

CONVENTIONAL SIGNS

STATE LINE	TIMBER
COUNTY LINE	BRUSH
TOWNSHIP OR RANGE LINE	ORCHARD
SECTION LINE	ROCK LEDGE
QUARTER LINE	BARD
SIXTEENTH LINE	EDGE OF CUT
RIGHT-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	WEANDER 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
COUNTY ROAD-B**

From West County Line To Hamline Avenue

GROSS LENGTH 13,200 FEET 2.50 MILES
LENGTH OF EXCEPTIONS 200 FEET 0.04 MILES
NET LENGTH 13,000 FEET 2.46 MILES

PLAN, 1 inch = 100 Feet
PROFILE, Horz. 1 inch = 100 Feet. Vert. 1 inch = 10 Feet
WORKING PLANS { Horiz. 1 inch = 100 Feet
Vert. 1 inch = 10 Feet
Cross-Sections, 1 inch = 10 Feet

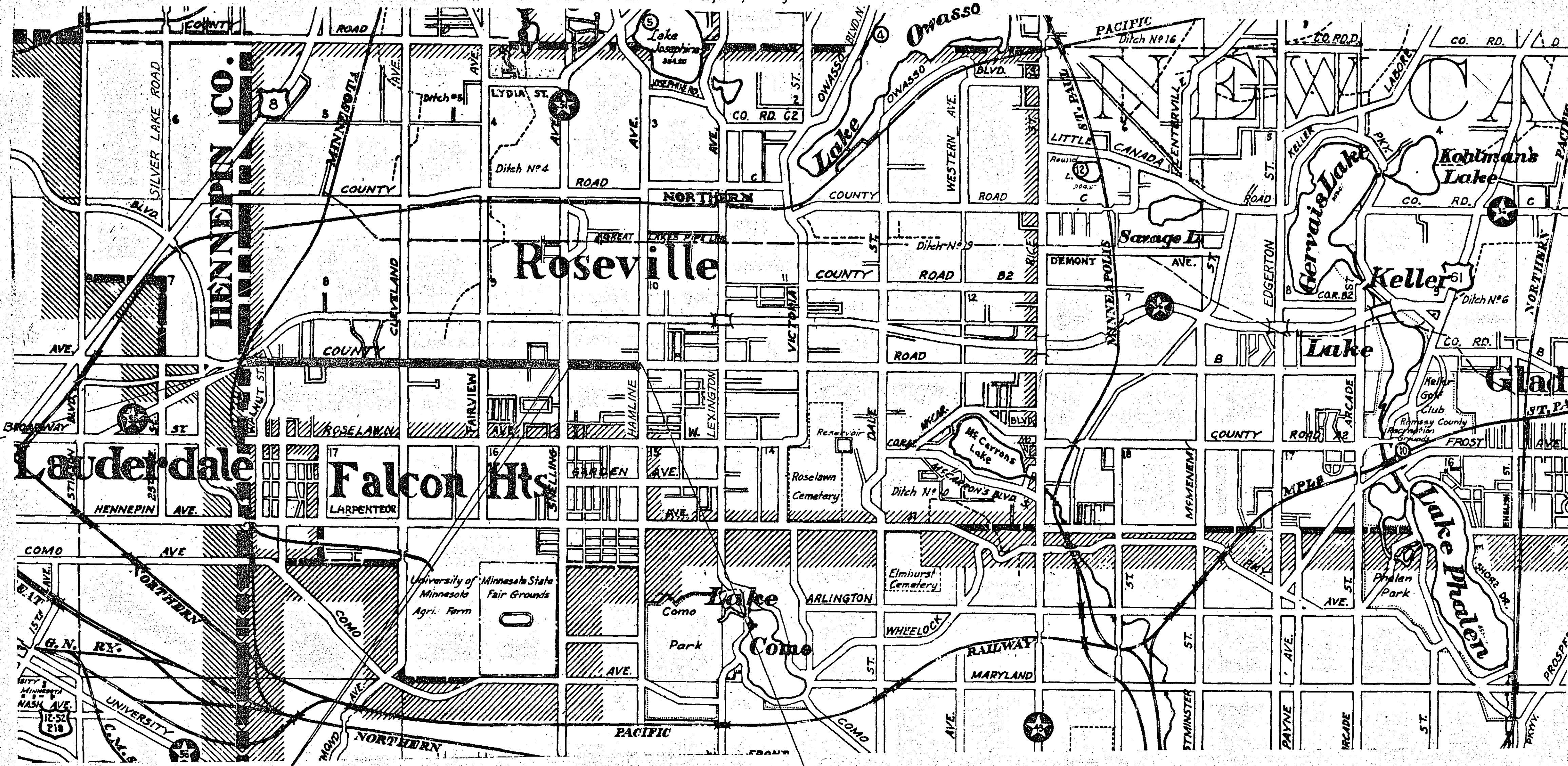
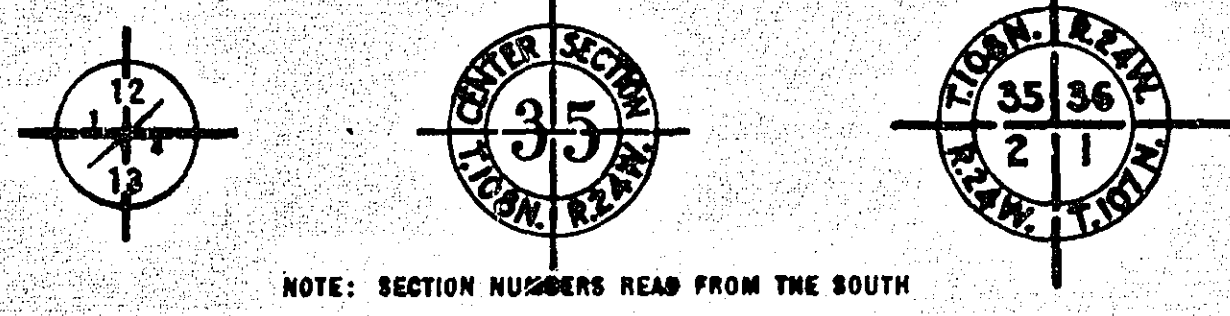
LAYOUT

SCALE, 1 inch = 2640 FT.
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
3-4 & 5	PLAN & PROFILE
6 to 19 Inc.	CROSS SECTIONS



BEG. PROJ.
STA. 0+00

EXCEPTION
STA. 105+40 to 107+40

END OF PROJECT
STA. 132+00

APPROVED *Barry S. Brown* 5/15 1951
COUNTY SURVEYOR

APPROVED 1951 *Ed. D. D.*
CHAIRMAN RAMSEY COUNTY BOARD

RECOMMENDED FOR APPROVAL *J. E. Chad* 5-25-51
DISTRICT ENGINEER

RECOMMENDED FOR APPROVAL *S. M. Evans* 5-28-51
ENGINEER OF COUNTY DIVISION

RECOMMENDED FOR APPROVAL *F. J. Starman* 5-28-51
ENGINEER OF SURVEYS & DESIGN

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.

