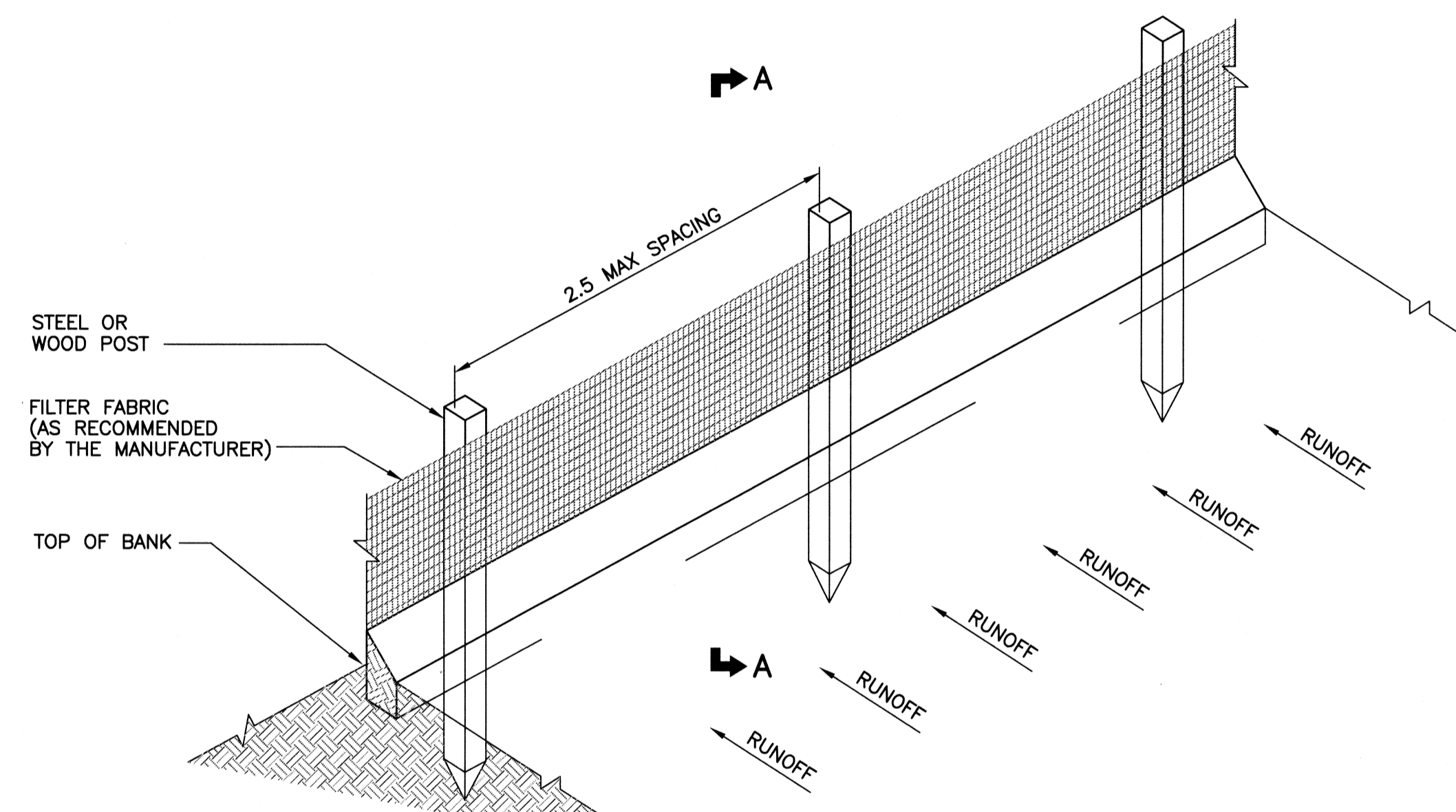
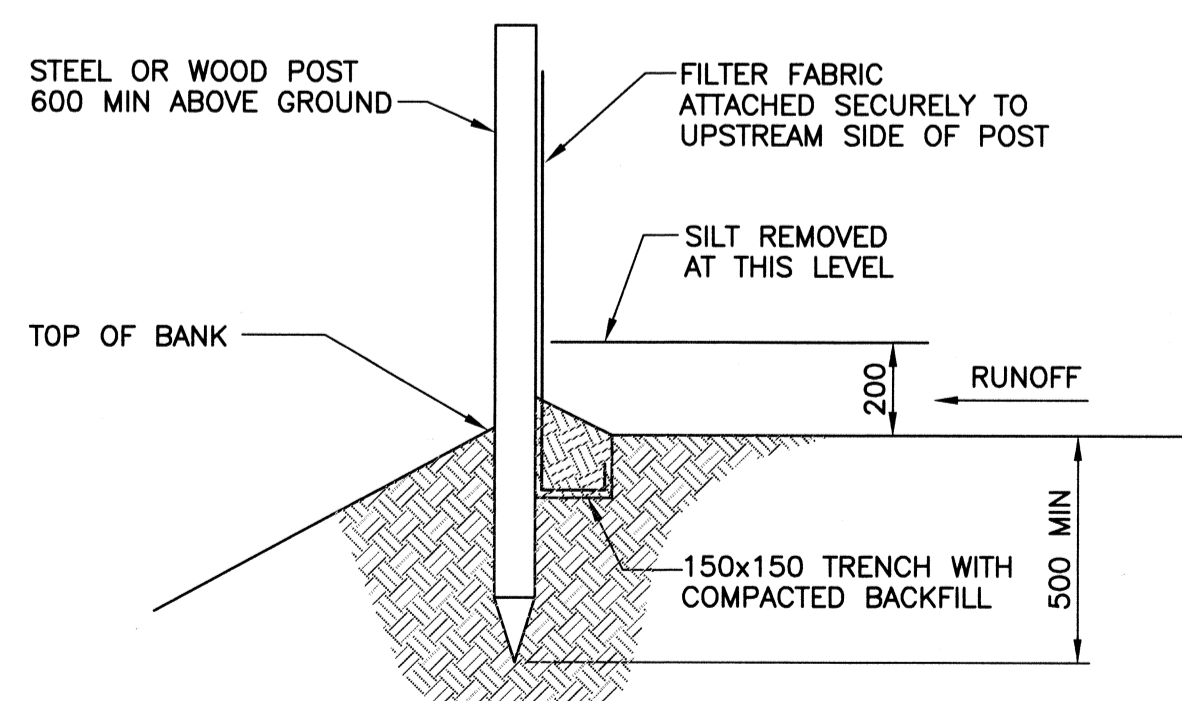


