

STATE OF MINNESOTA
DEPARTMENT OF HIGHWAYS
CONSTRUCTION PLAN FOR

County State Aid Highway No. 14

BETWEEN BEGINNING 90° NORTH WESTERLY OF 8 ST. RUNNING SOUTH EASTERLY TO END OF PROJECT AND 90° THENCE EASTERLY 1747' TO END OF PROJECT.
From A POINT 549 FT. NORTH WESTERLY OF A ST. IN THE VILLAGE OF CENTERVILLE To A POINT 1305.45 FT. SOUTH OF THE SOUTH 1/4 COR. SECTION 14 T. 51 N. R. 22 W.

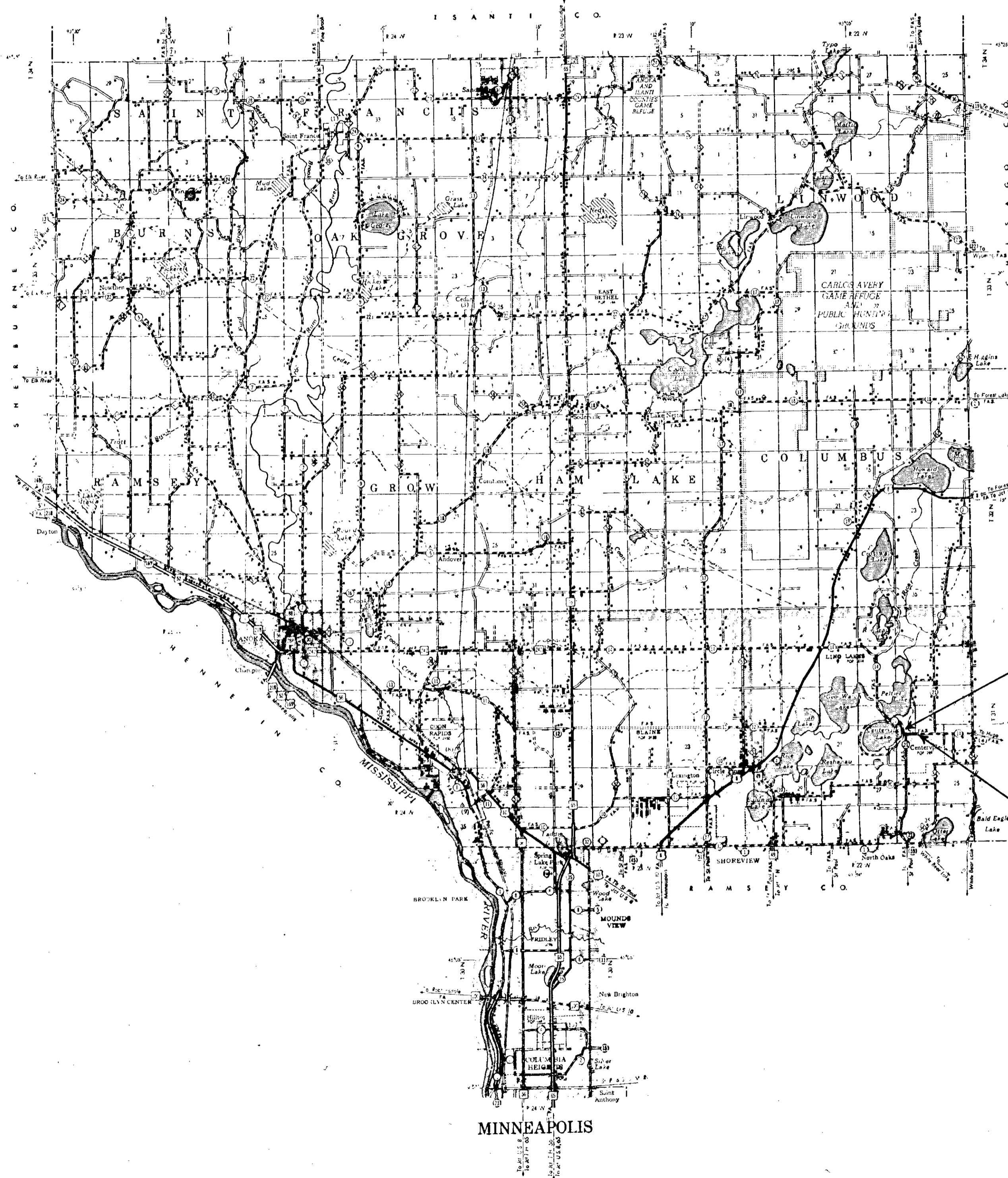
GROSS LENGTH 2650 FEET 0.502 MILES
BRIDGES LENGTH 0 FEET 0 MILES
EXCEPTIONS LENGTH 0 FEET 0 MILES
NET LENGTH 2650 FEET 0.502 MILES

