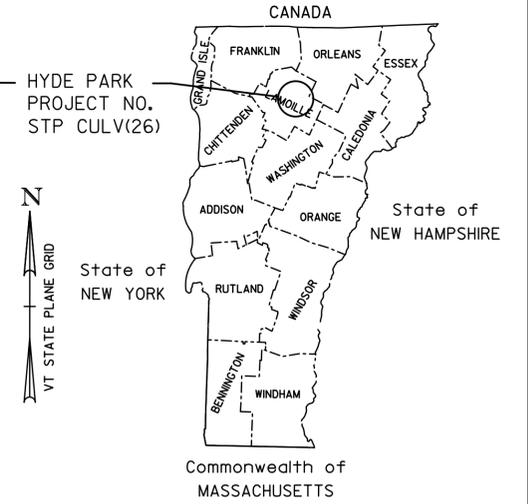
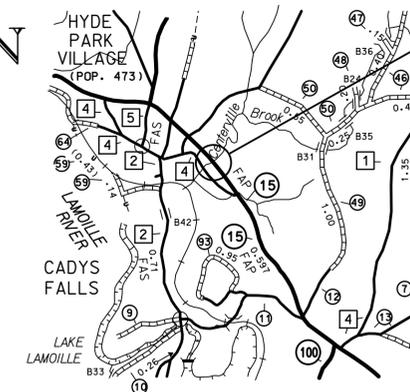


STATE OF VERMONT AGENCY OF TRANSPORTATION



PROPOSED IMPROVEMENT BRIDGE PROJECT TOWN OF HYDE PARK COUNTY OF LAMOILLE VT. ROUTE 15 (MINOR ARTERIAL) BRIDGE NO. 42

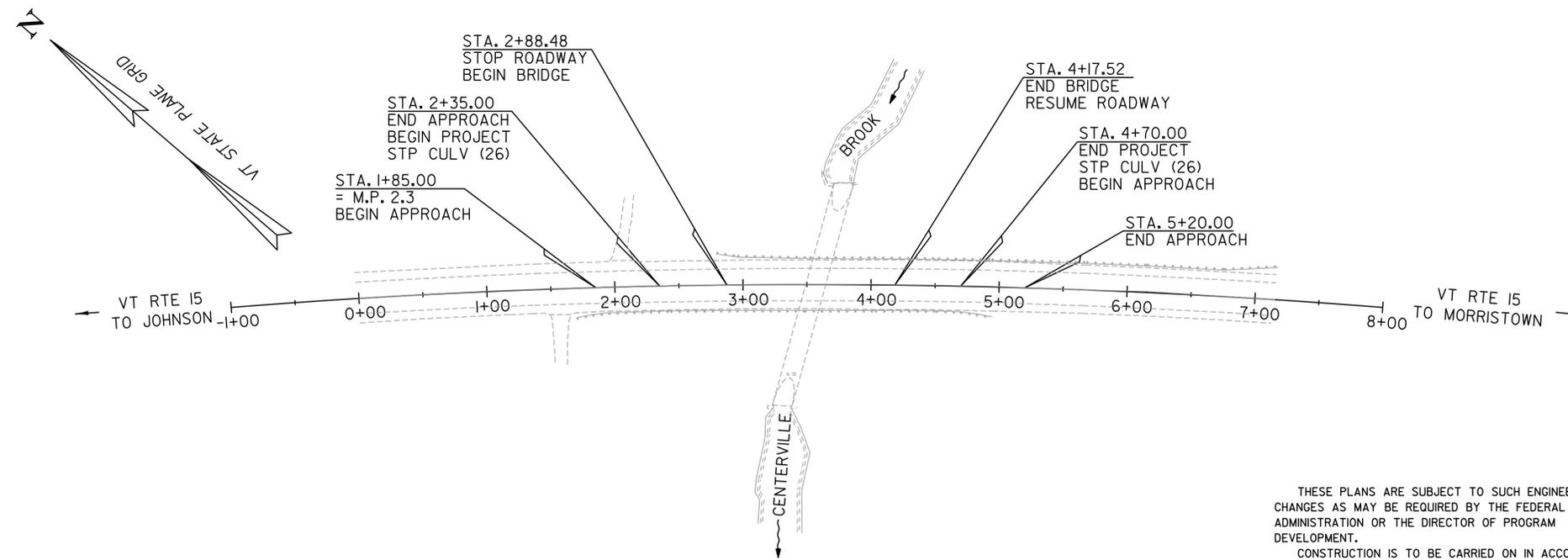


SEE SHEET 2 FOR
INDEX OF SHEETS AND
STANDARDS LIST.

BEGINNING AT A POINT, ON VT ROUTE 15, IN THE TOWN OF HYDE PARK APPROXIMATELY 2959 FEET (0.560 MILES) WESTERLY OF HYDE PARK/MORRISTOWN TOWN LINE AND EXTENDING EASTERLY ALONG VT ROUTE 15 APPROXIMATELY 235 FEET (0.045 MILES).

STRUCTURE LENGTH: 129.04 FEET = 0.024 MILES
ROADWAY LENGTH: 105.96 FEET = 0.020 MILES
PROJECT LENGTH: 235.00 FEET = 0.045 MILES

WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES REPLACEMENT OF BRIDGE #42 WITH A NEW BRIDGE ON EXISTING ALIGNMENT WITH CHANNEL WORK AND OTHER RELATED HIGHWAY ITEMS.



QUALITY ASSURANCE PROGRAM: LEVEL 2

CONVENTIONAL SYMBOLS	
COUNTY LINE	
TOWN LINE	
LIMITS OF ACCESS	
POINT OF ACCESS	
FENCE LINE	
STONE WALL	
TRAVELED WAY	
GUARD RAIL	
RAILROAD	
SURVEY LINE	
CULVERT	
POWER POLE	
TELEPHONE POLE	
TREES	
CONTROL OF ACCESS	
PROPERTY LINE	
R.O.W. TAKING LINE	
SLOPE RIGHTS	
TOP OF CUT	
TOE OF SLOPE	

SURVEYED BY : R. GAUVIN PC & T. YEFCHAK
SURVEYED DATE : 4/23/2012
DATUM
VERTICAL NAVD 88 (GEOID09) FT
HORIZONTAL NAD 83 (CORS) sFT



THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY ADMINISTRATION OR THE DIRECTOR OF PROGRAM DEVELOPMENT.
CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2011, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JULY 20, 2011 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.



DIRECTOR OF PROGRAM DEVELOPMENT
APPROVED _____ DATE _____
PROJECT MANAGER : DANNY LANDRY, P.E.
PROJECT NAME : HYDE PARK
PROJECT NUMBER : STP CULV (26)
SHEET 1 OF 60 SHEETS

TYL INTERNATIONAL

INDEX OF SHEETS

FINAL HYDRAULIC REPORT

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STANDARDS LIST

B-5	SLOPE GRADING, EMBANKMENTS, MUCK	06-01-1994
C-10	CURBING	02-11-2008
E-121	STANDARD SIGN PLACEMENT - CONVENTIONAL ROAD	08-08-1995
E-134	BRIDGE NUMBER PLAQUE	08-08-1995
E-142	REGULATORY SIGN DETAILS	09-20-1995
E-193	PAVEMENT MARKING DETAILS	08-18-1995
G-1	STEEL BEAM GUARDRAIL DETAILS (POST, DELINEATOR, TYPICALS)	01-03-2000
G-1D	STEEL BEAM GUARDRAIL DETAILS (END TERMINAL, ANCHOR, MEDIAN)	01-03-2000
G-4	PLANK RAIL, GUIDE POSTS, MARKER POSTS	08-01-1994
G-19	GENERIC GRADING PLANS FOR GUARDRAIL END TERMINALS	11-15-2002
S-360a	BRIDGE RAILING, GALVANIZED 2 RAIL BOX BEAM	04-23-2012
S-360b	GUARDRAIL APPROACH SECTION, GALVANIZED 2 RAIL BOX BEAM	04-23-2012
T-1	TRAFFIC CONTROL GENERAL NOTES	08-06-2012
T-17	TRAFFIC CONTROL MISCELLANEOUS DETAILS	08-06-2012
T-24	TRAFFIC CONTROL FOR MAINTENANCE PAVEMENT MARKING OPERATION	08-06-2012
T-28	CONSTRUCTION SIGN DETAILS	08-06-2012
T-29	CONSTRUCTION SIGN DETAILS	08-06-2012
T-30	CONSTRUCTION SIGN DETAILS	08-06-2012
T-35	CONSTRUCTION ZONE LONGITUDINAL DROP-OFFS	08-06-2012
T-36	CONSTRUCTION ZONE LONGITUDINAL DROP-OFFS FOR PAVING	08-06-2012
T-40	DELINEATORS AND MILEPOSTS	01-02-2013
T-45	SQUARE TUBE SIGN POST AND ANCHOR	01-02-2013

STRUCTURES DETAIL SHEETS

SD-501.00	CONCRETE DETAILS AND NOTES	05-07-2010
SD-502.00	CONCRETE DETAILS AND NOTES	10-10-2012
SD-516.10	BRIDGE JOINT, ASPHALTIC PLUG	05-07-2010
SD-601.00	STRUCTURAL STEEL DETAILS & NOTES	06-05-2010
SD-602.00	STRUCTURAL STEEL PLATE GIRDER DETAILS AND NOTES	05-02-2011

HYDROLOGIC DATA

DATE: 4/17/2013

DRAINAGE AREA: 8.0 sq. mi.
 CHARACTER OF TERRAIN: HILLY TO MOUNTAINOUS VALLEY SETTING
 STREAM CHARACTERISTICS: CHANNELIZED SINUOUS, LITTLE TO NO FLOODPLAIN
 NATURE OF STREAMBED: SAND AND GRAVEL

Q 2.33 =	400 CFS	Q50 =	1450 CFS
Q 10 =	900 CFS	Q 100 =	1700 CFS
Q 25 =	1170 CFS	Q 500 =	2280 CFS

DATE OF FLOOD OF RECORD: UNKNOWN
 ESTIMATED DISCHARGE: UNKNOWN
 WATER SURFACE ELEVATION: UNKNOWN
 NATURAL STREAM VELOCITY: 6.9 FPS AT Q50 = 1450 CFS
 ICE CONDITIONS: LOW
 DEBRIS: LOW TO MODERATE
 DOES THE STREAM REACH MAXIMUM HIGHWATER ELEV. RAPIDLY? NO
 IS ORDINARY RISE RAPID? NO
 IS STAGE AFFECTED BY UPSTREAM OR DOWNSTREAM CONDITIONS? NO
 IF YES, DESCRIBE N/A

WATERSHED STORAGE: 7% HEADWATERS: -
 UNIFORM: X
 IMMEDIATELY ABOVE SITE: -

EXISTING STRUCTURE INFORMATION

STRUCTURE TYPE: 15 FT DIAMETER CMPP
 YEAR BUILT: 1959
 CLEAR SPAN (NORMAL TO STREAM): 15 FT
 VERTICAL CLEARANCE ABOVE STREAMBED: 15 FT
 WATERWAY OF FULL OPENING: 177 SQ FT
 DISPOSITION OF STRUCTURE: COMPLETE REMOVAL
 TYPE OF MATERIAL UNDER SUBSTRUCTURE: SAND AND GRAVEL

WATER SURFACE ELEVATIONS AT: UPSTREAM END OF CULVERT

Q 2.33 =	609.2 FT	VELOCITY =	20.8 FT/SEC
Q 10 =	613.0 FT	"	24.8 FT/SEC
Q 25 =	614.8 FT	"	26.2 FT/SEC
Q50 =	616.4 FT	"	27.3 FT/SEC
Q 100 =	617.8 FT	"	28.1 FT/SEC

LONG TERM STREAMBED CHANGES: END OF EXISTING PIPE HANGING APPROX. 2 FT

IS THE ROADWAY OVERTOPPED BELOW Q100? No
 FREQUENCY: >Q500
 RELIEF ELEVATION: 632.0 +/-
 DISCHARGE OVER ROAD @ Q100: N/A

UPSTREAM STRUCTURE

TOWN: HYDE PARK DISTANCE: 1 MI
 HIGHWAY #: SILVER RIDGE ROAD STRUCTURE #: N/A
 CLEAR SPAN: UNKNOWN CLEAR HEIGHT: UNKNOWN
 YEAR BUILT: UNKNOWN FULL WATERWAY: UNKNOWN
 STRUCTURE TYPE: CULVERT

DOWNSTREAM STRUCTURE

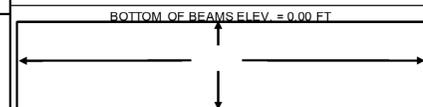
TOWN: HYDE PARK DISTANCE: 900 FT
 HIGHWAY #: EAST MAIN STREET STRUCTURE #: 41
 CLEAR SPAN: UNKNOWN CLEAR HEIGHT: UNKNOWN
 YEAR BUILT: UNKNOWN FULL WATERWAY: UNKNOWN
 STRUCTURE TYPE: UNKNOWN

LRFR LOAD RATING FACTORS

LOADING LEVELS	TRUCK						
	H-20	HL-93	3S2	6 AXLE	3A STR.	4A STR.	5A SEMI
TONNAGE	20	36	36	66	30	34.5	38
INVENTORY	2.83	1.20					
POSTING							
OPERATING	3.68	1.56	1.98	1.17	1.96	1.75	1.77
COMMENTS:							

AS BUILT "REBAR" DETAILS		
LEVEL I	LEVEL II	LEVEL III
TYPE:	TYPE:	TYPE:
GRADE:	GRADE:	GRADE:

TEMPORARY BRIDGE PROFILE ALONG TEMP CL



PILE DRIVING AND TESTING REQUIREMENTS

- NOMINAL PILE DRIVING CAPACITY R_{ndr} : 585.00 KIP
- PILE TEST RESISTANCE FACTOR ϕ : 0.65
- MAXIMUM PILE TIP ELEVATION See Below
- PILES SHALL BE DRIVEN A MINIMUM OF 18 FT BELOW BOTTOM OF ABUTMENT ELEVATIONS, REGARDLESS IF REQUIRED DRIVING RESISTANCE HAS BEEN MET.

PROPOSED STRUCTURE

STRUCTURE TYPE: SINGLE SPAN STEEL GIRDER

CLEAR SPAN (NORMAL TO STREAM): 122.0 FT
 VERTICAL CLEARANCE ABOVE STREAMBED: 29.3 FT
 WATERWAY OF FULL OPENING: 2364 SQ FT

WATER SURFACE ELEVATIONS AT: ONE BRIDGE LENGTH UPSTREAM

Q 2.33 =	607.0 FT	VELOCITY =	8.7 FT/SEC
Q 10 =	608.4 FT	"	11.8 FT/SEC
Q 25 =	608.9 FT	"	13.1 FT/SEC
Q50 =	609.5 FT	"	14.3 FT/SEC
Q 100 =	609.9 FT	"	15.1 FT/SEC

IS THE ROADWAY OVERTOPPED BELOW Q100? No
 FREQUENCY: >Q500
 RELIEF ELEVATION: 632.0 +/-
 DISCHARGE OVER ROAD @ Q100: N/A

AVERAGE LOW ELEVATION OF SUPERSTRUCTURE: 628.9 FT
 VERTICAL CLEARANCE: 19.4 FT @ Q50

SCOUR: CONTRACTION SCOUR FOR Q100 IS 2.3 FT (Q50 IS 3.3 FT)

REQUIRED CHANNEL PROTECTION: 4 FT THICK, STONE FILL, TYPE IV

PERMIT INFORMATION

AVERAGE DAILY FLOW: 20 CFS DEPTH OR ELEVATION:
 ORDINARY LOW WATER: 10 CFS 603.9 FT
 ORDINARY HIGH WATER: 180 CFS 606.9 FT

TEMPORARY BRIDGE REQUIREMENTS

STRUCTURE TYPE: N/A
 CLEAR SPAN (NORMAL TO STREAM): N/A
 VERTICAL CLEARANCE ABOVE STREAMBED: N/A
 WATERWAY AREA OF FULL OPENING: N/A

ADDITIONAL INFORMATION

TRAFFIC MAINTENANCE NOTES

- MAINTAIN TWO-WAY TRAFFIC USING TEMPORARY ROADWAY AND EXISTING AND PROPOSED STRUCTURES.
- SIDEWALKS ARE NOT NECESSARY

DESIGN VALUES

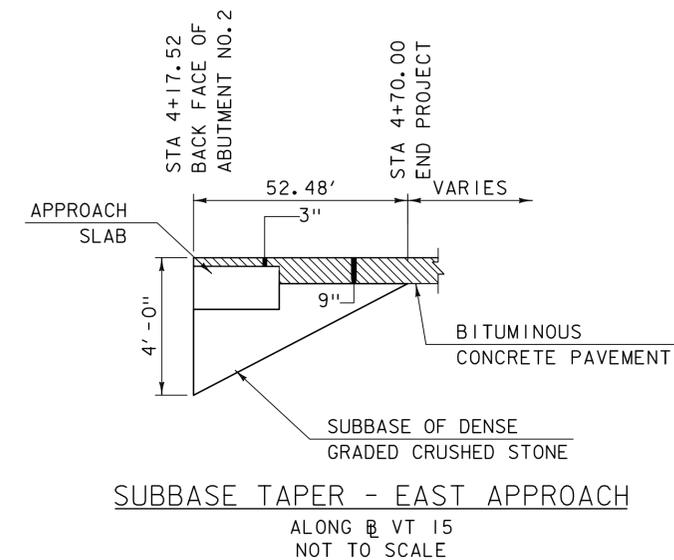
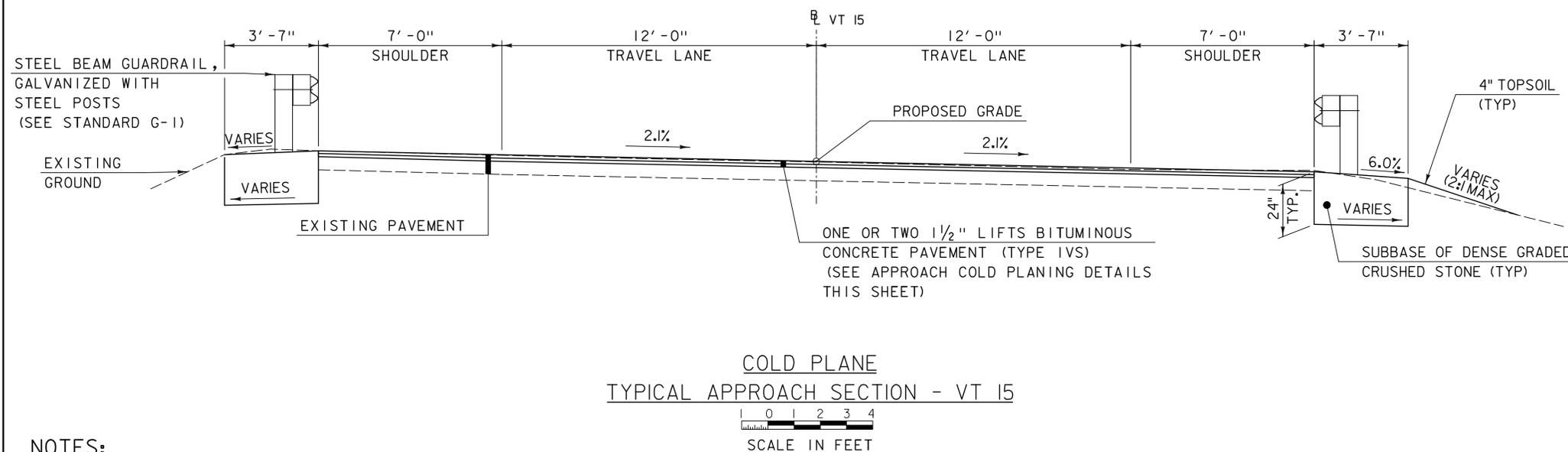
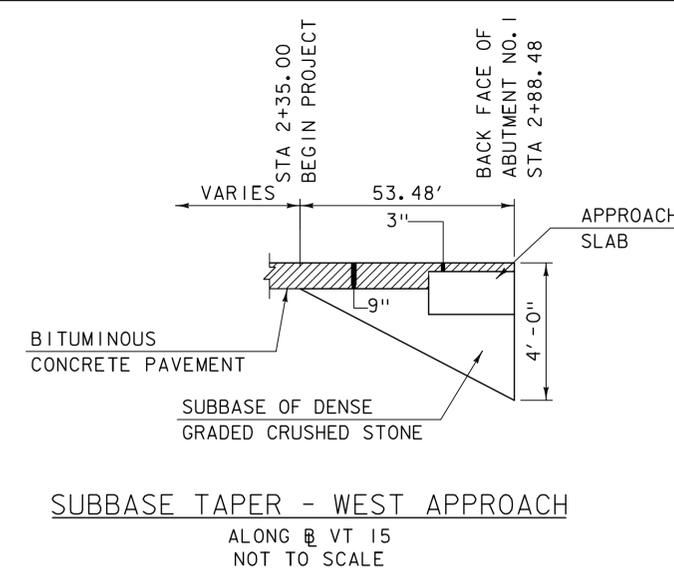
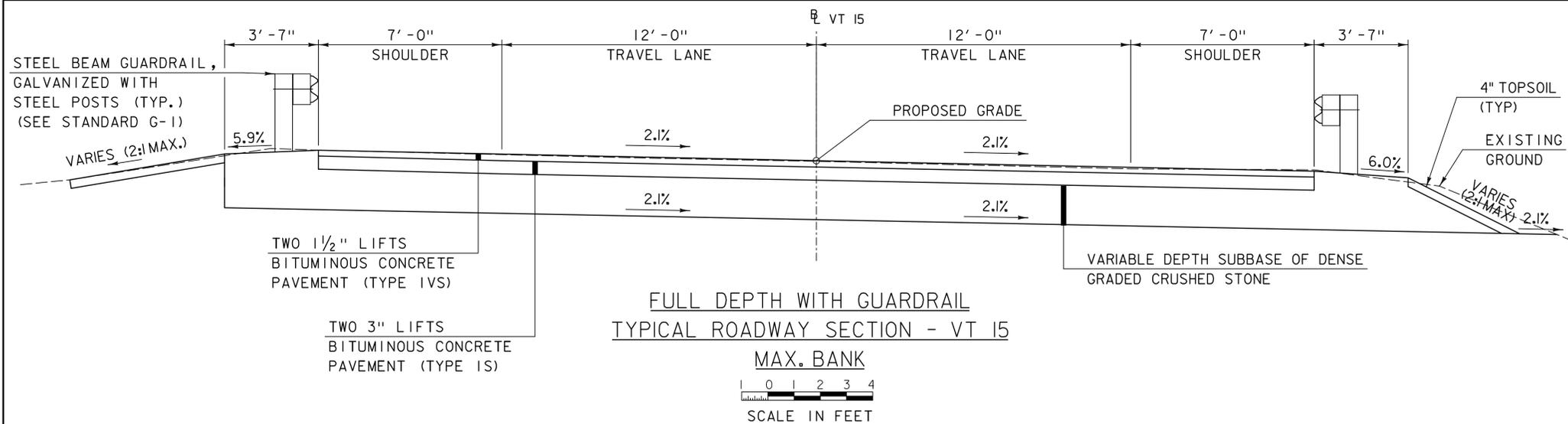
1. DESIGN LIVE LOAD	HL-93
2. FUTURE PAVEMENT	dp : 2.5 INCH
3. DESIGN SPAN	L : 128.00 FT
4. MIN. MID-SPAN POS. CAMBER @ RELEASE (PRESTRESSED UNITS)	Δ : 0.00 INCH
5. PRESTRESSING STRAND (0.375 INCH DIAMETER - LOW RELAX)	f_y : 270 KSI
6. PRESTRESSED CONCRETE STRENGTH	$f'c$: 5.0 KSI
7. PRESTRESSED CONCRETE RELEASE STRENGTH	$f'ci$: 4.0 KSI
8. CONCRETE, HIGH PERFORMANCE CLASS AA	$f'c$: ---
9. CONCRETE, HIGH PERFORMANCE CLASS A	$f'c$: 4.0 KSI
10. CONCRETE, HIGH PERFORMANCE CLASS B	$f'c$: 3.5 KSI
11. CONCRETE, CLASS C	$f'c$: ---
12. REINFORCING STEEL	f_y : 60 KSI
13. STRUCTURAL STEEL AASHTO M270 (WEATHERING)	f_y : 50 KSI
14. SOIL UNIT WEIGHT	γ : 0.140 KCF
15. NOMINAL BEARING RESISTANCE OF SOIL	qn : ---
16. SOIL BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD)	ϕ : ---
17. NOMINAL BEARING RESISTANCE OF ROCK	qn : ---
18. ROCK BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD)	ϕ : ---
19. NOMINAL AXIAL PILE RESISTANCE	qp : 585.0 KIPS
20. PILE YIELD STRENGTH ASTM A572	f_y : 50 KSI
21. PILE SIZE	HP 12X74
22. EST. PILE LENGTHS (TWO SUBSTRUCTURES) (ABUTMENT 1 = 27 AND ABUTMENT 2 = 21) FT	L_p : ---
23. PILE RESISTANCE FACTOR	ϕ : 0.65
24. LATERAL PILE DEFLECTION	Δ : 0.50 INCH
25. BASIC WIND SPEED	V_{3s} : 100 MPH
26. MINIMUM GROUND SNOW LOAD	ps : ---
27. SEISMIC DATA	PGA : 9 %g S_s : 19 %g S_r : 6 %g

PROJECT NAME: HYDE PARK
 PROJECT NUMBER: STP CULV(26)

FILE NAME: z11b292bdrpi.dgn PLOT DATE: 11/5/2013
 PROJECT LEADER: J. HEBERT DRAWN BY: T. KELLEY
 DESIGNED BY: R. OLUND CHECKED BY: R. HEBERT
 PRELIMINARY INFORMATION SHEET SHEET 2 OF 60

TRAFFIC DATA

YEAR	ADT	DHV	% D	% T	ADTT	20 year ESAL for flexible pavement from 2015 to 2035 : 3856000
2014	9900	1100	59	6.8	740	40 year ESAL for flexible pavement from 2015 to 2055 : 8904000
2034	10500	1200	59	11	1300	Design Speed : 50 mph

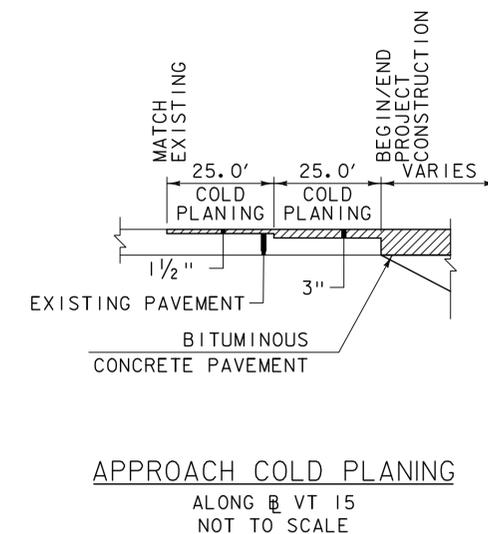
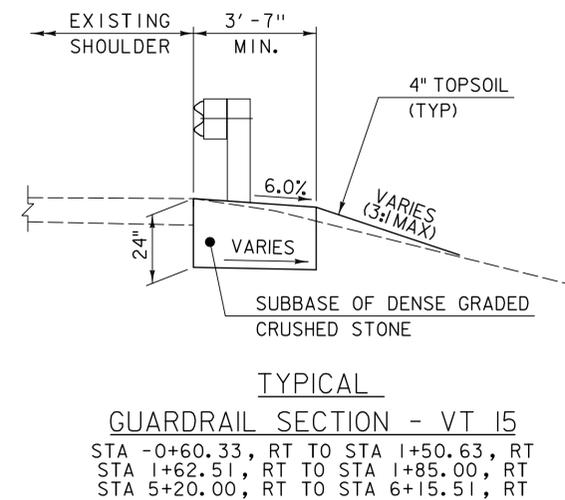
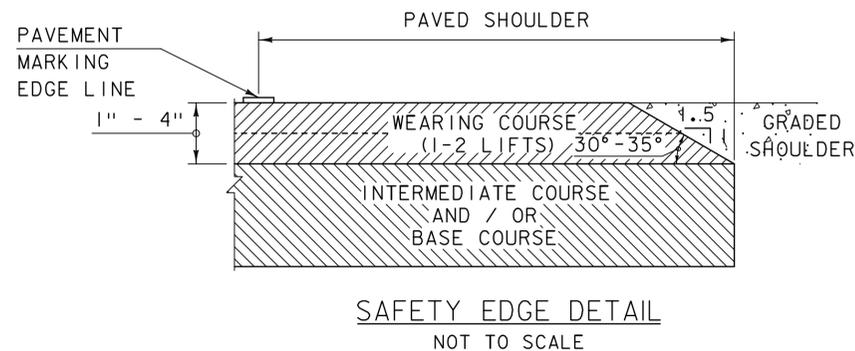


NOTES:

1. DELINEATOR POSTS: TO BE PLACED IN ACCORDANCE WITH STANDARD SHEET T-40.
2. SLOPE ROUNDING: ALL CUT SLOPES TO BE ROUNDED IN ACCORDANCE WITH STANDARD SHEET B-5.
3. TACK COAT: EMULSIFIED ASPHALT SHALL BE APPLIED TO THE COLD PLANED BITUMINOUS CONCRETE PAVEMENT SURFACE AT THE RATE OF 0.040 GAL./SY. OR AS DIRECTED BY THE ENGINEER. EMULSIFIED ASPHALT SHALL ALSO BE APPLIED BETWEEN ALL LIFTS OF PAVEMENT. THE COST SHALL BE PAID UNDER ITEM 404.65, "EMULSIFIED ASPHALT".

**MATERIAL TOLERANCES
(IF USED ON PROJECT)**

	TOTAL DEPTH
SURFACE - PAVEMENT	+/- 1/4"
SUBBASE	+/- 1"
SAND BORROW	+/- 1"

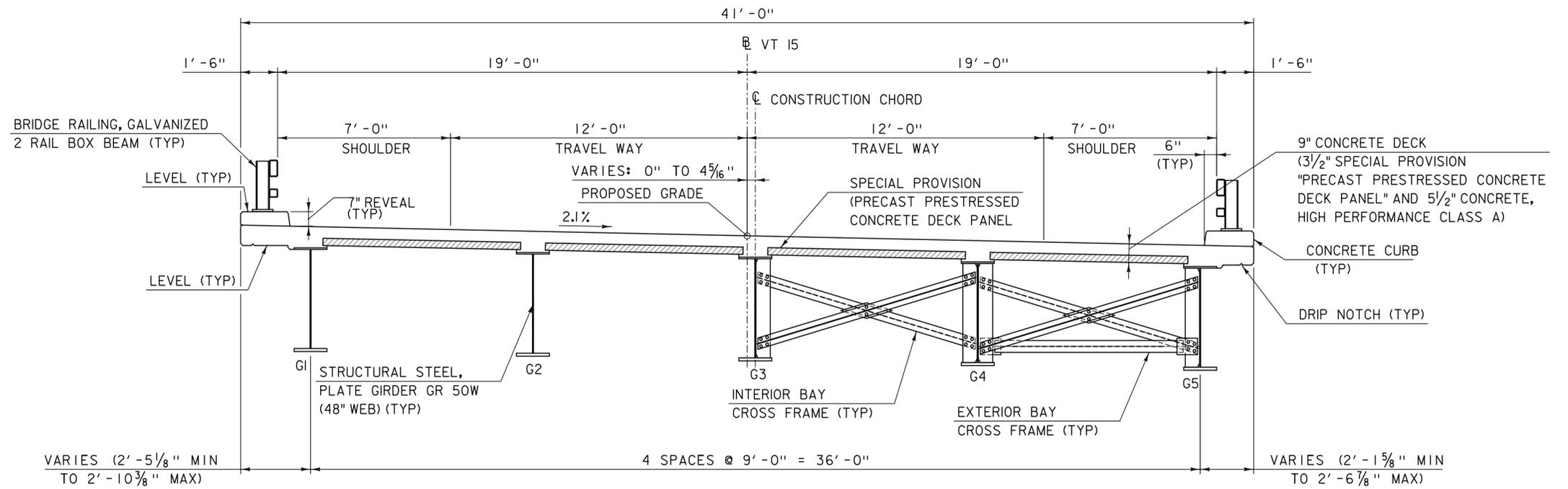


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PROJECT NAME: HYDE PARK
PROJECT NUMBER: STP CULV(26)

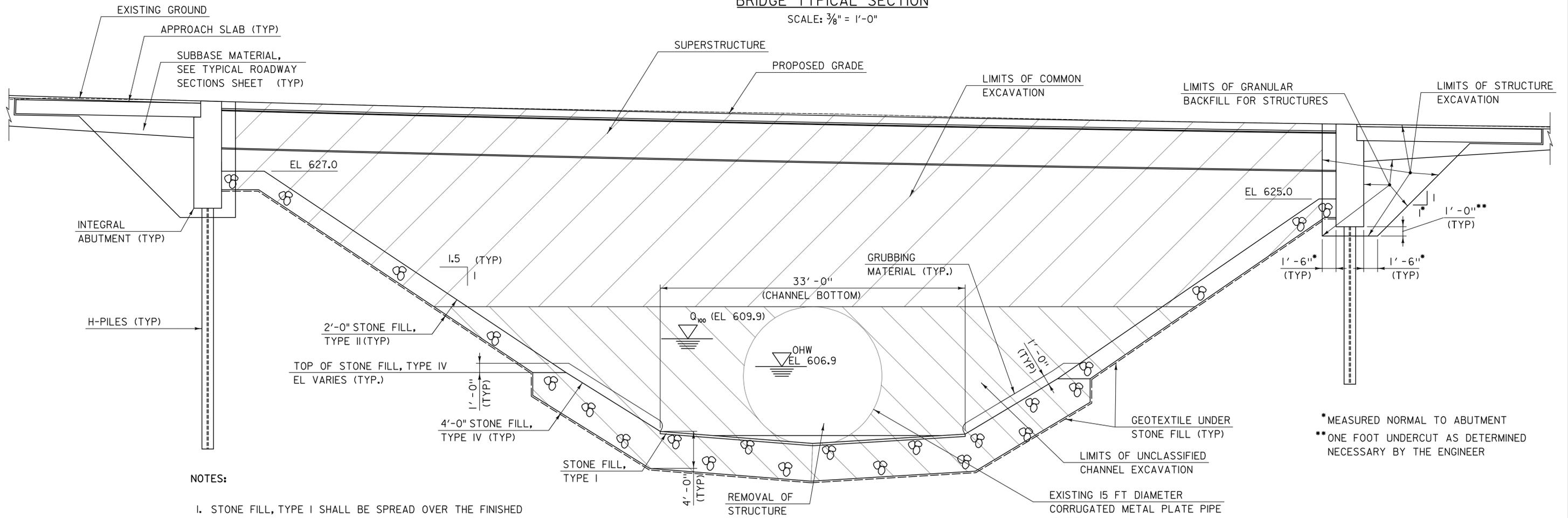
FILE NAME: zllb292bdr_typ.dgn
PROJECT LEADER: R. HEBERT
DESIGNED BY: T. KELLEY
TYPICAL ROADWAY SECTIONS

PLOT DATE: 11/6/2013
DRAWN BY: T. KELLEY
CHECKED BY: D. BURHANS
SHEET 3 OF 60



BRIDGE TYPICAL SECTION

SCALE: 3/8" = 1'-0"



TYPICAL CHANNEL & EARTHWORK SECTION

SCALE: 3/16" = 1'-0"
(VIEW NORMAL TO CHANNEL ALIGNMENT)

NOTES:

1. STONE FILL, TYPE I SHALL BE SPREAD OVER THE FINISHED CHANNEL BOTTOM TO FILL THE SURFACE VOIDS IN THE STONE FILL, TYPE IV. COSTS ASSOCIATED WITH SUPPLYING AND PLACING STONE FILL, TYPE I AT THIS LOCATION SHALL BE INCIDENTAL TO ITEM 613.13, "STONE FILL, TYPE IV."
2. WATER SURFACE ELEVATIONS VARY SIGNIFICANTLY THROUGH THE REACH DUE TO THE BROOK GRADIENT. SEE CHANNEL SECTIONS FOR OHW AND STONE FILL TRANSITION ELEVATIONS.

* MEASURED NORMAL TO ABUTMENT
** ONE FOOT UNDERCUT AS DETERMINED NECESSARY BY THE ENGINEER

TYLINT INTERNATIONAL

PROJECT NAME: HYDE PARK
PROJECT NUMBER: STP CULV(26)

FILE NAME: z1b292bdr+typ1cals.dgn
PROJECT LEADER: R. HEBERT
DESIGNED BY: J. OLUND
BRIDGE & EARTHWORK TYPICAL SECTIONS

PLOT DATE: 11/6/2013
DRAWN BY: S. MORGAN
CHECKED BY: R. HEBERT
SHEET 4 OF 60

GENERAL

- 1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO STATE OF VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, DATED 2011, WITH ITS LATEST REVISIONS AND THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 6TH EDITION WITH INTERIMS THROUGH 2012.
- 2. THE BRIDGE IS DESIGNED FOR HL-93 LIVE LOADING.
- 3. ALL DIMENSIONS SHOWN IN THE PLANS ARE HORIZONTAL OR VERTICAL AT 70°F, UNLESS NOTED OTHERWISE.
- 4. NO PROVISIONS HAVE BEEN MADE FOR THE CONTRACTOR TO PERFORM WORK OR SET UP STAGING OUTSIDE THE EXISTING RIGHT-OF-WAY.
- 5. EXISTING AERIAL ELECTRIC AND TELEPHONE LINES AND POLES SHALL BE REMOVED AND PERMANENTLY RELOCATED BY OTHERS. CONTRACTOR SHALL COORDINATE ALL BRIDGE REPLACEMENT AND APPROACH RECONSTRUCTION WORK WITH UTILITY RELOCATION WORK AS REQUIRED. SEE UTILITY SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

EARTHWORK AND RELATED ITEMS

- 6. ITEMS 613.11 "STONE FILL, TYPE II", AND 613.13 "STONE FILL, TYPE IV" UNDER THE BRIDGE AS SHOWN IN THE PLANS SHALL BE PLACED BEFORE THE SUPERSTRUCTURE IS SET.
- 7. TEMPORARY CONSTRUCTION FILLS USED FOR ANY PURPOSE WITHIN THE WATERCOURSE SHALL CONSIST OF CLEAN STONE FILL ONLY. NO OTHER FILLING IN THE STREAM SHALL OCCUR WITHOUT THE APPROVAL OF THE STREAM ALTERATION ENGINEER.
- 8. EXCAVATION OUTSIDE OF LIMITS SHOWN ON THE LAYOUT SHEET AND THE BRIDGE AND EARTHWORKS TYPICAL SECTIONS SHEET SHALL BE PAID UNDER ITEM 900.645 "SPECIAL PROVISION (TEMPORARY ROADWAY)".
- 9. ITEM 613.10, "STONE FILL, TYPE I" SHALL BE USED TO REPAIR AREAS OF EMBANKMENT AND SLOPE EROSION AS ORDERED BY THE ENGINEER AND TO CONSTRUCT STONE PAD AS DETAILED IN THE PLANS.

CONCRETE

- 10. ALL PORTIONS OF THE SUPERSTRUCTURE AND THE INTEGRAL ABUTMENT ABOVE THE BRIDGE SEAT CONSTRUCTION JOINT, EXCEPT GROUT BEDDING FOR PRECAST PRESTRESSED DECK PANELS, SHALL BE "CONCRETE, HIGH PERFORMANCE CLASS A". BEDDING FOR PRECAST PRESTRESSED DECK PANELS SHALL BE "MORTAR, TYPE IV" MEETING THE REQUIREMENTS OF SUBSECTION 707.03 AND SHALL BE PAID UNDER ITEM 900.620 "SPECIAL PROVISION (PRECAST PRESTRESSED CONCRETE DECK PANEL)".
- 11. THE ABUTMENT BELOW THE BRIDGE SEAT CONSTRUCTION JOINT, PEDESTALS, AND APPROACH SLABS SHALL BE ITEM 501.34 "CONCRETE, HIGH PERFORMANCE CLASS B".
- 12. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1"x1", UNLESS NOTED OTHERWISE.
- 13. WATER REPELLENT, SILANE, SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES, EXCEPT THE UNDERSIDE OF THE DECK BETWEEN DRIP NOTCHES.
- 14. ALL REINFORCING STEEL SHALL BE DETAILED AND FABRICATED USING PROCEDURES AND TOLERANCES IN ACCORDANCE WITH APPLICABLE PUBLICATIONS OF THE "CONCRETE REINFORCING STEEL INSTITUTE".
- 15. ALL REINFORCING STEEL SHALL BE LEVEL I OR LEVEL II IN ACCORDANCE WITH SECTION 507. PLACEMENT TOLERANCES SHALL BE AS FOLLOWS:
 SPACING +/- 1 INCH
 CLEARANCE +/- ¼ INCH
- 16. MINIMUM CLEAR COVER FOR REINFORCING STEEL SHALL BE AS FOLLOWS:
 ALONG TOP SURFACE OF DECK SLAB 3.0 INCH
 ALONG BOTTOM SURFACE OF DECK SLAB 1.5 INCH
 SURFACES CAST AGAINST EARTH 3.0 INCH
 CURBS 3.0 INCH
 ELSEWHERE, UNLESS NOTED OTHERWISE 2.0 INCH
- 17. THE BRIDGE DECK CONCRETE SHALL BE PLACED IN ONE CONTINUOUS POUR AND SHALL REMAIN PLASTIC THROUGHOUT THE ENTIRE POUR.
- 18. THE BRIDGE DECK CONCRETE SHALL BE DEPOSITED PARALLEL TO THE CENTERLINE OF BEARING SO AS TO LOAD THE GIRDERS EQUALLY.
- 19. ALL REINFORCING STEEL LAP LENGTHS WERE DESIGNED ASSUMING EPOXY-COATED REINFORCING STEEL.

PILE FOUNDATIONS

- 20. THE PILES SHALL BE HP 12 X 74.
- 21. PILE SHOES ARE REQUIRED AND SHALL CONFORM TO SUBSECTION 505.04(F) OF THE STANDARD SPECIFICATIONS.

- 22. THE TOPS OF PILES AFTER DRIVING SHALL NOT VARY FROM THE PLAN POSITION BY MORE THAN 3 INCHES. THE CONTRACTOR SHALL DEMONSTRATE TO THE SATISFACTION OF THE ENGINEER HOW THE TOLERANCES WILL BE MET REGARDLESS OF INSTALLATION METHOD.
- 23. THE PILES SHALL BE DRIVEN TO A NOMINAL RESISTANCE OF 585 KIPS AS DETERMINED BY THE RESULTS OF DYNAMIC TESTING, AS INTERPRETED BY THE ENGINEER.
- 24. FOR ESTIMATING PURPOSES, THE PILE TIP ELEVATIONS WERE ASSUMED AS SHOWN ON THE BORING LOGS. THE ACTUAL LENGTHS MAY VARY.
- 25. TO ENSURE THAT THE NOMINAL RESISTANCE HAS BEEN ATTAINED AND TO PREVENT THE OVERSTRESSING OF THE PILES DURING DRIVING OPERATIONS, DYNAMIC TESTING SHALL BE PERFORMED IN ACCORDANCE WITH SUBSECTION 505.04(d)-2 OF THE STANDARD SPECIFICATIONS. ONE PILE TEST SHALL BE CONDUCTED ON THE FIRST PILE DRIVEN AT EACH ABUTMENT, FOR A TOTAL OF TWO (2) TESTS. MORE TESTS MAY BE REQUIRED BY THE ENGINEER.

STRUCTURAL STEEL

- 26. THE WEB AND BOTTOM FLANGE PLATES OF THE GIRDER SHALL BE CHARPY V-NOTCH (CVN) TESTED IN ACCORDANCE WITH SUBSECTION 714.01.
- 27. BOLTS USED IN FIELD CONNECTIONS SHALL BE TYPE 3, 7/8" DIA., AND MEET THE REQUIREMENTS OF SUBSECTION 714.05. HOLE DIAMETERS SHALL BE 15/16".
- 28. AFTER SUPERSTRUCTURE STEEL HAS BEEN ERECTED AND BEFORE ANY FORMWORK OR OTHER LOADS ARE ADDED TO THE GIRDERS, ELEVATIONS ALONG THE TOP OF THE GIRDERS SHALL BE TAKEN AS DIRECTED BY THE ENGINEER FOR USE IN DETERMINING FINISHED GRADES.
- 29. ANY BOLT HOLES IN THE WEBS OF FASCIA GIRDERS NOT OTHERWISE FILLED SHALL BE FILLED WITH BUTTON HEAD OR HEX HEAD TYPE 3 BOLTS. THE BOLTS SHALL BE TIGHTENED IN ACCORDANCE WITH SUBSECTION 506.19 OF THE STANDARD SPECIFICATIONS.
- 30. ENDS OF GIRDERS SHALL BE VERTICAL IN THEIR FINAL POSITION.

TYLININTERNATIONAL

PROJECT NAME: HYDE PARK	PLOT DATE: 11/6/2013
PROJECT NUMBER: STP CULV(26)	DRAWN BY: S. MORGAN
FILE NAME: z1lb292bdrnotes.dgn	CHECKED BY: J. OLUND
PROJECT LEADER: R. HEBERT	SHEET 5 OF 60
DESIGNED BY: D. MYERS	
PROJECT NOTES	

QUANTITY SHEET 1

SUMMARY OF ESTIMATED QUANTITIES										TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES			
						ROADWAY	TRAINING	EROSION CONTROL	BRIDGE	FULL C.E. ITEMS	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS
						1					1		LS	CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS	201.10	-			
						521			6710		7231		CY	COMMON EXCAVATION	203.15	ROUND			
						20			230		250		CY	SOLID ROCK EXCAVATION	203.16	EST.			
									5760		5760		CY	UNCLASSIFIED CHANNEL EXCAVATION	203.27	ROUND			
						1					1		CY	TRENCH EXCAVATION OF EARTH, EXPLORATORY (N.A.B.I.)	204.22	EST.			
									620		620		CY	STRUCTURE EXCAVATION	204.25	ROUND			
									340		340		CY	GRANULAR BACKFILL FOR STRUCTURES	204.30	ROUND			
						425					425		SY	COLD PLANING-BIT.PAVEMENT	210.10	ROUND			
						310					310		CY	SUBBASE OF DENSE GRADED CRUSHED STONE	301.35	ROUND			
						5.1					5.1		CWT	EMULSIFIED ASPHALT	404.65	ROUND			
						1					1		LU	PRICE ADJUSTMENT, ASPHALT CEMENT (N.A.B.I.)	406.50	-			
									188		188		CY	CONCRETE, HIGH PERFORMANCE CLASS A	501.33	ROUND			
									138		138		CY	CONCRETE, HIGH PERFORMANCE CLASS B	501.34	ROUND			
									1		1		LS	FURNISHING EQUIPMENT FOR DRIVING PILING	504.10	-			
									240		240		LF	STEEL PILING, HP 12 X 74	505.16	ROUND			
									2		2		EACH	DYNAMIC PILE LOADING TEST	505.45	-			
									168000		168000		LB	STRUCTURAL STEEL, PLATE GIRDER	506.55	ROUND			
									8120		8120		LB	REINFORCING STEEL, LEVEL I	507.11	ROUND			
									37190		37190		LB	REINFORCING STEEL, LEVEL II	507.12	ROUND			
									1		1		LS	SHEAR CONNECTORS (1630 - 7/8" X 7")	508.15				
									517		517		SY	LONGITUDINAL DECK GROOVING	509.10	ROUND			
									55		55		GAL	WATER REPELLENT, SILANE	514.10	ROUND			
									76		76		LF	BRIDGE EXPANSION JOINT, ASPHALTIC PLUG	516.10	ROUND			
									76		76		LF	JOINT SEALER, HOT POURED	524.11	ROUND			
									259		259		LF	BRIDGE RAILING, GALVANIZED 2 RAIL BOX BEAM	525.33	ROUND			
									1		1		EACH	REMOVAL OF STRUCTURE (15' DIAMETER X 182' CMPP)	529.15				
									10		10		EACH	BEARING DEVICE ASSEMBLY, PLAIN ELASTOMERIC PAD	531.16	-			
								20			20		HR	POWER GRADER RENTAL	608.15	EST.			
								20			20		HR	ALL PURPOSE EXCAVATOR RENTAL, TYPE I	608.25	EST.			
								20			20		HR	TRUCK RENTAL	608.37	EST.			
								20			20		HR	LOADER RENTAL, TYPE I	608.40	EST.			
						45					45		MGAL	DUST CONTROL WITH WATER	609.10	ROUND			
								5			5		CY	STONE FILL, TYPE I	613.10	ROUND			
									750		750		CY	STONE FILL, TYPE II	613.11	ROUND			
									1850		1850		CY	STONE FILL, TYPE IV	613.13	ROUND			
						160					160		LF	CAST-IN-PLACE CONCRETE CURB, TYPE B	616.28	-			
						476.5					476.5		LF	STEEL BEAM GUARDRAIL, GALVANIZED	621.20	-			
						2					2		EACH	MANUFACTURED TERMINAL SECTION, FLARED	621.50	-			
						3					3		EACH	ANCHOR FOR STEEL BEAM RAIL	621.60	-			
						4					4		EACH	GUARDRAIL APPROACH SECTION, GALVANIZED 2 RAIL BOX BEAM	621.72	-			

PROJECT NAME:	HYDE PARK
PROJECT NUMBER:	STP CULV(26)
FILE NAME: z11b292.xls	PLOT DATE: 11/06/2013
PROJECT LEADER: R. HEBERT	DRAWN BY: S. MORGAN
DESIGNED BY: D. MYERS	CHECKED BY: J. OLUND
QUANTITY SHEET #1	SHEET 6 OF 60



QUANTITY SHEET 2

SUMMARY OF ESTIMATED QUANTITIES										TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES			
						ROADWAY	TRAINING	EROSION CONTROL	BRIDGE	FULL C.E. ITEMS	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS
						595					595		LF	REMOVAL AND DISPOSAL OF GUARDRAIL	621.80	ROUND			
						160					160		HR	UNIFORMED TRAFFIC OFFICERS	630.10	EST.			
						600					600		HR	FLAGGERS	630.15	EST.			
										1	1		LS	FIELD OFFICE-ENGINEERS	631.10	-			
										1	1		LS	TESTING EQUIPMENT, CONCRETE	631.16	-			
										1	1		LS	TESTING EQUIPMENT, BITUMINOUS	631.17	-			
										3000	3000		DL	FIELD OFFICE TELEPHONE (N.A.B.I.)	631.26	EST.			
							520				520		HR	EMPLOYEE TRAINEESHIP	634.10	EST.			
						1					1		LS	MOBILIZATION / DEMOBILIZATION	635.11	-			
						1					1		LS	TRAFFIC CONTROL	641.10	-			
						2					2		EACH	PORTABLE CHANGEABLE MESSAGE SIGN	641.15	-			
						2					2		EACH	PORTABLE ARROW BOARD	641.16	-			
						1070					1070		LF	DURABLE 4 INCH WHITE LINE	646.400	ROUND			
						1390					1390		LF	DURABLE 4 INCH YELLOW LINE	646.410	ROUND			
								9	2650		2659		SY	GEOTEXTILE UNDER STONE FILL	649.31	ROUND			
								255			255		SY	GEOTEXTILE FOR SILT FENCE	649.51	ROUND			
								87			87		SY	GEOTEXTILE FOR SILT FENCE, WOVEN WIRE REINFORCED	649.515	ROUND			
								138			138		LB	SEED	651.15	ROUND			
								3			3		LB	SEED, WINTER RYE	651.17	ROUND			
								432			432		LB	FERTILIZER	651.18	ROUND			
								1.7			1.7		TON	AGRICULTURAL LIMESTONE	651.20	ROUND			
								1			1		TON	HAY MULCH	651.25	ROUND			
								465			465		CY	TOPSOIL	651.35	ROUND			
									1250		1250		SY	GRUBBING MATERIAL	651.40	ROUND			
								1			1		LS	EROSION PREVENTION & SEDIMENT CONTROL PLAN	652.10	-			
								80			80		HR	MONITORING EROSION PREVENTION & SEDIMENT CONTROL PLAN	652.20	EST.			
								1			1		LU	MAINTENANCE OF EROSION PREVENTION & SEDIMENT CONTROL PLAN (N.A.B.I.)	652.30	-			
								1900			1900		SY	TEMPORARY EROSION MATTING	653.20	ROUND			
								80			80		CY	TEMPORARY STONE CHECK DAM, TYPE I	653.25	ROUND			
								30			30		CY	VEHICLE TRACKING PAD	653.35	ROUND			
								1			1		EACH	FILTER BAG	653.45	-			
								550			550		LF	BARRIER FENCE	653.50	ROUND			
								1330			1330		LF	PROJECT DEMARCATION FENCE	653.55	ROUND			
						1					1		SF	TRAFFIC SIGNS, TYPE A	675.20	ROUND			
						19					19		LF	SQUARE TUBE SIGN POST AND ANCHOR	675.341	ROUND			
						1					1		EACH	REMOVING SIGNS	675.50	-			
						1					1		EACH	DELINEATOR WITH STEEL POST	676.10	-			
						1					1		LU	PRICE ADJUSTMENT, FUEL (N.A.B.I.)	690.50	-			
						1					1		LS	SPECIAL PROVISION (TEMPORARY ROADWAY)	900.645	-			
						1					1		LU	SPECIAL PROVISION (MAT DENSITY PAY ADJUSTMENT, SMALL QUANTITY) (N.A.B.I.)	900.650	-			

PROJECT NAME:	HYDE PARK
PROJECT NUMBER:	STP CULV(26)
FILE NAME: z11b292.xls	PLOT DATE: 11/06/2013
PROJECT LEADER: R. HEBERT	DRAWN BY: S. MORGAN
DESIGNED BY: D. MYERS	CHECKED BY: J. OLUND
QUANTITY SHEET #2	SHEET 7 OF 60

