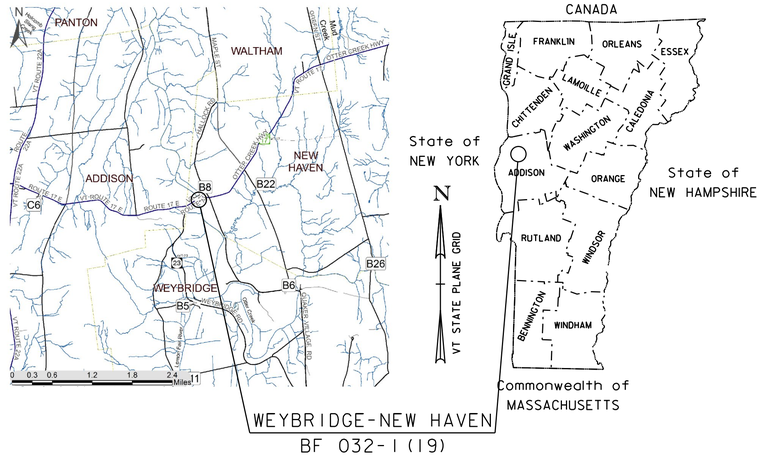
STATE OF VERMONT
AGENCY OF TRANSPORTATION



WEYBRIDGE-NEW HAVEN
BF 032-1(19)

PROPOSED IMPROVEMENT
BRIDGE PROJECT

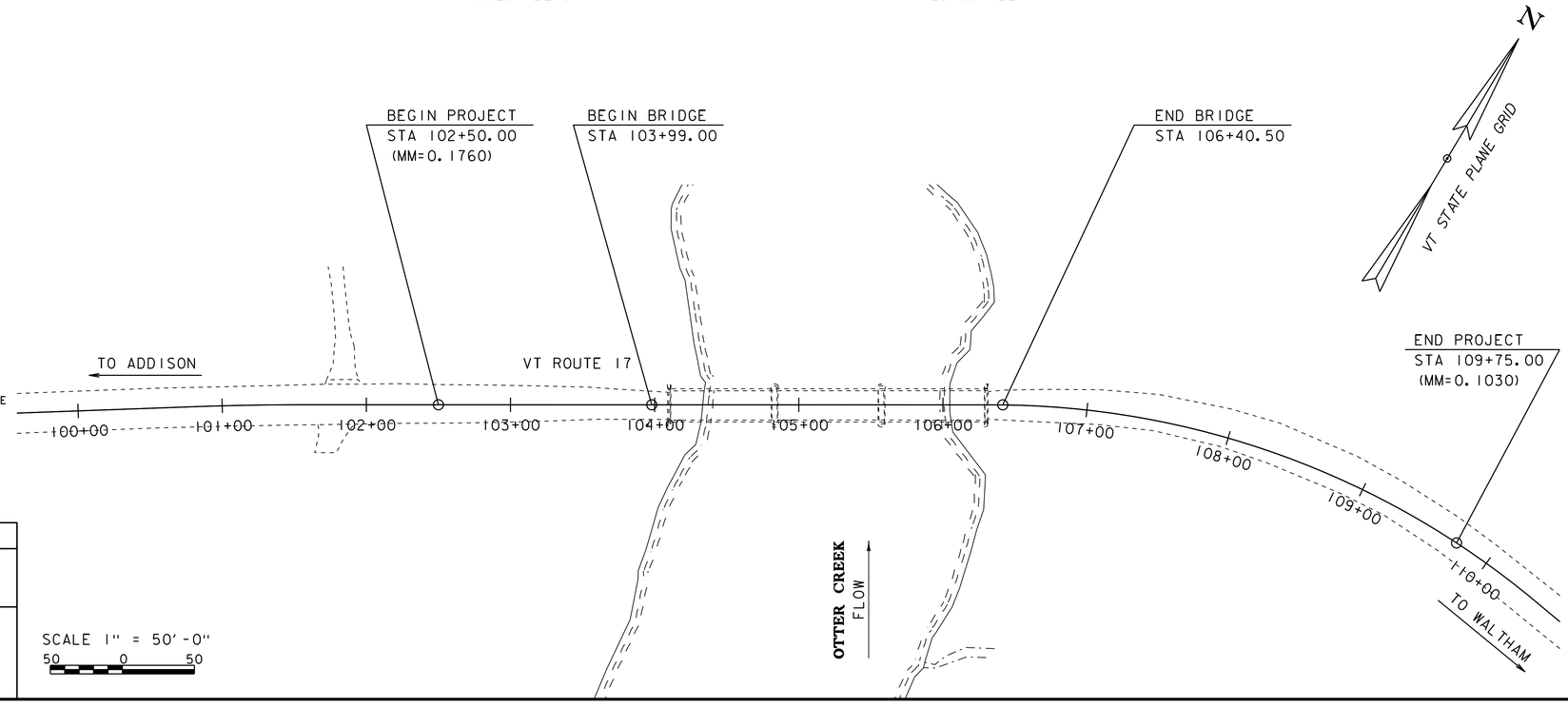
TOWNS OF WEYBRIDGE AND NEW HAVEN
COUNTY OF ADDISON

ROUTE NO : VT ROUTE 17 MINOR ARTERIAL BRIDGE NO : 8

PROJECT LOCATION: APPROXIMATELY 3.0 MILES EAST OF THE JUNCTION WITH VT ROUTE 22A

PROJECT DESCRIPTION: FULL REPLACEMENT OF BRIDGE NO. 8 ON VT ROUTE 17 BETWEEN WEYBRIDGE AND NEW HAVEN, OVER OTTER CREEK.

LENGTH OF BRIDGE:	241.50 FEET
LENGTH OF ROADWAY:	483.50 FEET
PROJECT LENGTH:	725.00 FEET



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.

QUALITY ASSURANCE PROGRAM : LEVEL 2	
SURVEYED BY :	L.ORVIS
SURVEYED DATE :	1-10-2014
DATUM	
VERTICAL	NAVD88
HORIZONTAL	NAD83(96)

FINAL PLANS
20-APR-2017

DIRECTOR OF PROJECT DELIVERY
APPROVED _____ DATE _____

PROJECT MANAGER : C.W. CARLSON P.E.

PROJECT NAME : WEYBRIDGE-NEW HAVEN
PROJECT NUMBER : BF 032-1(19)

SHEET 1 OF 85 SHEETS

STATE OF VERMONT
AGENCY OF TRANSPORTATION

PRELIMINARY INFORMATION SHEET (BRIDGE)

Version
LRFD

INDEX OF SHEETS

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SD-601.00	STRUCTURAL STEEL DETAILS AND NOTES	06-04-2010
SD-602.00	STRUCTURAL STEEL PLATE GIRDER DETAILS AND NOTES	05-02-2011
HSD-400.01	SAFETY EDGE DETAILS	03-29-2016
HSD-621.06	GUARDRAIL TERMINAL LABEL DETAIL	02-27-2017

TRAFFIC DATA

YEAR	ADT	DHV	% D	% T	ADTT
2017	1100	120	54	21.3	190
2037	1200	140	54	30.3	290

20 year ESAL for flexible pavement from 2017 to 2037 : 1709000

40 year ESAL for flexible pavement from 2017 to 2057 : 4076700

Design Speed : 45 mph

AS BUILT "REBAR" DETAIL

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

FINAL HYDRAULIC REPORT

HYDROLOGIC DATA

Date: November 2016

DRAINAGE AREA : 858 sq. mi.
CHARACTER OF TERRAIN : Mixture fields and forested, hilly
STREAM CHARACTERISTICS : Sinuous, incised and alluvial
NATURE OF STREAMBED : Sand and gravel

PEAK FLOW DATA - ANNUAL EXCEEDANCE PROBABILITY (AEP)

43% =	5,500 cfs	2% =	12,100 cfs
10% =	8,900 cfs	1% =	13,600 cfs
4% =	10,500 cfs	0.2% =	17,300 cfs

DATE OF FLOOD OF RECORD : Unknown
ESTIMATED DISCHARGE: Unknown
WATER SURFACE ELEV.: Unknown
NATURAL STREAM VELOCITY : @ 2% AEP = 4.2'
ICE CONDITIONS : Moderate
DEBRIS: Light
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:

WATERSHED STORAGE: 2% HEADWATERS:
UNIFORM: X
IMMEDIATELY ABOVE SITE:

EXISTING STRUCTURE INFORMATION

STRUCTURE TYPE: 3-span steel beam bridge
YEAR BUILT: 1934
CLEAR SPAN(NORMAL TO STREAM): 217'
VERTICAL CLEARANCE ABOVE STREAMBED: 22'
WATERWAY OF FULL OPENING: 3690 sq. ft.
DISPOSITION OF STRUCTURE: Remove and replace
TYPE OF MATERIAL UNDER SUBSTRUCTURE: See borings

WATER SURFACE ELEVATIONS AT:

43% AEP =	138.5'	VELOCITY =	4.8 fps
10% AEP =	145.2'	"	3.8 fps
4% AEP =	146.3'	"	4.1 fps
2% AEP =	147.3'	"	4.4 fps
1% AEP =	148.0'	"	4.8 fps

LONG TERM STREAMBED CHANGES: None noted

IS THE ROADWAY OVERTOPPED BELOW 1% AEP: No
FREQUENCY: N/A
RELIEF ELEVATION: 151.3'
DISCHARGE OVER ROAD @ 1% AEP: None

UPSTREAM STRUCTURE

TOWN: Weybridge DISTANCE: 30.750'
HIGHWAY # : TH 2 STRUCTURE #: 7
CLEAR SPAN: 162' CLEAR HEIGHT:
YEAR BUILT: 1970 FULL WATERWAY:
STRUCTURE TYPE: 3-span steel beam bridge

DOWNSTRUCTURE STRUCTURE

TOWN: Vergennes DISTANCE: 35,100'
HIGHWAY # : VT 22A STRUCTURE #: 27
CLEAR SPAN: 338' CLEAR HEIGHT:
YEAR BUILT: 1934, recontructed 1969 FULL WATERWAY:
STRUCTURE TYPE: 5-span rooled beam bridge

LRFR LOAD RATING FACTORS

LOADING LEVELS	TRUCK						
	H-20	HL-93	3S2	6 AXLE	3A STR.	4A STR.	5A SEM
TONNAGE	**20**	**36**	**36**	**66**	**30**	**34.5**	**38**
INVENTORY	3.57	1.08					
POSTING							
OPERATING	4.64	1.4	3.19	1.93	3.22	2.84	2.86
COMMENTS:							

PROPOSED STRUCTURE

STRUCTURE TYPE: 2-span steel beam bridge

CLEAR SPAN(NORMAL TO STREAM): 237'
VERTICAL CLEARANCE ABOVE STREAMBED: 20'
WATERWAY OF FULL OPENING: 3810 sq. ft.

WATER SURFACE ELEVATIONS AT:

43% AEP =	138.4'	VELOCITY=	4.0 fps
10% AEP =	145.2'	"	3.3 fps
4% AEP =	146.2'	"	3.6 fps
2% AEP =	147.2'	"	3.9 fps
1% AEP =	148.0'	"	4.2 fps

IS THE ROADWAY OVERTOPPED BELOW 1% AEP: No
FREQUENCY: N/A
RELIEF ELEVATION: 151.3'
DISCHARGE OVER ROAD @ 1% AEP: None

BRIDGE LOW CHORD ELEVATION: 148.4'
FREEBOARD: @ 2% AEP = 1.2'

SCOUR: Abutment and pier to be placed on ledge. At time of final hydraulics, borings hadn't been done, so scour wasn't calculated.
REQUIRED CHANNEL PROTECTION: Stone Fill, Type II

PERMIT INFORMATION

		DEPTH OR ELEVATION:
AVERAGE DAILY FLOW:	-	
ORDINARY LOW WATER:	-	-
ORDINARY HIGH WATER:	-	-

TEMPORARY BRIDGE REQUIREMENTS

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

ADDITIONAL INFORMATION

TRAFFIC MAINTENANCE NOTES

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

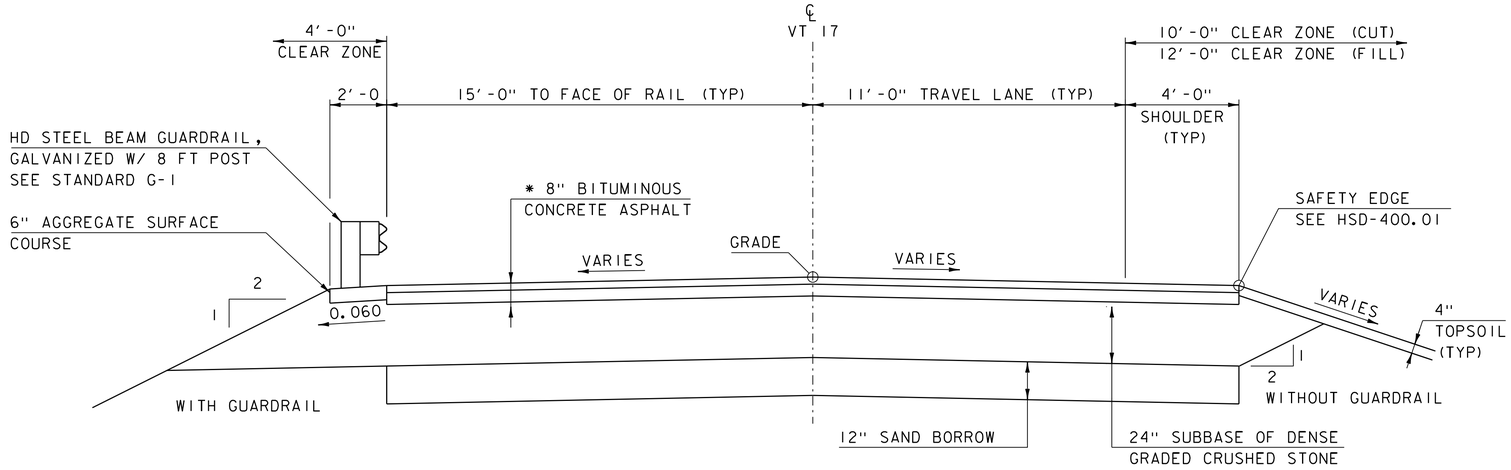
DESIGN VALUES

1.	DESIGN LIVE LOAD		HL-93
2.	FUTURE PAVEMENT	d_P:	0.0 INCH
3.	ABUTMENT BEARING TO BEARING LENGTH (TWO SPANS) (115.50 - 125.00) FT	L:	240.50 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.	CONCRETE, HIGH PERFORMANCE CLASS AA	f'_c:	4.0 KSI
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:	3.0 KSI
12.	REINFORCING STEEL	f_y:	60 KSI
13.	STRUCTURAL STEEL AASHTO M270 (WEATHERING)	f_y:	50 KSI
14.	NOMINAL BEARING RESISTANCE OF SOIL	q_n:	4.0 KSF
15.	SOIL BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD)	ϕ:	---
16.	NOMINAL BEARING RESISTANCE OF ROCK	q_n:	70.0 KSF
17.	ROCK BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD)	ϕ:	0.45
18.	PILE RESISTANCE FACTOR	ϕ:	0.65
19.	LATERAL PILE DEFLECTION	Δ:	1.02" INCH
20.	BASIC WIND SPEED	V_{3s}:	---
21.	MINIMUM GROUND SNOW LOAD	p_g:	---
22.	SEISMIC DATA PGA : 0.65	S_s:	---
		S_1:	---
23.			
24.			---
25.			---
26.			---

PROJECT NAME: **WEYBRIDGE-NEW HAVEN**
PROJECT NUMBER: **BF 032-1(19)**

FILE NAME: **s12b552pi.dgn**
PROJECT LEADER: **C.W. CARLSON**
DESIGNED BY: **D. PETERSON**
PRELIMINARY INFORMATION SHEET 1

PLOT DATE: 1/20/2017
DRAWN BY: **M. LONGSTREET**
CHECKED BY: **D. PETERSON**
SHEET 2 OF 85

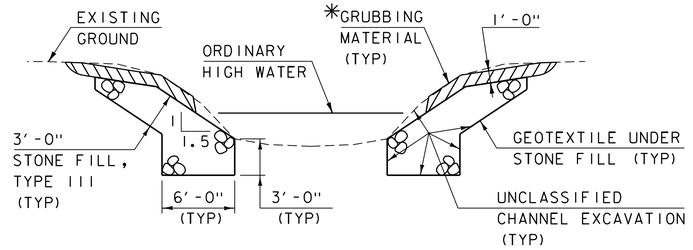


ROADWAY TYPICAL SECTION

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

*2 LIFTS OF 1½" BITUM. CONC. PAVEMENT TYPE IVB OVER 2 LIFTS OF 2½" BITUM. CONC. PAVEMENT TYPE IIS

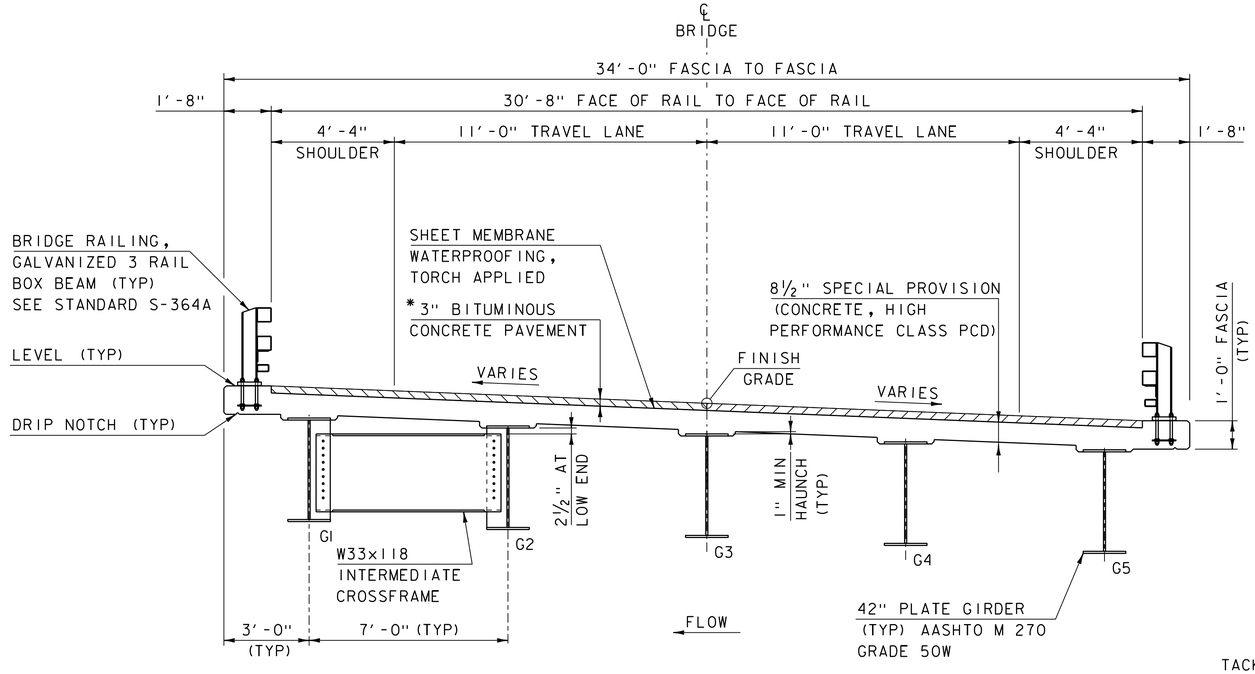
TYPE IIS SHALL BE PAID UNDER SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, SMALL QUANTITY) AND TYPE IVB SHALL BE PAID FOR UNDER SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, TYPE IVB)



TYPICAL CHANNEL SECTION

(NOT TO SCALE)

*GRUBBING MATERIAL SHALL NOT BE PLACED WITHIN 3 FEET OF THE ABUTMENTS UNDER THE BRIDGE. WHENEVER CHANNEL SLOPE INTERSECTS ROADWAY SUBBASE, GRUBBING MATERIAL SHALL BEGIN AT THE BOTTOM OF SUBBASE.

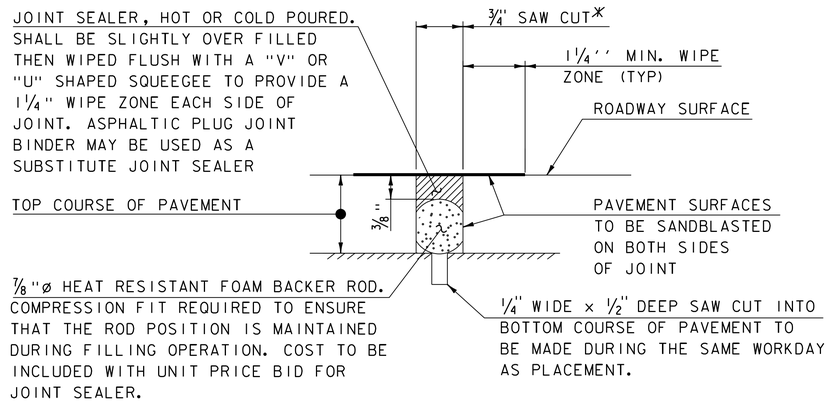


BRIDGE TYPICAL SECTION

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

*2 LIFTS OF 1½" BITUM. CONC. PAVEMENT TYPE IVB

TACK COAT: EMULSIFIED ASPHALT IS TO BE APPLIED AT A RATE OF 0.025 GAL/SY BETWEEN SUCCESSIVE COURSES OF PAVEMENT AND 0.080 GAL/SY ON COLD PLANED SURFACES AS DIRECTED BY THE ENGINEER.



SAWED PAVEMENT JOINT DETAIL

(NOT TO SCALE)

*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.

MATERIAL TOLERANCES

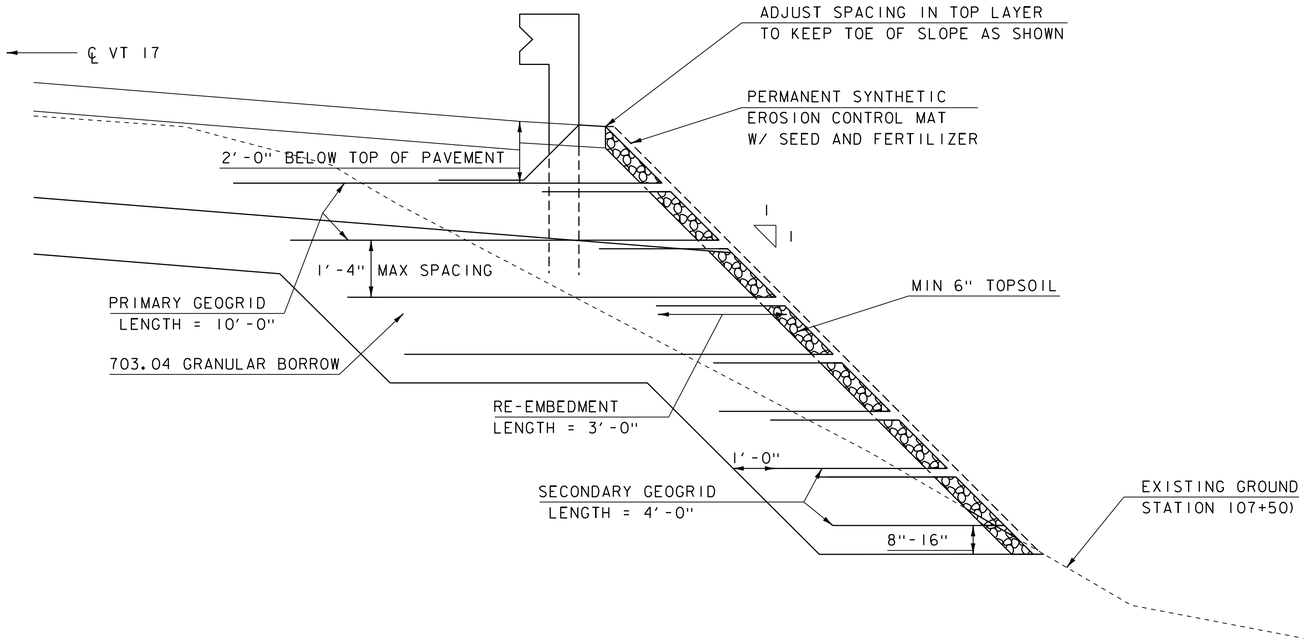
(IF USED ON PROJECT)

SURFACE	
- PAVEMENT (TOTAL THICKNESS)	+/- ¼"
- AGGREGATE SURFACE COURSE	+/- ½"
SUBBASE	+/- 1"
SAND BORROW	+/- 1"

PROJECT NAME: WEYBRIDGE-NEW HAVEN
PROJECT NUMBER: BF 032-1(19)

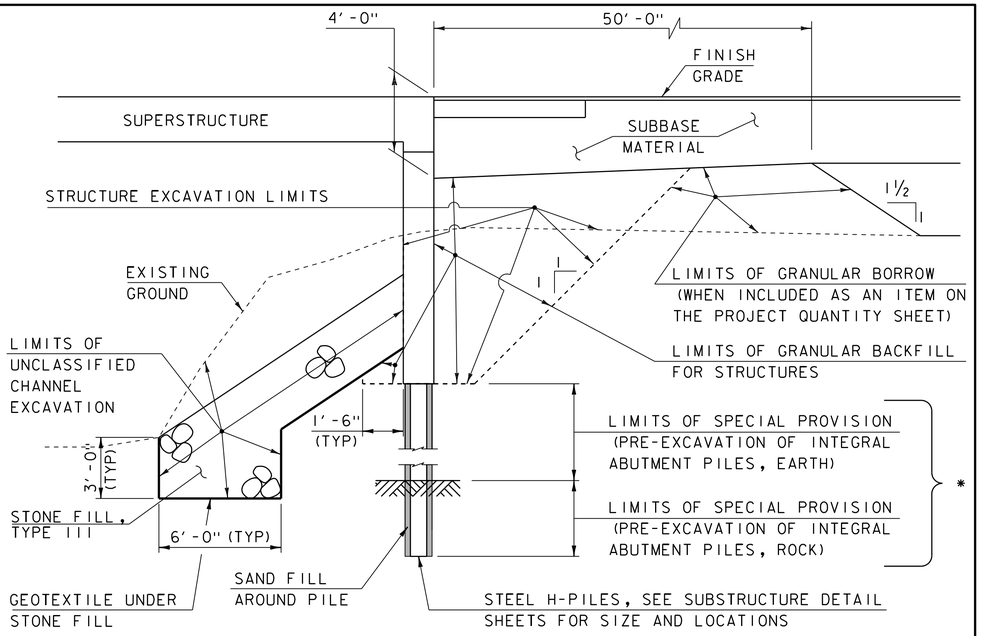
FILE NAME: s12b552typ.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: D. PETERSON
TYPICAL SECTIONS

PLOT DATE: 20-APR-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: D. PETERSON
SHEET 3 OF 85



TYPICAL SECTION 1: STATION 106+90 TO 107+50 & 108+50 TO 109+22

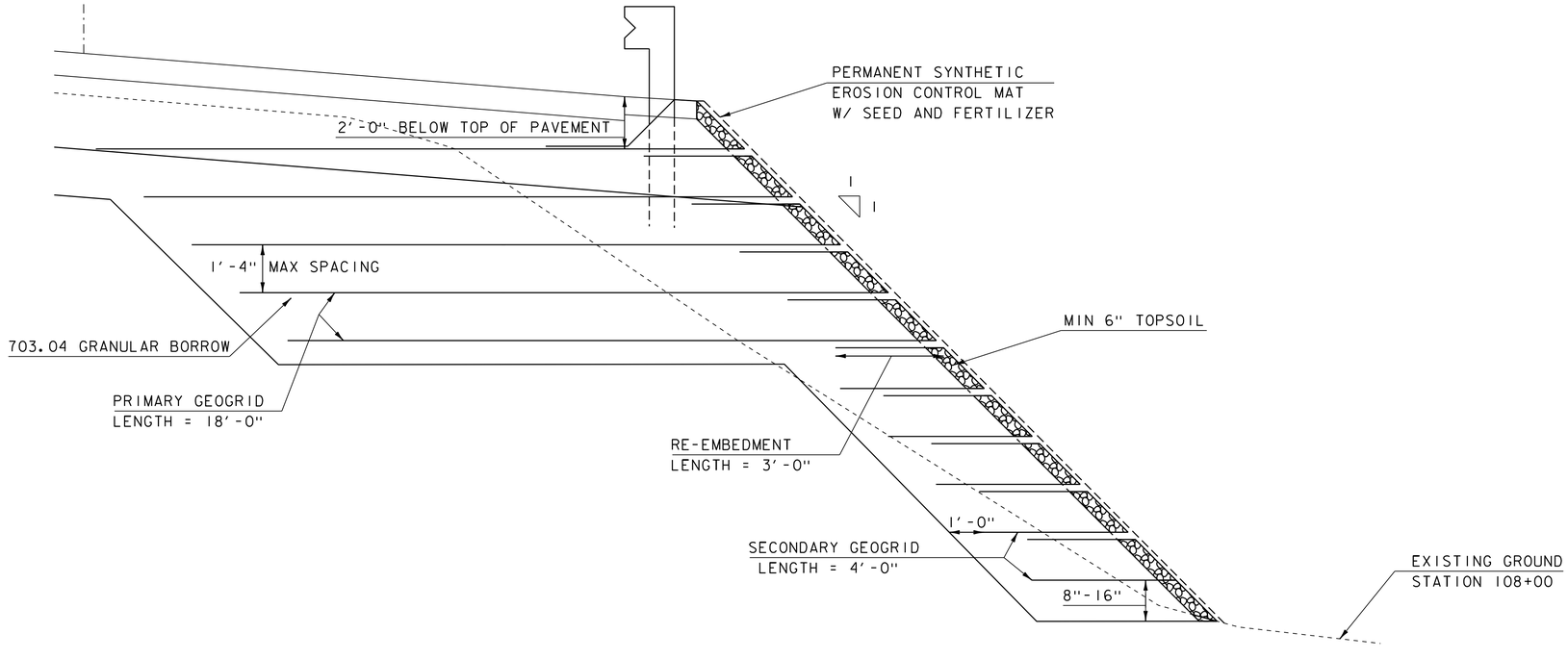
(STATION 107+50 SHOWN)



ABUTMENT EARTHWORK TYPICAL SECTION

NOT TO SCALE

*THESE ITEMS FOR ABUTMENT #1 ONLY, ABUTMENT #2 WILL BE FULLY DRIVEN PILES



TYPICAL SECTION 2: STATION 107+50 TO 108+50

(STATION 108+00 SHOWN)

	SECTIONS 417+00 - 417+75	SECTION 418+00
MINIMUM GEOGRID ULTIMATE TENSILE STRENGTH	1700 lb/ft	1700 lb/ft
NUMBER OF PRIMARY REINFORCEMENT LAYERS	4	5
LENGTH OF PRIMARY REINFORCEMENT	10 FT	18 FT
MINIMUM NUMBER OF SECONDARY REINFORCEMENT LAYERS	3	3
LENGTH OF SECONDARY REINFORCEMENT	4 FT	4 FT
VERTICAL SPACING OF SECONDARY REINFORCEMENT	16 in	16 in
TOP REINFORCEMENT LAYER LOCATION	2 FT BELOW PAVMNT SURFACE	2 FT BELOW PAVMNT SURFACE

PROJECT NAME: WEYBRIDGE-NEW HAVEN
PROJECT NUMBER: BF 032-1(19)

FILE NAME: sl2b552typ.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: D. PETERSON
TYPICALS & DETAILS

PLOT DATE: 20-APR-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: D. PETERSON
SHEET 4 OF 85

GENERAL

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE VERMONT AGENCY OF TRANSPORTATION 2011 STANDARD SPECIFICATIONS FOR CONSTRUCTION, THE 2014 AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, AND THEIR LATEST REVISIONS.

2. ALL DIMENSIONS ARE HORIZONTAL OR VERTICAL, AND ARE GIVEN AT 68 DEGREES FAHRENHEIT, UNLESS NOTED OTHERWISE.

TRAFFIC CONTROL

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND IMPLEMENTATION OF A SITE SPECIFIC TRAFFIC CONTROL PLAN FOR ALL STAGES OF CONSTRUCTION. THE PLAN SHALL CLEARLY DETAIL HOW TRAFFIC WILL BE MAINTAINED. THE PLAN SHALL SPECIFY ALL CONSTRUCTION ACTIVITIES REQUIRING ALTERNATING ONE WAY TRAFFIC, RELATE THOSE ACTIVITIES TO THE CONSTRUCTION SCHEDULE, AND SHOW APPROPRIATE TEMPORARY TRAFFIC CONTROL. ALL COSTS WILL BE INCLUDED IN ITEM 900.645 "SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE)".

4. THE CONTRACTOR MAY SUBMIT A SITE SPECIFIC TRAFFIC CONTROL PLAN FOR THE WORK REQUIRED TO INSTALL THE PIER, TO BE APPROVED AS A SEPARATE SUBMITTAL FROM THE OVERALL TCP PLAN.

5. ALL ITEMS REQUIRED TO IMPLEMENT THE CONTRACTOR'S TRAFFIC CONTROL PLAN WILL NOT BE PAID FOR DIRECTLY BUT WILL BE INCLUDED IN THE BID PRICE FOR ITEM 900.645, "SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE)".

6. VT ROUTE 17 WILL BE CLOSED AT THE BRIDGE FOR THE ENTIRE BRIDGE CLOSURE PERIOD (BCP). A SIGNED DETOUR SHALL BE PROVIDED AS SHOWN IN THE PLANS. PAYMENT FOR THE DETOUR SIGNS SHALL BE INCLUDED IN ITEM 900.645, "SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE)". PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE PAID FOR SEPERATELY UNDER ITEM 641.15.

7. ALL SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MUTCD. FOR ADDITIONAL SIGNING INSTRUCTIONS SEE THE T SERIES OF THE STANDARD DRAWINGS. WHERE CONFLICTS EXIST, THE MUTCD SHALL GOVERN.

EARTHWORK

8. REMOVAL OF THE EXISTING STRUCTURE WILL BE PAID FOR UNDER ITEM 529.15, "REMOVAL OF STRUCTURE". THIS WORK SHALL INCLUDE REMOVAL OF THE EXISTING SUPERSTRUCTURE AS WELL AS ANY PORTIONS OF THE EXISTING ABUTMENTS THAT FALL OUTSIDE THE LIMITS OF STRUCTURE EXCAVATION OR UNCLASSIFIED CHANNEL EXCAVATION AND THE REMOVAL OF THE EXISTING PIERS TO STREAMBED ELEVATION. ANY EXISTING STEEL PLATES FOUND ON THE BRIDGE DECK SHALL REMAIN THE PROPERTY OF STATE OF VERMONT AND SHALL BE DELIVERED TO THE VTRANS NEW HAVEN DISTRICT GARAGE.

9. THE "STONE FILL, TYPE III" UNDER THE BRIDGE AS SHOWN IN THE PLANS SHALL BE PLACED BEFORE THE NEW SUPERSTRUCTURE IS SET.

10. THE CONTRACTOR MAY SUBSTITUTE SUBBASE MATERIAL FOR THE SAND BORROW SHOWN IN THE MATERIALS TRANSITION. THE SUBBASE MATERIAL SHALL BE THE TYPE SPECIFIED IN THE CONTRACT AND SHALL BE PLACED TO MEET THE SUBBASE SPECIFICATIONS. IF SUBBASE IS PLACED IN LIEU OF SAND BORROW, A GEOTEXTILE MEETING THE REQUIREMENTS OF ITEM 649.11 "GEOTEXTILE FOR ROAD BED SEPARATOR" SHALL BE PLACED BETWEEN THE SUBGRADE AND SUBBASE MATERIAL. ALL COSTS ASSOCIATED WITH THE SUBSTITUTION INCLUDING THE GEOTEXTILE WILL BE CONSIDERED INCIDENTAL TO 203.31 "SAND BORROW".

11. TEMPORARY CONSTRUCTION FILLS WITHIN THE WATERCOURSE, IN ACCORDANCE WITH THE PROJECT PLANS, SHALL CONSIST OF CLEAN STONE FILL ONLY. NO OTHER FILLING IN THE STREAM SHALL OCCUR WITHOUT PRIOR WRITTEN APPROVAL OF THE STREAM ALTERATION ENGINEER AND THE ARMY CORPS OF ENGINEERS, VERMONT PROJECT OFFICE.

12. THE TEMPORARY CAUSEWAY, TO INSTALL THE NEW PIER, SHALL BE REMOVED TO ORIGINAL GROUND PRIOR TO THE MARCH 15TH IN-STREAM WORK RESTRICTION PER PERMIT #. A CAUSEWAY CAN THEN BE INSTALLED AFTER THE END OF THE IN-STREAM RESTRICTION DATE OF JUNE 15TH. PAYMENT FOR EACH CAUSEWAY WILL BE MADE UNDER ITEM 900.620 SPECIAL PROVISION (TEMPORARY CAUSEWAY).

CONCRETE

13. WATER REPELLENT, SILANE SHALL BE APPLIED TO ALL EXPOSED CONCRETE ON THE BRIDGE SUPERSTRUCTURE AND SUBSTRUCTURE, EXCEPT FOR THE BOTTOM OF THE DECK BETWEEN THE DRIP NOTCHES.

14. ITEM 900.608 SPECIAL PROVISION (CONCRETE HIGH PERFORMANCE, CLASS PCD)(FPQ): USE FOR THE DECK, INTEGRAL ABUTMENT CURTAIN WALL AND WINGWALLS ABOVE THE PILE CAP CONSTRUCTION JOINT.

15. CONCRETE FOR THE APPROACH SLAB CLOSURE POURS AND ABUTMENT PILE CAVITIES SHALL MEET THE REQUIREMENTS OF ITEM 900.608, "SPECIAL PROVISION (HIGH PERFORMANCE CONCRETE, RAPID SET)(FPQ)".

16. THE CONCRETE EDGES ALONG THE LONGITUDINAL CLOSURE POURS OF THE APPROACH SLABS SHALL BE TREATED TO PROVIDE A ROUGHENED/ EXPOSED AGGREGATE SURFACE. THE AMPLITUDE OF THE EXPOSED AGGREGATE SHALL BE A MINIMUM OF 1/8". THE FABRICATOR SHALL INDICATE THE METHOD USED TO ACHIEVE THIS SURFACE ON THE FABRICATION DRAWINGS AND METHOD USED TO PROTECT THE REINFORCING STEEL.

17. ALL LIFTING POINTS IN THE SUPERSTRUCTURE SHALL BE REMOVABLE TO THE MINIMUM CLEAR COVER FOR REINFORCING STEEL SPECIFIED IN THE PLANS. THE LIFTING POINTS SHALL BE DETAILIED IN THE APPROPRIATE FABRICATION DRAWING. PAYMENT FOR THIS WORK WILL BE CONSIDERED INCIDENTAL TO THE APPROPRIATE PRECAST ITEM.

18. ALL RECESSED LIFTING POINTS, DOWEL DUCTS, AND GROUT PAD BENEATH THE PIER CAP SHALL BE FILLED WITH A TYPE IV MORTAR PER SUBSECTION 707.03 AND WILL BE CONSIDERED INCIDENTAL TO THE APPROPRIATE PRECAST ITEM. A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI, AS DETERMINED BY FIELD-CURED TEST CYLINDERS, SHALL BE ACHIEVED IN THE MORTAR PRIOR TO LOADING.

19. ALL FORM SUPPORTS AND FORM TIES THAT ARE TO REMAIN PERMANENTLY IN THE CONCRETE ABOVE THE BRIDGE SEAT SHALL BE GALVANIZED AND CONFORM TO SECTION 726 OF THE STANDARD SPECIFICATIONS.

REINFORCING STEEL

20. ALL REINFORCING STEEL IN THE PRECAST APPROACH SLABS, ABUTMENTS, AND WINGWALLS SHALL MEET THE REQUIREMENTS FOR LEVEL III CORROSION RESISTANCE IN ACCORDANCE WITH SECTION 507 AND ARE MARKED WITH A ".3" IN THEIR SUFFIX. PAYMENT FOR ALL APPROACH SLAB AND PRECAST ABUTMENT REINFORCING WILL BE MADE UNDER THE APPROPRIATE SECTION 540 CONTRACT ITEM. THE ADDITIONAL LONGITUDINAL STEEL IN THE APPROACH SLAB CLOSURE POURS SHALL BE LEVEL III AND BE INCIDENTAL TO THE PRECAST APPROACH SLAB CONTRACT ITEMS.

21. TEST BARS FOR THE PRECAST UNITS SHALL BE PROVIDED IN ACCORDANCE WITH THE "VERMONT AGENCY OF TRANSPORTATION MATERIAL SAMPLING MANUAL" AVAILABLE ON THE AGENCY WEBSITE.

22. ALL GROUTED COUPLERS FOR BAR REINFORCEMENT SHALL MEET THE REQUIREMENTS OF SECTION 507. EPOXY COATED MECHANICAL SPLICES SHALL BE ALLOWED FOR LEVEL III REINFORCEMENT CONNECTIONS.

23. GROUT FOR GROUTED COUPLERS FOR BAR REINFORCEMENT SHALL BE APPROVED BY THE SPLICE MANUFACTURER. THE CONTRACTOR SHALL SUBMIT A GROUTING PROCEDURE PROPOSAL TO THE ENGINEER, INCLUDING A PREMIX NAME BRAND FOR APPROVAL.

24. A TEMPLATE SHALL BE USED FOR THE LAYOUT OF GROUTED COUPLERS FOR BAR REINFORCEMENT. THE SAME TEMPLATE SHALL BE USED FOR MATCHING FACES OF EACH CONNECTION.

25. ALL REINFORCING STEEL IN THE CAST-IN-PLACE PORTION OF THE PIER SHALL MEET THE REQUIREMENTS FOR LEVEL I CORROSION RESISTANCE. REINFORCING STEEL EXTENDING INTO AND IN THE PRECAST PIER CAP SHALL MEET THE REQUIREMENT FOR LEVEL III CORROSION RESISTANCE.

26. REINFORCING STEEL IN THE DECK WILL INCLUDE BOTH LEVEL III AND GLASS FIBER REINFORCED POLYMER (GFRP) REINFORCING BARS. BARS MARKED ".G" IN THEIR SUFFIX INDICATE GFRP BARS.

27. THE TOP MAT OF GFRP REINFORCING BARS IN THE DECK SHALL BE TIED DOWN TO AVOID FLOATING DURING DECK CASTING. PAYMENT SHALL BE INCIDENTAL TO ITEM 900.640, "SPECIAL PROVISION (REINFORCING BAR, GFRP) (#5)" OR ITEM 900.640, "SPECIAL PROVISION (REINFORCING BAR, GFRP) (#6)", AS APPROPRIATE.

28. MINIMUM CLEAR COVER FOR REINFORCING STEEL SHALL BE AS FOLLOWS:

ALONG BACK FACES OF WALLS AGAINST EARTH:	2 INCH
ALONG TOP SURFACE OF DECK SLAB:	1.5 INCH
ALONG BOTTOM SURFACE OF DECK SLAB:	1.5 INCH
ELSEWHERE UNLESS OTHERWISE INDICATED:	3 INCH

29. GFRP REINFORCING BAR DESIGN VALUES:

a)	MINIMUM TENSILE STRENGTH	100,000 PSI
b)	MINIMUM ELASTIC MODULUS	6,150,000 PSI

PRECAST ABUTMENTS AND PIER

30. THE UNIT PRICE FOR EACH PRECAST ABUTMENT SHALL INCLUDE THE ASSOCIATED WINGWALLS, AND ALL LABOR AND MATERIALS TO CONNECT WINGWALLS TO THE PILE CAPS. THIS WORK WILL BE PAID FOR UNDER THE APPROPRIATE PRECAST CONCRETE STRUCTURE ABUTMENT PAY ITEM.

31. CORRUGATED STEEL PIPES IN THE PRECAST ABUTMENTS FOR PILE CAVITIES AND ANCHOR BOLT CAVITIES SHALL MEET THE REQUIREMENTS OF SUBSECTION 711.01, BE COATED IN ACCORDANCE WITH AASHTO M 218, AND BE TYPE 1. ALL COSTS ASSOCIATED WITH PLACING THE CORRUGATED STEEL PIPES SHALL BE INCLUDED IN THE BID PRICE FOR EACH 540.10 AND 900.645, "SPECIAL PROVISION, (CONTRACTOR-FABRICATED PRECAST CONCRETE STRUCTURE)" CONTRACT ITEM AS APPROPRIATE.

32. CORRUGATED POST-TENSIONING DUCTS IN THE PRECAST APPROACH SLABS AND PRECAST PIER CAP FOR ANCHOR BOLT AND DOWEL CONNECTIONS SHALL BE CONSTRUCTED FROM EITHER POLYETHYLENE OR POLYPROPYLENE. THE DUCT SHALL HAVE A MINIMUM MATERIAL THICKNESS OF 0.080 IN. +/- 0.010 IN. AND SHALL HAVE A WHITE COATING ON THE OUTSIDE OR SHALL BE OF WHITE MATERIAL WITH ULTRAVIOLET STABILIZERS ADDED. POLYETHYLENE DUCT SHALL BE FABRICATED FROM RESINS MEETING OR EXCEEDING THE REQUIREMENTS OF ASTM D 3350 WITH A CELL CLASSIFICATION OF 345464A. POLY PROPYLENE DUCT SHALL BE FABRICATED FROM RESINS MEETING OR EXCEEDING THE REQUIREMENTS OF ASTM D 4101 WITH A CELL CLASSIFICATION RANGE OF PP0340B44544 TO PP0340B65884. ALL COSTS ASSOCIATED WITH PLACING THE DUCTS SHALL BE INCLUDED IN THE BID PRICE FOR EACH 540.10 AND 900.640, "SPECIAL PROVISION, (CONTRACTOR-FABRICATED PRECAST CONCRETE STRUCTURE)" CONTRACT ITEM AS APPROPRIATE.

33. AN OPTIONAL VERTICAL CONSTRUCTION JOINT IS SHOWN FOR ABUTMENTS #1 AND #2. THIS IS ALLOWED TO REDUCE THE WEIGHT OF THE ABUTMENTS FOR HANDLING, IF NECESSARY. ALL COSTS ASSOCIATED WITH CONSTRUCTING THE VERTICAL CONSTRUCTION JOINT WILL BE INCLUDED IN THE COST OF THE ASSOCIATED CONTRACT ITEM. REINFORCING DOES NOT NEED TO BE CONTINUOUS BETWEEN ADJACENT PILE CAPS PIECES. A GROUTED SHEAR KEY IS REQUIRED BETWEEN THE PIECES AND THE DETAILS ARE INCLUDED IN THE PLANS.

34. BACKFILL SHALL NOT BE COMPLETED UNTIL SPLICE CONNECTOR GROUT HAS REACHED 85% OF THE MANUFACTURER SPECIFIED STRENGTH.

STRUCTURAL STEEL

35. SOME OF THE EXISTING STRUCTURAL STEEL IS PAINTED WITH A MATERIAL THAT MAY CONTAIN LEAD. THE CONTRACTOR SHALL FOLLOW ALL APPLICABLE REGULATIONS WHEN HANDLING AND WORKING WITH THIS STEEL. THE REMOVED STRUCTURAL STEEL IS THE PROPERTY OF THE CONTRACTOR. THE CONTRACTOR SHALL INDEMNIFY AND HOLD THE STATE, ITS OFFICERS, AND EMPLOYEES HARMLESS CONCERNING THE CONTRACTOR'S USE OR DISPOSITION OF THE REMOVED EXISTING STRUCTURAL STEEL.

36. UNLESS OTHERWISE NOTED, ALL NEW STRUCTURAL STEEL SHALL CONFORM TO AASHTO M270 GRADE 50W AND SHALL BE PAID FOR UNDER ITEM 506.55, "STRUCTURAL STEEL (PLATE GIRDER)".

37. FLEMING BRACKETS OR SIMILAR FALSEWORK SHALL BE SPACED AS REQUIRED BY DESIGN, BUT SHALL BE LIMITED TO A MAXIMUM SPACING OF 4 FEET. THE DESIGN OF FALSEWORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

38. ANY BOLT HOLES IN THE WEBS OF FASCIA GIRDERS NOT OTHERWISE FILLED SHALL BE FILLED WITH BUTTON HEAD OR HEX HEAD BOLTS. THE BOLTS SHALL BE TIGHTENED IN ACCORDANCE WITH SUBSECTION 506.19 OF THE STANDARD SPECIFICATIONS.

39. STRUCTURAL STEEL MEMBERS DESIGNATED "CVN" IN THE PLANS SHALL BE CHARPY V-NOTCH TESTED IN ACCORDANCE WITH SUBSECTION 714.01 OF THE STANDARD SPECIFICATIONS.

40. AFTER SUPERSTRUCTURE STEEL HAS BEEN ERECTED, ELEVATIONS ALONG THE TOP OF THE GIRDERS SHALL BE TAKEN AS DIRECTED BY THE ENGINEER FOR USE IN DETERMINING FINISHED GRADES.

41. ALL WELDING SHALL CONFORM TO THE PROVISIONS OF SUBSECTION 506.10.

42. GIRDER WEBS AND CROSS FRAMES SHALL BE PLUMB IN FINAL POSITION.

H-PILES

43. FOR ESTIMATING PURPOSES, THE PILE TIP ELEVATIONS WERE ASSUMED AS SHOWN ON THE BORING LOGS. THE ACTUAL IN PLACE LENGTHS MAY VARY.

44. THE PILES SHALL BE HP 12 X 84.

45. TO PREVENT DAMAGE TO THE PILES, PILE SHOES ARE REQUIRED FOR DRIVEN PILES AND SHALL CONFORM TO SUBSECTION 505.04 (f).

46. THE PILE LOCATIONS AT ABUTMENT 1 SHALL BE PRE-EXCAVATED A MINIMUM OF THREE (3) FEET INTO COMPETENT BEDROCK. THE MINIMUM REQUIRED PILE LENGTH AT ABUTMENT 1 IS 14 FEET BELOW THE BOTTOM OF THE PILE CAP. PRE-EXCAVATED HOLES SHALL BE A MINIMUM OF 24 INCHES IN DIAMETER. THE PILES AT ABUTMENT 1 SHALL BE SEATED ON THE BEDROCK WITH A PILE DRIVING IMPACT HAMMER TO A NOMINAL AXIAL PILE DRIVING RESISTANCE OF 284 KIPS.

47. THE PILES AT ABUTMENT 2 SHALL BE DRIVEN TO A NOMINAL AXIAL PILE DRIVING RESISTANCE (RNDR) OF 360KIPS, PROVIDED A MINIMUM PENETRATION OF 39 FEET BELOW THE BOTTOM OF PILE CAP HAS BEEN ACHIEVED AND THE PILE IS SEATED ON BEDROCK.

48. A MINIMUM OF TWO DYNAMIC PILE TESTS SHALL BE CONDUCTED ON PILES AT ABUTMENT 2. NO LOAD TESTING IS REQUIRED AT ABUTMENT 1.

49. THE TOPS OF THE PILES AFTER DRIVING OR PLACEMENT SHALL NOT VARY FROM THE POSITION SHOWN ON THE PLANS BY MORE THAN 3 INCHES. THE PILE ORIENTATION SHALL NOT VARY BY MORE THAN 5 DEGREES. THE CONTRACTOR SHALL DEMONSTRATE HOW THE TOLERANCES WILL BE MET TO THE SATISFACTION OF THE ENGINEER. THESE MEASURES SHALL BE DEMONSTRATED IN A SUBMITTAL TO BE ACCEPTED BEFORE PILE DRIVING COMMENCES.

50. PAYMENT FOR PRE-EXCAVATION WILL BE CONSIDERED INCIDENTAL TO ITEM 900.640, "SPECIAL PROVISION (PRE-EXCAVATION OF INTEGRAL ABUTMENTS PILES, EARTH)" OR ITEM 900.640, "SPECIAL PROVISION (PRE-EXCAVATION OF INTEGRAL ABUTMENTS PILES, ROCK)". THE ENTIRE PRE-EXCAVATED HOLE SHALL BE BACKFILLED WITH SAND AND THE PILES DRIVEN THROUGH THE SAND. SAND SHALL CONFORM TO THE REQUIREMENTS OF SUBSECTION 703.03. REFER TO THE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.

PIER

51. FOOTINGS FOR SUBSTRUCTURES ON BEDROCK SHALL BE PLACED ON CLEAN COMPETENT ROCK. ALL LOOSE ROCK AND DEBRIS SHALL BE REMOVED

52. UPON COMPLETION OF THE EXCAVATION FOR SUBSTRUCTURES FOUNDED ON BEDROCK AND PRIOR TO PLACING FORMWORK, THE ENGINEER SHALL NOTIFY THE PROJECT MANAGER AND GEOTECHNICAL ENGINEERING MANAGER. THE AGENCY GEOLOGIST AND/OR GEOTECHNICAL ENGINEER WILL DETERMINE IF THE BEDROCK IS COMPETENT TO OBTAIN THE NOMINAL BEARING RESISTANCE AS SHOWN ON THE PLANS. FIVE (5) WORKING DAYS FROM NOTIFICATION SHALL BE ALLOWED TO MAKE THE INSPECTION AND THE DETERMINATION FOR THE COMPETENCY OF THE BEDROCK.

53. IF NECESSARY, THE LIMITS OF SUBFOOTINGS SHALL BE 1 FT OUTSIDE THE HORIZONTAL LIMITS OF THE FOOTING. ANY CONCRETE REQUIRED FOR SUBFOOTINGS WILL BE PAID UNDER ITEM 541.30, "CONCRETE, CLASS C." AN ESTIMATED QUANTITY OF 17 CY OF ITEM 541.30 HAS BEEN INCLUDED IN THE CONTRACT. THE TOP SURFACE OF THE SUBFOOTING SHALL BE INTENTIONALLY ROUGHENED TO A 1/4 INCH AMPLITUDE.

54. THE CAST-IN-PLACE PORTION OF THE PIER MAY BE CONSTRUCTED PRIOR THE BRIDGE CLOSURE. IF THE PIER IS TO BE LEFT INSTALLED THROUGH WINTER AND SPRING, THE STEM SHALL BE CONSTRUCTED TO A MINIMUM ELEVATION OF 144.92.

55. A TEMPLATE OF THE DUCT LOCATIONS SHALL BE MADE TO CORRIDINATE INSTALLATION AND FITUP BETWEEN THE CAST-IN-PLACE PORTION OF THE PIER AND THE PRECAST PIER CAP.

REINFORCED SOIL SLOPE

56. FOR INSTALLATION OF THE GUARDRAIL, A MINIMUM OF THE TOP TWO LAYERS OF GEOGRID WILL BE PUNCTURED TO EMBED THE RAIL. IF WOODEN POSTS ARE USED, SECTIONS SHALL BE BOXED OUT IN EACH GEOGRID LAYER DURING INSTALLATION TO ENSURE THE GEOGRID ENDURES NO ADDITIONAL DAMAGE DURING GUARDRAIL INSTALLATION. ALTERNATIVELY, A WEDGE-SHAPED SHOE ATTACHMENT TO FACILITATE INSTALLATION DURING DRIVING IN RAILS COULD ALSO BE SPECIFIED. STEEL POSTS CAN BE DRIVEN THROUGH THE GEOGRID WITHOUT ADVERSELY AFFECTING THE PERFORMANCE OF THE REINFORCEMENT.

MISCELLANEOUS

57. THE EXISTING FENCE BETWEEN STATION 102+50 LT AND 104+20 LT HAS BEEN PARTIALLY REMOVED OR FALLEN OVER. THE REMAINING PORTIONS OF THIS FENCE SHALL BE REMOVED AND PAID FOR UNDER ITEM 620.55 "REMOVAL OF EXISTING FENCE".

58. AN ADDITIONAL 50 LF OF ITEM 900.640 SPECIAL PROVISION (BARBED WIRE FENCE) HAS BEEN ADDED TO THE PROJECT IF ANY OF THE EXISTING FENCING ON THE EAST SIDE OF THE PROJECT NEEDS TO BE REPLACED.

59. THE CONTRACTOR SHALL CONTACT THE AGENCY OF NATURAL RESOURCES FISH & WILDLIFE FACILITIES AND LANDS ADMINISTRATOR PRIOR TO CONSTRUCITON OF THE PARKING ACCESS AREA DN RIVER ACCESS STAIRS.

PROJECT NAME: WEYBRIDGE-NEW HAVEN
PROJECT NUMBER: BF 032-1(19)

FILE NAME: sl2b552forms.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: D. PETERSON
GENERAL NOTES

PLOT DATE: 20-APR-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: D. PETERSON
SHEET 5 OF 85

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET 1

SUMMARY OF ESTIMATED QUANTITIES

ROADWAY	LANDSCAPING	EROSION CONTROL	BRIDGE	FULL C.E. ITEMS
1				
2610				
20				
1140				
930				
1				
			260	
			80	
			1	
467				
1790				
40				
23				
1				
			1	
			279	
			2	
			335819	
			13030	
			19134	
			80	
			1	
			20	
			62	
			805	
			62	
			485	
			1	
			5	
			1	
			1	
			1	
			1	

TOTALS

GRAND TOTAL	FINAL
1	
2610	
20	
1140	
930	
1	
260	
80	
1	
467	
1790	
40	
23	
1	
1	
279	
2	
335819	
13030	
19134	
80	
1	
20	
62	
805	
62	
485	
1	
5	
1	
1	
1	
1	
1	
1	

DESCRIPTIONS

UNIT	ITEMS	ITEM NUMBER	ROUND
LS	CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS	201.10	
CY	COMMON EXCAVATION	203.15	
CY	SOLID ROCK EXCAVATION	203.16	
CY	UNCLASSIFIED CHANNEL EXCAVATION	203.27	
CY	SAND BORROW	203.31	
CY	TRENCH EXCAVATION OF EARTH, EXPLORATORY (N.A.B.I.)	204.22	
CY	STRUCTURE EXCAVATION	204.25	
CY	GRANULAR BACKFILL FOR STRUCTURES	204.30	
LS	COFFERDAM	208.40	
SY	COLD PLANING, BITUMINOUS PAVEMENT	210.10	
CY	SUBBASE OF DENSE GRADED CRUSHED STONE	301.35	
CY	AGGREGATE SURFACE COURSE	401.10	
CWT	EMULSIFIED ASPHALT	404.65	
LU	PRICE ADJUSTMENT, ASPHALT CEMENT (N.A.B.I.)	406.50	
LS	FURNISHING EQUIPMENT FOR DRIVING PILING	504.10	
LF	STEEL PILING, HP 12 X 84	505.165	
EACH	DYNAMIC PILE LOADING TEST	505.45	
LB	STRUCTURAL STEEL, PLATE GIRDER (FPQ)	506.55	
LB	REINFORCING STEEL, LEVEL I	507.11	
LB	REINFORCING STEEL, LEVEL III (FPQ)	507.13	
LF	DRILLING AND GROUTING DOWELS	507.16	
LS	SHEAR CONNECTORS (2400 - 7/8" X 7")	508.15	
GAL	WATER REPELLENT, SILANE	514.10	
LF	BRIDGE EXPANSION JOINT, ASPHALTIC PLUG	516.10	
SY	SHEET MEMBRANE WATERPROOFING, TORCH APPLIED	519.20	
LF	JOINT SEALER, HOT POURED	524.11	
LF	BRIDGE RAILING, GALVANIZED 3 RAIL BOX BEAM	525.335	
EACH	REMOVAL OF STRUCTURE (5090 SF - EST.)	529.15	
EACH	BEARING DEVICE ASSEMBLY, ELASTOMERIC PAD W/ EXT. LOAD PLATES	531.18	
	BEGIN OPTION CC		
LS	PRECAST CONCRETE STRUCTURE (ABUTMENT #1)	540.10	
LS	SPECIAL PROVISION (ABUTMENT #1)	900.645	
	END OPTION CC		
	BEGIN OPTION DD		
LS	PRECAST CONCRETE STRUCTURE (ABUTMENT #2)	540.10	
LS	SPECIAL PROVISION (ABUTMENT #2)	900.645	
	END OPTION DD		
	BEGIN OPTION AA		
LS	PRECAST CONCRETE STRUCTURE (APPROACH SLAB #1)	540.10	
LS	SPECIAL PROVISION (APPROACH SLAB #1)	900.645	

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS
		EARTHWORKS SUMMARY
		FILL AVAILABLE
1827	CY	COMMON EXCAVATION (2610 x .7)
342	CY	UNCLASSIFIED CHANNEL EXCAVATION (1140 x 0.3)
78	CY	STRUCTURE EXCAVATION (260 x 0.3)
3	CY	ROUNDING
2250	**CY**	**TOTAL FILL AVAILABLE**
		FILL REQUIRED
414	CY	FACTORED FILL (360 x 1.15)
1	CY	ROUNDING
415	**CY**	**TOTAL FILL REQUIRED**
1835	**CY**	**TOTAL WASTE**
		N.A.B.I. = NOT A BID ITEM

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QUANTITY SHEET 1

PLOT DATE: 20-APR-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: D. PETERSON
SHEET 6 OF 85

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET 2

SUMMARY OF ESTIMATED QUANTITIES									TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES		
					ROADWAY	LANDSCAPING	EROSION CONTROL	BRIDGE	FULL C.E. ITEMS	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS
													END OPTION AA					N.A.B.I. = NOT A BID ITEM
													BEGIN OPTION BB					
								1		1		LS	PRECAST CONCRETE STRUCTURE (APPROACH SLAB #2)	540.10				
								1		1		LS	SPECIAL PROVISION (APPROACH SLAB #2)	900.645				
													END OPTION BB					
								1		1		LS	PRECAST CONCRETE STRUCTURE (PIER CAP)	540.10				
								106		106		CY	CONCRETE, CLASS B	541.25				
								17		17		CY	CONCRETE, CLASS C	541.30				
					330			330		660		CY	STONE FILL, TYPE III	613.12				
					4					4		EACH	YIELDING MARKER POSTS	619.17				
					399					399		LF	REMOVING AND RESETTING FENCE	620.50				
					190					190		LF	REMOVAL OF EXISTING FENCE	620.55				
					732					732		LF	HD STEEL BEAM GUARDRAIL, GALVANIZED W/8 FEET POSTS	621.215				
					4					4		EACH	ANCHOR FOR STEEL BEAM RAIL	621.60				
					870					870		LF	REMOVAL AND DISPOSAL OF GUARDRAIL	621.80				
					100					100		HR	UNIFORMED TRAFFIC OFFICERS	630.10				
					1000					1000		HR	FLAGGERS	630.15				
									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				
					1					1		LS	MOBILIZATION/DEMOBILIZATION	635.11				
					7					7		EACH	PORTABLE CHANGEABLE MESSAGE SIGN	641.15				
					1850					1850		LF	4 INCH WHITE LINE	646.20				
					1850					1850		LF	4 INCH YELLOW LINE	646.21				
					440					440		SY	GEOTEXTILE FOR ROADBED SEPARATOR	649.11				
								810		810		SY	GEOTEXTILE UNDER STONE FILL	649.31				
							346			346		SY	GEOTEXTILE FOR SILT FENCE	649.51				
							112			112		SY	GEOTEXTILE FOR SILT FENCE, WOVEN WIRE REINFORCED	649.515				
							220			220		SY	GEOTEXTILE FOR FILTER CURTAIN	649.61				
							30			30		LB	SEED	651.15				
							20			20		LB	SEED, WINTER RYE	651.17				
							200			200		LB	FERTILIZER	651.18				
							1			1		TON	AGRICULTURAL LIMESTONE	651.20				
							1			1		TON	HAY MULCH	651.25				
							190			190		CY	TOPSOIL	651.35				
							560			560		SY	GRUBBING MATERIAL	651.40				
							1			1		LS	EPSC PLAN	652.10				
							200			200		HR	MONITORING EPSC PLAN	652.20				
							1			1		LU	MAINTENANCE OF EPSC PLAN (N.A.B.I.)	652.30				

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QUANTITY SHEET 2

PLOT DATE: 20-APR-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: D. PETERSON
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STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET 3

SUMMARY OF ESTIMATED QUANTITIES									TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES		
						ROADWAY	LANDSCAPING	EROSION CONTROL	BRIDGE	FULL C.E. ITEMS	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS
								500			500		SY	TEMPORARY EROSION MATTING	653.20				N.A.B.I. = NOT A BID ITEM
								580			580		SY	PERMANENT EROSION MATTING	653.21				
								30			30		CY	VEHICLE TRACKING PAD	653.35				
								1			1		EACH	FILTER BAG	653.45				
								600			600		LF	BARRIER FENCE	653.50				
								1160			1160		LF	PROJECT DEMARCATION FENCE	653.55				
							3				3		EACH	DECIDUOUS TREES (ACER SACCHARINUM) (CONT.) (30")	656.30				
							1				1		EACH	DECIDUOUS TREES (QUERCUS BICOLOR) (B&B) (2-2.5")	656.30				
							24				24		EACH	DECIDUOUS SHRUBS (CEPHALANTHUS OCCIDEBTALIS)(CONT.)(30")	656.35				
							15				15		EACH	DECIDUOUS SHRUBS (CORNUS AMOMUM)(CONT.)(30")	656.35				
							5				5		MGAL	LANDSCAPE WATERING	656.65				
							30				30		CY	LANDSCAPE BACKFILL, TRUCK MEASUREMENT	656.80				
						7					7		SF	TRAFFIC SIGNS, TYPE A	675.20	0.75			
						113					113		LF	SQUARE TUBE SIGN POST AND ANCHOR	675.341				
						10					10		EACH	REMOVING SIGNS	675.50				
						4					4		EACH	ERECTING SALVAGED SIGNS	675.60				
						4					4		EACH	DELINEATOR WITH STEEL POST	676.10				
						1					1		LU	PRICE ADJUSTMENT, FUEL (N.A.B.I.)	690.50				
									281		281		CY	SPECIAL PROVISION (CONCRETE HIGH PERFORMANCE, CLASS PCD)(FPQ)	900.608				
									11		11		CY	SPECIAL PROVISION (HIGH PERFORMANCE CONCRETE, RAPID SET)(FPQ)	900.608				
						192000					192000		DL	SPECIAL PROVISION (INCENTIVE/DISINCENTIVE) (N.A.B.I.)	900.615				
						13					13		EACH	SPECIAL PROVISION (CPM SCHEDULE)	900.620				
						4					4		EACH	SPECIAL PROVISION (GUARDRAIL THRIE BEAM APPROACH SECTION, GALVANIZED 3 RAIL BOX BEAM)	900.620				
						22					22		EACH	SPECIAL PROVISION (RIVER BOULDER)	900.620				
									2		2		EACH	SPECIAL PROVISION (TEMPORARY CAUSEWAY)	900.620				
						50					50		LF	SPECIAL PROVISION (BARBED WIRE FENCE)	900.640				
									56		56		LF	SPECIAL PROVISION (PRE-EXCAVATION OF ABUTMENT PILES, EARTH)	900.640				
									28		28		LF	SPECIAL PROVISION (PRE-EXCAVATION OF ABUTMENT PILES, ROCK)	900.640				
									15867		15867		LF	SPECIAL PROVISION (REINFORCING BAR, GFRP) (#5)(FPQ)	900.640				
									39019		39019		LF	SPECIAL PROVISION (REINFORCING BAR, GFRP) (#6)(FPQ)	900.640				
						1					1		LS	SPECIAL PROVISION (RIVER ACCESS STAIRS)	900.645				
						1					1		LS	SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE)	900.645				
						1					1		LU	SPECIAL PROVISION (MAT DENSITY PAY ADJUSTMENT, SMALL QUANTITY) (N.A.B.I)	900.650				
						2					2		LU	SPECIAL PROVISION (MAT DENSITY PAY ADJUSTMENT, TYPE IVB) (N.A.B.I)	900.650				
						1					1		LU	SPECIAL PROVISION (MIXTURE PAY ADJUSTMENT) (N.A.B.I.)	900.650				
						490					490		SY	SPECIAL PROVISION (REINFORCED SOIL SLOPE)	900.675				
						540					540		TON	SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, SMALL QUANTITY)	900.680				
						365			138		503		TON	SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, TYPE IVB)	900.680				

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QUANTITY SHEET 3

PLOT DATE: 20-APR-2017
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CHECKED BY: D. PETERSON
SHEET 8 OF 85

STATE OF VERMONT
AGENCY OF TRANSPORTATION

BRIDGE QUANTITY SHEET 1

SUMMARY OF BRIDGE QUANTITIES

SUPER STRUCTURE	APPROACH SLAB NO. 1	APPROACH SLAB NO. 2	ABUTMENT NO. 1	PIER	ABUTMENT NO. 2	TOTALS BRIDGE TOTAL	UNIT	DESCRIPTIONS ITEMS	ITEM NUMBER
			115		145	260	CY	STRUCTURE EXCAVATION	204.25
			30		50	80	CY	GRANULAR BACKFILL FOR STRUCTURES	204.30
				1		1	LS	COFFERDAM	208.40
					1	1	LS	FURNISHING EQUIPMENT FOR DRIVING PILING	504.10
			84		195	279	LF	STEEL PILING, HP 12 X 84	505.165
					2	2	EACH	DYNAMIC PILE LOADING TEST	505.45
335819						335819	LB	STRUCTURAL STEEL, PLATE GIRDER (FPQ)	506.55
				13030		13030	LB	REINFORCING STEEL, LEVEL I	507.11
14257			2367		2510	19134	LB	REINFORCING STEEL, LEVEL III (FPQ)	507.13
				80		80	LF	DRILLING AND GROUTING DOWELS	507.16
1						1	LS	SHEAR CONNECTORS (2400 - 7/8" X 7")	508.15
8			3	6	3	20	GAL	WATER REPELLENT, SILANE	514.10
62						62	LF	BRIDGE EXPANSION JOINT, ASPHALTIC PLUG	516.10
805						805	SY	SHEET MEMBRANE WATERPROOFING, TORCH APPLIED	519.20
62						62	LF	JOINT SEALER, HOT POURED	524.11
485						485	LF	BRIDGE RAILING, GALVANIZED 3 RAIL BOX BEAM	525.335
1						1	EACH	REMOVAL OF STRUCTURE (5090 SF - EST.)	529.15
				5		5	EACH	BEARING DEVICE ASSEMBLY, ELASTOMERIC PAD W/ EXT. LOAD PLATES	531.18
								BEGIN OPTION CC	
			1			1	LS	PRECAST CONCRETE STRUCTURE (ABUTMENT #1)	540.10
			1			1	LS	SPECIAL PROVISION (ABUTMENT #1)	900.645
								END OPTION CC	
								BEGIN OPTION DD	
					1	1	LS	PRECAST CONCRETE STRUCTURE (ABUTMENT #2)	540.10
					1	1	LS	SPECIAL PROVISION (ABUTMENT #2)	900.645
								END OPTION DD	
								BEGIN OPTION AA	
	1					1	LS	PRECAST CONCRETE STRUCTURE (APPROACH SLAB #1)	540.10
	1					1	LS	SPECIAL PROVISION (APPROACH SLAB #1)	900.645
								END OPTION AA	
								BEGIN OPTION BB	
		1				1	LS	PRECAST CONCRETE STRUCTURE (APPROACH SLAB #2)	540.10
		1				1	LS	SPECIAL PROVISION (APPROACH SLAB #2)	900.645
								END OPTION BB	
				1		1	LS	PRECAST CONCRETE STRUCTURE (PIER CAP)	540.10
				106		106	CY	CONCRETE, CLASS B	541.25
				17		17	CY	CONCRETE, CLASS C	541.30
			175		155	330	CY	STONE FILL, TYPE III	613.12
			470		340	810	SY	GEOTEXTILE UNDER STONE FILL	649.31
227			27		27	281	CY	SPECIAL PROVISION (CONCRETE HIGH PERFORMANCE, CLASS PCD)(FPQ)	900.608

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS

PROJECT NAME: WEYBRIDGE-NEW HAVEN
PROJECT NUMBER: BF 032-1(19)

FILE NAME: sl2b552forms.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: D. PETERSON
BRIDGE QUANTITY SHEET 1

PLOT DATE: 20-APR-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: D. PETERSON

STATE OF VERMONT
AGENCY OF TRANSPORTATION

BRIDGE QUANTITY SHEET 2

SUMMARY OF BRIDGE QUANTITIES

SUPER STRUCTURE	APPROACH SLAB NO. 1	APPROACH SLAB NO. 2	ABUTMENT NO. 1	PIER	ABUTMENT NO. 2	BRIDGE TOTAL
	2.5	2.5	3		3	11
				2		2
				56		56
				28		28
15867						15867
39019						39019
138						138

DESCRIPTIONS

UNIT	ITEMS	ITEM NUMBER
CY	SPECIAL PROVISION (HIGH PERFORMANCE CONCRETE, RAPID SET)(FPQ)	900.608
EACH	SPECIAL PROVISION (TEMPORARY CAUSEWAY)	900.620
LF	SPECIAL PROVISION (PRE-EXCAVATION OF ABUTMENT PILES, EARTH)	900.640
LF	SPECIAL PROVISION (PRE-EXCAVATION OF ABUTMENT PILES, ROCK)	900.640
LF	SPECIAL PROVISION (REINFORCING BAR, GFRP) (#5)(FPQ)	900.640
LF	SPECIAL PROVISION (REINFORCING BAR, GFRP) (#6)(FPQ)	900.640
TON	SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, TYPE IVB)	900.680

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS

PROJECT NAME: WEYBRIDGE-NEW HAVEN
PROJECT NUMBER: BF 032-1(19)

FILE NAME: s12b552forms.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: D. PETERSON
BRIDGE QUANTITY SHEET 2

PLOT DATE: 20-APR-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: D. PETERSON
SHEET 10 OF 85

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
	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
	R&RES	REMOVE & RESET
	R&REP	REMOVE & REPLACE
	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 RADUIS OF
T	CURVE TANGENT LENGTH
L	CURVE LENGTH OF
E	CURVE EXTERNAL DISTANCE

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
- PROJECT DEMARCATION FENCE (PDF)
- BARRIER FENCE (BF)
- 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 PROPERTY BOUNDARY
- 4f — 4F PROPERTY BOUNDARY
- HAZ — HAZARDOUS WASTE

EPSC LAYOUT PLAN SYMBOLOGY

EPSC MEASURES

- FILTER CURTAIN
- 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
- (H) 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

PROJECT NAME: WEYBRIDGE-NEW HAVEN
PROJECT NUMBER: BF 032-1(19)

FILE NAME: sl2b552forms.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: D. PETERSON
CONVENTIONAL SYMBOLOGY

PLOT DATE: 20-APR-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: D. PETERSON
SHEET 11 OF 85

GPS CONTROL POINTS

HVCTRL # 1

STANDARD DISK STAMPED

Chalker Az Mk

N = 580550.5810

E = 1444341.9110

ELEV. = 201.246

To reach from the intersection of VT routes 17 and 23 go east along route 17 for 0.4 mi to the intersection of Hallock Road left and Quaker Village Road right. Turn left and go north along Hallock Road for 0.3 mi to an old concrete barn foundation on the left and the site of the mark on the left, set in the top of the most southernly of two concrete pads in the foundation structure. It is about opposite a 2 1/2 story barn on the right. It is 37.1 ft west of and about level with the centerline of Hallock Road, 134.5 ft south of a pole no. 3002/5-1, 4.9 ft northwest of the southeast corner of the concrete pad, 4.9 ft southwest of the northeast corner of the concrete pad, and 39.4 ft north northwest of a fiberglass witness post at a wire fence corner.

