

CONVENTIONAL SIGNS & ABBREVIATIONS

STATE LINE	-----	EXCAVATION	.....	F
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	.....	P1
LEEVE	-----	CORRUGATED METAL CULVERT	.....	C.M.
GRAVEL PIT	.....	CULVERT HAUL	.....	P.L.H.
SAND PIT	.....	TOW MILES	.....	T.M.
CLAY PIT	.....	IN PLACE	.....	P
ROCK QUARRY	.....	REPLACE	.....	Rep
CULVERTS	.....	RIGHT	.....	R
PLAIN	.....	LEFT	.....	L
WITH FACEWALLS	.....	HAND DITCHING	.....	H.D.
WITH WINGWALLS	.....	POINT OF CURVE	.....	P.C.
DROP INLET	.....	POINT OF TANGENT	.....	P.T.
POWER POLE LINE	.....	POINT OF INTERSECTION	.....	P.I.
TELEPHONE OR TELEGRAPH LINE	.....	SPECIAL EXCAVATION	.....	S.E.
MARSH	.....	SPECIAL PLOWING	.....	S.P.
HEDGE, BUSH, OR TIMBER	.....	TELEPHONE POLE	.....	Tel.P.
GROUND ELEVATION	.....		
GRADE ELEVATION	.....		

OFFICE OF COUNTY SURVEYOR

RAMSEY COUNTY

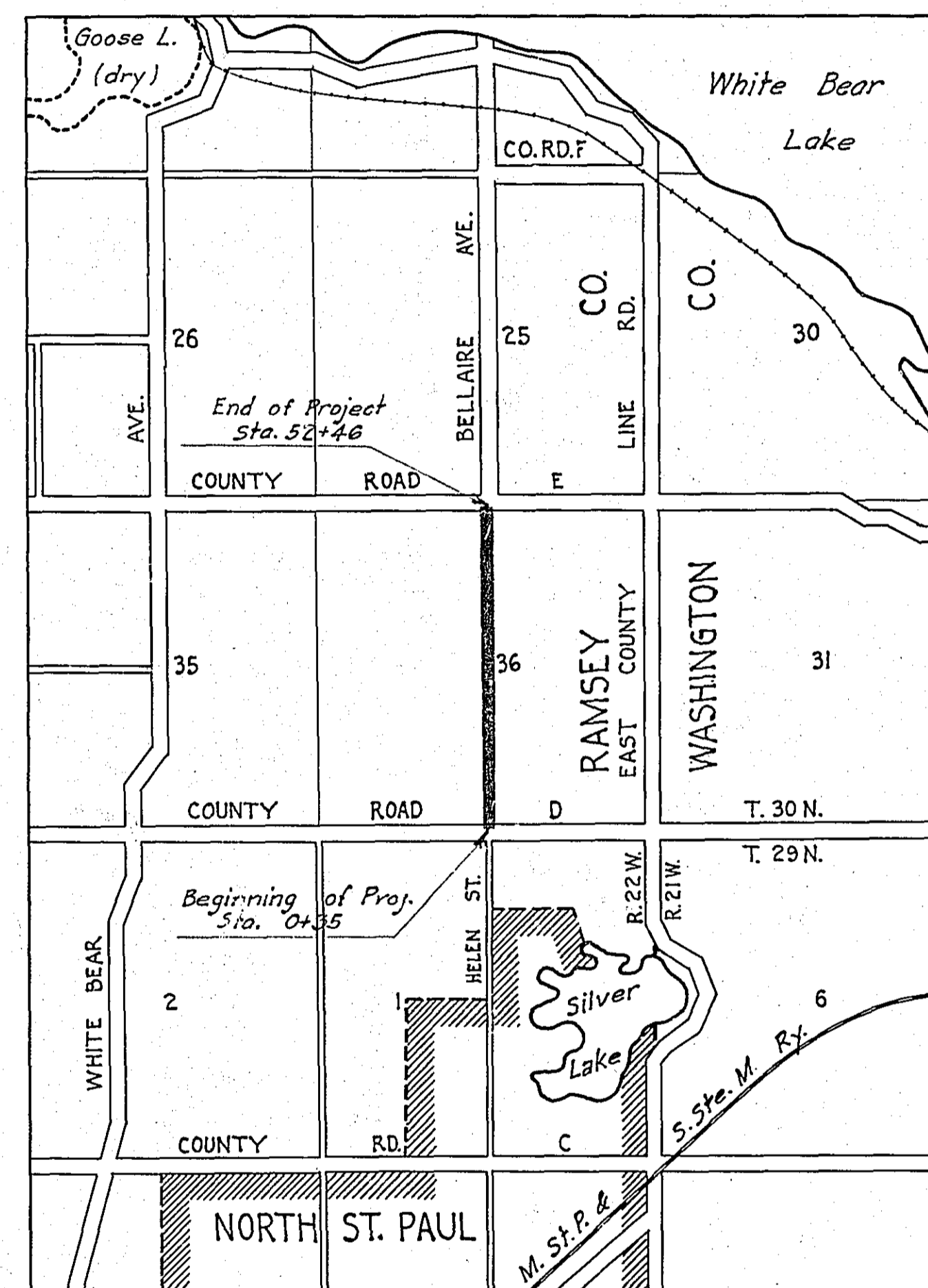
Plan and Profile of County Aid Road (Bellaire Ave.) Proj. 30-W31