TYLININTERNATIONAL

BRIDGE QUANTITY SHEET 1

SUMMARY OF BRIDGE QUANTITIES										TOTALS		DESCRIPTIONS			DETAILED SUMMARY OF QUANTITIES		
							APPROACH SLABS	ABUTMENT #1	ABUTMENT #2	SUPERSTRUCTURE	BRIDGE TOTAL	UNIT	ITEMS	ITEM NUMBER	QUANTITIES	UNIT	ITEMS
								3355	3355		6710	CY	COMMON EXCAVATION	203.15			
								115	115		230	CY	SOLID ROCK EXCAVATION	203.16			
								2880	2880		5760	CY	UNCLASSIFIED CHANNEL EXCAVATION	203.27			
							20	300	300		620	CY	STRUCTURE EXCAVATION	204.25			
								170	170		340	CY	GRANULAR BACKFILL FOR STRUCTURES	204.30			
								37.5	37.5	113	188	CY	CONCRETE, HIGH PERFORMANCE CLASS A	501.33			
							68	35	35		138	CY	CONCRETE, HIGH PERFORMANCE CLASS B	501.34			
								0.5	0.5		1	LS	FURNISHING EQUIPMENT FOR DRIVING PILING	504.10			
								135	105		240	LF	STEEL PILING, HP 12 X 74	505.16			
								1	1		2	EACH	DYNAMIC PILE LOADING TEST	505.45			
										168000	168000	LB	STRUCTURAL STEEL, PLATE GIRDER	506.55			
							8120				8120	LB	REINFORCING STEEL, LEVEL I	507.11			
								6075	6075	25040	37190	LB	REINFORCING STEEL, LEVEL II	507.12			
										1	1	LS	SHEAR CONNECTORS (1630 - 7/8" X 7")	508.15			
										517	517	SY	LONGITUDINAL DECK GROOVING	509.10			
								4	4	47	55	GAL	WATER REPELLENT, SILANE	514.10			
							76				76	LF	BRIDGE EXPANSION JOINT, ASPHALTIC PLUG	516.10			
										76	76	LF	JOINT SEALER, HOT POURED	524.11			
										259	259	LF	BRIDGE RAILING, GALVANIZED 2 RAIL BOX BEAM	525.33			
										1	1	EACH	REMOVAL OF STRUCTURE (15' DIAMETER X 182' CMPP)	529.15			
								5	5		10	EACH	BEARING DEVICE ASSEMBLY, PLAIN ELASTOMERIC PAD	531.16			
								375	375		750	CY	STONE FILL, TYPE II	613.11			
								925	925		1850	CY	STONE FILL, TYPE IV	613.13			
								1325	1325		2650	SY	GEOTEXTILE UNDER STONE FILL	649.31			
								625	625		1250	SY	GRUBBING MATERIAL	651.40			
										3880	3880	SF	SPECIAL PROVISION (PRECAST PRESTRESSED CONCRETE DECK PANEL) (3 1/2") (FPQ)	900.670			

PROJECT NAME: **HYDE PARK**
PROJECT NUMBER: **STP CULV(26)**
FILE NAME: z11b292.xls PLOT DATE: 11/06/2013
PROJECT LEADER: **R. HEBERT** DRAWN BY: **S. MORGAN**
DESIGNED BY: **D. MYERS** CHECKED BY: **J. OLUND**
BRIDGE QUANTITY SHEET #1 SHEET **9** OF **60**



EARTHWORKS

		TOTAL EXCAVATION EARTH AND ROCK		ROCK EXCAVATION		EMBANKMENT						TOTAL EXCAVATION EARTH AND ROCK		ROCK EXCAVATION		EMBANKMENT						TOTAL EXCAVATION EARTH AND ROCK		ROCK EXCAVATION		EMBANKMENT						SUMMARY AND BALANCES							
STATION	DIST	AREA	VOLUME	AREA	VOLUME	AREA	VOLUME	AREA	VOLUME	STATION	DIST	AREA	VOLUME	AREA	VOLUME	AREA	VOLUME	AREA	VOLUME	STATION	DIST	AREA	VOLUME	AREA	VOLUME	AREA	VOLUME	AREA	VOLUME	STATION TO STATION	TOT EXC. EARTH & ROCK C.Y.	ROCK EXCAV C.Y.	EMBANK C.Y.	EXCESSES		ACUMULATIVE EXCESSES			
	FT.	S.F.	C.Y.	S.F.	C.Y.	S.F.	C.Y.	S.F.	C.Y.		FT.	S.F.	C.Y.	S.F.	C.Y.	S.F.	C.Y.	S.F.	C.Y.		FT.	S.F.	C.Y.	S.F.	C.Y.	S.F.	C.Y.	S.F.	C.Y.	S.F.	C.Y.					CUT	FILL	CUT	FILL
ROADWAY QUANTITIES																																							
WEST APPROACH																																							
-0+60		0.0	6																																				
0+00	60	5.7	12			2.0	2																																
0+50	50	6.8	13																																				
1+00	50	6.8	13																																				
1+50	50	6.8	13																																				
2+00	35	6.7	34																																				
2+35	15	45.0	40				0																																
2+50	27	99.0	149			0.6	0																																
2+77		199.0																																					
EAST APPROACH																																							
4+32		186.0	102																																				
4+50	18	120.0	61																																				
4+70	20	45.0	36																																				
5+00	30	20.3	25																																				
5+50	50	6.7	13																																				
6+00	16	7.0	2																																				
6+16		0.0																																					
BRIDGE QUANTITIES																																							
50+50		0.0	231																																				
50+75	25	498.5	1007																																				
51+00	25	1677.3	1771																																				
51+25	25	2147.1	2580																																				
51+50	25	3426.5	3064																																				
51+75	25	3191.6	2354																																				
52+00	25	1892.5	1319																																				
52+25	25	956.9	604																																				
52+50	25	347.3	161																																				
52+75		0.0																																					
																											REMARKS												
																											EARTH AND ROCK EXCAVATION			13607									
																											SOLID ROCK EXCAVATION			0									
																											EARTH EXCAVATION			13607									
																											PLANIMETERED FILL			2									
																											LESS FACTORED SOLID ROCK			0									
																											LESS DISPLACEMENT OF ANY LARGE STRUCTURES			0									
																											NET PLANIMETERED FILL			2									
																											FACTOR			1.15									
																											PLANIMETERED FILL INCLUDING FACTOR			2									
																											MATERIALS AVAILABLE FOR FILLS												
																											EARTH EXCAVATION			7227									
																											CHANNEL EXCAVATION			5760									
																											UNDERDRAIN EXCAVATION			0									
																											STRUCTURE EXCAVATION			620									
																											TOTAL MATERIAL AVAILABLE FOR FILL			13607									
																											TOTAL FILL INCLUDING FACTOR			2									
																											TOTAL MATERIAL FOR FILL			13607									
																											BORROW												
																											EXCESS EXCAVATION			13605									
																											PROJECT NAME:			HYDE PARK									
																											PROJECT NUMBER:			STP CULV(26)									
																											FILE NAME:			z11b292EW									
																											PROJECT LEADER:			R. HEBERT									
																											DESIGNED BY:			T. KELLEY									
																											EARTHWORK SHEET												
																											PLOT DATE:			8/9/2013									
																											DRAWN BY:			T. KELLEY									
																											CHECKED BY:			D. BRYANT									
																											SHEET			10 OF 60									

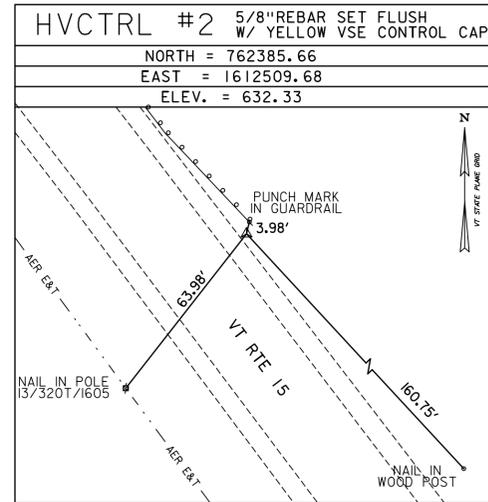
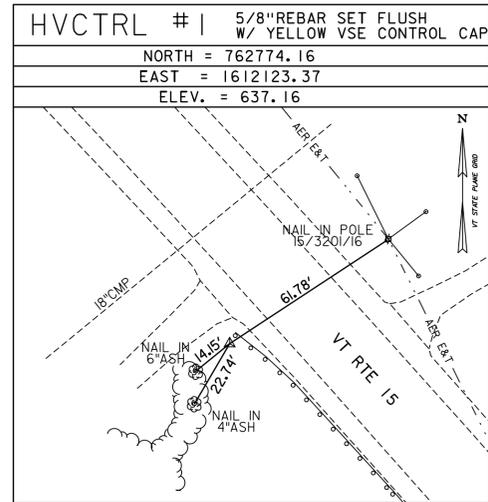
GPS/NGS CONTROL POINTS

HARDWICK CORS ARP

PID DM7840
 N = 732128.65
 E = 1675405.58
 ELLIP HEIGHT = 842.61

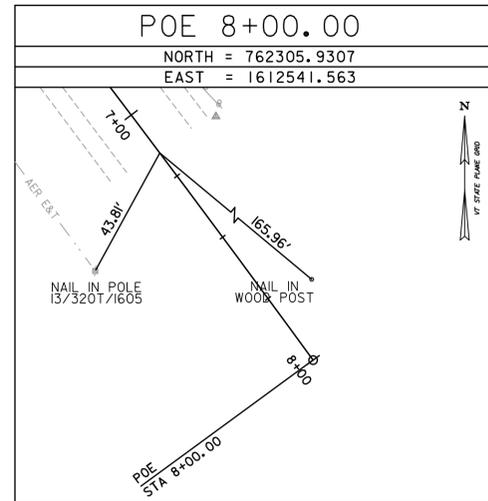
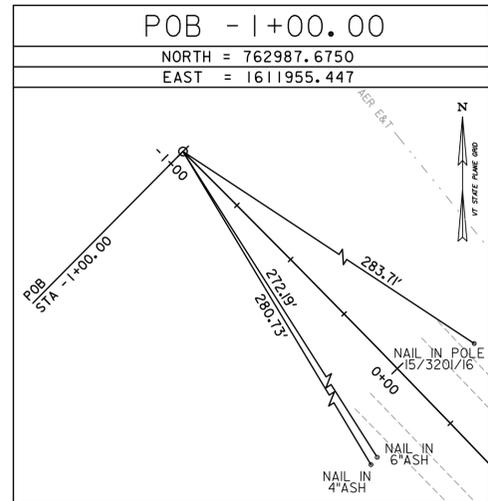
STATION IS A GPS CONTINUOUSLY OPERATING REFERENCE STATION. STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA. LOCATED AT THE HARDWICK, VERMONT HAZEN UNION HIGH SCHOOL, THE MONUMENT IS ATTACHED TO A TWO STORY CONCRETE & BRICK BUILDING WITH AN 8 FT CONCRETE FOUNDATION BUILT IN 1970. THE MAST IS A 1.75 INCH DIA. GALV PIPE THAT IS 108 INCHES LONG. THE MAST IS ATTACHED TO A STEEL MOUNTING FRAME WITH THREE ATTACHMENTS CONSISTING OF 3/8 INCH SS THROUGH BOLTS. THE MOUNTING FRAME IS ATTACHED TO THE BUILDING USING 6 ATTACHMENT POINTS. ALL 6 ATTACHMENTS ARE THROUGH BOLTED AND CONSIST OF 1/2 INCH SS THREADED ROD AND NUTS.

TRAVERSE TIES



* MAIN TRAVERSE COMPLETED: APRIL 23, 2012 BY VSE, R. GAUVIN-PC, T. YEFCHAK

ALIGNMENT TIES



SURVEYED BY : R. GAUVIN PC & T. YEFCHAK

SURVEYED DATE : 4/23/2012

DATUM

VERTICAL NAVD 88 (GEOID09) FT
 HORIZONTAL NAD 83 (CORS) sFT



TYLININTERNATIONAL

PROJECT NAME: HYDE PARK
 PROJECT NUMBER: STP CULV(26)

FILE NAME: z1lb292bdr_+1.dgn
 PROJECT LEADER: R. HEBERT
 DESIGNED BY: D. BRYANT
 TIE SHEET

PLOT DATE: 11/6/2013
 DRAWN BY: T. KELLEY
 CHECKED BY: D. BRYANT
 SHEET II OF 60

TOPSOIL

-0+48.43, RT - 1+47.03, RT
 1+66.21, RT - 2+60.05, RT
 1+85.00, LT - 1+98.28, LT
 2+11.34, LT - 2+94.00, LT
 4+12.52, RT - 6+45.51, RT
 4+24.30, LT - 5+25.00, LT

SEED

-0+48.43, RT - 1+47.03, RT
 1+66.21, RT - 2+60.05, RT
 1+85.00, LT - 1+98.28, LT
 2+11.34, LT - 2+94.00, LT
 4+12.52, RT - 6+45.51, RT
 4+24.30, LT - 5+25.00, LT

BRIDGE RAILING, GALVANIZED 2 RAIL BOX BEAM

2+83.14, RT - 4+12.64, RT
 2+93.79, LT - 4+22.36, LT

STEEL BEAM GUARDRAIL, GALVANIZED

0+09.33, RT - 1+50.63, RT
 1+62.60, RT - 2+53.96, RT
 2+15.29, 25.68' LT - 2+64.90, 21.33' LT
 4+41.82, RT - 5+29.61, RT
 4+51.35, LT - 5+40.07, LT

MANUFACTURED TERMINAL SECTION, FLARED

-0+11.55, RT - 0+09.33, RT
 5+29.61, RT - 5+67.00, RT

CAST-IN-PLACE CONCRETE CURB, TYPE B

2+55.06, LT - 2+93.79, LT
 2+43.01, RT - 2+83.14, RT
 4+22.36, LT - 4+62.23, LT
 4+12.64, RT - 4+52.77, RT

REMOVING SIGNS

3+19.2, RT

GUARDRAIL APPROACH SECTION, GALVANIZED 2 RAIL BOX BEAM

2+53.96, RT - 2+83.14, RT
 2+64.90, 21.33' LT - 2+93.79, LT
 4+12.64, RT - 4+41.82, RT
 4+22.36, LT - 4+51.35, LT

ANCHOR FOR STEEL BEAM RAIL

1+34.67, RT
 1+78.70, RT
 2+15.29, LT

REMOVAL AND DISPOSAL OF GUARDRAIL

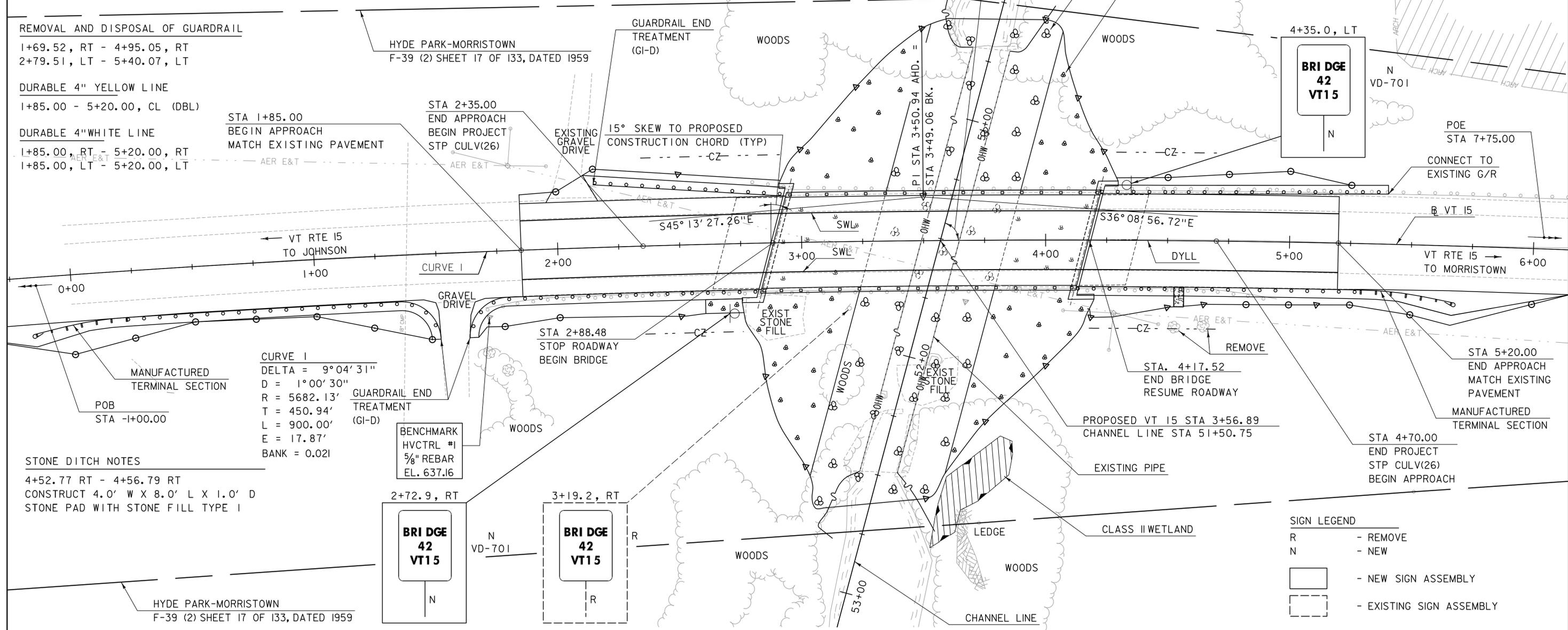
1+69.52, RT - 4+95.05, RT
 2+79.51, LT - 5+40.07, LT

DURABLE 4" YELLOW LINE

1+85.00 - 5+20.00, CL (DBL)

DURABLE 4" WHITE LINE

1+85.00, RT - 5+20.00, RT
 1+85.00, LT - 5+20.00, LT



CURVE I
 DELTA = 9°04'31"
 D = 1°00'30"
 R = 5682.13'
 T = 450.94'
 L = 900.00'
 E = 17.87'
 BANK = 0.021

STONE DITCH NOTES
 4+52.77 RT - 4+56.79 RT
 CONSTRUCT 4.0' W X 8.0' L X 1.0' D
 STONE PAD WITH STONE FILL TYPE I

- SIGN LEGEND**
- R - REMOVE
 - N - NEW
 - [Solid Box] - NEW SIGN ASSEMBLY
 - [Dashed Box] - EXISTING SIGN ASSEMBLY
- STRIPING LEGEND**
- DYL - DOUBLE YELLOW LINE (4" YELLOW LINE)
 - SWL - SINGLE WHITE LINE (4" WHITE LINE)

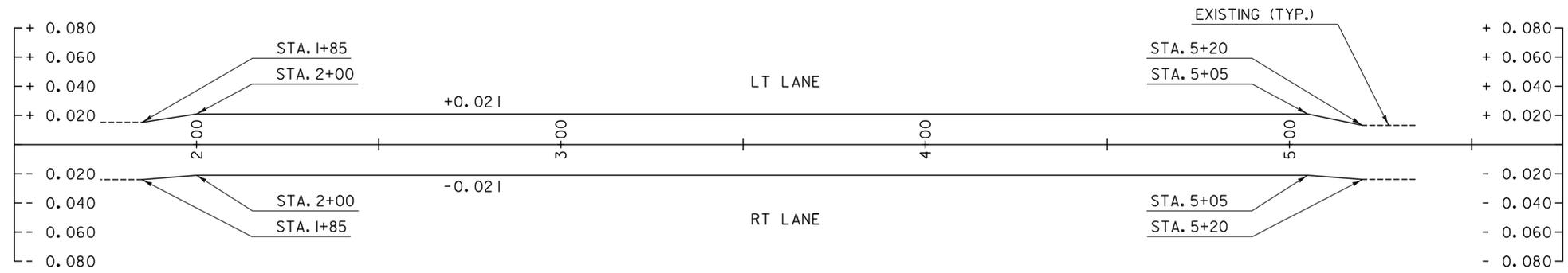
TRAFFIC SIGN SUMMARY

MARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				NEW SIGN POSTS					REMARKS	SIGN DETAIL			
		E A	WIDTH (in)	HEIGHT (in)	"A"	"B"	SALV SIGN	SALV TIS	NO. OF POSTS	SQUARE STEEL (in)				ANCHOR	SLEEVE	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER
										1.75	2.0	2.5					
2+72.9, RT 4+35.0, LT		2	6	8	0.67				2	1.88	2.16	3.35	"x"	2		E-134	
					SF	SF	EA.	SF	EA.	FT	FT	FT	EA.	EA.			

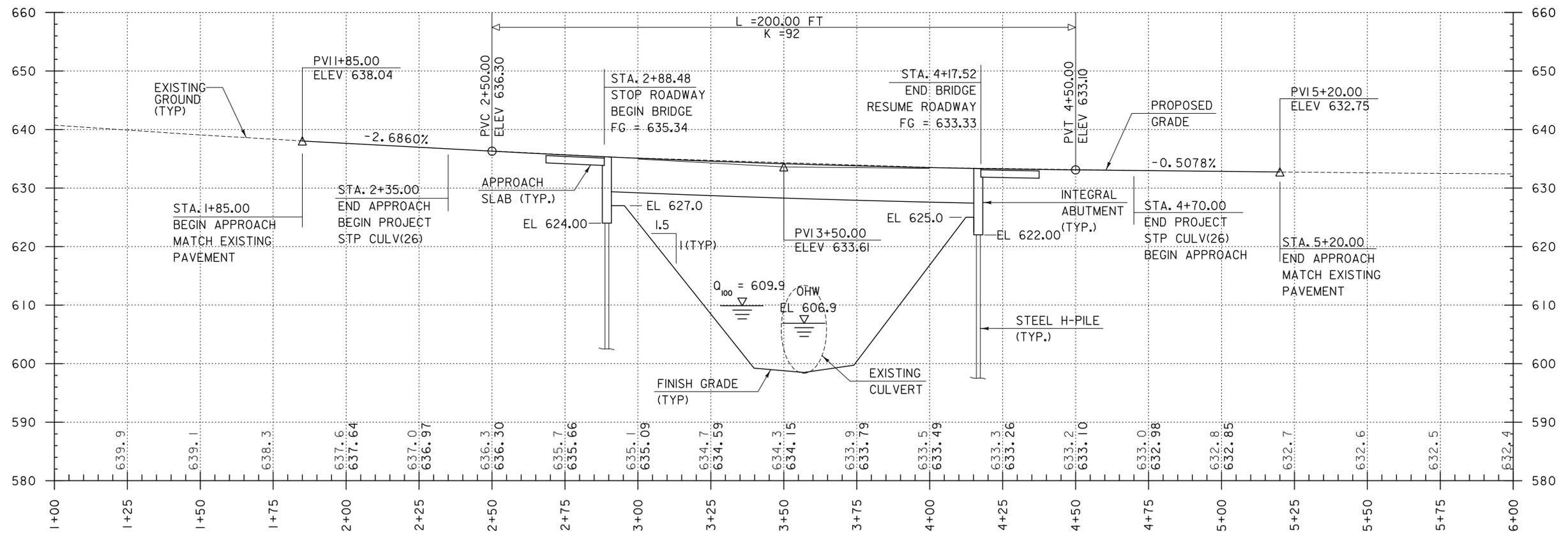


TYLIN INTERNATIONAL

PROJECT NAME: HYDE PARK
 PROJECT NUMBER: STP CULV(26)
 FILE NAME: z1lb292bdr_nul.dgn
 PROJECT LEADER: R. HEBERT
 DESIGNED BY: D. BURHANS
 LAYOUT SHEET
 PLOT DATE: 11/6/2013
 DRAWN BY: T. KELLEY
 CHECKED BY: D. BRYANT
 SHEET 12 OF 60



BANKING DIAGRAM
STATIONS ARE IN FEET AND
SUPERELEVATIONS ARE IN FT/FT



PROFILE - VT 15
STATIONING AND ELEVATIONS ARE IN FEET

NOTE:
WATER SURFACE ELEVATION VARIES SIGNIFICANTLY
THROUGH REACH DUE TO STEEP STREAM GRADIENT.

THE GRADES SHOWN TO THE NEAREST TENTH ARE THE SURVEYED
GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT

THE GRADES SHOWN TO THE NEAREST HUNDRETH ARE THE PROPOSED
GRADES ALONG THE NEW ALIGNMENT

TYL INTERNATIONAL	PROJECT NAME: HYDE PARK	PLOT DATE: 11/6/2013
	PROJECT NUMBER: STP CULV(26)	DRAWN BY: A. GREENLAW
	FILE NAME: z11b292bdr_pro.dgn PROJECT LEADER: R. HEBERT DESIGNED BY: A. GREENLAW PROFILE SHEET	CHECKED BY: D. BURHANS SHEET 13 OF 60

MAINTENANCE OF TRAFFIC

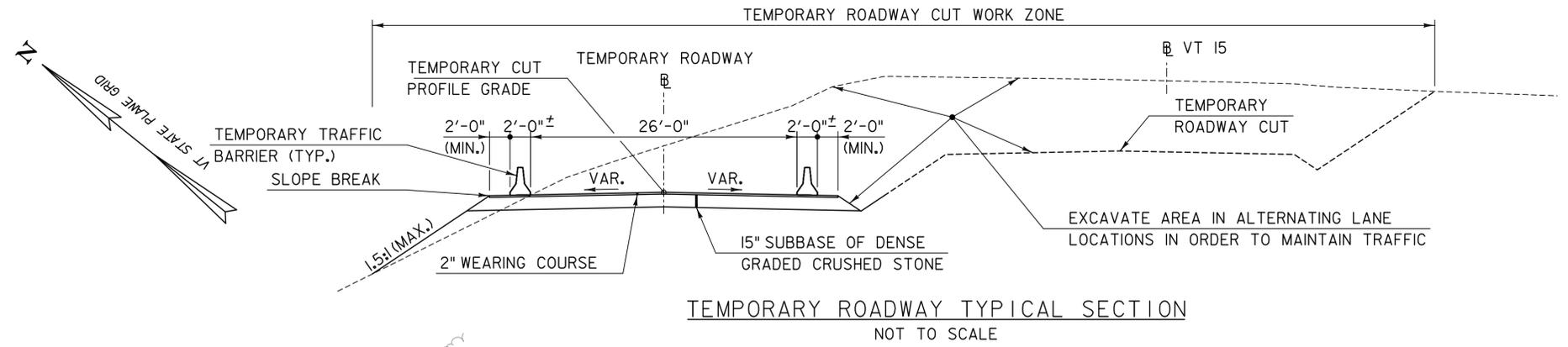
NOTES:

1. THE SUGGESTED SEQUENCE OF CONSTRUCTION DETAILED HEREIN IS PROVIDED AS A GENERAL GUIDE ONLY. THESE PLANS DO NOT ANTICIPATE ALL POSSIBLE CONTRACTOR ACTIVITIES.
2. DURING CONSTRUCTION THE CONTRACTOR MUST MAINTAIN TWO-WAY TRAFFIC THROUGHOUT THE PROJECT SITE WITH THE EXCEPTION OF THOSE TIMES SPECIFICALLY NOTED IN THE PLANS. THESE PLANS SHOW ONE OPTION THE CONTRACTOR CAN USE TO FACILITATE TWO-WAY TRAFFIC DURING CONSTRUCTION WHICH INVOLVES SHIFTING TRAFFIC TO THE NORTH SIDE OF THE PROPOSED BRIDGE LOCATION AND REVISING THE PROFILE SUCH THAT THE TEMPORARY ROADWAY IS AT A LOWER ELEVATION NEAR THE PROPOSED BRIDGE. IF THE CONTRACTOR ELECTS TO USE AN ALTERNATE TEMPORARY ROADWAY SCHEME, THE CONTRACTOR MUST SUBMIT REVISIONS TO THE TEMPORARY ROADWAY DETOUR PLANS FOR APPROVAL. ANY CHANGE THAT ALTERS THE BASIC CONCEPT OF THE PLANS MUST BE SUBMITTED 30 DAYS IN ADVANCE TO THE AGENCY FOR REVIEW AND APPROVAL.
3. MAINTENANCE OF TRAFFIC (MOT) SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 641 OF THE STANDARD SPECIFICATIONS, ITEM 900.645 , "SPECIAL PROVISION (TEMPORARY ROADWAY)", THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), ITS REVISIONS AND AMENDMENTS, ANY PROVISIONS IN THE PLANS AND / OR SPECIFICATIONS OF THIS PROJECT, AND VERMONT AGENCY OF TRANSPORTATION STANDARD DETAILS.
4. CONSTRUCTION AND REMOVAL OF THE TEMPORARY ROADWAY AND RE-ESTABLISHING THE PRE-EXISTING CONDITIONS WITHIN THE LIMITS OF THE TEMPORARY ROADWAY AS SHOWN ON THE MAINTENANCE OF TRAFFIC SHEETS OR OF OTHER VTRANS APPROVED ALTERNATIVE MEANS OF MAINTAINING TRAFFIC DEVELOPED BY THE CONTRACTOR SHALL BE PAID FOR UNDER ITEM 900.645, "SPECIAL PROVISION (TEMPORARY ROADWAY)". ALTERNATE MEANS OF MAINTAINING TRAFFIC MAY BE DEVELOPED AND PROPOSED BY THE CONTRACTOR AND SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL. PAYMENT UNDER ITEM 900.645, "SPECIAL PROVISION (TEMPORARY ROADWAY)" SHALL INCLUDE THE FOLLOWING:
 - A) CONSTRUCTION OF THE TEMPORARY ROADWAY SHALL INCLUDE BUT IS NOT LIMITED TO EXCAVATION, EMBANKMENT, SUBBASE, PAVEMENT, PAVEMENT MARKINGS, TEMPORARY SEEDING/MULCHING, TEMPORARY TRAFFIC BARRIER, TEMPORARY STRUCTURES, TEMPORARY SHEETING AND BRACING, AND TEMPORARY SHEETING FOR FLOW DIVERSION. EXCAVATION ALONG THE TEMPORARY ROADWAY WITHIN THE LIMITS OF THE FINAL BUILD EXCAVATION AS SHOWN ON THE LAYOUT SHEET AND THE BRIDGE AND EARTHWORK TYPICAL SECTIONS SHEET SHALL BE PAID UNDER ITEM 203.15 "COMMON EXCAVATION". PAYMENT FOR APPROACH SIGNING AND OTHER MAINTENANCE OF TRAFFIC ITEMS SHALL BE UNDER THE APPROPRIATE MAINTENANCE OF TRAFFIC ITEMS.
 - B) AFTER THE NEW BRIDGE IS CONSTRUCTED AND TRAFFIC IS MOVED FROM THE TEMPORARY ROADWAY TO THE NEW BRIDGE, THE CONTRACTOR SHALL REMOVE THE TEMPORARY ROADWAY. PAYMENT FOR REMOVAL OF THE TEMPORARY ROADWAY SHALL INCLUDE BUT IS NOT LIMITED TO REMOVAL OF TEMPORARY OVERBUILD EMBANKMENT, TEMPORARY PAVEMENT, TEMPORARY TRAFFIC BARRIERS, TEMPORARY STRUCTURES, TEMPORARY SHEETING AND BRACING, AND TEMPORARY SHEETING FOR FLOW DIVERSION.
 - C) AFTER THE NEW BRIDGE IS CONSTRUCTED AND TRAFFIC IS MOVED FROM THE TEMPORARY ROADWAY TO THE NEW BRIDGE, THE CONTRACTOR SHALL RE-ESTABLISH THE PRE-EXISTING CONDITIONS WITHIN THE LIMITS OF THE TEMPORARY ROADWAY ALONG THE APPROACHES AND OUTSIDE THE LIMITS OF THE FINAL BUILD EXCAVATION AS SHOWN ON THE LAYOUT SHEET AND THE BRIDGE AND EARTHWORK TYPICAL SECTIONS SHEET. PAYMENT FOR RE-ESTABLISHING PRE-EXISTING CONDITIONS WITHIN THESE LIMITS SHALL INCLUDE BUT IS NOT LIMITED TO RECONSTRUCTION OF APPROACH ROADWAY EMBANKMENT, SUBBASE, PAVEMENT, PAVEMENT MARKINGS, GUARDRAIL, DRAINAGE CULVERTS, AND FIELD DRIVES AS SHOWN ON THE MAINTENANCE OF TRAFFIC SHEETS. SEEDING/MULCHING AND ASSOCIATED TURF ESTABLISHMENT ITEMS FOR RE-ESTABLISHING THE PRE-EXISTING CONDITIONS SHALL BE PAID FOR UNDER THE APPROPRIATE SECTION 651 CONTRACT ITEMS.
5. TEMPORARY LANE WIDTHS SHALL BE A MINIMUM OF 12 FEET UNLESS OTHERWISE NOTED. 26' MINIMUM CLEAR WIDTH BETWEEN FACES OF BARRIER SHALL BE STRICTLY ADHERED TO.
6. RE-CONSTRUCTION OF APPROACHES ALONG VT15 FINAL ALIGNMENT ALTERED DUE TO CONSTRUCTION OF THE TEMPORARY ROADWAY ALIGNMENT, SHALL BE PER "TYPICAL ROADWAY RE-CONSTRUCTION SECTION" SHOWN ON MAINTENANCE OF TRAFFIC PLAN, PHASE 2B. PAYMENT FOR RE-CONSTRUCTION OF THESE APPROACHES SHALL BE PAID FOR UNDER ITEM 900.645, "SPECIAL PROVISION (TEMPORARY ROADWAY)".
7. ADVISORY SPEED WILL BE 25 MPH FOR THE TEMPORARY DETOUR ROADWAY.
8. TEMPORARY ROADWAY SHALL BE PAVED TO A MINIMUM DEPTH OF TWO INCHES.
9. ALL DROP OFF AREAS WITHIN CONSTRUCTION AND MAINTENANCE WORK ZONE AREAS SHALL BE PROTECTED FROM ADJACENT TRAVEL LANES IN ACCORDANCE WITH POLICIES FOLLOWED BY THE AGENCY (SEE STANDARD DETAILS T-35 AND T-36).
10. DESIGN OF THE TEMPORARY SHEETING AND BRACING AND/OR TEMPORARY STRUCTURE(S) SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATIONS 505 AND 528, RESPECTIVELY. PAYMENT WILL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 900.645 , "SPECIAL PROVISION (TEMPORARY ROADWAY)".
11. BEFORE TRAFFIC CAN UTILIZE CONSTRUCTION ROADWAYS, ALL DRAINAGE STRUCTURES, GUARDRAIL AND BARRIERS SHALL BE IN PLACE.
12. THE CONTRACTOR SHALL SCHEDULE OPERATIONS IN A MANNER THAT REDUCES THE AMOUNT OF TIME THAT NORMAL TRAFFIC FLOWS ARE DISRUPTED.
13. WHEN TEMPORARY TRAFFIC BARRIER IS USED, BARRIER ENDS FACING ONCOMING TRAFFIC SHALL BE TAPERED BEYOND THE CLEAR ZONE OR PROTECTED WITH AN ENERGY ABSORPTION ATTENUATOR OR AN EQUIVALENT APPROVED END TREATMENT DESIGNED FOR THE 85TH PERCENTILE SPEED OR THE POSTED SPEED LIMIT OF THE ROAD WAY.
14. THE ENERGY ABSORPTION ATTENUATORS FOR THIS PROJECT SHALL BE SUITABLE FOR A NARROW WIDTH APPLICATION AND SHALL BE INSTALLED AS SHOWN ON THE MAINTENANCE OF TRAFFIC PLAN SHEETS. THESE ATTENUATORS WILL BE PAID FOR UNDER THE ITEM 900.645 , "SPECIAL PROVISION (TEMPORARY ROADWAY)". THE ATTENUATORS SHALL BE FURNISHED IN ACCORDANCE WITH SECTION 621 AND MEET THE REQUIREMENTS OF THE LATEST VERSION OF THE AASHTO "ROADSIDE DESIGN GUIDE," AND SHALL BE DESIGNED FOR A 4500 LB VEHICLE TRAVELING AT 35 MPH.
15. LONGITUDINAL CONSTRUCTION JOINTS WITHIN THE SUPERSTRUCTURE DECK ARE NOT ALLOWED.
16. TRAFFIC CONTROL SIGNS AND DEVICES SHOWN IN THE MAINTENANCE OF TRAFFIC PLANS ARE CONSIDERED THE MINIMUM REQUIREMENTS FOR SAFE OPERATIONS. ADDITIONAL SIGNS AND / OR TRAFFIC CONTROL DEVICES MAY BE REQUIRED AS DETERMINED BY THE ENGINEER.
17. IN ORDER TO MAINTAIN EFFECTIVE TRAFFIC CONTROL, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING SURE THAT THE SIGNS AND OTHER TRAFFIC CONTROL DEVICES ARE IN GOOD CONDITION AND ARE PROPERLY PLACED.
18. VEHICLES / EQUIPMENT PARKED WITHIN THE PROJECT LIMITS BELONGING TO THE CONTRACTOR AND / OR THE CONTRACTOR'S EMPLOYEES SHALL BE KEPT TO A MINIMUM AND PARKED IN SUCH A MANNER THAT DOES NOT OBSTRUCT THE VIEW OF SIGNS, BARRIERS, BARRICADES OR ANY OTHER TRAFFIC CONTROL DEVICES. THE CONTRACTOR SHALL NOT PARK VEHICLES / EQUIPMENT OR STORE MATERIALS IN ANY LOCATION WHERE IT IS DEEMED A SAFETY HAZARD BY THE ENGINEER.
19. WHEN SHORT-DURATION ONE-WAY TRAFFIC IS NECESSARY AND APPROVED BY THE ENGINEER, THE CONTRACTOR SHALL REFER TO THE TYPICAL FLAGGER OPERATION DETAIL IN THE STANDARD DETAILS AND THE MUTCD FOR TYPICAL CHANNELIZATION AND MAINTENANCE OF TRAFFIC.
20. ALL PAVEMENT MARKINGS THAT CONFLICT WITH THE PROPOSED PAVEMENT MARKINGS IN EACH PHASE OF CONSTRUCTION SHALL BE COMPLETELY REMOVED OR COVERED WITH BLACK PAVEMENT MARKING MASKING TAPE IN ACCORDANCE WITH SUBSECTION 646.08(b). PAINTING OUT EXISTING LINES WILL NOT BE ACCEPTABLE. PAYMENT WILL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 900.645 , "SPECIAL PROVISION (TEMPORARY ROADWAY)".
21. SIGNS AND SIGN LOCATIONS SHALL BE IN CONFORMANCE WITH THE CURRENT MUTCD, STATE OF VERMONT STANDARDS, AS SHOWN ON THE MAINTENANCE OF TRAFFIC PLANS AND AS DIRECTED BY THE ENGINEER. SIGN LOCATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. EXACT LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER IN THE FIELD.
22. INSTALL SIGNS AND PAVEMENT MARKINGS AS SHOWN ON THE PLANS PRIOR TO OPENING ANY PORTION OF THE PROJECT TO FINAL AND / OR DETOUR TRAFFIC. CARE MUST BE TAKEN TO INSURE THAT FINAL SIGNS AND PAVEMENT MARKINGS DO NOT CONFLICT WITH PROPOSED TRAFFIC PATTERNS IN ANY ONE STAGE. FINAL SIGNS THAT ARE IN PLACE, BUT NOT IN USE, SHALL BE COVERED.
23. THE COVERING, RELOCATION AND REMOVAL OF EXISTING SIGNS SHALL BE AS ORDERED BY THE ENGINEER. EXISTING SIGNAGE SHALL BE RETURNED TO THE OWNER OF RECORD - STATE OR TOWN. PAYMENT FOR COVERING SIGNS WILL BE INCLUDED IN THE PRICE BID FOR CONTRACT ITEM 641.10. PAYMENT FOR RELOCATION AND REMOVAL OF EXISTING SIGNS SHALL BE INCLUDED UNDER THEIR RESPECTIVE ITEMS.
24. THE CONTRACTOR SHALL COORDINATE WITH ALL UTILITIES TO ELIMINATE OR MINIMIZE DISRUPTIONS TO SERVICE.
25. PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) SHALL BE PLACED AT THE PROJECT LOCATION 14 DAYS PRIOR TO THE START OF CONSTRUCTION TO WARN OF THE IMPENDING DETOUR AND MAY BE REMOVED ONCE CONSTRUCTION HAS BEGUN. THESE SIGNS AND THEIR REMOVAL SHALL BE PAID UNDER ITEM 641.15, "PORTABLE CHANGEABLE MESSAGE SIGN".
26. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL FIELD ENTRANCES.

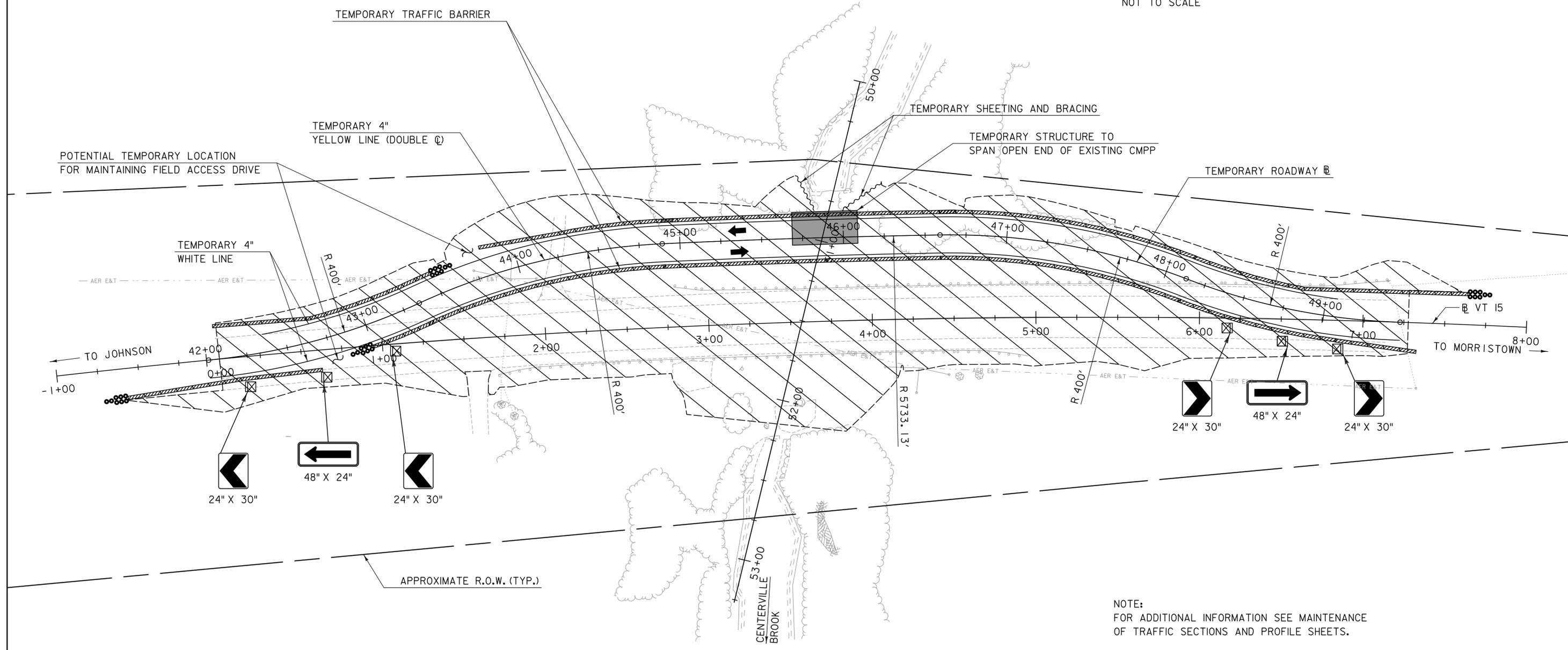
TYLIN INTERNATIONAL	PROJECT NAME: HYDE PARK	
	PROJECT NUMBER: STP CULV(26)	
	FILE NAME: z1lb292bdr_.mot_.N.dgn	PLOT DATE: 11/6/2013
	PROJECT LEADER: R. HEBERT	DRAWN BY: T. KELLEY
	DESIGNED BY: D. BRYANT	CHECKED BY: D. BRYANT
	MAINTENANCE OF TRAFFIC - NOTES	SHEET 14 OF 60

SUGGESTED SEQUENCE OF CONSTRUCTION - PHASE I:

- EXCAVATE EXISTING ROADWAY, ALTERNATING LANE LOCATIONS IN ORDER TO MAINTAIN TWO-WAY CHANNELIZED TRAFFIC, UNTIL THE REQUIRED GRADE IS ACHIEVED AND TEMPORARY STRUCTURE OVER EXISTING CULVERT IS INSTALLED. DURATION OF FLAGGED ONE-WAY TRAFFIC SHALL BE MINIMIZED AND PRE-APPROVED BY THE ENGINEER.
- MAINTAIN CHANNEL FLOW THROUGH EXISTING CMPP.



TEMPORARY ROADWAY TYPICAL SECTION
NOT TO SCALE



NOTE:
FOR ADDITIONAL INFORMATION SEE MAINTENANCE OF TRAFFIC SECTIONS AND PROFILE SHEETS.

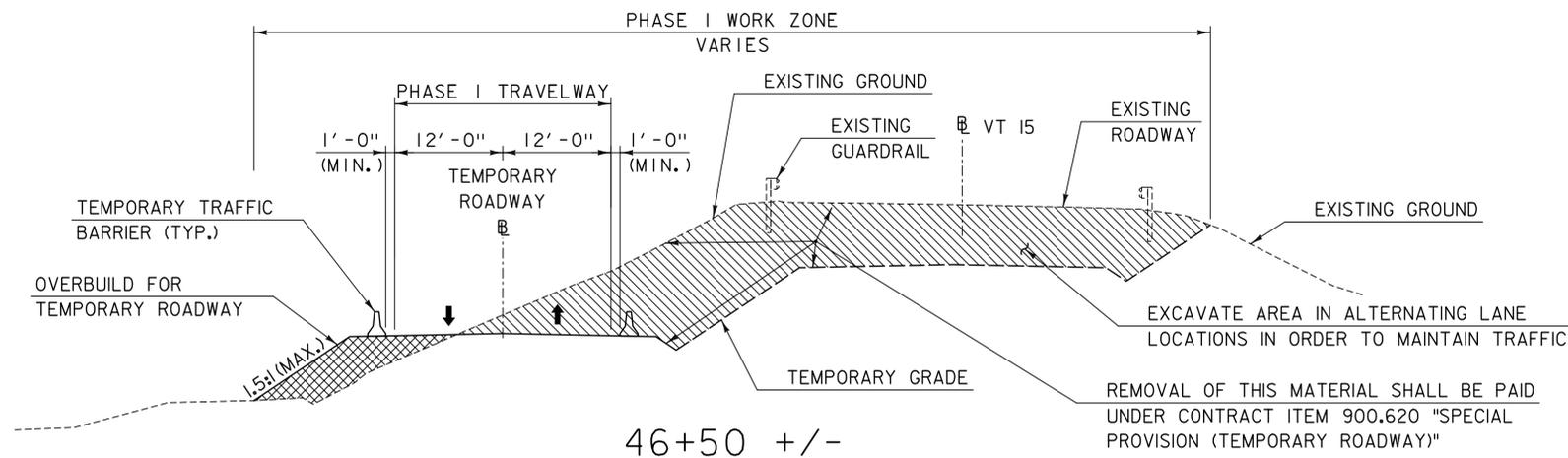
LEGEND

- TEMPORARY TRAFFIC BARRIER
- ENERGY ABSORPTION ATTENUATOR
- TYPE III BARRICADE (MOD.)
- REFLECTORIZED PLASTIC DRUM
- WORK ZONE
- TEMPORARY SHEETING AND BRACING
- DIRECTION OF TRAFFIC

PROJECT NAME: HYDE PARK	PLOT DATE: 11/6/2013
PROJECT NUMBER: STP CULV(26)	DRAWN BY: T. KELLEY
FILE NAME: z11b292bdr_mot.Pl.dgn	CHECKED BY: D. BRYANT
PROJECT LEADER: R. HEBERT	SHEET 15 OF 60
DESIGNED BY: T. KELLEY	
MAINTENANCE OF TRAFFIC PLAN, PHASE I	

TYLIN INTERNATIONAL

MAINTENANCE OF TRAFFIC SECTIONS - PHASE I



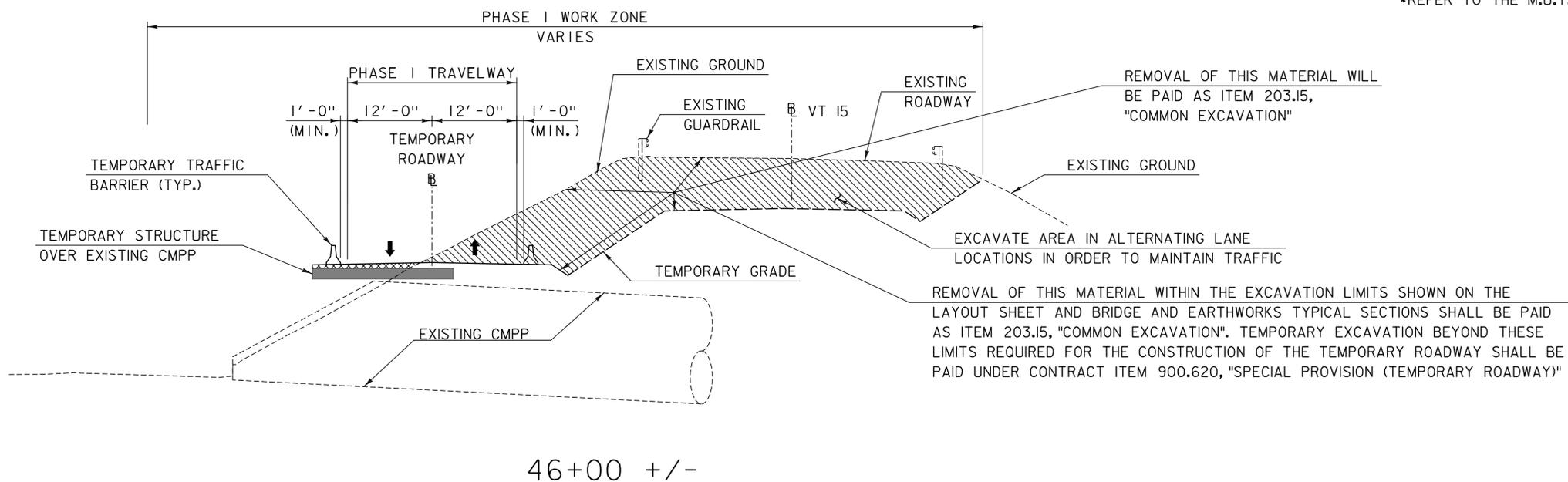
PROPOSED TRAFFIC CONTROL PLAN NOTES - PHASE I

EXCAVATE EXISTING ROADWAY, ALTERNATING LANE LOCATIONS IN ORDER TO MAINTAIN TWO-WAY CHANNELIZED TRAFFIC, UNTIL THE REQUIRED GRADE IS ACHIEVED AND TEMPORARY STRUCTURE OVER EXISTING CULVERT IS INSTALLED.

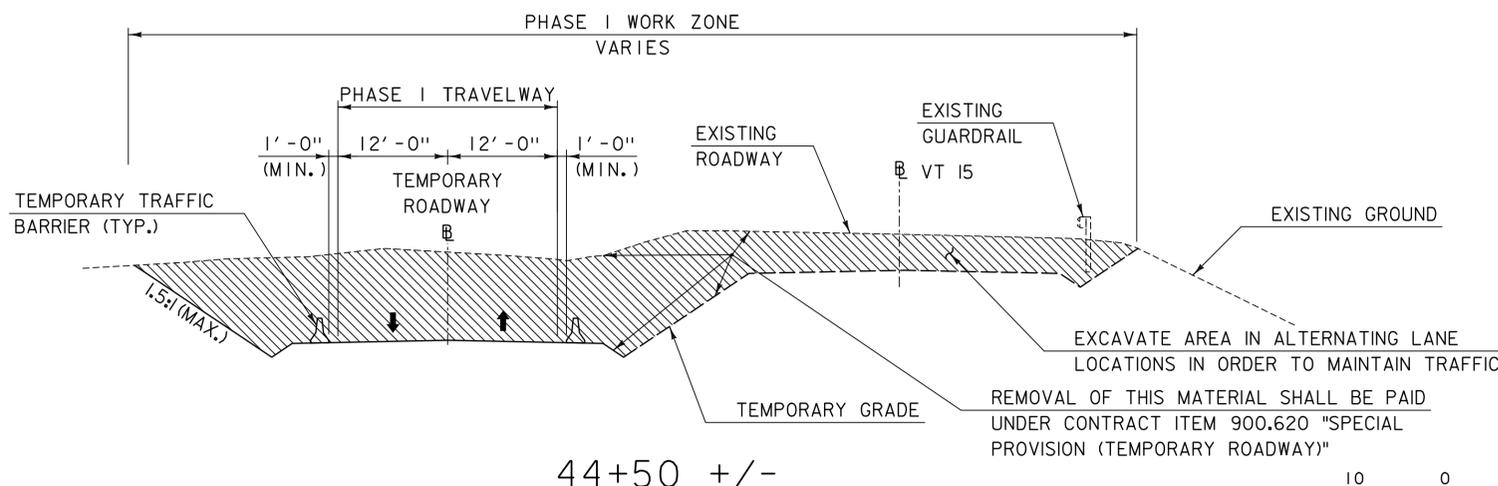
THE FOLLOWING SIGNS WILL BE REQUIRED DURING THIS PHASE:

- BUMP (W8-1)*
- PAVEMENT ENDS (W8-3)*

*REFER TO THE M.U.T.C.D. FOR SIGN DETAILS



REMOVAL OF THIS MATERIAL WITHIN THE EXCAVATION LIMITS SHOWN ON THE LAYOUT SHEET AND BRIDGE AND EARTHWORKS TYPICAL SECTIONS SHALL BE PAID AS ITEM 203.15, "COMMON EXCAVATION". TEMPORARY EXCAVATION BEYOND THESE LIMITS REQUIRED FOR THE CONSTRUCTION OF THE TEMPORARY ROADWAY SHALL BE PAID UNDER CONTRACT ITEM 900.620, "SPECIAL PROVISION (TEMPORARY ROADWAY)"



NOTE:
FOR ADDITIONAL INFORMATION SEE MAINTENANCE OF TRAFFIC PLANS AND PROFILE SHEETS.

