

INDEX OF SHEETS

- 1 TITLE PAGE
- 2 TYPICAL CROSS-SECTION OF IMPROVEMENT (1 1/2" BITUMINOUS CONCRETE PAVEMENT)
- 3 QUANTITY SHEET (ITEMS)
- 4 QUANTITY SHEET (DRAINAGE)
- 5-7 EARTHWORK SHEETS
- 8 STANDARD SHEET B-1 (BANKING TABLES)
- 9 STANDARD SHEET B-5 (TYPICAL SLOPE GRADING)
- 10 STANDARD SHEET C-1 (TIMBER CURB)
- 11 STANDARD SHEET D-1 (PRECAST DROP INLETS)
- 12 STANDARD SHEET D-2 (HEADWALLS & UNDERDRAIN)
- 13 STANDARD SHEET D-4 (FLUSHING BASIN)
- 14 STANDARD SHEET D-8 (REIN. CONC. DROP INLETS)
- 15 STANDARD SHEET D-10 (TOP FOR DROP INLETS)
- 16 STANDARD SHEET D-16 (CAST IRON GRATES)
- 17 STANDARD SHEET E-1 (BARRICADES, SIGNS, & LIGHTS FOR ROADWAY)
- 18 STANDARD SHEET E-2 (BARRICADES, SIGNS, & LIGHTS FOR BRIDGE)
- 19 STANDARD SHEET E-9 (IDENTIFICATION SIGNS)
- 20 STANDARD SHEET G-2a (TWO CABLE GUARD RAIL)
- 21 STANDARD SHEET G-2b (THREE CABLE GUARD RAIL)
- 22 STANDARD SHEET G-3 (GUIDE & MARKER POSTS)
- 23 STANDARD SHEET H-1a (METAL BIN-TYPE RETAINING WALL)
- 24 STANDARD SHEET H-1b (METAL BIN-TYPE RETAINING WALL)
- 25 STANDARD SHEET J-1 (MARKERS)
- 26 BRIDGE PLAN AND PROFILE OF SUPERSTRUCTURE
- 27 BRIDGE QUANTITY SHEET
- 28 ABUTMENT #1
- 29 ABUTMENT #2
- 30 REINFORCING STEEL SHEET
- 31 METAL BIN-TYPE RETAINING WALL PLAN AND PROFILE
- 32 DETAIL SHEET SB-PP N#2 (14" C.G.M.P.)
- 33-41 PLAN AND PROFILE SHEET
- 42-68 CROSS-SECTIONS
- 69 APPROACH-SECTIONS
- 70-72 CHANNEL-SECTIONS
- 73-75 CURVE BANKING TRANSITION DIAGRAMS
- 7A-C FINAL EARTHWORK SHEETS

**STATE OF VERMONT
DEPARTMENT OF HIGHWAYS**

PROPOSED IMPROVEMENT

TOWNS OF BRISTOL & STARKSBORO

**COUNTY OF ADDISON
STATE AID ROUTE NO 1
BRISTOL-WAITSFIELD ROAD**

FEDERAL AID SECONDARY PROJECT

PROJECT NAME & NUMBER TYPE PAVT. AREA.
BRISTOL-STARKSBORO S0200(1) SA BIT. CONC. 24,398 S.Y.

