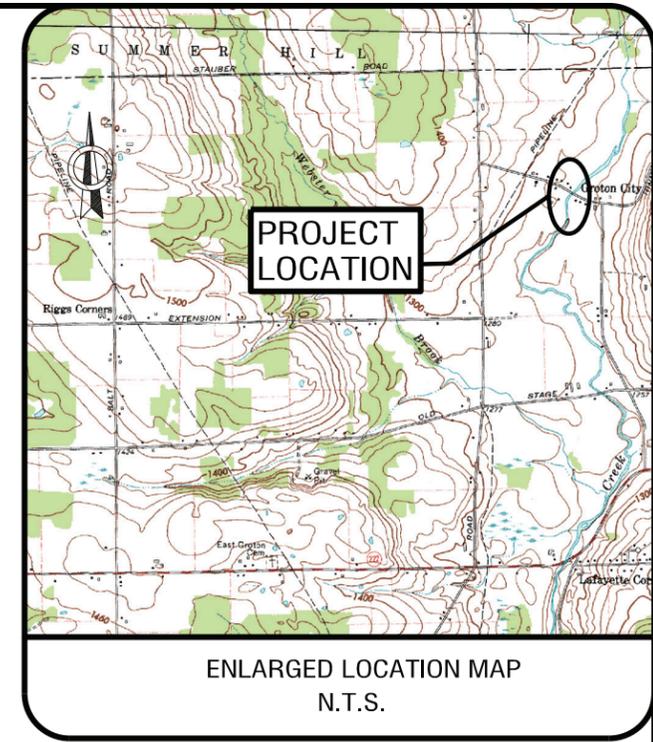


# REPLACEMENT PLANS OF GROTON CITY ROAD BRIDGE OVER FALL CREEK

B.I.N. 3314230



TOMPKINS COUNTY CONTRACT NUMBER HW-14-24A

TOWN OF GROTON, NEW YORK

PREPARED FOR  
TOMPKINS COUNTY  
HIGHWAY DIVISION

ALL WORK CONTEMPLATED UNDER THIS CONTRACT IS TO BE COVERED BY AND IN CONFORMITY WITH THE NYSDOT STANDARD SPECIFICATIONS OF MAY 1, 2008, WITH CURRENT ADDITIONS & MODIFICATIONS, EXCEPT AS MODIFIED ON THESE PLANS AND IN THE ITEMIZED PROPOSAL.



DESIGNED BY:

DATE

*Wayne A. Frye* 5/22/15

WAYNE A. FRYE, P.E.  
N.Y.S. LICENSE NO. 076862  
LABELLA ASSOCIATES, D.P.C.

APPROVED BY:

DATE

JEFFERY B. SMITH, DIRECTOR  
TOMPKINS COUNTY HIGHWAY DIVISION

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INDEX		
SHEET NO.	DESCRIPTION	DRAWING NO.
1	TITLE SHEET	COVER
2	INDEX AND ABBREVIATIONS	ID-1
3	LEGEND - 1	L-1
4	LEGEND - 2	L-2
5	GENERAL NOTES	GN-1
6	SURVEY PLAN AND BASELINE TIES	SP-1
7	TEMPORARY EROSION AND SEDIMENT CONTROL PLAN AND NOTES	ESC-1
8	CONSTRUCTION TABLES AND DETAILS	CT-1
9	GENERAL PLAN AND ELEVATION	PLN-1
10	PROFILE	PR-1
11	TYPICAL HIGHWAY SECTIONS	TS-1
12	TYPICAL BRIDGE SECTIONS	TS-2
13	EXCAVATION AND BACKFILL PLAN	ST-1
14	EXCAVATION AND BACKFILL SECTIONS	ST-2
15	WEST ABUTMENT PLAN AND ELEVATION	ST-3
16	WEST ABUTMENT REINFORCEMENT	ST-4
17	EAST ABUTMENT PLAN AND ELEVATION	ST-5
18	EAST ABUTMENT REINFORCEMENT	ST-6
19	ABUTMENT DETAILS - 1	ST-7
20	ABUTMENT DETAILS - 2	ST-8
21	TRANSVERSE SECTION AND PRESTRESSED CONCRETE ADJACENT BEAMS FRAMING PLAN	ST-9
22	PRESTRESSED CONCRETE ADJACENT BEAMS - BOX BEAM PLAN AND ELEVATION	ST-10
23	PRESTRESSED CONCRETE ADJACENT BOX BEAM DETAILS	ST-11
24	PRESTRESSED CONCRETE ADJACENT BEAMS BOX BEAM DETAILS - 1	ST-12
25	PRESTRESSED CONCRETE ADJACENT BEAMS BOX BEAM DETAILS - 2	ST-13
26	DECK PLAN	ST-14
27	APPROACH SLAB PLAN AND DETAILS	ST-15
28	RAILING PLAN	ST-16
29	RAILING DETAILS - 1	ST-17
30	RAILING DETAILS - 2	ST-18
31	RAILING DETAILS - 3	ST-19
32	RAILING DETAILS - 4	ST-20
33	RAILING DETAILS - 5	ST-21
34	RAILING DETAILS - 6	ST-22
35	BAR BENDING DIAGRAMS	ST-23
36	BARLIST - 1	ST-24
37	BARLIST - 2	ST-25
38	ESTIMATE OF QUANTITIES	EQ-1

**NYS DOT STANDARD SHEET NOTES**

THE FOLLOWING NYS DOT STANDARD SHEETS SUPPLEMENT THE DETAILS AND INSTRUCTIONS PROVIDED IN THIS PLAN SET:

209-01, 209-03, 606-04, 619-01, 619-02, 619-04, 619-10, 619-11, 619-12, 645-03

ALIGNMENT	
ABBR.	DESCRIPTION
AH	AHEAD
AZ	AZIMUTH
BK	BACK
B	BASELINE
BRC	BEARING
C	CENTERLINE
CS	CURVE TO SPIRAL
e	SUPERELEVATION RATE (CROSS SLOPE)
EQ	EQUALITY
EXT	EXTERNAL
HCL	HORIZONTAL CONTROL LINE
HSD	HEADLIGHT SIGHT DISTANCE
L	LENGTH OF CIRCULAR CURVE
LS	LENGTH OF SPIRAL
LVC	LENGTH OF VERTICAL CURVE
E	CENTER CORRECTION OF VERTICAL CURVE
M	MAIN LINE
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
POL	POINT ON LINE
PSD	PASSING SIGHT DISTANCE
PT	POINT OF TANGENT
PVC	POINT OF VERTICAL CURVE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENT
R	RADIUS
SC	SPIRAL TO CURVE
SSD	STOPPING SIGHT DISTANCE
ST	SPIRAL TO TANGENT
STA	STATION
T	TANGENT LENGTH
TGL	THEORETICAL GRADE LINE
TS	TANGENT TO SPIRAL
VC	VERTICAL CURVE

TOPOGRAPHY (DRAINAGE)	
ABBR.	DESCRIPTION
BB	BOTTOM OF BANK (STREAM)
BC	BOTTOM OF CURB
BO	BOTTOM OF OPENING
CAP	CORRUGATED ALUMINUM PIPE
CB	CATCH BASIN
CIP	CAST IRON PIPE
C STRM	CENTERLINE OF STREAM
CMP	CORRUGATED METAL PIPE
CP	CONCRETE PIPE
CSP	CORRUGATED STEEL PIPE
CULV	CULVERT
DIA	DIAMETER
DMH	DRAINAGE MANHOLE
DS	DRAINAGE STRUCTURE PIPE
D'XING	DITCH CROSSING
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

TOPOGRAPHY (MISCELLANEOUS)	
ABBR.	DESCRIPTION
ABUT	ABUTMENT
AOBE	AS ORDERED BY ENGINEER
ASPH	ASPHALT
BDY	BOUNDARY
BLDG	BUILDING
BM	BENCH MARK
CC	CENTER TO CENTER
CONC	CONCRETE
CONST	CONSTRUCTION
CR	COUNTY ROAD
D	DEED DISTANCE
DM	DIRECT MEASUREMENT
DWY	DRIVEWAY
EP	EDGE OF PAVEMENT
ES	EDGE OF SHOULDER
FEE	FEE ACQUISITION
FEE WO/A	FEE ACQUISITION WITHOUT ACCESS
FP	FENCE POST
FD	FOUNDATION
FL	FENCE LINE
GAR	GARAGE
GR	GRAVEL
HO	HOUSE
HWY	HIGHWAY
IP	IRON PIN OR IRON PIPE
MB	MAILBOX
MON	MONUMENT
N&W	NAIL AND WASHER
OG	ORIGINAL GROUND
O/H	OVERHEAD
P	PARCEL
PAV'T	PAVEMENT
PE	PERMANENT EASEMENT
PED POLE	PEDESTRIAN POLE
P	PROPERTY LINE
POR	PORCH
RR	RAILROAD
RTE	ROUTE
ROW	RIGHT OF WAY
RW	RETAINING WALL
SH	STATE HIGHWAY
SHLDR	SHOULDER
SPK	SPIKE
ST	STREET
STK	STAKE
STY	STORY
SW	SIDEWALK
TE	TEMPORARY EASEMENT
TO	TEMPORARY OCCUPANCY
U/G	UNDERGROUND
WW	WING WALL

UTILITIES	
ABBR.	DESCRIPTION
E	ELECTRIC
EMH	ELECTRIC MANHOLE
G	GAS
GP	GUY POLE
GSB	GAS SERVICE BOX (HOUSE LINE)
GV	GAS VALVE (MAIN LINE)
HYD	HYDRANT
LP	LIGHT POLE
LPG	LOW PRESSURE GAS
PP	POWER POLE
SA	SANITARY SEWER
SMH	SANITARY MANHOLE
ST	STORM SEWER
T	TELEPHONE
TCB	TRAFFIC CONTROL BOX
TELBOX	TELEPHONE BOX
TEL P	TELEPHONE POLE
TMH	TELEPHONE MANHOLE
CTV	CABLE TELEVISION
W	WATER
WSB	WATER SERVICE BOX (HOUSE LINE)
WV	WATER VALVE (MAIN LINE)

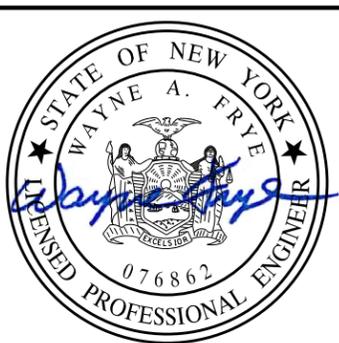
  

SUBSURFACE EXPLORATION	
ABBR.	DESCRIPTION
REPLACE ABBREVIATION "AB" WITH:	
AH	HAND AUGER
CP	CONE PENETROMETER
DA	2 1/4 INCHES CASSED DRILL HOLE
DM	DRILLING MUD
DN	4 INCHES CASSED DRILL HOLE
FH	HOLLOW FLIGHT AUGER
PA	POWER AUGER
PH	PROBE
PT	PERCOLATION TEST HOLE
RP	1 INCH SAMPLER (RETRACTABLE PLUG)
TO BE DEFINED AT THE TIME OF EXPLORATION	
SP	SEISMIC POINT
TP	TEST PIT
ABBREVIATION "C" IN CATEGORIES: DA, DM, DN, AND FH WITH:	
B	BRIDGE
C	CUT
D	DAM
F	FILL
K	CULVERT
W	WALL
X	TO BE USED IF ONE OF THE ABOVE CANNOT BE DEFINED AT THE TIME THE EXPLORATION IS MADE

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

PLOTDRWR: pdf, bwh, hga, jdc  
 MODEL: INDEX AND ABBREVIATIONS  
 FILE PATH: C:\Compass\County\2150220 - Groton City Rd Bridge Replace\Drawings\Structural\PlanSet\2150220\_ID-1.dgn  
 DATE: 05/27/2015 2:36:08 PM  
 PROJECT MANAGER:

DESIGNER: VLG  
 ENGINEER: WAF  
 AIR



NO.	REVISION	BY	DATE
1			
2			
3			
4			
5			

I HEREBY CERTIFY BY MY SIGNATURE, THAT I HAVE PREPARED THIS RECORD DRAWING WHICH IS, TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, A TRUE REPRESENTATION OF THE WORK AS CONSTRUCTED.

DATE: \_\_\_\_\_

It is a violation of New York Education Law Article 145 Sec. 7209, for any person, unless acting under the direction of a licensed architect, professional engineer, or land surveyor, to alter an item in any way, if an item bearing the seal of an architect, engineer, or land surveyor is altered; the altering architect, engineer, or land surveyor shall affix to the item their seal and notation, "altered by" followed by their signature and date of such alteration, and a specific description of the alteration.

**LABELLA**  
Associates, P.C.

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PROJECT/CLIENT  
 REPLACEMENT OF GROTON CITY ROAD BRIDGE  
 OVER FALL CREEK  
 B.I.N. 3314230  
 TOMPKINS COUNTY  
 TOWN OF GROTON

DRAWING TITLE  
**INDEX AND ABBREVIATIONS**

PROJECT NUMBER  
 2150220  
 DATE  
 MAY 2015  
 DRAWING NUMBER  
 ID-1

ALIGNMENT			DRAINAGE			ITS			ROW MAPPING			ROADWAY			TRAFFIC WORK ZONE (CONT.)			
CELL	NAME	DESCRIPTION	CELL	NAME	DESCRIPTION	CELL	NAME	DESCRIPTION	CELL	NAME	DESCRIPTION	RES P	ELEVATION, SPOT	TWZSDT.P	SYMBOL, DIRECTION OF TRAFFIC			
⊗	ACC	CENTER OF CURVATURE	+	DINV	INVERT	⊕	IANT P	ANTENNAS	⊕	MDL1P	DEED LINE, TYPE 1	⊗	RES P	RG A	GUIDE RAIL, ANCHOR	↔	TWZSDT.P	SYMBOL, DIRECTION OF TRAFFIC
+	ACOG	COGO	+	DS	STRUCTURE, RECTANGULAR	⊕	IASCTS	ACCOU. SPEED/COUNT SNSR.S	⊕	MDL2P	DEED LINE, TYPE 2	○	RGP	GUIDE POST, SINGLE	↔	TWZSDT.P	SYMBOL, DIRECTION OF TEMPORARY TRAFFIC DETOUR	
⊗	ACS	CURVE TO SPIRAL	+	DSI	STRUCTURE, INVERT	⊕	ICABPAD	CABINET & PAD	⊕	MDL3P	DEED LINE, TYPE 3	SIGNS			⊕	TWZSGN.P	SIGN (TEMPORARY)	
⊕	ADPI.P	DETOUR, POINT OF INTERSECT.	+	DSM	STRUCTURE, MANHOLE	⊕	ICCTV	CCTV SITE	⊕	MDL4P	DEED LINE, TYPE 4	CELL	NAME	DESCRIPTION	⊕	TWZSIG.P	SIGNAL, TRAFFIC OR PEDESTRIAN (TEMPORARY)	
○	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	⊕	S	SINGLE POST	⊕	TWZWL.P	WARNING LIGHT	
○	AEQN	EQUATION	⊕	DSR	STRUCTURE, ROUND	⊕	ICELLT	CELL PHONE TOWER	⊕	MEEP	EASEMENT, EXISTING	⊕	S.P	SINGLE POST, PROPOSED	⊕	TWZV.V.P	WORK VEHICLE	
⊕	AEQNAHD	EQUATION AHEAD	⊕	DST"X"CB P	STRUCTURE, RECT., WITH CURB TYPE "X" "X" = F, G, N, O, P, R	⊕	ICJTB	CONDUIT JACK OR BORING	⊕	MEPAP.P	EASEMENT, PERM., APPROX.	⊕	SB.P	BACK TO BACK, PROPOSED	⊕	TWZV.V.P	WORK VEHICLE WITH TRUCK MOUNTED ATTENUATOR	
⊕	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	UTILITIES			CELL	NAME	DESCRIPTION	
⊕	AEVT	EVENT STATION	ENVIRONMENTAL			⊕	ICPB	COMMUNICATION PULL BOX	⊕	MEPSP.P	EASEMENT, PERM., SHAPE	⊕	SDEL	DELINEATORS	⊕	UEB	ELECTRIC, BOX	
⊕	APC	POINT OF CURVATURE	CULV	EIOP.P	STR., INLET, OUTLET PROT.	⊕	ICTD	CONDUIT TURNING DOWN	⊕	MFAP.P	FEE ACQUISITION, APPROX.	⊕	SPM	PARKING METER	⊕	UEM	ELECTRIC, METER	
⊕	APCC	POINT OF COMPOUND CURVATURE	⊕	EIPGB.P	STR., INLET PROT., GRAVEL BAG	⊕	ICTU	CONDUIT TURNING UP	⊕	MFSP.P	FEE ACQUISITION, BACK LINE	⊕	SRM	REFERENCE MARKERS	⊕	UEMH	ELECTRIC, MANHOLE	
⊕	APCC	POINT OF COMPOUND CURVATURE	⊕	EIPHS.P	STR., INLET PROT., HAY/STRAW	⊕	ICVTRT	COMM. VEH. ROAD TRANSCEIVER	⊕	MHBP	HIGHWAY BNDRY., APPROX.	⊕	SRSC3	SHLD. CTY, 123 DIG.	⊕	UEPT	ELECTRIC, POLE, TRANS.	
⊕	API	POINT OF INTERSECTION	⊕	EIPSP.P	STR., INLET PROT., SILT FENCE	⊕	IDFAULT	DEFAULT	⊕	MHBCP	HISTORICAL, BLDG. CORNERS	⊕	SRSC4	SHLD. CTY, 4 DIG.	⊕	UGM	GAS, METER	
⊕	APOB	POINT OF BEGINNING	⊕	ERCB	RISER, CONCRETE BOX	⊕	IEZR	E-ZPASS READER	⊕	MJCP	PT., JURIS. CITY	⊕	SRSC2	SHLD. CTY TOUR, 1-2 DIG.	⊕	UGMH	GAS, MANHOLE	
⊕	APOC	POINT OF CURVATURE	⊕	ETRS.P	TRAP, SEDIMENT	⊕	IEZTR	TRANSMITTAL READER	⊕	MPBC	PT., BUILDING CORNER	⊕	SRSC4	SHLD. CTY TOUR, 3-4 DIG.	⊕	UGLM	GAS, LINE MARKER	
⊕	APOE	POINT OF END	⊕	EWFG	WETLAND FLAG	⊕	IFOXCB	FIBER OPTIC X-CONNECT CABINET	⊕	MPCC	PT., CROSS CUT	⊕	SRSI	SHLD. INTERSTATE	⊕	UGP	GAS/FUEL PUMP	
⊕	APOL	POINT ON LINE	GEOTECHNICAL			⊕	IFUSSPL	FUSION SPLICE	⊕	MPDH	PT., DRILL HOLE	⊕	SRS2	SHLD. NATIONAL, 2 DIG.	⊕	UGV	GAS, VALVE	
⊕	APOT	POINT ON TANGENT	⊕	GDH	DRILL HOLE	⊕	IHARADV	HAR ADVISORY SIGN	⊕	MPFH	PT., FENCE LOCATION	⊕	SRS1	SHLD. NATIONAL, 3 DIG.	⊕	UGVT	GAS, VENT	
⊕	APOV	POINT ON VERTICAL CURVE	LANDSCAPE			⊕	IHARST	HAR SITE	⊕	MPF	PT., FENCE LOCATION	⊕	SRS2	SHLD. STATE, 2 DIG.	⊕	ULP	LIGHTING, POLE	
⊕	APOV	POINT ON VERTICAL TANGENT	+	LELS	ELEVATION, SPOT	⊕	ILC	LOAD CENTER	⊕	MPIP	PT., IRON PIPE	⊕	SRS3	SHLD. STATE, 3 DIG.	⊕	ULPM	LIGHTING, POLE, MEDIAN	
⊕	APOR	POINT ON REVERSE CURVE	⊕	LFP	FLAG POLE	⊕	IMECSPL	MECHANICAL SPLICE	⊕	MPIR	PT., IRON ROD	⊕	SRS3	SHLD. STATE, 3 DIG.	⊕	ULPP	LIGHTING, POLE, PED.	
⊕	APOT	POINT ON TANGENCY	⊕	LMB	MAILBOX	⊕	IMSCS	PORT. SPEED & COUNT SENSOR	⊕	MPMM	PT., MONUMENT, MISC.	⊕	SRS4	SHLD. STATE, 4 DIG.	⊕	UMFC	MISC. FILLER CAP	
⊕	APVC	POINT OF VERTICAL CURVATURE	⊕	LPB	PAPER BOX	⊕	IMSCS	MICRO SPEED & COUNT SENSOR	⊕	MPN	PT., NAIL	⊕	TCBJ	BOX, JUNCTION	⊕	UOLM	OIL, LINE MARKER	
⊕	APVCC	POINT OF VERT. CMPND CURVE	⊕	LPST	POST, SINGLE	⊕	IMT	MICROWAVE TRANSCEIVER	⊕	MPS	PT., SPIKE	⊕	TCBP	BOX, PULL BOX	⊕	UP	POLE, WITH UTILITY	
⊕	APVI	POINT OF VERT. INTERSECTION	⊕	LPB	PAPER BOX	⊕	IPASCS	PORT. ACCOU. SPD & CNT. SENSOR	⊕	MPST	PT., STAKE	⊕	TCBS	BOX, SPLICE	⊕	UPD	POLE, DEAD (NO UTILITY)	
⊕	APVRC	POINT OF VERT. REVERSE CURVE	⊕	LPST	POST, SINGLE	⊕	IPEDS	PEDESTRIAN SIGNAL HEAD	⊕	MPTW	PT., TREE W/ WIRE	⊕	TCM	MICROCOMPUTER CABINET	⊕	UPL	POLE, WITH LIGHT	
⊕	APVT	POINT OF VERTICAL TANGENCY	⊕	LPST	POST, SINGLE	⊕	IPSS	PAVEMENT SURFACE SENSOR	⊕	MPWL	PT., WALL LOCATION	⊕	TCPP	PED POLE	⊕	USMH	SANITARY SEWER MANHOLE	
⊕	ASC	SPIRAL TO CURVE	⊕	LPST	POST, SINGLE	⊕	IPVMS	PERM. VMS	⊕	MPW	PT., WALL LOCATION	⊕	TCSP	SIGNAL POLE	⊕	UTB	TELEPHONE, BOOTH	
⊕	ASPI	SPIRAL POINT OF INTERSECTION	⊕	LPST	POST, SINGLE	⊕	IRWIS	RDWY WEATHER INFO. SENSOR	ROW ACQUISITION			⊕	TCSP	SIGNAL POLE	⊕	UTLM	TELEPHONE, LINE MARKER	
⊕	ASTS	SPIRAL TO SPIRAL	⊕	LPST	POST, SINGLE	⊕	IRWIS	RDWY WEATHER INFO. SENSOR	⊕	MFS.P.T	FEE ACQUISITION	⊕	TCSP	SIGNAL POLE	⊕	UTMH	TELEPHONE, MANHOLE	
⊕	AST	SPIRAL TO TANGENT	⊕	LPST	POST, SINGLE	⊕	IRWIS	RDWY WEATHER INFO. SENSOR	⊕	MEPS.P.T	EASEMENT, PERMANENT	⊕	TCSP	SIGNAL POLE	⊕	UTVLM	CABLE TV, LINE MARKER	
⊕	ATS	TANGENT TO SPIRAL	⊕	LPST	POST, SINGLE	⊕	IRWIS	RDWY WEATHER INFO. SENSOR	⊕	METS.P.T	EASEMENT, TEMPORARY	⊕	TCSP	SIGNAL POLE	⊕	UTVLM	CABLE TV, LINE MARKER	
⊕	AVEVT	VERTICAL EVENT POINT	⊕	LPST	POST, SINGLE	⊕	IRWIS	RDWY WEATHER INFO. SENSOR	⊕	METS.P.T	OCCUPANCY, TEMPORARY	⊕	TCSP	SIGNAL POLE	⊕	UTVLM	CABLE TV, LINE MARKER	
⊕	AVHIGH	VERTICAL HIGH POINT	⊕	LPST	POST, SINGLE	⊕	IRWIS	RDWY WEATHER INFO. SENSOR	⊕	MFS.P.T	FEE ACQUISITION W/O ACCESS	⊕	TCSP	SIGNAL POLE	⊕	UTVLM	CABLE TV, LINE MARKER	
⊕	AVLOW	VERTICAL LOW POINT	⊕	LPST	POST, SINGLE	⊕	IRWIS	RDWY WEATHER INFO. SENSOR	⊕	MFS.P.T	FEE ACQUISITION W/O ACCESS	⊕	TCSP	SIGNAL POLE	⊕	UTVLM	CABLE TV, LINE MARKER	
BRIDGE			LANDSCAPE			ROW ACQUISITION			ROW ACQUISITION			TRAFFIC CONTROL			TRAFFIC WORK ZONE			
⊕	BSC	BRIDGE, SCUPPER	+	LELS	ELEVATION, SPOT	⊕	IRWIS	RDWY WEATHER INFO. SENSOR	⊕	MFS.P.T	FEE ACQUISITION	⊕	TCBJ	BOX, JUNCTION	⊕	TWZAP.P	ARROW PANEL	
CONTROL			⊕	LFP	FLAG POLE	⊕	IRWIS	RDWY WEATHER INFO. SENSOR	⊕	MEPS.P.T	EASEMENT, PERMANENT	⊕	TCBP	BOX, PULL BOX	⊕	TWZAP.P	ARROW PANEL, CAUTION MODE	
⊕	CBP	BASLINE, POINT	⊕	LFP	FLAG POLE	⊕	IRWIS	RDWY WEATHER INFO. SENSOR	⊕	METS.P.T	EASEMENT, TEMPORARY	⊕	TCBS	BOX, SPLICE	⊕	TWZAPT.P	ARROW PANEL, TRAILER OR SUPPORT	
⊕	CBPOL	BASLINE, POINT ON LINE	⊕	LFP	FLAG POLE	⊕	IRWIS	RDWY WEATHER INFO. SENSOR	⊕	METS.P.T	OCCUPANCY, TEMPORARY	⊕	TCM	MICROCOMPUTER CABINET	⊕	TWZBCD.P	BARRICADE (TYPE III)	
⊕	CBSP	BASLINE, SPUR POINT	⊕	LFP	FLAG POLE	⊕	IRWIS	RDWY WEATHER INFO. SENSOR	⊕	MFS.P.T	FEE ACQUISITION W/O ACCESS	⊕	TCPP	PED POLE	⊕	TWZCMS.P	CHANGEABLE MESSAGE SIGN (PVMS)	
⊕	CBTP	BASLINE, TIE POINT	⊕	LFP	FLAG POLE	⊕	IRWIS	RDWY WEATHER INFO. SENSOR	⊕	MFS.P.T	FEE ACQUISITION W/O ACCESS	⊕	TCSP	SIGNAL POLE	⊕	TWZFLG.P	FLAGGER	
⊕	CPBM	BENCHMARK	⊕	LFP	FLAG POLE	⊕	IRWIS	RDWY WEATHER INFO. SENSOR	⊕	MFS.P.T	FEE ACQUISITION W/O ACCESS	⊕	TCSP	SIGNAL POLE	⊕	TWZFT.P	FLAG TREE	
⊕	CPH	POINT, HORIZ. PHOTOGRAMMETRY	⊕	LFP	FLAG POLE	⊕	IRWIS	RDWY WEATHER INFO. SENSOR	⊕	MFS.P.T	FEE ACQUISITION W/O ACCESS	⊕	TCSP	SIGNAL POLE	⊕	TWZIA.P	IMPACT ATTENUATOR / CRASH CUSHION (TEMPORARY)	
⊕	CPSM	POINT, SURVEY MARKER, PERM.	⊕	LFP	FLAG POLE	⊕	IRWIS	RDWY WEATHER INFO. SENSOR	⊕	MFS.P.T	FEE ACQUISITION W/O ACCESS	⊕	TCSP	SIGNAL POLE	⊕	TWZLUM.P	LUMINAIRE (TEMPORARY)	
⊕	CPSV	POINT, VERT., PHOTOGRAMMETRY	⊕	LFP	FLAG POLE	⊕	IRWIS	RDWY WEATHER INFO. SENSOR	⊕	MFS.P.T	FEE ACQUISITION W/O ACCESS	⊕	TCSP	SIGNAL POLE	⊕	TWZLUM.P	LUMINAIRE (TEMPORARY)	
BRIDGE			LANDSCAPE			ROW ACQUISITION			ROW ACQUISITION			TRAFFIC CONTROL			TRAFFIC WORK ZONE			
⊕	BSC	BRIDGE, SCUPPER	+	LELS	ELEVATION, SPOT	⊕	IRWIS	RDWY WEATHER INFO. SENSOR	⊕	MFS.P.T	FEE ACQUISITION	⊕	TCBJ	BOX, JUNCTION	⊕	TWZAP.P	ARROW PANEL	
CONTROL			⊕	LFP	FLAG POLE	⊕	IRWIS	RDWY WEATHER INFO. SENSOR	⊕	MEPS.P.T	EASEMENT, PERMANENT	⊕	TCBP	BOX, PULL BOX	⊕	TWZAP.P	ARROW PANEL, CAUTION MODE	
⊕	CBP	BASLINE, POINT	⊕	LFP	FLAG POLE	⊕	IRWIS	RDWY WEATHER INFO. SENSOR	⊕	METS.P.T	EASEMENT, TEMPORARY	⊕	TCBS	BOX, SPLICE	⊕	TWZAPT.P	ARROW PANEL, TRAILER OR SUPPORT	
⊕	CBPOL	BASLINE, POINT ON LINE	⊕	LFP	FLAG POLE	⊕	IRWIS	RDWY WEATHER INFO. SENSOR	⊕	METS.P.T	OCCUPANCY, TEMPORARY	⊕	TCM	MICROCOMPUTER CABINET	⊕	TWZBCD.P	BARRICADE (TYPE III)	
⊕	CBSP	BASLINE, SPUR POINT	⊕	LFP	FLAG POLE	⊕	IRWIS	RDWY WEATHER INFO. SENSOR	⊕	MFS.P.T	FEE ACQUISITION W/O ACCESS	⊕	TCPP	PED POLE	⊕	TWZCMS.P	CHANGEABLE MESSAGE SIGN (PVMS)	
⊕	CBTP	BASLINE, TIE POINT	⊕	LFP	FLAG POLE	⊕	IRWIS	RDWY WEATHER INFO. SENSOR	⊕	MFS.P.T	FEE ACQUISITION W/O ACCESS	⊕	TCSP	SIGNAL POLE	⊕	TWZFLG.P	FLAGGER	
⊕	CPBM	BENCHMARK	⊕	LFP	FLAG POLE	⊕	IRWIS	RDWY WEATHER INFO. SENSOR	⊕	MFS.P.T	FEE ACQUISITION W/O ACCESS	⊕	TCSP	SIGNAL POLE	⊕	TWZFT.P	FLAG TREE	
⊕	CPH	POINT, HORIZ. PHOTOGRAMMETRY	⊕	LFP	FLAG POLE	⊕	IRWIS	RDWY WEATHER INFO. SENSOR	⊕	MFS.P.T	FEE ACQUISITION W/O ACCESS	⊕	TCSP	SIGNAL POLE	⊕	TWZIA.P	IMPACT ATTENUATOR / CRASH CUSHION (TEMPORARY)	
⊕	CPSM	POINT, SURVEY MARKER, PERM.	⊕	LFP	FLAG POLE	⊕	IRWIS	RDWY WEATHER INFO. SENSOR	⊕	MFS.P.T	FEE ACQUISITION W/O ACCESS	⊕	TCSP	SIGNAL POLE	⊕	TWZLUM.P	LUMINAIRE (TEMPORARY)	
⊕	CPSV	POINT, VERT., PHOTOGRAMMETRY	⊕	LFP	FLAG POLE	⊕	IRWIS	RDWY WEATHER INFO. SENSOR	⊕	MFS.P.T	FEE ACQUISITION W/O ACCESS	⊕	TCSP	SIGNAL POLE	⊕	TWZLUM.P	LUMINAIRE (TEMPORARY)	

- NOTES:**
- THE LEGEND ILLUSTRATES MAPPING FEATURES (EXISTING AND PROPOSED).
  - FEATURES ARE SHOWN AS EITHER LINEAR (ROADWAY GUIDERAIL, ROADWAY SIDEWALK, UTILITY LINES, ETC.) OR POINT (SIGN, UTILITY POLE, ETC.).
  - FEATURES SHOWN ON THE LEGEND AS EXISTING FEATURES ALSO HAVE CORRESPONDING PROPOSED FEATURES.
  - 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).
  - 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.
  - FEATURES SHOWN AT THE HEAVIER WEIGHT ARE PROPOSED ONLY AND DO NOT HAVE CORRESPONDING EXISTING FEATURES.



**RECORD PLANS**

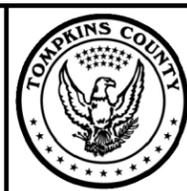
I HEREBY CERTIFY BY MY SIGNATURE, THAT I HAVE PREPARED THIS RECORD DRAWING WHICH IS, TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, A TRUE REPRESENTATION OF THE WORK AS CONSTRUCTED.

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NO.	REVISION	BY	DATE
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**ABELLA**  
Associates, P.C.

