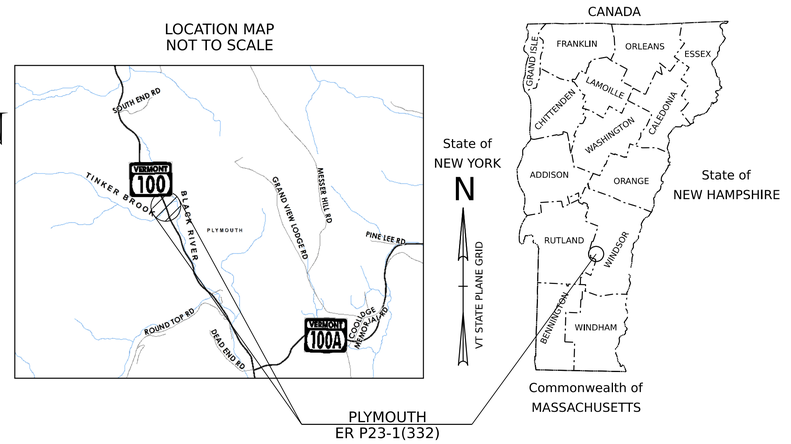
REVIEWER NOTES:

1. OVERHEAD UTILITIES WILL NEED TO BE RELOCATED.
2. TRAFFIC WILL BE DETOURED AROUND SITE.
3. BOTH PERMANENT AND TEMPORARY RIGHT-OF-WAY WILL NEED TO BE ACQUIRED.
4. PLANS ARE BEING SUBMITTED FOR REVIEW WITHOUT BORING LOGS. LEDGE ELEVATION ARE KNOWN AND HAVE BEEN CONSIDERED IN THE PROJECT QUANTITIES.
5. FINAL HYDRAULICS ARE NOT COMPLETE.
6. DETOUR PLAN SHEETS ARE NOT COMPLETE

STATE OF VERMONT
AGENCY OF TRANSPORTATION

LOCATION MAP
NOT TO SCALE



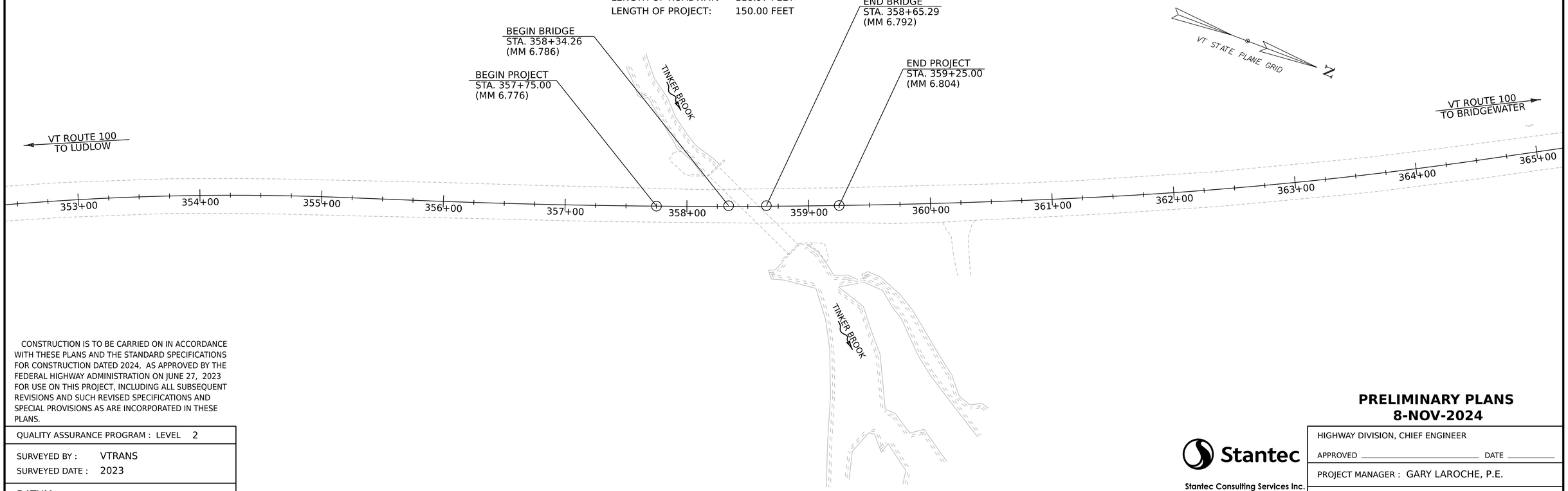
PROPOSED IMPROVEMENT
BRIDGE PROJECT
TOWN OF PLYMOUTH
COUNTY OF WINDSOR

ROUTE NO: VT ROUTE 100, BRIDGE NO. 112

PROJECT LOCATION: IN THE TOWN OF PLYMOUTH, ON VT ROUTE 100, BRIDGE NO. 112 OVER THE TINKER BROOK, APPROXIMATELY 1.4 MILES NORTH OF THE INTERSECTION WITH VT ROUTE 100A.

PROJECT DESCRIPTION: FULL REPLACEMENT OF THE EXISTING CULVERT ALONG WITH THE RELATED ROADWAY APPROACH AND CHANNEL WORK.

LENGTH OF STRUCTURE: 31.03 FEET
LENGTH OF ROADWAY: 118.97 FEET
LENGTH OF PROJECT: 150.00 FEET



CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2024, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JUNE 27, 2023 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

QUALITY ASSURANCE PROGRAM : LEVEL 2

SURVEYED BY : VTRANS
SURVEYED DATE : 2023

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (2011)

0 40 80
SCALE IN FEET

PRELIMINARY PLANS
8-NOV-2024

HIGHWAY DIVISION, CHIEF ENGINEER
APPROVED _____ DATE _____

PROJECT MANAGER : GARY LAROCHE, P.E.

PROJECT NAME : PLYMOUTH
PROJECT NUMBER : ER P23-1(332)

SHEET 1 OF 26 SHEETS

Stantec
Stantec Consulting Services Inc.
193 Tilley Drive, Suite 1
South Burlington VT U.S.A. 05403
Phone: (802) 864-0223
www.stantec.com

STATE OF VERMONT
AGENCY OF TRANSPORTATION

PRELIMINARY INFORMATION SHEET (CULVERT)

LRFD

INDEX OF SHEETS

PLAN SHEETS

1	TITLE SHEET
2	PRELIMINARY INFORMATION SHEET
3	TYPICAL SECTIONS
4	CONVENTIONAL SYMBOLOGY LEGEND
5	TIE SHEET
6	LAYOUT PLAN SHEET
7 - 8	PROFILE SHEETS
9 - 11	DETOUR PLAN SHEET 1-3
12	BORING LAYOUT SHEET
13 - 14	BORING LOG SHEETS
15	PROPOSED UTILITY RELOCATION PLAN
16	GUARDRAIL LAYOUT SHEET
17 - 21	ROADWAY CROSS SECTION SHEETS 1-5
22 - 24	CHANNEL CROSS SECTION SHEETS 1-3
25	EXISTING CONDITIONS SITE PLAN
26	LANDSCAPE PLANS

STANDARDS LIST

DETAIL SHEETS

FINAL HYDRAULIC REPORT

TRAFFIC MAINTENANCE NOTES

1. MAINTAIN TRAFFIC ON AN OFF SITE DETOUR.
2. TRAFFIC SIGNALS ARE NOT NECESSARY.
3. SIDEWALKS ARE NOT NECESSARY

DESIGN VALUES

1. DESIGN LIVE LOAD		HL-93
2. FUTURE PAVEMENT	d_p:	2.5 INCH
3. CULVERT OPENING	D:	20.00 FT
4. MIN. MID-SPAN POS. CAMBER @ RELEASE (PRESTRESSED UNITS)	Δ:	---
5. PRESTRESSING STRAND	f_y:	---
6. PRESTRESSED CONCRETE STRENGTH	f'_c:	---
7. PRESTRESSED CONCRETE RELEASE STRENGTH	f'_{ci}:	---
8. HIGH PERFORMANCE CONCRETE, CLASS PCD	f'_c:	---
9. HIGH PERFORMANCE CONCRETE, CLASS PCS	f'_c:	---
10. CONCRETE HIGH PERFORMANCE, CLASS SCC	f'_c:	---
11. CONCRETE, CLASS C	f'_c:	---
12. REINFORCING STEEL	f_y:	60 KSI
13. STRUCTURAL STEEL AASHTO M270	f_y:	---
14. NOMINAL BEARING RESISTANCE OF SOIL	q_n:	---
15. SOIL BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD)	ϕ:	---
16. NOMINAL BEARING RESISTANCE OF ROCK	q_n:	---
17. ROCK BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD)	ϕ:	---
18. PILE RESISTANCE FACTOR	ϕ:	---
19. LATERAL PILE DEFLECTION	Δ:	---
20. BASIC WIND SPEED	V_{3s}:	---
21. MINIMUM GROUND SNOW LOAD	p_g:	---
22. SEISMIC DATA PGA: ---	S_s:	---
	S_1:	---
23.		
24.		---
25.		---
26.		---

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							
POSTING							
OPERATING							
COMMENTS:	TABLE TO BE COMPLETED BY CONTRACTOR'S DESIGNER						

CULVERT DESIGN CRITERIA

1. PROPOSED CULVERT IS A PRECAST CONCRETE BOX (20'-0" X 9'-0" X 98'-0" BOX).
2. CULVERT ENDS ARE NOT SKEWED.
3. CULVERT WILL BE SET AT A SLOPE OF 9.66 IN. ON 100 FT.
4. CULVERT WILL REQUIRE FISH PASSAGE ACCOMODATIONS
5. CULVERT CONSTRUCTION WILL REQUIRE A TEMPORARY PIPE

TRAFFIC DATA

YEAR	ADT	DHV	% D	% T	ADTT	
2026	1069	240	68	1.1	68	20 year ESAL for flexible pavement from 2026 to 2046 : 361000
2046	1157	250	68	1.9	121	40 year ESAL for flexible pavement from 2026 to 2066 : 841500
						Design Speed : 50 mph

AS BUILT "REBAR" DETAIL

LEVEL I	LEVEL II	LEVEL III
TYPE:	TYPE:	TYPE:
GRADE:	GRADE:	GRADE:

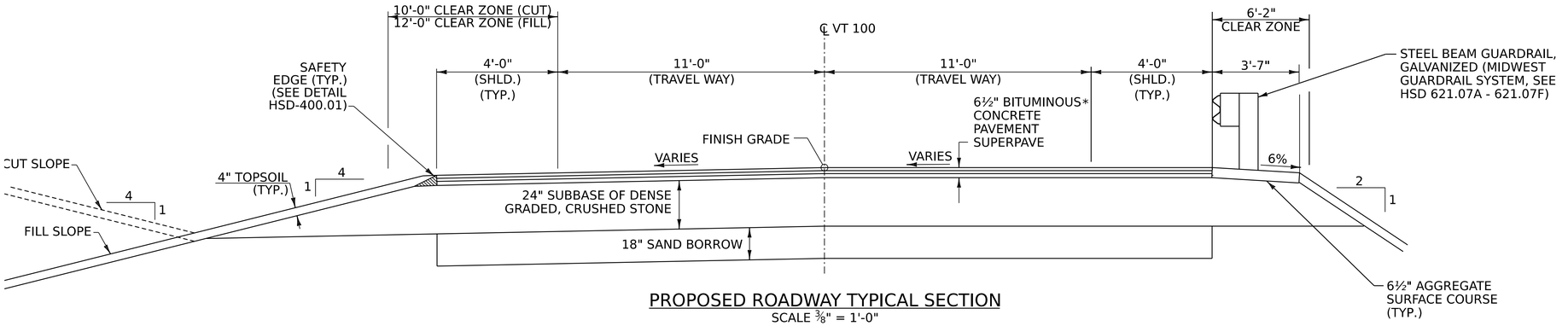
Stantec

PROJECT NAME: PLYMOUTH
PROJECT NUMBER: ER P23-1(332)

FILE NAME: z23b791_pi.dgn
PROJECT LEADER: T. KNIGHT
DESIGNED BY: S.WINES
PRELIMINARY INFORMATION

PLOT DATE: 8-NOV-2024
DRAWN BY: S.WINES
CHECKED BY: T. KNIGHT
SHEET 2 OF 26

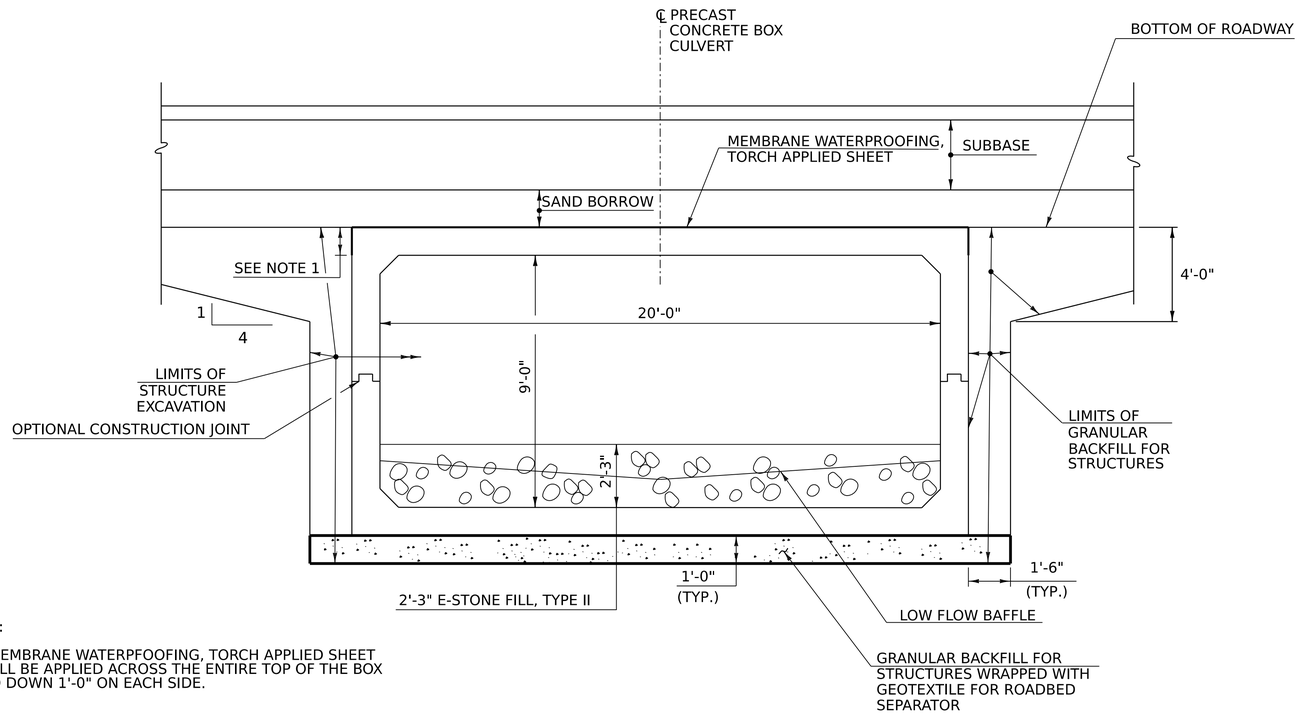
MATERIAL ITEM	TOLERANCE
SURFACE	
• PAVEMENT (TOTAL THICKNESS)	± ¼"
• AGGREGATE SURFACE COURSE	± ½"
• SUBBASE	± 1"
• SAND BORROW	± 1"



PROPOSED ROADWAY TYPICAL SECTION

SCALE ⅜" = 1'-0"

* 1½" BITUMINOUS CONCRETE PAVEMENT, TYPE IVS, QA TIER III OVER
1½" BITUMINOUS CONCRETE PAVEMENT, TYPE IVS, QA TIER III OVER
3¼" BITUMINOUS CONCRETE PAVEMENT, TYPE IIS, QA TIER III

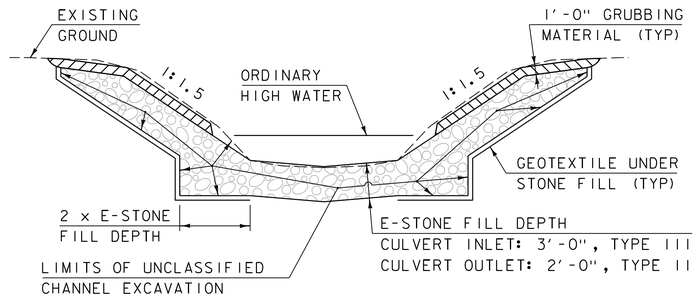


NOTE:

1. MEMBRANE WATERPFOOFING, TORCH APPLIED SHEET SHALL BE APPLIED ACROSS THE ENTIRE TOP OF THE BOX AND DOWN 1'-0" ON EACH SIDE.

PRECAST CONCRETE BOX TYPICAL SECTION

SCALE ⅜" = 1'-0"



TYPICAL CHANNEL SECTION

(NOT TO SCALE)

1. WHENEVER CHANNEL SLOPE INTERSECTS ROADWAY SUBBASE, GRUBBING MATERIAL SHALL BEGIN AT THE BOTTOM OF SUBBASE.

2. THE CONTRACTOR SHALL CREATE A LOW FLOW CHANNEL IN THE STREAM BED MATERIAL AS DIRECTED BY THE ENGINEER.

Stantec

PROJECT NAME: PLYMOUTH
PROJECT NUMBER: ER P23-1(332)

FILE NAME: z23b791_typical.dgn
PROJECT LEADER: T. KNIGHT
DESIGNED BY: S.WINES
TYPICAL SECTIONS

PLOT DATE: 8-NOV-2024
DRAWN BY: S.WINES
CHECKED BY: J. GRIGAS
SHEET 3 OF 26

GENERAL INFORMATION

SYMBOLOGY LEGEND NOTE

THE SYMBOLOGY ON THIS SHEET IS INTENDED TO COVER STANDARD CONVENTIONAL SYMBOLOGY. THE SYMBOLOGY IS USED FOR EXISTING & PROPOSED FEATURES WITH HEAVIER LINEWEIGHT, IN COMBINATION WITH PROJECT ANNOTATION, AS NOTED ON PROJECT PLAN SHEETS. THIS LEGEND SHEET COVERS THE BASICS. SYMBOLOGY ON PLANS MAY VARY, PLAN ANNOTATIONS AND NOTES SHOULD BE USED TO CLARIFY AS NEEDED.

