 ALUMINUM CAPPED IRON ROD
 OPPOSITE ALEXANDER ROAD
 130' NORTHWEST OF RM 79-9103-1064
 19.7' SOUTHWEST OF C NY 79
 NYSPCS CENTRAL ZONE NAD 83/CORS96
 N: 825511.4066 NAVD88
 E: 1011062.6913 ELEV: 920.313

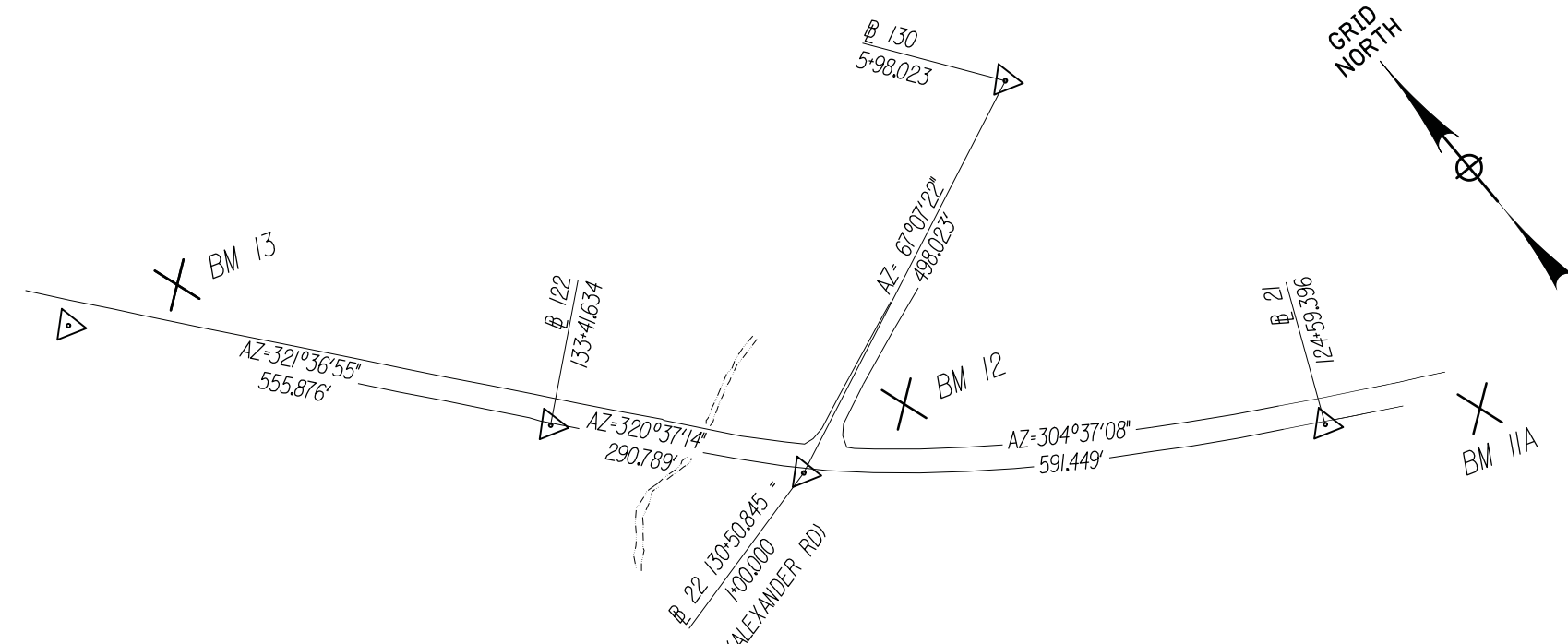


B 130 STA. 5+98.023
 CAPPED IRON ROD
 472' NORTHEAST OF NY 79
 14.2' SOUTHEAST OF C ALEXANDER RD
 NYSPCS CENTRAL ZONE NAD 83/CORS96
 N: 825705.0169 NAVD88
 E: 1011521.5400 ELEV: 994.01



B 21 STA. 124+59.396
 ALUMINUM CAPPED IRON ROD
 0.11 MILES SOUTH OF ALEXANDER ROAD
 4' NORTHWEST OF RM 79-9103-1063
 17.8' SOUTHWEST OF C NY 79
 NYSPCS CENTRAL ZONE NAD 83/CORS96
 N: 825175.3949 NAVD88
 E: 1011549.4233 ELEV: 926.538

SURVEY NOTES:
 BASE MAPPING OF THIS PROJECT IS FROM GROUND SURVEY PERFORMED SEPTEMBER 2008, AND MAY 2012.
 HORIZONTAL DATUM: NYSPCS, CENTRAL ZONE, NAD83/CORS96.
 VERTICAL DATUM: NAVD88.
 COMBINED FACTOR: 0.99994021 (TO REDUCE GROUND DISTANCES TO GRID DISTANCES)



AFFIX SEAL: ON:	ALTERED BY: ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 79, SH 8209	PIN 9805.93 ROUTE 79 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS 124408	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED BASELINE TIE DIAGRAMS	CONTRACT NUMBER D262989
	CHENANGO FORKS - WHITNEY POINT, PARTS 1 AND 2					DRAWING NO. BLT-01-D SHEET NO. 109
	CULVERT REPLACEMENT BROOME, DELAWARE, OTSEGO COUNTIES				SITE D	
	TOWN OF BARKER					
	COUNTY: BROOME	REGION: 09				

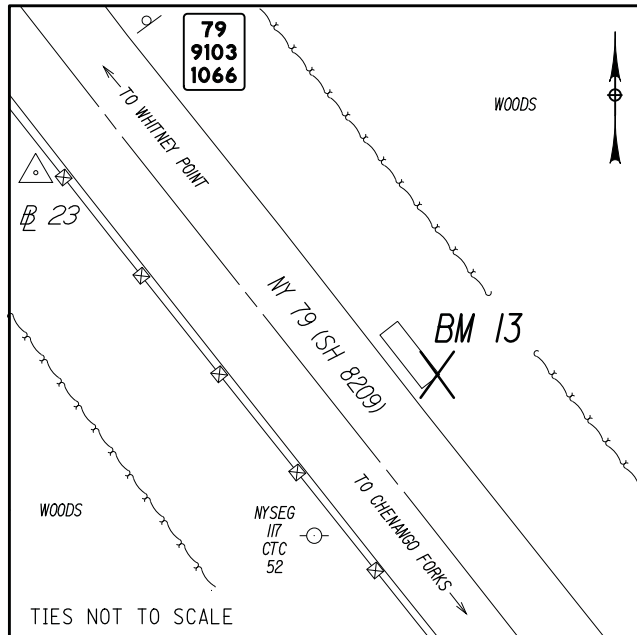
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



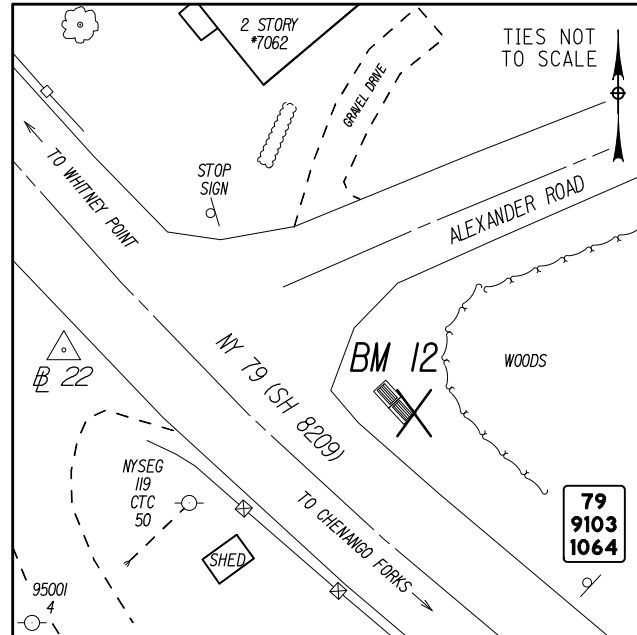
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 DATE/TIME = 22-JUL-2015 09:35
 USER = gmeyer

PROJECT MANAGER W.BAGLEY
 CHECK J.L.PHILLIPS
 DRAFTING D.MELSZER
 CHECK J.L.PHILLIPS
 DESIGN D.MELSZER
 JOB MANAGER J.L.PHILLIPS
 DESIGN SUPERVISOR R.WILDER

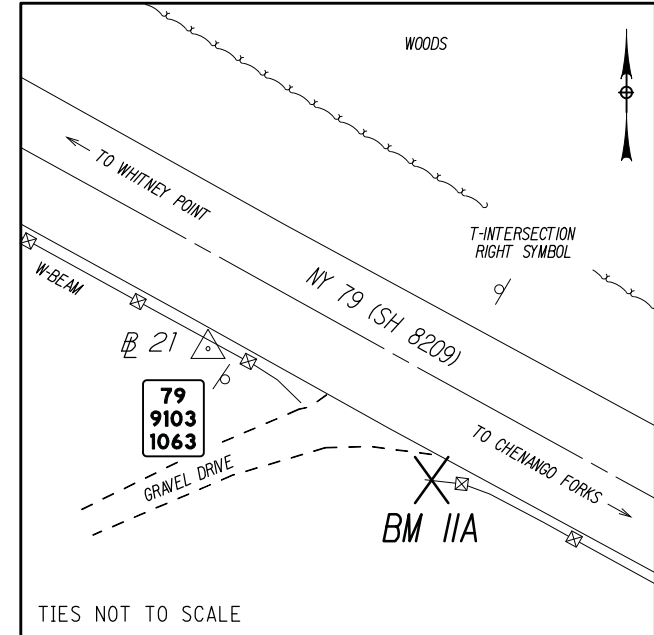
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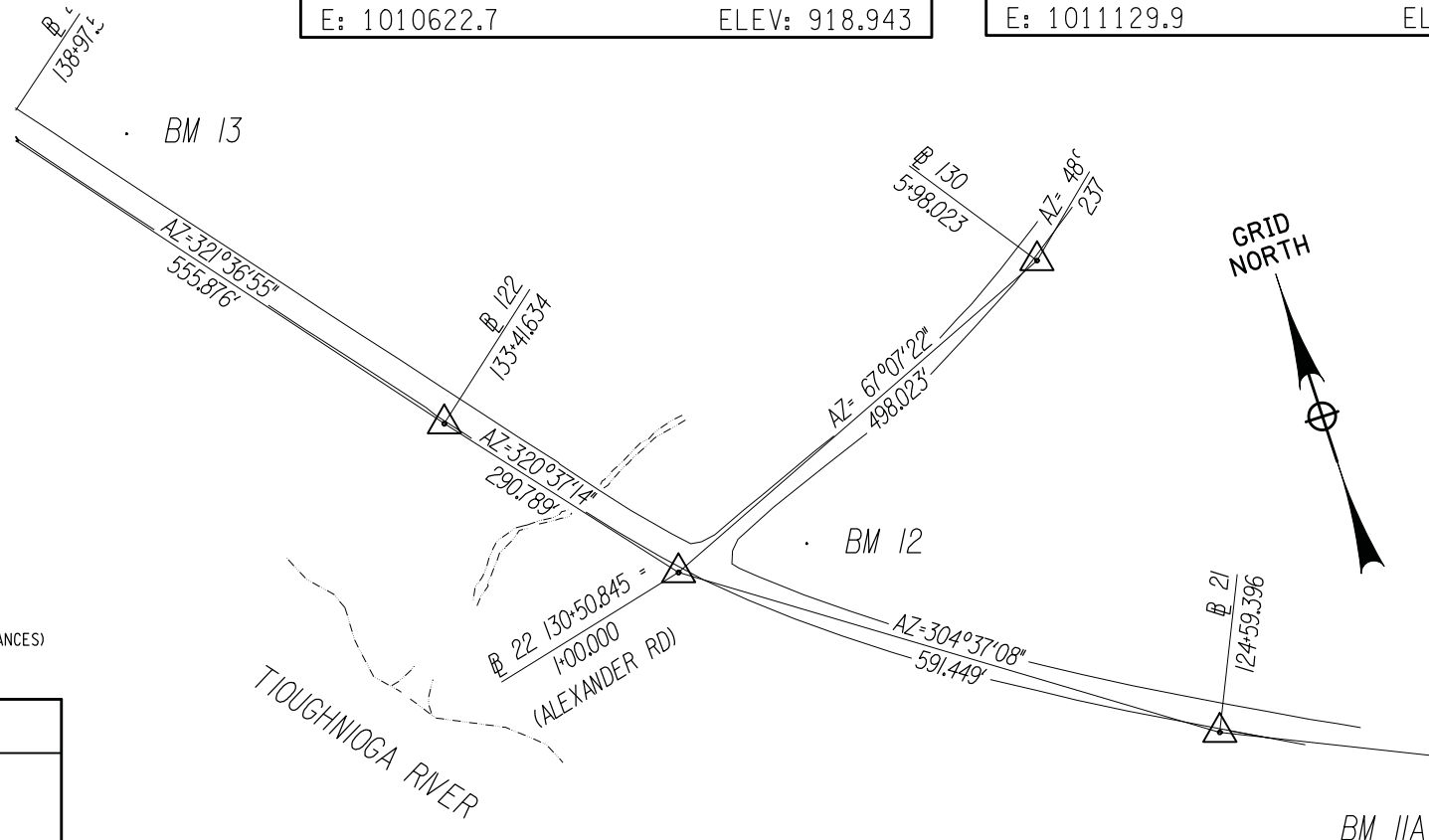
BM 13
 CHISELED SQUARE SOUTHEAST CORNER
 CONCRETE HEADWALL
 0.14 MILES NORTH OF ALEXANDER ROAD
 235' SOUTH OF RM 79-9103-1066
 17.6' NORTHERLY OF C NY 79
 NYSPCS CENTRAL ZONE NAD 83/CORS96
 N: 826111.8 NAVD88
 E: 1010622.7 ELEV: 918.943



BM 12
 CHISELED SQUARE SOUTHEAST
 CORNER CONCRETE DRAIN STRUCTURE
 34' SOUTH OF ALEXANDER RD
 74' NORTH OF RM 79-9103-1064
 22.7' NORTHEAST OF C NY 79
 NYSPCS CENTRAL ZONE NAD 83/CORS96
 N: 825505.0 NAVD88
 E: 1011129.9 ELEV: 918.706



BM 11A
 CHISELED "X" ANCHOR BLOCK BOLT
 0.12 MILES SOUTH OF ALEXANDER ROAD
 50' SOUTH OF RM 79-9103-1063
 16.1' SOUTH OF C NY 79
 NYSPCS CENTRAL ZONE NAD 83/CORS96
 N: 825150.7 NAVD88
 E: 1011597.4 ELEV: 927.316



SURVEY NOTES:
 BASE MAPPING OF THIS PROJECT IS FROM GROUND SURVEY PERFORMED
 SEPTEMBER 2008, AND MAY 2012.
 HORIZONTAL DATUM: NYSPCS, CENTRAL ZONE, NAD83/CORS96.
 VERTICAL DATUM: NAVD88.
 COMBINED FACTOR: 0.99994021 (TO REDUCE GROUND DISTANCES TO GRID DISTANCES)

AFFIX SEAL: ON:	ALTERED BY: ON:


AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 79 - SH 8209	PIN 9805.93 ROUTE 79 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS 124408	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED BENCHMARK DIAGRAMS SITE D	CONTRACT NUMBER D262989
	CHENANGO FORKS - WHITNEY POINT, PARTS 1 & 2					DRAWING NO. BLT-02-D SHEET NO. 110
	CULVERT REPLACEMENT					
	TOWN OF BARKER					
	COUNTY: BROOME	REGION: 09				

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TABLE OF RIGHT OF WAY ACQUISITIONS						P.I.N. 980595
S.H. 8209 CHENANGO FORKS - WHTNEY POINT, PARTS 1&2						BROOME COUNTY
MAP NO.	PARCEL NO.	TYPE OF TAKE	TRN NO.	REPUTED OWNER	AREA	REMARKS
					SQ. FT.	
146	242	FEE	2	DAVID J. CROFFUTT AND JENNIFER L. GREMS	251± sq ft	
146	243	PE	2	DAVID J. CROFFUTT AND JENNIFER L. GREMS	1377± sq ft	
147	244	FEE	3	JACQUELYN A. RUTHERFORD A.K.A JACQUELYN A. DELANOY	896± sq ft	
147	245	PE	3	JACQUELYN A. RUTHERFORD A.K.A JACQUELYN A. DELANOY	6076± sq ft	
148	246	FEE	4	BRIAN F. MILLS AND KIMBERLY ANN MILLS	1154± sq ft	
148	247	PE	4	BRIAN F. MILLS AND KIMBERLY ANN MILLS	7599± sq ft	
149	248	FEE	5	THREE MAPLE FARMS, LLC	1012± sq ft	
149	249	PE	5	THREE MAPLE FARMS, LLC	3962± sq ft	

CHENANGO FORKS - WHTNEY POINT, PARTS 1&2		P.I.N. 980595
S.H. 8209		
RIGHT OF WAY MARKERS FOR PROPOSED HIGHWAY BOUNDARY (NEW TAKINGS)		
ITEM 625.03 CONCRETE RIGHT OF WAY MARKERS, TYPE H (HIGH)		
ITEM 625.04 CONCRETE RIGHT OF WAY MARKERS, TYPE L (LOW)		
ITEM 625.05 STEEL PIN AND CAP RIGHT OF WAY MARKERS		
NO. OF 625.03	NO. OF 625.04	NO. OF 625.05
		19
NOTE: RIGHT OF WAY MARKERS SHALL BE SET AT ANGLE POINTS IN THE NEW HIGHWAY BOUNDARY AS DEPICTED ON THE APPROPRIATION MAPS		

AFFIX SEAL: ON:	ALTERED BY: ON:
	

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 79 - SH 8209	PIN 9805.93 NYS RTE 79 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS 124408	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED RIGHT-OF-WAY TABLES SITE D	CONTRACT NUMBER D262989
	CHENANGO FORKS - WHITNEY POINT, PARTS 1 AND 2					DRAWING NO. RWT-01-D SHEET NO. 111
	CULVERT REPLACEMENT BROOME, DELAWARE, OTSEGO COUNTIES					
	TOWN OF BARKER					
	COUNTY: BROOME	REGION: 09				

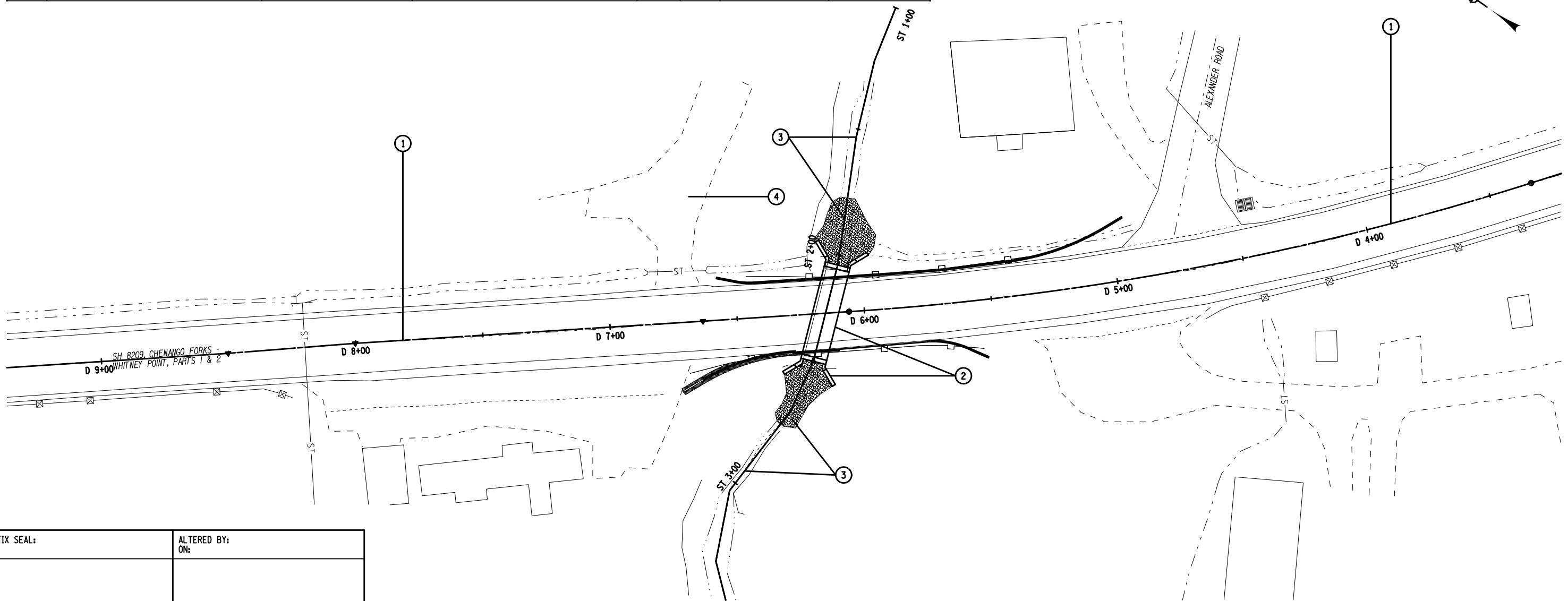
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TABLE OF MAINTENANCE JURISDICTION SITE B

PART NO.	HIGHWAY/LOCATION	LIMITS STATIONING	FEATURES TO BE MAINTAINED	Q miles	LANE miles	AGENCY	AUTHORITY TO MAINTAIN
①	N.Y. ROUTE 79 CHENAGO FORKS - WHITNEY POINT, PARTS 1 & 2 S.H. 8209	PROJECT LIMITS MAINLINE STATIONING D 5+70.00 TO D 6+60.00	ALL OF STATE HIGHWAY (PAVEMENT, GUIDERAIL, DRAINAGE DITCHES, CULVERTS, PAVEMENT MARKINGS, SIGNS, SNOW AND ICE CONTROL)	0.017	0.034	NEW YORK STATE	HIGHWAY LAW SECTION 12
②	PROPOSED 8 x 4 PRECAST BOX CULVERT - 124408 AND WING WALLS	STREAM STATIONING ST 2+03.95 TO ST 2+42.95 D 6+10.95 TO D 6+19.39	PROPOSED CONCRETE BOX CULVERT AND WING WALLS	0.007 ALONG C STREAM	N/A	NEW YORK STATE	HIGHWAY LAW SECTIONS 230
③	UNKNOWN STREAM UNDER N.Y. ROUTE 79 AND WATERSHED RUNOFF	STREAM STATIONING ST 1+00.00 TO ST 3+96.00	STREAMS CHANNEL, BANKS AND STONE FILLING WITHIN R.O.W. AND PE TAKING LINES	0.056 ALONG C STREAM	N/A	NEW YORK STATE	HIGHWAY LAW SECTIONS 12
④	LOCAL DRIVEWAYS ADJACENT TO ROUTE 79	D 6+63.71 TO D 6+81.54 (14' RT)	DRIVEWAY SURFACE SNOW AND ICE CONTROL	0.003 ALONG M	N/A	PROPERTY OWNER (SEE NOTE 3)	HIGHWAY LAW 54(a) (SEE NOTE 3)

NOTES:

1. THIS TABLE INDICATES THE DIVISION OF RESPONSIBILITY FOR MAINTENANCE FOR THIS CONTRACT UPON COMPLETION UNLESS STATED OTHERWISE. IT IN NO WAY RELIEVES THE CONTRACTOR OR REPRESENTATIVE OF THEIR RESPONSIBILITIES AS COVERED BY SECTION 619 OF THE STANDARD SPECIFICATION.
2. ALL EXISTING SANITARY SEWERS AND OTHER SEWERS NOT DEEMED TO BE PART OF THE PROJECT BY THE COMMISSIONER, WATERMANS, HYDRANTS, AND OTHER MUNICIPALLY OR PRIVATELY OWNED FACILITIES WITHIN THE LIMITS OF THE HIGHWAY RIGHT-OF-WAY WHICH REMAIN IN SERVICE UNCHANGED, AND ALL SUCH FACILITIES RELOCATED OR PROTECTED AS PART OF THE WORK PERFORMED UNDER THIS PROJECT, WHETHER CROSSING, LOCATED WITHIN OR ADJACENT TO THE RIGHT-OF-WAY, SHALL BE MAINTAINED AS THE CASE MAY BE, BY THE MUNICIPALITY OR BY THE AGENCY OR UNIT OWNING OR HAVING CONTROL AND JURISDICTION THEREOF AT NO COST OR EXPENSE TO THE STATE.
3. THE PORTION OF A DRIVEWAY OR PRIVATE ROAD, CONSTRUCTED OR ADJUSTED UNDER THE PROPOSED PROJECT BETWEEN THE EDGE OF PAVEMENT AND THE OUTSIDE EDGE OF SHOULDER SHALL BE MAINTAINED BY THE STATE UNDER SECTION 10, SUBDIVISION 25 OF THE HIGHWAY LAW. THE REMAINING PORTION OF THE ADJUSTED DRIVEWAY OR PRIVATE ROAD BEYOND THE OUTSIDE EDGE OF SHOULDER SHALL BE MAINTAINED BY THE OWNER(S) UNDER SECTION 54(g) OF THE HIGHWAY LAW. ALSO, ENTRANCE STAIRS AND WALKS SHALL BE MAINTAINED BY THE OWNER(S) UNDER SECTION 54(g) OF THE HIGHWAY LAW.
4. INTERSECTING PUBLIC HIGHWAYS - OTHER THAN STATE HIGHWAYS, BEYOND THE OUTSIDE EDGE OF THE SHOULDER OR PAVEMENT EDGE OF THE STATE HIGHWAY SHALL BE MAINTAINED BY THE LOCAL UNIT OF GOVERNMENT HAVING JURISDICTION.



AFFIX SEAL: ON:	ALTERED BY: ON:										
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:											
<table border="1"> <tr> <td>NYS ROUTE 79 - SH 8209</td> <td>PIN 9805.93</td> </tr> <tr> <td>CHENAGO FORKS - WHITNEY POINT, PARTS 1 & 2</td> <td>NYS RTE 79</td> </tr> <tr> <td>CULVERT REPLACEMENT BROOME, DELAWARE, OTSEGO COUNTIES</td> <td>UTILITY QUALITY LEVEL D</td> </tr> <tr> <td>TOWN OF BARKER</td> <td></td> </tr> <tr> <td>COUNTY: BROOME</td> <td>REGION: 09</td> </tr> </table>		NYS ROUTE 79 - SH 8209	PIN 9805.93	CHENAGO FORKS - WHITNEY POINT, PARTS 1 & 2	NYS RTE 79	CULVERT REPLACEMENT BROOME, DELAWARE, OTSEGO COUNTIES	UTILITY QUALITY LEVEL D	TOWN OF BARKER		COUNTY: BROOME	REGION: 09
NYS ROUTE 79 - SH 8209	PIN 9805.93										
CHENAGO FORKS - WHITNEY POINT, PARTS 1 & 2	NYS RTE 79										
CULVERT REPLACEMENT BROOME, DELAWARE, OTSEGO COUNTIES	UTILITY QUALITY LEVEL D										
TOWN OF BARKER											
COUNTY: BROOME	REGION: 09										
<table border="1"> <tr> <td>BRIDGES</td> <td>CULVERTS 124408</td> <td>ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED</td> <td>CONTRACT NUMBER D262989</td> </tr> <tr> <td colspan="3">MAINTENANCE JURISDICTION SITE D</td> <td>DRAWING NO. MJP-01-D SHEET NO. 112</td> </tr> </table>		BRIDGES	CULVERTS 124408	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989	MAINTENANCE JURISDICTION SITE D			DRAWING NO. MJP-01-D SHEET NO. 112		
BRIDGES	CULVERTS 124408	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989								
MAINTENANCE JURISDICTION SITE D			DRAWING NO. MJP-01-D SHEET NO. 112								

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DATE/TIME = 30-JUL-2015 13:53
USER = jphillips

PROJECT MANAGER G. WOJCIK
CHECK J.L. PHILLIPS
DRAFTING P.F. BLOW
CHECK J.L. PHILLIPS
DESIGN K.LORF
JOB MANAGER J.L. PHILLIPS
DESIGN SUPERVISOR R. WILDER

**HORIZONTAL CONTROL TABLE
(STREAM) - 124408**

PROJECT NAME: 980593 124408 ROUTE79 FEA RWY
DESCRIPTION: ROUTE 79 ALIGNMENT FILE
HORIZONTAL ALIGNMENT NAME: PROPOSED CULVERT AND STREAM
DESCRIPTION: PROPOSED CULVERT AND STREAM
STYLE: AC P

	STATION	NORTHING	EASTING
ELEMENT: LINEAR			
POB (	10)	ST 1+00.00	825662.4487 1011110.6352
EQNBK (	)	1+00.00	825662.4487 1011110.6352
EQNAHD (	)	ST 1+00.00	825662.4487 1011110.6352
PI (	24)	ST 1+22.40	825657.3474 1011088.8250
TANGENT DIRECTION: 256°50'06.9361"			
TANGENT LENGTH: 22.3989			
ELEMENT: LINEAR			
PI (	24)	ST 1+22.40	825657.3474 1011088.8250
PI (	20)	ST 1+53.22	825646.0293 1011060.1611
TANGENT DIRECTION: 248°27'11.3760"			
TANGENT LENGTH: 30.8175			
ELEMENT: LINEAR			
PI (	20)	ST 1+53.22	825646.0293 1011060.1611
PI (	19)	ST 1+85.61	825631.3639 1011031.2747
TANGENT DIRECTION: 243°05'00.6620"			
TANGENT LENGTH: 32.3959			
ELEMENT: LINEAR			
PI (	19)	ST 1+85.61	825631.3639 1011031.2747
PI (	18)	ST 2+03.95	825623.1920 1011014.8605
TANGENT DIRECTION: 243°31'59.7341"			
TANGENT LENGTH: 18.3358			
ELEMENT: LINEAR			
PI (	18)	ST 2+03.95	825623.1920 1011014.8605
PI (	17)	ST 2+42.95	825609.3290 1010978.4023
TANGENT DIRECTION: 249°10'51.8198"			
TANGENT LENGTH: 39.0049			
ELEMENT: LINEAR			
PI (	17)	ST 2+42.95	825609.3290 1010978.4023
PI (	16)	ST 2+64.70	825605.4606 1010956.9977
TANGENT DIRECTION: 259°45'19.5719"			
TANGENT LENGTH: 21.7514			
ELEMENT: LINEAR			
PI (	16)	ST 2+64.70	825605.4606 1010956.9977
PI (	15)	ST 3+03.68	825607.1511 1010918.0551
TANGENT DIRECTION: 272°29'08.8734"			
TANGENT LENGTH: 38.9792			
ELEMENT: LINEAR			
PI (	15)	ST 3+03.68	825607.1511 1010918.0551
PI (	27)	ST 3+32.00	825595.6374 1010892.1884
TANGENT DIRECTION: 246°00'19.1546"			
TANGENT LENGTH: 28.3135			
ELEMENT: LINEAR			
PI (	27)	ST 3+32.00	825595.6374 1010892.1884
PI (	25)	ST 3+67.07	825569.0922 1010869.2697
TANGENT DIRECTION: 220°48'24.3345"			
TANGENT LENGTH: 35.0702			
ELEMENT: LINEAR			
PI (	25)	ST 3+67.07	825569.0922 1010869.2697
POE (	11)	ST 3+96.01	825547.3195 1010850.2041
TANGENT DIRECTION: 221°12'27.0866"			
TANGENT LENGTH: 28.9404			

**HORIZONTAL CONTROL TABLE
(ROUTE 79) - 124408**

PROJECT NAME: 980593 124408 ROUTE79 FEA RWY
DESCRIPTION: ROUTE 79 ALIGNMENT FILE
HORIZONTAL ALIGNMENT NAME: ROUTE79 CL P
DESCRIPTION: ROUTE 79 ALIGNMENT
STYLE: AC P

	STATION	NORTHING	EASTING
ELEMENT: LINEAR			
POB (	1)	D 1+00.00	825288.0335 1011389.7910
EQNBK (	)	1+00.00	825288.0335 1011389.7910
EQNAHD (	)	D 1+00.00	825288.0335 1011389.7910
PC (	2)	D 1+52.04	825315.2823 1011345.4591
TANGENT DIRECTION: 301°34'37.8334"			
TANGENT LENGTH: 52.0367			
ELEMENT: CIRCULAR			
PC (	2)	D 1+52.04	825315.2823 1011345.4591
PI (	)	D 2+27.77	825354.9412 1011280.9369
CC (	4)		826593.1857 1012130.9290
PT (	5)	D 3+03.38	825400.8974 1011220.7375
RADIUS: 1500.0000			
DELTA: 5°46'51.2291" RIGHT			
DEGREE OF CURVATURE(ARC): 3°49'10.9871"			
LENGTH: 151.3435			
TANGENT: 75.7360			
CHORD: 151.2793			
MIDDLE ORDINATE: 1.9083			
EXTERNAL: 1.9108			
TANGENT DIRECTION: 301°34'37.8334"			
RADIAL DIRECTION: 31°34'37.8334"			
CHORD DIRECTION: 304°28'03.4480"			
RADIAL DIRECTION: 37°21'29.0625"			
TANGENT DIRECTION: 307°21'29.0625"			
ELEMENT: LINEAR			
PT (	5)	D 3+03.38	825400.8974 1011220.7375
PC (	7)	D 3+32.84	825418.7763 1011197.3173
TANGENT DIRECTION: 307°21'29.0625"			
TANGENT LENGTH: 29.4646			
ELEMENT: CIRCULAR			
PC (	7)	D 3+32.84	825418.7763 1011197.3173
PI (	)	D 4+70.03	825502.0176 1011088.2769
CC (	8)		826312.9925 1011879.9609
PT (	41)	D 6+05.86	825609.0228 1011002.4351
RADIUS: 1125.0000			
DELTA: 13°54'16.5881" RIGHT			
DEGREE OF CURVATURE(ARC): 5°05'34.6494"			
LENGTH: 273.0163			
TANGENT: 137.1821			
CHORD: 272.3469			
MIDDLE ORDINATE: 8.2718			
EXTERNAL: 8.3331			
TANGENT DIRECTION: 307°21'29.0625"			
RADIAL DIRECTION: 37°21'29.0625"			
CHORD DIRECTION: 314°18'37.3565"			
RADIAL DIRECTION: 51°15'45.6506"			
TANGENT DIRECTION: 321°15'45.6506"			
ELEMENT: LINEAR			
PT (	41)	D 6+05.86	825609.0228 1011002.4351
PI (	12)	D 6+63.34	825653.8590 1010966.4665
TANGENT DIRECTION: 321°15'45.6506"			
TANGENT LENGTH: 57.4806			
ELEMENT: LINEAR			
PI (	12)	D 6+63.34	825653.8590 1010966.4665
PI (	3)	D 8+00.04	825760.6227 1010881.1014
TANGENT DIRECTION: 321°21'18.6418"			
TANGENT LENGTH: 136.6956			
ELEMENT: LINEAR			
PI (	3)	D 8+00.04	825760.6227 1010881.1014
PI (	26)	D 8+50.04	825799.1981 1010849.2904
TANGENT DIRECTION: 320°29'22.1101"			
TANGENT LENGTH: 50.0000			
ELEMENT: LINEAR			
PI (	26)	D 8+50.04	825799.1981 1010849.2904
POE (	6)	D 10+00.04	825916.2464 1010755.4837
TANGENT DIRECTION: 321°17'24.2127"			
TANGENT LENGTH: 150.0000			

AFFIX SEAL: ON: ALTERED BY: ON:



AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 79 - SH 8209	PIN 9805.93 RT 79 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS 124408	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED HORIZONTAL CONTROL TABLES	CONTRACT NUMBER D262989
	CHENANGO FORKS - WHITNEY POINT, PARTS 1 AND 2					DRAWING NO. HCT-01-D
	CULVERT REPLACEMENT BROOME, DELEWARE, OTSEGO COUNTIES					SHEET NO. 113
	TOWN OF BARKER					
	COUNTY: BROOME REGION: 09					

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TABLE OF GUIDE RAILING - INSTALLATION

STATION TO STATION	SIDE	OFFSET	POST SPACING (FT)	PAY FACTOR	ITEM 606-10 - BOX BEAM GUIDE RAILING (LF)	ITEM 606-100002 (LF) BOX BEAM RAIL (SHOP BENT) W/ TYPE 0 END TERM.	ITEM 606-100002 (LF) BOX BEAM RAIL (SHOP BENT)	ITEM 606-120101 (EACH) BOX BEAM END PIECE	ITEM 606-1001004 - REINFORCED DOUBLE BOX BEAM GUIDE RAIL	COMMENTS
D 5+53.33 TO D 5+59.33	L	22.5	6					1		
D 5+59.33 TO D 5+76.36	L	18.8	6						18.3	RADIUS = 35.5 FEET
D 5+76.36 TO D 6+28.83	L	13.7	6	52.8						
D 6+28.83 TO D 6+64.74	L	14.0	6						37.3	RADIUS = 80.0 FEET
D 6+64.74 TO D 6+72.84	L	22.7	6					1		
D 4+94.04 TO D 4+96.89	R	24.3	6	2	(3LF X 2) = 6					
D 4+96.89 TO D 5+48.22	R	23.2	6		52					RADIUS = 103.6 FEET
D 5+48.22 TO D 5+67.63	R	13.5	6	19.2						
D 5+67.63 TO D 5+87.92	R	13.2	6	20.1						
D 5+87.92 TO D 6+01.72	R	13.4	6	13.6						
D 6+01.72 TO D 6+19.77	R	14	6					18		
D 6+19.77 TO D 6+42.27	R	14	6	22.5						
D 6+42.27 TO D 6+49.95	R	13.4	6					7.8		RADIUS = 30 FEET
D 6+49.95 TO D 6+56.98	R	14.5	6					1		
TOTALS					128.2 LF	58 LF	63.4 LF	3	18 LF	

NOTES: STATION TO STATION DISTANCE MAY NOT EQUAL TRUE DISTANCE DUE TO RADIUS.

TABLE OF ITEM 608.020102 - HOT MIX ASPHALT (HMA) SIDEWALKS, DRIVEWAY, BICYCLE PATHS & VEGETATIVE CONTROL STRIPS

STATION	OFFSET	TO	STATION	OFFSET	SIDE	AREA	TONS
D 5+68.77	13.77		D 5+97.46	15.5	L	46	1.2
D 6+31.50	15.8		D 6+44.02	14.57	L	17	0.44
D 5+31.07	12.89		D 5+97.74	14.7	R	128	3.33
D 6+34.24	15.2		D 6+47.10	13.17	R	16	0.42
TOTALS						207 SF	5.4

NOTES: STATION TO STATION DISTANCE MAY NOT EQUAL TRUE DISTANCE

TABLE OF SOIL BORING LOCATIONS

BORING #	BASELINE STA.	BASELINE OFFSET	NORTHING	EASTING
FH-K-7	D 5+90.66	0.2	R	825604.450 1011012.000
FH-K-8	D 6+11.33	14.8	L	825604.010 1010987.440
FH-K-14	D 6+24.33	0.3	R	825623.400 1010990

NOTES: BASELINE ALIGNMENT DIRECTION IS NORTH TO SOUTH (OPPOSITE DIRECTION OF THE ROAD ALIGNMENT)

TABLE OF EXISTING GUIDE RAILING - REMOVAL

STATION/LOCATION	SIDE	OFFSET (FEET)	ITEM 606-73 (LF) REMOVING & DISPOSING BOX BEAM GUIDE RAILING	ITEM 606-7920 (EACH) REMOVING & DISPOSING BOX BEAM GUIDE RAIL END ASSEMBLY	COMMENTS
D 5+54.70	L	19.0		1	
D 5+54.70	L	19.0	116 LF		
D 6+69.72	L	20.1		1	
D 6+69.72	L	20.1			
D 5+33.57	R	14.7		1	
D 5+33.57	R	14.7	111 LF		
D 6+45.46	R	16.4		1	
D 6+45.46	R	16.4			
TOTALS			227 LF	4	

NOTES: STATION TO STATION DISTANCE MAY NOT EQUAL TRUE DISTANCE DUE TO RADIUS.

TABLE OF CLEAR ZONE WIDTHS

STATION TO STATION	WIDTH	NOTES
D 4+93.00 TO D 6+75.00	10 W/O GUIDRAIL OR 4 W/	PER CHAPTER 10 IN HDM SECT. 2.7.3.11

NOTE: MINIMUM CLEARZONE WIDTH FOR THIS SECTION OF ROUTE 79 WITH 1:4 SLOPES IS 22 FEET

TABLE OF PAVEMENT CUTTING - ITEM 627.50140008 (LF)


LOCATION	LENGTH	REMARKS
D 6+44.00 14' LT TO A 6+44.00 14' RT	28'	FULL WIDTH (SHOULDER TO SHOULDER) AT FULL DEPTH
D 5+89.00 14' LT TO D 5+89.00 14' RT	28'	
D 5+70 OFFSET 11' LT TO D 6+60 OFFSET 11.5' LT	90'	AT SHOULDER FOR DETOUR
TOTALS	146 LF	

TABLE OF CHECK DAMS ITEM 209.1106

STATION	SIDE	OFFSET
D 5+90.45	R	22.9
D 6+18.59	R	28.1

TABLE OF SILT FENCE TEMPORARY - ITEM 209.13

STATION	SIDE	OFFSET	LINEAR FEET
D 5+96.40	R	24.8	
TO D 5+95.05	R	50.7	25.8
TO D 5+84.47	R	92.6	43.2
D 6+18.02	R	29.6	
TO D 6+07.75	R	48.3	21.4
TO D 6+01.13	R	75.0	27.4
D 6+16.09	L	30.1	
TO D 6+31.48	L	46.3	22.4
TO D 6+51.74	L	70.5	31.6
TO D 6+59.04	L	95.1	25.5
TO D 6+50.92	L	136.7	42.6
D 6+33.44	L	25.7	
TO D 6+41.48	L	40.1	16.5
TO D 6+61.76	L	62.6	30.3
TO D 6+69.42	L	93.6	32.0
TO D 6+61.40	L	136.7	43.9
TOTALS			362.6 LF

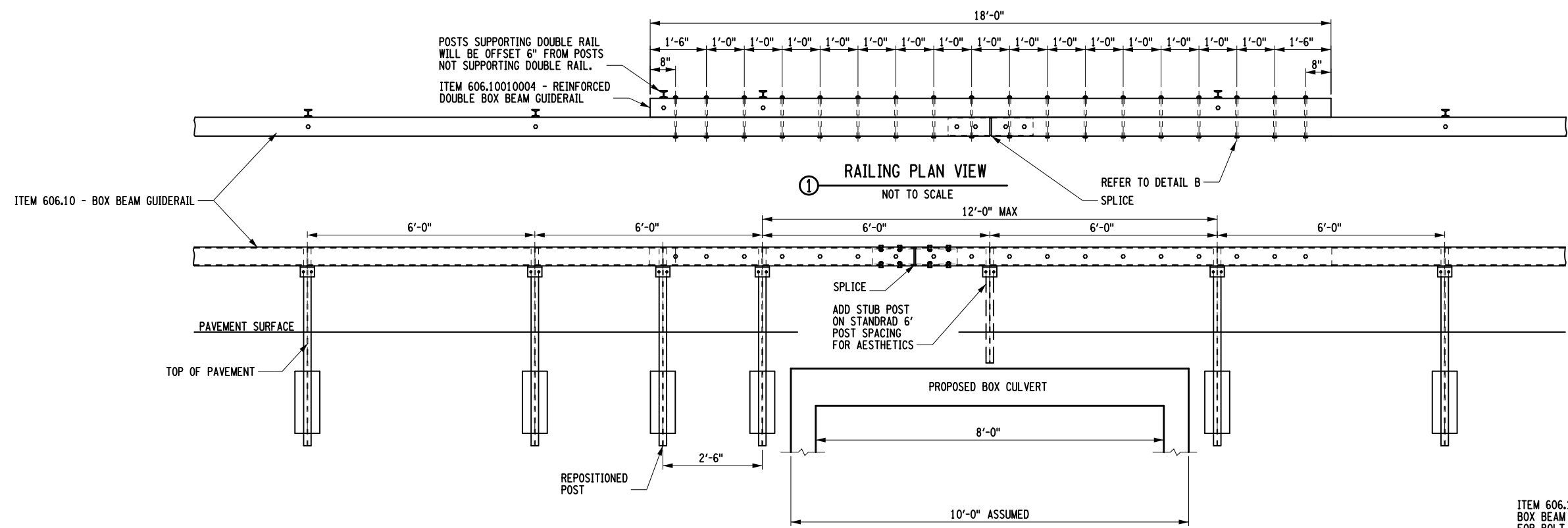
AFFIX SEAL: ON: 

ALTERED BY: ON:

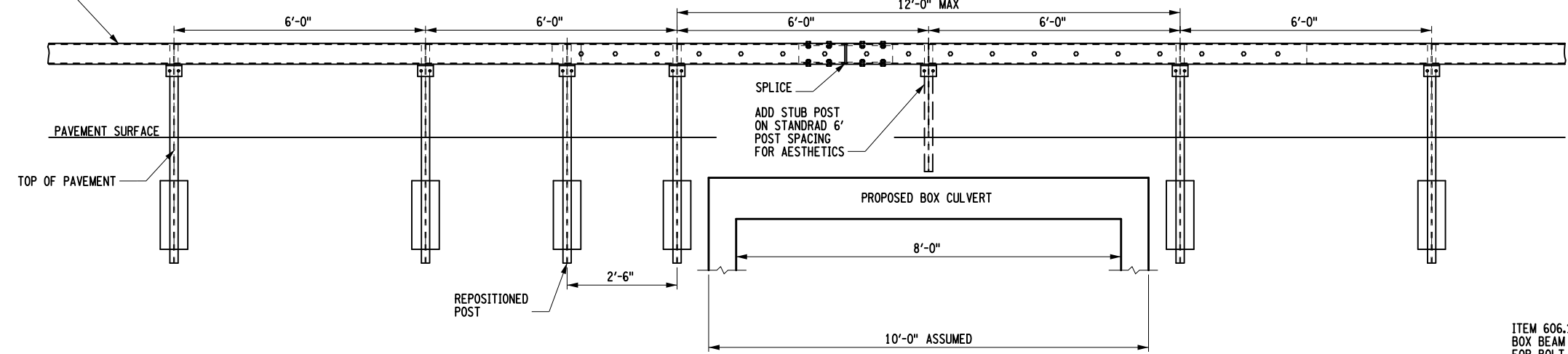
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 79 - SH 8209 CHENANGO FORKS - WHITNEY POINT, PARTS 1 & 2 CULVERT REPLACEMENT BROOME, DELAWARE, OTSEGO COUNTIES TOWN OF BARKER COUNTY: REGION: 09	PIN 9805.93 NYS RTE 79 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS 124408	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED MISCELLANEOUS TABLES SITE D	CONTRACT NUMBER D262989 DRAWING NO. MST-01-D SHEET NO. 114
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.						