HVCTRL # 2

STANDARD DISK STAMPED

Chalker

N = 578921.0470

E = 1444009.969

ELEV. = 157.939

To reach from the intersection of VT routes 17 and 23 go east along route 17 for 0.15 mi to the site of the mark on the left, on a small rise, just east of a field drive. The mark is set flush with ground surface in the top of a massive rock outcrop. It is86.0 ft north of and about 6.6 ft higher than the centerline of route 17, 50 ft east of and about 10 ft higher than the centerline of the field drive, 131.2 ft southeast of the southeast corner of a equipment barn, 49 ft west northwest of a 18 in. oak, and 57 ft north of a fiberglass witness post in an east-west wire fenceline.

* DESCRIPTION PROVIDED BY VERMONT AGENCY OF TRANSPORTATION GEODETIC SURVEY UNIT
* RECOVERED 8-26-14 LGO, HAM, GAH

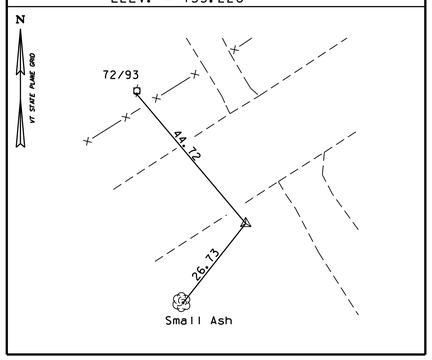
TRAVERSE TIES

HVCTRL #3

NORTH = 578564.3820

EAST = 1443636.410

ELEV. = 155.226

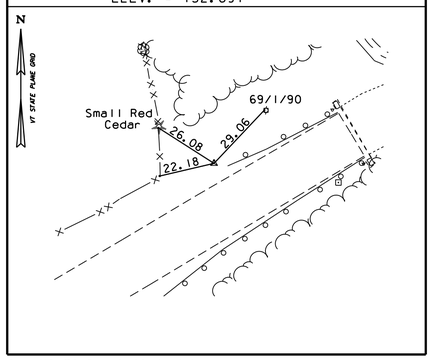


HVCTRL #4

NORTH = 578927.4270

EAST = 1444154.3370

ELEV. = 152.691

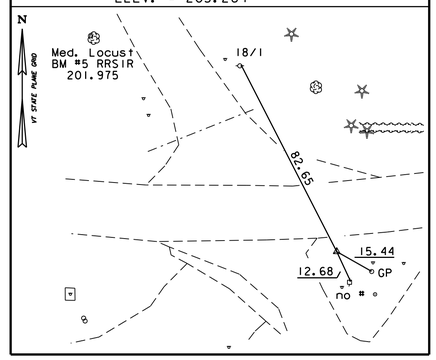


HVCRTL #5

NORTH = 579075.5590

EAST = 1445170.5110

ELEV. = 203.264

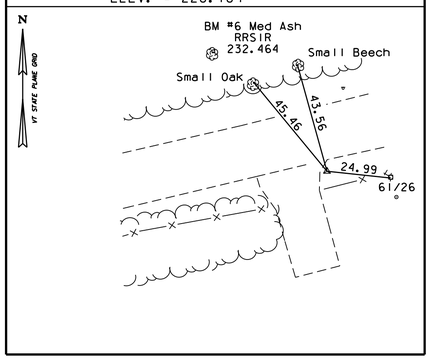


HVCTRL #6

NORTH = 579239.6280

EAST = 1445926.650

ELEV. = 228.184



* MAIN TRAVERSE COMPLETED 1/17/01 by L. Orvis (P.C) & J. Hulett

ALIGNMENT TIES

NORTH =	NORTH =	NORTH =	NORTH =
EAST =	EAST =	EAST =	EAST =

DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (96)

ADJUSTMENT none

PROJECT NAME: WEYBRIDGE-NEW HAVEN

PROJECT NUMBER: BF 032-1(19)

FILE NAME: s12b552forms.dgn

PROJECT LEADER: C.W. CARLSON

DESIGNED BY: D. PETERSON

TIE SHEET

PLOT DATE: 20-APR-2017

DRAWN BY: M. LONGSTREET

CHECKED BY: D. PETERSON

REMOVAL AND DISPOSAL OF GUARDRAIL
VT17 STA 103+11 - STA 103+25 RT

HEAVY DUTY STEEL BEAM GUARDRAIL, GALVANIZED W/ 8 FT POST
VT17 STA 103+08 - STA 103+25 RT

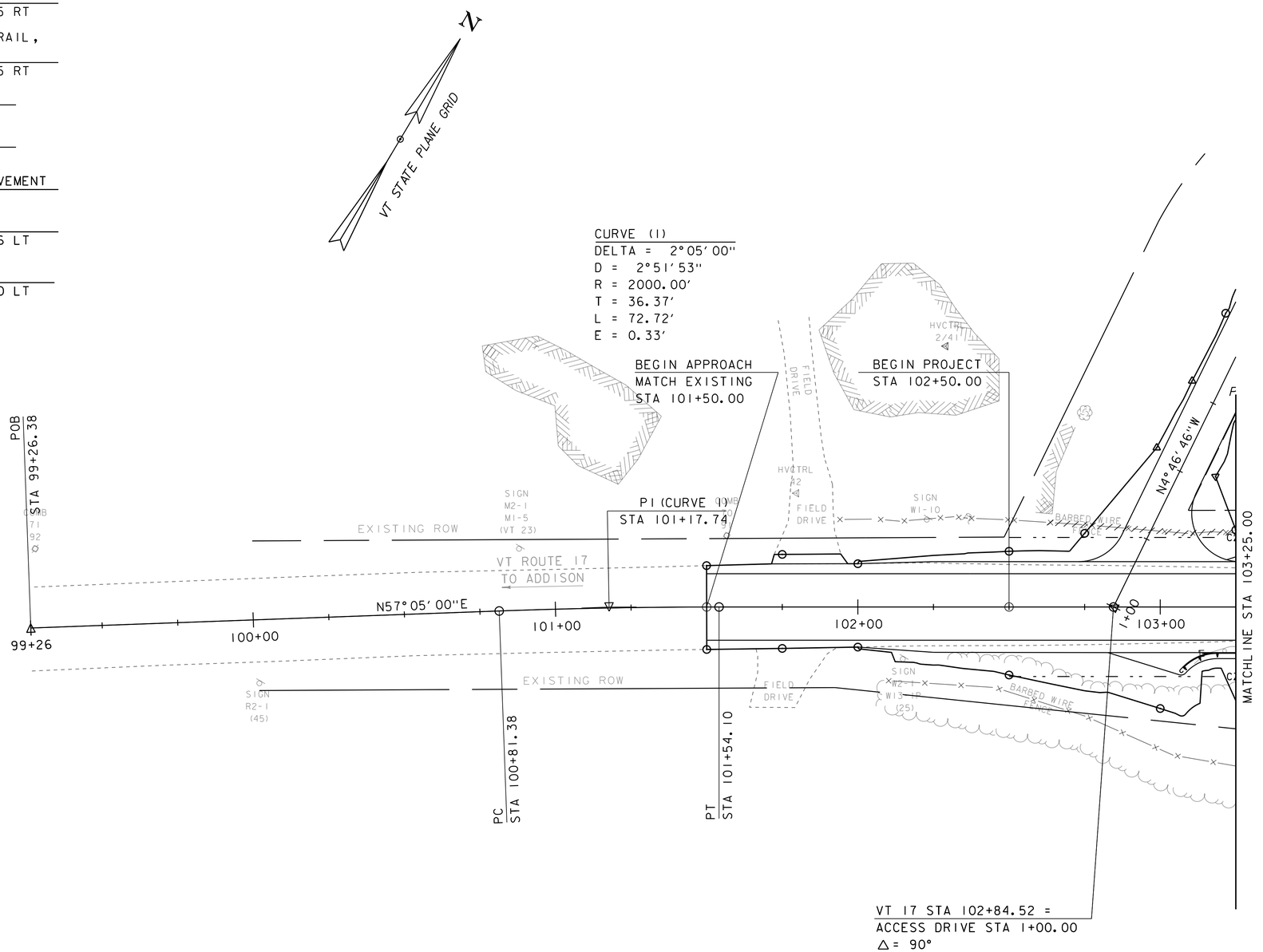
ANCHOR FOR STEEL BEAM RAIL
VT17 STA 103+18.9 RT

DELINEATOR WITH STEEL POST
VT17 STA 103+19.9 RT (BLUE)

COLD PLANING, BITUMINOUS PAVEMENT
VT17 STA 101+50 - 102+00

CONSTRUCT PAVED DRIVE
VT17 STA 101+71.5 - 101+96.6 LT

REMOVING OF EXISTING FENCE
VT17 STA 102+63.2 - 103+25.0 LT



SCALE 1" = 20'-0"
20 0 20

PROJECT NAME:	WEYBRIDGE-NEW HAVEN
PROJECT NUMBER:	BF 032-1(19)
FILE NAME: sl2b552bdr.dgn	PLOT DATE: 20-APR-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: D. PETERSON	CHECKED BY: D. PETERSON
LAYOUT SHEET 1	SHEET 13 OF 85

REMOVAL AND DISPOSAL OF GUARDRAIL
VT17 STA 103+61 - STA 103+96 LT
VT17 STA 106+42 - STA 107+25 LT
VT17 STA 103+25 - STA 103+96 RT
VT17 STA 106+42 - STA 107+25 RT

HEAVY DUTY STEEL BEAM GUARDRAIL, GALVANIZED W/ 8 FT POST
VT17 STA 103+45.2 - STA 103+68.9 LT
VT17 STA 106+68.7 - STA 107+25.0 LT
VT17 STA 103+25.0 - STA 103+68.9 RT
VT17 STA 106+70.5 - STA 107+25.0 RT

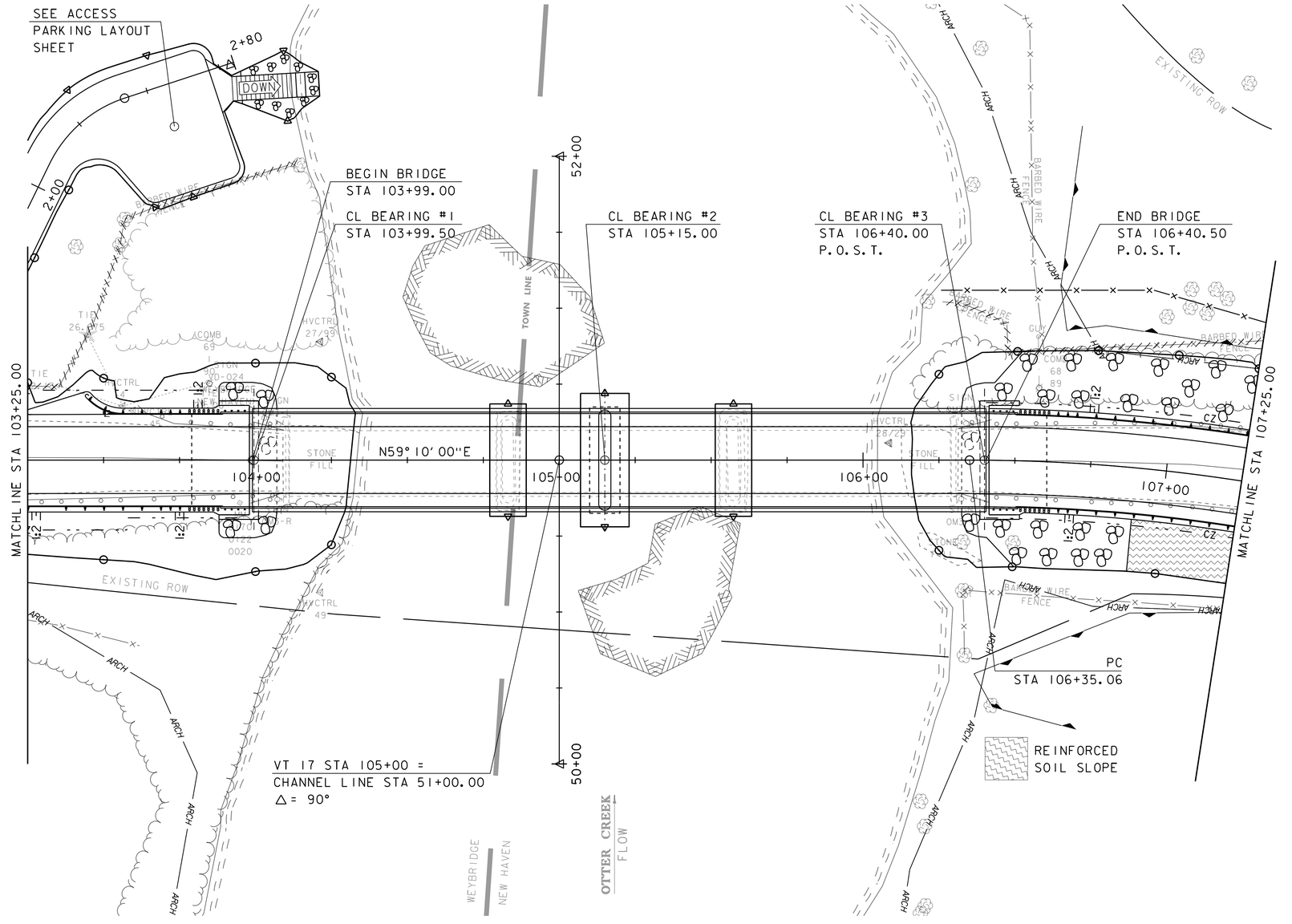
ANCHOR FOR STEEL BEAM RAIL
VT17 STA 103+56.4 LT

DELINEATOR WITH STEEL POST
VT17 STA 103+56.4 LT (GREEN)

BRIDGE RAILING GALVANIZED 3 RAIL BOX BEAM
VT17 STA 103+98.0 - STA 106+40.4 LT
VT17 STA 103+98.0 - STA 106+40.7 RT

SPECIAL PROVISION (GUARDRAIL THRIE BEAM APPROACH SECTION, GALVANIZED 3 RAIL BOX BEAM)
VT17 STA 103+68.9 - STA 103+98.0 LT
VT17 STA 103+68.9 - STA 103+98.0 RT
VT17 STA 106+40.4 - STA 106+68.7 LT
VT17 STA 106+40.7 - STA 106+70.5 RT

REMOVING OF EXISTING FENCE
VT17 STA 103+25.0 - 104+13.6 LT
VT17 STA 106+25.0 - 107+25.0 LT



SCALE 1" = 20'-0"
20 0 20

PROJECT NAME:	WEYBRIDGE-NEW HAVEN
PROJECT NUMBER:	BF 032-1(19)
FILE NAME: sl2b552bdr.dgn	PLOT DATE: 20-APR-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: D. PETERSON	CHECKED BY: D. PETERSON
LAYOUT SHEET 2	SHEET 14 OF 85

REMOVAL AND DISPOSAL OF GUARDRAIL
VT17 STA 107+25.0 - STA 109+66.8 LT
VT17 STA 107+25.0 - STA 110+08.9 RT

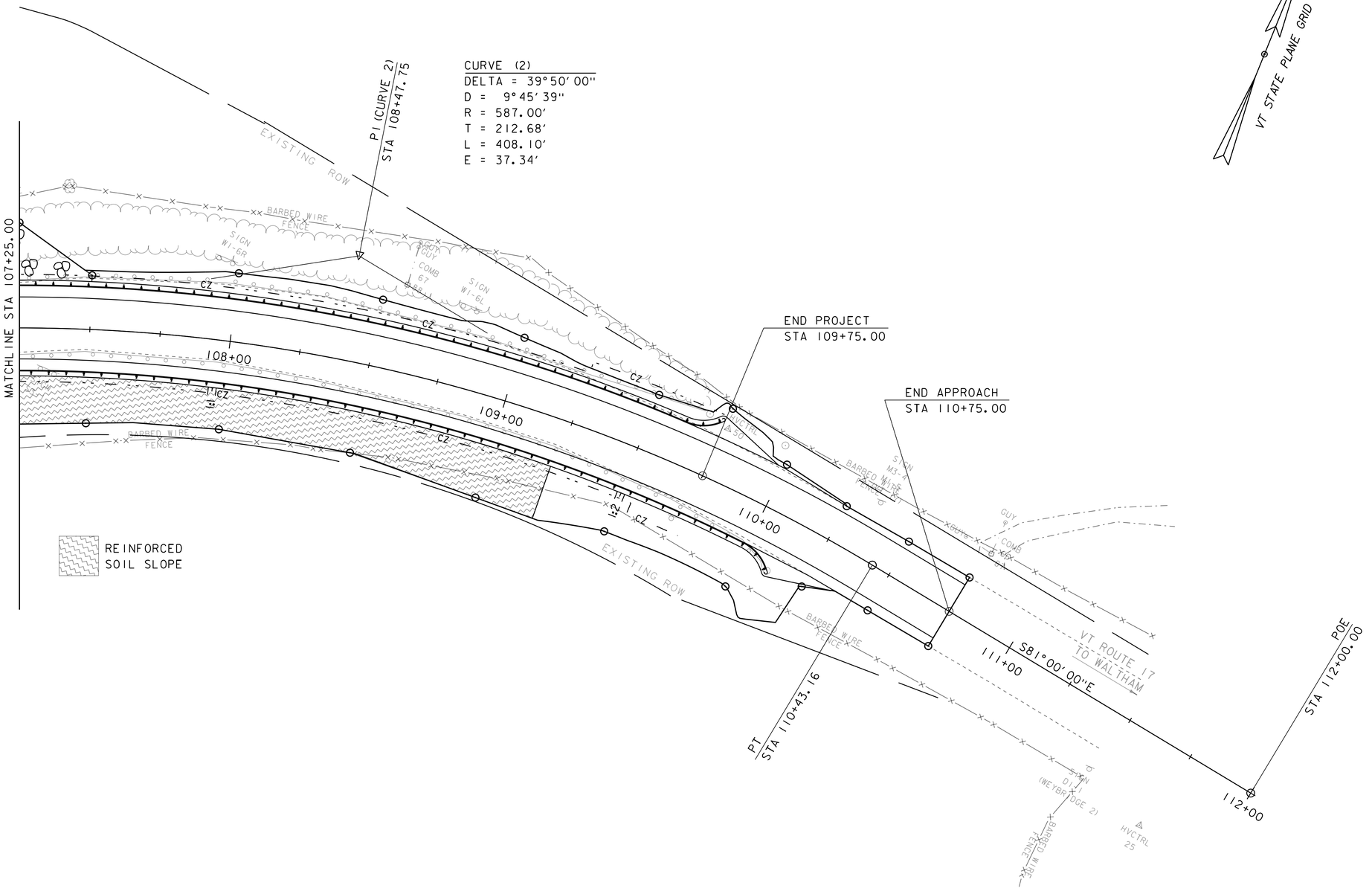
HEAVY DUTY STEEL BEAM GUARDRAIL, GALVANIZED W/ 8 FT POST
VT17 STA 107+25.0 - STA 109+73.1 LT
VT17 STA 107+25.0 - STA 110+10.3 RT

ANCHOR FOR STEEL BEAM RAIL
VT17 STA 109+62.2 LT
VT17 STA 109+98.6 RT

DELINEATOR WITH STEEL POST
VT17 STA 109+61.3 LT (BLUE)
VT17 STA 109+97.6 RT (GREEN)

COLD PLANING, BITUMINOUS PAVEMENT
VT17 STA 110+25 - 110+75

REMOVING AND RESETTING FENCE
VT17 STA 107+25.0 - 107+41.4 LT
VT17 STA 107+97.8 - 110+75.0 RT



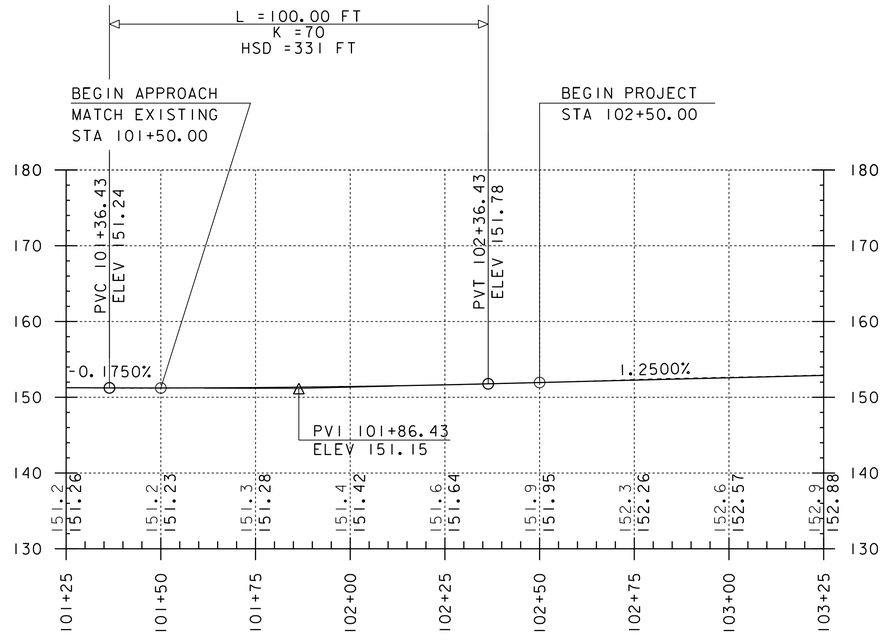
SCALE 1" = 20'-0"
20 0 20

PROJECT NAME:	WEYBRIDGE-NEW HAVEN
PROJECT NUMBER:	BF 032-1(19)
FILE NAME: s12b552bdr.dgn	PLOT DATE: 20-APR-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: D. PETERSON	CHECKED BY: D. PETERSON
LAYOUT SHEET 3	SHEET 15 OF 85

NOTE:

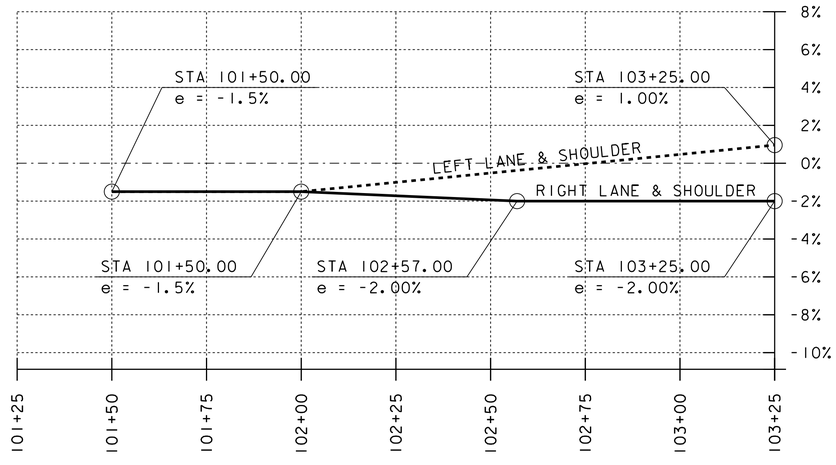
ELEVATIONS SHOWN TO THE NEAREST TENTH ARE
EXISTING GROUND ALONG PROPOSED CENTERLINE.

ELEVATIONS SHOWN TO THE NEAREST HUNDREDTH ARE
FINISH GRADES ALONG PROPOSED CENTERLINE.



VT 17 PROFILE 1

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



BANKING DIAGRAM 1

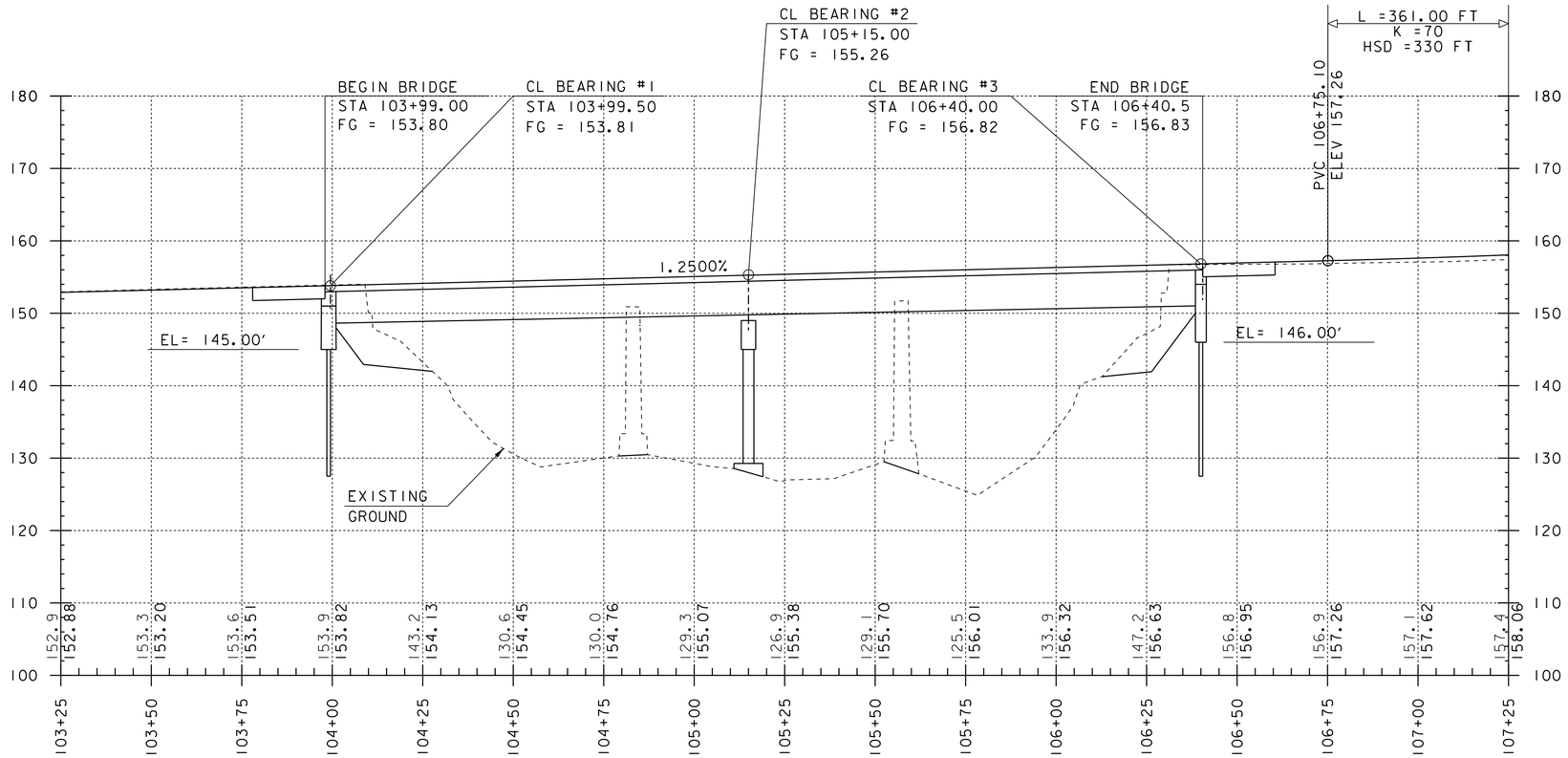
SCALE: HORIZONTAL 1"=20'-0"
VERTICAL 1"=4%

PROJECT NAME:	WEYBRIDGE-NEW HAVEN
PROJECT NUMBER:	BF 032-1(19)
FILE NAME: s12b552pro.dgn	PLOT DATE: 20-APR-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: D. PETERSON	CHECKED BY: D. PETERSON
PROFILE & BANKING 1	SHEET 16 OF 85

NOTE:

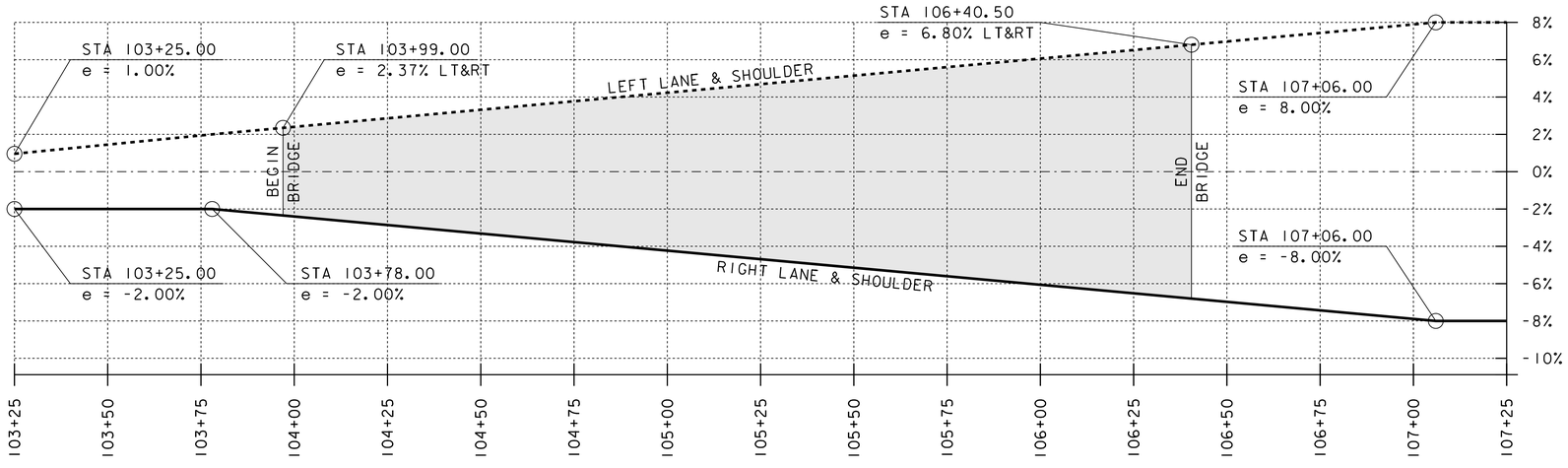
ELEVATIONS SHOWN TO THE NEAREST TENTH ARE EXISTING GROUND ALONG PROPOSED CENTERLINE.

ELEVATIONS SHOWN TO THE NEAREST HUNDREDTH ARE FINISH GRADES ALONG PROPOSED CENTERLINE.



VT 17 PROFILE 2

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



BANKING DIAGRAM 2

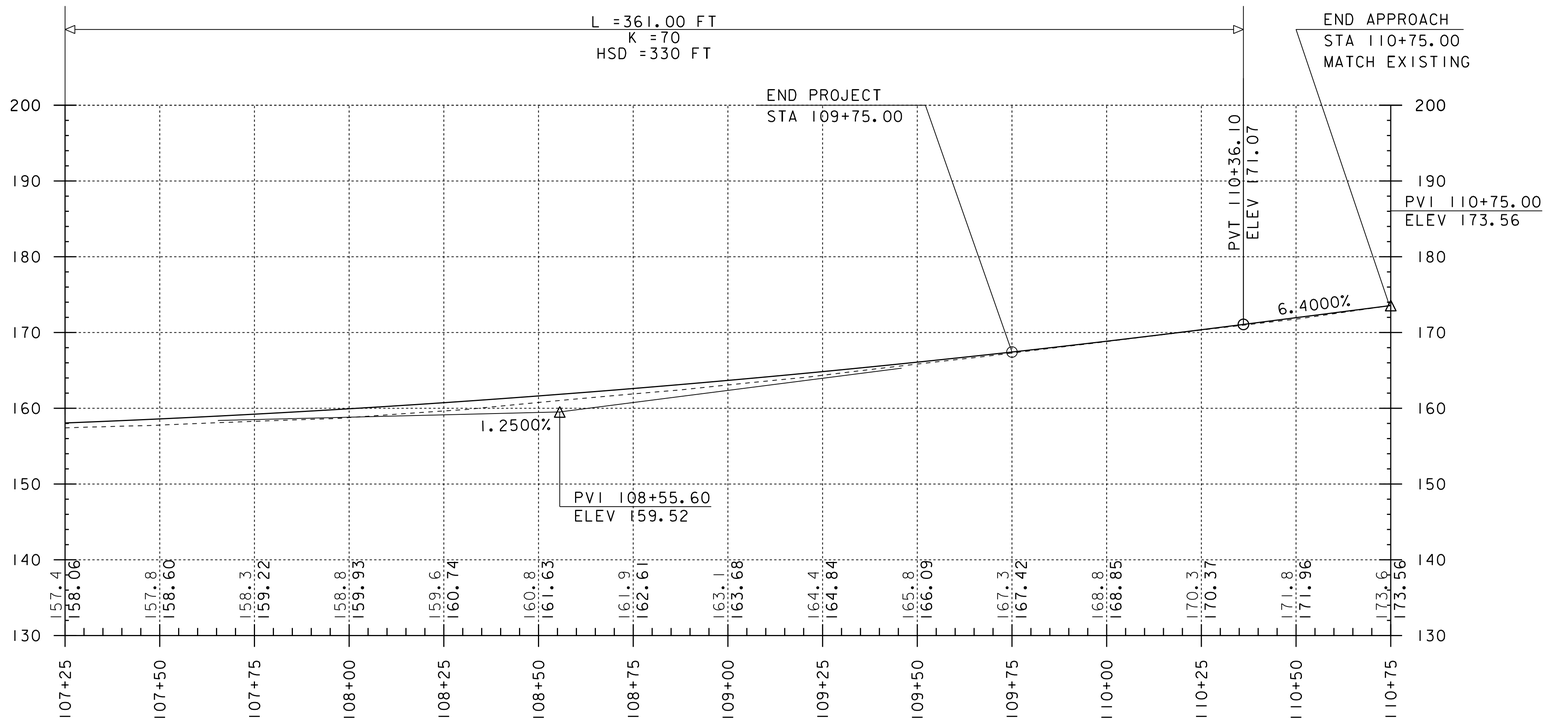
SCALE: HORIZONTAL 1"=20'-0"
VERTICAL 1"=4%

PROJECT NAME:	WEYBRIDGE-NEW HAVEN
PROJECT NUMBER:	BF 032-1(19)
FILE NAME: sl2b552pro.dgn	PLOT DATE: 20-APR-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: D. PETERSON	CHECKED BY: D. PETERSON
PROFILE & BANKING 2	SHEET 17 OF 85

NOTE:

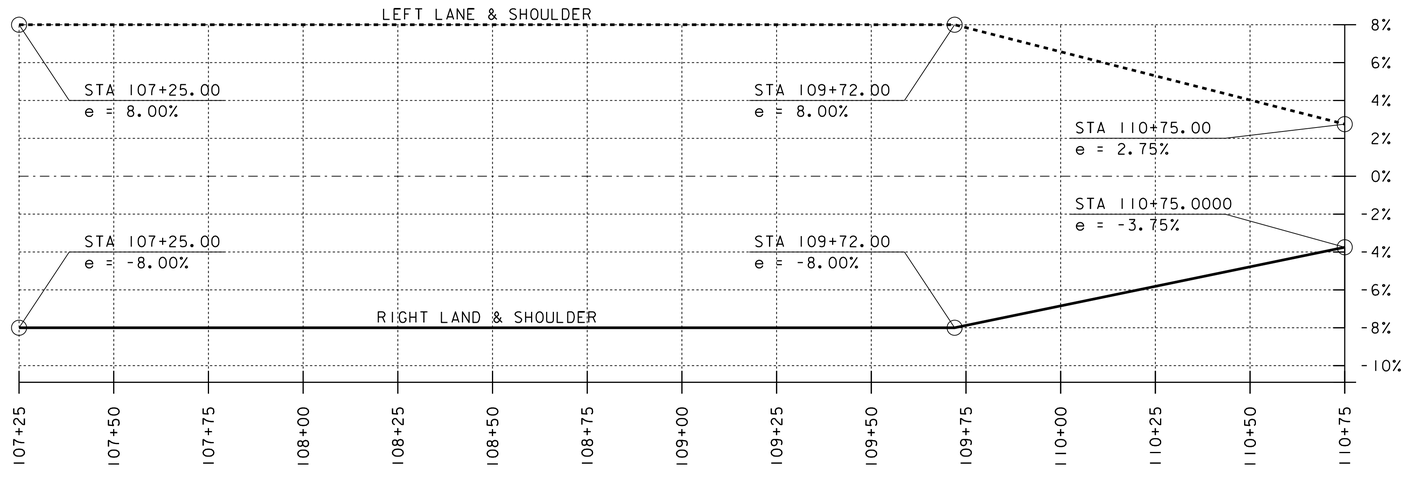
ELEVATIONS SHOWN TO THE NEAREST TENTH ARE EXISTING GROUND ALONG PROPOSED CENTERLINE.

ELEVATIONS SHOWN TO THE NEAREST HUNDREDTH ARE FINISH GRADES ALONG PROPOSED CENTERLINE.



VT 17 PROFILE 3

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



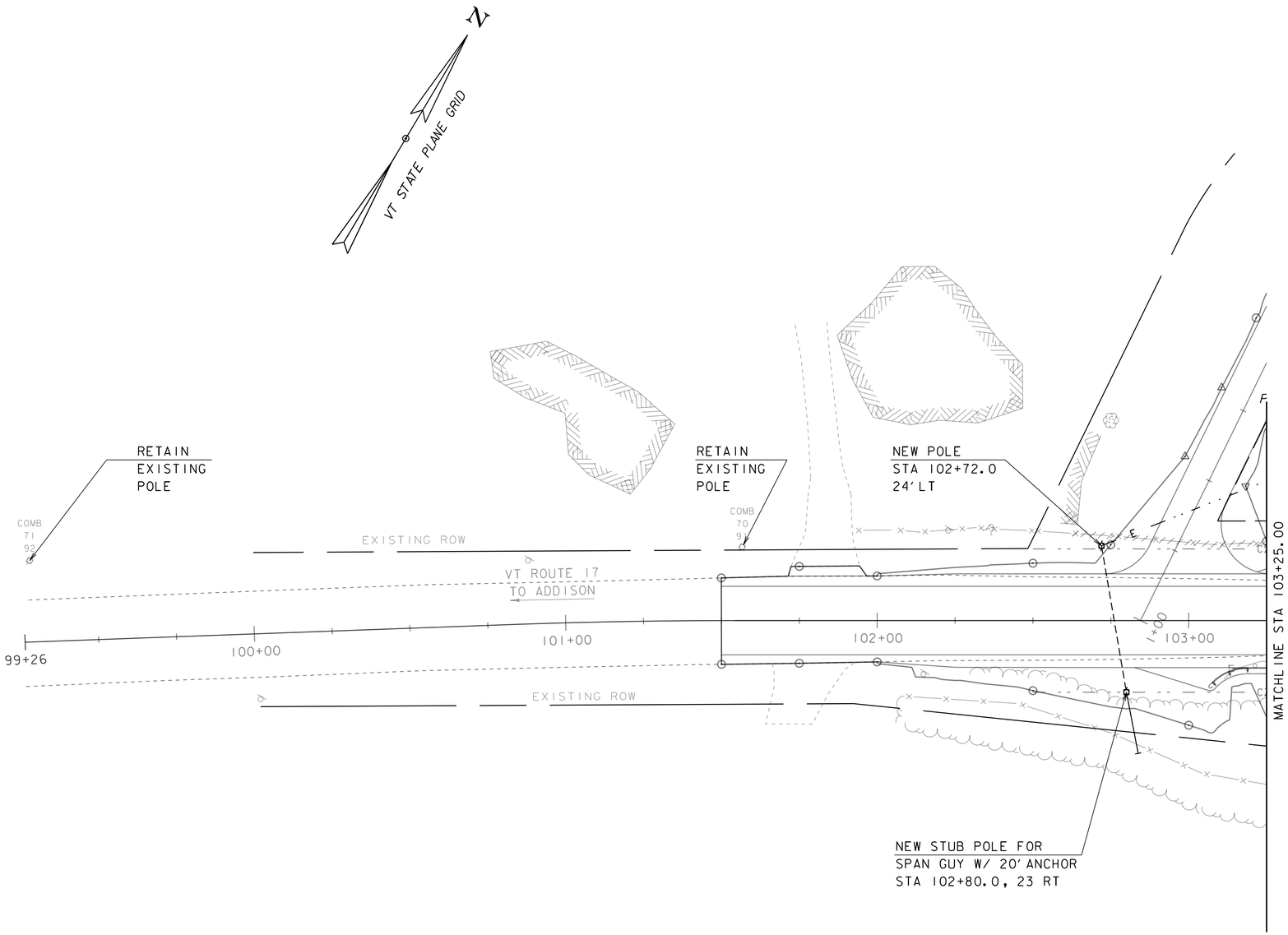
BANKING DIAGRAM 3

SCALE: HORIZONTAL 1"=20'-0"
VERTICAL 1"=4%

PROJECT NAME: WEYBRIDGE-NEW HAVEN
PROJECT NUMBER: BF 032-1(19)

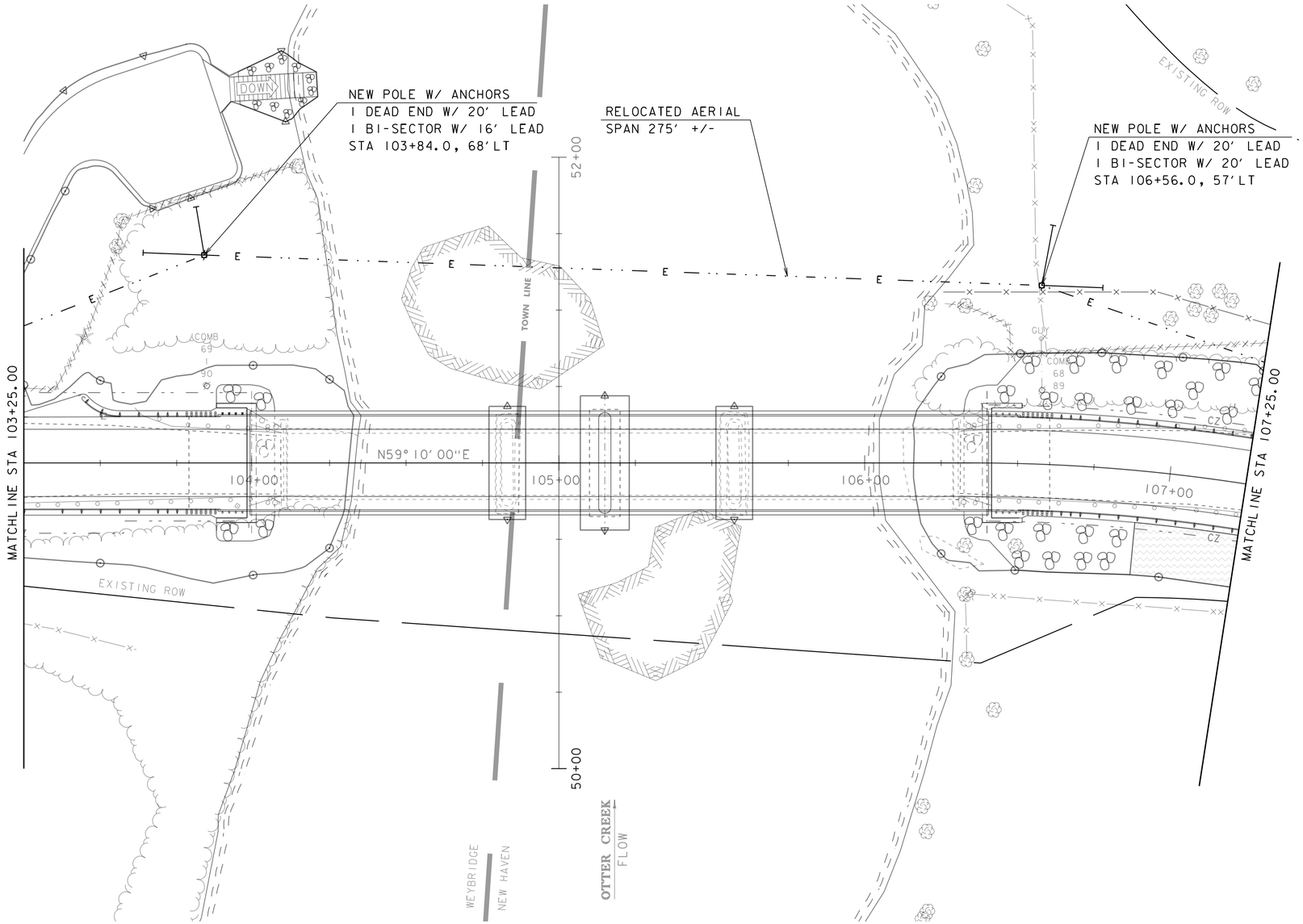
FILE NAME: sl2b552pro.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: D. PETERSON
PROFILE & BANKING 3

PLOT DATE: 20-APR-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: D. PETERSON
SHEET 18 OF 85



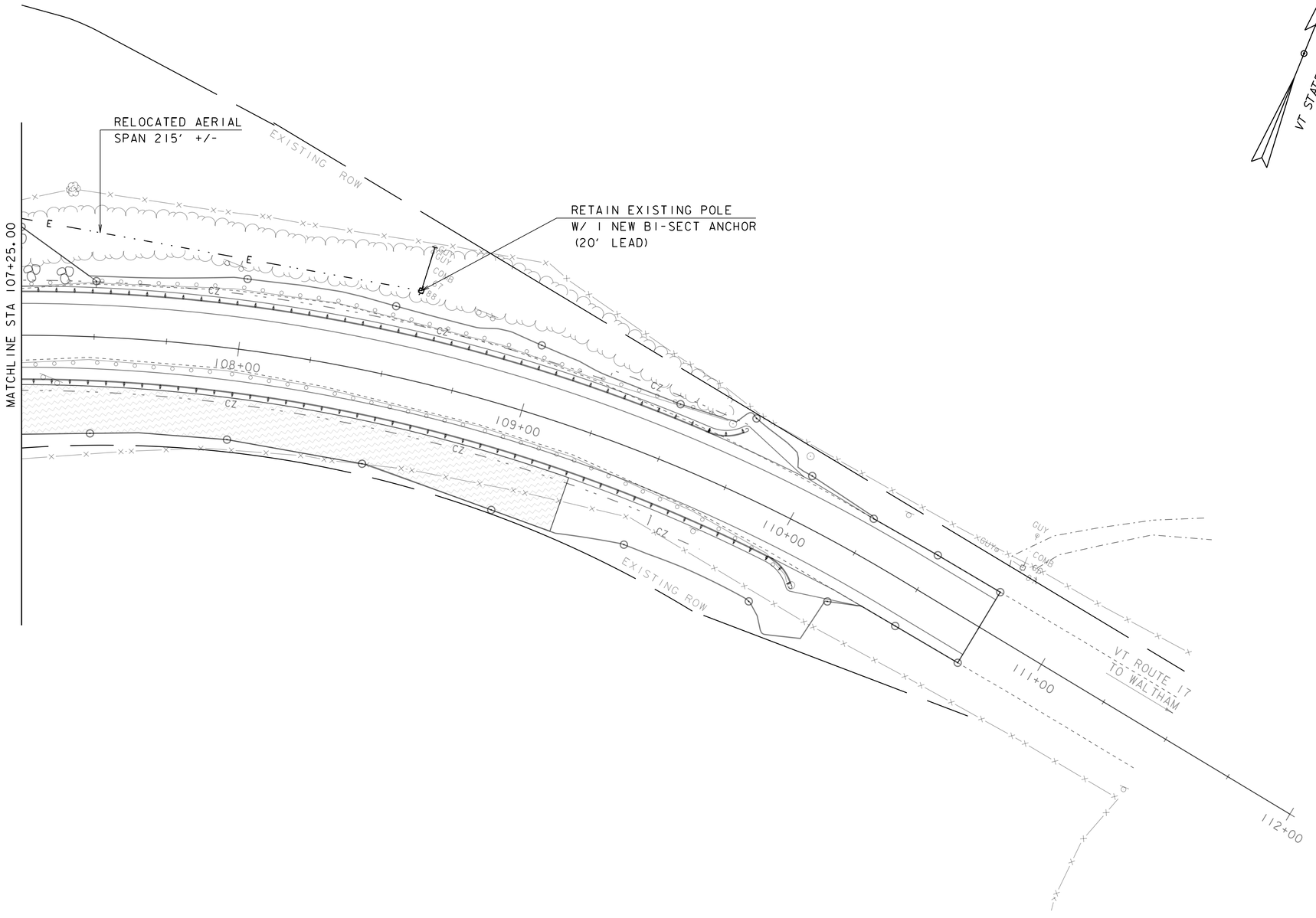
SCALE 1" = 20'-0"
20 0 20

PROJECT NAME:	WEYBRIDGE-NEW HAVEN
PROJECT NUMBER:	BF 032-1(19)
FILE NAME: sl2b552bdr_util.dgn	PLOT DATE: 20-APR-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: D. PETERSON	CHECKED BY: D. PETERSON
UTILITY LAYOUT SHEET 1	SHEET 19 OF 85



SCALE 1" = 20'-0"
20 0 20

PROJECT NAME:	WEYBRIDGE-NEW HAVEN
PROJECT NUMBER:	BF 032-1(19)
FILE NAME: sl2b552bdr_util.dgn	PLOT DATE: 20-APR-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: D. PETERSON	CHECKED BY: D. PETERSON
UTILITY LAYOUT SHEET 2	SHEET 20 OF 85



SCALE 1" = 20'-0"
20 0 20

PROJECT NAME:	WEYBRIDGE-NEW HAVEN
PROJECT NUMBER:	BF 032-1(19)
FILE NAME: s12b552bdr_util.dgn	PLOT DATE: 20-APR-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: D. PETERSON	CHECKED BY: D. PETERSON
UTILITY LAYOUT SHEET 3	SHEET 21 OF 85

SIGN LEGEND

N = NEW
R = REMOVE
R&S = REMOVE & SALVAGE
ES = ERECTING SALVAGED SIGNS

EXISTING SIGNS

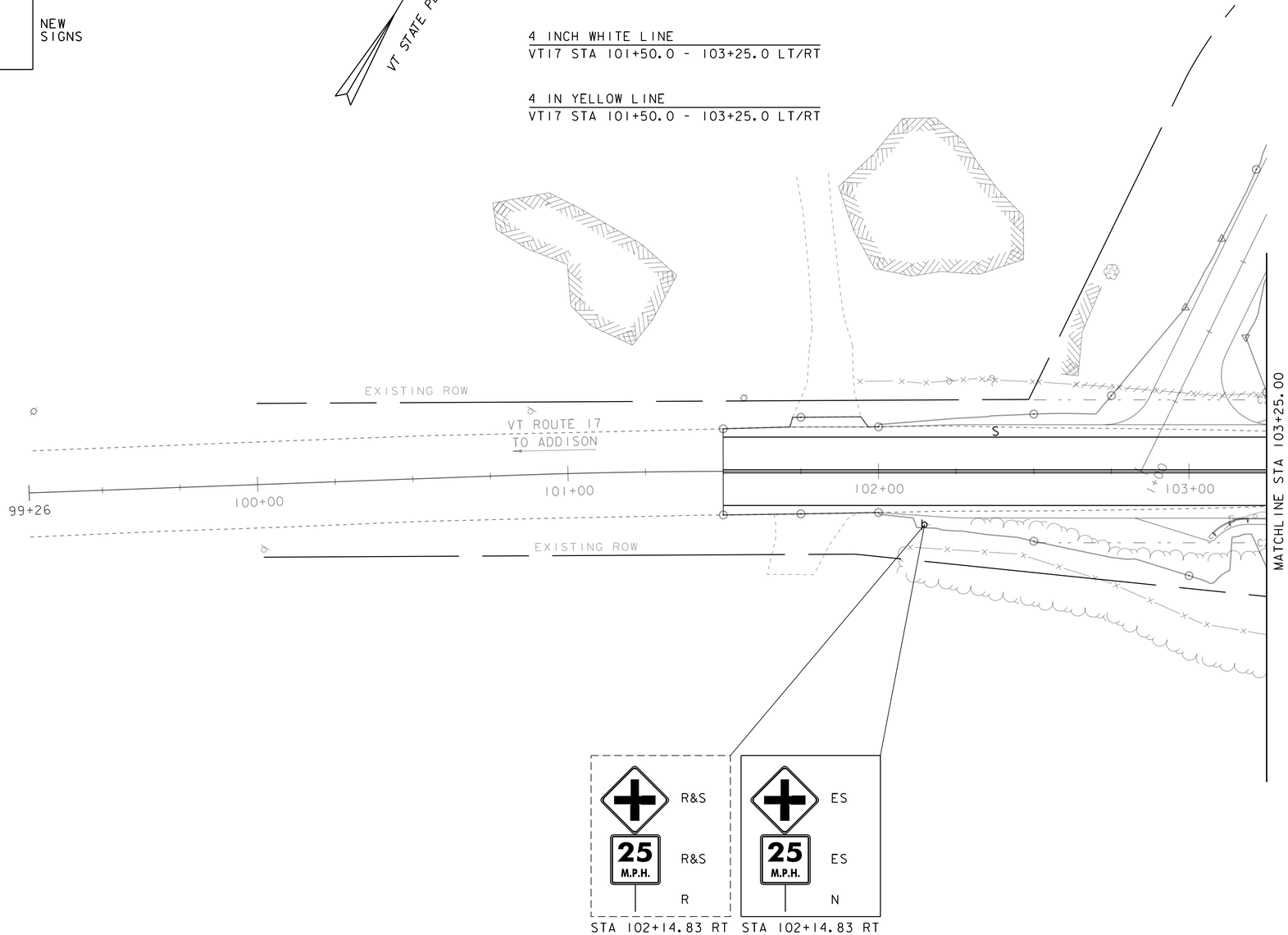
NEW SIGNS

N

VT STATE PLANE GRID

4 INCH WHITE LINE
VT17 STA 101+50.0 - 103+25.0 LT/RT

4 IN YELLOW LINE
VT17 STA 101+50.0 - 103+25.0 LT/RT



SCALE 1" = 20'-0"
20 0 20

PROJECT NAME: WEYBRIDGE-NEW HAVEN
PROJECT NUMBER: BF 032-1(19)

FILE NAME: sl2b552sign.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: D. PETERSON
SIGN LAYOUT SHEET 1

PLOT DATE: 20-APR-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: D. PETERSON
SHEET 22 OF 85

SIGN LEGEND

N = NEW
R = REMOVE
R&S = REMOVE & SALVAGE
ES = ERECTING SALVAGED SIGNS

EXISTING SIGNS

NEW SIGNS

4 INCH WHITE LINE
VT17 STA 103+25.0 - 107+25.0 LT/RT

4 IN YELLOW LINE
VT17 STA 103+25.0 - 107+25.0 LT/RT

N

VT STATE PLANE GRID

STA 104+01.85 LT

Weybridge	New Haven	
		R
		R

STA 104+07.48 LT

R
R

STA 106+45.00 LT

BRIDGE 8 VT-17

N
N

EXISTING ROW

STA 106+33.88 LT

R
R

STA 103+25.00

MATCHLINE STA 103+25.00

2+80

2+00

DOWN

TOWN LINE

52+00

104+00

105+00

106+00

107+00

CZ

MATCHLINE STA 107+25.00

STA 107+25.00

R
R

STA 104+07.48 RT

01 70
01 22
0020

R
R

STA 103+94.86 RT

01 70
01 22
0020

BRIDGE 8 VT-17

N
N
N

STA 103+94.86 RT

STA 104+85.84 RT

New Haven	Weybridge	
VD-024		N
		N

50+00

SEE RAIL DETAIL SHEET 1
FOR MOUNTING DETAIL

WEYBRIDGE

NEW HAVEN

OTTER CREEK
FLOW

R
R

STA 106+33.88 RT

SCALE 1" = 20'-0"
20 0 20

PROJECT NAME:	WEYBRIDGE-NEW HAVEN
PROJECT NUMBER:	BF 032-1(19)
FILE NAME: sl2b552sign.dgn	PLOT DATE: 20-APR-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: D. PETERSON	CHECKED BY: D. PETERSON
SIGN LAYOUT SHEET 2	SHEET 23 OF 85

SIGN LEGEND

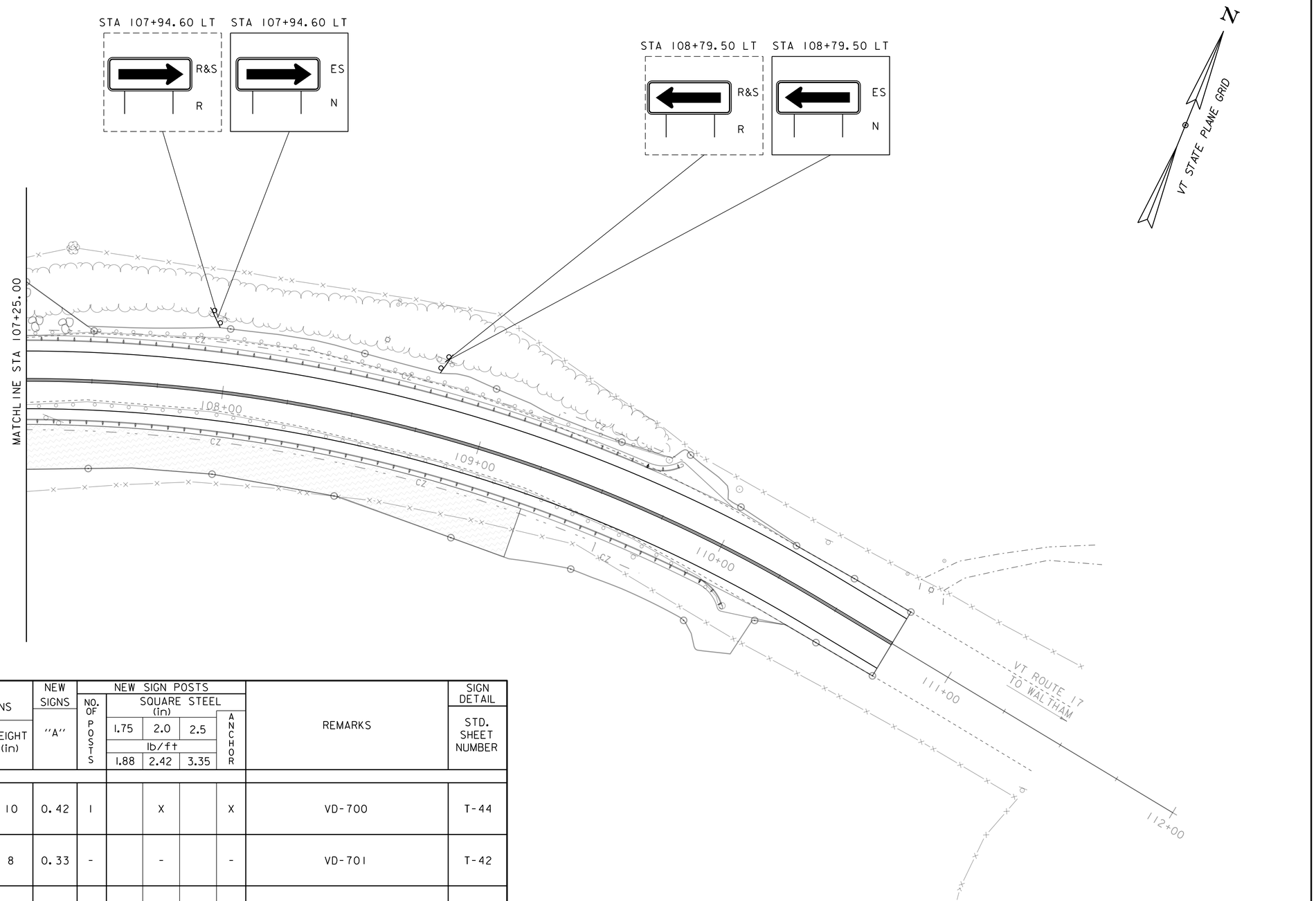
N = NEW
R = REMOVE
R&S = REMOVE & SALVAGE
ES = ERECTING SALVAGED SIGNS

EXISTING SIGNS

NEW SIGNS

4 INCH WHITE LINE
VT17 STA 107+25.0 - 110+75.0 LT/RT

4 INCH YELLOW LINE
VT17 STA 107+25.0 - 110+75.0 LT/RT



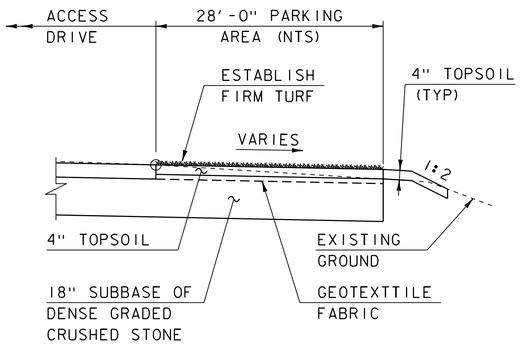
MILEMARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS EA	WIDTH (in)	HEIGHT (in)	NEW SIGNS "A"	NEW SIGN POSTS NO. OF POSTS	SQUARE STEEL (in) 1.75 lb/ft 1.88	2.0 lb/ft 2.42	2.5 lb/ft 3.35	ANCHOR	REMARKS	SIGN DETAIL STD. SHEET NUMBER
103+94.86 RT	0170 0122 0020	1	6	10	0.42	1		X		X	VD-700	T-44
	BRIDGE 8 VT-17	1	6	8	0.33	-		-		-	VD-701	T-42
104+85.84 RT	New Haven | Weybridge	1	74.5	10	5.17	1		X		X	VD-024	T-94
106+45.00 LT	BRIDGE 8 VT-17	1	6	8	0.33	-		-		-	VD-701	T-42
FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD.		**TOTALS**			SF 6.25	FT 30					POST LENGTH IS FOR NEW SIGNS ADDITIONAL POSTS FOR ERECTING SALVAGED SIGNS	

SCALE 1" = 20'-0"
20 0 20

PROJECT NAME: WEYBRIDGE-NEW HAVEN
PROJECT NUMBER: BF 032-1(19)

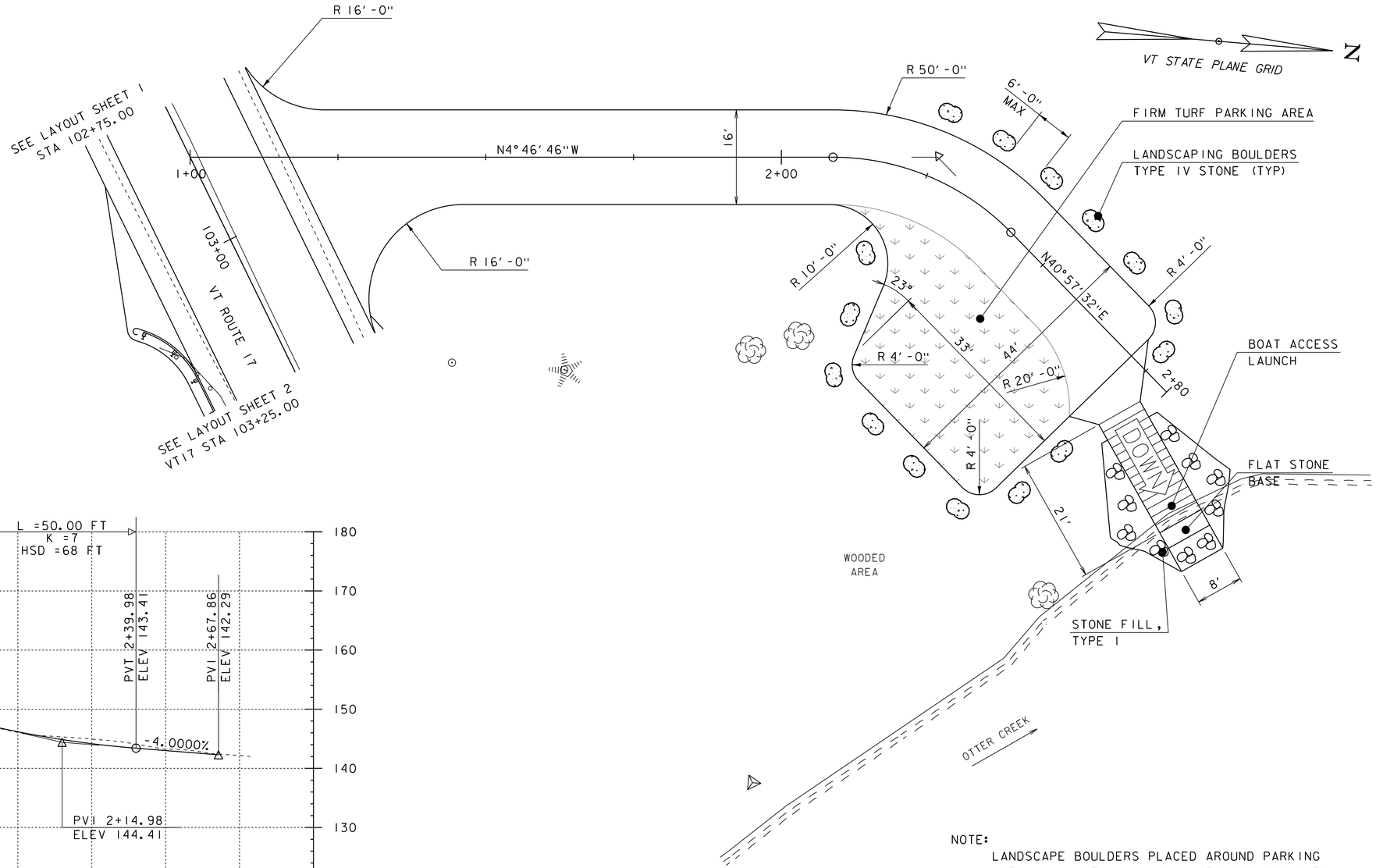
FILE NAME: sl2b552sign.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: D. PETERSON
SIGN LAYOUT SHEET 3

PLOT DATE: 20-APR-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: D. PETERSON
SHEET 24 OF 85



PARKING AREA

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

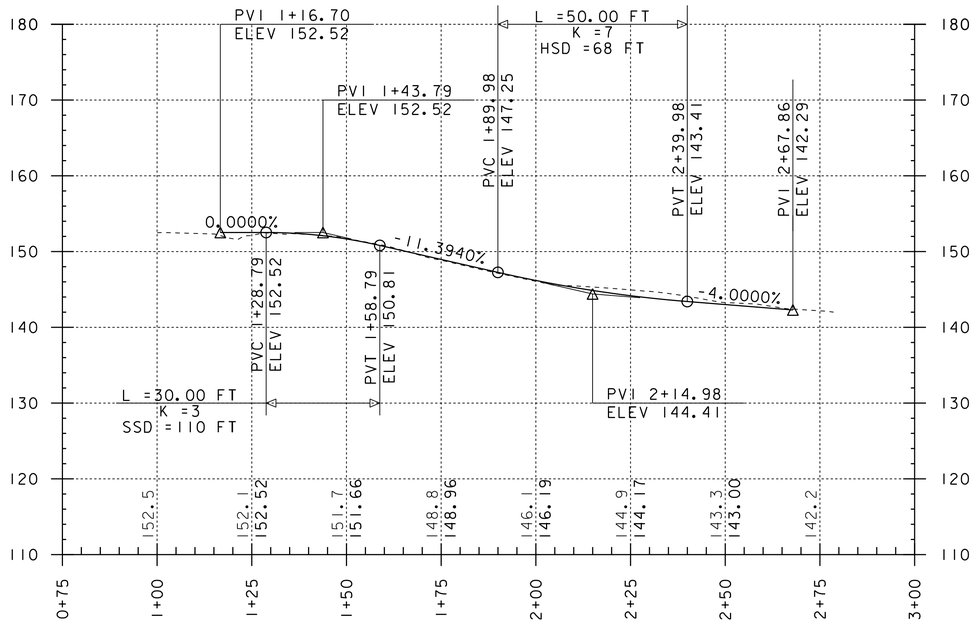


ACCESS PARKING LOT LAYOUT

SCALE: 1"=10'-0"

NOTE:

LANDSCAPE BOULDERS PLACED AROUND PARKING AREA SHALL BE PAID FOR UNDER 900.620 SPECIAL PROVISION (RIVER BOULDER).



