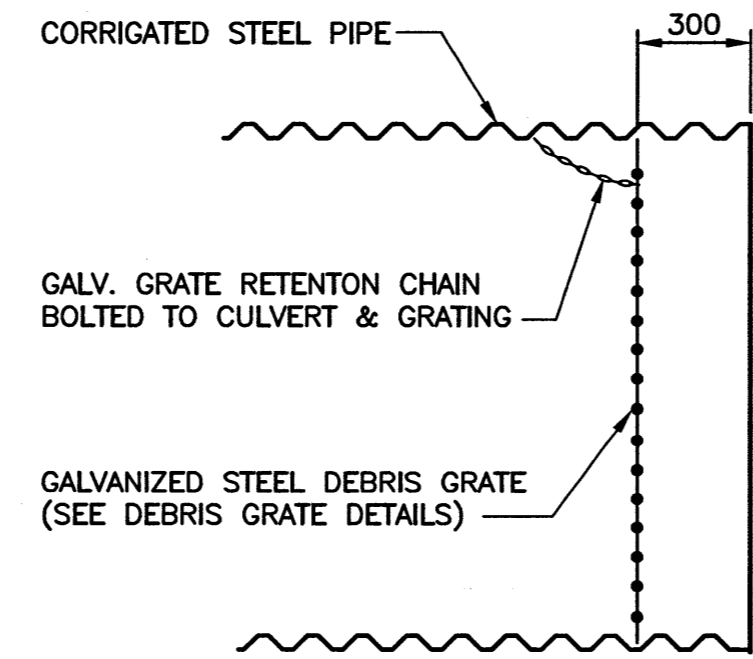


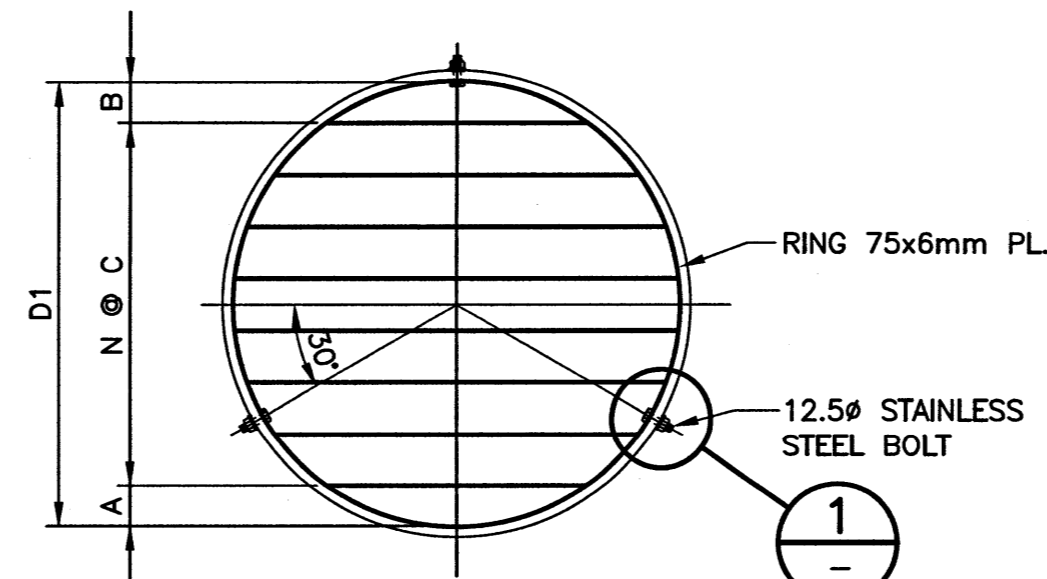
COFFER DAM DETAILS

SCALE: NTS



