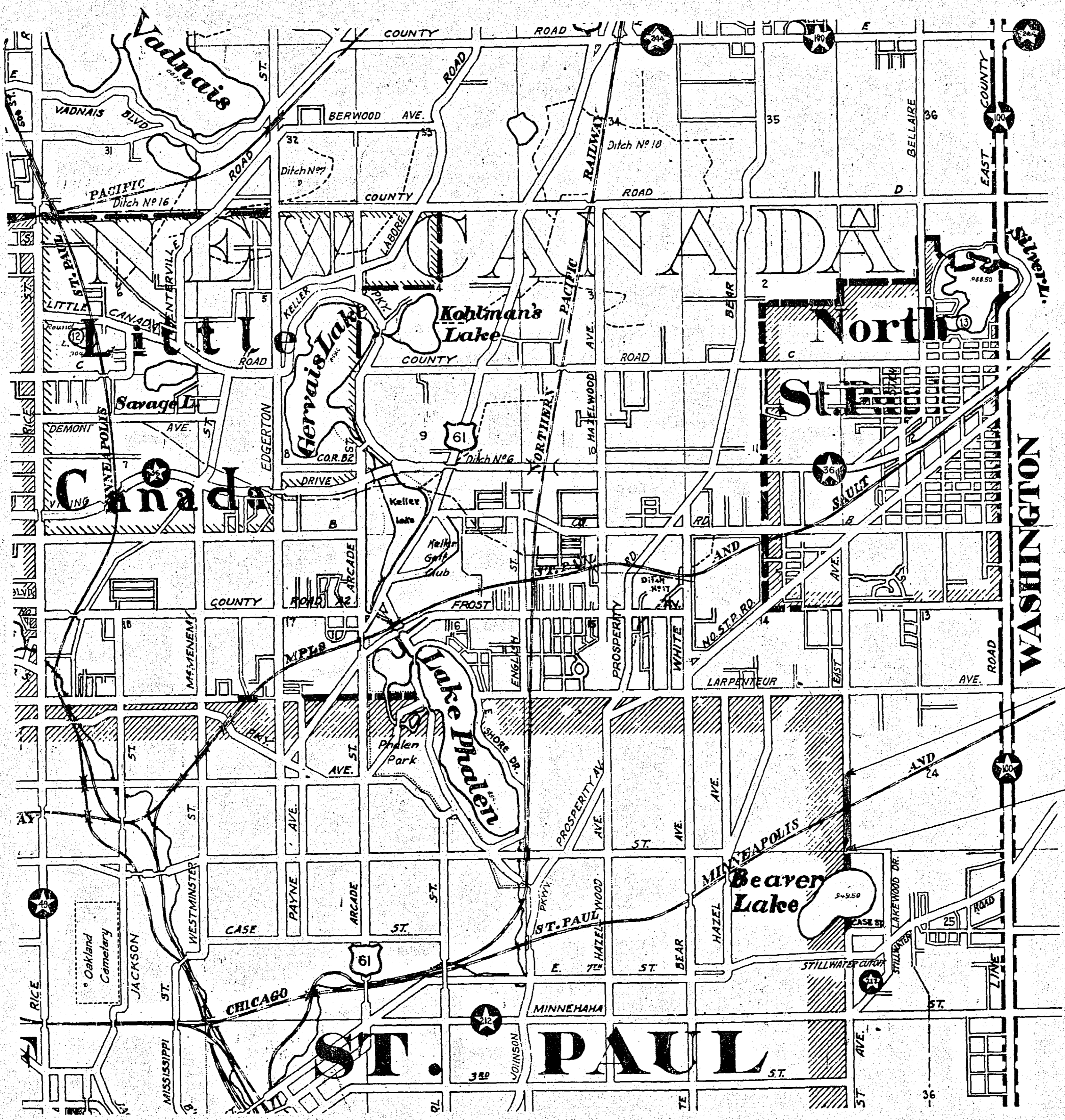


CONVENTIONAL SIGNS

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	
PRESENT ROAD 3/4" LINE	-----	CATCH BASIN	
LIMITED ACCESS	-----	MANNHOLE	
PROPERTY LINE (Except Land Lines)	-----	DROP INLET	
VACATED PLATTED PROPERTY	-----	FIRE HYDRANT	
CORPORATE OR CITY LIMITS	-----	ARC LAMP	
TRUNK HIGHWAY CENTER LINE	-----	OTHER LAMPS (State Kind)	
RETAINING WALL	-----	RAILROAD CROSSING SIGN	
STEAM RAILROAD	-----	ELECTRIC WARNING SIGN	
ELECTRIC RAILROAD	-----	CROSSING GATE	
RAILROAD RIGHT-OF-WAY LINE	-----	CATTLE GUARD	
CREEK	-----	OVERHEAD (Highway Over)	
RAPIDS OR WATERFALL	-----	UNDERPASS (Highway Under)	
DRY RUN	-----	ABUTMENT, WALL & PIER	
RAINAGE DITCH	-----	BRIDGE	
HIGH TENSION LINE	-----	CULVERT	
POWER POLE LINE	-----	BUILDING (One Story Frame)	
TELEPHONE OR TELEGRAPH LINE	-----	C-CONCRETE S-STONE T-TILE B-BRICK ST-STUCCO	
TELEPHONE CONDUIT	-----	HEDGE	
GUARD RAIL	-----	IRON PIPE	
WIRE FENCE	-----	STONE MONUMENT	
RAILROAD SNOW FENCE	-----	WOOD STAKE OR HUB	
BOARD OR HIGHWAY SNOW FENCE	-----	MEANDER CORNER	
STONE WALL OR FENCE	-----		
GAS MAIN	-----		
WATER PIPE	-----		
SEWER PIPE	-----		
DRAIN TILE	-----		
GRAVEL PIT	-----		
SAND PIT	-----		
CLAY PIT	-----		
ROCK QUARRY	-----		
SPRINGS	-----		
MARSH	-----		



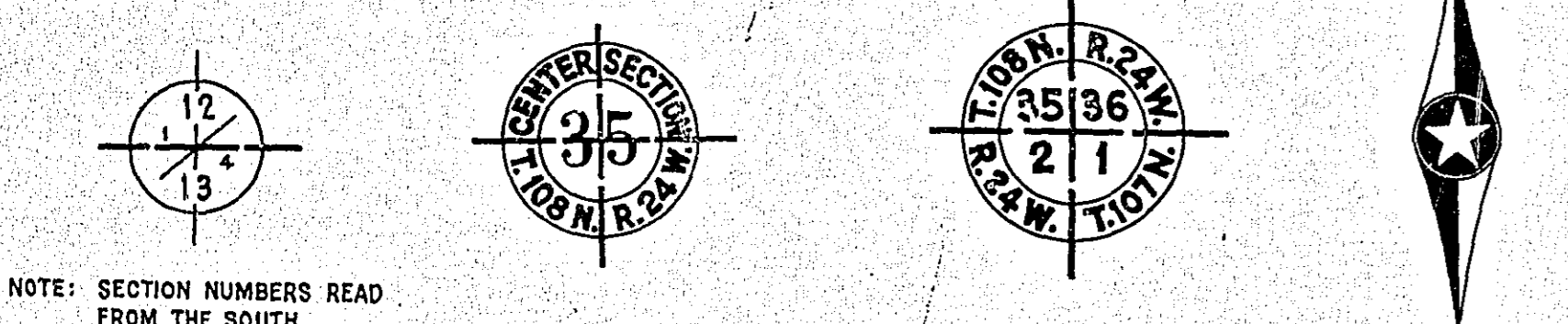
GROSS LENGTH	2,637 FEET	0.499 MILES
BRIDGES-LENGTH	0 FEET	0 MILES
EXCEPTIONS-LENGTH	60 FEET	0.011 MILES
NET LENGTH	2,577 FEET	0.488 MILES