ACCESS DRIVE PROFILE

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

NOTE:

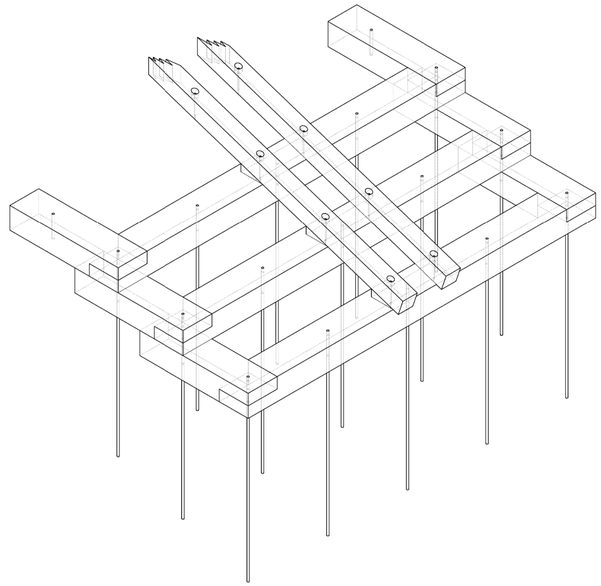
ELEVATIONS SHOWN TO THE NEAREST TENTH ARE EXISTING GROUND ALONG PROPOSED CENTERLINE.

ELEVATIONS SHOWN TO THE NEAREST HUNDREDTH ARE FINISH GRADES ALONG PROPOSED CENTERLINE.

CONTROL LINE DATA - ParkingLotAcc

POINT ID	BEARING	DISTANCE (FEET)	NORTHING (Y)	EASTING (X)	PC	PI	PT	DELTA	R	L	T
30	N 4°46'45.96" W	108.7333 '	578875.3762	1444101.805		1+00.00					
	N 40°57'32.09" E	55.4537 '	579001.3846	1444091.27	2+08.73		2+42.26	45°44'18.06"	42.0000 '	33.5280 '	17.7149 '
42			579043.2621	1444127.62		2+80.00					

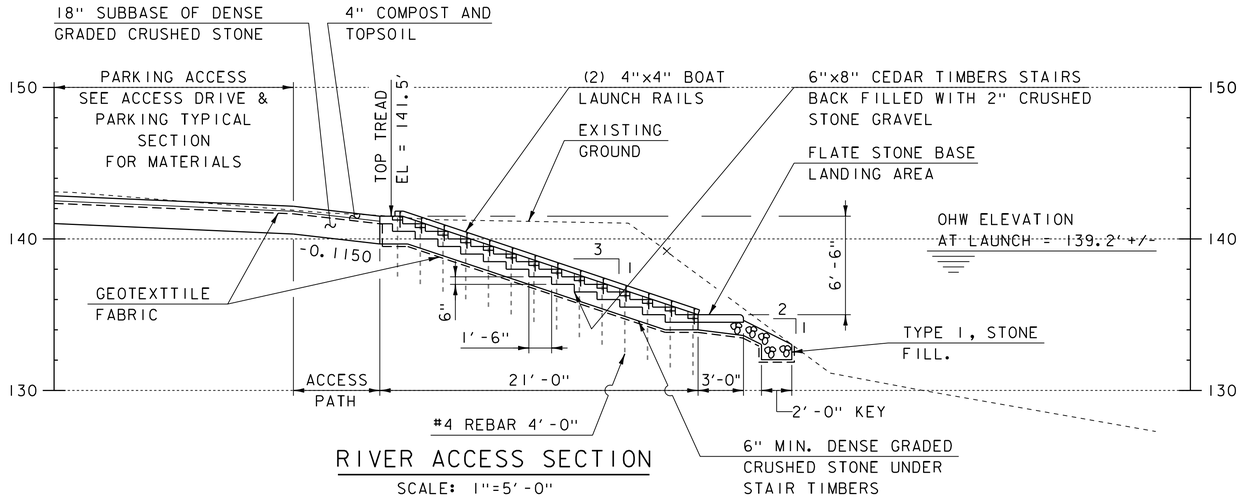
PROJECT NAME:	WEYBRIDGE-NEW HAVEN
PROJECT NUMBER:	BF 032-I(19)
FILE NAME: sl2b552rivAccess.dgn	PLOT DATE: 20-APR-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: D. PETERSON	CHECKED BY: D. PETERSON
ACCESS & PARKING LAYOUT	SHEET 25 OF 85



ISOMETRIC TREAD VIEW

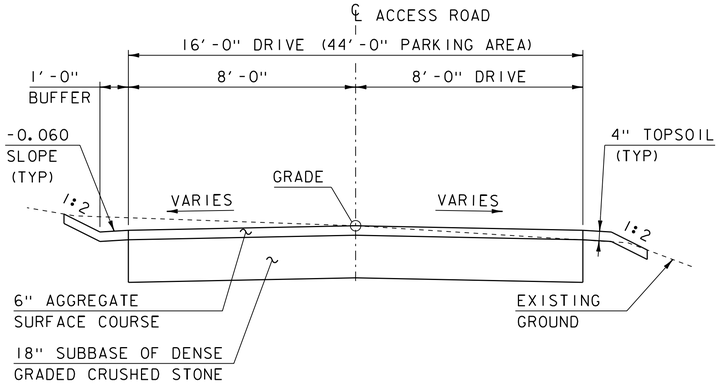
NOT TO SCALE

1) BOTTOM THREE TREADS SHOWN.



RIVER ACCESS SECTION

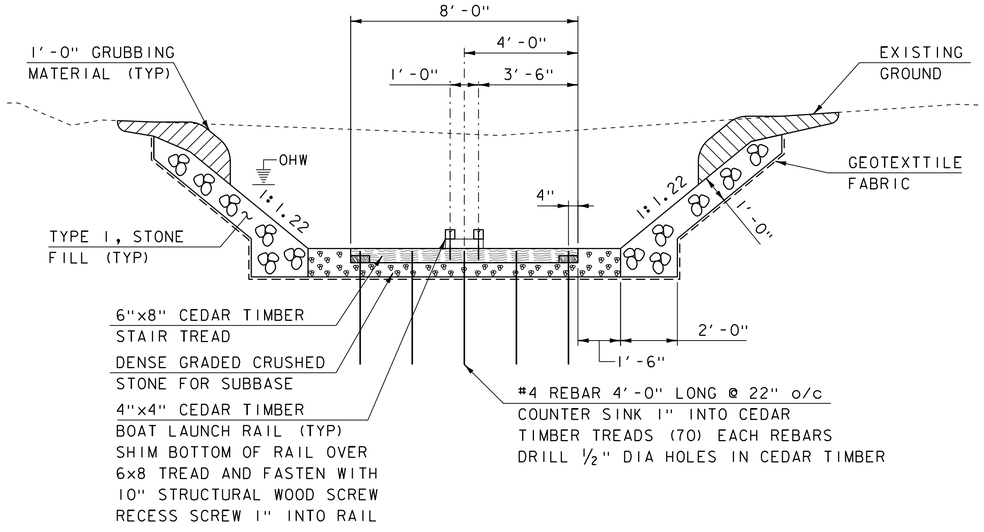
SCALE: 1"=5'-0"



ACCESS DRIVE & PARKING TYPICAL SECTION

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

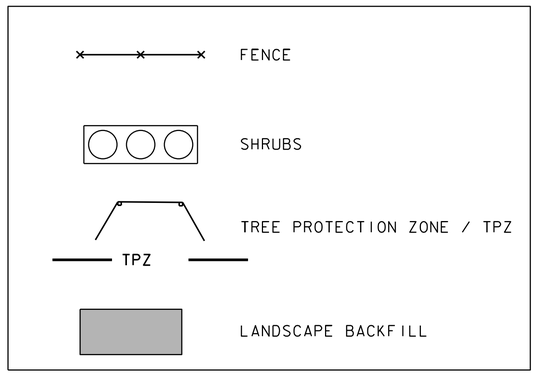
SEE ACCESS DRIVE CROSS SECTIONS FOR CROSS SLOPES OF DRIVE AND PARKING AREA.

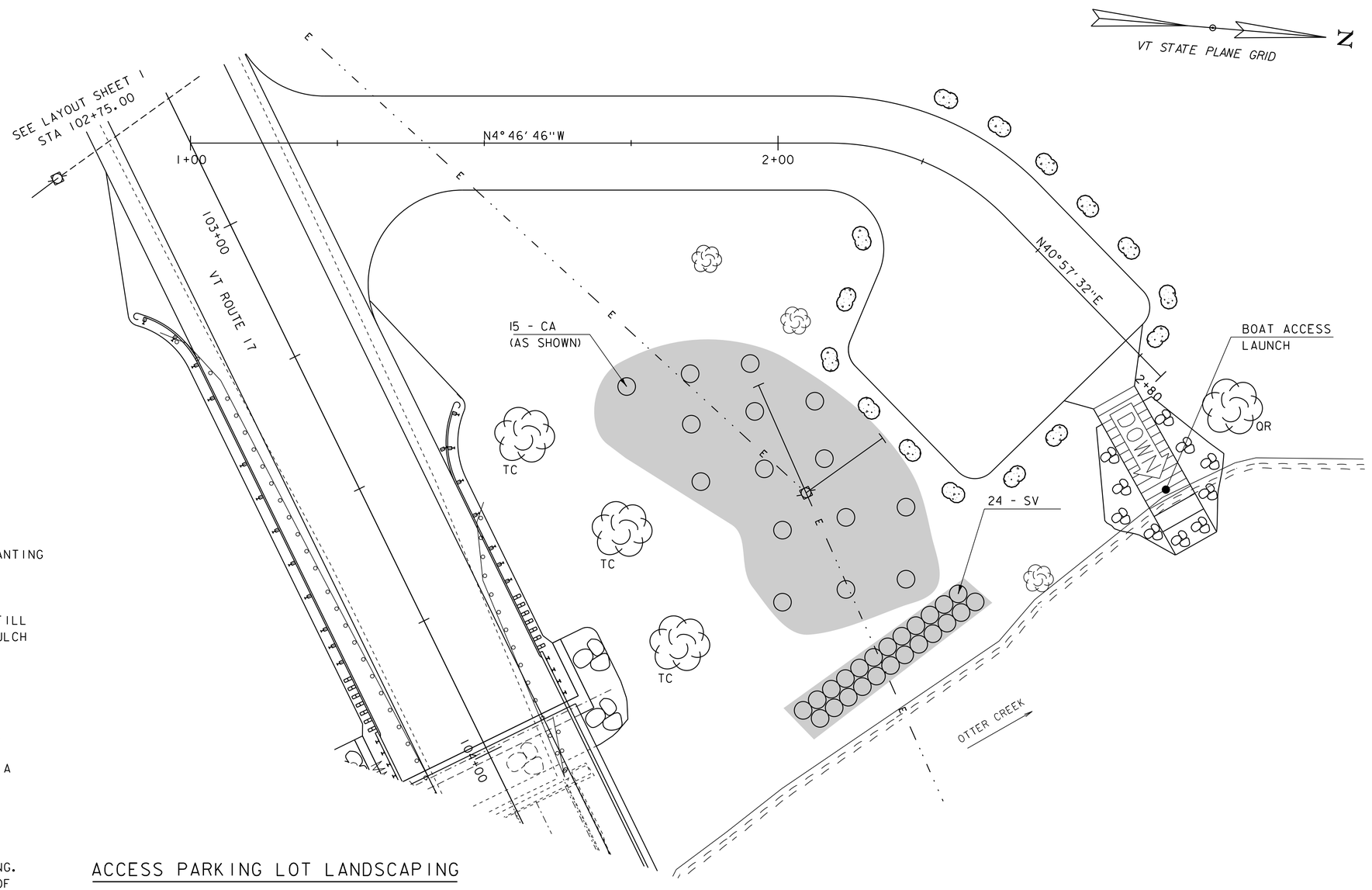


RIVER ACCESS TYPICAL SECTION

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

PROJECT NAME:	WEYBRIDGE-NEW HAVEN
PROJECT NUMBER:	BF 032-1(19)
FILE NAME: sl2b552rivAccess.dgn	PLOT DATE: 20-APR-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: D. PETERSON	CHECKED BY: D. PETERSON
ACCESS & PARKING DETAILS	SHEET 26 OF 85





ACCESS PARKING LOT LANDSCAPING

NOTES:

1. PLANTING BED LOCATED IN UNDISTURBED SOIL
   BEFORE PLANTING, REMOVE EXISTING GRASS FROM ENTIRE PLANTING BED AREA. PROVIDE CONTINUOUS BARK MULCH FOR BED.

2. PLANTING BEDS LOCATED IN DISTURBED AREAS
   REMOVE COMPACTED FILL AND REPLACE WITH LANDSCAPE BACKFILL AT STATIONING SHOWN ABOVE. PROVIDE CONTINUOUS BARK MULCH FOR ALL SHRUB BEDS.

3. LOCATIONS AND BED SHAPES ARE APPROXIMATE AND MAY VARY DUE TO SLOPE. FINAL LOCATION AND ELEVATIONS TO BE DETERMINED BY THE ENGINEER WITH APPROVAL FROM VT FISH AND WILDLIFE FACILITY AND LANDS ADMINISTRATOR.

4. GROUPING SHAPES ARE TO BE STAKED AND LAID OUT TO GIVE A NATURAL APPEARANCE.

5. TYPICAL GROUPING LAYOUTS SHOWN ARE FOR FLAT AND STEEP SLOPES OF PROJECT WHERE THERE IS NO STONE FILL.

6. WATER ALL SHRUBS AND SEEDLING TREES AT TIME OF PLANTING. EACH SHRUB AND SEEDLING TREE SHALL RECEIVE A MINIMUM OF 5 GALLONS OF WATER TWICE A WEEK.

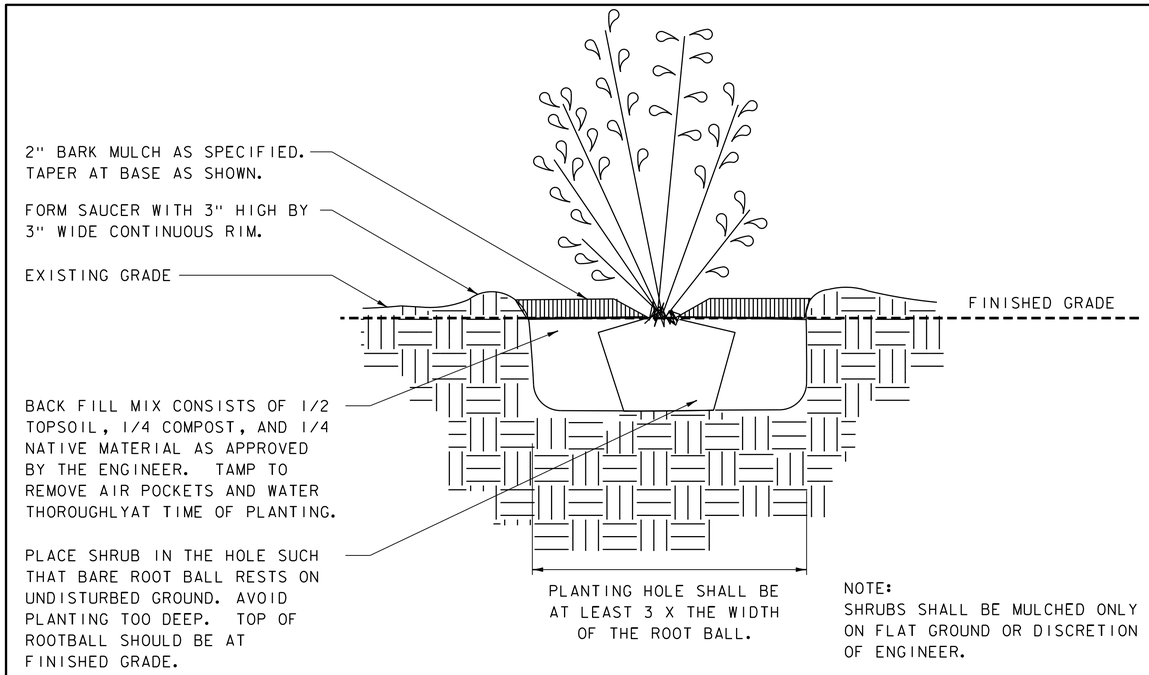
QTY	KEY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	SPACING, REMARKS, ITEMS
		DECIDUOUS SHRUBS				**ITEM No. 656.35**
15	CA	CORNUS AMOMUM	SILKY DOGWOOD	3'-4' HEIGHT	CONTAINER	5 FT o.c. (min.)
24	SV	CEPHALANTHUS OCCIDEBTALIS	BUTTON BUSH	3'-4' HEIGHT	CONTAINER	5 FT o.c. (min.)
		DECIDUOUS TREES				**ITEM No. 656.30**
1	QR	QUERCUS BICOLOR	SWAMP WHITE OAK	3'-4' HEIGHT	CONTAINER	AS SHOWN
3	TC	ACER SACCHARINUM	SILVER MAPLES	4'-5' HEIGHT	CONTAINER	AS SHOWN

SCALE: 1"=10'-0"

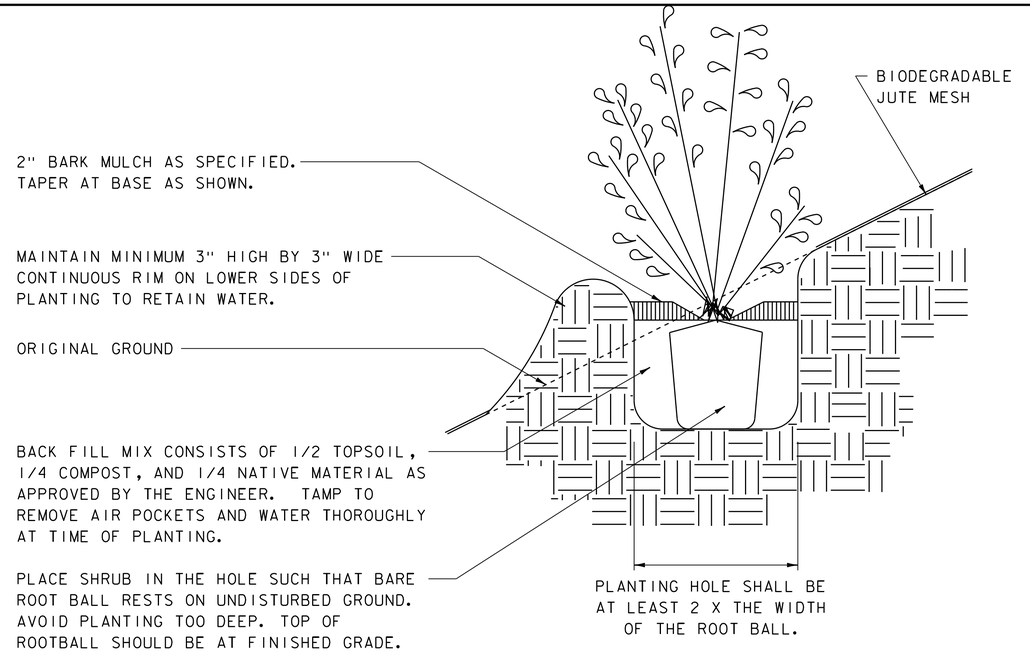
PROJECT NAME: WEYBRIDGE-NEW HAVEN
PROJECT NUMBER: BF 032-1(19)

FILE NAME: sl3b058landscape.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: D. PETERSON
ACCESS & PARKING LANDSCAPING

PLOT DATE: 20-APR-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: D. PETERSON
SHEET 27 OF 85



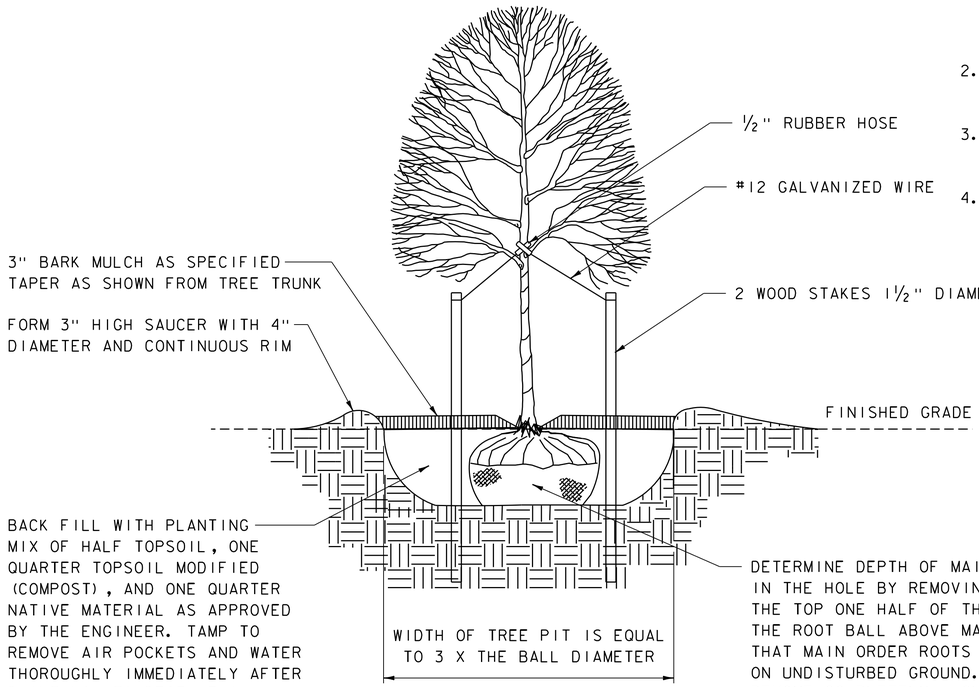
SHRUB AND SEEDLING TREE PLANTING DETAIL



SHRUB AND SEEDLING TREE PLANTING ON SLOPES DETAIL

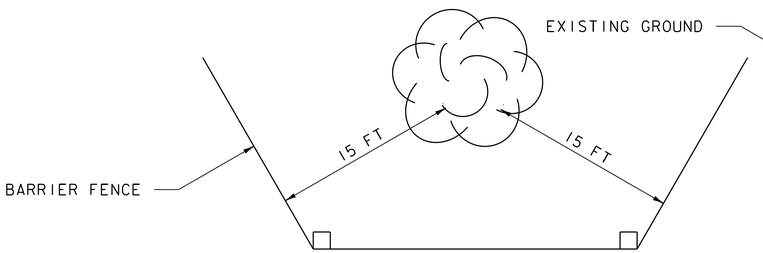
NOTES:

1. STAKE ONLY THOSE TREES PLANTED IN WINDY, EXPOSED LOCATIONS, WHERE THEY MIGHT BE BLOWN OVER OR VANDALIZED.
2. COMPLETELY REMOVE ALL GUY WIRES, RUBBER HOSE, AND STAKES ONE YEAR AFTER PLANTING.
3. ANTI-DESICCANT SPRAY IS TO BE APPLIED TO ALL EVERGREENS PER MANUFACTURER SPECIFICATIONS.
4. FOLLOW STATE OF VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, SECTION 656.

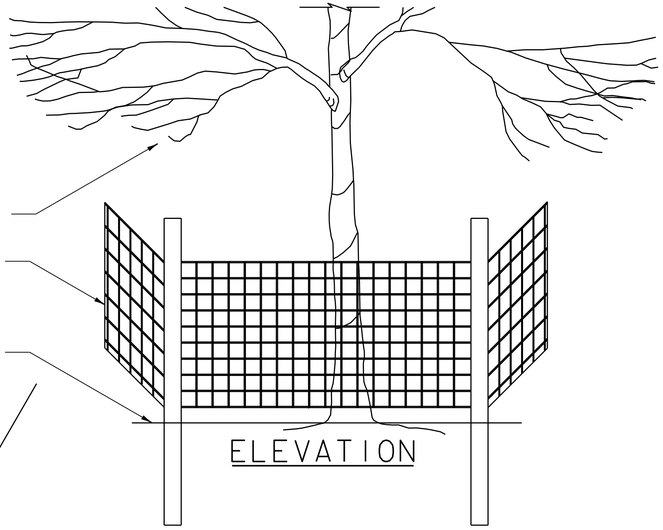


DETERMINE DEPTH OF MAIN ORDER ROOTS IN THE BALL BEFORE PLACING IN THE HOLE BY REMOVING ALL TWINE AND BURLAP FROM THE STEM AND THE TOP ONE HALF OF THE BALL. REMOVE ANY EXCESS SOIL ON TOP OF THE ROOT BALL ABOVE MAIN ORDER ROOTS. PLACE TREE IN THE HOLE SO THAT MAIN ORDER ROOTS ARE AT FINISHED GRADE, AND ROOT BALL SITS ON UNDISTURBED GROUND. IF PLANT IS BALLED IN SYNTHETIC BURLAP, REMOVE COMPLETELY. CUT ANY WIRE BASKETS AND REMOVE ENTIRE SIDES. SEE NOTES FOR BACKFILL INFORMATION.

DECIDUOUS TREE PLANTING DETAIL



PLAN



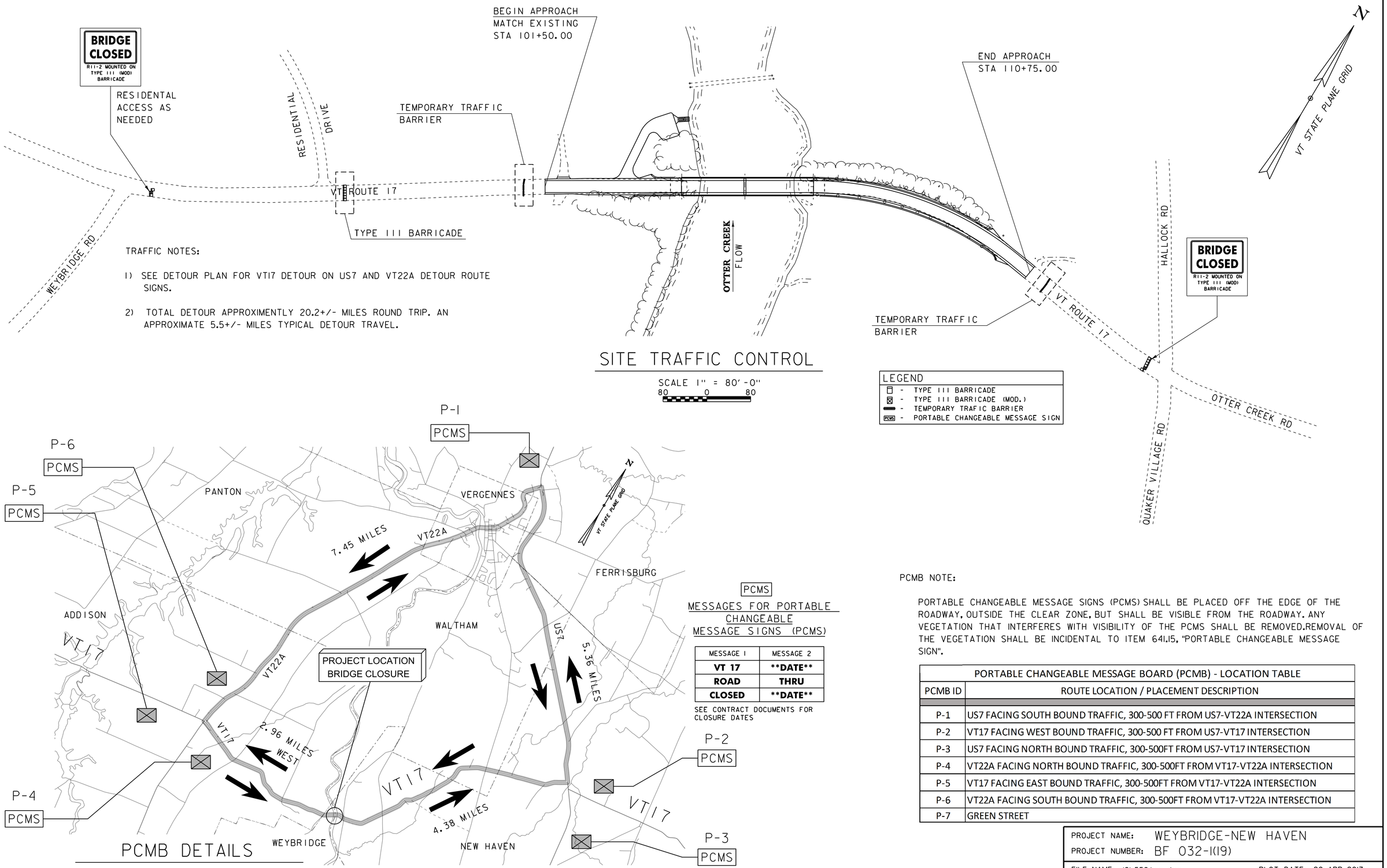
ELEVATION

TREE PROTECTION DETAIL

SEE SECTION 620.04 (MOD) FOR DIMENSIONS
THIS WILL BE PAID FOR UNDER
ITEM 653.50 "BARRIER FENCE"

NOT TO SCALE

PROJECT NAME:	WEYBRIDGE-NEW HAVEN
PROJECT NUMBER:	BF 032-1(19)
FILE NAME: sl3b058landscape.dgn	PLOT DATE: 20-APR-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: D. PETERSON	CHECKED BY: D. PETERSON
LANDSCAPE PLANTING DETAILS	SHEET 28 OF 85



PCMS

MESSAGES FOR PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS)

MESSAGE 1	MESSAGE 2
VT 17	****DATE****
ROAD	**THRU**
CLOSED	****DATE****

SEE CONTRACT DOCUMENTS FOR CLOSURE DATES

PCMB NOTE:

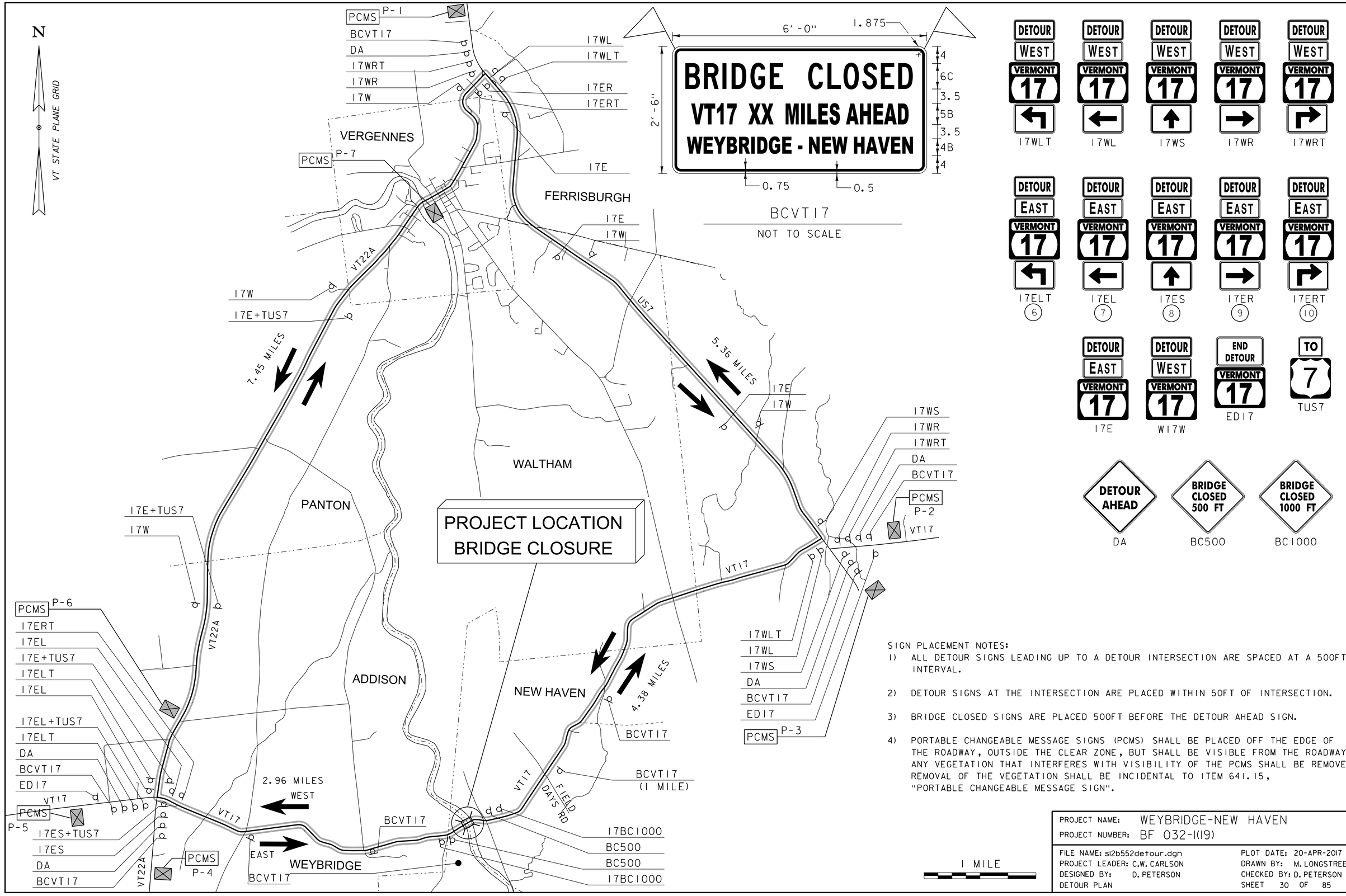
PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) SHALL BE PLACED OFF THE EDGE OF THE ROADWAY, OUTSIDE THE CLEAR ZONE, BUT SHALL BE VISIBLE FROM THE ROADWAY. ANY VEGETATION THAT INTERFERES WITH VISIBILITY OF THE PCMS SHALL BE REMOVED. REMOVAL OF THE VEGETATION SHALL BE INCIDENTAL TO ITEM 641.15, "PORTABLE CHANGEABLE MESSAGE SIGN".

PORTABLE CHANGEABLE MESSAGE BOARD (PCMB) - LOCATION TABLE	
PCMB ID	ROUTE LOCATION / PLACEMENT DESCRIPTION
P-1	US7 FACING SOUTH BOUND TRAFFIC, 300-500 FT FROM US7-VT22A INTERSECTION
P-2	VT17 FACING WEST BOUND TRAFFIC, 300-500 FT FROM US7-VT17 INTERSECTION
P-3	US7 FACING NORTH BOUND TRAFFIC, 300-500FT FROM US7-VT17 INTERSECTION
P-4	VT22A FACING NORTH BOUND TRAFFIC, 300-500FT FROM VT17-VT22A INTERSECTION
P-5	VT17 FACING EAST BOUND TRAFFIC, 300-500FT FROM VT17-VT22A INTERSECTION
P-6	VT22A FACING SOUTH BOUND TRAFFIC, 300-500FT FROM VT17-VT22A INTERSECTION
P-7	GREEN STREET

PROJECT NAME: WEYBRIDGE-NEW HAVEN
PROJECT NUMBER: BF 032-1(19)

FILE NAME: sl2b552tcp.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: D. PETERSON
SITE TRAFFIC CONTROL & PCMB DETAILS

PLOT DATE: 20-APR-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: D. PETERSON



SIGN PLACEMENT NOTES:

1) ALL DETOUR SIGNS LEADING UP TO A DETOUR INTERSECTION ARE SPACED AT A 500FT INTERVAL.

2) DETOUR SIGNS AT THE INTERSECTION ARE PLACED WITHIN 50FT OF INTERSECTION.

3) BRIDGE CLOSED SIGNS ARE PLACED 500FT BEFORE THE DETOUR AHEAD SIGN.

4) PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) SHALL BE PLACED OFF THE EDGE OF THE ROADWAY, OUTSIDE THE CLEAR ZONE, BUT SHALL BE VISIBLE FROM THE ROADWAY. ANY VEGETATION THAT INTERFERES WITH VISIBILITY OF THE PCMS SHALL BE REMOVED. REMOVAL OF THE VEGETATION SHALL BE INCIDENTAL TO ITEM 641.15, "PORTABLE CHANGEABLE MESSAGE SIGN".

1 MILE

PROJECT NAME: WEYBRIDGE-NEW HAVEN
PROJECT NUMBER: BF 032-1(19)

FILE NAME: si2b552detour.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: D. PETERSON
DETOUR PLAN

PLOT DATE: 20-APR-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: D. PETERSON
SHEET 30 OF 85

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) N	DESCRIPTIVE TERM	CONSISTENCY (COHESIVE SOILS) 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
AX	Core Size 1 1/8"
BX	Core Size 1 5/8"
NX	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	Top of Ledge Or Boulder
NR	No Recovery
Rec.	Recovery
%Rec.	Percent Recovery
ROD	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		

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.

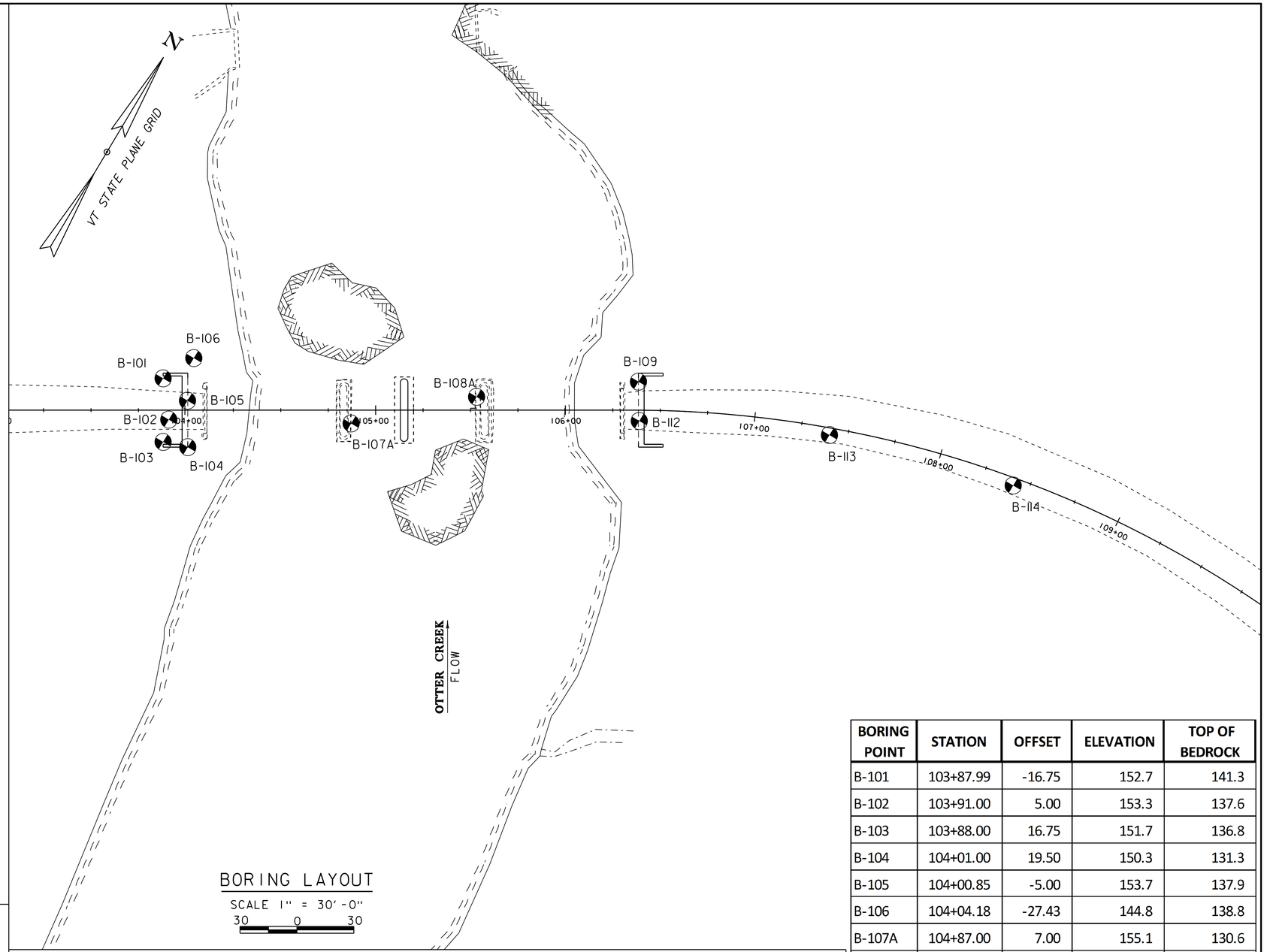
MUCK - Soft organic soil (containing > 10% organic material.

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.



BORING LAYOUT

SCALE 1" = 30'-0"

30 0 30

GENERAL NOTES

1. The subsurface explorations shown herein were made between 10/25/16 and 12/21/16 by the Agency.
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.

BORING POINT	STATION	OFFSET	ELEVATION	TOP OF BEDROCK
B-101	103+87.99	-16.75	152.7	141.3
B-102	103+91.00	5.00	153.3	137.6
B-103	103+88.00	16.75	151.7	136.8
B-104	104+01.00	19.50	150.3	131.3
B-105	104+00.85	-5.00	153.7	137.9
B-106	104+04.18	-27.43	144.8	138.8
B-107A	104+87.00	7.00	155.1	130.6
B-108A	105+53.20	-7.00	156.2	128.7
B-109	106+38.41	-15.00	154.5	96.5
B-112	106+38.98	5.65	156.6	94.3
B-113	107+40.40	3.76	157.4	n/a
B-114	108+41.61	4.00	160.0	n/a

PROJECT NAME: WEYBRIDGE-NEW HAVEN

PROJECT NUMBER: BF 032-1(19)

FILE NAME: si2b552bor.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: D. PETERSON
BORING INFORMATION SHEET

PLOT DATE: 20-APR-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: D. PETERSON
SHEET 31 OF 85

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

BORING LOG

Weybridge-New Haven
BF 032-1(19)
VT 17 Br. #8

Boring No.: **B-101**
Page No.: 1 of 1
Pin No.: 12b552
Checked By: END

Boring Crew: Judkins, Gomes
Date Started: 11/17/16 Date Finished: 11/18/16
VTSPG NAD83: N 578941.50 ft E 1444182.82 ft
Station: 103+88.00 Offset: -16.75
Ground Elevation: 152.7 ft

	Casing	Sampler
Type:	WB	SS
I.D.:	3 in	1.5 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:	Auto/AWJ	
Rig:	Diedrich 25	CE = Unknown

Groundwater Observations		
Date	Depth (ft)	Notes
11/18/16		No W.T. observed

BOTTOM OF
PILE CAP
ELEV. 145.00

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (RQD %)	Drill Rate minutes/ft	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		Field Note:, Fill for drilling pad								
2.5		A-1-b, GrSa, brn, Dry, Rec. = 0.6 ft				1-1-3-4 (4)	11.5	42.7	44.2	13.1
5.0		A-1-b, SaGr, brn, Moist, Rec. = 1.4 ft				6-4-3-3 (7)	7.4	48.8	32.5	18.7
7.5		A-4, GrSiSa, brn, Moist, Rec. = 1.3 ft				3-4-3-3 (7)	12.2	25.4	37.5	37.1
		A-2-4, GrSiSa, brn, Moist, Rec. = 0.8 ft				18-48-7-18 (55)	10.3	28.0	41.8	30.2
10.0		A-1-a, Gr, brn, Moist, Rec. = 0.7 ft, Lab Note: A lot of broken rock was within sample				3-47-R@5" (R)	9.0	76.8	15.9	7.3
12.5		11.4 ft - 14.4 ft, No Recovery. BX	1 (0)	0 (0)	8 5 6	Top of Bedrock @ 11.4 ft				
15.0		14.4 ft - 16.4 ft, Blue gray to gray, DOLOMITE, with calcite veins. Faint yellowish-orange staining on joints.. Hard, Very slightly weathered, Poor rock, BX, RMR=33	2 (55)	60 (0)	7 7					
17.5		16.4 ft - 18.4 ft, Blue gray, DOLOMITE, with calcite veins. Brownish-yellow/orange staining on joints.. Hard, Very slightly weathered, Poor rock, BX, RMR=27	3 (55)	45 (0)	7 8					
20.0		Hole stopped @ 18.4 ft								
22.5		Remarks: Hole collapsed at 0.0 feet.								

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
<<SUB>><<SUB>> 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 2 WEYBRIDGE-NEW HAVEN BF032-1(19).GPJ VERMONT AOT.GDT 1/30/17

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

BORING LOG

Weybridge-New Haven
BF 032-1(19)
VT 17 Br. #8

Boring No.: **B-102**
Page No.: 1 of 1
Pin No.: 12b552
Checked By: END

Boring Crew: Judkins, Gomes
Date Started: 10/31/16 Date Finished: 11/01/16
VTSPG NAD83: N 578925.65 ft E 1444195.78 ft
Station: 103+91.00 Offset: 5.00
Ground Elevation: 153.3 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:	CME 55 TRACK	CE = 1.41

Groundwater Observations		
Date	Depth (ft)	Notes
11/01/16	15.3	W.T. Before Drilling

BOTTOM OF
PILE CAP
ELEV. 145.00

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (RQD %)	Drill Rate minutes/ft	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	LL %	PI %
		Asphalt Pavement, 0.0 ft - 1.0 ft										
5		A-1-a, SaGr, brn, Moist, Rec. = 1.1 ft Field Note:, Rollercone, cleaned out casing.				15-13-26-15 (39)	6.4	54.6	33.7	11.7		
		A-2-4, SiSaGr, brn, Moist, Rec. = 1.1 ft Field Note:, Rollercone, cleaned out casing.				12-14-9-14 (23)	8.6	40.9	31.4	27.7		
		Field Note:, No Recovery, Rec. = 0.0 ft				3-5-4-4 (9)						
10		A-1-b, SiSaGr, brn, Moist, Rec. = 0.8 ft Field Note:, Rollercone, cleaned out casing.				2-4-8-7 (12)	10.2	46.0	31.9	22.1		
		A-1-b, SiGrSa, brn, Moist, Rec. = 0.6 ft				6-5-6-13 (11)	9.3	36.7	38.5	24.8		
		A-2-4, GrSiSa, brn, Moist, Rec. = 0.7 ft, Lab Note: A few pieces of wood and sticks were within sample. Field Note:, NXDC, cleaned out casing.				23-21-4-3 (25)	18.3	24.4	45.5	30.1		
		A-4, ClSi, gry, Moist, Rec. = 1.3 ft, Lab Note: Pieces of decomposing wood were within sample. Field Note:, NXDC, cleaned out casing.				5-4-3-4 (7)	27.8	1.9	30.9	67.2	28	8
15		A-2-4, SiGr, gry-red, Moist, Rec. = 0.5 ft, Lab Note: Broken Rock was within sample. Insufficient sample size to perform Atterberg Limit testing. Similar to 13-15 FT sample.				18-R@2.5" (R)	17.8	60.4	11.8	27.8		
		15.7 ft - 20.7 ft, Blue gray to black, Interbedded META-LIMESTONE, and DOLOMITE with calcite veins. Calcite coating and brown staining on joints. Hard, Slightly weathered, Good rock, NX, RMR=69	R-1 (40)	100 (100)	5 6 6 6 6	Top of Bedrock @ 15.7 ft						
20		20.7 ft - 25.7 ft, Blue gray to black, Interbedded META-LIMESTONE, DOLOMITE, and SHALE. Hard, Unweathered, Fair rock, NX, RMR=49	R-2 (40-45)	100 (62)	7 7 6 7 6							
25		Hole stopped @ 25.7 ft										
30		Remarks: Hole collapsed at 7.3 feet.										

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
<<SUB>><<SUB>> 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 2 WEYBRIDGE-NEW HAVEN BF032-1(19).GPJ VERMONT AOT.GDT 1/30/17

PROJECT NAME: WEYBRIDGE-NEW HAVEN
PROJECT NUMBER: BF 032-1(19)

FILE NAME: sl2b552bor.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: D. PETERSON
BORING LOGS 1

PLOT DATE: 20-APR-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: D. PETERSON
SHEET 32 OF 85

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

BORING LOG

Weybridge-New Haven
BF 032-1(19)
VT 17 Br. #8

Boring No.: **B-103**
Page No.: 1 of 1
Pin No.: 12b552
Checked By: END

Boring Crew: Gomes, Judkins, Emerson
Date Started: 11/08/16 Date Finished: 11/14/16
VTSPG NAD83: N 578914.02 ft E 1444199.23 ft
Station: 103+88.00 Offset: 16.75
Ground Elevation: 151.7 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:	CME 55 TRACK	CE = 1.41

Groundwater Observations

Date	Depth (ft)	Notes
11/14/16	14.8	W.T. after drilling

BOTTOM OF
PILE CAP
ELEV. 145.00

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (RQD %)	Drill Rate minutes/ft	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		Field Note:, Fill for drilling pad								
		Field Note:, No Recovery				1-3-2-2 (5)				
5		Field Note:, No Recovery				4-3-4-6 (7)				
		Field Note:, NXDC, Cleaned out casing								
		A-2-4, SiSa, brn, Moist, Rec. = 0.7 ft				5-3-3-3 (6)	11.5	19.1	47.2	33.7
		Field Note:, NXDC, Cleaned out casing								
		A-2-4, SiGrSa, brn, Moist, Rec. = 0.5 ft				6-4-5-3 (9)	12.8	30.1	45.3	24.6
10		Field Note:, Rollercone, Cleaned out casing								
		A-4, SaSi, brn, Moist, Rec. = 0.1 ft				3-2-3-2 (5)	32.2	0.5	21.3	78.2
		A-4, SaGrSi, brn, Moist, Rec. = 0.5 ft				5-11-R@1" (R)	19.6	38.7	22.3	39.0
15		14.9 ft - 19.9 ft, Blue gray, DOLOMITE, with calcite veins. Yellow and tan staining along joints.. Hard, Slightly weathered, Fair rock, NX, RMR=49	1 (40)	100 (38)	5 4 4 4 3	Top of Bedrock @ 14.9 ft				
20		19.9 ft - 24.9 ft, Blue gray, DOLOMITE, with calcite veins. Calcite crystals along joints with tan staining. Hard, Very slightly weathered, Good rock, NX, RMR=62	2 (50)	94 (72)	13 9 7 6 5					
25		Hole stopped @ 24.9 ft								

Remarks:
Hole collapsed at 7.0 feet.

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
<<SUB>><<SUB>> 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 2 WEYBRIDGE-NEW HAVEN BF032-1(19).GPJ VERMONT AOT.GDT 1/30/17

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

BORING LOG

Weybridge-New Haven
BF 032-1(19)
VT 17 Br. #8

Boring No.: **B-104**
Page No.: 1 of 1
Pin No.: 12b552
Checked By: END

Boring Crew: Judkins, Emerson
Date Started: 11/14/16 Date Finished: 11/16/16
VTSPG NAD83: N 578918.32 ft E 1444211.80 ft
Station: 104+1.00 Offset: 19.50
Ground Elevation: 150.3 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:	CME 55 TRACK	CE = 1.41

Groundwater Observations

Date	Depth (ft)	Notes
11/15/16	16.4	W.T. Before Drilling
11/16/16	11.9	W.T. Before Drilling

BOTTOM OF
PILE CAP
ELEV. 145.00

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (RQD %)	Drill Rate minutes/ft	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		Field Note:, Fill for Pad								
		Field Note:, NXDC, Cleaned out casing								
5		Field Note:, No Recovery				2-2-2-1 (4)				
		Field Note:, No Recovery				1-1-1-2 (2)				
		Field Note:, NXDC, Cleaned out casing								
		A-1-b, SiSaGr, brn, Moist, Rec. = 0.7 ft				4-4-5-4 (9)	9.3	40.3	36.1	23.6
10		Field Note:, NXDC, Cleaned out casing								
		A-2-4, GrSiSa, brn, Moist, Rec. = 0.8 ft				5-3-3-7 (6)	10.1	28.5	39.0	32.5
		Field Note:, NXDC, Cleaned out casing								
		Field Note:, No Recovery Field Note:, NXDC, Cleaned out casing				9-7-8-5 (15)				
15		A-4, GrSiSa, gry, Moist, Rec. = 1.0 ft				5-3-3-3 (6)	12.2	21.3	39.9	38.8
		Field Note:, No Recovery				4-3-4-3 (7)				
		A-4, SaSiGr, gry-blk, Moist, Rec. = 0.5 ft				5-5-R@0" (R)	14.0	41.0	22.6	36.4
20		19.0 ft - 24.0 ft, Blue gray, DOLOMITE, with calcite veins. Calcite crystals along joint surfaces. Hard, Severely to moderately weathered, Fair rock, NX, RMR=56	1 (70)	94 (60)	17 14 15 11 10	Top of Bedrock @ 19.0 ft				
25		Hole stopped @ 24.0 ft								

Remarks:
Hole collapsed at 0.0 feet.

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
<<SUB>><<SUB>> 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 2 WEYBRIDGE-NEW HAVEN BF032-1(19).GPJ VERMONT AOT.GDT 1/30/17

PROJECT NAME: WEYBRIDGE-NEW HAVEN
PROJECT NUMBER: BF 032-1(19)

FILE NAME: s12b552bor.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: D. PETERSON
BORING LOGS 2

PLOT DATE: 20-APR-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: D. PETERSON
SHEET 33 OF 85

STATE OF VERMONT
AGENCY OF TRANSPORTATION
CONSTRUCTION AND
MATERIALS BUREAU
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BORING LOG

Weybridge-New Haven
BF 032-1(19)
VT 17 Br. #8

Boring No.: **B-105**
Page No.: 1 of 1
Pin No.: 12b552
Checked By: END

Boring Crew: Garrow, Emerson
Date Started: 11/04/16 Date Finished: 11/07/16
VTSPG NAD83: N 578939.28 ft E 1444199.11 ft
Station: 104+00.85 Offset: -5.00
Ground Elevation: 153.7 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:	CME 55 TRACK	CE = 1.41

Groundwater Observations		
Date	Depth (ft)	Notes
11/07/16		No W.T. to depth

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (RQD %)	Drill Rate minutes/ft	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		Asphalt Pavement, 0.0 ft - 1.15 ft								
		A-1-a, SaGr, brn, Moist, Rec. = 0.9 ft				11-10-11-12 (21)	5.7	58.8	31.8	9.4
		Field Note:, Rollercone, Cleaned out casing								
		A-1-a, SaGr, brn, Moist, Rec. = 1.0 ft				8-11-9-7 (20)	5.4	54.0	30.6	15.4
		Field Note:, Rollercone, Cleaned out casing								
5		A-1-a, SaGr, brn, Moist, Rec. = 0.7 ft				6-6-4-6 (10)	5.1	68.7	23.2	8.1
		Field Note:, Rollercone, Cleaned out casing								
		A-1-a, SaGr, brn, Moist, Rec. = 0.6 ft				3-6-7-6 (13)	5.8	62.1	26.0	11.9
		Field Note:, Rollercone, Cleaned out casing								
10		Field Note:, No Recovery				7-6-3-8 (9)				
		Field Note:, Rollercone, Cleaned out casing								
		A-1-b, SaGr, brn, Moist, Rec. = 0.4 ft				5-12-9-6 (21)	8.3	48.1	32.5	19.4
		Field Note:, NXDC, Cleaned out casing								
		Field Note:, No Recovery				2-5-4-3 (9)				
15		Field Note:, NXDC, Cleaned out casing								
		A-1-b, Gr, brn-gry, Moist, Rec. = 0.3 ft				4-R@3.5"	9.0	64.2	18.1	17.7
		(R) Top of Bedrock @ 15.8 ft								
		15.8 ft - 19.8 ft, Blue gray, DOLOMITE, with calcite veins. Rust and tan staining along joints. Hard, Slightly weathered, Poor rock, NX, RMR=40	1 (45-55)	72 (36)	4 3 4 4					
20		19.8 ft - 20.8 ft, Blue gray, DOLOMITE, with calcite veins. Tan staining along joints. Hard, Very slightly weathered, Poor rock, NX, RMR=39	2 (45)	20 (35)	3					
		20.8 ft - 25.8 ft, Blue gray, DOLOMITE, with calcite veins. Faint tan and brown staining along joints. Hard, Very slightly weathered, Fair rock, NX, RMR=49	100 (45-50)	100 (34)	4 3 4 3 4					
25		Hole stopped @ 25.8 ft								
		Remarks: Hole collapsed at 5.5 feet.								
30										

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
<<SUB>><<SUB>> 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.

BOTTOM OF
PILE CAP
ELEV. 145.00

BORING LOG 2 WEYBRIDGE-NEW HAVEN BF032-1(19).GPJ VERMONT AOT.GDT 1/30/17

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

BORING LOG

Weybridge-New Haven
BF 032-1(19)
VT 17 Br. #8

Boring No.: **B-106**
Page No.: 1 of 1
Pin No.: 12b552
Checked By: END

Boring Crew: Judkins, Gomes
Date Started: 11/02/16 Date Finished: 11/04/16
VTSPG NAD83: N 578960.25 ft E 1444190.48 ft
Station: 104+4.18 Offset: -27.43
Ground Elevation: 144.8 ft

	Casing	Sampler
Type:	WB	SS
I.D.:	3 in	1.5 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:	Auto/AWJ	
Rig:	Diedrich 25	CE = Unknown

Groundwater Observations		
Date	Depth (ft)	Notes
11/04/16		No W.T. observed

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (RQD %)	Drill Rate minutes/ft	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		A-1-b, SiSaGr, brn, Dry, Rec. = 0.9 ft, Lab Note: Sticks and twigs were wtihin sample				2-2-4-4 (6)	8.1	41.7	37.7	20.6
2.5		A-1-b, SiSaGr, brn, MTD, Rec. = 1.4 ft, Lab Note: Broken rock was within sample				6-5-14-22 (19)	16.0	42.6	33.8	23.6
5.0		A-1-a, SaGr, brn, Moist, Rec. = 0.7 ft				8-18-14-49 (32)	11.8	66.6	21.3	12.1
7.5		6.0 ft - 11.0 ft, Blue gray, DOLOMITE, with quartz and calcite veins. Brown, orange, and rust staining along joints. Hard, Slightly weathered, Fair rock, BX, RMR=48	1 (70)	86 (50)	8 10 12 13 13	Top of Bedrock @ 6.0 ft				
10.0		11.0 ft - 16.0 ft, Blue gray, DOLOMITE, with calcite veins. Yellowish-orange staining along joints. Hard, Slightly weathered, Poor rock, BX, RMR=40	2 (70)	32 (0)	11 11 11 12 11					
12.5										
15.0										
17.5		Hole stopped @ 16.0 ft								
20.0		Remarks: Hole collapsed at 4.0 feet.								

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
<<SUB>><<SUB>> 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.

BOTTOM OF
PILE CAP
ELEV. 145.00

BORING LOG 2 WEYBRIDGE-NEW HAVEN BF032-1(19).GPJ VERMONT AOT.GDT 1/30/17

PROJECT NAME: WEYBRIDGE-NEW HAVEN
PROJECT NUMBER: BF 032-1(19)

FILE NAME: sl2b552bor.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: D. PETERSON
BORING LOGS 3

PLOT DATE: 20-APR-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: D. PETERSON
SHEET 34 OF 85

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

BORING LOG

Weybridge-New Haven
BF 032-1(19)
VT 17 Br. #8

Boring No.: **B-107A**
Page No.: 1 of 1
Pin No.: 12b552
Checked By: END

Boring Crew: Gomes, Judkins, Olden
Date Started: 12/06/16 Date Finished: 12/07/16
VTSPG NAD83: N 578973.13 ft E 1444279.24 ft
Station: 104+87.00 Offset: 7.00
Ground Elevation: 155.1 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:	CME 45C SKID	CE = 1.42

Groundwater Observations

Date	Depth (ft)	Notes
12/07/17	20.4	W.T. after drilling

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (RQD %)	Drill Rate minutes/ft	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		Asphalt Pavement, 0.0 ft - 0.1 ft								
		Concrete, 0.1 ft - 1.25 ft, (Bridge Deck)								
20		Field Note:, Top of Water								
		Concrete, 21.9 ft - 24.5 ft, (Footing)								
TOP OF PIER FOOTING ELEV. 130.50		24.5 ft - 29.5 ft, Blue gray, Interbedded META-LIMESTONE, and DOLOMITE with calcite veins. Faint orange/yellow staining along joints. Hard, Very slightly weathered, Fair rock, NX, RMR=48	1 (50)	84 (61)	7 6 6 5 3					
30		Top of Bedrock @ 24.5 ft 29.5 ft - 34.5 ft, Dark-gray to black, Interbedded calcareous-sulfidic-SHALE, and DOLOMITE with calcite veins. Sub-vertical joint from 29.5 feet to 30.2 feet. Faint rust and brown/gray coating on joints.. Moderately hard to hard, Slightly weathered, Fair rock, NX, RMR=50	2 (60)	84 (83)	6 6 6 6 7					
35		Hole stopped @ 34.5 ft								

Remarks:
1. Backfilled hole with cement grout to top of footing.

