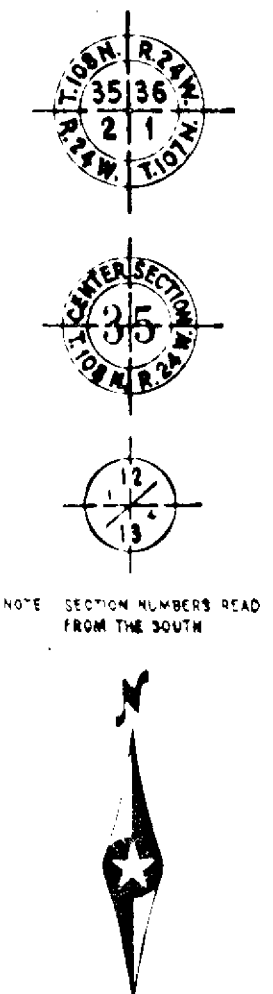
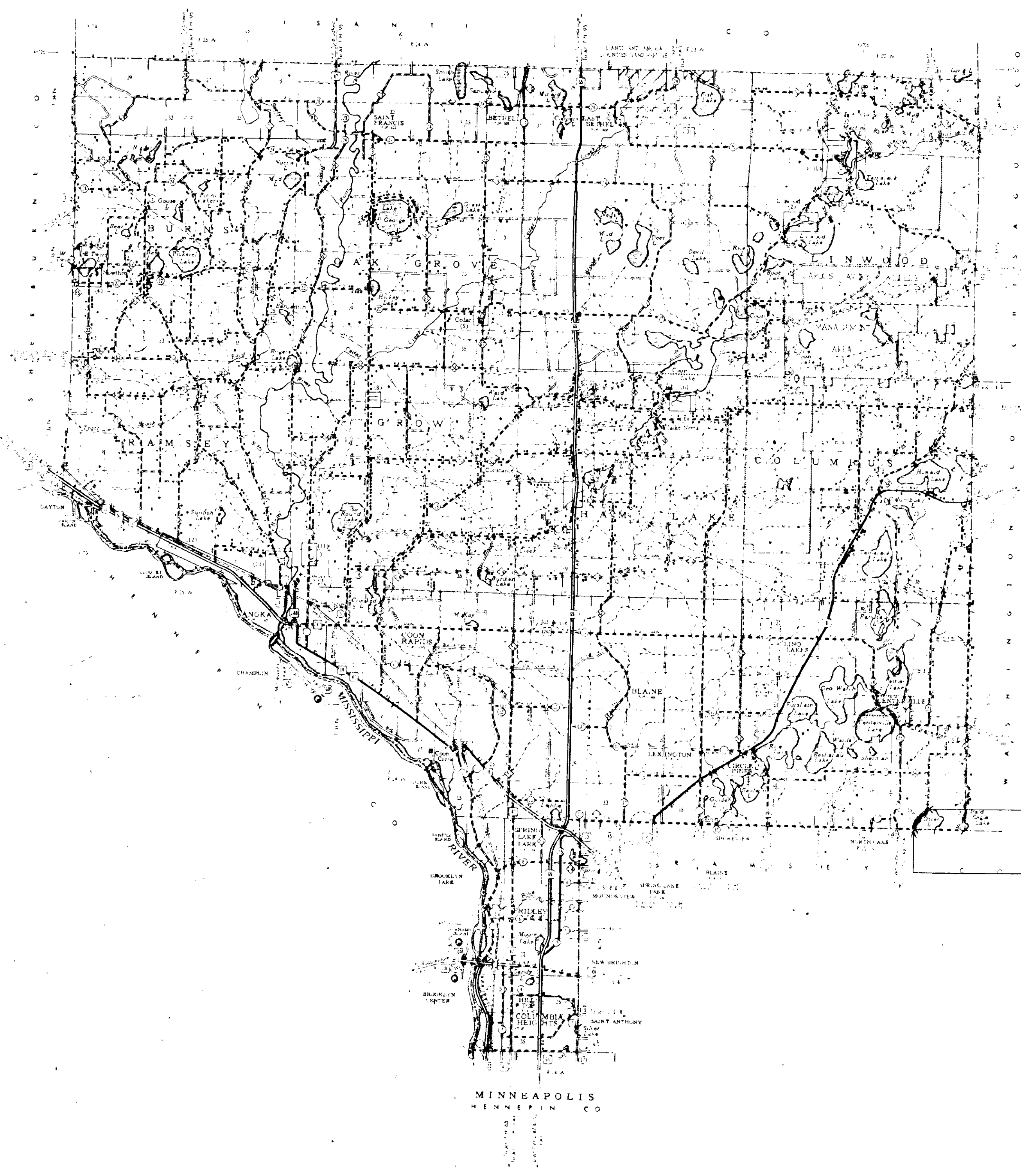


