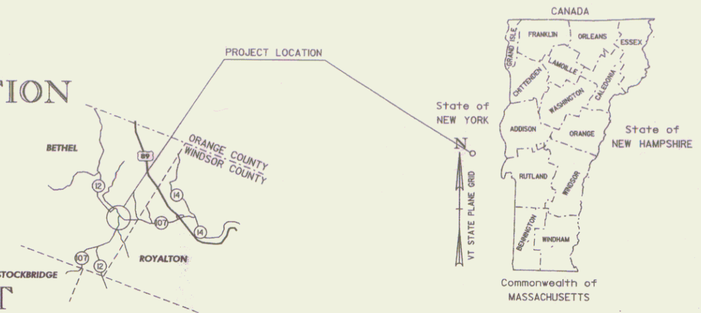
R.O.W. PLANS

STATE OF VERMONT
AGENCY OF TRANSPORTATION

PROJECT LOCATION:
BEGINNING AT A POINT ON VT. ROUTE 107 APPROXIMATELY 3.180 MILES EASTERLY OF THE STOCKBRIDGE / BETHEL TOWN LINE AND EXTENDING NORTHERLY 0.144 MILES.

LENGTH OF ROADWAY	437.34 FEET
LENGTH OF BRIDGE	324.66 FEET
LENGTH OF PROJECT	762.00 FEET
LENGTH OF R.O.W. PROJECT	**807.51 FEET**

PROJECT DESCRIPTION:
WORK TO BE PERFORMED UNDER THIS CONTRACT INCLUDES THE REPLACEMENT OF BRIDGE 15 AND RELATED APPROACH AND CHANNEL WORK.



PROPOSED IMPROVEMENT
BRIDGE PROJECT
TOWN OF BETHEL
COUNTY OF WINDSOR
VT ROUTE 107
(MINOR ARTERIAL)
BRIDGE #15

MP 3.168
BEGIN R.O.W. PROJECT
BRF 022-1(14)
STA. 121+70.00 24.97' LT.

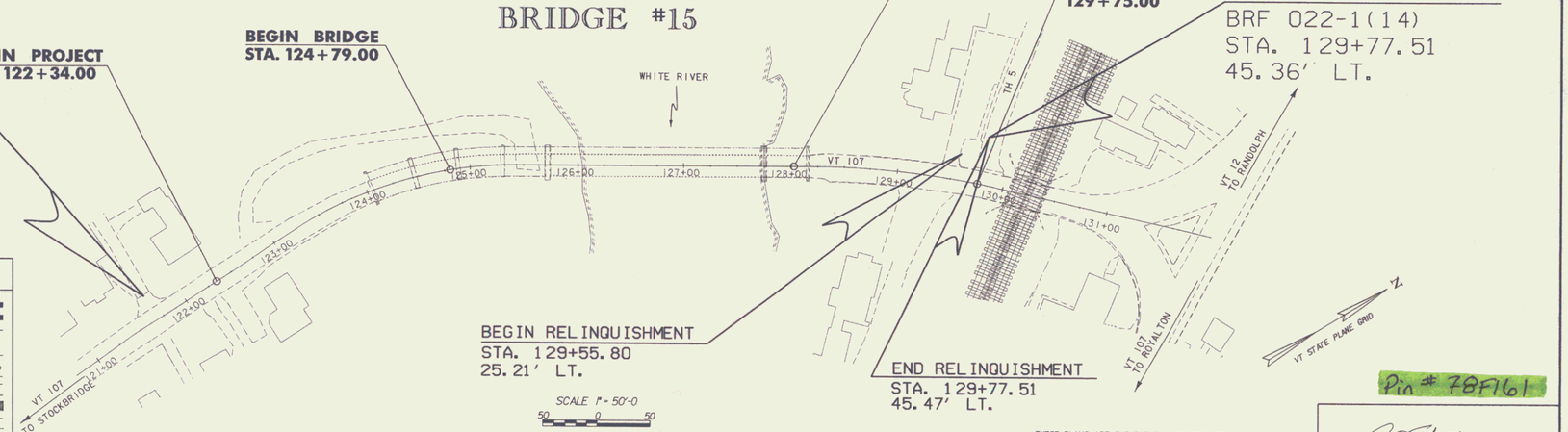
BEGIN PROJECT
STA 122+34.00

BEGIN BRIDGE
STA. 124+79.00

END BRIDGE
STA. 128+02.50

END PROJECT
129+75.00

MP 3.321
END R.O.W. PROJECT
BRF 022-1(14)
STA. 129+77.51
45.36' LT.



BEGIN RELINQUISHMENT
STA. 129+55.80
25.21' LT.

END RELINQUISHMENT
STA. 129+77.51
45.47' LT.

SCALE 1"-50'-0
50 0 50

CONVENTIONAL SYMBOLS

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

SURVEYED BY :
SURVEYED DATE :

DATUM
VERTICAL
HORIZONTAL

ALL DRIVES AS INDICATED ON PLANS ARE SUBJECT TO PERMITS PURSUANT TO TITLE 19 V.S.A. 1111

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.

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.

Pin # 78F161

APPROVED _____ DATE 2-1-10
Director of Program Development

APPROVED _____ DATE 2/4/10
Chief of Right of Way

BETHEL
BRF 022-1(14)
R.O.W. SHEET 1 OF 27 SHEETS

1

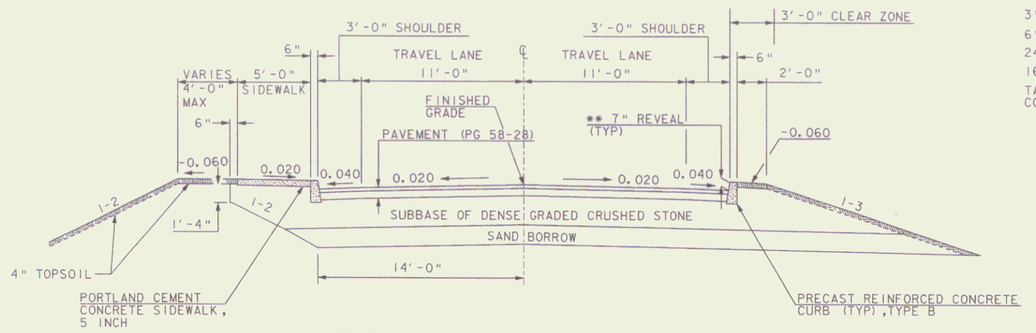
VT 107 (RIVER STREET)

3" SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-28) (1½" TYPE IVS OVER 1½" TYPE IVS)
6" BASE COURSE OF SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-28) - TYPE IIS (TWO 3" LIFTS)
24" SUBBASE OF DENSE GRADED CRUSHED STONE
16" SAND BORROW

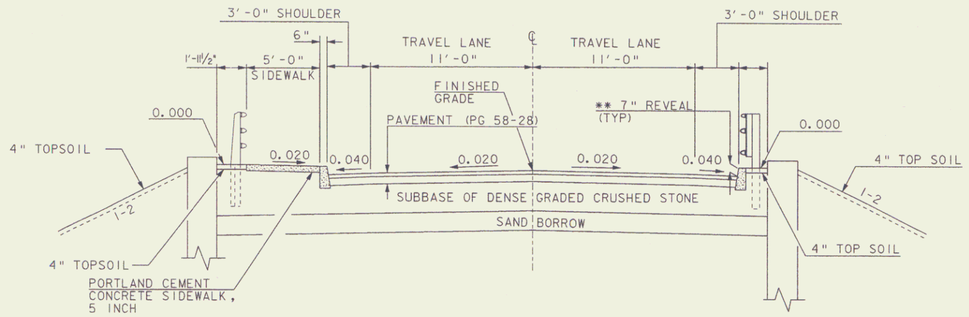
TACK COAT: EMULSIFIED ASPHALT IS TO BE APPLIED AT THE RATE OF 0.025 GAL/SY BETWEEN SUCCESSIVE COURSES OF PAVEMENT AS DIRECTED BY THE ENGINEER.

MATERIAL ITEM	THICKNESS TOLERANCE
BITUMINOUS CONCRETE PAVEMENT* (TOTAL DEPTH)	+/-¼"
SUBBASE OF DENSE GRADED CRUSHED STONE	+/-½"
SAND BORROW	+/- 1"

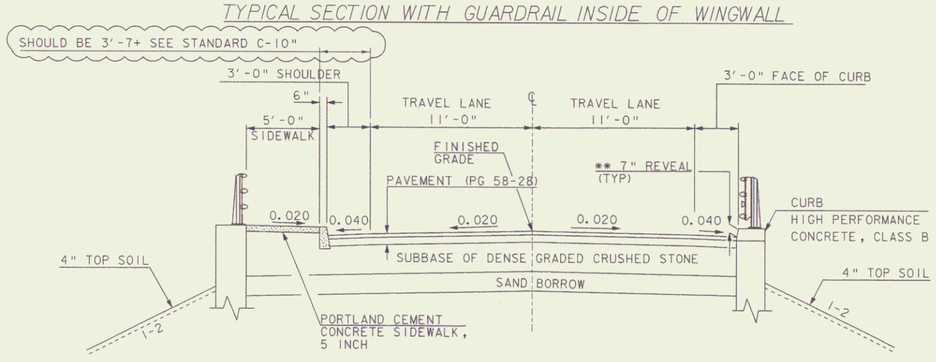
** TRANSITION FROM 7" ROADWAY CURB TO 10" BRIDGE CURB IN 10'-0"



TYPICAL SECTION WITHOUT GUARDRAIL



TYPICAL SECTION WITH GUARDRAIL INSIDE OF WINGWALL



TYPICAL SECTION WITH GUARDRAIL ON TOP OF WINGWALL

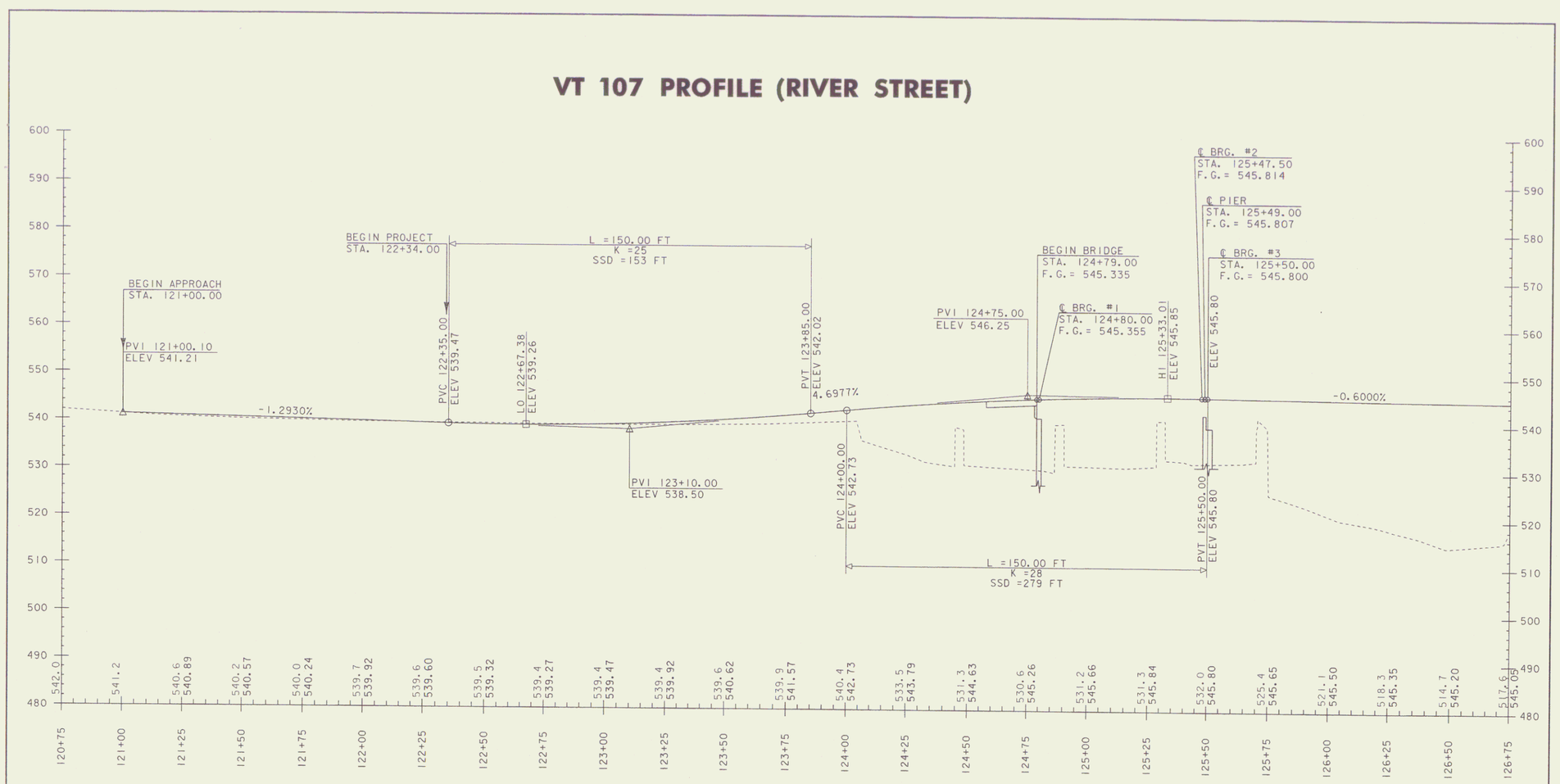
SCALE 1/4" = 1'-0
1 0 2 4 6

TYPICAL SECTIONS - VT 107

PROJECT NAME: BETHEL
PROJECT NUMBER: BRF 022-1(14)

FILE NAME: ppms*/Section/------.dgn
PROJECT LEADER: M. EVANS-MONGEON
DESIGNED BY: S. SCRIBNER
PLOT DATE: 10-FEB-2010
DRAWN BY: G. ROKES
CHECKED BY: S. SCRIBNER
R. O. W. SHEET 2 OF 27 SHEETS

VT 107 PROFILE (RIVER STREET)



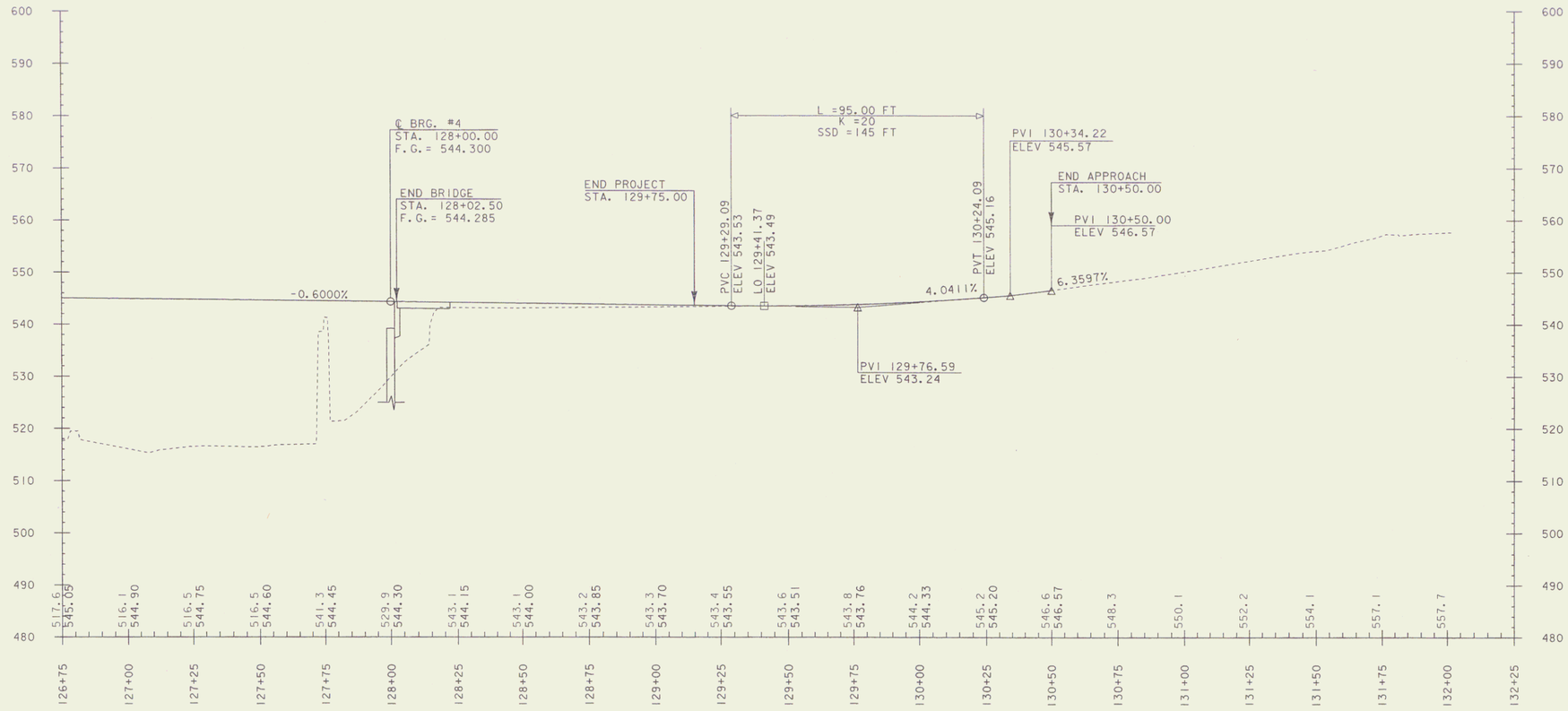
NOTE:
ELEVATIONS SHOWN TO THE TENTH ARE EXISTING GROUND
ELEVATIONS SHOWN TO THE HUNDREDTH ARE FINISH GRADE

VT 107 PROFILE SHEET 1

PROJECT NAME:	BETHEL
PROJECT NUMBER:	BRF 022-1(14)

FILE NAME: 78f161\STR\sf161xs.dgn	PLOT DATE: 10-FEB-2010
PROJECT LEADER: M. EVANS-MONGEON	DRAWN BY: G. ROKES
DESIGNED BY: S. SCRIBNER	CHECKED BY: S. SCRIBNER
	R.O.W. SHEET 3 OF 27 SHEETS

VT 107 PROFILE (RIVER STREET)



NOTE:
ELEVATIONS SHOWN TO THE TENTH ARE EXISTING GROUND
ELEVATIONS SHOWN TO THE HUNDREDTH ARE FINISH GRADE

VT 107 PROFILE SHEET 2

PROJECT NAME:	BETHEL
PROJECT NUMBER:	BRF 022-1(14)
FILE NAME: 78f161\STR\sf161xs.dgn	PLOT DATE: 10-FEB-2010
PROJECT LEADER: M. EVANS-MONGEON	DRAWN BY: G. ROKES
DESIGNED BY: S. SCRIBNER	CHECKED BY: S. SCRIBNER
	R.O.W. SHEET 4 OF 27 SHEETS

GPS CONTROL POINTS

HVCTRL #1

CLEVELAND

NORTH = 77610.30
EAST = 1931.49
ELEV. = 579.72

DESCRIBED BY VERMONT AGENCY OF TRANSPORTATION 1996 (DJM) GENERAL LOCATION BETHEL, 1.4 MILES (2.3 KM) SW OF BETHEL VILLAGE. TO REACH FROM THE JUNCTION OF VT 107 AND VT 12 SOUTH OF BETHEL, PROCEED EASTERLY ALONG VT 107 AND VT 12 FOR APPROX 0.3 M (1.0 FT) TO THE MARK ON THE LEFT. THE MARK IS DIRECTLY OPPOSITE CLEVELAND BROOK ROAD, 25.5 FT (7.8 M) NORTH FROM THE CENTERLINE OF VT 107 AND VT 12. OWNERSHIP STATE OF VERMONT STATION MARK IS A STATE OF VERMONT SURVEY MARK SET IN THE TOP OF A 12 INCH DIAMETER CONCRETE POST SET FLUSH WITH GROUND. IT IS 25.5 FT (7.8 M) NORTH OF CENTERLINE VT 107 AND VT 12, 4.5 FT (1.4 M) NORTH OF 3 CABLE GUARD RAIL, 45 FT (13.7 M) SOUTHEAST FROM COMBINATION POLE 4/49/57, 15 FT (4.6 M) SOUTH OF THE NORTH END OF A 4 FT (1.2 M) X 5 FT (1.5 M) CONCRETE BOX, 72 FT (21.9 M) NORTH OF THE SOUTH END OF A 4 FT (1.2 M) X 5 FT (1.5 M) CONCRETE BOX.

