STATE OF VERMONT
AGENCY OF TRANSPORTATION

INDEX OF SHEETS

GENERAL NOTES

1. TOWN HIGHWAY #20 WILL REMAIN OPEN TO LOCAL TRAFFIC.
2. THE CONTRACTOR SHALL MAINTAIN ONE-WAY TRAFFIC AT ALL TIMES ON THE PROJECT (WITH ONE EXCEPTION - SEE NOTE #9). THIS WILL REQUIRE THE BUILDING OF ONLY HALF THE BRIDGE AT A TIME. SEE SHEET 7 FOR BRIDGE CONSTRUCTION SEQUENCE.
3. ANY SHORING REQUIRED TO MAINTAIN TRAFFIC OVER EXISTING BRIDGE SHALL BE SUBSIDIARY TO THE ITEM "MAINTENANCE OF TRAFFIC FOR BRIDGE PROJECTS".
4. TEMPORARY TRAFFIC BARRIER WILL BE PAID FOR UNDER THE ITEM "TEMPORARY TRAFFIC BARRIER".
5. ALL ON-PROJECT SIGNING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, AND SHALL BE CONSIDERED SUBSIDIARY TO THE ITEM "MAINTENANCE OF TRAFFIC FOR BRIDGE PROJECTS".
6. THE CONTRACTOR SHALL ERECT SNOW FENCE UNDER THE DIRECTION OF THE RESIDENT ENGINEER AT THE LOCATIONS INDICATED ON SHEET 2. THIS WILL BE PAID FOR UNDER ITEM 620.17, "SNOW FENCE" (MD), SEE SPECIAL PROVISIONS. THE CONTRACTOR WILL NOT BE ALLOWED TO GO BEYOND THE SNOW FENCE IN ORDER TO PROTECT THE ARCHAEOLOGICAL DIGGINGS IN THE PROJECT AREA.
7. EXISTING SUPERSTRUCTURE, ABUTMENTS, AND WINGWALLS SHALL BE REMOVED AS DETAILED ON PLANS AND PAID FOR UNDER THE ITEM "PARTIAL REMOVAL OF STRUCTURE". CARE SHOULD BE TAKEN WHEN REMOVING EXISTING BEAMS AND STEEL PLATES. THESE SHALL BE STOCKPILED ON THE SITE AND REMAIN THE PROPERTY OF THE TOWN. THE CONTRACTOR SHALL LOAD BEAMS ONTO TOWN TRUCKS. THIS WORK SHALL BE SUBSIDIARY TO "PARTIAL REMOVAL OF STRUCTURE".
8. IN-STREAM CONSTRUCTION SHALL BE RESTRICTED TO JUNE 1 TO OCTOBER 1, UNLESS THE CONTRACTOR OBTAINS WRITTEN PERMISSION FROM THE VERMONT AGENCY OF NATURAL RESOURCES TO DO WORK OUTSIDE THAT TIME FRAME.
9. IT IS OUR INTENT THAT THE CONTRACTOR PLACE THE SHEET MEMBRANE WATERPROOFING AND PAVEMENT ON THE ENTIRE STRUCTURE AND ROADWAY AT ONE TIME. THIS WILL REQUIRE THE CONTRACTOR TO CONTACT THE TOWN OF ST. ALBANS TWO (2) WEEKS PRIOR TO THIS WORK, INFORMING THEM THAT T.H. 20 WILL BE CLOSED FOR A MAXIMUM OF 5 DAYS IN ORDER TO COMPLETE THE TASK. THE CONTRACTOR WILL BE RESPONSIBLE FOR PLACING "ROAD CLOSED" SIGNS AT EACH ENTRANCE TO T.H. 20. ~~SEE SPECIAL PROVISIONS~~

SEE SHEET 14 FOR MORE GENERAL NOTES.

LIST OF STANDARDS

E-100	5/26/89 R
E-101	10/30/87
E-102	1/23/89 R
E-103	1/23/89 R
E-107	4/29/88 R
E-107A	9/10/87
E-110	3/01/88 R
G-1	10/31/85 R
G-1d	10/31/85 R
SB-R6-82	12/13/84 R
T-1	12/01/76 R
T-2	7/05/72
G-18	1/19/88

RECORD PLANS

CONTRACTOR Meunier Const, Inc
Troy, VT

RESIDENT ENGINEER C. Craig

CONSTRUCTION BEGAN 5/8/91
CONSTRUCTION COMPLETED 11/4/91

RECORD PLANS BY J. Marsceill

I hereby certify that all the construction required by this set of drawings has been accomplished as indicated herein.

By C. Craig D. Cz Resident Engineer

Date 3-13-92

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

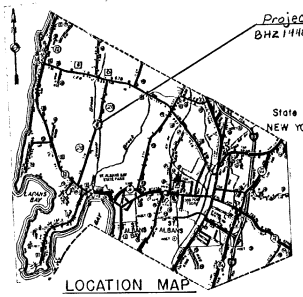
PROPOSED IMPROVEMENT
BRIDGE PROJECT

TOWN OF ST. ALBANS
COUNTY OF FRANKLIN
ROUTE NO: TH 20 (CLASS 3) BRIDGE NO: 9

PROJECT LOCATION: BEGINNING 1.777 MILES FROM THE INTERSECTION OF VT. 36 AND TH 20 AND HEADING NORTHERLY 0.043 MILES (225.0 FT) ALONG TH 20.

PROJECT DESCRIPTION: REMOVE EXISTING SUPERSTRUCTURE, WIDEN ABUTMENTS ON DOWNSTREAM SIDE, ADD NEW CONCRETE SLAB, RELATED ROADWAY AND CHANNEL WORK.

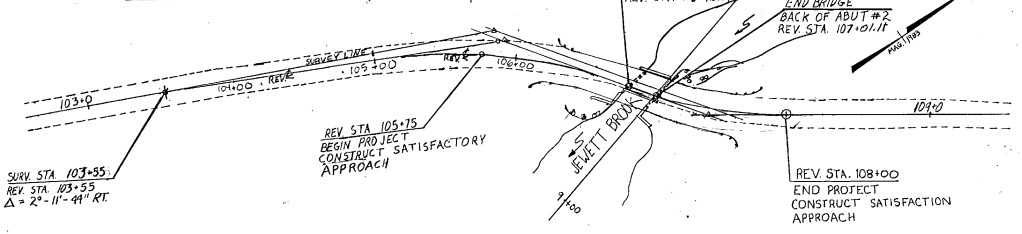
LENGTH OF STRUCTURE: 25.15 FEET = 0.005 MILES
LENGTH OF PARTICIPATION ROADWAY: 199.85 FEET = 0.038 MILES
LENGTH OF PROJECT: 225.0 FEET = 0.043 MILES



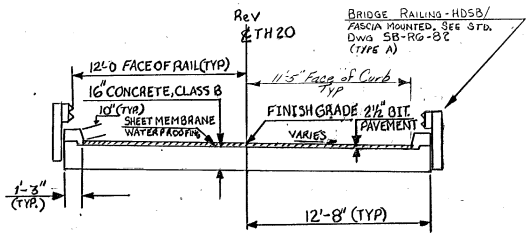
LOCATION MAP

Scale in Miles 0 0.5 1 2

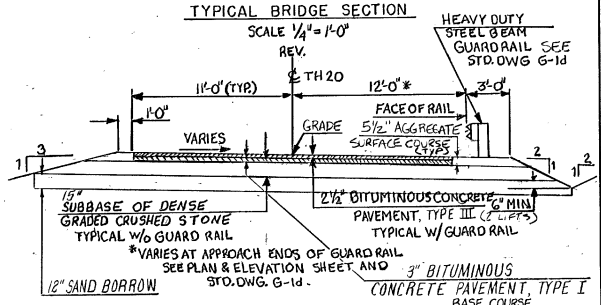
LOAD RATING (TONS)							
STRESS LEVELS	TRUCK						
	H	HS	3S2	6 AXLE	3A. STR.	4A. STR.	5A. SEMI
INVENTORY	21	38	X	X	X	X	X
POSTED	31	57	67	X	37	39	67
OPERATING	X	67	79	71	44	46	X



SCALE: 1" = 40'



TYPICAL BRIDGE SECTION
SCALE 1/4" = 1'-0"



TYPICAL ROADWAY SECTION
SCALE: 1/4" = 1'-0"

CONVENTIONAL SIGNS

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

DATUM
VERTICAL NGVD 1929
HORIZONTAL N/A

HYDRAULIC DATA

DRAINAGE AREA = 7.0 SQ. MI.
Q10 = 400 CFS
Q25 = 550 CFS
Q50 = 675 CFS
Q100 = 800 CFS

TAILWATER @ Q25 = EL 101.6
OUTLET VELOCITY @ Q25 = 5.4 FPS

** Table shows headwater elevations at the structure based on various flow frequencies occurring with Lake Champlain @ several flood elevations.

HEADWATER ELEVATIONS** (AFFECTED BY LAKE CHAMPLAIN)

Lake Champlain at:	Q10 (101.0)	Q25 (101.6)	Q50 (101.8)	Q100 (102.0)
Stream Flow @ Q10 :	101.4	102.0	102.2	102.4
Q25 :	101.8	102.4	102.6	102.8
Q50 :	102.2	102.8	103.0	103.3
Q100 :	102.6	103.3	103.3	103.4

TRAFFIC DATA

1986 ADT = 440
2006 ADT = 590
1986 DHV = 60
2006 DHV = 85
T = 21%
T(ADT) = 23%
D = 63%

BUILT AS DESIGNED

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, FOR USE ON THESE PROJECTS, INCLUDING ALL SUBSEQUENT PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

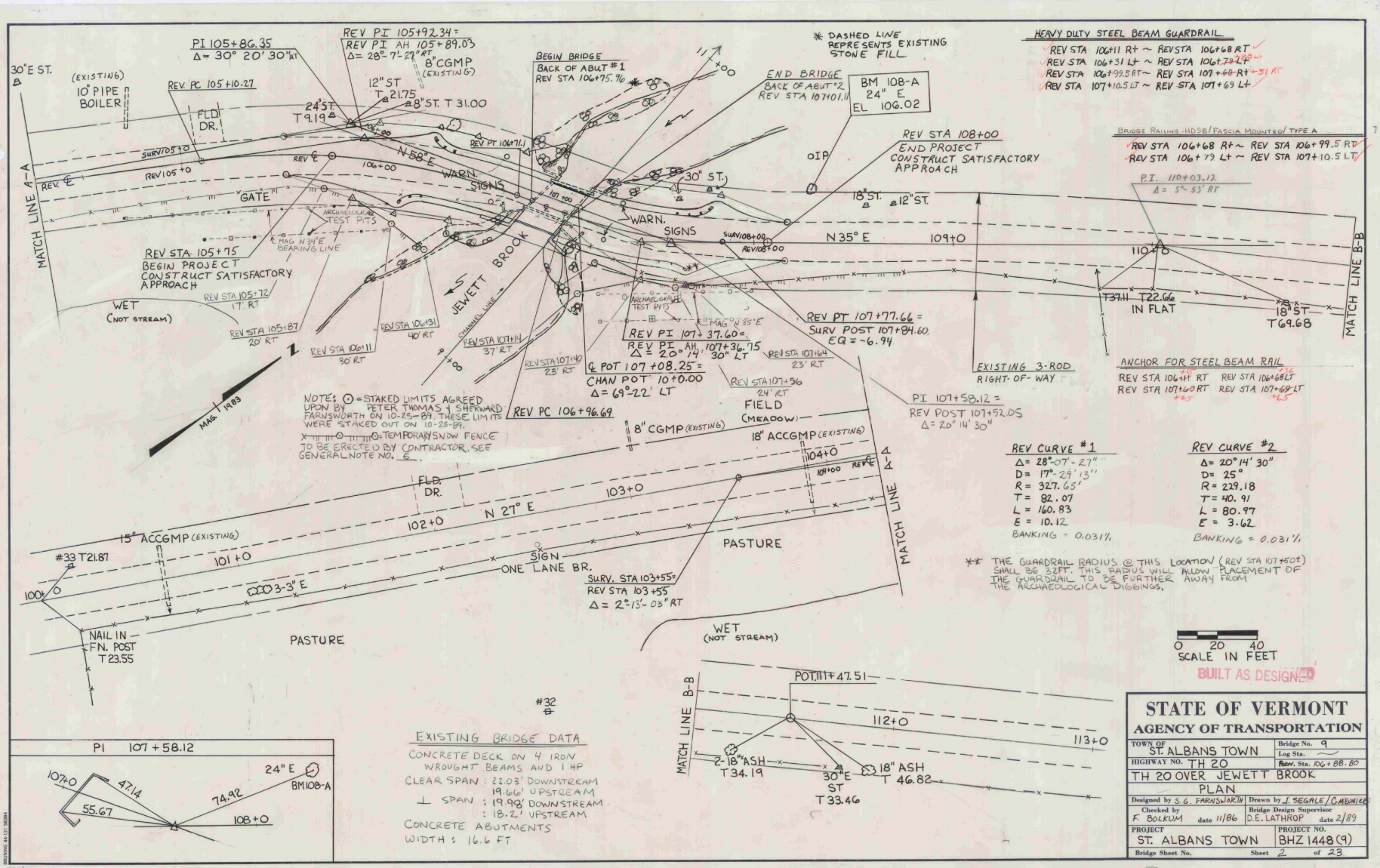
SUBMITTED BY: [signature] DIRECTOR OF PLANNING
APPROVED: [signature] DATE: 2/10/97
FOR THE STATE TRANSPORTATION BOARD

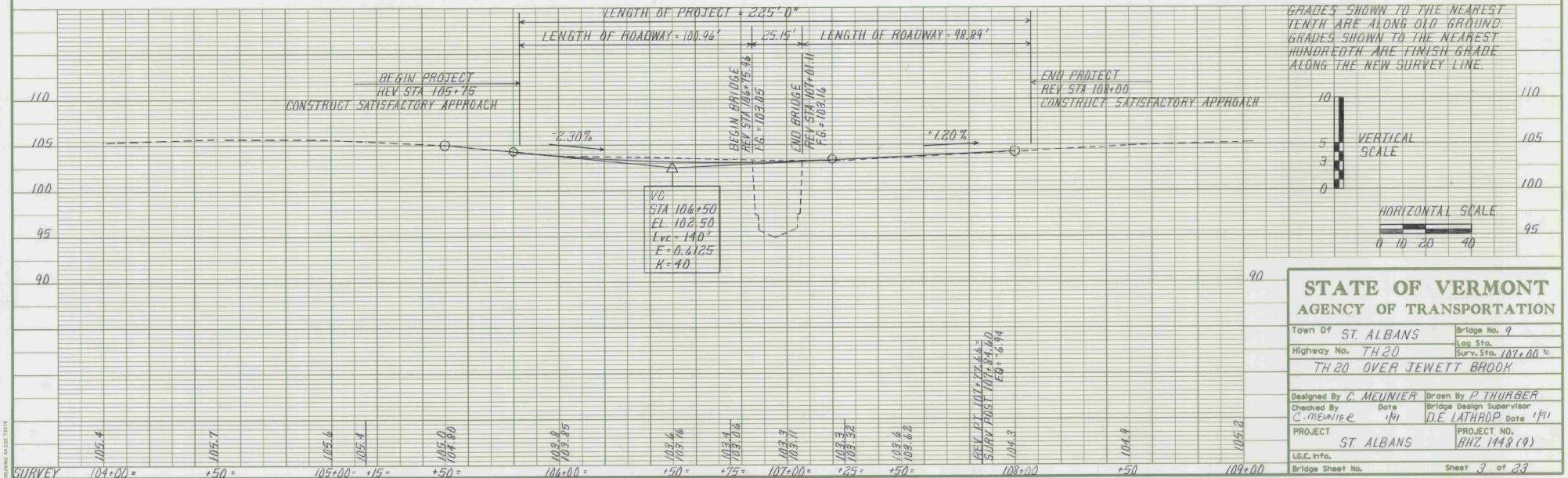
PROJECT	PROJECT NO.
ST. ALBANS	BHZ 1448(9)

SHEET 1 OF 23 SHEETS

SJB 7/21/81

D-10


30° E ST.
(EXISTING) 10" PIPE BOILER
PI 105+86.35
Δ = 30° 20' 30" RT
REV PC 105+10.27
FLD DR.
24" ST T 9.19
REV PI 105+92.34 =
REV PI AH 105+89.03
Δ = 28° 7'-27" RT
8" CGMP (EXISTING)
12" ST T 21.75
8" ST. T 31.00
SURV 105+70
REV 105+70
REV ℄
106+00
N 58° E
WARN. SIGNS
GATE
ARCHAEOLOGICAL TEST PITS
MAG N 34° E BEARING LINE
REV STA 105+75
BEGIN PROJECT CONSTRUCT SATISFACTORY APPROACH
REV STA 105+72 17' RT
WET (NOT STREAM)
REV STA 105+87 20' RT
REV STA 106+11 30' RT
REV STA 106+31 40' RT
MATCH LINE A-A
REV PT 106+71.1
BEGIN BRIDGE
BACK OF ABUT #1
REV STA 106+75.96
JEWETT BROOK
CHANNEL LINE
REV STA 107+14 37' RT
REV STA 107+40 23' RT
℄ POT 107+08.25 =
CHAN POT 10+0.00
Δ = 69°-22' LT
REV PC 106+96.69
MAG 1983
NOTE: ① = STAKED LIMITS AGREED UPON BY PETER THOMAS & SHERWARD FARNSWORTH ON 10-25-89. THESE LIMITS WERE STAKED OUT ON 10-25-89.
= TEMPORARY SNOW FENCE TO BE ERECTED BY CONTRACTOR. SEE GENERAL NOTE NO. 6.
8" CGMP (EXISTING)
18" ACCGMP (EXISTING)
104+0
101+00 REV ℄
FLD. DR.
103+0
102+0
N 27° E
15" ACCGMP (EXISTING)
#33 T 21.87
101+0
100+0
3-3" E
SIGN ONE LANE BR.
SURV. STA 103+55 =
REV STA 103+55
Δ = 2°-13'-03" RT
NAIL IN FN. POST T 23.55
PASTURE
MATCH LINE
WET (NOT STREAM)
POT 111+47.51
MATCH LINE B-B
112+0
113+0
2-18" ASH T 34.19
30° E ST T 33.46
18" ASH T 46.82
PI 107+58.12
107+0
47.14
74.92
55.67
108+0
24" E
BM 108-A
#32
EXISTING BRIDGE DATA
CONCRETE DECK ON 4 IRON WROUGHT BEAMS AND 1 HP
CLEAR SPAN : 22.03' DOWNSTREAM
19.66' UPSTREAM
⊥ SPAN : 19.98' DOWNSTREAM
18.2' UPSTREAM
CONCRETE ABUTMENTS
WIDTH : 16.6 FT
* DASHED LINE REPRESENTS EXISTING STONE FILL
END BRIDGE
BACK OF ABUT #2
REV STA 107+01.11
BM 108-A
24" E
EL 106.02
OIP
REV STA 108+00
END PROJECT CONSTRUCT SATISFACTORY APPROACH
18" ST.
12" ST.
30" ST.)
SURV 108+00
REV 108+00
N 35° E
109+0
REV PT 107+77.66 =
SURV POST 107+84.60
EQ = -6.94
REV PI 107+37.60 =
REV PI AH 107+36.75
Δ = 20°-14'-30" LT
REV STA 107+64 23' RT
REV STA 107+56 24' RT
FIELD (MEADOW)
EXISTING 3-ROD RIGHT-OF-WAY
PI 107+58.12 =
REV POST 107+52.05
Δ = 20° 14' 30"
HEAVY DUTY STEEL BEAM GUARDRAIL
REV STA 106+11 Rt ~ REV STA 106+68 RT
REV STA 106+31 Lt ~ REV STA 106+79 LT
REV STA 106+99.5 RT ~ REV STA 107+60 RT +31 RT
REV STA 107+10.5 LT ~ REV STA 107+69 LT
BRIDGE RAILING - HD5B/FASCIA MOUNTED/ TYPE A
REV STA 106+68 Rt ~ REV STA 106+99.5 RT
REV STA 106+79 Lt ~ REV STA 107+10.5 LT
P.I. 110+03.12
Δ = 5°-53' RT
110+0
T 37.11
T 22.66 IN FLAT
18" ST. T 69.68
MATCH LINE B-B
ANCHOR FOR STEEL BEAM RAIL
REV STA 106+11 RT
REV STA 106+68 LT
REV STA 107+60 RT
REV STA 107+69 LT
REV CURVE #1
Δ = 28°-07'-27"
D = 17°-29'-13"
R = 327.65'
T = 82.07
L = 160.83
E = 10.12
BANKING = 0.03 1/ft
REV CURVE #2
Δ = 20°14'30"
D = 25°
R = 229.18
T = 40.91
L = 80.97
E = 3.62
BANKING = 0.03 1/ft
** THE GUARDRAIL RADIUS @ THIS LOCATION (REV STA 107+50) SHALL BE 32FT. THIS RADIUS WILL ALLOW PLACEMENT OF THE GUARDRAIL TO BE FURTHER AWAY FROM THE ARCHAEOLOGICAL DIGGINGS.
0 20 40
SCALE IN FEET
BUILT AS DESIGNED
STATE OF VERMONT
AGENCY OF TRANSPORTATION
TOWN OF ST. ALBANS TOWN
Bridge No. 9
HIGHWAY NO. TH 20
Rev. Sta. 106+88.80
TH 20 OVER JEWETT BROOK
PLAN
Designed by S.G. FARNSWORTH
Drawn by J. SEGALE / C. MEHNERT
Checked by F. BOLEUM date 11/86
Bridge Design Supervisor D.E. LATHROP date 2/89
PROJECT ST. ALBANS TOWN
PROJECT NO. BHZ 1448(9)
Bridge Sheet No.
Sheet 2 of 23



