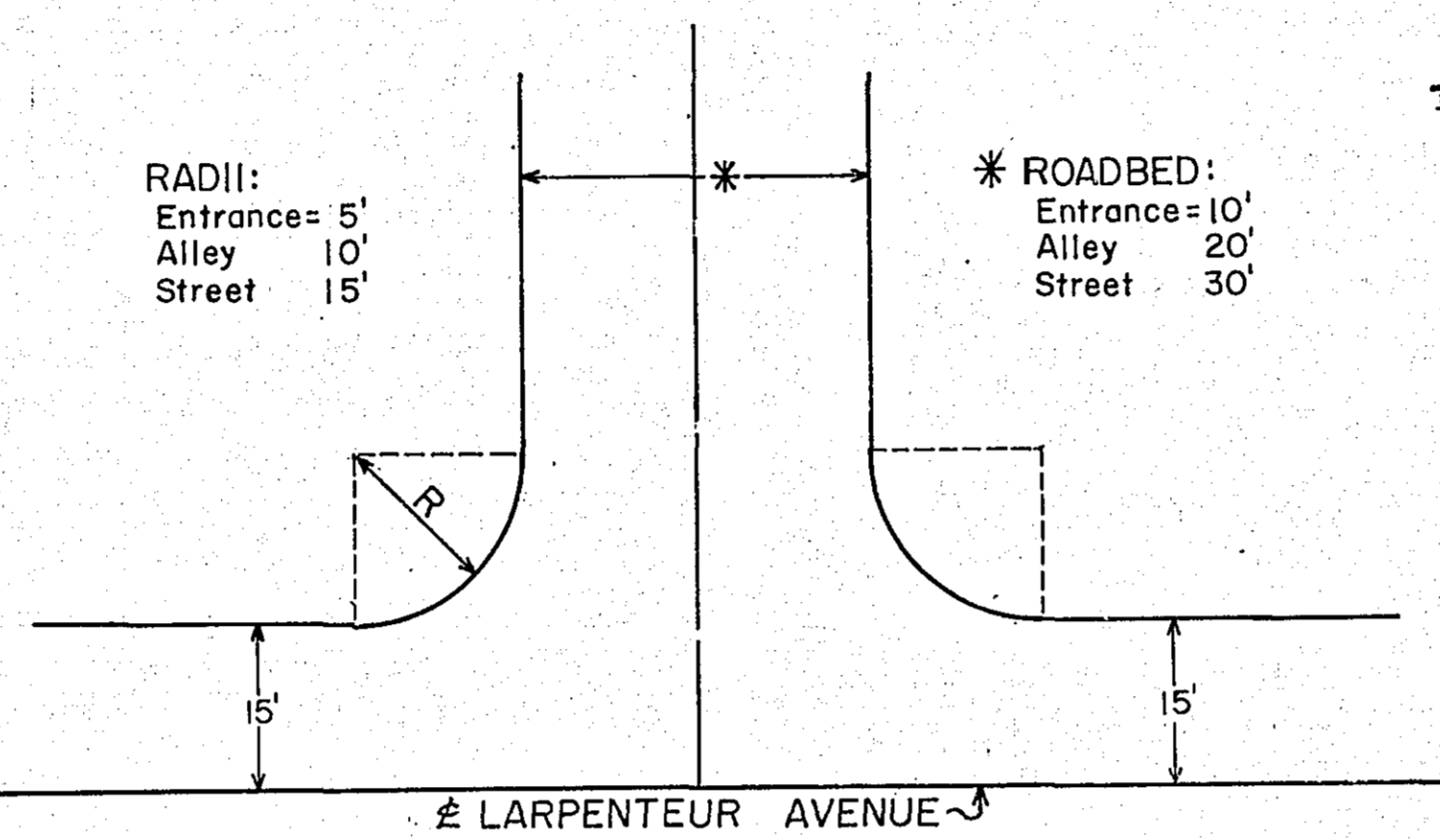


ESTIMATED QUANTITIES

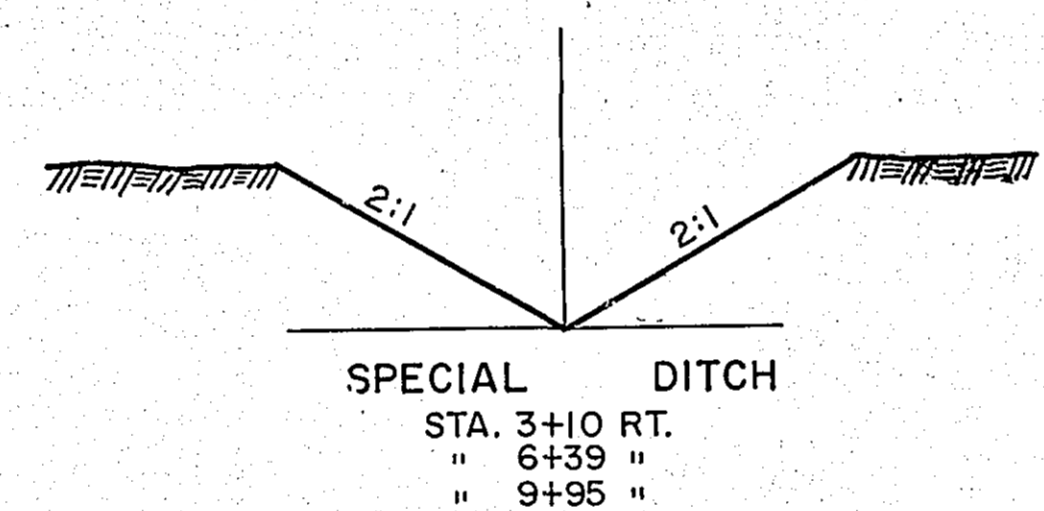
SPECIFICATION NO.	ITEM	UNIT	TOTAL ESTIMATED QUANTITIES
2101.502	CLEARING	TREE	51
2101.507	GRUBBING	TREE	60
2104.501	REMOVE PORTABLE CULVERT	LINEAR FOOT	136
2104.510	REMOVE FENCE	"	333
2105.503	CLASS "C" EXCAVATION	CUBIC YARD	89,709
2123.506	DRAGLINE	HOUR	20
2501.521-15	F. & I. S.C.P. CULVERT 15"	LINEAR FOOT	80
2501.521-24	F. & I. S.C.P. CULVERT 24"	"	54
2503.512-15	F. & I. R.C.P. SEWER 15"	"	174
2503.512-18	F. & I. R.C.P. SEWER 18"	"	376
2506.506	CONSTRUCT MANHOLES-TYPE "A"	LINEAR FOOT	22
2506.507	CONSTRUCT CATCH BASINS-TYPE "C"	"	8.6
2506.516	F. & I. CASTING ASSEMBLIES	ASSEMBLY	7
2515-502	MASONRY EROSION CONTROL STRUCTURE	CUBIC YARD	3.1
501.571-18	F. & I. EXTRA STRENGTH S.C.P. CULVERT 18"	LINEAR FOOT	180
506.552	CONSTRUCT SPECIAL CATCH BASINS (THIS ITEM SHALL INCLUDE 2 COAL RINGS & COVERS)	LINEAR FOOT	8.8

