

STATE OF MAINE
STATE HIGHWAY COMMISSION

PLAN AND PROFILE

STATE HIGHWAY "E"
MANCHESTER - AUGUSTA

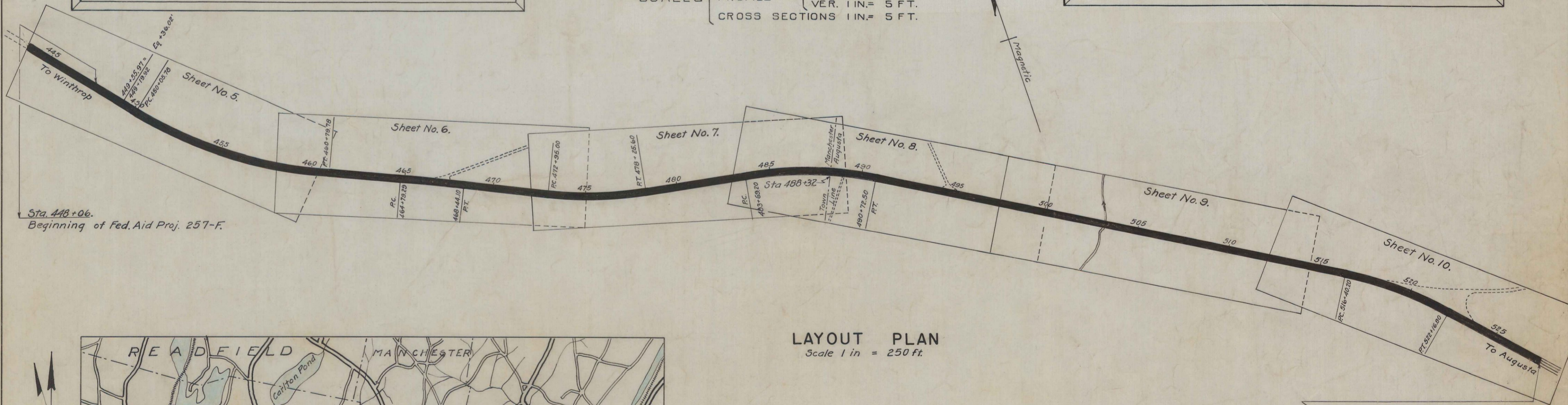
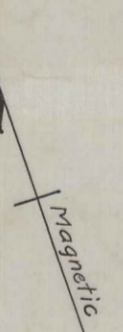
KENNEBEC COUNTY
FEDERAL AID PROJECT NO. 257-F

CONVENTIONAL SIGNS	
STATE OR NATIONAL LINE	SURVEY LINE
COUNTY LINE	CULVERT
TOWN LINE	DROP INLET
UNFENCED PROPERTY	TROLLEY POLE
FENCE	POWER POLE
RIGHT OF WAY LINE	TEL. POLE
TRAVELED WAY	MARSH
RAILROAD	TREES
RETAINING WALL	STONE WALL

INDEX OF SHEETS		
SHEET NO. 1	TITLE PAGE	STA. 448 + 06 to 527 + 70
SHEET NO. 2 & 2A	TYPICAL SECTIONS	
SHEET NO. 5 - 10	PLAN AND PROFILE	STA. 448 + 06 to 527 + 70
SHEET NO. 11 - 21	CROSS-SECTIONS	STA. 448 + 06 to 527 + 70
SHEET NO.	BRIDGES	STA.
SHEET NO. 3-3A & 4	SPECIAL DETAILS	

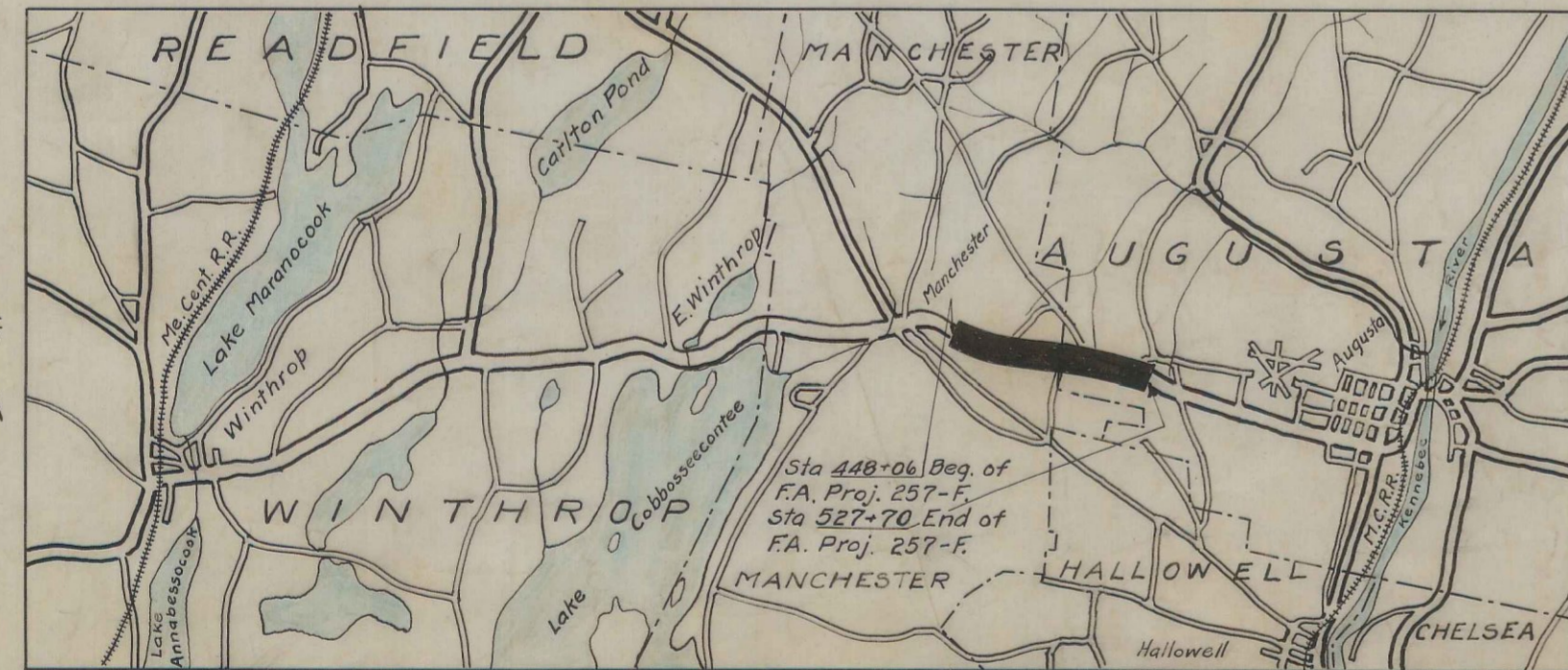
TOTAL LENGTH **1.515** MILES

SCALES { PLAN 1 IN = 50 FT.
 { PROFILE { HOR. 1 IN = 50 FT.
 { VER. 1 IN = 5 FT.
 { CROSS SECTIONS 1 IN = 5 FT.



Sta. 448+06.
Beginning of Fed. Aid Proj. 257-F.

Sta. 527+70. End of Fed. Aid Proj. 257-F.
and Beginning of Fed. Aid Proj. 257-D.



LAYOUT PLAN
Scale 1 in = 250 ft.

Note: All work contemplated under this contract to be governed by and in conformity with the specifications as revised May 1935, except as modified on this plan.

APPROVED:
MAINE STATE HIGHWAY COMMISSION

Paul C. Brewster
CHAIRMAN

Steward

Frederic Banning
CHIEF ENGINEER

APPROVED:
U. S. BUREAU OF PUBLIC ROADS

DISTRICT ENGINEER

CHIEF ENGINEER

DIRECTOR

A PORTION KENNEBEC CO.

AA-28

CEMENT CONCRETE PAVEMENT

NOTE: Where Gravel Base is completed during 1936 Bituminous Treatment may be required over a width of 20 ft.