BRUNING 44-232 73216

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of ST. ALBANS	Bridge No. 9
Highway No. TH 20	Log Sta. Surv. Sta. 107+00 ±
TH 20 OVER JEWETT BROOK	
Designed By C. MEUNIER	Drawn By P THURBER
Checked By C. MEUNIER Date 1/91	Bridge Design Supervisor D.E. LATHROP Date 1/91
PROJECT ST. ALBANS	PROJECT NO. BHZ 1448 (9)
L.G.C. Info.	
Bridge Sheet No.	Sheet 3 of 23

BR-3

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

PARCEL NO.	GRANTOR	SHEET NO.	BEGINNING STATION	ENDING STATION	TAKING	REM.	RIGHTS	TITLE TAKEN	DATE	TOWN OR CITY RECORDED	BK.	PG.	REMARKS
1	LUNEAU, ROGER N. & CAROL A.	3	REV. 105 + 65 RT. REV. 106 + 00 RT. REV. 106 + 38 RT. REV. 106 + 93 RT. REV. 107 + 14 RT.	REV. 108 + 12 RT. REV. 106 + 31 RT. REV. 106 + 64 RT. REV. 107 + 13 RT. REV. 107 + 35 RT.	0.02 A±		. EASE. TO INSTALL (T) CHANNEL (P) (110 S.F.±) CHANNEL (P) (50 S.F.±) EASE. TO INSTALL (T)	WDOE		ST. ALBANS			770 S.F.± ARCHAEOLOGICAL FENCE ARCHAEOLOGICAL FENCE
2	BOURBEAU, PAUL C. & BONNIE M.	3	REV. 105 + 86 LT. REV. 106 + 79 LT	REV. 108 + 00 LT. REV. 106 + 89 LT.			CONST. EASE. (T) (0.03 A±) CHANNEL (P) (25 S.F.±)	WDOE		ST. ALBANS			1153 S.F.±

REVISION NO.	SHEET NO.	DESCRIPTION OF REVISION	DATE	MADE BY	APPROVED BY
1	3,4	Parcel No 1 Delete const. ease (T) & added archaeological fencing per Co # 7834 Mylars to Structures 10-9-90	11-16-89	JDP	JDP

NOTE:
THIS SHEET IS FOR R.O.W. LIMIT DETAILS ONLY. REFER TO THE REMAING PLAN SHEETS FOR ALL OTHER CONTRACT DETAILS.

MADE BY: A.S.J. DATE 5/6/87

CHECKED BY: J.D.P. DATE 5/6/87

DR. RT.- DRAINAGE RIGHT
DIT. RT.- DITCHING RIGHT
CH. RT.- CHANNEL RT.
DRIVE RT.- DRIVE RIGHT
CUL. RT.- CULVERT RIGHT
(D)- DEMOLITION OR REMOVAL
[W]- WATER SOURCES

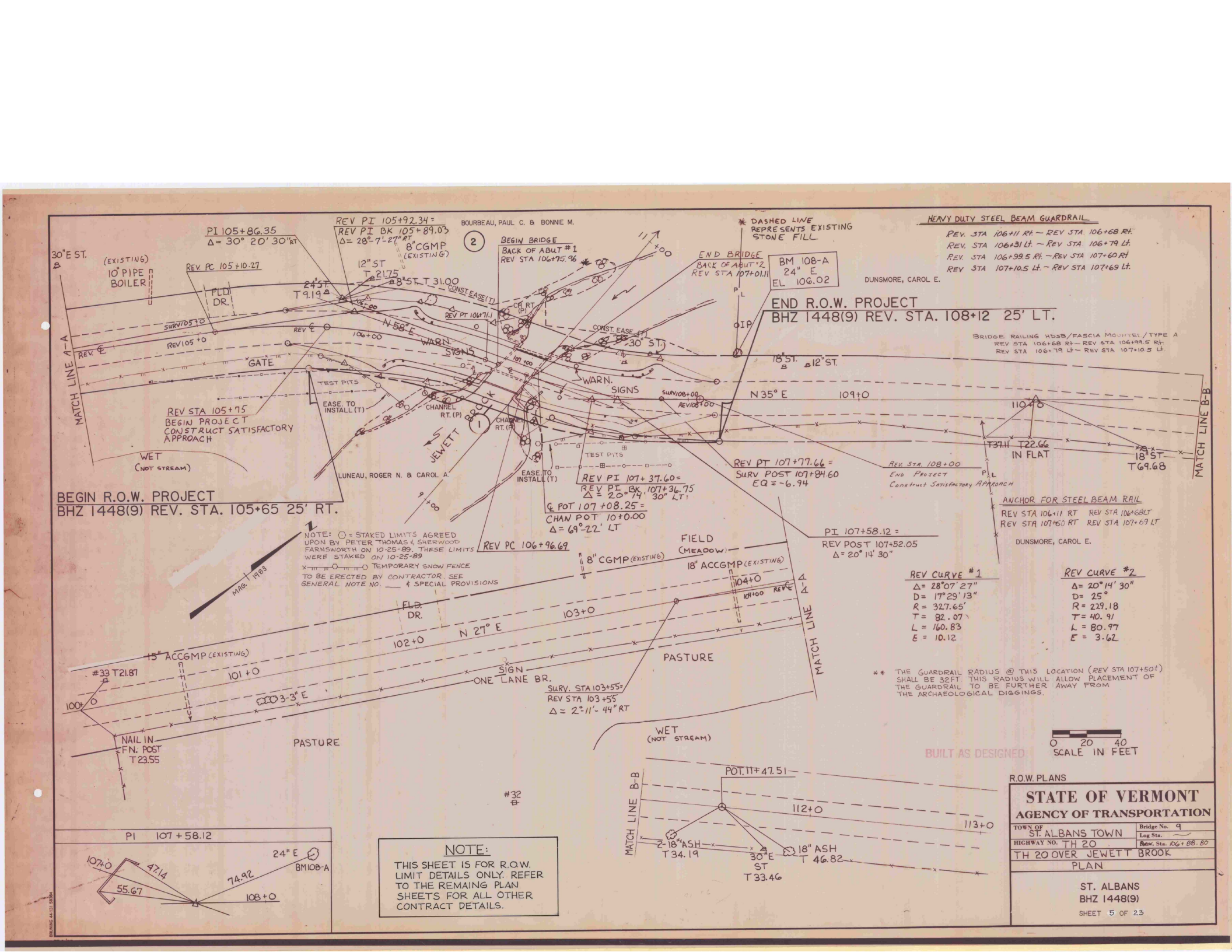
PRESENT R.O.W.
TAKING WITHOUT ACCESS
TAKING WITH ACCESS
PERMANENT EASEMENT
TEMPORARY EASEMENT

LEGEND
CONST. EASE.
SLOPE RIGHTS
PROPERTY LINE
TOP OF CUT
TOE OF SLOPE

R.O.W. PLANS

APPROVED: _____ DATE: _____
AGENT D. PLANS & TITLES

ST. ALBANS
BHZ 1448 (9)
SHEET 4 OF 23



NOTE:
THIS SHEET IS FOR R.O.W. LIMIT DETAILS ONLY. REFER TO THE REMAING PLAN SHEETS FOR ALL OTHER CONTRACT DETAILS.

R.O.W. PLANS

STATE OF VERMONT
AGENCY OF TRANSPORTATION

TOWN OF ST. ALBANS TOWN	Bridge No. 9
HIGHWAY NO. TH 20	Log Sta. ~
	Rev. Sta. 106+88.80

TH 20 OVER JEWETT BROOK
PLAN

ST. ALBANS
BHZ 1448(9)

SHEET 5 OF 23

BRUNING 44-13 98584

EARTHWORK

% GDE	VERT CUR	STATION	GRADES ELEVATION ON TAN.	ON V.C.	CORR. V.C.	DIST.	COMMON EXCAVATION AREA	CU.YDS.	SUBBASE OF DENSE GRADED CRUSHED STONE AREA	CU.YDS.	AREA	CU.YDS.	AREA	CU. YDS.
		105+50	104.80											
		105+75	104.23		BEGIN PROJ	0		0						
	PVC	+80	104.11			17.28		20		12				
-2.32%		105+92.28	103.93	103.85	0.07		62		38					
		106+00	103.65	103.70	0.05	50.73		133		76				
		106+43.01	102.66	103.16	0.50		80		43					
	PVI	106+50	102.50	103.11	0.61	25.03		64		40				
		106+68.04	102.72	103.05	0.34		59		43					
		106+75	102.80	103.05	0.25	7.92		17		13				
		+75.96	102.81	103.05	BEGIN	BRIDGE	59		43					
+1.20%		107+00	103.10	103.15	0.05									
		107+01.11	103.11	103.16	END	BRIDGE	59		43					
		107+01.89	103.12	103.16	0.04									
						16.96		27		27				
		107+18.07	103.32	103.32			28		43					
	PVT	+20	103.34											
		107+25	103.40			25.30		52		41				
		107+43.37	103.62				83		45					
		107+50	103.70											
						56.63		87		47				
		107+93.07	104.22											
		106+00	104.30		END PROJECT		0		0					
					SUB-TOTAL		400			256				
					ROUNDING		0			4				
					TOTAL		400			260				

BRIDGE QUANTITY SHEET

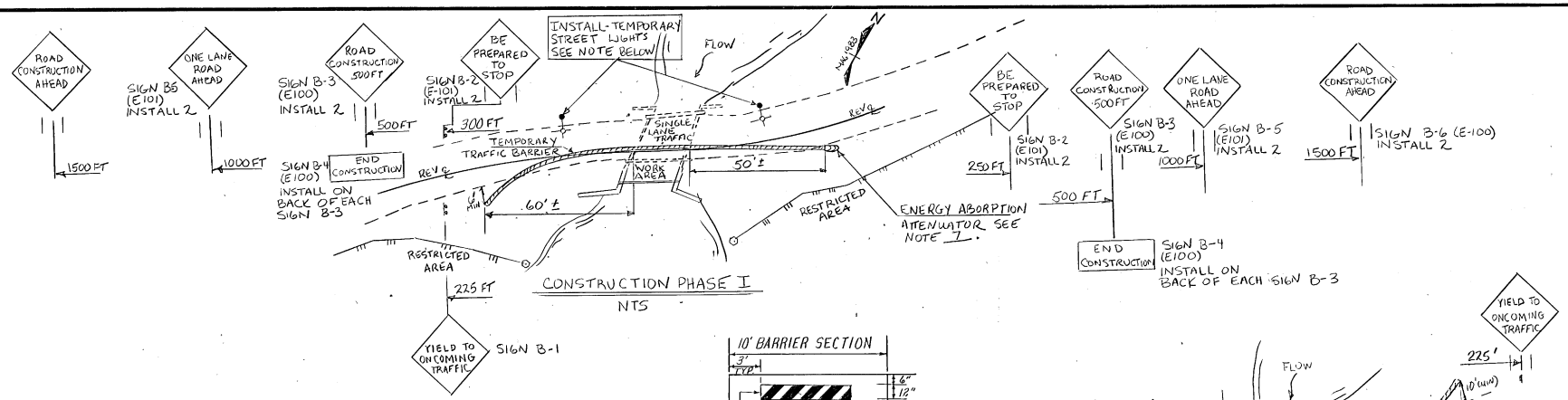
STATE OF VERMONT
AGENCY OF TRANSPORTATION
STRUCTURES DIVISION

ITEM NO.	ITEM	UNIT	QUANTITY BREAKDOWN SUPER-STRUCTURE	ABUT #1	ABUT #2	ROADWAY	CHANNEL	TOTAL	FINAL
203.15	COMMON EXCAVATION	CY				400		400	
203.27	UNCLASSIFIED CHANNEL EXCAVATION	CY					80	80	
203.31	SAND BORROW	CY				220		220	
204.25	STRUCTURE EXCAVATION	CY		60	40			100	
204.30	GRANULAR BACKFILL FOR STRUCTURES	CY		40	50			90	
301.35	SUBBASE OF DENSE GRADED CRUSHED STONE	CY				260		260	
401.10	AGGREGATE SURFACE COURSE	CY				30		30	
406.25	BITUMINOUS CONCRETE PAVEMENT	TON	9			150		159	
501.25	CONCRETE, CLASS B	CY	35	39	31			105	
507.15	REINFORCING STEEL	LB	5540	3490	2750			11780	
507.16	DRILLING AND GROUTING DOWELS	LF		36	36			72	
514.10	WATER REPELLENT	GAL	2	2	2			6	
519.20	SHEET MEMBRANE WATERPROOFING	SY	70					70	
524.11	JOINT SEALER, HOT POURED	LF	60					60	
525.41	BRIDGE RAILING - HD STEEL BEAM /FASCIA MOUNTED	LF	63					63	
527.10	MAINTENANCE OF TRAFFIC FOR BRIDGE PROJECTS	LS				1		1	
529.20	PARTIAL REMOVAL OF STRUCTURE	EACH	1					1	
608.25	ALL PURPOSE EXCAVATOR RENTAL, TYPE I (EST)	HR				10		10	
613.11	STONE FILL, TYPE II	CY					70	70	
620.50	REMOVING / RESETTING FENCE (MOD)	LF				240		240	
620.60	BARBED WIRE FENCE	LF				240		240	
620.70	SNOW FENCE (MOD)	LF				330		330	
621.21	HEAVY DUTY STEEL BEAM GUARD RAIL	LF				256		256	
621.57	ENERGY ABSORPTION ATTENUATOR	EA				1		1	
621.60	ANCHOR FOR STEEL BEAM RAIL	EACH				4		4	
621.90	TEMPORARY TRAFFIC BARRIER	LF				280		280	
630.15	FLAGGERS	HRS				100		100	
631.16	TESTING EQUIPMENT - CONCRETE	LS				1		1	
631.17	TESTING EQUIPMENT - BITUMINOUS	LS				1		1	
635.10	MOBILIZATION	LS				1		1	
649.10	GEOTEXTILE FABRIC FOR FILTERS	SY					100	100	
651.40	GRUBBING MATERIAL	SY					50	50	

BRIDGE(S) AT STATION(S) 106+88.80
LOCATION(S) TH 20 OVER THE JEWETT BROOK

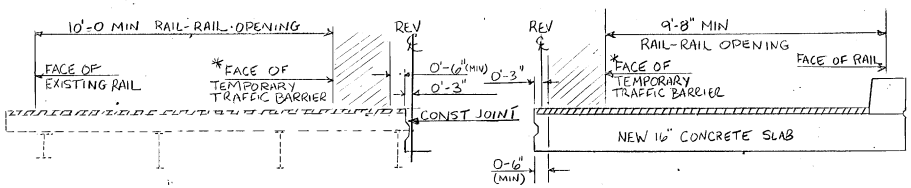
PREPARED BY: R.WHITCOMB | CHECKED BY: S. REUNER
SUPERVISOR: D.E. LATHROP

PROJECT: ST. ALBANS TOWN PROJECT NO: BHZ 1448 (7)
BR _____ OF _____ SHEET NO: 6 OF 23



CONSTRUCTION PHASE I

NTS

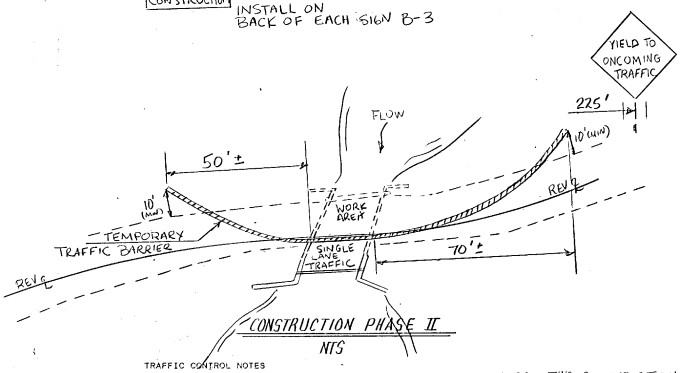


CONSTRUCTION PHASE I

SCALE: ½" = 1'-0

APPROACH BARRIER DELINEATION TO BE PLACED ON ALL APPROACH BARRIER SECTIONS.

PAYMENT FOR PANEL IS INCLUDED IN THE PRICE FOR BARRIER.



CONSTRUCTION PHASE II

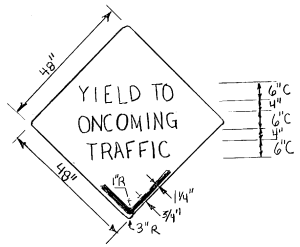
NTS

CONSTRUCTION PHASE II

SCALE: ½" = 1'-0

* THE CONTRACTOR WILL NOT BE ALLOWED TO USE CONCRETE TEMPORARY TRAFFIC BARRIER ON THE BRIDGE. AN ALTERNATIVE RAIL SYSTEM MUST BE DEVELOPED. THE CONTRACTOR SHOULD SUBMIT THE ALTERNATE TEMPORARY TRAFFIC BARRIER DETAILS TO THE STRUCTURE ENGINEER FOR APPROVAL.

IF CONCRETE BARRIER IS USED OFF THE BRIDGE AN ADEQUATE CONNECTION (APPROVED BY THE ENGINEER) BETWEEN THE TWO TYPES OF BARRIER SHALL BE PROVIDED.



SIGN B-1

NTS

TRAFFIC CONTROL SEQUENCE

IN ORDER TO MAINTAIN ONE-WAY TRAFFIC AT ALL TIMES ON THIS PROJECT, THE ABUTMENTS AND BRIDGE SLAB MUST BE BUILT IN TWO PHASES.

PHASE I

A. PLACE TEMPORARY TRAFFIC BARRIER AND REROUTE TRAFFIC AS DETAILED FOR CONSTRUCTION PHASE I.

B. EXCAVATE, FORM AND POUR DOWNSTREAM HALF OF ABUTMENTS.

C. STRIP FORMS AND BACKFILL TO TOP OF ABUTMENT STEM. SHEETING MAY BE REQUIRED SO THAT REMAINING ABUTMENT STEMS CAN BE EXCAVATED. COST OF SHEETING SHALL BE SUBSIDIARY TO "MAINTENANCE OF TRAFFIC FOR BRIDGE PROJECTS".

