FED. ROAD DIST. NO.	STATE	FED. PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
9	Vt.	22(2)	1947	1	24

INDEX OF SHEETS

STANDARD STRUCTURE SHEETS APPROVED BY THE CHIEF ENGINEER, STATE DEPARTMENT OF HIGHWAYS

S-28 APRIL 26, 1941
S-30 MAY 12, 1941
S-30A APRIL 19, 1941
S-40 DECEMBER 18, 1945

STATE OF VERMONT

STATE HIGHWAY DEPARTMENT

PLAN AND PROFILE OF PROPOSED STATE HIGHWAY

FEDERAL PROJECT

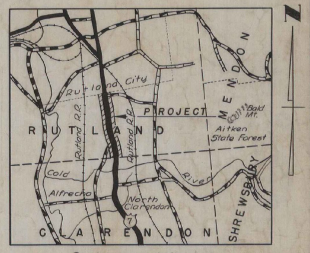
TOWN OF RUTLAND

U. S. ROUTE 7

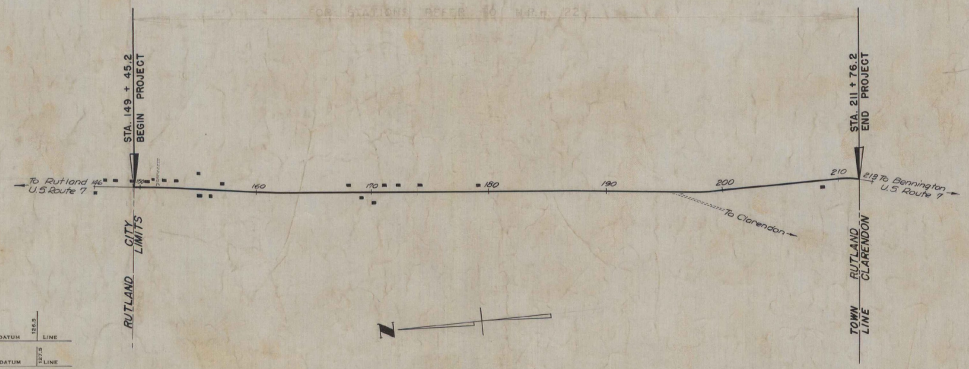
RUTLAND – BENNINGTON ROAD

BEGINNING AT THE RUTLAND CITY LIMIT AND EXTENDING SOUTHERLY 1.180 MILES TO THE RUTLAND – CLARENDON TOWN LINE.

LENGTH OF PROJECT – 6231.0 FEET = 1.180 MILES



Scale 1 inch = 1 mile



APPROVED: February 16, 1948

H. E. Laughton
COMMISSIONER OF HIGHWAYS

SUBMITTED BY ORDER OF THE STATE HIGHWAY BOARD

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

GROUND ELEVATION ..... DATUM ..... LINE
GRADE ELEVATION ..... DATUM ..... LINE

CURVE DATA

DEFLECTION ANGLE ..... Δ
DEGREE OF CURVE ..... D.
RADIUS OF CURVE ..... R.
TANGENT DISTANCE ..... T.
LENGTH OF CURVE ..... L.
EXTERNAL DISTANCE ..... E.
POINT OF INTERSECTION ..... P. I.
POINT OF CURVE ..... P. C.
POINT OF TANGENT ..... P. T.
POINT ON TANGENT ..... P. O. T.

SCALES

TITLE	1" = 500'
TYPICAL	1" = 2'
PLAN	1" = 50'
PROFILE HORIZONTAL	1" = 50'
PROFILE VERTICAL	1" = 10'
CROSS SECTIONS	1" = 5'

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

CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THE PLANS AND THE STANDARD ROAD AND BRIDGE SPECIFICATIONS OF 1936, AS APPROVED DECEMBER 29TH, 1936 BY THE PUBLIC ROADS ADMINISTRATION, INCLUDING ALL SUBSEQUENT APPROVED REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE SUBMITTED WITH THE PLANS.

RECOMMENDED FOR APPROVAL

DISTRICT ENGINEER
PUBLIC ROADS ADMINISTRATION
FEDERAL WORKS AGENCY

APPROVED

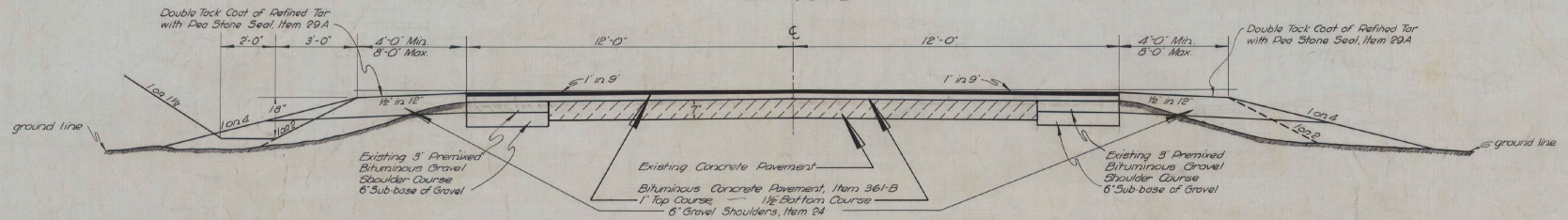
DIVISION ENGINEER
PUBLIC ROADS ADMINISTRATION
FEDERAL WORKS AGENCY

APPROVED Feb 16, 1948 H. W. Hewitt HIGHWAY ENGINEER	APPROVED Aug 1 1947 E. H. Allen DISTRICT HIGHWAY COMMISSIONER	SERIES F No. 22(2) FILED SHEET 1 OF 24

FED. AID DIST. NO.	STATE	F PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
9	VT.	22(2)	1947	2	24

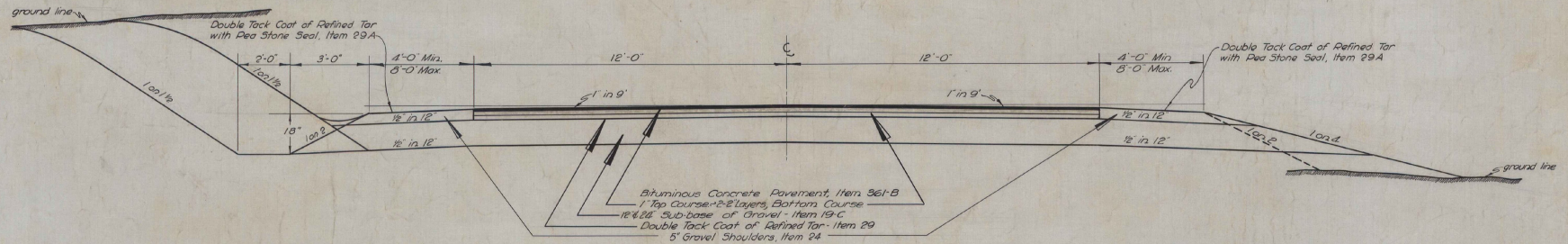
TYPICAL SECTIONS

BITUMINOUS CONCRETE PAVEMENT, CLASS I
ITEM 361-B



NORMAL SECTION

NOTE: Bituminous Concrete Pavement shall be paid for on a ton basis.



SECTION SHOWING SUB-BASE OF GRAVEL

12" SUB-BASE STA. 151+55 TO STA. 152+55
12" SUB-BASE STA. 156+70 TO STA. 170+00
24" SUB-BASE STA. 204+37.9 TO STA. 211+76.2

NOTE:
Bituminous Concrete Pavement, Gravel Shoulders and Guard Rail are to be constructed by Force Account.

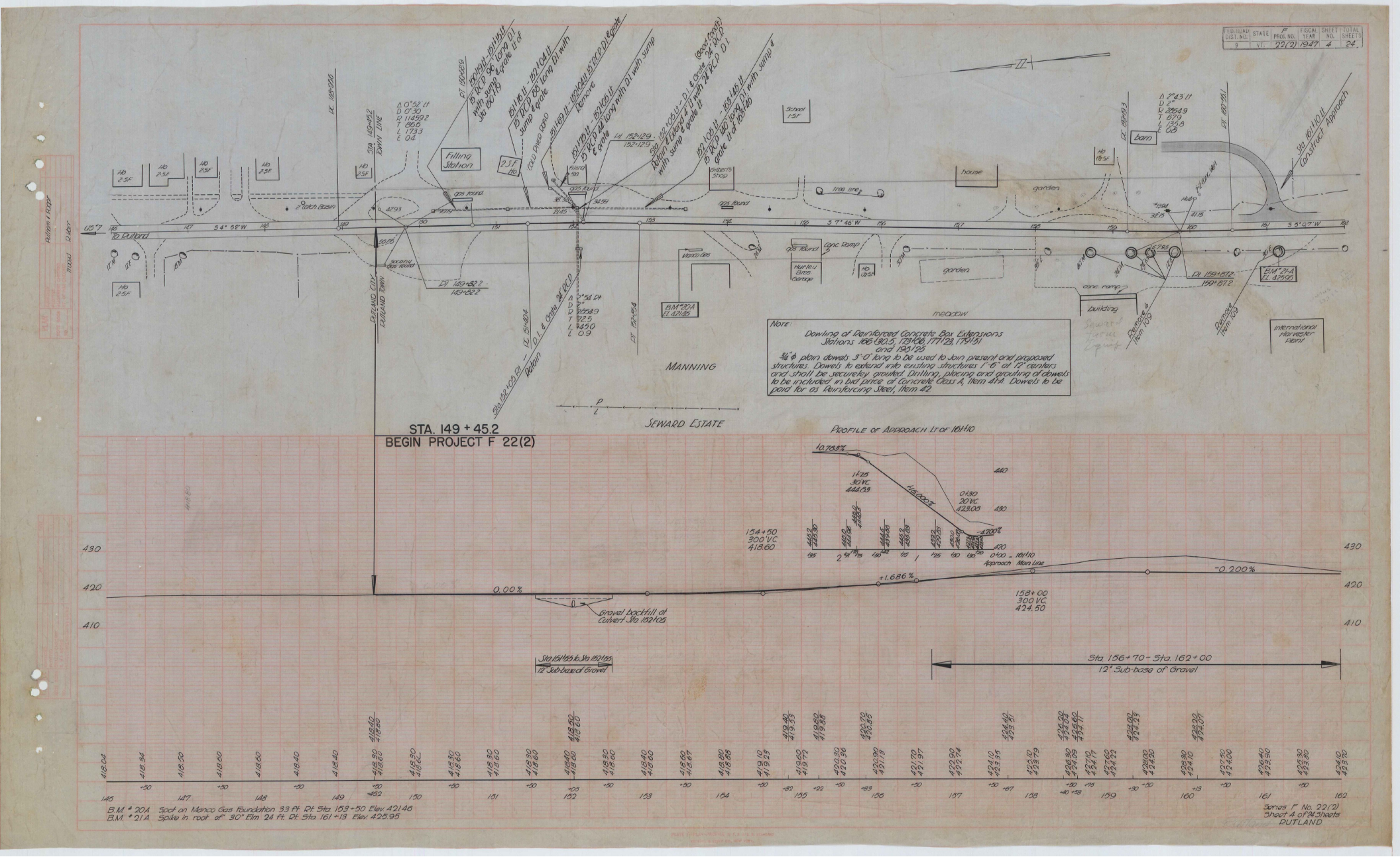
DOUBLE TACK COAT OF REFINED TAR WITH PEA STONE SEAL ON SHOULDERS

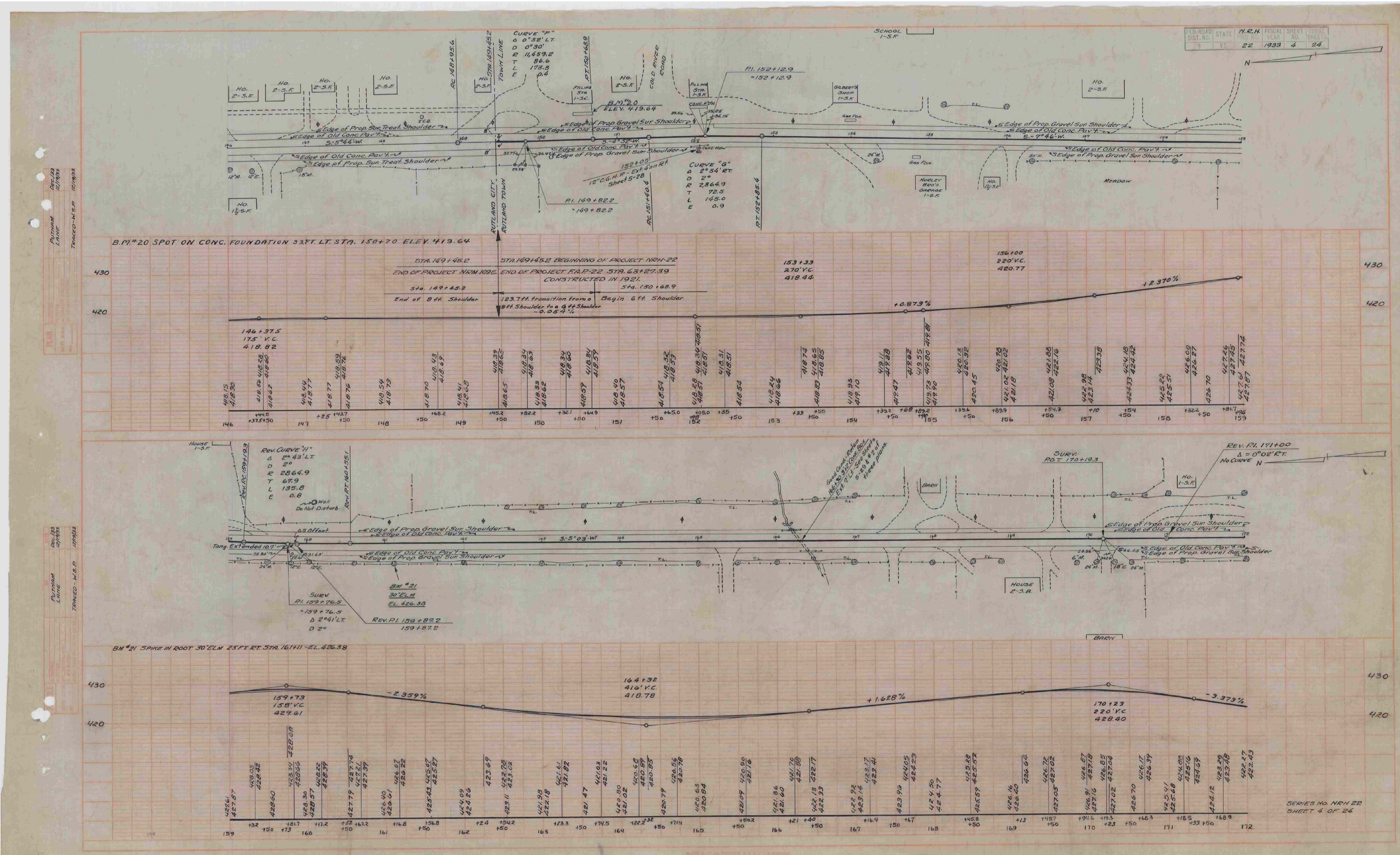
STA	STA	4' WIDTH LT	4' WIDTH RT	8' WIDTH LT	8' WIDTH RT
149+45.2	155+50	604.8'	604.8'		
155+50	158+00		250.0'		
155+50	189+00			3350.0'	
158+00	211+76.2				5376.2'
189+00	197+00	800.0'			
197+00	200+00			300.0'	
200+00	204+00	400.0'			
204+00	211+76.2			776.2'	

SCALE 1 INCH=2 FEET

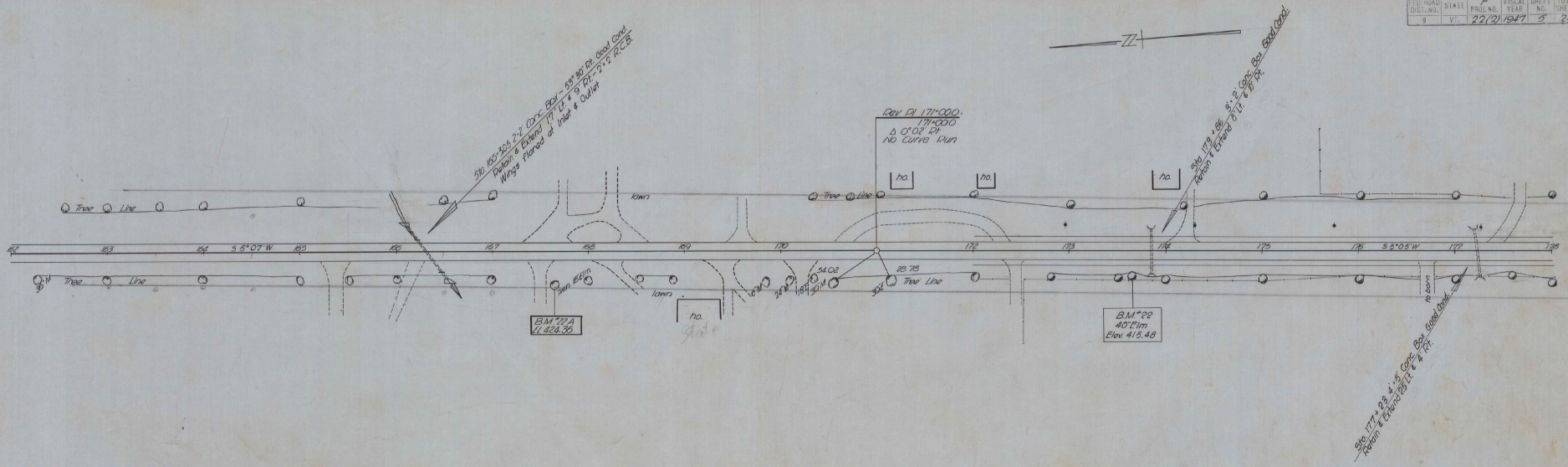
RUTLAND

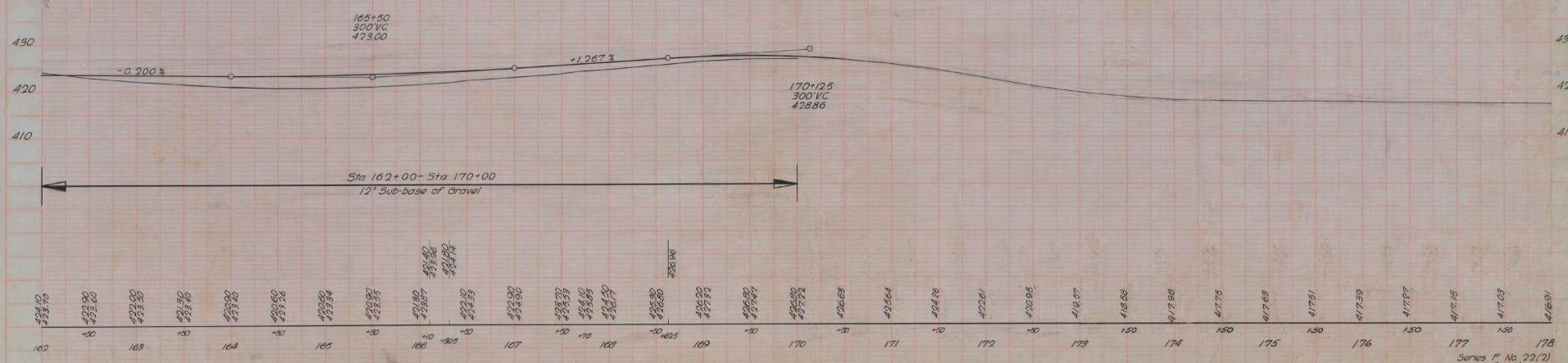
Surveyed by
Designed by
Drawn by E. Rogers
Traced by E. Rogers
Checked by
Series F No. 22(2) Filed
Sheet 2 of 24 Sheets