**CONVENTIONAL SIGNS**

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	TIE OF EMBANKMENT
PRESENT ROAD "A" LINE	DITCH BASIN
LIMITED ACCESS	MANHOLE
PROPERTY LINE (CITY, TOWNSHIP)	TIEP INLET
UNCLERED PROPERTY	FIRE HYDRANT
CROSSING OR CITY LIMITS	ICE JUMP
TOWN HIGHWAY CENTER LINE	OTHER JUMP (SHOW 6' 11")
RETAINING WALL	RAILROAD CROSSING BEAM
ELECTRIC RAILROAD	ELECTRIC WIRE (NO. 24)
RAILROAD RIGHT OF WAY LINE	CROSSING GATE
GRAVEL	CATTLE GUARD
DEY RIVER	OVERHEAD TRIP-WIRE GUARD
CRANKS DITCH	UNDERPASS (SHOW 12')
HIGH TENSION LINE	RESILIENT WALL & RAIL
POWER POLE LINE	BRIDGE
TELEPHONE OR TELEGRAPH LINE	CONCRETE & STONE TIE & BRICK ST. STUCCO
TELEPHONE COUNTOUT	WOOD STAKE OR B
ROAD BANK	WEANER CORNER
WIRE FENCE	
RAILROAD SNOW FENCE	
BOUND OR HIGHWAY SNOW FENCE	
STONE WALL OR FENCE	
BARB WIRE	
WATER PIPE	
SEWER PIPE	
DEAN TILE	
CONCRETE PIPE	
SAND PIT	
CLAY PIT	
ROCK BLAST	
SPRINGS	
WASH	



NOTE: SECTION NUMBERS READ FROM THE SOUTH



**STATE OF MINNESOTA  
DEPARTMENT OF HIGHWAYS**

CONSTRUCTION PLAN FOR GRADING

**County Highway No. 54**

BETWEEN SO. COUNTY LINE AND TOUCH DOWN PT. ON FR. RD. 35E  
 APT. 2418 FT. W. OF M.C. # 31 ON APT. 1350 FT. SO. OF SEC. COR. ON THE N.W.  
 From THE SO. LINE OF SEC. 35, T. 31N., R. 22W. To COR. OF SEC. 36, T. 31N., R. 22W.

GROSS LENGTH 4700 FEET 0.89 MILES  
 BRIDGES LENGTH 0 FEET 0 MILES  
 EXCEPTIONS LENGTH 0 FEET 0 MILES  
 NET LENGTH 4700 FEET 0.89 MILES

Plan 1 inch = 200 Feet  
 PROFILE: Horiz 1 inch = 200 Feet Vert 1 inch = 20 Feet  
 WORKING PLANS: Horiz 1 inch = 100 Feet Vert 1 inch = 10 Feet  
 Cross Section 1 inch = FEET  
 LAYOUT: Scale 1 inch = Feet

MINN. PROJ. \_\_\_\_\_

**INDEX OF SHEETS**

Sheet No. 1.	Title Sheet & Layout Map
" No. 2.	Est. Quantities & Typical Sec.
" No. 3. To 3	Plan & Profile
" No. 4. To 7	Cross Sections

ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND ORDINANCES WILL BE COMPLIED WITH IN THE CONSTRUCTION OF THIS PROJECT

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

*Ervin J. Lundheim* DATE: 1-10-67

ANOKA COUNTY REG. NO. 2551

RECOMMENDED FOR APPROVAL \_\_\_\_\_ 19\_\_ DISTRICT ENGINEER

RECOMMENDED FOR APPROVAL \_\_\_\_\_ 19\_\_

APPROVED \_\_\_\_\_ 19\_\_ STATE AID ENGINEER

DEPARTMENT OF COMMERCE  
BUREAU OF PUBLIC ROADS

\_\_\_\_\_  
DISTRICT ENGINEER

\_\_\_\_\_  
DATE

Minn. Project No. \_\_\_\_\_ S.A.P. \_\_\_\_\_  
 State Project No. \_\_\_\_\_

ANOKA County, Minnesota. County Proj. No. 66-11-54 Plan No. \_\_\_\_\_ Sheet 1 of 7 Sheets