END CONDITION '1'
SCALE: N.T.S.

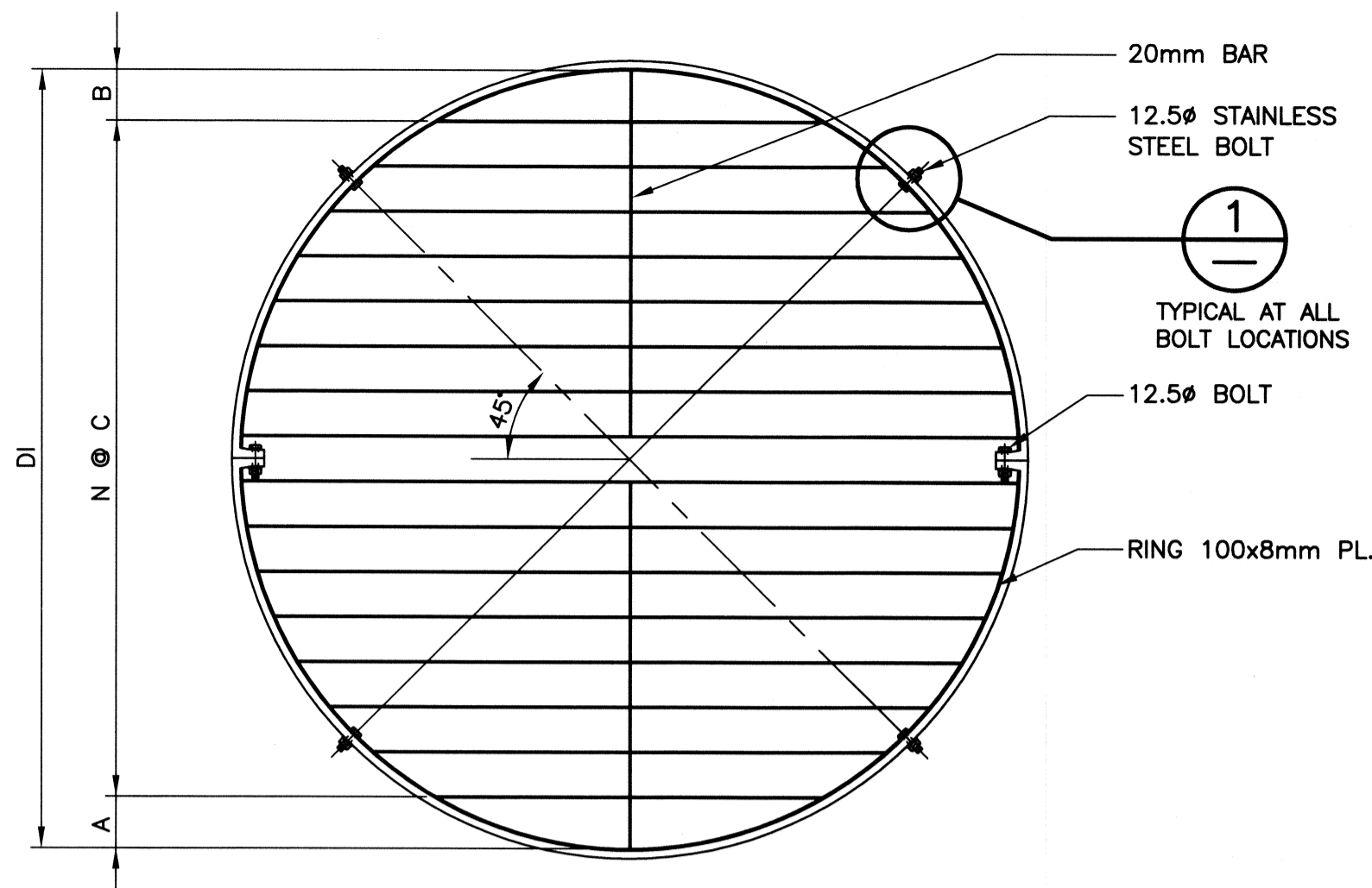
STANDARD PIPE END DETAILS