Plan 1 inch = 50 Feet
PROFILE: Horiz. 1 inch = 50 Feet Vert. 1 inch = 5 Feet
WORKING PLANS: Horiz. 1 inch = 5 Feet Vert. 1 inch = 5 Feet
LAYOUT: Scale 1 inch = 10 Feet

CONVENTIONAL SIGNS

STATE LINE	--- ---	TIMBER	
COUNTY LINE	--- ---	BRUSH	
TOWNSHIP OR RANGE LINE	--- ---	ORCHARD	
SECTION LINE	--- ---	ROCK LEDGE	
QUARTER LINE	--- ---	SAND	
SECTION LINE	--- ---	EDGE OF CUT	
RIGHT OF WAY LINE	--- ---	TOE OF EMBANKMENT	
PRESENT ROAD	--- ---	CATCH BASIN	
LIMITED ACCESS	--- ---	MANHOLE	
PROPERTY LINE	--- ---	TURP PILE	
LOCATED PLANTED PROPERTY	--- ---	FIRE HYDRANT	
CONDUITE OR C.Y. MTS	--- ---	ARC LAMP	
"R" OR "H" CENTER LINE	--- ---	OTHER LAMP (SHOW ROAD)	
RETAINING WALL	--- ---	RAILROAD CROSSING SIGNAL	
STEAM RAILROAD	--- ---	RAILROAD CROSSING SIGNAL	
ELECTRIC RAILROAD	--- ---	ELECTRIC WARNING SIGN	
RAILROAD RIGHT OF WAY LINE	--- ---	CROSSING GATE	
CREEK	--- ---	"AT" LE SLARE	
DAPDS OR WATERFALL	--- ---	OVERHEAD "Highway Over"	
DEY ROW	--- ---	UNDERPASS (Hwy. over)	
DRAINAGE DITCH	--- ---	ADJUTMENT, HALL & PIER	
HIGH TENSION LINE	--- ---	RAILROAD	
POWER POLE LINE	--- ---	COUNTRY	
TELEPHONE OR TELEGRAPH LINE	--- ---	BUILDING (OR SIGN) PANEL	
TELEPHONE CONDUIT	--- ---	C. CONCRETE & STONE T. TILE B. BRICK S. STUCCO	
ROAD SIGN	--- ---	WOOD	
WIRE FENCE	--- ---	IRON PIPE	
RAILROAD SNOW FENCE	--- ---	STONE MONUMENT	
BOARD OR HIGHWAY SNOW FENCE	--- ---	ADDS STONE OR "B"	
STONE WALL OR FENCE	--- ---	MEANDER CORNER	
GRASS MAINT.	--- ---		
WATER PIPE	--- ---		
SEWER PIPE	--- ---		
GRAVEL P.T.	--- ---		
SAND P.T.	--- ---		
CLAY P.T.	--- ---		
ROCK GLASSY	--- ---		
SPRINGS	--- ---		
MARKS	--- ---		

NOTE: SECTION NUMBERS READ FROM THE SOUTH



BEGIN PROJECT S.A.P. 02-614-01
STA. 7+00

END PROJECT S.A.P. 02-614-01
STA. 33+50

MINN. PROJ. _____

INDEX OF SHEETS

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

DESIGN SPEED
40 M.P.H.
LOCALLY RESTRICTED
30 M.P.H.

