

CONVENTIONAL SIGNS & ABBREVIATIONS

STATE LINE	-----	EXCAVATION	-----	E
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	-----	EL
RAILROADS	-----	VERTICAL CURVE	-----	VC
RETAINING WALL	-----	BENCH MARK	-----	B.M.
BASE OR SURVEY LINE	-----	SECTIONAL CONCRETE CULVERT	-----	P.1
LEVEE	-----	CORRUGATED METAL CULVERT	-----	C.M.
GRAVEL PIT	-----	CULVERT HAUL	-----	P.1.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, BRUSH, OR TIMBER	-----	SPECIAL FLOWING	-----	S.F.
GROUND ELEVATION	-----	TELEPHONE POLE	-----	Tel.P.
GRADE ELEVATION	-----			

OFFICE OF COUNTY ENGINEER

RAMSEY COUNTY

Plan and Profile of County Project No. 25-56

From $\frac{1}{4}$ Cor. Sec. 31, T.30N.~R.23W. To $\frac{1}{4}$ Cor. Sec. 32, T.30N.~R.23W.

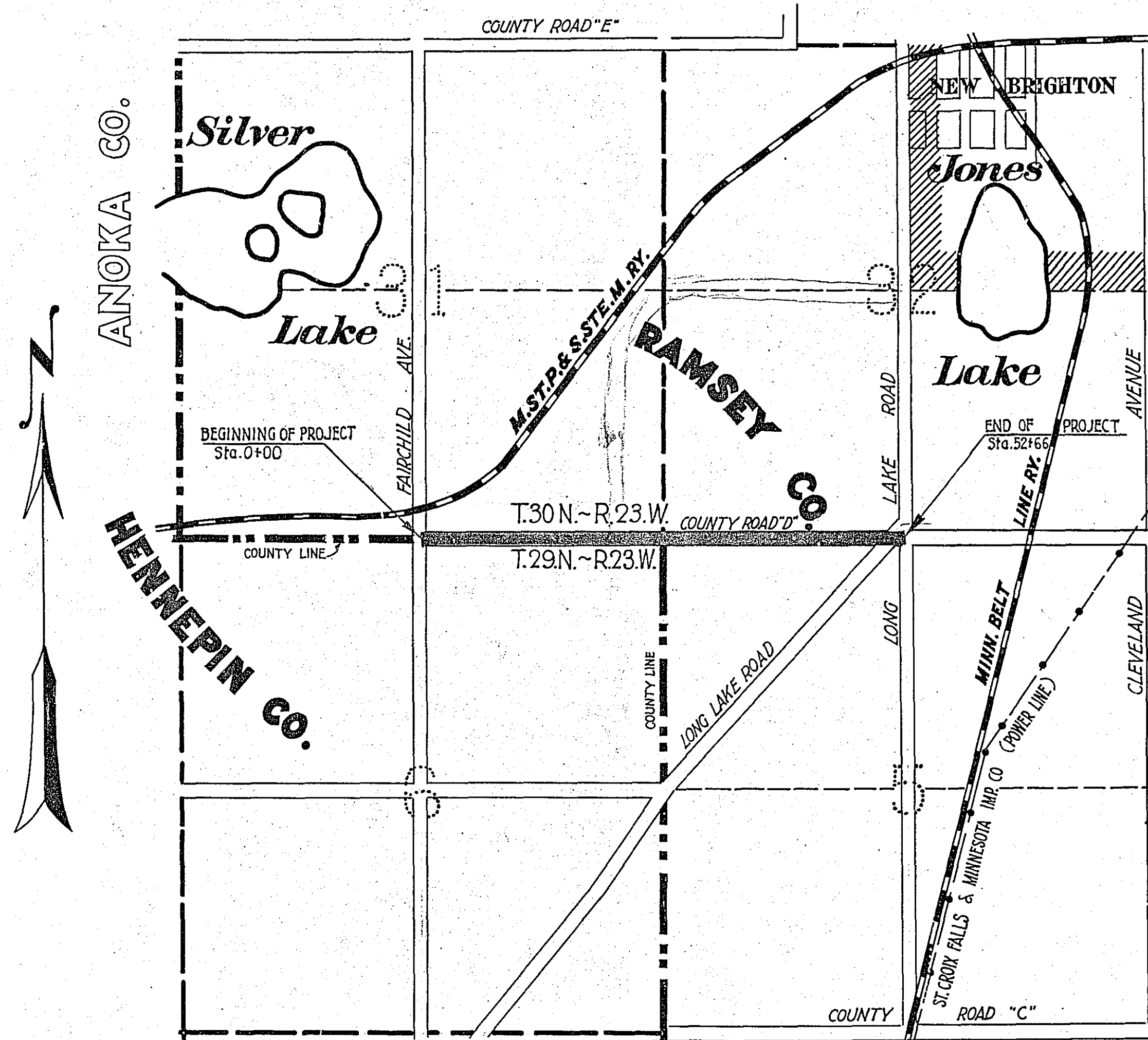
GROSS LENGTH.....5266 FEET .0997 MILES
 LENGTH OF EXCEPTIONS..... FEET MILES
 NET LENGTH.....5266 FEET .0997 MILES
 PLAN, 1 Inch = 200 Feet
 PROFILE, Horiz. 1 Inch = 200 Feet. Vert. 1 Inch = 20 Feet
 WORKING PLANS { Horiz. 1 Inch = 100 Feet
 Vert. 1 Inch = 10 Feet
 Cross-Sections, 1 Inch = 10 Feet