R.O.W. ABBREVIATIONS (CODES) & SYMBOLS

POINT	CODE	DESCRIPTION
	BF	BARRIER FENCE
	CH	CHANNEL EASEMENT
	CONST	CONSTRUCTION EASEMENT
	CUL	CULVERT EASEMENT
	D&C	DISCONNECT & CONNECT
	DIT	DITCH EASEMENT
	DR	DRAINAGE EASEMENT
	DRIVE	DRIVEWAY EASEMENT
	EC	EROSION CONTROL
	HWY	HIGHWAY EASEMENT
	I&M	INSTALL & MAINTAIN EASEMENT
	LAND	LANDSCAPE EASEMENT
	PDF	PROJECT DEMARCATION FENCE
	R&RES	REMOVE & RESET
	R&REP	REMOVE & REPLACE
	R.T. & I.	RIGHT, TITLE, AND INTEREST
	SR	SLOPE RIGHT
	UE	UTILITY EASEMENT
	(P)	PERMANENT EASEMENT
	(T)	TEMPORARY EASEMENT
■	BNDNS	BOUND SET
⧈	BNDNS	BOUND TO BE SET
◎	IPNF	IRON PIN FOUND
●	IPNS	IRON PIN TO BE SET
⊠	CALC	EXISTING ROW POINT
○	PROW	PROPOSED ROW POINT
[LENGTH]		LENGTH CARRIED ON NEXT SHEET

COMMON TOPOGRAPHIC POINT SYMBOLS

POINT	CODE	DESCRIPTION
	APL	BOUND APPARENT LOCATION
	BM	BENCHMARK
	BND	BOUND
	CB	CATCH BASIN
	COMB	COMBINATION POLE
	DITHR	DROP INLET THROATED DNC
	EL	ELECTRIC POWER POLE
	FPOLE	FLAGPOLE
	GASFIL	GAS FILLER
	GP	GUIDE POST
	GSO	GAS SHUT OFF
	GUY	GUY POLE
	GUYW	GUY WIRE
	GV	GATE VALVE
	H	TREE HARDWOOD
	HCTRL	CONTROL HORIZONTAL
	HVCTRL	CONTROL HORIZ. & VERTICAL
	HYD	HYDRANT
	IP	IRON PIN
	IPIPE	IRON PIPE
	LI	LIGHT - STREET OR YARD
	MB	MAILBOX
	MH	MANHOLE (MH)
	MM	MILE MARKER
	PM	PARKING METER
	PMK	PROJECT MARKER
	POST	POST STONE/WOOD
	RRSIG	RAILROAD SIGNAL
	RRSL	RAILROAD SWITCH LEVER
	S	TREE SOFTWOOD
	SAT	SATELLITE DISH
	SHRUB	SHRUB
	SIGN	SIGN
	STUMP	STUMP
	TEL	TELEPHONE POLE
	TIE	TIE
	TSIGN	SIGN W/DOUBLE POST
	VCTRL	CONTROL VERTICAL
	WELL	WELL
	WSO	WATER SHUT OFF

THESE ARE COMMON VAOT SURVEY POINT SYMBOLS FOR EXISTING FEATURES, ALSO USED FOR PROPOSED FEATURES WITH HEAVIER LINEWEIGHT, IN COMBINATION WITH PROPOSED ANNOTATION.

PROPOSED GEOMETRY CODES

CODE	DESCRIPTION
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
CC	CENTER OF CURVE
PT	POINT OF TANGENCY
PCC	POINT OF COMPOUND CURVE
PRC	POINT OF REVERSE CURVE
POB	POINT OF BEGINNING
POE	POINT OF ENDING
STA	STATION PREFIX
AH	AHEAD STATION SUFFIX
BK	BACK STATION SUFFIX
D	CURVE DEGREE OF (100FT)
R	CURVE RADIUS OF
T	CURVE TANGENT LENGTH
L	CURVE LENGTH OF
E	CURVE EXTERNAL DISTANCE
CB	CHORD BEARING

UTILITY SYMBOLOGY

UNDERGROUND UTILITIES

- UGU — UTILITY (GENERIC-UNKNOWN)
- UT — TELEPHONE
- UE — ELECTRIC
- UC — CABLE (TV)
- UEC — ELECTRIC+CABLE
- UET — ELECTRIC+TELEPHONE
- UCT — CABLE+TELEPHONE
- UECT — ELECTRIC+CABLE+TELEP.
- G — GAS LINE
- W — WATER LINE
- S — SANITARY SEWER (SEPTIC)

ABOVE GROUND UTILITIES (AERIAL)

- AGU — UTILITY (GENERIC-UNKNOWN)
- T — TELEPHONE
- E — ELECTRIC
- C — CABLE (TV)
- EC — ELECTRIC+CABLE
- ET — ELECTRIC+TELEPHONE
- AER E&T — ELECTRIC+TELEPHONE
- CT — CABLE+TELEPHONE
- ECT — ELECTRIC+CABLE+TELEP.
- UTILITY POLE GUY WIRE

PROJECT CONSTRUCTION SYMBOLOGY

PROJECT DESIGN & LAYOUT SYMBOLOGY

- CZ — CLEAR ZONE
- PLAN LAYOUT MATCHLINE

PROJECT CONSTRUCTION FEATURES

- TOP OF CUT SLOPE
- TOE OF FILL SLOPE
- STONE FILL
- BOTTOM OF DITCH ℄
- CULVERT PROPOSED
- STRUCTURE SUBSURFACE
- PDF — PDF — PROJECT DEMARCATION FENCE
- BF — BF — BARRIER FENCE
- TREE PROTECTION ZONE (TPZ)
- STRIPING LINE REMOVAL
- SHEET PILES

CONVENTIONAL BOUNDARY SYMBOLOGY

BOUNDARY LINES

- TOWN LINE — TOWN BOUNDARY LINE
- COUNTY LINE — COUNTY BOUNDARY LINE
- STATE LINE — STATE BOUNDARY LINE
- PROPOSED STATE R.O.W. (LIMITED ACCESS)
- PROPOSED STATE R.O.W.
- STATE ROW (LIMITED ACCESS)
- STATE ROW
- TOWN ROW
- PERMANENT EASEMENT LINE (P)
- TEMPORARY EASEMENT LINE (T)
- SURVEY LINE
- P/L — PROPERTY LINE (P/L)
- SR SR SR — SLOPE RIGHTS
- 6f — 6f — 6F PROPERTY BOUNDARY
- 4f — 4f — 4F PROPERTY BOUNDARY
- HAZ — HAZ — HAZARDOUS WASTE

EPSC LAYOUT PLAN SYMBOLOGY

EPSC MEASURES

- ISOLATION BARRIER
- SILT FENCE
- SILT FENCE WOVEN WIRE
- CHECK DAM
- DISTURBED AREAS REQUIRING RE-VEGETATION
- EROSION MATTING

SEE EPSC DETAIL SHEETS FOR ADDITIONAL SYMBOLOGY

ENVIRONMENTAL RESOURCES

- WETLAND BOUNDARY
- RIPARIAN BUFFER ZONE
- WETLAND BUFFER ZONE
- SOIL TYPE BOUNDARY
- T&E — THREATENED & ENDANGERED SPECIES
- HAZ — HAZ — HAZARDOUS WASTE AREA
- AG — AGRICULTURAL LAND
- HABITAT — FISH & WILDLIFE HABITAT
- FLOOD PLAIN — FLOOD PLAIN
- OHW — ORDINARY HIGH WATER (OHW)
- STORM WATER
- USDA FOREST SERVICE LANDS
- WILDLIFE HABITAT SUIT/CONN

ARCHEOLOGICAL & HISTORIC

- ARCH — ARCHEOLOGICAL BOUNDARY
- HISTORIC DIST — HISTORIC DISTRICT BOUNDARY
- HISTORIC — HISTORIC AREA
- Ⓗ — HISTORIC STRUCTURE

CONVENTIONAL TOPOGRAPHIC SYMBOLOGY

EXISTING FEATURES

- ROAD EDGE PAVEMENT
- ROAD EDGE GRAVEL
- DRIVEWAY EDGE
- DITCH
- FOUNDATION
- FENCE (EXISTING)
- FENCE WOOD POST
- FENCE STEEL POST
- GARDEN
- ROAD GUARDRAIL
- RAILROAD TRACKS
- CULVERT (EXISTING)
- STONE WALL
- WALL
- WOOD LINE
- BRUSH LINE
- HEDGE
- BODY OF WATER EDGE
- LEDGE EXPOSED

Stantec

PROJECT NAME:	PLYMOUTH
PROJECT NUMBER:	ER P23-1(332)
FILE NAME: z23b791_legend.dgn	PLOT DATE: 8-NOV-2024
PROJECT LEADER: T. KNIGHT	DRAWN BY: VTRANS
DESIGNED BY: VTRANS	CHECKED BY: T. KNIGHT
CONVENTIONAL SYMBOLOGY LEGEND	SHEET 4 OF 26

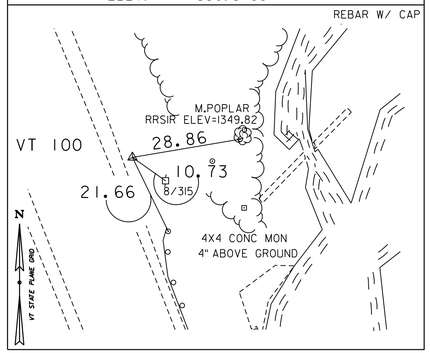
PRIMARY CONTROL

HVCTRL 42 &43 FROM 13B172 LUDLOW-BRIDGEWATER ER STP 013-3(9)

SECONDARY CONTROL

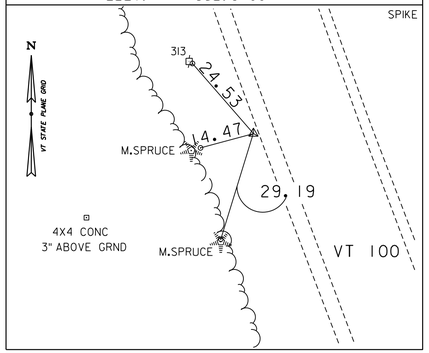
HVCTRL #4

NORTH =	382290.0378
EAST =	1573404.1245
ELEV. =	1356.5498



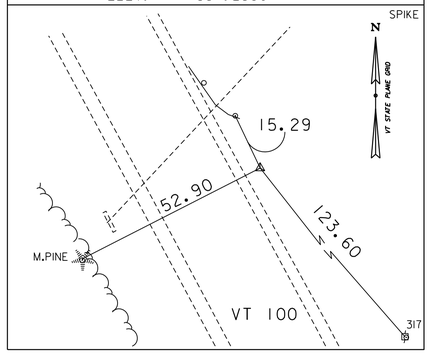
HVCTRL #42

NORTH =	381792.8380
EAST =	1573549.1960
ELEV. =	1352.8400



HVCTRL #43

NORTH =	382775.8020
EAST =	1573176.5790
ELEV. =	1357.2390



HVCTRL

NORTH =	
EAST =	
ELEV. =	

NORTH =	
EAST =	
ELEV. =	

ALIGNMENT TIES

NORTH =	
EAST =	
ELEV. =	

NORTH =	
EAST =	
ELEV. =	

NORTH =	
EAST =	
ELEV. =	

NORTH =	
EAST =	
ELEV. =	

NORTH =	
EAST =	
ELEV. =	

DATUM

VERTICAL NAVD 88

HORIZONTAL NAD83 (2011)

ADJUSTMENT NONE

PROJECT NAME: PLYMOUTH

PROJECT NUMBER: ER P 23-1(332)

FILE NAME: X23B791TI.DGN
PROJECT LEADER: C.COTA
DESIGNED BY: VTRANS
TIE SHEET

PLOT DATE: 8-NOV-2024
DRAWN BY: H.MCGOWAN
CHECKED BY: R. GILMAN
SHEET 5 OF 26

CONSTRUCT 3" AGGREGATE SURFACE COURSE DRIVE, 10'-0"
STA. 360+07.75 - 360+36.90 RT

CONSTRUCT DITCH
STA. 358+41.10 - 360+00.00 LT

YIELDING MARKER POSTS
STA. 358+40.1 LT

REMOVAL AND DISPOSAL OF GUARDRAIL
STA. 357+97.10 - 359+37.00 RT
STA. 357+54.00 - 358+93.50 LT

4" YELLOW LINE (DOUBLE)
STA. 356+25.00 - 361+75.00 ℄

4" WHITE LINE
STA. 356+25.00 - 361+75.00 RT
STA. 356+25.00 - 361+75.00 LT

TRAFFIC SIGNS, FLAT SHEET ALUMINUM
STA. 358+48.4, OFFSET = 21.7' RT
STA. 358+51.0, OFFSET = 21.7' LT

(1) 3' X 3' PRECAST CONCRETE DROP INLET
STA. 358+39.4
OFFSET = 39.1' LT

(2) 15" X 14'-8" CPEP(SL)
INLET: STA. 358+38.0, OFFSET = 39.9' LT
OUTLET: STA. 358+25.2, OFFSET = 47.1' LT

CURVE 2
DELTA = 04°50'16"
D = 00°54'34"
R = 6300.00'
T = 266.13'
L = 531.94'
E = 5.62'

NOTES:

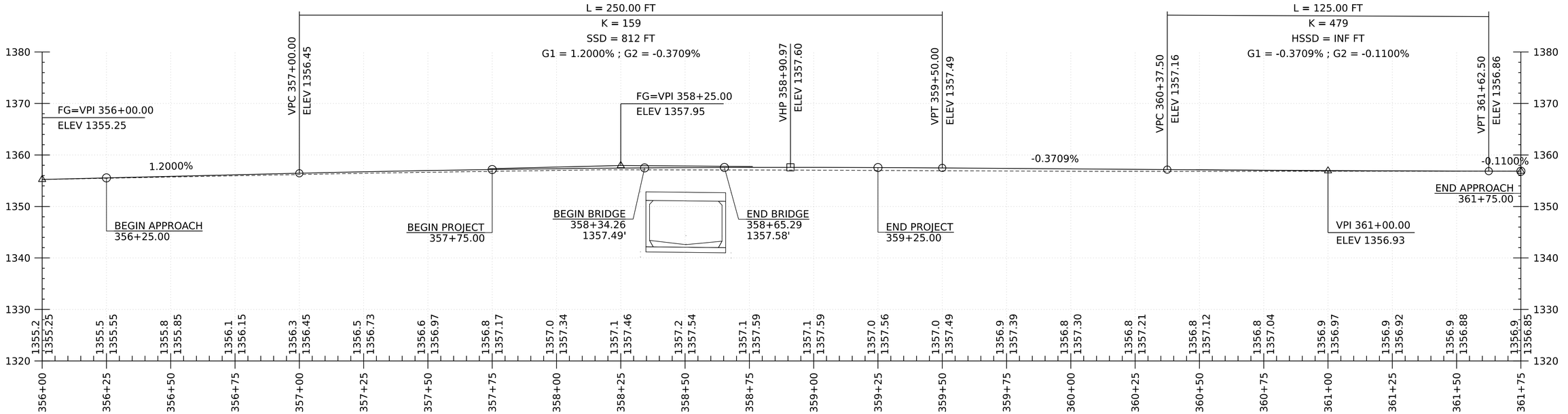
1. REFER TO PROFILE SHEET 2 FOR DRAINAGE DETAILS
2. REFER TO GUARDRAIL LAYOUT SHEET FOR GUARDRAIL CONSTRUCTION NOTES

EXISTING BRIDGE INFORMATION
CULVERT CGMPPA
BUILT 1971
11' SPAN, 7' RISE X 94' LENGTH

0 20 40
SCALE IN FEET

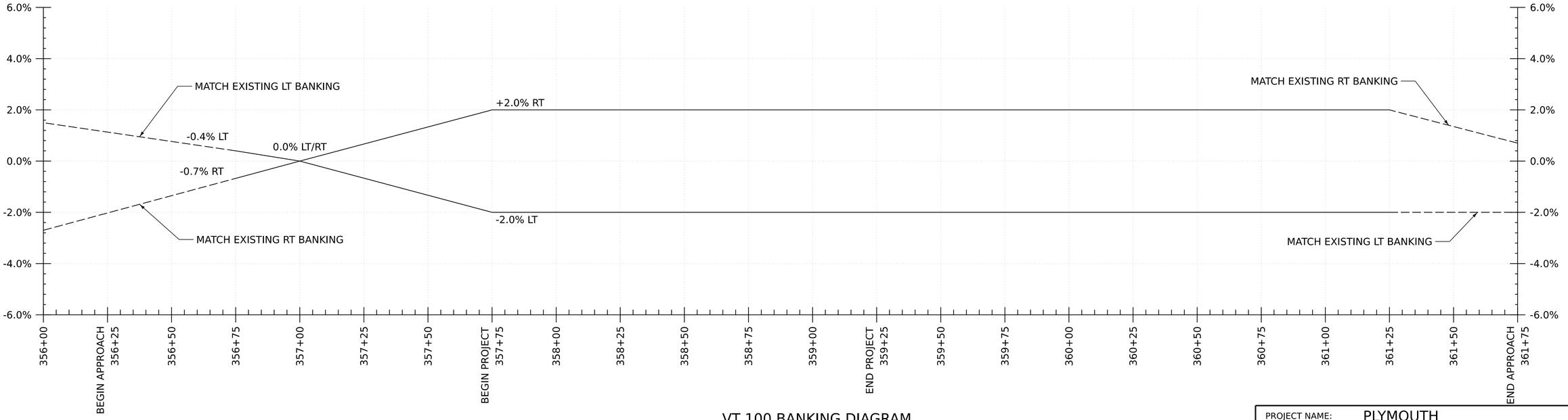
Stantec

PROJECT NAME:	PLYMOUTH		
PROJECT NUMBER:	ER P23-1(332)		
FILE NAME:	z23b791_bdr_proposed.dgn	PLOT DATE:	8-NOV-2024
PROJECT LEADER:	T. KNIGHT	DRAWN BY:	S.WINES
DESIGNED BY:	S.WINES	CHECKED BY:	J. GRIGAS
LAYOUT PLAN SHEET 1		SHEET 6 OF 26	



VT 100 PROFILE

SCALE: 1" = 20'-0" HORIZONTAL
1" = 10'-0" VERTICAL

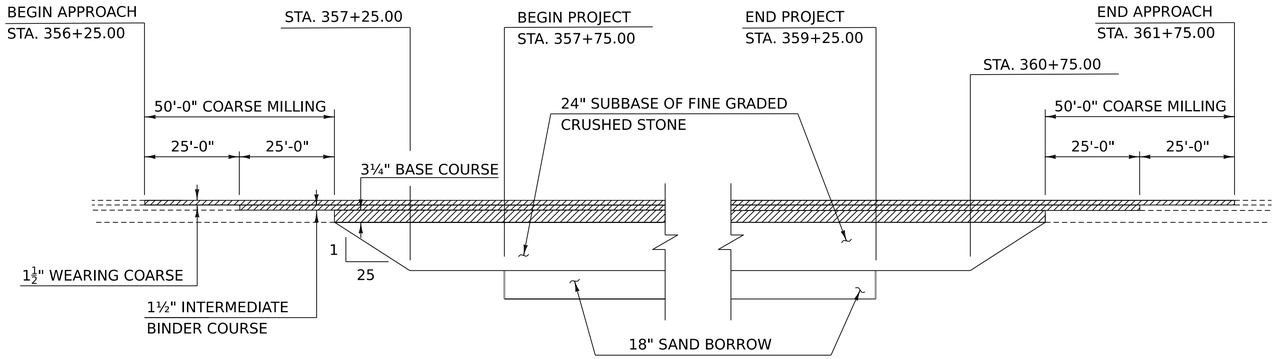


VT 100 BANKING DIAGRAM

SCALE: 1" = 20'-0" HORIZONTAL
1" = 2% VERTICAL

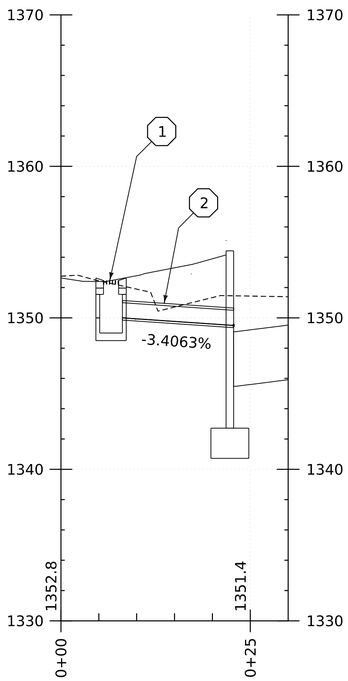
Stantec

PROJECT NAME:	PLYMOUTH
PROJECT NUMBER:	ER P(23)-1(332)
FILE NAME: z23b791pro.dgn	PLOT DATE: 8-NOV-2024
PROJECT LEADER: T. KNIGHT	DRAWN BY: J. GRIGAS
DESIGNED BY: J. GRIGAS	CHECKED BY: ------
PROFILE SHEET 1	SHEET 7 OF 26



