

CONVENTIONAL SIGNS & ABBREVIATIONS

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

STATE HIGHWAY DEPARTMENT
OF MINNESOTA

Plan and Profile of State Road No. 1

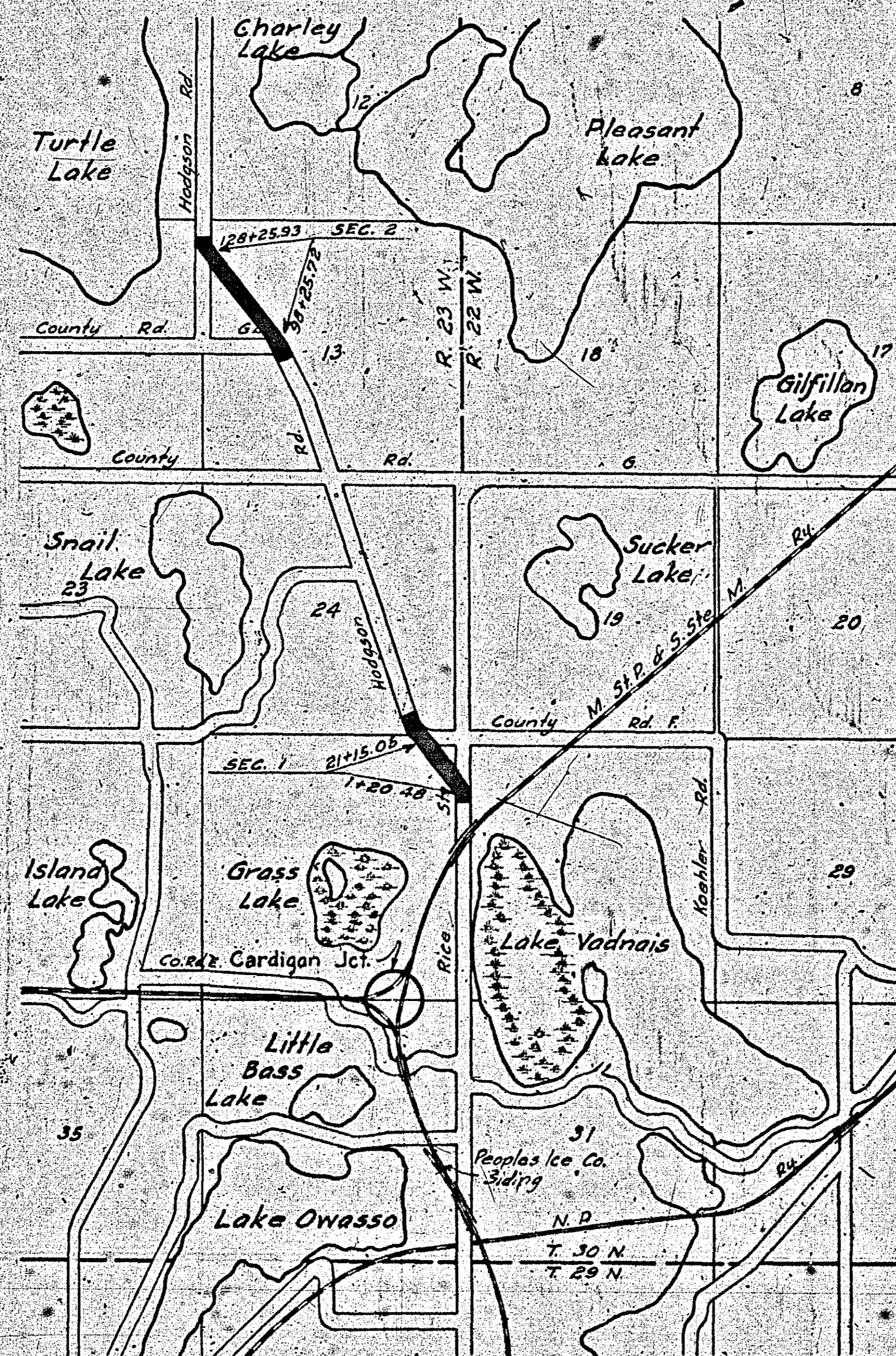
COUNTY OF RAMSEY

From A point 1132.63' S. of N.E. Cor. Sec. 25-30-23 To A point 11490' W. and 442' N. of N.E. Cor. Sec. 21-15-23
Give proper reference to Sections, Township and Range

