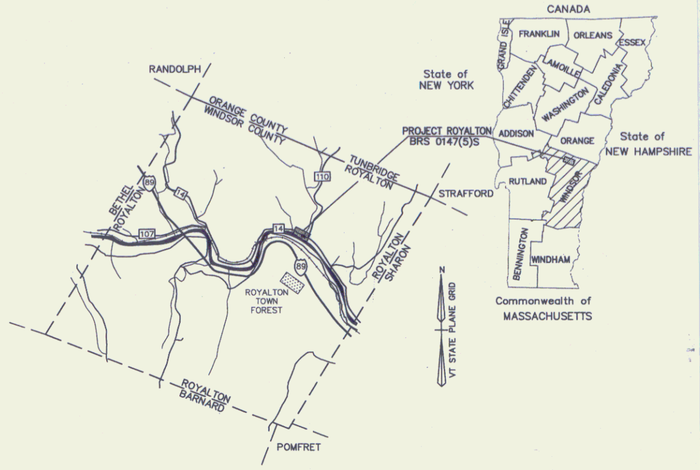
R.O.W. PLANS

STATE OF VERMONT
AGENCY OF TRANSPORTATION

PROPOSED IMPROVEMENT
TOWN OF ROYALTON
COUNTY OF WINDSOR
VT ROUTE 14



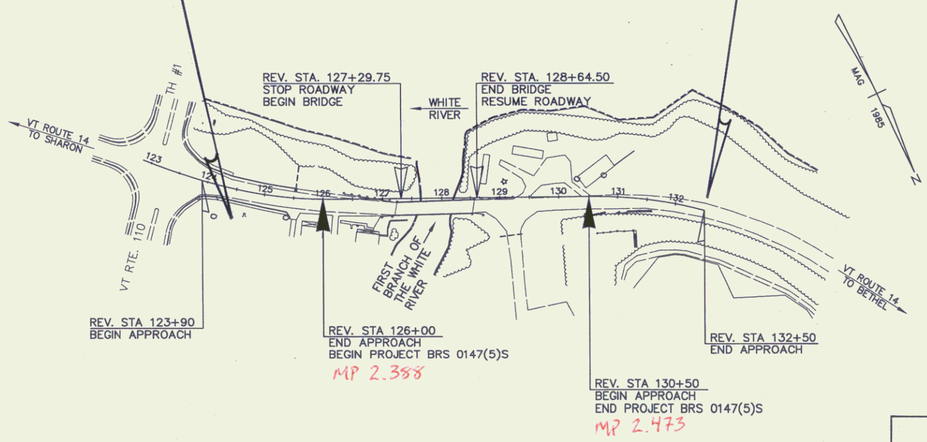
BEGIN R.O.W. PROJECT
BRS 0147(5)S REV. STA. 124+50 25' RT.

BEGINNING AT A POINT IN THE TOWN OF ROYALTON, ON VT ROUTE 14 APPROXIMATELY 200' NORTH OF THE INTERSECTION OF VT ROUTE 110, AND EXTENDING NORTHWESTERLY ALONG VT ROUTE 14 FOR A DISTANCE OF 0.085 MILES.

LENGTH OF ROADWAY = 315.25 FEET = 0.060 MILES
LENGTH OF BRIDGE = 134.75 FEET = 0.026 MILES
LENGTH OF PROJECT = 450.00 FEET = 0.085 MILES
LENGTH OF R.O.W. PROJECT = 800.00 FEET = 0.151 MILES

WORK TO BE PERFORMED UNDER THIS PROJECT CONSISTS OF THE REPLACEMENT OF EXISTING BRIDGE #21, ON VT ROUTE 14, INCLUDING ALL NECESSARY ROADWAY APPROACH WORK.

END R.O.W. PROJECT
BRS 0147(5)S STA. REV. 132+50 25' LT.



100 0 100
SCALE IN FEET

THE FOLLOWING RIGHT OF WAY PLAN SHEETS PERTAIN DIRECTLY TO THE ACQUISITION OF LAND AND RIGHTS NECESSARY TO CONSTRUCT THIS TRANSPORTATION PROJECT. SHEETS REGARDING SPECIFIC CONSTRUCTION DETAILS ARE NOT INCLUDED IN THIS RECORDED SET.

THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY ADMINISTRATION OR THE CHIEF ENGINEER.
CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 1990, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON MARCH 15, 1990 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

Pin # 78F232

APPROVED _____ DATE 6/15/98
Director of Project Development

APPROVED _____ DATE _____
Chief, Right of Way

ROYALTON
BRS 0147(5)S
R.O.W. SHEET 1 OF 14 SHEETS

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

CONVENTIONAL SIGNS

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

DATUM
VERTICAL NGVD 1929
HORIZONTAL N/A

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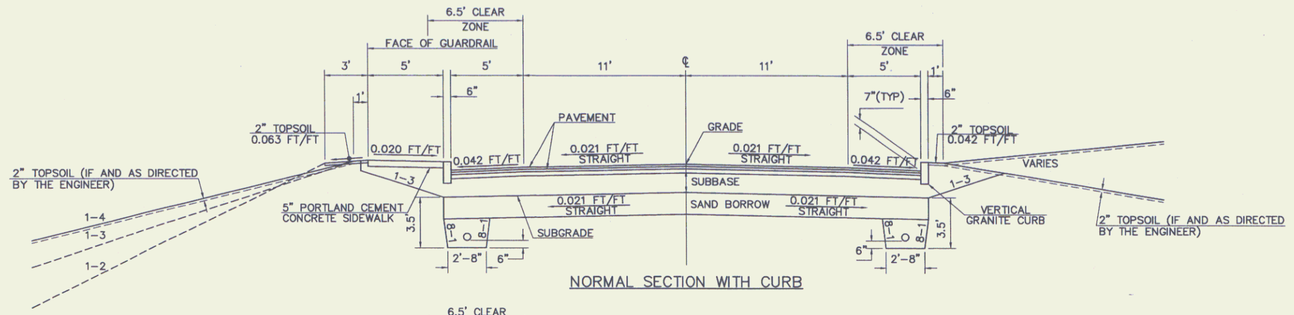
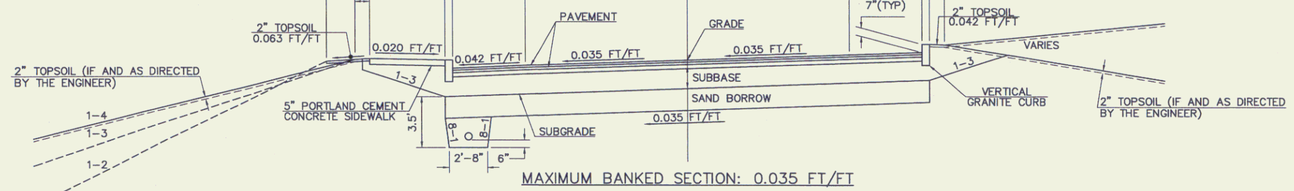
TYPICAL SECTIONS

MATERIAL ITEM	THICKNESS TOLERANCE
PAVEMENT (TOTAL DEPTH)	±1/4"
SUBBASE	±1/2"
SAND BORROW	±1"

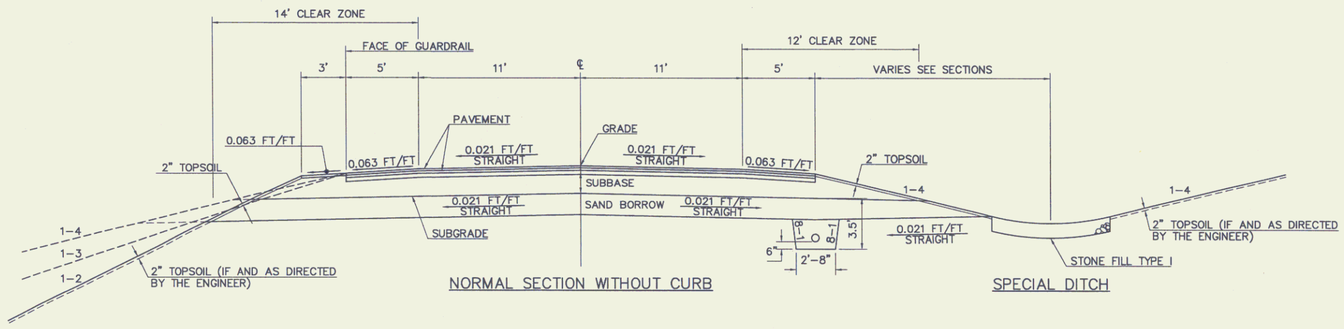
1-1/4" BITUMINOUS CONCRETE PAVEMENT (TYPE III)
1-3/4" BITUMINOUS CONCRETE PAVEMENT (TYPE II)
2-1/2" BITUMINOUS CONCRETE PAVEMENT (TYPE I)
} PG 58-34
18" SUBBASE OF CRUSHED GRAVEL (COARSE GRADED)(MODIFIED)
18" SAND BORROW



NORMAL SECTION WITH CURB



MAXIMUM BANKED SECTION: 0.035 FT/FT



NORMAL SECTION WITHOUT CURB

SPECIAL DITCH

SEEDING FORMULA
URBAN AREAS

% WT.	LBS./A.	NAME	PUR %	GERM %
42.5	34.0	CREEPING RED FESCUE	98	85
10.0	8.0	PERENNIAL RYE GRASS	95	90
42.5	34.0	KENTUCKY BLUE GRASS	85	85
5.0	4.0	ANNUAL RYE GRASS	95	85
100.00	80.0			

SEED MIXTURE: SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT AND SHALL BE FREE OF ALL NOXIOUS WEED 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.

MARKER POSTS: TO BE PLACED AS INDICATED OR AS DIRECTED BY THE ENGINEER.

SLOPE ROUNDING: ALL CUT SLOPES TO BE ROUNDED IN ACCORDANCE WITH STANDARD SHEET B-5.

PAY LIMITS OF SAND BORROW: WHEN USED IN CONJUNCTION WITH UNDERDRAIN - SEE STANDARD SHEET D-2.

TACK COAT: EMULSIFIED ASPHALT IS TO BE APPLIED ON ALL EXISTING PAVEMENT SURFACES, ON COLD PLANED SURFACES AND BETWEEN ALL COURSES OF PAVEMENT AT THE RATE OF 0.015 GAL/SY OR AS DIRECTED BY THE ENGINEER.

FOR SLOPES IN SOLID ROCK EXCAVATION AND DRILLING AND BLASTING OF SOLID ROCK SUBGRADE, SEE STANDARD SHEET A-62.