235 HARRISON STREET  
SYRACUSE, NY 13202



PROJECT/CLIENT

REPLACEMENT OF GROTON CITY ROAD BRIDGE  
OVER FALL CREEK  
B.I.N. 3314230  
TOMPKINS COUNTY  
TOWN OF GROTON

DRAWING TITLE

**LEGEND - 1**

PROJECT NUMBER  
2150220

DATE  
MAY 2015

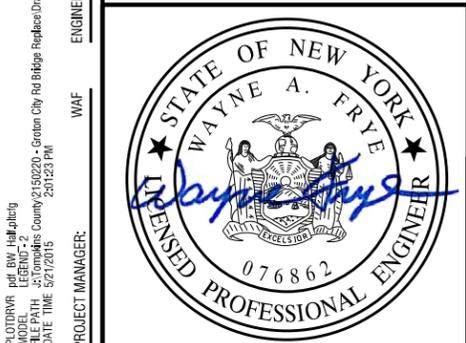
DRAWING NUMBER  
L-1

PLOT/DRAWN: pdf, BW, 11x17, 1/16  
 LEGEND: 1  
 MODEL: 01/16/2015  
 DATE: 05/15/15  
 TIME: 5:21:18 PM  
 PROJECT MANAGER:

VLG  
 DESIGNER: AJR  
 ENGINEER: WAF

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		TWZCD.P	BARRIER, TEMPORARY, W/ WARNING LIGHTS
	AT.P	TRANSITION CONTROL		LAPB	AREA, PLANTING BED		RGB	GUIDE RAIL, BOX BEAM		TWZPMRC.P	CHANNELIZING DEVICE
<b>BRIDGE</b>				LAWA	AREA, WOODED AREA OUTLINE		RGBM	GUIDE RAIL, BOX BEAM, MEDIAN	<b>UTILITIES</b>		
	BR	RAIL		LAWE	AREA, WATERS EDGE		RGC	GUIDE RAIL, CABLE	<b>STYLE</b>	<b>NAME</b>	<b>DESCRIPTION</b>
	BSHT	SHEET PILING		LCUT.P	CUT LIMIT		RGC.B	GUIDE RAIL, CONCRETE BARRIER		UC	CONDUIT, UNDERGROUND
<b>CONTROL</b>				LFILL.P	FILL LIMIT		RGP.P	GUIDE POST		UCH	CONDUIT, HANGING
	CB	BASELINE		LFNC	FENCE		RCW	GUIDE RAIL, W BEAM		UCO	CONDUIT, OVERHEAD
	CBPR	BASELINE, PROJECTION		LTRC	TREE ROW, CONIFEROUS		RGWM	GUIDE RAIL, W BEAM, MEDIAN		UE	ELECTRIC LINE, UNDERGROUND
<b>DRAINAGE</b>				LTRD	TREE ROW, DECIDUOUS		RPB	PARKING BUMPER		UEH	ELECTRIC LINE, HANGING
	DCP	CULVERT PIPE		LWH	WALL, H PILE		RRC	RAIL ROAD, CATENARY		UEO	ELECTRIC LINE, OVERHEAD
	DCP.P	CULVERT PIPE (DIR)		LWR	WALL, RETAINING		RRER	RAIL ROAD, 3RD RAIL		UETO	ELECTRIC TRANSMISSION, OVERHEAD
	DDG.P	DITCH, GRASS LINED		LWS	WALL, STONE		RRPLS.P	RAIL, PHOTO, LARGE SCALE		UESS	ELECTRIC, SUBSTATIONS
	DDP.P	DITCH, PAVED INVERT	<b>ROW MAPPING</b>				RRPSS	RAIL, PHOTO, SMALL SCALE		UFO	FIBER OPTIC, UNDERGROUND
	DDS.P	DITCH, STONE LINED		MDL	DEED LINE		RRS	RUMBLE STRIP		UFOH	FIBER OPTIC, HANGING
	DFL.P	FLOW LINE		PE	EASEMENT, EXISTING		RRSLS.P	RAIL, SURVEY, LARGE SCALE		UFOO	FIBER OPTIC, OVERHEAD
	DSSD	SLOTTED DRAIN		MEP.P	EASEMENT, PERMANENT		RRSSS	RAIL, SURVEY, SMALL SCALE		UG	GAS, UNDERGROUND
	DUD.P	UNDERDRAIN		MEPA.P	EASEMENT, PERMANENT, APPROX.	<b>SIGNS</b>				UGH	GAS, HANGING
<b>ENVIRONMENTAL</b>				MET.P	EASEMENT, TEMPORARY		SBLB	BILLBOARDS		UGO	GAS, OVERHEAD
	EBLHS	BALE, STRAW		META.P	EASEMENT, TEMPORARY, APPROX.		SM	MULTIPLE POST		UIC	INFORM CABLE, UNDERGROUND
	ECT	CURTAIN, TURBIDITY		FEE	FEE ACQUISITION, W/ ACCESS		SSO	STRUCTURE, OVERHEAD		UICH	INFORM CABLE, HANGING
	EDMC	DAM, COFFER		AFEE	FEE ACQUISITION, APPROXIMATE		SSOC	STRUCTURE, OVHD. CANTILEVER		UO	OIL LINE, UNDERGROUND
	EDMEC.P	DAM, EARTHEN CHECK		MFS.P	FEE ACQUISITION, SHAPE	<b>STRIPING</b>				UOH	OIL LINE, HANGING
	EDMGSC.P	DAM, GRAVEL BAG/SAND BAG CHECK		MFWOA.P	FEE ACQUISITION, W/O ACCESS		STB•	BROKEN LINE		UPBP	POLE, BRACE, PUSH BRACE
	EDMPC.P	DAM, PREFABRICATED CHECK		MHA	HISTORICAL, ACQUISITION		STDB•	DOUBLE BROKEN LINE		UPGW	POLE, GUY WIRE
	EDMSC.P	DAM, STONE CHECK		MHB	HIGHWAY BOUNDARY		STDL•	DOTTED LINE LONG		USA	SANITARY SEWER, UNDERGROUND
	EFNS	FENCE, SILT		MHBA	HIGHWAY BOUNDARY, APPROX.		STDS•	DOTTED LINE SHORT		USAH	SANITARY SEWER, HANGING
	EFNSV	FENCE, SILT & VEGETATION		MHBW	HWY BOUNDARY, FACE OF WALL		STFB•	FULL BARRIER LINE		USAF	SANITARY SEWER, FORCE MAIN, UGND
	EFNV	FENCE, VEGETATION		MHBWOA	HIGHWAY BOUNDARY, W/O ACCESS		STH•	HATCH LINE		USAFH	SANITARY SEWER, FORCE MAIN, HANG
	EWAA.P	WETLAND, ADJACENT AREA		MJC	JURISDICTION, CITY		STPB•	PARTIAL BARRIER LINE		UT	TELEPHONE, UNDERGROUND
	EWF	WETLAND, FEDERAL		MJCY	JURISDICTION, COUNTY		STRCT	ROUNDAABOUT, CAT TRACKS		UTH	TELEPHONE, HANGING
	EWFS	WETLAND, FEDERAL AND STATE		MJHD	JURISDICTION, HISTORIC DISTRICT		STRYL	ROUNDAABOUT, YIELD LINE		UTO	TELEPHONE, OVERHEAD
	EWM	WETLAND, MITIGATION AREA		MJLL	JURIS., (GREAT, MILITARY) LOT LINE		STSB	STOP BAR		UTV	CABLE TV, UNDERGROUND
	EWS	WETLAND, STATE		MJN	JURISDICTION, NATION		STSE•	SOLID, EDGE		UTVH	CABLE TV, HANGING
				MJPB	JURISDICTION, PUBLIC LANDS		STXL	X WALK, LADDER LINE		UTVO	CABLE TV, OVERHEAD
				MJS	JURISDICTION, STATE		STXLB	X WALK, LADDER BAR LINE		UUU	UNKNOWN, UNDERGROUND
				MJT	JURISDICTION, TOWN	<b>TRAFFIC CONTROL</b>				UUH	UNKNOWN, HANGING
				MJV	JURISDICTION, VILLAGE		TCSW	SIGNAL, SPAN WIRE		UUO	UNKNOWN, OVERHEAD
				MPL	PROPERTY LOT LINE					UW	WATER LINE, UNDERGROUND
				MPLA	PROPERTY LOT LINE, APPROXIMATE					UWH	WATER LINE, HANGING
				MSL	SUB LOT LINE					UWO	WATER LINE, OVERHEAD

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**RECORD PLANS**

I HEREBY CERTIFY BY MY SIGNATURE, THAT I HAVE PREPARED THIS RECORD DRAWING WHICH IS, TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, A TRUE REPRESENTATION OF THE WORK AS CONSTRUCTED.

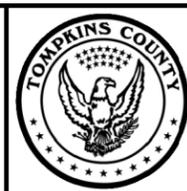
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If it is a violation of New York Education Law Article 145 Sec.7209, for any person, unless acting under the direction of a licensed architect, professional engineer, or land surveyor, to alter in any way, if an item bearing the seal of an architect, engineer, or land surveyor is altered; the altering architect, engineer, or land surveyor shall affix to the item their seal and notation "altered by" followed by their signature and date of such alteration, and a specific description of the alteration.

**LABELLA**  
Associates, P.C.

235 HARRISON STREET  
SYRACUSE, NY 13202



PROJECT/CLIENT

REPLACEMENT OF GROTON CITY ROAD BRIDGE  
OVER FALL CREEK  
B.I.N. 3314230  
TOMPKINS COUNTY  
TOWN OF GROTON

DRAWING TITLE

LEGEND - 2

PROJECT NUMBER  
2150220

DATE  
MAY 2015

DRAWING NUMBER  
L-2

PLOT/DRAWN: pdf, BW, hdd, jtbl  
 MODEL: LEGEND-2  
 CHECKED: J. Tompkins County  
 DATE: 5/2/2015  
 PROJECT MANAGER:

DESIGNER: VLG  
 ENGINEER: WAF

**GENERAL NOTES**

DESIGN SPECIFICATIONS: NYSDOT LRFD BRIDGE DESIGN SPECIFICATIONS WITH ALL PROVISIONS IN EFFECT AS OF MARCH 2015 (FOR DESIGN PURPOSES, COMPRESSIVE STRENGTH OF CONCRETE FOR SUBSTRUCTURES AT 28 DAYS:  $f'_c = 3000$  psi.)

LIVE LOAD: AASHTO HL - 93

CONSTRUCTION AND MATERIALS SPECIFICATIONS: STANDARD SPECIFICATIONS, CONSTRUCTION AND MATERIALS, NEW YORK STATE DEPARTMENT OF TRANSPORTATION, OFFICE OF ENGINEERING, DATED MAY 1, 2008 WITH CURRENT ADDITIONS AND MODIFICATIONS.

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.

ALL SHOP DRAWINGS SUBMITTED FOR THIS PROJECT SHALL BE IN US CUSTOMARY UNITS.

THE COST OF WATER USED FOR COMPACTION OF SELECT FILL ITEMS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 203.21 - SELECT STRUCTURE FILL.

THE COST OF ALL JOINT MATERIAL SHALL BE INCLUDED IN THE UNIT PRICES BID FOR THE VARIOUS ITEMS OF THE CONTRACT, UNLESS OTHERWISE SPECIFIED ON THE PLANS.

THIS BRIDGE SHALL BE MAINTAINED IN ACCORDANCE WITH THE GUIDELINES CONTAINED IN THE CURRENT EDITION OF THE AASHTO MAINTENANCE MANUAL: THE MAINTENANCE AND MANAGEMENT OF ROADWAYS AND BRIDGES.

**FOUNDATION NOTES**

SUBSURFACE EXPLORATIONS HAVE BEEN MADE FOR THIS PROJECT AT THE LOCATIONS ON THE GENERAL PLAN. BORING LOGS AND OTHER SUBSTRUCTURE INFORMATION MADE AVAILABLE FOR THE INSPECTION OF BIDDERS WERE OBTAINED WITH REASONABLE CARE AND RECORDED IN GOOD FAITH.

THE RECORDS TO THESE EXPLORATIONS ARE AVAILABLE TO THE BIDDERS FOR THEIR INSPECTION. THESE RECORDS WERE PREPARED FOR DESIGN PURPOSES ONLY, AND MAY NOT CONTAIN SUFFICIENT INFORMATION TO ACCURATELY PORTRAY ALL CONDITIONS THAT MAY BE ENCOUNTERED IN THE FIELD.

THE ABUTMENT PILES ARE DESIGNED TO SUPPORT A MAXIMUM STRENGTH LIMIT STATE AXIAL LOAD OF 160 KIPS PER PILE. DRIVE THESE PILES TO PRACTICAL REFUSAL (6 BLOWS PER INCH MINIMUM), AND NOMINAL RESISTANCE OF 240 KIPS PER PILE.

THE MAXIMUM SERVICE LIMIT STATE AXIAL LOAD FOR THE PILES AT THE ABUTMENTS IS 150 KIPS PER PILE.

DYNAMIC PILE TESTS SHALL BE CONDUCTED IN THE FIRST PILE DRIVEN AT EACH ABUTMENT OR AT OTHER LOCATIONS ORDERED BY THE ENGINEER. THE DRIVING CRITERIA FOR THE REMAINING PILES SHALL BE BASED ON THE RESULTS OF THESE TESTS. THE PILE USED FOR THE DYNAMIC PILE TEST SHALL BE A MINIMUM OF 5 FEET LONGER THAN THE ESTIMATED PILE LENGTH AT THE TEST LOCATION.

THE ORIGINAL BRIDGE HAD STEEL SHEET ABUTMENTS. THE EXISTING STEEL SHEETING MAY INTERFERE WITH THE INSTALLATION OF THE PROPOSED PILES. IF THERE ARE PILE INTERFERENCES, THE ENGINEER WILL DIRECT THE CONTRACTOR ON HOW TO PROCEED.

PROVIDE STEEL H-PILES MEETING THE REQUIREMENTS OF ASTM A572 GRADE 50 STEEL.

EQUIP ALL STEEL H-PILES WITH REINFORCED SHOES (APF HP77750 OR EQUIVALENT).

DO NOT USE MECHANICAL PILE SPLICES ON THIS STRUCTURE.

AFTER COMPLETION OF THE PILE INSTALLATION, THE ENGINEER WILL COMPLETE THE "PILE TABLE" FOR INCLUSION IN THE AS-BUILT PLANS.

**SUBSTRUCTURE NOTES**

ALL PLACEMENTS OF SELECT STRUCTURE FILL, ITEM 203.21, SHALL BE COMPACTED TO 95 PERCENT OF STANDARD PROCTOR MAXIMUM DENSITY.

HIGHWAY EMBANKMENT MATERIAL, ITEM 203.03, AND SELECT STRUCTURE FILL, ITEM 203.21, SHALL BE PLACED SIMULTANEOUSLY, IN CONTACT, ON BOTH SIDES OF THE VERTICAL PAYMENT LINE.

THE FOLLOWING CONCRETE ELEMENTS SHALL BE SEALED WITH A PENETRATING TYPE PROTECTIVE SEALER ACCORDING TO ITEM 559.18960118 - PROTECTIVE SEALING OF STRUCTURAL CONCRETE: ALL EXPOSED ABUTMENT AND WINGWALL CONCRETE.

IF THE STRUCTURE HAS A BRIDGE IDENTIFICATION NUMBER (B.I.N.) PLATE ATTACHED, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT IT DURING CONSTRUCTION OR REMOVE AND REMOUNT IT AFTER CONSTRUCTION IS COMPLETED.

**COFFERDAM NOTES**

SHOULD THE CONTRACTOR ELECT TO LAY BACK A PORTION OF THE EXISTING EARTH ADJACENT TO AN EXCAVATION REQUIRING A COFFERDAM, ANY REQUIRED EXTENSIONS OF THE COFFERDAM NECESSARY TO KEEP FROM ENTERING THE EXCAVATION SHALL BE FURNISHED AND PLACED AT NO COST TO THE COUNTY.

WHERE A COFFERDAM IS USED, THE COST OF DEWATERING THE ENTIRE EXCAVATION, REGARDLESS OF SOURCE OF WATER, SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE COFFERDAM ITEM.

SHOULD FIELD CONDITIONS REQUIRE A CHANGE FROM THE TYPE OF COFFERDAM SYSTEM CALLED FOR ON THE PLANS, THE ENGINEER-IN-CHARGE SHALL CONTACT THE ENGINEER FOR COORDINATION WITH APPROPRIATE AGENCIES TO APPROVE THE CHANGE.

IF MULTIPLE COFFERDAMS ARE REPLACED BY A SINGLE SYSTEM, AS PERMITTED BY THE ENGINEER, PAYMENT SHALL BE BASED ON ALL OF THE APPLICABLE COFFERDAM ITEMS INDICATED ON THE PLANS.

ORDINARY HIGH WATER IS ESTIMATED TO BE APPROXIMATELY 1269.15. THIS IS DEFINED AS THE WATER SURFACE ELEVATION FOR THE MEAN ANNUAL FLOOD, WHICH IS THE FLOOD THAT HAS A RECURRENCE INTERVAL OF 2.33 YEARS.

ORDINARY WATER IS ESTIMATED TO BE 1268.30. THIS IS DEFINED AS THE HIGHEST SURFACE WATER ELEVATION LIKELY TO BE ENCOUNTERED DURING ONE CONSTRUCTION SEASON (OTHER THAN MAJOR FLOODS). IT IS ALWAYS LESS THAN THE ORDINARY HIGH WATER ELEVATION AND IT IS USUALLY AN OBSERVED ELEVATION RATHER THAN A COMPUTED ONE.

LOW WATER IS ESTIMATED TO BE 1266.20. THIS WATER ELEVATION IS THE NORMAL LOW WATER ELEVATION PREVALENT DURING ONE CONSTRUCTION SEASON FOR MORE THAN 25% OF THE TIME. IT IS AN OBSERVED ELEVATION RATHER THAN A COMPUTED ONE.

**REMOVAL NOTES**

THE EXISTING ORIGINAL STEEL SUBSTRUCTURE SHALL BE REMOVED AS NECESSARY FOR THE CONSTRUCTION OF THE PROPOSED ABUTMENTS. THE COST FOR REMOVAL OF THE STEEL SUBSTRUCTURE WILL BE INCLUDED UNDER ITEM 202.19. THE CONTRACTOR'S ATTENTION IS DIRECTED TO AN EXISTING CONCRETE SUBSTRUCTURE IN THE NORTHWEST CORNER OF THE PROPOSED WEST ABUTMENT. THE LIMITS OF THIS SUBSTRUCTURE ARE UNKNOWN, UNLESS OTHERWISE SHOWN ON THE CONTRACT PLANS, REMOVE EXISTING SUBSTRUCTURES AS FOLLOWS:

COMPLETELY REMOVE THE PORTION OF THE EXISTING SUBSTRUCTURE TO 1'-0" BELOW PROPOSED BOTTOM OF ABUTMENT ELEVATION AND WITHIN A LATERAL LIMIT OF 3'-0" OF ALL NEW SUBSTRUCTURES.

REMOVE THE PORTION OF THE EXISTING SUBSTRUCTURE THAT IS OUTSIDE OF THIS LATERAL LIMIT AS FOLLOWS:

EXISTING SUBSTRUCTURE LOCATED UNDER SLOPE PROTECTION - REMOVE TO ELEVATION WHERE IT INTERSECTS THE BOTTOM OF STONE FILLING.

EXISTING SUBSTRUCTURE AT ALL OTHER LOCATIONS - REMOVE TO 1'-0" BELOW FINISHED GRADE.

THE EXISTING TEMPORARY BRIDGE SUBSTRUCTURE WILL BE REMOVED BY THE COUNTY.

EXISTING SUPERSTRUCTURE WILL BE REMOVED BY THE COUNTY.

WHENEVER ITEMS IN THE CONTRACT REQUIRE MATERIALS TO BE REMOVED AND DISPOSED OF, THE COST OF SUPPLYING A DISPOSAL AREA AND TRANSPORTATION TO THAT AREA SHALL BE INCLUDED IN THE UNIT PRICES BID FOR THOSE ITEMS.

ALL MATERIAL FALLING ON THE AREA BELOW AND ADJACENT TO THE BRIDGE SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AT NO COST TO THE COUNTY.

THE COST OF FURNISHING, INSTALLING, MAINTAINING, REMOVING AND DISPOSING OF ALL PLATFORMS, NETS, SCREENS OR OTHER PROTECTIVE DEVICES SHALL BE INCLUDED IN THE UNIT PRICES BID FOR THE APPROPRIATE ITEMS OF THE CONTRACT.

**RECONSTRUCTION NOTES**

THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE FACT THAT DUE TO THE NATURE OF RECONSTRUCTION PROJECTS, THE EXACT EXTENT OF RECONSTRUCTION WORK CANNOT ALWAYS BE ACCURATELY DETERMINED PRIOR TO THE COMMENCEMENT OF WORK. THE CONTRACT DOCUMENTS HAVE BEEN PREPARED BASED ON FIELD INSPECTION AND OTHER INFORMATION AVAILABLE AT THE TIME. ACTUAL FIELD CONDITIONS MAY REQUIRE MODIFICATIONS TO CONSTRUCTION DETAILS AND WORK QUANTITIES. THE CONTRACTOR SHALL PERFORM THE WORK IN ACCORDANCE WITH FIELD CONDITIONS.

THE CONTRACTOR SHALL PERFORM ALL WORK WITH CARE SO THAT ANY MATERIALS WHICH ARE TO REMAIN IN PLACE, OR WHICH ARE TO REMAIN THE PROPERTY OF THE COUNTY, WILL NOT BE DAMAGED. IF THE CONTRACTOR DAMAGES ANY MATERIALS WHICH ARE TO REMAIN IN PLACE OR WHICH ARE TO REMAIN THE PROPERTY OF THE COUNTY, THE DAMAGED MATERIALS SHALL BE REPAIRED OR REPLACED IN A MANNER SATISFACTORY TO THE ENGINEER AT THE EXPENSE OF THE CONTRACTOR.

**SUPERSTRUCTURE NOTES**

FOR BIN 3314230, SHOP DRAWING SUBMITTALS ARE REQUIRED FOR THE FOLLOWING: BRIDGE RAIL & TRANSITION ITEMS: 568.54 & 568.70.

ALL EXPOSED SURFACES OF NEW BRIDGE DECKS AND APPROACH SLABS SHALL BE SEALED ACCORDING TO ITEM 559.18960118 - PROTECTIVE SEALING OF STRUCTURAL CONCRETE ON NEW BRIDGE DECKS AND BRIDGE DECK OVERLAYS.

**DECK PLACEMENT NOTES**

CONCRETE PLACEMENT AND FINISHING OPERATIONS SHALL BE PERFORMED AS RAPIDLY AS POSSIBLE. THE ENGINEER MAY ORDER THE CONTRACTOR TO STOP PLACEMENT OPERATIONS AT ANY TIME IF, IN THE ENGINEER'S OPINION, CONCRETE PLACED DURING THE PLACEMENT HAS STARTED TO SET, OR IS ABOUT TO SET, AND FURTHER PLACEMENT OF CONCRETE WILL CAUSE DEFLECTION CRACKING.

LONGITUDINAL CONSTRUCTION JOINTS WILL NOT BE PERMITTED.

FINISHING MACHINE(S) SHALL BE OPERATED AS CLOSE TO THE SKEW ANGLE AS PRACTICABLE FOR SKEW ANGLES BETWEEN 0° AND 50°. WHEN THE SKEW ANGLE IS GREATER THAN 50° THE FINISHING MACHINE(S) SHALL BE OPERATED AT AN ANGLE OF 50°.

WET BURLAP CURING BLANKETS ARE REQUIRED TO BE PLACED ON THE CONCRETE DECK WITHIN 30 MINUTES OF THE CONCRETE BEING DEPOSITED INTO THE FORMS OR 5 MINUTES AFTER FINISHING, WHICHEVER COMES FIRST. THE PLACEMENT OF THE TURF DRAG TEXTURE SHALL NOT INTERFERE WITH THESE REQUIREMENTS.

IN THE EVENT THE CONTRACTOR'S DECK PLACEMENT OPERATION IS STOPPED PRIOR TO COMPLETION, WHETHER BY THE CONTRACTOR'S OWN DECISION OR BY ORDER OF THE ENGINEER, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A FINISHED DECK GRADE WHICH MATCHES THE PLANNED PROFILE. ANY SUBSEQUENT REVISIONS TO DECK FORMS MADE NECESSARY BY SUCH ACTION SHALL BE AT THE CONTRACTOR'S EXPENSE.

ALL PRESTRESSED CONCRETE BRIDGE BEAMS SHALL HAVE A MINIMUM AGE OF 60 DAYS AT THE TIME OF CONCRETE DECK PLACEMENT.

**STREAM PROTECTION NOTES**

DURING THE COURSE OF CONSTRUCTION, THE CONTRACTOR SHALL CONDUCT OPERATIONS IN SUCH A MANNER AS TO PREVENT OR REDUCE TO A MINIMUM ANY DAMAGE TO ANY STREAM FROM POLLUTION BY DEBRIS, SEDIMENT, OR OTHER FOREIGN MATERIAL OR FROM MANIPULATION OF EQUIPMENT AND/OR MATERIALS IN OR NEAR SUCH STREAMS. THE CONTRACTOR SHALL NOT RETURN DIRECTLY TO A STREAM 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 A STREAM, THE CONTRACTOR SHALL CONSTRUCT AN INTAKE OR TEMPORARY DAM REQUIRED TO PROTECT AND MAINTAIN WATER RIGHTS AND TO SUSTAIN FISH LIFE DOWNSTREAM.

**UTILITY NOTES**

EXISTING UTILITIES (LOCATIONS, SIZES AND INVERTS) SHOWN ON THE PLANS HAVE BEEN PLOTTED FROM FIELD SURVEYS AND RECORD MAPS AND ARE NOT CERTIFIED AS TO THEIR ACCURACY OR COMPLETENESS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATIONS AND DEPTHS OF ALL UTILITIES, AND STRUCTURES IN THE PATH OF, OR CLOSELY PARALLEL TO, OR UNDER THE PROPOSED CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE RESPECTIVE OWNERS IN AMPLE TIME FOR THEM TO LOCATE AND MARK THEIR FACILITIES. THE CONTRACTOR SHALL ALSO NOTIFY U.F.P.O. STAKEOUT AT LEAST 48 HOURS IN ADVANCE OF COMMENCING WORK.

THE ADJUSTMENT OF EXISTING UTILITY FACILITIES, IF REQUIRED, SHALL BE PERFORMED BY OTHERS UNLESS NOTED OTHERWISE WITHIN THE CONTRACT DRAWINGS. THE UTILITY COMPANIES SHALL BE INFORMED BY THE CONTRACTOR BEFORE CONSTRUCTION IS STARTED TO DETERMINE THE EXACT LOCATION OF ANY UTILITIES THAT ARE TO BE ADJUSTED, RELOCATED OR REPLACED. THE CONTRACTOR SHALL COORDINATE ANY WORK TO BE PERFORMED BY THE UTILITY COMPANIES THAT IS TO BE DONE DURING THE CONSTRUCTION OF THE PROJECT.

THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PRESERVE THE INTEGRITY OF THE EXISTING UTILITIES TO REMAIN AND SHALL PROVIDE UNINTERRUPTED SERVICE TO ALL USERS OF THE EXISTING SERVICE. EXISTING UTILITIES (TO REMAIN) ENCOUNTERED DURING RECONSTRUCTION ACTIVITIES SHALL BE PROTECTED AND SUPPORTED AS ORDERED BY THE ENGINEER. NO SEPARATE PAYMENT SHALL BE MADE FOR THE SUPPORTING OF UTILITIES ENCOUNTERED DURING THE PERFORMANCE OF THE WORK. ANY UTILITIES DAMAGED BY THE CONTRACTOR THROUGH DISREGARD OF THESE PROVISIONS SHALL BE REPAIRED AT THE CONTRACTOR'S SOLE COST.

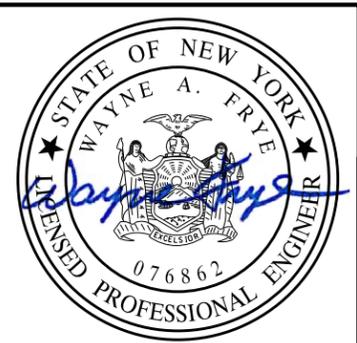
**BRIDGE CLOSURE AND DETOUR NOTES**

THE COUNTY WILL PROVIDE, INSTALL, AND MAINTAIN ALL ROAD CLOSURE BARRICADES, BARRIERS, FLASHERS AND SIGNAGE AND ALL DETOUR RELATED SIGNAGE.

THE CONTRACTOR SHALL COORDINATE ANY MODIFICATIONS NEEDED TO THE ROAD CLOSURE WITH THE COUNTY. THE COUNTY WILL NOTIFY THE APPROPRIATE LAW ENFORCEMENT AND EMERGENCY SERVICES IN ADVANCE OF ANY SUBSTANTIAL CHANGE IN TRAFFIC PATTERNS.

ALL GUIDE RAIL WORK SHALL BE COMPLETED PRIOR TO THE OPENING OF THE ROADWAY TO TRAFFIC.

PLOTDRWN pdf: BW: hdd: jrb: jrb  
 MODEL: GENERAL NOTES  
 DATE: 05/14/18  
 TIME: 5:21:04 PM  
 PROJECT NUMBER: 2150220  
 PROJECT CLIENT: Groton City Rd Bridge Replacement Structural Planset C150220\_gn-1.dgn  
 DATE TIME: 5/21/2018  
 PROJECT MANAGER: WAF  
 ENGINEER: WAF  
 DESIGNER: VLG  
 AUR



**RECORD PLANS**

I HEREBY CERTIFY BY MY SIGNATURE, THAT I HAVE PREPARED THIS RECORD DRAWING WHICH IS, TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, A TRUE REPRESENTATION OF THE WORK AS CONSTRUCTED.

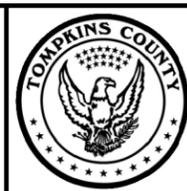
DATE: \_\_\_\_\_

NO.	REVISION	BY	DATE
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**LABELLA**  
Associates, P.C.

235 HARRISON STREET  
SYRACUSE, NY 13202



PROJECT/CLIENT

REPLACEMENT OF GROTON CITY ROAD BRIDGE  
OVER FALL CREEK  
B.I.N. 3314230  
TOMPKINS COUNTY  
TOWN OF GROTON

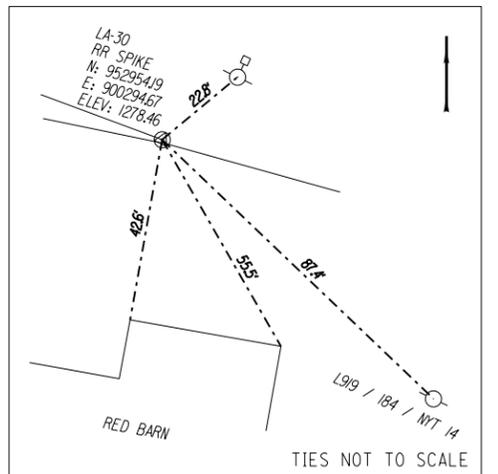
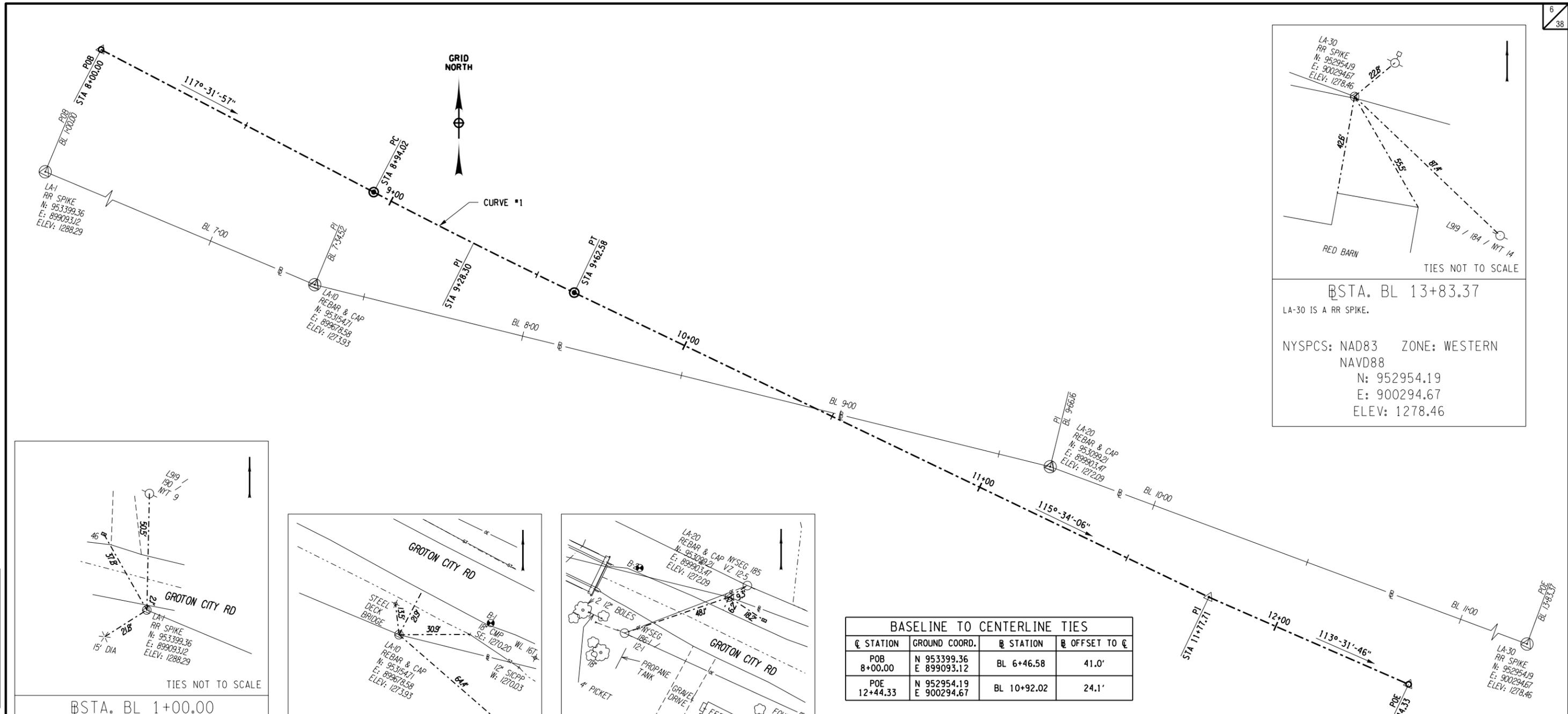
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GENERAL NOTES

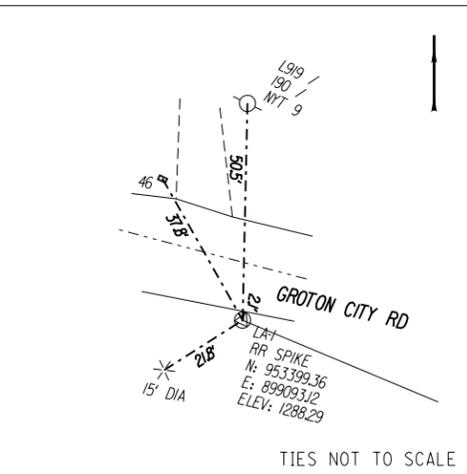
PROJECT NUMBER  
2150220

DATE  
MAY 2015

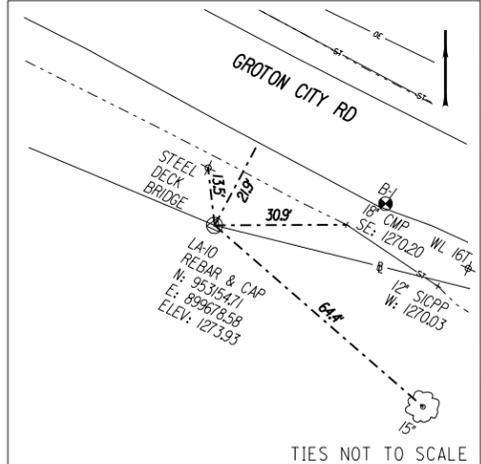
DRAWING NUMBER  
GN-1



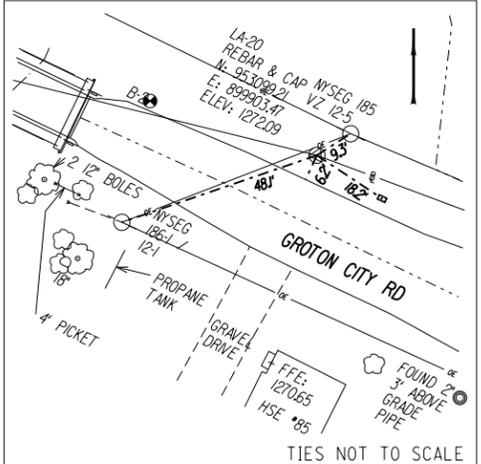
STATION: BL 13+83.37  
 LA-30 IS A RR SPIKE.  
 NYSPCS: NAD83 ZONE: WESTERN  
 NAVD88  
 N: 952954.19  
 E: 900294.67  
 ELEV: 1278.46



STATION: BL 1+00.00  
 LA-1 IS A RR SPIKE SET IN LAWN.  
 NYSPCS: NAD83 ZONE: WESTERN  
 NAVD88  
 N: 953399.36  
 E: 899093.12  
 ELEV: 1288.29



STATION: BL 7+34.52  
 LA-10 IS A REBAR & CAP SET IN LAWN.  
 NYSPCS: NAD83 ZONE: WESTERN  
 NAVD88  
 N: 953154.71  
 E: 899678.58  
 ELEV: 1273.93



STATION: BL 9+66.16  
 LA-20 IS A REBAR & CAP SET IN THE NORTH EDGE OF THE LAWN.  
 NYSPCS: NAD83 ZONE: WESTERN  
 NAVD88  
 N: 953099.21  
 E: 899903.47  
 ELEV: 1272.09

BASELINE TO CENTERLINE TIES			
STATION	GROUND COORD.	STATION	OFFSET TO C
POB 8+00.00	N 953399.36 E 899093.12	BL 6+46.58	41.0'
POE 12+44.33	N 952954.19 E 900294.67	BL 10+92.02	24.1'

CURVE #1	
STA.	8+94.02
P.C.	N 953182.94 E 899696.61
STA.	9+28.30
P.I.	N 953167.09 E 899727.01
STA.	9+62.58
P.T.	N 953152.30 E 899757.94
R	2000'
Δ	1°-57'-52" LT.
L	68.57'
T	34.29'

- NOTES:**
1. SURVEY MONUMENTS WITHIN THE PROJECT LIMITS MUST BE PROTECTED OR REPLACED AT THE EXPENSE OF THE CONTRACTOR.
  2. ALL DISTANCES, STATIONS AND COORDINATES SHOWN ON THE PLANS ARE REFERENCED TO NAD 83 / 96 HORIZONTAL DATUM. THE COMBINED SCALE FACTOR FOR THE PROJECT EQUALS 0.99990513.
  3. THE SURVEY CONTROL PTS. SHOWN ON THIS DWG. ALSO SERVE AS THE PROJECT BENCHMARKS. ALL ELEVATIONS REFERENCE NAVD 88 VERTICAL DATUM.
  4. SEE GENERAL PLAN DWG. PLN-1 FOR SURVEY CONTROL POINTS WITHIN THE PROJECT LIMITS.