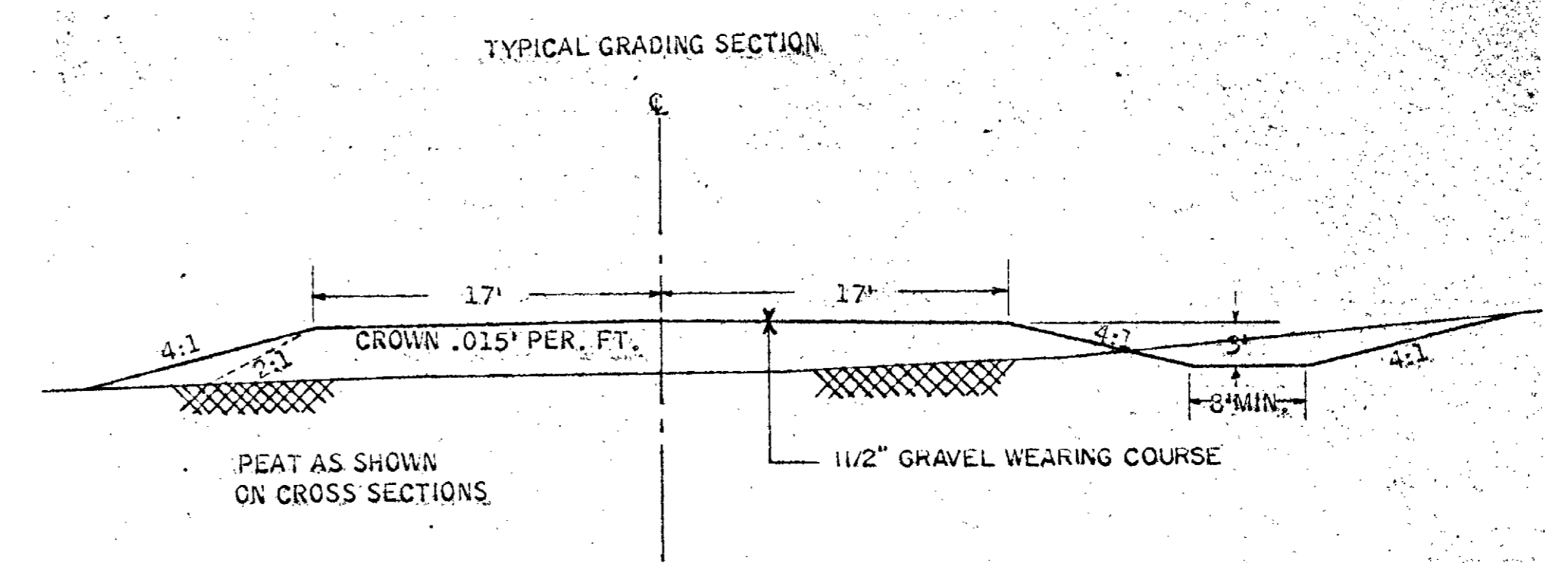
**SPECIFICATIONS**  
 THE "STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION", DATED JAN. 1, 1964, AS AMENDED  
 "SUPPLEMENTAL SPECIFICATIONS" DATED FEB. 1, 1966 SHALL GOVERN.

FORM 21155-10-58

STATEMENT OF ESTIMATED QUANTITIES

ITEM NO.	ITEM	UNIT	S.P. QUANTITIES		S.P. QUANTITIES		TOTAL ESTIMATED QUANTITIES	TOTAL FINAL QUANTITIES
			QUANTITIES		QUANTITIES			
			EST.	FINAL	EST.	FINAL		
2101.501	CLEARING	ACRE					4.78	
2101.502	CLEARING	TREE					9	
2101.506	GRUBBING	ACRE					4.68	
2101.507	GRUBBING	TREE					9	
2104.501	REMOVE PORTABLE CULVERTS	LIN. FT.					84	
2104.510	REMOVE FENCE	LIN. FT.					881	
557.501	RESET FENCE	LIN. FT.					712	
2105.501	CLASS A EXCAVATION	CU. YD.					34,352	
2123.509	DOZER	HR.					60	
2123.506	DRAGLINE	HR.					24	
2501.511-15	F&I 15" CMP CULV.	LIN. FT.					36	
2501.511-24	F&I 24" CMP CULV.	LIN. FT.					76	
2501.531-18	INST. 18" CM CULV.	LIN. FT.					48	
2515.531-24	F&I MET. APRONS FOR 24" CMP	APRON					2	
2574.501	ROADSIDE SEEDING	ACRE					6.621	
2251.527	GRAVEL WEARING COURSE INP. (CLASS 1)	TON					3,356	

A COUNTY WILL FURNISH SEED ON PROJECT.  
 B EQUIPMENT HOURS TO BE USED FOR MOVING WASTE PEAT AREAS



The following Standard Detail plates, approved by the Bureau of Public Roads, shall apply on this project.

STANDARD DETAIL PLATES	
PLATE NO.	DESCRIPTION
8000A-8001	STANDARD SIGNS & BARRICADES
8003 - 8008A	STANDARD SIGNS & BARRICADES
9000	APPROACHES AND ENTRANCES
9123C	METAL APRON FOR 24" PIPE CULVERT