SURVEYED BY N/A DATE N/A
DRAWN BY TJS DATE 12/96
SQUAD LEADER JAW

DESIGN FILE NO. 91298

IPARM FILE
DATE PLOTTED
PROJ. NAME ROYALTON
PROJ. NO. BRS 0147(5)S

R.O.W. SHEET 2 OF 14 SHEETS

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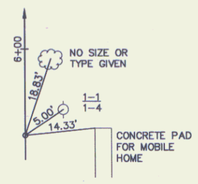
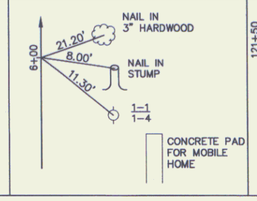
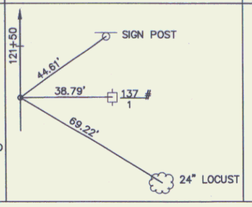
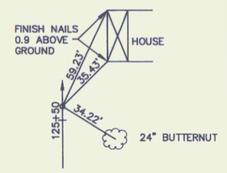
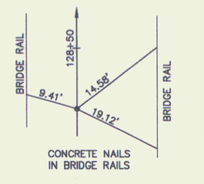
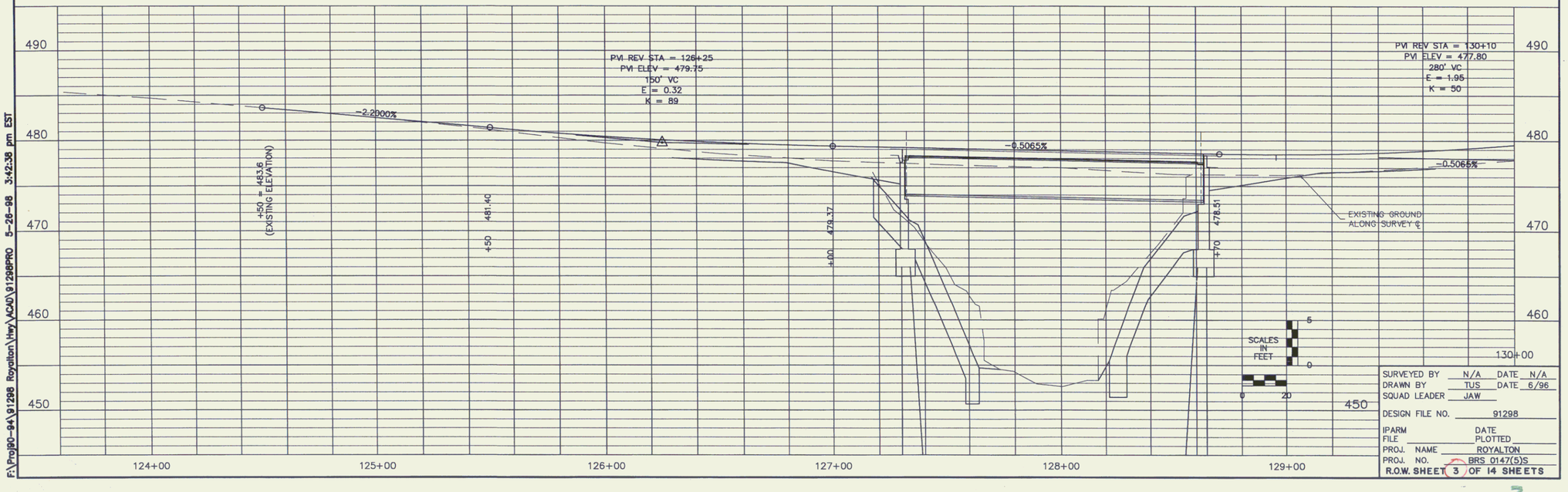
SURVEY LINE TIES

VT. ROUTE 14 SURV CHAN 5+85.48	VT. ROUTE 14 SURV CHAN 6+00.00	VT. ROUTE 14 SURV P.C. 121+26.96	VT. ROUTE 14 SURV P.C.C. 125+55.60		VT. ROUTE 14 SURV P.T. 128+35.00
					

SURV POT 129+25 = SURV DRIVE 10+00	VT. ROUTE 14 SURV PT 134+94.84	VT. ROUTE 14 SURV P.C. 130+27.65	VT. ROUTE 14 SURV P.O.C. 132+00.00	SURV P.T. 134+94.84

NOT TO SCALE



SURVEYED BY N/A DATE N/A
DRAWN BY TUS DATE 6/96
SQUAD LEADER JAW

DESIGN FILE NO. 91298

IPARM FILE
DATE PLOTTED
PROJ. NAME ROYALTON
PROJ. NO. BRS 0147(5)S
R.O.W. SHEET 3 OF 14 SHEETS

PLAN
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NOTE BOOK ALIGNMENT CHECKED
NO. RT. OF WAY CHECKED
91
DATE

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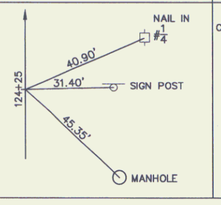
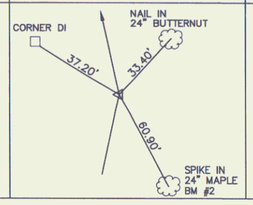
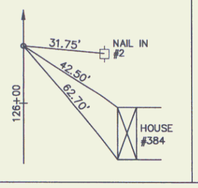
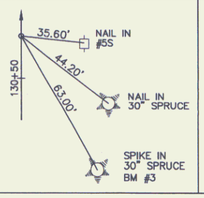
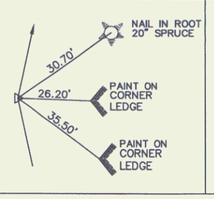
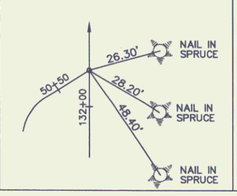
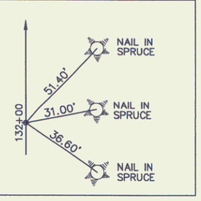
3

CONSTRUCTION LINE TIES

VT. ROUTE 14 REV 124+25	VT. ROUTE 14 REV PI 125+20.92	VT. ROUTE 14 REV PT 126+15.71	VT. ROUTE 14 REV PC 130+54.24	VT. ROUTE 14 REV PI 131+52.66	REV POC 132.09.06 = REV DRIVE 50+00	VT. ROUTE 14 REV PT 132+50.00
						

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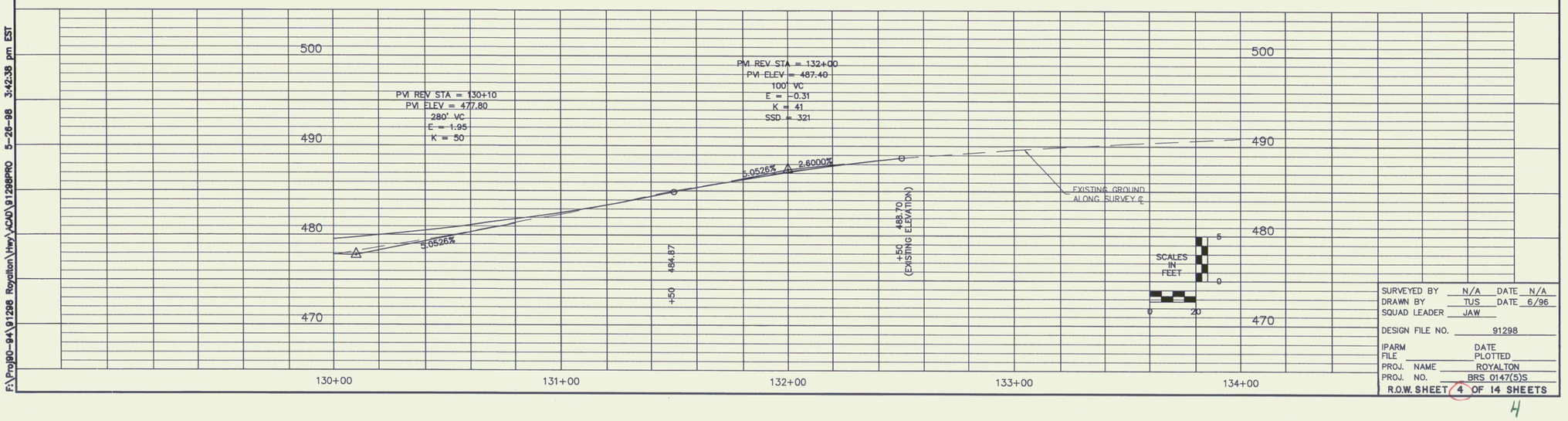

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DRAWN BY	TJS DATE 6/96
SQUAD LEADER	JAW
DESIGN FILE NO.	91298
IPARM FILE	DATE PLOTTED
PROJ. NAME	ROYALTON
PROJ. NO.	BRS 0147(5)S
R.O.W. SHEET	4 OF 14 SHEETS