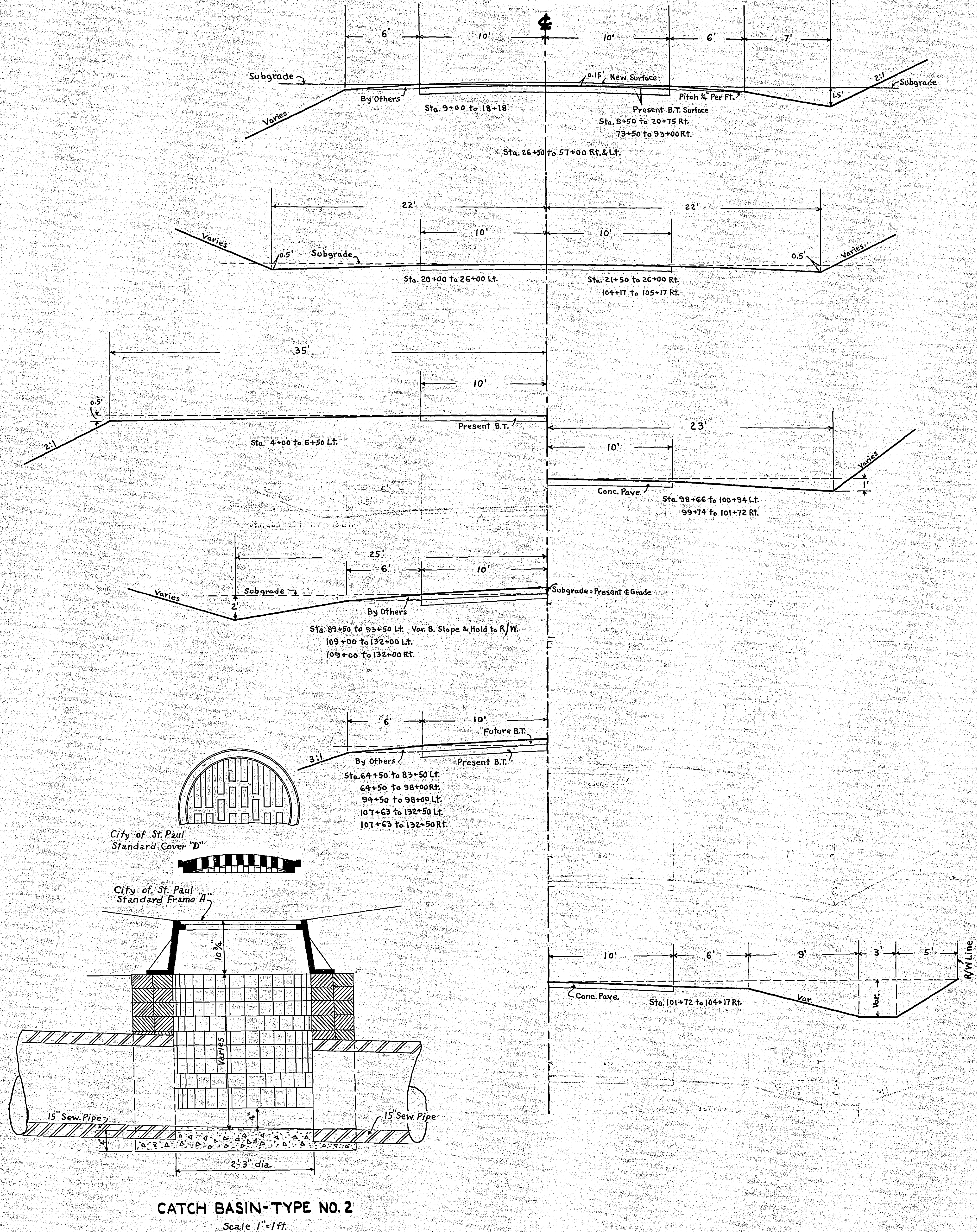
Barry S. Brown
DATE *5/15/51* REG. NO. *815*