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
<<SUB>><<SUB>> 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 2 WEYBRIDGE-NEW HAVEN BF032-1(19).GPJ VERMONT AOT.GDT 1/30/17

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

BORING LOG

Weybridge-New Haven
BF 032-1(19)
VT 17 Br. #8

Boring No.: **B-108A**
Page No.: 1 of 1
Pin No.: 12b552
Checked By: END

Boring Crew: Garrow, Judkins, Olden
Date Started: 12/20/16 Date Finished: 12/21/16
VTSPG NAD83: N 579019.09 ft E 1444328.91 ft
Station: 105+53.20 Offset: -7.00
Ground Elevation: 156.2 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:	CME 45C SKID	CE = 1.42

Groundwater Observations

Date	Depth (ft)	Notes
12/21/17	7.4	W.T. above ground

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (RQD %)	Drill Rate minutes/ft	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		Asphalt Pavement, 0.0 ft - 0.15 ft								
		Conrete, 0.15 ft - 1.3 ft, (Bridge Deck)								
TOP OF PIER FOOTING ELEV. 130.50		27.5 ft - 28.5 ft, Gray, /dark gray DOLOMITE, with calcite veins and rare pyrite. Faint rust staining on joints. Moderately hard, Very slightly weathered, Fair rock, NX, RMR=46	1 (50)	70 (50)	15 7					
30		28.5 ft - 32.5 ft, Gray, DOLOMITE, with calcite veins and rare pyrite. Moderately hard, Unweathered, Good rock, NX, RMR=69	2 (40-50)	98 (95)	7 6 6					
35		32.5 ft - 37.5 ft, Dark-gray to black, Interbedded DOLOMITE, with calcite veins and pyrite and sulfidic SHALEY-DOLOMITE with calcite veins. Yellow and gray staining along joints. Sub-vertical weathered joint at 8.9 feet to 9.5 feet. Moderately hard, Slightly weathered, Fair rock, NX, RMR=44	3 (60-70)	98 (57)	5 5 6 5 6					
40		Hole stopped @ 37.5 ft								

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
<<SUB>><<SUB>> 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 2 WEYBRIDGE-NEW HAVEN BF032-1(19).GPJ VERMONT AOT.GDT 1/30/17

PROJECT NAME: WEYBRIDGE-NEW HAVEN
PROJECT NUMBER: BF 032-1(19)

FILE NAME: sl2b552bor.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: D. PETERSON
BORING LOGS 4

PLOT DATE: 20-APR-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: D. PETERSON
SHEET 35 OF 85

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

BORING LOG

Weybridge-New Haven
BF 032-1(19)
VT 17 Br. #8

Boring No.: **B-109**
Page No.: 1 of 2
Pin No.: 12b552
Checked By: END

Boring Crew: Olden, Garrow, Emerson
Date Started: 11/17/16 Date Finished: 12/02/16
VTSPG NAD83: N 579069.68 ft E 1444398.05 ft
Station: 106+38.41 Offset: -15.00
Ground Elevation: 154.5 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:	CME 45C SKID	CE = 1.42

Groundwater Observations		
Date	Depth (ft)	Notes
12/01/17		No W.T. to 15.5 feet
12/02/17	19.5	W.T. before drilling

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (RQD %)	Drill Rate minutes/ft	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		Field Note:, Fill for drilling pad								
5		A-1-a, SaGr, brn, Moist, Rec. = 0.4 ft				7-4-3-3 (7)	12.6	59.1	34.8	6.1
		Field Note:, NXDC, Cleaned out casing								
		A-4, GrSaSi, brn, Moist, Rec. = 0.6 ft				4-6-2-3 (8)	10.8	23.9	37.0	39.1
		A-4, SaSi, brn, Moist, Rec. = 0.4 ft				4-2-2-1 (4)	10.7	16.1	39.0	44.9
10		Field Note:, No Recovery, Stone stuck in the end of the sampler				4-13-7-11 (20)				
		A-2-4, SaSiGr, brn, Moist, Rec. = 0.8 ft				11-7-13-10 (20)	9.9	36.0	31.7	32.3
		Field Note:, Cobbles								
15		Field Note:, NXDC, Cleaned out casing								
		A-4, GrSaSi, brn, Moist, Rec. = 0.8 ft				2-2-2-2 (4)	11.4	21.3	37.6	41.1
		A-4, SaSi, brn, Moist, Rec. = 1.2 ft				1-2-2-2 (4)	13.9	12.6	39.6	47.8
20		A-2-4, GrSiSa, gry, Moist, Rec. = 0.7 ft				3-3-8-3 (11)	14.2	32.0	35.4	32.6
		Field Note:, NXDC, Cleaned out casing								
25		A-2-4, SiSa, brn, Moist, Rec. = 0.3 ft				3-2-2-2 (4)	30.5	14.9	59.4	25.7
30		A-2-4, GrSiSa, gry, Moist, Rec. = 2.0 ft, Lab Note: A small amount of clay was within sample. Sample tested non-plastic				3-4-3-1 (7)	9.8	28.1	41.4	30.5
35		Field Note:, No Recovery				1-5-6-8 (11)				

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
<<SUB>><<SUB>> 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.

BOTTOM OF
PILE CAP
ELEV. 146.00

BORING LOG 2 WEYBRIDGE-NEW HAVEN BF032-1(19).GPJ VERMONT AOT.GDT 1/30/17

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

BORING LOG

Weybridge-New Haven
BF 032-1(19)
VT 17 Br. #8

Boring No.: **B-109**
Page No.: 2 of 2
Pin No.: 12b552
Checked By: END

Boring Crew: Olden, Garrow, Emerson
Date Started: 11/17/16 Date Finished: 12/02/16
VTSPG NAD83: N 579069.68 ft E 1444398.05 ft
Station: 106+38.41 Offset: -15.00
Ground Elevation: 154.5 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:	CME 45C SKID	CE = 1.42

Groundwater Observations		
Date	Depth (ft)	Notes
12/01/17		No W.T. to 15.5 feet
12/02/17	19.5	W.T. before drilling

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (RQD %)	Drill Rate minutes/ft	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		Field Note:, NXDC, Cleaned out casing								
40		A-3, Sa, blk, Moist, Rec. = 0.9 ft				7-6-5-6 (11)	18.8	8.0	88.1	3.9
45		A-4, SiSa, gry, Moist, Rec. = 0.9 ft, Lab Note: A small amount of clay was within sample. Sample tested non-plastic				13-10-11-18 (21)	8.9	19.7	43.7	36.6
50		Field Note:, Cobbles								
55		A-3, Sa, gry, Moist, Rec. = 0.8 ft				11-17-30-28 (47)	20.2	4.7	88.8	6.5
		A-4, SaGrSi, gry, Moist, Rec. = 1.0 ft, Lab Note: Some clay was within sample. Sample tested non-plastic					7.8	31.6	28.9	39.5
60		58.0 ft - 63.0 ft, Dark gray, DOLOMITE, with calcite veins. Sub-vertical joints at 58.4 to 59.1 feet. Calcite crystals along joint surfaces. Some joints are faded light brown/gray. Hard, Slightly weathered, Fair rock, NX, RMR=47	1 (60-70)	88 (48)	6 6 6 5 5	Top of Bedrock @ 58.0 ft				
65		63.0 ft - 68.0 ft, Dark gray, DOLOMITE, with calcite veins. Sub-vertical joints at 58.4 to 59.1 feet. Calcite crystals along joint surfaces. Some joints are faded light gray. Hard, Very slightly weathered, Fair rock, NX, RMR=52	2 (60-70)	100 (68)	8 9 7 7 7					
70		Hole stopped @ 68.0 ft								
		Remarks: Hole collapsed at 4.0 feet.								

Notes:
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<<SUB>><<SUB>> 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.

APPROX. PILE TIP
ELEV. 96.5

BORING LOG 2 WEYBRIDGE-NEW HAVEN BF032-1(19).GPJ VERMONT AOT.GDT 1/30/17

PROJECT NAME: WEYBRIDGE-NEW HAVEN
PROJECT NUMBER: BF 032-1(19)

FILE NAME: sl2b552bor.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: D. PETERSON
BORING LOGS 5

PLOT DATE: 20-APR-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: D. PETERSON
SHEET 36 OF 85

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

BORING LOG

Weybridge-New Haven
BF 032-1(19)
VT 17 Br. #8

Boring No.: **B-112**
Page No.: 1 of 2
Pin No.: 12b552
Checked By: END

Boring Crew: Judkins, Gomes
Date Started: 10/25/16 Date Finished: 10/27/16
VTSPG NAD83: N 579052.12 ft E 1444409.05 ft
Station: 106+38.98 Offset: 5.65
Ground Elevation: 156.6 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:	CME 45C SKID	CE = 1.42

Groundwater Observations

Date	Depth (ft)	Notes
10/26/16	22.6	W.T. Before Drilling
10/27/16	22.6	W.T. Before Drilling

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (RQD %)	Drill Rate minutes/ft	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		Asphalt Pavement, 0.0 ft - 1.3 ft								
		A-1-a, SaGr, brn, Moist, Rec. = 0.7 ft, Lab Note: Some asphalt pavement was within sample.				7-12-15 (19)	7.7	66.3	27.4	6.3
		Field Note:, NXDC, cleaned out casing.				7-6-9-8 (15)	7.6	58.4	29.4	12.2
5		A-1-a, SaGr, brn, Moist, Rec. = 1.1 ft								
		Field Note:, NXDC, cleaned out casing.				8-6-4-4 (10)	9.9	20.7	35.3	44.0
		A-4, GrSaSi, brn, Moist, Rec. = 1.0 ft								
		Field Note:, Rollercone, cleaned out casing.				4-11-6-5 (17)	16.0	37.1	32.3	30.6
		A-2-4, SiSaGr, brn, Moist, Rec. = 0.6 ft								
		Field Note:, NXDC, cleaned out casing.				6-6-4-7 (10)	12.3	16.8	39.1	44.1
10		A-4, SaSi, brn, Moist, Rec. = 0.9 ft								
		A-4, SaSi, brn, Moist, Rec. = 1.0 ft				4-3-3-2 (6)	10.8	15.7	38.6	45.7
		Field Note:, NXDC, cleaned out casing.								
		A-4, GrSaSi, brn, Moist, Rec. = 0.8 ft				2-1-2-4 (3)	11.2	22.2	35.4	42.4
15		Field Note:, NXDC, cleaned out casing.								
		A-4, GrSaSi, brn, Moist, Rec. = 0.9 ft				4-2-3-4 (5)	10.5	24.4	35.0	40.6
		A-4, SaSi, gray, Moist, Rec. = 1.0 ft, Lab Note: A very small amount of clay was within sample. Sample tested Non-Plastic.				3-2-1-3 (3)	11.9	19.6	35.1	45.3
20		A-4, GrSaSi, gray, Moist, Rec. = 0.6 ft				4-1-2-3 (3)	10.9	23.3	34.9	41.8
		Field Note:, Rollercone, cleaned out casing.								
25		Field Note:, No Recovery				2-1-2-1 (3)				
		Field Note:, Pushed 3"x30" Shelby Tube, No Recovery								
30		30.0 ft - 32.0 ft				2-1-2-6 (3)				
		A-4, GrSaSi, gry-brn, Moist, Rec. = 1.2 ft, Lab Note: Pieces of decomposing wood were within sample. Sample tested Non-Plastic.				15-16-11-16 (27)	22.4	26.4	30.2	43.4
		Field Note:, NXDC, cleaned out casing.								
35		35.0 ft - 37.0 ft				10-8-7-4 (15)				
		Field Note:, Rollercone, cleaned out casing.								
40		Field Note:, No Recovery				1-1-1-1 (2)				
		Field Note:, Pushed 3"x30" Shelby Tube, No Recovery								

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
<<SUB>><<SUB>> 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.

BOTTOM OF PILE CAP ELEV. 146.00

BORING LOG 2 WEYBRIDGE-NEW HAVEN BF032-1(19).GPJ VERMONT AOT.GDT 1/30/17

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

BORING LOG

Weybridge-New Haven
BF 032-1(19)
VT 17 Br. #8

Boring No.: **B-112**
Page No.: 2 of 2
Pin No.: 12b552
Checked By: END

Boring Crew: Judkins, Gomes
Date Started: 10/25/16 Date Finished: 10/27/16
VTSPG NAD83: N 579052.12 ft E 1444409.05 ft
Station: 106+38.98 Offset: 5.65
Ground Elevation: 156.6 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:	CME 45C SKID	CE = 1.42

Groundwater Observations

Date	Depth (ft)	Notes
10/26/16	22.6	W.T. Before Drilling
10/27/16	22.6	W.T. Before Drilling

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (RQD %)	Drill Rate minutes/ft	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		A-4, SaSi, gray, Moist, Rec. = 1.9 ft, Lab Note: A small amount of clay was within sample. Sample tested Non-Plastic.				3-2-2-3 (4)	10.9	16.8	33.5	49.7
		Field Note:, Rollercone, cleaned out casing.								
50		A-2-4, SiSaGr, gray, Moist, Rec. = 0.5 ft, Lab Note: A very small amount of clay was within sample. Sample tested Non-Plastic.				3-1-2-3 (3)	10.1	36.2	34.3	29.5
		Field Note:, NXDC, cleaned out casing.								
55		Field Note:, No Recovery				7-6-7-10 (13)				
		Field Note:, NXDC, cleaned out casing.								
60		A-4, SaSi, gray, Moist, Rec. = 1.8 ft, Lab Note: Some clay was within sample. Sample tested Non-Plastic.				15-22-35-R@4" (R)	8.0	15.3	31.7	53.0
		62.3 ft - 67.3 ft, Light gray/gray to black, Interbedded META-LIMESTONE, and DOLOMITE with calcite veins. Faint brown staining on joints. Hard, Unweathered, Poor rock, NX, RMR=34	R-1 (40)	92 (0)	4 4 4 10 4	Top of Bedrock @ 62.3 ft				
65										
		67.3 ft - 72.3 ft, Light gray/gray to black, Interbedded META-LIMESTONE, and DOLOMITE with calcite veins. Faint brown and yellow staining on joints. Hard, Unweathered, Good rock, NX, RMR=64	R-2 (40)	98 (89)	4 4 4 4 5 4					
70										
		Hole stopped @ 72.3 ft								
75										
		Remarks: Hole collapsed at 8.9 feet.								
80										
85										

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
<<SUB>><<SUB>> 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.

APPROX. PILE TIP ELEV. 94.3

BORING LOG 2 WEYBRIDGE-NEW HAVEN BF032-1(19).GPJ VERMONT AOT.GDT 1/30/17

PROJECT NAME: WEYBRIDGE-NEW HAVEN
PROJECT NUMBER: BF 032-1(19)

FILE NAME: s12b552bor.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: D. PETERSON
BORING LOGS 6

PLOT DATE: 20-APR-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: D. PETERSON
SHEET 37 OF 85

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

BORING LOG

Weybridge-New Haven
BF 032-1(19)
VT 17 Br. #8

Boring No.: **B-113**
Page No.: 1 of 1
Pin No.: 12b552
Checked By: AJT

Boring Crew: Judkins, Emerson
Date Started: 11/28/16 Date Finished: 11/30/16
VTSPG NAD83: N 579097.12 ft E 1444498.90 ft
Station: 107+40.40 Offset: 3.76
Ground Elevation: 157.4 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:	CME 55 TRACK	CE = 1.41

Groundwater Observations

Date	Depth (ft)	Notes
11/30/16	4.0	W.T. during drilling

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	LL %	PI %
		Asphalt Pavement, brn, Moist, 0.0 ft - 0.85 ft							
		A-1-b, SaGr, brn, Moist, Rec. = 0.6 ft	9-19-19-14 (38)	6.1	47.5	35.7	16.8		
		A-2-4, SiGrSa, brn, Moist, Rec. = 1.4 ft	9-6-5-5 (11)	9.9	34.0	40.7	25.3		
5		A-2-4, GrSiSa, brn, Moist, Rec. = 0.5 ft	7-6-5-6 (11)	9.5	25.2	43.3	31.5		
		A-4, SiSa, brn, Moist, Rec. = 0.3 ft	5-4-6-10 (10)	11.5	18.7	42.6	38.7		
		A-2-4, SiSa, brn, Moist, Rec. = 1.0 ft	7-5-8-6 (13)	11.7	19.9	45.4	34.7		
10		Field Note:, No Recovery	10-10-10-8 (20)						
		Field Note:, No Recovery	7-2-2-1 (4)						
		A-4, Si, gry, Moist, Rec. = 0.7 ft, Lab Note: Some clay was within sample. Sample tested non-plastic	7-5-4-5 (9)	32.2	0.7	8.7	90.6		
15		Visual Description:, Si, gry, Moist, Field Note: Pushed 3x30 inch Shelby Tube							
		A-6, SiCl, gry, Moist, Field Note: Pushed 3x30 inch Shelby Tube		27.5		6.7	93.3	40	18
20									
		A-4, Si, gry, Moist, Rec. = 2.0 ft, Lab Note: A small amount of clay was within sample. Sample tested non-plastic	WH-WH-WH-WH (WH)	28.3		16.2	83.8		
25									
		A-4, GrSaSi, gry, Moist, Rec. = 0.9 ft	1-10-14-19 (24)	13.3	25.2	33.0	41.8		
		A-2-4, Sa, gry-blk, Moist, Rec. = 0.8 ft		16.0	8.3	72.5	19.2		
30		Hole stopped @ 32.0 ft							
		Remarks: Hole collapsed at 5.7 feet.							
35									

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
<<SUB>><<SUB>> 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 2 WEYBRIDGE-NEW HAVEN BF032-1(19).GPJ VERMONT AOT.GDT 1/30/17

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

BORING LOG

Weybridge-New Haven
BF 032-1(19)
VT 17 Br. #8

Boring No.: **B-114**
Page No.: 1 of 1
Pin No.: 12b552
Checked By: AJT

Boring Crew: Judkins, Gomes
Date Started: 11/30/16 Date Finished: 11/30/16
VTSPG NAD83: N 579123.92 ft E 1444595.68 ft
Station: 108+41.61 Offset: 4.00
Ground Elevation: 160.0 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:	CME 55 TRACK	CE = 1.41

Groundwater Observations

Date	Depth (ft)	Notes
11/30/16	7.5	W.T. during drilling

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	LL %	PI %
		Asphalt Pavement, 0.0 ft - 0.53 ft							
		Reclaimed Stabilised Base, 0.53 ft - 1.5 ft							
		A-1-b, GrSa, brn, Moist, Rec. = 0.8 ft	11-9-8 (20)	6.6	44.1	45.2	10.7		
		A-4, GrSiSa, brn, Moist, Rec. = 1.2 ft	5-6-4-4 (10)	13.9	20.7	42.2	37.1		
5		A-2-4, SiGrSa, brn, Moist, Rec. = 1.8 ft	6-12-7-8 (19)	8.2	29.5	43.8	26.7		
		A-2-4, GrSiSa, brn, Moist, Rec. = 1.2 ft Field Note:, Rollercone, cleaned out casing	4-4-7-10 (11)	8.4	25.8	43.6	30.6		
		Field Note:, No Recovery	11-9-5-4 (14)						
10		A-1-b, SaGr, brn, Moist, Rec. = 0.6 ft Field Note:, NXDC, cleaned out casing	4-3-8-6 (11)	9.9	40.3	40.0	19.7		
		A-2-4, GrSiSa, gry, Moist, Rec. = 0.3 ft Field Note:, NXDC, cleaned out casing	7-1-1-2 (2)	11.3	23.5	45.7	30.8		
		Field Note:, No Recovery Field Note:, Rollercone, cleaned out casing	4-5-9-10 (14)						
15		Field Note:, Pushed 3x30 inch Shelby Tube, Rec. = 1.9 ft Field Note:, Rollercone, cleaned out casing							
		A-7-6, Cl, gry, Moist, Rec. = 1.7 ft	3-6-9-13 (15)	31.8	0.7	2.3	97.0	54	29
20									
		A-6, SiCl, brn-gry, Moist, Rec. = 2.0 ft	2-3-5-7 (8)	34.8	4.0	8.7	87.3	31	14
25									
		A-4, GrSaSi, gry, Moist, Rec. = 2.0 ft, Lab Note: Some clay was within sample. Sample tested non-plastic	4-4-7-8 (11)	10.8	22.4	33.0	44.6		
30		Hole stopped @ 32.0 ft							
		Remarks: Hole collapsed at 6.5 feet.							
35									

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
<<SUB>><<SUB>> 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 2 WEYBRIDGE-NEW HAVEN BF032-1(19).GPJ VERMONT AOT.GDT 1/30/17

PROJECT NAME: WEYBRIDGE-NEW HAVEN
PROJECT NUMBER: BF 032-1(19)

FILE NAME: sl2b552bor.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: D. PETERSON
BORING LOGS 7

PLOT DATE: 20-APR-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: D. PETERSON
SHEET 38 OF 85

BEGIN BRIDGE
STA 103+99.00

2'-6" (TYP)
FIRST POST
OFF BRIDGE

CL BEARING ABUT #1
STA 103+99.50

TOWN LINE

CL BEARING PIER
STA 105+15.00

CL BEARING ABUT #2
STA 106+40.00
P.O.S.T.

PC
STA 106+35.06

END BRIDGE
STA 106+40.50
P.O.S.T.

WW1
WW2
WW3
WW4
1:2

STONE FILL

104+00
105+00
106+00
90°

51+25
51+00
50+50

STONE FILL,
TYPE III

WEYBRIDGE
NEW HAVEN

VT 17 STA 105+00 =
CHANNEL LINE STA 51+00.00
△ = 90°

OTTER CREEK
FLOW

N

VT STATE PLANE GRID

PLAN

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

HEAVY DUTY STEEL BEAM
GUARDRAIL, GALV. W/8 FT POST

29'-7"

PAY LIMITS SPECIAL PROVISION (GUARDRAIL THRIE BEAM APPROACH SECTION, GALVANIZED 3 RAIL BOX BEAM)

242.5' - PAY LIMIT BRIDGE RAILING, GALVANIZED 3 RAIL BOX BEAM LT/RT

TOTAL SPAN 240'-6"

170
160
150
140
130
120

INT
FIXED
INT.

1% AEP EL=148'

STONE FILL,
TYPE III

EXISTING GROUND

REMOVE EXISTING PIER TO 1'-0"
BELOW STREAM BED ELEVATION

REMOVE EXISTING PIER TO
EXISTING STREAM BED ELEVATION

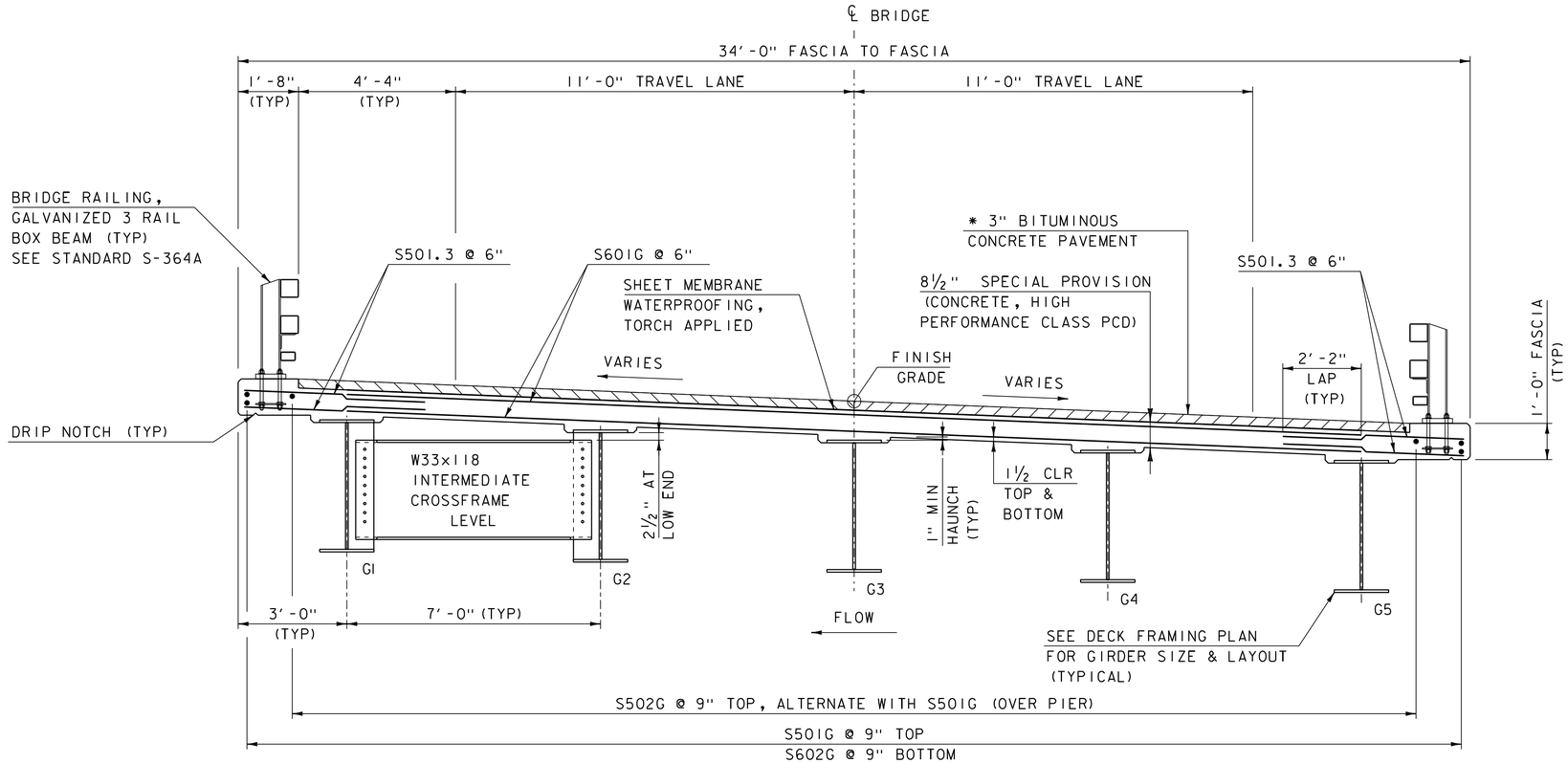
ELEVATION

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

PROJECT NAME: WEYBRIDGE-NEW HAVEN
PROJECT NUMBER: BF 032-1(19)

FILE NAME: sl2b552pe.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: D. PETERSON
PLAN & ELEVATION

PLOT DATE: 20-APR-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: D. PETERSON
SHEET 39 OF 85

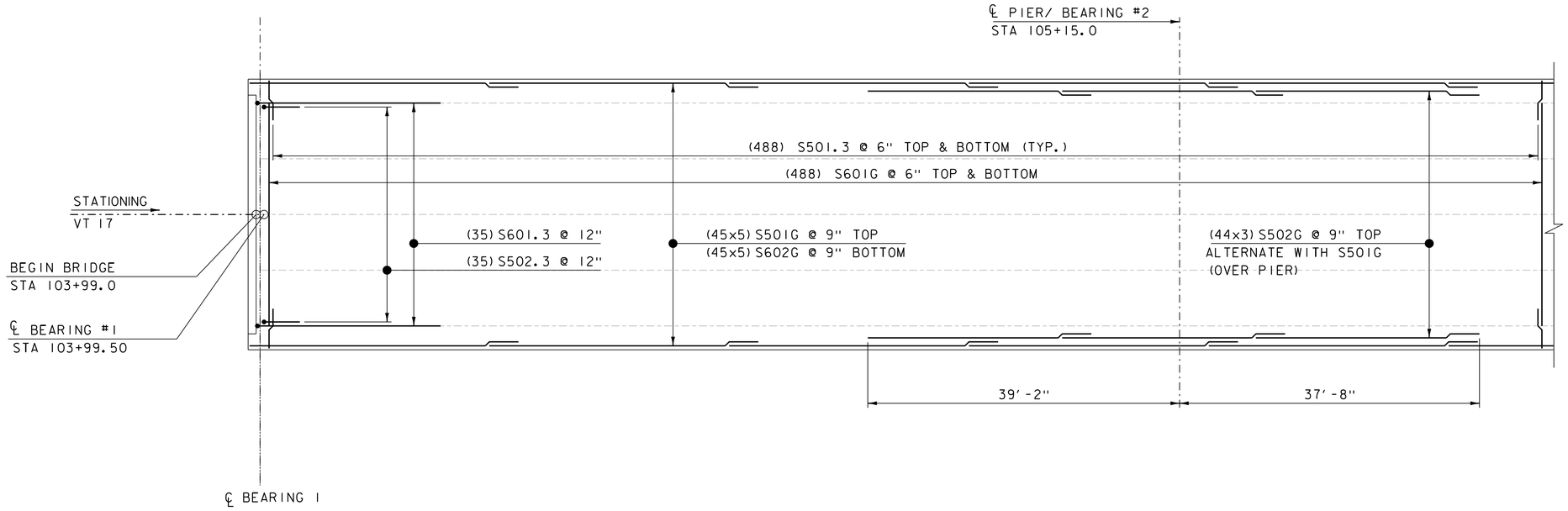


DECK REINFORCING SECTION

SCALE: ½" = 1'-0"

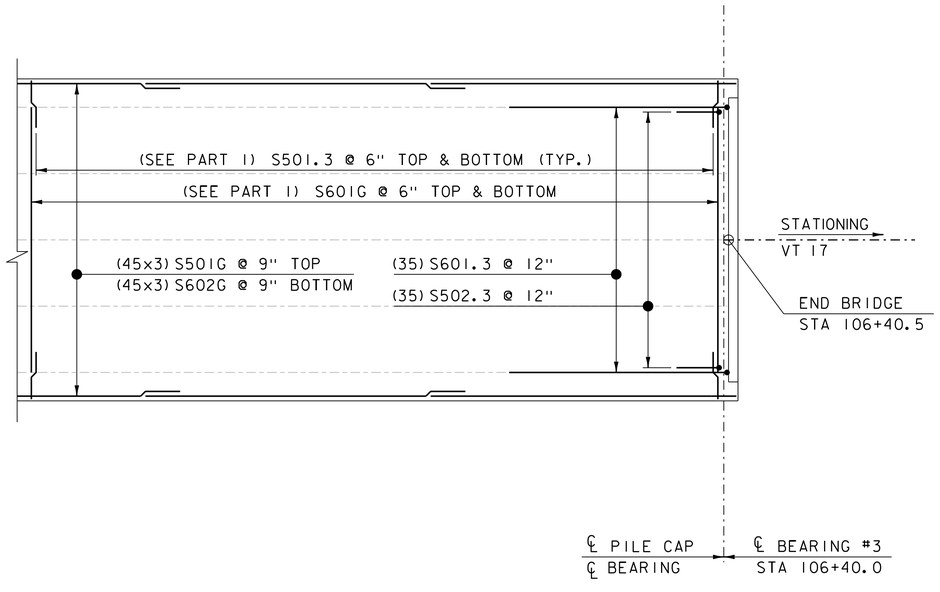
*SEE BRIDGE TYPICAL SECTION FOR PAVEMENT DETAILS

PROJECT NAME:	WEYBRIDGE-NEW HAVEN
PROJECT NUMBER:	BF 032-1(19)
FILE NAME: s12b552sup.dgn	PLOT DATE: 20-APR-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: D. PETERSON	CHECKED BY: D. PETERSON
DECK TYPICAL	SHEET 40 OF 85



DECK REINFORCING PLAN (PART 1)

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



DECK REINFORCING PLAN (PART 2)

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

NOTE:

NF = NEAR FACE
FF = FAR FACE
EF = EACH FACE
▲ = CUT TO FIT IN FIELD
3" CLEAR, UNLESS OTHERWISE SPECIFIED ON THE PLANS.

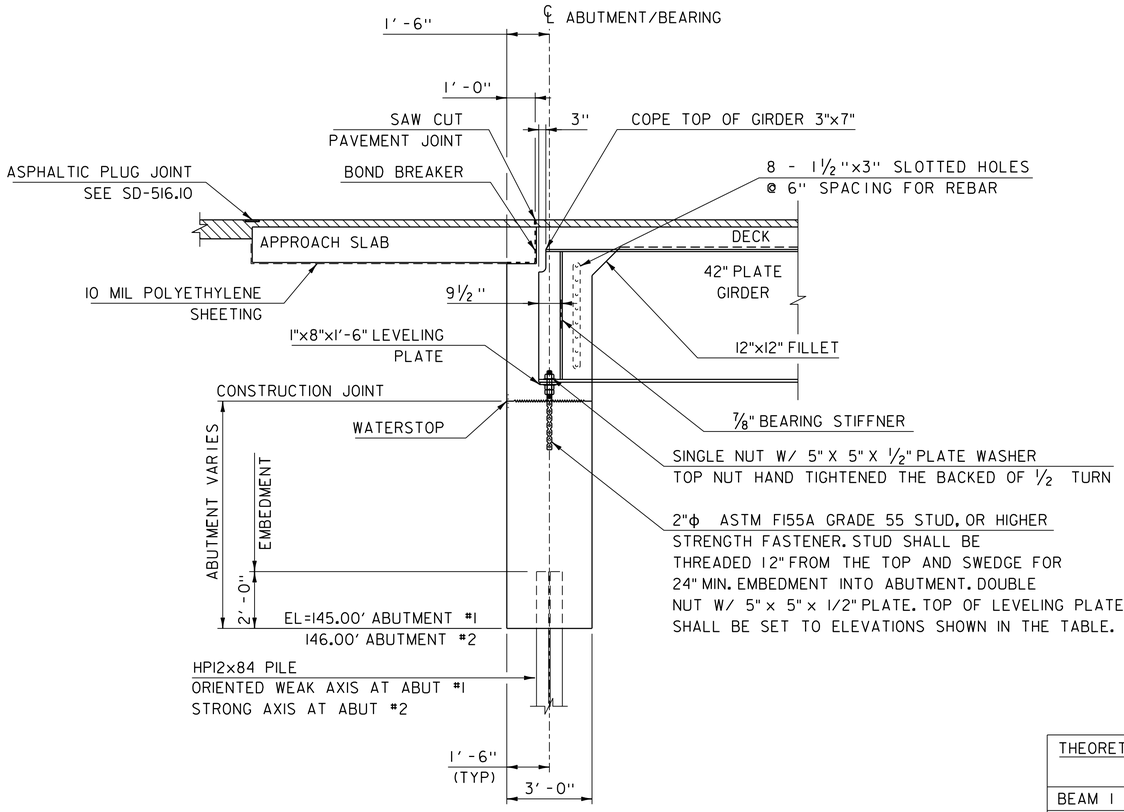
NOTE:

NF = NEAR FACE
FF = FAR FACE
EF = EACH FACE
▲ = CUT TO FIT IN FIELD
3" CLEAR, UNLESS OTHERWISE SPECIFIED ON THE PLANS.
2'-2" BAR LAP UNLESS OTHERWISE SPECIFIED ON THE PLANS.
3'-8" BAR LAP FOR GFRP LONGITUDINAL BARS.

PROJECT NAME: WEYBRIDGE-NEW HAVEN
PROJECT NUMBER: BF 032-1(19)

FILE NAME: sl2b552sup.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: D. PETERSON
DECK REINFORCING PLAN

PLOT DATE: 20-APR-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: D. PETERSON
SHEET 41 OF 85



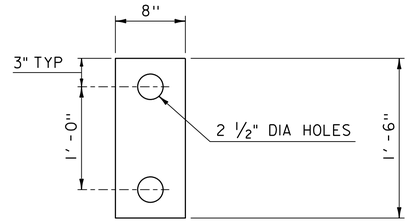
ABUTMENT END BRIDGE DETAIL

SCALE: ⅜" = 1'-0"

NOTES:

1) PAYMENT FOR LEVELING PLATES, ANCHOR BOLTS, WASHERS, NUTS AND MORTAR TYPE IV SHALL BE INCIDENTAL TO ITEMS 506.55 STRUCTURAL STEEL, PLATE GIRDER.

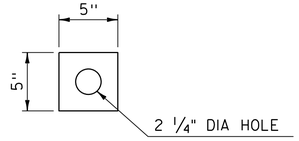
2) ALL STEEL IN THE LEVELING PLATE ASSEMBLY SHALL BE AASHTO M270 GR 50W.



LEVELING PLATE DETAIL

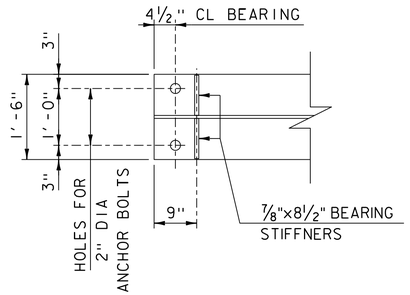
NOT TO SCALE

THEORETICAL TOP OF SOLE PLATE ELEVATION:		
	ABUTMENT #1	ABUTMENT #2
BEAM 1	149.24	152.86
BEAM 2	149.07	152.38
BEAM 3	148.91	151.91
BEAM 4	148.74	151.43
BEAM 5	148.58	151.96



1/2" PLATE WASHER DETAIL

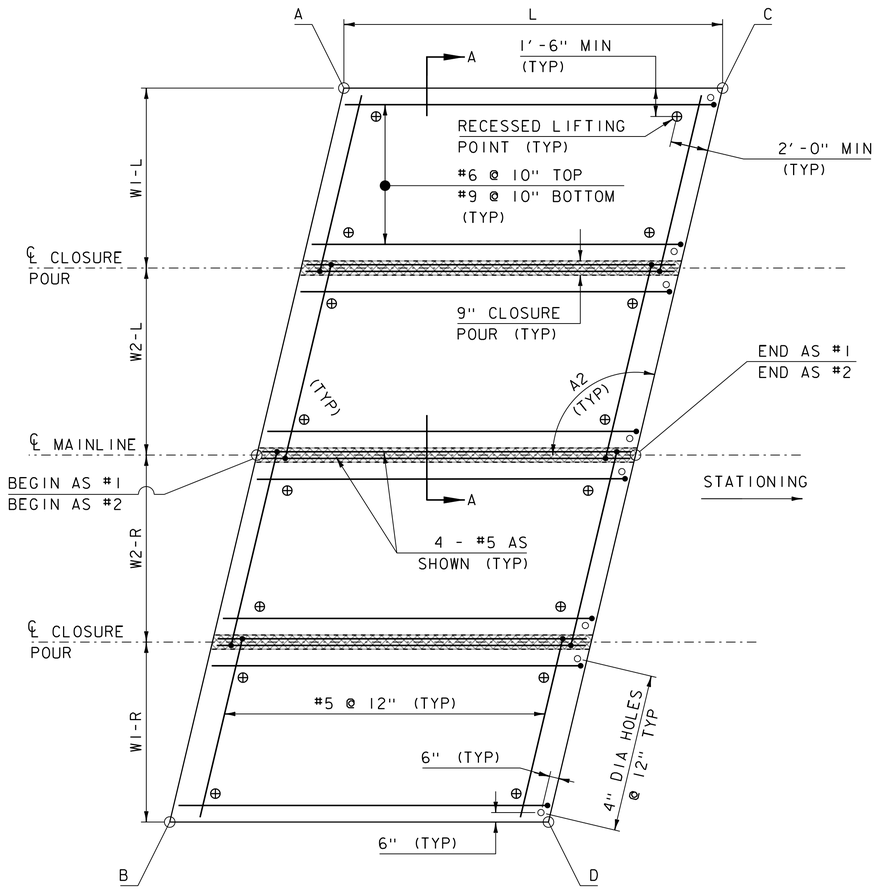
NOT TO SCALE



END BEAM BEARING DETAIL

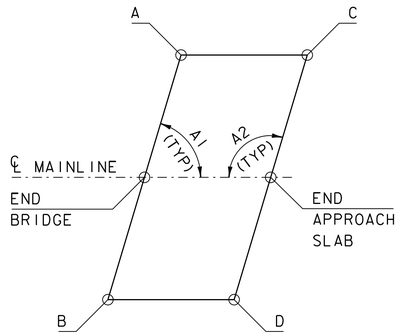
SCALE: ¾" = 1'-0"

PROJECT NAME:	WEYBRIDGE-NEW HAVEN
PROJECT NUMBER:	BF 032-1(19)
FILE NAME: s12b552sub.dgn	PLOT DATE: 20-APR-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: D. PETERSON	CHECKED BY: D. PETERSON
BEGIN/END BRIDGE DETAILS	SHEET 42 OF 85



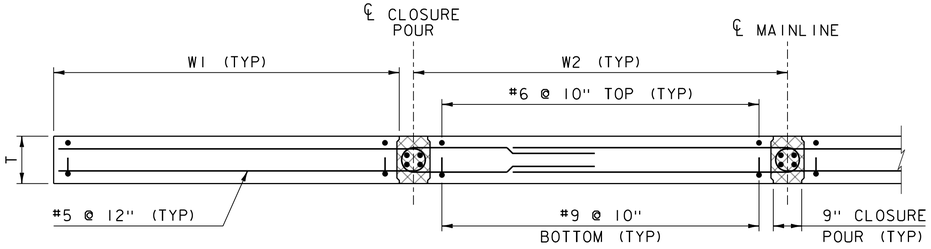
APPROACH SLAB #1 PLAN VIEW

NOT TO SCALE



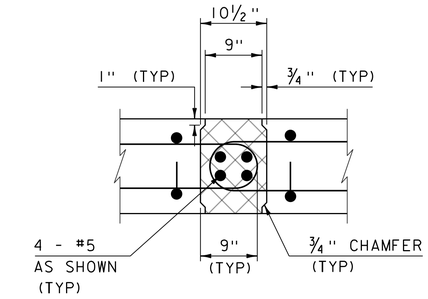
APPROACH SLAB #2 PLAN VIEW

NOT TO SCALE



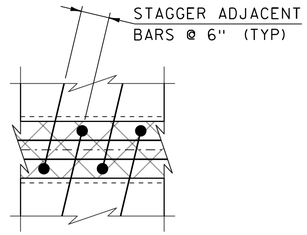
SECTION A-A

SCALE 1/2" = 1'-0"



CONNECTION DETAIL SECTION

SCALE 1" = 1'-0"

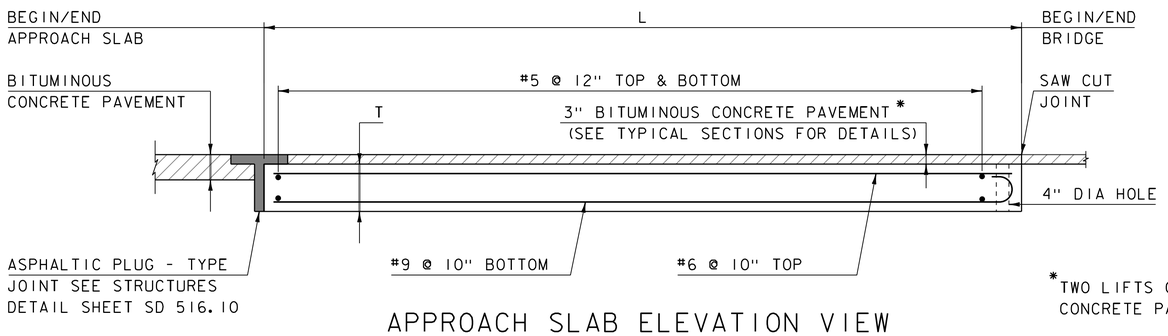


CONNECTION DETAIL PLAN

SCALE 1" = 1'-0"

APPROACH SLAB #1			
	STATION	OFFSET	ELEVATION
1A	103+79.00	15.33	153.59
BEGIN AS #1	103+79.00	0.00	153.31
1B	103+79.00	15.33	152.99
1C	103+99.00	15.33	153.92
END AS #1	103+99.00	0.00	153.56
1D	103+99.00	15.33	153.19

1. LIFTING POINTS SHALL BE DESIGNED BY FABRICATOR AND SUBMITTED WITH CALCULATIONS.
2. REINFORCING STEEL FOR APPROACH SLAB #2 SHALL BE SIMILAR TO THAT SHOWN FOR APPROACH SLAB #1
3. CLOSURE POUR CONCRETE SHALL BE PAID FOR UNDER ITEM 900.608 SPECIAL PROVISION (HIGH PERFORMANCE CONCRETE, RAPID SET) (FPO)



APPROACH SLAB ELEVATION VIEW

SCALE 1/2" = 1'-0"

*TWO LIFTS OF 1 1/2 BITUMINOUS CONCRETE PAVEMENT TYPE IVB

T	1'-3"
L	20'-0"
W1-R	7'-4"
W2-R	8'-0"
W1-L	7'-4"
W2-L	8'-0"

APPROACH SLAB #1	A1	90°
	A2	90°

POINTS BASED ON SUBTANGENT CONTROL		
APPROACH SLAB #2	A1	90°
	A2	90°

APPROACH SLAB DIMENSIONS

NOTE:

NF = NEAR FACE
FF = FAR FACE
EF = EACH FACE
3" CLEAR, UNLESS OTHERWISE SPECIFIED ON THE PLANS.
2'-7" BAR LAP UNLESS OTHERWISE SPECIFIED ON THE PLANS.

APPROACH SLAB #2			
	STATION	OFFSET	ELEVATION
2A	106+40.36	15.36	157.66
BEGIN AS #2	106+40.50	0.00	156.58
2B	106+40.65	15.31	154.54
2C	106+59.86	15.32	157.87
END AS #2	106+60.51	0.00	156.83
END AS #2	106+60.50 P.O.S.T.	0.00	156.87
2D	106+61.19	15.32	155.74

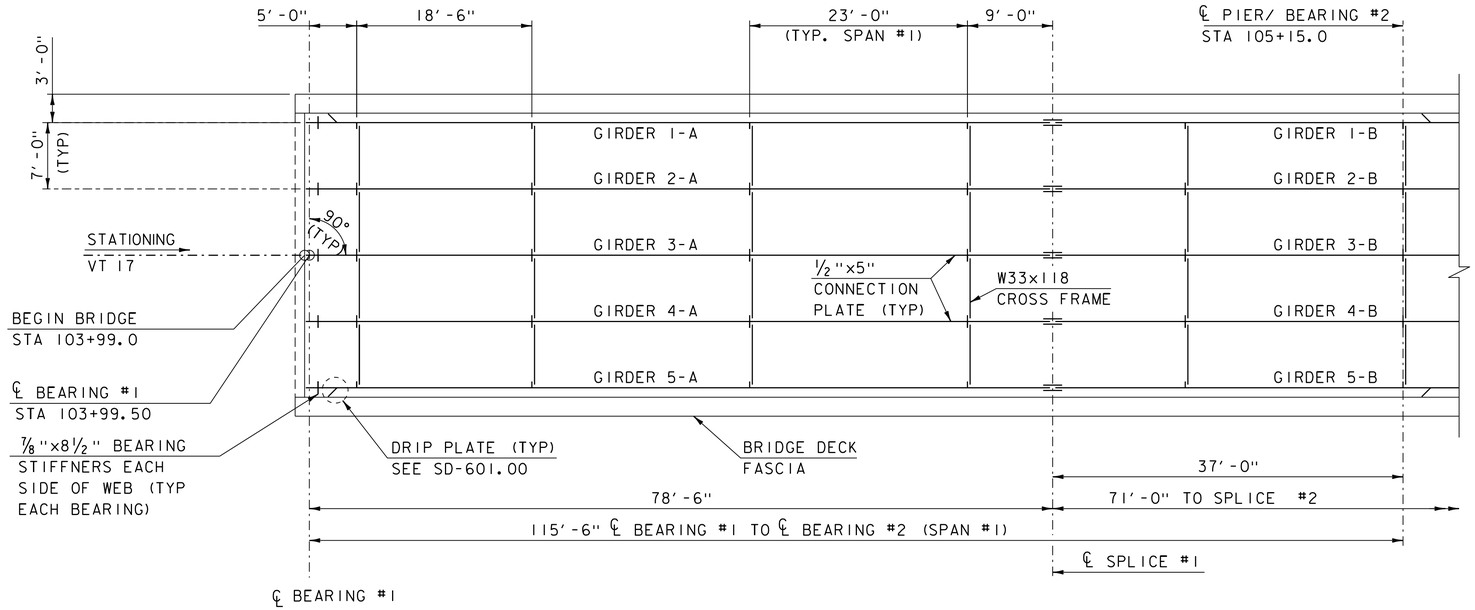
APPROACH SLAB ELEVATIONS

ALL ELEVATIONS ARE TOP OF SLAB

PROJECT NAME: WEYBRIDGE-NEW HAVEN
PROJECT NUMBER: BF 032-1(19)

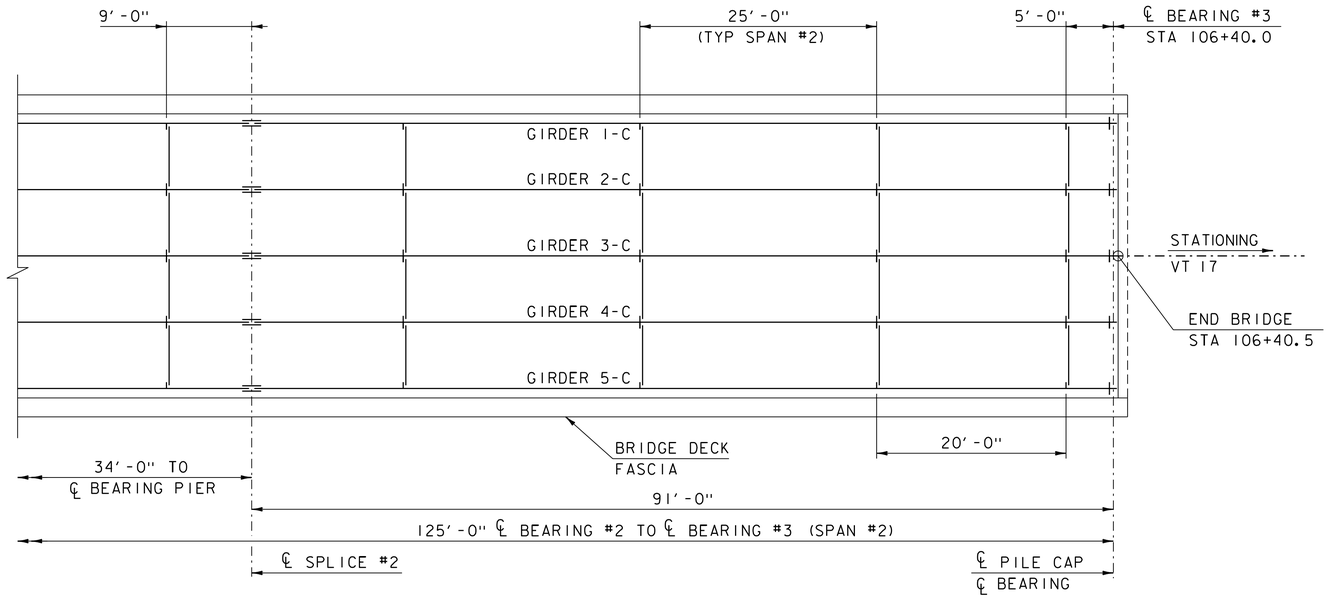
FILE NAME: sl2b552appslab.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: D. PETERSON
APPROACH SLAB DETAILS

PLOT DATE: 20-APR-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: D. PETERSON
SHEET 43 OF 85



DECK FRAMING PLAN (PART 1)

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

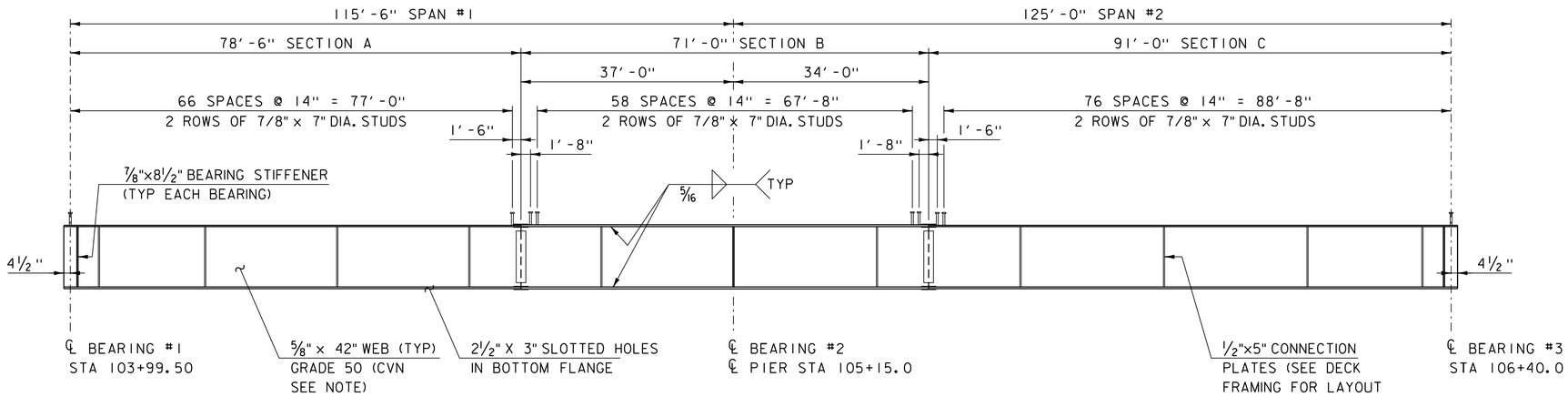


DECK FRAMING PLAN (PART 2)

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

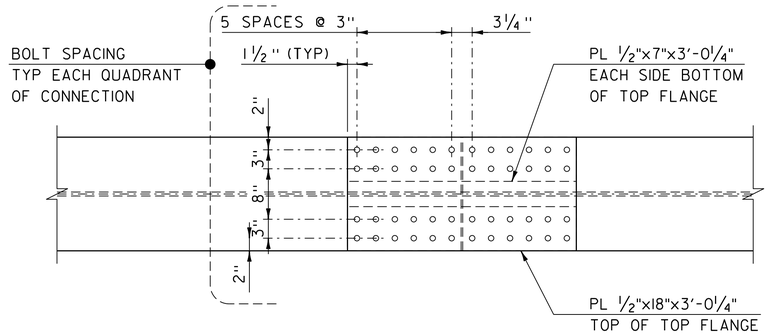
PROJECT NAME:	WEYBRIDGE-NEW HAVEN
PROJECT NUMBER:	BF 032-1(19)
FILE NAME: sl2b552sup.dgn	PLOT DATE: 20-APR-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: D. PETERSON	CHECKED BY: D. PETERSON
DECK FRAMING PLAN	SHEET 44 OF 85

PLATE GIRDER - PLATE SIZE CHART					
GIRDER SECTION	GIRDER COMPONENT	THICKNESS (IN)	WIDTH (IN)	CHARPY V-NOTCH	STEEL GRADE
A	TOP FLANGE	7/8	18	YES	50
	WEB	5/8	42	YES	50
	BOTTOM FLANGE	1 1/4	18	YES	50
B	TOP FLANGE	2	18	YES	50
	WEB	5/8	42	YES	50
	BOTTOM FLANGE	2	18	YES	50
C	TOP FLANGE	7/8	18	YES	50
	WEB	5/8	42	YES	50
	BOTTOM FLANGE	1 1/4	18	YES	50



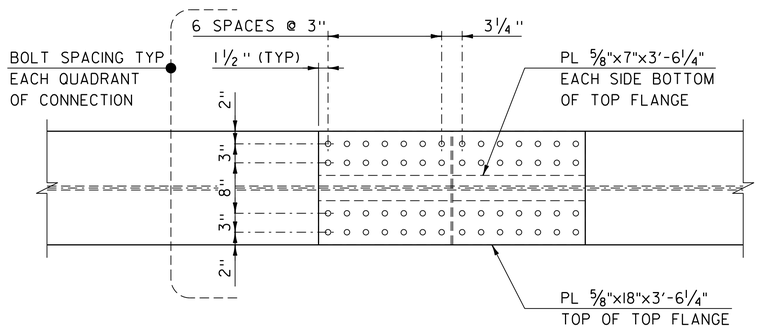
GIRDER ELEVATION

N.T.S (H=1/4/3 ; V=1/4)



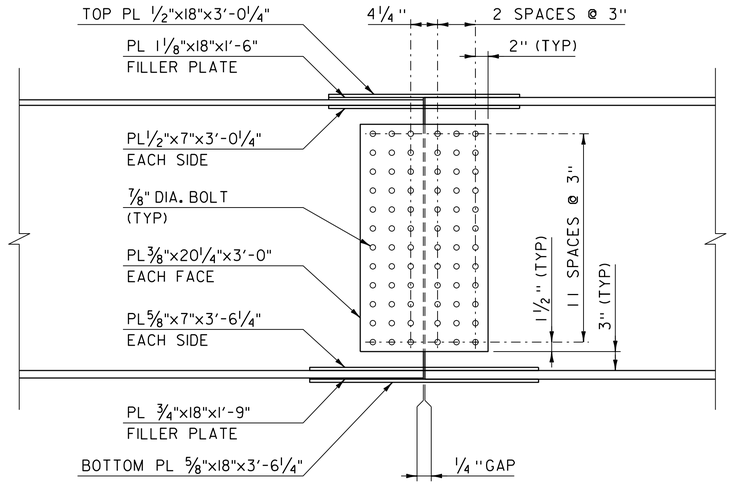
TOP SPLICE DETAIL

SCALE: 1" = 1'-0"



BOTTOM SPLICE DETAIL

SCALE: 1" = 1'-0"



GIRDER ELEVATION SPLICE DETAIL

SCALE: 1" = 1'-0"

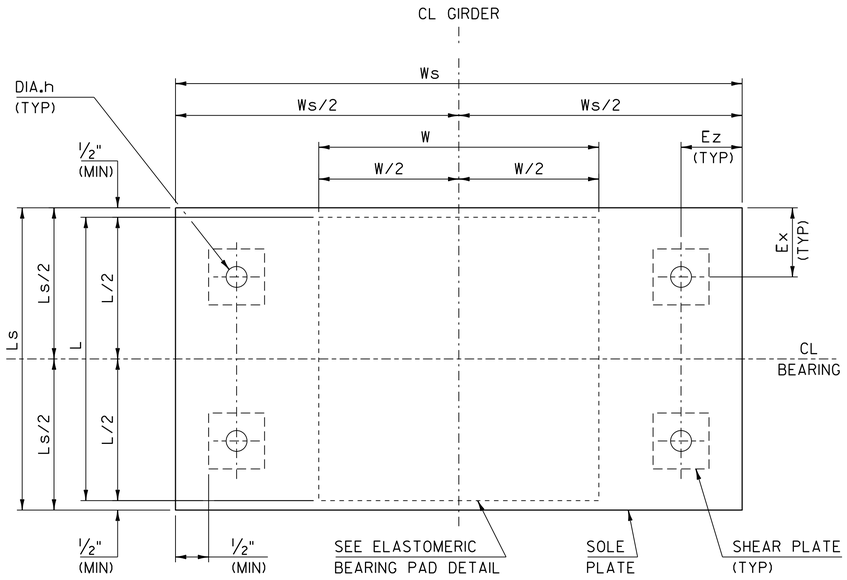
1.) TYPICAL SPLICE LINE #1 DETAIL, MIRROR FOR SPLICE LINE #2.

NOTE:
CVN - SHALL MEET CHARPY V-NOTCH REQUIREMENTS FOR MAIN MEMBERS AS INDICATED IN SECTION 714 OF THE STANDARD SPECIFICATION

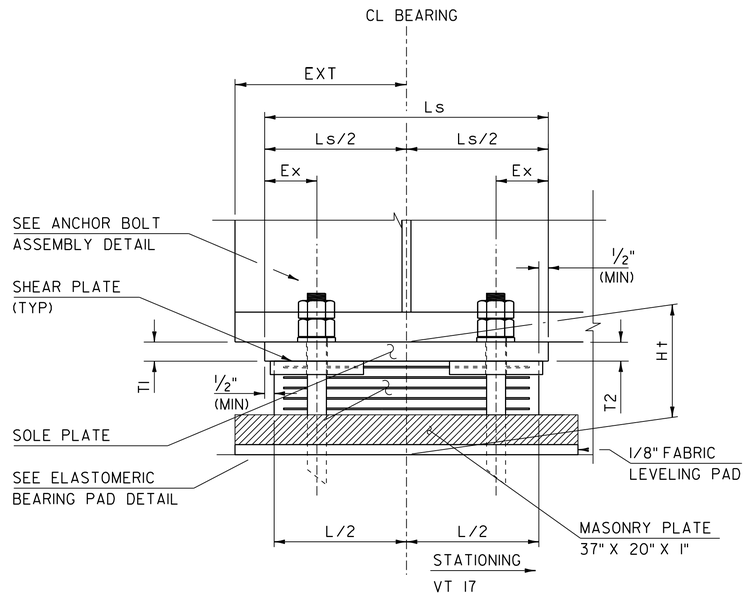
PROJECT NAME: WEYBRIDGE-NEW HAVEN
PROJECT NUMBER: BF 032-1(119)

FILE NAME: sl2b552sup.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: D. PETERSON
GIRDER DETAILS

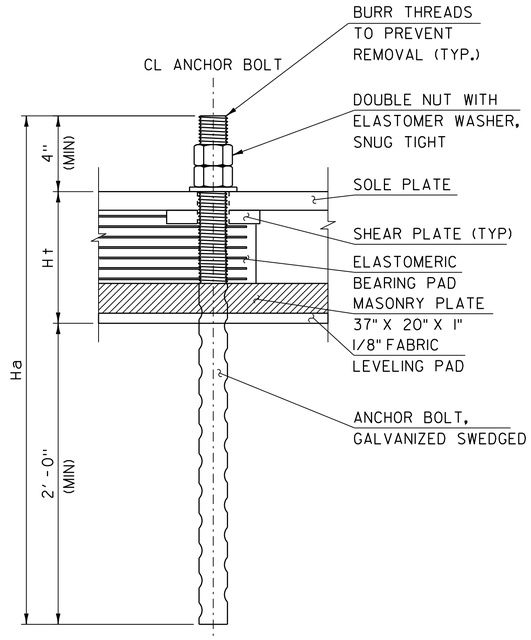
PLOT DATE: 20-APR-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: D. PETERSON
SHEET 45 OF 85



FIXED PIER BEARING TYPICAL PLAN
(NTS)



FIXED PIER BEARING TYPICAL SECTION
(NTS)

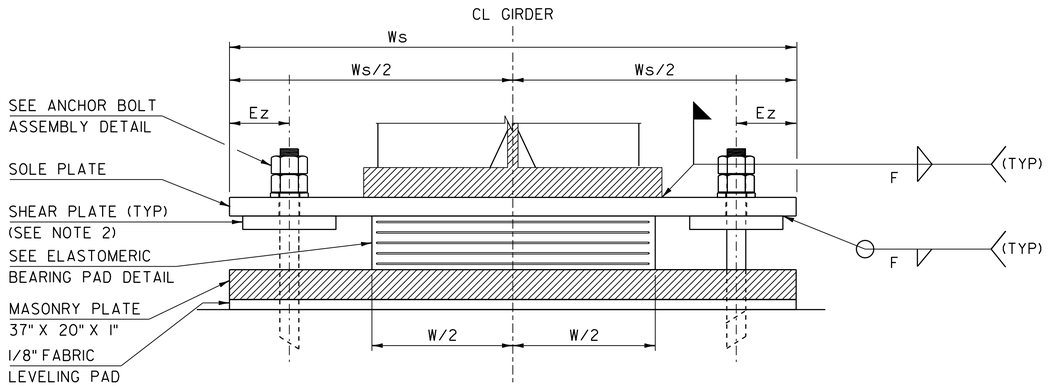


ANCHOR BOLT ASSEMBLY DETAIL
(NTS)

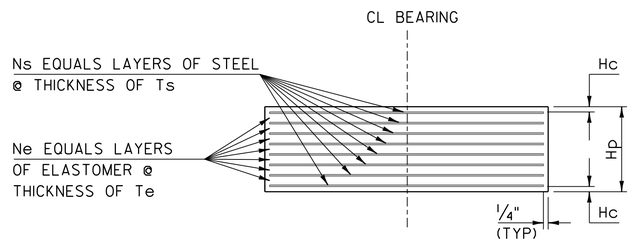
NOTES

1. THE TOTAL HEIGHT OF THE ELASTOMER LAYERS AND STEEL LAMINATIONS: Hp=2(Hc)+Ns(Ts)+Ne(Te)

2. SHEAR PLATES (TO REINFORCE SOLE PLATE) ARE 5"x5"x3".



FIXED PIER BEARING TYPICAL ELEVATION
(NTS)



ELASTOMERIC BEARING PAD DETAIL
(NTS)

ELASTOMERIC BEARING NOTES

1) BOLTS FURNISHED FOR BEARINGS SHALL CONFORM TO ASTM F1554 GRADE 105.

2) PRIOR TO WELDING BEAMS/GIRDERS TO SOLE PLATES AT THE PIERS, THE CONCRETE DECK SHALL BE PLACED AND CURED, AND THE BEAMS/GIRDERS SHALL BE RAISED TO ALLOW RELEASE OF INITIAL BEARING DEFORMATION DUE TO BEAM/GIRDER CAMBER RELAXATION. THE CONTRACTOR SHALL MEET ALL OF THE REQUIREMENTS OF SECTION 502, INCLDUING THE SUBMITTAL OF CONSTRUCTION DRAWINGS. ALL MATERIALS AND WORK REQUIRED IN ORDER TO RESET BEARINGS SHALL BE INCIDENTAL TO THE STRUCTURAL STEEL ITEM IN THE CONTRACT.

3) THE STEEL SOLE PLATES SHALL BE HOT BONDED TO THE REINFORCED ELASTOMERIC PAD DURING THE VULCANIZATION PROCESS. THE STEEL SURFACES TO BE BONDED TO THE PAD SHALL NOT BE GALVANIZED/METALIZED.

4) DESIGN CRITERIA:

   A) DESIGN ROTATION
      PIER = 0.016 RAD

   B) HORIZONTAL CAPACITY SHALL BE MINIMUM OF 25% VERTICAL LOAD IN ANY UNRESTRAINED DIRECTION.