HVCTRL #2

CLEVELAND AZ

NORTH = 78386.83
EAST = 3594.38
ELEV. = 553.18

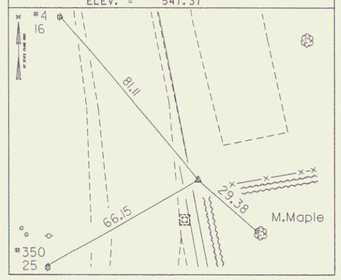
DESCRIBED BY VERMONT AGENCY OF TRANSPORTATION 1996 (DJM) GENERAL LOCATION, BETHEL, VT. 1.1 MILES (1.8 KM) SOUTHWEST OF BETHEL VILLAGE. OWNERSHIP STATE OF VERMONT. TO REACH FROM THE JUNCTION OF VT ROUTE 107 AND VT ROUTE 12, SOUTH OF BETHEL, PROCEED EASTERLY ALONG VT 107 AND VT 12 FOR APPROX 0.6 M (2.0 FT) TO THE MARK ON THE LEFT. STATION MARK IS A STATE OF VERMONT SURVEY MARK SET IN THE TOP OF A 12 INCH DIAMETER CONCRETE POST SET FLUSH WITH GROUND. IT IS 26 FT (7.9 M) NORTHWEST OF THE CENTERLINE OF THE ROAD, 88.5 FT (27.0 M) SOUTHWEST OF COMBINATION POLE 49/4/41, 143 FT (43.6 M) WEST OF 18 INCH CGMP WITH 7FT MARBLE HEADWALL.

* TO ALLOW THE STATE PLANE COORDINATES TO FIT THE AGENCY DESIGN PLANE, SUBTRACT 400,000 FROM THE NORTHINGS AND SUBTRACT 1,600,000 FROM THE EASTINGS

TRAVERSE TIES

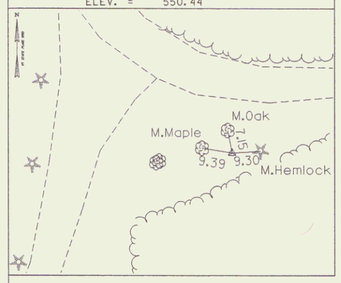
HVCTRL #6

NORTH = 82173.10
EAST = 5769.29
ELEV. = 547.37



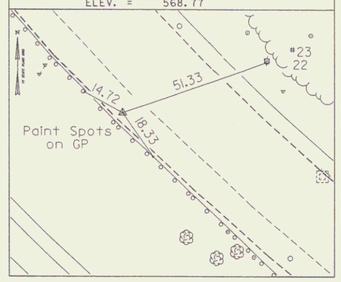
HVCTRL #7

NORTH = 82479.28
EAST = 6136.34
ELEV. = 550.44



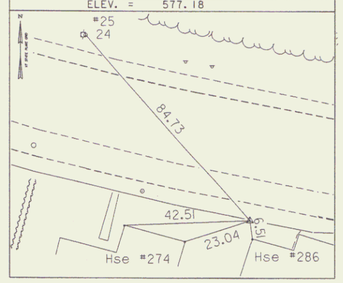
HVCTRL #8

NORTH = 83428.31
EAST = 6392.01
ELEV. = 568.77



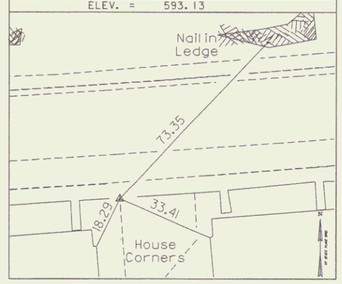
HVCTRL #9

NORTH = 83182.31
EAST = 6845.80
ELEV. = 577.18



HVCTRL #10

NORTH = 83089.54
EAST = 7611.91
ELEV. = 593.13

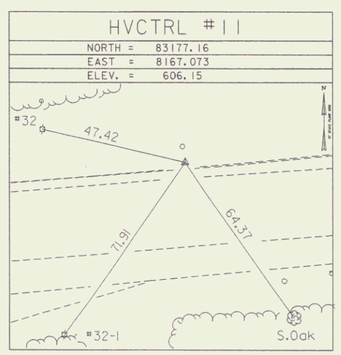


* Main Traverse Completed 12/94 by R.Gilman P.C. & T.Companiion

Traverse Ties

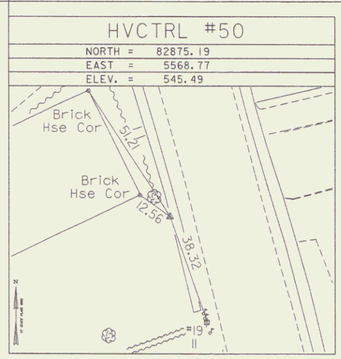
HVCTRL #11

NORTH = 83177.16
EAST = 8167.073
ELEV. = 606.15



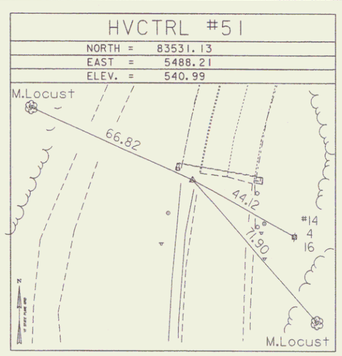
HVCTRL #50

NORTH = 82875.19
EAST = 5568.77
ELEV. = 545.49



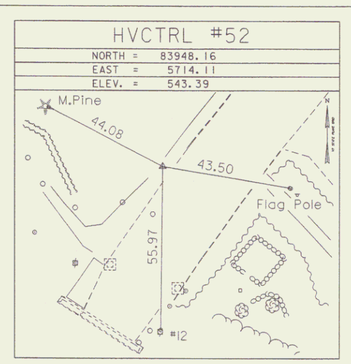
HVCTRL #51

NORTH = 83531.13
EAST = 5488.21
ELEV. = 540.99



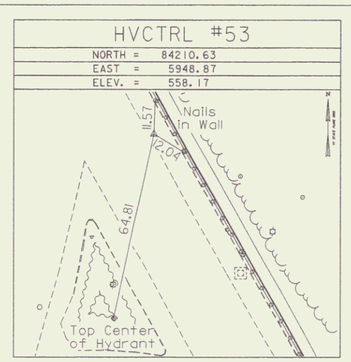
HVCTRL #52

NORTH = 83948.16
EAST = 5714.11
ELEV. = 543.39



HVCTRL #53

NORTH = 84210.63
EAST = 5948.87
ELEV. = 558.17



* Secondary Traverse Completed 3/22/07 by R.Gilman P.C. & P.Winters & R.Bullock

DATUM

VERTICAL NAVD 88
HORIZONTAL NAD 83 (92)
ADJUSTMENT Compass

PROJECT NAME: Bethel
PROJECT NUMBER: BRF 022-1(14)

FILE NAME: r78f161t1.dg
PROJECT LEADER: Martha Evans-Mongeon
DESIGNED BY:
Tie Sheet 1of 2

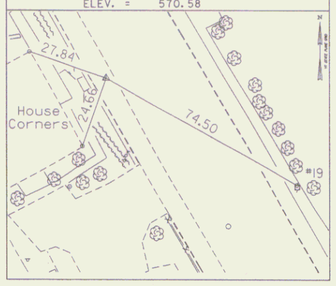
PLOT DATE: 10-FEB-2010
DRAWN BY: R. Bullock
CHECKED BY:
ROW SHEET 5 OF 27

5

Traverse Ties

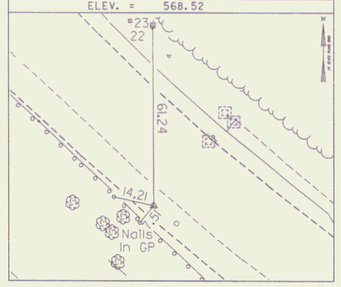
HVCTRL #54

NORTH = 83778.01
EAST = 6163.20
ELEV. = 570.58



HVCTRL #55

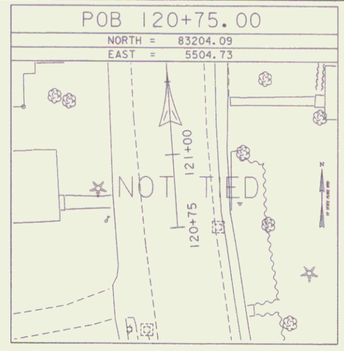
NORTH = 83384.43
EAST = 6440.96
ELEV. = 568.52



ALIGNMENT TIES

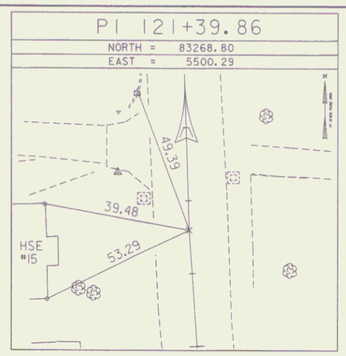
POB 120+75.00

NORTH = 83204.09
EAST = 5504.73



PI 121+39.86

NORTH = 83268.80
EAST = 5500.29

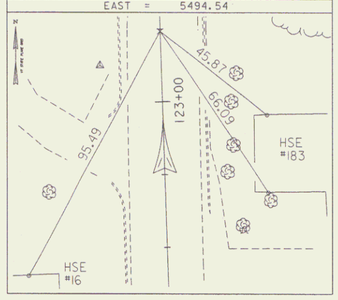


• AlignmentStaked 3/22/07 by R.Gilman P.C. & P.Winters & R.Bullock

Alignment Ties

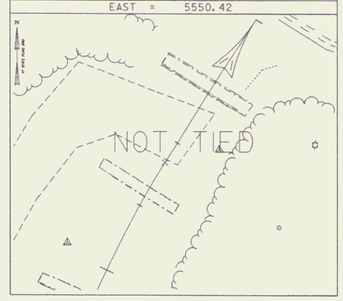
PC 123+24.21

NORTH = 83453.07
EAST = 5494.54



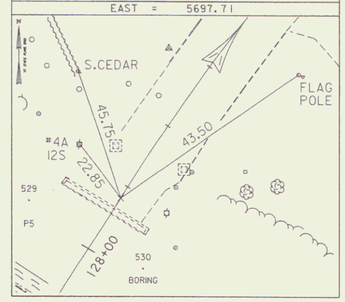
PT 125+42.09

NORTH = 83660.41
EAST = 5550.42



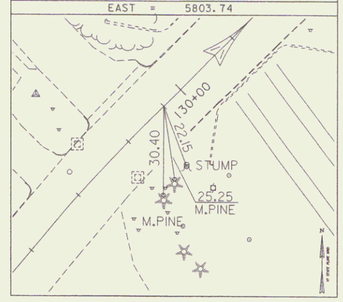
PC 128+20.43

NORTH = 83896.58
EAST = 5697.71



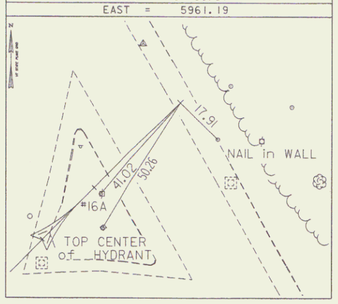
PT 129+97.89

NORTH = 84030.89
EAST = 5803.74



POE 132+16.00

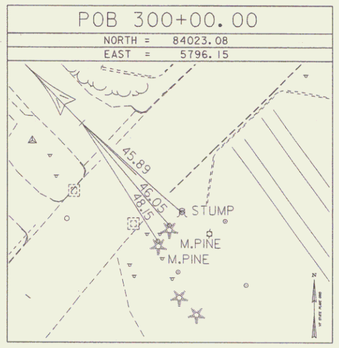
NORTH = 84190.37
EAST = 5961.19



ALIGNMENT TIES

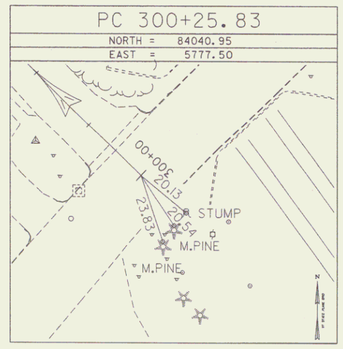
POB 300+00.00

NORTH = 84023.08
EAST = 5796.15



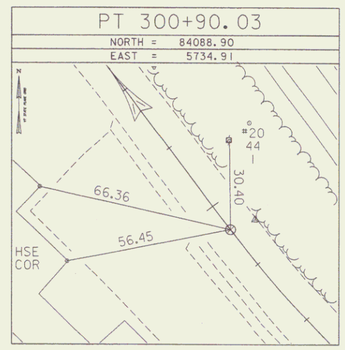
PC 300+25.83

NORTH = 84040.95
EAST = 5777.50



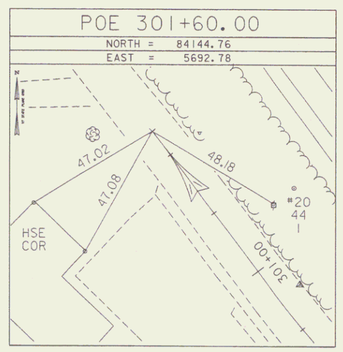
PT 300+90.03

NORTH = 84088.90
EAST = 5734.91



POE 301+60.00

NORTH = 84144.76
EAST = 5692.78



NORTH =
EAST =
ELEV. =

DATUM

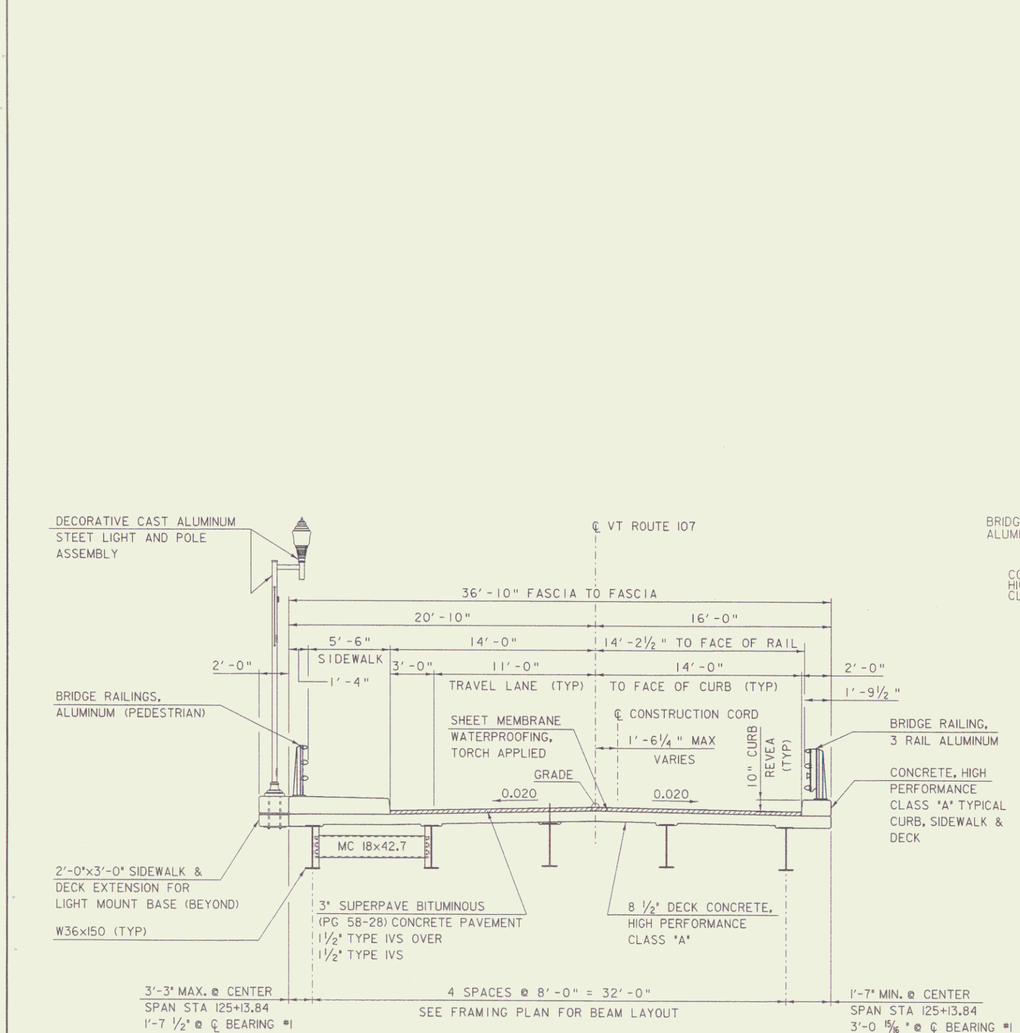
VERTICAL NAVD 88
HORIZONTAL NAD 83 (92)
ADJUSTMENT Compass

