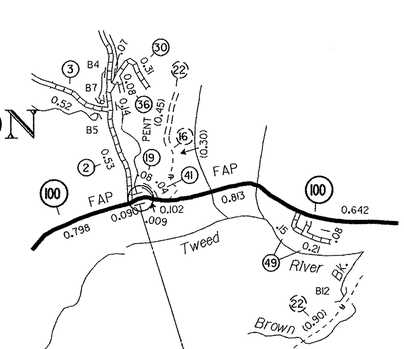
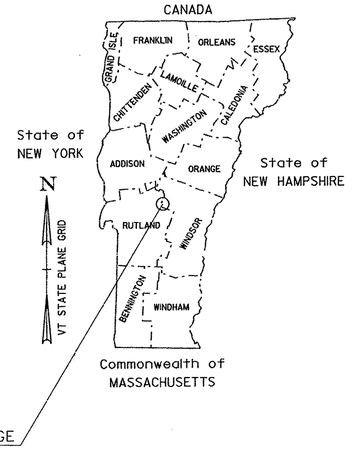
SEE SHEET 2 FOR INDEX OF SHEETS
AND LIST OF STANDARDS

STATE OF VERMONT
AGENCY OF TRANSPORTATION





PITTSFIELD-STOCKBRIDGE
STP 022-1(22)

PROPOSED IMPROVEMENT
BRIDGE PROJECT

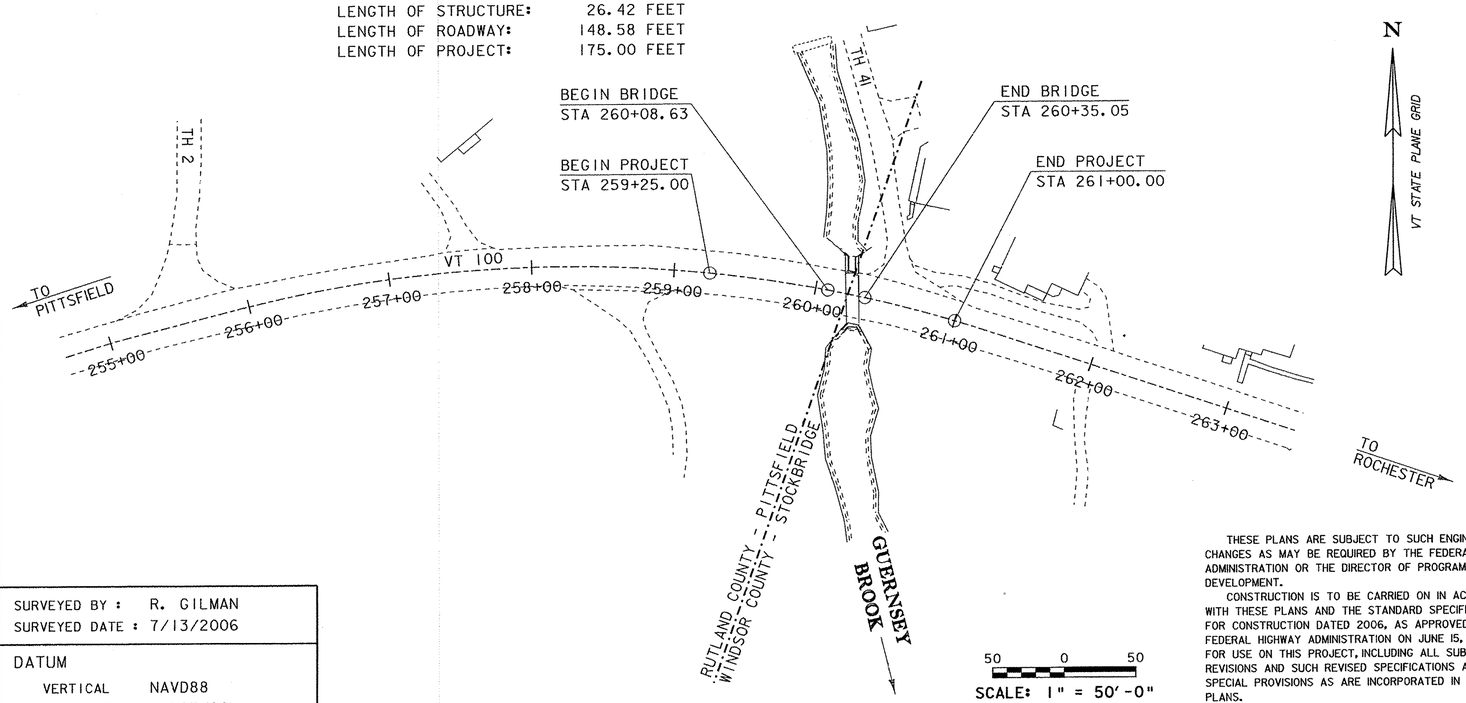
TOWNS OF PITTSFIELD AND STOCKBRIDGE
COUNTIES OF RUTLAND AND WINDSOR

ROUTE NO : VT RT 100, MINOR ARTERIAL BRIDGE NO : 127

PROJECT LOCATION: BEGINNING AT A POINT APPROXIMATELY 0.026 MILE WEST FROM THE JUNCTION OF VT 100 AND TH 41 AND EXTENDING EASTERLY ALONG VT 100 FOR 175 FEET.

PROJECT DESCRIPTION: REPLACEMENT OF EXISTING BOX CULVERT WITH A PRECAST CONCRETE STRUCTURE ALONG WITH RELATED ROADWAY AND CHANNEL WORK.

LENGTH OF STRUCTURE:	26.42 FEET
LENGTH OF ROADWAY:	148.58 FEET
LENGTH OF PROJECT:	175.00 FEET



50 0 50
SCALE: 1" = 50'-0"

QUALITY ASSURANCE PROGRAM: LEVEL 2

CONVENTIONAL SYMBOLS

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

RECORD PLANS

CONTRACTOR: KUBRICKY CONSTURCTION CORP. - GLENS FALLS, NY
RESIDENT ENGINEER: TIM POCKETTE
CONSTRUCTION BEGAN: OCTOBER 12, 2011
CONSTRUCTION COMPLETE: AUGUST 19, 2011
RECORD PLANS BY: TIM POCKETTE & STEPHEN KENT

I HEREBY CERTIFY THAT ALL THE CONSTUCTION REQUIRED BY THIS SET OF DRAWINGS HAS BEEN ACCOMPLISHED AS INDICATED HEREIN.

BY _____ RESIDENT ENGINEER

DATE 02-06-2013

NOTE: Any further information concerning final quantities, amounts or other details relative to this project may be found at Central Files in the electronic archives.

SURVEYED BY : R. GILMAN
SURVEYED DATE : 7/13/2006

DATUM
VERTICAL NAVD88
HORIZONTAL NAD83(96)

THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY ADMINISTRATION OR THE DIRECTOR OF PROGRAM DEVELOPMENT.

CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2006, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JUNE 15, 2006 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

PLOTTED 02-SEP-2011

DIRECTOR OF PROGRAM DEVELOPMENT
APPROVED _____ DATE 8-6-11

PROJECT MANAGER : C.P. WILLIAMS

PROJECT NAME : PITTSFIELD-STOCKBRIDGE
PROJECT NUMBER : STP 022-1(22)S

SHEET 1 OF 41 SHEETS

STATE OF VERMONT
AGENCY OF TRANSPORTATION

PRELIMINARY INFORMATION SHEET (BRIDGE)

Version 09.02.03

LRFD

INDEX OF SHEETS

PLAN SHEETS

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G-1	STEEL BEAM GUARDRAIL DETAILS (POST, DELINEATOR, TYPICALS)	01-03-2000
G-1D	STEEL BEAM GUARDRAIL DETAILS (END TERMINAL, ANCHOR, MEDIAN)	01-03-2000
G-19	GENERIC GRADING PLANS FOR GUARDRAIL END TERMINALS	11-15-2002

TRAFFIC DATA

YEAR	ADT	DHV	% D	% T	ADTT
2010	3500	390	51	12	468
2030	4300	490	51	17	811

20 year ESAL for flexible pavement from 2010 to 2030 : 4555000

40 year ESAL for flexible pavement from 2010 to 2050 : 11132000

Design Speed : 45 mph

FINAL HYDRAULIC REPORT

HYDROLOGIC DATA

Date: Jan. 5, 2011

DRAINAGE AREA : 4.4 sq. mi.
CHARACTER OF TERRAIN : Hilly to mountainous, mostly forested with some open areas
STREAM CHARACTERISTICS : Steep, incised with some bank erosion downstream
NATURE OF STREAMBED : Gravel, cobbles and boulders

PEAK FLOW DATA

Q 2.33 =	350 cfs	Q 50 =	1200 cfs
Q 10 =	700 cfs	Q 100 =	1450 cfs
Q 25 =	950 cfs	Q 500 =	2150 cfs

DATE OF FLOOD OF RECORD: Unknown
ESTIMATED DISCHARGE: Unknown
WATER SURFACE ELEV.: Unknown
NATURAL STREAM VELOCITY: @ Q50 = 17.4 fps
ICE CONDITIONS : Moderate
DEBRIS: Moderate
DOES THE STREAM REACH MAXIMUM HIGHWATER ELEV. RAPIDLY? Yes
IS ORDINARY RISE RAPID? Yes
IS STAGE AFFECTED BY UPSTREAM OR DOWNSTREAM CONDITIONS? No
IF YES, DESCRIBE:

WATERSHED STORAGE: < 1%
HEADWATERS:
UNIFORM: X
IMMEDIATELY ABOVE SITE:

EXISTING STRUCTURE INFORMATION

STRUCTURE TYPE: Buried concrete bridge/box
YEAR BUILT: Built in 1926. Widened in 1937 and 1947
CLEAR SPAN(NORMAL TO STREAM): 9.5'
VERTICAL CLEARANCE ABOVE STREAMBED: 10.5'
WATERWAY OF FULL OPENING: 100 sq. ft.
DISPOSITION OF STRUCTURE: Remove
TYPE OF MATERIAL UNDER SUBSTRUCTURE: See boring logs

WATER SURFACE ELEVATIONS AT:

Q2.33 =	830.8'	VELOCITY =	12.4 fps
Q10 =	834.5'	"	15.8 fps
Q25 =	836.6'	"	17.4 fps
Q50 =	838.6'	"	18.8 fps
Q100 =	841.3'	"	22.7 fps

LONG TERM STREAMBED CHANGES: Local scour through and downstream of the bridge.

IS THE ROADWAY OVERTOPPED BELOW Q100: No
FREQUENCY: Just above Q100
RELIEF ELEVATION: 841.4'
DISCHARGE OVER ROAD @Q100: None

UPSTREAM STRUCTURE

TOWN: Pittsfield — DISTANCE: 3,200'
HIGHWAY # : T. H. 2 — STRUCTURE #: 7
CLEAR SPAN: 15.5' — CLEAR HEIGHT: 9.7'
YEAR BUILT: — FULL WATERWAY: 118 sq. ft.
STRUCTURE TYPE: CGMPPA

DOWNSTREAM STRUCTURE

TOWN: NA - Confluence with the Tweed River — DISTANCE: 1,300'
HIGHWAY # : — STRUCTURE #:
CLEAR SPAN: — CLEAR HEIGHT:
YEAR BUILT: — FULL WATERWAY:
STRUCTURE TYPE:

LRFR LOAD RATING FACTORS

LOADING LEVELS	TRUCK						
	H-20	HL-93	3S2	6 AXLE	3A STR.	4A STR.	5A SEMI
TONNAGE	20	36	36	66	30	34.5	38
INVENTORY							
POSTING							
OPERATING							
COMMENTS:							

PROPOSED STRUCTURE

STRUCTURE TYPE: Buried precast concrete bridge

CLEAR SPAN(NORMAL TO STREAM): 24'
VERTICAL CLEARANCE ABOVE STREAMBED: 8'
WATERWAY OF FULL OPENING: 180 sq. ft.

WATER SURFACE ELEVATIONS AT:

Q2.33 =	829.3'	VELOCITY=	12.2 fps
Q10 =	830.5'	"	14.3 fps
Q25 =	831.1'	"	16.0 fps
Q50 =	831.7'	"	17.4 fps
Q100 =	832.3'	"	18.5 fps

IS THE ROADWAY OVERTOPPED BELOW Q100: No
FREQUENCY: Above Q100
RELIEF ELEVATION: 841.3'
DISCHARGE OVER ROAD @Q100: None

AVERAGE LOW ELEVATION OF SUPERSTRUCTURE: 833.9' at inlet, 830.4' at outlet
VERTICAL CLEARANCE: @ Q50 = 2.2'

SCOUR: Contraction scour = 3' at Q100 and 4' at Q500. Long term channel degradation is estimated to be 1' at Q100 and 2' at Q500. Total scour at Q100 = 4' and at Q500 = 6'.
REQUIRED CHANNEL PROTECTION: Stone Fill, Type IV

PERMIT INFORMATION

AVERAGE DAILY FLOW:	10 cfs	DEPTH OR ELEVATION:
ORDINARY LOW WATER:	5 cfs	Depth = 1'
ORDINARY HIGH WATER:	150 cfs	Depth = 3'

TEMPORARY BRIDGE REQUIREMENTS

STRUCTURE TYPE: No temporary required. Traffic maintained with phased construction.
CLEAR SPAN (NORMAL TO STREAM):
VERTICAL CLEARANCE ABOVE STREAMBED:
WATERWAY AREA OF FULL OPENING:

ADDITIONAL INFORMATION

TRAFFIC MAINTENANCE NOTES

1. MAINTAIN ONE-WAY TRAFFIC ON THE EXISTING STRUCTURE.
2. TRAFFIC SIGNALS ARE NOT NECESSARY.
3. SIDEWALKS ARE NOT NECESSARY

DESIGN VALUES

1. DESIGN LIVE LOAD		HL-93
2. FUTURE PAVEMENT	d_P:	---
3. DESIGN SPAN	L:	24.00 FT
4. MIN. MID-SPAN POS. CAMBER @ RELEASE (PRESTRESSED UNITS)	Δ:	---
5. PRESTRESSING STRAND	f_y:	---
6. PRESTRESSED CONCRETE STRENGTH	f'_c:	---
7. PRESTRESSED CONCRETE RELEASE STRENGTH	f'_{ci}:	---
8. 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	f_y:	---
14. SOIL UNIT WEIGHT	γ:	0.140 KCF
15. NOMINAL BEARING RESISTANCE OF SOIL	q_n:	SEE SHEET 3
16. SOIL BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD)	ϕ:	---
17. NOMINAL BEARING RESISTANCE OF ROCK	q_n:	---
18. ROCK BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD)	ϕ:	---
19. NOMINAL AXIAL PILE RESISTANCE	q_p:	---
20. PILE YIELD STRENGTH ASTM A572	f_y:	---
21. PILE SIZE		---
22. EST. PILE LENGTH	L_p:	
23. PILE RESISTANCE FACTOR	ϕ:	---
24. LATERAL PILE DEFLECTION	Δ:	---
25. BASIC WIND SPEED	V_{3s}:	---
26. MINIMUM GROUND SNOW LOAD	p_g:	---
27. SEISMIC DATA — PGA: ---	S_s:	---
	S_1:	---

PROJECT NAME: **PITTSFIELD-STOCKBRIDGE**
PROJECT NUMBER: **STP 022-1(22)S**

FILE NAME: s00b122pi.dgn
PROJECT LEADER: C. P. WILLIAMS
DESIGNED BY: R. YOUNG
PRELIMINARY INFORMATION SHEET 1

PLOT DATE: 9/7/2011
DRAWN BY: G. ROY
CHECKED BY: R. YOUNG

GENERAL

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2006, AND ITS LATEST REVISIONS, THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, DATED 2010, AND ITS LATEST REVISIONS, AND THE VTRANS STRUCTURES DESIGN MANUAL.

2. DESIGN CRITERIA:

DESIGN LIVE LOAD :	HL-93
FILL OVER THE STRUCTURE:	10 FEET
FOUNDATION SOIL PARAMETERS	
UNIT WEIGHT :	110 PCF
FRICTION ANGLE :	27 DEGREES
RETAINED SOIL PARAMETERS	
UNIT WEIGHT:	140 PCF
FRICTION ANGLE:	35 DEGREES
FACTORED BEARING RESISTANCE (FOOTING WIDTH)	
6800 PSF (8 FEET)	
7000 PSF (9 FEET)	
7200 PSF (10 FEET)	

3. REINFORCING STEEL SHALL BE UNCOATED.

4. THE DESIGN SHALL INCLUDE THE EFFECTS OF ALL LOADS INCLUDING BUT NOT LIMITED TO LIVE LOAD, EARTH SURCHARGE, AND HYDROSTATIC PRESSURE.

5. FOR INFORMATION REGARDING UTILITIES SEE THE SPECIAL PROVISIONS.

6. ALL DIMENSIONS SHOWN IN THE PLANS ARE HORIZONTAL OR VERTICAL AND ARE GIVEN AT 68 DEGREES FAHRENHEIT, UNLESS NOTED OTHERWISE.

7. ITEM 529.15 "REMOVAL OF STRUCTURE(11'x 9'x 50'CONCRETE BOX)" SHALL BE USED FOR REMOVAL OF THE EXISTING CONCRETE BOX CULVERT AND ANY ADDITIONAL WORK REQUIRED FOR PARTIAL REMOVAL DUE TO PHASE CONSTRUCTION.

8. 1 ½" OF TEMPORARY PAVEMENT SHALL BE PLACED ON TOP OF SUBBASE PRIOR TO WINTER SHUT DOWN. THE PAVEMENT NEED NOT MEET THE MIX DESIGN SUBMITTAL AND PLANT INSPECTION REQUIREMENTS SET FORTH IN SECTION 406 OR 490.

CONCRETE

9. WATER REPELLENT, SILANE SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES, EXCEPT THE UNDERSIDE OF THE BURIED STRUCTURE.

10. REINFORCING STEEL PLACEMENT TOLERANCES SHALL BE:
    SPACING: +/- 1 INCH
    CLEARANCE: +/- 1/4 INCH

11. PRECAST TOLERANCES:
    HEIGHT/WIDTH: +/- 1/4 INCH
    LENGTH: +/- 1/2 INCH

BURIED STRUCTURE

12. THE PRECAST CONCRETE BURIED STRUCTURE SHALL BE A THREE-SIDED FRAME OR ARCH TYPE STRUCTURE WITH A MINIMUM CLEAR SPAN OF 24 FEET. THE LUMP SUM COST FOR ITEM 540.10 "PRECAST CONCRETE STRUCTURE (24' X 6.5' X 72' FRAME OR ARCH TYPE)" SHALL INCLUDE THE PRECAST BURIED UNITS, HEADWALLS, WINGWALLS, AND MECHANICAL CONNECTIONS.

13. THE WINGWALLS SHALL BE SELECTED FROM THE LIST OF WALLS ON THE APPROVED RETAINING WALL DOCUMENT AVAILABLE FROM VAOT MATERIALS AND RESEARCH WEB SITE. THE RETAINING WALL SHALL HAVE CONCRETE FACING.
    http://www.aot.state.vt.us/matres/Documents/ACROBAT.pdf/S&FDox/VAOT%20APPROVED%20Retaining%20Walls%2012-2008.pdf

14. THE USE OF EQUIPMENT AND THE METHOD OF BACKFILLING AROUND THE BURIED STRUCTURE SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. CARE SHALL BE TAKEN WHEN BACKFILLING AGAINST JOINT SEALING MATERIALS.

15. CARE SHALL BE TAKEN WHEN DRIVING GUARDRAIL POSTS AS TO NOT DAMAGE THE BURIED STRUCTURE OR INTERFERE WITH WINGWALL COMPONENTS.

ABUTMENTS

16. ABUTMENTS SHALL BE PLACED UNDER THE BURIED STRUCTURE AND WINGWALLS AND MAY BE CONSTRUCTED OF EITHER PRECAST OR CAST-IN-PLACE CONCRETE. ABUTMENTS SHALL BE PAID FOR UNDER THE ITEM 900.645, "SPECIAL PROVISION (PEDESTAL WALL)(ABUTMENT NO.1)" OR "SPECIAL PROVISION (PEDESTAL WALL)(ABUTMENT NO.2)". SEE SPECIAL PROVISIONS.

PROJECT NAME:	PITTSFIELD-STOCKBRIDGE
PROJECT NUMBER:	STP 022-1(22)S
FILE NAME: s00b122note.dgn	PLOT DATE: 07-SEP-2011
PROJECT LEADER: C. P. WILLIAMS	DRAWN BY: G. ROY
DESIGNED BY: G. ROY	CHECKED BY: R. YOUNG
GENERAL NOTES	SHEET 3 OF 41

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET 1

SUMMARY OF ESTIMATED QUANTITIES			TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES		
ROADWAY	EROSION CONTROL	BRIDGE	FULL C.E. ITEMS	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS
1				1		LS	CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS	201.10				**EARTHWORKS SUMMARY**
1410				1410		CY	COMMON EXCAVATION	203.15	8.9			FILL AVAILABLE
										1410	CY	COMMON EXCAVATION (1400 x 1.0)
		170		170		CY	UNCLASSIFIED CHANNEL EXCAVATION	203.27	5.4	51	CY	UNCLASSIFIED CHANNEL EXCAVATION (170 x 0.3)
										0	CY	UNDERDRAIN EXCAVATION (0 x 0.9)
390				390		CY	GRANULAR BORROW	203.32	8.6	447	CY	STRUCTURE EXCAVATION (1490 x 0.3)
										27	CY	TRENCH EXCAVATION OF EARTH (30 x 0.9)
10	10			20		CY	TRENCH EXCAVATION OF EARTH	204.20		5	CY	ROUNDING
1				1		CY	TRENCH EXCAVATION OF EARTH, EXPLORATORY (N.A.B.I.)	204.22		1940	**CY**	**TOTAL FILL AVAILABLE**
		1490		1490		CY	STRUCTURE EXCAVATION	204.25	9.3			**FILL REQUIRED**
		530		530		CY	GRANULAR BACKFILL FOR STRUCTURES	204.30	9.1	130	CY	PLANIMETERED FILL
										149.5	CY	FACTORED FILL (x 1.15)
460				460		SY	COLD PLANING, BITUMINOUS PAVEMENT	210.10	0.2	0.5	CY	ROUNDING
										150	**CY**	**TOTAL FILL REQUIRED**
1220	20			1240		CY	SUBBASE OF DENSE GRADED CRUSHED STONE	301.35	7.3			
										1790	**CY**	**TOTAL WASTE**
1				1		LU	PRICE ADJUSTMENT, ASPHALT CEMENT (N.A.B.I.)	406.50				
		5		5		GAL	WATER REPELLENT, SILANE	514.10				
												PAVEMENT SUMMARY
		1		1		EACH	REMOVAL OF STRUCTURE (11' X 9' X 50' CONCRETE BOX)	529.15				
										544	TON	PERMANENT PAVEMENT (AS SHOWN ON PLANS)
		1		1		LS	PRECAST CONCRETE STRUCTURE (24' X 6.5' X 72' FRAME OR ARCH TYPE)	540.10		127	TON	TEMPORARY PAVEMENT (1 1/2" TYPE I I I)
	10			10		HR	ALL PURPOSE EXCAVATOR RENTAL, TYPE I	608.25		671	**TON**	**TOTAL PAVEMENT**
	10	40		50		CY	STONE FILL, TYPE I	613.10	13.4			
		50		50		CY	STONE FILL, TYPE IV	613.13	7.7			
340				340		LF	HD STEEL BEAM GUARDRAIL, GALVANIZED W/8 FEET POSTS	621.215	0.5			
3				3		EACH	MANUFACTURED TERMINAL SECTION, TANGENT	621.51				
1				1		EACH	ANCHOR FOR STEEL BEAM RAIL	621.60				
500				500		LF	REMOVAL AND DISPOSAL OF GUARDRAIL	621.80	7.8			
150				150		HR	UNIFORMED TRAFFIC OFFICERS	630.10				
2200				2200		HR	FLAGGERS	630.15				
			1	1		LS	FIELD OFFICE, ENGINEERS	631.10				
			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				
780				780		LF	4 INCH WHITE LINE	646.20	9.1			
770				770		LF	4 INCH YELLOW LINE	646.21	--			
		350		350		SY	GEOTEXTILE UNDER STONE FILL	649.31	3.1			
	200			200		SY	GEOTEXTILE FOR SILT FENCE	649.51	1.7			
	20			20		LB	SEED	651.15	7.4			
	20			20		LB	SEED, WINTER RYE	651.17				
	110			110		LB	FERTILIZER	651.18	4.7			
	1			1		TON	AGRICULTURAL LIMESTONE	651.20	0.6			
	1			1		TON	HAY MULCH	651.25	0.6			
	70			70		CY	TOPSOIL	651.35	6.4			
		130		130		SY	GRUBBING MATERIAL	651.40	1.8			
	1			1		LS	EPSC PLAN	652.10				
	25			25		HR	MONITORING EPSC PLAN	652.20				

PROJECT NAME: PITTSFIELD-STOCKBRIDGE
PROJECT NUMBER: STP 022-1(22)S

FILE NAME: s00b122qty.dgn
PROJECT LEADER: C. P. WILLIAMS
DESIGNED BY: R. YOUNG
QUANTITY SHEET #1

PLOT DATE: 09/07/2011
DRAWN BY: G. ROY
CHECKED BY: R. YOUNG
SHEET 4 OF 41

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET 2

SUMMARY OF ESTIMATED QUANTITIES					TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES		
ROADWAY	EROSION CONTROL	BRIDGE	FULL C.E. ITEMS		GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS
	1				1		LU	MAINTENANCE OF EPSC PLAN (N.A.B.I.)	652.30				
	1260				1260		SY	TEMPORARY EROSION MATTING	653.20	0.2			
	20				20		CY	VEHICLE TRACKING PAD	653.35				
	1				1		EACH	INLET PROTECTION DEVICE, TYPE I	653.40				
	150				150		LF	BARRIER FENCE	653.50	5.4			
	420				420		LF	PROJECT DEMARCATION FENCE	653.55	4.9			
11.42					11.42		SF	TRAFFIC SIGNS, TYPE A	675.20				
56					56		LF	SQUARE TUBE SIGN POST AND ANCHOR	675.341				
8					8		EACH	REMOVING SIGNS	675.50				
5					5		EACH	ERECTING SALVAGED SIGNS	675.60				
1					1		LU	PRICE ADJUSTMENT, FUEL (N.A.B.I.)	690.50				
		320			320		CY	SPECIAL PROVISION (STONE FILL, CHANNEL FLOW LINE)	900.608	2.3			
		1			1		LS	SPECIAL PROVISION (PEDESTAL WALL)(ABUTMENT NO.1)	900.645				
		1			1		LS	SPECIAL PROVISION (PEDESTAL WALL)(ABUTMENT NO.2)	900.645				
		1			1		LS	SPECIAL PROVISION (TEMPORARY RELOCATION OF STREAM)	900.645				
1					1		LS	SPECIAL PROVISION (TEMPORARY ROADWAY)(PHASE 1)	900.645				
1					1		LS	SPECIAL PROVISION (TEMPORARY ROADWAY)(PHASE 2)	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				
1					1		LU	SPECIAL PROVISION (MIXTURE PAY ADJUSTMENT)(N.A.B.I.)	900.650				
671					671		TON	SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, SMALL QUANTITY)	900.680	0.9			

PROJECT NAME: PITTSFIELD-STOCKBRIDGE
PROJECT NUMBER: STP 022-1(22)S

FILE NAME: s00b122qty.dgn
PROJECT LEADER: C. P. WILLIAMS
DESIGNED BY: R. YOUNG
QUANTITY SHEET #2

PLOT DATE: 09/07/2011
DRAWN BY: G. ROY
CHECKED BY: R. YOUNG
SHEET 5 OF 41

STATE OF VERMONT
AGENCY OF TRANSPORTATION

BRIDGE QUANTITY SHEET 1

SUMMARY OF BRIDGE QUANTITIES			TOTALS	DESCRIPTIONS			DETAILED SUMMARY OF QUANTITIES		
STRUCTURE	ABUTMENT NO.1	ABUTMENT NO.2	CHANNEL	BRIDGE TOTAL	UNIT	ITEMS	ITEM NUMBER	QUANTITIES	UNIT	ITEMS
			170	170	CY	UNCLASSIFIED CHANNEL EXCAVATION	203.27			
1490				1490	CY	STRUCTURE EXCAVATION	204.25			
	260	270		530	CY	GRANULAR BACKFILL FOR STRUCTURES	204.30			
5				5	GAL	WATER REPELLENT, SILANE	514.10			
1				1	EACH	REMOVAL OF STRUCTURE (11' X 9' X 50' CONCRETE BOX)	529.15			
1				1	LS	PRECAST CONCRETE STRUCTURE (24' X 6.5' X 72' FRAME OR ARCH TYPE)	540.10			
			40	40	CY	STONE FILL, TYPE I	613.10			
			50	50	CY	STONE FILL, TYPE IV	613.13			
			350	350	SY	GEOTEXTILE UNDER STONE FILL	649.31			
			130	130	SY	GRUBBING MATERIAL	651.40			
			320	320	CY	SPECIAL PROVISION (STONE FILL, CHANNEL FLOW LINE)	900.608			
	1			1	LS	SPECIAL PROVISION (PEDESTAL WALL)(ABUTMENT NO.1)	900.645			
		1		1	LS	SPECIAL PROVISION (PEDESTAL WALL)(ABUTMENT NO.2)	900.645			
			1	1	LS	SPECIAL PROVISION (TEMPORARY RELOCATION OF STREAM)	900.645			

PROJECT NAME: PITTSFIELD-STOCKBRIDGE
PROJECT NUMBER: STP 022-1(22)S

FILE NAME: s00b122qty.dgn
PROJECT LEADER: C. P. WILLIAMS
DESIGNED BY: R. YOUNG
BRIDGE QUANTITY SHEET #1

PLOT DATE: 09/07/2011
DRAWN BY: G. ROY
CHECKED BY: R. YOUNG
SHEET 6 OF 41

GPS CONTROL POINTS

HVCTRL #1
V 12

NORTH = 463284.43
EAST = 1557709.70
ELEV. = 883.34

DESCRIBED BY COAST AND GEODETIC SURVEY 1935 IN PITTSFIELD.
LOCATED AT PITTSFIELD. 36 FEET WEST OF CENTERLINE OF STATE ROAD NO. 100. 3.3 FEET SOUTH OF THE NORTHEAST CORNER OF PITTSFIELD CEMETERY FENCE. STANDARD TABLET SET IN TOP OF CONCRETE POST 3 INCHES HIGH.

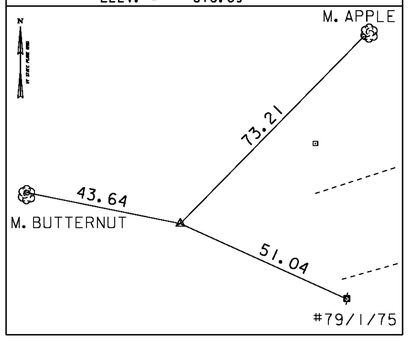
HVCTRL #50 = #8
PITTSFIELD TEMP 2

NORTH = 466039.61
EAST = 1562109.80
ELEV. = 840.51

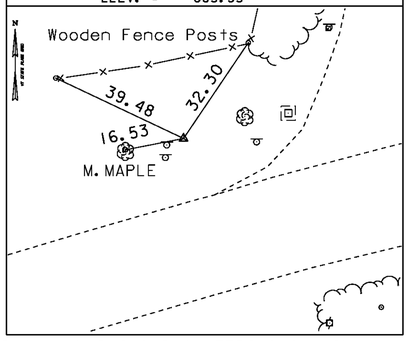
TO REACH THE MARK FROM THE POST OFFICE IN PITSFIELD, PROCEED NORTH ALONG VT 100 FOR 1.0 MI (1.6 KM) TO THE MARK ON THE RIGHT. TO REACH THE MARK FROM THE JUNCTION OF VT 107 AND VT 12 IN BETHEL, PROCEED SOUTH ALONG VT 107 THROUGH THE JUNCTION OF VT 100 AND VT 107 11.9 MI (19.2 KM) TO THE MARK ON THE LEFT. THE MARK IS 62.0 FT (18.9 M) NORTH OF A BROWN GARAGE, 32 FT (9.8 M) EAST AND .3 FT (9.1 CM) LOWER THAN THE CENTERLINE OF VT 100, 20 FT (6.1 M) SOUTH OF A COMBINATION POLE NUMBER 71/1/65. A WOODEN WITNESS ACCOMPANIES THE MARK THE MARK IS A CENTERPUNCHED REBAR 3 CM BELOW GROUND SURFACE THE TWO TEMP MARKS ARE NOT INDIVISABLE

TRAVERSE TIES

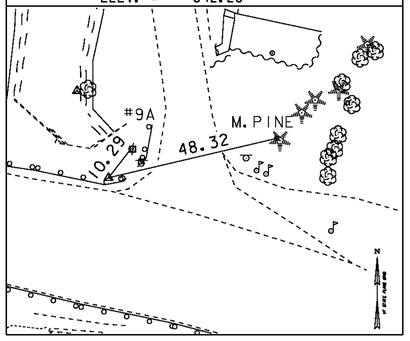
HVCTRL #5
NORTH = 466056.73
EAST = 1560662.20
ELEV. = 878.69



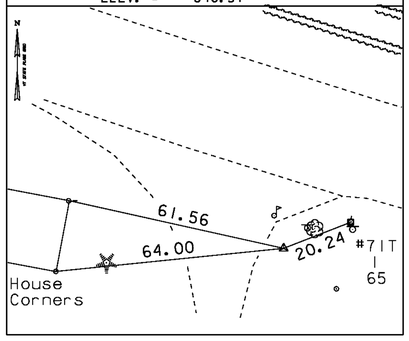
HVCTRL #6
NORTH = 466221.06
EAST = 1561133.75
ELEV. = 883.53



HVCTRL #7
NORTH = 466238.63
EAST = 1561665.99
ELEV. = 842.28



HVCTRL #8
NORTH = 466039.61
EAST = 1562109.80
ELEV. = 840.51



HVCTRL
NORTH =
EAST =
ELEV. =

* Main Traverse Completed 07-13-2006 by R.GILMAN.P.C & P.WINTERS & S.HISMAN

ALIGNMENT DATA

VERMONT 100

	STATION	NORTHING	EASTING
POB	253+83.00	466155.298	1561026.426
PI	255+01.94	466190.046	1561140.182
PC	255+87.19	466211.498	1561222.687
PI	258+63.46	466281.019	1561490.064

Radius:	935.00
Delta:	32°55'19.42" Right
Degree of Curvature(Arc):	6°07'40.41"
Length:	537.25
Tangent:	276.27
Chord:	529.89
Middle Ordinate:	38.32
External:	39.96

PT	261+24.44	466194.056	1561752.288
PC	264+91.59	466078.484	1562100.776
PI	268+09.22	465978.501	1562402.261

Radius:	1150.00
Delta:	30°52'49.56" Left
Degree of Curvature(Arc):	4°58'56.07"
Length:	619.81
Tangent:	317.63
Chord:	612.34
Middle Ordinate:	41.50
External:	43.06

PT	271+11.40	466047.428	1562712.323
POE	273+22.09	466093.146	1562917.985

TOWN HIGHWAY 41

	STATION	NORTHING	EASTING
POB	30+00.00	466210.961	1561695.312
POE	31+20.00	466329.651	1561677.629

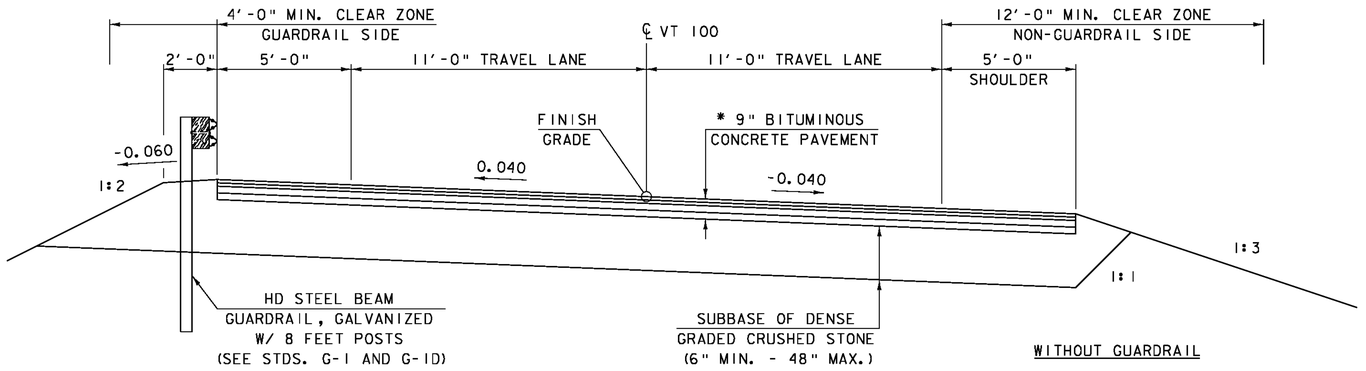
DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83(92)
ADJUSTMENT Compass

ALIGNMENT DATA CURRENT AS OF 12/15/2010

PROJECT NAME: PITTSFORD - STOCKBRIDGE
PROJECT NUMBER: STP 022-1(22) S

FILE NAME: 00b122\survey\x00b122ti.dgn
PROJECT LEADER: C. P. WILLIAMS
DESIGNED BY: G. ROY
TIE SHEET

PLOT DATE: 02-SEP-2011
DRAWN BY: R. Bullock
CHECKED BY: R. YOUNG
SHEET 7 OF 41



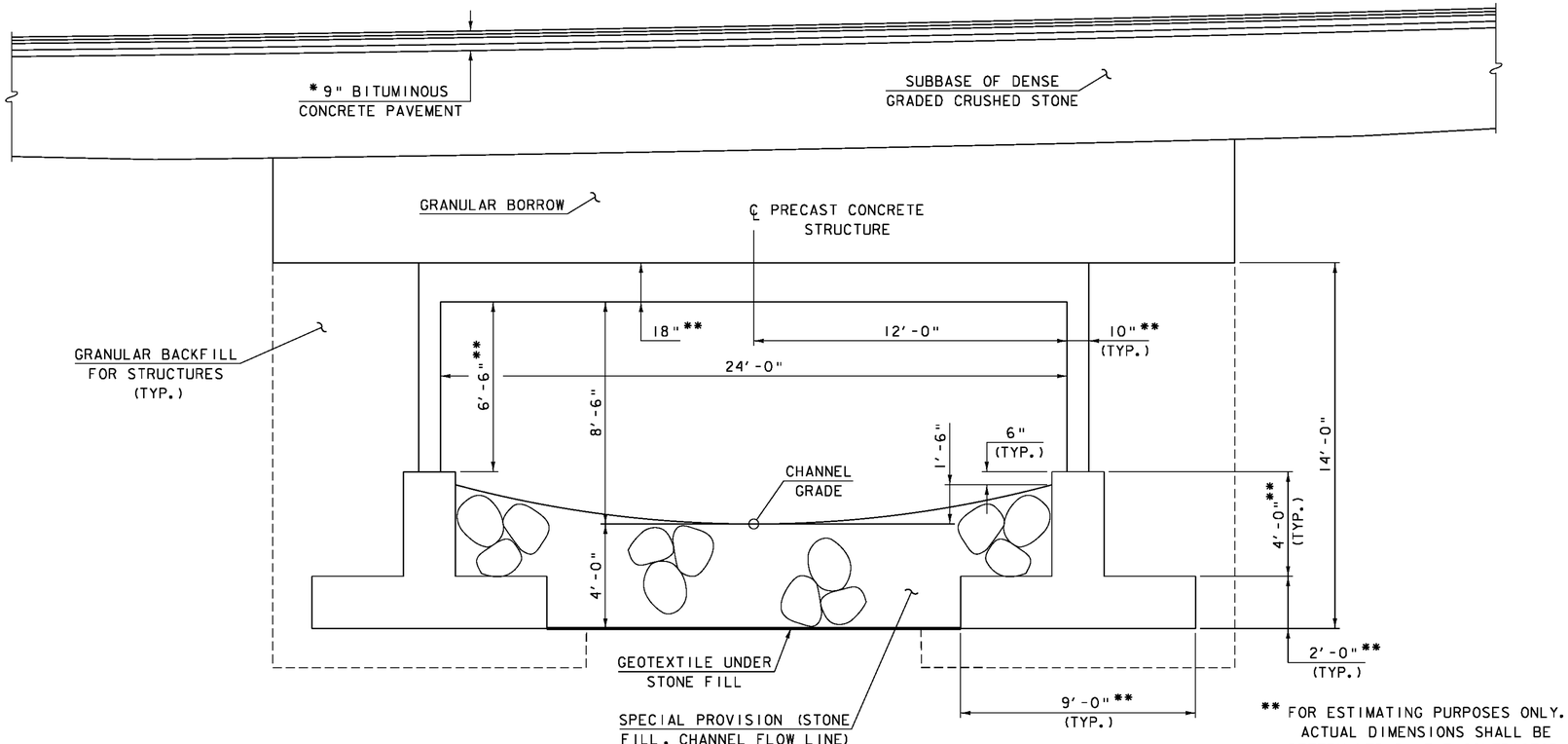
WITH GUARDRAIL

WITHOUT GUARDRAIL

VT 100 ROADWAY TYPICAL SECTION

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

*2 LIFTS OF 1½" BITUM. CONC. PAVEMENT TYPE 111S OVER 2 LIFTS OF 3" BITUM. CONC. PAVEMENT TYPE 1S OR 11S PAID UNDER SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, SMALL QUANTITY).



PRECAST CONCRETE STRUCTURE TYPICAL SECTION

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

** FOR ESTIMATING PURPOSES ONLY. ACTUAL DIMENSIONS SHALL BE DETERMINED BY THE CONTRACTOR.

MATERIAL TOLERANCES

(IF USED ON PROJECT)

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

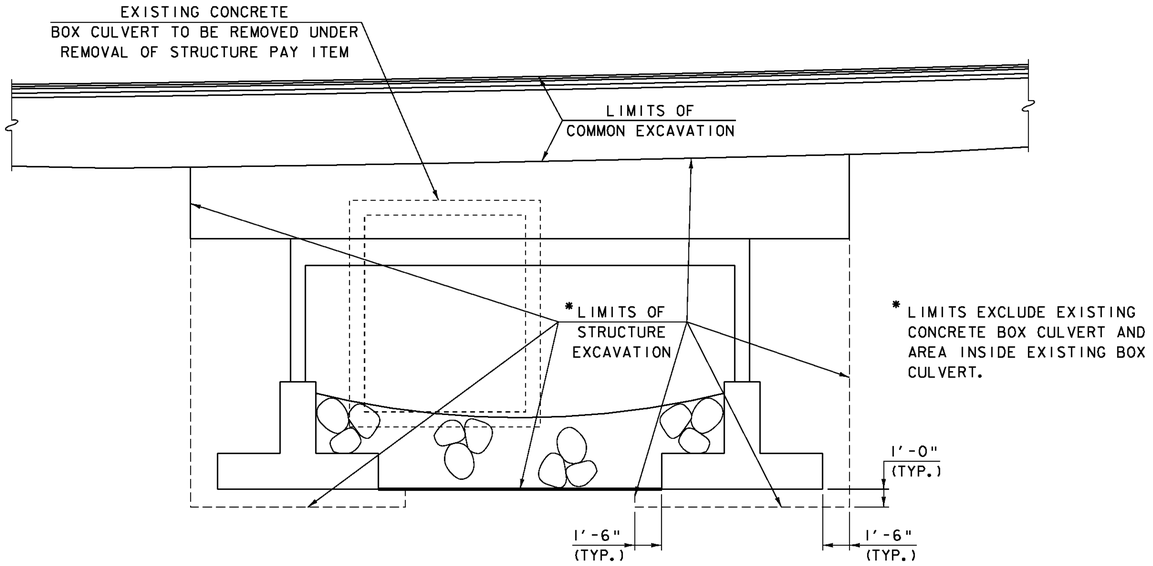
1 0 1 2 3 4 5

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

PROJECT NAME: PITTSFIELD-STOCKBRIDGE
PROJECT NUMBER: STP 022-1(22)S

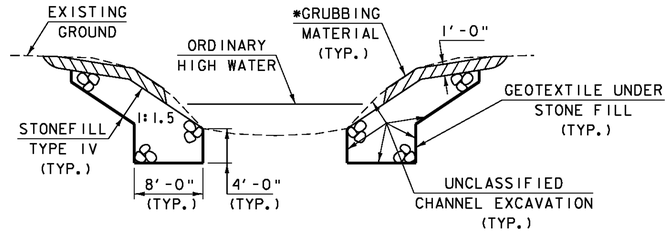
FILE NAME: s00b122typ.dgn
PROJECT LEADER: C. P. WILLIAMS
DESIGNED BY: G. ROY
PROJECT TYPICAL SECTIONS

PLOT DATE: 07-SEP-2011
DRAWN BY: G. ROY
CHECKED BY: R. YOUNG
SHEET 8 OF 41



PRECAST CONCRETE STRUCTURE EXCAVATION DETAIL

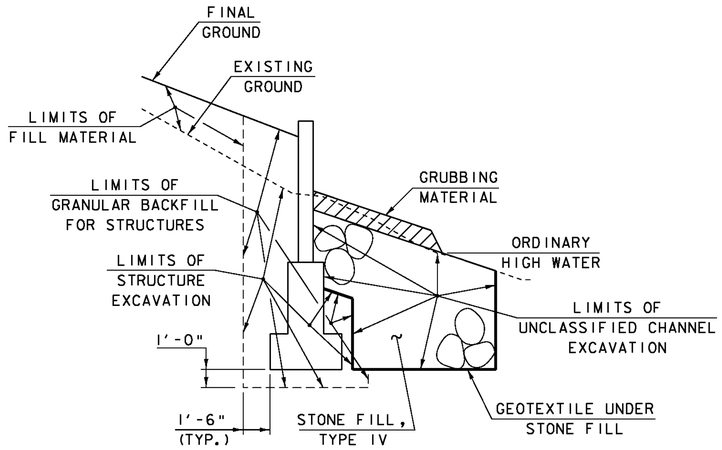
NOT TO SCALE



CHANNEL TYPICAL SECTION

NOT TO SCALE

* GRUBBING MATERIAL SHALL NOT BE PLACED ON THE STONE FILL IN THE AREA UNDER THE BRIDGE. WHENEVER CHANNEL SLOPE INTERSECTS ROADWAY SUBBASE, GRUBBING MATERIAL SHALL BEGIN AT THE BOTTOM OF SUBBASE.