PLOT/DRAWN: pdf, bwh, hhh, jhb  
 MODEL: SURVEY PLAN AND BASELINE TIES  
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 DATE: 05/12/2015 2:31:24 PM  
 PROJECT MANAGER:

DESIGNER: VLG  
 ENGINEER: AIR  
 WAF



**RECORD PLANS**

I HEREBY CERTIFY BY MY SIGNATURE, THAT I HAVE PREPARED THIS RECORD DRAWING WHICH IS, TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, A TRUE REPRESENTATION OF THE WORK AS CONSTRUCTED.

DATE: \_\_\_\_\_

NO.	REVISION	BY	DATE
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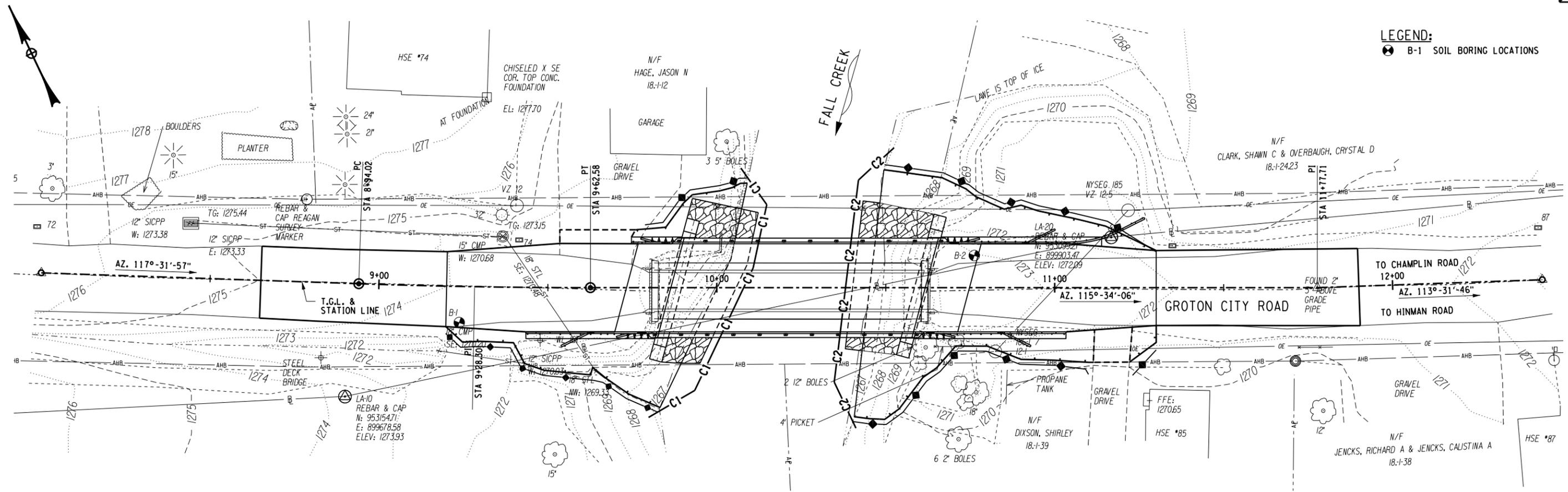
**LABELLA**  
 Associates, P.C.  
 235 HARRISON STREET  
 SYRACUSE, NY 13202



PROJECT CLIENT  
 REPLACEMENT OF GROTON CITY ROAD BRIDGE  
 OVER FALL CREEK  
 B.I.N. 3314230  
 TOMPKINS COUNTY  
 TOWN OF GROTON

DRAWING TITLE  
**SURVEY PLAN AND BASELINE TIES**

PROJECT NUMBER  
 2150220  
 DATE  
 MAY 2015  
 DRAWING NUMBER  
 SP-1



**LEGEND:**  
 ● B-1 SOIL BORING LOCATIONS

**TEMPORARY EROSION & SEDIMENT CONTROL PLAN**  
 NOT TO SCALE

**TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL NOTES:**

1. THE CONTRACTOR SHALL COMPLY WITH ALL PROVISIONS OF THE SECTION 401 WATER QUALITY CERTIFICATION.
2. THE ELEMENTS OF THESE DRAWINGS KNOWN AS TEMPORARY SOIL EROSION AND SEDIMENT CONTROL PLANS SHALL BE USED DURING CONSTRUCTION IN ANY AREA WHERE FINE MATERIALS MAY ENTER THE WATERS OF THE STATE OF NEW YORK.
3. ALL STREAM CHANNEL WORK SHALL BE LIMITED TO WITHIN THE DESIGNATED RIGHT OF WAY, EASEMENT LIMITS OR RELEASE.
4. ALL NECESSARY PRECAUTIONS SHALL BE TAKEN TO PREVENT MIGRATION INTO WATER BY SILT, SEDIMENT, FUELS, SOLVENTS, LUBRICANTS, CONCRETE LEACHATE OR ANY OTHER POLLUTANT ASSOCIATED WITH CONSTRUCTION PROCEDURES.
5. ANY DEBRIS OR EXCESS MATERIALS FROM CONSTRUCTION OF THIS PROJECT SHALL BE IMMEDIATELY AND COMPLETELY REMOVED FROM THE BED AND BANKS OF ALL WATER AREAS TO AN APPROPRIATE UPLAND AREA FOR DISPOSAL.
6. THE COST OF INSTALLING, CLEANING AND REMOVING TEMPORARY SOIL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE PAID UNDER THE ITEMS SHOWN.
7. IN THE EVENT DEWATERING OPERATION BECOMES NECESSARY, PUMPING TO AN APPROVED UPLAND VEGETATED AREA OUTSIDE THE STREAMBED WILL BE REQUIRED UNLESS THE PUMP DISCHARGE IS AS CLEAR AND FREE OF SEDIMENT AS THE FLOWING STREAM.
8. HEAVY EQUIPMENT SHALL NOT BE DRIVEN IN WATER.
9. ACCESS FILLS: CONSTRUCTION OF TEMPORARY ACCESS FILLS SHALL INCLUDE PLACEMENT OF GEOTEXTILE ON ORIGINAL GROUND FIRST, TO MAINTAIN SEPARATION OF MATERIALS. ANY ACCESS FILL MATERIALS PLACED SHALL MEET THE GRADATION SPECIFICATIONS FOR ITEM 203.06 SELECT FILL. ALL MATERIALS ARE TO BE REMOVED ONCE THE ACCESS FILLS ARE NO LONGER NEEDED. NO EXTRA PAYMENT WILL BE MADE FOR TEMPORARY ACCESS FILLS.
10. NO DISCHARGE OF TEMPORARY FILL MATERIAL INTO THE WATERWAY IS PERMITTED.
11. ANY ACCESS WAYS OR DETOURS SHALL BE COMPLETELY ISOLATED WITH EROSION CONTROL TREATMENTS. IF THE ACCESS WAY IS TO REMAIN IN PLACE LONGER THAN FIVE DAYS, THE EXPOSED SOILS ARE TO BE TEMPORARILY SEEDED AND MULCHED AS DESCRIBED UNDER SECTION 209, TEMPORARY SOIL EROSION AND SEDIMENT CONTROL.
12. SAND BAGS APPROVED FOR USE SHALL BE OF A REINFORCED GEOTEXTILE TYPE WITH TIES. NO BURLAP BAGS SHALL BE USED. SAND OR GRAVEL MAY BE USED AS THE FILL MATERIAL WITH THIS TYPE OF BAG IF MATERIAL IS DOUBLE BAGGED AND INDIVIDUALLY TIED TO PREVENT LEAKAGE. GRAVEL MATERIAL USED TO FILL THE BAGS SHALL MEET THE SIZE DESIGNATION #1 OF TABLE 703-4 OF N.Y.S.D.O.T. STANDARD SPECIFICATIONS.
13. GEOTEXTILE SHALL SATISFY THE REQUIREMENTS OF SECTION 207-2 OF THE N.Y.S.D.O.T. STANDARD SPECIFICATIONS.
14. WHERE SILT FENCE IS USED IN AREAS OF CONCENTRATED FLOW OR HEAVY SILT BUILDUP, THE ENGINEER-IN-CHARGE MAY CALL FOR BACKING THE FENCE WITH HAY BALES AS ADDITIONAL HIGH FLOW PROTECTION.
15. ONLY AFTER FABRIC HAS BEEN INSTALLED ON WIRE FENCING, MAY THE ENGINEER-IN-CHARGE ALSO CALL FOR BACKING THE FENCE WITH HAY BALES AS ADDITIONAL HIGH FLOW PROTECTION.
16. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PLACED PRIOR TO STARTING EARTHWORK OPERATIONS AND SHALL REMAIN IN PLACE UNTIL THE SLOPES ARE STABILIZED WITH SEEDING AND/OR SLOPE PROTECTION, A.O.B.E.
17. THE TEMPORARY SOIL EROSION AND SEDIMENT CONTROL DEVICES SPECIFIED IN THIS CONTRACT SHALL BE CHECKED AND REPAIRED AS NECESSARY, ON A WEEKLY BASIS AND AFTER EACH STORM EVENT. PERIODIC CLEANING OF SOIL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE NECESSARY AND A.O.B.E.
18. SEDIMENT DEPOSITS SHALL BE REMOVED FROM BEHIND SILT FENCES WHENEVER MORE THAN 6 INCHES OF MATERIAL HAS ACCUMULATED OR IF THE FENCE HAS BEEN BREACHED OR IS BULGING.
19. ANY DISTURBED AREAS WHICH ARE LEFT EXPOSED MORE THAN 14 DAYS, AND ARE NOT SUBJECT TO CONSTRUCTION TRAFFIC SHALL IMMEDIATELY RECEIVE TEMPORARY SEEDING IN ACCORDANCE WITH ITEM 209.1003. HOWEVER, NO EXTRA PAYMENT WILL BE MADE FOR TEMPORARY SEEDING.
20. ANY GRADED AREAS NOT SUBJECT TO FURTHER DISTURBANCE OR CONSTRUCTION TRAFFIC SHALL BE ESTABLISHED WITH PERMANENT VEGETATIVE COVER, AS PER CONTRACT SPECIFICATIONS, WITHIN 14 DAYS OF FINAL GRADING.
21. ALL STORM DRAINAGE OUTLETS SHALL BE STABILIZED, AS REQUIRED, BEFORE THE DISCHARGE POINTS BECOME OPERATIONAL.
22. THE SITE SHALL AT ALL TIMES BE GRADED AND MAINTAINED SUCH THAT ALL STORM WATER RUNOFF IS DIVERTED TO SOIL EROSION AND SEDIMENT CONTROL FACILITIES.
23. STORM WATER FROM DISTURBED AREAS MUST BE PASSED THROUGH A SEDIMENT TRAP OR SILTATION FENCE BEFORE DISCHARGE BEYOND DISTURBED AREAS OR INTO INLETS OF OTHER DRAINAGE SYSTEMS.
24. DURING CONSTRUCTION NO WET OR FRESH CONCRETE OR LEACHATE SHALL BE ALLOWED TO ESCAPE TO NY WATERS NOR SHALL WASHING FROM CONCRETE TRUCKS, MIXERS, OR OTHER DEVICES BE ALLOWED TO ENTER ANY WATERS.
25. ALL DREDGED AND EXCAVATED MATERIAL SHALL BE DISPOSED OF ON AN UPLAND SITE AND BE SUITABLY STABILIZED SO THAT IT CANNOT REASONABLY RE-ENTER ANY WATER BODY.
26. THE LOCATION OF EROSION AND SEDIMENT CONTROL MEASURES AS INDICATED IN THE CONTRACT DOCUMENTS, MAY REQUIRE FIELD ADJUSTMENT DEPENDING ON THE SEQUENCE OF CONSTRUCTION ACTIVITIES, CONSTRUCTION METHODS AND/OR ACTUAL FIELD CONDITIONS. NO MODIFICATIONS WILL BE MADE WITHOUT THE APPROVAL OF THE ENGINEER.

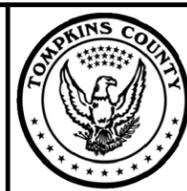
**LEGEND:**  
 ● SILT FENCE - TEMPORARY, ITEM 209.13  
 C COFFERDAM (TYPE 2) - ITEMS 553.020001 & 553.020002  
 — FILL LIMIT LINE  
 ▲ CUT LIMIT LINE

SILT FENCE TABLE		
STATION TO STATION	SIDE	LENGTH (FT)
9+78 TO 10+09	LT.	36
10+50 TO 11+30	LT.	87
9+20 TO 9+82	RT.	70
10+40 TO 11+10	RT.	80
11+23 TO 11+30	RT.	10

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 DATE: \_\_\_\_\_

NO.	REVISION	BY	DATE
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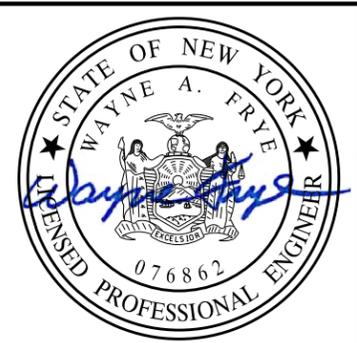


PROJECT/CLIENT  
 REPLACEMENT OF GROTON CITY ROAD BRIDGE  
 OVER FALL CREEK  
 B.I.N. 3314230  
 TOMPKINS COUNTY  
 TOWN OF GROTON

DRAWING TITLE  
**TEMPORARY EROSION AND SEDIMENT CONTROL PLAN AND NOTES**

PROJECT NUMBER  
 2150220  
 DATE  
 MAY 2015  
 DRAWING NUMBER  
 ESC-1

PLOT/DRAW: pdf, BW, 11x17, 1/2" = 1' (1/4" = 1' 0")  
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 ENGINEER: WAF

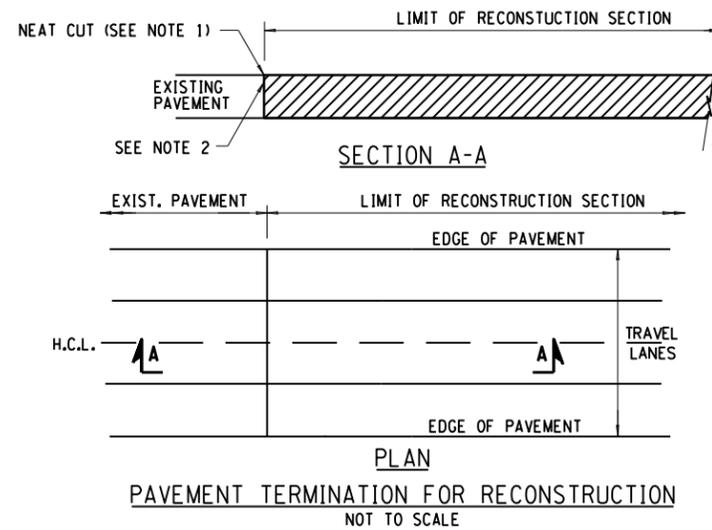


BRIDGE RAILING & GUIDE RAILING TABLE						
STATION TO STATION	SIDE	568.54	568.70	606.10	606.120101	606.120201
9+78.70 TO 11+26.68	L.T.	81'-6"	43'-7"	3'-0"	---	1
9+43.58 TO 11+03.30	RT.	81'-6"	58'-0"	6'-0"	2	---
TOTALS		163'-0"	101'-7"	9'-0"	2	1

- ITEM 568.54 - STEEL BRIDGE RAILING (THREE RAIL)
- ITEM 568.70 - TRANSITION BRIDGE RAILING
- ITEM 606.10 - BOX BEAM GUIDE RAILING
- ITEM 606.120101 - BOX BEAM END PIECE
- ITEM 606.120201 - BOX BEAM GUIDE RAILING END ASSEMBLY, TYPE IIA

**PLAN**

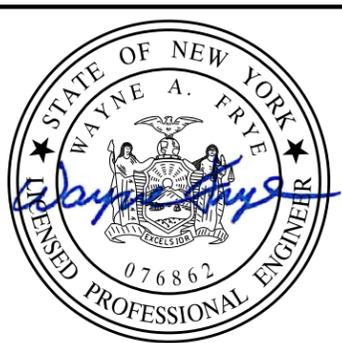
LENGTHS SHOWN ARE ACTUAL MEASURED DISTANCES WHICH MUST BE MULTIPLIED BY PAYMENT FACTORS FOR THE VARIOUS POST SPACINGS



**NOTES:**

1. THE COST OF THE NEAT CUT SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 203.02, UNCLASSIFIED EXCAVATION AND DISPOSAL.
2. ALL SEAMS BETWEEN EXISTING AND NEW ASPHALT SURFACES SHALL BE SEALED WITH AN ASPHALT FILLER CORRESPONDING TO THE MATERIAL REQUIREMENTS OF NYS DOT MATERIAL DESIGNATION 702-05 OR 702-3401. THE COST TO BE INCLUDED IN THE VARIOUS ASPHALT ITEMS IN THE CONTRACT.

PLOT/DRAW: pdf, BW, hdd, jtd, jg  
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 ENGINEER: WAF  
 DESIGNER: AJR  
 VLG



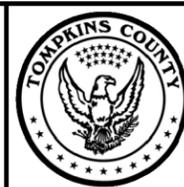
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**LABELLA**  
Associates, O.P.C.

235 HARRISON STREET  
SYRACUSE, NY 13202



PROJECT/CLIENT

REPLACEMENT OF GROTON CITY ROAD BRIDGE  
OVER FALL CREEK  
B.I.N. 3314230  
TOMPKINS COUNTY  
TOWN OF GROTON

DRAWING TITLE

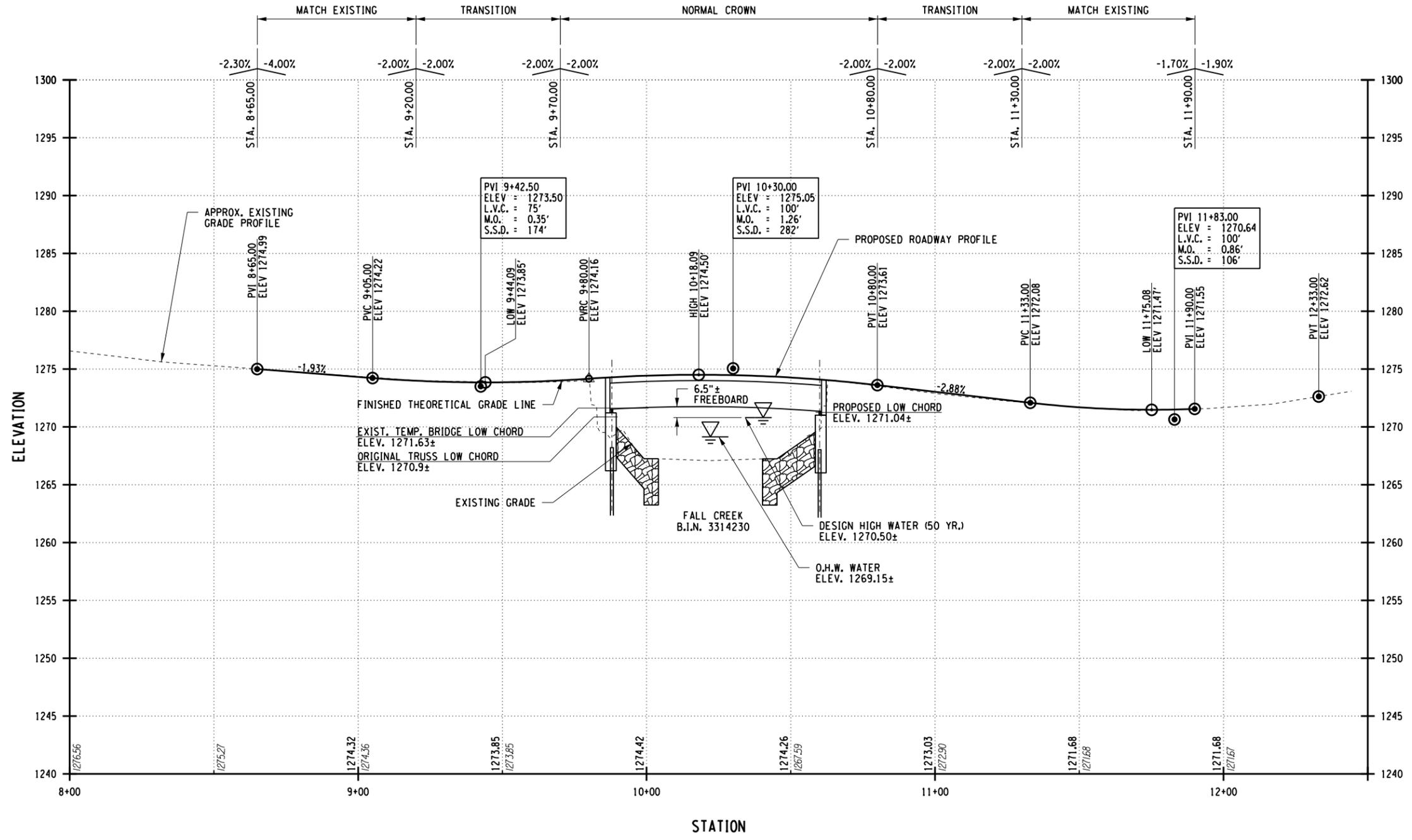
CONSTRUCTION TABLES  
AND DETAILS

PROJECT NUMBER  
2150220

DATE  
MAY 2015

DRAWING NUMBER  
CT-1





GROTON CITY ROAD PROFILE  
SCALE: HORIZ. 1" = 40'  
VERT. 1" = 10'

PLOT/DRAW: pdf, BW, 11x17, 1/16  
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 PROJECT MANAGER: WAF  
 ENGINEER: WAF  
 DESIGNER: VLG  
 AIR



**RECORD PLANS**

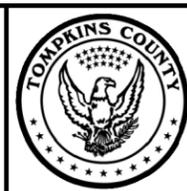
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TOWN OF GROTON

DRAWING TITLE

PROFILE

PROJECT NUMBER  
2150220

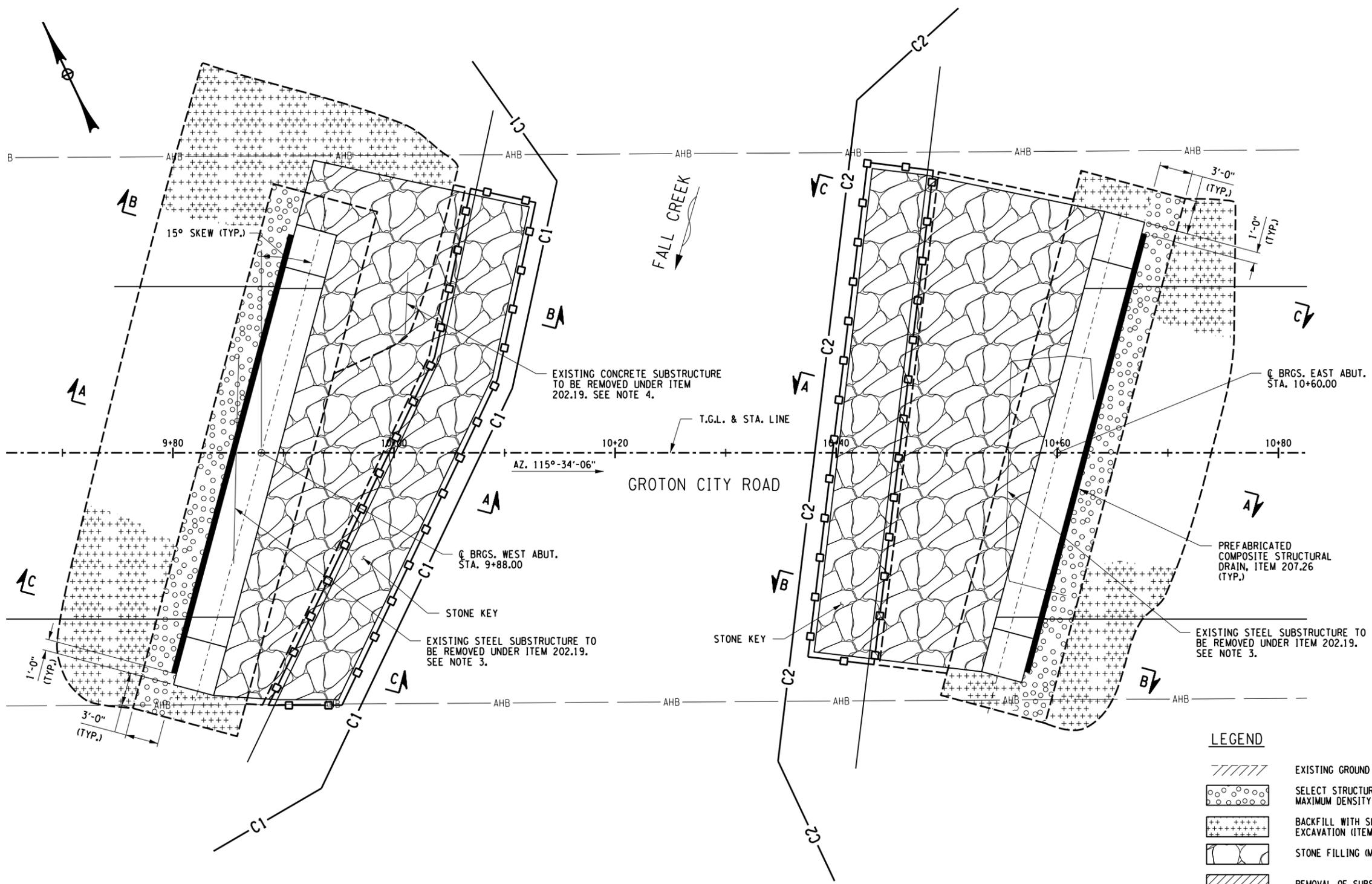
DATE  
MAY 2015

DRAWING NUMBER  
PR-1





- NOTES:**
- FOR SECTIONS A-A THRU C-C, SEE DWG. ST-2.
  - CONTRACTOR SHALL COMPLETE ALL WORK IN THE DRY (OUT OF EXISTING CREEK FLOW).
  - SEE REMOVAL NOTES ON DWG. GN-1 FOR EXISTING SUBSTRUCTURE REMOVAL LIMITS.

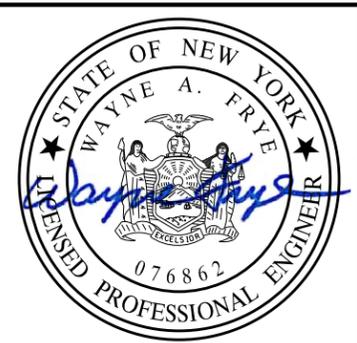


**EXCAVATION AND BACKFILL PLAN**  
SCALE: 1" = 10'-0"

**LEGEND**

- EXISTING GROUND SURFACE
- SELECT STRUCTURE FILL (ITEM 203.21), COMPACTED TO 95% OF STANDARD PROCTOR MAXIMUM DENSITY
- BACKFILL WITH SUITABLE EXCAVATED MATERIAL AS PROVIDED FOR UNDER STRUCTURE EXCAVATION (ITEM 206.01), OR TRENCH & CULVERT EXCAVATION (ITEM 206.0201)
- STONE FILLING (MEDIUM) (ITEM 620.04)
- REMOVAL OF SUBSTRUCTURES (ITEM 202.19)
- PREFABRICATED COMPOSITE STRUCTURAL DRAIN (ITEM 207.26)
- AREA ENCLOSED WITHIN THESE LINES DESIGNATES PAYMENT LINES FOR STRUCTURE EXCAVATION (ITEM 206.01)
- DESIGNATES COFFERDAM (TYPE 2) (ITEMS 553.020001 & 553.020002)
- AREA ENCLOSED WITHIN THESE LINES DESIGNATES PAYMENT LINES FOR TRENCH & CULVERT EXCAVATION (ITEM 206.0201)

PROJECT MANAGER: WAF  
 ENGINEER: AIR  
 DESIGNER: VLG  
 PLOT/DRAW: pdf, BW, hdd, auto  
 EXCAVATION AND BACKFILL PLAN  
 FILE PATH: J:\Tompkins County\2150220 - Groton City Fall Bridge Replace\Drawings\Structural\PlanSet\2150220\_e01a.dgn  
 DATE: 05/21/2015 2:52:21 PM



**RECORD PLANS**

I HEREBY CERTIFY BY MY SIGNATURE, THAT I HAVE PREPARED THIS RECORD DRAWING WHICH IS, TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, A TRUE REPRESENTATION OF THE WORK AS CONSTRUCTED.

DATE: \_\_\_\_\_

NO.	REVISION	BY	DATE
1			
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It is a violation of New York Education Law Article 145 Sec. 7209, for any person, unless acting under the direction of a licensed architect, professional engineer, or land surveyor, to alter an item in any way, if an item bearing the seal of an architect, engineer, or land surveyor is altered; the altering architect, engineer, or land surveyor shall affix to the item their seal and notation "altered by" followed by their signature and date of such alteration, and a specific description of the alteration.