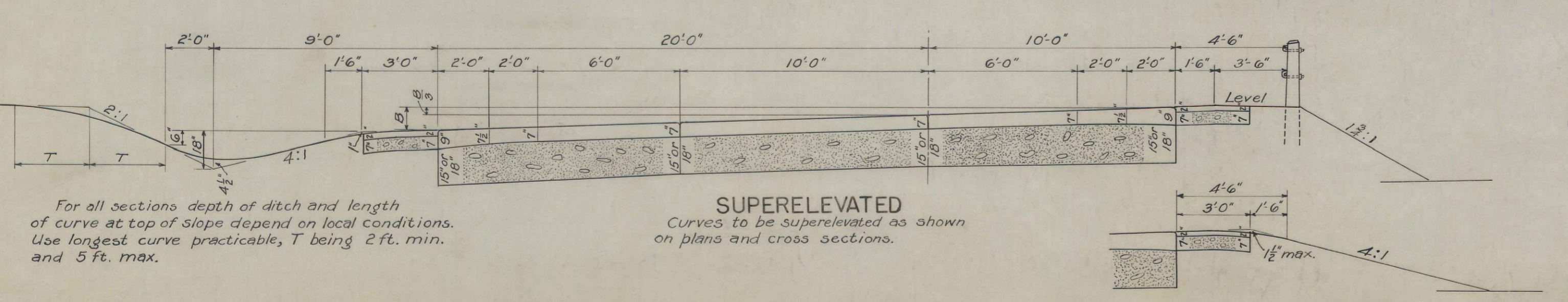
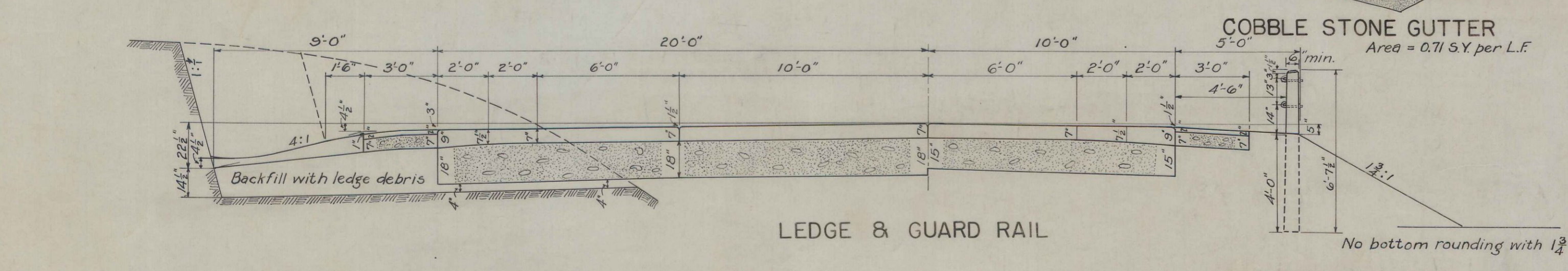
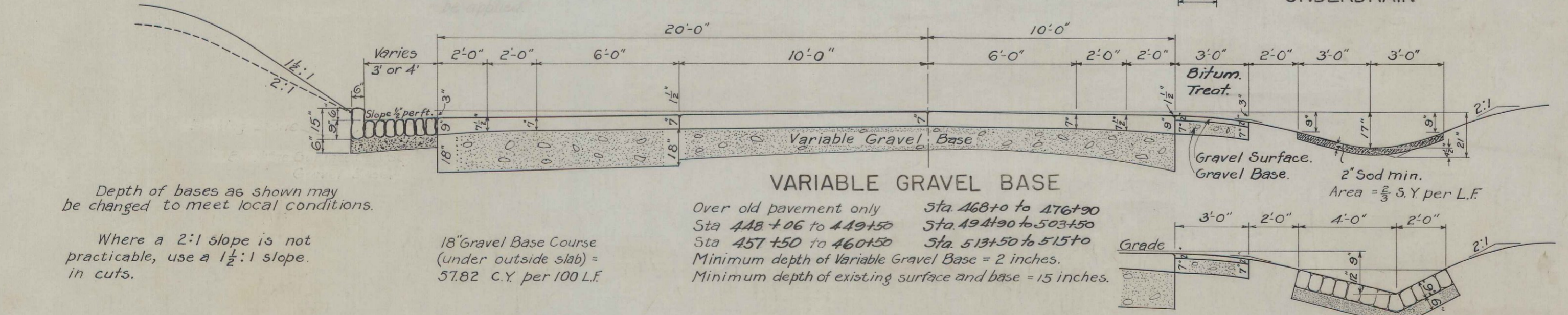
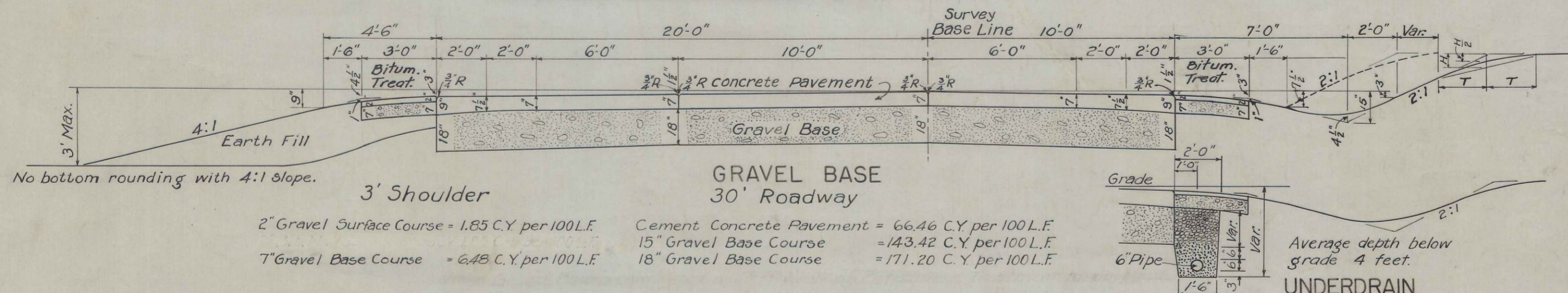
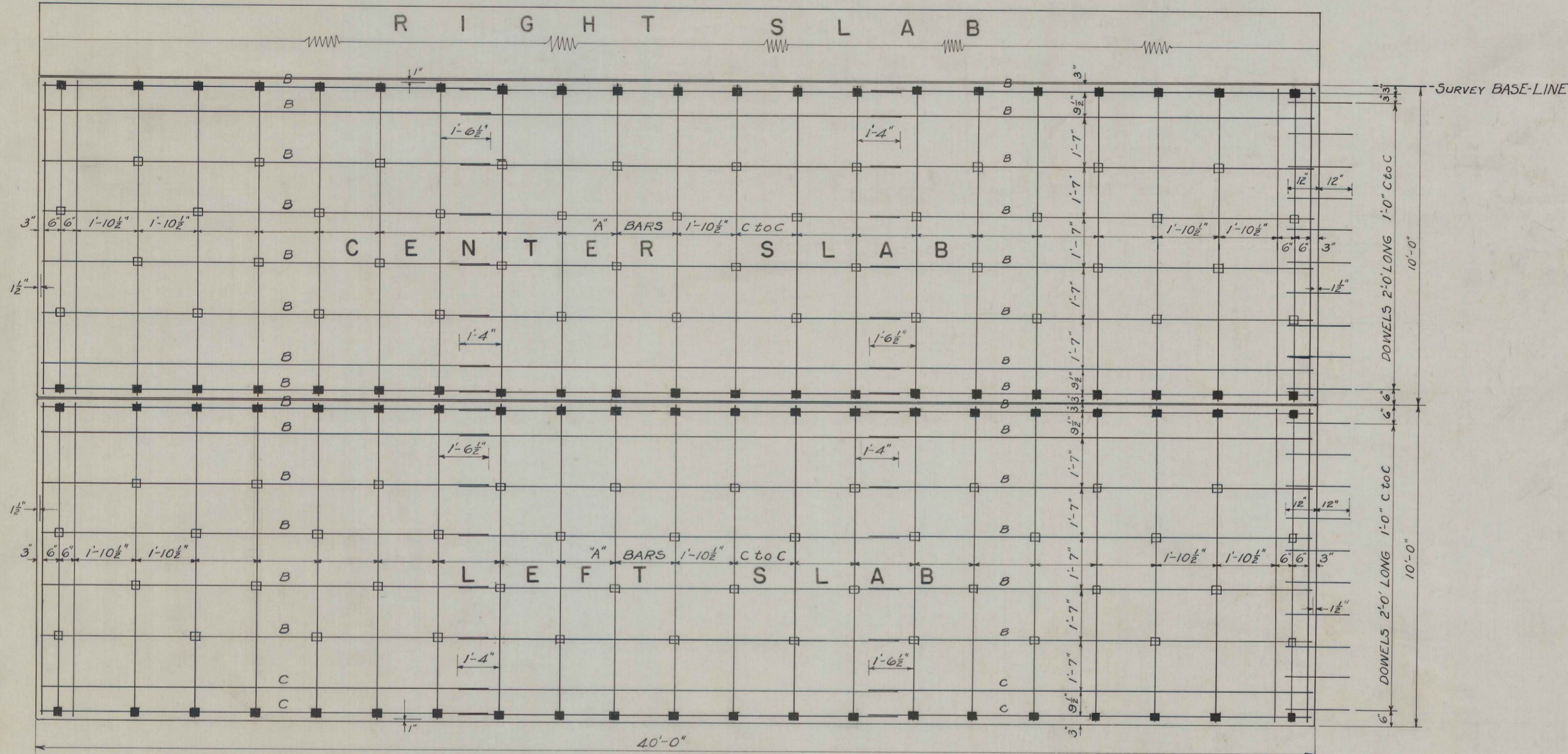