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 FULLY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

Earling J. Lundheim DATE 3-20-62
ANOKA COUNTY REG. NO. 2551

RECOMMENDED FOR APPROVAL *Edgar G. Pearson* 3-21 1962
DISTRICT ENGINEER

RECOMMENDED FOR APPROVAL *J. S. McMillan* 4/9 1962

APPROVED 4-9 1962 *J. M. Egan*
STATE AID ENGINEER

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

DISTRICT ENGINEER _____ DATE _____

MICRO-FILMED

Minn. Project No. _____ S.A.P. 02-614-01
State Project No. _____

ANOKA County, Minnesota. County Proj. No. _____ Plan No. 1 Sheet 1 of 9 Sheets

SPECIFICATIONS

THE "SPECIFICATIONS FOR HIGHWAY CONSTRUCTION" DATED MAY 1, 1959, AND SUBMITTED FOR APPROVAL BY THE DIVISION ENGINEER OF THE BUREAU OF PUBLIC ROADS ON MARCH 26, 1959, SHALL GOVERN.

ESTIMATED QUANTITIES

SPECIFICATION NO.	ITEM	UNIT	MUNICIPAL	RURAL	TOTAL ESTIMATED QUANTITIES
2101.501	CLEARING	ACRE			0.05
2101.502	CLEARING	TREE			22
2101.506	GRUBBING	ACRE			0.05
2101.507	GRUBBING	TREE			33
2104.501	REMOVE PORT. CULV.	LIN. FT.			284
2104.504	REMOVE CURB	LIN. FT.			685
2104.506	REMOVE SIDE WALK	SQ. YD.			135
2104.507	REMOVE MASONRY (CONCRETE) STRUCTURE	CU. YD.			4
2104.510	REMOVE FENCE	LIN. FT.			899
557.621	RESET FENCE	LIN. FT.			840
2104.511	REMOVE CATCH BASIN	STRUCTURE			2
2105.501	CLASS "A" EXC.	CU. YD.			6620
2103.501	WATER	M-GAL			194
2201.527	GRAVEL SUB-BASE INPL. (CL.4)	CU. YD. (V.M.)			9700
2208.501	BIT. MATL. FOR PRIME (MCO,1)	GAL.			4000
2208.503	BIT. MATL. FOR MIXTURE (MC 2,3,4)	GAL.			8180
2208.507	AGGREGATE	CU. YD. (V.M.)			487
2341.502	BIT. MATL. FOR TACK (MC 2,3)	GAL.			670
2341.504	BIT. MATL. FOR MIXTURE (ACI) PEN 120-150	TON			58
2341.511	BIT. MIX. (WEARING COURSE)	TON			1060
* 2412.501	SEC. PLATE ARCH	LIN. FT.			34
2515.531-18	F&I APRON FOR CMP 18"	APRON			1
2501.501	PIPE CULV. EXC.	CU. YD.			85
2501.511-18	F&I 18" C.M.P. CULV.	LIN. FT.			64
2501.522-29	F&I 29" SCP ARCH CULV. CLASS 3	LIN. FT.			40
2501.549	SAND GRAVEL SUB FOUNDATION	CU. YD.			66
2503.512-12	F&I 12" REINFORCED CONC. PIPE CLASS 2	LIN. FT.			346
2503.512-18	F&I 18" REINFORCED CONC. PIPE CLASS 2	LIN. FT.			440
2503.512-18	F&I 18" REINFORCED CONC. PIPE CLASS 3	LIN. FT.			350
2506.506	CONSTRUCT MAN HOLES DESIGN A&C OF F&G	LIN. FT.			25
2506.507	CONSTRUCT CATCH BASINS DESIGN A&C OF F&G	LIN. FT.			29
2506.516	F&I CASTINGS	ASSEMBLY			8
2515.542-29	F&I APRON FOR SCP 29" (ARCH)	APRON			2
2521.501	CONCRETE WALK 4" THICK	SQ. FT.			1310
2535.501	BITUMINOUS CURB	LIN. FT.			2913
** 2574.501	ROADSIDE SEEDING	ACRES			0.589
2576.501	SODDING	SQ. YD.			2357
2501.511-24	F&I 24" C.M.P. CULV.	LIN. FT.			30
2515.531-24	F&I APRON FOR C.M.P. CULV. 24"	EA.			2

* WILL INCLUDE COMPENSATION FOR REMOVE & REPLACING OF CUT PLATES.
 ** SEED & INOCULANT WILL BE FURNISHED BY THE COUNTY.