PROJECT MANAGER G. WOJCIK
 CHECK J.L. PHILLIPS
 DRAFTING P.F. BLOW
 CHECK J.L. PHILLIPS
 DESIGN K.J. LORF
 JOB MANAGER J.L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER

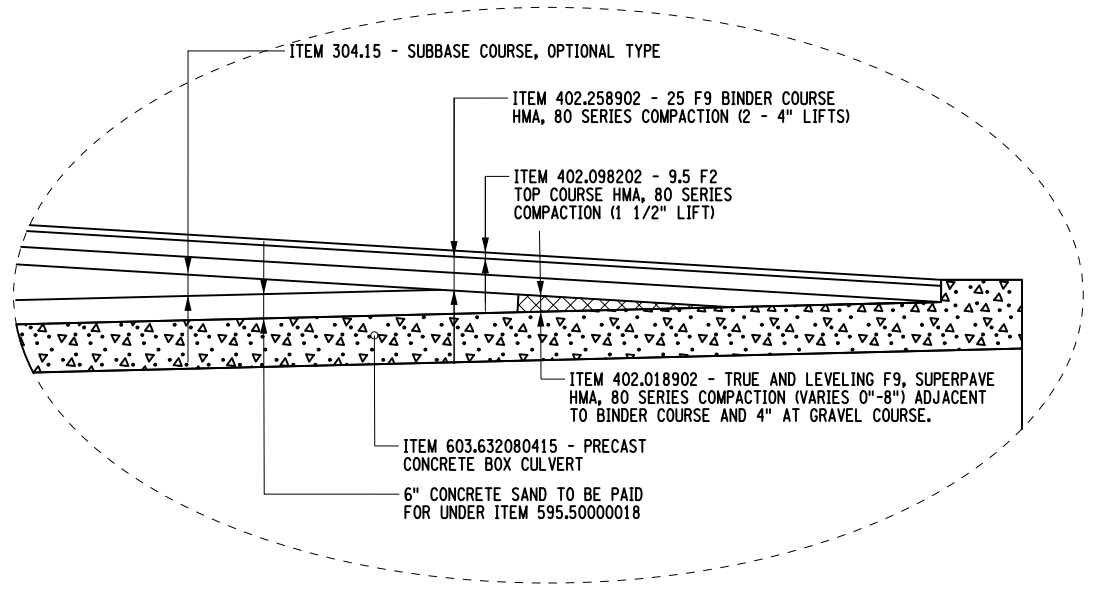
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 USER = jphillips



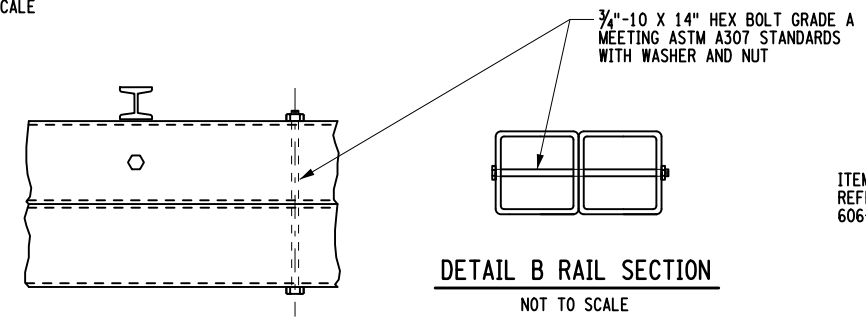
① RAILING PLAN VIEW
NOT TO SCALE



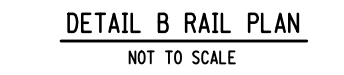
② RAILING ELEVATION
NOT TO SCALE



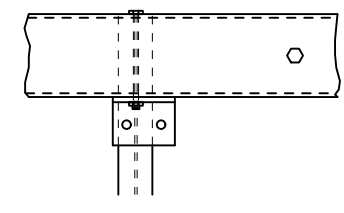
③ ASPHALT SHIM DETAIL
NOT TO SCALE



DETAIL B RAIL SECTION
NOT TO SCALE



DETAIL B RAIL PLAN
NOT TO SCALE



DETAIL B RAIL ELEVATION
NOT TO SCALE

NOTES:

- WHERE BOX BEAM SPANS EXCEED 10 FT., THE SPANNED LENGTH SHALL BE SUPPORTED BY FASTENING AN ADDITIONAL BOX BEAM TO THE BACK SIDE OF THE PRIMARY RAIL. THE TOTAL NUMBER OF FULL LENGTH POSTS SHALL BE UNCHANGED FROM THE NORMAL COUNT. THE BACKUP RAIL SHALL BE SUPPORTED BY AT LEAST THREE FULL-LENGTH POSTS.

④ SUPPORT OF GUIDE RAIL OVER SHALLOW OBSTRUCTIONS DETAILS
NOT TO SCALE

AFFIX SEAL: ON: _____
 ALTERED BY: ON: _____



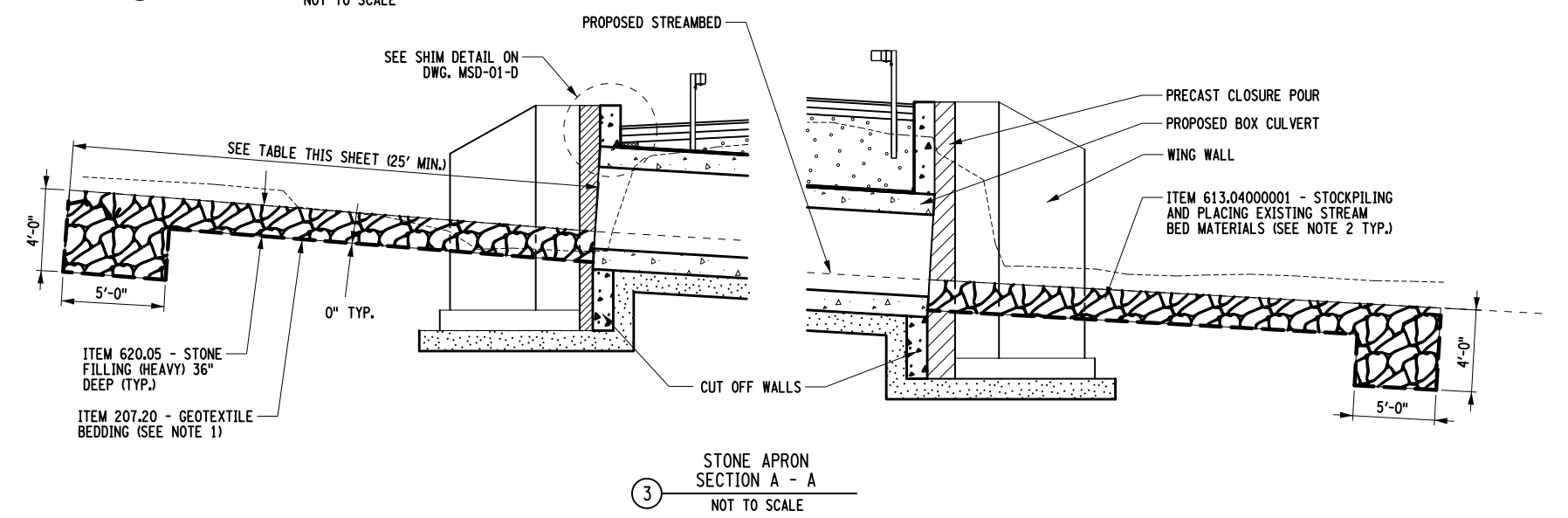
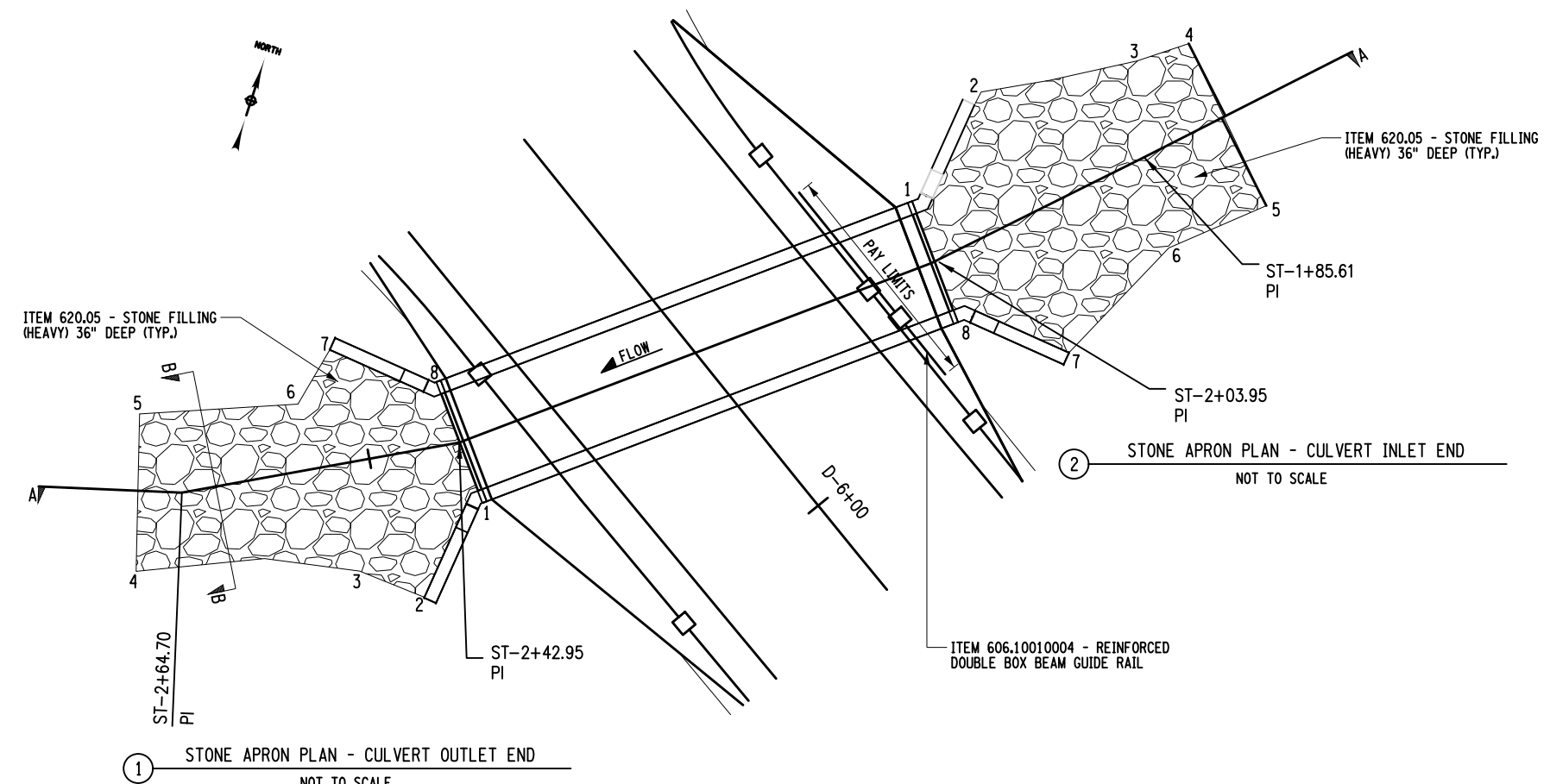
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 79 - SH 8209	PIN 9805.93	BRIDGES	CULVERTS 124408	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	CHENANGO FORKS - WHITNEY POINT, PARTS 1 & 2	ROUTE 79			MISCELLANEOUS DETAILS	DRAWING NO. MSD-01-D
	CULVERT REPLACEMENT & REPAIR PROJECT	UTILITY QUALITY LEVEL D				SHEET NO. 115
	TOWN OF BARKER					
	COUNTY: BROOME	REGION: 09				

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FILE NAME = 980593_124408_RTT9_cph.msdd.02.D.dgn
 DATE/TIME = 14-AUG-2015 11:11
 USER = klorf

PROJECT MANAGER G. WOJCIK
 CHECK
 DRAFTING K.M. LORF
 CHECK J. PHILLIPS
 DESIGN K.M. LORF
 JOB MANAGER J. L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER



- NOTES:
1. GEOTEXTILE BEDDING ITEM 207.20 SHALL BE SECURED BY BURYING THE FABRIC ENDS INTO THE STONE A DISTANCE EQUAL TO THE FULL HEIGHT OF DEPTH OF THE STONE FILLING. THE GEOTEXTILE BEDDING SHALL MEET THE REQUIREMENTS OF SPECIFICATION TABLE 737-01A CLASS 1.
 2. EXCAVATED AND STOCKPILED NATIVE STREAM BED MATERIAL SHALL BE MIXED WITH THE HEAVY STONE FILL DURING CONSTRUCTION OF THE SCOUR PROTECTION APRONS UPSTREAM AND DOWNSTREAM OF THE CULVERT IN ORDER TO FILL IN VOID SPACES. THE FILLING OF THE VOID SPACES IS NECESSARY TO PREVENT THE STREAM FLOW FROM PERCOLATING BELOW THE STREAM BED GRADE DURING LOW FLOWS. THE STONE FILL IN THE LOWER PORTIONS OF THE APRONS SHALL BE MIXED WITH STOCKPILED NATIVE MATERIAL SOURCED FROM THE DEEPER STREAM BED LAYER. THE SURFACE OF THE NEWLY CONSTRUCTED APRONS (OR LAYERS THEREOF IF PLACED IN MULTIPLE LIFTS) SHALL BE SPRAYED SUFFICIENTLY WITH WATER TO WASH FINER PARTICLES DOWN INTO THE DEEPER VOID SPACES. IF THE NATIVE STREAM BED MATERIAL DOES NOT CONTAIN ENOUGH PARTICLES OF FINE SAND SIZE OR SMALLER TO COMPRISE APPROXIMATELY 5-10% PROPORTION OF THE VOLUME OF THE APRON MATERIAL, ENOUGH OF THIS FINE MATERIAL SHALL BE ADDED TO ACHIEVE THIS APPROXIMATE PROPORTION OF FINES IN THE LOWER 75% OF THE DEPTH OF THE APRON. ANY WASH WATER COLLECTING IN OR FLOWING FROM THE BASE OF THE STONE FILL SHALL BE ALLOWED TO PERCOLATE INTO THE GROUND (PREFERRED), OR IF NECESSARY, DISCHARGED TO A SETTLING BASIN, FILTER SOCK, OR SIMILAR SEDIMENT CONTROL MECHANISM APPROVED BY THE ENGINEER IN CHARGE. THE PLACEMENT OF NATIVE STREAM BED MATERIAL SHALL BE PAID FOR UNDER ITEM 613.04000001.

TABLE OF STONE FILLING (HEAVY) 620.05 - INLET END			
LOCATION	STREAM STATION	OFFSET (FT)	ELEVATION
1	ST 2+01.79	3.7 RT	915.8
2	ST 1+96.75	8.0 RT	917.0
3	ST 1+88.99	7.5 RT	919.0
4	ST 1+78.80	4.2 RT	918.0
5	ST 1+79.48	4.6 RT	918.0
6	ST 1+86.33	6.9 LT	917.2
7	ST 1+98.52	9.1 LT	917.0
8	ST 2.02.52	4.00 LT	915.8

TABLE OF STONE FILLING (HEAVY) 620.05 - OUTLET END			
LOCATION	STREAM STATION	OFFSET (FT)	ELEVATION
1	ST 2+43.85	4.2 LT	913.3
2	ST 2+47.92	10.2 LT	916.0
3	ST 2+56.51	6.8 LT	913.9
4	ST 2+67.84	4.8 LT	913.0
5	ST 2+67.69	4.6 RT	913.0
6	ST 2+56.61	5.1 RT	914.0
7	ST 2+52.95	8.8 RT	917.2
8	ST 2+45.29	3.5 RT	913.3

AFFIX SEAL:
ON:

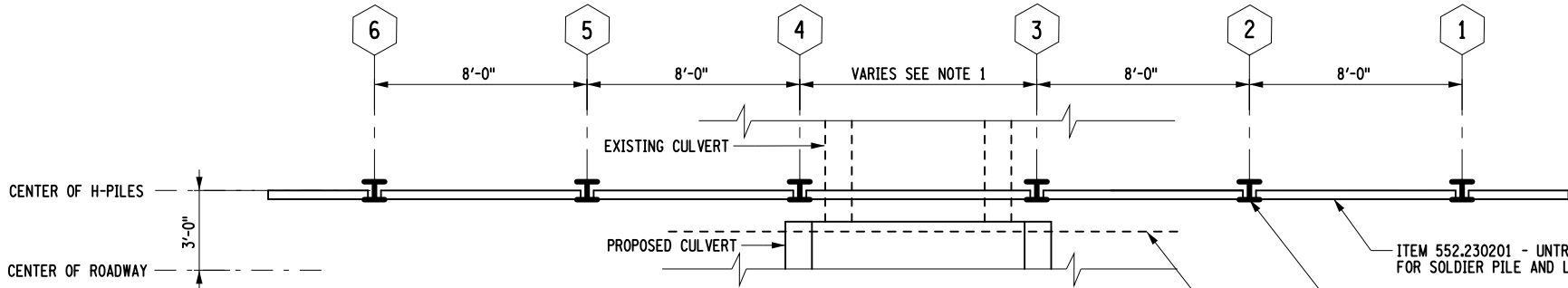
ALTERED BY:
ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 79 - SH 8209	PIN 9805.93	BRIDGES	CULVERTS 124408	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED MISCELLANEOUS DETAILS	CONTRACT NUMBER D262989
	CHENANGO FORKS - WHITNEY POINT, PARTS 1 & 2	ROUTE 79 UTILITY QUALITY LEVEL D				DRAWING NO. MSD-02-D SHEET NO. 116
	TOWN OF BARKER				SITE D	
	COUNTY: BROOME	REGION: 09				

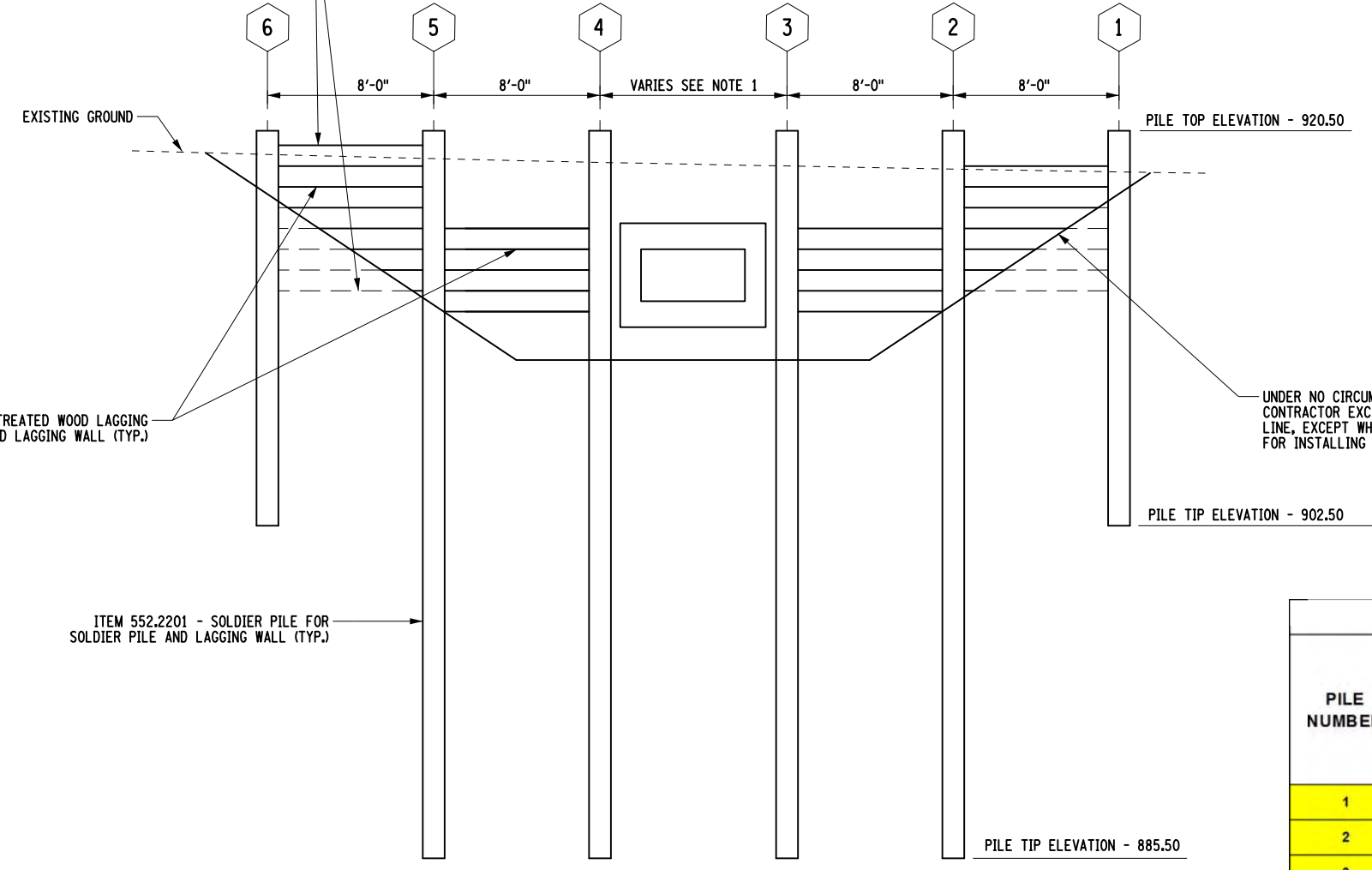
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FILE NAME = 980593.124408_RT79_cph_ged.01_d.dgn
 DATE/TIME = 30-JUL-2015 13:53
 USER = jphillips

PROJECT MANAGER G. WOJCIK
 CHECK J.L. PHILLIPS
 DRAFTING G. MEYER
 CHECK J.L. PHILLIPS
 DESIGN D. MELSZER
 JOB MANAGER J.L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER



1
SOLDIER PILE AND LAGGING WALL - PLAN
 NOT TO SCALE



3
SOLDIER PILE AND LAGGING WALL - ELEVATION
 NOT TO SCALE

LAGGING SHALL BE ROUGH SAWN AND A MINIMUM OF 4" THICK

SOLDIER PILE

EXCAVATION LINE

3
SECTION X-X FOR DRIVEN PILES
 NOT TO SCALE

- NOTES:
1. FIELD DETERMINE THE LOCATION OF THE SIDES OF THE EXISTING CULVERT AND INSTALL TWO PILES NEXT TO THE EXISTING CULVERT. INSTALL THE REMAINDER OF THE PILES AT 8' O.C.
 2. PROVIDE STEEL H-PILES MEETING THE REQUIREMENTS OF ASTM A572 GRADE 50 STEEL.
 3. THE COST OF FURNISHING THE PILE DRIVING EQUIPMENT SHALL BE INCLUDE IN THE UNIT PRICE BID FOR ITEM 552.2201.

TABLE OF SOLDIER PILES							
PILE NUMBER	STATION	PILE TOP ELEVATION ¹ (FEET)	DEPTH OF EXCAVATION (FEET)	ESTIMATED PILE TIP ELEV. (FEET)	ESTIMATED PILE LENGTH (FEET)	MINIMUM PILE SECTION MODULUS (CUBIC INCHES)	SOLDIER PILE SECTION
1	5+95.00	920.50	2.40	902.50	18.00	18.40	HP 10X42
2	6+03.00	920.50	7.70	885.50	35.00	121.20	HP 14X89
3	6+11.00	920.50	10.00	885.50	35.00	121.20	HP 14X89
4	6+19.00	920.50	10.00	885.50	35.00	121.20	HP 14X89
5	6+27.00	920.50	7.20	885.50	35.00	121.20	HP 14X89
6	6+35.00	920.50	2.00	902.50	18.00	18.40	HP 10X42

AFFIX SEAL: ON: _____
 ALTERED BY: ON: _____



AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 79 - SH 8209	PIN 9805.93	BRIDGES	CULVERTS 124408	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	CHENANGO FORKS - WHITNEY POINT, PARTS 1 AND 2	ROUTE 79			SOLDIER PILE	DRAWING NO. GED-01-D
	CULVERT REPLACEMENT	UTILITY QUALITY LEVEL D				SHEET NO. 117
	TOWN OF BARKER					
	COUNTY: BROOME	REGION: 09				

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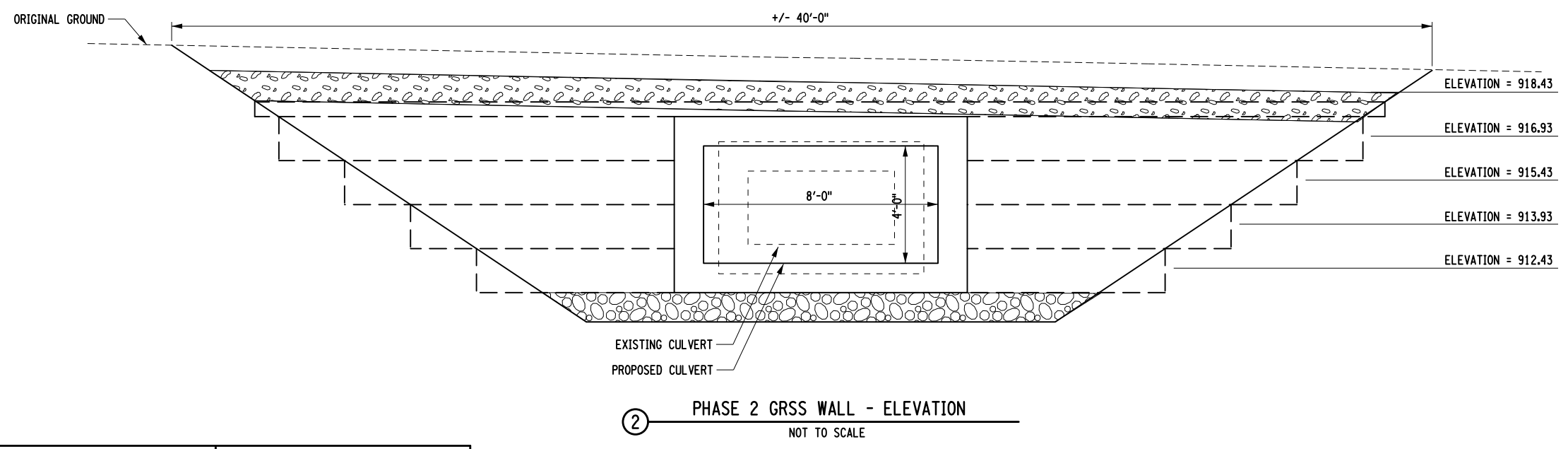
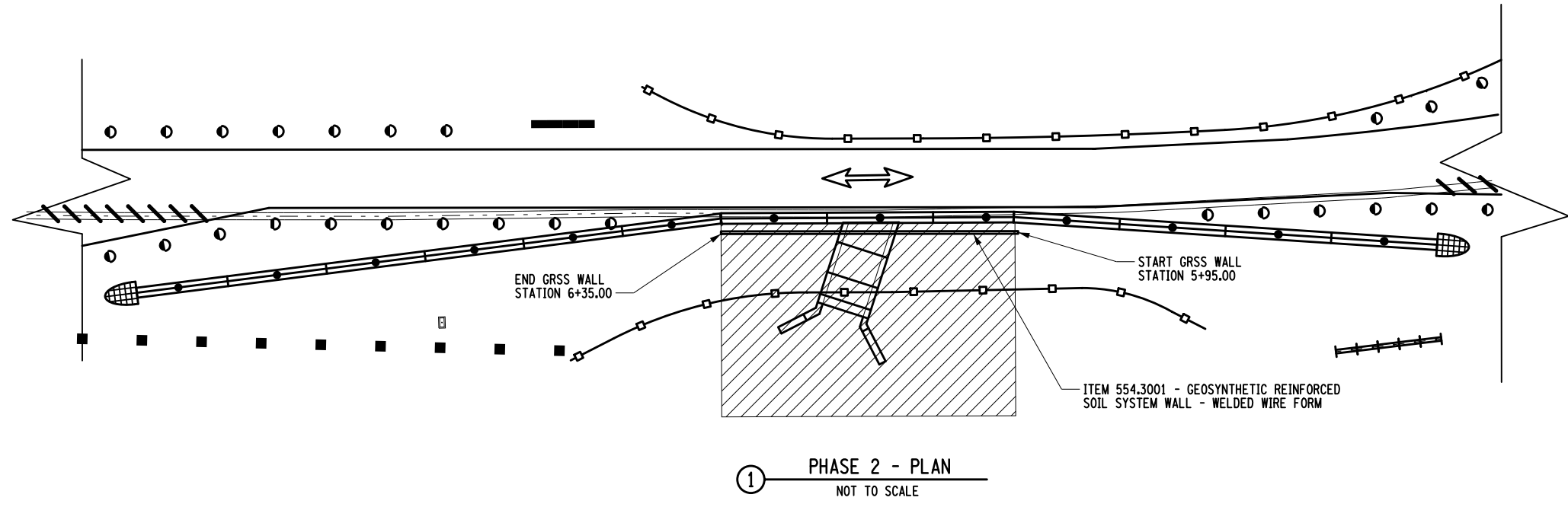
PROJECT MANAGER G. WOJCIK
 CHECK J.L. PHILLIPS
 DRAFTING G. MEYER
 CHECK J.L. PHILLIPS
 DESIGN D. MELSZER
 JOB MANAGER J.L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER

FILE NAME = 980593.124408_RT79_cph_gecd_02.dgn
 DATE/TIME = 30-JUL-2015 13:53
 USER = jphillips

- NOTES:
1. PROVIDE STEEL H-PILES MEETING THE REQUIREMENTS OF ASTM A572 GRADE 50 STEEL.
 2. THE FOLLOWING INFORMATION WAS USED IN THE DESIGN OF THE SOLDIER PILE AND LAGGING WALL:

LOCATION	ELEVATION (FT)	UNIT WEIGHT (LBS/FT ³)	FRICTION ANGLE (DEGREES)	COHESION (LBS/FT ²)	WALL FRICTION (DEGREES)	PILE SPACING (FT)
C950119	O.G.S. TO 879.5	120	33	0	0	8.0
	879.5 TO 874.0	120	35	0	0	

- A. DIVIDE THE PASSIVE EARTH PRESSURE COEFFICIENT (K_p) BY 1.25.
- B. GROUNDWATER IS ASSUMED AT ELEVATION 915.0 FEET.
- C. A SURCHARGE LOAD OF 250 POUNDS PER SQUARE FOOT IS ASSUMED AT THE TOP OF THE WALL.



AFFIX SEAL: ON:	ALTERED BY: ON:

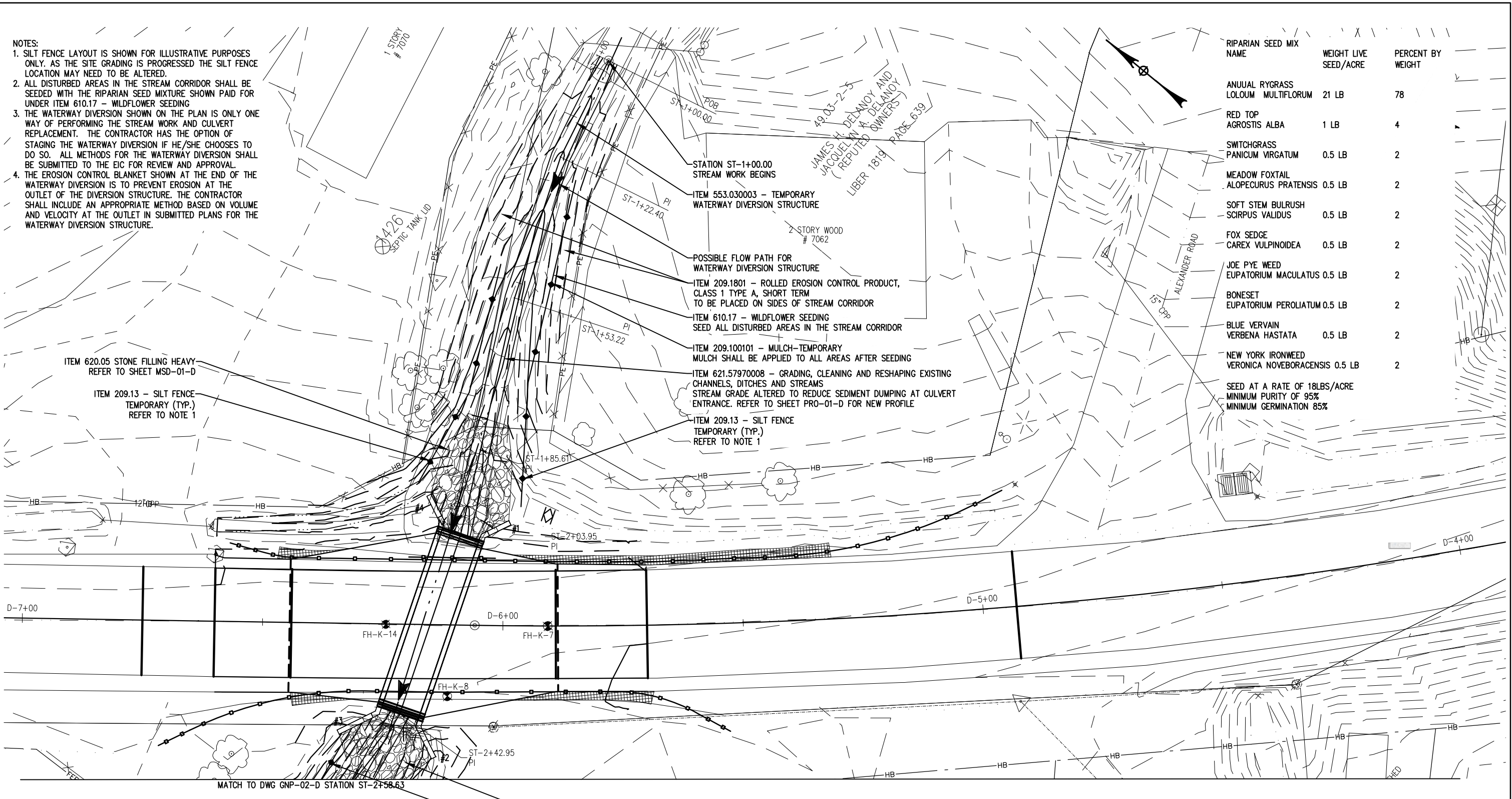
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 79, S.H. 8209 CHENANGO FORKS - WHITNEY POINT, PARTS 1 & 2 CULVERT REPLACEMENT TOWN OF BARKER COUNTY: BROOME	PIN 9805.93 ROUTE 79 REGION: 09	BRIDGES	CULVERTS	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED GEOTECHNICAL DETAILS	CONTRACT NUMBER D262989 DRAWING NO. GED-02-D SHEET NO. 118
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.						



FILE NAME = 980593_C124408_FEA_Route79.dwg
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 USER = klorf

PROJECT MANAGER G. WOODICK
 CHECK B. PRIESTLY
 DRAFTING K. M. LORE
 CHECK B. PRIESTLY
 DESIGN K. M. LORE
 JOB MANAGER J. L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER

- NOTES:
1. SILT FENCE LAYOUT IS SHOWN FOR ILLUSTRATIVE PURPOSES ONLY. AS THE SITE GRADING IS PROGRESSED THE SILT FENCE LOCATION MAY NEED TO BE ALTERED.
 2. ALL DISTURBED AREAS IN THE STREAM CORRIDOR SHALL BE SEEDED WITH THE RIPARIAN SEED MIXTURE SHOWN PAID FOR UNDER ITEM 610.17 - WILDFLOWER SEEDING
 3. THE WATERWAY DIVERSION SHOWN ON THE PLAN IS ONLY ONE WAY OF PERFORMING THE STREAM WORK AND CULVERT REPLACEMENT. THE CONTRACTOR HAS THE OPTION OF STAGING THE WATERWAY DIVERSION IF HE/SHE CHOOSES TO DO SO. ALL METHODS FOR THE WATERWAY DIVERSION SHALL BE SUBMITTED TO THE EIC FOR REVIEW AND APPROVAL.
 4. THE EROSION CONTROL BLANKET SHOWN AT THE END OF THE WATERWAY DIVERSION IS TO PREVENT EROSION AT THE OUTLET OF THE DIVERSION STRUCTURE. THE CONTRACTOR SHALL INCLUDE AN APPROPRIATE METHOD BASED ON VOLUME AND VELOCITY AT THE OUTLET IN SUBMITTED PLANS FOR THE WATERWAY DIVERSION STRUCTURE.



RIPIARIAN SEED MIX NAME	WEIGHT LIVE SEED/ACRE	PERCENT BY WEIGHT
ANNUAL RYGRASS LOLOUM MULTIFLORUM	21 LB	78
RED TOP AGROSTIS ALBA	1 LB	4
SWITCHGRASS PANICUM VIRGATUM	0.5 LB	2
MEADOW FOXTAIL ALOPECURUS PRATENSIS	0.5 LB	2
SOFT STEM BULRUSH SCIRPUS VALIDUS	0.5 LB	2
FOX SEDGE CAREX VULPINOIDEA	0.5 LB	2
JOE PYE WEED EUPATORIUM MACULATUS	0.5 LB	2
BONESET EUPATORIUM PEROLIATUM	0.5 LB	2
BLUE VERVAIN VERBENA HASTATA	0.5 LB	2
NEW YORK IRONWEED VERONICA NOVEBORACENSIS	0.5 LB	2

SEED AT A RATE OF 18LBS/ACRE
 MINIMUM PURITY OF 95%
 MINIMUM GERMINATION 85%

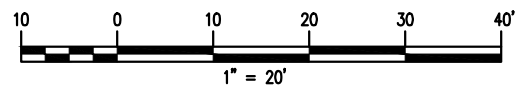
AFFIX SEAL ON:

ALTERED BY: ON:

- ITEM 620.05 STONE FILLING HEAVY REFER TO SHEET MSD-01-D
- ITEM 209.13 - SILT FENCE TEMPORARY (TYP.) REFER TO NOTE 1

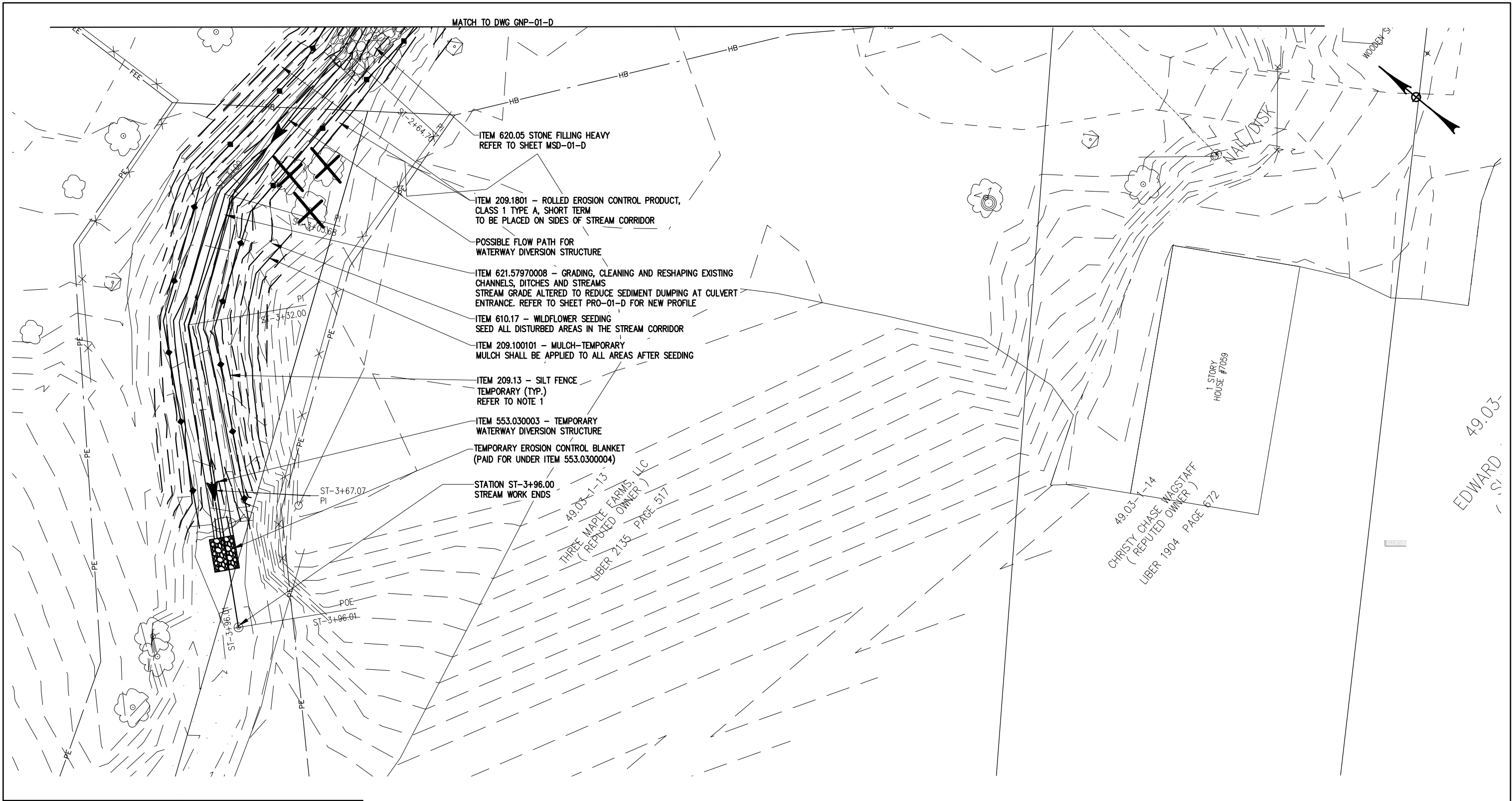
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 79 - SH 8209	PIN 9805.93	BRIDGES	CULVERTS 124408	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	CHENANGO FORKS - WHITNEY POINT, PARTS 1 & 2	NYS ROUTE 79			EROSION CONTROL PLANS SITE D	DRAWING NO. ECP-01-D
	CULVERT REPLACEMENT BROOME, DELEWARE, OTSEGO COUNTIES	QUALITY LEVEL D				SHEET NO. 119
	TOWN OF BARKER					
	COUNTY: BROOME					

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FILE NAME = 980593_C124408_FEA_Route79.dwg
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 USER = klorf

PROJECT MANAGER G. WOJCIK
 CHECK B. PRIESTLY
 DRAFTING K. M. LORE
 CHECK B. PRIESTLY
 DESIGN K. M. LORE
 JOB MANAGER J. L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER



MATCH TO DWG GNP-01-D

ITEM 620.05 STONE FILLING HEAVY
 REFER TO SHEET MSD-01-D

ITEM 209.1801 - ROLLED EROSION CONTROL PRODUCT,
 CLASS 1 TYPE A, SHORT TERM
 TO BE PLACED ON SIDES OF STREAM CORRIDOR

POSSIBLE FLOW PATH FOR
 WATERWAY DIVERSION STRUCTURE

ITEM 621.57970008 - GRADING, CLEANING AND RESHAPING EXISTING
 CHANNELS, DITCHES AND STREAMS
 STREAM GRADE ALTERED TO REDUCE SEDIMENT DUMPING AT CULVERT
 ENTRANCE. REFER TO SHEET PRO-01-D FOR NEW PROFILE

ITEM 610.17 - WILDFLOWER SEEDING
 SEED ALL DISTURBED AREAS IN THE STREAM CORRIDOR

ITEM 209.100101 - MULCH-TEMPORARY
 MULCH SHALL BE APPLIED TO ALL AREAS AFTER SEEDING

ITEM 209.13 - SILT FENCE
 TEMPORARY (TYP.)
 REFER TO NOTE 1

ITEM 553.030003 - TEMPORARY
 WATERWAY DIVERSION STRUCTURE

TEMPORARY EROSION CONTROL BLANKET
 (PAID FOR UNDER ITEM 553.0300004)

STATION ST-3+96.00
 STREAM WORK ENDS

49.03-1-13
 THREE MAPLE FARMS, LLC
 (REPUTED OWNER)
 LIBER 2135 PAGE 517

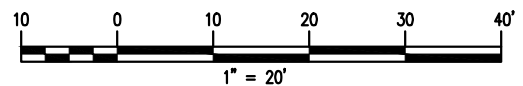
49.03-1-14
 CHRISTY CHASE WAGSTAFF
 (REPUTED OWNER)
 LIBER 1904 PAGE 672

49.03-
 EDWARD ST.