TABLE OF FINAL QUANTITIES			
ITEMS	DESCRIPTION	QUANTITY	UNIT
12-A	Earth Excavation	13,007	c.y.
12-B	Rock Excavation	306	c.y.
12-C	Trees Removed	16	each
13	Excavation for Struct.	1,399	c.y.
17-A	Common Borrow	990	c.y.
17-B	Gravel Borrow	608	c.y.
23	Gravel Base Course	12,811.5	c.y.
27	Gravel Surface Course	343	c.y.
31	Cmt. Concrete Pavt.	4,120.5	c.y.
32	Stl. Rein. for Con. Pavt.	279,613	lbs.
35-A	Class "A" Concrete	6.2	c.y.
35-B	Class "B" Concrete	49.4	c.y.
36	Stl. Rein. for Con. Str.	994	lbs.
38	Cmt. Rubble Masonry	17.4	c.y.
40-A	12" C.M.P.	278	l.f.
40-B	15" C.M.P.	86	l.f.
40-E	24" C.M.P.	50	l.f.
43-B	15" R.C.D.	260	l.f.
43-D	24" R.C.D.	152	l.f.
	6" V.C.P.	50	l.f.
44-C	12" V.C.P.	44	l.f.
44-D	15" V.C.P.	250	l.f.
44-E	18" V.C.P.	280	l.f.
45-A	Drop Inlets "A"	5	each.
45-B	Drop Inlets "B"	2	each.
45-C	Catch Basins	1	each.
48-A	Underdrain "A"	230	l.f.
48-B	Underdrain "B"	2,351	l.f.
49	Cobble Stone Gutter	2,596	s.y.
51-A	Wire Cable Guard Rail	3,531	l.f.
51-B	Anchorage for W.C.G.R.	22	each.
52	Loam	4	c.y.
53-B	Seeding - Roadside	179.5	T.S.F.
54	Sodding	1,092	s.y.
55	Bituminous Treatment	2,652	gals.
57	Integral Conc. Curb	3,600	l.f.
58	Cmt. Concrete Base	1,348.5	c.y.
59	Tack Coat	7,854	s.y.
60	Bit. Conc. Surf. Course	7,857.7	s.y.
61	Relaying 12" C.M.P.	78	l.f.
62	Relaying 18" C.M.P.	30	l.f.
	Liquidated Damages	3	days.

NOTE:
 PREMOULDED BITUMINOUS EXPANSION JOINT FILLER SHALL BE USED STA. 448+06 TO STA. 476+90 & STA. 494+90 TO STA. 527+70
 PREMOULDED CORK EXPANSION JOINT FILLER AND TIE BARS SHALL BE USED STA. 476+90 TO STA. 494+90

PLAN OF PAVEMENT REINFORCEMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
0	MAINE	257-F		3	25



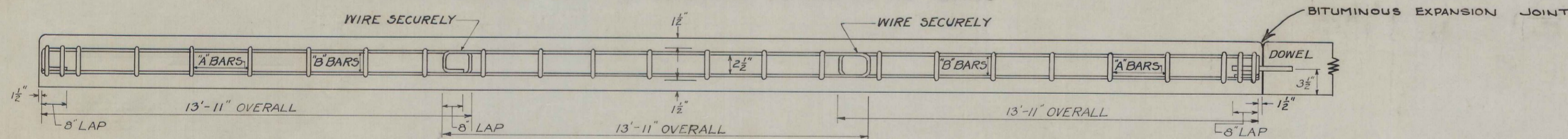
REINFORCING DATA
 Bars $\frac{3}{8}$ " Diameter. Plain Steel = 0.376 Lbs. per Lin. Ft.
 Dowels $\frac{3}{4}$ " Diameter. Plain Steel = 1.502 Lbs. per Lin. Ft.
 "A" Bars Bent 9'-10" overall. Lapped 6" and wired.
 "B" Bars Bent 13'-11" overall. Lapped 8" and wired.
 "C" Bars Straight 13'-11" long. Top and Bottom.
 Dowels 2'-0" Long.
 Each Outside 10'x40' Slab contains 25 "A" Bars, 18 "B" Bars and 12 "C" Bars made up in 3 Sections.
 The Center 10'x40' Slab contains 25 "A" Bars, and 24 "B" Bars made up in 3 Sections.
 Each Section to be securely wired before placing.
 Each 10'x40' Slab contains a minimum of 42 low Supports and 42 high Supports.
 Total weight of steel including dowels for a 30 foot width of pavement 10,908 lbs. per sq. yd.

Dowels must be accurately held in place perpendicular to the plane of the cross section of the pavement. One-half of the dowel shall be coated with bituminous material sufficient to break the bond, and provided with a 6 in. approved tight fitting metal cap allowing a $\frac{3}{4}$ in. expansion.

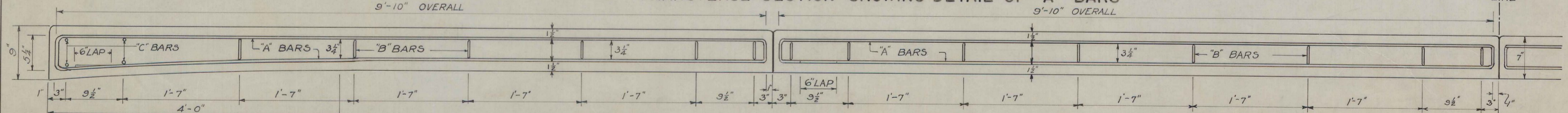
ALL BARS $\frac{3}{8}$ " DIAM. DOWELS $\frac{3}{4}$ " DIAM.
 ALL TRANSVERSE BARS ARE "A" BARS