STA. 149 + 45.2
BEGIN PROJECT F 22(2)
PROFILE OF APPROACH LT OF 161+10
10.78.8%
1+775
30 VC
444.09
1+600%
0+30
20 VC
429.05
4.200%
154+50
300 VC
418.60
0.00%
+1.686%
-0.200%
158+00
300 VC
424.50
Gravel backfill at Culvert Sta 152+05
Sta 151+55 to Sta 152+55
12" Sub-base of Gravel
Sta. 156+70 - Sta. 162+00
12" Sub-base of Gravel
Filling Station
MANNING
SEWARD ESTATE
meadow
garden
house
barn
building
tree line
Note:
Doweling of Reinforced Concrete Box Extensions
Stations 106+90.5, 123+06, 171+29, 179+51
and 193+25
¾" ϕ plain dowels 3'-0" long to be used to join present and proposed structures. Dowels to extend into existing structures 1'-0" at 12" centers and shall be secureley grouted. Drilling, placing and grouting of dowels to be included in bid price of Concrete Class A, Item 41A. Dowels to be paid for as Reinforcing Steel, Item 42.
B.M. # 20A Spot on Manco Gas Foundation 9.3 ft. Rt Sta. 153+50 Elev. 421.46
B.M. # 21A Spike in root of 30" Elm 24 ft. Rt. Sta. 161+13 Elev. 425.95
Series F No. 22(2)
Sheet 4 of 24 Sheets
RUTLAND


FED. ROAD DIST. NO. | STATE | N.R.H. PROJECT NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS
1 | VT. | 22 | 1933 | 4 | 24
CURVE "F"
Δ 0°52' LT.
D 0°30'
R 11,459.2
T 86.6
L 173.3
E 0.4
PC. 148+95.6
STA. 149+45.2
TOWN LINE
PT. 150+68.9
COLD RIVER ROAD
SCHOOL 1-S.F.
P.I. 152+12.9
=152+12.9
GILBERT'S SHOP 1-S.F.
B.M. #20
ELEV. 419.64
Edge of Prop. Sur. Treat. Shoulder
Edge of Old Conc. Pav't.
Edge of Prop. Gravel Sur. Shoulder
S.-5°44'-W.
S.-4°32'-W.
S.-7°46'-W.
Edge of Prop. Sur. Treat. Shoulder
RUTLAND CITY
RUTLAND TOWN
P.I. 149+82.2
=149+82.2
12" C.G.M.P. - Ext. 4 on Rt.
Sheet 5-28
CURVE "G"
Δ 2°54' RT.
D 2°
R 2864.9
T 72.5
L 145.0
E 0.9
PC. 151+40.6
PT. 152+85.6
HURLEY BRO'S. GARAGE 1-S.F.
MEADOW
B.M. #20 SPOT ON CONC. FOUNDATION 32 FT. LT. STA. 150+70 ELEV. 419.64
STA. 149+45.2
STA. 149+45.2 BEGINNING OF PROJECT NRH-22
END OF PROJECT NRM 109E. END OF PROJECT F.A.P.-22 STA. 63+27.39
CONSTRUCTED IN 1921.
Sta. 149+45.2
Sta. 150+68.9
End of 8 ft. Shoulder
123.7 ft. transition from a 8 ft. Shoulder to a 6 ft. Shoulder
Begin 6 ft. Shoulder
-0.054%
153+33
270' V.C.
418.44
156+00
220' V.C.
420.77
+0.873%
+2.370%
146+37.5
175' V.C.
418.82
430
420
Rev. CURVE "H"
Δ 2°43' LT.
D 2°
R 2864.9
T 67.9
L 135.8
E 0.8
Rev. P.C. 159+19.3
Rev. P.T. 160+55.1
Well Do Not Disturb
S.-5°03'-W.
Tang. Extended 10.7'
SURV. P.I. 159+76.5
=159+76.5
Δ 2°41' LT.
D 2°
Rev. P.I. 159+87.2
159+87.2
BM #21
30" ELM
EL. 426.38
SURV. P.O.T. 170+19.3
Rev. P.I. 171+00
Δ = 0°02' RT.
No Curve
BARN
HOUSE 2-S.B.
BM #21 SPIKE IN ROOT 30" ELM 25 FT. RT. STA. 161+11 - EL. 426.38
159+73
158' V.C.
429.61
-2.359%
164+32
416' V.C.
418.78
+1.628%
170+23
220' V.C.
428.40
-3.373%
SERIES No. NRH 22
SHEET 4 OF 24
PUTNAM
LANE
TRACED - W.S.P.

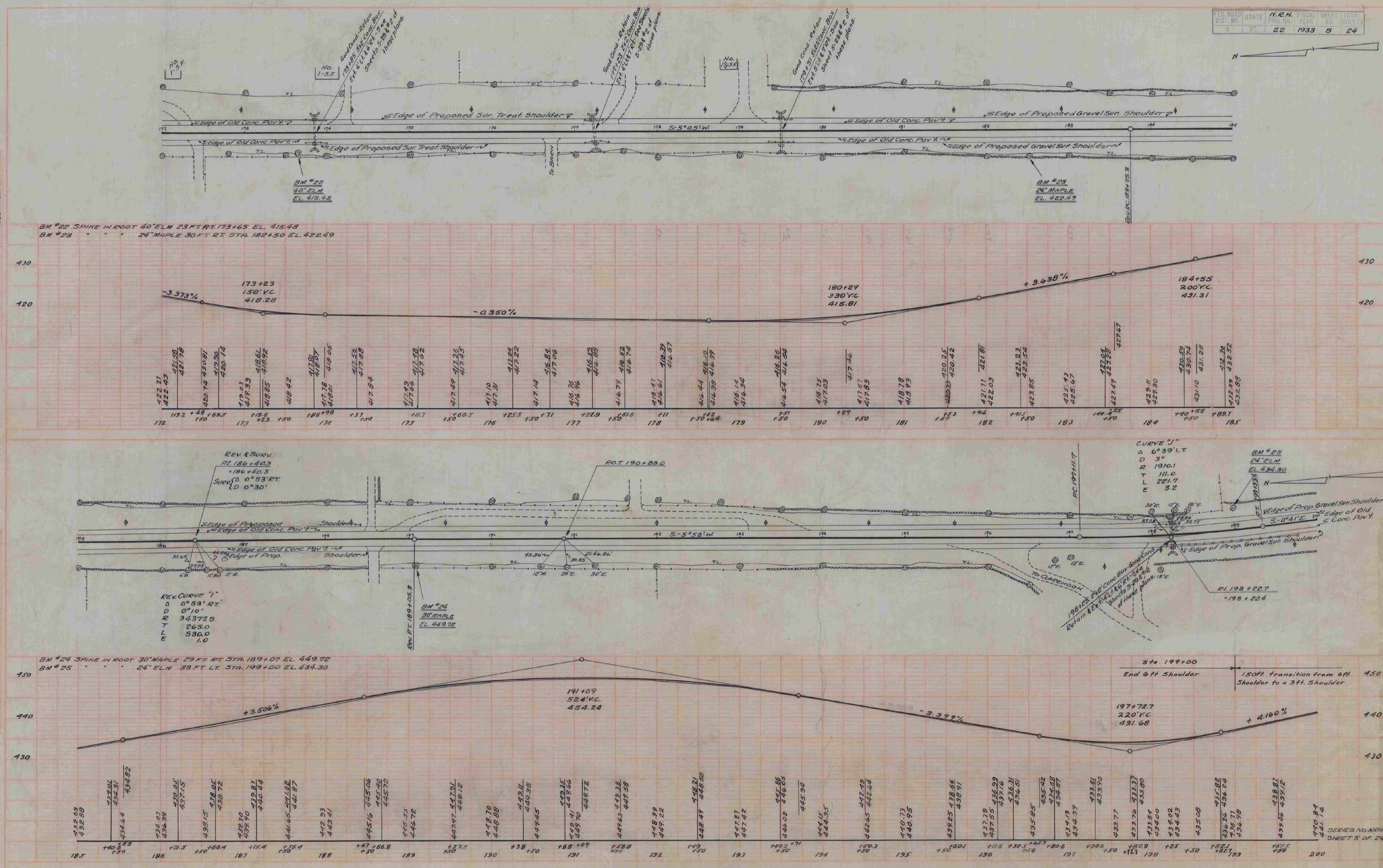
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
9	Vt.	F 22(2)	1947	5	24



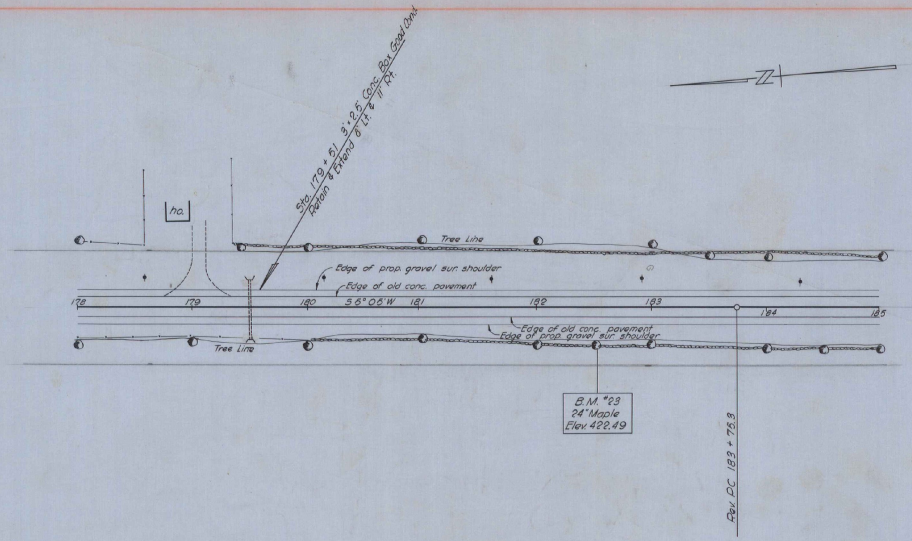


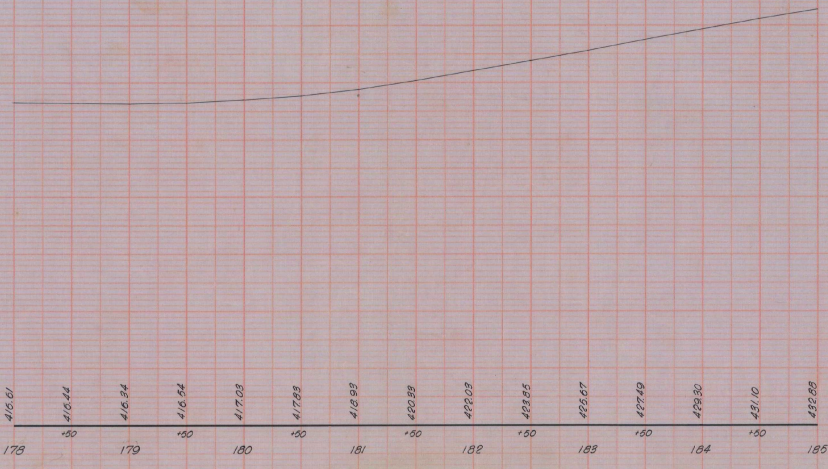
BM 22A Spike in root of 18" Elm 29.5 ft. Rt. Sta. 167+64 Elev. 424.38

Series F No. 22(2)
Sheet 5 of 24 Sheets
RUTLAND


FED. ROAD DIST. NO. 9 | STATE VT. | N.R.H. PROJ. NO. 22 | FISCAL YEAR 1933 | SHEET NO. 5 | TOTAL SHEETS 24
N
S. Edge of Proposed Sur. Treat. Shoulder
S. Edge of Old Conc. Pav't.
S. Edge of Proposed Gravel Sur. Shoulder
S-5°05'W.
To Barn
BM #22 40" ELM EL. 415.48
BM #23 24" MAPLE EL. 422.69
BM #22 SPIKE IN ROOT 40" ELM 23 FT. RT. 173+65 EL. 415.48
BM #23 " " " 24" MAPLE 30 FT. RT. STA. 182+50 EL. 422.69
-3.373%
173+23 150' V.C. 418.28
-0.350%
180+29 330' V.C. 415.81
+3.638%
184+55 200' V.C. 431.31
Rev. & Surv. P.I. 186+40.3
P.O.T. 190+88.0
S-5°58'W.
CURVE "J" Δ 6°39' LT. D 3° R 1910.1 T 111.0 L 221.7 E 3.2
BM #25 24" ELM EL. 434.30
S-0°41'E.
S. Edge of Prop. Gravel Sur. Shoulder
S. Edge of Old Conc. Pav't.
To Claremont
P.I. 198+22.7
REV. CURVE "I" Δ 0°53' RT. D 0°10' R 34377.5 T 265.0 L 530.0 E 1.0
BM #24 38" MAPLE EL. 449.72
BM #24 SPIKE IN ROOT 30" MAPLE 29 FT. RT. STA. 189+07 EL. 449.72
BM #25 " " " 24" ELM 33 FT. LT. STA. 199+00 EL. 434.30
+3.506%
191+09 524' V.C. 454.24
-3.399%
197+72.7 220' V.C. 431.68
+4.160%
Sta. 199+00 End 6 ft. Shoulder
150 ft. transition from 6 ft. Shoulder to a 3 ft. Shoulder
SERIES No. NRH22 SHEET 5 OF 24
PUTNAM LANE TRACED-PRATT

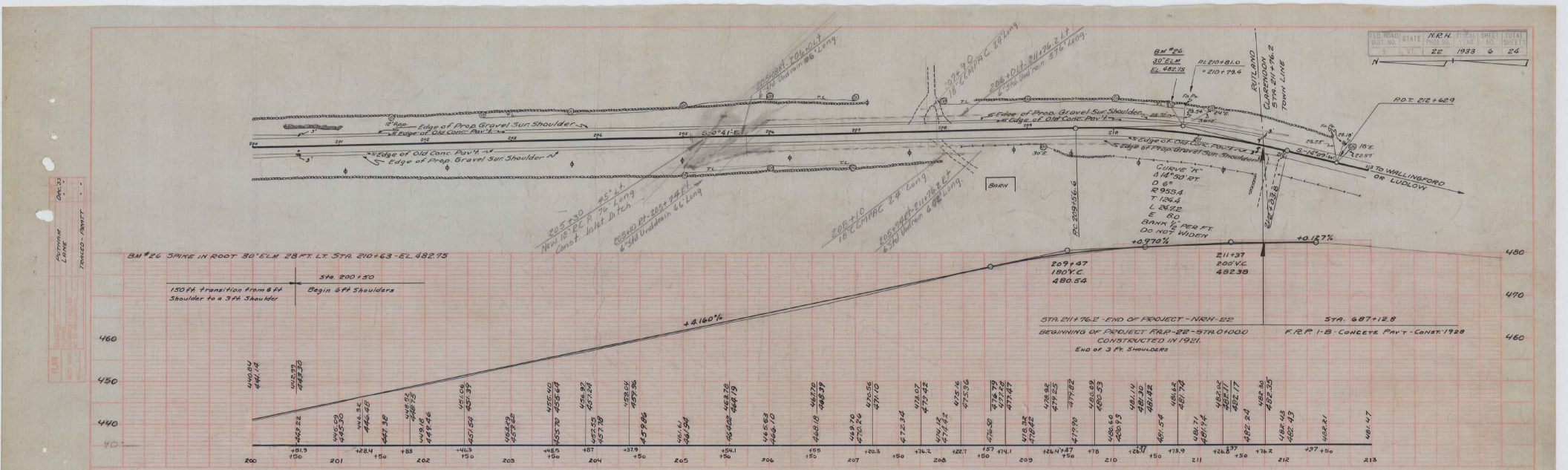
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
9	VT.	22(2)	1947	6	24





BM# 23 Spike in root 24" Maple 30 ft. Rt. sta. 182 + 50 Elev. 422.49

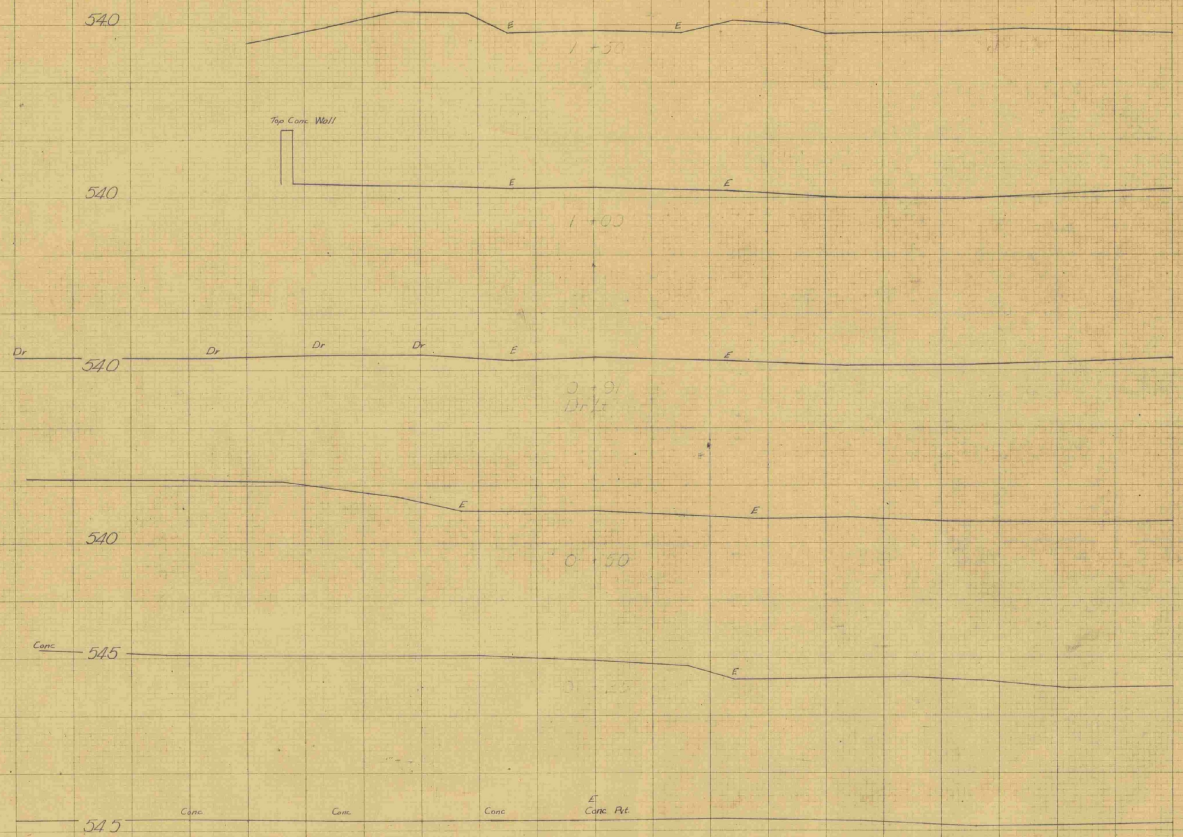
Series F No. 22 (2)
Sheet 6 of 24 Sheets
RUTLAND



FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	VT.	N.R.H. 22	1933	6	24

Series No. N.R.H. 22
Sheet 6 of 24

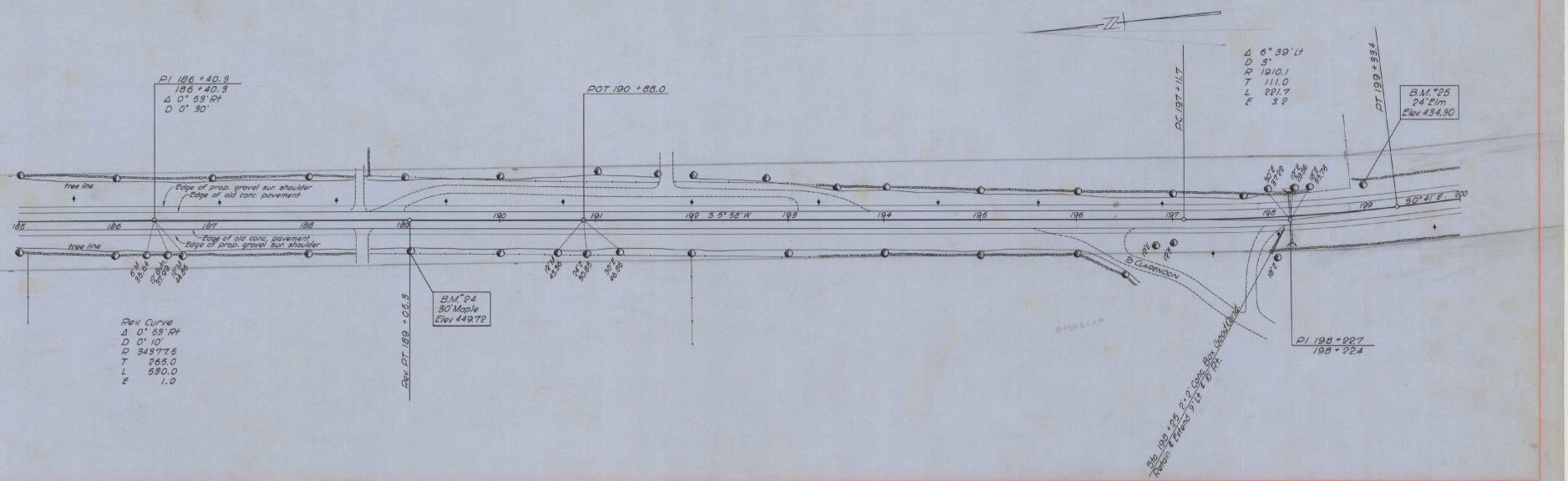
FED.ROAD DIV.NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
9	VT				

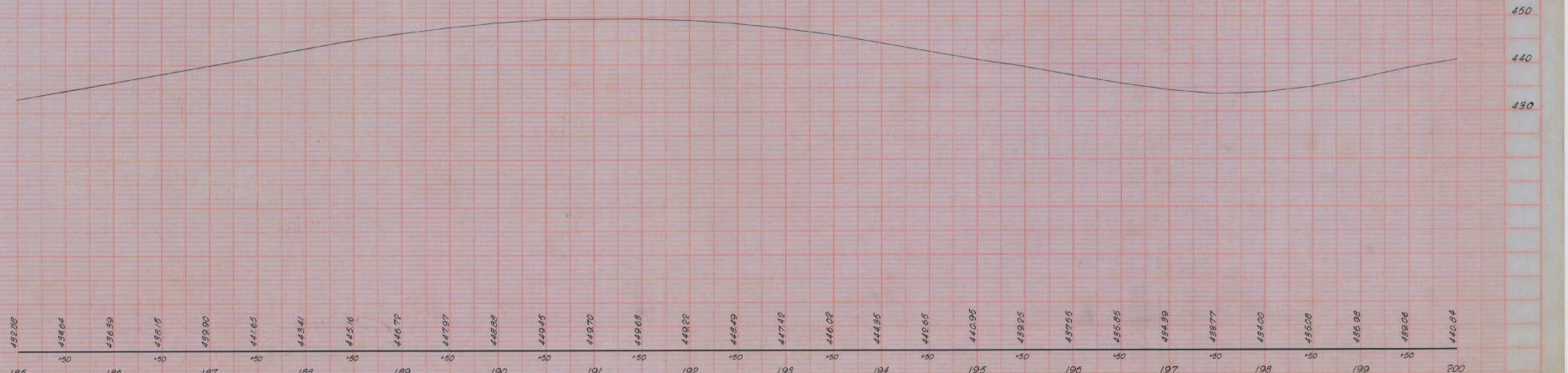


RUTLAND SIDE LINE
RIPLEY ROAD

LEVELS BY Pogue 10-46
SECTIONS PLOTTED BY Crossett CKD. BY
PLANIMETER: BY CKD. BY
EXAMINED BY
SERIES F NO. FILED
SHEET OF

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
9	VT.	F 22(2) 1947	7	24	

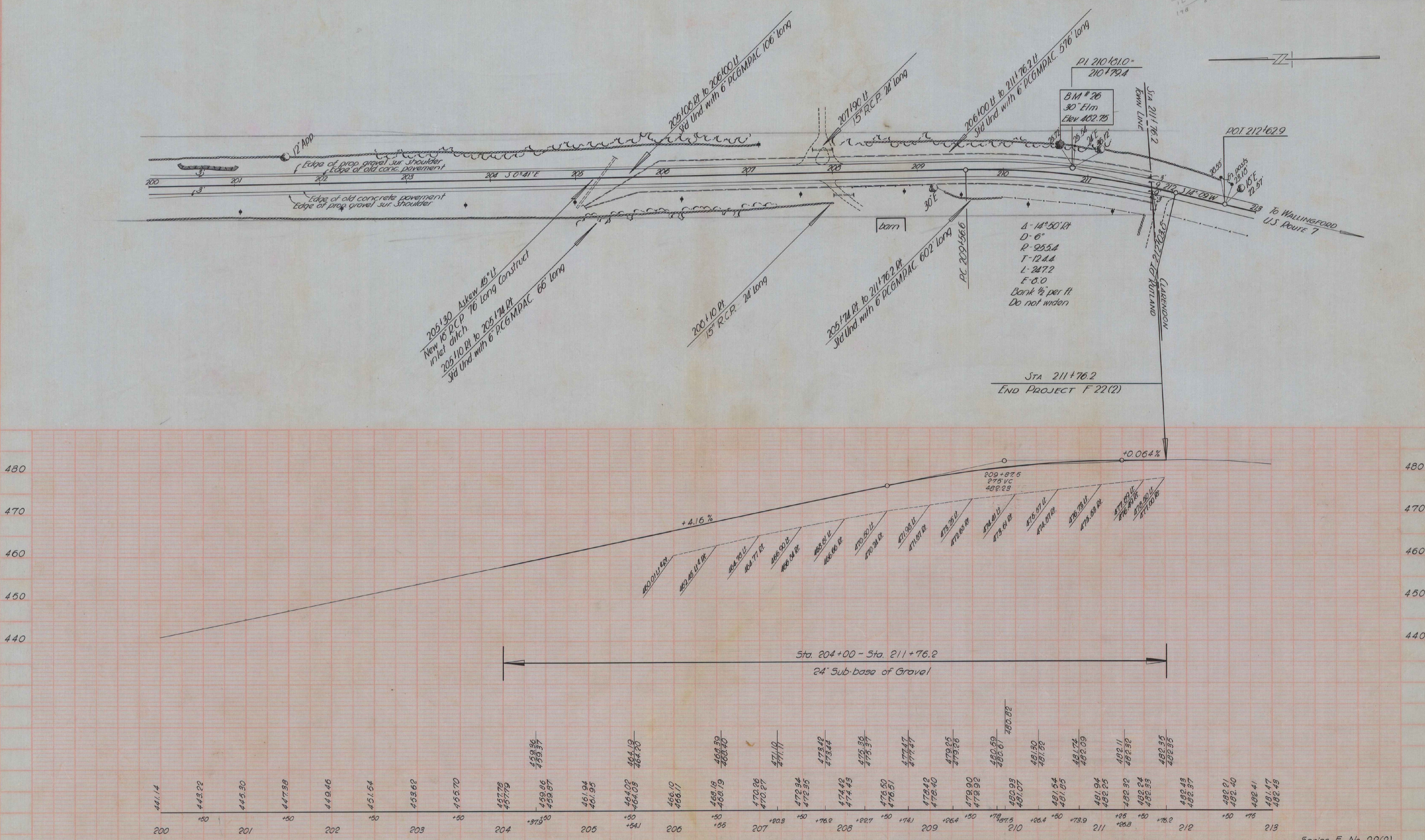




B.M. #24 Spike in root 30" Maple 29 ft Rt. sta. 189 +07 Elev. 449.72
B.M. #25 Spike in root 24" Elm 33 ft Lt sta 199 +00 Elev 434.30

Series F No. 22(2)
Sheet 7 of 24 Sheets
RUTLAND

FED. ROAD DIST. NO.	STATE	F PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
9	Vt.	22(2)	1947	8	24



P.I. 210+61.0 =
210+79.4
BM #26
30" Elm
Elev 482.75
Sta 211+76.2
Town Line
P.O.T. 212+62.9
To Wallingford
U.S. Route 7
12' App.
Edge of prop. gravel sur. Shoulder
Edge of old conc. pavement
Edge of old concrete pavement
Edge of prop. gravel sur. Shoulder
S 0°41' E
S 14°09' W
205+05 Rt to 206+00 Lt
Std Und with 6" PCGMPAC 106' long
207+90 Lt
15" R.C.P. 24' long
206+00 Lt to 211+76.2 Lt
Std Und with 6" PCGMPAC 576' long
barn
30" E
Δ - 14°50' Rt
D - 6°
R - 955.4
T - 124.4
L - 247.2
E - 8.0
Bank ½" per ft
Do not widen
PC 209+56.6
205+30 Askew 45° Lt
New 18" R.C.P. 76' long Construct inlet ditch
205+10 Rt to 205+74 Rt
Std Und with 6" PCGMPAC 66' long
205+10 Rt
15" R.C.P. 24' long
205+74 Rt to 211+76.2 Rt
Std Und with 6" PCGMPAC 602' long
Rutland
Clarendon
Sta 211+76.2
End Project F 22(2)
+0.064%
+4.16%
209+87.5
275 V.C.
482.23
Sta. 204+00 - Sta. 211+76.2
24" Sub-base of Gravel
480
470
460
450
440
200
201
202
203
204
205
206
207
208
209
210
211
212
213

BM. #26 Spike in root 30" Elm 28 ft Lt sta. 210+63 Elev. 482.75

Series F No 22(2)
Sheets 8 of 24 Sheets
RUTLAND

RUTLAND PROJECT NO. F 22 (2)

STATE OF VERMONT

SUMMARY SHEET NO. 1 OF 2 1947

DEPARTMENT OF HIGHWAYS

TYPE OF CONSTRUCTION BITUMINOUS CONCRETE PAVEMENT, CLASS 1 ITEM 361B

APPROXIMATE SUMMARY OF QUANTITIES

QUANTITIES	UNIT	CONTRACT QUANTITIES	ITEM NO.
750	c.y.	Solid Rock Excavation	10
11600	c.y.	Common Excavation	10
1000	c.y.	Trench Excavation of Earth	12A
80	c.y.	Trench Excavation of Rock	12B
6600	c.y.	Sub-base of Gravel	19C
3800	gal	Double Tack Coat of Refined Tar	29
72	c.y.	Concrete Class A	41A
7200	lb	Reinforcing Steel	42
10	c.y.	Cement Rubble Masonry	45
456	lf	15" Reinforced Concrete Pipe	49B
116	lf	18" Reinforced Concrete Pipe	49C
4	lf	24" Reinforced Concrete Pipe	49D
1400	lf	Std. Underdrain with 6" P.C.G.M.P.A.C.	72A
5	each	Cutting and Removing Trees	109
		PIPE OVERRUNS	
40	lf	15" Reinforced Concrete Pipe	
40	lf	18" Reinforced Concrete Pipe	
50	lf	Std. Underdrain with 6" P.C.G.M.P.A.C.	
		FORCE ACCOUNT QUANTITIES	
1650	c.y.	Gravel Shoulders (includes 166 c.y. overrun)	24
6900	gal	Double Tack Coat of Refined Tar with Pea Stone Seal	29A
240	lf	Wood Guard Rail	78
3	each	Guide Posts	83
2	each	Erection of State or Fed Aid Markers	84
15	each	Boundary Markers	85
8350	s.y.	Cleaning Existing Pavement (plus 100 s.y. overrun)	120
5475	lf	Preparing Transverse Joints	121
3600	ton	Bituminous Concrete Pavement Class 1	361B

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS
		SOLID ROCK EXCAVATION
565	c.y.	Removal of Concrete Pavement (156+70 - 170+00) & (151+55 - 152+55) & (204+00 - 211+76.2)
107	c.y.	Roadway (170+00 - 204+00) estimated
78	c.y.	Overrun
750	c.y.	Total
		COMMON EXCAVATION
6567	c.y.	As per sections (151+55 - 152+55) & (149+452 - 170+00) & (204+00 - 211+76.2)
2687	c.y.	Roadway (170+00 - 204+00) estimated
1141	c.y.	Drive 11 of 161+10
1205	c.y.	Overrun
11600	c.y.	Total
		TRENCH EXCAVATION OF EARTH
353	c.y.	Pipe Culverts
30	c.y.	Box Culverts
306	c.y.	Std. Underdrain
111	c.y.	Overrun
1000	c.y.	Total
		TRENCH EXCAVATION OF ROCK
6	c.y.	Pipe Culverts
12	c.y.	Box Culverts
50	c.y.	Std. Underdrain (est.)
12	c.y.	Overrun
80	c.y.	Total
		SUB-BASE OF GRAVEL
5059	c.y.	As per sections (156+70 - 170+00) & (204+00 - 211+76.2) (151+55 - 152+55)
142	c.y.	Backfill Culv. 152+05
837	c.y.	Roadway (170+00 - 204+00) estimated
75	c.y.	Drive 11 of 161+10
487	c.y.	Overrun
6600	c.y.	Total
		DOUBLE TACK COAT OF REFINED TAR
3413	gal	Roadway (151+55 - 152+55) & (156+70 - 170+00) & (204+00 - 211+76.2)
387	gal	Overrun
3800	gal	Total
		CONCRETE CLASS A
10.8	c.y.	Pipe Culverts
58.1	c.y.	Box Culverts
3.1	c.y.	Overrun
72.0	c.y.	Total
		REINFORCING STEEL
942	lb	Pipe Culverts
5664	lb	Box Culverts
594	lb	Overrun
7200	lb	Total
		CEMENT RUBBLE MASONRY
7.9	c.y.	Pipe Culverts
1.0	c.y.	Std. Underdrain
1.1	c.y.	Overrun
10	c.y.	Total

STATIONS FROM	STATIONS TO	PAVEMENT WIDTHS	EQUATIONS +	EQUATIONS −
		24'		
149+452	211+762	6231.0		
TOTALS		6231.0		

LENGTH OF PROJECT

STATIONS		FEET	MILES	REMARKS
149+452	211+762	6231.0	1.180	
TOTALS		6231.0	1.180	

SERIES F NO. 22(2) FILED

SHEET 1 OF 2 SHEETS

FED. ROAD DIST. NO.	STATE	F PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
9	VT.	22(2)	1947	2	2

QUANTITY SHEET

PLANIMETERED SUB-BASE OF GRAVEL

LINEAR FEET

STA	STA	12"		24"		EQ +	EQ −
151 + 55	152 + 55	100					
[illegible]56 + 70	170 + 00	1330					
204 + 37.9	211 + 76.2			738.3			
		1330		738.3			

GUIDE POSTS

STA	LT	RT
152+05		1
205+30	1	1
	1	2
Total	3	

DRAINAGE STRUCTURES

STA	STA	POS	OLD CULV	TYPE IN	TYPE OUT	RCP D	RCP L	D	L	R C BOX S	R C BOX L	CONC A
151+16	152+04	Lt		DI		15"	88					1.8
151+69	152+04	Lt	15"RCP									
151+75	152+05	Lt		DI		15"	44					1.8
152+05		Lt	24"RCP	DI		24"	4					3.6
152+05		Rt	24"RCP									
166+30.5		℄	2'x2'RCB	WF	WF					2'x2'	26	13.3
173+86		℄	3'x2'RCB	WF	WF					3'x2'	18	10.7
177+23		℄	4'x5'RCB	WF	WF					4'x5'	6.5	13.0
179+51		℄	3'x2.5'RCB	WF	WF					3'x2.5'	19	11.7
198+25		℄	2'x2'RCB	WF	WF					2'x2'	19	9.4
205+30		℄		SH		18"	76					
207+90		Lt		SH	SH	15"	24					
208+10		Rt		SH	SH	15"	24					
150+19	151+15	Lt		DI		15"	96					1.8
152+05	153+45	Lt		DI		15"	140					1.8
						15" 18" 24"	416 76 4			RCB Pipe		58.1 10.8

STA	REINF STEEL	CRM	DI GRATE	DEPTH DI	TRENCH EXCAV E	TRENCH EXCAV R	RELAY PIPE	Gravel Back Fill	REMARKS
151+16	159		1	3'-0"	38		Pav.		D.I. with Sump & Grate
151+69					15	3	Pav.		Remove
151+75	159		1	3'-0"	20		Pav.		
152+05	306		1	5'-0"	14.5	3	Pav.	142	Retain & Extend 4' Lt
152+05							Pav.		Retain
166+30.5	1362				4	1	Pav.		Retain & Extend 17' Lt & 9' Rt
173+86	1213				4	1	N.P.		Ret. & Ext. 8' Lt & 10' Rt
177+23	837				5	8	N.P.		Ret. & Ext. 25' Lt & 4' Rt
179+51	1264				6	1	NP		Ret. & Ext. 8' Lt & 11' Rt
198+25	988				11	1	NP		Ret. & Ext. 9' Lt & 10' Rt
205+30		1.9			29		Pav		Construct Inlet Ditch
207+90		3.0			9		Pav.		Drive Culvert
208+10		3.0			9		Pav.		Drive Culvert
150+19	159		1	3'-0"	38		NP.		D.I. with Sump & Grate
152+05	159		1	3'-0"	50		NP		D.I. with Sump & Grate
	5664 942	7.9	5	RCB Pipe	30 353	12 6		142	

STD. UNDERDRAIN WITH 6" P.C.G.M.P., A.C.

STA	STA	LT	RT	TR. EARTH	CRM
205+08 Rt	206+00 Lt	106		20	
206+00	211+76	576		242	
205+10	205+74		66	12	1.0
205+74	211+76		602	232	
		682	668		
	Totals	1350		506	1.0

CABLE GUARD RAIL

STA	STA	LT	RT	ANCH

WOOD GUARD RAIL

STA	STA	LT	RT
166+30.5		24	24
173+86		24	24
177+23		24	24
179+51		24	24
198+25		24	24
		120	120
	Total	240	

TREE REMOVAL ITEM 109

STA	RT
158 + 72	1
159 + 23	1
159 + 50	1
159 + 80	1
161 + 13	1
Total	5

RUTLAND
Series F No. 22 (2)
Sheet 2 of 2 Sheets

INDEX OF SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.			
9	VT.				

STATE OF VERMONT
STATE HIGHWAY DEPARTMENT

PLAN AND PROFILE OF PROPOSED
STATE HIGHWAY
FEDERAL AID PROJECT

TOWN OF RUTLAND
U. S. ROUTE 7
RUTLAND – BENNINGTON ROAD

BEGINNING AT THE RUTLAND CITY LIMIT AND EXTENDING SOUTHERLY 1.180 MILES TO THE RUTLAND – CLARENDON TOWN LINE.