- LEGEND
- AREA OF EXCAVATION
 - AREA OF TEMPORARY OVERBUILD

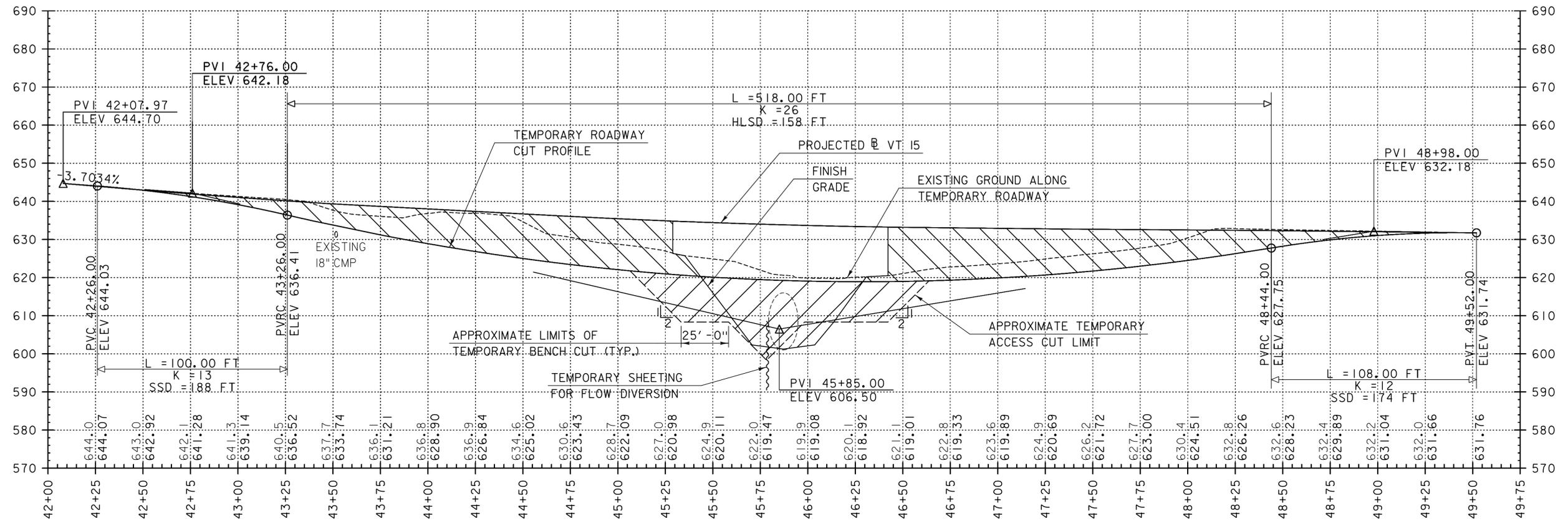


TYLIN INTERNATIONAL

PROJECT NAME: HYDE PARK
PROJECT NUMBER: STP CULV(26)

FILE NAME: z1lb292bdr_mot_CON.dgn
PROJECT LEADER: R. HEBERT
DESIGNED BY: T. KELLEY
MAINTENANCE OF TRAFFIC SECTIONS, PHASE I SHEET 16 OF 60

PLOT DATE: 11/6/2013
DRAWN BY: T. KELLEY
CHECKED BY: D. BRYANT



TEMPORARY ROADWAY B PROFILE

STATIONING AND ELEVATIONS ARE IN FEET

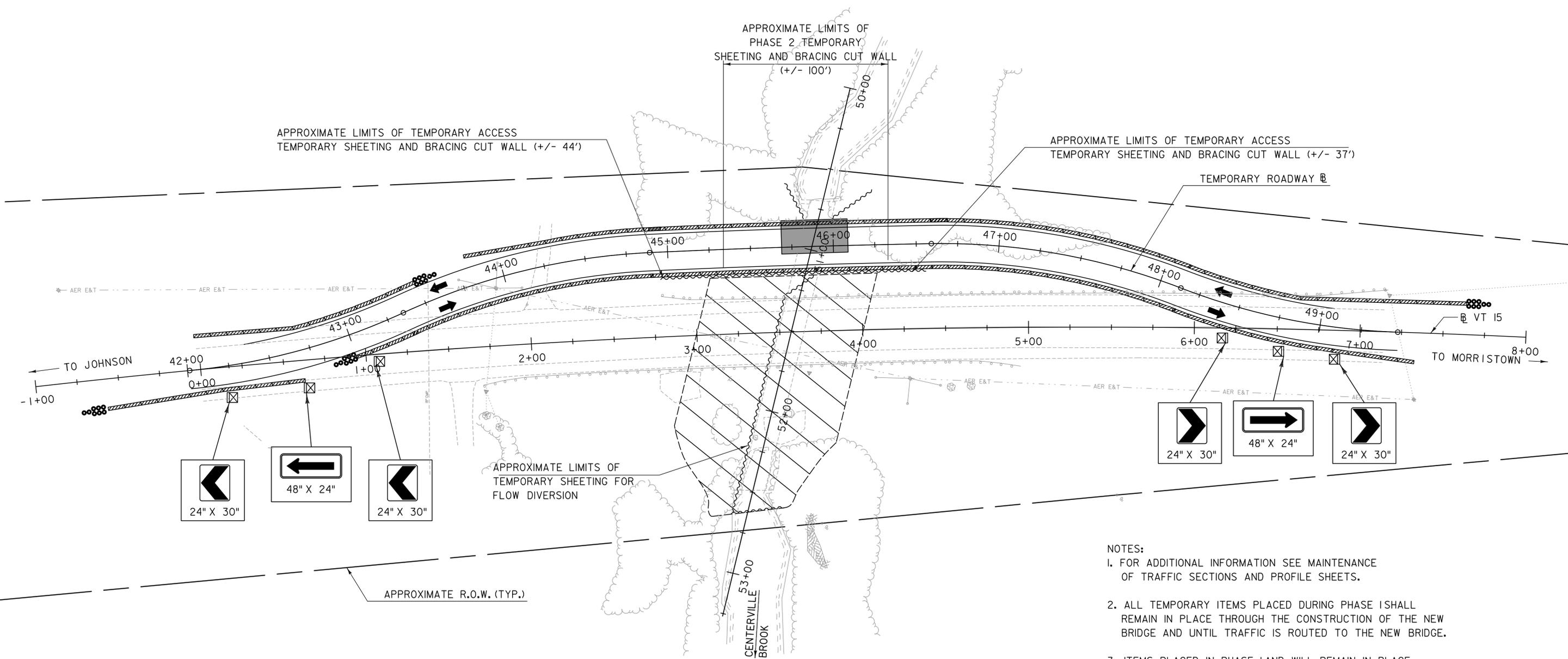
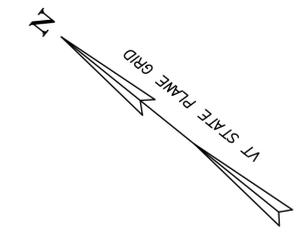
- PHASE 2 CUT WALL SHORING
- PHASE 2 FILL WALL SHORING
- TEMPORARY SHEETING FOR FLOW DIVERSION

NOTE:
FOR ADDITIONAL INFORMATION SEE MAINTENANCE
OF TRAFFIC PLANS AND SECTIONS.

TYL INTERNATIONAL	PROJECT NAME: HYDE PARK	PLOT DATE: 11/6/2013
	PROJECT NUMBER: STP CULV(26)	DRAWN BY: T. KELLEY
	FILE NAME: z11b292bdr_mot.PR.dgn	CHECKED BY: D. BRYANT
	PROJECT LEADER: R. HEBERT	SHEET 17 OF 60
	DESIGNED BY: T. KELLEY	
	MAINTENANCE OF TRAFFIC PROFILE	

SUGGESTED SEQUENCE OF CONSTRUCTION - PHASE 2A:

- MAINTAIN TRAFFIC OVER TEMPORARY ROADWAY ALIGNMENT
- INSTALL TEMPORARY SHEETING AND BRACING CUT WALL
- MAINTAIN FLOW THROUGH EXISTING CMPP
- EXCAVATE NORTHWEST SIDE OF CHANNEL AND CONSTRUCT NORTHWEST SIDE OF CHANNEL
- INSTALL TEMPORARY SHEETING FOR FLOW DIVERSION AND DIVERT FLOW THROUGH NORTHWEST SIDE OF CHANNEL
- EXCAVATE SOUTHWEST SIDE OF CHANNEL, REMOVE WEST END OF EXISTING CMPP AND CONSTRUCT SOUTHWEST SIDE OF CHANNEL
- REMOVE TEMPORARY SHEETING FOR FLOW DIVERSION



- NOTES:**
1. FOR ADDITIONAL INFORMATION SEE MAINTENANCE OF TRAFFIC SECTIONS AND PROFILE SHEETS.
 2. ALL TEMPORARY ITEMS PLACED DURING PHASE 1 SHALL REMAIN IN PLACE THROUGH THE CONSTRUCTION OF THE NEW BRIDGE AND UNTIL TRAFFIC IS ROUTED TO THE NEW BRIDGE.
 3. ITEMS PLACED IN PHASE 1 AND WILL REMAIN IN PLACE FOR THE DURATION OF PHASE 2.

- LEGEND**
- TEMPORARY TRAFFIC BARRIER
 - ENERGY ABSORPTION ATTENUATOR
 - TYPE III BARRICADE (MOD.)
 - REFLECTORIZED PLASTIC DRUM
 - WORK ZONE
 - TEMPORARY SHEETING AND BRACING
 - DIRECTION OF TRAFFIC
 - SIGN FROM PREVIOUS PHASE

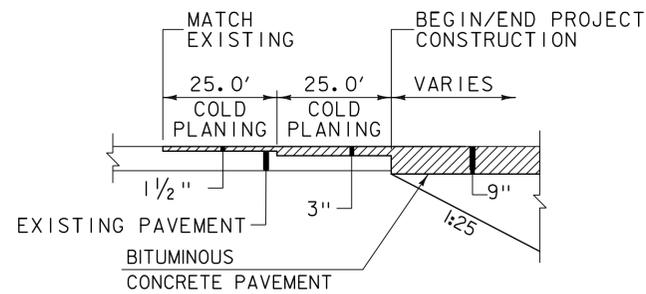


TYLIN INTERNATIONAL

PROJECT NAME: HYDE PARK	PLOT DATE: 11/6/2013
PROJECT NUMBER: STP CULV(26)	DRAWN BY: T. KELLEY
FILE NAME: z1b292bdr_mot_P2a.dgn	CHECKED BY: D. BRYANT
PROJECT LEADER: R. HEBERT	SHEET 18 OF 60
DESIGNED BY: T. KELLEY	
MAINTENANCE OF TRAFFIC PLAN, PHASE 2A	

SUGGESTED SEQUENCE OF CONSTRUCTION - PHASE 2B:

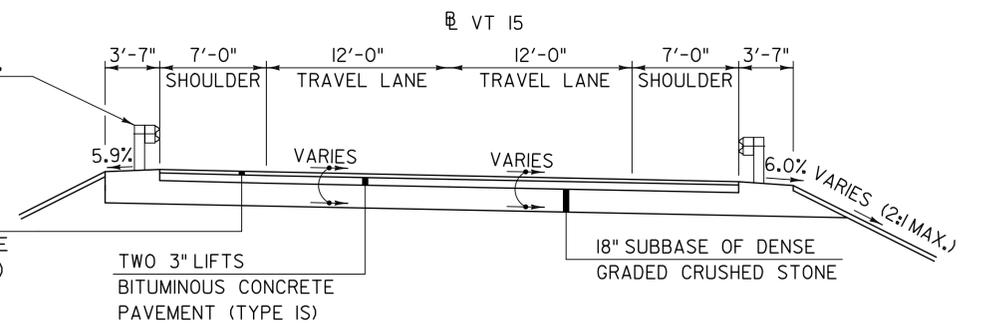
- MAINTAIN TRAFFIC OVER TEMPORARY ROADWAY ALIGNMENT
- INSTALL TEMPORARY SHEETING AND BRACING FILL WALL
- CONSTRUCT APPROACH AND NEW BRIDGE ON FINAL ALIGNMENT



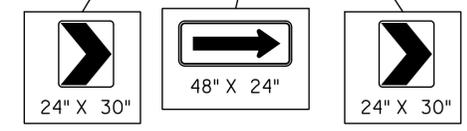
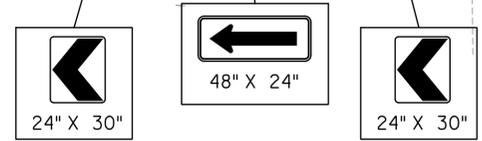
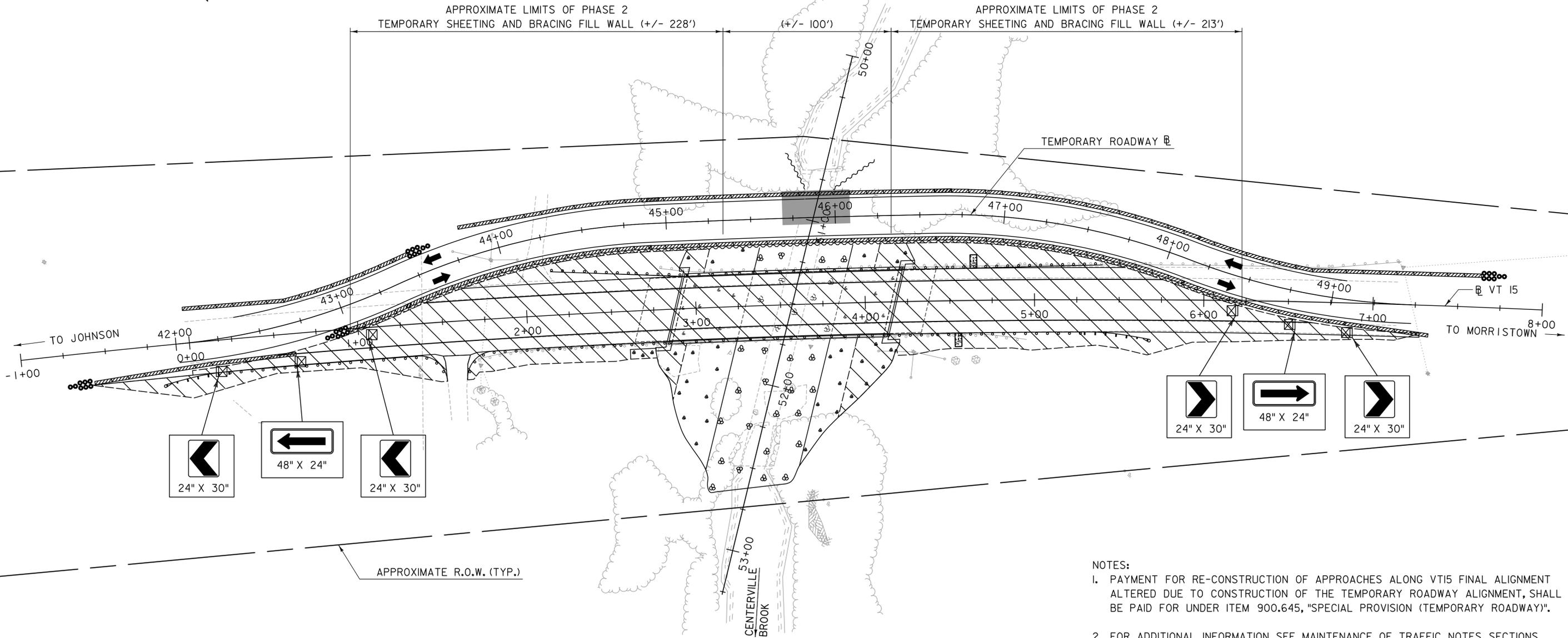
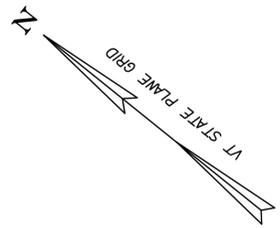
RE-CONSTRUCTION APPROACH COLD PLANING
ALONG TEMPORARY ROADWAY
NOT TO SCALE

STEEL BEAM GUARDRAIL,
GALVANIZED WITH
STEEL POSTS (TYP.)
(SEE STANDARD G-1)

TWO 1 1/2" LIFTS
BITUMINOUS CONCRETE
PAVEMENT (TYPE IVS)



TYPICAL ROADWAY RE-CONSTRUCTION SECTION
NOT TO SCALE



NOTES:

1. PAYMENT FOR RE-CONSTRUCTION OF APPROACHES ALONG VT15 FINAL ALIGNMENT ALTERED DUE TO CONSTRUCTION OF THE TEMPORARY ROADWAY ALIGNMENT, SHALL BE PAID FOR UNDER ITEM 900.645, "SPECIAL PROVISION (TEMPORARY ROADWAY)".
2. FOR ADDITIONAL INFORMATION SEE MAINTENANCE OF TRAFFIC NOTES, SECTIONS AND PROFILE SHEETS.
3. ITEMS PLACED IN PHASE I WILL REMAIN IN PLACE FOR THE DURATION OF PHASE 2.

LEGEND

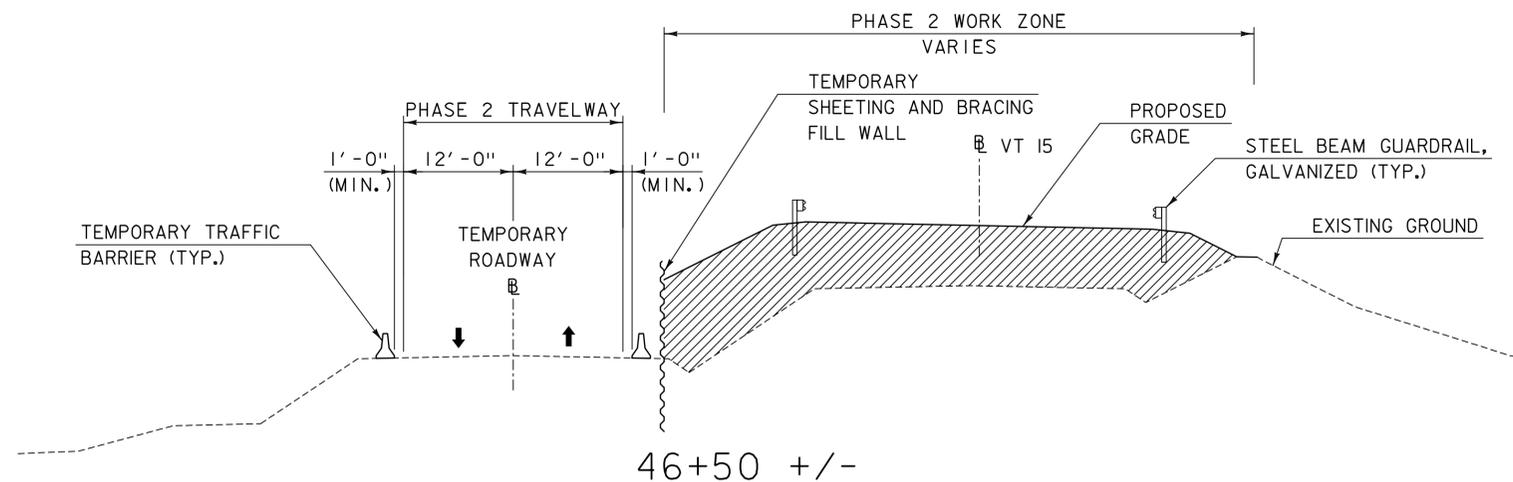
- TEMPORARY TRAFFIC BARRIER
- ENERGY ABSORPTION ATTENUATOR
- TYPE III BARRICADE (MOD.)
- REFLECTORIZED PLASTIC DRUM
- WORK ZONE
- TEMPORARY SHEETING AND BRACING
- DIRECTION OF TRAFFIC
- SIGN FROM PREVIOUS PHASE



TYLIN INTERNATIONAL

PROJECT NAME: HYDE PARK	PLOT DATE: 11/6/2013
PROJECT NUMBER: STP CULV(26)	DRAWN BY: T. KELLEY
FILE NAME: z1lb292bdr_mot_P2b.dgn	CHECKED BY: D. BRYANT
PROJECT LEADER: R. HEBERT	SHEET 19 OF 60
DESIGNED BY: T. KELLEY	
MAINTENANCE OF TRAFFIC PLAN, PHASE 2B	

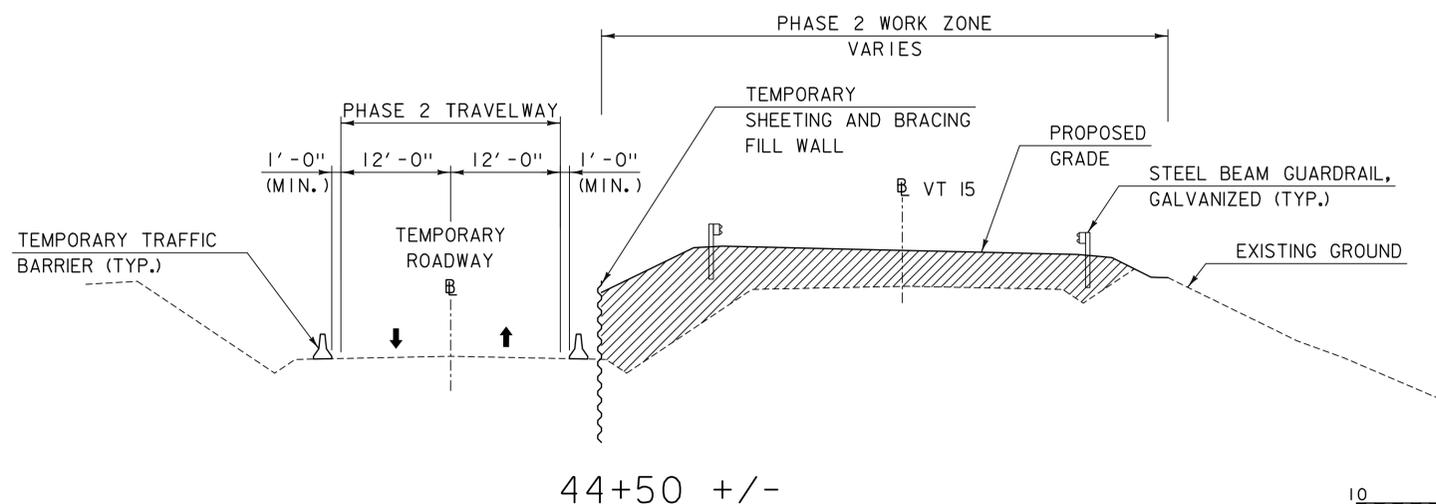
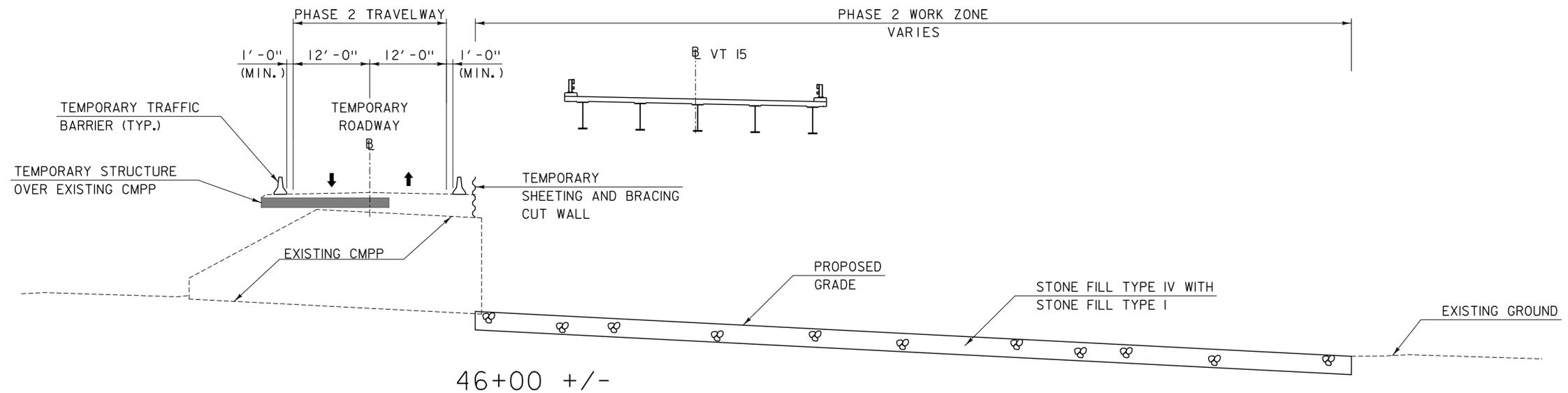
MAINTENANCE OF TRAFFIC SECTIONS - PHASE 2



PROPOSED TRAFFIC CONTROL PLAN NOTES - PHASE 2

PLACE TEMPORARY SHEETING AND BRACING AND BARRIERS AT LOCATIONS SHOWN TO CREATE A TWO-WAY TEMPORARY ROADWAY. DIRECT ALL TRAFFIC ON TO THIS ROADWAY. SEE SPECIAL PROVISION 900.645 FOR DETAILS REGARDING TEMPORARY ROADWAY PAY ITEM.

WITH TRAFFIC MAINTAINED ON TEMPORARY ROADWAY, EXCAVATE WEST SIDE OF CHANNEL, REMOVE WEST END OF EXISTING CMPP, CONSTRUCT WEST END OF NEW CHANNEL AND CONSTRUCT APPROACH AND NEW BRIDGE ON FINAL ALIGNMENT.



NOTE:
FOR ADDITIONAL INFORMATION SEE MAINTENANCE OF TRAFFIC PLANS AND PROFILE SHEETS.

LEGEND
 AREA OF FINAL BUILD

10 0 10
SCALE IN FEET

TYLIN INTERNATIONAL

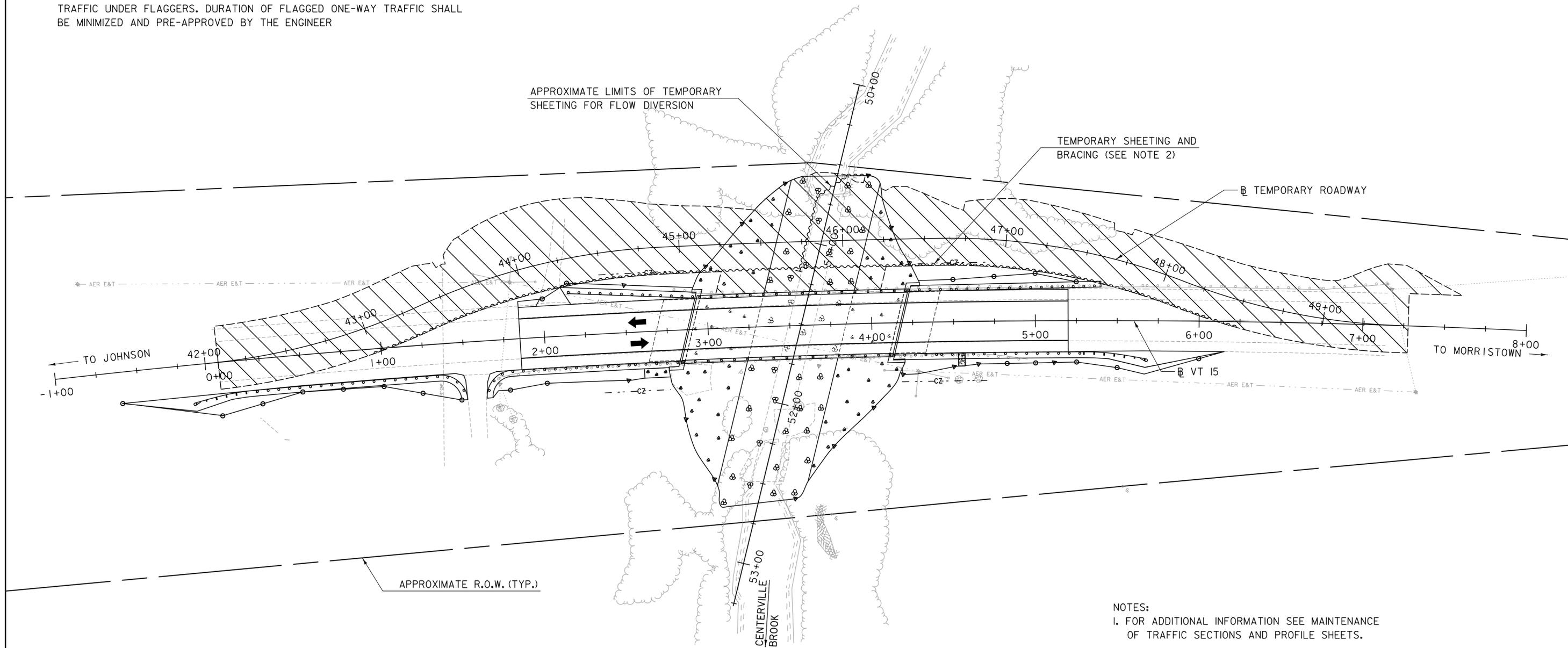
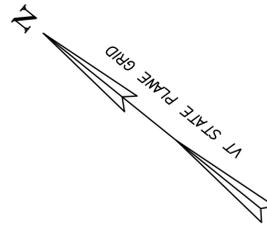
PROJECT NAME: HYDE PARK
 PROJECT NUMBER: STP CULV(26)

FILE NAME: z1lb292bdr_mot_CON.dgn
 PROJECT LEADER: R. HEBERT
 DESIGNED BY: T. KELLEY
 MAINTENANCE OF TRAFFIC SECTIONS, PHASE 2 SHEET 20 OF 60

PLOT DATE: 11/6/2013
 DRAWN BY: T. KELLEY
 CHECKED BY: D. BRYANT

SUGGESTED SEQUENCE OF CONSTRUCTION - PHASE 3:

- SHIFT TRAFFIC TO VT15 FINAL ALIGNMENT AND NEW BRIDGE
- REMOVE TEMPORARY STRUCTURE OVER CULVERT
- MAINTAIN FLOW THROUGH EXISTING CMPP
- EXCAVATE NORTHEAST SIDE OF CHANNEL AND CONSTRUCT NORTHEAST SIDE OF CHANNEL
- INSTALL TEMPORARY SHEETING FOR FLOW DIVERSION AND DIVERT FLOW THROUGH NORTHEAST SIDE OF CHANNEL
- EXCAVATE SOUTHEAST SIDE OF CHANNEL, REMOVE EAST END OF EXISTING CMPP, AND CONSTRUCT SOUTHEAST SIDE OF CHANNEL
- REMOVE TEMPORARY SHEETING AND BRACING CUT WALL AND TEMPORARY SHEETING FOR FLOW DIVERSION
- CONSTRUCT EAST SIDE OF APPROACH EMBANKMENTS TO FINAL BUILD AND REMOVE TEMPORARY SHEETING AND BRACING FILL WALL
- CONSTRUCT APPROACH TIE-INS UNDER SINGLE LANE ALTERNATING ONE-WAY TRAFFIC UNDER FLAGGERS. DURATION OF FLAGGED ONE-WAY TRAFFIC SHALL BE MINIMIZED AND PRE-APPROVED BY THE ENGINEER



NOTES:

1. FOR ADDITIONAL INFORMATION SEE MAINTENANCE OF TRAFFIC SECTIONS AND PROFILE SHEETS.
2. ITEM PLACED IN PRIOR PHASES AND WILL REMAIN IN PLACE FOR THE DURATION OF PHASE 3.

LEGEND

- TEMPORARY TRAFFIC BARRIER
- ENERGY ABSORPTION ATTENUATOR
- TYPE III BARRICADE (MOD.)
- REFLECTORIZED PLASTIC DRUM
- WORK ZONE
- TEMPORARY SHEETING AND BRACING
- DIRECTION OF TRAFFIC

30 0 30
SCALE IN FEET

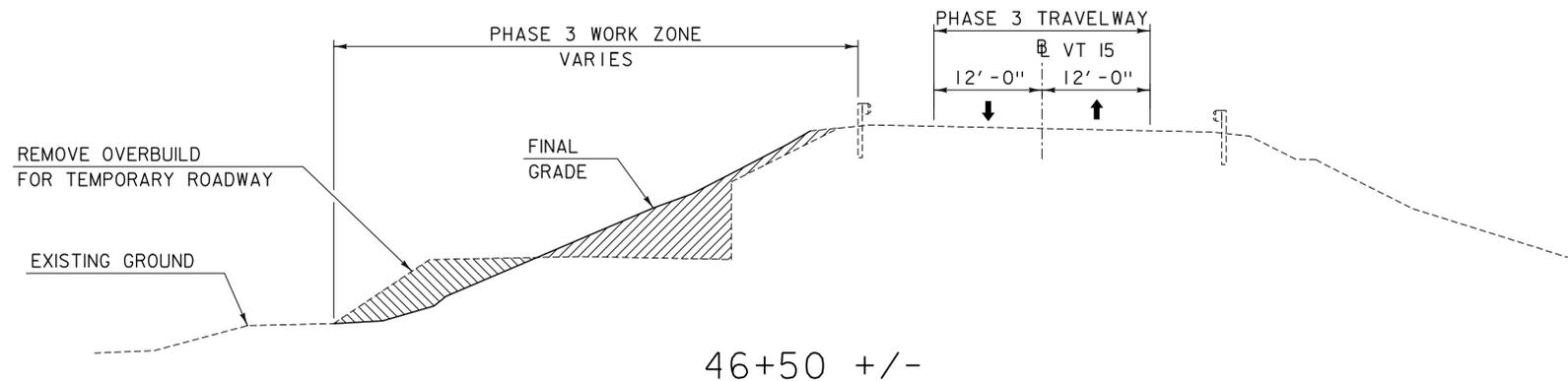
TYLININTERNATIONAL

PROJECT NAME: HYDE PARK
PROJECT NUMBER: STP CULV(26)

FILE NAME: z11b292bdr_mot_P3.dgn
PROJECT LEADER: R. HEBERT
DESIGNED BY: T. KELLEY
MAINTENANCE OF TRAFFIC PLAN, PHASE 3

PLOT DATE: 11/6/2013
DRAWN BY: T. KELLEY
CHECKED BY: D. BRYANT
SHEET 21 OF 60

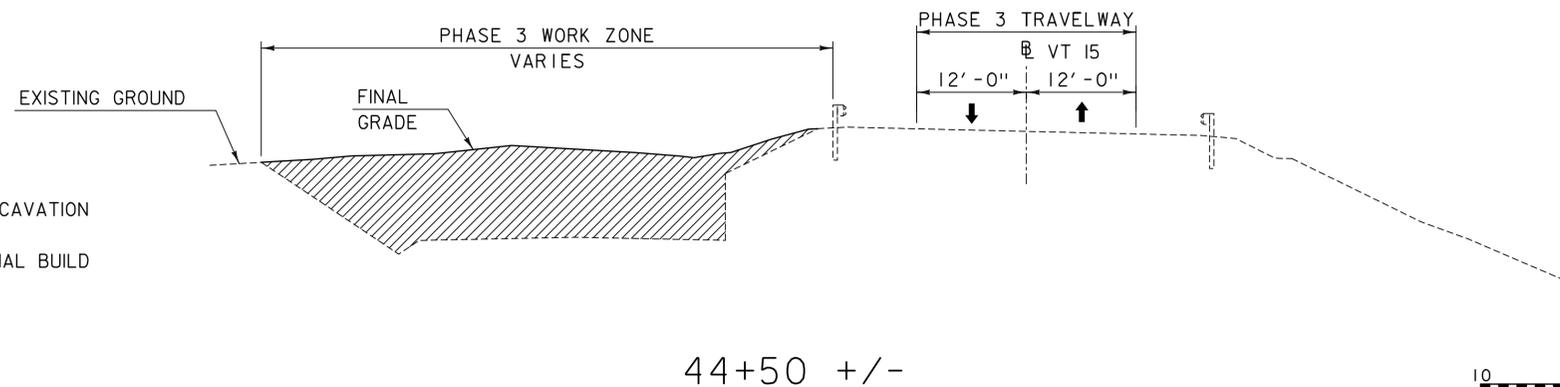
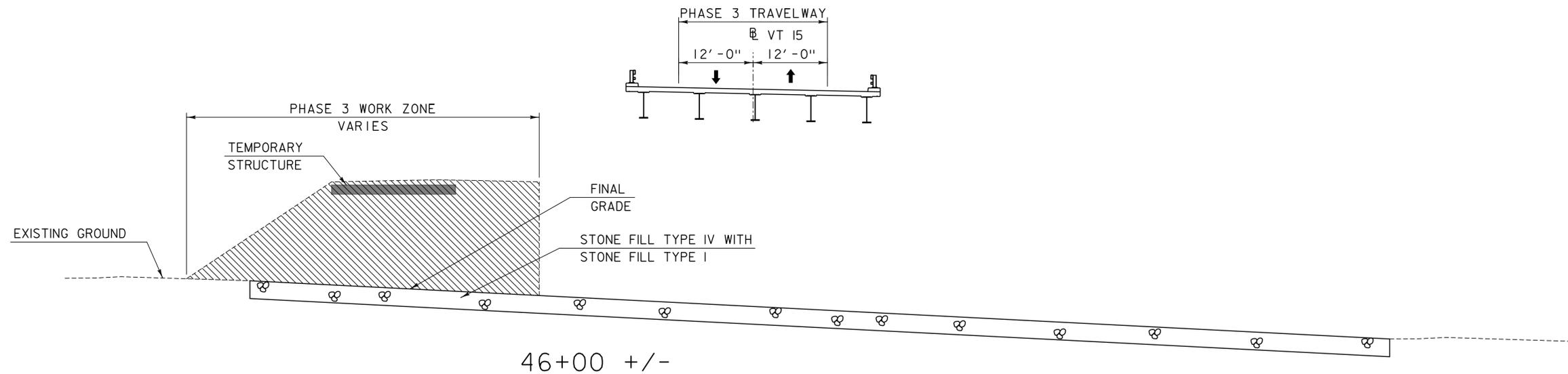
MAINTENANCE OF TRAFFIC SECTIONS - PHASE 3



PROPOSED TRAFFIC CONTROL PLAN NOTES - PHASE 3

SHIFT TRAFFIC TO VT15 FINAL ALIGNMENT AND NEW BRIDGE. REMOVE TEMPORARY STRUCTURE (OVER EXISTING CMPP), EXCAVATE EAST SIDE OF CHANNEL, REMOVE EAST END OF EXISTING CMPP, CONSTRUCT EAST END NEW CHANNEL, AND CONSTRUCT REMAINING PORTION OF EAST SIDE OF ROADWAY APPROACH EMBANKMENT.

CONSTRUCT APPROACH TIE-INS UNDER SINGLE LANE ALTERNATING ONE-WAY TRAFFIC UNDER FLAGGERS.



NOTE:
FOR ADDITIONAL INFORMATION SEE MAINTENANCE OF TRAFFIC PLANS AND PROFILE SHEETS.

- LEGEND
-  AREA OF EXCAVATION
 -  AREA OF FINAL BUILD

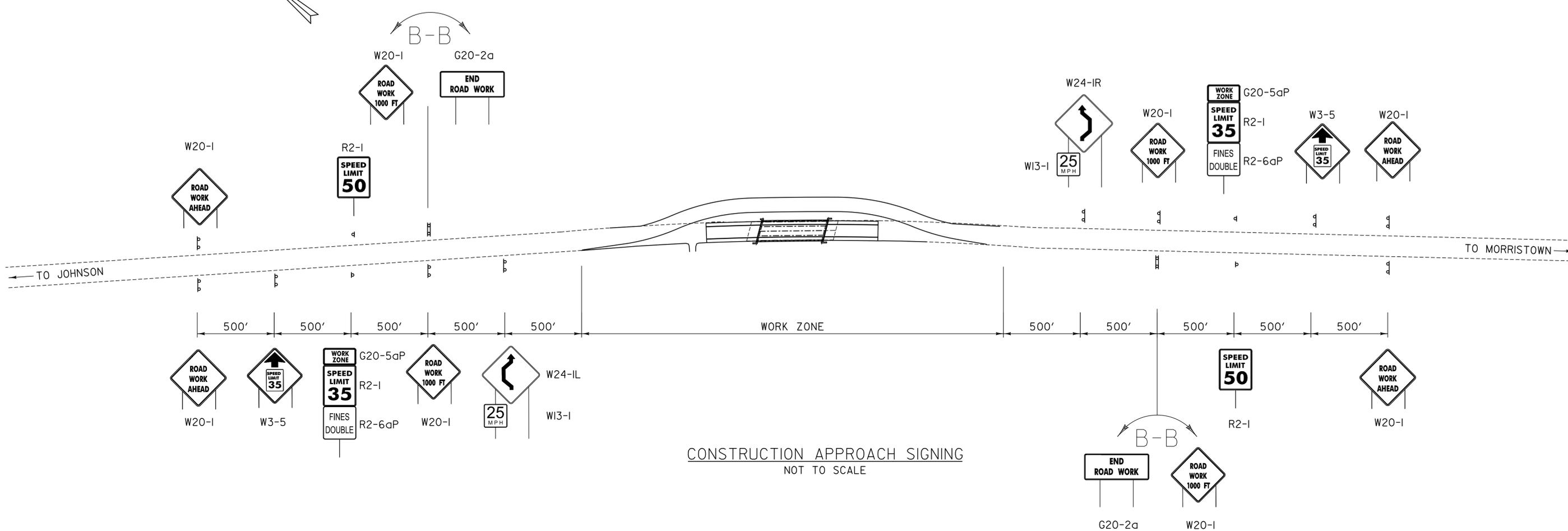
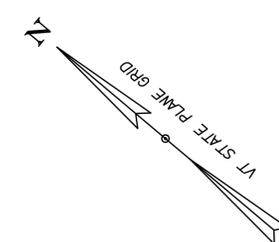


TYLIN INTERNATIONAL

PROJECT NAME: HYDE PARK
PROJECT NUMBER: STP CULV(26)

FILE NAME: z1lb292bdr_mot_CON.dgn
PROJECT LEADER: R. HEBERT
DESIGNED BY: T. KELLEY
MAINTENANCE OF TRAFFIC SECTIONS, PHASE 3 SHEET 22 OF 60

PLOT DATE: 11/6/2013
DRAWN BY: T. KELLEY
CHECKED BY: D. BRYANT



CONSTRUCTION APPROACH SIGNING
NOT TO SCALE

SIGN #	DESCRIPTION	SIZE	QTY	SUPPORT
G20-2a	END ROAD WORK	48x24	2	4 - POSTS (2/SIGN ASSEMBLY)
W20-1	ROAD WORK 1000 FT	48x48	2	
G20-5a (P)	WORK ZONE	24x18	2	2 - POSTS (1/SIGN ASSEMBLY)
R2-1	SPEED LIMIT 35	24x30	2	
R2-6a (P)	FINES DOUBLE	24x24	2	
R2-1	SPEED LIMIT 50	24x30	2	2 - POSTS (1/SIGN)
W3-5	SPEED LIMIT 35 (SPEED REDUCTION)	48x48	2	4 - POSTS (2/SIGN)
W20-1	ROAD WORK AHEAD	48x48	4	8 - POSTS (2/SIGN)
W20-1	ROAD WORK 1000 FT	48x48	2	4 - POSTS (2/SIGN)
W24-1L	DOUBLE REVERSE CURVE (1LANE)	48x48	1	2 - POSTS (2/SIGN ASSEMBLY)
W13-1	25 MPH	24x24	1	
W24-1R	DOUBLE REVERSE CURVE (1LANE)	48x48	1	2 - POSTS (2/SIGN ASSEMBLY)
W13-1	25 MPH	24x24	1	

(P) = PLAQUE

SQUARE SIGN POSTS	28
POST ANCHORS	28

- SIGNING NOTES:**
- INSTALL SIGNS WITH THE FLOW OF TRAFFIC.
 - ADJUST SIGN SPACINGS TO ACCOMODATE EXISTING SIGNS OR OBSTRUCTIONS - TRIM BRANCHES AS NECESSARY.
 - AFTER SIGNS ARE INSTALLED, VERIFY THAT:
DRIVER CAN SEE ALL DEVICES CLEARLY
DRIVER KNOWS WHAT TO DO AND WHERE TO GO
DRIVER HAS TIME/DISTANCE TO SLOW DOWN.
 - COVER CONTRADICTORY EXISTING SIGNING.

LEGEND
 SIGN WITH 1 POST
 SIGN WITH 2 POSTS

CONSTRUCTION NOTE:
PAYMENT FOR CONSTRUCTION SIGNING, AND IT'S MAINTENANCE AND REMOVAL, WILL BE INCLUDED FOR PAYMENT UNDER CONTRACT ITEM 641.10.

TYLIN INTERNATIONAL	PROJECT NAME: HYDE PARK	PLOT DATE: 11/6/2013
	PROJECT NUMBER: STP CULV(26)	DRAWN BY: P. MCCLURE
	FILE NAME: z1lb292bdr_mot_sgn.dgn	CHECKED BY: R. HEBERT
	PROJECT LEADER: R. HEBERT	SHEET 23 OF 60
	DESIGNED BY: D. BRYANT	
	CONSTRUCTION APPROACH SIGNING	

SOIL CLASSIFICATION

AASHTO

- A1 Gravel and Sand
- A3 Fine Sand
- A2 Silty or Clayey Gravel and Sand
- A4 Silty Soil - Low Compressibility
- A5 Silty Soil - Highly Compressible
- A6 Clayey Soil - Low Compressibility
- A7 Clayey Soil - Highly Compressible

ROCK QUALITY DESIGNATION

R.Q.D. (%)	ROCK DESCRIPTION
<25	Very Poor
25 to 50	Poor
51 to 75	Fair
76 to 90	Good
>90	Excellent

SHEAR STRENGTH

UNDRAINED SHEAR STRENGTH IN P.S.F.	CONSISTENCY
<250	Very Soft
250-500	Soft
500-1000	Med. Stiff
1000-2000	Stiff
2000-4000	Very Stiff
>4000	Hard

CORRELATION GUIDE OF "N" TO DENSITY/CONSISTENCY

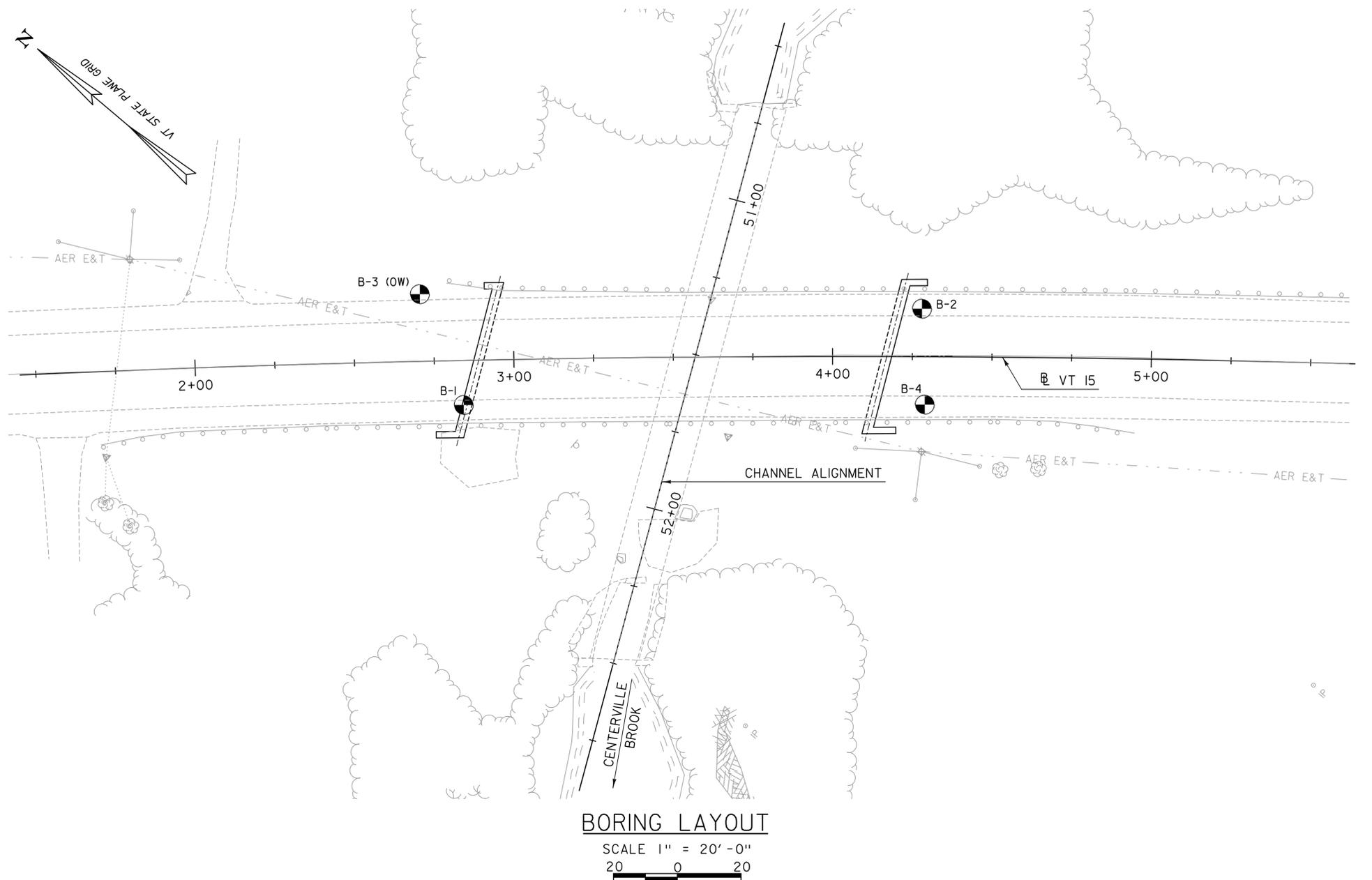
DENSITY (GRANULAR SOILS)		CONSISTENCY (COHESIVE SOILS)	
N	DESCRIPTIVE TERM	N	DESCRIPTIVE TERM
<5	Very Loose	<2	Very Soft
5-10	Loose	2-4	Soft
11-24	Med. Dense	5-8	Med. Stiff
25-50	Dense	9-15	Stiff
>50	Very Dense	16-30	Very Stiff
		31-60	Hard
		>60	Very Hard

COMMONLY USED SYMBOLS

- ▼ Water Elevation
- ⊕ Standard Penetration Boring
- ⊕ Auger Boring
- ⊙ Rod Sounding
- S Sample
- N Standard Penetration Test Blow Count Per Foot For: 2" O. D. Sampler 1 3/8" I. D. Sampler Hammer Weight Of 140 Lbs. Hammer Fall Of 30"
- VS Field Vane Shear Test
- US Undisturbed Soil Sample
- B Blast
- DC Diamond Core
- MD Mud Drill
- WA Wash Ahead
- HSA Hollow Stem Auger Core Size 1 1/8" Core Size 1 5/8" Core Size 2 1/8"
- M Double Tube Core Barrel Used
- LL Liquid Limit
- PL Plastic Limit
- PI Plasticity Index
- NP Non Plastic
- w Moisture Content (Dry Wgt. Basis)
- D Dry
- M Moist
- MTW Moist To Wet
- W Wet
- Sat Saturated
- Bo Boulder
- Gr Gravel
- Sa Sand
- SI Silt
- Cl Clay
- HP Hardpan
- Le Ledge
- NLTD No Ledge To Depth
- CNPF Can Not Penetrate Further
- TLOB To Ledge Or Boulder
- NR No Recovery
- Rec. Recovery
- %Rec. Percent Recovery
- RQD Rock Quality Designation
- CBR California Bearing Ratio
- < Less Than
- > Greater Than
- R Refusal (N > 100)

COLOR

bik	Black	pnk	Pink
bl	Blue	pu	Purple
brn	Brown	rd	Red
dk	Dark	tn	Tan
gry	Gray	wh	White
gn	Green	yel	Yellow
lt	Light	mltc	Multicolored
or	Orange		



GENERAL NOTES

- The subsurface explorations shown herein were made between August 13, 2012 and August 16, 2012 by GeoDesign, Inc.
- Soil and rock classifications, properties and descriptions are based on engineering interpretation from available subsurface information by GeoDesign, Inc. and may not necessarily reflect actual variations in subsurface conditions that may be encountered between individual boring or sample locations.
- Observed water levels and/or conditions indicated are as recorded at the time of exploration and may vary according to the prevailing rainfall, methods of exploration and other factors.
- Engineering judgement was exercised in preparing the subsurface information presented herein. Analysis and interpretation of subsurface data was performed and interpreted for Agency design and estimating purposes. Presentation of the information in the Contract is intended to provide the Contractor access to the same data available to the Agency. The subsurface information is presented in good faith and is not intended as a substitute for personal investigation, independent interpretation, independent analysis or judgement by the Contractor.
- Pictorial structure details shown on the boring plan layout or soils profile are for illustrative purposes only and may not accurately portray final contract details.

HOLE NO.	STATION	OFFSET	NORTHING	EASTING	GROUND ELEVATION	ELEVATION TLOB
B-1	2+84.00	14.00' RT	762699.00	1612208.00	635.0 FT.	598.0 FT.
B-2	4+28.00	15.00' LT	762609.00	1612324.00	634.0 FT.	602.0 FT.
B-3 (OW)	2+71.00	21.00' LT	762732.00	1612226.00	636.0 FT.	597.9 FT.
B-4	4+29.00	15.00' RT	762589.00	1612302.00	633.0 FT.	605.8 FT.

DEFINITIONS (AASHTO)

- BEDROCK (LEDGE)** - Rock in its native location of indefinite thickness.
- BOULDER** - A rock fragment with an average dimension > 12 inches.
- COBBLE** - Rock fragments with an average dimension between 3 and 12 inches.
- GRAVEL** - Rounded particles of rock < 3" and > 0.075" (#10 sieve).
- SAND** - Particles of rock < 0.075" (#10 sieve) and > 0.0025" (#200 sieve).
- SILT** - Soil < 0.0025" (#200 sieve), non or slightly plastic and exhibits no strength when air-dried.
- CLAY** - Fine grained soil, exhibits plasticity when moist and considerable strength when air-dried.
- VARVED** - Alternate layers of silt and clay.
- HARDPAN** - Extremely dense soil, cemented layer, not softened when wet.
- MUCK** - Soft organic soil (containing > 10% organic material).
- MOISTURE CONTENT** - Weight of water divided by dry weight of soil.
- FLOWING SAND** - Granular soil so saturated (loose) that it flows into drill casing during extraction of wash rod.
- STRIKE** - Angle from magnetic north to line of intersection of bed with a horizontal plane.
- DIP** - Inclination of bed with a horizontal plane.