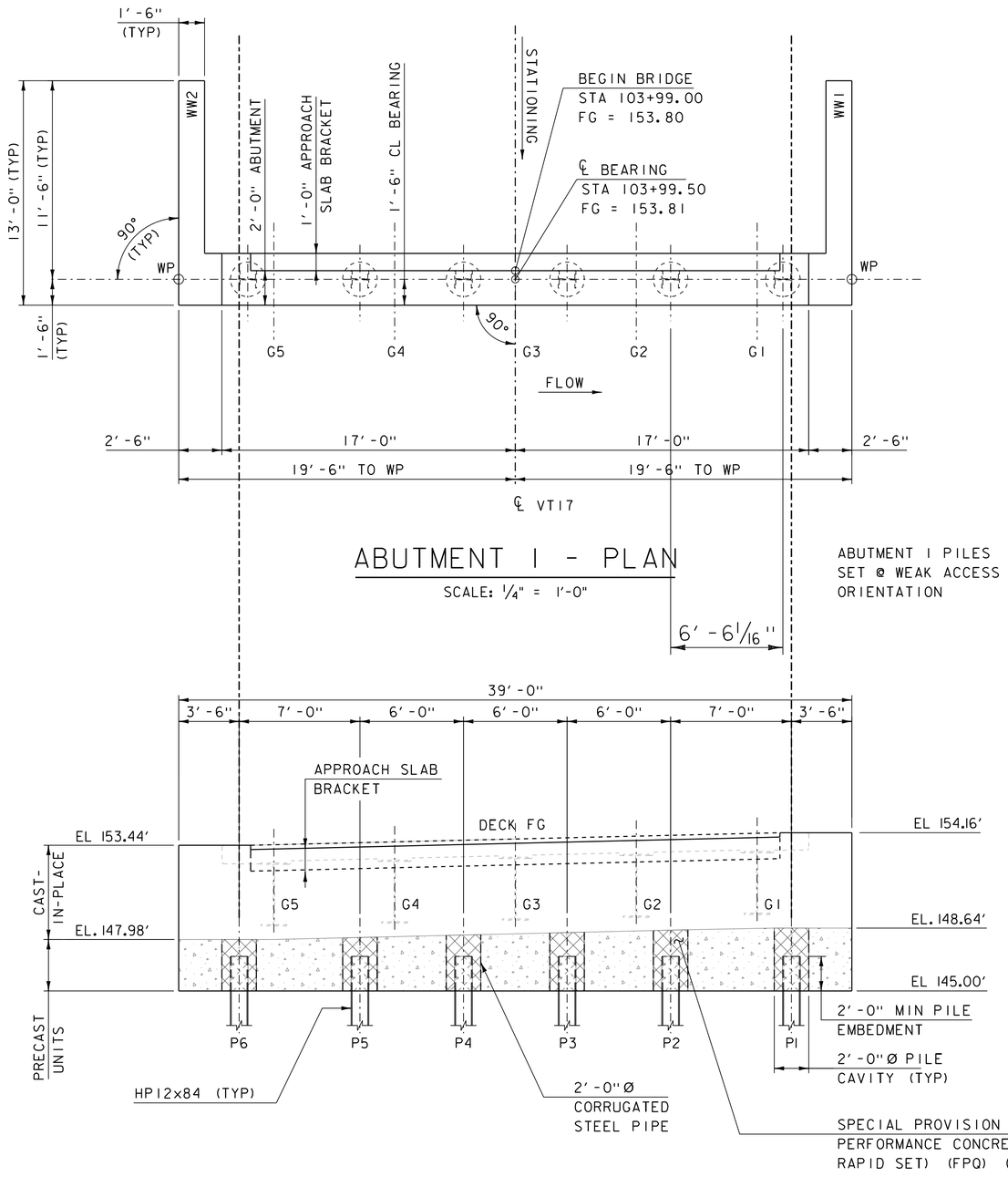
   C) DESIGN LOAD PER BEARING : SEE TABLE

   D) NO FABRIC REINFORCEMENT WILL BE ALLOWED IN ELASTOMERIC PADS

ELASTOMERIC BEARING TABLE - FIXED

LOCATION	QUANTITY REQUIRED	UNFACTORED LOADS DL+SDL (kips)	LL W/O IMP. (kips)	TOTAL DESIGN REACTION (kips)	ELASTOMERIC PAD L	W	Ns	Ts	Ne	Te	Hc	Hp	ANCHOR BOLTS PER/BRG.	DIA.a	Ha	ANCHOR BOLT HOLES DIA.h	Ez	Ex	WELD SIZE F	SOLE PLATE Ws	Ls	T1	T2	MASONRY PLATE W	L	T	BRG. Ht
PIER	5	216.6	142.1	358.7	18"	22"	6	0.125"	5	0.5"	0.25"	3.75"	4	1 1/2"	35"	1 5/16"	3"	3"	5/16"	37	19	1.5"	1.875"	37"	20"	1"	6.5625"

PROJECT NAME:	WEYBRIDGE-NEW HAVEN
PROJECT NUMBER:	BF 032-1(19)
FILE NAME: sl2b552sup.dgn	PLOT DATE: 20-APR-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: D. PETERSON	CHECKED BY: D. PETERSON
PIER BEARINGS DETAIL SHEET	SHEET 46 OF 85



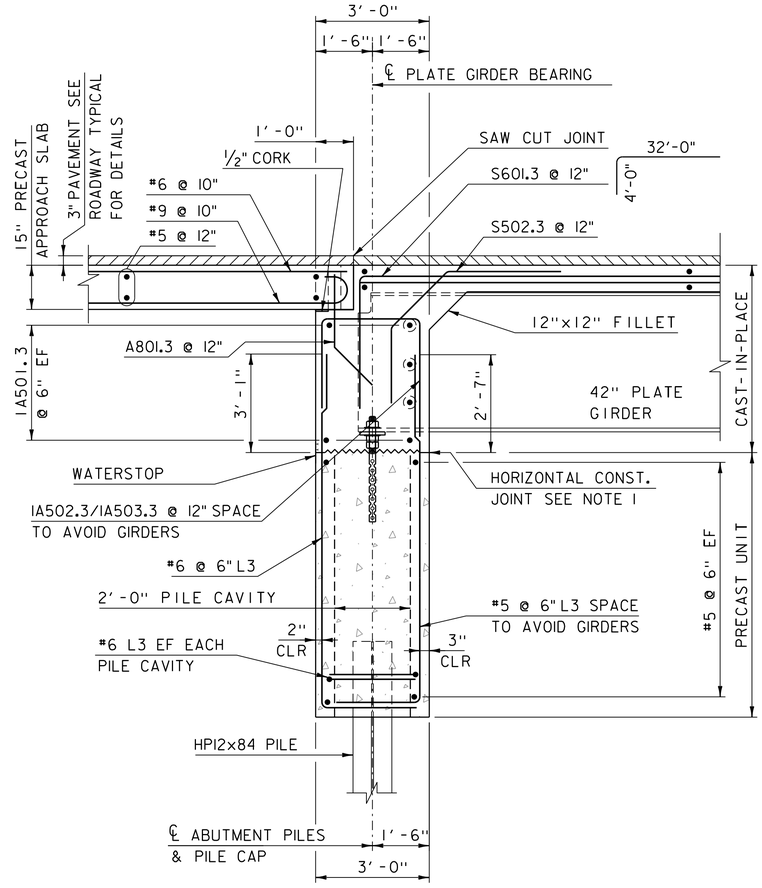
ABUTMENT 1 - ELEVATION

SCALE: 1/4" = 1'-0"

ABUTMENT 1 PILES SET @ WEAK ACCESS ORIENTATION

ABUTMENT 1 - PLAN

SCALE: 1/4" = 1'-0"



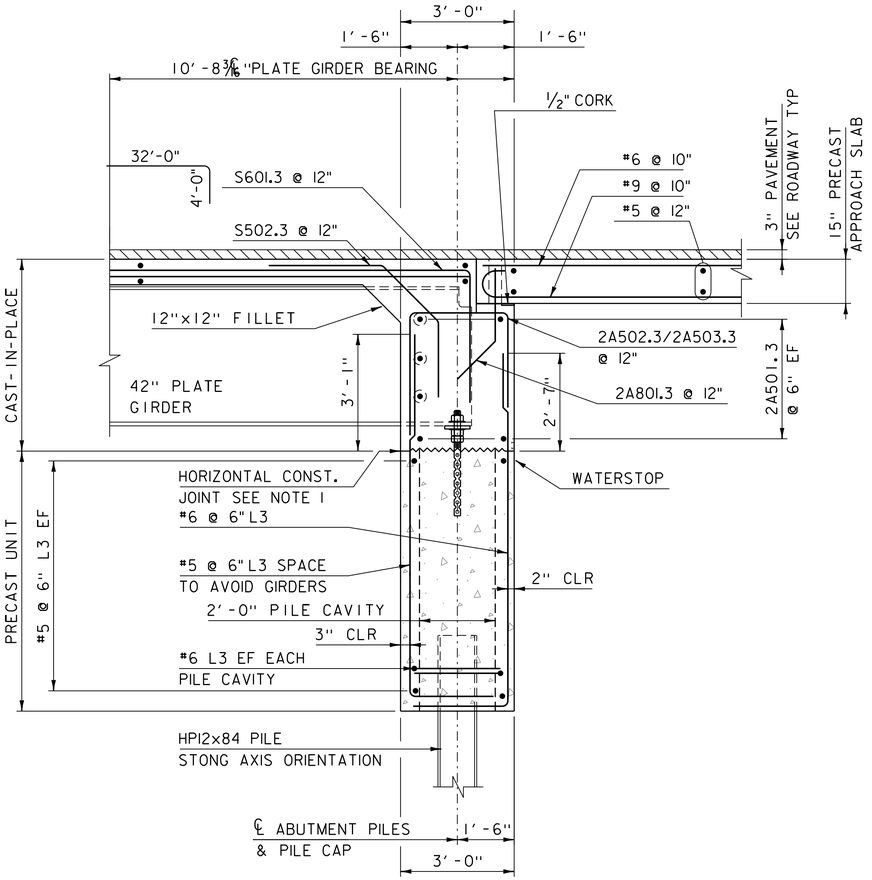
ABUTMENT 1 - TYPICAL

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

1) HORIZONTAL CONSTRUCTION JOINT SHALL BE ROUGHENED AS SHOWN IN SD-501.00. SURFACE SHALL BE ROUGHENED TO WITHIN 3" OF EACH FACE OF CONCRETE.

2) CUT TABS ON WATERSTOP AND ADHERE TO PRECAST.

PROJECT NAME:	WEYBRIDGE-NEW HAVEN
PROJECT NUMBER:	BF 032-1(19)
FILE NAME: sl2b552sub.dgn	PLOT DATE: 20-APR-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: D. PETERSON	CHECKED BY: D. PETERSON
ABUTMENT 1 PLAN & ELEVATION	SHEET 47 OF 85

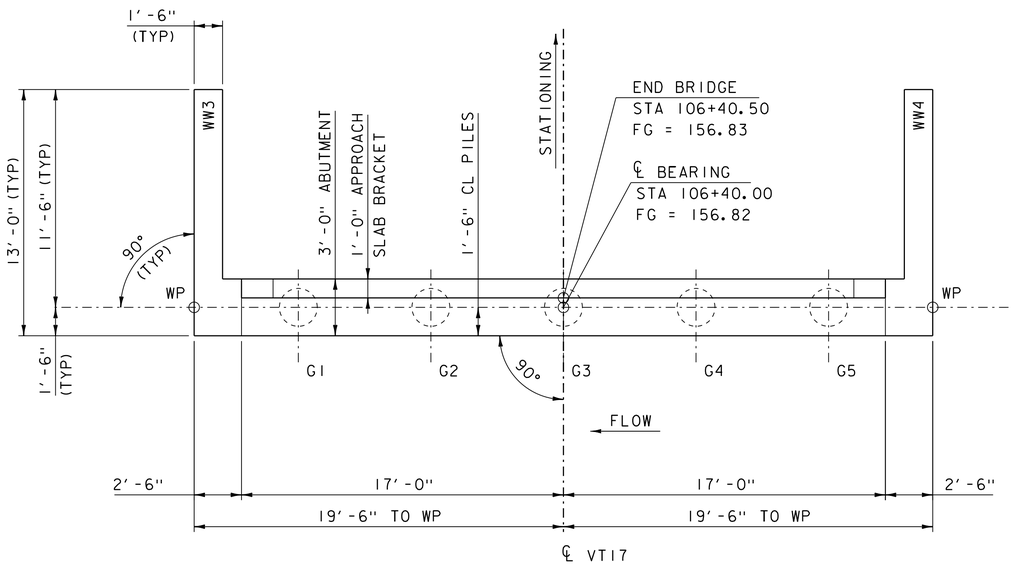


ABUTMENT 2 - TYPICAL

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

1) HORIZONTAL CONSTRUCTION JOINT SHALL BE ROUGHENED AS SHOWN IN SD-501.00. SURFACE SHALL BE ROUGHENED TO WITHIN 3" OF EACH FACE OF CONCRETE.

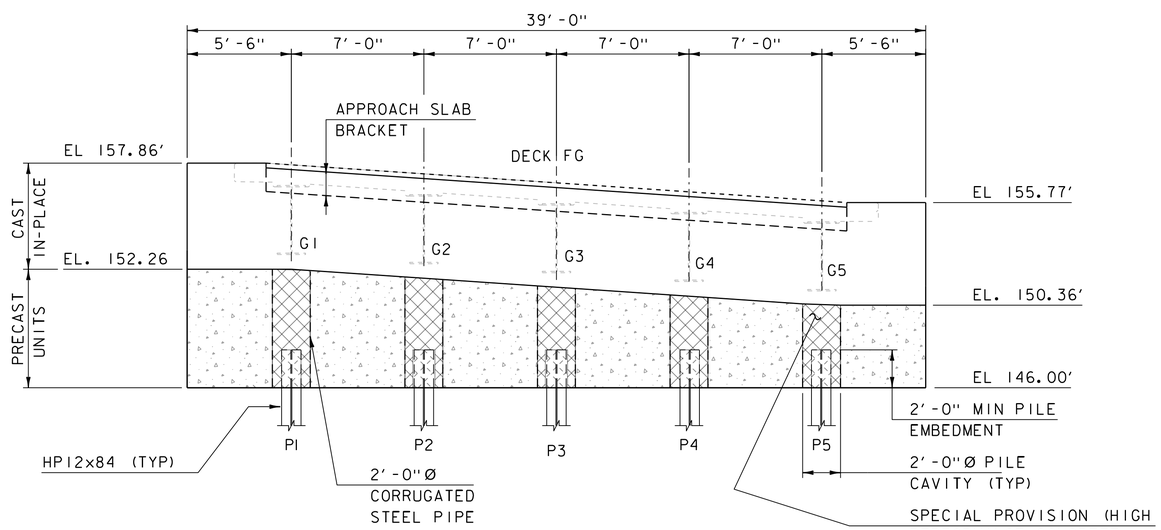
2) CUT TABS ON WATERSTOP AND ADHERE TO PRECAST.



ABUTMENT 2 - PLAN

SCALE: 1/4" = 1'-0"

ABUTMENT 2 PILES SET @ STRONG ACCESS ORIENTATION



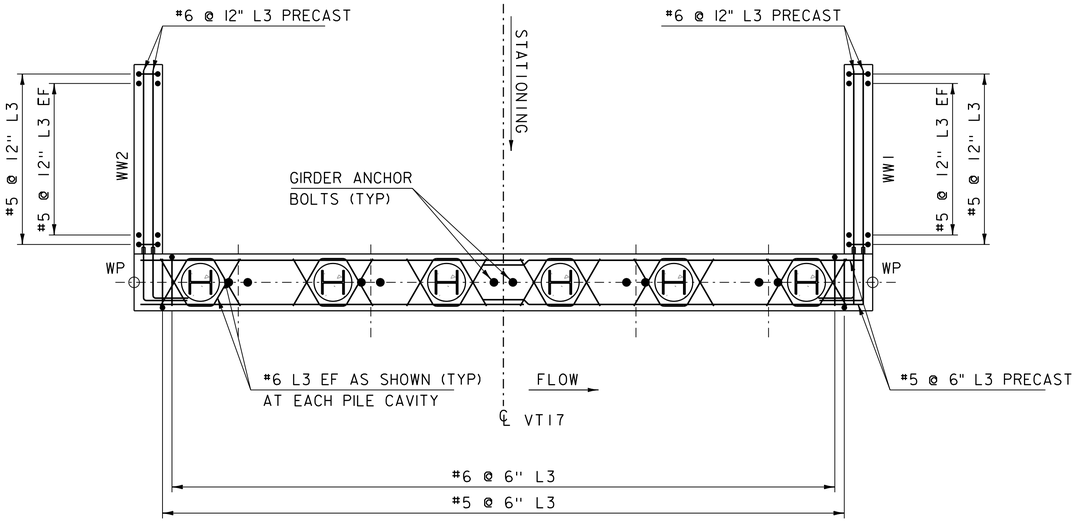
ABUTMENT 2 - ELEVATION

SCALE: 1/4" = 1'-0"

PROJECT NAME: WEYBRIDGE-NEW HAVEN
PROJECT NUMBER: BF 032-1(19)

FILE NAME: sl2b552sub.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: D. PETERSON
ABUTMENT 2 PLAN & ELEVATION

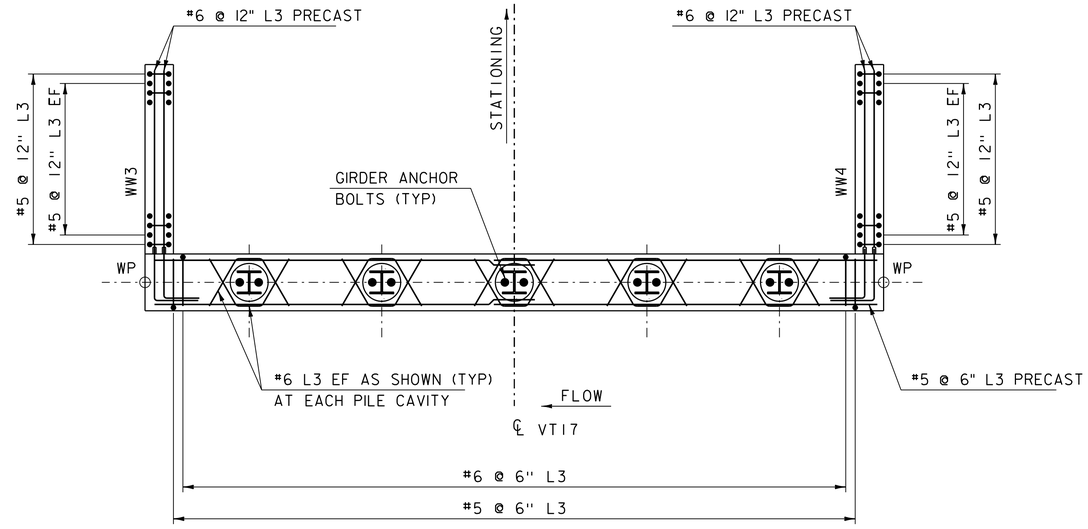
PLOT DATE: 20-APR-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: D. PETERSON
SHEET 48 OF 85



ABUTMENT 1 PRECAST - REINFORCING PLAN

SCALE: 1/4" = 1'-0"

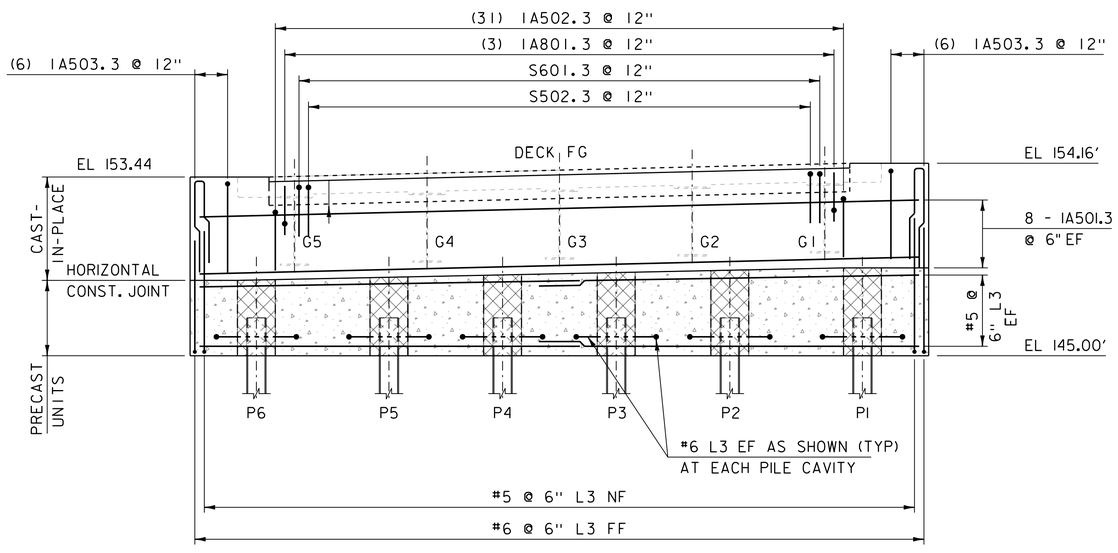
ABUTMENT 1 PILES
SET @ WEAK ACCESS
ORIENTATION



ABUTMENT 2 PRECAST - REINFORCING PLAN

SCALE: 1/4" = 1'-0"

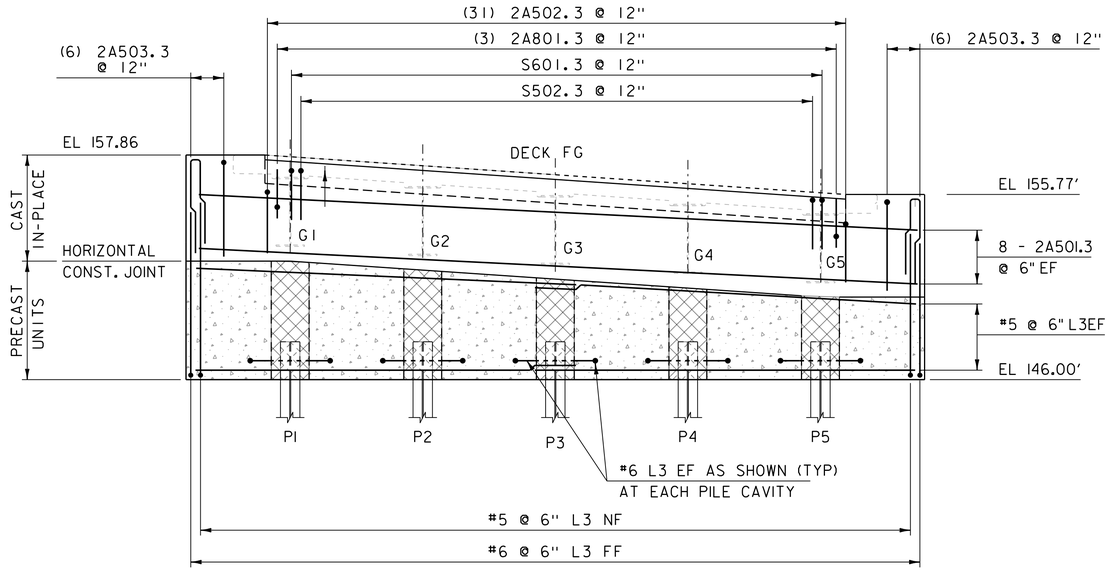
ABUTMENT 2 PILES
SET @ STRONG ACCESS
ORIENTATION



ABUTMENT 1 - ELEVATION

SCALE: 1/4" = 1'-0"

GIRDER SEAT ELEVATIONS TOP OF LEVELING PLATE		
	ABUTMENT #1	ABUTMENT #2
G1	149.22	152.84
G2	149.05	152.36
G3	148.89	151.89
G4	148.72	151.41
G5	148.56	150.94



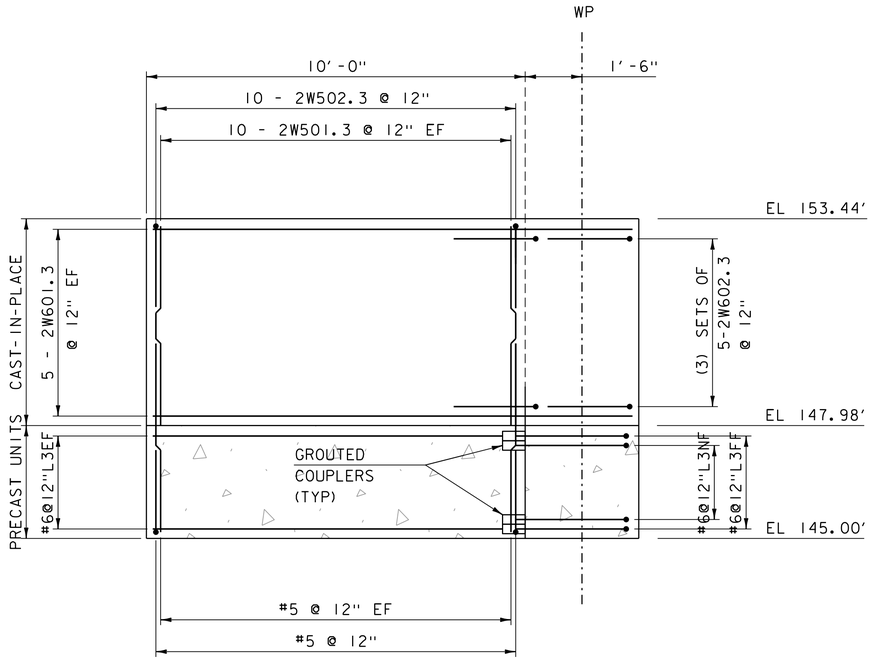
ABUTMENT 2 - ELEVATION

SCALE: 1/4" = 1'-0"

PROJECT NAME: WEYBRIDGE-NEW HAVEN
PROJECT NUMBER: BF 032-1(19)

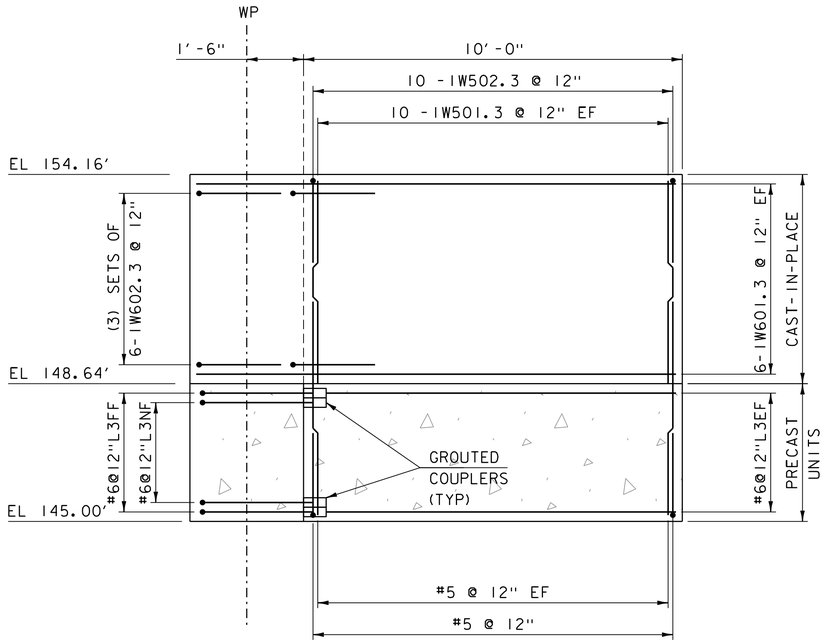
FILE NAME: sl2b552sub.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: D. PETERSON
ABUTMENT REINFORCING DETAILS

PLOT DATE: 20-APR-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: D. PETERSON
SHEET 49 OF 85



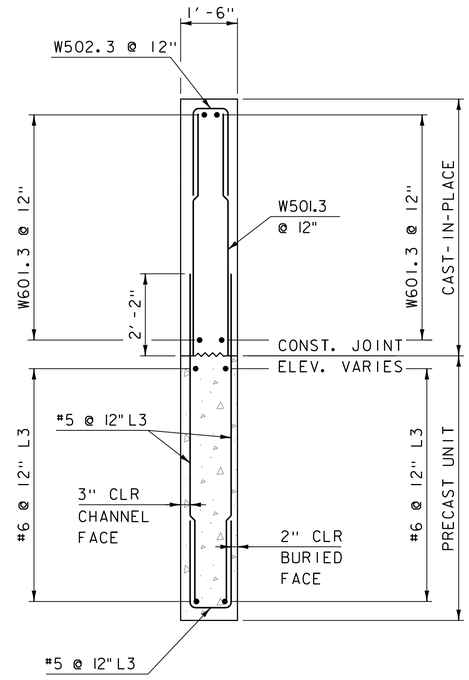
WINGWALL 2 - ELEVATION

SCALE: ½" = 1'-0"



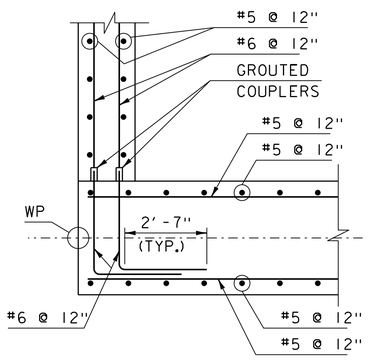
WINGWALL 1 - ELEVATION

SCALE: ½" = 1'-0"



WINGWALL 1-4 - TYPICAL

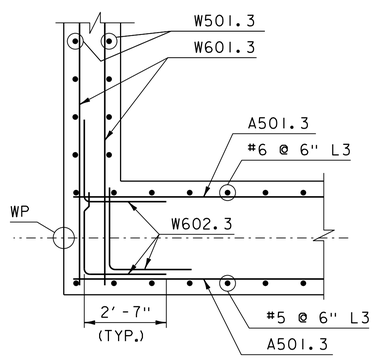
SCALE: ½" = 1'-0"



WW1-WW4 CORNER DETAIL PCU

SCALE: ½" = 1'-0"
(BELOW SEAT)

1) WING WALL CORNER DETAILS SIMILAR BUT OPOSITE HAND FOR WW1 AND WW4.



WW1-WW4 CORNER DETAIL CIP

SCALE: ½" = 1'-0"
(ABOVE SEAT)

1) WING WALL CORNER DETAILS SIMILAR BUT MIRRORED FOR WW1 AND WW4.

NOTE:

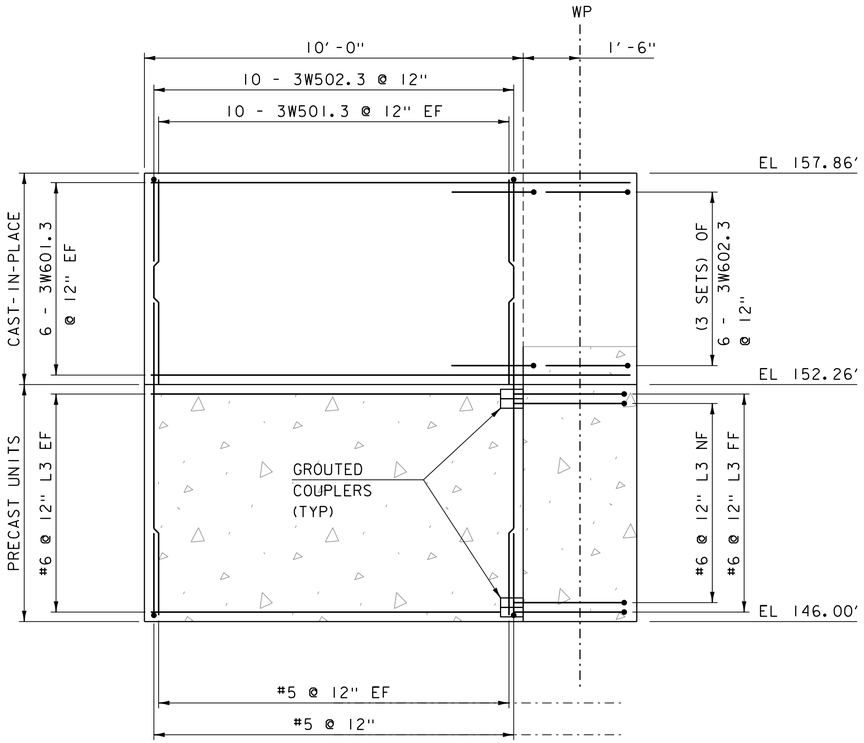
NF = NEAR FACE
FF = FAR FACE
EF = EACH FACE
▲ = CUT TO FIT IN FIELD
3" CLEAR, UNLESS OTHERWISE SPECIFIED ON THE PLANS.
2'-2" BAR LAP UNLESS OTHERWISE SPECIFIED ON THE PLANS.

PROJECT NAME:	WEYBRIDGE-NEW HAVEN
PROJECT NUMBER:	BF 032-1(19)

FILE NAME: sl2b552sub.dgn	PLOT DATE: 20-APR-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: D. PETERSON	CHECKED BY: D. PETERSON
WINGWALL DETAILS 1	SHEET 50 OF 85

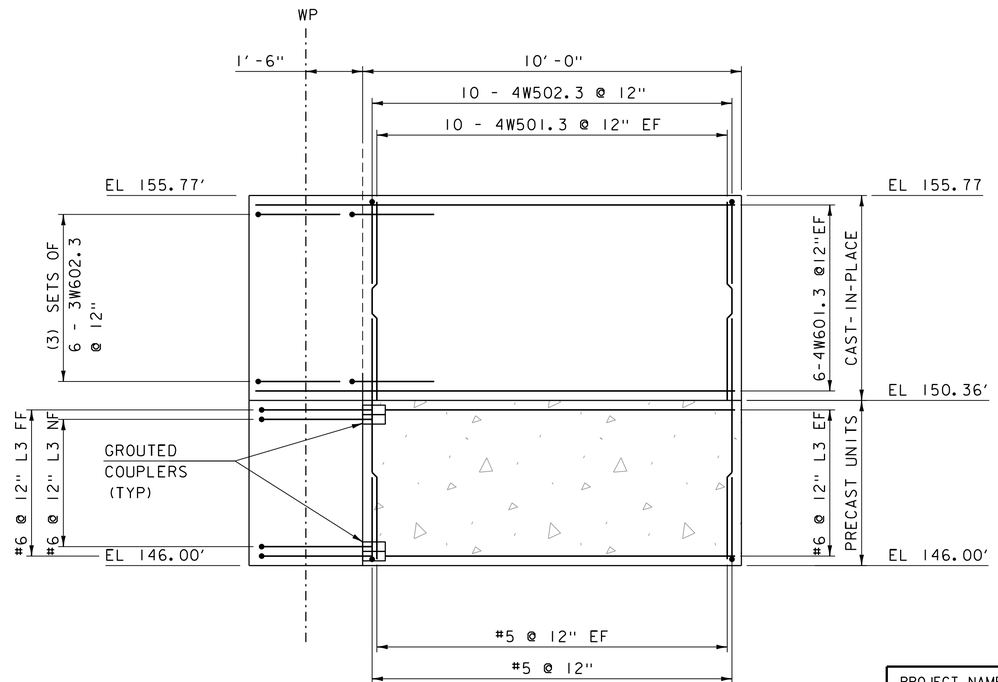
PRECAST ABUTMENT FABRICATION TOLERANCES	
LENGTH (OVERALL)	± 1/4"
WIDTH (OVERALL)	± 1/4"
DEPTH (OVERALL)	± 1/4"
VARIATION FROM SPECIFIED END SQUARENESS OR SKEW	± 1/8" PER 12" WIDTH ± 1/2" MAXIMUM
LOCATION OF MECHANICAL SPLICE CONNECTORS MEASURED FROM COMMON REFERENCE POINT	± 1/4"
LOCATION OF PROJECTING REINFORCING MEASURED FROM COMMON REFERENCE POINT	± 1/4"
LOCAL SMOOTHNESS OF ANY SURFACE	± 1/4" IN 10 FEET
LOCATION OF POST TENSIONING CONDUITS	± 1/4"
LOCATION OF PILE CAVITIES	± 1"

PRECAST ABUTMENT ERECTION TOLERANCE	
VARIATION FROM SPECIFIED BRIDGE SEAT ELEVATION	± 1/8", 1/8" MAXIMUM BETWEEN ADJACENT UNITS
PLAN LOCATION OF ANY POINT MEASURED FROM COMMON REFERENCE POINT	± 1/2"
PLUMB	± 1/4" IN 10 FEET ± 1/2" MAXIMUM



WINGWALL 3 - ELEVATION

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



WINGWALL 4 - ELEVATION

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

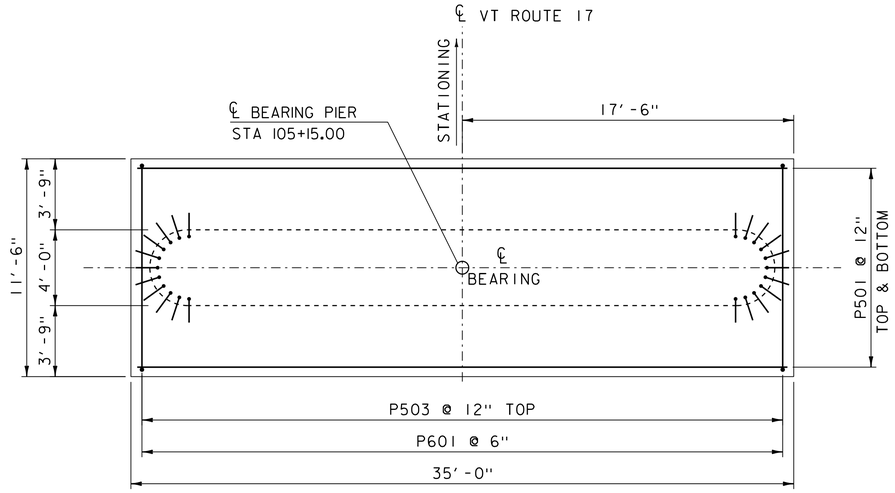
NOTE:

NF = NEAR FACE
FF = FAR FACE
EF = EACH FACE
▲ = CUT TO FIT IN FIELD
3" CLEAR, UNLESS OTHERWISE SPECIFIED ON THE PLANS.
2'-2" BAR LAP UNLESS OTHERWISE SPECIFIED ON THE PLANS.

PROJECT NAME: WEYBRIDGE-NEW HAVEN
PROJECT NUMBER: BF 032-1(19)

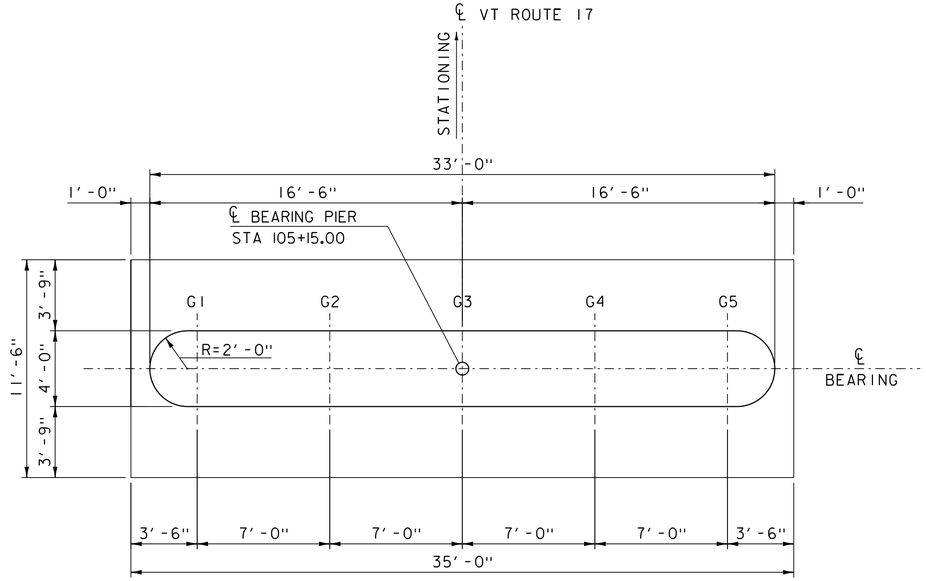
FILE NAME: sl2b552sub.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: D. PETERSON
WINGWALL DETAILS 2

PLOT DATE: 20-APR-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: D. PETERSON
SHEET 51 OF 85



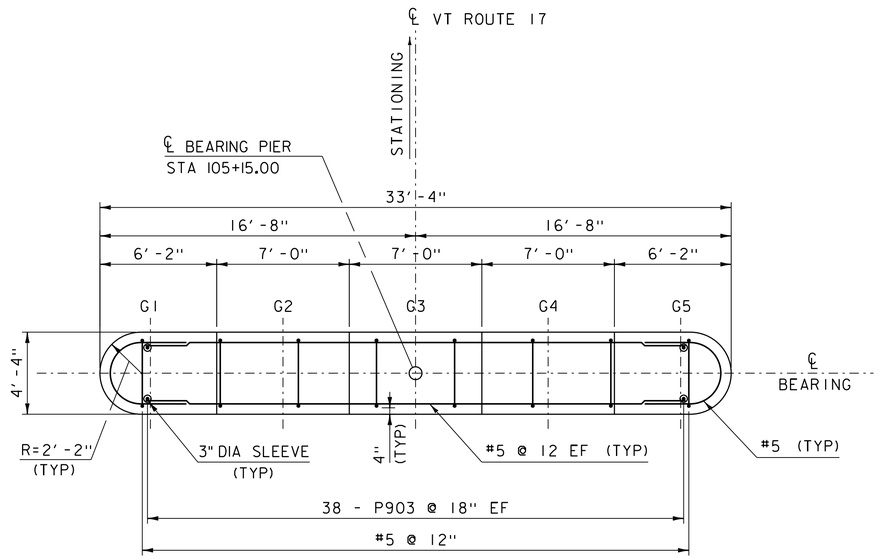
PIER FOUNDATION REINFORCING PLAN

SCALE: 1/4" = 1'-0"



PIER PLAN

SCALE: 1/4" = 1'-0"



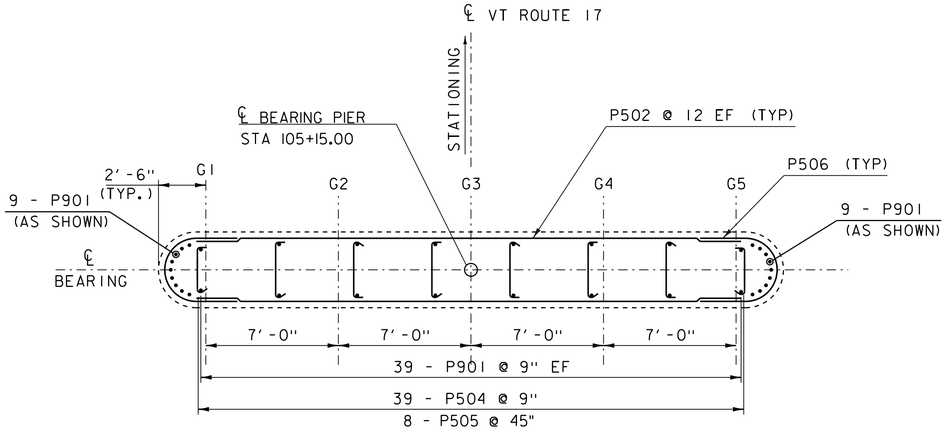
PRECAST PIER CAP PLAN

SCALE: 1/4" = 1'-0"

NOTE:

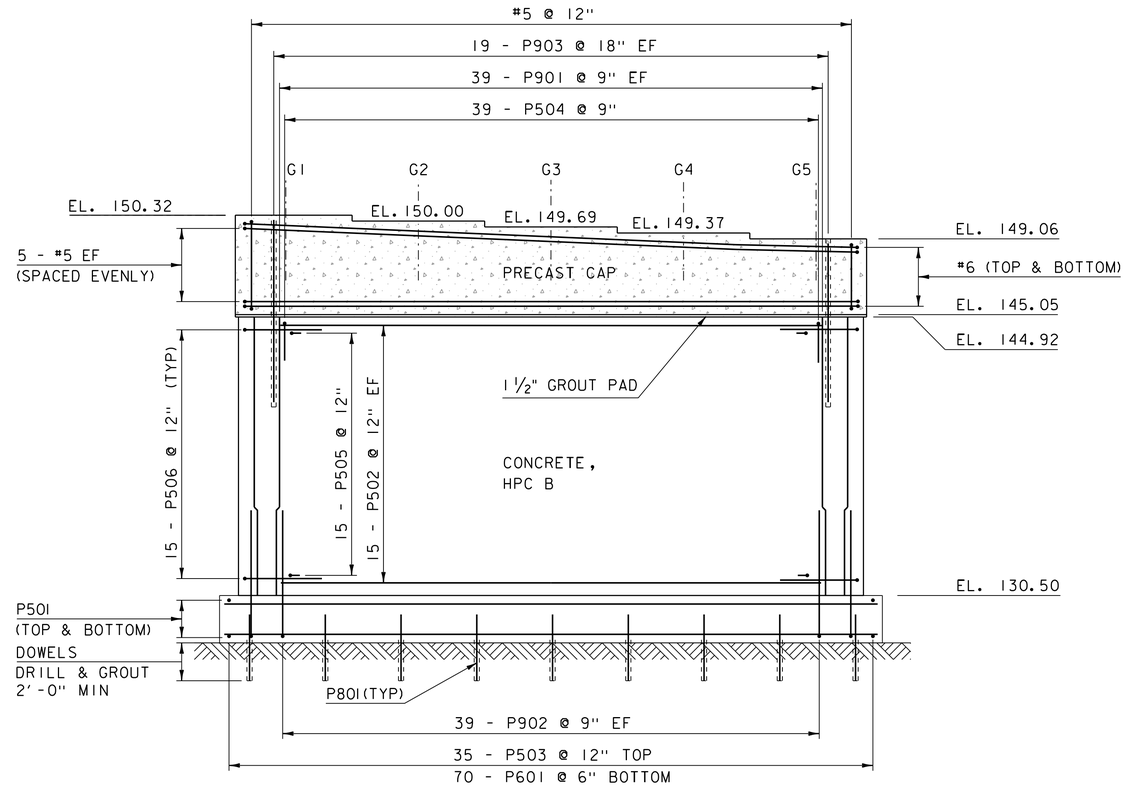
NF = NEAR FACE
FF = FAR FACE
EF = EACH FACE
▲ = CUT TO FIT IN FIELD
4" CLEAR, UNLESS OTHERWISE SPECIFIED ON THE PLANS.
2'-2" BAR LAP UNLESS OTHERWISE SPECIFIED ON THE PLANS.

PROJECT NAME:	WEYBRIDGE-NEW HAVEN
PROJECT NUMBER:	BF 032-1(19)
FILE NAME: sl2b552sub.dgn	PLOT DATE: 20-APR-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: D. PETERSON	CHECKED BY: D. PETERSON
PIER DETAILS 1	SHEET 52 OF 85



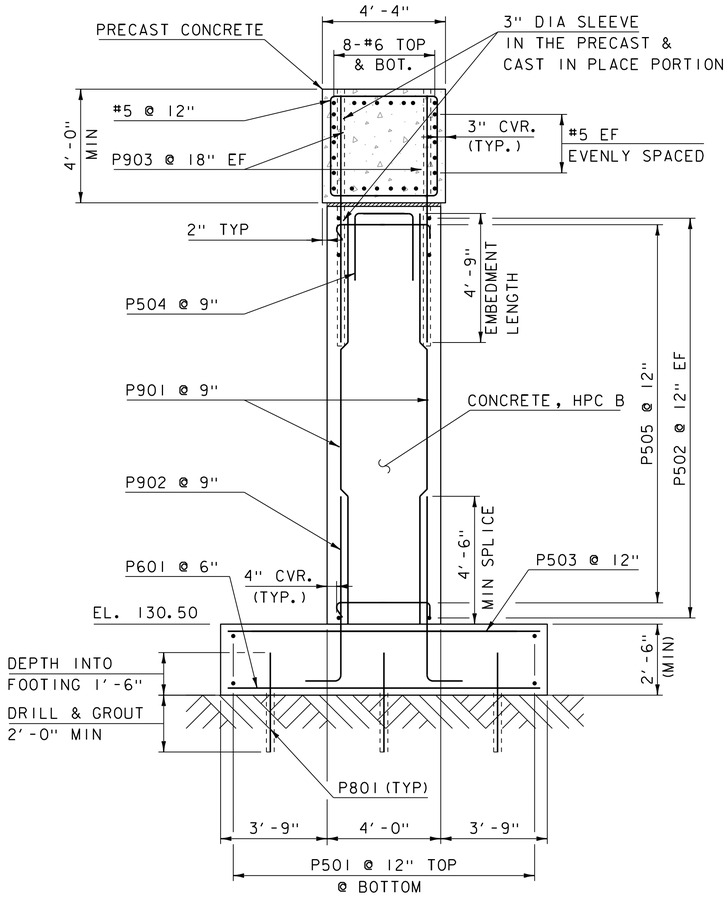
PIER STEM REINFORCING PLAN

SCALE: 1/4" = 1'-0"



PIER ELEVATION

SCALE: 1/4" = 1'-0"



PIER SECTION (TYP)

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

NOTE:

NF = NEAR FACE
FF = FAR FACE
EF = EACH FACE
▲ = CUT TO FIT IN FIELD
4" CLEAR, UNLESS OTHERWISE SPECIFIED ON THE PLANS.
2'-2" BAR LAP UNLESS OTHERWISE SPECIFIED ON THE PLANS.

PROJECT NAME: WEYBRIDGE-NEW HAVEN
PROJECT NUMBER: BF 032-1(19)

FILE NAME: s12b552sub.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: D. PETERSON
PIER DETAILS 2

PLOT DATE: 20-APR-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: D. PETERSON
SHEET 53 OF 85

STATE OF VERMONT
AGENCY OF TRANSPORTATION

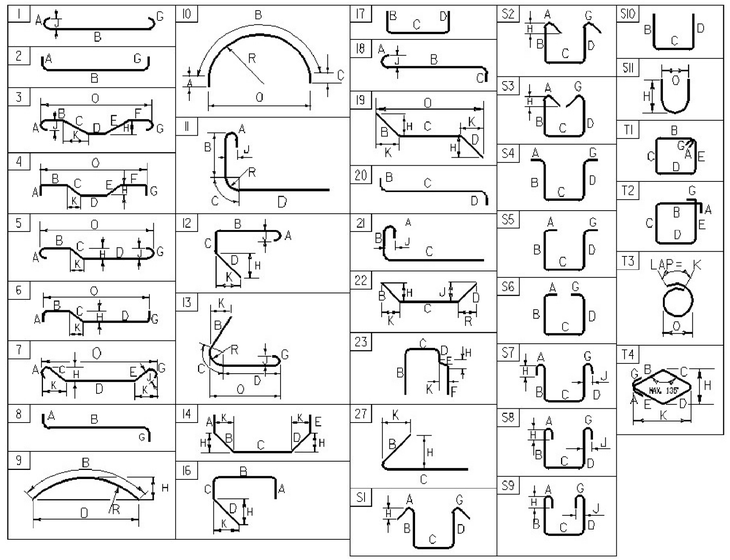
REINFORCING STEEL SCHEDULE

ITEM	EACH	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O
	DECK																
·	361	5	32'- 3"	S501G	STR												
	132	5	32'- 3"	S502G	STR												
△	1954	5	4'- 11"	S501.3	STR												
	70	5	6'- 4"	S502.3	22		2'- 2"	2'- 0"	2'- 2"				1'- 6"	1'- 6"	1'- 6"	1'- 6"	
✳	977	6	28'- 1"	S601G	STR												
	360	6	32'- 3"	S602G	STR												
✳	71	6	36'- 0"	S601.3	17		32'- 0"	4'- 0"	---								
	ABUTMENT #1																
✳	17	5	38'- 1"	1A501.3	STR												
	31	5	10'- 1"	1A502.3	S10		3'- 9"	2'- 7"	3'- 9"								
△	14	5	12'- 9"	1A503.3	S10		5'- 1"	2'- 7"	5'- 1"								
△	33	8	4'- 0"	1A801.3	22		2'- 0"	2'- 0"	---				1'- 5"	---	1'- 5"	---	
	ABUTMENT #2																
✳	17	5	38'- 1"	2A501.3	STR												
	31	5	10'- 1"	2A502.3	S10		3'- 9"	2'- 7"	3'- 9"								
△	14	5	12'- 9"	2A503.3	S10		5'- 1"	2'- 7"	5'- 1"								
△	33	8	4'- 0"	2A801.3	22		2'- 0"	2'- 0"	---				1'- 5"	---	1'- 5"	---	
	PIER																
	24	5	34'- 5"	P501	STR												
	30	5	29'- 0"	P502	STR												
✳	36	5	11'- 0"	P503	STR												
✳	71	6	11'- 0"	P601	STR												
△	29	8	3'- 6"	P801	STR												
✳	97	9	14'- 4"	P901	STR												
	38	9	9'- 10"	P903	STR												
	39	5	7'- 7"	P504	S10		2'- 2"	3'- 3"	2'- 2"								
	120	5	4'- 4"	P505	S3	0'- 6"	3'- 4"	0'- 6"	---			---	0'- 4"				
△	32	5	9'- 6"	P506	S11								3'- 10"				3'- 4"
✳	97	9	8'- 0"	P902	2	1'- 3"	6'- 9"	---									
	WINGWALL #1																
	20	5	5'- 3"	1W501.3	STR												
	12	6	12'- 6"	1W601.3	STR												
	10	5	5'- 5"	1W502.3	S10		2'- 2"	1'- 1"	2'- 2"								
	18	6	5'- 2"	1W602.3	S10		2'- 7"	2'- 7"	---								
	WINGWALL #2																
	20	5	5'- 2"	2W501.3	STR												
	10	5	12'- 6"	2W601.3	STR												
	10	5	5'- 5"	2W502.3	S10		2'- 2"	1'- 1"	2'- 2"								
	15	6	5'- 2"	2W602.3	S10		2'- 7"	2'- 7"	---								
	WINGWALL #3																
	20	5	5'- 0"	3W501.3	STR												
	12	6	12'- 6"	3W601.3	STR												
	10	5	5'- 4"	3W502.3	S10		2'- 2"	1'- 0"	2'- 2"								
	18	6	5'- 2"	3W602.3	S10		2'- 7"	2'- 7"	---								
	WINGWALL #4																
	20	5	5'- 1"	4W501.3	STR												
	12	6	12'- 6"	4W601.3	STR												
	10	5	5'- 4"	4W502.3	S10		2'- 2"	1'- 0"	2'- 2"								
	18	6	5'- 2"	4W602.3	S10		2'- 7"	2'- 7"	---								

ITEM	EACH	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O

~ NOTES ~

1. 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.
2. 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".
3. BARS WHICH REQUIRE MORE ACCURATE BENDING THAN STANDARD PRACTICES SHOULD HAVE LIMITS INDICATED.
4. ALL DIMENSIONS ARE OUT TO OUT OF BAR EXCEPT "A" AND "G" ON STANDARD 180 DEGREE AND 135 DEGREE HOOKS.
5. "J" DIMENSION ON 180 DEGREE HOOKS TO BE SHOWN ONLY WHERE NECESSARY TO RESTRICT HOOK SIZE. OTHERWISE, STANDARD HOOKS ARE TO BE USED.
6. "H" DIMENSION ON STIRRUPS TO BE SHOWN ONLY WHEN NECESSARY TO MAINTAIN CLEARANCES.
7. WHERE SLOPE DIFFERS FROM 45 DEGREES, DIMENSIONS "H" AND "K" MUST BE SHOWN.
8. ▲ DENOTES BARS TO BE CUT IN FIELD.
9. ✳ DENOTES ONE EXTRA BAR ADDED FOR TESTING PURPOSES.
10. △ DENOTES TWO EXTRA BARS ADDED FOR TESTING PURPOSES.
11. E IN BAR MARK PREFIX DENOTES EPOXY COATED REINFORCING STEEL.



ASTM STANDARD REINFORCING BARS

BAR SIZE DESIGNATION	NOMINAL POUNDS PER FOOT	NOMINAL DIMENSIONS — DIAMETER (INCHES)	AREA (SQUARE INCHES)	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	2.04	0.875	0.60	2.749
#8	2.670	1.000	0.79	3.14
#9	3.400	1.13	1.00	3.54
#10	4.3	1.270	1.27	3.990
#11	5.31	1.410	1.56	4.430
#14	7.65	1.69	2.25	5.32
#18	13.60	2.26	4.00	7.09

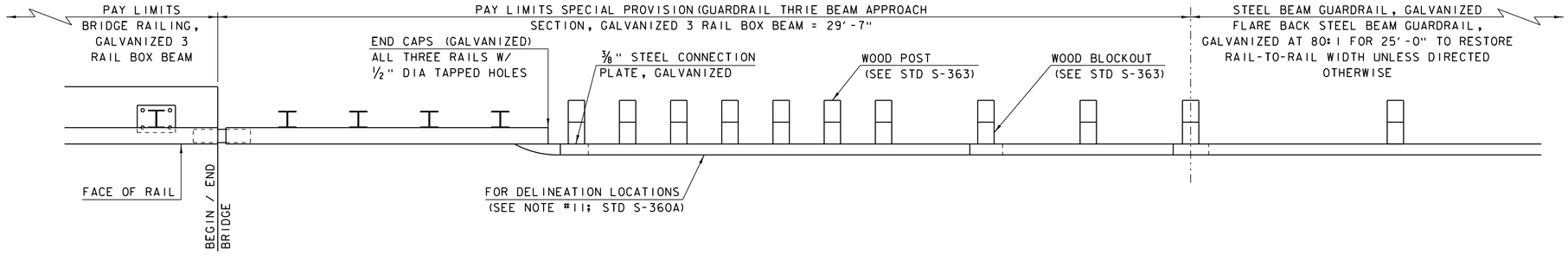
~ REINFORCING STEEL CORROSION RESISTANCE LEVEL ~

THE REINFORCING STEEL MARKS IN THIS SCHEDULE INDICATE THE REQUIRED BAR CORROSION RESISTANCE LEVEL. CORROSION RESISTANCE LEVEL IS DENOTED WITH A .2 FOR LEVEL TWO SUFFIX OR .3 FOR LEVEL THREE SUFFIX, .1 FOR LEVEL ONE IS TO BE OMITTED. THE BAR MATERIAL TYPE AND BAR STEEL GRADE PROVIDED FOR EACH CORROSION LEVEL WILL BE RECORDED ON THE PLAN SET PI SHEET FOR AS-BUILT RECORD PLAN ARCHIVES.

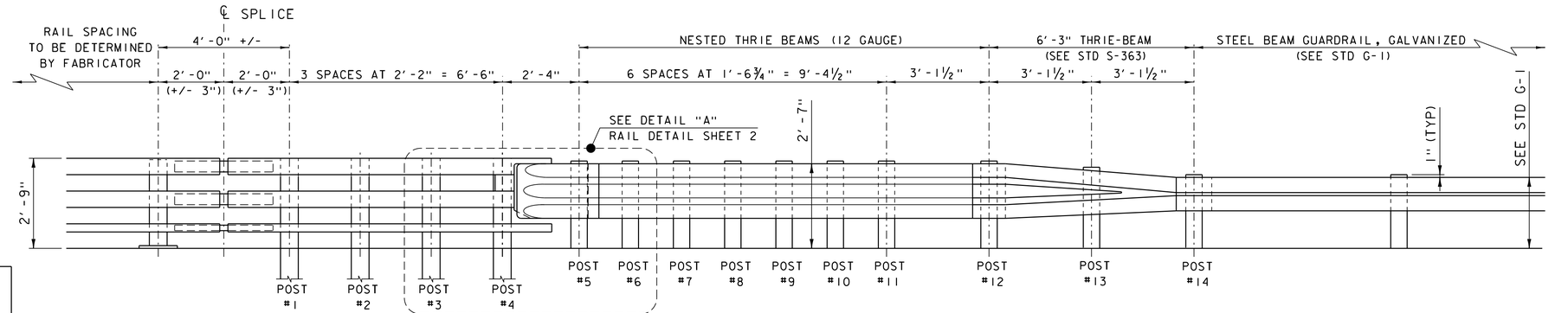
PROJECT NAME: **WEYBRIDGE - NEW HAVEN**
PROJECT NUMBER: **BF 032-1(19)**

FILE NAME: **12B552rss.dgn**
PROJECT MANAGER: **C. CARLSON**
DESIGNED BY: **D. PETERSON**
REINFORCING STEEL SCHEDULE SHEET #1

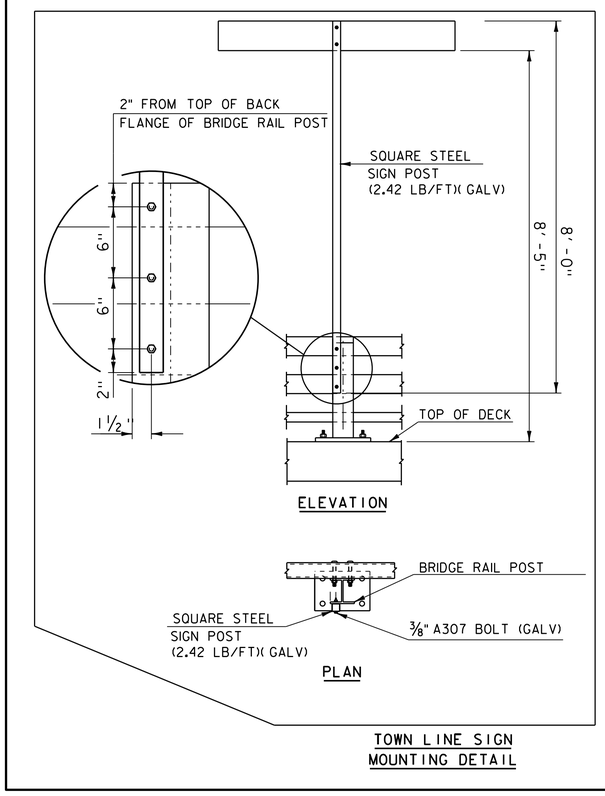
PLOT DATE: **2/26/2013**
DRAWN BY: **D. KARABEGOVI(**
CHECKED BY: **D. PETERSON**
SHEET 54 OF 85



RAILING TRANSITION PLAN



RAILING TRANSITION ELEVATION

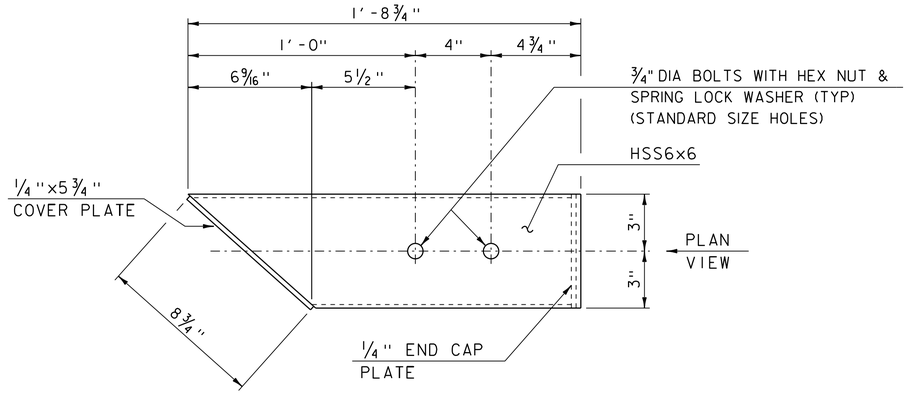


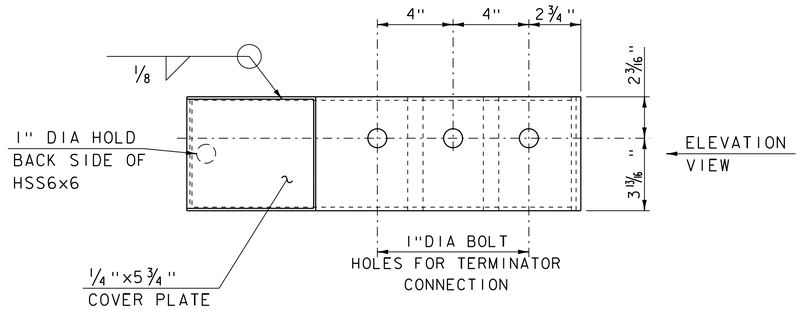
TOWN LINE SIGN MOUNTING DETAIL

NOTES:

1. ALL APPROACH RAIL SPLICES SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC FLOW.
2. TUBE AND STEEL POST MATERIALS, DIMENSION SIZES AND NOTES SHALL BE THE SAME AS THOSE OF THE BRIDGE RAIL, UNLESS OTHERWISE NOTED.
3. APPROACH RAIL BOLTS SHALL BE ASTM A307 GRADE A AND NUTS SHALL BE AASHTO M291 (ASTM A563 GRADE A OR BETTER) (GALVANIZED). WASHERS SHALL BE ASTM F844.
4. PRIOR TO GALVANIZING, GRIND ALL EDGES TO A MINIMUM RADIUS OF 1/16".