GROSS LENGTH $\frac{2 \times 187005}{2 \times 5280}$ FEET $\frac{0.35}{0.37}$ MILES
 LENGTH OF EXCEPTIONS 00 FEET 00 MILES
 NET LENGTH 4870.26 FEET 0.92 MILES

PLAN: 1 Inch = 100 Feet
 PROFILE: Horz. 1 Inch = 100 Feet, Vert. 1 Inch = 10 Feet
 WORKING PLANS: Horz. 1 Inch = 10 Feet, Vert. 1 Inch = 10 Feet

LAYOUT
 SCALE: 1 Inch = 2640 Feet



Clay hauled from road R.O.W. of County Road 17, 1000 ft. West of Lexington Ave. 2.92 miles to Sta. 11+80 - Sec. 1. 2.44 miles to Station 113+25.82 - Sec. 2.

Gravel hauled from Indykiewicz pit on Hamline Ave. 1/2 mile south of County Road 1. 4.65 miles to Sta. 11+80 - Sec. 1. 4.27 miles to Sta. 113+26 - Sec. 2.

INDEX OF SHEETS

Sheet No. 1.	Title Sheet and Layout Map
No. 2.	Typical Cross-Sections and Statement Sec. 1.
No. 3.	Sec. 2.
No. 4.	Plan and Profile Sta. 1+20.40 to Sta. 21+15.05
No. 5.	98+25.92 - 128+25.93
No. 6, 7, 8.	Cross Sections
No. 9.	Cross Sections of clay pit

Planned by *[Signature]*

PRINCIPAL ASSISTANT ENGINEER FOR RAMSEY COUNTY

Recommended for Approval *[Signature]* DIVISION ENGINEER

Recommended for Approval *[Signature]* CONSTRUCTION ENGINEER

Approved *[Signature]* 192 *[Signature]* CHIEF ENGINEER & DEPUTY COMMISSIONER

STATEMENT OF ESTIMATED QUANTITIES AND COSTS.