PLAN
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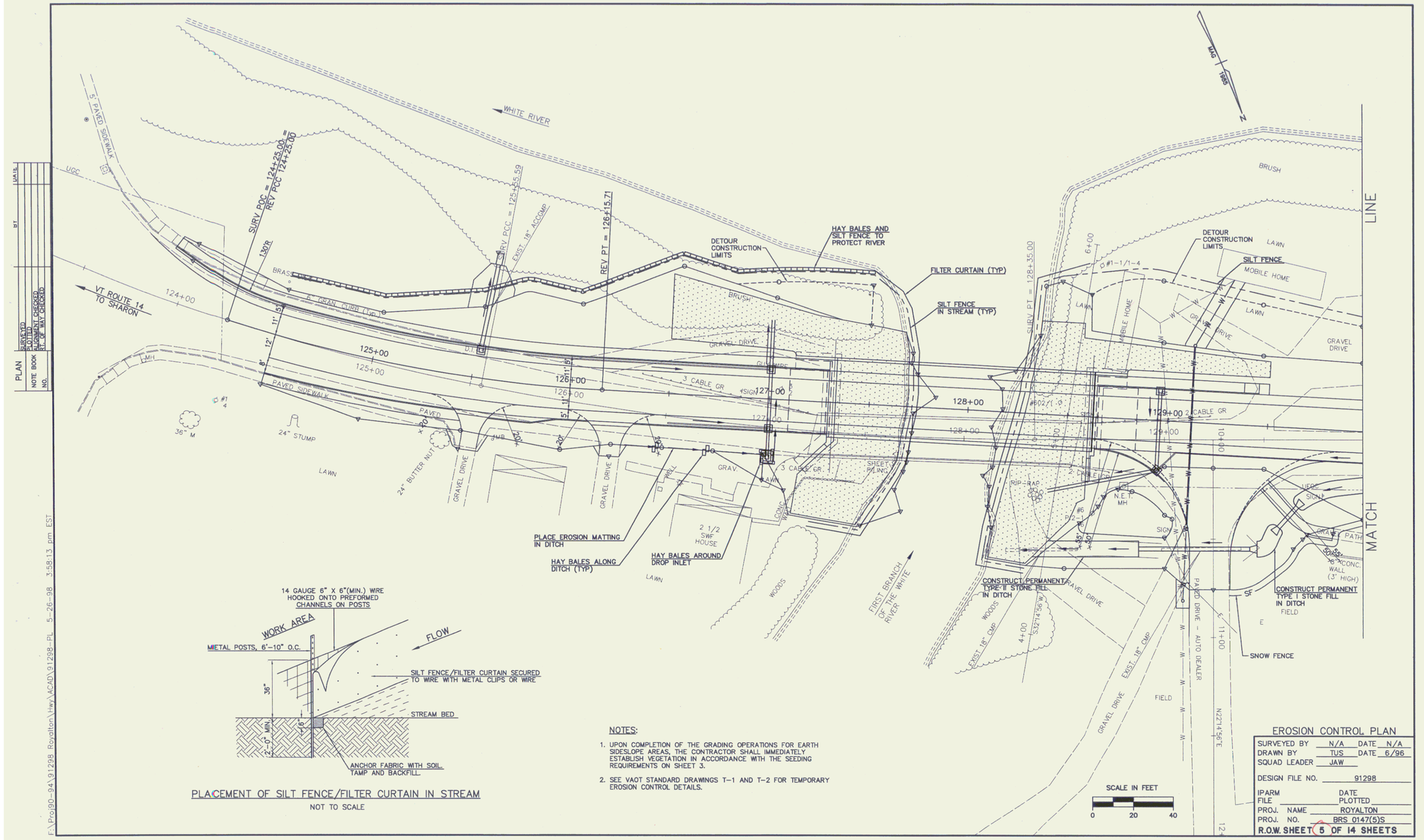

PLACEMENT OF SILT FENCE/FILTER CURTAIN IN STREAM

NOT TO SCALE

NOTES:

1. UPON COMPLETION OF THE GRADING OPERATIONS FOR EARTH SIDESLOPE AREAS, THE CONTRACTOR SHALL IMMEDIATELY ESTABLISH VEGETATION IN ACCORDANCE WITH THE SEEDING REQUIREMENTS ON SHEET 3.
2. SEE VAOT STANDARD DRAWINGS T-1 AND T-2 FOR TEMPORARY EROSION CONTROL DETAILS.

PLAN: SURVEYED / PLOTTED / PLANIMETRIC CHECKED / PROFILE CHECKED / NOTE BOOK / NO.

EROSION CONTROL PLAN

SURVEYED BY N/A DATE N/A
DRAWN BY TJS DATE 6/96
SQUAD LEADER JAW

DESIGN FILE NO. 91298

IPARM FILE
DATE PLOTTED
PROJ. NAME ROYALTON
PROJ. NO. BRS 0147(5)S

R.O.W. SHEET 5 OF 14 SHEETS

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WHITE RIVER

MAG 10.85

#4

HAY BALES AND SILT FENCE TO PROTECT RIVER

DETOUR CONSTRUCTION LIMITS
SILT FENCE

20+00

X-ING ROAD

21+00

51+00

6" CONC. WALL

FIELD

SILT FENCE

BRUSH

GRAVEL DRIVE

8" CLUMP ASH

HORSE BARN

12" ELM

PLACE EROSION MATTING IN DITCH

HAY BALES AROUND DROP INLET

HAY BALES ALONG DITCH (TYP)

X-20'

20'+

#6/5

130

4 SIGN

131+00

131+00

5'

11'

132+00

132+00

2'

GUY POLE #5S

CONSTRUCT PERMANENT TYPE I STONE FILL IN DITCH

PIPE RAILING W/12" x 12" CONC. POSTS

GRAVEL PATH

8" CONC. WALL (3' HIGH)

SURV PC = 130+27.65

REV PC = 130+54.24

CONC. STEPS

REV POC 131+58.78
SURV POC 131+60.78
ANGLE BETWEEN BACK TANGENTS= 11°00"

133+00

FIELD

4 SIGN

UFOC

134+00

MATCH LINE

WOODS

WOODS

CEMETERY

REV PT = 132+50.00

GRAV. DRIVE (CEMETERY)

VT ROUTE 14 TO BETHEL

HEADSTONE LINE

SURV PT = 134+94.84

SCALE IN FEET
0 20 40

EROSION CONTROL PLAN

SURVEYED BY	N/A	DATE	N/A
DRAWN BY	TJS	DATE	6/96
SQUAD LEADER	JAW		
DESIGN FILE NO.	91298		
IPARM FILE		DATE PLOTTED	
PROJ. NAME	ROYALTON		
PROJ. NO.	BRS 0147(5)S		

R.O.W. SHEET 6 OF 14 SHEETS

6

PLAN
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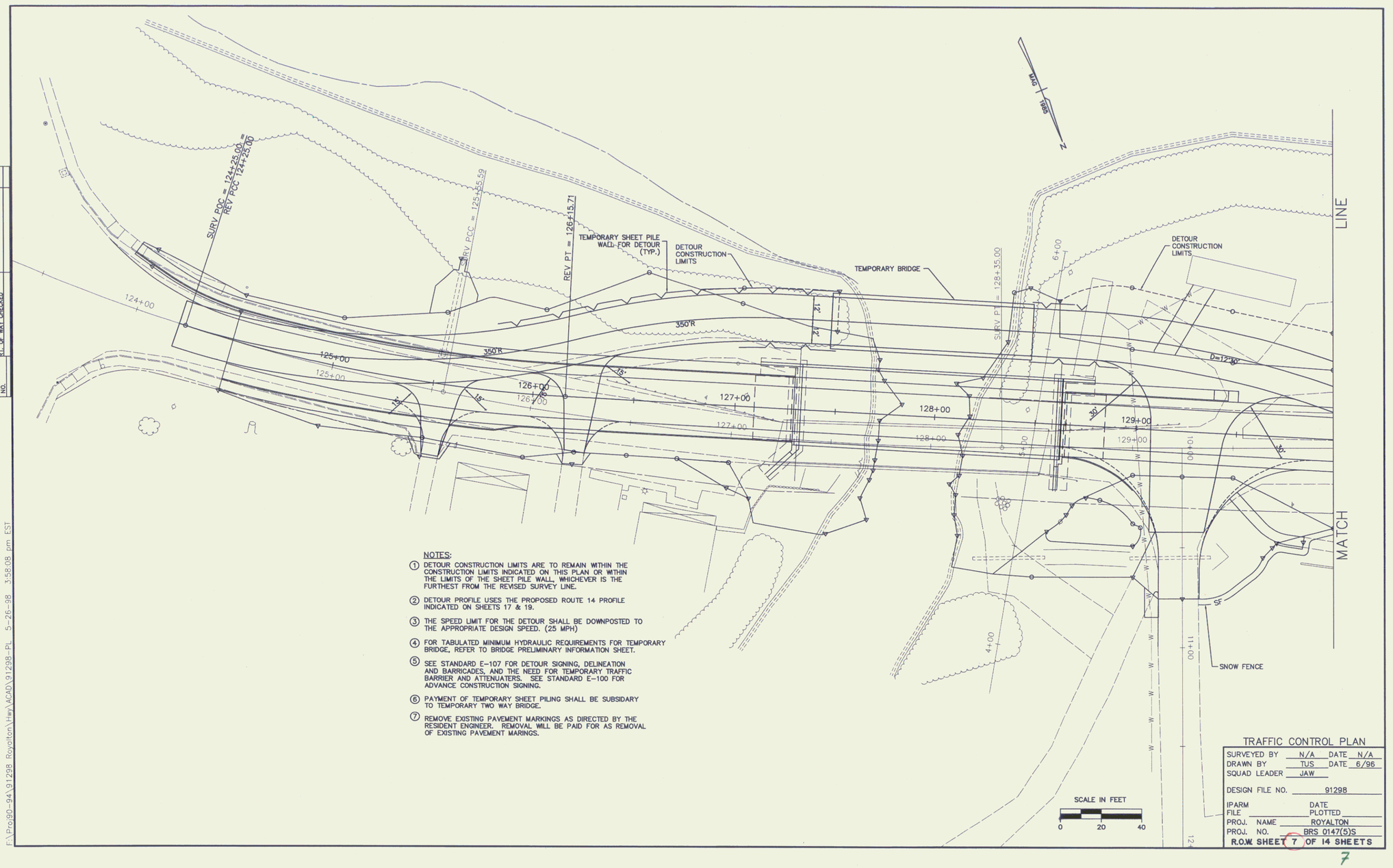

NOTES:

1. DETOUR CONSTRUCTION LIMITS ARE TO REMAIN WITHIN THE CONSTRUCTION LIMITS INDICATED ON THIS PLAN OR WITHIN THE LIMITS OF THE SHEET PILE WALL, WHICHEVER IS THE FURTHEST FROM THE REVISED SURVEY LINE.
2. DETOUR PROFILE USES THE PROPOSED ROUTE 14 PROFILE INDICATED ON SHEETS 17 & 19.
3. THE SPEED LIMIT FOR THE DETOUR SHALL BE DOWNPOSTED TO THE APPROPRIATE DESIGN SPEED. (25 MPH)
4. FOR TABULATED MINIMUM HYDRAULIC REQUIREMENTS FOR TEMPORARY BRIDGE, REFER TO BRIDGE PRELIMINARY INFORMATION SHEET.
5. SEE STANDARD E-107 FOR DETOUR SIGNING, DELINEATION AND BARRICADES, AND THE NEED FOR TEMPORARY TRAFFIC BARRIER AND ATTENUATERS. SEE STANDARD E-100 FOR ADVANCE CONSTRUCTION SIGNING.
6. PAYMENT OF TEMPORARY SHEET PILING SHALL BE SUBSIDARY TO TEMPORARY TWO WAY BRIDGE.
7. REMOVE EXISTING PAVEMENT MARKINGS AS DIRECTED BY THE RESIDENT ENGINEER. REMOVAL WILL BE PAID FOR AS REMOVAL OF EXISTING PAVEMENT MARINGS.