WINGWALL EXCAVATION AND FILL DETAIL

NOT TO SCALE

PROJECT NAME:	PITTSFIELD-STOCKBRIDGE
PROJECT NUMBER:	STP 022-1(22)S
FILE NAME: s00b122typ.dgn	PLOT DATE: 02-SEP-2011
PROJECT LEADER: C. P. WILLIAMS	DRAWN BY: G. ROY
DESIGNED BY: G. ROY	CHECKED BY: R. YOUNG
EARTHWORK EXCAVATION DETAILS	SHEET 9 OF 41

NOTE: SEE REVISED SHEET
DATED 26-OCT-2011
FOR POST IRENE REVISIONS

PI
STA 258+63.46 BK =
STA 258+48.17 AHD

BEGIN BRIDGE
STA 260+08.63
FG = 843.24

CHANNEL LINE POB
STA 10+00.00

CURVE DATA VT 100
Δ = 32°55'20"
D = 6°07'41"
R = 935.00'
T = 276.27'
L = 537.25'
E = 39.96'
MAX. BANK = 0.040

EXISTING BRIDGE DATA
11'H X 9'W CONCRETE BOX
CULVERT BUILT IN 1937
OVERALL LENGTH = 50'
WATERWAY AREA = 99 SF

N
VT STATE PLANE GRID

BEGIN APPROACH
MATCH EXISTING
STA 258+00.00

TH 41 POE
STA 31+20.00

VT 100 POST STA 260+19.97 AHD =
CHANNEL LINE STA 11+50.00
Δ = 70° RT

BM #2
RR SPIKE IN ROOT
OF 2 CHERRY TREES
ELEV = 838.554

TEMPORARY
CONSTRUCTION
LIMITS

CV #69A
RETIRE

NEW POLE
#68A/40/3
STA 260+83
33' LT
SEC POLE

50' NEW
#4XXX

END APPROACH
MATCH EXISTING
STA 262+25.00

VT 100
TO PITTSFIELD N75°25'31"E
257+00
258+00
259+00
260+00
261+00
262+00
S71°39'09"E
N8°28'25"W

RETIRE
ANCHOR

CV #70
RETIRE

H-20'
2 GUYS

167' NEW 3Ø
I/O POLY

NEW POLE
#70/45/3
12A1A-IT
TO
12A4A-T1

CV #70SP
OK

80' SPAN GUY

RETIRE
MAIN LINE

CONSTRUCTION
LIMITS

NEW POLE
#69/45/3
A4A
STA 259+75
66' RT
±5' OFF

TEMPORARY
CONSTRUCTION
LIMITS

END APPROACH
BEGIN PROJECT
STA 259+25.00

CHANNEL LINE POE
STA 13+00.00

END BRIDGE
STA 260+35.05
FG = 842.44

PT
STA 261+24.44

END PROJECT
BEGIN APPROACH
STA 261+00.00

238' NEW 3Ø
I/O POLY

VT 100 STA 260+65.00 =
TH 41 STA 30+00.00
Δ = 113°10'42" LT
FROM TANGENT TO CURVE

CONSTRUCT 5' PAVED APRON
VT 100 STA 258+50.0 - 258+75.0 RT

HD STEEL BEAM GUARDRAIL, GALVANIZED W/ 8 FEET POSTS
VT 100 STA 259+03.4 LT - TH 41 STA 30+56.4 LT
VT 100 STA 259+55.1 - 261+33.0 RT

MANUFACTURED TERMINAL SECTION, TANGENT
VT 100 STA 258+54.2 - 259+03.4 LT
VT 100 STA 259+04.2 - 259+55.1 RT
VT 100 STA 261+33.0 - 261+83.0 RT

ANCHOR FOR STEEL BEAM RAIL
TH 41 STA 30+50.2 LT

REMOVAL AND DISPOSAL OF GUARDRAIL
VT 100 STA 258+58.6 - 260+37.8 LT
VT 100 STA 258+96.8 - 261+85.8 RT

SPECIAL PROVISION (STONE FILL, CHANNEL FLOW LINE)
CHANNEL STA 11+14 - 11+96

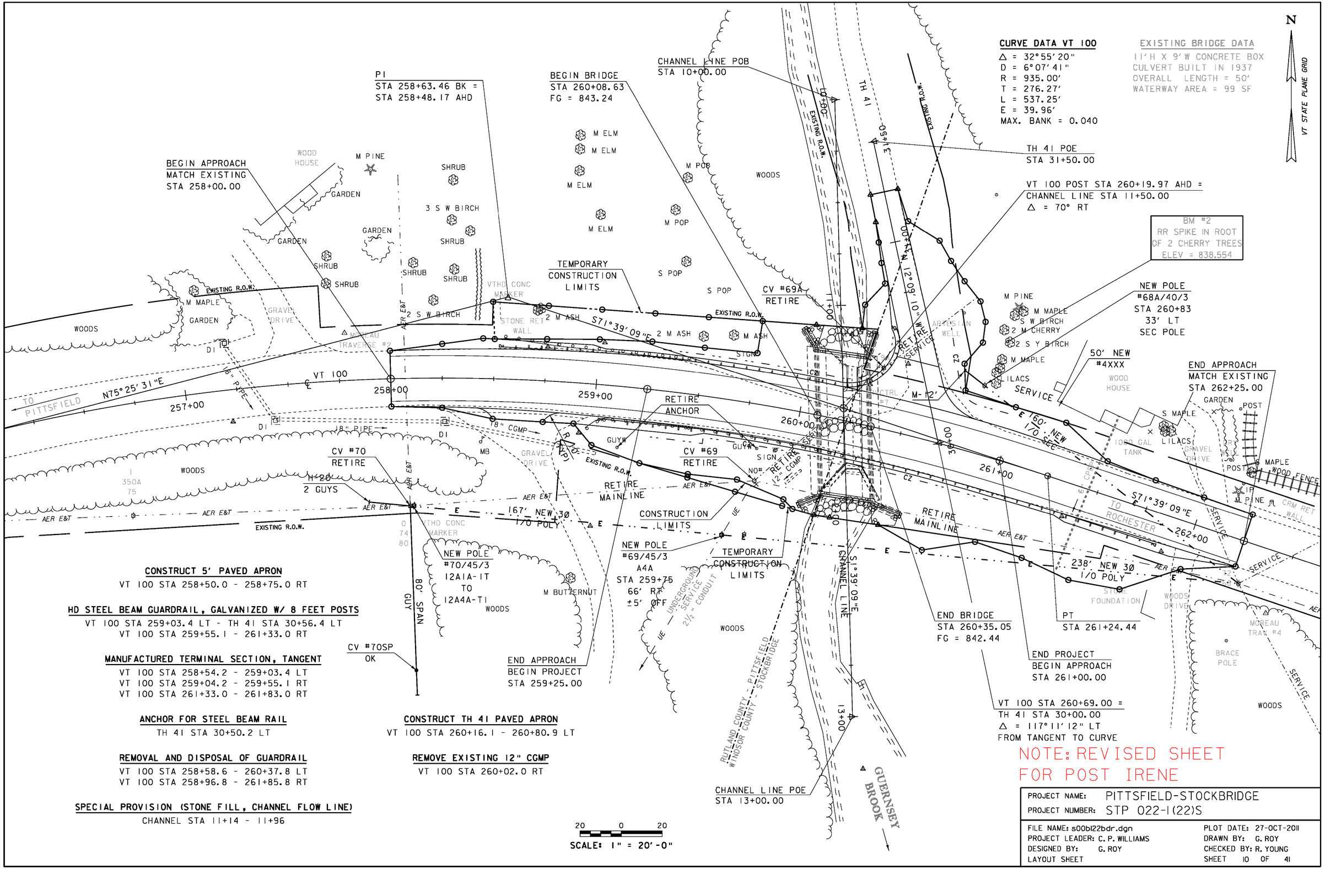
STONE FILL, TYPE I
VT 100 STA 261+25.0 - 261+95.0 RT

CONSTRUCT TH 41 PAVED APRON
VT 100 STA 260+16.1 - 260+80.9 LT

REMOVE EXISTING 12" CGMP
VT 100 STA 260+02.0 RT

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

PROJECT NAME:	PITTSFIELD-STOCKBRIDGE
PROJECT NUMBER:	STP 022-1(22)S
FILE NAME: s00b122bdr.dgn	PLOT DATE: 07-SEP-2011
PROJECT LEADER: C. P. WILLIAMS	DRAWN BY: G. ROY
DESIGNED BY: G. ROY	CHECKED BY: R. YOUNG
LAYOUT SHEET	SHEET 10 OF 41



CONSTRUCT 5' PAVED APRON
VT 100 STA 258+50.0 - 258+75.0 RT

HD STEEL BEAM GUARDRAIL, GALVANIZED W/ 8 FEET POSTS
VT 100 STA 259+03.4 LT - TH 41 STA 30+56.4 LT
VT 100 STA 259+55.1 - 261+33.0 RT

MANUFACTURED TERMINAL SECTION, TANGENT
VT 100 STA 258+54.2 - 259+03.4 LT
VT 100 STA 259+04.2 - 259+55.1 RT
VT 100 STA 261+33.0 - 261+83.0 RT

ANCHOR FOR STEEL BEAM RAIL
TH 41 STA 30+50.2 LT

REMOVAL AND DISPOSAL OF GUARDRAIL
VT 100 STA 258+58.6 - 260+37.8 LT
VT 100 STA 258+96.8 - 261+85.8 RT

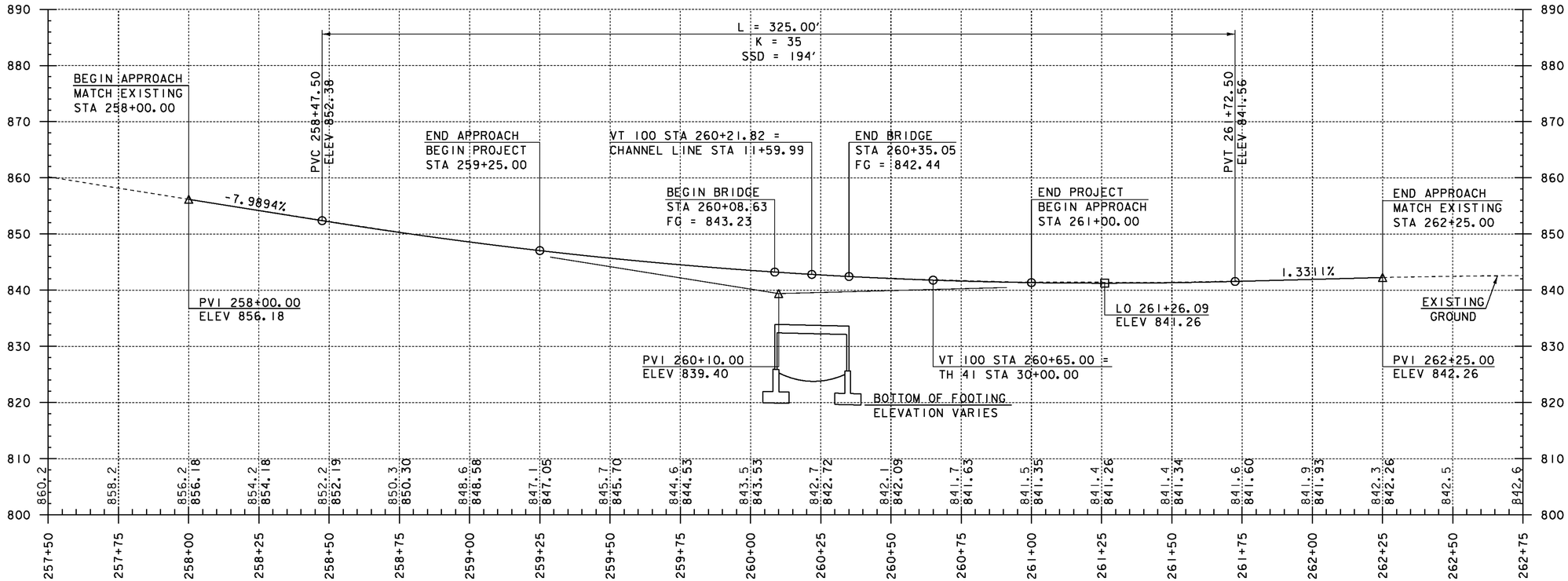
SPECIAL PROVISION (STONE FILL, CHANNEL FLOW LINE)
CHANNEL STA 11+14 - 11+96

CONSTRUCT TH 41 PAVED APRON
VT 100 STA 260+16.1 - 260+80.9 LT

REMOVE EXISTING 12" CGMP
VT 100 STA 260+02.0 RT

NOTE: REVISED SHEET FOR POST IRENE

PROJECT NAME:	PITTSFIELD-STOCKBRIDGE
PROJECT NUMBER:	STP 022-1(22)S
FILE NAME: s00b122bdr.dgn	PLOT DATE: 27-OCT-2011
PROJECT LEADER: C. P. WILLIAMS	DRAWN BY: G. ROY
DESIGNED BY: G. ROY	CHECKED BY: R. YOUNG
LAYOUT SHEET	SHEET 10 OF 41



PROFILE ALONG VT 100

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

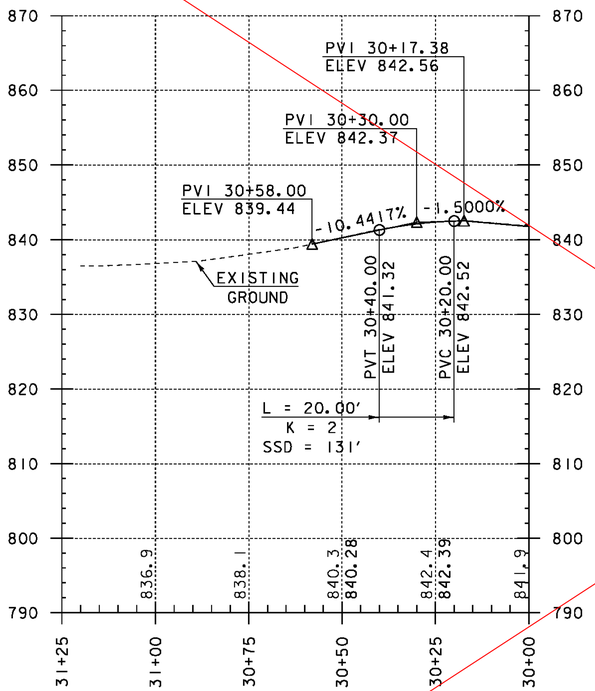
NOTE:

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

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

PROJECT NAME:	PITTSFIELD-STOCKBRIDGE
PROJECT NUMBER:	STP 022-1(22)S
FILE NAME: s00b122pro.dgn	PLOT DATE: 02-SEP-2011
PROJECT LEADER: C. P. WILLIAMS	DRAWN BY: G. ROY
DESIGNED BY: G. ROY	CHECKED BY: R. YOUNG
VT 100 PROFILE	SHEET 11 OF 41

NOTE: SEE REVISED SHEET
DATED 27-OCT-2011
FOR POST IRENE REVISIONS



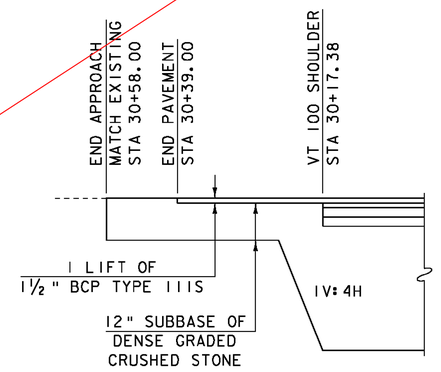
PROFILE ALONG TH 41

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

NOTE:

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

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

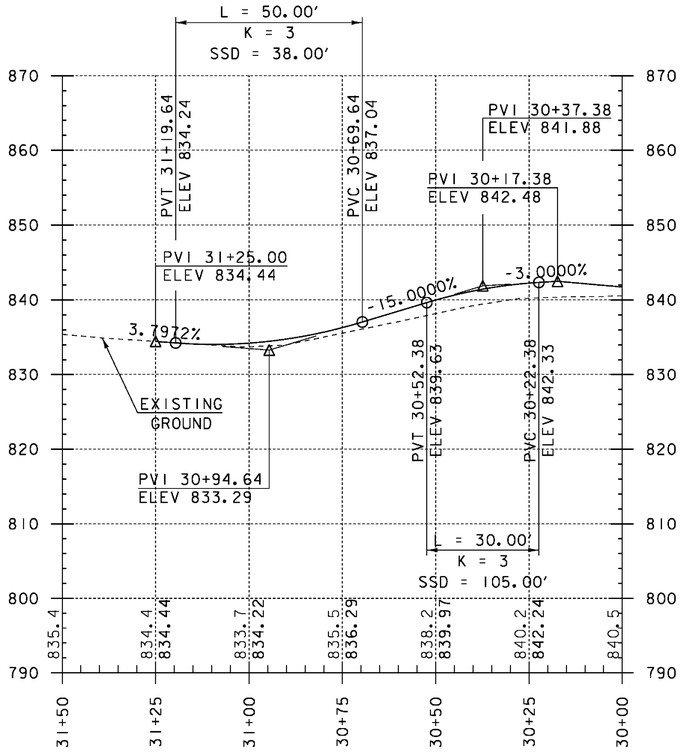


TH 41 MATERIAL TRANSITION DETAIL

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

PROJECT NAME:	PITTSFIELD-STOCKBRIDGE
PROJECT NUMBER:	STP 022-1(22)S

FILE NAME: s00b122pro.dgn	PLOT DATE: 07-SEP-2011
PROJECT LEADER: C. P. WILLIAMS	DRAWN BY: G. ROY
DESIGNED BY: G. ROY	CHECKED BY: R. YOUNG
TH 41 PROFILE AND MATERIAL TRANSITION	SHEET 12 OF 41



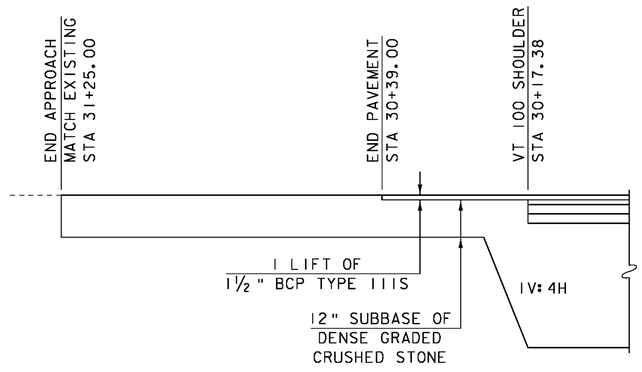
PROFILE ALONG TH 41

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

NOTE:

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

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



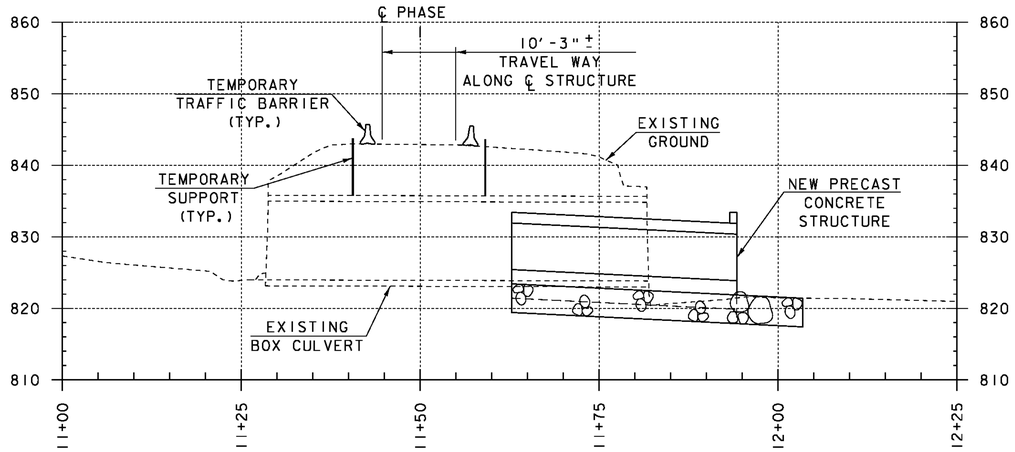
TH 41 MATERIAL TRANSITION DETAIL

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

NOTE: REVISED SHEET FOR POST IRENE

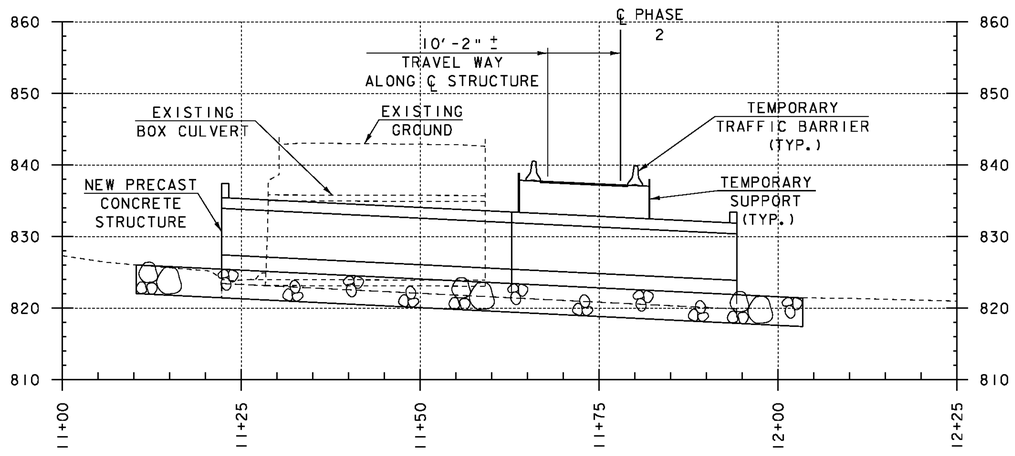
PROJECT NAME:	PITTSFIELD-STOCKBRIDGE
PROJECT NUMBER:	STP 022-1(22)S

FILE NAME: s00b122pro.dgn	PLOT DATE: 27-OCT-2011
PROJECT LEADER: C. P. WILLIAMS	DRAWN BY: G. ROY
DESIGNED BY: G. ROY	CHECKED BY: R. YOUNG
TH 41 PROFILE AND MATERIAL TRANSITION	SHEET 12 OF 41



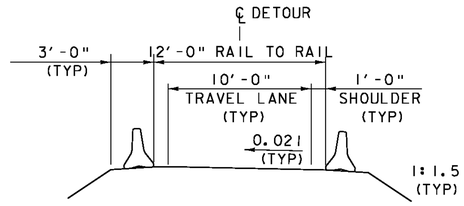
PHASE 1 DETOUR @ ℄ STRUCTURE

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



PHASE 2 DETOUR @ ℄ STRUCTURE

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



DETOUR TYPICAL SECTION

SCALE: 1" = 5'-0"

TRAFFIC PHASE DESCRIPTION

PHASE 1: (SEE SHEET 14)
TRAFFIC WILL BE SHIFTED TO THE NORTH ONTO A TEMPORARY ROADWAY WHILE THE SOUTHERN PORTION OF THE EXISTING BOX CULVERT IS REMOVED AND REPLACED WITH A NEW CONCRETE STRUCTURE.

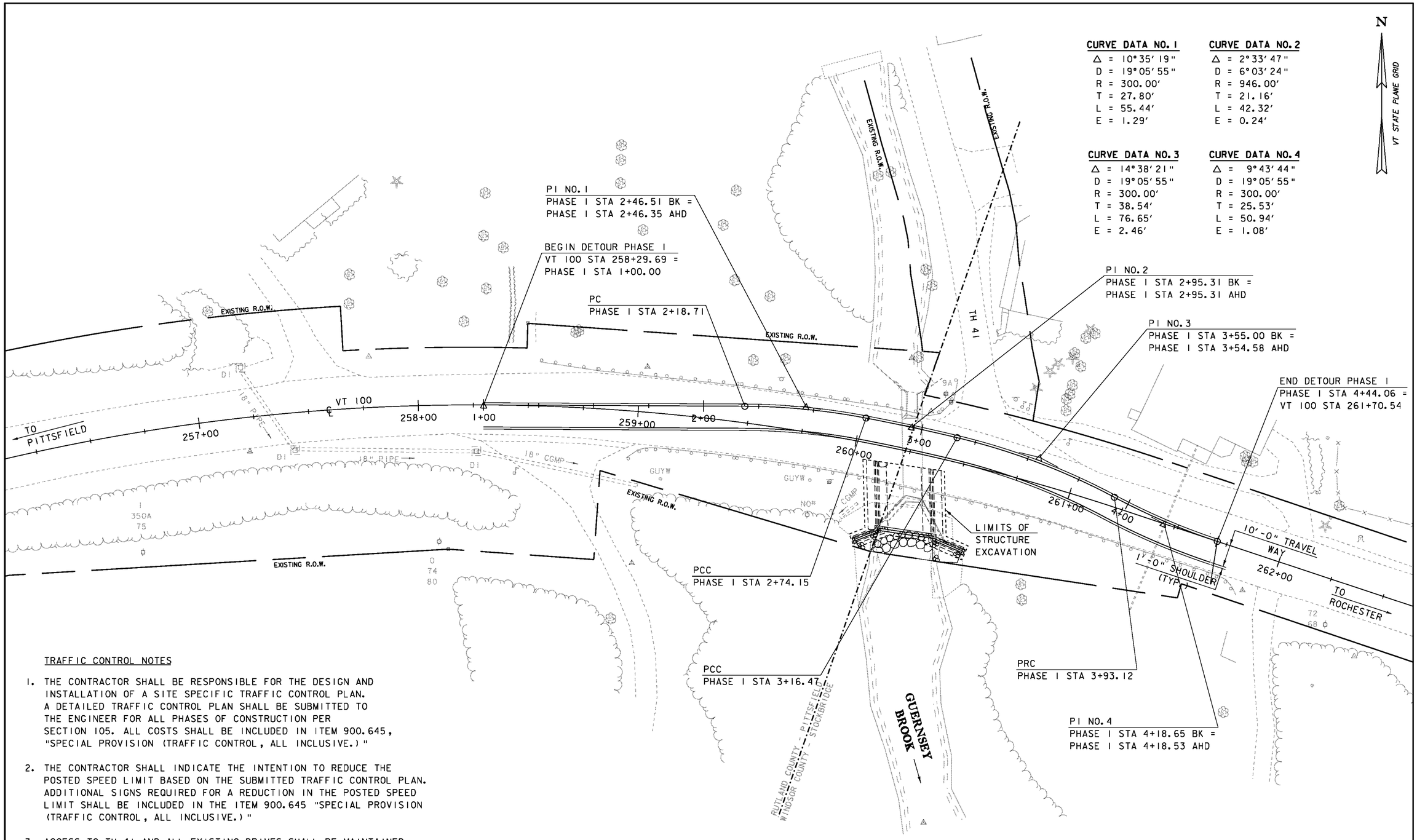
PHASE 2: (SEE SHEET 15)
TRAFFIC WILL BE SHIFTED ONTO A TEMPORARY ROADWAY OVER THE SOUTHERN END OF THE NEW PRECAST CONCRETE STRUCTURE. THE NORTHERN END OF THE CULVERT WILL BE REMOVED AND REPLACED WITH THE REMAINING CONCRETE STRUCTURE. TRAFFIC CAN THEN BE RETURNED TO THE ORIGINAL ALIGNMENT, TEMPORARY ROADWAYS CAN BE REMOVED, AND FINAL GRADES ESTABLISHED.

PHASE CONSTRUCTION NOTES

1. THE PHASING SHOWN IS OF A CONCEPTUAL NATURE ONLY. THE CONTRACTOR SHALL DETERMINE HOW TRAFFIC IS MAINTAINED AND SUBMIT DETAILS FOR APPROVAL PER SPECIAL PROVISION (TEMPORARY ROADWAY).
2. ANY TEMPORARY MEANS OF SUPPORTING FILL FOR THE TEMPORARY ROADWAY SHALL BE PAID FOR UNDER THE ITEM 900.645 "SPECIAL PROVISION (TEMPORARY ROADWAY) (PHASE 1) OR (PHASE 2) AS APPROPRIATE.
3. ANY TEMPORARY MEANS OF SUPPORTING EXCAVATION SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 204.25 "STRUCTURE EXCAVATION" AND SHALL MEET THE REQUIREMENTS OF SECTION 204.
4. ANY TEMPORARY MEANS OF SUPPORTING EXCAVATION OR FILL SHALL NOT DAMAGE STRUCTURES THAT ARE TO BE LEFT IN PLACE. IF THE STRUCTURES THAT ARE TO BE LEFT IN PLACE ARE DAMAGED, THEY SHALL BE REPLACED OR REPAIRED TO THE SATISFACTION OF THE RESIDENT ENGINEER AT THE CONTRACTOR'S EXPENSE.
5. ALL TEMPORARY MEANS OF SUPPORTING EXCAVATION OR FILL SHALL BE ADEQUATELY SEPARATED FROM THE TRAVELING PUBLIC PER THE AASHTO ROADSIDE DESIGN GUIDE.
6. ANY TEMPORARY MEANS OF SUPPORTING EXCAVATION OR FILL SHALL BE PLACED TO AVOID OBSCURING SIGHT DISTANCE OF TRAFFIC ON VT RTE 100 AND TRAFFIC ENTERING OR EXITING VT RTE 100.
7. THE CONTRACTOR SHALL COORDINATE PHASE CONSTRUCTION CLEARANCES WITH THE PRECAST CONCRETE FABRICATOR FOR EXACT DIMENSIONS. INTERMEDIATE SKEWED SECTIONS MAY BE REQUIRED.
8. ANY EXCAVATION OR FILL NECESSARY TO MAINTAIN THE STREAM FLOW THROUGH THE SITE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR 900.645 "SPECIAL PROVISION (TEMPORARY RELOCATION OF STREAM)".

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

PROJECT NAME:	PITTSFIELD-STOCKBRIDGE
PROJECT NUMBER:	STP 022-1(22)S
FILE NAME: s00b122bdr_phase.dgn	PLOT DATE: 07-SEP-2011
PROJECT LEADER: C. P. WILLIAMS	DRAWN BY: G. ROY
DESIGNED BY: G. ROY	CHECKED BY: R. YOUNG
PHASE TYPICAL SECTIONS	SHEET 13 OF 41



TRAFFIC CONTROL NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF A SITE SPECIFIC TRAFFIC CONTROL PLAN. A DETAILED TRAFFIC CONTROL PLAN SHALL BE SUBMITTED TO THE ENGINEER FOR ALL PHASES OF CONSTRUCTION PER SECTION 105. ALL COSTS SHALL BE INCLUDED IN ITEM 900.645, "SPECIAL PROVISION (TRAFFIC CONTROL, ALL INCLUSIVE.)"

2. THE CONTRACTOR SHALL INDICATE THE INTENTION TO REDUCE THE POSTED SPEED LIMIT BASED ON THE SUBMITTED TRAFFIC CONTROL PLAN. ADDITIONAL SIGNS REQUIRED FOR A REDUCTION IN THE POSTED SPEED LIMIT SHALL BE INCLUDED IN THE ITEM 900.645 "SPECIAL PROVISION (TRAFFIC CONTROL, ALL INCLUSIVE.)"

3. ACCESS TO TH 41 AND ALL EXISTING DRIVES SHALL BE MAINTAINED AT ALL TIMES DURING ALL PHASES OF CONSTRUCTION.

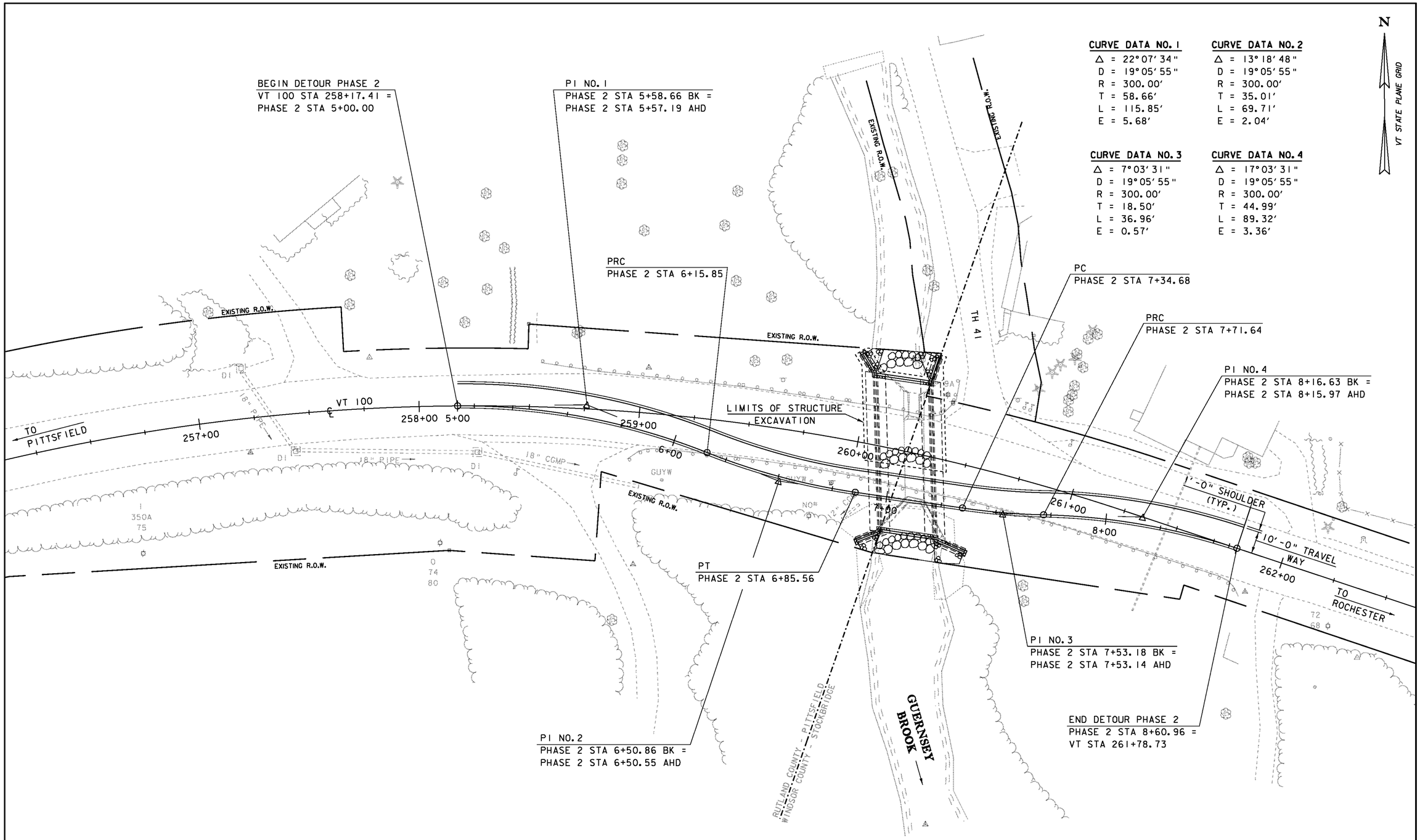
4. INSTALLATION OF DETOUR SIGNS SHALL BE COORDINATED WITH EXISTING TRAFFIC CONTROL SIGN ASSEMBLIES. ALL SIGNS REMOVED OR COVERED SHALL BE REPLACED OR UNCOVERED WHEN THE TRAFFIC CONTROL PLAN IS DISASSEMBLED.

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

PROJECT NAME: PITTSFIELD-STOCKBRIDGE
PROJECT NUMBER: STP 022-1(22)S

FILE NAME: s00b122bdr_phase.dgn
PROJECT LEADER: C. P. WILLIAMS
DESIGNED BY: G. ROY
PHASE 1 DETOUR LAYOUT

PLOT DATE: 07-SEP-2011
DRAWN BY: G. ROY
CHECKED BY: R. YOUNG
SHEET 14 OF 41



CURVE DATA NO. 1
Δ = 22°07'34"
D = 19°05'55"
R = 300.00'
T = 58.66'
L = 115.85'
E = 5.68'

CURVE DATA NO. 2
Δ = 13°18'48"
D = 19°05'55"
R = 300.00'
T = 35.01'
L = 69.71'
E = 2.04'

CURVE DATA NO. 3
Δ = 7°03'31"
D = 19°05'55"
R = 300.00'
T = 18.50'
L = 36.96'
E = 0.57'

CURVE DATA NO. 4
Δ = 17°03'31"
D = 19°05'55"
R = 300.00'
T = 44.99'
L = 89.32'
E = 3.36'

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

PROJECT NAME:	PITTSFIELD-STOCKBRIDGE
PROJECT NUMBER:	STP 022-1(22)S
FILE NAME: s00b122bdr_phase.dgn	PLOT DATE: 02-SEP-2011
PROJECT LEADER: C. P. WILLIAMS	DRAWN BY: G. ROY
DESIGNED BY: G. ROY	CHECKED BY: R. YOUNG
PHASE 2 DETOUR LAYOUT	SHEET 15 OF 41

SOIL CLASSIFICATION

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

ROCK QUALITY DESIGNATION

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

SHEAR STRENGTH

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

CORRELATION GUIDE OF "N" TO DENSITY/CONSISTENCY

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

COMMONLY USED SYMBOLS

▼	Water Elevation
⊙	Standard Penetration Boring
⊕	Auger Boring
⊙	Rod Sounding
S	Sample
N	Standard Penetration Test Blow Count Per Foot For: 2" O.D. Sampler 1 3/8" I.D. Sampler Hammer Weight Of 140 Lbs. Hammer Fall Of 30"
VS	Field Vane Shear Test
US	Undisturbed Soil Sample
B	Blast
DC	Diamond Core
MD	Mud Drill
WA	Wash Ahead
HSA	Hollow Stem Auger
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
RQD	Rock Quality Designation
CBR	California Bearing Ratio
<	Less Than
>	Greater Than
R	Refusal (N > 100)
VTSPG	NAD83 - See Note 7

COLOR

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

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.

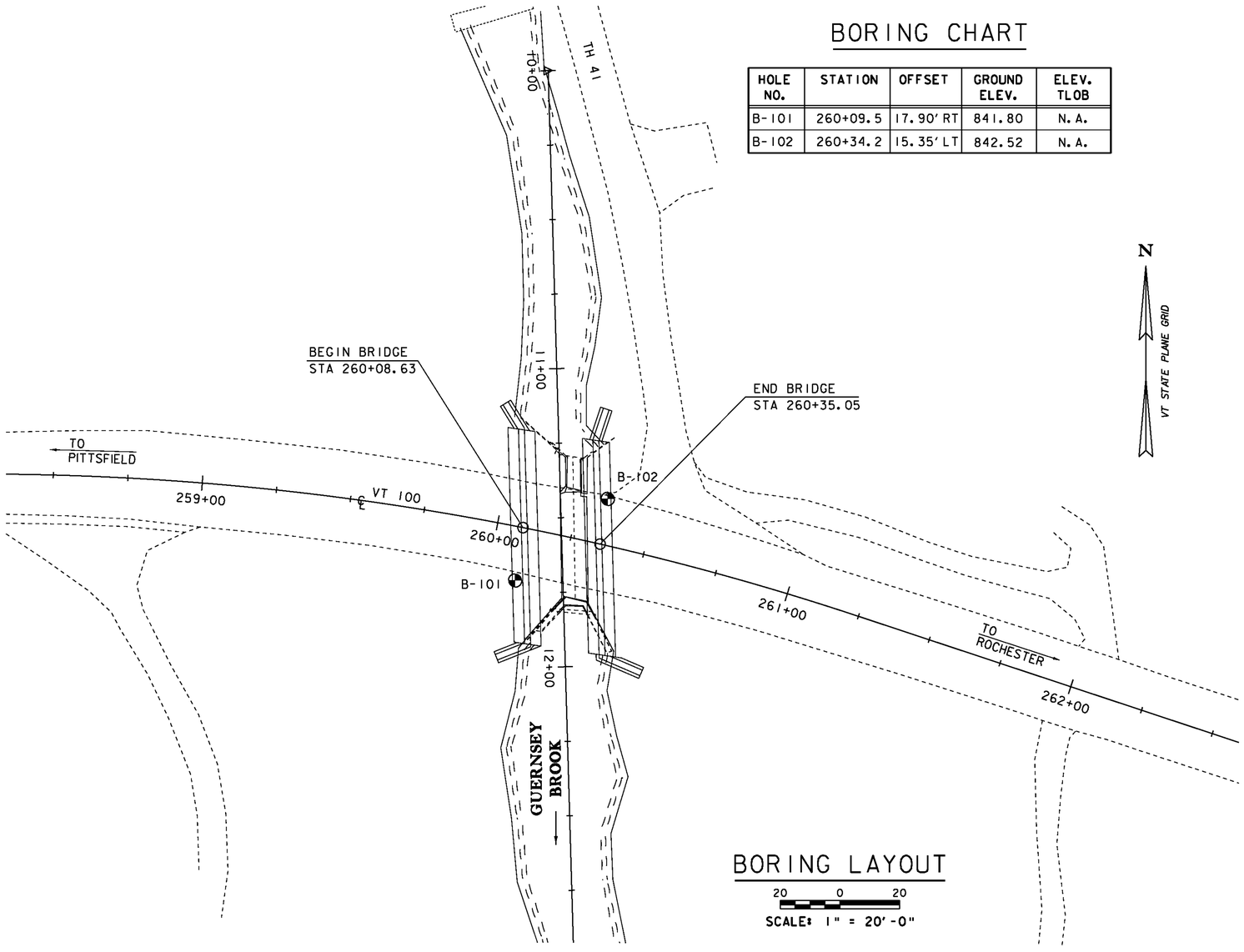
FLOWING SAND - Granular soil so saturated (loose) that it flows into drill casing during extraction of wash rod.

STRIKE - Angle from magnetic north to line of intersection of bed with a horizontal plane.

DIP - Inclination of bed with a horizontal plane.

BORING CHART

HOLE NO.	STATION	OFFSET	GROUND ELEV.	ELEV. TLOB
B-101	260+09.5	17.90' RT	841.80	N.A.
B-102	260+34.2	15.35' LT	842.52	N.A.



BORING LAYOUT

20 0 20

SCALE: 1" = 20'-0"

GENERAL NOTES

1. The subsurface explorations shown herein were made between 06/11/2007 and 06/26/2007 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.