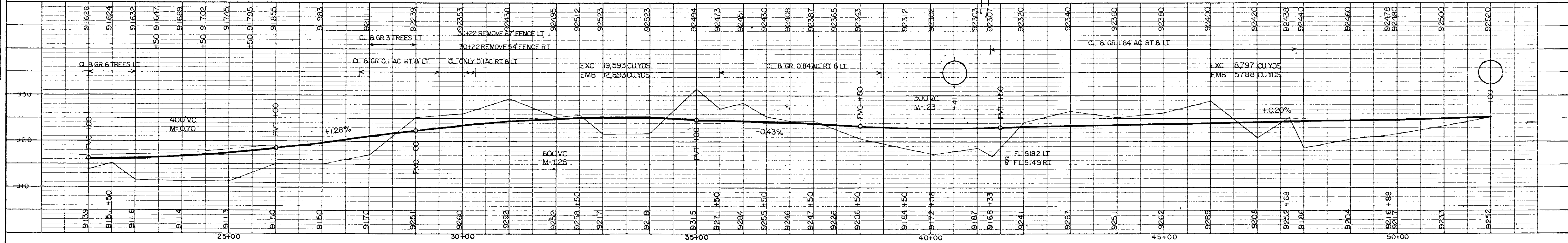
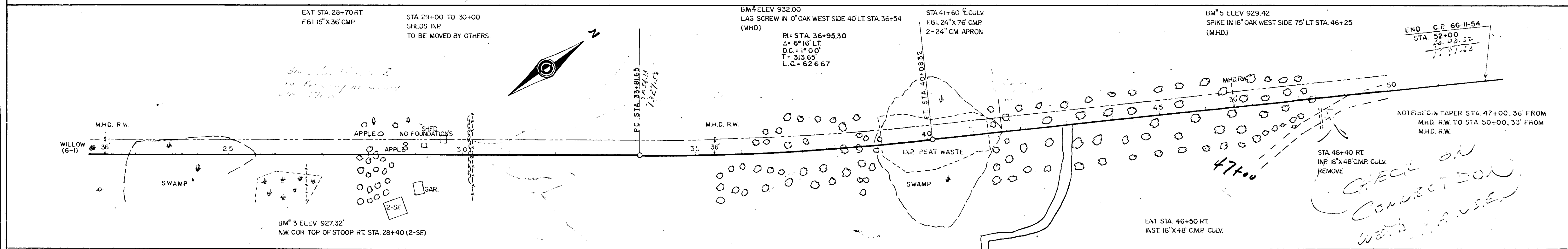
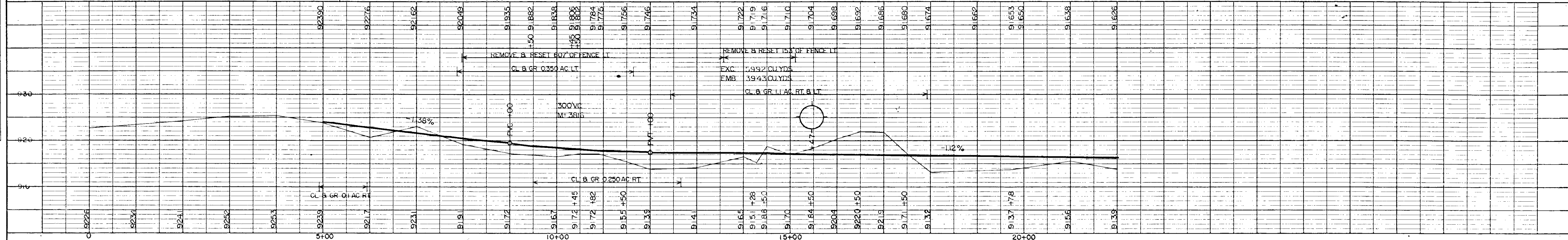
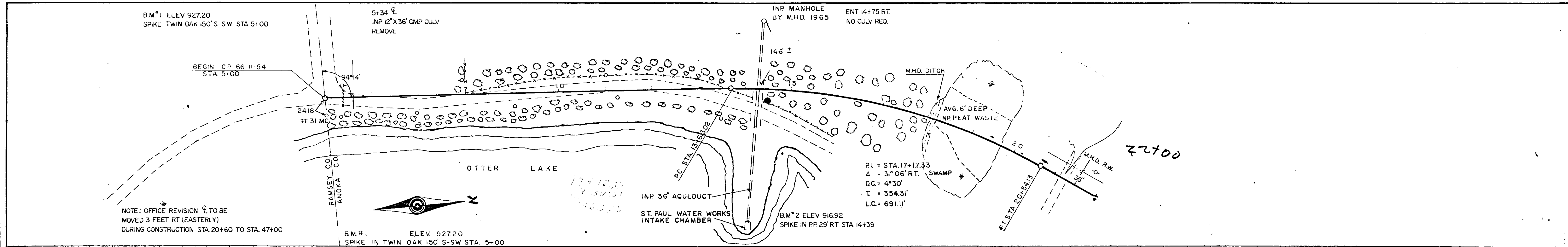
NOTE: ROAD BED TO BE BLADED TO 0.015' CROWN DURING FINISHING OPERATIONS. THE UPPER 1.0' OF NATURAL SOIL IS CONSIDERED UNSUITABLE FOR USE IN THE UPPER 1.0' OF ROADWAY. THIS PORTION SHALL BE PLACED BELOW THE UPPER 1.0' OF EMBANKMENT DURING CONSTRUCTION.

NOTE: ALL DIMENSIONS & SLOPES SHOWN ON TYPICAL SECTION ARE APPROXIMATE ONLY.

NOTE: ALL CURVES WILL BE SUPERELEVATED IN ACCORDANCE WITH THE DESIGN STANDARDS DURING CONSTRUCTION.

NOTE: WORKING AROUND MISC. UTILITY POLES WILL BE CONSIDERED INCIDENTAL TO CLASS "A" EXC.

ST. PAUL WATER WORKS CROSSING ANOKA COUNTY ROAD NO. 54  
IN SECTION 35 LIND LAKES ANOKA COUNTY.