ISOMETRIC DETAIL
SCALE: N.T.S.



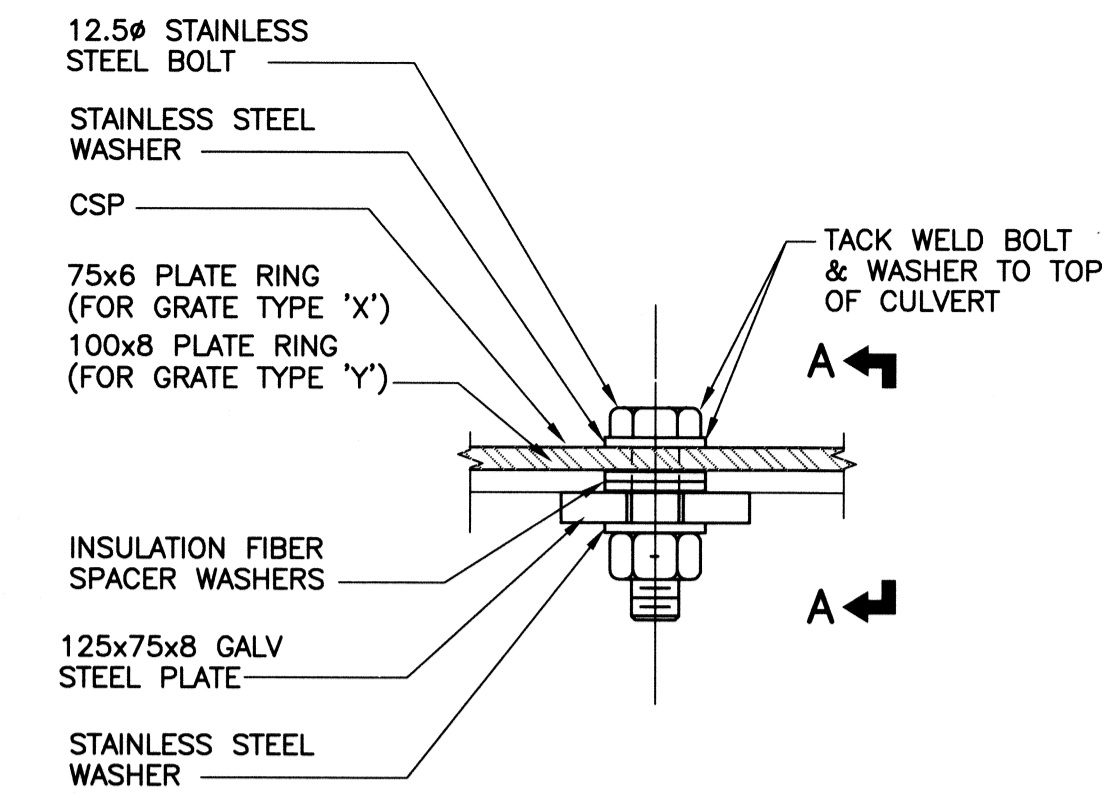
SECTION A-A
SCALE: 1:2
SILT FENCE DETAILS