PROJECT NAME: PITTSFIELD-STOCKBRIDGE

PROJECT NUMBER: STP 022-1(22)S

FILE NAME: s00b122bor.dgn
PROJECT LEADER: C. P. WILLIAMS
DESIGNED BY: R. YOUNG
BORING INFORMATION SHEET

PLOT DATE: 02-SEP-2011
DRAWN BY: G. ROY
CHECKED BY: R. YOUNG
SHEET 16 OF 41

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING NUMBER: B-101
SHEET 1 of 1
DATE STARTED: 6/21/07
DATE COMPLETED: 6/26/07

PROJECT NAME: PITTSFIELD - STOCKBRIDGE
SITE NAME: VT-100
STATION: 260+09.50
OFFSET: 17.90
VTSPG: N 466205.94 ft E 1561637.80 ft

PROJECT NUMBER: STP 022-1(22)S
SITE NUMBER: BR-127
GROUND ELEVATION: 841.8 ft
GROUNDWATER DEPTH: 25.0 ft 6/26/07
PROJECT PIN NUMBER: 00B122

BORING CREW
CREW CHIEF: GARROW
DRILLER: GARROW
LOGGER: SINGLETON

BORING RIG: SMALL SKID RIG
BORING TYPE: WASH BORE
SAMPLE TYPE: SPLIT BARREL
CHECKED BY: DLG

DEPTH (ft)	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. (%)	GRAVEL (%)	SAND (%)	FINES (%)
		A-2-4, SlSa, brn, Moist, Rec. = 0.7 ft	2	13.3	19.5	50.4	30.1
		BXDC, Boulder, Cleaned out casing, 4.1 ft - 5.0 ft					
		Visual Classification, Fill Material: Silty sand with asphalt pavement, brn-blk, Moist, Rec. = 0.5 ft	8	14.5			
10		A-4, Si, Lt/brn, Moist, Rec. = 0.8 ft	5	29.1	7.7	17.0	75.3
		BXDC, Cobbles, Cleaned out casing, 13.5 ft - 15.0 ft					
		A-1-a, SaGr, brn, Wet, Rec. = 0.5 ft	15	10.0	71.2	20.6	8.2
20		No recovery. Silty material on sampler., 20.0 ft - 22.0 ft	8				
		A-4, Si, brn, Wet, Rec. = 0.7 ft	12	32.0	17.3	9.6	73.1
		A-4, Si, brn, Wet, Rec. = 0.8 ft	5	39.9	0.1	6.7	93.2
		No recovery, Rock in end of sampler, 26.0 ft - 28.0 ft	8				
		A-4, SaSi, brn, Wet, Rec. = 1.3 ft	5	31.2	0.7	26.6	72.7
30		A-4, SaSi, brn, Wet, Rec. = 1.0 ft	7	30.8	6.3	36.8	56.9
		A-4, SaSi, brn, Wet, Rec. = 1.3 ft	6	27.7	3.0	27.2	69.8
		A-4, Si, brn, Wet, Rec. = 0.8 ft	5	36.0	0.0	4.9	95.1
		A-4, Si, brn, Wet, Rec. = 1.3 ft	5	38.4	2.3	2.9	94.8
		A-4, Si, brn, Wet, Rec. = 2.0 ft	7	36.3	4.9	1.5	93.6
40		A-4, SaSi, brn, Wet, Rec. = 1.4 ft	4	32.1	0.0	44.5	55.5
		A-2-4, SlSa, brn, Wet, Rec. = 1.0 ft	13	25.4	3.9	74.2	21.9
		A-2-4, Sa, brn, Wet, Rec. = 1.1 ft	13	20.4	11.7	72.2	16.1
		A-2-4, SlSa, brn, Wet, Rec. = 1.3 ft	7	26.4	3.5	67.0	29.5
		A-2-4, SaSlGr, brn, Wet, Rec. = 1.3 ft	36	15.8	50.3	22.3	27.4
50		A-1-a, SaGr, brn, Wet, Rec. = 0.8 ft	32	10.9	64.2	25.9	9.9
		Hole stopped @ 52.0 ft					

DRILLER'S NOTES:
1. Hole offset was moved 1.0 ft.

BOTTOM OF FTG
EL 819.0 ±

LOG OF BORING PITTSFIELD STOCKBRIDGE STP 022-1(22)S.GPJ VT ADT.GDT 7/10/07

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING NUMBER: B-102
SHEET 1 of 1
DATE STARTED: 6/11/07
DATE COMPLETED: 6/19/07

PROJECT NAME: PITTSFIELD - STOCKBRIDGE
SITE NAME: VT-100
STATION: 260+34.20
OFFSET: -15.35
VTSPG: N 466233.27 ft E 1561668.72 ft

PROJECT NUMBER: STP 022-1(22)S
SITE NUMBER: BR-127
GROUND ELEVATION: 842.52 ft
GROUNDWATER DEPTH: 20.0 ft 6/19/07
PROJECT PIN NUMBER: 00B122

BORING CREW
CREW CHIEF: GARROW
DRILLER: GARROW
LOGGER: CARRIERE

BORING RIG: LARGE SKID RIG w/AUTO HAMMER
BORING TYPE: WASH BORE
SAMPLE TYPE: SPLIT BARREL
CHECKED BY: DLG

DEPTH (ft)	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. (%)	GRAVEL (%)	SAND (%)	FINES (%)
		A-1-b, SlGrSa, brn, Moist, Rec. = 1.1 ft	7	7.5	39.6	39.7	20.7
		NXDC, Cobbles, Cleaned out casing, 4.6 ft - 5.0 ft					
		A-4, GrSi, brn, MTW, Rec. = 0.9 ft	21	18.8	40.4	17.6	42.0
10		NXDC, Cleaned out casing, 9.9 ft - 10.0 ft					
		No recovery, 10.0 ft - 12.0 ft	6				
		NXDC, Cobbles, Cored ahead & cleaned out casing, 12.7 ft - 15.0 ft					
		A-1-a, Gr, brn-gry, Moist, Rec. = 0.9 ft, Broken Rock was within sample	23	10.3	68.5	19.9	11.6
		NXDC, Cobbles, Cored ahead & cleaned out casing, 17.0 ft - 20.0 ft					
20		A-1-a, SaGr, gry, Moist, Rec. = 0.6 ft, Broken Rock was within sample	41	10.8	65.0	29.1	5.9
		NXDC, Cleaned out casing, 21.5 ft - 22.0 ft	6	34.3	2.6	20.1	77.3
		A-4, SaSi, brn, MTW, Rec. = 0.2 ft					
		A-4, Si, brn, MTW, Rec. = 1.4 ft	5	38.8	0.0	3.6	96.4
		A-4, Si, brn, MTW, Rec. = 1.9 ft	5	37.4	0.0	3.9	96.1
		A-4, Si, brn, MTW, Rec. = 1.7 ft	3	38.7	0.0	19.8	80.2
30		A-4, Si, brn, Wet, Rec. = 0.4 ft	4	42.6	2.5	4.9	92.6
		A-4, Si, brn, Wet, Rec. = 2.0 ft	4	33.9	0.0	4.1	95.9
		A-4, Si, brn, Wet, Rec. = 1.9 ft	2	41.9	1.6	2.3	96.1
		A-4, Si, brn, Wet, Rec. = 2.0 ft	1	39.3	6.1	2.0	91.9
		A-1-a, SaGr, brn, Wet, Rec. = 1.1 ft, NXDC, Cleaned out casing 39.6'-40.0'	23	11.9	49.7	37.1	13.2
40		No recovery, 40.0 ft - 42.0 ft	33				
		A-1-b, SaGr, brn, Moist, Rec. = 1.0 ft	21	12.5	46.4	36.6	17.0
		A-1-a, SaGr, brn, Moist, Rec. = 0.8 ft	17	10.8	62.6	26.2	11.2
		A-1-a, SaGr, brn, Moist, Rec. = 0.8 ft	19	11.0	58.9	26.8	14.3
		A-1-b, SaGr, brn-gry, Moist, Rec. = 1.7 ft	32	10.4	55.9	28.5	15.6
50		A-1-a, SaGr, brn, Moist, Rec. = 1.2 ft	59	10.8	65.0	24.9	10.1
		Hole stopped @ 52.0 ft					

DRILLER'S NOTES:
1. Hole offset was moved 3.0 ft.

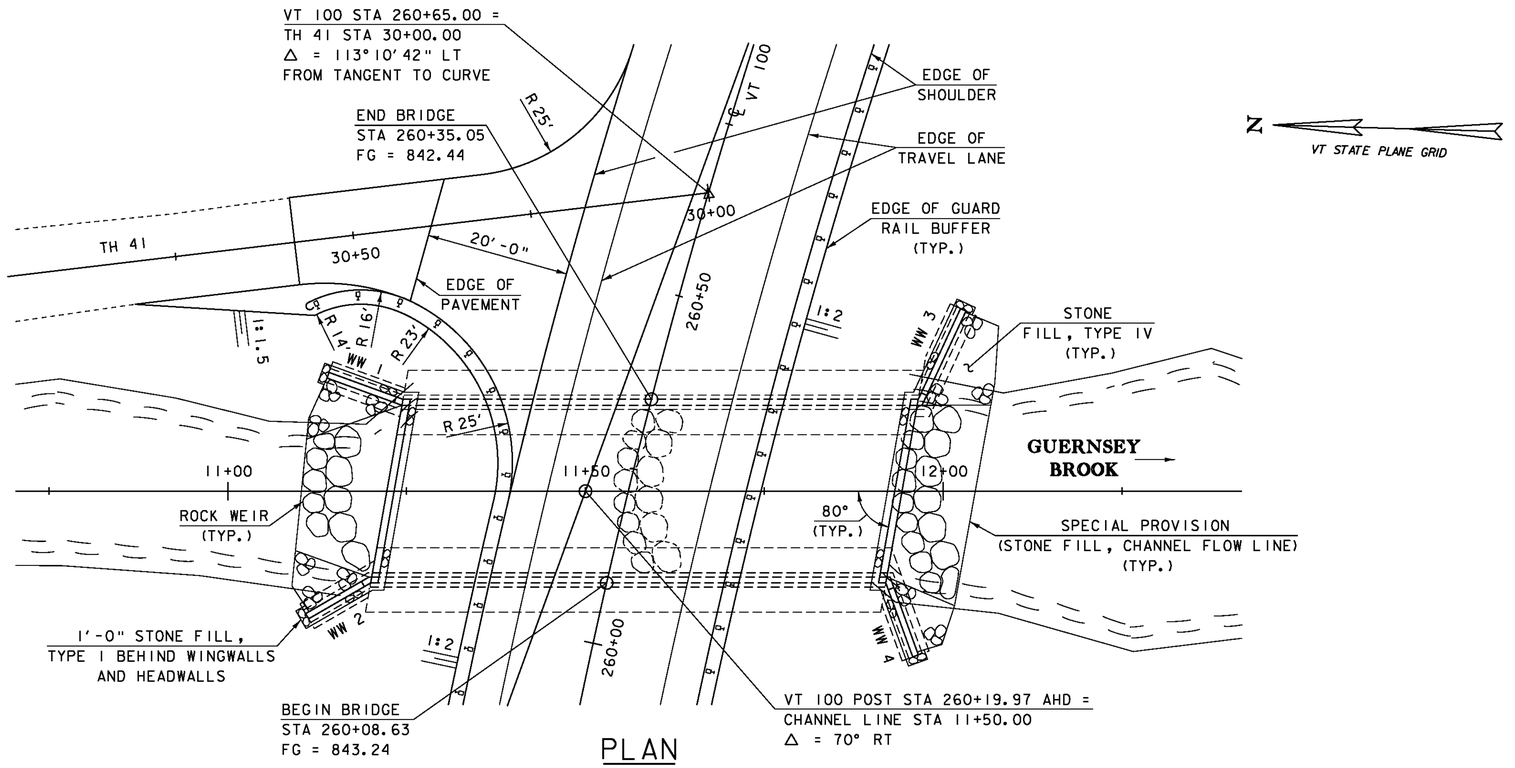
BOTTOM OF FTG
EL 820.4 ±

LOG OF BORING PITTSFIELD STOCKBRIDGE STP 022-1(22)S.GPJ VT ADT.GDT 7/10/07

PROJECT NAME: PITTSFIELD-STOCKBRIDGE
PROJECT NUMBER: STP 022-1(22)S

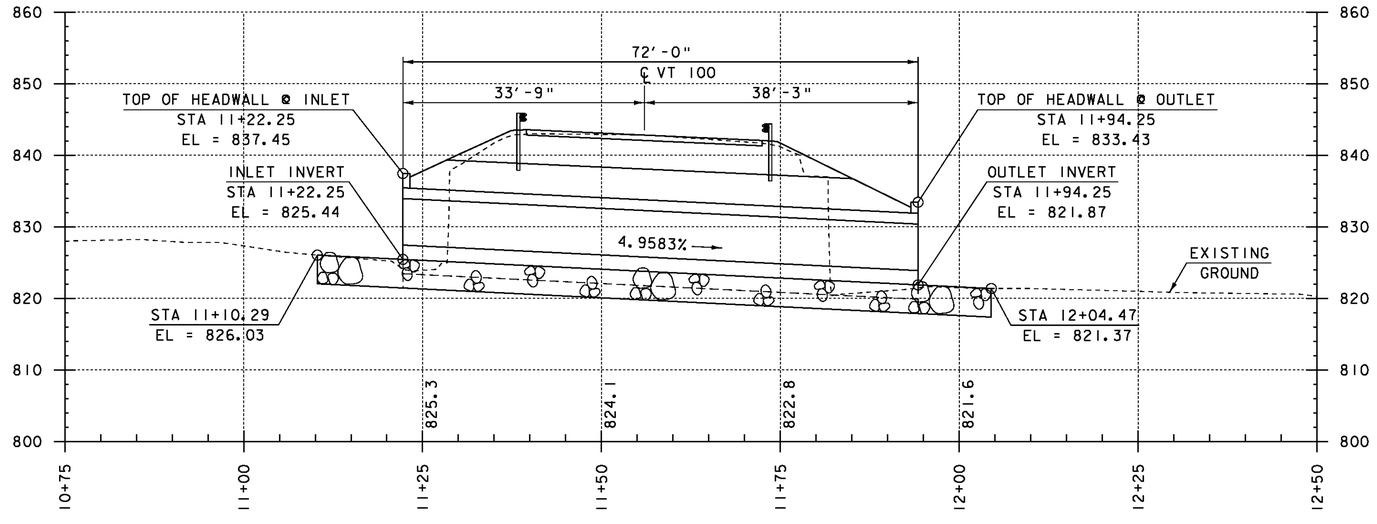
FILE NAME: s00b122bor.dgn
PROJECT LEADER: C. P. WILLIAMS
DESIGNED BY: R. YOUNG
BORING LOGS

PLOT DATE: 02-SEP-2011
DRAWN BY: G. ROY
CHECKED BY: R. YOUNG
SHEET 17 OF 41



PLAN

SCALE: 1" = 10'-0"



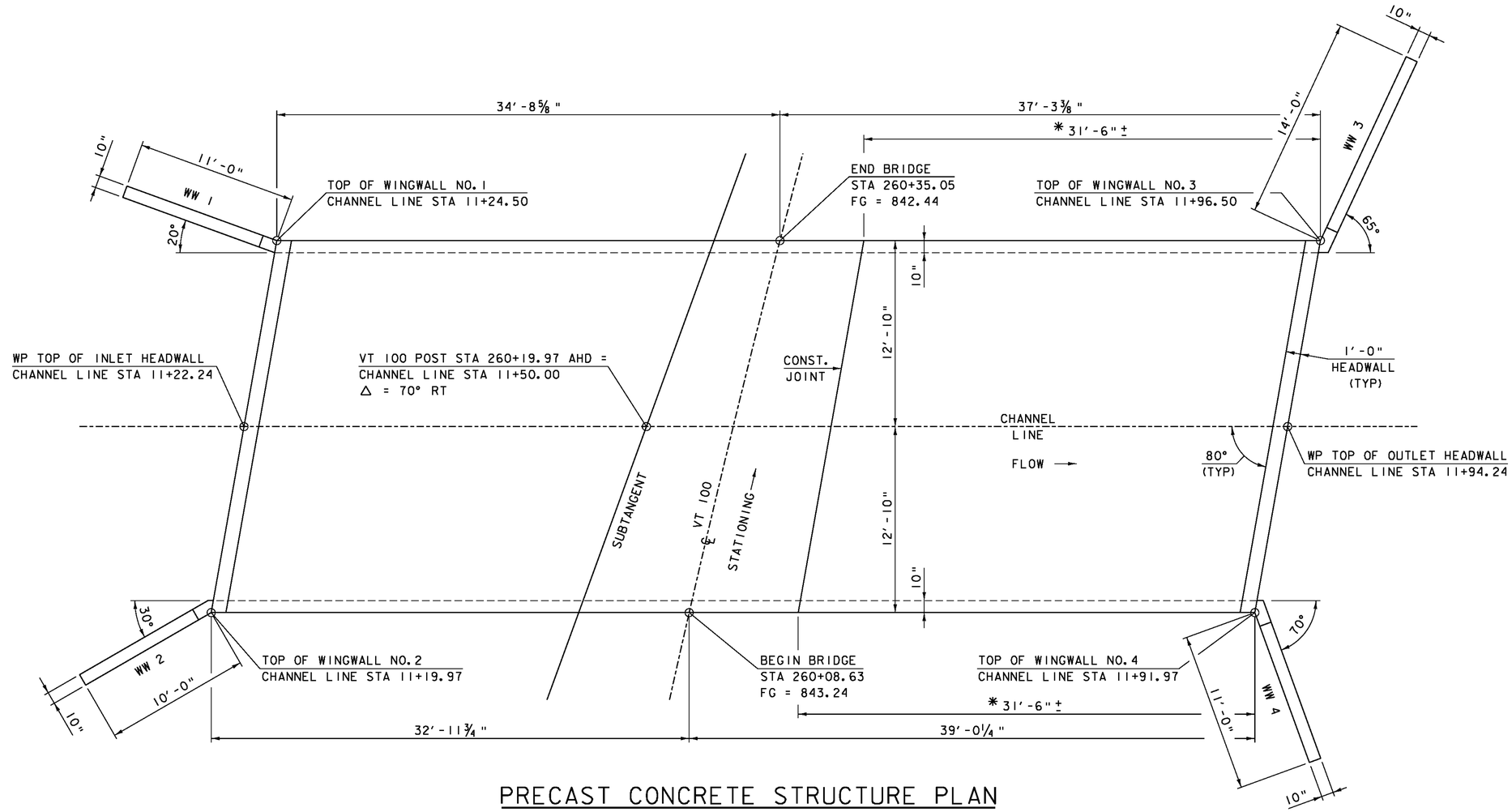
PROFILE ALONG CHANNEL LINE

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

10 0 10

SCALE: 1" = 10'-0"

PROJECT NAME:	PITTSFIELD-STOCKBRIDGE
PROJECT NUMBER:	STP 022-1(22)S
FILE NAME: s00b122pp.dgn	PLOT DATE: 02-SEP-2011
PROJECT LEADER: C. P. WILLIAMS	DRAWN BY: G. ROY
DESIGNED BY: G. ROY	CHECKED BY: R. YOUNG
PLAN AND PROFILE	SHEET 18 OF 41



PRECAST CONCRETE STRUCTURE PLAN

SCALE: ¼" = 1′-0"

WP TOP OF HEADWALL	NORTHING	EASTING
CHANNEL LINE STA 11+22.24	466254.691	1561652.330
CHANNEL LINE STA 11+94.24	466182.721	1561654.407

* IT IS ANTICIPATED THAT INTERMEDIATE SKEWED SECTIONS WILL BE REQUIRED FOR PHASED CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE WITH THE FABRICATOR ON THE EXACT LOCATION.

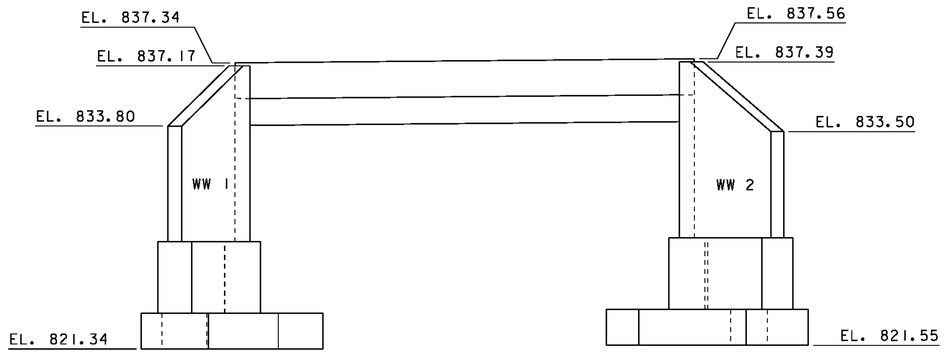
0 1 2 3 4 5 6

SCALE: ¼" = 1′-0"

PROJECT NAME: PITTSFIELD-STOCKBRIDGE
PROJECT NUMBER: STP 022-1(22)S

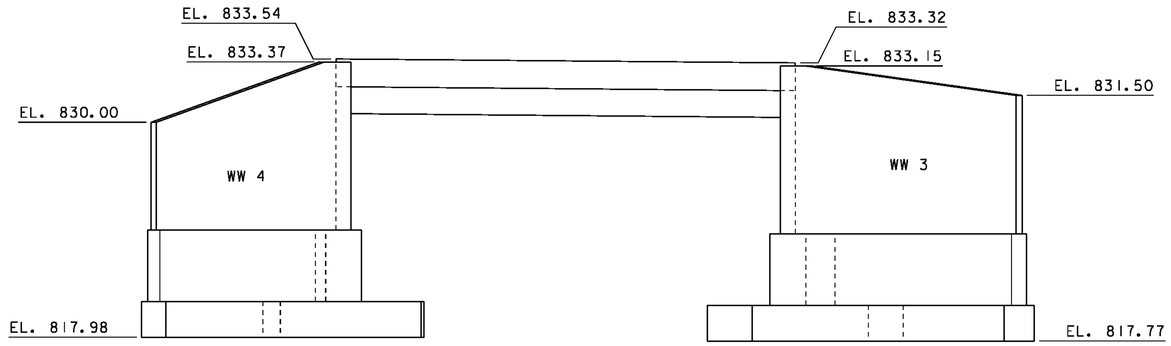
FILE NAME: s00b122abut.dgn
PROJECT LEADER: C. P. WILLIAMS
DESIGNED BY: G. ROY
PRECAST CONCRETE STRUCTURE PLAN

PLOT DATE: 02-SEP-2011
DRAWN BY: G. ROY
CHECKED BY: R. YOUNG
SHEET 19 OF 41



INLET ELEVATION

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



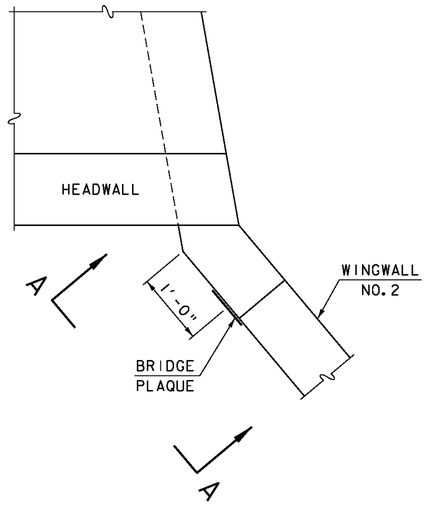
OUTLET ELEVATION

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

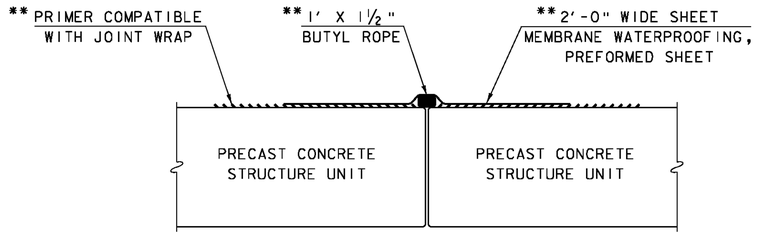
1 0 1 2 3 4 5 6

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

PROJECT NAME:	PITTSFIELD-STOCKBRIDGE
PROJECT NUMBER:	STP 022-1(22)S
FILE NAME: s00bl22abut.dgn	PLOT DATE: 07-SEP-2011
PROJECT LEADER: C. P. WILLIAMS	DRAWN BY: G. ROY
DESIGNED BY: G. ROY	CHECKED BY: R. YOUNG
WINGWALL ELEVATIONS	SHEET 20 OF 41



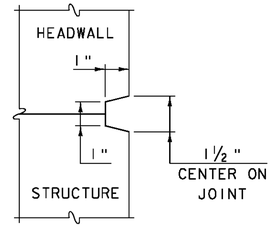
PLAN



BUTT JOINT SEALING DETAIL

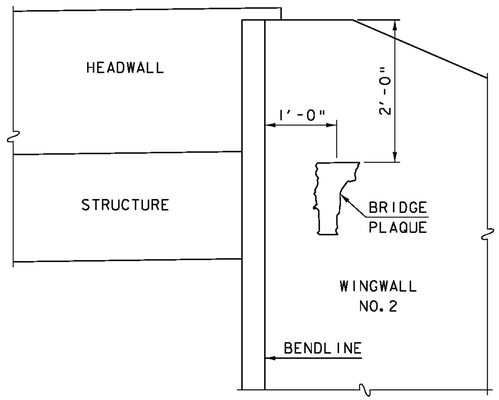
NOT TO SCALE

** MEMBRANE WATERPROOFING SHALL BE APPLIED AT EACH ARCH JOINT (TOP AND SIDES). MEMBRANE SHALL BE CENTERED ON THE JOINT AND COVER THE FULL WIDTH OF THE TOP AND FULL HEIGHT OF THE SIDES. THE SIDES SHALL BE COVERED FIRST AND THE TOP WILL FOLLOW. ANY OVERLAPPING OF MEMBRANE SHALL BE DONE IN A SHINGLE TYPE STYLE TO SHED WATER AND SHALL OVERLAP A MINIMUM OF ONE FOOT. PAYMENT FOR MEMBRANE WATERPROOFING SHALL BE INCIDENTAL TO ITEM 540.10 "PRECAST CONCRETE STRUCTURE".



SCORE MARK DETAIL

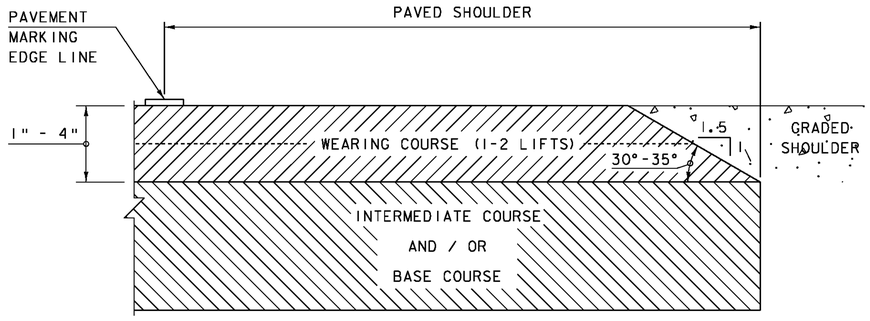
NOT TO SCALE



VIEW "A-A"

LOCATE BRIDGE PLAQUE

THE BRIDGE PLAQUE WILL BE SUPPLIED BY THE AGENCY OF TRANSPORTATION AND SHALL BE INSTALLED BY THE CONTRACTOR ON WINGWALL NO.2 AS SHOWN OR AS DIRECTED BY THE ENGINEER.

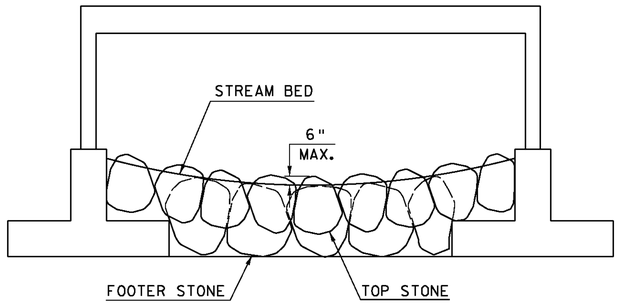


SAFETY EDGE DETAIL

NOT TO SCALE

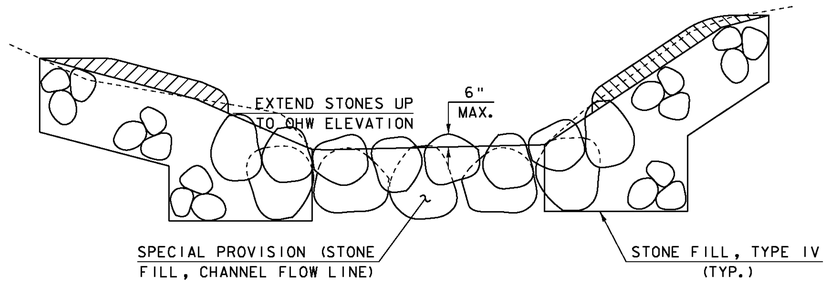
NOTE: LEVELING COURSE MAY INCLUDE THE "SAFETY EDGE" AT THE CONTRACTOR'S CHOICE.

PROJECT NAME:	PITTSFIELD-STOCKBRIDGE
PROJECT NUMBER:	STP 022-1(22)S
FILE NAME: s00b122abut.dgn	PLOT DATE: 07-SEP-2011
PROJECT LEADER: C. P. WILLIAMS	DRAWN BY: G. ROY
DESIGNED BY: G. ROY	CHECKED BY: R. YOUNG
MISCELLANEOUS DETAILS	SHEET 21 OF 41



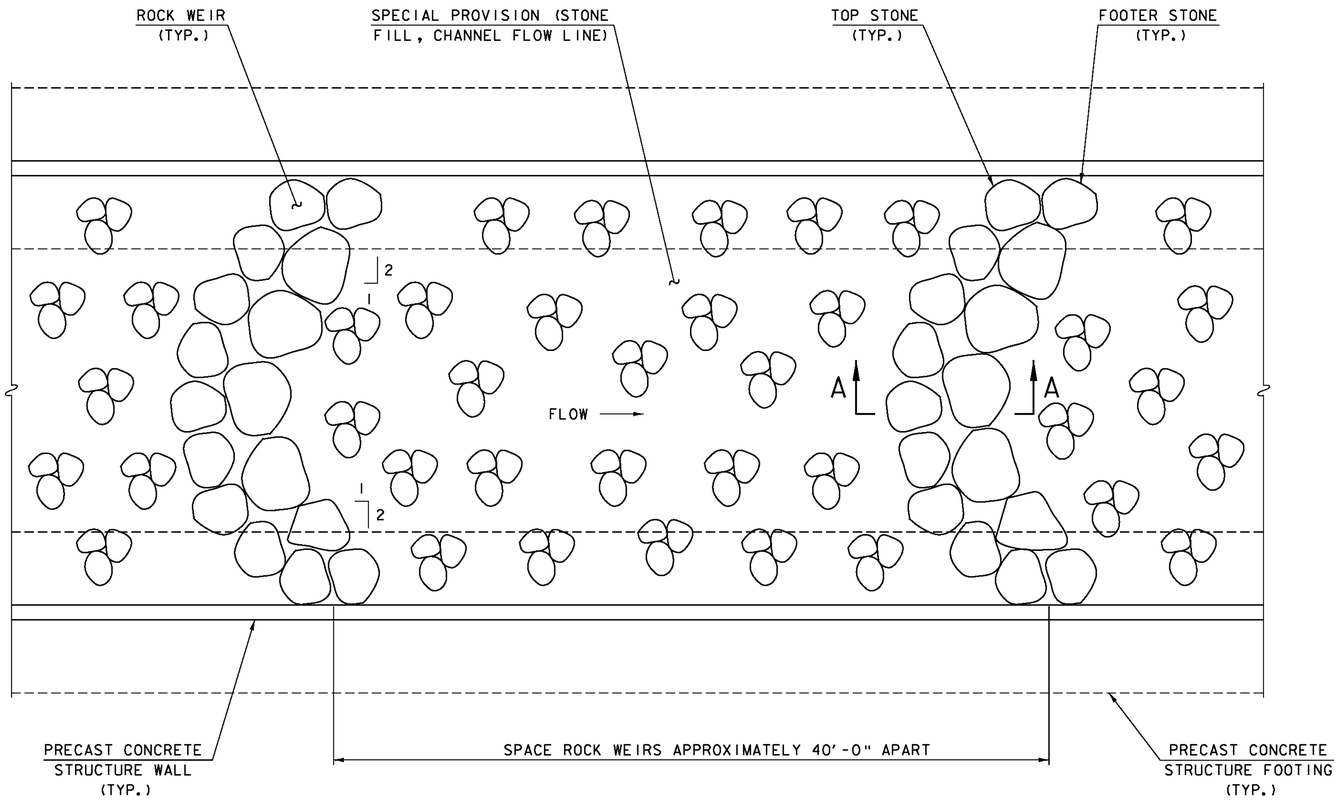
CHANNEL SECTION AT ROCK WEIR IN CULVERT

NOT TO SCALE



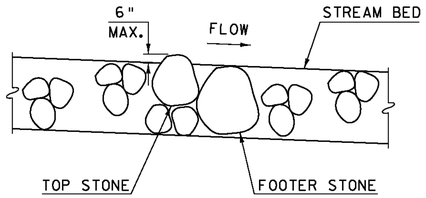
CHANNEL SECTION AT ROCK WEIR IN CHANNEL

NOT TO SCALE



ROCK WEIR LAYOUT

NOT TO SCALE



SECTION A-A

NOT TO SCALE

NOTES

1. ROCK WEIRS SHALL BE USED FOR GRADE CONTROL. THE CONTRACTOR SHALL USE THE LARGER STONES FROM THE CHANNEL FLOW LINE MATERIAL TO FORM THE ROCK WEIRS DETAILED ON THIS SHEET. WORK AND MATERIALS NEEDED TO CONSTRUCT THE ROCK WEIRS SHALL BE PAID FOR UNDER ITEM 900.608 "SPECIAL PROVISION (STONE FILL, CHANNEL FLOW LINE)".

2. THERE SHALL BE THREE ROCK WEIRS ALONG THE LENGTH OF THE CHANNEL, STARTING 5'-0" UPSTREAM FROM THE INLET OF THE STRUCTURE.

PROJECT NAME:	PITTSFIELD-STOCKBRIDGE
PROJECT NUMBER:	STP 022-1(22)S
FILE NAME: s00b122aop.dgn	PLOT DATE: 02-SEP-2011
PROJECT LEADER: C. P. WILLIAMS	DRAWN BY: G. ROY
DESIGNED BY: G. ROY	CHECKED BY: R. YOUNG
AQUATIC ORGANISM PASSAGE DETAILS	SHEET 22 OF 41

4 INCH WHITE LINE

STA 258+00.0 - 260+08.6 LT
STA 260+87.7 - 262+25.0 LT
STA 258+00.0 - 262+25.0 RT

4 INCH YELLOW LINE

STA 258+00.0 - 260+28.1 CL (DOUBLE)
STA 260+68.1 - 262+25.0 CL (DOUBLE)

TRAFFIC SIGNS, TYPE A

STA 260+30.7 LT (1)
STA 260+35.1 LT (1)

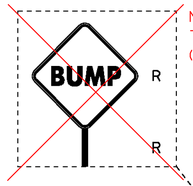
REMOVING SIGNS

STA 259+62.3 LT (1)
STA 259+91.6 RT (4)
STA 260+38.2 LT (3)

ERECTING SALVAGED SIGNS

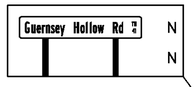
STA 259+91.6 RT (4)
STA 260+35.1 LT (1)

STA 259+62.3 LT

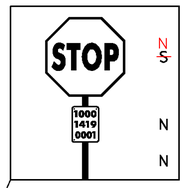


NOT THERE (IRENE)

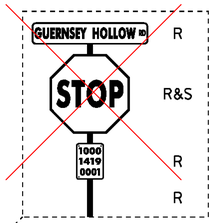
STA 260+30.7 LT



STA 260+35.1 LT

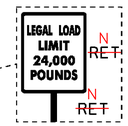


STA 260+38.2 LT



NOT THERE (IRENE)

STA 260+65.30 LT



WASHED AWAY BY IRENE

LEGEND

EXISTING SIGNS

NEW SIGNS

R	REMOVE
N	NEW
R&S	REMOVE & SALVAGE
S	SALVAGE

STA 259+91.6 RT

STA 259+91.6 RT

20 0 20

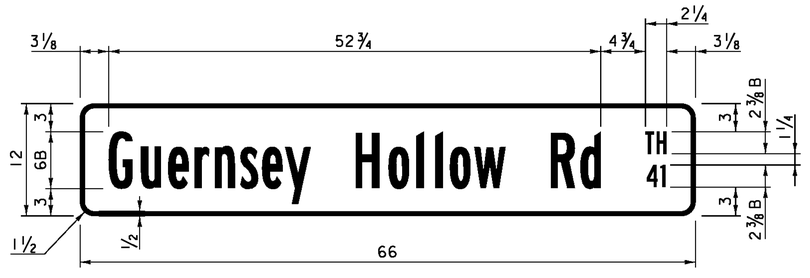
SCALE: 1" = 20'-0"

PROJECT NAME:	PITTSFIELD-STOCKBRIDGE
PROJECT NUMBER:	STP 022-1(22)S
FILE NAME: s00b122bdr.dgn	PLOT DATE: 02-SEP-2011
PROJECT LEADER: C. P. WILLIAMS	DRAWN BY: G. ROY
DESIGNED BY: G. ROY	CHECKED BY: R. YOUNG
TRAFFIC SIGNS AND PAVEMENT MARKINGS	SHEET 23 OF 41

STATE OF VERMONT
AGENCY OF TRANSPORTATION

TRAFFIC SIGN SUMMARY SHEET

MILEMARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS			NEW & SALVAGED SIGNS				EXIST POST		NEW SIGN POSTS																		SIGN DETAIL		
		EA	WIDTH (in)	HEIGHT (in)	"A"	"B"	SALV SIGN	SALV TIS	RETAIN	SALVAGE	NO. OF POSTS	FLANGED CHANNEL lb/ft			SQUARE STEEL (in) lb/ft			ANCHOR	SLEEVE	TUBULAR ALUMINUM Ø (in) lb/ft			TUBULAR STEEL Ø (in) FOUND-ATION	lb/ft				W-SHAPE STEEL FTG. SIZE		WEIGHT	POST SIZE	SIGN FRAME REQUIRED	REMARKS	DETAIL IN SHS	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER
															1.75	2.0	2.5			3.0	4.0	4.0 MOD						24"	30"							
												1.12	2.0	3.0	1.88	2.42	3.35			1.3	1.7	1.7		7.6	9.0	10.8	14.6								
		OPTION ITEMS																																	
259+91.6 RT	STOCKBRIDGE PITTSFIELD						X				~~1~~ 2					X 28		X																
	WINDSOR CO RUTLAND CO						X																												
	1000 1419 0000						X																												
	1000 1115 0487						X																												
260+30.7 LT	Guernsey Hollow Rd TH 41	2	66	12	11.00						2					X 24		X														D3-1 GUERNSEY HOLLOW RD TH 41 INSTALL BACK TO BACK		SEE BELOW	
260+35.1 LT	STOP	1	30	30	6.25		~~X~~				1					X 13		X														ORIGINAL SIGN WASHED AWAY BY IRENE			
	1000 1419 0001	1	6	10	0.42																											VD-700 1000 / 1419 / 0001			E-138
260+65.30 LT		1	24	30	5.0						1					X 13		X														SIGN THAT WAS TO BE RETAINED WAS WASHED AWAY BY IRENE			



COLORS: LEGEND & BORDER - WHITE (RETROREFLECTIVE)
BACKGROUND - GREEN (RETROREFLECTIVE)

FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND VTRANS "SIGN POST DESIGN GUIDELINE."
SHS = STANDARD HIGHWAY SIGNS

							FT	FT	FT	FT	FT	FT		EA	LB	LB	LB		LB	LB	LB	LB			
TOTALS	SF ~~11.42~~ 22.67	SF	EA.	SF			FT			FT	~~56.0~~ 78.0				LB			EA.	LB				EA.	EA.	LB

PROJECT NAME: PITTSFIELD-STOCKBRIDGE
PROJECT NUMBER: STP 022-1(22)S

FILE NAME: s00b122tss.dgn
PROJECT LEADER: C.P.WILLIAMS
DESIGNED BY: G. ROY
TRAFFIC SIGN SUMMARY SHEET

PLOT DATE: 02-SEP-2011
DRAWN BY: G. ROY
CHECKED BY: R. YOUNG
SHEET 24 OF 41

R.O.W. PLANS

BEGIN ROW PROJECT
STP 022-1(22)
STA. 260+17 57.46' LT.

PI
STA 258+63.46 BK =
STA 258+48.17 AHD

BEGIN BRIDGE
STA 260+08.63
FG = 843.24

BEGIN APPROACH
MATCH EXISTING
STA 258+00.00

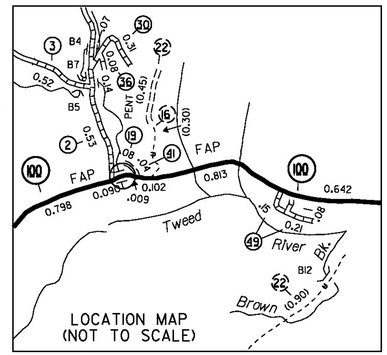
NIF DAVIS, YONEKO T.

NIF STUMPG, GARY B. & JANICE T.

END ROW PROJECT
STP 022-1(22)
STA. 260+64 24.70' LT.

NIF ELDREDGE, GLENN & SHIRLEY TRUSTEES

END APPROACH
MATCH EXISTING
STA 262+25.00



N
VT STATE PLANE GRID

TOWN OF PITTSFIELD
TOWN OF STOCKBRIDGE

PITTSFIELD TH.19
GURNSEY HOLLOW ROAD
STOCKBRIDGE TH. 41
EXISTING R.O.W.

258+67.42
46.69'LT.
258+67.42
26.44'LT.
258+48.80
26.19'LT.
CMF
258+48.80
37.40'LT.
260+28.39
46.90' LT.
260+25.92
26.53'LT.
260+82.67
27.00'LT.
258+84.40
28.03' RT.
258+84.40
68.57' RT.
CMF
258+12.66
65.50' RT.
262+25.00
26.56'LT.
262+25.00
24.04'RT.
261+61.42
23.43' RT.
261+61.42
30.09' RT.
260+16.81
48.06' RT.

183.93' DIST. TO CFM
83.72'
20.25'
187.63'
20.41'
66.38'
40.53'
128.48'
141.04'
L=143.53'
R=999.75'
6.66'
63.85'

CONST(T)
SR(P)
INSTALL & MAINT(P)
APPROACH(T)
INSTALL & MAINT(P)
INSTALL(T)
INSTALL & MAINT(P)

TEMPORARY CONSTRUCTION LIMITS
CONSTRUCTION LIMITS
TEMPORARY CONSTRUCTION LIMITS

NIF COLTON, RAY G. TRUSTEE OF THE ROBERT F. & VIRGINIA G. COLTON IRREVOCABLE TRUST

NIF PETERSON, JOHN & PATRICIA E.

NIF ELDREDGE, GLENN & SHIRLEY TRUSTEES

END APPROACH
BEGIN PROJECT
STA 259+25.00

END BRIDGE
STA 260+35.05
FG = 842.44

PT
STA 261+24.44

END PROJECT
BEGIN APPROACH
STA 261+00.00

VT 100
N75° 25' 31"E
S71° 39' 09"E
S1° 39' 09"E
257+00
258+00
259+00
260+00
261+00
262+00
263+00

18" PIPE
18" CGMP
AER E&T
UE — UNDERGROUND SERVICE 2½" CONDUIT
CHANNEL LINE
RUTLAND COUNTY - PITTSFIELD
WINDSOR COUNTY - STOCKBRIDGE
(APPROXIMATE)

CMF= CONCRETE MONUMENT FOUND

EXISTING ROW IS PLOTTED BASED ON AGENCY PROJECT VT. 101-J 1932

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

LENGTH OF ROW PROJECT: 47.37'

STATE OF VERMONT
AGENCY OF TRANSPORTATION

RIGHT - OF - WAY DETAIL SHEET

TABLE OF PROPERTY ACQUISITION

PARCEL NO.	PROPERTY OWNER	SHEET NO.	BEGINNING STATION	ENDING STATION	TAKE AREA±	REMAINDER AREA±	RIGHT TYPE	(T)(P)	AREA ±	RECORDING DATA TITLE	DATE	TOWN / CITY	BOOK	PAGE	REMARKS
1	TOWN OF PITTSFIELD	1	260+17 LT	260+31 LT			CONST.	(T)	114 SF						INCL. PDF & EROSION CONTROL
			260+17 LT	260+31 LT			SLOPE	(P)	176 SF						
			260+24 LT	260+28 LT			INSTALL & MAINT.	(P)	30 SF						HEADWALL/WINGWALL/FOOTINGS
2	TOWN OF STOCKBRIDGE	2	260+28 LT	260+64 LT			SLOPE	(P)	116 SF						
			260+27 LT	260+32 LT			INSTALL & MAINT.	(P)	51 SF						HEADWALL/WINGWALL/FOOTINGS
			260+30 LT	260+40 LT			INSTALL & MAINT.	(P)							GUARD RAIL
			260+54 LT				APPROACH	(T)							
			260+26 LT	260+37 LT			INSTALL	(T)							EROSION CONTROL

LINES SHOWN ON THIS PLAN AS EXISTING PROPERTY LINES P/L ARE BELIEVED TO BE ACCURATE BUT SHOULD NOT BE RELIED UPON FOR PURPOSES UNRELATED TO THE STATE OF VERMONT'S ACQUISITION OF LAND AND RIGHTS FOR THIS PROJECT.

FOR R.O.W. USE ONLY

PROJECT NAME: PITTSFIELD-STOCKBRIDGE
PROJECT NUMBER: STP 022-1(22)S

FILE NAME: 00b122/ROW/r00b122bdr.dgn
PROJECT LEADER: C.P. WILLIAMS
DESIGNED BY: G. ROY
ROW SHEET 1 OF 1

PLOT DATE: 02-SEP-2011
DRAWN BY: B. FERLAZO
CHECKED BY: H. PETROVS
SHEET 25 OF 41

NOTE:

THE FLOW OF THE GUERNSEY BROOK SHALL BE MAINTAINED EITHER THROUGH THE EXISTING CULVERT OR ADJACENT TO THE EXISTING CULVERT WITHIN THE LIMITS OF THE PROPOSED STRUCTURE. IF THE SITE-SPECIFIC PLAN REQUIRES WORK OUTSIDE THE R.O.W., THE CONTRACTOR WILL BE RESPONSIBLE FOR ACQUIRING ADDITIONAL RIGHTS AND PERMITS.