PROJECT NAME: Bethel
PROJECT NUMBER: BRF 022-1(14)

FILE NAME: [illegible]\x78f161t1.dg
PROJECT LEADER: Martha Evans-Mongeon
DESIGNED BY:
Tie Sheet 2 of 2

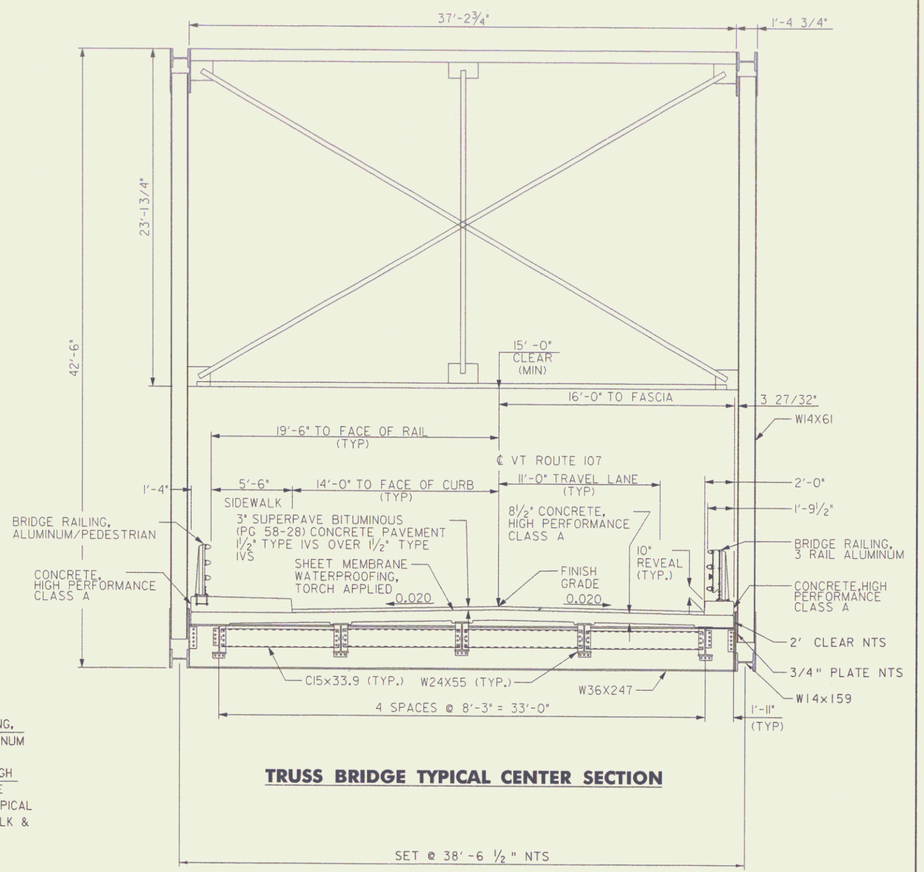
PLOT DATE: 10-FEB-2010
DRAWN BY: R. Bullock
CHECKED BY:
ROW SHEET 6 OF 27

6



APPROACH BRIDGE TYPICAL SECTION

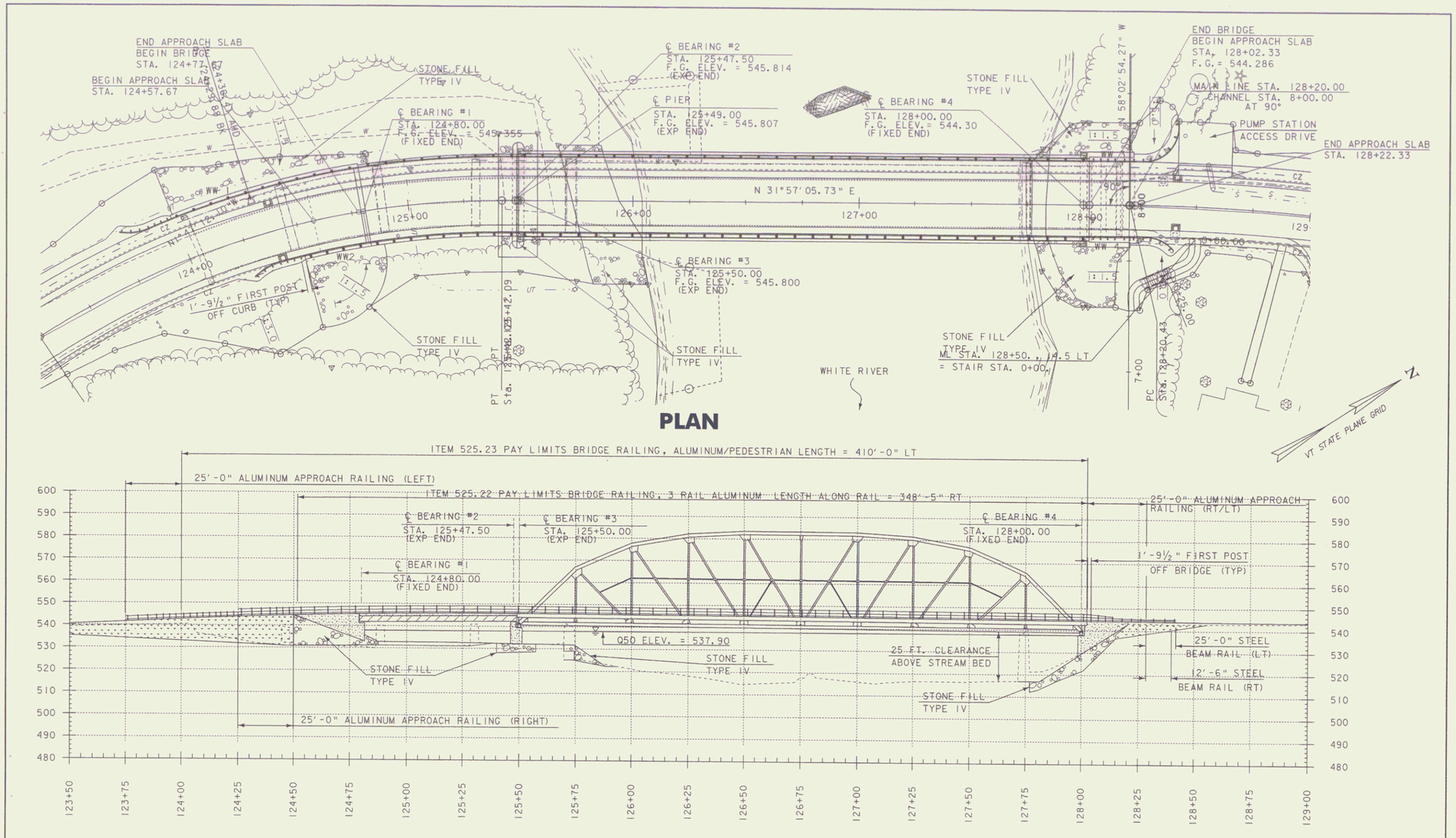
SCALE ¼" = 1'-0"



TRUSS BRIDGE TYPICAL CENTER SECTION

SET @ 38'-6 ½" NTS

PROJECT NAME:	BETHEL
PROJECT NUMBER:	BRF 022-1(14)
FILE NAME: s1614typ.dgn	PLOT DATE: 10-FEB-2010
PROJECT LEADER: M. EVANS-MONGEON	DRAWN BY: G. ROKES
DESIGNED BY: S. SCRIBNER	CHECKED BY: S. SCRIBNER
R. O. W. SHEET 7 OF 27 SHEETS	



PLAN

ELEVATION

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

PLAN AND ELEVATION

PROJECT NAME: VAOT PROJECT NAME
PROJECT NUMBER: PROJECT NUMBER

FILE NAME: ppms*/Section/------.dgn
PROJECT LEADER: ------
DESIGNED BY: ------

PLOT DATE: 10-FEB-2010
DRAWN BY: ------
CHECKED BY: ------
ROW SHEET 8 OF 27 SHEETS

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STATE OF VERMONT
AGENCY OF TRANSPORTATION

PRELIMINARY INFORMATION SHEET

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FINAL HYDRAULIC REPORT

HYDROLOGIC DATA

Date: April 2000

DRAINAGE AREA : 408 square miles
CHARACTER OF TERRAIN : Mountainous, rolling hills and agricultural lands
STREAM CHARACTERISTICS : Perennial, sinuous, not braided, equiwidth
NATURE OF STREAMBED : Gravel to cobble and boulders with some ledge

PEAK FLOW DATA

Q 2.33 =	11,600 cfs	Q 50 =	42,000 cfs
Q 10 =	25,400 cfs	Q 100 =	51,000 cfs
Q 25 =	34,300 cfs	Q 500 =	76,000 cfs

DATE OF FLOOD RECORD : November 1927
ESTIMATED DISCHARGE: Unknown
WATER SURFACE ELEV.: 542 feet (Approximate according to COE 12/73 Study)
NATURAL STREAM VELOCITY : @ Q50 = 11.6 fps
ICE CONDITIONS : moderate
DEBRIS: moderate
DOES THE STREAM REACH MAXIMUM HIGHWATER ELEV. RAPIDLY? No
IS ORDINARY RISE RAPID? No
IS STAGE AFFECTED BY UPSTREAM OR DOWNSTREAM CONDITIONS? No
IF YES, DESCRIBE:

WATERSHED STORAGE: 1% Est. HEADWATERS:
UNIFORM: X
IMMEDIATELY ABOVE SITE:

EXISTING STRUCTURE INFORMATION

STRUCTURE TYPE: Through truss w/ 5 rolled beam approach spans, 4 to south, 1 to north
YEAR BUILT: 1928
CLEAR SPAN(NORMAL TO STREAM): Total = 330 feet
VERTICAL CLEARANCE ABOVE STREAMBED: 25 feet (over main channel)
WATERWAY OF FULL OPENING: Total = 6200 square feet
DISPOSITION OF STRUCTURE: Remove
TYPE OF MATERIAL UNDER SUBSTRUCTURE: Unknown

WATER SURFACE ELEVATIONS AT:

Q2.33 =	527.7 feet *	VELOCITY =	6.0 fps
Q10 =	532.4 feet *	"	9.8 fps
Q25 =	535.3 feet *	"	11.2 fps
Q50 =	537.9 feet *	"	11.6 fps
Q100 =	540.7 feet *	"	12.2 fps

LONG TERM STREAMBED CHANGES: Unknown

IS THE ROADWAY OVERTOPPED BELOW Q100: No
FREQUENCY: Above Q100
RELIEF ELEVATION: 539.4 feet
DISCHARGE OVER ROAD @Q100: None - due to drawdown through the bridge

UPSTREAM STRUCTURE

TOWN: N/A - confluence 600 feet upstream** DISTANCE:
HIGHWAY # : STRUCTURE #:
CLEAR SPAN: CLEAR HEIGHT:
YEAR BUILT: FULL WATERWAY:
STRUCTURE TYPE:

DOWNSTREAM STRUCTURE

TOWN: Royalton DISTANCE: 3.2 miles
HIGHWAY # : I-89 STRUCTURE #: 26-S
CLEAR SPAN: 689 feet CLEAR HEIGHT: 17 feet
YEAR BUILT: 1968 FULL WATERWAY: 12,600 sf
STRUCTURE TYPE: 6-span continuous welded plate girder

LOAD FACTOR - LOAD RATING (TONS)

LOADING LEVELS	TRUCK						
	H	HS	3S2	6 AXLE	3A. STR.	4A. STR.	5A. SEMI
INVENTORY							
POSTED							
OPERATING							

COMMENTS:

TRAFFIC DATA

YEAR	ADT	DHV	% D	% T	ADTT
2007	6500	730	56	8	580
2027	8400	920	56	12	1100

20 year ESAL for flexible pavement from 2007 to 2027 : 4,644,000
40 year ESAL for flexible pavement from 2007 to 2047 : 11,775,000
Design Speed : 25 mph

PROPOSED STRUCTURE

STRUCTURE TYPE: Through truss main span w/1 rolled beam approach span on south side

CLEAR SPAN(NORMAL TO STREAM): Total = 311 feet
VERTICAL CLEARANCE ABOVE STREAMBED: 25 feet (over main channel)
WATERWAY OF FULL OPENING: Total = 6250 square feet

WATER SURFACE ELEVATIONS AT:

Q2.33 =	527.7 feet *	VELOCITY=	6.0 fps
Q10 =	532.3 feet *	"	9.8 fps
Q25 =	535.3 feet *	"	11.2 fps
Q50 =	537.9 feet *	"	11.6 fps
Q100 =	540.9 feet *	"	12.1 fps

IS THE ROADWAY OVERTOPPED BELOW Q100: No
FREQUENCY: Above Q100
RELIEF ELEVATION: 539.8 feet
DISCHARGE OVER ROAD @Q100: None - due to drawdown through the bridge

AVERAGE LOW ELEVATION OF SUPERSTRUCTURE: 540.3 feet
VERTICAL CLEARANCE: @ Q50 = 2.4 feet

SCOUR: Maximum contraction scour @ Q100 = 4 feet
Maximum pier scour @ Q500 = 9 feet
REQUIRED CHANNEL PROTECTION: Type IV Stone Fill

PERMIT INFORMATION

AVERAGE DAILY FLOW:	850 cfs	
ORDINARY LOW WATER:	375 cfs	DEPTH OR ELEVATION: 515 feet
ORDINARY HIGH WATER:	5000 cfs	520 feet

TEMPORARY BRIDGE REQUIREMENTS

STRUCTURE TYPE: Maximum of 1 pier, low steel elev. = 533.3 feet
CLEAR SPAN (NORMAL TO STREAM): Total = 385 feet
VERTICAL CLEARANCE ABOVE STREAMBED: 23 feet (B.O.S. elev = 537.0 feet)
WATERWAY AREA OF FULL OPENING: 4700 square feet

ADDITIONAL INFORMATION

* WSE's are reported 250 feet upstream of the existing and proposed bridge(s) centerline.
** Confluence of White River and the Third Branch of the White River.
*** Temporary bridge designed to be in through the winter.
Pier piles should be designed to be freestanding above elevation 505.5 feet.

DESIGN CRITERIA

1. DESIGN LIVE LOAD AASHTO HL-93
2. DESIGN SPAN APPROACH SPAN = 67.5' TRUSS SPAN = 250'
3. ALLOWABLE LOAD FOR SPREAD FOOTINGS ON SOIL SEE NOTE
   ON LEDGE
4. ALLOWABLE LOAD FOR PILING SEE NOTE
   TYPE
   ESTIMATED LENGTH SEE NOTE
5. STRUCTURAL STEEL AASHTO M270M/M270 GRADE 50 GALVANIZED
6. REINFORCING STEEL GRADE 60
7. CONCRETE, HIGH PERFORMANCE CLASS A f'c: 4000 psi
   CONCRETE, HIGH PERFORMANCE CLASS B f'c: 3500 psi
8. DESIGN SOIL UNIT WEIGHT 140 pcf
9. DESIGN LOAD FOR SPREAD FOOTINGS ON SOIL

TRAFFIC MAINTENANCE

1. IS TRAFFIC TO BE MAINTAINED? YES
   IF YES, ON EXISTING STRUCTURE? NO
   OR ON TEMPORARY BRIDGE? YES
   ONE OR TWO-WAY TRAVEL? TWO
2. TRAFFIC CONTROL SIGNALS REQUIRED? NO
3. ARE SIDEWALKS REQUIRED? YES (URBAN ENVIRONMENT)
   IF SO, ON WHAT SIDE? RIGHT

PROJECT NAME: **BETHEL**
PROJECT NUMBER: **BRF 022-1(14)**

FILE NAME: **/str2/sf161pi.xls** PLOT DATE: **4/3/2008**
PROJECT MANAGER: **M. EVANS-MONGEON** DRAWN BY: **T. HUSK**
DESIGNED BY: **G. COLGROVE** CHECKED BY: **G. COLGROVE**
PRELIMINARY INFORMATION **ROW** SHEET 9 OF 27