INDEX

SHEET NO.	DESCRIPTION
1	LAYOUT MAP AND TITLE SHEET
2	ESTIMATE AND TYPICAL SECTIONS
3	PLAN AND PROFILE
4,5,6,7	CROSS SECTIONS

SCALES

PLAN, 1 inch = 100 Feet
 PROFILE, Horiz. 1 inch = 100 Feet. Vert. 1 inch = 10 Feet.
 WORKING PLANS { Horiz. 1 inch = Feet
 Vert. 1 inch = Feet
 Cross-Sections 1 inch = 10 Feet
 LAYOUT, 1 inch = 2640 Feet



PIT DATA

PIT NO.	Located in
.....	Dead Haul
PIT NO.	Located in
.....	Dead Haul
PIT NO.	Located in
.....	Dead Haul

END OF PROJ.
STA. 26 + 36.75

EXCEPTION: STA. 11+55 TO STA. 12+15

BEG. OF PROJ.
STA. 0 + 00

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.
Rory J. Brennan COUNTY ENGINEER REG. NO. 818 DATE 2/28/56

RECOMMENDED FOR APPROVAL *Rory J. Brennan* COUNTY ENGINEER DATE 2/28/56
 APPROVED *Joseph E. O'Brien* CHAIRMAN OF RAMSEY COUNTY BOARD DATE 3/10/56