N

VT STATE PLANE GRID

EXISTING BRIDGE DATA

11'H X 9'W CONCRETE BOX CULVERT BUILT IN 1937
OVERALL LENGTH = 50'
WATERWAY AREA = 99 SF

BM #2
RR SPIKE IN ROOT OF 2 CHERRY TREES
ELEV = 838.554

OHW - - ◆ — ◆ — ◆ - -

FLOODPLAIN = Q_{100} — — ▬ — ▬ - -

AGRICULTURAL LAND —— AG ——

ARCHEAOLOGICAL SITE —— ARCH ——

HISTORIC — HISTORIC —

AREA OF IMPACT BELOW OHW:
PERMANENT = 1451.92 SF
TEMPORARY = 0.00 SF

AREA OF IMPACT IN FLOODPLAIN:
ABOVE OHW = 843.45 SF
TOTAL FLOODPLAIN ENCHROACHMENT = 2295.37 SF

AREA OF ARCHEAOLOGICAL IMPACT: 39.76 SF

SCALE 1" = 20'-0
20 0 20

PROJECT NAME: PITTSFIELD-STOCKBRIDGE	
PROJECT NUMBER: STP 022-1(22)S	
FILE NAME: s00b122impact.dgn	PLOT DATE: 02-SEP-2011
PROJECT LEADER: C. P. WILLIAMS	DRAWN BY: G. ROY
DESIGNED BY: G. ROY	CHECKED BY: R. YOUNG
RESOURCE IMPACT SHEET	SHEET 26 OF 41

EPSC PLAN NARRATIVE

1.1 PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE REMOVAL OF BRIDGE 127 AND ITS WINGWALLS AND FOOTINGS. BRIDGE 127 WILL BE REPLACED WITH A PRECAST CONCRETE STRUCTURE WITH AN 8.5 FEET RISE, SPANNING 24 FEET OVER GUERNSEY BROOK. BRIDGE 127 IS LOCATED IN THE TOWNS OF PITTSFIELD AND STOCKBRIDGE, ON VT ROUTE 100, JUST WEST OF THE INTERSECTION OF VT ROUTE 100 AND GUERNSEY HOLLOW ROAD. TWO-WAY TRAFFIC WILL BE MAINTAINED ON EXISTING ROAD THROUGH THE USE OF PHASED CONSTRUCTION.

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 0.60 ACRES.

IT IS ANTICIPATED THAT THIS PROJECT WILL BE COMPLETED IN TWO CONSTRUCTION SEASONS.

1.2 SITE INVENTORY

1.2.1 TOPOGRAPHY

THE TOPOGRAPHY OF THE AREA IS HILLY TO MOUNTAINOUS, MOSTLY FORESTED WITH SOME OPEN AREAS. VT ROUTE 100, GUERNSEY HOLLOW ROAD, AND A GRAVEL DRIVEWAY ARE WITHIN THE PROJECT SITE. THE IMMEDIATE AREA IS RURAL RESIDENTIAL WITH SEVERAL HOUSES IN THE GENERAL VICINITY OF THE PROJECT.THERE ARE OVERHEAD UTILITIES WHICH MAY HAVE TO BE RELOCATED PRIOR TO CONSTRUCTION.

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

GUERNSEY BROOK IS THE ONLY WATER SOURCE ON THE PROJECT SITE. IT IS A TRIBUTARY TO THE TWEED RIVER. THE BROOK IS CLASSIFIED AS STEEP, INCISED WITH SOME BANK EROSION DOWNSTREAM WITH A STREAM BED CONSISTING OF GRAVEL, COBBLES, AND BOULDERS. THE TRIBUTARY AREA AT THE CULVERT CROSSING IS 4.4 SQUARE MILES. THERE ARE A NUMBER OF DROP INLETS ON SITE DRAINING FROM THE ROADWAY TOWARDS THE BROOK. DUE TO THE NATURE OF THE SURROUNDING TERRAIN, RUNOFF WATER ENTERING THE PROJECT SITE WILL BE PRIMARILY LIMITED TO THAT WHICH IS CONVEYED ALONG ROADWAY EMBANKMENT, AND THAT WHICH FOLLOWS VT ROUTE 100 ALONG THE 8.0% GRADE AT THE BEGINNING OF THE PROJECT LIMITS AND 1.3% GRADE AT THE END OF THE PROJECT LIMITS.

1.2.3 VEGETATION

THE VEGETATION IN THE PROJECT AREA CONSISTS OF HARDWOOD TREES, GRASS AND UNDERGROWTH. THE IMPACT TO VEGETATION WILL BE LIMITED TO THAT WHICH IS DIRECTLY AFFECTED BY REPLACEMENT OF THE EXISTING CULVERT. UPON PROJECT COMPLETION, THE CHANNEL WILL BE ARMORED WITH STONE FILL TYPE IV 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 COUNTIES OF RUTLAND AND WINDSOR, VERMONT. SOIL ON THE PROJECT SITE IS HINCKLEY GRAVELLY LOAMY FINE SAND, 25% TO 40% SLOPES, "K FACTOR" = 0.17. THE SOIL IS CONSIDERED HIGHLY ERODIBLE DUE TO SIGNIFICANT SLOPES.

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: FISHERIES, DOWNSTREAM OF CULVERT.
HISTORICAL AREAS: YES IN NE QUADRANT WITH NO PROJECT IMPACTS.
ARCHEOLOGICAL AREAS: YES IN NW, SW, AND SE QUANDRANTS WITH NO PROJECT IMPACTS.
PRIME AGRICULTURAL LAND: YES IN SW QUANDRANT WITH NO PROJECT IMPACTS.
THREATENED AND ENDANGERED SPECIES: NO.
WATER RESOURCE: GUERNSEY BROOK.
WETLANDS: NO.

1.3 RISK EVALUATION

THIS PROJECT DOES NOT FALL UNDER THE JURISDICTION OF GENERAL PERMIT 3-9020 FOR STORMWATER RUNOFF FROM CONSTRUCTION SITES. SHOULD CHANGES PRIOR TO OR DURING CONSTRUCTION RESULT IN ONE OR MORE ACRES OF EARTH DISTURBANCE OR SHOULD THE PROJECT BECOME PART OF A LARGER PLAN OF DEVELOPMENT, 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 POLLLUTION 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 SPECIFC 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 APPPROVED 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.

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 MNIMIZED 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.

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 CONSTRUCITON SITE.

THE NEED TO DIVERT UPLAND RUNOFF IS NOT ANTICIPATED AT THIS SITE.

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.

THE USE OF STONE CHECK DAMS IS NOT ANTICIPATED FOR THIS PROJECT. DI PROTECTION SHALL BE INSTALLED AS PROPOSED ON THE EPSC PLAN.

1.4.7 CONSTRUCT PERMANENT CONTROLS

PERMANENT STORMWATER TREATMENT DEVICES SHALL BE INSTALLED AS SHOWN ON THE PLANS AND IN ACCORDANCE WITH PERMIT CONDITIONS.

THE USE OF PERMANENT STORMWATER TREATMENT DEVICES IS NOT ANTICIPATED FOR 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). 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.

DEWATERING IS NOT ANTICIPATED AT THIS SITE. IF DEWATERING IS NECESSARY, 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.

1.5 SEQUENCE AND STAGING

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

1.5.1 CONSTRUCTION SEQUENCE

1.5.2 OFF-SITE ACTIVITIES

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

1.5.3 UPDATES

PROJECT NAME:	PITTSFIELD-STOCKBRIDGE
PROJECT NUMBER:	STP 022-1(22)S
FILE NAME: s00bl22erodet.dgn	PLOT DATE: 07-SEP-2011
PROJECT LEADER: C. P. WILLIAMS	DRAWN BY: G. ROY
DESIGNED BY: G. ROY	CHECKED BY: R. YOUNG
EPSC NARRATIVE	SHEET 27 OF 41

SOIL CLASSIFICATION

SOIL TYPE: HINCKLEY GRAVELLY LOAMY FINE SAND
SLOPES: 25-40%
"K" FACTOR: 0.17
CLASSIFIED: HIGHLY ERODIBLE LAND

EXISTING BRIDGE DATA

11'H X 9'W CONCRETE BOX
CULVERT BUILT IN 1937
OVERALL LENGTH = 50'
WATERWAY AREA = 99 SF

N
VT STATE PLANE GRID

BM #2
RR SPIKE IN ROOT
OF 2 CHERRY TREES
ELEV = 838.554

DAVIS, YONEKO T.

STUMPF, GARY B. & JANICE T.

ELDREDGE, GLENN & SHIRLEY TRUSTEES

COLTON, RAY G TRUSTEE OF THE ROBERT F & VIRGINIA G. COLTON IRREVOCABLE TRUST

ELDREDGE, GLENN & SHIRLEY TRUSTEES

PETERSON, JOHN & PATRICIA E.

LEGEND

AER E	AERIAL ELECTRIC & TELEPHONE
AG	AGRICULTURAL LAND
ARCH	ARCHEOLOGICAL SITE
	CLASS III WETLANDS
FLOOD PLAIN	FLOOD PLAIN
HISTORIC DIST	HISTORIC DISTRICT
	PROPERTY LINE
	RIPARIAN BUFFER ZONE

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

PROJECT NAME:	PITTSFIELD-STOCKBRIDGE
PROJECT NUMBER:	STP 022-1(22)S
FILE NAME: s00b122bdr_ero.dgn	PLOT DATE: 02-SEP-2011
PROJECT LEADER: C. P. WILLIAMS	DRAWN BY: G. ROY
DESIGNED BY: G. ROY	CHECKED BY: R. YOUNG
EXISTING CONDITIONS SITE PLAN	SHEET 28 OF 41

NOTES:

1. THESE PLANS SHOW A CONCEPTUAL EROSION CONTROL PLAN, THE CONTRACTOR MUST SUBMIT A TEMPORARY EROSION CONTROL PLAN FOR APPROVAL.

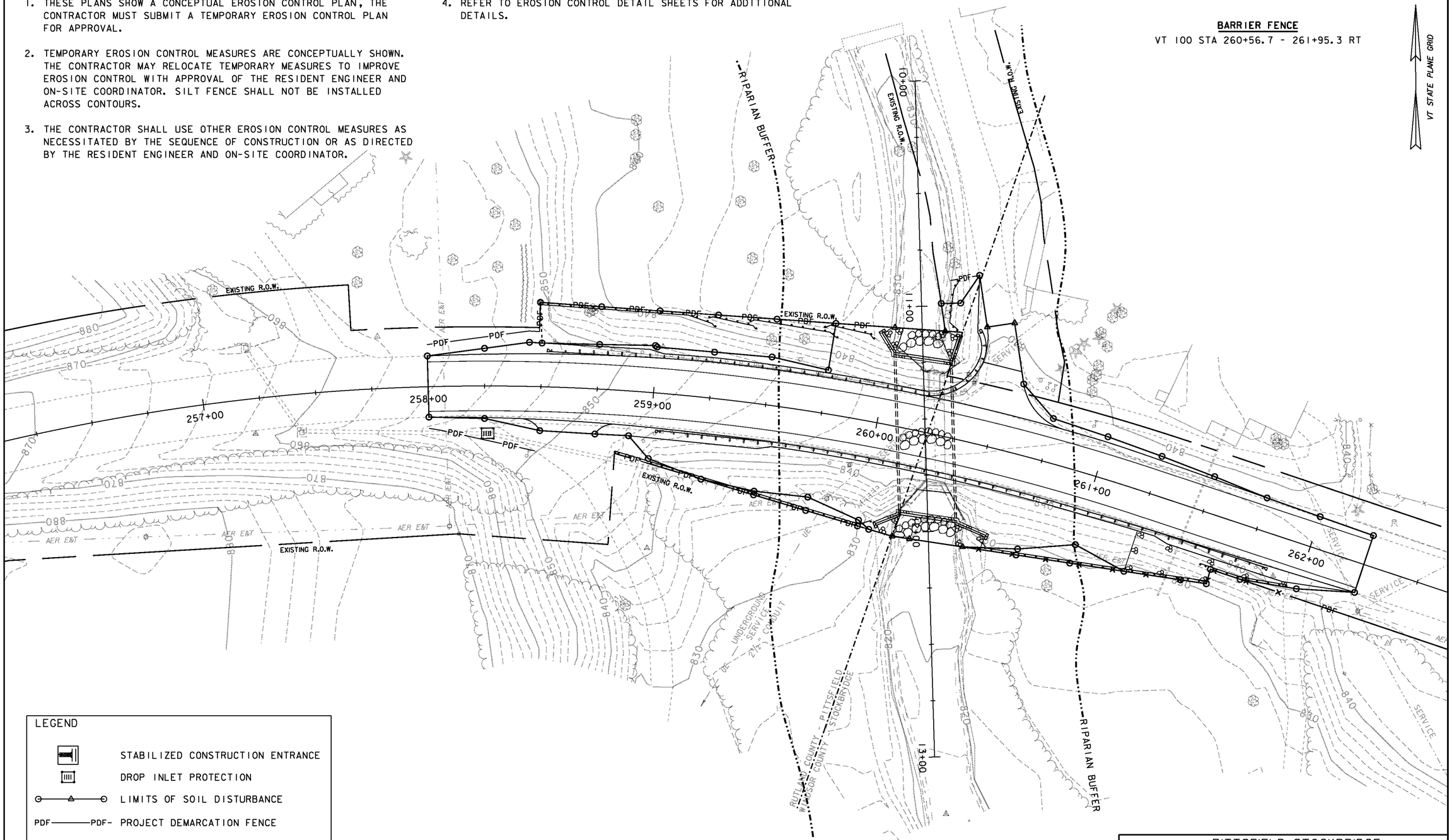
2. TEMPORARY EROSION CONTROL MEASURES ARE CONCEPTUALLY SHOWN. THE CONTRACTOR MAY RELOCATE TEMPORARY MEASURES TO IMPROVE EROSION CONTROL WITH APPROVAL OF THE RESIDENT ENGINEER AND ON-SITE COORDINATOR. SILT FENCE SHALL NOT BE INSTALLED ACROSS CONTOURS.

3. THE CONTRACTOR SHALL USE OTHER EROSION CONTROL MEASURES AS NECESSITATED BY THE SEQUENCE OF CONSTRUCTION OR AS DIRECTED BY THE RESIDENT ENGINEER AND ON-SITE COORDINATOR.

4. REFER TO EROSION CONTROL DETAIL SHEETS FOR ADDITIONAL DETAILS.

BARRIER FENCE
VT 100 STA 260+56.7 - 261+95.3 RT

N
VT STATE PLANE GRID



LEGEND

- STABILIZED CONSTRUCTION ENTRANCE
- DROP INLET PROTECTION
- LIMITS OF SOIL DISTURBANCE
- PDF——PDF- PROJECT DEMARCATION FENCE
- ×——×——×- BARRIER FENCE
- RIPARIAN BUFFER ZONE
- SILT FENCE

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

PROJECT NAME:	PITTSFIELD-STOCKBRIDGE
PROJECT NUMBER:	STP 022-1(22)S

FILE NAME: s00b122bdr_ero.dgn	PLOT DATE: 02-SEP-2011
PROJECT LEADER: C. P. WILLIAMS	DRAWN BY: G. ROY
DESIGNED BY: G. ROY	CHECKED BY: R. YOUNG
EPSC CONSTRUCTION SITE PLAN	SHEET 29 OF 41

N

VT STATE PLANE GRID

RIPARIAN BUFFER

EXISTING R.O.W.

EXISTING R.O.W.

EXISTING R.O.W.

EXISTING R.O.W.

EXISTING R.O.W.

257+00

258+00

259+00

260+00

261+00

262+00

00+01

00+11

13+00

AER E&T

UE

UNDERGROUND SERVICE 2½" CONDUIT

RUTLAND COUNTY - PITTSFIELD
WINDSOR COUNTY - STOCKBRIDGE

SERVICE

LEGEND

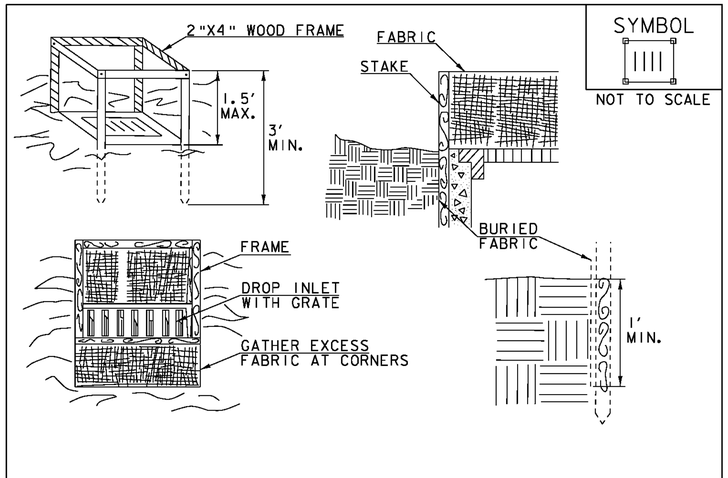
- RIPARIAN BUFFER ZONE
- LIMITS OF SOIL DISTURBANCE
- EROSION MATTING
- SEED AND MULCH

20 0 20

SCALE: 1" = 20'-0"

PROJECT NAME:	PITTSFIELD-STOCKBRIDGE
PROJECT NUMBER:	STP 022-1(22)S

FILE NAME: s00b122bdr_ero.dgn	PLOT DATE: 02-SEP-2011
PROJECT LEADER: C. P. WILLIAMS	DRAWN BY: G. ROY
DESIGNED BY: G. ROY	CHECKED BY: R. YOUNG
FINAL CONDITIONS SITE PLAN	SHEET 30 OF 41



CONSTRUCTION SPECIFICATIONS

1. FILTER FABRIC SHALL HAVE AN APPARENT OPENING SIZE OF 40-85. BURLAP MAY BE USED FOR SHORT TERM APPLICATIONS.
2. CUT FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED THEY WILL BE OVERLAPPED TO THE NEXT STAKE.
3. STAKE MATERIALS WILL BE STANDARD 2"x 4" WOOD OR EQUIVALENT METAL WITH A MINIMUM LENGTH OF 3'.
4. SPACE STAKES EVENLY AROUND INLET 3' APART AND DRIVE A MINIMUM 18" DEEP. SPANS GREATER THAN 3' MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.
5. FABRIC SHALL BE EMBEDDED 1' MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
6. A 2" x 4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVER FLOW STABILITY.
7. MAXIMUM DRAINAGE AREA 1 ACRE

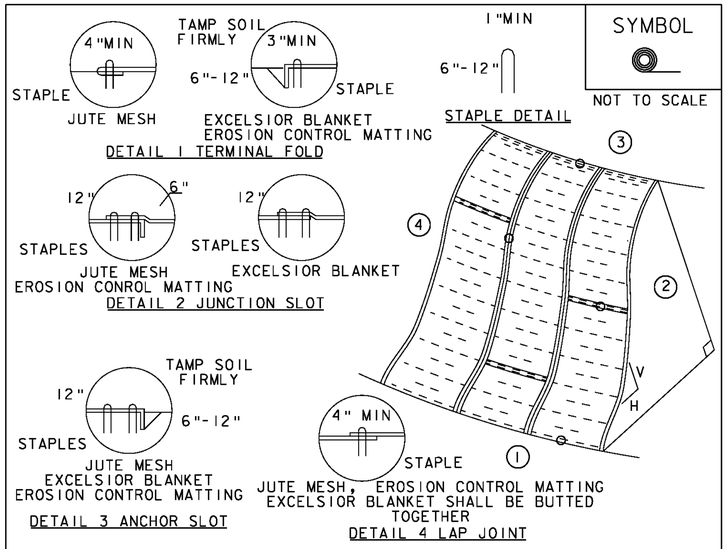
ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FILTER FABRIC DROP INLET PROTECTION

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 INLET PROTECTION DEVICE, TYPE 1 (PAY ITEM 653.40).

REVISIONS	
MARCH 7, 2008	WHF
JANUARY 13, 2009	WHF



CONSTRUCTION SPECIFICATIONS

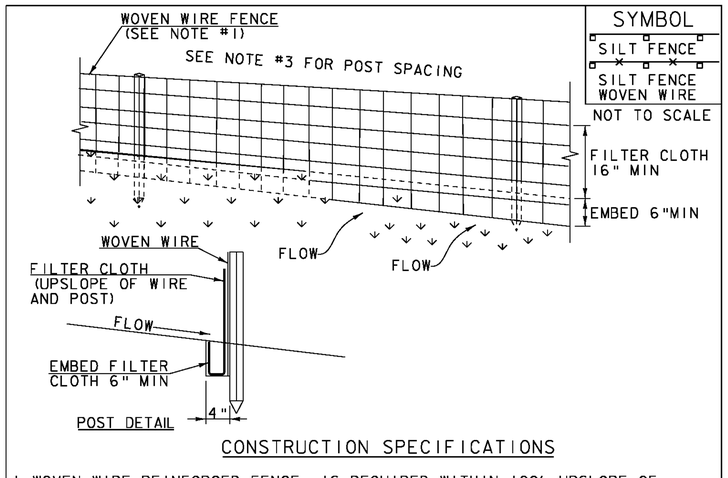
1. APPLY TO SLOPES GREATER THAN 3H: IV OR WHERE NECESSARY TO AID IN ESTABLISHING VEGETATION.
2. APPLY FERTILIZER, LIME SEED PRIOR TO PLACING MATTING.
3. STAPLES ARE TO BE PLACED ALTERNATELY, IN COLUMNS APPROXIMATELY 2' APART AND IN ROWS APPROXIMATELY 3' APART. APPROXIMATELY 175 STAPLES ARE REQUIRED PER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



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

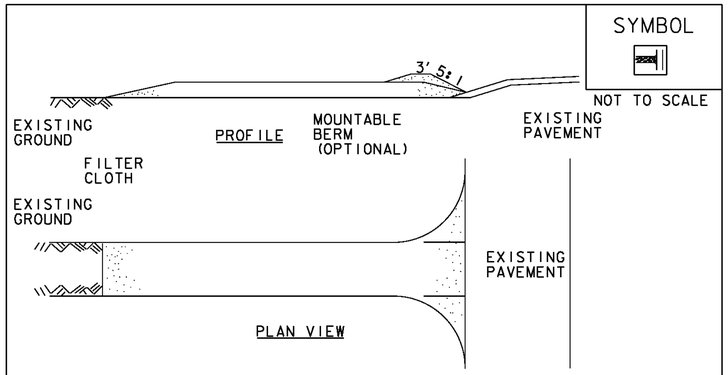
PROJECT NAME: PITTSFIELD-STOCKBRIDGE
PROJECT NUMBER: STP 022-1(22)S

FILE NAME: s00b122erodet.dgn
PROJECT LEADER: C. P. WILLIAMS
DESIGNED BY: G. ROY
EPSC DETAILS (1)

PLOT DATE: 07-SEP-2011
DRAWN BY: G. ROY
CHECKED BY: R. YOUNG
SHEET 31 OF 41

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

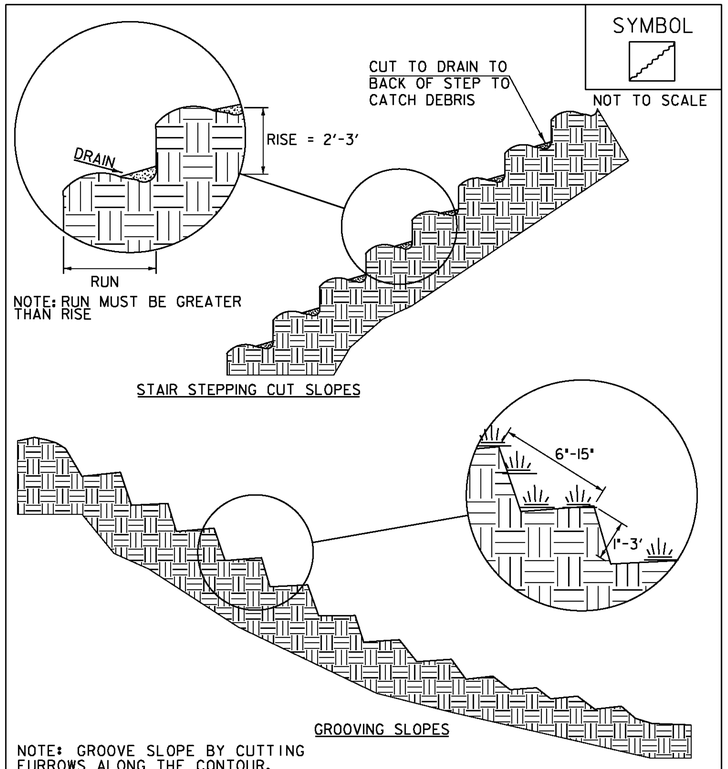
NOTES:
REFER TO 'THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- ' FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

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

SYMBOL

NOT TO SCALE



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

VAOT RURAL AREA MIX

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

VAOT URBAN AREA MIX

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

SOIL AMENDMENT GUIDANCE

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

CONSTRUCTION GUIDANCE

1. RURAL SEED MIX: USE AS INDICATED IN THE PLANS AND/OR FOR ALL ESTABLISHED UPLAND (NON WETLAND) AREAS DISTURBED BY THE CONTRACTOR.
2. URBAN SEED MIX: USE AS INDICATED IN THE PLANS AND/OR FOR ALL ESTABLISHED LAWN 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. TOPSOIL: TO BE USED WITH SEED AS INDICATED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.
7. HYDROSEEDING: ALTHOUGH GUIDANCE IS GIVEN ABOVE THE SITE CONDITIONS AND THE TYPE OF HYDROSEED WILL ULTIMATELY DICTATE THE AMOUNTS AND TYPES OF SOIL AMENDMENTS TO BE APPLIED
8. TURF ESTABLISHMENT: PLACING SEED, FERTILIZER, LIME AND MULCH PRIOR TO SEPTEMBER 15 AND AFTER APRIL 15 CAN BETTER ENSURE A VIGOROUS GROWTH OF GRASS.

ADAPTED FROM VTRANS TECHNICAL LANDSCAPE MANUAL FOR ROADWAYS AND TRANSPORTATION FACILITIES

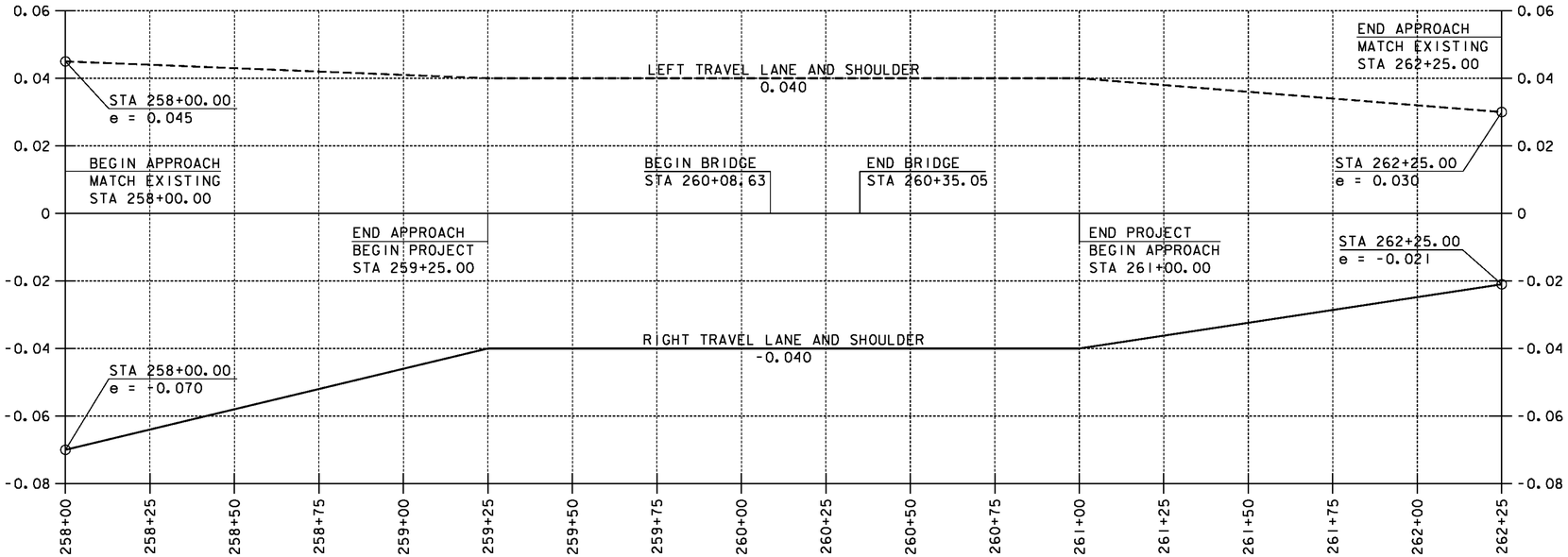
TURF ESTABLISHMENT

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

PROJECT NAME: PITTSFIELD-STOCKBRIDGE
PROJECT NUMBER: STP 022-1(22)S

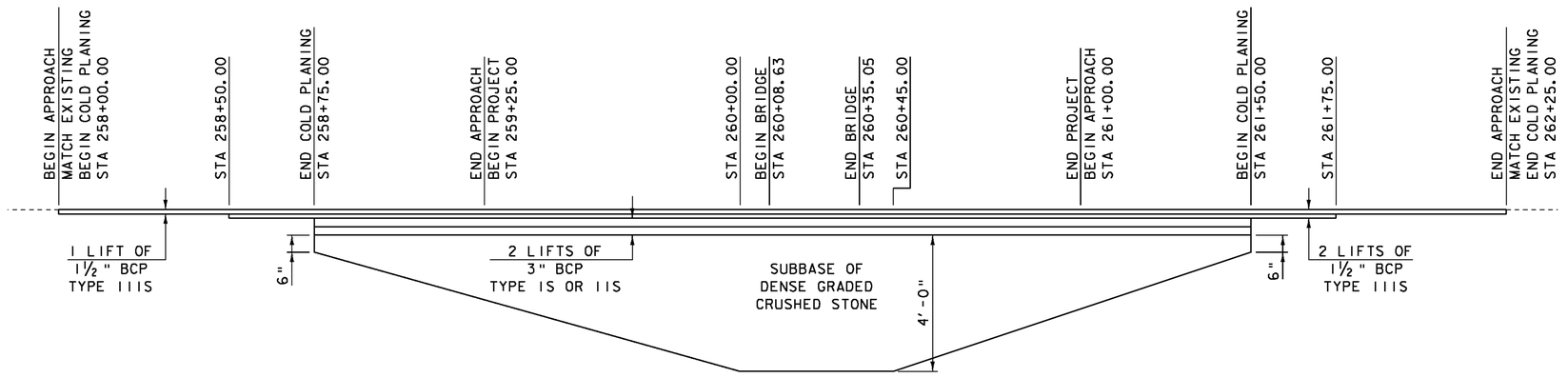
FILE NAME: s00b122erodet.dgn
PROJECT LEADER: C. P. WILLIAMS
DESIGNED BY: G. ROY
EPSC DETAILS (2)

PLOT DATE: 02-SEP-2011
DRAWN BY: G. ROY
CHECKED BY: R. YOUNG
SHEET 32 OF 41



VT 100 BANKING DIAGRAM

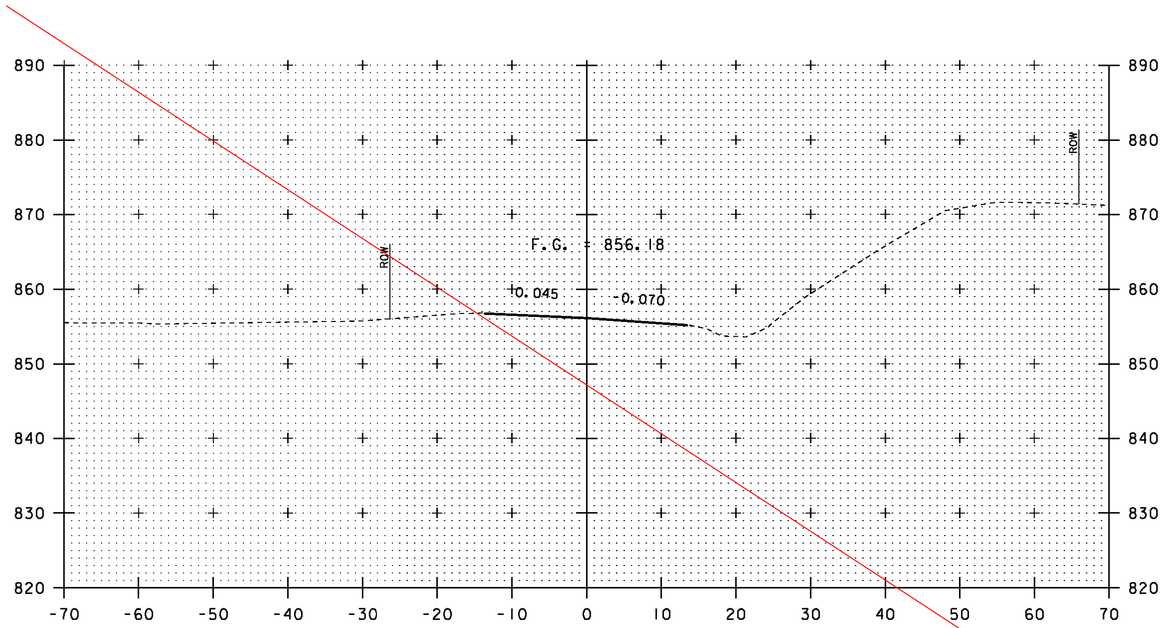
HORIZONTAL SCALE: 1" = 20'-0"
VERTICAL SCALE: 1" = 0.02'/'



VT 100 MATERIAL TRANSITION DETAIL

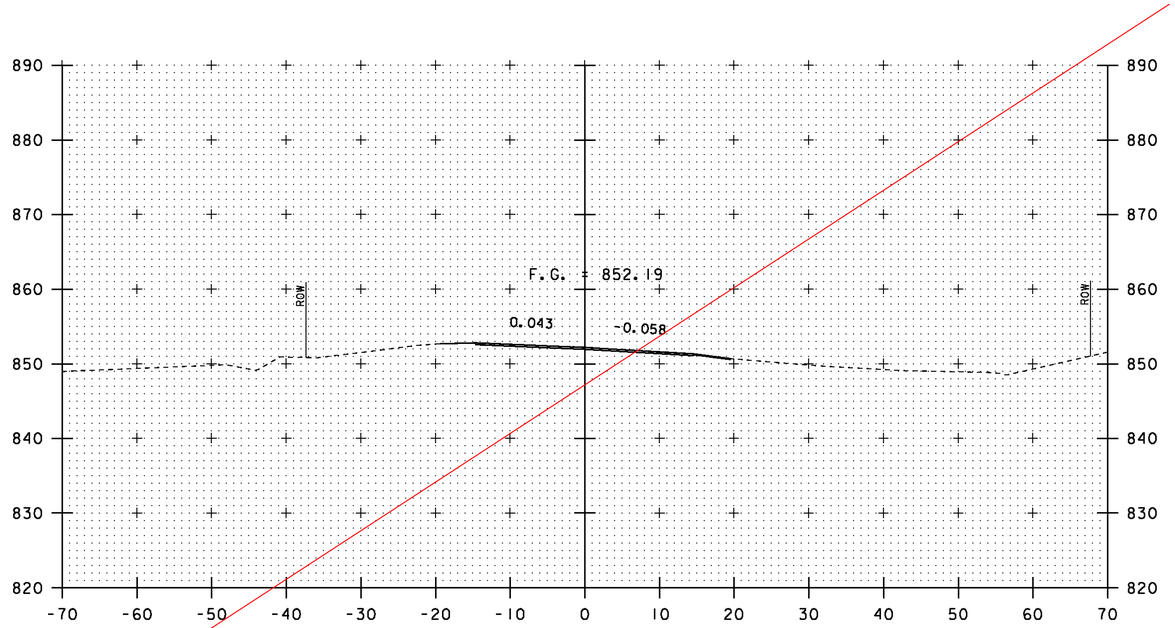
HORIZONTAL SCALE: 1" = 20'-0"
VERTICAL SCALE: 1" = 2'-0"

PROJECT NAME:	PITTSFIELD-STOCKBRIDGE
PROJECT NUMBER:	STP 022-1(22)S
FILE NAME: s00b122pro.dgn	PLOT DATE: 02-SEP-2011
PROJECT LEADER: C. P. WILLIAMS	DRAWN BY: G. ROY
DESIGNED BY: G. ROY	CHECKED BY: R. YOUNG
BANKING DIAGRAM AND MATERIAL TRANSITION	SHEET 33 OF 41

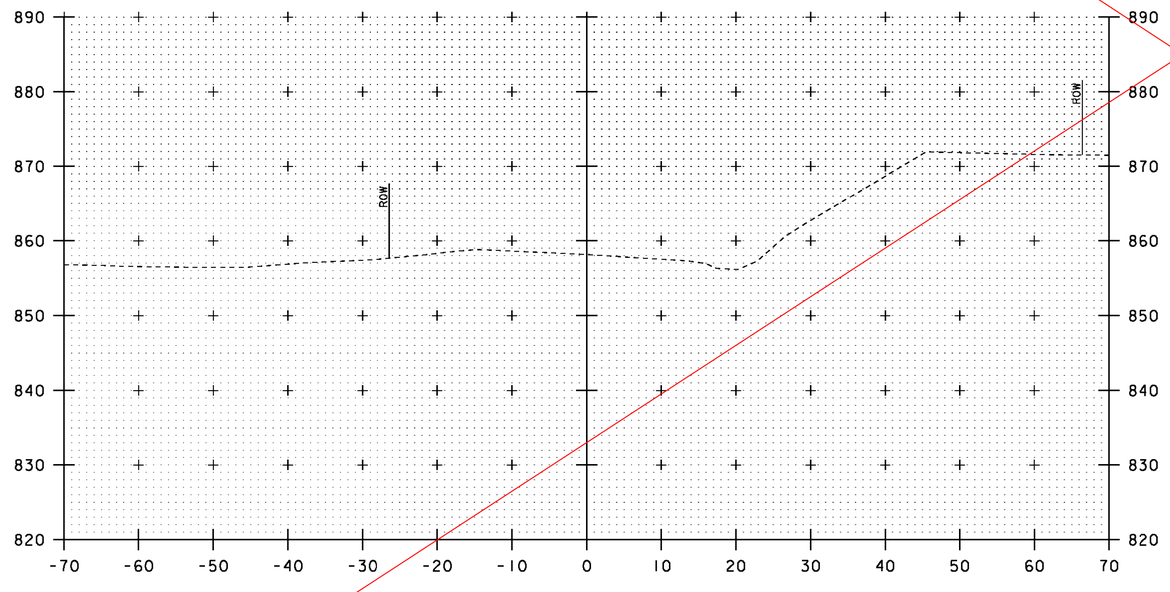


258+00

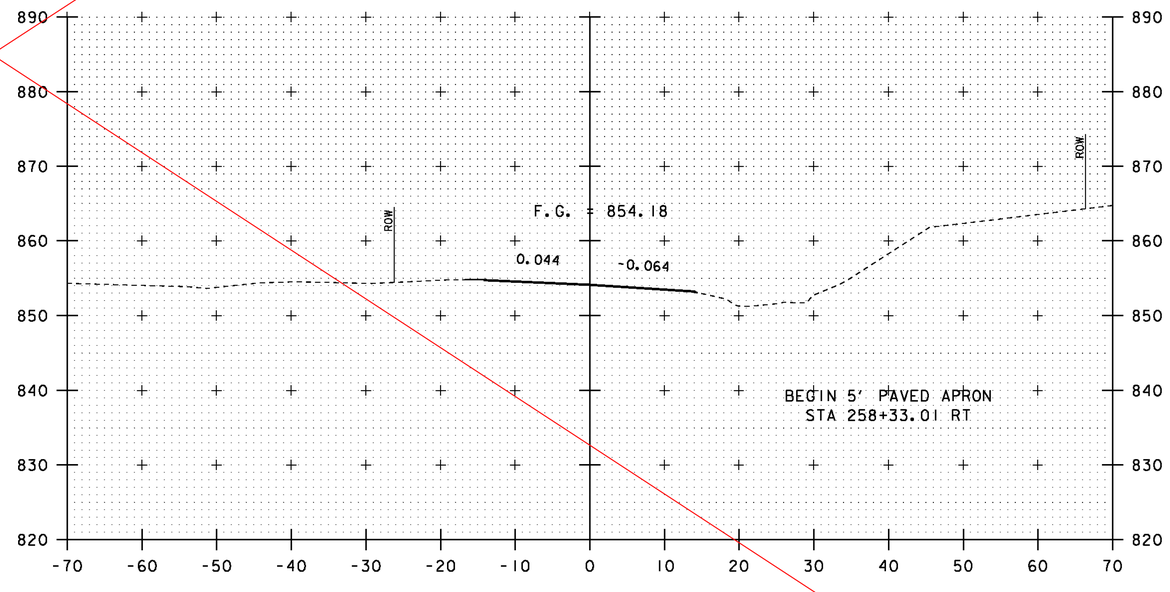
BEGIN APPROACH
MATCH EXISTING
STA 258+00.00



258+50



257+75



258+25

NOTE: SEE REVISED SHEET
DATED 26-OCT-2011
FOR POST IRENE REVISIONS

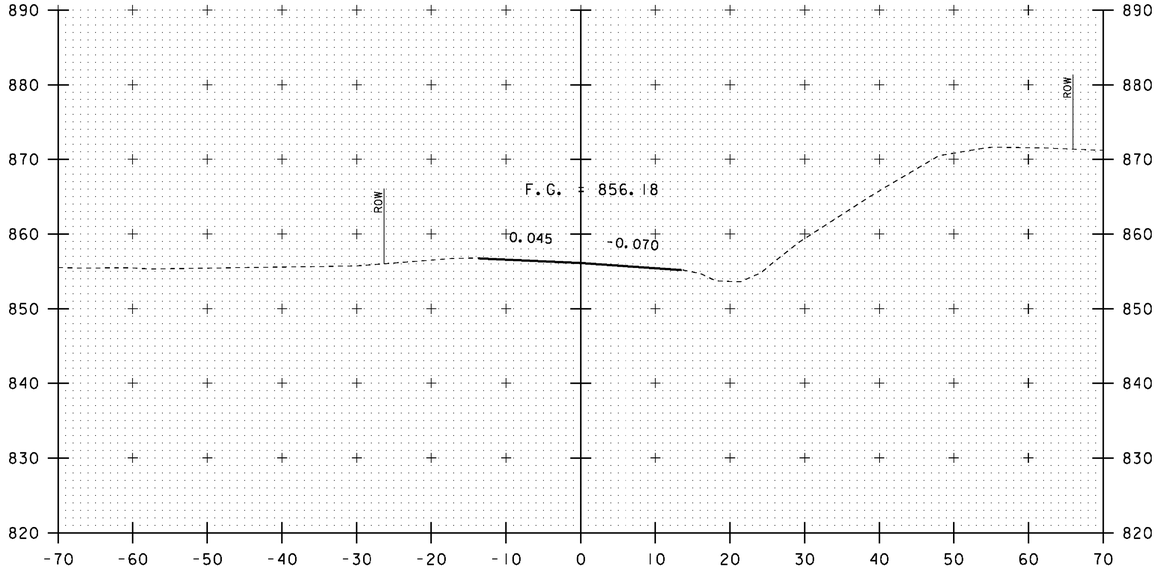
10 0 10
SCALE: 1" = 10'-0"

STA. 257+75 TO STA. 258+50

PROJECT NAME: PITTSFIELD-STOCKBRIDGE
PROJECT NUMBER: STP 022-1(22)S

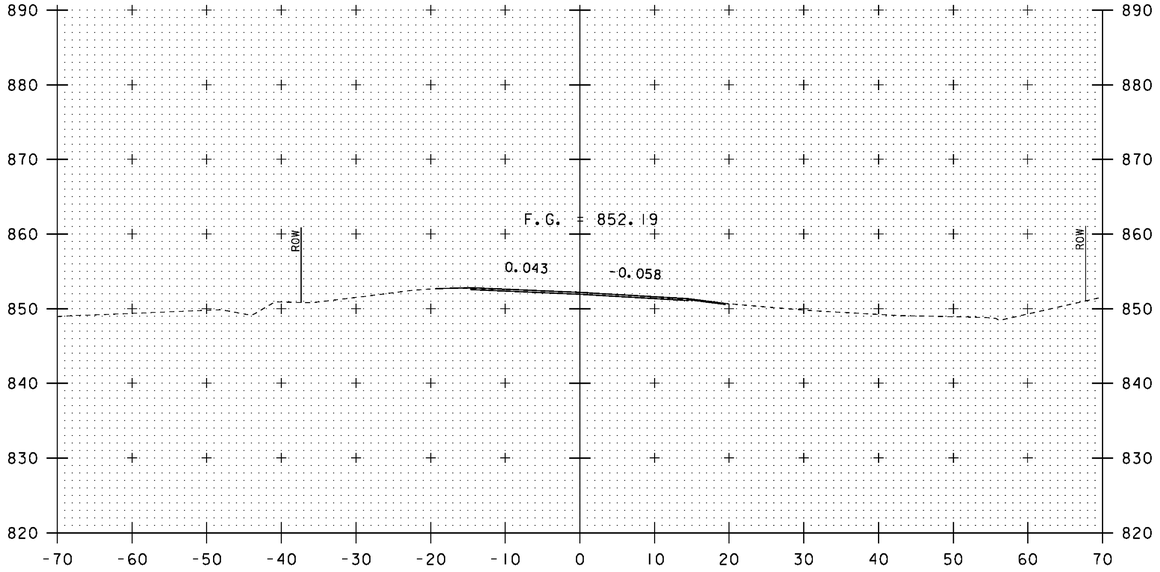
FILE NAME: s00b122xsl.dgn
PROJECT LEADER: C. P. WILLIAMS
DESIGNED BY: G. ROY
VT 100 CROSS SECTIONS (1)