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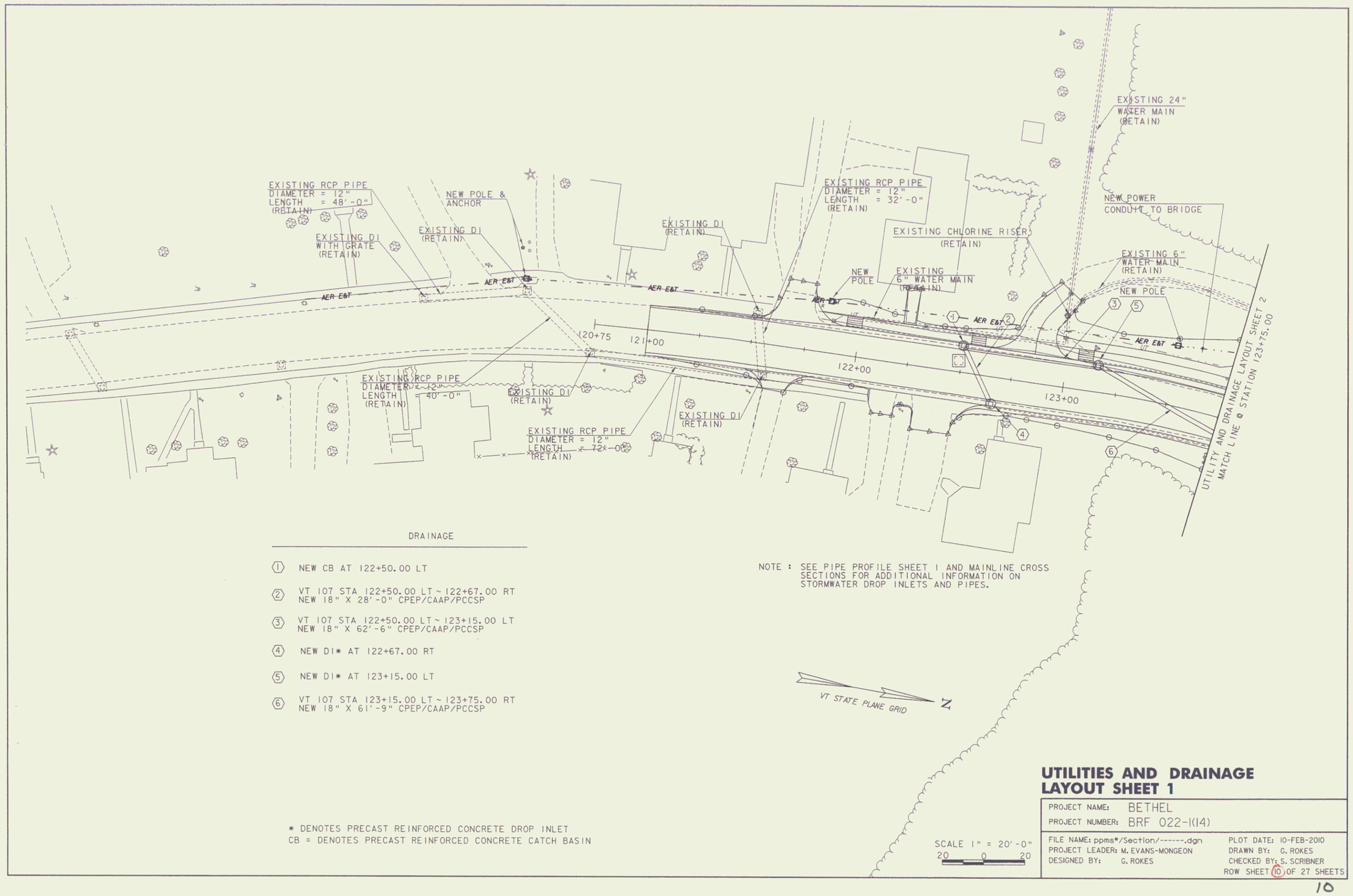


DRAINAGE

1. NEW CB AT 122+50.00 LT
2. VT 107 STA 122+50.00 LT ~ 122+67.00 RT
   NEW 18" X 28'-0" CPEP/CAAP/PCCSP
3. VT 107 STA 122+50.00 LT ~ 123+15.00 LT
   NEW 18" X 62'-6" CPEP/CAAP/PCCSP
4. NEW DI* AT 122+67.00 RT
5. NEW DI* AT 123+15.00 LT
6. VT 107 STA 123+15.00 LT ~ 123+75.00 RT
   NEW 18" X 61'-9" CPEP/CAAP/PCCSP

NOTE : SEE PIPE PROFILE SHEET 1 AND MAINLINE CROSS SECTIONS FOR ADDITIONAL INFORMATION ON STORMWATER DROP INLETS AND PIPES.

VT STATE PLANE GRID N

* DENOTES PRECAST REINFORCED CONCRETE DROP INLET
CB = DENOTES PRECAST REINFORCED CONCRETE CATCH BASIN

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

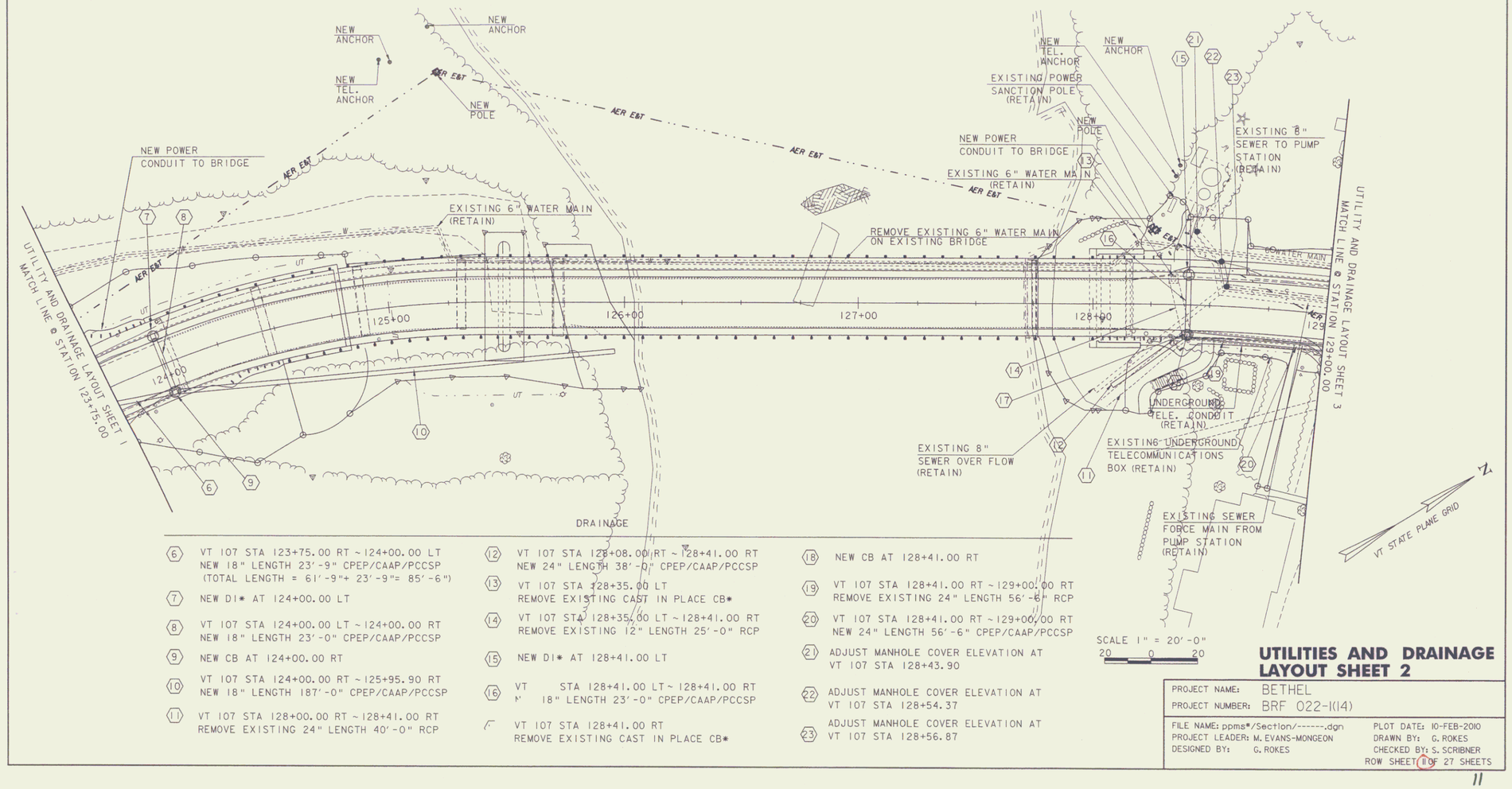
UTILITIES AND DRAINAGE LAYOUT SHEET 1

PROJECT NAME: BETHEL
PROJECT NUMBER: BRF 022-1(14)

FILE NAME: ppms*/Section/------.dgn
PROJECT LEADER: M. EVANS-MONGEON
DESIGNED BY: G. ROKES
PLOT DATE: 10-FEB-2010
DRAWN BY: G. ROKES
CHECKED BY: S. SCRIBNER
ROW SHEET 10 OF 27 SHEETS

* DENOTES PRECAST REINFORCED CONCRETE DROP INLET

NOTE : SEE PIPE PROFILE SHEET 1 AND SHEET 2 INCLUDING MAINLINE CROSS SECTIONS FOR ADDITIONAL INFORMATION ON STORMWATER DROP INLETS AND PIPES.



⑥ VT 107 STA 123+75.00 RT ~ 124+00.00 LT
NEW 18" LENGTH 23'-9" CPEP/CAAP/PCCSP
(TOTAL LENGTH = 61'-9"+ 23'-9"= 85'-6")

⑦ NEW DI* AT 124+00.00 LT

⑧ VT 107 STA 124+00.00 LT ~ 124+00.00 RT
NEW 18" LENGTH 23'-0" CPEP/CAAP/PCCSP

⑨ NEW CB AT 124+00.00 RT

⑩ VT 107 STA 124+00.00 RT ~ 125+95.90 RT
NEW 18" LENGTH 187'-0" CPEP/CAAP/PCCSP

⑪ VT 107 STA 128+00.00 RT ~ 128+41.00 RT
REMOVE EXISTING 24" LENGTH 40'-0" RCP

⑫ VT 107 STA 128+08.00 RT ~ 128+41.00 RT
NEW 24" LENGTH 38'-0" CPEP/CAAP/PCCSP

⑬ VT 107 STA 128+35.00 LT
REMOVE EXISTING CAST IN PLACE CB*

⑭ VT 107 STA 128+35.00 LT ~ 128+41.00 RT
REMOVE EXISTING 12" LENGTH 25'-0" RCP

⑮ NEW DI* AT 128+41.00 LT

⑯ VT STA 128+41.00 LT ~ 128+41.00 RT
" 18" LENGTH 23'-0" CPEP/CAAP/PCCSP

VT 107 STA 128+41.00 RT
REMOVE EXISTING CAST IN PLACE CB*

⑱ NEW CB AT 128+41.00 RT

⑲ VT 107 STA 128+41.00 RT ~ 129+00.00 RT
REMOVE EXISTING 24" LENGTH 56'-6" RCP

⑳ VT 107 STA 128+41.00 RT ~ 129+00.00 RT
NEW 24" LENGTH 56'-6" CPEP/CAAP/PCCSP

㉑ ADJUST MANHOLE COVER ELEVATION AT
VT 107 STA 128+43.90

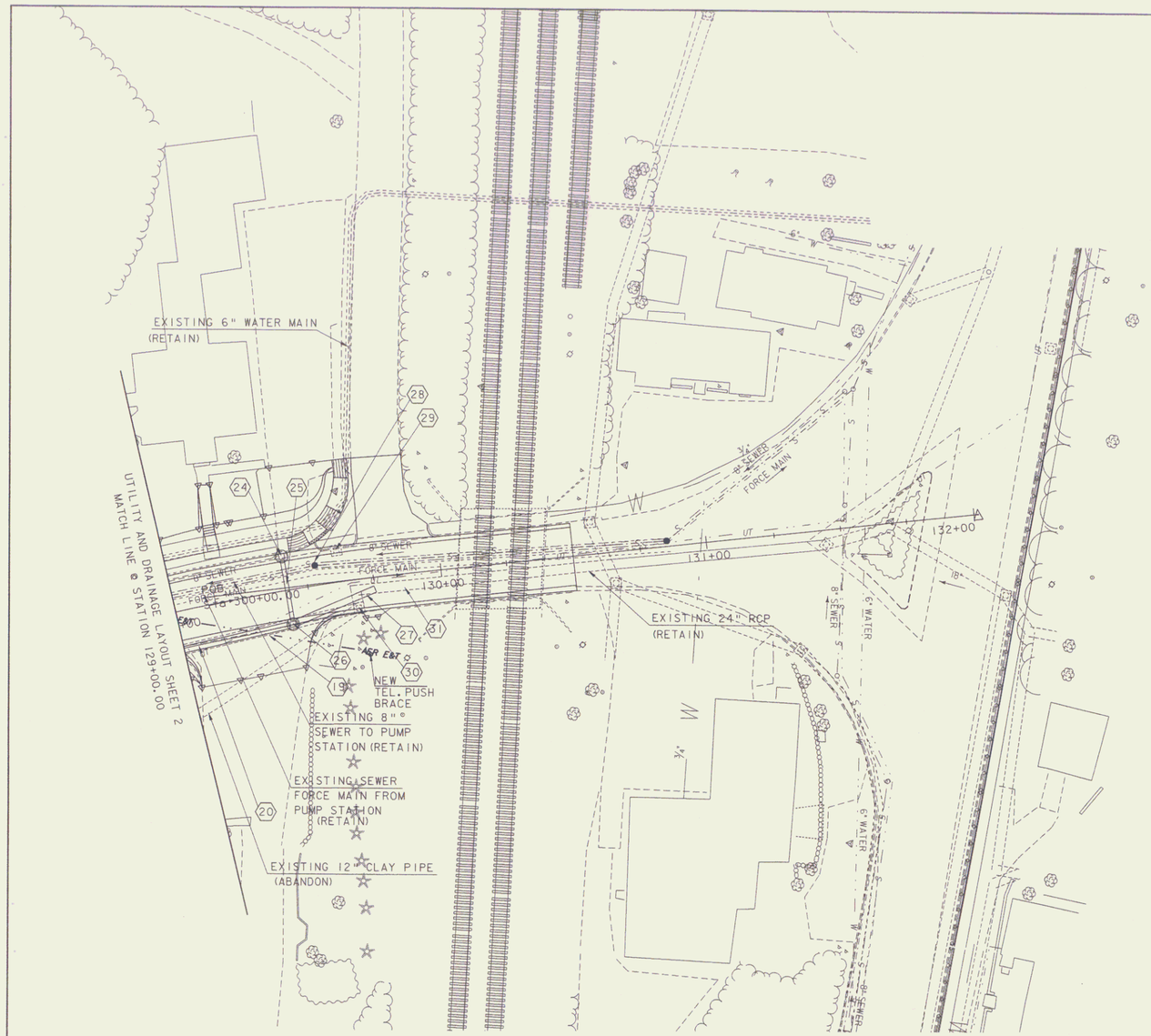
㉒ ADJUST MANHOLE COVER ELEVATION AT
VT 107 STA 128+54.37

㉓ ADJUST MANHOLE COVER ELEVATION AT
VT 107 STA 128+56.87

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

UTILITIES AND DRAINAGE LAYOUT SHEET 2

PROJECT NAME:	BETHEL
PROJECT NUMBER:	BRF 022-1(14)
FILE NAME: ppms*/Section/------.dgn	PLOT DATE: 10-FEB-2010
PROJECT LEADER: M. EVANS-MONGEON	DRAWN BY: G. ROKES
DESIGNED BY: G. ROKES	CHECKED BY: S. SCRIBNER
	ROW SHEET 11 OF 27 SHEETS



NOTE : SEE PIPE PROFILE SHEET 2 AND MAINLINE CROSS SECTIONS FOR ADDITIONAL INFORMATION ON STORMWATER DROP INLETS AND PIPES.

N

VT STATE PLANE GRID

DRAINAGE

(19) VT 107 STA 129+00.00 RT ~ 129+68.00 RT
REMOVE 24" LENGTH 67'-0" RCP
(TOTAL= 56'-6" + 67'0" = 123'-6")

(20) VT 107 STA 129+00.00 RT ~ 129+42.00 RT
NEW 24" LENGTH 40'-0" CPEP/CAAP/PCCSP
(TOTAL= 56'-6" + 40'-0" = 96'-6")

(24) NEW DI* AT 129+42.00 LT

(25) VT 107 STA 129+42.00 LT ~ 129+42.00 RT
NEW 12" LENGTH 23'-0" CPEP/CAAP/PCCSP

(26) NEW CB AT 129+42.00 RT

(27) VT 107 STA 129+42.00 RT ~ 129+75.00 RT
NEW 24" LENGTH 32'-5" CPEP/CAAP/PCCSP
(NEW PIPE 27 TO BE CONNECTED TO CUT PIPE 31)

(28) ADJUST MANHOLE COVER ELEVATION AT
VT 107 STA 129+54.00 LT

(29) VT 107 STA 129+63.00 LT
REMOVE EXISTING CAST IN PLACE CB*

(30) VT 107 STA 129+68.00 RT
REMOVE EXISTING CAST IN PLACE CB*

(31) VT 107 STA 129+68.00 RT ~ 129+75.00 RT
REMOVE 24" (CUT) LENGTH 7'-0" RCP

* DENOTES PRECAST REINFORCED CONCRETE DROP INLET

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

UTILITIES AND DRAINAGE LAYOUT SHEET 3

PROJECT NAME: BETHEL
PROJECT NUMBER: BRF 022-1(14)

FILE NAME: ppms*/Section/------.dgn
PROJECT LEADER: M. EVANS-MONGEON
DESIGNED BY: G. ROKES
PLOT DATE: 10-FEB-2010
DRAWN BY: G. ROKES
CHECKED BY: S. SCRIBNER
ROW SHEET 12 OF 27 SHEETS

STATE OF VERMONT
AGENCY OF TRANSPORTATION

EROSION CONTROL NARRATIVE

EROSION CONTROL NARRATIVE

1.1 PROJECT DESCRIPTION

This project involves the replacement of a truss bridge over the White River. The project is on VT 107 (River Street) a paved, minor arterial in the Town of Bethel. A temporary two lane bridge will be erected downstream of the existing structure. This temporary bridge will be a continuous span with a temporary pier at mid point by the south river edge. The approach work to the temporary bridge will come close to two property owners. Extra caution will be exercised to prevent erosion from the project to cause damage or adversely affect these property owners.
Once the temporary bridge is in place; the existing truss, abutments approach spans, and piers can be removed.
Upon the completion of the new structure the temporary bridge will be removed. Work including both approaches, is approximately 762.00 feet. The limits of construction approach buildings and other structures.
Historic Resources have been identified in the project area.
The existing structure has been cleared for removal as it has been photo-documented for Historical purposes. The site is located, based upon NAD 83/92 at 258776.257 N, 491595.522 E.

It is anticipated that this project will last two construction seasons.

Total disturbed area (excluding waste, borrow and staging areas): 1.02 ac.

1.2 SITE INVENTORY

1.2.1 OFF SITE DRAINAGE CHARACTERISTICS:

The property surrounding the project site consists of well established vegetation, moderate to steeply sloping, mixed softwood and hardwood forest with well defined drainage ways. 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 ditches, and that which follows River Street along the 14% grade at the end of the project limits. The current roadway ditches are not well defined and are not lined with stone.

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

White River is located in the project area. There are no other water bodies or wetlands within the project area. The White River is classified as perennial, sinuous, not braided and equiwidth containing a streambed of some ledge with some boulders, cobbles and gravel. The contributing drainage area at the bridge crossing is 408 sq. mi.