D. FORM AND POUR DOWNSTREAM HALF OF BRIDGE SLAB.

E. DURING SLAB CURE PERIOD, POUR RIGHT SIDE CURB AND PLACE BRIDGE RAIL. PLACE ROADWAY SUBBASE MATERIAL TO TOP OF NEW SLAB.

PHASE II

A. MOVE TEMPORARY TRAFFIC BARRIER TO NEW LOCATION AS DETAILED IN CONSTRUCTION PHASE II. SHIFT TRAFFIC PATTERN TO NEW SLAB BRIDGE WITH MINIMUM 9'-8" CLEAR WIDTH BETWEEN NEW TRAFFIC RAIL AND TEMPORARY TRAFFIC BARRIER.

B. REMOVE REMAINING EXISTING BRIDGE.

C. EXCAVATE, FORM AND POUR ABUTMENT AND WINGWALL CAPS.

D. STRIP FORMS AND BACKFILL TO TOP OF ABUTMENT CAP. REMOVE ANY TEMPORARY SHEETING.

E. FORM AND POUR UPSTREAM HALF OF BRIDGE SLAB.

F. DURING SLAB CURE PERIOD, POUR CURB AND PLACE BRIDGE RAIL.

G. PLACE ROADWAY SUBBASE MATERIALS TO TOP OF NEW SLAB FOR LEFT SIDE OF ROADWAY.

H. SEE GENERAL NOTE #9 REGARDING PLACEMENT OF SHEET MEMBRANE AND PAVEMENT.

TRAFFIC CONTROL NOTES

1. THIS IS THE SUGGESTED CONTRACTOR'S CONSTRUCTION SIGNING PACKAGE FOR TRAFFIC CONTROL ON THE PROJECT. OTHER SIGNS MAY BE REQUIRED BY THE ENGINEER.
2. THE RESIDENT ENGINEER MAY DIRECT THE CONTRACTOR TO MODIFY THE PLAN TO CONFORM TO FIELD CONDITIONS AND ALSO ACCOMMODATE CHANGING CONDITIONS DURING THE CONSTRUCTION PERIOD.
3. THE CONTRACTOR SHALL FURNISH FLAG PERSONS AT THE DIRECTION OF THE ENGINEER, AND SUPPLY AND ERECT APPROPRIATE SIGNING FOR THEIR PROTECTION. ANY SUCH SIGNING SHALL BE COVERED OR REMOVED WHEN PERSONNEL ARE NOT CONTROLLING TRAFFIC.
4. ATTENTION IS DIRECTED TO STANDARD SHEETS E-100, E-102, E-106, E-107, E-107A AND E-110 FOR THESE AND OTHER SIGNS, BARRICADES, ETC., AND FOR MATERIALS, COLORS, SIZES AND LOCATIONS.
5. 'PAVEMENT ENDS' SIGNS SHALL BE ERECTED BY THE CONTRACTOR WHEN EXISTING PAVEMENT IS REMOVED FROM AREAS OPEN TO TRAFFIC.
6. TEMPORARY STREET LIGHTS ARE TO BE INSTALLED APPROXIMATELY WHERE SHOWN. LIGHTS ARE TO BE INSTALLED ON WOOD POLES OF SUFFICIENT LENGTH TO OBTAIN A 30 FOOT MOUNTING HEIGHT. THE LUMINARY SHALL BE A 150 WATT, HIGH PRESSURE SODIUM LIGHT WITH TYPE II DISTRIBUTION ON A 6 FOOT ARM. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE POWER COMPANY FOR A POWER SOURCE THROUGH A METER FOR THE STREET LIGHTS, AND PAY ALL COSTS INCURRED UNTIL REMOVAL OF THE LIGHTS, POLES AND POWER SOURCE UPON COMPLETION OF THE PROJECT. PAYMENT TO BE SUBSIDIARY TO THE ITEM "MAINTENANCE OF TRAFFIC FOR BRIDGE PROJECTS".
7. TO ALLOW THE CONTRACTOR ACCESS TO THE WORK AREA, THE NORMAL BARRIER TAPER CANNOT BE INSTALLED. AN ENERGY ABSORPTION ATTENUATOR SHALL BE INSTALLED ON THE END OF THE TEMPORARY BARRIER RAIL IF CONCRETE TEMPORARY RAIL BARRIER IS USED. THE ATTENUATOR UNIT SHALL BE PAID FOR UNDER THE ITEM 621.57. THE UNIT SHALL BE SUITABLE FOR A NARROW WIDTH APPLICATION.

   THESE ENERGY ABSORPTION ATTENUATORS SHALL MEET THE REQUIREMENTS OF THE 1977 AASHTO PUBLICATION "GUIDE FOR SELECTING, LOCATING AND DESIGNING TRAFFIC BARRIERS" AND SHALL BE DESIGNED FOR A 40 MPH DESIGN SPEED AND 4500 LBS. VEHICLE.

   THE REPLACEMENT OF ANY PORTION OF AN ATTENUATOR DAMAGED BY AN ERRANT VEHICLE WHILE IN PLACE SHALL BE AN EXTRA WORK ITEM.
8. SEE STANDARD SHT G-18 FOR CONCRETE TRAFFIC BARRIER DETAILS IF USED.

NOTE: THE CONSTRUCTION SIGNS REMAIN THE SAME AS DETAILED IN PHASE I, EXCEPT FOR THE YIELD SIGN WHICH IS SWITCHED TO THE EAST END OF BRIDGE.

BUILT AS DESIGNED

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of ST. ALBANS TOWN	Bridge No. 9
Highway No. TH 20	Log Sta. —
	REV Sta. 107+00 ±

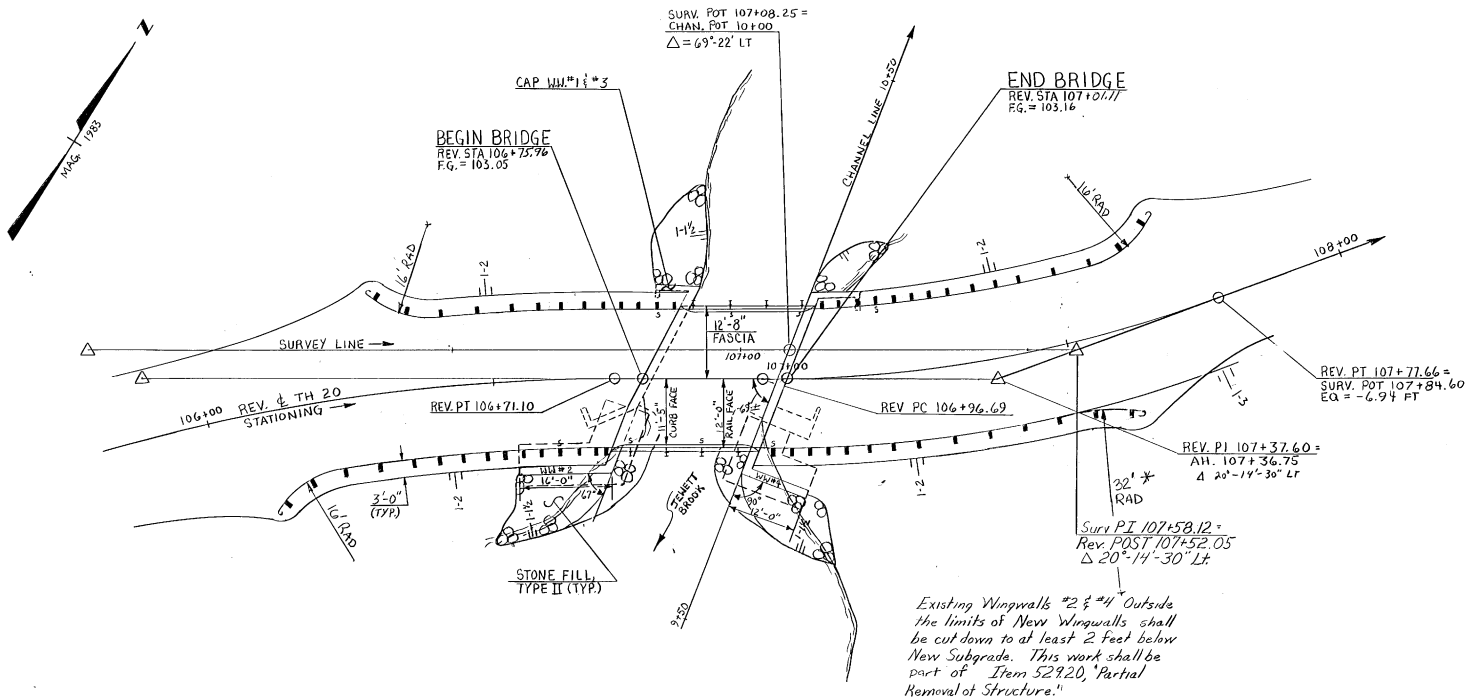
TH 20 OVER JEWETT'S BROOK

TRAFFIC CONTROL SHEET

Designed By C. MEUNIER	Drawn By C. MEUNIER
Checked By R. WHITCOMB Date 12/89	Bridge Design Supervisor D.E. LATHROP Date 12/89
PROJECT ST. ALBANS TOWN	PROJECT NO. BHZ 1418(9)
L.G.C. Info.	
Bridge Sheet No.	Sheet 7 of 23

BRUNING 44-232-7321-6

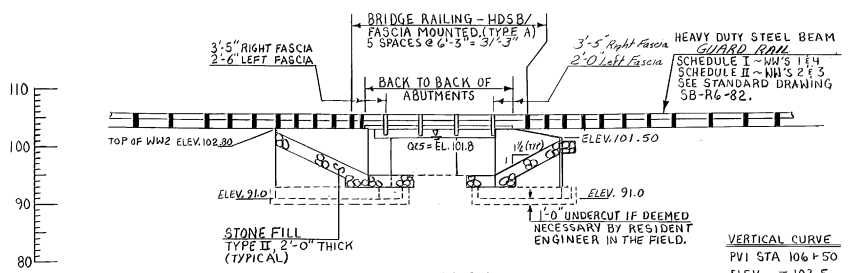
BR-6



Existing Wingwalls #2 & #1 Outside the limits of New Wingwalls shall be cut down to at least 2 feet below New Subgrade. This work shall be part of Item 529.20, 'Partial Removal of Structure."

PLAN
SCALE: 0 5 10 FT

* THE GUARDRAIL RADIUS AT THIS LOCATION WILL BE 32 FT. THIS RADIUS WILL ALLOW US TO BE FURTHER AWAY FROM THE ARCHAEOLOGICAL DIGGINGS.



ELEVATION
SCALE: 0 5 10 FT

VERTICAL CURVE
PVI STA 106+50
ELEV = 102.5
LENGTH = 140 FT
G_1 = -2.30 %
G_2 = +1.20 %

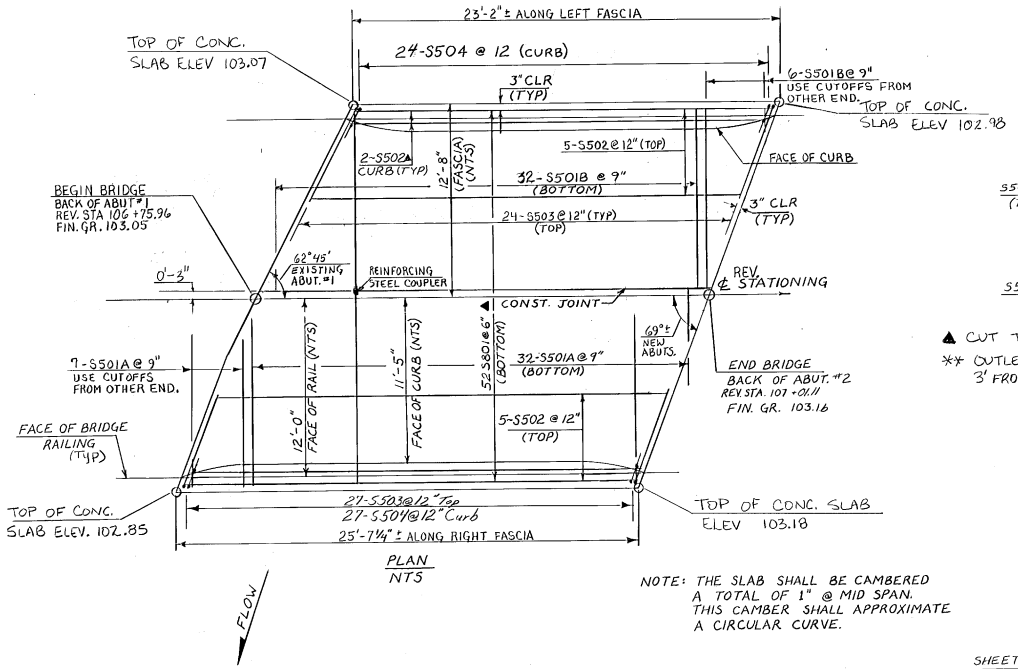
BUILT AS DESIGNED

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of ST. ALBANS	Bridge No. 2
Highway No. TH 20	Log Sta. ~
	Surv. Sta. 107+00 +/-
TH 20 OVER JEWETT BROOK	
PLAN & ELEVATION	
Designed By S.G. FARNSWORTH	Drawn By R. TETREAULT
Checked By S.G. FARNSWORTH Date 2/89	Bridge Design Supervisor D.E. LATHROP Date 2/89
PROJECT ST. ALBANS	PROJECT NO. BHZ 1448(9)
L.G.C. Info.	
Bridge Sheet No.	Sheet 8 of 23

BRUNING 44-232-73216

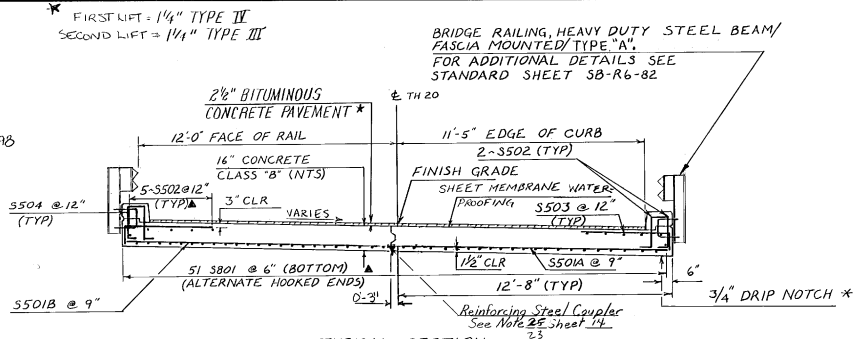
BR-6



PLAN
NTS

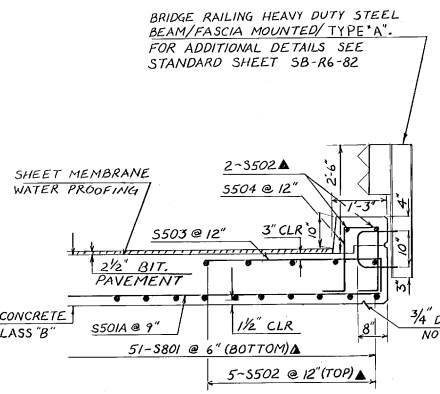
NOTE: THE SLAB SHALL BE CAMBERED A TOTAL OF 1" @ MID SPAN. THIS CAMBER SHALL APPROXIMATE A CIRCULAR CURVE.

★ FIRST LIFT = 1¼" TYPE IV
SECOND LIFT = 1¼" TYPE III

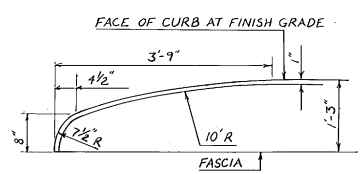


TYPICAL SECTION
SCALE 3/8" = 1'-0"

▲ CUT TO FIT, IN FIELD
** OUTLET DRIP NOTCHES 3' FROM FACE OF ABUTMENTS.

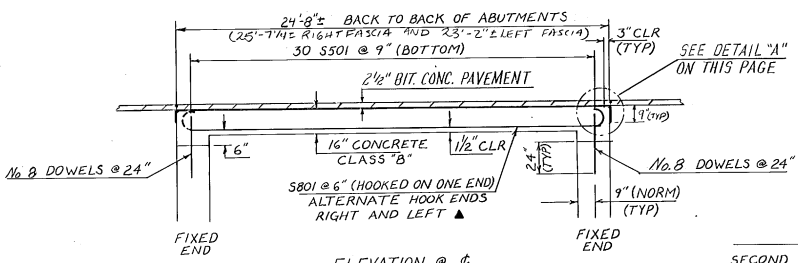


FASCIA & RAILING DETAIL
NTS

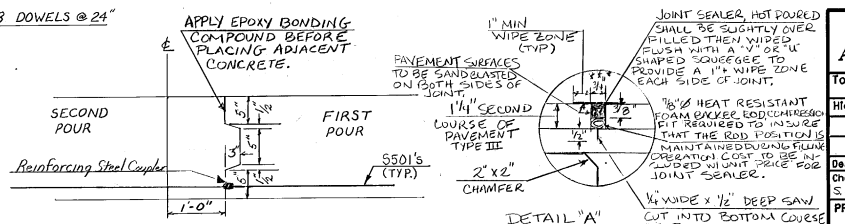


END OF CURB DETAIL
SCALE 1"=1'-0"

*** JOINT IS TO BE LOCATED ACCURATELY BY STRING LINING OR OTHER MEANS, PRIOR TO PAVING, SO THAT THE SAW CUTS WILL BE MADE DIRECTLY OVER THE END OF CONCRETE SLAB. JOINT SHALL BE CUT DRY IN A SINGLE PASS AND BE SEALED WITHIN 24 HOURS OR PRIOR TO EXPOSURE TO TRAFFIC. JOINT SHALL BE CLEANED PRIOR TO APPLYING THE JOINT SEALER, SEE VT. SPECIFICATION 524 AND SPECIAL PROVISIONS.