PLOT DATE: 02-SEP-2011
DRAWN BY: G. ROY
CHECKED BY: R. YOUNG
SHEET 34 OF 41

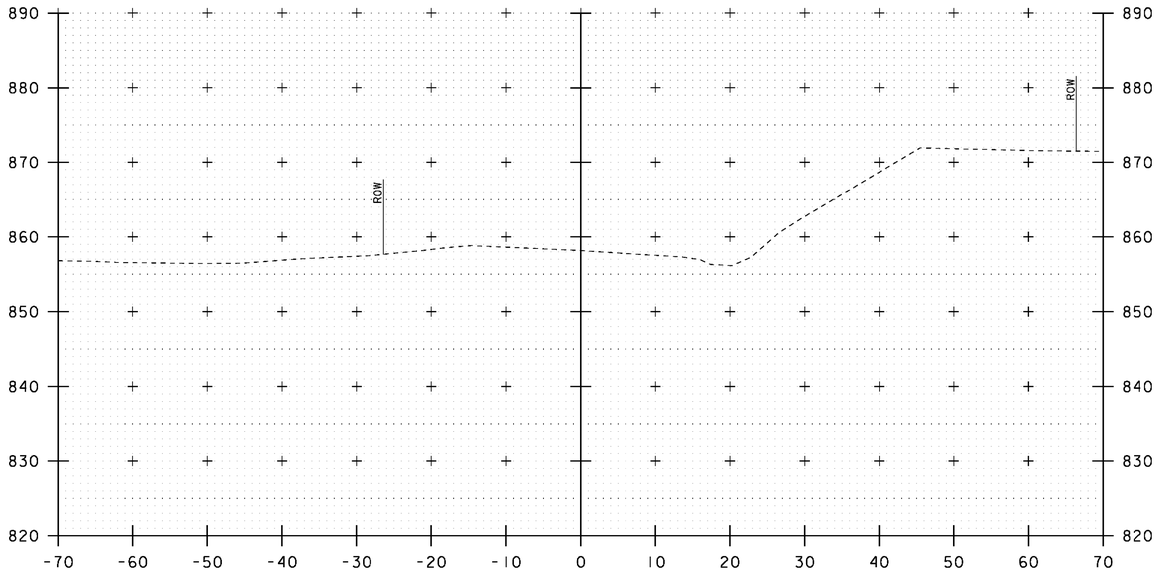


258+00

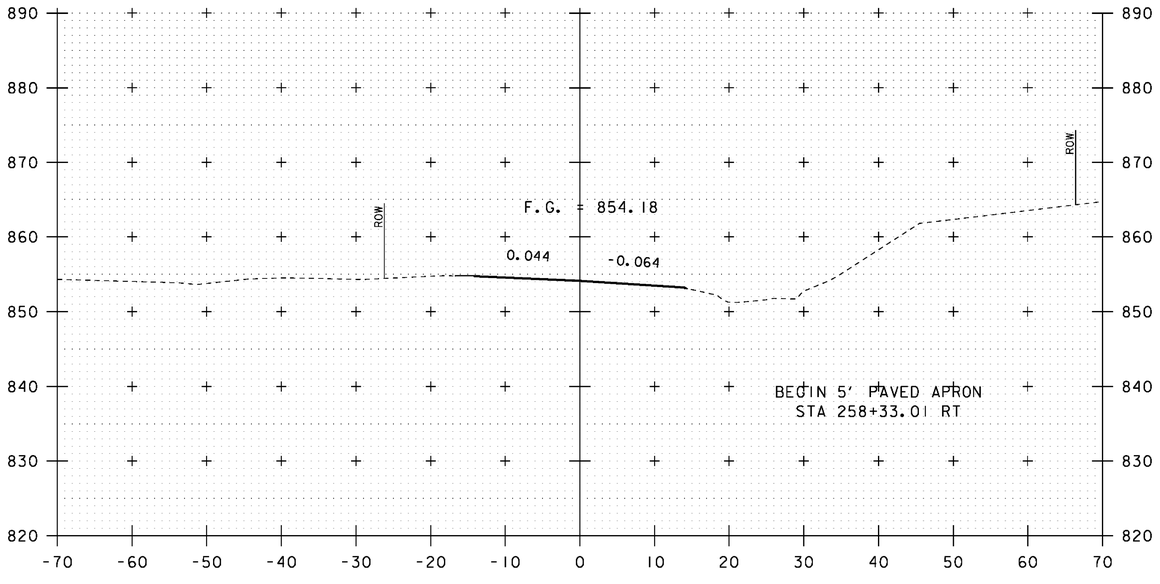
BEGIN APPROACH
MATCH EXISTING
STA 258+00.00



258+50



257+75



258+25

NOTE: REVISED SHEET
FOR POST IRENE

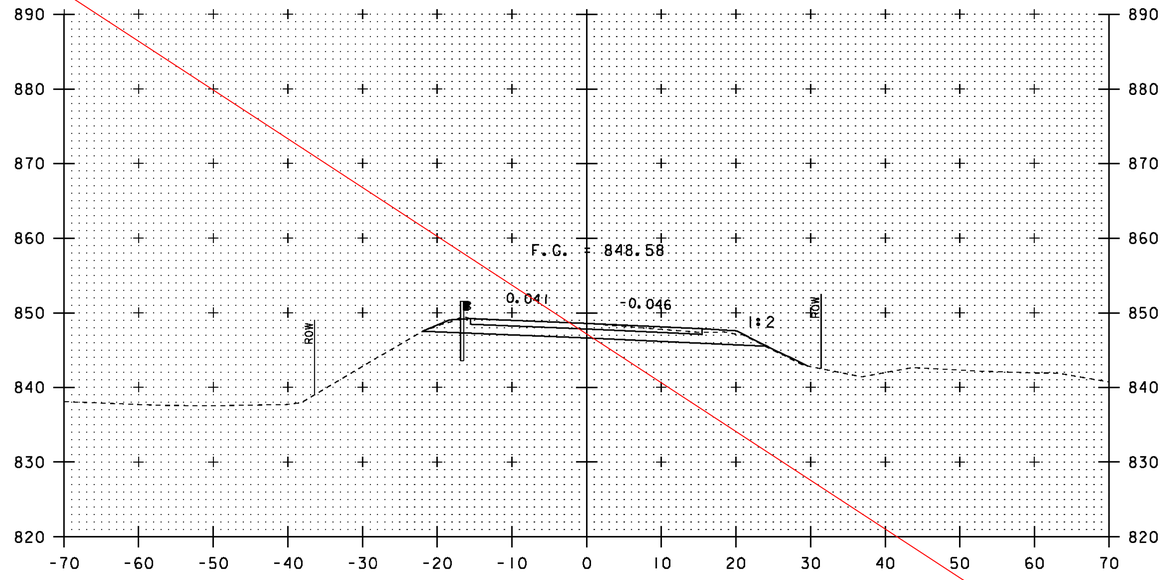
10 0 10
SCALE: 1" = 10'-0"

STA. 257+75 TO STA. 258+50

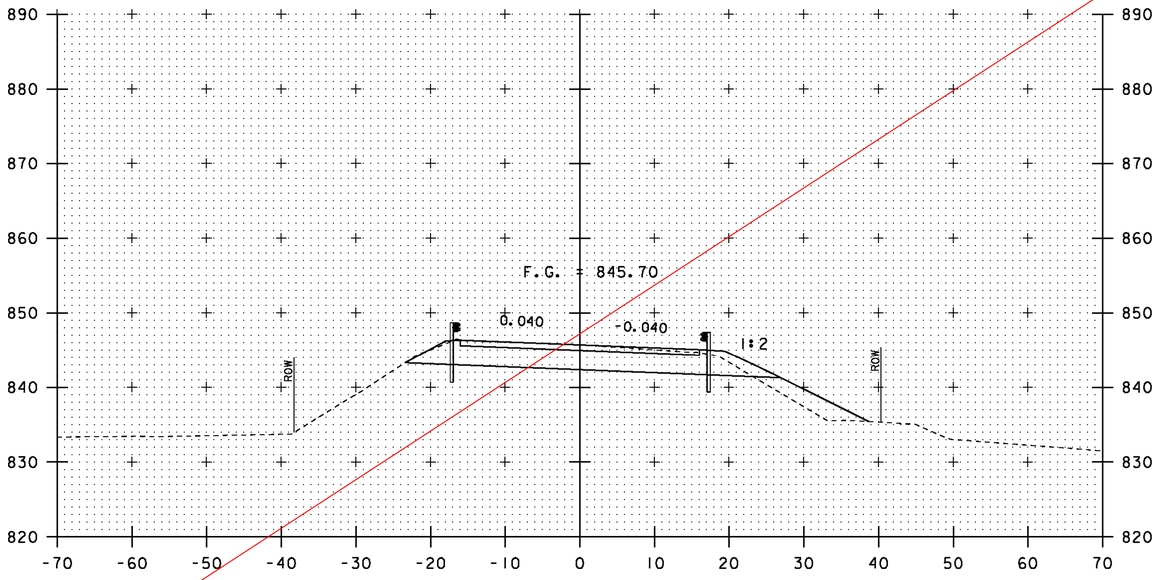
PROJECT NAME: PITTSFIELD-STOCKBRIDGE
PROJECT NUMBER: STP 022-1(22)S

FILE NAME: s00b122xsl.dgn
PROJECT LEADER: C. P. WILLIAMS
DESIGNED BY: G. ROY
VT 100 CROSS SECTIONS (1)

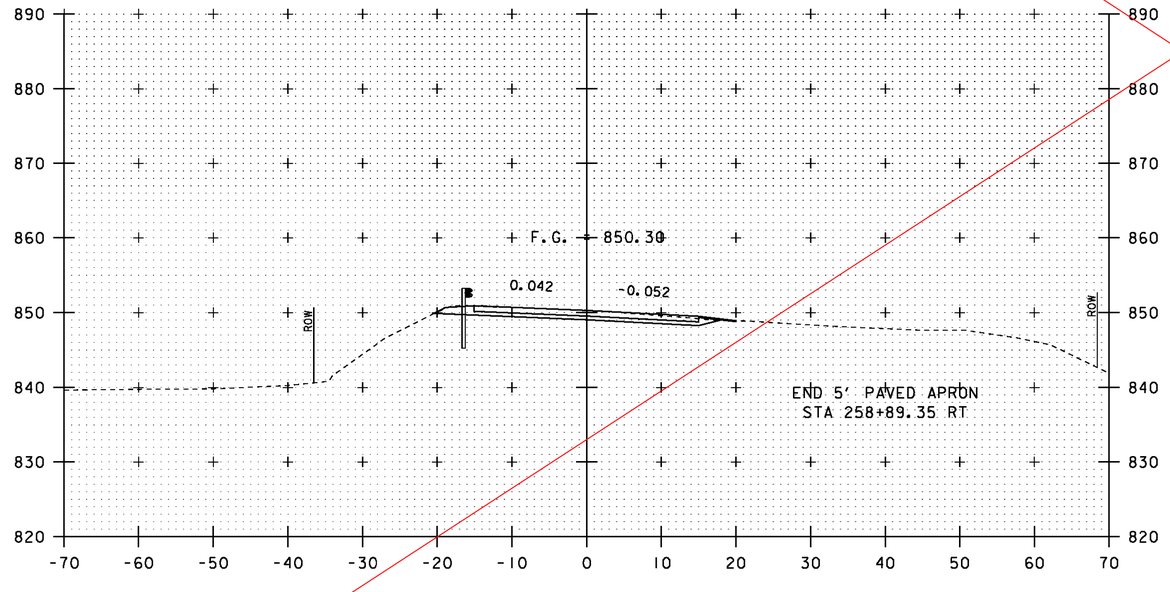
PLOT DATE: 26-OCT-2011
DRAWN BY: G. ROY
CHECKED BY: R. YOUNG
SHEET 34 OF 41



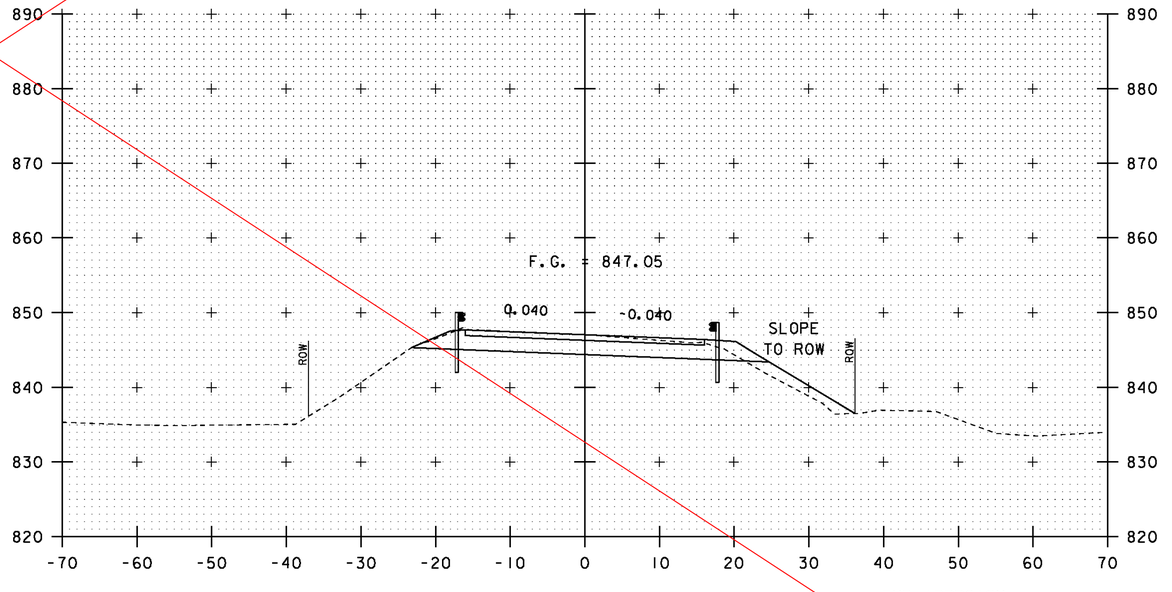
259+00



259+50



258+75



259+25

END APPROACH
BEGIN PROJECT
STA 259+25.00

NOTE: SEE REVISED SHEET
DATED 26-OCT-2011
FOR POST IRENE REVISIONS

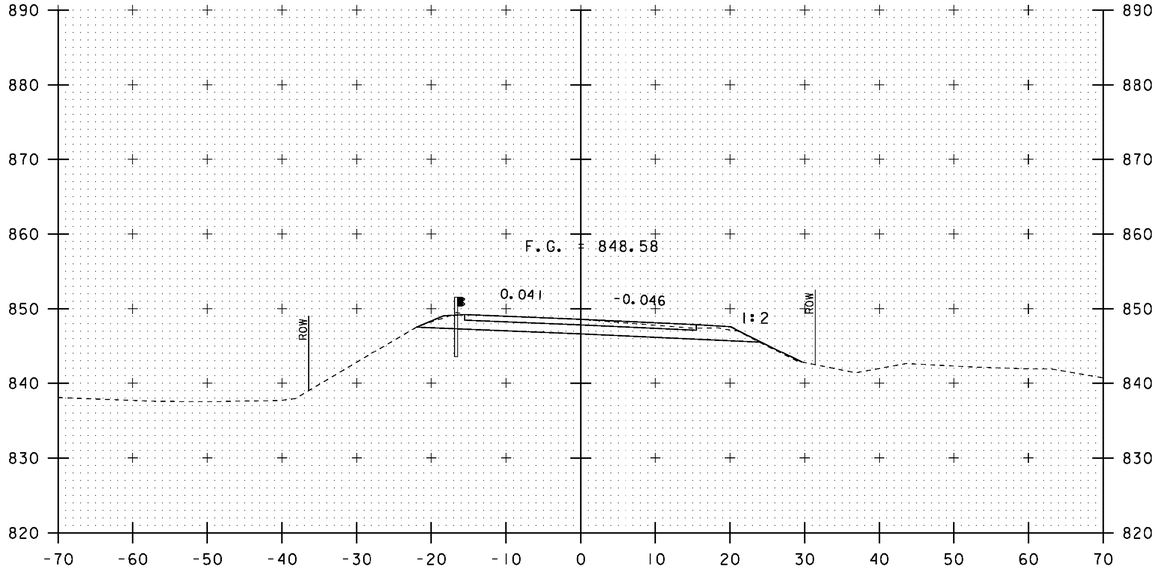
10 0 10
SCALE: 1" = 10'-0"

STA. 258+75 TO STA. 259+50

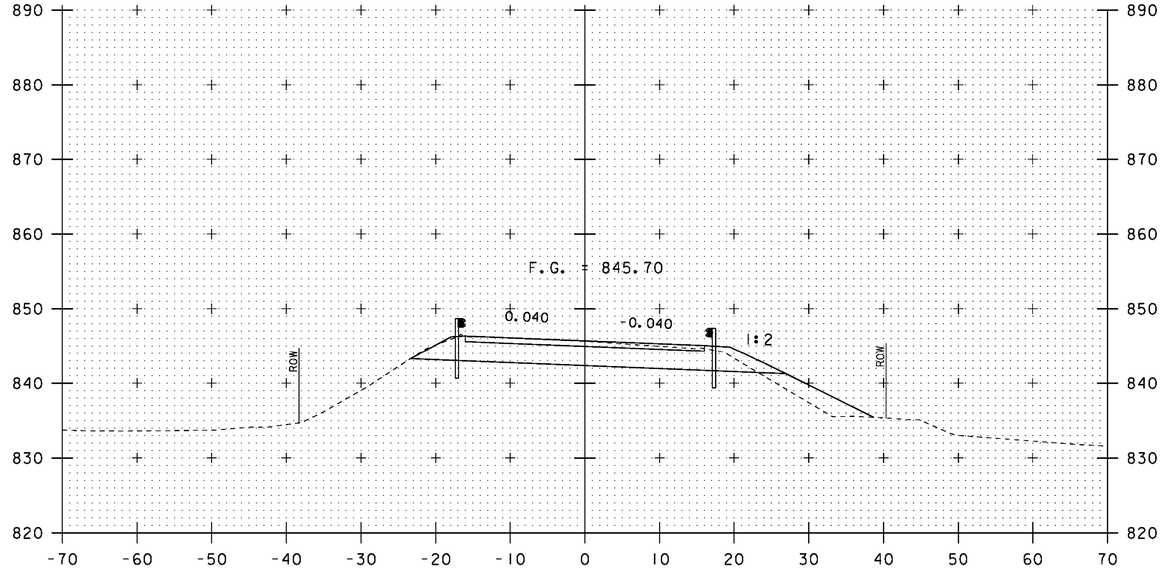
PROJECT NAME: PITTSFIELD-STOCKBRIDGE
PROJECT NUMBER: STP 022-1(22)S

FILE NAME: s00b122xsl.dgn
PROJECT LEADER: C. P. WILLIAMS
DESIGNED BY: G. ROY
VT 100 CROSS SECTIONS (2)

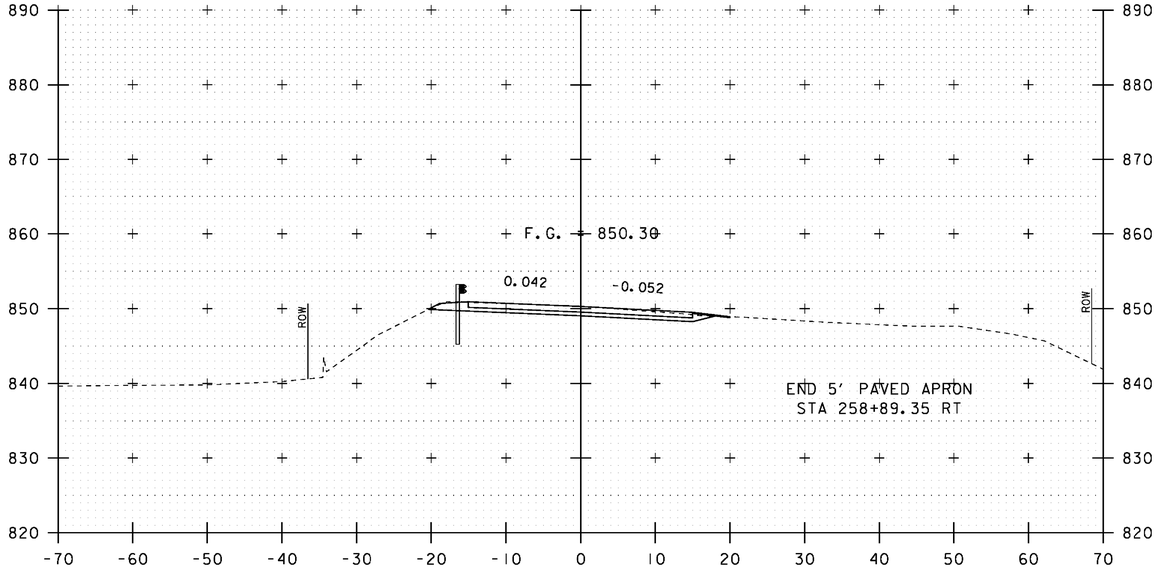
PLOT DATE: 02-SEP-2011
DRAWN BY: G. ROY
CHECKED BY: R. YOUNG
SHEET 35 OF 41



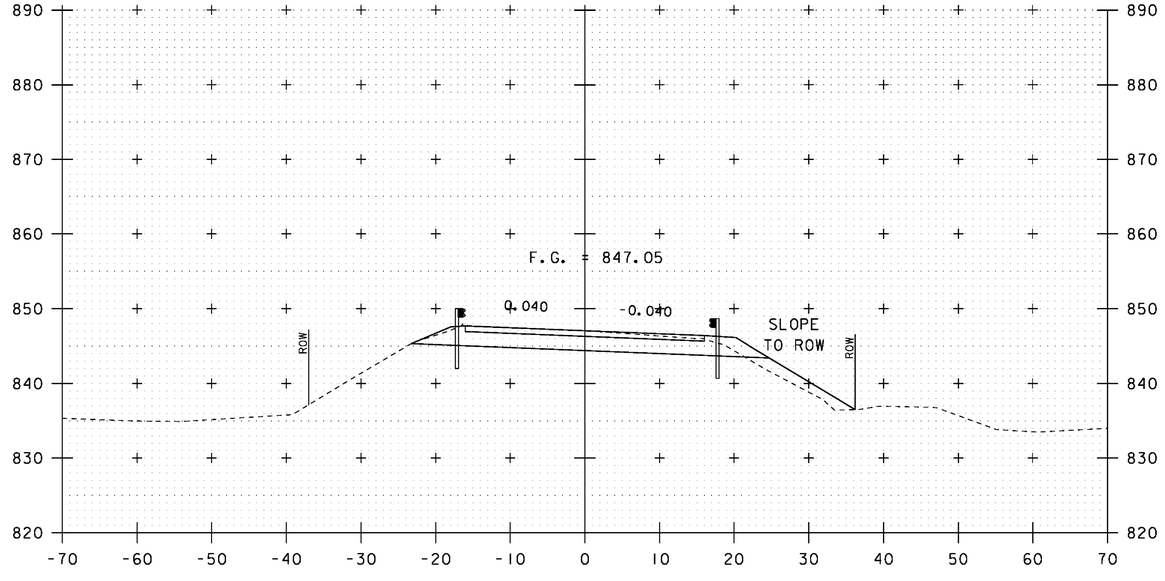
259+00



259+50



258+75



259+25

END APPROACH
BEGIN PROJECT
STA 259+25.00

NOTE: REVISED SHEET
FOR POST IRENE

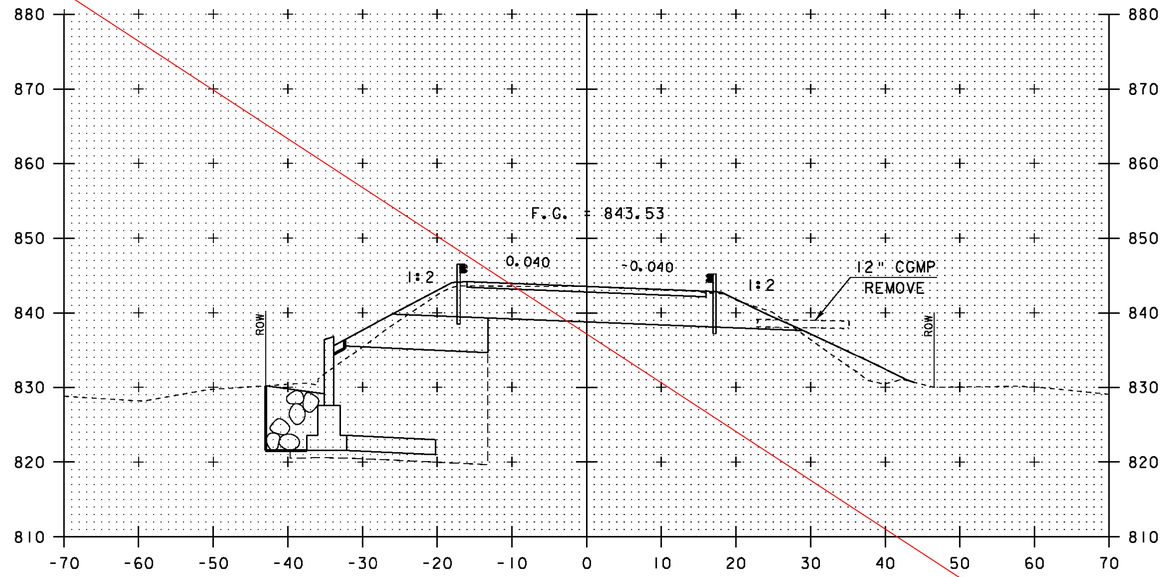
10 0 10
SCALE: 1" = 10'-0"

STA. 258+75 TO STA. 259+50

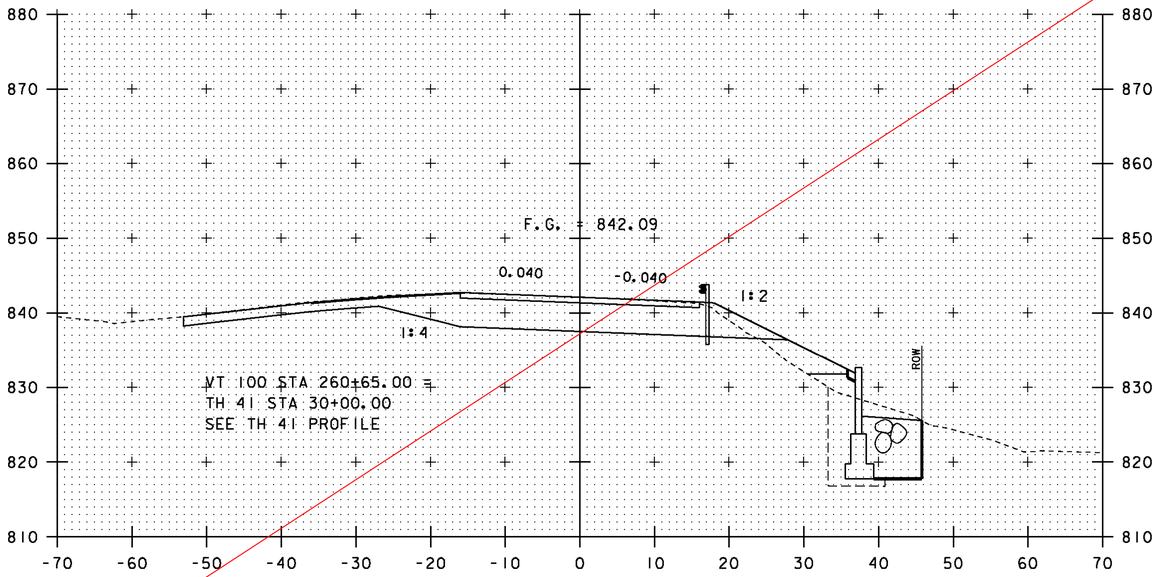
PROJECT NAME: PITTSFIELD-STOCKBRIDGE
PROJECT NUMBER: STP 022-1(22)S

FILE NAME: s00b122xsl.dgn
PROJECT LEADER: C. P. WILLIAMS
DESIGNED BY: G. ROY
VT 100 CROSS SECTIONS (2)

PLOT DATE: 26-OCT-2011
DRAWN BY: G. ROY
CHECKED BY: R. YOUNG
SHEET 35 OF 41

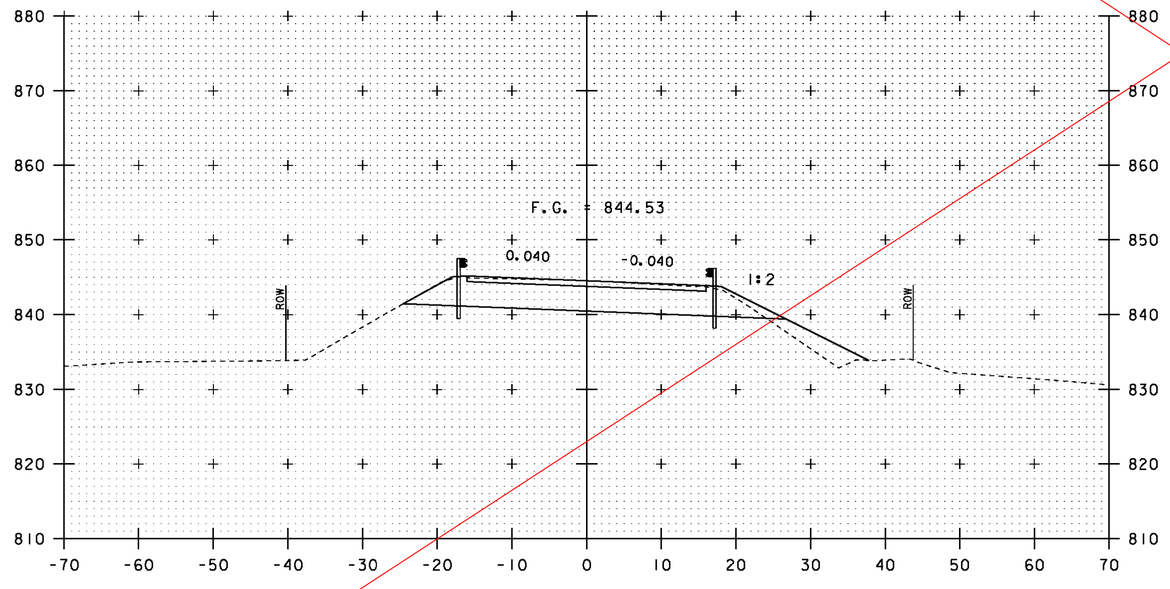


260+00

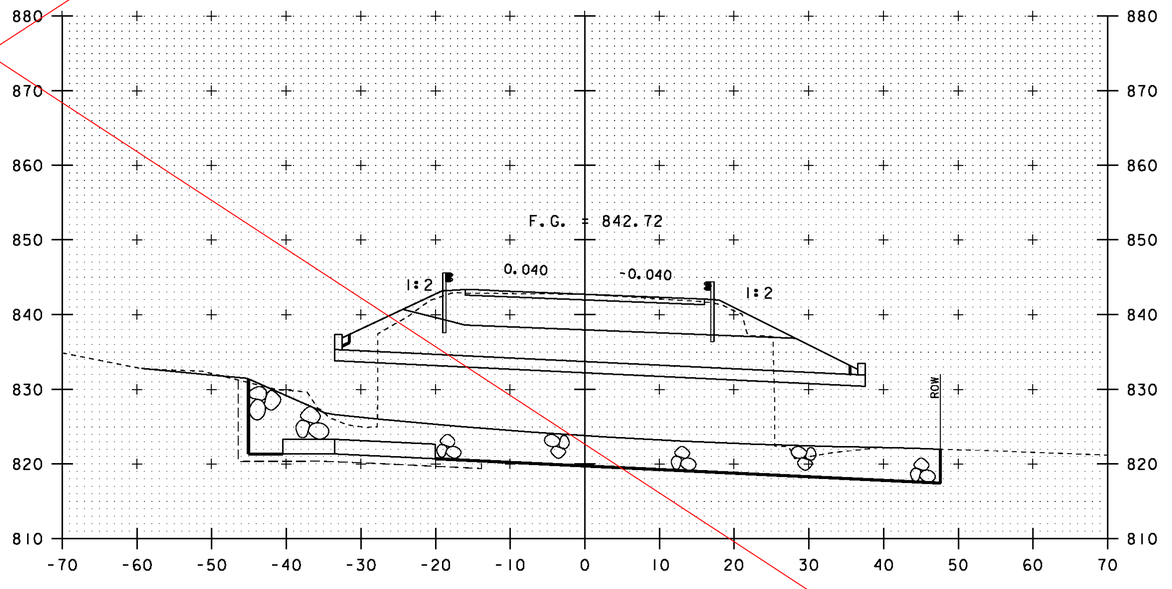


END BRIDGE
STA 260+35.05

260+50



259+75



BEGIN BRIDGE
STA 260+08.63

260+25

NOTE: SEE REVISED SHEET
DATED 26-OCT-2011
FOR POST IRENE REVISIONS

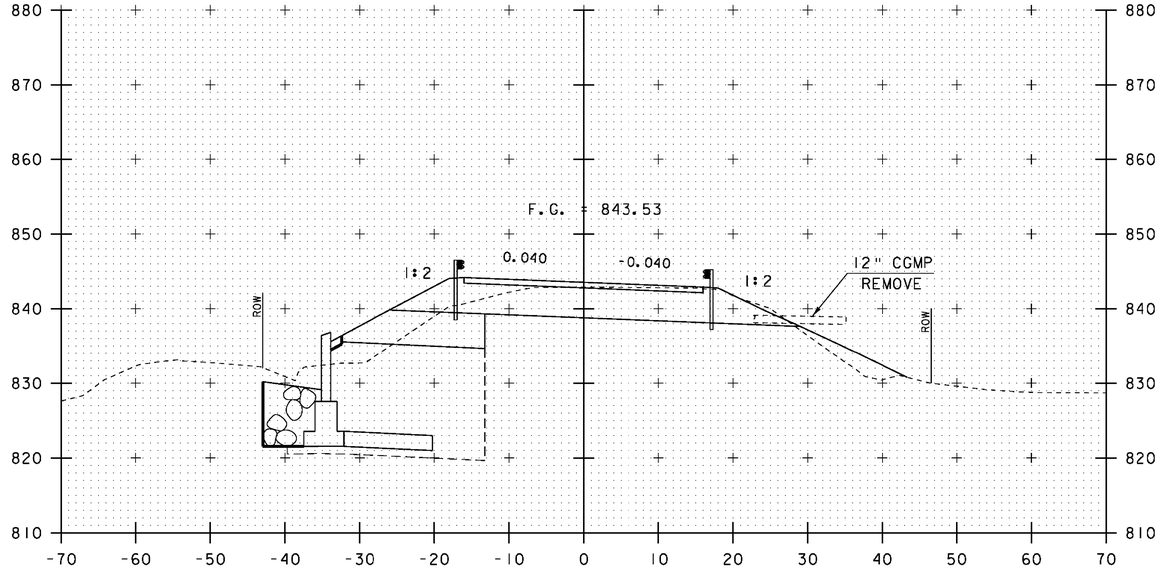
10 0 10
SCALE: 1" = 10'-0"

STA. 259+75 TO STA. 260+50

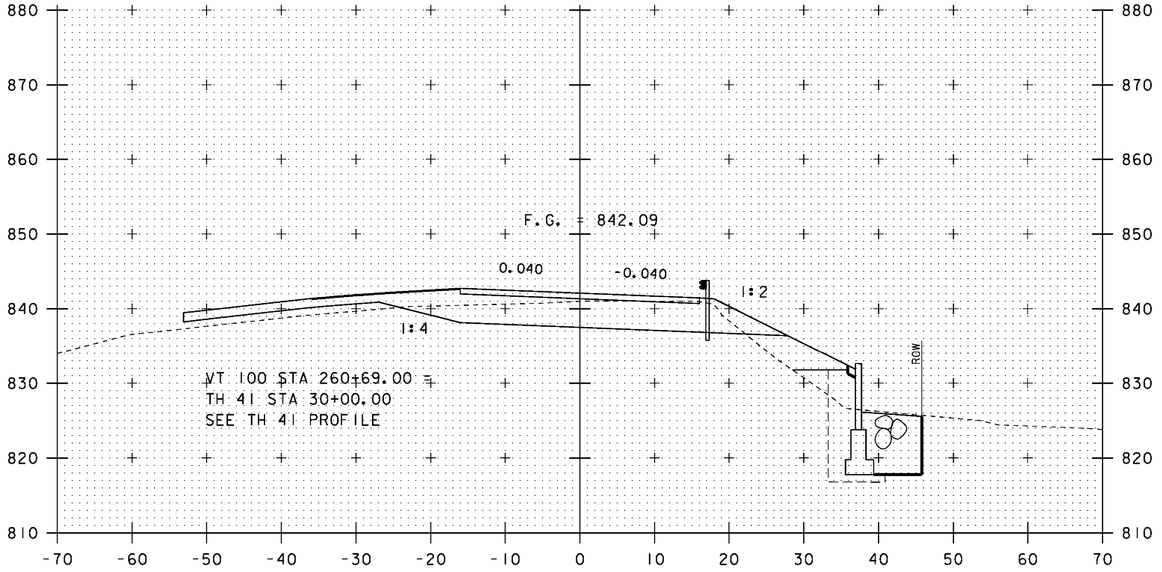
PROJECT NAME: PITTSFIELD-STOCKBRIDGE
PROJECT NUMBER: STP 022-1(22)S

FILE NAME: s00b122xsl.dgn
PROJECT LEADER: C. P. WILLIAMS
DESIGNED BY: G. ROY
VT 100 CROSS SECTIONS (3)

PLOT DATE: 02-SEP-2011
DRAWN BY: G. ROY
CHECKED BY: R. YOUNG
SHEET 36 OF 41

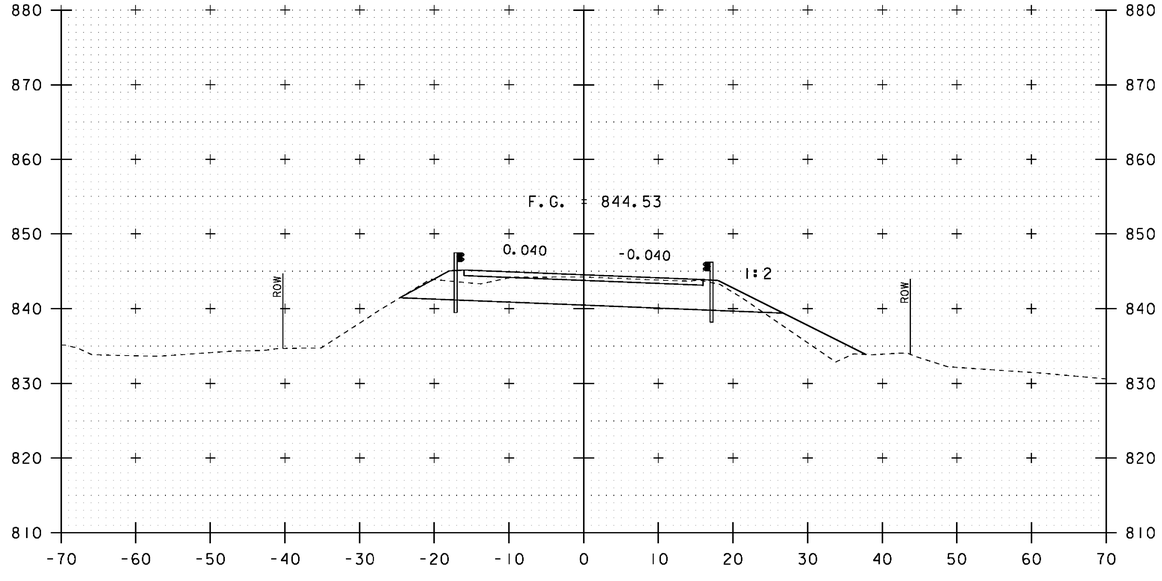


260+00

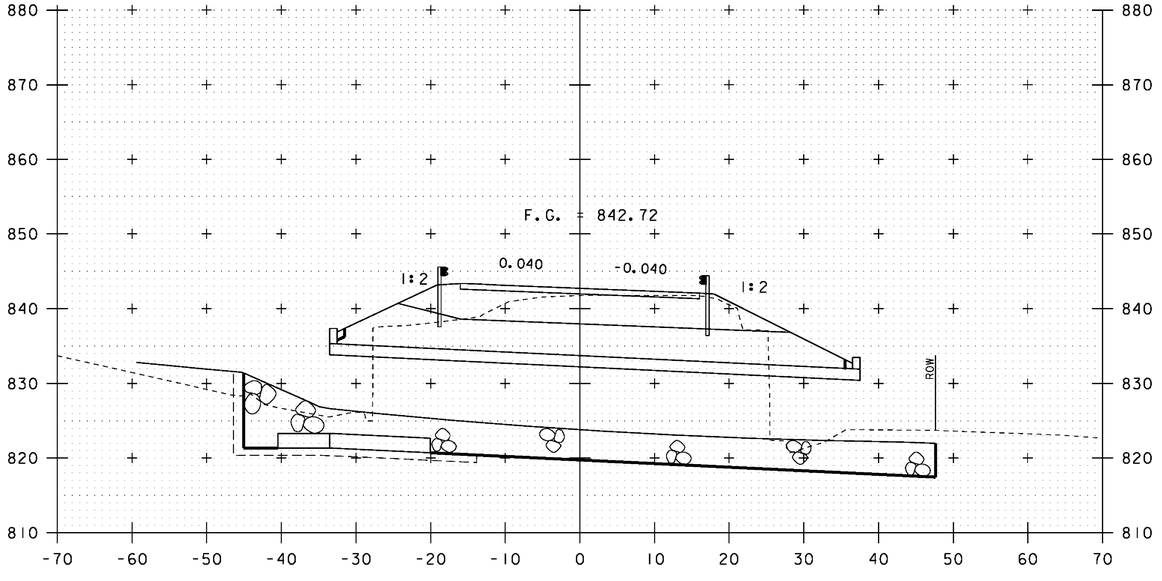


260+50

END BRIDGE
STA 260+35.05



259+75



260+25

BEGIN BRIDGE
STA 260+08.63

NOTE: REVISED SHEET
FOR POST IRENE

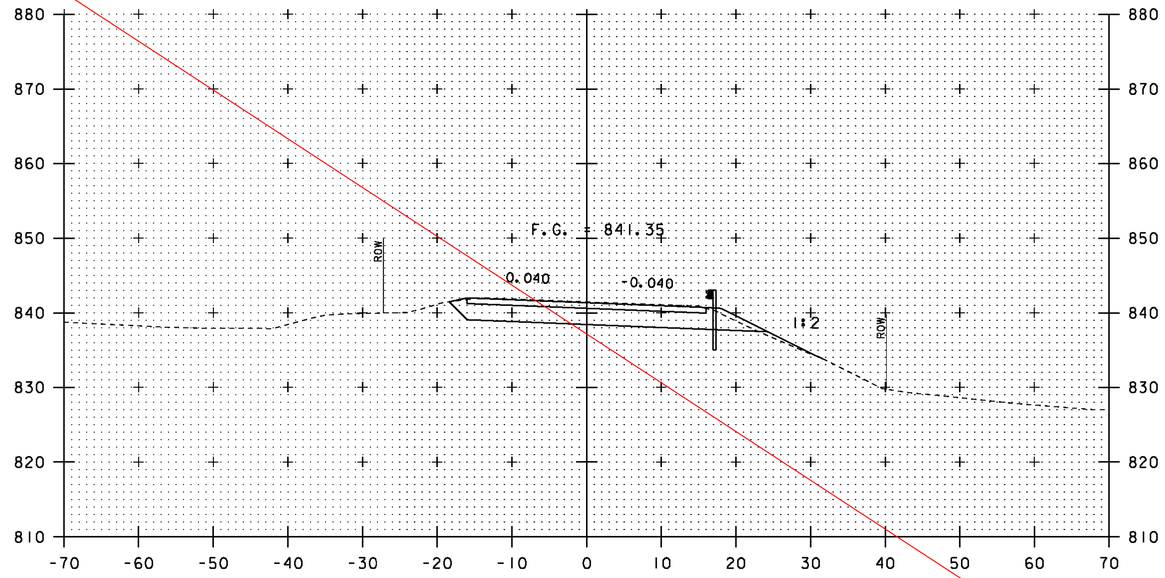
10 0 10
SCALE: 1" = 10'-0"