Disturbance of soils near natural or man-made waterways consists of that which is necessary to construct two new concrete bridge abutments, a pier and applicable roadway approaches as well as the removal of the existing crossing. Stabilization of disturbances to stream banks will be accomplished with Stone Fill, Type IV.

1.2.3 TOPOGRAPHY, EXISTING ROADS, BUILDINGS, UTILITIES:

The topography of the project site is relatively flat. Before the bridge at around STA. 122+90 there is a gravel access road that goes underneath the bridge to a gravel parking lot. After the bridge at approximately STA.129+80 TH 5 runs parallel with the train tracks before coming to a bridge. Development along VT 107 consists of permanent residences two of which exist near the project limits. Underground utilities run throughout the entire project on both sides of VT 107. There is also a sewage pumping station after the bridge at STA. 128+25

1.2.4 VEGETATION:

A mix of hardwood and softwood trees of all sizes exist along VT 107
The residences near the bridge site have small areas of lawn and stone walls with plantings. One field exists near the project. Impacts to vegetation will be limited to that which are effected by the construction of the new bridge.

Following construction of the temporary bridge, the existing bridge and roadway approaches will be removed, the slopes stabilized with stone fill and vegetation reestablished with standard seed & mulch practices.

1.2.5 SOILS:

The Soil Conservation Service has mapped the soils throughout Windsor County. One of the soil type identified for this project site is Urban Land-Windsor-Agawam complex. This soil type is described as '...Moderately steep and hilly, shallow, somewhat excessively drained and excessively drained soils and rock outcrop in irregularly shaped areas on bedrock ridges... they have a surface layer of very dark grayish brown fine sandy loam 2 inches thick. The subsoil is friable, brown to dark brown gravelly fine sandy loam 10 inches thick. Hard, massive schist bedrock is at a depth of 12 inches....Permeability is moderately rapid...The hazard of erosion is moderate. Runoff is rapid on the rock outcrop part of this complex.

The listed Soil Erodibility Coefficient (K-value) for this soil type is 0.20. Generally, K-values indicate the following: 0.0 - 0.23 = low erodibility; 0.24 - 0.36 = moderate erodibility; 0.37 and higher = high erodibility.

Another soil type identified on this project is Ondawa fine sandy loam, this soil type is described as '...Moderately sloped with slopes ranging from 0 to 3 percent. The soil is considered to be not erodible and is occasionally flooded. It is identified as not a hydric soil. It's in hydraulic group B and its soil depth will be moderately deep to very deep/ bedrock that is either sandy/sandy-skeletal to loamy/loamy-skeletal.

1.2.6 SENSITIVE RESOURCE AREAS:

No 'Threatened & Endangered Species' have been identified within the project limits and there will be no adverse effect to Historic or Archaeological features. The White River is the only identified resource and being a steep, high gradient stream, there are no wetlands within the vicinity of the project.

1.3 RISK EVALUATION

Low Risk Evaluation
The project has been determined to be low risk and as such the low risk site hand book must be on site and complied with.
No changes to the project limits or soil stabilization techniques that may affect the risk level at this point.
Any modifications to the project shall result in a re-evaluation of the risk and the contractor is responsible for re-filing should the risk change.

1.4 EROSION PREVENTION AND SEDIMENT CONTROL

The erosion control plans are meant as a guideline for preventing erosion and controlling sediment transport. The work outlined in this narrative consists of applying measures throughout the life of the project minimizing sediment transport to the receiving waters. The measures include stabilization and structural practices, storm water controls and other pollution prevention controls.

Preventing initial soil erosion is much more effective than treating eroded sediment. 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.

All measures shall be regularly maintained and shall be checked for sediment build-up. Sediment shall be disposed at an approved site where it will not be subject to erosion.

(Refer to the low risk site handbook and appropriate detail sheets for each practice required on the project to include but not limited to the following.)

1.4.1 MARK SITE BOUNDARIES

Project demarcation fencing, denoted -pdf- on the plans, is used to delineate the limits the contractor can access with construction equipment. This measure limits the area that can be disturbed and exposed to erosion.

1.4.2 LIMIT DISTURBANCE AREA

Employ temporary stabilization practices in incremental stages (PHASING) as construction proceeds. Turbidity curtain shall be used when work is being done for the pier. Additional measures may be needed due to the phasing of the project and as directed by the engineer.

1.4.3 STABILIZE CONSTRUCTION EXIT

Stabilized construction entrance shall be utilized by the direction of the RE.

1.4.4 INSTALL SILT FENCE

Silt fence shall be installed prior to any up slope work as shown on the plans or as necessary.

1.4.5 DIVERT UPLAND RUNOFF

Swale grass lined (Storm water from street collection drainage system)

1.4.6 SLOW DOWN CHANNELIZED RUNOFF

Check dams shall be utilized by the direction of the Resident Engineer.

1.4.7 CONSTRUCT PERMANENT CONTROLS

Type IV stone for slope lining and channel protection
Seed and mulch
Drainage inlets and piping
Soil retention walls

Stream bank vegetation will be introduced in the grubbing material that is to be placed over the stream bank stone fill.

1.4.8 STABILIZED EXPOSED SOILS

Seed and mulch
Erosion matting

Tracking of all exposed slopes, combined with temporary mulching, will be utilized on a regular basis. Slopes shall be stabilized with 48 hours of forecasted rain. Seeding, mulching and biodegradable erosion control matting or an equivalent shall be used to stabilize all slopes steeper than 1:3. These slopes shall be stabilized within 48 hours of reaching intermittent phases of construction.

1.4.9 WINTER STABILIZATION

Various measures specific to winter (See low risk handbook)

1.4.10 STABILIZE SOIL AT FINAL GRADE

Seed and mulch
Erosion matting

Seeding, mulching and biodegradable erosion matting or an equivalent shall be used to stabilize all slopes steeper than 1:3. These slopes shall be stabilized within 48 hours of reaching final grade.

1.4.11 DE-WATERING ACTIVITIES

Sediment basins for pier work shall be used as directed by the Resident Engineer.

1.4.12 INSPECT YOUR SITE

Inspect site based on permit authorization or special provision requirements.

% WT.	LBS./A.	NAME	PUR %	GERM %
37.5	22.5	CREEPING RED FESCUE	98	85
37.5	22.5	TALL FESCUE	95	90
5.0	3.0	RED TOP	95	90
15.0	9.0	BIRDSFOOT TREFOIL	98	85
5.0	3.0	ANNUAL RYEGRASS	95	85
100.0	60.0			

General Notes

Seed mixture shall not have a weed content exceeding 0.40% by weight and shall be free of all noxious seed.

Seed to be applied per seeding formulas or as directed by the engineer

Fertilizer formula 10-20-10, to be used with seed, applied at the rate of 500 lbs./acre (Hydro seeders may use 19-19-19 formula.)

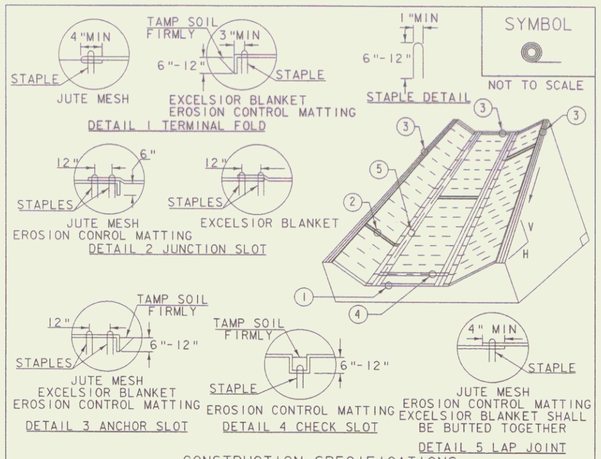
Agricultural limestone to be applied at the rate of 2 tons/acre, or as directed by the engineer

Hay mulch to be placed on earth slopes at the rate of 2 tons/acre or as directed by the engineer.

Topsoil to be used with seed as indicated on the plans, or as directed by the engineer.

EROSION CONTROL NARRATIVE

PROJECT NAME:	BETHEL		
PROJECT NUMBER:	BRF 022-1(14)		
FILE NAME:	78f161\Structures\sf161forms.c	PLOT DATE:	5/5/2008
PROJECT LEADER:	M. Evans-Mongeon	DRAWN BY:	G. Rokes
DESIGNED BY:	G. Colgrove	CHECKED BY:	S. Scribner
EROSION CONTROL NARRATIVE	ROW	SHEET 13	OF 27



CONSTRUCTION SPECIFICATIONS

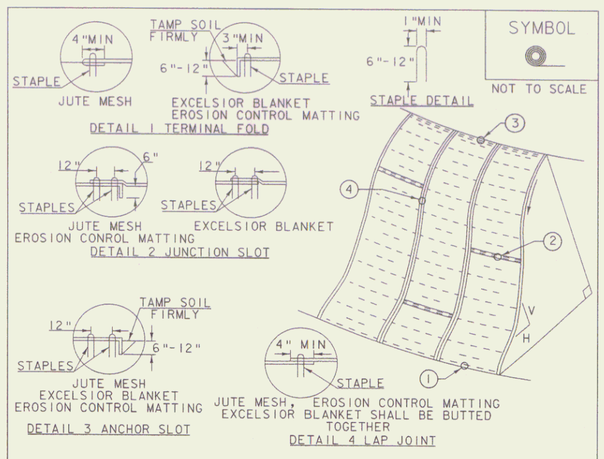
1. EROSION MATTING, CHECK SLOTS, SHALL BE SPACED IN DITCH CHANNEL SO THAT ONE OCCURS WITHIN EACH 50' ON SLOPES OF MORE THAN 4% AND LESS THAN 6%. ON SLOPES OF 6% OR MORE, THEY SHALL BE SPACED SO THAT ONE OCCURS WITHIN EACH 25'.
2. APPLY FERTILIZER, LIME SEED PRIOR TO PLACING MATTING.
3. STAPLES ARE TO 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) DITCH

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	
MARCH 8, 2007	JMF
APRIL 16, 2007	WHF
JANUARY 13, 2009	WHF



CONSTRUCTION SPECIFICATIONS

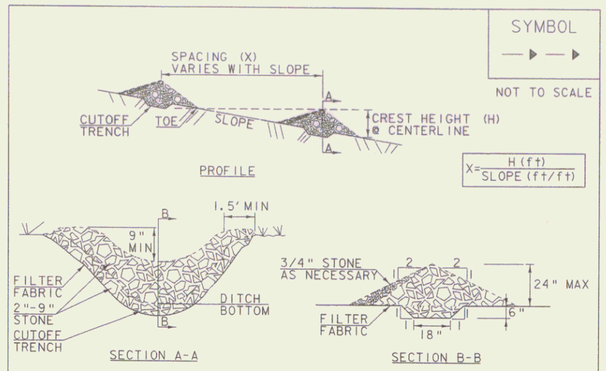
1. APPLY TO SLOPES GREATER THAN 3H: IV OR WHERE NECESSARY TO AID IN ESTABLISHING VEGETATION.
2. APPLY FERTILIZER, LIME SEED PRIOR TO PLACING MATTING.
3. STAPLES ARE TO BE PLACED ALTERNATELY, IN COLUMNS APPROXIMATELY 2' APART AND IN ROWS APPROXIMATELY 3' APART. APPROXIMATELY 175 STAPLES ARE REQUIRED PER 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. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION.
2. CHECK DAMS SHALL BE SPACED SO THAT THE ELEVATION OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION AS THE TOE OF THE UPSTREAM DAM.
3. 3/4" FILTERING STONE MAY BE ADDED TO THE FACE OF THE CHECK DAM AS NECESSARY.
4. EXTEND THE STONE A MINIMUM OF 1.5' BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
5. PROTECT CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
6. ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE.
7. MAXIMUM DRAINAGE AREA 2 ACRES.

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

CHECK DAM

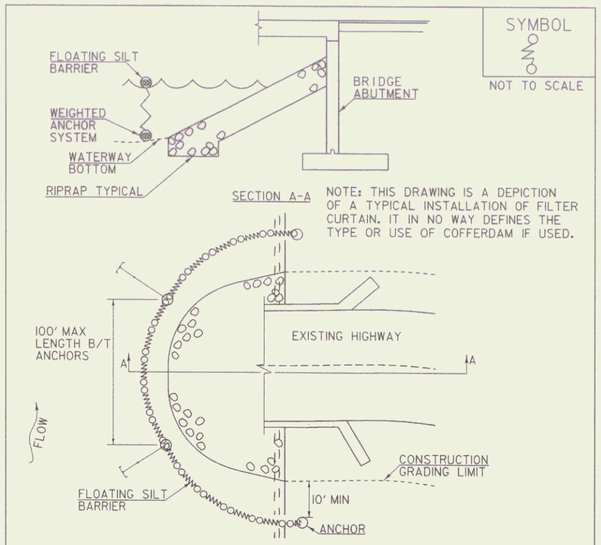
NOTES:
REFER TO 'THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- 'FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.
THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR TEMPORARY STONE CHECK DAM, TYPE I (PAY ITEM 653.25)

REVISIONS	
MARCH 21, 2008	WHF
JANUARY 8, 2009	WHF

EPSC DETAILS SHEET 1

PROJECT NAME: BETHEL
PROJECT NUMBER: BRF 022-1(14)

FILE NAME: ppms*/Section/------.dgn
PROJECT LEADER: M. EVANS-MONGEON
DESIGNED BY: S. SCRIBNER
PLOT DATE: 10-FEB-2010
DRAWN BY: T. DREW
CHECKED BY: S. SCRIBNER
R.O.W. SHEET 14 OF 27 SHEETS



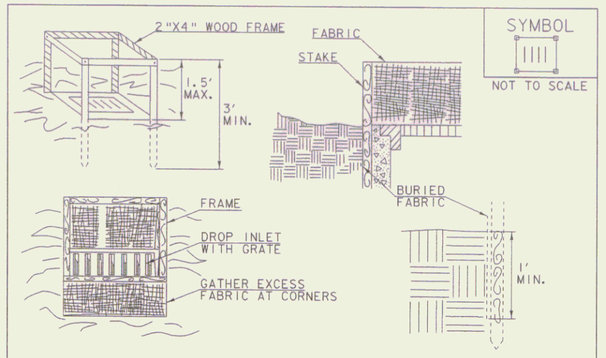
CONSTRUCTION SPECIFICATIONS

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

	FILTER CURTAIN

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

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



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.

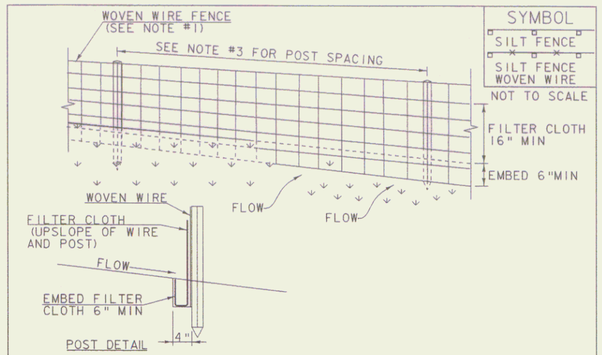
THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR INLET PROTECTION DEVICE, TYPE I (PAY ITEM 653.40).

REVISIONS	
MARCH 7, 2008	WHF
JANUARY 13, 2009	WHF

EPSC DETAILS SHEET 2

PROJECT NAME: BETHEL
PROJECT NUMBER: BRF 022-1(14)

FILE NAME: ppms*/Section/------.dgn
PROJECT LEADER: M. EVANS-MONGEON
DESIGNED BY: S. SCRIBNER
PLOT DATE: 10-FEB-2010
DRAWN BY: T. DREW
CHECKED BY: S. SCRIBNER
R.O.W. SHEET (15) OF 27 SHEETS



SYMBOL

SILT FENCE

SILT FENCE WOVEN WIRE

NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

1. WOVEN WIRE REINFORCED FENCE IS REQUIRED WITHIN 100' UPSLOPE OF RECEIVING WATERS WHEN THE PROJECT FALLS UNDER A CONSTRUCTION STORMWATER PERMIT. WOVEN WIRE SHALL BE A MIN. 14 GAUGE WITH A 6" MAX. MESH OPENING.
2. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI100X, STABILINKA T140N OR APPROVED EQUIVALENT.
3. POST SPACING FOR WIRE-BACKED FENCE SHALL BE 10' MAXIMUM. FOR FILTER-CLOTH FENCE, WHEN ELONGATION IS >50%, POST SPACING SHALL NOT EXCEED 4' AND WHEN ELONGATION IS <50%, POST SPACING SHALL NOT EXCEED 6'.
4. WOVEN WIRE FENCE IS TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES. FILTER CLOTH IS TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
5. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY 6" AND FOLDED.
6. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN SEDIMENT REACHES HALF OF FABRIC HEIGHT.

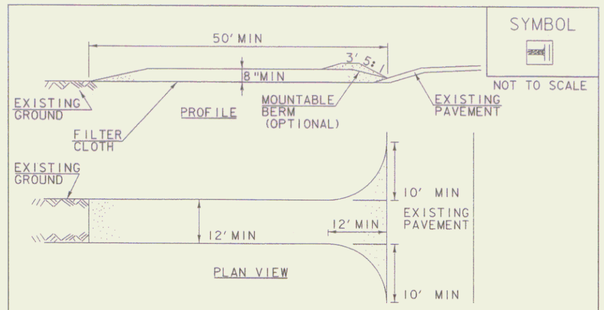
ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SILT FENCE

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

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 649 AND AS SHOWN IN THE PLANS FOR GEOTEXTILE FOR SILT FENCE (PAY ITEM 649.51) OR GEOTEXTILE FOR SILT FENCE, WOVEN WIRE REINFORCED (PAY ITEM 649.515).

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



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.