6724

STATEMENT OF ESTIMATED QUANTITIES

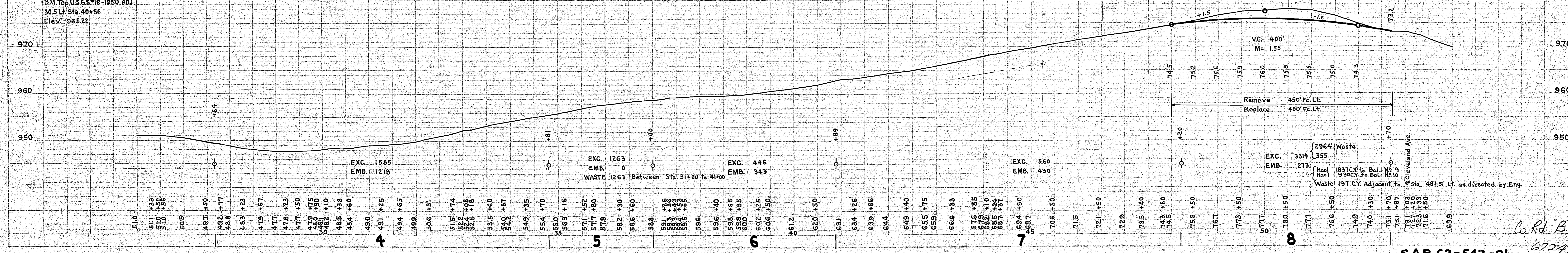
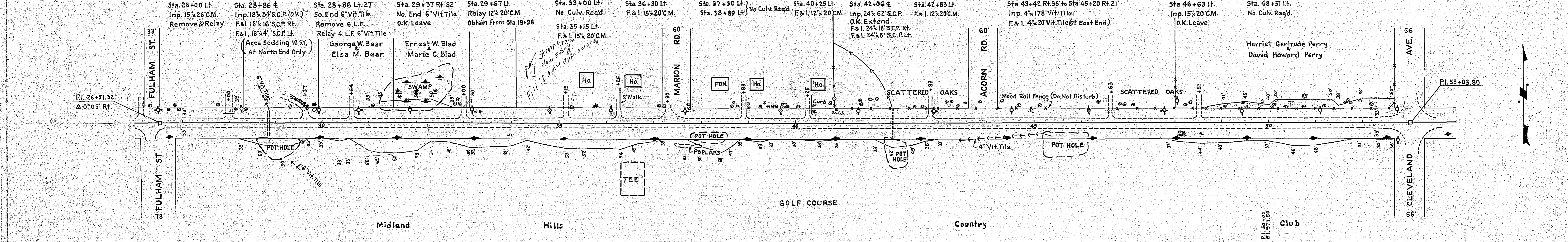
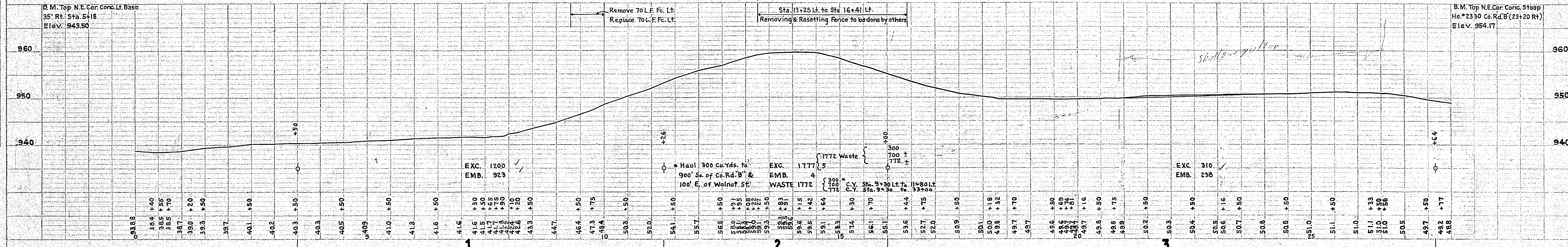
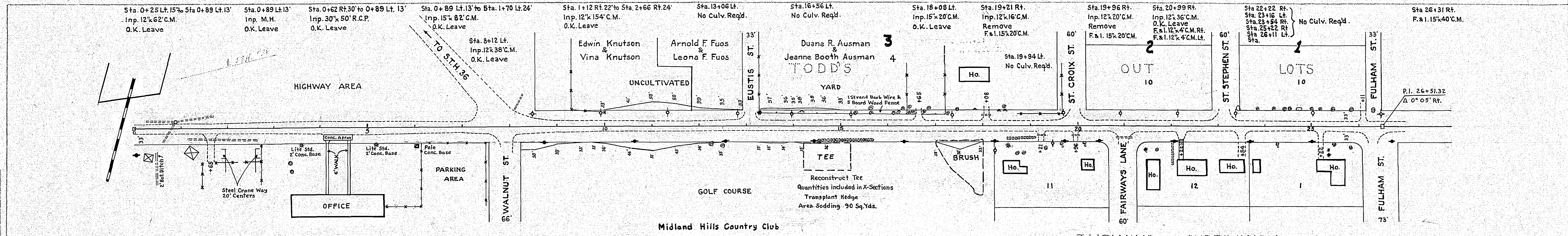
ITEM	UNIT	MILE 1 From to	MILE 2 From to	MILE 3 From to	TOTAL	MILE From To	MILE From To	MILE From To	MILE From To	MILE From To	MILE From To	TOTAL ESTIMATED QUANTITIES
2101.502	Clearing	Trees	24	8	4	36						
2101.507	Grubbing	Trees	29	8	5	42						
	Clearing	Acres										
	Grubbing	Acres										
2105.503	Excavation Class "C"	Cu. Yds.	10460	3879	641	14980						
	Excavation	Cu. Yds.										
2501.501	Excavation Pipe/Culvert	Cu. Yds.	0	0	16	16						
	Excavation	Cu. Yds.										
	Excavation	Cu. Yds.										
	Excavation	Cu. Yds.										
2501.531-12	Install 12" C.M.	Lin. Ft.	20	0	0	20						
2501.531-15	Install 15" C.M.	Lin. Ft.	26	40	0	66						
	Install 18" C.M.	Lin. Ft.										
	Install 24" C.M.	Lin. Ft.										
2571.548	Transplant Hedge (Lilac)	Lin. Ft.	111	0	0	111						
2576.501	Area Sodding	Sq. Yds.	100	0	0	100						
2503.513-4	F. & I. Drain Tile 4"	Lin. Ft.	20	0	0	20						
2503.522-6	Install Drain Tile 6"	Lin. Ft.	4	0	0	4						
	Install 30" Ps	Lin. Ft.										
	Install 36" Ps	Lin. Ft.										
	Install	Lin. Ft.										
2104.501	Remove Portable Culvert	Lin. Ft.	62	106	0	168						
	Replace Old Culvert	Lin. Ft.										
	Finishing and Seeding	100 Sq. Yds.										
	Rubble Gutter	Cu. Yds.										
	Headwall Concrete	Cu. Yds.										
	Headwall Steel	Lbs.										
2104.510	Remove Fence	Lin. Ft.	520	1383	500	2403						
101.501	Replace Fence	Lin. Ft.	520	1383	500	2403						
2104.515-6	Remove 6" Vit. Tile	Lin. Ft.	6	0	0	6						
2501.511-12	Furnish & Install 12"	Lin. Ft.	48	12	10	70						
2501.511-15	Furnish & Install 15"	Lin. Ft.	120	0	20	140						
2501.511-18	Furnish & Install 18"	Lin. Ft.	0	8	0	8						
	Furnish 24" C.M.	Lin. Ft.										
	Furnish	Lin. Ft.										
	Furnish 12" C.M. Band	Each										
	Furnish 15" C.M. Band	Each										
2501.521-15	Furnish & Install 15"	Lin. Ft.	0	10	0	10						
2501.521-18	Furnish & Install 18"	Lin. Ft.	20	0	46	66						
2501.521-24	Furnish & Install 24"	Lin. Ft.	26	34	0	60						
	Furnish 36"	Lin. Ft.										
	Guard Rail - Cable	Lin. Ft.										
	Guard Rail Anchors	Each										
	Dummy Posts	Each										
	Concrete Curb - Straight	Lin. Ft.										
	Concrete Curb - Radius	Lin. Ft.										
	Remove Old Curb	Lin. Ft.										
	Remove Old Curb and Gutter	Lin. Ft.										
	Remove Old Sidewalk	Sq. Ft.										
	Replace Old Sidewalk	Sq. Ft.										
	Construct New Sidewalk	Sq. Ft.										
	Curb Inlet	Each										
	Catch Basin Complete	Each										
2503.512-12	F. & I. Vitrified Sewer Pipe 12"	Lin. Ft.	0	198	0	198						
	15" Vitrified Sewer Pipe	Lin. Ft.										
	18" Vitrified Sewer Pipe	Lin. Ft.										
	20" Vitrified Sewer Pipe	Lin. Ft.										
	24" Vitrified Sewer Pipe	Lin. Ft.										
	Manhole Complete	Each										
	Catch Basin Complete	Each										
2506.501	Excavation for C.B.S.	Cu. Yds.	0	10.3	0	10.3						
2506.507	Const. C.B. Type No. 2	Lin. Ft.	0	5.2	0	5.2						
2506.516	F. & I. C.B. Casting Assembly	Assembly	0	2	0	2						
* This item shall include One Cover Type "D" & One Cover Type "B" (Solid)												
	1 Loading Gravel	Cu. Yds.										
	2 Hauling Gravel	C. Y. M.										
	3 Shaping & Compacting	Cu. Yds.										
	4 Oil	Gal.										
	5 Cut-back	Sq. Yds.										
	1 Concrete	Cu. Yds.										
	2 Reinforcing Steel	Lbs.										
	3 Excavation	Cu. Yds.										
	4 Piling	Lin. Ft.										