PLAN
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NOTE BOOK
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ALIGNMENT CHECKED
RT. OF WAY CHECKED
BY
DATE

TRAFFIC CONTROL PLAN

SURVEYED BY	N/A	DATE	N/A
DRAWN BY	TJS	DATE	6/96
SQUAD LEADER	JAW		
DESIGN FILE NO.	91298		
IPARM FILE		DATE PLOTTED	
PROJ. NAME	ROYALTON		
PROJ. NO.	BRS 0147(5)S		

R.O.W. SHEET 7 OF 14 SHEETS

7

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PLAN

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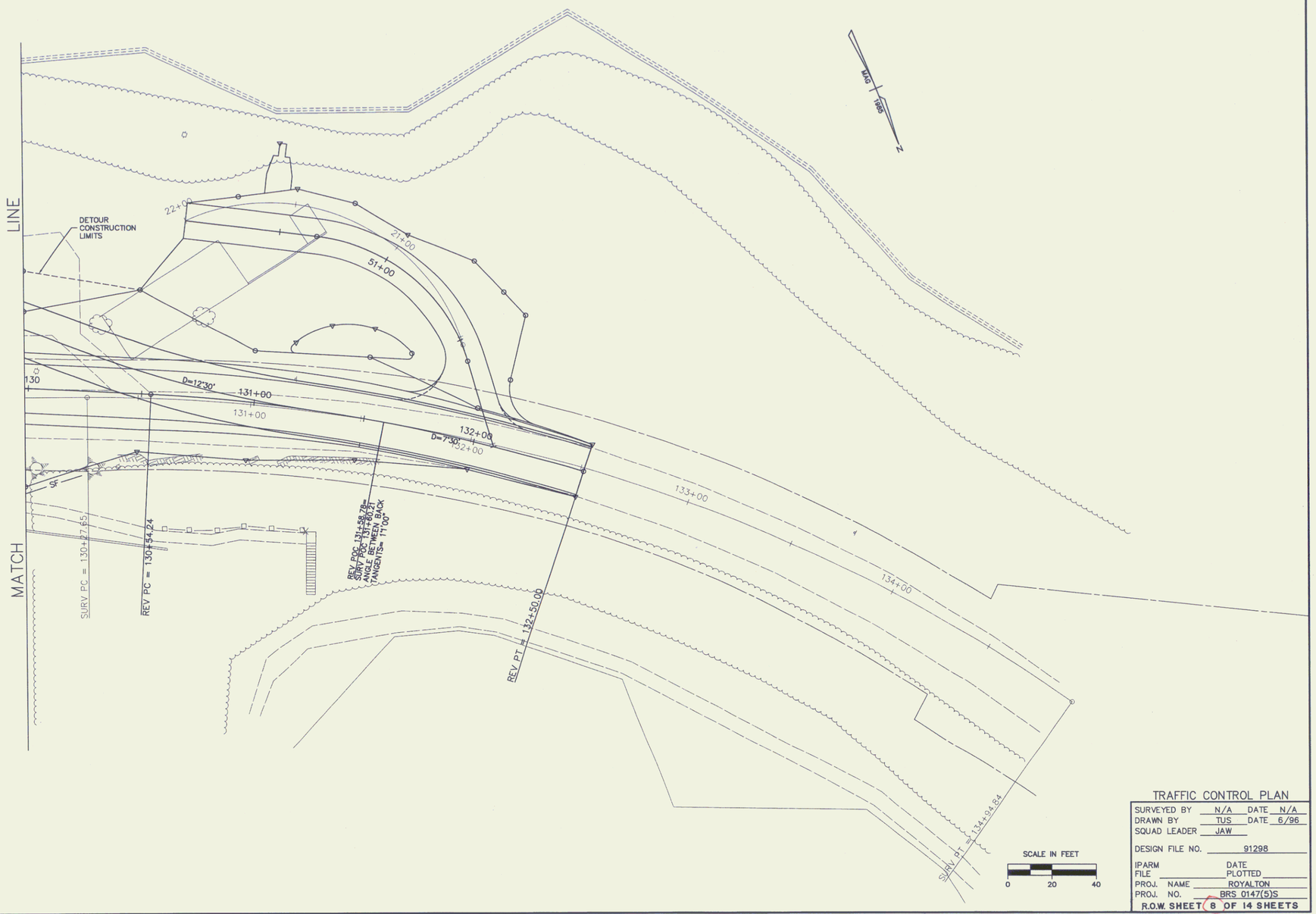

TRAFFIC CONTROL PLAN

SURVEYED BY	N/A	DATE	N/A
DRAWN BY	TJS	DATE	6/96
SQUAD LEADER	JAW		

DESIGN FILE NO. 91298

IPARM FILE ____ DATE PLOTTED ____

PROJ. NAME ROYALTON

PROJ. NO. BRS 0147(5)S

R.O.W. SHEET 8 OF 14 SHEETS

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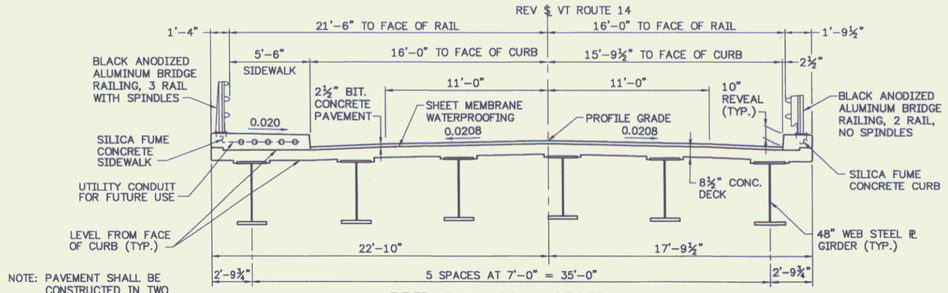
REV $ VT ROUTE 14



NOTE: PAVEMENT SHALL BE CONSTRUCTED IN TWO LIFTS OF 1½" TYPE III AND 1" TYPE IV

BRIDGE TYPICAL SECTION

SCALE: ¼"=1'-0"

GENERAL NOTES

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO STATE OF VERMONT, AGENCY OF TRANSPORTATION, 1990 STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, AND ITS LATEST REVISIONS, AND THE 1996 AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, AND ITS LATEST REVISIONS.
2. DESIGN IS FOR HS25–44 LOADING WITH ALLOWANCE FOR FUTURE PAVING UNLESS OTHERWISE NOTED ON THE PLANS.
3. ALL STRUCTURAL STEEL SHALL BE DETAILED AND FABRICATED USING PROCEDURES AND TOLERANCES IN ACCORDANCE WITH APPLICABLE PUBLICATIONS OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC).
4. WHEN NOT DETAILED ON THE PLANS, BEAMS SHALL BE CAMBERED FOR THE DEAD LOAD DEFLECTION PLUS ONE EIGHTH (1/8) INCH FOR EACH TEN FEET OF SPAN, OR FRACTION THEREOF. THE CAMBER SHALL APPROXIMATE A SIMPLE CIRCULAR CURVE FROM SUPPORT TO SUPPORT.
5. ALL FIELD CONNECTIONS SHALL BE MADE WITH 7/8" DIAMETER, TYPE III BOLTS MEETING ASTM DESIGNATION A–325. HOLES SHALL BE 15/16" DIAMETER. CONNECTIONS NOT DESIGNATED SHALL BE DETAILED BY THE FABRICATOR AND SUBMITTED TO THE STATE FOR APPROVAL.
6. ALL WELDING SHALL CONFORM WITH THE PROVISIONS OF SUBSECTION 506.10.
7. AFTER SUPERSTRUCTURE STEEL HAS BEEN ERECTED, ELEVATIONS ALONG THE TOP OF BEAMS SHALL BE TAKEN AS DIRECTED BY THE ENGINEER FOR USE IN DETERMINING FINAL GRADE.
8. ANY HOLES IN FASCIA BEAMS OR FASCIA GIRDER WEBS NOT OTHERWISE FILLED SHALL BE FILLED WITH BUTTON HEAD OR HEX HEAD BOLTS. SEE STANDARD SPECIFICATION SECTION 506.19 FOR BOLT TENSIONING REQUIREMENTS.
9. ALL REINFORCING STEEL SHALL BE DETAILED AND FABRICATED USING PROCEDURES AND TOLERANCES IN ACCORDANCE WITH APPLICABLE PUBLICATIONS OF THE "CONCRETE REINFORCING STEEL INSTITUTE".
10. MINIMUM COVER FOR REINFORCING STEEL SHALL BE TWO (2) INCHES ALONG BACK FACES OF WALLS AGAINST EARTH, AND THREE (3) INCHES ELSEWHERE. FOR BRIDGE DECK: 2 1/2" MIN. COVER FOR TOP REINFORCING, AND 1 1/2" MIN. COVER FOR BOTTOM REINFORCING.
11. REINFORCING PLACEMENT TOLERANCES SHALL BE:
    SPACING +– 1"
    CLEARANCE +– 1/4"
12. DRILLING AND GROUTING OF REINFORCING STEEL INTO EXISTING CONCRETE SHALL BE PAID FOR UNDER ITEM 507.16.
13. DECK CONCRETE SHALL BE "CONCRETE, CLASS A". ALL OTHER CONCRETE SHALL BE "CONCRETE, CLASS B" UNLESS OTHERWISE DESIGNATED ON THE PLANS.
14. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1" BY 1".
15. SURFACES OF BRIDGE SEATS UNDER BEARING DEVICES SHALL BE LEVEL. OTHER BRIDGE SEAT AREAS SHALL BE SLOPED 1/2" PER FOOT. ABUTMENT SEATS SHALL BE SLOPED FULL WIDTH TOWARD CENTER SPAN. PIER SEATS SHALL BE SLOPED EACH WAY FROM CENTER. THE ENTIRE BRIDGE SEAT SURFACE SHALL BE SMOOTH STEEL TROWEL FINISHED.
16. FOR BRIDGE DECK POURS, THE MAXIMUM TIME LIMIT FOR ANY COMBINATION OF POURS DONE IN ONE DAY SHALL BE EIGHT HOURS. THERE SHALL BE A MINIMUM DELAY OF NINETY SIX HOURS BETWEEN THE COMPLETION OF ONE DAY'S POUR AND THE BEGINNING OF ANY OTHER POUR.
17. WATER REPELLENT SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES EXCEPT THE UNDERSIDE OF DECK BETWEEN DRIP BEADS.
18. THE FOLLOWING TABLE OF ALLOWABLE STRESSES AND WEIGHTS APPLY TO THESE PLANS FOR DESIGN PURPOSES:

CONCRETE:	f'c	=	3500 PSI
	fc	=	1400 PSI
STRUCTURAL STEEL:			
M270 – Grade 50	Fa=Fb	=	27,000 PSI
	Fv	=	17,000 PSI
M270 – Grade 36	Fa=Fb	=	20,000 PSI
	Fv	=	12,000 PSI
REINFORCING STEEL:			
Grade 60	fs	=	24,000 PSI
	f's	=	20,000 PSI
SOIL: UNIT WEIGHT		=	140 PCF

19. ALL DIMENSIONS ARE HORIZONTAL OR VERTICAL, AND ARE GIVEN AT 68 DEGREES F.
20. FILL IN AREAS THROUGH WHICH PILES ARE TO BE DRIVEN SHALL HAVE A MAXIMUM STONE SIZE OF NINE (9) INCHES.
21. TRAFFIC SHALL BE ALLOWED ON THE NEW BRIDGE ONLY AFTER THE SPECIFIED CURE PERIOD HAS EXPIRED AND DESIGN STRENGTH HAS BEEN ATTAINED.
22. JOINTS AND SCORE MARKS IN CONCRETE SHALL BE CONSTRUCTED AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
23. THE KEY IN CONCRETE CONSTRUCTION JOINTS SHALL BE MONOLITHIC AND CONTINUOUS FOR THE FULL LENGTH OF THE JOINT.
24. IN STREAM CONSTRUCTION SHALL BE PERFORMED BETWEEN JUNE 1 AND OCTOBER 1, UNLESS THE CONTRACTOR OBTAINS PERMISSION FROM THE AGENCY OF NATURAL RESOURCES TO DO THE WORK OUTSIDE OF THAT TIME FRAME.
25. THE PAINTING OF THE NEW STEEL WILL BE PAID FOR UNDER THE ITEM 513.25 "STRUCTURAL PAINTING, SHOP APPLIED." SEE SPECIAL PROVISIONS FOR THE SPECIFICATIONS PERTAINING TO THE PAINTING OF STRUCTURAL STEEL.
26. THE FASCIA OVERHANG BRACKETS SHALL BE SPACED AT A MAXIMUM OF FOUR (4) FEET.
27. TEN CUBIC YARDS OF STONE FILL TYPE IV HAS BEEN INCLUDED IN THE PROJECT FOR CONSTRUCTION OF A FISH HABITAT BOULDER CLUSTER. THIS CLUSTER SHALL BE LOCATED IN A HIGH VELOCITY PORTION OF THE STREAM A MINIMUM OF 30 FEET DOWNSTREAM OF THE NEW BRIDGE. FINAL LOCATION OF BOULDERS TO BE AS DIRECTED BY THE ENGINEER, BASED ON THE RECOMMENDATIONS OF THE DISTRICT FISHERIES BIOLOGIST AND/OR THE AGENCY OF NATURAL RESOURCES STREAM ALTERATION ENGINEER. CLUSTER SHALL CONSIST OF THREE BOULDERS, EACH 5 FOOT TO 6 FOOT IN DIAMETER, SPACED AT 10 FEET TO 15 FEET AND BURIED 1/3 DIAMETER BELOW STREAMBED.
28. ALL NEW PERMANENT FILL SLOPES WITHIN 50 FT OF THE TOP OF BANK OF THE WHITE RIVER SHALL BE REVEGETATED WITH BOTH GRUBBING MATERIAL AND PLANTING OF NATIVE RIPARIAN TREE AND BRUSH SPECIES. A COMPLETE REVEGETATION PLAN AND SCHEDULE SHALL BE DEVELOPED FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.

HYDRAULIC DATA

DRAINAGE AREA 103 SQ.MI.
CHARACTER OF TERRAIN MOUNTAINOUS, MODERATE RELIEF
CHARACTER AND TYPE OF STREAM SMALL PERENNIAL BUT FLASHY
NATURE OF STREAMBED SHALLOW SANDS AND SILTS AND SOME GRAVEL OVER BEDROCK

Q 2.33	3200 CFS	Q 50	11000 CFS
Q 10	6800 CFS	Q 100	15000 CFS
Q 25	9100 CFS	Q 500	14200 CFS

DATE OF FLOOD OF RECORD 1927 WATER SURFACE ELEVATION * ESTIMATED DISCHARGE *
NATURAL STREAM VELOCITY @ Q 10 = 6.9 fps (approach section) ICE CONDITIONS MODERATE DEBRIS MODERATE
DOES THE STREAM REACH MAX. HIGHWATER ELEVATION RAPIDLY? YES IS ORDINARY RISE RAPID ? YES
IS STAGE AFFECTED BY UPSTREAM OR DOWNSTREAM CONDITIONS? YES
IF YES, DESCRIBE: CONFLUENCE WITH THE WHITE RIVER APPROXIMATELY 50 FT FROM DOWNSTREAM FACE OF PROPOSED STRUCTURE
WATERSHED STORAGE 2% HEADWATERS X UNIFORM THROUGHOUT WATERSHED IMMEDIATELY ABOVE SITE

EXISTING STRUCTURE

1. STRUCTURE TYPE: 3–SPAN REINFORCED CONCRETE T–BEAM YEAR BUILT: 1928
2. SPAN NORMAL TO STREAM: 32'–56'–32'
3. VERTICAL CLEARANCE ABOVE STREAMBED: 18.2' +/–
4. WATERWAY AREA OF FULL OPENING (NORMAL TO STREAM): 1410 SF
5. DISPOSITION OF STRUCTURE: SUPERSTRUCTURE AND PORTIONS OF SUBSTRUCTURE TO BE REMOVED
6. TYPE OF SUBSTRUCTURE FOUNDATION MATERIAL: SPREAD FOOTINGS ON SANDY SILT AND/OR LEDGE
7. WATER SURFACE ELEVATION @ Q 2.33 462.6 @APPROACH AREA VELOCITY= 5.4 fps
   Q 10 466.6 (466.8) = 6.9 fps (6.8 fps)
   Q 25 468.4 = 7.7 fps
   Q 50 469.6 (472.0) = 8.3 fps (6.6 fps)
   Q 100 470.0 (474.9) = 9.4 fps (6.7fps)
8. LONG TERM STREAM BED CHANGES: NARROW FLOOD PLAIN: ALLUVIAL
9. IS THE ROADWAY OVERTOPPED BELOW THE Q100? NO FREQUENCY: **
10. RELIEF ELEVATION: ** DISCHARGE OVER ROAD @Q100:
11. UPSTREAM STRUCTURE: TH 12 STR. NO. 27 DISTANCE 1.5 MILES
    SPAN : 180' CLEAR HEIGHT: 10'
12. DOWNSTREAM STRUCTURE: N/A STR. NO. N/A DISTANCE
    SPAN : N/A CLEAR HEIGHT:

PROPOSED STRUCTURE

STRUCTURE GEOMETRY:
1. STRUCTURE TYPE REINFORCED CONCRETE SLAB OVER STEEL PLATE GIRDER
2. CLEAR SPAN LENGTH(S) NORMAL TO STREAM: 128'
3. VERTICAL CLEARANCE ABOVE STREAMBED: 18.8'
4. ARE PROVISIONS TO BE MADE FOR PUBLIC UTILITIES? YES, CONDUIT IN SIDEWALK FOR FUTURE USE

HYDRAULIC DATA:
1. WATERWAY AREA OF FULL OPENING (NORMAL TO STREAM): 1700 SF
2. WATER SURFACE ELEVATION @ Q 2.33 462.5 @APPROACH AREA VELOCITY= 5.6 fps
   Q 10 466.6 (466.9) = 7.6 fps (7.3 fps)
   Q 25 468.4 = 8.7 fps
   Q 50 469.6 (472.0) = 9.4 fps (7.3 fps)
   Q 100 471.6 (476.01) = 10.8 fps (8.9 fps)
3. IS THE ROADWAY OVERTOPPED BELOW THE Q100? NO FREQUENCY: N/A
4. RELIEF ELEVATION: N/A DISCHARGE OVER ROAD @Q100: N/A
5. AVERAGE LOW ELEVATION OF SUPERSTRUCTURE: 472.8' (LIMITED BY LOW STEEL)
6. VERTICAL CLEARANCE @Q100: 1.74 FT (–3.2 FT)
7. SCOUR: PRESENCE OF BEDROCK LIMITS TOTAL SCOUR TO 10 FEET
8. REQUIRED CHANNEL PROTECTION: STONE FILL, TYPE IV

ALLOWABLE STRESSES:
1. DESIGN LIVE LOAD AASHTO HS25
2. ALLOWABLE LOAD FOR SPREAD FOOTINGS ON SOIL ___ ON LEDGE ___
3. ALLOWABLE LOAD FOR PILING 9000 PSI TYPE HP ESTIMATED LENGTH 21'±
4. ALLOWABLE STRESS FOR STRUCTURAL STEEL AASHTO M 270 GR50 PAINTED TENSION 27 KSI
5. ALLOWABLE STRESS FOR REINFORCING STEEL GRADE 60 TENSION 24000 PSI COMPRESSION 20000 PSI
6. ALLOWABLE STRESS FOR CONCRETE CLASS A f'_c 4000 PSI f_c 1400 PSI
   CLASS B f'_c 3500 PSI f_c 1400 PSI
   SILICA FUME f'_c 5000 PSI f_c 2000 PSI

TRAFFIC MAINTENANCE:
1. IS TRAFFIC TO BE MAINTAINED? YES IF YES, ON EXISTING STRUCTURE ___ OR ON TEMPORARY BRIDGE X
2. TEMPORARY BRIDGE REQUIREMENTS: ONE OR TWO WAY TWO WAY TRAFFIC CONTROL SIGNALS REQUIRED NO
   MINIMUM CLEAR SPAN 95' MINIMUM CLEAR HEIGHT 14 *** MINIMUM WATERWAY AREA 1000 SF
   ARE SIDEWALKS REQUIRED? NO IF SO, ON WHAT SIDE?

PERMIT INFORMATION
AVERAGE DAILY FLOW: 212 cfs ORDINARY LOW WATER : 95 cfs DEPTH: 2 ft
ORDINARY HIGH WATER : 1373 cfs DEPTH: 6 ft

NOTES:
FOR WATER SURFACE ELEVATION AND VELOCITY DATA, THE FIRST NUMBER SHOWN IS THE LOW FLOW ON THE WHITE RIVER CASE. THE SECOND NUMBER (IN PARENTHESES) IS FOR THE HIGH FLOW ON THE WHITE RIVER CASE.

