FORM 302

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	36 750	Sectional Concrete Culvert	P.1.
Levee		Corrugated Metal Culvert	C.M.
Gravel Pit	G	Culvert Haul	P.1.H.
Sand Pit	S	Ton Miles	T.M.
Clay Pit	C	Place	P
Rock Quarry	Q	In Place	Inp.
Culverts — Plain		Replace	Rep.
With Facewalls		Right	R
With Wingwalls		Left	L
Drop Inlet		Hand Ditching	H.D.
Power Pole Line		Point of Curve	P.C.
Telephone or Telegraph Line		Point of Tangent	P.T.
Marsh		Point of Intersection	P.I.
Hedge, Brush, or Timber		Special Excavation	S.E.
Ground Elevation	742	Special Plowing	S.P.
Grade Elevation	745	Telephone Pole	Tel.P.

OFFICE OF COUNTY SURVEYOR

RAMSEY COUNTY

Plan and Profile of County Project No. 27-50

From a point 120 ft. East of the S.W. Cor. of Sec. 18-29-22 **To** S.E. Cor. of Sec. 18-29-22

Give proper reference to Sections, Township and Range

GROSS LENGTH- 5055.2 FEET 0.96 MILES

LENGTH OF EXCEPTIONS- ..... FEET ..... MILES

NET LENGTH- ..... FEET ..... MILES

SCALES

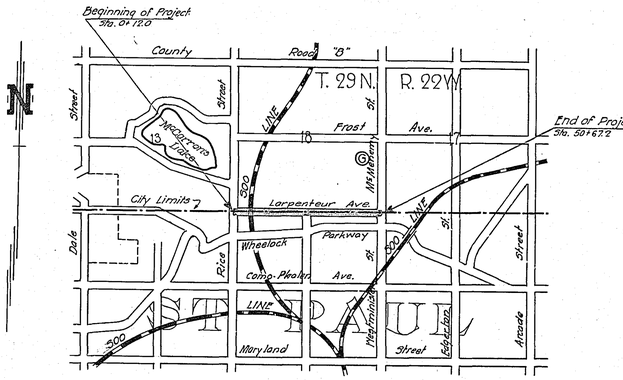
PLAN, 1 Inch = 100 Feet

PROFILE, Horz. 1 Inch = 100 Feet. Vert. 1 Inch = 20 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



NOTE:
Gravel material to be furnished and loaded by Ramsey County from pit as shown, 2000 ft. north of Sta. 50+67.20

INDEX OF SHEETS

3/10/27
"D"

PLAN 27-171 INDEX

Date of Resolution for Preparation of Plans SEPTEMBER 13th 19 26

Planned by _____ ASSISTANT ENGINEER

Recommended for Approval _____ CONSTRUCTION ENGINEER

Plans Approved and Recommended for Consideration _____ COUNTY SURVEYOR

Approved by County Board _____ 19 _____ CHAIRMAN OF COUNTY BOARD

Ramsey County, Minnesota. County Proj. No. 27-50 Plan No. _____ Sheet 1 of 5 Sheets

FORM 129-C REV. AUG. 1926.

STATEMENT OF ESTIMATED QUANTITIES AND COSTS.