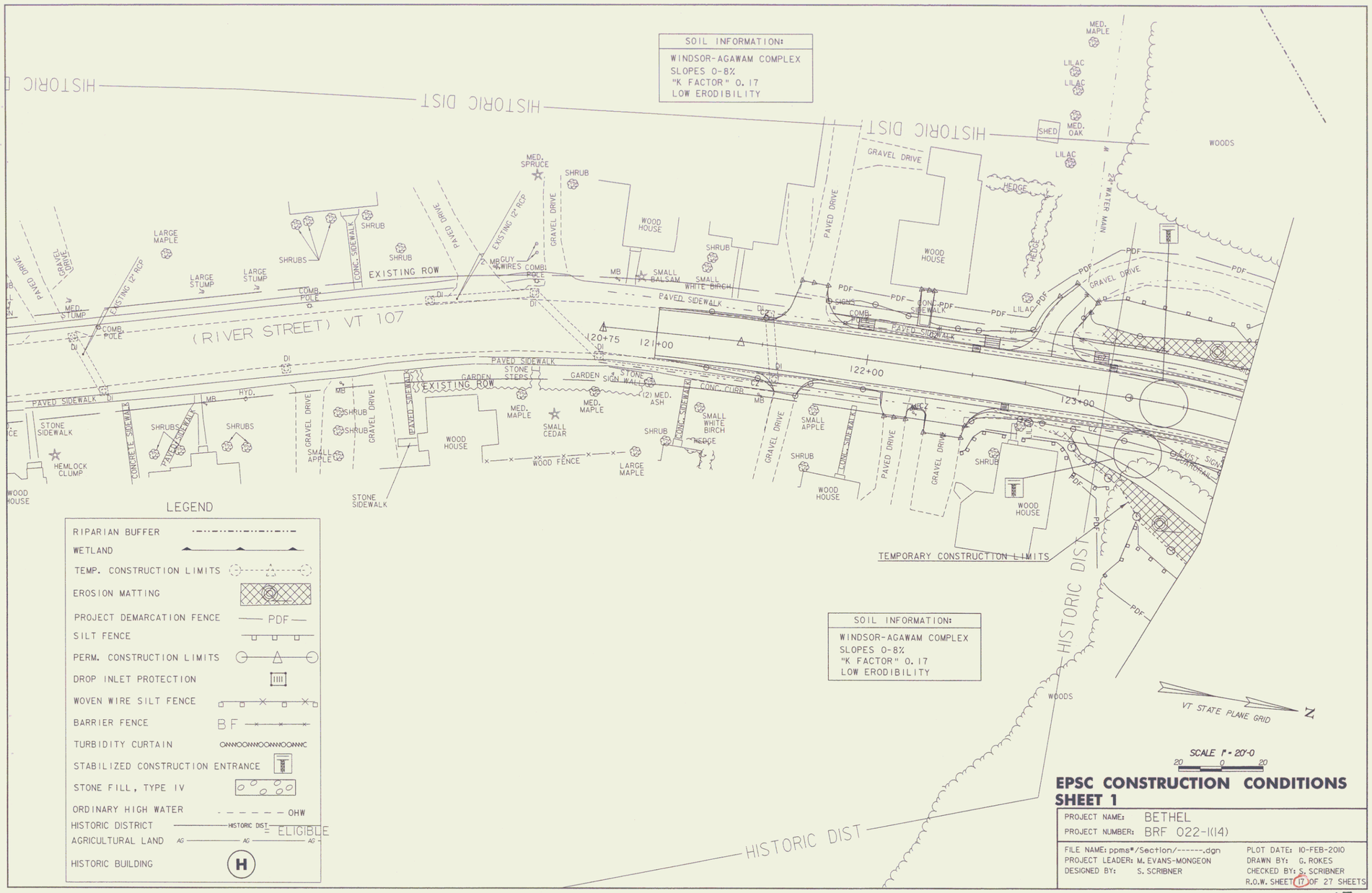
THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR VEHICLE TRACKING PAD (PAY ITEM 653.35) OR AS SPECIFIED IN THE CONTRACT.

REVISIONS	
MARCH 24, 2008	WHF
JANUARY 13, 2009	WHF

EPSC DETAILS SHEET 3

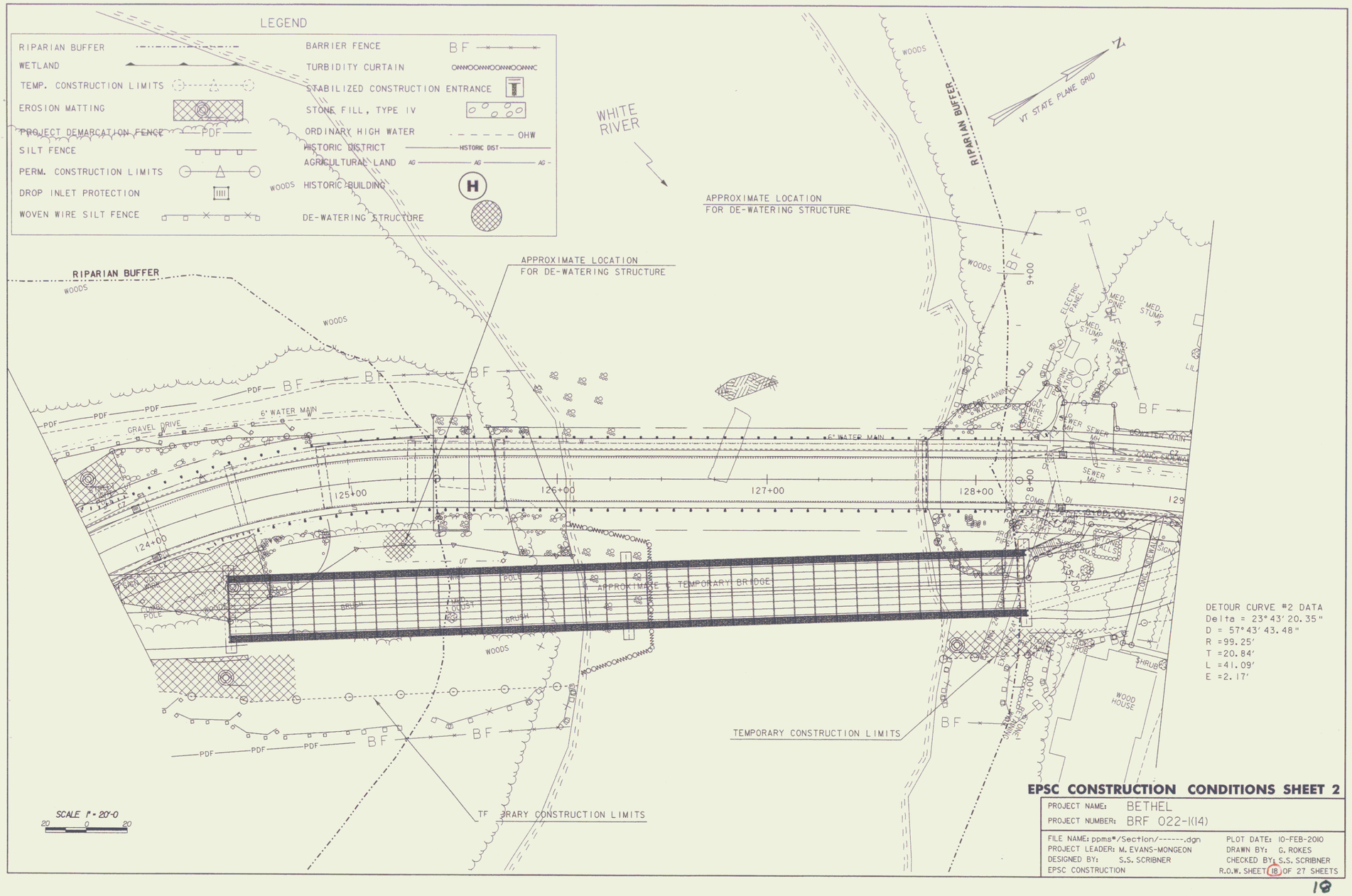
PROJECT NAME: BETHEL
PROJECT NUMBER: BRF 022-1(14)

FILE NAME: ppms*/Section/------.dgn
PROJECT LEADER: M. EVANS-MONGEON
DESIGNED BY: S. SCRIBNER
PLOT DATE: 10-FEB-2010
DRAWN BY: T. DREW
CHECKED BY: S. SCRIBNER
R.O.W. SHEET 16 OF 27 SHEETS



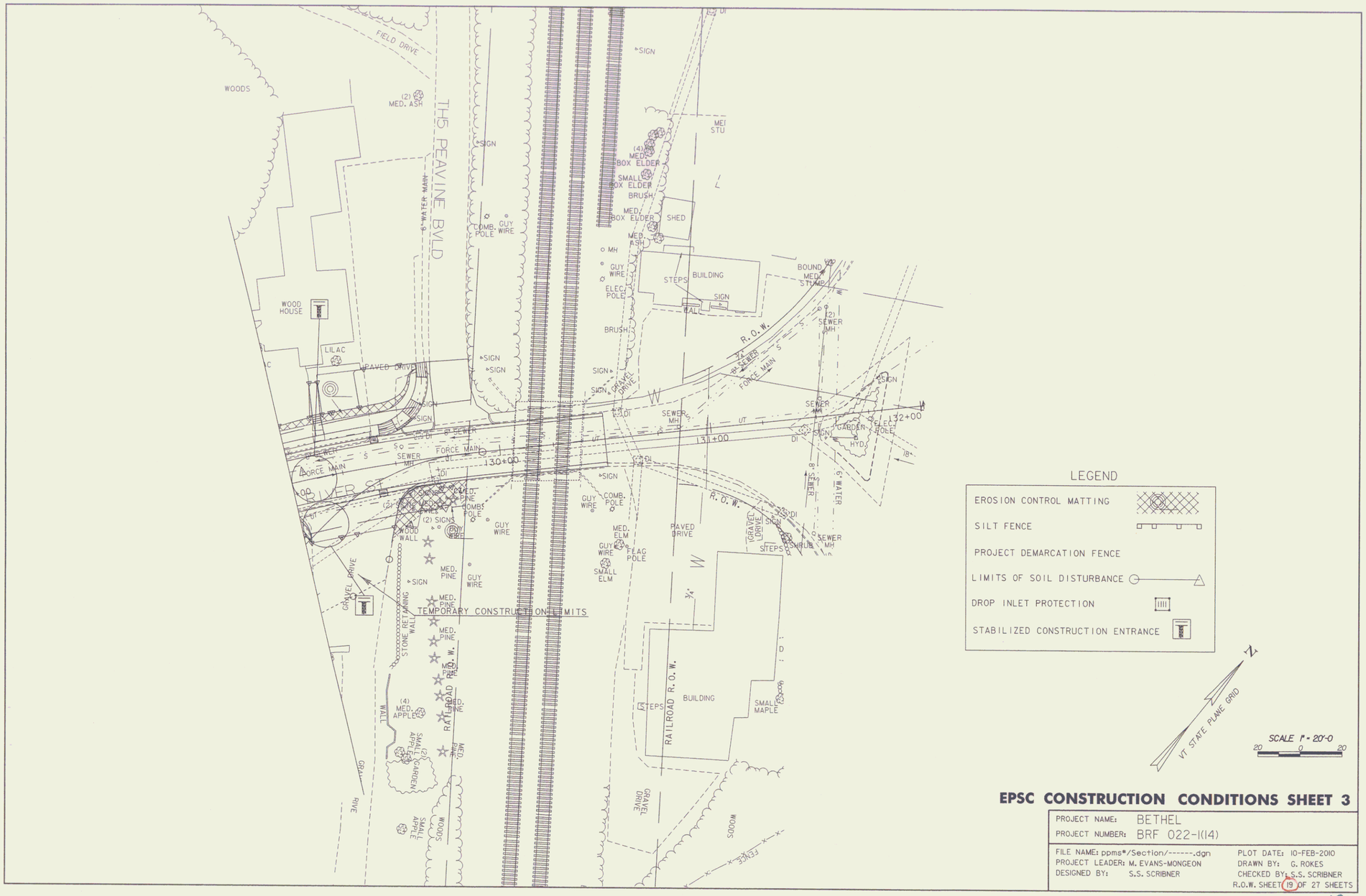
EPSC CONSTRUCTION CONDITIONS SHEET 1

PROJECT NAME:	BETHEL
PROJECT NUMBER:	BRF 022-1(14)
FILE NAME: ppms*/Section/------.dgn	PLOT DATE: 10-FEB-2010
PROJECT LEADER: M. EVANS-MONGEON	DRAWN BY: G. ROKES
DESIGNED BY: S. SCRIBNER	CHECKED BY: S. SCRIBNER
	R.O.W. SHEET 17 OF 27 SHEETS



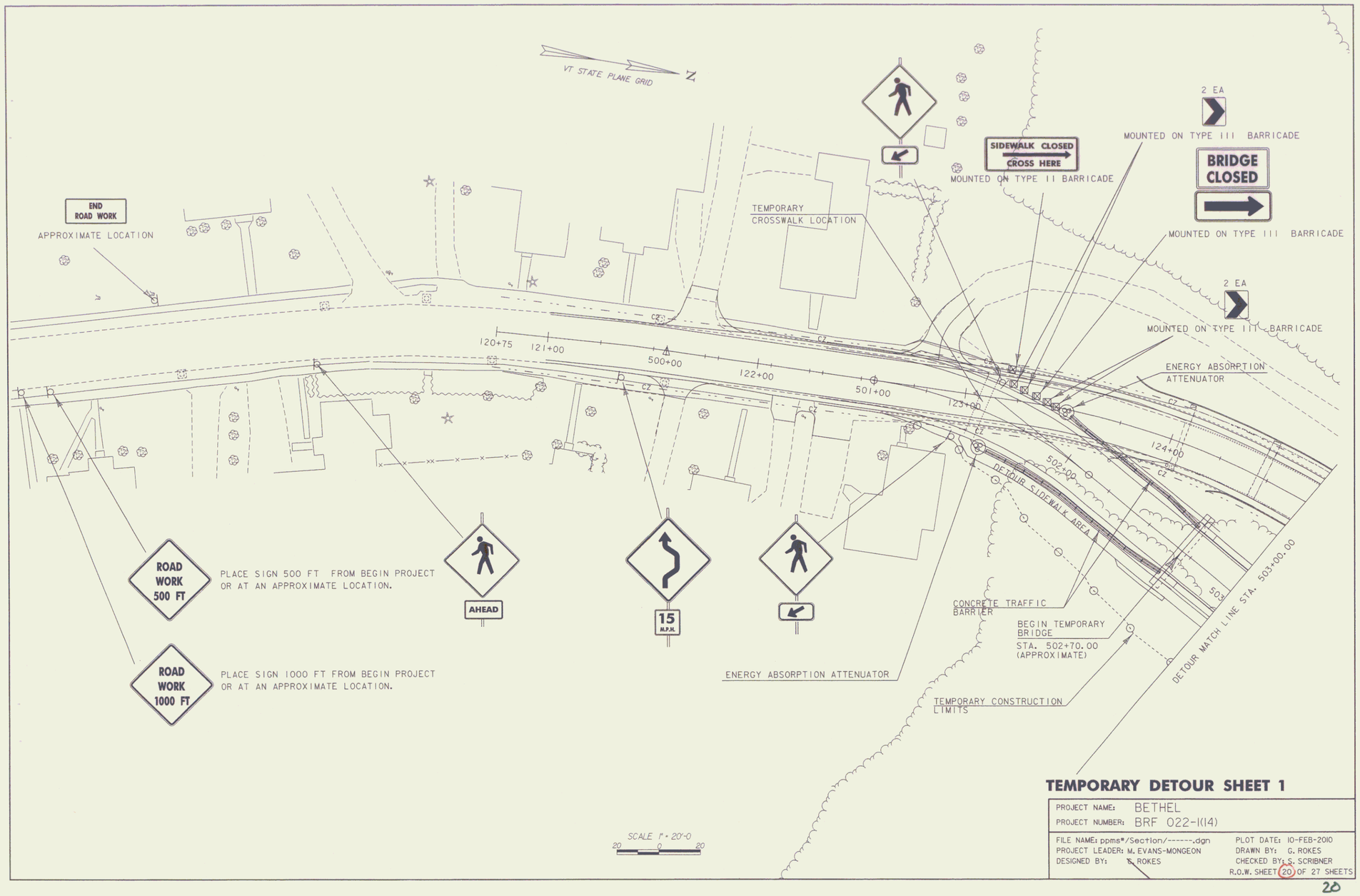
EPSC CONSTRUCTION CONDITIONS SHEET 2

PROJECT NAME:	BETHEL
PROJECT NUMBER:	BRF 022-1(14)
FILE NAME: ppms#/Section/------.dgn	PLOT DATE: 10-FEB-2010
PROJECT LEADER: M. EVANS-MONGEON	DRAWN BY: G. ROKES
DESIGNED BY: S.S. SCRIBNER	CHECKED BY: S.S. SCRIBNER
EPSC CONSTRUCTION	R.O.W. SHEET 18 OF 27 SHEETS



