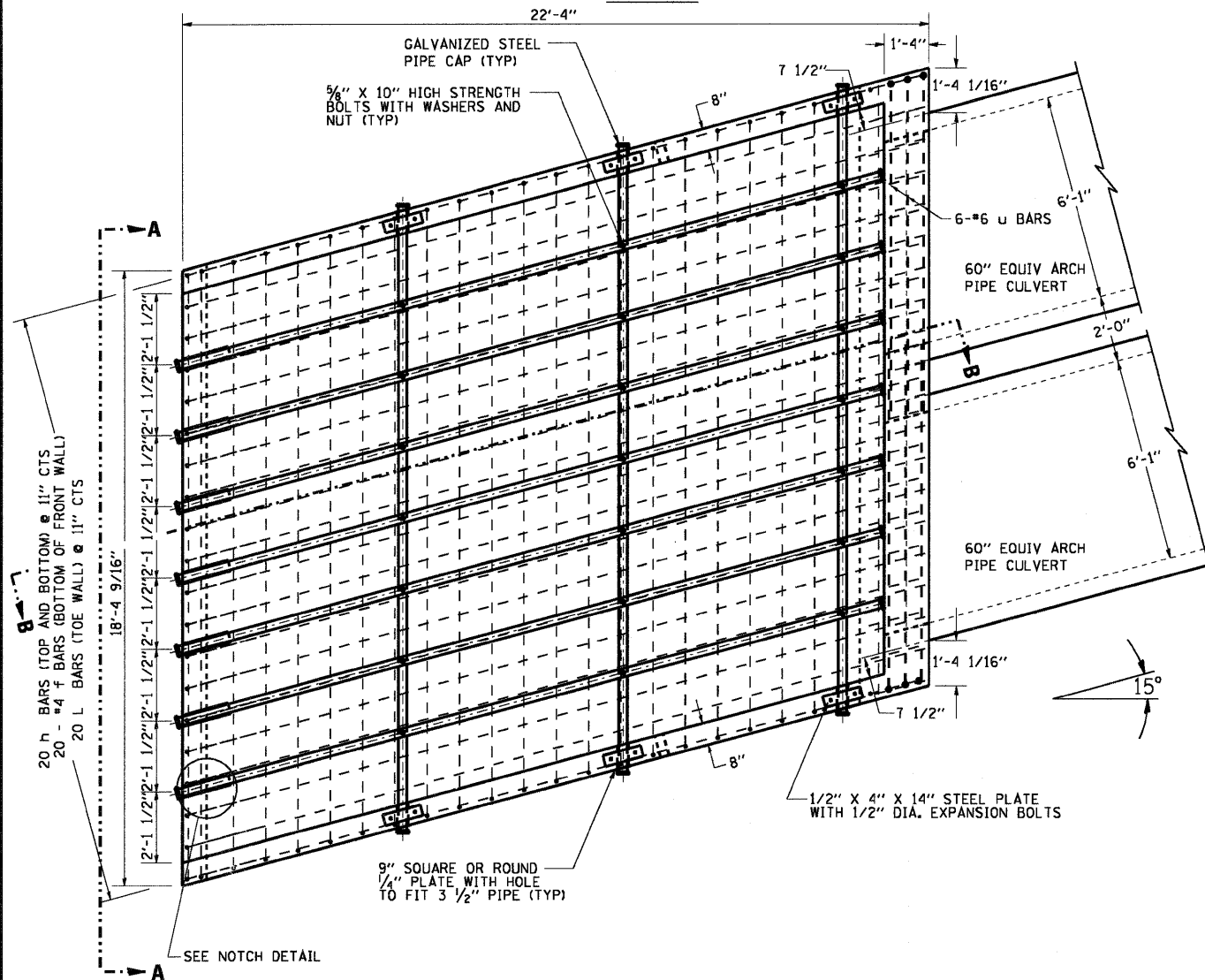


GRATED CULVERT EXTENSION NO. 3

SN 043-1069 - LT STA. 484+22.22 (IL RTE 78)

