

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	GR
FENCE LINE	-----	INTERSECTION ANGLE	A
RIGHT-OF-WAY LINE	-----	RADIUS	R
TRAVELLED WAY	-----	ELEVATION	EL
RAILROADS	-----	VERTICAL CURVE	VC
RETAINING WALL	-----	BECH MARK	B.M.
BASE OR SURVEY LINE	-----	SECTIONAL CONCRETE CULVERT	P.C.
LEVEE	-----	CORRUGATED METAL CULVERT	C.M.
GRAVEL PIT	⊙	CULVERT HAUL	P.H.
SAND PIT	⊙	TON MILES	T.M.
CLAY PIT	⊙	PLACE	P
ROCK QUARRY	⊙	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 FLOWING	S.P.
GROUND ELEVATION	-----	TELEPHONE POLE	Tel.P.
GRADE ELEVATION	-----		

STATE HIGHWAY DEPARTMENT  
OF MINNESOTA

Plan and Profile of State Road No. 17

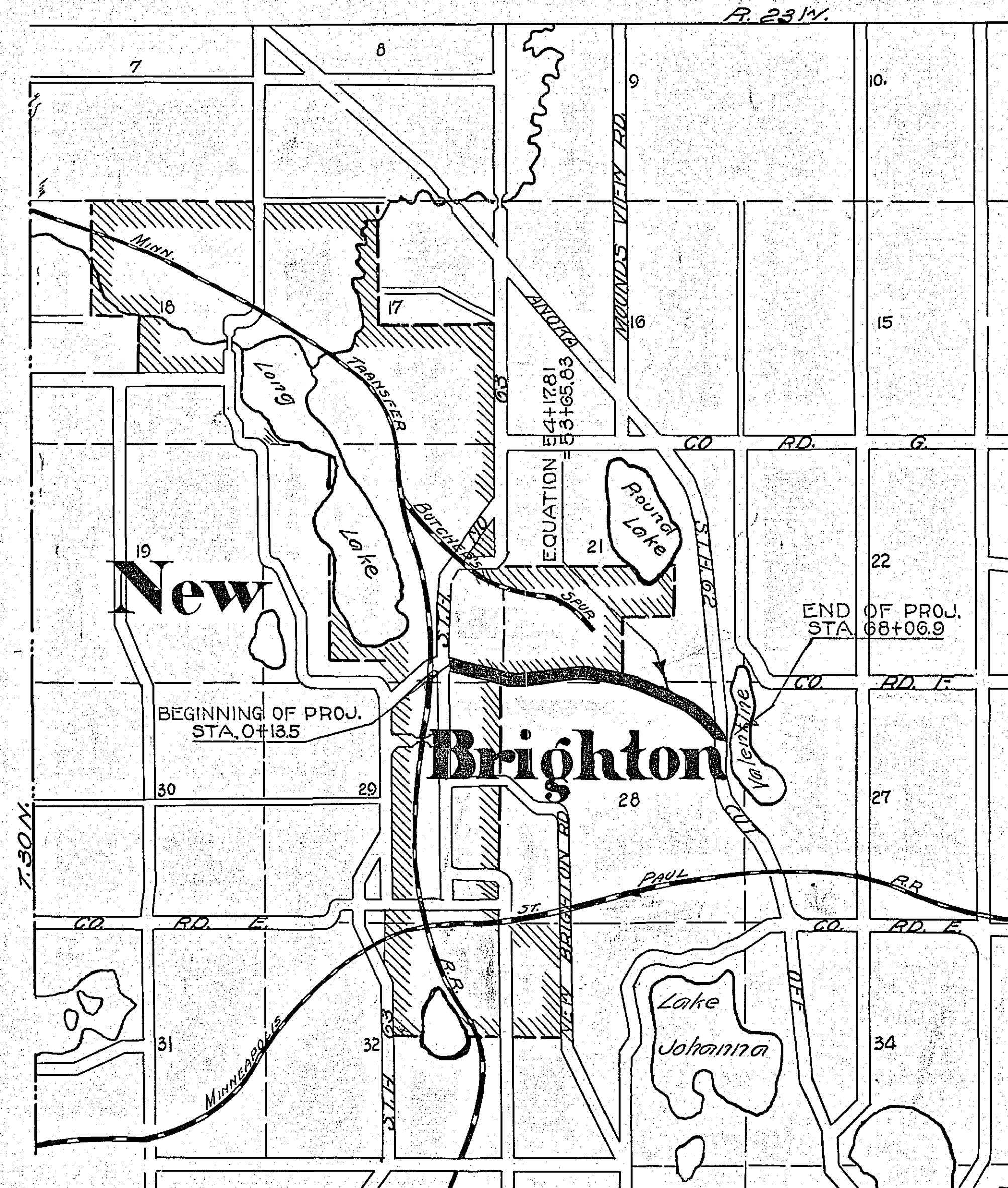
COUNTY OF RAMSEY

From A point which is approx. 1294' W. and 220' No. of the S.E. cor. Sec. 20-30-23 To A point which is 892' No. and 628' W. of the S.E. cor. of N.E. 1/4 Sec. 28-30-23  
Give proper reference to Sections, Township and Range

GROSS LENGTH 6845.36 FEET 1.30 MILES  
LENGTH OF EXCEPTIONS --- FEET --- MILES  
NET LENGTH 6845.36 FEET 1.30 MILES

PLAN, 1 Inch = 100 Feet  
PROFILE, Horz. 1 Inch = 100 Feet, Vert. 1 Inch = 10 Feet  
SCALES WORKING PLANS Horz. 1 Inch = 100 Feet, Vert. 1 Inch = 10 Feet  
Cross-Sections, 1 Inch = 10 Feet

LAYOUT  
SCALE, 1 Inch = 2000 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+135 to Sta. 49+88
- " No. 4. " " " " 49+88 " " 68+07
- " No. 5-14 Cross sections