PIPE END CONDITION-1

SCALE: NTS



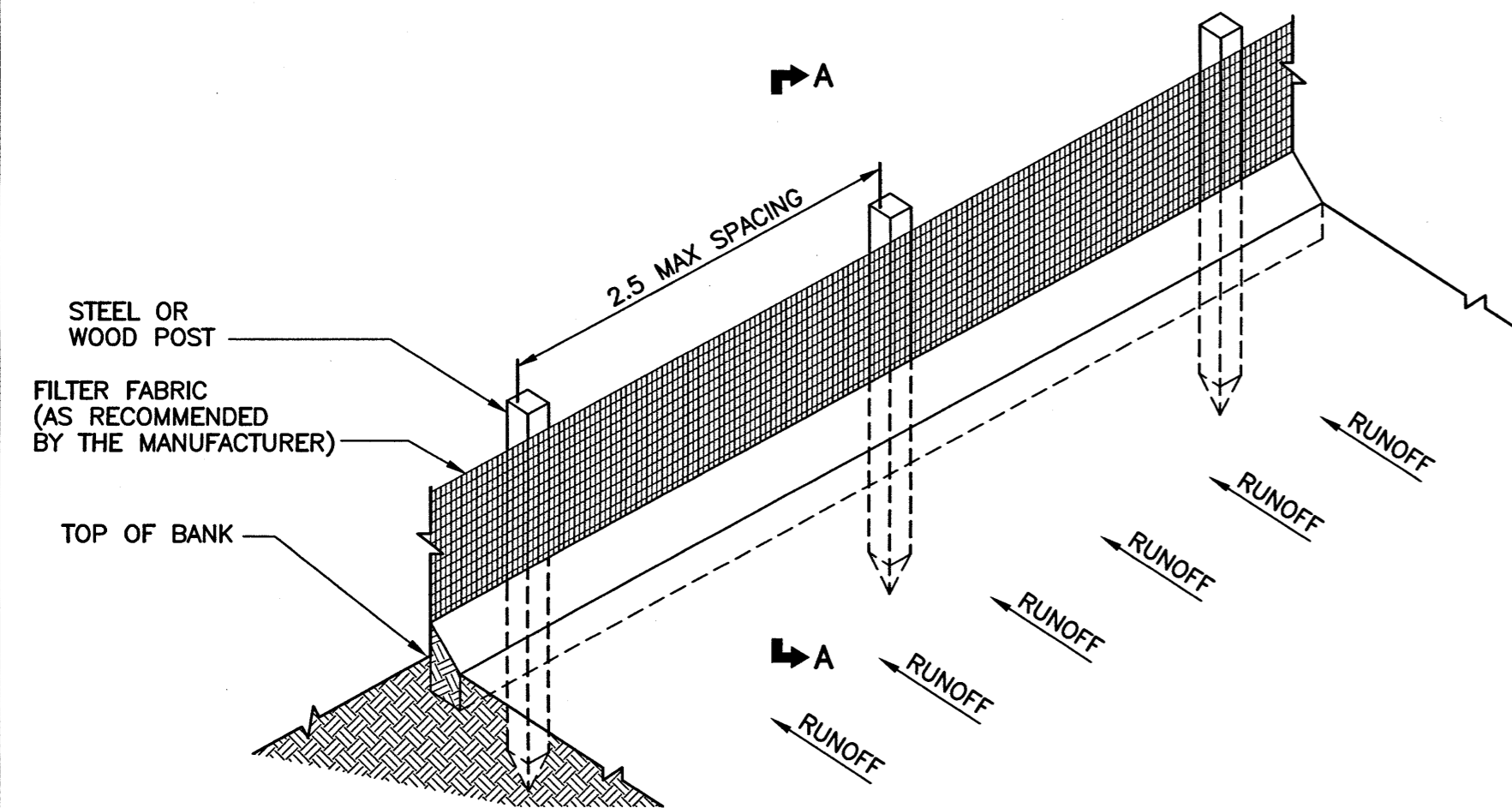
GRATING TYPE 'X'

SCALE: N.T.S.