MATERIAL TRANSITION

NOT TO SCALE

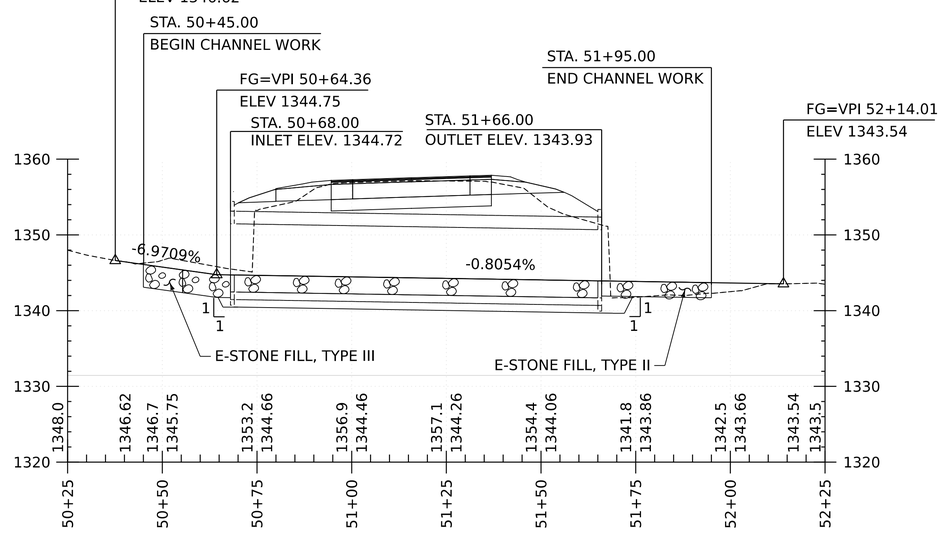


DRAINAGE PROFILE

SCALE:HORIZONTAL 1" = 10'-0"
VERTICAL 1" = 5'-0"

1. NEW 3'-0"x 3'-0" PRECAST REINFORCED CONCRETE DROP INLET
   WITH CAST IRON GRATE, TYPE D
   RIM EL 1352.46 FT
   SUMP EL 1349.00 FT

2. NEW 15"x 14'-8" CPEP(SL)
   INLET INV. EL 1350.00 FT
   OUTLET INV. EL 1349.50 FT



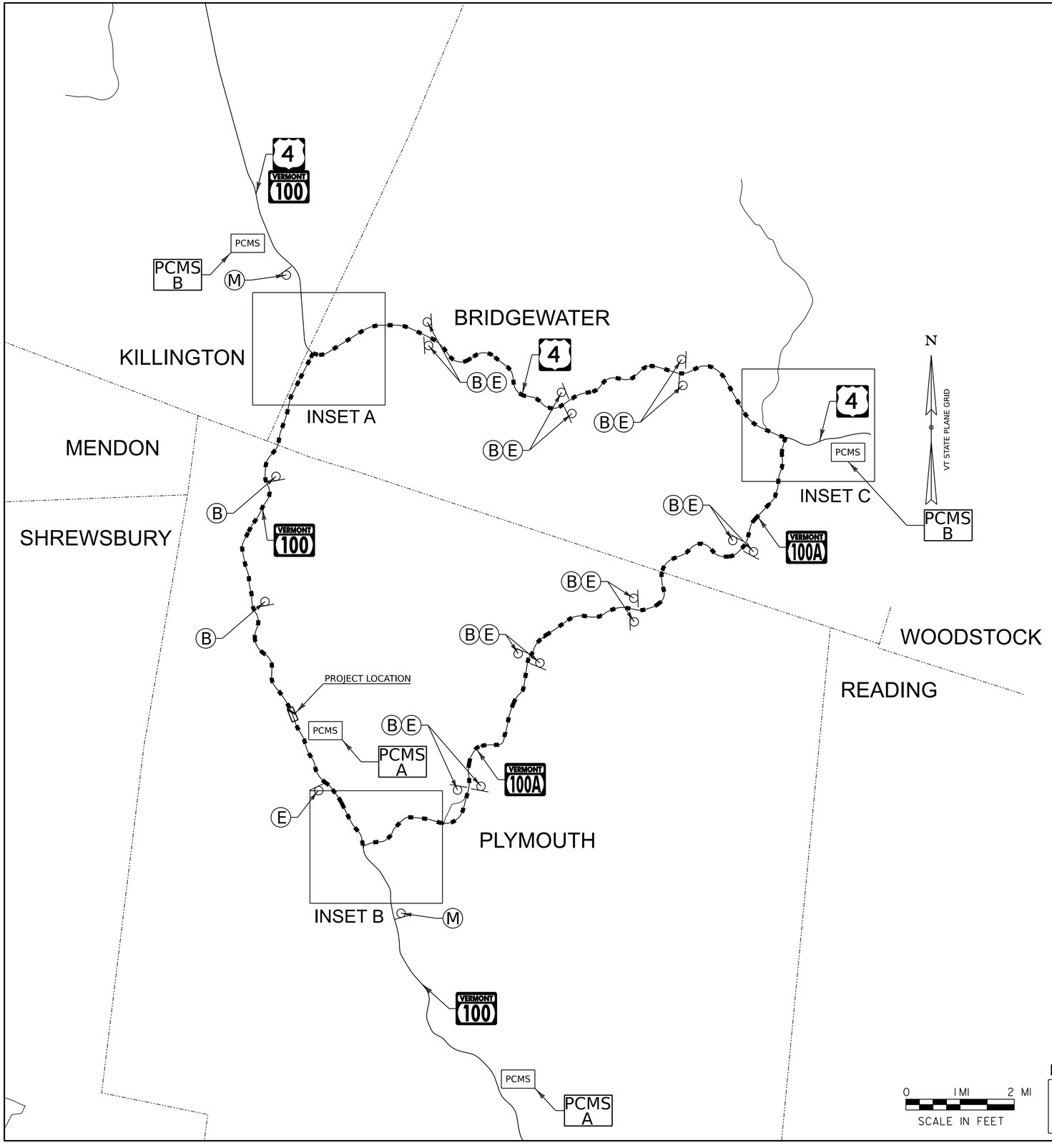
CHANNEL PROFILE

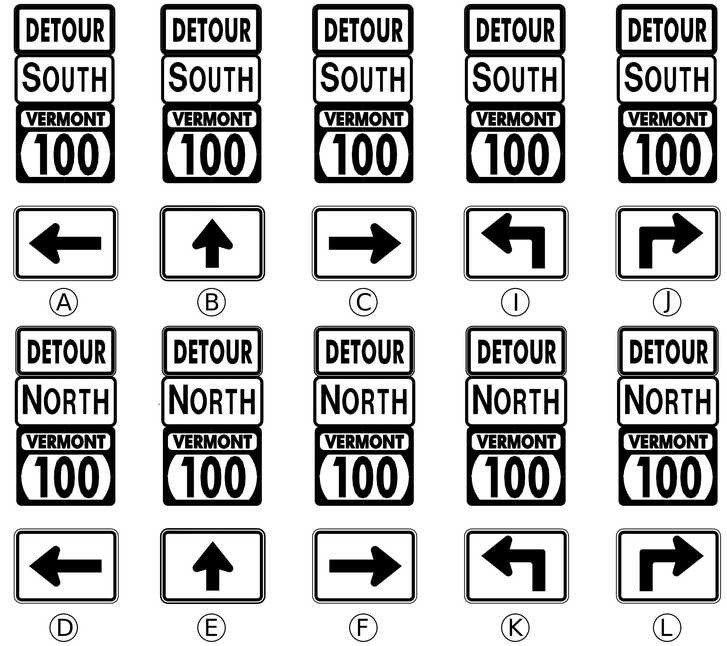
SCALE:HORIZONTAL 1" = 20'-0"
VERTICAL 1" = 10'-0"

Stantec

PROJECT NAME:	PLYMOUTH
PROJECT NUMBER:	ER P23-1(332)

FILE NAME:	z23b791_bdr_VT 100 profile.dgn	PLOT DATE:	8-NOV-2024
PROJECT LEADER:	T.KNIGHT	DRAWN BY:	S.WINES
DESIGNED BY:	S.WINES	CHECKED BY:	J. GRIGAS
PROFILE SHEET 2		SHEET	8 OF 26





PCMS A

VT 100	MM/DD -
NORTH	MM/DD
CLOSED	

PCMS DETAIL - MESSAGE 7DAYS PRIOR TO ROAD CLOSURE AND DURING ROAD CLOSURE

PCMS B

VT 100	MM/DD -
SOUTH	MM/DD
CLOSED	

PCMS DETAIL - MESSAGE 7DAYS PRIOR TO ROAD CLOSURE AND DURING ROAD CLOSURE

0 1 MI 2 MI
SCALE IN FEET

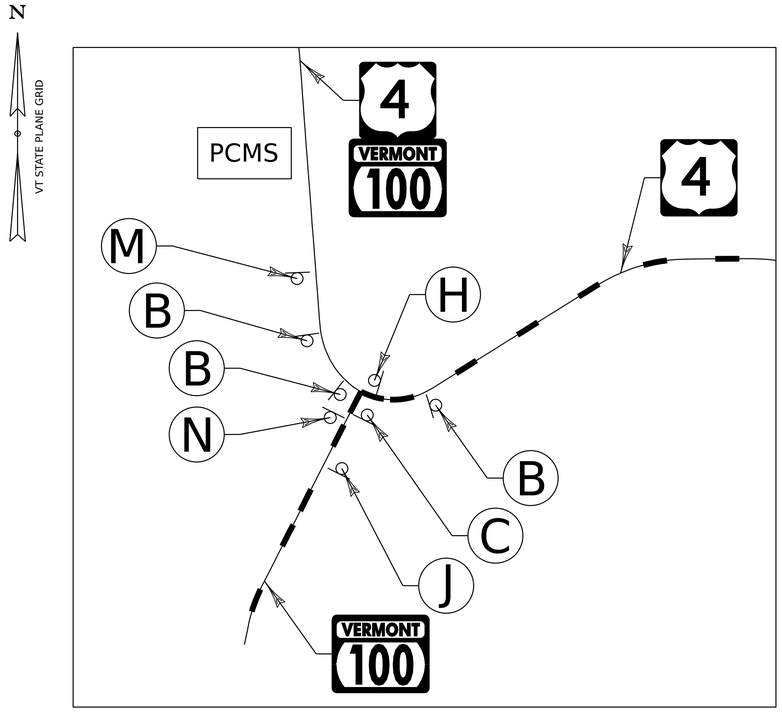
LEGEND
PCMS PORTABLE CHANGING MESSAGE SIGN
DETOUR

Stantec

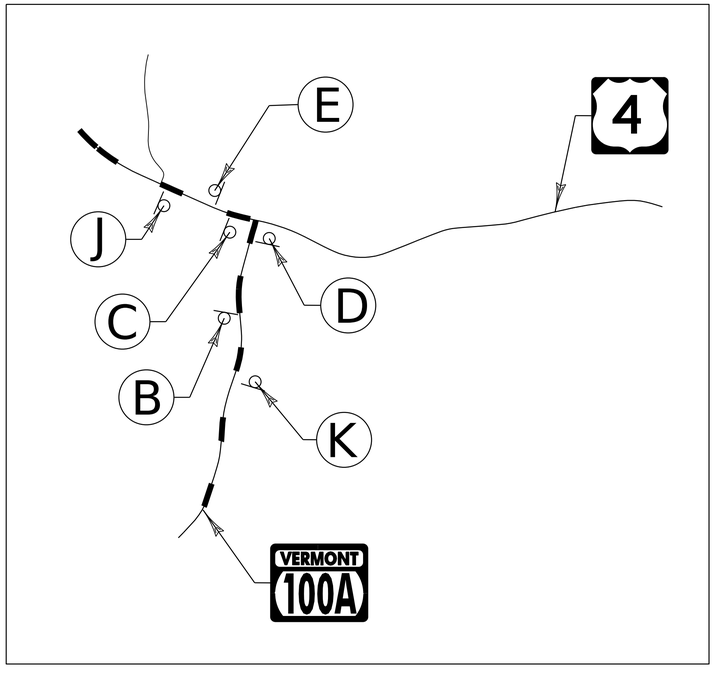
PROJECT NAME: PLYMOUTH
PROJECT NUMBER: ER P23-1(332)

FILE NAME: z23b791_detour.dgn
PROJECT LEADER: T. KNIGHT
DESIGNED BY: S.WINES
DETOUR PLAN SHEET 1

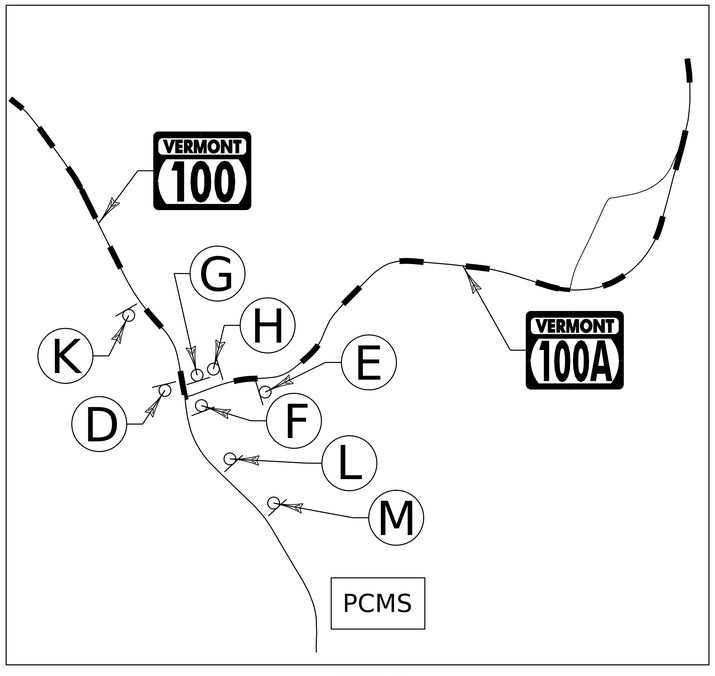
PLOT DATE: 8-NOV-2024
DRAWN BY: P. ARMATA
CHECKED BY: D. YOULEN
SHEET 9 OF 26



INSET A



INSET C



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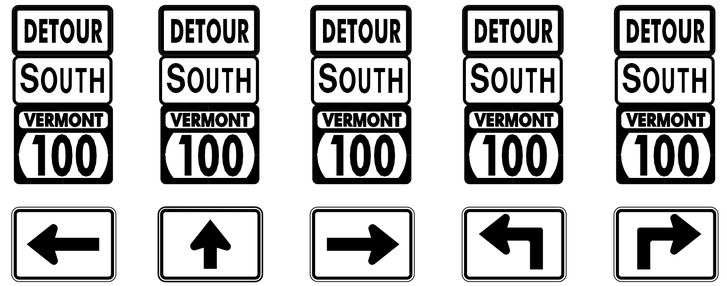
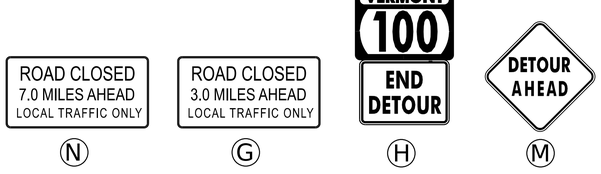




PCMS A

VT 100	MM/DD -
NORTH	MM/DD
CLOSED	

PCMS DETAIL - MESSAGE 7DAYS PRIOR TO ROAD CLOSURE AND DURING ROAD CLOSURE

PCMS B

VT 100	MM/DD -
SOUTH	MM/DD
CLOSED	

PCMS DETAIL - MESSAGE 7DAYS PRIOR TO ROAD CLOSURE AND DURING ROAD CLOSURE

0 0.5 MI 1 MI
SCALE IN FEET

LEGEND

PCMS PORTABLE CHANGING MESSAGE SIGN

DETOUR

Stantec

PROJECT NAME: PLYMOUTH
PROJECT NUMBER: ER P23-1(332)

FILE NAME: z23b791_detour.dgn
PROJECT LEADER: T. KNIGHT
DESIGNED BY: S.WINES
DETOUR PLAN SHEET 2

PLOT DATE: 8-NOV-2024
DRAWN BY: P. ARMATA
CHECKED BY: D. YOULEN
SHEET 10 OF 26

TRAFFIC CONTROL NOTES:

1. THE FOLLOWING TRAFFIC CONTROL INFORMATION IS INTENDED TO BE A GENERAL OUTLINE FOR HOW THE WORK COULD PROCEED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE SITE SPECIFIC DETAILS TO THE PAVEMENT DESIGN UNIT VIA THE ENGINEER TO ADDRESS SPECIFIC SITUATIONS. THIS RESPONSIBILITY INCLUDES PROVIDING A PLAN DETAILING THE USE AND PLACEMENT OF SIGNS, CHANNELING DEVICES, ARROW PANELS, FLAGGERS AND UNIFORMED TRAFFIC OFFICERS (UTO'S) DURING LANE CLOSURES. THE CONTRACTOR MUST ALLOW AT LEAST FOUR WEEKS FOR REVIEW AND APPROVAL OF THE COMPREHENSIVE PLAN AND TWO WEEKS FOR REVIEW AND APPROVAL OF MINOR CHANGES/DETAILS. ALL TRAFFIC CONTROL DETAILS MUST BE DESIGNED AND IMPLEMENTED IN ACCORDANCE WITH THE MUTCD AND VTRANS STANDARDS T-1, T-11, T-12, T-13, T-17, T-22, T-23, T-28, T-29, T-30, T-31, T-35 AND T-36. WHERE CONFLICTS EXIST, THE MUTCD SHALL GOVERN.

2. THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND LATEST REVISIONS SHALL BE THE STANDARD FOR ALL TRAFFIC CONTROL DEVICES. EXISTING SIGNS AND MARKINGS SHALL BE VALID UNTIL SUCH TIME AS THEY ARE REPLACED OR RECONSTRUCTED. WHEN NEW TRAFFIC DEVICES ARE ERECTED OR PLACED, OR EXISTING TRAFFIC CONTROL DEVICES ARE REPLACED OR REPAIRED, THE EQUIPMENT, DESIGN, METHOD OF INSTALLATION, PLACEMENT OR REPAIR SHALL CONFORM WITH SUCH STANDARDS.

3. CONSTRUCTION ZONE SIGN LAYOUT SHALL BE IN ACCORDANCE WITH SECTION 6 OF THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND IT'S LATEST REVISIONS AND CURRENT STATE STANDARDS.

4. THE CONTRACTOR SHALL SUBMIT A SITE SPECIFIC TRAFFIC CONTROL PLAN FOR APPROVAL BY THE PROJECT MANAGER PER SECTION 105.06 OF THE VTRANS SPECIFICATIONS. THE COST OF PREPARING THIS PLAN (AND MAKING CHANGES IF NECESSARY) WILL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 641.1100 TRAFFIC CONTROL, ALL-INCLUSIVE. THE TRAFFIC CONTROL PLAN SHALL BE IN COMPLIANCE WITH VTRANS STANDARDS AND THE LATEST EDITION OF THE MUTCD. WHERE CONFLICTS EXIST, THE MUTCD SHALL GOVERN.

5. THE BID PRICE FOR ITEM 641.1100 TRAFFIC CONTROL, ALL-INCLUSIVE SHALL INCLUDE ALL OF THE FOLLOWING, AS NEEDED: APPROACHES AND RAMPS, ON AND OFF PROJECT CONSTRUCTION SIGNING, PORTABLE FLASHING ARROW BOARDS, BARRIERS, BARRELS, CONES, BARRICADES, TEMPORARY REGULATORY AND WARNING SIGNS, AND POSTS AS DETAILED IN VTRANS STANDARDS. ALL ADJUSTING, RELOCATING AND REMOVING OF THESE DEVICES AS DIRECTED BY THE ENGINEER SHALL ALSO BE INCLUDED.

6. PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) WILL BE PROVIDED FOR USE ALONG THIS PROJECT AND ARE TO BE USED AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL POSITION PORTABLE CHANGEABLE MESSAGE SIGNS WARNING MOTORISTS OF THE EXPECTED ROADWAY CONDITIONS AHEAD. THE MESSAGE TO BE DISPLAYED SHALL BE SUBMITTED TO THE ENGINEER IN ADVANCE FOR APPROVAL. MESSAGES SHOULD AVOID REPEATING THOSE COVERED BY STATIC SIGNS AND SHOULD BE UPDATED PERIODICALLY TO DESCRIBE THE WORK ACTIVITY OCCURRING SO THAT THE PCMS CONTINUES TO COMMAND THE ATTENTION OF MOTORISTS. THE COST OF PROVIDING THESE MESSAGE SIGNS SHALL BE PAID UNDER ITEM 641.1500 PORTABLE CHANGEABLE MESSAGE SIGN.