LENGTH OF PROJECT – 6231.0 FEET = 1.180 MILES

Scale 1 inch = 1 mile

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

GROUND ELEVATION
GRADE ELEVATION

CURVE DATA

DEFLECTION ANGLE	Δ
DEGREE OF CURVE	D
RADIUS OF CURVE	R
TANGENT DISTANCE	T
LENGTH OF CURVE	L
EXTERNAL DISTANCE	E
POINT OF INTERSECTION	P.I.
POINT OF CURVE	P.C.
POINT OF TANGENT	P.T.
POINT ON TANGENT	P.O.T.

SCALES

TITLE	1
TYPICAL	1
PLAN	1
PROFILE HORIZONTAL	1
PROFILE VERTICAL	1
ROSS SECTIONS	1

APPROVED:
COMMISSIONER OF HIGHWAYS
SUBMITTED BY ORDER OF THE STATE HIGHWAY BOARD

RECOMMENDED FOR APPROVAL:
DISTRICT ENGINEER
PUBLIC ROADS ADMINISTRATION
FEDERAL WORKS AGENCY

APPROVED:
DIVISION ENGINEER
PUBLIC ROADS ADMINISTRATION
FEDERAL WORKS AGENCY

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

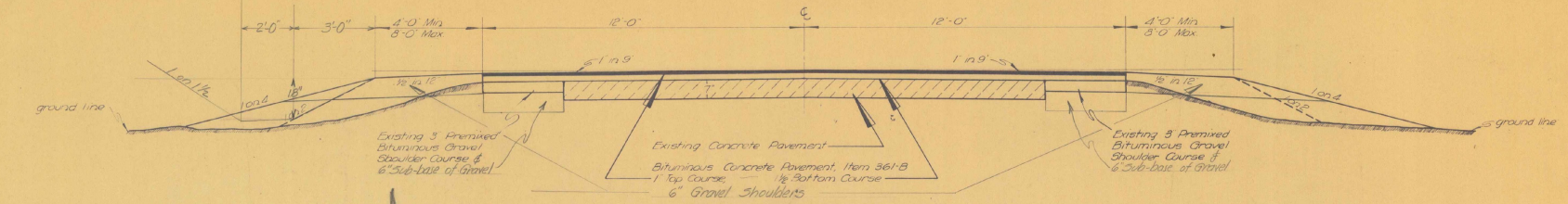
CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THE PLANS AND THE STANDARD ROAD AND BRIDGE SPECIFICATIONS OF 1936, AS APPROVED DECEMBER 29TH, 1936 BY THE PUBLIC ROADS ADMINISTRATION, INCLUDING ALL SUBSEQUENT APPROVED REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE SUBMITTED WITH THE PLANS.

APPROVED	APPROVED	SERIES F NO.	FILED
	DISTRICT HIGHWAY COMMISSIONER	SHEET 1 OF	

F
22(2) 1947 2 17

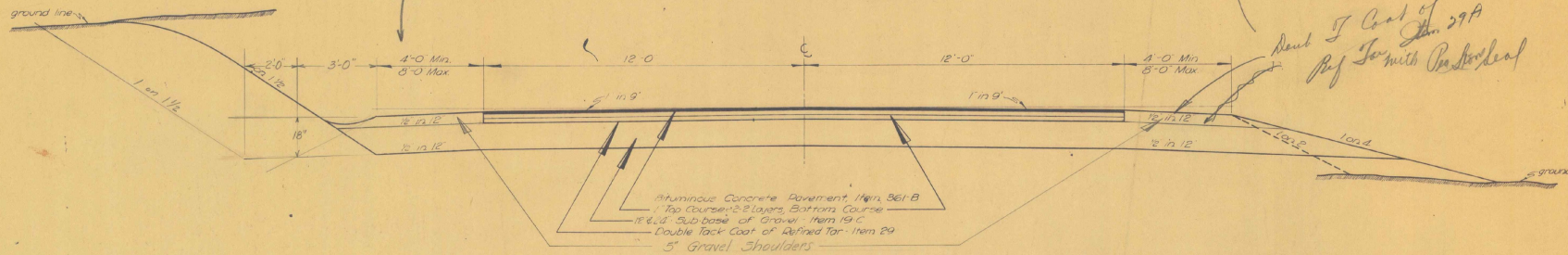
TYPICAL SECTIONS

BITUMINOUS CONCRETE PAVEMENT, CLASS I
ITEM 361-B



NORMAL SECTION

NOTE. Bituminous Concrete Pavement shall be paid for on a ton basis.



Dead II Coat of Item 29A
Req for mitts Per Std Leaf

SECTION SHOWING SUB-BASE OF GRAVEL

151+55 152+55
12" SUB-BASE STA. 156+70 TO STA. 170+00
24" SUB-BASE STA. 204+00 TO STA. 211+76.2

Note:
Bituminous Concrete Pavement, Gravel shoulders and Guard Rail are to be constructed by Force Account.

RUTLAND

Surveyed by
Designed by
Drawn by E. Rogers
Traced by E. Rogers
Checked by
Series F No. 22(2) Filed
Sheet 2 of 17 Sheets

STATE OF VERMONT — DEPARTMENT OF HIGHWAYS

RUTLAND — F. A. P. No. F 022 (2)

Form Eng. 1 A — EARTHWORK SHEET NO. 19

REVISIONS

VOLUMES — Computed by — Checked by

VERTICAL CURVES — Computed by — Checked by

GRADES — Computed by — Checked by

SUMMARY OF BALANCES

STATION TO STATION		TOTAL EXCAV. EARTH & ROCK CU. YDS.	ROCK EXCAV. CU. YDS.	EMBANKMENT CU. YDS.	EXCESSES CUT	EXCESSES FILL	ACCUMULATIVE EXCESSES CUT	ACCUMULATIVE EXCESSES FILL	GRAVEL SHOULDERS C.Y.	SHAPING COURSE OF GRAVEL CU. YDS.
149+45.2	150+00	4							8	18
150+00	155+00	42							71	92
155+00	160+00	2542	130						102	553
160+00	165+00	1512	110	656					141	846
165+00	170+00	135	0	1026					142	851
170+00	175+00	68		189					141	21
175+00	180+00	80		385					142	19
180+00	185+00	231		253					134	101
185+00	190+00	682		39					135	269
190+00	195+00	1075	0	28					91	215
195+00	200+00	313	4	584					109	74
200+00	205+00	536	116	144					105	433
205+00	210+00	1740	157	47					124	1689
210+00	212+00	770	77	0					38	597
		9730'	594'	3351'					1483'	5778'

1012

SUMMARY OF BALANCES

STATION TO STATION		TOTAL EXCAV. EARTH & ROCK CU. YDS.	ROCK EXCAV. CU. YDS.	EMBANKMENT CU. YDS.	EXCESSES CUT	EXCESSES FILL	ACCUMULATIVE EXCESSES CUT	ACCUMULATIVE EXCESSES FILL	SHAPING COURSE OF GRAVEL CU. YDS.

SUMMARY BY COLUMNS

SHEET NO.	COL. NO.	EXCAVATION TOTAL CU. YDS.	EXCAVATION ROCK CU. YDS.	EMBANKMENT CU. YDS.	SHAPING COURSE OF GRAVEL CU. YDS. Shoulders	
1	1	3075'	150'	0	194'	739'
	2	1216'	90'	1706	345'	1635'
2	1	122'	0	777	280	50'
	2	1484'	0	65	234	451'
3	1	939'	104'	736	198	285
	2	2405'	203'	67	213	2327
4	1	489	47'	0	19	351
	2	0	0	0	0	0
		9730'	594'	3351'	1483'	5778'

Shaping Course 5778
Gravel Shoulders 1483

606
12
594

REMARKS

Total Excav. (Earth and Rock)	9730
Total Rock Excav.	594
Bal. Earth Excav.	9136
Total Planim. Fill	3351
Factor	1.1
Fill incl. Factor	3686
Total Excav. (Earth and Rock).	
Borrow	
Total Excav. (Earth and Rock)	9730
Total Fill incl. Factor	3686
Excess cut	6044

Void

RUTLAND PROJECT NO. F 22(2)

STATE OF VERMONT

SUMMARY SHEET NO. 2 OF 2 19 47

DEPARTMENT OF HIGHWAYS

TYPE OF CONSTRUCTION Bituminous Concrete Pavement Class 1, Item 3618

APPROXIMATE SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS	ITEM NO.
600	cy	Solid Rock Excavation	10
8900	cy	Common Excavation	10
400	cy	Trench Excavation of Earth	12A
70	cy	Trench Excavation of Rock	12B
8500	cy	Sub-base of Gravel	19C
3600	gal	Double Tack Coat of Refined Tar	29
60	cy	Concrete Class A	41A
6400	lb	Reinforcing Steel	42
	cy	Cement Rubble Masonry includes cy Overrun	45
	lf	16" Corr Galv Metal Pipe Asphalt Coated	52D
	lf	18 Corr Galv Metal Pipe Asphalt Coated	52E
	lf	Standard Underdrain with 6" PCCP/PAC	92A
	lf	Wood Guard Rail	118
	ea	Changing Elevation of Manholes or Catch Basins	88
	ea	Cutting & Removing Trees + Overrun	109
8260	sy	Cleaning Existing Pavement	120
5470	lf	Preparing Transverse Joints	121
3150	ton	Bituminous Concrete Pavement	3618

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS
		SOLID ROCK EXCAVATION
549	cy	Removal of Conc. Pavement 156+70 - 163+00 + 204+00 - 211+76.2
53		Overrun
600		Total
		COMMON EXCAVATION
8113	cy	Roadway
787		Overrun
8900		Total
		TRENCH EXCAVATION OF EARTH
27	cy	Box Culverts + Pipe Culverts
1	cy	~~Changing Elevation of Manholes or Catch Bas~~
372	cy	Underdrain
73		Overrun
400		TOTAL
		TRENCH EXCAVATION OF ROCK
12	cy	Box Culverts + Pipe Culverts
48	cy	Underdrain
10	cy	Overrun
70	cy	Total
		SUB-BASE OF GRAVEL
7721	cy	Roadway
100	cy	Approaches
679	cy	Overrun
8500	cy	Total
		DOUBLE TACK COAT OF REFINED TAR
3258	gal	Roadway
342	gal	Overrun
3600	gal	Total
		CONCRETE CLASS A
53.5	cy	Box Culverts
6.5	cy	Overrun
60.0	cy	Total
		REINFORCING STEEL
5855		Box Culverts
545		Overrun
6400		Total
		CLEANING EXISTING PAVEMENT
10722	sy	Roadway
	sy	Overrun
	sy	Total
		BITUMINOUS CONCRETE PAVEMENT
3088	TON	Roadway
62	TON	Overrun
3150	TON	Total

STATIONS FROM	STATIONS TO	PAVEMENT WIDTHS	EQUATIONS +	EQUATIONS −
149+452	211+762	24' 6231.0		
TOTALS		6231.0		

LENGTH OF PROJECT

STATIONS		FEET	MILES	REMARKS
149+452	211+762	6231.0	1.180	
TOTALS		6231.0	1.180	

SERIES F NO. 22(2) FILED

SHEET 2 OF 2 SHEETS

69770
69770

QUANTITY SHEET

PLANIMETERED SUB-BASE OF GRAVEL

STA	STA	12'	24'			EQ +	EQ −
156+70	163+00	630'					
205+00	211+762		776.2				

GUIDE POSTS

STA	LT	RT

DRAINAGE STRUCTURES

STA	STA	POS	OLD CULV	TYPE IN	TYPE OUT	D	L	COMPAC D	COMPAC L	R C BOX S	R C BOX L	CONC A	REINF STEEL	CRM	DI GRATE	DEPTH DI	TRENCH EXCAV E	TRENCH EXCAV R	RELAY PIPE	Asbem LT	Asbem RT	REMARKS
166+20		℄	2-22RCB	WF	WF					2-2	26	11.5	1440				3	2			5330	Desert 17'LT 9'RT
173+86		℄	3-22RCB	WF	WF					3-2	18	10.6	1162.3				4	3				8 LT 10 RT
177+209		℄	2-22RCB	WF	WF					2-2	19.5	9.6	1004.1				3	2				7.5 LT 12 RT
179+51		℄	3-25RCB	WF	WF					3-25	19	12.4	1264.0				7	3				8 LT 11 RT
198+25		℄	2-22RCB	WF	WF					2-2	19	9.4	983.8				10	2				9 LT 10 RT
205+30		℄		SH				18"	84'					1.9'			39	2		4900		
207+86		LT		SH	SH			15"	40'					3.0'			18					
208+12		RT		SH	SH			15"	28'					3.0'			15					
												53.5	5834.2									

STANDARD UNDERDRAIN WITH 6" PCGIMPAC

STA	STA	LT	RT	TRENCH EX E	TRENCH EX R
	211+762				
	211+762				

CABLE GUARD RAIL

STA	STA	LT	RT	ANCH

WOOD GUARD RAIL

STA	STA	LT	RT

OUTLAND
F 22 (2)
1 of 2

State of Vermont — Department of Highways

Rutland — F. A. P. No. 22 (2)

FORM ENG. 1A — EARTHWORK SHEET NO. 1 — 1947

REVISIONS — By

VOLUMES — Computed by — Checked by

VERTICAL CURVES — Computed by — Checked by

GRADES — Computed by — Checked by

V.C.	% Grade	STATION	PROFILE ELEVATION On Grades	PROFILE ELEVATION On V Curves	Correction for Vertical Curve	DIST.	Total Excavation Earth and Rock AREA	Total Excavation Earth and Rock CU. YDS.	Balance and Rock Excavation AREA	Balance and Rock Excavation CU. YDS.	Embankment AREA	Embankment CU. YDS.	Shaping Course of Gravel AREA	Shaping Course of Gravel CU. YDS.
		146												
		+50												
		147	418.60											
		+50	418.60											
		148	418.60			..			STA 149+45.2					
		+50	418.60						BEGIN PROJECT F 22 (2)					
		149	418.60						C	4	Gr. Sh.			
		+45.2	418.60				1		Gr.Sh.	8				
						4.8		1	S.B.	18	4		6	
		+50	418.60				1		Fac.	1.10		1		1
						50		3	Ex.C.	4	4	7	8	17
	0.00%	150	418.60				2				4		10	
						50		4				7		19
		+50	418.60				2				4		10	
						50		4				7		24
		151	418.60				2				4		16	
						50		4				7		24
		+50	418.60				2				4		10	
						50		3	+55			7		15
		152	418.60				1				4		6	
		+05	418.60			50		2	C	42		7		6
									Gr.Sh	71				
		+50	418.60				1		S.B.	92	4		1	
						50		3	Fac.	1.10		7		2
		153	418.60				2		Ex.C.	42	4		1	
						50		5				7		1
		+50	418.60	418.67	+0.07		3				4		0	
						50		6				7		
		154	418.60	418.88	+0.28		3				4			
						50		6				7		
		+50	418.60	419.23	+0.63		3				4			
						32		4				5		
		+82	419.14	419.53	+0.39		3				4		0	
						18		1			4	3	1	1
		155	419.44	419.72	+0.28		1							
						22		2				3		1
		+22	419.81	419.98	+0.17		3		C	2542	4		1	
						28		3	R	130		4		5
		+50	420.29	420.36	+0.07		2		Gr.Sh.	102	4		9	
						33		4	S.B.	553		6		6
		+83	420.89	420.85	+0.01		5		Fac.	1.10	5		0	
						17		3	Ex.C.	2542		3		
	+1.686%	156	421.13		0		6				5			
						50		8				9		
		+50	421.97		0		3		+70		0		5	0
						50		72		10		9		34
		157	422.82	422.74	-0.08		75		11		5		37	
						50		155		20		9		69
		+50	423.66	423.35	-0.31		92		11		5		37	
						17		75		7		3		27
		+67	423.94	423.51	-0.43		145		11		5		49	
						33		177		13		6		60
	-0.20%	158	424.50	423.79	-0.71		149		11		5		49	
						40		264		16		9		72
		+40	424.42	424.04	-0.38		213		11		7		48	
						10		86		4		3		18
		+50	424.40	424.09	-0.31		252		11		7		51	
						8		78		3	7	2		15
		+58	424.38	424.11	-0.27		276		11		7		49	
		CARRIED FORWARD						927		73		66		
		COLUMN FOOTINGS						973		73		145		

V.C.	% Grade	STATION	PROFILE ELEVATION On Grades	PROFILE ELEVATION On V Curves	Correction for Vertical Curve	DIST.	Total Excavation Earth and Rock AREA	Total Excavation Earth and Rock CU. YDS.	Balance and Rock Excavation AREA	Balance and Rock Excavation CU. YDS.	Embankment AREA	Embankment CU. YDS.	Shaping Course of Gravel AREA	Shaping Course of Gravel CU. YDS.
												Gr. Sh.		
		158+58	424.38	424.11	-0.27		276		11		7		49	
		+75	424.35	424.17	-0.18	17	325	189	11	7	7	4	51	32
		159	424.30	424.22	-0.08	25	341	308	11	10	7	6	51	47
		+30	424.24	424.23	-0.01	30	340	378	11	12	7	8	52	57
		+50	424.20		0	20	280	230	11	8	7	5	41	34
		160	424.10			50	271	510	11	20	7	13	41	76
		+13	424.07			13	286	134	11	5	7	3	41	20
		+50	424.00			37	232	353	11	15	7	10	41	56
		161	423.90			50	210	409	11	20	7	13	41	76
		+50	423.80			50	122	367	11	20	7	13	41	80
		162	423.70			50	78	185	11	20	7	13	45	81
		+50	423.60			50	28	98	11	20	7	14	42	81
		163	423.50			50	0	26	0 Gr.Sh 8	10	8 Fill 20	15	46	88
		+50	423.40			50	C	1512	8	15	56	19	49	91
		164	423.30			50	R	110	8	15	100	70	49	91
		+50	423.20	423.26	+0.06	50	F	656	8	15	120	144	49	91
	-0.20%	165	423.10	423.34	+0.24		Gr.Sh.	141				204		
						50	SB	846	8	15	122	220	49	91
		+50	423.00	423.55	+0.55	50	Fact.	110				233		
		166	423.63	423.87	+0.24	10	Ex.C.	790	8	15	116	55	49	91
		+10	423.76	423.96	+0.20	40	C	135	8	3	130	235	49	19
		+30.5	424.02	424.14	+0.12		F	1026		12				77
							Gr.Sh.	142						
		+50	424.27	424.33	+0.06		S.B	851	8		151		48	
						50	Fact.	1.10		15		194		94
		167	424.90		0		Ex F	994	8		58		53	
						50				14		71		96
		+50	425.53						7		19		51	
						25				6		13		48
		+75	425.85				0		7		10		52	
	+1.267%					25		1		6		5		46
		168	426.17				1		7		0		48	
						50		1		14				82
		+50	426.80				0		8				41	
		+62.5	426.96			50		8		14				67
		169	427.43	427.32	-0.11		9		7				31	
						50		43		14				66
		+50	428.07	427.47	-0.60		37		8				40	
	-3.335%					50		82		14				74
		170	428.70	427.22	-1.48		52		7				40	
		+12.5	428.86	427.13	-1.73									
		+19.3	428.63	427.04	-1.59									
		+25	428.44	426.96	-1.48									
		+50	427.61	426.63	-0.98									
		+68.3	427.00	426.31	-0.69									
		171	425.94	425.64	-0.30									
		CARRIED FORWARD												
		COLUMN FOOTINGS						3262	Rock 167	Gr.Sh. 319		1682		1943

State of Vermont — Department of Highways

RUTLAND — F. ~~A.P.~~ No. 22(2)