* This item shall include 2 cast Rings & Covers

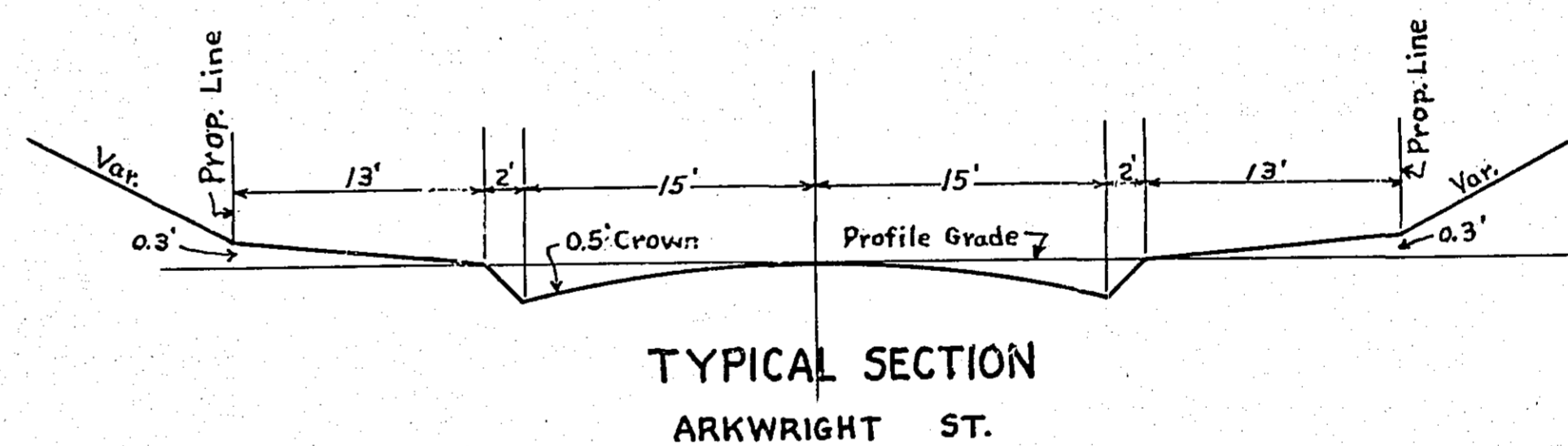
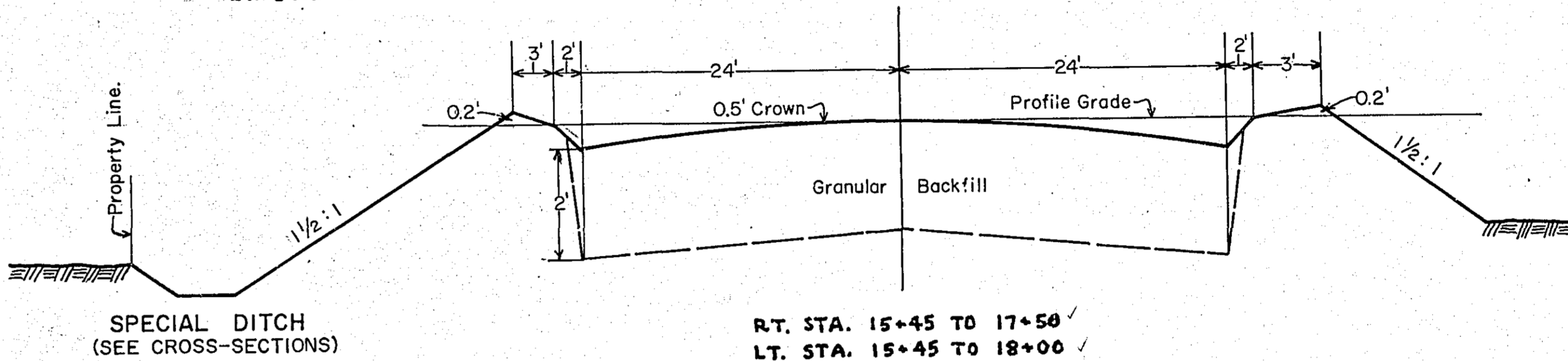
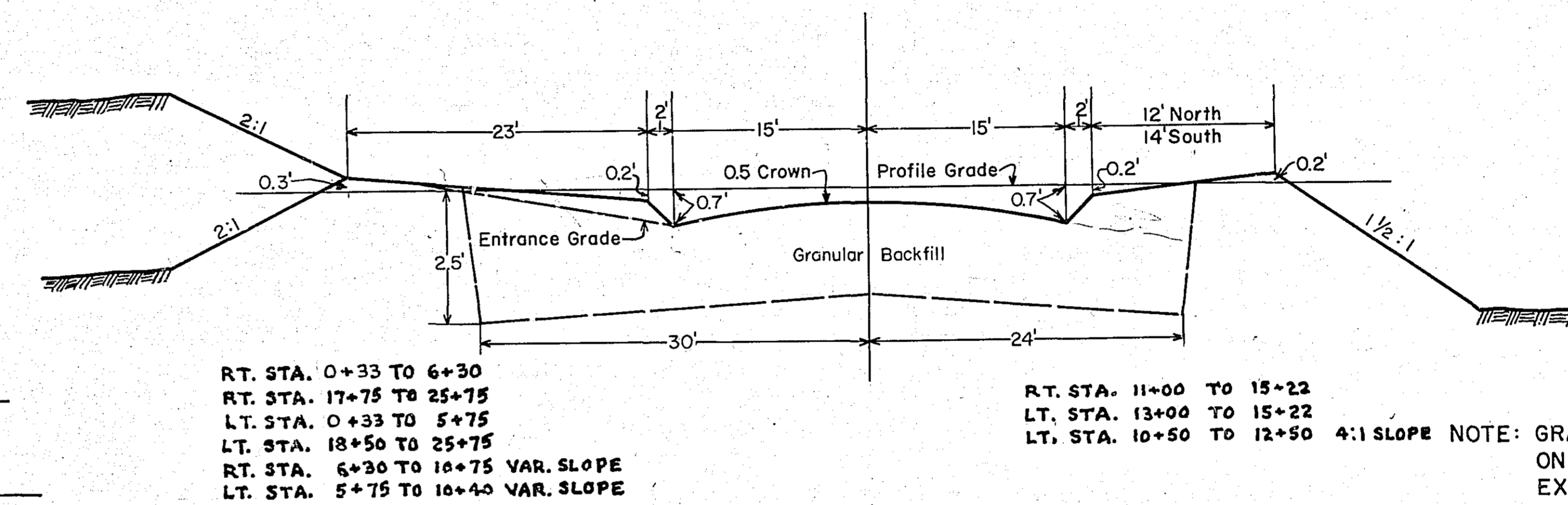
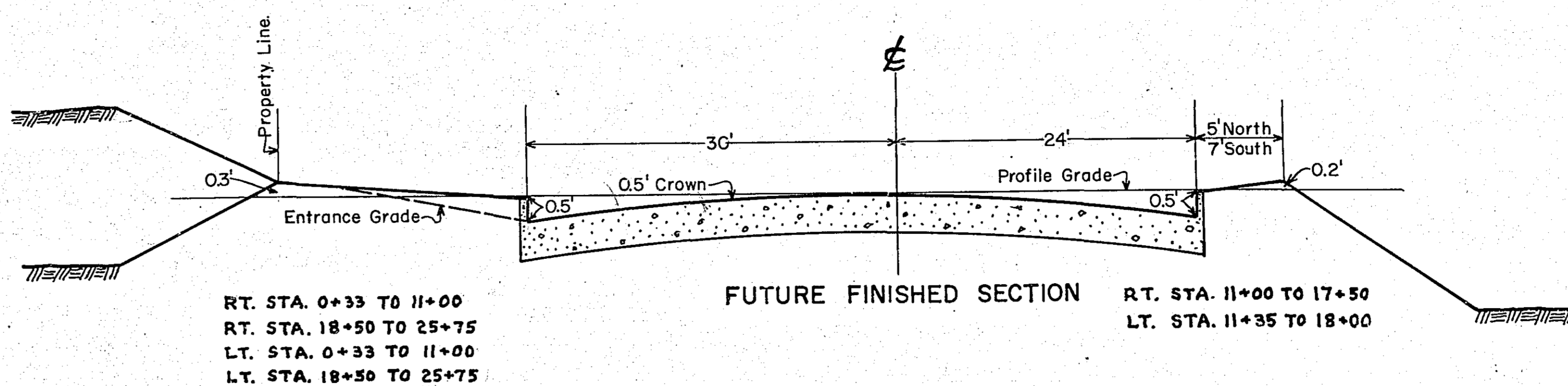
PLATE NO.	STANDARD DETAIL PLATE
4000 C	MANHOLE OR CATCH BASIN
4002 B	" " " "
4101	RING CASTING FOR MANHOLE OR CATCH BASIN
4111 B	COVER CASTING FOR MANHOLE
4126 A	CATCH BASIN FRAME CASTING (CURB BOX NO. 82.)