SPECIFICATIONS

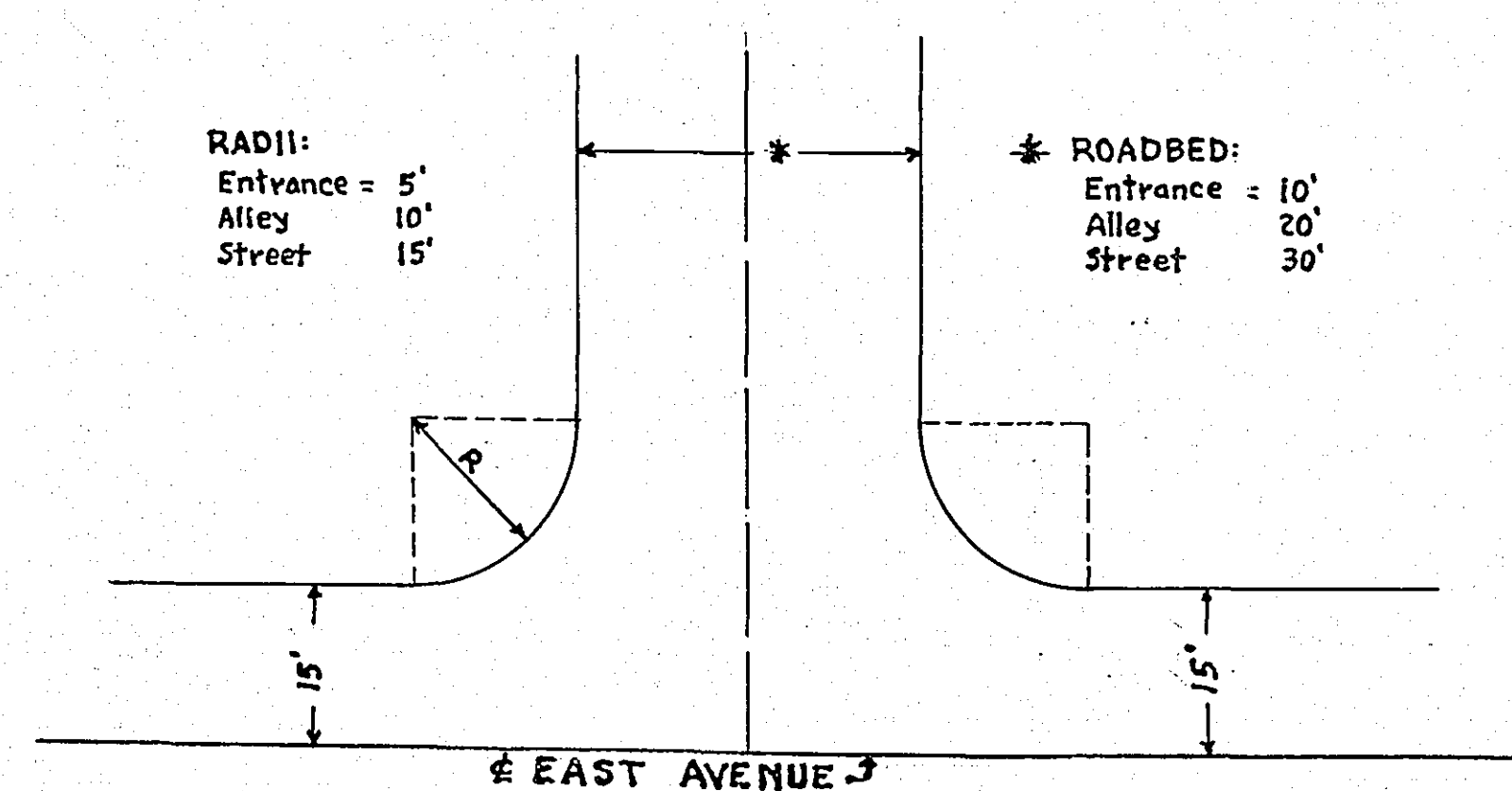
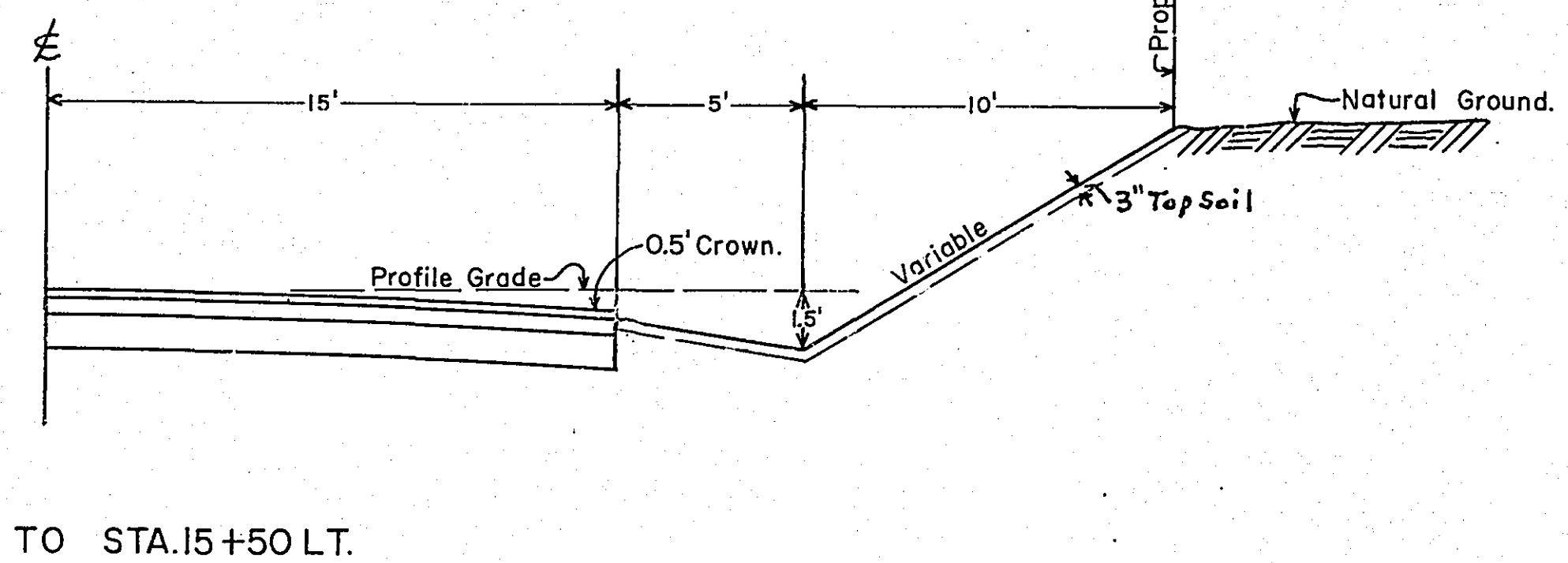
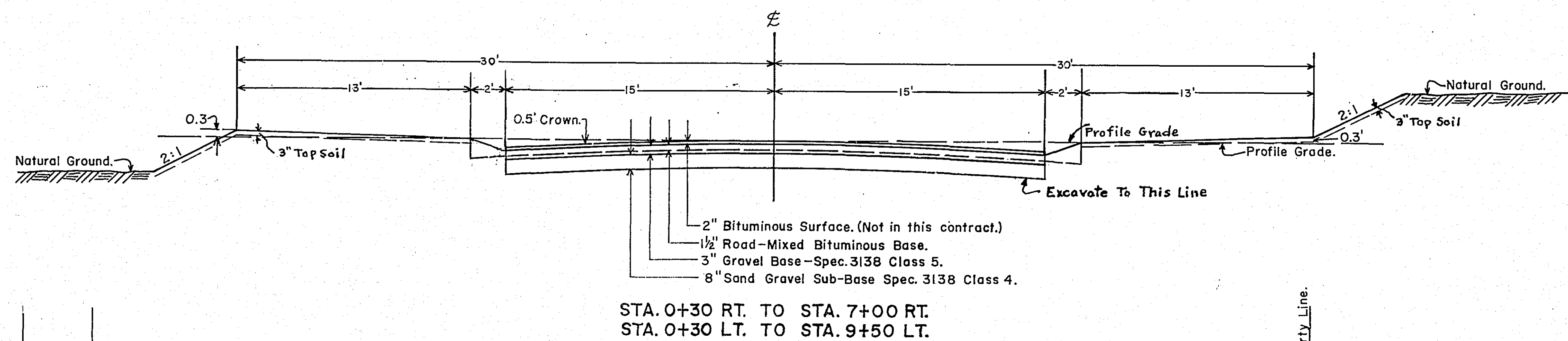
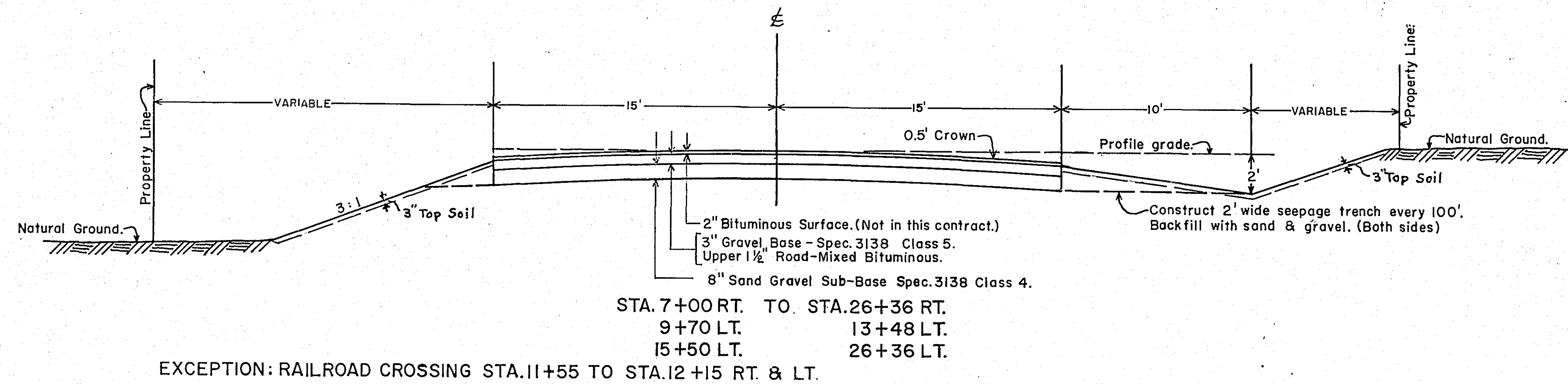