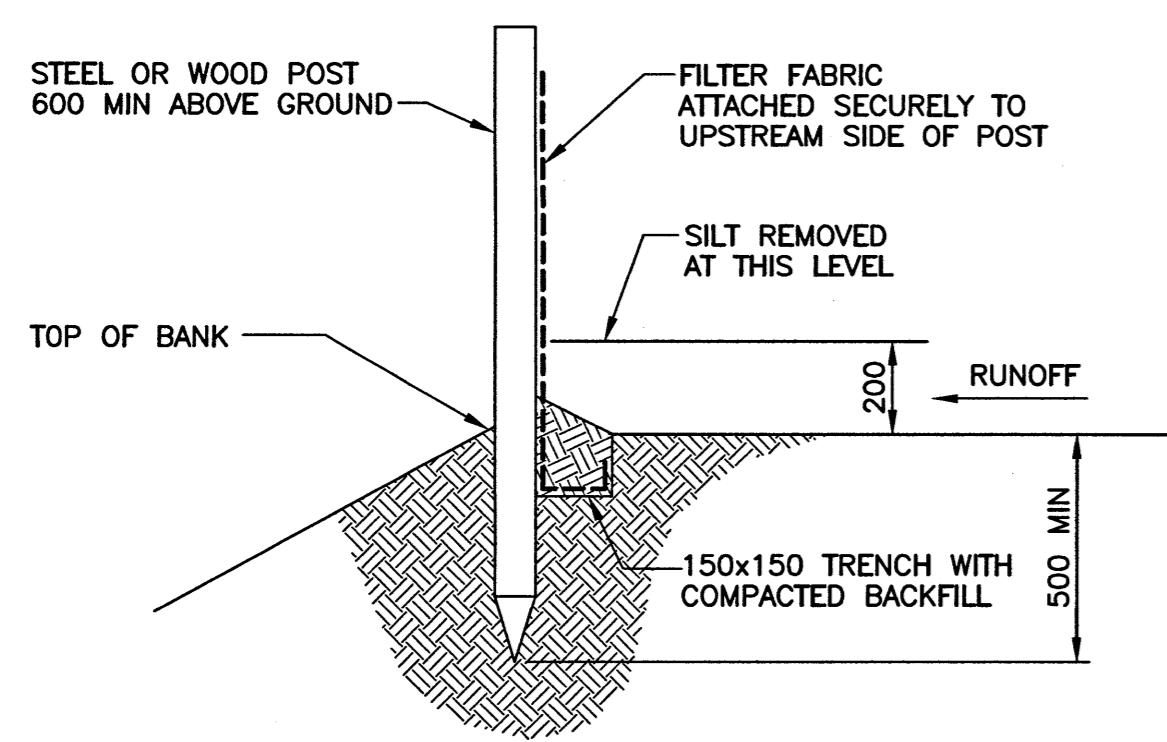
LOCATION	PIPE		END CONDITION	GRATING							
	DIAMETER D	MATERIAL		DIAMETER D1	TYPE	BAR DIA.	A	B	C	N	WEIGHT (lbs)
BISHOP GRANDIN BLVD (RR-21)	750	CSP	1	735±	X	20	150	75	165	4	42