AFFIX SEAL: ON:	ALTERED BY: ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 79 - SH 8209	PIN 9805.93 NYS ROUTE 79 QUALITY LEVEL D	BRIDGES	CULVERTS 124408	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED EROSION CONTROL PLANS SITE D	CONTRACT NUMBER D262989
	CHENANGO FORKS - WHITNEY POINT, PARTS 1 & 2					DRAWING NO. ECP-02-D
	CULVERT REPLACEMENT BROOME, DELEWARE, OTSEGO COUNTIES					SHEET NO. 120
	TOWN OF BARKER					
	COUNTY: BROOME					

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DESIGN SUPERVISOR R. WILDER

JOB MANAGER J. L. PHILLIPS

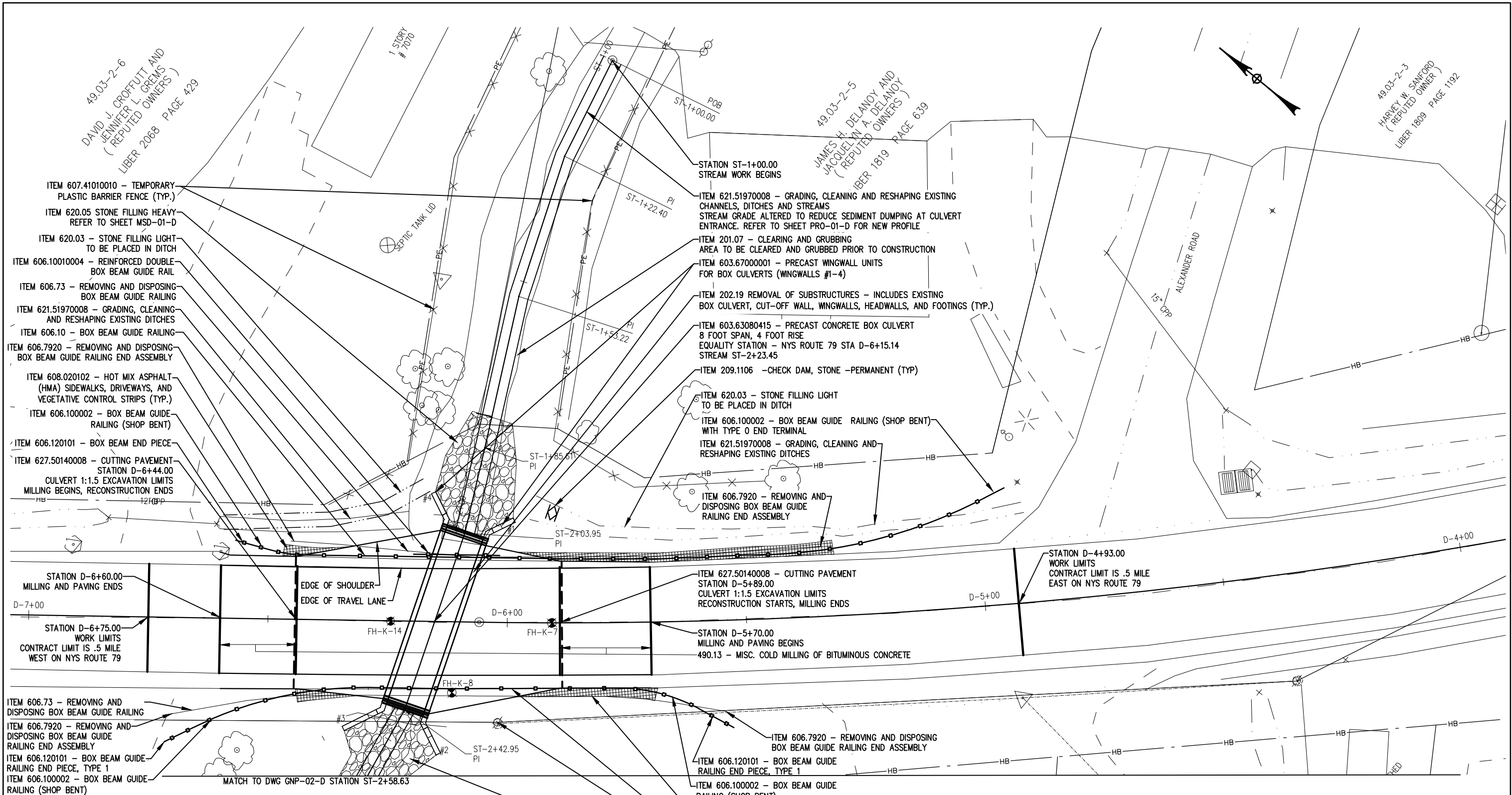
DESIGN K. M. LORE

CHECK J. L. PHILLIPS

DRAFTING K. M. LORE

CHECK J. L. PHILLIPS

PROJECT MANAGER G. WOJCIK

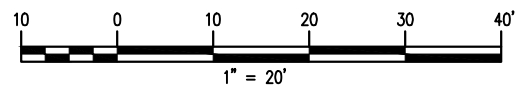


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ON:

ALTERED BY:
ON:

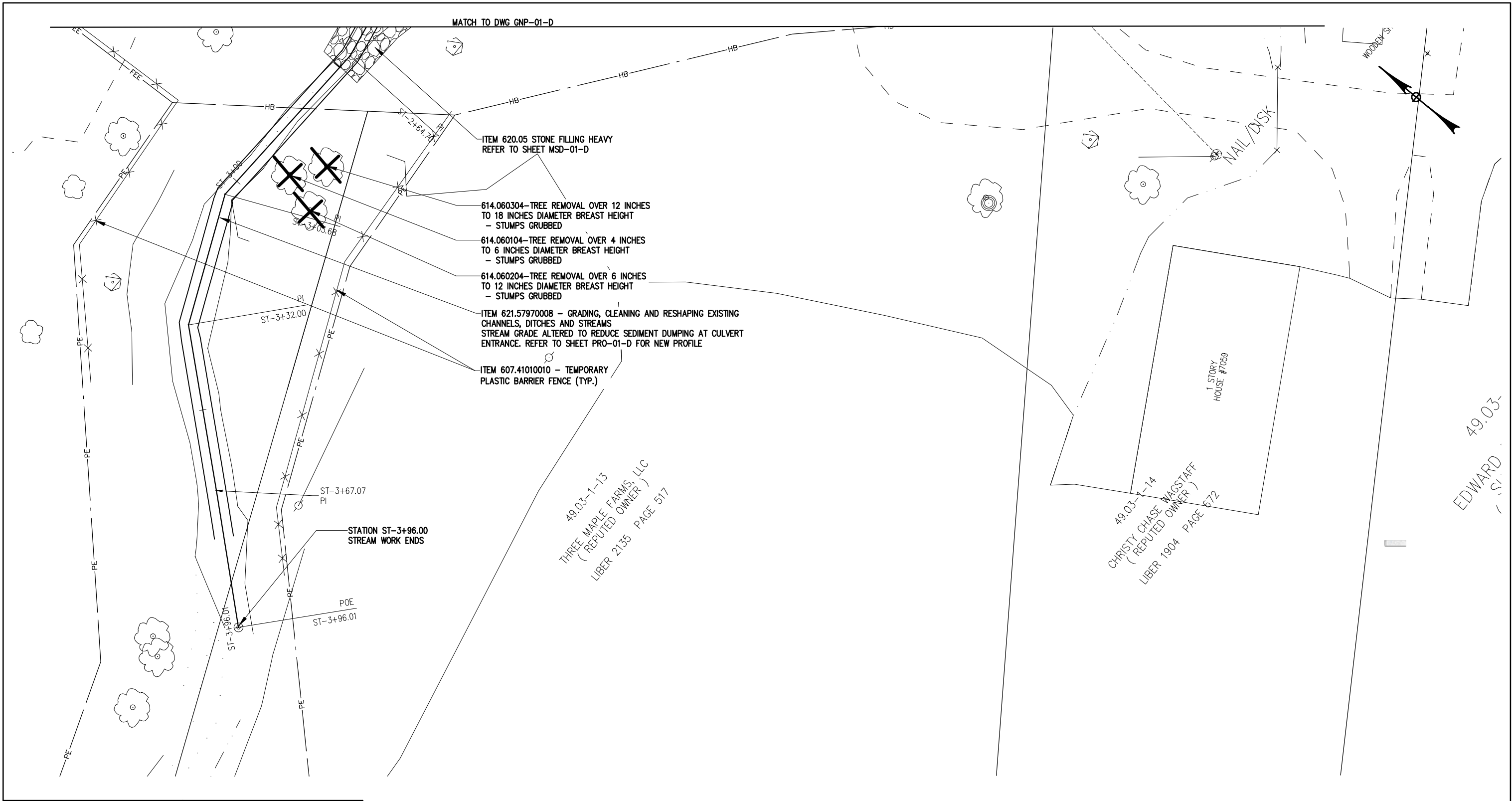
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 79 - SH 8209	PIN 9805.93	BRIDGES	CULVERTS 124408	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	CHENANGO FORKS - WHITNEY POINT, PARTS 1 & 2	NYS ROUTE 79			GENERAL PLANS SITE D	DRAWING NO. GNP-01-D SHEET NO. 121
	CULVERT REPLACEMENT BROOME, DELEWARE, OTSEGO COUNTIES	QUALITY LEVEL D				
	TOWN OF BARKER					
	COUNTY: BROOME					

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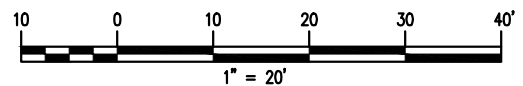
PROJECT MANAGER G. WOJCIK
 CHECK
 DRAFTING K. M. LORE
 CHECK J. L. PHILLIPS
 DESIGN K. M. LORE
 JOB MANAGER J. L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER



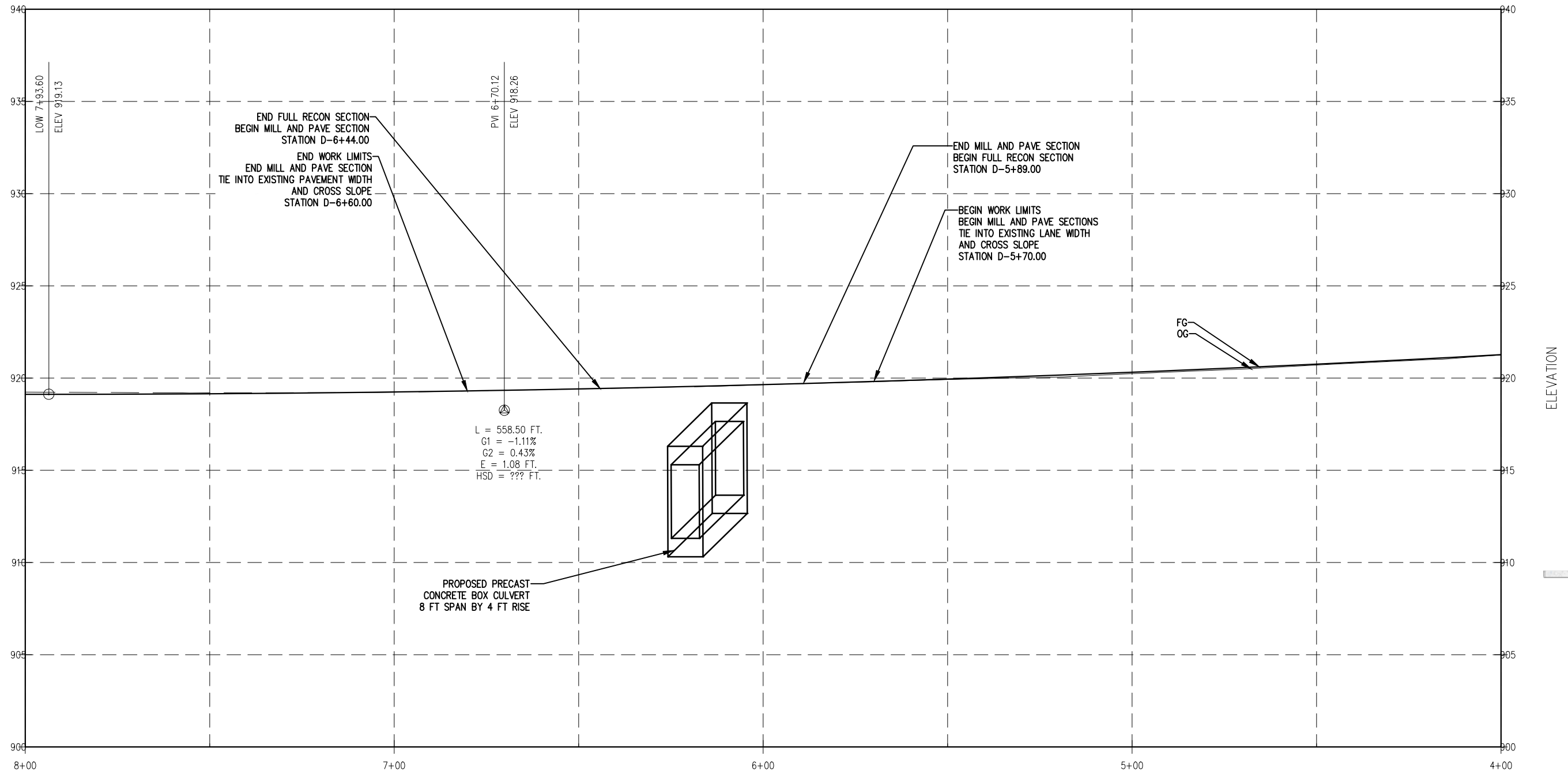
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AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 79 - SH 8209	PIN 9805.93	BRIDGES	CULVERTS 124408	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	CHENANGO FORKS - WHITNEY POINT, PARTS 1 & 2	NYS ROUTE 79			GENERAL PLANS SITE D	DRAWING NO. GNP-02-D
	CULVERT REPLACEMENT BROOME, DELEWARE, OTSEGO COUNTIES	QUALITY LEVEL D				SHEET NO. 122
	TOWN OF BARKER					
	COUNTY: BROOME					

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ROUTE 79 PROFILE

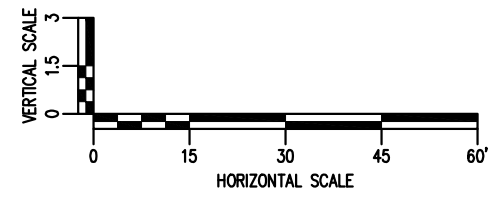


PROJECT MANAGER G. WOJCIK
 CHECK J. PHILLIPS
 DRAFTING K. M. LORE
 CHECK J. PHILLIPS
 DESIGN K. M. LORE
 JOB MANAGER J. L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER

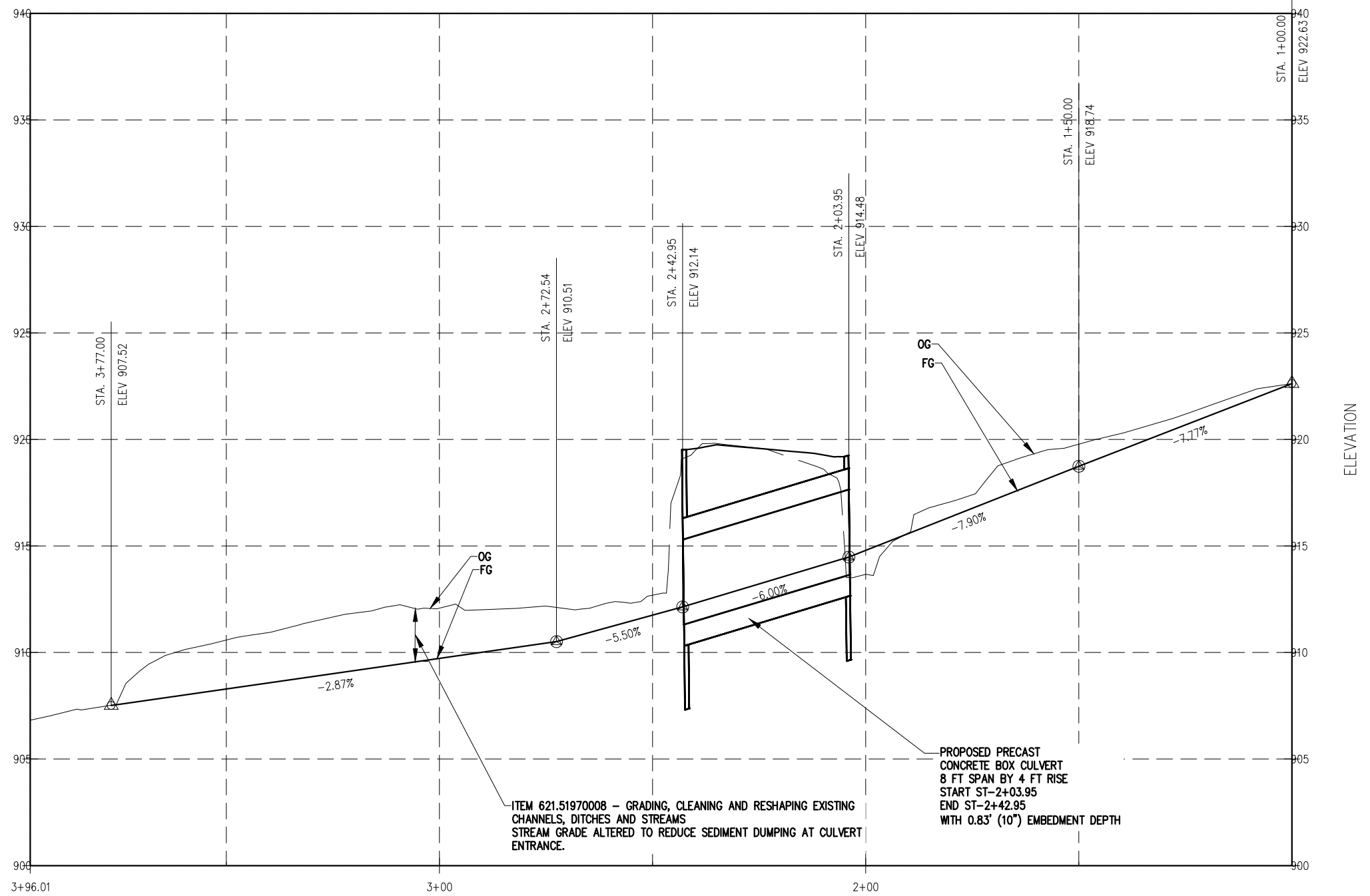
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 USER = klorf

AFFIX SEAL: ON:	ALTERED BY: ON:
	

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 79 - SH 8209 CHENANGO FORKS - WHITNEY POINT, PARTS 1 & 2 CULVERT REPLACEMENT BROOME, DELEWARE, OTSEGO COUNTIES TOWN OF BARKER COUNTY: BROOME	PIN 9805.93 NYS ROUTE 79 QUALITY LEVEL D	BRIDGES	CULVERTS 124408	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED ROUTE 79 PROFILE SITE D	CONTRACT NUMBER D262989 DRAWING NO. PRO-01-D SHEET NO. 123
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.						



STREAM PROFILE




ITEM 621.51970008 - GRADING, CLEANING AND RESHAPING EXISTING CHANNELS, DITCHES AND STREAMS. STREAM GRADE ALTERED TO REDUCE SEDIMENT DUMPING AT CULVERT ENTRANCE.

PROPOSED PRECAST CONCRETE BOX CULVERT
8 FT SPAN BY 4 FT RISE
START ST-2+03.95
END ST-2+42.95
WITH 0.83' (10") EMBEDMENT DEPTH

ELEVATION

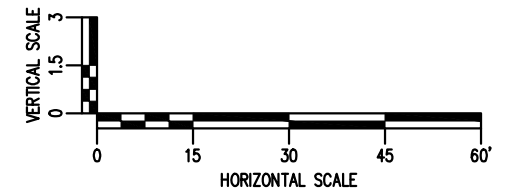
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JOB MANAGER J. L. PHILLIPS DESIGN K. M. LORE DRAFTING K. M. LORE CHECK J. PHILLIPS PROJECT MANAGER G. WOJCIK

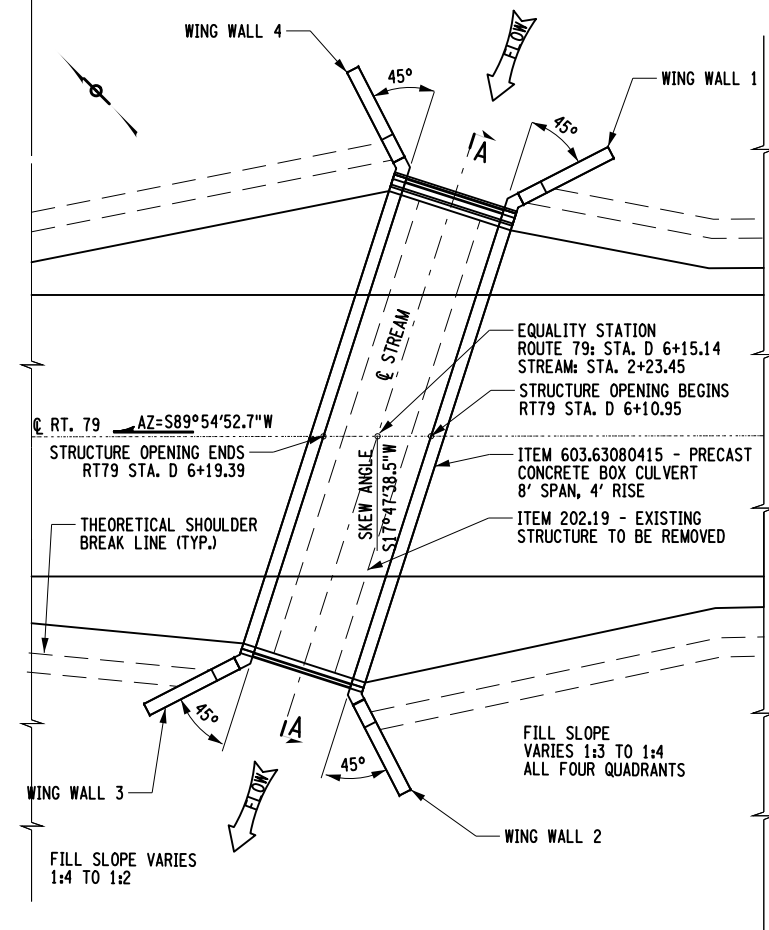
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AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 79 - SH 8209	PIN 9805.93	BRIDGES	CULVERTS 124408	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	CHENANGO FORKS - WHITNEY POINT, PARTS 1 & 2	NYS ROUTE 79			STREAM PROFILE SITE D	DRAWING NO. PRO-02-D
	CULVERT REPLACEMENT BROOME, DELEWARE, OTSEGO COUNTIES	QUALITY LEVEL D				SHEET NO. 124
	TOWN OF BARKER					
	COUNTY: BROOME					

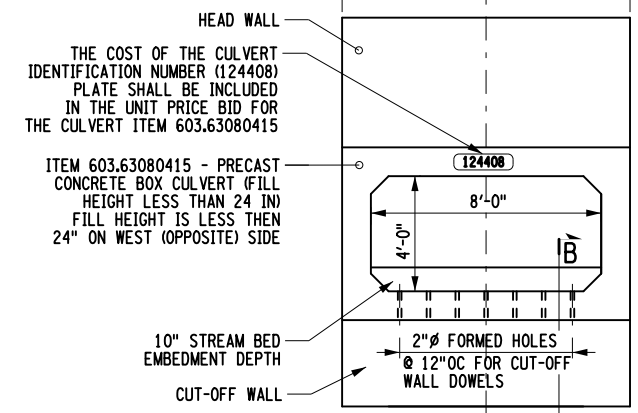
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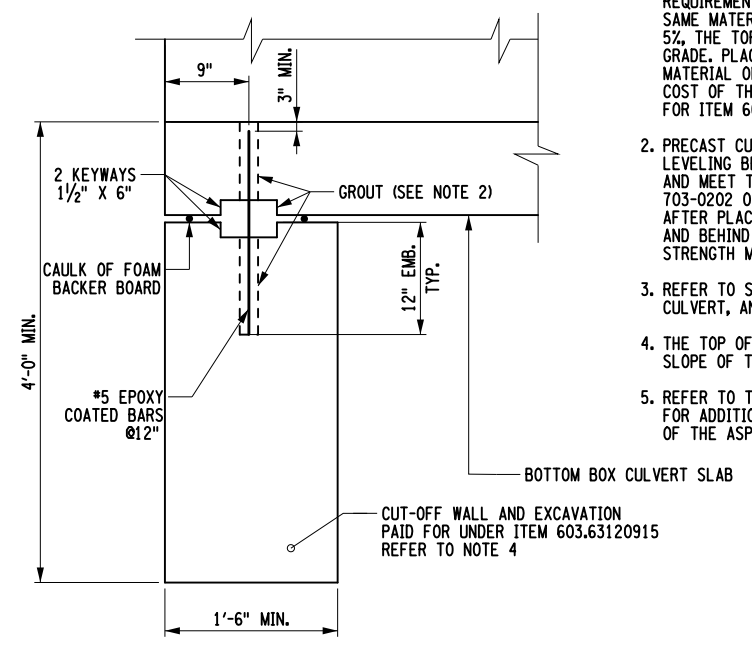
PROJECT MANAGER G. WOJCIK
 CHECK J.L. PHILLIPS
 DRAFTING K. M. LORE
 CHECK J.L. PHILLIPS
 DESIGN K. M. LORE
 JOB MANAGER J.L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER



1 CULVERT PLAN VIEW
NOT TO SCALE



2 CULVERT ELEVATION - WEST
NOT TO SCALE



4 CULVERT SECTION B-B
NOT TO SCALE

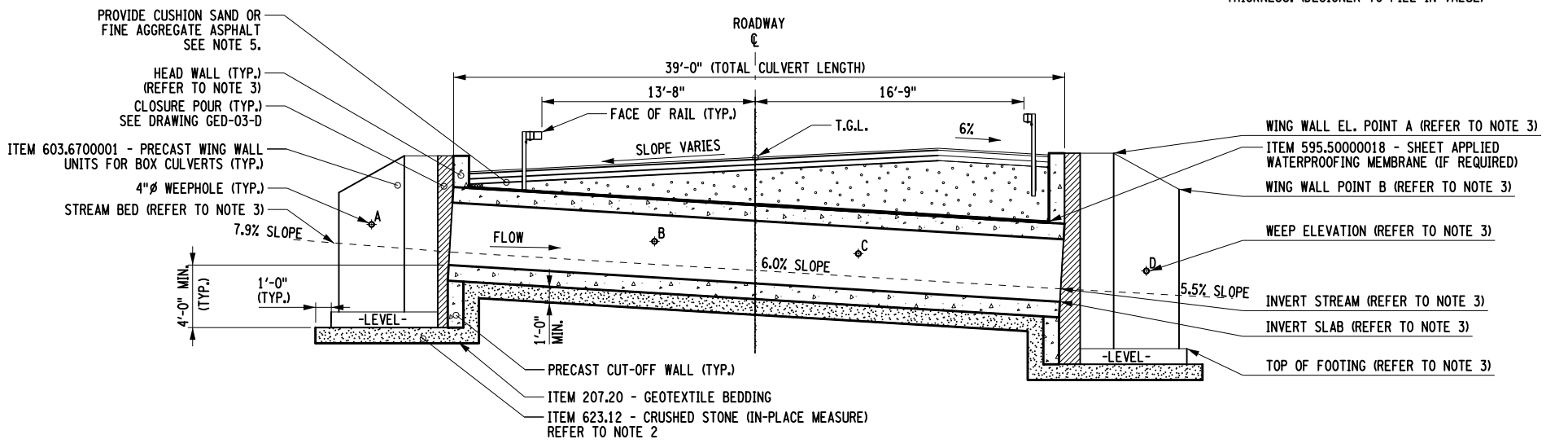
- NOTES:
1. DOWEL BARS USED TO ATTACH THE CUT-OFF WALL TO THE BOX CULVERT SHALL BE DRILLED AND GROUTED PER THE REQUIREMENTS OF STANDARD SPECIFICATION SECTION 586 EXCEPT THE GROUT SHALL MEET THE REQUIREMENTS OF 701-06. THE KEYWAY SHALL BE GROUTED WITH THE SAME MATERIAL AS THE DOWELS. WHEN THE GRADE OF THE BOX EXCEEDS 5%, THE TOP OF THE CUT-OFF WALL SHOULD BE BEVELED TO MATCH THE GRADE. PLACE A BEAD OF CAULK, CLOSED CELL FOAM OR OTHER SUITABLE MATERIAL ON BOTH SIDES OF THE KEYWAY TO CONTAIN THE GROUT. THE COST OF THE GROUT AND REBAR SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 603.63080415.
 2. PRECAST CUT-OFF WALLS AND WING WALLS SHALL BE PLACED ON A LEVELING BED OF ITEM 623.12 - CRUSHED STONE (IN-PLACE MEASURE), AND MEET THE REQUIREMENTS OF MATERIAL DESIGNATION 703-0201, 703-0202 OR 703-0204 WITH A PRIMARY SIZE DESIGNATION OF 2. AFTER PLACING AND LEVELING THE PRECAST UNITS, THE AREAS BENEATH AND BEHIND THE UNITS SHALL BE GROUTED WITH CONTROLLED LOW STRENGTH MATERIAL MEETING THE REQUIREMENTS OF SECTION 204.
 3. REFER TO SHEETS CDT-02-D AND CDT-03-D FOR ALL WING WALL, CULVERT, AND EMBEDMENT ELEVATION POINTS.
 4. THE TOP OF THE CUT-OFF WALL SHALL BE BEVELED TO MATCH THE SLOPE OF THE PROPOSED CULVERT.
 5. REFER TO THE SPECIAL SPECIFICATION 595.50000018 IN THE PROPOSAL FOR ADDITIONAL INFORMATION ON THE PROPER INSTALLATION AND PROTECTION OF THE ASPHALT MEMBRANE.

BOX CULVERT DESIGN DATA	
CLEAR SPAN, ft.	8'-0"
CLEAR RISE, ft.	4'-0"
MIN. FILL HEIGHT, ft.	1'-0"
MAX. FILL HEIGHT, ft.	4'-4"
(CSKEW) SKEW ANGLE \perp TO \perp OF ROADWAY, DEG.	72 DEGREES
LIVE LOAD	HL-93
RAILING / BARRIER TEST LEVEL	TL-3

BASED ON ASSUMED TOP SLAB THICKNESS OF 10". FABRICATOR SHALL ADJUST BASED ON ACTUAL TOP SLAB THICKNESS. (DESIGNER TO FILL IN VALUE)

PRECAST CANTILEVER WING WALL SOIL PARAMETERS AND RESISTANCE FACTORS						
FRICITION ANGLE OF SOIL RETAINED BY THE WALL (DEGREES)	FRICITION ANGLE OF FOUNDATION SOIL (DEGREES)	TOTAL SOIL UNIT WEIGHT (LBS/CF)	MAXIMUM SERVICE LIMIT STATE BEARING RESISTANCE (KIPS/SF)	NOMINAL COEFFICIENT OF FRICTION FOR SLIDING	STRENGTH LIMIT STATE RESISTANCE FACTOR FOR SLIDING	STRENGTH LIMIT STATE RESISTANCE FACTOR FOR BEARING
34	34	120	3.0	0.54	0.9	0.45

- NOTES:
- A. FOR THE SLIDING AND ECCENTRICITY ANALYSES, ASSUME A GROUNDWATER ELEVATION OF 916 FEET.
 - B. FOR THE BEARING ANALYSES, ASSUME A GROUNDWATER ELEVATION OF 911 FEET.
 - C. USE SUBMERGED UNIT WEIGHTS BELOW THE GROUNDWATER ELEVATIONS PROVIDED.
 - D. ASSUME A SURCHARGE LOAD OF 250 POUNDS PER SQUARE FOOT.



3 LONGITUDINAL SECTION A-A
NOT TO SCALE
NOTE: CHAMFERS, HAUCHES, APRON AND DISHS ARE NOT SHOWN FOR CLARITY.

AFFIX SEAL: ON:

ALTERED BY: ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 79 - SH 8209	PIN 9805.93	BRIDGES	CULVERTS 124408	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	CHENANGO FORKS - WHITNEY POINT, PARTS 1 & 2	ROUTE 79	UTILITY QUALITY LEVEL D			DRAWING NO. CDT-01-D
	CULVERT REPLACEMENT	TOWN OF BARKER	COUNTY: BROOME	REGION: 09	CULVERT DETAILS	SHEET NO. 125
						SITE D

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 USER = jphillips

FILE NAME = 980593.124408_RT79_cph_cdt_02.dgn
 DATE/TIME = 06-AUG-2015 10:08
 USER = jphillips

DESIGN SUPERVISOR R.WILDER

JOB MANAGER J.L.PHILLIPS

DESIGN K. M. LORE

CHECK J.L.PHILLIPS

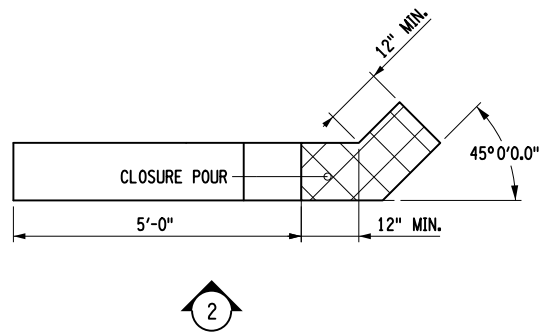
DRAFTING K. M. LORE

CHECK J.L.PHILLIPS

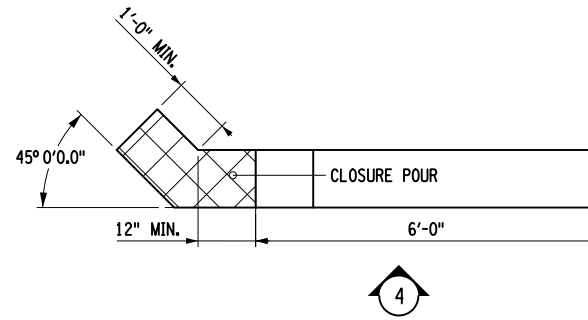
PROJECT MANAGER G. WOJCIK

NOTES:

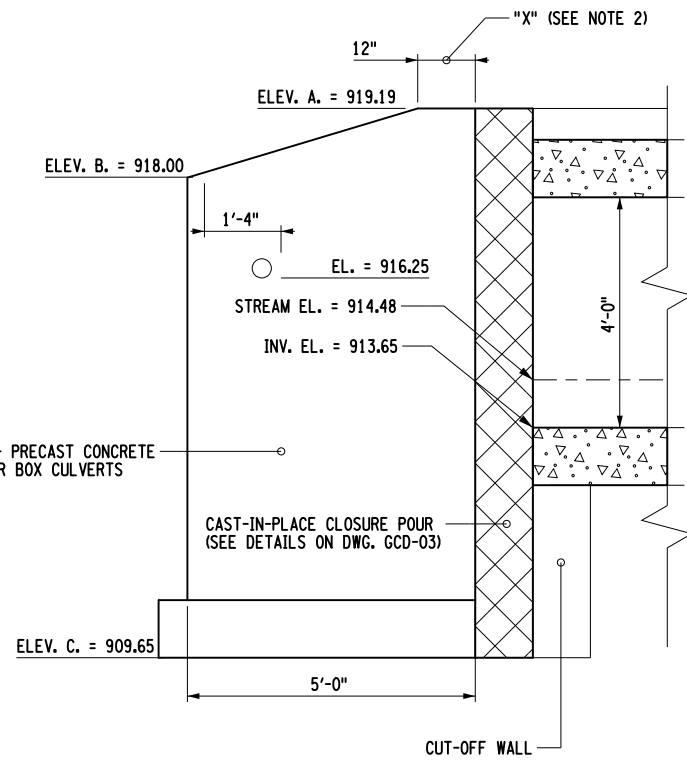
1. WING WALLS, CULVERT TOP SLABS AND CULVERT BOTTOM SLABS ARE DRAWN AND ASSUMED TO BE 12" THICK. FINAL SIZE AND CONFIGURATION SHALL BE DETERMINED BY THE CONTRACTOR'S PRECAST FABRICATOR.
2. DIMENSION "X" IS THE LEVEL DISTANCE ACROSS THE TOP OF THE WING WALL AND IS MEASURED ALONG THE FRONT FACE OF THE WALL.



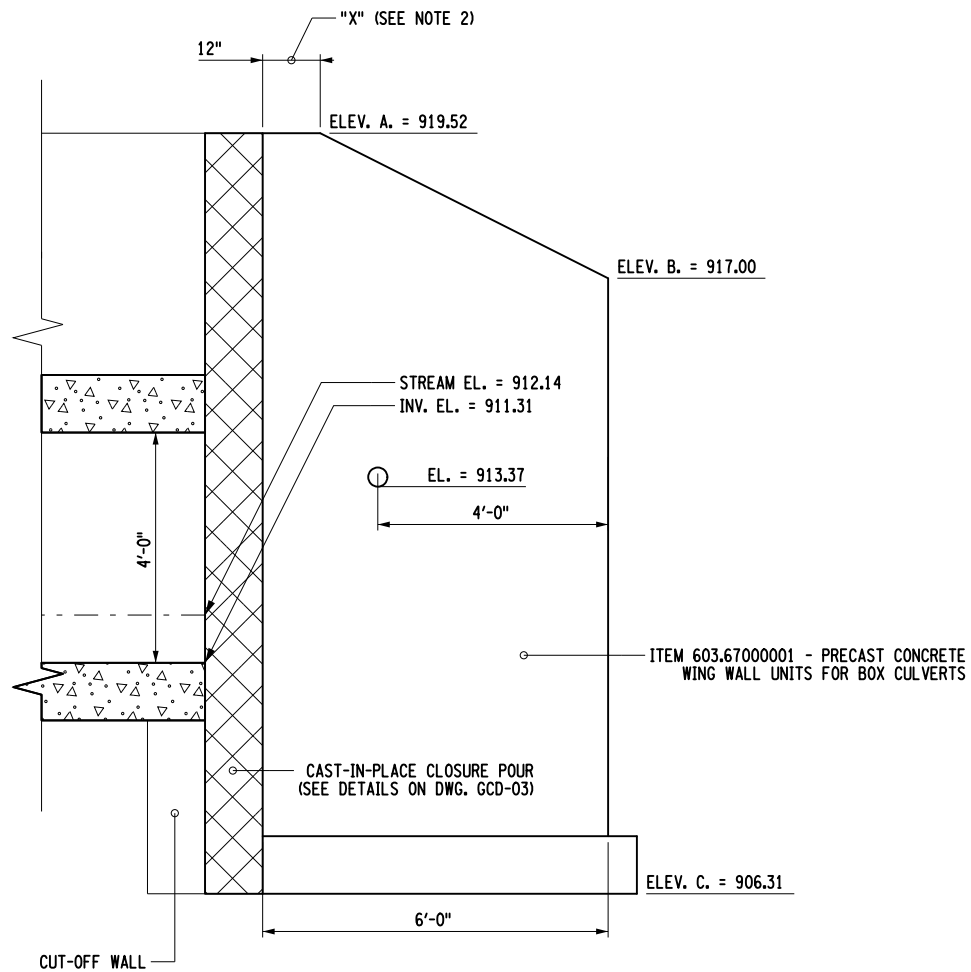
① WING WALL 1 - PLAN VIEW
NOT TO SCALE



③ WING WALL 2 - PLAN VIEW
NOT TO SCALE



② WING WALL 1 - ELEVATION VIEW
NOT TO SCALE



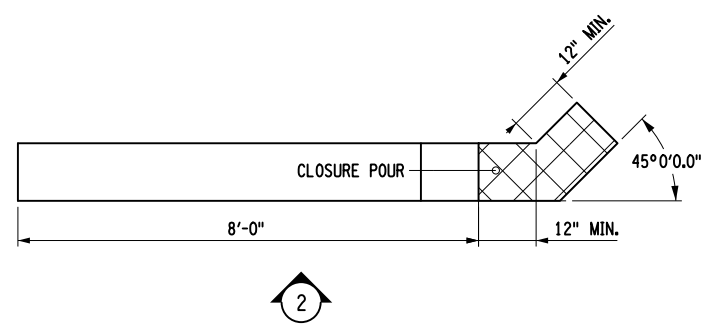
④ WING WALL 2 - ELEVATION VIEW
NOT TO SCALE

AFFIX SEAL: ON:	ALTERED BY: ON:

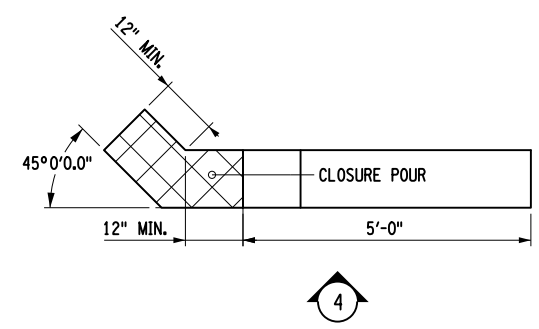
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 79 - SH 8209	PIN 9805.93	BRIDGES	CULVERTS 124408	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED CULVERT DETAILS SITE D	CONTRACT NUMBER D262989
	CHENANGO FORKS - WHITNEY POINT, PARTS 1 & 2	ROUTE 79 UTILITY QUALITY LEVEL D				DRAWING NO. CDT-02-D SHEET NO. 126
	CULVERT REPLACEMENT					
	TOWN OF BARKER					
	COUNTY: BROOME	REGION: 09				
<p>IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.</p>						
						Department of Transportation

FILE NAME = 980593.124408_RT79_cph_cdt_03.D.dgn
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 USER = jphillips

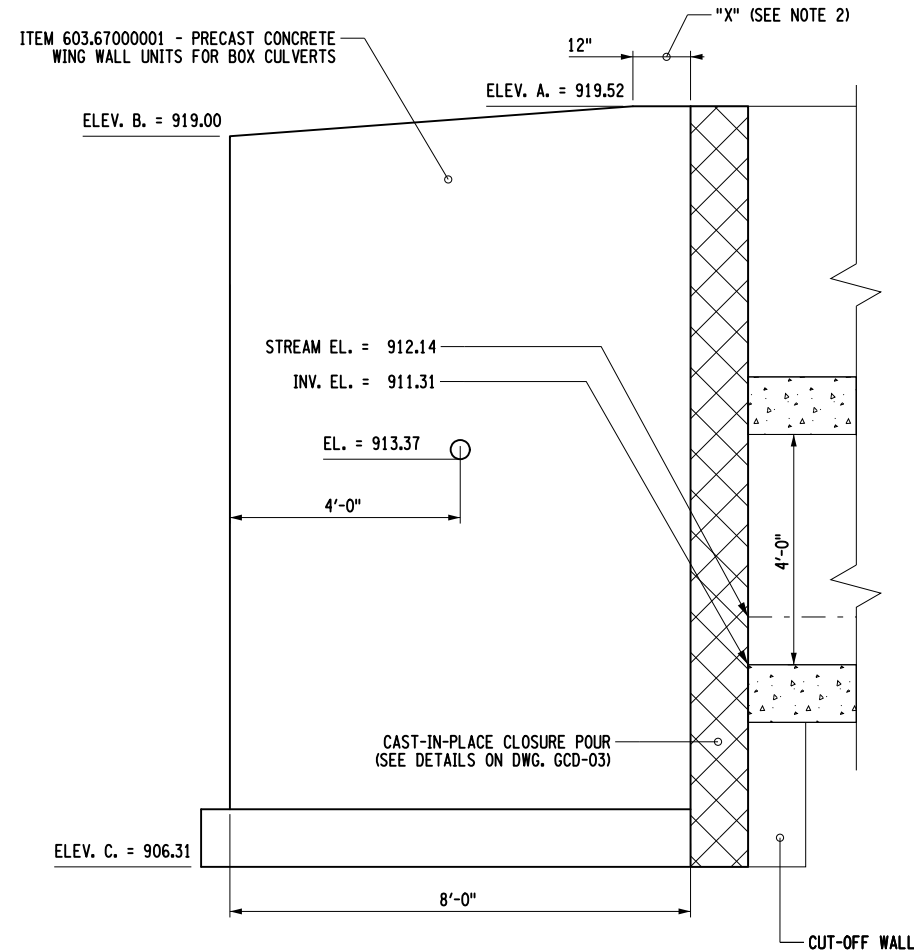
PROJECT MANAGER G. WOJCIK
 CHECK J.L. PHILLIPS
 DRAFTING K. M. LORE
 CHECK J.L. PHILLIPS
 DESIGN K. M. LORE
 CHECK J.L. PHILLIPS
 JOB MANAGER J.L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER



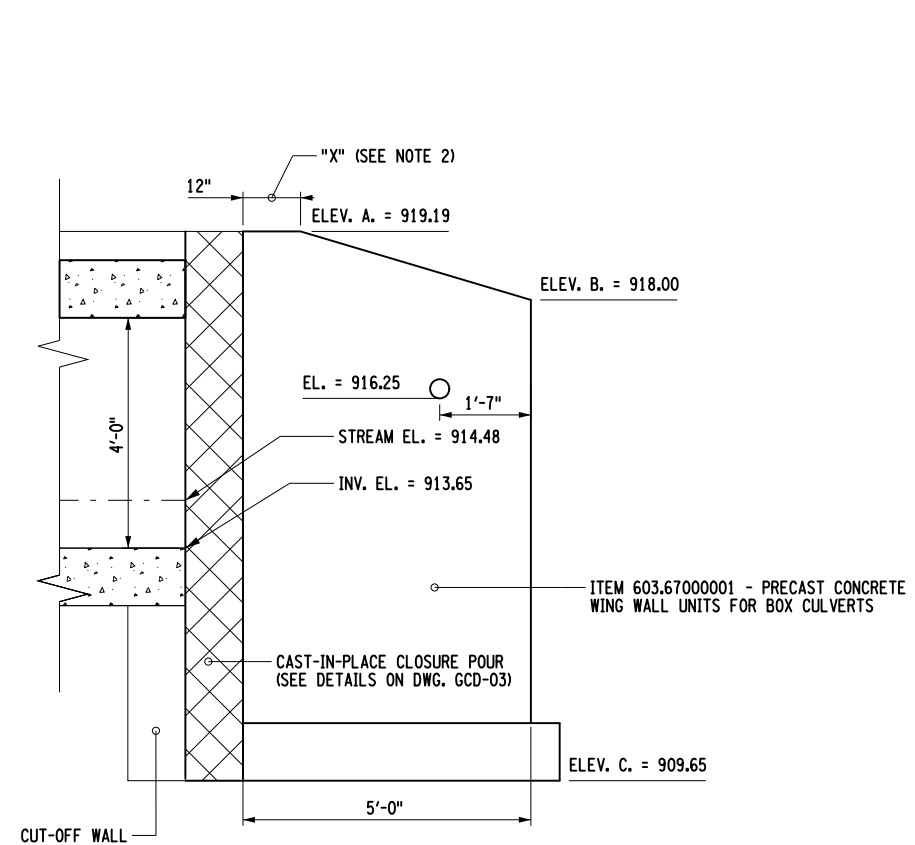
① WING WALL 3 - PLAN VIEW
 NOT TO SCALE



③ WING WALL 4 - PLAN VIEW
 NOT TO SCALE



② WING WALL 3 - ELEVATION VIEW
 NOT TO SCALE



④ WING WALL 4 - ELEVATION VIEW
 NOT TO SCALE

- NOTES:
1. WING WALLS, CULVERT TOP SLABS AND CULVERT BOTTOM SLABS ARE DRAWN AND ASSUMED TO BE 12" THICK. FINAL SIZE AND CONFIGURATION SHALL BE DETERMINED BY THE CONTRACTOR'S PRECAST FABRICATOR.
 2. DIMENSION "X" IS THE LEVEL DISTANCE ACROSS THE TOP OF THE WING WALL AND IS MEASURED ALONG THE FRONT FACE OF THE WALL.