7. CONSTRUCTION SIGNS SHALL BE IN NEW OR LIKE NEW CONDITION PER VTRANS STANDARDS. REFER TO VTRANS STANDARDS, SPECIAL PROVISIONS, THE SHSM HANDBOOK, AND THE MUTCD FOR TEMPORARY TRAFFIC CONTROL SIGN DIMENSIONS AND COLORS.

8. NO CONSTRUCTION SIGNS SHALL BE INSTALLED AS TO INTERFERE OR OBSTRUCT THE VIEW OF EXISTING TRAFFIC CONTROL DEVICES, STOPPING SIGHT DISTANCE, AND CORNER SIGHT DISTANCE FROM DRIVES AND TOWN HIGHWAYS. ALL VEGETATION THAT INTERFERES WITH THE VISIBILITY OF THE SIGNS SHALL BE REMOVED.

9. ALL PERMANENT SIGNS THAT CONFLICT WITH TEMPORARY TRAFFIC CONTROL SHALL BE COMPLETELY COVERED, THE PAYMENT FOR WHICH WILL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 641.1100 TRAFFIC CONTROL, ALL-INCLUSIVE. SIGN COVERING SHALL NOT DAMAGE THE RETRO-REFLECTIVITY OF THE SIGN FACE AND THE SIGN COVER SHALL NOT BE ALLOWED TO DETERIORATE FOR THE DURATION THAT THE SIGN NEEDS COVERING.

10. IF FLAGGERS ARE TO BE USED ON RAMPS, ADDITIONAL ADVANCE WARNING CONSTRUCTION SIGNS (FLAGGER SYMBOL, BE PREPARED TO STOP, ETC.) SHALL BE REQUIRED. AS THE PAVING OPERATION MOVES, FLAGGER SIGNS SHALL BE MOVED ACCORDINGLY. AT NO TIME SHOULD THE FLAGGER SYMBOL SIGN BE MORE THAN 500 FEET FROM THE FLAGGER STATION. FLAGGER SIGNS SHALL BE COVERED OR TURNED AWAY FROM TRAFFIC WHEN FLAGGING OPERATIONS CEASE FOR LONGER THAN 15 MINUTES. FLAGGERS ARE NOT RECOMMENDED TO BE USED ALONG I-89.

11. THE CONTRACTOR SHALL PROVIDE ACCESS THROUGH THE WORK ZONE FOR EMERGENCY VEHICLES AT ALL TIMES OR COORDINATE EMERGENCY ROUTES PRIOR TO THE START OF CONSTRUCTION.

12. THE CONTRACTOR SHALL INCLUDE A CONSTRUCTION SIGN APPROACH PACKAGE AND WORK ZONE SPEED REDUCTIONS IN COMPLIANCE WITH VTRANS STANDARDS. PAYMENT FOR PROVIDING THIS PACKAGE SHALL BE INCIDENTAL TO ITEM 641.1100 TRAFFIC CONTROL, ALL-INCLUSIVE. ADD G20-5ap "WORK ZONE" PLAQUE AND R2-6ap "FINES DOUBLED" PLAQUE TO SPEED LIMIT SIGNS (SEE FIG. 6F-3 OF THE MUTCD). OMIT VR-355 "FINES DOUBLED FOR SPEEDING IN WORK ZONE" SIGN.

13. WHEN LANE WIDTHS ARE REDUCED TO LESS THAN 11 FEET DMV SHALL BE NOTIFIED TO REROUTE SUPER LOADS PERMITS. IT SHOULD BE NOTED THAT ONCE A PERMIT IS ISSUED, THE APPLICANT/HAULER HAS 10 DAYS TO MOVE THEIR LOAD. THIS REQUIRES ADDITIONAL NOTICE TIME TO CAPTURE THAT 10-DAY WINDOW.

14. WHEN MILLED BITUMINOUS PAVEMENT IS OPEN TO TRAFFIC, A "MOTORCYCLES USE CAUTION" SIGN, AS PER VTRANS STANDARDS T-17 AND T-28, SHALL BE PROVIDED. SIGN DETAILS FOR SIGN FABRICATION PROVIDED ON T-28.

15. IF LONGITUDINAL DROP-OFFS ARE TO BE LEFT DURING THE OVERNIGHT HOURS, THEY SHALL BE CONSTRUCTED USING THE HSD-400.01 SAFETY EDGE DETAIL AND CONFORM TO VTRANS STANDARD T-36.

16. WHEN NIGHT WORK OCCURS, A LIGHTING PLAN IS REQUIRED AND SHALL INCLUDE THE FOLLOWING:

    - LAYOUT SHOWING LOCATION OF LIGHT TOWERS, INCLUDING SPACING, LATERAL PLACEMENT AND MOUNTING HEIGHT, AND CLEARLY SHOW THE LOCATION OF ALL
    - LIGHTS NECESSARY FOR ALL WORK TO BE DONE AT NIGHT, INCLUDING ISO-FOOTCANDLE DIAGRAM FOR EACH UNIT OVERLAY ONTO EXISTING PROJECT PLANS.
    - DESCRIPTION OF LIGHT TOWERS TO BE USED AND ELECTRICAL POWER SOURCE.
    - SPECIFIC TECHNICAL DATA ON ALL LIGHTING EQUIPMENT, INCLUDING BRAND NAMES, MODEL NUMBERS, POWER RATING, AND PHOTOMETRIC DATA.
    - DETAILS OF ANY HOODS, LOUVERS, SHIELDS OR OTHER MEANS TO BE USED TO CONTROL GLARE.
    - ATTACHMENT AND MOUNTING DETAILS FOR LIGHTING TO BE ATTACHED TO EQUIPMENT.
    - LIGHTING CALCULATIONS CONFIRMING THAT THE ILLUMINATION REQUIREMENTS WILL BE MET BY THE LAYOUT.

17. EXISTING SPEED LIMIT SIGNS SHALL BE COVERED WHEN REDUCED SPEED SIGNS ARE POSTED. KEEP RECORDS WHEN POSTING THE WORK ZONE SPEED LIMIT FOR LEGAL PURPOSES; DOCUMENTING DATES, TIMES AND LOCATIONS OF SIGNS. WHEN WORK ZONE SPEED LIMIT IS NOT IN USE, ALL ASSOCIATED SIGNS SHALL BE COVERED, TURNED AND/OR LAID FLAT SO AS THE MOTORING PUBLIC CANNOT READ THESE SIGNS. A SIGNED AND APPROVED TEMPORARY SPEED CERTIFICATE WILL BE REQUIRED FOR A TEMPORARY SPEED LIMIT REDUCTION.

18. IN ADVANCE OF THE PROPOSED DETOUR, THE CONTRACTOR SHALL SUBMIT A PLAN THAT WILL DEPICT HOW ADVANCED WARNING TO THE TRAVELLING PUBLIC WILL BE ACCOMMODATED DURING THE DETOUR AND ROAD CLOSURE. ADVANCED WARNING SHALL BE DEFINED AS PROVIDING ADVANCED WARNING SIGNS, BOTH STATIC AND PCMS, THAT PROVIDE INFORMATION FOR MOTORISTS TO SAFELY UTILIZE THE REGIONALLY ACCEPTABLE OPPORTUNITIES FOR SEEKING AN ALTERNATIVE ROUTE PRIOR TO PROJECT LOCATION. THE PLAN WILL NEED TO BE SUBMITTED FOR REVIEW AND COMMENT BY THE PROJECT MANAGER A MINIMUM OF FOURTEEN (14) CALENDAR DAYS AHEAD OF ANY PLANNED CLOSURE IN ACCORDANCE WITH SECTION 105.

19. INSTALLATION OF THE PCMS NETWORK SHALL BE DONE SEVEN (7) DAYS BEFORE WORK MAY BEGIN. ELEMENTS OF THE PLAN SHALL INCLUDE BUT WILL NOT BE LIMITED TO THE LOCATION OF PCMS AND ASSOCIATED MESSAGES, ANY OTHER NECESSARY SIGNAGE, LOCATIONS FOR DEPLOYMENT OF UNIFORMED TRAFFIC OFFICERS AND FLAGGERS, AND SEQUENCING AND DURATION OF CLOSURE FOR EACH RAMP WITHIN THE RESPECTIVE INTERCHANGE. NO MORE THAN ONE INTERCHANGE PER WORK PERIOD MAY HAVE RAMP CLOSURES. THE COST OF PREPARING THIS PLAN (AND MAKING CHANGES IF NECESSARY) SHALL NOT BE PAID SEPARATELY BUT WILL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 641.1100 TRAFFIC CONTROL, ALL-INCLUSIVE.

20. PLEASE NOTE THAT THE UNIFORMED TRAFFIC OFFICER (UTO'S), UNDER AUTHORITY GRANTED BY LAW (TITLE 23 VSA) MAY DIRECT AND CONTROL TRAFFIC. SUITABLE EXAMPLES IN WORK MIGHT INCLUDE THE DIRECTION AND CONTROLS OF TRAFFIC AT INTERSECTIONS WHERE SIGNALS ARE NOT FUNCTIONING OR ARE MALFUNCTIONING. IN THESE CASES, THE PRESENCE OF A VEHICLE WITH A BLUE LIGHT MAY NOT BE SUITABLE OR NECESSARY. THE WEARING OF DEPARTMENTALLY REQUIRED AND APPROVED REFLECTIVE GARMENTS IS REQUIRED. UTO VEHICLE TO BE PARKED WHERE IT DOES NOT PROMOTE BACK LIGHTING OF THE FLAGGER/UTO STATION BLINDING APPROACHING TRAFFIC AND WASHING OUT THE VISIBILITY OF THE UTO/FLAGGER STANDING THERE. FOR LANE CLOSURE WITH WORK ACTIVITY AREA LESS THAN 1 MILE FROM THE MERGING TAPER THE POLICE VEHICLE SHOULD BE POSITIONED UPSTREAM OF THE LAST ADVANCE WARNING SIGN. VEHICLE SHOULD FACE IN THE DIRECTION MUTUALLY AGREED UPON BY THE HIGHWAY AND ENFORCEMENT AGENCY.

Stantec

PROJECT NAME:	PLYMOUTH
PROJECT NUMBER:	ER P23-1(332)

FILE NAME:	z23b791_detour.dgn	PLOT DATE:	8-NOV-2024
PROJECT LEADER:	T. KNIGHT	DRAWN BY:	P. ARMATA
DESIGNED BY:	S.WINES	CHECKED BY:	D. YOULEN
DETOUR PLAN SHEET 3		SHEET	11 OF 26

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

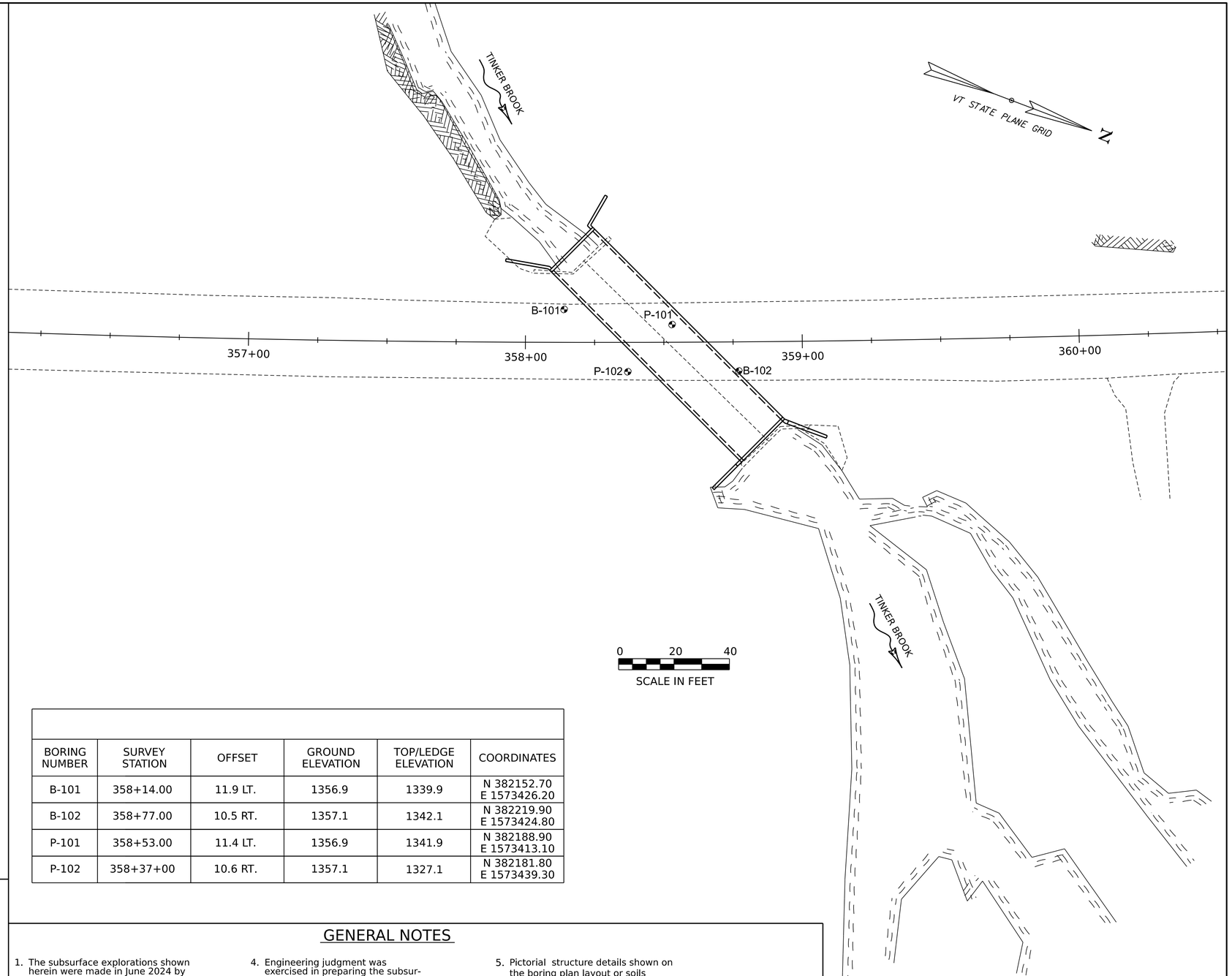
DENSITY (GRANULAR SOILS)		CONSISTENCY (COHESIVE SOILS)	
N	DESCRIPTIVE TERM	N	DESCRIPTIVE TERM
<5	Very Loose	<2	Very Soft
5-10	Loose	2-4	Soft
11-24	Med. Dense	5-8	Med. Stiff
25-50	Dense	9-15	Stiff
>50	Very Dense	16-30	Very Stiff
		31-60	Hard
		>60	Very Hard

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 ⅜" 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
AX	Core Size 1 ⅛"
BX	Core Size 1 ⅝"
NX	Core Size 2 ⅛"
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	Top of 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) >
VTSPG	NAD83 - See Note 7

COLOR

blk	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		



BORING NUMBER	SURVEY STATION	OFFSET	GROUND ELEVATION	TOP/LEDGE ELEVATION	COORDINATES
B-101	358+14.00	11.9 LT.	1356.9	1339.9	N 382152.70 E 1573426.20
B-102	358+77.00	10.5 RT.	1357.1	1342.1	N 382219.90 E 1573424.80
P-101	358+53.00	11.4 LT.	1356.9	1341.9	N 382188.90 E 1573413.10
P-102	358+37+00	10.6 RT.	1357.1	1327.1	N 382181.80 E 1573439.30

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 > 0.0787" (#10 sieve).

SAND - Particles of rock < 0.0787" (#10 sieve) and > 0.0029" (#200 sieve).

SILT - Soil < 0.0029" (#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.

GENERAL NOTES

1. The subsurface explorations shown herein were made in June 2024 by VTrans.
2. Soil and rock classifications, properties and descriptions are based on engineering interpretation from available subsurface information by the Agency and may not necessarily reflect actual variations in subsurface conditions that may be encountered between individual boring or sample locations.
3. 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.
4. Engineering judgment 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 judgment by the Contractor.
5. 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.
6. Terminology used on boring logs to describe the hardness, degree of weathering, and spacing of fractures, joints and other discontinuities in the bedrock is defined in the AASHTO Manual on Subsurface Investigations, 1988.
7. Northing and Easting coordinates are shown in Vermont State Plane Grid North American Datum 1983 in meters and survey feet.

Stantec

PROJECT NAME: PLYMOUTH
PROJECT NUMBER: ER P23-1(332)

FILE NAME: z23b791_Borings.dgn
PROJECT LEADER: T.KNIGHT
DESIGNED BY: S.WINES
BORING LAYOUT SHEET

PLOT DATE: 8-NOV-2024
DRAWN BY: S.WINES
CHECKED BY: T.KNIGHT
SHEET 12 OF 26

STATE OF VERMONT
AGENCY OF TRANSPORTATION
CONSTRUCTION AND
MATERIALS BUREAU
CENTRAL LABORATORY

BORING LOG

Plymouth
ER P23-1(332)
VT 100 Bridge 112

Boring No.: B-101
Page No.: 1 of 1
Pin No.: 23b791
Checked By: END

Boring Crew: Thurston, Lubas, Bacon
Date Started: 6/27/24 Date Finished: 7/01/24
VTSPG NAD83: N 382152.70 ft E 1573426.20 ft
Station: 358+14 Offset: -11.90
Ground Elevation: 1356.9 ft

	Casing	Sampler
Type:	WB	SS
I.D.:	4 in	1.5 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:	Auto/AWJ	
Rig: Acker Renegade ATV	CE = 1.3	

Groundwater Observations

Date	Depth (ft)	Notes
07/01/24	12.0	WT after drilling

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (ROD %)	Drill Rate minutes/ft	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		Field Description:, SAND and GRAVEL, trace Silt, tan, MTD, Rec. = 1.0 ft				14-18-13-10 (31)				
		Field Description:, SAND and GRAVEL, some Silt, tan, MTD, Rec. = 1.0 ft				7-5-5-6 (10)				
5		A-1-a, Lab Classification: GRAVEL, some Sand, little Silt, brn, Dry, Rec. = 0.9 ft				8-8-5-3 (13)	4.4	72.5	15.3	12.2
		Field Description:, SILT, some Gravel, little Sand, brn, Dry, Rec. = 0.1 ft, Rollercone cleanout 6.5'-10'. Lost water return at 8'.				R@6" (R)				
10		A-1-a, Lab Classification: GRAVEL, some Sand, trace Silt, brn, Moist, Rec. = 1.0 ft, Rollercone cleanout 10'-13'. Advanced casing to refusal at 17'.				8-3-4-9 (7)	12.3	59.1	32.8	8.1
15										
20		17.0 ft - 22.0 ft, Gray and white, Muscovite-biotite-chlorite-albite-quartz GNEISS, Pyrite and magnetite present in core. Foliation is wavy and deformed. Close joint spacing. Hard, Very slightly weathered, Good rock, NXDC, RMR = 61	R-1 (65)	80 (88)	0.25 1.5 2 1.75 2	Top of Bedrock @ 17.0 ft				
25		22.0 ft - 27.0 ft, Gray and white, Muscovite-biotite-chlorite-albite-quartz GNEISS, Magnetite present with quartz veining, Foliation is wavy and deformed. Close joint spacing. Hard, Fresh to very slightly weathered, Good rock, NXDC, RMR = 70	R-2 (45)	100 (84)	2 2.25 2 2 2					
		Hole stopped @ 27.0 ft								
30		Remarks: Hole collapsed at 12'.								
35										
40										
45										

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 may occur due to other factors than those present at the time measurements were made.