ELEVATION @ ℄
NTS



SLAB KEYWAY DETAIL
SCALE 1"=1'-0"

DETAIL "A"
NTS

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of ST. ALBANS	Bridge No. 9
Highway No. TH 20	Log Sta. —
	REV. Sta. 106+88.50

TH 20 OVER JEWETT BROOK

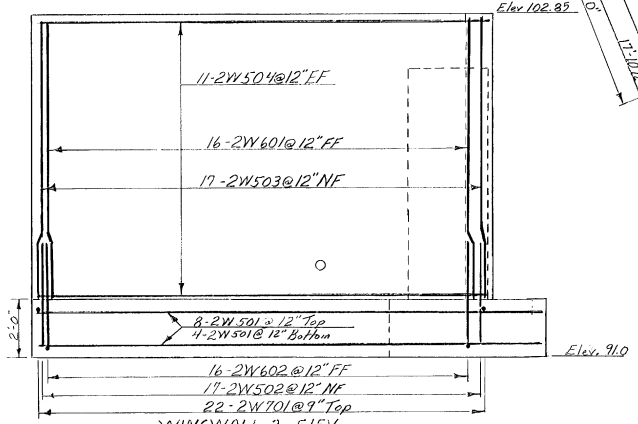
SLAB DETAIL SHEET

Designed By S.G. FARNSWORTH	Drawn By C.S. PECOR
Checked By S.G. FARNSWORTH Date 2/89	Bridge Design Supervisor D.E. LATHROP Date 2/89
PROJECT ST. ALBANS	PROJECT NO. BHZ 1448 (9)
L.G.C. Info.	
Bridge Sheet No.	Sheet 9 of 23

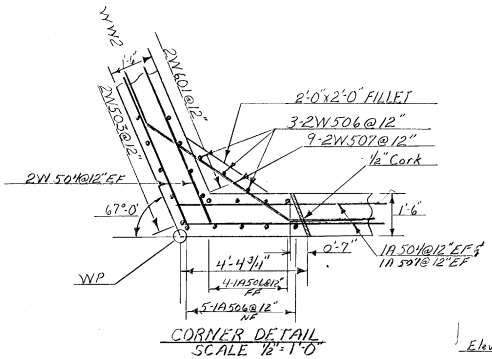
BRUNING 44-232 64442

BR-6

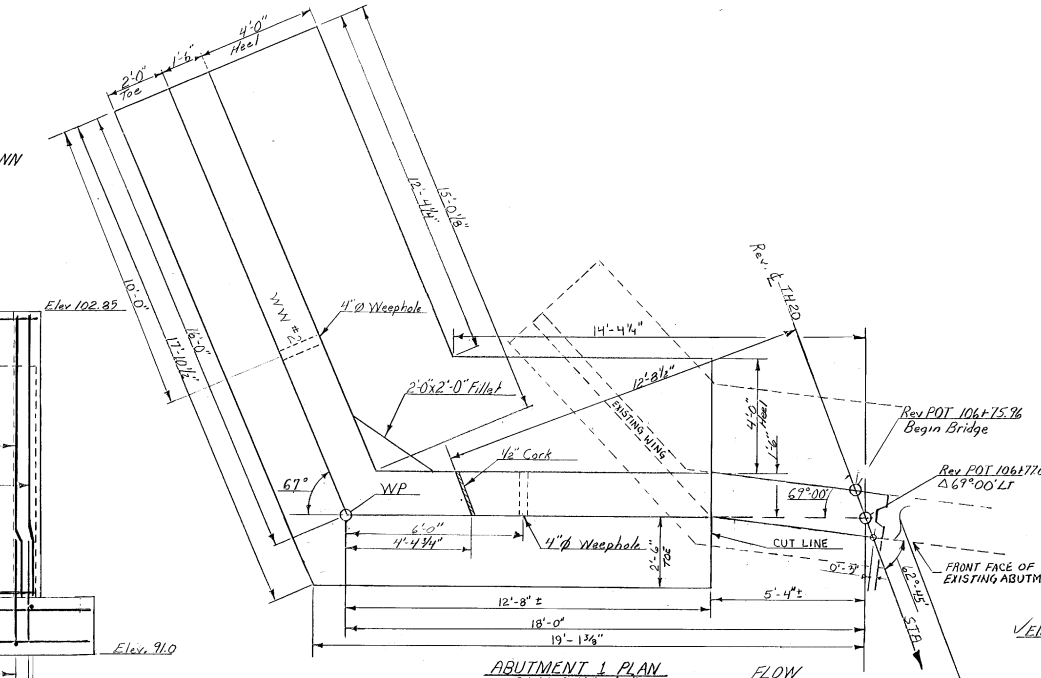
NOTE: FILLET STEEL NOT SHOWN
See Corner Detail this Sheet



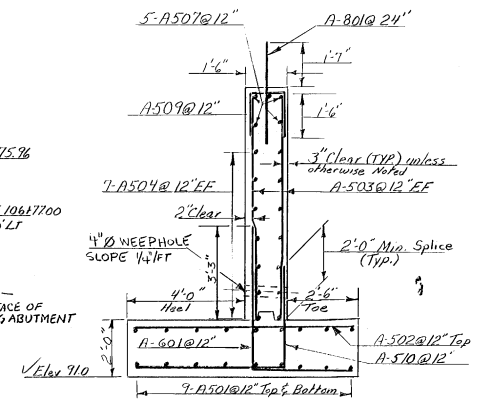
WINGWALL 2 ELEV.
SCALE 1/2"=1'-0"



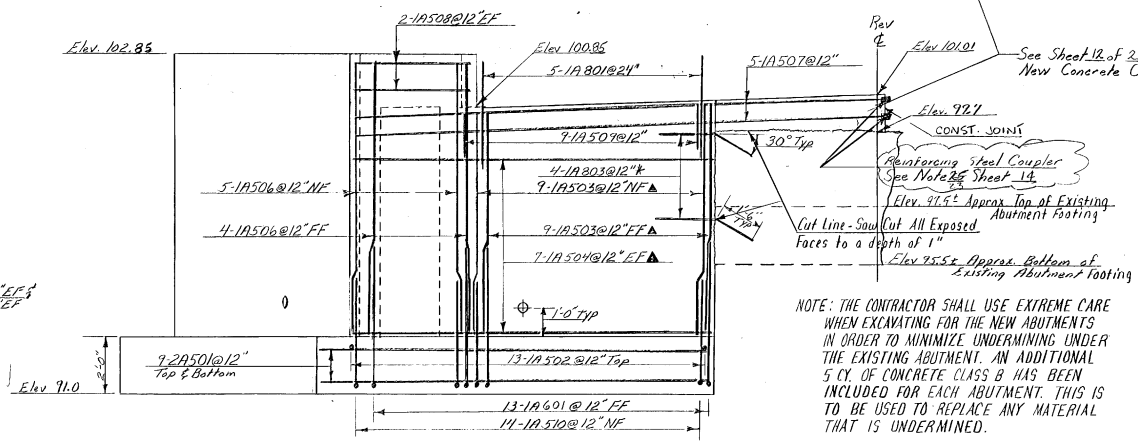
CORNER DETAIL
SCALE 1/2"=1'-0"



ABUTMENT 1 PLAN
SCALE 1/2"=1'-0"



ABUTMENT TYPICAL SECTION
SCALE 1/2"=1'-0"



ABUTMENT 1 ELEVATION
SCALE 1/2"=1'-0"

See Sheet 12 of 23 for details of New Concrete Caps For Existing Abutments

▲ Denotes Bars to be Cut to Fit in Field

* Drill & Grout Dowels into Existing Abutments. Work will be paid for under Item 502.16, Drilling & Grouting Dowels.

NOTE: THE CONTRACTOR SHALL USE EXTREME CARE WHEN EXCAVATING FOR THE NEW ABUTMENTS IN ORDER TO MINIMIZE UNDERMINING UNDER THE EXISTING ABUTMENT. AN ADDITIONAL 5 CY. OF CONCRETE CLASS B HAS BEEN INCLUDED FOR EACH ABUTMENT. THIS IS TO BE USED TO REPLACE ANY MATERIAL THAT IS UNDERMINED.

BUILT AS DESIGNED

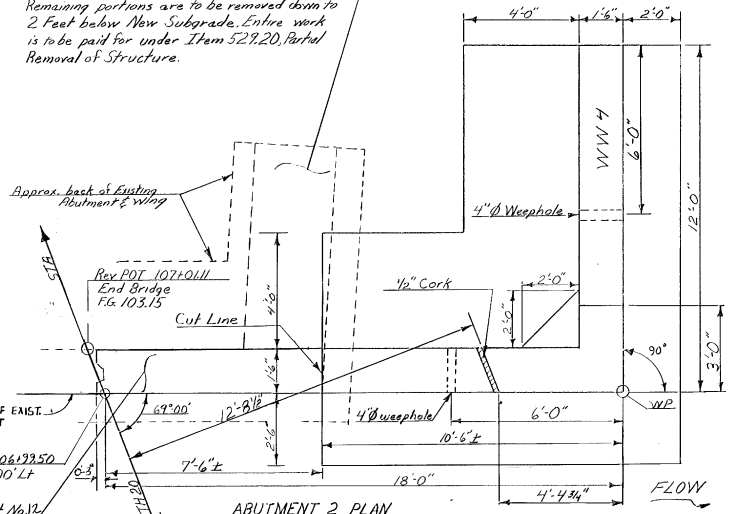
STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of ST. ALBANS	Bridge No. 9
Highway No. TH 20	Log Sta. Surv. Sta. 107+0 ±
TH 20 over JEWETT BROOK	
ABUTMENT 1 DETAILS	
Designed By S.G. Farnsworth	Drawn By R. Stevens
Checked By R.M. Tetreault Date 4-15-88	Bridge Design Supervisor D.E. LATHROP Date 2/89
PROJECT ST. ALBANS	PROJECT NO. BHZ 1448(2)
L.G.C. Info.	
Bridge Sheet No.	Sheet 10 of 23

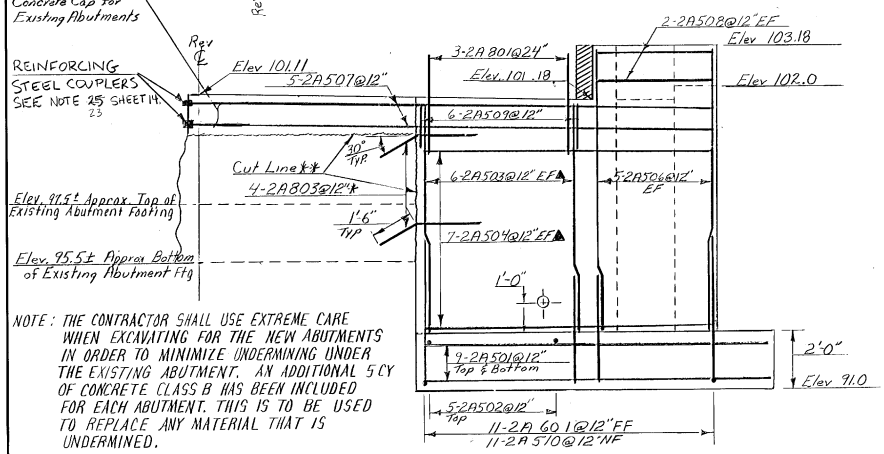
BRUNING 44-232 7316

BR-6

Existing Wingwall No.4 within the limits of the new Structure is to be completely Removed. Remaining portions are to be removed down to 2 Feet below New Subgrade. Entire work is to be paid for under Item 527.20, Partial Removal of Structure.



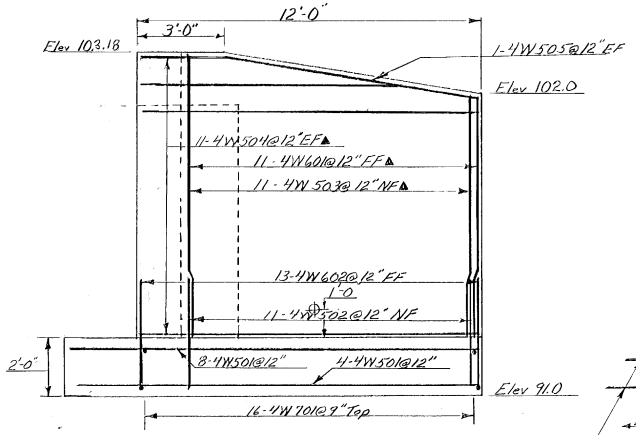
ABUTMENT 2 PLAN
Scale 1/2"=1'-0"



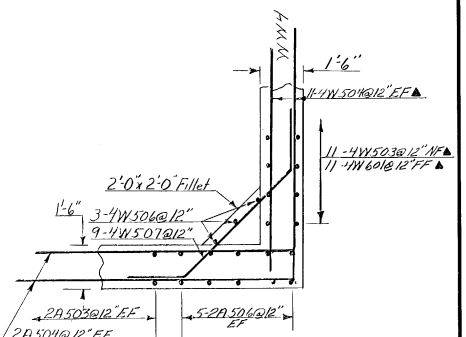
NOTE: THE CONTRACTOR SHALL USE EXTREME CARE WHEN EXCAVATING FOR THE NEW ABUTMENTS IN ORDER TO MINIMIZE UNDERMINING UNDER THE EXISTING ABUTMENT. AN ADDITIONAL 5 CY OF CONCRETE CLASS B HAS BEEN INCLUDED FOR EACH ABUTMENT. THIS IS TO BE USED TO REPLACE ANY MATERIAL THAT IS UNDERMINED.

ABUTMENT 2 ELEVATION
SCALE 1/2"=1'-0"

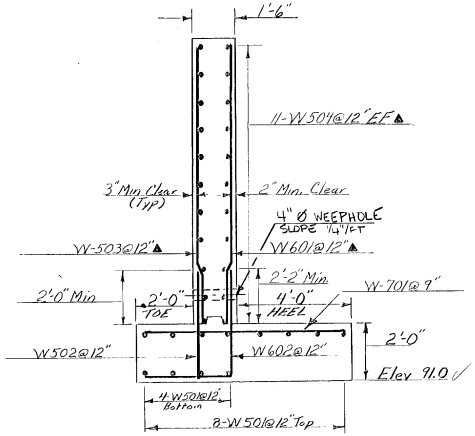
NOTE: FILLET STEEL NOT SHOWN
See Corner Detail this Sheet



WINGWALL 4 ELEVATION
SCALE 1/2"=1'-0"



CORNER DETAIL
SCALE 1/2"=1'-0"



WINGWALL TYPICAL SECTION
SCALE 1/2"=1'-0"

▲ Denotes Bars to be Cut to Fit in Field

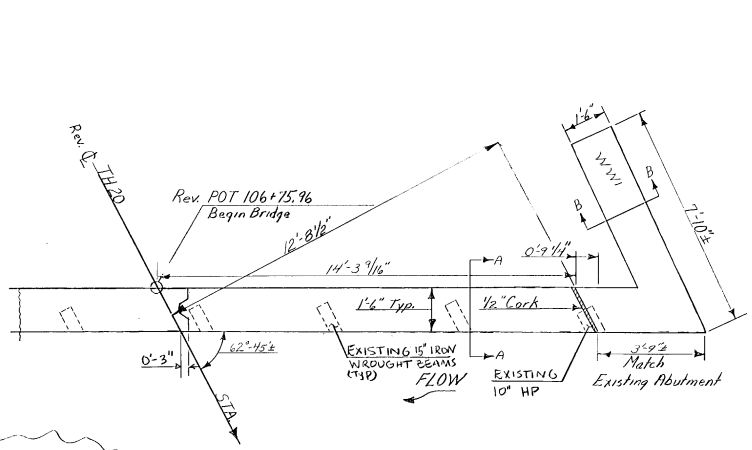
‡ Drill & Grout Dowels into Existing Abutment. Work to be paid for under Item 507.16, Drilling & Grouting Dowels

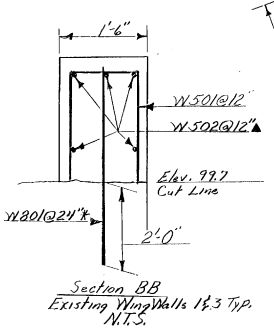
** All Exposed Concrete Surfaces to be Saw Cut 1" Deep.

STATE OF VERMONT
AGENCY OF TRANSPORTATION

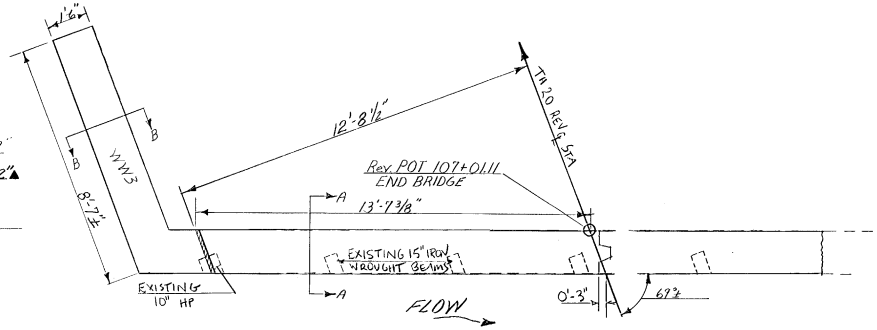
Town Of ST. ALBANS	Bridge No. 9
Highway No. TH 20	Log Sta. Surv. Sta. 107+10 ±
TH 20 over JEWETT BROOK	
ABUTMENT 2 DETAILS	
Designed By S.G. Farnsworth	Drawn By R. Stevens
Checked By R.M. Tetreault Date 4-15-88	Bridge Design Supervisor D.E. LATHROP Date 2/89
PROJECT ST. ALBANS	PROJECT NO. BHZ 1448(9)
I.C.C. Info.	
Bridge Sheet No.	Sheet 11 of 23

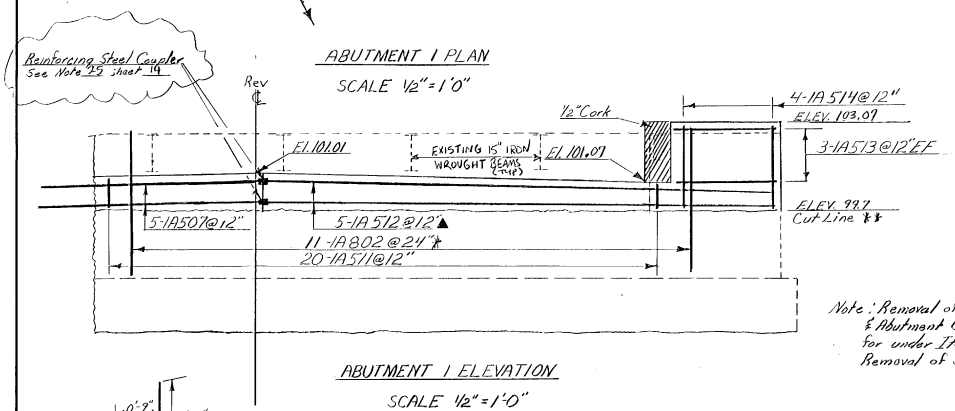
BR-6





Section BB
Existing Wingwalls 1 & 3 Typ.
N.T.S.

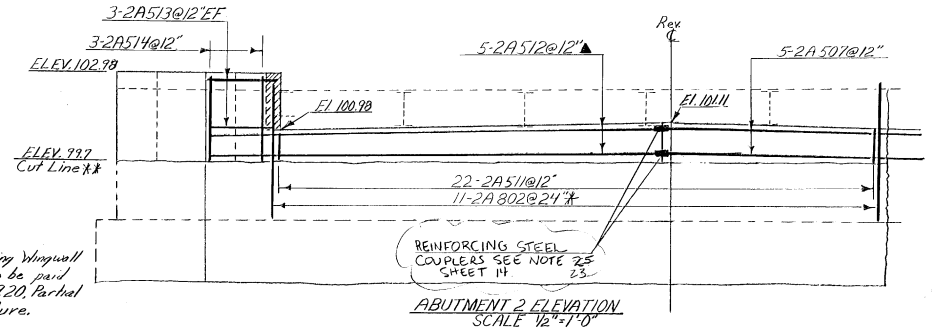




ABUTMENT 1 PLAN
SCALE ½"=1'0"

ABUTMENT 1 ELEVATION
SCALE ½"=1'0"

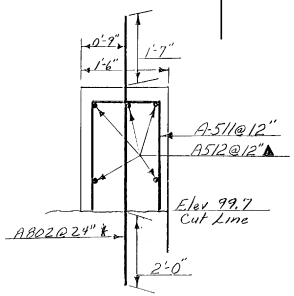
Note: Removal of Existing Wingwall & Abutment Caps to be paid for under Item 529120, Partial Removal of Structure.



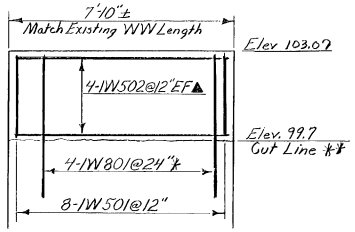
ABUTMENT 2 PLAN
SCALE ½"=1'0"

ABUTMENT 2 ELEVATION
SCALE ½"=1'0"

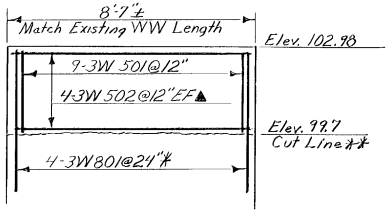
▲ Denotes Bars to be Cut to Fit in Field
* Drill & Grout Dowels into Existing Abutments & Wingwalls, Work to be paid under Item 501.16, Drilling & Grouting Dowels
** Saw Cut all exposed Surfaces 1" Deep.



