

CONVENTIONAL SIGNS

STATE LINE		TIMBER	
COUNTY LINE		BRUSH	
TOWNSHIP OR RANGE LINE		ORCHARD	
SECTION LINE		ROCK LEDGE	
QUARTER LINE		SAND	
SIXTEENTH LINE		EDGE OF CUT	
HIGH-OF-WAY LINE		TOE OF EMBANKMENT	
PROPERTY LINE (Except Land Lines)		CATCH BASIN	
VACATED PLATTED PROPERTY		MANHOLE	
CORPORATE OR CITY LIMITS		FIRE HYDRANT	
TRUNK HIGHWAY CENTER LINE		ARC LAMP	
RETAINING WALL		OTHER LAMPS (State Kind)	
STEAM RAILROAD		RAILROAD CROSSING SIGN	
ELECTRIC RAILROAD		RAILROAD CROSSING BELL	
RAILROAD RIGHT-OF-WAY LINE		ELECTRIC WARNING SIGN	
CREEK		CROSSING GATE	
RAPIDS OR WATERFALL		CATTLE GUARD	
DRY RUN		OVERHEAD (Highway Over)	
DRAINAGE DITCH		UNDERPASS (Highway Under)	
HIGH TENSION LINE		ABUTMENT, WALL & PIER	
POWER POLE LINE		BRIDGE	
TELEPHONE OR TELEGRAPH LINE		BUILDING (One Story Frame)	
CULVERT		F-FRAME C-CONCRETE	
DROP INLET		S-STONE T-TILE	
GUARD RAIL		B-BRICK ST-STUCCO	
WIRE FENCE		IRON PIPE	
RAILROAD SNOW FENCE		STONE MONUMENT	
BOARD OR HIGHWAY SNOW FENCE		WOOD STAKE OR HUB	
STONE WALL OR FENCE		MEANDER CORNER	
HEDGE			
WATER PIPE			
SEWER PIPE			
DRAIN TILE			
GRAVEL PIT			
SAND PIT			
CLAY PIT			
ROCK QUARRY			
SPRINGS			
MARSH			
TRUNK HIGHWAY R/W			
RAILROAD R/W			
PRESENT ROAD R/W			

OFFICE OF COUNTY SURVEYOR

**RAMSEY COUNTY
GRADING PLAN**

JACKSON ST. MINN. PROJ. S.A.P. 62-541-01

From South 1/4 Corner, Sec. 18, T 29 N-R 22 W To Center of Sec. 18, T 29 N-R 22 W