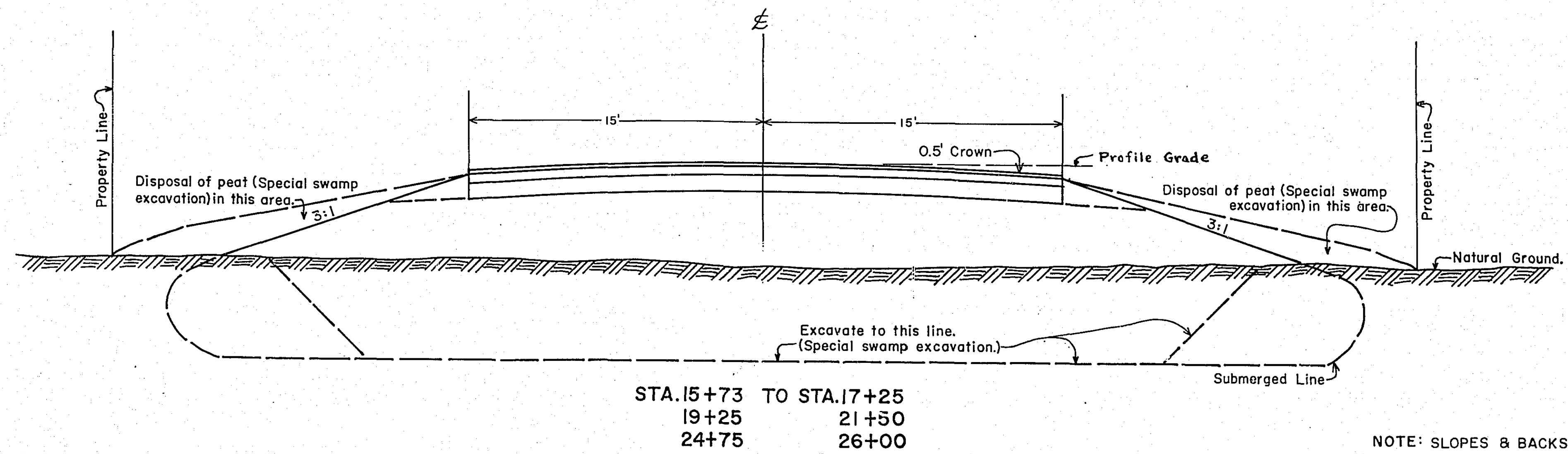
THE "SPECIFICATIONS FOR HIGHWAY CONSTRUCTION" DATED JULY 1, 1947 AND SUBMITTED FOR APPROVAL BY THE DIVISION ENGINEER OF THE BUREAU OF PUBLIC ROADS ON OCTOBER 15, 1947, AS MODIFIED BY "SUPPLEMENT 1" THERETO DATED APRIL 15, 1953 AND SUBMITTED FOR APPROVAL BY THE DIVISION ENGINEER OF THE BUREAU OF PUBLIC ROADS ON MARCH 25, 1953, SHALL GOVERN.