BORING LOG PLYMOUTH ER P23-1(332).GPJ VERMONT AOT.GDT 9/20/24

STATE OF VERMONT
AGENCY OF TRANSPORTATION
CONSTRUCTION AND
MATERIALS BUREAU
CENTRAL LABORATORY

BORING LOG

Plymouth
ER P23-1(332)
VT 100 Bridge 112

Boring No.: B-102
Page No.: 1 of 1
Pin No.: 23b791
Checked By: END

Boring Crew: Thurston, McGinley, Lubas
Date Started: 6/19/24 Date Finished: 6/20/24
VTSPG NAD83: N 382219.90 ft E 1573424.80 ft
Station: 358+77 Offset: 10.50
Ground Elevation: 1357.1 ft

	Casing	Sampler
Type:	WB	SS
I.D.:	4 in	1.5 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:	Auto/AWJ	
Rig: Acker Renegade ATV	CE = 1.3	

Groundwater Observations

Date	Depth (ft)	Notes
06/20/24		No WT after drilling

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (ROD %)	Drill Rate minutes/ft	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		Field Note:, Asphalt 0.0-0.4'								
		Field Description:, CRUSHED STONE and SILT, some Sand, white/brn, Dry, Rec. = 1.2 ft				19-21-17-11 (38)				
		A-1-b, Lab Classification: GRAVEL, some Sand, little Silt, white/brn, MTD, Rec. = 1.0 ft				9-7-6-7 (13)	3.7	58.2	22.0	19.8
5		Field Description:, SILT and Gravel, some Sand, white/brn, MTD, Rec. = 1.1 ft				7-5-4-9 (9)				
		A-1-b, Lab Classification: SAND, some Gravel, little Silt, Lt brn, MTD, Rec. = 0.3 ft				5-3-3-5 (6)	6.2	34.0	51.1	14.9
		Field Description:, SAND, some Gravel, some Silt, Lt brn, MTD, Rec. = 0.4 ft, Refusal at 6" 10 blows no movment.				3-10-R@6" (R)				
10										
15		Field Note:, No Recovery, Refusal no movement. Assumed cobbles.				R@0" (R)				
		15.0 ft - 20.0 ft, Gray and white, Muscovite-biotite-chlorite-albite-quartz GNEISS, Medium grained with wavy and deformed foliation, chlorite and magnetite splots present. Tan discolorations present in joints, Close to moderatley close joint spacing. Hard to medium hard, Slightly weathered, Fair rock, NXDC, RMR = 47	R-1 (40)	86 (7)	1.25 1 2 2.5 2	Top of Bedrock @ 15.0 ft				
20		20.0 ft - 25.0 ft, Gray and white, Muscovite-biotite-chlorite-albite-quartz GNEISS, Medium grained with wavy and deformed foliation, chlorite and magnetite splots present. Tan discolorations present in joints, Close to moderatley close joint spacing. Hard to medium hard, Slightly weathered, Fair rock, NXDC, RMR = 52	R-2 (40)	98 (35)	2 2.25 3 2 2.5					
25		Hole stopped @ 25.0 ft								
		Remarks: Hole collapsed at 12.7'.								
30										
35										
40										
45										

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 may occur due to other factors than those present at the time measurements were made.

BORING LOG PLYMOUTH ER P23-1(332).GPJ VERMONT AOT.GDT 9/20/24

Stantec

PROJECT NAME: PLYMOUTH
PROJECT NUMBER: ER P23-1(332)

FILE NAME: z23b791_Borings.dgn
PROJECT LEADER: T.KNIGHT
DESIGNED BY: S.WINES
BORING LOG SHEET 1

PLOT DATE: 8-NOV-2024
DRAWN BY: S.WINES
CHECKED BY: T.KNIGHT
SHEET 13 OF 26

STATE OF VERMONT
AGENCY OF TRANSPORTATION
CONSTRUCTION AND
MATERIALS BUREAU
CENTRAL LABORATORY

BORING LOG

Plymouth
ER P23-1(332)
VT 100 Bridge 112

Boring No.: P-101
Page No.: 1 of 1
Pin No.: 23b791
Checked By: END

Boring Crew: Thurston, Lubas, Bacon
Date Started: 7/01/24 Date Finished: 7/01/24
VTSPG NAD83: N 382188.90 ft E 1573413.10 ft
Station: 358+53 Offset: -11.40
Ground Elevation: 1356.9 ft

	Casing	Sampler
Type:	WB	SS
I.D.:	4 in	1.5 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:	Auto/AWJ	
Rig: Acker Renegade ATV	CE = 1.3	

Groundwater Observations

Date	Depth (ft)	Notes
07/01/24		No WT to depth

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (ROD %)	Drill Rate minutes/ft	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		Field Note:, Asphalt 0.0-1.1'								
		2.0 ft, Lost water return, regained at 3'.								
		4.0 ft, Lost water return, regained at 5'.								
5		5.0 ft - 9.0 ft, Sporadic water loss.								
10										
		14.0 ft - 15.0 ft, Rollercone cleanout. Casing refusal at 15 ft.								
15		15.0 ft - 20.0 ft, Gray and white, Muscovite-biotite-chlorite-albite-quartz GNEISS, and QUARTZITE Magnetite present with chlorite splotches in gneiss. Foliation in gneiss and no foliation in quartzite, Close to moderatley close joint spacing. Hard, Slightly weathered, Fair rock, NXDC, RMR = 52	R-1 (30)	61 (49)	1 2.75 1.5 1.75 2.5	Top of Bedrock @ 15.0 ft				
20		20.0 ft - 25.0 ft, Gray and white, Muscovite-biotite-chlorite-albite-quartz GNEISS, Magnetite present with quartz veining and chlorite splotches, Foliation is wavy and deformed. Close joint spacing. Hard, Fresh to very slightly weathered, Good rock, NXDC, RMR = 74	R-2 (30)	70 (90)	0.5 1 2.25 2.25 2.25					
25		Hole stopped @ 25.0 ft								
30		Remarks: Hole collapsed at 11'.								
35										
40										
45										

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 may occur due to other factors than those present at the time measurements were made.

BORING LOG PLYMOUTH ER P23-1(332).GPJ VERMONT AOT.GDT 9/20/24

STATE OF VERMONT
AGENCY OF TRANSPORTATION
CONSTRUCTION AND
MATERIALS BUREAU
CENTRAL LABORATORY

BORING LOG

Plymouth
ER P23-1(332)
VT 100 Bridge 112

Boring No.: P-102
Page No.: 1 of 1
Pin No.: 23b791
Checked By: END

Boring Crew: Thurston, McGinley, Bacon
Date Started: 6/20/24 Date Finished: 6/20/24
VTSPG NAD83: N 382181.80 ft E 1573439.30 ft
Station: 358+37 Offset: 10.60
Ground Elevation: 1357.1 ft

	Casing	Sampler
Type:	WB	SS
I.D.:	4 in	1.5 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:	Auto/AWJ	
Rig: Acker Renegade ATV	CE = 1.3	

Groundwater Observations

Date	Depth (ft)	Notes

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (ROD %)	Drill Rate minutes/ft	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		Field Note:, Asphalt 0.0-0.5'								
5		6.5 ft, Lost water return, regained at 15'.								
10										
15		15.0 ft - 20.0 ft, Cored. Believed to be cobbles. Loss of water return at 16'.								
20		20.0 ft - 25.0 ft, Advanced casing. Believed to be flowing sand.								
25		25.0 ft - 30.0 ft, Advanced casing to refusal at 30'. Loss of water return at 29'.								
30		30.0 ft - 35.0 ft, Gray and white, Muscovite-biotite-chlorite-albite-quartz GNEISS, Medium grained with wavy and deformed foliation, chlorite and magnetite splots present. Tan discolorations present in joints, Close to moderatley close joint spacing. Hard to medium hard, Slightly weathered, Fair rock, NXDC, RMR = 57	R-1 (40)	78 (63)	2.3 7.25 3.25 3 2.5	Top of Bedrock @ 30.0 ft				
35		35.0 ft - 40.0 ft, Gray and white, Muscovite-biotite-chlorite-albite-quartz GNEISS, Medium grained with wavy and deformed foliation, chlorite and magnetite splots present. Tan discolorations present in joints, Close to moderatley close joint spacing. Hard to medium hard, Slightly weathered, Fair rock, NXDC, RMR = 57	R-2 (40)	100 (61)	1.25 2 1.75 1.75 2					
40		Hole stopped @ 40.0 ft								
45		Remarks: Hole collapsed at 14'.								

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 may occur due to other factors than those present at the time measurements were made.

BORING LOG PLYMOUTH ER P23-1(332).GPJ VERMONT AOT.GDT 9/20/24

Stantec

PROJECT NAME: PLYMOUTH
PROJECT NUMBER: ER P23-1(332)

FILE NAME: z23b791_Borings.dgn
PROJECT LEADER: T.KNIGHT
DESIGNED BY: S.WINES
BORING LOG SHEET 2

PLOT DATE: 8-NOV-2024
DRAWN BY: S.WINES
CHECKED BY: T.KNIGHT
SHEET 14 OF 26

N/F
THE BLACK
POND TRUST

VT STATE PLANE GRID

N

TINKER BROOK

1766 IP
1.5" UP
8"

HVCTRL
100

EXISITNG
WING WALL

BRIDGE
112 / VT 100
BRIDGE PLAQUE

356+00

357+00

358+00

359+00

360+00

361+00

362+00

HVCTRL
104

HVCTRL
104

BRIDGE
112 / VT 100
BRIDGE PLAQUE

EXISTING
WING WALL

GUY
POLE

GUY
POLE

EXISTING
WALL

GRAVEL
DRIVE

EXISTING
STONE WALL

EXISTING
FENCE
W/GATE

314

316

8/315

8/310/17

309/16

1209\BND
4X4 CONC. MON.
3" ABOVE LEANING

TEMPORARY 25' PUSH BRACE

TEMPORARY 20' DEAD END ANCHOR

EXISTING OVERHEAD ELECTRIC TO BE
TEMPORARILY RELOCATED PRIOR
TO CONSTRUCTION (BY OTHERS)

PROPOSED TEMPORARY
POLE WITH 15' ANCHOR

TINKER BROOK

EXISTING
WALL

N/F
THE BLACK
POND TRUST

N/F
THE BLACK
POND TRUST

0 20 40
SCALE IN FEET

Stantec

PROJECT NAME:	PLYMOUTH
PROJECT NUMBER:	ER P23-1(332)

FILE NAME:	z23b791_utl.dgn	PLOT DATE:	8-NOV-2024
PROJECT LEADER:	T. KNIGHT	DRAWN BY:	S.WINES
DESIGNED BY:	S.WINES	CHECKED BY:	T. KNIGHT
PROPOSED UTILITY RELOC. PLAN		SHEET	15 OF 26

DELINEATOR WITH STEEL POST

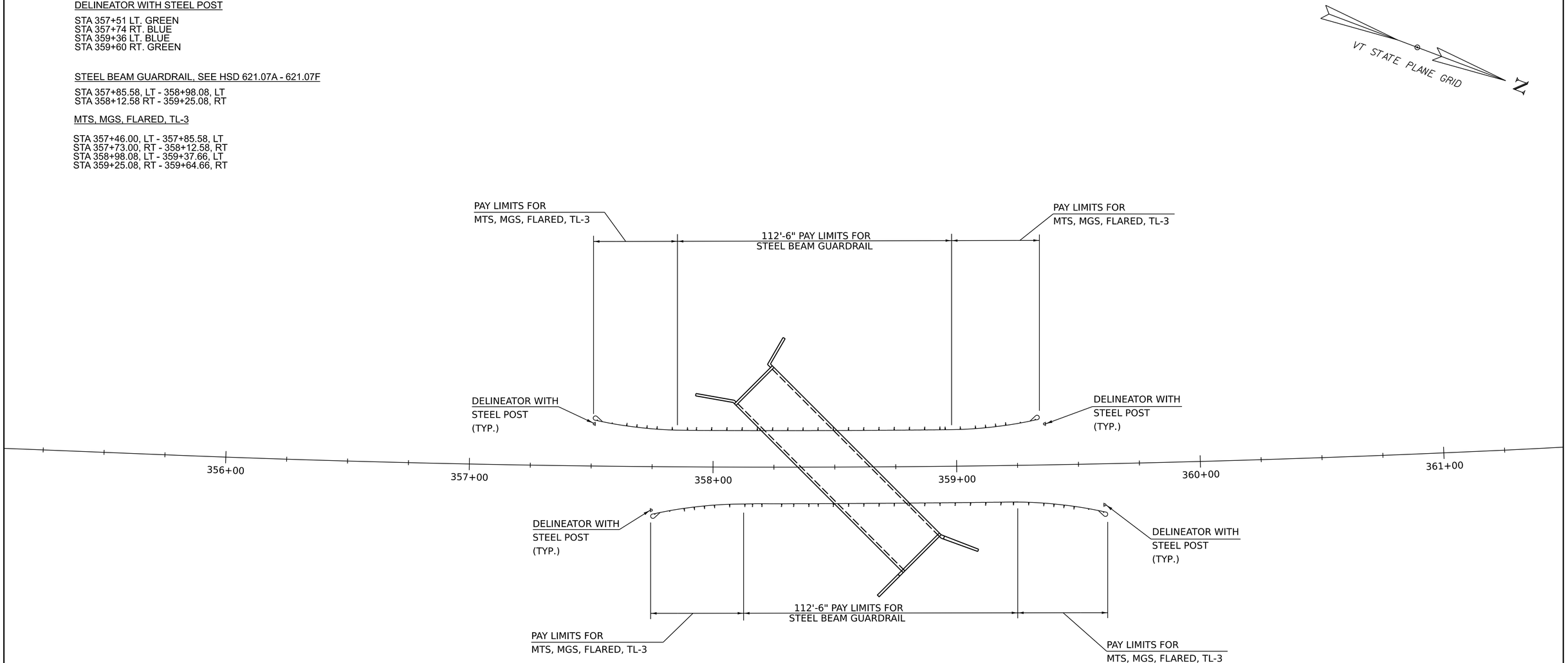
STA 357+51 LT. GREEN
STA 357+74 RT. BLUE
STA 359+36 LT. BLUE
STA 359+60 RT. GREEN

STEEL BEAM GUARDRAIL, SEE HSD 621.07A - 621.07F

STA 357+85.58, LT - 358+98.08, LT
STA 358+12.58 RT - 359+25.08, RT

MTS, MGS, FLARED, TL-3

STA 357+46.00, LT - 357+85.58, LT
STA 357+73.00, RT - 358+12.58, RT
STA 358+98.08, LT - 359+37.66, LT
STA 359+25.08, RT - 359+64.66, RT



GUARDRAIL LAYOUT SHEET

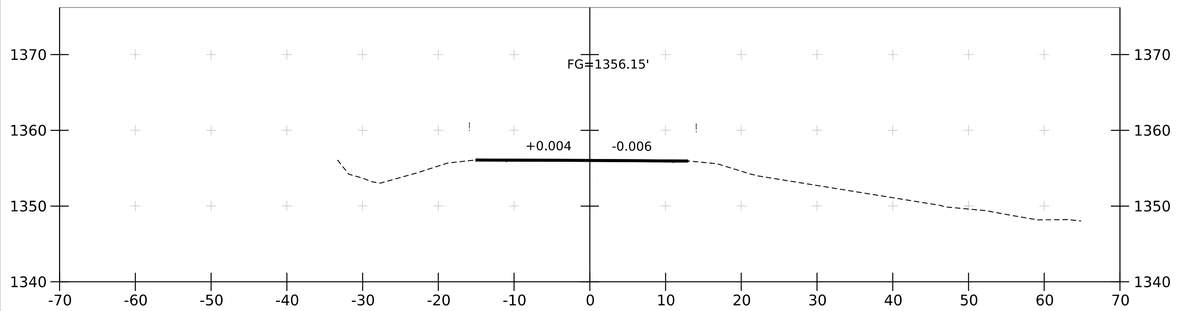
SCALE: 1" = 20'-0"

0 20 40
SCALE IN FEET

Stantec

PROJECT NAME:	PLYMOUTH
PROJECT NUMBER:	ER P23-1(332)

FILE NAME:	z23b791_bdr_rail.dgn	PLOT DATE:	8-NOV-2024
PROJECT LEADER:	T.KNIGHT	DRAWN BY:	S.WINES
DESIGNED BY:	S.WINES	CHECKED BY:	J. GRIGAS
GUARD RAIL LAYOUT SHEET		SHEET 16 OF 26	



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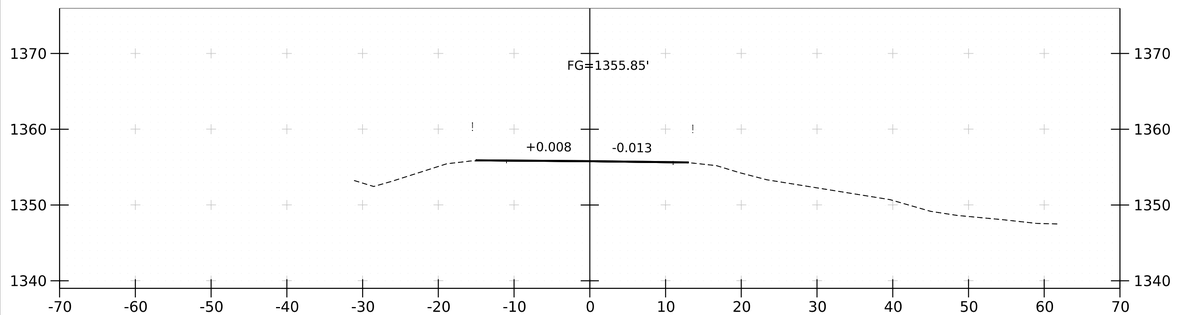

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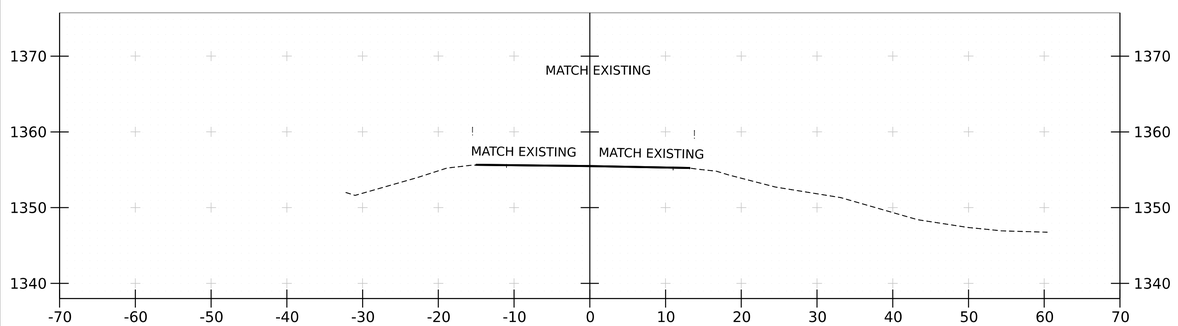
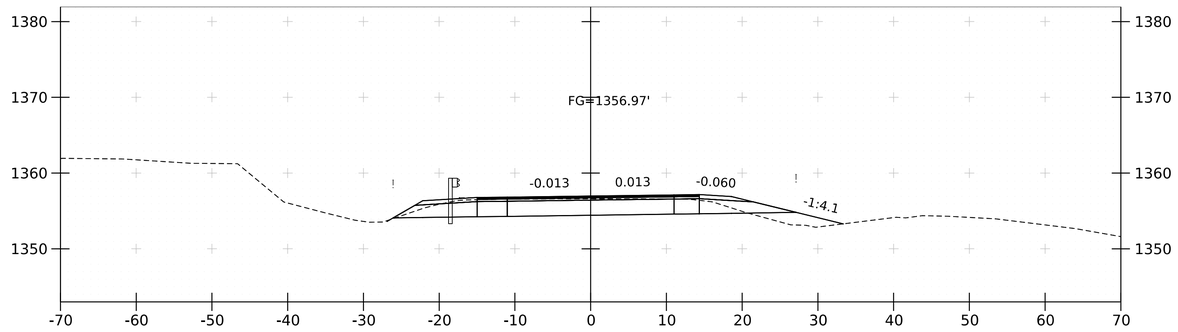