AFFIX SEAL: ON: _____
 ALTERED BY: ON: _____



AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 79 - SH 8209	PIN 9805.93	BRIDGES	CULVERTS 124408	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	CHENANGO FORKS - WHITNEY POINT, PARTS 1 & 2	ROUTE 79			CULVERT DETAILS	DRAWING NO. CDT-03-D SHEET NO. 127
	CULVERT REPLACEMENT	UTILITY QUALITY LEVEL D				
	TOWN OF BARKER					
	COUNTY: BROOME	REGION: 09			SITE D	

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



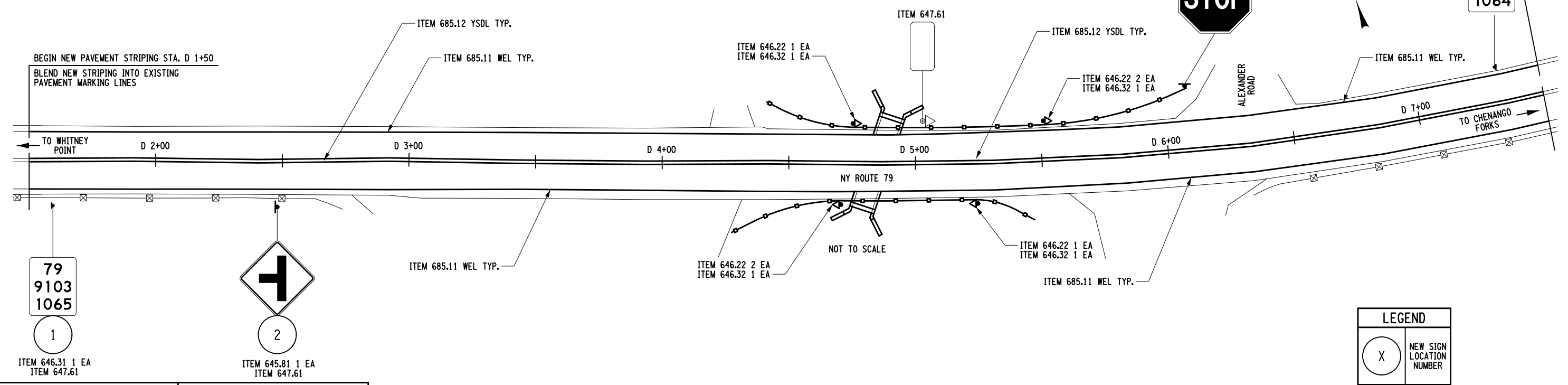
PROJECT MANAGER G. WOJCIK
 CHECK J.L. PHILLIPS
 DRAFTING G. MEYER
 CHECK J.L. PHILLIPS
 DESIGN D. MELSZER
 JOB MANAGER J.L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER

FILE NAME = 980593.124408.RT79_cph_sgp_01.dwg
 DATE/TIME = 30-JUL-2015 13:53
 USER = jphillips

SIGN AND PAVEMENT MARKING ITEM SUMMARY TABLE ROUTE 79 SITE D 124408			
ITEM NUMBER	DESCRIPTION	UNIT	QUANTITY
645.03040011	HIGH VISIBILITY GROUND-MOUNTED SIGN PANELS LESS THAN OR EQUAL TO 30 SF WITH Z-BARS	SF	12.6
645.81	TYPE A SIGN POSTS	EA	2
646.21	REFERENCE MARKER PANEL	EA	2
646.22	DELINEATOR, SNOWPLOWING MARKER, SUPPLEMENTARY SNOW PLOWING MARKER PANELS	EA	6
646.31	STEEL POST, 1.1 LB/FT	EA	2
646.32	STEEL POST, 2.0 LB/FT	EA	4
647.61	REMOVE AND DISPOSE SIGNS, GROUND MOUNTED TYPE A SIGN SUPPORTS AND FOUNDATIONS - SIZE 1 (UNDER 30 SF)	EA	5
685.11	WHITE EPOXY REFLECTORIZED PAVEMENT STRIPES - 20 MILS	FT	1200
685.12	YELLOW EPOXY REFLECTORIZED PAVEMENT STRIPES - 20 MILS	FT	1200

DESIGNATION & COLOR (SEE NOTE 2)	LOCATION	TEXT	ITEM	SIZE	PAYMENT AREA (SEE NOTE 3)
				AREA (SEE NOTE 3)	TOTAL PAYMENT AREA
N/A	1	79 9103 1065	646.21	8 X 10	N/A
				0.6 SF	N/A
W2-2L	2		645.03040011	30 X 30	6.3 SF
				6.3 SF	6.3 SF
R1-1	3	STOP	645.03040011	30 X 30	6.3 SF
				5.0 SF	6.3 SF
N/A	4	79 9103 1064	646.21	8 X 10	N/A
				0.6 SF	N/A

- SIGNING NOTES:**
- SIGN LOCATIONS AS SHOWN ON PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL INSTALL NEW SIGNS AND RELOCATE EXISTING SIGNS IN ACCORDANCE WITH THE MUTCD AND NYS SUPPLEMENT.
 - THE COLOR IS ONLY SHOWN WHEN THERE IS AN OPTION THAT MUST BE SPECIFIED.
 - SIGN SIZE IS IN INCHES. THE AREA AND PAYMENT AREA FOR SIGNS ARE FROM THE APPLICABLE STANDARD SHEETS OR SIGN FACE LAYOUTS.



AFFIX SEAL: ON: _____
 ALTERED BY: ON: _____



AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 79 - SH 8209	PIN 9805.93	BRIDGES	CULVERTS 124408	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED SIGN DATA SHEET AND SIGN AND PAVEMENT MARKING SCHEMATIC SITE D	CONTRACT NUMBER D262989 DRAWING NO. SGP-01-D SHEET NO. 128
	CHENANGO FORKS - WHITNEY POINT, PARTS 1 & 2	RT 79				
	CULVERT REPLACEMENT	UTILITY QUALITY LEVEL D				
	TOWN OF BARKER					
	COUNTY: BROOME	REGION: 09				

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



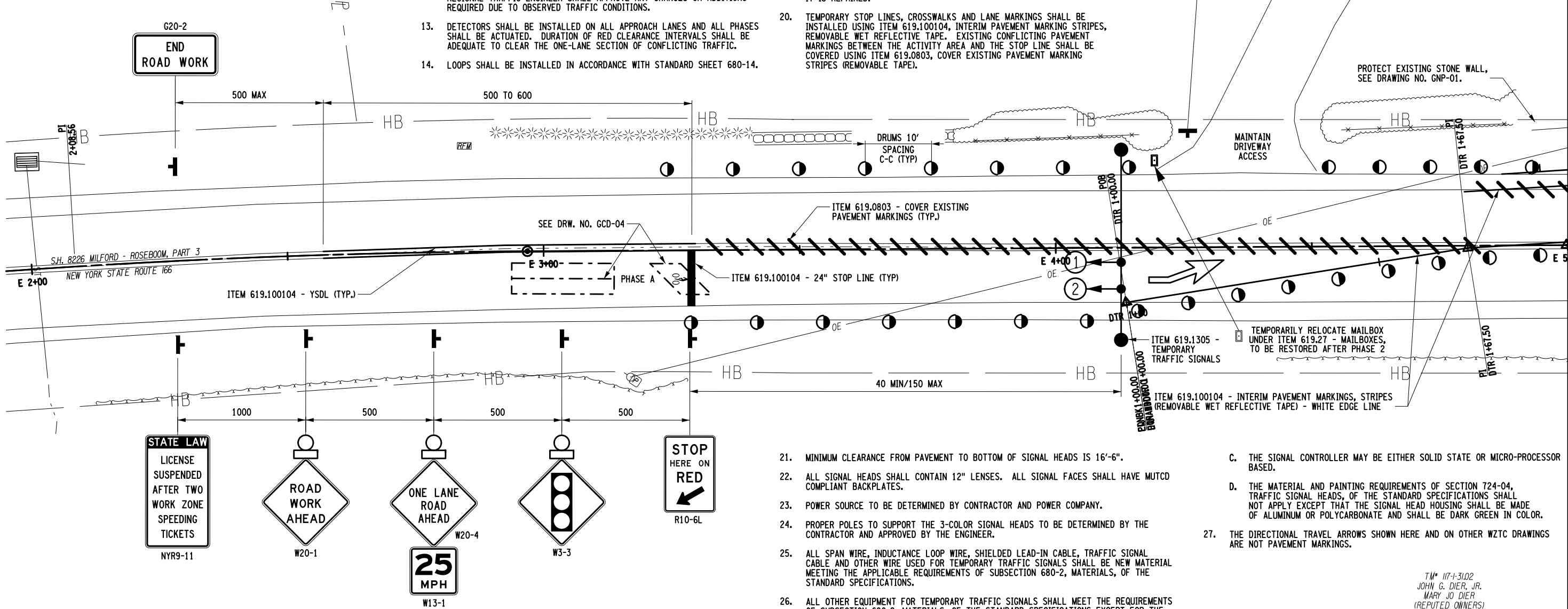
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 DATE/TIME = 04-AUG-2015 12:11
 USER = dmelszer

PROJECT MANAGER G. WOJCIK
 CHECK J. L. PHILLIPS
 DRAFTING P. F. BLOW
 CHECK J. L. PHILLIPS
 DESIGN D. MELSZER
 JOB MANAGER J. L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER

- NOTES:
- NUMBERS FOR SIGNS REFER TO THEIR MUTCD/NYS SUPPLEMENT NUMBER. SEE MUTCD, NYS SUPPLEMENT TO THE MUTCD, AND APPLICABLE 619 STANDARD SHEETS.
 - THE CONTRACTOR SHALL COORDINATE WITH THE ADJACENT PROPERTY OWNERS TO ENSURE THEY HAVE ACCESS TO AND FROM THEIR PROPERTIES AT ALL TIMES. THIS MAY INCLUDE THE INSTALLATION OF TEMPORARY PARKING, DRIVEWAYS, ETC., TO BE OUTSIDE OF THE LIMITS OF THE TEMPORARY TRAFFIC SIGNAL, AND IN WRITTEN AGREEMENT VIA A PROPERTY RELEASE WITH THE OWNER(S), AND AS ORDERED BY THE ENGINEER. THE COST FOR THIS WORK AND COORDINATION SHALL BE INCLUDED IN THE COST BID FOR ITEM 619.01 - BASIC WORK ZONE TRAFFIC CONTROL (SEE DRAWING TCN-01, PUBLIC INGRESS AND EGRESS NOTES AND MST-01-E FOR TABLE OF PROPERTY RELEASES).
 - ALL PAVEMENT MARKINGS SHALL BE 4 INCHES WIDE UNLESS NOTED.
 - ALL STOP BARS SHALL BE 24 INCHES WIDE.
 - TEMPORARY CONCRETE BARRIER, FENCING, BARRELS, ETC. MAY BE REMOVED TO ACCOMMODATE DAYTIME CONSTRUCTION ACTIVITIES BUT SHALL BE PUT BACK IN PLACE AT THE END OF EACH DAY. THE COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 619.01 - BASIC WORK ZONE TRAFFIC CONTROL.

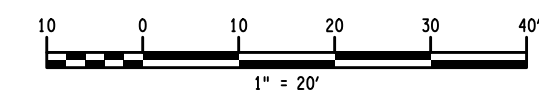
- THE TAPER RATE FOR CONCRETE BARRIER SHOULD BE 1 ON 8.
- DRUM SPACING SHALL BE 10 FEET.
- SEE DRAWING NO. WZTC-03-E FOR TEMPORARY SIGNAL PHASING TABLE, PHASING PLAN AND PHASING DIAGRAM SCHEMATIC.
- THE SIGNAL LOCATION SHALL BE FIELD DETERMINED AS DIRECTED BY THE ENGINEER.
- ADJUSTMENTS IN THE LOCATION OF ADVANCED WARNING SIGNS SHALL BE MADE TO ACCOMMODATE THE HORIZONTAL AND VERTICAL ALIGNMENT OF THE ROADWAY, RECOGNIZING THAT THE DISTANCES SHOWN FOR SIGN SPACING ARE MINIMUMS.
- FLASHING WARNING LIGHTS ARE REQUIRED ON THE SIGNAL AHEAD SIGNS (W3-3). FLASHING WARNING LIGHTS SHALL ALSO BE REQUIRED ON THE ROAD WORK AHEAD SIGNS (W20-1) AND ONE LANE ROAD AHEAD SIGNS (W20-4).
- THE TIMING, PHASING AND DETECTOR LOCATIONS ARE TO BE VERIFIED BY THE REGIONAL TRAFFIC ENGINEER AT LEAST 2 WEEKS PRIOR TO START UP. THE REGIONAL TRAFFIC ENGINEER SHALL APPROVE ANY CHANGES OR ADDITIONS REQUIRED DUE TO OBSERVED TRAFFIC CONDITIONS.
- DETECTORS SHALL BE INSTALLED ON ALL APPROACH LANES AND ALL PHASES SHALL BE ACTUATED. DURATION OF RED CLEARANCE INTERVALS SHALL BE ADEQUATE TO CLEAR THE ONE-LANE SECTION OF CONFLICTING TRAFFIC.
- LOOPS SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD SHEET 680-14.

- OTHER TYPES OF VEHICLE DETECTION EQUIPMENT MAY BE USED IF PRIOR APPROVAL IS OBTAINED FROM THE REGIONAL TRAFFIC ENGINEERING AND SAFETY GROUP. REQUESTS BY THE CONTRACTOR TO USE SUCH ALTERNATIVES SHALL BE ACCOMPANIED BY DETAILED PLANS AND SPECIFICATIONS.
- THE TRAFFIC SIGNAL SHALL REST IN RED. WHEN THE SIGNAL IS CHANGED TO THE FLASHING MODE, EITHER MANUALLY OR AUTOMATICALLY, RED SIGNAL INDICATIONS SHALL BE FLASHED TO ALL APPROACHES.
- REST IN RED FEATURE MAY BE SUBSTITUTED FOR PHASE C.
- EMERGENCY FLASH OPERATION IS CONSIDERED A MALFUNCTION. FLAGGERS ARE REQUIRED UNTIL THE MALFUNCTION IS REPAIRED.
- THE CONTRACTOR SHALL COMMENCE REPAIR WORK ON THIS SIGNAL WITHIN TWO HOURS AFTER HE/SHE HAS BEEN NOTIFIED OF A MALFUNCTION. THE CONTRACTOR HAS AN EIGHT HOUR TIME LIMIT TO MAKE REPAIRS. FLAGGER CONTROL SHALL BE PROVIDED AT THE CONTRACTOR'S EXPENSE UNTIL THE TEMPORARY SIGNAL IS RESTORED TO PROPER OPERATION. IF THE REPAIRS REMAIN UNCOMPLETED AFTER THIS TIME, LIQUIDATED DAMAGES OF ONE DAY WILL BE ASSESSED FOR EACH DAY THE SIGNAL IS MALFUNCTIONING UNTIL IT IS REPAIRED.
- TEMPORARY STOP LINES, CROSSWALKS AND LANE MARKINGS SHALL BE INSTALLED USING ITEM 619.100104, INTERIM PAVEMENT MARKING STRIPES, REMOVABLE WET REFLECTIVE TAPE. EXISTING CONFLICTING PAVEMENT MARKINGS BETWEEN THE ACTIVITY AREA AND THE STOP LINE SHALL BE COVERED USING ITEM 619.0803, COVER EXISTING PAVEMENT MARKING STRIPES (REMOVABLE TAPE).



- MINIMUM CLEARANCE FROM PAVEMENT TO BOTTOM OF SIGNAL HEADS IS 16'-6".
- ALL SIGNAL HEADS SHALL CONTAIN 12" LENSES. ALL SIGNAL FACES SHALL HAVE MUTCD COMPLIANT BACKPLATES.
- POWER SOURCE TO BE DETERMINED BY CONTRACTOR AND POWER COMPANY.
- PROPER POLES TO SUPPORT THE 3-COLOR SIGNAL HEADS TO BE DETERMINED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.
- ALL SPAN WIRE, INDUCTANCE LOOP WIRE, SHIELDED LEAD-IN CABLE, TRAFFIC SIGNAL CABLE AND OTHER WIRE USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE NEW MATERIAL MEETING THE APPLICABLE REQUIREMENTS OF SUBSECTION 680-2, MATERIALS, OF THE STANDARD SPECIFICATIONS.
- ALL OTHER EQUIPMENT FOR TEMPORARY TRAFFIC SIGNALS SHALL MEET THE REQUIREMENTS OF SUBSECTION 680-2, MATERIALS, OF THE STANDARD SPECIFICATIONS EXCEPT FOR THE FOLLOWING MODIFICATIONS:
 - USED EQUIPMENT IN GOOD OPERATING CONDITION MAY BE FURNISHED TO PROVIDE THE REQUIRED OPERATION OF THE SIGNAL.
 - MANUFACTURER'S CERTIFICATION OF COMPLIANCE WILL NOT BE REQUIRED.

- THE SIGNAL CONTROLLER MAY BE EITHER SOLID STATE OR MICRO-PROCESSOR BASED.
- THE MATERIAL AND PAINTING REQUIREMENTS OF SECTION 724-04, TRAFFIC SIGNAL HEADS, OF THE STANDARD SPECIFICATIONS SHALL NOT APPLY EXCEPT THAT THE SIGNAL HEAD HOUSING SHALL BE MADE OF ALUMINUM OR POLYCARBONATE AND SHALL BE DARK GREEN IN COLOR.
- THE DIRECTIONAL TRAVEL ARROWS SHOWN HERE AND ON OTHER WZTC DRAWINGS ARE NOT PAVEMENT MARKINGS.



TW* 117-1-3102
 JOHN G. DIER, JR.
 MARY JO DIER
 (REPUTED OWNERS)
 L. 976 P. 95

AFFIX SEAL: ON: _____
 ALTERED BY: ON: _____

PVMS NOTE:
 PORTABLE VARIABLE MESSAGE SIGNS (PVMS) SHALL BE LOCATED ON ROUTE 166 ONE MILE NORTH AND SOUTH OF THE CULVERT SITE. THE FINAL LOCATIONS SHALL BE APPROVED BY THE ENGINEER (SEE THE SPECIAL NOTE PORTABLE VARIABLE MESSAGE SIGNS ITEM 619.110202 IN THE CONTRACT PROPOSAL).

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 166, SH 8226 MILFORD - ROSEBOOM, PART 3 CULVERT REPLACEMENT PROJECT TOWN OF MIDDLEFIELD COUNTY: OTSEGO REGION: 09	PIN 9805.93 ROUTE 166 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS C950119	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED WORK ZONE TRAFFIC CONTROL PLAN PHASE 1 SITE E	CONTRACT NUMBER D262989 DRAWING NO. WZTC-01-E SHEET NO. 130
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.						

MATCH DRAWING WZTC-02-E STATION E 5+00.00

FILE NAME = 980593_C950119_RT1166_cph_wztc.02_E.dgn
 DATE/TIME = 04-AUG-2015 12:49
 USER = jphillips

DESIGN SUPERVISOR R. WILDER

JOB MANAGER J. L. PHILLIPS

DESIGN D. MELSZER

CHECK J. L. PHILLIPS

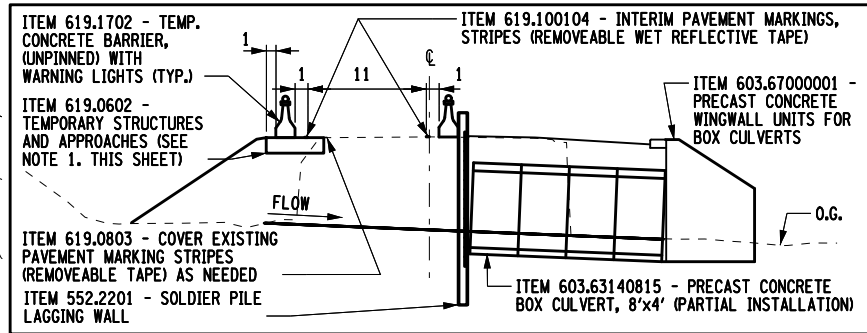
DRAFTING P. F. BLOW

CHECK J. L. PHILLIPS

PROJECT MANAGER G. WOJCIK

MATCH DRAWING WZTC-01-E STATION E 5+00.00

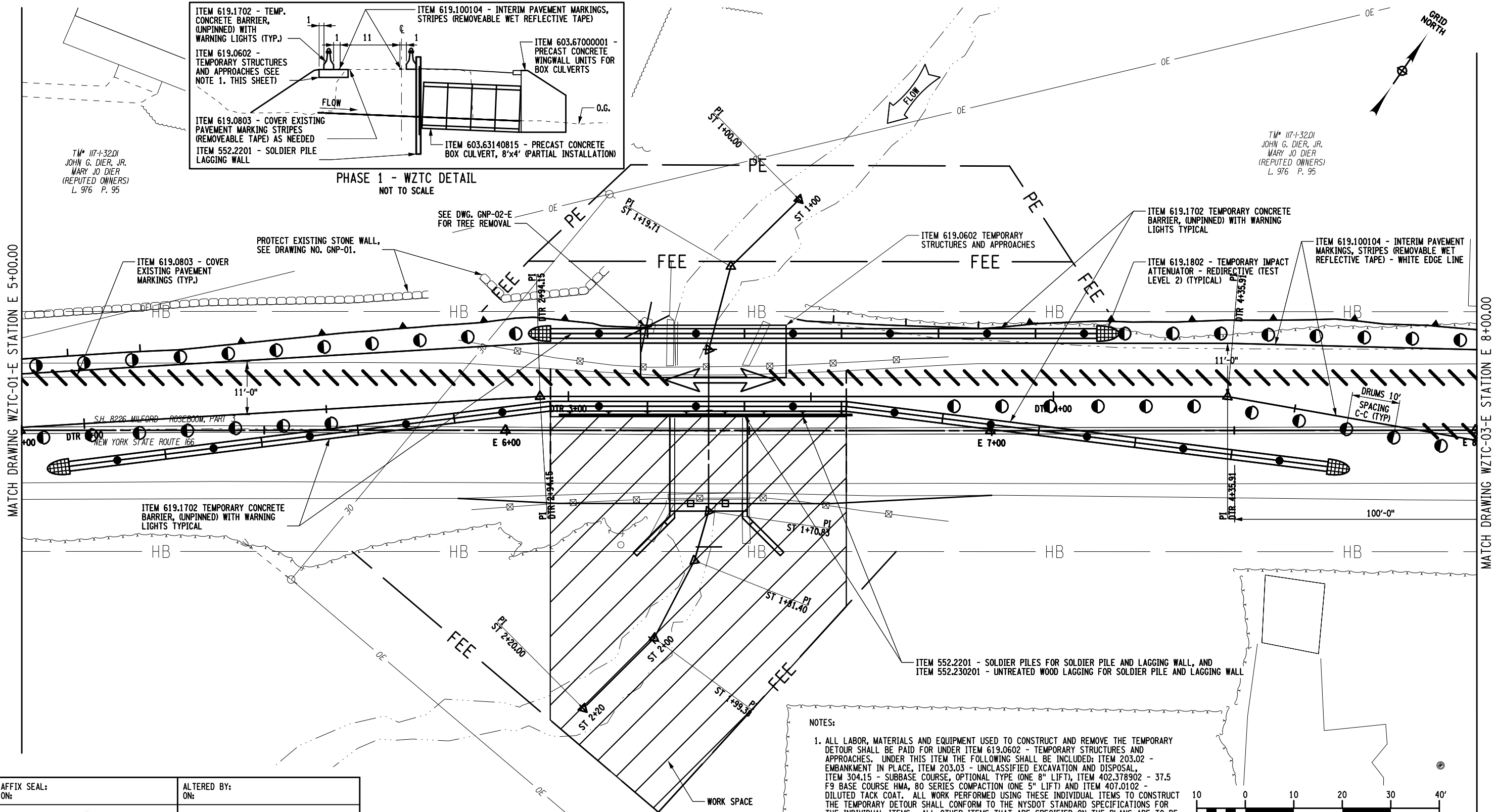
MATCH DRAWING WZTC-03-E STATION E 8+00.00



PHASE 1 - WZTC DETAIL
NOT TO SCALE

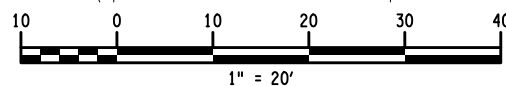
TW 117-1-3201
JOHN G. DIER, JR.
MARY JO DIER
(REPUTED OWNERS)
L 976 P. 95

TW 117-1-3201
JOHN G. DIER, JR.
MARY JO DIER
(REPUTED OWNERS)
L 976 P. 95



NOTES:

- ALL LABOR, MATERIALS AND EQUIPMENT USED TO CONSTRUCT AND REMOVE THE TEMPORARY DETOUR SHALL BE PAID FOR UNDER ITEM 619.0602 - TEMPORARY STRUCTURES AND APPROACHES. UNDER THIS ITEM THE FOLLOWING SHALL BE INCLUDED: ITEM 203.02 - EMBANKMENT IN PLACE, ITEM 203.03 - UNCLASSIFIED EXCAVATION AND DISPOSAL, ITEM 304.15 - SUBBASE COURSE, OPTIONAL TYPE (ONE 8" LIFT), ITEM 402.378902 - 37.5 F9 BASE COURSE HMA, 80 SERIES COMPACTION (ONE 5" LIFT) AND ITEM 407.0102 - DILUTED TACK COAT. ALL WORK PERFORMED USING THESE INDIVIDUAL ITEMS TO CONSTRUCT THE TEMPORARY DETOUR SHALL CONFORM TO THE NYSOT STANDARD SPECIFICATIONS FOR THE INDIVIDUAL ITEMS. ALL OTHER ITEMS THAT ARE SPECIFIED ON THE PLANS ARE TO BE PAID FOR UNDER THE APPROPRIATE ITEM NUMBERS.
- FOR ADDITIONAL NOTES SEE DRAWING WZTC-01-E.



AFFIX SEAL: ON: _____
 ALTERED BY: ON: _____



AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 166, SH 8226 MILFORD - ROSEBOOM, PART 3 CULVERT REPLACEMENT PROJECT TOWN OF MIDDLEFIELD COUNTY: OTSEGO REGION: 09
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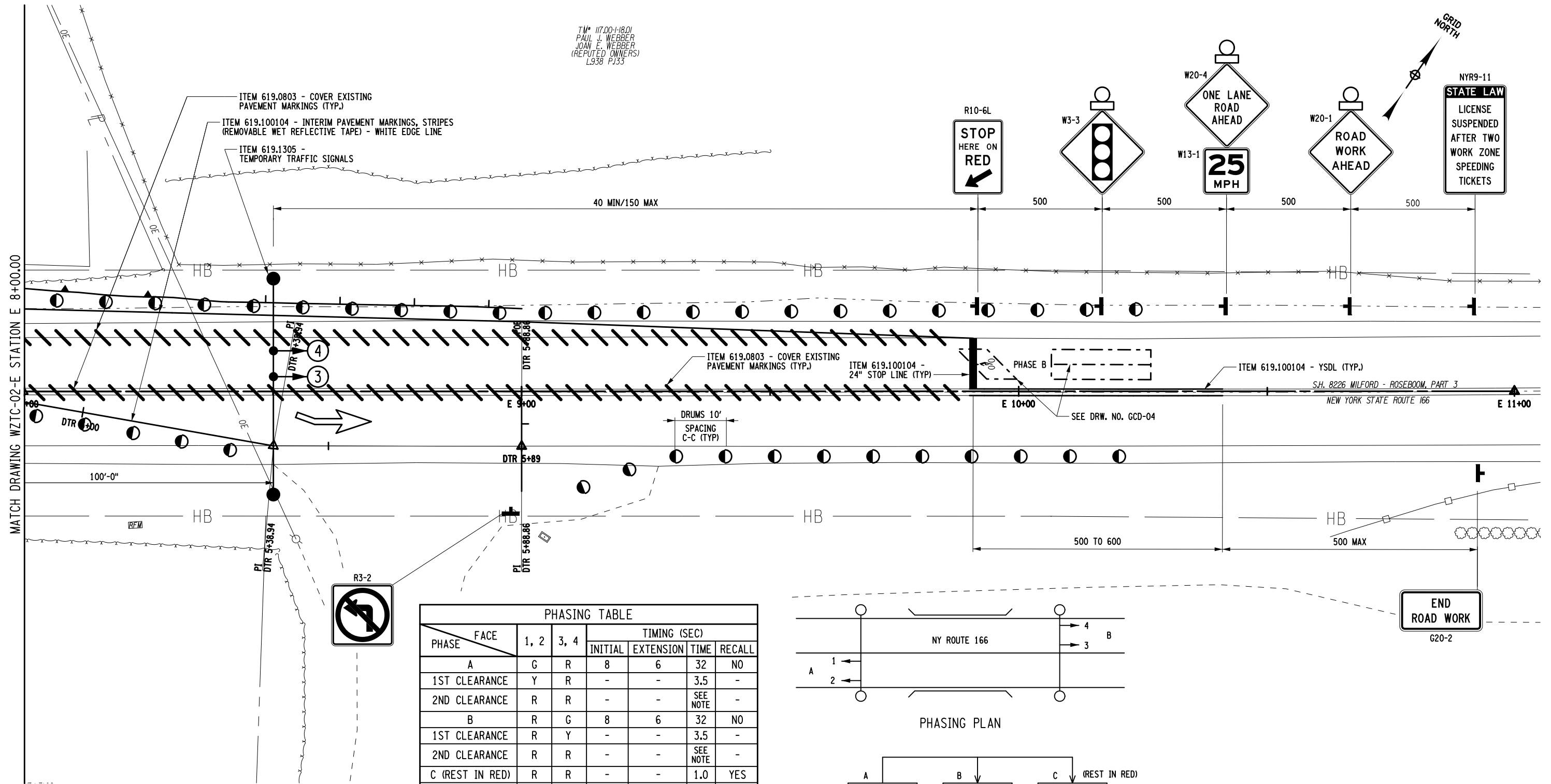
PIN 9805.93 ROUTE 166 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS C950119	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED WORK ZONE TRAFFIC CONTROL PLAN PHASE 1 SITE E	CONTRACT NUMBER D262989 DRAWING NO. WZTC-02-E SHEET NO. 131
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IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

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 USER = dmelszer

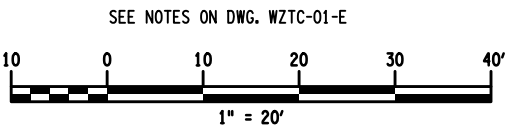
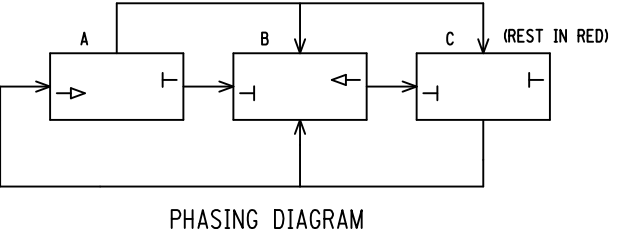
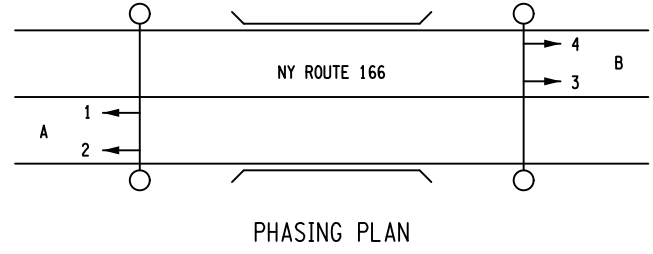
DESIGN SUPERVISOR R. WILDER
 JOB MANAGER J. L. PHILLIPS
 DESIGN D. MELSZER
 CHECK J. L. PHILLIPS
 DRAFTING P. F. BLOW
 CHECK J. L. PHILLIPS
 PROJECT MANAGER G. WOJCIK

T.M. 117.00-118.01
 PAUL J. WEBBER
 JOAN E. WEBBER
 (REPUTED OWNERS)
 L338 P33



PHASING TABLE							
PHASE	FACE	1, 2	3, 4	TIMING (SEC)			RECALL
				INITIAL	EXTENSION	TIME	
A	G	R		8	6	32	NO
1ST CLEARANCE		Y	R	-	-	3.5	-
2ND CLEARANCE		R	R	-	-	SEE NOTE	-
B	R	G		8	6	32	NO
1ST CLEARANCE		R	Y	-	-	3.5	-
2ND CLEARANCE		R	R	-	-	SEE NOTE	-
C (REST IN RED)		R	R	-	-	1.0	YES
1ST CLEARANCE		R	R	-	-	0.5	-
2ND CLEARANCE		R	R	-	-	0.5	-
EMERGENCY FLASH		FR	FR	-	-	-	-

NOTE: DIVIDE THE TRAVEL DISTANCE IN FEET BETWEEN STOP LINES BY 22 FEET PER SECOND FOR THE TIME OF THE PHASE A AND PHASE B 2ND CLEARANCES.



AFFIX SEAL: ON: _____
 ALTERED BY: ON: _____

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 166, SH 8226	PIN 9805.93	BRIDGES	CULVERTS C950119	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	MILFORD - ROSEBOOM, PART 3	ROUTE 166	UTILITY QUALITY LEVEL D			WORK ZONE TRAFFIC CONTROL PLAN PHASE 1	DRAWING NO. WZTC-03-E
	CULVERT REPLACEMENT PROJECT	TOWN OF MIDDLEFIELD			SITE E	SHEET NO. 132
	COUNTY: OTSEGO	REGION: 09				

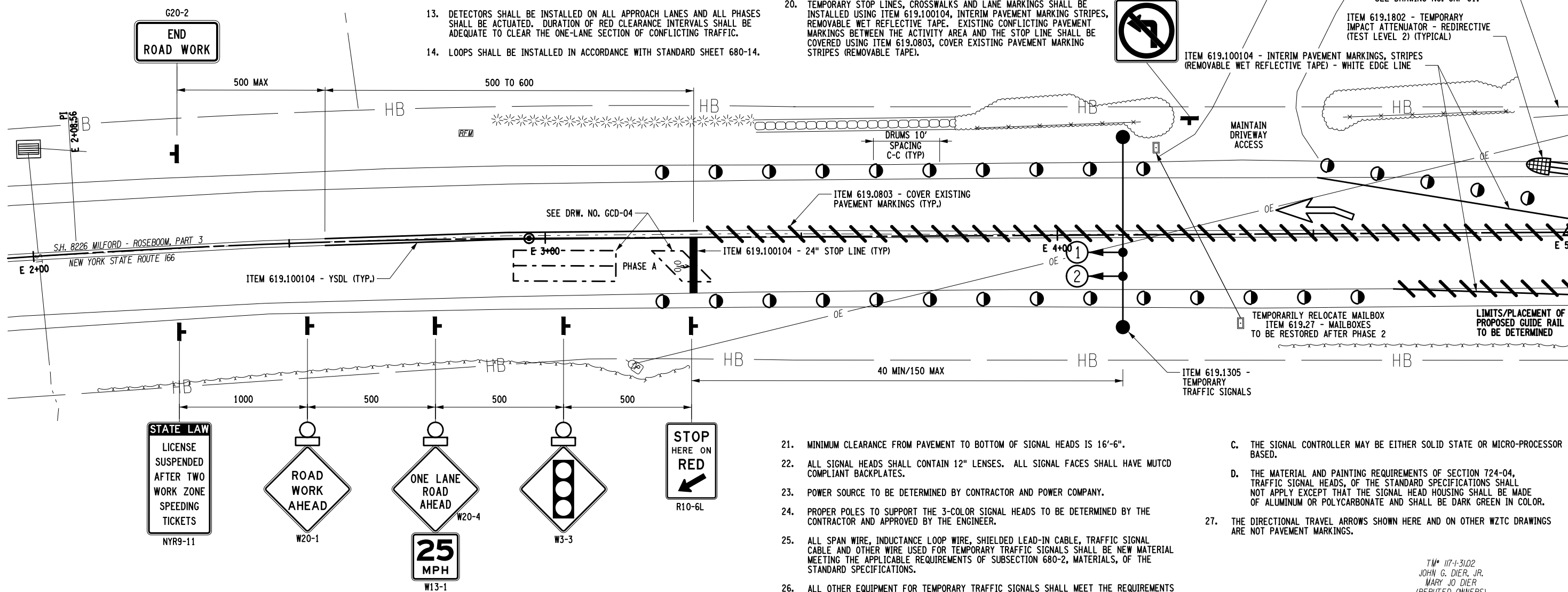
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

FILE NAME = 980593_C950119_RT1166_cph_wztc_04_E.dgn
 DATE/TIME = 30-JUL-2015 14:02
 USER = jphillips

PROJECT MANAGER G. WOJCIK
 CHECK J. L. PHILLIPS
 DRAFTING P. F. BLOW
 CHECK J. L. PHILLIPS
 DESIGN D. WELTZER
 JOB MANAGER J. L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER

NOTES:

- NUMBERS FOR SIGNS REFER TO THEIR MUTCD/NYS SUPPLEMENT NUMBER. SEE MUTCD, NYS SUPPLEMENT TO THE MUTCD, AND APPLICABLE 619 STANDARD SHEETS.
- THE CONTRACTOR SHALL COORDINATE WITH THE ADJACENT PROPERTY OWNERS TO ENSURE THEY HAVE ACCESS TO AND FROM THEIR PROPERTIES AT ALL TIMES. THIS MAY INCLUDE THE INSTALLATION OF TEMPORARY PARKING, DRIVEWAYS, ETC., TO BE OUTSIDE OF THE LIMITS OF THE TEMPORARY TRAFFIC SIGNAL, AND IN WRITTEN AGREEMENT VIA A PROPERTY RELEASE WITH THE OWNER(S), AND AS ORDERED BY THE ENGINEER. THE COST FOR THIS WORK AND COORDINATION SHALL BE INCLUDED IN THE COST BID FOR ITEM 619.01 - BASIC WORK ZONE TRAFFIC CONTROL (SEE DRAWING TCN-01, PUBLIC INGRESS AND EGRESS NOTES).
- ALL PAVEMENT MARKINGS SHALL BE 4 INCHES WIDE UNLESS NOTED.
- ALL STOP BARS SHALL BE 24 INCHES WIDE.
- TEMPORARY CONCRETE BARRIER, FENCING, BARRELS, ETC. MAY BE REMOVED TO ACCOMMODATE DAYTIME CONSTRUCTION ACTIVITIES BUT SHALL BE PUT BACK IN PLACE AT THE END OF EACH DAY. THE COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 619.01 - BASIC WORK ZONE TRAFFIC CONTROL.
- THE TAPER RATE FOR CONCRETE BARRIER SHOULD BE 1 ON 8.
- DRUM SPACING SHALL BE 10 FEET.
- SEE DRAWING NO. WZTC-06-E FOR TEMPORARY SIGNAL PHASING TABLE, PHASING PLAN AND PHASING DIAGRAM SCHEMATIC.
- THE SIGNAL LOCATION SHALL BE FIELD DETERMINED AS DIRECTED BY THE ENGINEER.
- ADJUSTMENTS IN THE LOCATION OF ADVANCED WARNING SIGNS SHALL BE MADE TO ACCOMMODATE THE HORIZONTAL AND VERTICAL ALIGNMENT OF THE ROADWAY, RECOGNIZING THAT THE DISTANCES SHOWN FOR SIGN SPACING ARE MINIMUMS.
- FLASHING WARNING LIGHTS ARE REQUIRED ON THE SIGNAL AHEAD SIGNS (W3-3). FLASHING WARNING LIGHTS SHALL ALSO BE REQUIRED ON THE ROAD WORK AHEAD SIGNS (W20-1) AND ONE LANE ROAD AHEAD SIGNS (W20-4).
- THE TIMING, PHASING AND DETECTOR LOCATIONS ARE TO BE VERIFIED BY THE REGIONAL TRAFFIC ENGINEER AT LEAST 2 WEEKS PRIOR TO START UP. THE REGIONAL TRAFFIC ENGINEER SHALL APPROVE ANY CHANGES OR ADDITIONS REQUIRED DUE TO OBSERVED TRAFFIC CONDITIONS.
- DETECTORS SHALL BE INSTALLED ON ALL APPROACH LANES AND ALL PHASES SHALL BE ACTUATED. DURATION OF RED CLEARANCE INTERVALS SHALL BE ADEQUATE TO CLEAR THE ONE-LANE SECTION OF CONFLICTING TRAFFIC.
- LOOPS SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD SHEET 680-14.
- OTHER TYPES OF VEHICLE DETECTION EQUIPMENT MAY BE USED IF PRIOR APPROVAL IS OBTAINED FROM THE REGIONAL TRAFFIC ENGINEERING AND SAFETY GROUP. REQUESTS BY THE CONTRACTOR TO USE SUCH ALTERNATIVES SHALL BE ACCOMPANIED BY DETAILED PLANS AND SPECIFICATIONS.
- THE TRAFFIC SIGNAL SHALL REST IN RED. WHEN THE SIGNAL IS CHANGED TO THE FLASHING MODE, EITHER MANUALLY OR AUTOMATICALLY, RED SIGNAL INDICATIONS SHALL BE FLASHED TO ALL APPROACHES.
- REST IN RED FEATURE MAY BE SUBSTITUTED FOR PHASE C.
- EMERGENCY FLASH OPERATION IS CONSIDERED A MALFUNCTION. FLAGGERS ARE REQUIRED UNTIL THE MALFUNCTION IS REPAIRED.
- THE CONTRACTOR SHALL COMMENCE REPAIR WORK ON THIS SIGNAL WITHIN TWO HOURS AFTER HE/SHE HAS BEEN NOTIFIED OF A MALFUNCTION. THE CONTRACTOR HAS AN EIGHT HOUR TIME LIMIT TO MAKE REPAIRS. FLAGGER CONTROL SHALL BE PROVIDED AT THE CONTRACTOR'S EXPENSE UNTIL THE TEMPORARY SIGNAL IS RESTORED TO PROPER OPERATION. IF THE REPAIRS REMAIN UNCOMPLETED AFTER THIS TIME, LIQUIDATED DAMAGES OF ONE DAY WILL BE ASSESSED FOR EACH DAY THE SIGNAL IS MALFUNCTIONING UNTIL IT IS REPAIRED.
- TEMPORARY STOP LINES, CROSSWALKS AND LANE MARKINGS SHALL BE INSTALLED USING ITEM 619.100104, INTERIM PAVEMENT MARKING STRIPES, REMOVABLE WET REFLECTIVE TAPE. EXISTING CONFLICTING PAVEMENT MARKINGS BETWEEN THE ACTIVITY AREA AND THE STOP LINE SHALL BE COVERED USING ITEM 619.0803, COVER EXISTING PAVEMENT MARKING STRIPES (REMOVABLE TAPE).