		ITEM	UNIT	MILE ONE Sta. 0+02 to Sta. 520+62	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.	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	Acre																		
	2	Clearing	Tree	19																	
	3	Grubbing	Acre																		
	4	Grubbing	Tree	2																	
	5	Excavation - Earth	Cu. Yd.	13714																	
	6	Excavation - Loose Rock	Cu. Yd.	50																	
	7	Excavation - Solid Rock	Cu. Yd.	85																	
	8	Excavation - Overhaul	Cu. Yd.	14990																	
	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 15" CM	Lin. Ft.	144																	
	18	Install 36" CM	Lin. Ft.	20																	
	19	Install	Lin. Ft.																		
	20	Install	Lin. Ft.																		
	21	Install	Lin. Ft.																		
	22	Install	Lin. Ft.																		
	23	Install	Lin. Ft.																		
	24	Install	Lin. Ft.																		
	25	Install 24" P_3	Lin. Ft.	238																	
	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	59.82																	
	30	Remove old culv.		110																	
	31	Replace " "		38																	
	32																				
		TOTAL ESTIMATED COST OF GRADING (IN 'TOTALS' COLUMN)																			
PORTABLE CULVERTS	33	C.M. Culv. Material 15"	Lin. Ft.	144																	
	34	C.M. Culv. Material 36"	Lin. Ft.	20																	
	35	Culv. Material	Lin. Ft.																		
	36	Culv. Material	Lin. Ft.																		
	37	Culv. Material	Lin. Ft.																		
	38	Culv. Material	Lin. Ft.																		
	39	P_3 Culv. Material 24"	Lin. Ft.	238																	
	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)																			
GRAVEL HAUL	42	Gravel Pit Stripping	Cu. Yd.																		
	43	Screening	Cu. Yd.																		
	44	Loading	Cu. Yd.																		
	45	Hauling	Cu. Yd. Mile	1399																	
	46	Shaping & Compacting	Man Hour	97																	
	47	Shaping & Compacting	Man & Team Hour	225																	
	48																				
	49																				
	50																				
	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.																		
	56	Shoulders - Earth	Cu. Yd.																		
	57																				
	58																				
	59	Pavement	Sq. Yd.																		
	60	Integral Curb { One Course Concrete }	Lin. Ft.																		
	61	Sloping Curb	Lin. Ft.																		
	62	Surface Drain	Lin. Ft.																		
	63	Surface Drain Basins	Basin																		
	64	Bridge Approach Slabs (Square)	Slab																		
	65	Bridge Approach Slabs (Skew)	Slab																		
	66																				
	67																				
	68																				
		TOTAL ESTIMATED COST OF PAVEMENT CONSTRUCTION (IN 'TOTALS' COLUMN)																			
STRUCTURES	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.	Br. No.	Br. No.	Br. No.	Br. No.	Br. No.	Br. No.	Br. No.	Br. No.	Br. No.	Br. No.	Br. No.	Br. No.	Br. No.	Br. 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)																			
MISCELLANEOUS	85	Guard Rail - Cable	Lin. Ft.	1810																	
	86	Guard Rail Anchor	Lin. Ft.	16																	
	87	Excavation for Gutter	Cu. Yd.																		
		TOTAL ESTIMATED COST OF MISCELLANEOUS ITEMS IN 'TOTALS' COLUMN																			
		GRAND TOTAL																			

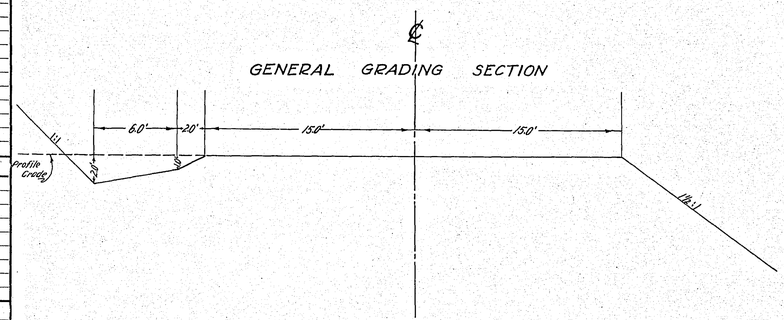
* NOTE: BRIDGE ITEMS LISTED UNDER BRIDGE NUMBERS IN MILE COLUMNS REGARDLESS OF LOCATION

TYPICAL CROSS SECTIONS AND DETAILS

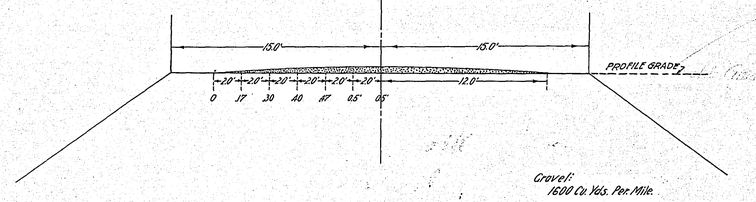
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SEC.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MINN.					