SECTION A-A
Existing Abutment Typical
NTS



WINGWALL 1 ELEVATION
SCALE ½"=1'0"



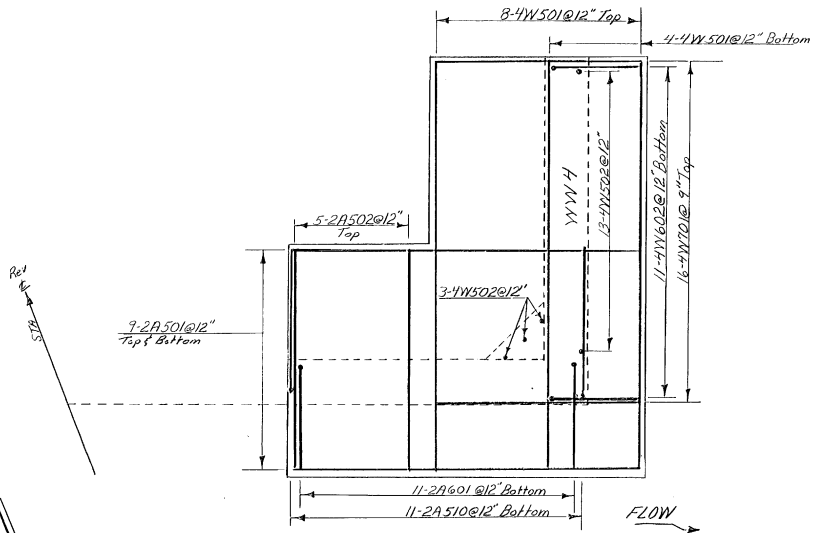
WINGWALL 3 ELEVATION
SCALE ½"=1'0"

STATE OF VERMONT
AGENCY OF TRANSPORTATION

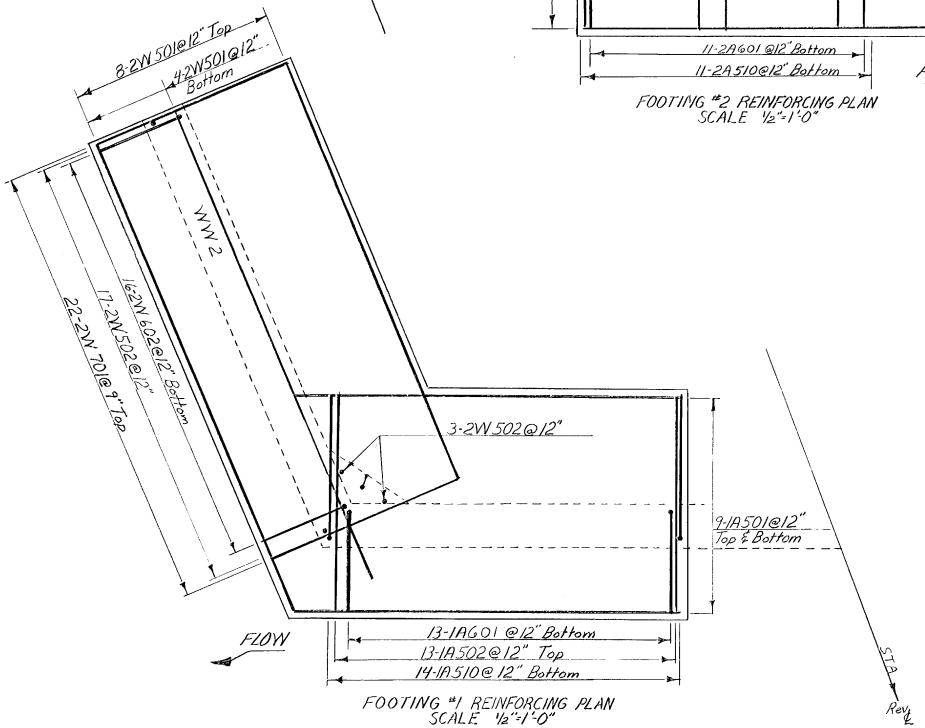
Town Of ST. ALBANS	Bridge No. 9
Highway No. TH 20	Log Sta. Surv. Sta. 107+01
TH 20 Over JEWETT BROOK	
Existing Abutments 1 & 2 Details	
Designed By S. Farnsworth	Drawn By R. Stevens
Checked By R.M. Talbeault Date 1-18-88	Bridge Design Supervisor D.E. LATHROP Date 2/89
PROJECT ST. ALBANS	PROJECT NO. BHZ 1418(9)
I.G.C. Info.	
Bridge Sheet No.	Sheet 12 of 23

BRUNING 44-232 72218

BR-6



FOOTING #2 REINFORCING PLAN
SCALE 1/2"=1'-0"



FOOTING #1 REINFORCING PLAN
SCALE 1/2"=1'-0"

BUILT AS DESIGNED

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of ST ALBANS	Bridge No. 9
Highway No. TH 20	Log Sta. —
	Surv. Sta. 10+70.2
TH 20 over JEWETT BROOK	
FOOTING DETAILS	
Designed By S. Farnsworth	Drawn By A. Stevens
Checked By R.M. Tetreault Date 2/89	Bridge Design Supervisor D.E. LATHROP Date 2/89
PROJECT ST. ALBANS	PROJECT NO. BHZ 1448(9)
I.G.C. Info.	
Bridge Sheet No.	Sheet 13 of 23

BRUNING 44-232 7216

BR-6

GENERAL NOTES CONTINUED

10. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO STATE OF VERMONT, AGENCY OF TRANSPORTATION, STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, AND ITS LATEST REVISIONS, AND THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES AND IT'S LATEST REVISIONS. DESIGN IS FOR HS-20 LIVE LOAD.

11. THE HEIGHT OF FILL BEHIND ABUTMENTS WILL BE LIMITED TO BRIDGE SEAT ELEVATION UNTIL THE SLAB HAS BEEN POURED AND CURED.

12. IN ALL HORIZONTAL CONSRUCTION JOINTS, SHEAR KEYS SHALL BE FORMED, AS DETAILED BELOW, AND THEY SHALL BE CONTINUOUS FOR THE FULL LENGTH OF THE JOINT. ANY MALE KEY SHALL BE PLACED INTEGRALLY WITH THE CONCRETE BELOW THE JOINT.

13. TRAFFIC SHALL NOT BE ALLOWED ON THE NEW BRIDGE UNTIL THE SPECIFIED CURE PERIOD OF 10 DAYS HAS EXPIRED.

14. ALL REINFORCING STEEL SHALL BE DETAILED AND FABRICATED USING PROCEDURES AND TOLERANCES IN ACCORDANCE WITH APPLICABLE PUBLICATIONS OF THE "CONCRETE REINFORCING STEEL INSTITUTE".

15. MINIMUM COVER FOR REINFORCING STEEL SHALL BE TWO (2) INCHES ALONG BACK FACES OF WALLS AGAINST EARTH, AND THREE (3) INCHES ELSEWHERE, EXCEPT AS NOTED IN THE TYPICAL SLAB DETAILS ON SHT. 9 OF 23.

16. REINFORCING PLACEMENT TOLERANCES SHALL BE:
SPACING +- 1"
CLEARANCE +- 1/4"

17. NO BORINGS WERE TAKEN ON THIS PROJECT. SUBSURFACE CONDITIONS MAY VARY FROM THE CONDITIONS ASSUMED FOR DESIGN.

18. WATER REPELLENT SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES EXCEPT THE UNDERSIDE OF DECK BETWEEN DRIP BEADS.

19. THE FOLLOWING TABLE OF ALLOWABLE STRESSES AND WEIGHTS APPLY TO THESE PLANS FOR DESIGN PURPOSES:

CONCRETE:	f'c = 3500 PSI	fc=1400 PSI
REINFORCING STEEL:	Ft = 24,000 PSI	Grade 60
SOIL: UNIT WEIGHT	140 PCF	

20. ALL DIMENSIONS ARE HORIZONTAL OR VERTICAL, AND ARE GIVEN AT 68 DEGREES F.

21. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1" BY 1".

22. JOINTS AND SCORE MARKS IN CONCRETE SHALL BE CONSTRUCTED AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

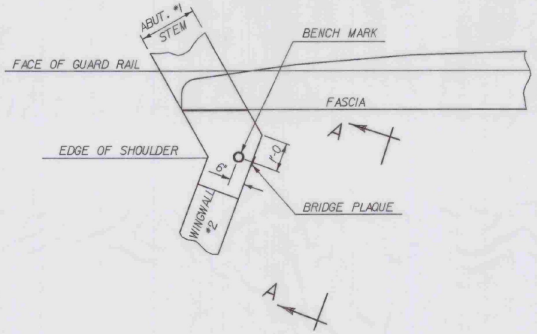
23. COUPLERS FOR REINFORCING STEEL SHALL PROVIDE A MINIMUM YIELD STRENGTH EQUAL TO 125% OF THAT OF THE REINFORCING STEEL. COST OF THE COUPLERS AND THEIR INSTALLATION SHALL BE SUBSIDIARY TO THE ITEM "REINFORCING STEEL".

24. ALL STONE FILL ABOVE NORMAL WATER LEVEL SHALL BE COVERED WITH NATIVE TURF AS DETAILED ON THE CHANNEL SECTIONS. TURF SHALL CONSIST OF GRUBBED OR STRIPPED EARTH MATERIAL CONTAINING ROOTS OF NATIVE STREAMBANK VEGETATION. PROVIDE FOR TEMPORARY EROSION CONTROL BY APPLYING GRASS SEED AND HAY MULCHING. THIS WORK IS TO BE PAID FOR UNDER THE ITEM "GRUBBING MATERIAL".

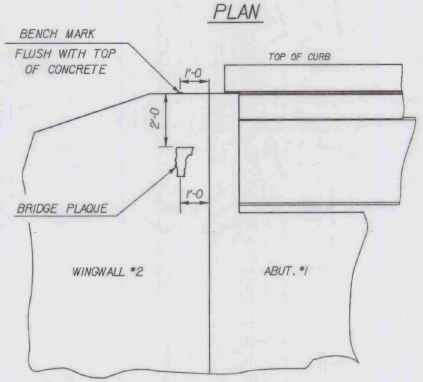
25. EXISTING FENCE LOCATED IN CONSTRUCTION AREA SHALL BE REMOVED AND RESET ON THE PASTURE SIDE 6' FROM THE SNOW FENCE UNDER THE ITEM "REMOVING AND RESETTING FENCE (MOD)".

26. AFTER THE BRIDGE / ROADWAY IS COMPLETED, NEW FENCING SHALL BE PLACED BETWEEN REVISED STATIONS 105+50± RIGHT AND 108+10± RIGHT. THE NEW FENCING WILL CONSIST OF FIVE STRANDS OF BARBED WIRE WITH PROPER TENSION. THE POSTS WILL BE PRESSURE TREATED WOOD AND PLACED 10 FEET ON CENTER AND INSERTED INTO THE GROUND AT LEAST 36 INCHES. SEE DETAILS ON THIS SHEET. THE POSTS WILL BE INSTALLED ON THE NEW R-O-W LINE FOR TH 20. PAYMENT WILL BE MADE UNDER THE ITEM "BARBED WIRE FENCE".

27. THE FINAL REMOVAL OF TEMPORARY FENCING WILL BE SUBSIDIARY TO THE ITEM "REMOVING AND RESETTING FENCE (MOD)".



PLAN

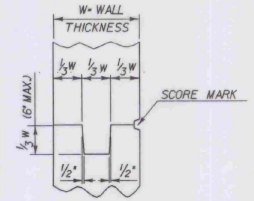


VIEW "A - A"

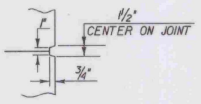
LOCATE BENCH MARK AND BRIDGE PLAQUE

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

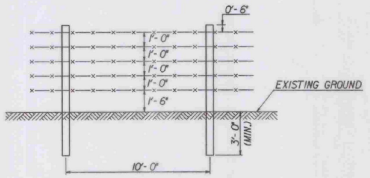
THE BRIDGE PLAQUE WAS NOT INSTALLED BY THE CONTRACTOR BECAUSE IT WAS NOT SUPPLIED BY THE VAOT UNTILL AFTER CONSTRUCTION WAS COMPLETED. CDC



TYPICAL CONCRETE CONSTRUCTION JOINT



SCORE MARK DETAIL



BARBED WIRE FENCE TYPICAL
NTS

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of ST. ALBANS	Bridge No. 9
Highway No. TH 20	Log Sta. Surv. Sta. 107 + 00 +/-
TH 20 OVER JEWETT BROOK	
CONCRETE DETAILS AND GENERAL NOTES CON'T	
Designed By S.FARNSWORTH	Drawn By R.TETREAULT
Checked By S.FARNSWORTH Date 2/89	Bridge Design Supervisor D.E.LATHROP Date 12/89
PROJECT ST. ALBANS	PROJECT NO. BHZ 1448(9)
I.G.C. Info.	ZFA\(30,54)63C509.DGN 63C509.PRF
Bridge Sheet No.	Sheet 14 of 23

ITEM	NO. PIECES	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O
1						SUPERSTRUCTURE											
2																	
*3	33	5	12-8	S501A	Str	▲											
4	32		12-2	S501B	Str	▲											
5	14		25'-1"	S502	Str	▲											
6																	
7	51		4'-11	S503	17		0'-11"	4'-0									
8	51	5	6'-4	S504	55	1'-3"	1'-11	0'-8"	1'-11			0'-6"					
9																	
10	53	8	26'-0	S801▲	1	0'-11"	25'-1"							0'-8"			
11																	
12																	
13																	
14						ABUTMENT 1											
15																	
16	18	5	13'-3"	1A501	Str												
17	13		7'-6"	1A502													
18	13		7'-9"	1A503		▲											
19	14		12'-9"	1A504		▲											
*20	10		9'-6"	1A506													
21																	
22	4		3'-10"	1A508													
23	5		17'-9"	1A512		▲											
24	6	5	3'-3"	1A513													
25																	
26	5	8	3'-7"	1A801													
27	11	8	4'-11"	1A802	Str.												
28				1A505 (NOT USED)													
29	5	5	18-6	1A507	19		6'-0	12-6					0-6		6-0		
30	9		4'-1"	1A509	17		1'-6"	1'-1"	1'-6"								
31	14		8'-10"	1A510	17		3'-9"	5'-1"									
32	20		3'-1"	1A511	17		1'-0"	1'-1"	1'-0"								
33	4	5	7'-1"	1A514	17		3'-0"	1'-1"	3'-0"								
34	13	6	8'-7"	1A601	17		3'-7"	5'-0"									
35	4	8	3'-6"	1A803	19		1'-6"	2'-0"					0'-9"		1'-4"		
36																	
37																	
38						WINGWALL No. 1											
39																	
40	5	5	7'-3	1W502	Str	▲											
41																	
42	4	8	5'-2"	1W801	Str												
43																	
44	8	5	7'-3"	1W501	17		3'-1"	1'-1"	3'-1"								
45																	
46																	
47																	
48						WINGWALL No. 2											
49																	
50	12	5	17'-4	2W501	Str												
51	20		3'-9"	2W502													
52	17		9'-7"	2W503													
53	22		15'-6"	2W504													
54	3	5	7'-9"	2W506													
55																	
56*	17	6	9'-7"	2W601													
57																	
58	22	7	7'-0"	2W701	Str												
59																	
60	9	5	10'-10"	2W507	14		2'-0"	6'-10"	2'-0"				1'-2"				10'-0"
61																	
62	16	6	7'-0"	2W602	17		3'-11"	3'-1"									
63																	
64																	
65																	
66																	
67																	
68																	
69																	
70																	
71																	
72																	
73																	
74																	
75																	
76																	
77																	
78																	
79																	
80																	

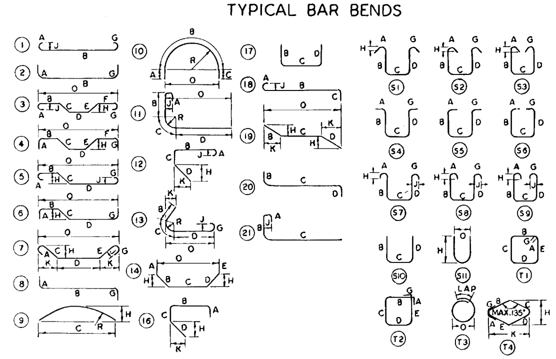
ITEM	NO. PIECES	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O
81						ABUTMENT 2											
82																	
83	18	5	12'-0"	2A501	Str												
84	5		7'-6"	2A502													
85	12		7'-11"	2A503		▲											
86	14		10'-6"	2A504		▲											
87	10		9'-8"	2A506													
88	5		18'-0	2A507													
89	4		4'-6"	2A508		▲											
90	5		15'-7"	2A512													
91	6	5	2'-0"	2A513													
92																	
93	3	8	3'-7"	2A801													
94	12*	8	4'-11"	2A802	Str.												
95																	
96				2A505	~ NOT USED ~												
97	6		4'-1"	2A509	17		1'-6"	1'-1"	1'-6"								
98	11		8'-10"	2A510	17		3'-9"	5'-1"									
99	22		3'-1"	2A511	17		1'-0"	1'-1"	1'-0"								
100	3	5	7'-1"	2A514	17		3'-0"	1'-1"	3'-0"								
101	11	6	8'-7"	2A601	17		3'-7"	5'-0"									
102	4	8	3'-6"	2A803	19		1'-6"	2'-0"					0'-9"		1'-4"		
103																	
104																	
105						WINGWALL No. 3											
106																	
107	8	5	8'-0"	3W502	Str												
108																	
109	4	8	5'-0	3W801	Str												
110																	
111	9	5	7'-1"	3W501	17		3'-0	1'-1"	3'-0								
112																	
113																	
114						WINGWALL No. 4											
115																	
116	12	5	14'-0"	4W501	Str												
117	14		3'-9"	4W502													
118	11		9'-11"	4W503		▲											
119	11		11'-6"	4W504		▲											
120	2		8'-6"	4W505													
121	3	5	7'-9"	4W506													
122																	
123	11	6	7'-11"	4W601		▲											
124																	
125	17*	7	7'-0"	4W701	Str												
126																	
127	9	5	9'-7"	4W507	14		2'-0"	5'-7"	2'-0"				1'-5"				8'-6"
128																	
129	13	6	7'-0"	4W602	17		3'-11"	3'-1"									
130																	
131																	
132																	
133																	
134																	
135																	
136																	
137																	
138																	
139																	
140																	
141																	
142																	
143																	
144																	
145																	
146																	
147																	
148																	
149																	
150																	
151																	
152																	
153																	
154																	
155																	
156																	
157																	
158																	
159																	
160																	

ITEM	NO. PIECES	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O
161																	
162																	
163																	
164																	
165																	
166																	
167																	
168																	
169																	
170																	
171																	
172																	
173																	
174																	
175																	
176																	
177																	
178																	
179																	
180																	

ASTM STANDARD REINFORCING BARS

BAR SIZE DESIGNATION	WEIGHT POUNDS PER FOOT	NOMINAL DIMENSIONS ROUND SECTION: DIAMETER INCHES	CROSS SECTIONAL AREA SQ. INCHES	PERIMETER INCHES
#3	.376	.375	.11	1.178
#4	.668	.500	.20	1.571
#5	1.043	.625	.31	1.963
#6	1.502	.750	.44	2.356
#7	2.044	.875	.60	2.749
#8	2.670	1.000	.79	3.142
#9	3.400	1.128	1.00	3.544
#10	4.303	1.270	1.27	3.990
#11	5.313	1.410	1.56	4.430
#14	7.65	1.693	2.25	5.32
#18	13.60	2.257	4.00	7.09

TYPICAL BAR BENDS



NOTES

1. UNLESS OTHERWISE DESIGNATED, ALL BAR REINFORCEMENT FOR CONCRETE IN SIZES UP TO AND INCLUDING NO. 18 SHALL CONFORM TO THE REQUIREMENTS OF THE "SPECIFICATIONS FOR DEFORMED BILLET-STEEL BARS FOR CONCRETE REINFORCEMENT," AASHTO M 31 (ASTM A 615-SI). ALL BARS SHALL BE GRADE 60, UNLESS OTHERWISE DESIGNATED.
2. FOR TYPICAL BENDING DETAILS, RECOMMENDED PIN DIAMETER "D" OF BENDS AND HOOKS AND OTHER STANDARD PRACTICE SEE CURRENT CONCRETE REINFORCING STEEL INSTITUTE "MANUAL OF STANDARD PRACTICE."
3. BARS WHICH REQUIRE MORE ACCURATE BENDING THAN STANDARD PRACTICES SHOULD HAVE LIMITS INDICATED.
4. ALL DIMENSIONS ARE OUT TO OUT OF BAR EXCEPT "A" AND "G" ON STANDARD 180° AND 135° HOOKS.
5. "J" DIMENSION ON 180° HOOKS TO BE SHOWN ONLY WHERE NECESSARY TO RESTRICT HOOK SIZE, OTHERWISE STANDARD HOOKS ARE TO BE USED.
6. "H" DIMENSION ON STIRRUPS TO BE SHOWN ONLY WHEN NECESSARY TO MAINTAIN CLEARANCES.
7. WHERE SLOPE DIFFERS FROM 45° DIMENSIONS "H" AND "K" MUST BE SHOWN.