STA. 259+75 TO STA. 260+50

PROJECT NAME: PITTSFIELD-STOCKBRIDGE
PROJECT NUMBER: STP 022-1(22)S

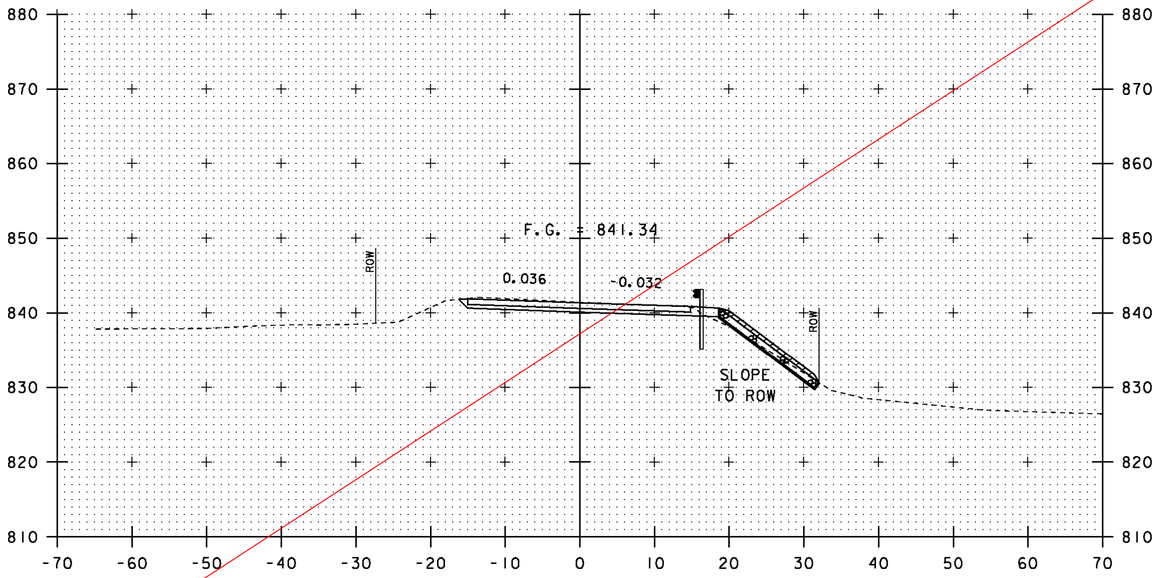
FILE NAME: s00b122xsl.dgn
PROJECT LEADER: C. P. WILLIAMS
DESIGNED BY: G. ROY
VT 100 CROSS SECTIONS (3)

PLOT DATE: 26-OCT-2011
DRAWN BY: G. ROY
CHECKED BY: R. YOUNG
SHEET 36 OF 41

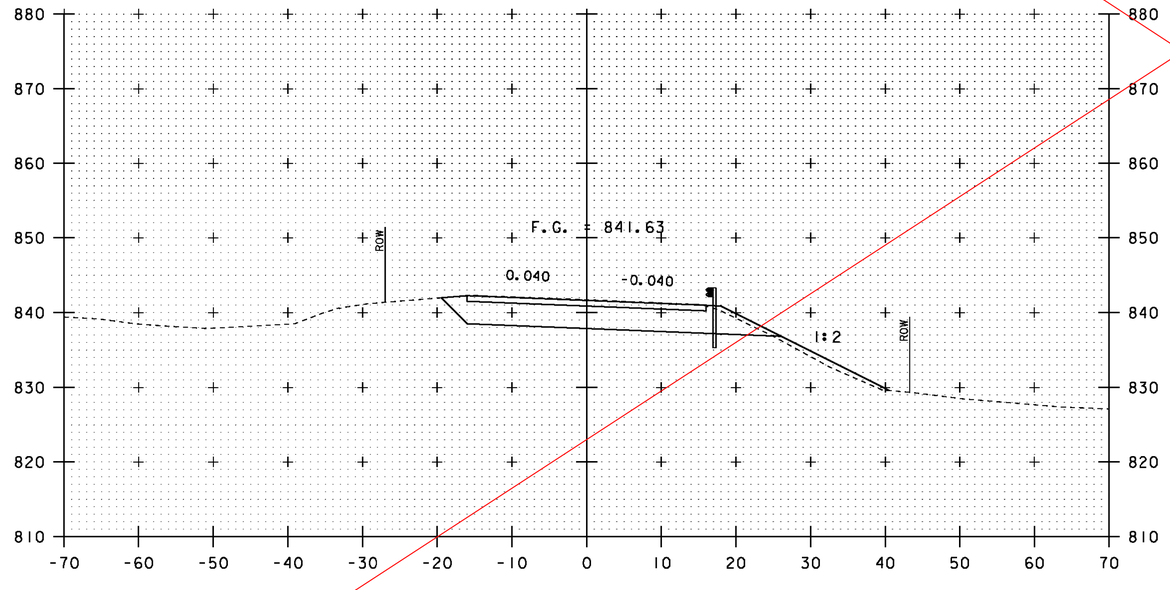


261+00

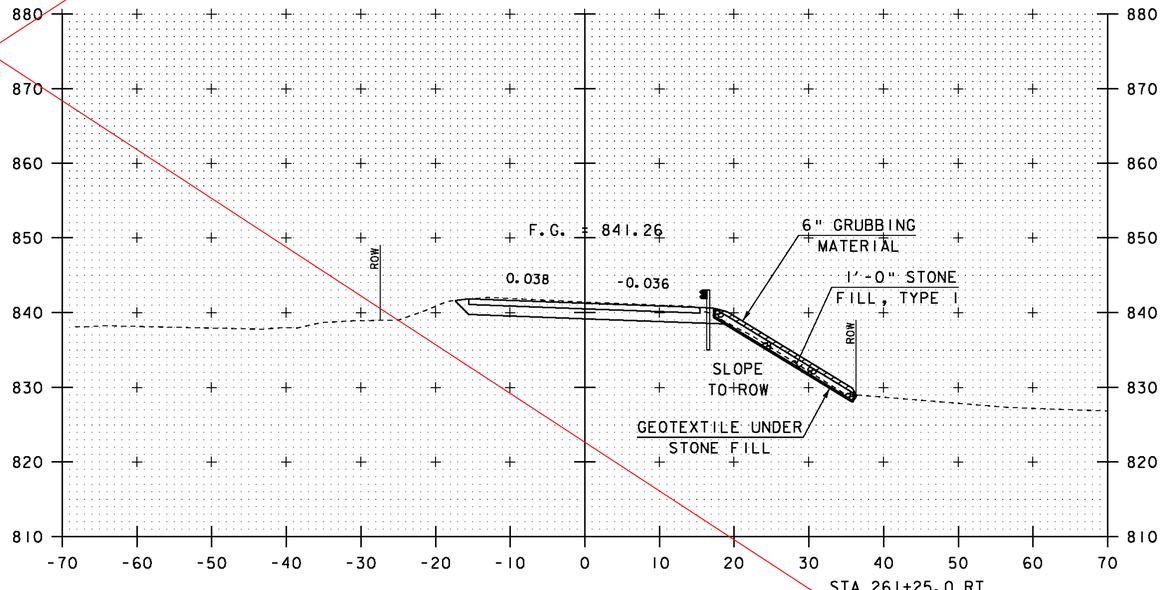
END PROJECT
BEGIN APPROACH
STA 261+00.00



261+50



260+75



261+25

STA 261+25.0 RT
BEGIN GEOTEXTILE UNDER STONE FILL
STONE FILL, TYPE I
GRUBBING MATERIAL

NOTE: SEE REVISED SHEET
DATED 26-OCT-2011
FOR POST IRENE REVISIONS

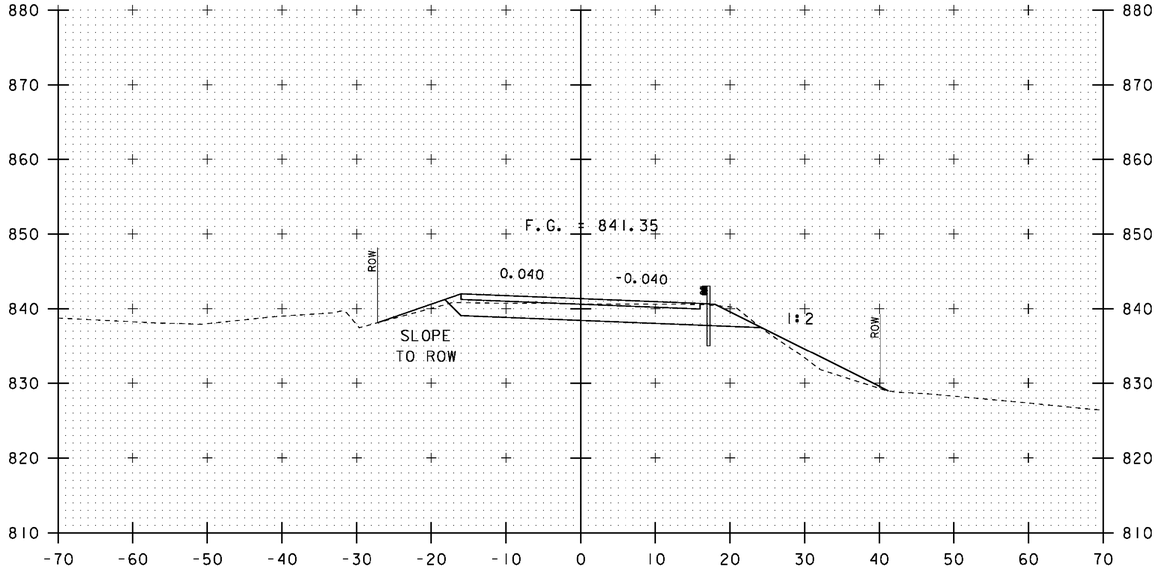
10 0 10
SCALE: 1" = 10'-0"

STA. 260+75 TO STA. 261+50

PROJECT NAME: PITTSFIELD-STOCKBRIDGE
PROJECT NUMBER: STP 022-1(22)S

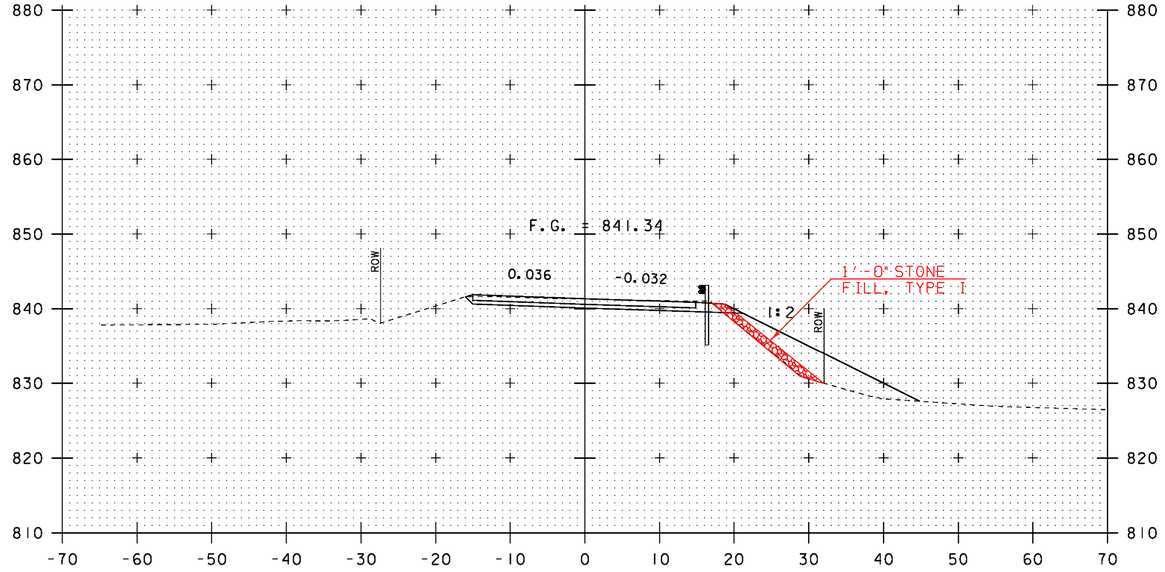
FILE NAME: s00b122xsl.dgn
PROJECT LEADER: C. P. WILLIAMS
DESIGNED BY: G. ROY
VT 100 CROSS SECTIONS (4)

PLOT DATE: 02-SEP-2011
DRAWN BY: G. ROY
CHECKED BY: R. YOUNG
SHEET 37 OF 41

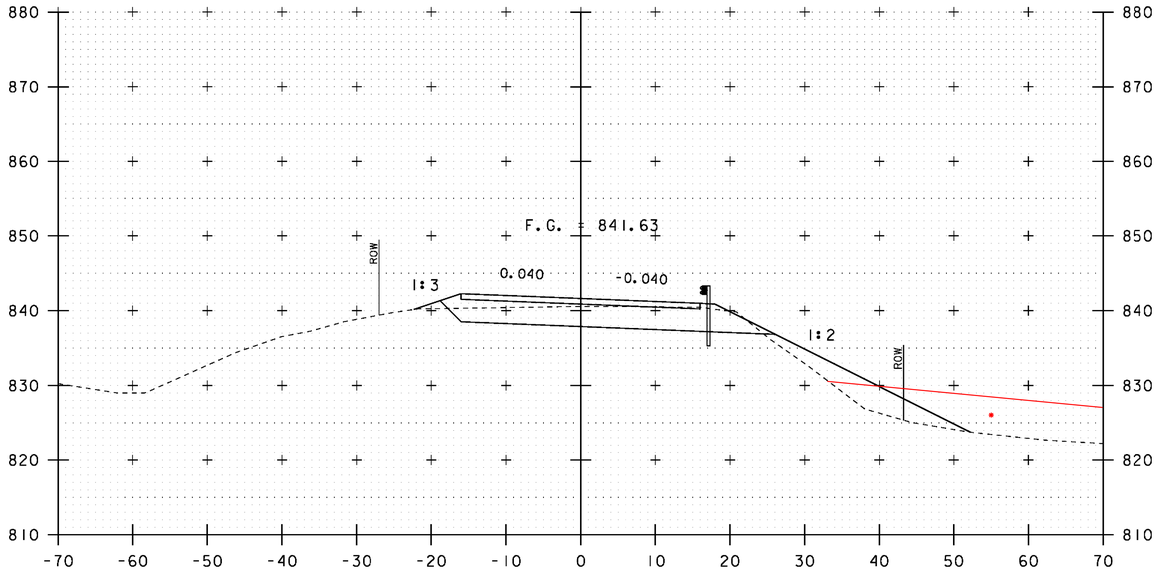


261+00

END PROJECT
BEGIN APPROACH
STA 261+00.00

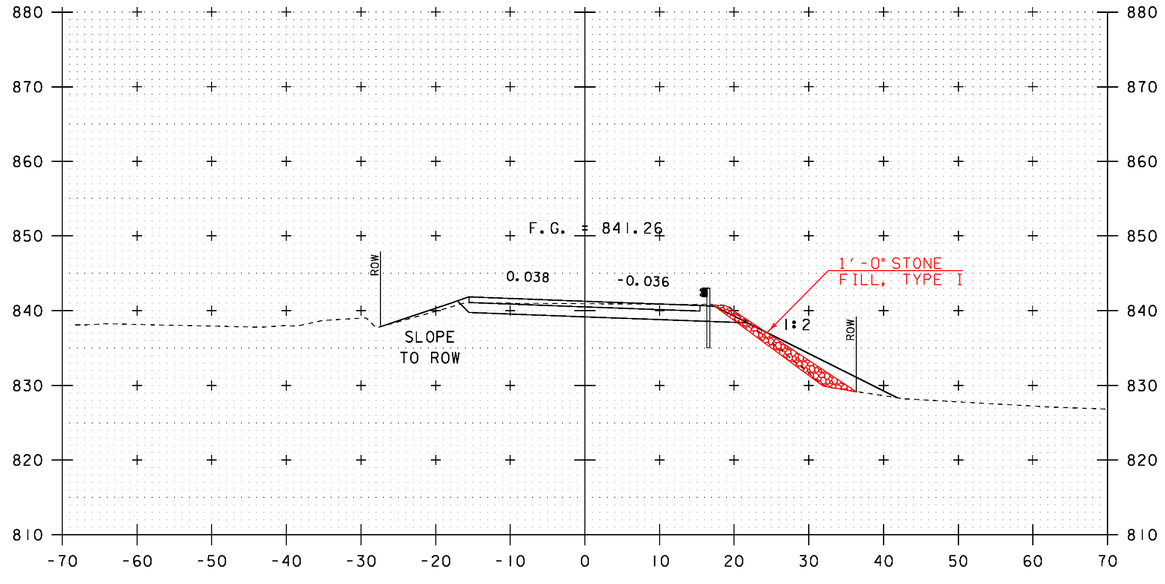


261+50



260+75

*MATERIAL FROM STAGING LEFT IN PLACE TO RE-ESTABLISH RIPARIAN AREA



261+25

NOTE: REVISED SHEET
FOR POST IRENE

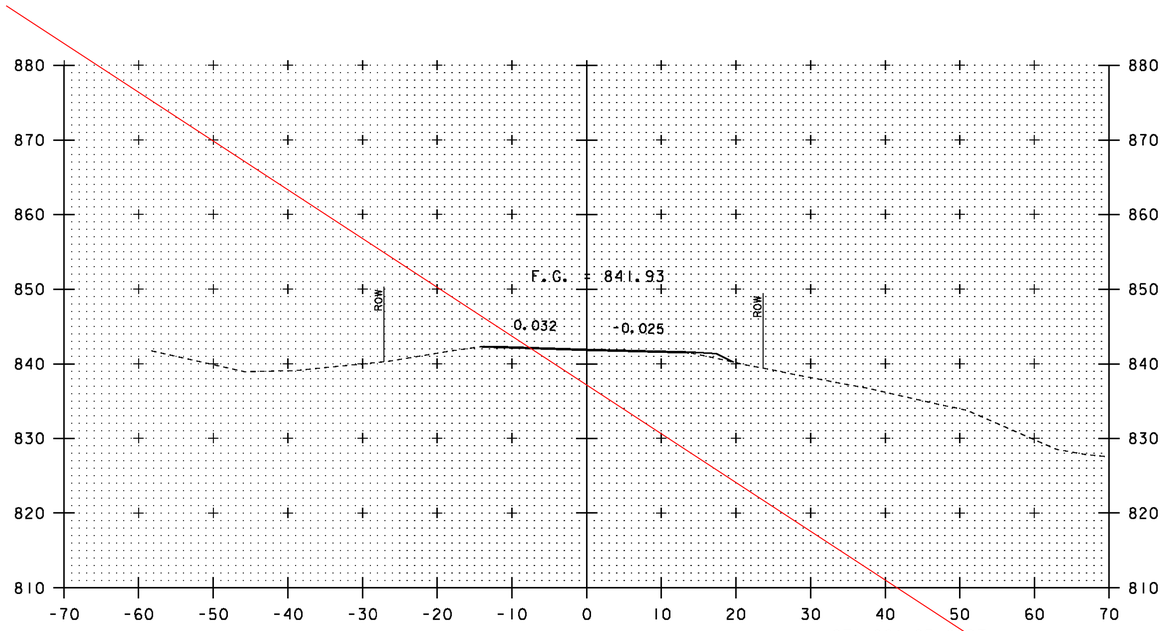
10 0 10
SCALE: 1" = 10'-0"

STA. 260+75 TO STA. 261+50

PROJECT NAME: PITTSFIELD-STOCKBRIDGE
PROJECT NUMBER: STP 022-1(22)S

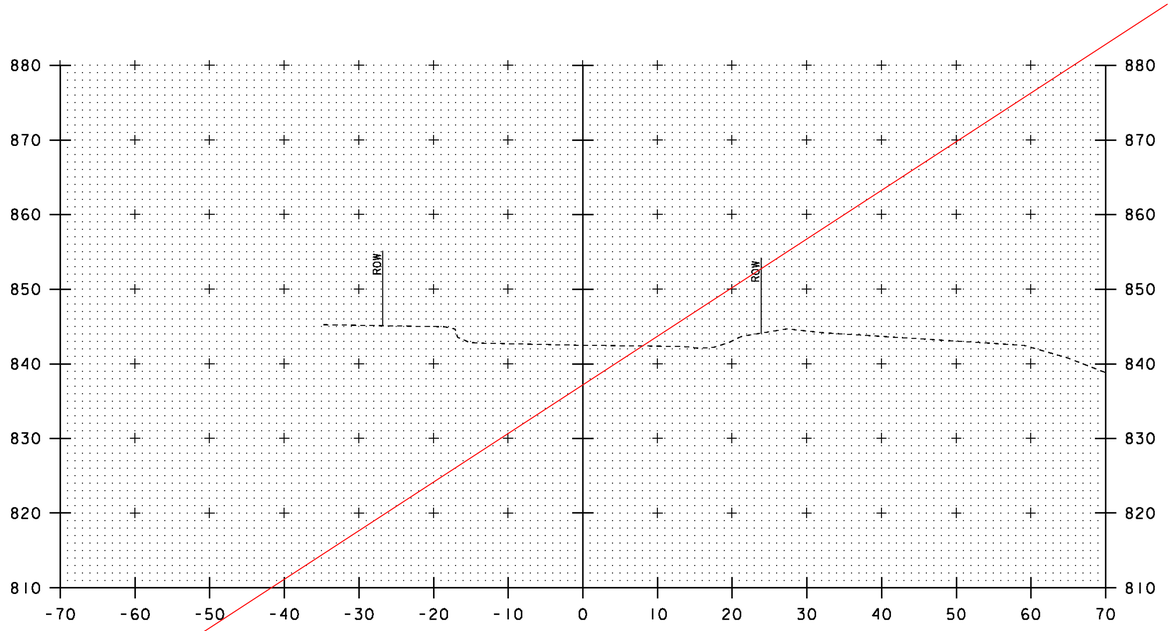
FILE NAME: s00b122xsl.dgn
PROJECT LEADER: C. P. WILLIAMS
DESIGNED BY: G. ROY
VT 100 CROSS SECTIONS (4)

PLOT DATE: 26-OCT-2011
DRAWN BY: G. ROY
CHECKED BY: R. YOUNG
SHEET 37 OF 41

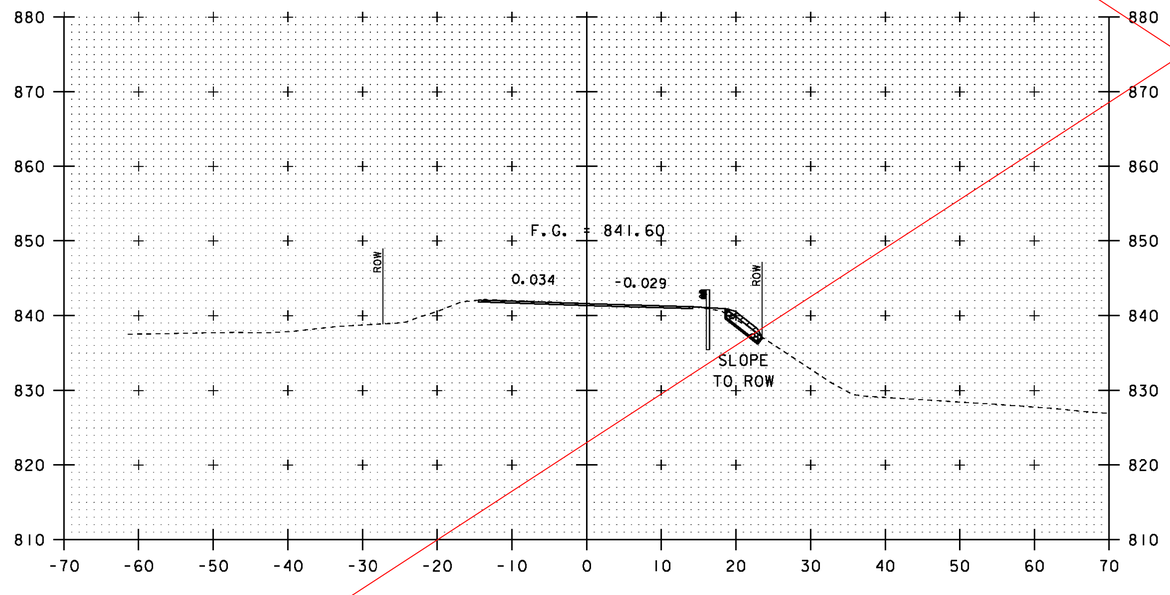


262+00

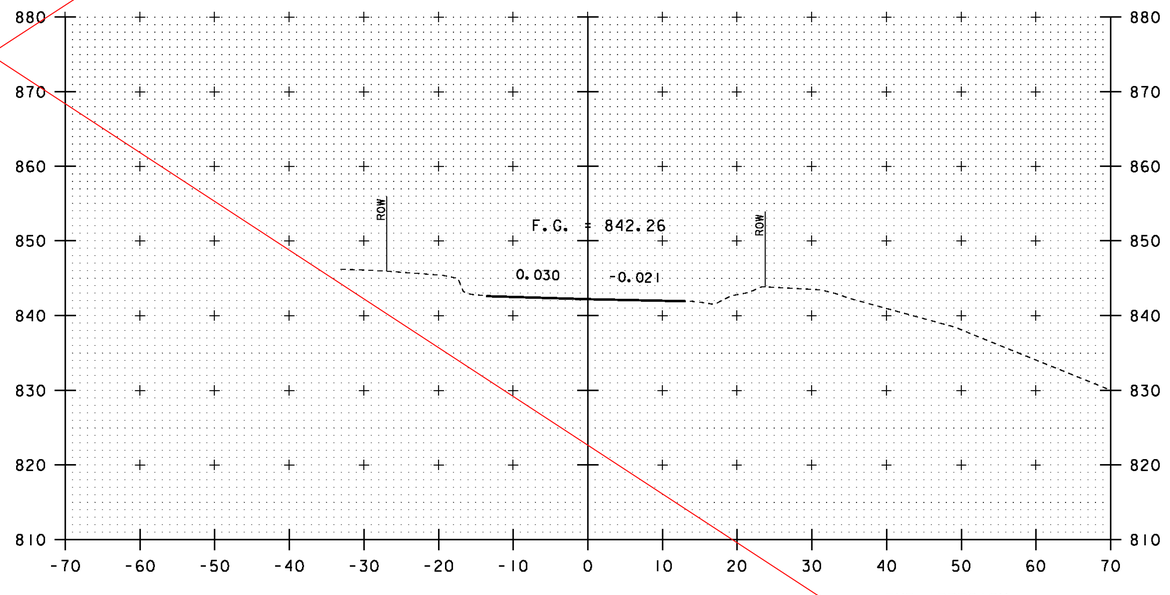
STA 261+95.0 RT
END GEOTEXTILE UNDER STONE FILL
STONE FILL, TYPE I
GRUBBING MATERIAL



262+50



261+75



262+25

END APPROACH
MATCH EXISTING
STA 262+25.00

NOTE: SEE REVISED SHEET
DATED 26-OCT-2011
FOR POST IRENE REVISIONS

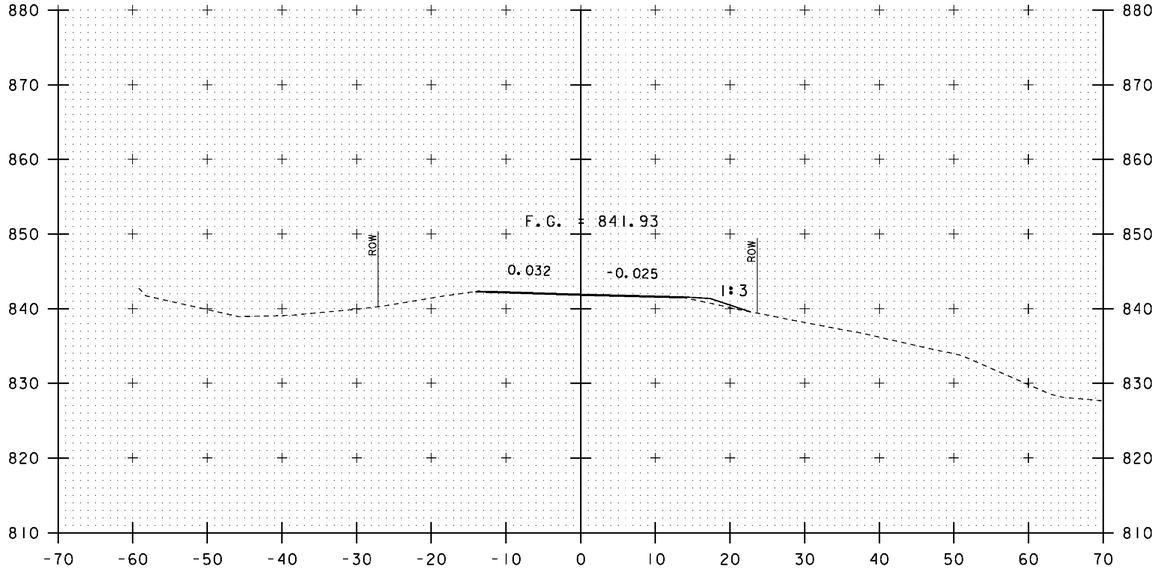
10 0 10
SCALE: 1" = 10'-0"

STA. 261+75 TO STA. 262+50

PROJECT NAME: PITTSFIELD-STOCKBRIDGE
PROJECT NUMBER: STP 022-1(22)S

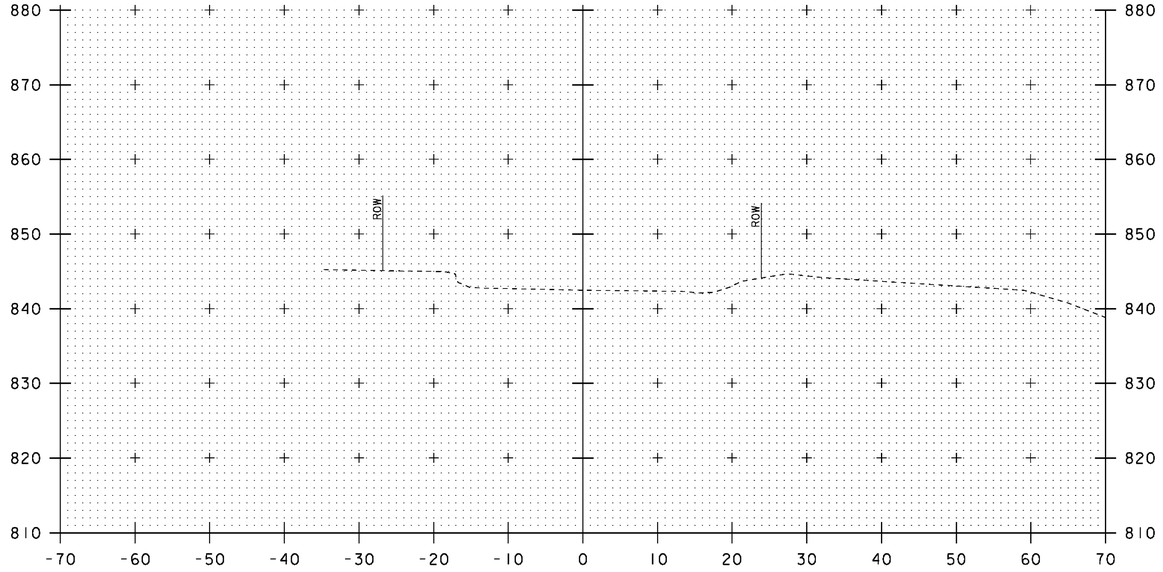
FILE NAME: s00b122xsl.dgn
PROJECT LEADER: C. P. WILLIAMS
DESIGNED BY: G. ROY
VT 100 CROSS SECTIONS (5)

PLOT DATE: 02-SEP-2011
DRAWN BY: G. ROY
CHECKED BY: R. YOUNG
SHEET 38 OF 41

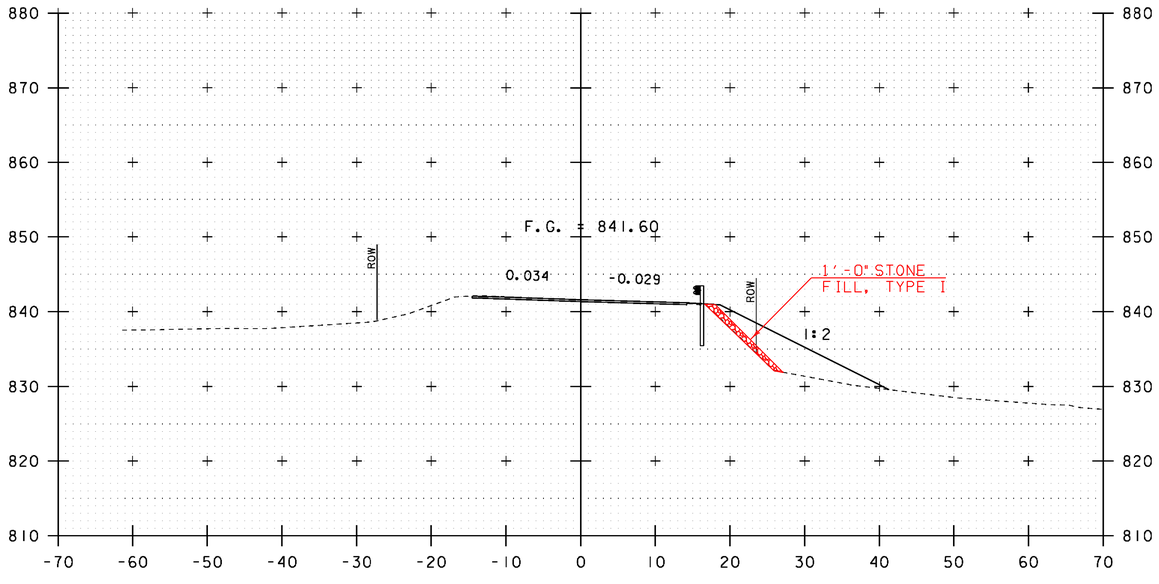


262+00

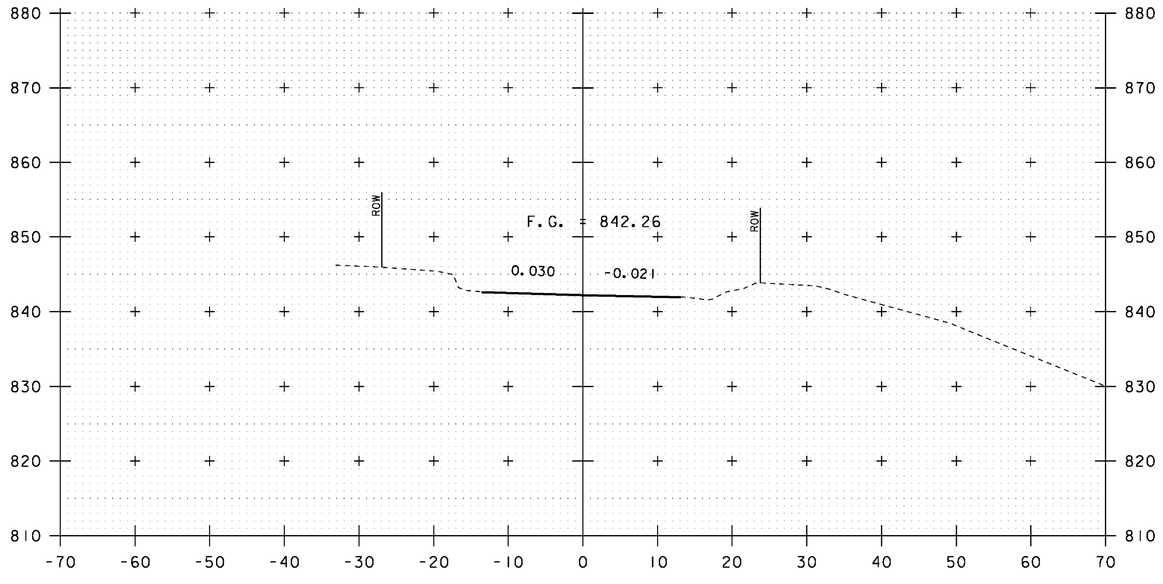
STONE FILL, TYPE I
ENDS AT 261+96 RT
11' WIDE



262+50



261+75



262+25

END APPROACH
MATCH EXISTING
STA 262+25.00

NOTE: REVISED SHEET
FOR POST IRENE

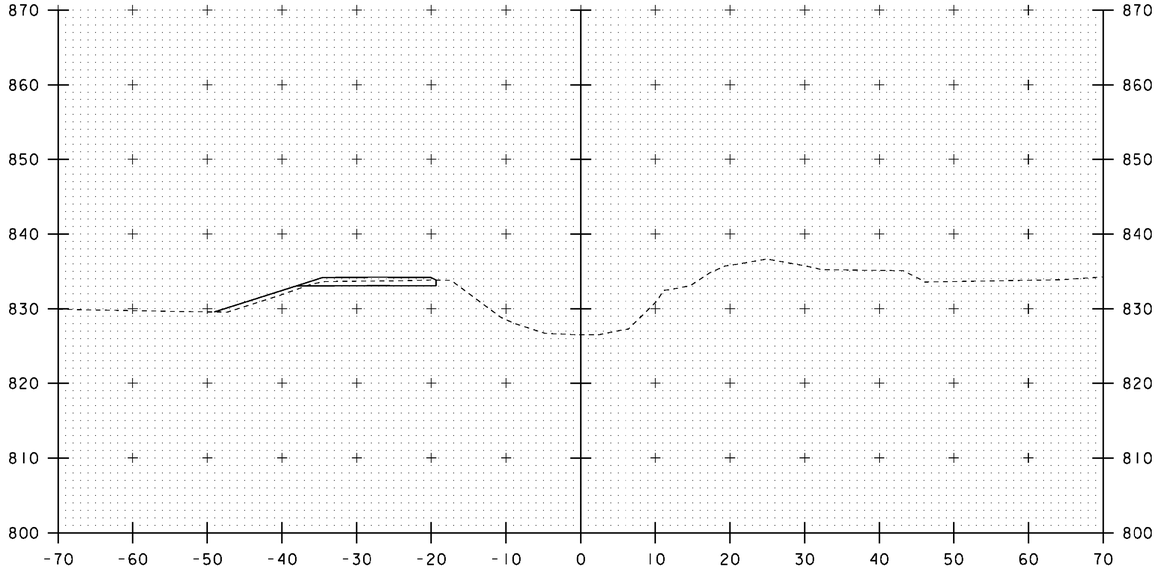
10 0 10
SCALE: 1" = 10'-0"

STA. 261+75 TO STA. 262+50

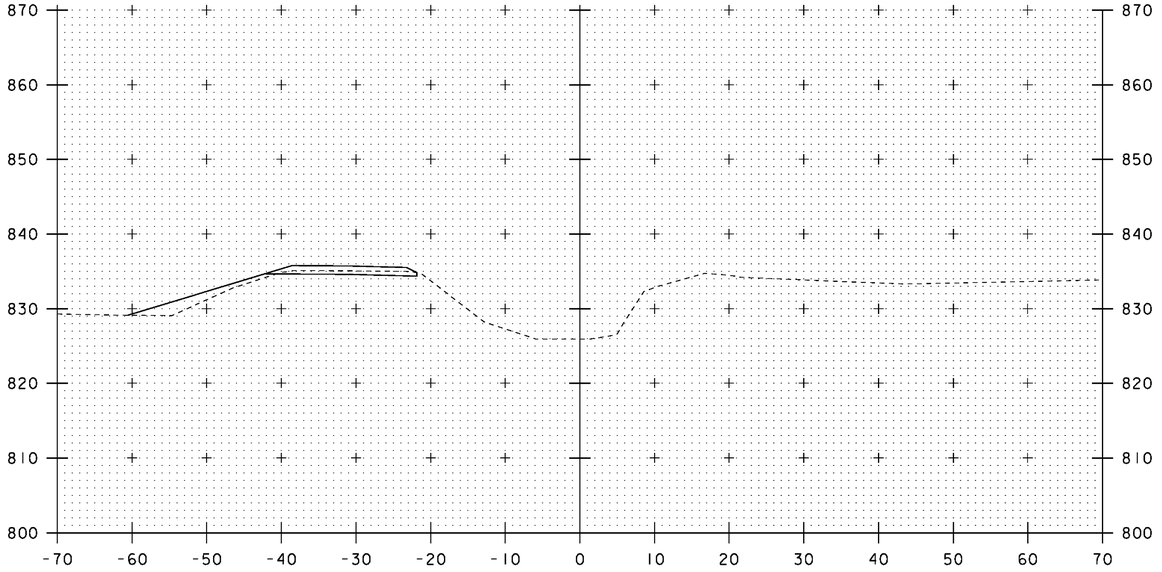
PROJECT NAME: PITTSFIELD-STOCKBRIDGE
PROJECT NUMBER: STP 022-1(22)S

FILE NAME: s00b122xsl.dgn
PROJECT LEADER: C. P. WILLIAMS
DESIGNED BY: G. ROY
VT 100 CROSS SECTIONS (5)

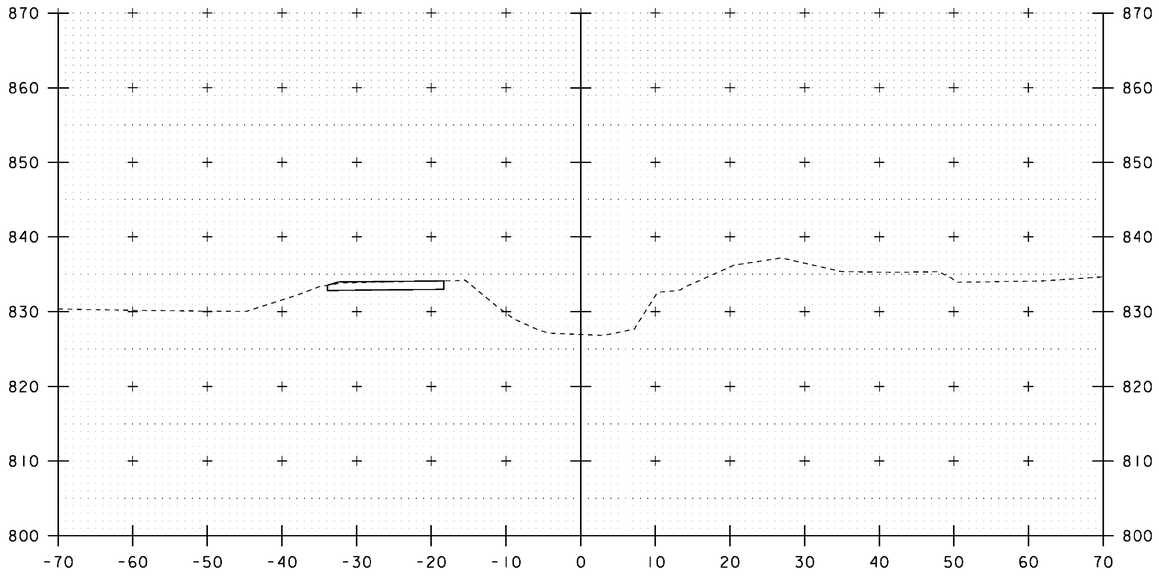
PLOT DATE: 26-OCT-2011
DRAWN BY: G. ROY
CHECKED BY: R. YOUNG
SHEET 38 OF 41



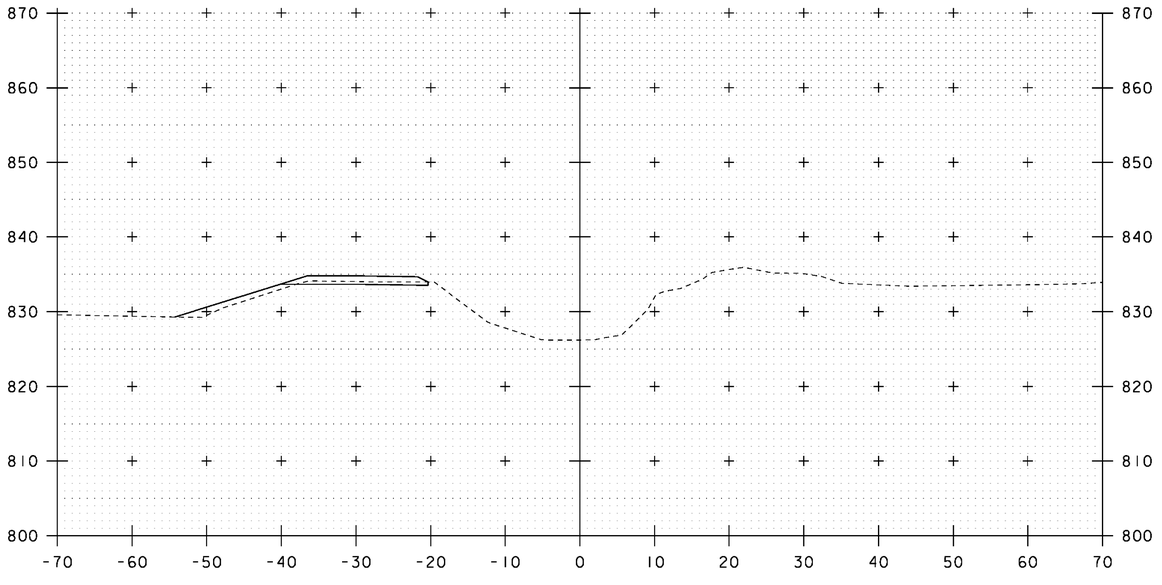
10+70



10+90



10+60



10+80

NOTE: REVISED SHEET FOR POST IRENE

10 0 10

SCALE: 1" = 10'-0"