RECORD PLANS

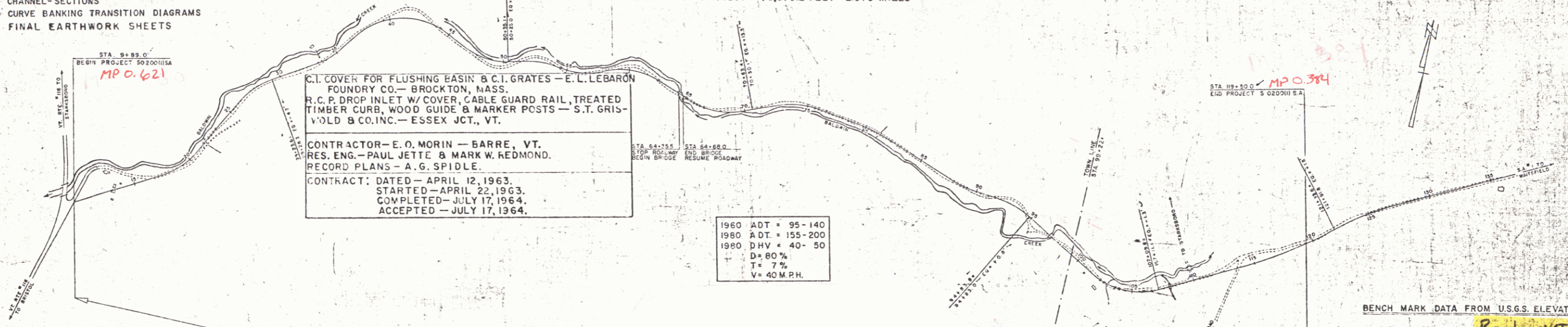
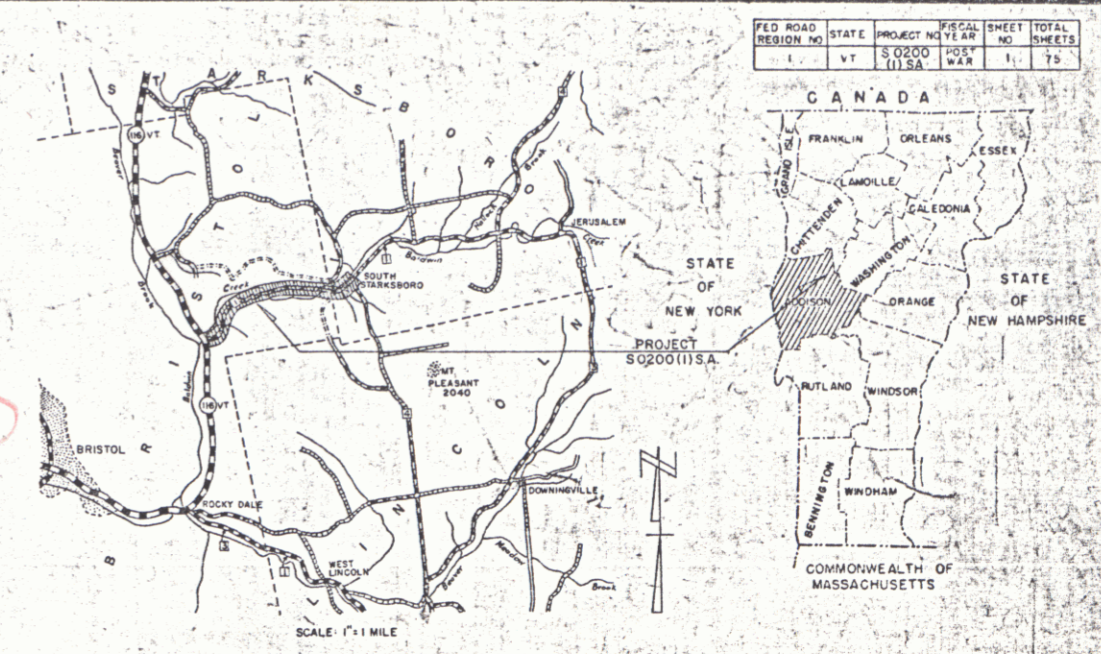
MATERIALS

SUBBASE OF GRAVEL - STARKSBORO TOWN PIT - STARKSBORO, VT.
- KELLY GRAVEL KNOLES - STARKSBORO, VT.
- LAROCHE PIT - BRISTOL, VT.

ASPHALT - MOBIL OIL CO. - ALBANY, N.Y.
BITUMINOUS CONCRETE - L.M. FIKE & SON, INC. - LACONIA, N.H.
TAR EMULSION - BORDEN CHEMICAL CO. - NEW YORK, N.Y.
CONCRETE CLASS 'B' - S.T. GRISWOLD & CO. INC. - WILLISTON, VT.
REINFORCING & STRUCTURAL STEEL & STEEL GUARD RAIL
POSTS - V.T. STRUCTURAL STEEL CORP. - BURLINGTON, VT.
REINFORCING CONC. PIPE - NEW ENG. CONC. PIPE CO. - NEWTON, MASS.
- S.T. GRISWOLD & CO. INC. - ESSEX JCT., VT.
A.C.C.G.M. PIPE & MET. BIN TYPE RETAINING WALL - NEW ENG.
LAND METAL CULVERT CO. - WHITE RIVER JCT., VT.

BEGINNING AT A POINT 1.70 MILES WESTERLY OF THE
BRISTOL-STARKSBORO TOWN LINE AT THE INTERSECTION
OF VERMONT RTE. #116 AND STATE AID RTE. #1 AND
EXTENDING EASTERLY 2.079 MILES.

LENGTH OF ROADWAY = 10,946.7 FEET = 2.073 MILES
LENGTH OF BRIDGE = 32.5 FEET = 0.006 MILES
LENGTH OF PROJECT = 10,979.2 FEET = 2.079 MILES



C.I. COVER FOR FLUSHING BASIN & C.I. GRATES - E. L. LEBARON
FOUNDRY CO. - BROCKTON, MASS.
R.C.P. DROP INLET W/ COVER, CABLE GUARD RAIL, TREATED
TIMBER CURB, WOOD GUIDE & MARKER POSTS - S.T. GRIS-
WOLD & CO. INC. - ESSEX JCT., VT.

CONTRACTOR - E. O. MORIN - BARRE, VT.
RES. ENG. - PAUL JETTE & MARK W. REDMOND.
RECORD PLANS - A. G. SPIDLE.