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



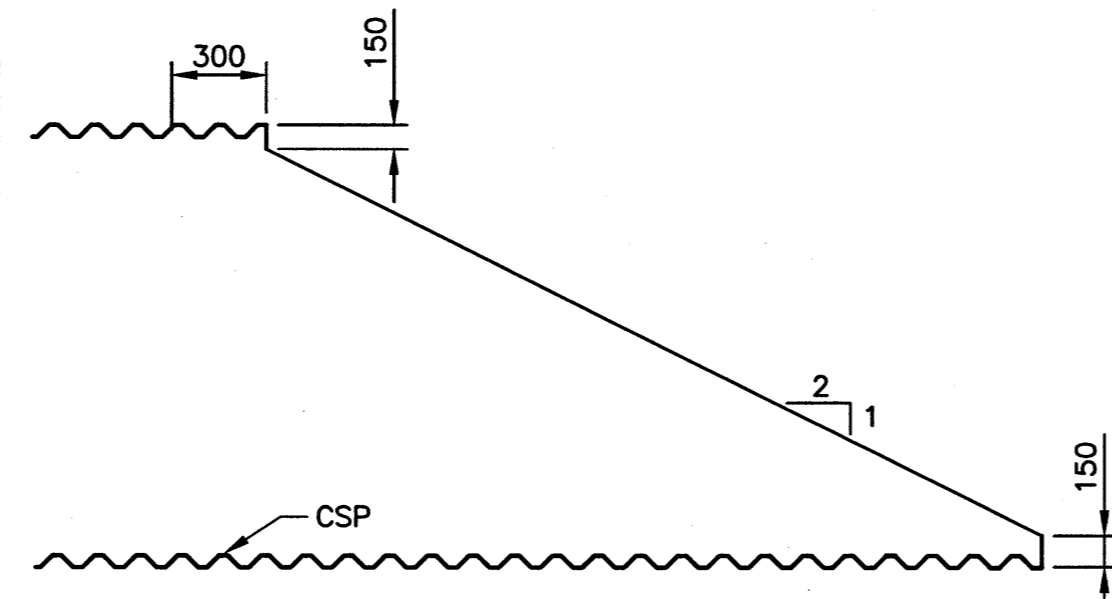
ISOMETRIC DETAIL



SECTION A-A

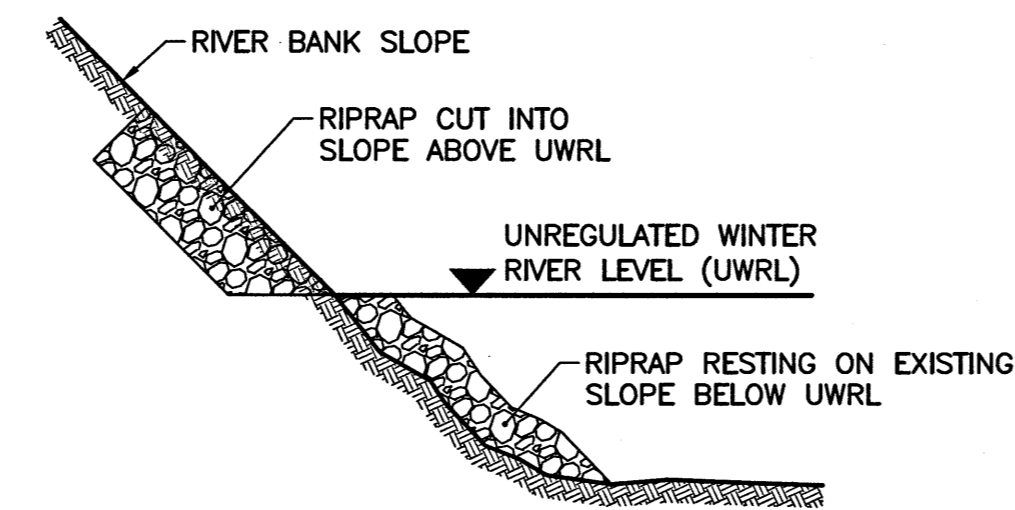
SILT FENCE DETAILS

SCALE: NTS



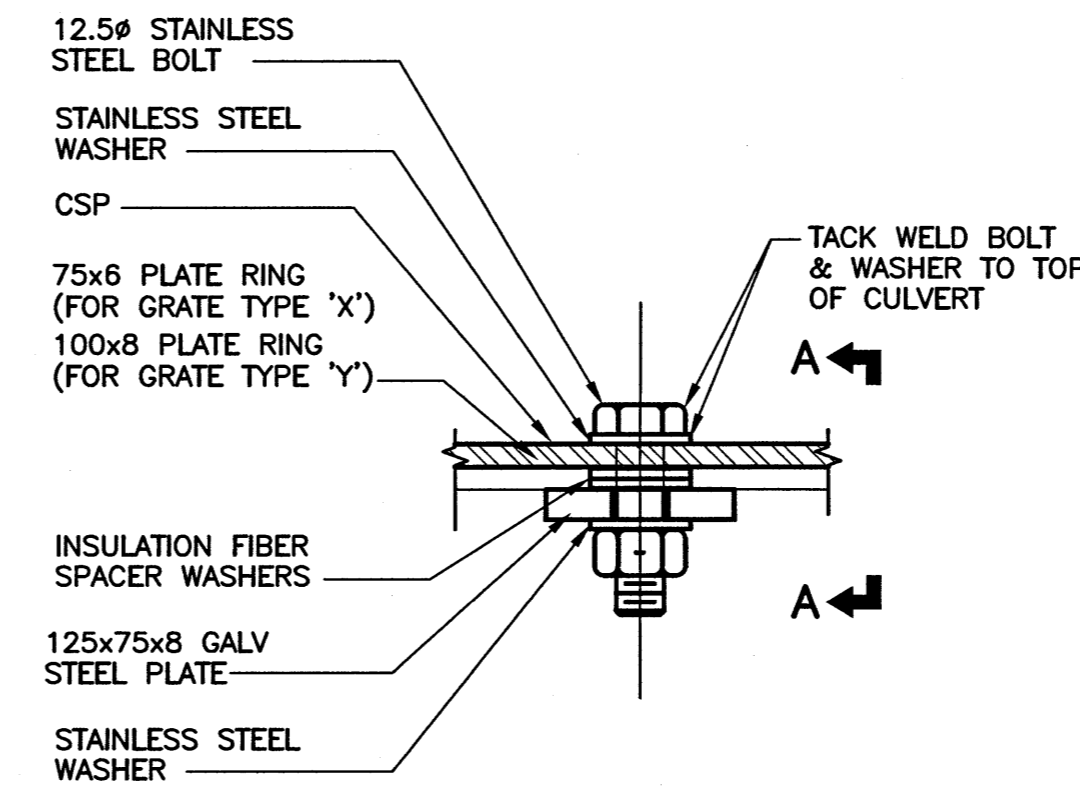
PIPE END CONDITION-2

SCALE: NTS



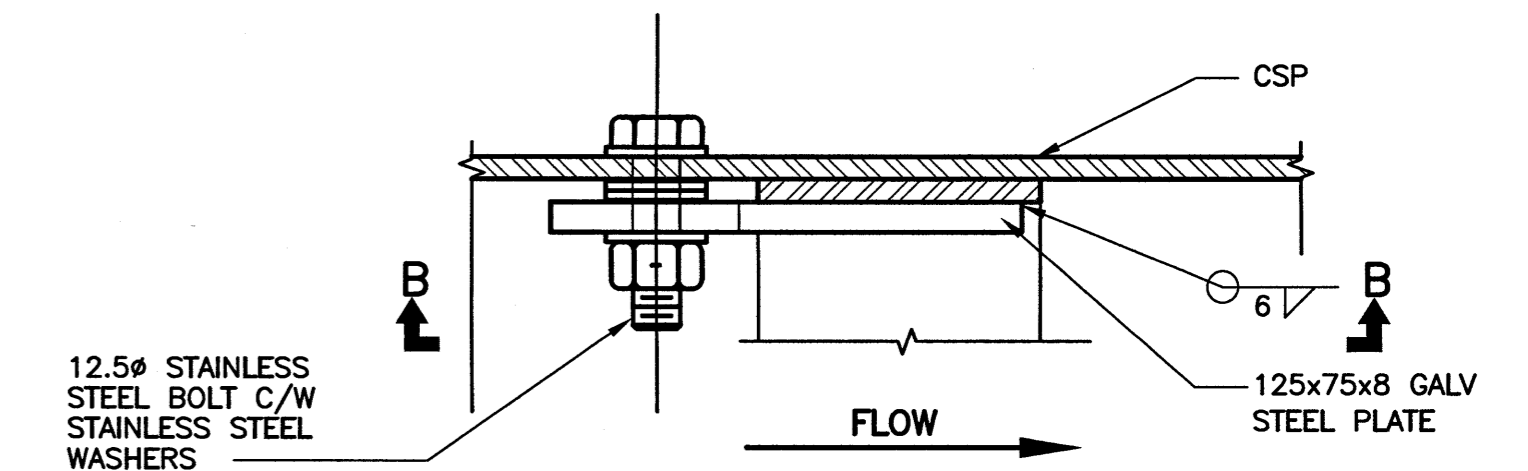
RIPRAP DETAIL

SCALE: NTS



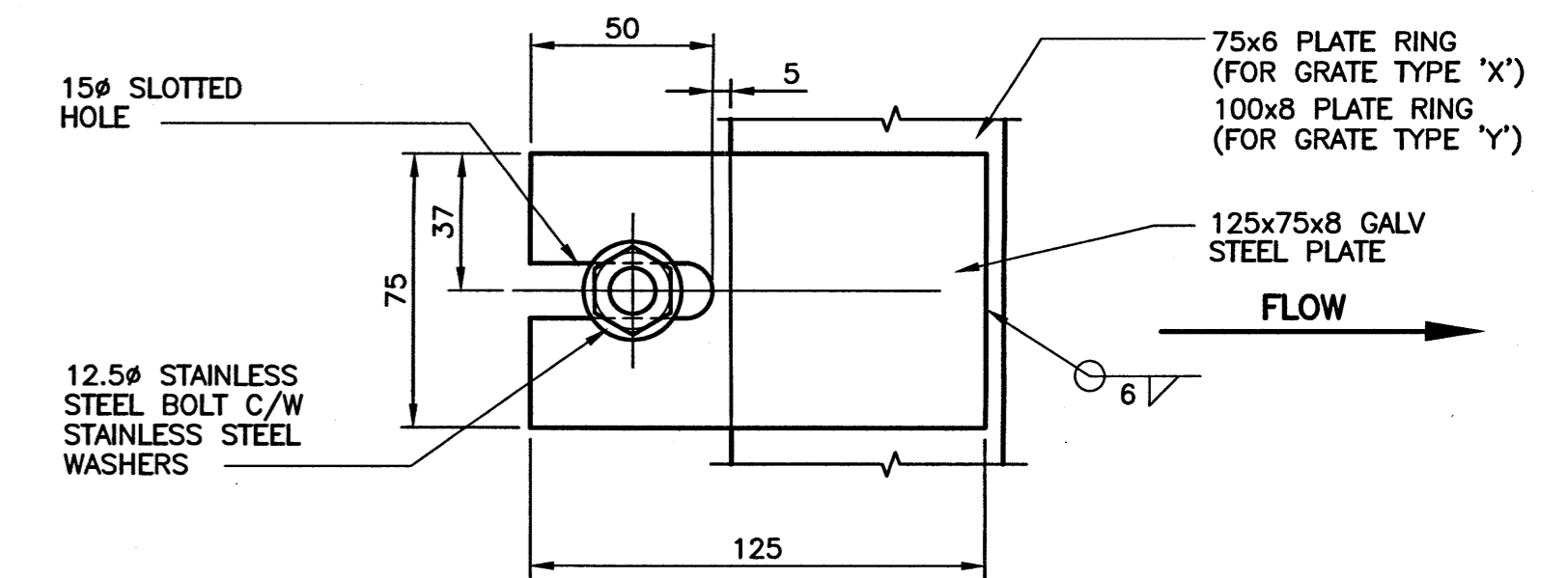
DETAIL