PLAN

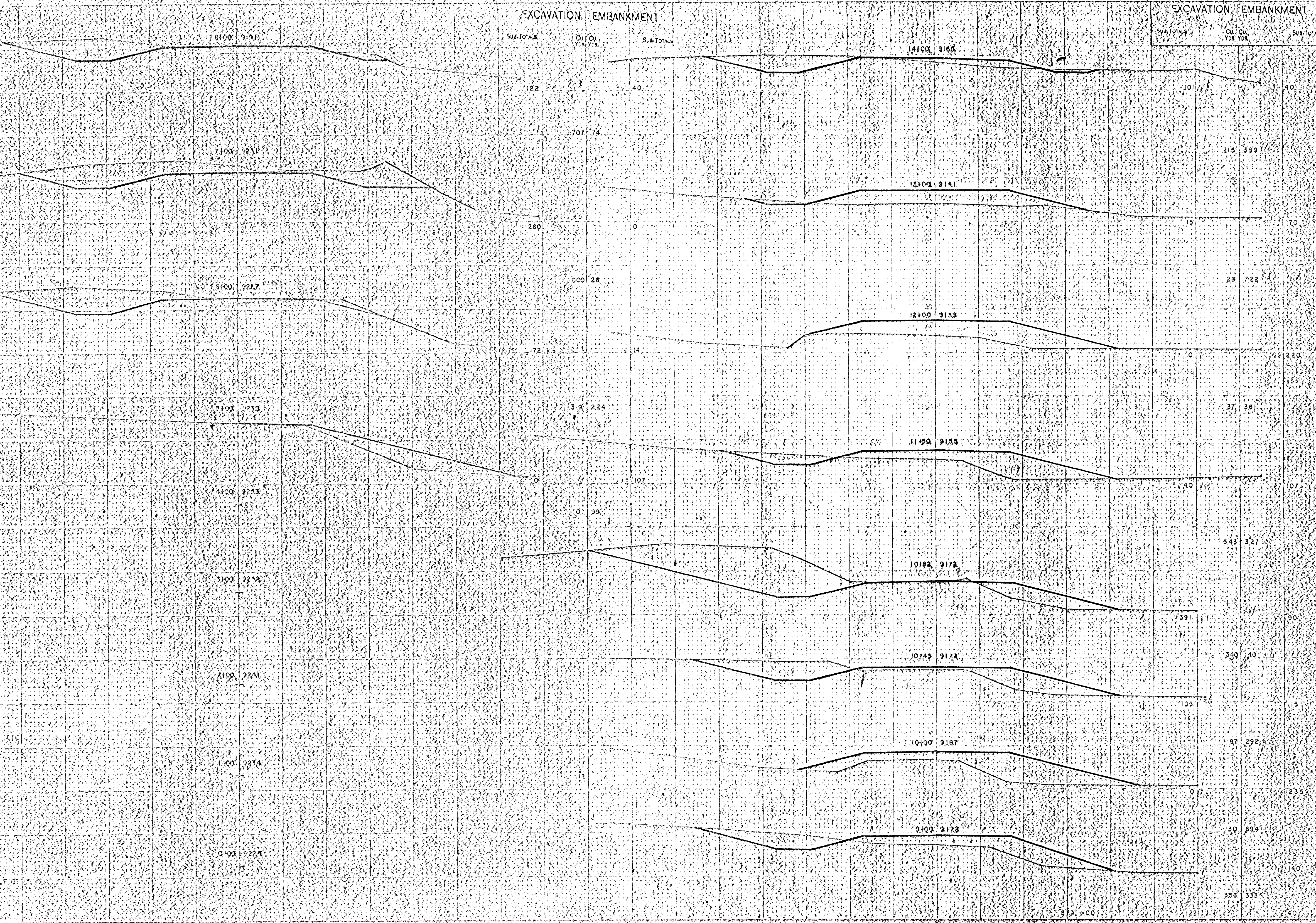
DATE	
BY	
SURVEYED	
PLOTTED	
CHECKED	
NO.	

PROFILE

DATE	
BY	
SURVEYED	
PLOTTED	
CHECKED	
NO.	

