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		Sectional Concrete Culvert	F.1
Levee		Corrugated Metal Culvert	C.M.
Gravel Pit	G	Culvert Haul	Pi.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	721	Telephone Pole	Tel.P.
Grade Elevation	725		

OFFICE OF COUNTY SURVEYOR

RAMSEY COUNTY

Plan and Profile of County Project No.

From A point on the north line of sec.3-28-22 which is 535' E. of the N.W. Corner To A point which is approx. 940' W. and 250' N. of the S.E.Cor. sec.3-28-22

Give proper reference to Sections, Township and Range

GROSS LENGTH- 6825 FEET 1.29 MILES

LENGTH OF EXCEPTIONS- — FEET — MILES

NET LENGTH- 6825 FEET 1.29 MILES

SCALES

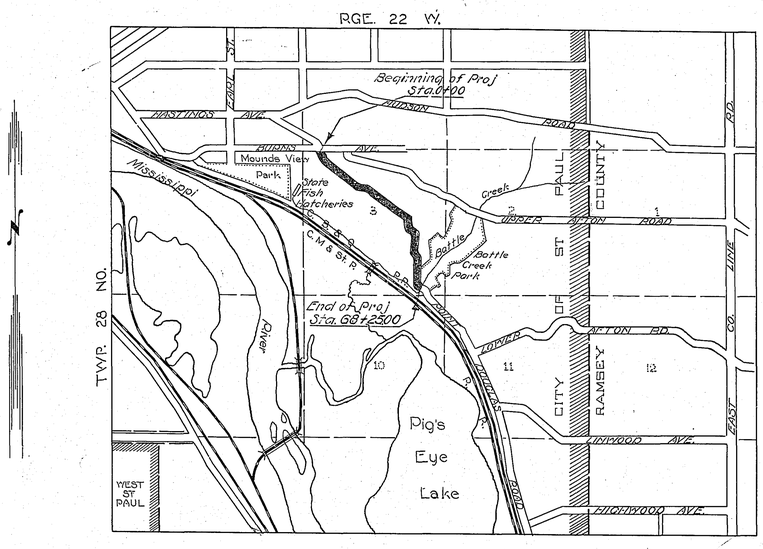
PLAN, 1 Inch = 100 Feet

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 = 5 Feet Right side; 1 Inch = 10 Feet Left side

LAYOUT

SCALE, 1 Inch = 2640 Feet



INDEX OF SHEETS

Date of Resolution for Preparation of Plans 9/12 1928

Planned by W. Van Kuveler, ASSISTANT ENGINEER

Recommended for Approval Thos. Mackintosh, CONSTRUCTION ENGINEER

Plans Approved and Recommended for Consideration Paul Hodges, COUNTY SURVEYOR

Approved by County Board 4/1 1929 T. Hodgson, CHAIRMAN OF COUNTY BOARD

Hwy 61

Ramsey County, Minnesota. County Proj. No. 29-STH3 Plan No. Sheet 1 of 15 Sheets

5501

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

FORM 129-C REV. AUG. 1925.

STATEMENT OF ESTIMATED QUANTITIES AND COSTS.

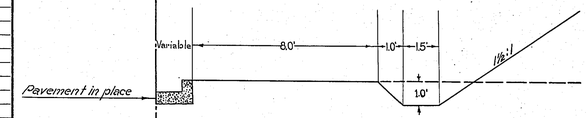
		ITEM	UNIT	MILE 1 Sta. 0+00 to Sta. 68+25	MILE ... Sta. ... to Sta. ...	MILE ... Sta. ... to Sta. ...	MILE ... Sta. ... to Sta. ...	MILE ... Sta. ... to Sta. ...	MILE ... Sta. ... to Sta. ...	MILE ... Sta. ... to Sta. ...	MILE ... Sta. ... to Sta. ...	MILE ... Sta. ... to Sta. ...	MILE ... Sta. ... to 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	0.76														0.76			
	2	Clearing	Tree	96														96			
	3	Grubbing	Acre																		
	4	Grubbing	Tree	104														104			
	5	Excavation - Earth	Cu. Yd.	6203														6203			
	6	Excavation - Loose Rock	Cu. Yd.	50														50			
	7	Excavation - Solid Rock	Cu. Yd.	25														25			
	8	Excavation - Overhaul	Cu. Yd.	5440														5440			
	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	Masonry Rip-Rap or Stone Drain Material	Cu. Yd. mile																		
	17	Install	Lin. Ft.																		
	18	Furnish & Extend 18"Ø	Lin. Ft.	30														30			
	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.																		
	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																		
	30																				
	31																				
	32																				
		TOTAL ESTIMATED COST OF GRADING (IN 'TOTALS' COLUMN)																			
PORTABLE CULVERTS	33	Culv. Material	Lin. Ft.																		
	34	Culv. Material	Lin. Ft.																		
	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.																		
	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																		
	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 4"	Lin. Ft.	19														19			
	62	Surface Drain	Lin. Ft.	103														103			
	63	Surface Drain Basins	Basin	8														8			
	64	Bridge Approach Slabs (Square)	Slab																		
	65	Bridge Approach Slabs (Skew)	Slab																		
	66	Remove old surface drains	Each	3														3			
	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.	3735														3735			
	86	Guard Rail Anchors	Each	20														20			
	87	Remove old G.Rail	Lin. Ft.	60														60			
		TOTAL ESTIMATED COST OF MISCELLANEOUS ITEMS IN 'TOTALS' COLUMN																			