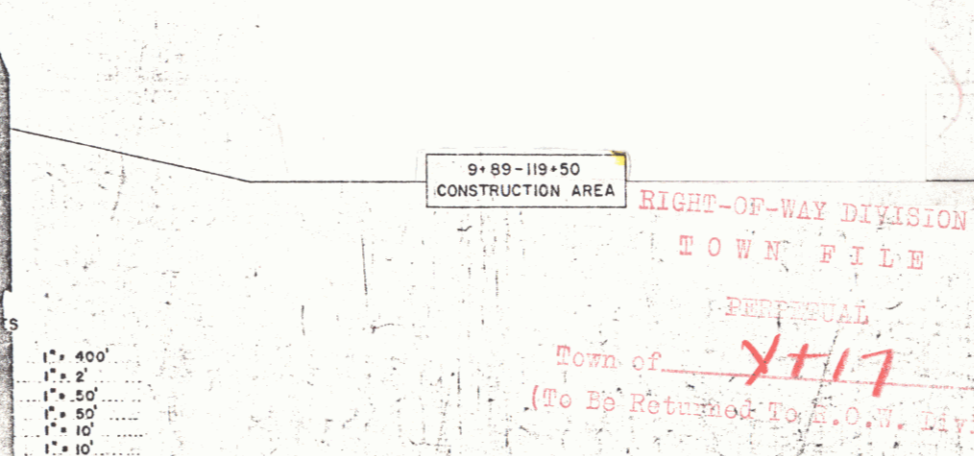
CONTRACT: DATED - APRIL 12, 1963.
STARTED - APRIL 22, 1963.
COMPLETED - JULY 17, 1964.
ACCEPTED - JULY 17, 1964.

1960 ADT = 95-140
1980 ADT = 155-200
1980 DHV = 40-50
D = 80 %
T = 7 %
V = 40 MPH.

CONVENTIONAL SIGNS

RIGHT-WAY LINE	SR SR
SLOPE RIGHTS	SR SR
COUNTY LINE	SR SR
TOWN LINE	SR SR
FENCE LINE	SR SR
STONE WALL	SR SR
UNFENCED PROPERTY	SR SR
GUARD RAIL	SR SR
TRAVELED WAY	SR SR
RAILROAD	SR SR
RETAINING WALL	SR SR
CULVERT LINE	SR SR
SURVEY LINE	SR SR
CULVERT	SR SR
DROP INLET	SR SR
TROLLEY POLE	SR SR
POWER POLE	SR SR
TELEPHONE POLE	SR SR
TREES	SR SR
HEDGE	SR SR

BRISTOL-STARKSBORO S 0200(1) SA
CONTRACTOR - E. O. MORIN - BARRE, VT.
RECORD PLANS - A. G. SPIDLE.
CONSIST. COMPLETED - JULY 17, 1964.



THESE PLANS ARE SUBJECT TO SUCH REVISIONS AS MAY BE
REQUIRED BY THE BUREAU OF PUBLIC ROADS OR THE COMMISSIONER
OF HIGHWAYS.

CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH
THE PLANS AND THE STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE
CONSTRUCTION OF JANUARY 1956 SUBMITTED TO THE BUREAU OF
PUBLIC ROADS AS APPROVED JULY 5, 1956, INCLUDING ALL SUBSEQUENT
APPROVED REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL
PROVISIONS AS ARE SUBMITTED WITH THE PLANS.

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

APPROVED _____

DIVISION ENGINEER _____ DATE _____

PROJECT S. NO. 0200(1) S.A.

SHEET (1) OF 75 SHEETS

APPROVED _____ DATE 10/26/62
APPROVED _____ DATE 10/26/62
APPROVED _____ DATE 10/26/62
APPROVED _____ DATE 10/26/62
APPROVED _____ DATE 10/26/62
APPROVED _____ DATE 10/26/62

Route VT 17
Pin # 00R537
Date 10/26/1962

RIGHT-OF-WAY DIVISION
TOWN FILE
PERPETUAL
Town of YTH
(To Be Returned To A.C.W. Division)

WOOD GUIDE POSTS
10+00 - 10+32 Lt.

CONSTRUCT DRIVE
12+50 Rt.
13+50 Lt.
15+25 Lt.

INSTALL WATER PIPE SLEEVE
13+90±

DEMOLITION AND REMOVAL OF BUILDING
Item 586
#1 13+10 Rt.
#2 13+40 Lt.
#3 13+95 Lt.

DRILLING AND BLASTING OF
SOLID ROCK SUBGRADE
13+75 - 15+32

12+75 Lt. - 14+25 Lt.
Remove Side Lt. To Eliminate Blind Spot to Drive +13+50 Rt.

NOTE
Drives are to be constructed with a minimum width of 12 feet with a minimum 15 foot flare radius.
Sub-base of gravel, Item 201-A shall be used to stabilize cut slopes as indicated on the plans or as ordered by the Engineer.
Rock Fills are to be made with Rock Excavation on the Project. No further compensation will be made for this item.

