FORM 352

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	G.R.
FENCE LINE		INTERSECTION ANGLE	Δ
RIGHT-OF-WAY LINE		RADIUS	R
TRAVELLED WAY		ELEVATION	El.
RAILROADS		VERTICAL CURVE	V.C.
RETAINING WALL		BENCH MARK	B.M.
BASE OR SURVEY LINE	36 150	SECTIONAL CONCRETE CULVERT	P.1
LEVEE		CORRUGATED METAL CULVERT	C.M.
GRAVEL PIT	G	CULVERT HAUL	P.H.
SAND PIT	S	TON MILES	T.M.
CLAY PIT	C	PLACE	P
ROCK QUARRY	Q	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	S.E.
HEDGE, BRUSH, OR TIMBER		SPECIAL PLOWING	S.P.
GROUND ELEVATION	782	TELEPHONE POLE	Tel.P.
GRADE ELEVATION	775		

OFFICE OF COUNTY ENGINEER

RAMSEY COUNTY

Plan and Profile of County Project No. 25-52

From a point 660 ft. North & 1718 ft. West of the ¼ Cor. to Sec. 9-16, T.30.N-R.20W To a point 1275 ft. North & 1270 ft. West of ¼ Cor. to Sec. 6-7, T.26N-R.20W

Give proper reference to Sections, Township and Range

GROSS LENGTH- 15,370.° FEET 2.911 MILES

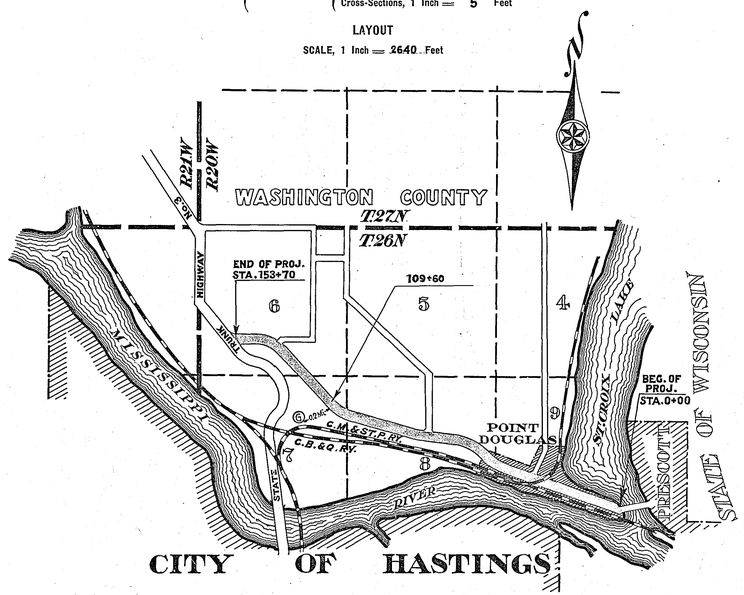
LENGTH OF EXCEPTIONS- FEET MILES

NET LENGTH- 15,370.° FEET 2.911 MILES

SCALES
- PLAN, 1 Inch = 200 Feet
- PROFILE, Horz. 1 Inch = 200 Feet. Vert. 1 Inch = 20 Feet
- WORKING PLANS: Horz. 1 Inch = 100 Feet; Vert. 1 Inch = 10 Feet; Cross-Sections, 1 Inch = 5 Feet

LAYOUT

SCALE, 1 Inch = 2640 Feet



Note:-
Gravel to be hauled from Pit Located 0.2 Mi. Southwesterly from Sta. 109+60. Fair Road.

INDEX OF SHEETS

1-4-25
A. (25-52)

Date of Resolution for Preparation of Plans May 4th 1925

Planned by P. R. Bannister. DESIGNING HIGHWAY ENGINEER

Recommended for Approval May 7th 1925 E. G. Briggs CONSTRUCTION ENGINEER

Plans Approved and Recommended for Consideration Paul N. Coates COUNTY SURVEYOR

Approved by County Board 19 CHAIRMAN OF COUNTY BOARD

FORM 120-C

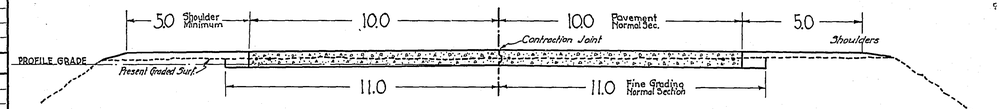
STATEMENT OF ESTIMATED QUANTITIES AND COSTS.