From A point 35' N. of S. 1/4 Cor. of Sec. 36-30-22 To A point 145' S. of N. 1/4 Cor. of Sec. 36-30-22
Give proper reference to Sections, Township and Range

GROSS LENGTH - 5211.0 FEET 0.987 MILES
 LENGTH OF EXCEPTIONS - FEET MILES
 NET LENGTH - 5211.0 FEET 0.987 MILES
 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+35 to Sta. 52+46
 " No. 4-7. Inc. Cross Sections



Date of Resolution for Preparation of Plans June 23, 1930

Planned by *Blair* ASSISTANT ENGINEER

Recommended for Approval *Wood* CONSTRUCTION ENGINEER

Plans Approved and Recommended for Consideration *Paul* COUNTY SURVEYOR

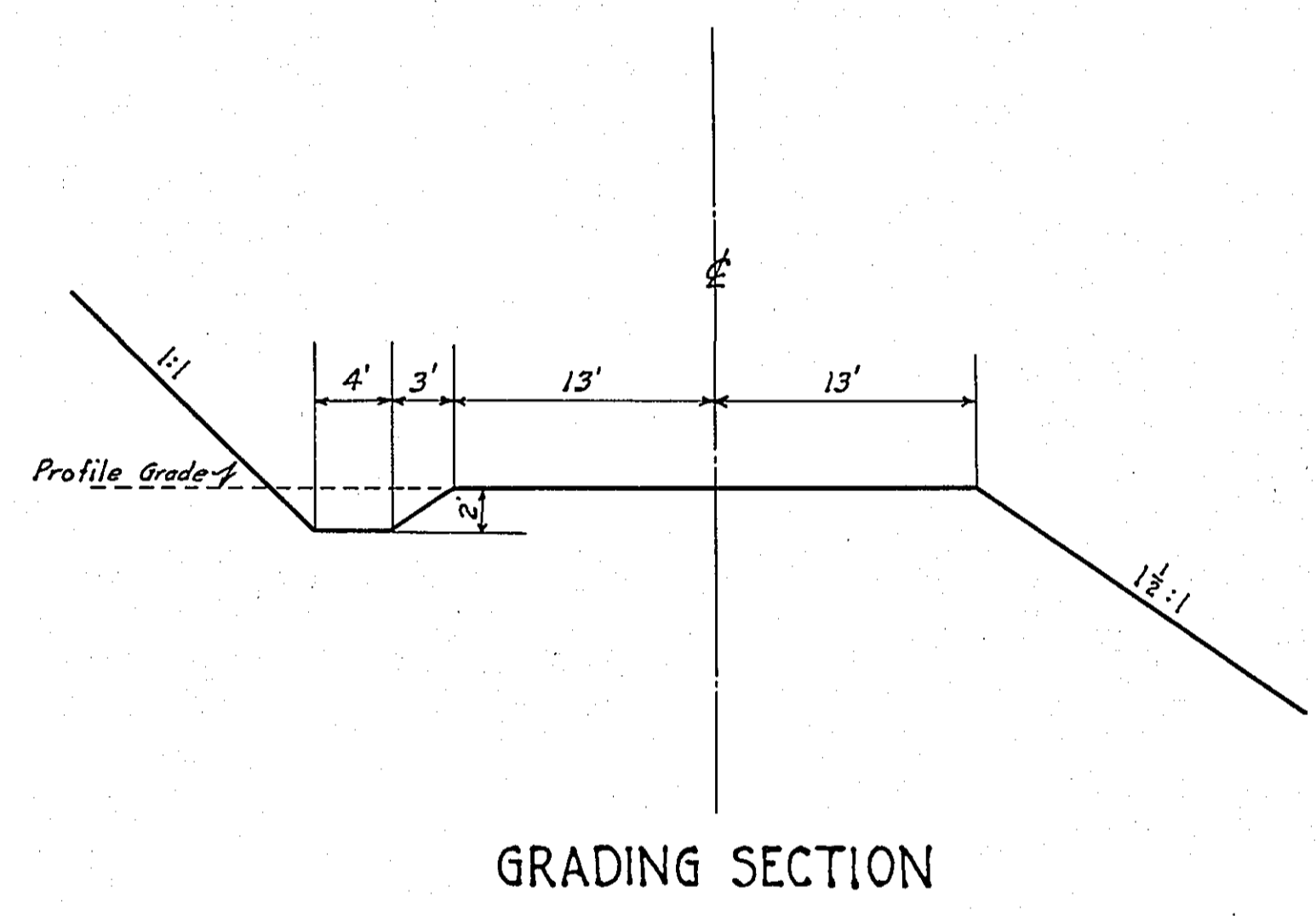
Approved by Town Board 7/27 1930 *Chairman* CHAIRMAN OF TOWN BOARD
 Approved by County Board 8/4 1930 *H.P. Church* CHAIRMAN OF COUNTY BOARD