Surveyed by Vincent B. G.
Checked by William J. G.
Plotted by C.E.H. 12-61

Δ 31°00' Lt
D 4'
R 14327
T 3973
L 7250
E 541

BM #2
Chis on abutment
U.S. Elev. 643.31
Rev. P.O.T.
8+71.0± =
9+28.8± Main Line

PARCEL	1	STA. 5+60-18+80
GRANTOR	ANNIE MERRILL	
TAKING	C.S.A.	REM.
RIGHTS, SLOPE	12+28-14+70 Rt., 21+74-23+05 Rt., 12+58-14+20 Lt., 14+60-14+88 Lt.	
TITLE TAKEN		
RECORDED		
RIGHTS DRAINAGE	10+10 Lt., 12+00 Rt.	

BRISTOL - STARKSBORO
Project 6 N° 020011 SA
Sheet 33 of 75

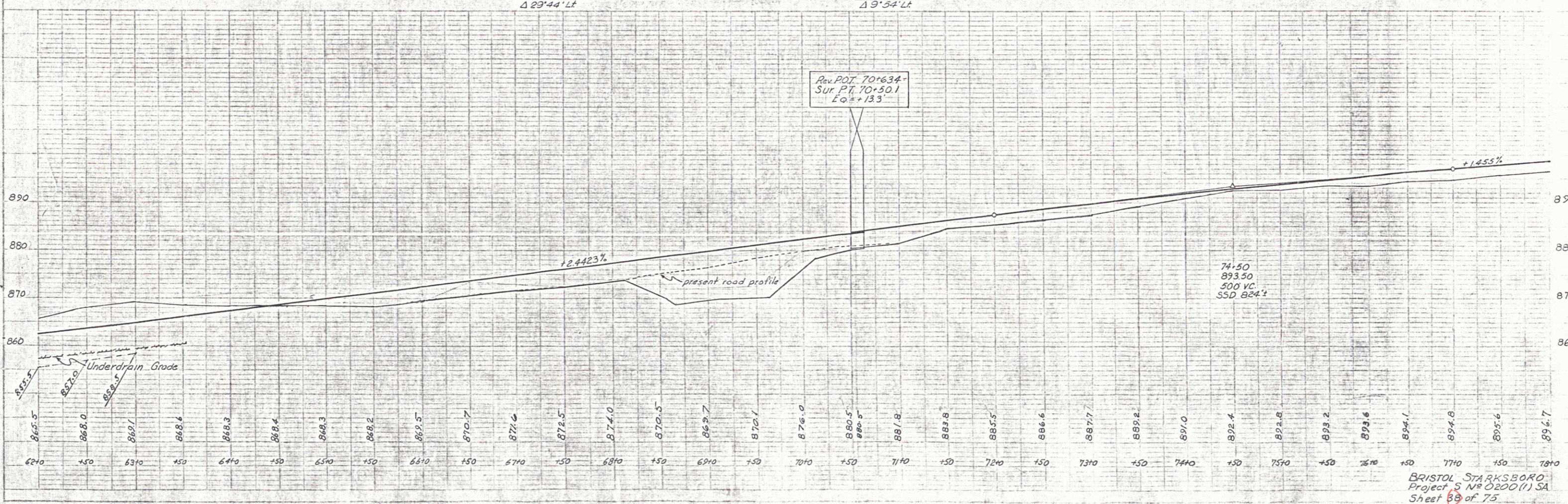
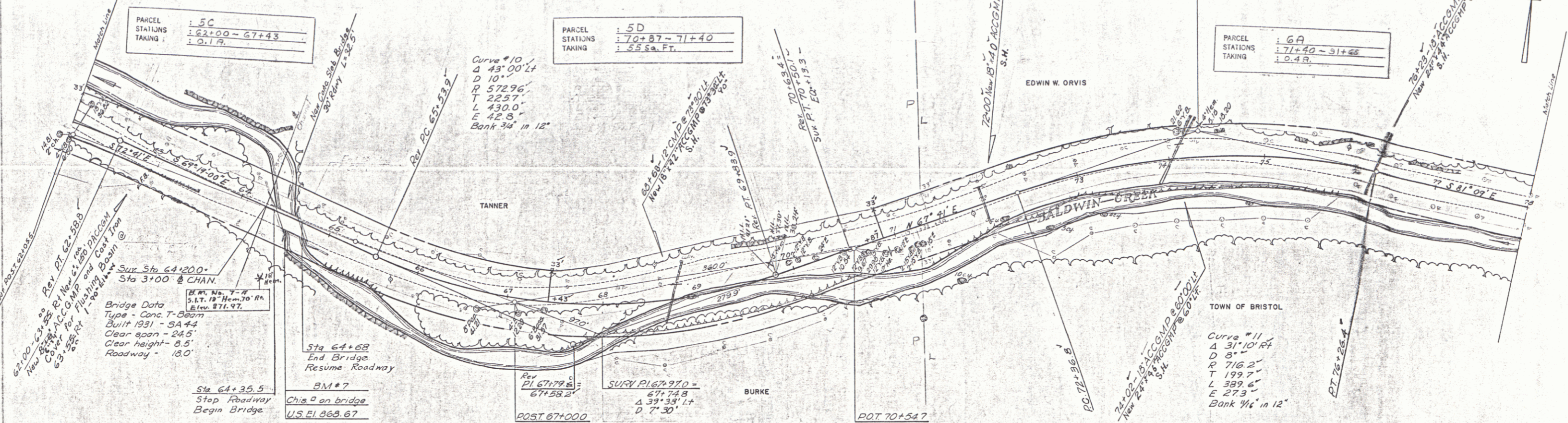
6' SHOULDER TWO CABLE GUARD RAIL (Mod)
 LT RT LT RT
 63+29-64+89 64+15-65+55.5 63+29-64+89 64+15-65+55.5
 4' SHOULDER
 LT RT
 65+39-65+55.5 63+55-63+65