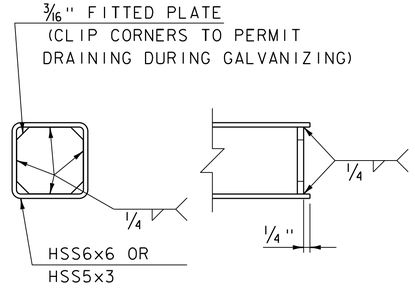
PROJECT NAME:	WEYBRIDGE-NEW HAVEN
PROJECT NUMBER:	BF 032-1(19)
FILE NAME: s12b552rail.dgn	PLOT DATE: 20-APR-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: D. PETERSON	CHECKED BY: D. PETERSON
RAIL DETAIL SHEET 1	SHEET 55 OF 85





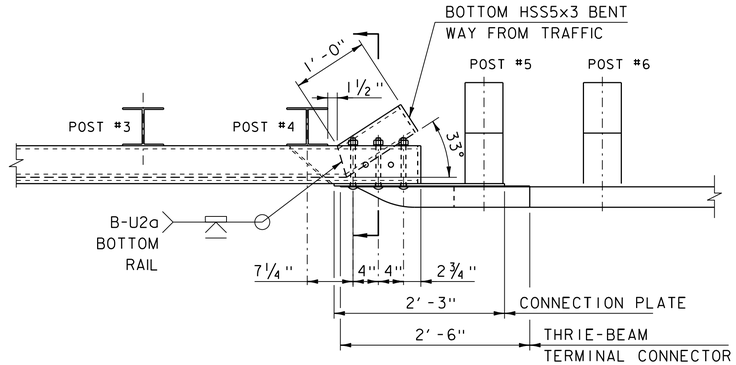
DETAIL "C"

SCALE: 3"=1'-0"



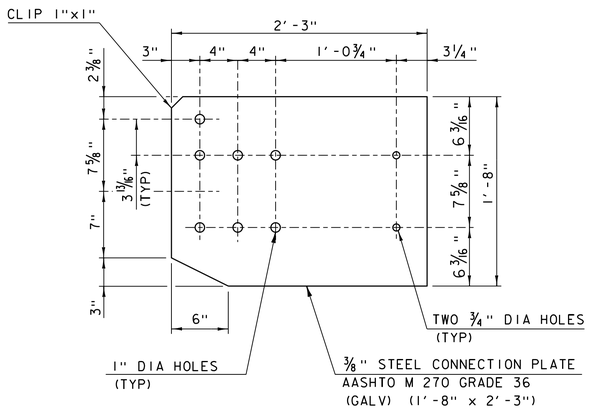
END CAP PLATE DETAIL

SCALE: 3"=1'-0"



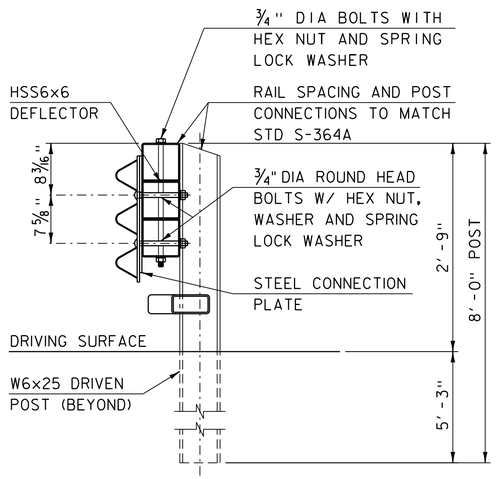
THRIE-BEAM TERMINAL CONNECTION PLAN VIEW

SCALE: 1"=1'-0"



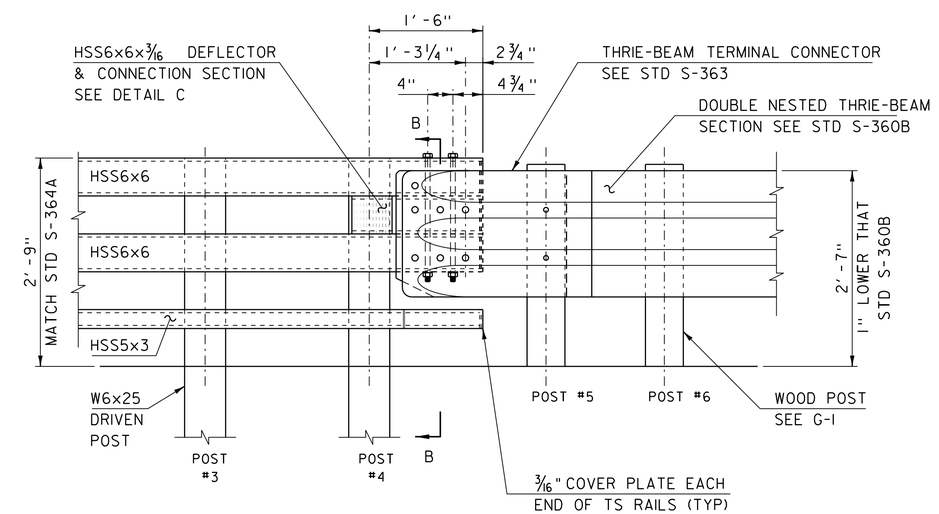
CONNECTION PLATE

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



SECTION B-B

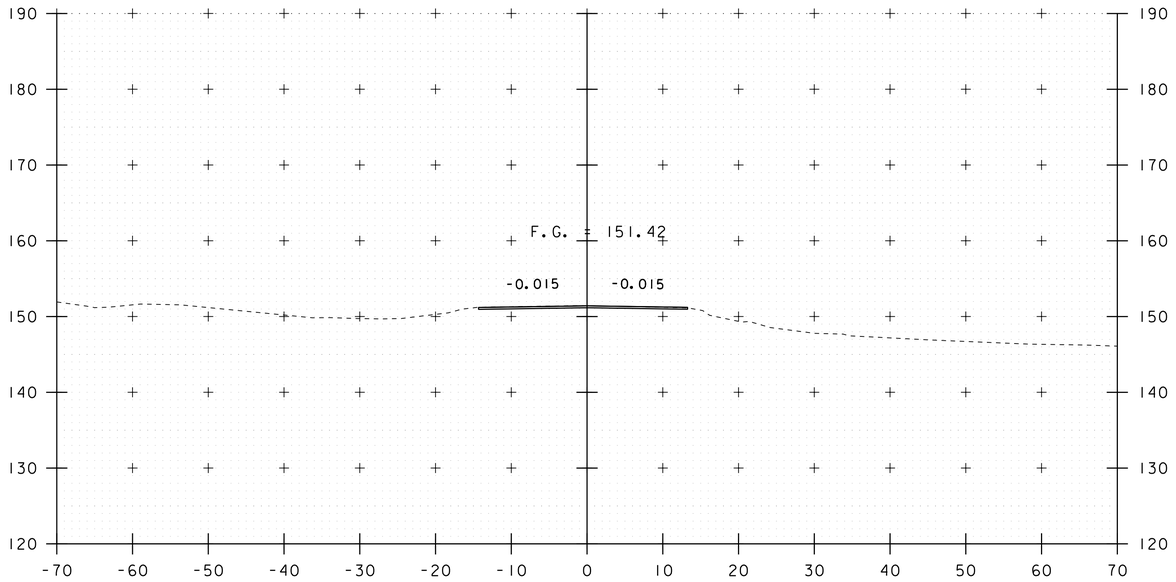
SCALE: 1"=1'-0"



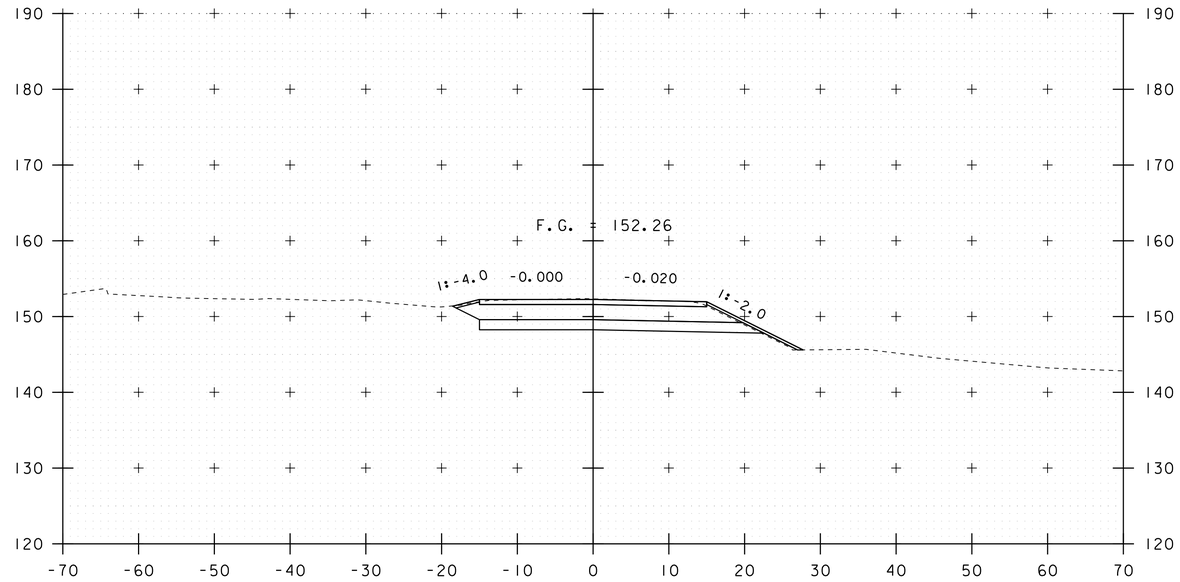
DETAIL A - TERMINAL CONNECTION ELEVATION VIEW

SCALE: 1"=1'-0"

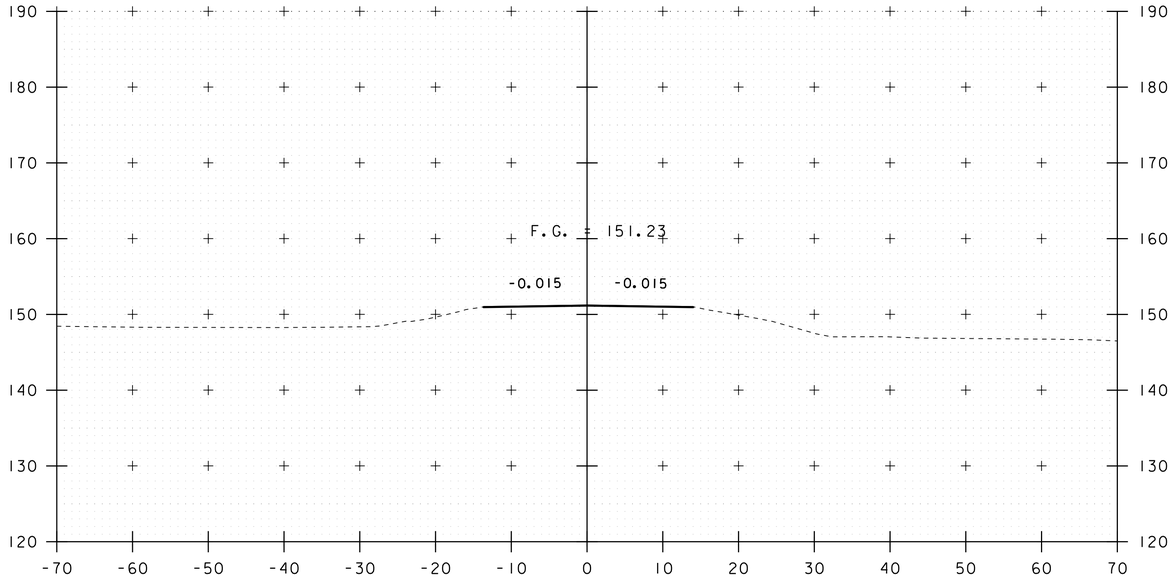
PROJECT NAME:	WEYBRIDGE-NEW HAVEN
PROJECT NUMBER:	BF 032-1(19)
FILE NAME: sl2b552rail.dgn	PLOT DATE: 20-APR-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: D. PETERSON	CHECKED BY: D. PETERSON
RAIL DETAIL SHEET 2	SHEET 56 OF 85



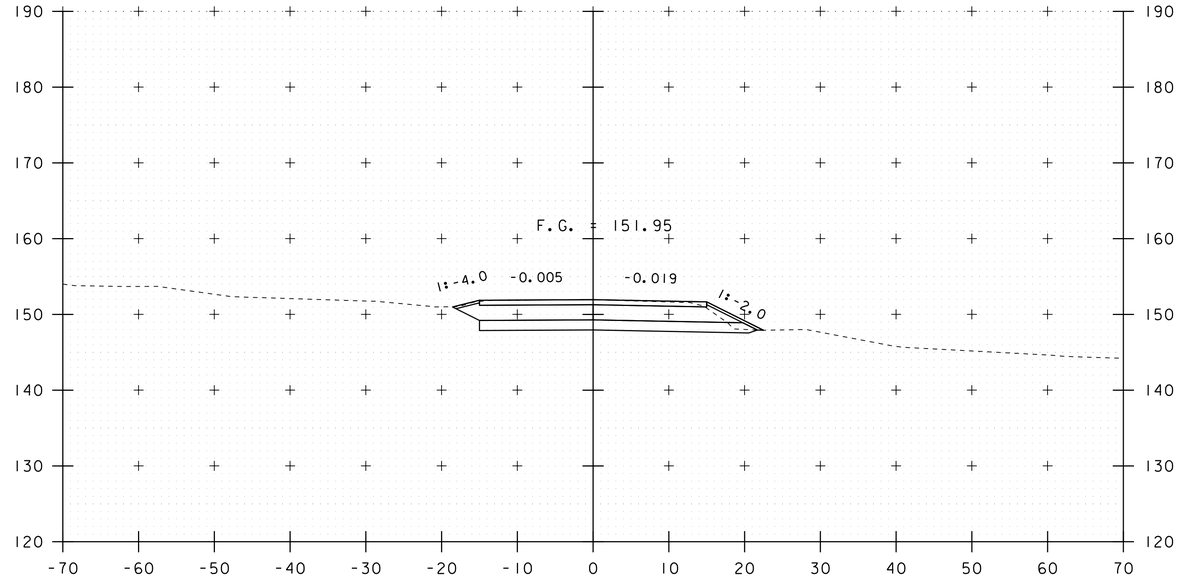
102+00



102+75



101+50
BEGIN APPROACH



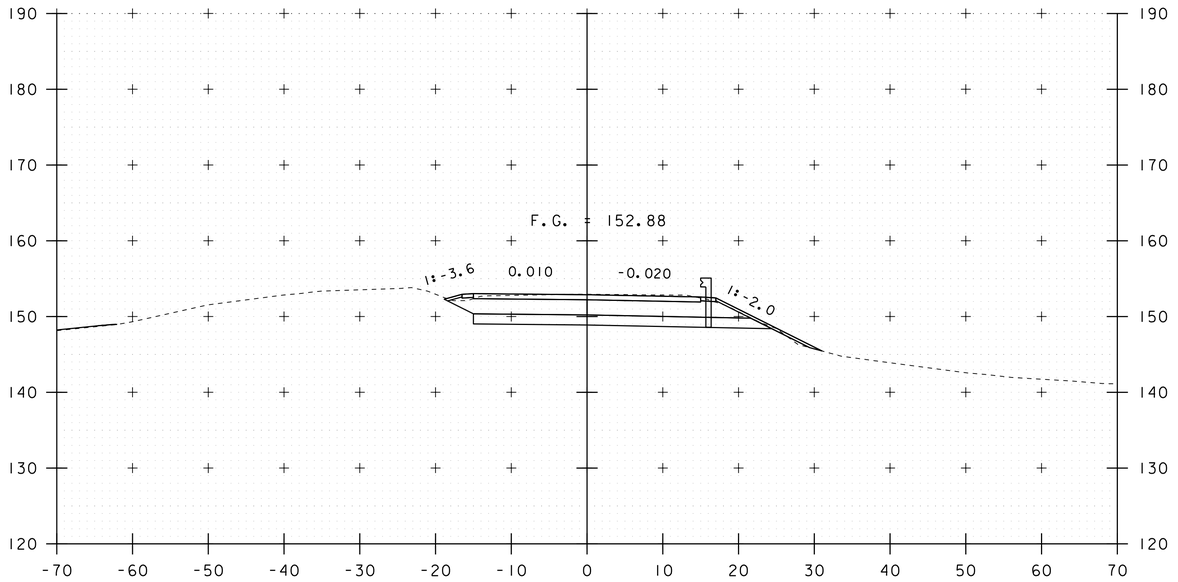
102+50
BEGIN PROJECT

STA. 101+50 TO STA. 102+75

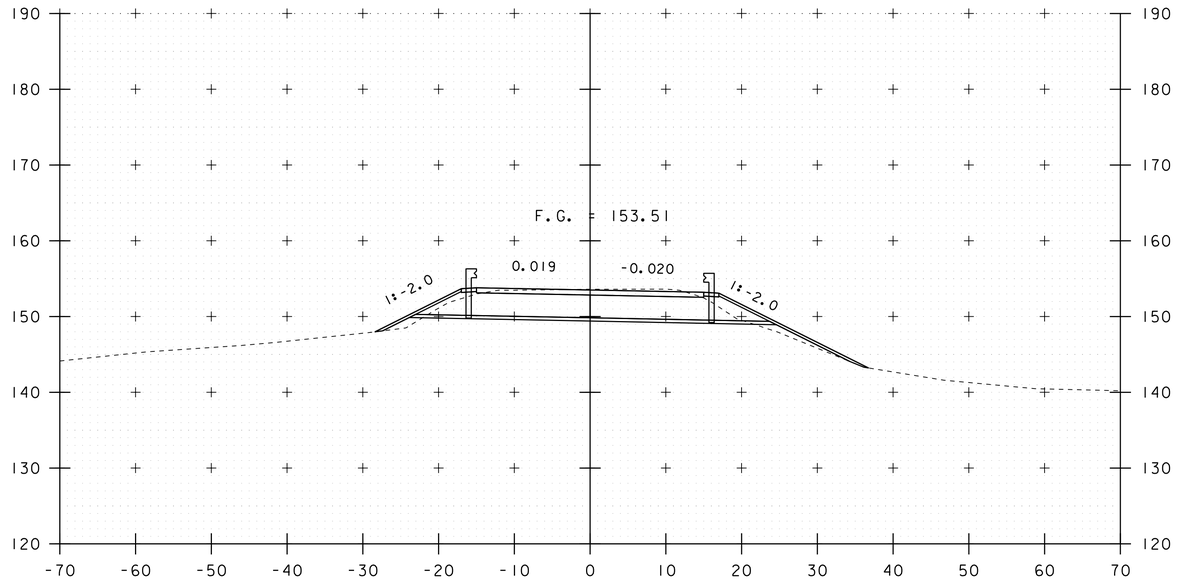
PROJECT NAME: WEYBRIDGE-NEW HAVEN
PROJECT NUMBER: BF 032-1(19)

FILE NAME: sl2b552xs.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: D. PETERSON
VT 17 CROSS SECTIONS 1

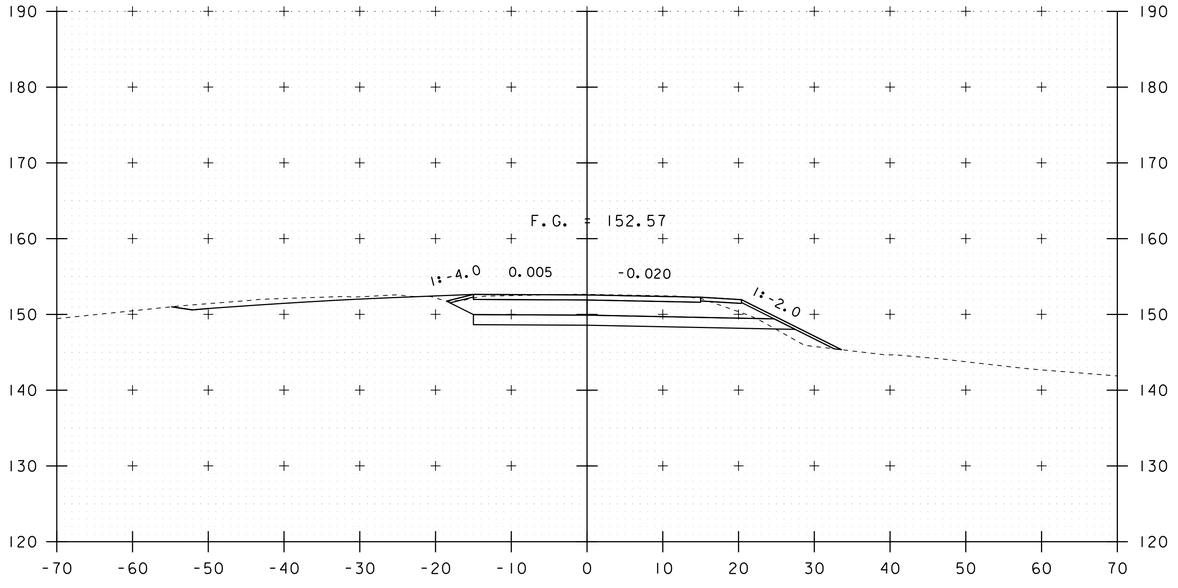
PLOT DATE: 20-APR-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: D. PETERSON
SHEET 57 OF 85



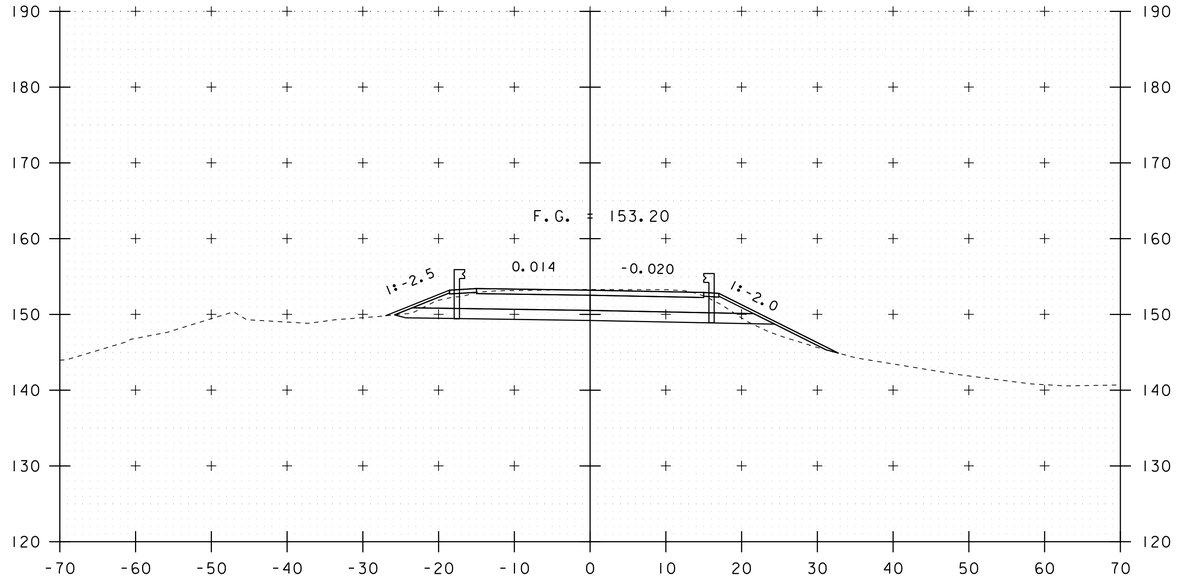
103+25



103+75



103+00



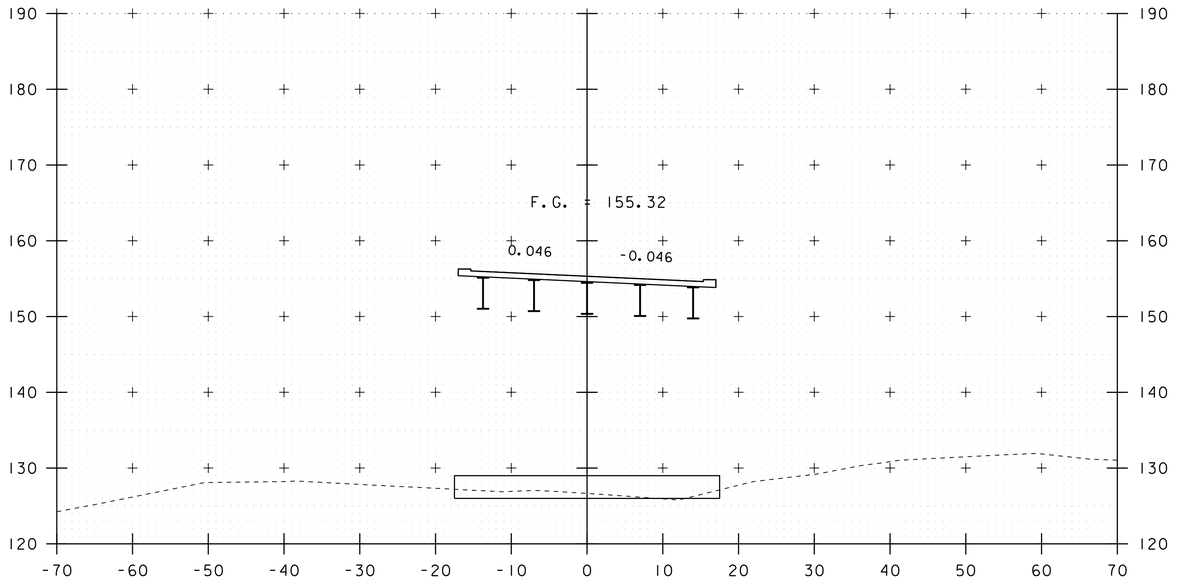
103+50

STA. 103+00 TO STA. 103+75

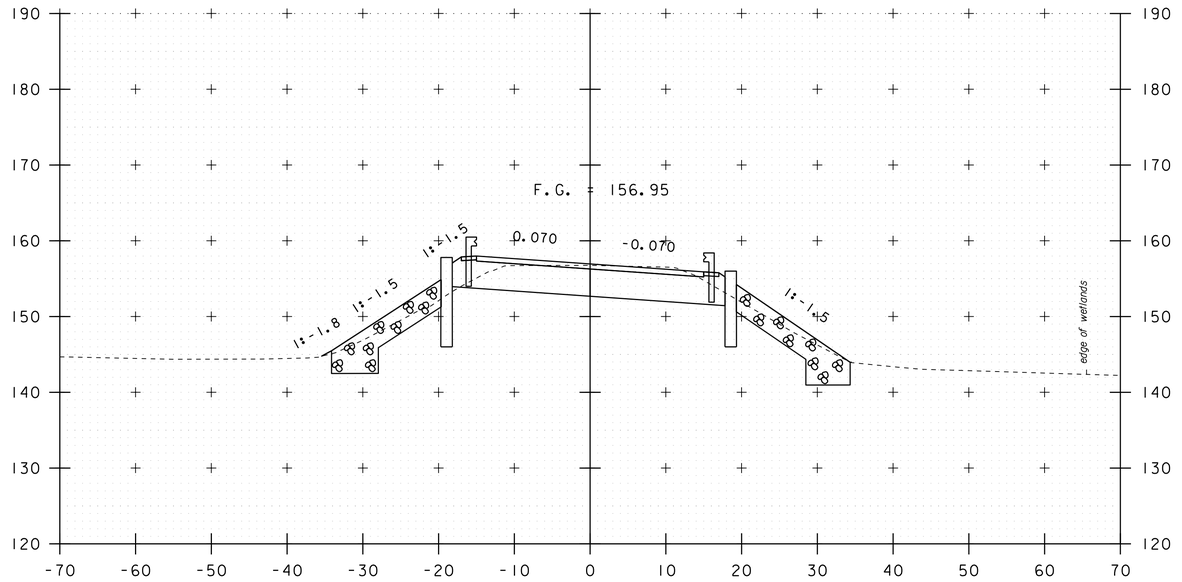
PROJECT NAME: WEYBRIDGE-NEW HAVEN
PROJECT NUMBER: BF 032-1(19)

FILE NAME: sl2b552xs.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: D. PETERSON
VT 17 CROSS SECTIONS 2

PLOT DATE: 20-APR-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: D. PETERSON
SHEET 58 OF 85

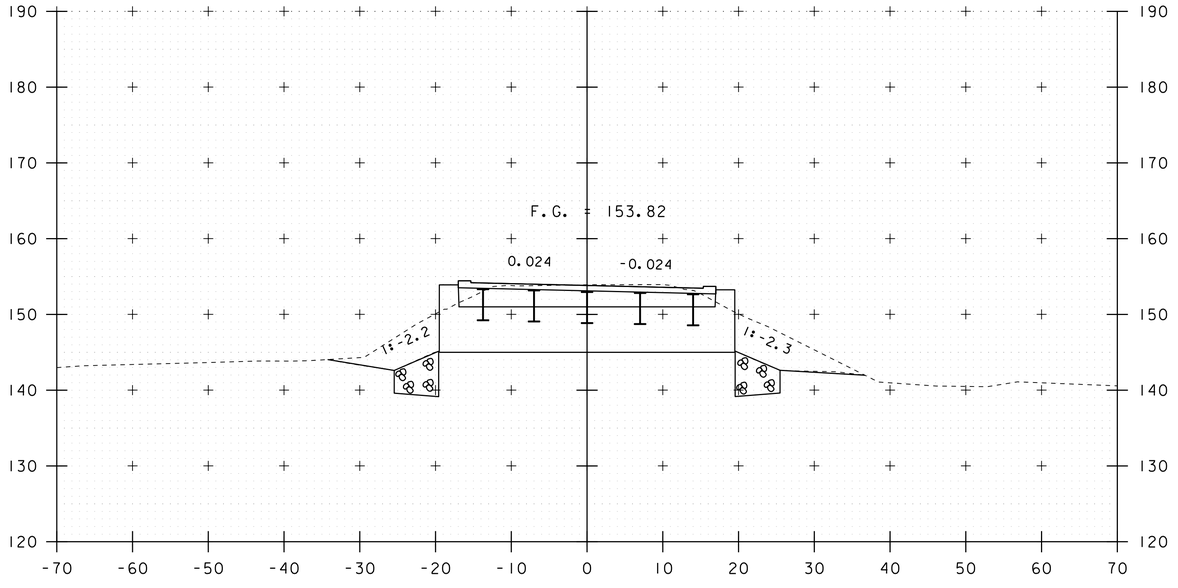


105+20



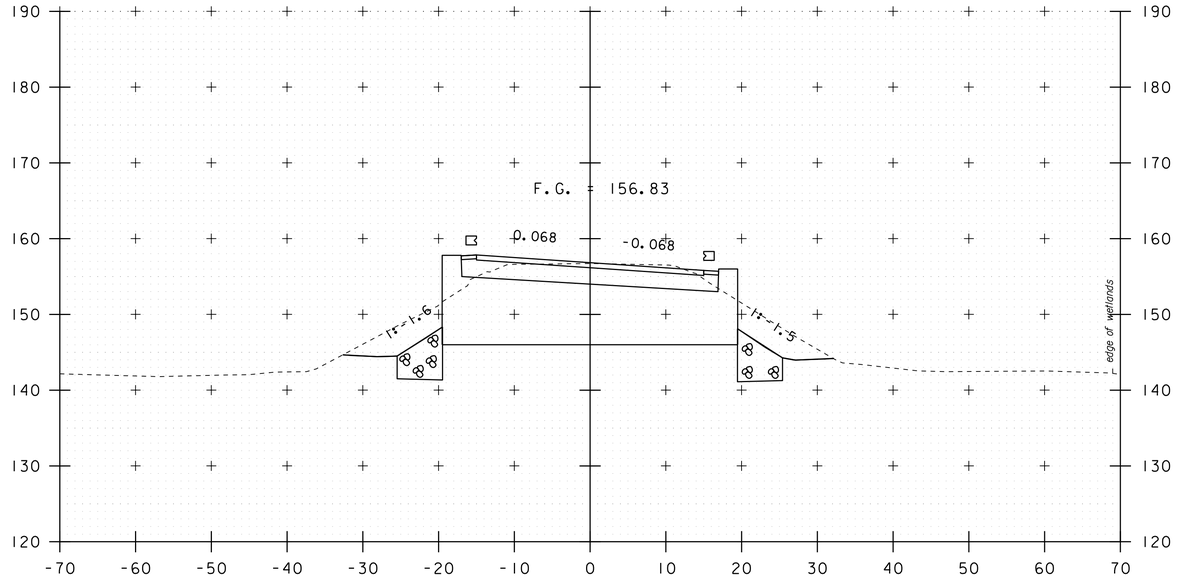
106+50

106+40.50 END BRIDGE



104+00

103+99 BEGIN BRIDGE



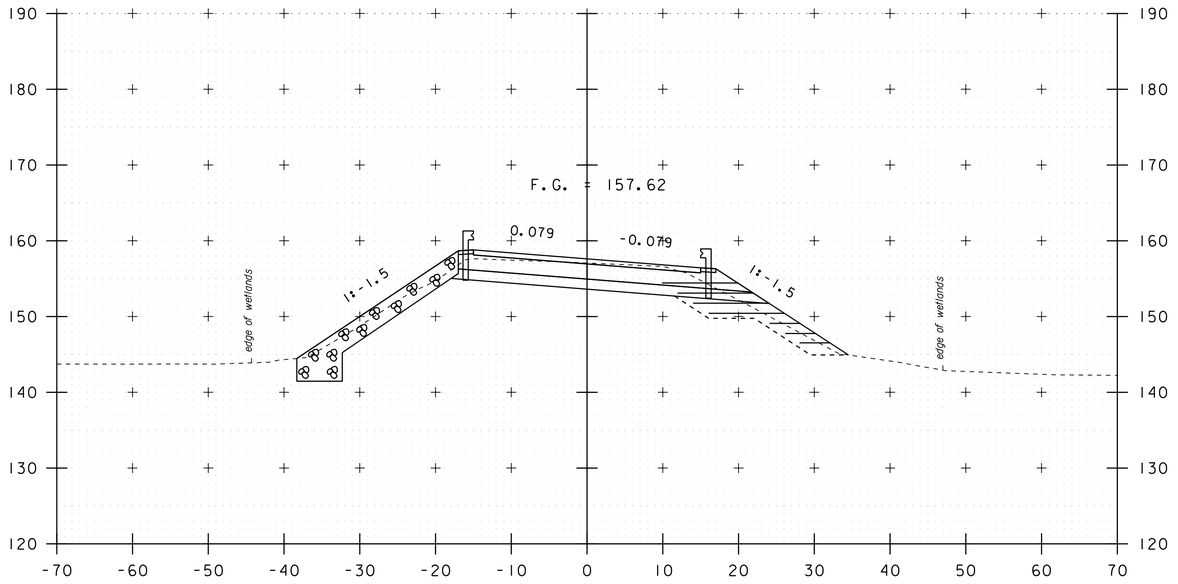
106+40

STA. 104+00 TO STA. 106+50

PROJECT NAME: WEYBRIDGE-NEW HAVEN
PROJECT NUMBER: BF 032-1(19)

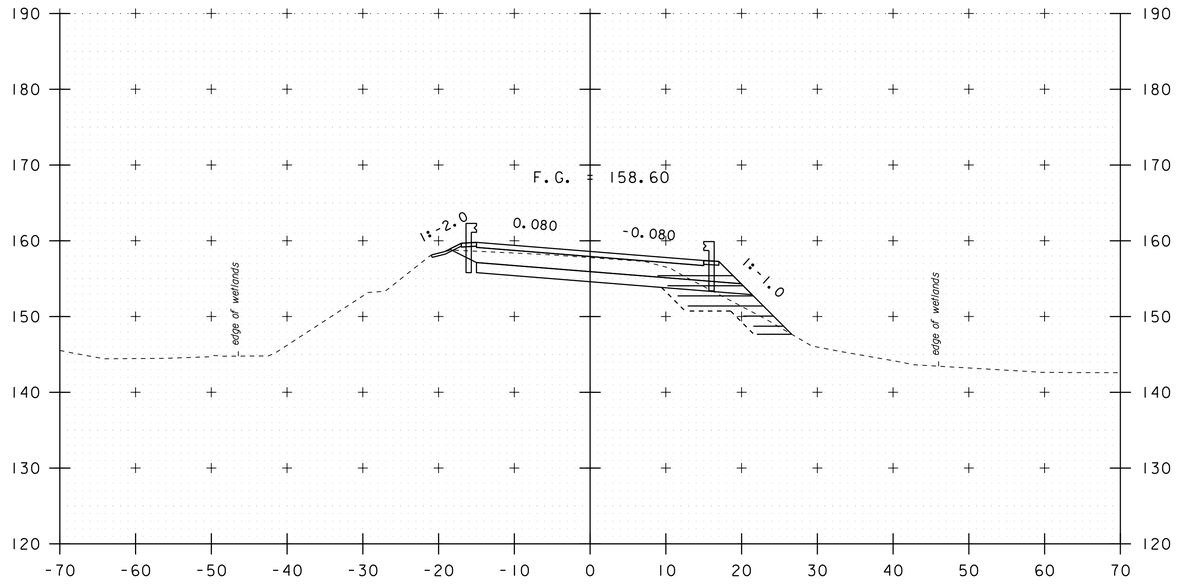
FILE NAME: sl2b552xs.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: D. PETERSON
VT 17 CROSS SECTIONS 3

PLOT DATE: 20-APR-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: D. PETERSON
SHEET 59 OF 85

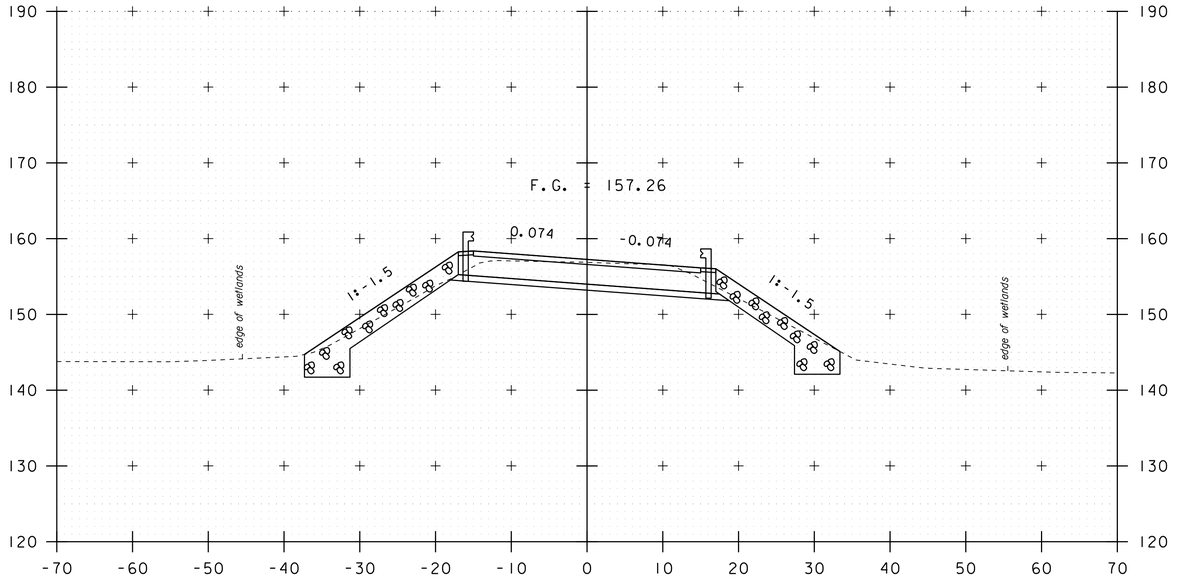


STA 106+90 RT
BEGIN SPECIAL PROVISION
(REINFORCED SOIL SLOPE)

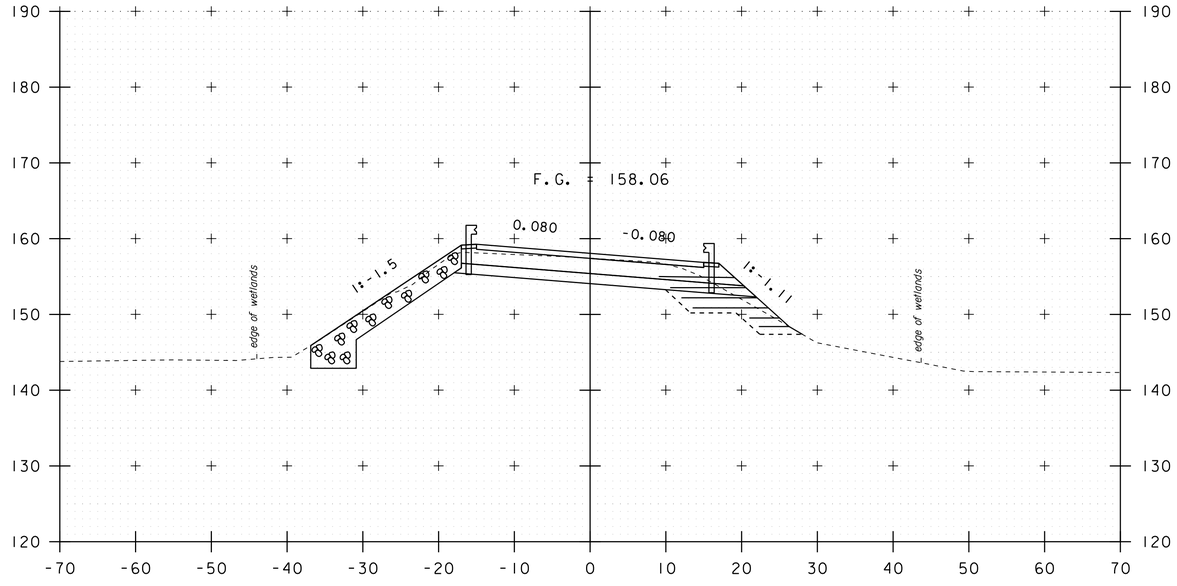
107+00



107+50



106+75



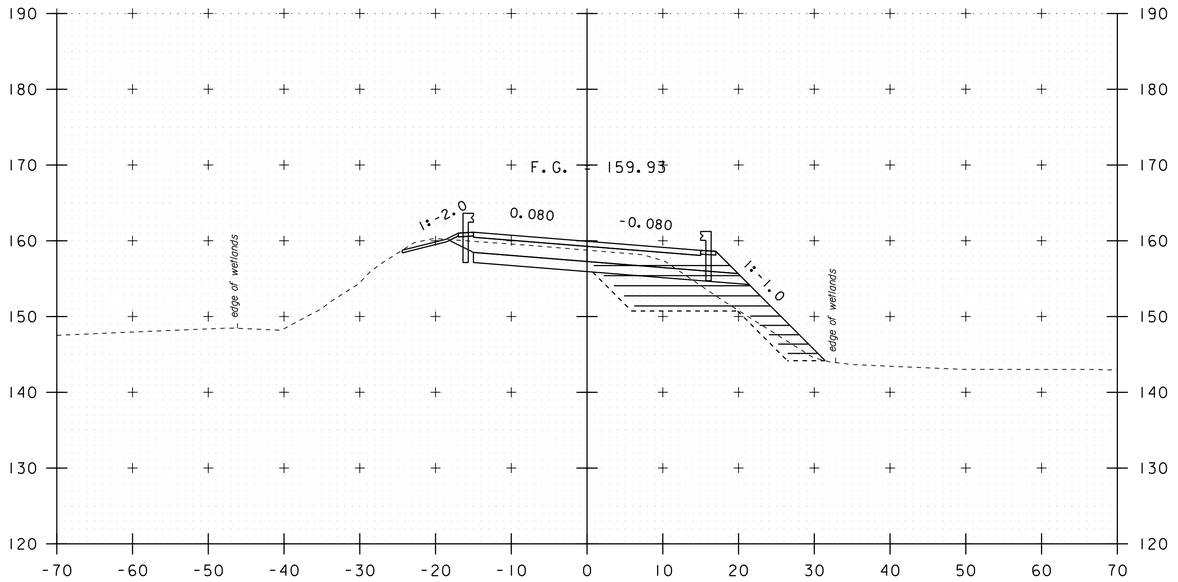
107+25

STA. 106+75 TO STA. 107+50

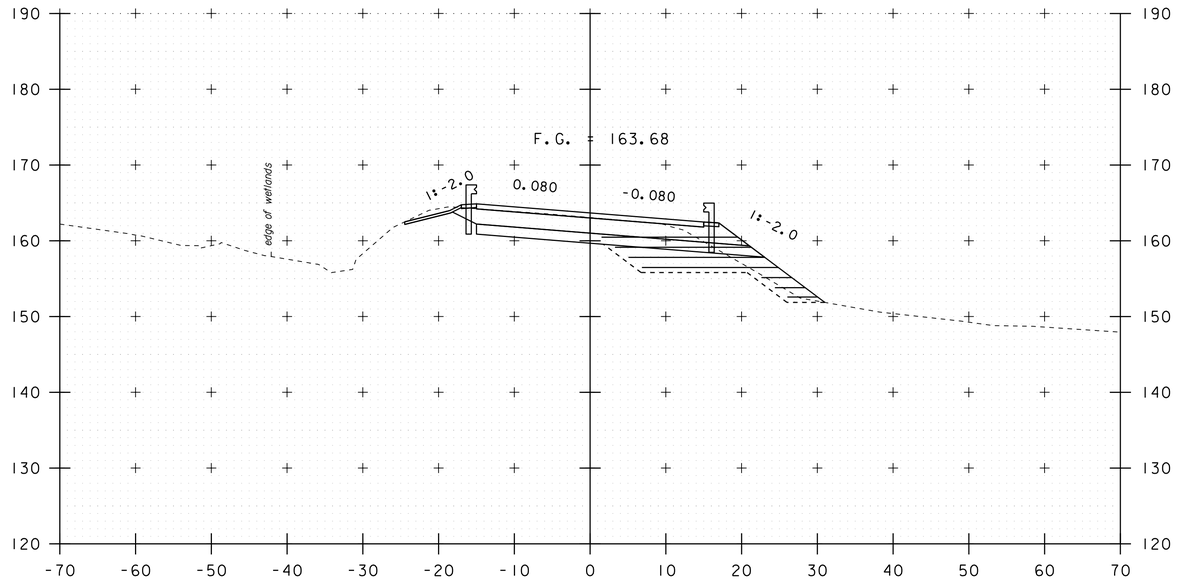
PROJECT NAME: WEYBRIDGE-NEW HAVEN
PROJECT NUMBER: BF 032-1(19)

FILE NAME: sl2b552xs.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: D. PETERSON
VT 17 CROSS SECTIONS 4

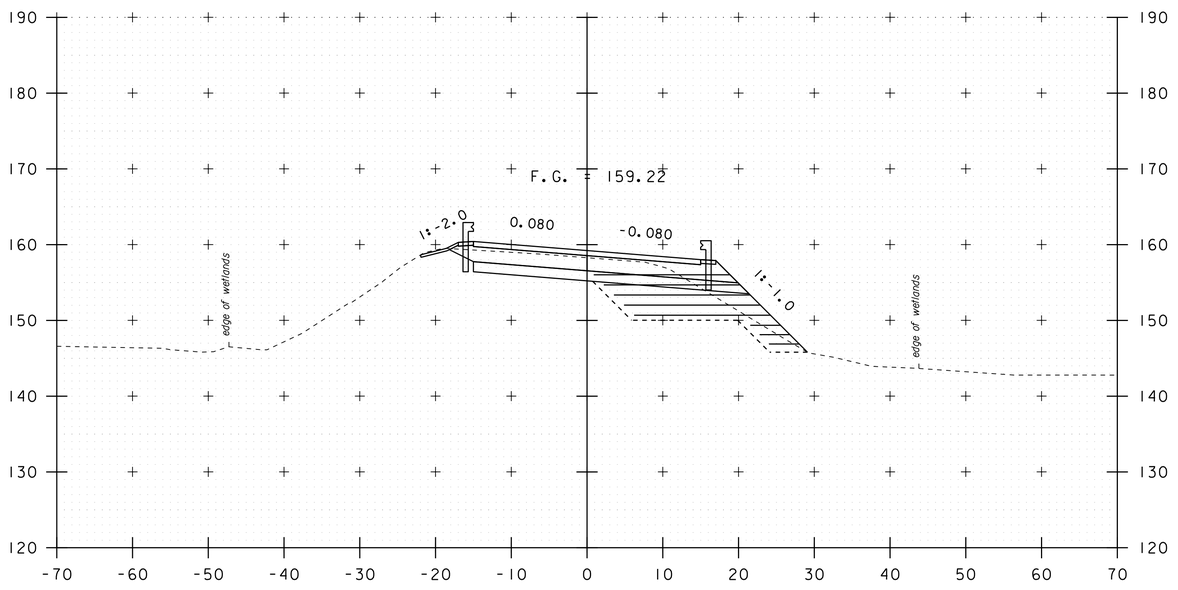
PLOT DATE: 20-APR-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: D. PETERSON
SHEET 60 OF 85



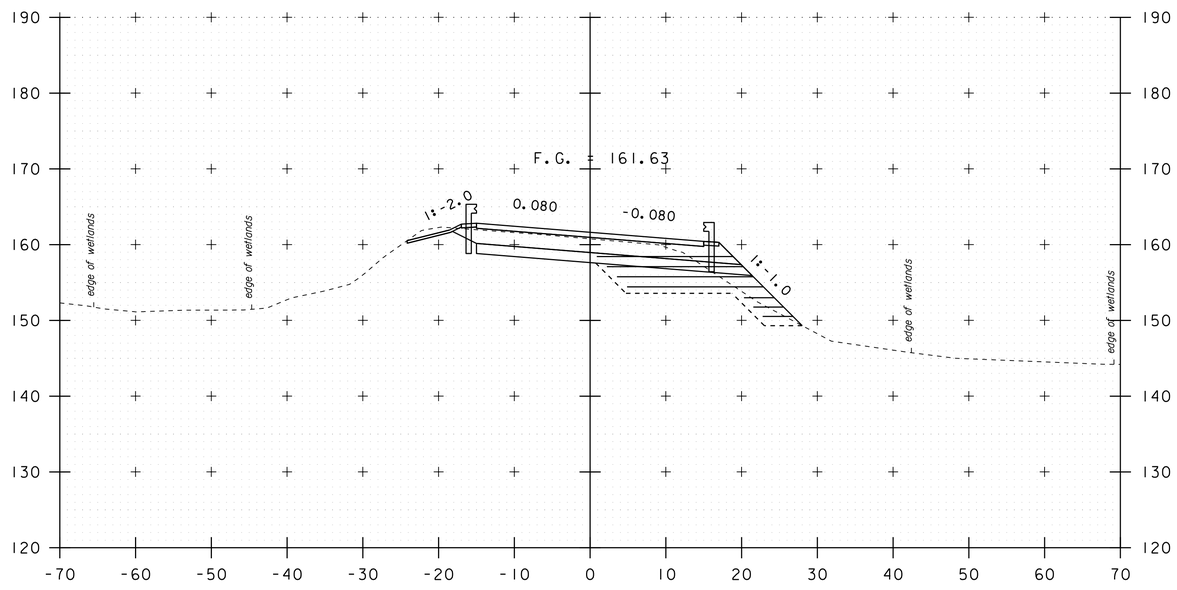
108+00



109+00



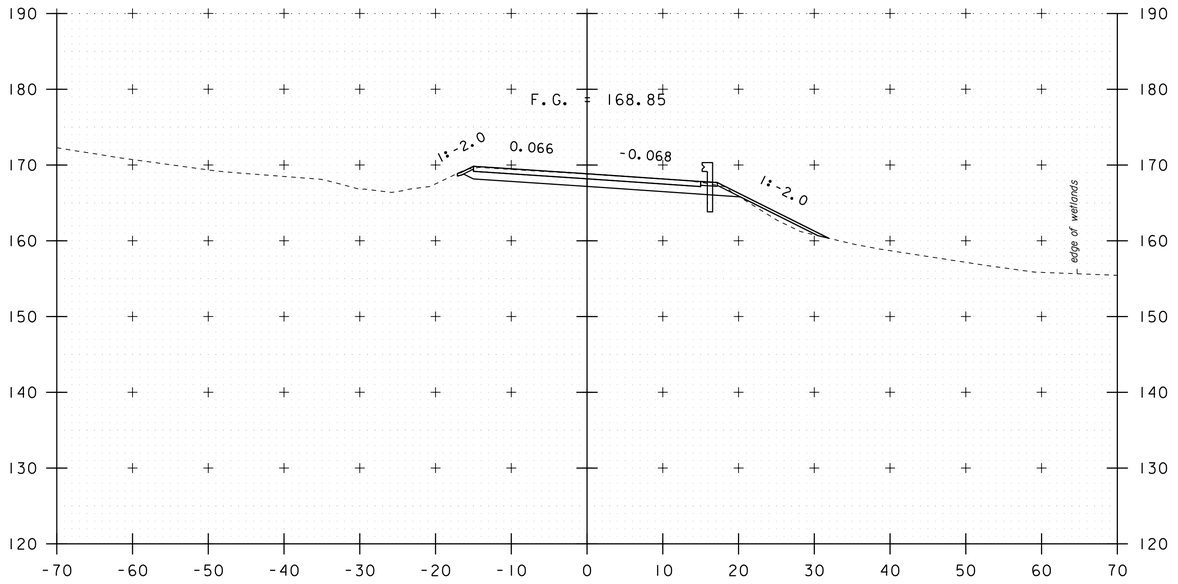
107+75



108+50

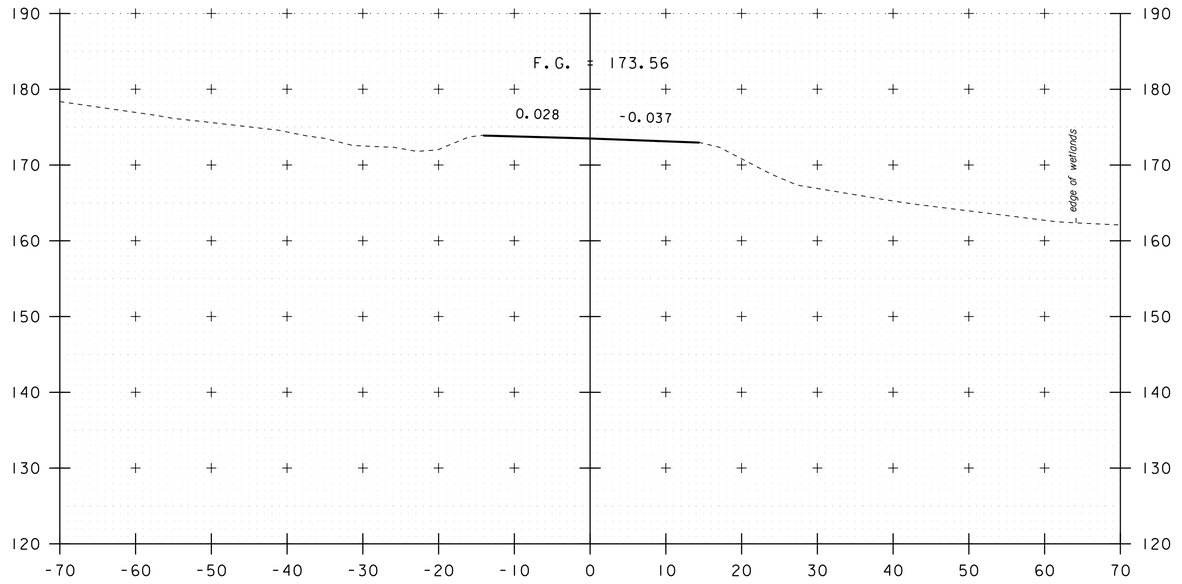
STA. 107+75 TO STA. 109+00

PROJECT NAME:	WEYBRIDGE-NEW HAVEN
PROJECT NUMBER:	BF 032-1(19)
FILE NAME: sl2b552xs.dgn	PLOT DATE: 20-APR-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: D. PETERSON	CHECKED BY: D. PETERSON
VT 17 CROSS SECTIONS 5	SHEET 61 OF 85



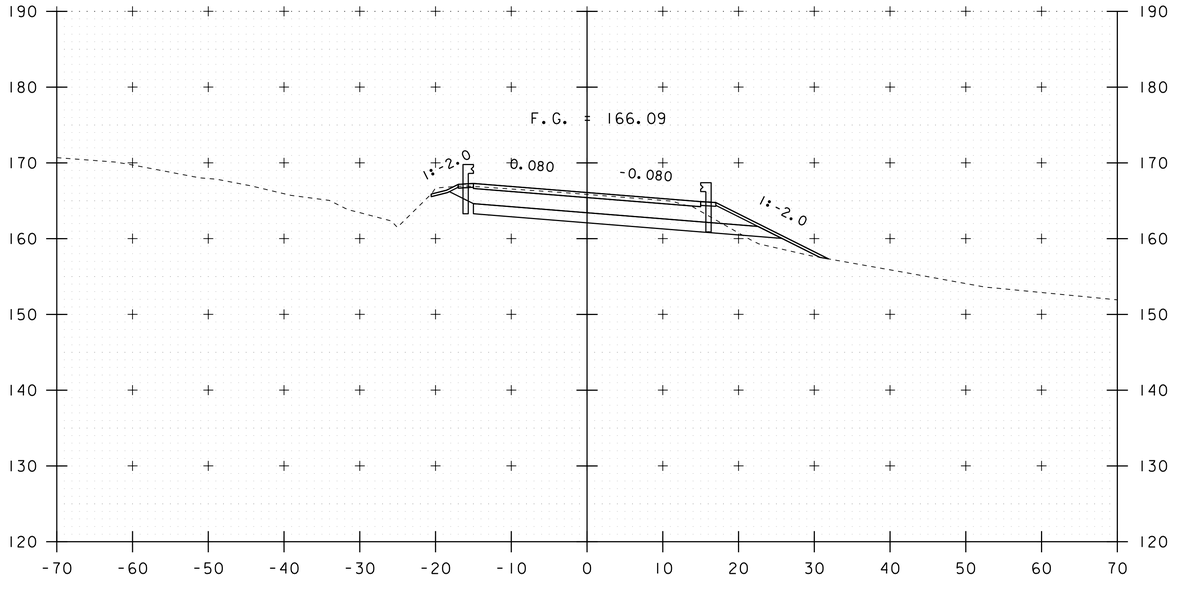
109+50

STA 109+22 RT
END SPECIAL PROVISION
(REINFORCED SOIL SLOPE)



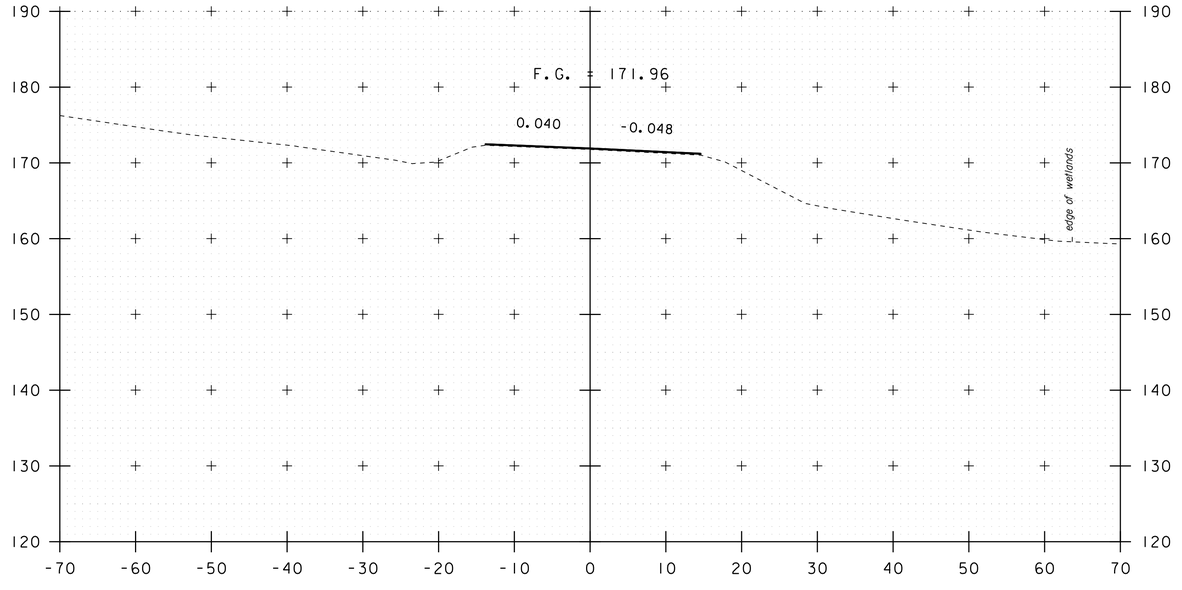
110+00

109+75.00 END PROJECT



110+75

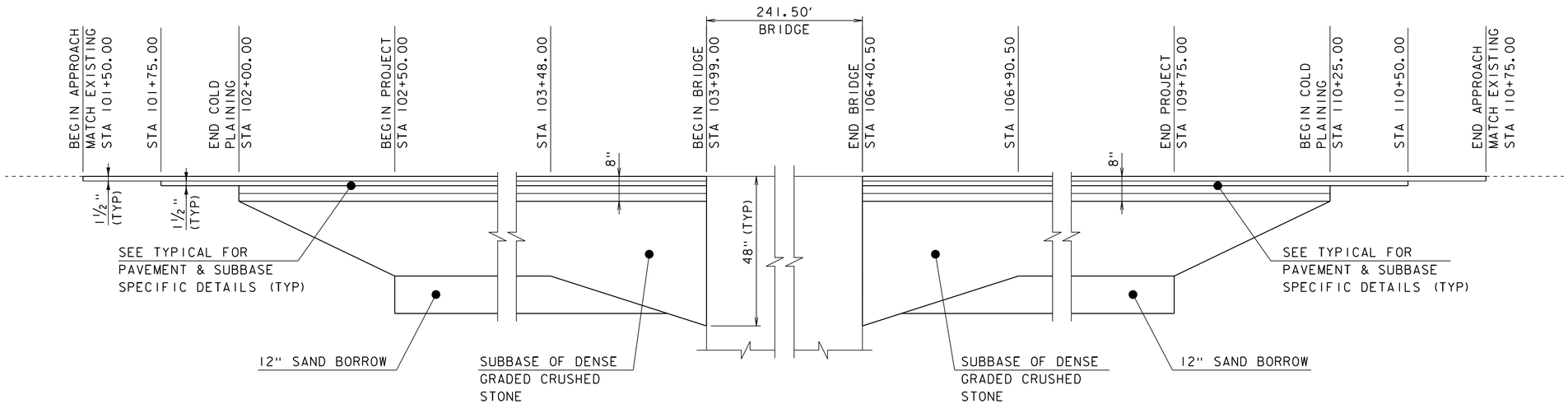
END APPROACH



110+50

STA. 109+50 TO STA. 110+75

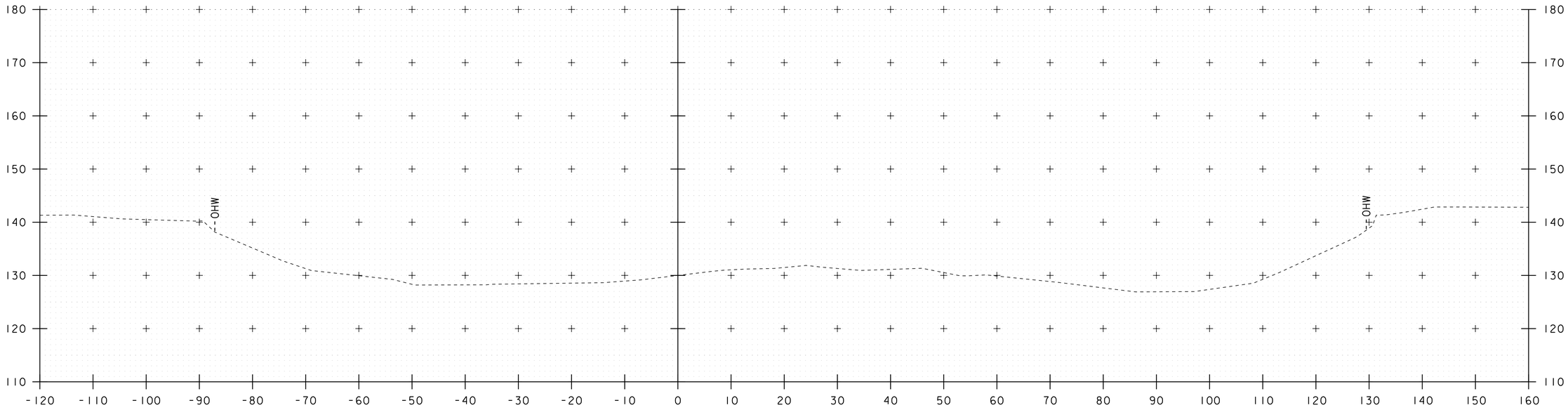
PROJECT NAME:	WEYBRIDGE-NEW HAVEN
PROJECT NUMBER:	BF 032-1(19)
FILE NAME: sl2b552xs.dgn	PLOT DATE: 20-APR-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: D. PETERSON	CHECKED BY: D. PETERSON
VT 17 CROSS SECTIONS 6	SHEET 62 OF 85



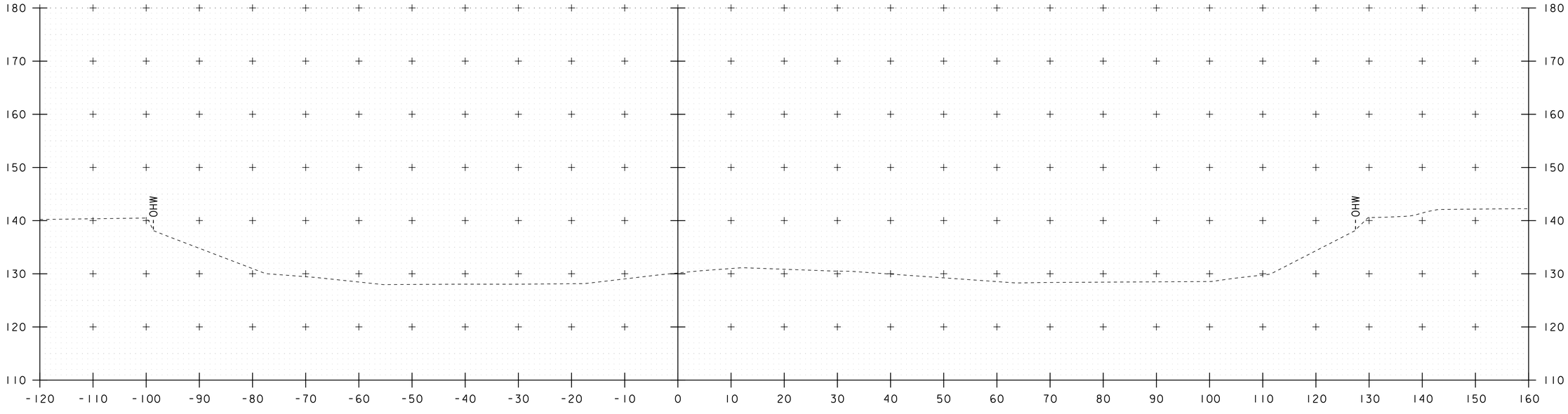
VTI7 MATERIAL TRANSITION DETAIL

HORIZONTAL SCALE: 1" = 20'-0"
NO VERTICAL SCALE

PROJECT NAME:	WEYBRIDGE-NEW HAVEN
PROJECT NUMBER:	BF 032-1(19)
FILE NAME: sl2b552pro.dgn	PLOT DATE: 20-APR-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: D. PETERSON	CHECKED BY: D. PETERSON
MATERIAL TRANSITION & DETAILS	SHEET 63 OF 85



50+50



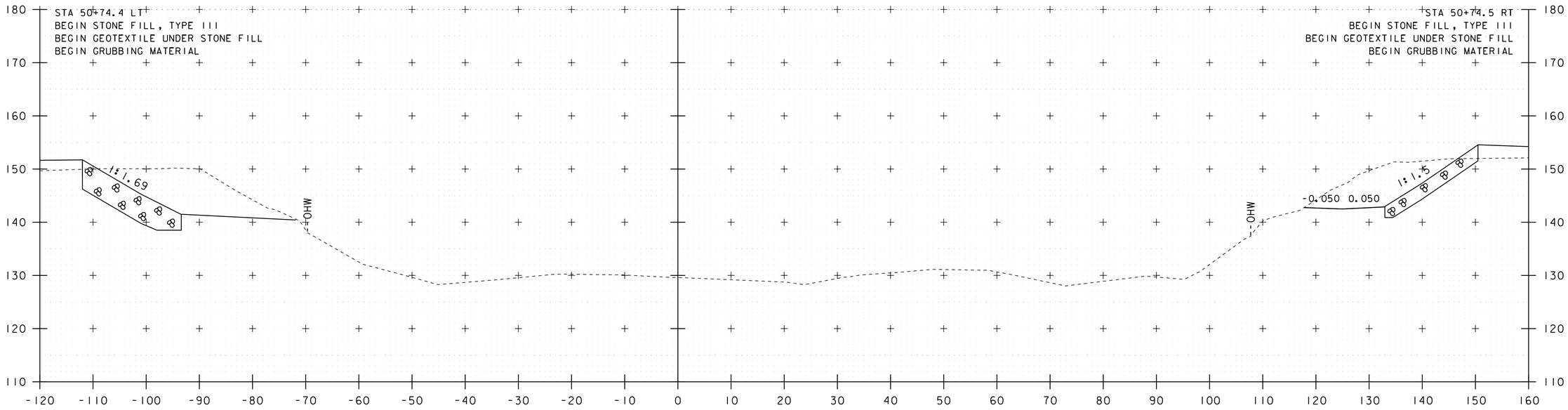
50+25

STA. 50+25 TO STA. 50+50

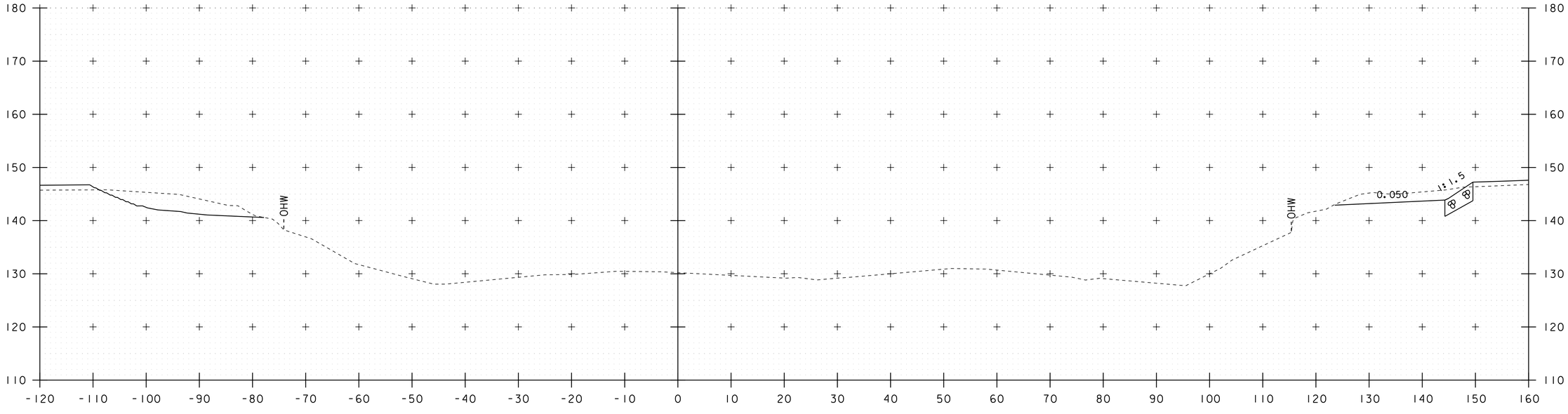
PROJECT NAME: WEYBRIDGE-NEW HAVEN
PROJECT NUMBER: BF 032-1(19)

FILE NAME: sl2b552xs.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: D. PETERSON
CHANNEL CROSS SECTIONS 1

PLOT DATE: 20-APR-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: D. PETERSON
SHEET 64 OF 85