PROJECT NAME: HYDE PARK
PROJECT NUMBER: STP CULV(26)

TYLIN INTERNATIONAL

FILE NAME: z11b292bdrbor-info.dgn
PROJECT LEADER: R. HEBERT
DESIGNED BY: J. OLUND
BORING INFORMATION & LAYOUT SHEET

PLOT DATE: 11/6/2013
DRAWN BY: S. MORGAN
CHECKED BY: J. OLUND
SHEET 24 OF 60

VT <small>Working to Get You There</small> <small>Without A Penny of Transportation</small>		STATE OF VERMONT AGENCY OF TRANSPORTATION MATERIALS & RESEARCH SECTION SUBSURFACE INFORMATION		BORING LOG		Boring No.: B-1						
				Hyde Park Bridge #42 STP CULV (26)		Page No.: 1 of 2						
						Pin No.:						
						Checked By: DTH						
Boring Crew: J. Wirmett (GeoDesign), J. Leonhardt (TransTech)		Casing: FJ		Sampler: SS		Groundwater Observations						
Date Started: 8/13/12 Date Finished: 8/14/12		Type: FJ		I.D.: 4 in 1.38 in		Date Depth Notes						
VTSPG NAD83: N 762699.00 ft E 1612208.00 ft		Hammer Wt: 140 lb. 140 lb.		Hammer Fall: 30 in. 30 in.		08/13/12 12.0 Wet soil.						
Station: 2+84 Offset: 14' R		Hammer/Rod Type: Auto/NWJ		Rig: CME 75 TRACK CE = 1.43		08/14/12 21.0 In casing (overnight).						
Ground Elevation: 635.0 ft												
Depth (ft)	Strata (i)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (ROD %)	Drill Rate (minutes/ft)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	LL %	PI %
0	X X X	Asphalt, 0.0 ft - 0.2 ft				9-12-14 (26)	37.3	39.3	11.6			
0.2	X X X	Visual Description (Burmister), S1 (0.5'-2'): Medium dense, brown fine to coarse SAND, some fine Gravel, little Silt, slightly moist, (AASHTO M145 Classification: A-1-b)				10-10-14 (24)	4.1	25.3	48.4	13.8		
0.5	X X X	Rec. = 1.0 ft				2-5-4-4 (9)	9.1	0.7	68.0	30.6		
0.5	X X X	Visual Description (Burmister), S2 (2'-4'): Medium dense,				3-4-5-7 (9)	28.2	7.3	92.7	29	6	
0.5	X X X	S2A - Top 6": Similar to S1, (AASHTO M145 Classification: A-1-b)				7-8-7-6 (15)	25.7	1.4	98.6			
0.5	X X X	S2B - Bottom 18": Brown fine SAND and SILT, slightly moist, (AASHTO M145 Classification: A-4), Rec. = 2.0 ft				2-3-2-9 (5)	13.2	43.4	56.6			
0.5	X X X	Visual Description (Burmister), S3 (5'-7'): S3A - Top 17": Loose, brown fine SAND, some Silt, slightly moist, (AASHTO M145 Classification: A-2-4)				8-9-5-4 (14)	22.2	30.9	69.1			
0.5	X X X	S3B - Bottom 4": Medium, gray finely parted SILT & CLAY, moist, (AASHTO M145 Classification: A-4), Rec. = 1.75 ft				4-4-6-8 (10)	25.9	4.2	95.8			
0.5	X X X	Visual Description (Burmister), S4 (7'-9'): Loose, S4A - Top 17": Gray SILT, trace Clayey Silt, trace fine Sand, moist.				6-4-5-5 (9)	24.7					
0.5	X X X	S4B - Bottom 3": Brown SILT and fine SAND, slightly moist, Rec. = 1.67 ft, (AASHTO M145 Classification: A-4)				2-5-6-7 (11)	25.9	6.5	93.5	26	3	
0.5	X X X	Visual Description (Burmister), S5 (10'-12'): Medium dense, brown fine SAND and SILT, moist, Rec. = 2.0 ft				5-6-6-15 (12)	25.9	7.0	93.0			
0.5	X X X	Visual Description (Burmister), S6 (12'-14'): S6A - Top 6": Loose, brown fine SAND and SILT, wet. S6B - Bottom 12": Medium, gray finely parted Clayey SILT, trace fine Sand, moist, Rec. = 1.5 ft, (AASHTO M145 Classification: A-4)				6-4-3-4 (7)	19.7	9.3	23.4	60.2		
0.5	X X X	Visual Description (Burmister), S7 (15'-17'): Medium dense, alternating 3" to 6" layers of brown fine SAND and gray SILT, trace Clayey Silt, moist (silt layers) to wet (sand layers), Rec. = 1.33 ft, (AASHTO M145 Classification: A-4)				9-50	11.3	47.7	26.5	20.2		
0.5	X X X	Visual Description (Burmister), S8 (17'-19'): Medium dense, gray finely parted Clayey SILT, trace fine Sand, trace Organic Fibers, moist to wet, Rec. = 1.33 ft, (AASHTO M145 Classification: A-4)										
0.5	X X X	Visual Description (Burmister), S9 (20'-22'): Loose, brown and gray with occasional black partings Clayey SILT, some fine Sand, trace Silt & Clay, trace Organic Fibers, slight Organic Odor, wet, Rec. = 1.33 ft	C1	100 (73)								
0.5	X X X	Visual Description (Burmister), S10 (22'-24'): Medium dense, gray finely parted SILT, little Clayey Silt, trace Silty Clay partings, trace fine Sand, trace (-) Organic Fibers, wet, Rec. = 1.33 ft, (AASHTO M145 Classification: A-4)	C2	100 (100)	15							
0.5	X X X	Visual Description (Burmister), S11 (25'-27'): Medium dense,	C3	85 (57)	7.5							
0.5	X X X	S11A - Top 14": Grayish brown Clayey SILT, little fine Sand, trace Organic Fibers, wet.										
0.5	X X X	S11B - Bottom 1": Gray SILT and fine to medium SAND, little (-) fine Gravel, wet, Rec. = 1.25 ft, (AASHTO M145 Classification: A-4)										
Notes: 1. Stratification lines represent approximate boundary between material types. Transition may be gradual. 2. N Values have not been corrected for hammer energy. CE is the hammer energy correction factor. 3. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.												

BOTTOM OF ABUT. #1
ELEV. 624.00

APPROX. PILE TIP @ ABUT #1
ELEV. 598.00

VT <small>Working to Get You There</small> <small>Without A Penny of Transportation</small>		STATE OF VERMONT AGENCY OF TRANSPORTATION MATERIALS & RESEARCH SECTION SUBSURFACE INFORMATION		BORING LOG		Boring No.: B-1						
				Hyde Park Bridge #42 STP CULV (26)		Page No.: 2 of 2						
						Pin No.:						
						Checked By: DTH						
Boring Crew: J. Wirmett (GeoDesign), J. Leonhardt (TransTech)		Casing: FJ		Sampler: SS		Groundwater Observations						
Date Started: 8/13/12 Date Finished: 8/14/12		Type: FJ		I.D.: 4 in 1.38 in		Date Depth Notes						
VTSPG NAD83: N 762699.00 ft E 1612208.00 ft		Hammer Wt: 140 lb. 140 lb.		Hammer Fall: 30 in. 30 in.		08/13/12 12.0 Wet soil.						
Station: 2+84 Offset: 14' R		Hammer/Rod Type: Auto/NWJ		Rig: CME 75 TRACK CE = 1.43		08/14/12 21.0 In casing (overnight).						
Ground Elevation: 635.0 ft												
Depth (ft)	Strata (i)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (ROD %)	Drill Rate (minutes/ft)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	LL %	PI %
55		Classification: A-4										
55		Visual Description (Burmister), S12 (30'-32'): Loose, gray to grayish brown SILT, some finely parted Clayey Silt, little fine to medium Sand, trace fine Gravel, trace Organic Fibers, wet, Rec. = 0.83 ft, (AASHTO M145 Classification: A-4)										
55		Visual Description (Burmister), S13 (35'-36'): Refusal, brownish gray fine to coarse SAND and fine GRAVEL, some Silt, wet, (AASHTO M145 Classification: A-1-b) Rec. = 0.42 ft										
55		Field Note: Inferred weathered rock.										
55		37.0 ft - 42.0 ft, (C1) Fair quality, hard, fresh with occasional decayed abscesses up to 1/4" in diameter in top 12" of core, close to moderately jointed, gray with occasional white intrusions PHYLLITE. Moderate reaction to dilute HCl in white intrusions only. Graphite sheen noticeable on fractured surfaces. Fractured surfaces range widely from horizontal to near vertical.										
55		42.0 ft - 43.1 ft, (C2) Excellent quality, slightly weathered with moderately weathered jointing, hard, closely jointed gray with white intrusions PHYLLITE. Moderate reaction to dilute HCl in white portions. Jointing at approximately 70 degrees from horizontal with occasional horizontal beams.										
55		43.1 ft - 47.0 ft, (3) Fair quality, slightly to moderately weathered, hard, close to moderately jointed, gray PHYLLITE with white intrusions (Quartz and other minerals). Occasional white intrusions have a moderate reaction to HCl (non-quartz portions). Jointing typically between 70 degrees from horizontal to vertical with occasional horizontal fractures and joints.										
55		Hole stopped @ 47.0 ft										
55		Remarks: 1) Ground surface elevation, coordinates, and stationing are estimated from an electronic site plan provided by TY Lin and taped measurements in the field. 2) Augered to 6" deep prior to sampling S1. 3) Noted a wet layer in at the top of the spoon in sample S6 at 12' deep. Let stabilize for 15 minutes and check water level in borehole. Borehole dry to 14'. Infer wet zone to be perched water within the fill soils. 4) Used 3.25" I.D. hollow stem augers (HSA) to 15' deep. Switch from HSA's to 4" O.D. flush joint casing after sampling S7 at 15' deep. 5) Driller notes loss of water while drilling from 33' deep. Infer due to reaching bottom of clayey silt fill soils. 6) Advance roller bit through inferred weathered rock from 36' to 37' deep. 7) Note black graphite sheen on wash water throughout coring. 8) Core run C2 was stopped after 13" of penetration at 43.1' deep due to core blockage. 9) SPT N-values were performed according to ASTM D1586. 10) Lab testing gradations reported are per AASHTO M145.										
Notes: 1. Stratification lines represent approximate boundary between material types. Transition may be gradual. 2. N Values have not been corrected for hammer energy. CE is the hammer energy correction factor. 3. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.												

PROJECT NAME: HYDE PARK
PROJECT NUMBER: STP CULV(26)

TYLIN INTERNATIONAL

FILE NAME: z1lb292bdrborlogl.dgn
PROJECT LEADER: R. HEBERT
DESIGNED BY: J. OLUND
BORING LOGS I

PLOT DATE: 11/6/2013
DRAWN BY: S. MORGAN
CHECKED BY: J. OLUND
SHEET 25 OF 60

VT Trans		STATE OF VERMONT AGENCY OF TRANSPORTATION MATERIALS & RESEARCH SECTION SUBSURFACE INFORMATION		BORING LOG		Boring No.: B-2						
		Hyde Park Bridge #42 STP CULV (26)				Page No.: 1 of 2						
						Pin No.:						
						Checked By: DTH						
Boring Crew: J. Wirmett (GeoDesign), J. Leonhardt (TransTech)		Casing Sampler		Groundwater Observations								
Date Started: 8/14/12 Date Finished: 8/15/12		Type: FJ SS		Date	Depth (ft)	Notes						
VTSPG NAD83: N 762609.00 ft E 1612324.00 ft		Hammer Wt: 140 lb. 140 lb.		08/14/12	16.5	Wet soil.						
Station: 4+28 Offset: 15' L		Hammer Fall: 30 in. 30 in.		08/15/12	24.5	In casing overnight.						
Ground Elevation: 634.0 ft		Hammer/Rod Type: Auto/NWJ										
		Rig: CME 75 TRACK CE = 1.43										
Depth (ft)	Strata (i)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (ROD %)	Drill Rate (minutes/ft)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	LL %	PI %
0	X X X	Asphalt, 0.0 ft - 0.2 ft				18-11-14 (25)	2.8	42.1	37.2	8.2		
0.2	X X X	Visual Description (Burmister), S1 (0.5'-2'): Medium dense, brown fine to coarse SAND and fine to coarse GRAVEL, trace (+) Silt, dry, (AASHTO M145 Classification: A-1-a)				11-12-15-16 (27)	8.0	5.8	60.9	32.4		
1.08	X X X	Rec. = 1.08 ft				2-2-2-3 (4)	6.8	1.3	72.4	26.3		
1.58	X X X	Visual Description (Burmister), S2 (2'-4'): Medium dense, light brown fine SAND, some Silt, trace fine Gravel, slightly moist, Rec. = 1.58 ft, (AASHTO M145 Classification: A-2-4)				1-1-2-3 (3)	5.2	0.4	74.0	25.6	31	3
1.5	X X X	Rec. = 1.5 ft, (AASHTO M145 Classification: A-2-4)				1-2-2-5 (4)	29.1	4.5	95.5	30	5	
1.5	X X X	Visual Description (Burmister), S4 (7'-9'): Very loose, S4A - Top 7": similar to S3. (AASHTO M145 Classification: A-2-4)				5-4-4-4 (8)	8.4					
1.25	X X X	S4B - Bottom 8": Soft, gray Clayey SILT, trace Clay & Silt partings, moist, (AASHTO M145 Classification: A-4), Rec. = 1.25 ft				1-4-3-6 (7)	28.8	12.5	87.5			
1.5	X X X	Rec. = 1.5 ft, (AASHTO M145 Classification: A-4)				3-6-4-5 (10)	28.7	6.6	93.4	30	11	
1.5	X X X	Visual Description (Burmister), S5 (10'-12'): Very loose, gray SILT, little (-) Clayey Silt, very moist, Rec. = 1.5 ft, (AASHTO M145 Classification: A-4)				9-16-14 (30)	21.9	18.6	13.0	87.0		
1.75	X X X	Rec. = 1.75 ft				19-12-14-16 (26)	12.6		32.6	37.8		
1.58	X X X	Visual Description (Burmister), S7 (15'-17'): Loose, gray-brown to gray SILT, little Clayey Silt, trace fine Sand, very moist to wet at tip, Rec. = 1.58 ft, (AASHTO M145 Classification: A-4)				24-50/3"	10.5	19.1	33.0	36.7		
1.17	X X X	Rec. = 1.17 ft, (AASHTO M145 Classification: A-6)				12-10-5-50/4" (15)	10.4	31.0	42.4	23.3		
1.33	X X X	Visual Description (Burmister), S9 (20'-22'): Dense, S9A - Top 6": Grayish brown finely parted SILT, trace Clayey Silt, trace fine Sand, wet.						43.8	26.3	18.9		
1.33	X X X	S9B - Bottom 10": Light brown SILT and fine to medium SAND, little fine to coarse Gravel, wet. Coarse Gravel stuck in tip, Rec. = 1.33 ft, (AASHTO M145 Classification: A-4)	C1	91 (52)	3							
1.25	X X X	Rec. = 1.25 ft	C2	100 (79)	4							
1.25	X X X	Visual Description (Burmister), S10 (22'-24'): Medium dense, grayish brown SILT, some fine to medium Sand, little fine Gravel, wet, Rec. = 1.25 ft	C3	100 (81)	8							
0.5	X X X	Rec. = 0.5 ft, (AASHTO M145 Classification: A-4)	C4	100 (38)	8							
0.5	X X X	Visual Description (Burmister), S11 (25'-25.75'): Refusal, gray SILT and fine to medium SAND, little fine Gravel, wet, Rec. = 0.5 ft, (AASHTO M145 Classification: A-4)										
1.25	X X X	Rec. = 1.25 ft, (AASHTO M145 Classification: A-2-4)										
1.25	X X X	Visual Description (Burmister), S12 (30'-31.8') Medium dense, S12A - Top 11": Gray fine to medium SAND, some Silt, some fine Gravel, wet, Rec. = 1.25 ft, (AASHTO M145 Classification: A-2-4)										
1.25	X X X	Rec. = 1.25 ft, (AASHTO M145 Classification: A-2-4)										
4	X X X	Visual Description (Burmister) S12B - Bottom 4": Gray										
Notes:												
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.												
2. N Values have not been corrected for hammer energy. CE is the hammer energy correction factor.												
3. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.												

BOTTOM OF ABUT. #2
ELEV. 622.00

APPROX. PILE TIP @ ABUT #2
ELEV. 602.00

BORING LOG (EDITED) 888-042 HYDE PARK.GPJ VERMONT AOT.GIT 10/12/12

VT Trans		STATE OF VERMONT AGENCY OF TRANSPORTATION MATERIALS & RESEARCH SECTION SUBSURFACE INFORMATION		BORING LOG		Boring No.: B-2						
		Hyde Park Bridge #42 STP CULV (26)				Page No.: 2 of 2						
						Pin No.:						
						Checked By: DTH						
Boring Crew: J. Wirmett (GeoDesign), J. Leonhardt (TransTech)		Casing Sampler		Groundwater Observations								
Date Started: 8/14/12 Date Finished: 8/15/12		Type: FJ SS		Date	Depth (ft)	Notes						
VTSPG NAD83: N 762609.00 ft E 1612324.00 ft		Hammer Wt: 140 lb. 140 lb.		08/14/12	16.5	Wet soil.						
Station: 4+28 Offset: 15' L		Hammer Fall: 30 in. 30 in.		08/15/12	24.5	In casing overnight.						
Ground Elevation: 634.0 ft		Hammer/Rod Type: Auto/NWJ										
		Rig: CME 75 TRACK CE = 1.43										
Depth (ft)	Strata (i)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (ROD %)	Drill Rate (minutes/ft)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	LL %	PI %
55		DECOMPOSED ROCK, foliated, (AASHTO M145 Classification: A-1-b)										
55		32.0 ft - 34.8 ft, (C1) Fair quality, highly to moderately weathered, moderately hard to hard, fractured (top 10") to close jointed, gray with white intrusions PHYLLITE. Moderate reaction to dilute HCl in white intrusions, jointing near vertical with occasional horizontal beds.										
55		34.8 ft - 38.0 ft, (C2) Fair quality, slightly weathered with moderately weathered jointing, moderately hard to hard, close to moderately jointed, gray with white and occasional green PHYLLITE. With occasional white Quartzite intrusions. Moderate reaction to dilute HCl in white non-quartzite intrusions. Jointing at near vertical with occasional moderately weathered horizontal seams.										
55		38.0 ft - 40.3 ft, (C3) Good quality, slightly to moderately weathered with moderately weathered joints, moderately hard to hard, closely jointed, gray with white and occasional green PHYLLITE. With occasional white Quartzite intrusions. Moderate reaction to dilute HCl in occasional white non-quartzite intrusions. Jointing at near vertical with occasional near horizontal seams (possible driller breaks).										
55		40.3 ft - 42.0 ft, (C4) Poor quality, slightly to moderately weathered, moderately hard to hard, closely jointed, gray with green and white PHYLLITE. Occasional moderate reaction to dilute HCl in white intrusions. Jointing near vertical.										
55		Hole stopped @ 42.0 ft										
55		Remarks:										
55		1) Ground surface elevation, coordinates, and stationing are estimated from an electronic site plan provided by TY Lin and taped measurements in the field.										
55		2) Augered to 6" deep prior to sampling S1.										
55		3) Auger grinding from 2' to 2.5' on inferred cobble or boulder.										
55		4) Used 3.25" I.D. hollow stem augers (HSA) to 15' deep. Switch from HSA's to 4" O.D. flush joint casing after sampling S7 at 15' deep.										
55		5) Driller attempted to advance boring open hole below 20' deep through dense silt. Noted approximately 12" of heave at 25' deep. Driller drove casing to 25' deep and cleared with the roller bit prior to taking sample S11.										
55		6) Clean hole with roller bit and telescope 3" casing to 32' deep prior to coring.										
55		7) Core run C1 was stopped after 33" of penetration at 34.8' deep due to core block.										
55		8) Ended core run C2 at 38' due to core block. Recovered lost portion of C1 when coring C2 (39" penetration with 42" recovery).										
55		9) Ended core run C3 at 40.3' deep due to core block.										
55		10) SPT N-values were performed according to ASTM D1586.										
55		11) Lab testing gradations reported are per AASHTO M145.										
Notes:												
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.												
2. N Values have not been corrected for hammer energy. CE is the hammer energy correction factor.												
3. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.												

BORING LOG (EDITED) 888-042 HYDE PARK.GPJ VERMONT AOT.GIT 10/12/12

PROJECT NAME: HYDE PARK
PROJECT NUMBER: STP CULV(26)

TYLIN INTERNATIONAL

FILE NAME: z1lb292bdrborlog2.dgn
PROJECT LEADER: R. HEBERT
DESIGNED BY: J. OLUND
BORING LOGS 2

PLOT DATE: 11/6/2013
DRAWN BY: S. MORGAN
CHECKED BY: J. OLUND
SHEET 26 OF 60

VT Trans		STATE OF VERMONT AGENCY OF TRANSPORTATION MATERIALS & RESEARCH SECTION SUBSURFACE INFORMATION		BORING LOG		Boring No.: B-3 (OW)				
				Hyde Park Bridge #42 STP CULV (26)		Page No.: 1 of 1				
						Pin No.:				
						Checked By: DTH				
Boring Crew: J. Wimet (GeoDesign), J. Leonhardt (TransTech)		Type: Casing Sampler		Groundwater Observations						
Date Started: 8/16/12 Date Finished: 8/16/12		I.D.: FJ SS		Date		Depth (ft)				
VTSPG NAD83: N 762732.00 ft E 1612226.00 ft		Hammer Wt: 140 lb. 140 lb.		08/16/12		12.0				
Station: 2+71 Offset: 21' L		Hammer Fall: 30 in. 30 in.		08/16/12		19.5				
Ground Elevation: 636.0 ft		Hammer/Rod Type: Auto/NWJ		08/16/12		19.5				
		Rig: CME 75 TRACK CE = 1.43		08/16/12		19.5				
Depth (ft)	Strata (I)	CLASSIFICATION OF MATERIALS (Description)	Well Diagram	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	LL %	PI %
0		Top of Well Elevation: 636.0 ft								
0-2	Visual Description (Burmister), S1 (0'-2'): Medium dense, brown fine to coarse SAND, some fine to coarse Gravel, little (-) Silt, moist, Rec. = 1.08 ft, (AASHTO M145 Classification: A-1-b)		2-5-6-10 (11)	5.0	44.3	47.0	8.7			
5-7	Visual Description (Burmister), S2 (5'-7'): Medium dense, brown fine SAND and SILT, moist, Rec. = 0.92 ft, (AASHTO M145 Classification: A-4)		7-6-6-5 (12)	11.7	0.3	61.9	37.8			
10-12	Visual Description (Burmister), S3 (10'-12'): Loose, gray SILT, some Clayey Silt, trace fine Sand, very moist, Rec. = 1.0 ft, (AASHTO M145 Classification: A-4)		3-3-3-4 (6)	28.5	4.8	3.4	91.8	29	4	
15-17	Visual Description (Burmister), S4 (15'-17'): Very loose, gray SILT, little Clayey Silt, trace Silty Clay, trace fine Sand, wet, Rec. = 1.08 ft, (AASHTO M145 Classification: A-4)		3-2-2-2 (4)	30.4	0.9	8.6	90.5	23	2	
20-22	Visual Description (Burmister), S5 (20'-22'): Loose, gray-brown grading to gray with occasional black spots SILT, little fine Sand, trace fine Gravel, trace Organic Fibers, occasional layering towards bottom of sample, very moist, Rec. = 1.33 ft, (AASHTO M145 Classification: A-4)		6-4-5-3 (9)	23.8	4.6	21.8	73.6			
25-27	Visual Description (Burmister), S6 (25'-27'): Medium dense, gray fine to medium SAND and SILT, some fine Gravel, wet, (AASHTO M145 Classification: A-2-4) Rec. = 1.17 ft		1-5-5-4 (10)	10.7	29.1	38.4	32.5			
30-32	Visual Description (Burmister), S7 (30'-32'): Medium dense, gray fine to medium SAND and fine to coarse GRAVEL, little Silt, wet, (AASHTO M145 Classification: A-1-b) Rec. = 0.83 ft		18-10-12-16 (22)	8.0	54.5	30.7	14.8			
35-35.8	Visual Description (Burmister), S8 (35'-35.8'): Refusal, fine to coarse SAND, some fine to coarse Gravel, little (+) Silt, wet, Rec. = 0.83 ft, (AASHTO M145 Classification: A-1-b)		38-50/4"	11.7	36.9	43.0	20.1			
38-38.1	Visual Description (Burmister), S9 (38'-38.1'): Refusal, gray WEATHERED ROCK, wet. Rec. = 0.08 ft		50/1"							
38.1	Hole stopped @ 38.1 ft Roller bit refusal in inferred bedrock.									
Remarks: 1) Ground surface elevation, coordinates, and stationing are estimated from an electronic site plan provided by TY Lin and taped measurements in the field and taped measurements in the field. 2) Infer natural soils at 22' based on slight increase in roller bit resistance. 3) Increase in rig chatter noted beginning at 28' deep through denser soils. 4) Infer cobble or small boulder from 33.5' to 34' deep based on roller bit resistance. 5) Infer top of bedrock at 36.5'. Roller bit into rock to 38' deep. 6) SPT N-values were performed according to ASTM D1586. 7) Lab testing gradations reported are per AASHTO M145.										
Notes: 1. Stratification lines represent approximate boundary between material types. Transition may be gradual. 2. N Values have not been corrected for hammer energy. CE is the hammer energy correction factor. 3. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.										

BOTTOM OF ABUT. #1
ELEV. 624.00

APPROX. PILE TIP @ ABUT #1
ELEV. 597.90

BORING LOG (EDITED) BBB-042 HYDE PARK GRU VERMONT AOT/GJT 10/12/12

PROJECT NAME: HYDE PARK
PROJECT NUMBER: STP CULV(26)

FILE NAME: z1b292bdrbor-log3.dgn
PROJECT LEADER: R. HEBERT
DESIGNED BY: J. OLUND
BORING LOGS 3

PLOT DATE: 11/6/2013
DRAWN BY: S. MORGAN
CHECKED BY: J. OLUND
SHEET 27 OF 60

TYLIN INTERNATIONAL

VT <small>Working to Get You There</small> Vermont Agency of Transportation		STATE OF VERMONT AGENCY OF TRANSPORTATION MATERIALS & RESEARCH SECTION SUBSURFACE INFORMATION		BORING LOG		Boring No.: B-4			
				Hyde Park Bridge #42 STP CULV (26)		Page No.: 1 of 1			
						Pin No.:			
						Checked By: DTH			
Boring Crew: J. Wimet (GeoDesign), J. Leonhardt (TransTech)		Type: Casing H.S.A. Sampler SS		Groundwater Observations					
Date Started: 8/16/12 Date Finished: 8/16/12		I.D.: 3.25 in 1.38 in		Date	Depth (ft)	Notes			
VTSPG NAD83: N 762589.00 ft E 1612302.00 ft		Hammer Wt: N.A. 140 lb.		08/16/12	15.0	Wet soil.			
Station: 4+29 Offset: 15' R		Hammer Fall: 30 in. 30 in.		08/16/12	25.7	In augers (30 min)			
Ground Elevation: 633.0 ft		Hammer/Rod Type: Auto/AWJ		08/16/12	25.0	In augers (70 min)			
		Rig: CME 75 TRACK CE = 1.43							
Depth (ft)	Strata (I)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	LL %	PI %
0-0.3	Asphalt	Asphalt, 0.0 ft - 0.3 ft	11-14-15 (29)	3.5	35.6	51.5	12.9		
0.3-1.08	S1	Visual Description (Burmister), S1 (0.5'-2'): Medium dense, brown fine to coarse SAND, some (-) fine to coarse Gravel, little (-) Silt, slightly moist, (AASHTO M145 Classification: A-1-b) Rec. = 1.08 ft							
1.08-1.42	S2	Visual Description (Burmister), S2 (5'-7'): Very loose, light brown fine SAND, little Silt, slightly moist, Rec. = 1.42 ft, (AASHTO M145 Classification: A-2-4)	3-3-1-2 (4)	6.7	1.6	78.7	19.7		
1.42-1.58	S3	Visual Description (Burmister), S3 (10'-12'): Loose gray SILT, trace brown fine Sand (concentrated in one 3" seam), trace Silty Clay, moist (sand) to very moist (silt/clay), Rec. = 1.58 ft, (AASHTO M145 Classification: A-4)	2-4-5-4 (9)	22.2		4.6	95.4	23	2
1.58-1.42	S4	Visual Description (Burmister), S4 (15'-17'): Loose, gray and brown SILT, trace fine Sand, very moist to wet (perched), Rec. = 1.42 ft, (AASHTO M145 Classification: A-4)	2-2-3-3 (5)	26.5		5.1	94.9		
1.42-0.67	S5	Visual Description (Burmister), S5 (20'-22'): Medium dense, olive brown SILT, little fine Sand, little fine Gravel, wet, Rec. = 0.67 ft, (AASHTO M145 Classification: A-4)	4-6-6-10 (12)	19.0	20.7	12.5	66.8		
0.67-1.0		Field Note, Inferred Gravelly Sandy Silt. Rec. = 1.0 ft							
1.0-25.5	S6	Visual Description (Burmister), S6 (25'-26.5'): Refusal, dark gray DECOMPOSED ROCK (fine to coarse Gravel and fine to coarse Sand), wet, (AASHTO M145 Classification: A-1-a)	9-16-52 (68)	6.2	63.8	24.3	11.9		
25.5-27.2	S7	Visual Description (Burmister), S7 (27'-27.2'): Refusal, dark gray pulverized and fractured WEATHERED ROCK (fine to coarse Sand and fine to coarse Gravel), wet, Rec. = 0.21 ft, (AASHTO M145 Classification: A-1-a) Hole stopped @ 27.2 ft HSA refusal in inferred bedrock.	50/2.5	10.9	62.0	29.3	8.7		
27.2-47.2		Remarks: 1) Ground surface elevation, coordinates, and stationing are estimated from an electronic site plan provided by TY Lin and taped measurements in the field. 2) Augered to 6" deep prior to sampling S1. 3) Note consistent auger grinding and rig chatter below 23' deep through inferred gravelly sandy silt soils 4) Infer top of weathered rock at 25.5' based on auger resistance. 5) Hollow stem auger refusal at 27' deep on inferred bedrock. 6) SPT N-values were performed according to ASTM D1586. 7) Lab testing gradations reported are per AASHTO M145.							
Notes: 1. Stratification lines represent approximate boundary between material types. Transition may be gradual. 2. N Values have not been corrected for hammer energy. CE is the hammer energy correction factor. 3. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.									

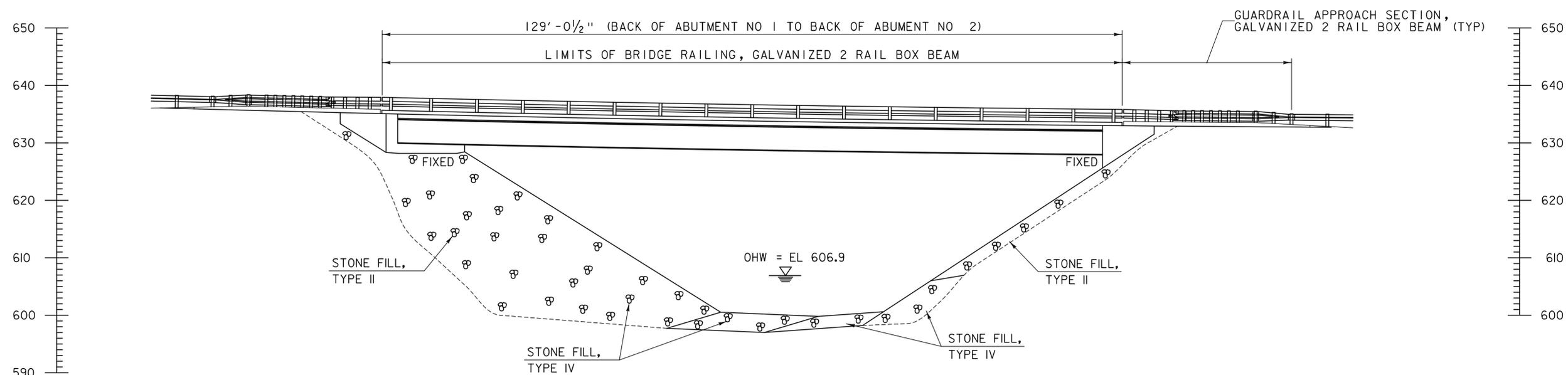
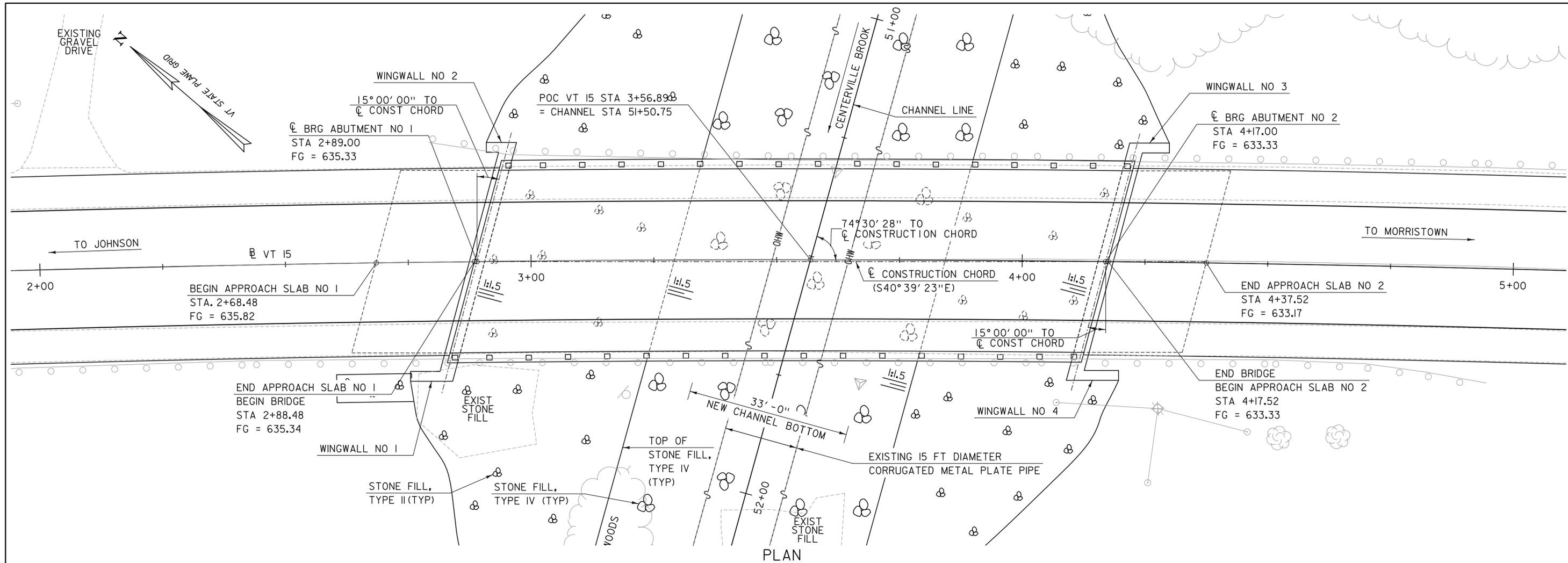
BOTTOM OF ABUT. #2
ELEV. 622.00

APPROX. PILE TIP @ ABUT #2
ELEV. 605.80

BORING LOG (EDITED) BBS-042 HYDE PARK.GPJ VERMONT AOT/GBT 10/02/12

PROJECT NAME: HYDE PARK
PROJECT NUMBER: STP CULV(26)

TYLIN INTERNATIONAL	FILE NAME: z1b292bdrbor-log4.dgn	PLOT DATE: 11/6/2013
	PROJECT LEADER: R. HEBERT	DRAWN BY: S. MORGAN
	DESIGNED BY: J. OLUND	CHECKED BY: J. OLUND
	BORING LOGS 4	SHEET 28 OF 60



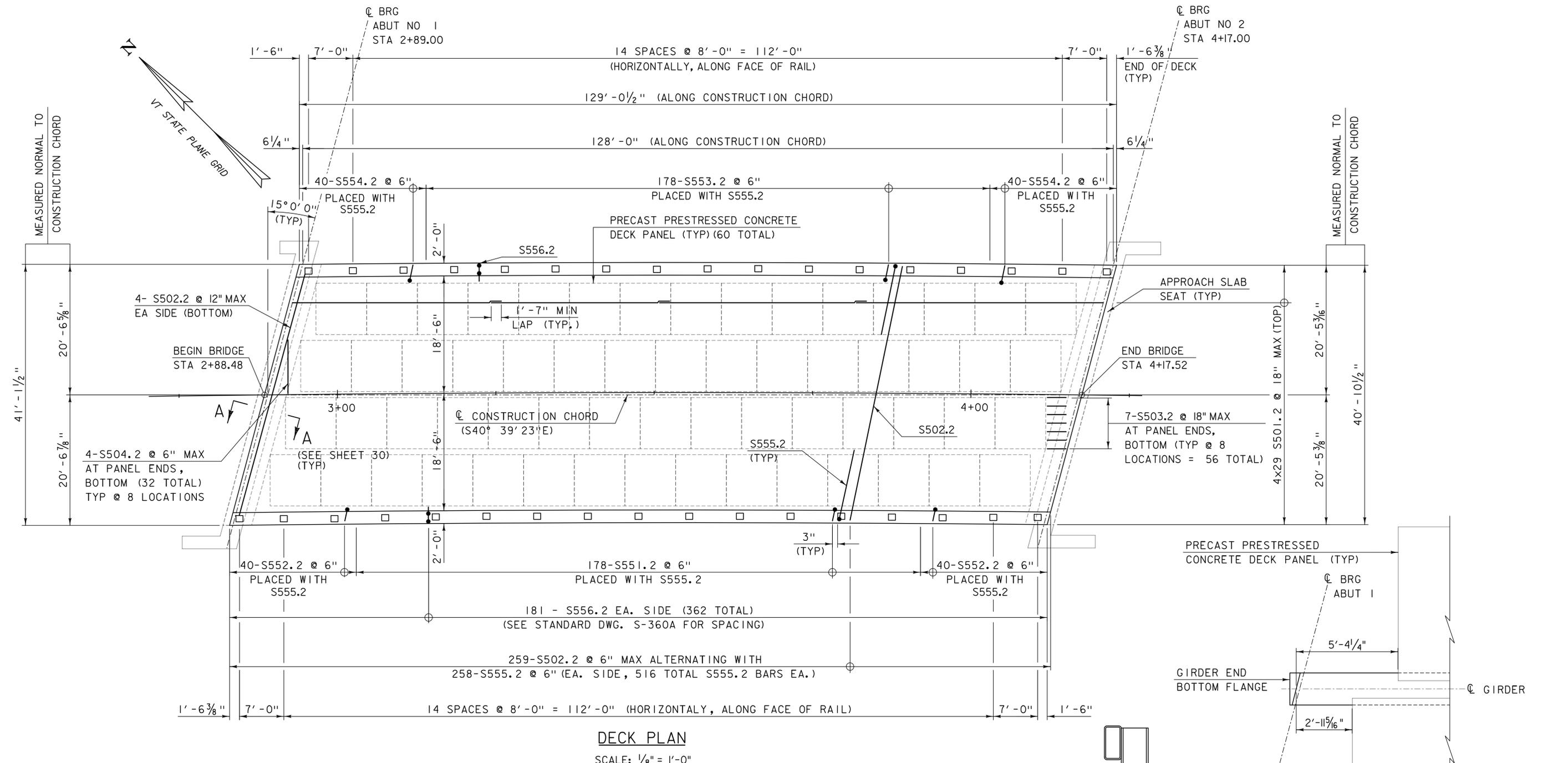
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TYLIN INTERNATIONAL

PROJECT NAME: HYDE PARK
PROJECT NUMBER: STP CULV(26)

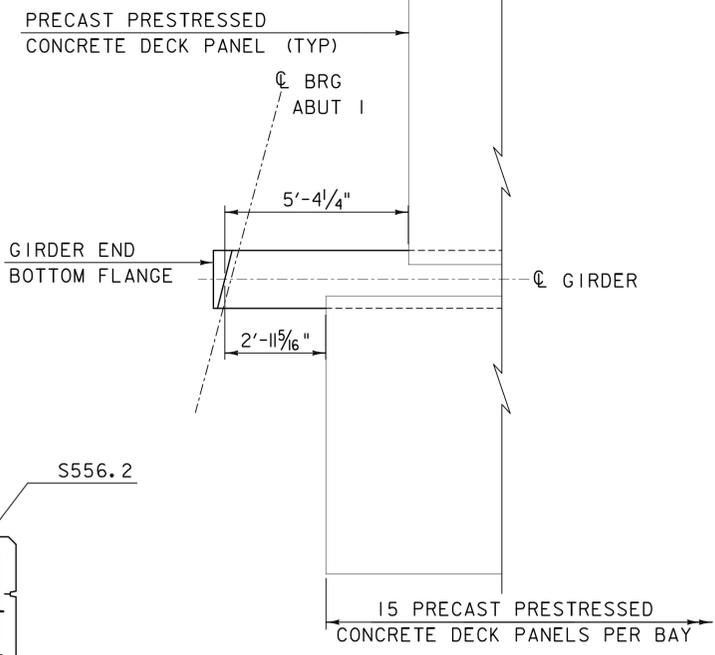
FILE NAME: z1lb292bdr.gpe.dgn
PROJECT LEADER: R. HEBERT
DESIGNED BY: J. OLUND
BRIDGE PLAN & ELEVATION

PLOT DATE: 11/6/2013
DRAWN BY: S. MORGAN
CHECKED BY: R. HEBERT
SHEET 29 OF 60



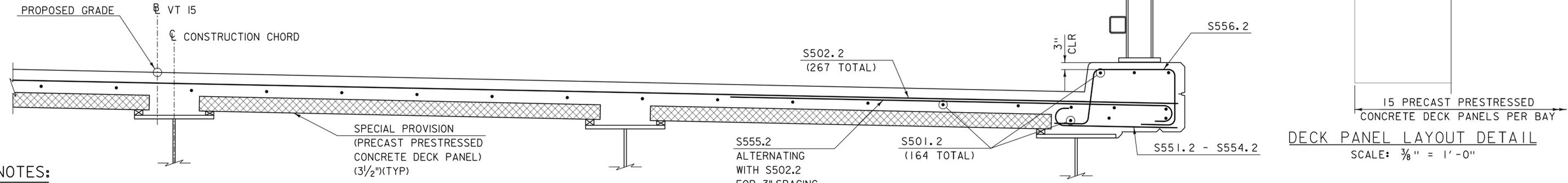
DECK PLAN

SCALE: 1/8" = 1'-0"



DECK PANEL LAYOUT DETAIL

SCALE: 3/8" = 1'-0"

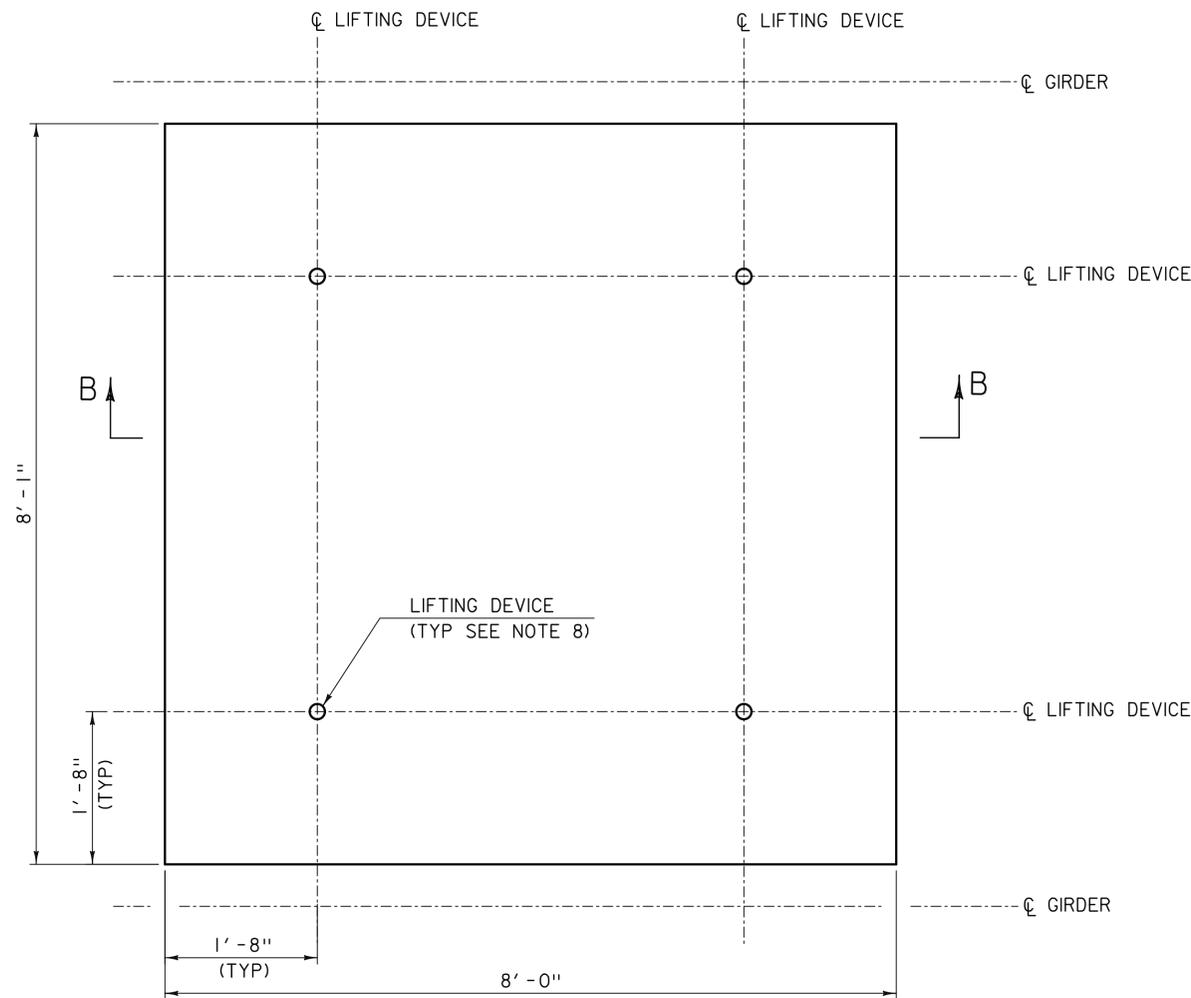


BRIDGE TYPICAL SECTION

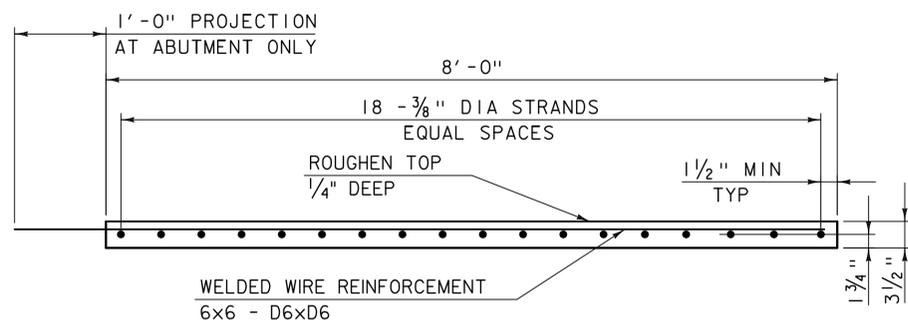
SCALE: 1" = 1'-0"

- NOTES:**
1. TRANSVERSE BARS TO BE PLACED PARALLEL WITH ABUTMENTS.
 2. CURB STIRRUPS TO BE NORMAL TO CURB.
 3. SEE ABUTMENT REINFORCING AND ABUTMENT SECTIONS SHEETS FOR ADDITIONAL REINFORCING NOT SHOWN AT BRIDGE ENDS.

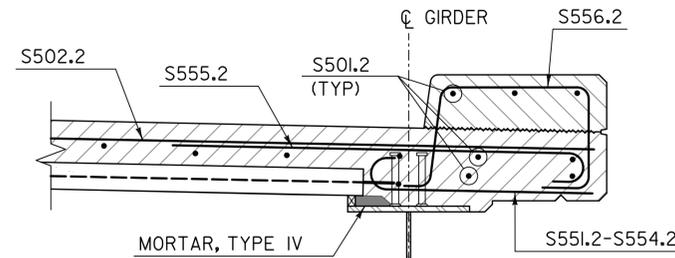
TYLIN INTERNATIONAL	PROJECT NAME: HYDE PARK	PLOT DATE: 11/6/2013
	PROJECT NUMBER: STP CULV(26)	DRAWN BY: B. CARTER
	FILE NAME: z1lb292bdrdeckplan.dgn PROJECT LEADER: R. HEBERT DESIGNED BY: J. OLUND SUPERSTRUCTURE PLAN & SECTIONS	CHECKED BY: D. MYERS SHEET 30 OF 60



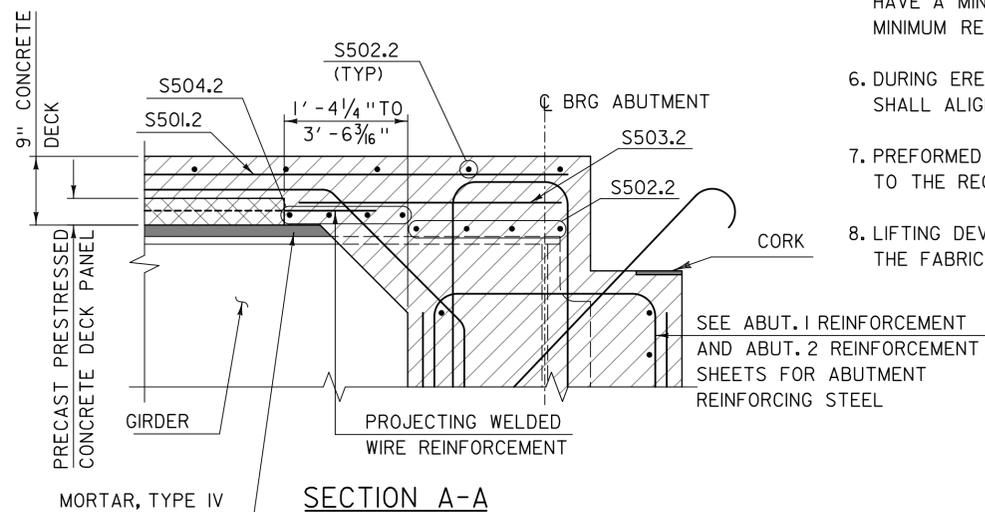
**PRECAST PRESTRESSED
CONCRETE DECK PANEL PLAN**
SCALE: 1" = 1'-0"



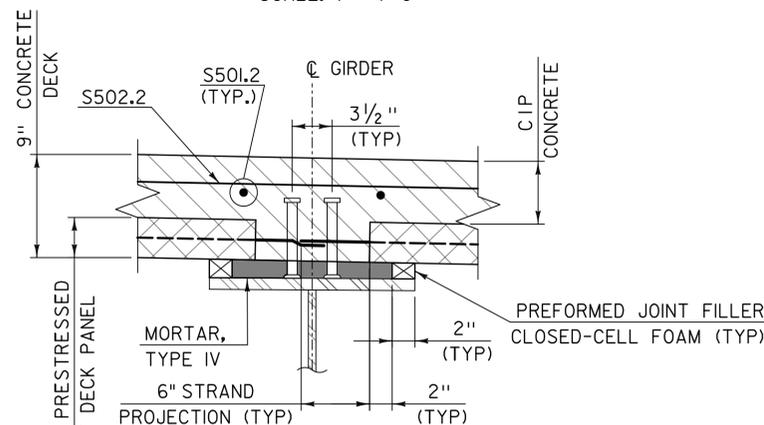
SECTION B-B
SCALE: 1" = 1'-0"



TYPICAL OVERHANG SECTION
SCALE: 1" = 1'-0"



SECTION A-A
SCALE: 1" = 1'-0"



BLOCKING DETAIL
SCALE: 1/2" = 1'-0"

NOTES:

1. PRECAST PRESTRESSED CONCRETE DECK PANELS SHALL BE FABRICATED IN ACCORDANCE WITH SECTION 510 OF THE STANDARD SPECIFICATIONS AND SPECIAL PROVISION 900.670. MORTAR, TYPE IV AND PREFORMED JOINT FILLER CLOSED - CELL FOAM SHALL BE PAID FOR UNDER SPECIAL PROVISION ITEM 900.670 (PRECAST PRESTRESSED CONCRETE DECK PANEL)(3 1/2").
2. PANEL WIDTHS OF LESS THAN 8'-0" MAY BE USED. PROVIDE STRANDS IN THE RATIO OF THE SMALLER PANEL WIDTH TO 8'-0", MULTIPLIED BY THE NUMBER OF STRANDS SHOWN, ROUNDING UP TO THE NEXT EVEN NUMBER OF STRANDS. THE MINIMUM PANEL WIDTH IS 3'-0".
3. PRESTRESSING STRANDS SHALL BE 3/8" DIAMETER, GRADE 270 SEVEN - WIRE LOW RELAXATION STRANDS CONFORMING TO THE REQUIREMENTS OF AASHTO M203 (ASTM A416). INITIAL TENSION SHALL BE 17.2 KIPS PER STRAND.
4. A MAT OF #3 REINFORCING BARS SPACED AT 6 INCHES O.C. IN EACH DIRECTION MAY BE SUBSTITUTED FOR WELDED WIRE FABRIC. THE WELDED WIRE FABRIC OR THE REINFORCING BARS SHALL MEET THE REQUIREMENTS OF SECTION 507 FOR REINFORCING STEEL, LEVEL II.
5. CONCRETE FOR PRECAST PRESTRESSED CONCRETE DECK PANELS SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 5,000 PSI AND A MINIMUM RELEASE STRENGTH OF 4,000 PSI.
6. DURING ERECTION, PRECAST PRESTRESSED CONCRETE DECK PANELS SHALL ALIGN VERTICALLY TO WITHIN 1/4 INCH.
7. PREFORMED JOINT FILLER, CLOSED-CELL FOAM SHALL BE CUT IN THE FIELD TO THE REQUIRED THICKNESS.
8. LIFTING DEVICE SELECTION AND DESIGN SHALL BE THE RESPONSIBILITY OF THE FABRICATOR.