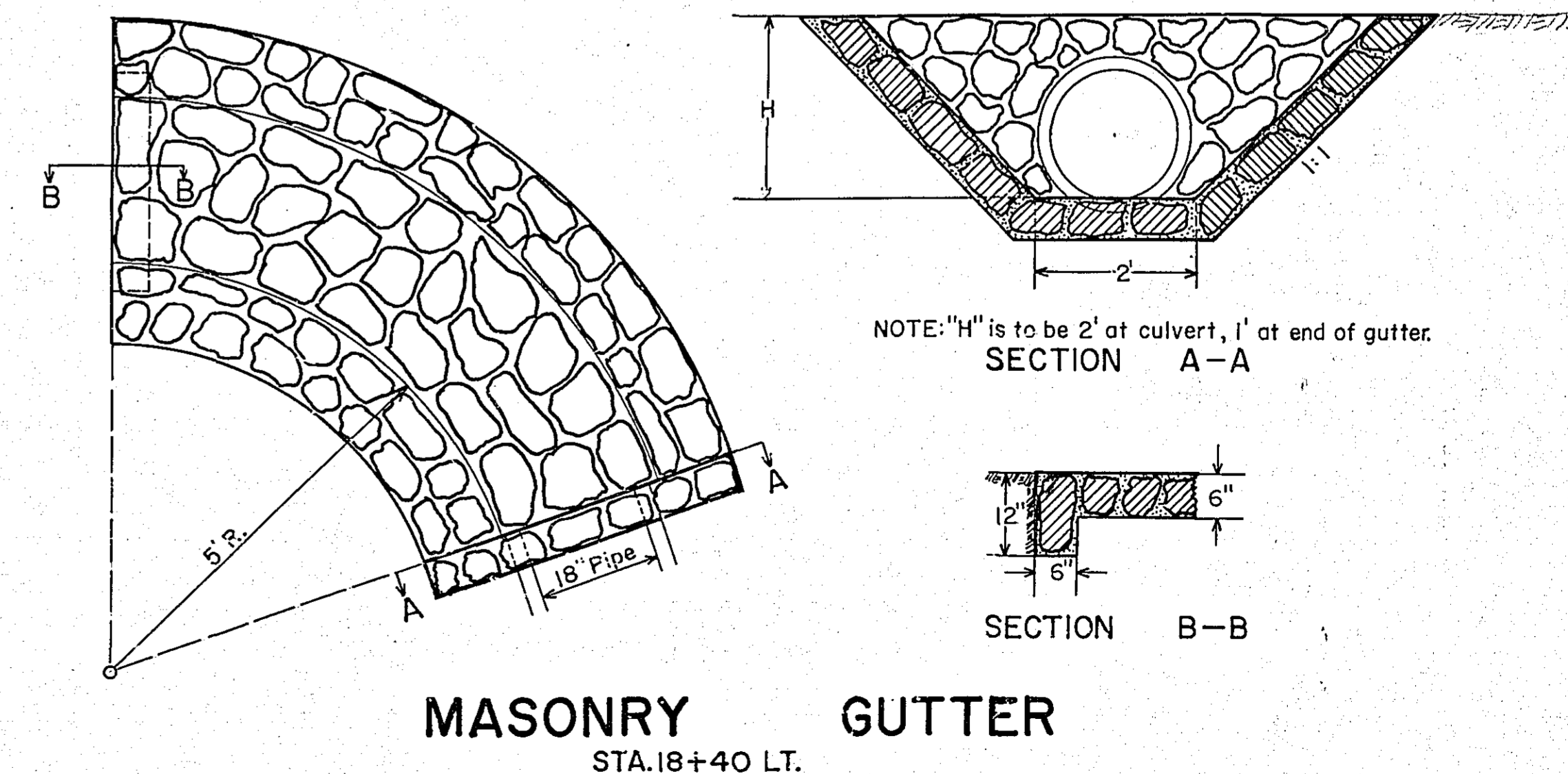
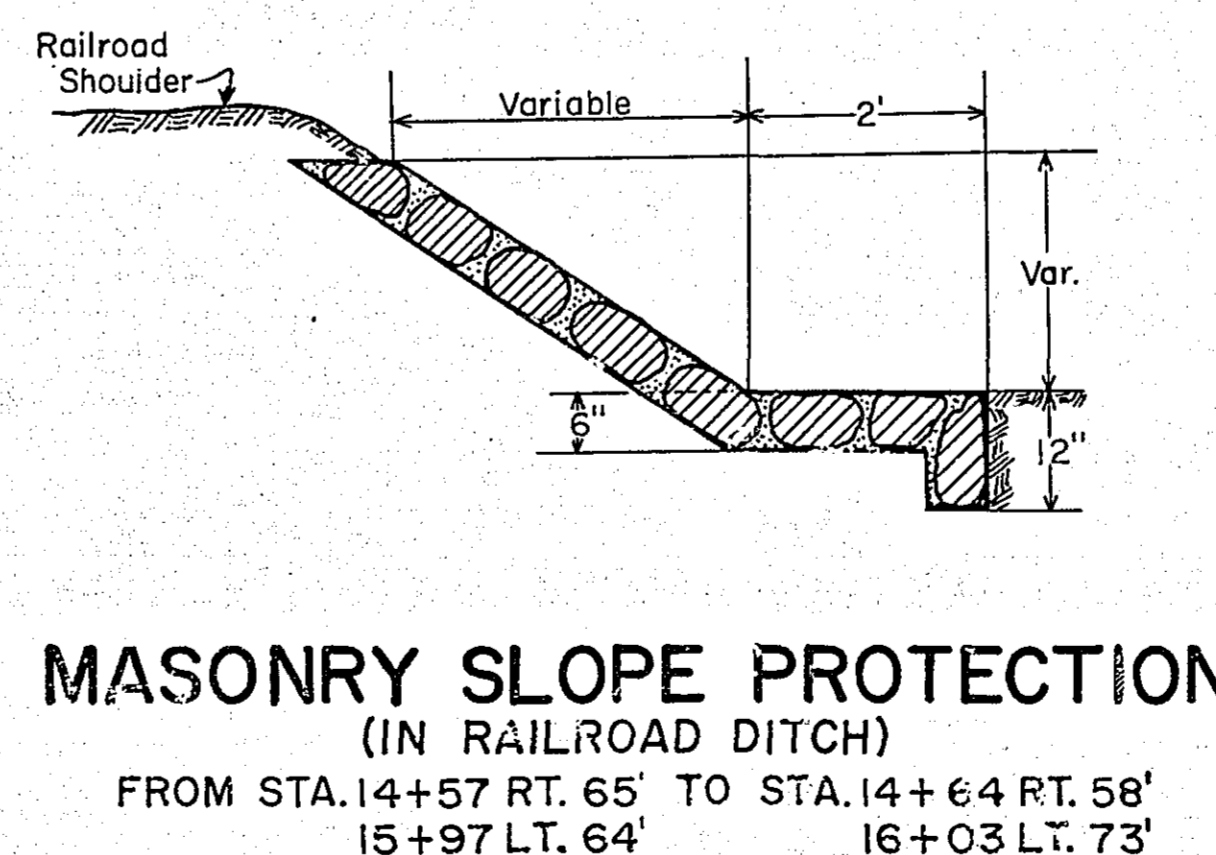