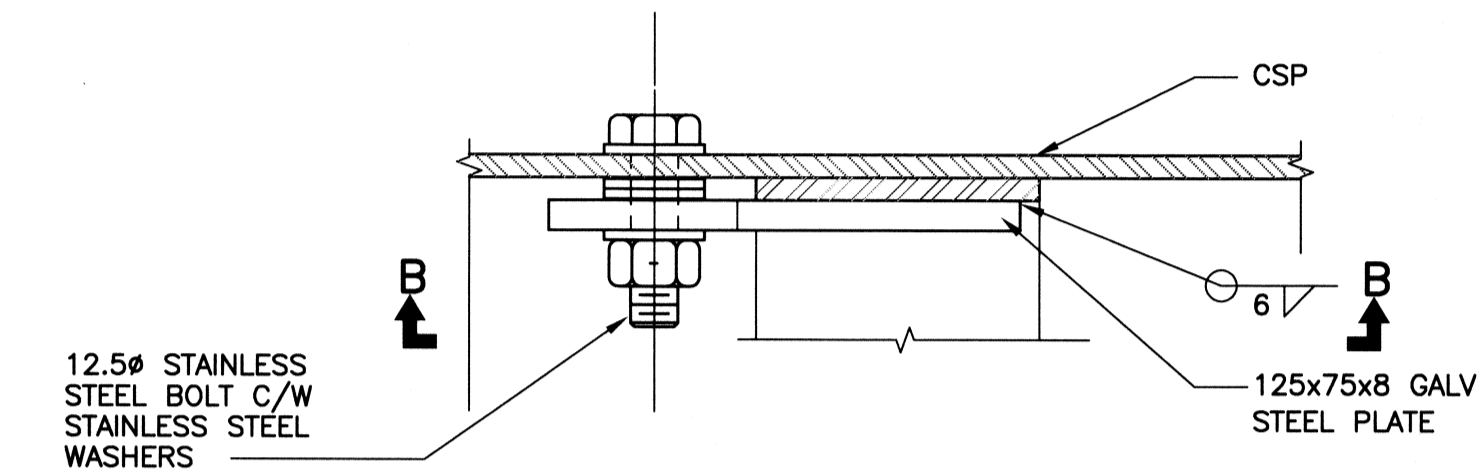
GRATING TYPE 'Y'
SCALE: N.T.S.

LOCATION	PIPE		END CONDITION	GRATING							WEIGHT (lbs)
	DIAMETER D	MATERIAL		DIAMETER D1	TYPE	BAR DIA.	A	B	C	N	
FORT ROUGE PARK (AS-92)	2400	SPCSP	1	2385±	Y	25	145	140	150	14	355