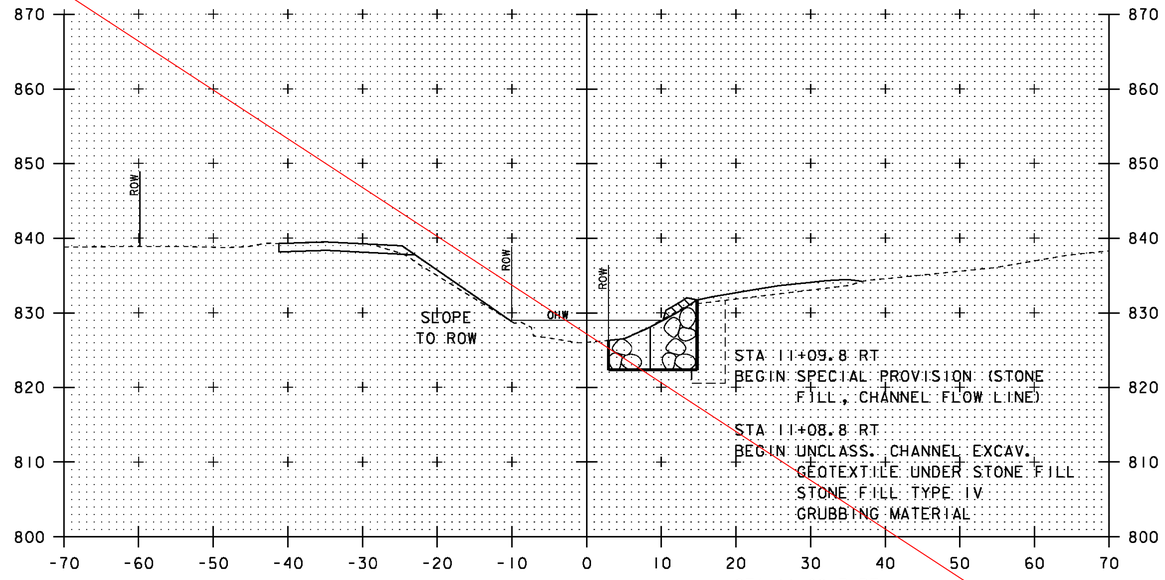
STA. 10+60 TO STA. 10+90

PROJECT NAME: PITTSFIELD-STOCKBRIDGE

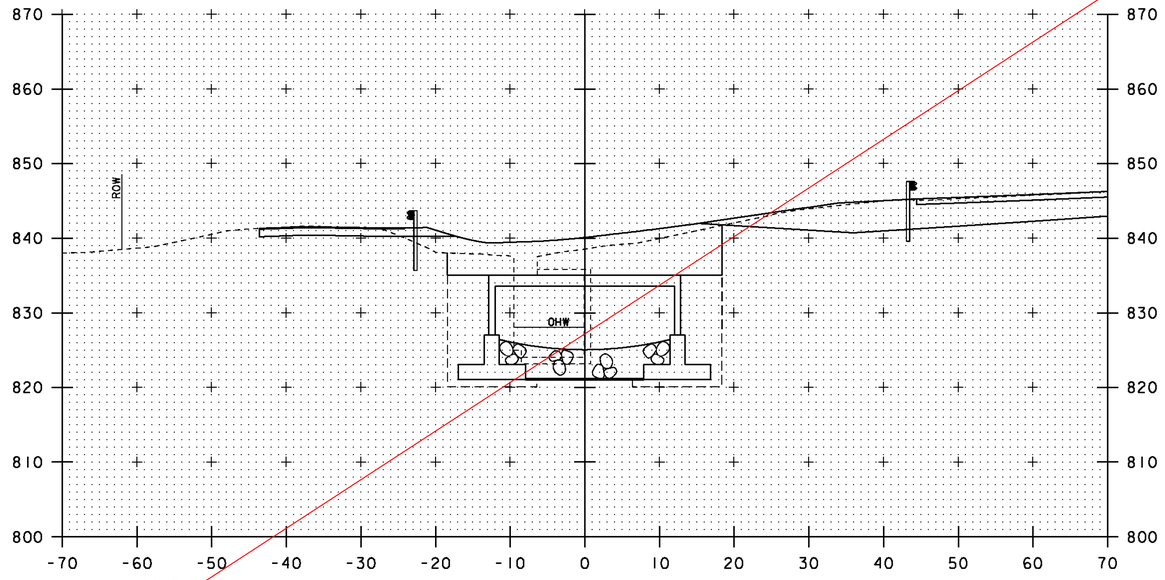
PROJECT NUMBER: STP 022-1(22)S

FILE NAME: s00b122xsl.dgn
PROJECT LEADER: C. P. WILLIAMS
DESIGNED BY: G. ROY
CHANNEL CROSS SECTIONS (1A)

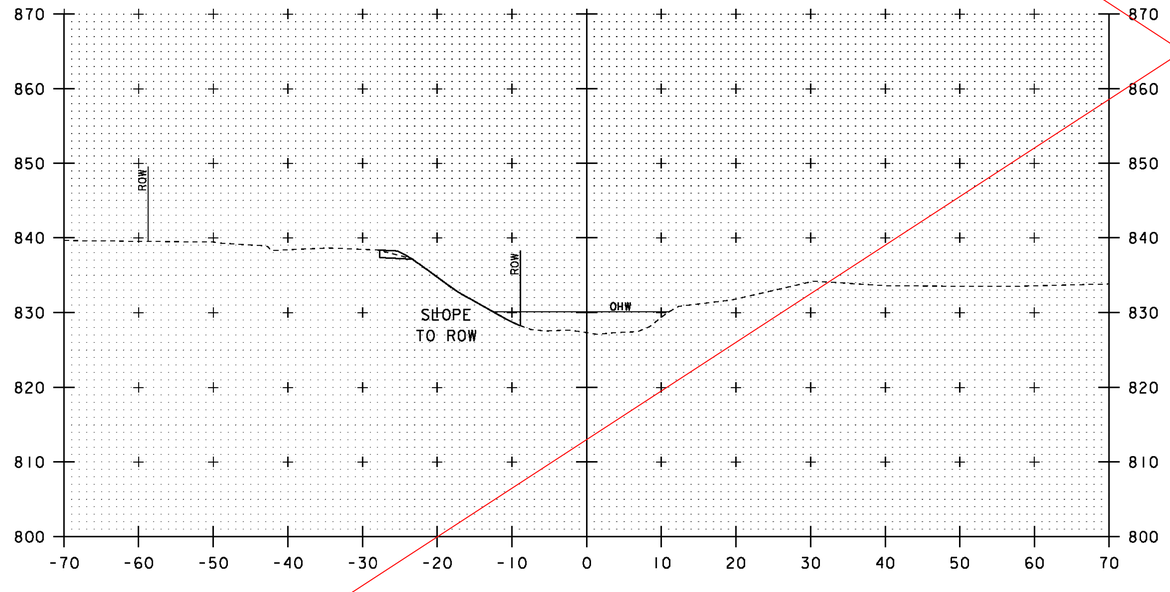
PLOT DATE: 27-OCT-2011
DRAWN BY: G. ROY
CHECKED BY: R. YOUNG



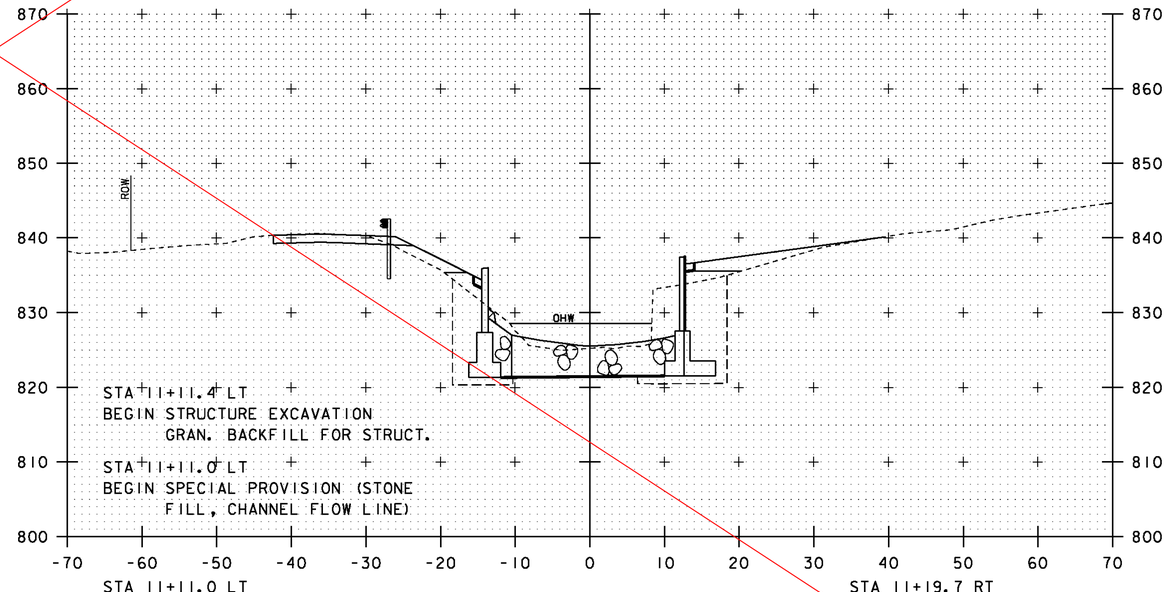
11+10



11+30



11+00



11+20

NOTE: SEE REVISED SHEET
DATED 27-OCT-2011
FOR POST IRENE REVISIONS

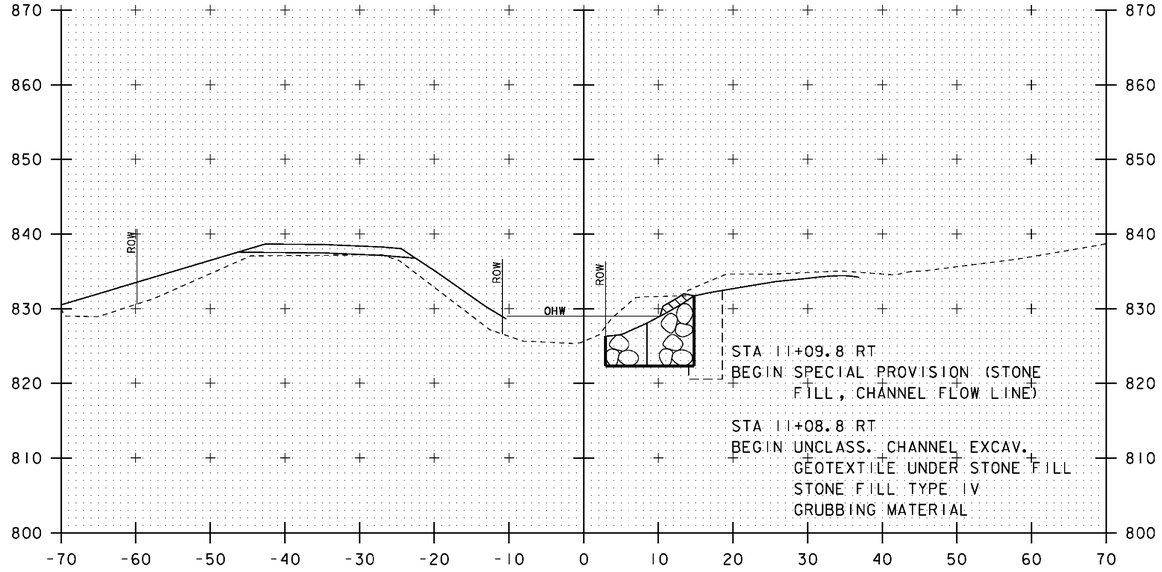
10 0 10
SCALE: 1" = 10'-0"

STA. 11+00 TO STA. 11+30

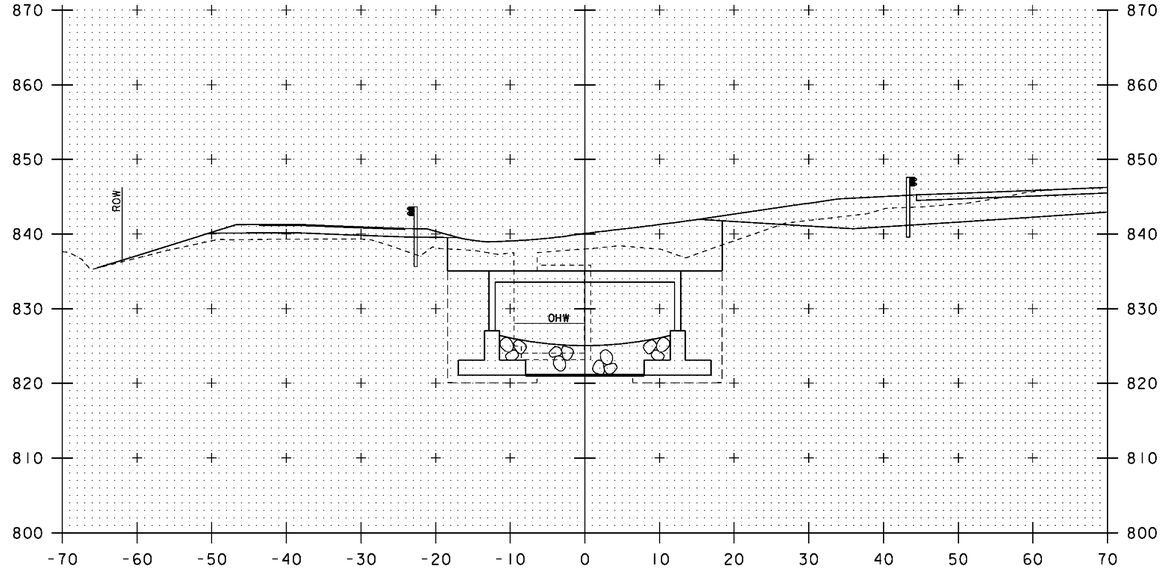
PROJECT NAME: PITTSFIELD-STOCKBRIDGE
PROJECT NUMBER: STP 022-1(22)S

FILE NAME: s00b122xsl.dgn
PROJECT LEADER: C. P. WILLIAMS
DESIGNED BY: G. ROY
CHANNEL CROSS SECTIONS (1)

PLOT DATE: 02-SEP-2011
DRAWN BY: G. ROY
CHECKED BY: R. YOUNG
SHEET 39 OF 41



11+10



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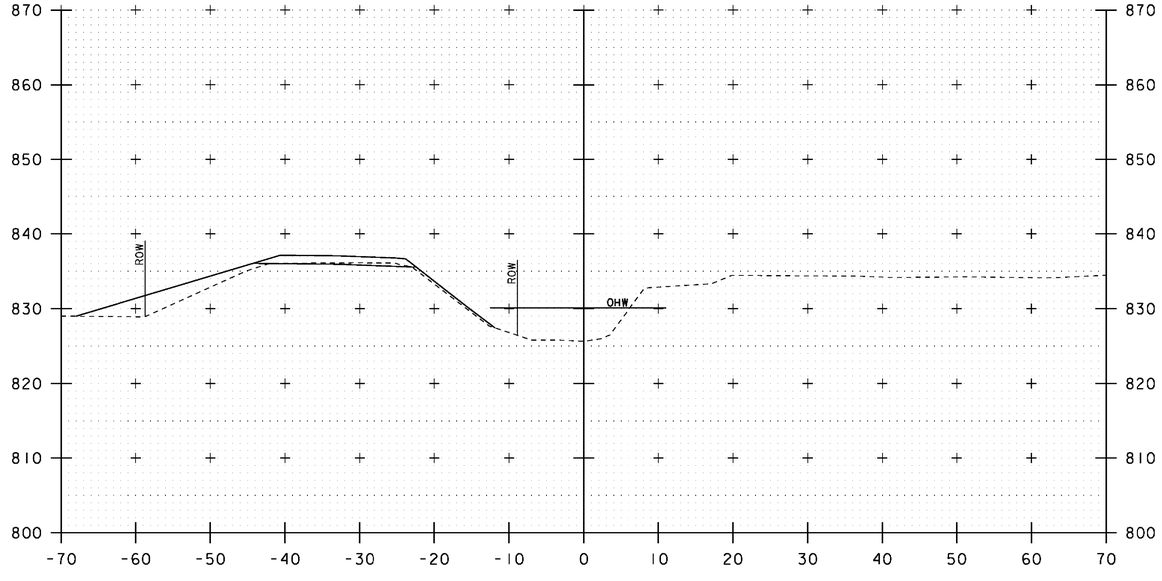

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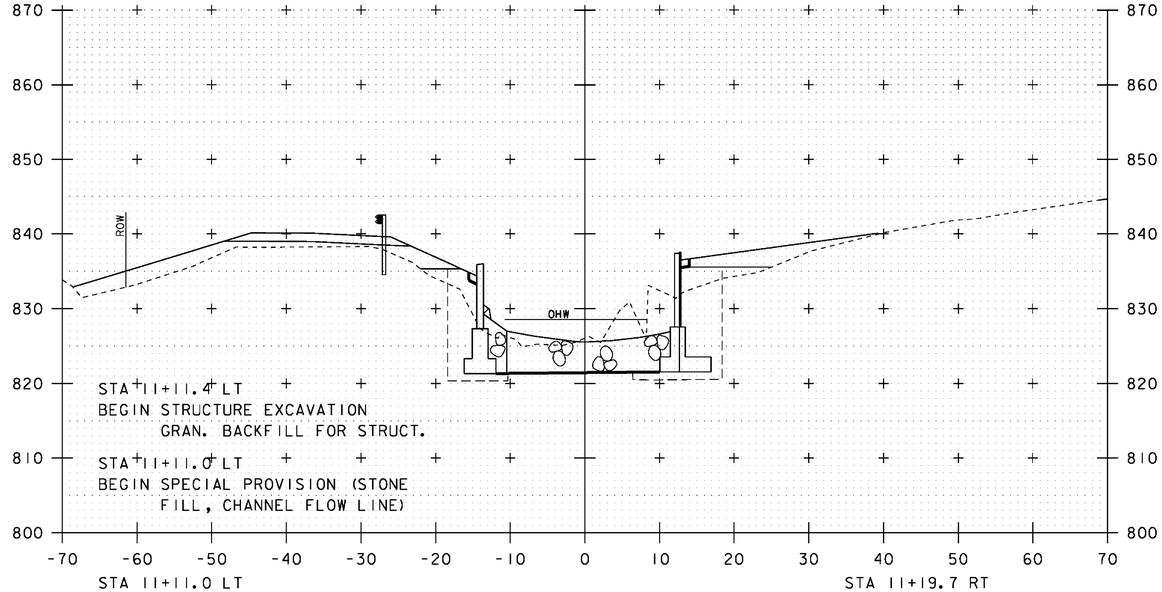


11+20

NOTE: REVISED SHEET FOR POST IRENE

10 0 10

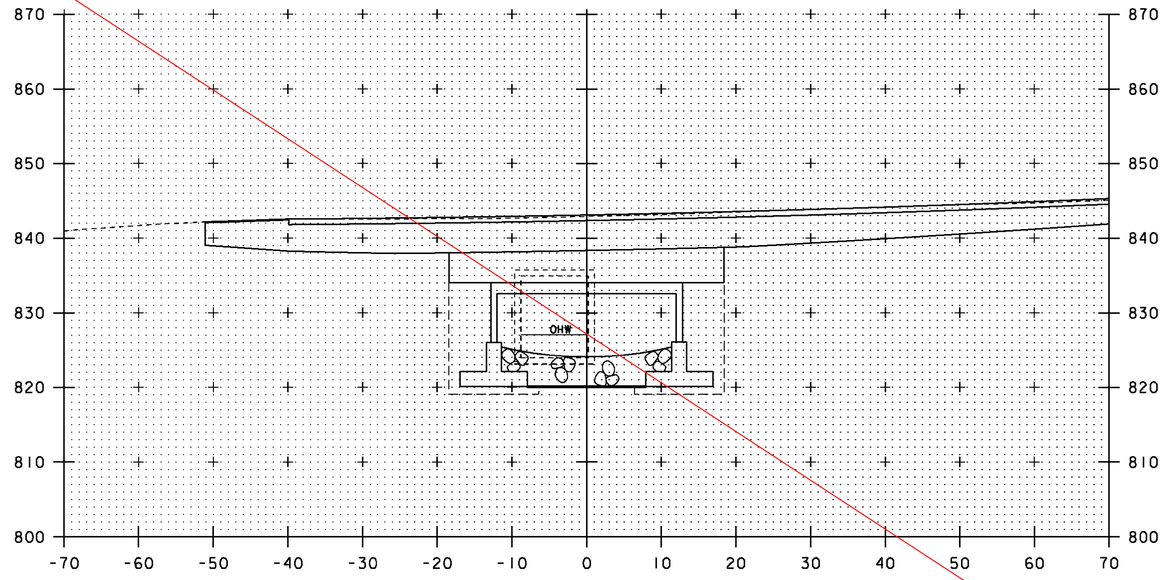
SCALE: 1" = 10'-0"

STA. 11+00 TO STA. 11+30

PROJECT NAME: PITTSFIELD-STOCKBRIDGE
PROJECT NUMBER: STP 022-1(22)S

FILE NAME: s00b122xsl.dgn
PROJECT LEADER: C. P. WILLIAMS
DESIGNED BY: G. ROY
CHANNEL CROSS SECTIONS (1)

PLOT DATE: 27-OCT-2011
DRAWN BY: G. ROY
CHECKED BY: R. YOUNG
SHEET 39 OF 41



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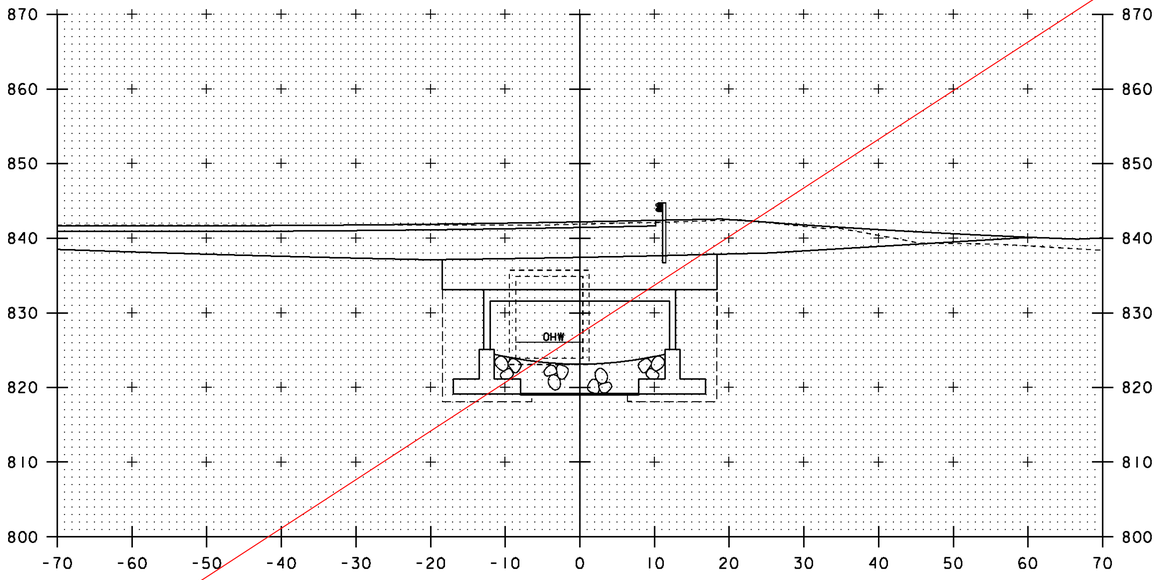

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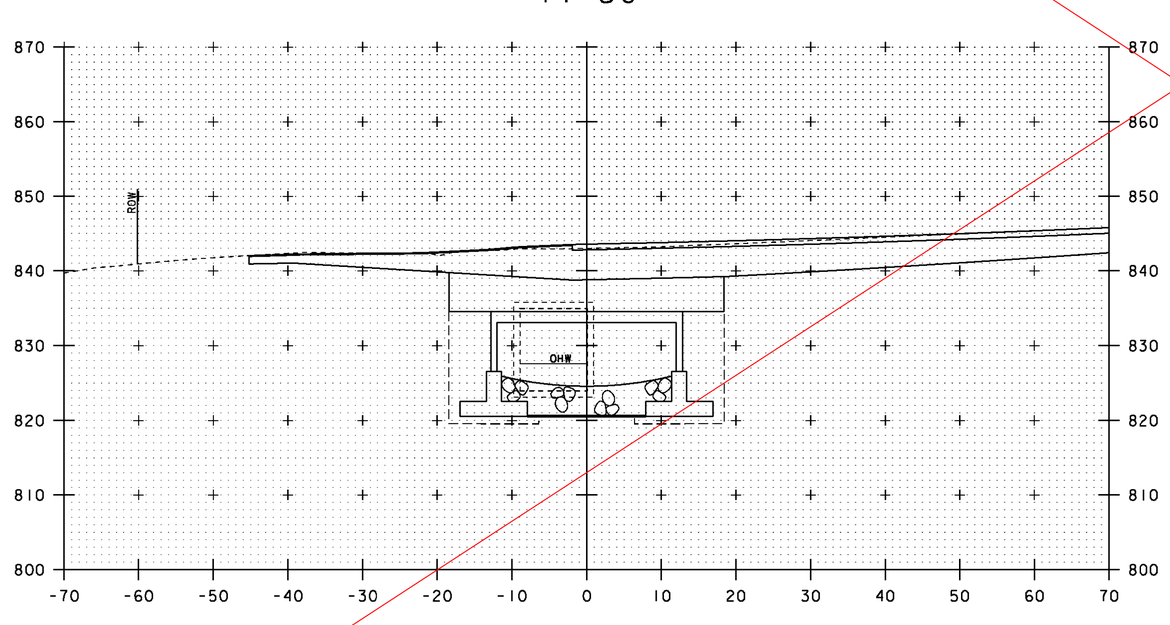

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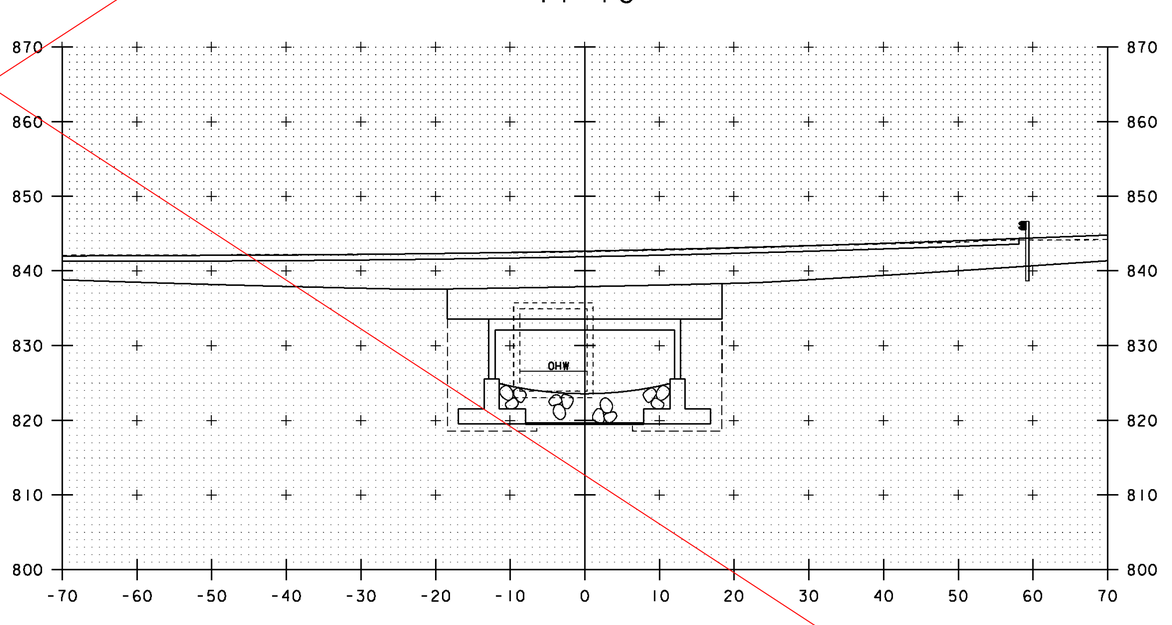


11+60

NOTE: SEE REVISED SHEET
DATED 27-OCT-2011
FOR POST IRENE REVISIONS

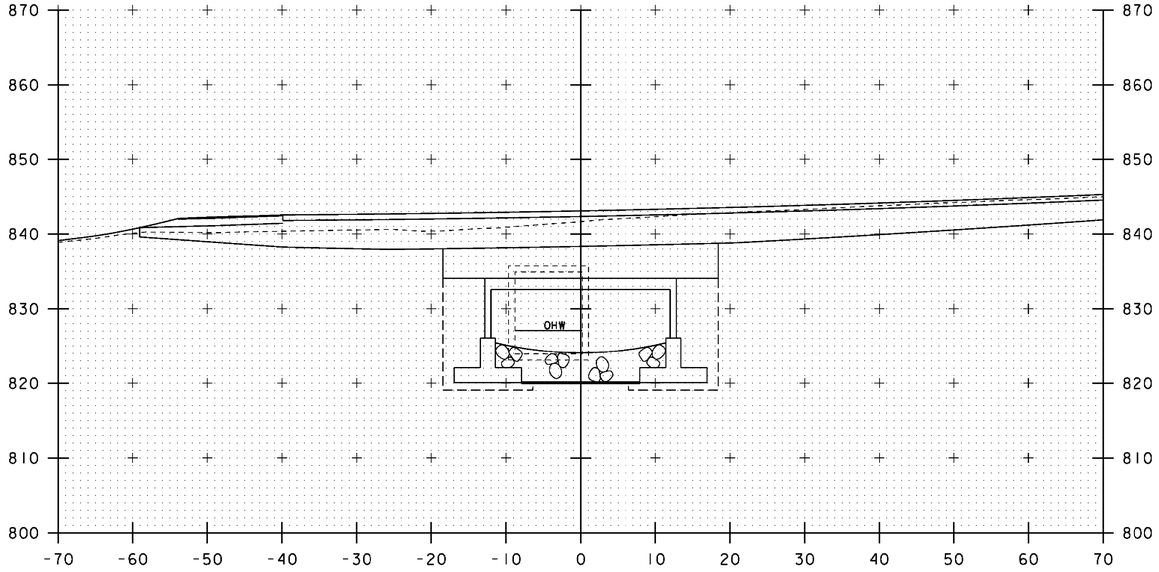
10 0 10
SCALE: 1" = 10'-0"

STA. 11+40 TO STA. 11+70

PROJECT NAME: PITTSFIELD-STOCKBRIDGE
PROJECT NUMBER: STP 022-1(22)S

FILE NAME: s00b122xsl.dgn
PROJECT LEADER: C. P. WILLIAMS
DESIGNED BY: G. ROY
CHANNEL CROSS SECTIONS (2)

PLOT DATE: 02-SEP-2011
DRAWN BY: G. ROY
CHECKED BY: R. YOUNG
SHEET 40 OF 41



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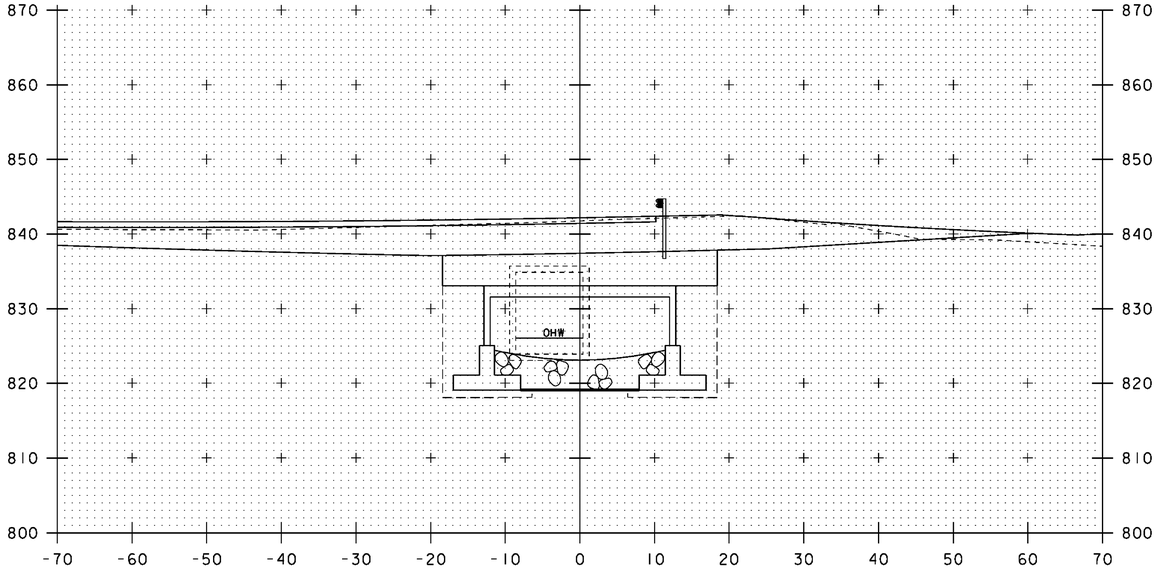

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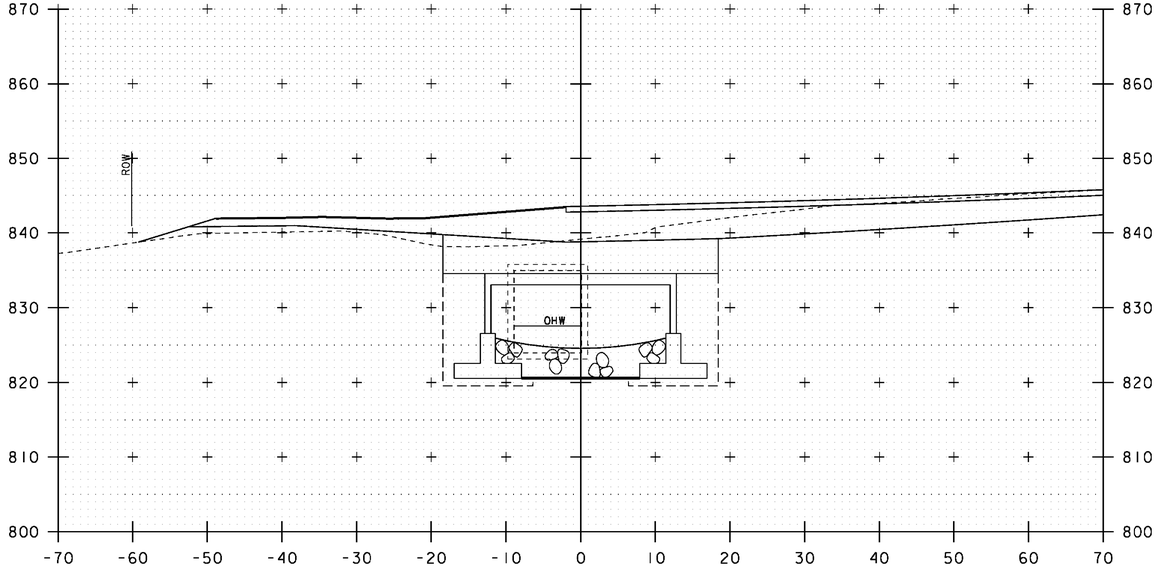

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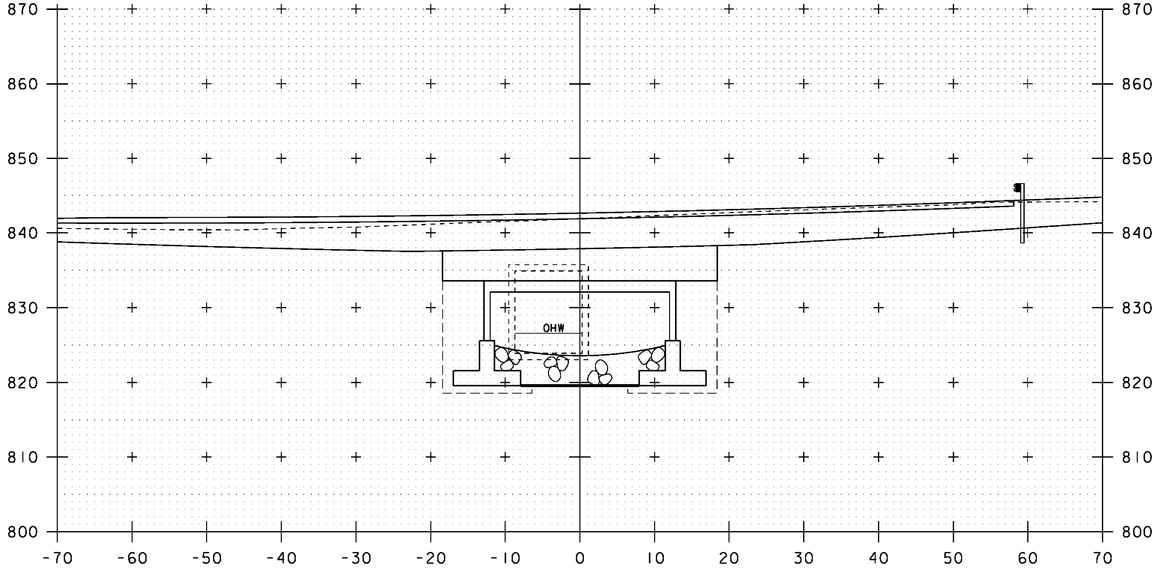


11+60

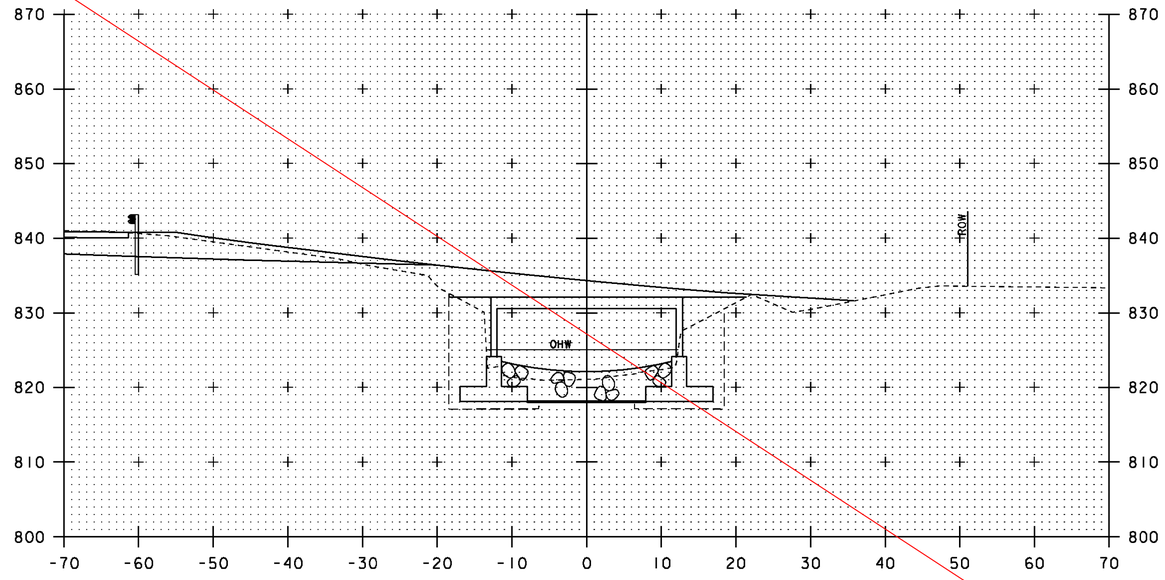
NOTE: REVISED SHEET FOR POST IRENE

10 0 10

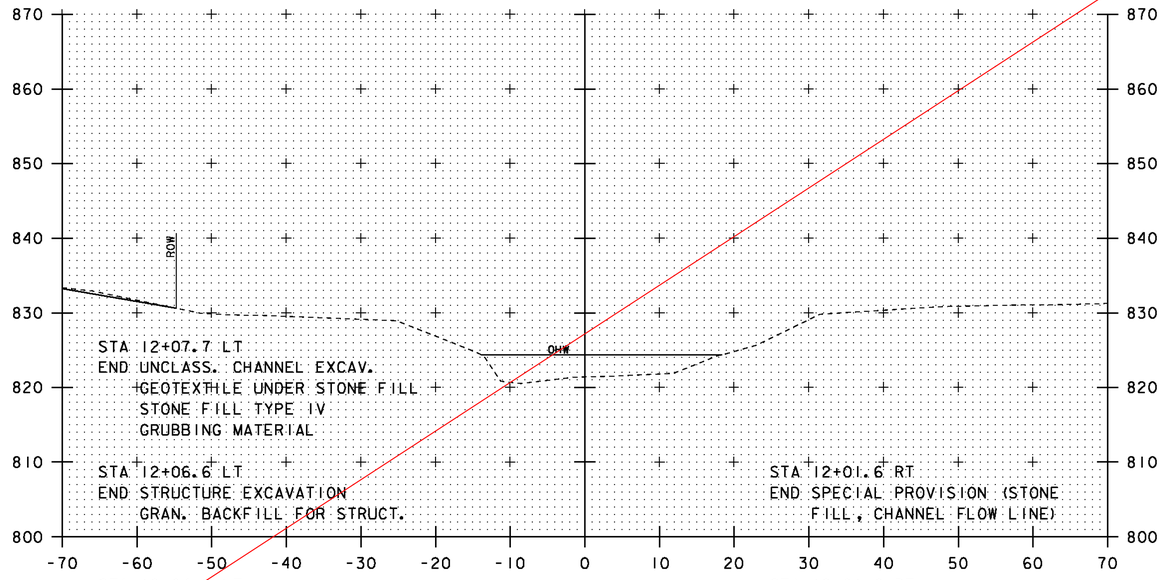
SCALE: 1" = 10'-0"

STA. 11+40 TO STA. 11+70

PROJECT NAME:	PITTSFIELD-STOCKBRIDGE
PROJECT NUMBER:	STP 022-1(22)S
FILE NAME: s00b122xsl.dgn	PLOT DATE: 27-OCT-2011
PROJECT LEADER: C. P. WILLIAMS	DRAWN BY: G. ROY
DESIGNED BY: G. ROY	CHECKED BY: R. YOUNG
CHANNEL CROSS SECTIONS (2)	SHEET 40 OF 41



11+90



STA 12+07.7 LT
END UNCLASS. CHANNEL EXCAV.
GEOTEXTILE UNDER STONE FILL
STONE FILL TYPE IV
GRUBBING MATERIAL

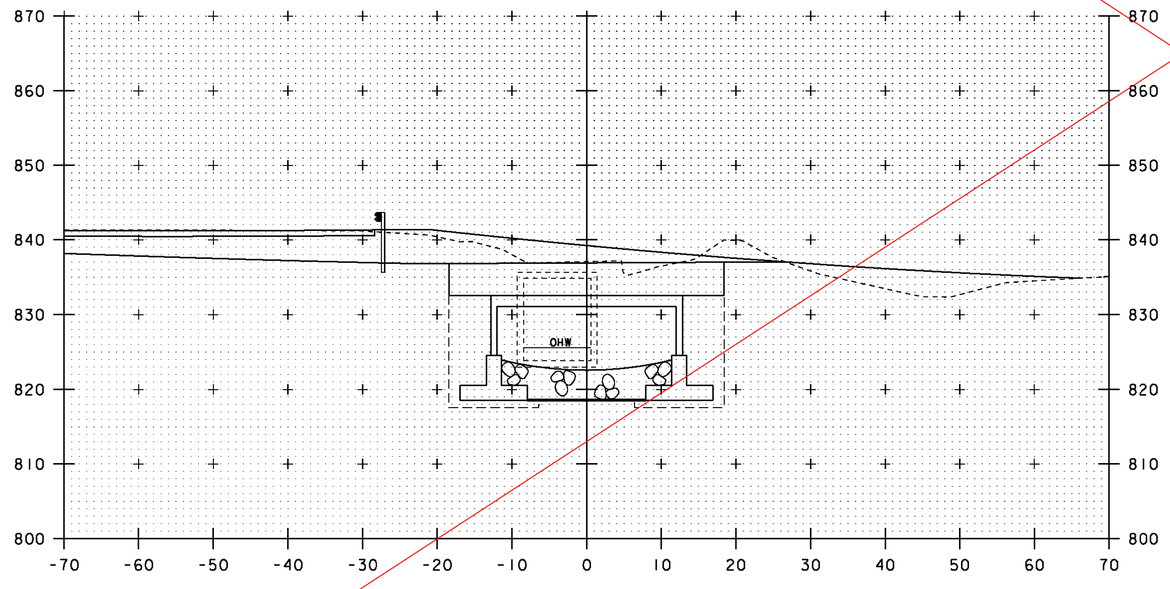
STA 12+06.6 LT
END STRUCTURE EXCAVATION
GRAN. BACKFILL FOR STRUCT.