EXCAVATION EMBANKMENT

EXCAVATION EMBANKMENT



TRANSVERSE SECTION GREEN DOT '92

State Proj. No. CR 69-17-541

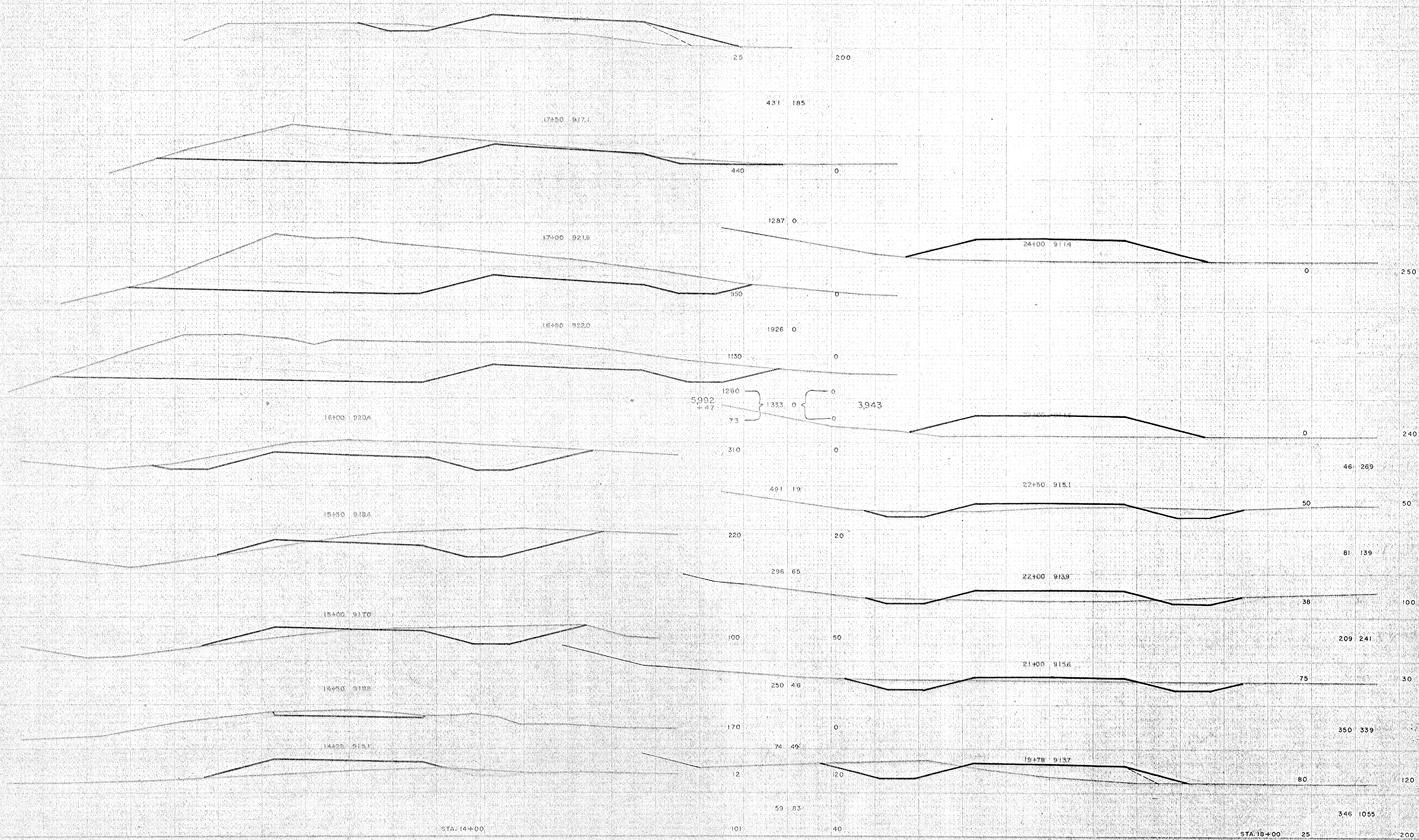
Sheet No. 4 of 7

EXCAVATION EMBANKMENT

EXCAVATION EMBANKMENT

SUM TOTALS Cu. Yds. Cu. Yds. Sub-Totals

SUM TOTALS Cu. Yds. Cu. Yds. Sub-Totals



STA. 14+00

STA. 18+00

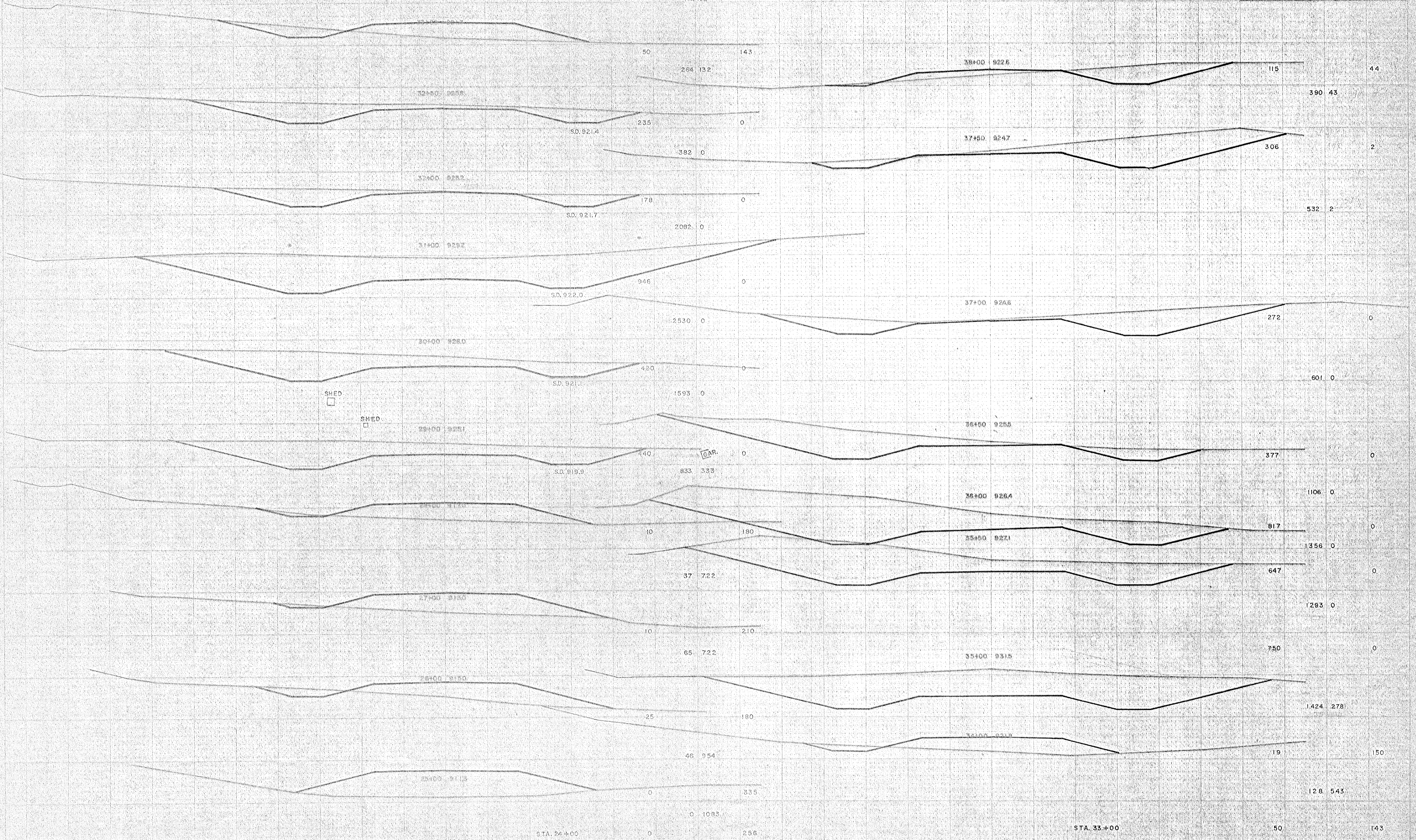
FUNCTIONAL CROSS SECTION WHEN DOTTED  
 ALL DIMENSIONS IN FEET UNLESS OTHERWISE NOTED