□ HIGH SUPPORTS
 ■ LOW SUPPORTS

LONGITUDINAL SECTION SHOWING DETAIL OF B BARS



TRANSVERSE SECTION SHOWING DETAIL OF A BARS



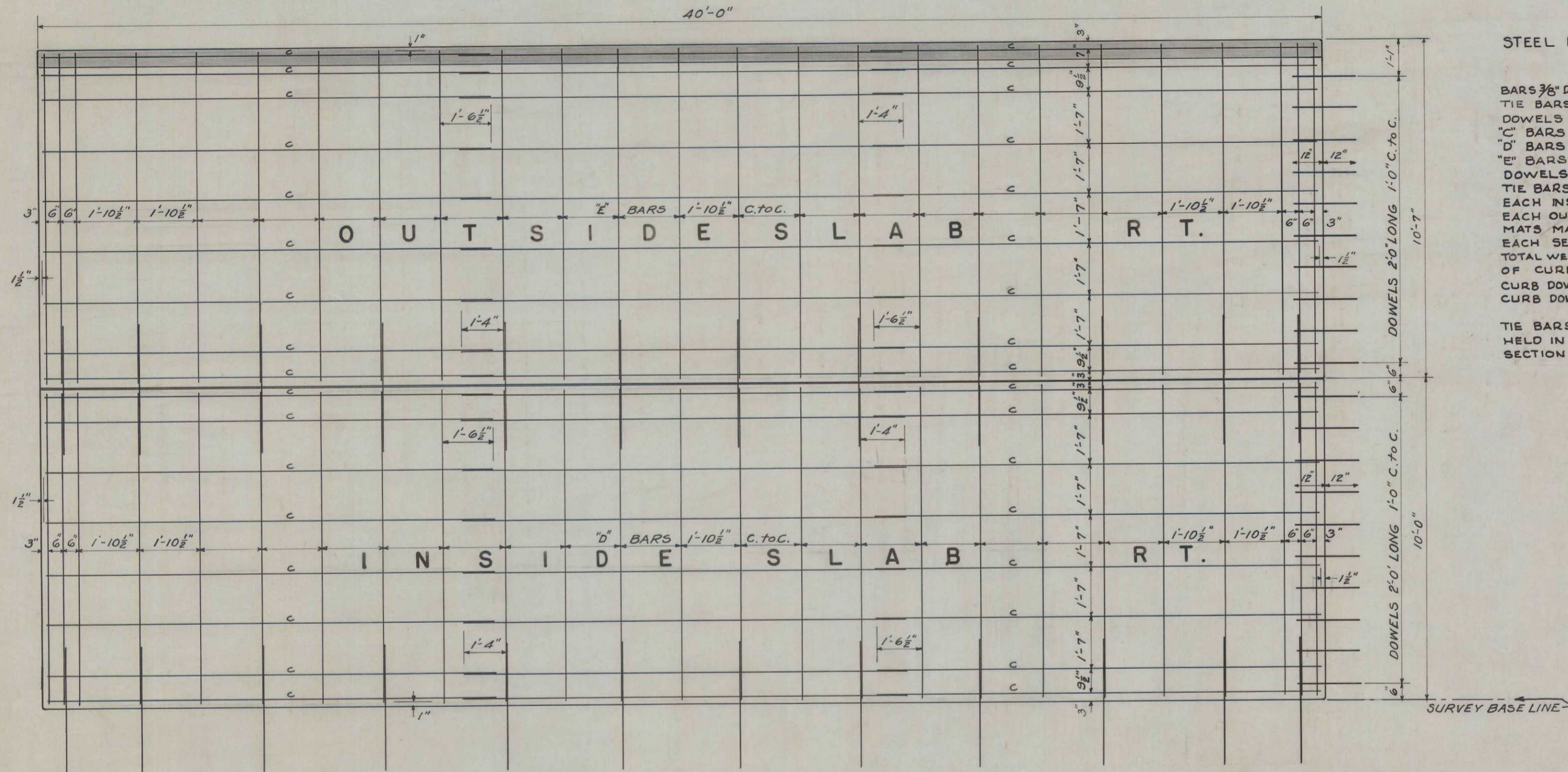
LEFT SLAB

CENTER SLAB

RT. SLAB

PLAN OF CONCRETE BASE REINFORCEMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MAINE	257-F		3-A	23



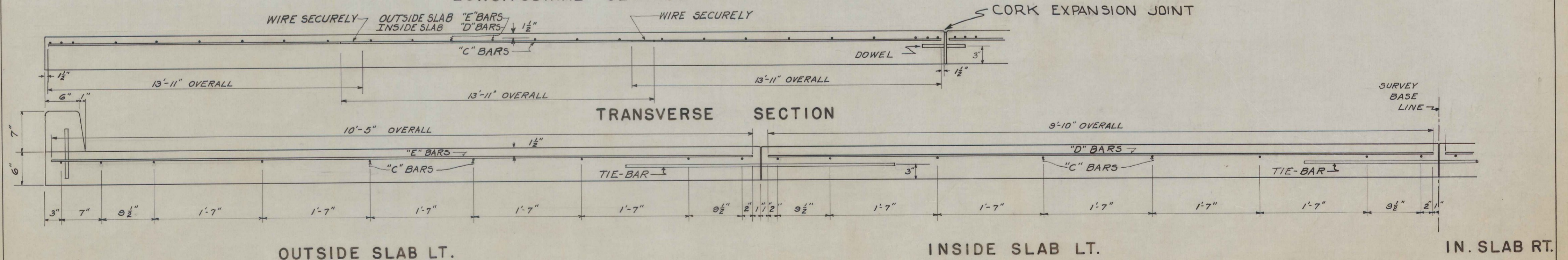
STEEL REINFORCEMENT FOR CONCRETE BASE SINGLE MAT

BARS $\frac{3}{8}$ " DIA. PLAIN STEEL = 0.376 LBS. PER LIN. FT.
 TIE BARS $\frac{5}{8}$ " DIA. PLAIN STEEL = 1.043 LBS. PER LIN. FT.
 DOWELS $\frac{3}{4}$ " DIA. PLAIN STEEL = 1.502 LBS. PER LIN. FT.
 "C" BARS STRAIGHT 13'-11" LONG
 "D" BARS STRAIGHT 9'-10" LONG
 "E" BARS STRAIGHT 10'-5" LONG
 DOWELS 2'-0" LONG
 TIE BARS 4'-0" LONG
 EACH INSIDE 10'X40' SLAB CONTAINS 24 "C" BARS & 25 "D" BARS
 EACH OUTSIDE 10'X41'-2" SLAB CONTAINS 27 "C" BARS & 25 "E" BARS
 MATS MADE UP IN 3 SECTIONS
 EACH SECTION TO BE SECURELY WIRED BEFORE PLACING
 TOTAL WEIGHT OF STEEL FOR 41'-2" WIDTH OF PAVEMENT = 6.474 LBS. PER SQ. YD. EXCLUSIVE OF CURB DOWELS.
 CURB DOWELS $\frac{1}{2}$ " DIA. PLAIN STEEL = 0.668 LBS. PER LIN. FT.
 CURB DOWELS 9" LONG IN STANDARD CURB & 7" LONG IN DRIVEWAY CURB
 TIE BARS SHALL BE INSTALLED WITHOUT BENDING AND SHALL BE ACCURATELY HELD IN PLACE PERPENDICULAR TO THE PLANE OF THE TRANSVERSE SECTION OF THE PAVEMENT.

— ALL BARS $\frac{3}{8}$ " DIAM.— DOWELS $\frac{3}{4}$ " DIAM.— TIE-BARS $\frac{5}{8}$ " DIAM.—

NOTE: TIE BARS MAY UNIFORMLY BE SPACED 3'-4" CENTER TO CENTER IN LIEU OF SPACING SHOWN ON PLAN.

LONGITUDINAL SECTION



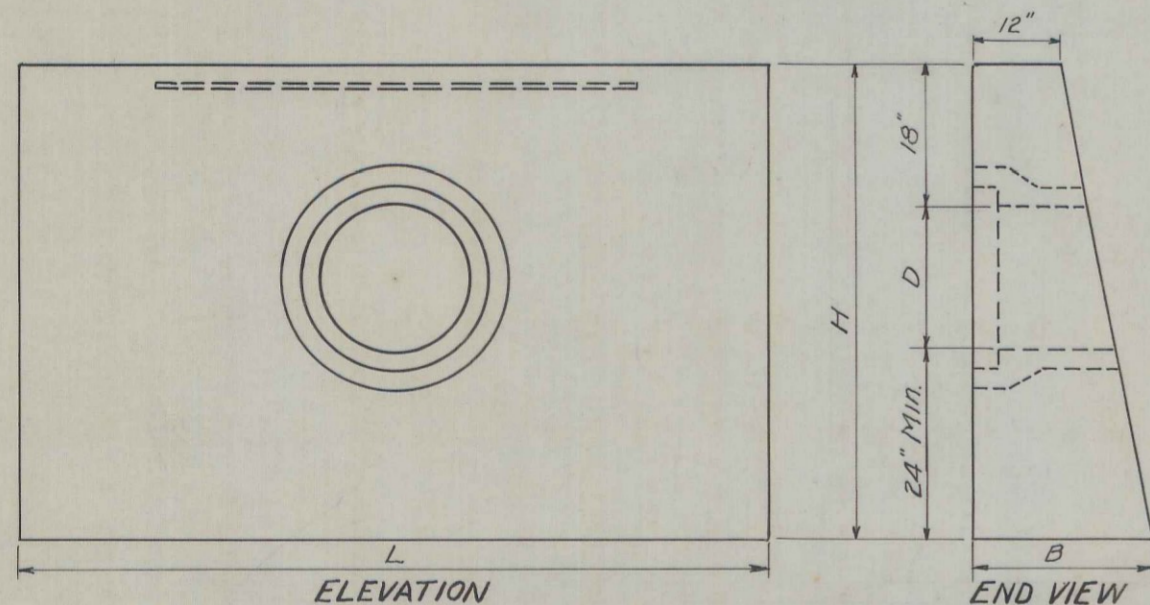
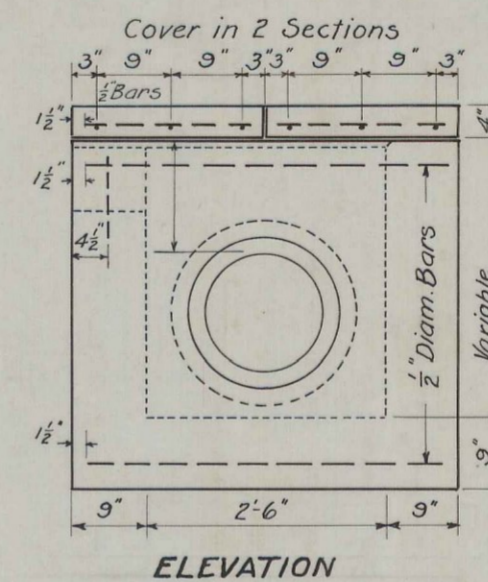
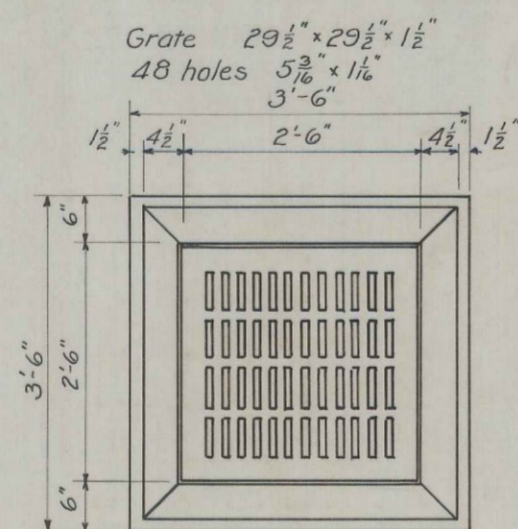