- MINIMUM CLEARANCE FROM PAVEMENT TO BOTTOM OF SIGNAL HEADS IS 16'-6".
- ALL SIGNAL HEADS SHALL CONTAIN 12" LENSES. ALL SIGNAL FACES SHALL HAVE MUTCD COMPLIANT BACKPLATES.
- POWER SOURCE TO BE DETERMINED BY CONTRACTOR AND POWER COMPANY.
- PROPER POLES TO SUPPORT THE 3-COLOR SIGNAL HEADS TO BE DETERMINED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.
- ALL SPAN WIRE, INDUCTANCE LOOP WIRE, SHIELDED LEAD-IN CABLE, TRAFFIC SIGNAL CABLE AND OTHER WIRE USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE NEW MATERIAL MEETING THE APPLICABLE REQUIREMENTS OF SUBSECTION 680-2, MATERIALS, OF THE STANDARD SPECIFICATIONS.
- ALL OTHER EQUIPMENT FOR TEMPORARY TRAFFIC SIGNALS SHALL MEET THE REQUIREMENTS OF SUBSECTION 680-2, MATERIALS, OF THE STANDARD SPECIFICATIONS EXCEPT FOR THE FOLLOWING MODIFICATIONS:
 - USED EQUIPMENT IN GOOD OPERATING CONDITION MAY BE FURNISHED TO PROVIDE THE REQUIRED OPERATION OF THE SIGNAL.
 - MANUFACTURER'S CERTIFICATION OF COMPLIANCE WILL NOT BE REQUIRED.
- THE SIGNAL CONTROLLER MAY BE EITHER SOLID STATE OR MICRO-PROCESSOR BASED.
- THE MATERIAL AND PAINTING REQUIREMENTS OF SECTION 724-04, TRAFFIC SIGNAL HEADS, OF THE STANDARD SPECIFICATIONS SHALL NOT APPLY EXCEPT THAT THE SIGNAL HEAD HOUSING SHALL BE MADE OF ALUMINUM OR POLYCARBONATE AND SHALL BE DARK GREEN IN COLOR.
- THE DIRECTIONAL TRAVEL ARROWS SHOWN HERE AND ON OTHER WZTC DRAWINGS ARE NOT PAVEMENT MARKINGS.

TM# 117-3102
 JOHN G. DIER, JR.
 MARY JO DIER
 (REPUTED OWNERS)
 L. 976 P. 95

AFFIX SEAL:
ON:

ALTERED BY:
ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 166, SH 8226	PIN 9805.93 ROUTE 166 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS C950119	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	MILFORD - ROSEBOOM, PART 3					
	CULVERT REPLACEMENT PROJECT					
	TOWN OF MIDDLEFIELD					
COUNTY: OTSEGO	REGION: 09	WORK ZONE TRAFFIC CONTROL PLAN PHASE 2	DRAWING NO. WZTC-04-E SHEET NO. 133			

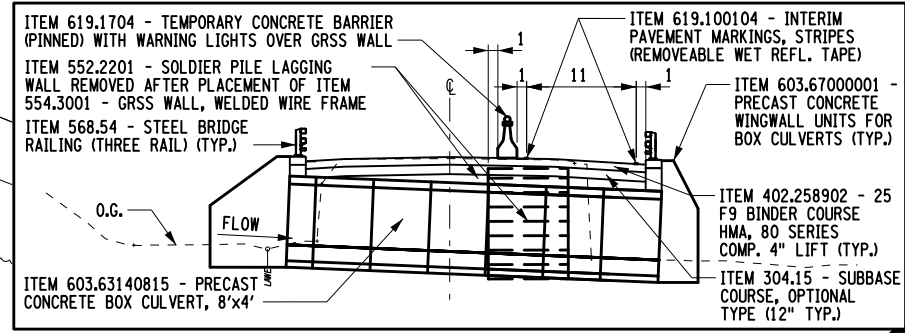
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



MATCH DRAWING WZTC-05-E STATION E 5+00.00

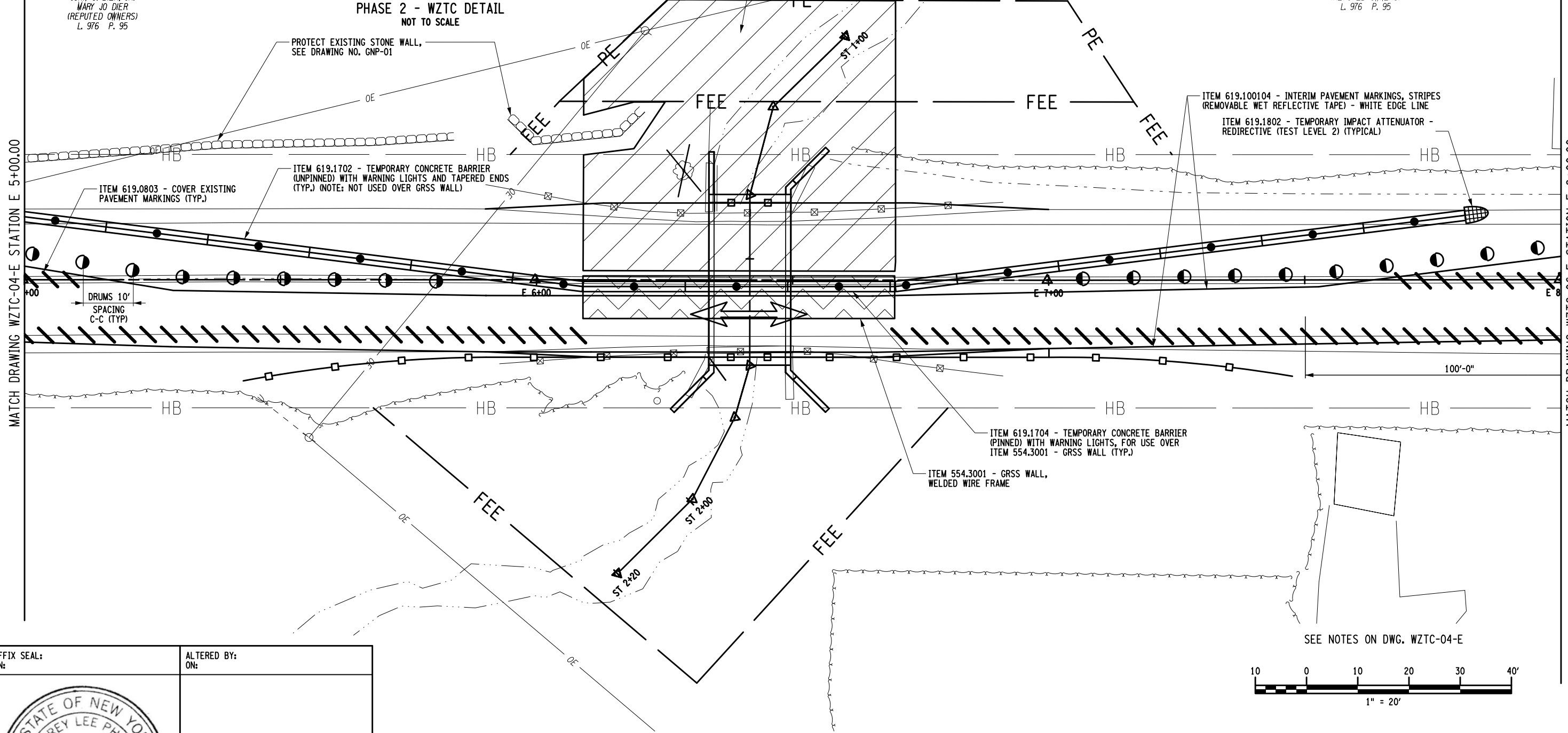
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 USER = jphillips

PROJECT MANAGER G. WOJCIK
 CHECK J. L. PHILLIPS
 DRAFTING P. F. BLOW
 CHECK J. L. PHILLIPS
 DESIGN D. WELSZER
 JOB MANAGER J. L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER



TM# 117-1-32.01
 JOHN G. DIER, JR.
 MARY JO DIER
 (REPUTED OWNERS)
 L. 976 P. 95

TM# 117-1-32.01
 JOHN G. DIER, JR.
 MARY JO DIER
 (REPUTED OWNERS)
 L. 976 P. 95



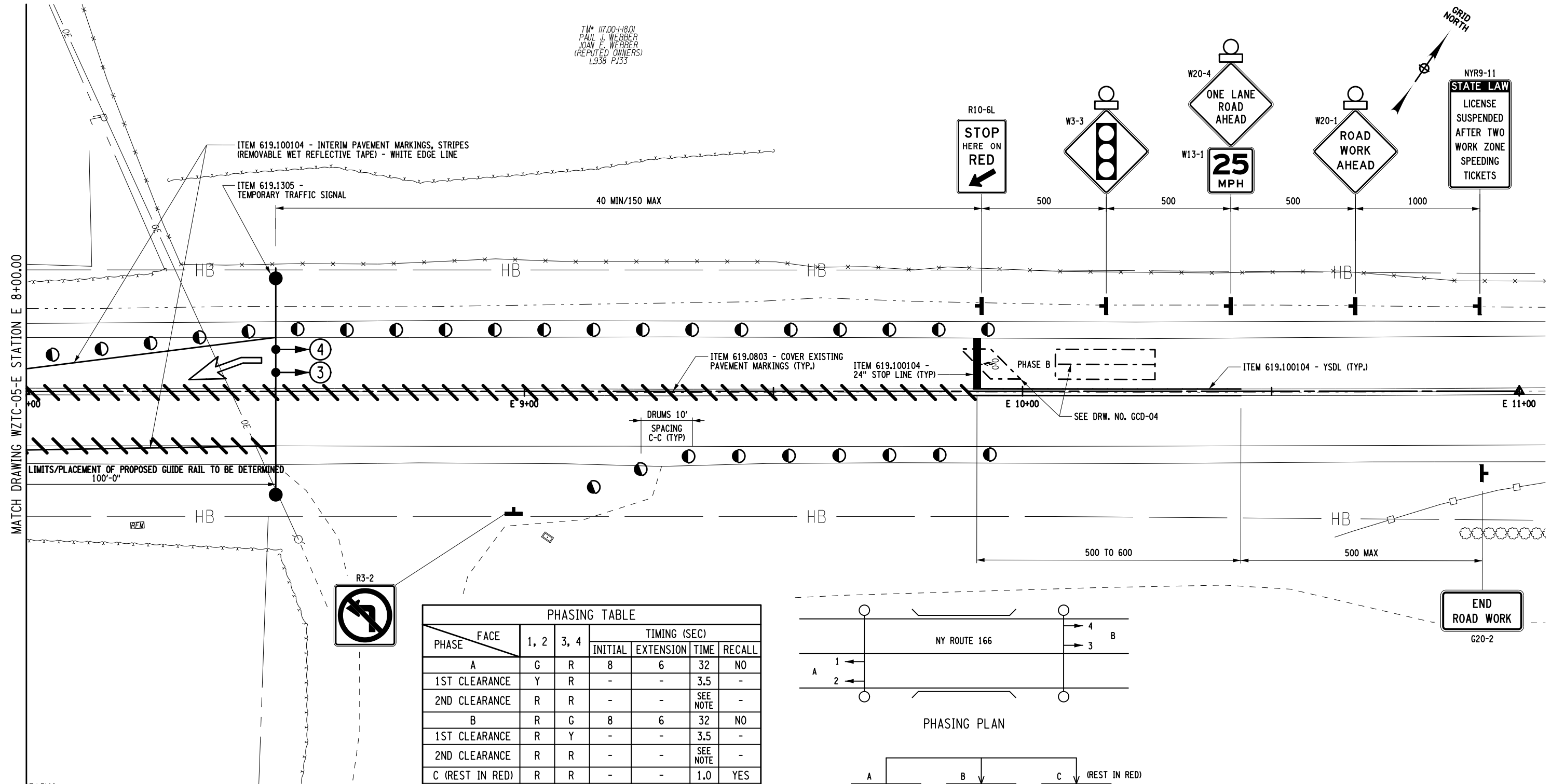
AFFIX SEAL: ON:	ALTERED BY: ON:
	AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:
	NYS ROUTE 166, SH 8226 MILFORD - ROSEBOOM, PART 3 CULVERT REPLACEMENT PROJECT TOWN OF MIDDLEFIELD COUNTY: OTSEGO REGION: 09

PIN 9805.93 ROUTE 166 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS C950119	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
WORK ZONE TRAFFIC CONTROL PLAN PHASE 2			SITE E	DRAWING NO. WZTC-05-E SHEET NO. 134
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.				Department of Transportation

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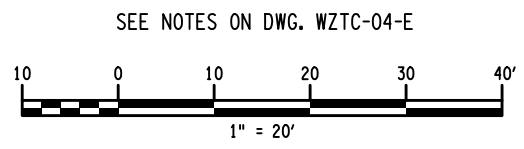
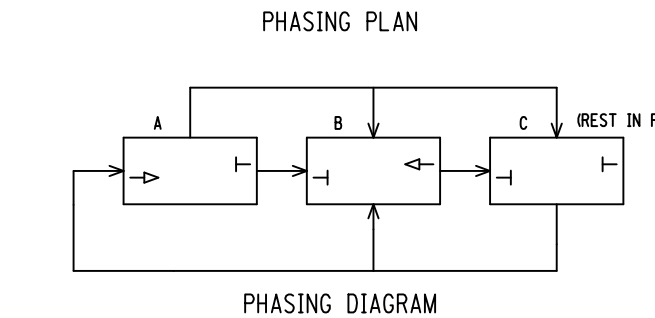
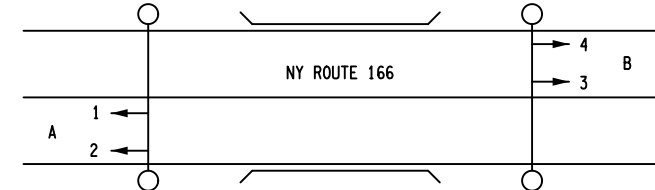
PROJECT MANAGER G. WOJCIK
 CHECK W.C. GRIFFITHS
 DRAFTING P.F. BLOW
 CHECK J.L. PHILLIPS
 DESIGN D. WELSZER
 JOB MANAGER J.L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER

TW# 17.00-118.01
 PAUL J. WEBBER
 JOAN E. WEBBER
 (REPUTED OWNERS)
 L938 PJ33



PHASING TABLE							
PHASE	FACE	1, 2	3, 4	TIMING (SEC)			RECALL
				INITIAL	EXTENSION	TIME	
A	G	R		8	6	32	NO
1ST CLEARANCE	Y	R		-	-	3.5	-
2ND CLEARANCE	R	R		-	-	SEE NOTE	-
B	R	G		8	6	32	NO
1ST CLEARANCE	R	Y		-	-	3.5	-
2ND CLEARANCE	R	R		-	-	SEE NOTE	-
C (REST IN RED)	R	R		-	-	1.0	YES
1ST CLEARANCE	R	R		-	-	0.5	-
2ND CLEARANCE	R	R		-	-	0.5	-
EMERGENCY FLASH	FR	FR		-	-	-	-

NOTE: DIVIDE THE TRAVEL DISTANCE IN FEET BETWEEN STOP LINES BY 22 FEET PER SECOND FOR THE TIME OF THE PHASE A AND PHASE B 2ND CLEARANCES.



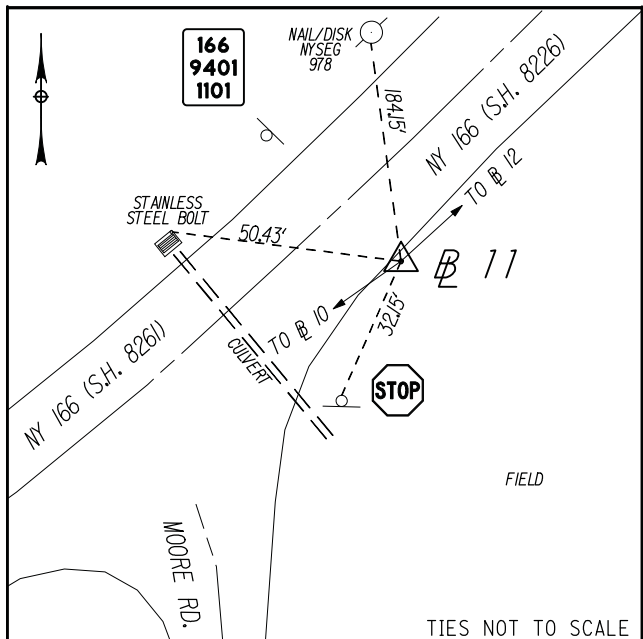
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 ALTERED BY: ON: _____



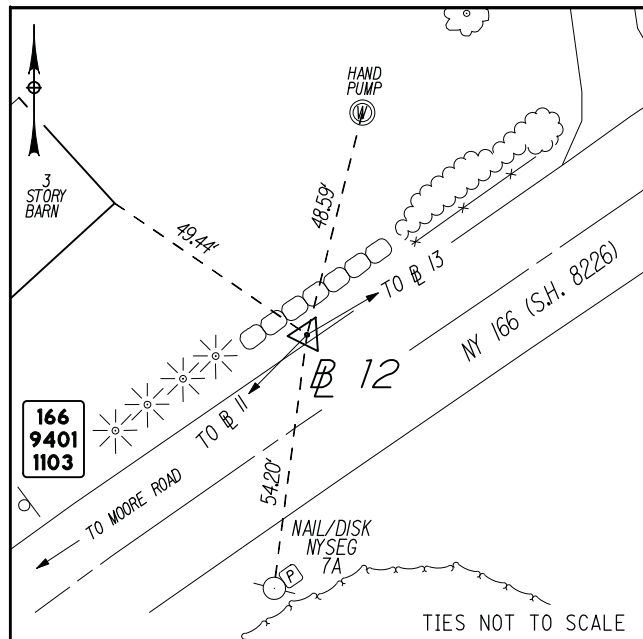
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 166, SH 8226	PIN 9805.93	BRIDGES	CULVERTS C950119	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	MILFORD - ROSEBOOM, PART 3	ROUTE 166				DRAWING NO. WZTC-06-E
	CULVERT REPLACEMENT PROJECT	UTILITY QUALITY LEVEL D			WORK ZONE TRAFFIC CONTROL PLAN PHASE 2	SHEET NO. 135
	TOWN OF MIDDLEFIELD	REGION: 09			SITE E	
COUNTY: OTSEGO						

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

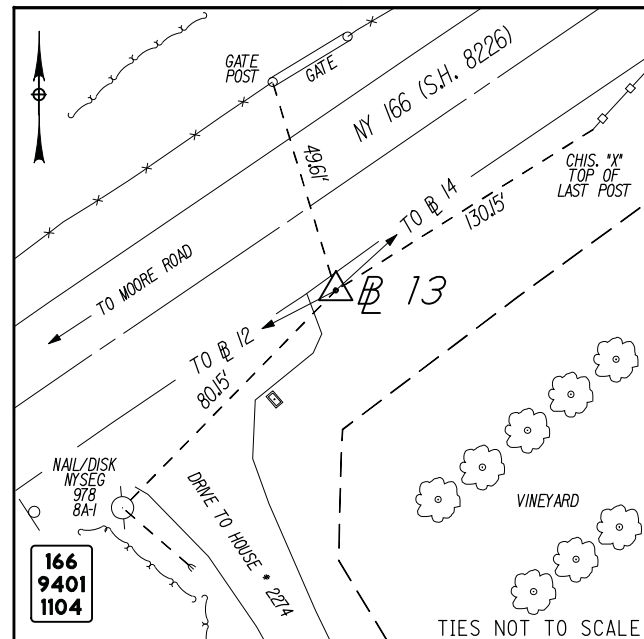




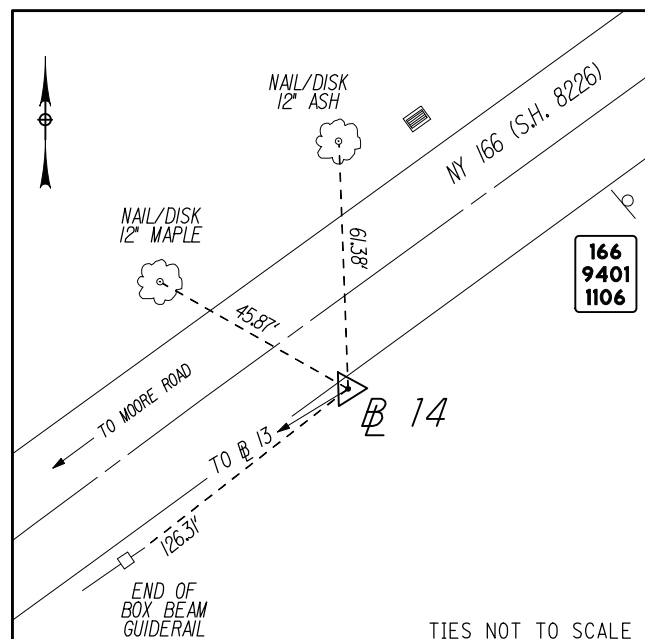
B 11 STA. 480+37.989
 CAPPED IRON ROD
 53' NORTHEAST OF MOORE ROAD
 82' SOUTHWEST OF RM 166-9401-1101
 17.6' SOUTHEAST OF Q NY 166
 NYSPCS EAST ZONE NAD 83/CORS96
 N: 1408358.0773 NAVD88
 E: 400361.1369 ELEV: 1308.469



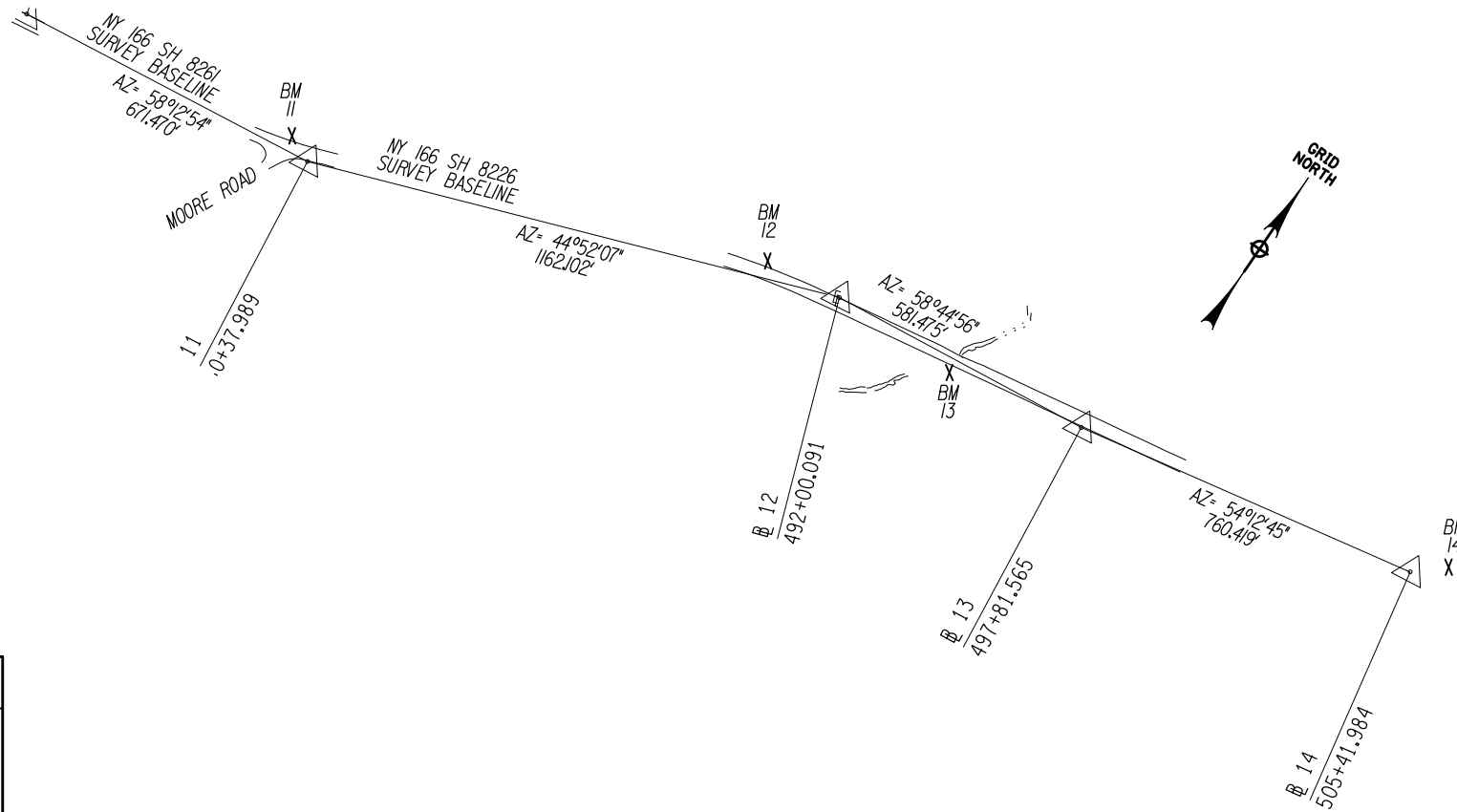
B 12 STA. 492+00.091
 CAPPED IRON ROD
 0.2 MILES NORTHEAST OF MOORE ROAD
 69' NORTHEAST OF RM 166-9401-1103
 14.9' NORTHWEST OF Q NY 166
 NYSPCS EAST ZONE NAD 83/CORS96
 N: 1409181.6898 NAVD88
 E: 401180.9804 ELEV: 1331.244



B 13 STA. 497+81.565
 CAPPED IRON ROD
 0.3 MILES NORTHEAST OF MOORE ROAD
 112' NORTHEAST OF RM 166-9401-1104
 17.0' SOUTHEAST OF Q NY 166
 NYSPCS EAST ZONE NAD 83/CORS96
 N: 1409483.3523 NAVD88
 E: 401678.0844 ELEV: 1316.986



B 14 STA. 505+41.984
 ALUMINUM CAPPED IRON ROD
 0.5 MILES NORTHEAST OF MOORE ROAD
 197' SOUTHWEST OF RM 166-9401-1106
 15.8' SOUTHEAST OF Q NY 166
 NYSPCS EAST ZONE NAD 83/CORS96
 N: 1409928.0299 NAVD88
 E: 402294.9303 ELEV: 1315.598



AFFIX SEAL:
 ON:

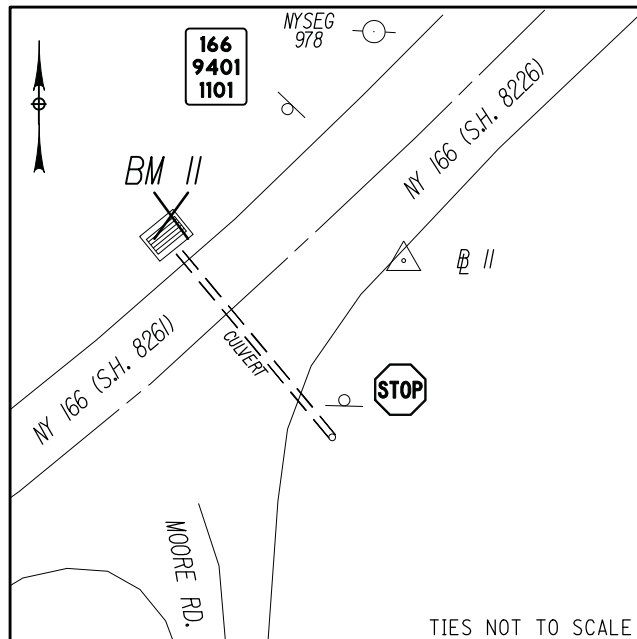
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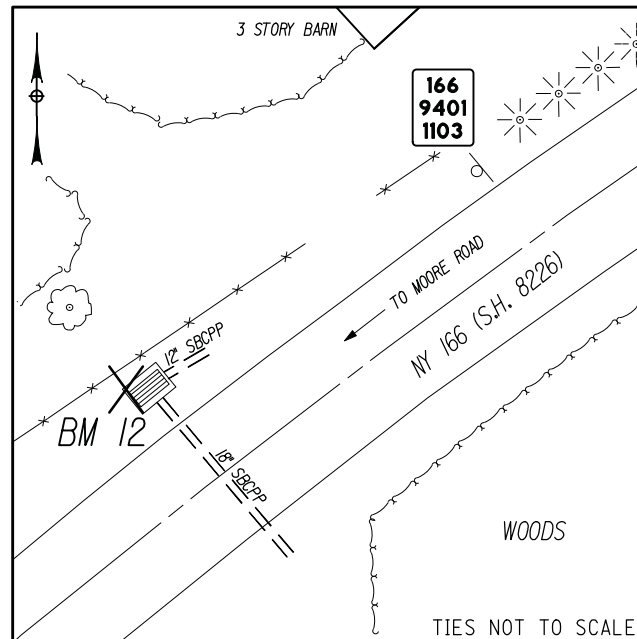
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 166, SH 8226	PIN 9805.93	BRIDGES	CULVERTS C950119	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	MILFORD - ROSEBOOM, PART 3	ROUTE 166			BASELINE TIE DIAGRAMS	DRAWING NO. BLT-01-E
	CULVERT REPLACEMENT PROJECT	UTILITY QUALITY LEVEL D				SHEET NO. 136
	TOWN OF MIDDLEFIELD					
	COUNTY: OTSEGO	REGION: 09				

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

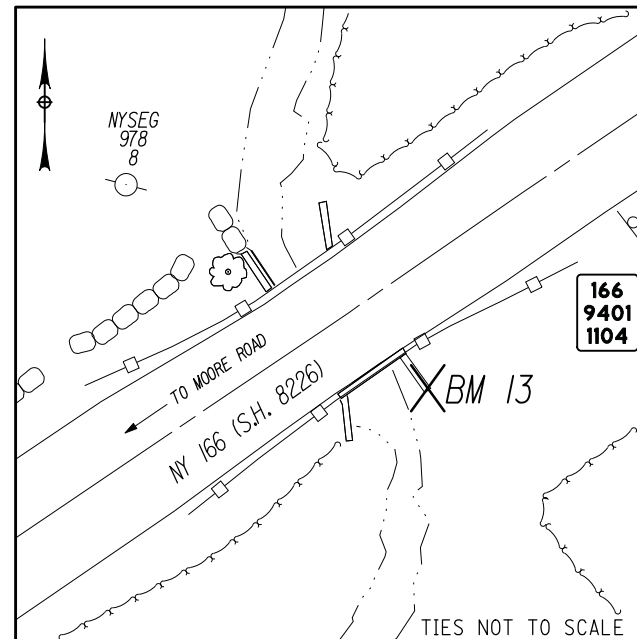




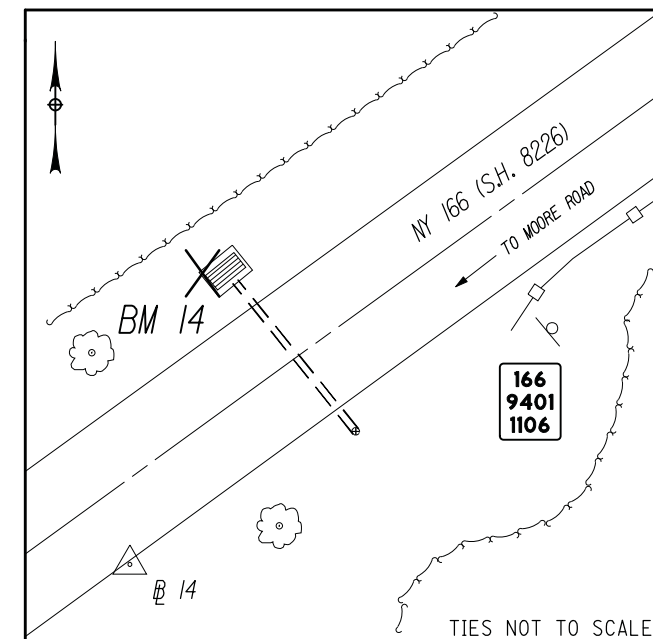
BM 11
 STAINLESS STEEL BOLT NORTH CORNER
 CONCRETE DRAINAGE STRUCTURE
 OPPOSITE MOORE ROAD
 105' SOUTHWEST OF RM 166-9401-1101
 20.4' NORTHWEST OF C NY 166
 NYSPCS EAST ZONE NAD 83/CORS96
 N: 1408362.85 NAVD88
 E: 400310.92 ELEV: 1306.251



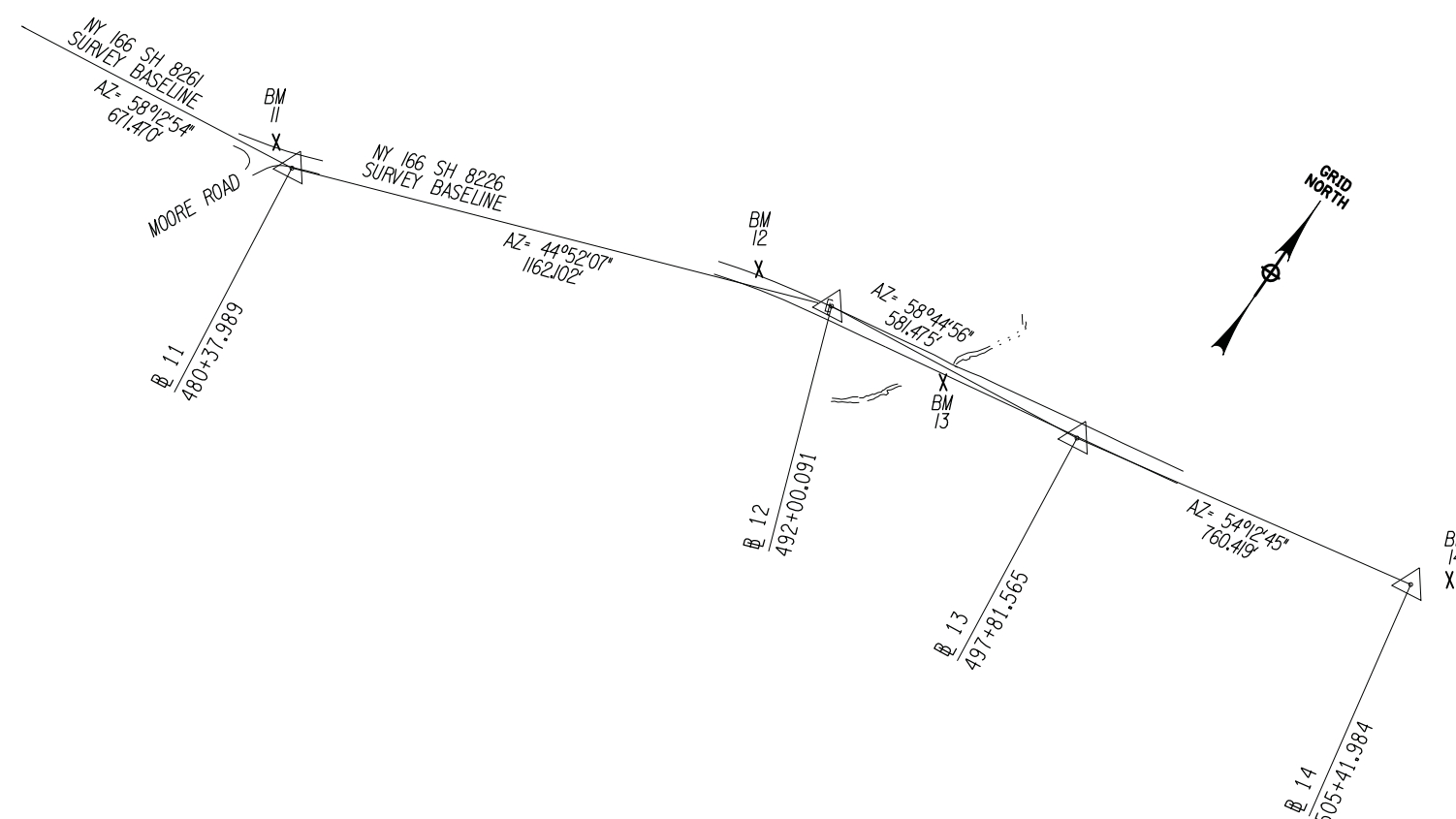
BM 12
 STAINLESS STEEL BOLT WEST CORNER
 CONCRETE DRAINAGE STRUCTURE
 0.2 MILES NORTHEAST OF MOORE ROAD
 88' SOUTHWEST OF RM 166-9401-1103
 22.3' NORTHWEST OF C NY 166
 NYSPCS EAST ZONE NAD 83/CORS96
 N: 1409095.72 NAVD88
 E: 401050.47 ELEV: 1325.407



BM 13
 CHISELED SQUARE SOUTH END
 SOUTHEAST WINGWALL CULVERT #950119
 0.3 MILES NORTHEAST OF MOORE ROAD
 172' SOUTHWEST OF RM 166-9401-1104
 23' SOUTHEAST OF C NY 166
 NYSPCS EAST ZONE NAD 83/CORS96
 N: 1409318.3 NAVD88
 E: 401447.5 ELEV: 1321.766



BM 14
 DRILL HOLE WEST CORNER
 CONCRETE DRAINAGE STRUCTURE
 0.5 MILES NORTHEAST OF NY 166
 105' SOUTHWEST OF RM 166-9401-1106
 24' NORTHWEST OF C NY 166
 NYSPCS EAST ZONE NAD 83/CORS96
 N: 1410008.5 NAVD88
 E: 402340.8 ELEV: 1315.099



AFFIX SEAL: ON: _____
 ALTERED BY: ON: _____



AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 166, SH 8226	PIN 9805.93 ROUTE 166 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS C950119	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	MILFORD - ROSEBOOM, PART 3					
	CULVERT REPLACEMENT PROJECT				BENCHMARKS	DRAWING NO. BLT-02-E SHEET NO. 137
	TOWN OF MIDDLEFIELD					
	COUNTY: OTSEGO	REGION: 09			SITE E	

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

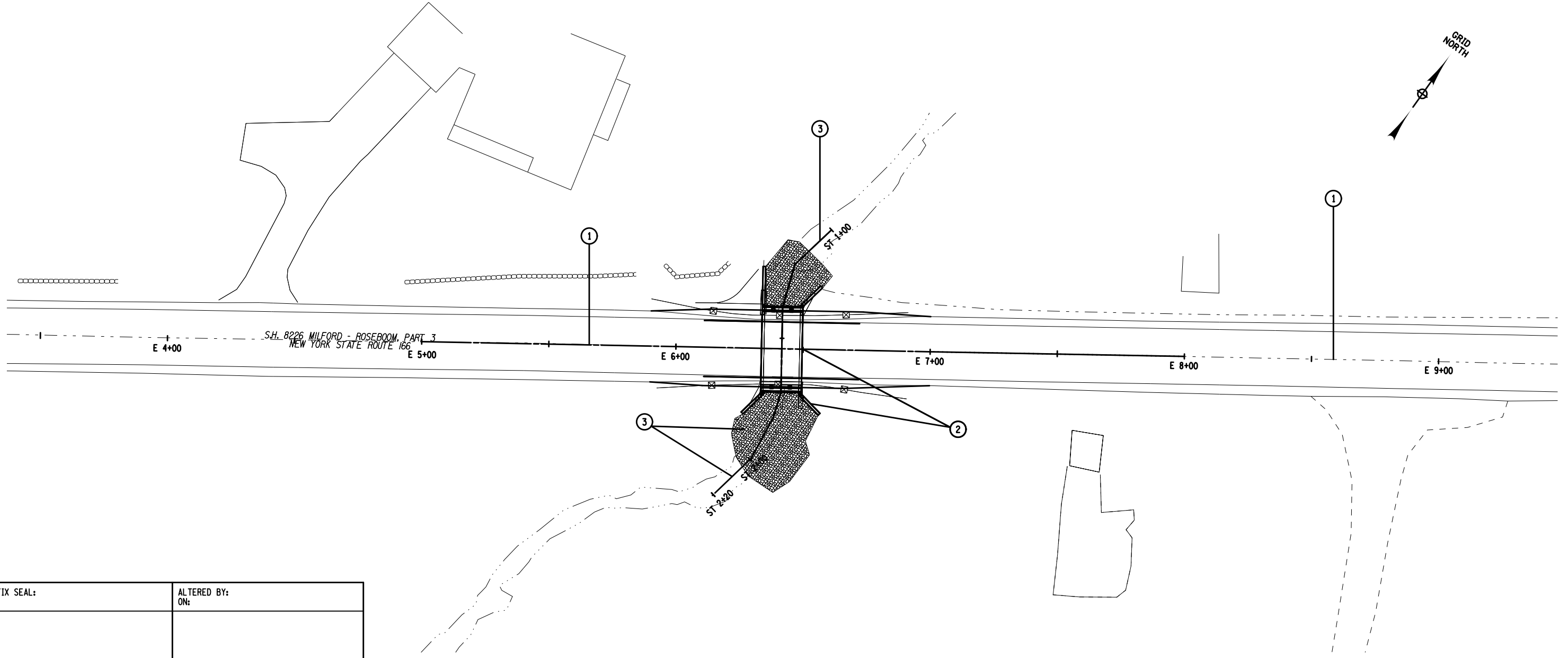


TABLE OF MAINTENANCE JURISDICTION SITE B

PART NO.	HIGHWAY/LOCATION	LIMITS STATIONING	FEATURES TO BE MAINTAINED	Q miles	LANE miles	AGENCY	AUTHORITY TO MAINTAIN
①	N.Y. ROUTE 166 MILFORD - ROSEBOOM, PART 3 S.H. 8226	PROJECT LIMITS MAINLINE STATIONING 5+42.75 TO 7+70.25	ALL OF STATE HIGHWAY (PAVEMENT, GUIDERAIL, DRAINAGE DITCHES, CULVERTS, PAVEMENT MARKINGS, SIGNS, SNOW AND ICE CONTROL)	0.013	0.026	NEW YORK STATE	HIGHWAY LAW SECTION 12
②	PROPOSED 14' X 8' RISE PRECAST CONCRETE BOX CULVERT - C950119 AND WING WALLS	STREAM STATIONING ST 1+37.50 TO ST 1+70.83	PROPOSED CONCRETE BOX CULVERT AND WING WALLS	0.015 ALONG Q STREAM	N/A	NEW YORK STATE	HIGHWAY LAW SECTION 230
③	INDIAN RUN CREEK UNDER N.Y. ROUTE 166 AND WATERSHED RUNOFF	STREAM STATIONING ST 1+00.00 TO ST 2+20.00	STREAMS CHANNEL, BANKS AND STONE FILLING WITHIN THE R.O.W. AND PE TAKING LINES	0.022 ALONG Q STREAM	N/A	NEW YORK STATE	HIGHWAY LAW SECTIONS 12

NOTES:

1. THIS TABLE INDICATES THE DIVISION OF RESPONSIBILITY FOR MAINTENANCE FOR THIS CONTRACT UPON COMPLETION UNLESS STATED OTHERWISE. IT IN NO WAY RELIEVES THE CONTRACTOR OR REPRESENTATIVE OF THEIR RESPONSIBILITIES AS COVERED BY SECTION 619 OF THE STANDARD SPECIFICATION.
2. ALL EXISTING SANITARY SEWERS AND OTHER SEWERS NOT DEEMED TO BE PART OF THE PROJECT BY THE COMMISSIONER, WATERMANS, HYDRANTS, AND OTHER MUNICIPALLY OR PRIVATELY OWNED FACILITIES WITHIN THE LIMITS OF THE HIGHWAY RIGHT-OF-WAY WHICH REMAIN IN SERVICE UNCHANGED, AND ALL SUCH FACILITIES RELOCATED OR PROTECTED AS PART OF THE WORK PERFORMED UNDER THIS PROJECT, WHETHER CROSSING, LOCATED WITHIN OR ADJACENT TO THE RIGHT-OF-WAY, SHALL BE MAINTAINED AS THE CASE MAY BE, BY THE MUNICIPALITY OR BY THE AGENCY OR UNIT OWNING OR HAVING CONTROL AND JURISDICTION THEREOF AT NO COST OR EXPENSE TO THE STATE.
3. THE PORTION OF A DRIVEWAY OR PRIVATE ROAD, CONSTRUCTED OR ADJUSTED UNDER THE PROPOSED PROJECT BETWEEN THE EDGE OF PAVEMENT AND THE OUTSIDE EDGE OF SHOULDER SHALL BE MAINTAINED BY THE STATE UNDER SECTION 10, SUBDIVISION 25 OF THE HIGHWAY LAW. THE REMAINING PORTION OF THE ADJUSTED DRIVEWAY OR PRIVATE ROAD BEYOND THE OUTSIDE EDGE OF SHOULDER SHALL BE MAINTAINED BY THE OWNER(S) UNDER SECTION 54(a) OF THE HIGHWAY LAW. ALSO, ENTRANCE STAIRS AND WALKS SHALL BE MAINTAINED BY THE OWNER(S) UNDER SECTION 54(a) OF THE HIGHWAY LAW.
4. INTERSECTING PUBLIC HIGHWAYS - OTHER THAN STATE HIGHWAYS, BEYOND THE OUTSIDE EDGE OF THE SHOULDER OR PAVEMENT EDGE OF THE STATE HIGHWAY SHALL BE MAINTAINED BY THE LOCAL UNIT OF GOVERNMENT HAVING JURISDICTION.