DETAILS
TYPICAL SECTIONS



PLAN SURVEYED BY: [Name] DATE: [Date]
NOTED BY: [Name] DATE: [Date]
NOTE BOOK NO. [Number]
ETC. OF ANY CHECKED

PROFILE SURVEYED BY: [Name] DATE: [Date]
NOTED BY: [Name] DATE: [Date]
NOTE BOOK NO. [Number]
ETC. OF ANY CHECKED

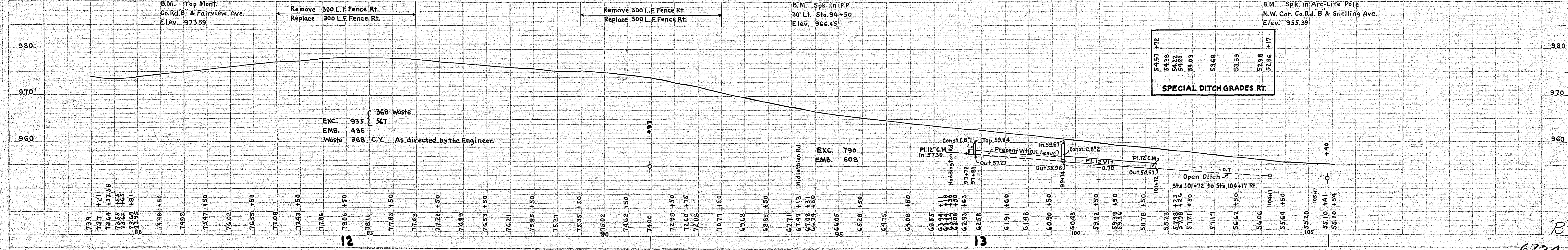
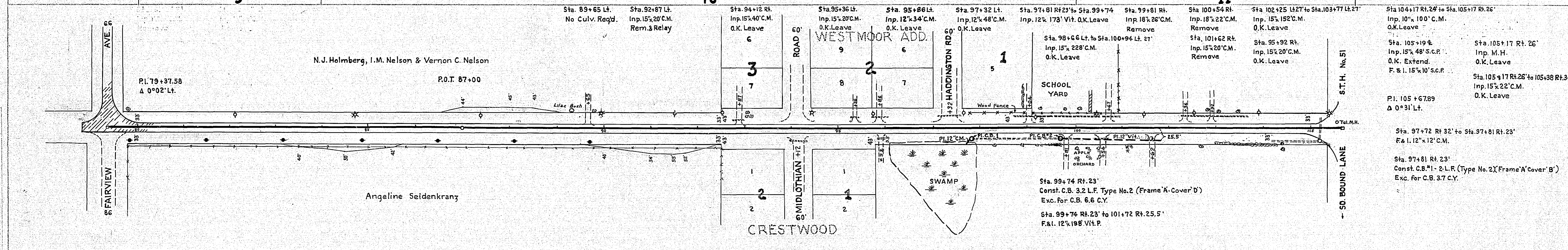
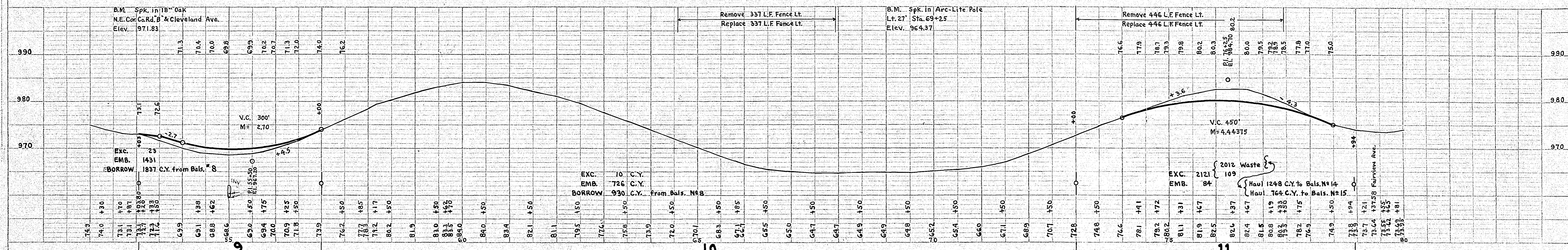
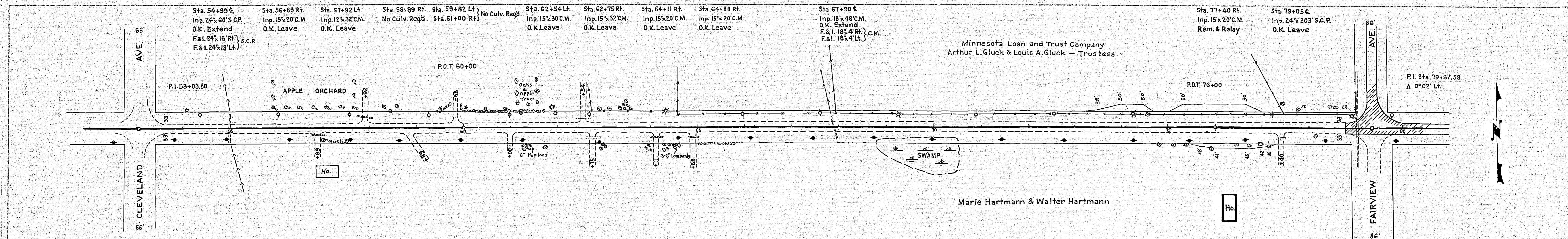