64+50+LT-66+75+LT
 DIVERT EXISTING WATER COURSE INTO OLD WATER COURSE LOCATED APPROXIMATELY 110' TO 120' LEFT OF STA. 66+75. NECESSARY EXCAVATION TO BE PAID FOR UNDER THE ITEM OF UNCLASSIFIED CHANNEL EXCAVATION, ITEM 106-C

UNCLASSIFIED CHANNEL EXCAVATION
 67+59 RT-70+63.3 RT.
 72+00 RT-75+75 RT.

STONE FILL FOR SLOPE PROTECTION
 RT
 65+25-65+75'
 67+35-70+75'
 71-25-75+75'

PLAN
 GENERAL NOTES
 1. ALL DIMENSIONS ARE IN FEET AND DECIMALS THEREOF.
 2. ALL CURVES ARE TO BE CONFORMED TO THE STANDARD SPECIFICATIONS FOR HIGHWAYS.
 3. ALL GRADES ARE TO BE CONFORMED TO THE STANDARD SPECIFICATIONS FOR HIGHWAYS.
 4. ALL ELEVATIONS ARE TO BE CONFORMED TO THE STANDARD SPECIFICATIONS FOR HIGHWAYS.
 5. ALL DISTANCES ARE TO BE CONFORMED TO THE STANDARD SPECIFICATIONS FOR HIGHWAYS.
 6. ALL ANGLES ARE TO BE CONFORMED TO THE STANDARD SPECIFICATIONS FOR HIGHWAYS.
 7. ALL SLOPES ARE TO BE CONFORMED TO THE STANDARD SPECIFICATIONS FOR HIGHWAYS.
 8. ALL PROFILES ARE TO BE CONFORMED TO THE STANDARD SPECIFICATIONS FOR HIGHWAYS.
 9. ALL STRUCTURES ARE TO BE CONFORMED TO THE STANDARD SPECIFICATIONS FOR HIGHWAYS.
 10. ALL UTILITIES ARE TO BE CONFORMED TO THE STANDARD SPECIFICATIONS FOR HIGHWAYS.
 11. ALL EROSION CONTROL MEASURES ARE TO BE CONFORMED TO THE STANDARD SPECIFICATIONS FOR HIGHWAYS.
 12. ALL DRAINAGE SYSTEMS ARE TO BE CONFORMED TO THE STANDARD SPECIFICATIONS FOR HIGHWAYS.
 13. ALL LIGHTING SYSTEMS ARE TO BE CONFORMED TO THE STANDARD SPECIFICATIONS FOR HIGHWAYS.
 14. ALL SIGNAGE SYSTEMS ARE TO BE CONFORMED TO THE STANDARD SPECIFICATIONS FOR HIGHWAYS.
 15. ALL SAFETY SYSTEMS ARE TO BE CONFORMED TO THE STANDARD SPECIFICATIONS FOR HIGHWAYS.
 16. ALL UTILITIES ARE TO BE CONFORMED TO THE STANDARD SPECIFICATIONS FOR HIGHWAYS.
 17. ALL EROSION CONTROL MEASURES ARE TO BE CONFORMED TO THE STANDARD SPECIFICATIONS FOR HIGHWAYS.
 18. ALL DRAINAGE SYSTEMS ARE TO BE CONFORMED TO THE STANDARD SPECIFICATIONS FOR HIGHWAYS.
 19. ALL LIGHTING SYSTEMS ARE TO BE CONFORMED TO THE STANDARD SPECIFICATIONS FOR HIGHWAYS.
 20. ALL SIGNAGE SYSTEMS ARE TO BE CONFORMED TO THE STANDARD SPECIFICATIONS FOR HIGHWAYS.
 21. ALL SAFETY SYSTEMS ARE TO BE CONFORMED TO THE STANDARD SPECIFICATIONS FOR HIGHWAYS.