EXCAVATION EMBANKMENT

EXCAVATION EMBANKMENT

SUB-TOTALS Cu. Cu. Yds. Yds. SUB-TOTALS

SUB-TOTALS Cu. Cu. Yds. Yds. SUB-TOTALS



SHED

SHED

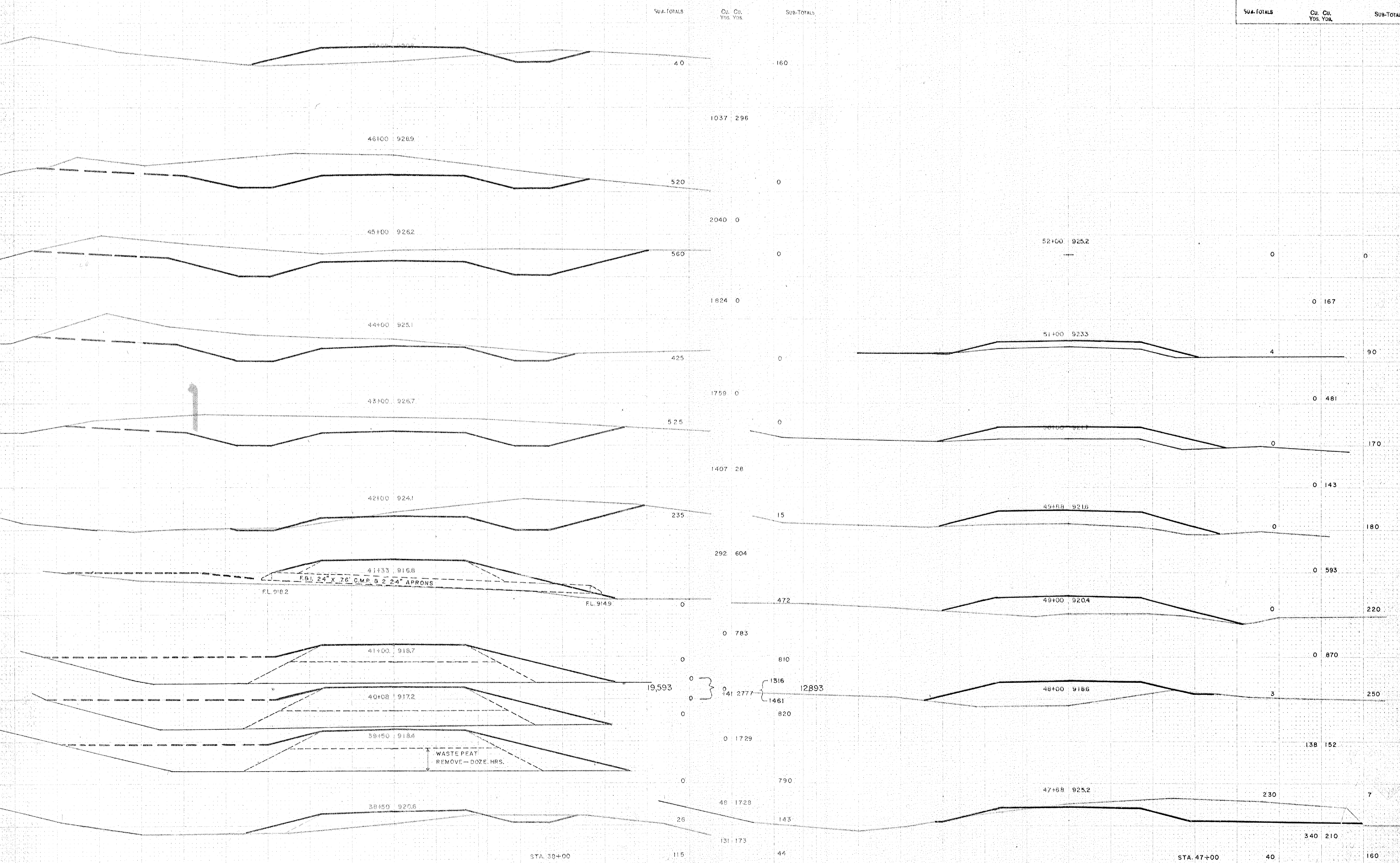
CAR

STA. 24+00

STA. 33+00

EXCAVATION EMBANKMENT

EXCAVATION EMBANKMENT		
SQA. TOTALS	Cu. Cu. Yds. Yds.	SUB-TOTALS



41+33 916.8  
 F.B.I. 24" X 76" CMP 8 2 24" APRONS  
 FL. 918.2  
 FL. 914.9

WASTE PEAT REMOVE - DOZE. HRS.

FUNCTIONAL CROSS SECTION - OPEN DOTTED  
 H. A. ROBERTS CO., MINNEAPOLIS, ST. PAUL, EDGAR

ST. PAUL WATER WORKS  
AND  
ANOKA COUNTY HWY. NO. 54  
S. 1/2 SEC. 35 31-22

ST. PAUL WATER WORKS  
AND  