AFFIX SEAL: ON:	ALTERED BY: ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 166, SH 8226	PIN 9805.93 ROUTE 166 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS C950119	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	MILFORD - ROSEBOOM, PART 3					
	CULVERT REPLACEMENT PROJECT					
	TOWN OF MIDDLEFIELD					
COUNTY: OTSEGO	REGION: 09	MAINTENANCE JURISDICTION PLAN		DRAWING NO. MJP-01-E SHEET NO. 139		
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.						
Department of Transportation						

FILE NAME = 980593_C950119_RT166_cph.mjp_01_E.dgn
DATE/TIME = 30-JUL-2015 14:02
USER = jphillips

PROJECT MANAGER G. WOJCIK
CHECK J. L. PHILLIPS
DRAFTING K. LORF
CHECK J. L. PHILLIPS
DESIGN D. WELSZER
JOB MANAGER J. L. PHILLIPS
DESIGN SUPERVISOR R. WILDER

**HORIZONTAL CONTROL TABLE
(STREAM) - C950119**


PROJECT NAME: C950119
DESCRIPTION: RT 166 OTSEGO CO
HORIZONTAL ALIGNMENT NAME: PROPOSED STREAM
DESCRIPTION: PROPOSED CULVERT AND STREAM
STYLE: AC P

	STATION	NORTHING	EASTING
ELEMENT: LINEAR			
POB (611)	ST 1+00.00	1409382.4233	401415.8990
EQNBK ()	1+00.00	1409382.4233	401415.8990
EQNAHD ()	ST 1+00.00	1409382.4233	401415.8990
PI (28)	ST 1+19.71	1409363.0915	401412.0659
TANGENT DIRECTION: 191°12'55.1434"			
TANGENT LENGTH: 19.7082			
ELEMENT: LINEAR			
PI (28)	ST 1+19.71	1409363.0915	401412.0659
PI (32)	ST 1+37.50	1409346.3252	401418.0109
TANGENT DIRECTION: 160°28'34.7441"			
TANGENT LENGTH: 17.7891			
ELEMENT: LINEAR			
PI (32)	ST 1+37.50	1409346.3252	401418.0109
PI (609)	ST 1+70.83	1409318.8009	401436.8144
TANGENT DIRECTION: 145°39'38.3985"			
TANGENT LENGTH: 33.3340			
ELEMENT: LINEAR			
PI (609)	ST 1+70.83	1409318.8009	401436.8144
PI (33)	ST 1+81.40	1409308.7739	401440.1413
TANGENT DIRECTION: 161°38'40.4738"			
TANGENT LENGTH: 10.5645			
ELEMENT: LINEAR			
PI (33)	ST 1+81.40	1409308.7739	401440.1413
PI (610)	ST 1+99.38	1409290.9212	401442.3143
TANGENT DIRECTION: 173°03'36.3920"			
TANGENT LENGTH: 17.9845			
ELEMENT: LINEAR			
PI (610)	ST 1+99.38	1409290.9212	401442.3143
POE (5)	ST 2+20.00	1409270.6649	401438.4532
TANGENT DIRECTION: 190°47'30.7375"			
TANGENT LENGTH: 20.6210			

**HORIZONTAL CONTROL TABLE
(ROUTE 166) - C950119**

PROJECT NAME: C950119
DESCRIPTION: RT 166 OTSEGO CO
HORIZONTAL ALIGNMENT NAME: ROUTE 166 CL P
DESCRIPTION: PROPOSED ROUTE 166 CENTERLINE
STYLE: AC P

	STATION	NORTHING	EASTING
ELEMENT: LINEAR			
POB (600)	E 1+00.00	1409015.0147	400989.0957
EQNBK ()	1+00.00	1409015.0147	400989.0957
EQNAHD ()	E 1+00.00	1409015.0147	400989.0957
PI (2)	E 1+10.42	1409021.9268	400996.8938
TANGENT DIRECTION: 48°26'49.1669"			
TANGENT LENGTH: 10.4204			
ELEMENT: LINEAR			
PI (2)	E 1+10.42	1409021.9268	400996.8938
PC (601)	E 1+20.11	1409028.3017	401004.1874
TANGENT DIRECTION: 48°50'43.8081"			
TANGENT LENGTH: 9.6870			
ELEMENT: CIRCULAR			
PC (601)	E 1+20.11	1409028.3017	401004.1874
PI ()	E 2+08.56	1409086.5140	401070.7896
CC (607)	E 2+08.56	1407842.4247	402040.6819
PT (608)	E 2+96.83	1409136.9027	401143.4910
RADIUS: 1575.0000			
DELTA: 6°25'44.4824" RIGHT			
DEGREE OF CURVATURE(ARC): 3°38'16.1782"			
LENGTH: 176.7270			
TANGENT: 88.4563			
CHORD: 176.6343			
MIDDLE ORDINATE: 2.4781			
EXTERNAL: 2.4820			
TANGENT DIRECTION: 48°50'43.8081"			
RADIAL DIRECTION: 138°50'43.8081"			
CHORD DIRECTION: 52°03'36.0493"			
RADIAL DIRECTION: 145°16'28.2905"			
TANGENT DIRECTION: 55°16'28.2905"			
ELEMENT: LINEAR			
PT (608)	E 2+96.83	1409136.9027	401143.4910
PI (602)	E 4+99.72	1409252.4748	401310.2397
TANGENT DIRECTION: 55°16'28.2905"			
TANGENT LENGTH: 202.8843			
ELEMENT: LINEAR			
PI (602)	E 4+99.72	1409252.4748	401310.2397
PI (606)	E 5+99.72	1409308.9535	401392.7614
TANGENT DIRECTION: 55°36'42.6036"			
TANGENT LENGTH: 99.9984			
ELEMENT: LINEAR			
PI (606)	E 5+99.72	1409308.9535	401392.7614
PI (605)	E 6+99.72	1409365.3515	401475.3422
TANGENT DIRECTION: 55°40'08.8822"			
ELEMENT: LINEAR			
PI (605)	E 6+99.72	1409365.3515	401475.3422
PI (604)	E 7+99.72	1409421.9308	401557.7970
TANGENT DIRECTION: 55°32'33.5888"			
TANGENT LENGTH: 100.0000			
ELEMENT: LINEAR			
PI (604)	E 7+99.72	1409421.9308	401557.7970
POE (603)	E 10+99.72	1409591.4105	401805.3382
TANGENT DIRECTION: 55°36'08.6555"			
TANGENT LENGTH: 300.0000			
TANGENT LENGTH: 100.0016			

AFFIX SEAL: ON:	ALTERED BY: ON:
	

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 166 - SH 8226	PIN 9805.93 RT 166 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS C950119	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	MILFORD - ROSEBOOM, PART 3					
	CULVERT REPLACEMENT PROJECT					
	TOWN OF MIDDLEFIELD					
COUNTY: OTSEGO	REGION: 09	SITE E		DRAWING NO. HCT-01-E SHEET NO. 140		

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



FILE NAME = 980593_C950119_RT166_cph_mst_01_E.dgn
 DATE/TIME = 30-JUL-2015 14:02
 USER = jphillips

PROJECT MANAGER G. WOJCIK
 CHECK J.L. PHILLIPS
 DRAFTING D. WELSZER
 CHECK J.L. PHILLIPS
 DESIGN D. WELSZER
 JOB MANAGER J.L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER

TABLE OF GUIDE RAILING - INSTALLATION										
STATION TO STATION	SIDE	OFFSET	POST SPACING (FT)	FACTOR	ITEM 606.10 - BOX BEAM GUIDE RAILING (LF)	ITEM 568.54 - STEEL BOX BEAM GUIDE RAILING (SHOP BENT) OR SHOP MITERED	ITEM 606.100002 (LF)	ITEM 606.120101 (EACH)	ITEM 568.70 - TRANSITION BRIDGE RAIL	COMMENTS
E 5+47.60 TO E 5+54.69	LT	19.8 18.5	6	7.1						TYPE 0 END PEICE
E 5+54.69 TO E 5+89.52	LT	18.5 15	6			34.8				R=255 FT., L=35 FT.
E 5+89.52 TO E 6+01.97	LT	15 15	6	12.5						TANGENT SECTION OF BOX BEAM GUIDE RAILING
E 6+01.97 TO E 6+33.65	LT	15 15	VARIES				32			
E 6+33.65 TO E 6+49.65	LT	15 15	6		16					
E 6+49.65 TO E 6+81.64	LT	15 15	VARIES				32			
E 6+81.64 TO E 7+19.19	LT	15 15	6	37.6						TANGENT SECTION OF BOX BEAM GUIDE RAILING
E 7+19.19 TO E 7+66.94	LT	15 20.8	6			47.8				R=263.5 FT., L=49 FT.
E 7+66.94 TO E 7+70.16	LT	20.8 21.4	6	2	3.2					TYPE 0 END PEICE
E 5+42.89 TO E 5+49.99	RT	19.8 18.4	6				1			TYPE 1 END PIECE
E 5+49.99 TO E 5+84.82	RT	18.4 15.0	6			34.8				R=255 FT., L=35 FT.
E 5+84.82 TO E 6+01.95	RT	15.0 15.0	6	17.1						TANGENT SECTION OF BOX BEAM GUIDE RAILING
E 6+01.95 TO E 6+33.65	RT	15.0 15.0					32			
E 6+33.65 TO E 6+49.65	RT	15.0 15.0			16					
E 6+49.65 TO E 6+81.62	RT	15.0 15.0					32			
E 6+81.62 TO E 6+99.85	RT	15.0 15.0	6	18.2						TANGENT SECTION OF BOX BEAM GUIDE RAILING
E 6+99.85 TO E 7+34.67	RT	15.0 18.5	6			34.8				R=255 FT., L=35 FT.
E 7+34.67 TO E 7+41.77	RT	15.0 19.9	6				1			
TOTAL				96	32	152.2	2	128		

NOTES: STATION TO STATION DISTANCE MAY NOT EQUAL TRUE DISTANCE DUE TO RADIUS.


TABLE OF SOIL BORING LOCATIONS				
BORING #	BASELINE STA.	BASELINE OFFSET	NORTHING	EASTING
FH-K-15	494+56.00	7.46	LT	1,409,321.14
FH-K-16	495+47.44	16.56	RT	401,396.40
				401,486.52

NOTES: BASELINE ALIGNMENT DIRECTION IS NORTH TO SOUTH

TABLE OF CLEAR ZONE WIDTHS		
STATION TO STATION	WIDTH	NOTES
E 5+42.00 TO E 7+72.00	30	PER CHAPTER 10, TABLE 10-1 IN HDM

NOTE: MINIMUM CLEARZONE WIDTH FOR THIS SECTION OF ROUTE 166 WITH 1:4 SLOPES IS 30 FEET

TABLE OF PAVEMENT CUTTING - ITEM 627.50140008 (LF)		
LOCATION	LENGTH	REMARKS
E 6+07.00 13' LT TO E 6+07.00 13' RT	26'	FULL WIDTH (SHOULDER TO SHOULDER) AT FULL DEPTH
E 6+74.00 13' LT TO E 6+74.00 13' RT	26'	

AFFIX SEAL: ON: 

ALTERED BY: ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 166, SH 8226 MILFORD - ROSEBOOM, PART 3 CULVERT REPLACEMENT PROJECT TOWN OF MIDDLEFIELD COUNTY: OTSEGO	PIN 9805.93 ROUTE 166 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS C950119	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED MISCELLANEOUS TABLES	CONTRACT NUMBER D262989
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.					SITE E	DRAWING NO. MST-01-E SHEET NO. 141

TABLE OF EXISTING GUIDE RAILING - REMOVAL						
STATION/ LOCATION	SIDE	OFFSET (FEET)	ITEM 606.11 (LF)	ITEM 606.7910 (EACH)	COMMENTS	
E 5+92.74	RT	16.41				
TO E 6+05.70		15.45		1		
E 6+05.70	RT	15.45	73 LF			
TO E 6+78.24		17.13				
E 6+78.24	RT	17.13		1		
TO E 6+91.13		18.70				
E 5+90.02	LT	18.59		1		
TO E 6+02.78		16.25				
E 6+02.78	LT	16.25	76 LF			
TO E 6+78.14		14.50				
E 6+78.14	LT	14.50		1		
TO E 6+91.11		15.23				
TOTAL			149 LF	4		

NOTES: STATION TO STATION DISTANCE MAY NOT EQUAL TRUE DISTANCE DUE TO RADIUS.
 E PREFIX STATIONING IS FOR ROUTE 166

TABLE OF ITEM 608.020102 - HOT MIX ASPHALT (HMA) SIDEWALKS, DRIVEWAY, BICYCLE PATHS & VEGETATIVE CONTROL STRIPS									
STATION	OFFSET	TO	STATION	OFFSET	SIDE	LENGTH (FT)	WIDTH (FT)	AREA	TONS
E 5+86.61	13.86		E 6+33.50	15.00	LT	47	2.75	117.5	2.3
E 6+52.50	15.00		E 7+19.22	13.78	LT	70	2.75	192.5	3.8
E 5+82.43	14.08		E 6+33.50	15.00	RT	51	2.75	140.3	2.7
E 6+49.19	15.00		E 7+07.68	13.40	RT	58	2.75	159.5	3.1
TOTAL								609.75	11.9

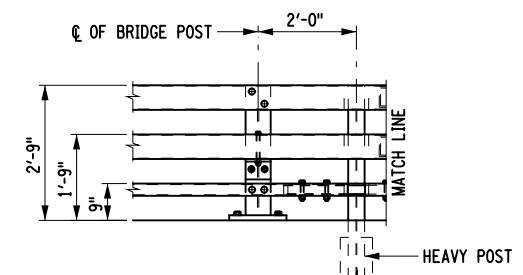
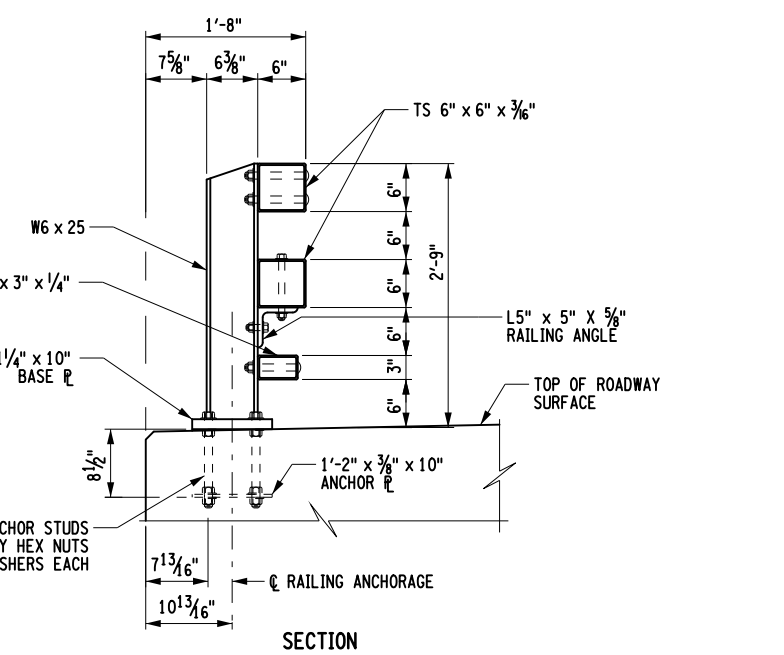
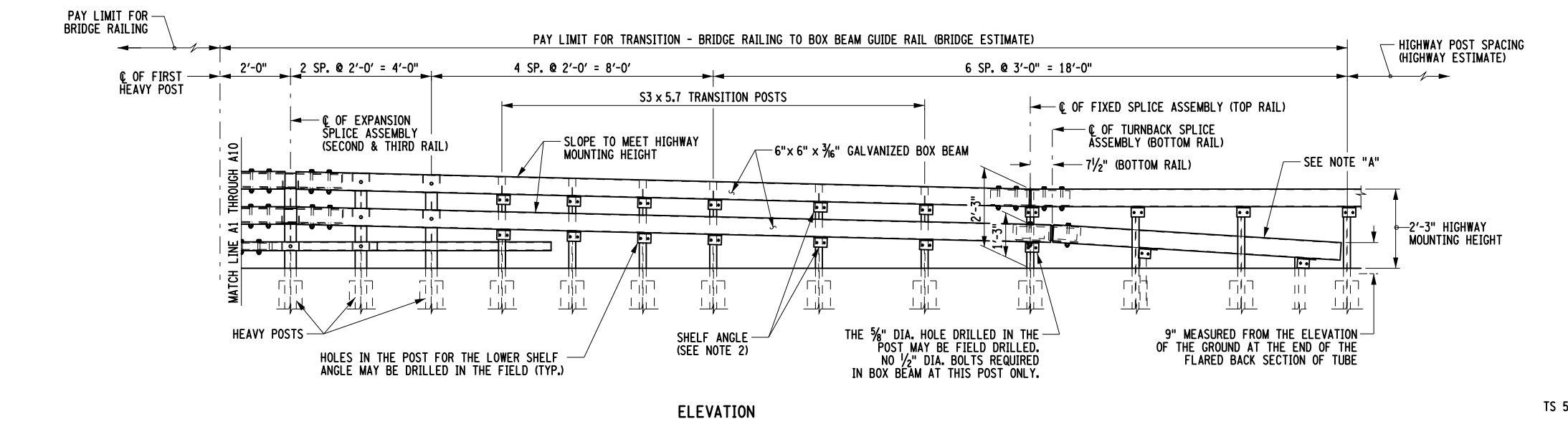
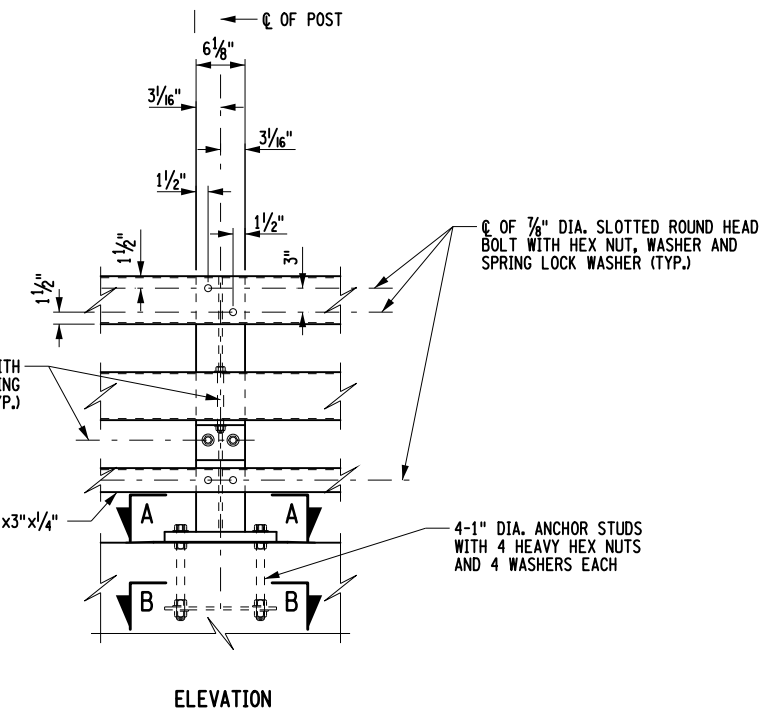
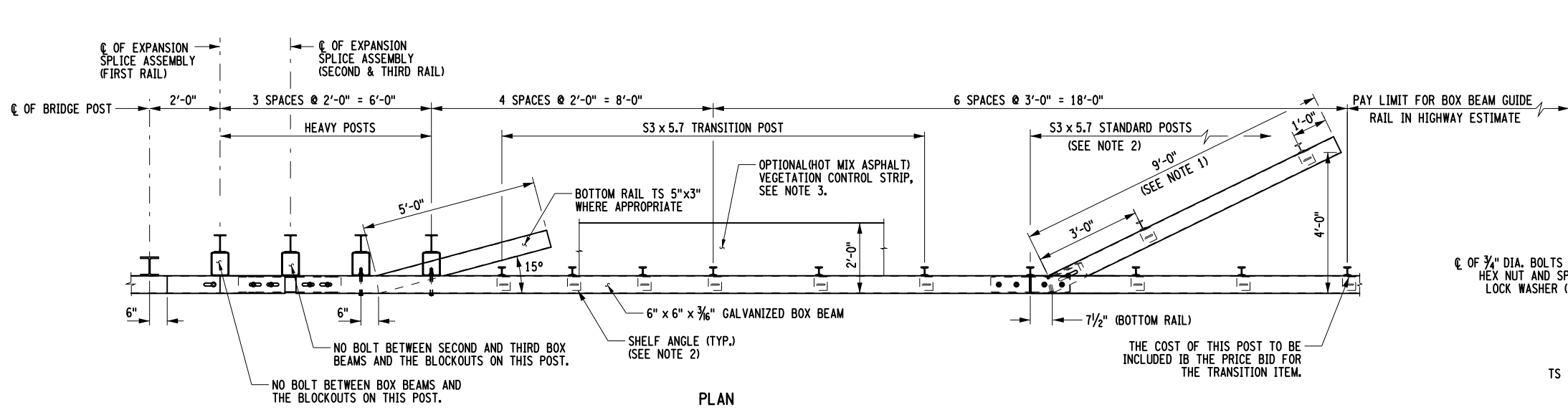
NOTES: STATION TO STATION DISTANCE MAY NOT EQUAL TRUE DISTANCE DUE TO RADIUS.
 E PREFIX STATIONING IS FOR ROUTE 166.

TABLE OF SILT FENCE TEMPORARY - ITEM 209.13			
RT. 166 STATION	SIDE	OFFSET	LINEAR FEET
E 5+94.89	RT	45.77	26
TO E 6+20.72	RT	43.44	
E 6+10.04	RT	35.02	21
TO E 6+30.46	RT	34.56	
E 6+56.14	RT	25.42	56
TO E 7+11.51	RT	21.91	
E 5+85.04	LT	18.15	31.50
TO E 6+16.51	LT	18.96	
E 6+16.51	LT	18.96	7
TO E 6+23.04	LT	20.87	
E 6+26.01	LT	23.89	15
TO E 6+34.53	LT	35.28	
E 6+56.47	LT	26.11	3
TO E 6+58.53	LT	28.43	
E 6+58.53	LT	28.43	9
TO E 6+64.03	LT	21.59	
E 6+64.03	LT	21.59	40.5
TO E 7+04.52	LT	19.80	
TOTAL			209 LF



FILE NAME = 980593_C950119_RT166_cph.msdc01.E.dgn
 DATE/TIME = 30-JUL-2015 14:02
 USER = jphillips

PROJECT MANAGER G. WOJCIK
 CHECK J.L. PHILLIPS
 DRAFTING D. MELSZER
 CHECK J.L. PHILLIPS
 DESIGN D. MELSZER
 JOB MANAGER J.L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER



- NOTES:**
1. THE COST OF THE POSTS, SPLICE TUBE AND RAIL FOR THE LOWER TUBE FLARE SECTION IS INCLUDED IN THE PRICE BID FOR THE TRANSITION ITEM.
 2. SEE TYPICAL RAIL TO POST CONNECTION DETAIL ON CURRENT HIGHWAY STANDARD SHEET TITLED "BOX BEAM GUIDE RAIL".
 3. PAVE THIS AREA WITH THE SAME MATERIAL USED IN THE STABILIZED SHOULDER. PAYMENT WILL BE MADE UNDER THE SHOULDER MATERIAL ITEM (HIGHWAY ESTIMATE).

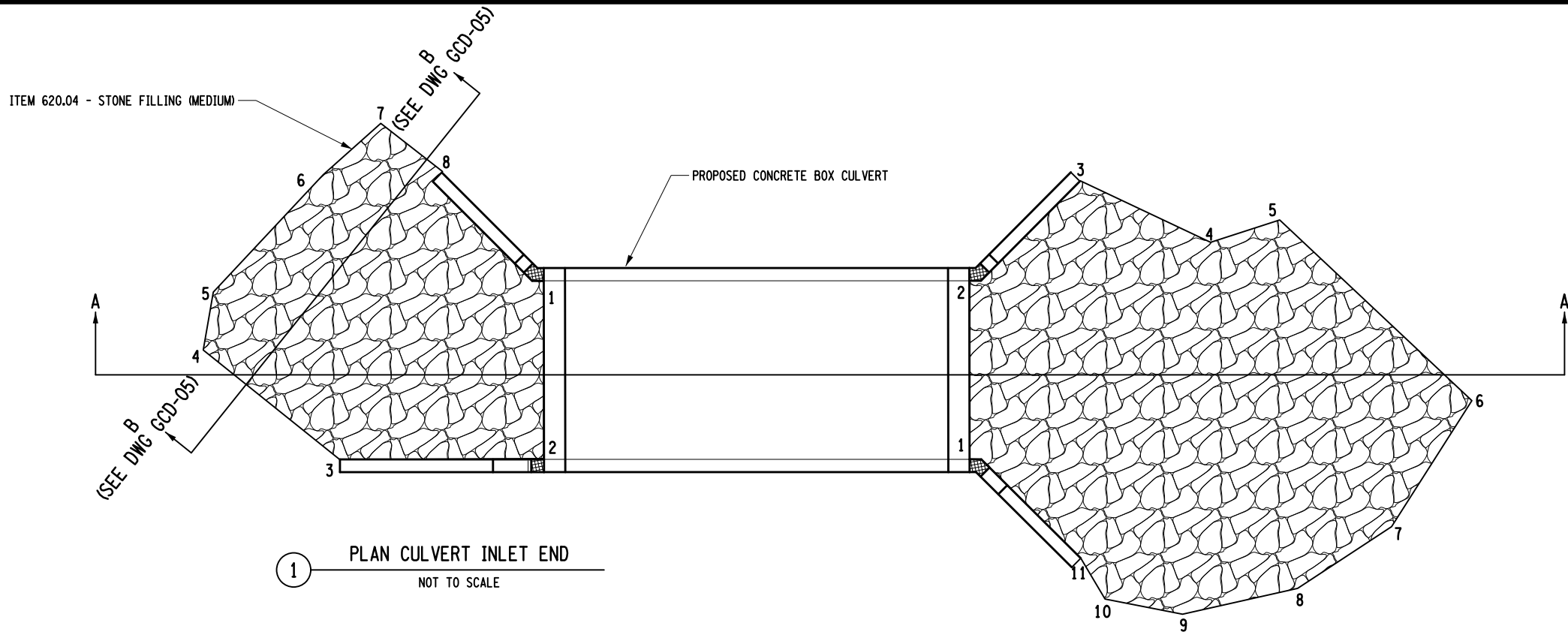
AFFIX SEAL: ON: ALTERED BY: ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 166, SH 8226 MILFORD - ROSEBOOM, PART 3 CULVERT REPLACEMENT PROJECT TOWN OF MIDDLEFIELD COUNTY: OTSEGO	PIN 9805.93 ROUTE 166 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS C950119	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED MISCELLANEOUS DETAILS	CONTRACT NUMBER D262989
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.					SITE E	DRAWING NO. MSD-01-E SHEET NO. 142



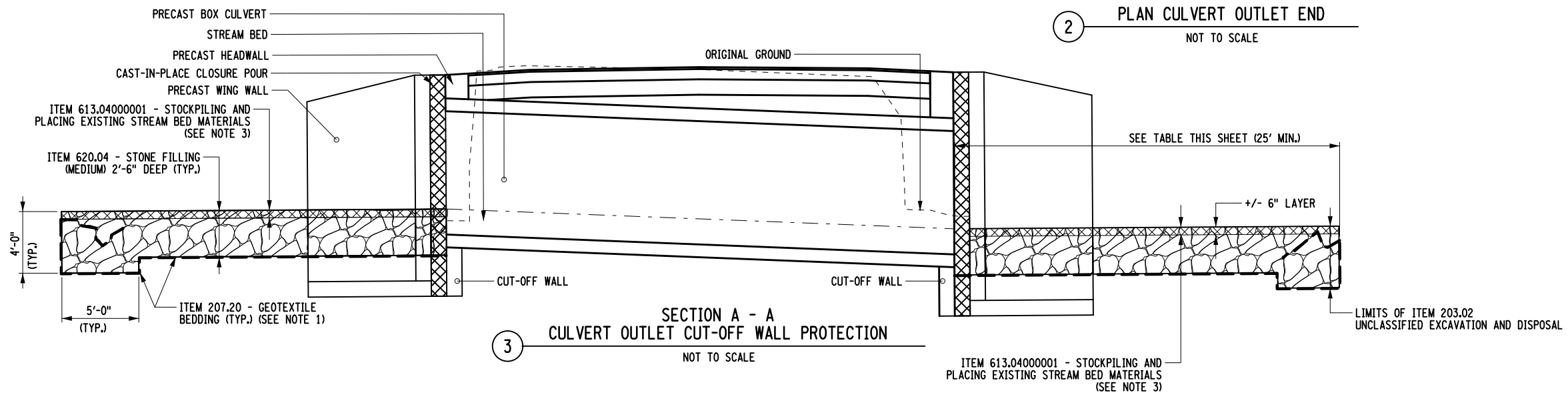
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 DATE/TIME = 30-JUL-2015 14:02
 USER = jphillips

PROJECT MANAGER G. WOJCIK
 CHECK J.L. PHILLIPS
 DRAFTING D. MELSZER
 CHECK J.L. PHILLIPS
 DESIGN D. MELSZER
 JOB MANAGER J.L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER



1 PLAN CULVERT INLET END
 NOT TO SCALE

2 PLAN CULVERT OUTLET END
 NOT TO SCALE



3 SECTION A - A
 CULVERT OUTLET CUT-OFF WALL PROTECTION
 NOT TO SCALE

- NOTES:
1. GEOTEXTILE BEDDING ITEM 207.20 SHALL BE SECURED BY BURYING THE FABRIC ENDS INTO THE STONE A DISTANCE EQUAL TO THE FULL HEIGHT OF DEPTH OF THE STONE FILLING. THE GEOTEXTILE BEDDING SHALL MEET THE REQUIREMENTS OF SPECIFICATION TABLE 737-01A CLASS I.
 2. EXCAVATED AND STOCKPILED NATIVE STREAM BED MATERIAL SHALL BE MIXED WITH THE MEDIUM STONE FILL DURING CONSTRUCTION OF THE SCOUR PROTECTION APRONS UPSTREAM AND DOWNSTREAM OF THE CULVERT IN ORDER TO FILL IN VOID SPACES. THE FILLING OF THE VOID SPACES IS NECESSARY TO PREVENT THE STREAM FLOW FROM PERCOLATING BELOW THE STREAM BED GRADE DURING LOW FLOWS. THE STONE FILL IN THE LOWER PORTIONS OF THE APRONS SHALL BE MIXED WITH STOCKPILED NATIVE MATERIAL SOURCED FROM THE DEEPER STREAM BED LAYER. THE SURFACE OF THE NEWLY CONSTRUCTED APRONS (OR LAYERS THEREOF IF PLACED IN MULTIPLE LIFTS) SHALL BE SPRAYED SUFFICIENTLY WITH WATER TO WASH FINER PARTICLES DOWN INTO THE DEEPER VOID SPACES. IF THE NATIVE STREAM BED MATERIAL DOES NOT CONTAIN ENOUGH PARTICLES OF FINE SAND SIZE OR SMALLER TO COMPRISE APPROXIMATELY 5-10% PROPORTION OF THE VOLUME OF THE APRON MATERIAL, ENOUGH OF THIS FINE MATERIAL SHALL BE ADDED TO ACHIEVE THIS APPROXIMATE PROPORTION OF FINES IN THE LOWER 75% OF THE DEPTH OF THE APRON. ANY WASH WATER COLLECTING IN OR FLOWING FROM THE BASE OF THE STONE FILL SHALL BE ALLOWED TO PERCOLATE INTO THE GROUND (PREFERRED), OR IF NECESSARY, DISCHARGED TO A SETTLING BASIN, FILTER SOCK, OR SIMILAR SEDIMENT CONTROL MECHANISM APPROVED BY THE ENGINEER IN CHARGE. THE PLACEMENT OF NATIVE STREAM BED MATERIAL SHALL BE PAID FOR UNDER ITEM 613.04000001.
 3. THE EXCAVATION FOR THE RIP-RAP WILL BE PAID FOR UNDER ITEM 203.02 - UNCLASSIFIED EXCAVATION AND DISPOSAL. PRIOR TO THIS EXCAVATION, THE USABLE STREAM BED MATERIAL SHALL BE EXCAVATED AND STORED USING ITEM 614.04000001 - STOCKPILING AND PLACING EXISTING STREAMBED MATERIALS.

TABLE OF STONE FILLING (MEDIUM) ITEM 620.04 - INLET END			
LOCATION	STREAM STATION	OFFSET (FT)	ELEVATION
1	ST 1+37.50	12.79 LT	1315.0
2	ST 1+37.50	6.32 RT	1315.0
3	ST 1+22.61	10.19 RT	1320.0
4	ST 1+15.11	8.93 RT	1320.0
5	ST 1+12.42	5.19 RT	1316.0
6	ST 1+11.93	7.39 LT	1316.0
7	ST 1+12.17	13.45 LT	1320.0
8	ST 1+26.66	11.69 LT	1320.0

TABLE OF STONE FILLING (MEDIUM) ITEM 620.04 - OUTLET END			
LOCATION	STREAM STATION	OFFSET (FT)	ELEVATION
1	ST 1+72.86	7.04 RT	1313.5
2	ST 1+70.82	6.69 LT	1313.5
3	ST 1+76.13	18.06 LT	1316.0
4	ST 1+83.17	15.50 LT	1316.0
5	ST 1+87.17	19.50 LT	1316.0
6	ST 1+94.51	18.50 LT	1314.0
7	ST 2+02.47	15.56 LT	1310.5
8	ST 2+05.03	4.12 LT	1310.5
9	ST 2+03.27	4.51 RT	1313.0
10	ST 1+94.63	11.43 RT	1316.0
11	ST 1+89.91	12.79 RT	1316.0

AFFIX SEAL:
ON:

ALTERED BY:
ON:

AS-BUILT REVISIONS
 DESCRIPTION OF ALTERATIONS:

NYS ROUTE 166, SH 8226
 MILFORD - ROSEBOOM, PART 3
 CULVERT REPLACEMENT PROJECT
 TOWN OF MIDDLEFIELD
 COUNTY: OTSEGO REGION: 09

PIN 9805.93
 ROUTE 166
 UTILITY QUALITY LEVEL D

BRIDGES
 CULVERTS
 C950119

ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED
 MISCELLANEOUS DETAILS
 SITE E

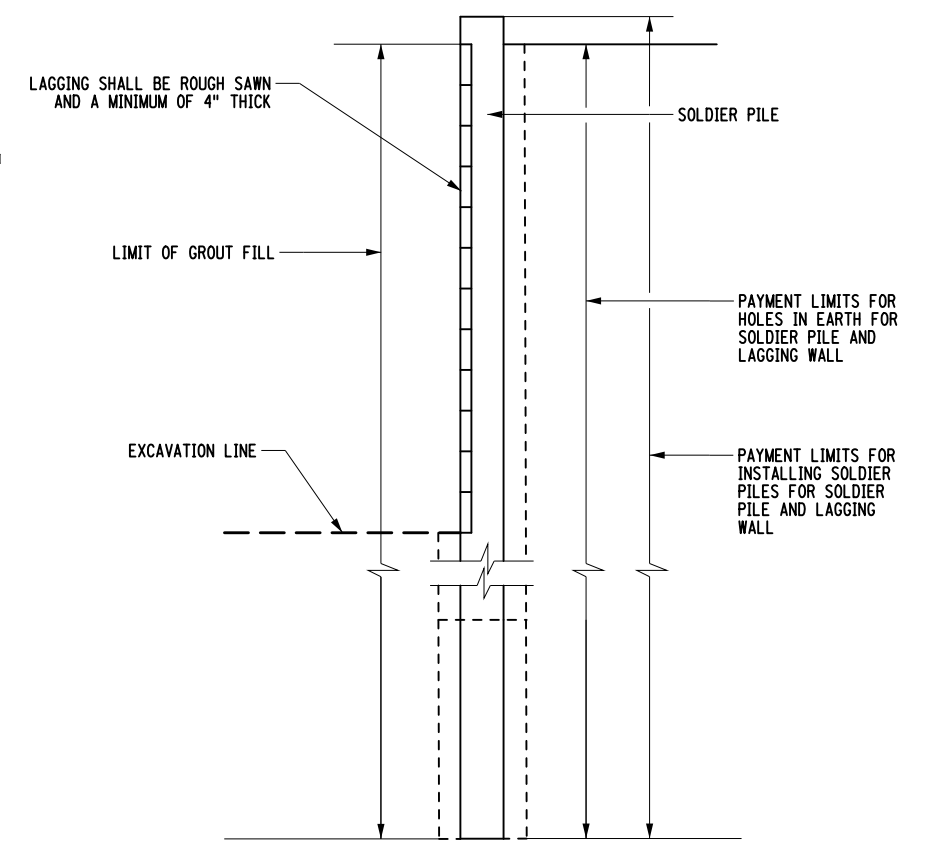
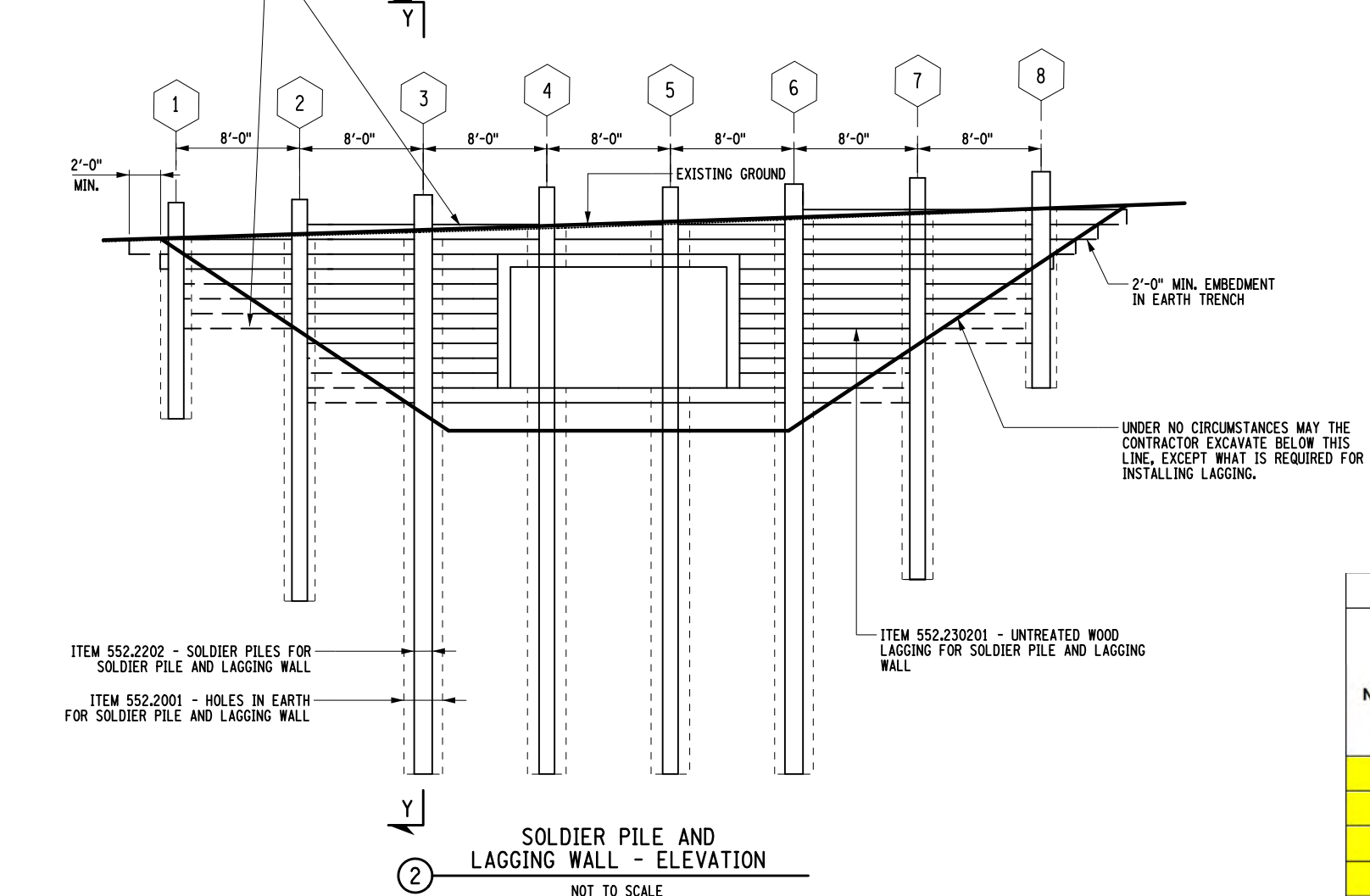
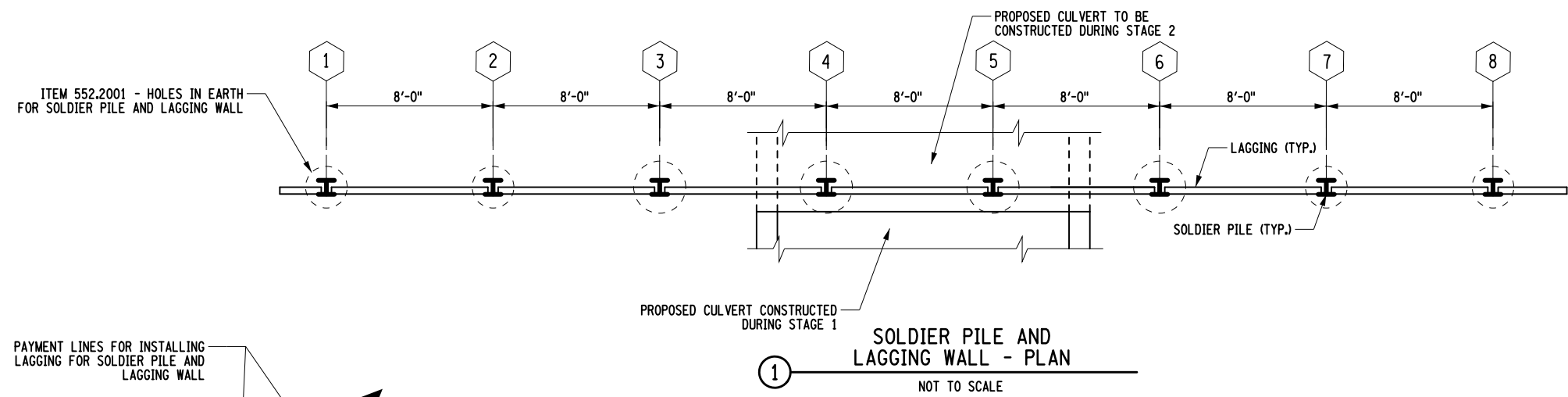
CONTRACT NUMBER
 D262989
 DRAWING NO. MSD-02-E
 SHEET NO. 143

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



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 DATE/TIME = 30-JUL-2015 14:02
 USER = jphillips

PROJECT MANAGER G. WOJCIK
 CHECK J.L. PHILLIPS
 DRAFTING G. MEYER
 CHECK J.L. PHILLIPS
 DESIGN D. MELSZER
 JOB MANAGER J.L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER



PILE NUMBER	STATION	PILE TOP ELEVATION ¹ (FEET)	DEPTH OF EXCAVATION (FEET)	ESTIMATED PILE TIP ELEV. (FEET)	ESTIMATED PILE LENGTH (FEET)	MINIMUM PILE SECTION MODULUS (CUBIC INCHES)	SOLDIER PILE SECTION	MINIMUM DIA. OF HOLE (INCHES)
1	LWR 6+13.00	1324.00	3.00	1310.00	14.00	79.10	HP12X74	24
2	LWR 6+21.00	1324.20	8.50	1298.20	26.00	79.10	HP12X74	24
3	LWR 6+29.00	1324.50	13.00	1286.50	38.00	208.50	W14X132	30
4	LWR 6+37.00	1324.80	13.00	1286.80	38.00	208.50	W14X132	30
5	LWR 6+45.00	1325.00	13.00	1287.00	38.00	208.50	W14X132	30
6	LWR 6+53.00	1325.20	13.00	1287.20	38.00	208.50	W14X132	30
7	LWR 6+61.00	1325.60	9.80	1299.60	26.00	79.10	HP12X74	24
8	LWR 6+69.00	1326.00	5.00	1312.00	14.00	79.10	HP12X74	24

AFFIX SEAL: ON:

ALTERED BY: ON:

NOTE:
 IF CONTRACTOR ELECTS NOT TO LAY SLOPE BACK AND NOT USE THE EXCAVATION SUPPORT SYSTEM AS DETAILED, ANY EXCAVATION SUPPORT SYSTEM USED MUST BE DESIGNED FOR ANTICIPATED CONSTRUCTION LOADING.