**LABELLA**  
Associates, P.C.

235 HARRISON STREET  
SYRACUSE, NY 13202



PROJECT/CLIENT

REPLACEMENT OF GROTON CITY ROAD BRIDGE  
OVER FALL CREEK  
B.I.N. 3314230  
TOMPKINS COUNTY  
TOWN OF GROTON

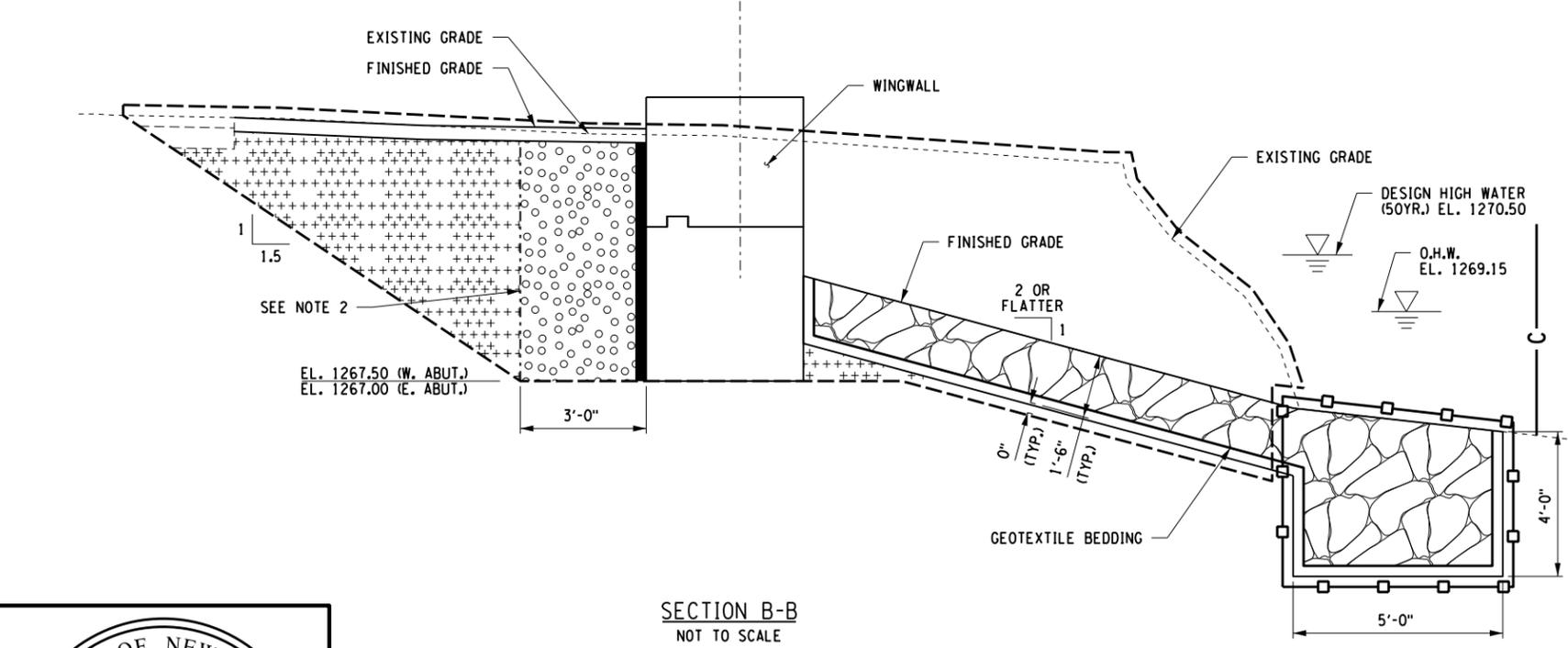
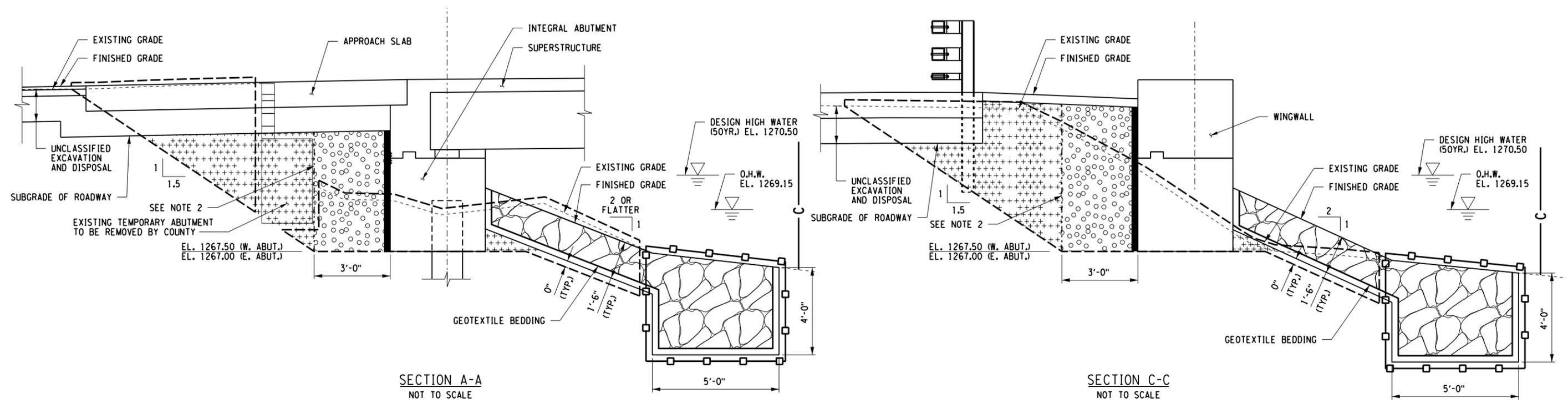
DRAWING TITLE

**EXCAVATION AND BACKFILL PLAN**

PROJECT NUMBER  
2150220

DATE  
MAY 2015

DRAWING NUMBER  
ST-1



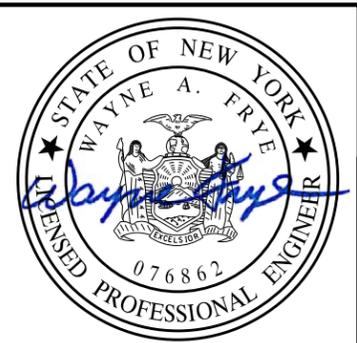
**NOTES:**

- FOR LEGEND AND LOCATION OF SECTIONS A-A THRU C-C, SEE DWG. ST-1.
- MATERIALS ON BOTH SIDES OF THE VERTICAL PAYMENT LINE SHALL BE PLACED AT THE SAME TIME.
- INCLUDE A LAYER OF GEOTEXTILE BEDDING, ITEM 207.20, MEETING THE MATERIAL REQUIREMENTS OF MATERIAL CODE 737.0103 OR MATERIAL CODE 737.0106 AND BEDDING CLASS B, BENEATH THE STONE FILLING (MEDIUM), ITEM 620.04, AT THIS SITE.
- ORDINARY WATER IS ESTIMATED TO BE 1268.30. THIS IS DEFINED AS THE HIGHEST SURFACE WATER ELEVATION LIKELY TO BE ENCOUNTERED DURING ONE CONSTRUCTION SEASON (OTHER THAN MAJOR FLOODS). IT IS ALWAYS LESS THAN THE ORDINARY HIGH WATER ELEVATION AND IT IS USUALLY AN OBSERVED ELEVATION RATHER THAN A COMPUTED ONE.
- LOW WATER IS ESTIMATED TO BE 1266.20. THIS WATER ELEVATION IS THE NORMAL LOW WATER ELEVATION PREVALENT DURING ONE CONSTRUCTION SEASON FOR MORE THAN 25% OF THE TIME. IT IS AN OBSERVED ELEVATION RATHER THAN A COMPUTED ONE.

**LEGEND**

- EXISTING GROUND SURFACE
- SELECT STRUCTURE FILL (ITEM 203.21), COMPACTED TO 95% OF STANDARD PROCTOR MAXIMUM DENSITY
- BACKFILL WITH SUITABLE EXCAVATED MATERIAL AS PROVIDED FOR UNDER STRUCTURE EXCAVATION (ITEM 206.01), OR TRENCH & CULVERT EXCAVATION (ITEM 206.0201)
- STONE FILLING (MEDIUM) (ITEM 620.04)
- REMOVAL OF SUBSTRUCTURES (ITEM 202.19)
- PREFABRICATED COMPOSITE STRUCTURAL DRAIN (ITEM 207.26)
- AREA ENCLOSED WITHIN THESE LINES DESIGNATES PAYMENT LINES FOR STRUCTURE EXCAVATION (ITEM 206.01)
- DESIGNATES COFFERDAM (TYPE 2) (ITEMS 553.020001 & 553.020002)
- AREA ENCLOSED WITHIN THESE LINES DESIGNATES PAYMENT LINES FOR TRENCH & CULVERT EXCAVATION (ITEM 206.0201)

PLOT/DRAWN BY: B.W. HALL/ajb  
 EXCAVATION AND BACKFILL SECTIONS  
 MODEL FILE: C:\p\comptons\groton\2150220 - Groton City Rd Bridge\Replace Structural\PlanSet\2150220\_01b.dwg  
 DATE/TIME: 5/2/2015 2:58:57 PM  
 PROJECT MANAGER: WAF  
 ENGINEER: IJF  
 DESIGNER: VLG



**RECORD PLANS**

I HEREBY CERTIFY BY MY SIGNATURE, THAT I HAVE PREPARED THIS RECORD DRAWING WHICH IS, TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, A TRUE REPRESENTATION OF THE WORK AS CONSTRUCTED.

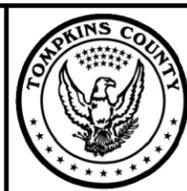
DATE: \_\_\_\_\_

NO.	REVISION	BY	DATE
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**LABELLA**  
Associates, P.C.

235 HARRISON STREET  
SYRACUSE, NY 13202



PROJECT/CLIENT

REPLACEMENT OF GROTON CITY ROAD BRIDGE  
OVER FALL CREEK  
B.I.N. 3314230  
TOMPKINS COUNTY  
TOWN OF GROTON

DRAWING TITLE

EXCAVATION AND BACKFILL  
SECTIONS

PROJECT NUMBER  
2150220

DATE  
MAY 2015

DRAWING NUMBER  
ST-2

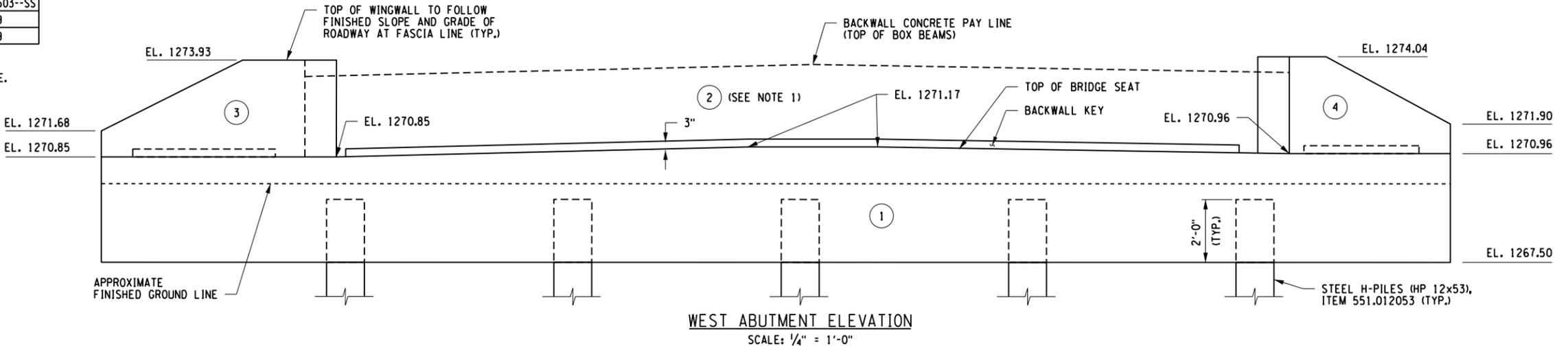
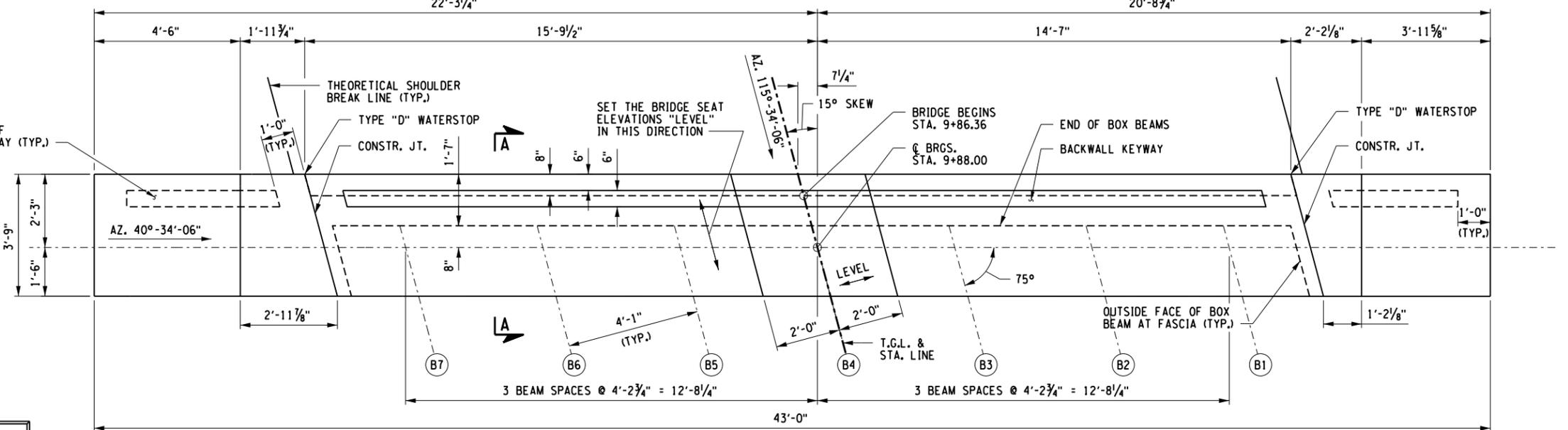
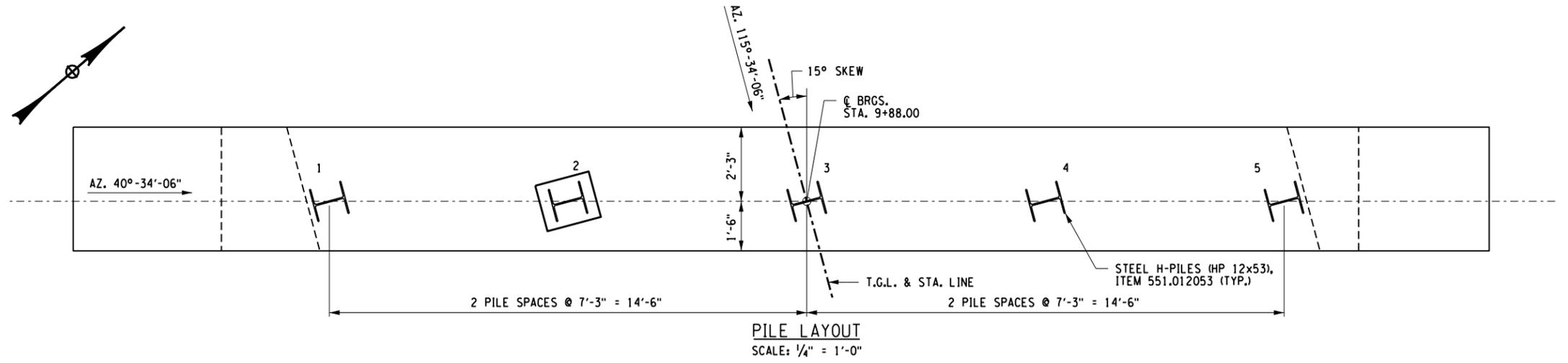
LEGEND	
	STEEL BEARING PILE, ITEM 551.012053
	DYNAMIC PILE LOAD TESTING, ITEM 551.14
PILE CUT-OFF ELEVATION IS 1269.50.	
FOR PILE SPLICE DETAILS, SEE DWG. NO. ST-8	
FOR PILE TIP DETAILS, SEE DWG. NO. ST-8	
THE ESTIMATED LENGTH OF PILE IS 60 ft.	

- NOTES:**
- BACKWALL CONCRETE FROM TOP OF BRIDGE SEAT TO TOP OF BOX BEAM UNITS IS TO BE POURED AT THE SAME TIME AS THE SUPERSTRUCTURE SLAB AND PAID FOR UNDER THE SUPERSTRUCTURE SLAB ITEM. REFER TO POUR 2 IN CONCRETE TABLE.
  - COVER FOR STEEL REINFORCEMENT SHALL BE 2" UNLESS OTHERWISE NOTED.
  - FOR SECTION A-A SEE DWG. ST-7.
- (NO.) - INDICATES CONCRETE PLACEMENT NUMBER.

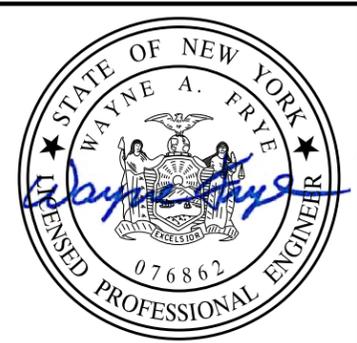
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PILE NO.	LENGTH BELOW CUT-OFF
1	
2	
3	
4	
5	

CONCRETE TABLE		
PLACEMENT	QUANTITY	ITEM NO.
1	21.3 CY	555.09
2 **	5.2 CY	557.0503--SS
3 *	2.3 CY	555.09
4 *	1.8 CY	555.09

- \* THESE POURS TO BE PLACED AFTER THE TRANSVERSE TENDONS ARE IN PLACE.
- \*\* QUANTITY SHOWN FOR INFORMATION ONLY. COST TO BE INCLUDED IN SUPERSTRUCTURE SLAB ITEM.



PLOTDRWR: pdf, BW, H:\projects\2150220\Drawings\Structural\PlanSet\2150220\_a1a.dgn  
 MODEL: WEST ABUTMENT PLAN AND ELEVATION  
 FILE PATH: C:\Users\jgordon\OneDrive\Documents\Drawings\Structural\PlanSet\2150220\_a1a.dgn  
 DATE: 05/21/2015 10:23:03 AM  
 PROJECT MANAGER:



RECORD PLANS	
I HEREBY CERTIFY BY MY SIGNATURE, THAT I HAVE PREPARED THIS RECORD DRAWING WHICH IS, TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, A TRUE REPRESENTATION OF THE WORK AS CONSTRUCTED.	DATE: _____

NO.	REVISION	BY	DATE
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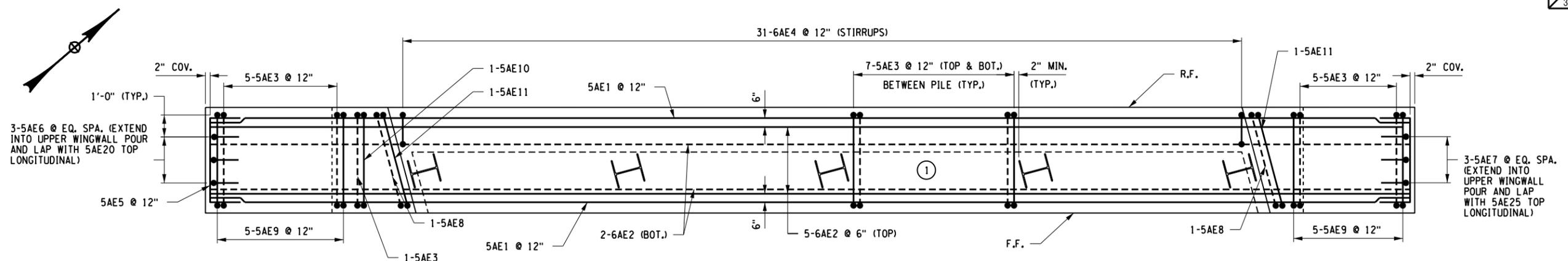
**LABELLA**  
Associates, P.C.  
235 HARRISON STREET  
SYRACUSE, NY 13202



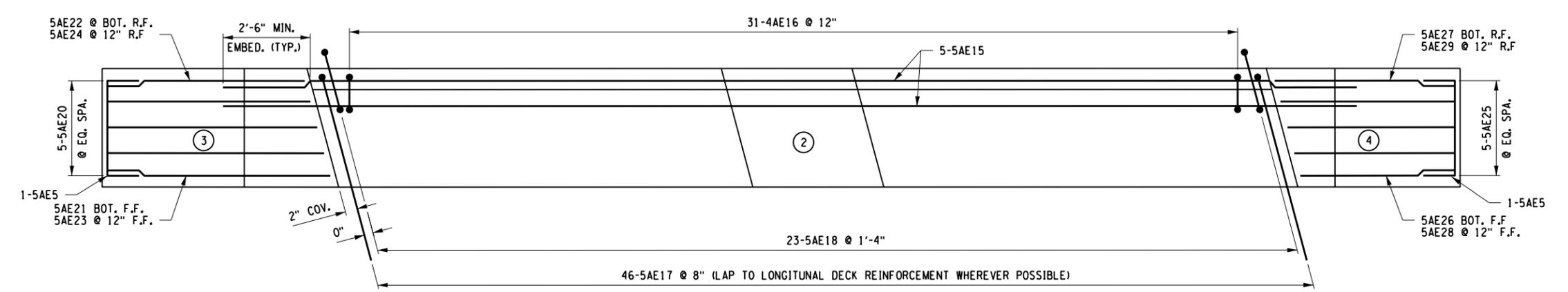
PROJECT/CLIENT  
REPLACEMENT OF GROTON CITY ROAD BRIDGE  
OVER FALL CREEK  
B.I.N. 3314230  
TOMPKINS COUNTY  
TOWN OF GROTON

DRAWING TITLE  
**WEST ABUTMENT  
PLAN AND ELEVATION**

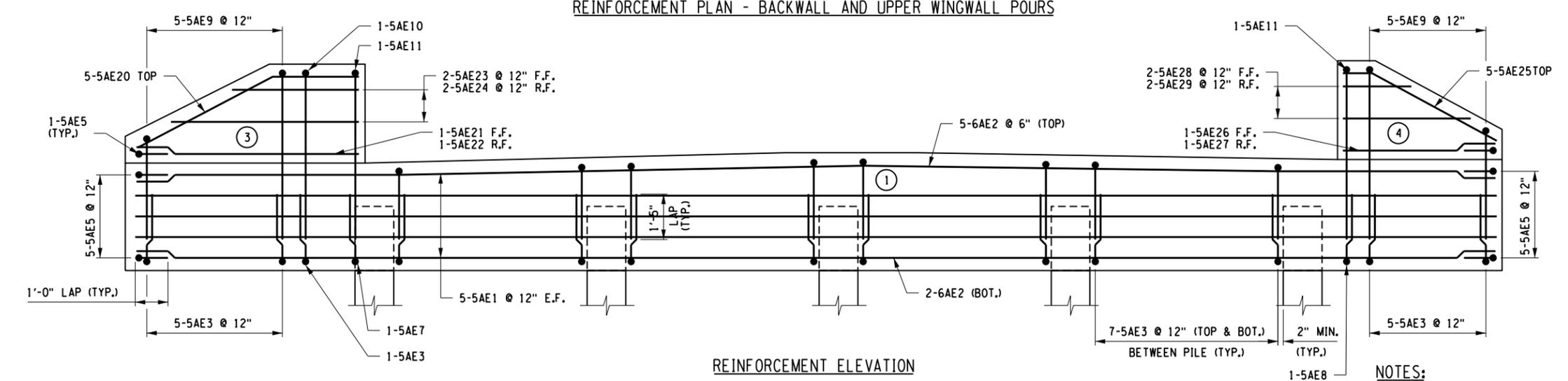
PROJECT NUMBER  
2150220  
DATE  
MAY 2015  
DRAWING NUMBER  
ST-3



WEST REINFORCEMENT PLAN - LOWER POUR



REINFORCEMENT PLAN - BACKWALL AND UPPER WINGWALL POURS



REINFORCEMENT ELEVATION

- NOTES:**
- (E) DENOTES EPOXY COATED BARS.
  - COVER FOR STEEL REINFORCEMENT SHALL BE 2\"/>

PROJECT MANAGER: WAF  
 ENGINEER: AJR  
 DESIGNER: VLG



**RECORD PLANS**

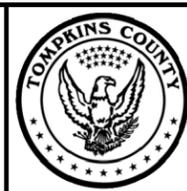
I HEREBY CERTIFY BY MY SIGNATURE, THAT I HAVE PREPARED THIS RECORD DRAWING WHICH IS, TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, A TRUE REPRESENTATION OF THE WORK AS CONSTRUCTED.

DATE: \_\_\_\_\_

NO.	REVISION	BY	DATE
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2			
3			
4			
5			

**LABELLA**  
Associates, P.C.

235 HARRISON STREET  
SYRACUSE, NY 13202



PROJECT/CLIENT

REPLACEMENT OF GROTON CITY ROAD BRIDGE  
OVER FALL CREEK  
B.I.N. 3314230  
TOMPKINS COUNTY  
TOWN OF GROTON

DRAWING TITLE

WEST ABUTMENT REINFORCEMENT

PROJECT NUMBER  
2150220

DATE  
MAY 2015

DRAWING NUMBER  
ST-4

PLOTTED BY: B.W. HARRINGTON  
 MODEL: WEST ABUTMENT REINFORCEMENT  
 FILE: C:\Users\BWH\Documents\Drawings\Structural\Plans\ST-4\ST-4.dwg  
 DATE: 5/15/15 9:23:08 AM

LEGEND	
	STEEL BEARING PILE, ITEM 551.012053
	DYNAMIC PILE LOAD TESTING, ITEM 551.14
	PILE CUT-OFF ELEVATION IS 1269.00.
	FOR PILE SPLICE DETAILS, SEE DWG. NO. ST-8
	FOR PILE TIP DETAILS, SEE DWG. NO. ST-8
	THE ESTIMATED LENGTH OF PILE IS 60 FT.

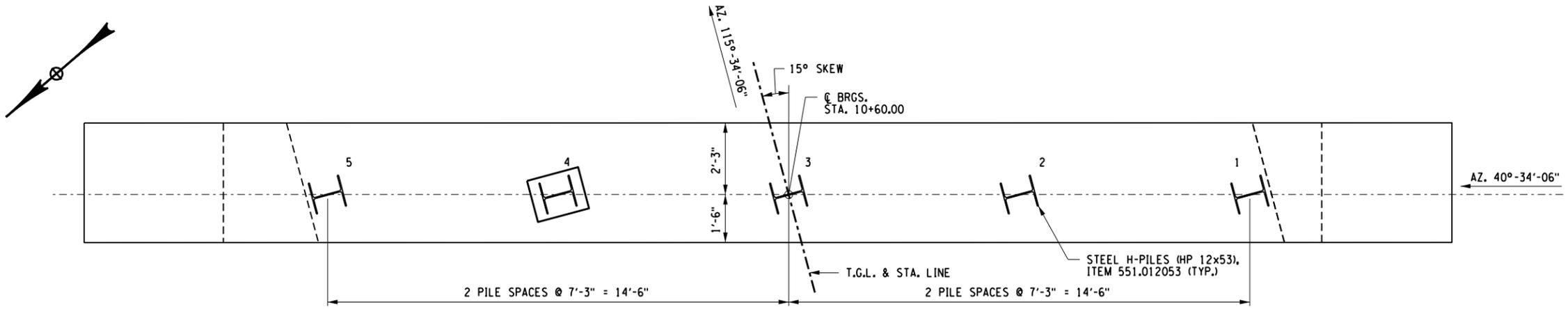
- NOTES:**
- BACKWALL CONCRETE FROM TOP OF BRIDGE SEAT TO TOP OF BOX BEAM UNITS IS TO BE POURED AT THE SAME TIME AS THE SUPERSTRUCTURE SLAB AND PAID FOR UNDER THE SUPERSTRUCTURE SLAB ITEM. REFER TO POUR 2 IN CONCRETE TABLE.
  - COVER FOR STEEL REINFORCEMENT SHALL BE 2" UNLESS OTHERWISE NOTED.
  - FOR SECTIONS A-A SEE DWG. ST-7.

(NO.) - INDICATES CONCRETE PLACEMENT NUMBER.

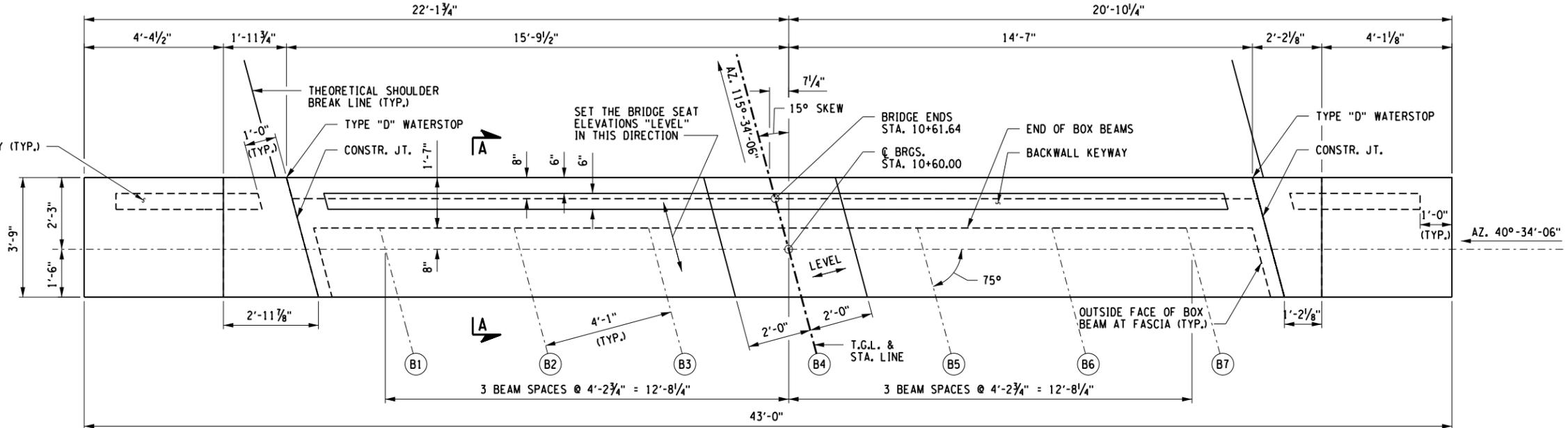
PILE TABLE	
PILE NO.	LENGTH BELOW CUT-OFF
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2	
3	
4	
5	

CONCRETE TABLE		
PLACEMENT	QUANTITY	ITEM NO.
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3 *	2.3 CY	555.09
4 *	1.9 CY	555.09

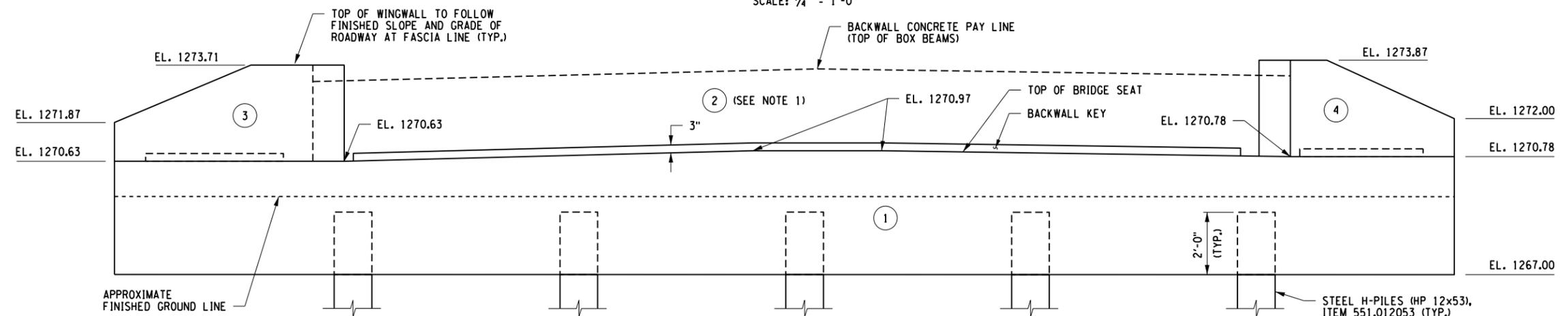
- \* THESE POURS TO BE PLACED AFTER THE TRANSVERSE TENDONS ARE IN PLACE.
- \*\* QUANTITY SHOWN FOR INFORMATION ONLY. COST TO BE INCLUDED IN SUPERSTRUCTURE SLAB ITEM.



**PILE LAYOUT**  
SCALE: 1/4" = 1'-0"

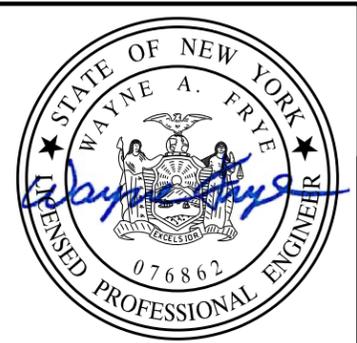


**EAST ABUTMENT PLAN**  
SCALE: 1/4" = 1'-0"



**EAST ABUTMENT ELEVATION**  
SCALE: 1/4" = 1'-0"

PLOTDRVR: pdf\_bv\_hair.plt  
 MODEL: EAST ABUTMENT PLAN AND ELEVATION  
 DATE: 05/15/2015 10:53:23 AM  
 FILE: C:\Users\jgibson\OneDrive\Documents\Drawings\Structural\PlanSet\2150220\_a2.dwg  
 PROJECT MANAGER: WAF  
 ENGINEER: AIR  
 DESIGNER: VLG



**RECORD PLANS**

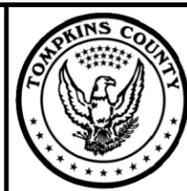
I HEREBY CERTIFY BY MY SIGNATURE, THAT I HAVE PREPARED THIS RECORD DRAWING WHICH IS, TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, A TRUE REPRESENTATION OF THE WORK AS CONSTRUCTED.

DATE: \_\_\_\_\_

NO.	REVISION	BY	DATE
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**LABELLA**  
Associates, P.C.