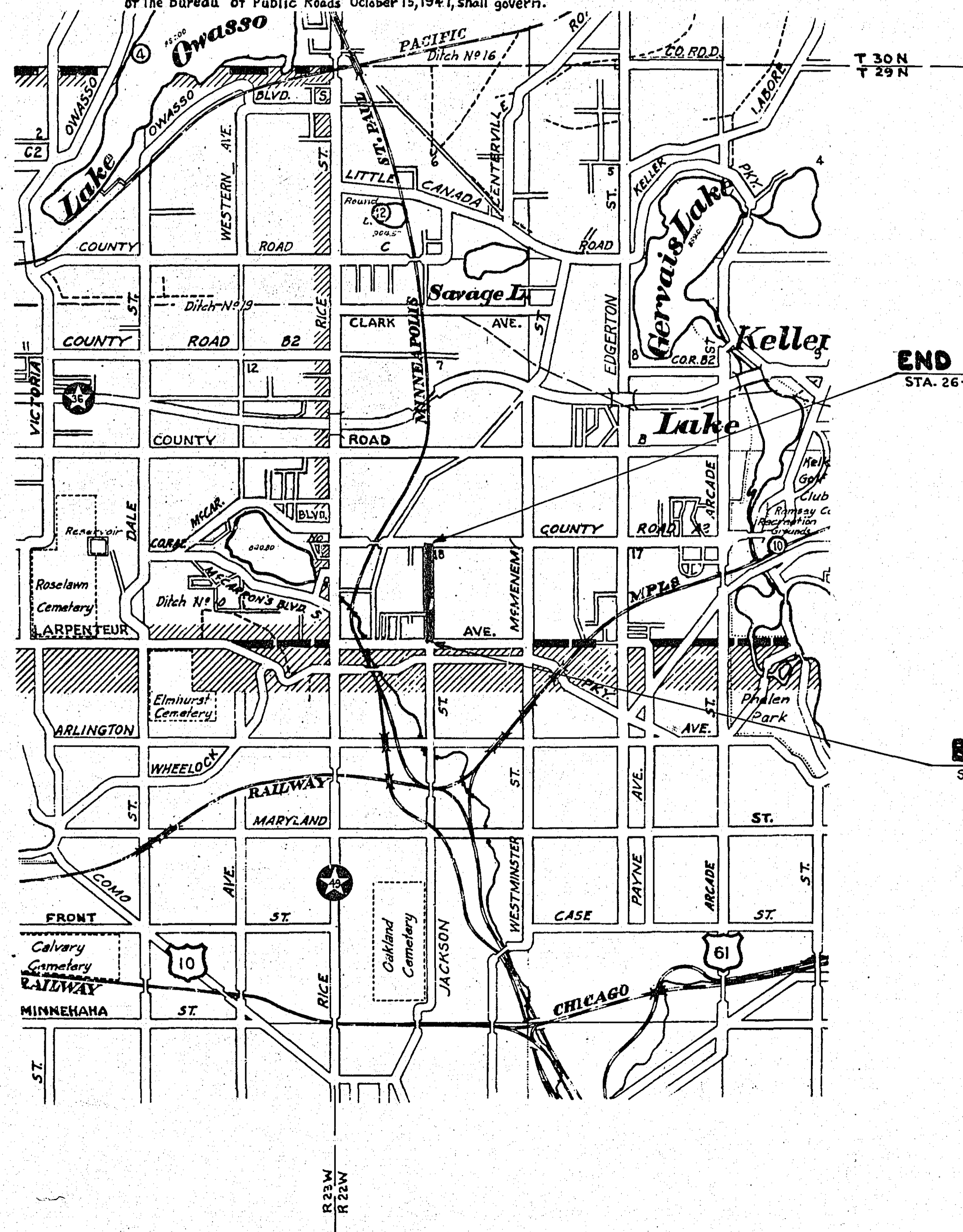
GROSS LENGTH 2600 FEET 0.492 MILES
 LENGTH OF EXCEPTIONS 0 FEET 0 MILES
 NET LENGTH 2600 FEET 0.492 MILES
 PLAN, 1 Inch = 100 Feet
 PROFILE, Horz. 1 Inch = 100 Feet. Vert. 1 Inch = 10 Feet
 WORKING PLANS { Horz. 1 Inch = } As Noted
 { Vert. 1 Inch = } As Noted
 Cross-Sections, 1 Inch = 10 Feet

LAYOUT

SCALE, 1 inch = 2640 Feet

SPECIFICATIONS

The specifications for Highway Construction, dated July 1, 1947, and submitted for Approval by the Division Engineer of the Bureau of Public Roads October 15, 1947, shall govern.



INDEX

SHEET NO.	DESCRIPTION
1	LAYOUT MAP & TITLE SHEET
2	ESTIMATE & MISC. DETAILS
3	CATCH BASIN DETAIL
4	PLAN & PROFILE
5-7	CROSS SECTIONS



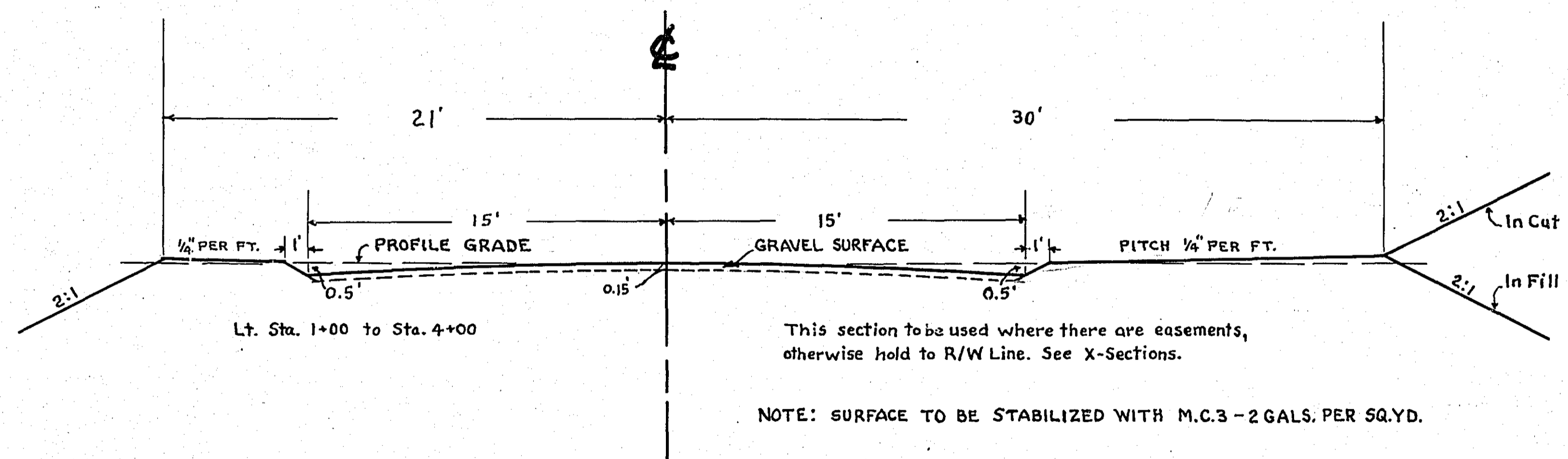
Approved *Harry S. Bronson* 4/19/1950
 COUNTY SURVEYOR
 Approved 1950 *Edward W. DeLong*
 CHAIRMAN, RAMSEY COUNTY BOARD
 Recommended for Approval *J. S. Reed* 5-3-1950
 DISTRICT ENGINEER
 Recommended for Approval *G. M. ...* 5-3-1950
 ENGINEER OF COUNTY DIVISION
 Recommended for Approval *F. S. ...* 5-3-1950
 DEPARTMENT OF PLANS AND SURVEYS