STORM SEWER DEPTH
(FOR INFORMATION ONLY)
18" LINE

DEPTH	LENGTH
0-6'	100FT.
6'-10'	340FT.
10'-14'	350FT.

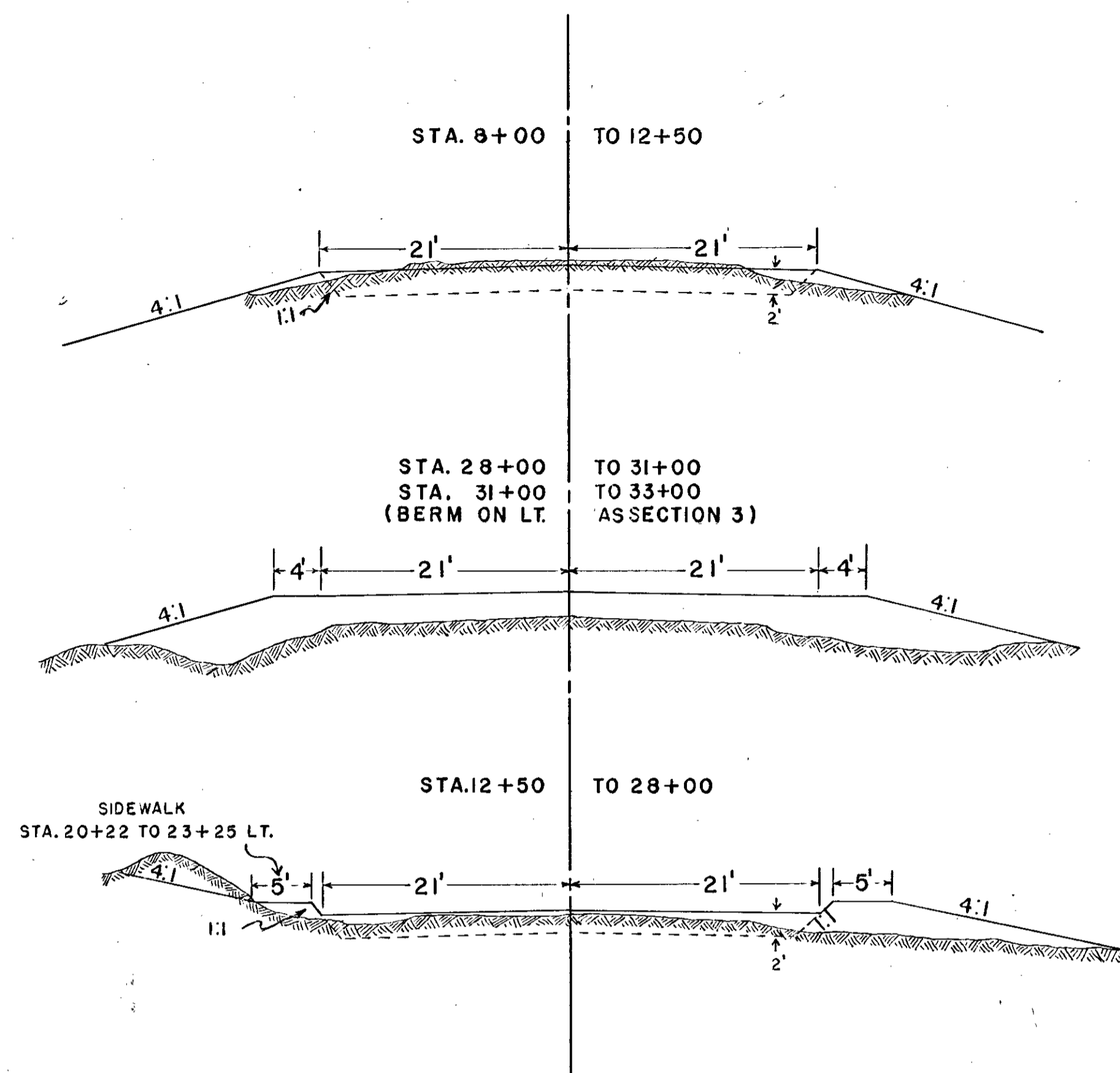
12" ALL 0-5 FT.