FORM ENG. 1A — EARTHWORK SHEET NO. 2 — 1947

PROFILE V.C.	% Grade	STATION	ELEVATION On Grades	ELEVATION On V Curves	Correction for Vertical Curve	DIST.	Total Excavation Earth and Rock AREA	Total Excavation Earth and Rock CU. YDS.	Balance and Rock Excavation AREA	Balance and Rock Excavation CU. YDS.	Embankment AREA	Embankment CU. YDS.	Shaping Course of Gravel AREA	Shaping Course of Gravel CU. YDS.
							Gravel	Shoulder		C	191		SB	295
										Rock	13		FOC	110
										F	17		EX.C	172
										Gr.Sh.	26			
		204	457.79				15				0		19	
						37.9		5.1				2		7.9
		+37.9	459.37				57		0		3		93	
		+50	459.87			62.1		14.0		13		15		21.6
		205	461.95				65		11		10		95	
		+35	463.41											
		+50	464.03											
						100		21.7		20		33		34.8
		+54.1	464.20											
		206	466.11				52		0		8		93	
		+50	468.19			55		9.5		11		11		18.6
		+55	468.90			45	41		11		3		90	
								9.6		1.8		3		15.0
		207	470.27				95		11		0		90	
						20.3		6.0		8				6.8
		+20.3	471.11				85		11				90	
		+50	472.35			55.9		20.0		23	C	1740		18.6
											Rock	157		
		+76.2	473.44				108		11		F	47	90	
		+85	473.81			23.8		10.4		10	Gr.Sh.	124		8.2
		208	474.43				124		11		SB	1689	95	
						22.7		11.7		5	FOC	1.10		7.8
		+22.7	475.37				154		0		EX.C.	1688	91	
		+50	476.51		0	51.4		28.3		10				17.2
		+74.1	477.51	477.47	-0.04		144		11				90	
						25.9		13.3		11				8.6
		209	478.59	478.40	-0.19		134		11				90	
						26.8		12.7		11				8.8
		+26.4	479.69	479.26	-0.43		126		11				90	
		+50	480.61	479.92	-0.75	51.6		22.3		21				17.2
		+78	481.83	480.61	-1.22		107		11				90	
		+87.5	482.23	480.82	-1.41	22		8.5		9				7.3
		210	482.24	481.07	-1.17		101		11				90	
						26.4		10.0		11				8.8
		+26.4	482.25	481.52	-0.73		104		11		C	770	90	
											Rock	77		
		+50	482.27	481.85	-0.42	47.5		18.1		19	F	0		15.8
											Gr.Sh.	38		
		+73.9	482.29	482.09	-0.20		102		11		SB	597	90	
						26.1		9.9		11	FOC	1.10		8.6
		211	482.30	482.25	-0.05		102		11		EX.C	770	88	
		+25	482.32		0	26.8		11.2		11				8.5
		+26.8	482.32				123		11				84	
		+50	482.33			49.4		22.4		20				14.6
		+73.7	482.35											
		+76.2	482.35				123		11				76	
		CARRIED FORWARD						71.6		7.2		0		56.3
		COLUMN FOOTINGS						26.4.7		24.2		6.4		25.4.7

275' V.C. — +0.64 % — + 4.16 %

PROFILE V.C.	% Grade	STATION	ELEVATION On Grades	ELEVATION On V Curves	Correction for Vertical Curve	DIST.	Total Excavation Earth and Rock AREA	Total Excavation Earth and Rock CU. YDS.	Balance and Rock Excavation AREA	Balance and Rock Excavation CU. YDS.	Embankment AREA	Embankment CU. YDS.	Shaping Course of Gravel AREA	Shaping Course of Gravel CU. YDS.
		+76.2	482.35			23.8	12.3	5.2	11.1	5	K		7.6	3.4
		212	482.37				0		0		0		0	
		+50	482.40											
		+75	482.41		Column	Footings		5.4		5				3.4
		213	482.43											
							Gravel	Shoulder						
		204				37.9	7	10						
		+37.9					7							
		+50				62.1		16						
		205					7							
		+50				100		28						
		+54.1												
		206					8							
		+50				55		15						
		+55					7							
						45		12						
		207					7							
						20.3		5						
		+20.3					7							
		+50				55.9		15						
		+76.2					7							
						23.8		6						
		208					7							
						22.7	0	3						
		+22.7												
		+50				51.4		7						
		+74.1					7							
						25.9		7						
		209					7							
						26.4		7						
		+26.4					7							
		+50				51.6		13						
		+78					7							
		+87.5				22		6						
		210					7							
						26.4		7						
		+26.4					7							
		+50				47.5		12						
		+73.9					7							
						26.1		6						
		211					6							
		+25				26.8		5						
		+26.8					5							
		+50				49.4		7						
		+76.2					3							
						23.8		1						
		212					0							
		+50												
		CARRIED FORWARD												
		COLUMN FOOTINGS						18.8						

275' V.C. — +0.064 % — + 4.16 %

State of Vermont — Department of Highways

RUTLAND — F. A. P. No. 22(2)

FORM ENG. 1A — EARTHWORK SHEET NO. 3 — 19

STANDARD 6" P.C.G.M.P.A.C. UNDERDRAIN

LEFT — RIGHT

PROFILE V.C.	% Grade	STATION	ELEVATION On Grades	ELEVATION On V Curves	Correction for Vertical Curve	DIST.	Total Excavation Earth and Rock AREA	Total Excavation Earth and Rock CU. YDS.	Balance and Rock Excavation AREA	Balance and Rock Excavation CU. YDS.	Embankment AREA	Embankment CU. YDS.	Shaping Course of Gravel AREA	Shaping Course of Gravel CU. YDS.
		205+												
		+50												
		+541												
		206	460.01						460.01					
		+50	462.45		0				462.45		0			
	+4.88%	+55	462.70	462.69	-0.01				462.70	462.69	-0.01			
		207	464.89	464.78	-0.11				464.89	464.77	-0.12			
		+203	465.88	465.67	-0.21				465.88	465.64	-0.24			
		+50	467.33	466.90	-0.43				467.33	466.84	-0.49			
		+762	468.61	467.93	-0.68				468.61	467.83	-0.78			
300 VC.		208	469.77	468.81	-0.96			300 VC.	469.77	468.66	-1.11			
		+227	470.30	469.61	-0.69				470.21	469.41	-0.80			
		+50	470.93	470.50	-0.43				470.73	470.24	-0.49			
		+741	471.49	471.25	-0.24				471.19	470.91	-0.28			
	+2.32%	209	472.09	471.98	-0.11				471.69	471.57	-0.12			
		+260	472.70	472.68	-0.02				472.20	472.17	-0.03			
		+50	473.25		0				472.65		0			
		+78	473.90						473.19					
		210	474.41						473.61					
		+264	475.02					+1.92%	474.12					
		+50	475.57						474.57					
		+739	476.13						475.03					
		211	476.73						475.53					
		+268	477.35						476.04					
		+50	477.89						476.49					
		+762	478.50						477.00					

CARRIED FORWARD

COLUMN FOOTINGS

REVISIONS — By

VOLUMES — Computed by — Checked by

VERTICAL CURVES — Computed by — Checked by

GRADES — Computed by — Checked by

PROFILE V.C.	% Grade	STATION	ELEVATION On Grades	ELEVATION On V Curves	Correction for Vertical Curve	DIST.	Total Excavation Earth and Rock AREA	Total Excavation Earth and Rock CU. YDS.	Balance and Rock Excavation AREA	Balance and Rock Excavation CU. YDS.	Embankment AREA	Embankment CU. YDS.	Shaping Course of Gravel AREA	Shaping Course of Gravel CU. YDS.

CARRIED FORWARD

COLUMN FOOTINGS

REVISIONS — By

VOLUMES — Computed by — Checked by

VERTICAL CURVES — Computed by — Checked by

GRADES — Computed by — Checked by

STATE OF VERMONT — DEPARTMENT OF HIGHWAYS

RUTLAND — F.A.P. No. A 022(2)

Form Eng. 1 A — EARTHWORK SHEET NO. 3 — 1947

REVISIONS / VOLUMES / VERTICAL CURVES / GRADES — Computed by / Checked by

SUMMARY OF BALANCES

STATION TO STATION		TOTAL EXCAV. EARTH & ROCK CU. YDS.	ROCK EXCAV. CU. YDS.	EMBANKMENT CU. YDS.	EXCESSES CUT	EXCESSES FILL	ACCUMULATIVE EXCESSES CUT	ACCUMULATIVE EXCESSES FILL	GRAVEL SHOULDERS CU. YDS.	SHAPING COURSE OF GRAVEL CU. YDS.
149+45.2	150+00	4							8	18
150+00	155+00	42							71	92
155+00	160+00	2542	130						102	553
160+00	165+00	1512	110	656					141	846
165+00	170+00	135	0	1026					142	851
									~~114~~	~~2380~~
170+00	204+00	(2794	107	1605	Estimated				832	837)
204+00	205+00	191	13	17					26	295
205+00	210+00	1740	157	47					124	1689
210+00	211+762	770	77	0					38	597
	Totals	9730	594	3351					~~781~~ 1484	~~2581~~ 5778
149+45.2 + 204+00	170+00 + 211+762	6936	487	1746					652	4941
170+00	204+00	2794	107	1605					832	837
Grand	Total	9730	594	3351					1484	5778

SUMMARY OF BALANCES

STATION TO STATION		TOTAL EXCAV. EARTH & ROCK CU. YDS.	ROCK EXCAV. CU. YDS.	EMBANKMENT CU. YDS.	EXCESSES CUT	EXCESSES FILL	ACCUMULATIVE EXCESSES CUT	ACCUMULATIVE EXCESSES FILL	SHAPING COURSE OF GRAVEL CU. YDS.

SUMMARY BY COLUMNS

SHEET NO.	COL. NO.	EXCAVATION TOTAL CU. YDS.	EXCAVATION ROCK CU. YDS.	EMBANKMENT CU. YDS.	SHAPING COURSE OF GRAVEL CU. YDS.

REMARKS

Total Excav. (Earth and Rock)	9730
Total Rock Excav. (+78 CY. Pavt. Removal 151+55 - 152+55)	594
Bal. Earth Excav.	9136
Excv. 151+55 - 152+55	118
Total	9254
Total Planim. Fill	3351
Factor	1.10
Fill incl. Factor	3686
Total Excav. (Earth and Rock).	
Borrow	
Shaping Course + 118 CY (151+55 - 152+55)	5896
Gravel Shoulders	1483
Total Excav. (Earth and Rock)	9730
Total Fill incl. Factor	3686
Excess cut	6044

State of Vermont — Department of Highways

Rutland — F. A. P. No. F-22(2)

FORM ENG. 1A — Final — EARTHWORK SHEET NO. 1 of 4 — 1948

Item 24

Station 149+45.2
Begin Project F-22(2)

Station	Dist.	Total Excavation Earth and Rock: Area	Total Excavation: Cu. Yds.	~~Balance and Rock Excavation~~ Gravel: Area	Shoulders: Cu. Yds.	Embankment	Shaping Course of Gravel: Area	Shaping Course of Gravel: Cu. Yds.
149+45.2		1		4		C. = 3, Gr.Sh. = 5, S.B. = 4	2	
	4.8		0		1	Fac = 0.0, Ex.C. = 3, Fill = 0		0
+50		1		2			2	
	50		3		4			4
150		2		2			2	
	50		4		5			4
+50		2		3			2	
	50		4		6			4
151		2		3			2	
	50		4		6			4
+50		2		3			2	
	50		3		6			3
152		1		3		C. = 37	1	
	50		3		5	Gr.Sh. = 44, S.B. = 45		3
+50		2		2		Fac = 0.0	2	
	50		3		5	Ex.C. = 37		4
153		1		3		Fill = 0	2	
	50		3		4	40		6
+50		2		1			4	
	50		4		2			7
154		2		1			4	
	50		5		2			6
+50		3		1			3	
	50		4		3			4
155		1		2			1	
	22		1		2			1
+22		2		2			1	
	28		2		3			1
+50		2		3			0	
	33		5		4			1
+83		6		3			2	
	17		4		2			1
156		7		4			0	
	50		12		8			0
+50		6		5			0	
	5		1		1			0
+55		6		5			0	
156+55 ← Begin 12" Sub-base plus 5" Surface.		69		4			36	
	45		115		7			60
157		69		4		C. = 2387	36	
	50		150		6	Gr.Sh. = 80, S.B. = 500		68
+50		93		2		Fac = 0.0	37	
	17		71		2	Ex.C. = 2458		23
+67		132		3		Fill = 0	36	
	33		163		5			44
158		134		5			36	
	40		223		8			57
+40		167		6			41	
	10		64		2			15
+50		181		4			41	
	8		57		1			12
+58		205		6			41	
	17		169		3			26
+75		331		5			41	
	25		270		5			38
159		252		6			41	
	30		323		7			46
+30		330		7			41	
CARRIED FORWARD			1630		66			393
COLUMN FOOTINGS			1670		115			442

Item 24

Station	Dist.	Total Excavation Earth and Rock: Area	Total Excavation: Cu. Yds.	~~Balance and Rock Excavation~~ Gravel: Area	Shoulders: Cu. Yds.	Embankment	Shaping Course of Gravel: Area	Shaping Course of Gravel: Cu. Yds.
159+30		330		7			41	
	20		226		4			31
+50		280		5			41	
	50		531		10			76
160		294		6			41	
	13		138		3			20
+13		281		6			40	
	37		349		8			55
+50		229		5			40	
	50		413		8			76
161 — Drive Left at 161+10		217 / 568		4			42 / 67	
	50		779		7			101
+50		273		4		C. = 2130	42	
	50		333		10	Gr.Sh. = 116		77
162		87		7		S.B. = 863	41	
	50		99		13	Fac = 0.0		83
+50		20		7		Ex.C. = 2064	49	
	50		19		15	Fill = 0		90
163		0		9			48	
	50		0		15			91
+50		0		7			50	
	50		0		13			94
164		0		7			52	
	50		0		12			91
+50		0		6			46	
	50		0		12			85
165		0		7			46	
	50		0		14			90
+50		0		8			51	
	50		0		15			90
166		0		8			46	
	10		0		3			17
+10		0		7			47	
	40		0		10			67
+50		0		7			44	
	50		0		13	C. = 112		81
167		0		7		Gr.Sh. = 130	43	
	50		0		13	S.B. = 806		82
+50		0		7		Fac = 0.0	46	
	50		8		12	Ex.C. = 112		81
168		9		6		Fill = 0	42	
	50		8		13			76
+50		0		8			40	
	50		4		14			76
169		4		7			42	
	45		29		11			68
+45		31		6			40	
	50		57		11			74
+95		31		6			40	
169+95 ← End 12" Sub-base plus 5" Surface		30		6			20	
	5		6		1			4
170		30		6			20	
	50		51		13			35
+50		25		8			18	
	50		42		13			31
171		20		6			15	
	50		38		12			29
+50		21		7		C. = 374	16	
	50		46		15	Gr.Sh. = 129		32
172		29		9		S.B. = 361	19	
	50		48		13	Fac = 0.0		38
+50		23		5		Ex.C. = 374	22	
	50		36		9	Fill = 0		44
173		16		5			26	
	50		28		13			42
+50		14		9			19	
	50		29		16			34
174		17		8			18	
CARRIED FORWARD			318		104			285
COLUMN FOOTINGS			3317		364			2061

REVISIONS — By — VOLUMES — Computed by — Checked by — VERTICAL CURVES — Computed by — Checked by — GRADES — Computed by — Checked by

State of Vermont — Department of Highways

Rutland — F. A. P. No. F-22(2)

FORM ENG. 1A — Item 24 — Final — EARTHWORK SHEET NO. 2 of 4 — 1948

Item 24

REVISIONS — By

VOLUMES — Computed by — Checked by

VERTICAL CURVES — Computed by — Checked by

GRADES — Computed by — Checked by

PROFILE V.C.	PROFILE % Grade	PROFILE STATION	PROFILE ELEVATION On Grades	PROFILE ELEVATION On V Curves	Correction for Vertical Curve	DIST.	Total Excavation Earth and Rock AREA	Total Excavation Earth and Rock CU. YDS.	~~Balance and Rock Excavation~~ AREA Gravel	~~Balance and Rock Excavation~~ CU. YDS. Shoulds	Embankment AREA	Embankment CU. YDS.	Shaping Course of Gravel AREA	Shaping Course of Gravel CU. YDS.
		174					17		8				18	
		+50				50		28 ✓		13 ✓				38 ✓
							13		6				23	
		175				50		28 ✓		12 ✓				38 ✓
		+50					17		7				18	
						50		36 ✓		12 ✓				32 ✓
		176					22		6				17	
		+50				50		43 ✓		12 ✓				53 ✓
							24		7				40	
		177				50		50 ✓		14 ✓				67 ✓
		+50					30		8				32	
						50		51 ✓		16 ✓				48 ✓
		178					25		9		C. = 405 ✓		20	
		+50				50		46 ✓		15 ✓	Gr. Sh. = 124 ✓			43 ✓
							25		7		S.B. = 442 ✓		26	
		179				50		44 ✓		11 ✓	Exc. = 566			46 ✓
		+50					23		5		Ex C = 476		24	
						50		43 ✓		10 ✓	Fill = 0			41 ✓
		180					23		6				20	
		+50				50		39 ✓		8 ✓				38 ✓
							19		3				21	
		181				50		29 ✓		10 ✓				36 ✓
		+50					12		8				18	
						50		24 ✓		16 ✓				38 ✓
		182					14		9				23	
		+50				50		32 ✓		14 ✓				40 ✓
							21		6				20	
		183				50		36 ✓		10 ✓				45 ✓
		+50					18		5				29	
						50		32 ✓		10 ✓				51 ✓
		184					17		6				26	
		+50				50		41 ✓		13 ✓				54 ✓
							27		8				32	
		185				50		51 ✓		11 ✓	C. = 570 ✓			49 ✓
		+50					28		4		Gr. Sh. = 107 ✓		21	
						50		69 ✓		9 ✓	S.B. = 455 ✓			41 ✓
		186					46		6		Exc. = 510		23	
		+50				50		85 ✓		11 ✓	Ex C = 510			48 ✓
							46		6		Fill = 0		29	
		187				50		85 ✓		12 ✓				45 ✓
		+50					46		7				20	
						50		72 ✓		11 ✓				39 ✓
		188					32		5				22	
		+50				50		67 ✓		6 ✓				43 ✓
							40		2				24	
		189				50		68 ✓		6 ✓				51 ✓
		+50					33		4				31	
						50		55 ✓		9 ✓				56 ✓
		190					26		6				29	
		+50				50		51 ✓		9 ✓				48 ✓
							29		4				23	
						50		57 ✓		9 ✓				44 ✓
							33		6				25	
						50		69 ✓		11 ✓	C. = 766 ✓			48 ✓
							41		6		Gr. Sh. = 91 ✓		27	
						50		85 ✓		11 ✓	S.B. = 465 ✓			44 ✓
							51		6		Exc. = 556		21	
						50		90 ✓		11 ✓	Ex C = 766			46 ✓
							46		6		Fill = 0		29	
						50		84 ✓		10 ✓				47 ✓
							45		5				22	
						50		93 ✓		8 ✓				37 ✓
							55		4				18	
						50		114 ✓		7 ✓				44 ✓
							68		4				30	
						50		138 ✓		8 ✓				43 ✓
							81		5				16	
		CARRIED FORWARD						138 ✓		8 ✓				43 ✓
		COLUMN FOOTINGS						1935 ✓		355 ✓				1481