235 HARRISON STREET  
SYRACUSE, NY 13202



PROJECT/CLIENT

REPLACEMENT OF GROTON CITY ROAD BRIDGE  
OVER FALL CREEK  
B.I.N. 3314230  
TOMPKINS COUNTY  
TOWN OF GROTON

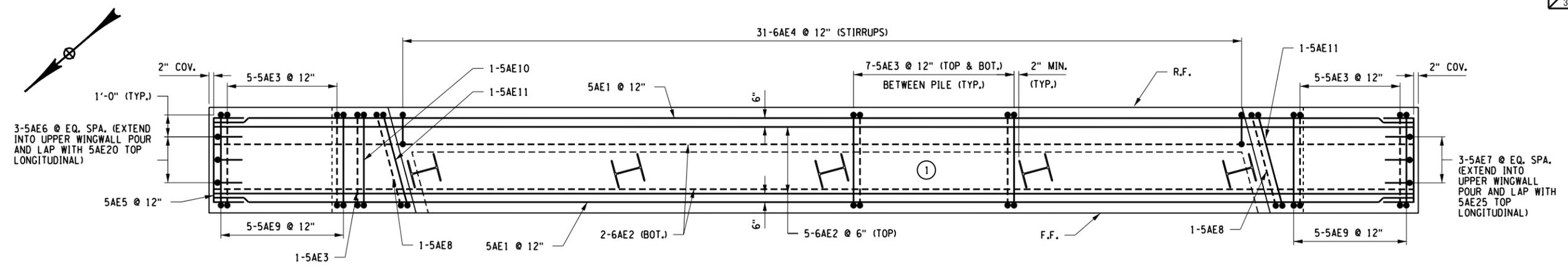
DRAWING TITLE

**EAST ABUTMENT  
PLAN AND ELEVATION**

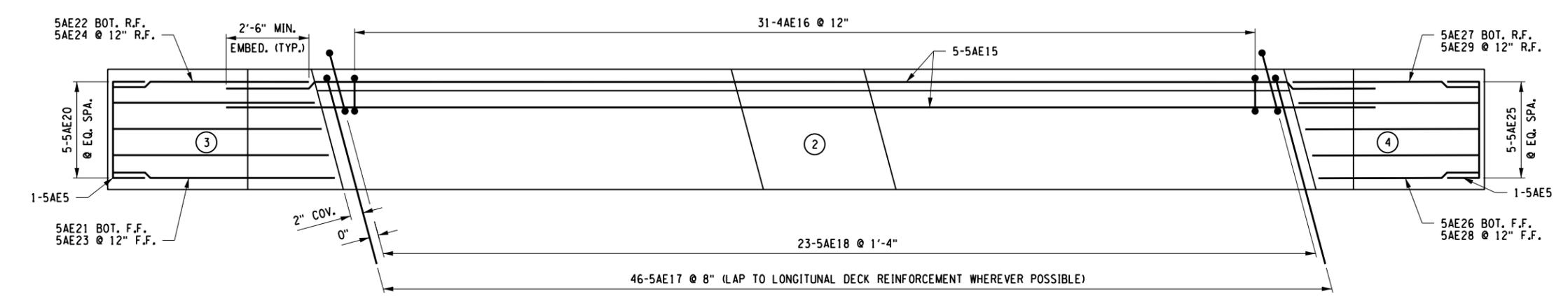
PROJECT NUMBER  
2150220

DATE  
MAY 2015

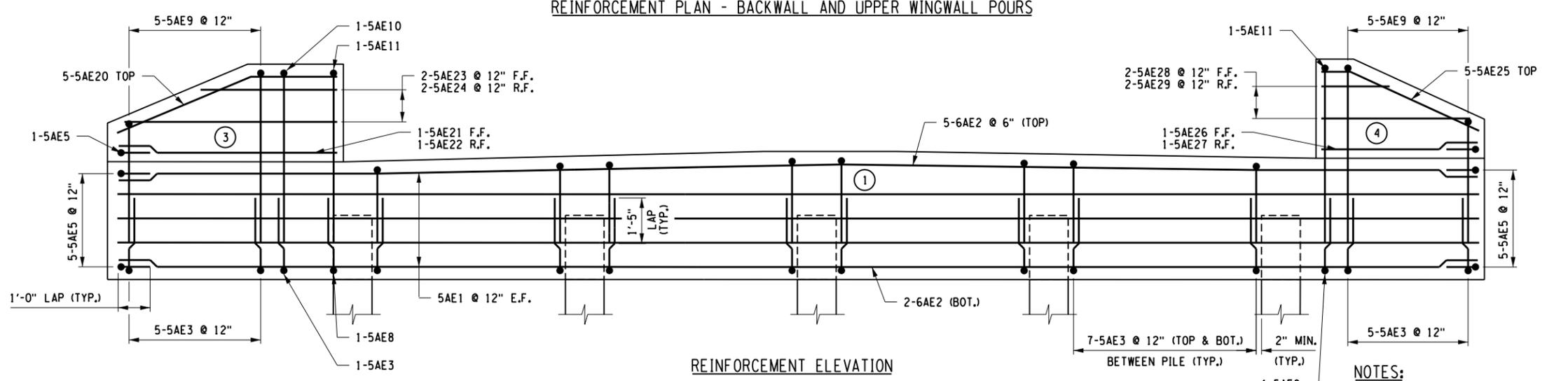
DRAWING NUMBER  
ST-5



EAST REINFORCEMENT PLAN - LOWER POUR



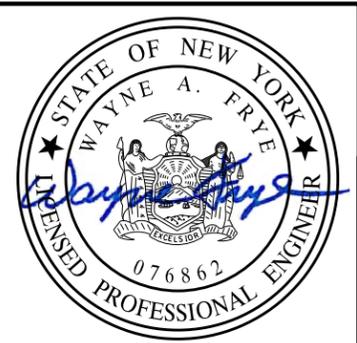
REINFORCEMENT PLAN - BACKWALL AND UPPER WINGWALL POURS



REINFORCEMENT ELEVATION

- NOTES:
- (E) DENOTES EPOXY COATED BARS.
  - COVER FOR STEEL REINFORCEMENT SHALL BE 2" UNLESS OTHERWISE NOTED.
  - (NO.) - INDICATES CONCRETE PLACEMENT NUMBER

PROJECT MANAGER: WAF  
 ENGINEER: WAF  
 DESIGNER: AJR  
 VLG



**RECORD PLANS**

I HEREBY CERTIFY BY MY SIGNATURE, THAT I HAVE PREPARED THIS RECORD DRAWING WHICH IS, TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, A TRUE REPRESENTATION OF THE WORK AS CONSTRUCTED.

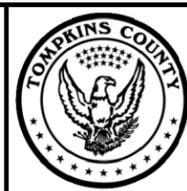
DATE: \_\_\_\_\_

NO.	REVISION	BY	DATE
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**LABELLA**  
Associates, P.C.

235 HARRISON STREET  
SYRACUSE, NY 13202



PROJECT/CLIENT

REPLACEMENT OF GROTON CITY ROAD BRIDGE  
OVER FALL CREEK  
B.I.N. 3314230  
TOMPKINS COUNTY  
TOWN OF GROTON

DRAWING TITLE

EAST ABUTMENT REINFORCEMENT

PROJECT NUMBER  
2150220

DATE  
MAY 2015

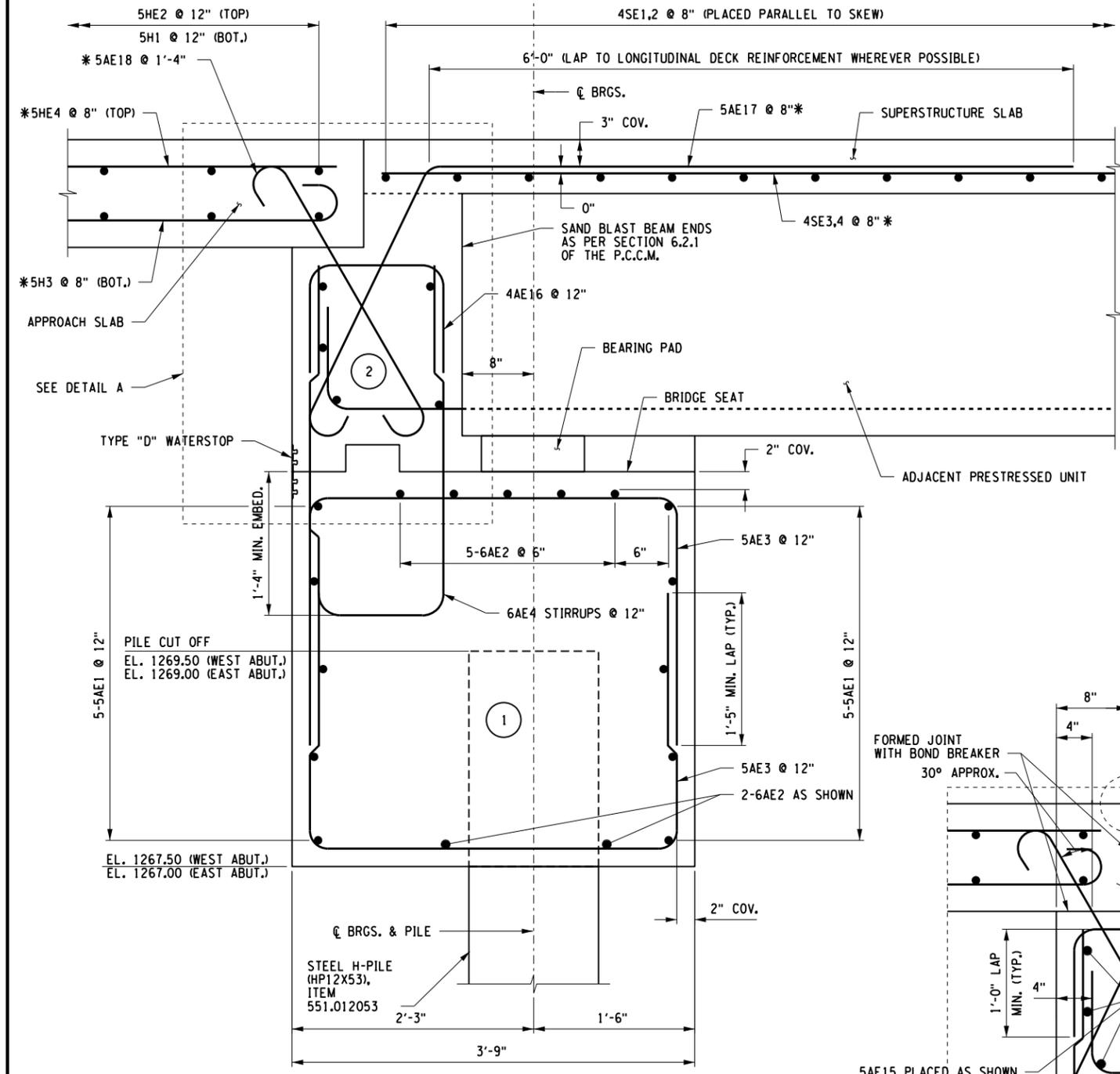
DRAWING NUMBER  
ST-6

**INTEGRAL ABUTMENT CONSTRUCTION PROCEDURE  
ADJACENT PRESTRESSED CONCRETE SUPERSTRUCTURE**

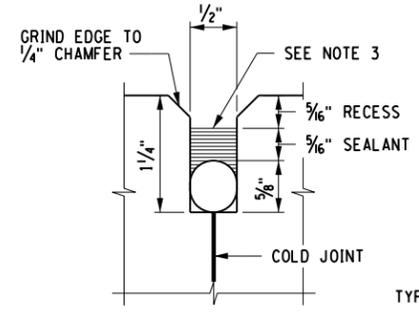
1. DRIVE PILES AND CUT OFF PILES AT ELEVATIONS SHOWN.
2. PLACE ABUTMENT STEM CONCRETE TO BRIDGE SEAT ELEVATION.
3. BACKFILL ABUTMENT STEMS TO 6" BELOW THE BRIDGE SEAT ELEVATION. NO BACKFILL OF THE ABUTMENT STEMS ALLOWED UNTIL THE ABUTMENTS HAVE CURED FOR 7 DAYS.
4. PLACE STONE FILL OR SLOPE PROTECTION.
5. ERECT PRESTRESSED UNITS ON BEARING PADS.
6. PLACE CLASS E CONCRETE ABOVE BRIDGE SEAT ELEVATION FOR THE ABUTMENT BACKWALL UP TO THE TOP OF THE PRESTRESSED UNITS. COST TO BE INCLUDED IN THE SUPERSTRUCTURE SLAB ITEM. TO FACILITATE COMPLETE CONSOLIDATION OF CONCRETE BETWEEN THE TOP OF THE BRIDGE SEAT AND THE BOTTOM OF THE BEAM, VENT HOLES SHALL BE PROVIDED FOR THE INSERTION OF A 1" DIAMETER WATER REDUCERS (SUPER PLASTICIZER) MAY BE ADDED ONLY FOR THE REMAINDER OF THE ABUTMENT POUR, UP TO THE TOP OF THE PRESTRESSED UNITS. HIGH RANGE WATER REDUCERS SHALL NOT BE ALLOWED FOR THE DECK SLAB.
7. PLACE TOP OF INTEGRAL WINGWALLS CONCRETE.
8. BACKFILL ABUTMENT BACKWALLS. NO BACKFILLING OF BACKWALL IS ALLOWED UNTIL THE BACKWALLS HAVE CURED FOR 7 DAYS.
9. PLACE CONCRETE FOR APPROACH SLABS.

**NOTES:**

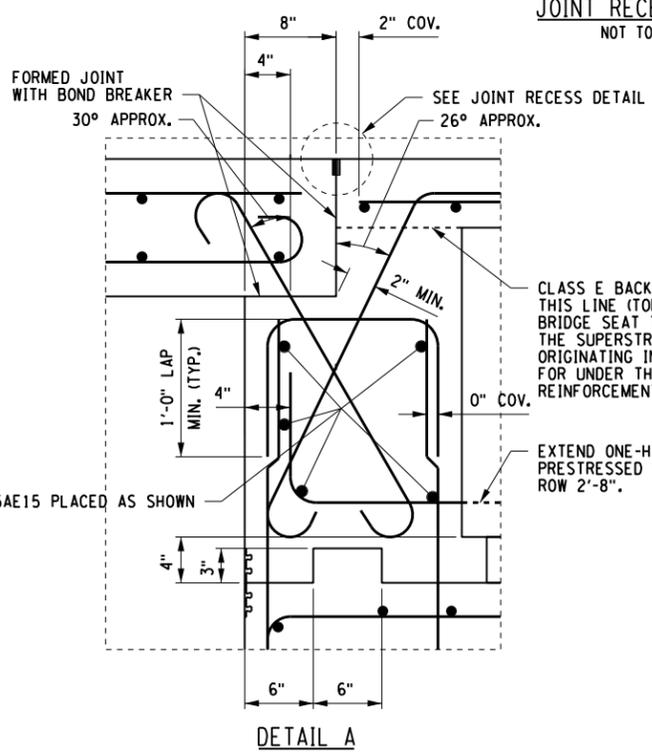
1. (E) DENOTES EPOXY-COATED BARS.
2. BEARING PAD TO MEET THE REQUIREMENTS OF NYS MATERIAL SPEC. 728-01. RUBBER-IMPREGNATED WOVEN COTTON-POLYESTER FABRIC BEARING PAD. BEARING PAD TO BE PAID FOR UNDER ITEM 565.30.
3. FILL THE RECESS WITH A STRUCTURAL JOINT MATERIAL, SILICONE SEALANT, FROM THE DEPARTMENT'S APPROVED LIST FOR ITEM 567.51--16. IF THE RECESS IS SAW CUT, WATER BLAST IMMEDIATELY FOLLOWING CUTTING TO REMOVE ANY RESIDUAL SLURRY BEFORE IT DRIES. CLEAN THE VERTICAL FACES OF THE RECESS BY ABRASIVE BLAST, AND AIR BLOW THE RESIDUE FROM THE RECESS. PRIME THE VERTICAL FACES WITH THE MANUFACTURER'S RECOMMENDED PRIMER, AND ALLOW TO DRY. PLACE A 3/8" DIA. SOFT CLOSED CELL BACKER ROD IN THE BOTTOM OF THE RECESS. POUR THE SILICONE SEALANT TO A DEPTH OF APPROX. 3/8". PAYMENT TO BE INCLUDED IN THE UNIT PRICE BID FOR THE APPROACH SLAB.



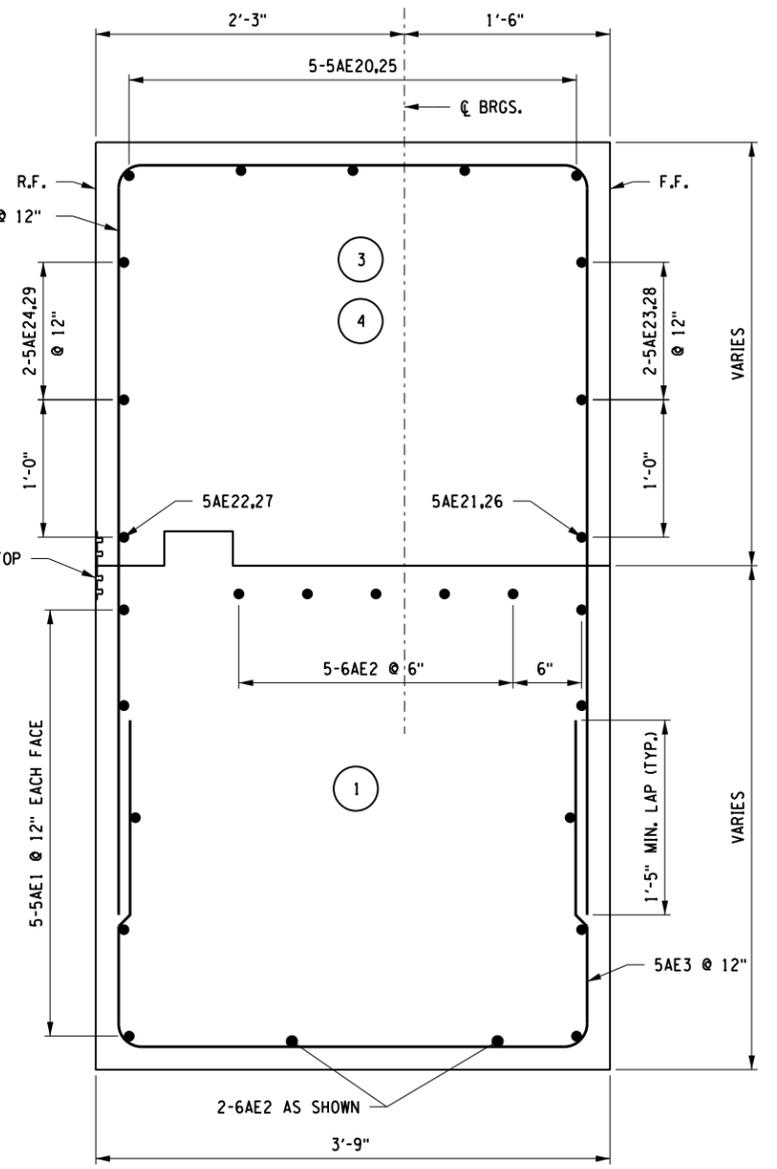
**INTEGRAL ABUTMENT SECTION A-A**  
SCALE: 3/4" = 1'-0"



**JOINT RECESS DETAIL**  
NOT TO SCALE



**DETAIL A**



**TYPICAL WINGWALL SECTION**  
SCALE: 3/4" = 1'-0"

\* SPACINGS SHOWN FOR THESE BARS ARE PARALLEL OR PERPENDICULAR TO STATION LINE OR BEAMS.

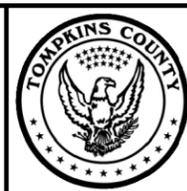
PROJECT MANAGER: VLG  
DESIGNER: VLG  
ENGINEER: VLG  
DATE: 5/2/2016



**RECORD PLANS**  
I HEREBY CERTIFY BY MY SIGNATURE, THAT I HAVE PREPARED THIS RECORD DRAWING WHICH IS, TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, A TRUE REPRESENTATION OF THE WORK AS CONSTRUCTED.  
DATE: \_\_\_\_\_

NO.	REVISION	BY	DATE
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**LABELLA**  
Associates, P.C.  
235 HARRISON STREET  
SYRACUSE, NY 13202

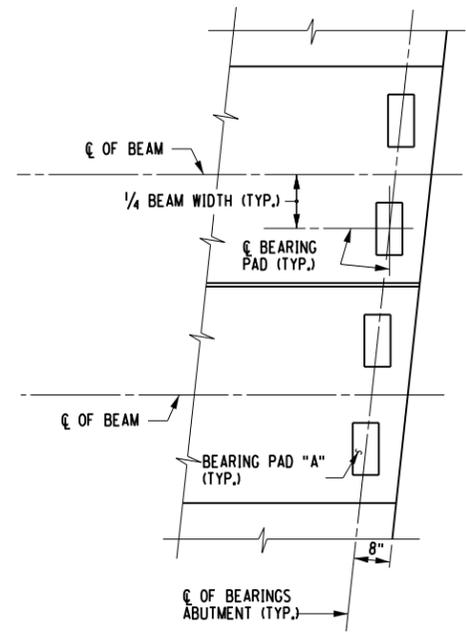


PROJECT/CLIENT  
**REPLACEMENT OF GROTON CITY ROAD BRIDGE  
OVER FALL CREEK  
B.I.N. 3314230  
TOMPKINS COUNTY  
TOWN OF GROTON**

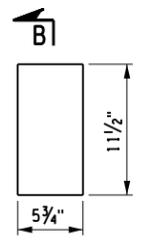
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**ABUTMENT DETAILS - 1**

PROJECT NUMBER  
2150220  
DATE  
MAY 2015  
DRAWING NUMBER  
ST-7

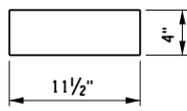
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MODEL ABUTMENT DETAILS - 1  
DATE TIME 5/2/2016 5:28:05 PM  
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PLAN  
BEARING PAD PLACEMENT  
PRESTRESSED ADJACENT BEAM  
NOT TO SCALE

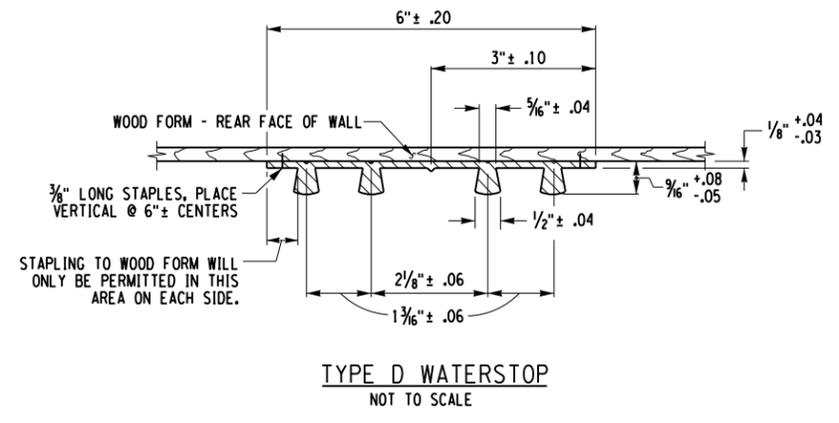


PLAN  
BEARING PAD "A"



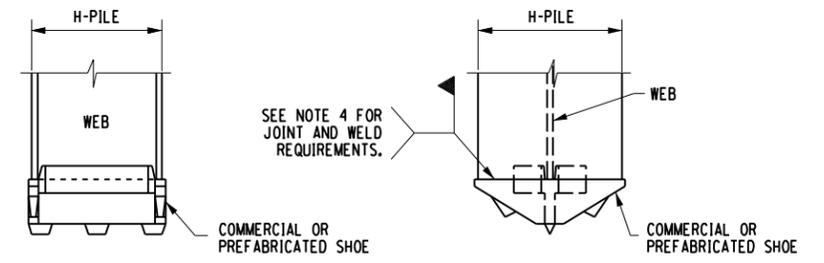
SECTION B-B

**BEARING PAD NOTE:**  
BEARING PAD TO MEET THE REQUIREMENTS OF NYS MATERIAL SPEC. 728-01, RUBBER-IMPREGNATED WOVEN COTTON-POLYESTER FABRIC BEARING PAD. BEARING PAD TO BE PAID FOR UNDER ITEM 565.30.

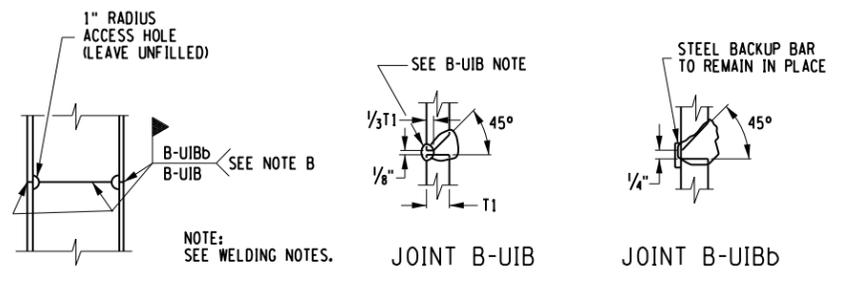


TYPE D WATERSTOP  
NOT TO SCALE

**WATERSTOP NOTES:**  
HOLES MUST NOT BE MADE IN WATERSTOP FOR ANY PURPOSE EXCEPT AS REQUIRED FOR STAPLING TO FORMS. TYPE D WATERSTOP SHALL BE LIGHT GRAY IN COLOR.  
PVC USED IN WATERSTOPS SHALL CONFORM TO THE REQUIREMENTS OF N.Y.S. STANDARD SPECIFICATIONS SUBSECTION 705-11.  
THE COST OF FURNISHING AND PLACING WATERSTOPS SHALL BE INCLUDED IN THE UNIT PRICES BID FOR THE CONCRETE ITEMS.  
FIELD SPLICES SHOULD BE AVOIDED IF POSSIBLE, HOWEVER, HEAT WELDED BUTT SPLICES WILL BE PERMITTED ON LONG STRAIGHT RUNS (GENERALLY IN EXCESS OF 50 FEET) AT POINTS APPROVED BY THE ENGINEER.  
WATERSTOP SHALL BE SHIPPED IN STRAIGHT SECTIONS HAVING A MINIMUM LENGTH OF 10 FEET UNLESS SHORTER LENGTHS ARE REQUIRED.  
PREMOULDED RESILIENT JOINT FILLER SHALL CONFORM TO THE REQUIREMENTS OF N.Y.S. STANDARD SPECIFICATION SUBSECTION 705-07.



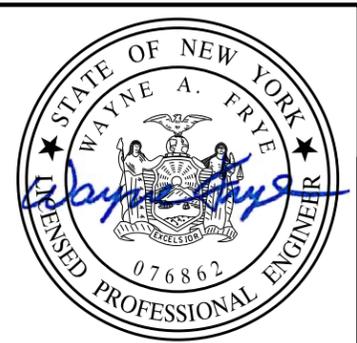
STEEL BEARING PILE SHOES  
NOT TO SCALE



SPlice FOR STEEL BEARING PILE  
NOT TO SCALE

**WELDING NOTES:**  
A "WELDING PROCEDURE SPECIFICATION" (WPS) APPROVED BY THE D.C.E.S. IS REQUIRED.  
ALL WELDING SHALL BE PERFORMED BY A CERTIFIED WELDER IN CONFORMANCE WITH REQUIREMENTS FOR WELDING SPECIFIED IN THE N.Y.S. STEEL CONSTRUCTION MANUAL.  
A: SIZE TO BE INDICATED IN THE F.D.R.  
B: EITHER JOINT MAY BE USED AT CONTRACTOR'S OPTION.  
B-UIB: AIR CARBON ARC GOUGE TO SOUND WELD METAL PRIOR TO WELDING THE SECOND SIDE. THE GOUGE SHALL HAVE A 1/4" MINIMUM RADIUS AT THE ROOT WITH THE TOP SLOPED BACK AT 45° MINIMUM.

PLOT/DRAW: pdf, BW, hdd, hdd, hdd  
 MODEL: ABUTMENT DETAILS - 2  
 DATE: 05/15/15  
 PROJECT MANAGER: VLG  
 DESIGNER: AJR  
 ENGINEER: WAF



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DATE: \_\_\_\_\_

**LABELLA**  
Associates, D.P.C.  
235 HARRISON STREET  
SYRACUSE, NY 13202

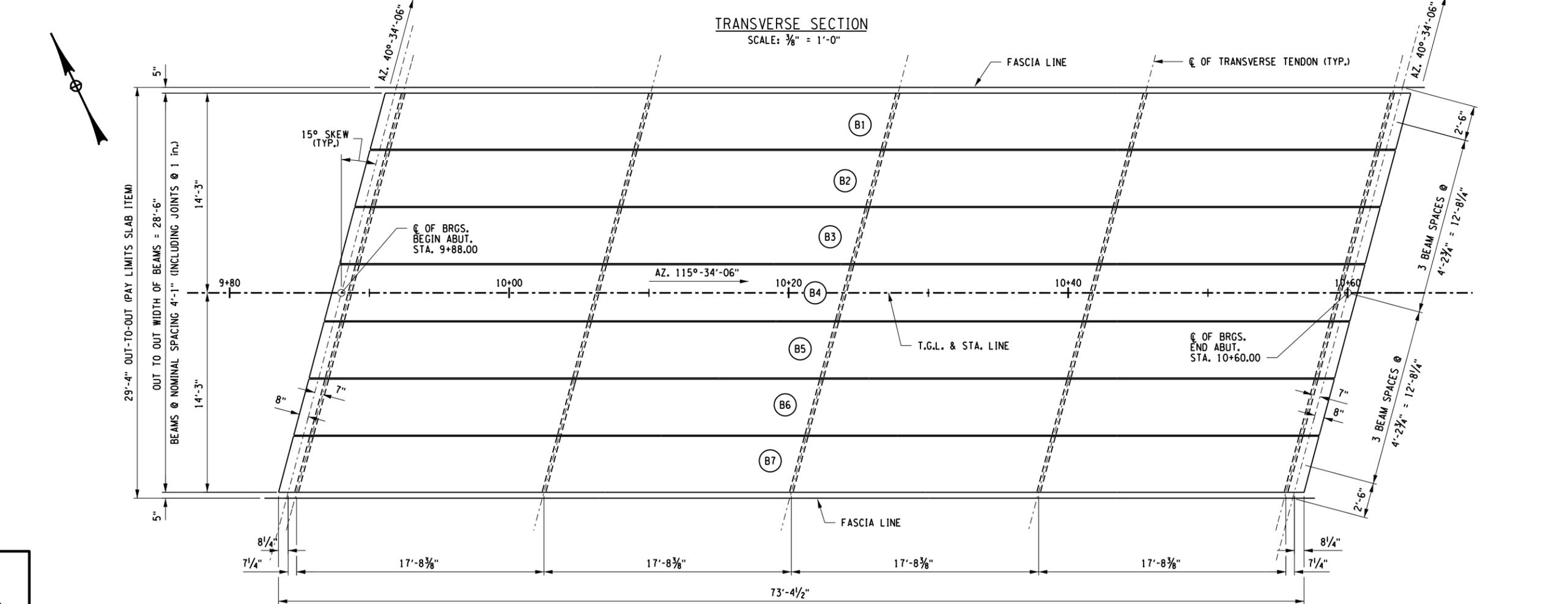
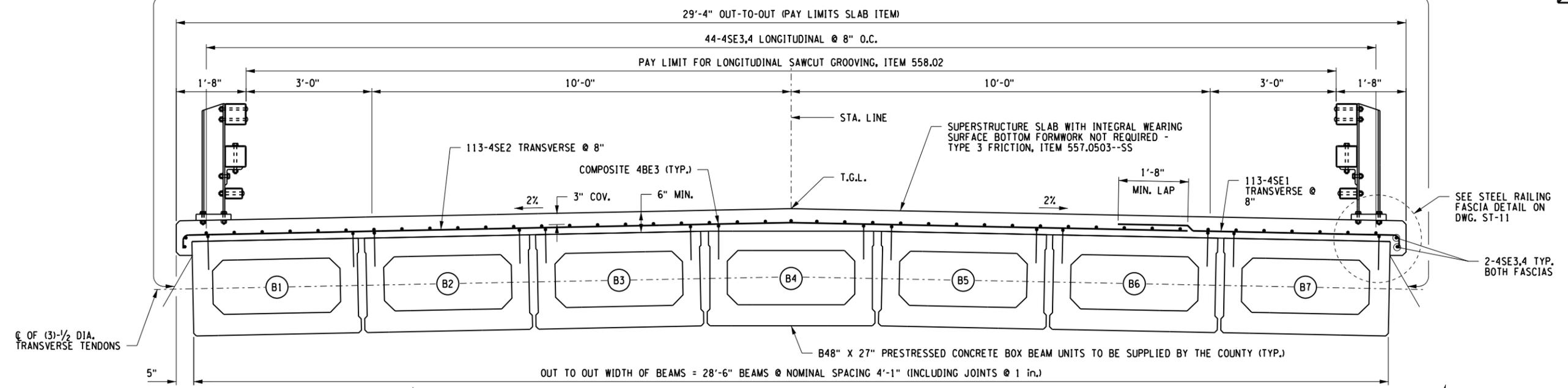


PROJECT/CLIENT  
REPLACEMENT OF GROTON CITY ROAD BRIDGE  
OVER FALL CREEK  
B.I.N. 3314230  
TOMPKINS COUNTY  
TOWN OF GROTON

DRAWING TITLE  
ABUTMENT DETAILS - 2

PROJECT NUMBER  
2150220  
DATE  
MAY 2015  
DRAWING NUMBER  
ST-8

PROTECTIVE SEALING OF STRUCTURAL CONCRETE FOR NEW BRIDGE DECKS, ITEM 559.18960118



PLOT/DRAWN: pdf, bwi, hhh, jrb, jcb  
 MODEL: TRANSVERSE SECTION AND PRESTRESSED CONCRETE ADJACENT BEAMS FRAMING PLAN  
 DATE: 05/11/15  
 PROJECT NUMBER: 2150220  
 PROJECT TITLE: Groton City Rd Bridge Replacement  
 DRAWING NUMBER: ST-9

PROJECT MANAGER: WAF  
 ENGINEER: WAF  
 DESIGNER: AJR  
 VLG



**RECORD PLANS**

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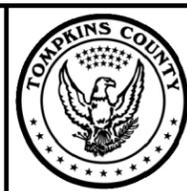
DATE: \_\_\_\_\_

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If it is a violation of New York Education Law Article 145 Sec. 7209, for any person, unless acting under the direction of a licensed architect, professional engineer, or land surveyor, to alter an item in any way, if an item bearing the seal of an architect, engineer, or land surveyor is altered; the altering architect, engineer, or land surveyor shall affix to the item their seal and notation "altered by" followed by their signature and date of such alteration, and a specific description of the alteration.

**LABELLA**  
Associates, D.P.C.

235 HARRISON STREET  
SYRACUSE, NY 13202



PROJECT/CLIENT

REPLACEMENT OF GROTON CITY ROAD BRIDGE  
OVER FALL CREEK  
B.I.N. 3314230  
TOMPKINS COUNTY  
TOWN OF GROTON

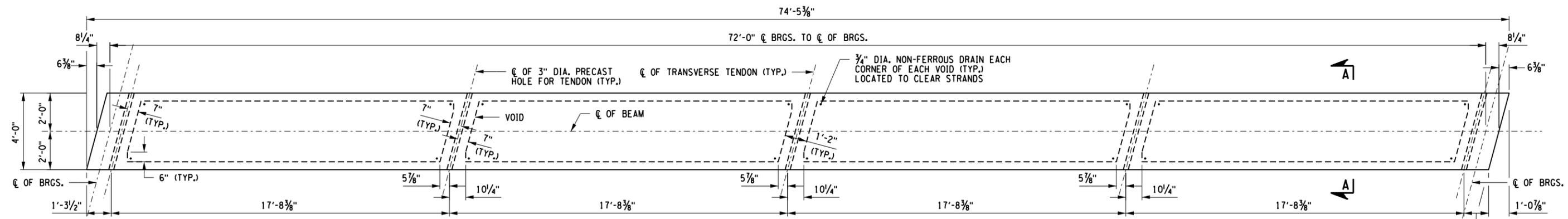
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TRANSVERSE SECTION AND  
PRESTRESSED CONCRETE ADJACENT  
BEAMS FRAMING PLAN

PROJECT NUMBER  
2150220

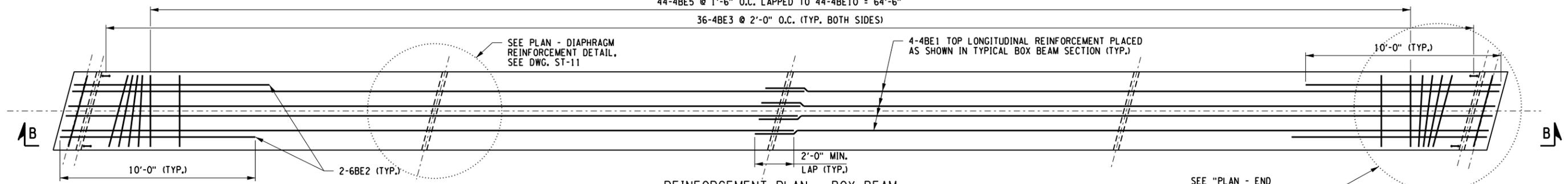
DATE  
MAY 2015

DRAWING NUMBER  
ST-9



PLAN - BOX BEAM  
SCALE: 3/16" = 1'-0"

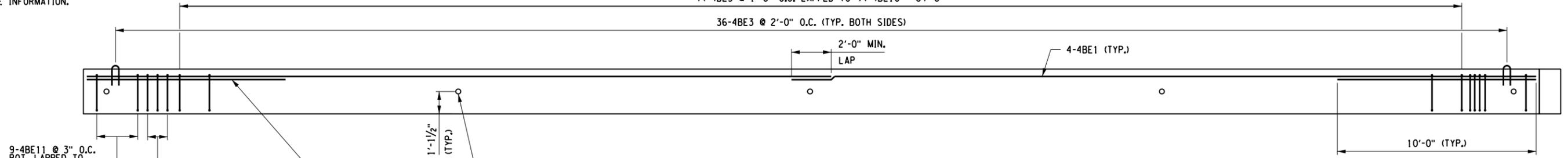
44-4BE5 @ 1'-6" O.C. LAPPED TO 44-4BE10 = 64'-6"  
36-4BE3 @ 2'-0" O.C. (TYP. BOTH SIDES)



REINFORCEMENT PLAN - BOX BEAM  
SCALE: 3/16" = 1'-0"

NOTE:  
STRANDS NOT SHOWN FOR CLARITY. SEE BEAM END BLOCK REINFORCEMENT AND DIAPHRAGM REINFORCEMENT DETAILS FOR MORE INFORMATION.

