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	34 950	Sectional Concrete Culvert	P.L.
Levee		Corrugated Metal Culvert	C.M.
Gravel Pit	G	Culvert Haul	P.L.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	742	Telephone Pole	Tel.P.
Grade Elevation	742		

OFFICE OF COUNTY SURVEYOR

RAMSEY COUNTY

Plan and Profile of County Project No. 33-NSP 1

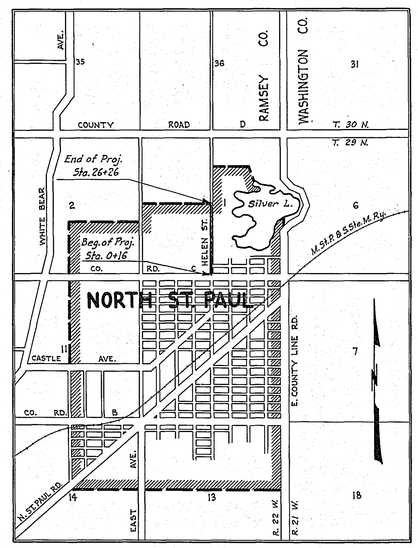
From a point which is 16.00 ft. N. of the S.¼ Cor. of Sec. 1-29-22, to the Center of Sec. 1-29-22

GROSS LENGTH- 2610.00 FEET 0.494 MILES
LENGTH OF EXCEPTIONS-..... FEET..... MILES
NET LENGTH- 2610.00 FEET 0.494 MILES

SCALES:
- 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+16.00 to Sta. 26+26.00
" No. 4. to 6. Incl. Cross Sections

Date of Resolution for Preparation of Plans 4-3 1933

Planned by M. W. Carlen
ASSISTANT ENGINEER

Recommended for Approval B. Van Kruelen
ASSISTANT ENGINEER

Plans Approved and Recommended for Consideration Paul D. Carter
COUNTY SURVEYOR

Approved 4/25 1933 Joseph Schmoch.
PRESIDENT OF VILLAGE COUNCIL

Approved by County Board 5-1 1933 William Mahoney
CHAIRMAN OF COUNTY BOARD

"IMPERIAL" TRACING CLOTH
K & E CO., N.Y.

FORM 129-C REV. AUG. 1926.

STATEMENT OF ESTIMATED QUANTITIES AND COSTS.

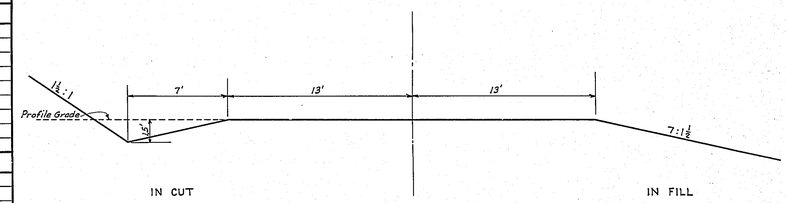
	No.	ITEM	UNIT	MILE ONE Sta. 0+16 to Sta. 26+26	MILE ..... Sta. ..... to Sta.	MILE ..... Sta. ..... to Sta.	MILE ..... Sta. ..... to Sta.	MILE ..... Sta. ..... to Sta.	MILE ..... Sta. ..... to Sta.	MILE ..... Sta. ..... to Sta.	MILE ..... Sta. ..... to Sta.	MILE ..... Sta. ..... to Sta.	MILE ..... Sta. ..... 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	62													62			
	3	Grubbing	Acre																	
	4	Grubbing	Tree	60													60			
	5	Excavation - Earth	Cu. Yd.	2855													2855			
	6	Excavation - Loose Rock	Cu. Yd.	30													30			
	7	Excavation - Solid Rock	Cu. Yd.	15													15			
	8	Excavation - Overhaul	Cu. Yd.																	
	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 12" C.M.	Lin. Ft.	212													212			
	18	Install	Lin. Ft.																	
	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" P3	Lin. Ft.	54													54			
	26	Install 30" P3	Lin. Ft.																	
	27	Install 36" P3	Lin. Ft.																	
	28	P1 Culvert Haul	Ton Mile																	
	29	P3 Culvert Haul	Ton Mile																	
	30	Remove Old Culvert	Lin. Ft.	78													78			
	31	Replace Old Culvert	Lin. Ft.	32													32			
	32																			
		TOTAL ESTIMATED COST OF GRADING (IN 'TOTALS' COLUMN)																		
PORTABLE CULVERTS	33	Culv. Material	Lin. Ft.																	
	34	Culv. Material	Lin. Ft.																	
	35	C.M. Culv. Material 12"	Lin. Ft.	212													212			
	36	12" C.M. Bands.	Each	1													1			
	37	Culv. Material	Lin. Ft.																	
	38	Culv. Material	Lin. Ft.																	
	39	P3 Culv. Material 24"	Lin. Ft.	54													54			
	40	P3 Culv. Material 30"	Lin. Ft.																	
	41	P3 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																	
	46	Shaping & Compacting	Man Hour																	
	47	Shaping & Compacting	Man & Team Hour																	
	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	Lin. Ft.	725													725			
	86	Guard Rail Anchors	Each	8													8			
	87	Excavation for Gutter	Cu. Yd.																	
		TOTAL ESTIMATED COST OF MISCELLANEOUS ITEMS IN 'TOTALS' COLUMN																		