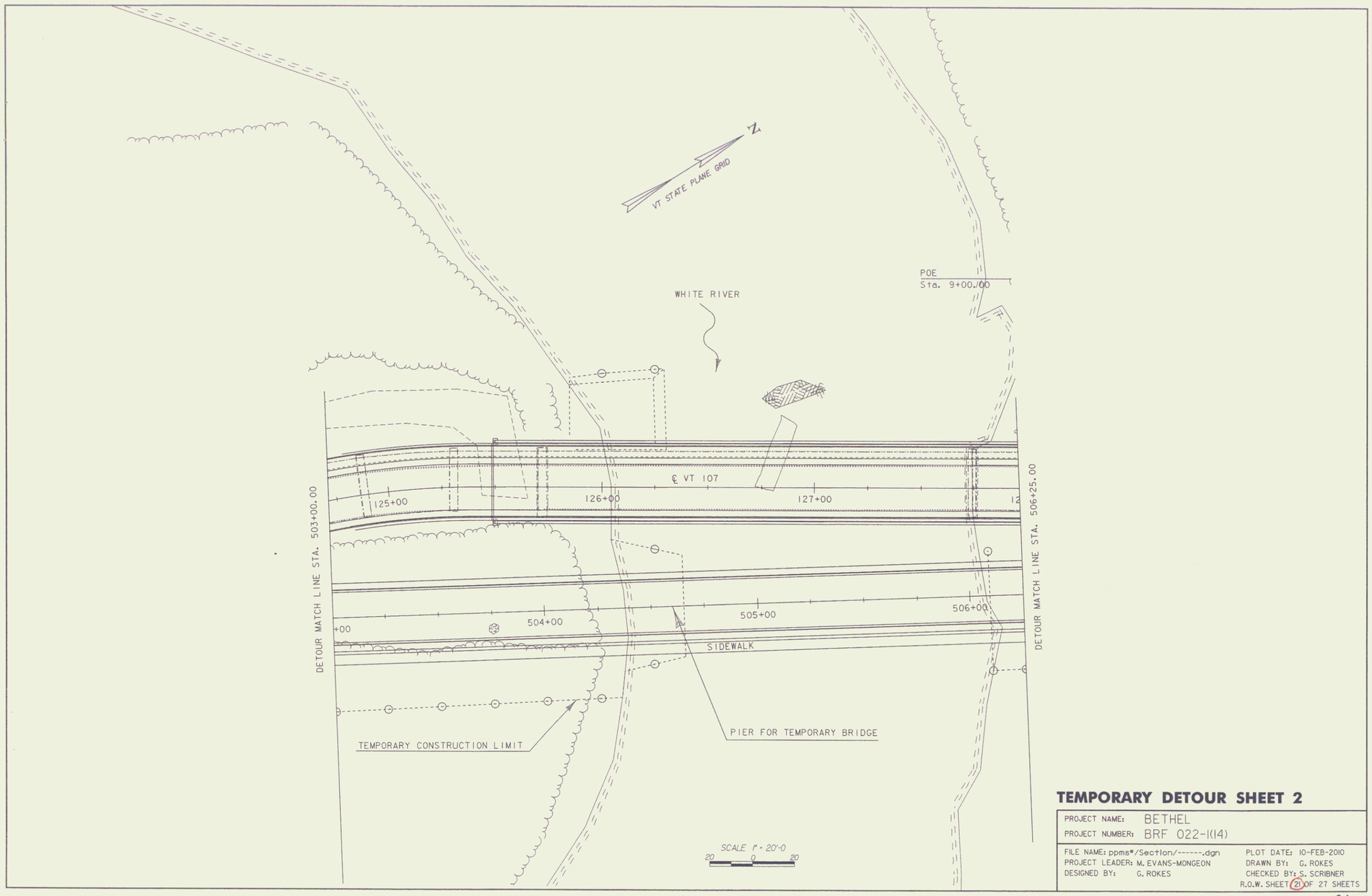
EPSC CONSTRUCTION CONDITIONS SHEET 3

PROJECT NAME:	BETHEL
PROJECT NUMBER:	BRF 022-1(14)
FILE NAME: ppms*/Section/------.dgn	PLOT DATE: 10-FEB-2010
PROJECT LEADER: M. EVANS-MONGEON	DRAWN BY: G. ROKES
DESIGNED BY: S.S. SCRIBNER	CHECKED BY: S.S. SCRIBNER
	R.O.W. SHEET 19 OF 27 SHEETS



TEMPORARY DETOUR SHEET 1

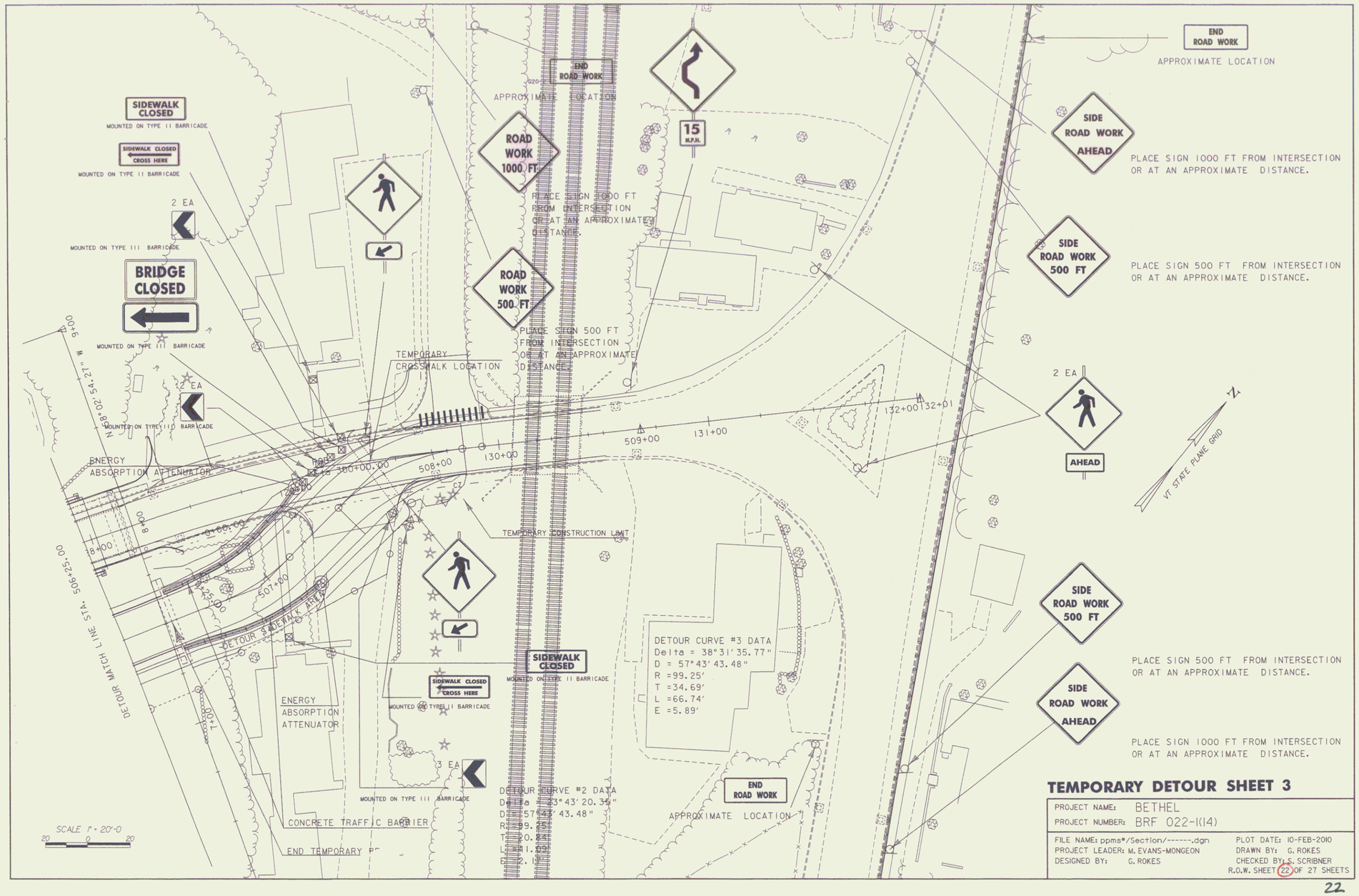
PROJECT NAME:	BETHEL
PROJECT NUMBER:	BRF 022-1(14)
FILE NAME: ppms*/Section/------.dgn	PLOT DATE: 10-FEB-2010
PROJECT LEADER: M. EVANS-MONGEON	DRAWN BY: G. ROKES
DESIGNED BY: G. ROKES	CHECKED BY: S. SCRIBNER
	R.O.W. SHEET 20 OF 27 SHEETS



TEMPORARY DETOUR SHEET 2

PROJECT NAME:	BETHEL
PROJECT NUMBER:	BRF 022-1(14)

FILE NAME: ppms#/Section/------.dgn
PROJECT LEADER: M. EVANS-MONGEON
DESIGNED BY: G. ROKES
PLOT DATE: 10-FEB-2010
DRAWN BY: G. ROKES
CHECKED BY: S. SCRIBNER
R.O.W. SHEET 21 OF 27 SHEETS



TEMPORARY DETOUR SHEET 3

PROJECT NAME:	BETHEL
PROJECT NUMBER:	BRF 022-1(14)
FILE NAME: ppms*/Section/------.dgn	PLOT DATE: 10-FEB-2010
PROJECT LEADER: M. EVANS-MONGEON	DRAWN BY: G. ROKES
DESIGNED BY: G. ROKES	CHECKED BY: S. SCRIBNER

R.O.W. SHEET 22 OF 27 SHEETS

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	REMAINDER	RIGHT			RECORDING DATA					REMARKS
					AREA±	AREA±	TYPE	(T)(P)	AREA ±	TITLE	DATE	TOWN / CITY	BOOK	PAGE	
1	FEENEY, PAUL J. & DIETRE R.	25	122+16.00 RT				DRIVE	(T)		GTR	01/06/11	BETHEL	101	317	10' PAVED MM 0317
2A	TOWN OF BETHEL	25	121+70.00 LT				APPROACH	(T)		QCD	04/17/11	BETHEL	101	563-564	TH 69, MILLER DRIVE
			121+77.00 LT	121+94.00 LT			INSTALL	(T)							PDF
			121+78.16 LT	121+94.00 LT			SLOPE	(T)	17 SF						
2B	TOWN OF BETHEL	25,26	122+85.00 LT				DRIVE	(T)							15' GRAVEL MM 0319; IN COMMON
															WITH PARCEL 4
			123+89.27 LT	125+73.53 LT			UE	(P)	4,270 SF	.10					
			123+85.31 LT	125+99.56 LT			ACCESS	(T)							FOR CONSTRUCTION VEHICLES
			123+85.31 LT	125+99.56 LT			CONST.	(T)	0.14A						6,112 SF±, INC.EC, PDF&BF, CRANE PAD
			123+89.34 LT	124+00.56 LT			SLOPE	(T)	160 SF						
			124+00.17 LT	124+84.73 LT			SLOPE	(P)	765 SF	.02					
			124+84.56 LT	125+02.87 LT			INSTALL & MAINTAIN	(P)							GUY WIRES
			125+40.50 LT	125+57.50 LT			CHANNEL	(P)	92 SF						
			125+48.95 LT				INSTALL & MAINTAIN	(P)							BRIDGE PIER & FOOTING
2C	TOWN OF BETHEL	25,26	123+43.99 RT	126+09.36 RT			DETOUR	(T)	0.38A						TWO WAY VEHICULAR/PEDESTRIAN
															WALKWAY
			123+42.86 RT	126+09.41 RT			CONST.	(T)	0.11A						4,960 SF±, INC. EC, PDF & BF
			123+64.03 RT	125+82.61 RT			SLOPE	(P)	2,768 SF	.06					
			124+50.32 RT	125+67.87 RT			CULVERT	(P)							
			125+79.03 RT	126+06.99 RT			CHANNEL	(P)	310 SF						
2D	TOWN OF BETHEL	26	127+91.48 RT	128+46.28 RT			DETOUR	(T)	2,966 SF	.07					TWO WAY VEHICULAR/PEDESTRIAN
															WALKWAY
			127+82.48 RT	128+37.78 RT			CONST.	(T)	1,586 SF	.04					INCLUDES EC & BF
			128+07.72 RT	128+24.66 RT			CULVERT	(P)							
			127+97.71 RT	128+08.88 RT			DRAINAGE	(P)							
			127+97.28 RT	128+15.18 RT			CHANNEL	(P)	318 SF						
			128+52.76 RT	128+20.99 RT			INSTALL	(T)							SIDEWALK AND STAIRS
2E		27	129+78.00 LT				APPROACH	(T)							TH 5 PEAVINE BOULEVARD
3	PIELA, MICHAEL W. & LESLIE K.	25	122+40.00 RT				DRIVE	(T)		GTR	03/16/11	BETHEL	101	517	18' GRAVEL MM 0318
			122+49.00 RT	122+69.00 RT			INSTALL	(T)							EC
			122+77.00 RT	123+00.00 RT			INSTALL	(T)							EC
			122+98.69 RT	123+45.13 RT			CONST.	(T)	1,231 SF	.03					INCLUDES EC & PDF
			122+98.69 RT	123+42.86 RT			DETOUR	(T)	726 SF	.02					TWO WAY VEHICULAR/PEDESTRIAN
															WALKWAY
4	MILLER, HELEN	25,26	121+94.00 LT	122+10.00 LT			SLOPE	(T)	19 SF	WDOE	03/26/11	BETHEL	101	550-551	
			121+94.00 LT	122+20.59 LT			INSTALL	(T)							PDF
			121+94.00 LT	123+93.41 LT			UE	(P)	1,846 SF	.09					
			122+25.00 LT				WALK	(T)							6' CONCRETE
			122+26.46 LT	122+71.55 LT			INSTALL	(T)							PDF
			122+71.55 LT	123+89.34 LT			CONST.	(T)	3,641 SF	.05					INCLUDES PDF & EC
			122+85.00 LT				DRIVE	(T)							15' GRAVEL MM 0319, IN COMMON WITH
															PARCEL 2B
			122+85.00 LT	123+86.18 LT			ACCESS	(T)							FOR CONSTRUCTION VEHICLES
			123+00.00 LT	123+89.55 LT			SLOPE	(T)	911 SF	.02					

TABLE OF REVISIONS

REVISION NO.	SHEET NO.	DESCRIPTION	DATE
1	24	PARCEL NO. 6 RICHARDSON. CHANGE WHAT WAS INITIALLY	05/03/10
		A TAKING OF 336 SF± TO A "HIGHWAY (P)" 336 SF±	
		MADE BY: MR PER C.O. 9611 APPROVED BY: HP	
2	23	PARCEL NO. 2 TOWN OF BETHEL. CHANGE AREA OF	05/27/10
		CHANNEL RIGHT AT STATION 127+97.28 RT ~ 128+15.18 RT	
		FROM 604 SF TO 318 SF.	
		MADE BY: MR PER C.O. 9615 APPROVED BY: HP	
3	26	PARCEL NO. 2B TOWN OF BETHEL - AMEND BEGINNING	05/18/11
		STATION 123+89.10 LT TO 123+89.27 LT; AMEND END	
		STATION 125+62.76 LT TO 125+73.53 LT; AMEND SF FROM	
		4,147 TO 4,270 SF; AMEND GUY WIRE BEGIN STATION	
		FROM 125+06.18 TO 124+84.56 LT AND END STATION	
		FROM 125+20.50 LT TO 125+02.87 LT.	
		MADE BY: MT PER C.O. 9714 APPROVED BY: HP	

PLOT DATE 05/18/11

PLAN LEGEND

- EXISTING RIGHT-OF-WAY
- TAKING WITH ACCESS
- TAKING WITHOUT ACCESS
- CLEAR ZONE (CZ)
- PROPERTY LINE (P/L)
- TOE OF SLOPE
- TOP OF CUT
- SLOPE RIGHT (SR (P))
- CONSTRUCTION RIGHT (CONST. (T))
- PROJECT DEMARCATION FENCE (PDF)

EC -EROSION CONTROL
(P) -PERMANENT
(T) -TEMPORARY
DR. -DRAINAGE RIGHT
DIT. -DITCHING RIGHT
CH. -CHANNEL RIGHT
DRIVE -DRIVE RIGHT
CUL. -CULVERT RIGHT
C&T -CLEARING & TRIMMING RIGHT
SR -SLOPE RIGHT
UE -UTILITY EASEMENT

APPROVED: HARRY PETROVS DATE: 02-01-10
CHIEF, PLANS & TITLES

PROJECT NAME: **BETHEL**
PROJECT NUMBER: **BRF 022-1(14)**
FILE NAME: **r 78f161 Detail Sheet.xls**
PROJECT LEADER: **M. EVANS-MONGEON**
DESIGNED BY: **S. SCRIBNER**
DRAWN BY: **MR**
CHECKED BY: **JB**
PLOT DATE:
ROW SHEET 23 OF 27
SHEET **28** OF **148**

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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	REMAINDER	RIGHT			RECORDING DATA					REMARKS
					AREA±	AREA±	TYPE	(T)(P)	AREA ±	TITLE	DATE	TOWN / CITY	BOOK	PAGE	
5A	TAYLOR, J. KEPLER & MARY JEANNE	26	127+78.20 RT	127+99.75 RT			DETOUR	(T)	925 SF .02	COND.	02/23/11	BETHEL	101	440-442	TWO-WAY VEHICULAR/PED. WALKWAY
			127+80.42 RT	128+01.74 RT			CHANNEL	(P)	298 SF						
			127+81.30 RT	127+97.71 RT			DRAINAGE	(P)							
			127+87.24 RT				INSTALL	(T)							EC
5B		26, 27	128+41.44 RT	129+59.40 RT			DETOUR	(T)	3,436 SF .08						TWO-WAY VEHICULAR/PED. WALKWAY
			128+40.84 RT	128+94.49 RT			INSTALL	(T)							EC & BF
			128+57.32 RT	128+71.68 RT			REMOVE	(T)							STONE WALLS
			128+79.50 RT				INSTALL	(T)							BARRICADE TYPE 2
			128+87.65 RT				WALK	(T)							4' CONCRETE
			128+91.66 RT				REMOVE & RESET	(T)							FLAG POLE
			128+91.66 RT				REMOVE & RESET	(T)							GAZEBO
			128+91.66 RT				REMOVE & RESET	(T)							SIGN
			129+24.05 RT				ACCESS	(T)							INGRESS / EGRESS DETOUR
			129+25.00 RT				DRIVE	(T)							40' GRAVEL MM 0327
			129+63.85 RT				REMOVE & RESET	(T)							SIGN
6	RICHARDSON, JOYCE S.	26, 27	129+55.80 LT	129+77.51 LT			HIGHWAY	(P)	336 SF	WDOE	01/28/11	BETHEL	101	407-408	
			127+81.56 LT	128+23.89 LT			CHANNEL	(P)	417 SF						
			127+81.56 LT	129+37.01 LT			INSTALL	(T)							EC & BF
			127+86.35 LT	128+64.23 LT			UE	(P)	1,133 SF .03						
			127+98.56 LT	128+21.98 LT			INSTALL & MAINTAIN	(P)							ABUTMENT FOOTING
			128+35.27 LT	128+36.34 LT			INSTALL & MAINTAIN	(P)							(2) GUY WIRES
			128+30.94 LT	128+40.63 LT			INSTALL & MAINTAIN	(P)							GUARD RAIL
			128+53.00 LT				DRIVE	(T)							24' CONCRETE MM 0326; IN COMMON WITH TOWN OF BETHEL
			128+63.30 LT	129+16.14 LT			SLOPE	(P)	242 SF						
			129+18.00 LT				WALK	(T)							4' CONCRETE INCLUDING STAIRS
			129+18.00 LT				INSTALL	(T)							BARRICADE TYPE 2
			129+20.08 LT	129+64.52 LT			SLOPE	(P)	614 SF						
			129+48.57 LT				REMOVE	(T)							ACCESS TO VT. RTE. 107
7	NOT USED														
8	TELEPHONE OPERATING COMPANY OF VERMONT LLC		121+70.00 LT	129+77.51 LT			ALL R.T. & I.			COND.	02/23/11	BETHEL	101	440-442	UTILITY EASEMENTS
9	CENTRAL VERMONT PUBLIC SERVICE CORPORATION		121+70.00 LT	129+77.51 LT			ALL R.T. & I.			COND.	02/23/11	BETHEL	101	440-442	UTILITY EASEMENTS
10	TOWN OF BETHEL (SEWER & WATER)		121+70.00 LT	129+77.51 LT			ALL R.T. & I.			COND.	02/23/11	BETHEL	101	440-442	UTILITY EASEMENTS
	RELINQUISHMENT # I		129+55.80 LT	129+77.51 LT											336 SF±