44-4BE5 @ 1'-6" O.C. LAPPED TO 44-4BE10 = 64'-6"  
36-4BE3 @ 2'-0" O.C. (TYP. BOTH SIDES)



SECTION B-B REINFORCEMENT  
SCALE: 3/16" = 1'-0"

NOTE:  
PRESTRESSED CONCRETE BOX BEAM UNITS TO BE SUPPLIED BY THE COUNTY.

PROJECT MANAGER: WAF  
ENGINEER: WAF  
DESIGNER: AJR  
V.L.G.



RECORD PLANS  
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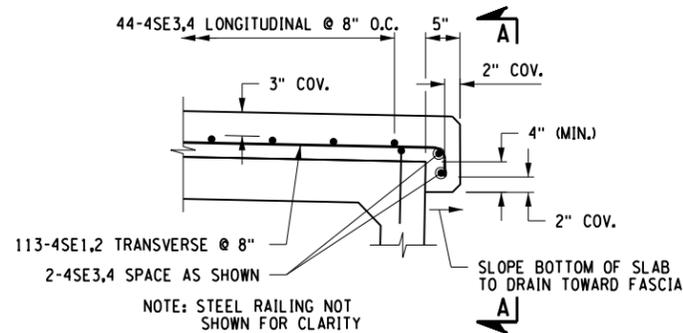


PROJECT/CLIENT  
REPLACEMENT OF GROTON CITY ROAD BRIDGE  
OVER FALL CREEK  
B.I.N. 3314230  
TOMPKINS COUNTY  
TOWN OF GROTON

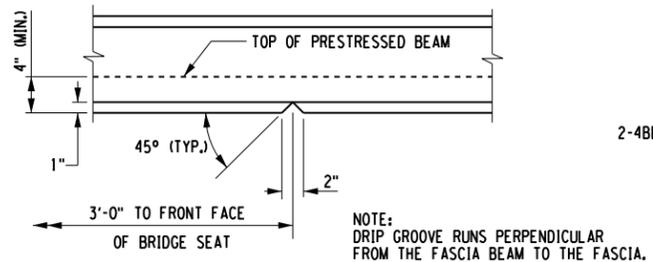
DRAWING TITLE  
PRESTRESSED CONCRETE ADJACENT BEAMS - BOX BEAM PLAN AND ELEVATION

PROJECT NUMBER  
2150220  
DATE  
MAY 2015  
DRAWING NUMBER  
ST-10

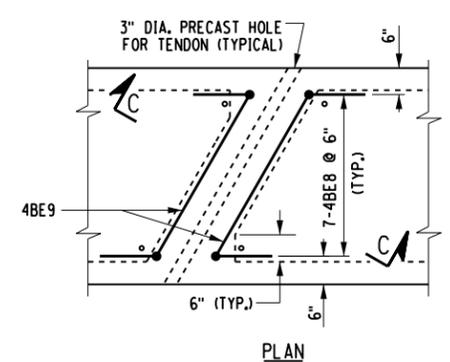
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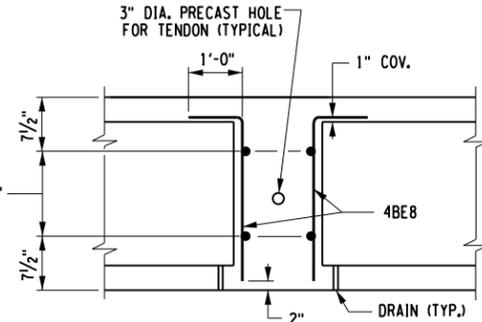
**STEEL RAILING FASCIA DETAIL**  
NOT TO SCALE



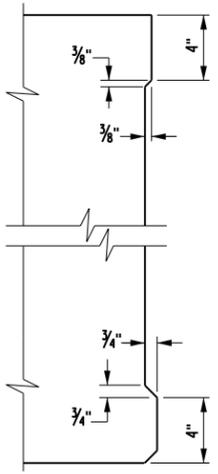
**ELEVATION A-A (SHOWING DRIP GROOVE DETAIL)**  
NOT TO SCALE



**PLAN**

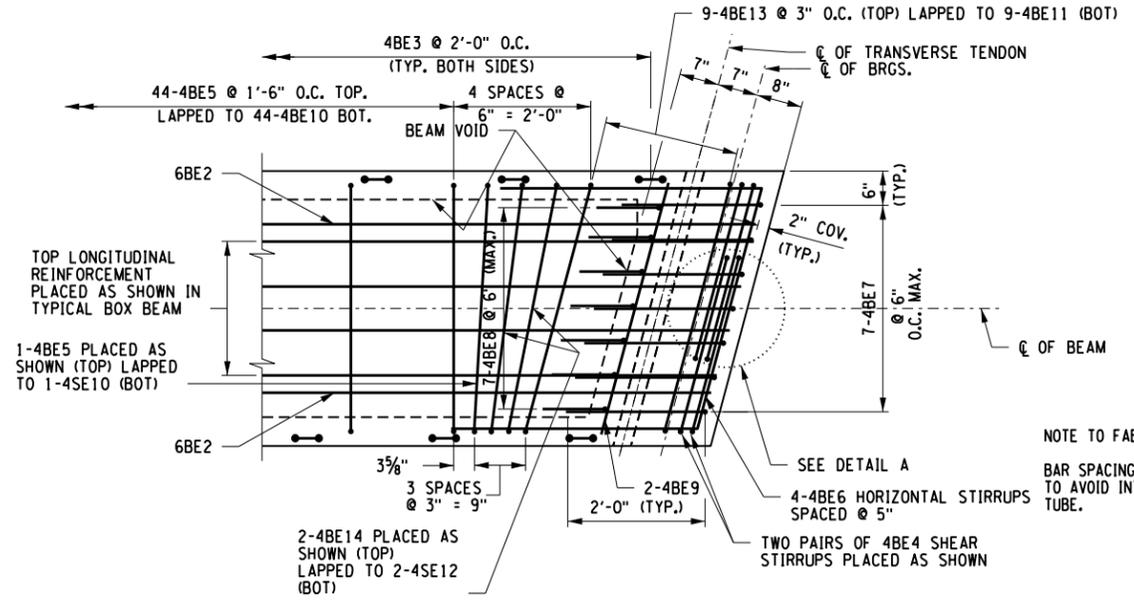


**SECTION C-C DIAPHRAGM REINFORCEMENT**  
NOT TO SCALE

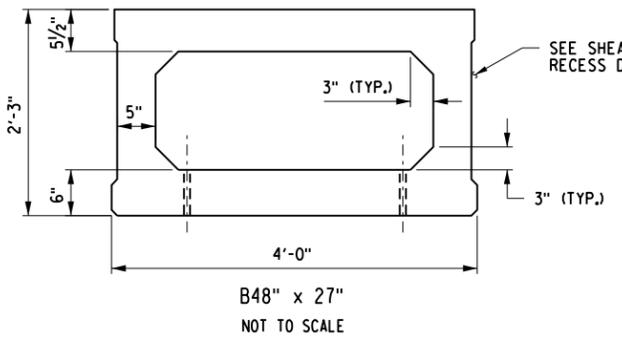


**SHEAR KEY RECESS DETAIL**  
NOT TO SCALE

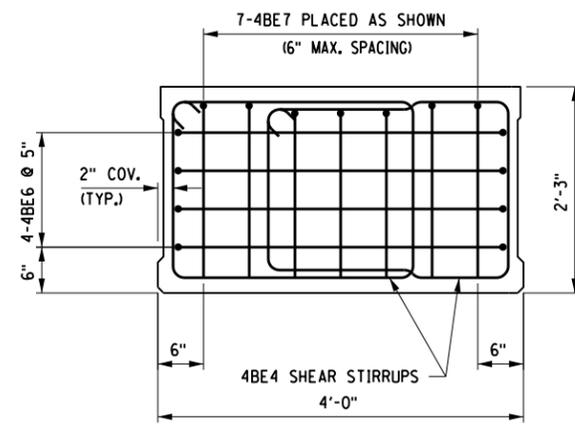
NOTE:  
OMIT SHEAR KEY FROM OUTSIDE OF FASCIA BEAMS



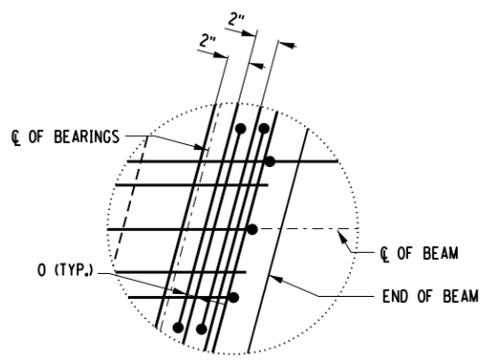
**PLAN - END BLOCK REINFORCEMENT**  
NOT TO SCALE



**B48\"/>**



**END BLOCK REINFORCEMENT (4'-0\"/>**

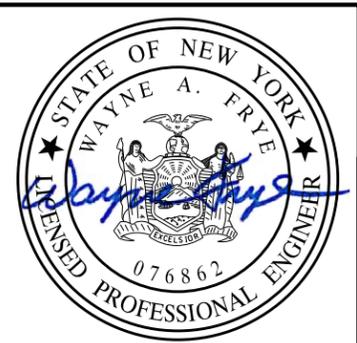


**DETAIL A**  
NOT TO SCALE

NOTE TO FABRICATOR:  
BAR SPACING MAY BE SLIGHTLY ADJUSTED TO AVOID INTERFERENCE WITH TRANSVERSE TENDON TUBE.

NOTE:  
PRESTRESSED CONCRETE BOX BEAM UNITS TO BE SUPPLIED BY THE COUNTY.

PLOT/DRAWN: pdf\_bw\_half.tbl  
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 DATE: 05/11/15  
 PROJECT MANAGER: WAF  
 ENGINEER: WAF  
 DESIGNER: AJR  
 VLG



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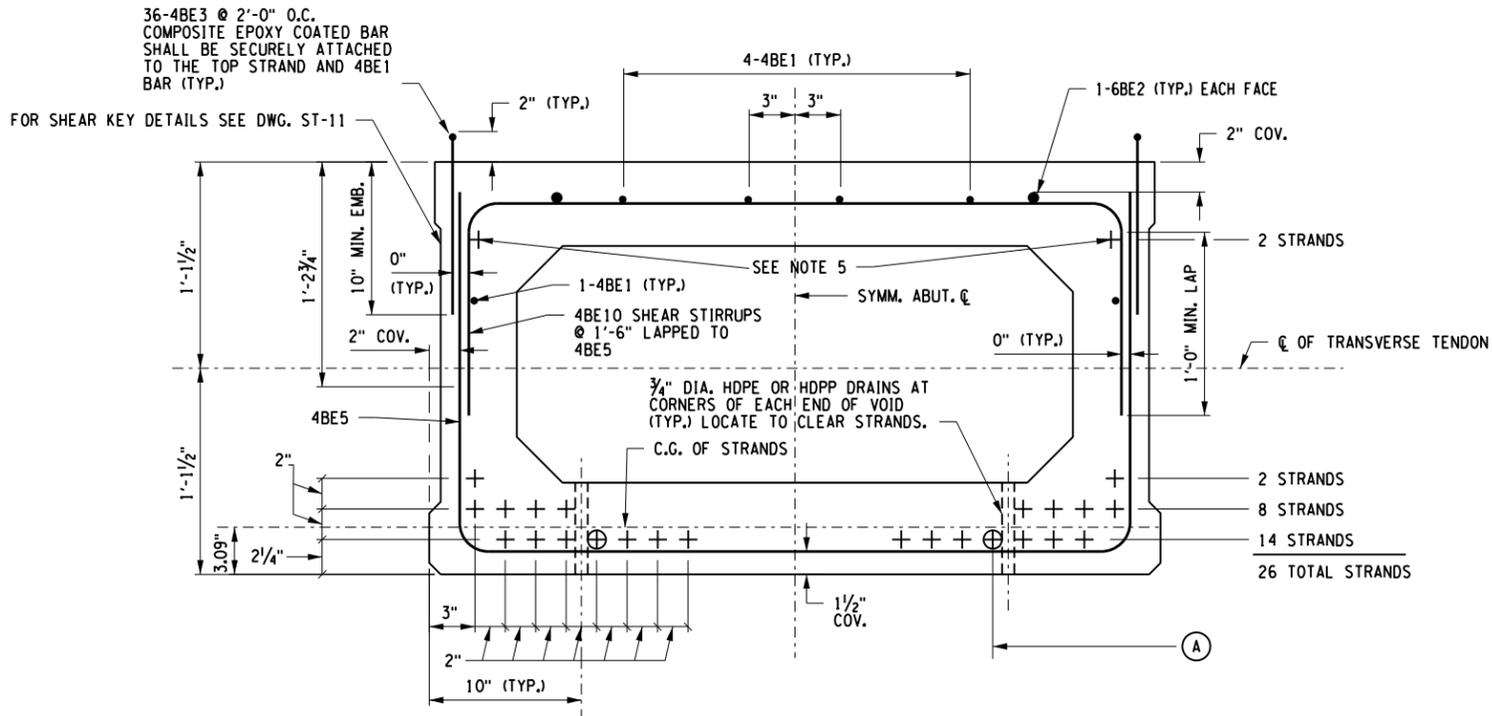
**LABELLA**  
Associates, P.C.  
235 HARRISON STREET  
SYRACUSE, NY 13202



PROJECT/CLIENT  
REPLACEMENT OF GROTON CITY ROAD BRIDGE  
OVER FALL CREEK  
B.I.N. 3314230  
TOMPKINS COUNTY  
TOWN OF GROTON

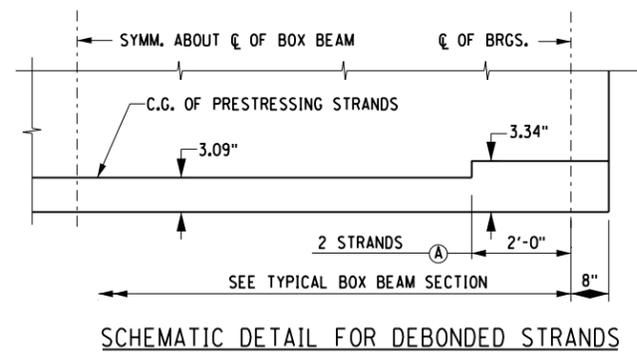
DRAWING TITLE  
**PRESTRESSED CONCRETE ADJACENT BOX BEAM DETAILS**

PROJECT NUMBER  
2150220  
DATE  
MAY 2015  
DRAWING NUMBER  
ST-11



TYPICAL BOX BEAM SECTION  
NOT TO SCALE

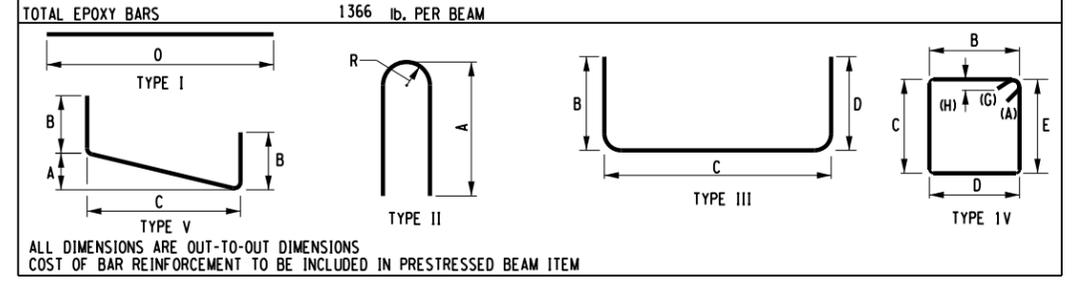
+ - DENOTES STRAIGHT BONDED STRANDS  
⊕ - DENOTES DEBONDED STRANDS



SCHEMATIC DETAIL FOR DEBONDED STRANDS  
NOT TO SCALE

- NOTES:**
1. THE PRESTRESSING STRANDS SHALL BE 0.6 in. DIAMETER WITH A GUARANTEED ULTIMATE STRENGTH OF 270 ksi.  
JACKING FORCE = 44 kips PER STRAND  
REQUIRED MINIMUM CONCRETE STRENGTH AT TRANSFER = 8 ksi.  
REQUIRED MINIMUM CONCRETE STRENGTH AT 56 DAYS = 10 ksi.  
THE ALLOWABLE TENSION IN THE PRESTRESSED CONCRETE UNITS:  
AT TRANSFER = 0.20 ksi.  
AT SERVICE LIMIT STATE = 0.60 ksi.
  2. ALL EXPOSED CORNERS, EXCEPT THE TOP, SHALL BE CHAMFERED 3/4 in.
  3. ALL TEMPORARY INSERTS SHALL BE APPROVED BY THE DEPUTY CHIEF ENGINEER (STRUCTURES) AND DETAILED ON THE PRESTRESSED CONCRETE "SHOP DRAWINGS".
  4. BAR REINFORCEMENT SHALL BE ASTM A615, GRADE 60. THE TOPS OF PRESTRESSED UNITS SHALL RECEIVE A TRANSVERSE ROUGHENED FINISH WITH AN AMPLITUDE OF 1/4 in.
  5. THESE STRANDS SHALL BE TENSIONED TO A JACKING FORCE OF 2.2 KIPS.
  6. EXTEND ONE-HALF OF ALL BONDED PRESTRESSED STRANDS IN THE BOTTOM ROW 2'-8". (SEE "DETAIL A" ON DWG. ST-7.)
  7. PRESTRESSED CONCRETE BOX BEAM UNITS TO BE SUPPLIED BY THE COUNTY.

PRESTRESSED CONCRETE BOX BEAM REINFORCEMENT																		
	MARK	NO.	LENGTH	TYPE	WEIGHT	A	B	C	D	E	F	G	H	J	K	O	R	
4'-0" BEAM	4BE1	12	38'-8"	I	305												38'-8"	
	6BE2	4	10'-0"	I	60												10'-0"	
	4BE3	72	2'-4"	II	112	1'-0"												2"
	4BE4	8	9'-2"	IV	49	4 1/2"	2'-4"	1'-10 1/2"	2'-4"	1'-10 1/2"			4 1/2"	3"				
	4BE5	46	7'-6"	III	230		1'-11"	3'-8"	1'-11"									
	4BE6	8	11'-1"	V	59	11 1/2"	3'-8"	3'-7"	3'-8"									
	4BE7	14	3'-11"	III	37		2'-0"	1'-11"	--									
	4BE8	56	2'-11"	III	109		1'-0"	1'-11"	--									
	4BE9	16	3'-2"	I	34													3'-2"
	4BE10	46	5'-8"	III	174		1'-0"	3'-8"	1'-0"									
	4BE11	18	7'-8"	III	92		1'-11"	3'-10"	1'-11"									
	4BE12	4	7'-7"	III	20		1'-11"	3'-9"	1'-11"									
	4BE13	18	5'-10"	III	70		1'-0"	3'-10"	1'-0"									
	4BE14	4	5'-9"	III	15		1'-0"	3'-9"	1'-0"									



CAMBER TABLE	
CAMBER DUE TO PRESTRESSED FORCE AND BEAM D.L. (WITHOUT GROWTH) @ TRANSFER	↑ 1.46"
DEFLECTION DUE TO SLAB DEAD LOAD	↓ 0.62"
DEFLECTION DUE TO SUPER IMPOSED D.L.	↓ 0.10"

THEORETICAL SLAB THICKNESS TABLE				
LOCATION	EDGE OF LEFT FASCIA BEAM	STATION LINE	CROWN LINE	EDGE OF RIGHT FASCIA BEAM
C OF BRGS. - ABUT.	6.00"	6.00"	6.00"	6.00"
MIDSPAN	8.45"	8.45"	8.45"	8.45"
C OF BRGS. - ABUT.	6.00"	6.00"	6.00"	6.00"

THIS TABLE SHOWS THE THEORETICAL THICKNESS OF THE DECK SLAB IN IN. BASED ON ASSUMED BEAM CAMBERS. IT IS SHOWN TO ASSIST IN ESTIMATING CONCRETE VOLUME. ACTUAL DECK THICKNESS WILL BE SET TO CONFORM TO THE HIGHWAY PROFILE.

DESIGN LOAD TABLE			
	UNIT	REACTION AT ABUTMENT (kips)	MAX. MOM. MIDSPAN (kip-ft.)
D.L.	BEAM	35.8	508
	SLAB	12.5	180.6
S.O.L.	UTILITIES	---	---
	SIDEWALK	---	---
	RAILINGS	7.7	15.7
	FUTURE W.S.	28.1	48.1
L.L.	HL	150	231.2

TOP OF SLAB ELEVATIONS					
UNIT	C OF BRGS.	1/4 PT.	MIDSPAN	3/4 PT.	C OF BRGS.
B1	1274.09	1274.23	1274.23	1274.08	1273.78
B2	1274.16	1274.31	1274.32	1274.17	1273.88
B3	1274.22	1274.39	1274.40	1274.27	1273.98
B4	1274.29	1274.46	1274.49	1274.36	1274.09
B5	1274.19	1274.38	1274.41	1274.29	1274.03
B6	1274.09	1274.29	1274.33	1274.22	1273.96
B7	1274.00	1274.20	1274.25	1274.15	1273.90

LIVE LOAD = HL-93 VEHICLE FOR LRFD

PROJECT MANAGER: WAF ENGINEER: AIR DESIGNER: VLG  
 PLOT/DRAW: pdf, BW, hdd, jtd  
 MODEL: PRESTRESSED CONCRETE ADJACENT BEAMS BOX BEAM DETAILS - 1  
 DATE: 05/11/15  
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 DATE TIME: 5/12/15 11:45 AM



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NO.	REVISION	BY	DATE
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**LABELLA**  
Associates, P.C.

235 HARRISON STREET  
SYRACUSE, NY 13202

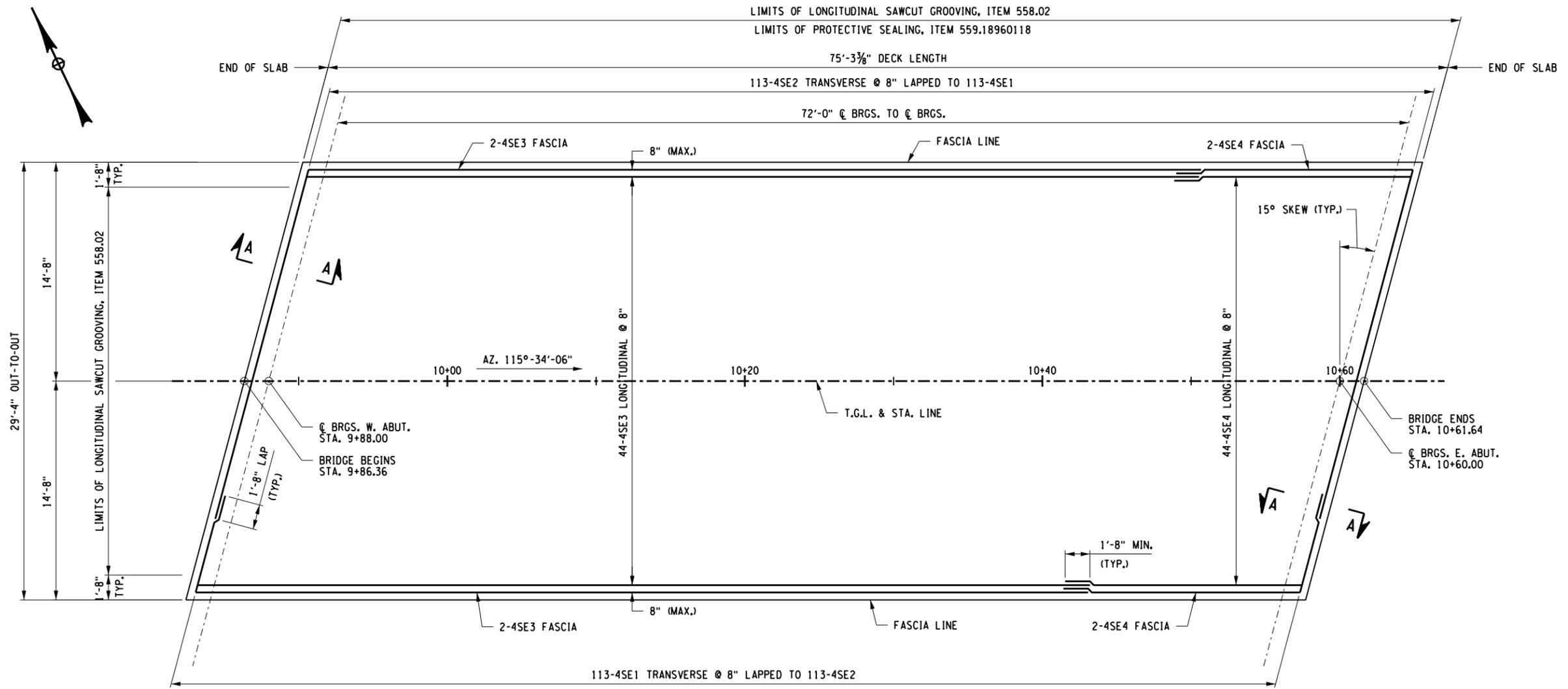


PROJECT/CLIENT  
REPLACEMENT OF GROTON CITY ROAD BRIDGE  
OVER FALL CREEK  
B.I.N. 3314230  
TOMPKINS COUNTY  
TOWN OF GROTON

DRAWING TITLE  
PRESTRESSED CONCRETE ADJACENT  
BEAMS BOX BEAM DETAILS - 1

PROJECT NUMBER  
2150220  
DATE  
MAY 2015  
DRAWING NUMBER  
ST-12





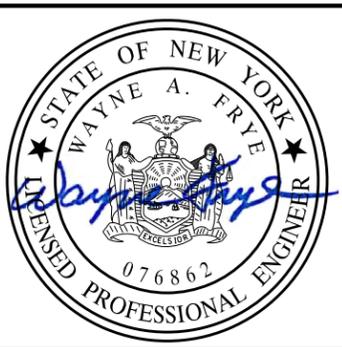
**SUPERSTRUCTURE SLAB REINFORCEMENT PLAN**  
SCALE: 1/8" = 1'-0"

SUPERSTRUCTURE SLAB TABLE		
CONCRETE ITEM 557.0503--SS	LONGITUDINAL SAWCUT GROOVING ITEM 558.02	PROTECTIVE SEALER ITEM 559.18960118
245.4 YD <sup>2</sup>	217.5 YD <sup>2</sup>	2390 ft <sup>2</sup>

- NOTES:**
- (E) DENOTES EPOXY COATED BARS.
  - FOR SECTION A-A, SEE DWG. ST-7.

PLOTDRVR: pdf, BW, Hdr, Jpl, Jctg  
 MODEL: DECK PLAN  
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 PROJECT MANAGER:

DESIGNER: VLG  
 ENGINEER: IAF



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NO.	REVISION	BY	DATE
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**LABELLA**  
Associates, P.C.

235 HARRISON STREET  
SYRACUSE, NY 13202



PROJECT/CLIENT

REPLACEMENT OF GROTON CITY ROAD BRIDGE  
OVER FALL CREEK  
B.I.N. 3314230  
TOMPKINS COUNTY  
TOWN OF GROTON

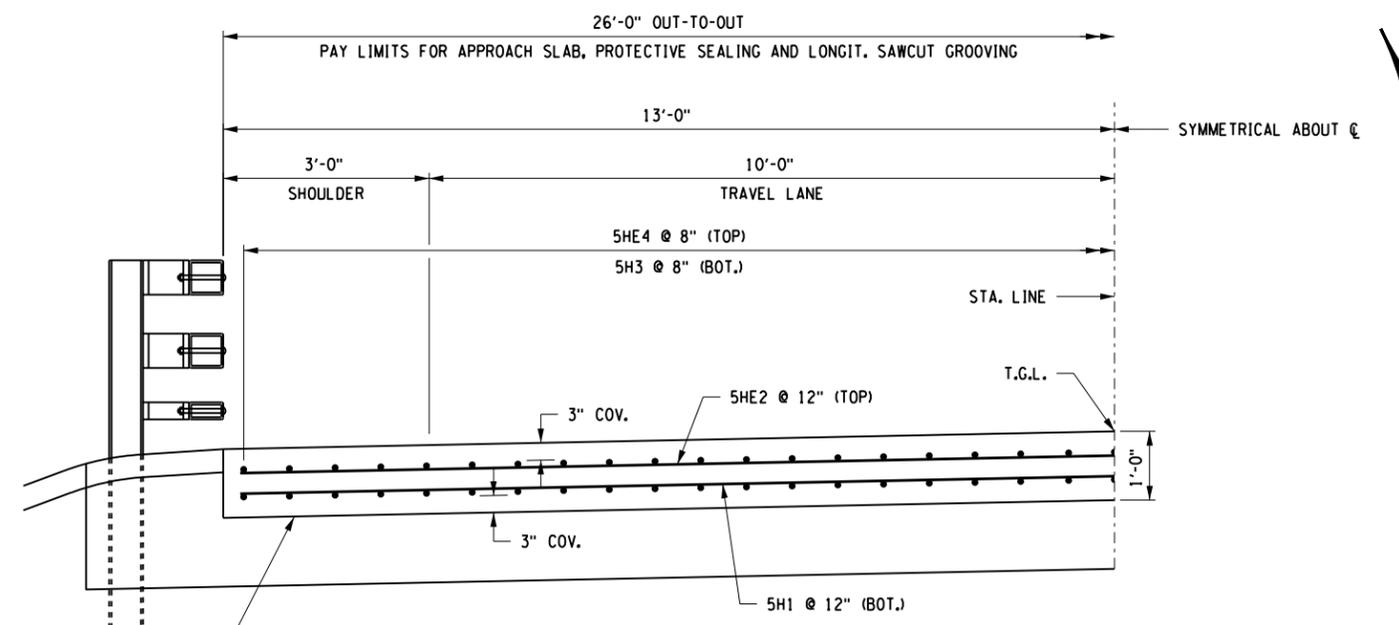
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DECK PLAN

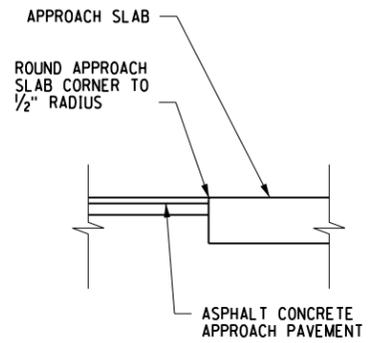
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2150220

DATE  
MAY 2015

DRAWING NUMBER  
ST-14

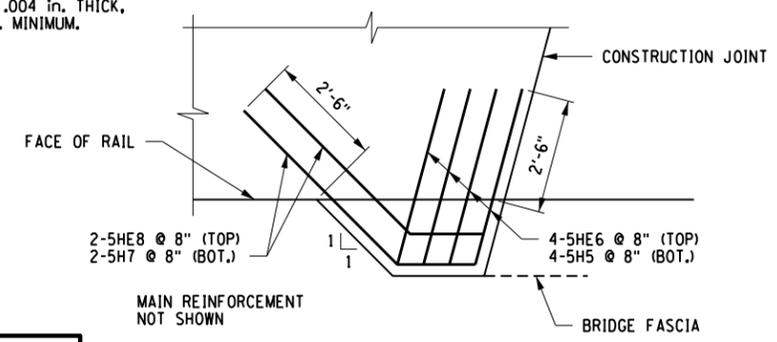
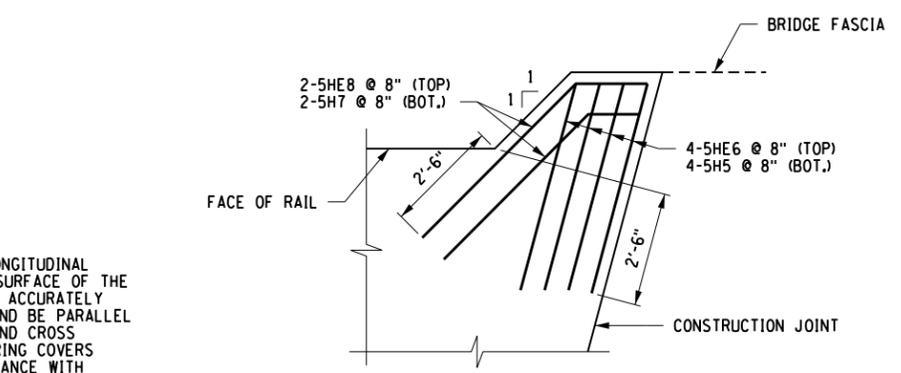


**SECTION A-A**  
SCALE: 3/8" = 1'-0"

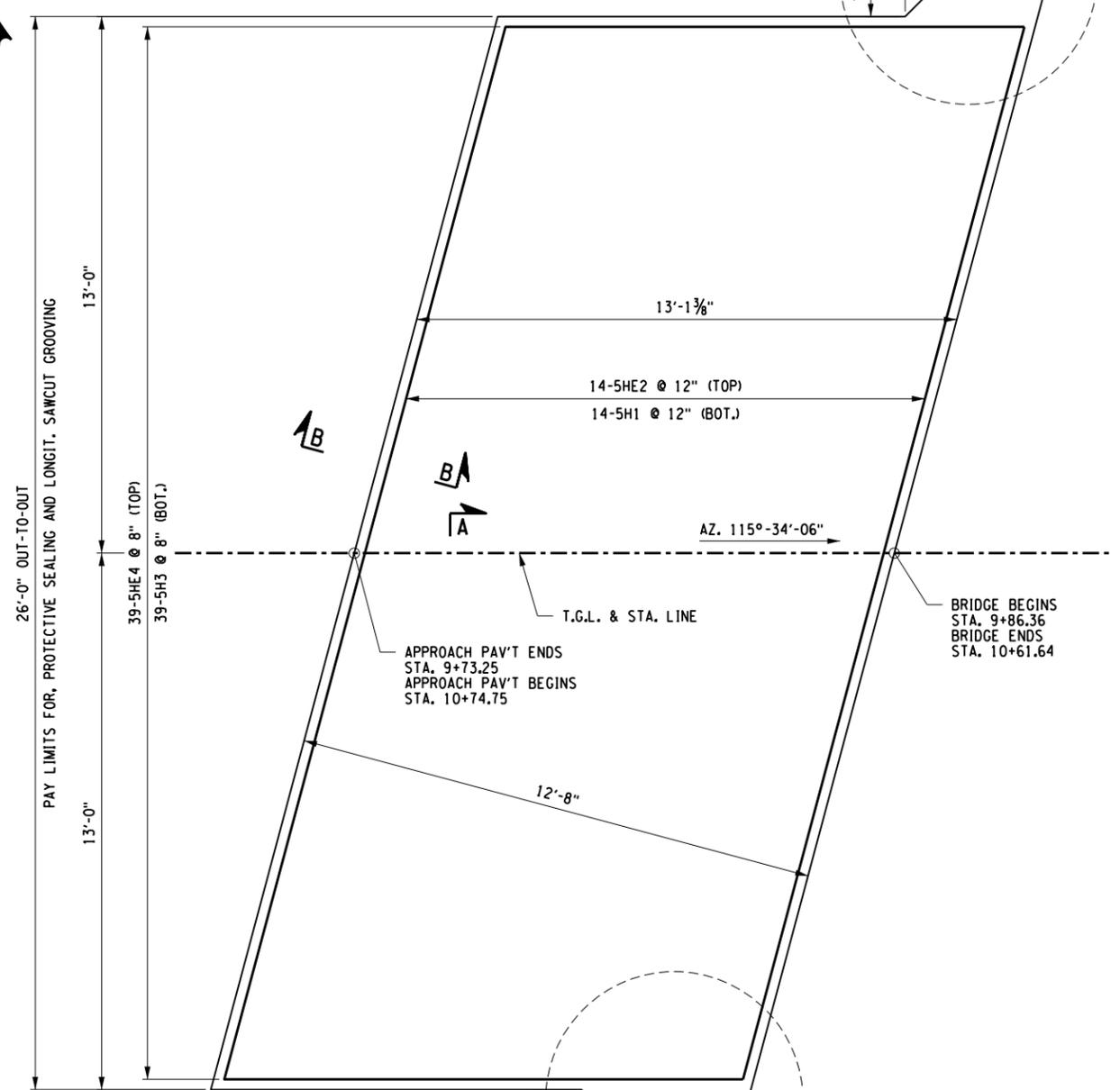


**SECTION B-B**  
SCALE: 1/4" = 1'-0"

**NOTES:**  
1. TO PERMIT UNHINDERED LONGITUDINAL MOVEMENT OF SLAB, THE SURFACE OF THE SUBBASE COURSE MUST BE ACCURATELY CONTROLLED TO FOLLOW AND BE PARALLEL TO THE ROADWAY GRADE AND CROSS SLOPE. POLYETHYLENE CURING COVERS (WHITE OPAQUE) IN ACCORDANCE WITH MATERIAL SPECIFICATION SUBSECTION 711-04 SHALL BE PLACED ON THE FINISHED SUBBASE COURSE THE FULL WIDTH OF THE APPROACH SLAB PRIOR TO PLACEMENT OF THE REINFORCEMENT. THE CURING COVERS SHALL BE .004 in. THICK, AND LAPS SHALL BE 2 ft. MINIMUM.