ADDITIONAL DESIGN CONSIDERATIONS

* WATER SURFACE ELEVATION FOR FLOOD OF RECORD IS UNKNOWN. PLANS FOR EXISTING BRIDGE INDICATE A "HIGH WATER ELEVATION" OF APPROXIMATELY 471, WHICH PROBABLY REPRESENTS THE 1925 FLOOD (LESSER EVENT THAN THE 1927 FLOOD.)

** FOR HIGH FLOW ON THE WHITE RIVER CASE (COINCIDENT FLOODS), OVERTOPPING OCCURS OF THE EXISTING STRUCTURE FOR THE 100 YEAR EVENT. THE WATER SURFACE ELEVATION IS 477.04 WITH 74 SF OF ROADWAY WEIR FLOW AT A MAXIMUM DEPTH OF 10 INCHES.

*** CONFLUENCE WITH WHITE RIVER IS IMMEDIATELY DOWNSTREAM OF BRIDGE.

LOAD RATING (TONS) (LOAD FACTOR)

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

REVISIONS

NO.	DESCRIPTION	BY & DATE

CONSULTING ENGINEERS
540 Commercial St.
Manchester, NH 03101
PH: (603) 668–8223
FAX: (603) 668–8802
E-MAIL: CLD@CLDENGINEERS.COM

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of ROYALTON	Bridge No. 21
Highway No. VT. Route 14	Log Sta.
	Surv. Sta.

VT. Route 14 over the First Branch of the White River

PRELIMINARY INFORMATION

Designed By E. M. STUMPH	Drawn By G. F. BONIN
Checked By Date	Bridge Design Supervisor Date
PROJECT ROYALTON	PROJECT NO. BRS 0147(5) S

I.G.C. Info.

R.O.W. SHEET 9 OF 14 SHEETS

91298PI (1=1) 91298

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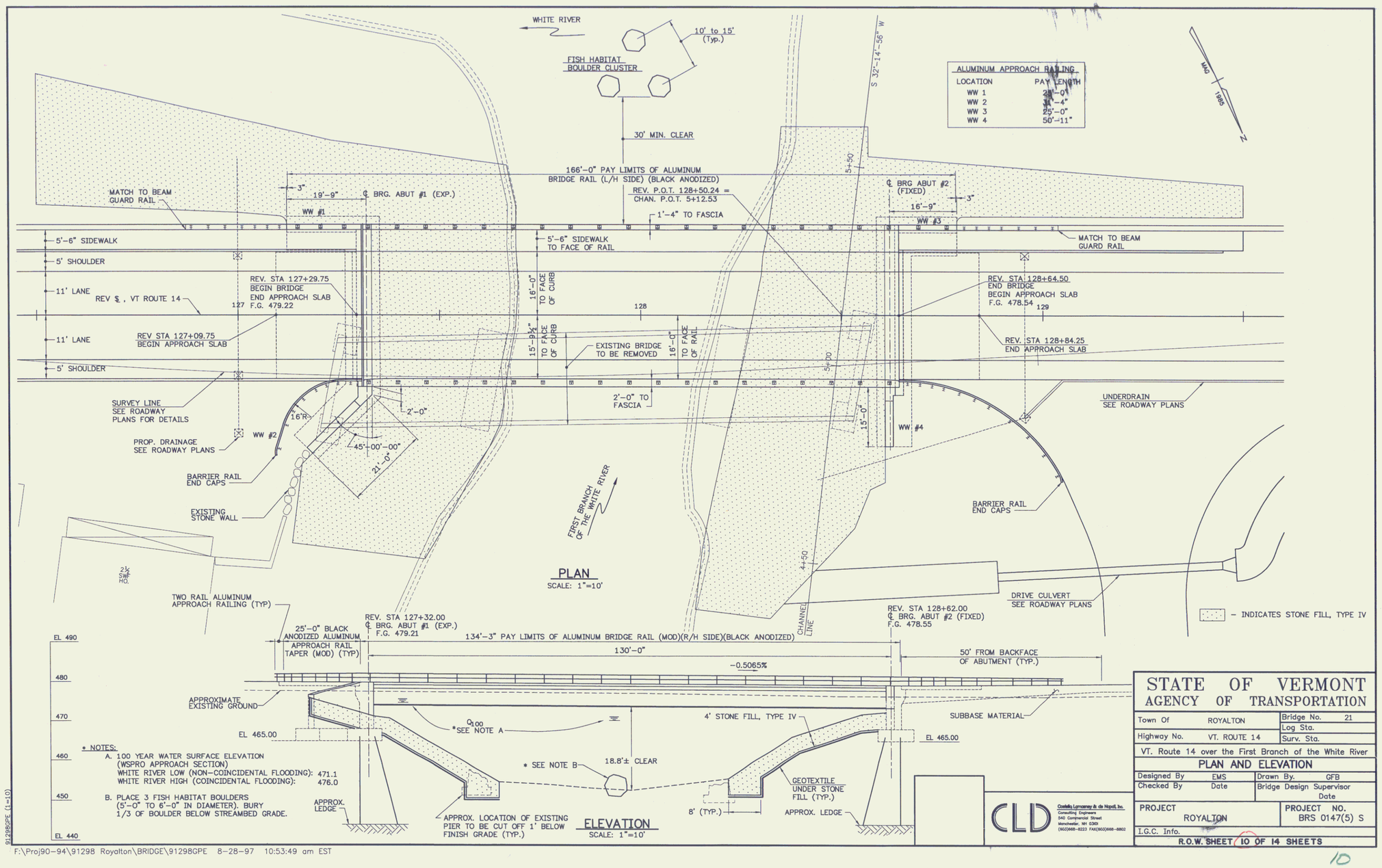

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of	ROYALTON	Bridge No.	21
Highway No.	VT. ROUTE 14	Log Sta.	
		Surv. Sta.	

VT. Route 14 over the First Branch of the White River

PLAN AND ELEVATION

Designed By	EMS	Drawn By.	GFB
Checked By	Date	Bridge Design Supervisor	Date

PROJECT ROYALTON	PROJECT NO. BRS 0147(5) S
I.G.C. Info.	

R.O.W. SHEET 10 OF 14 SHEETS

CLD
Costello, Lamoureux & de Napoli, Inc.
Consulting Engineers
540 Commercial Street
Manchester, NH 03101
(603)668-8223 FAX(603)668-8802

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STATE OF VERMONT
AGENCY OF TRANSPORTATION
RIGHT OF WAY PLANS
DETAIL SHEET

TABLE OF PROJECT PROPERTY ACQUISITION

PARCEL NO.	GRANTOR	SHEET NO.	BEGINNING STATION	ENDING STATION	TAKING	REM.	RIGHTS	TITLE TAKEN	DATE	TOWN OR CITY RECORDED	BK.	PG.	REMARKS
1A	CRAWFORD, LILLIAN D.	13	REV. 124+50 RT. REV. 125+53 RT.	REV. 125+32 RT.			SLOPE (T) 205 SF± DRIVE (T)	WD	07-11-01	ROYALTON	67	6-8	16' GRAVEL MM 0235
1B		13,14	REV. 128+22 LT. REV. 128+22 LT. REV. 128+94 LT. REV. 128+89 LT. REV. 128+84 LT. REV. 129+50 LT. REV. 128+85 LT. REV. 130+31 LT. REV. 130+63 LT. REV. 131+00 LT. REV. 132+10 LT. REV. 129+00 LT. REV. 129+13 LT.	REV. 132+50 LT. REV. 129+05 LT. REV. 129+30 LT. REV. 132+15 LT. REV. 129+50 LT. REV. 130+93 LT. REV. 130+50 LT. REV. 131+20 LT. REV. 130+68 LT. REV. 130+65 LT.	3480 S.F.±		ALL R. T. & I. ALL R. T. & I. CONST. (T) 2900 SF± SLOPE (P) 845 SF± SLOPE (T) 1675 SF± DETOUR (T) 3375 SF± ALL R. T. & I. INSTALL (P) CULVERT DITCH (T) DRIVE (T) REMOVE & RESET (T) EASE. (T)	WD	07-11-01	RANDOLPH	67	6-8	TRAILER & APPURTENANCES WATERLINE EROSION CONTROL FENCE BARN CONC. WALL & SLAB GUY WIRE 16' PAVED MM 0251 TREE INSTALL WATERLINE
1C		13,14	REV. 128+16 RT.	REV. 132+50 LT.	0.25 A±		ALL R. T. & I.	WD	07-11-01	RANDOLPH	67	6-8	VT RTE. 14 HWY EASEMENT
1D		13	REV. 128+38 LT.	REV. 128+98 LT.	3925 S.F.±			WD	07-11-01	RANDOLPH	67	6-8	MITIGATION SITE
2	CRAWFORD, HERBERT C.	13	REV. 126+94 RT. REV. 127+05 RT. REV. 127+11 RT. REV. 127+11 RT. REV. 126+21 RT.	REV. 127+09 RT. REV. 127+50 RT. REV. 127+16 RT. REV. 127+46 RT.			SLOPE (T) 35 SF± CHANNEL (P) 545 SF± ALL R. T. & I. INSTALL (T) DRIVE (T)	WDOE	07-12-01	ROYALTON	67	1-3	STONEWALL EROSION CONTROL ELEMENTS 16' GRAVEL MM 0240