PLAN: 2 - PLAN - PROFILE
PROFILE: 1 - PROFILE
SHEET 3 OF 19 SHEETS

Sta. 54+99 E. Inp. 24'x60' S.C.P. O.K. Extend F&I. 24'x16' RT. F&I. 24'x18' LT. } S.C.P.
 Sta. 56+88 Rt. Inp. 15'x20' C.M. O.K. Leave
 Sta. 57+92 Lt. Inp. 12'x32' C.M. O.K. Leave
 Sta. 58+89 Rt. No Culv. Req'd. No Culv. Req'd.
 Sta. 59+82 Lt. No Culv. Req'd. No Culv. Req'd.
 Sta. 61+00 Rt. No Culv. Req'd. No Culv. Req'd.
 Sta. 62+54 Lt. Inp. 15'x30' C.M. O.K. Leave
 Sta. 62+75 Rt. Inp. 15'x32' C.M. O.K. Leave
 Sta. 64+11 Rt. Inp. 15'x20' C.M. O.K. Leave
 Sta. 64+88 Rt. Inp. 15'x20' C.M. O.K. Leave
 Sta. 67+90 E. Inp. 18'x48' C.M. O.K. Extend F&I. 18'x4' RT. F&I. 18'x4' LT. } C.M.
 Sta. 77+40 Rt. Inp. 15'x20' C.M. Rem. & Relay
 Sta. 79+05 E. Inp. 24'x20' S.C.P. O.K. Leave

Minnesota Loan and Trust Company
 Arthur L. Gluck & Louis A. Gluck - Trustees -

Marie Hartmann & Walter Hartmann



Station	Elevation
94.57 +72	94.57
94.58	94.58
94.62	94.62
94.69	94.69
94.73	94.73
94.83	94.83
94.88	94.88
94.93	94.93
95.03	95.03
95.68	95.68
95.33	95.33
92.86 +17	92.86

PLATE 2 - PLAN - PROFILE - 2 1/2" x 3 1/2" STANDARD
 REFERENCE TO SHEET 60, NEW 6000

K & E Co. No. 346-25A
 Allow 1000' Twp. Dist.

Sta. 107+77 Lt. 23' to Rt. 21'
Inp. 12"x44" V.P. O.K. Extend
F&I. 12"x4" C.M. Rt.
F&I. 12"x6" C.M.Lt.

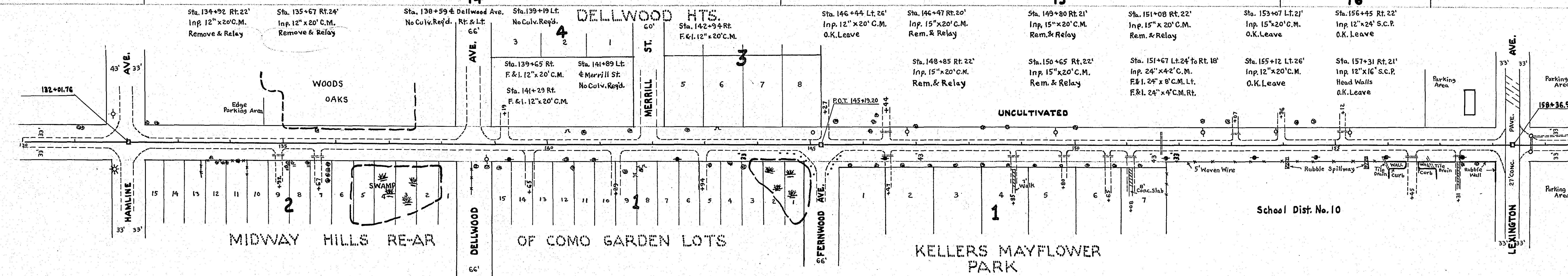
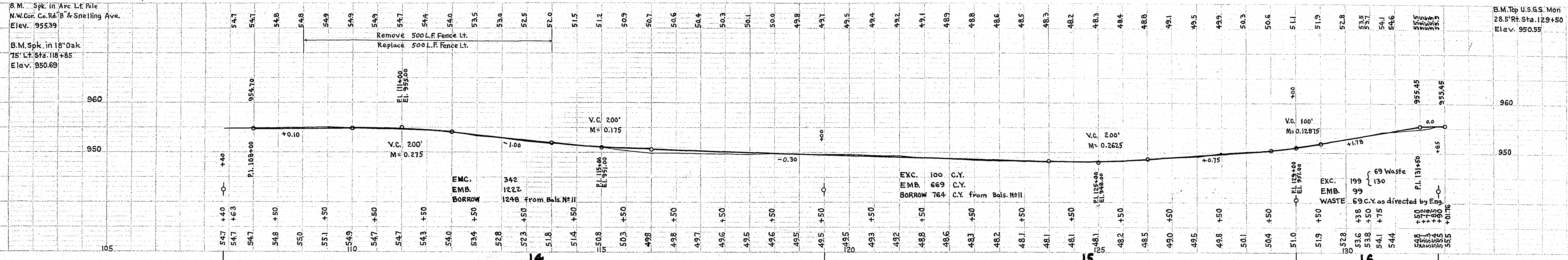
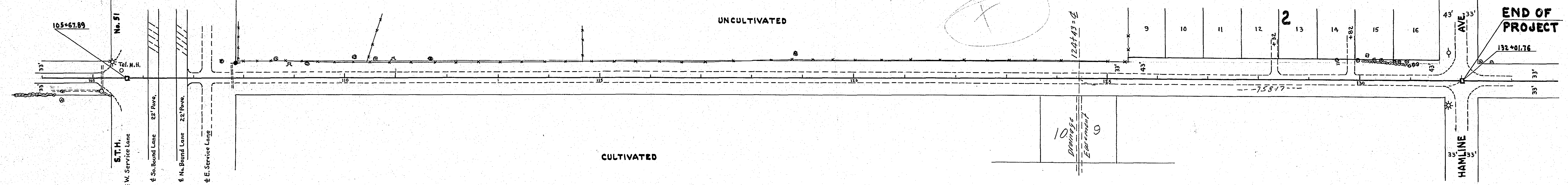
Sta. 123+50 ±
F&I. 18"x46" S.C.P.
Pipe Culv. Exc. 16 Cu.Yds.

Sta. 128+32 Lt.
No Culv. Req'd.

Sta. 129+82 Lt.
F&I. 15"x20" C.M.

WOEHRLE'S ADD.