PROFILE V.C.	PROFILE % Grade	PROFILE STATION	PROFILE ELEVATION On Grades	PROFILE ELEVATION On V Curves	Correction for Vertical Curve	DIST.	Total Excavation Earth and Rock AREA	Total Excavation Earth and Rock CU. YDS.	~~Balance and Rock Excavation~~ AREA Gravel	~~Balance and Rock Excavation~~ CU. YDS. Shoulds	Embankment AREA	Embankment CU. YDS.	Shaping Course of Gravel AREA	Shaping Course of Gravel CU. YDS.
		190+50					81		5				16	
						50		179 ✓		11 ✓				35 ✓
		191					112		7				22	
		+50				50		186 ✓		10 ✓				38 ✓
							89		4				19	
		192				50		175 ✓		8 ✓				32 ✓
							100		5		C. = 1170 ✓		16	
		+50				50		164 ✓		9 ✓	Gr. Sh. = 100 ✓			31 ✓
							77		5		S.B. = 347 ✓		18	
		193				50		120 ✓		11 ✓	Exc. = 1170			37 ✓
							53		7		Ex C = 1170		22	
		+50				50		78 ✓		12 ✓	Fill = 0			33 ✓
							31		6				14	
		194				50		49 ✓		11 ✓				27 ✓
		+50					22		6				15	
						50		41 ✓		10 ✓				34 ✓
		195					22		5				22	
		+50				50		40 ✓		10 ✓				37 ✓
							21		6				18	
		196				50		41 ✓		9 ✓				31 ✓
		+50					23		4				15	
						50		45 ✓		8 ✓				29 ✓
		197					26		5				16	
		+50				50		61 ✓		17 ✓				36 ✓
							40		13				23	
		198				50		69 ✓		18 ✓				42 ✓
		+50					35		6				22	
						50		49 ✓		12 ✓	C. = 417 ✓			32 ✓
		199					18		7		Gr. Sh. = 123 ✓		13	
		+50				50		30 ✓		14 ✓	S.B. = 379 ✓			30 ✓
							14		8		Exc. = 417		19	
		200				50		23 ✓		14 ✓	Ex C = 417			39 ✓
		+50					11		7		Fill = 0		23	
						50		26 ✓		12 ✓				46 ✓
		201					17		6				27	
		+50				50		26 ✓		10 ✓				51 ✓
							11		5				28	
		202				50		47 ✓		9 ✓				43 ✓
		+50					40		5				18	
						50		68 ✓		11 ✓				39 ✓
		203					33		7				24	
		+50				50		59 ✓		11 ✓				41 ✓
							31		5				20	
		204				50		46 ✓		9 ✓				43 ✓
		+35					19		5				26	
		204+35				50		41 ✓		8 ✓				44 ✓
		+37.9					25		4				22	
		205				50		46 ✓		8 ✓				37 ✓
		+54.1					25		5				18	
						50		56 ✓		11 ✓	C. = 656 ✓			32 ✓
		206+55					36		7		Gr. Sh. = 106 ✓		17	
		207				50		60 ✓		12 ✓	S.B. = 551 ✓			36 ✓
							29		6		Exc. = 656		22	
						50		52 ✓		11 ✓	Ex C = 656			41 ✓
							27		6		Fill = 0		22	
						35		35 ✓		8 ✓				29 ✓
							27		6				22	
		204+35 ← Begin 24" Sub-base plus 8" Surface					76		7				88	
						2.9		8 ✓		1 ✓				9 ✓
							76		7				88	
						62.1		185 ✓		16 ✓				200 ✓
							85		7				86	
						54.1		153 ✓		13 ✓				170 ✓
							68		6				84	
						100.9		240 ✓		26 ✓				338 ✓
							61		8				97	
						45		129 ✓		12 ✓				163 ✓
							94		6				98	
		CARRIED FORWARD						522 ✓		51 ✓				671 ✓
		COLUMN FOOTINGS						2627 ✓		372 ✓				1905 ✓

State of Vermont — Department of Highways

Rutland — F. A. P. No. F-22(2)

FORM ENG. 1A — Item 24 — Final — EARTHWORK SHEET NO. 3 of 4 — 1948

PROFILE V.C.	% Grade	STATION	ELEVATION On Grades	ELEVATION On V Curves	Correction for Vertical Curve	DIST.	Total Excavation Earth and Rock AREA	Total Excavation Earth and Rock CU. YDS.	~~Balance and Rock Excavation~~ AREA Gravel	~~Balance and Rock Excavation~~ CU. YDS. Shoulders	Embankment AREA	Embankment CU. YDS.	Shaping Course of Gravel AREA	Shaping Course of Gravel CU. YDS.
		207+00					94		6				98	
						20.3		73 ✓		5 ✓				71 ✓
		+20.3					99		8				90	
						79.7		386 ✓		21 ✓				288 ✓
		208					163		7		C. = 2039 ✓		105	
						74.1		425 ✓		19 ✓	Gr. Sh. = 126 ✓			254 ✓
		+74.1					146		7		S.B. = 1716 ✓		80	
						26.9		145 ✓		6 ✓	Exc. = 0			83 ✓
		209					157		6		Ex. C. = 2039		93	
						26.4		149 ✓		6 ✓	Fill = 0			92 ✓
		+26.4					147		6				94	
						51.6		251 ✓		12 ✓				182 ✓
		+78					115		7				96	
						22		88 ✓		5 ✓				75 ✓
		210					101		6				89	
						26.4		99 ✓		6 ✓				88 ✓
		+26.4					102		7				90	
						47.5		176 ✓		13 ✓				158 ✓
		+73.9					98		8		C. = 862 ✓		90	
						26.1		98 ✓		8 ✓	Gr. Sh. = 51 ✓			86 ✓
		211					105		8		S.B. = 665 ✓		87	
						26.8		118 ✓		7 ✓	Exc. = 0			89 ✓
		+26.8					132		6		Ex. C. = 862		92	
						49.4		248 ✓		13 ✓	Fill = 0			165 ✓
		+76.2 ← (Town Line)					139		7				89	
						23.8		123 ✓		6 ✓				79 ✓
		212 ← End 24' Sub-base plus 5" Surface					139		7				89	
		Column Footings						2379 ✓		126 ✓				1710 ✓

Station 211+76.2 (Town Line)
End Project F-22(2)

Extra: Station 161+00 - Driveway Left.

		159+55				0						0		
					45		14			C. = 704			7	
		160				17				S.B. = 44		8		
		+13			13		16						4	
						51						8		
		+50			37		133						11	
						133						8		
		+75			25		221						7	
						345						8		
		161			25		320						15	
						351						25		
		Column Footings						704						44

CARRIED FORWARD

COLUMN FOOTINGS

REVISIONS — By

VOLUMES — Computed by — Checked by

VERTICAL CURVES — Computed by — Checked by

GRADES — Computed by — Checked by

PROFILE V.C.	% Grade	STATION	ELEVATION On Grades	ELEVATION On V Curves	Correction for Vertical Curve	DIST.	Total Excavation Earth and Rock AREA	Total Excavation Earth and Rock CU. YDS.	Balance and Rock Excavation AREA	Balance and Rock Excavation CU. YDS.	Embankment AREA	Embankment CU. YDS.	Shaping Course of Gravel AREA	Shaping Course of Gravel CU. YDS.

CARRIED FORWARD

COLUMN FOOTINGS

REVISIONS — By

VOLUMES — Computed by — Checked by

VERTICAL CURVES — Computed by — Checked by

GRADES — Computed by — Checked by

STATE OF VERMONT — DEPARTMENT OF HIGHWAYS

Rutland — F. A. P. No. R 22(2)

Form Eng. 1 A — Final — EARTHWORK SHEET NO. 4 of 4 — 1948

REVISIONS / VOLUMES / VERTICAL CURVES / GRADES — Computed by / Checked by

SUMMARY OF BALANCES

STATION TO STATION		TOTAL EXCAV. EARTH & ROCK CU. YDS.	ROCK EXCAV. CU. YDS.	EMBANKMENT CU. YDS.	EXCESSES CUT	EXCESSES FILL	ACCUMULATIVE EXCESSES CUT	ACCUMULATIVE EXCESSES FILL	(Item 24) Gravel Shoulders Cu. Yds.	SHAPING COURSE OF GRAVEL CU. YDS.
				Final Rock Deductable	Diff ±					
149+45.2	150+00	3	-1						5	4
150+00	155+00	37	-5	39					44	45
155+00	160+00	2387	-25	276	+404				80	500
160+00	165+00	2130	+728 (Part of S.L. incl. in M.L.)						116	863
165+00	170+00	112	-23						130	806
170+00	175+00	374							129	361
175+00	180+00	405							124	442
180+00	185+00	570							107	455
185+00	190+00	766	4358 / 2865 / +1493 / 26 / 467	Original an est. No orig sections. 170 to 204					91	465
190+00	195+00	1170							100	347
195+00	200+00	417							123	379
200+00	205+00	656		1 / 27 / 24					106	551
205+00	210+00	2039	+456	208 sections	+196				126	1716
210+00	212+00	862	+169	" 84 + 35	+ Lengthening to Sta 212+00				51	665
	Totals -	11,928							1,332	7,599
Driveway Left:										
159+55	161+00	704 (Included in summary breakdown) Field Book							Total as per sections for gravel	44
Grand Totals -		12,632							1,332	7,643

SUMMARY OF BALANCES

STATION TO STATION		TOTAL EXCAV. EARTH & ROCK CU. YDS.	ROCK EXCAV. CU. YDS.	EMBANKMENT CU. YDS.	EXCESSES CUT	EXCESSES FILL	ACCUMULATIVE EXCESSES CUT	ACCUMULATIVE EXCESSES FILL	SHAPING COURSE OF GRAVEL CU. YDS.
-14									
-47									
+53									
+17	(Part of S.L. incl. in M.L.)								
-45									
3000 Final / 1132 Orig. / +1868	Original an est., No orig. sections Gravel shldrs.								
+27	Gravel Shoulders above design grade.								
+68	" + Lengthening to Sta 212+00								

SUMMARY BY COLUMNS

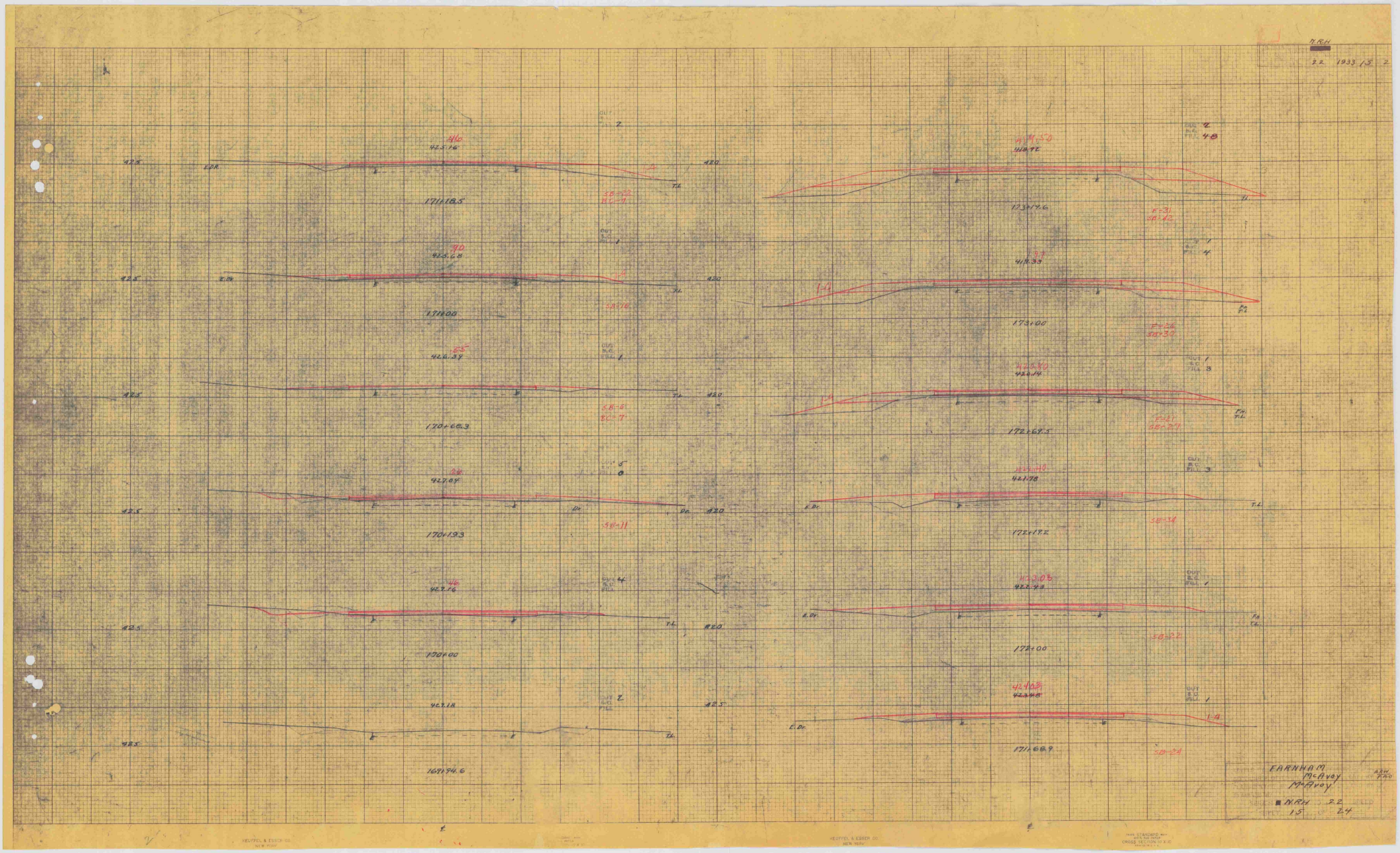
SHEET NO.	COL. NO.	EXCAVATION TOTAL CU. YDS.	EXCAVATION ROCK CU. YDS.	(Item 24) Gravel Shoulders EMBANKMENT CU. YDS.	SHAPING COURSE OF GRAVEL CU. YDS.
1	1	1670		115	442
	2	3317		364	2061
2	1	1935		355	1481
	2	2627		372	1905
3	1	2379		126	1710
Totals		11,928		~~1,332~~	7,599
Drive Left at Sta. 161+00					
3	1	704			44
Grand Totals		12,632		~~1,332~~	7,643

11,928
52 Measured Excav.
39 Deductable rock measured separately to be added to total excavation.
12,019

REMARKS

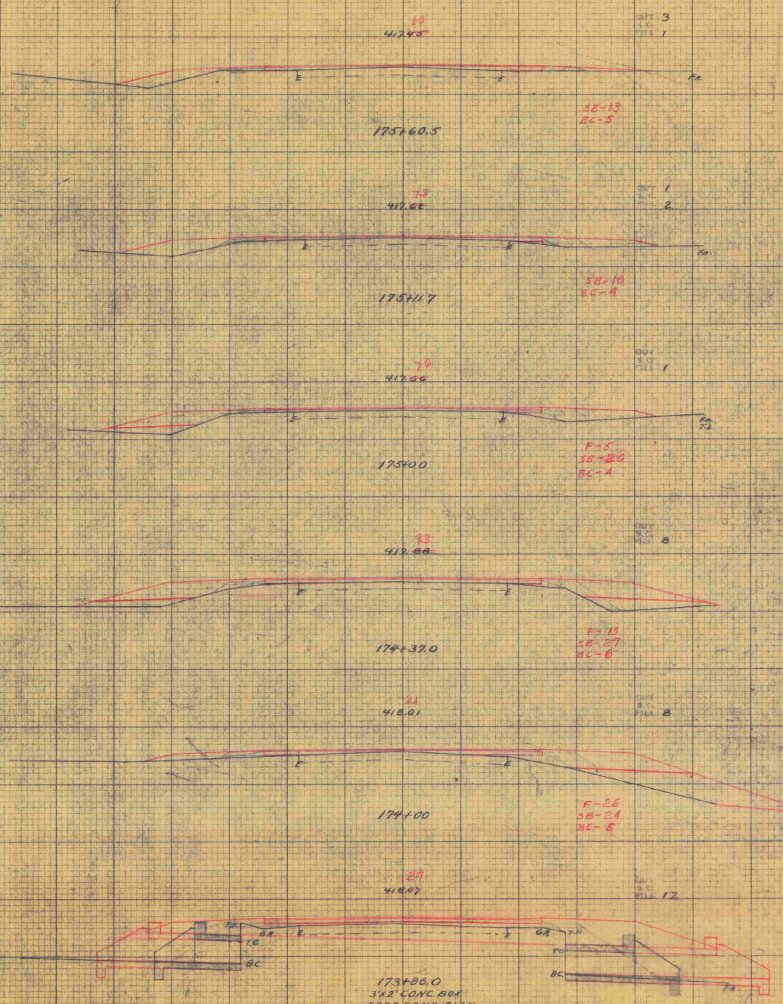
Total Excav. (Earth and Rock)	12,019
Total Rock Excav.	685
Bal. Earth Excav. Net pay excavation	11,334
Total Planim. Fill	—
Factor	0
Fill incl. Factor	—
Total Excav. (Earth and Rock).	
Borrow	
~~Gravel Shoulders (Item 24)~~	~~1,332~~
Shaping Course	7,599
Culv. backfill sta 151+59 / 152+56	129
Total gravel as per Sections	7,728
Total Excav. (Earth and Rock)	
Total Fill incl. Factor	0
Excess cut	

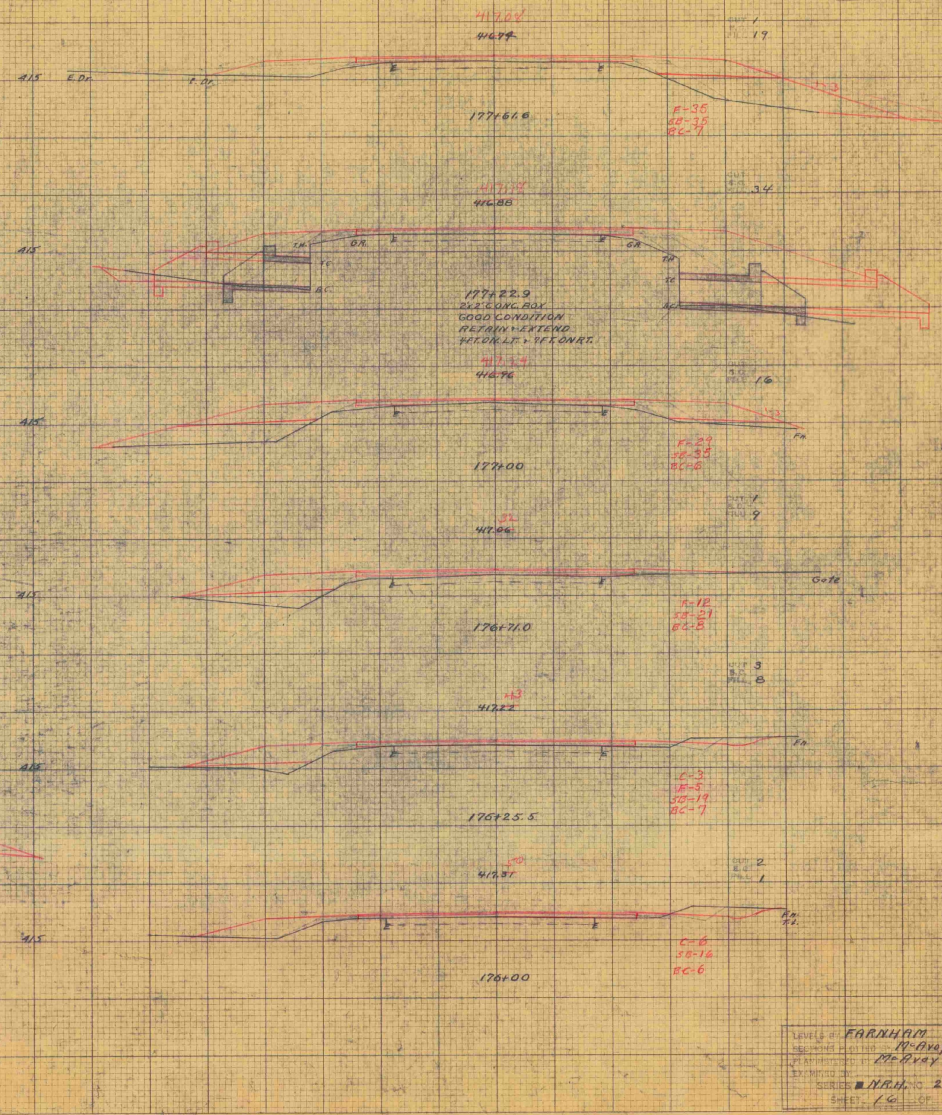
Note: Waste Project. Impossible to figure the factor. Extensive wasting off Project.