**APPROACH SLAB CORNER DETAIL**  
SCALE: 1/4" = 1'-0"

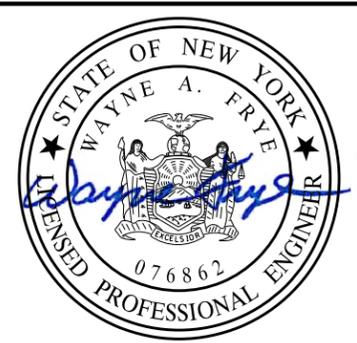


**APPROACH SLAB REINFORCEMENT PLAN**  
SCALE: 1/4" = 1'-0"

APPROACH SLAB TABLE			
LOCATION	CONCRETE ITEM 557.2003--SS	LONGITUDINAL SAWCUT GROOVING ITEM 558.02	PROTECTIVE SEALING ITEM 559.18960118
BEGIN APPROACH SLAB	38.9 YD <sup>2</sup>	37.9 YD <sup>2</sup>	351 ft <sup>2</sup>
END APPROACH SLAB	38.9 YD <sup>2</sup>	37.9 YD <sup>2</sup>	351 ft <sup>2</sup>

PLOTDRVR: pldr\_bv\_hddr.plt  
 MODEL: APPROACH SLAB PLAN AND DETAILS  
 FILE PATH: C:\Compass\County\2150220 - Groton City rd Bridge Replace\Drawings\Structural\PlanSet\2150220\_1b.dwg  
 DATE: TIME: 5/21/2015 2:30:44 PM  
 PROJECT MANAGER:

DESIGNER: VLG  
 AIR  
 ENGINEER: WAF



**RECORD PLANS**  
I HEREBY CERTIFY BY MY SIGNATURE, THAT I HAVE PREPARED THIS RECORD DRAWING WHICH IS, TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, A TRUE REPRESENTATION OF THE WORK AS CONSTRUCTED.  
DATE: \_\_\_\_\_

NO.	REVISION	BY	DATE
1			
2			
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It is a violation of New York Education Law Article 145 Sec.7209, for any person, unless acting under the direction of a licensed architect, professional engineer, or land surveyor, to alter an item in any way, if an item bearing the seal of an architect, engineer, or land surveyor is altered; the altering architect, engineer, or land surveyor shall affix to the item their seal and notation "altered by" followed by their signature and date of such alteration, and a specific description of the alteration.

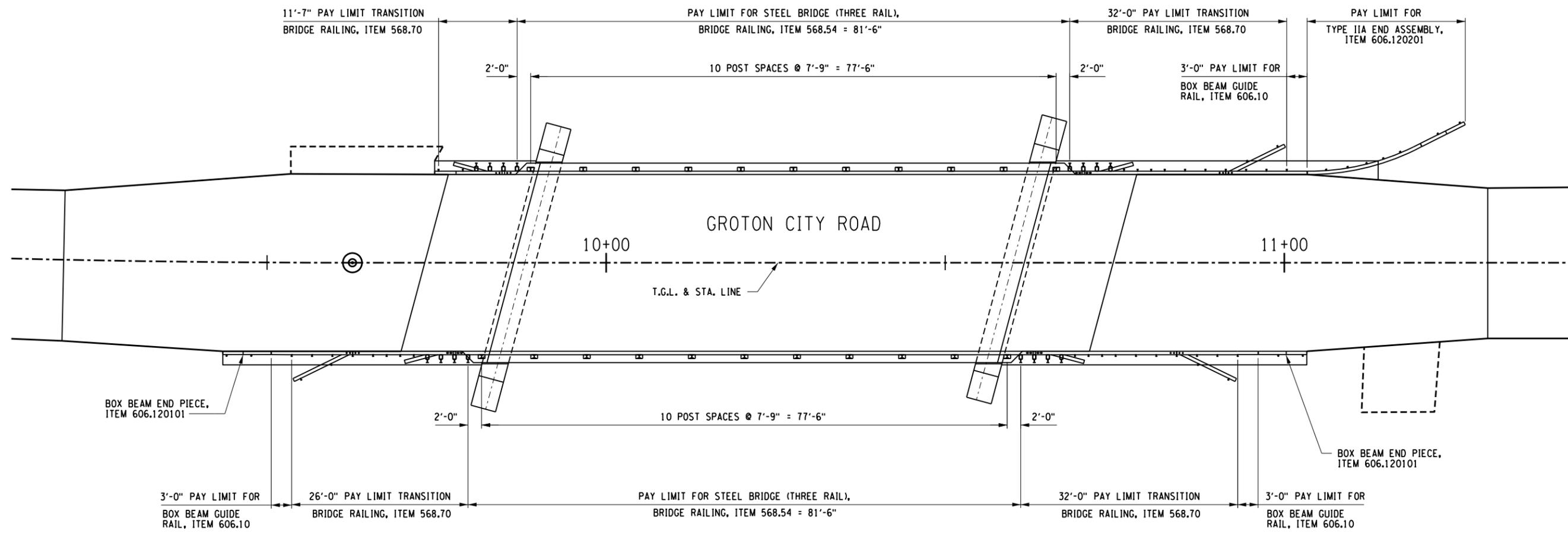
**LABELLA**  
Associates, P.C.  
235 HARRISON STREET  
SYRACUSE, NY 13202



PROJECT CLIENT  
REPLACEMENT OF GROTON CITY ROAD BRIDGE  
OVER FALL CREEK  
B.I.N. 3314230  
TOMPKINS COUNTY  
TOWN OF GROTON

DRAWING TITLE  
**APPROACH SLAB  
PLAN AND DETAILS**

PROJECT NUMBER  
2150220  
DATE  
MAY 2015  
DRAWING NUMBER  
ST-15



**RAILING LAYOUT**  
SCALE: 1/16" = 1'-0"

VLG  
 DESIGNER:  
 AJR  
 ENGINEER:  
 WAF  
 PROJECT MANAGER:



**RECORD PLANS**

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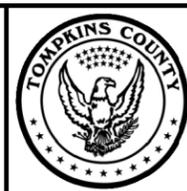
DATE: \_\_\_\_\_

NO.	REVISION	BY	DATE
1			
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REPLACEMENT OF GROTON CITY ROAD BRIDGE  
OVER FALL CREEK  
B.I.N. 3314230  
TOMPKINS COUNTY  
TOWN OF GROTON

DRAWING TITLE

**RAILING PLAN**

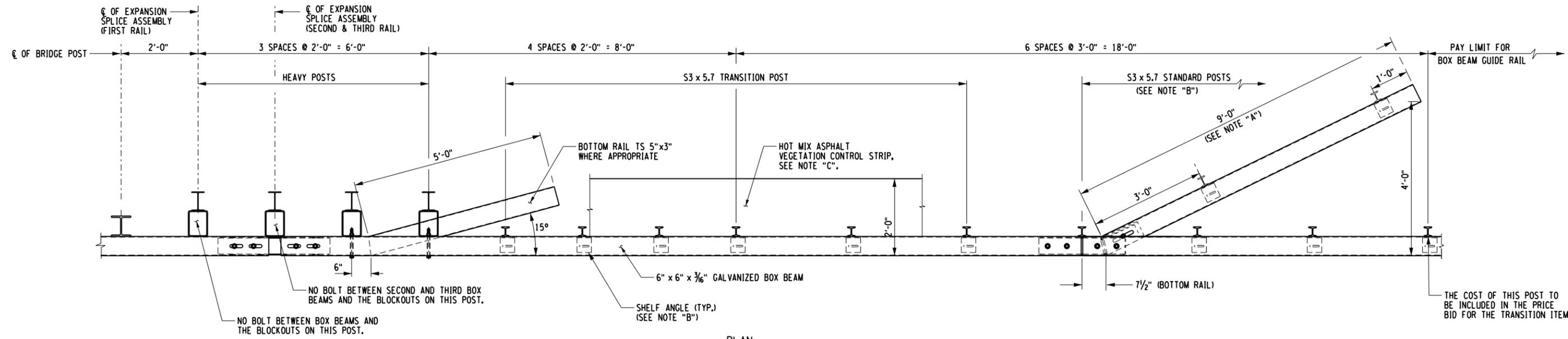
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2150220

DATE  
MAY 2015

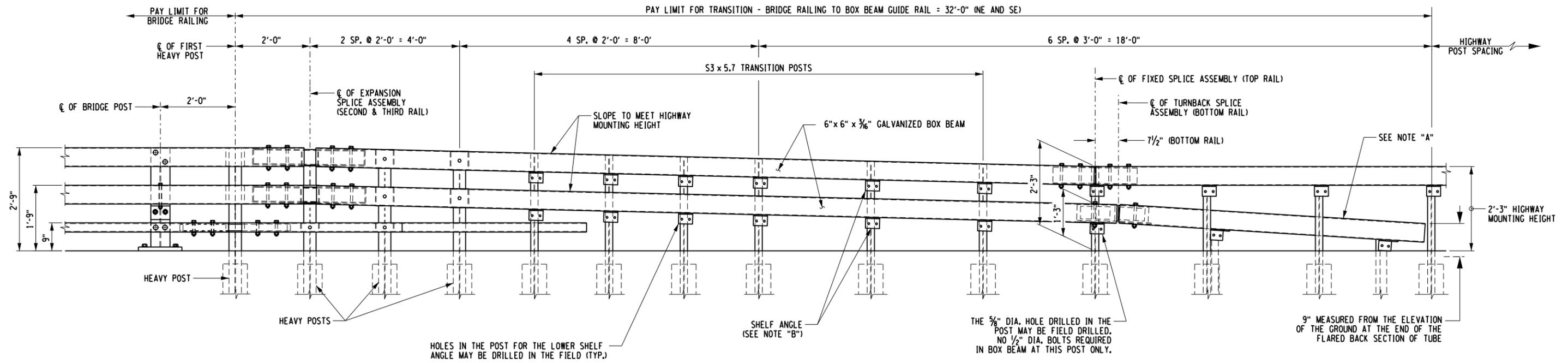
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ST-16

PLOT/DRAW: pdf, BW, hdd, jld, b3g  
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 DATE: TIME: 5/2/2015 2:45:33 PM





PLAN



ELEVATION

RAIL DETAIL FOR NORTHEAST AND SOUTHEAST QUADRANTS

- NOTES:
- NOTE "A":  
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.
- NOTE "B":  
SEE TYPICAL RAIL TO POST CONNECTION DETAIL ON CURRENT HIWAY STANDARD SHEET TITLED "BOX BEAM GUIDE RAIL".
- NOTE "C":  
PAVE THIS AREA WITH THE SAME MATERIAL USED IN THE SHOULDER. PAYMENT WILL BE MADE UNDER THE SHOULDER MATERIAL ITEMS.

PLOTDRW: pdf, BW, hdd, jobtbl, RAILINGDETAILS - 2, 150220, Groton City Rd Bridge Replace/Drawings/Structural/PlanSet/2150220\_06.dgn, DATE: TIME: 5/21/2015 2:58:04 PM, PROJECT MANAGER: WAF, ENGINEER: AJR, DESIGNER: VLG



RECORD PLANS

I HEREBY CERTIFY BY MY SIGNATURE, THAT I HAVE PREPARED THIS RECORD DRAWING WHICH IS, TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, A TRUE REPRESENTATION OF THE WORK AS CONSTRUCTED.

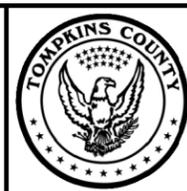
DATE: \_\_\_\_\_

NO.	REVISION	BY	DATE
1			
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SYRACUSE, NY 13202



PROJECT/CLIENT

REPLACEMENT OF GROTON CITY ROAD BRIDGE  
OVER FALL CREEK  
B.I.N. 3314230  
TOMPKINS COUNTY  
TOWN OF GROTON

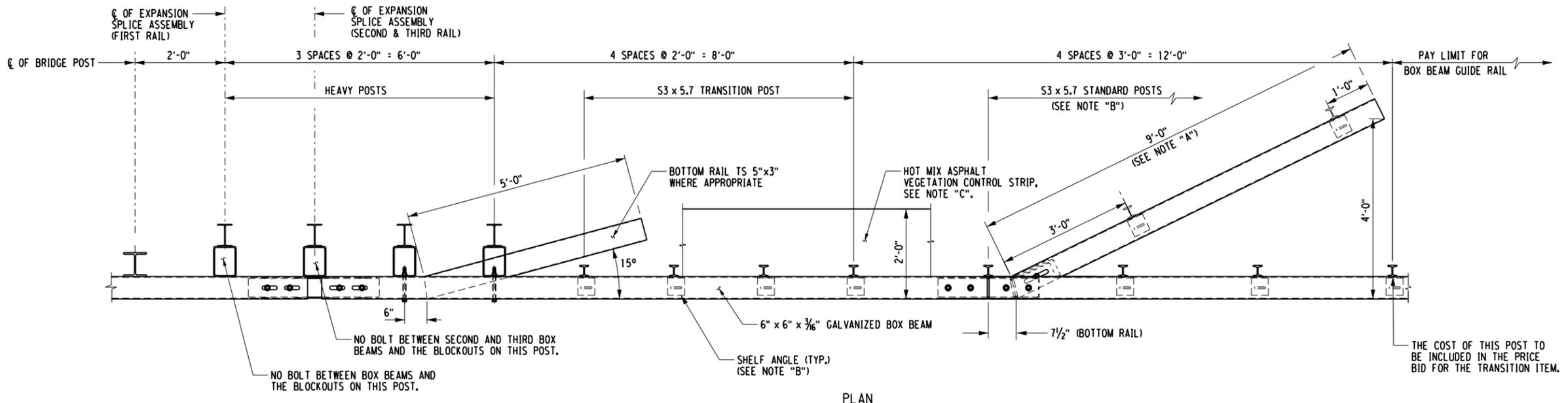
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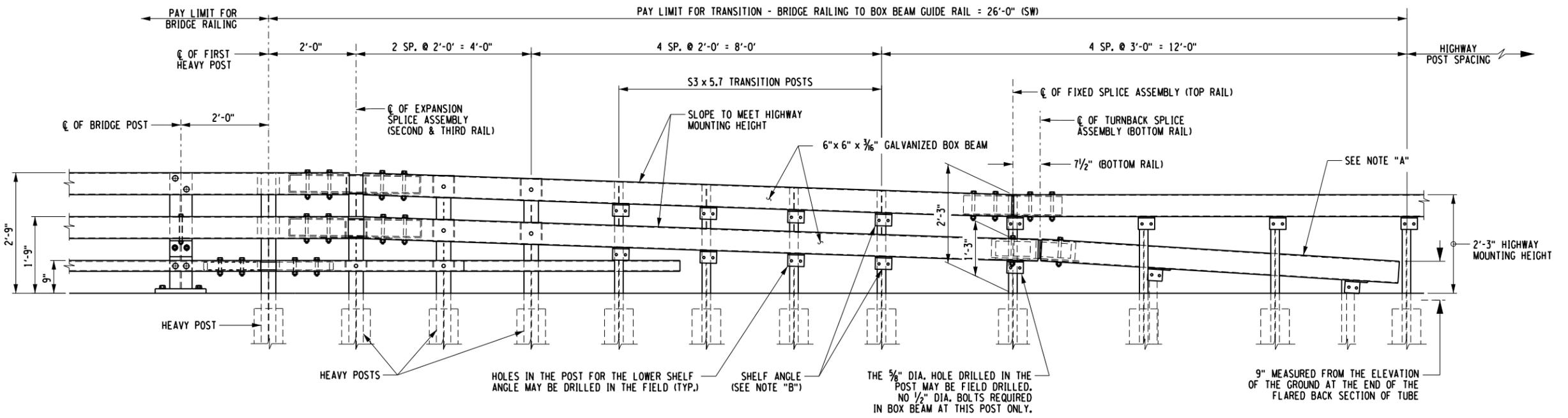
PROJECT NUMBER  
2150220

DATE  
MAY 2015

DRAWING NUMBER  
ST-18



PLAN



ELEVATION

RAIL DETAIL FOR SOUTHWEST QUADRANT

- NOTES:
- NOTE "A":  
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.
- NOTE "B":  
SEE TYPICAL RAIL TO POST CONNECTION DETAIL ON CURRENT HIGHWAY STANDARD SHEET TITLED "BOX BEAM GUIDE RAIL".
- NOTE "C":  
PAVE THIS AREA WITH THE SAME MATERIAL USED IN THE SHOULDER. PAYMENT WILL BE MADE UNDER THE SHOULDER MATERIAL ITEMS.

PLOT/DRAWN: pdf, BW, hdd, hdd, hdd  
 MODEL: RAILING DETAILS - 3  
 DATE: 05/15/15  
 PROJECT NUMBER: 2150220  
 PROJECT TITLE: Groton City Rd Bridge Replace/Drawings/Structural/Phase1/2150220\_04.dwg  
 DATE TIME: 5/15/15 10:00 AM

DESIGNER: VLG  
 ENGINEER: AJR  
 PROJECT MANAGER: WAF



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DATE: \_\_\_\_\_

NO.	REVISION	BY	DATE
1			
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3			
4			
5			

**LABELLA**  
Associates, P.C.

235 HARRISON STREET  
SYRACUSE, NY 13202



PROJECT/CLIENT

REPLACEMENT OF GROTON CITY ROAD BRIDGE  
OVER FALL CREEK  
B.I.N. 3314230  
TOMPKINS COUNTY  
TOWN OF GROTON

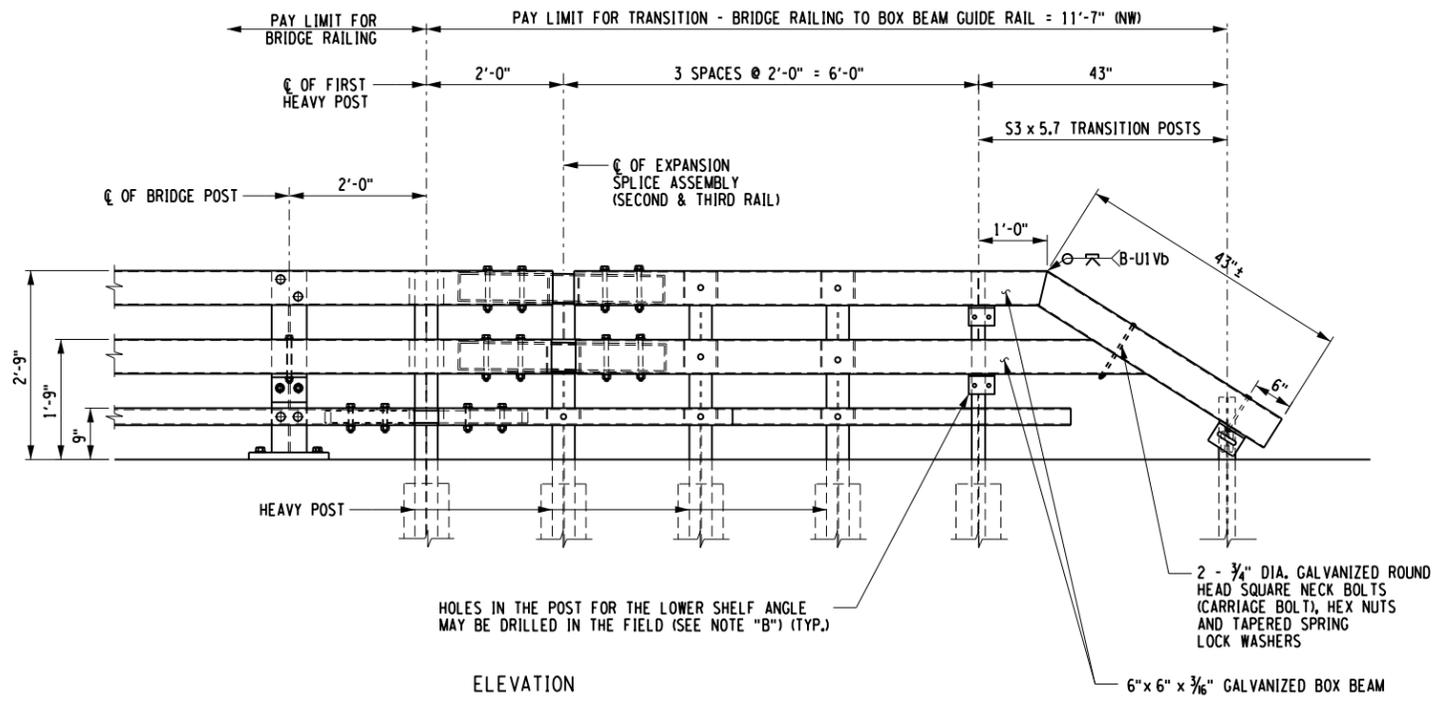
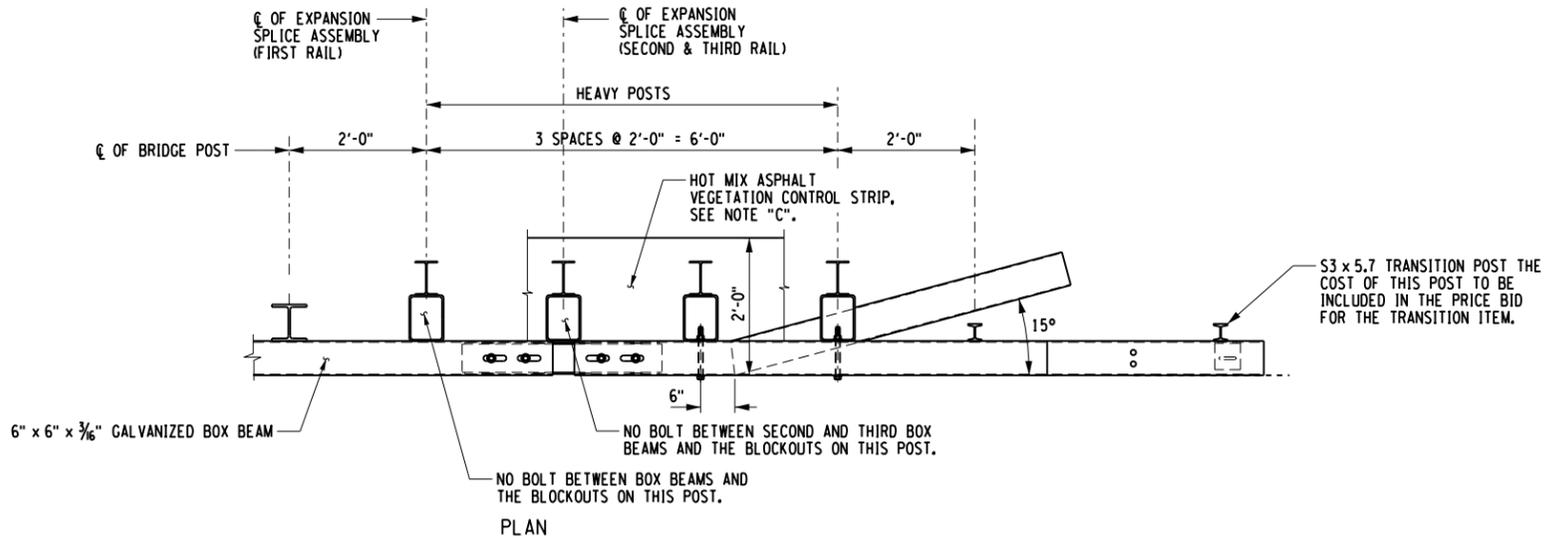
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RAILING DETAILS - 3

PROJECT NUMBER  
2150220

DATE  
MAY 2015

DRAWING NUMBER  
ST-19



RAILING DETAIL NORTHWEST QUADRANT

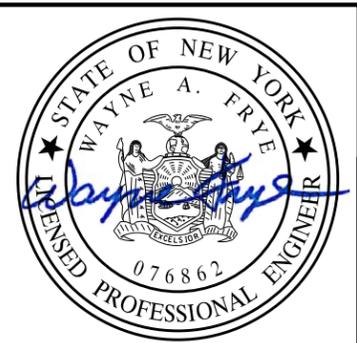
NOTES:

NOTE "A":  
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.

NOTE "B":  
SEE TYPICAL RAIL TO POST CONNECTION DETAIL ON CURRENT HIGHWAY STANDARD SHEET TITLED "BOX BEAM GUIDE RAIL".

NOTE "C":  
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PLOT/DRAWN: pdf, BW, hdd, jld, jld  
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 DESIGNER: AJR  
 ENGINEER: WAF

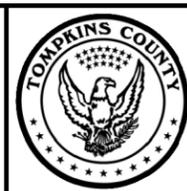


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DATE:	

NO.	REVISION	BY	DATE
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**LABELLA**  
Associates, P.C.

235 HARRISON STREET  
SYRACUSE, NY 13202



PROJECT/CLIENT

REPLACEMENT OF GROTON CITY ROAD BRIDGE  
OVER FALL CREEK  
B.I.N. 3314230  
TOMPKINS COUNTY  
TOWN OF GROTON

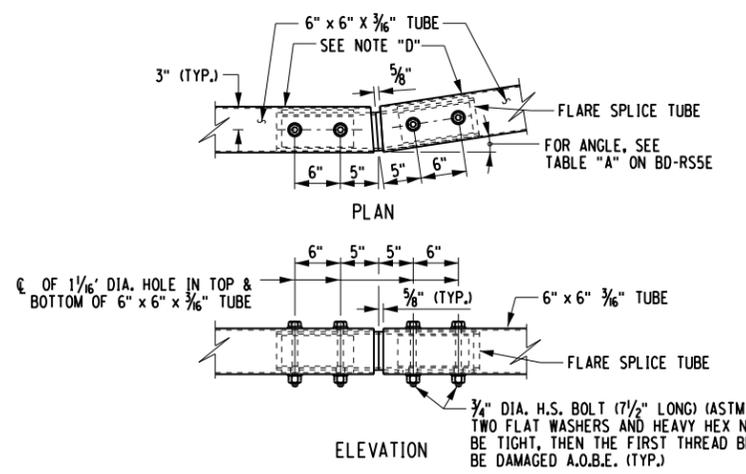
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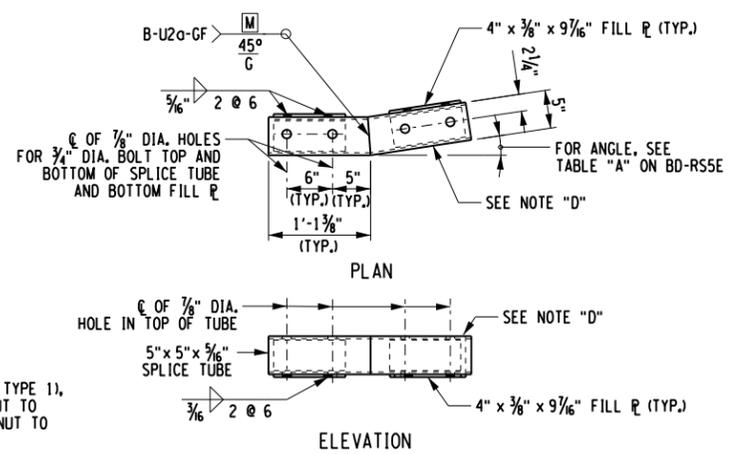
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DATE  
MAY 2015

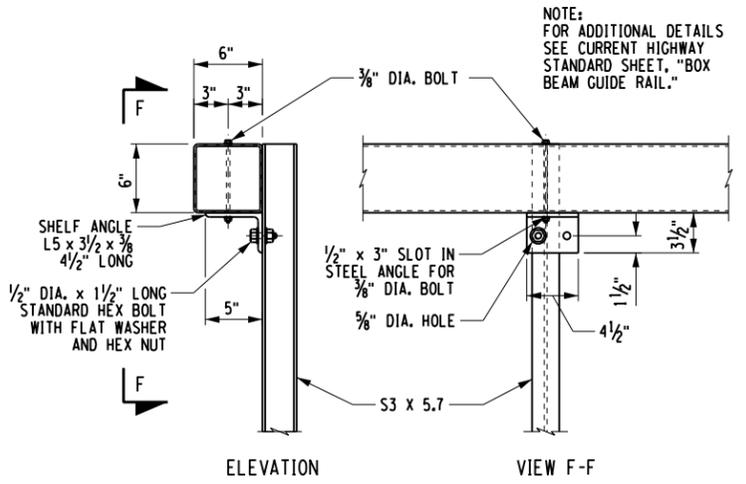
DRAWING NUMBER  
ST-20



FLARE SPLICE ASSEMBLY

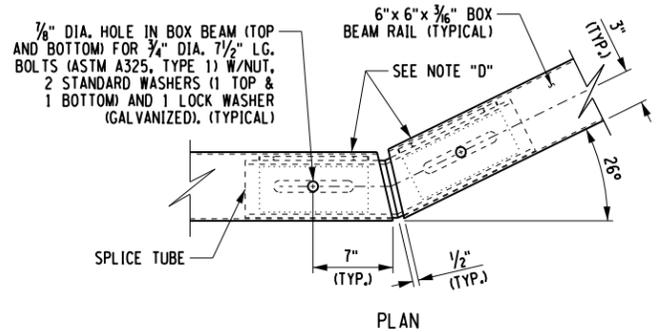


FLARE SPLICE TUBE DETAIL

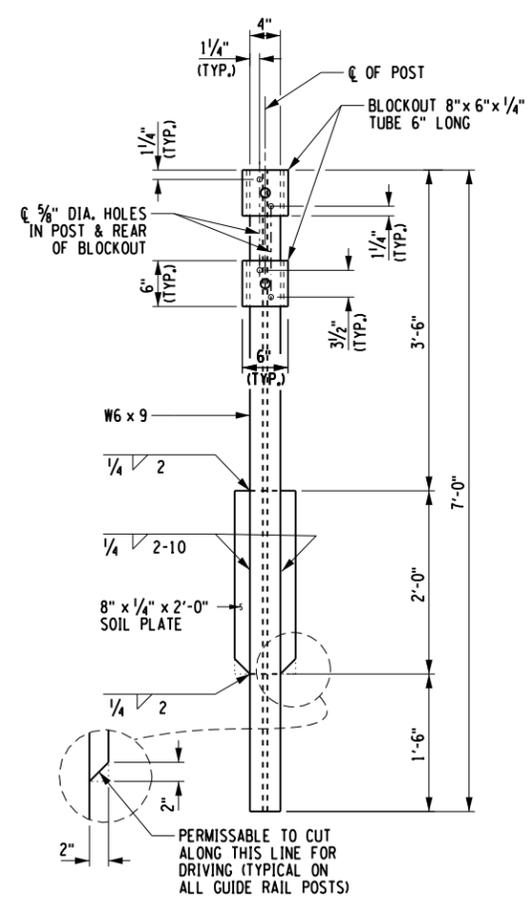


TYPICAL RAIL TO POST CONNECTION

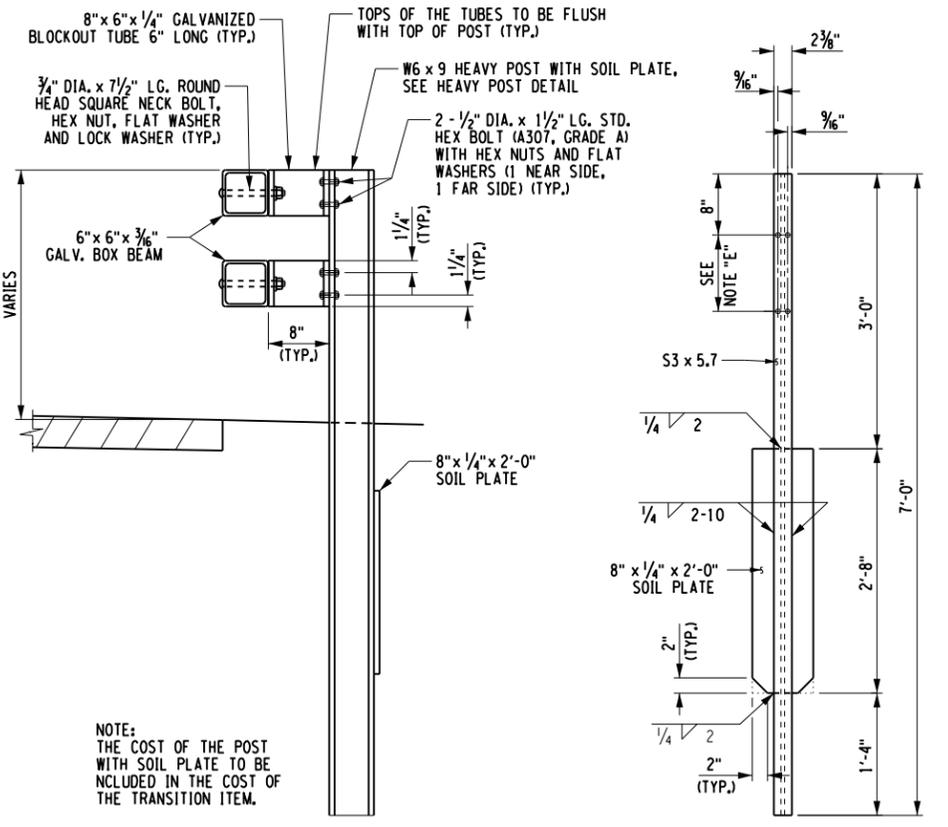
**NOTES:**  
 NOTE "A": THE COST OF THE POSTS, SPLICE TUBE AND RAIL FOR THE LOWER TUBE FLARE SECTION IS INCLUDED IN THE PRICE BID FOR THE TRANSITION ITEM.  
 NOTE "B": SEE TYPICAL RAIL TO POST CONNECTION DETAIL ON CURRENT HIGHWAY STANDARD SHEET TITLE "BOX BEAM GUIDE RAIL".  
 NOTE "C": PAVE THIS AREA WITH THE SAME MATERIAL USED IN THE STABILIZED SHOULDER. PAYMENT WILL BE MADE UNDER SHOULDER MATERIAL ITEM.  
 NOTE "D": PROTRUSIONS CAUSED BY WELDING OR GALVANIZING ARE NOT PERMITTED ON THE ADJOINING SURFACES OF THE BOX BEAM RAILS, SPLICE TUBES AND FILL PLATES.  
 NOTE "E": HOLES IN THE POST FOR THE LOWER RAIL MAY BE LOCATED AND DRILLED IN THE FIELD. IF SO, THE GALVANIZING SHALL BE REPAIRED IN ACCORDANCE WITH SUBSECTION 719-01.