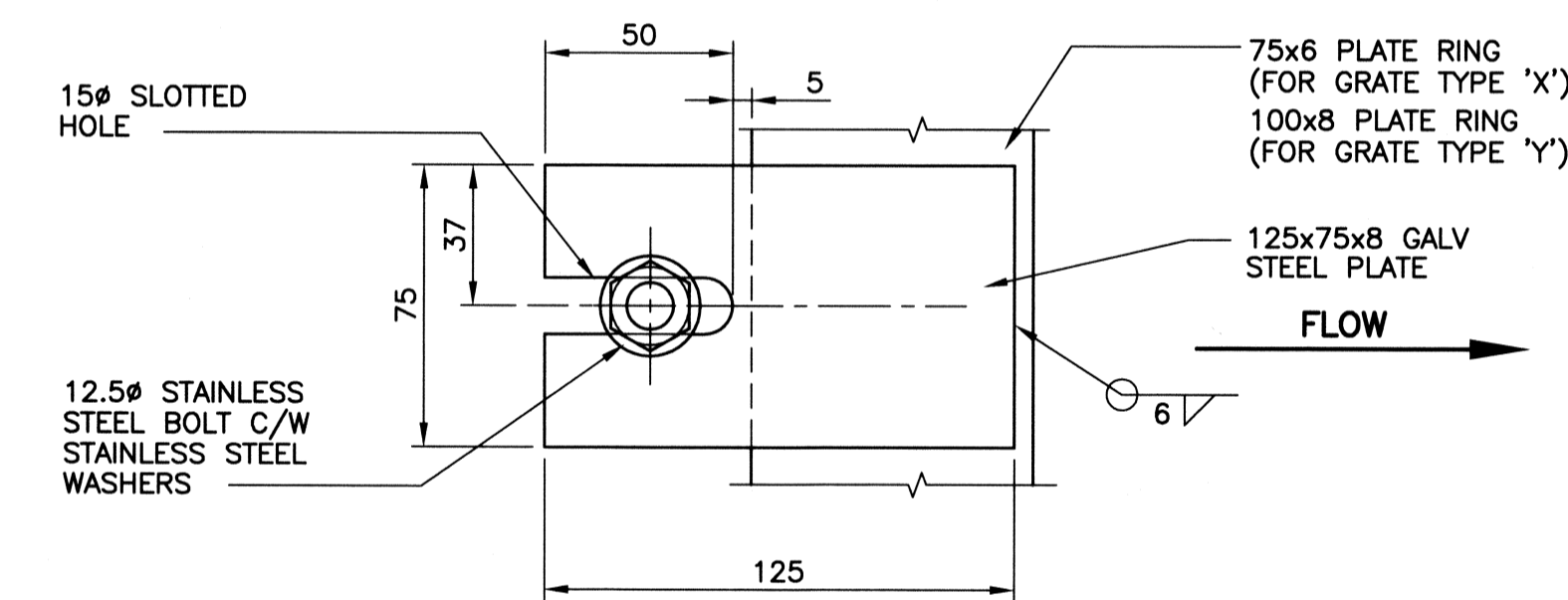
- NOTE:
1. ALL PLATES AND BARS ARE CSA G40.21-300W.
2. ALL COMPONENTS ARE GALVANIZED.
3. ALL BOLTS TO BE TYPE 316 STAINLESS STEEL CONFORMING TO ASTM A320 GRADE B8M