▲ DENOTES BARS TO BE CUT IN FIELD.
✳ DENOTES ONE EXTRA BAR ADDED FOR TESTING PURPOSES.
△ DENOTES TWO EXTRA BARS ADDED FOR TESTING PURPOSES.

REV. NO.	MADE BY	DATE	DESCRIPTION

STATE OF VERMONT
AGENCY OF TRANSPORTATION

TOWN OF ST. ALBANS — BRIDGE NO. 9 — LOG STA. — SURV. STA. 10710 ±

HIGHWAY NO. TH20

TH20 over JEWETT BROOK

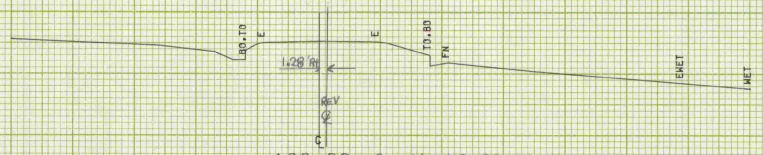
REINFORCING STEEL SCHEDULE

DESIGNED BY S. Farnsworth — DRAWN BY R. Stevens

CHECKED BY R.M. Tetreault DATE 4/88 — BRIDGE DESIGN SUPERVISOR D.E. LATHROP DATE 2/89

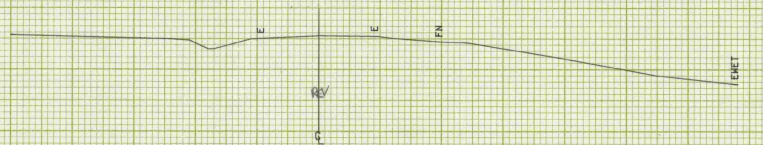
PROJECT ST. ALBANS — PROJECT NO. BHZ 1448(9)

BRIDGE SHEET NO. — SHEET 15 OF 23



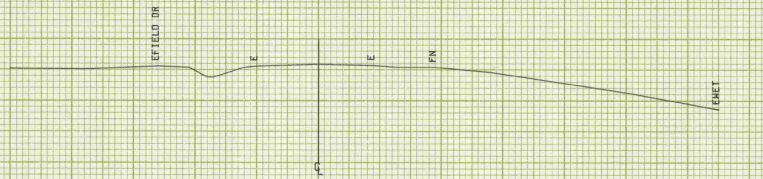
100

103+88 = Rev Sta 103+88.02



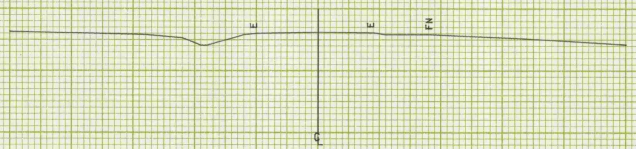
100

103+50 = Rev Sta 103+50.0



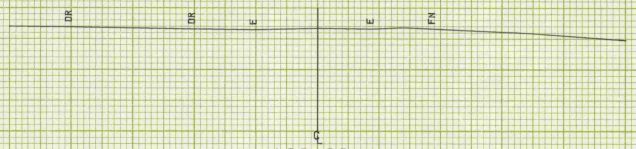
100

103+00



100

102+50

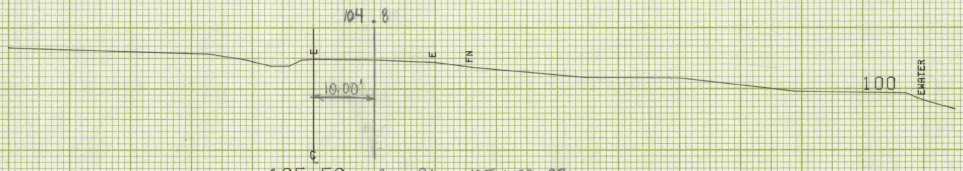


100

102+00

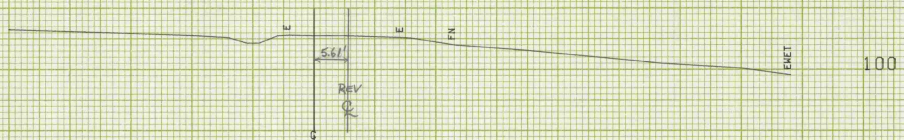
FROM STA.	102+00	TO STA.	103+88
PROJECT NAME	ST ALBANS TOWN		MAIN
NO.	BHZ1448(9)	PLOTTED	07/19/84
SURVEYED BY	BRADY		MARCH 1983
SHEET 16 OF 28	SHEETS		

SCALE 10 FEET

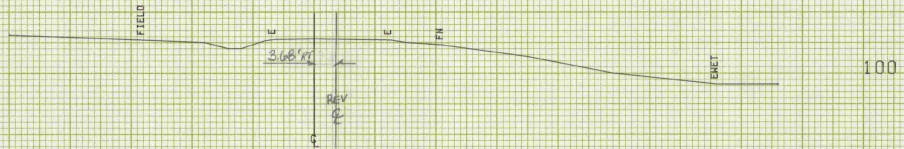


105+50 = Rev Sta. 105+50.38

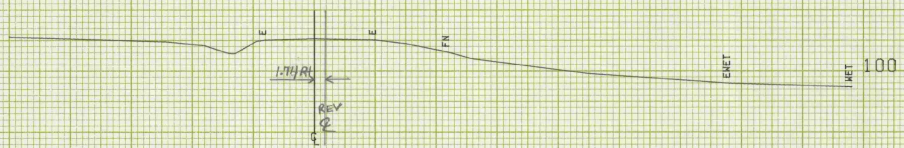
105+15 = Rev Sta. 105+15.11



105+00 = Rev Sta. 105+00.10



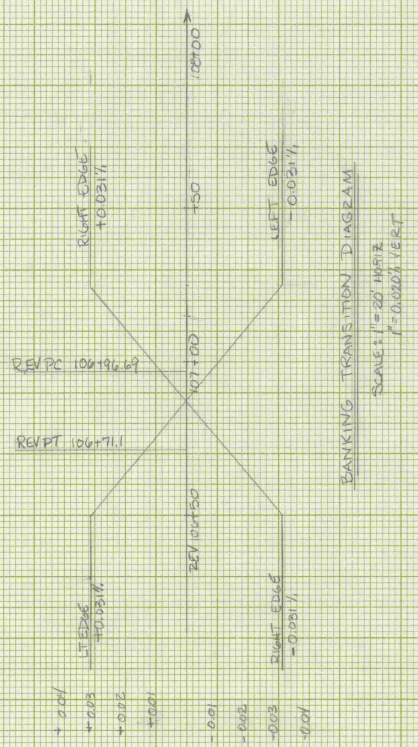
104+50 = Rev Sta. 104+50.06



104+00 = Rev Sta. 104+00.03

SCALE 10 FEET

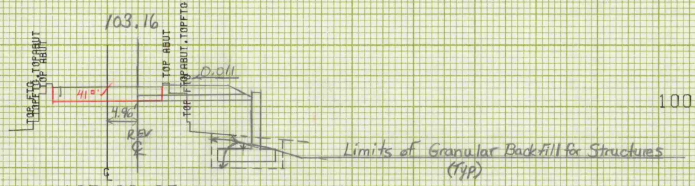
FROM STA.	104+00	TO STA.	105+50
PROJECT NAME	ST ALBANS TOWN		MAIN
NO.	BHZ1448(19)		PLOTTED 07/19/84
SURVEYED BY	BRADY		MARCH 1983
SHEET 10 OF 23	SHEETS		



REV PC 106+96.69

REV PT 106+71.1

Rev Sta 107+10.5 Lt, End Bridge Rail
Begin Heavy Duty Steel Beam Guard Rail



107+08.25 = Rev Sta 107+01.26 = Rev Sta 107+06.7 - Incr 205.15 -

Rev Sta 106+93.6 = ∅ Section - Incr 205.15 -

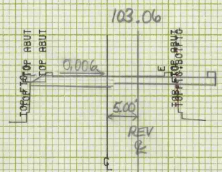
Rev Sta 106+83.7 = ∅ Section - Incr 205.15 -

Rev Sta 107+01.11 End Bridge

Rev Sta 106+99.5 Rt End Bridge Rail Begin Heavy Duty Steel Beam Guard Rail

100

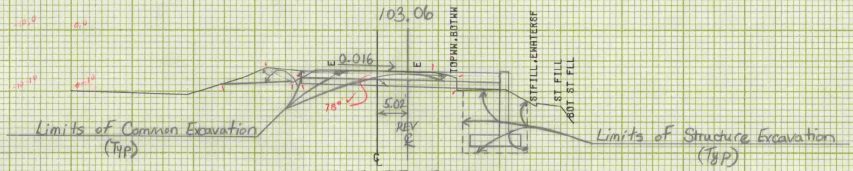
Rev. Sta 106+79 Lt End Guard Rail
Begin Bridge Railing-HD Steel Beam/fascia Mounted



106+87.30 = Rev Sta 106+80.31

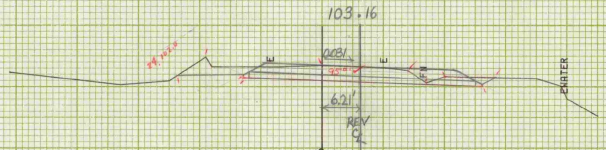
Rev Sta 106+75.96 Begin Bridge

100



106+75 = Rev Sta 106+68.03

Rev Sta 106+68 Rt End Guard Rail
Begin Bridge Railing-HD Steel Beam / Fascia Mounted

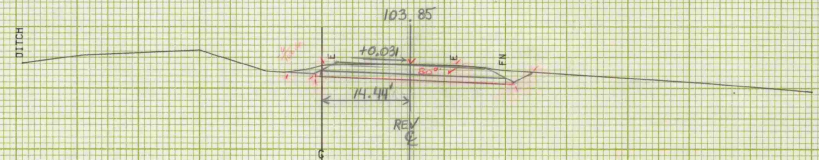


100

Rev Sta 106+31 Lt Begin Heavy Duty Steel Beam Guard Rail

106+50 = Rev Sta 106+42.98, Same for Rev Sta's 106+11 & 106+31 - Incr 205.15 -

Rev Sta 106+11 Rt Begin Heavy Duty Steel Beam Guard Rail



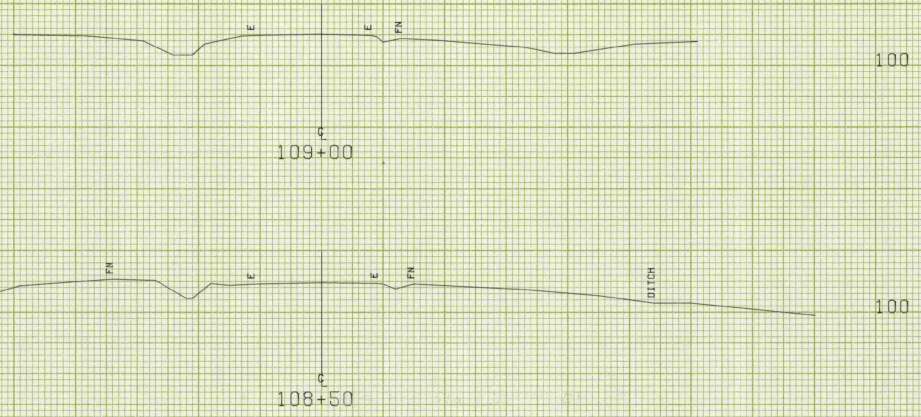
100

106+00 = Rev Sta 105+92.26, Same for Rev Sta 105+75 (Begin) - Incr 205.15 -

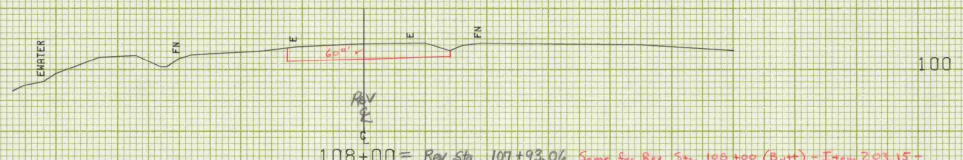
Rev Sta 105+75 Begin Project
Construct Satisfactory Approach

FROM STA.	106+00	TO STA.	107+08.25
PROJECT NAME	ST ALBANS TOWN		MAIN
NO.	BHZ1448(9)		PLOTTED 07/19/84
SURVEYED BY	BRADY		MARCH 1983
SHEET 18	OF 22	SHEETS	

SCALE 10 FEET



Rev Sta 108+00 End Project
Construct Satisfactory Approach



108+00 = Rev Sta 107+93.06, Same for Rev Sta 108+00 (Butt) - Item 203.15 -

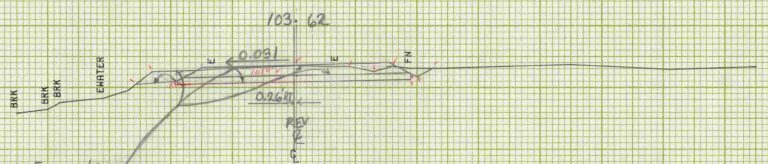
Item 203.15
Common Excavation

Sta.	Area	Dist.	Vol.
105+75	80°	36'	3150 cy
106+11	95°	20'	1900 cy
106+31	95°	37'	3200 cy
106+68	28°	18.7'	612 cy
106+83.7	0		
106+93.6	0	13.1'	269 cy
107+06.7	41°	11.3'	554 cy
107+18	57°	32'	2528 cy
107+50	101°	19'	1919 cy
107+69	101°	31'	2496 cy
108+00	60°		

16628 (1/27) = 616 cy

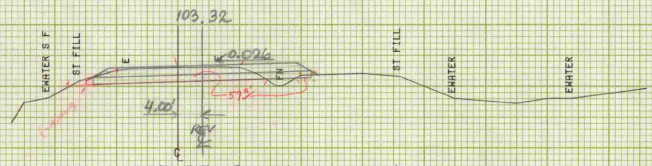
Rev Sta 107+69 Lt, End Guard Rail

Rev Sta 107+45 Rt, End Guard Rail



Limits of Common Excavation (Typ)

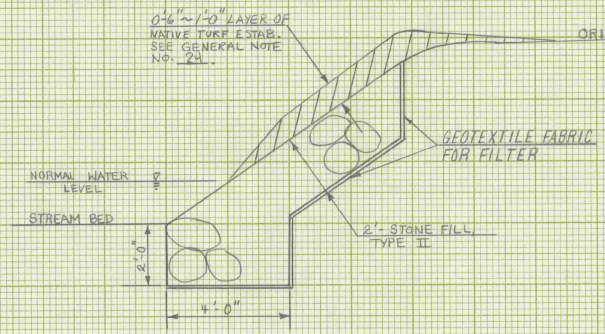
107+50 = Rev Sta 107+43.38, Same for Rev Sta's 107+57 & 107+69 - Item 203.15 -



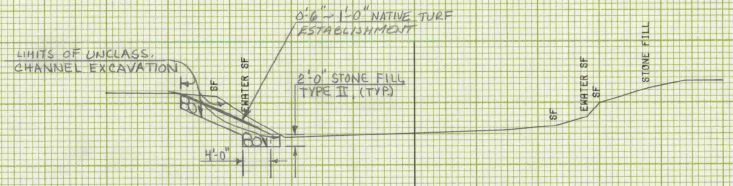
107+25 = Rev Sta 107+18.04

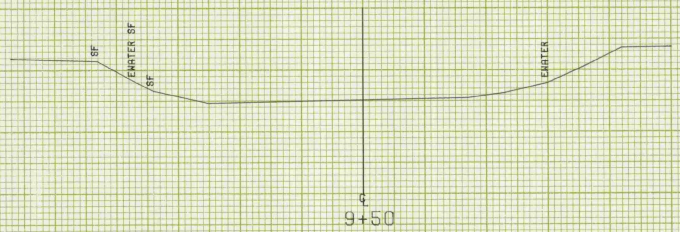
FROM STA.	107+25	TO STA.	109+00
PROJECT NAME	ST ALBANS TOWN		MAIN
NO.	BHZ1448(9)		PLOTTED 07/19/84
SURVEYED BY	BRADY		MARCH 1983
SHEET 12 OF 23	SHEETS		

SCALE 10 FEET

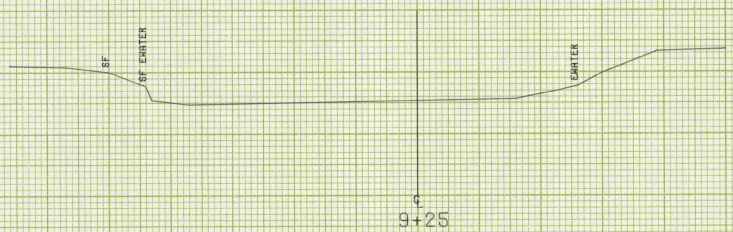


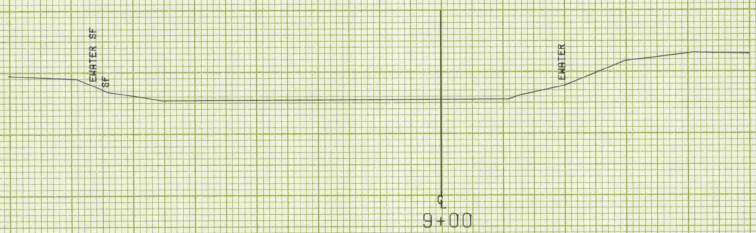
STONE FILL TYPICAL
N.T.S.





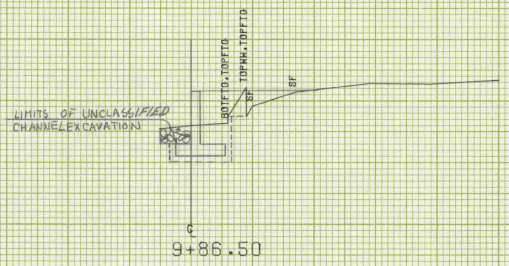
STA 9+50 Lt, BEGIN STONEFILL AND UNCLASSIFIED CHANNEL EXCAVATION SEE STONE FILL TYPICAL AT LEFT, THIS SHEET.