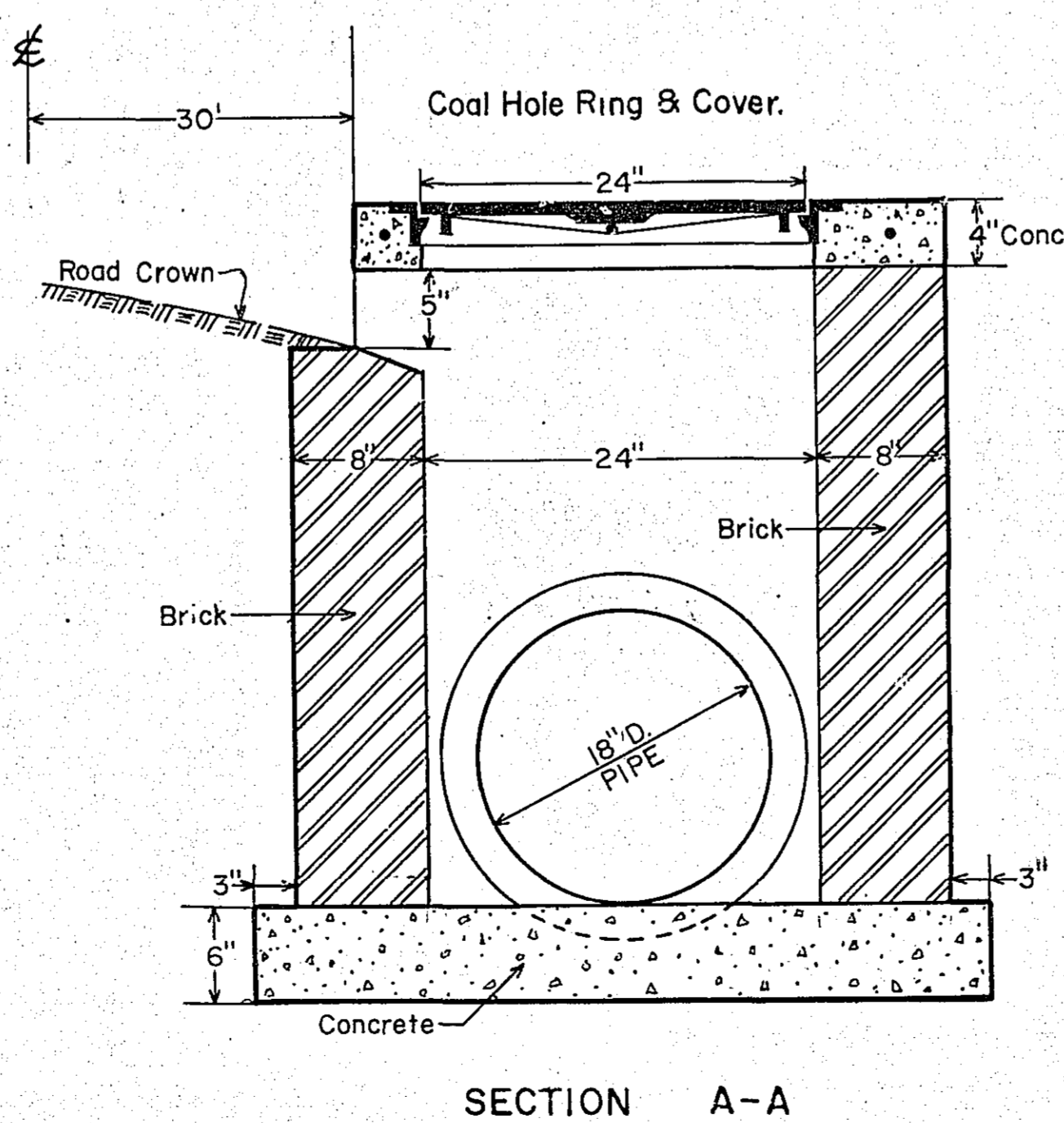