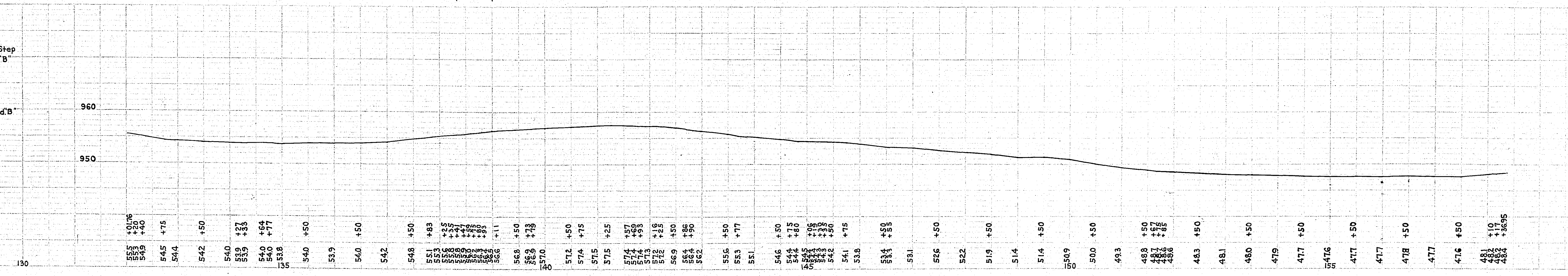
END OF PROJECT



B.M. Top U.S.G.S. Mon.
28.5 Rt. Sta. 129+50
Elev. 950.55

B.M. Top N.E. Cor. Btm. Step
House No. 1244 Co. Rd. 'B'
Sta. 144+00 Rt.
Elev. 958.25

B.M. Top Mon.
of Lexington Ave & Co. Rd. 'B'
Sta. 158+36.95
Elev. 948.16



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	
RIGHT-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	P-FRAME	
DROP INLET	C-CONCRETE	
GUARD RAIL	S-STONE	
WIRE FENCE	T-TILE	
RAILROAD SNOW FENCE	B-BRICK	
BOARD OR HIGHWAY SNOW FENCE	ST-STUCCO	
STONE WALL OR FENCE	IRON PIPE	
HEDGE	STONE MONUMENT	
WATER PIPE	WOOD STAKE OR HUB	
SEWER PIPE	MEANDER CORNER	
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
BITUMINOUS SURFACING & SHOULDERING
COUNTY ROAD - B**

From West County Line To Hamline Avenue

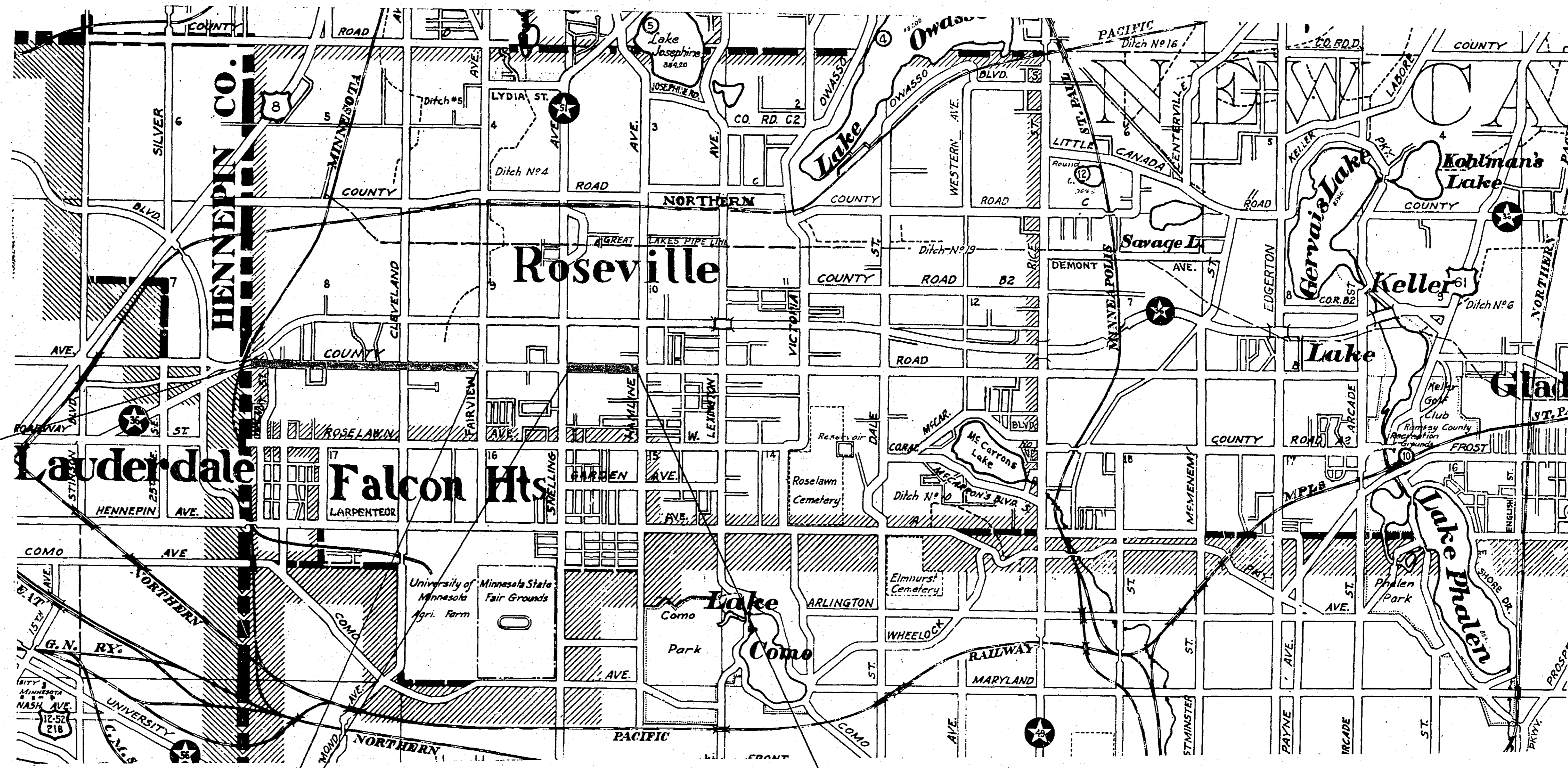
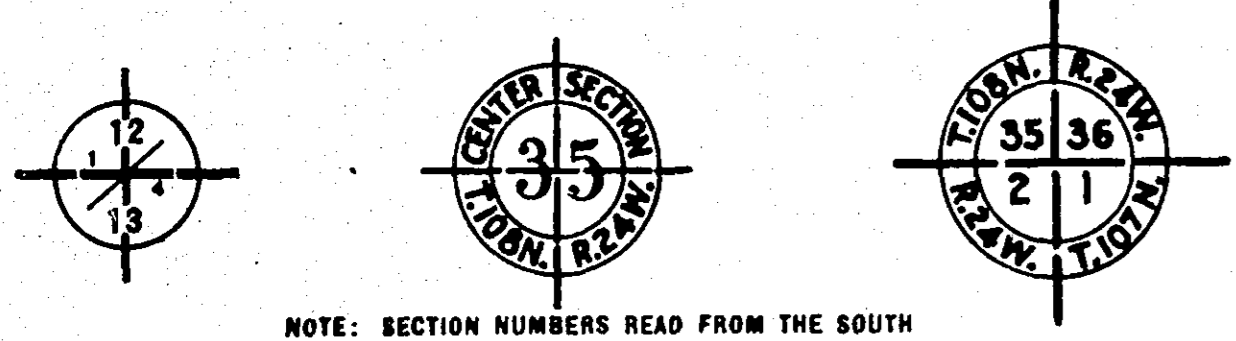
GROSS LENGTH 13,200 FEET 2.50 MILES
LENGTH OF EXCEPTIONS 2,640 FEET 0.50 MILES
NET LENGTH 10,560 FEET 2.00 MILES