LARPENTEUR AVE.
PROJ.~ 27-50

GENERAL GRADING SECTION



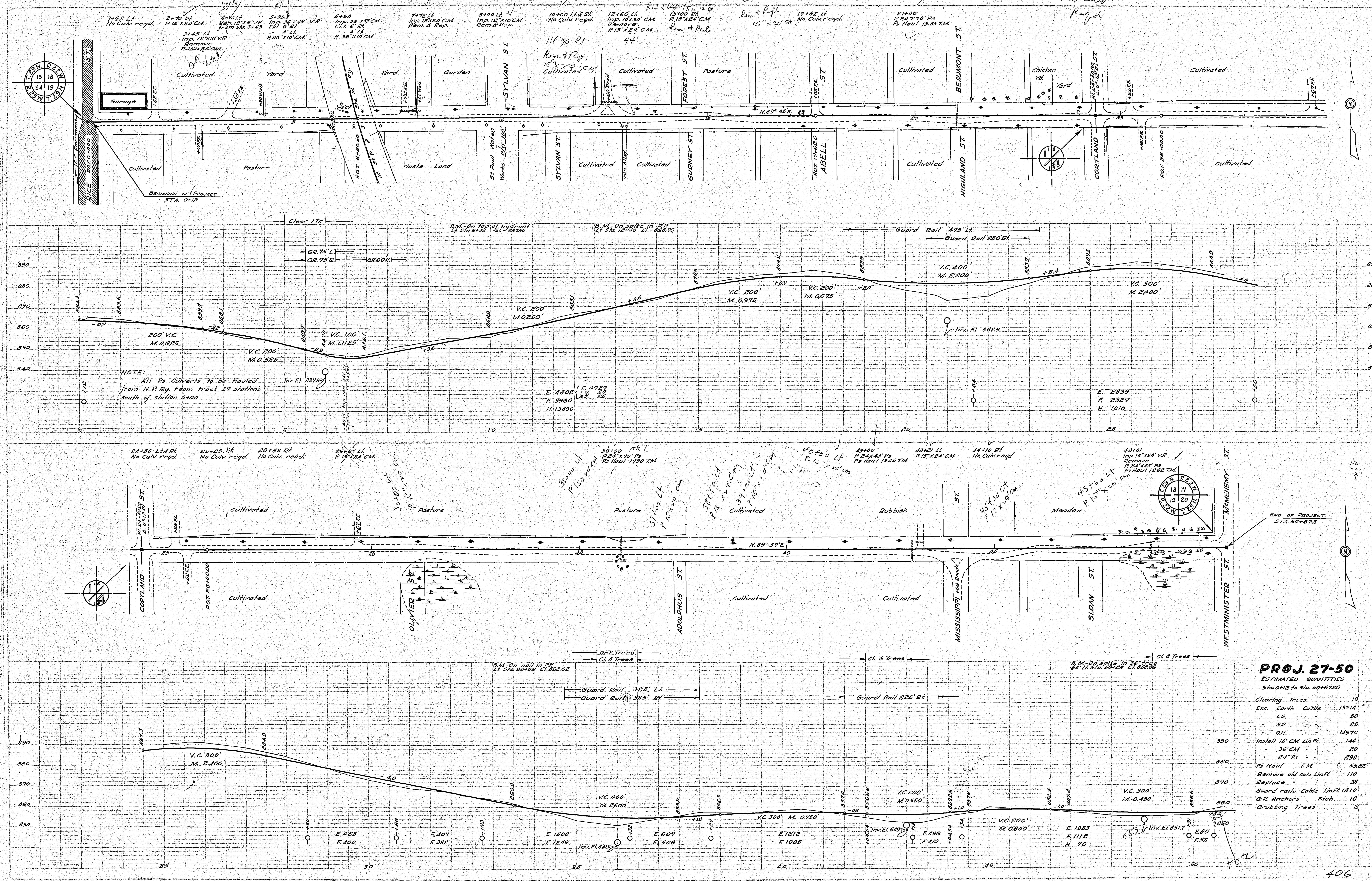
GENERAL GRAVEL SECTIONS



Gravel
1600 Cu. Yds. Per Mile

~ 406

RAMSEY CO. PROJ. No. 27-50 SEC. ..... F. A. P. No. ..... SEC. ..... SHEET No. 2 OF 5 SHEETS.



PROJ. 27-50

ESTIMATED QUANTITIES

Sta. 0+12 to Sta. 50+67.20

Clearing Trees			19
Exc. Earth	Cu. Yds.		13714
" L.R.	" "		50
" S.R.	" "		25
" O.H.	" "		14970
Install 15" C.M.	Lin. Ft.		144
" 36" C.M.	" "		20
" 24" P3	" "		238
P3 Haul	T.M.		59.82
Remove old culv.	Lin. Ft.		110
Replace "	" "		38
Guard rail: Cable	Lin. Ft.		1810
G.R. Anchors	Each		16
Grubbing Trees			2

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

Ramsey Co. Minnesota. County Proj. 27-50. Sheet 3 of 5 Sheets