ITEM	UNIT	MILE SEC 1		MILE		MILE		MILE		MILE		MILE		MILE		MILE		TOTAL ESTIMATED QUANTITIES	ESTIMATED UNIT PRICES	AMOUNTS	TOTALS
		Sta. 2+45 to Sta. 2+15.05	Sta.	Sta.	to	Sta.	to	Sta.	to	Sta.	to	Sta.	to	Sta.	to	Sta.	to				
1	Clearing	Acre																			
2	Clearing	Tree	24															24			
3	Grubbing	Acre																			
4	Grubbing	Tree	24															24			
5	Excavation - Earth	Cu. Yd.	5020															5020			
6	Excavation - Loose Rock	Cu. Yd.	50															50			
7	Excavation - Solid Rock	Cu. Yd.	25															25			
8	Excavation - Overhaul	Cu. Yd.	5390															5390			
9	Special Excavation	Lin. Ft.																			
10	Hand Ditching	Cu. Yd.																			
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 - Rap	Cu. Yd.																			
16	Hauling Rip - Rap or Stone Drain Material	Cu. Yd. Mile																			
17	Install	Lin. Ft.																			
18	Install	Lin. Ft.																			
19	Install	Lin. Ft.																			
20	Install	Lin. Ft.																			
21	Install	Lin. Ft.																			
22	Install	Lin. Ft.																			
23	Install 15" C.M.	Lin. Ft.	24															24			
24	Install	Lin. Ft.																			
25	Install 24" P ₃	Lin. Ft.	60															60			
26	Install 30" P ₃	Lin. Ft.																			
27	Install 36" P ₃	Lin. Ft.																			
28	P ₁ Culvert Haul	Ton Mile																			
29	P ₃ Culvert Haul	Ton Mile	22.5															22.5			
30																					
31																					
32																					
TOTAL ESTIMATED COST OF GRADING (IN 'TOTALS' COLUMN)																					
33	Culv. Material	Lin. Ft.																			
34	Culv. Material	Lin. Ft.																			
35	Culv. Material	Lin. Ft.																			
36	C.M. Culv. Material 15"	Lin. Ft.	24															24			
37	Culv. Material	Lin. Ft.																			
38	Culv. Material	Lin. Ft.																			
39	P ₃ Culv. Material 24"	Lin. Ft.	60															60			
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.	40															40			
43	Screening	Cu. Yd.	420															420			
44	Loading	Cu. Yd.	420															420			
45	Hauling	Cu. Yd. Mile	1953															1953			
46	Shaping & Compacting	Man Hour	27															27			
47	Shaping & Compacting	Man & Team Hrs.	62															62			
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	Stripping Clay Pit	Cu. Yd.	65															65			
59	Loading Clay	Cu. Yd.	203															203			
60	Hauling Clay	Cu. Yd. Mile	2546.45															2546.45			
61	Shaping & Compacting	Man Hrs.	57.4															57.4			
62	Shaping & Compacting	Man & Team Hrs.	132.4															132.4			
63																					
64																					
65																					
66																					
67																					
68																					
TOTAL ESTIMATED COST OF CLAYING (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	Br. No.																			
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	Lin. Ft.																			
86	Gutter	Lin. Ft.																			
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.	SEC.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MINN.					

28-01-B - SEC. 1.

GRADING SECTION



STATEMENT OF ESTIMATED QUANTITIES AND COSTS.

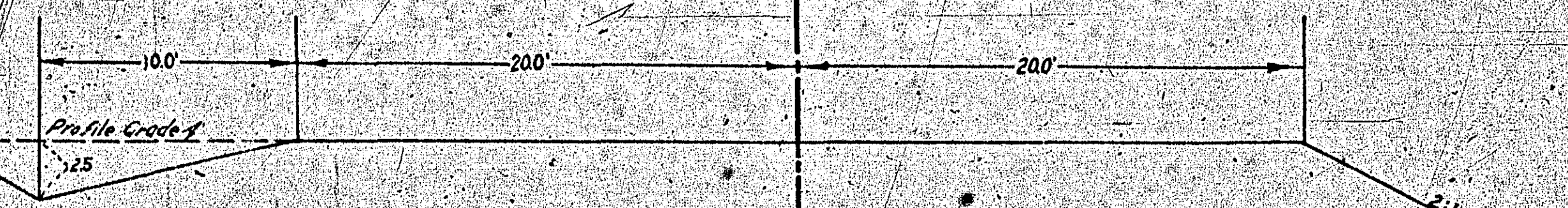