LAYOUT

SCALE, 1 Inch = .1320 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+00 to Sta. 52+66
- " No. 4.&5 Cross Sections " 0+00 " 52+66



-NOTE-
 Gravel Pit located 0.2 miles West of Cor. Sec. 10, T.30N.~R.23W.
 Haul 6.6 miles to Sta. 52+66. To be hauled by way of
 Hamline Ave. to Lake Johanna Blvd. to Co. Rd. "D" to Sta 52+66
 Good Road.

12-31-24
 B (25-56)

Date of Resolution for Preparation of Plans Aug 1924

Planned by *R. J. Hollander*
 DESIGNING HIGHWAY ENGINEER

Recommended for Approval *E. J. Briggs*
 CONSTRUCTION ENGINEER

Plans Approved and Recommended for Consideration *Paul Coates*
 COUNTY SURVEYOR

Approved by County Board 19 CHAIRMAN OF COUNTY BOARD

Plans approved *John W. Skupper*
 HENNEPIN CO. SURVEYOR

Approved by Hennepin County Board *April 2, 1925*

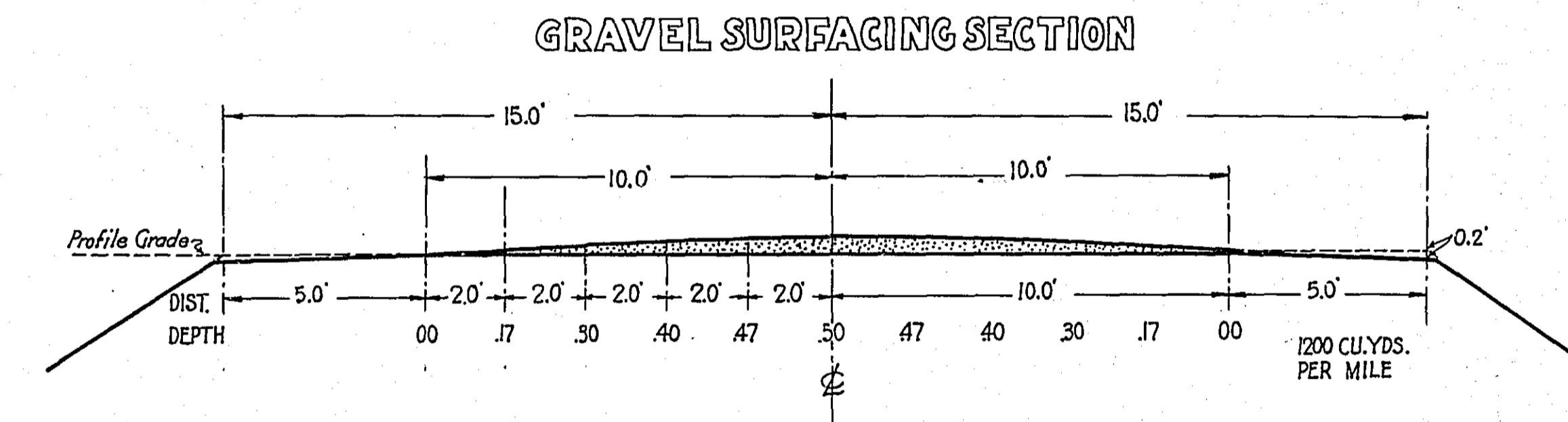
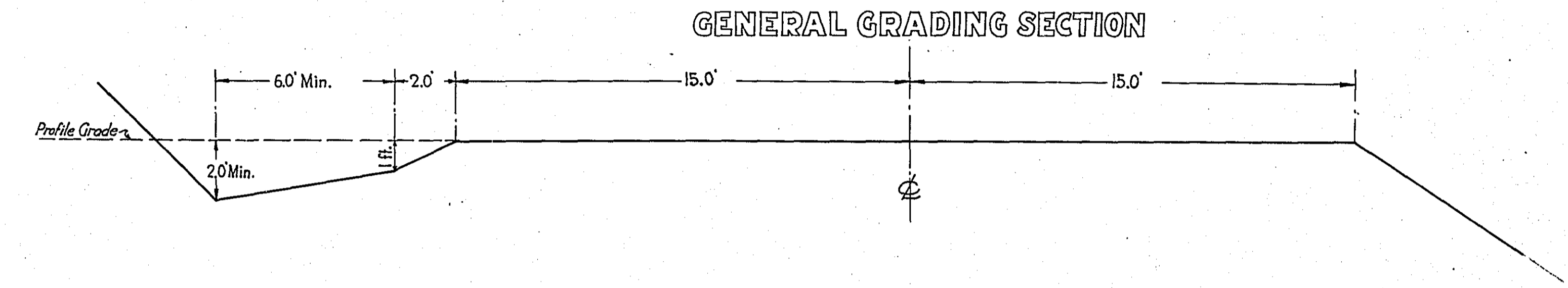
Geo. H. McCallan
 CHAIRMAN OF BOARD

STATEMENT OF ESTIMATED QUANTITIES AND COSTS.