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

TYPICAL CROSS SECTIONS AND DETAILS

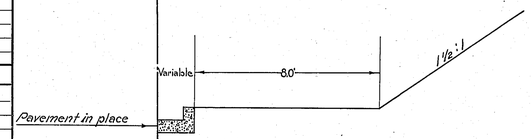
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SEC.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
4	MINN.					

PROJ. 29-S.T.H.3



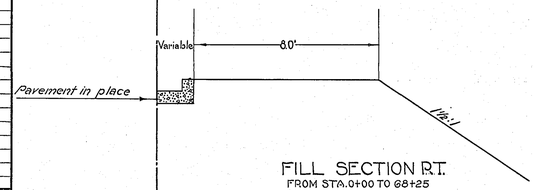
SPECIAL SECTION RT.
FROM STA. 0+00 TO 7+50 LT.

Line 7

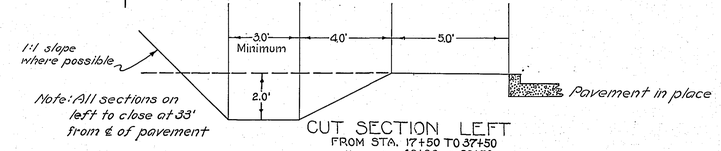


CUT SECTION RT.
FROM STA. 7+50 TO 68+25

Base



FILL SECTION RT.
FROM STA. 0+00 TO 68+25



CUT SECTION LEFT
FROM STA. 17+50 TO 37+50
" " 46+00 " 62+50

5501

RAMSEY COUNTY PROJ. No. 29-S.T.H.3 SEC. ... F. A. P. No. ... SEC. ... SHEET No. 2 OF 15 SHEETS.

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

5501

PLATE 1-PLAN-PROFILE

Ramsey County Project No. 29-S.T.H.3 Sheet 3 of 15 Sheets

29+78
Inp. 30" C.M.-26' R.
O.K.

33+16
Inp. 24" C.M.-19' R.
O.K.

33+62
Inp. 18" V.P.-11' Rt
Extend 18"X18" V.P.

37+26
Inp. 30" C.M.-16' R.
O.K.

40+85
Inp. 15" C.M.-10' R.
O.K.

42+13
Inp. 18" C.M.-11' R.
O.K.

42+15 & 43+85 - Rt.
Rem. old surface drains - 2
Pl. New " " - 2
Drain 10' & 17'

44+66
Inp. 30" C.M.-22' R.
O.K.

45+87 Rt.
Inp. 10"X10"X17' conc. culv.

46+62
Inp. 18" C.M.-27' R.
O.K.

49+15 - Rt.
Pl. - Surface drain
Drain 14.0'

50+66
Inp. 18" C.M.-12' R.
O.K.

50+90 - Rt.
Rem. old surface drain
Pl. new " "
Drain 9.0'

53+51
Inp. 24" C.M.-14' R.
O.K.

55+00 - Rt
Pl. surface drain
Drain 6.0'

Pl. 28+71.0
Δ. 1°05'
D. 1° Lt.
T. 55.00
L. 110.00
R. 5729.65
PC. 29+91.90
PT. 31+01.90
Pl. 30+26.9
Δ. 41°30'
30°21'
T. 73.29
L. 138.50
R. 199.19
PC. 29+79.62
Pl. 34+26.9
Δ. 14°38'
7° Lt.
T. 105.16
L. 209.05
R. 819.02
PC. 33+80.42
Pl. 34+85.6
PT. 35+89.49
Δ. 14°30'
8° Lt.
T. 91.19
L. 181.25
R. 716.76
PC. 38+68.81
Pl. 40+40.06
Pl. 42+69.45
Δ. 31°33'
12°30' R.
T. 129.75
L. 252.40
R. 459.28
Pl. 42+61.81
Pl. 44+80.15
60°06'
Pl. 44+22.57
PC. 44+71.57
Pl. 47+74.18
PT. 48+92.95
Pl. 50+60.11
Δ. 14°21'
D. 13° Lt.
T. 55.61
L. 110.56
R. 441.68
PC. 52+05.07
PT. 52+16.04
Pl. 52+36.2
Pl. 53+37.35
Pl. 53+63.35
Δ. 44°50'
19°18'
T. 123.04
L. 232.29
R. 294.28
PC. 52+18.17
PT. 53+49.69
Δ. 1°10'
24° Lt.
T. 29.58
L. 59.16
R. 819.02
PC. 53+28.53
PT. 53+87.69
Δ. 1°10'
16°48'
T. 168.73
L. 335.97
R. 479.68
PC. 54+88.43
PT. 56+71.80
Pl. 55+54.62
Spillway
Conc. steps
Spillway
House
1283.26
1285.96
26+82.4
107°56'
End of curb
Sta. 28+00

