

CONVENTIONAL SIGNS & ABBREVIATIONS

STATE LINE	-----	EXCAVATION	.....	F
COUNTY LINE	-----	EMBANKMENT	.....	F
TOWNSHIP LINE	-----	OVERHAUL	.....	H
SECTION LINE	-----	SURFACING	.....	S
CITY, VILLAGE, OR BOROUGH	-----	GUARD RAIL	.....	GR
FENCE LINE	-----	INTERSECTION ANGLE	.....	A
RIGHT-OF-WAY LINE	-----	RADIUS	.....	R
TRAVELLED WAY	-----	ELEVATION	.....	EI
RAILROADS	-----	VERTICAL CURVE	.....	VC
RETAINING WALL	-----	BECH MARK	.....	B.M.
BASE OR SURVEY LINE	-----	SECTIONAL CONCRETE CULVERT	.....	P.C.
LEVEE	-----	CORRUGATED METAL CULVERT	.....	C.M.
GRAVEL PIT	.....	CULVERT HAUL	.....	P.L.H.
SAND PIT	.....	TON MILES	.....	T.M.
CLAY PIT	.....	IN PLACE	.....	P
ROCK QUARRY	.....	REPLACE	.....	Rep
CULVERTS	.....	RIGHT	.....	R
PLAIN	-----	LEFT	.....	L
WITH FACE WALLS	-----	HAND DITCHING	.....	H.D.
WITH WING WALLS	-----	POINT OF CURVE	.....	P.C.
DROP INLET	.....	POINT OF TANGENT	.....	P.T.
POWER POLE LINE	.....	POINT OF INTERSECTION	.....	P.I.
TELEPHONE OR TELEGRAPH LINE	.....	SPECIAL EXCAVATION	.....	SE
MARSH	.....	SPECIAL FLOWING	.....	SF
HEDGE, BRUSH, OR THIBER	.....	TELEPHONE POLE	.....	T.P.
GROUND ELEVATION	.....		
GRADE ELEVATION	.....		

OFFICE OF COUNTY SURVEYOR

RAMSEY COUNTY

Plan and Profile of County Project No. 30-51

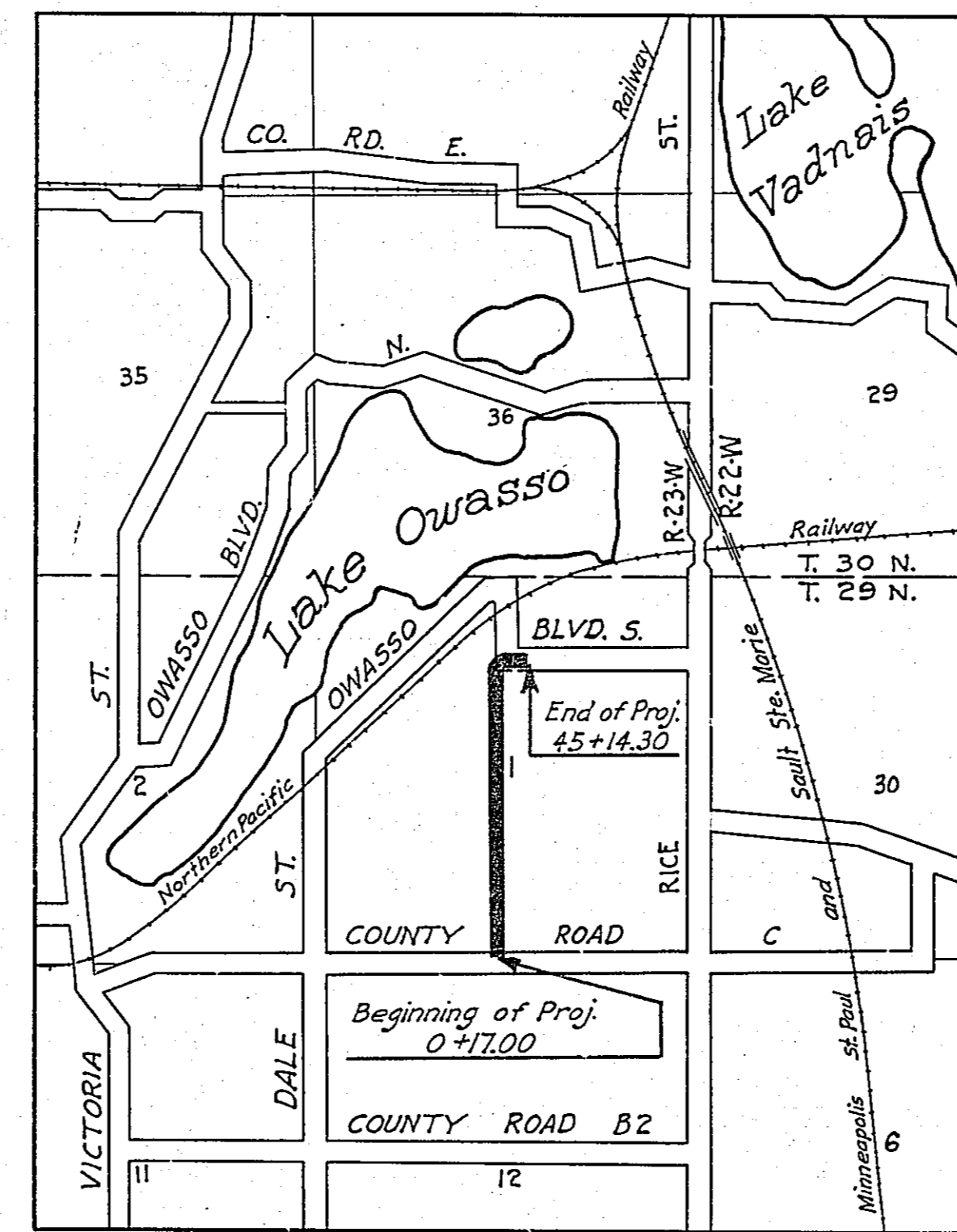
From A point 170' N. of the S 1/4 Cor. of Sec. 1-29-23 To A point 1320.0' N. and 709.98' E. of the Cor. of Sec. 1-29-23
Give proper reference to Sections, Township and Range