FROM STA.	9+00	TO STA.	9+60
PROJECT NAME	ST ALBANS TOWN		CHAN
NO.	BHZ1448(9)		PLOTTED 07/19/84
SURVEYED BY	BRADY		MARCH 1983
SHEET 20 OF 25 SHEETS			

SCALE 10 FEET



℄ 9+86.50

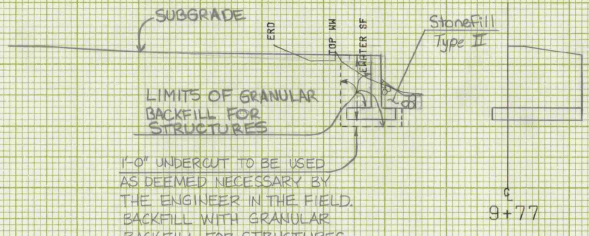
STA. 9+87 END STRUCTURE EXCAVATION AND GRANULAR BACKFILL FOR STRUCTURE FOR ABUTMENT #2

90

℄ 9+81.50

STA 9+81 END STRUCTURE EXCAVATION AND GRANULAR BACKFILL FOR STRUCTURES FOR ABUTMENT #1

90

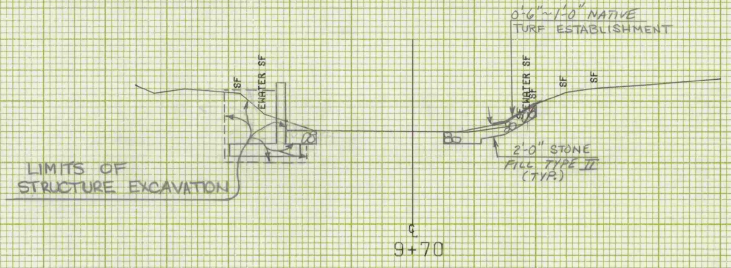


℄ 9+77

STA. 9+87 Rt END STONEFILL

90

STA. 9+75 BEGIN STRUCTURE EXCAVATION AND GRANULAR BACKFILL FOR STRUCTURE FOR ABUTMENT #2



℄ 9+70

STA. 9+81 Lt END STONEFILL

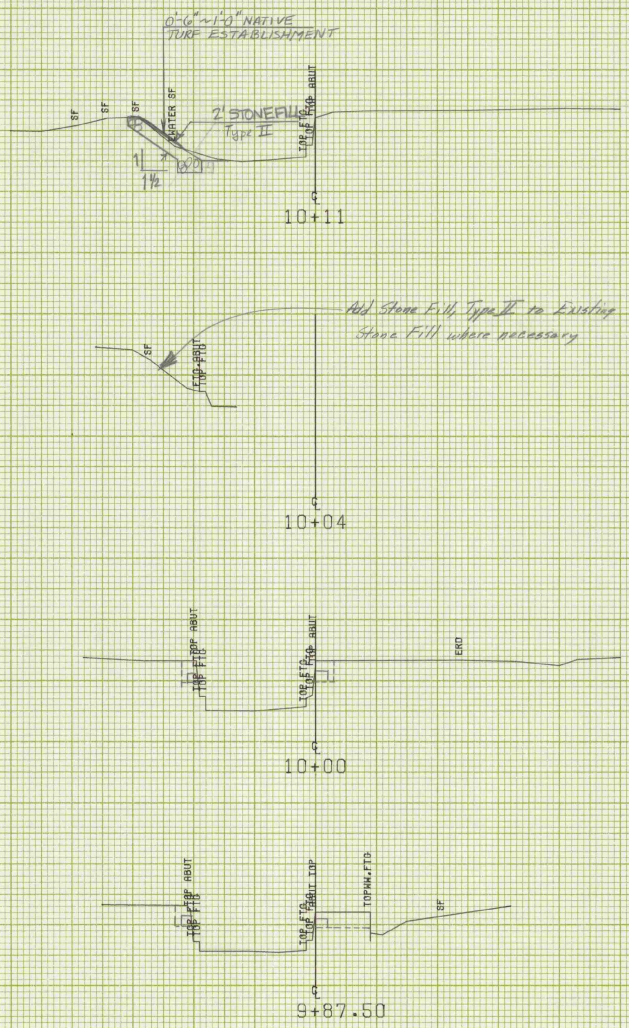
90

STA. 9+67 Rt BEGIN STONEFILL

STA. 9+62 BEGIN STRUCTURE EXCAVATION AND GRANULAR BACKFILL FOR STRUCTURES FOR ABUTMENT #1

FROM STA. 9+70		TO STA. 9+86.50	
PROJECT NAME	ST ALBANS TOWN		CHAN
NO.	BHZ1448(9)		PLOTTED 07/19/84
SURVEYED BY	BRADY		MARCH 1983
SHEET 21 OF 23 SHEETS			

SCALE 10 FEET



STA 10+11 AT BEGIN STONEFILL TYPE II

100

90

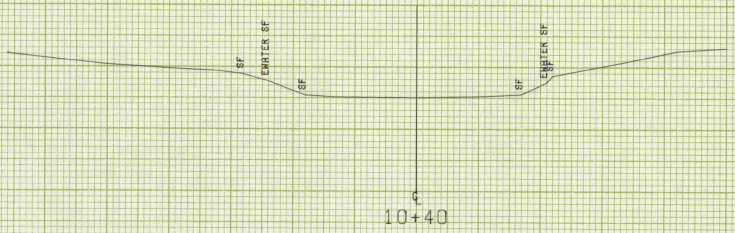
STA 10+03 LT BEGIN STONEFILL TYPE II

100

100

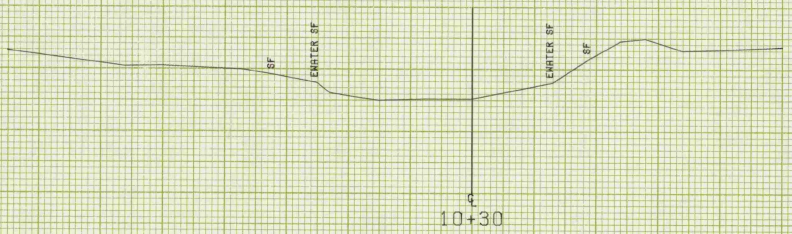
FROM STA.	9+87.50	TO STA.	10+11
PROJECT NAME	ST ALBANS TOWN		CHAN
NO.	BHZ1448(9)		PLOTTED 07/19/84
SURVEYED BY	BRADY		MARCH 1983
SHEET 22 OF 23 SHEETS			

SCALE 10 FEET



90

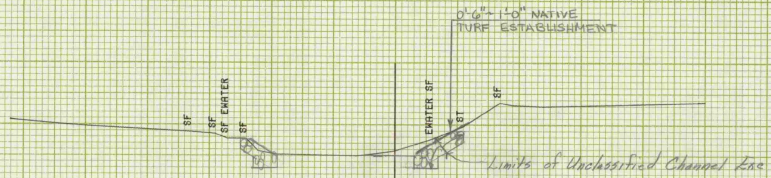
10+40



90

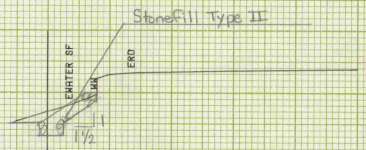
10+30

STA 10+33 LT & RT END STONEFILL
TYPE II



90

10+20

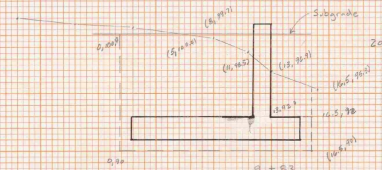


90

10+14

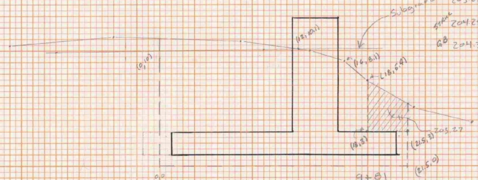
FROM STA.	10+14	TO STA.	10+40
PROJECT NAME	ST ALBANS TOWN		CHAN
NO.	BHZ1448(9)		PLOTTED 07/19/84
SURVEYED BY	BRADY		MARCH 1983
SHEET 28	OF 28	SHEETS	

SCALE 10 FEET



9 + 83

204.30 – 4 + 16.6 + 11.6(7.1) = 103.0 □'

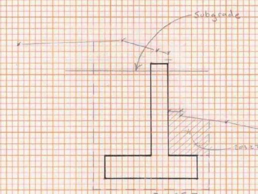


9 + 81

203.27 – ½(2.4+4.4)(3.5) = 11.9 □'
Str. 204.25 – 21.5(3) + 2(5.2) + 4(6.7) + 12(7.1) = 185.7 □'
GB 204.30 – (4 + 21.5) + 11.5(7.1) = 107.2 □'

Item 203.27 –
Unclassified Channel Excavation

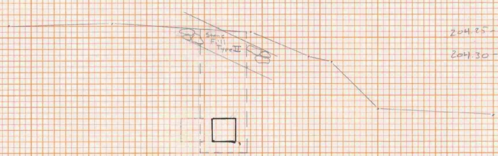
Sta	Dist	Area	Vol
9+81 (Butt)		11.9	
	5		56
9+86		10.5	
	9.3		104
9+95.3 (Butt)		11.9	
			160 (1/27) = 5.9 cy



9 + 95.3

℄

203.27 – ½(3.1+3.4)(2.5) + 1(3.8) = 11.9 □'
204.25 – 3(10) + 6.5(7.3) = 77.5 □'
204.30 – 14 + 5(7.3) = 50.5 □'



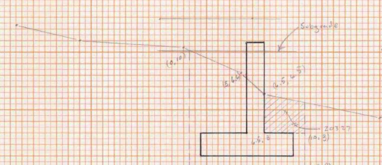
9 + 74

204.25 – 4(10.6) = 42.4 □'
204.30 – ½(7.3+9.3)(4) = 33.2 □'

Item 204.30 –
Granular Backfill for Structures

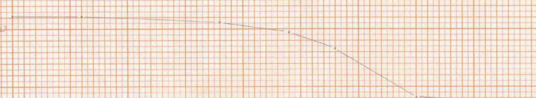
Sta	Dist	Area	Vol
9+72		0	
	2		33.2
9+74		33.2	
	7		491.4
9+81		107.2	
	2		210.2
9+83		103.0	
	3		228.8
9+86		49.5	
	9.3		465.0
9+95.3		50.5	
			1428.6 (1/27) = 52.9 cy

9+72 = Zero X-Section



9 + 86 = 9+88

203.27 – ½(2.6+3.4)(3.5) = 10.5 □'
204.25 – 3(10) + 2(4.2) + 4.5(5.9) = 65.0 □'
204.30 – 14 + 5(7.1) = 49.5 □'
(14+1) + (5 x 7.1)



9 + 70

Item 204.25 –
STRUCTURE Excavation

Sta	Dist	Area	Vol
9+72		0	
	2		42.4
9+74		42.4	
	7		798.7
9+81		185.7	
	5		626.8
9+86		65.0	
	9.3		662.6
9+95.3		77.5	
			2130.2 (1/27) = ~~79~~ 78.9 cy

CDC 7-29-91

Decou 11/12/91

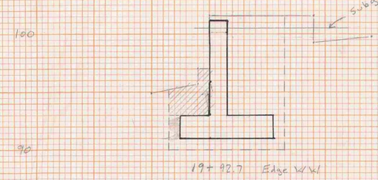
~~Checked DECOU 7/30/91~~

ABUTMENT # 1

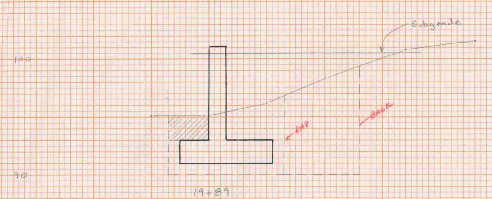
St Albans BHZ 1443(9)
Structure X-Sections
Sheet #1 of 2

FINAL SURVEY NOTE BOOK NO. — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED — BY — DATE

ORIGINAL SURVEY NOTE BOOK NO. — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED — BY — DATE

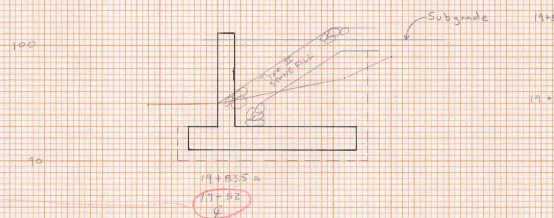


203.27 – 10.2 □'
204.25 – 3(10) + 6.5(7.5) = 78.8 □'
204.30 – 14 + 5(7.5) = 51.5 □'



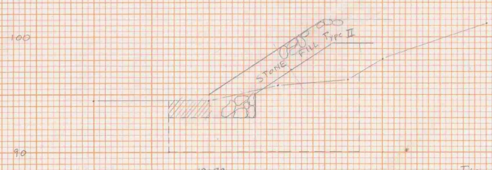
203.27 – 7.5 □'
204.25 – (Ahead) 3(10) + ½(2.1+3.8)(6.5) = 49.2 □'
(Back) 49.2 + ½(6.8+9.4)(6.5) = 101.9 □'
204.30 – (Ahead) 14 + 5(7.5) = 51.5 □'
(Back) 51.5 + 6.5(10.5) = 119.8 □'

Extra Sections for 204.30



19+83.5:
204.30 = 20.5 + 11.5(7.5) = 106.8 □'

19+82:
204.30 = 20.5 + ½(2.2+6.5)(6.7) + 6.5(2.3) = 64.6 □'



203.27 – 5.3 □'
204.25 – 3(3.5) + ½[(4.5+5.8)6 + (5.8+6.3)6] + 1(6.6) = 84.3 □'
204.30 – 3(16.5) + ½(2+6.5)6.7 + 6.5(2.3) = 92.9 □'

Item 204.25
Structure Excavation

Sta	Dist	Area	Vol.
19+79		84.3	
	10		931 ft³
+89 (B)		101.9	
+89 (A)		49.2	
	3.7		237 ft³
+92.7		78.8	
			1168 (1/27) = 43 cy

CDC
7-25-91

CHECKED
DECELL
7/30/91

Item 204.30
Granular Backfill for Structures

Sta	Dist	Area	Vol.
19+79		92.9	
	3		236.3
+82		64.6	
	—		
+83.5		106.8	
	5.5		623.2
+89 (B)		119.8	
	—		
+89 (A)		51.5	
	3.7		191 (190.6)
+92.7		51.5	
			1050.1 (1/27) = 38.9 cy

CDC
8-5-91

DECELL
11/12/91

Item 203.27
Unclassified Channel Excavation

Sta	Dist	Area	Vol
19+79 (Both)		5.3	
	10		64.0
19+89		7.5	
	3.7		32.7
19+92.7 (Both)		10.2	
			96.7 (1/27) = 3.6 cy

DECELL
11/12/91

100

90

℄
19+75

ABUTMENT # 2 – Rev ℄ 106+99.50 = Rev. Channel Line 20+00 @ 69° Lt

PLATE 3 CROSS SECTION D.P.R. & R.E. STANDARD
DIETZGEN CORPORATION

St. Albans BHZ 1448 (9)
Structure X-Sections
Sheet #2 of 2

INDEX OF SHEETS

STATE OF VERMONT
AGENCY OF TRANSPORTATION

R.O.W. PLANS

PROPOSED IMPROVEMENT
BRIDGE PROJECT

TOWN OF ST. ALBANS

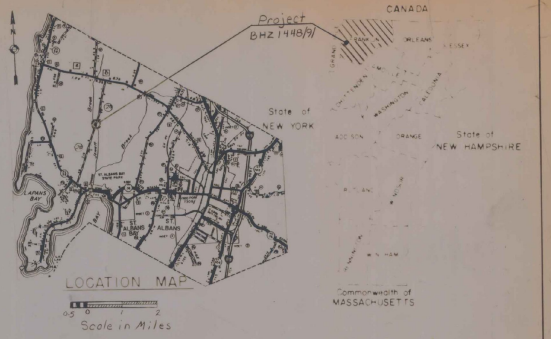
COUNTY OF FRANKLIN

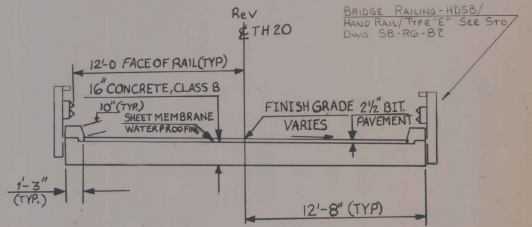
ROUTE NO TH 20 BRIDGE NO 9

PROJECT LOCATION: BEGINNING 1.777 MILES FROM THE INTERSECTION OF VT 36 AND TH 20 AND HEADING NORTHERLY 0.043 MILES (225.0 FT) ALONG TH 20.

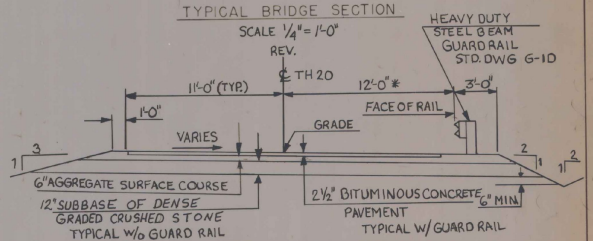
PROJECT DESCRIPTION: REMOVE EXISTING SUPERSTRUCTURE, WIDEN ABUTMENTS ON DOWNSTREAM SIDE, ADD NEW CONCRETE SLAB, RELATED ROADWAY AND CHANNEL WORK.

LENGTH OF STRUCTURE	21.8 FEET	= 0.004 MILES
LENGTH OF PARTICIPATION ROADWAY	203.2 FEET	= 0.039 MILES
LENGTH OF R.O.W. PROJECT	247.0 FEET	= 0.047 MILES





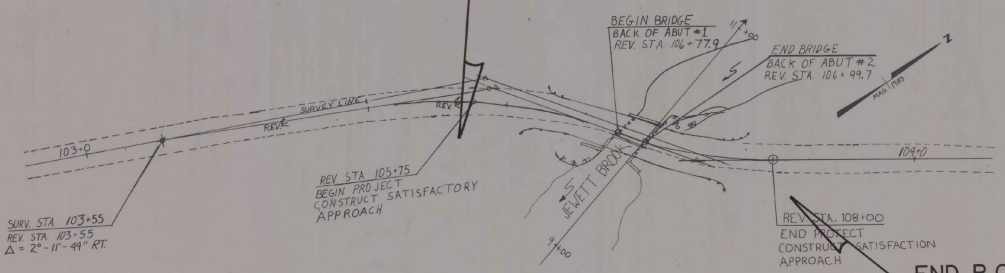
TYPICAL BRIDGE SECTION
SCALE 1/4" = 1'-0"



* VARIES AT APPROACH ENDS OF GUARD RAIL. SEE PLAN & ELEVATION SHEET AND STD. DWG. G-10.

TYPICAL ROADWAY SECTION
SCALE : 1/4" = 1'-0"

BEGIN R.O.W. PROJECT
BHZ 1448(9) REV. STA. 105+65 25'RT.



END R.O.W. PROJECT
BHZ 1448(9) REV. STA. 108 + 12 25'RT.

CONVENTIONAL SIGNS

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 SR
TOP OF CUT
TOE OF SLOPE

DATUM
VERTICAL NGVD 1929
HORIZONTAL N/A

HYDRAULIC DATA
DRAINAGE AREA = 7.0 SQ. MI.
Q10 = 400 CFS
Q25 = 550 CFS
Q50 = 675 CFS
Q100 = 800 CFS

TAILWATER @ Q25 = EL 101.6
OUTLET VELOCITY @ Q25 = 5.4 FPS

** Table shows headwater elevations at the structure based on various flow frequencies occurring with Lake Champlain @ several flood elevations.