ANOKA COUNTY HWY. NO. 54  
S. 1/2 SEC. 35 31-22

O T T E R L A K E



MANHOLE  
BY M.H.D. 1965

STA 14+33.91 P.O.S.T

P.C. STA. 13+68.66

146.02'

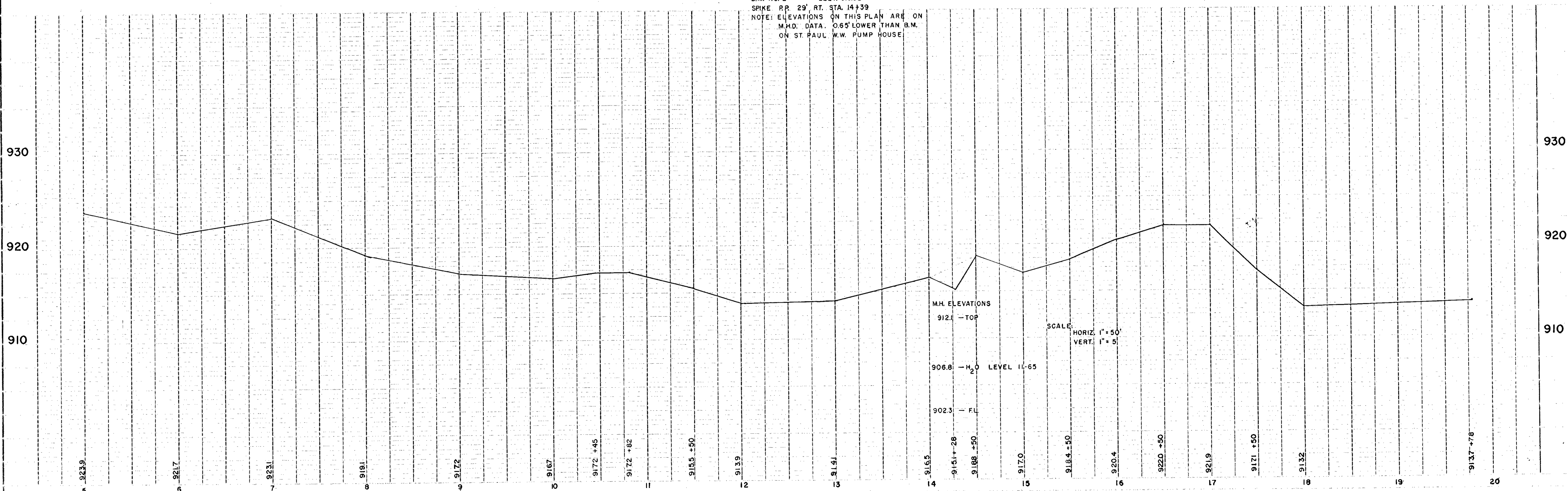
95°53'

PI=STA. 17+22.97  
Δ=31°06' RT.  
D.C.=4°30'  
T=354.31'  
L=691.11'

SCALE 1" = 50'

P.T. STA. 20+55.77

B.M. NO. 2 ELEV. 916.92  
SPIKE RP. 29', RT. STA. 14+39  
NOTE: ELEVATIONS ON THIS PLAN ARE ON  
M.H.D. DATA. 0.65' LOWER THAN B.M.  
ON ST. PAUL W.W. PUMP HOUSE



MADE BY: J. H. HENNINGER  
DATE: 11-11-65



100 3378

76130 8956

100 3378

76100 8962

100 3378

75973 8977

75150 8982

75100 8984

75150 8993

75100 8999

75150 9006