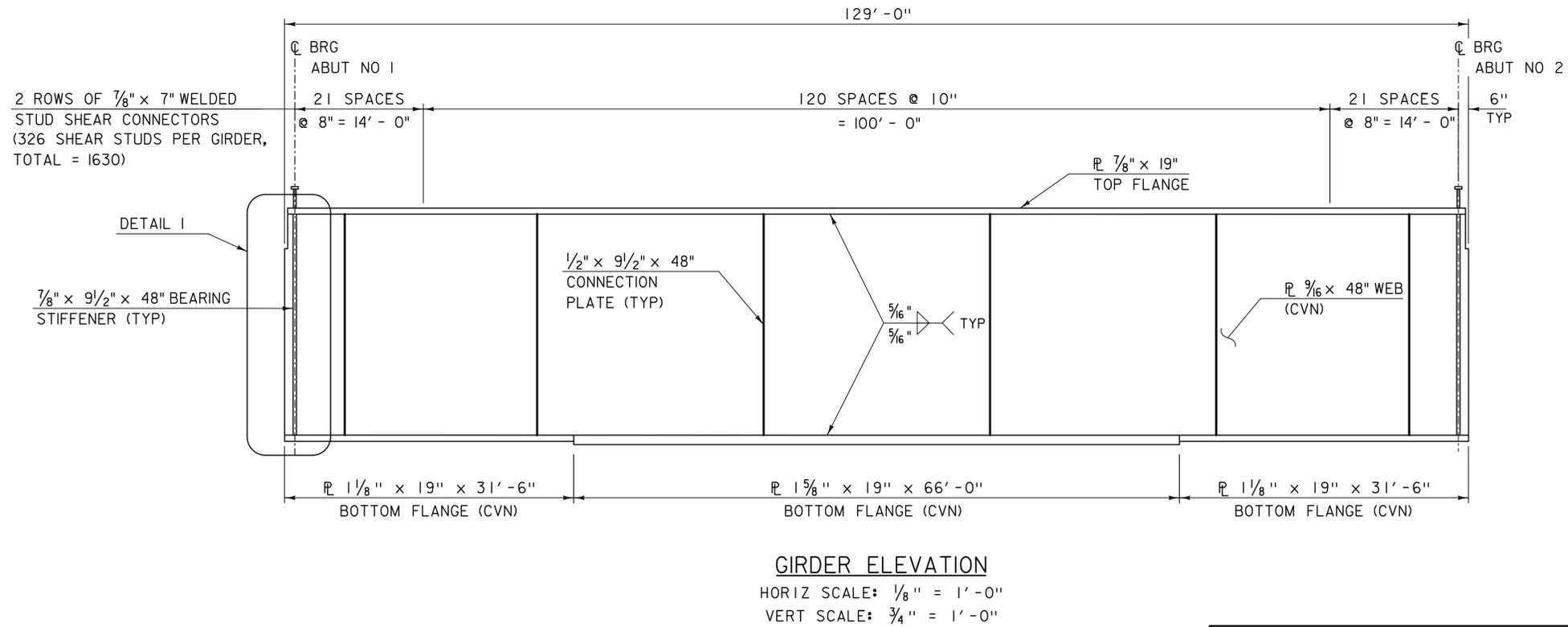
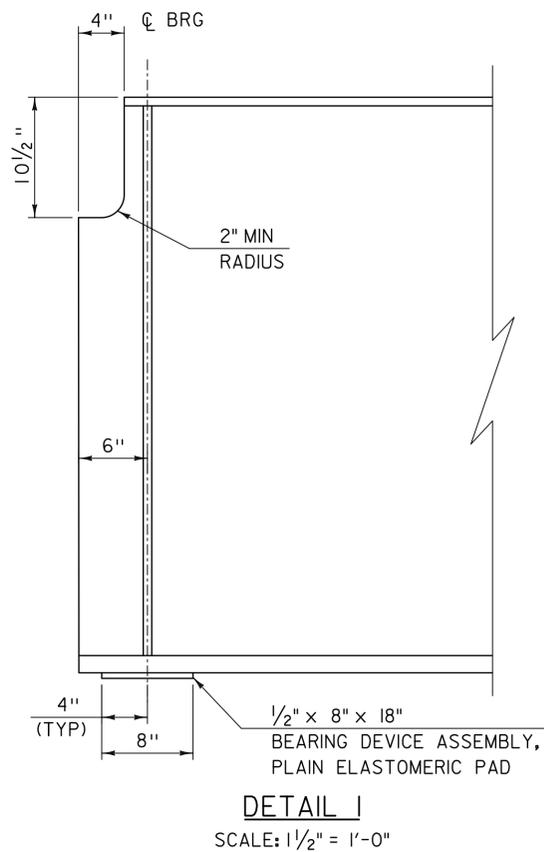
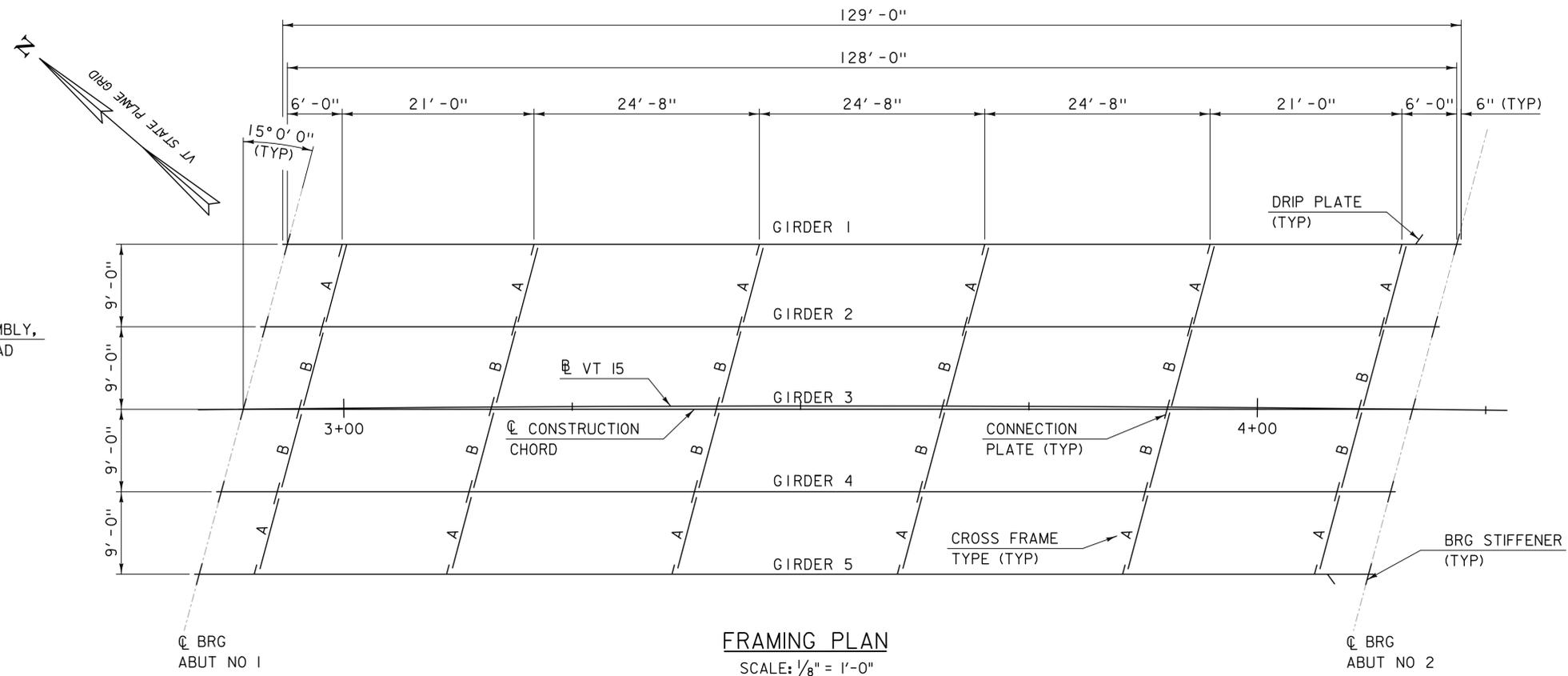
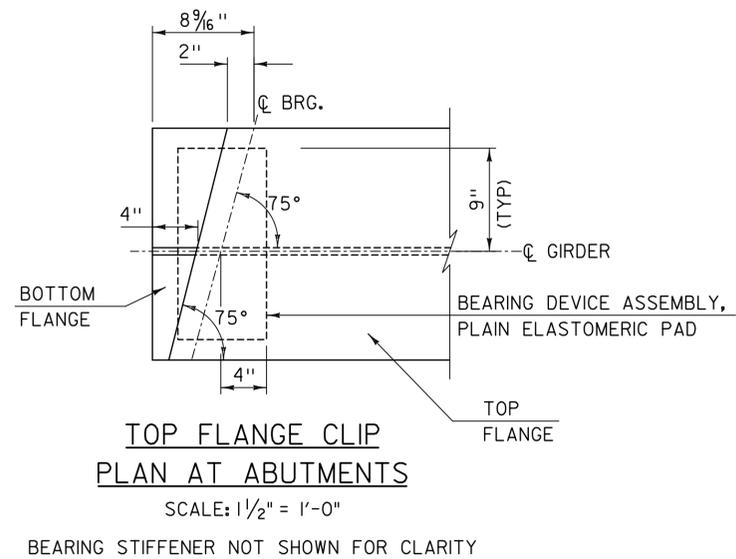
LEGEND:

- CONCRETE, HIGH PERFORMANCE CLASS A
- PRECAST PRESTRESSED CONCRETE DECK PANEL
- MORTAR, TYPE IV

PROJECT NAME: HYDE PARK
PROJECT NUMBER: STP CULV(26)

FILE NAME: z1lb292bdrsupl.dgn
PROJECT LEADER: R. HEBERT
DESIGNED BY: J. OLUND
PRECAST CONCRETE DECK PANEL DETAILS

PLOT DATE: 11/6/2013
DRAWN BY: B. CARTER
CHECKED BY: D. MYERS
SHEET 31 OF 60

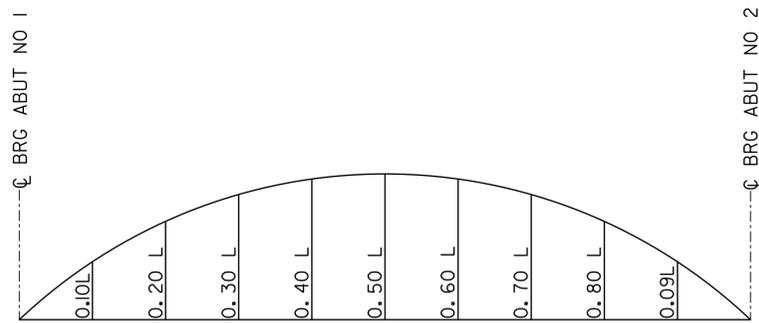


TYLIN INTERNATIONAL

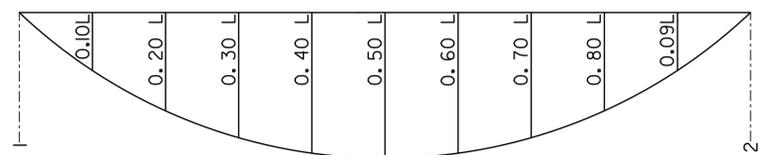
PROJECT NAME: HYDE PARK
PROJECT NUMBER: STP CULV(26)

FILE NAME: z11b292bdrframe.dgn
PROJECT LEADER: R. HEBERT
DESIGNED BY: T. POULIN
FRAMING PLAN & GIRDER ELEVATION

PLOT DATE: 11/6/2013
DRAWN BY: B. CARTER
CHECKED BY: D. MYERS
SHEET 32 OF 60



CAMBER DIAGRAM
NOT TO SCALE

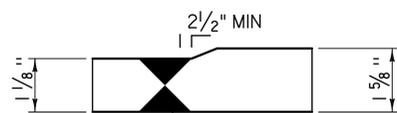


TOTAL DEAD LOAD DEFLECTION DIAGRAM
NOT TO SCALE

GIRDER 1-5	.10L	.20L	.30L	.40L	.50L	.60L	.70L	.80L	.90L
STEEL DEFLECTION	0 1/2"	1"	1 3/8"	1 9/16"	1 5/8"	1 9/16"	1 3/8"	1"	0 1/2"
SLAB & SDL DEFLECTION	2 1/8"	3 15/16"	5 3/8"	6 5/16"	6 5/8"	6 5/16"	5 3/8"	3 15/16"	2 1/8"
TOTAL DEFLECTION	2 5/8"	4 15/16"	6 3/4"	7 7/8"	8 1/4"	7 7/8"	6 3/4"	4 15/16"	2 5/8"
VERTICAL CURVE CAMBER	-1"	-1 3/4"	-2 5/16"	-2 5/8"	-2 3/4"	-2 5/16"	-1 3/4"	-1"	-1"
TOTAL CAMBER	1 5/8"	3 3/16"	4 7/16"	5 3/16"	5 1/2"	5 3/16"	4 7/16"	3 3/16"	1 5/8"

NOTE:

FUTURE WEARING SURFACE NOT CONSIDERED IN CAMBER.



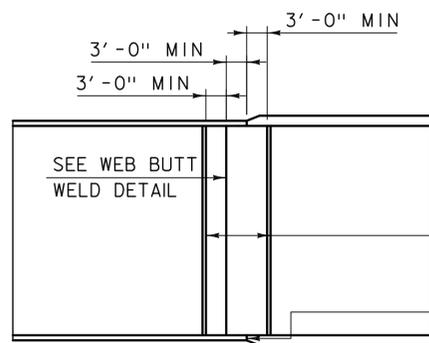
COMPLETE JOINT PENETRATION GROOVE WELD TO BE GROUND SMOOTH AND FLUSH IN THE LONGITUDINAL DIRECTION OF THE GIRDER

FLANGE TRANSITION BUTT WELD
NOT TO SCALE

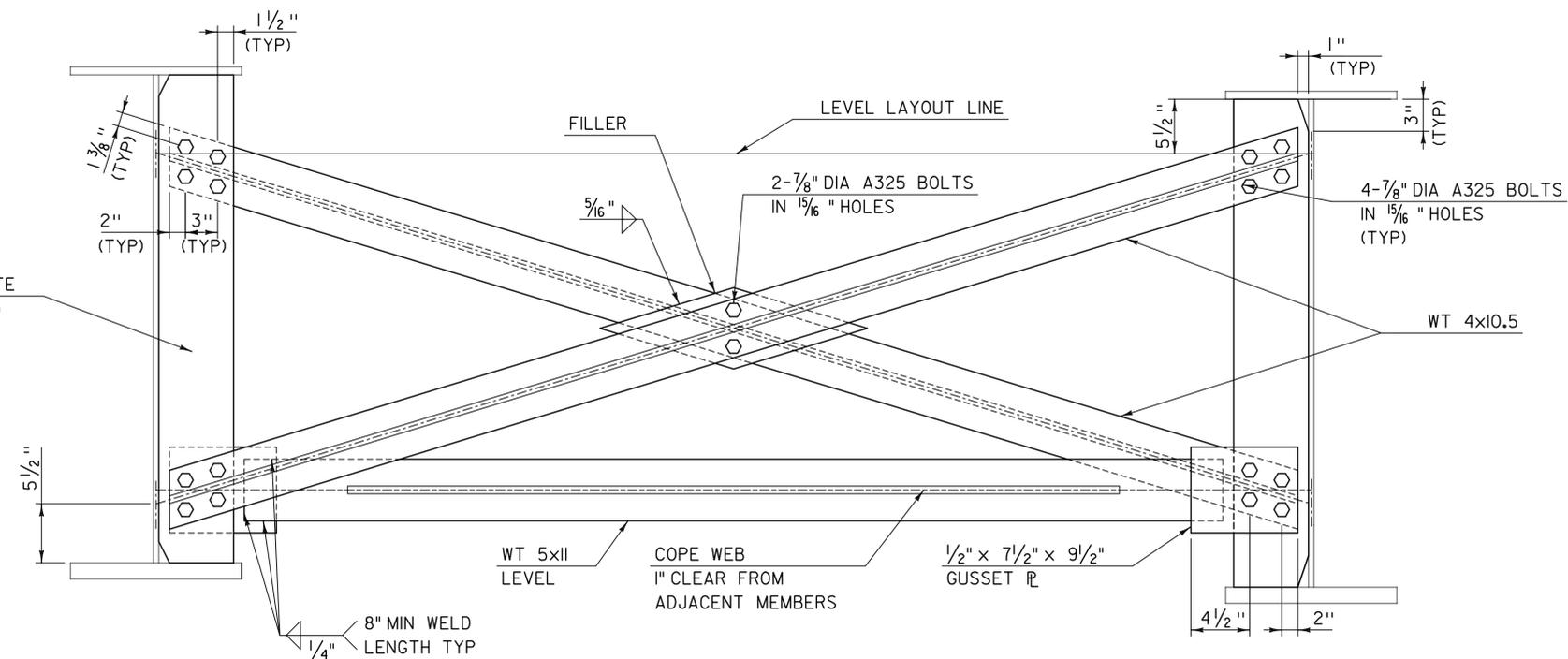


COMPLETE JOINT PENETRATION GROOVE WELD TO BE GROUND SMOOTH AND FLUSH IN THE LONGITUDINAL DIRECTION OF THE GIRDER

FLANGE OR WEB BUTT WELD
NOT TO SCALE

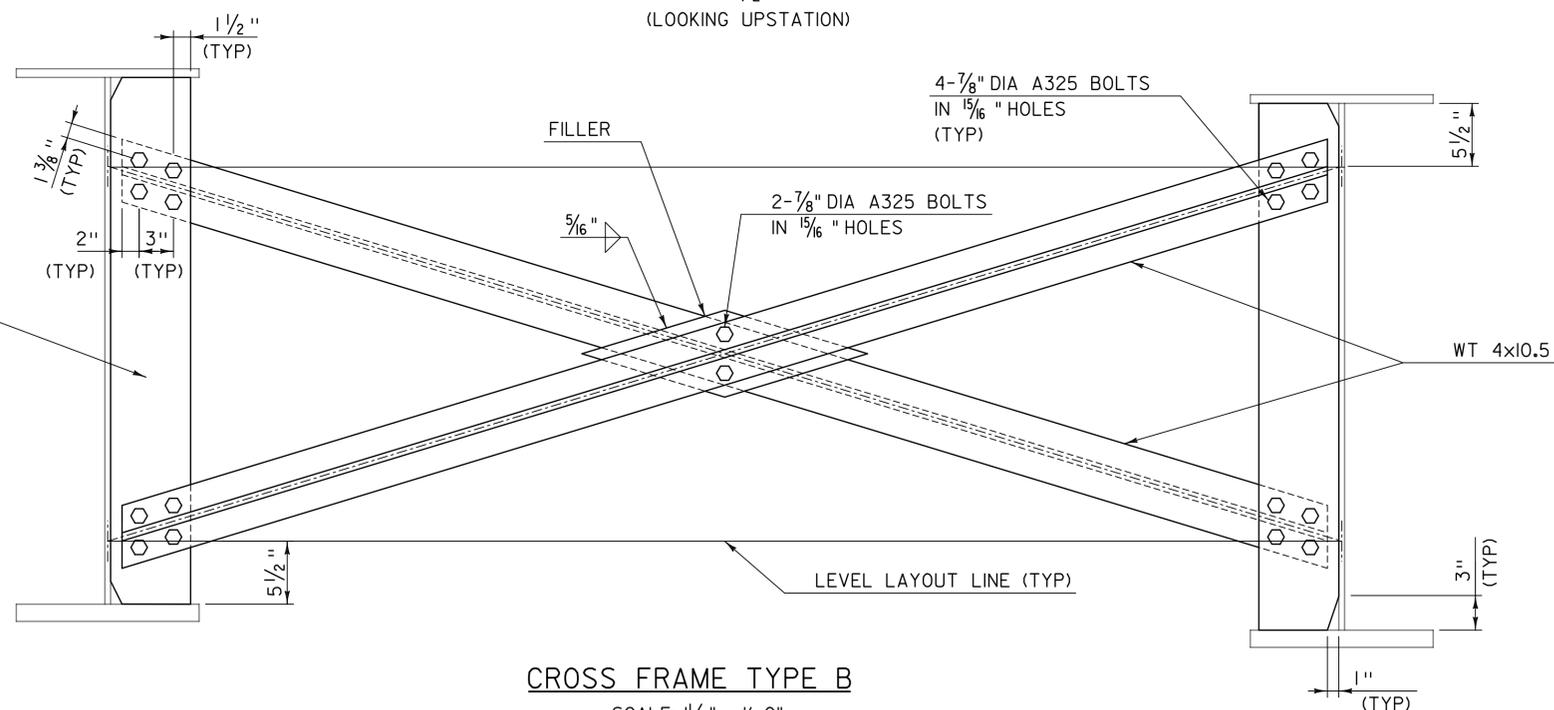


WELDED SPLICE TRANSITION
NOT TO SCALE



CROSS FRAME TYPE A

SCALE: 1 1/2" = 1'-0"
(LOOKING UPSTATION)



CROSS FRAME TYPE B

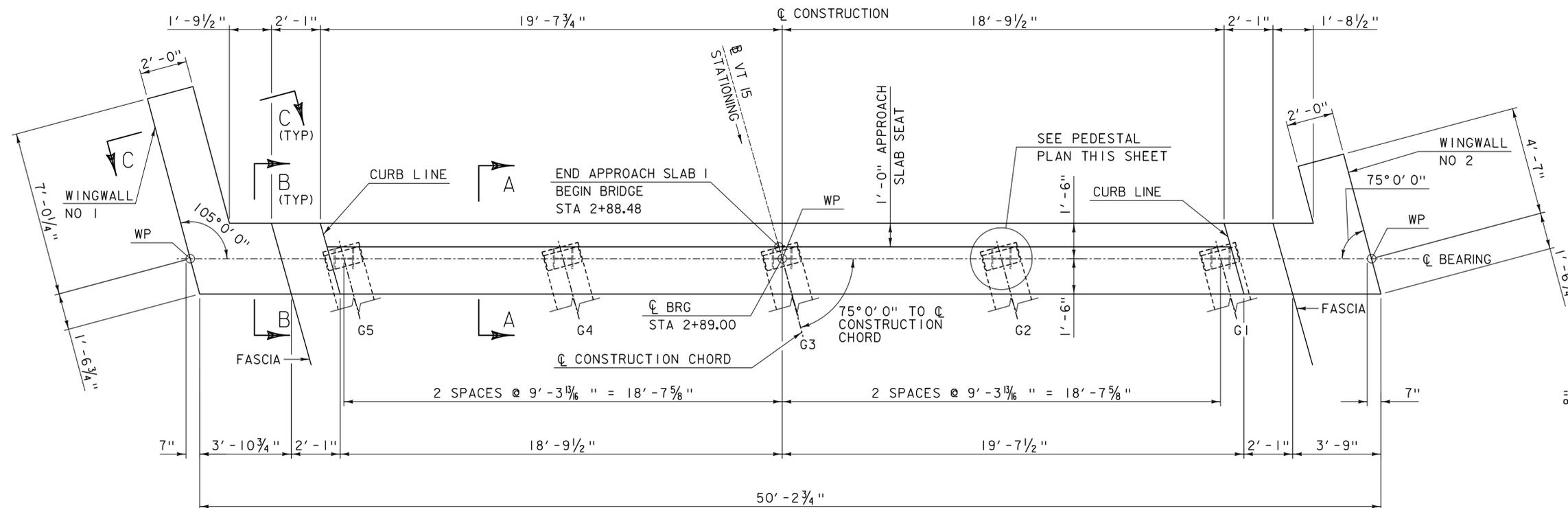
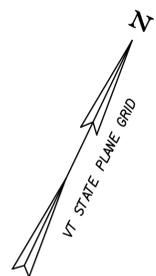
SCALE: 1 1/2" = 1'-0"
(LOOKING UPSTATION)

TYLIN INTERNATIONAL

PROJECT NAME: HYDE PARK
PROJECT NUMBER: STP CULV(26)

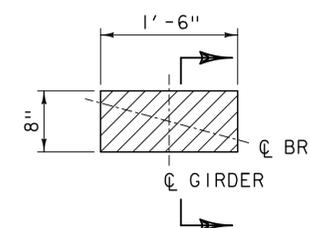
FILE NAME: z11b292bdrxfame.dgn
PROJECT LEADER: R. HEBERT
DESIGNED BY: T. POULIN
STEEL GIRDER DETAILS

PLOT DATE: 11/6/2013
DRAWN BY: B. CARTER
CHECKED BY: D. MYERS
SHEET 33 OF 60

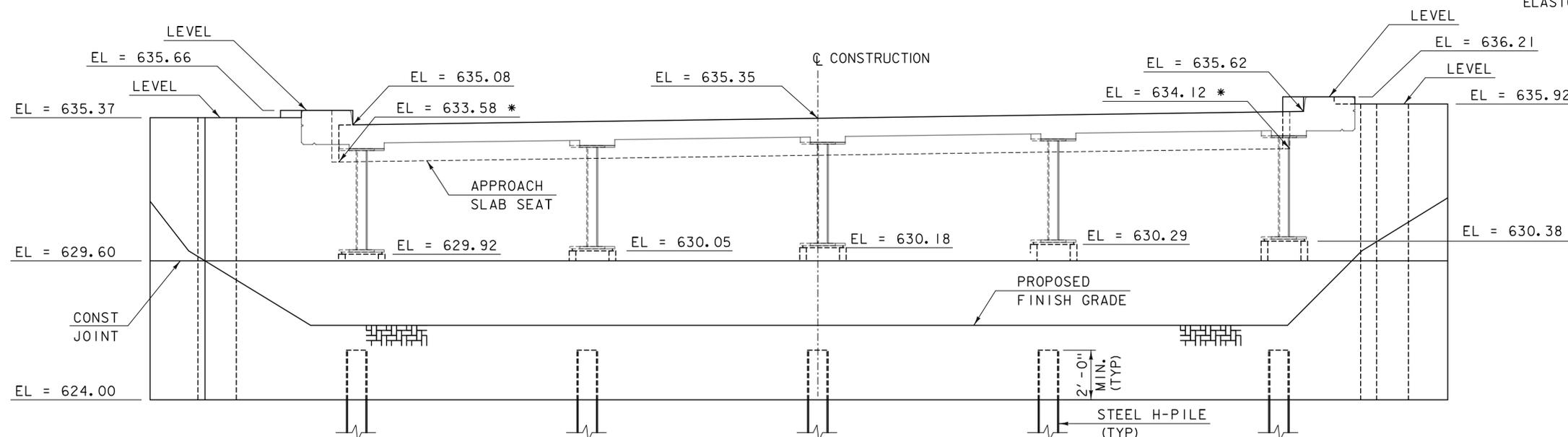


ABUTMENT NO. 1 PLAN

SCALE: $\frac{3}{8}$ " = 1'-0"
 NOTE: SEE ABUTMENT SECTIONS SHEET
 FOR SECTIONS A-A, B-B, AND C-C.

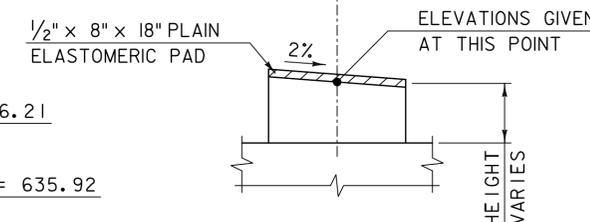


PEDESTAL PLAN
 SCALE: 1" = 1'-0"



ABUTMENT NO. 1 ELEVATION

SCALE: $\frac{3}{8}$ " = 1'-0"
 NOTE: ELEVATIONS AT FRONT FACE OF ABUTMENT
 UNLESS OTHERWISE NOTED



PEDESTAL SECTION
 SCALE: 1" = 1'-0"

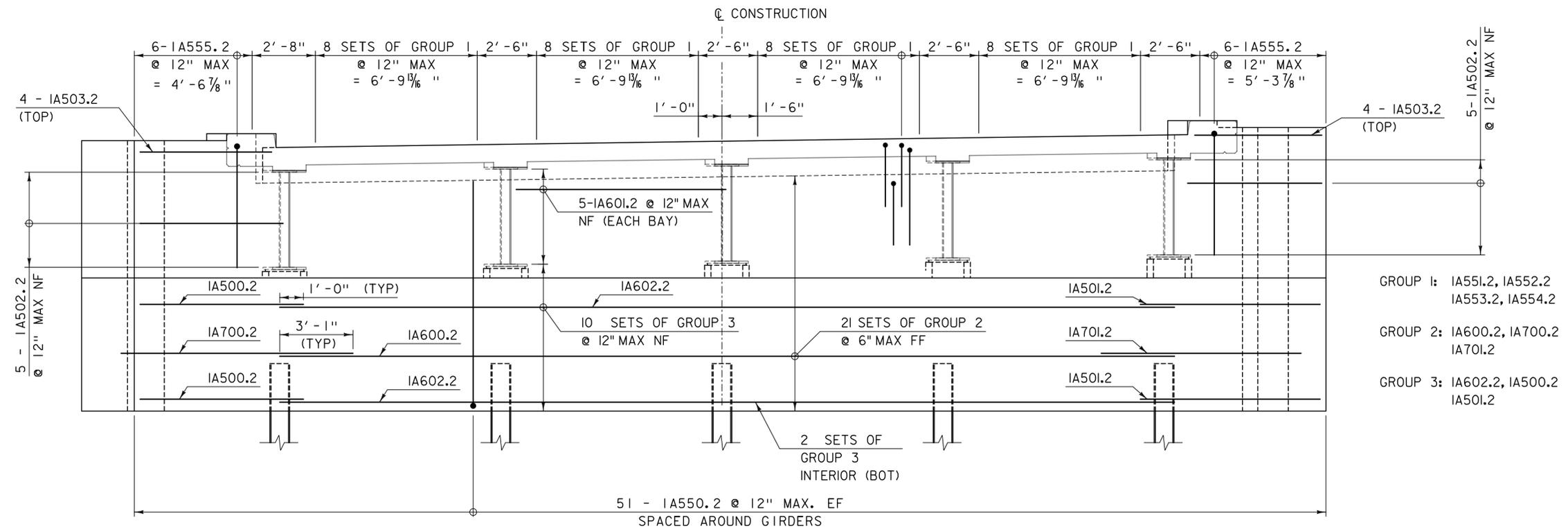
* ELEVATIONS AT CORNER
 OF APPROACH SLAB SEAT

TYLINT INTERNATIONAL

PROJECT NAME: HYDE PARK
 PROJECT NUMBER: STP CULV(26)

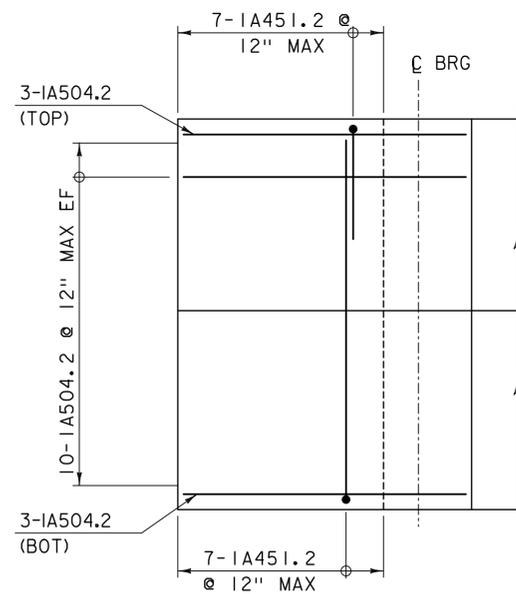
FILE NAME: z1lb292bdrabu1.dgn
 PROJECT LEADER: R. HEBERT
 DESIGNED BY: D. MYERS
 ABUTMENT I PLAN AND ELEVATION

PLOT DATE: 11/6/2013
 DRAWN BY: T. KELLEY
 CHECKED BY: J. OLUND
 SHEET 34 OF 60



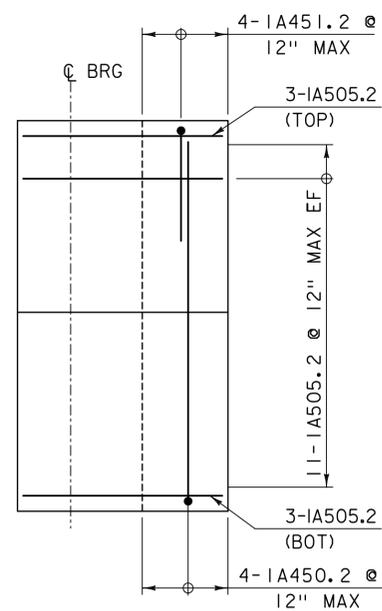
ABUTMENT NO 1 REINFORCEMENT ELEVATION

SCALE: 3/8" = 1'-0"



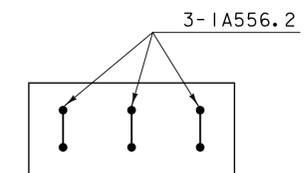
WINGWALL 1 - REINFORCEMENT ELEVATION

SCALE: 3/8" = 1'-0"



WINGWALL 2 - REINFORCEMENT ELEVATION

SCALE: 3/8" = 1'-0"



TYPICAL PEDESTAL REINFORCEMENT PLAN

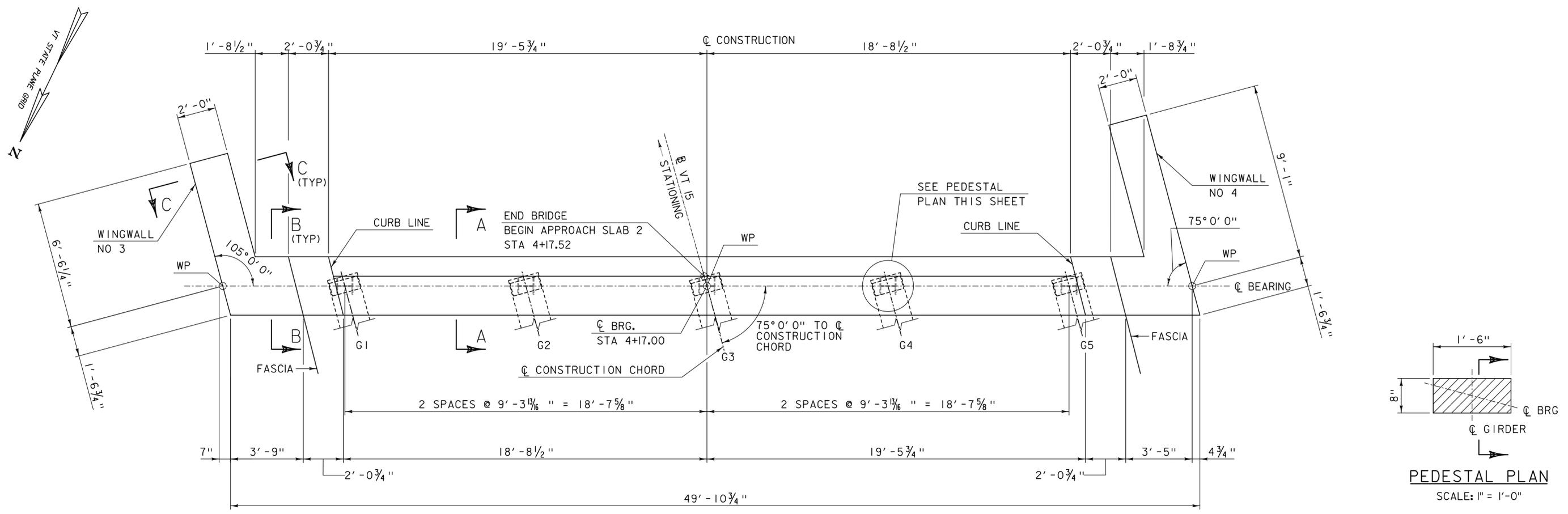
SCALE: 1/2" = 1'-0"

TYLINTERNATIONAL

PROJECT NAME: HYDE PARK
PROJECT NUMBER: STP CULV(26)

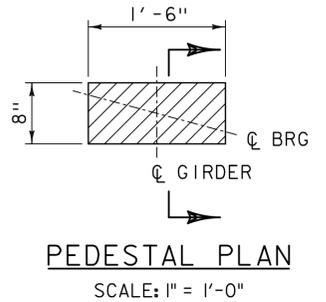
FILE NAME: zllb292bdrabu1r.dgn
PROJECT LEADER: R. HEBERT
DESIGNED BY: D. MYERS
ABUTMENT 1- REINFORCEMENT

PLOT DATE: 11/6/2013
DRAWN BY: S. MORGAN
CHECKED BY: D. MYERS
SHEET 35 OF 60

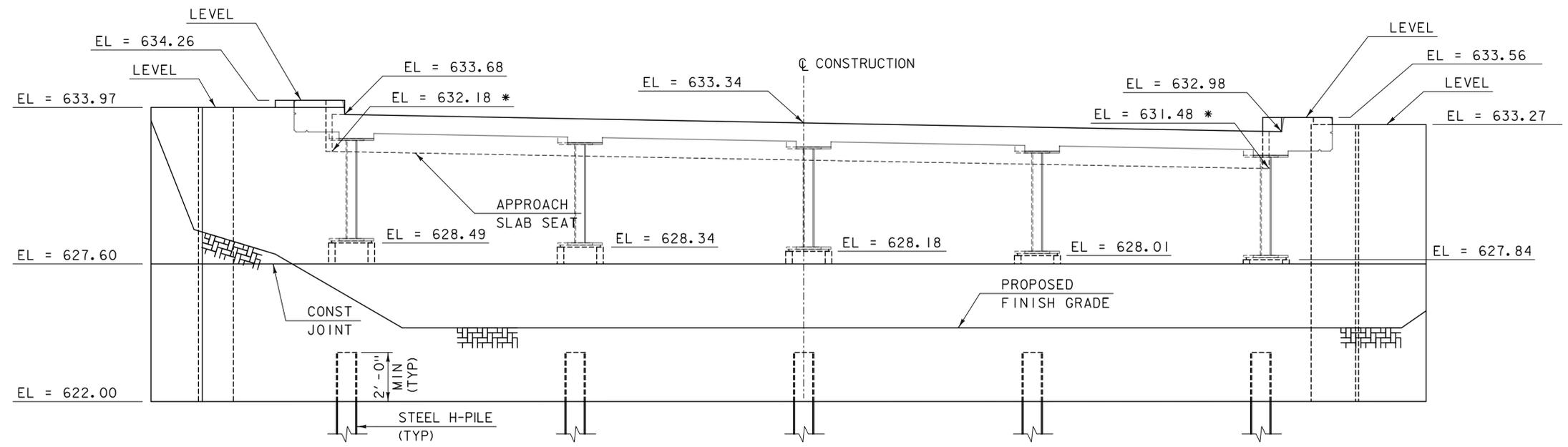


ABUTMENT NO. 2 PLAN

SCALE: 3/8" = 1'-0"
 NOTE: SEE ABUTMENT SECTIONS SHEET FOR SECTIONS A-A, B-B AND C-C

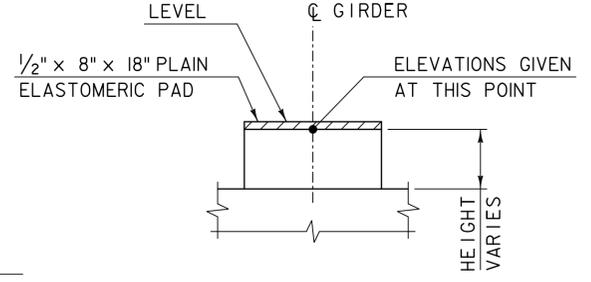


PEDESTAL PLAN
 SCALE: 1" = 1'-0"



ABUTMENT NO. 2 ELEVATION

SCALE: 3/8" = 1'-0"
 NOTE: ELEVATIONS AT FRONT FACE OF ABUTMENT UNLESS OTHERWISE NOTED

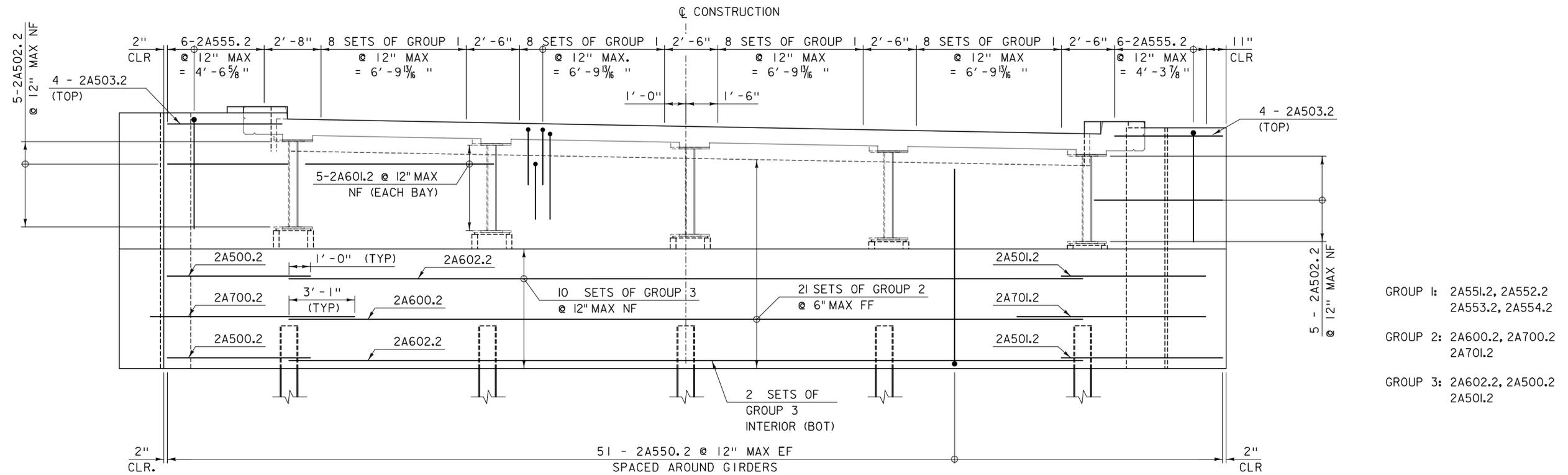


PEDESTAL SECTION
 SCALE: 1" = 1'-0"

* ELEVATIONS AT CORNER OF APPROACH SLAB SEAT



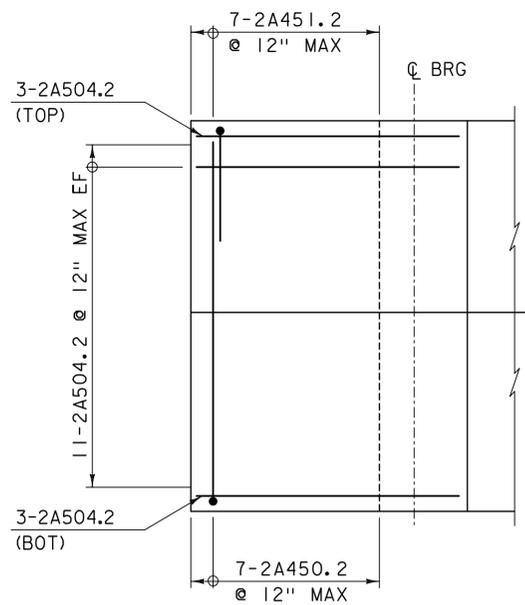
PROJECT NAME: HYDE PARK	PLOT DATE: 11/6/2013
PROJECT NUMBER: STP CULV(26)	DRAWN BY: T.KELLEY
FILE NAME: z11b292bdrabut2.dgn	CHECKED BY: J. OLUND
PROJECT LEADER: R. HEBERT	SHEET 36 OF 60
DESIGNED BY: D. MYERS	
ABUTMENT 2 PLAN AND ELEVATION	



- GROUP 1: 2A551.2, 2A552.2
2A553.2, 2A554.2
- GROUP 2: 2A600.2, 2A700.2
2A701.2
- GROUP 3: 2A602.2, 2A500.2
2A501.2

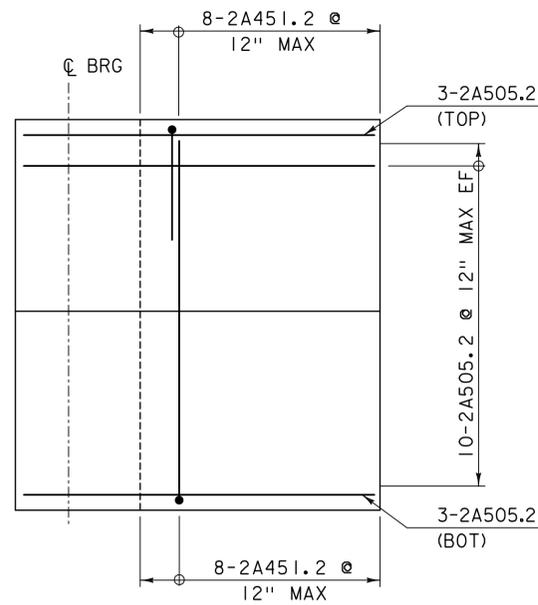
ABUTMENT NO. 2 REINFORCEMENT ELEVATION

SCALE: 3/8" = 1'-0"



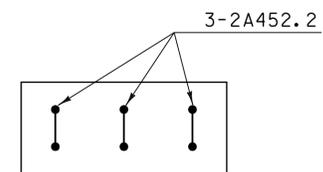
WINGWALL 3 - REINFORCEMENT ELEVATION

SCALE: 3/8" = 1'-0"



WINGWALL 4 - REINFORCEMENT ELEVATION

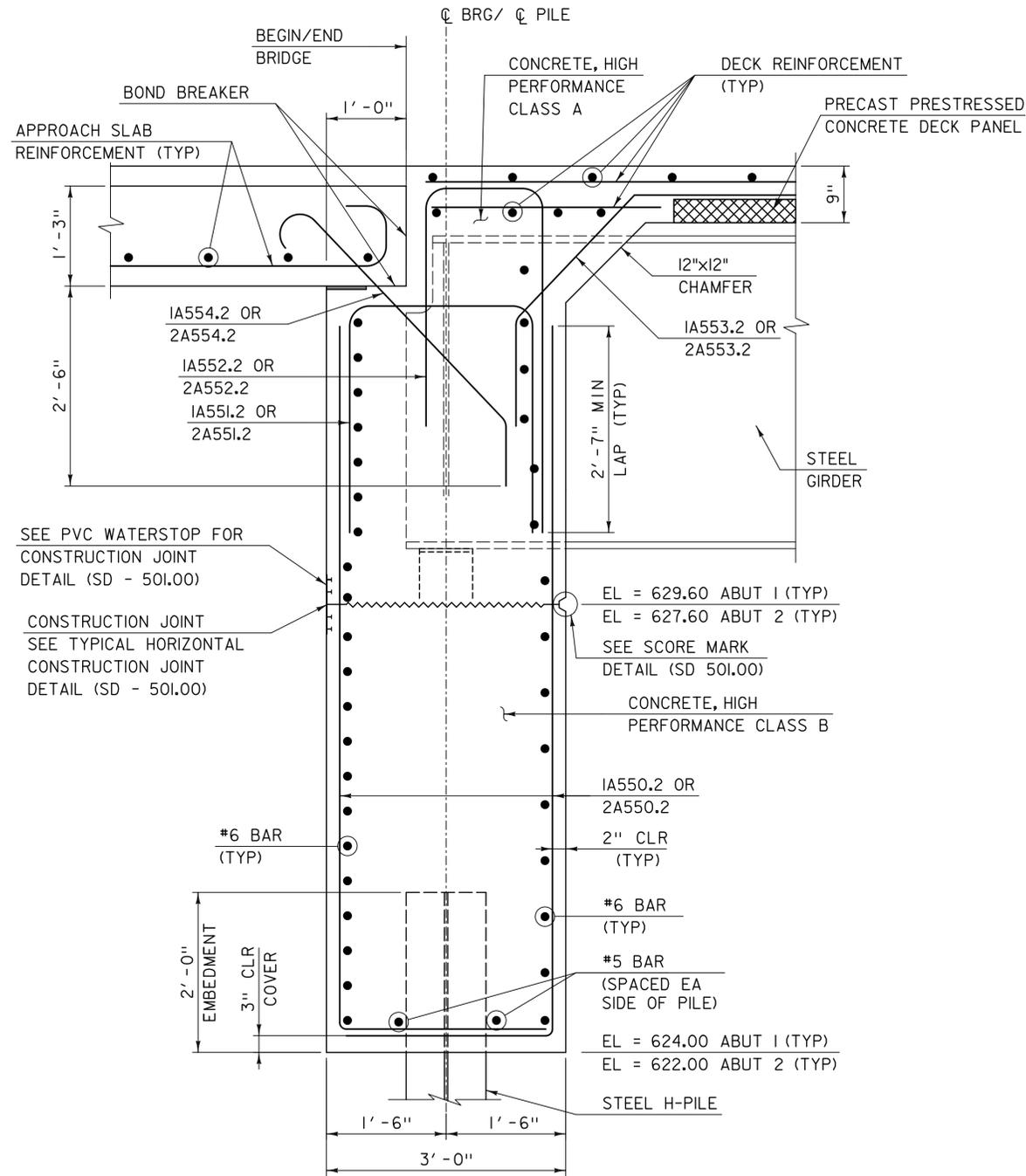
SCALE: 3/8" = 1'-0"



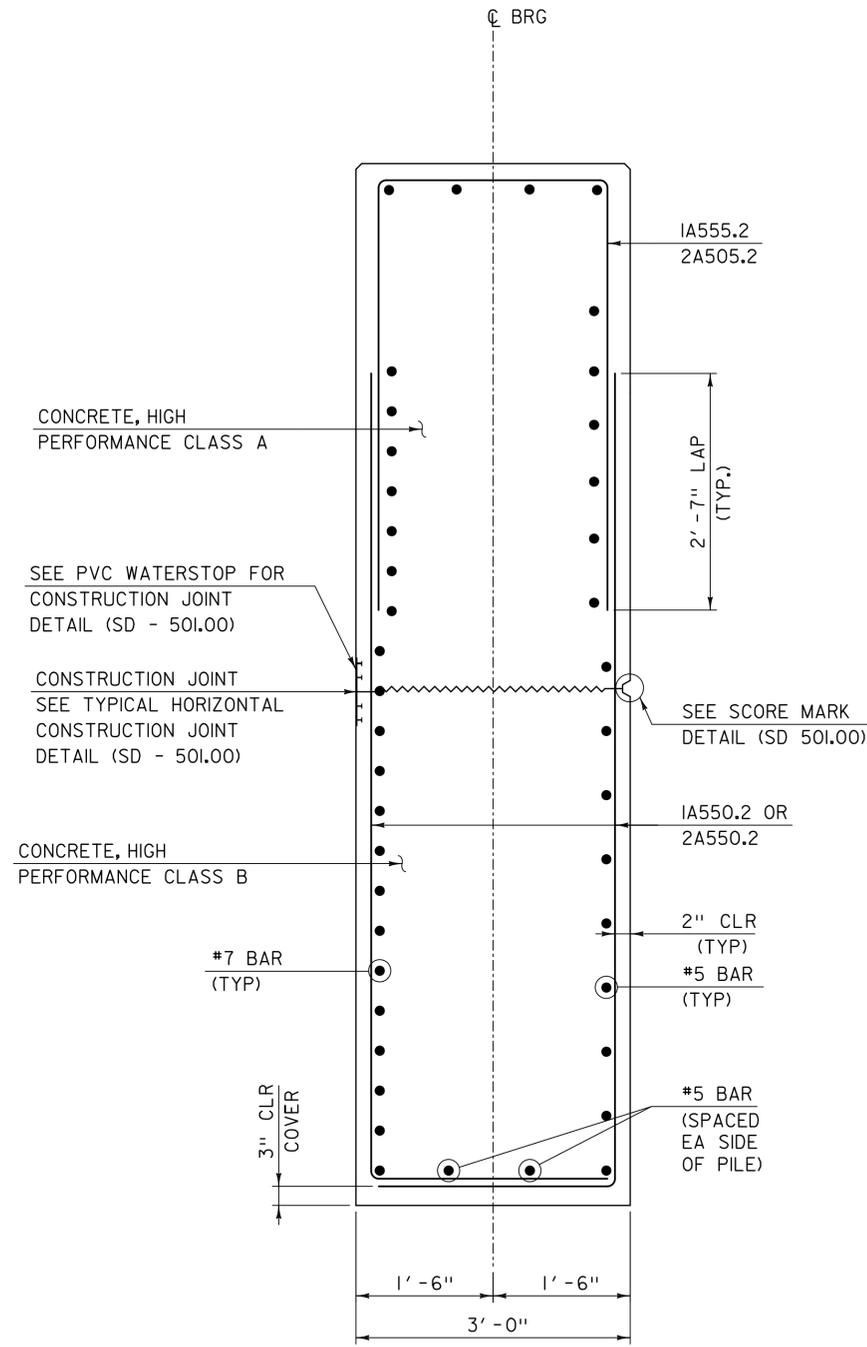
TYPICAL PEDESTAL REINFORCEMENT PLAN

SCALE: 1/2" = 1'-0"

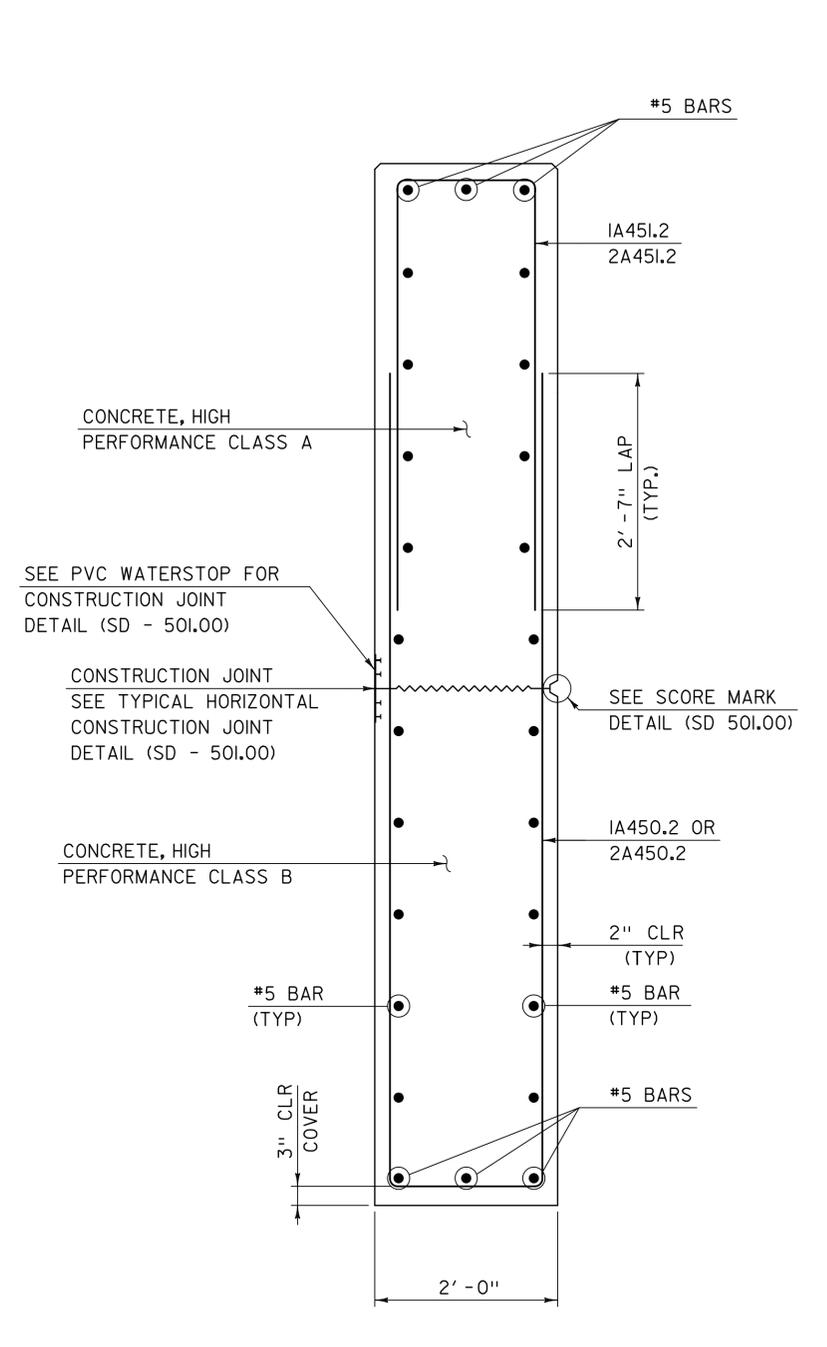
TYLIN INTERNATIONAL	PROJECT NAME: HYDE PARK	PLOT DATE: 11/6/2013
	PROJECT NUMBER: STP CULV(26)	DRAWN BY: S. MORGAN
	FILE NAME: zllb292bdrabut2r.dgn	CHECKED BY: T. POULIN
	PROJECT LEADER: R. HEBERT	SHEET 37 OF 60
	DESIGNED BY: D. MYERS	
	ABUTMENT 2 - REINFORCEMENT	