GROSS LENGTH - 4497.30 FEET 0.852 MILES
 LENGTH OF EXCEPTIONS - FEET MILES
 NET LENGTH - 4497.30 FEET 0.852 MILES
 PLAN, 1 Inch = 100 Feet
 PROFILE, Horz. 1 Inch = 100 Feet. Vert. 1 Inch = 10 Feet
 WORKING PLANS (Horz. 1 Inch = 100 Feet
 Vert. 1 Inch = 10 Feet
 Cross-Sections, 1 Inch = 10 Feet

LAYOUT
 SCALE, 1 Inch = .2640 Feet

INDEX OF SHEETS

- Sheet No. 1. Title Sheet and Layout Map
- " No. 2. Typical Cross-Sections and Statement
- " No. 3. Plan and Profile, Sta. 0+17 to Sta. 45+14.35
- " No. 4. to 7 Incl. Cross-Sections
- " No. 8. Detail of So. Owasso Blvd. Intersection



Date of Resolution for Preparation of Plans September 29, 1929

Planned by [Signature]
ASSISTANT ENGINEER

Recommended for Approval [Signature]
CONSTRUCTION ENGINEER

Plans Approved and Recommended for Consideration [Signature]
COUNTY SURVEYOR

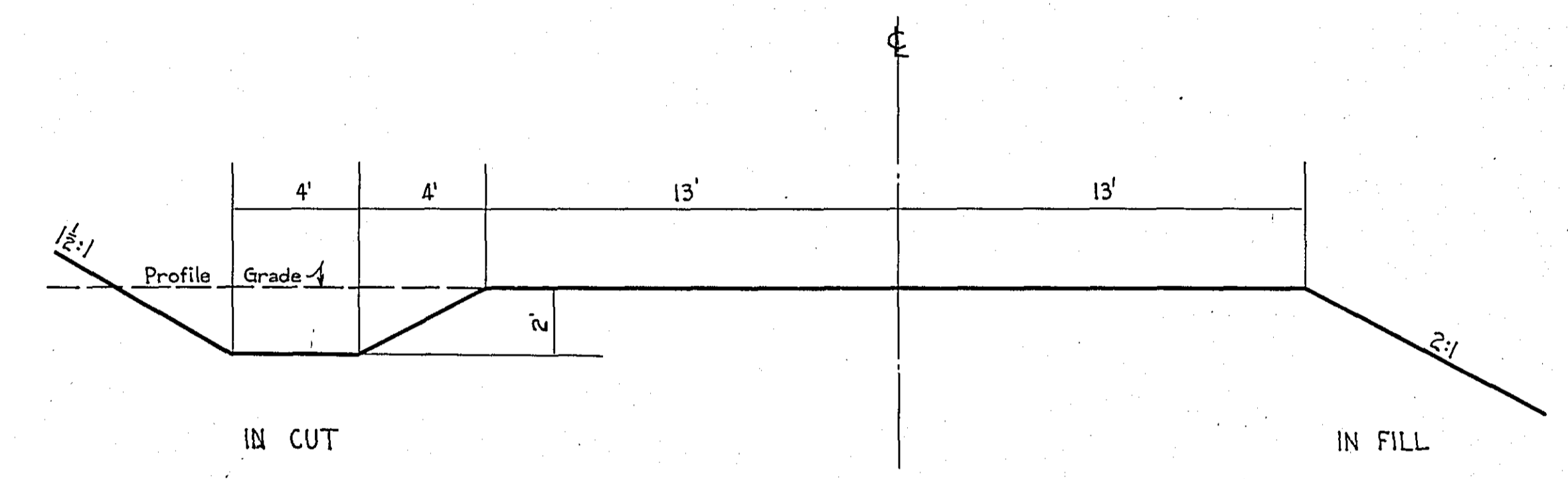
Approved by County Board 4/7 1930 [Signature]
CHAIRMAN OF COUNTY BOARD