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
Harry S. Bronson
 DATE: 4/19/50 REG. NO. 818

STATEMENT OF ESTIMATED QUANTITIES			
SPECIFICATION REF. NO.	ITEM	UNIT	TOTAL ESTIMATED QUANTITIES
2101.502	CLEARING	TREE	13
2101.507	GRUBBING	TREE	7
2503.501	TRENCH EXCAVATION 0' TO 6' DEEP	L. F.	134
2506.501	EXCAV. FOR CATCH BASINS	CU. YD.	29.3
2506.507	CONST. C.B. TYPE N#1 (CITY OF ST. PAUL)	L. F.	19.5
2105.503	CLASS "C" EXCAVATION	CU. YD.	424.7
2108.501	SPECIAL DITCH EXCAVATION	CU. YD.	389
2506.516	F. & I. CASTING ASSEMBLIES	ASSEMBLIES	6
2576.501	AREA SODDING	SQ. YD.	300
151.501	RESET FENCE	L. F.	260
2104.501	REMOVE PORTABLE CULVERT	L. F.	44
2104.510	REMOVE FENCE	L. F.	525
2501.531	INSTALL 12" CORRUGATED METAL CULV.	L. F.	24
2503.512	F. & I. 15" R.C.S.P.	L. F.	46 + 80 = 126 L.F.
2503.512	F. & I. 18" R.C.S.P.	L. F.	40
2503.512	F. & I. 24" R.C.S.P.	L. F.	48
2568.501	PROJECT MARKERS	EACH	2
	GRAVEL BASE IN PLACE (VEH. MEAS. 4 1/2 MI. HAUL)	CU. YD.	489
2207.503	BITUMINOUS MAT'L. (2 GAL. PER. SQ. YD.) M.C. 3	GALS.	17600
2207.512	BITUMINOUS STAB. BASE (MIKING - 2" THICK)	SQ. YD.	8800

GRADING

TYPICAL GRADING SECTION



Sta. 2+75 P.I. C.B. Type No. 1, Rt. & Lt.
 Pl. 18" x 28" R.C.S.P.
 Pl. 18" x 12" R.C.S.P. Lt.
 Exc. For C.B. 9.7 C.Y.
 Const. C.B. 6.5 L.F.
 Trench Exc. 0'-6" Deep - 40 L.F.