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

LAYOUT
SCALE, 1 Inch = 2,640 Feet

INDEX

SHEET NO.	DESCRIPTION
1	LAYOUT MAP & TITLE SHEET
2	ESTIMATE & MISC. DETAILS
3 to 5	PLAN & PROFILE



BEG. PROJ.
STA. 0+00

END OF PROJ.
STA. 132+00

EXCEPTION
STA. 79+00 TO STA. 105+40

APPROVED *Barry J. Brinson* 1951
COUNTY SURVEYOR

APPROVED 1951
CHAIRMAN RAMSEY COUNTY BOARD

RECOMMENDED FOR APPROVAL *A. E. Glaw*
DISTRICT ENGINEER

RECOMMENDED FOR APPROVAL _____
ENGINEER OF COUNTY DIVISION

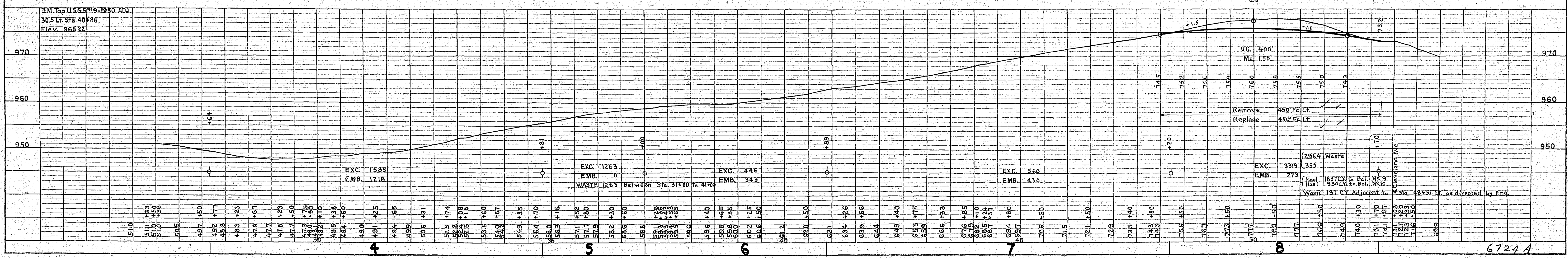
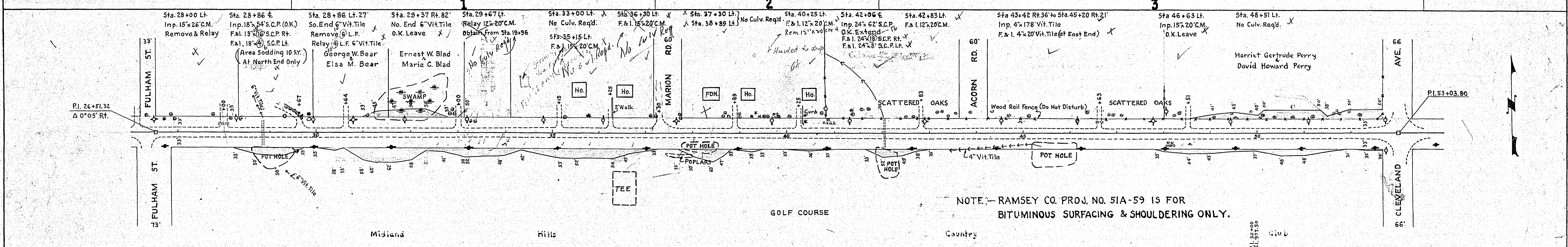
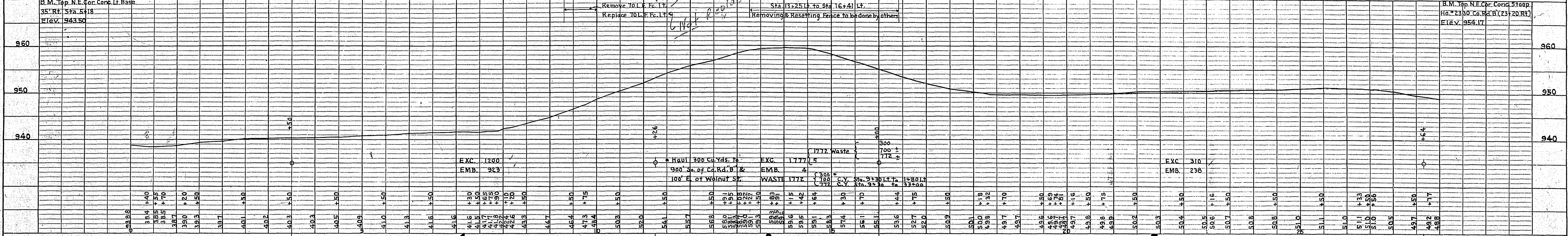
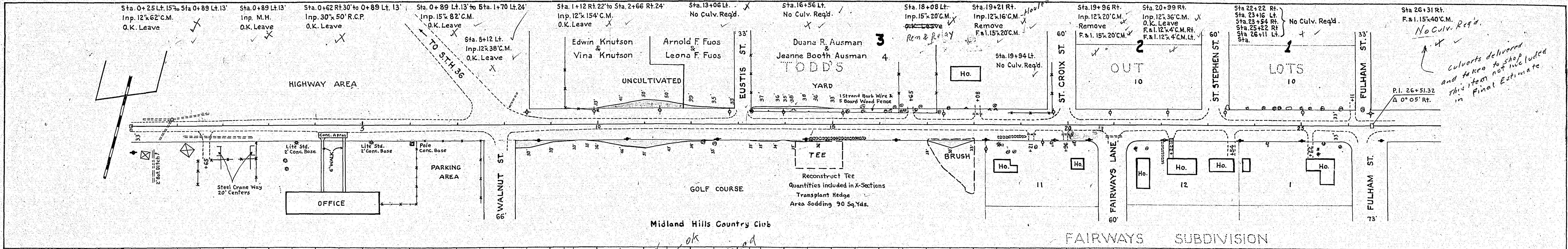
RECOMMENDED FOR APPROVAL _____
ENGINEER OF SURVEYS & DESIGN

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.