BRISTOL STARKSBORO
 Project S N 0200 (1) SA
 Sheet 69 of 75

DRILLING & BLASTING of SOLID
ROCK SUB-GRADE
81+75-88+80 85
82+64

TWO CABLE GUARD RAIL (Mod)
81+00-81+40 82+20
80+90 78+00-88+20
80+90 80+90-92+00

UNCLASSIFIED CHANNEL EXCAVATION
91+50.5 Rt. - 92+00 Rt.

METAL BIN-TYPE RETAINING WALL
88+45 Lt - 91+60 Lt.

PARCEL	: G.P.C. STA. 71+40-93+46
GRANTOR	: EDWIN W. ORVIS
TAKING	: 0.52 R.M.
RIGHTS, Slope	: 78+88-78+25 Lt., 81+40-82+55 Lt., 92+35-95+24 26+90 37+50 Lt., 37+14-38+35 Rt.
TITLE TAKEN	: _____
RECORDED	: _____
RIGHTS, DRAINAGE	: 81+33 Lt.

Rev. PI 80+91.5
80+89.9
Sur. PI 81+00.8
80+93.2
Δ 12' 26" Rt.
D 3'

BM#8
Chis on wingwall
US FI 910.69
H.M. No. 8-R
Set in Stream 40%
Elev. 914.41

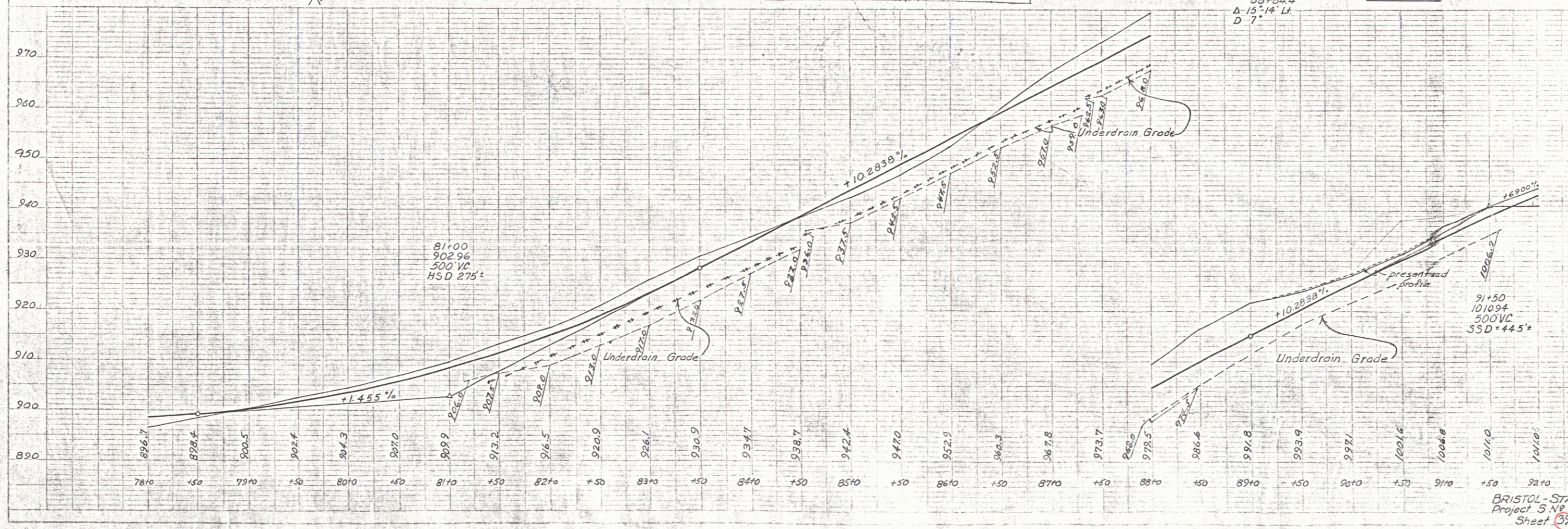
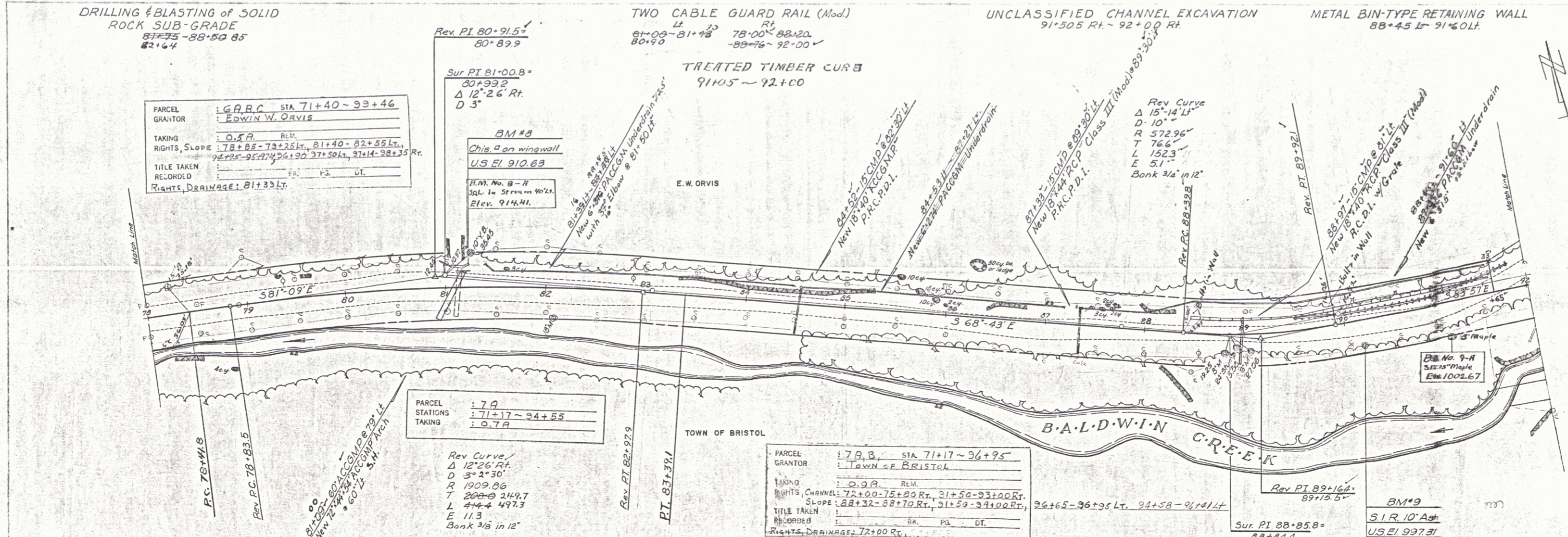
TREATED TIMBER CURB
91+05 - 92+00