CULVERT MAT'L. TO BE DELIVERED ON PROJ.

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

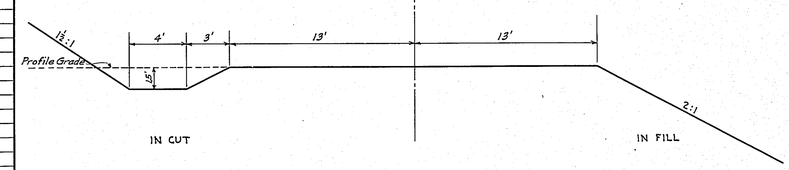
TYPICAL CROSS SECTIONS AND DETAILS

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



GRADING SECTION

Sta. 0+16 to Sta. 7+27



GRADING SECTION

Sta. 7+27 to Sta. 26+26

6105

PRINTED ON "TRIPLEMAT" TRACING CLOTH K & E & CO., N. Y.

1+48 Lt.
P. 12"x20' C.M.

1+84 Rt.
No Culv. Reqd.

2+05 Rt.
No Culv. Reqd.

2+67 Lt.
No Culv. Reqd.

3+63 Rt.
P. 12"x40' C.M.

5+20 Lt.
P. 12"x20' C.M.

5+52 Rt.
P. 12"x24' C.M.

7+19 Rt.
Inp. 12"x32' C.M.
Rem., Rep. & Ext. 8' C.M.
1 12" C.M. Band.

7+27 Lt.
No Culv. Reqd.

11+70
No Culv. Reqd.

14+53 Rt.
P. 12"x30' C.M.

14+53 Lt.
P. 12"x20' C.M.

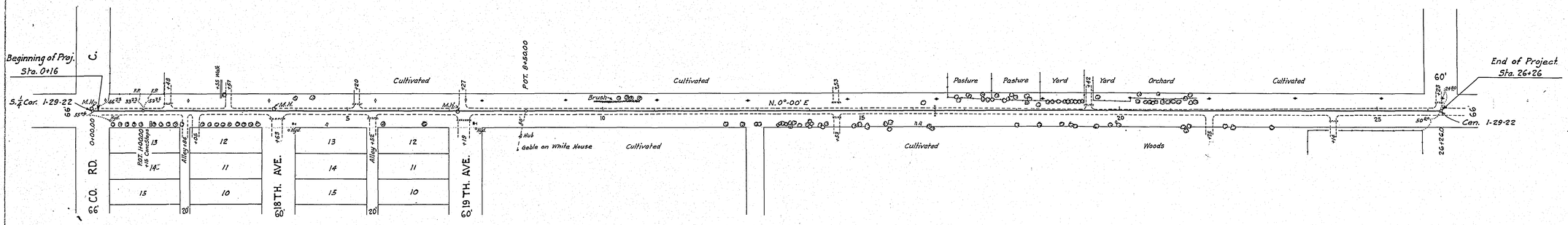
16+44
Inp. 9"x30' V.P.
Remove
P. 24"x54' P3

19+42 Lt.
P. 12"x20' C.M.