N.R.H.
22 1933 15 2
EARNHAM
McAVOY
McAVOY
N.R.H. 22
15 24

N.R.H.

22 1933 16 24



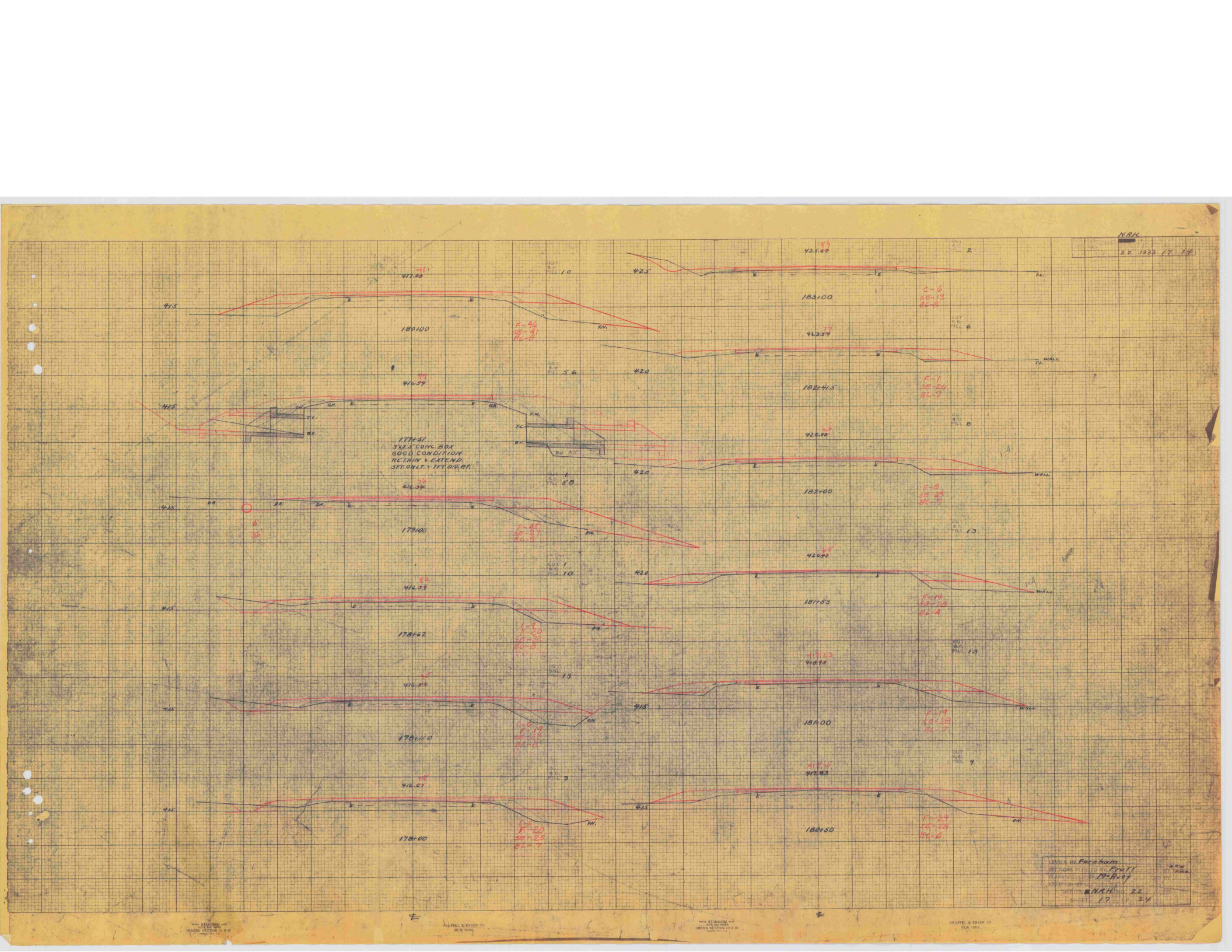


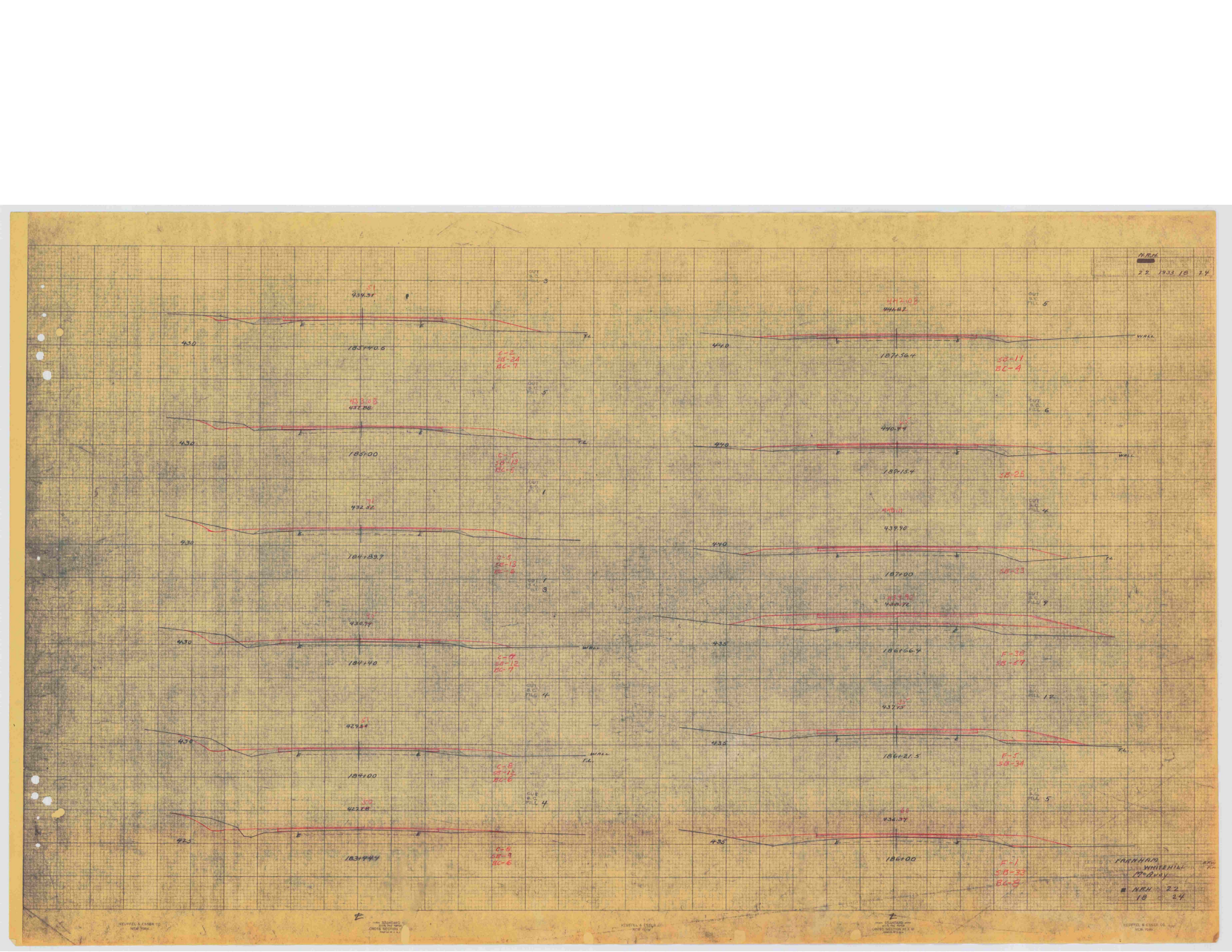
FARNHAM
McAvoy
McAvoy

SERIES N.R.H. NO. 22 SHEET 16 OF 24

A.R.W. 2.22

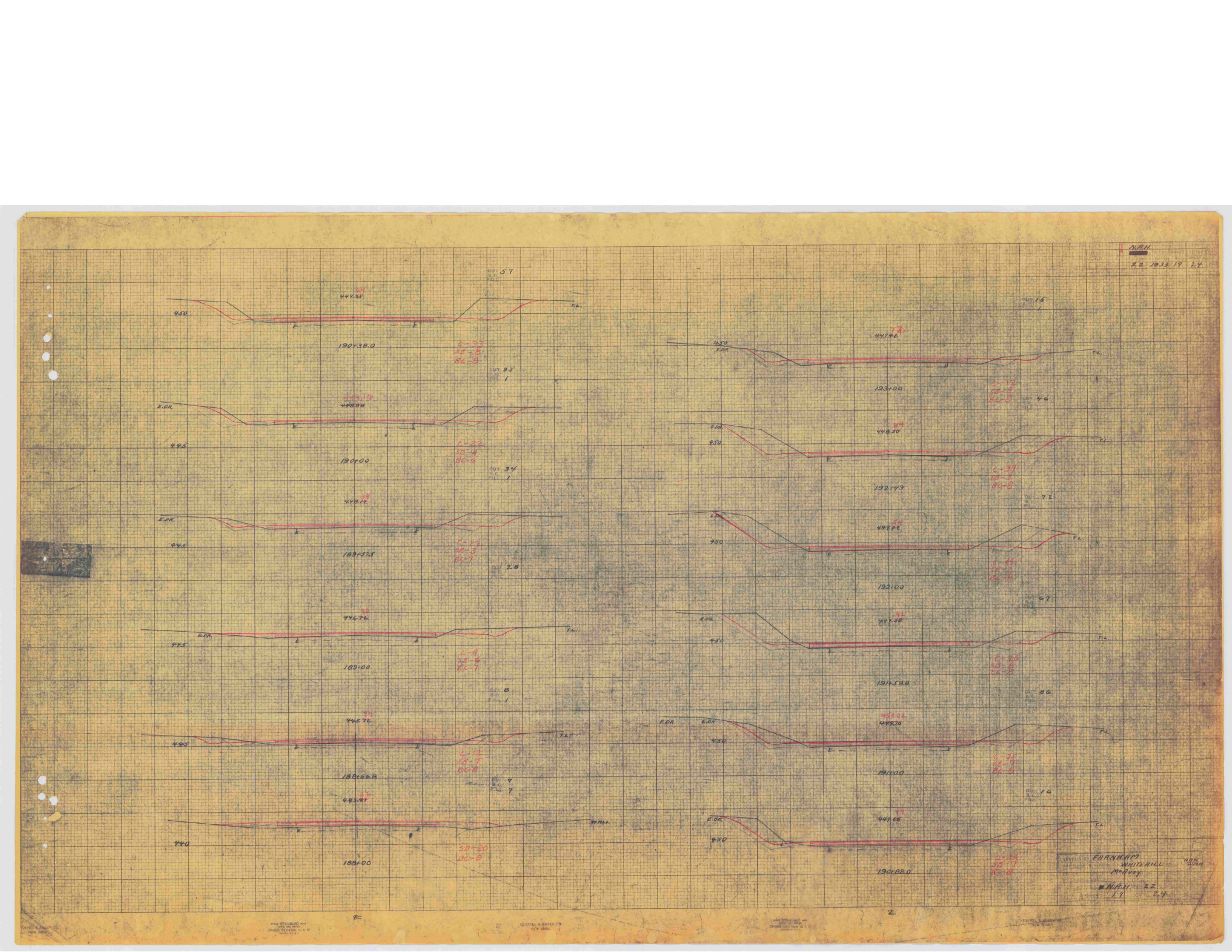
KEUFFEL & ESSER CO. NEW YORK

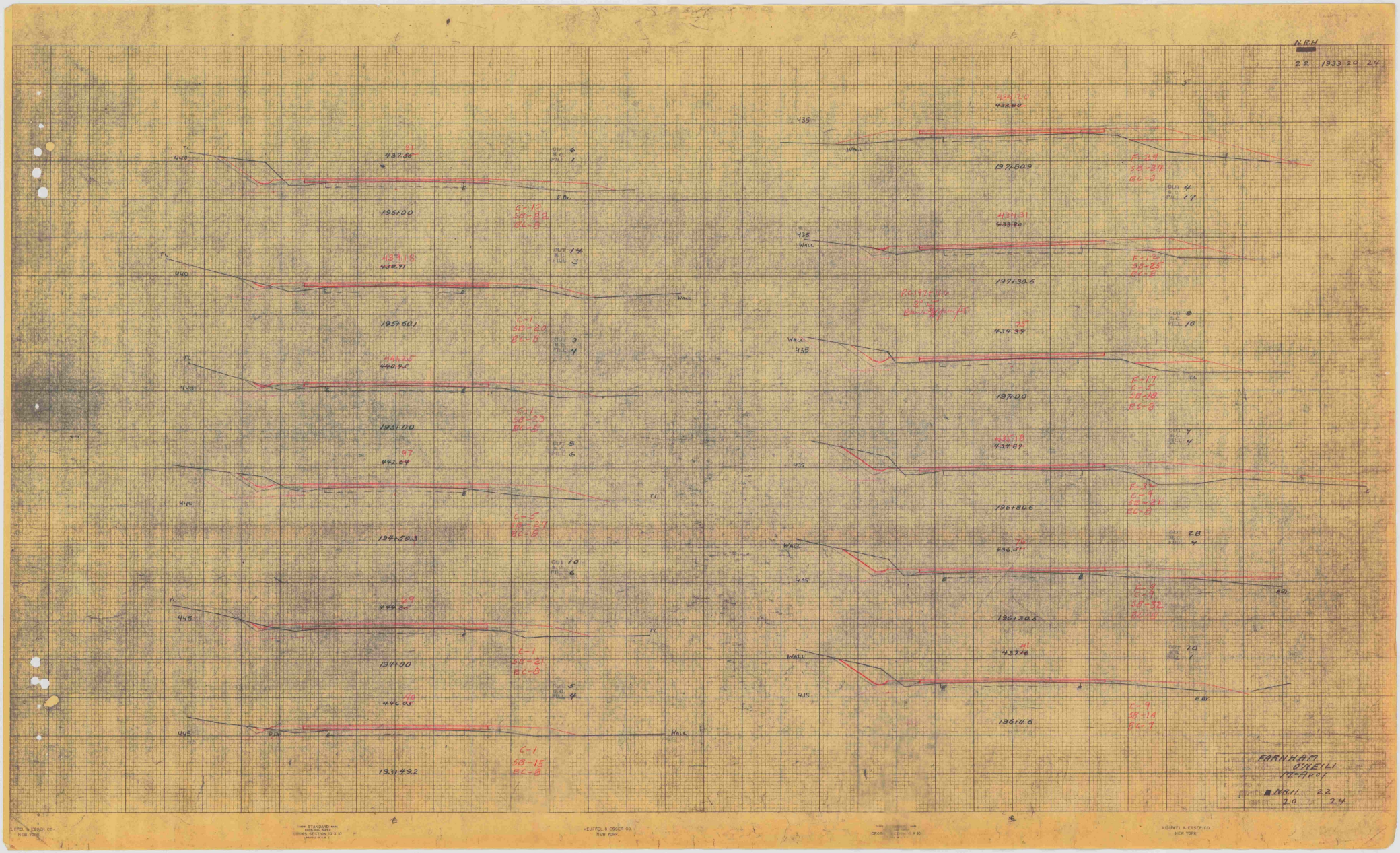

N.R.H.
22 1933 17 24
417.83
415
180+00
F-46
SB-91
BC-8
416.34
177+51
3'X2.5' CONC. BOX
GOOD CONDITION.
RETAIN & EXTEND.
SET ON LT. & JET ON RT.
179+00
F-45
SB-27
BC-6
416.33
178+62
C-7
F-20
SB-32
BC-8
416.53
178+11.0
C-6
F-19
SB-29
BC-8
416.67
178+00
F-20
SB-25
BC-7
425
183+00
C-6
SB-13
BC-8
423.34
420
182+41.5
F-7
SB-26
BC-7
422.63
182+00
F-8
SB-28
BC-7
422.92
181+53
F-19
SB-30
BC-4
418.93
181+00
F-19
SB-30
BC-7
417.17
417.83
182+50
F-29
SB-28
BC-6
WALL
LEVELS BY Fordham
SECTIONS PLOTTED BY Pratt
COMPUTED BY McRury
CHECKED BY
SECTIONS N.R.H. NO. 22
SHEET 17 OF 24


N.R.H.
22 1933 18 24
434.31
430
183+40.6
C-2
SB-24
BC-7
CUT B.C. FILL 3
432.88
185+00
C-5
SB-13
BC-6
CUT B.C. FILL 5
432.42
184+89.7
C-5
SB-13
BC-6
CUT B.C. FILL 1
430.74
184+40
C-7
SB-12
BC-7
CUT B.C. FILL 3
427.84
184+00
C-8
SB-12
BC-6
CUT B.C. FILL 4
427.28
183+44
C-6
SB-9
BC-6
CUT B.C. FILL 4
441.82
187+56.4
SB-11
BC-4
CUT B.C. FILL 5
440.44
187+13.4
SB-28
CUT B.C. FILL 6
439.90
187+00
SB-33
CUT B.C. FILL 4
438.72
186+66.4
F-33
SB-29
CUT B.C. FILL 7
437.73
186+21.5
F-5
SB-34
CUT B.C. FILL 12
436.34
186+00
F-1
SB-33
BC-5
CUT B.C. FILL 5
WALL
FARNHAM
WHITEHILL
McAvay
N.R.H. 22
18 24

N.Y.P.H.

22 1933 19 24




N.R.H.
22 1933 20 24
440
TC
432.35
196+00
C-12
SB-82
EC-8
CUT 6
FILL 1
439.18
438.71
195+60.1
C-7
SB-20
EC-6
CUT 14
FILL 3
Wall
441.25
440.95
195+00
C-1
SB-23
EC-8
CUT 3
FILL 4
442.64
194+50.3
C-5
SB-27
EC-8
CUT 8
FILL 6
445
445.34
194+00
C-1
SB-21
EC-8
CUT 10
FILL 6
444.03
193+49.2
C-1
SB-15
EC-8
CUT 5
FILL 4
EP
435
433.80
197+60.9
F-24
SB-37
EC-8
CUT 4
FILL 17
437+31
433.20
197+30.6
F-15
SB-25
EC-8
RC 197+11.0
439.39
197+00
F-17
SB-28
EC-8
CUT 8
FILL 10
433.19
433.87
196+80.6
F-14
SB-21
EC-8
CUT 7
FILL 4
436.31
196+30.5
F-9
SB-32
EC-10
CUT 28
FILL 4
433.76
196+11.6
C-9
SB-14
EC-7
CUT 10
FILL 7
EP
FARNHAM
O'NEILL
McCARTHY
NRH 22
20 24

N.R.H.