RECEIVED FIRST	
RECEIVED TO E.O.B.	
TO DIVISION ENGR.	
APPROVED	
FROM OFFICE ENGR.	
FILED	

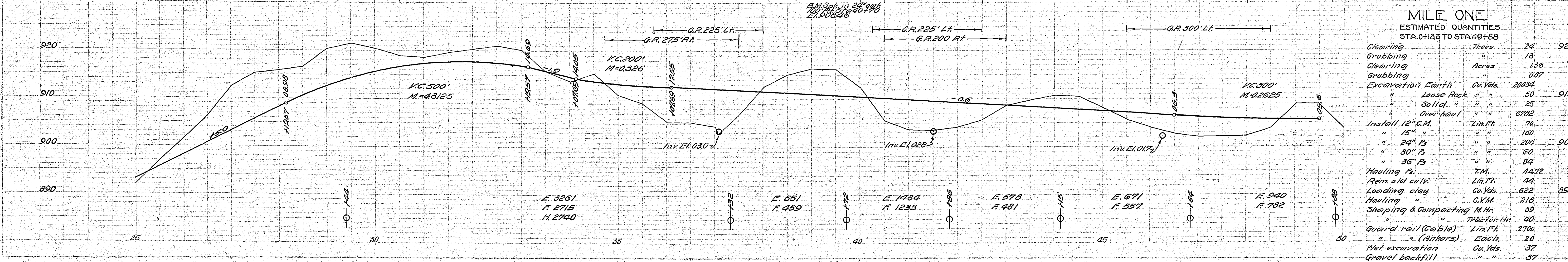
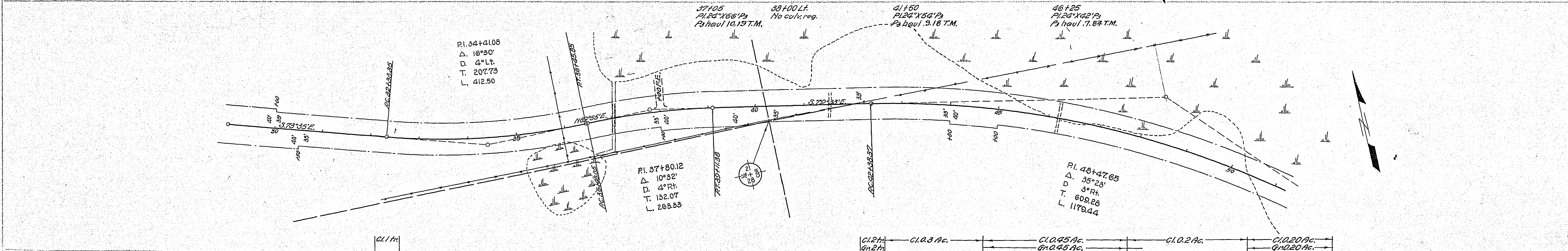
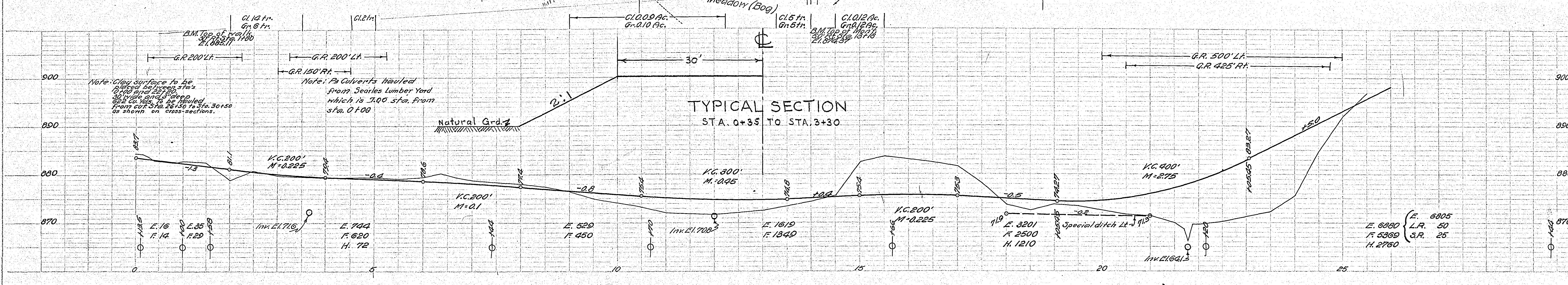
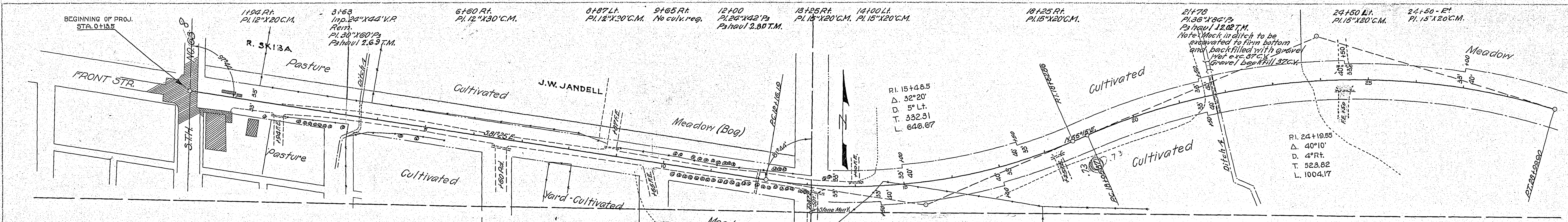
RESUBMITTED 5/7/17

Planned by Paul L. Coates  
HIGHWAY ENGINEER FOR RAMSEY COUNTY.

Recommended for Approval [Signature] DIVISION ENGINEER  
Recommended for Approval [Signature] ENGINEER OF SURVEYS AND DESIGN