SCALE: 1:2



SECTION A-A

SCALE: 1:2

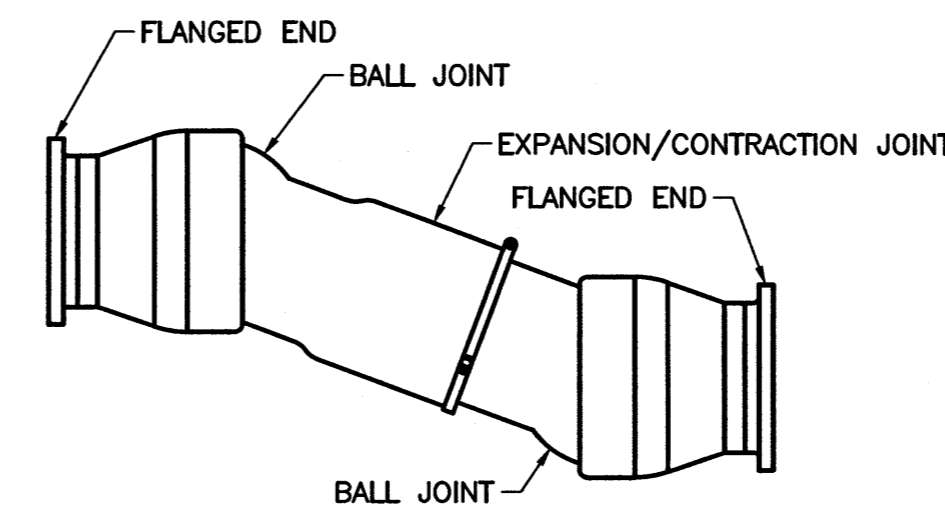


SECTION B-B

SCALE: 1:2

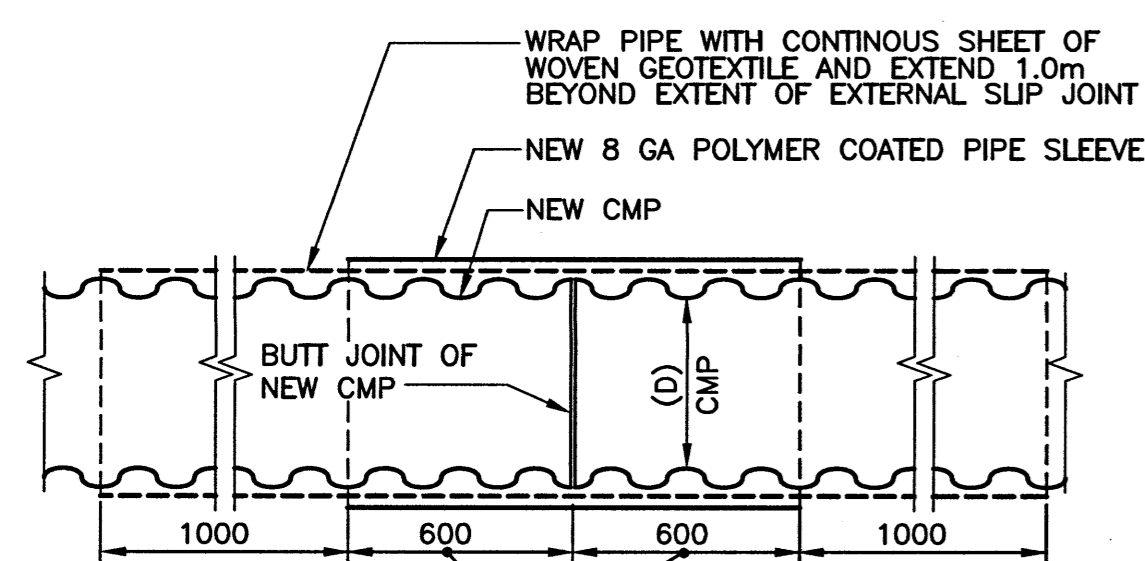
DEBRIS GRATE DETAILS

SCALE: NTS



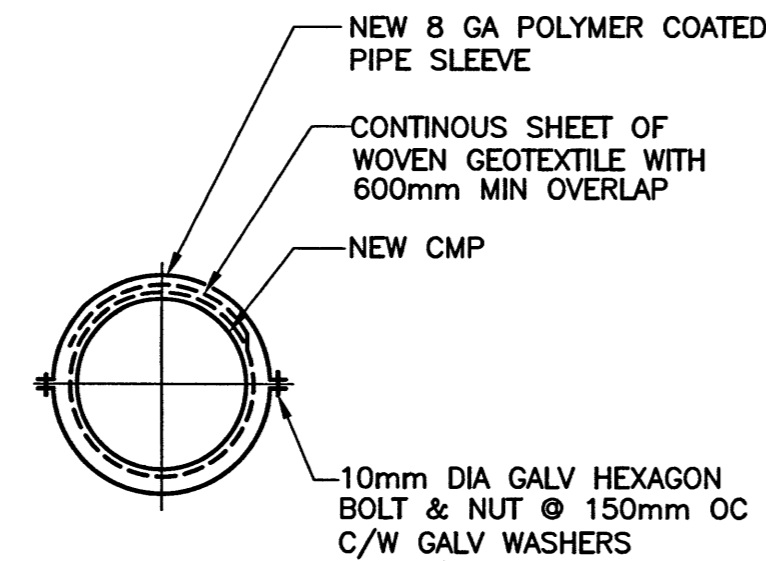
FLEXIBLE EXPANSION JOINT DETAIL

SCALE: NTS



EXTERNAL SLIP JOINT DETAIL

SCALE: NTS



LOCATION APPROVED UNDERGROUND STRUCTURES

SUPV. U/G STRUCTURES COMMITTEE DATE