1
SCALE: 1:2

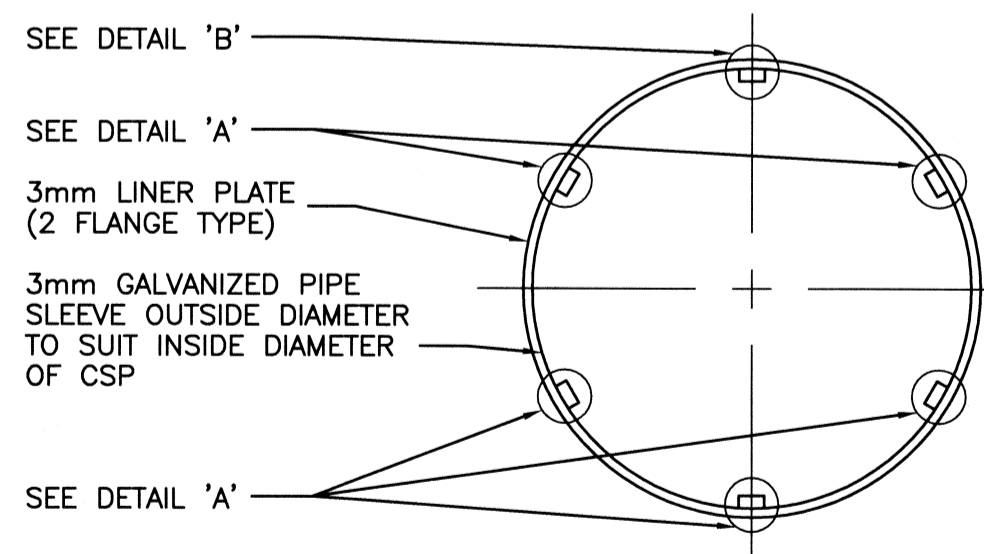


SECTION A-A
SCALE: 1:2

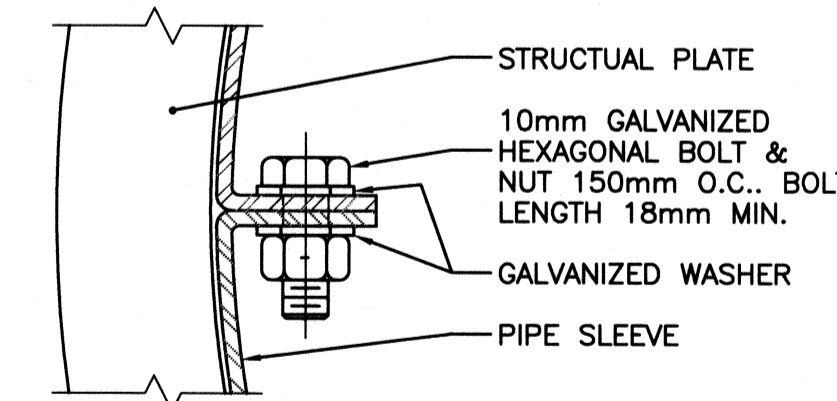


SECTION B-B
SCALE: 1:2

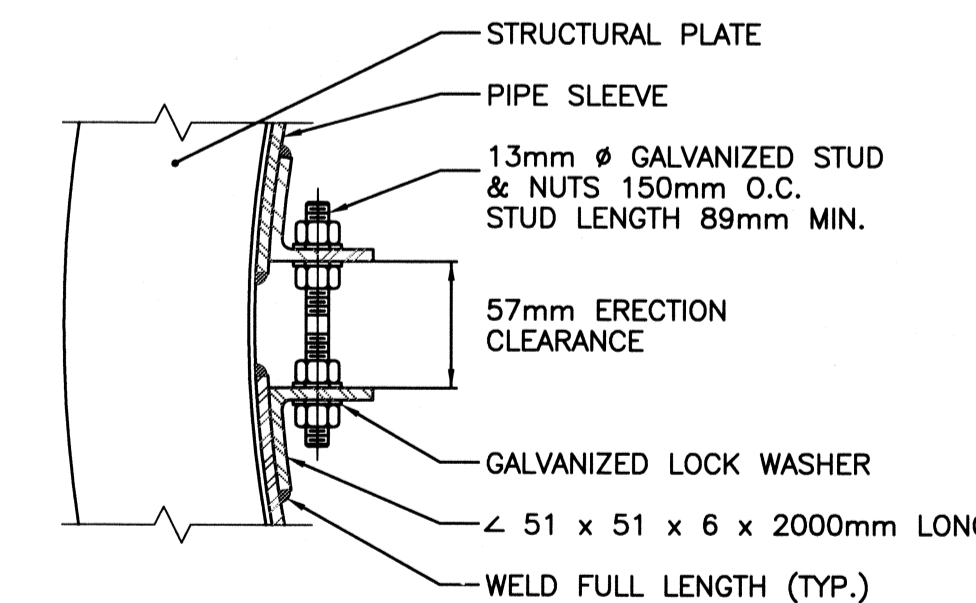
STANDARD DEBRIS GRATE DETAILS



ELEVATION



DETAIL 'A'



DETAIL 'B'

INTERNAL SLIP JOINT DETAILS
SCALE: N.T.S.

APEGN
Certificate of Authorization
KGS Group
No. 245 Date: Nov 24/07

LOCATION APPROVED UNDERGROUND STRUCTURES

SUPV. U/G STRUCTURES DATE COMMITTEE

NOTE:
LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE, BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION.

B.M. ELEV.	NO.	ISSUED FOR TENDER	DATE	BY
	0	ISSUED FOR TENDER	03/12/07	RJH
		REVISIONS		

KGS GROUP
CONSULTING ENGINEERS & PROJECT MANAGERS
WINNIPEG (204) 896-1209
THUNDER BAY (807) 345-2233

DESIGNED BY: RJH
CHECKED BY: RJH
DRAWN BY: DW
APPROVED BY:
HOR. SCALE: AS NOTED
RELEASED FOR CONSTRUCTION:
DATE: 09/08/07

ENGINEER'S SEAL
PROVINCE OF MANITOBA
R.J. HOUSTON
Member
1999/07
PROFESSIONAL ENGINEER

THE CITY OF WINNIPEG
Winnipeg WATER & WASTE DEPARTMENT
FORT ROUGE PARK
OUTFALL PIPE REPLACEMENT
MISCELLANEOUS DETAILS
SHEET 03 OF 10
CAD FILE DRAWING NUMBER: DETAILS-PLOT
CITY DRAWING NUMBER: LD-3775