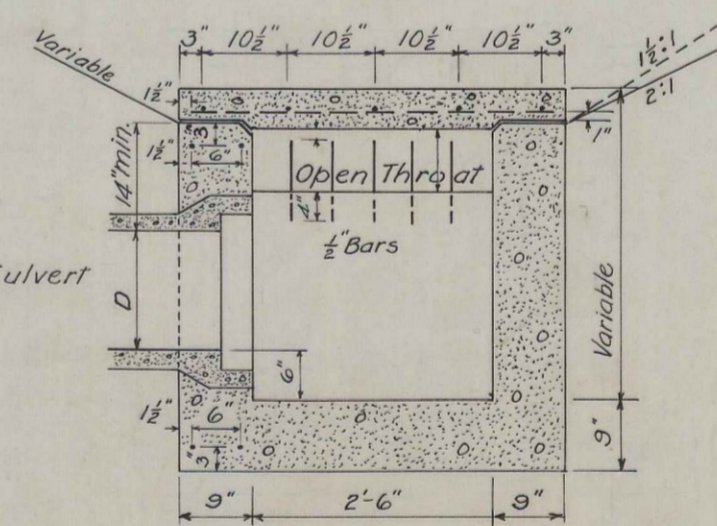
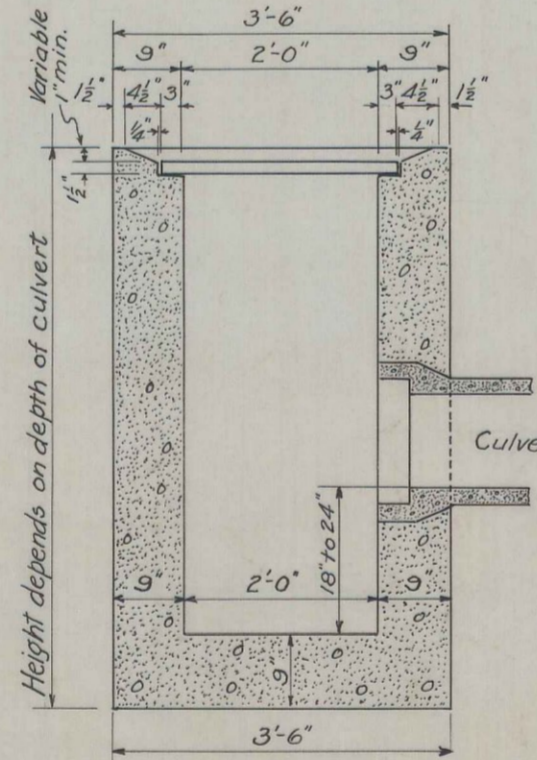
TABLE OF QUANTITIES

D	H	L	B	One end wall				Number of Bars	Length of Bars
				Cast Pipe Bell End C.Y. Conc.	Machine Spigot End C.Y. Conc.	Pipe Bell End C.Y. Conc.	Spigot End C.Y. Conc.		
12"	4'-6"	5'-9"	1'-11"	1.30	1.32	1.32	1.33	2 1/2"	4'-0"
15"	4'-9"	6'-9"	2'-0"	1.64	1.67	1.66	1.68	2 1/2"	4'-6"
18"	5'-0"	7'-9"	2'-0"	1.96	2.00	1.98	2.01	2 1/2"	5'-0"
24"	5'-6"	9'-9"	2'-2"	2.82	2.87	2.84	2.89	2 1/2"	6'-0"



PLAN

ELEVATION



SECTION

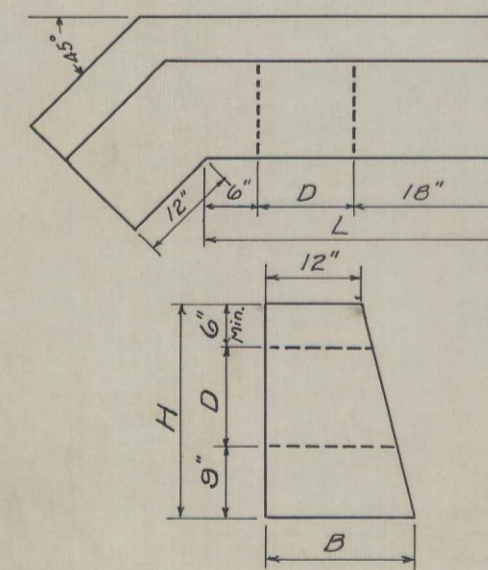
SECTION

TYPE "A"

DROP INLETS

TYPE "B"

End wall flared to meet road shoulder.



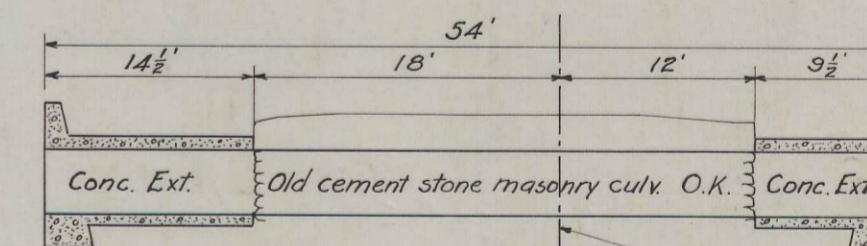
PLAN & END VIEW

TABLE OF QUANTITIES

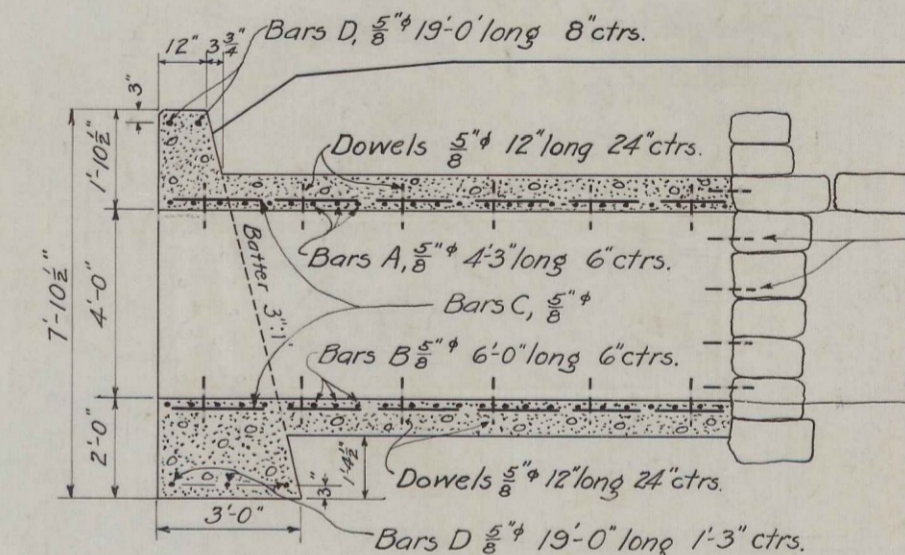
D	L	H	B	Rubble Masonry C. Y.
12"	3'-0"	2'-3"	1'-6"	0.44
15"	3'-3"	2'-6"	1'-6"	0.50
18"	3'-6"	2'-9"	1'-7"	0.58
24"	4'-0"	3'-3"	1'-8"	0.74

MAINE
STATE HIGHWAY COMMISSION
STANDARD DESIGN
END WALLS FOR PIPE CULVERTS
February 1932.
AND DROP INLETS
March 1935.