CLEARING LEFT — Cl. 7 Ac. — Cl. 11 Ac. — Cl. 0.13 Ac. — Cl. 0.14 Ac. — Cl. 17 Ac.
GRUBBING " — Gr. 12 Ac. — Gr. 11 Ac. — Cl. 1 Ac. — Gr. 18 Ac.
CLEARING RIGHT — Cl. 0.04 Ac. — Cl. 2 Ac. — Cl. 6 Ac. — Cl. 0.03 Ac.

B.M. Nail in T.R.
30' Lt. Sta. 28+60
El. 782.18

B.M. Bolt in T.R.
30' Lt. Sta. 43+54
El. 762.60

B.M. Spk. in P.R.
35' Lt. Sta. 51+70
El. 750.14

G.R. 150' — G.R. 350' — G.R. 1150' 4 anchors

Sta. 17+67 to 68+25 { E. 5438 / L.R. 50 / S.R. 25
E. 5518 / F. 4406

780
770
760
750
740

25 30 35 40 45 50 55

5501

PLATE I-PLAN-PROFILE U.S.B.R. STANDARD

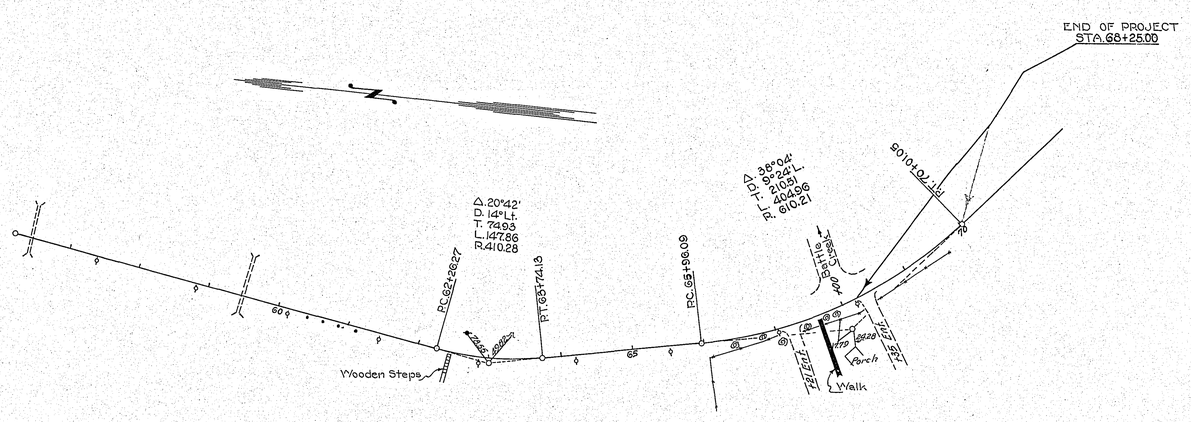
Ramsey County Project No. 29-S.T.1-1.3 Sheet 4 of 15 Sheets

EUGENE DIETZGEN CO. CHGO. N.Y.

PLAN — SURVEY PLOTTED RECHECKED NOTE BOOK FIELD WORK CHECKED NO. — DATE BY

PROFILE — LEVELED PLOTTED BLUE LINE CHECKED NOTE BOOK FIELD WORK STRUCTURES NOTATIONS CHECK NO. — DATE BY

56+44	56+30 - Rt	59+52	59+50 - Rt
Inp. 24"C.M.-29'R Alt.	Pl. Surface drain Drain 16.0'	Inp. 18"V.P.-16'R. Extend 18"X12'V.P.	Pl. Surface drain Drain 18.0'