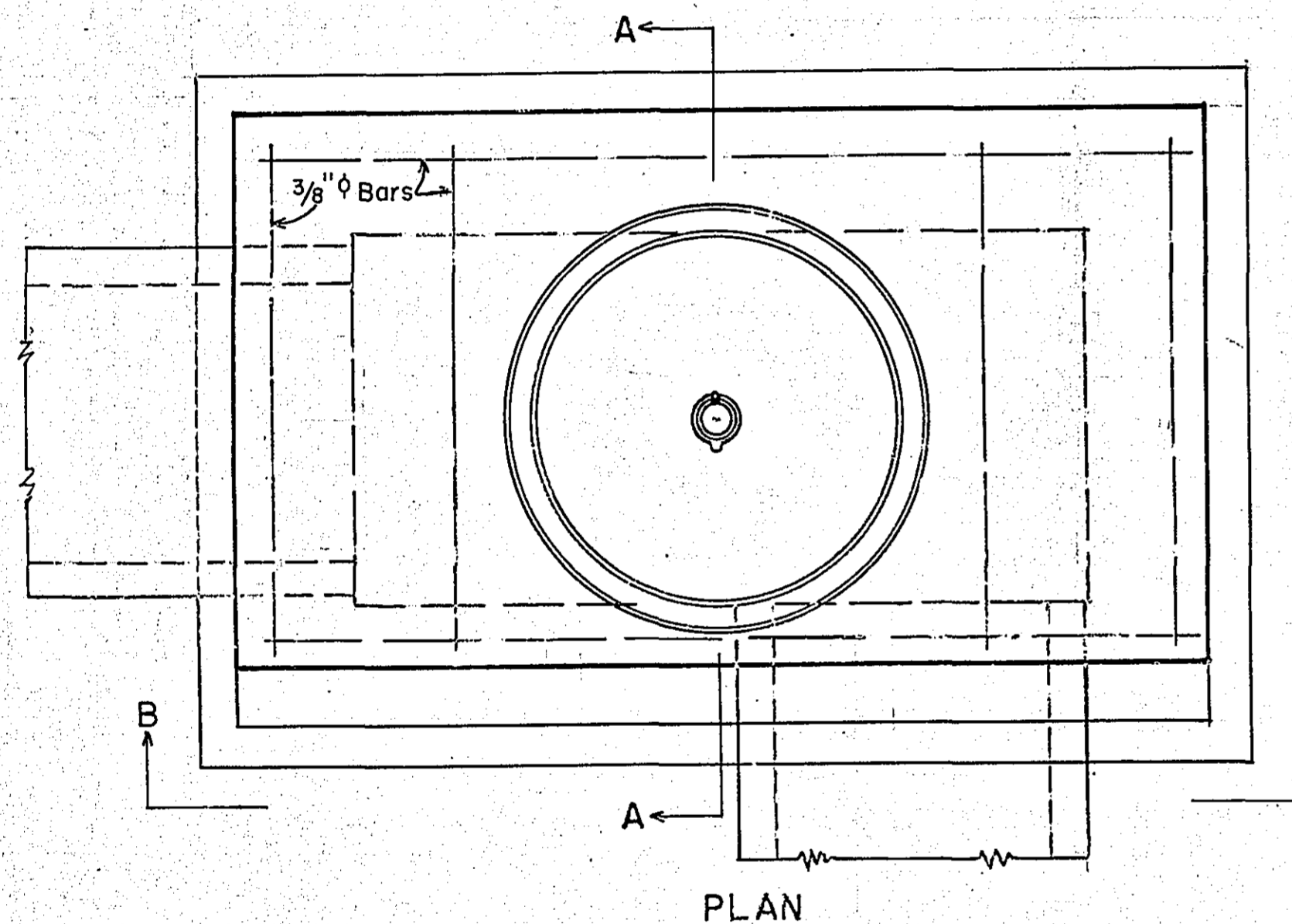
TYPICAL INTERSECTION