STATEMENT OF ESTIMATED QUANTITIES AND COSTS.

ITEM	UNIT	MILE														TOTAL ESTIMATED QUANTITIES	ESTIMATED UNIT PRICES	AMOUNTS	TOTALS
		Sta. 0+00 to Sta. 0+46	Sta. 0+46 to Sta. 0+92	Sta. 0+92 to Sta. 1+38	Sta. 1+38 to Sta. 1+84	Sta. 1+84 to Sta. 2+30	Sta. 2+30 to Sta. 2+76	Sta. 2+76 to Sta. 3+22	Sta. 3+22 to Sta. 3+68	Sta. 3+68 to Sta. 4+14	Sta. 4+14 to Sta. 4+60	Sta. 4+60 to Sta. 5+06	Sta. 5+06 to Sta. 5+52	Sta. 5+52 to Sta. 5+98	Sta. 5+98 to Sta. 6+44				
1	Clearing	Acre	0.34														0.34		
2	Clearing	Tree																	
3	Grubbing	Acre	0.29														0.29		
4	Grubbing	Tree																	
5	Excavation - Earth	Cu. Yd.	14909														14909		
6	Excavation - Loose Rock	Cu. Yd.	95														95		
7	Excavation - Solid Rock	Cu. Yd.	15														15		
8	Excavation - Overhaul	Cu. Yd.	7938														7938		
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	Stone Rip-Rap or Stone Drain Material	Cu. Yd. mile																	
17	Install 18" C.M.	Lin. Ft.	50														50		
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" P ₃	Lin. Ft.	234														234		
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	133.48														133.48		
30																			
31																			
32																			
TOTAL ESTIMATED COST OF GRADING (IN 'TOTALS' COLUMN)																			
33	Culv. Material	Lin. Ft.																	
34	C.M. Culv. Material 18"	Lin. Ft.	50														50		
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.	186														186		
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.																	
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)																			
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																			
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 (Sawed)	Slab																	
65	Bridge Approach Slabs (Cure)	Slab																	
66																			
67																			
68																			
TOTAL ESTIMATED COST OF PAVEMENT CONSTRUCTION (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.	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.	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)																			
85	Guard Rail - Cable	Lin. Ft.	2625														2625		
86	Anchors	Each	18														18		
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.					



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