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:

NYS ROUTE 166, S.H. 8226
 MILFORD-ROSEBOOM, PART 3
 CULVERT REPLACEMENT PROJECT
 TOWN OF MIDDLEFORD
 COUNTY: OTSEGO REGION: 09

PIN 9805.93
 ROUTE 166
 UTILITY QUALITY LEVEL D

BRIDGES

CULVERTS C950119

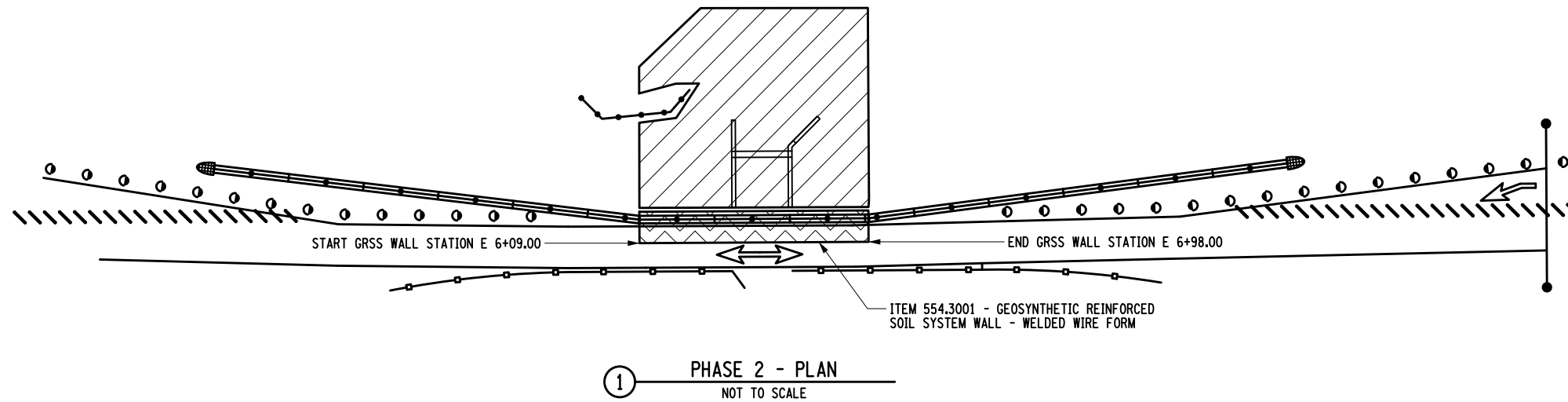
ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED
 SOLDIER PILE & LAGGING WALL DETAILS

SITE E

CONTRACT NUMBER D262989
 DRAWING NO. GED-01-E
 SHEET NO. 144

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

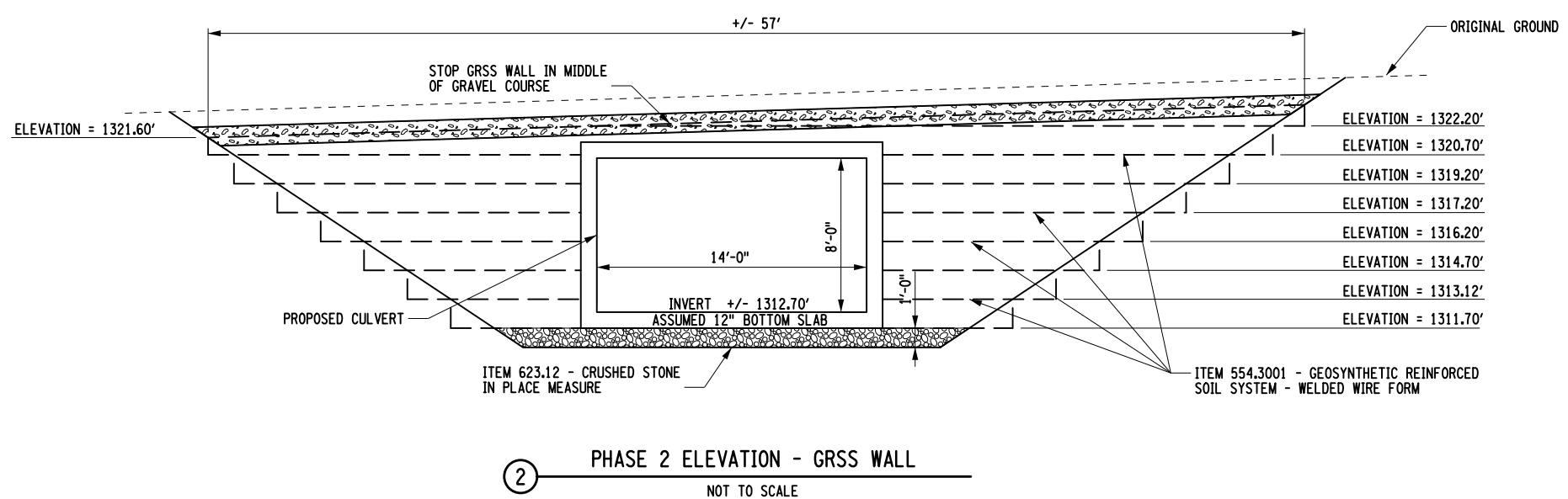




- NOTES:
1. PROVIDE STEEL H-PILES MEETING REQUIREMENTS OF ASTM A572 GRADE 50 STEEL.
 2. LARGE BOULDERS WILL BE ENCOUNTERED WHILE DRILLING HOLES FOR SOLDIER PILES.
 3. TEMPORARY CASING WILL BE NECESSARY TO KEEP DRILLED HOLES OPEN.
 4. THE FOLLOWING INFORMATION WAS USED IN THE DESIGN OF THE SOLDIER PILE AND LAGGING WALL:

LOCATION	ELEVATION (FT)	UNIT WEIGHT (LBS/FT ³)	FRICTION ANGLE (DEGREES)	COHESION (LBS/FT ²)	WALL FRICTION (DEGREES)	PILE SPACING (FT)
C950119	0.G.S. TO 1300.0	120	33	0	0	8.0
	1300.0 TO 1288.0	120	35	0	0	

- A. DIVIDE THE PASSIVE EARTH PRESSURE COEFFICIENT (Kp) BY 1.25.
- B. GROUNDWATER IS ASSUMED AT ELEVATION 1319.0 FEET.
- C. A SURCHARGE LOAD OF 250 POUNDS PER SQUARE FOOT IS ASSUMED AT THE TOP OF THE WALL.



FILE NAME = 980593_C950119_RT166_cph_ged_02_E.dgn
 DATE/TIME = 30-JUL-2015 14:02
 USER = jphillips

PROJECT MANAGER G. WOJCIK
 CHECK J.L. PHILLIPS
 DRAFTING G. MEYER
 CHECK J.L. PHILLIPS
 DESIGN D. MELSZER
 JOB MANAGER J.L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER

AFFIX SEAL: ON:	ALTERED BY: ON:

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

NYS ROUTE 166, S.H. 8226
 MILFORD-ROSEBOOM, PART 3
 CULVERT REPLACEMENT PROJECT
 TOWN OF MIDDLEFIELD
 COUNTY: OTSEGO REGION: 09

PIN 9805.93
 ROUTE 166
 UTILITY QUALITY LEVEL D
 BRIDGES
 CULVERTS
 C950119
 SITE E

ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED
 GEOTECHNICAL DETAILS

CONTRACT NUMBER
 D262989
 DRAWING NO. GED-02
 SHEET NO. 145

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



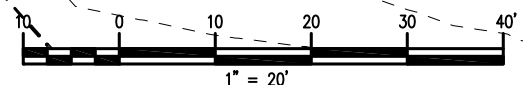
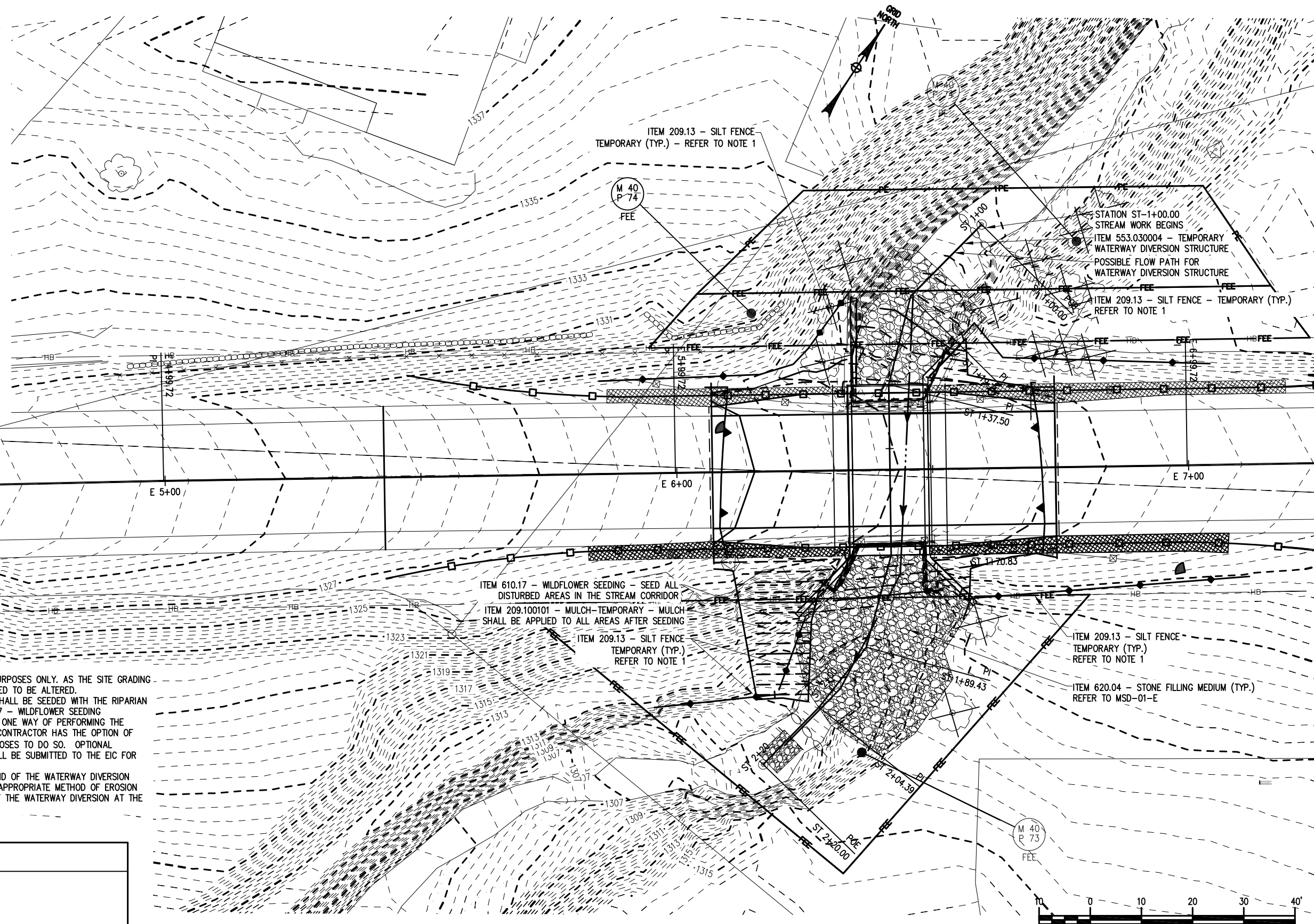
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 DATE/TIME = 7/30/2015 3:28:01 PM
 USER = dmelszr

PROJECT MANAGER G. WOJCIK
 CHECK J. L. PHILLIPS
 DRAFTING D. WELSZER
 CHECK J. L. PHILLIPS
 DESIGN D. WELSZER
 JOB MANAGER FIRST INITIAL LAST NAME DESIGN D. WELSZER

RIPARIAN SEED MIX NAME	WEIGHT LIVE SEED/ACRE	PERCENT BY WEIGHT
ANNUAL RYGRASS LOLOUM MULTIFLORUM	21 LB	78
RED TOP AGROSTIS ALBA	1 LB	4
SWITCHGRASS PANICUM VIRGATUM	0.5 LB	2
MEADOW FOXTAIL ALOPECURUS PRATENSIS	0.5 LB	2
SOFT STEM BULRUSH SCIRPUS VALIDUS	0.5 LB	2
FOX SEDGE CAREX VULPINOIDEA	0.5 LB	2
JOE PYE WEED EUPATORIUM MACULATUS	0.5 LB	2
BONESET EUPATORIUM PEROLIATUM	0.5 LB	2
BLUE VERVAIN VERBENA HASTATA	0.5 LB	2
NEW YORK IRONWEED VERONICA NOVEBORACENSIS	0.5 LB	2

SEED AT A RATE OF 18LBS/ACRE
 MINIMUM PURITY OF 95%
 MINIMUM GERMINATION 85%

- NOTES:
- SILT FENCE LAYOUT IS SHOWN FOR ILLUSTRATIVE PURPOSES ONLY. AS THE SITE GRADING IS PROGRESSED THE SILT FENCE LOCATION MAY NEED TO BE ALTERED.
 - ALL DISTURBED AREAS IN THE STREAM CORRIDOR SHALL BE SEEDED WITH THE RIPARIAN SEED MIXTURE SHOWN PAID FOR UNDER ITEM 610.17 - WILDFLOWER SEEDING
 - THE WATERWAY DIVERSION SHOWN ON THE PLAN IS ONE WAY OF PERFORMING THE STREAM WORK AND CULVERT REPLACEMENT. THE CONTRACTOR HAS THE OPTION OF STAGING THE WATERWAY DIVERSION IF HE/SHE CHOOSES TO DO SO. OPTIONAL METHODS OF USING THE WATERWAY DIVERSION SHALL BE SUBMITTED TO THE EIC FOR REVIEW AND APPROVAL.
 - THE EROSION CONTROL BLANKET SHOWN AT THE END OF THE WATERWAY DIVERSION STRUCTURE. THE CONTRACTOR SHALL INCLUDE AN APPROPRIATE METHOD OF EROSION CONTROL BASED ON THE VOLUME AND VELOCITY OF THE WATERWAY DIVERSION AT THE OUTLET.



AFFIX SEAL ON:

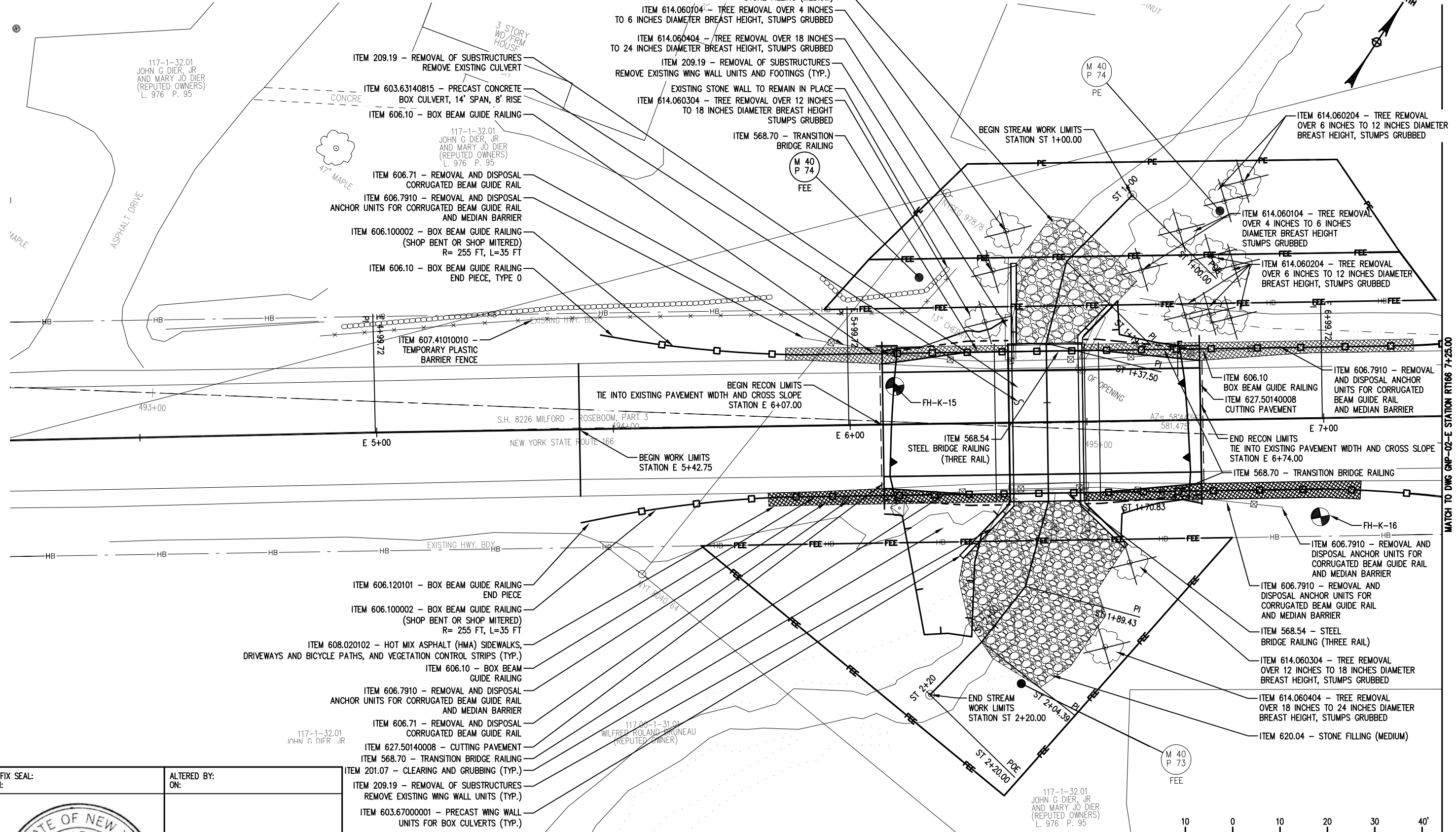
ALTERED BY ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 166 - SH 8226	PIN 9805.93	BRIDGES	CULVERTS C950119	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	MILFORD - ROSEBOOM, PART 3	ROUTE 166	UTILITY QUALITY LEVEL D			EROSION CONTROL PLANS SITE E	DRAWING NO. ECP-01-E
	CULVERT REPLACEMENT PROJECT					SHEET NO. 146
	TOWN OF MIDDLEFIELD					
	COUNTY: OTSEGO					

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NEW YORK STATE OF PROFESSIONAL ENGINEERS
 Department of Transportation

NOTE: PROJECT LIMITS ARE 1/4 MILE FROM STATION 5+42.75 AND 1/4 MILE FROM STATION 7+70.00



PROJECT MANAGER G. WOJCIK
 CHECK J. L. PHILLIPS
 DRAFTING D. MELSZER
 CHECK J. L. PHILLIPS
 DESIGN D. MELSZER
 JOB MANAGER FIRST INITIAL LAST NAME
 DESIGN D. MELSZER
 JOB MANAGER FIRST INITIAL LAST NAME
 DESIGN D. MELSZER

FILE NAME = D262989_980593_R09_Site_E_fec_wvy_Feature_File.dwg
 DATE / TIME = 8/4/2015 11:06:55 AM
 USER = dmelszer

AFFIX SEAL ON:
 ALTERED BY ON:



- ITEM 606.120101 - BOX BEAM GUIDE RAILING END PIECE
- ITEM 606.100002 - BOX BEAM GUIDE RAILING (SHOP BENT OR SHOP MITERED) R= 255 FT, L=35 FT
- ITEM 608.020102 - HOT MIX ASPHALT (HMA) SIDEWALKS, DRIVEWAYS AND BICYCLE PATHS, AND VEGETATION CONTROL STRIPS (TYP.)
- ITEM 606.10 - BOX BEAM GUIDE RAILING
- ITEM 606.7910 - REMOVAL AND DISPOSAL ANCHOR UNITS FOR CORRUGATED BEAM RAIL AND MEDIAN BARRIER
- ITEM 606.71 - REMOVAL AND DISPOSAL CORRUGATED BEAM GUIDE RAIL
- ITEM 627.50140008 - CUTTING PAVEMENT
- ITEM 568.70 - TRANSITION BRIDGE RAILING
- ITEM 201.07 - CLEARING AND GRUBBING (TYP.)
- ITEM 209.19 - REMOVAL OF SUBSTRUCTURES REMOVE EXISTING WING WALL UNITS (TYP.)
- ITEM 603.67000001 - PRECAST WING WALL UNITS FOR BOX CULVERTS (TYP.)

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 166 - SH 8226
	MILFORD - ROSEBOOM, PART 3
	CULVERT REPLACEMENT PROJECT
	TOWN OF MIDDLEFIELD
	COUNTY: OTSEGO

PIN 9805.93	BRIDGES
ROUTE 166	CULVERTS C950119
UTILITY QUALITY LEVEL D	

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
GENERAL PLANS SITE E	DRAWING NO. GNP-01-E
	SHEET NO. 147

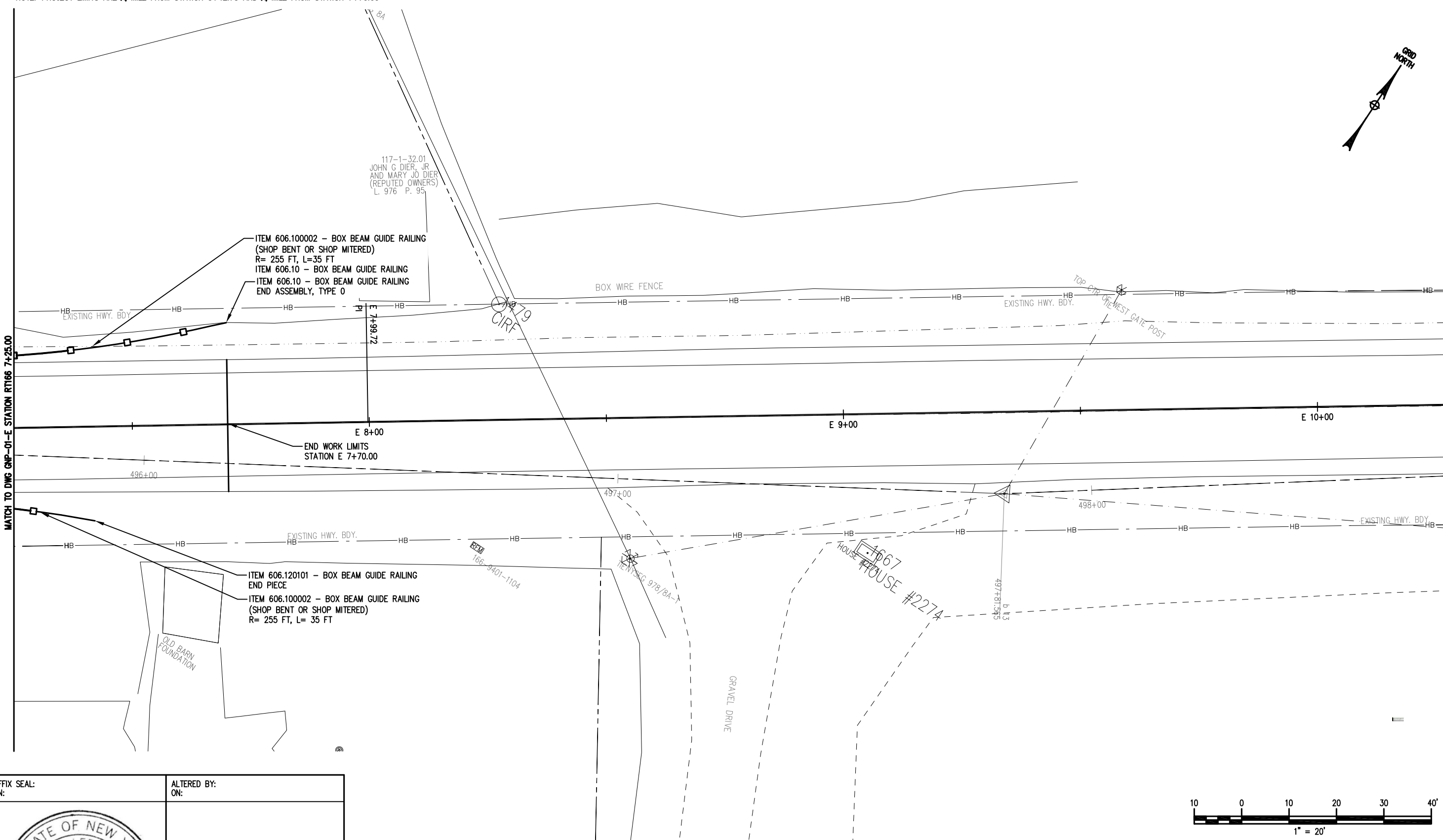
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 USER = dmelszr

DESIGN SUPERVISOR FIRST INITIAL LAST NAME JOB MANAGER FIRST INITIAL LAST NAME DESIGN D. MELSZER
 CHECK J. L. PHILLIPS DRAFTING D. MELSZER CHECK J. L. PHILLIPS PROJECT MANAGER G. WOJCIK

NOTE: PROJECT LIMITS ARE 1/4 MILE FROM STATION 5+42.75 AND 1/4 MILE FROM STATION 7+70.00



AFFIX SEAL:
ON:



ALTERED BY:
ON:

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

NYS ROUTE 166 - SH 8226
 MILFORD - ROSEBOOM, PART 3
 CULVERT REPLACEMENT PROJECT
 TOWN OF MIDDLEFIELD
 COUNTY: OTSEGO

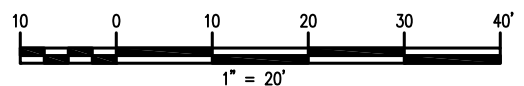
PIN 9805.93
 ROUTE 166
 UTILITY QUALITY LEVEL D

BRIDGES

CULVERTS
C950119

ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED
 GENERAL PLANS
 SITE E

CONTRACT NUMBER
D262989
 DRAWING NO. GNP-02-E
 SHEET NO. 148



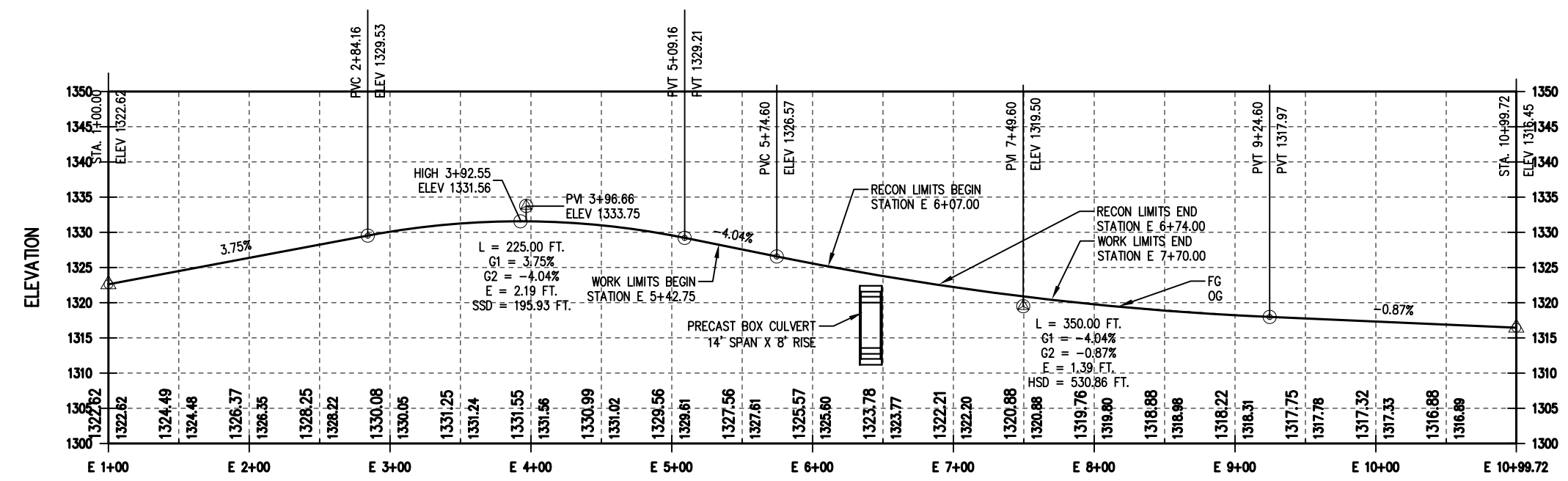
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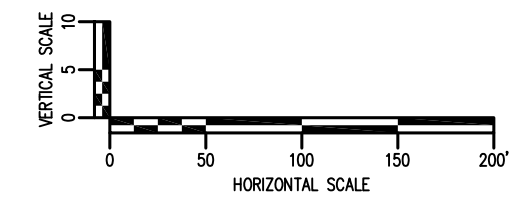
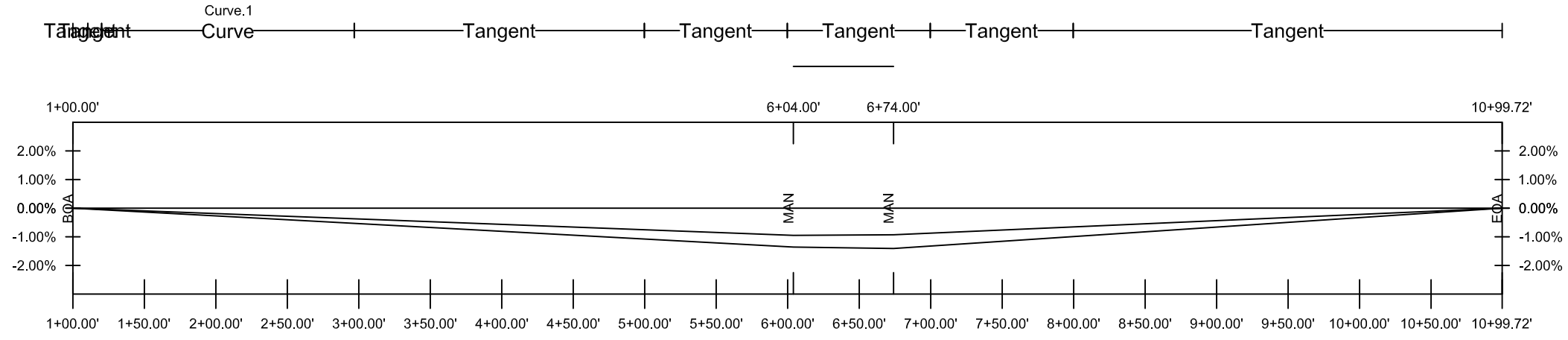
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DESIGN SUPERVISOR FIRST INITIAL LAST NAME JOB MANAGER FIRST INITIAL LAST NAME DESIGN D. MELSZER CHECK J. L. PHILLIPS DRAFTING D. MELSZER CHECK J. L. PHILLIPS PROJECT MANAGER G. WOJCIK

PROPOSED ROUTE 166 PROFILE



Superelevation



AFFIX SEAL ON:

ALTERED BY ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 166 - SH 8226	PIN 9805.93	BRIDGES	CULVERTS C950119	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED ROUTE 166 PROFILE SITE E	CONTRACT NUMBER D262989
	MILFORD - ROSEBOOM, PART 3	ROUTE 166	UTILITY QUALITY LEVEL D			DRAWING NO. PRO-01-E SHEET NO. 149
	CULVERT REPLACEMENT PROJECT					
	TOWN OF MIDDLEFIELD					
	COUNTY: OTSEGO					

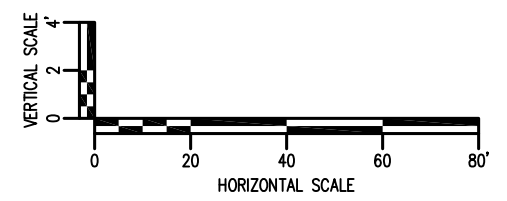
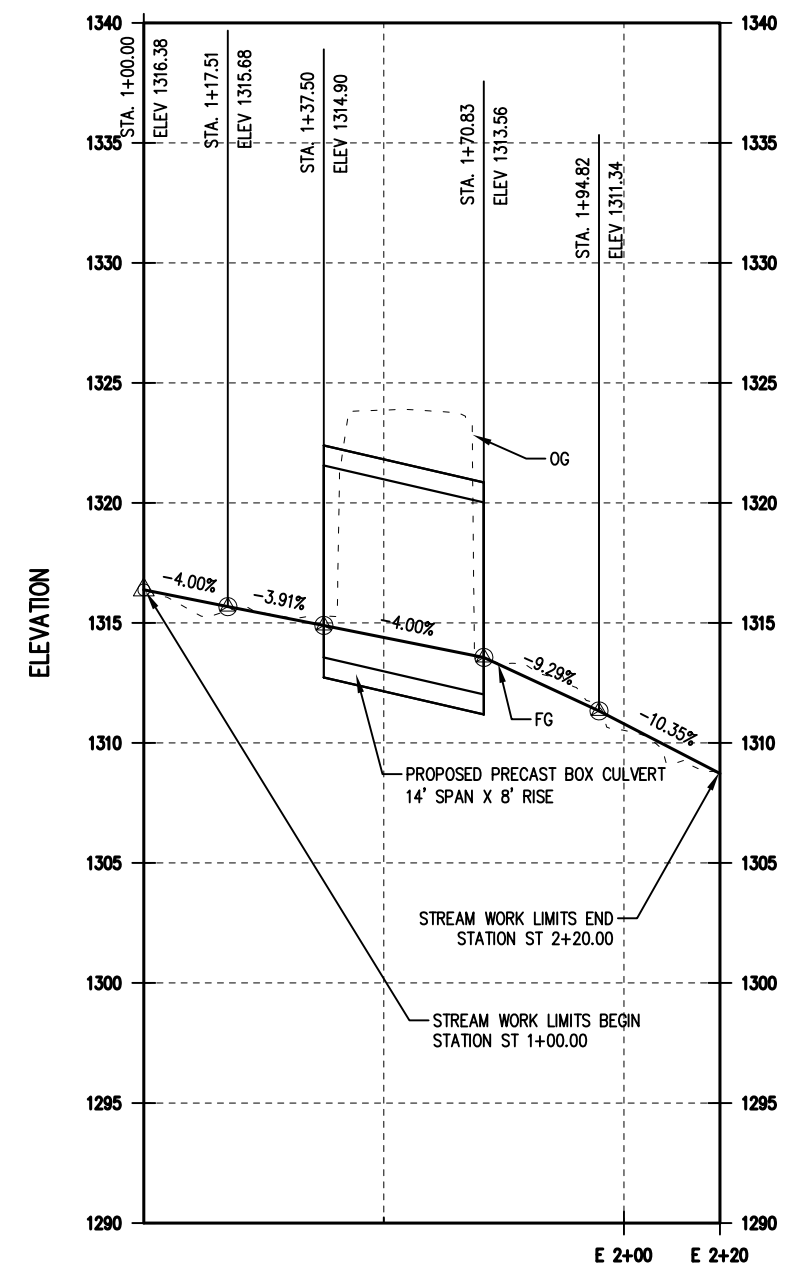
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NEW YORK STATE OF OPEN OPPORTUNITY. Department of Transportation

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 USER = klorf

DESIGN SUPERVISOR FIRST INITIAL LAST NAME JOB MANAGER FIRST INITIAL LAST NAME DESIGN D. MELSZER CHECK J. L. PHILLIPS DRAFTING D. MELSZER CHECK J. L. PHILLIPS PROJECT MANAGER G. WOJCIK

PROPOSED STREAM PROFILE



AFFIX SEAL ON: ALTERED BY ON:



AS-BUILT REVISIONS
 DESCRIPTION OF ALTERATIONS:

NYS ROUTE 166 - SH 8226
 MILFORD - ROSEBOOM, PART 3
 CULVERT REPLACEMENT PROJECT
 TOWN OF MIDDLEFIELD
 COUNTY: OTSEGO

PIN 9805.93
 ROUTE 166
 UTILITY QUALITY LEVEL D

BRIDGES

CULVERTS
 C950119

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED
 STREAM PROFILE
 SITE E

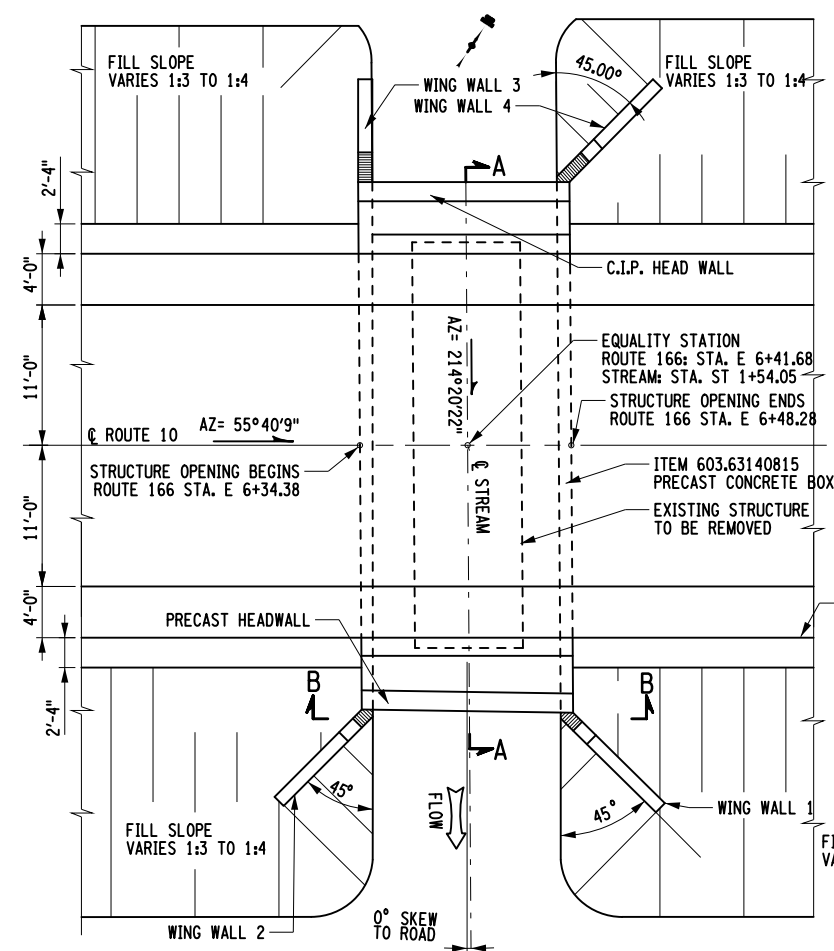
CONTRACT NUMBER
 D262989
 DRAWING NO. PRO-02-E
 SHEET NO. 150

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



FILE NAME = 980593_C950119_RT166_cph_cdt_01_E.dgn
 DATE/TIME = 30-JUL-2015 14:02
 USER = jphillips

PROJECT MANAGER G. WOJCIK
 CHECK J.L. PHILLIPS
 DRAFTING G. MEYER
 CHECK J.L. PHILLIPS
 DESIGN D. WELSZER
 JOB MANAGER J.L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER



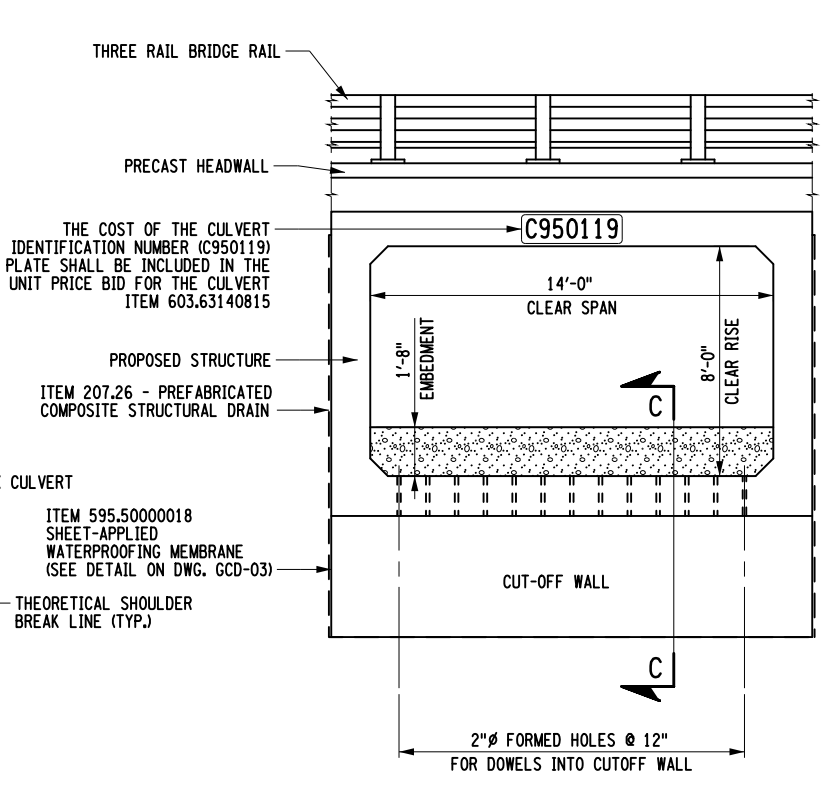
1 CULVERT PLAN VIEW
NOT TO SCALE

GEOTECHNICAL PRECAST CANTILEVER WING WALL SOIL PARAMETERS AND RESISTANCE FACTORS						
FRICTION ANGLE OF SOIL RETAINED BY THE WALL (DEGREES).	FRICTION ANGLE OF FOUNDATION SOIL (DEGREES)	TOTAL SOIL UNIT WEIGHT (LBS/FT ³)	MAXIMUM SERVICE LIMIT STATE BEARING RESISTANCE (LBS/FT ²)	NOMINAL COEFFICIENT OF FRICTION FOR SLIDING	STRENGTH LIMIT STATE RESISTANCE FACTOR FOR SLIDING	STRENGTH LIMIT STATE RESISTANCE FACTOR FOR BEARING
33	36	120	5.0	0.58	0.90	0.45

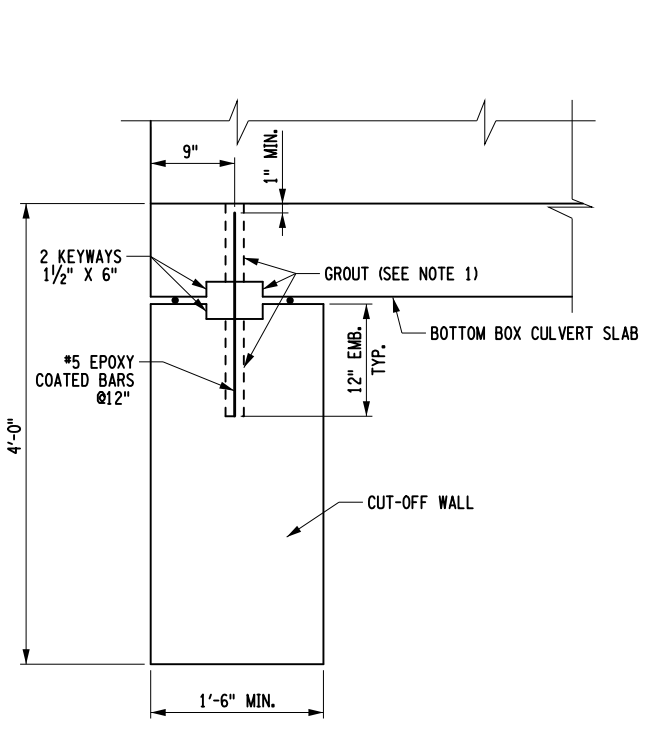
- NOTES:
- FOR THE SLIDING AND ECCENTRICITY ANALYSIS, ASSUME A GROUNDWATER ELEVATION OF 1316 FEET.
 - FOR THE BEARING ANALYSIS, ASSUME A GROUNDWATER ELEVATION OF 1312 FEET.
 - USE SUBMERGED UNIT WEIGHTS BELOW THE GROUNDWATER ELEVATIONS PROVIDED.
 - ASSUME A SURCHARGE LOAD OF 250 POUNDS PER SQUARE FOOT.