TYPICAL SECTIONS



NOTE: SLOPES AND BACKSLOPES TO CONFORM TO R/W WHERE THERE ARE NO EASEMENTS.



NOTE: "H" is to be 2' at culvert, 1' at end of gutter.

ELEVATION B-B

SPECIAL CATCH BASIN DETAILS

STA. 19+98 LT.
STA. 20+02 RT.

**OFFICE OF COUNTY ENGINEER
RAMSEY COUNTY**
CONSTRUCTION PLAN FOR GRADING
LARPENTEUR AVENUE
RAMSEY COUNTY PROJECT NO. 56-50B
FROM MCMENEMY STREET TO EDGERTON STREET

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



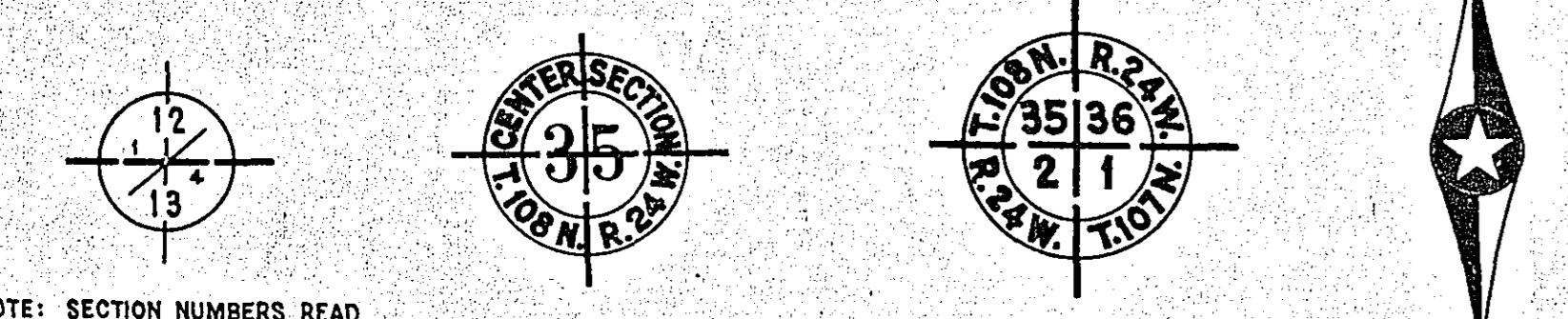
GROSS LENGTH	FEET	MILES
BRIDGES-LENGTH	FEET	MILES
EXCEPTIONS-LENGTH	FEET	MILES
NET LENGTH	2569.4 FEET	0.49 MILES

INDEX

SHEET NO.	DESCRIPTION
1	LAYOUT MAP AND TITLE SHEET
2	ESTIMATE AND DETAIL SHEET
3	PLAN AND PROFILE
4-12	CROSS SECTIONS
13	ARKWRIGHT ST. CROSS-SECTIONS
14	DESOTO ST. PLAN & CROSS-SECTIONS

SCALES

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 = 10 Feet
LAYOUT, 1 inch = 2640 Feet



PIT DATA

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

BEG. PROJ.
STA. 0+10

EXCEPTION FOR BRIDGE
STA. 15+22 TO STA. 15+45
(Toe of Slope to Toe of Slope)

END OF PROJ.
STA. 26+02.4

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.

Barney A. Barrows
COUNTY ENGINEER REG. NO. 818 DATE 5/29/56

RECOMMENDED FOR APPROVAL *Barney A. Barrows* DATE 5/29/56
COUNTY ENGINEER

APPROVED *James S. Johnson* DATE 5/29/56
CHAIRMAN OF RAMSEY COUNTY BOARD

—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.