3+53 Lt. 18"
 Inp. 12" x 24" C.M.
 Remove & Relay

5+11 Lt. 17"
 Inp. 12" x 20" C.M.
 Remove

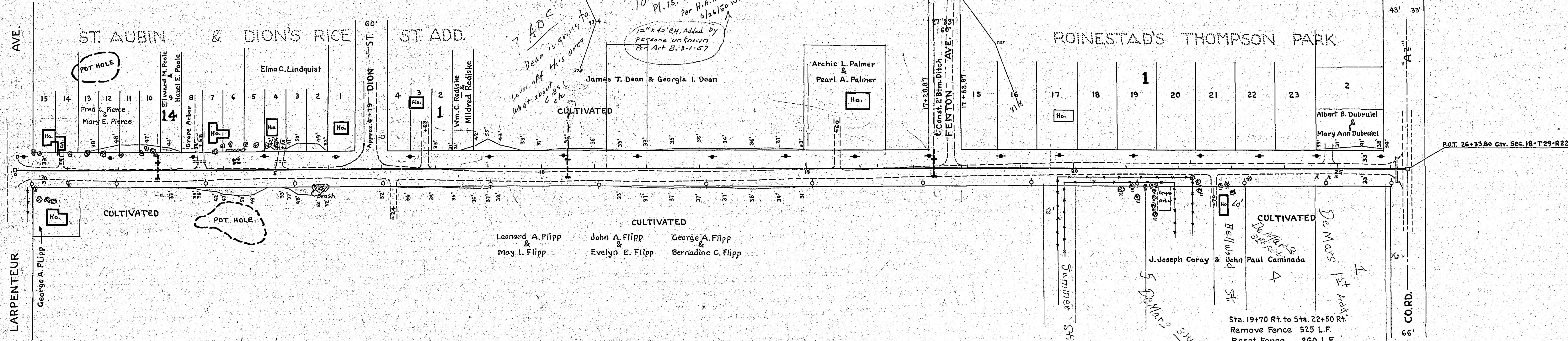
Sta. 10+50 P.I. C.B. Type No. 1, Rt. & Lt.
 Pl. 15" x 28" R.C.S.P.
 Pl. 15" x 18" R.C.S.P.
 Exc. For C.B. 9.9 C.Y. Const. C.B. 6.5 L.F.
 Trench Exc. 0'-6" Deep - 46 L.F.

Sta. 17+37 Lt. 35" to 380' Lt.
 Const. 2' Btm. Ditch - 389 C.Y.

Sta. 17+37 P.I. C.B. Type No. 1, Rt. & Lt.
 Pl. 24" x 28" R.C.S.P.
 Pl. 24" x 20" R.C.S.P. Lt.
 Exc. For C.B. 9.7 C.Y.
 Const. C.B. 6.5 L.F.
 Trench Exc. 0'-6" Deep - 48 L.F.

26+16 Lt. 23' to 26+16 Rt. 27'
 Inp. 18" x 50" Conc. Culv.
 O.K. Leave

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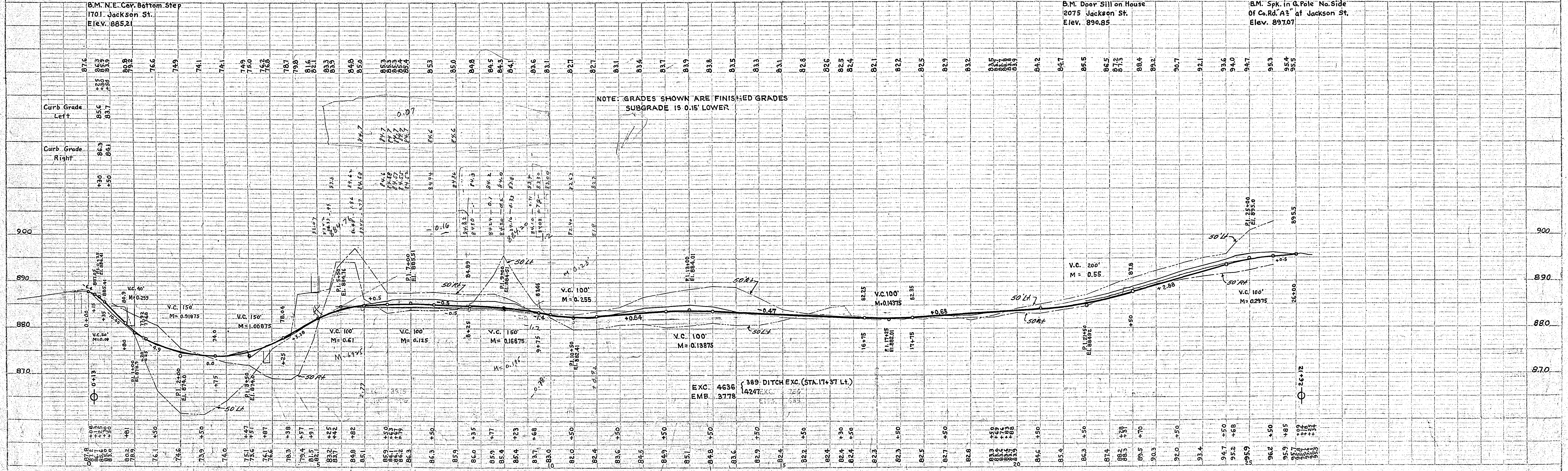


PLATE 1 - PLAN - PROFILE (S. P. & R. E. COVERED)
 J. & E. CO. INC. NEW YORK

RAMSEY CO. S.A.P. 62-541-01 SHEET 4 OF 7 SHEETS