ITEM	UNIT	MILE SEC. 2		MILE		MILE		MILE		MILE		MILE		MILE		MILE		TOTAL ESTIMATED QUANTITIES	ESTIMATED UNIT PRICES	AMOUNTS	TOTALS
		Sta. 20+25 to Sta. 20+25.71	Sta. 20+25.71 to Sta. 20+26.42	Sta. to Sta.	Sta. to Sta.	Sta. to Sta.	Sta. to Sta.	Sta. to Sta.	Sta. to Sta.	Sta. to Sta.	Sta. to Sta.	Sta. to Sta.	Sta. to Sta.	Sta. to Sta.	Sta. to Sta.	Sta. to Sta.	Sta. to Sta.				
1	Clearing																				
2	Clearing																				
3	Grubbing																				
4	Grubbing																				
5	Excavation - Earth																				
6	Excavation - Loose Rock																				
7	Excavation - Solid Rock																				
8	Excavation - Overhaul																				
9	Special Excavation																				
10	Hand Ditching																				
11	Tile Drain																				
12	Tile Drain																				
13	Tile Drain																				
14	Porous Back Fill Material																				
15	Stone Rip - Rap																				
16	Heating Rip Rap or Stone Drain Material																				
17	Install																				
18	Install																				
19	Install																				
20	Install																				
21	Install																				
22	Install																				
23	Install																				
24	Install																				
25	Install 24" P ₃																				
26	Install 30" P ₃																				
27	Install 36" P ₃																				
28	P ₁ Culvert Haul																				
29	P ₃ Culvert Haul																				
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33	Culv. Material																				
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35	Culv. Material																				
36	C.M. Culv. Material 15"																				
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38	Culv. Material																				
39	P ₃ Culv. Material 24"																				
40	P ₃ Culv. Material 30"																				
41	P ₃ Culv. Material 36"																				
TOTAL ESTIMATED COST OF PORTABLE CULVERT MATERIAL (IN 'TOTALS' COLUMN)																					
42	Gravel Pit Stripping																				
43	Screening																				
44	Loading																				
45	Hauling																				
46	Shaping & Compacting																				
47	Shaping & Compacting																				
48																					
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50																					
51																					
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57	Stripping Clay Pit																				
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69	Concrete																				
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71	Excavation - Earth																				
72	Excavation - Loose Rock																				
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76	Concrete																				
77	Reinforcing Steel																				
78	Structural Steel																				
79	Piling																				
80	Temporary Crossing																				
81	Removing old Bridge																				
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85	Guard Rail																				
86	Gutter																				
87	Excavation for Gutter																				
TOTAL ESTIMATED COST OF MISCELLANEOUS ITEMS (IN 'TOTALS' COLUMN)																					