356+25

BEGIN APPROACH



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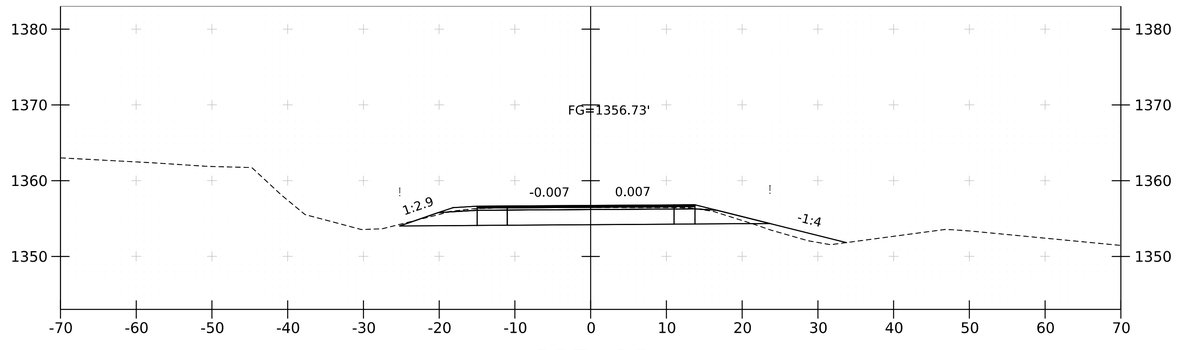

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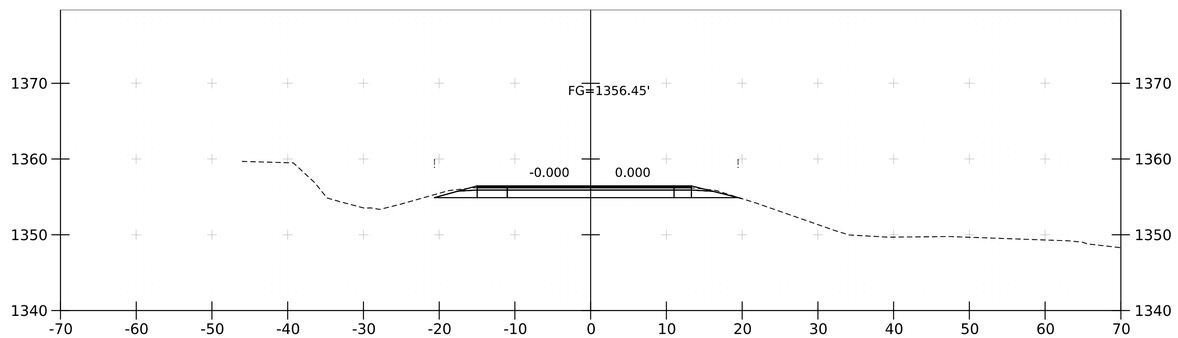


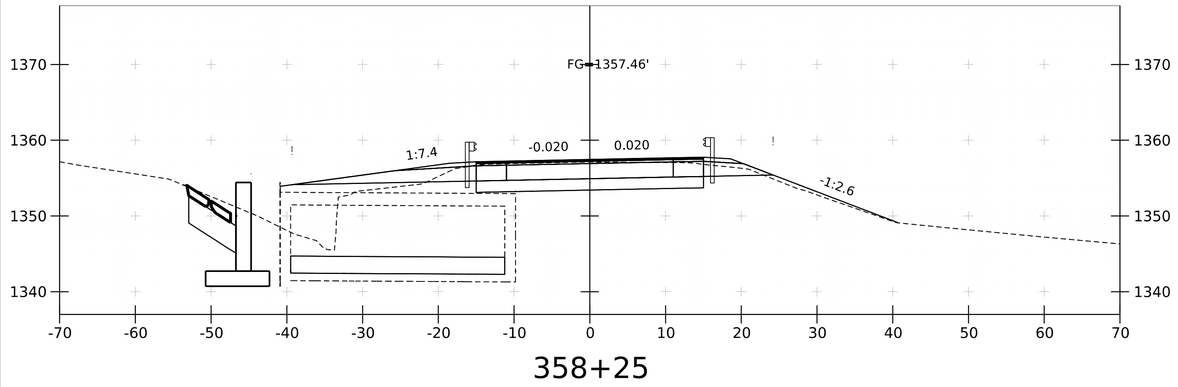
357+00

0 10 20

SCALE IN FEET

Stantec

PROJECT NAME:	PLYMOUTH
PROJECT NUMBER:	ER P23-1(332)
FILE NAME: z23b791xs_mainline.dgn	PLOT DATE: 8-NOV-2024
PROJECT LEADER: T. KNIGHT	DRAWN BY: J. GRIGAS
DESIGNED BY: J. GRIGAS	CHECKED BY: T. KNIGHT
ROADWAY CROSS SECTION SHEET 1	SHEET 17 OF 26



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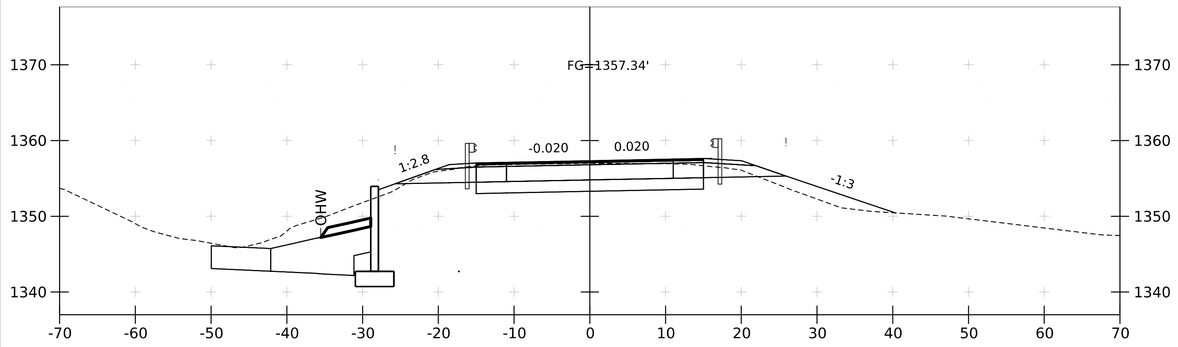

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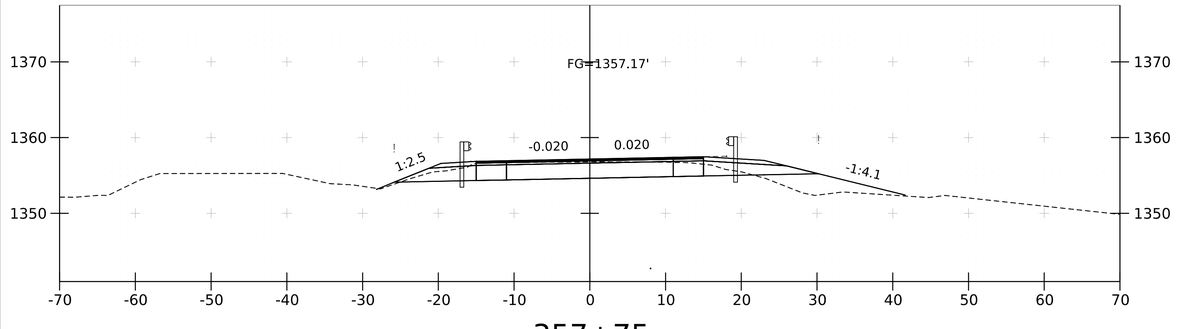

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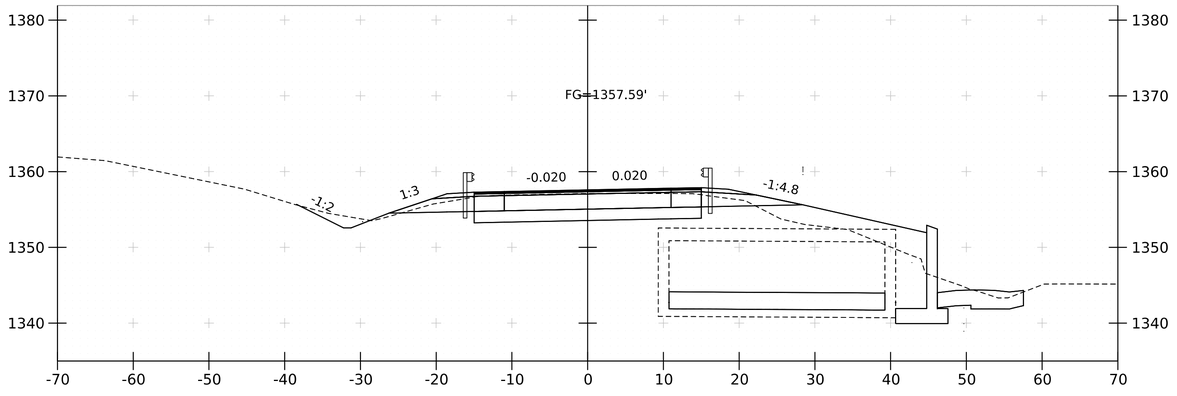

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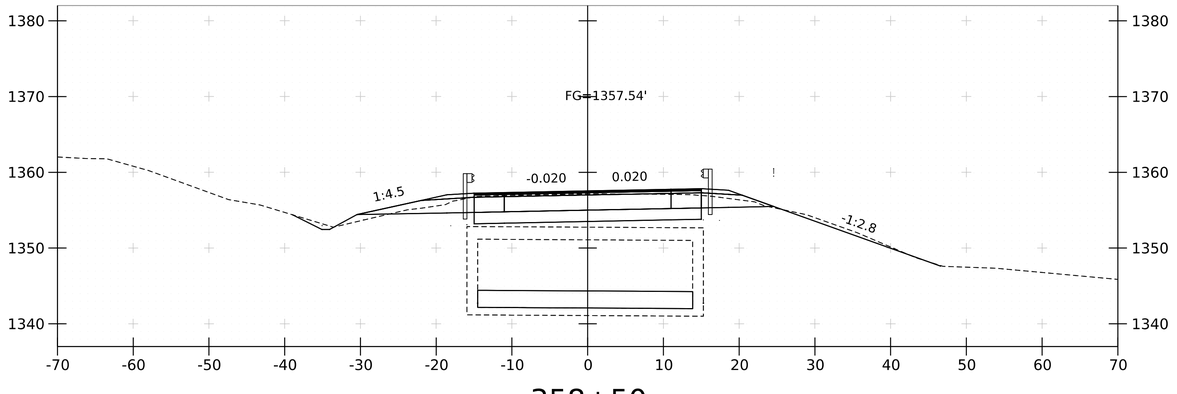


358+50

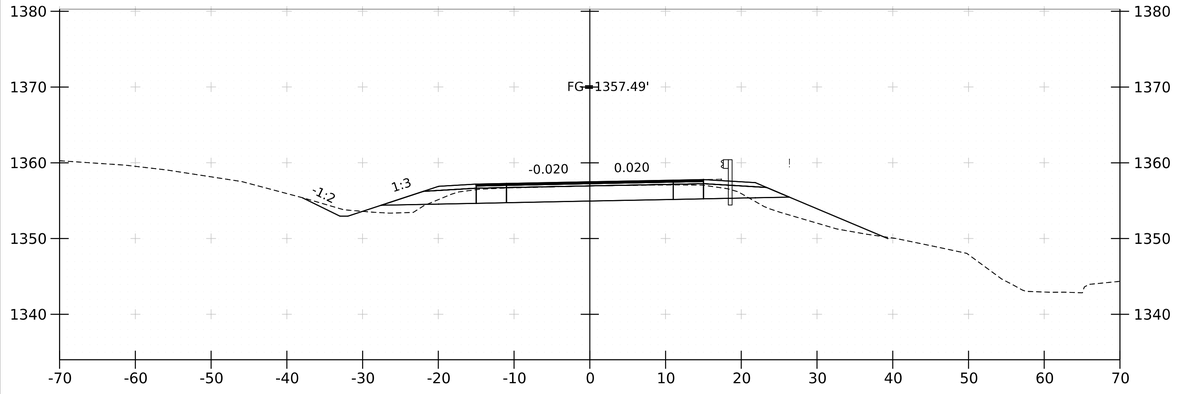
0 10 20

SCALE IN FEET

Stantec

PROJECT NAME:	PLYMOUTH
PROJECT NUMBER:	ER P23-1(332)

FILE NAME:	z23b791xs_mainline.dgn	PLOT DATE:	8-NOV-2024
PROJECT LEADER:	T. KNIGHT	DRAWN BY:	J. GRIGAS
DESIGNED BY:	J. GRIGAS	CHECKED BY:	T. KNIGHT
ROADWAY CROSS SECTION SHEET 2		SHEET	18 OF 26



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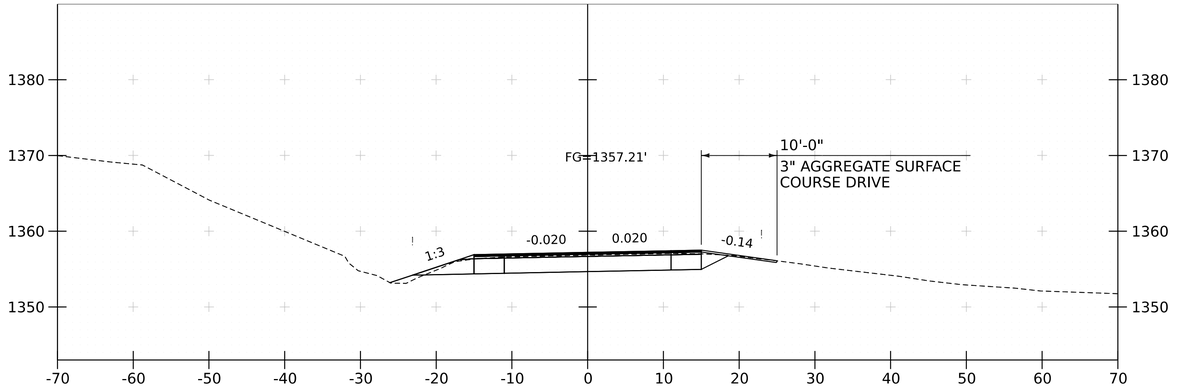

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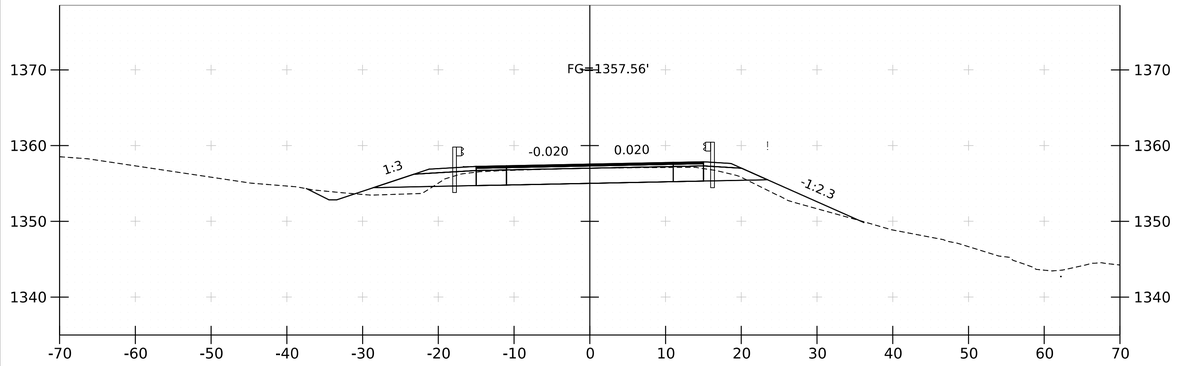

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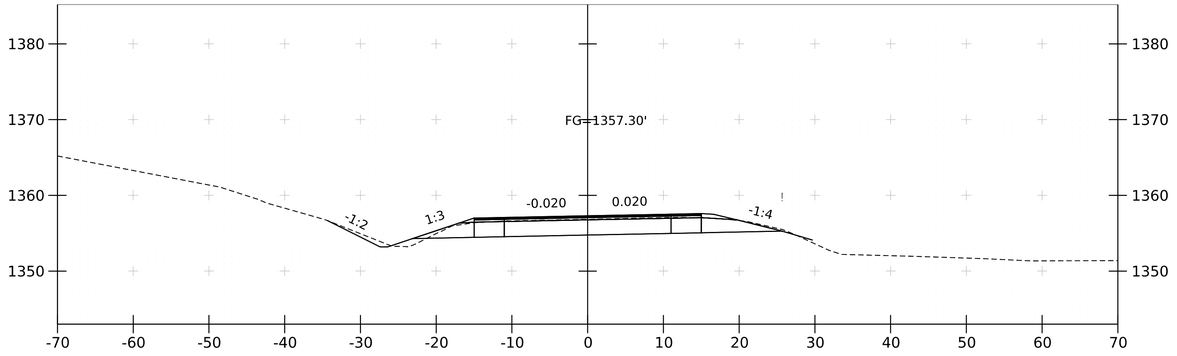
END PROJECT



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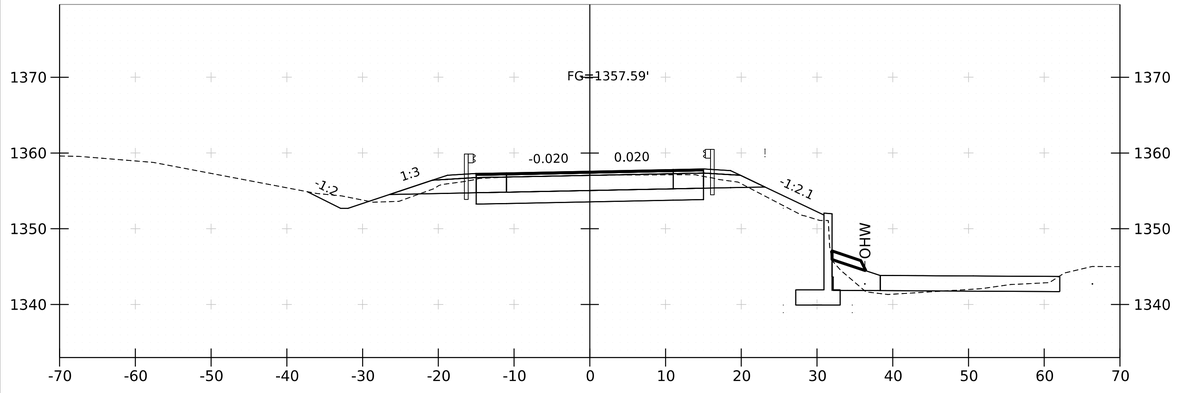

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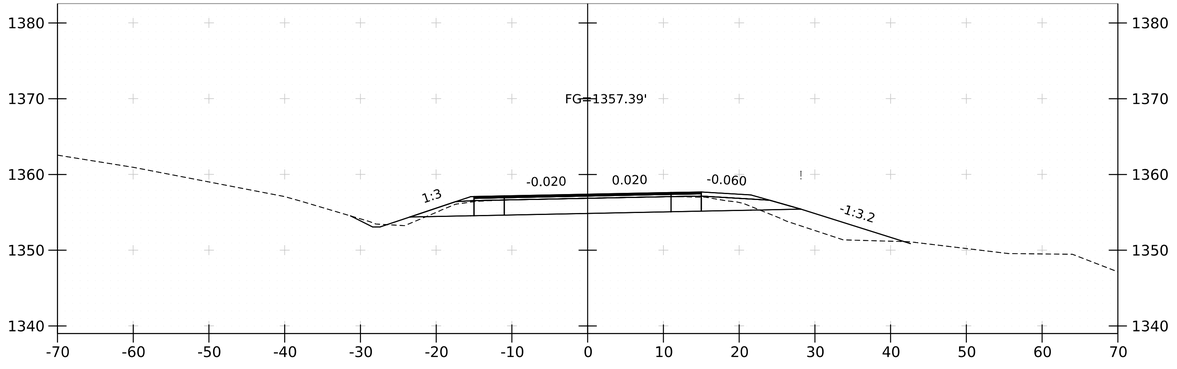