CULVERT @ 15° SKEW TO RDWY

PLAN

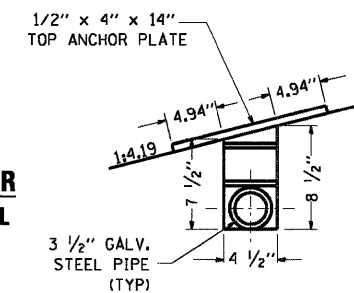


BILL OF MATERIALS
(FOR INFORMATION ONLY)

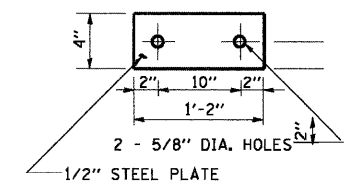
BAR	SIZE	NO.	LENGTH	SHAPE
a	#4	48	18'-1"	—
f	#4	20	3'-6"	└
h	#4	40	22'-10"	—
h ₁	#4	2	18'-7"	—
h ₂	#4	2	14'-3"	—
h ₃	#4	2	9'-0"	—
h ₄	#4	2	5'-4"	—
h ₅	#4	6	6'-4"	—
h ₆	#4	2	18'-0"	—
L	#4	26	4'-7"	└
L ₁	#4	12	4'-2"	└
L ₂	#4	2	4'-10"	└
L ₃	#4	2	5'-1"	└
L ₄	#4	2	5'-4"	└
L ₅	#4	4	5'-6"	└
L ₆	#4	2	6'-0"	└
L ₇	#4	2	6'-3"	└
L ₈	#4	2	6'-5"	└
L ₉	#4	2	6'-8"	└
L ₁₀	#4	2	6'-11"	└
L ₁₁	#4	4	7'-2"	└
u	#6	6	26'-1"	—
v	#4	2	5'-10"	—
v ₁	#4	18	7'-7"	└
z	#4	8	9'-3"	└

DESCRIPTION	UNIT	QTY
CLASS "SI" CONCRETE	CU YD	17.7
REINFORCEMENT BARS	LB	1940

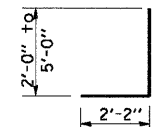
DETAIL "A"



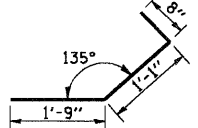
TOP ANCHOR PLATE



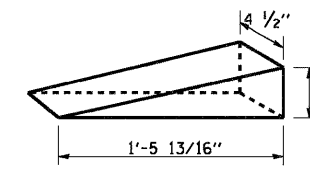
#4 L TO L₁₁ BAR WINGWALLS



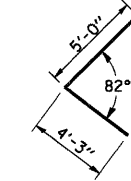
#4 f BAR FRONTWALL



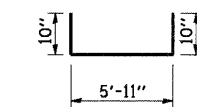
NOTCH DETAIL



#4 z BAR HEADWALL



#4 v₁ BAR HEADWALL



GENERAL NOTES:

THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER "EACH" FOR GRATED CULVERT EXTENSION NO. 3. THIS WORK SHALL INCLUDE THE GALVANIZED PIPE, ANCHOR PLATES, & CAPS, CLASS SI CONCRETE, REINFORCEMENT BARS, BOLTS, NUTS, WASHERS, INSTALLATION ON THE PROPOSED CULVERT, PIPE GRATING, EARTH EXCAVATION AND DIVERTING WATER WHERE REQUIRED, AND ANY NECESSARY GRADING TO FIT THE GRATED CULVERT EXTENSION AS SHOWN IN THE CROSS SECTIONS OR TO SLOPE.

CLASS SI CONCRETE SHALL BE USED THROUGHOUT, EXPOSED EDGES SHALL BE BEVELED 3/4"

SLOPE FLOW LINE FOR END SECTION IS THE SAME RATE AS THE FLOW LINE OF THE PIPE.

BOLTS, NUTS, AND WASHERS SHALL BE IN ACCORDANCE WITH ARTICLE 1006.08 OF THE STANDARD SPECIFICATION AND SHALL BE GALVANIZED.

STEEL PIPES SHALL CONFORM TO A.S.T.M. A-53 (TYPE E OR S) GRADE B, SCHEDULE 40, AND SHALL BE GALVANIZED CONFORMING TO A.S.T.M. A-120. CONTRACTOR SHALL FIELD VERIFY PIPE LENGTH.