Scale 3/4" = 1'.

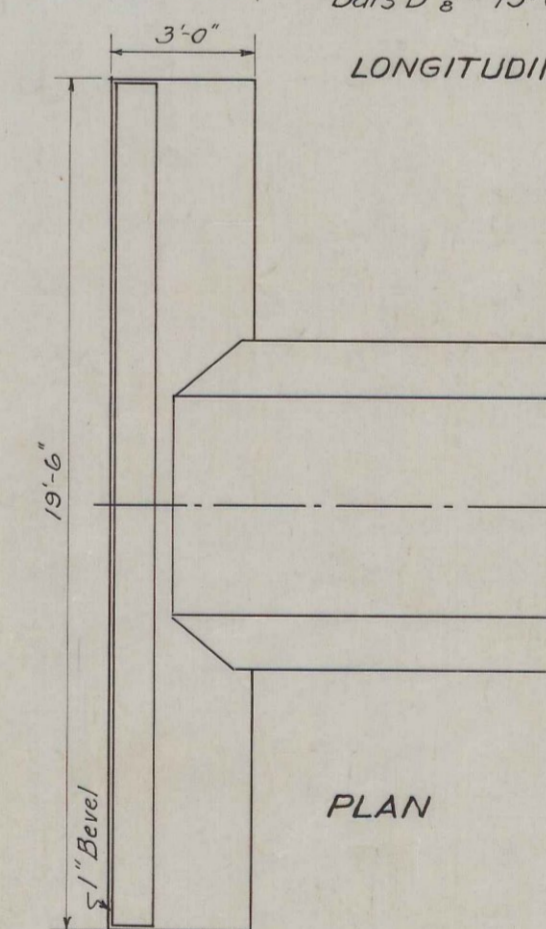


CROSS SECTION



LONGITUDINAL SECTION

Note: Top and bottom slabs Class "A" Concrete 1:2:4.
Side walls and end walls Class "B" Concrete 1:2 1/2:5.
All steel rods to be firmly wired at each intersection.
Steel must not be nearer than 1" to surface of concrete.



PLAN

TRANSVERSE SECTION

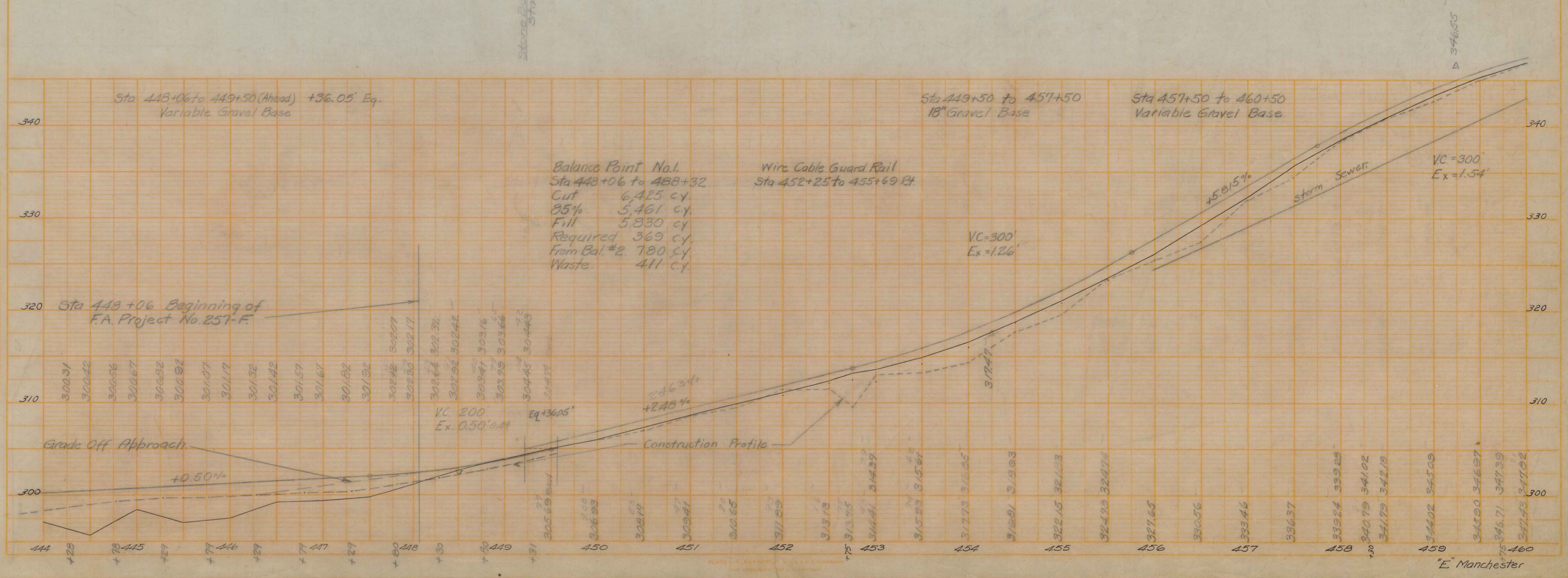
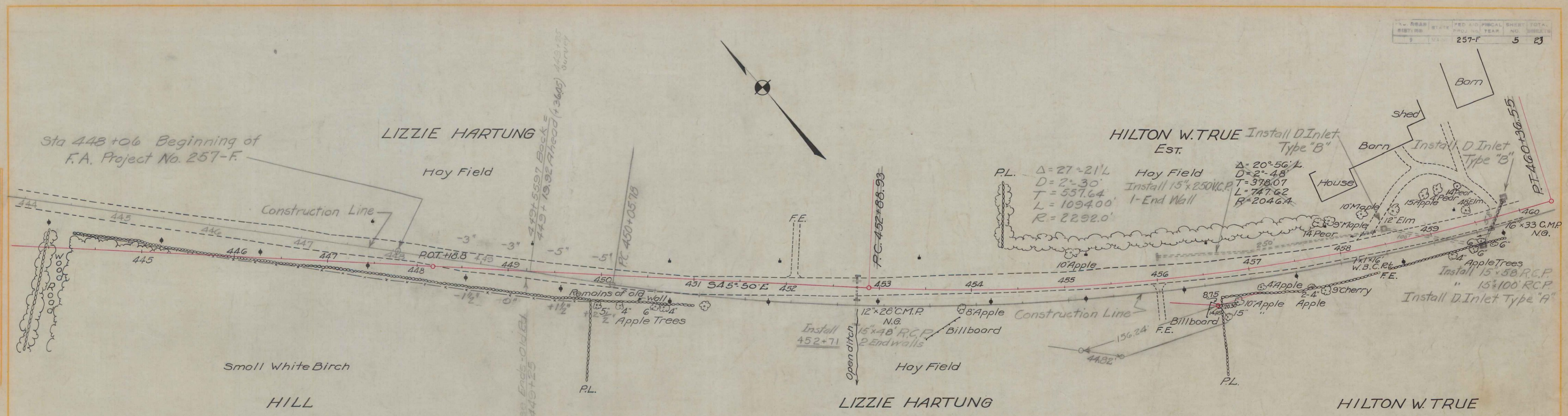
TABLE OF QUANTITIES

Length Ft.	Concrete Cu. Yds.	Barrels Cement	Sand Cu. Yds.	Stone Cu. Yds.	Bars A 5/8" dia 4'-3" long 6" ctrs. No.	Bars B 5/8" dia 6'-0" long 6" ctrs. No.	Bars C 5/8" dia. Length No.	Bars D 5/8" dia 19'-0" long 8" ctrs. No.	Dowels 5/8" dia 12" long 24" ctrs. No.	Total weight of steel Pounds		
9 1/2	246	12.86	20.58	7.00	14.00	19	19	9-0	5	33	393	
14 1/2	3.75	14.77	25.09	8.44	16.89	29	29	14-0	5	41	540	
Total	24	6.21	27.63	45.67	15.44	30.89	48	48	9-0	10	74	933

MAINE
STATE HIGHWAY COMMISSION
SPECIAL DESIGN
3'x4' CONCRETE BOX CULVERT
FOR EXTENSION OF
EXISTING STONE MASONRY CULV.
January 1936. Scale 3/8" = 1'.