359+75

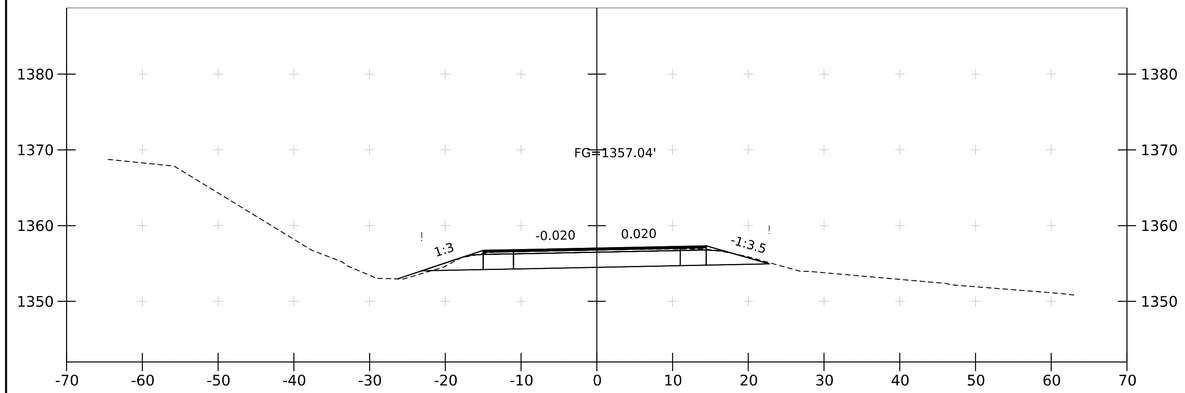
0 10 20

SCALE IN FEET

Stantec

PROJECT NAME:	PLYMOUTH
PROJECT NUMBER:	ER P23-1(332)

FILE NAME:	z23b791xs_mainline.dgn	PLOT DATE:	8-NOV-2024
PROJECT LEADER:	T. KNIGHT	DRAWN BY:	J. GRIGAS
DESIGNED BY:	J. GRIGAS	CHECKED BY:	T. KNIGHT
ROADWAY CROSS SECTION SHEET 3		SHEET	19 OF 26



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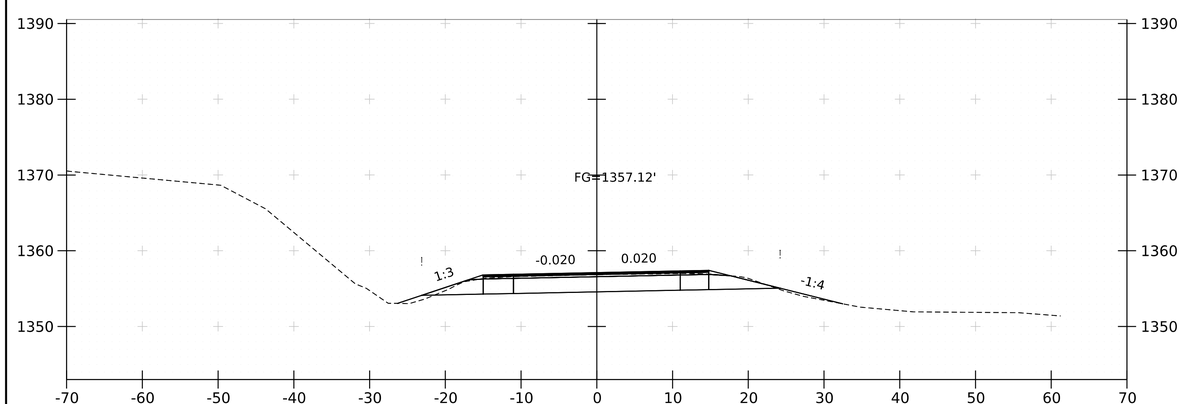

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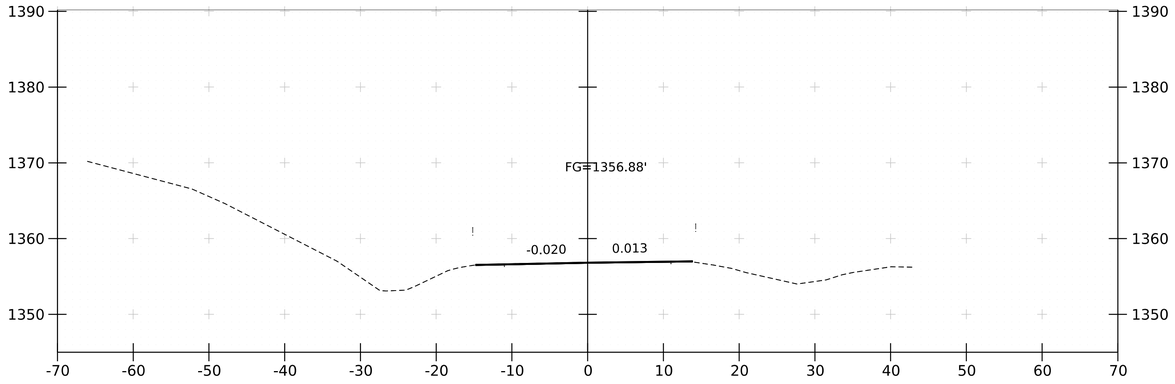

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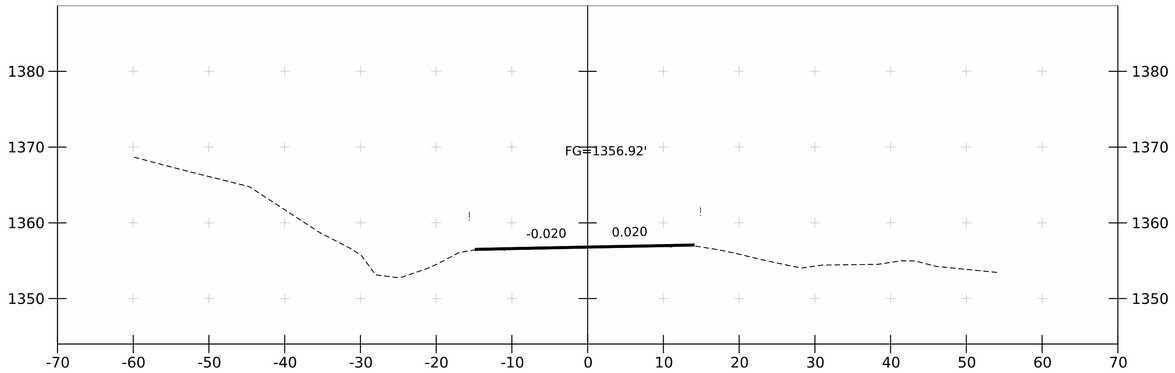

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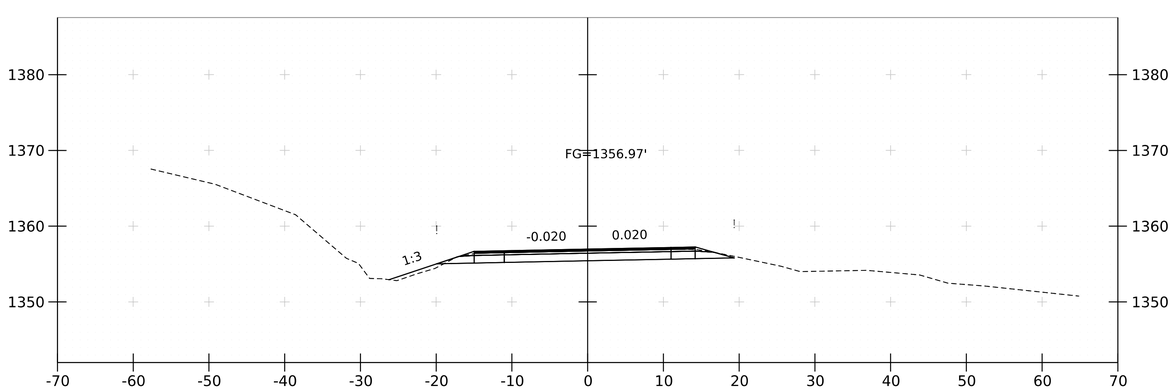


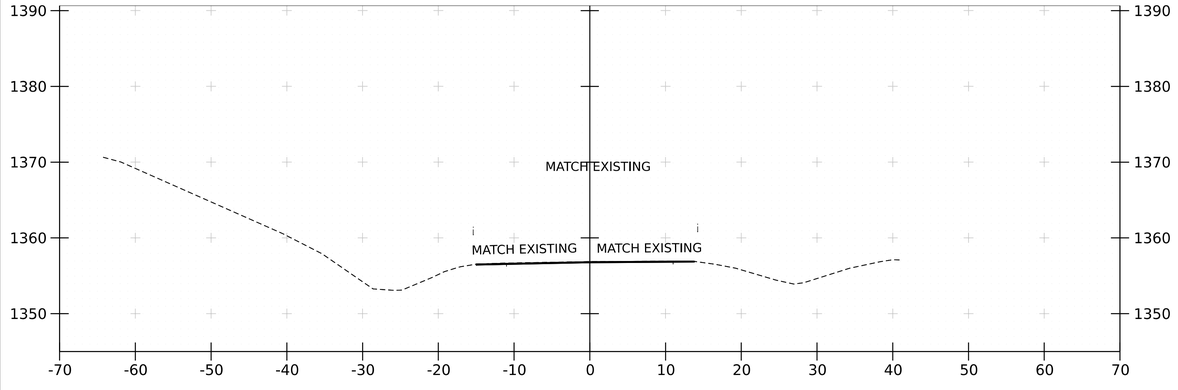
361+00

0 10 20
SCALE IN FEET

Stantec

PROJECT NAME:	PLYMOUTH
PROJECT NUMBER:	ER P23-1(332)

FILE NAME:	z23b791xs_mainline.dgn	PLOT DATE:	8-NOV-2024
PROJECT LEADER:	T. KNIGHT	DRAWN BY:	J. GRIGAS
DESIGNED BY:	J. GRIGAS	CHECKED BY:	T. KNIGHT
ROADWAY CROSS SECTION SHEET 4		SHEET	20 OF 26



361+75

END APPROACH

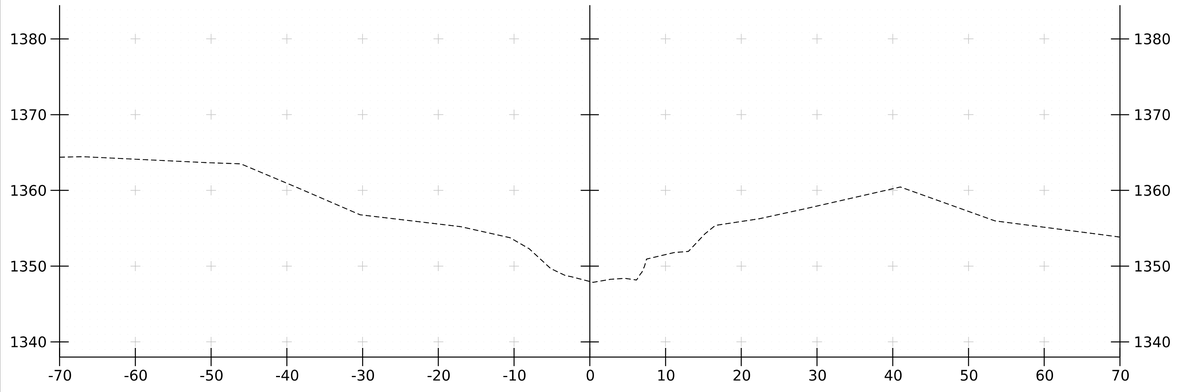
0 10 20

SCALE IN FEET

Stantec

PROJECT NAME:	PLYMOUTH
PROJECT NUMBER:	ER P23-1(332)

FILE NAME:	z23b791xs_mainline.dgn	PLOT DATE:	8-NOV-2024
PROJECT LEADER:	T. KNIGHT	DRAWN BY:	J. GRIGAS
DESIGNED BY:	J. GRIGAS	CHECKED BY:	T. KNIGHT
ROADWAY CROSS SECTION SHEET 5		SHEET	21 OF 26



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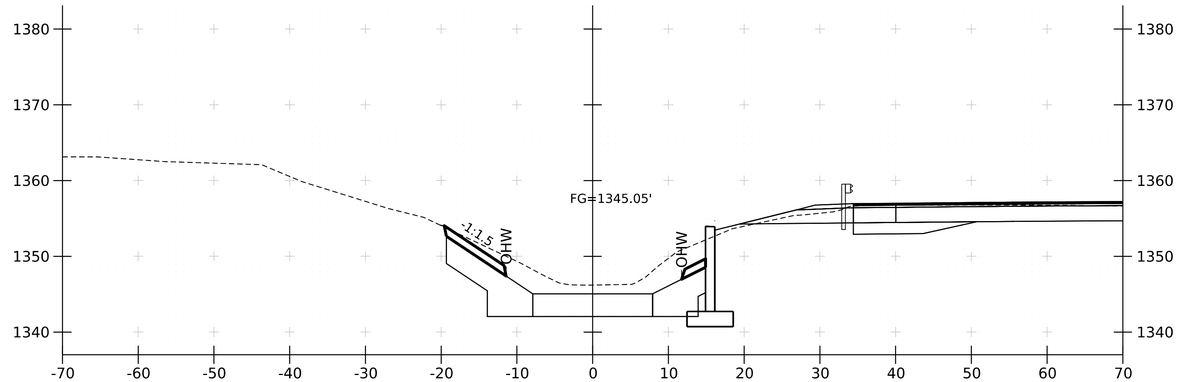

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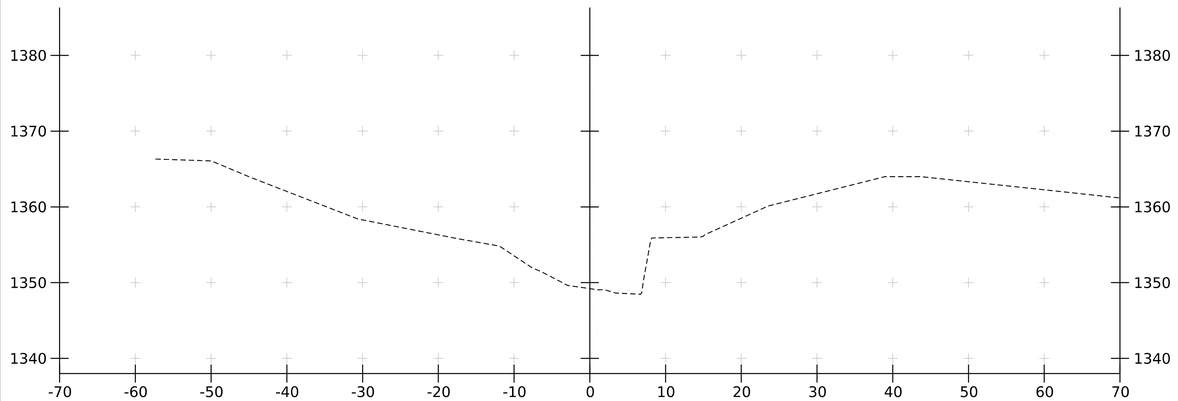
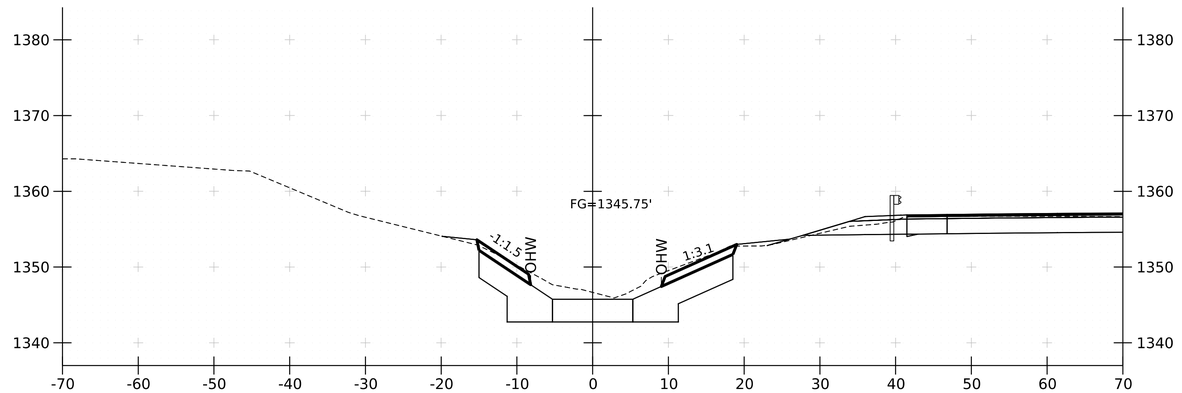


50+00

STA. 50+45.00 LT/RT
BEGIN UNCLASSIFIED CHANNEL EXCAVATION
BEGIN GEOTEXTILE UNDER STONE FILL
BEGIN E-STONE FILL, TYPE III
BEGIN GRUBBING MATERIAL



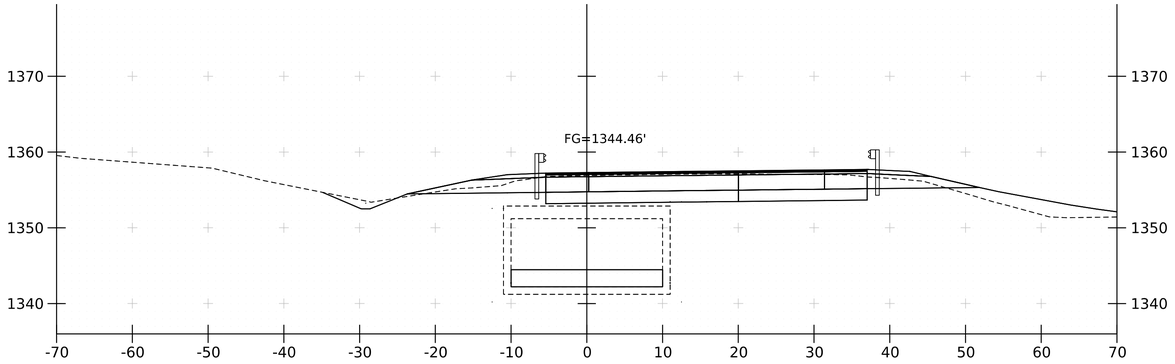
50+50

0 10 20
SCALE IN FEET

Stantec

PROJECT NAME:	PLYMOUTH
PROJECT NUMBER:	ER P23-1(332)

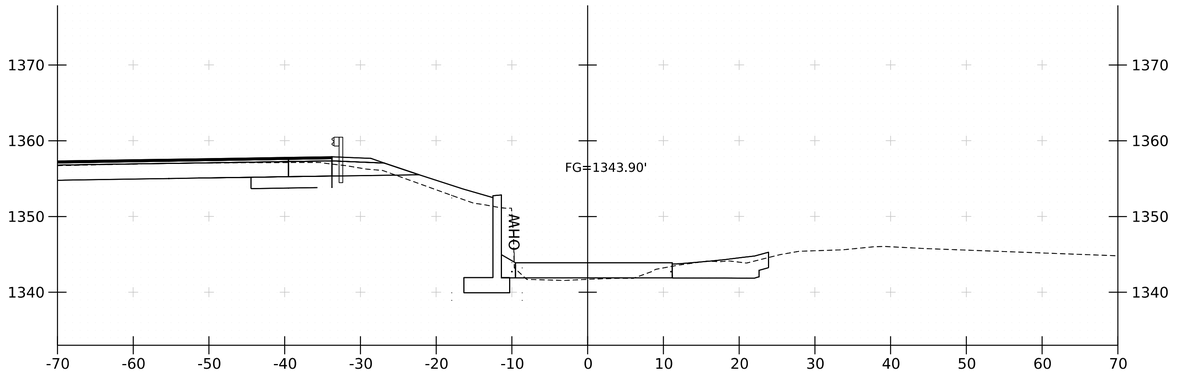
FILE NAME:	z23b791xs_channel.dgn	PLOT DATE:	8-NOV-2024
PROJECT LEADER:	T. KNIGHT	DRAWN BY:	J. GRIGAS
DESIGNED BY:	J. GRIGAS	CHECKED BY:	T. KNIGHT
CHANNEL CROSS SECTION SHEET 1		SHEET	22 OF 26