STEEL PLATES SHALL CONFORM TO AASHTO M-183 AND SHALL BE GALVANIZED CONFORMING TO AASHTO M-111.

REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A706 GR. 60 (IL MODIFIED).

SEE PLAN AND PROFILE SHEET FOR MORE INFORMATION.

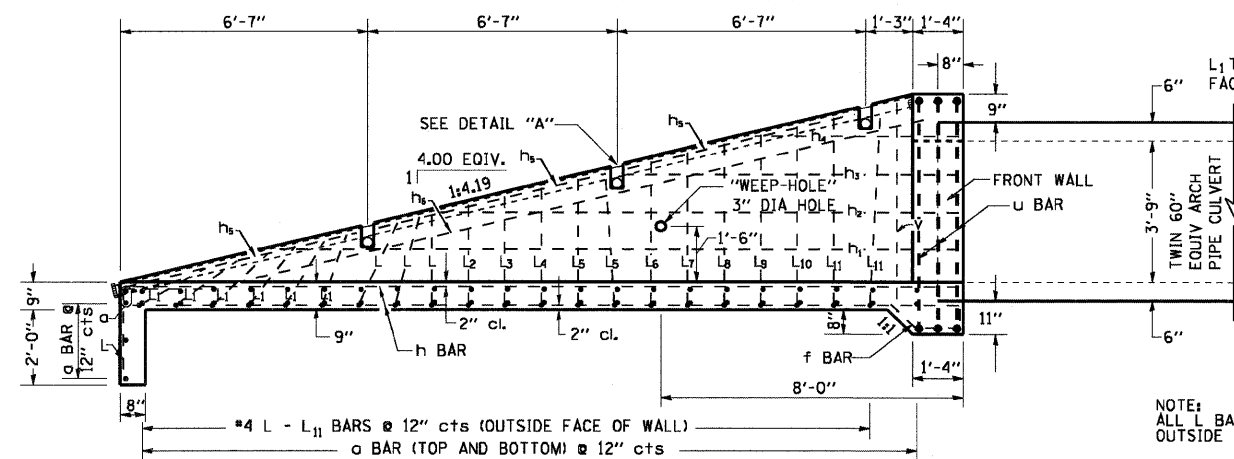
SEE CROSS SECTION SHEET FOR MORE INFORMATION INCLUDING INVERT ELEVATION.

GRATING DESIGN CONFORMS TO AASHTO ROADSIDE DESIGN GUIDE ART. 3.4.2.1.

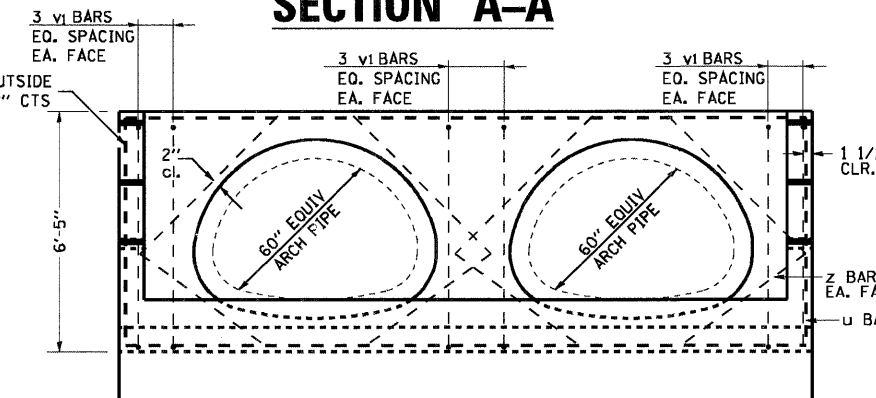
TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, THIS DESIGN IS STRUCTURALLY ADEQUATE FOR THE DESIGN LOADING SHOWN ON THE PLANS. THE DESIGN IS AN ECONOMICAL ONE FOR THE STYLE OF STRUCTURE AND COMPLIES WITH REQUIREMENTS OF THE CURRENT "AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES".



SECTION B-B



SECTION A-A



NOTE: ALL L BARS TO BE IN OUTSIDE FACE OF WALL