TYPICAL CROSS SECTIONS AND DETAILS

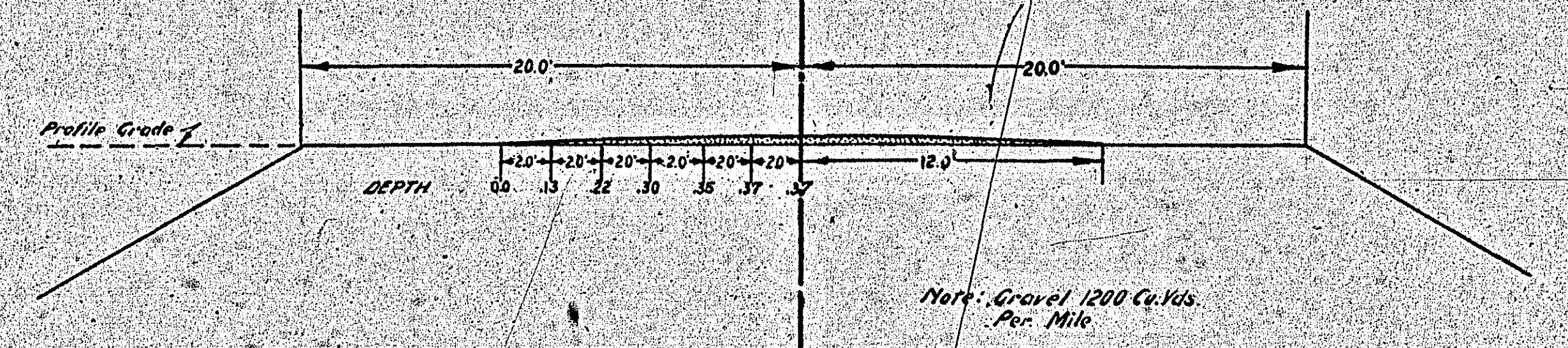
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SEC.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MINN.					

28-01-B - SEC. 2.