DATE _____ REG. NO. _____

DATE: _____ BY: _____
 SURVEYED, PLOTTED, GRADES CHECKED, STRUCTURE NOTATIONS CHKD.
 NOTE BOOK ALIGNED CHECKED, RT. OF WAY ORDERED.
 NO. _____

DATE: _____ BY: _____
 SURVEYED, PLOTTED, GRADES CHECKED, STRUCTURE NOTATIONS CHKD.
 NOTE BOOK ALIGNED CHECKED, RT. OF WAY ORDERED.
 NO. _____



Culverts delivered and taken to shop this item not included in Final Estimate

NOTE: - RAMSEY CO. PROJ. NO. 51A-59 IS FOR BITUMINOUS SURFACING & SHOULDERING ONLY.

6724 A

PLAN
 SURVEYED, PLOTTED, GRADES CHECKED, STRUCTURE LOCATIONS CHECKED
 NOTE BOOK NO. OF WAY CHECKED

PROFILE
 SURVEYED, PLOTTED, GRADES CHECKED, STRUCTURE LOCATIONS CHECKED
 NOTE BOOK NO. OF WAY CHECKED

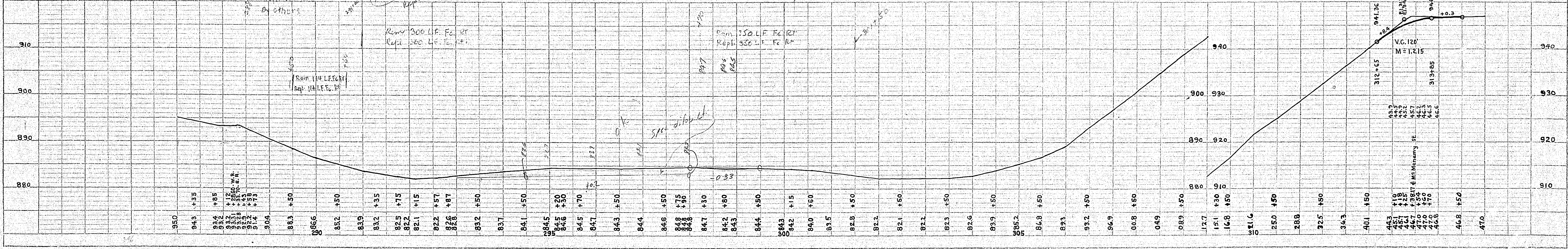
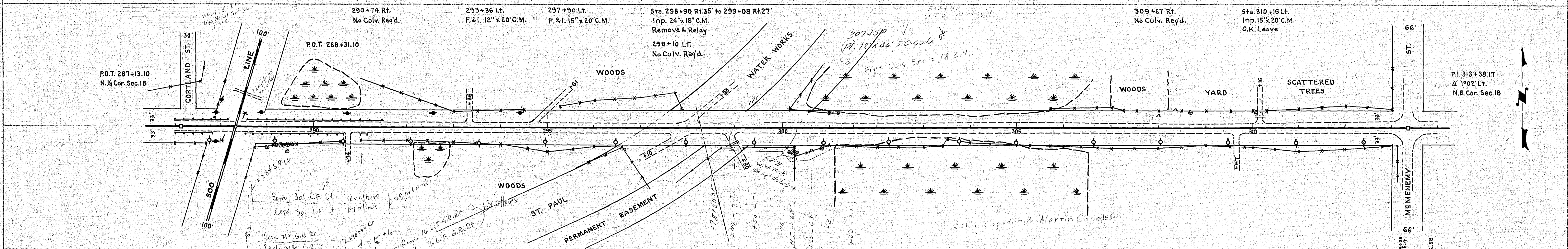
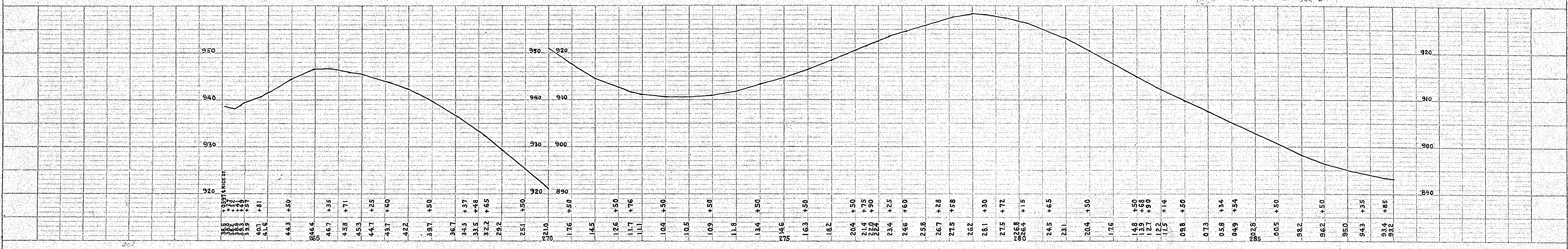
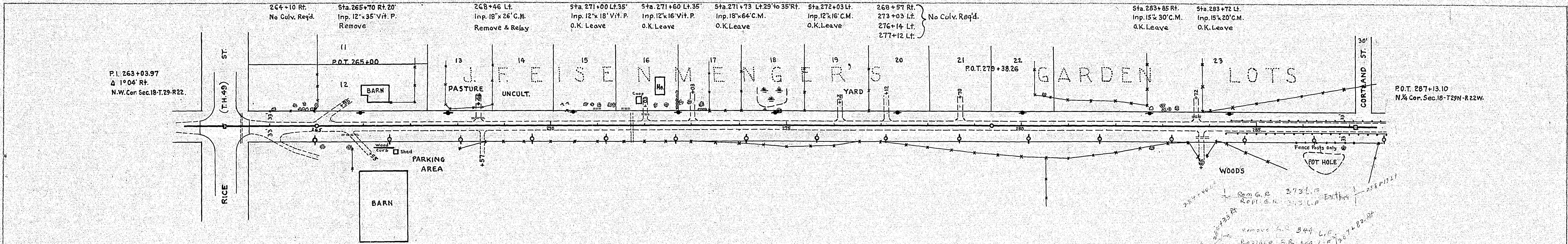


PLATE 2 - PLAN, PROFILE, & P. & I. BY STANDARD
 MEYER & BISSON, NEW YORK