ESTIMATED QUANTITIES			
SPECIFICATION NO.	ITEM	UNIT	TOTAL ESTIMATED QUANTITIES
2101.501	CLEARING	ACRE	1.6
2101.506	GRUBBING	ACRE	1.6
2104.501	REMOVE PORTABLE CULVERTS	LINEAR FOOT	57
2104.510	REMOVE FENCE	LINEAR FOOT	1580
2104.511	REMOVE MANHOLES AND CATCH BASINS	STRUCTURE	3
2105.503	CLASS "C" EXCAVATION	CUBIC YARD	15,740
2123.506	DRAGLINE (SPECIAL SWAMP EXCAVATION)	HOUR	75
2130.501	WATER	(M) GALLON	40
2201.527	GRAVEL SUB-BASE IN PLACE (VEH. MEAS.)	CUBIC YARD	2260
2202.527	GRAVEL BASE IN PLACE (VEH. MEAS.)	CUBIC YARD	420
2208.501	BITUMINOUS MATERIAL FOR PRIME COAT	GALLON	1760
2208.503	BITUMINOUS MATERIAL FOR MIXTURE	GALLON	7900
2208.507	AGGREGATE (VEH. MEAS.)	CUBIC YARD	420
2501.511-18	F. & I. C.M. PIPE CULVERT 18"	LINEAR FOOT	54
2501.511-24	F. & I. C.M. PIPE CULVERT 24"	LINEAR FOOT	70
2501.521-15	F. & I. S.C.P. CULVERT 15"	LINEAR FOOT	40
2501.521-18	F. & I. S.C.P. CULVERT 18"	LINEAR FOOT	88
2503.512-12	F. & I. R.C.P. SEWER 12"	LINEAR FOOT	32
2506.506	CONSTRUCT MANHOLE	LINEAR FOOT	7
2506.507	CONSTRUCT CATCH BASIN	LINEAR FOOT	6
2506.522	ADJUST FRAME & RING CASTING	ASSEMBLY	1