HEADWATER ELEVATIONS** (AFFECTED BY LAKE CHAMPLAIN)

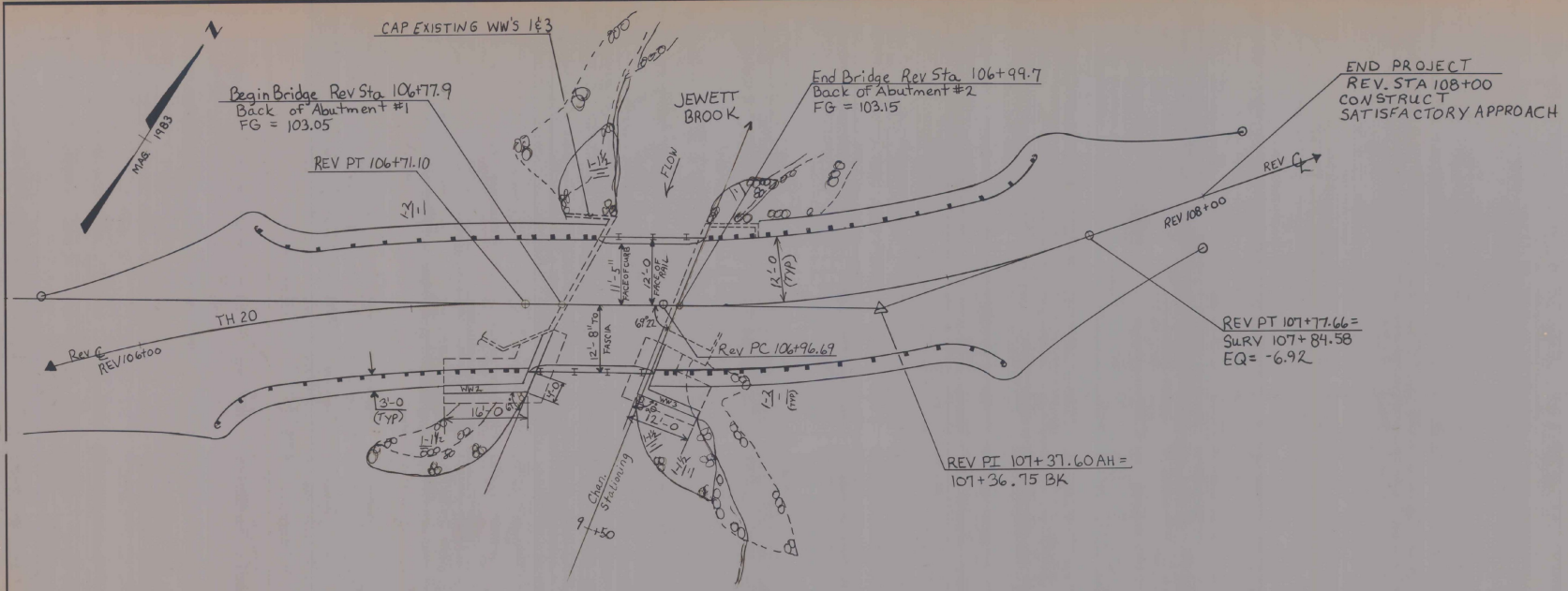
Lake Champlain at:	Q10 (101.0)	Q25 (101.6)	Q50 (101.8)	Q100 (102.0)
Stream Flow @ Q10 :	101.4	102.0	102.2	102.4
Q25 :	101.8	102.4	102.6	102.8
Q50 :	102.2	102.8	103.0	103.3
Q100 :	102.6	103.3	103.3	103.4

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 1988, FOR USE ON THESE PROJECTS, INCLUDING ALL SUBSEQUENT PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

APPROVED [signature] DATE 4/20/87
Dir., Dept. of Planning & Preconstruction

APPROVED [signature] DATE 5/1/87
Chief, Property Administration

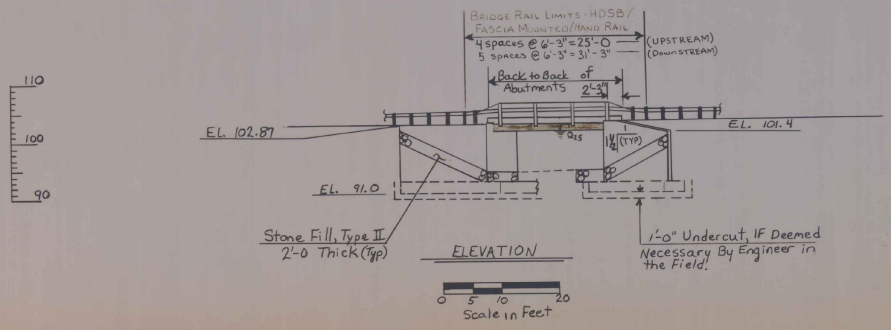
ST. ALBANS
BHZ 1448(9)
SHEET 1 OF 5



PLAN

0 5 10 20

Scale in Feet



ELEVATION

0 5 10 20

Scale in Feet

VERTICAL CURVE
PVI 106 + 50
ELEV.= 102.5
LVC = 140'
G_1 = -2.30%
G_2 = 1.20%

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of ST. ALBANS	Bridge No. 9
Highway No. TH 20	Log Sta. ~
	Rev. Sta. 106+88.80

TH 20 OVER JEWETT BROOK
PLAN AND ELEVATION
Designed By J. G. FARNSWORTH Drawn By C. WILLIS

ST. ALBANS
BHZ 1448(9)
SHEET 2 OF 5

BR-6

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

PARCEL NO.	GRANTOR	SHEET NO.	BEGINNING STATION	ENDING STATION	TAKING	REM.	RIGHTS	TITLE TAKEN	DATE	TOWN OR CITY RECORDED	BK.	PG.	REMARKS
1	LUNEAU, ROGER N. & CAROL A.	3	REV. 105 + 65 RT. REV. 106 + 00 RT. REV. 106 + 38 RT. REV. 106 + 93 RT. REV. 107 + 14 RT.	REV. 108 + 12 RT. REV. 106 + 31 RT. REV. 106 + 64 RT. REV. 107 + 13 RT. REV. 107 + 35 RT.	0.02 A±		. EASE. TO INSTALL (T) CHANNEL (P) (110 S.F.±) CHANNEL (P) (50 S.F.±) EASE. TO INSTALL (T)	WDOE	8-28-91	ST. ALBANS	67	644- 646	770 S.F.± ARCHAEOLOGICAL FENCE ARCHAEOLOGICAL FENCE
2	BOURBEAU, PAUL C. & BONNIE M.	3	REV. 105 + 86 LT. REV. 106 + 79 LT	REV. 108 + 00 LT. REV. 106 + 89 LT.			CONST. EASE. (T) (0.03 A±) CHANNEL (P) (25 S.F.±)	WDOE	1-29-91	ST. ALBANS	65	347- 348	1153 S.F.±

REVISION NO.	SHEET NO.	DESCRIPTION OF REVISION	DATE	MADE BY	APPROVED BY
1	3,4	Parcel No 1 Delete const. ease (T) & added archaeological fencing per Co. # 7834 Mylars to Structures 10-9-90	11-16-89	JDP	JDP

MADE BY: A.S.J. DATE 5/6/87

CHECKED BY: J.D.P. DATE 5/6/87

DR. RT.- DRAINAGE RIGHT
DIT. RT.- DITCHING RIGHT
CH. RT.- CHANNEL RT.
DRIVE RT.- DRIVE RIGHT
CUL. RT.- CULVERT RIGHT
(D)- DEMOLITION OR REMOVAL
(W)- WATER SOURCES

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

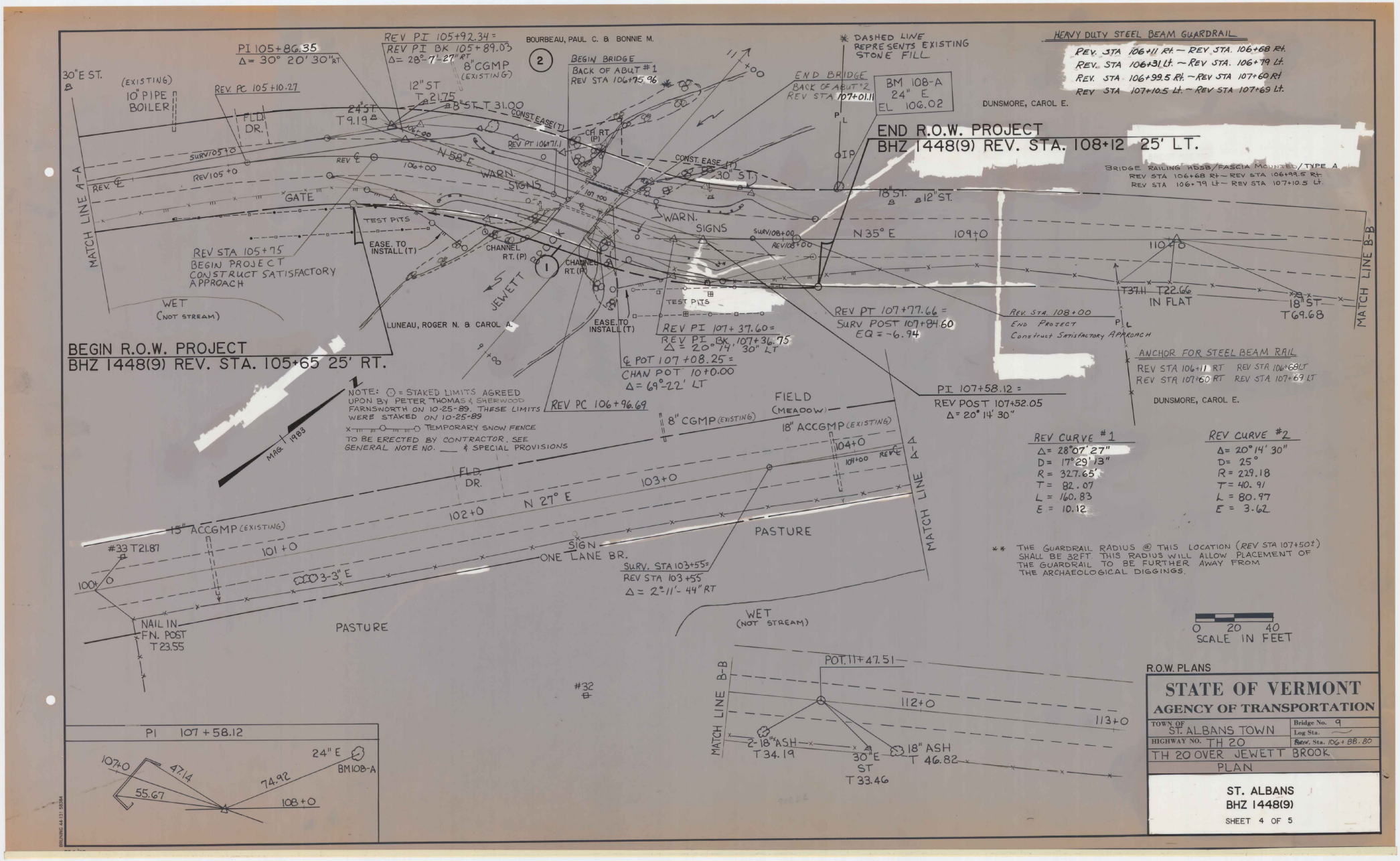
LEGEND

CONST. EASE.
SLOPE RIGHTS
PROPERTY LINE
TOP OF CUT
TOE OF SLOPE

R.O.W. PLANS

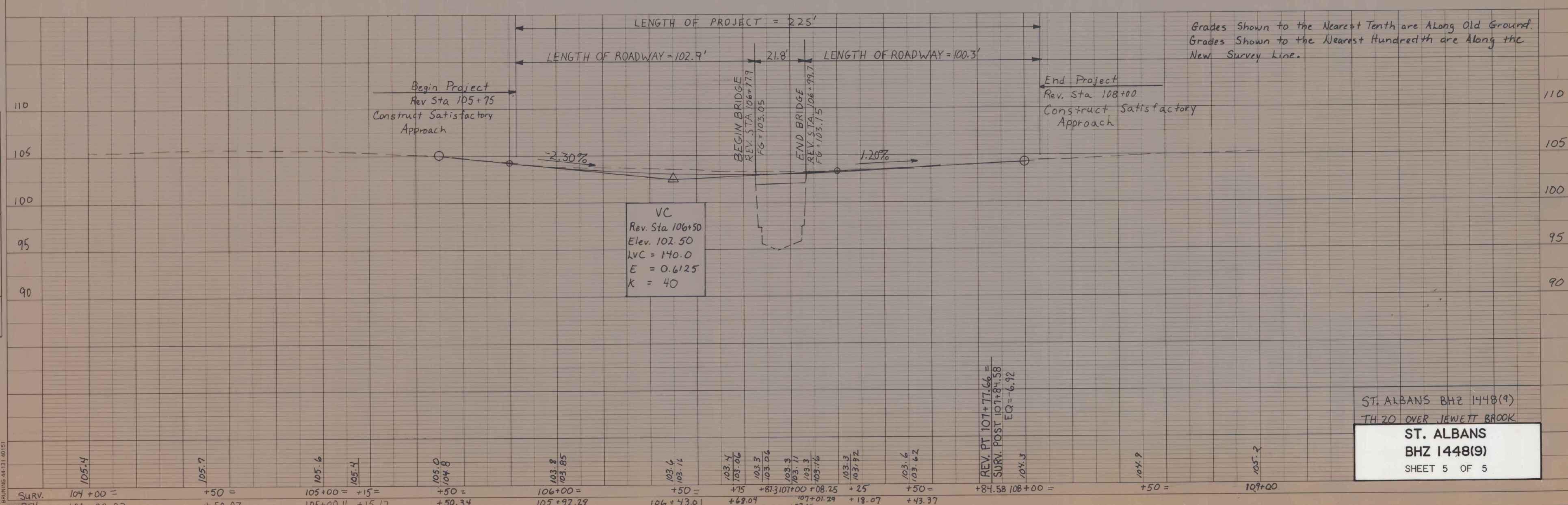
APPROVED: [signature] DATE: 5-6-87
AGENT D. PLANS & TITLES

ST. ALBANS
BHZ 1448 (9)
SHEET 3 OF 5


BEGIN R.O.W. PROJECT
BHZ 1448(9) REV. STA. 105+65 25' RT.
END R.O.W. PROJECT
BHZ 1448(9) REV. STA. 108+12 25' LT.
BOURBEAU, PAUL C. & BONNIE M.
LUNEAU, ROGER N. & CAROL A.
DUNSMORE, CAROL E.
DUNSMORE, CAROL E.
PI 105+86.35
Δ = 30° 20' 30" RT
REV PI 105+92.34 =
REV PI BK 105+89.03
Δ = 28° 7' 27" RT
REV PC 105+10.27
REV STA 105+75
BEGIN PROJECT
CONSTRUCT SATISFACTORY
APPROACH
BEGIN BRIDGE
BACK OF ABUT #1
REV STA 106+75.96
END BRIDGE
BACK OF ABUT #2
REV STA 107+01.11
BM 108-A
24" E
EL 106.02
DASHED LINE
REPRESENTS EXISTING
STONE FILL
HEAVY DUTY STEEL BEAM GUARDRAIL
REV. STA 106+11 Rt. — REV. STA. 106+68 Rt.
REV. STA 106+31 Lt. — REV. STA. 106+79 Lt.
REV. STA 106+99.5 Rt. — REV STA 107+60 Rt.
REV STA 107+10.5 Lt. — REV STA 107+69 Lt.
BRIDGE RAILING HDSB/FASCIA MOUNTED/TYPE A
REV STA 106+68 Rt — REV STA 106+99.5 Rt.
REV STA 106+79 Lt — REV STA 107+10.5 Lt.
REV PT 107+77.66 =
SURV POST 107+84.60
EQ = -6.94
REV STA 108+00
END PROJECT
Construct Satisfactory APPROACH
REV PI 107+37.60 =
REV PI BK 107+36.75
Δ = 20° 14' 30" LT
℄ POT 107+08.25 =
CHAN POT 10+0.00
Δ = 69°-22' LT
PI 107+58.12 =
REV POST 107+52.05
Δ = 20° 14' 30"
REV PC 106+96.69
ANCHOR FOR STEEL BEAM RAIL
REV STA 106+11 RT REV STA 106+68 LT
REV STA 107+60 RT REV STA 107+69 LT
REV CURVE #1
Δ = 28°07' 27"
D = 17°29' 13"
R = 327.65'
T = 82.07
L = 160.83
E = 10.12
REV CURVE #2
Δ = 20° 14' 30"
D = 25°
R = 229.18
T = 40.91
L = 80.97
E = 3.62
SURV. STA 103+55=
REV STA 103+55
Δ = 2°-11'-44" RT
** THE GUARDRAIL RADIUS @ THIS LOCATION (REV STA 107+50±) SHALL BE 32FT THIS RADIUS WILL ALLOW PLACEMENT OF THE GUARDRAIL TO BE FURTHER AWAY FROM THE ARCHAEOLOGICAL DIGGINGS.
NOTE: ⬡ = STAKED LIMITS AGREED UPON BY PETER THOMAS & SHERWOOD FARNSWORTH ON 10-25-89. THESE LIMITS WERE STAKED ON 10-25-89
TEMPORARY SNOW FENCE TO BE ERECTED BY CONTRACTOR, SEE GENERAL NOTE NO. ___ & SPECIAL PROVISIONS
MAG. 1983
SCALE IN FEET
0 20 40
MATCH LINE A-A
MATCH LINE B-B
MATCH LINE B-B
(EXISTING) 10" PIPE BOILER
30° E ST.
12" ST T 21.75
24" ST T 9.19
8" ST T 31.00
18" ST.
12" ST.
18" ST T 69.68
T 37.11 T 22.66 IN FLAT
FLD. DR.
GATE
WARN. SIGNS
CONST EASE (T)
CONST. EASE (T)
30" ST.
CH. RT (P)
CHANNEL RT. (P)
EASE. TO INSTALL (T)
TEST PITS
WET (NOT STREAM)
JEWETT
8" CGMP (EXISTING)
18" ACCGMP (EXISTING)
FIELD (MEADOW)
15" ACCGMP (EXISTING)
#33 T 21.87
NAIL IN FN. POST T 23.55
3-3" E
ONE LANE BR.
PASTURE
PASTURE
#32
POT. 117+47.51
2-18" ASH T 34.19
30" E ST T 33.46
18" ASH T 46.82
PI 107+58.12
24" E
BM 108-A
47.14
74.92
55.67
107+0
108+0
R.O.W. PLANS
STATE OF VERMONT
AGENCY OF TRANSPORTATION
TOWN OF ST. ALBANS TOWN
Bridge No. 9
Log Sta. ~
HIGHWAY NO. TH 20
Rev. Sta. 106+88.80
TH 20 OVER JEWETT BROOK
PLAN
ST. ALBANS
BHZ 1448(9)
SHEET 4 OF 5

PLAN		
NOTE BOOK NO.	SURVEYED. PLOTTED. ALIGNMENT CHECKED. RT. OF WAY CHECKED.	BY

PROFILE			
NOTE BOOK NO.	SURVEYED. PLOTTED. GRADES CHECKED. B.M.'s NOTED. STRUCTURE NOTATIONS CHK'D.	BY	DATE



ST. ALBANS BHZ 1448(9)
TH 20 OVER JEWETT BROOK

ST. ALBANS
BHZ 1448(9)
SHEET 5 OF 5

BRUNING 44-131 40151

Vermont Agency of
Transportation
Phase III- Interstate
#090303-01

INITIALS Hanger 3889 PHONE

1991

ST. ALBANS
BHZ 1448(9)

1991

VERMONT AGENCY OF
TRANSPORTION
PHASE III-INTERSTATE

HANGER 3936

R.O.W.
1987

ST. Albans
B.H.Z. 1448 (9)

R.O.W.
1987