PLAN	DATE
REVISIONS	
BY	
CHECKED	
DATE	

PROFILE	DATE
REVISIONS	
BY	
CHECKED	
DATE	



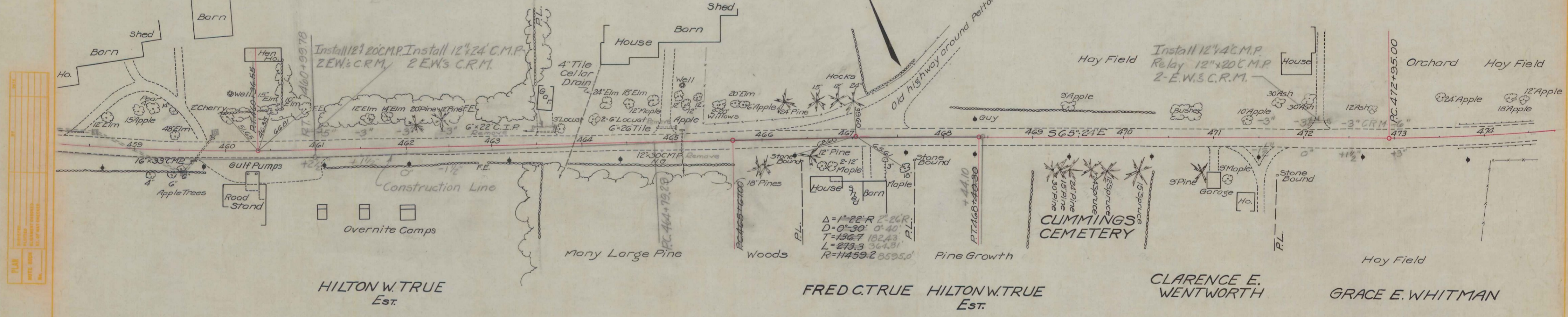
Balance Point No. 1
 Sta 448+06 to 488+32
 Cut 6,425 cy
 85% 5,461 cy
 Fill 5,830 cy
 Required 369 cy
 From Bal. #2 780 cy
 Waste 411 cy

Sta 448+06 Beginning of
 F.A. Project No. 257-F

HILTON W. TRUE Est.

WILLIAM J. CARL

GRACE E. WHITMAN



HILTON W. TRUE Est.

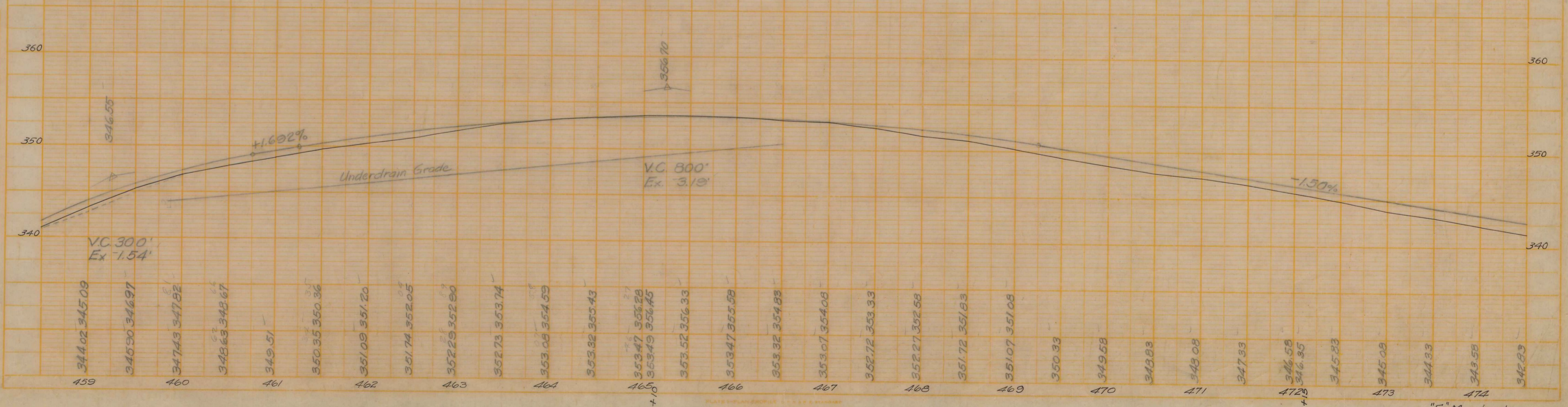
FRED C. TRUE HILTON W. TRUE Est.

CLARENCE E. WENTWORTH

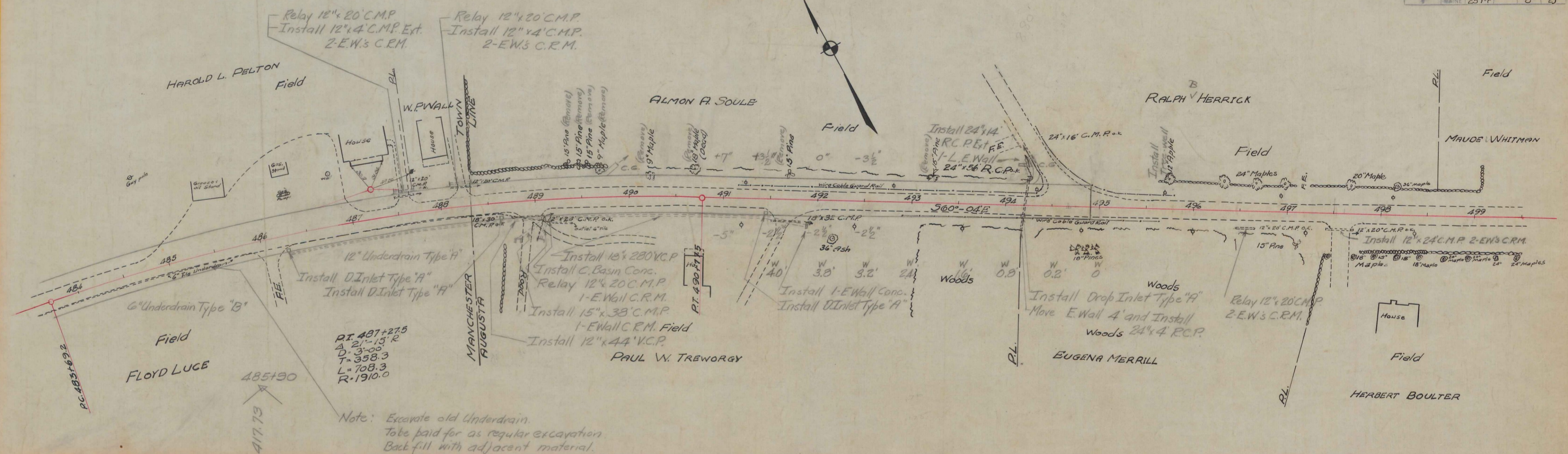
GRACE E. WHITMAN

Sta 460+50 to 468+0 18" Gravel Base
 Sta 459+90 to 466+50 Lt Underdrain Type "B"