ITEM	UNIT	MILE												TOTAL ESTIMATED QUANTITIES	ESTIMATED UNIT PRICES	AMOUNTS	TOTALS
		ONE Sta. 52+00 to Sta. 52+66	to Sta.	to Sta.	to Sta.	to Sta.	to Sta.	to Sta.	to Sta.	to Sta.	to Sta.	to Sta.	to Sta.				
1 Clearing	Acres	.25												.25			
2 Clearing	Trees	10												10			
3 Clearing Brush	Acres																
4 Grubbing	Acres	.25												.25			
5 Grubbing	Trees	10												10			
6 Excavation - Earth	Cu. Yd.	14,397												14,397			
7 Excavation - Loose Rock	Cu. Yd.	100												100			
8 Excavation - Solid Rock	Cu. Yd.	62												62			
9 Excavation-Overhaul	Cu. Yd.	12,090												12,090			
10 Special Plowing	Lin. Ft.																
11 Special Excavation	Cu. Yd.																
12 Hand Ditching	Cu. Yd.																
13 Tile Drain	in. Lin. Ft.																
14 Tile Drain	in. Lin. Ft.																
15 Tile Drain	in. Lin. Ft.																
16 Tile Outlet Headwalls	Headwall																
17 Porous Backfill Material	Cu. Yd.																
18 Stone Drains	Lin. Ft.																
19 Stone Rip Rap	Cu. Yd.																
20 Rip Rap	Cu. Yd. Mile																
21 Concrete End Walls	Cu. Yd.																
22 Install and Haul 12" C. M.	Lin. Ft.	48												48			
23 Install and Haul 15" C. M.	Lin. Ft.	60												60			
24 Install 18" C. M.	Lin. Ft.	74												74			
25 Install 24" C. M.	Lin. Ft.	246												246			
26 Removing Old Culverts	Lin. Ft.	143												143			
27 Replacing Old Culverts	Lin. Ft.	100												100			
28 Install P	Lin. Ft.																
29 Install P	Lin. Ft.																
30 P Culvert Haul	Ton Miles																
31 Guard Rail (wood)	Lin. Ft.	3,690												3,690			
32																	
33																	
TOTAL ESTIMATED COST OF GRADING (IN 'TOTALS' COLUMN)																	\$ 6,966.45
34 C. M. Culv. Material 12"	Lin. Ft.	48												48			
35 C. M. Culv. Material 15"	Lin. Ft.	60												60			
36 C. M. Culv. Material 18"	Lin. Ft.	74												74			
37 C. M. Culv. Material 24"	Lin. Ft.	246												246			
38 C. M. Culv. Connecting Bonds	Each	4												4			
39 Culv. Material	Lin. Ft.																
40 Culv. Material	Lin. Ft.																
41 P Culv. Material	Lin. Ft.																
42 P Culv. Material	Lin. Ft.																