BASIS FOR PLANNED QUANTITIES	
GRAVEL BASE	
WATER FOR COMPACTION 20 GAL. PER TON OF BASE CONSTRUCTION	
BITUMINOUS BASE	
BITUMINOUS MATERIAL FOR PRIME	0.20 GAL. PER SQ. YD.
BITUMINOUS MATERIAL FOR MIXTURE	0.90 GAL. PER SQ. YD.
MINERAL AGGREGATE	150 LBS. PER SQ. YD.

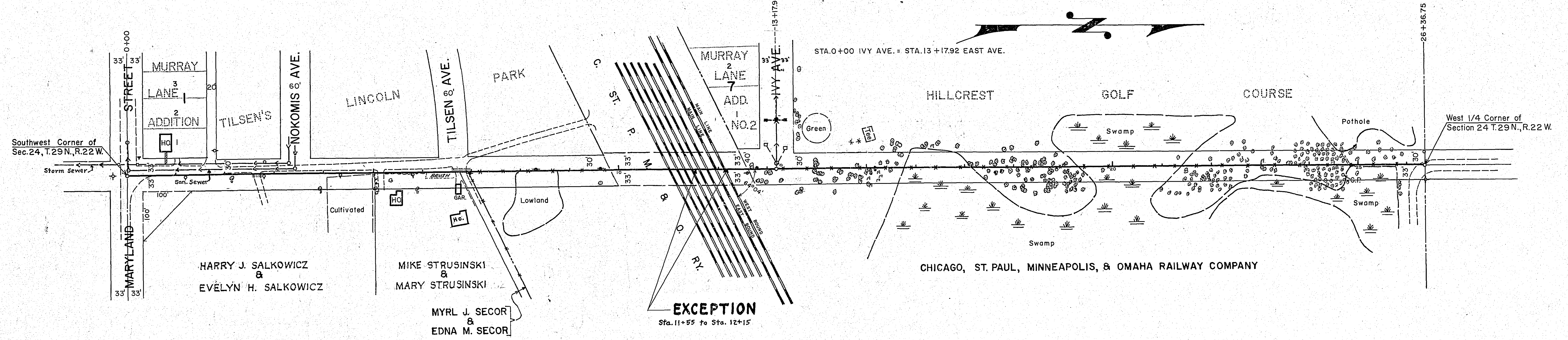
PLATE NO.	STANDARD DETAIL PLATES
	IVY AVE. DETAIL PLATES ARE INCLUDED IN SPECS.