50+80



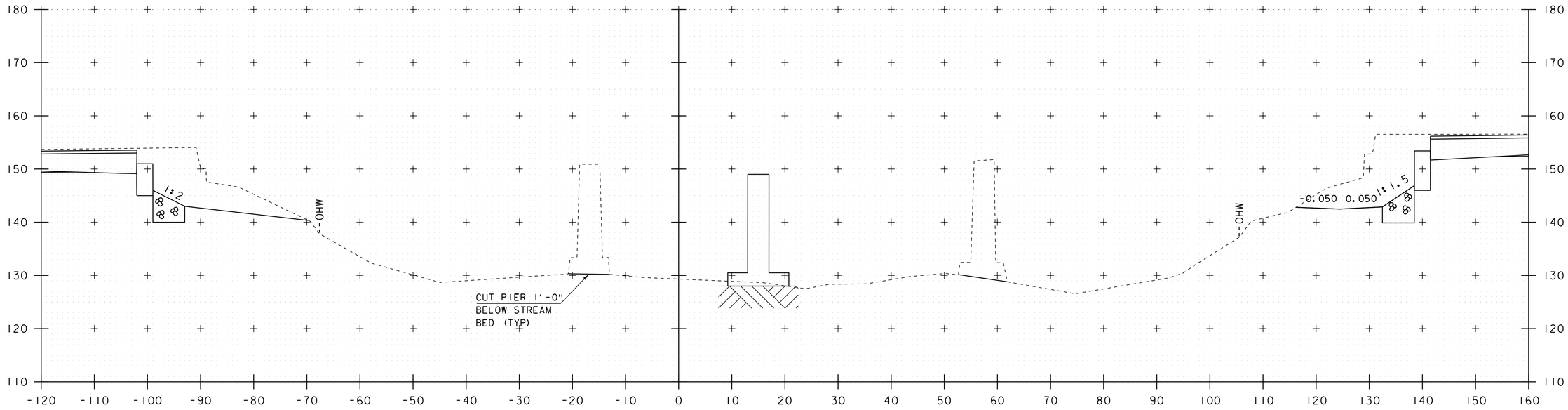
50+70

STA. 50+70 TO STA. 50+80

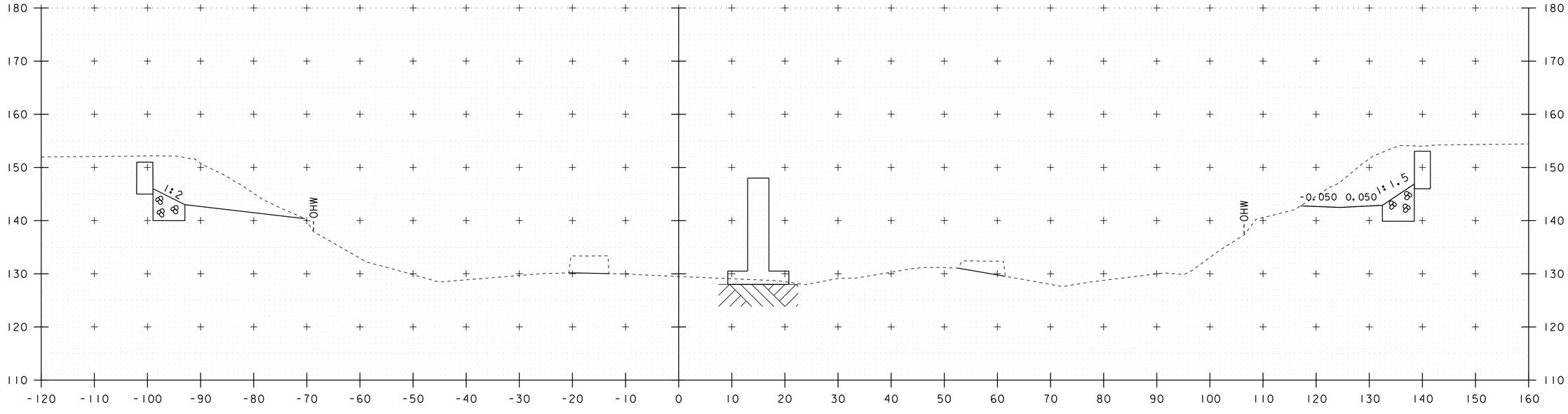
PROJECT NAME: WEYBRIDGE-NEW HAVEN
PROJECT NUMBER: BF 032-1(19)

FILE NAME: sl2b552xs.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: D. PETERSON
CHANNEL CROSS SECTIONS 2

PLOT DATE: 20-APR-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: D. PETERSON
SHEET 65 OF 85



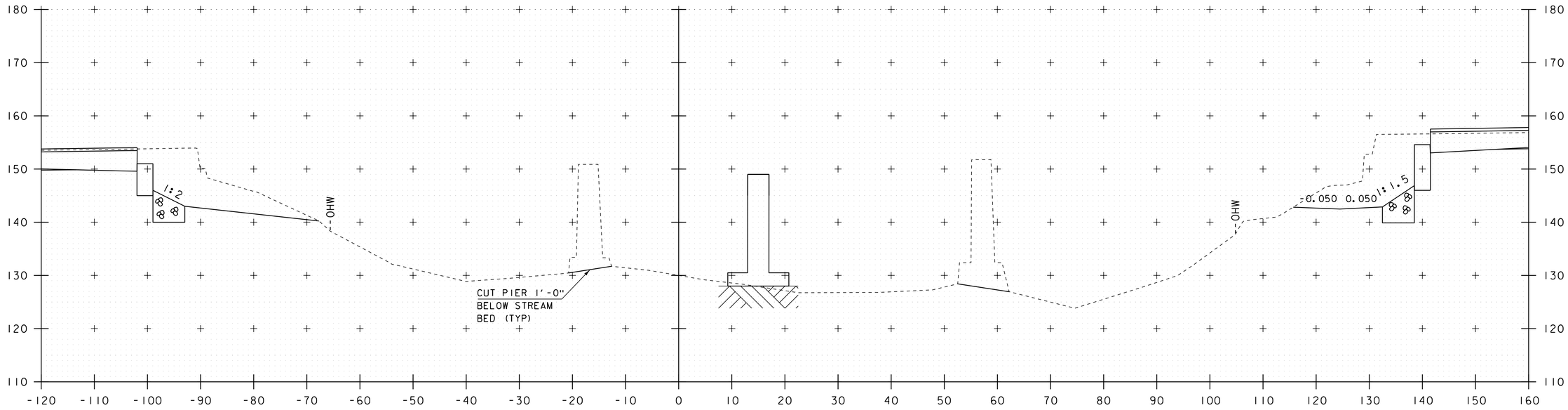
50+90



50+84

PROJECT NAME:	WEYBRIDGE-NEW HAVEN
PROJECT NUMBER:	BF 032-1(19)
FILE NAME: sl2b552xs.dgn	PLOT DATE: 20-APR-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: D. PETERSON	CHECKED BY: D. PETERSON
CHANNEL CROSS SECTIONS 3	SHEET 66 OF 85

STA. 50+84 TO STA. 50+90



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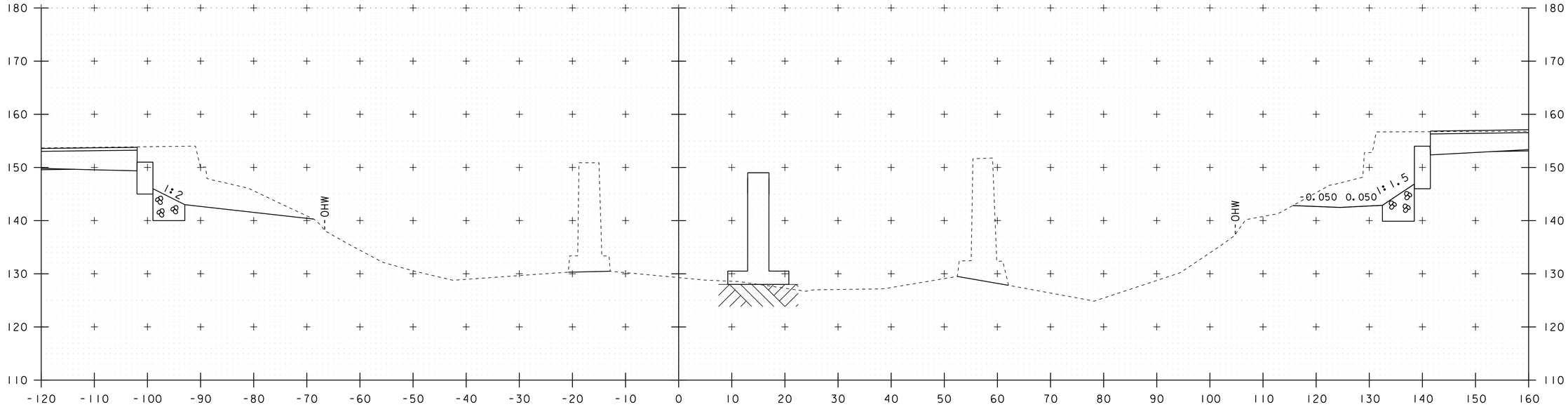


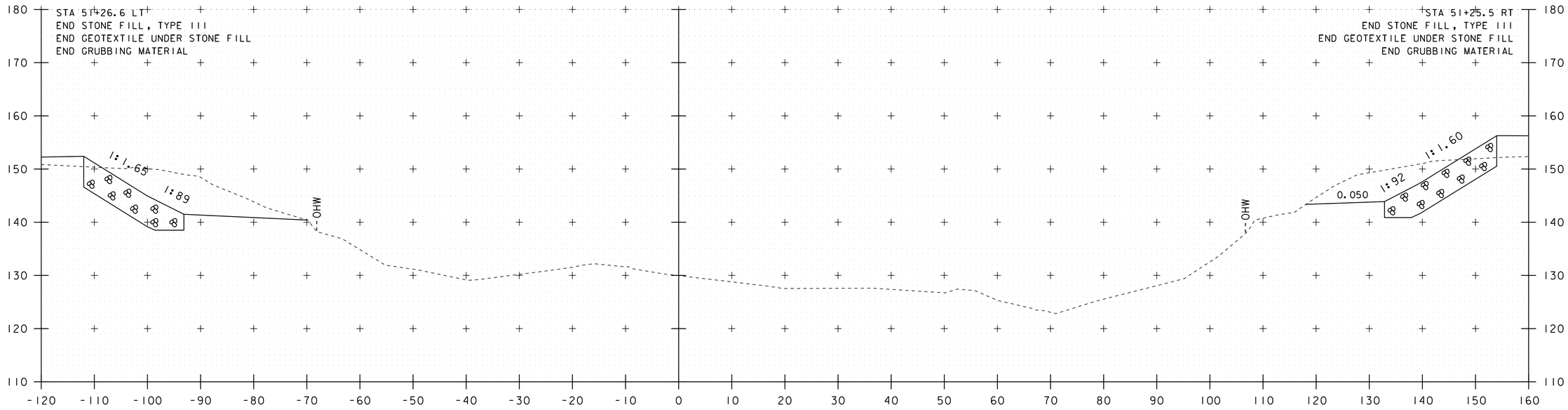
51+00

STA. 51+00 TO STA. 51+10

PROJECT NAME: WEYBRIDGE-NEW HAVEN
PROJECT NUMBER: BF 032-1(19)

FILE NAME: sl2b552xs.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: D. PETERSON
CHANNEL CROSS SECTIONS 4

PLOT DATE: 20-APR-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: D. PETERSON
SHEET 67 OF 85



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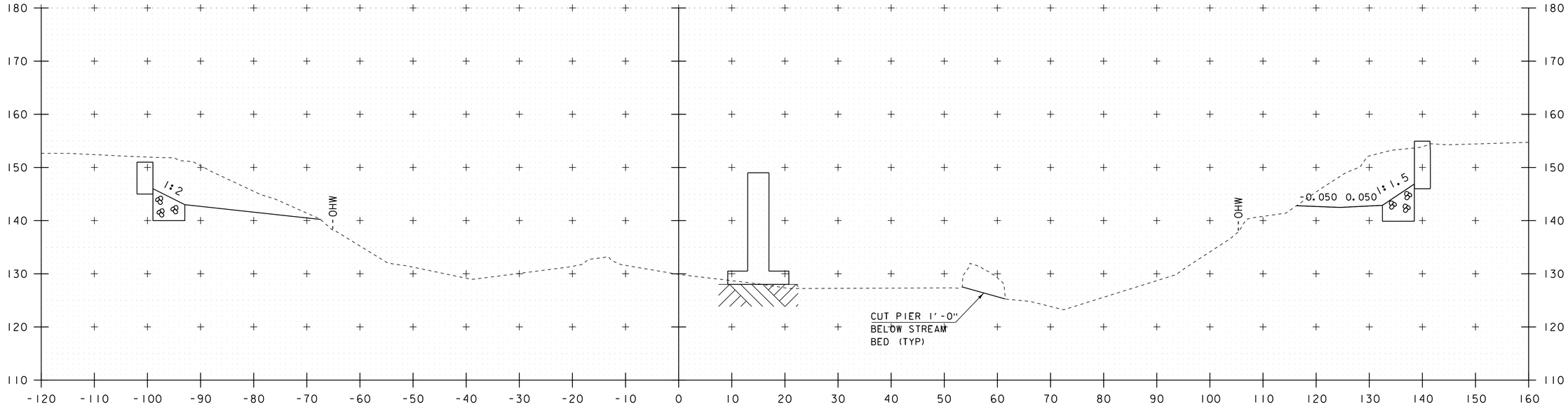

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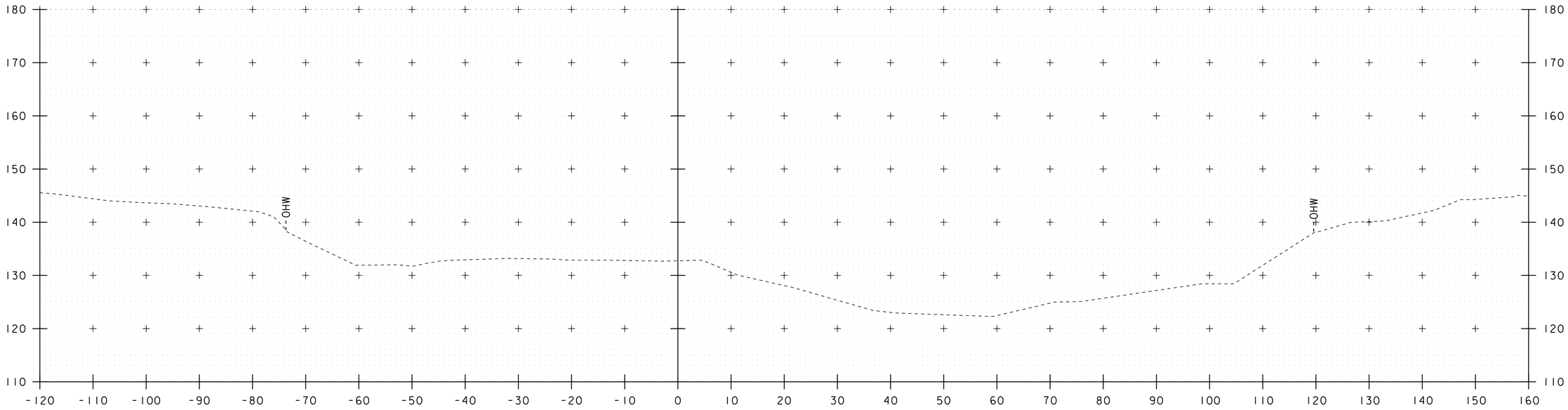
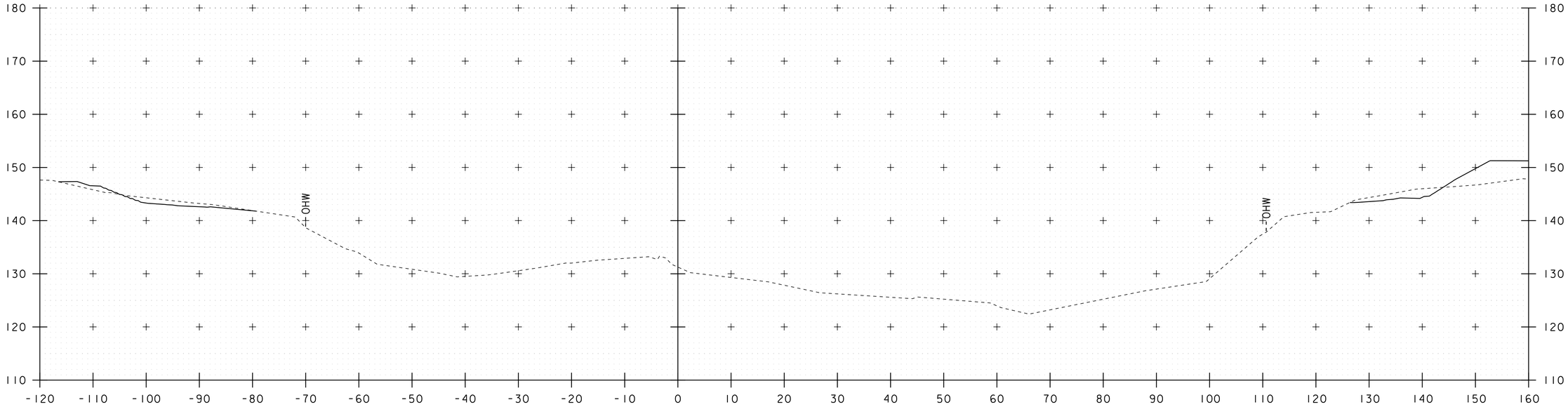
PROJECT NAME: WEYBRIDGE-NEW HAVEN
PROJECT NUMBER: BF 032-1(19)

FILE NAME: sl2b552xs.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: D. PETERSON
CHANNEL CROSS SECTIONS 5

PLOT DATE: 20-APR-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: D. PETERSON
SHEET 68 OF 85



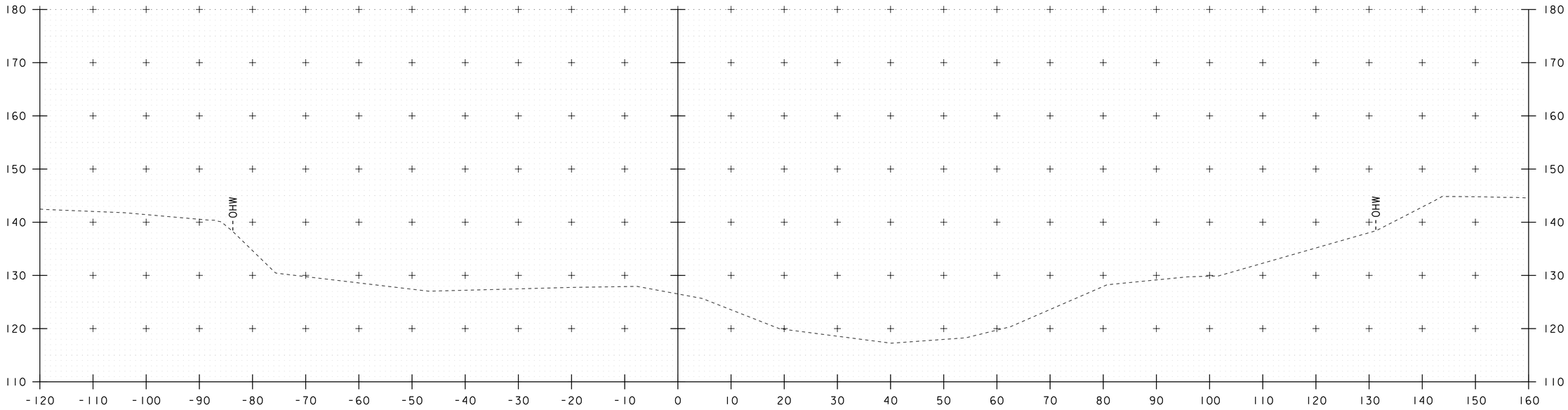
51+50



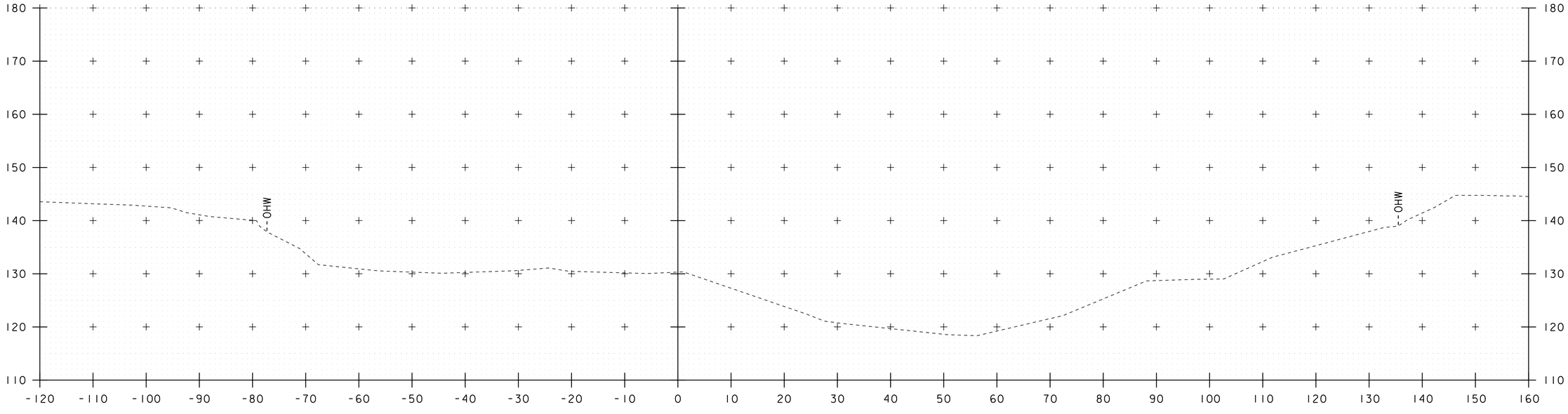
51+30

STA. 51+30 TO STA. 51+50

PROJECT NAME:	WEYBRIDGE-NEW HAVEN
PROJECT NUMBER:	BF 032-1(19)
FILE NAME: sl2b552xs.dgn	PLOT DATE: 20-APR-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: D. PETERSON	CHECKED BY: D. PETERSON
CHANNEL CROSS SECTIONS 6	SHEET 69 OF 85



52+00

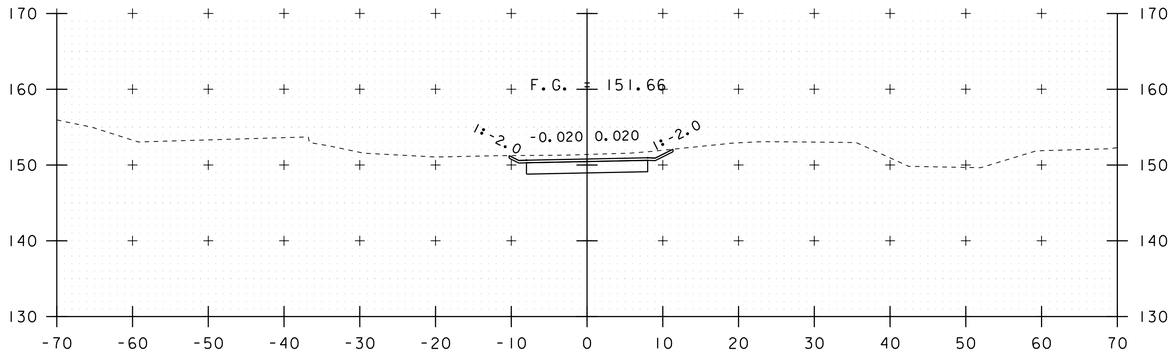


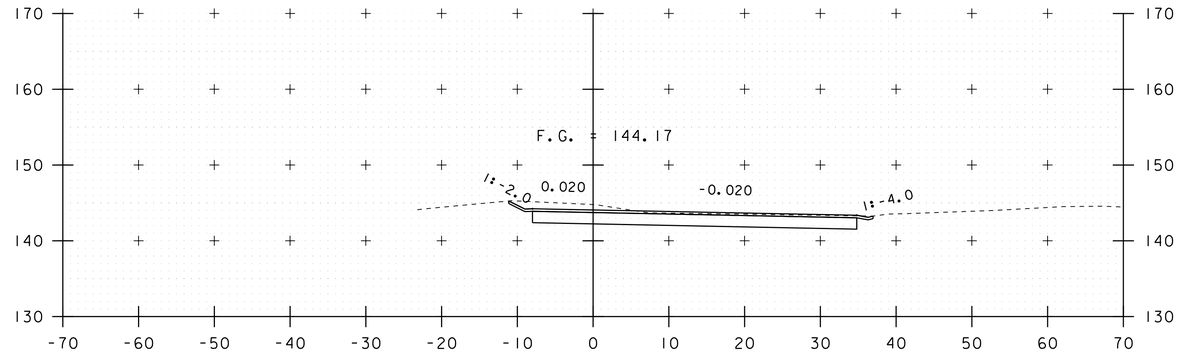
51+75

STA. 51+75 TO STA. 52+00

PROJECT NAME:	WEYBRIDGE-NEW HAVEN
PROJECT NUMBER:	BF 032-1(19)

FILE NAME: sl2b552xs.dgn	PLOT DATE: 20-APR-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: D. PETERSON	CHECKED BY: D. PETERSON
CHANNEL CROSS SECTIONS 7	SHEET 70 OF 85





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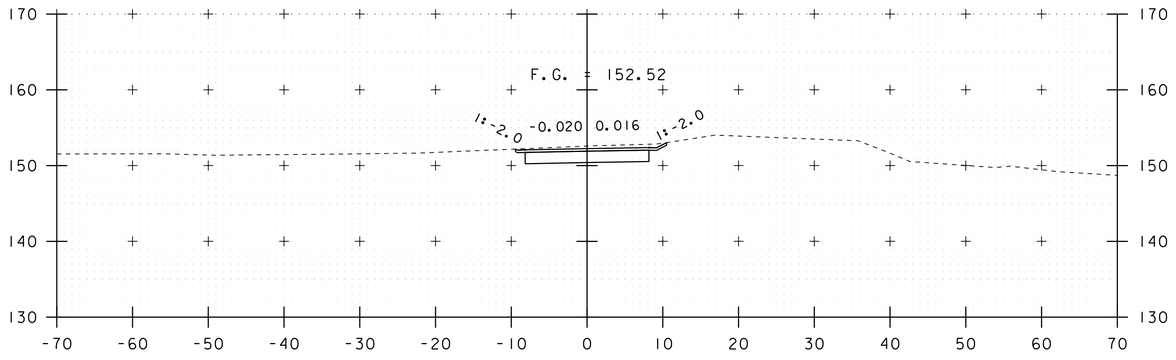

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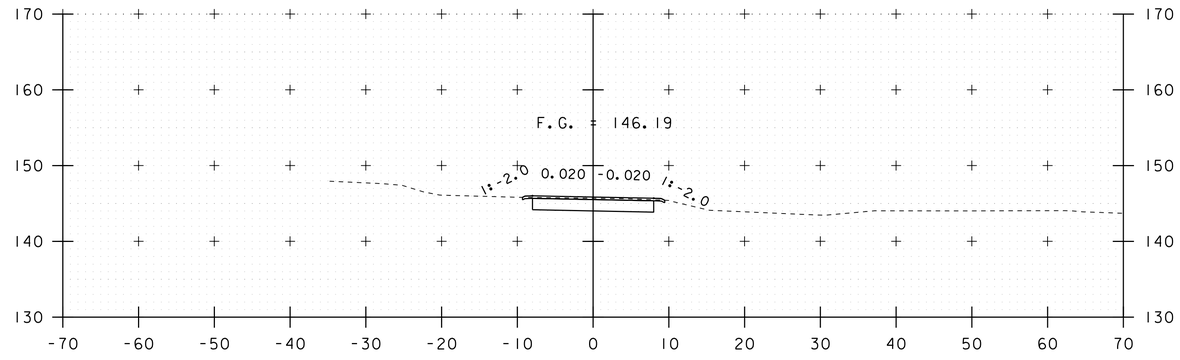

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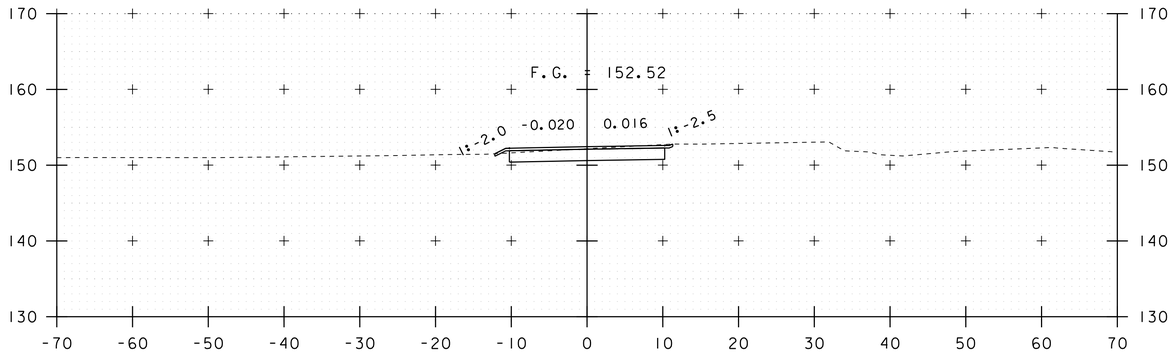
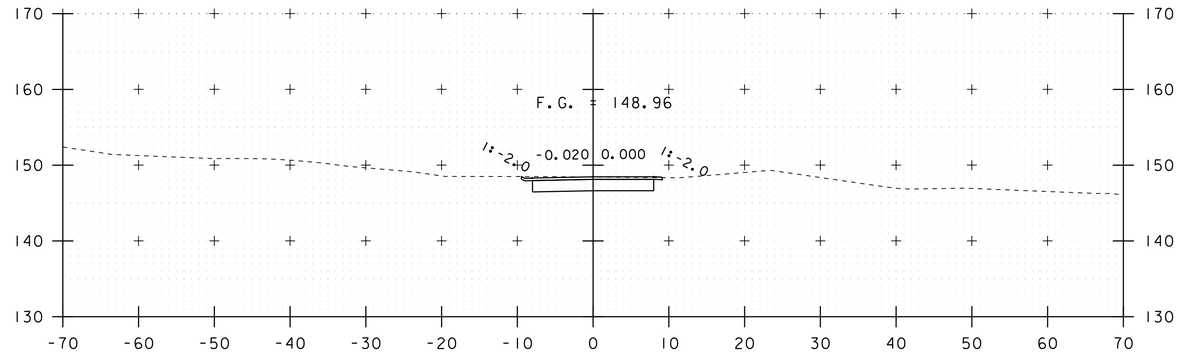


2+00



1+20

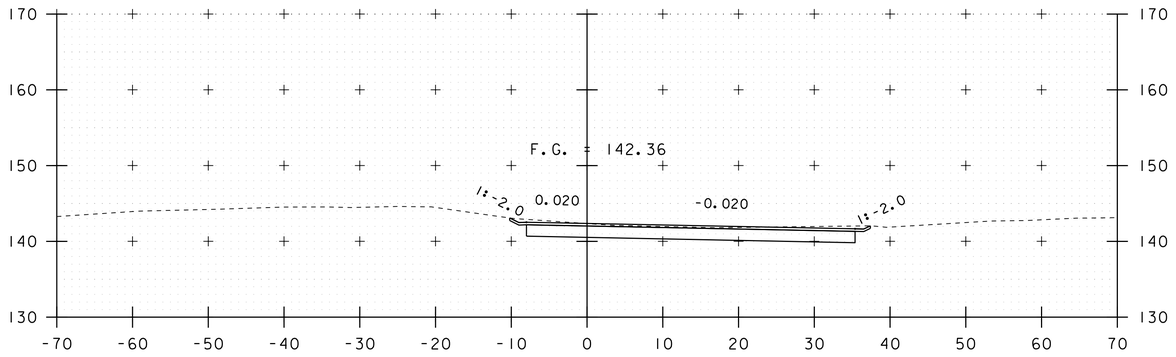
1+75

STA. 1+20 TO STA. 2+25

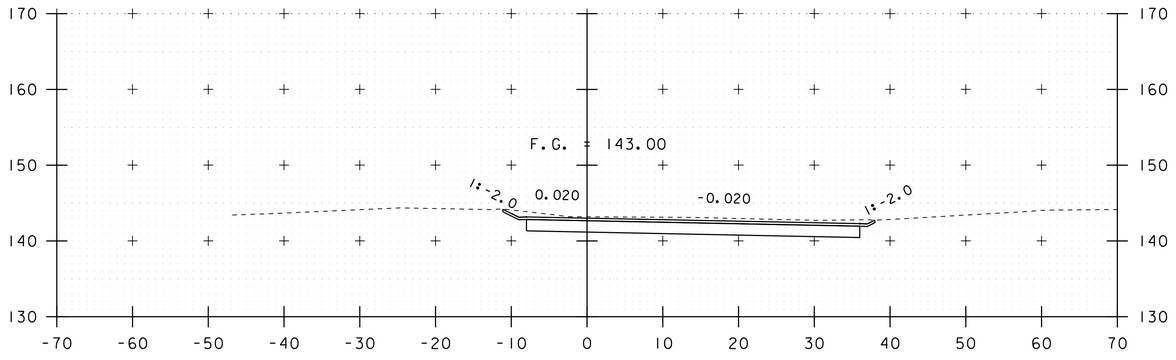
PROJECT NAME: WEYBRIDGE-NEW HAVEN
PROJECT NUMBER: BF 032-1(19)

FILE NAME: s12b552xs.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: D. PETERSON
ACCESS DRIVE CROSS SECTIONS 1

PLOT DATE: 20-APR-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: D. OETERSIB
SHEET 71 OF 85



2+66



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STA. 2+50 TO STA. 2+66

PROJECT NAME: WEYBRIDGE-NEW HAVEN
PROJECT NUMBER: BF 032-1(19)

FILE NAME: s12b552xs.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: D. PETERSON
ACCESS DRIVE CROSS SECTIONS 2

PLOT DATE: 20-APR-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: D. PETERSON
SHEET 72 OF 85

EPSC PLAN NARRATIVE

1.1 PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE REMOVAL AND REPLACEMENT OF BRIDGE NUMBER 8 OVER THE OTTER CREEK. THE BRIDGE IS ON VT ROUTE 17, ON THE WEYBRIDGE - NEW HAVEN TOWN BOUNDARY. THE PROJECT IS APPROXIMATELY 3.0 MILES EAST OF THE JUNCTION WITH VT ROUTE 22A. THE SPAN OF THE PROPOSED BRIDGE IS 241.50 FEET. THE TOTAL PROJECT IS 725.00 FEET IN LENGTH INCLUDING THE BRIDGE.

NOTE: AREA OF DISTURBANCE INCLUDES LIMITS OF EARTH DISTURBANCE WITHIN THE PROJECT AREA, AS WELL AS WASTE, BORROW AND STAGING AREAS, AND OTHER EARTH DISTURBING ACTIVITIES WITHIN OR DIRECTLY ADJACENT TO THE PROJECT LIMITS AS SHOWN ON THE ATTACHED EPSC PLAN.

TOTAL AREA OF DISTURBANCE AS SHOWN ON THE ATTACHED EPSC PLAN IS APPROXIMATELY 1.78 ACRES.

IT IS ANTICIPATED THAT THIS PROJECT WILL LAST ONE CONSTRUCTION SEASON.

1.2 SITE INVENTORY

1.2.1 TOPOGRAPHY

THE TOPOGRAPHY OF THE AREA IS RELATIVELY FLAT TERRAIN WITH CULTIVATED FARM LAND AND PASTURES. THERE IS LOW BRUSH AND SMALL TREE VEGETATION ON THE BANKS OF THE CREEK AND ALL FOUR CORNERS OF THE BRIDGE AS WELL AS ALONG SIDE VT 17 SURROUNDING THE BRIDGE. THERE ARE NO RESIDENTIAL STRUCTURES WITHIN THE PROJECT LIMITS. THERE IS ONE STORAGE BARN WITH A GRAVEL DRIVE LOCATED NEAR THE BEGIN PROJECT LOCATION SOUTH EAST OF THE BRIDGE.

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

THE OTTER CREEK IS THE ONLY WATER SOURCE ON THE PROJECT SITE. THE CREEK IS CLASSIFIED CLASS B, IT IS MEDIUM SIZE, HAS LEDGE AND SILT BOTTOM, THE WATER IS SLOW MOVING WITH A WIDE FLOOD PLAIN, THE BANKS ARE EQUIWIDTH WITH A SINUOSITY RATED AS IRREGULAR, WANDERING.

1.2.3 VEGETATION

THE VEGETATION IN THE PROJECT AREA CONSISTS OF SMALL TREES AND UNDERGROWTH. THE IMPACT TO VEGETATION WILL BE LIMITED TO THAT WHICH IS DIRECTLY AFFECTED BY REPLACEMENT OF BRIDGE. UPON PROJECT COMPLETION, THE CHANNEL WILL BE ARMORED WITH STONE FILL TYPE III AS SPECIFIED ON THE PLANS. DISTURBED VEGETATION WILL BE REESTABLISHED WITH STANDARD SEED AND MULCH PRACTICES.

1.2.4 SOILS

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

- Cw—Covington and Panton silty clays
- FaC—Farmington extremely rocky silt loam
- Lf—Limerick silt loam, very wet
- Wo—Winooski very fine sandy loam

NOTE: K-VALUES GENERALLY INDICATE THE FOLLOWING:
0.0-0.23 = LOW EROSION POTENTIAL
0.24-0.36 = MODERATE EROSION POTENTIAL
0.37 AND HIGHER = HIGH EROSION POTENTIAL

1.2.5 SENSITIVE RESOURCE AREAS

CRITICAL HABITATS: NO
HISTORICAL OR ARCHEOLOGICAL AREAS: YES, ON 3 CORNERS (SEE PLANS FOR LOCATION)
PRIME AGRICULTURAL LAND: NO
THREATENED AND ENDANGERED SPECIES: YES, FRESHWATER MUSSELS, NORTHERN LONG-EARED BAT AND INDIANA BAT
WATER RESOURCE: OTTER CREEK
WETLANDS: YES, ON (2) CORNERS, NO PERMANENT IMPACTS IN WETLANDS.

1.3 RISK EVALUATION

THIS 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 CONSIST OF APPLYING MEASURES THROUGHOUT CONSTRUCTION OF THE PROJECT IN ORDER TO MINIMIZE 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 OF 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 THIS 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 CONTRACTORS 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 SHALL BE INSTALLED PRIOR TO ANY UP-SLOPE WORK.

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

FILTER CURTAIN WILL BE INSTALLED AS PROPOSED ON THE EPSC PLAN.

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.

THE PROJECT AREA IS RELATIVELY FLAT. THEREFORE, IT IS NOT ANTICIPATED THAT DIVERSION MEASURES WILL BE NECESSARY.

1.4.6 SLOW DOWN CHANNELIZED RUNOFF

CHECK STRUCTURES SHALL BE UTILIZED TO REDUCE THE VELOCITY, AND THUS THE EROSIVE POTENTIAL, OF CONCENTRATED FLOW IN CHANNELS. STONE CHECK DAMS ARE NOT ANTICIPATED AT THIS TIME.

1.4.7 CONSTRUCT PERMANENT CONTROLS

PERMANENT STORMWATER TREATMENT DEVICES SHALL BE INSTALLED AS SHOWN ON THE PLANS AND IN ACCORDANCE WITH PERMIT CONDITIONS. PERMANENT STORMWATER TREATMENT NOT ANTICIPATED ON THIS PROJECT.

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). THE PIER WILL BE CONSTRUCTED IN THE FALL OF ONE CONSTRUCTION SEASON AND REMAINDER OF THE BRIDGE WILL BE CONSTRUCTED THE FOLLOWING CONSTRUCTION SEASON. ANY CHANNEL OR CAUSEWAY EXCAVATION SHALL BE PREPARED FOR WINTER STABILIZATION. REFER TO THE LOW RISK SITE HANDBOOK FOR GUIDANCE.

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 ANTICIPATED. A LOCATION FOR TREATMENT HAS BEEN PROPOSED AND IS SHOWN ON THE PLANS. HOWEVER, THE SPECIFIC MEANS FOR TREATMENT OF DISCHARGE SHALL BE PROVIDED BY THE CONTRACTOR.

1.4.12 INSPECT YOUR SITE

INSPECT THE PROJECT SITE BASED ON SPECIAL PROVISION REQUIREMENTS OR CONSTRUCTION GENERAL PERMIT AUTHORIZATION STIPULATIONS. NO KNOW SPECIAL SITE SPECIFIC OR GENERAL PERMIT INSPECTION REQUIREMENTS AT THIS TIME.

1.5 SEQUENCE AND STAGING

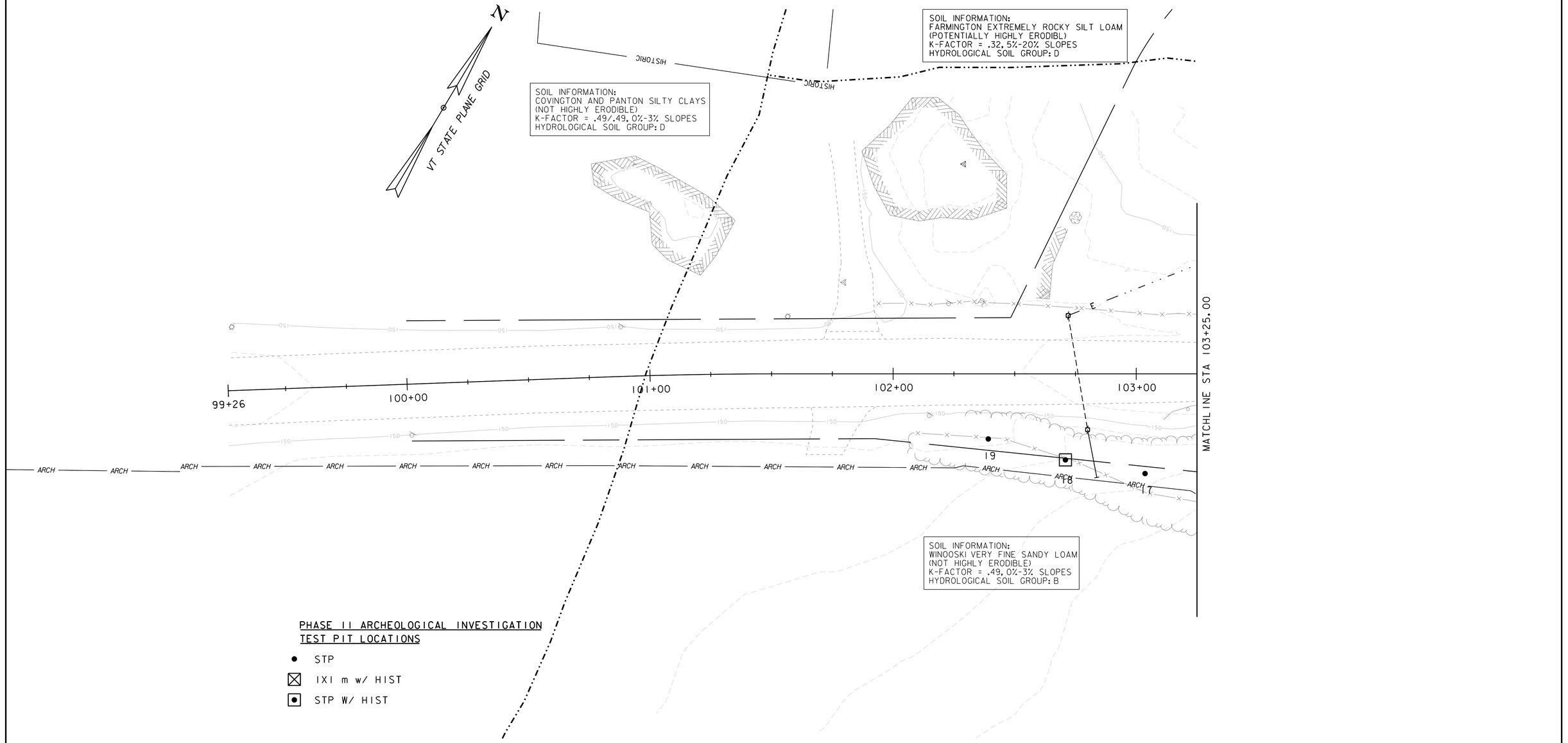
THIS SECTION WILL BE DEVELOPED BY THE CONTRACTOR USING THE GUIDANCE OUTLINED IN THE VTRANS EPSC PLAN CONTRACTOR CHECKLIST.

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 SPECIFICATION 105.25- 105.29 OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION.

PROJECT NAME:	WEYBRIDGE-NEW HAVEN
PROJECT NUMBER:	BF 032-1(19)
FILE NAME: sl2b552eronar.dgn	PLOT DATE: 20-APR-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: D. PETERSON	CHECKED BY: D. PETERSON
EPSC NARRATIVE	SHEET 73 OF 85



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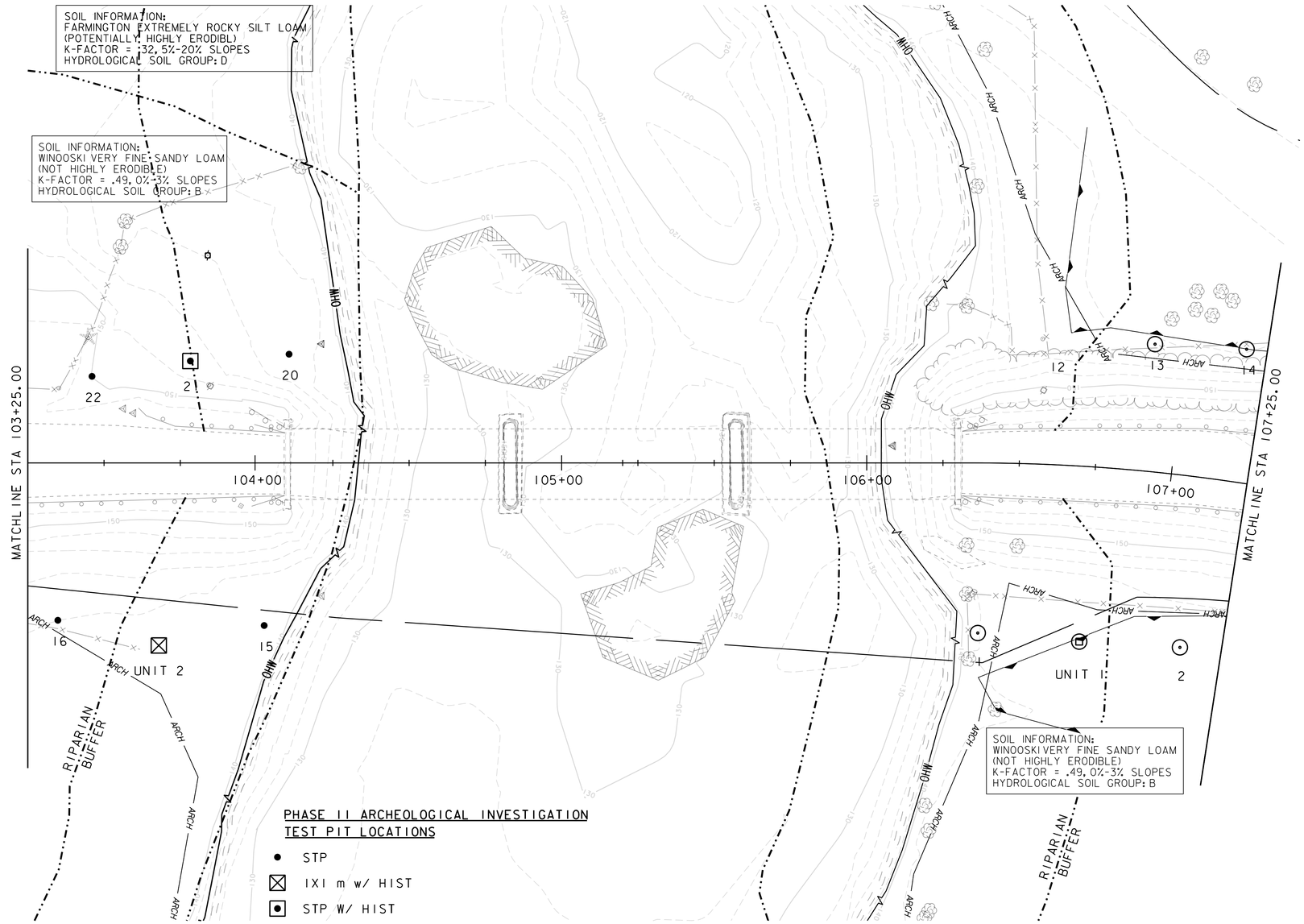
PROJECT NUMBER:	BF 032-1(19)
FILE NAME: sl2b552bdr_ero.dgn	PLOT DATE: 20-APR-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: D. PETERSON	CHECKED BY: D. PETERSON
EPSC EXISTING LAYOUT 1	SHEET 74 OF 85



SCALE 1" = 20'-0"
20 0 20

PROJECT NAME:	WEYBRIDGE-NEW HAVEN
PROJECT NUMBER:	BF 032-1(19)
FILE NAME: sl2b552bdr_ero.dgn	PLOT DATE: 20-APR-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: D. PETERSON	CHECKED BY: D. PETERSON
EPSC EXISTING LAYOUT 2	SHEET 75 OF 85

PHASE II ARCHEOLOGICAL INVESTIGATION
TEST PIT LOCATIONS

- STP
- STP W/ HIST
- STP W/ NAM MATERIAL
- STP W/ NAM & HIST
- IXI m w/ NAM & HIST

N

VT STATE PLANE GRID

MATCHLINE STA 107+25.00

108+00

109+00

110+00

111+00

112+00

ARCH

3 4 5 6 7 8 9 10 11

SOIL INFORMATION:
LIMERICK SILT LOAM
(POTENTIALLY HIGHLY ERODIBL)
K-FACTOR = .49, 6%-12% SLOPES
HYDROLOGICAL SOIL GROUP: D

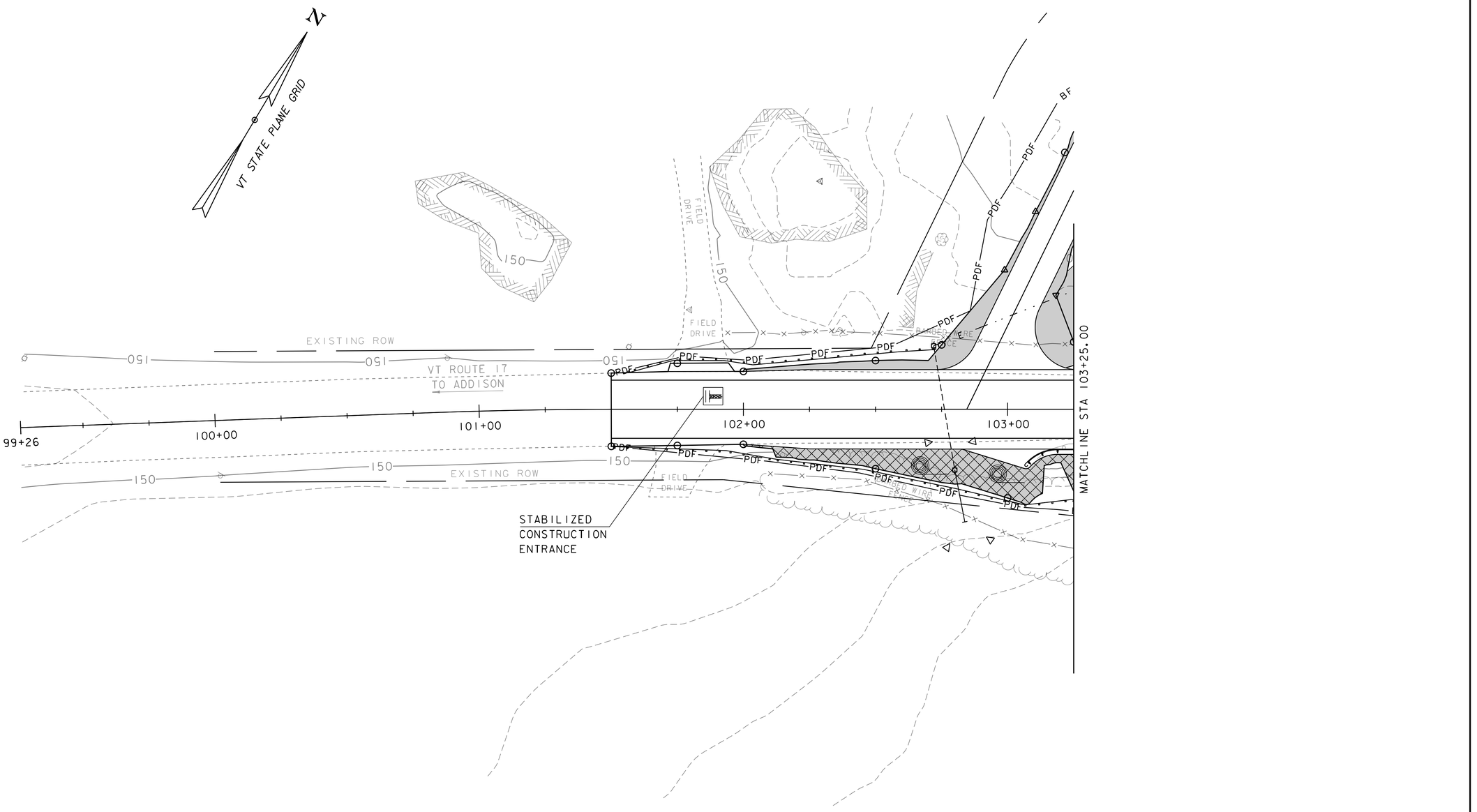
SOIL INFORMATION:
COVINGTON AND PANTON SILTY CLAYS
(NOT HIGHLY ERODIBLE)
K-FACTOR = .49/.49, 0%-3% SLOPES
HYDROLOGICAL SOIL GROUP: D

SCALE 1" = 20'-0"
20 0 20

PROJECT NAME: WEYBRIDGE-NEW HAVEN
PROJECT NUMBER: BF 032-1(19)

FILE NAME: sl2b552bdr_ero.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: D. PETERSON
EPSC EXISTING LAYOUT 3

PLOT DATE: 20-APR-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: D. PETERSON
SHEET 76 OF 85



SCALE 1" = 20'-0"
20 0 20

PROJECT NAME:	WEYBRIDGE-NEW HAVEN
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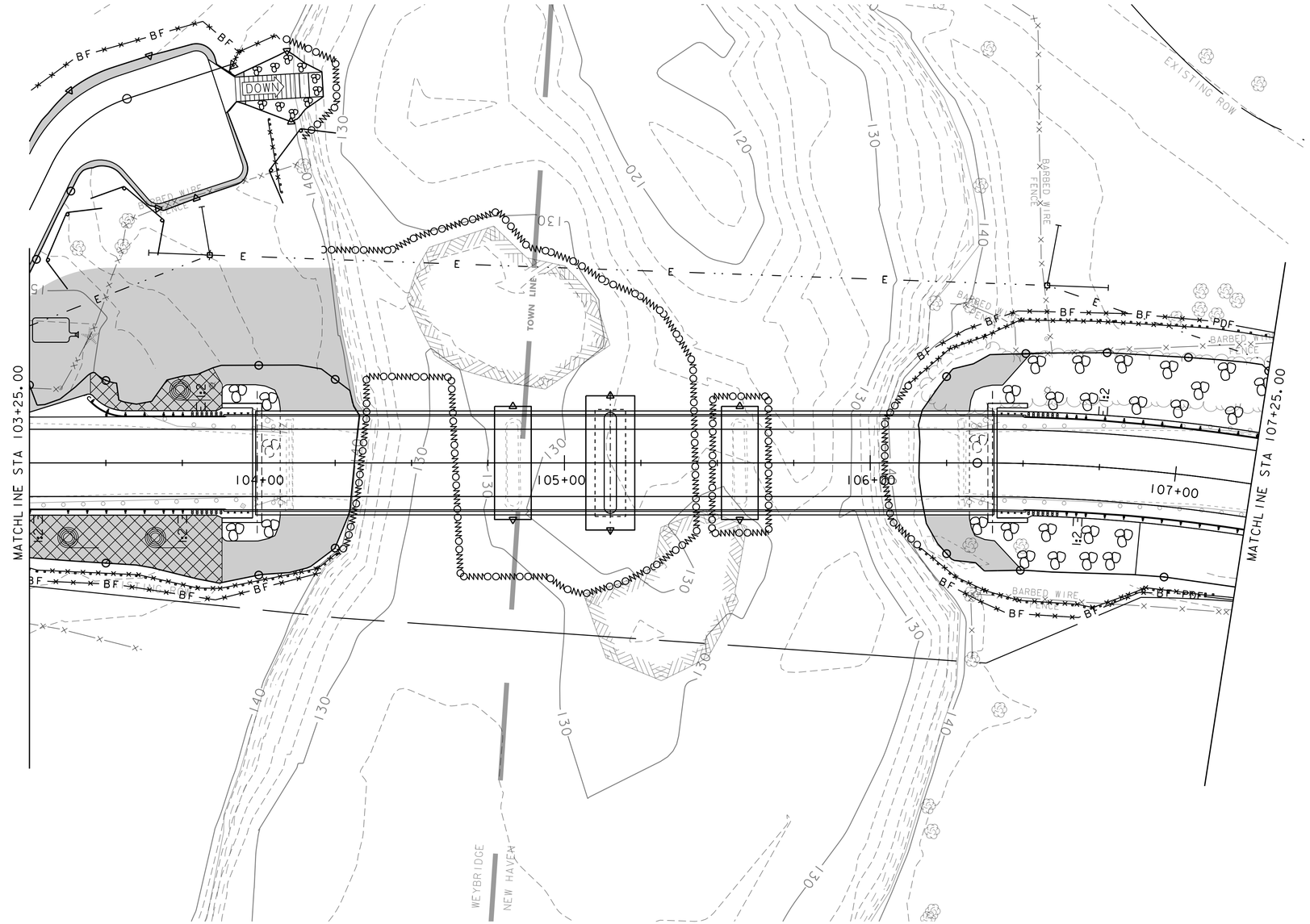
FILE NAME: sl2b552bdr_ero.dgn	PLOT DATE: 20-APR-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: D. PETERSON	CHECKED BY: D. PETERSON
EPSC CONSTRUCTION LAYOUT 1	SHEET 77 OF 85



SCALE 1" = 20'-0"
20 0 20

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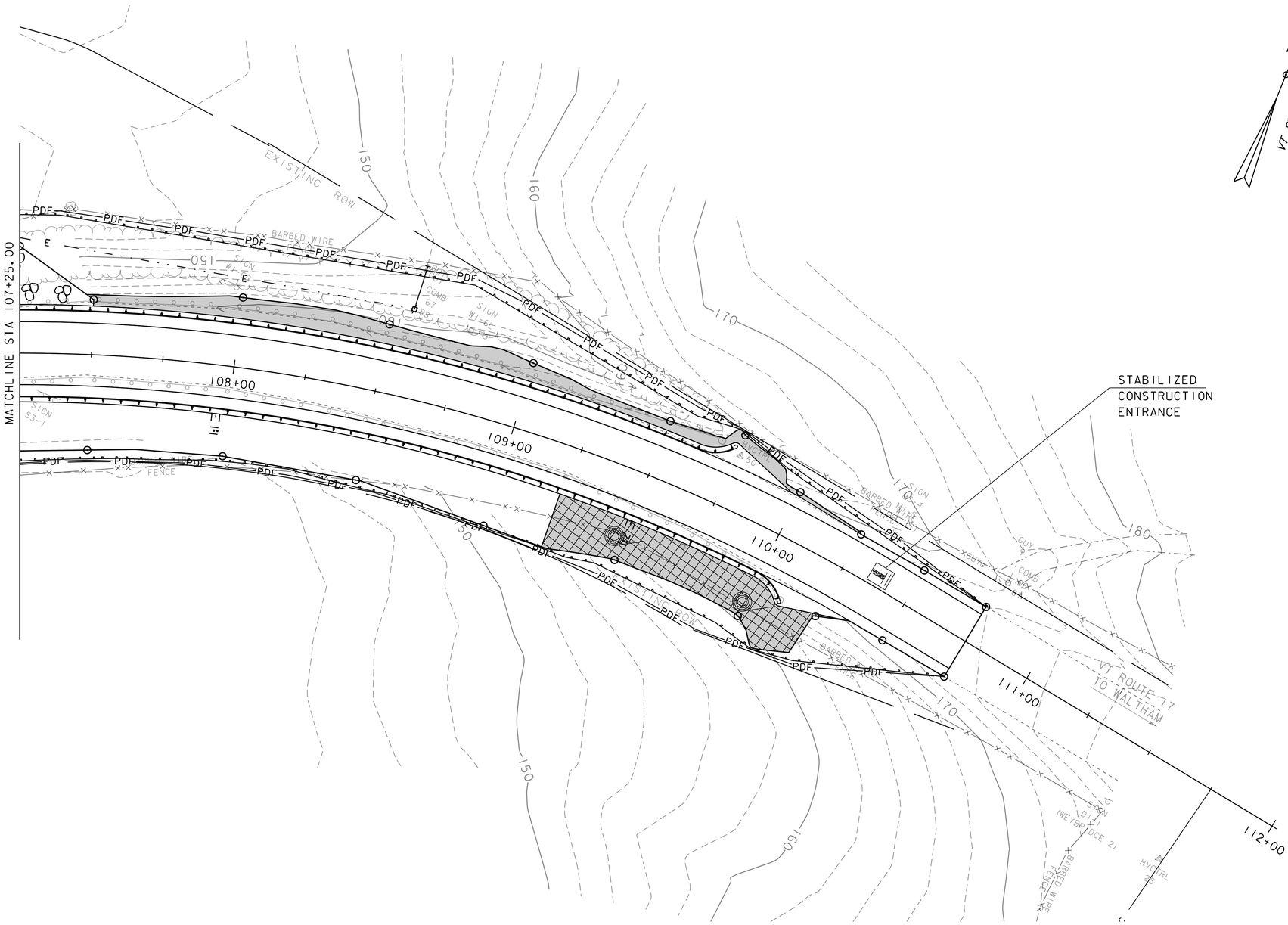
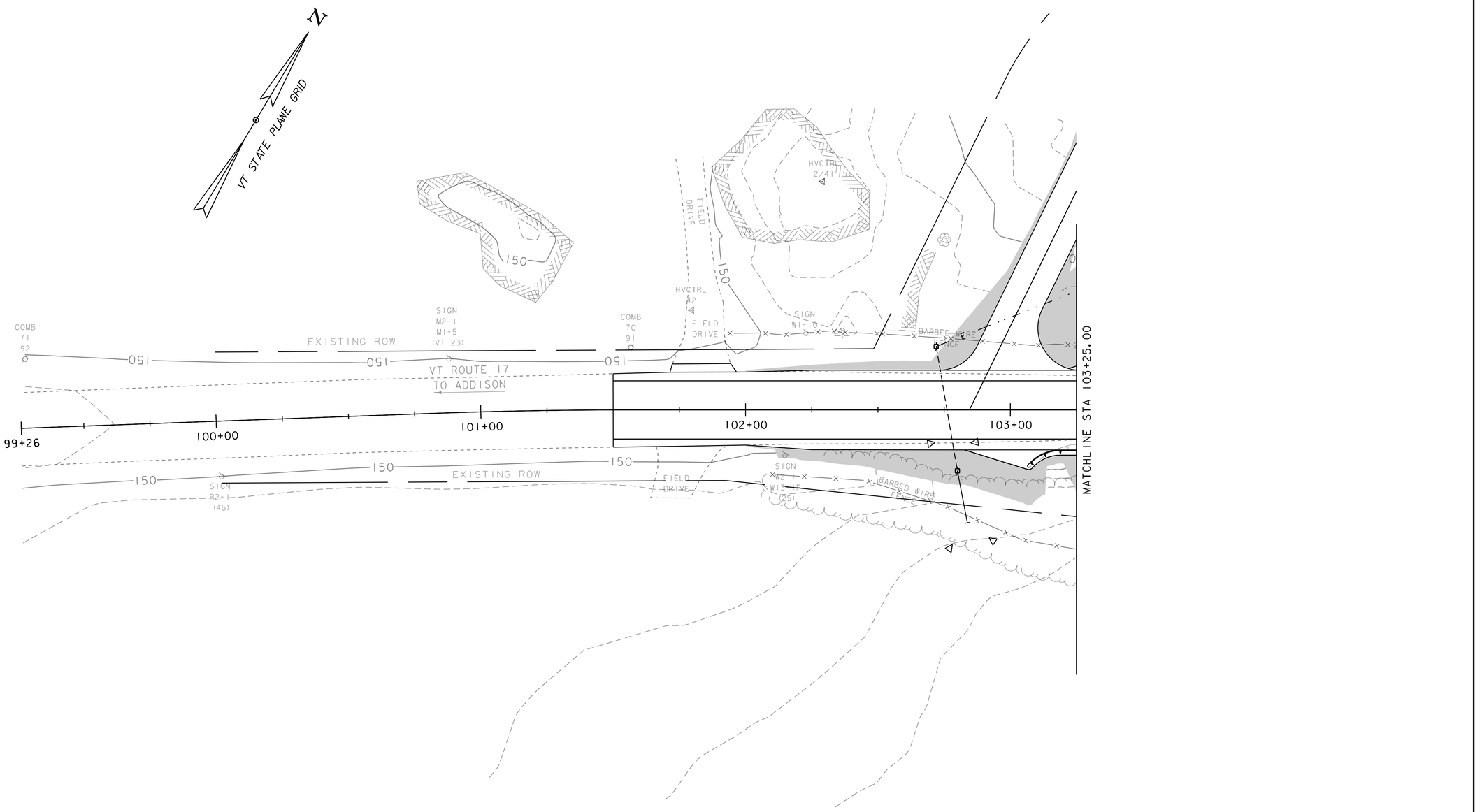
PROJECT NUMBER:	BF 032-1(19)
FILE NAME: s12b552bdr_ero.dgn	PLOT DATE: 20-APR-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: D. PETERSON	CHECKED BY: D. PETERSON
EPSC CONSTRUCTION LAYOUT 2	SHEET 78 OF 85