STA 12+01.6 RT
END SPECIAL PROVISION (STONE FILL, CHANNEL FLOW LINE)

STA 12+04.9 LT
END SPECIAL PROVISION (STONE FILL, CHANNEL FLOW LINE)

12+10

STA 12+01.6 RT
END UNCLASS. CHANNEL EXCAV.
GEOTEXTILE UNDER STONE FILL
STONE FILL TYPE IV
GRUBBING MATERIAL



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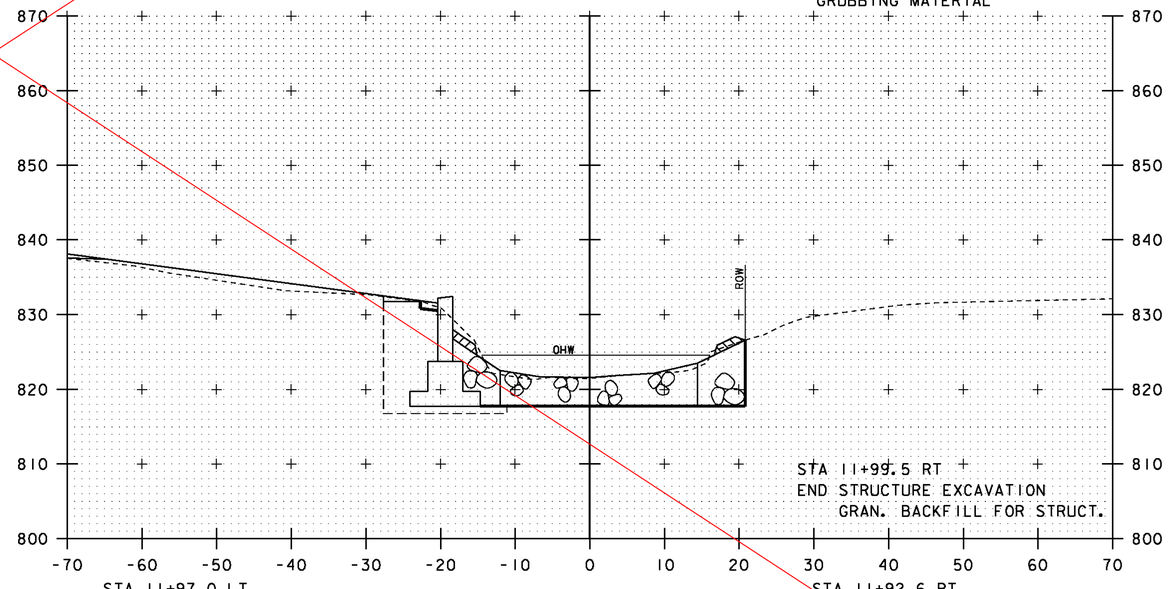


STA 11+97.0 LT
BEGIN STONE FILL TYPE IV
GRUBBING MATERIAL

STA 11+99.5 RT
END STRUCTURE EXCAVATION
GRAN. BACKFILL FOR STRUCT.

STA 11+92.6 RT
BEGIN STONE FILL TYPE IV
GRUBBING MATERIAL

12+00

NOTE: SEE REVISED SHEET
DATED 27-OCT-2011
FOR POST IRENE REVISIONS

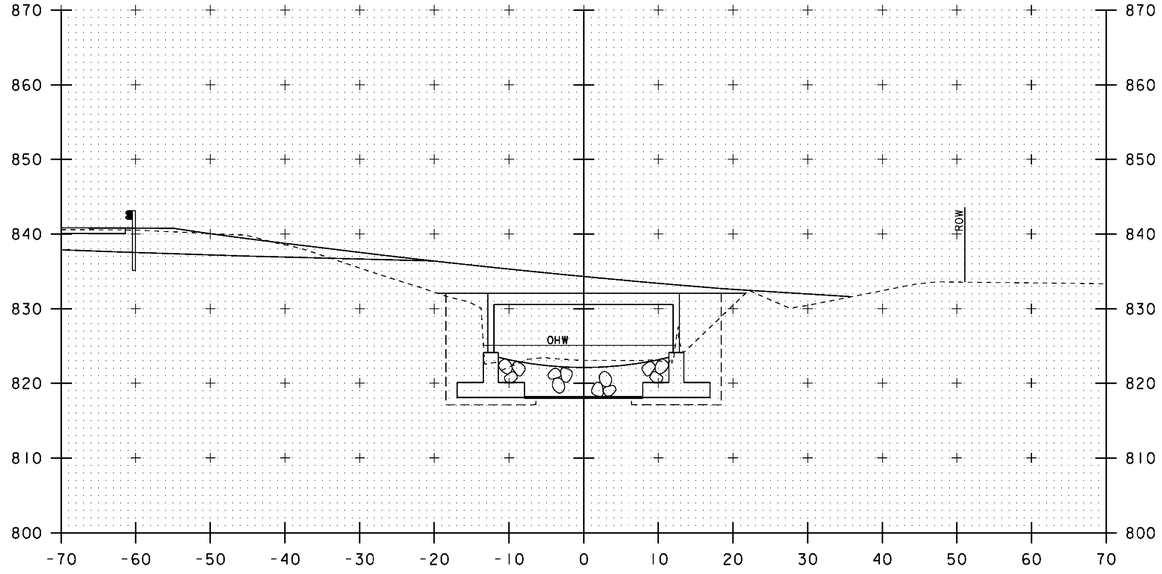
10 0 10
SCALE: 1" = 10'-0"

STA. 11+80 TO STA. 12+10

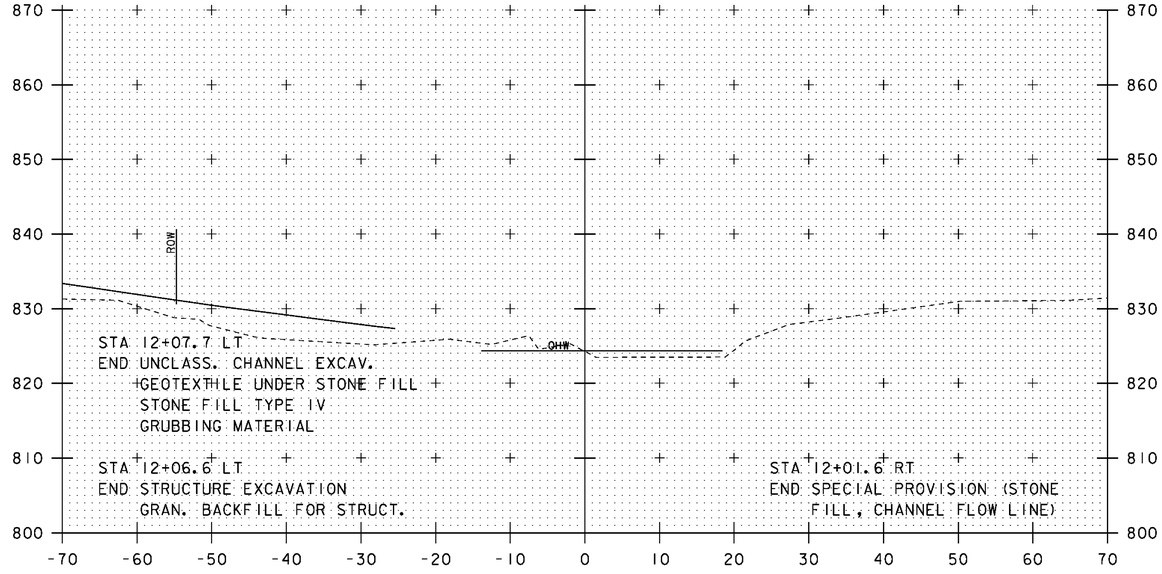
PROJECT NAME: PITTSFIELD-STOCKBRIDGE
PROJECT NUMBER: STP 022-1(22)S

FILE NAME: s00b122xsl.dgn
PROJECT LEADER: C. P. WILLIAMS
DESIGNED BY: G. ROY
CHANNEL CROSS SECTIONS (3)

PLOT DATE: 02-SEP-2011
DRAWN BY: G. ROY
CHECKED BY: R. YOUNG
SHEET 41 OF 41



11+90



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GEOTEXTHLE UNDER STONE FILL
STONE FILL TYPE IV
GRUBBING MATERIAL

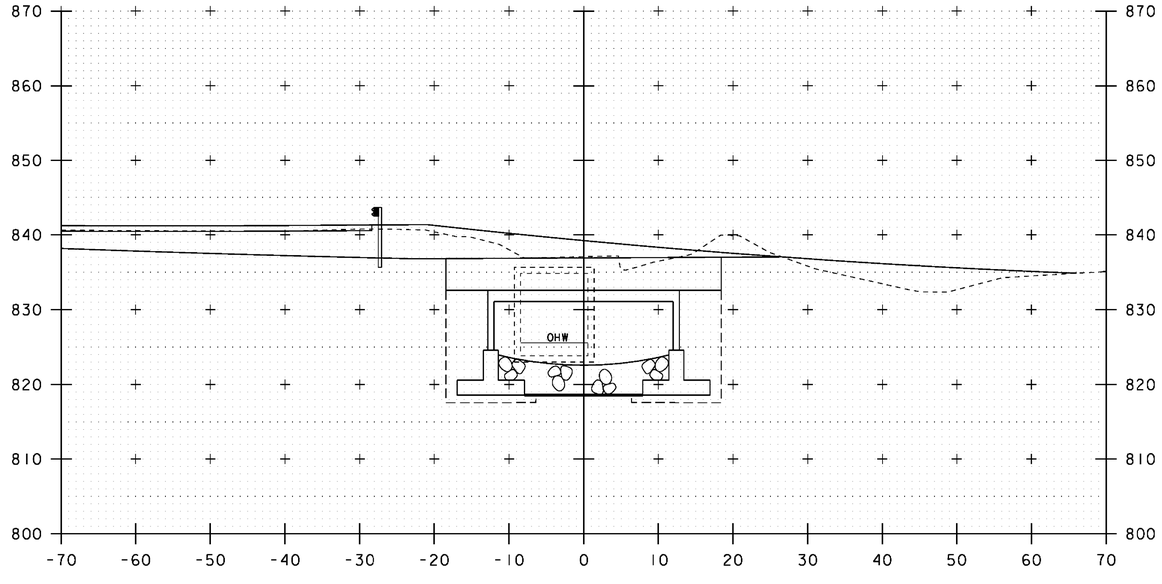
STA 12+06.6 LT
END STRUCTURE EXCAVATION
GRAN. BACKFILL FOR STRUCT.

STA 12+04.9 LT
END SPECIAL PROVISION (STONE
FILL, CHANNEL FLOW LINE)

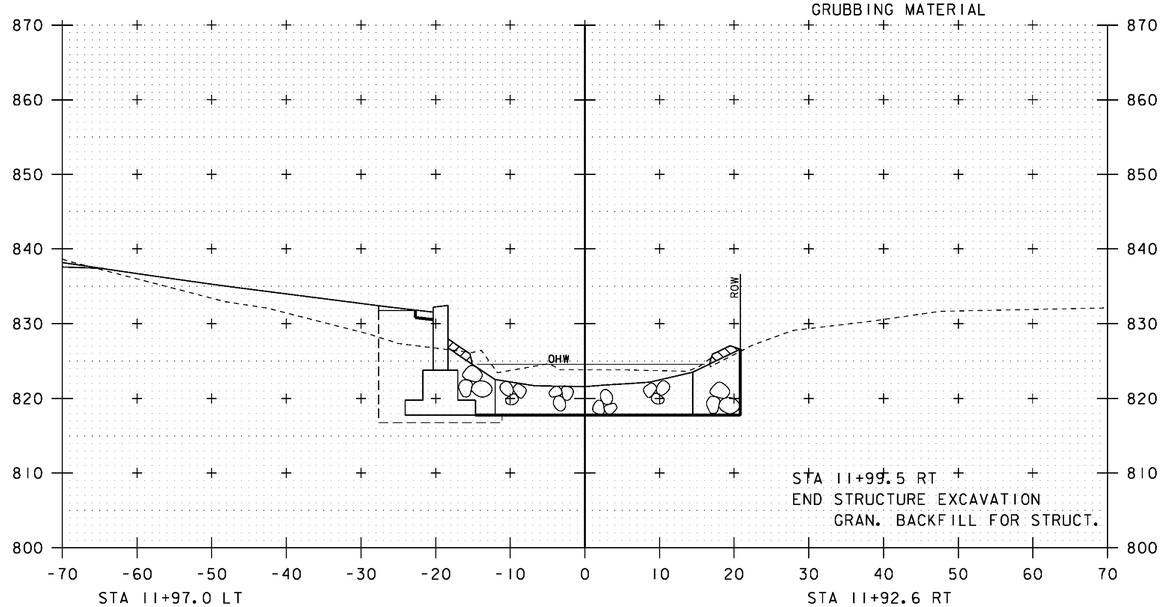
STA 12+01.6 RT
END SPECIAL PROVISION (STONE
FILL, CHANNEL FLOW LINE)

12+10

STA 12+01.6 RT
END UNCLASS. CHANNEL EXCAV.
GEOTEXTILE UNDER STONE FILL
STONE FILL TYPE IV
GRUBBING MATERIAL



11+80



STA 11+97.0 LT
BEGIN STONE FILL TYPE IV
GRUBBING MATERIAL

STA 11+99.5 RT
END STRUCTURE EXCAVATION
GRAN. BACKFILL FOR STRUCT.

STA 11+92.6 RT
BEGIN STONE FILL TYPE IV
GRUBBING MATERIAL

12+00

NOTE: REVISED SHEET
FOR POST IRENE

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

STA. 11+80 TO STA. 12+10

PROJECT NAME:	PITTSFIELD-STOCKBRIDGE
PROJECT NUMBER:	STP 022-1(22)S
FILE NAME: s00b122xsl.dgn	PLOT DATE: 27-OCT-2011
PROJECT LEADER: C. P. WILLIAMS	DRAWN BY: G. ROY
DESIGNED BY: G. ROY	CHECKED BY: R. YOUNG
CHANNEL CROSS SECTIONS (3)	SHEET 41 OF 41

KUBRICKY CONSTRUCTION CORP.

269 Ballard Road
Wilton, NY 12831-1357

Phone (518) 792-5864
Fax (518) 792-2458

KUBRICKY CONSTRUCTION CORP.

SUBMITTAL TRANSMITTAL

Date: 12/02/11

Project: *Pittsfield-Stockbridge*
Job: *2011048 Pittsfield-Stockbridge*

To: VAOT Resident Engineer
Southwest Regional Const.
1635 US Route 4
Mendon, VT 05701

Attention: Tim Pockette **Main Fax No:**

The following submittals are transmitted for your review. Please review, approve and return by the date indicated.

SUBMITTAL NUMBER: 6.2

Copies	Section	Description	Subcontractor	Submitted to eng	Required From eng	Status
	540	**Precast Concrete**				
3	.04	Shop Drawings for Precast As-Built	10012	12/2/11		FOR INFO. ONLY

Approved: Submittal is APPROVED AS NOTED, please proceed with fabrication and notify us of your lead time.
Rejected: Submittal is REJECTED, please revise and resubmit.

REMARKS:

Please see attached Shop Drawings Rev. 3 for the Precast Box Culvert

SIGNED: Harper Callahan

VERMONT

State of Vermont
PDD/Structures Design Section
One National Life Drive
Montpelier, VT 05633-5001
www.aot.state.vt.us

Agency of Transportation

[phone] 802-828-2621
[fax] 802-828-3566
[ttd] 800-253-0191

October 25, 2011

Concrete Systems Inc.
9 Commercial St.,
Hudson, NH 03051

Re: Pittsfield-Stockbridge STP 022-1(22)s VT 100, Bridge 127

The following precast concrete frame details (Item # 540.10 Precast Concrete Structure) for the above-referenced project, received in this office on 10/19/11 have been reviewed and are being returned herewith.

Sheets 1 through 2 are approved.

You must provide written notice to this office as to the date fabrication represented by these drawings will begin. That notice must be received at least seven days prior to that date. Any material fabricated prior to the notification date is subject to rejection without further cause.

Sincerely,

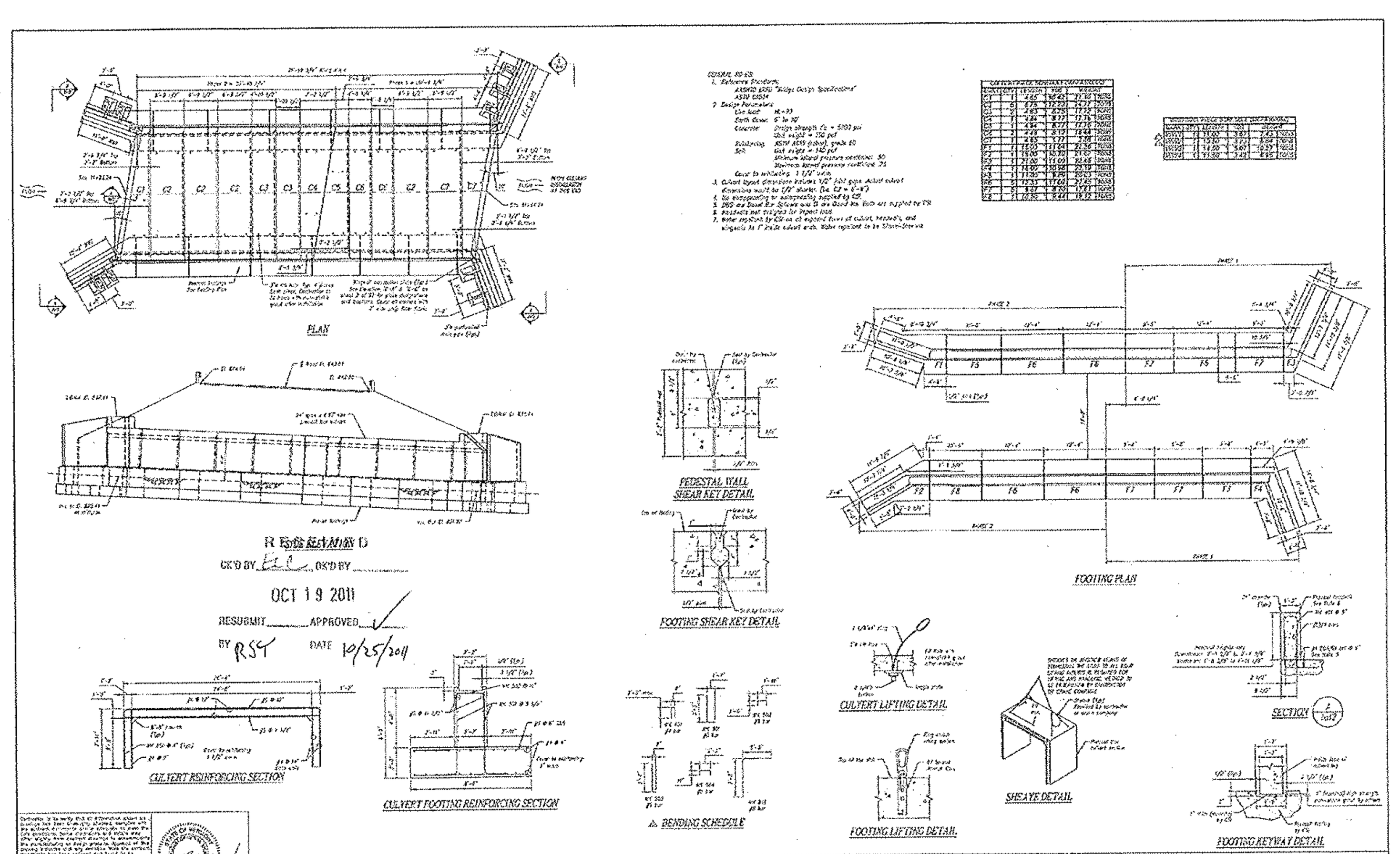
Robert S. Young, P.E.
Structures Project Manager

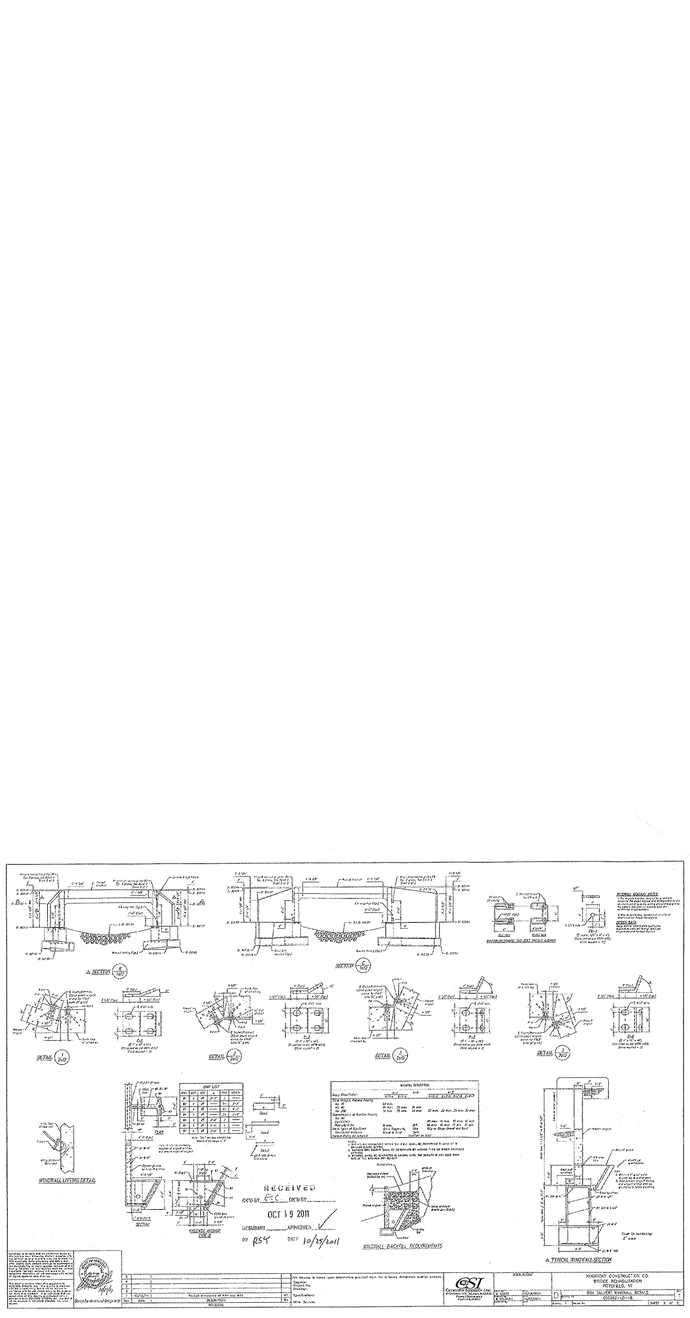
Attachments

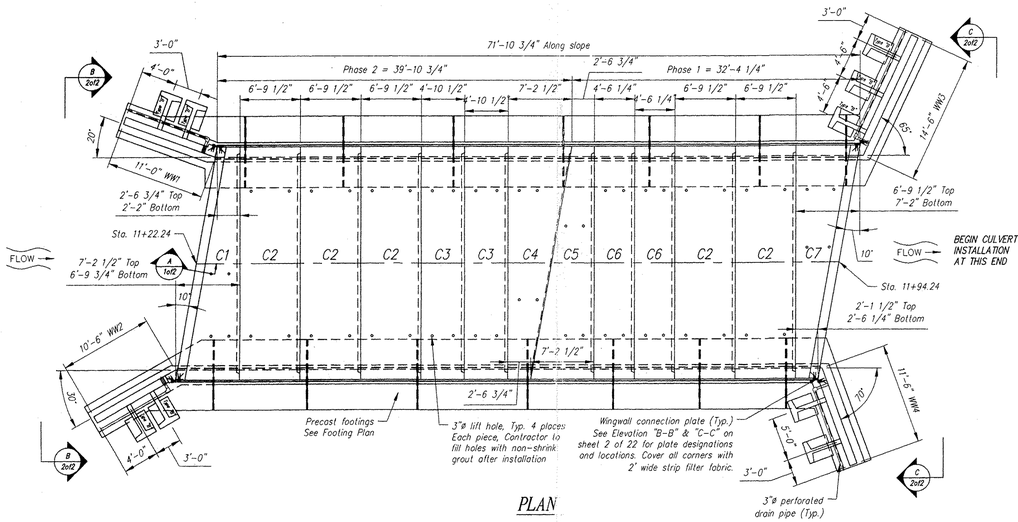
cc: Contractor – Kubricky Construction Corp.
Resident Engineer – Tim Pockette
Concrete Inspector – Jim Wild
Materials & Research (C&IA Unit) – (letter only)
Construction Division – (letter only)
Files (RSY)

VTrans Working to Get You There! Vermont Agency of Transportation

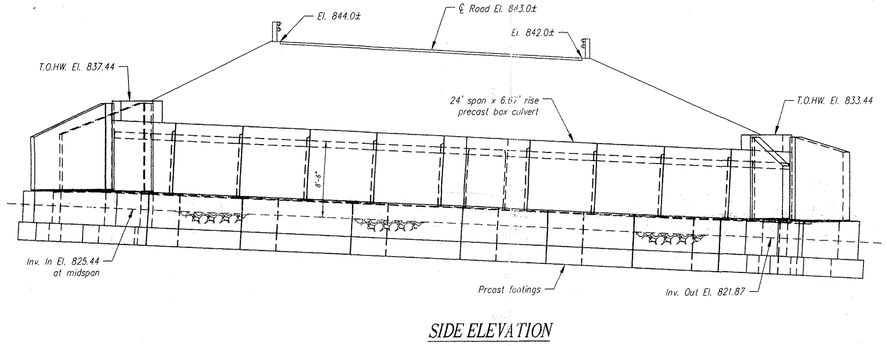
PRECAST CONCRETE


CULVERT REINFORCING SECTION
CULVERT FOOTING REINFORCING SECTION
BENDING SCHEDULE
CULVERT LIFTING DETAIL
FOOTING LIFTING DETAIL
SHEAVE DETAIL
SECTION
FOOTING KEYWAY DETAIL
FOOTING PLAN
PLAN
OCT 19 2011
RESUBMIT APPROVED
BY RSY DATE 10/25/2011
Concrete Systems Inc.
KUBRICKY CONSTRUCTION CO.
BRIDGE REHABILITATION
PITTSFIELD, VT
BOX CULVERT LAYOUT AND DETAILS


A SECTION
SECTION
RAILING
RAILING MOUNTED ON BRIDGE BARRIER
WINGWALL LIFTING DETAIL
PLAN
SECTION
SECTION
WINGWALL BACKFILL REQUIREMENTS
A TYPICAL WINGWALL SECTION
RECEIVED
OCT 19 2011
APPROVED
DATE 10/17/2011



PLAN



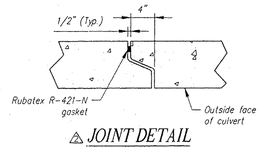
SIDE ELEVATION

GENERAL NOTES:

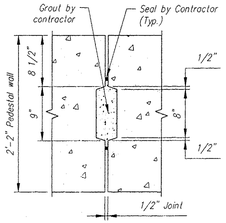
1. Reference Standards:
   AASHTO LRFD "Bridge Design Specifications"
   ASTM C1504
2. Design Parameters:
   Live load: HL-93
   Earth Cover: 9' to 10'
   Concrete: Design strength f'c = 5000 psi
   Unit weight = 150 pcf
   Reinforcing: ASTM A615 (rebar), grade 60
   Soil: Unit weight = 140 pcf
   Minimum lateral pressure coefficient .50
   Maximum lateral pressure coefficient .75
   Cover to reinforcing: 1 1/2" u.n.o.
3. Culvert layout dimensions includes 1/2" joint gaps. Actual culvert dimensions would be 1/2" shorter. (i.e. C2 = 6'-9")
4. No dampproofing or waterproofing supplied by CSI.
5. DBS are Dowel Bar Splicers and DI are Dowel Ins. Both are supplied by CSI.
6. Headwalls not designed for impact load.
7. Water repellant by CSI on all exposed faces of culvert, headwalls, and wingwalls to 1' inside culvert ends. Water repellant to be Silane-Siloxane.

CULVERT PIECE SCHEDULE (MX-FA5000SC)				
MARK	QTY	LENGTH	YDS	WEIGHT
C1	1	4.65 '	10.42	21.10 TONS
C2	5	6.75 '	12.23	24.77 TONS
C3	2	4.83 '	8.75	17.72 TONS
C4	1	4.84 '	8.77	17.76 TONS
C5	1	4.84 '	8.77	17.76 TONS
C6	2	4.48 '	8.12	16.44 TONS
C7	1	4.65 '	10.45	21.17 TONS
F1	1	15.00 '	11.04	22.36 TONS
F2	1	15.00 '	10.70	21.67 TONS
F3	1	21.00 '	11.09	22.46 TONS
F4	1	16.00 '	10.96	22.19 TONS
F5	1	11.00 '	9.89	20.03 TONS
F6	5	12.33 '	11.09	22.45 TONS
F7	5	9.67 '	8.70	17.61 TONS
F8	1	10.50 '	9.44	19.12 TONS

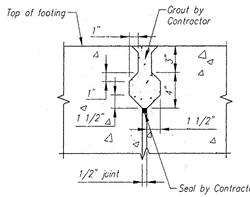
WINGWALL PIECE SCHEDULE (MX-FA5000SC)				
MARK	QTY	LENGTH	YDS	WEIGHT
⚠ WW1	1	11.00 '	3.67	7.43 TONS
⚠ WW2	1	10.50 '	3.35	6.78 TONS
WW3	1	14.50 '	5.07	10.27 TONS
WW4	1	11.50 '	3.43	6.95 TONS



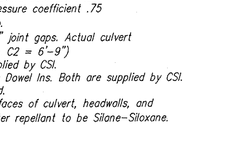
⚠ JOINT DETAIL



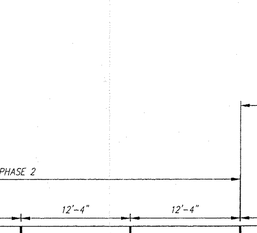
PEDESTAL WALL SHEAR KEY DETAIL



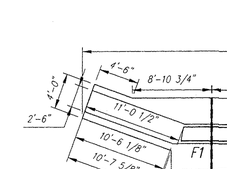
FOOTING SHEAR KEY DETAIL



CULVERT LIFTING DETAIL



SHEAVE DETAIL



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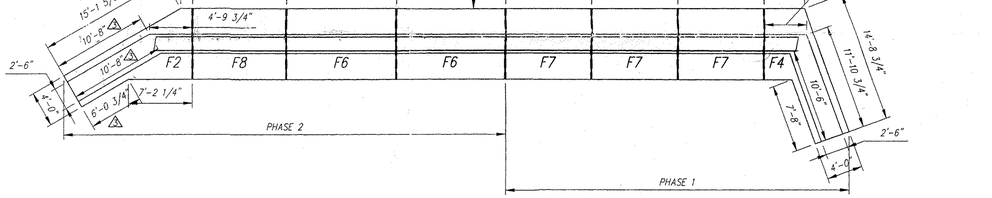
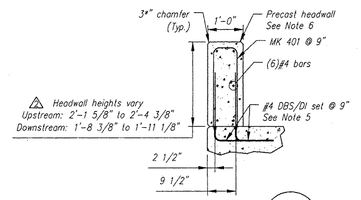
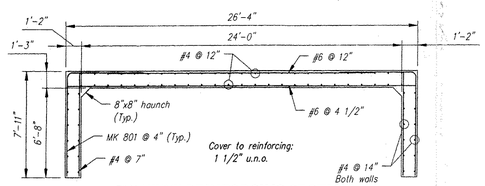


⚠ FOOTING PLAN



SECTION A 1of2



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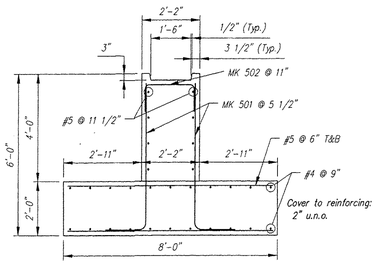

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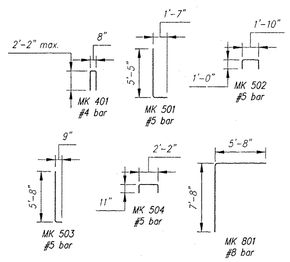
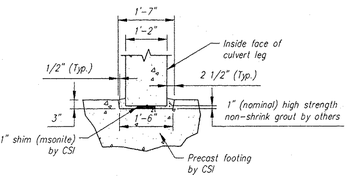


⚠ BENDING SCHEDULE



FOOTING KEYWAY DETAIL

Contractor is to verify that all information shown on drawings has been thoroughly checked, complies with the contract documents and is adequate to meet the field conditions. Some dimensions and details may differ slightly from contract drawings to accommodate the manufacturing or design process. Approval of this drawing indicates that any deviation from the contract documents has been reviewed and found to be acceptable. Production will not commence until receipt of signed, approved shop drawings.

Stamp for structural design only

Rev.	Date	DESCRIPTION	By
5			
4			
3	11/28/11	Revised WW2 and F2	MS
2	11/08/11	Revised Section A to show taller headwall at upstream end	MS
1	10/18/11	Revised weights of WW1 and WW2	MS

REVISIONS

This drawing is based upon information provided from the following documents and/or sources:

Engineer:
Project No:
Drawings:
Specifications:
Other Sources:

Concrete Systems Inc.
9 Commercial St., Hudson, NH,03051
Phone 603-889-4163
Fax 603-889-2417

STATE AGENCY

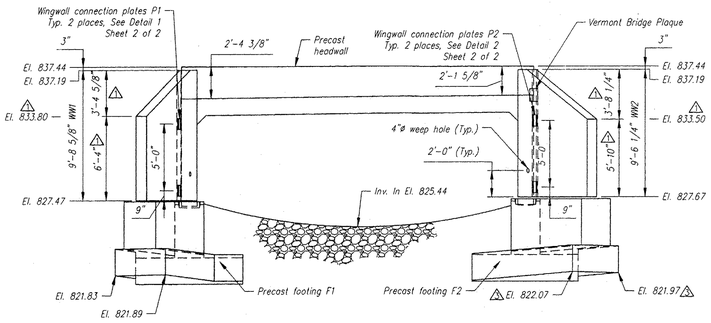
Drawn By	M SCOTT	Date 10/06/2011
Checked By	B KOLAWOLE	Date 10/07/2011
Approved By	M SCOTT	Date 11/28/2011

KUBRICKY CONSTRUCTION CO.
BRIDGE REHABILITATION
PITTSFIELD, VT

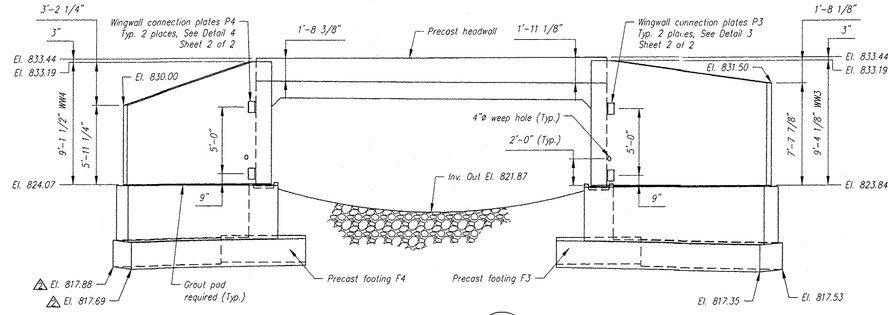
D | Drawing No. C20962-LO1-A | REV 3

BOX CULVERT LAYOUT AND DETAILS

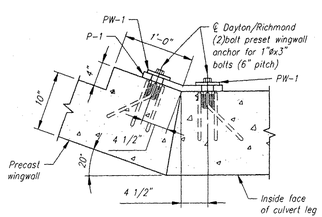
Quantity: 1 | Project No: | SHEET 1 OF 2



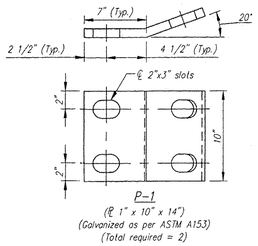
⚠ *ELEVATION* B 1of2



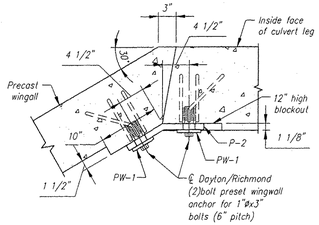
ELEVATION C 1of2



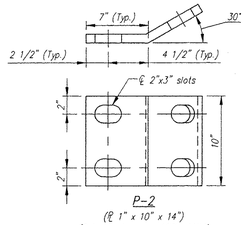
DETAIL 1 2of2



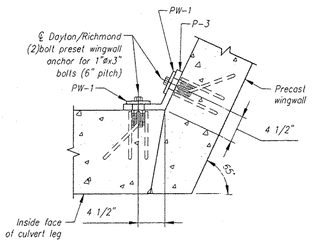
P-1
(℄ 1" x 10" x 14")
(Galvanized as per ASTM A153)
(Total required = 2)



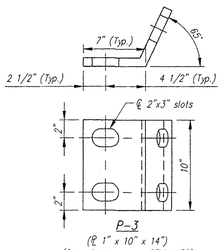
⚠ *DETAIL* 2 2of2



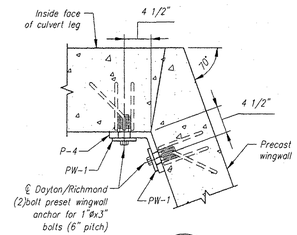
P-2
(℄ 1" x 10" x 14")
(Galvanized as per ASTM A153)
(Total required = 2)



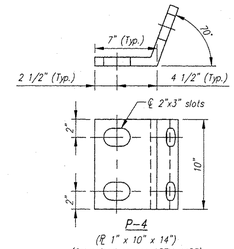
DETAIL 3 2of2



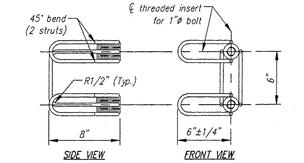
P-3
(℄ 1" x 10" x 14")
(Galvanized as per ASTM A153)
(Total required = 2)



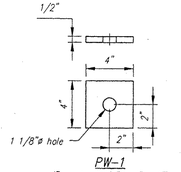
DETAIL 3 2of2



P-4
(℄ 1" x 10" x 14")
(Galvanized as per ASTM A153)
(Total required = 2)



DAYTON/RICHMOND TWO BOLT PRESET ANCHOR



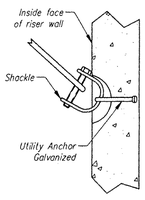
PW-1
(℄ washer, 1/2" x 4" x 4")
(Galvanized as per ASTM A153)
(Total required = 32)

WINGWALL GENERAL NOTES:

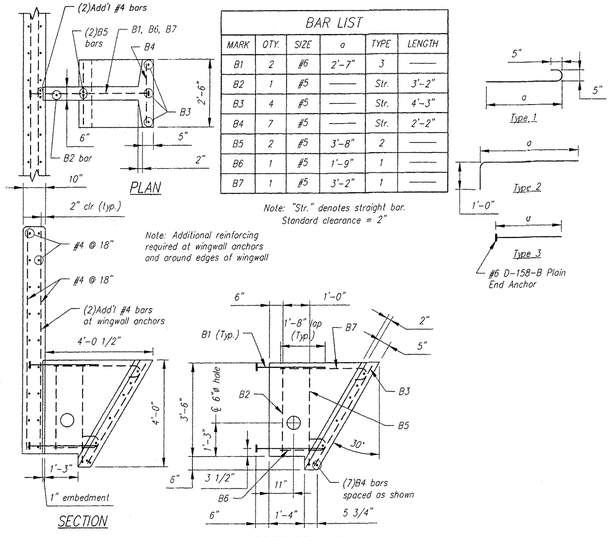
1. *The wingwalls have been designed for general site conditions. The project engineer shall be responsible for the structure's suitability to the existing site conditions and for the hydraulic evaluation — including scour and confirmation of soil conditions.*
2. *Prior to construction, contractor must verify all elevations shown through the engineer.*

DESIGN DATA

Design Method: AASHTO LRFD Specification
Assumed Allowable Soil Bearing: 3,500 psf
Wingwalls designed for Earth Pressure



WINGWALL LIFTING DETAIL



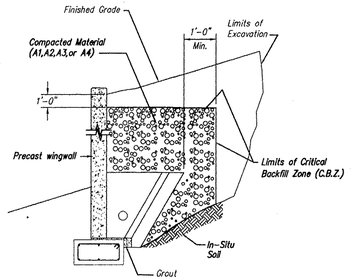
BAR LIST					
MARK	QTY.	SIZE	a	TYPE	LENGTH
B1	2	#6	2'-7"	3	——
B2	1	#5	——	Str.	3'-2"
B3	4	#5	——	Str.	4'-3"
B4	7	#5	——	Str.	2'-2"
B5	2	#5	3'-8"	2	——
B6	1	#5	1'-9"	1	——
B7	1	#5	3'-2"	1	——

Note: "Str." denotes straight bar.
Standard clearance = 2"

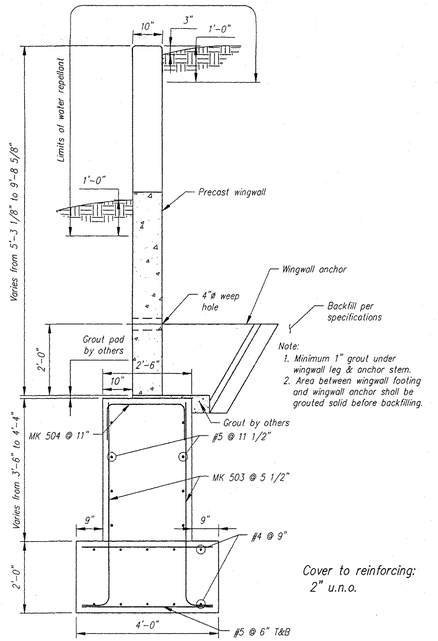
PRECAST ANCHOR TYPE B

BACKFILL DESCRIPTION							
Group Classification	A-1		A-3	A-2			
	A-1-a	A-1-b		A-2-4	A-2-5	A-2-6	A-2-7
Sieve Analysis, Percent Passing							
No. 10	50 max.						
No. 40	30 max.	50 max.	51 min.				
No. 200	15 max.	25 max.	10 max.	35 max.	35 max.	35 max.	35 max.
Characteristics of Fraction Passing No. 40							
Liquid Limit				40 max.	41 min.	40 max.	41 min.
Plasticity Index	6 max.		N.P.	10 max.	10 max.	11 min.	11 min.
Usual Types of Significant Constituent Materials	Stone Fragments, Gravel & Sand		Fine Sand	Silty or Clayey Gravel and Sand			
General Rating as Subgrade	Excellent to Good						

NOTES
1. BACKFILLING OPERATIONS WITHIN THE C.B.Z. SHALL BE PERFORMED IN LIFTS OF 8" OR LESS (LOOSE DEPTH).
2. MAXIMUM DRY DENSITY SHALL BE DETERMINED BY AASHTO T-99 OR OTHER APPROVED METHODS.
3. BACKFILL SHALL BE COMPACTED IN LAYERS UNTIL THE DENSITY IS NOT LESS THAN 95% OF THE MAXIMUM DRY DENSITY.



WINGWALL BACKFILL REQUIREMENTS



Cover to reinforcing:
2" u.n.o.

⚠ *TYPICAL WINGWALL SECTION*

Rev.	Date	DESCRIPTION	By
5			
4			
3	11/28/11	Revised Detail 3 for WW2	MS
2	11/08/11	Renamed Section B and Section C to Elevation B & C; Revised Footing F4 elevations	MS
1	10/18/11	Revised dimensions of WW1 and WW2	MS

REVISIONS

This drawing is based upon information provided from the following documents and/or sources:
Engineer:
Project No:
Drawings:
Specifications:
Other Sources:

Concrete Systems Inc.
9 Commercial St., Hudson, NH,03051
Phone 603-889-4163
Fax 603-889-2417

STATE AGENCY

Drawn By: M SCOTT	Date: 10/06/2011	
Checked By: B KOLAWOLE	Date: 10/07/2011	
Approved By: M SCOTT	Date: 11/28/2011	

KUBRICKY CONSTRUCTION CO.
BRIDGE REHABILITATION
PITTSFIELD, VT

D — BOX CULVERT WINGWALL DETAILS — REV 3
Drawing No. C20962-L01-B
Quantity: 1 | Project No: | SHEET 2 OF 2