STATEMENT OF ESTIMATED QUANTITIES AND COSTS.

ITEM	UNIT	MILE														TOTAL ESTIMATED QUANTITIES	ESTIMATED UNIT PRICES	AMOUNTS	TOTALS
		Sta. 0+17 to Sta. 0+19.2	Sta. to Sta.	Sta. to Sta.	Sta. to Sta.	Sta. to Sta.	Sta. to Sta.	Sta. to Sta.	Sta. to Sta.	Sta. to Sta.	Sta. to Sta.	Sta. to Sta.	Sta. to Sta.	Sta. to Sta.	Sta. to Sta.				
1	Clearing	Acres	0.27														0.27		
2	Clearing	Tree	42														42		
3	Grubbing	Acres	0.18														0.18		
4	Grubbing	Tree	40														40		
5	Excavation - Earth	Cu. Yd.	16,238														16,238		
6	Excavation - Loose Rock	Cu. Yd.	280														280		
7	Excavation - Solid Rock	Cu. Yd.	40														40		
8	Excavation - Overhaul	Cu. Yd.	1,905														1,905		
9	Special Excavation	Lin. Ft.																	
10	Hand Ditching	Cu. Yd.	175														175		
11	Tile Drain	in. Lin. Ft.																	
12	Tile Drain	in. Lin. Ft.																	
13	Tile Drain	in. Lin. Ft.																	
14	Porous Back Fill Material	Cu. Yd.																	
15	Stone Rip - Rip	Cu. Yd.																	
16	Heating Rip - Rip or Stone Drain Material	Cu. Yd. mile																	
17	Install	Lin. Ft.																	
18	Install	Lin. Ft.																	
19	Install 15" C.M.	Lin. Ft.	180														180		
20	Install 18" C.M.	Lin. Ft.	20														20		
21	Install	Lin. Ft.																	
22	Install	Lin. Ft.																	
23	Install	Lin. Ft.																	
24	Install	Lin. Ft.																	
25	Install 24" P ₃	Lin. Ft.	216														216		
26	Install 30" P ₃	Lin. Ft.																	
27	Install 36" P ₃	Lin. Ft.																	
28	P ₃ Culvert Haul	Ton Mile	6,399														6,399		
29	P ₃ Culvert Haul	Ton Mile																	
30	Remove old culv.	Lin. Ft.	121														121		
31	Replace old culv.	Lin. Ft.	62														62		
32																			
TOTAL ESTIMATED COST OF GRADING (IN 'TOTALS' COLUMN)																			
33	Culv. Material	Lin. Ft.																	
34	C.M. Culv. Material 15"	Lin. Ft.	180														180		
35	C.M. Culv. Material 18"	Lin. Ft.	20														20		
36	Culv. Material	Lin. Ft.																	
37	Culv. Material	Lin. Ft.																	
38	Culv. Material	Lin. Ft.																	
39	P ₃ Culv. Material 24"	Lin. Ft.	216														216		
40	P ₃ Culv. Material 30"	Lin. Ft.																	
41	P ₃ Culv. Material 36"	Lin. Ft.																	
TOTAL ESTIMATED COST OF PORTABLE CULVERT MATERIAL (IN 'TOTALS' COLUMN)																			
42	Gravel Pit Stripping	Cu. Yd.																	
43	Screening	Cu. Yd.																	
44	Loading	Cu. Yd.																	
45	Hauling	Cu. Yd. Mile																	
46	Shaping & Compacting	Man Hour																	
47	Shaping & Compacting	Man & Team Hour																	
48																			
49																			
50																			
51																			
TOTAL ESTIMATED COST OF GRAVEL HAUL (IN 'TOTALS' COLUMN)																			
52	Gravel Material F. O. B. Pit	Cu. Yd.																	
53	Freight (if any)	Cu. Yd.																	
54	Unloading from Cars	Cu. Yd.																	
TOTAL ESTIMATED COST OF GRAVEL MATERIAL (IN 'TOTALS' COLUMN)																			
55	Fine Grading - Exc. & Emb.	Cu. Yd.																	
56	Shoulders - Earth	Cu. Yd.																	
57																			
58																			
59	Pavement	Sq. Yd.																	
60	Integral Curb (One Course Concrete)	Lin. Ft.																	
61	Stopping Curb	Lin. Ft.																	
62	Surface Drain	Lin. Ft.																	
63	Surface Drain Basins	Basin																	
64	Bridge Approach Slabs (Square)	Slab																	
65	Bridge Approach Slabs (Rect)	Slab																	
66																			
67																			
68																			
TOTAL ESTIMATED COST OF PAVEMENT CONSTRUCTION (IN 'TOTALS' COLUMN)																			
69	Concrete	Cu. Yd.																	
70	Reinforcing Steel	Lb.																	
71	Excavation - Earth	Cu. Yd.																	
72	Excavation - Loose Rock	Cu. Yd.																	
73	Excavation - Solid Rock	Cu. Yd.																	
74	Bridge	* Bridge No.																	
75		Station																	
76	Concrete	Cu. Yd.																	
77	Reinforcing Steel	Lb.																	
78	Structural Steel	Lb.																	
79	Piling	Lin. Ft.																	
80	Temporary Crossing	Lump Sum																	
81	Removing old Bridge	Lump Sum																	
82	Bituminous Surface	Sq. Yd.																	
83																			
84																			
TOTAL ESTIMATED COST OF STRUCTURES (IN 'TOTALS' COLUMN)																			
85	Guard Rail (Cable)	Lin. Ft.	2665														2665		
86	Guard Rail Anchors	Each	22														22		
87	Excavation for Gutter	Cu. Yd.																	
TOTAL ESTIMATED COST OF MISCELLANEOUS ITEMS (IN 'TOTALS' COLUMN)																			