STANDARD DETAIL PLATES

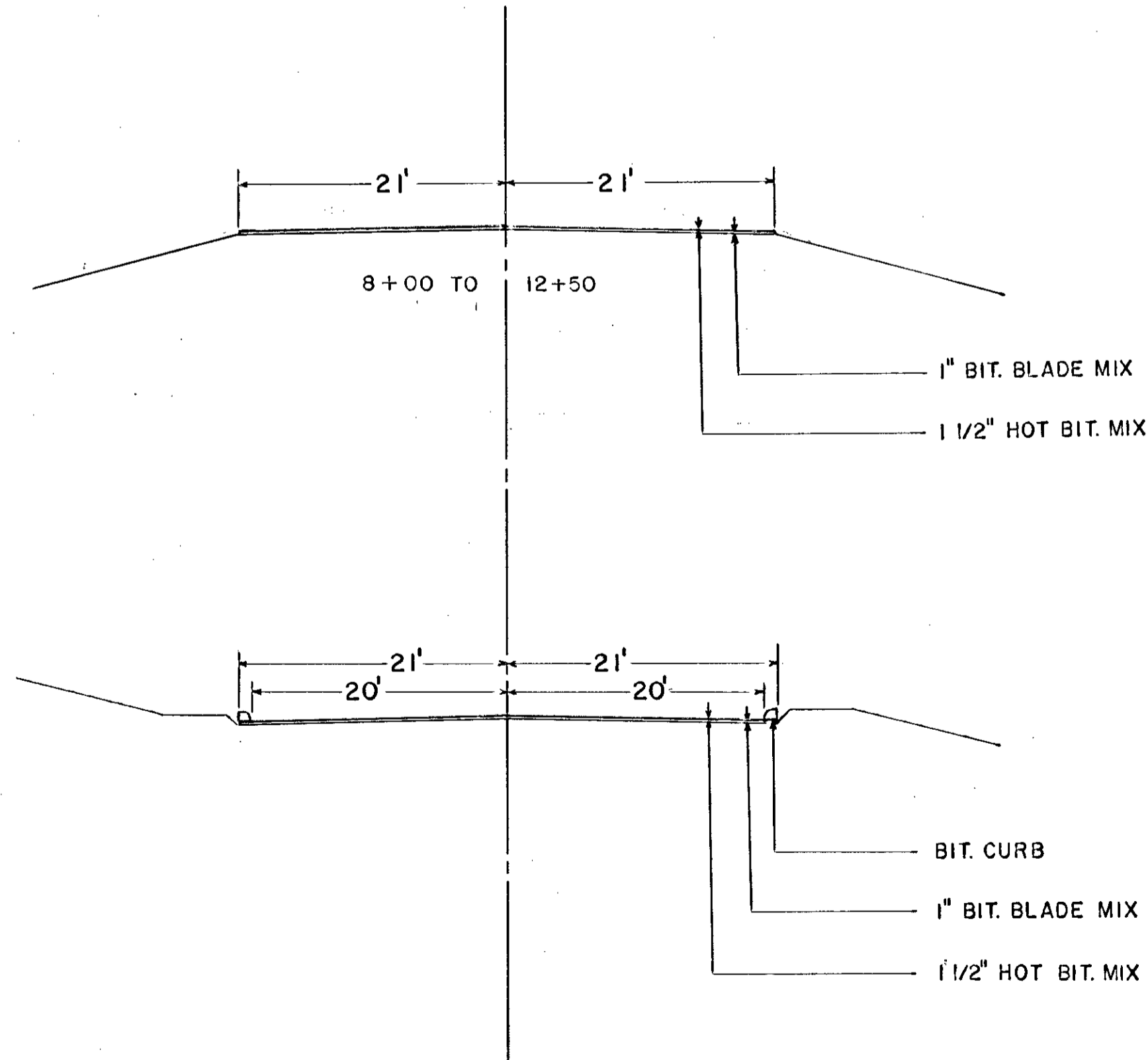
THE FOLLOWING STANDARD DETAIL PLATES, APPROVED BY THE BUREAU OF PUBLIC ROADS, SHALL APPLY ON THIS PROJECT.