Approved \_\_\_\_\_ 192 \_\_\_\_\_ CHIEF ENGINEER & DEPUTY COMMISSIONER





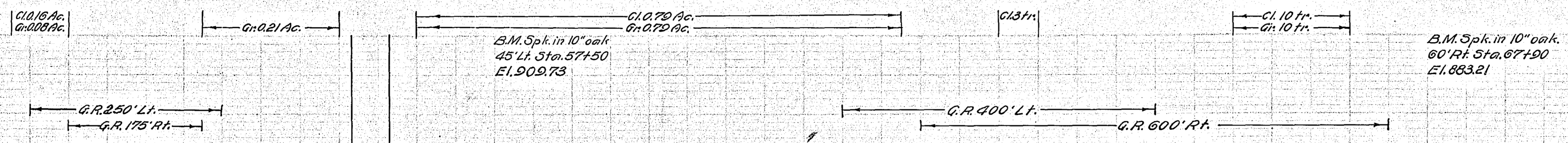
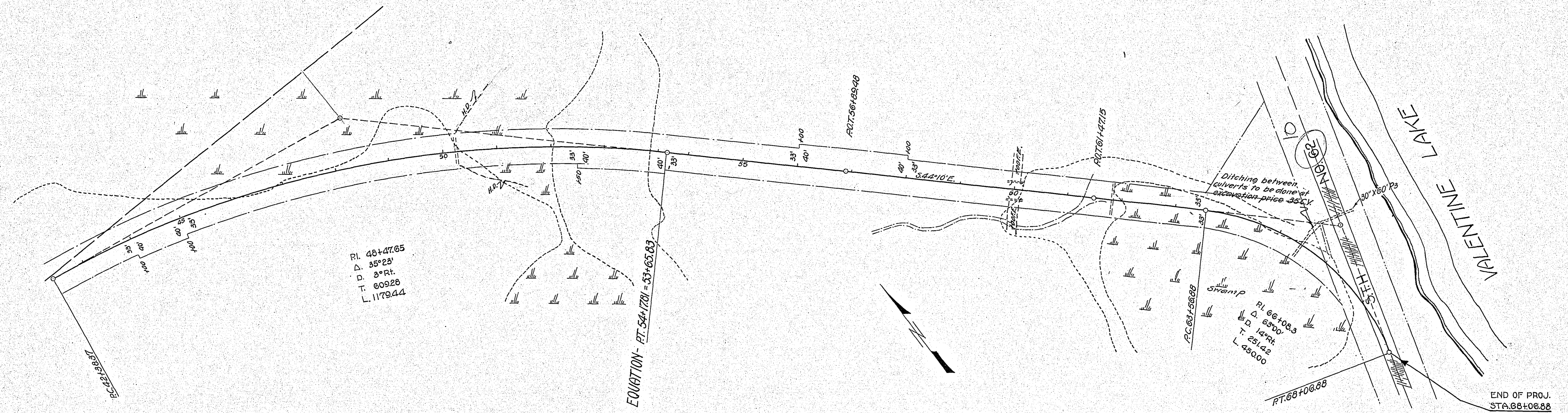
**MILE ONE**  
ESTIMATED QUANTITIES  
STA. 0+135 TO STA. 49+88

Clearing	Trees	24	920
Grubbing	"	13	
Clearing	Acres	136	
Grubbing	"	0.87	
Excavation Earth	Cu. Yds.	20434	
"	Loose Pack.	50	910
"	Solid "	25	
"	Over-haul	6702	
Install 12" C.M.	Lin. Ft.	70	
"	15" "	100	
"	24" P	200	900
"	30" P	60	
"	36" P	84	
Hauling P.	T.M.	44.72	
Rem. old culv.	Lin. Ft.	44	
Loading clay	Cu. Yds.	622	890
Hauling "	C.Y.M.	213	
Shaping & Compacting M.H.	"	39	
"	Two for Ft.	40	
Guard rail (Cable)	Lin. Ft.	2700	
"	(Anchors)	20	
Met excavation	Cu. Yds.	37	
Gravel backfill	"	37	

50+30  
 P1.24' X 68' P2  
 P3 haul 9.64 T.M.

60+20 Rt. 60+00 Lt.  
 P1.15' X 20' C.M. P1.15' X 20' C.M.  
 61+85  
 P1.24' X 54' P2  
 Haul 13.93 T.M.

65+50  
 P1.30' X 48' P2  
 P3 Haul 14.66 T.M.



**MILE TWO**  
 ESTIMATED QUANTITIES  
 STA. 49+88 TO STA. 68+06.88

Item	Unit	Quantity
Clearing	Trees	13
Grubbing	"	10
Clearing	Acres	0.95
Grubbing	"	1.08
Excavation Earth	Cu. Yds.	8097
" Loose Rock	"	25
" Solid "	"	15
" Over haul	"	525
Hand ditching	"	150
Install 15" C.M.	Lin. Ft.	40
" 24" P2	"	102
" 30" P2	"	48
Hauling P3	T.M.	37.33
Guard rail (Cable)	Lin. Ft.	1425
" " Anchors	Each	8

50+30 - H.D. 80 C.Y.  
 E. 2210  
 F. 1844  
 H. 525

E. 1025  
 L.R. 25  
 F. 885 S.R. 15

Hand ditch Rt. 5  
 E. 93  
 F. 300  
 Special ditch 35 C.Y.  
 Hand ditch 70 C.Y.

Note: Haul 4580 C.Y. from intersection of Co. Rd. F & S.T.H. 62

Col'd F 5503