GRADING SECTION



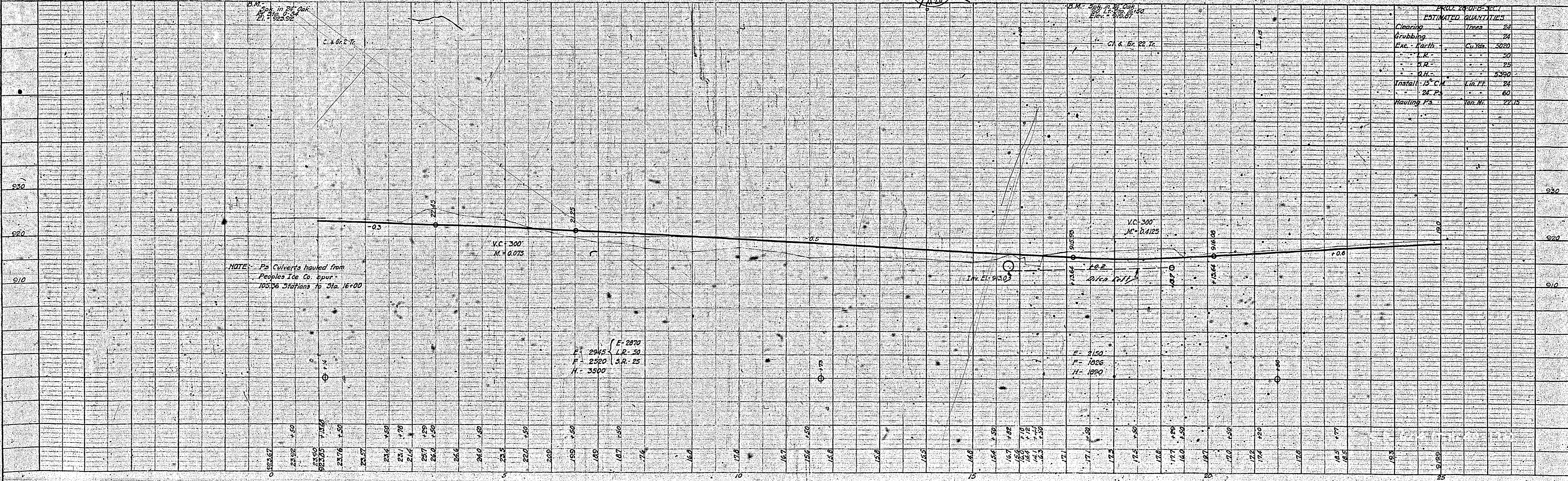
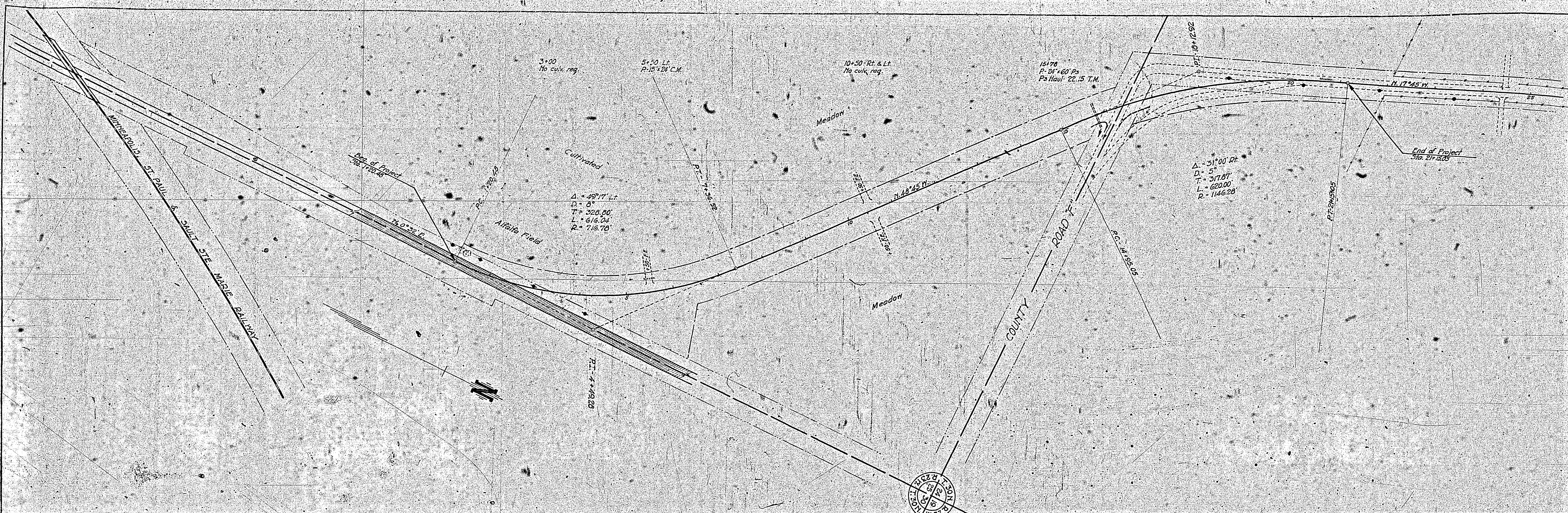
GRAVEL SECTION