BOX CULVERT DESIGN DATA	
CLEAR SPAN, ft.	14'-0"
CLEAR RISE, ft.	8'-0"
MIN. FILL HEIGHT, ft.	0'
MAX. FILL HEIGHT, ft.	2'-0"
(CSKEW) SKEW ANGLE \perp TO ϕ OF ROADWAY, DEG.	0.0 DEGREES
LIVE LOAD	HL93
RAILING / BARRIER TEST LEVEL	TL-4

BASED ON ASSUMED TOP SLAB THICKNESS OF 12". FABRICATOR SHALL ADJUST BASED ON ACTUAL TOP SLAB THICKNESS. (DESIGNER TO FILL IN VALUE)

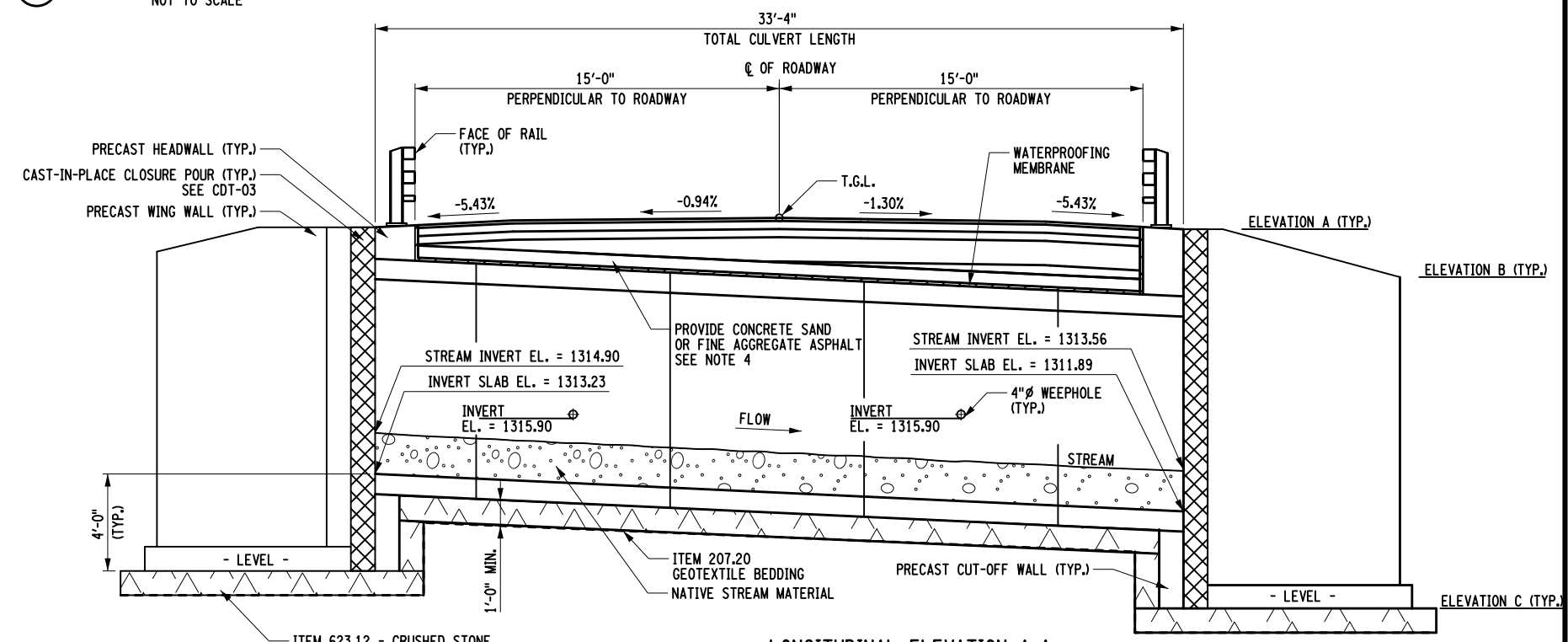


2 CULVERT SECTION B-B
NOT TO SCALE



3 CULVERT SECTION C-C
NOT TO SCALE

- NOTES:
- DOWEL BARS USED TO ATTACH THE CUT-OFF WALL TO THE BOX CULVERT SHALL BE DRILLED AND GROUTED PER THE REQUIREMENTS OF STANDARD SPECIFICATION SECTION 586 EXCEPT THE GROUT SHALL MEET THE REQUIREMENTS OF § 701-06. THE KEYWAY SHALL BE GROUTED WITH THE SAME MATERIAL AS THE DOWELS. WHEN THE GRADE OF THE BOX EXCEEDS 5%, THE TOP OF THE CUT-OFF WALL SHOULD BE BEVELED TO MATCH THE GRADE. PLACE A BEAD OF CAULK, CLOSED CELL FOAM OR OTHER SUITABLE MATERIAL ON BOTH SIDES OF THE KEYWAY TO CONTAIN THE GROUT. THE COST OF GROUT AND REBAR SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 603.63140815.
 - WEEPHOLE ELEVATION = STREAM INVERT ELEVATION (1314.90 FT) PLUS THE NORMAL DEPTH OF WATER ELEVATION FOR THE TWO YEAR STORM (0.50 FT) + 0.5' ADDITIONAL HEIGHT FROM THE NYS BRIDGE MANUAL.
 - PRECAST CUT-OFF WALLS AND WING WALLS SHALL BE PLACED ON A LEVELING BED OF ITEM 623.12 - CRUSHED STONE (IN-PLACE MEASURE), AND MEET THE REQUIREMENTS OF MATERIAL DESIGNATION 703-0201, 703-0202 OR 703-0204 WITH A PRIMARY SIZE DESIGNATION OF 2. AFTER PLACING AND LEVELING THE PRECAST UNITS, THE AREAS BENEATH AND BEHIND THE UNITS SHALL BE GROUTED WITH CONTROLLED LOW STRENGTH MATERIAL MEETING THE REQUIREMENTS OF SECTION 204 OF THE NYS DOT STANDRAD SPECIFICATION.
 - REFER TO THE SPECIAL SPECIFICATION 595.50000018 IN THE PROPOSAL FOR ADDITIONAL INFORMATION ON THE PROPER INSTALLATION AND PROTECTION OF THE ASPHALT MEMBRANE.



4 LONGITUDINAL ELEVATION A-A
NOT TO SCALE

NOTE: CHAMFERS, HAUNCHES, APRON AND DISHS ARE NOT SHOWN FOR CLARITY.

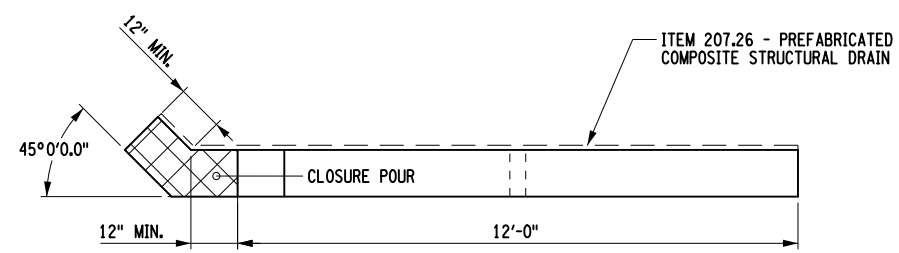
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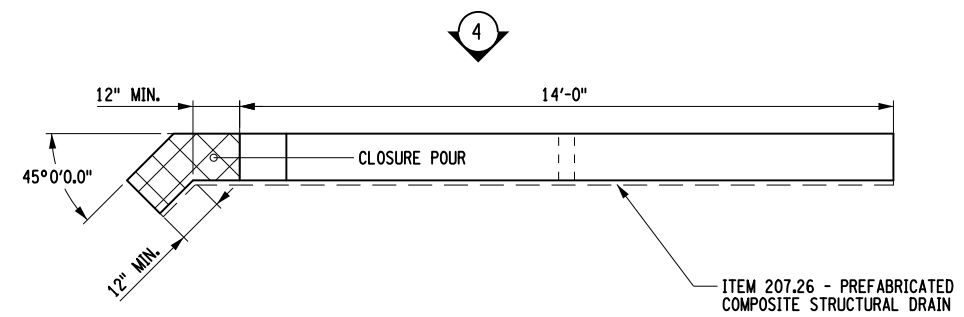
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 166, SH 8226	PIN 9805.93 ROUTE 166 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS C950119	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	MILFORD - ROSEBOOM, PART 3					
	CULVERT REPLACEMENT PROJECT					
	TOWN OF MIDDLEFIELD					
COUNTY: OTSEGO	REGION: 09	PRECAST BOX CULVERT PLAN AND SECTION		DRAWING NO. CDT-01-E SHEET NO. 151		

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

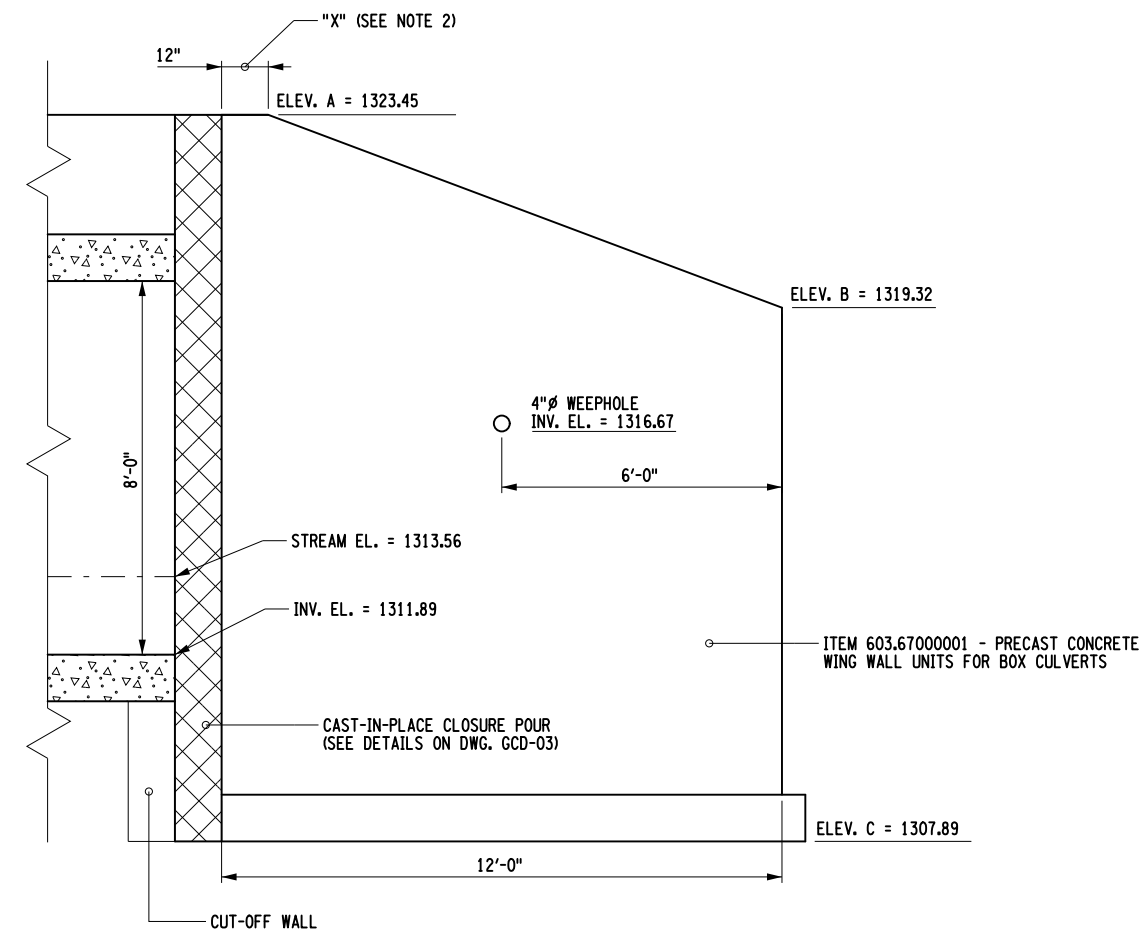




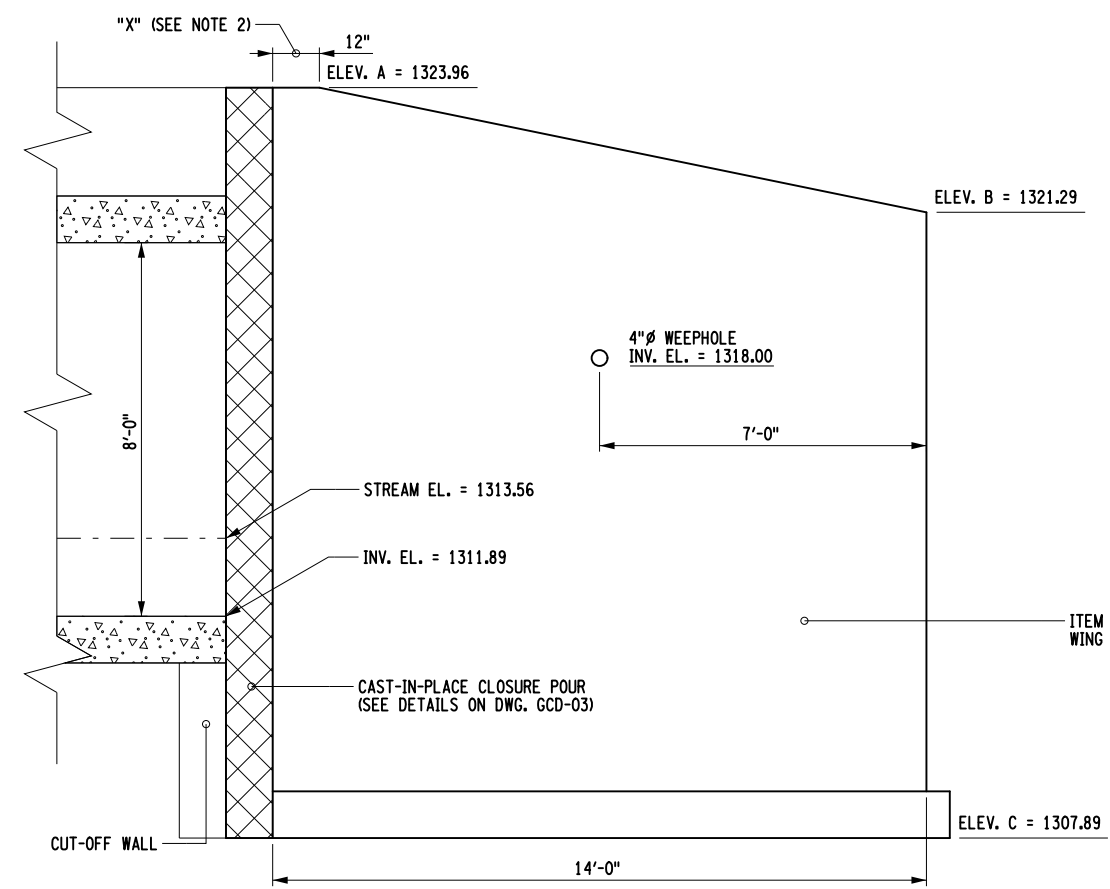
1 WING WALL 1 - PLAN VIEW
NOT TO SCALE



3 WING WALL 2 - PLAN VIEW
NOT TO SCALE



2 WING WALL 1 - ELEVATION VIEW
NOT TO SCALE



4 WING WALL 2 - ELEVATION VIEW
NOT TO SCALE

- NOTES:
1. WING WALLS, CULVERT TOP SLABS AND CULVERT BOTTOM SLABS ARE DRAWN AND ASSUMED TO BE 12" THICK. FINAL SIZE AND CONFIGURATION SHALL BE DETERMINED BY THE CONTRACTOR'S PRECAST FABRICATOR.
 2. DIMENSION "X" IS THE LEVEL DISTANCE ACROSS THE TOP OF THE WING WALL AND IS MEASURED ALONG THE FRONT FACE OF THE WALL.

PROJECT MANAGER G. WOJCIK
CHECK J. L. PHILLIPS
DRAFTING D. MELSZER
CHECK J. L. PHILLIPS
DESIGN D. MELSZER
JOB MANAGER J. L. PHILLIPS
DESIGN SUPERVISOR R. WILDER

FILE NAME = 980593_C950119_RT1166_cph.cdt_02_E.dgn
DATE/TIME = 06-AUG-2015 10:31
USER = jphillips

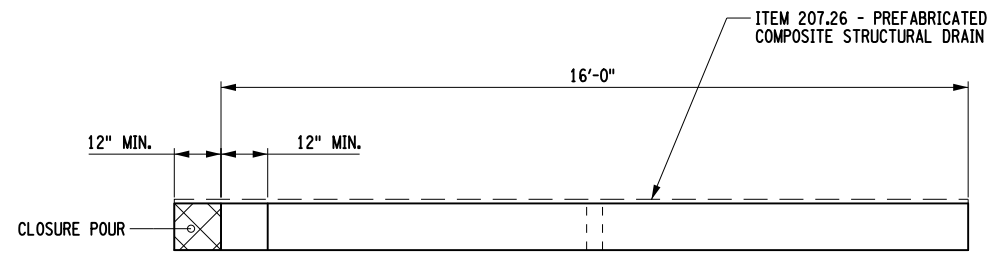
AFFIX SEAL: ON: _____
ALTERED BY: ON: _____



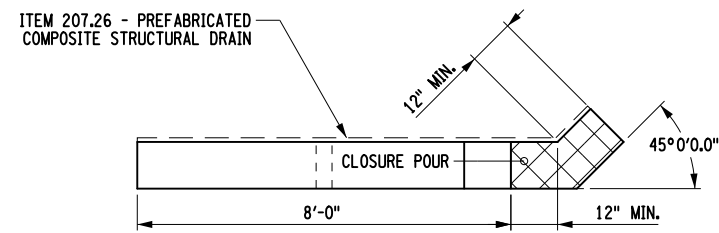
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 166, SH 8226	PIN 9805.93	BRIDGES	CULVERTS C950119	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
	MILFORD - ROSEBOOM, PART 3	ROUTE 166			WING WALL 1 & 2 DETAILS	DRAWING NO. CDT-02-E
	CULVERT REPLACEMENT PROJECT	UTILITY QUALITY LEVEL D				SHEET NO. 152
	TOWN OF MIDDLEFIELD					
	COUNTY: OTSEGO	REGION: 09				

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

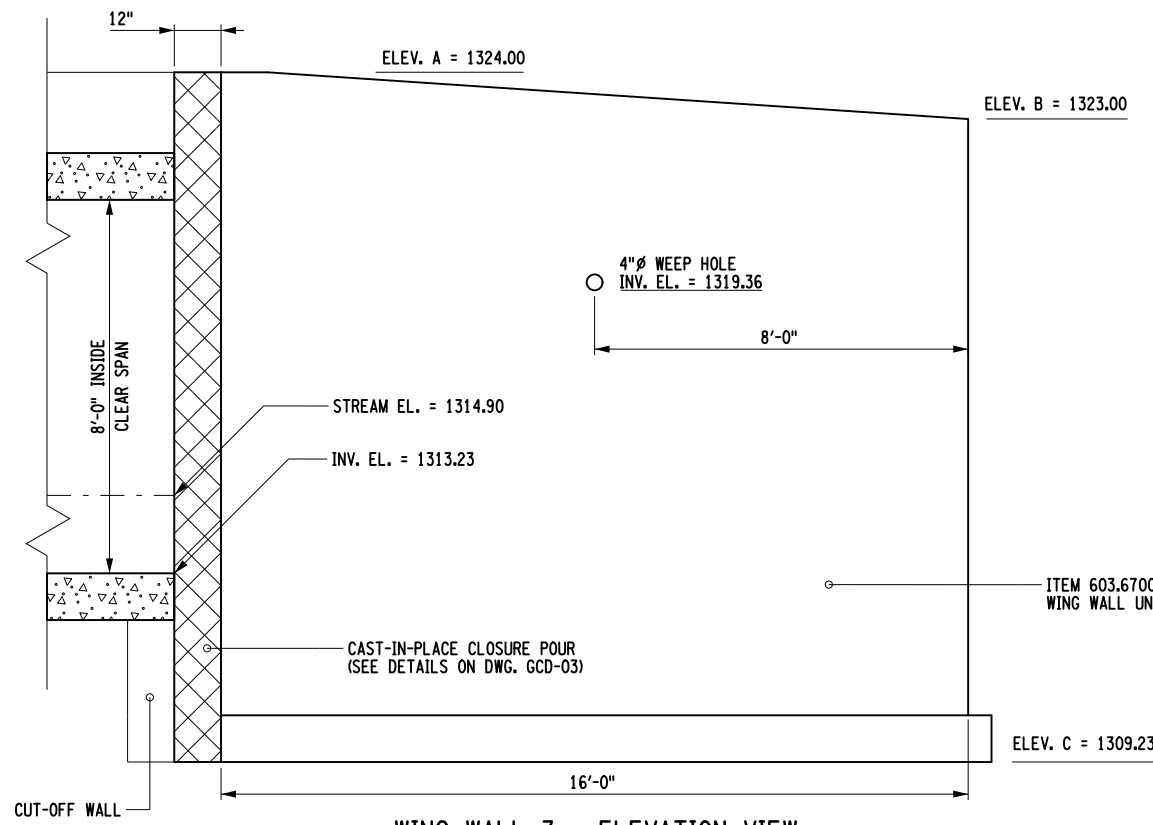




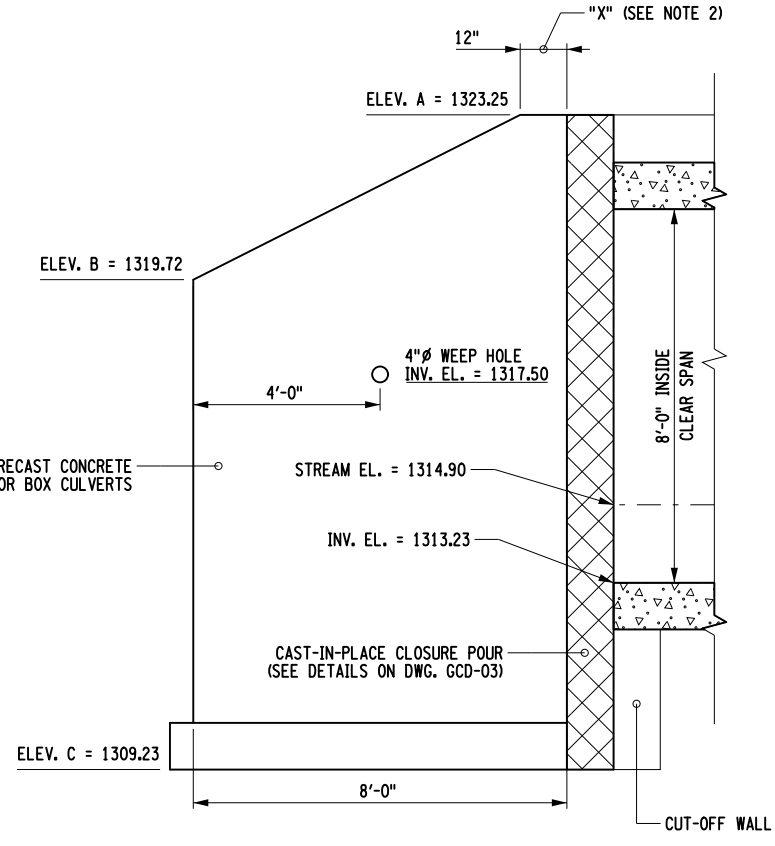
① WING WALL 3 - PLAN VIEW
NOT TO SCALE



③ WING WALL 4 - PLAN VIEW
NOT TO SCALE



② WING WALL 3 - ELEVATION VIEW
NOT TO SCALE



④ WING WALL 4 - ELEVATION VIEW
NOT TO SCALE

- NOTES:
1. WING WALLS, CULVERT TOP SLABS AND CULVERT BOTTOM SLABS ARE DRAWN AND ASSUMED TO BE 12" THICK. FINAL SIZE AND CONFIGURATION SHALL BE DETERMINED BY THE CONTRACTOR'S PRECAST FABRICATOR.
 2. DIMENSION "X" IS THE LEVEL DISTANCE ACROSS THE TOP OF THE WING WALL AND IS MEASURED ALONG THE FRONT FACE OF THE WALL.

PROJECT MANAGER G. WOJCIK
 CHECK J. L. PHILLIPS
 DRAFTING D. MELSZER
 CHECK J. L. PHILLIPS
 DESIGN D. MELSZER
 CHECK J. L. PHILLIPS
 JOB MANAGER J. L. PHILLIPS
 DESIGN SUPERVISOR R. WILDER

FILE NAME = 980593_C950119_RT1166_cph.cdt_03_E.dgn
 DATE/TIME = 06-AUG-2015 10:37
 USER = jphillips

AFFIX SEAL: ON:	ALTERED BY: ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 166, SH 8226	PIN 9805.93	BRIDGES	CULVERTS C950119	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED WING WALL 3 & 4 DETAILS	CONTRACT NUMBER D262989
	MILFORD - ROSEBOOM, PART 3	ROUTE 166				DRAWING NO. CDT-03-E
	CULVERT REPLACEMENT PROJECT	UTILITY QUALITY LEVEL D				SHEET NO. 153
	TOWN OF MIDDLEFIELD					
	COUNTY: OTSEGO	REGION: 09				

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FILE NAME = 980593_C950119_RT166_cph_sgp_01_E.dgn
 DATE/TIME = 30-JUL-2015 14:02
 USER = jphillips

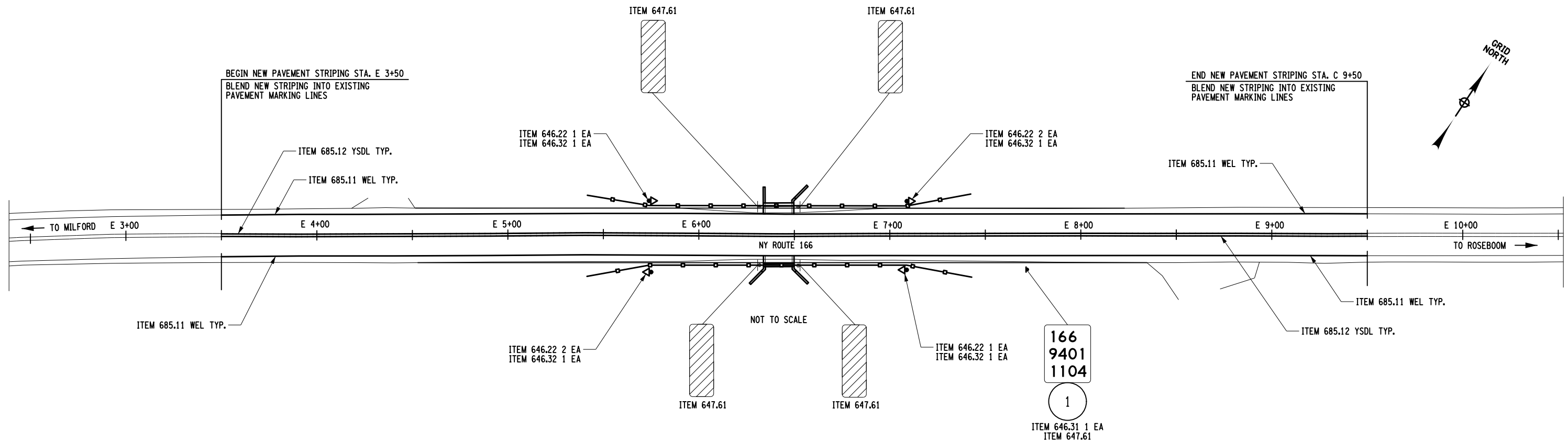
DESIGN SUPERVISOR R. WILDER
 JOB MANAGER J. L. PHILLIPS
 DESIGN D. WELLSER
 CHECK J. L. PHILLIPS
 DRAFTING G. MEYER
 CHECK J. L. PHILLIPS
 PROJECT MANAGER G. WOJCIK

SIGN AND PAVEMENT MARKING ITEM SUMMARY TABLE ROUTE 166 SITE E C950119			
ITEM NUMBER	DESCRIPTION	UNIT	QUANTITY
646.21	REFERENCE MARKER PANEL	EA	1
646.22	DELINEATOR, SNOWPLOWING MARKER, SUPPLEMENTARY SNOW PLOWING MARKER PANELS	EA	6
646.31	STEEL POST, 1.1 LB/FT	EA	1
646.32	STEEL POST, 2.0 LB/FT	EA	4
647.61	REMOVE AND DISPOSE SIGNS, GROUND MOUNTED TYPE A	EA	5
685.11	WHITE EPOXY REFLECTORIZED PAVEMENT STRIPES - 20 MILS	FT	1200
685.12	YELLOW EPOXY REFLECTORIZED PAVEMENT STRIPES - 20 MILS	FT	1200

DESIGNATION & COLOR (SEE NOTE 2)	LOCATION	TEXT	ITEM	SIZE	PAYMENT AREA (SEE NOTE 3)
				AREA (SEE NOTE 3)	TOTAL PAYMENT AREA
N/A	1	166 9401 1104	646.21	8 X 10	N/A
	1			0.6 SF	N/A

SIGNING NOTES:

- SIGN LOCATIONS AS SHOWN ON PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL INSTALL NEW SIGNS AND RELOCATE EXISTING SIGNS IN ACCORDANCE WITH THE MUTCD AND NYS SUPPLEMENT.
- THE COLOR IS ONLY SHOWN WHEN THERE IS AN OPTION THAT MUST BE SPECIFIED.
- SIGN SIZE IS IN INCHES. THE AREA AND PAYMENT AREA FOR SIGNS ARE FROM THE APPLICABLE STANDARD SHEETS OR SIGN FACE LAYOUTS.



AFFIX SEAL: ON:	ALTERED BY: ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NYS ROUTE 166, SH 8226 MILFORD - ROSEBOOM, PART 3 CULVERT REPLACEMENT PROJECT TOWN OF MIDDLEFIELD COUNTY: OTSEGO	PIN 9805.93 ROUTE 166 UTILITY QUALITY LEVEL D	BRIDGES	CULVERTS	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D262989
SIGN DATA SHEET AND SITE E					DRAWING NO. SGP-01-E SHEET NO. 154	

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

LEGEND	
	NEW SIGN LOCATION NUMBER
Department of Transportation	

FILE NAME = 980593EST_01.dgn
 DATE/TIME = 27-AUG-2015 09:44
 USER = wncolan

DESIGN SUPERVISOR R. WILDER

JOB MANAGER J. L. PHILLIPS

DESIGN MULTIPLE

CHECK

DRAFTING W. NOLAN

CHECK

PROJECT MANAGER G. WOJCIK

ESTIMATE OF QUANTITIES			
ITEM NUMBER	DESCRIPTION	UNIT	QUANTITY
201.07	CLEARING AND GRUBBING	ACRE	0.9
202.19	REMOVAL OF SUBSTRUCTURES	CY	341.0
203.02	UNCLASSIFIED EXCAVATION AND DISPOSAL	CY	1516.0
203.03	EMBANKMENT IN PLACE	CY	907.0
203.07	SELECT GRANULAR FILL	CY	781.0
204.01	CONTROLLED LOW STRENGTH MATERIAL (CLSM)	CY	49.0
206.01	STRUCTURE EXCAVATION	CY	2399.0
206.0201	TRENCH AND CULVERT EXCAVATION	CY	53.0
207.20	GEOTEXTILE BEDDING	SY	1075.0
207.26	PREFABRICATED COMPOSITE STRUCTURAL DRAIN	SY	296.0
209.100101	MULCH - TEMPORARY	SY	435.0
209.1003	SEED AND MULCH - TEMPORARY	SY	736.0
209.1106	CHECK DAM, STONE-PERMANENT	EA	4.0
209.13	SILT FENCE-TEMPORARY	LF	878.0
209.1801	ROLLED EROSION CONTROL PRODUCT, CLASS I TYPE A, SHORT TERM	SY	275.0
304.15	SUBBASE COURSE, OPTIONAL TYPE	CY	600.0
402.018902	TRUE & LEVELING F9, SUPERPAVE HMA, 80 SERIES COMPACTION	TON	6.0
402.018912	PLANT PRODUCTION QUALITY ADJUSTMENT TO 402.018902	QU	3.0
402.098202	9.5 F2 TOP COURSE HMA, 80 SERIES COMPACTION	TON	162.0
402.098212	PLANT PRODUCTION QUALITY ADJUSTMENT TO 402.098202	QU	11.0
402.258902	25 F9 BINDER COURSE HMA, 80 SERIES COMPACTION	TON	552.0
402.258912	PLANT PRODUCTION QUALITY ADJUSTMENT TO 402.258902	QU	30.0
402.378902	37.5 F9 BASE COURSE HMA, 80 SERIES COMPACTION	TON	275.0
402.378912	PLANT PRODUCTION QUALITY ADJUSTMENT 402.378902	QU	16.0
407.0102	DILUTED TACK COAT	GAL	144.0
490.30	MISCELLANEOUS COLD MILLING OF BITUMINOUS CONCRETE	SY	350.0
552.13	TEMPORARY STEEL SHEETING	SF	2640.0
552.2001	HOLES IN EARTH FOR SOLDIER PILE AND LAGGING WALL	LF	201.0
552.2201	SOLDIER PILES FOR SOLDIER PILE AND LAGGING WALL	LF	178.0

ESTIMATE OF QUANTITIES			
ITEM NUMBER	DESCRIPTION	UNIT	QUANTITY
552.2202	SOLDIER PILES FOR SOLDIER PILE AND LAGGING WALL	LF	230.0
552.230201	UNTREATED WOOD LAGGING FOR SOLDIER PILE AND LAGGING WALL	SF	695.0
553.030001	TEMPORARY WATERWAY DIVERSION STRUCTURE	EA	1.0
553.030002	TEMPORARY WATERWAY DIVERSION STRUCTURE	EA	1.0
553.030003	TEMPORARY WATERWAY DIVERSION STRUCTURE	EA	1.0
553.030004	TEMPORARY WATERWAY DIVERSION STRUCTURE	EA	1.0
554.3001	GEOSYNTHETIC REINFORCED SOIL SYSTEM WALL - WELDED WIRE FORM	SF	802.0
555.41000011	ENTRANCE PLATFORM (TREATED WOOD DECKING, RAILING, RAMPS AND STAIRS)	SF	120.0
568.50	STEEL BRIDGE RAILING (TWO RAIL)	LF	28.0
568.54	STEEL BRIDGE RAILING (THREE RAIL)	LF	32.0
568.70	TRANSITION BRIDGE RAILING	LF	256.0
587.01	BRIDGE RAILING REMOVAL AND DISPOSAL	LF	30.0
595.50000018	SHEET-APPLIED WATERPROOFING MEMBRANE	SF	2848.0
603.63060515	PRECAST CONCRETE BOX CULVERT, 6 FOOT SPAN, 5 FOOT RISE	LF	36.0
603.63060615	PRECAST CONCRETE BOX CULVERT, 6 FOOT SPAN, 6 FOOT RISE	LF	34.0
603.63080415	PRECAST CONCRETE BOX CULVERT, 8 FOOT SPAN, 4 FOOT RISE	LF	39.0
603.63120915	PRECAST CONCRETE BOX CULVERT (FILL HEIGHT LESS THAN 24 IN)	LF	35.0
603.63140815	PRECAST CONCRETE BOX CULVERT (FILL HEIGHT LESS THAN 24 IN)	LF	34.0
603.67000001	PRECAST CONCRETE WINGWALL UNITS FOR BOX CULVERTS	SY	373.0
603.9812	SMOOTH INTERIOR CORRUGATED POLYETHYLENE CULVERT AND STORM DRAIN 12 INCH DIAMETER	LF	92.0
603.9830	SMOOTH INTERIOR CORRUGATED POLYETHYLENE CULVERT AND STORM DRAIN 30 INCH DIAMETER	LF	20.0
603.9836	SMOOTH INTERIOR CORRUGATED POLYETHYLENE CULVERT AND STORM DRAIN 36 INCH DIAMETER	LF	46.0
604.302122	RECTANGULAR DRAINAGE STRUCTURE TYPE U FOR #22 WELDED FRAME	LF	3.5
606.0201	ANCHORAGE UNITS FOR CABLE GUIDE RAILING	EA	1.0
606.10	BOX BEAM GUIDE RAILING	LF	375.0
606.100002	BOX BEAM GUIDE RAILING (SHOP BENT OR SHOP MITERED)	LF	392.0
606.10010004	REINFORCED DOUBLE BOX BEAM GUIDE RAIL	LF	18.0
606.120101	BOX BEAM END PIECE	EA	15.0
606.120102	BOX BEAM GUIDE RAILING END ASSEMBLY, TYPE I	EA	1.0

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:
MULTI CULVERT REPLACEMENT PROJECT
ROUTE 10 - SH 1271, ROUTE 28 - SH 5659, ROUTE 28 - SH 5037, ROUTE 79 - SH 8209, ROUTE 166 - SH 8226
TOWNS OF BARKER, EXETER, MIDDLEFIELD & WALTON
COUNTY: VARIOUS

PIN 9805.93
UTILITY QUALITY LEVEL D

BRIDGES

CULVERTS C940011 C950058 C950059 124408

ALL DIMENSIONS IN M+ UNLESS OTHERWISE NOTED
ESTIMATE OF QUANTITIES

CONTRACT NUMBER D262989
DRAWING NO. EQQ-01 SHEET NO. 155

FILE NAME = 980593EST_02.dgn
 DATE/TIME = 27-AUG-2015 09:46
 USER = wncolan

DESIGN SUPERVISOR R. WILDER

JOB MANAGER J. L. PHILLIPS

DESIGN MULTIPLE

CHECK

DRAFTING W. NOLAN

CHECK

PROJECT MANAGER G. WOJCIK

ESTIMATE OF QUANTITIES			
ITEM NUMBER	DESCRIPTION	UNIT	QUANTITY
606.120201	BOX BEAM GUIDE RAILING END ASSEMBLY, TYPE IIA	EA	2.0
606.5048	RESETTING CABLE GUIDE RAILING (NEW POSTS)	LF	151.0
606.5901	RESETTING ANCHORAGE UNITS FOR CABLE GUIDE RAILING OR MEDIAN BARRIER	EA	1.0
606.71	REMOVING AND DISPOSING CORRUGATED BEAM GUIDE RAILING	LF	149.0
606.73	REMOVING AND DISPOSING BOX BEAM GUIDE RAILING	LF	394.0
606.79	REMOVING AND DISPOSING ANCHORAGE UNITS FOR CABLE GUIDE RAILING	EA	1.0
606.7910	REMOVING AND DISPOSING ANCHORAGE UNITS FOR CORRUGATED BEAM GUIDE RAILING AND MEDIAN BARRIER	EA	4.0
606.7920	REMOVING AND DISPOSING BOX BEAM GUIDE RAILING END ASSEMBLY	EA	7.0
607.41010010	TEMPORARY PLASTIC BARRIER FENCE	LF	1515.0
608.020102	HOT MIX ASPHALT (HMA) SIDEWALKS, DRIVEWAYS AND BICYCLE PATHS AND VEGETATION CONTROL STRIPS	TON	69.0
608.020112	PLANT PRODUCTION QUALITY ADJUSTMENT TO 608.020102	QU	5.0
609.99980008	REMOVE STORE AND RESET EXISTING PRECAST CONCRETE WHEEL STOP	EA	3.0
610.1101	MULCH FOR PLANTING TYPE A, B & D - WOOD CHIPS AND SHREDDED BARK	CY	1.0
610.1401	TOPSOIL - REUSE ON-SITE MATERIALS	CY	40.0
610.1402	TOPSOIL - ROADSIDE	CY	116.0
610.1602	TURF ESTABLISHMENT - LAWNS	SY	804.0
610.17	WILDFLOWER SEEDING	SY	238.0
610.19	WATERING VEGETATION	MGAL	106.0
611.0151	PLANTING - MAJOR DECIDUOUS TREES - 2 INCH CALIPER BALL & BURLAP, FIELD POTTED OR FIELD BOXED	EA	6.0
613.04000001	STOCKPILING AND PLACING EXISTING STREAM BED MATERIALS	CY	189.0
614.060104	TREE REMOVAL OVER 4 INCHES TO 6 INCHES DIAMETER BREAST HEIGHT - STUMPS GRUBBED	EA	11.0
614.060204	TREE REMOVAL OVER 6 INCHES TO 12 INCHES DIAMETER BREAST HEIGHT - STUMPS GRUBBED	EA	16.0
614.060304	TREE REMOVAL OVER 12 INCHES TO 18 INCHES DIAMETER BREAST HEIGHT - STUMPS GRUBBED	EA	4.0
614.060404	TREE REMOVAL OVER 18 INCHES TO 24 INCHES DIAMETER BREAST HEIGHT - STUMPS GRUBBED	EA	2.0
615.82010108	BOULDER CLUSTERS FOR STREAM BED ESTABLISHMENT	EA	16.0
617.01030024	CONTROLLING INVASIVE PLANT SPECIES BY EXCAVATION	CY	93.0
619.01	BASIC WORK ZONE TRAFFIC CONTROL	LS	1.0
619.04	TYPE III CONSTRUCTION BARRICADE	EA	50.0
619.0601	TEMPORARY STRUCTURES AND APPROACHES NO 1	EA	1.0

ESTIMATE OF QUANTITIES			
ITEM NUMBER	DESCRIPTION	UNIT	QUANTITY
619.0602	TEMPORARY STRUCTURES AND APPROACHES NO 2	EA	1.0
619.0803	COVER EXISTING PAVEMENT MARKING STRIPES (REMOVABLE TAPE)	LF	6150.0
619.100104	INTERIM PAVEMENT MARKINGS, STRIPES (REMOVABLE WET REFLECTABLE TAPE)	LF	19350.0
619.110202	PORTABLE, VARIABLE MESSAGE SIGN (PVMS) (LED) (CELLULAR COMMUNICATIONS)	EA	10.0
619.1301	TEMPORARY TRAFFIC SIGNALS	ELOC	1.0
619.1302	TEMPORARY TRAFFIC SIGNALS	ELOC	1.0
619.1303	TEMPORARY TRAFFIC SIGNALS	ELOC	1.0
619.1304	TEMPORARY TRAFFIC SIGNALS	ELOC	1.0
619.1305	TEMPORARY TRAFFIC SIGNALS	ELOC	1.0
619.1701	TEMPORARY CONCRETE BARRIER, (UNPINNED)	LF	94.0
619.1702	TEMPORARY CONCRETE BARRIER, (UNPINNED) WITH WARNING LIGHTS	LF	1616.0
619.1704	TEMPORARY CONCRETE BARRIER, (PINNED) WITH WARNING LIGHTS	LF	251.0
619.1802	TEMPORARY IMPACT ATTENUATOR - REDIRECTIVE (TEST LEVEL 2)	EA	19.0
619.27	MAILBOXES	EA	21.0
620.02	STONE FILLING (FINE)	CY	12.0
620.04	STONE FILLING (MEDIUM)	CY	250.0
620.05	STONE FILLING (HEAVY)	CY	238.0
621.51970008	GRADING, CLEANING AND RESHAPING EXISTING CHANNELS, DITCHES AND STREAMBEDS	LF	341.0
623.12	CRUSHED STONE (IN-PLACE MEASURE)	CY	208.0
625.01	SURVEY OPERATIONS	LS	1.0
625.03	CONCRETE RIGHT OF-WAY-MARKERS TYPE H (HIGH)	EA	34.0
625.05	STEEL PIN AND CAP RIGHT-OF-WAY MARKER	EA	19.0
625.06	PERMANENT SURVEY MARKERS	EA	8.0
627.50140008	CUTTING PAVEMENT	LF	427.0
637.12	ENGINEER'S FIELD OFFICE - TYPE 2	MNTH	26.0
637.34	OFFICE TECHNOLOGY AND SUPPLIES	DC	100.0
637.36	CONSTRUCTION TESTING SUPPLIES - CONSUMABLES	DC	100.0
645.03040011	HIGH VISIBILITY GROUND-MOUNTED SIGN PANELS LESS THAN OR EQUAL TO 30 SQ. FEET WITH Z-BARS	SF	40.0
645.81	TYPE A SIGN POSTS	EA	7.0

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:

MULTI CULVERT REPLACEMENT PROJECT
ROUTE 10 - SH 1271, ROUTE 28 - SH 5659, ROUTE 28 - SH 5037, ROUTE 79 - SH 8209, ROUTE 166 - SH 8226
TOWNS OF BARKER, EXETER, MIDDLEFIELD & WALTON
COUNTY: VARIOUS

PIN 9805.93
UTILITY QUALITY LEVEL D

BRIDGES

CULVERTS C940011 C950058 C950059 124408

ALL DIMENSIONS IN M+ UNLESS OTHERWISE NOTED
ESTIMATE OF QUANTITIES

CONTRACT NUMBER D262989
DRAWING NO. EQQ-02
SHEET NO. 156