Rev. Curve
Δ 15' 14" Lt.
D 10'
R 572.96'
T 766'
L 152.3'
E 51'
Bank 3/8 in 12'

Rev. PI 89+92.1
89+91.5
Sur. PI 88+85.8
88+84.4
Δ 15' 14" Lt.
D 7'

BM#9
SIR 10' Ag
US FI 997.81

Smart
1/2" = 100'
C.E.H.



BRISTOL-STARKSBORO
Project S NE 0200119A
Sheet 39 of 75

PARCEL GRANTOR : 10 STA 107+80 - 109+45
 ODELL N. ESTES, ESTATE
 TAKING : 1.830 Sq. Ft.
 RIGHTS, SLOPE : 107+90 LT, 109+45 LT
 TITLE TAKEN :
 RECORDED :

TWO CABLE GUARD RAIL (Mod) App 110+00 LT
 RT
 108+00-108+24 108+00-108+24
 11+25-112+93 110+96 BM #1113+76
 U.S.G.S B.M. #1089
 S.I.R. 3-18 Elms
 U.S. E.I. 1097.41

PARCEL STATIONS TAKING : 19 D
 110+21 - 111+25
 1.800 Sq. Ft.

DRILLING AND BLASTING SOLID ROCK SUB-GRADE
 108+25 - 110+75 43

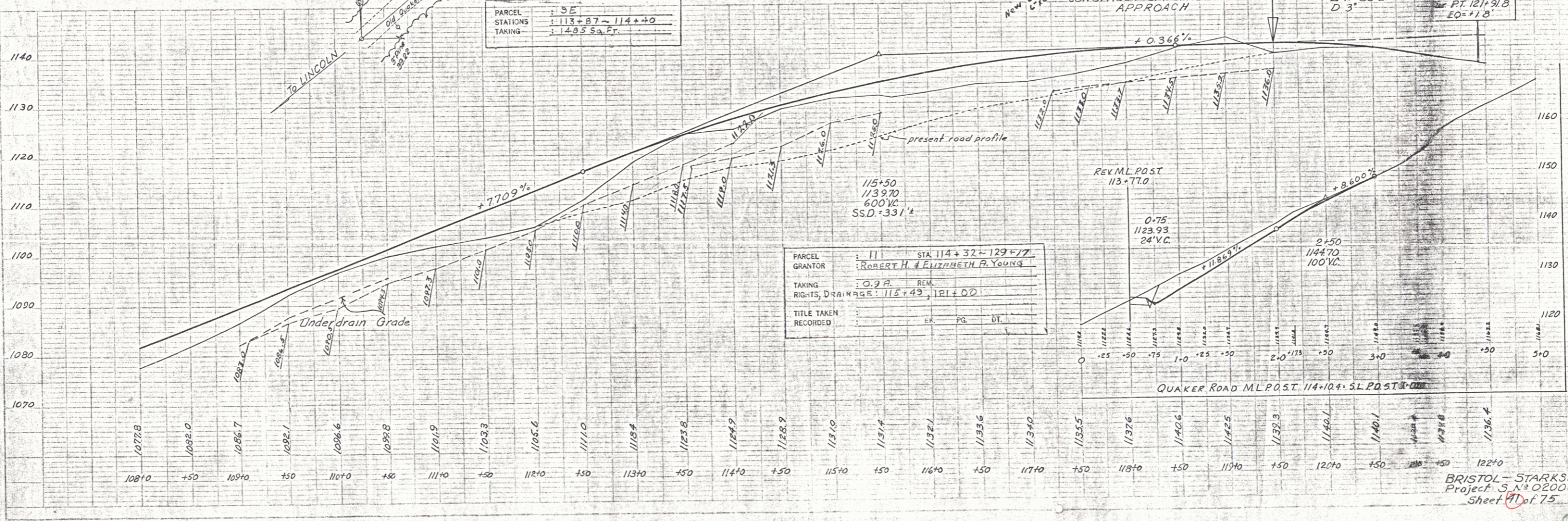
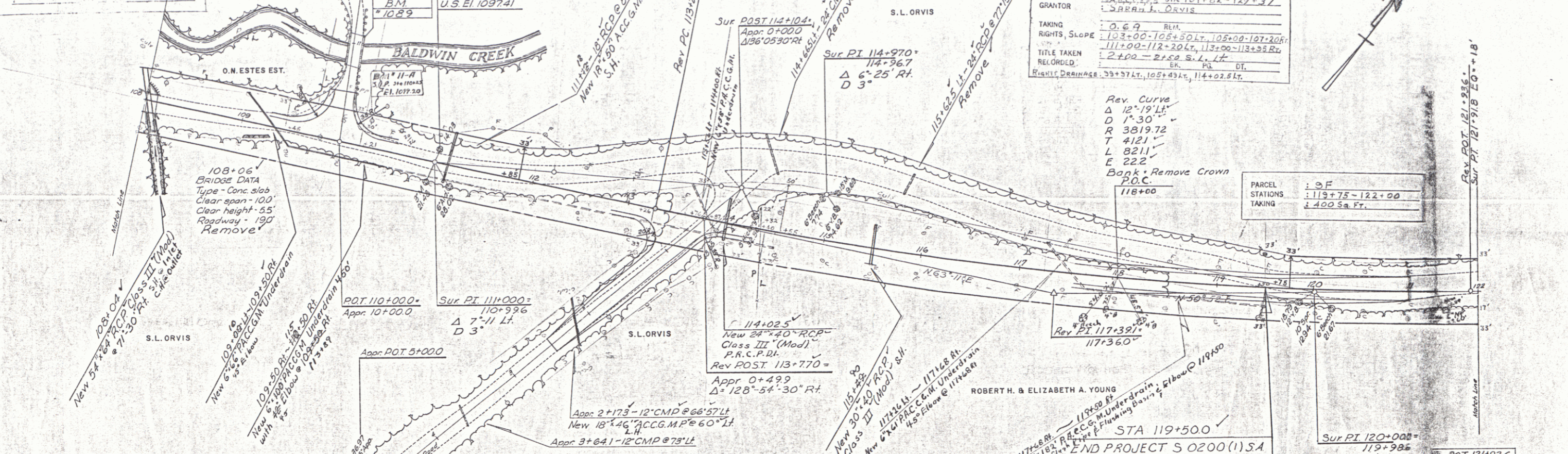
CONSTRUCT APPROACH
 110+00 LT