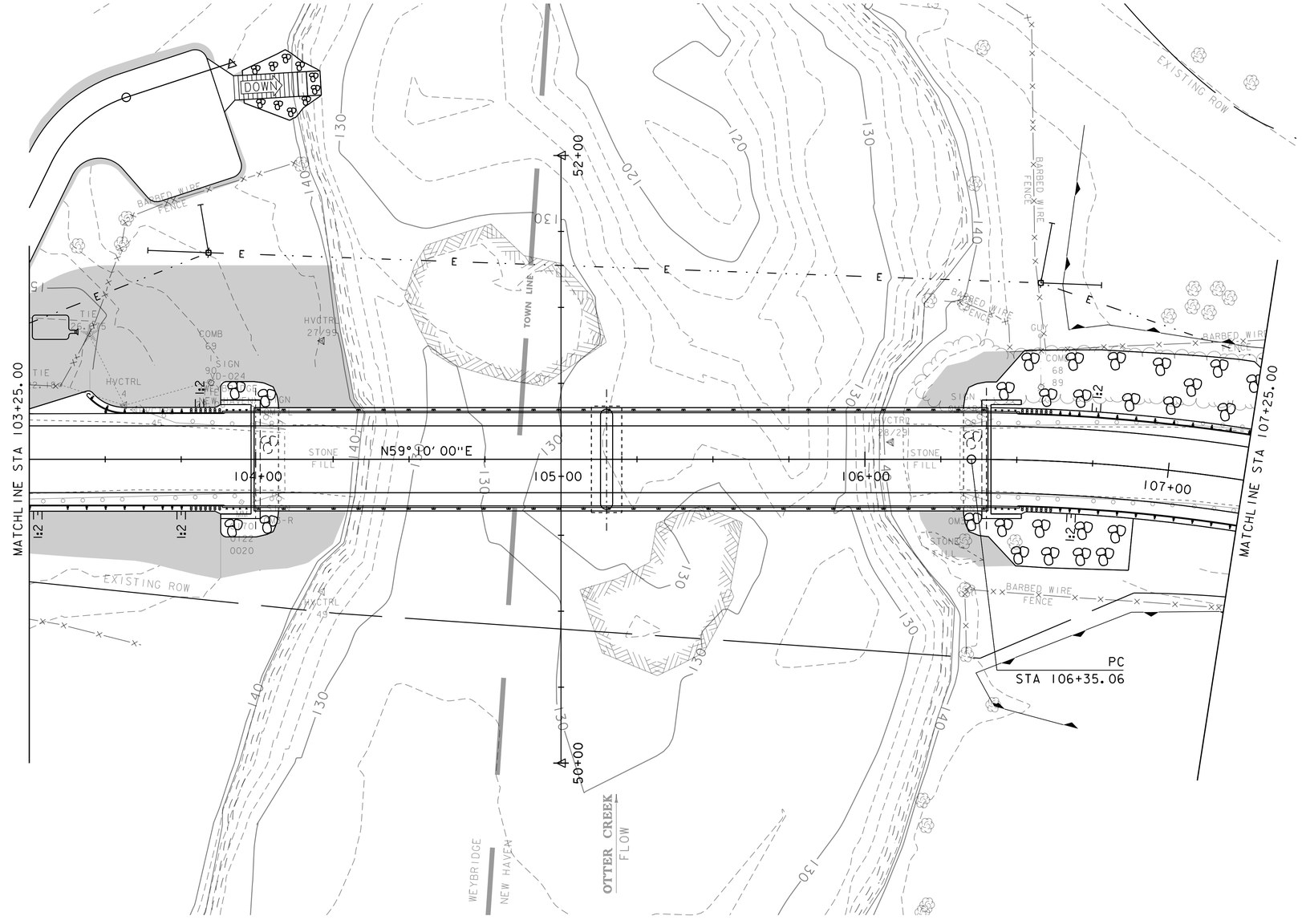
SCALE 1" = 20'-0"
20 0 20

PROJECT NAME:	WEYBRIDGE-NEW HAVEN
PROJECT NUMBER:	BF 032-1(19)
FILE NAME: s12b552bdr_ero.dgn	PLOT DATE: 20-APR-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: D. PETERSON	CHECKED BY: D. PETERSON
EPSC CONSTRUCTION LAYOUT 3	SHEET 79 OF 85



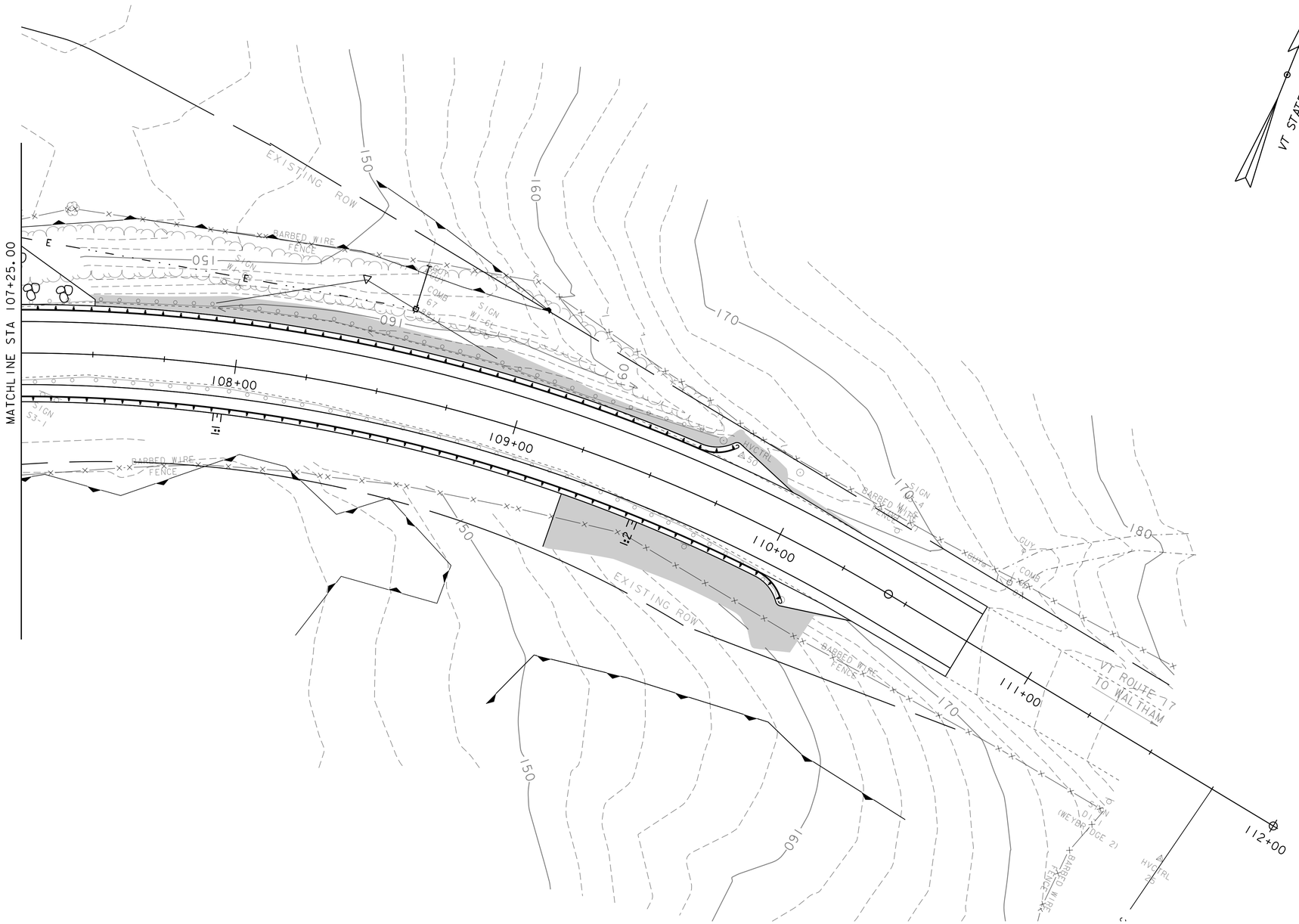
SCALE 1" = 20'-0"
20 0 20

PROJECT NAME:	WEYBRIDGE-NEW HAVEN
PROJECT NUMBER:	BF 032-1(19)
FILE NAME: sl2b552bdr_ero.dgn	PLOT DATE: 20-APR-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: D. PETERSON	CHECKED BY: D. PETERSON
EPSC FINAL LAYOUT 1	SHEET 80 OF 85



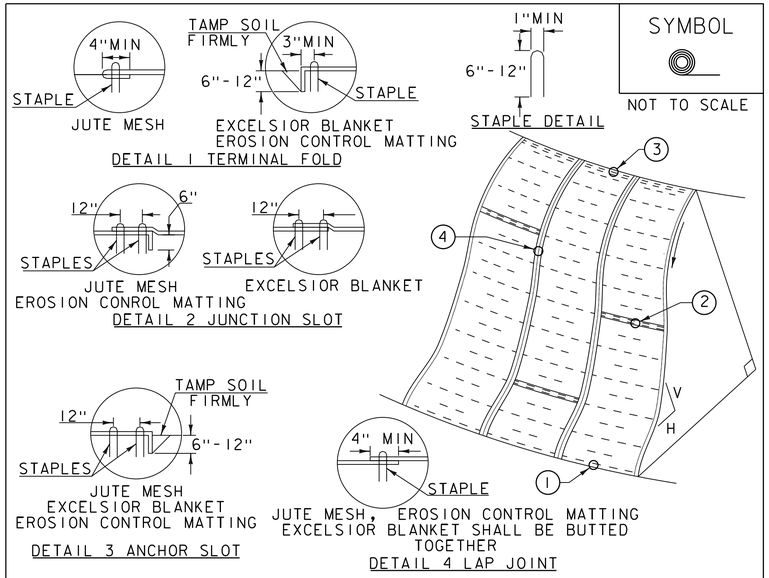
SCALE 1" = 20'-0"
20 0 20

PROJECT NAME:	WEYBRIDGE-NEW HAVEN
PROJECT NUMBER:	BF 032-1(19)
FILE NAME: s12b552bdr_ero.dgn	PLOT DATE: 20-APR-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: D. PETERSON	CHECKED BY: D. PETERSON
EPSC FINAL LAYOUT 2	SHEET 81 OF 85



SCALE 1" = 20'-0"
20 0 20

PROJECT NAME:	WEYBRIDGE-NEW HAVEN
PROJECT NUMBER:	BF 032-1(19)
FILE NAME: s12b552bdr_ero.dgn	PLOT DATE: 20-APR-2017
PROJECT LEADER: C.W. CARLSON	DRAWN BY: M. LONGSTREET
DESIGNED BY: D. PETERSON	CHECKED BY: D. PETERSON
EPSC FINAL LAYOUT 3	SHEET 82 OF 85



SYMBOL

NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

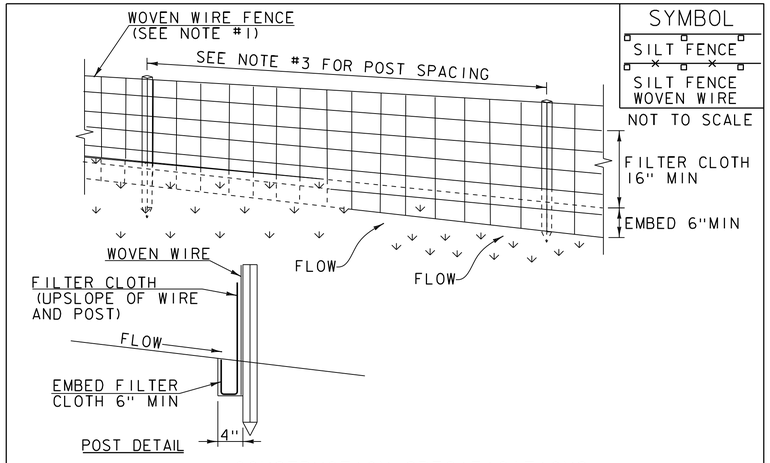
1. APPLY TO SLOPES GREATER THAN 3H:1V OR WHERE NECESSARY TO AID IN ESTABLISHING VEGETATION.
2. APPLY FERTILIZER, LIME SEED PRIOR TO PLACING MATTING.
3. STAPLES ARE TO BE PLACED ALTERNATELY, IN COLUMNS APPROXIMATELY 2' APART AND IN ROWS APPROXIMATELY 3' APART. APPROXIMATELY 175 STAPLES ARE REQUIRED PER 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 653.21).

REVISIONS		
APRIL 16, 2007	JMF
JANUARY 13, 2009	WHF



SYMBOL

SILT FENCE

SILT FENCE WOVEN WIRE

NOT TO SCALE

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, MIRAFI100X, 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 649.51) 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

VAOT LOW GROW/FINE FESCUE MIX

LBS/AC						
WEIGHT	BROADCAST	HYDROSEED	NAME	LATIN NAME	GERM	PURITY
38%	57	95	CREEPING RED FESCUE	FESTUCA RUBRA VAR. RUBRA	90%	98%
29%	43.5	72.5	HARD FESCUE	FESTUCA LONGIFOLIA	85%	95%
15%	22.5	37.5	CHEWINGS FESCUE	FESTUCA RUBRA VAR. COMMUTATA	87%	95%
15%	22.5	37.5	ANNUAL RYEGRASS	LOLIUM MULTIFLORUM	90%	95%
3%	4.5	7.5	INERTS			
100%	150	250				

VAOT RURAL AREA MIX

LBS/AC						
WEIGHT	BROADCAST	HYDROSEED	NAME	LATIN NAME	GERM	PURITY
37.5%	22.5	45	CREEPING RED FESCUE	FESTUCA RUBRA VAR. RUBRA	85%	98%
37.5%	22.5	45	TALL FESCUE	FESTUCA ARUNDINACEA	90%	95%
5.0%	3	6	RED TOP	AGROSTIS GIGANTEA	90%	95%
15.0%	9	18	WHITE FIELD CLOVER	TRIFOLIUM REPENS	85%	98%
5.0%	3	6	ANNUAL RYE GRASS	LOLIUM MULTIFLORUM	85%	95%
100%	60	120				

GENERAL AMENDMENT GUIDANCE

FERTILIZER	LIME	
10/20/10	AG LIME	PELLITIZED
500 LBS/AC	2 TONS/AC	1 TONS/AC

CONSTRUCTION GUIDANCE

1. SEED MIX: THE CONTRACTOR SHALL COORDINATE WITH THE RESIDENT ENGINEER ON WHICH SEED MIX TO USE.
2. SEED MIX: USE AS INDICATED IN THE PLANS AND/OR FOR ALL ESTABLISHED UPLAND (NON WETLAND) AREAS DISTURBED BY THE CONTRACTOR.
3. ALL SEED MIXTURES: SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT AND SHALL BE FREE OF ALL NOXIOUS SEED.
4. FERTILIZER AND LIMESTONE: SHALL FOLLOW RATES SHOWN ON PLAN OR AS DIRECTED BY THE ENGINEER.
5. 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.
6. HYDROSEEDING: ALTHOUGH GUIDANCE IS GIVEN ABOVE THE SITE CONDITIONS AND THE TYPE OF HYDROSEED PROPOSED FOR USE WILL ULTIMATELY DICTATE THE AMOUNTS AND TYPES OF SOIL AMENDMENTS TO BE APPLIED.
7. 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

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 651 FOR SEED (PAY ITEM 651.15)

REVISIONS		
JANUARY 12, 2015	WHF

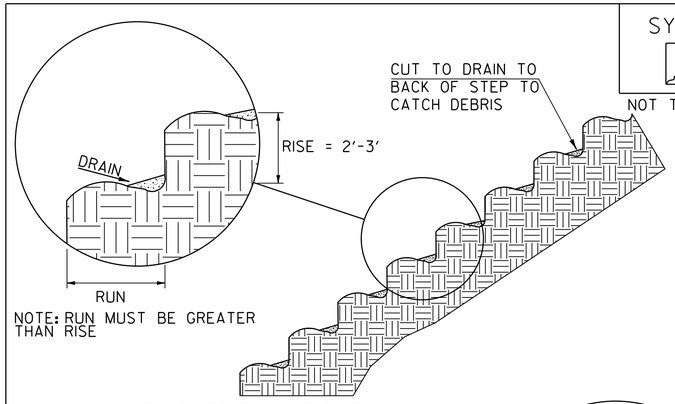
PROJECT NAME: WEYBRIDGE-NEW HAVEN
PROJECT NUMBER: BF 032-1(19)

FILE NAME: sl2b552eronar.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: D. PETERSON
EPSC DETAILS 1

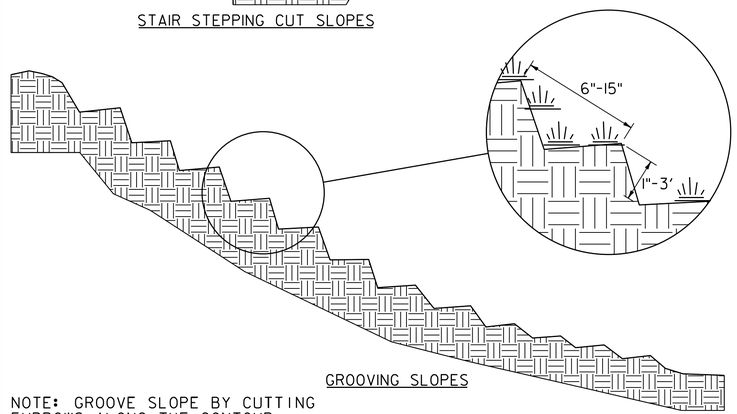
PLOT DATE: 20-APR-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: D. PETERSON
SHEET 83 OF 85

SYMBOL

NOT TO SCALE



STAIR STEPPING CUT SLOPES



GROOVING SLOPES

NOTE: GROOVE SLOPE BY CUTTING FURROWS ALONG THE CONTOUR. IRREGULARITIES IN THE SOIL SURFACE CATCH RAINWATER AND RETAIN LIME, FERTILIZER AND SEED.

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

SURFACE ROUGHENING

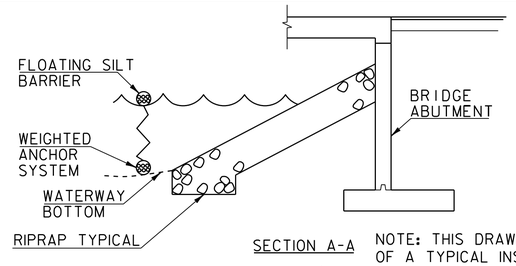
NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- " FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT

REVISIONS	
APRIL 1, 2008	WHF
JANUARY 13, 2009	WHF

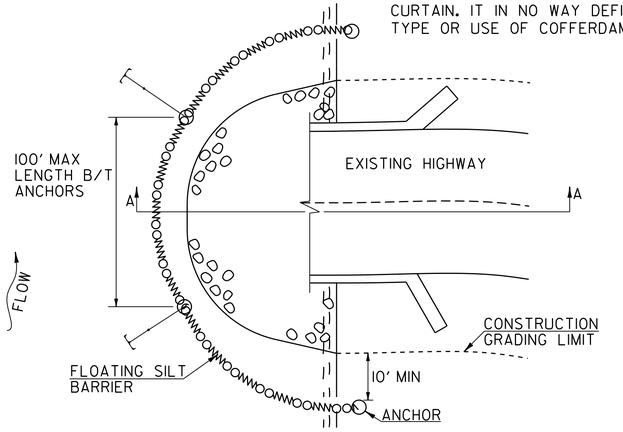
SYMBOL

NOT TO SCALE



SECTION A-A

NOTE: THIS DRAWING IS A DEPICTION OF A TYPICAL INSTALLATION OF FILTER CURTAIN. IT IN NO WAY DEFINES THE TYPE OR USE OF COFFERDAM IF USED.



CONSTRUCTION SPECIFICATIONS

1. FILTER CURTAIN SHALL NOT BE PLACED ACROSS A FLOWING WATERWAY, OR IN A WATERWAY WITH STREAM VELOCITIES GREATER THAN 1.5 FEET/SECOND.
2. MAXIMUM 100' LENGTH BETWEEN ANCHORS.
3. LAST SECTION SHALL TERMINATE A MINIMUM OF 10' BEYOND LIMIT OF DISTURBANCE.
4. THE WEIGHTED ANCHOR SYSTEM SHALL BE A TYPE WHICH ALLOWS THE CURTAIN TO CONFORM TO THE BOTTOM OF THE WATERWAY.
5. THE CURTAIN SHALL BE REMOVED BY SLOWLY PULLING TOWARD THE SHORE MINIMIZING THE ESCAPE OF SEDIMENTS INTO WATERWAY.

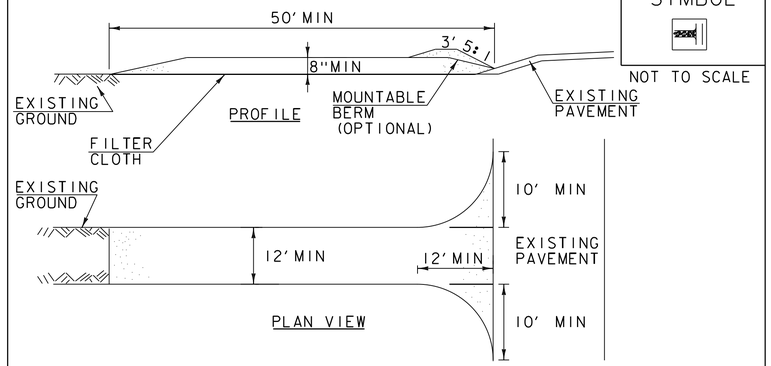
THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 649 FOR GEOTEXTILE FOR FILTER CURTAIN (PAY ITEM 649.61).

FILTER CURTAIN

REVISIONS	
APRIL 1, 2008	WHF
JANUARY 13, 2009	WHF
SEPTEMBER 4, 2009	WHF

SYMBOL

NOT TO SCALE



CONSTRUCTION SPECIFICATIONS

1. STONE SIZE- USE 1-4" STONE, RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH- NOT LESS THAN 50' (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30' MINIMUM LENGTH APPLIES).
3. THICKNESS- NOT LESS THAN 8".
4. WIDTH- 12' MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. 24' IF SINGLE ENTRANCE TO SITE.
5. GEOTEXTILE MUST BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING STONE.
6. SURFACE WATER- ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY, ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED ACCORDING TO PERMIT REQUIREMENTS.

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

STABILIZED CONSTRUCTION ENTRANCE

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

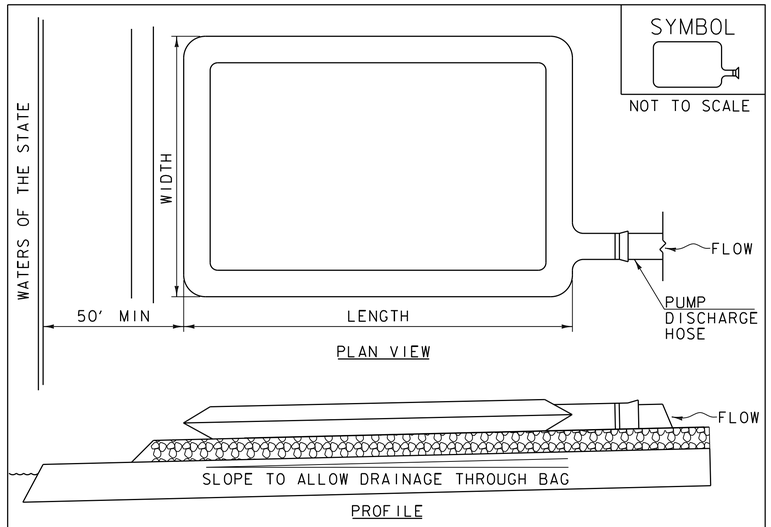
THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR VEHICLE TRACKING PAD (PAY ITEM 653.35) OR AS SPECIFIED IN THE CONTRACT.

REVISIONS	
MARCH 24, 2008	WHF
JANUARY 13, 2009	WHF

PROJECT NAME: WEYBRIDGE-NEW HAVEN
PROJECT NUMBER: BF 032-1(19)

FILE NAME: sl2b552eronar.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: D. PETERSON
EPSC DETAILS 2

PLOT DATE: 20-APR-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: D. PETERSON
SHEET 84 OF 85



CONSTRUCTION SPECIFICATIONS

1. THE PRIMARY PURPOSE OF FILTER BAG IS TO RETAIN SILT, SAND, AND FINES DURING DEWATERING OPERATIONS.
2. FILTER BAGS SHALL BE INSTALLED ON A VEGETATED SLOPE GRADED TO ALLOW INCOMING WATER TO FLOW THROUGH THE BAG.
3. FILTER BAGS MAY ALSO BE PLACED ON COARSE AGGREGATE, STONE, OR HAYBALES TO INCREASE FILTRATION EFFICIENCY.
4. FILTER BAGS SHALL BE LOCATED A MINIMUM OF 50' FROM WATERS OF THE STATE UNLESS OTHERWISE APPROVED BY THE ENGINEER.
5. THE NECK OF THE FILTER BAG SHALL BE STRAPPED TIGHTLY TO THE DISCHARGE HOSE.
6. A FILTER BAG IS FULL WHEN IT NO LONGER CAN EFFICIENTLY FILTER SEDIMENT OR ALLOW WATER TO PASS AT A REASONABLE RATE.
7. 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

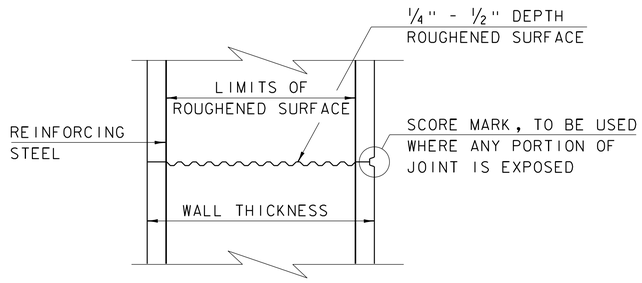
PROJECT NAME: WEYBRIDGE-NEW HAVEN
PROJECT NUMBER: BF 032-1(19)

FILE NAME: s12b552eronar.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: D. PETERSON
EPSC DETAILS 3

PLOT DATE: 20-APR-2017
DRAWN BY: M. LONGSTREET
CHECKED BY: D. PETERSON
SHEET 85 OF 85

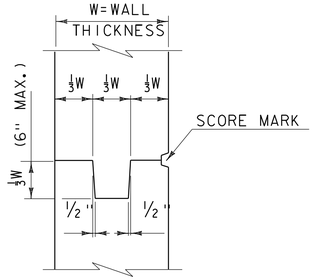
CONCRETE GENERAL NOTES

1. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1" x 1"
2. REINFORCING STEEL SIZE AND SPACING SHOWN IN THE PLANS IS BASED ON 60 KSI STEEL, UNLESS NOTED OTHERWISE. WITH THE ENGINEER'S PERMISSION, BAR SIZE AND SPACING MAY BE MODIFIED ACCORDING TO THE LATEST AASHTO LRFD BRIDGE DESIGN SPECIFICATION AND STRUCTURES DESIGN MANUAL WHEN USING HIGHER STRENGTH STEEL.

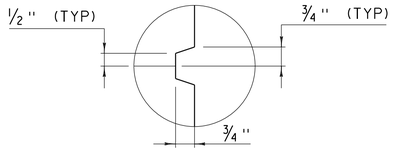


TYPICAL HORIZONTAL CONSTRUCTION JOINT
(NOT TO SCALE)

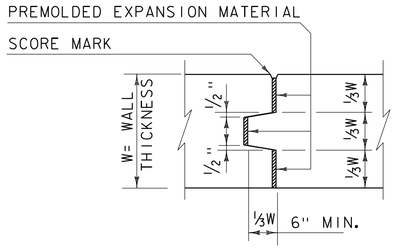
1. THE SURFACE OF THE CONCRETE CONSTRUCTION JOINTS SHALL BE CLEANED AND FREE OF LAITANCE.
2. IMMEDIATELY BEFORE NEW CONCRETE IS PLACED, ALL CONSTRUCTION JOINTS SHALL BE WETTED AND STANDING WATER REMOVED.



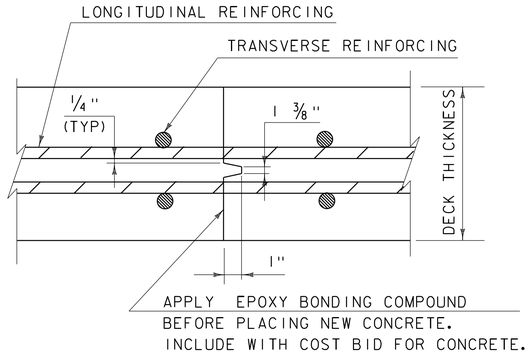
TYPICAL CONCRETE CONSTRUCTION JOINT
(NOT TO SCALE)



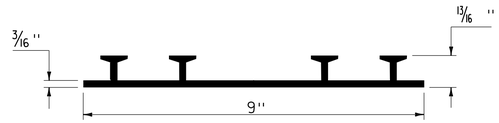
SCORE MARK DETAIL
(NOT TO SCALE)



TYPICAL CONCRETE EXPANSION JOINT
(NOT TO SCALE)



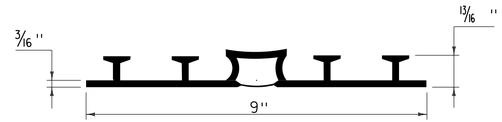
TRANSVERSE BRIDGE SLAB CONSTRUCTION JOINT DETAILS
(NOT TO SCALE)



P.V.C. WATERSTOP FOR CONSTRUCTION JOINTS
(NOT TO SCALE)

PAYMENT FOR THE P.V.C. WATERSTOP SHALL BE INCIDENTAL TO THE UNIT BID PRICE FOR THE ADJACENT CONCRETE.

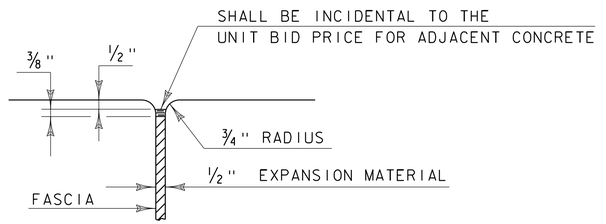
OTHER CONFIGURATIONS OF WATERSTOP MAY BE USED UPON APPROVAL OF THE ENGINEER.



P.V.C. WATERSTOP FOR EXPANSION JOINTS
(NOT TO SCALE)

PAYMENT FOR THE P.V.C. WATERSTOP SHALL BE INCIDENTAL TO THE UNIT BID PRICE FOR THE ADJACENT CONCRETE.

OTHER CONFIGURATIONS OF WATERSTOP MAY BE USED UPON APPROVAL OF THE ENGINEER.



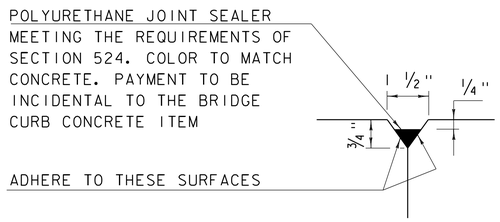
JOINT BETWEEN FASCIA AND WINGWALL
(NOT TO SCALE)

REVISIONS	
MAY 7, 2010	APPROVED FOR USE BY VAOT STRUCTURES SECTION
FEBRUARY 9, 2012	REBAR SUBSTITUTION ALLOWANCE ADDED TO CONCRETE GENERAL NOTES.

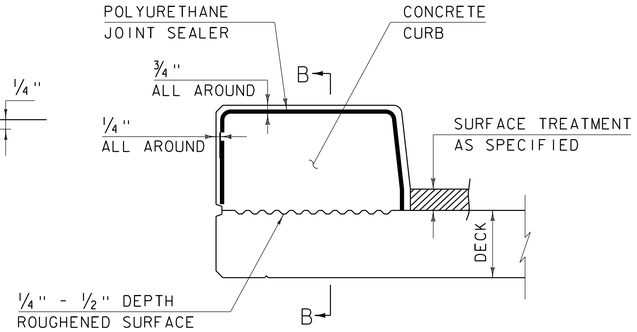
CONCRETE DETAILS AND NOTES

VERMONT AGENCY OF TRANSPORTATION
STRUCTURES - SECTION

STRUCTURES DETAIL
SD-501.00

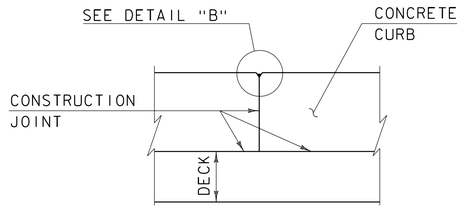


DETAIL "B"
(NOT TO SCALE)

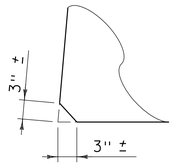


CONCRETE CURB JOINT SECTION
(NOT TO SCALE)

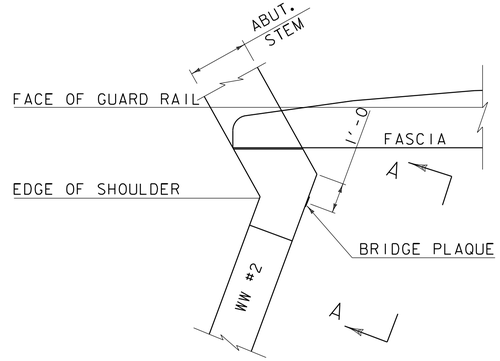
1. SEE TYPICAL HORIZONTAL CONSTRUCTION JOINT DETAIL FOR ADDITIONAL INFORMATION



SECTION B - B
(NOT TO SCALE)



ACUTE ANGLE CLIP DETAIL
(NOT TO SCALE)



PLAN

CONCRETE CURB JOINT NOTES

1. CONCRETE CURBS MAY BE PLACED IN ONE CONTINUOUS OPERATION IF AN APPROVED SHRINKAGE REDUCING ADMIXTURE LISTED IN THE SPECIAL PROVISIONS IS USED WITH THE CONCRETE MIX DESIGN. PAYMENT FOR THE SHRINKAGE REDUCING ADMIXTURE WILL BE INCIDENTAL TO THE BRIDGE CURB CONCRETE ITEM.

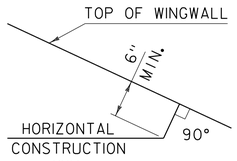
2. IF THE CONTRACTOR CHOOSES NOT TO USE AN APPROVED SHRINKAGE REDUCING ADMIXTURE, THE CURBS SHALL BE CONSTRUCTED WITH CONSTRUCTION JOINTS SPACED AT A MAXIMUM OF 15'-0" CENTER TO CENTER AND 2'-0" MINIMUM FROM THE CENTER OF NEAREST BRIDGE RAILING POST.

3. ON MULTI-SPAN CONTINUOUS SUPERSTRUCTURES, REGARDLESS OF WHETHER APPROVED SHRINKAGE REDUCING ADMIXTURE IS USED, CURB JOINTS SHALL BE LOCATED OVER THE CENTERLINE OF PIERS AND 7'-0" EACH SIDE OF THE CENTERLINE OF EACH PIER.

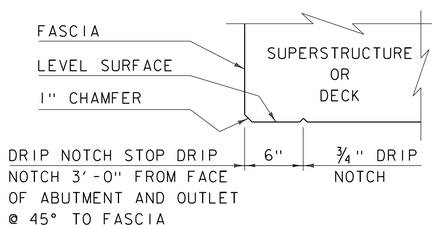
4. WHEN CURB JOINTS ARE USED THE CURBS SHALL BE PLACED IN ALTERNATE SECTIONS WITH A MINIMUM OF 48 HOUR DELAY BETWEEN ADJACENT PLACEMENTS.

5. LONGITUDINAL REINFORCING SHALL BE CONTINUOUS THROUGH CURB CONSTRUCTION JOINTS. CURB STIRRUP BARS SHALL BE TURNED AS NECESSARY TO MAINTAIN COVER IN THE FLARED CURB ENDS.

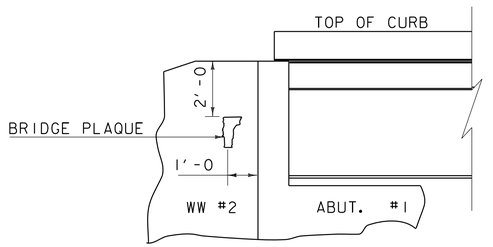
6. THE JOINT SPACING AND DETAILS SHOWN SHALL APPLY TO SIDEWALKS WHEN SHOWN IN THE PLANS.



HORIZONTAL WINGWALL CONSTRUCTION JOINT
(NOT TO SCALE)



DRIP NOTCH DETAIL
(NOT TO SCALE)



VIEW "A - A"

BRIDGE PLAQUE
(NOT TO SCALE)

THE BRIDGE PLAQUE WILL BE SUPPLIED BY THE AGENCY OF TRANSPORTATION AND SHALL BE INSTALLED BY THE CONTRACTOR AT ABUTMENT #1 ON THE RIGHT SIDE AS SHOWN OR AS DIRECTED BY THE ENGINEER.

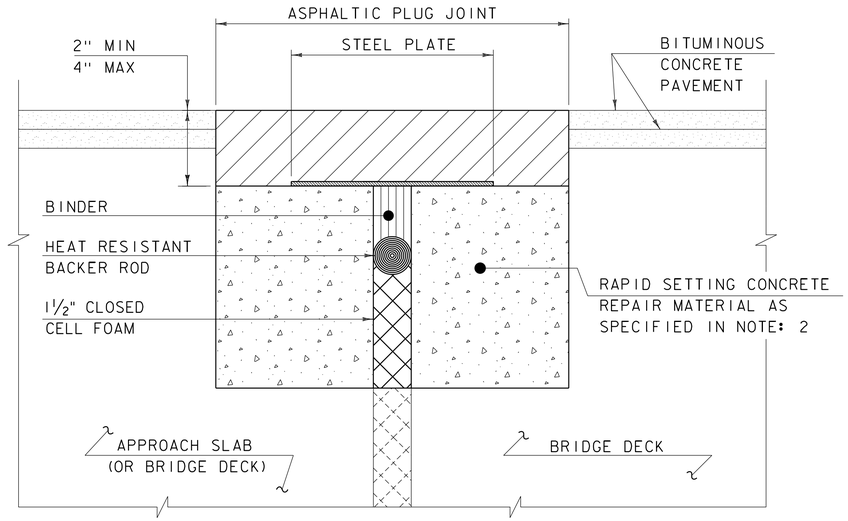
PAYMENT FOR INSTALLATION OF THE BRIDGE PLAQUE SHALL BE INCIDENTAL TO THE ADJACENT CONCRETE.

REVISIONS	
MAY 7, 2010	APPROVED FOR USE BY VAOT STRUCTURES SECTION
JUNE 4, 2010	MODIFIED AND ADDED TWO DETAILS
OCTOBER 10, 2012	MODIFIED HORZ. JOINT WINGWALL ADD 6" MIN. DIMENSION

CONCRETE DETAILS AND NOTES

VERMONT AGENCY OF TRANSPORTATION
STRUCTURES - SECTION

STRUCTURES DETAIL SD-502.00



ASPHALTIC PLUG JOINT DETAIL - REHAB

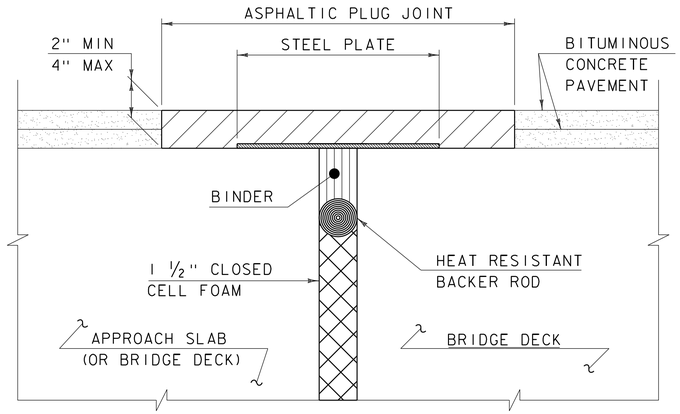
NOTES:

1. THE CONTRACTOR SHALL REMOVE ALL ASPHALTIC PLUG JOINT MATERIAL AND DETERIORATED CONCRETE AS DIRECTED BY THE ENGINEER. REMOVAL OF THE FIRST 4 INCHES OF MATERIAL SHALL BE INCLUDED IN THE BID PRICE FOR ITEM 516.10 BRIDGE EXPANSION JOINT, ASPHALTIC PLUG. ANY REMOVAL OF MATERIAL GREATER THAN 4 INCHES SHALL BE INCLUDED IN THE BID PRICE OF ITEM 580.20 RAPID SETTING CONCRETE REPAIR MATERIAL WITH COARSE AGGREGATE.

2. THE CONTRACTOR SHALL REPLACE REMOVED MATERIAL THAT IS LESS THAN 4" FROM FINISHED GRADE WITH ASPHALTIC PLUG JOINT MATERIAL MEETING THE REQUIREMENTS OF SUBSECTION 707.15. ALL REMOVED MATERIAL THAT IS GREATER THAN 4 INCHES FROM FINISHED GRADE SHALL BE REPLACED WITH RAPID SETTING CONCRETE REPAIR MATERIAL WITH COARSE AGGREGATE MEETING THE REQUIREMENTS OF SUBSECTION 780.04.

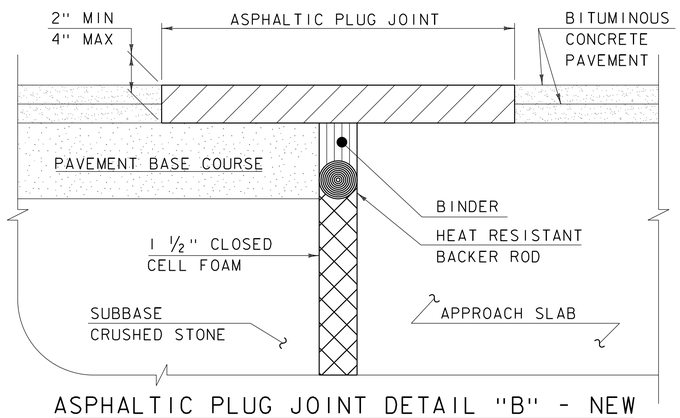
3. REINFORCING STEEL NOT SHOWN FOR CLARITY.

4. PLACE 1/4" THICK BY 8" WIDE SECTIONS OF STEEL PLATE OVER THE CENTER OF THE MOVEMENT GAP. SECURE THE PLATES FROM MOVING BY INSERTING LOCATING PINS THROUGH THE PRE-STAMPED HOLES INTO BACKER ROD AND COVER WITH HOT BINDER. THE STEEL PLATES MAY BE OMITTED WHERE THE ENGINEER DETERMINES THAT THE APPROACH SLAB OR BRIDGE DECK WILL PROVIDE INADEQUATE SUPPORT AND WHERE VERTICAL MOVEMENT OF THE PLATES MIGHT OCCUR.



ASPHALTIC PLUG JOINT DETAIL "A" - NEW

NOTE:
PLACE 1/4" THICK BY 8" WIDE SECTIONS OF STEEL PLATE OVER THE CENTER OF THE MOVEMENT GAP. SECURE THE PLATES FROM MOVING BY INSERTING LOCATING PINS THROUGH THE PRE-STAMPED HOLES INTO BACKER ROD AND COVER WITH HOT BINDER.



ASPHALTIC PLUG JOINT DETAIL "B" - NEW

ASPHALTIC PLUG JOINT NOTES

INSTALLATION:

1. LOCATE THE JOINT CENTRALLY OVER THE DECK OVERLAY EXPANSION GAP OR FIXED JOINT, MARKED OUT TO THE MANUFACTURER'S RECOMMENDED WIDTH.
2. REMOVE THE BITUMINOUS CONCRETE PAVEMENT FULL DEPTH AS SHOWN ON THE PLANS. THE PAVEMENT SHALL BE DRY AND SAW CUT TO THE LIMITS REQUIRED TO PLACE THE JOINT. A PNEUMATIC HAMMER AND CHISEL MAY BE USED ADJACENT TO THE CURB ONLY WHEN SAW CUTTING IS NOT POSSIBLE.
3. BLAST CLEAN THE JOINT AREA OF DEBRIS, ASPHALT AND SHEET MEMBRANE. THOROUGHLY DRY THE JOINT AREA WITH COMPRESSED AIR PRIOR TO APPLYING BINDER MATERIAL.
4. PLACE PROPERLY SIZED HEAT RESISTANT BACKER ROD IN THE MOVEMENT GAP ALLOWING FOR 1" +/- OF BINDER ABOVE THE ROD.
5. HEAT AND PLACE THE BINDER MATERIAL AS RECOMMENDED BY THE MANUFACTURER.
6. IMMEDIATELY AFTER TOP COATING, CAST AN ANTI-SKID MATERIAL OVER THE JOINT TO REDUCE THE RISK OF TRACKING.

WEATHER LIMITATIONS

APPLY BINDER MATERIAL ONLY WHEN THE FOLLOWING CONDITIONS PREVAIL OR AS RECOMMENDED BY THE MANUFACTURER:

1. THE AMBIENT AIR TEMPERATURE IS AT LEAST 10 DEG C (50 DEG F) AND RISING.
2. THE ROAD SURFACE IS DRY.
3. WEATHER CONDITIONS OR OTHER CONDITIONS ARE FAVORABLE AND ARE EXPECTED TO REMAIN SO FOR THE PERFORMANCE OF SATISFACTORY WORK.

DETAILS ON THIS SHEET ARE NOT TO SCALE.

REVISIONS	
MAY 7, 2010	APPROVED FOR USE BY VAOT STRUCTURES SECTION
AUGUST 29, 2011	ADD DETAIL "B" AND REV. NOTES

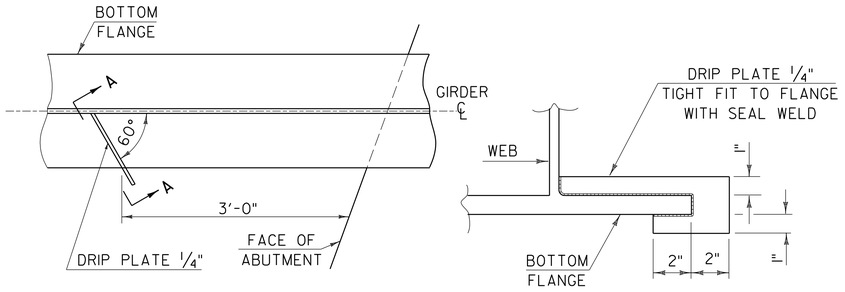
BRIDGE JOINT
ASPHALTIC PLUG

VERMONT AGENCY OF TRANSPORTATION
STRUCTURES - DIVISION

STRUCTURES DETAIL
SD-516.10

STRUCTURAL STEEL GENERAL NOTES:

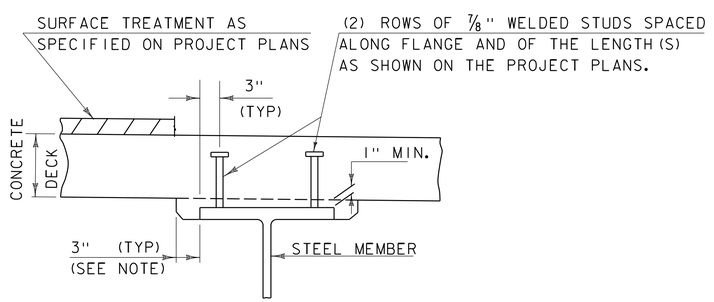
1. ALL FIELD CONNECTIONS SHALL BE MADE WITH 7/8" DIAMETER HIGH-STRENGTH BOLTS IN 15/16" DIAMETER HOLES, PER SUBSECTION 506.19, UNLESS OTHERWISE SPECIFIED.
2. ALL HOLES IN THE WEBS OF THE FASCIA GIRDERS THAT ARE NOT OTHERWISE FILLED, SHALL BE FILLED WITH EITHER BUTTON HEAD OR HEX HEAD BOLTS. THESE BOLTS SHALL BE TIGHTENED IN ACCORDANCE WITH SUBSECTION 506.19.
3. ALL WELDING SHALL CONFORM TO THE PROVISIONS OF SUBSECTION 506.10.
4. ANY CONNECTIONS THAT ARE NOT DETAILED ON THE PLANS SHALL BE DETAILED BY THE FABRICATOR AND SUBMITTED TO THE STRUCTURES ENGINEER FOR APPROVAL.
5. STRUCTURAL STEEL MEMBERS DESIGNATED "CVN" IN THE PLANS SHALL BE CHARPY V-NOTCH TESTED IN ACCORDANCE WITH SUBSECTION 714.01 OF THE STANDARD SPECIFICATIONS.
6. ENDS OF GIRDERS ARE TO BE VERTICAL IN THEIR FINAL POSITION.
7. AFTER SUPERSTRUCTURE STEEL HAS BEEN ERECTED, ELEVATIONS ALONG THE TOP OF THE GIRDERS SHALL BE TAKEN AS DIRECTED BY THE RESIDENT ENGINEER FOR USE IN DETERMINING FINISHED GRADES.



PLAN DRIP PLATE

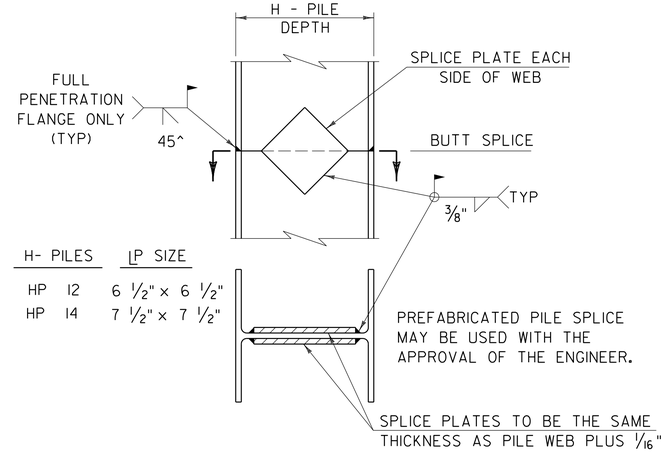
SECTION A - A

NOTE: DRIP PLATES SHALL BE PLACED ON OUTSIDE EDGE OF FASCIA GIRDERS ON THE HIGH SIDE OF ALL PIERS AND ABUTMENTS OR AS INDICATED ON PROJECT PLANS.



NOTE:
THE 3" HORIZONTAL SECTION MAY BE ELIMINATED FOR FORMING SYSTEMS DESIGNED FOR THE CONSTRUCTION OF VERTICAL HAUNCHES. ANY VOIDS RESULTING FROM FORMING SYSTEM ELEMENTS SHALL BE FILLED WITH JOINT SEALER, POLYURETHANE MEETING THE REQUIREMENTS OF SECTION 524. THE COST OF THE JOINT SEALER, POLYURETHANE SHALL BE INCIDENTAL TO THE ADJACENT CONCRETE.

HAUNCH AND SHEAR CONNECTOR DETAIL



H- PILES	LP SIZE
HP 12	6 1/2" x 6 1/2"
HP 14	7 1/2" x 7 1/2"

DETAIL OF PILE SPLICE

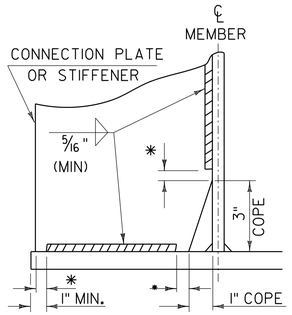
DETAILS ON THIS SHEET ARE "NOT TO SCALE" UNLESS NOTED OTHERWISE.

REVISIONS	
MAY 7, 2010	APPROVED FOR USE BY VAOT STRUCTURES SECTION
JUNE 4, 2010	MODIFIED NOTES

STRUCTURAL STEEL DETAILS & NOTES

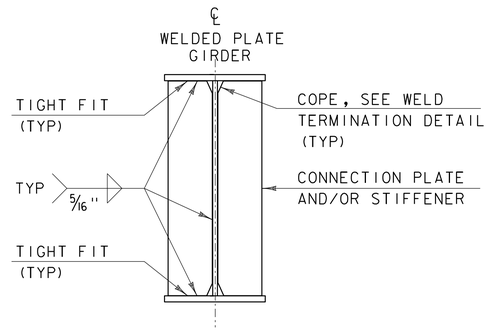
VERMONT AGENCY OF TRANSPORTATION
STRUCTURES - SECTION

STRUCTURES DETAIL
SD-601.00



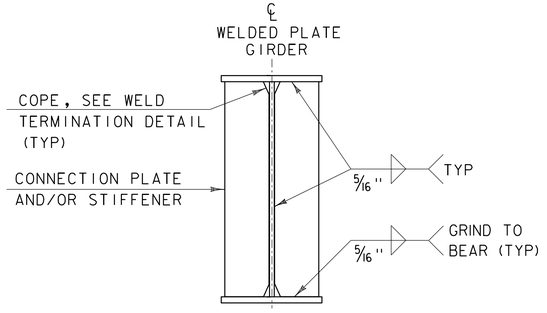
WELD TERMINATION AND COPING DETAILS FOR STEEL MEMBERS

*NO WELD FOR 3/8" MIN. 7/8" MAX. (EXCEPT MUST MAINTAIN 1" MINIMUM FROM EDGE OF FLANGE)

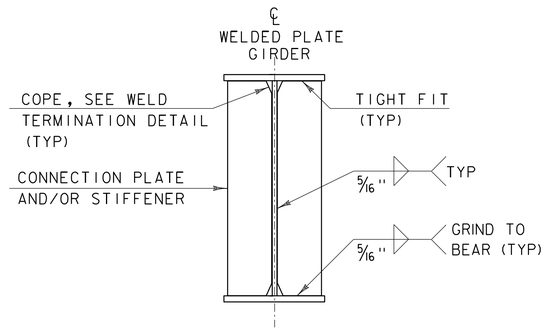


INTERMEDIATE CONNECTION PLATES AND/OR STIFFENERS FOR WELDED PLATE GIRDERS

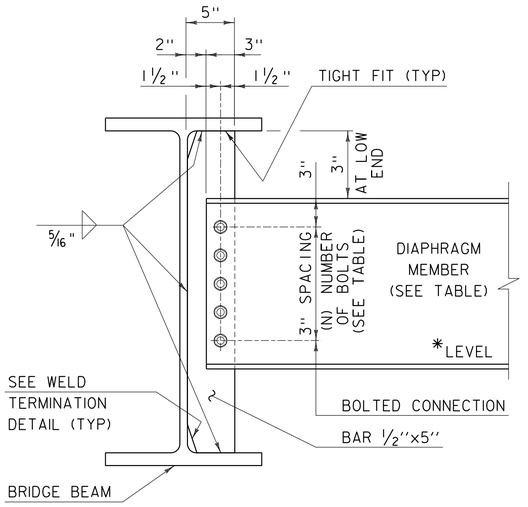
INTERMEDIATE DETAIL IS ONLY USED WHEN PLATE DOES NOT OCCUR AT AN ABUTMENT OR PIER.



ABUTMENT BEARING STIFFENERS AND/OR CONNECTION PLATES FOR WELDED PLATE GIRDERS



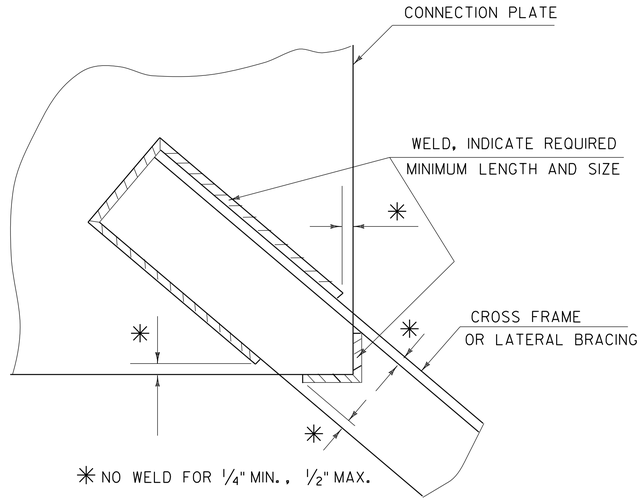
PIER BEARING STIFFENERS AND/OR CONNECTION PLATES FOR WELDED PLATE GIRDERS



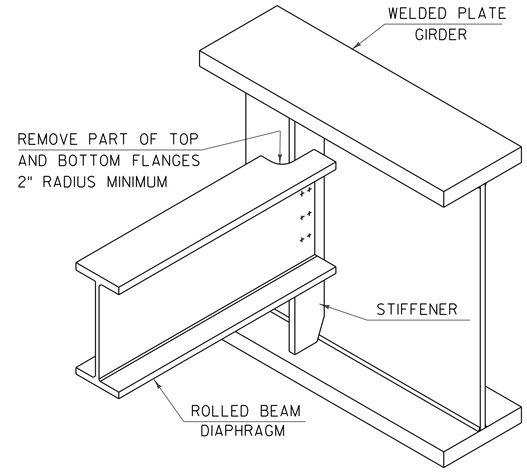
DEPTH		DIAPHRAGM MEMBER	(N) BOLTS
ROLLED BEAM	24" 30"	C15x33.9	4
	31" 36"	MC18x42.7	5
	37" 42"	W21x44	6
PLATE GIRDER WEB	31" 36"	W27x84	7
	37" 42"	W33x118	9
	43" 48"	W36x135	10

INTERMEDIATE DIAPHRAGMS FOR 24" TO 48" BRIDGE BEAMS

* IF CLEARANCE CANNOT BE MET, DIAPHRAGM MAY BE SLOPED.



WELD LOCATION DETAIL AT CROSS FRAMES AND LATERAL BRACING



SEE CONTRACT DRAWINGS FOR SIZES OF MEMBERS AND CONNECTION DETAILS

ROLLED BEAM USED AS DIAPHRAGM

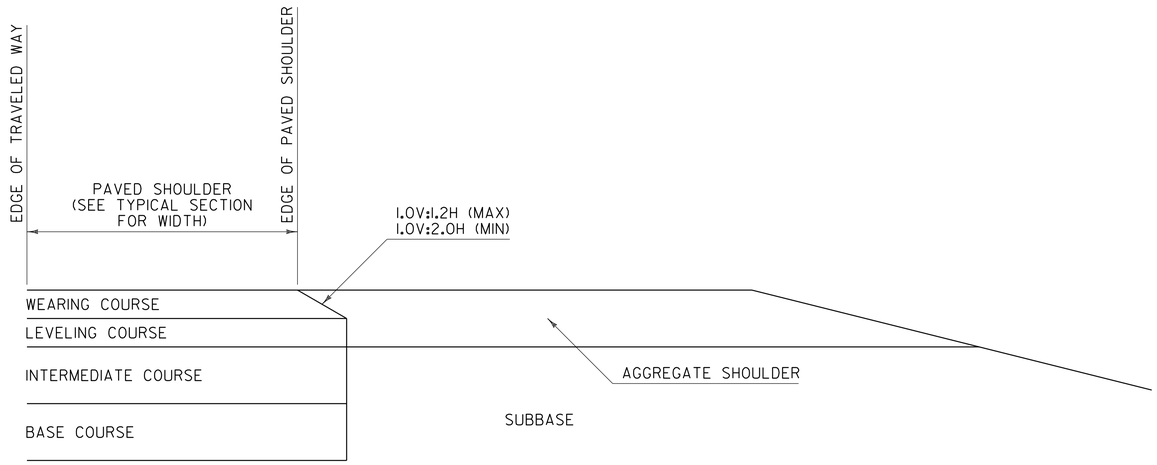
DETAILS ON THIS SHEET ARE "NOT TO SCALE" UNLESS NOTED OTHERWISE.

REVISIONS	
MAY 7, 2010	APPROVED FOR USE BY VAOT STRUCTURES SECTION
MAY 2, 2011	ADD INTERMEDIATE DIAPHRAGMS DETAIL & ADD NOT TO SCALE NOTE

STRUCTURAL STEEL PLATE GIRDER DETAILS AND NOTES

VERMONT AGENCY OF TRANSPORTATION
STRUCTURES - SECTION

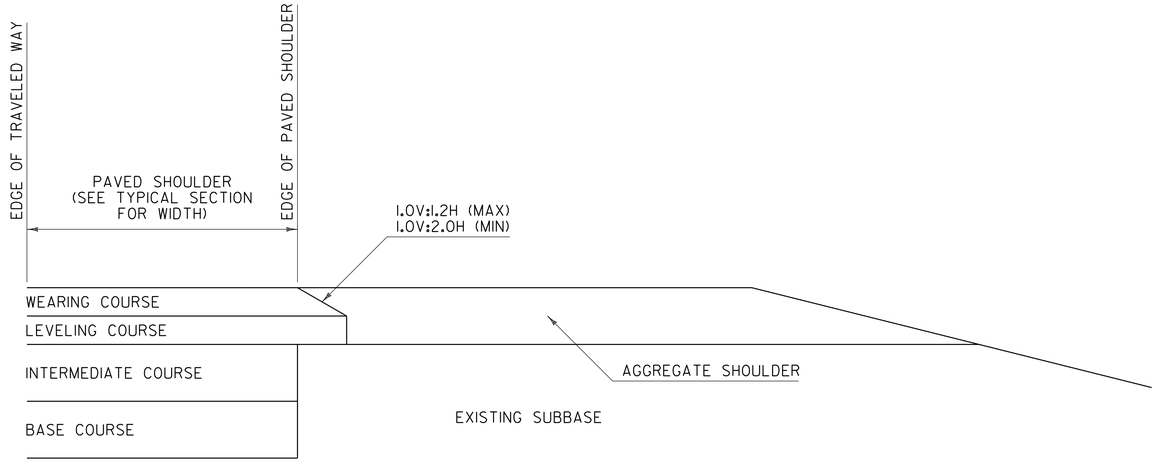
STRUCTURES DETAIL SD-602.00



SAFETY EDGE DETAIL
FOR PAVING BELOW WEARING COURSE

NOTES:

1. THIS DETAIL IS INTENDED FOR WHEN PAVING EXTENDS BELOW THE WEARING COURSE.
2. PRIOR TO PLACEMENT OF THE LEVELING AND/OR WEARING COURSE, THE SUBBASE LOCATED BENEATH THE AGGREGATE SHOULDER SHALL BE PREPARED FLUSH WITH THE BOTTOM OF THE LEVELING COURSE.
3. BASE COURSE LIMITS MAY VARY, SEE TYPICAL SECTIONS FOR WIDTH.



SAFETY EDGE DETAIL
FOR PAVING WEARING COURSE ONLY

NOTES:

1. THIS DETAIL IS INTENDED FOR WHEN ONLY THE LEVELING AND/OR WEARING COURSE IS TO BE PLACED.
2. PAVEMENT COURSES MAY VARY, SEE TYPICAL SECTIONS FOR ACTUAL PAVEMENT COURSES REQUIRED.

REV.	DATE	DESCRIPTION
0	MAR. 29, 2016	ORIGINAL APPROVAL

OTHER DETAILS REQUIRED: NONE

DETAILS APPROVED FOR USE BY HIGHWAY SAFETY & DESIGN

SAFETY EDGE WIDTH BASED ON WEARING COURSE THICKNESS AND A 1V:1.6H SLOPE	
WEARING COURSE THICKNESS (INCHES)	NOMINAL SAFETY EDGE WIDTH (INCHES)
1.25	2.000
1.50	2.375
1.75	2.750
2.00	3.125
2.25	3.500
2.50	4.000

GENERAL NOTES:

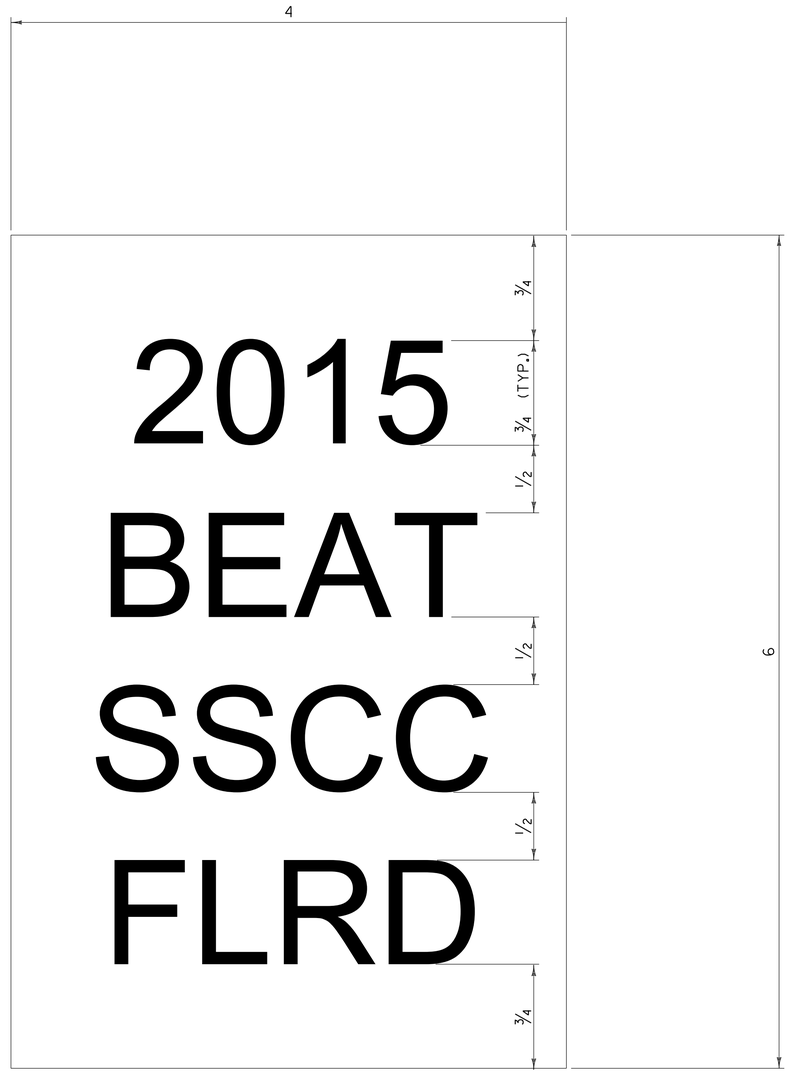
1. PLACEMENT OF THE WEARING COURSE SHALL INCLUDE THE SAFETY EDGE, UNLESS THE FOLLOWING APPLIES:
   - A. THE ADJACENT SLOPE IS STEEPER THAN THE SAFETY EDGE.
   - B. THE EDGE OF PAVEMENT BEING PLACED ABUTS BOUND MATERIAL.
   - C. VEHICLES ARE RESTRICTED FROM LEAVING THE PAVED SURFACE (EXAMPLE: GUARDRAIL).
2. THE SAFETY EDGE SHALL BE FORMED IN SUCH A WAY THAT THE BITUMINOUS CONCRETE PAVEMENT IS EXTRUDED OR COMPRESSED TO FORM THE SLOPE. DEVICES THAT SIMPLY STRIKE-OFF THE MIX WITHOUT PROVIDING ANY COMPACTIVE EFFORT WILL NOT BE ALLOWED.
3. THE SAFETY EDGE SHALL NOT BE CONSIDERED PART OF THE PAVED SHOULDER.
4. THIS WORK SHALL BE INCIDENTAL TO THE RESPECTIVE BITUMINOUS CONCRETE PAVEMENT ITEM.

SAFETY EDGE DETAILS

VTrans Working to Get You There
VERMONT AGENCY OF TRANSPORTATION

HIGHWAY SAFETY & DESIGN DETAIL

HSD-400.01



GENERAL NOTES:

1. LINE ONE SHALL INDICATE THE INSTALLATION YEAR (YYYY).
2. LINE TWO SHALL INDICATE THE MODEL AS IDENTIFIED ON THE APPROVED PRODUCTS LIST. FOR GENERIC INSTALLATIONS THE STANDARD DRAWING DESIGNATION OR NAME AS IDENTIFIED IN THE FHWA ELIGIBILITY LETTER SHALL BE USED.
3. LINE THREE SHALL SHALL INDICATE ADDITIONIAL MODEL INFORMATION IF NECESSARY.
4. LINE FOUR SHALL INDICATE FLARED (FLRD) OR TANGENT (TANG).
5. LEGEND SHALL BE ONE ARIEL FONT.
6. LEGEND SHALL BE BLACK ON A WHITE BACKGROUND, LENGEND AND BACKGROUND SHALL NOT BE REFLECTIVE.
7. SUITABLE MATERIAL SHALL BE USED SO AS TO NOT DETERIORATE DURING EXPOSURE TO WEATHER.
8. LABELS SHALL BE APPLIED IN SUCH A WAY THAT THEY REMAIN INTACT DURING THE LIFE OF THE TERMINAL.
9. FOR W-BEAM GUARDRAIL, LABEL SHALL BE PLACED ON THE TOP OF POST ONE FACING AWAY FROM TRAFFIC.
10. FOR BOX BEAM GUARDRAIL, LABEL SHALL BE PLACED ON THE BOX BEAM ADJACENT TO POST ONE FACING AWAY FROM TRAFFIC.
11. PAYMENT SHALL BE INCIDENTAL TO OTHER TRAFFIC BARRIER ITEMS.
12. ALL DIMENSIONS IN INCHES.

REV.	DATE	DESCRIPTION
0	NOV. 3, 2015	ORIGINAL APPROVAL

OTHER DETAILS REQUIRED: NONE

DETAILS APPROVED FOR USE BY HIGHWAY SAFETY & DESIGN

GUARDRAIL TERMINAL LABEL DETAIL

VTrans Working to Get You There
VERMONT AGENCY OF TRANSPORTATION

HIGHWAY SAFETY & DESIGN DETAIL

HSD-621.06