REVISION NO.	SHEET	DESCRIPTION OF REVISION	DATE	MADE BY	APPROVED BY
1	12,13	PARCEL NO. 3 CRAWFORD'S AUTOLAND. MOVE TAKE LINE 15' DOWN STA. CHANGE BEGINNING STA. OF CULVERT (P) FROM REV. 129+13 RT. TO REV. 128+99 RT. CHANGE ENDING STA. OF TAKE FROM 129+15 RT. TO 129+00 RT.; 3300 SF± CHANGE PLANS ACCORDINGLY. REMOVE DRIVE (T) AT STA. DRIVE 10+30 RT. PER C.O. 9002.	10-28-98	R.M.W.	L.W.B.
2	11,13	PARCEL NO. 2 CRAWFORD. CHANGE TITLE TO HERBERT C. CRAWFORD. PER C.O. 8999.	10-29-98	R.M.W.	L.W.B.
3	11,13	PARCEL NO. 1 CRAWFORD. CHANGE PARCEL 1C ENDING STA. ON DETAIL SHEET FROM REV. 132+00 LT. TO REV. 132+50 LT. CHANGE TAKE FLAG ON LAYOUT FROM REV. 128+24 LT. TO REV. 128+84 LT. PER C.O. 9008.	11-02-98	R.M.W.	L.W.B.
4	11	PARCEL NO. 1 CRAWFORD. ADD DRIVE (T) TO DETAIL SHEET FOR BEG. STA. 132+10 LT. PER C.O. 9026.	03-22-99	R.M.W.	L.W.B.
5	11	PARCEL NO. 1 CRAWFORD. CHANGE PARCEL 1A STA. REV. 123+53 RT. TO REV. 125+53 RT. PER C.O. 9070.	09-02-99	B.A.H.	R.B.J.
6	12	PARCEL NO. 7 HELICON. ADD NEW PARCEL NO. 7 THE HELICON GROUP, L.P. REMARKS UTILITY. PER C.O. 9071.	09-02-99	B.A.H.	L.W.B.
7	13	PARCEL NO. 1 CRAWFORD. ADD TOPO FOR A 24" MAPLE WHICH IS ALSO BENCH MARK NO. 2. ADD THE NOTE 'SAVE DO NOT TRIM' TO THIS MAPLE. PER C.O. 9076.	10-11-99	M.J.R.	L.W.B.
8	1, 11,13	PARCEL NO. 1 CRAWFORD. MOVE BEGINNING R.O.W. PROJECT TO REV. 124+50 25' RT.; CHANGE LENGTH OF PROJECT TO 800.00' (0.151 MILES); CHANGE RUNNING DISTANCE ALONG EXISTING R.O.W. TO 313'. PER C.O. 9107	3-22-00	R.B.K.	R.P.D.

ACCT.MRyan
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DATE PLOTTED 05-SEP-2001
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DR.(P)- DRAINAGE RIGHT
DIT.(P)- DITCHING RIGHT
CH.(P)- CHANNEL RT.
DRIVE (T)- DRIVE RIGHT
CUL.(P)- CULVERT RIGHT
[W]- WATER SOURCES

PRESENT R.O.W.
TAKING WITHOUT ACCESS
TAKING WITHOUT ACCESS ALONG PROPERTY LINE
TAKING WITH ACCESS
PERMANENT EASEMENT
TEMPORARY EASEMENT

LEGEND
CLEAR ZONE
CONSTRUCTION EASEMENT
SLOPE RIGHTS
PROPERTY LINE
TOP OF CUT
TOE OF SLOPE

APPROVED: LAWRENCE BLISS DATE: 06-16-98
AGENT D, PLANS & TITLES

R.O.W. PLANS
ROYALTON
BRS 0147(5)S
R.O.W. SHEET 11 OF 14 SHEETS
SHEET 10 OF 76

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STATE OF VERMONT
AGENCY OF TRANSPORTATION
RIGHT OF WAY PLANS
DETAIL SHEET

TABLE OF PROJECT PROPERTY ACQUISITION

PARCEL NO.	GRANTOR	SHEET NO.	BEGINNING STATION	ENDING STATION	TAKING	REM.	RIGHTS	TITLE TAKEN	DATE	TOWN OR CITY RECORDED	BK.	PG.	REMARKS
3A	HERB CRAWFORD'S AUTOLAND, INC.	13	REV. 128+12 RT. REV. 128+10 RT. REV. 128+94 LT. REV. 128+98 RT. REV. 129+00 RT. REV. 129+23 RT. REV. 129+49 RT. REV. 129+54 RT. REV. 129+64 RT. REV. 129+52 RT. REV. 129+13 RT.	REV. 129+00 RT. REV. 129+83 RT. REV. 129+11 RT. REV. 129+49 RT. REV. 129+60 RT. REV. 129+70 RT. REV. 129+75 RT. REV. 129+80 RT.	3300 SF±		CONST. EASE. (T) 1740 SF± ALL R. T. & I. CULVERT (P) REMOVE & RESET (T) DRIVE (T) DIT. & DRAINAGE (P) CULVERT (P) DITCH (P) WALK (T) EASE. (T)	WD	07-11-01	ROYALTON	47	4-5	 WATER LINE SIGN 20.5' PAVED MM 0245 INSTALL WATER LINE
3B		13	REV. 128+12 RT.	REV. 129.75 RT.	4000 SF±		ALL R. T. & I.	WD	07-11-01	ROYALTON	47	4-5	VT RTE. 14 HWY EASEMENT
4	TOWN OF ROYALTON	13,14	REV. 129+75 RT. REV. 129+75 RT. REV. 129+78 RT. REV. 129+82 RT.	REV. 132+50 RT. REV. 130+20 RT. REV. 129+85 RT. REV. 130+35 RT	0.15 A±		ALL R. T. & I. SLOPE (T) 300 SF± WALK (T) CONST. EASE. (T) 305 SF±	QCD	01-11-00	ROYALTON	62	440	VT RTE. 14 HWY EASEMENT
5	C.V.P.S. CORP.												UTILITY
6	BELL ATLANTIC												UTILITY
7	THE HELICON GROUP, L.P.												UTILITY
REVISED	10-11-99												

REVISION NO.	SHEET	DESCRIPTION OF REVISION	DATE	MADE BY	APPROVED BY
9	11,13	PARCEL NO. 2 CRAWFORD. DELETE CLEAR & TRIM (P) FROM PARCEL ON DETAIL & LAYOUT SHEETS; ADD DRIVE(T) TO LAYOUT AND ADJUST DETAIL SHEET TO SHOW DRIVE RT.(T); CHANGE SLOPE (T) STATION FROM 127+01 RT. TO 126+94 RT.(CHANGE AREA TO 35 SF±); CHANGE CHANNEL (P) STATION FROM 127+07 TO 127+05 AND CHANGE AREA TO 545 SF±. PER C.O. 9108	3-22-00	R.B.K.	R.P.D.
10	11,13	PARCEL NO. 1A CRAWFORD. DELETE CLEAR & TRIM (P); ADD SLOPE (T) TO LAYOUT AND DETAIL SHEET WITH AREA OF 205 SF±. PER C.O. 9109.	3-22-00	R.B.K.	R.P.D.
11	11,13	PARCEL NO. 1 CRAWFORD. ADD PARCEL 1D; REV. 128+38 LT. ~ REV. 128+98 LT.; 3925 S.F.± MITIGATION SITE. REDUCE AREA IN PARCEL 1B FROM 0.17A± TO 3480 S.F.±. PER C.O. 9111.	4-04-00	M.J.R.	R.P.D.
		MYLAR REPRODUCIBLES TO STRUCTURES 6-12-01			

ACCT.MRyan
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DATE PLOTTED 05-SEP-2001
rf232d2.1

DR.(P)- DRAINAGE RIGHT
DIT.(P)- DITCHING RIGHT
CH.(P)- CHANNEL RT.
DRIVE (T)- DRIVE RIGHT
CUL.(P)- CULVERT RIGHT
[W]- WATER SOURCES

PRESENT R.O.W.
TAKING WITHOUT ACCESS
TAKING WITHOUT ACCESS ALONG PROPERTY LINE
TAKING WITH ACCESS
PERMANENT EASEMENT (P)
TEMPORARY EASEMENT (T)

LEGEND
CZ (P) CLEAR ZONE
CONST.(T) CONSTRUCTION EASEMENT
SR SR SLOPE RIGHTS
P PROPERTY LINE
L
TOP OF CUT
TOE OF SLOPE

APPROVED: LAWRENCE BLISS DATE: 06-16-98
AGENT D, PLANS & TITLES

R.O.W. PLANS
ROYALTON
BRS 0147(5)S
R.O.W. SHEET 12 OF 14 SHEETS
SHEET 11 OF 76

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COLD PLANING BITUMINOUS CONCRETE PAVEMENT
REV 124+50 TO 125+00

STEEL BEAM GUARDRAIL
REV 126+12.5 – 126+87.5 LT
REV 129+03.5 – 130+00 LT

MODIFIED ECCENTRIC LOADER TERMINAL
REV 125+75 – 126+12.5 LT

ALUMINUM APPROACH RAIL (MOD 1)
REV 126+87.5 TO 127+12.5 LT
REV 128+78.5 TO 129+03.5 LT

ALUMINUM APPROACH RAIL (MOD 2)
REV 127+10 TO 127+30 RT
REV 128+64 TO 129+03 RT

ALUMINUM BRIDGE RAIL (MOD 1)
REV 127+12.5 TO 128+78.5 LT

ALUMINUM BRIDGE RAIL (MOD 2)
REV 127+30 TO 128+64 RT

REMOVAL AND DISPOSAL OF GUARDRAIL
REV 126+36 LT – 127+25 RT
REV 127+05 – 127+20 RT
REV 128+53 – 128+72 RT
REV 128+57 RT – 129+22 LT

5" PORTLAND CEMENT CONCRETE SIDEWALK
REV 123+90 – 127+30 LT
REV 124+50 – 125+45 RT
REV 128+65 – 129+50 LT

VERTICAL GRANITE CURB
REV 123+90 – 127+30 LT
REV 124+50 – 125+45 RT
REV 125+62 – 126+12 RT
REV 126+38 – 127+30 RT
REV 128+65 – 129+45 LT
REV 128+65 – 129+00 RT

CONSTRUCT DRIVE
REV 125+53 RT – 16'w SUBBASE MATERIAL W/ 2' PAVED APRON
REV 126+21 RT – 16'w SUBBASE MATERIAL W/ 2' PAVED APRON
REV 129+23 RT – 20.5'w PAVED

GRANULAR BORROW
REV 126+80 – 127+30
REV 128+65 – 129+15

EXTRA DEPTH OF SUBBASE
REV 126+80 – 127+30
REV 128+65 – 129+15

DEMOLITION AND DISPOSAL OF BUILDING
REV 128+75 LT – MOBILE HOME

EROSION MATTING
REV 126+30 – 127+00 RT

CONSTRUCT SIDEWALK RAMP
REV 125+45 RT (TYPE 1)
REV 129+50 LT (TYPE 1)

CHANGING ELEV. OF DROP INLETS, CATCH BASINS OR MANHOLES – BY OTHERS
REV 128+80 RT – TMH

CONSTRUCT GRAVEL PATH
REV 129+50 – 129+86

SLEEVES FOR UTILITIES
REV 129+13

PIPE INSULATION
REV 129+13 RT P

GATE VALVE
REV 129+13 RT
REV 129+13 LT

SEAMLESS COPPER WATER TUBE
REV 129+13 – 1"
REV 129+13 ~ 129+30 – 3/4"

REV STA 123+90
BEGIN APPROACH

REV STA 126+00
END APPROACH
BEGIN PROJECT BRS 0147(5)S

REV STA 127+29.75
STOP ROADWAY
BEGIN BRIDGE

REV STA 128+64.50
END BRIDGE
RESUME ROADWAY

RELOCATE MAILBOX – SINGLE SUPPORT
REV 125+64 RT

BEGIN R.O.W. PROJECT
BRS 0147(5)S REV. STA.124+50 25'RT.