TOTAL ESTIMATED COST OF PORTABLE CULVERT MATERIAL (IN 'TOTALS' COLUMN)																	\$ 84.750
43 Gravel Pit Stripping	Cu. Yd.																
44 Screening	Cu. Yd.																
45 Load & Haul - 0 to 1/2 Mile	Cu. Yd.																
46 Load & Haul - 1/2 to 1 Mile	Cu. Yd.																
47 Haul - 1 Mile Point	Cu. Yd.	1,196												1,196			
48 Additional Haul Beyond 1 Mi.	Cu. Yd. Mile	7,295												7,295			
49 Shaping & Compacting	Man Hour	75												75			
50 Shaping & Compacting	Man & Team Hour	175												175			
51																	
TOTAL ESTIMATED COST OF GRAVEL HAUL (IN 'TOTALS' COLUMN)																	\$ 2,352.55
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 Shoulder's - Earth	Cu. Yd.																
57 Overhaul - Earth Shoulders	Cu. Yd.																
58 Pavement	Sq. Yd.																
59 Integral Curb (One Course Concrete)	Lin. Ft.																
60																	
61																	
TOTAL ESTIMATED COST OF PAVEMENT CONSTRUCTION (IN 'TOTALS' COLUMN)																	
62 Concrete	Cu. Yd.																
63 Reinforcing Steel	Lb.																
64 Structural Steel	Lb.																
65 Excavation - Earth	Cu. Yd.																
66 Excavation - Loose Rock	Cu. Yd.																
67 Excavation - Solid Rock	Cu. Yd.																
Bridge	Bridge No. * Br. No.																
68 Concrete	Cu. Yd.																
69 Reinforcing Steel	Lb.																
70 Structural Steel	Lb.																
71 Piling	Lin. Ft.																
72 Temporary Crossing	Lump Sum																
73 Remove Old Bridge	Lump Sum																
74 Bituminous Surface	Sq. Yd.																
75																	
TOTAL ESTIMATED COST OF STRUCTURES (IN 'TOTALS' COLUMN)																	
76 Guard Rail - Wood	Lin. Ft.																
77 Guard Rail - Concrete	Lin. Ft.																
78 Gutter - Plain Rubble	Sq. Yd.																
79 Gutter - Grouted Rubble	Sq. Yd.																
80 Excavation for Rubble Gutter	Cu. Yd.																
81 Gutter - Concrete	Lin. Ft.																
82 Curbing - Concrete	Lin. Ft.																
83																	
84																	
TOTAL ESTIMATED COST OF MISCELLANEOUS ITEMS (IN 'TOTALS' COLUMN)																	
GRAND TOTAL ESTIMATED COST																	\$ 10,166.50

TYPICAL CROSS-SECTIONS AND DETAILS.