 113+77 RT

PARCEL GRANTOR : 3 B.C.E.P.S. STA 101+22 - 127+37
 S. BRAD J. ORVIS
 TAKING : 0.69 RM.
 RIGHTS, SLOPE : 103+00-105+50 LT, 105+00-107+20 RT
 111+00-112+20 LT, 113+00-113+35 RT
 TITLE TAKEN : 2+00 - 2+50 S.L. LT
 RECORDED :
 RIGHTS DRAINAGE : 33+37 LT, 105+43 RT, 114+02.5 LT

Rev. Curve
 Δ 12° 19' LT
 D 1° 30'
 R 3019.72
 T 4121
 L 8211
 E 222
 Bank - Remove Crown
 P.O.C.
 118+00

PARCEL STATIONS TAKING : 9 F
 119+75 - 122+00
 1.400 Sq. Ft.

10/21/12
 12/14/12
 S. BRAD J. ORVIS
 CIVIL ENGINEER
 No. 10000
 State of New Hampshire



PARCEL STATIONS TAKING : 3 E
 113+87 - 114+40
 1.435 Sq. Ft.

PARCEL GRANTOR : 111 STA 114+32 - 129+77
 ROBERT H. & ELIZABETH A. YOUNG
 TAKING : 0.92 RM.
 RIGHTS, SLOPE : 115+43, 121+00
 TITLE TAKEN :
 RECORDED :

BRISTOL - STARKSBORO
 Project S. N. 0200(1) SA
 Sheet 11 of 75