REV PI 125+20.92
(N49°23'33"W) =
125+19.79
(N64°38'58"W)

SURV POC = 124+25.00
REV POC 124+25.00

SURV CURVE DATA
Δ = 23° 34' 30" LT
D = 05° 30' 00"
R = 1041.74
T = 217.39
L = 428.64
E = 22.44
BANK N/A

REV CURVE DATA
Δ = 15° 15' 25" LT
D = 08° 00' 00"
R = 716.20
T = 95.92
L = 190.71
E = 6.40
BANK 0.035 FT/FT

SURV POC = 125+55.59

REV PT = 126+15.71

SURV CURVE DATA
Δ = 11° 10' 34" LT
D = 04° 00' 00"
R = 1432.39
T = 140.15
L = 279.40
E = 6.84
BANK N/A

SURV PI 126+95.74
(N56°34'30"W) =
126+94.85
(N67°45'04"W)

REV PT 128+35.00

REV POT 128+50.24=
CHAN POT 5+12.53
ANGLE = 83°6'6" AHEAD LT

SURV POT 128+50=
SURV CHAN 5+00
ANGLE = 80.0° AHEAD LT

SURV POT 129+25=
SURV DRIVE 10+00
ANGLE = 90.0° TO TANGENT

VAOT BENCH MARK #2
SPIKE IN ROOT
24" MAPLE
ELEV. 486.89

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.

① REV 125+53 TO 125+56 LT
NEW 18" X 42' CAAP (0.060) OR PCCSP (0.064)
NEW 4'X4' RCDI W/ CI GRATE TYPE D
CONSTRUCT 3' X 6' STONE FILL PAD, TYPE I, ● OUTLET

② REV 125+75 TO 127+00 LT
NEW 6" X 125' UNDERDRAIN
W/ FLUSHING BASIN ● REV 125+75 LT

③ REV 126+50 TO 127+00 RT
NEW 6" X 50' UNDERDRAIN
W/ FLUSHING BASIN ● REV 126+50 RT

④ REV 127+00 RT
NEW 18" X 14' CAAP (0.060) OR PCCSP (0.064) OR CPEP (SL) OR RCP (CL III)
NEW 4'X4' RCDI W/ CI GRATE TYPE D

⑤ REV 127+00
NEW 18" X 30' CAAP (0.060) OR PCCSP (0.064) OR CPEP (SL) OR RCP (CL III)
NEW 4'X4' RCDI W/ CI GRATE TYPE D

⑥ REV 127+00 LT
NEW 18" X 26' CAAP (0.060) OR PCCSP (0.064)
NEW 4'X4' RCDI W/ CI GRATE TYPE D

⑦ REV 128+95.5
NEW 18" X 40' CAAP (0.060) OR PCCSP (0.064) OR CPEP (SL) OR RCP (CL III)
NEW 4'X4' RCDI W/ CI GRATE TYPE D

⑧ REV 128+95.5 TO REV 128+42 RT
NEW 18" X 54' CAAP (0.060) OR PCCSP (0.064)
NEW 4'X4' RCDI W/ CI GRATE TYPE D

⑨ REV 128+95.5 TO 129+05 RT
NEW 6" X 12' UNDERDRAIN CARRIER PIPE

⑩ REV 129+05 TO 130+25 RT
NEW 6" X 120' UNDERDRAIN
W/ FLUSHING BASIN ● REV 130+25 RT

⑪ SURV 10+55 DEALERSHIP DRIVE
NEW 24" X 56' CSP (0.064) W/ CSPES ● INLET
CONSTRUCT STONE LINED DITCH, TYPE I, ● INLET

⑫ REV 129+48 TO 131+60 RT
CONSTRUCT SPECIAL DITCH
TYPE I STONE FILL

⑮ REV 128+38 TO 128+88 RT
CONSTRUCT SPECIAL DITCH
TYPE II STONE FILL

⑯ REV 129+56 TO 129+69 RT
NEW 24" X 14' CSP (0.064) W/ CSPES ● INLET & OUTLET

DOT HATCH INDICATES STONE FILL, TYPE IV

— — OHW — — APPROXIMATE AERIAL UTILITY RELOCATION ROUTING BY CENTRAL VERMONT PUBLIC SERVICE CORPORATION AND NEW ENGLAND TELEPHONE AND TELEGRAPH CO.

WATERLINE
THE LOCATION, SIZE AND MATERIAL OF THE EXISTING WATER LINE IS UNDETERMINED. THROUGH EXPLORATORY TEST PITS, THE CONTRACTOR SHALL LOCATE THE EXISTING WATER LINE PRIOR TO CONSTRUCTION. EXPLORATION TEST PITS WILL BE PAID AS TRENCH EXCAVATION OF EARTH.

SEE R.O.W. SHEET 5 FOR EROSION CONTROL DETAILS

SCALE IN FEET
0 20 40

GENERAL PLAN
SURVEYED BY N/A DATE N/A
DRAWN BY TUS DATE 6/96
SQUAD LEADER JAW
DESIGN FILE NO. 91298

ROYALTON
BRS 0147(5)S
R.O.W. SHEET 13 OF 14 SHEETS

MATCH LINE SEE R.O.W. SHEET 14 OF 14 SHEETS

PLAN SURVEYED / DRAWN / CHECKED / R.T. OF WAY CHECKED
NOTE BOOK
NO.

F:\Proj90-94\91298 Royalton\Hwy\ACAD\91298-PL 5-26-98 3:58:19 pm EST

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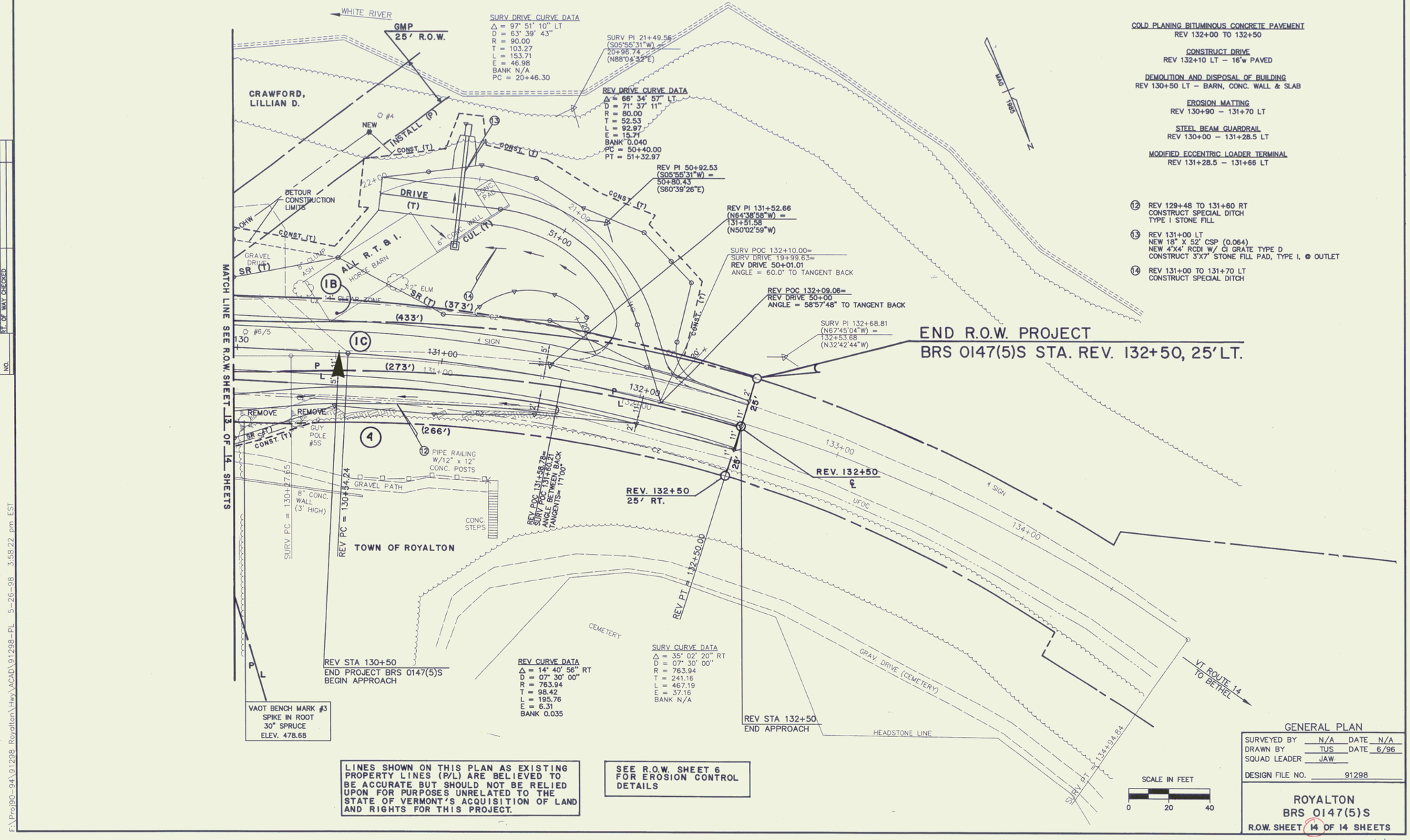

MATCH LINE SEE R.O.W. SHEET 13 OF 14 SHEETS

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.

SEE R.O.W. SHEET 6 FOR EROSION CONTROL DETAILS

PLAN
NOTE BOOK
NO.
SURVEYED
PLOTTED
ALIGNMENT CHECKED
R.O.W. STAKED
BY
DATE

F:\Proj90-94\91298 Royalton\Hwy\ACAD\91298-PL 5-26-98 3:58:22 pm EST

GENERAL PLAN

SURVEYED BY	N/A	DATE	N/A
DRAWN BY	TJS	DATE	6/96
SQUAD LEADER	JAW		
DESIGN FILE NO.	91298		

ROYALTON
BRS 0147(5)S
R.O.W. SHEET 14 OF 14 SHEETS

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