TYPICAL GRADING SECTIONS



TYPICAL INTERSECTION

STA. 2+64 RT. INP. 12" X 20' C.M. PIPE REMOVE-NO CULV. REQ'D.
 STA. 3+30 LT. 20' INP. MANHOLE O.K. LEAVE
 STA. 3+43 LT. 10' INP. MANHOLE ADJUST
 STA. 6+80 LT. INP. 12" X 37' C.M. PIPE REMOVE-NO CULV. REQ'D.
 STA. 9+95 ± F. & I. 18" X 46' S.C.P. CULV.
 STA. 12+23 ± F. & I. 18" X 42' S.C.P. CULV.
 TREES: STA. 2+15 TO STA. 26+10 CLEAR 1.6 ACRE GRUB 1.6 ACRE
 STA. 16+00 ± F. & I. 18" X 64' C.M. PIPE
 STA. 13+60 ± F. & I. 15" X 40' S.C.P. CULV.
 STA. 20+00 ± F. & I. 24" X 70' C.M. PIPE
 IVY AVE. STRUCTURE REMOVAL SEE SPECIFICATIONS
 IVY AVENUE: (SEE SPECS.) STA. 1+00 ± CONST. M.H. 7 L.F.
 STA. 1+00 RT. & LT. CONST. 6 L.F. CATCH BASINS DESIGN NO. 4A
 F. & I. 12" X 32' R.C.P. SEWER



PLAN
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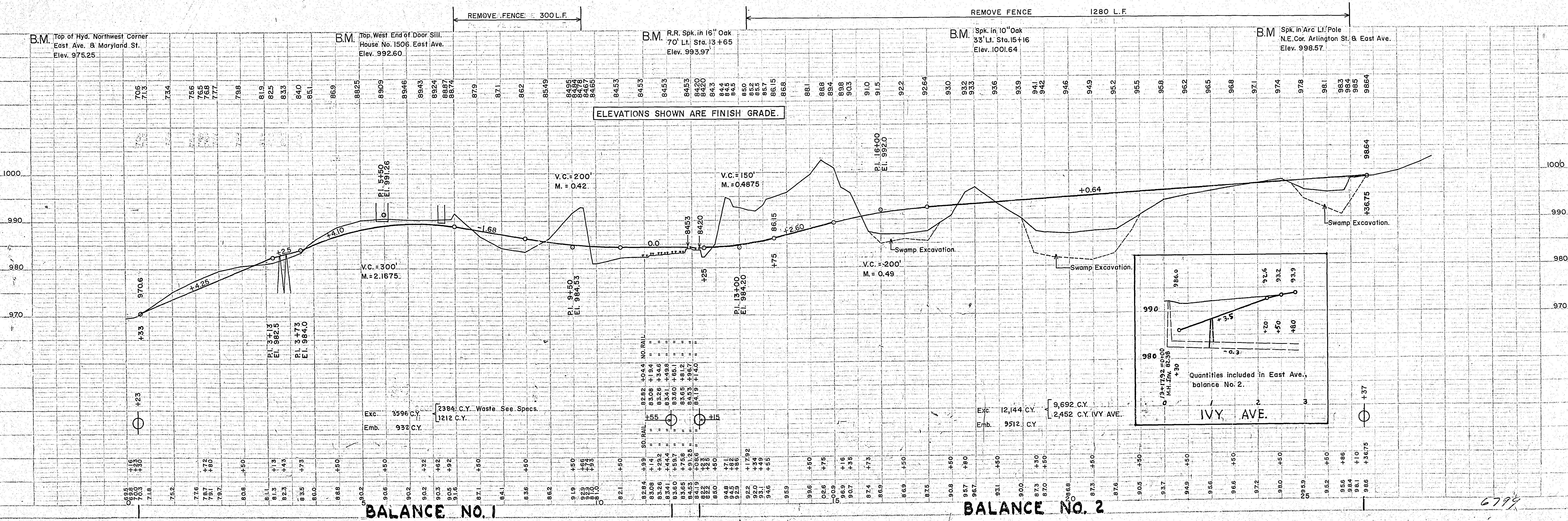


PLATE 1 - PLAN PROFILE & BALANCE SHEET
 REVISIONS
 DATE
 BY
 CHECKED
 DATE
 BY