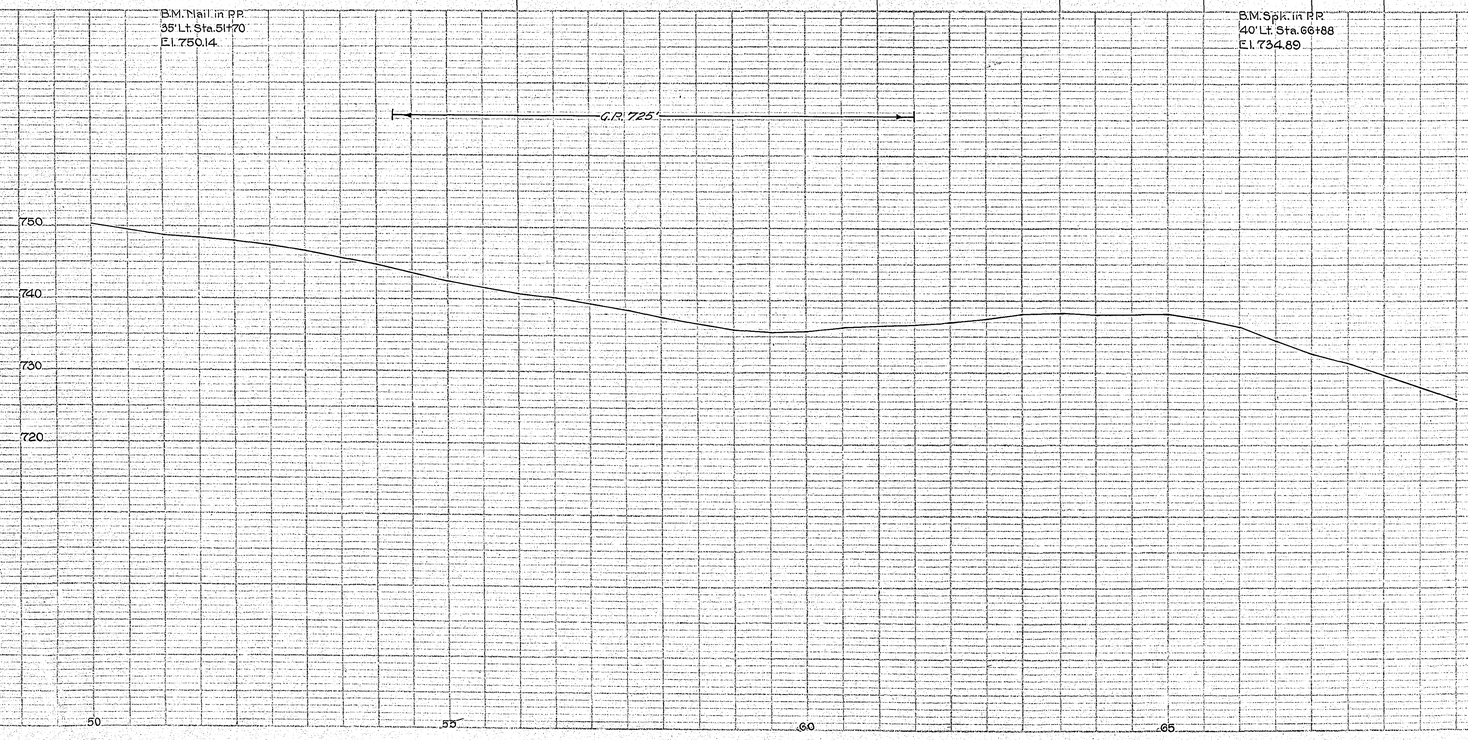


CLEARING LEFT — Cl. 25 Fr. — Gr. 32 Fr.
GRUBBING "
CLEARING RIGHT — Cl. 0.18 Ac. — Cl. 0.04 Ac. — Cl. 3 Fr.

B.M. Nail in P.P.
35' Lt. Sta. 51+70
El. 750.14

B.M. Spk. in P.P.
40' Lt. Sta. 66+88
El. 734.89

G.R. 725'



ESTIMATED QUANTITIES

FROM STA. 0+00 TO STA. 70+01.05'

Clearing		Trees	96
Grubbing		" "	104
Grubbing		Acres	0.76
Excavation	Earth	Cu. Yds.	6203
"	Loose Rock	" "	50
"	Solid Rock	" "	25
"	Over haul	" "	5440
Furnish and extend 18"KA		Lin. Ft.	30
Curb (Sloping)		Lin. Ft.	19
Surface drain basins		Each	8
Rem. old Guard Rail		Lin. Ft.	180
Guard Rail (Cable)		" "	3735
Guard Rail Anchors		Each	20
Rem. old surface drains		"	3

5501

ANSONIA BLUEPRINT CO., CHICAGO, N. Y.

PLATE I-PLAN-PROFILE C. P. R. STANDARD

Ramsey County Project No. 29-S.T.H. 3 Sheet 5 of 15 Sheets