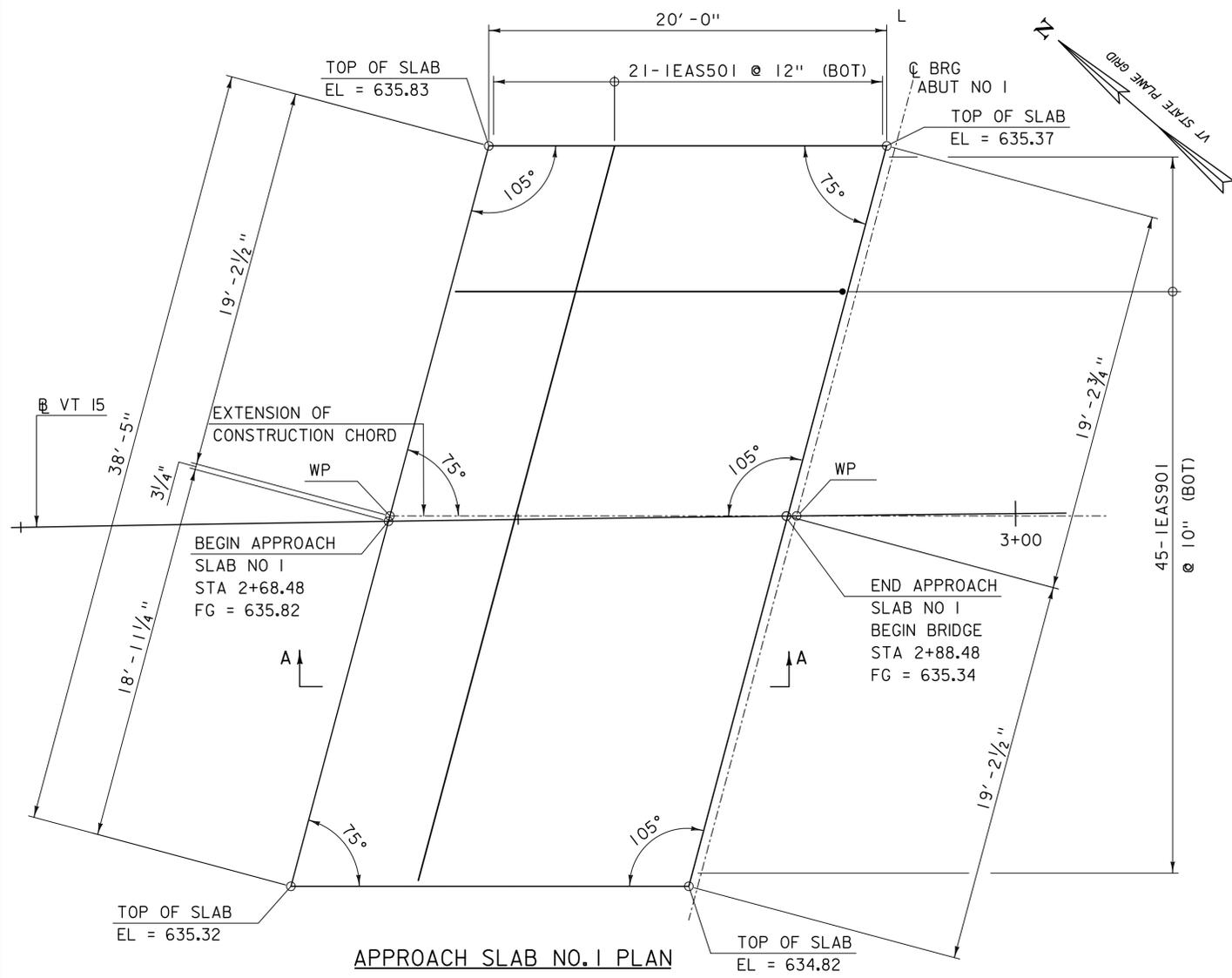
SECTION A-A
 ABUTMENT - APPROACH SLAB
 SCALE: 1" = 1'-0"



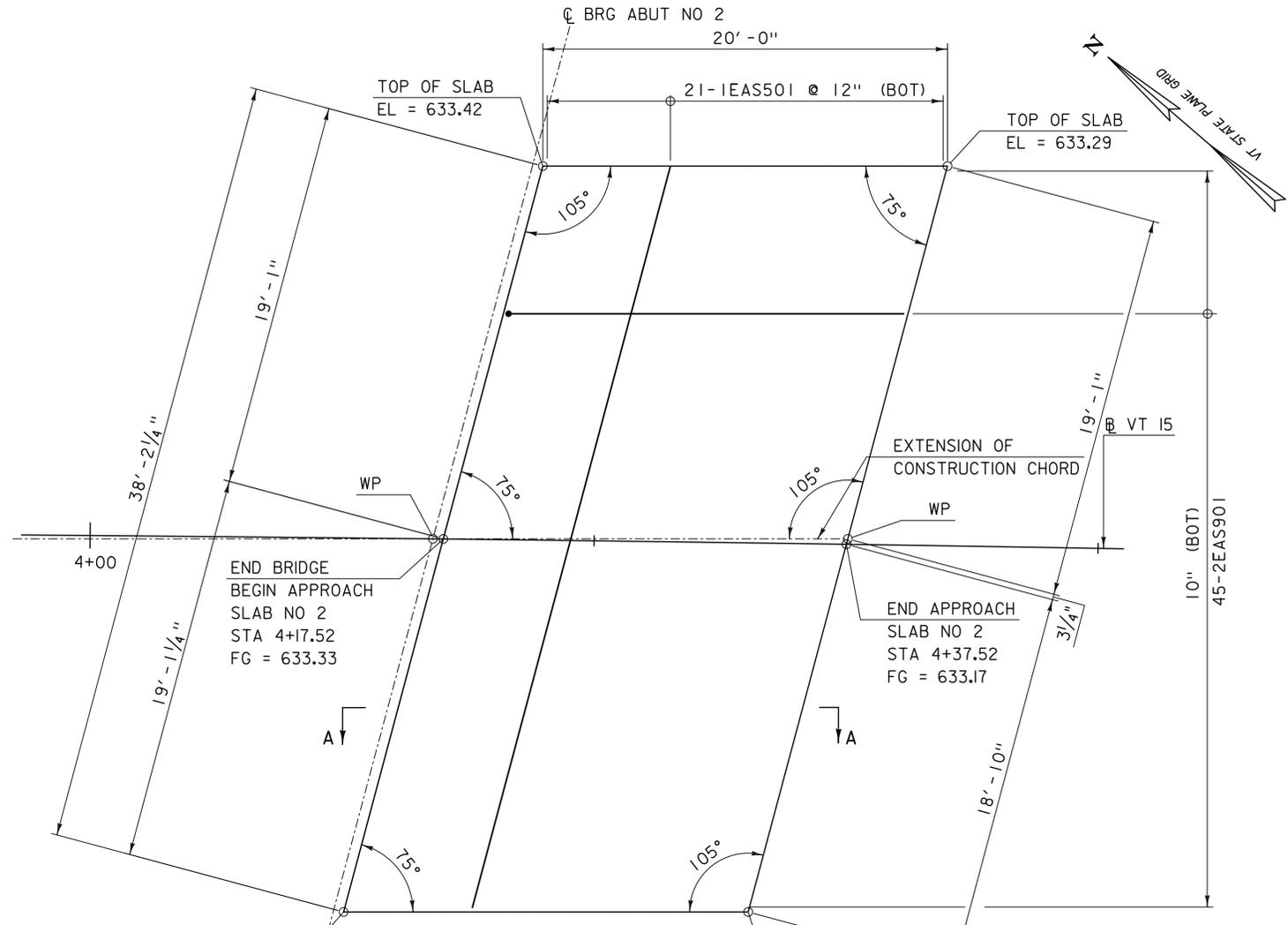
SECTION B-B
 ABUTMENT - BACKWALL
 SCALE: 1" = 1'-0"



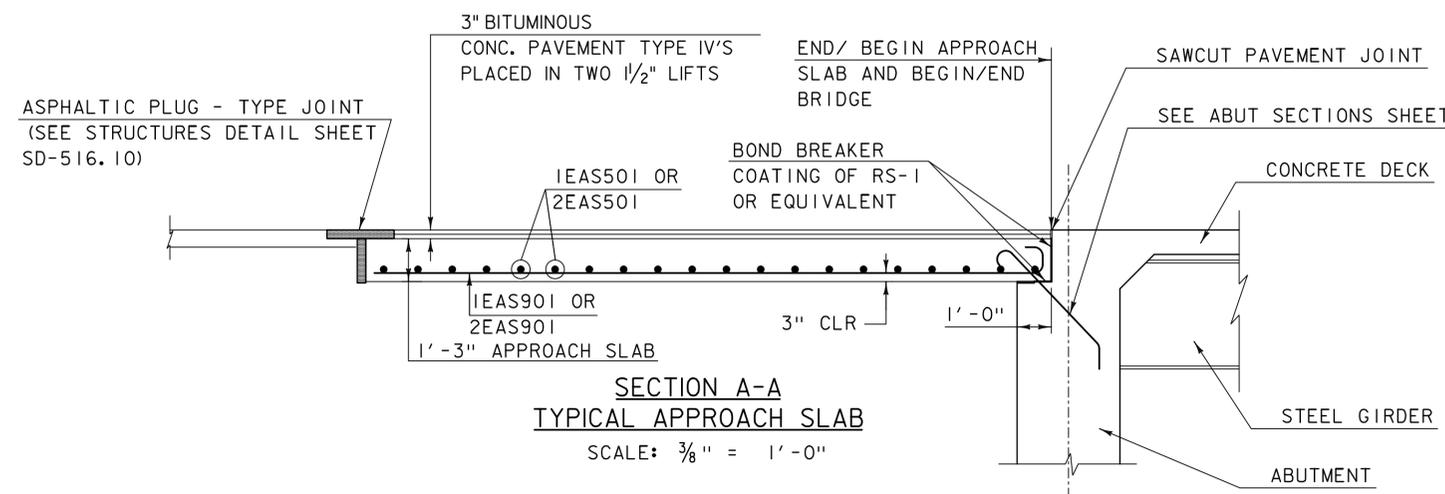
SECTION C-C
 WINGWALL TYPICAL
 SCALE: 1" = 1'-0"



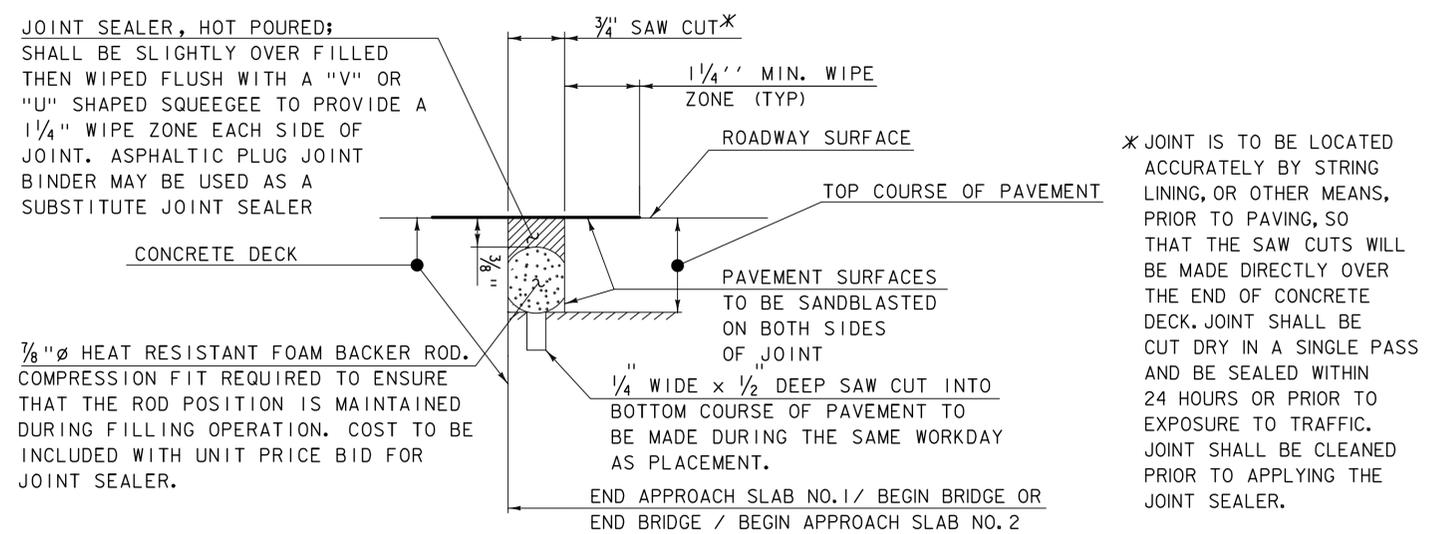
APPROACH SLAB NO. 1 PLAN
SCALE: 1/4" = 1'-0"



APPROACH SLAB NO. 2 PLAN
SCALE: 1/4" = 1'-0"



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



* JOINT IS TO BE LOCATED ACCURATELY BY STRING LINING, OR OTHER MEANS, PRIOR TO PAVING, SO THAT THE SAW CUTS WILL BE MADE DIRECTLY OVER THE END OF CONCRETE DECK. JOINT SHALL BE CUT DRY IN A SINGLE PASS AND BE SEALED WITHIN 24 HOURS OR PRIOR TO EXPOSURE TO TRAFFIC. JOINT SHALL BE CLEANED PRIOR TO APPLYING THE JOINT SEALER.

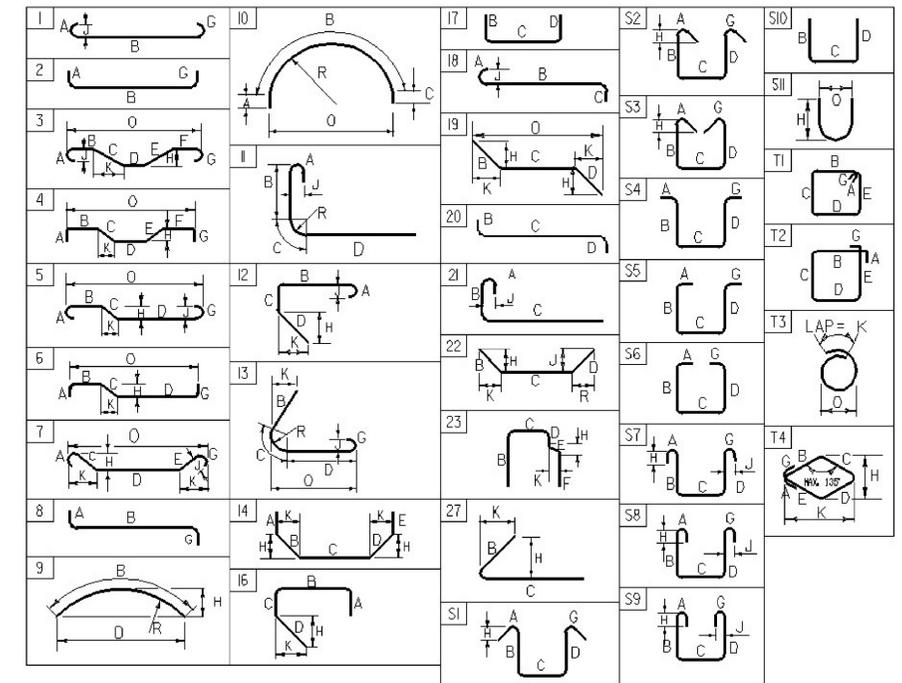
ITEM 524.II, "JOINT SEALER, HOT POURED"
SAWED PAVEMENT JOINT DETAIL
(NOT TO SCALE)

REINFORCING STEEL SCHEDULE

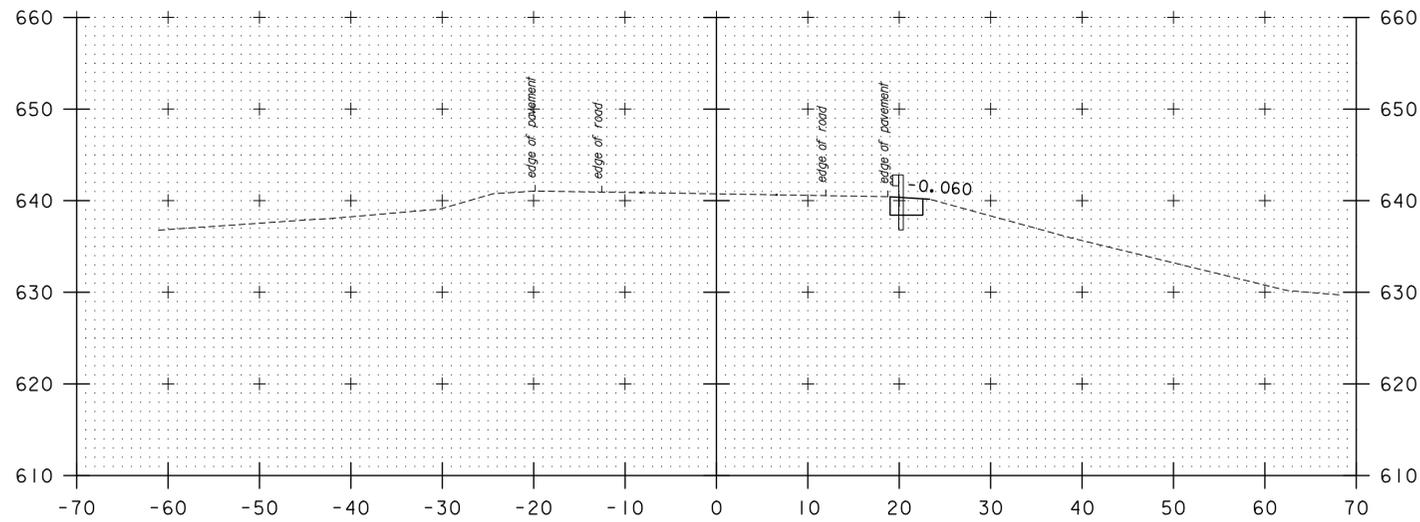
ITEM	EACH	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O	ITEM	EACH	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O		
DECK REINFORCEMENT																																					
164	5	33'- 5"	S501.2	STR																																	
267	5	42'- 1"	S502.2	STR																																	
56	5	3'- 3"	S503.2	STR																																	
32	5	9'- 0"	S504.2	STR																																	
178	5	3'- 1"	S551.2	1	0'- 7"	2'- 6"						0'- 0"																									
80	5	3'- 3"	S552.2	1	0'- 7"	2'- 8"						0'- 0"																									
178	5	3'- 7"	S553.2	1	0'- 7"	3'- 0"						0'- 0"																									
80	5	3'- 5"	S554.2	1	0'- 7"	2'- 10"						0'- 0"																									
516	5	6'- 4"	S555.2	1	0'- 7"	5'- 9"						0'- 0"																									
362	5	5'- 0"	S556.2	S5	0'- 10"	0'- 11"	1'- 6"	0'- 11"				0'- 10"																									
ABUTMENT 1 REINFORCEMENT																																					
16	4	8'- 3"	1A400.2	STR																																	
*	18	4	5'- 3"	1A401.2	STR																																
9	5	7'- 0"	1A500.2	STR																																	
9	5	7'- 8"	1A501.2	STR																																	
10	5	6'- 1"	1A502.2	STR																																	
8	5	5'- 5"	1A503.2	STR																																	
10	5	8'- 3"	1A504.2	STR																																	
*	12	5	5'- 3"	1A505.2	STR																																
30	6	37'- 4"	1A600.2	STR																																	
*	21	6	9'- 0"	1A601.2	STR																																
21	7	9'- 11"	1A700.2	STR																																	
21	7	9'- 0"	1A701.2	STR																																	
11	4	23'- 5"	1A450.2	17		10'- 11"	1'- 7"	10'- 11"																													
11	4	4'- 9"	1A451.2	17		1'- 7"	1'- 7"	1'- 7"																													
15	4	4'- 0"	1A452.2	17		1'- 10"	0'- 4"	1'- 10"																													
102	5	11'- 8"	1A550.2	17		2'- 7"	9'- 1"	0'- 0"																													
32	5	8'- 11"	1A551.2	17		3'- 2"	2'- 7"	3'- 2"																													
32	5	7'- 5"	1A552.2	17		2'- 11"	1'- 7"	2'- 11"																													
32	5	6'- 2"	1A553.2	14	1'- 6"	2'- 1"	2'- 7"					1'- 6"																									
32	5	5'- 6"	1A554.2	3	0'- 7"	4'- 5"	0'- 6"	0'- 0"	0'- 0"	0'- 0"	0'- 0"	0'- 4"																									
12	5	12'- 7"	1A555.2	17		5'- 0"	2'- 7"	5'- 0"																													
ABUTMENT 2 REINFORCEMENT																																					
17	4	7'- 9"	2A400.2	STR																																	
16	4	9'- 9"	2A401.2	STR																																	
9	5	6'- 9"	2A500.2	STR																																	
9	5	7'- 7"	2A501.2	STR																																	
10	5	6'- 0"	2A502.2	STR																																	
8	5	5'- 4"	2A503.2	STR																																	
11	5	7'- 9"	2A504.2	STR																																	
10	5	9'- 9"	2A505.2	STR																																	
30	6	37'- 4"	2A600.2	STR																																	
20	6	9'- 0"	2A601.2	STR																																	
21	7	9'- 8"	2A700.2	STR																																	
*	22	7	8'- 11"	2A701.2	STR																																
15	4	23'- 3"	2A450.2	17		10'- 10"	1'- 7"	10'- 10"																													
15	4	5'- 1"	2A451.2	17		1'- 9"	1'- 7"	1'- 9"																													
15	4	4'- 0"	2A452.2	17		1'- 10"	0'- 4"	1'- 10"																													
102	5	11'- 7"	2A550.2	17		2'- 7"	9'- 0"	0'- 0"																													
32	5	9'- 3"	2A551.2	17		3'- 4"	2'- 7"	3'- 4"																													
32	5	7'- 5"	2A552.2	17		2'- 11"	1'- 7"	2'- 11"																													
32	5	6'- 2"	2A553.2	14	1'- 6"	2'- 1"	2'- 7"					1'- 6"																									
32	5	5'- 6"	2A554.2	3	0'- 7"	4'- 5"	0'- 6"	0'- 0"	0'- 0"	0'- 0"	0'- 0"	0'- 4"																									
12	5	12'- 9"	2A555.2	17		5'- 1"	2'- 7"	5'- 1"																													
APPROACH SLAB 1																																					
21	5	37'- 10"	1EAS501	STR																																	
45	9	20'- 9"	1EAS901	1	1'- 3"	19'- 6"						0'- 0"																									
APPROACH SLAB 2																																					
*	22	5	37'- 7"	2EAS501	STR																																
*	46	9	20'- 9"	2EAS901	1	1'- 3"	19'- 6"					0'- 0"																									

~ NOTES ~

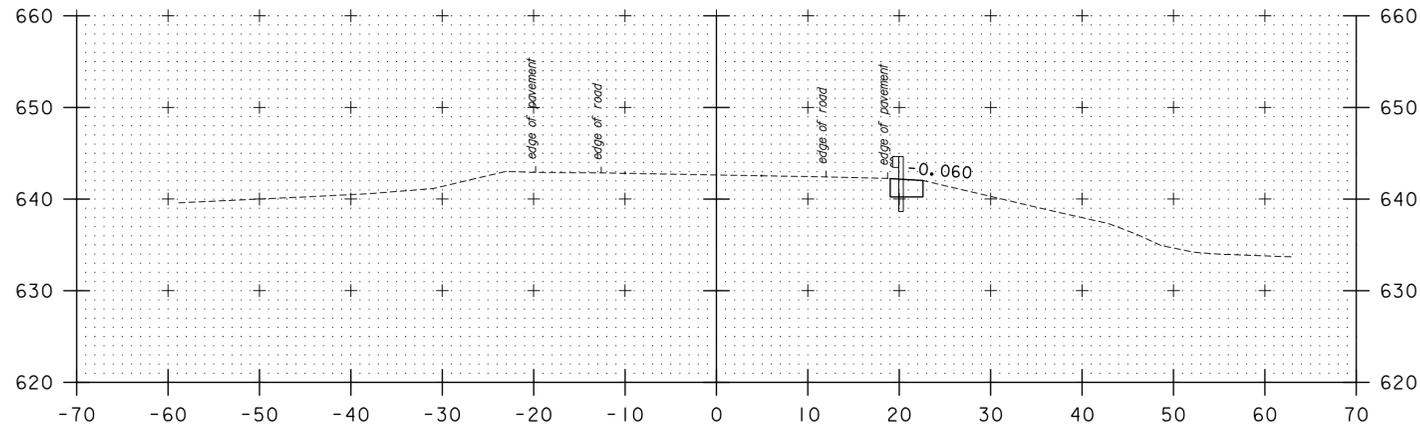
- UNLESS OTHERWISE DESIGNATED, ALL BAR REINFORCEMENT FOR CONCRETE IN SIZES UP TO AND INCLUDING NO. 18 SHALL CONFORM TO THE REQUIREMENTS OF THE "SPECIFICATIONS FOR DEFORMED BILLET-STEEL BARS FOR CONCRETE REINFORCEMENT", AASHTO M 31 (ASTM A 615-SI). ALL BARS SHALL BE GRADE 60, UNLESS OTHERWISE DESIGNATED.
- FOR TYPICAL BENDING DETAILS, RECOMMENDED PIN DIAMETER "D" OF BENDS AND HOOKS, AND OTHER STANDARD PRACTICE, SEE CURRENT CONCRETE REINFORCING STEEL INSTITUTE "MANUAL OF STANDARD PRACTICE".
- BARS WHICH REQUIRE MORE ACCURATE BENDING THAN STANDARD PRACTICES SHOULD HAVE LIMITS INDICATED.
- ALL DIMENSIONS ARE OUT TO OUT OF BAR EXCEPT "A" AND "G" ON STANDARD 180 DEGREE AND 135 DEGREE HOOKS.
- "J" DIMENSION ON 180 DEGREE HOOKS TO BE SHOWN ONLY WHERE NECESSARY TO RESTRICT HOOK SIZE. OTHERWISE, STANDARD HOOKS ARE TO BE USED.
- "H" DIMENSION ON STIRRUPS TO BE SHOWN ONLY WHEN NECESSARY TO MAINTAIN CLEARANCES.
- WHERE SLOPE DIFFERS FROM 45 DEGREES, DIMENSIONS "H" AND "K" MUST BE SHOWN.
- ▲ DENOTES BARS TO BE CUT IN FIELD.
- * DENOTES ONE EXTRA BAR ADDED FOR TESTING PURPOSES.
- .2
- E IN BAR MARK PREFIX DENOTES EPOXY COATED REINFORCING STEEL.



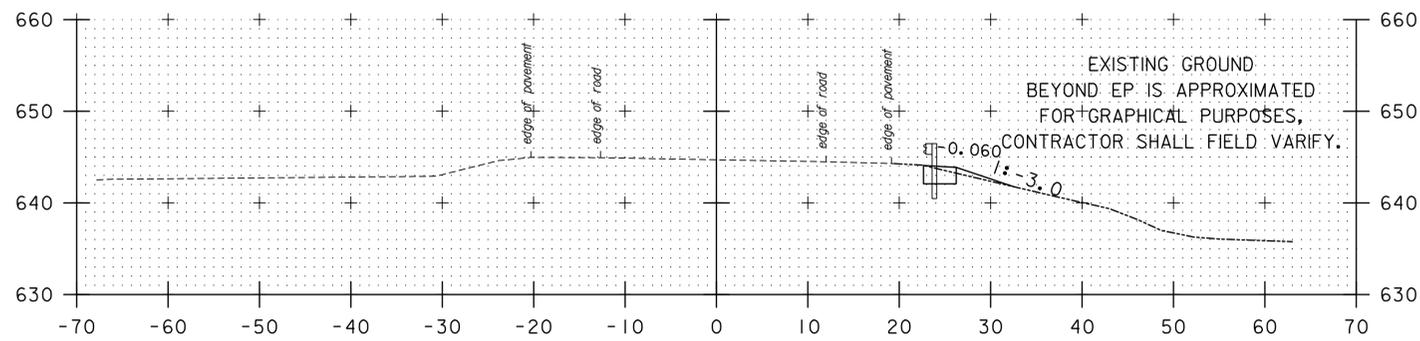
ASTM STANDARD REINFORCING BARS				
BAR SIZE DESIGNATION	WEIGHT POUNDS PER FOOT	NOMINAL DIMENSIONS ROUND SECTION		
		DIAMETER INCHES	AREA INCHES ²	PERIMETER INCHES
#3	0.376	0.375	0.11	1.178
#4	0.668	0.500	0.20	1.571
#5	1.043	0.625	0.31	1.963
#6	1.502	0.750	0.44	2.356
#7	2.044	0.875	0.60	2.749
#8	2.670	1.000	0.79	3.142
#9	3.400	1.128	1.00	3.544
#10	4.303	1.270	1.27	3.990
#11	5.313	1.410	1.56	4.430
#14	7.65	1.693	2.25	5.32
#18	13.60	2.257	4.00	



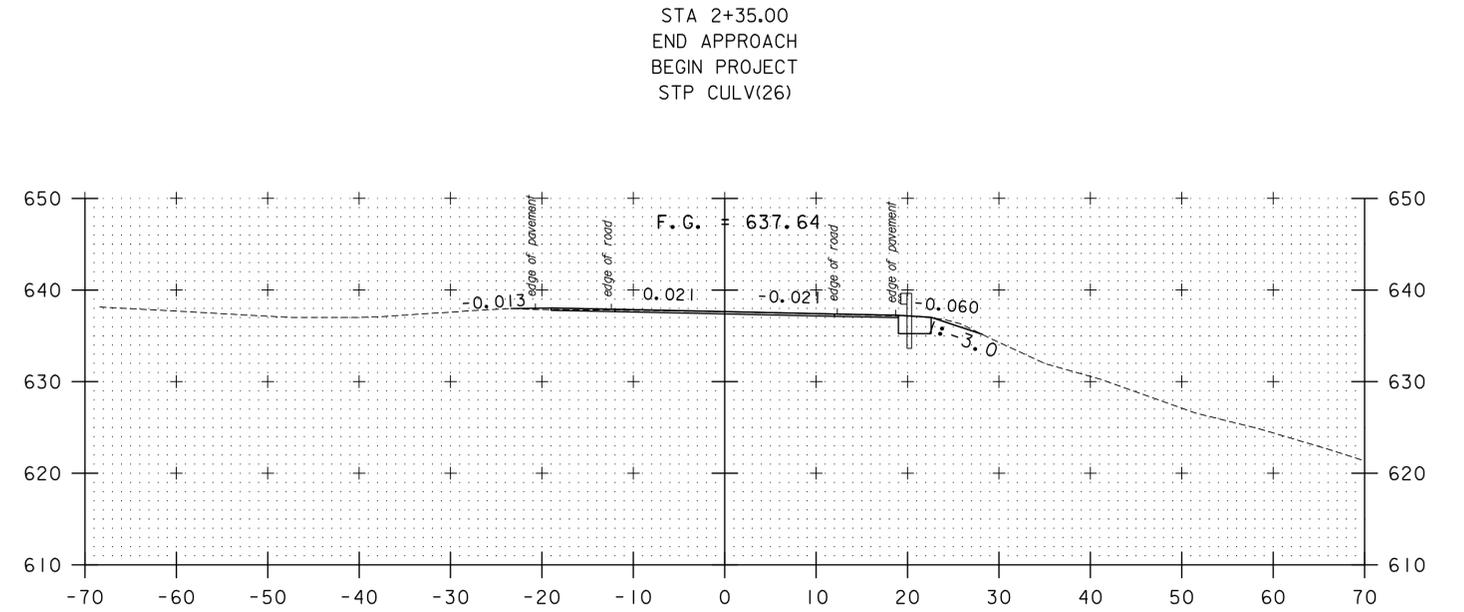
1+00



0+50



0+00



STA 2+35.00
END APPROACH
BEGIN PROJECT
STP CULV(26)

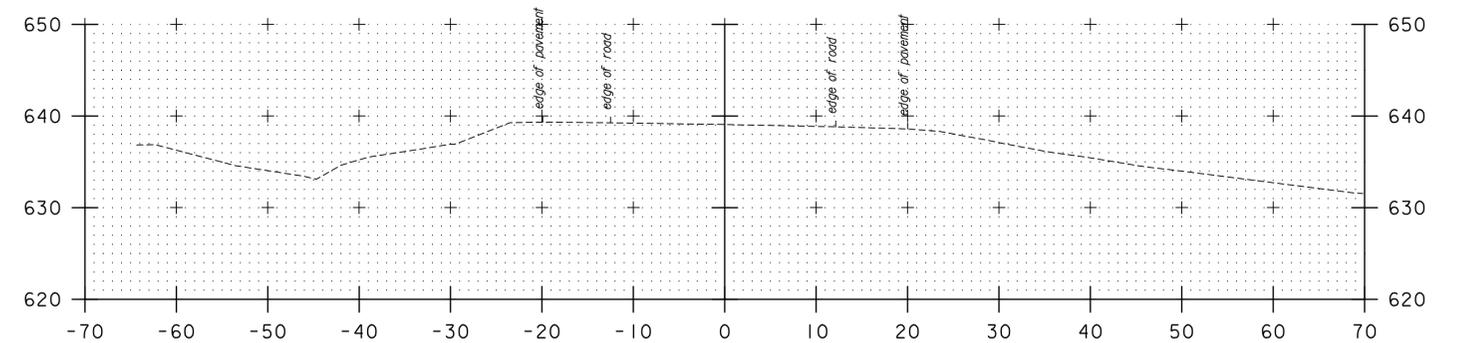
F.G. = 637.64



+80.83
34.71' LT
UTILITY POLE

2+00
DRIVE LEFT

VT 15
STA 1+85.00
BEGIN APPROACH
MATCH EXISTING PAVEMENT



1+50
DRIVE RIGHT

STA. 0+00 TO STA. 2+00

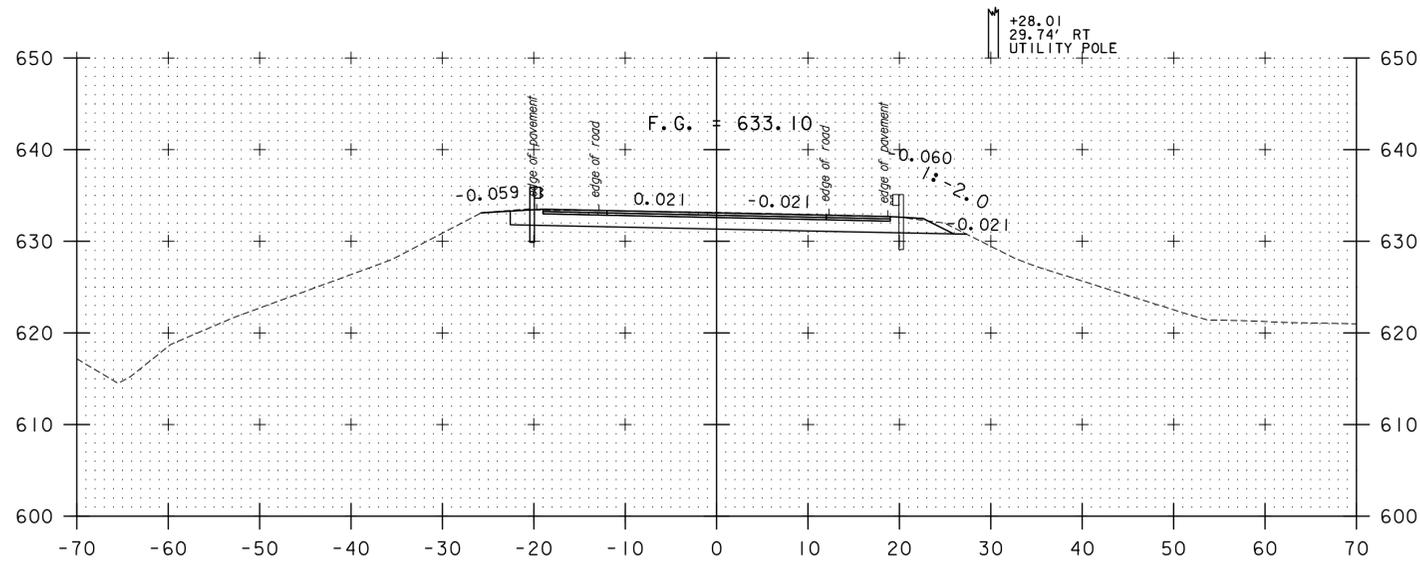
SCALE 1" = 10' - 0"
10 0 10

TYLIN INTERNATIONAL

PROJECT NAME: HYDE PARK
PROJECT NUMBER: STP CULV(26)

FILE NAME: z1lb292bdr_xs.dgn
PROJECT LEADER: R. HEBERT
DESIGNED BY: T. KELLEY
ROADWAY CROSS SECTIONS I

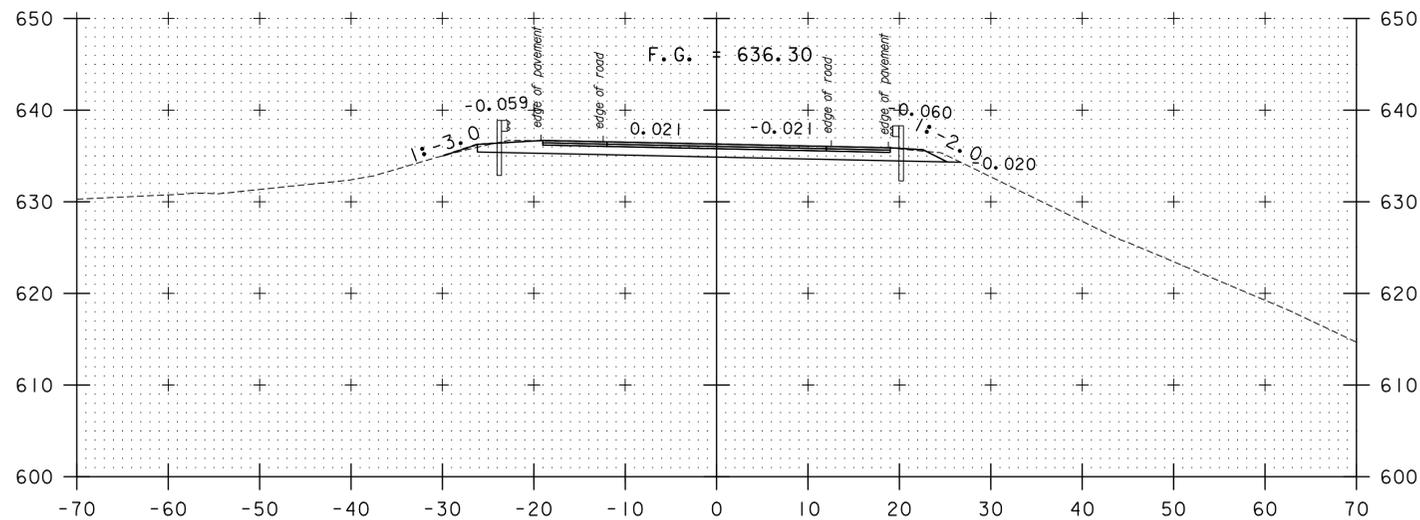
PLOT DATE: 11/6/2013
DRAWN BY: T. KELLEY
CHECKED BY: D. BRYANT
SHEET 41 OF 60



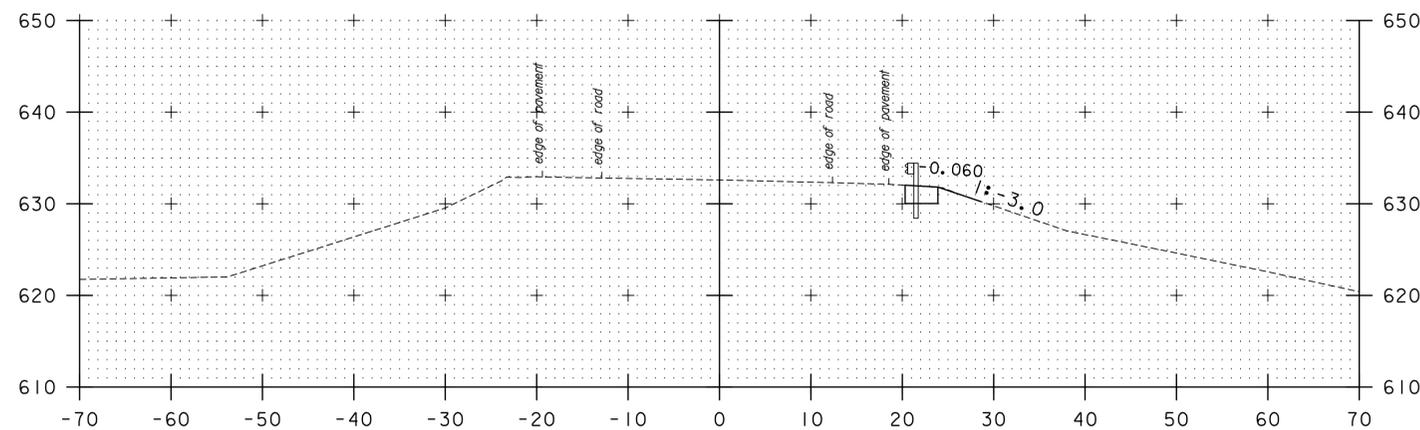
4+50

STA 4+17.52
END BRIDGE
RESUME ROADWAY

STA 2+88.48
STOP ROADWAY
BEGIN BRIDGE

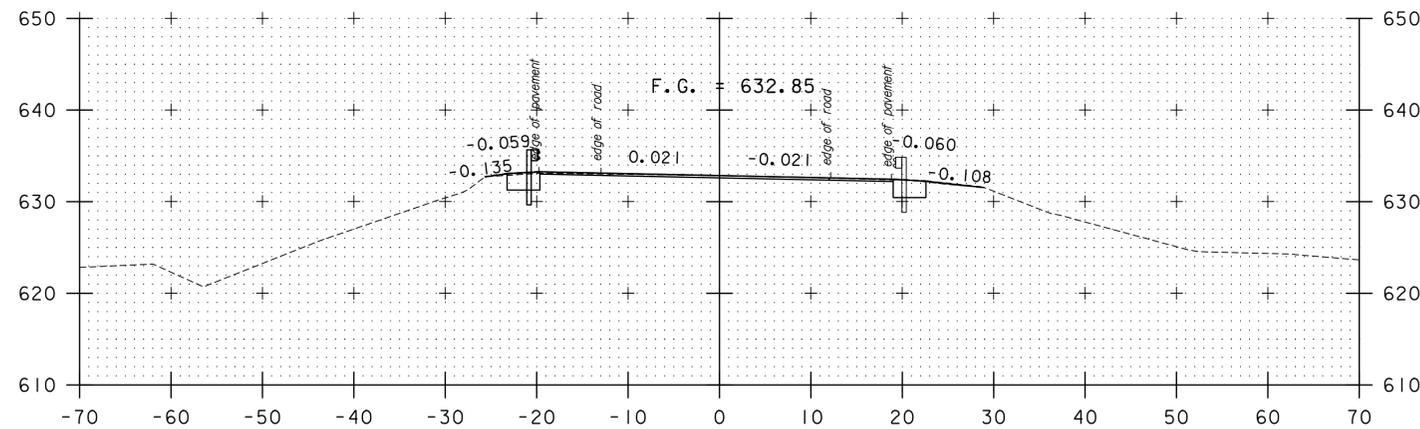


2+50



5+50

VT 15
STA 5+20.00
END APPROACH
MATCH EXISTING PAVEMENT



5+00

STA 4+70.00
END PROJECT
STP CULV(26)
BEGIN APPROACH

+52.72
35.33' RT
3" LOCUST (REMOVE)

+64.81
34.85' RT
3" LOCUST (REMOVE)

STA. 2+50 TO STA. 5+50

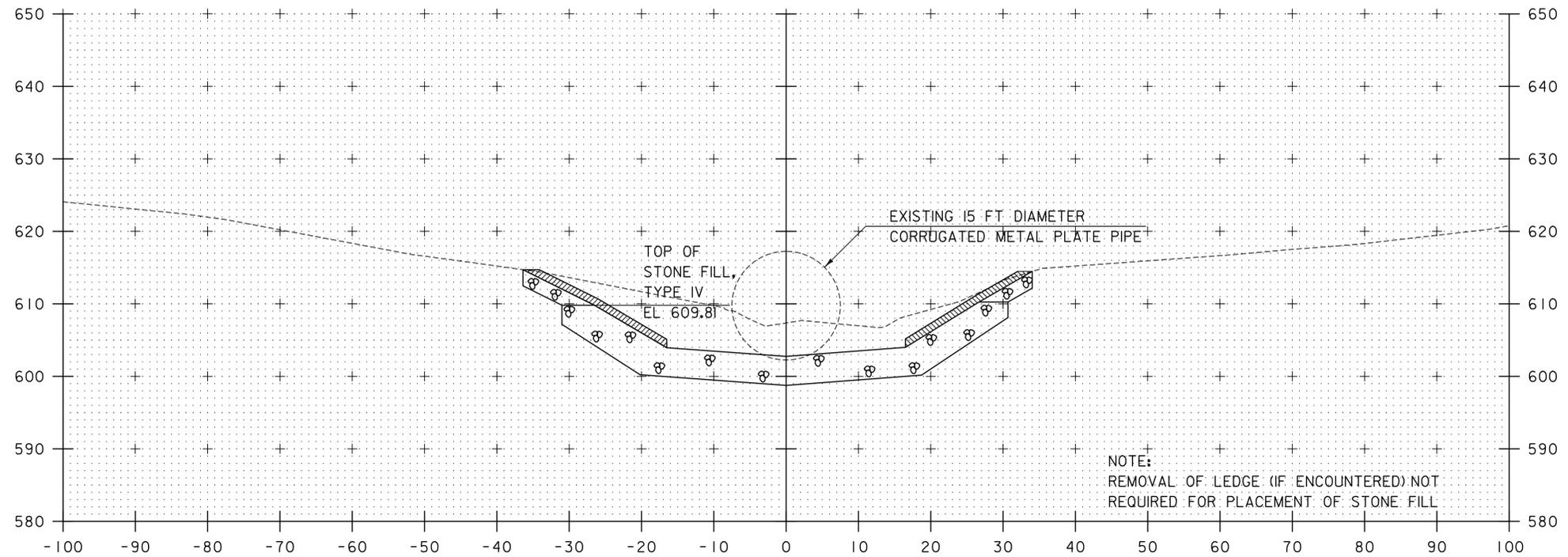
SCALE 1" = 10' - 0"
10 0 10

TYLIN INTERNATIONAL

PROJECT NAME: HYDE PARK
PROJECT NUMBER: STP CULV(26)

FILE NAME: z1lb292bdr_.x.s.dgn
PROJECT LEADER: R. HEBERT
DESIGNED BY: T. KELLEY
ROADWAY CROSS SECTIONS 2

PLOT DATE: 11/6/2013
DRAWN BY: T. KELLEY
CHECKED BY: D. BRYANT
SHEET 42 OF 60



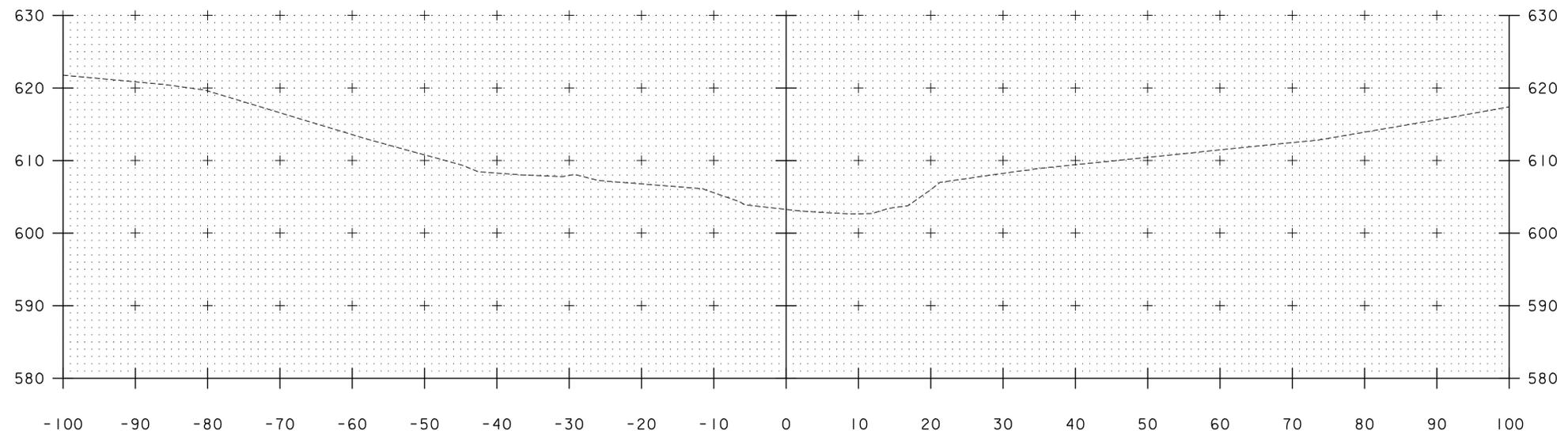
STATION 50+52, LT.
 BEGIN UNCLASSIFIED CHANNEL EXCAVATION,
 GEOTEXTILE UNDER STONE FILL,
 STONE FILL, TYPE IV, AND
 GRUBBING MATERIAL

50+75

STATION 50+62, RT.
 BEGIN UNCLASSIFIED CHANNEL EXCAVATION,
 GEOTEXTILE UNDER STONE FILL,
 STONE FILL, TYPE IV, AND
 GRUBBING MATERIAL

STATION 50+55, LT.
 BEGIN STONE FILL, TYPE II

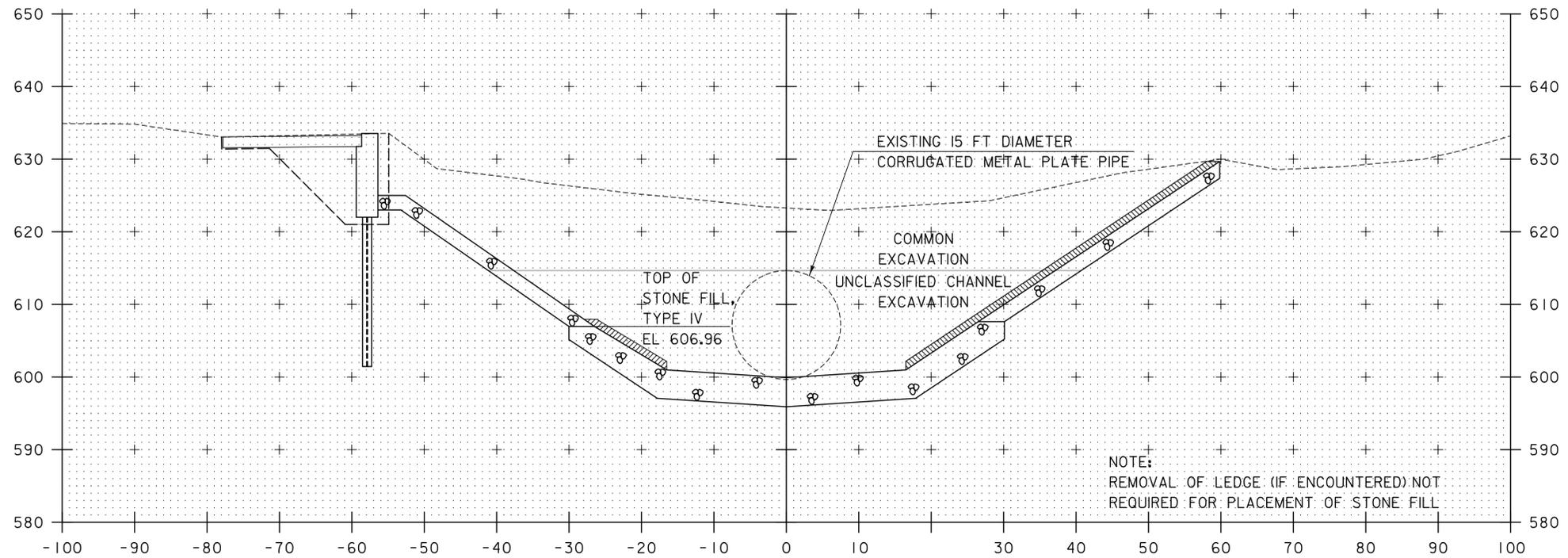
STATION 50+67, RT.
 BEGIN STONE FILL, TYPE II



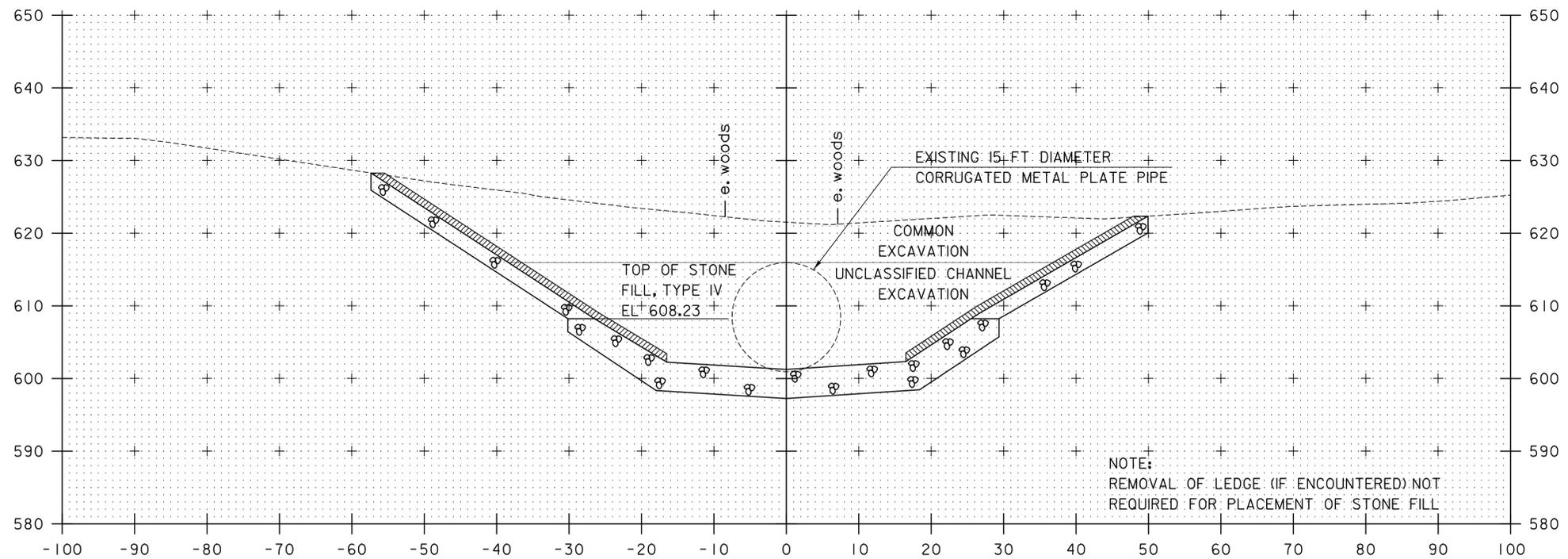
50+50

STA. 50+50 TO STA. 50+75

TYLIN INTERNATIONAL	PROJECT NAME: HYDE PARK	PLOT DATE: 11/6/2013
	PROJECT NUMBER: STP CULV(26)	DRAWN BY: S. MORGAN
	FILE NAME: z11b292bdrxschan.dgn	CHECKED BY: J. OLUND
	PROJECT LEADER: R. HEBERT DESIGNED BY: J. OLUND CHANNEL CROSS SECTIONS - 1	SHEET 43 OF 60