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

DATE	
BY	
PLAN	SURVEYED
	PLOTTED
	ALIGNED
	CHECKED
	BY
	NO.

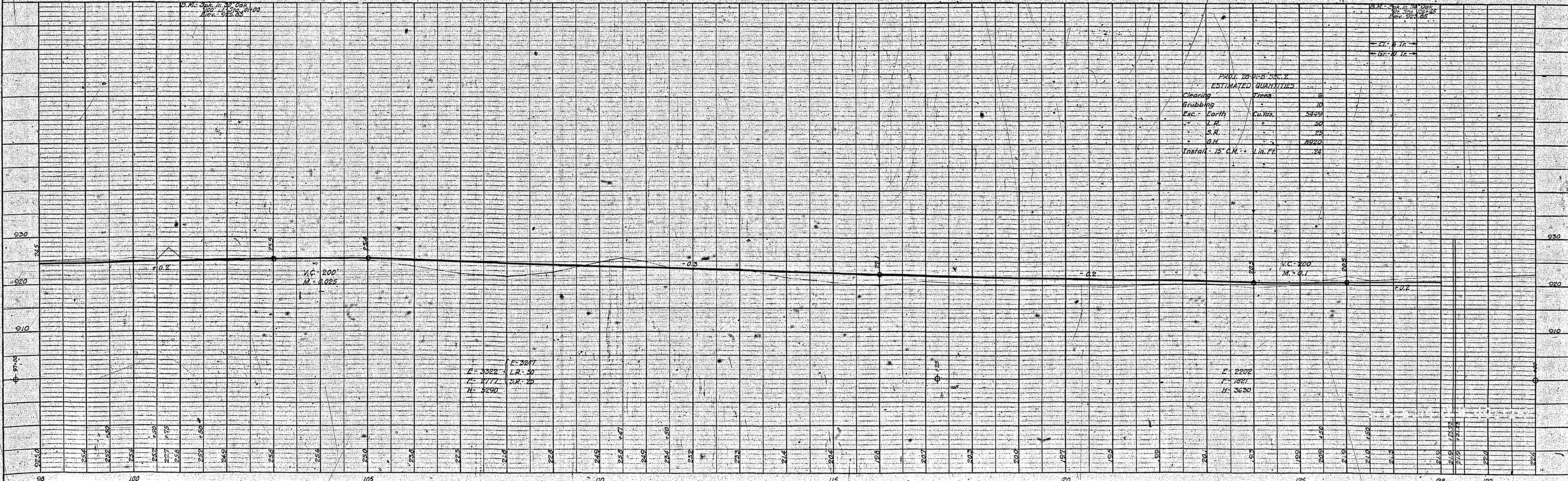
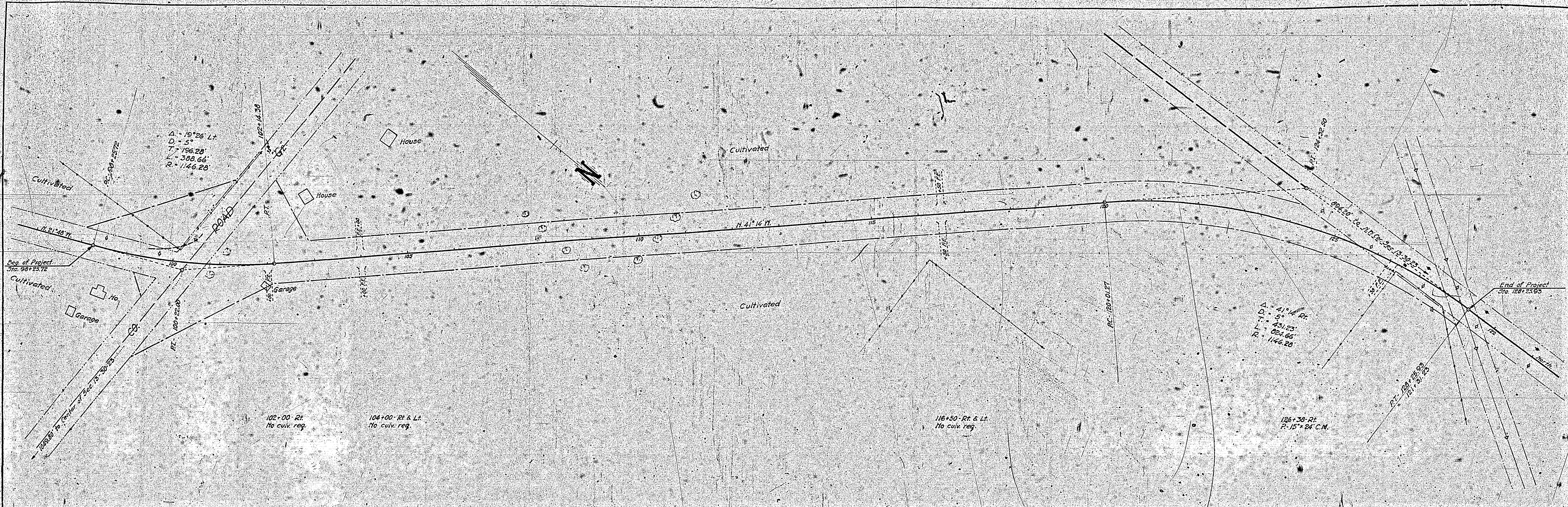
DATE	
BY	
PROFILE	SURVEYED
	PLOTTED
	GRADES CHECKED
	STRUCTURE NOTED
	NO.



PROJ. QUANTITIES	ESTIMATED QUANTITIES
Clearing	Trees 24
Grubbing	Exc. Earth 5020
Exc. Earth	Exc. Earth 5020
T.R.	25
S.R.	25
Q.H.	5390
Install 15" C.M.	116 FT. 24
24" Ps	60
Hauling Ps	Van. No. 2275

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

PROFILE SURVEYED BY DATE
 PLOTTED BY DATE
 NOTE BOOK NO. GRADES CHECKED BY DATE
 STRUCTURE NOTATIONS CHECKED BY DATE



PROJ. 28-VIC-SM. 2
 ESTIMATED QUANTITIES

Cleaning	Trees	0
Grubbing		10
Exc. Earth	Cu. Yds.	1442
Imp.		30
S.R.		25
Gr.		4920
Install. 15" C.M.	Lin. Ft.	24