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

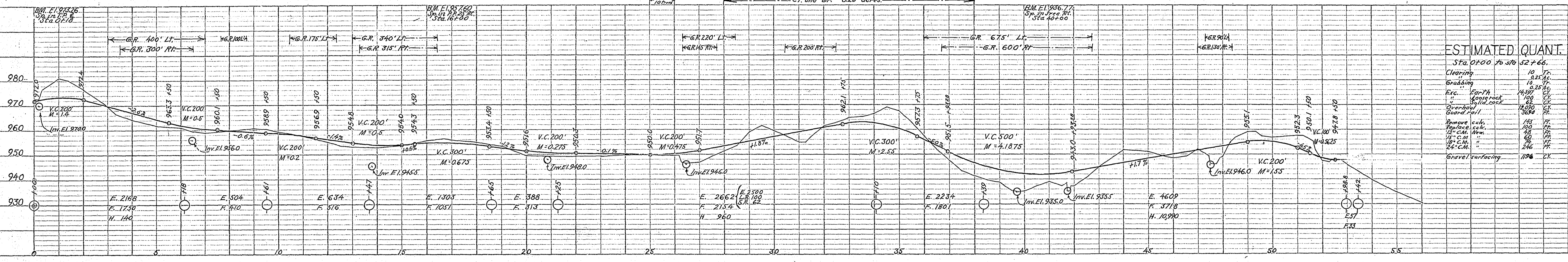
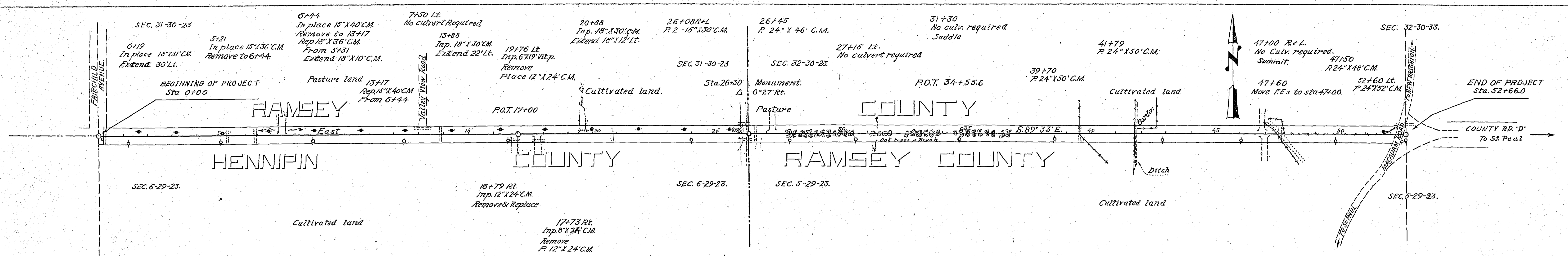


* NOTE: BRIDGE ITEMS LISTED UNDER BRIDGE NUMBERS IN MILE COLUMNS REGARDLESS OF LOCATION

4603

DATE
BY
SURVEYED
PLOTTED
CHECKED
NOTE BOOK
NO.

DATE
BY
SURVEYED
PLOTTED
CHECKED
NOTE BOOK
NO.



ESTIMATED QUANT.

Sta. 0+00	To Sta. 370	To Sta. 52+66.0
Clearing	10	10
Grubbing	10	10
Exc. Earth	14,300	14,300
Exc. Gravel	100	100
Overhaul	12,000	12,000
Gravel surfacing	100	100
Remove culv.	1/4	1/4
Replace culv.	1/4	1/4
12" cul. W.C.	60	60
18" cul. W.C.	60	60
24" cul. W.C.	216	216
Gravel surfacing	100	100