22 1933 21 24

435

439+12

199+51.5

F-57
SB-35
BC-4

435

437.98

193+00

F-48
SB-28
BC-5

435

436.24

198+62.1

F-32
SB-37
BC-6

435

439.93

199+25

2'x2' CONC. BOX
GOOD CONDITION
RETAIN + EXTEND.
4 FT. ON LT & 6 FT. ON RT.

435

434.00

198+00

F-22
SB-34
BC-25

430

448.75

201+83.0

C-2
F-9
SB-28
BC-6

445

446.98

201+28.4

C-9
F-11
SB-27
BC-6

445

443.00

201+00

C-7
F-6
SB-20
BC-6

440

443.30

200+31.9

C-20
F-12
SB-29
BC-6

440

441.14

200+00

F-15
SB-33

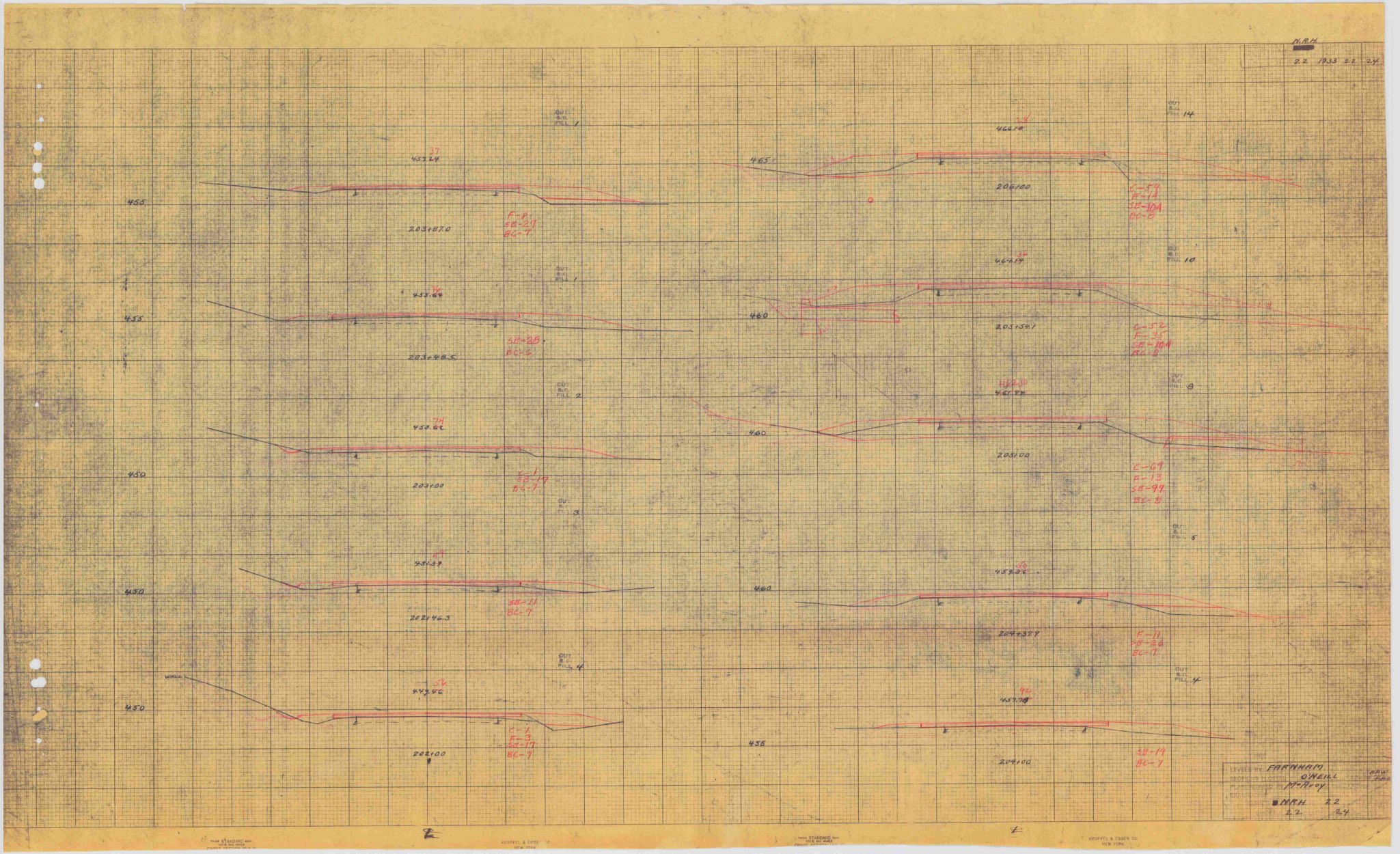
FARNHAM
O'NEILL
McAvey

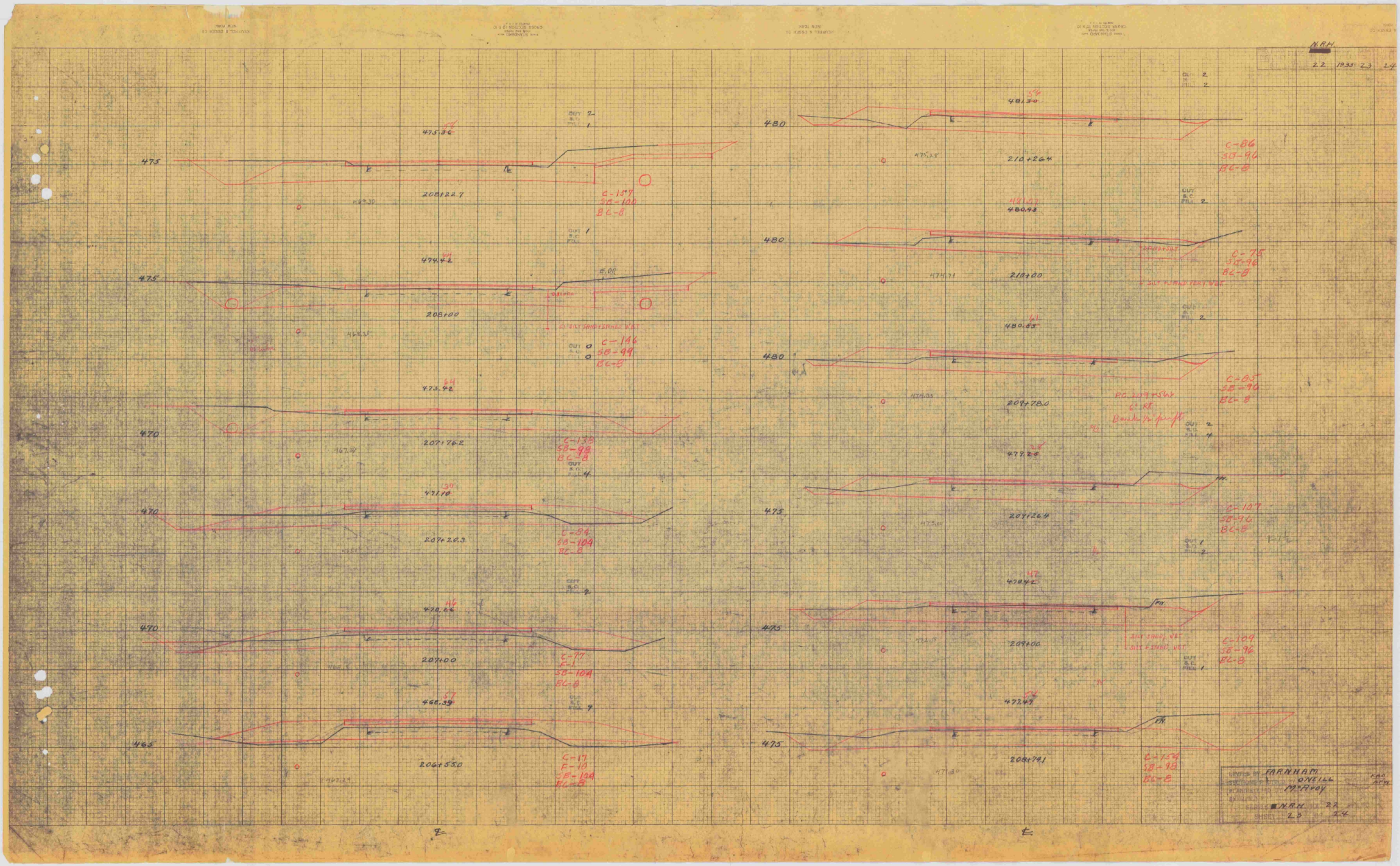
N.R.H. 22
21 24

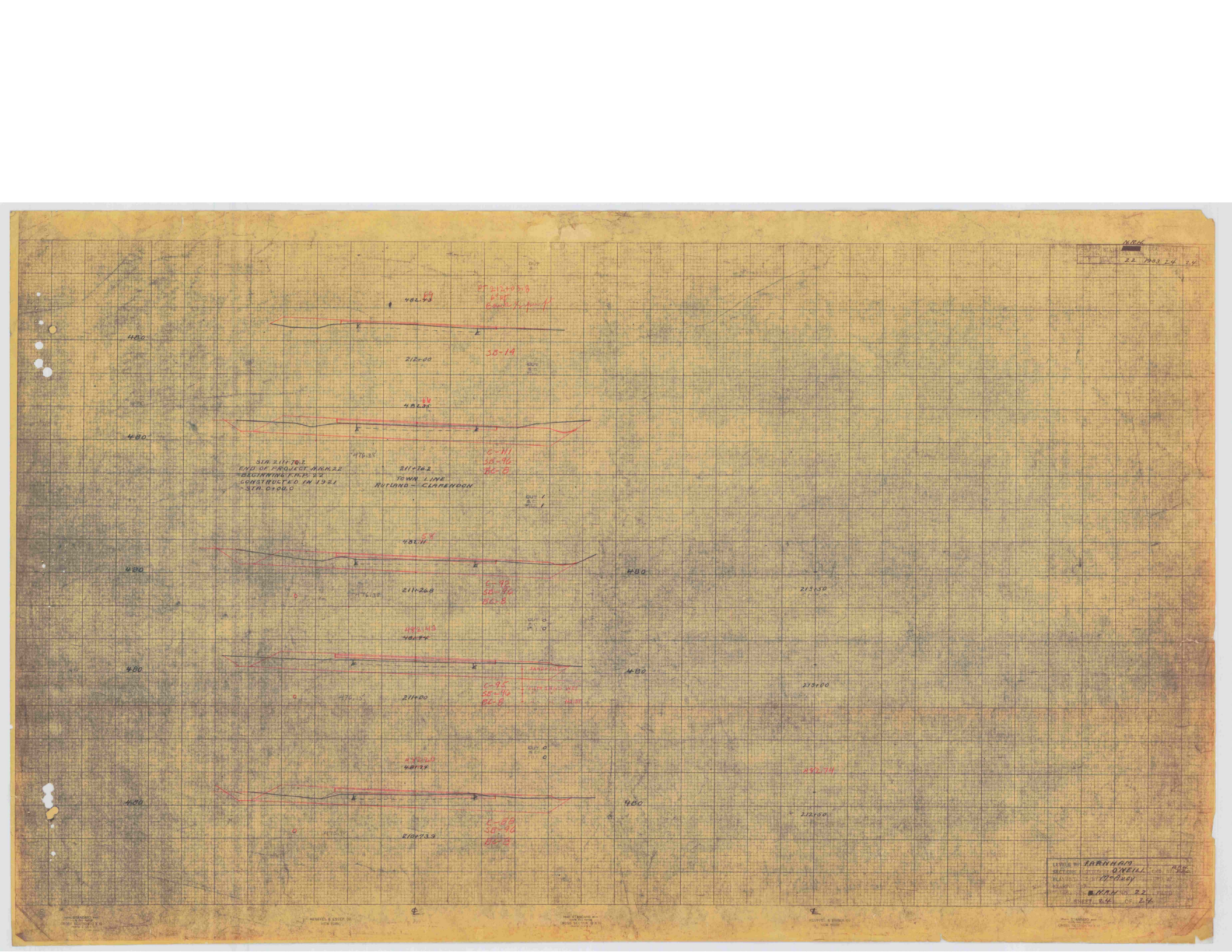
KEUFFEL & ESSER CO.
NEW YORK

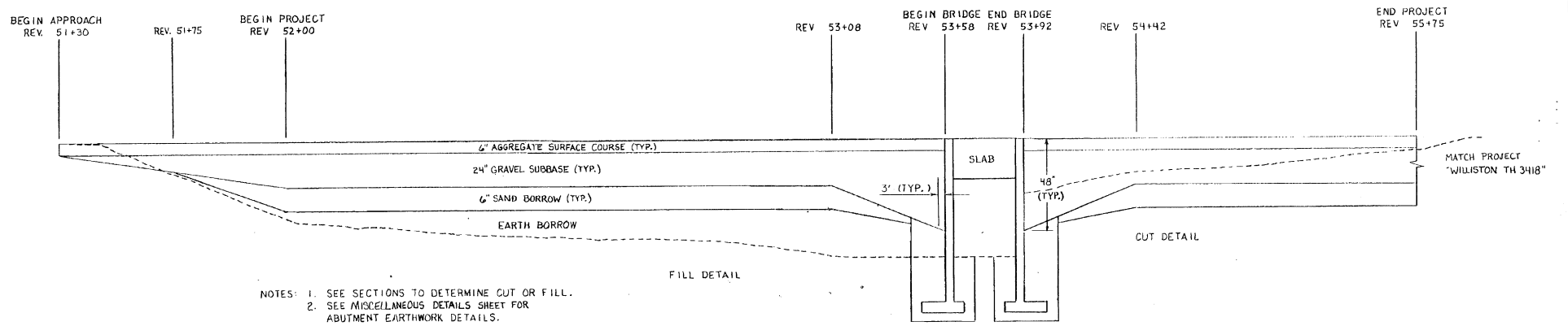
KEUFFEL & ESSER CO.
NEW YORK

KEUFFEL & ESSER CO
NEW YORK


455
453
450
430
430
203+87.0
203+48.5
203+00
202+46.3
202+00
F-8
SB-27
BC-7
SB-28
BC-7
SB-17
BC-7
SB-11
BC-7
C-1
F-3
SB-17
BC-7
465
460
460
460
458
206+00
205+54.1
205+00
204+35.9
204+00
C-59
F-17
SB-104
BC-8
C-52
F-35
SB-104
BC-8
C-67
F-13
SB-99
BC-8
F-11
SB-26
BC-7
SB-19
BC-7
LEVELED BY FARNHAM
O'NEILL
M-R-H
22 24


475
475.36
208+22.7
C-157
SB-100
BC-8
475
474.42
208+00
C-146
SB-99
BC-8
470
473.42
207+76.2
C-135
SB-98
BC-8
470
471.10
207+20.3
C-84
SB-109
BC-8
470
470.26
207+00
C-77
F-1
SB-104
BC-8
465
466.39
206+55.0
C-17
F-10
SB-106
BC-8
480
481.30
210+26.4
C-86
SB-96
BC-8
480
480.93
210+00
C-75
SB-96
BC-8
480
480.53
209+78.0
C-85
SB-96
BC-8
475
477.23
209+26.9
C-107
SB-96
BC-8
475
478.42
209+00
C-109
SB-96
BC-8
475
477.43
208+41.1
C-154
SB-93
BC-8
N.A.H.
2.2
1933
2.3
2.4
FARNHAM
O'NEILL

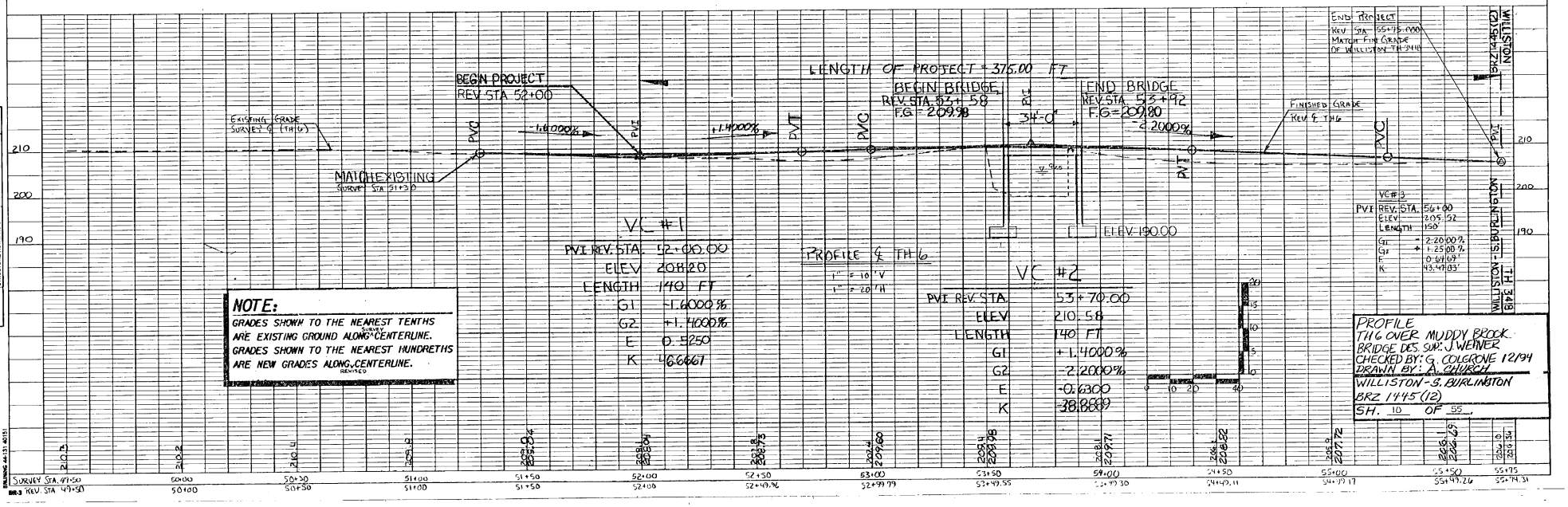

NRH
22 1983 24 24
480
482.93
6"HT
212+00
58-14
482.35
C-H1
SB-90
BC-8
STA. 2111-76.2
END OF PROJECT NRH 22
BEGINNING F.A.P. 22
CONSTRUCTED IN 1921
STA. 0+00.0
476.35
211+76.2
TOWN LINE
RUTLAND — CLARENDON
482.11
C-9S
SB-90
BC-8
476.38
211+26.8
482.74
C-9S
SB-90
BC-8
470.15
211+00
482.74
C-8S
SB-90
BC-8
210+73.9
213+50
213+00
212+50
LEVELS BY FARNHAM O'NEILL
PLANIMETER BY D.P. Avery
SERIES NRH NO. 22
SHEET 24 OF 24



NOTES: 1. SEE SECTIONS TO DETERMINE CUT OR FILL.
2. SEE MISCELLANEOUS DETAILS SHEET FOR ABUTMENT EARTHWORK DETAILS.

EARTHWORK TRANSITION DETAIL - T. H. 6

(NOT TO SCALE)



PROFILE
TH 6 OVER MUDDY BROOK
BRIDGE DES. SUP.: J. WEHNER
CHECKED BY: G. COLGRONE 12/94
DRAWN BY: A. CHURCH
WILLISTON - S. BURLINGTON
BRZ 1445 (12)
SH. 10 OF 55

PLAN — SURVEYED, PLOTTED, DRAWN, TRACED, CHECKED, ALIGNMENT CHECKED, R/W CHECKED, NOTE BOOK, NO.

PROFILE — PLOTTED, DRAWN, TRACED, CHECKED, GRADES CHECKED, STRUCTURE NOTATIONS CHECKED, NOTE BOOK, NO.

BRUNING 44-131-40151

Vermont Agency of
Transportation
PHASE 3-INTERSTATE

INITIALS

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