SPLICE DETAIL AT TURN BACK IN LOWER TRANSITION GUIDE RAIL

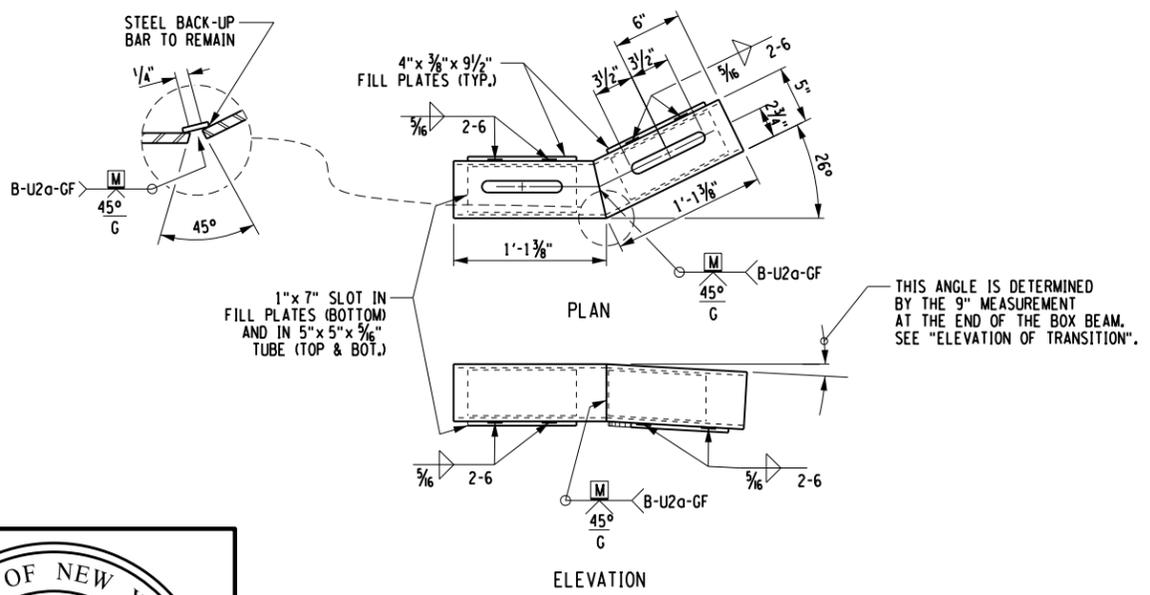


HEAVY POST DETAIL



HEAVY POST ELEVATION

TRANSITION POST DETAIL



SPLICE TUBE DETAILS FOR TURN BACK



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 I HEREBY CERTIFY BY MY SIGNATURE, THAT I HAVE PREPARED THIS RECORD DRAWING WHICH IS, TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, A TRUE REPRESENTATION OF THE WORK AS CONSTRUCTED.  
 DATE: \_\_\_\_\_

NO.	REVISION	BY	DATE
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**LABELLA**  
 Associates, P.C.  
 235 HARRISON STREET  
 SYRACUSE, NY 13202

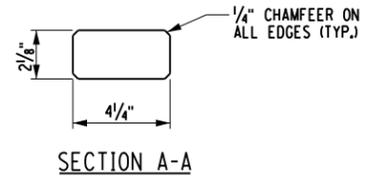
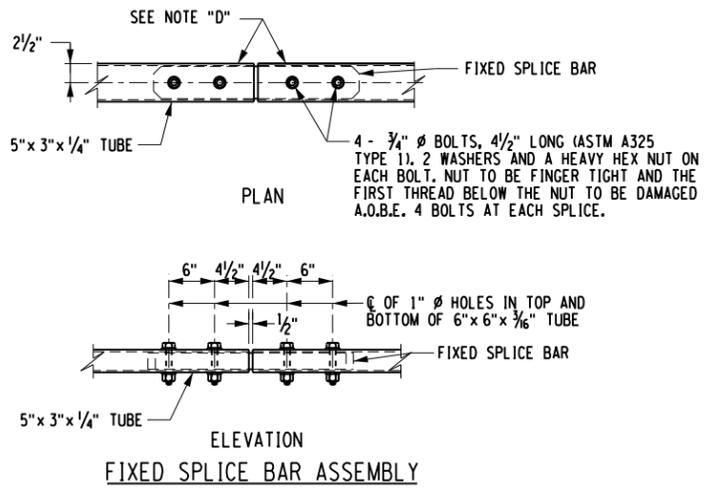
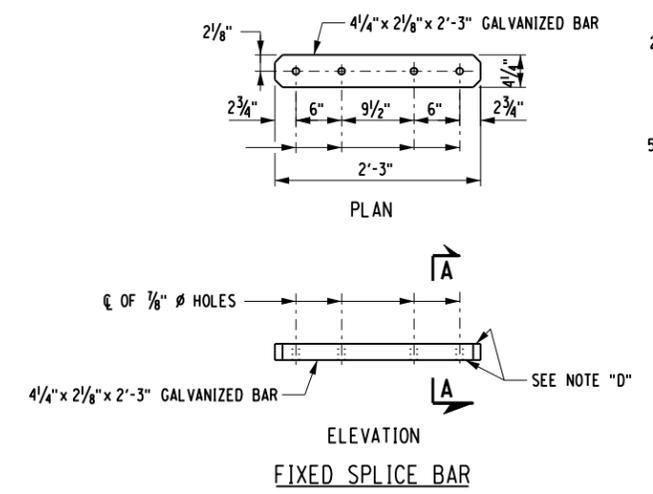
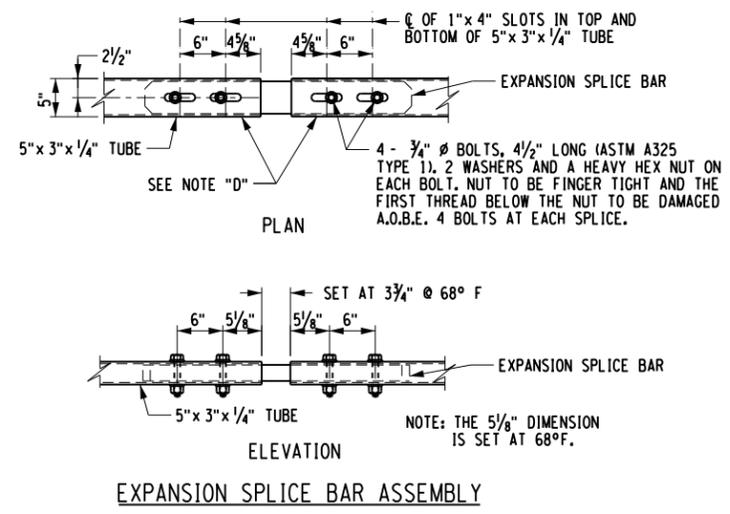
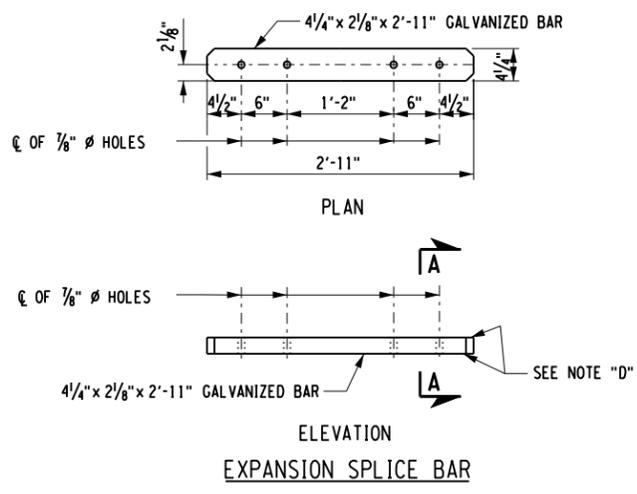
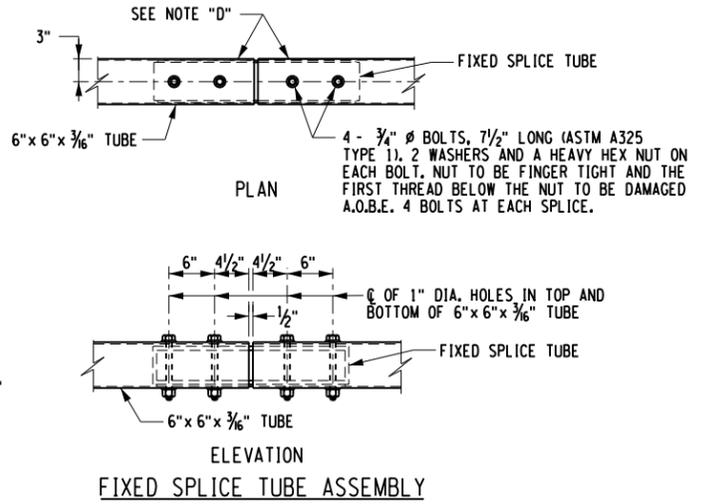
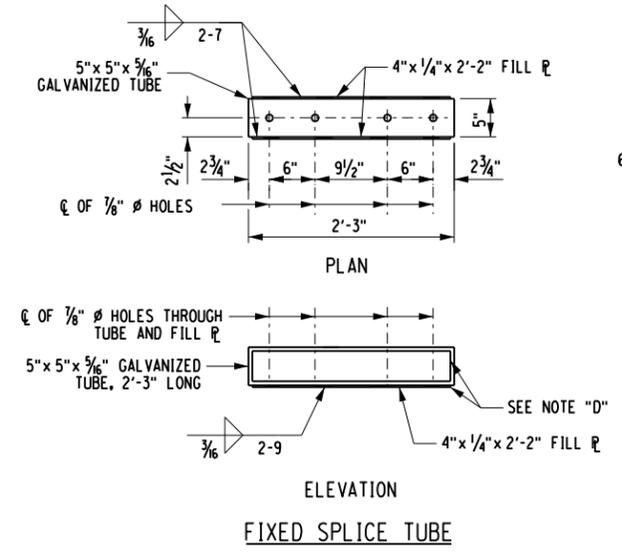
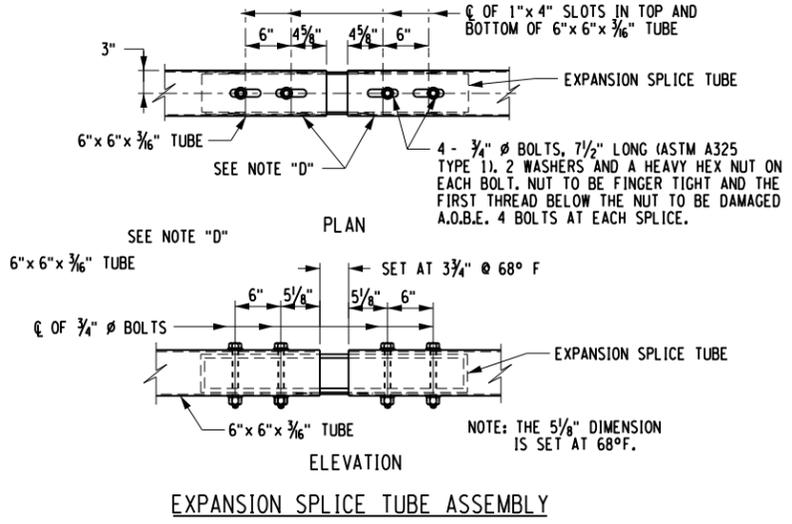
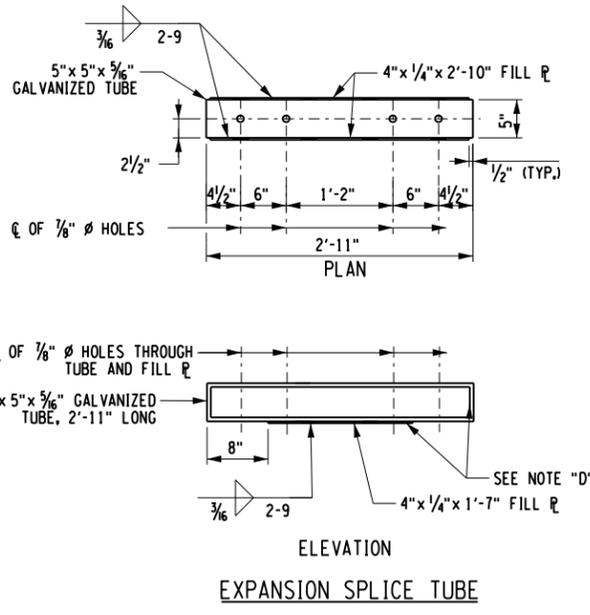


PROJECT/CLIENT  
 REPLACEMENT OF GROTON CITY ROAD BRIDGE  
 OVER FALL CREEK  
 B.I.N. 3314230  
 TOMPKINS COUNTY  
 TOWN OF GROTON

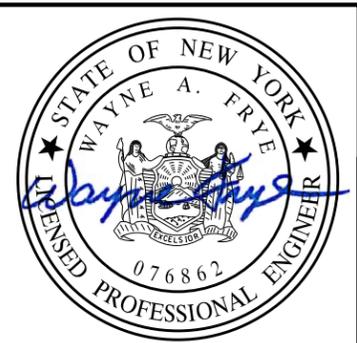
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PROJECT NUMBER  
 2150220  
 DATE  
 MAY 2015  
 DRAWING NUMBER  
 ST-21

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 ENGINEER:  
 AIR  
 DESIGNER: VLG



PROJECT MANAGER: WAF  
 ENGINEER: WAF  
 DESIGNER: VLG  
 PROJECT: Groton City Rd Bridge Replacement Drawings/Structural/PlanSet/2150220\_06.dgn  
 MODEL: 2/26/2015  
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 MODEL: 2/26/2015  
 DATE TIME: 5:27:35 PM



**RECORD PLANS**

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DATE: \_\_\_\_\_

NO.	REVISION	BY	DATE
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**LABELLA**  
Associates, P.C.

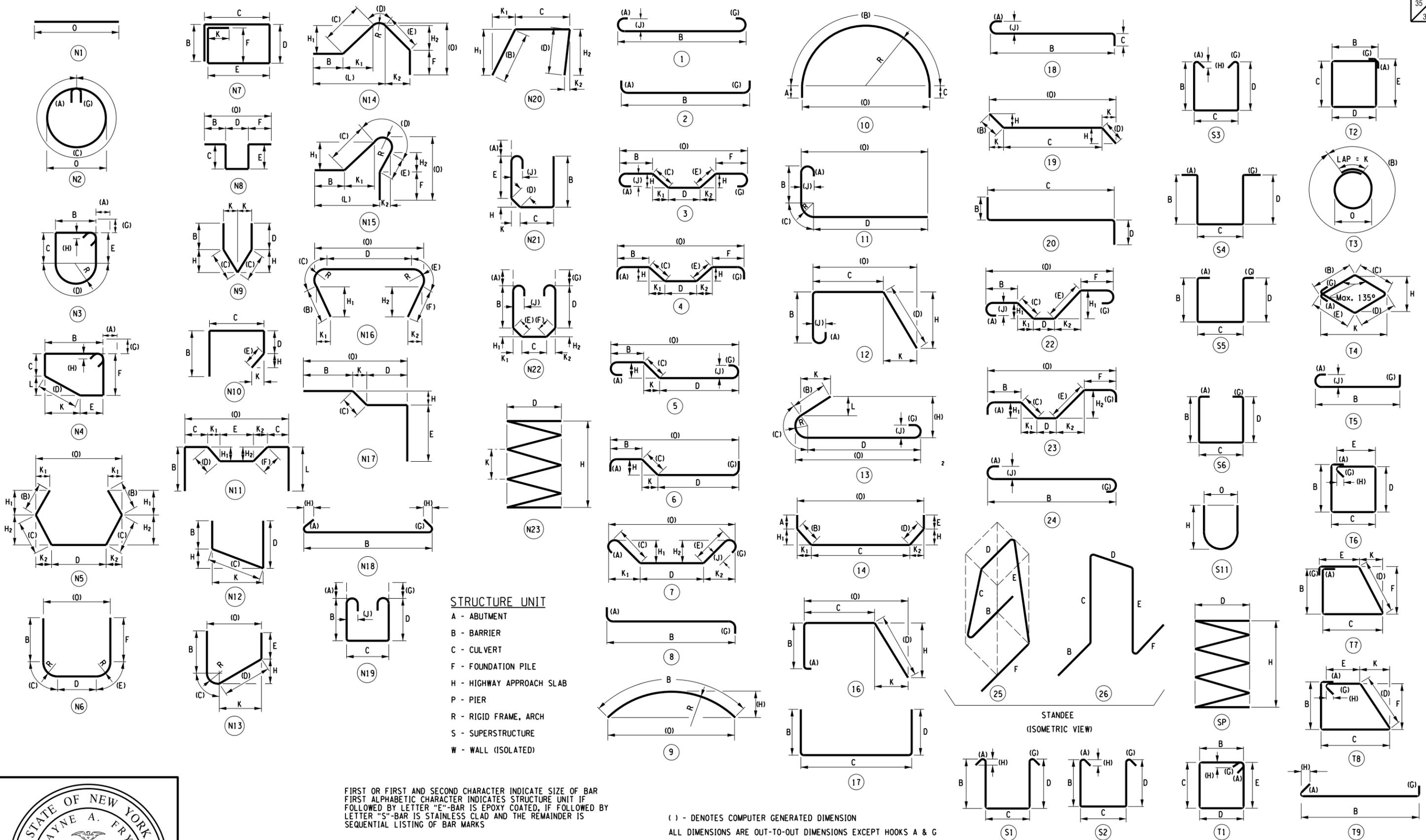
235 HARRISON STREET  
SYRACUSE, NY 13202



PROJECT/CLIENT  
REPLACEMENT OF GROTON CITY ROAD BRIDGE  
OVER FALL CREEK  
B.I.N. 3314230  
TOMPKINS COUNTY  
TOWN OF GROTON

DRAWING TITLE  
RAILING DETAILS - 6

PROJECT NUMBER  
2150220  
DATE  
MAY 2015  
DRAWING NUMBER  
ST-22



FIRST OR FIRST AND SECOND CHARACTER INDICATE SIZE OF BAR  
 FIRST ALPHABETIC CHARACTER INDICATES STRUCTURE UNIT IF  
 FOLLOWED BY LETTER "E"-BAR IS EPOXY COATED, IF FOLLOWED BY  
 LETTER "S"-BAR IS STAINLESS CLAD AND THE REMAINDER IS  
 SEQUENTIAL LISTING OF BAR MARKS

PLOTDRVR: rbf\_bw\_hall.plt  
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 PROJECT MANAGER:

AIR DESIGNER: VLG  
 ENGINEER:



**RECORD PLANS**  
 I HEREBY CERTIFY BY MY SIGNATURE, THAT I HAVE PREPARED THIS RECORD DRAWING WHICH IS, TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, A TRUE REPRESENTATION OF THE WORK AS CONSTRUCTED.  
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**LABELLA**  
 Associates, D.P.C.  
 235 HARRISON STREET  
 SYRACUSE, NY 13202



PROJECT CLIENT  
 REPLACEMENT OF GROTON CITY ROAD BRIDGE  
 OVER FALL CREEK  
 B.I.N. 3314230  
 TOMPKINS COUNTY  
 TOWN OF GROTON

DRAWING TITLE  
**BAR BENDING DIAGRAMS**

PROJECT NUMBER  
 2150220  
 DATE  
 MAY 2015  
 DRAWING NUMBER  
 ST-23

MARK	NO.	LENGTH	TYPE	WEIGHT	A	B	C	D	E	F	G	H H1	H2	J	K K1	K2	L	O	R
<b>WEST ABUTMENT</b>																			
<b>PLACEMENT 1 - STEM</b>																			
5AE1	10	42'-7"	N1	444														42'-7"	
6AE2	7	42'-7"	N1	448														42'-7"	
5AE3	67	8'-1"	17	565		2'-4"	3'-5"	2'-4"											
6AE4	31	7'-9"	17	361		3'-3"	1'-3"	3'-3"											
5AE5	12	5'-3"	17	66		1'-0"	3'-3"	1'-0"											
5AE6	3	5'-3"	N12	16		3'-10"	1'-5"	-				0'-8"			1'-3"				
5AE7	3	5'-6"	N12	17		4'-1"	1'-5"	-				0'-8"			1'-3"				
5AE8	2	8'-3"	17	17		2'-4"	3'-7"	2'-4"											
5AE9	10	12'-3"	17	128		4'-5"	3'-5"	4'-5"											
5AE9	DIMENSION "B" AND "D" VARIES FROM 3'-3" TO 5'-6"																		
5AE10	1	14'-5"	17	15		5'-6"	3'-5"	5'-6"											
5AE11	2	14'-7"	17	30		5'-6"	3'-7"	5'-6"											
SUBTOTAL EPOXY BARS =				2 107	lb														
<b>PLACEMENT 2 - BACKWALL</b>																			
5AE15	5	36'-0"	N1	188														36'-0"	
4AE16	31	3'-3"	17	67		1'-0"	1'-3"	1'-0"											
5AE17	46	9'-10"	N21	472	0'-7"	-	-	6'-0"	3'-3"			2'-8"		0'-5"	5'-5"				
5AE18	23	4'-5"	1	106	0'-7"	3'-3"						0'-7"		0'-5"					
SUBTOTAL EPOXY BARS =				833	lb														
<b>PLACEMENT 3 - SOUTH WINGWALL</b>																			
5AE5	1	5'-3"	17	5		1'-0"	3'-3"	1'-0"											
5AE20	5	7'-2"	N12	37		2'-3"	4'-11"	-				2'-3"			4'-4"				
5AE20	DIMENSION "B" VARIES FROM 1'-9" TO 2'-9"																		
5AE21	1	7'-1"	N1	7														7'-1"	
5AE22	1	5'-1"	N1	32														5'-1"	
5AE23	2	5'-3"	N1	11														5'-3"	
5AE23	DIMENSION "O" VARIES FROM 6'-3" TO 4'-3"																		
5AE24	2	4'-3"	N1	9														4'-3"	
5AE24	DIMENSION "O" VARIES FROM 5'-3" TO 3'-3"																		
SUBTOTAL EPOXY BARS =				74	lb														
<b>PLACEMENT 4 - NORTH WALL</b>																			
5AE5	1	5'-3"	17	5		1'-0"	3'-3"	1'-0"											
5AE25	5	5'-9"	N12	30		1'-5"	4'-4"	-				2'-0"			3'-10"				
5AE25	DIMENSION "B" VARIES FROM 11' TO 1'-11"																		
5AE26	1	4'-9"	N1	5														4'-9"	
5AE27	1	5'-9"	N1	6														5'-9"	
5AE28	2	3'-6"	N1	7														3'-6"	
5AE28	DIMENSION "O" VARIES FROM 4'-6" TO 2'-6"																		
5AE29	1	4'-6"	N1	5														4'-6"	
5AE29	DIMENSION "O" VARIES FROM 5'-6" TO 3'-6"																		
SUBTOTAL EPOXY BARS =				58	lb														
TOTAL EPOXY BARS WEST ABUTMENT =				3 072	lb														

MARK	NO.	LENGTH	TYPE	WEIGHT	A	B	C	D	E	F	G	H H1	H2	J	K K1	K2	L	O	R
<b>EAST ABUTMENT</b>																			
<b>PLACEMENT 1 - STEM</b>																			
5AE1	10	42'-8"	N1	445															42'-8"
6AE2	7	42'-8"	N1	449															42'-8"
5AE3	67	8'-5"	17	588		2'-6"	3'-5"	2'-6"											
6AE4	31	7'-9"	17	361		3'-3"	1'-3"	3'-3"											
5AE5	12	5'-3"	17	66		1'-0"	3'-3"	1'-0"											
5AE6	3	6'-0"	N12	19		4'-7"	1'-5"	-				0'-7"			1'-4"				
5AE7	3	6'-1"	N12	19		4'-8"	1'-5"	-				0'-7"			1'-4"				
5AE8	2	8'-7"	17	18		2'-6"	3'-7"	2'-6"											
5AE9	10	12'-11"	17	135		4'-9"	3'-5"	4'-9"											
5AE9	DIMENSION "B" & "D" VARIES FROM 3'-10" TO 5'-8"																		
5AE10	1	14'-9"	17	15		5'-8"	3'-5"	5'-8"											
5AE11	2	14'-11"	17	31		5'-8"	3'-7"	5'-8"											
SUBTOTAL EPOXY BARS =				2 146	lb														
<b>PLACEMENT 2 - BACKWALL</b>																			
5AE15	5	36'-0"	N1	188														36'-0"	
4AE16	31	3'-3"	17	67		1'-0"	1'-3"	1'-0"											
5AE17	46	9'-10"	N21	472	0'-7"	-	-	6'-0"	3'-3"			2'-8"		0'-5"	5'-5"				
5AE18	23	4'-5"	1	106	0'-7"	3'-3"						0'-7"		0'-5"					
SUBTOTAL EPOXY BARS =				833	lb														
<b>PLACEMENT 3 - NORTH WINGWALL</b>																			
5AE5	1	5'-3"	17	5		1'-0"	3'-3"	1'-0"											
5AE20	5	6'-10"	N12	36		2'-3"	4'-7"	-				1'-9"			4'-3"				
5AE20	DIMENSION "B" VARIES FROM 1'-9" TO 2'-9"																		
5AE21	1	7'-0"	N1	7														7'-0"	
5AE22	1	5'-1"	N1	32														5'-1"	
5AE23	2	5'-9"	N1	12														5'-9"	
5AE23	DIMENSION "O" VARIES FROM 6'-11" TO 4'-6"																		
5AE24	2	4'-9"	N1	10														4'-9"	
5AE24	DIMENSION "O" VARIES FROM 5'-11" TO 3'-6"																		
SUBTOTAL EPOXY BARS =				75	lb														
<b>PLACEMENT 4 - SOUTH WINGWALL</b>																			
5AE5	1	5'-3"	17	5		1'-0"	3'-3"	1'-0"											
5AE25	5	5'-9"	N12	30		1'-5"	4'-4"	-				1'-10"			3'-11"				
5AE25	DIMENSION "B" VARIES FROM 11' TO 1'-11"																		
5AE26	1	4'-11"	N1	5														4'-11"	
5AE27	1	5'-10"	N1	6														5'-10"	
5AE28	2	3'-8"	N1	8														3'-8"	
5AE28	DIMENSION "O" VARIES FROM 4'-9" TO 2'-7"																		
5AE29	1	4'-8"	N1	5														4'-8"	
5AE29	DIMENSION "O" VARIES FROM 5'-9" TO 3'-7"																		
SUBTOTAL EPOXY BARS =				59	lb														
TOTAL EPOXY BARS EAST ABUTMENT =				3 113	lb														
TOTAL EPOXY BARS =				6 185	lb														

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 DATE TIME: 5/27/2015 2:35:26 PM  
 PROJECT MANAGER: WAF  
 ENGINEER: AIR  
 DESIGNER: VLG



**RECORD PLANS**

I HEREBY CERTIFY BY MY SIGNATURE, THAT I HAVE PREPARED THIS RECORD DRAWING WHICH IS, TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, A TRUE REPRESENTATION OF THE WORK AS CONSTRUCTED.

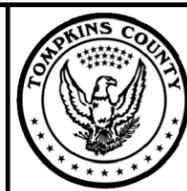
DATE: \_\_\_\_\_

NO.	REVISION	BY	DATE
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It is a violation of New York Education Law Article 145 Sec.7209, for any person, unless acting under the direction of a licensed architect, professional engineer, or land surveyor, to alter in any way, if an item bearing the seal of an architect, engineer, or land surveyor is altered; the altering architect, engineer, or land surveyor shall affix to the item their seal and notation "altered by" followed by their signature and date of such alteration, and a specific description of the alteration.

**LABELLA**  
Associates, P.C.

235 HARRISON STREET  
SYRACUSE, NY 13202



PROJECT/CLIENT

REPLACEMENT OF GROTON CITY ROAD BRIDGE  
OVER FALL CREEK  
B.I.N. 3314230  
TOMPKINS COUNTY  
TOWN OF GROTON

DRAWING TITLE

BARLIST - 1

PROJECT NUMBER  
2150220

DATE  
MAY 2015

DRAWING NUMBER  
ST-24

MARK	NO.	LENGTH	TYPE	WEIGHT	A	B	C	D	E	F	G	H H1	H2	J	K K1	K2	L	O	R
SUPERSTRUCTURE SLAB																			
(COST OF REINFORCMENT INCLUDED IN THE UNIT PRICE BID FOR ITEM 557.0503)																			
4SE1	113	8'-5"	17	636		0'-5"	8'-0"	--											
4SE2	113	24'-5"	17	1844		0'-5"	24'-0"	--											
4SE3	48	60'-0"	NI	1924														60'-0"	
4SE4	48	16'-6"	NI	530														16'-6"	
TOTAL EPOXY BARS IN SUPERSTRUCTURE SLAB =					4934	lb													
WEST APPROACH SLAB																			
(COST OF REINFORCMENT INCLUDED IN THE UNIT PRICE BID FOR ITEM 557.2003)																			
5H1	14	26'-4"	NI	385														26'-4"	
5H2	14	26'-4"	NI	385														26'-4"	
5H3	39	13'-2"	I	536	0'-7"	12'-7"				--			0'-5"						
5H4	39	12'-7"	NI	512														12'-7"	
5H5	8	4'-0"	NI	33														4'-0"	
5H6	8	4'-0"	NI	33														4'-0"	
5H7	4	6'-5"	NI2	27		1'-8"	4'-9"	--				3'-4"			3'-4"				
5H8	4	6'-5"	NI2	27		1'-8"	4'-9"	--				3'-4"			3'-4"				
SUBTOTAL EPOXY BARS =				957	lb														
SUBTOTAL UNCOATED BARS =				981	lb														
EAST APPROACH SLAB																			
(SAME AS WEST APPROACH SLAB)																			
SUBTOTAL EPOXY BARS =				957	lb														
SUBTOTAL UNCOATED BARS =				981	lb														
TOTAL EPOXY BARS IN APPROACH SLABS =					1914	lb													
TOTAL UNCOATED BARS IN APPROACH SLABS =					1962	lb													

PLOTDRVR pdf BW HighQuality  
 MODEL BARLIST - 2  
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 DATE TIME: 5/27/2015 2:25:00 PM  
 PROJECT MANAGER: WAF  
 ENGINEER: AJR  
 DESIGNER: VLG



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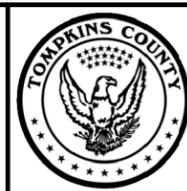
DATE: \_\_\_\_\_

NO.	REVISION	BY	DATE
1			
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B.I.N. 3314230  
TOMPKINS COUNTY  
TOWN OF GROTON

DRAWING TITLE

BARLIST - 2

PROJECT NUMBER  
2150220

DATE  
MAY 2015

DRAWING NUMBER  
ST-25