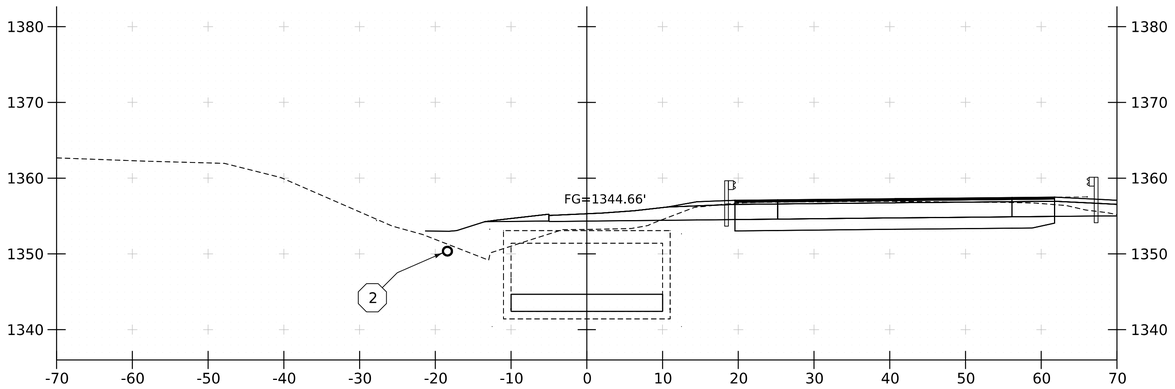
51+00

STA. 51+70.00 LT
BEGIN UNCLASSIFIED CHANNEL EXCAVATION
BEGIN GEOTEXTILE UNDER STONE FILL
BEGIN E-STONE FILL, TYPE II
BEGIN GRUBBING MATERIAL

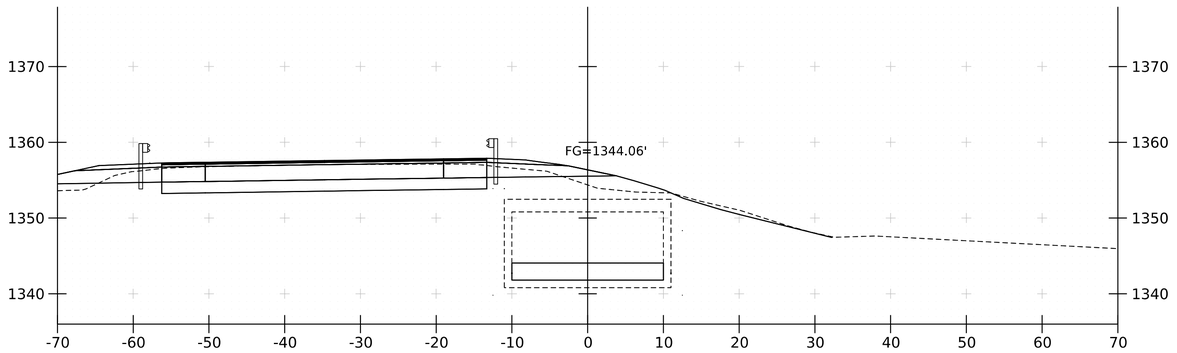
STA. 51+70.00 RT
BEGIN UNCLASSIFIED CHANNEL EXCAVATION
BEGIN E-STONE FILL, TYPE II



51+70

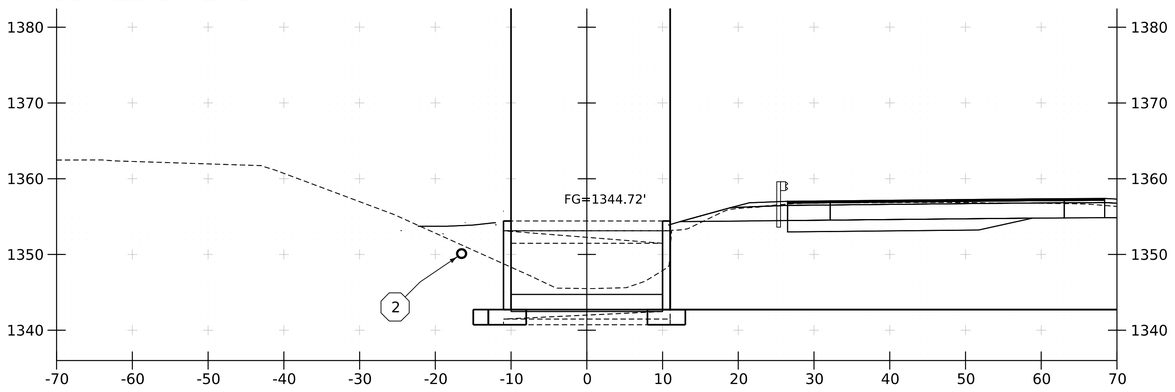


50+75

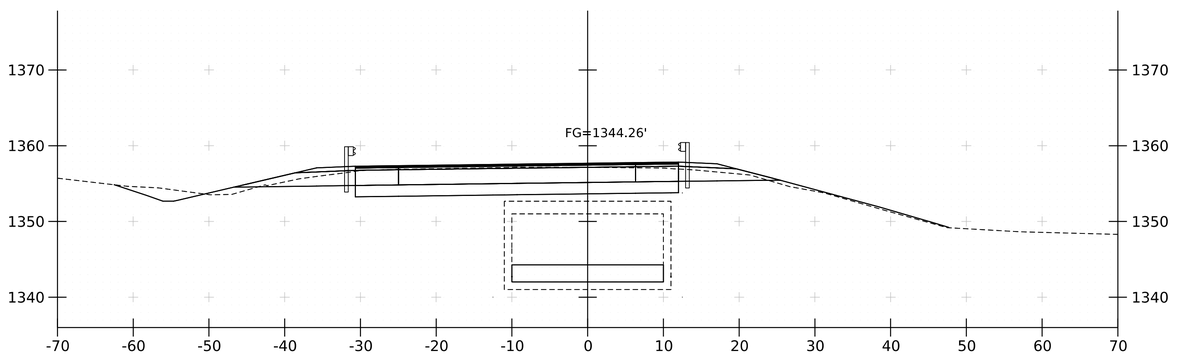


51+50

STA. 50+68.00 LT/RT
END UNCLASSIFIED CHANNEL EXCAVATION
END GEOTEXTILE UNDER STONE FILL
END E-STONE FILL, TYPE III
END GRUBBING MATERIAL



50+68



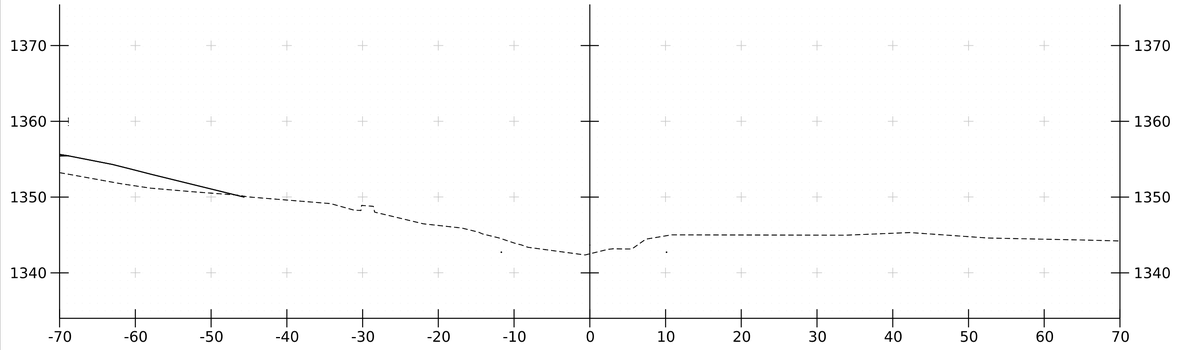
51+25

0 10 20
SCALE IN FEET

Stantec

PROJECT NAME:	PLYMOUTH
PROJECT NUMBER:	ER P23-1(332)

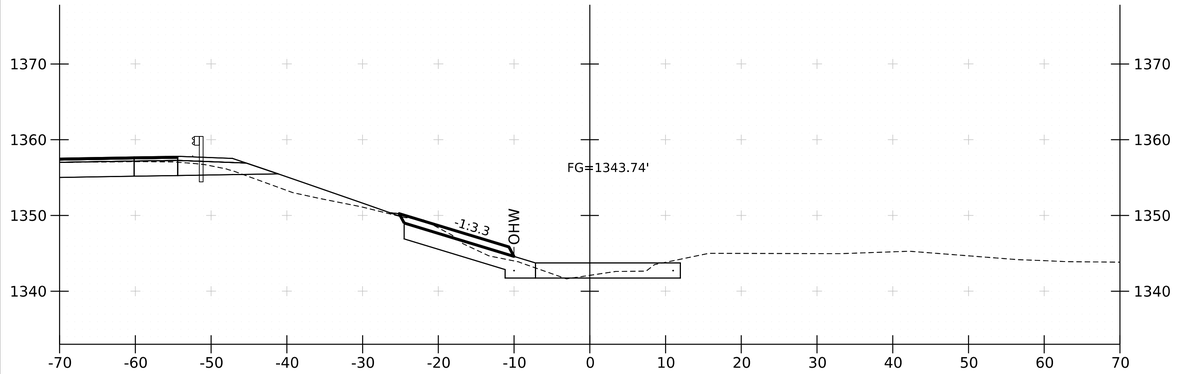
FILE NAME:	z23b791xs_channel.dgn	PLOT DATE:	8-NOV-2024
PROJECT LEADER:	T. KNIGHT	DRAWN BY:	J. GRIGAS
DESIGNED BY:	J. GRIGAS	CHECKED BY:	T. KNIGHT
CHANNEL CROSS SECTION SHEET 2		SHEET	23 OF 26



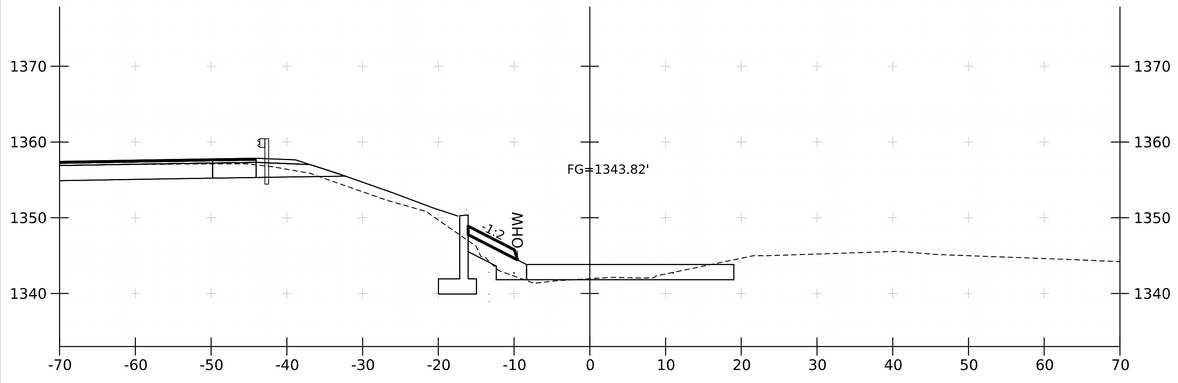
52+00

STA. 511+95.00 LT
END UNCLASSIFIED CHANNEL EXCAVATION
END GEOTEXTILE UNDER STONE FILL
END E-STONE FILL, TYPE II
END GRUBBING MATERIAL

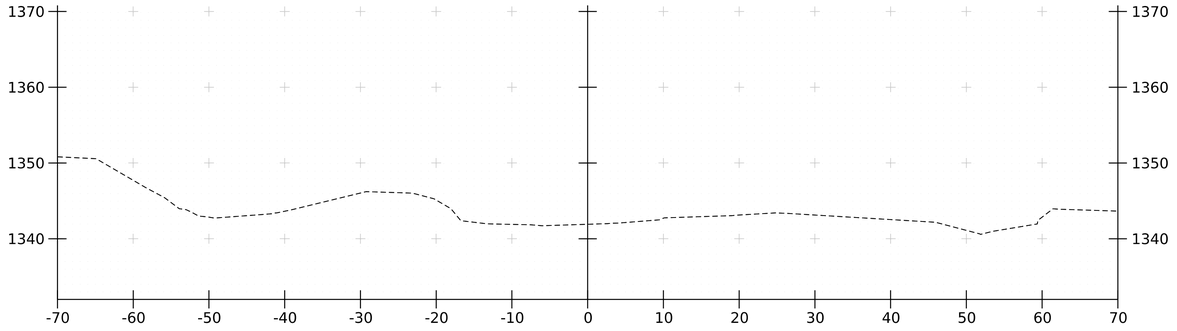
STA. 511+95.00 RT
END UNCLASSIFIED CHANNEL EXCAVATION
END E-STONE FILL, TYPE II



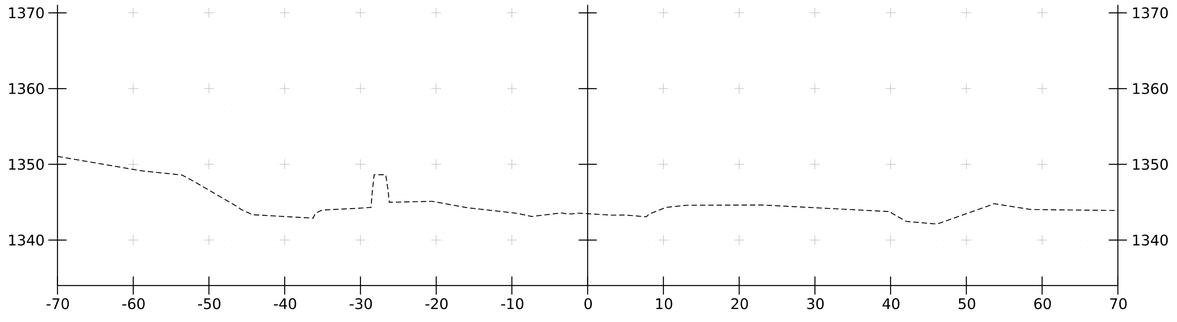
51+90



51+80



52+50



52+25

0 10 20
SCALE IN FEET

Stantec

PROJECT NAME: PLYMOUTH
PROJECT NUMBER: ER P23-1(332)

FILE NAME: z23b791xs_channel.dgn
PROJECT LEADER: T. KNIGHT
DESIGNED BY: J. GRIGAS
CHANNEL CROSS SECTION SHEET 3

PLOT DATE: 8-NOV-2024
DRAWN BY: J. GRIGAS
CHECKED BY: T. KNIGHT
SHEET 24 OF 26

12D
TURNBRIDGE-LYMAN COMPLEX
15 TO 35 PERCENT SLOPES, VERY ROCKY
"K" FACTOR = 0.43

68C
MONADNOCK AND BERKSHIRE SOILS
8 TO 15 PERCENT SLOPES
"K" FACTOR = 0.32

58E
BERKSHIRE-TURNBRIDGE COMPLEX
35 TO 50 PERCENT SLOPES, VERY STONY
"K" FACTOR = 0.55

SOIL BOUNDARY

VT STATE PLANE GRID

N

N/F
THE BLACK
POND TRUST

TINKER BROOK

OHW

BF

1766 IP
1.5" UP
6"

HVCTRL
200

EXISITNG
WING WALL

BRIDGE
112 / VT 100
BRIDGE PLAQUE

+00
357+00
358+00
359+00
360+00
361+00
362+00

314

HVCTRL
4

HVCTRL
101

8/315

316

GRAVEL
DRIVE

GUY
POLE

EXISITNG
WING WALL

EXISTING
WALL

EXISTING
STONE WALL

EXISTING
FENCE
W/GATE

8/310/17

309/16

1209\BND
4X4 CONC. MON.
3" ABOVE LEANING

N/F
THE BLACK
POND TRUST

N/F
THE BLACK
POND TRUST

EXISTING
WALL

0 20 40
SCALE IN FEET

Stantec

PROJECT NAME:	PLYMOUTH
PROJECT NUMBER:	ER P23-1(332)

FILE NAME:	z23b791_bdr_ex cond.dgn	PLOT DATE:	8-NOV-2024
PROJECT LEADER:	T. KNIGHT	DRAWN BY:	S.WINES
DESIGNED BY:	S.WINES	CHECKED BY:	J. GRIGAS
EXISTING CONDITION SITE PLAN SHEET 1		SHEET	25 OF 26

LEGEND:

VAOT POLLINATOR COMPACT SEED MIX

DECIDUOUS SHRUBS WITH POLLINATOR COMPACT SEED MIX

DECIDUOUS TREE

(10) SHRUBS WITH POLLINATOR SEED. MIX SPECIES EVENLY.

(15) SHRUBS WITH POLLINATOR SEED. MIX SPECIES EVENLY.

(7) SHRUBS WITH POLLINATOR SEED. MIX SPECIES EVENLY.

(10) SHRUBS WITH POLLINATOR SEED. MIX SPECIES EVENLY.

TINKER BROOK

TINKER BROOK

PLYMOUTH

VT 100

SOUTHBOUND

NORTHBOUND

N23°18'04.36"W

356+00

357+00

358+00

359+00

360+00

361+00

362+00

GUY POLE

GUY POLE

GRAVEL DRIVE

EXISTING STONE WALL

EXISTING FENCE W/GATE

CABIRCH

NOTES:

1. SEEDED AREAS SHALL BE PROTECTED IN ACCORDANCE WITH SPECIFICATION SUBSECTION 651.07 PROTECTION. WHERE WETLANDS OR WETLAND BUFFERS ARE PRESENT, STRAW MULCH SHALL BE USE INSTEAD OF HAY MULCH.

2. IF AREAS WITHIN PDF OR BARRIER FENCE ARE NOT DISTURBED, THEY SHOULD REMAIN VEGETATED, AND ADDITIONAL REVEGETATION IS NOT REQUIRED.

3. PROVIDING SUFFICIENT MOISTURE IS CRITICAL DURING THE ENTIRE PLANT ESTABLISHMENT PERIOD. WATERING TO BE PAID FOR UNDER 656.6500 LANDSCAPE WATERING.

4. THE VTRANS LANDSCAPE ARCHITECT AND LANDSCAPE INSPECTOR WILL CONFIRM PLANT LOCATIONS BASED ON THE PREPARED SITE, PRIOR TO INSTALLATION.

5. IN AREAS RECEIVING PLANTINGS ON STONE FILL, GRUBBING LAYER SHALL NOT DISAPPEAR INTO GAPS. TOP LAYER OF STONE FILL MAY BE BROKEN DOWN INTO SMALLER PIECES TO PREVENT SOIL LOSS AS DIRECTED BY THE RESIDENT ENGINEER.

6. APPLY MYCORRHIZAL FUNGI PER MANUFACTURERS RECOMMENDATIONS TO TREES AND SHRUBS.

0 20 40

SCALE IN FEET

PROJECT NAME: PLYMOUTH
PROJECT NUMBER: ER P23-1(332)

FILE NAME: w23b791_lds.dgn
PROJECT LEADER: T.KNIGHT
DESIGNED BY: B. DONAHUE
LANDSCAPE PLAN

PLOT DATE: 8-NOV-2024
DRAWN BY: B.DONAHUE
CHECKED BY: VTRANS
SHEET 26 OF 26