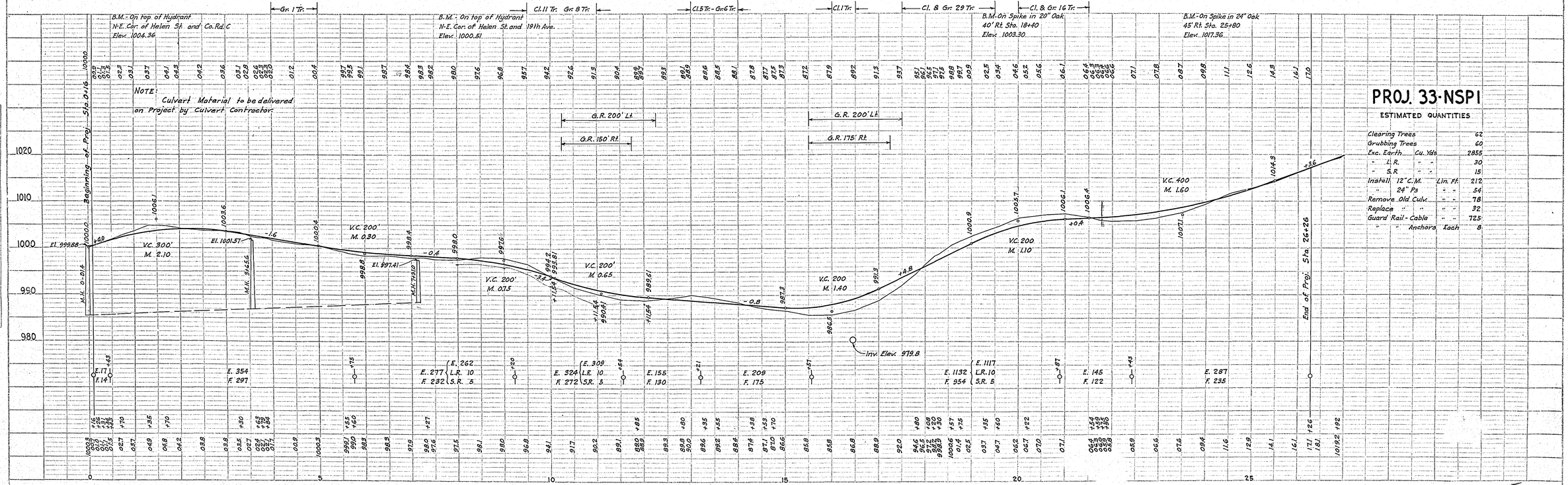
21+75 Rt.
No Culv. Reqd.

24+14 Rt.
Inp. 6"x16' V.P.
Remove
P. 12"x30' C.M.

26+23 Lt.
O.K. Leave



NOTE:
Row of trees as shown on Right, Sta. 0+40 to Sta. 3+50, are not to be removed. See Cross-Sections, Sheet 4, for special back slope between these stations.



PROJ. 33-NSP1

ESTIMATED QUANTITIES

Clearing Trees		62
Grubbing Trees		60
Exc. Earth	Cu. Yds	2855
" L.R.	" "	30
" S.R.	" "	15
Install 12" C.M.	Lin. Ft.	212
" 24" P3	" "	54
Remove Old Culv.	" "	78
Replace " "	" "	32
Guard Rail - Cable	" "	725
" " Anchors	Each	8

PLATE 3 - PLAN-PROFILE O. P. R. & R. R. STANDARD
HEUPEL & GEIER CO., NEW YORK

6105

Ramsey Co. Minnesota, County Proj. 33-WB1 Sheet 3 of 6 Sheets