TYPICAL CROSS SECTIONS AND DETAILS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	REC.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MINN.					



GRADING SECTION

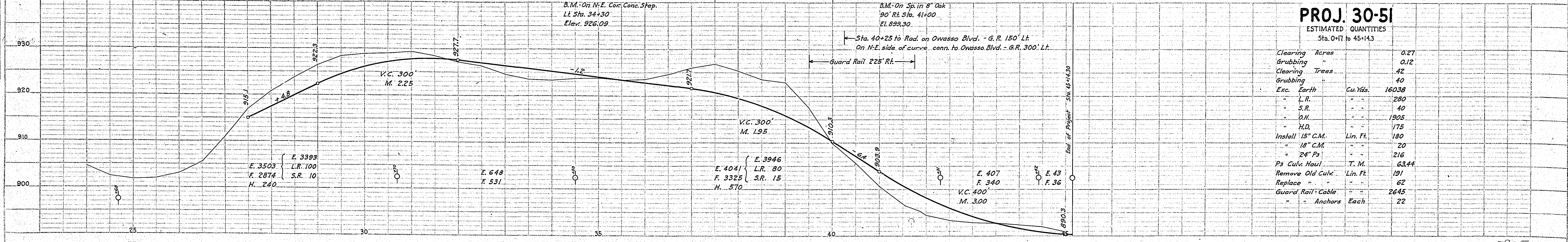
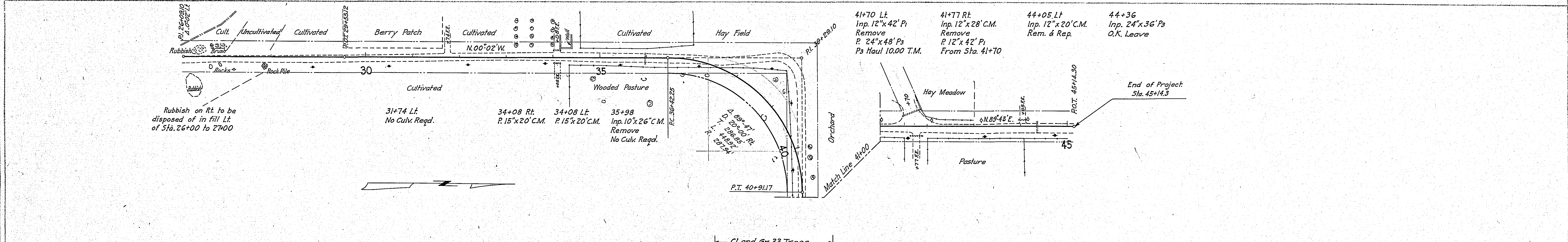
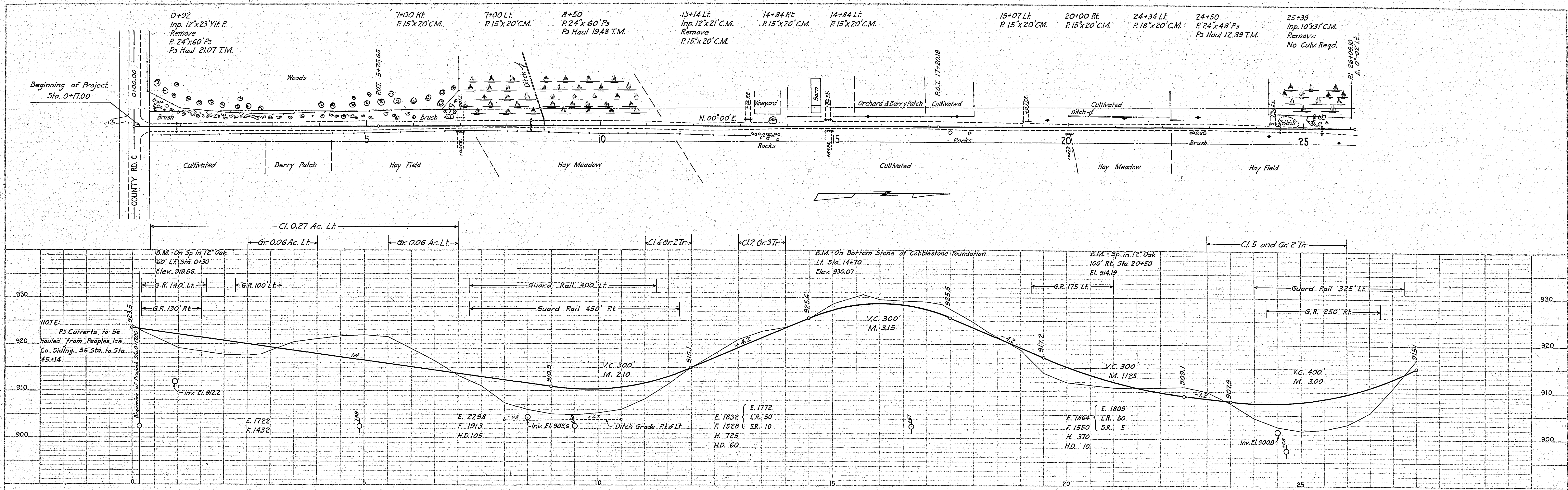
Note: See cross sections for hand ditch section sta. 8+00 to sta. 10+50

Note: All sections to conform to 66' R.O.W.

* NOTE: BRIDGE ITEMS LISTED UNDER BRIDGE NUMBERS IN MILE COLUMNS REGARDLESS OF LOCATION

PLAN	NO.	DATE
REVISED		
NOTE BOOK, ALACRANT CHECKED		
RT. OF WAY CHECKED		

PROFILE	NO.	DATE
REVISED		
NOTE BOOK, GRADES CHECKED		
S. & M. NOTED		
STRUCTURE NOTING CHECKED		



PROJ. 30-51

ESTIMATED QUANTITIES
Sta. 0+17 to 45+14.3

Clearing Acres	0.27
Grubbing "	0.12
Clearing Trees	42
Grubbing "	40
Exc. Earth	16038
L.R.	280
S.R.	40
D.H.	1905
H.D.	175
Install 15" C.M.	180
" 18" C.M.	20
" 24" Ps	216
Ps Culv. Haul	6344
Remove Old Culv.	191
Replace "	62
Guard Rail-Cable	2645
" Anchors	22