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. KGS_BASE	ELEV=249.213	NAD83	CSRS	CGVD28
NO.	REVISIONS	DATE	BY	DATE
1	REISSUED FOR CONSTRUCTION	15/11/16		
0	ISSUED FOR CONSTRUCTION	03/11/16	JB	
				29/09/16

KGS GROUP
CONSULTING ENGINEERS

DESIGNED BY: JB
DRAWN BY: DMW
HOR. SCALE: 1:250
VERTICAL: 1:50

APEGM
Certificate of Authorization
KGS Group
No. 245

ENGINEER'S SEAL
BOB BOSCHOW
REGISTERED PROFESSIONAL ENGINEER
2016-11-15
CONSULTANT DRAWING NO. 16-0107-021_C08

THE CITY OF WINNIPEG
WATER & WASTE DEPARTMENT

2017 OUTFALL RENEWAL/REHABILITATION PROGRAM
MISCELLANEOUS DETAILS

SHEET 08 OF 08
CAD FILE DRAWING NUMBER 16-0107-021_CALL
CITY DRAWING NUMBER LD-7993

File Name: U:\FMS\16-0107-021\16-0107-021_CALL.dwg - Tab: C08 Plotted By: dweber 16/11/15 [Tue 11:07am] A1:1 PLOT SCALE: 1:1