		ITEM	UNIT	MILE ONE Sta. 0+00 to Sta. 52+80	MILE TWO Sta. 52+80 to Sta. 105+60	MILE THREE Sta. 105+60 to Sta. 153+70	MILE Sta. to Sta.	MILE Sta. to Sta.	MILE Sta. to Sta.	MILE Sta. to Sta.	MILE Sta. to Sta.	MILE Sta. to Sta.	MILE Sta. to Sta.	TOTAL ESTIMATED QUANTITIES	ESTIMATED UNIT PRICES	AMOUNTS	TOTALS
GRADING	1	Clearing	Acres														
	2	Clearing	Trees														
	3	Clearing Brush	Acres														
	4	Grubbing	Acres														
	5	Grubbing	Trees														
	6	Excavation - Earth	Cu. Yd.														
	7	Excavation - Loose Rock	Cu. Yd.														
	8	Excavation - Solid Rock	Cu. Yd.														
	9	Excavation-Overhaul	Cu. Yd.														
	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	Hauling Mile Haul of Stone Drain Material	Cu. Yd. Mile														
	21	Concrete End Walls	Cu. Yd.														
	22	Install and Haul.....' C. M.	Lin. Ft.														
	23	Install and Haul.....' C. M.	Lin. Ft.														
	24	Install.....	Lin. Ft.														
	25	Install.....	Lin. Ft.														
	26	Install.....	Lin. Ft.														
	27	Install.....	Lin. Ft.														
	28	Install.....' P1	Lin. Ft.														
	29	Install.....' P1	Lin. Ft.														
	30	P1 Culvert Haul	Ton Miles														
	31																
	32																
	33																
		TOTAL ESTIMATED COST OF GRADING (IN 'TOTALS' COLUMN)															
PORTABLE CULVERTS	34	C. M. Culv. Material.....'	Lin. Ft.														
	35	C. M. Culv. Material 15 "	Lin. Ft.	142	222	172								536			
	36	.....Culv. Material.....'	Lin. Ft.														
	37	.....Culv. Material.....'	Lin. Ft.														
	38	.....Culv. Material.....'	Lin. Ft.														
	39	.....Culv. Material.....'	Lin. Ft.														
	40	.....Culv. Material.....'	Lin. Ft.														
	41	P1 Culv. Material.....'	Lin. Ft.														
	42	P1 Culv. Material.....'	Lin. Ft.														
		TOTAL ESTIMATED COST OF PORTABLE CULVERT MATERIAL (IN 'TOTALS' COLUMN)															750.40
GRAVEL HAUL	43	Gravel Pit Stripping	Cu. Yd.														
	44	Screening	Cu. Yd.														
	45	Load & Haul—0 to ½ Mile	Cu. Yd.														
	46	Load & Haul—½ to 1 Mile	Cu. Yd.														
	47	Load & Haul—1 Mile Point	Cu. Yd.														
	48	Additional Haul Beyond 1 Mi.	Cu. Yd. Mile														
	49	Shaping & Compacting	Man Hour														
	50	Shaping & Compacting	Man & Team Hour														
	51																
		TOTAL ESTIMATED COST OF GRAVEL HAUL (IN 'TOTALS' COLUMN)															
GRAVEL MATERIAL	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)															
PAVEMENT CONSTRUCTION	55	Fine Grading - Exc. & Emb.	Cu. Yd.	961.2	1122.0	833.7								2916.9			
	56	Shoulder's - Earth	Sq. Yd.	5860	5860	5344								17064			
	57	Overhaul - Earth Shoulders	Cu. Yd.														
	58	Pavement	Sq. Yd.	12051.63	11,948.86	10,905.38								34,906.93			
	59	Integral Curb 2"	Lin. Ft.	3.890	1,560	1,014								6464			
	60	Integral Curb 4"	Lin. Ft.	1.980	3.035	4200								9215			
	61																
		TOTAL ESTIMATED COST OF PAVEMENT CONSTRUCTION (IN 'TOTALS' COLUMN)															98,034.56
STRUCTURES — MONOLITHIC CONCRETE BRIDGES	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.	Br. No.	Br. No.	Br. No.	Br. No.	Br. No.	Br. No.	Br. No.	Br. No.	Br. No.				
			Station 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)															
MISCELLANEOUS	76	Catch Basins (Complete)	Each	8	6	9								25			
	77	Surface Drain (Concrete)	Each	4										4			
	78	Installing 15" C.M.	Lin. Ft.	142	222	172								536			
	79	Raking and Seeding	100 S.Y.	102.60	103.60	96.20								307.40			
	80	Fir Headers (3"x10")	Lin. Ft.	120		84								204			
	81	Bituminous Felt Joint	Lin. Ft.	34										34			
	82	Safety Island - Concrete	Cu. Yds	7.54										7.54			
	83	Safety Island - Rein. Steel	Lbs.	656										656			
	84	Warning Signs - Complete	Sq. Ft.	168										168			
		TOTAL ESTIMATED COST OF MISCELLANEOUS ITEMS (IN 'TOTALS' COLUMN)															1850.70
		GRAND TOTAL ESTIMATED COST															100,635.66

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

TYPICAL CROSS-SECTIONS AND DETAILS.

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



Pavement 7½" uniform thickness. Subgrade to be crowned 1" at center, ⅝" at quarter points, shaped within fine grading limits and excess material to be deposited outside of forms.