51+25

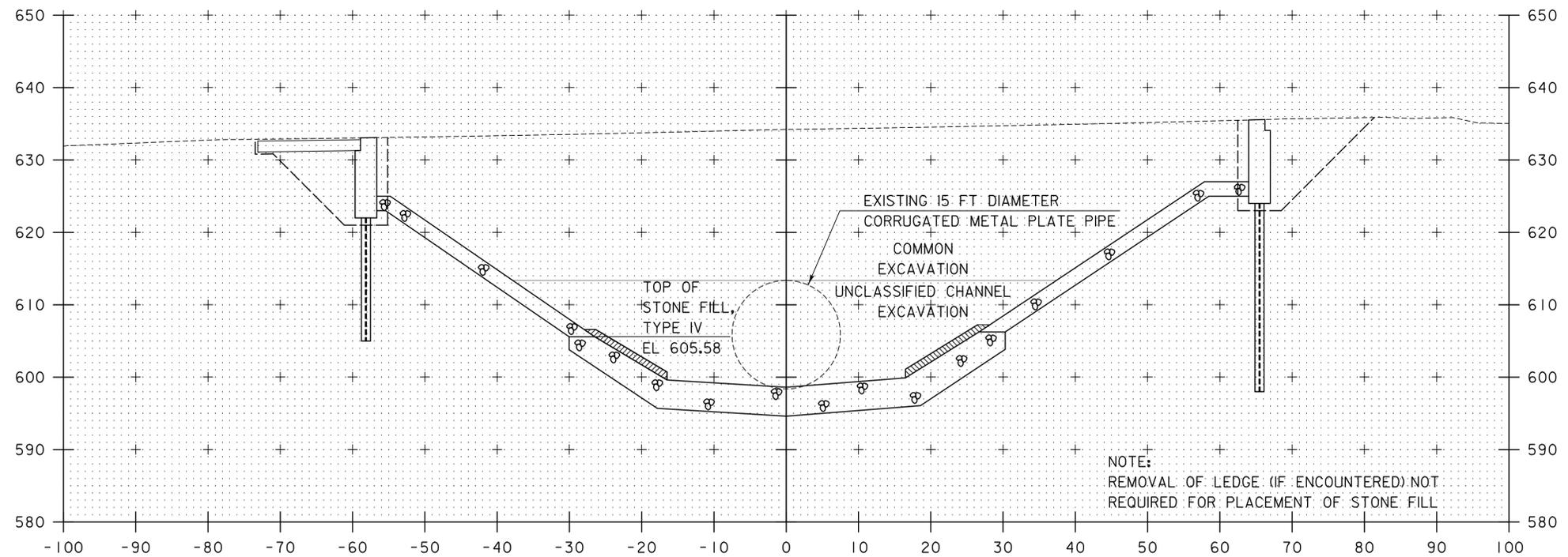
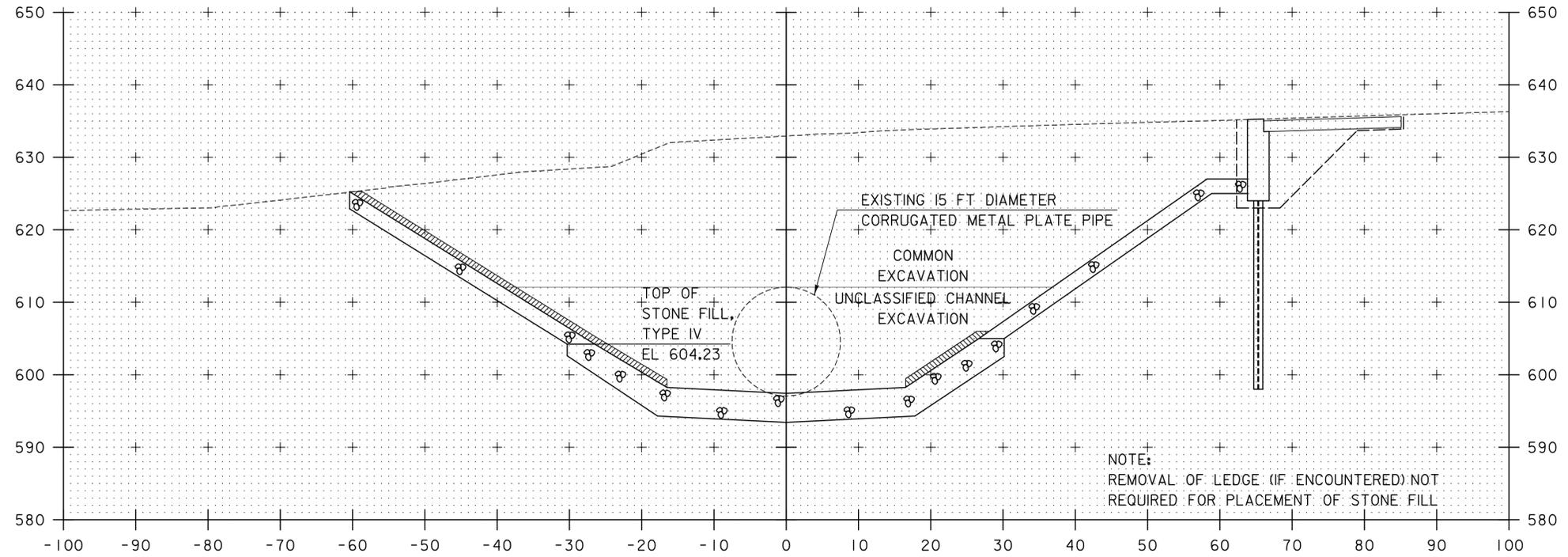


STATION 50+80
BEGIN COMMON EXCAVATION 51+00

STA. 51+00 TO STA. 51+25

TYL INTERNATIONAL	PROJECT NAME: HYDE PARK	PLOT DATE: 11/6/2013
	PROJECT NUMBER: STP CULV(26)	DRAWN BY: S. MORGAN
	FILE NAME: z11b292bdrxschan.dgn	CHECKED BY: J. OLUND
	PROJECT LEADER: R. HEBERT DESIGNED BY: J. OLUND	SHEET 44 OF 60

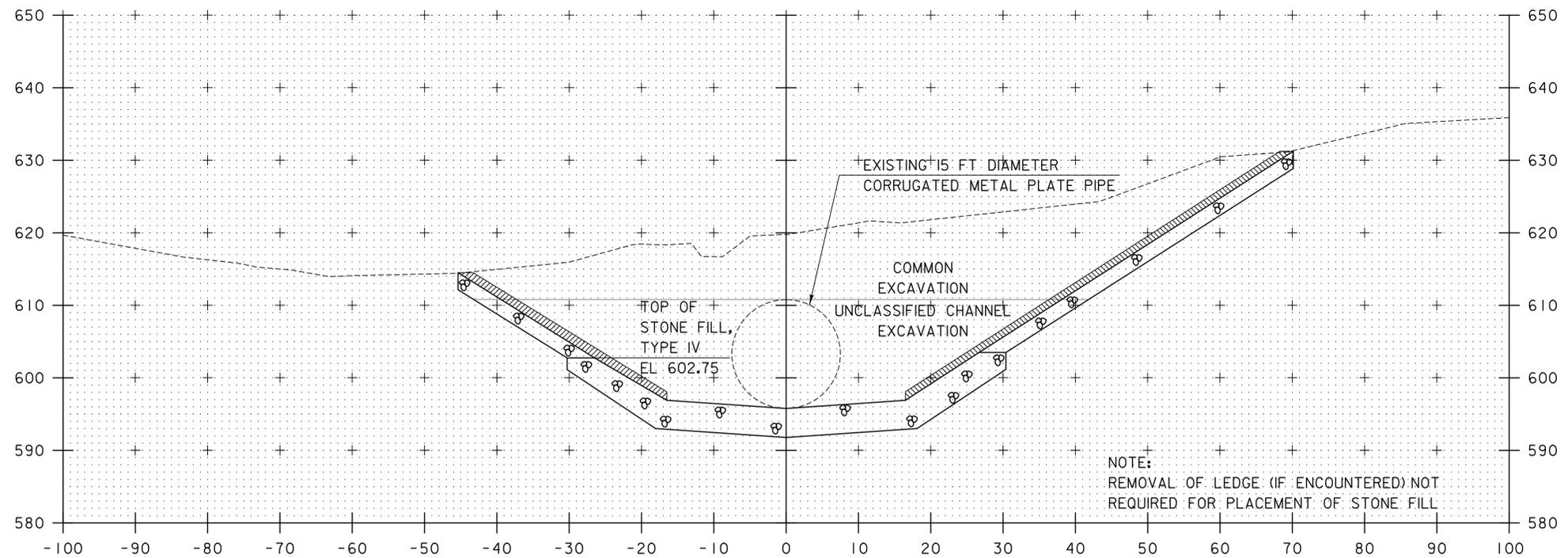
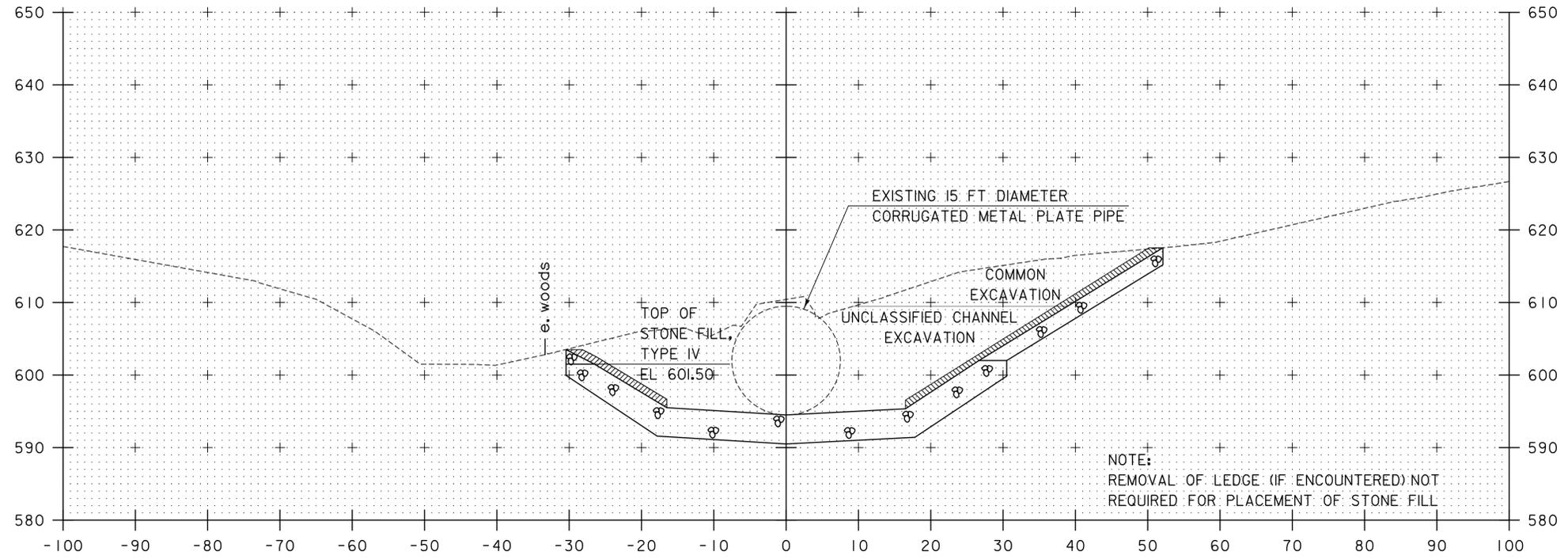
CHANNEL CROSS SECTIONS - 2



STA. 51+50 TO STA. 51+75

TYLINTERNATIONAL

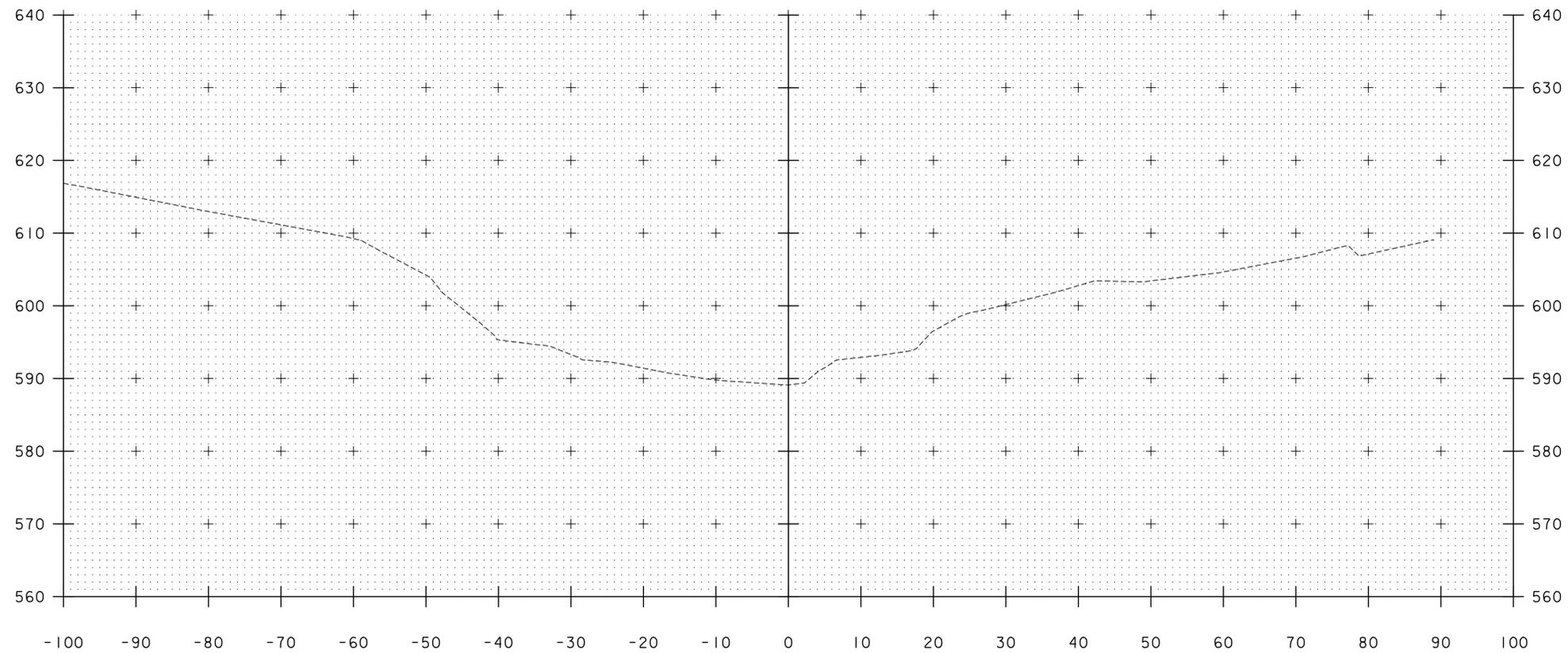
PROJECT NAME:	HYDE PARK	PLOT DATE:	11/6/2013
PROJECT NUMBER:	STP CULV(26)	DRAWN BY:	S. MORGAN
FILE NAME:	zlib292bdrxschan.dgn	CHECKED BY:	J. OLUND
PROJECT LEADER:	R. HEBERT	CHANNEL CROSS SECTIONS -	3
DESIGNED BY:	J. OLUND	SHEET	45 OF 60



STA. 52+00 TO STA. 52+25

TYLINTERNATIONAL

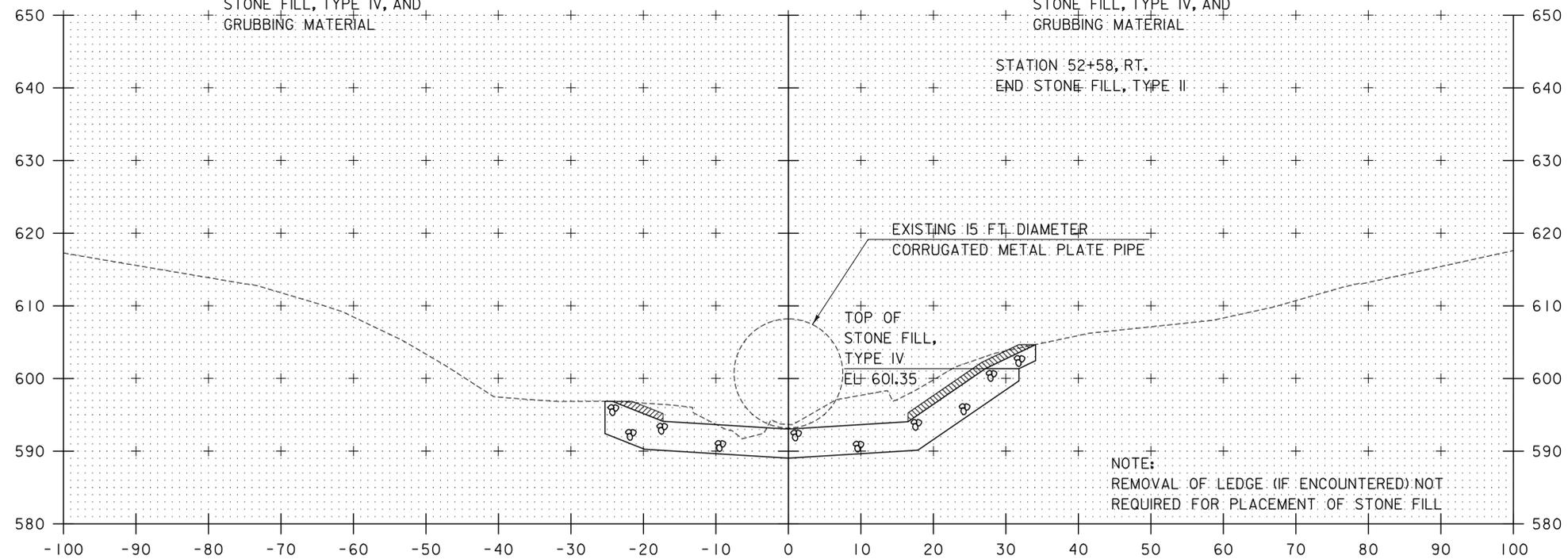
PROJECT NAME: HYDE PARK	PLOT DATE: 11/6/2013
PROJECT NUMBER: STP CULV(26)	DRAWN BY: S. MORGAN
FILE NAME: z1lb292bdrxschan.dgn	CHECKED BY: J. OLUND
PROJECT LEADER: R. HEBERT	SHEET 46 OF 60
DESIGNED BY: J. OLUND	
CHANNEL CROSS SECTIONS - 4	



STATION 52+55, LT.
 END UNCLASSIFIED CHANNEL EXCAVATION,
 GEOTEXTILE UNDER STONE FILL,
 STONE FILL, TYPE IV, AND
 GRUBBING MATERIAL

52+75

STATION 52+70, RT.
 END UNCLASSIFIED CHANNEL EXCAVATION,
 GEOTEXTILE UNDER STONE FILL,
 STONE FILL, TYPE IV, AND
 GRUBBING MATERIAL



STATION 52+42, LT.
 END STONE FILL, TYPE II

STATION 52+30
 END COMMON EXCAVATION

52+50

STATION 52+58, RT.
 END STONE FILL, TYPE II

EXISTING 15 FT DIAMETER
 CORRUGATED METAL PLATE PIPE

TOP OF
 STONE FILL,
 TYPE IV
 EL: 601.35

NOTE:
 REMOVAL OF LEDGE (IF ENCOUNTERED) NOT
 REQUIRED FOR PLACEMENT OF STONE FILL

STA. 52+50 TO STA. 52+75

TYLINTERNATIONAL

PROJECT NAME: HYDE PARK
 PROJECT NUMBER: STP CULV(26)

FILE NAME: z1lb292bdrxschan.dgn
 PROJECT LEADER: R. HEBERT
 DESIGNED BY: J. OLUND
 CHANNEL CROSS SECTIONS - 5

PLOT DATE: 11/6/2013
 DRAWN BY: S. MORGAN
 CHECKED BY: J. OLUND
 SHEET 47 OF 60

LEGEND

 STONE FILL, TYPE II

 STONE FILL, TYPE IV

 PERMANENT OHW IMPACTS
(TOTAL AREA 3,475 S.F.)

 AREA OF EARTH DISTURBANCE ABOVE OHW
(TOTAL AREA = 79,446 S.F.)

TOTAL AREA OF EARTH DISTURBANCE WITHIN PROJECT LIMITS = 84,035 S.F. (1.93 ACRE)

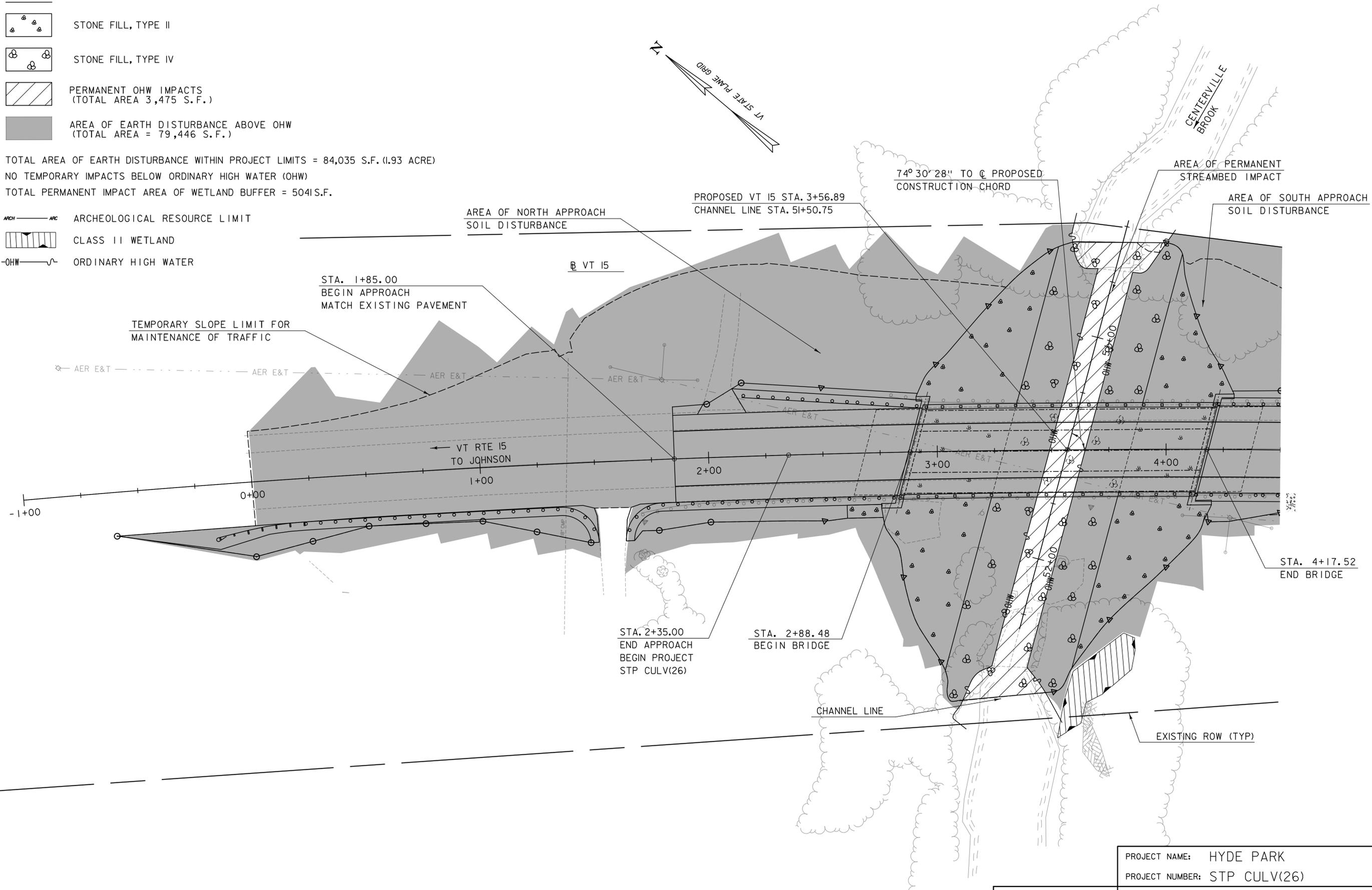
NO TEMPORARY IMPACTS BELOW ORDINARY HIGH WATER (OHW)

TOTAL PERMANENT IMPACT AREA OF WETLAND BUFFER = 5041 S.F.

 ARCHEOLOGICAL RESOURCE LIMIT

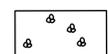
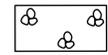
 CLASS II WETLAND

 ORDINARY HIGH WATER

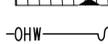


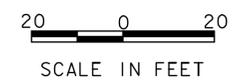
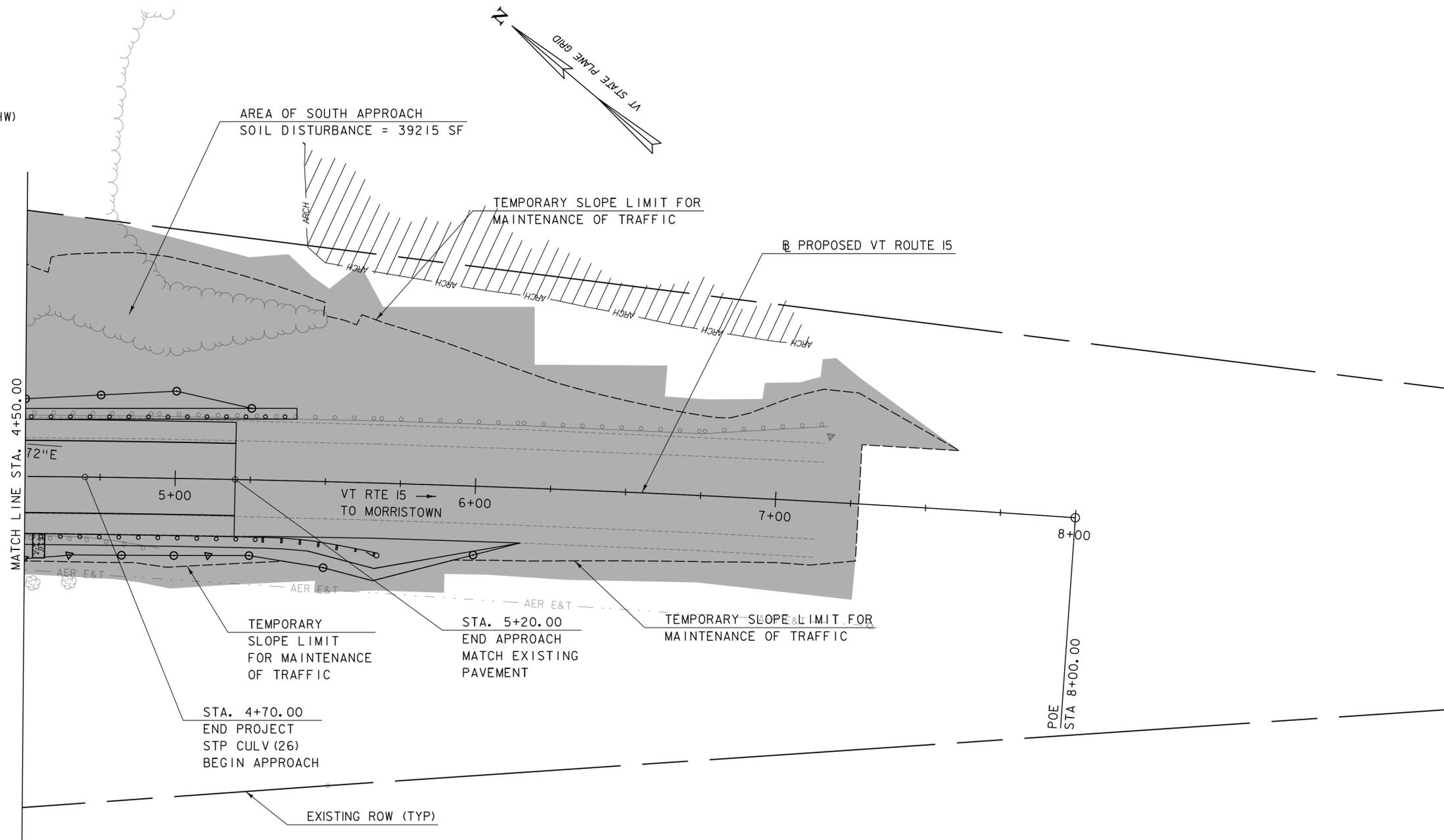
TYLIN INTERNATIONAL	PROJECT NAME: HYDE PARK	PLOT DATE: 11/6/2013
	PROJECT NUMBER: STP CULV(26)	DRAWN BY: D. BRYANT
	FILE NAME: z11b292bdr_R1.dgn	CHECKED BY: D. BURHANS
	PROJECT LEADER: R. HEBERT	SHEET 48 OF 60
	DESIGNED BY: D. BRYANT	
	RESOURCE LAYOUT PLAN I	

LEGEND

-  STONE FILL, TYPE II
-  STONE FILL, TYPE IV
-  PERMANENT OHW IMPACTS
-  AREA OF EARTH DISTURBANCE ABOVE OHW

NO TEMPORARY IMPACTS BELOW ORDINARY HIGH WATER (OHW)

-  ARCHEOLOGICAL RESOURCE LIMIT
-  CLASS II WETLAND
-  ORDINARY HIGH WATER



TYLININTERNATIONAL

PROJECT NAME: HYDE PARK	
PROJECT NUMBER: STP CULV(26)	
FILE NAME: z11b292bdr_RI.dgn	PLOT DATE: 11/6/2013
PROJECT LEADER: R. HEBERT	DRAWN BY: D. BRYANT
DESIGNED BY: D. BRYANT	CHECKED BY: D. BURHANS
RESOURCE LAYOUT PLAN 2	SHEET 49 OF 60

EROSION CONTROL NARRATIVE

1.1 PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE REPLACEMENT OF BRIDGE #42 (CORRUGATED METAL PLATE PIPE) ON VT 15 SPANNING 15 FEET OVER THE BODY OF WATER KNOWN AS CENTERVILLE BROOK IN THE TOWN OF HYDE PARK. THE PROJECT BEGINS AT A POINT 0.5 MILES SOUTHEASTERLY OF ITS INTERSECTION WITH VT ROUTE 100 AND PROCEEDS SOUTHEASTERLY ALONG VT ROUTE 15 FOR 0.045 MILES. WORK WILL INVOLVE REMOVAL OF EXISTING PIPE, CONSTRUCTION OF NEW ABUTMENTS AND CONSTRUCTION OF THE BRIDGE SUPERSTRUCTURE ON THE EXISTING ALIGNMENT. ALSO INCLUDED WILL BE RELATED TEMPORARY ROADWAY DETOUR, PERMANENT CHANNEL, AND APPROACH WORK.

NOTE: AREA OF DISTURBANCE INCLUDES LIMITS OF EARTH DISTURBANCE WITHIN THE PROJECT AREA AND SUGGESTED MOT METHOD AS SHOWN ON THE ATTACHED EPSC PLAN. THE AREA OF DISTURBANCE DOES NOT INCLUDE WASTE, BORROW AND STAGING AREAS. THE CONTRACTOR IS RESPONSIBLE FOR SUBMITTING THE LOCATION OF THE WASTE, BORROW AND STAGING AREAS, AS WELL AS THE MATERIAL STOCKPILE, REFUELING AND MAINTENANCE AREAS. A MAP SHALL BE ATTACHED IF NECESSARY.

TOTAL AREA OF DISTURBANCE IS APPROXIMATELY 84,035 SQUARE FEET (1.93 ACRES).

IT IS ANTICIPATED THAT THE PROJECT WILL LAST TWO CONSTRUCTION SEASONS.

1.2 SITE INVENTORY

1.2.1 TOPOGRAPHY, EXISTING ROADS, UTILITIES

THE TOPOGRAPHY ON BOTH SIDES OF VT 15 SLOPES DOWN STEEPLY AWAY FROM THE ROADWAY AND CONSISTS MOSTLY OF FIELD GRASS ON THE SLOPES AND LIGHTLY WOODED AREAS NEAR THE TOE OF SLOPE. PORTIONS NEAR THE WATER BODY ARE LIGHTLY WOODED WITH SHALLOW SLOPES. THE GENERAL TOPOGRAPHY OF THE AREA SLOPES FROM EAST TO WEST. ALL ROAD SURFACES IN THE PROJECT AREA ARE BITUMINOUS CONCRETE PAVEMENT. ONE COMMERCIAL PROPERTY BORDERS THE PROJECT ON THE SOUTHEASTERLY CORNER AND ONE RESIDENTIAL PROPERTY ON THE SOUTHWEST CORNER. BOTH ARE OUTSIDE THE PROJECT LIMITS.

THERE ARE OVERHEAD ELECTRICAL LINES ALONG THE EASTERLY SIDE OF THE NORTH APPROACH. THE LINES CROSS TO THE WESTERLY SIDE OF THE SOUTH APPROACH. THESE WILL BE RELOCATED TO ACCOMMODATE THE PROJECT. THERE ARE NO UNDERGROUND UTILITIES WITHIN THE PROJECT SITE.

1.2.2 DRAINAGE, WATERWAYS, BODIES OF WATER, AND PROXIMITY TO NATURAL OR MAN-MADE WATER FEATURES

THE BRIDGE SPANS THE BODY OF WATER KNOWN AS CENTERVILLE BROOK. THE BROOK IS CLASSIFIED AS SINUOUS. IN THE REACH INFLUENCED BY THE BRIDGE THE BROOK IS CHANNELIZED AND STRAIGHT, ITS BOUNDARIES ARE ALLUVIAL, AND ITS STREAM BANKS ARE INCISED WITH A NARROW FLOOD PLAIN. THE STREAM BED CONSISTS OF SAND AND GRAVEL AND LEDGE. CONSTRUCTION OF THE NEW BRIDGE WILL REQUIRE SOME PERMANENT IMPACTS OF CENTERVILLE BROOK. IT IS ANTICIPATED THAT EXISTING SOILS WILL BE DISTURBED IN THE BROOK DURING THE REMOVAL OF THE EXISTING CULVERT.

THE FOLLOWING DESCRIPTIONS ARE FOR THE EXISTING SITE PLANS: SURFACE DRAINAGE FROM VT 15 FLOWS DOWN EXISTING VEGETATED AND WOODED SIDESLOPES AND INTO CENTERVILLE BROOK.

1.2.3 VEGETATION

THE VEGETATION IN THE PROJECT AREA CONSISTS OF WELL ESTABLISHED FIELD AND LIGHTLY WOODED AREAS. THE IMPACT TO VEGETATION WILL BE LIMITED TO THAT WHICH IS REQUIRED FOR REPLACEMENT OF THE EXISTING CULVERT WITH A NEW BRIDGE. DISTURBED VEGETATION WILL BE REESTABLISHED WITH STANDARD SEED AND MULCH PRACTICES OR REPLACED WITH STONE FILL COVERED WITH GRUBBING MATERIAL.

1.2.4 SOILS

SOIL DATA CAME FROM THE U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE FOR THE COUNTY OF LAMOILLE, VERMONT. SOILS ON THE PROJECT SITE ARE:

NEAR THE SOUTHERN PROJECT LIMITS AND NEAR THE NORTHERLY END OF THE BRIDGE THE SOIL TYPE IS BOOTHBAY SILT LOAM, 3 TO 8 PERCENT SLOPE, "K FACTOR" = 0.49. THE EROSION HAZARD IS "HIGH" DUE TO ITS K FACTOR.

NEAR THE NORTHERLY PROJECT LIMITS THE SOIL TYPE IS SALMON VERY FINE SANDY LOAM, 8 TO 15 PERCENT SLOPE, "K FACTOR" = 0.49. THE EROSION HAZARD IS "HIGH" DUE TO ITS K FACTOR.

NEAR CENTERVILLE BROOK THE SOIL TYPE IS BOOTHBAY SILT LOAM, 15 TO 25 PERCENT SLOPE, "K" FACTOR = 0.49. THE EROSION HAZARD IS "HIGH" DUE TO ITS K FACTOR.

1.2.4 SENSITIVE RESOURCE AREAS

CRITICAL HABITATS: NO
HISTORICAL OR ARCHAEOLOGICAL AREAS: YES (AREA OF ARCHAEOLOGICAL SIGNIFICANCE ALONG THE SOUTHEAST APPROACH BEYOND THE PROJECT LIMITS OF WORK.)
PRIME AGRICULTURE LAND: NO
THREATENED AND ENDANGERED SPECIES: NO
WATER RESOURCE: CENTERVILLE BROOK
WETLANDS: YES, CLASS II, ADJACENT TO SOUTHEAST APPROACH QUADRANT
FISH & WILDLIFE HABITAT: COLDWATER FISHERY W/SEASONAL RESTRICTIONS

1.3 RISK EVALUATION

THE PROJECT FALLS UNDER THE JURISDICTION OF GENERAL PERMIT 3-9020 FOR STORMWATER RUNOFF FROM CONSTRUCTION SITES FOR LOW RISK PROJECTS. ANY MODIFICATIONS TO THE PROJECT THAT INCREASE THE RISK TO ENVIRONMENTAL RESOURCES SHALL BE EVALUATED IN ACCORDANCE WITH THE PERMIT REQUIREMENTS. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY ADDITIONAL PERMITTING.

1.4 EROSION PREVENTION AND SEDIMENT CONTROL

THE EROSION CONTROL PLANS ARE MEANT AS A GUIDELINE FOR PREVENTING EROSION AND CONTROLLING SEDIMENT TRANSPORT. THE PRINCIPLES OUTLINED IN THIS NARRATIVE CONSISTS OF APPLYING MEASURES THROUGHOUT THE LIFE OF THE PROJECT TO AVOID SEDIMENT TRANSPORT TO THE RECEIVING WATERS. THE MEASURES INCLUDE STABILIZATION AND STRUCTURAL PRACTICES, STORM WATER CONTROLS AND OTHER POLLUTION PREVENTION PRACTICES. THEY HAVE BEEN PROPOSED BY THE DESIGNER AS A BASIS FOR PROTECTING RESOURCES AND WILL NEED TO BE BUILT UPON BASED ON THE SPECIFIC MEANS AND METHODS OF THE CONTRACTOR. REFER TO THE LOW RISK SITE HANDBOOK AND APPROPRIATE DETAIL SHEETS FOR SPECIFIC GUIDANCE AND CONSTRUCTION DETAILING.

ALL MEASURES SHALL BE REGULARLY MAINTAINED AND SHALL BE CHECKED FOR SEDIMENT BUILD-UP. SEDIMENT SHALL BE DISPOSED AT AN APPROVED SITE WHERE IT WILL NOT BE SUBJECT TO EROSION.

1.4.1 MARK SITE BOUNDARIES

SITE BOUNDARIES AND AREAS CONSTRUCTION EQUIPMENT CAN ACCESS SHALL BE DELINEATED.

PROJECT DEMARCATION FENCING (PDF) SHALL BE USED TO PHYSICALLY MARK SITE BOUNDARIES. BECAUSE THE PROJECT FALLS UNDER THE CGP 3-9020, BARRIER FENCE SHALL BE USED INSTEAD OF PROJECT DEMARCATION FENCE WITHIN 100 FEET OF A WATER RESOURCE (STREAM, BROOK, LAKE, POND, WETLAND, ETC).

1.4.2 LIMIT DISTURBANCE AREA

PREVENTING INITIAL SOIL EROSION BY MINIMIZING THE EXPOSED AREA IS MUCH MORE EFFECTIVE THAN TREATING ERODED SEDIMENT. EARTH DISTURBANCE CAN BE MINIMIZED THROUGH CONSTRUCTION PHASING BY ONLY OPENING UP EARTH AS NECESSARY. THIS CAN LIMIT THE AREA THAT WILL BE DISTURBED AND EXPOSED TO EROSION. EMPLOY TEMPORARY CONSTRUCTION STABILIZATION PRACTICES IN INCREMENTAL STAGES AS PHASES CHANGE. FOR PROJECTS WHICH FALL UNDER THE CONSTRUCTION GENERAL PERMIT, ONLY THE ACREAGE LISTED ON THE PERMIT AUTHORIZATION MAY BE EXPOSED AT ANY GIVEN TIME.

MAINTAINING VEGETATED BUFFERS ALONG STREAM BANKS, WETLANDS OR OTHER SENSITIVE AREAS IS A CRUCIAL EROSION AND SEDIMENT CONTROL MEASURE THAT SHOULD BE ESTABLISHED WHEREVER POSSIBLE.

1.4.3 SITE ENTRANCE/EXIT STABILIZATION

TRACKING OF SEDIMENT ONTO PUBLIC HIGHWAYS SHALL BE MINIMIZED TO REDUCE THE POTENTIAL FOR RUNOFF ENTERING RECEIVING WATERS. INSTALLATION SHALL COINCIDE WITH THE CONTRACTOR'S PROGRESS SCHEDULE. STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AS PROPOSED ON THE EPSC PLAN AND ANYWHERE EQUIPMENT WILL BE GOING FROM AREAS OF EXPOSED SOILS TO PAVED SURFACES.

1.4.4 INSTALL SEDIMENT BARRIERS

SEDIMENT BARRIERS SHALL BE UTILIZED TO INTERCEPT RUNOFF AND ALLOW SUSPENDED SEDIMENT TO SETTLE OUT. THEY SHOULD BE INSTALLED PRIOR TO ANY UPSLOPE WORK.

SILT FENCE WILL BE INSTALLED AS PROPOSED ON THE EPSC PLAN OR AS NECESSARY. BECAUSE THE PROJECT FALLS UNDER THE CGP 3-9020, SILT FENCE, WOVEN WIRE REINFORCED SHALL BE USED INSTEAD OF SILT FENCE WITHIN 100 FEET OF RECEIVING WATERS.

1.4.5 DIVERT UPLAND RUNOFF

DIVERSIONARY MEASURES SHALL BE USED TO INTERCEPT RUNOFF FROM ABOVE THE CONSTRUCTION AND DIRECT IT AROUND THE DISTURBED AREA SO THAT CLEAN WATER DOES NOT BECOME MUDDIED WHILE TRAVELING OVER EXPOSED SOILS ON THE CONSTRUCTION SITE.

DIVERSION OF UPLAND RUNOFF NOT ANTICIPATED.

1.4.6 SLOW DOWN CHANNELIZED RUNOFF

CHECK STRUCTURES SHALL BE UTILIZED TO REDUCE THE VELOCITY, AND THUS THE EROSION POTENTIAL, OF CONCENTRATED FLOW IN CHANNELS.

THE USE OF STONE CHECK DAMS IS ANTICIPATED FOR THIS PROJECT IF A TEMPORARY ROADWAY DETOUR IS UTILIZED.

1.4.7 CONSTRUCT PERMANENT CONTROLS

PERMANENT STORMWATER TREATMENT DEVICES SHALL BE INSTALLED AS SHOWN ON THE PLANS.

SEED AND MULCH WILL BE USED AS PERMANENT CONTROLS TO STABILIZE EXPOSED SOIL. STONE FILL WILL BE USED TO STABILIZE THE SLOPES AND STREAMBED AROUND ABUTMENTS.

1.4.8 STABILIZE EXPOSED SOILS DURING CONSTRUCTION

ALL AREAS OF DISTURBANCE MUST HAVE TEMPORARY STABILIZATION IN PLACE WITHIN 48 HOURS OF DISTURBANCE OR IN ACCORDANCE WITH THE CONSTRUCTION GENERAL PERMIT 3-9020 AUTHORIZATION.

SURFACE ROUGHENING OF ALL EXPOSED SLOPES, COMBINED WITH TEMPORARY MULCHING, SHALL BE UTILIZED ON A REGULAR BASIS. BIODEGRADABLE EROSION CONTROL MATTING OR AN EQUIVALENT SHALL BE USED TO STABILIZE ALL SLOPES STEEPER THAN 1:3.

THE FORECAST OF RAINFALL EVENTS SHALL TRIGGER IMMEDIATE PROTECTION OF EXPOSED SOILS.

1.4.9 WINTER STABILIZATION

VARIOUS MEASURES SPECIFIC TO WINTER MAY BE NECESSARY SHOULD THE PROJECT EXTEND INTO WINTER (OCTOBER 15 THROUGH APRIL 15). REFER TO THE LOW RISK SITE HANDBOOK FOR GUIDANCE.

SHOULD EARTH DISTURBANCE BE PERFORMED OUTSIDE THE CONSTRUCTION SEASON, A WINTER EROSION AND SEDIMENT CONTROL PLAN DESCRIBING ALTERNATIVE STABILIZATION METHODS SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO AUGUST 15 FOR APPROVAL.

1.4.10 STABILIZE SOIL AT FINAL GRADE

EXPOSED SOIL MUST BE STABILIZED WITHIN 48 HOURS OF REACHING FINAL GRADE.

SEED, MULCH, FERTILIZER, AND LIME SHALL BE USED TO ESTABLISH PERMANENT VEGETATION. FOR SLOPES STEEPER THAN 1:3, BIODEGRADABLE EROSION CONTROL MATTING OR AN EQUIVALENT SHALL BE USED INSTEAD OF MULCH.

1.4.11 DE-WATERING ACTIVITIES

DISCHARGE FROM DEWATERING ACTIVITIES THAT FLOWS OFF OF THE CONSTRUCTION SITE MUST NOT CAUSE OR CONTRIBUTE TO A VIOLATION OF THE VERMONT WATER QUALITY STANDARDS.

TREATMENT OF DEWATERING COFFERDAM IS NOT ANTICIPATED.

1.4.12 INSPECT YOUR SITE

INSPECT THE PROJECT SITE BASED ON SPECIAL PROVISION REQUIREMENTS OR CONSTRUCTION GENERAL PERMIT AUTHORIZATION STIPULATIONS.

1.5 SEQUENCE AND STAGING

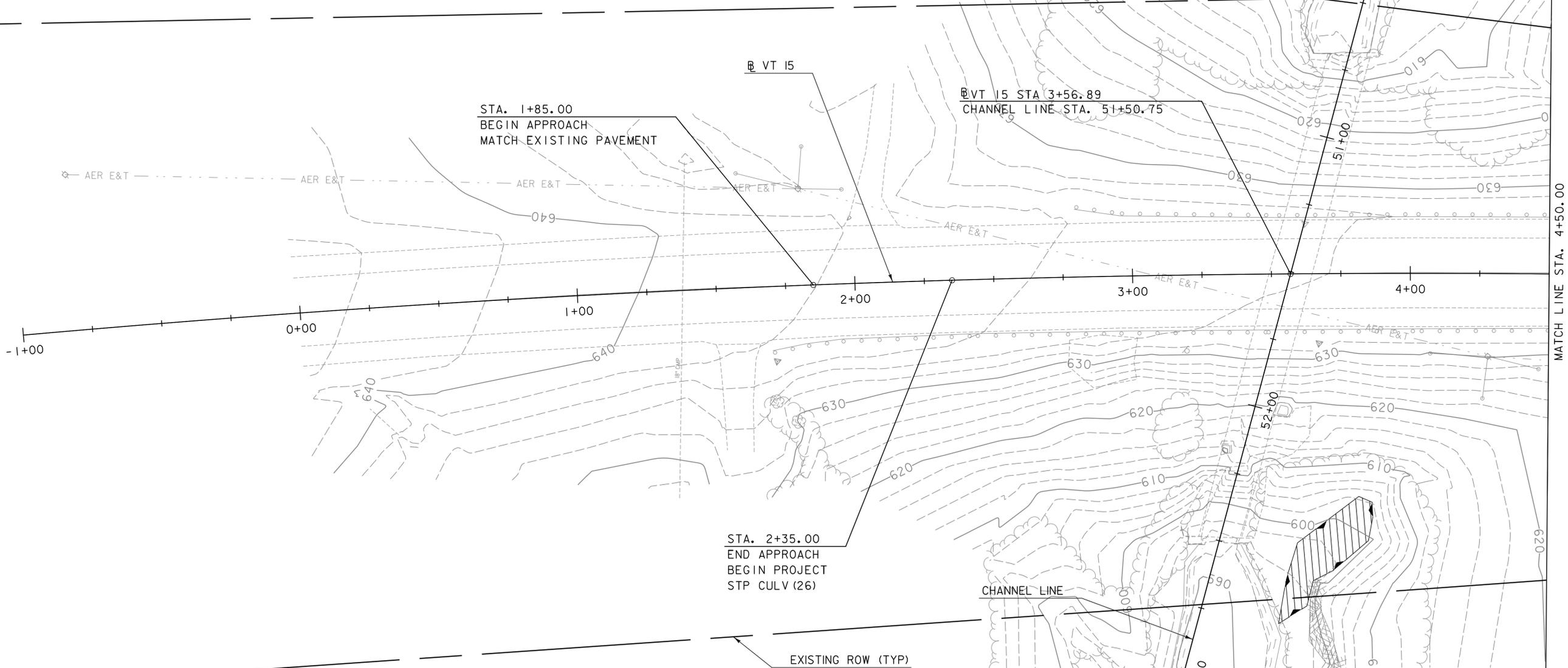
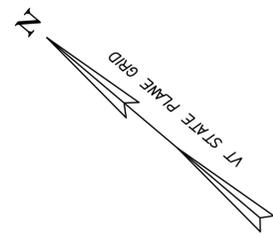
THIS SECTION WILL BE DEVELOPED BY THE CONTRACTOR USING THE GUIDANCE OUTLINED IN THE VTRANS EPSC PLAN CONTRACTOR CHECKLIST.

1.5.1 CONSTRUCTION SEQUENCE

1.5.2 OFF-SITE ACTIVITIES

IN ADDITION TO THE CONTRACTOR CHECKLIST ANY ACTIVITIES OUTSIDE THE CONSTRUCTION LIMITS SHALL FOLLOW SUBSECTIONS 105.25- 105.29 OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION.