PLATE NO.	DESCRIPTION
3000B	SCP CULVERTS
3014	REINFORCED CONCRETE PIPE ARCH
3050	STRUCTURAL PLATE STRUCTURE
3100B	CONCRETE APRON FOR SCP
3112	CONCRETE APRON FOR REINFORCED CONCRETE ARCH
3123B	METAL APRON FOR C.M. PIPES
4000E-4002C	
4005E-4006D	MANHOLE OR CATCH BASIN
4101A-4126B	CASTINGS
4141C-4143B	GRATES
4160	CURB BOX
7065B	BITUMINOUS CURB
8000A-8001	STANDARD SIGNS & BARRICADES
8003-8008A	

TYPICAL GRADING SECTIONS



TYPICAL BASE & SURFACE SECTIONS



SPECIAL DETAILS

BITUMINOUS SURFACE IN PLACE TO BE SALVAGED AND PLACED IN LAYERS TO SATISFACTION OF ENGINEER WITHIN THE LIMITS OF PROJECT.
 SALVAGE OPERATION TO BE CONSIDERED INCIDENTAL TO CLASS "A" EXCAVATION.
 EXCESS CLASS "A" EXCAVATION (APPROX. 1245 CU. YDS.) TO BE DISPOSED OF BY THE CONTRACTOR.
 ALL MATERIAL THAT MUST BE HAULED OFF PROJECT WILL BE HAULED IN RUBBER TIRED VEHICLES.
 BACK FILL BEHIND CURB WILL BE CONSIDERED INCIDENTAL TO CLASS "A" EXCAVATION.

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

BASIS FOR PLANNED QUANTITIES

WATER 20 GALS. PER. CU. YD.
 GRAVEL BASE EXC. AREA X 1.40% MINUS OLD BIT. SURFACE

ROAD MIXED BITUMINOUS BASE

PRIME 0.30 GAL. PER SQ. YD.
 BIT. MATERIAL FOR MIX 0.60 GAL. PER. 100# AGG.
 AGGREGATE 110# PER. SQ. YD. PER. 1" DEPTH.

PLANT MIXED BITUMINOUS SURFACE

BIT. MATERIAL FOR TACK COAT 0.05 GAL. PER. SQ. YD.
 BIT. MATERIAL FOR MIXTURE 5.5% FOR WEARING
 BIT. MIXTURE FOR WEARING COURSE 110# PER. SQ. YD. PER 1" DEPTH

S.A.P. 02-614-01
 Minn. Project No. _____ State Project No. _____

REMOVE 18" X 20"
FBI 18" X 34" C.M.P.

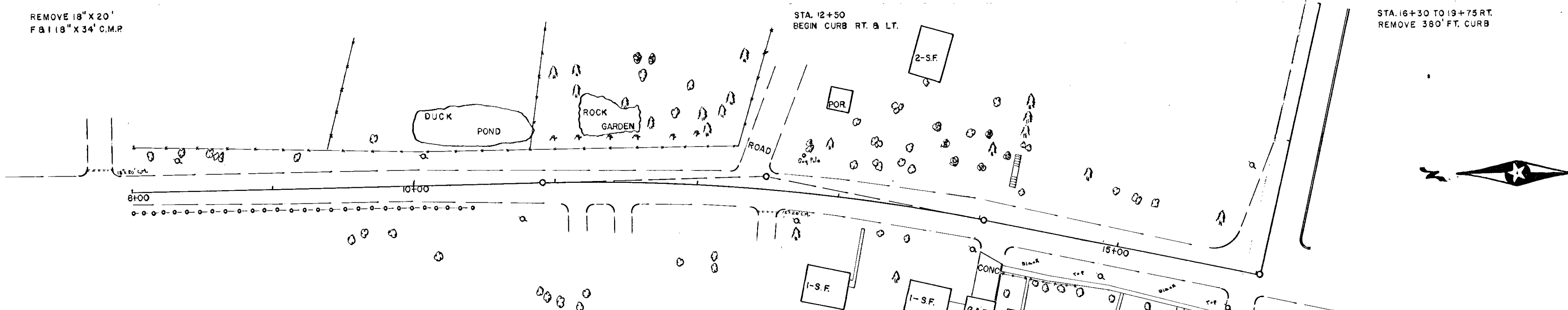
STA. 12+50
BEGIN CURB RT. & LT.