TABLE OF REVISIONS

REVISION NO.	SHEET NO.	DESCRIPTION	DATE

PLAN LEGEND

- EXISTING RIGHT-OF-WAY
- TAKING WITH ACCESS
- TAKING WITHOUT ACCESS
- CLEAR ZONE (CZ)
- PROPERTY LINE (P / L)
- TOE OF SLOPE
- TOP OF CUT
- SLOPE RIGHT (SR (P))
- CONSTRUCTION RIGHT (CONST. (T))
- PROJECT DEMARCATION FENCE (PDF)

EC	-EROSION CONTROL
(P)	-PERMANENT
(T)	-TEMPORARY
DR.	-DRAINAGE RIGHT
DIT.	-DITCHING RIGHT
CH.	-CHANNEL RIGHT
DRIVE	-DRIVE RIGHT
CUL.	-CULVERT RIGHT
C&T	-CLEARING & TRIMMING RIGHT
SR	-SLOPE RIGHT
UE	-UTILITY EASEMENT

APPROVED: HARRY PETROVS DATE: 02-01-10
CHIEF, PLANS & TITLES

PLOT DATE 03/23/11

PROJECT NAME: **BETHEL**
PROJECT NUMBER: **BRF 022-1(14)**

FILE NAME: r 78f161 Detail Sheet.xls
PROJECT LEADER: M. EVANS-MONGEON
DESIGNED BY: S. SCRIBNER
ROW SHEET 24 OF 27

PLOT DATE:
DRAWN BY: MR
CHECKED BY: JB
SHEET 29 OF 148

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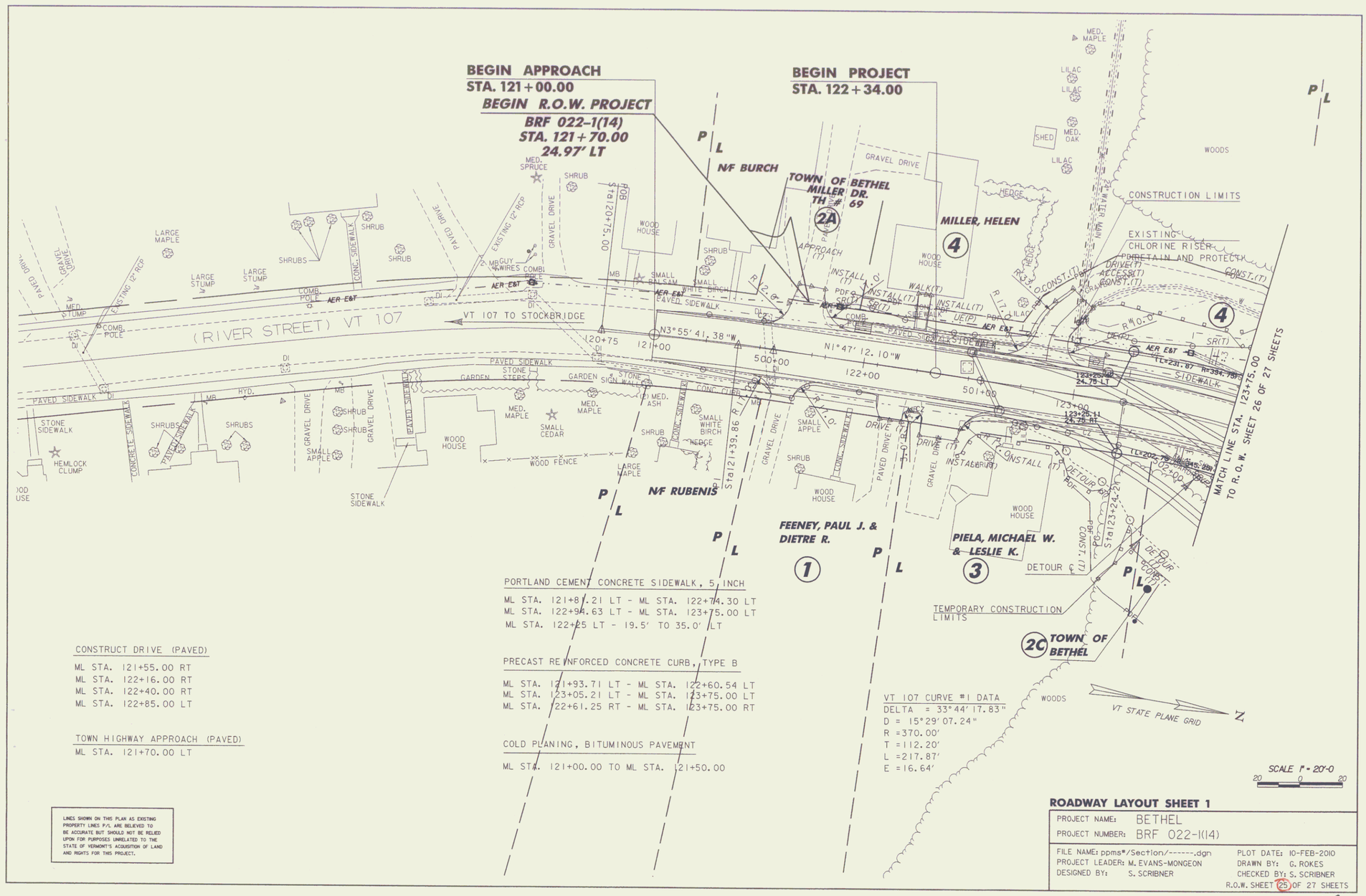

CONSTRUCT DRIVE (PAVED)

ML STA. 121+55.00 RT
ML STA. 122+16.00 RT
ML STA. 122+40.00 RT
ML STA. 122+85.00 LT

TOWN HIGHWAY APPROACH (PAVED)

ML STA. 121+70.00 LT

PORTLAND CEMENT CONCRETE SIDEWALK, 5' INCH

ML STA. 121+87.21 LT - ML STA. 122+74.30 LT
ML STA. 122+94.63 LT - ML STA. 123+75.00 LT
ML STA. 122+25 LT - 19.5' TO 35.0' LT

PRECAST REINFORCED CONCRETE CURB, TYPE B

ML STA. 121+93.71 LT - ML STA. 122+60.54 LT
ML STA. 123+05.21 LT - ML STA. 123+75.00 LT
ML STA. 122+61.25 RT - ML STA. 123+75.00 RT

COLD PLANING, BITUMINOUS PAVEMENT

ML STA. 121+00.00 TO ML STA. 121+50.00

VT 107 CURVE #1 DATA
DELTA = 33°44'17.83"
D = 15°29'07.24"
R = 370.00'
T = 112.20'
L = 217.87'
E = 16.64'

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.

ROADWAY LAYOUT SHEET 1

PROJECT NAME: BETHEL
PROJECT NUMBER: BRF 022-1(14)

FILE NAME: ppms#/Section/------.dgn
PROJECT LEADER: M. EVANS-MONGEON
DESIGNED BY: S. SCRIBNER
PLOT DATE: 10-FEB-2010
DRAWN BY: G. ROKES
CHECKED BY: S. SCRIBNER
R.O.W. SHEET 25 OF 27 SHEETS

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(SEE TOWN STAIRCASE SHEET)
STAIR STA. 0+34.17 - 0+47.75, ML STA. 128+50 LT
(SEE TOWN STAIRCASE SHEET)

ML STA. 123+75.00 LT - 124+79.00 LT
ML STA. 128+02.50 LT - 128+41.23 LT
ML STA. 128+64.73 LT - 129+00.00 LT
ML STA. 128+85.00 RT - 15.0' TO 77.0' RT

(HAND RAIL EACH SIDE OF STAIR SEE STD J-2)
AND SEE (TOWN STAIRCASE SHEET)

CONCRETE, HIGH PERFORMANCE CLASS B (CONCRETE STAIRS)
STAIR STA. 0+21.83 TO 0+34.17, (ML STA. 128+50 RT)
SEE (TOWN STAIRCASE SHEET)

PORTLAND CEMENT CONCRETE SIDEWALK, 8 INCH
CONSTRUCT DRIVE

STATION	WIDTH/OFFSET FROM SHOULDER
ML STA. 128+53.00 LT	24.0 FT / 24.0 FT

BRIDGE RAILING, 3 RAIL ALUMINUM
ML STA. 124+50.26 RT - 128+02.25 RT

ALUMINUM APPROACH RAILING
ML STA. 123+76.52 LT - 123+99.33 LT
ML STA. 124+24.76 RT - 124+50.26 RT
ML STA. 128+02.25 RT - 128+27.38 RT
ML STA. 128+02.25 LT - 128+27.14 LT

STEEL BEAM GUARDRAIL, GALVANIZED
ML STA. 128+27.14 LT - 128+40.49 LT
ML STA. 128+27.38 RT - 128+40.00 RT

DELINEATOR WITH STEEL POST
ML STA. 125+96.00 21'-2" RT (WHITE)
ML STA. 128+01.00 35'-4" RT (WHITE)

VT STATE PLANE GRID

BEGIN BRIDGE
END APPROACH SLAB
STA. 124+79.00
F.G. = 545.34

℄ PIER
STA. 125+49.00
F.G. = 545.81

END BRIDGE
BEGIN APPROACH SLAB
STA. 128+02.50
F.G. = 544.29

MAIN LINE STA. 128+20.00
= CHANNEL STA. 8+00.00
= 90° 00' 00"

BEGIN APPROACH SLAB
STA. 124+58.99

END APPROACH SLAB
STA. 128+22.50

MILLER, HELEN (4) — TOWN OF BETHEL (2B) — RICHARDSON, JOYCE S. (6) — TAYLOR, KEPLER, J. & MARY JEANNE (5A) — TOWN OF BETHEL (2D) — TAYLOR KEPLER, J. & MARY JEANNE (5B) — TOWN OF BETHEL (2C)

STONE FILL TYPE IV — PROPOSED CRANE PAD — WHITE RIVER — EXISTING PIER 5 — EXISTING PIER 4 — EXISTING PIER 3 — EXISTING PIER 2 — EXISTING PIER 1 — EXISTING ABUTMENT #1 — EXISTING ABUTMENT #2 — PROPOSED TEMPORARY PIER — ℄ TEMPORARY DETOUR — TEMPORARY CONSTRUCTION LIMITS — PERMANENT CONSTRUCTION L.M.ITS (TYP)

VT 107 — N 31°57'05.73" E

VT 107 CURVE #1 DATA
Δ = 33°44'17.83"
D = 19°29'07.24"
R = 294.00'
T = 112.20'
L = 217.87'
E = 16.64'

VT 107 CURVE #2 DATA
Δ = 12°40'33.95"
D = 7°23'34.81"
R = 775.00'
T = 86.10'
L = 171.46'
E = 4.77'

PRECAST REINFORCED CONCRETE CURB, TYPE B
ML STA. 123+75.00 RT - 124+50.00 RT
ML STA. 123+75.00 LT - 124+80.00 LT
ML STA. 128+02.50 LT - 128+40.26 LT
ML STA. 128+02.50 RT - 129+00.00 RT
ML STA. 128+65.80 LT - 129+00+00 LT

3 BOD PER TOWN OF BETHEL BRIDGE ST. VOL. 4 PG. 123

ANCHOR FOR STEEL BEAM RAIL
ML STA. 128+41.00 LT
ML STA. 128+35.00 RT

MATCH LINE STA. 123+75.00 TO R.O.W. SHEET 25 OF 27 SHEETS

TO R.O.W. SHEET 27 OF 27 SHEETS MATCH LINE STA. 129+00.00

SCALE 1" = 20'-0

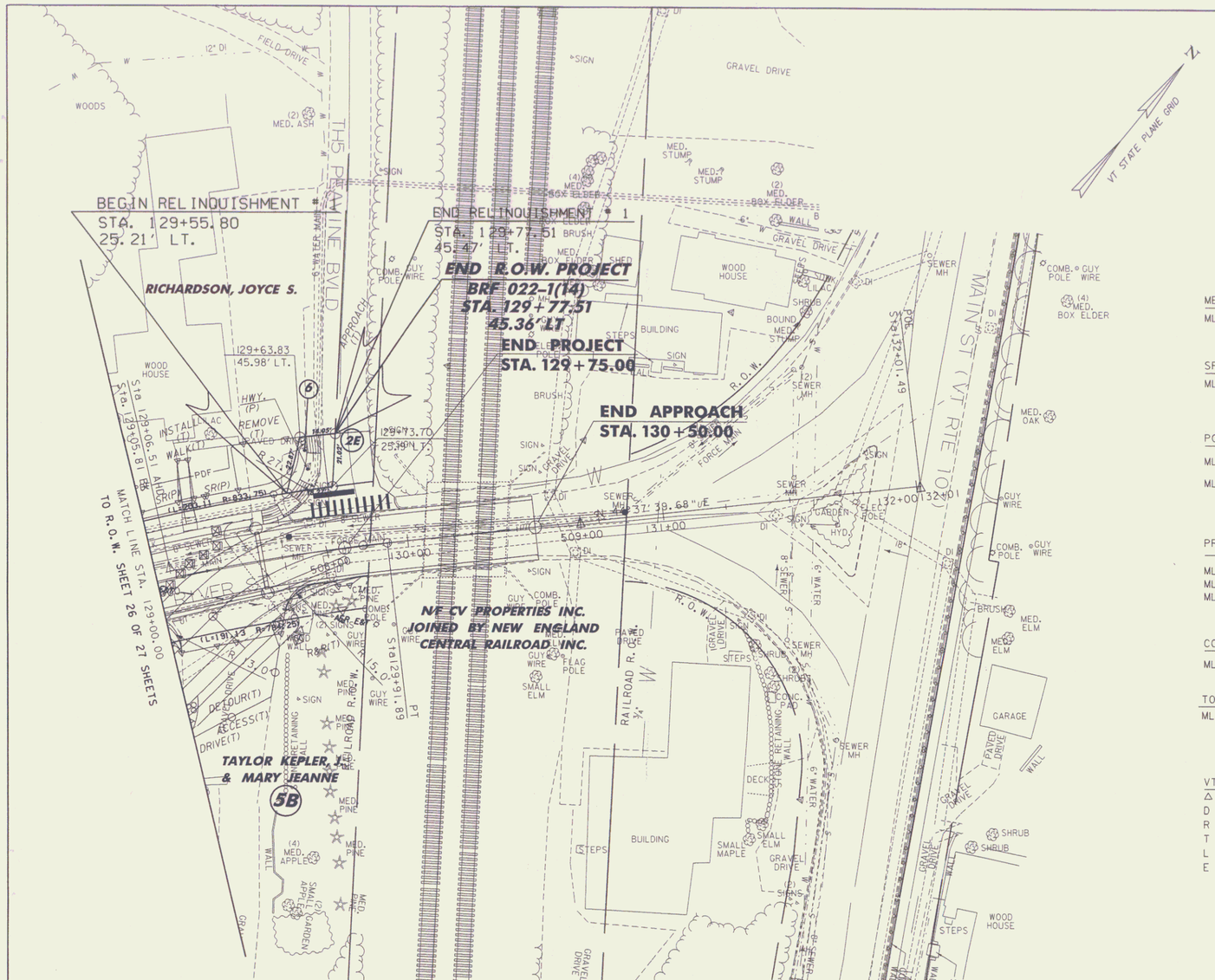
LINE SHOWN ON THIS PLAN AS EXISTING PROPERTY LINES P/L ARE BELIEVED TO BE ACCURATE BUT SHOULD NOT BE RELIED UPON FOR PURPOSES UNRELATED TO THE STATE OF VERMONT'S AQUISITION OF LAND AND RIGHTS FOR THIS PROJECT.

FOR R.O.W. USE ONLY

PROJECT NAME: BETHEL
PROJECT NUMBER: BRF 022-1(14)

FILE NAME: r78f161zzz.dgn
PROJECT LEADER: M. EVANS-MONGEON
DESIGNED BY: S. SCRIBNER
R.O.W. SHEET 26 OF 27

PLOT DATE: 18-MAY-2011
DRAWN BY: G. ROKES
CHECKED BY: S. SCRIBNER
SHEET 31 OF 148



METAL HAND RAILING

ML STA. 129+18.00 LT (STAIRS, LENGTH= 4 FT)

SPECIAL PROVISION (CONCRETE STAIRS)

ML STA. 129+18.00 LT

PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH

ML STA. 129+00.00 LT - ML STA. 129+70.9 LT
OFFSET = 45.80 FT
ML STA. 129+18.00 LT

PRECAST REINFORCED CONCRETE CURB, TYPE B

ML STA. 129+00.00 LT - ML STA. 129+53.23 LT
ML STA. 129+00.00 RT - ML STA. 129+03.16 RT
ML STA. 129+61.19 LT - ML STA. 129+70.90 LT
OFFSET = 45.80 FT

CONSTRUCT PAVED DRIVE

ML STA. 129+25.00 RT

TOWN HIGHWAY APPROACH (PAVED)

ML STA. 129+81.00 LT

VT 107 CURVE #2 DATA

Δ = 12°40'33.95"
D = 7°23'34.81"
R = 775.00'
T = 86.08'
L = 171.46'
E = 4.77'

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

ROADWAY LAYOUT SHEET 3

PROJECT NAME:	BETHEL
PROJECT NUMBER:	BRF 022-1(14)
FILE NAME: ppms*/Section/------.dgn	PLOT DATE: 10-MAY-2010
PROJECT LEADER: M. EVANS-MONGEON	DRAWN BY: G. ROKES
DESIGNED BY: S. SCRIBNER	CHECKED BY: S. SCRIBNER

R.O.W. SHEET 27 OF 27 SHEETS