TYLIN INTERNATIONAL	PROJECT NAME: HYDE PARK	
	PROJECT NUMBER: STP CULV(26)	
	FILE NAME: z1lb292bdr_epscn.dgn	PLOT DATE: 11/6/2013
	PROJECT LEADER: R. HEBERT	DRAWN BY: D. BRYANT
	DESIGNED BY: D. BRYANT	CHECKED BY: D. BURHANS
	EPSC NARRATIVE	SHEET 50 OF 60

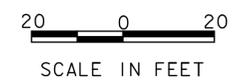


LEGEND:

- ARCH ——— ARCHAEOLOGICAL RESOURCE LIMIT
- CLASS II WETLAND

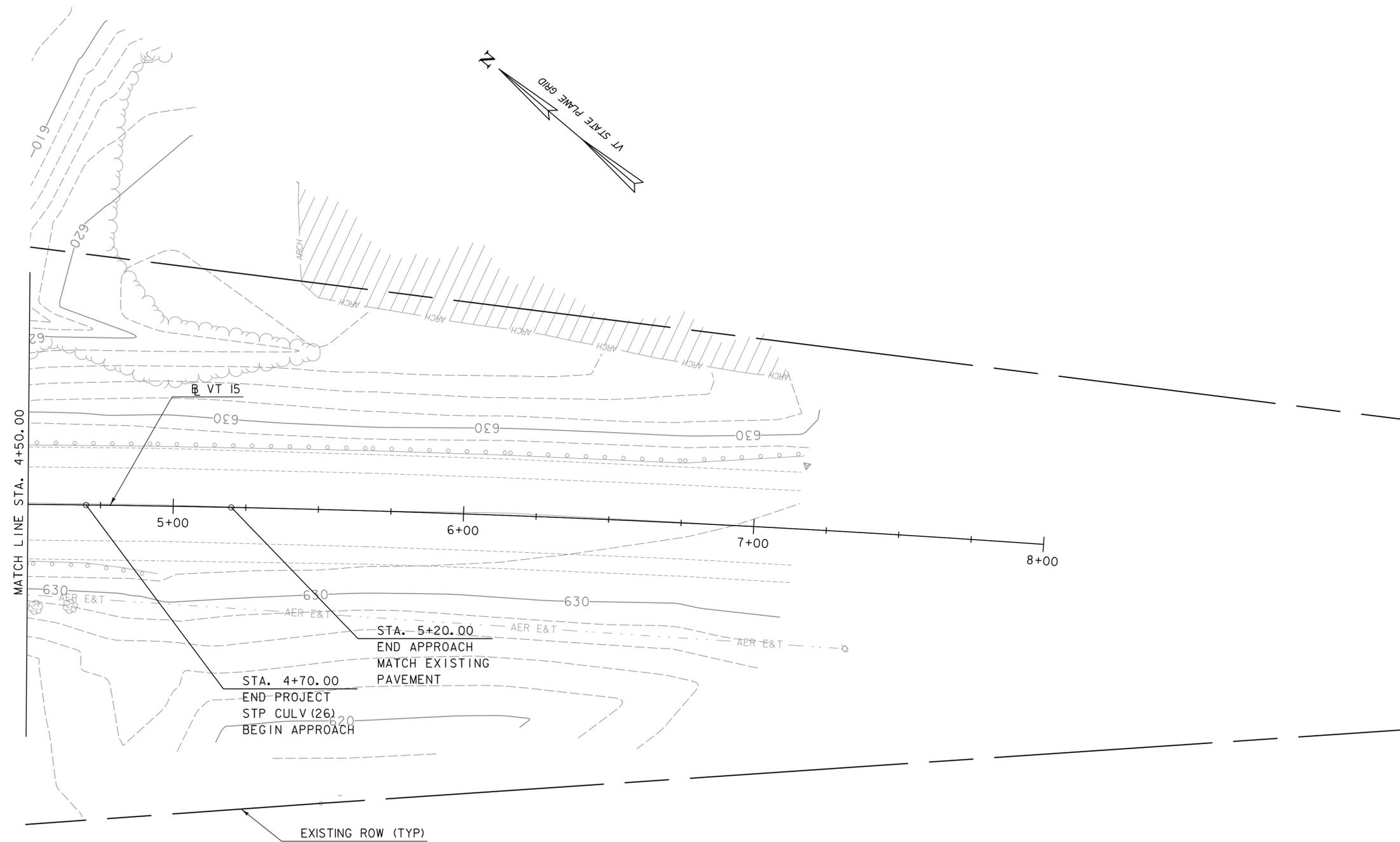
NOTES:

1. ORDINARY HIGH WATER ELEVATION = VARIES
2. COUNTOURS REFLECT EXISTING CONDITIONS.



TYLININTERNATIONAL

PROJECT NAME: HYDE PARK		PLOT DATE: 11/6/2013	
PROJECT NUMBER: STP CULV(26)		DRAWN BY: D. BRYANT	
FILE NAME: z11b292bdr_ero.dgn	DESIGNED BY: D. BRYANT	EPSC EXISTING CONDITIONS SITE PLAN I	CHECKED BY: D. BURHANS
		SHEET 51 OF 60	

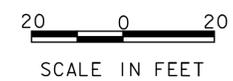


LEGEND:

- ARCH ——— ARCHAEOLOGICAL RESOURCE LIMIT
- CLASS II WETLAND

NOTES:

1. COUNTOURS REFLECT EXISTING CONDITIONS.



TYLININTERNATIONAL

PROJECT NAME: HYDE PARK	
PROJECT NUMBER: STP CULV(26)	
FILE NAME: z1b292bdr_ero.dgn	PLOT DATE: 11/6/2013
PROJECT LEADER: R. HEBERT	DRAWN BY: D. BRYANT
DESIGNED BY: D. BRYANT	CHECKED BY: D. BURHANS
EPSC EXISTING CONDITIONS SITE PLAN 2	SHEET 52 OF 60

**GEOTEXTILE FOR SILT FENCE,
WOVEN WIRE REINFORCED**

2+37.54 RT - 2+63.29 RT	= 78.0 SF
2+63.80 RT - 2+76.20 RT	= 37.8 SF
2+70.06 RT - 2+82.85 RT	= 39.2 SF
2+83.53 RT - 2+92.99 RT	= 28.3 SF
2+92.20 RT - 2+99.28 RT	= 21.3 SF
3+09.57 RT - 3+19.46 RT	= 20.4 SF
3+40.61 RT - 3+50.63 RT	= 30.4 SF
3+62.36 RT - 3+69.34 RT	= 22.0 SF
3+70.76 RT - 3+88.05 RT	= 51.7 SF
3+96.98 RT - 4+16.41 RT	= 59.3 SF
44+92.52 LT - 45+15.92 LT	= 93.2 SF
45+27.08 LT - 45+51.38 LT	= 86.8 SF
45+61.51 LT - 45+64.40 LT	= 19.4 SF
45+75.03 LT - 45+75.07 LT	= 24.9 SF
46.09.24 LT - 46+11.98 LT	= 15.4 SF
46+23.94 LT - 46+40.65 LT	= 65.1 SF
46+53.59 LT - 46+54.54 LT	= 20.7 SF

GEOTEXTILE FOR SILT FENCE

0+16.97 RT - 0+79.15 RT	= 169.3 SF
0+80.50 RT - 1+00.89 RT	= 54.9 SF
1+02.58 RT - 1+21.19 RT	= 50.3 SF
1+22.98 RT - 1+50.10 RT	= 74.5 SF
1+62.19 RT - 2+37.72 RT	= 207.1 SF
4+16.18 RT - 4+38.40 RT	= 59.1 SF
4+38.00 RT - 4+50.00 RT	= 31.8 SF
42+41.21 LT - 42+69.82 LT	= 100.6 SF
43+07.11 LT - 43+25.55 LT	= 82.6 SF
43+45.77 LT - 43+51.65 LT	= 33.6 SF
43+63.19 LT - 43+66.09 LT	= 22.3 SF
44+49.63 LT - 44+53.26 LT	= 36.6 SF
44+71.86 LT - 44+76.55 LT	= 33.7 SF

PROJECT DEMARCATION FENCE

42+07.84 LT - 44+79.46 LT	= 353.11 LF
-0+60.44 RT - 1+52.20 RT	= 230.99 LF
1+61.85 RT - 2+38.04 RT	= 78.57 LF
4+15.65 RT - 4+50.00 RT	= 38.51 LF

TEMPORARY STONE CHECK DAMS, TYPE I

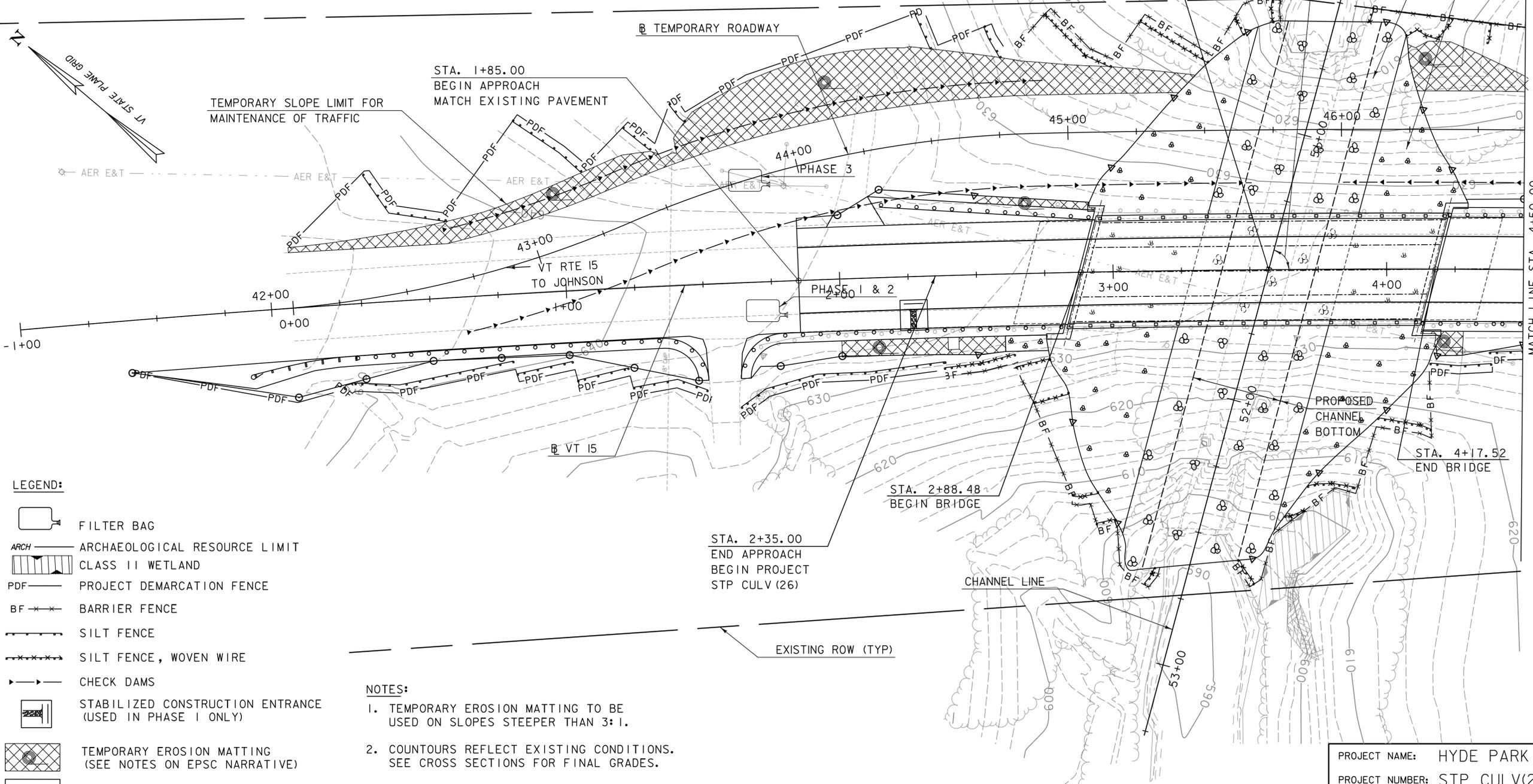
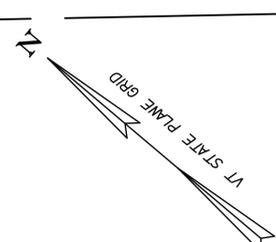
42+67 LT - 44+91 LT	
42+67 RT - 45+67 RT	
46+00 RT - 46+67 RT	

BARRIER FENCE

44+81.51 LT - 45+78.01 LT	= 143.18 LF
46+09.93 LT - 46+66.34 LT	= 57.85 LF
2+37.38 RT - 3+23.44 RT	= 144.29 LF
3+38.81 RT - 4+15.65 RT	= 139.85 LF

STABILIZED CONSTRUCTION ENTRANCE (30')

2+76.76 RT = 1 EACH

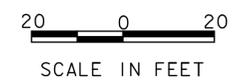


LEGEND:

- FILTER BAG
- ARCH — ARCHAEOLOGICAL RESOURCE LIMIT
- CLASS II WETLAND
- PDF — PROJECT DEMARCATION FENCE
- BF — BARRIER FENCE
- SILT FENCE
- SILT FENCE, WOVEN WIRE
- CHECK DAMS
- STABILIZED CONSTRUCTION ENTRANCE (USED IN PHASE I ONLY)
- TEMPORARY EROSION MATTING (SEE NOTES ON EPSC NARRATIVE)
- STONE FILL, TYPE II
- STONE FILL, TYPE IV

NOTES:

1. TEMPORARY EROSION MATTING TO BE USED ON SLOPES STEEPER THAN 3:1.
2. COUNTOURS REFLECT EXISTING CONDITIONS. SEE CROSS SECTIONS FOR FINAL GRADES.
3. ORDINARY HIGH WATER ELEVATION = 606.9
4. EPSC DETAILS, METHODS AND QUANTITIES SHOWN ARE APPLICABLE TO THE MOT SCHEME NOTED WITHIN THESE PLANS.



TYLININTERNATIONAL

PROJECT NAME:	HYDE PARK	PLOT DATE:	11/6/2013
PROJECT NUMBER:	STP CULV(26)	DRAWN BY:	D. BRYANT
FILE NAME:	zlib292bdr_ero.dgn	CHECKED BY:	D. BURHANS
PROJECT LEADER:	R. HEBERT	SHEET	53 OF 60
DESIGNED BY:	D. BRYANT		
EPSC CONSTRUCTION SITE PLAN I			

GEOTEXTILE FOR SILT FENCE,
WOVEN WIRE REINFORCED

46+90.75 LT - 46+90.92 LT = 17.4 SF
47+04.31 LT - 47+17.93 LT = 43.8 SF

GEOTEXTILE FOR SILT FENCE

4+50.00 RT - 5+48.39 RT = 258.9 SF
5+47.15 RT - 5+90.67 RT = 115.5 SF
5+90.65 RT - 7+27.62 RT = 363.3 SF
47+17.93 LT - 47+41.84 LT = 68.1 SF
47+45.42 LT - 47+70.77 LT = 91.1 SF
47+80.84 LT - 48+27.16 LT = 134.6 SF
48+34.25 LT - 48+79.24 LT = 116.1 SF
48+81.75 LT - 49+15.94 LT = 86.4 SF
49+16.27 LT - 49+39.45 LT = 78.2 SF

PROJECT DEMARCATION FENCE

47+18.35 LT - 49+85.58 LT = 316.35 LF
4+50.00 RT - 7+27.62 RT = 299.38 LF

TEMPORARY STONE CHECK DAMS, TYPE I

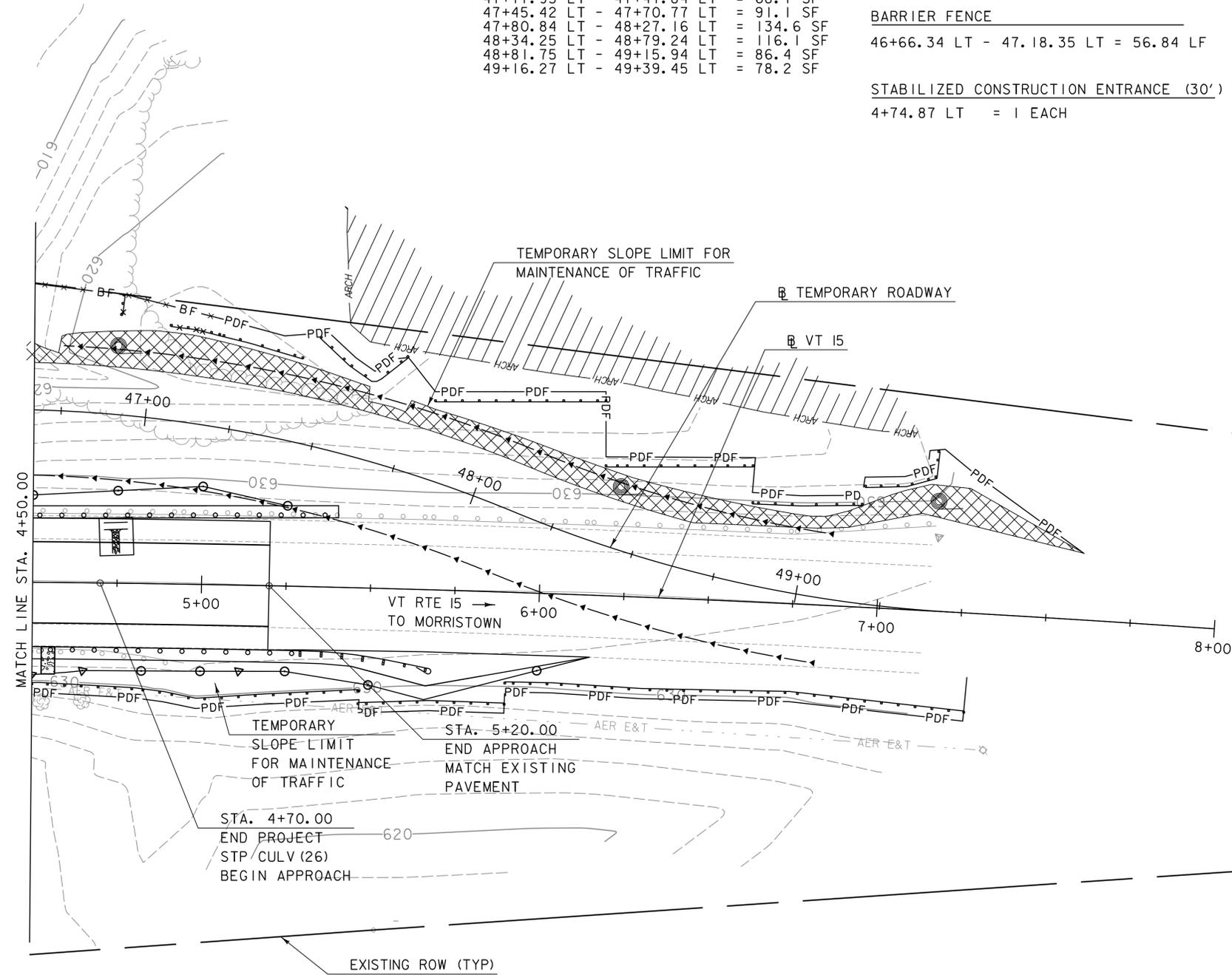
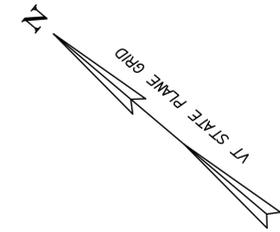
46+67 RT - 49+09 RT
46+75 LT - 49+09 LT

BARRIER FENCE

46+66.34 LT - 47.18.35 LT = 56.84 LF

STABILIZED CONSTRUCTION ENTRANCE (30')

4+74.87 LT = 1 EACH

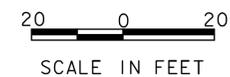


LEGEND:

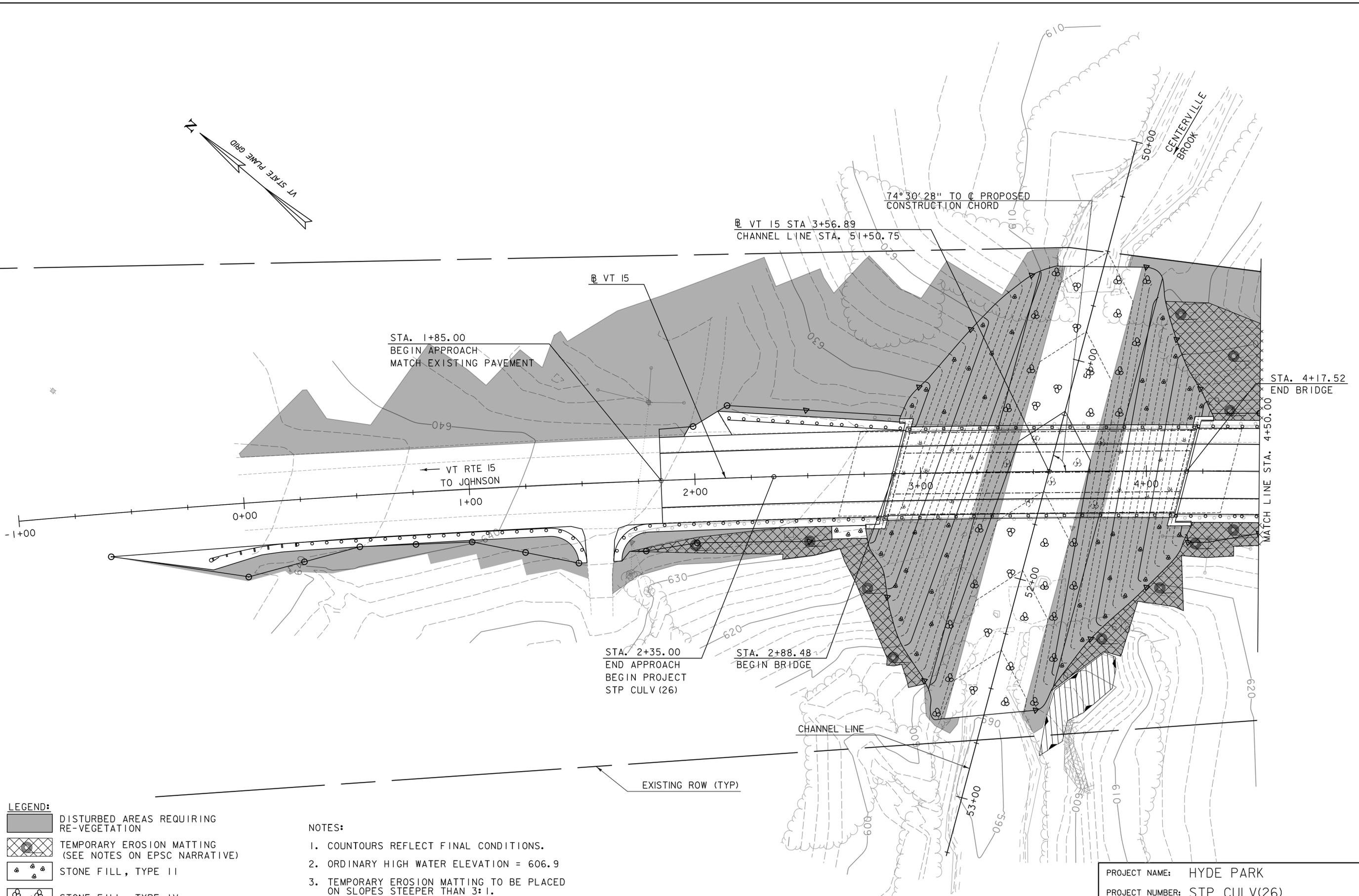
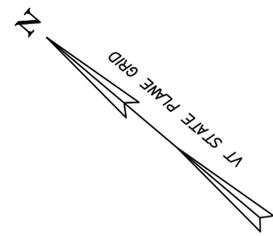
-  FILTER BAG
-  ARCH ——— ARCHAEOLOGICAL RESOURCE LIMIT
-  CLASS II WETLAND
-  PDF ——— PROJECT DEMARCATION FENCE
-  BF — x — BARRIER FENCE
-  ——— SILT FENCE
-  — x — x — SILT FENCE, WOVEN WIRE
-  —> — CHECK DAMS
-  STABILIZED CONSTRUCTION ENTRANCE (USED IN PHASE I ONLY)
-  TEMPORARY EROSION MATTING (SEE NOTES ON EPSC NARRATIVE)
-  STONE FILL, TYPE II
-  STONE FILL, TYPE IV

NOTES:

1. TEMPORARY EROSION MATTING TO BE USED ON SLOPES STEEPER THAN 3:1.
2. CONTOURS REFLECT EXISTING CONDITIONS. SEE CROSS SECTIONS FOR FINAL GRADES.
3. ORDINARY HIGH WATER ELEVATION = 606.9

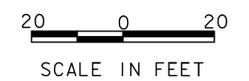


TYLIN INTERNATIONAL	PROJECT NAME: HYDE PARK	
	PROJECT NUMBER: STP CULV(26)	
FILE NAME: z1b292bdr_ero.dgn	PLOT DATE: 11/6/2013	
PROJECT LEADER: R. HEBERT	DRAWN BY: D. BRYANT	
DESIGNED BY: D. BRYANT	CHECKED BY: D. BURHANS	
EPSC CONSTRUCTION SITE PLAN 2	SHEET 54 OF 60	



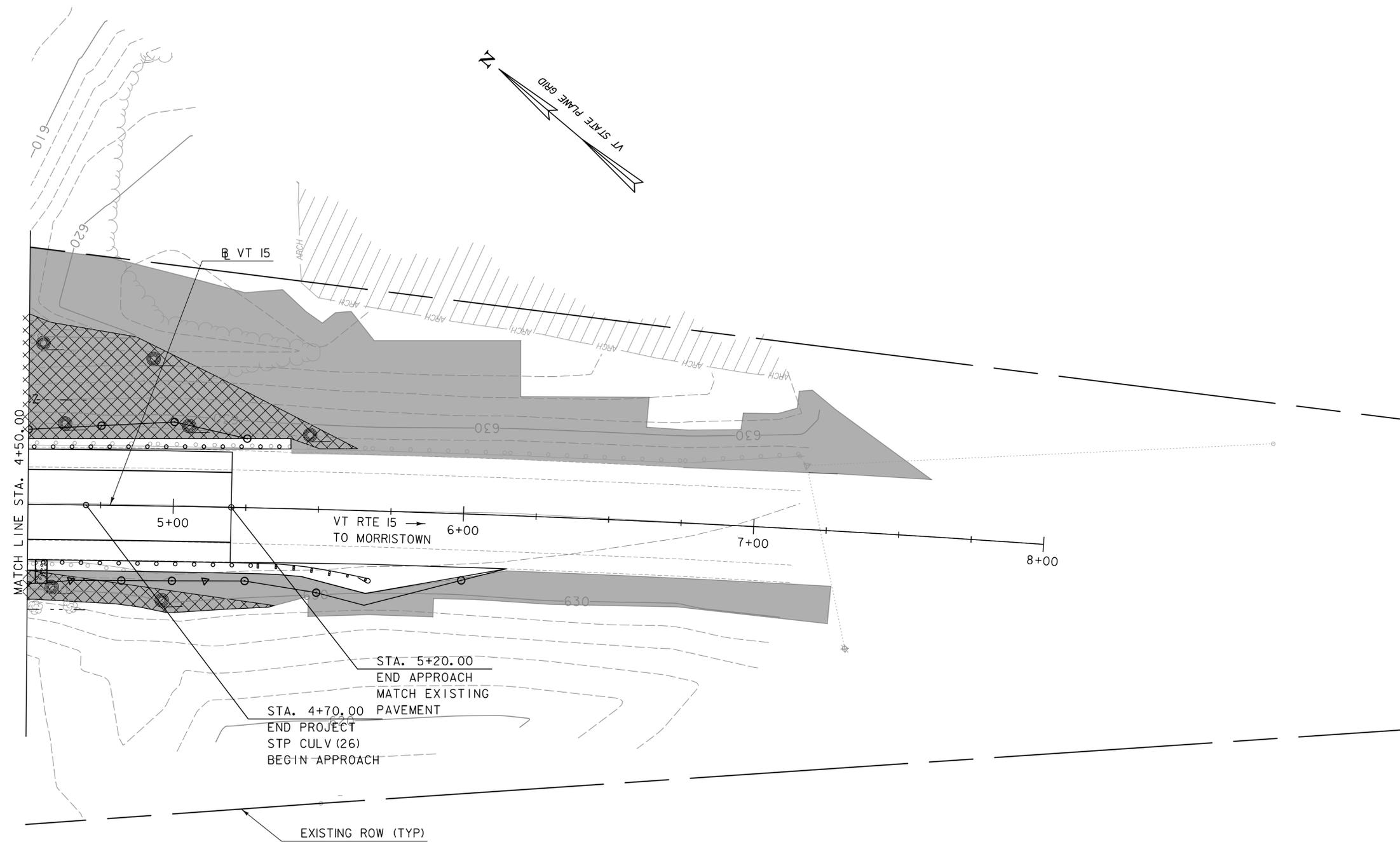
- LEGEND:**
- DISTURBED AREAS REQUIRING RE-VEGETATION
 - TEMPORARY EROSION MATTING (SEE NOTES ON EPSC NARRATIVE)
 - STONE FILL, TYPE II
 - STONE FILL, TYPE IV
 - ARCH A ——— ARCHAEOLOGICAL RESOURCE LIMIT
 - CLASS II WETLAND

- NOTES:**
1. COUNTOURS REFLECT FINAL CONDITIONS.
 2. ORDINARY HIGH WATER ELEVATION = 606.9
 3. TEMPORARY EROSION MATTING TO BE PLACED ON SLOPES STEEPER THAN 3:1.



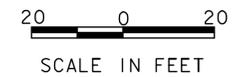
TYLININTERNATIONAL

PROJECT NAME: HYDE PARK	PLOT DATE: 11/6/2013
PROJECT NUMBER: STP CULV(26)	DRAWN BY: D. BRYANT
FILE NAME: z1lb292bdr_ero.dgn	CHECKED BY: D. BURHANS
PROJECT LEADER: R. HEBERT	SHEET 55 OF 60
DESIGNED BY: D. BRYANT	
EPSC FINAL CONDITIONS SITE PLAN I	

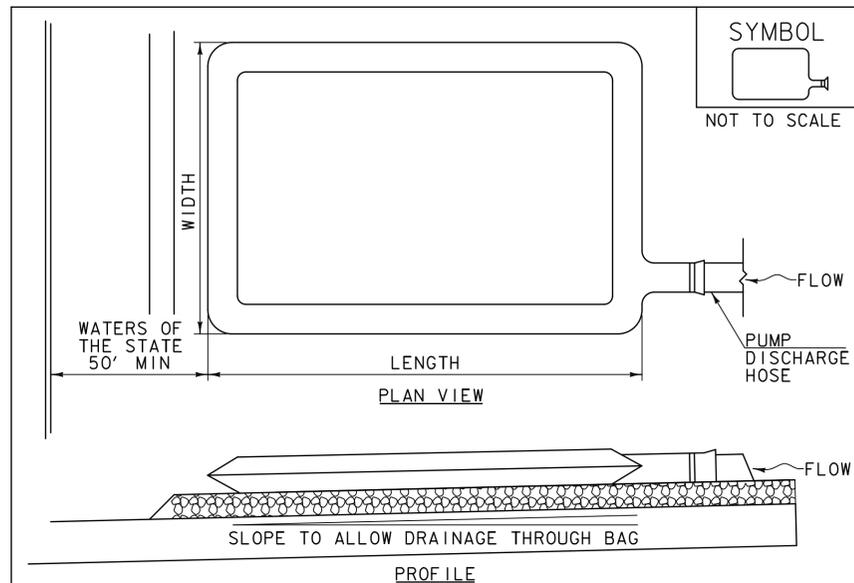


- LEGEND:**
-  DISTURBED AREAS REQUIRING RE-VEGETATION
 -  TEMPORARY EROSION MATTING (SEE NOTES ON EPSC NARRATIVE)
 -  STONE FILL, TYPE II
 -  STONE FILL, TYPE IV
 -  ARCHAEOLOGICAL RESOURCE LIMIT
 -  CLASS II WETLAND

- NOTES:**
1. CONTOURS REFLECT EXISTING CONDITIONS. FINAL CONTOURS WILL BE SIMILAR. SEE CROSS SECTION SHEETS FOR FINAL GRADES.
 2. ORDINARY HIGH WATER ELEVATION = 606.9
 3. TEMPORARY EROSION MATTING TO BE PLACED ON SLOPES STEEPER THAN 3:1.



TYLIN INTERNATIONAL	PROJECT NAME: HYDE PARK	
	PROJECT NUMBER: STP CULV(26)	
FILE NAME: z1b292bdr_ero.dgn	PLOT DATE: 11/6/2013	
PROJECT LEADER: R. HEBERT	DRAWN BY: D. BRYANT	
DESIGNED BY: D. BRYANT	CHECKED BY: D. BURHANS	
EPSC FINAL CONDITIONS SITE PLAN 2	SHEET 56 OF 60	



CONSTRUCTION SPECIFICATIONS

THE PRIMARY PURPOSE OF FILTER BAG IS TO RETAIN SILT, SAND, AND FINES DURING DEWATERING OPERATIONS.

FILTER BAGS SHALL BE INSTALLED ON A VEGETATED SLOPE GRADED TO ALLOW INCOMING WATER TO FLOW THROUGH THE BAG.

FILTER BAGS MAY ALSO BE PLACED ON COARSE AGGREGATE, STONE, OR HAYBALES TO INCREASE FILTRATION EFFICIENCY.

FILTER BAGS SHALL BE LOCATED A MINIMUM OF 50' FROM WATERS OF THE STATE UNLESS OTHERWISE APPROVED BY THE ENGINEER.

THE NECK OF THE FILTER BAG SHALL BE STRAPPED TIGHTLY TO THE DISCHARGE HOSE.

A FILTER BAG IS FULL WHEN IT NO LONGER CAN EFFICIENTLY FILTER SEDIMENT OR ALLOW WATER TO PASS AT A REASONABLE RATE.

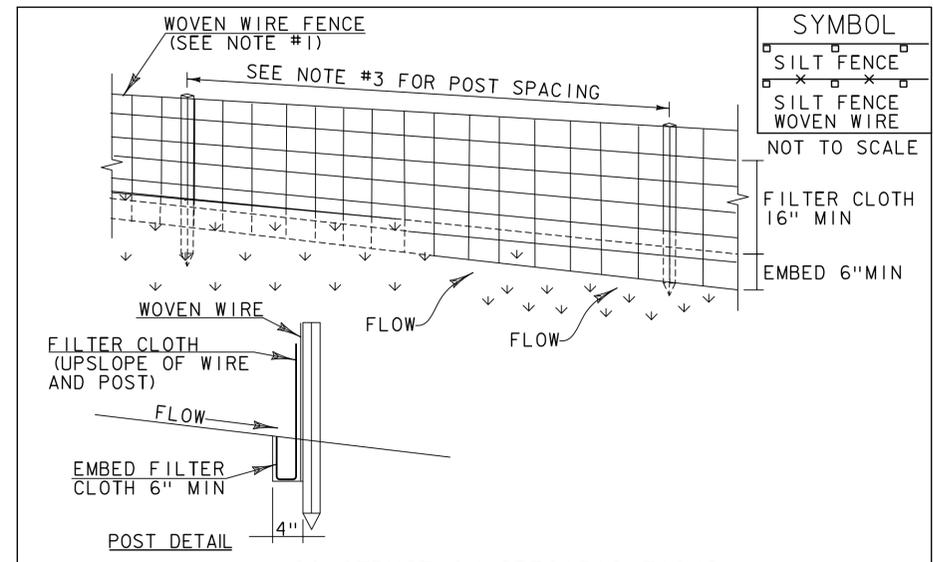
FILTER BAG SHALL BE DISPOSED OF AS APPROVED IN THE EPSC PLAN OR AS DIRECTED BY THE ENGINEER.

FILTER BAG

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006-" FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR FILTER BAG (PAY ITEM 653.45) AND AS SPECIFIED IN THE CONTRACT.

REVISIONS	
MARCH 24, 2008	WHF
JANUARY 13, 2009	WHF



CONSTRUCTION SPECIFICATIONS

1. WOVEN WIRE REINFORCED FENCE IS REQUIRED WITHIN 100' UPSLOPE OF RECEIVING WATERS WHEN THE PROJECT FALLS UNDER A CONSTRUCTION STORMWATER PERMIT. WOVEN WIRE SHALL BE A MIN. 14 GAUGE WITH A 6" MAX. MESH OPENING.
2. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAF1100X, STABILINKA T140N OR APPROVED EQUIVALENT.
3. POST SPACING FOR WIRE-BACKED FENCE SHALL BE 10' MAXIMUM. FOR FILTER-CLOTH FENCE, WHEN ELONGATION IS >50%, POST SPACING SHALL NOT EXCEED 4' AND WHEN ELONGATION IS <50%, POST SPACING SHALL NOT EXCEED 6'.
4. WOVEN WIRE FENCE IS TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES. FILTER CLOTH IS TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
5. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY 6" AND FOLDED.
6. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN SEDIMENT REACHES HALF OF FABRIC HEIGHT.

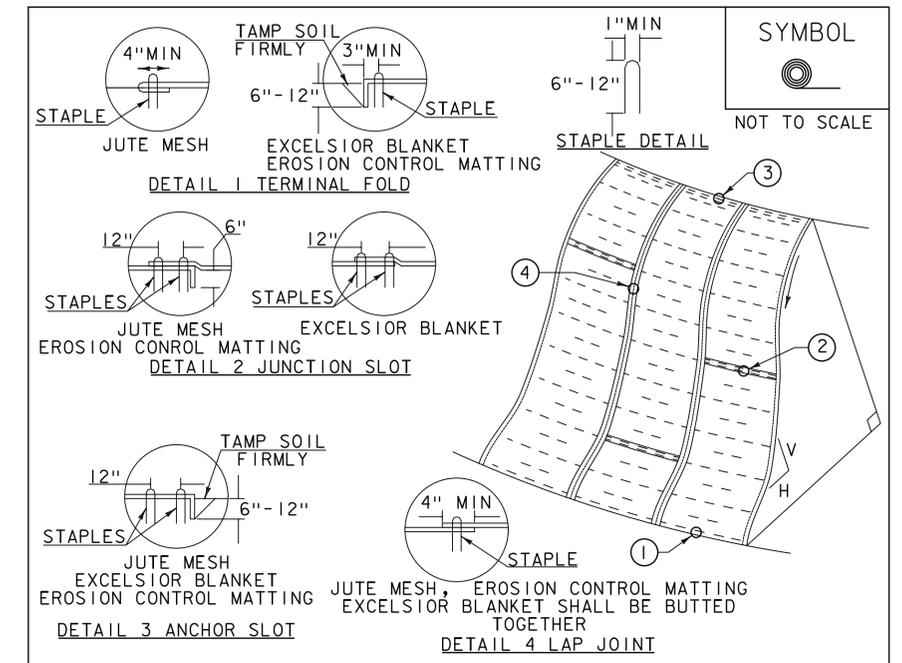
ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SILT FENCE

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006-" FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 649 AND AS SHOWN IN THE PLANS FOR GEOTEXTILE FOR SILT FENCE (PAY ITEM 649.5) OR GEOTEXTILE FOR SILT FENCE, WOVEN WIRE REINFORCED (PAY ITEM 649.515).

REVISIONS	
MARCH 21, 2008	WHF
DECEMBER 11, 2008	WHF
JANUARY 13, 2009	WHF



CONSTRUCTION SPECIFICATIONS

1. APPLY TO SLOPES GREATER THAN 3H:1V OR WHERE NECESSARY TO AID IN ESTABLISHING VEGETATION.
2. APPLY FERTILIZER, LIME SEED PRIOR TO PLACING MATTING.
3. STAPLES ARE TO BE PLACED ALTERNATELY, IN COLUMNS APPROXIMATELY 2' APART AND IN ROWS APPROXIMATELY 3' APART. APPROXIMATELY 175 STAPLES ARE REQUIRED PER 4'X225' ROLL OF MATERIAL AND 125 STAPLES ARE REQUIRED PER 4'X150' ROLL OF MATERIAL.
4. DISTURBED AREAS SHALL BE SMOOTHLY GRADED. EROSION CONTROL MATERIAL SHALL BE PLACED LOOSELY OVER GROUND SURFACE. DO NOT STRETCH.
5. ALL TERMINAL ENDS AND TRANSVERSE LAPS SHALL BE STAPLED AT APPROXIMATELY 12" INTERVALS.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

ROLLED EROSION CONTROL PRODUCT (RECP) SIDE SLOPE

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006-" FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 AND AS SHOWN IN THE PLANS FOR TEMPORARY EROSION MATTING (PAY ITEM 653.20) OR PERMANENT EROSION MATTING (PAY ITEM 653.2).

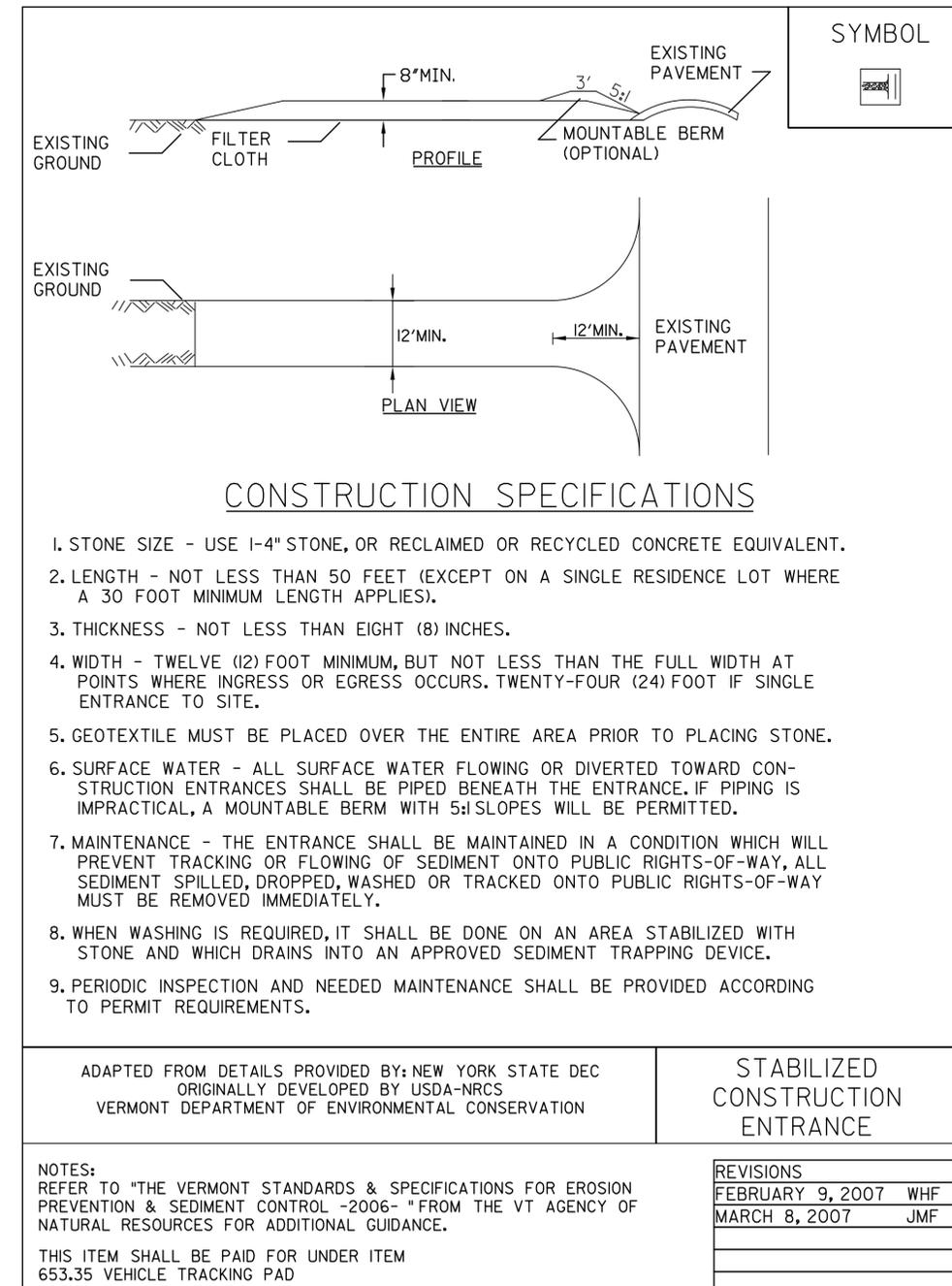
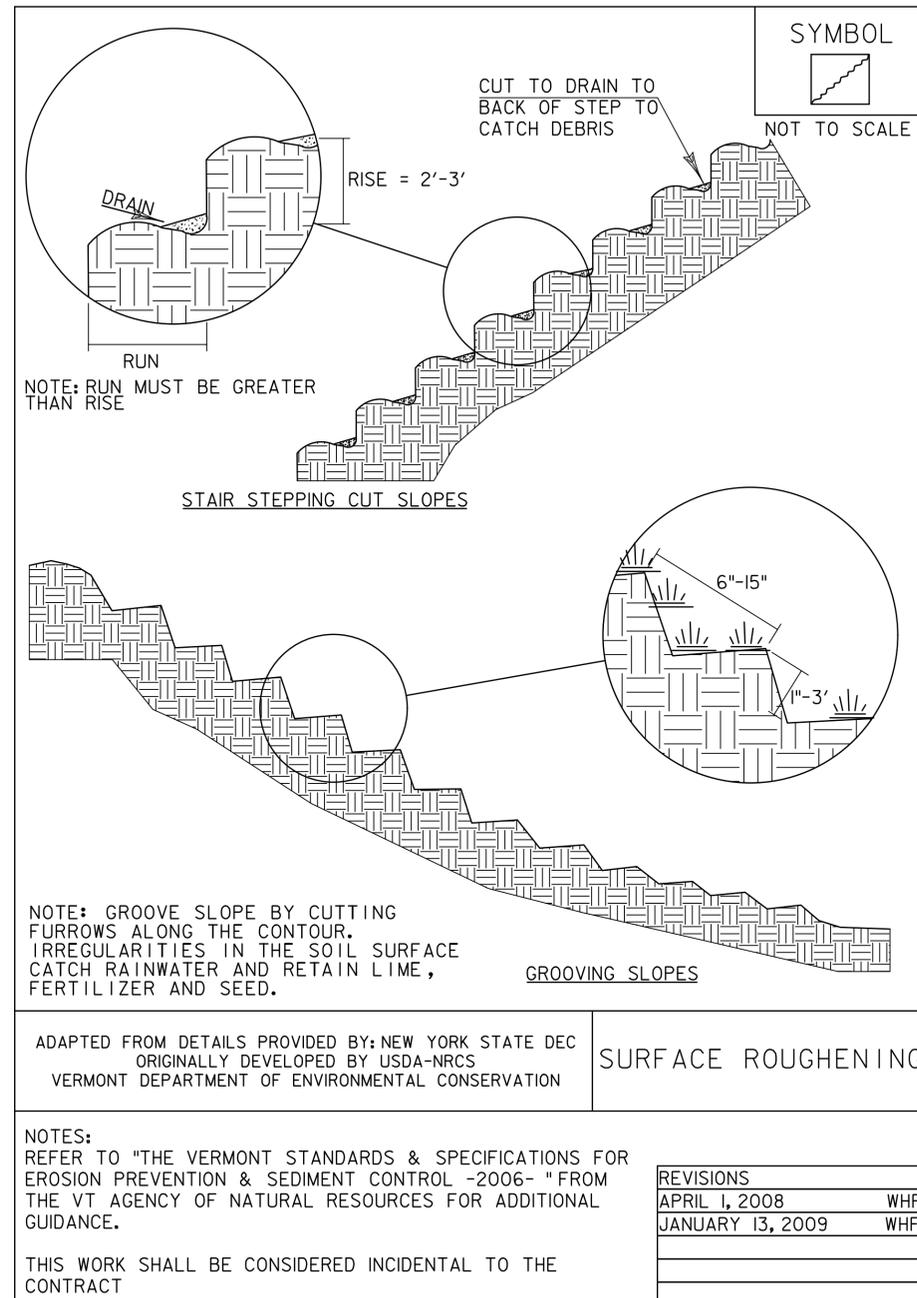
REVISIONS	
APRIL 16, 2007	JMF
JANUARY 13, 2009	WHF



PROJECT NAME: HYDE PARK
PROJECT NUMBER: STP CULV(26)

FILE NAME: z1b292bdr_erode.t.dgn
PROJECT LEADER: R. HEBERT
DESIGNED BY: D. BRYANT
EPSC DETAILS - 1

PLOT DATE: 11/6/2013
DRAWN BY: D. BRYANT
CHECKED BY: D. BURHANS
SHEET 57 OF 60

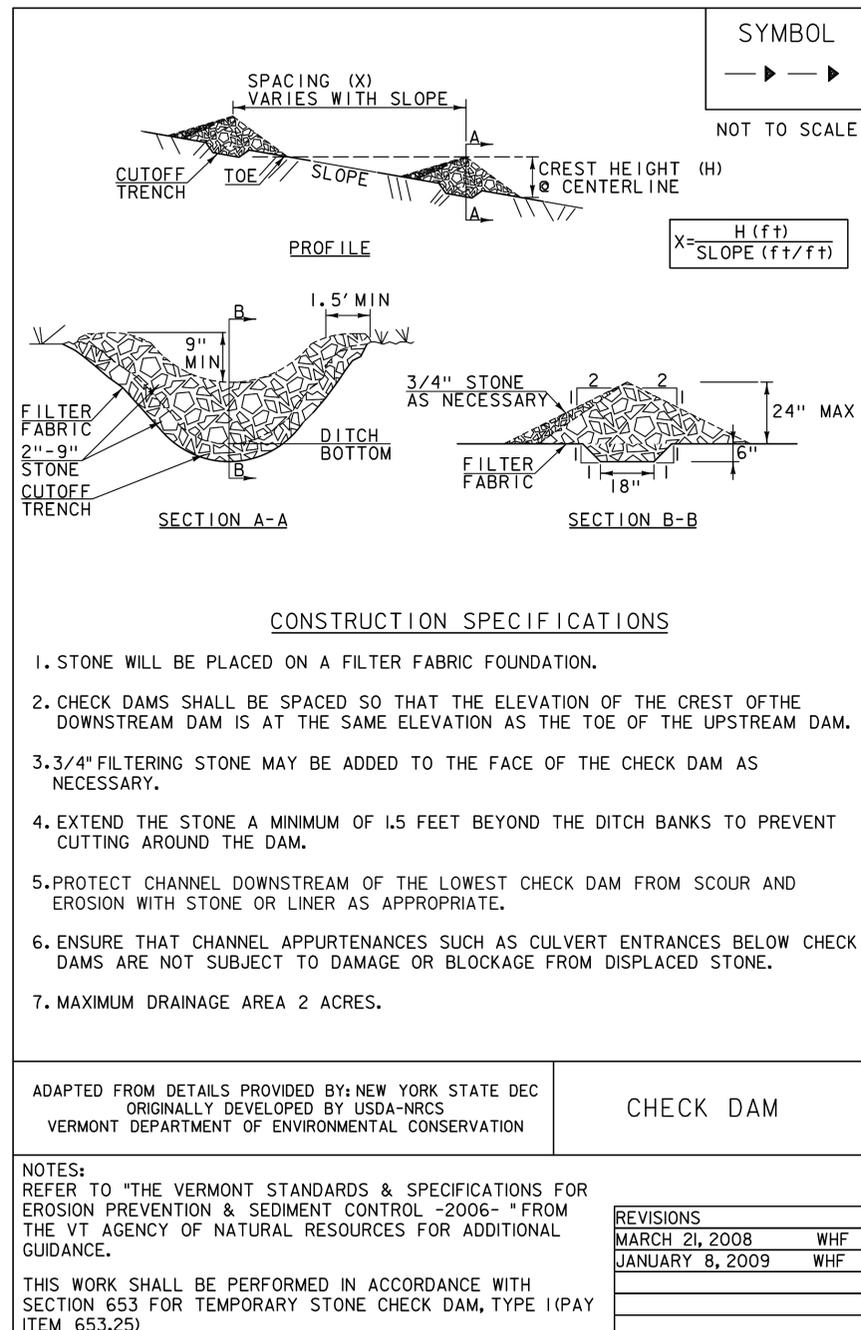


TYLIN INTERNATIONAL

PROJECT NAME: HYDE PARK
PROJECT NUMBER: STP CULV(26)

FILE NAME: z1lb292bdr_erodet.dgn
PROJECT LEADER: R. HEBERT
DESIGNED BY: D. BRYANT
EPSC DETAILS - 2

PLOT DATE: 11/6/2013
DRAWN BY: D. BRYANT
CHECKED BY: D. BURHANS
SHEET 58 OF 60



VAOT RURAL AREA MIX					
% WEIGHT	LBS/AC		NAME	GERM %	PURITY %
	BROADCAST	HYDROSEED			
37.5%	22.5	45	CREeping RED FESCUE	85%	98%
37.5%	22.5	45	TALL FESCUE	90%	95%
5.0%	3	6	RED TOP	90%	95%
15.0%	9	18	BIRDSFOOT TREFOIL	85%	98%
5.0%	3	6	ANNUAL RYE GRASS	85%	95%
100%	60	120			

VAOT URBAN AREA MIX					
% WEIGHT	LBS/AC		NAME	GERM %	PURITY %
	BROADCAST	HYDROSEED			
42.5%	34	68	CREeping RED FESCUE	85%	98%
10.0%	8	16	PERENNIAL RYE GRASS	90%	95%
42.5%	34	68	KENTUCKY BLUE GRASS	85%	85%
5.0%	4	8	ANNUAL RYE GRASS	85%	95%
100%	80	160			

SOIL AMENDMENT GUIDANCE			
FERTILIZER		LIME	
BROADCAST	HYDROSEED	BROADCAST	HYDROSEED
10-20-10	FOLLOW	PELLETIZED	FOLLOW
500 LBS/AC	MANUFACTURER	2 TONS/AC	MANUFACTURER

CONSTRUCTION GUIDANCE

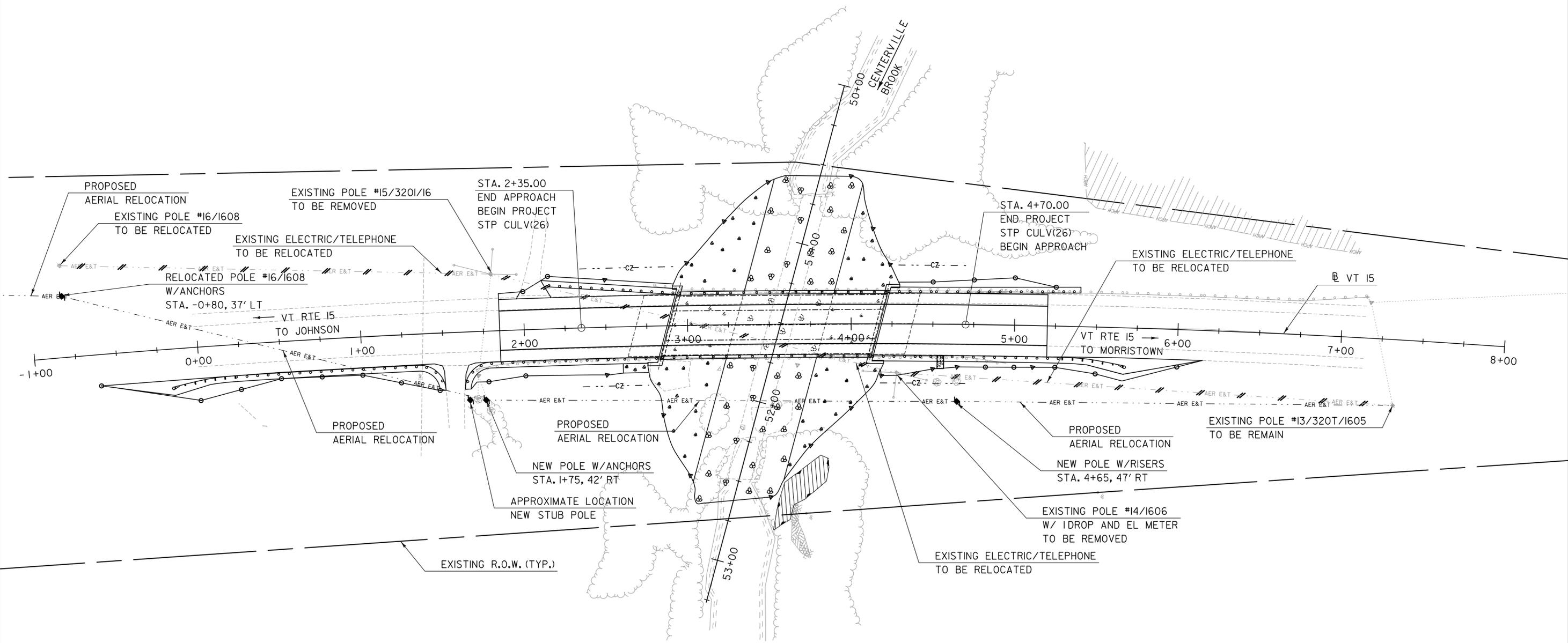
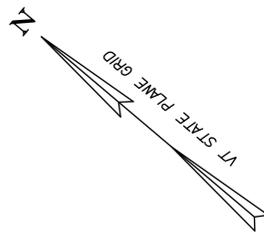
- RURAL SEED MIX: USE AS INDICATED IN THE PLANS AND/OR FOR ALL ESTABLISHED UPLAND (NON WETLAND) AREAS DISTURBED BY THE CONTRACTOR.
- URBAN SEED MIX: USE AS INDICATED IN THE PLANS AND/OR FOR ALL ESTABLISHED LAWN AREAS DISTURBED BY THE CONTRACTOR.
- ALL SEED MIXTURES: SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT AND SHALL BE FREE OF ALL NOXIOUS SEED.
- FERTILIZER AND LIMESTONE: SHALL FOLLOW RATES SHOWN ON PLAN OR AS DIRECTED BY THE ENGINEER
- HAY MULCH: TO BE PLACED ON EARTH SLOPES AT THE RATE OF 2 TONS/ACRE, ACHIEVE 90% GROUND COVER OR AS DIRECTED BY THE ENGINEER.
- TOPSOIL: TO BE USED WITH SEED AS INDICATED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.
- HYDROSEEDING: ALTHOUGH GUIDANCE IS GIVEN ABOVE THE SITE CONDITIONS AND THE TYPE OF HYDROSEED WILL ULTIMATELY DICTATE THE AMOUNTS AND TYPES OF SOIL AMENDMENTS TO BE APPLIED
- TURF ESTABLISHMENT: PLACING SEED, FERTILIZER, LIME AND MULCH PRIOR TO SEPTEMBER 15 AND AFTER APRIL 15 CAN BETTER ENSURE A VIGOROUS GROWTH OF GRASS.

ADAPTED FROM VTRANS TECHNICAL LANDSCAPE MANUAL FOR ROADWAYS AND TRANSPORTATION FACILITIES

TURF ESTABLISHMENT

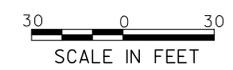
REVISIONS	
JUNE 23, 2009	WHF
JANUARY 15, 2010	WHF
FEBRUARY 16, 2011	WHF

TYLIN INTERNATIONAL	PROJECT NAME: HYDE PARK	PLOT DATE: 11/6/2013
	PROJECT NUMBER: STP CULV(26)	DRAWN BY: D. BRYANT
	FILE NAME: z11b292bdr_erode.t.dgn	CHECKED BY: D. BURHANS
	PROJECT LEADER: R. HEBERT	SHEET 59 OF 60
	DESIGNED BY: D. BRYANT	
	EPSC DETAILS - 3	



UTILITY RELOCATION PLAN

LEGEND:
 - AER E&T - - - - - ELECTRIC/TELEPHONE
 // AER E&T - - - - - ELECTRIC/TELEPHONE TO BE RELOCATED



TYLIN INTERNATIONAL

PROJECT NAME: HYDE PARK	PLOT DATE: 11/6/2013
PROJECT NUMBER: STP CULV(26)	DRAWN BY: T. KELLEY
FILE NAME: z1lb292bdr_Utl.dgn	CHECKED BY: D. BRYANT
PROJECT LEADER: R. HEBERT	SHEET 60 OF 60
DESIGNED BY: T. KELLEY	
UTILITY RELOCATION PLAN	