STA. 16+30 TO 19+75 RT.
REMOVE 380' FT. CURB

STORM SEWER SCHEDULE

M.H. No.	CASTING (SEE BELOW)	TOP OF GRATE ELEV.	FL. ELEV.	DESIGN
1	UNIT 2	910.50	906.0	A OR F
2	UNIT 2	910.16	905.3	A OR F
3	UNIT 2	908.24	904.5	C OR G
4	UNIT 1	907.50	905.0	C OR G
5	UNIT 1	909.59	901.81	A OR F
6	UNIT 2	909.59	902.4	A OR F
7	UNIT 1	909.39	896.5	A OR F
8	UNIT 1	903.87	891.7	A OR F

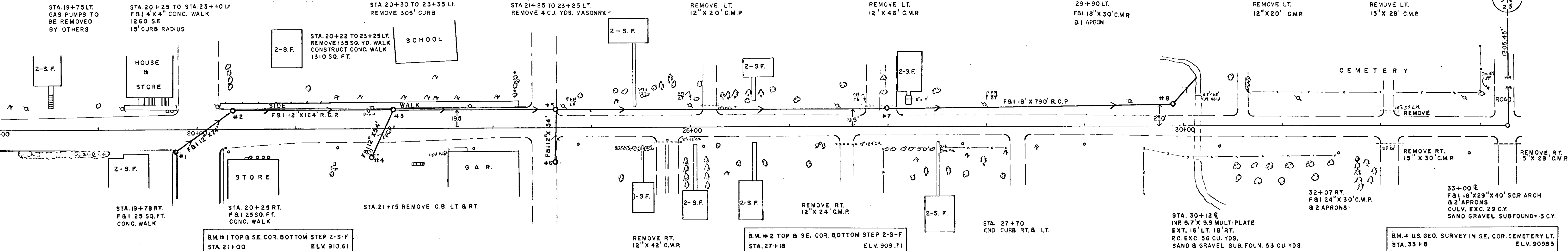
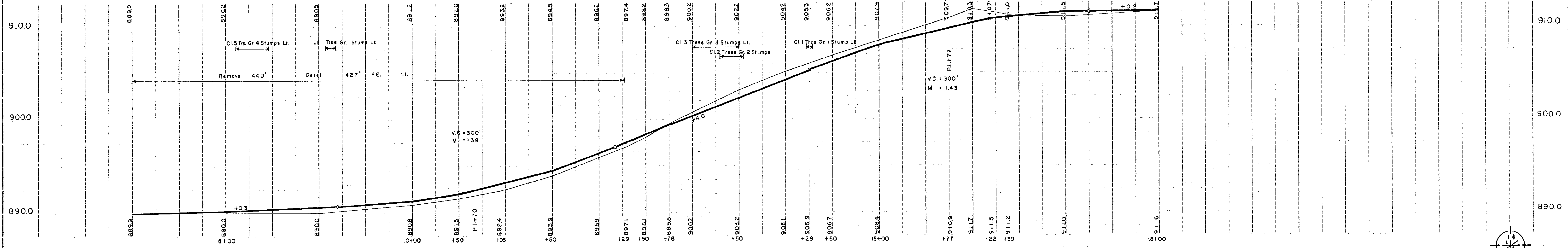
UNIT 1 = 4101A CASTING & 4141 C GRATE
UNIT 2 = 4126B CASTING & 41 9B GRATE WITH 4160 CURB BOX



B.M. #1C SPIKE IN 24" OAK LT. 120"
STA. 7+00 ELV. 893.74

B.M. #1B TOP & NE. COR. BOTTOM STR
STA. 13+20 ELV. 898.66

B.M. #1A TOP & SE. COR. BOTTOM STEP RT.
STA. 15+50 ELV. 911.60



B.M. #1 TOP & SE. COR. BOTTOM STEP 2-S-F
STA. 21+00 ELV. 910.61

B.M. #2 TOP & SE. COR. BOTTOM STEP 2-S-F
STA. 27+18 ELV. 909.71

B.M. # US. GEO. SURVEY IN SE. COR. CEMETERY LT.
STA. 33+8 ELV. 909.83