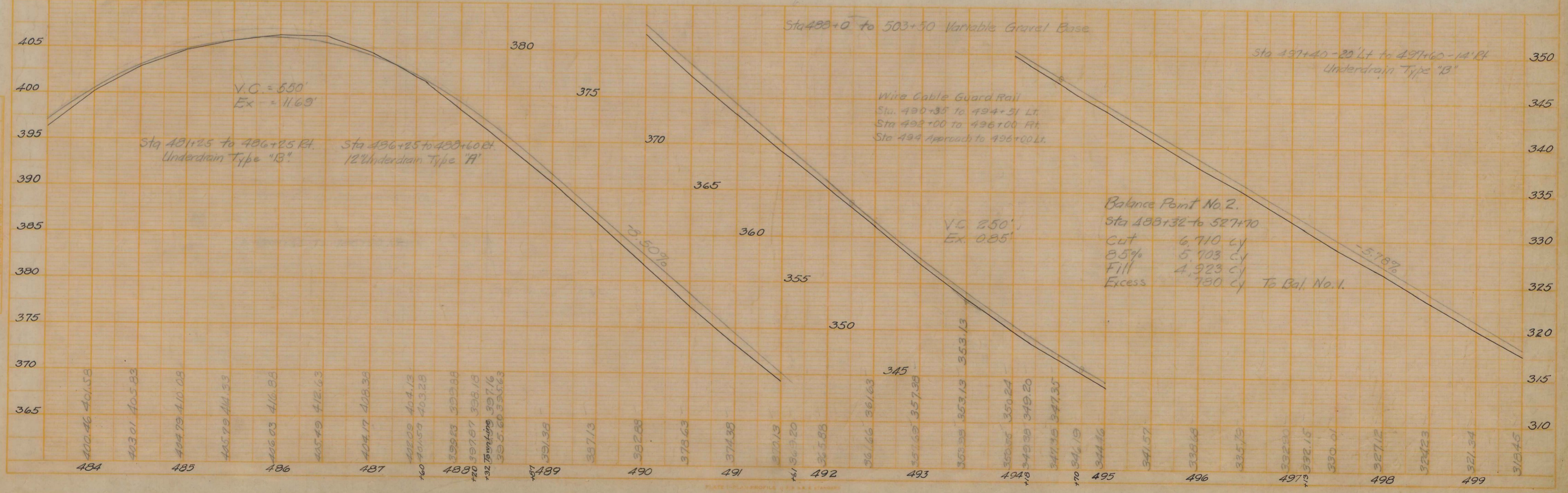
Sta 468+0 to 483+50 Variable Gravel Base
 Sta 471+0 to 474+0 Lt Underdrain Type "B"



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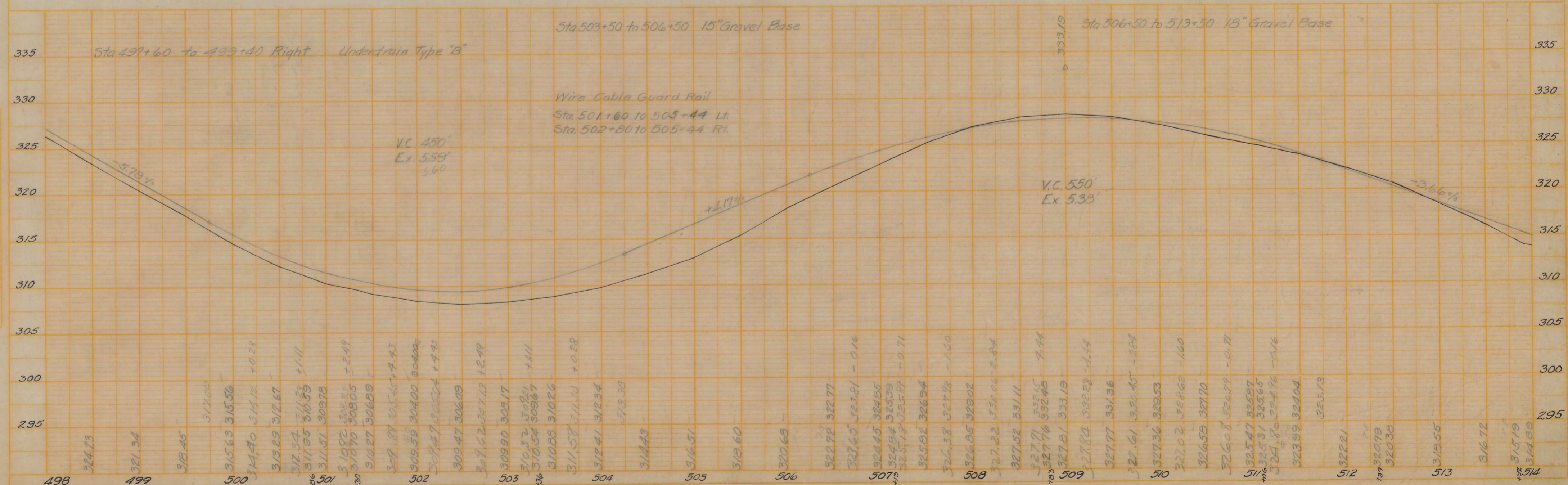
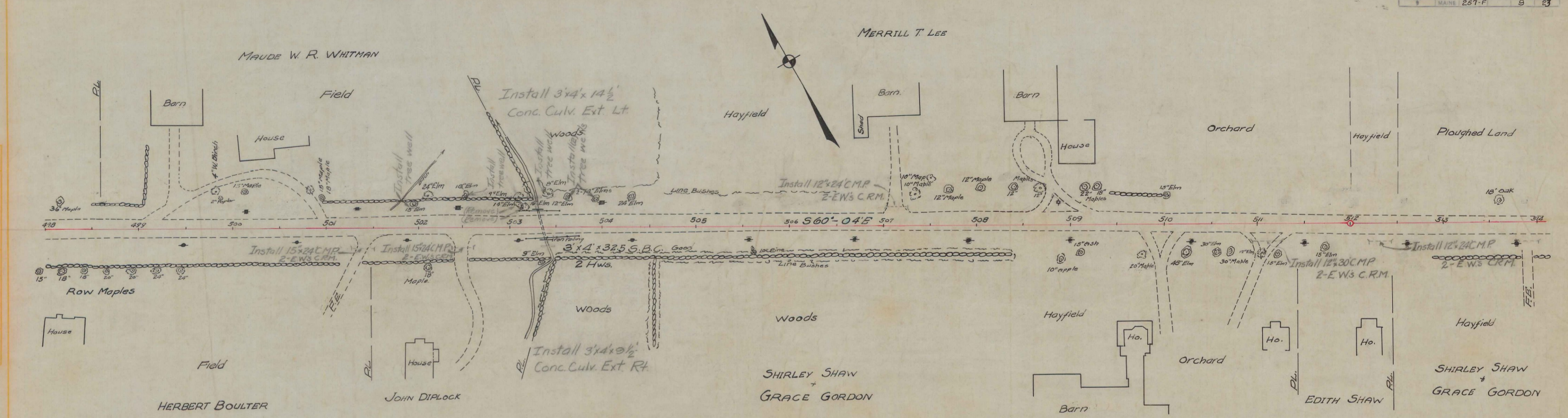


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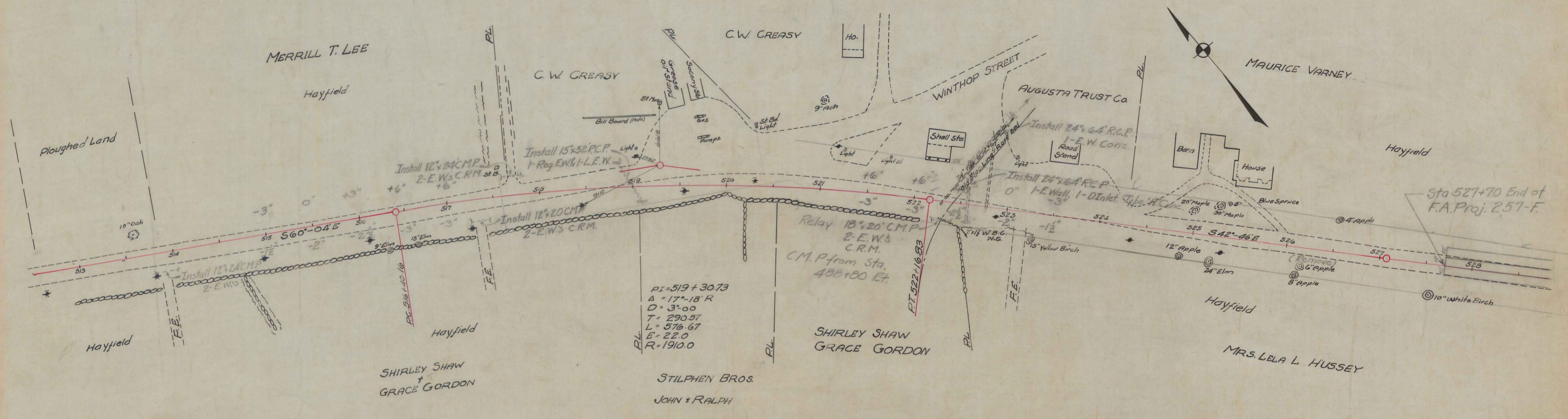


MAINE STATE ROAD DIST. NO. 9
 SHEET NO. 9
 TOTAL SHEETS 23

MAINE STATE ROAD DIST. NO. 9
 SHEET NO. 9
 TOTAL SHEETS 23



12/22
 S. G. C. M.
 S. B. B. B.
 1/3



9/24
 S. G. C. M.
 S. B. B. B.
 8/32