NORMAL PAVING SECTION

FOR DETAILS SEE SHEETS NO. 14, 15 & 16

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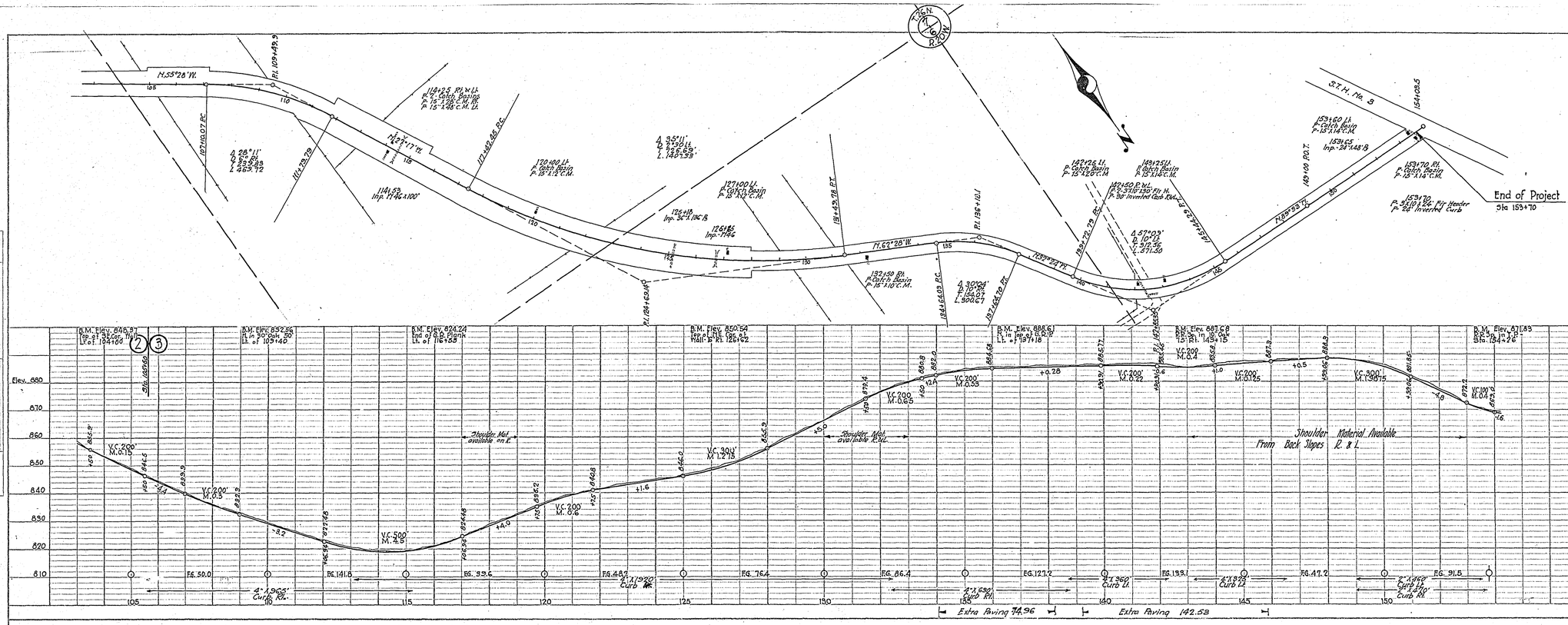
RAMSEY COUNTY PROJ. No. 25-52 F. A. P. No. PLAN No. SHEET No. 2 OF 16 SHEETS.



MILE THREE
ESTIMATED QUANTITIES

Sta. 105+60 to Sta. 153+70	
Fine Grading	889.7
One Course Paving	10,906.98
2" Integral Curb	1,014
4" "	4,200
Catch Basins	9
15" C.M.	172
Raking & Seeding	96.20
Shoulders	5944
Fir Headers 6"x10"	84

PLAN: SURVEYED, PLOTTED, NOTE BOOK, NO., DATE, BY, CHK'D, CHECKED, RT. OF WAY CHECKED

PROFILE: SURVEYED, PLOTTED, NOTE BOOK, NO., CHECKED, U.M.S. NOTED, STRUCTURE NOTATIONS CH. CK.

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PLATE 2 — PLAN-PROFILE O. F. R. & P. K. STANDARD
KELLER & REED CO. NEW YORK

MILE ONE

ESTIMATED QUANTITIES Sta. 0+00 to Sta. 52+80	
Fine Grading	961.2
One Course Paving	12,051.69
2" Integral Curb	3,890
4" " "	1,980
Catch Basins	8
Surface Drains	4
15" C.M.	142
Raking & Seeding	105.60
Shoulders	5860
Fir. Headers (3"x10")	120
Bit. Felt Joint	94

MILE TWO

ESTIMATED QUANTITIES Sta. 52+80 to Sta. 105+60	
Fine Grading	1,122
One Course Paving	11,948.86
2" Integral Curb	1,560
4" " "	3,035
Catch Basins	8
15" C.M.	222
Raking & Seeding	105.60
Shoulders	5,860

PLATE 2 — PLAN-PROFILE O. P. R. & R. E. STANDARD
KEUFFEL & ESSER CO. NEW YORK

Ramsey Co. Minnesota. County Project No. 25-52 Sheet No. 3 of [illegible] Sheets.

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