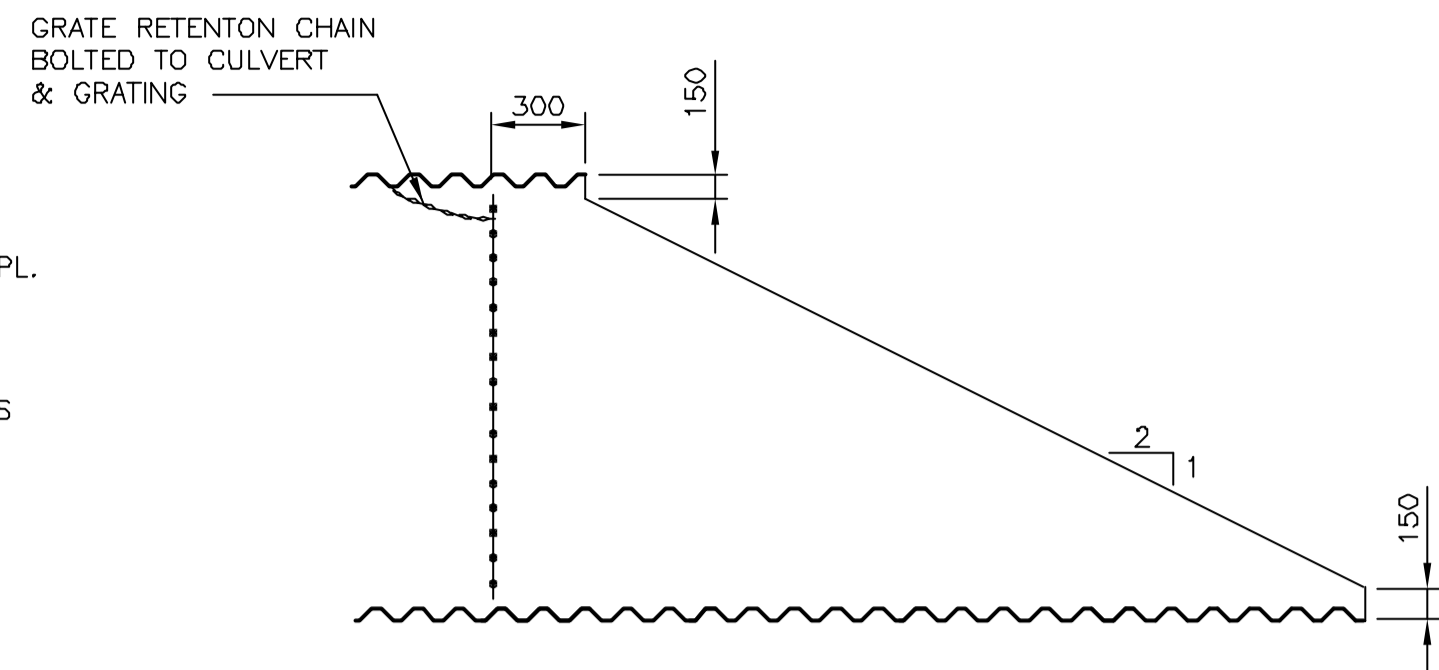
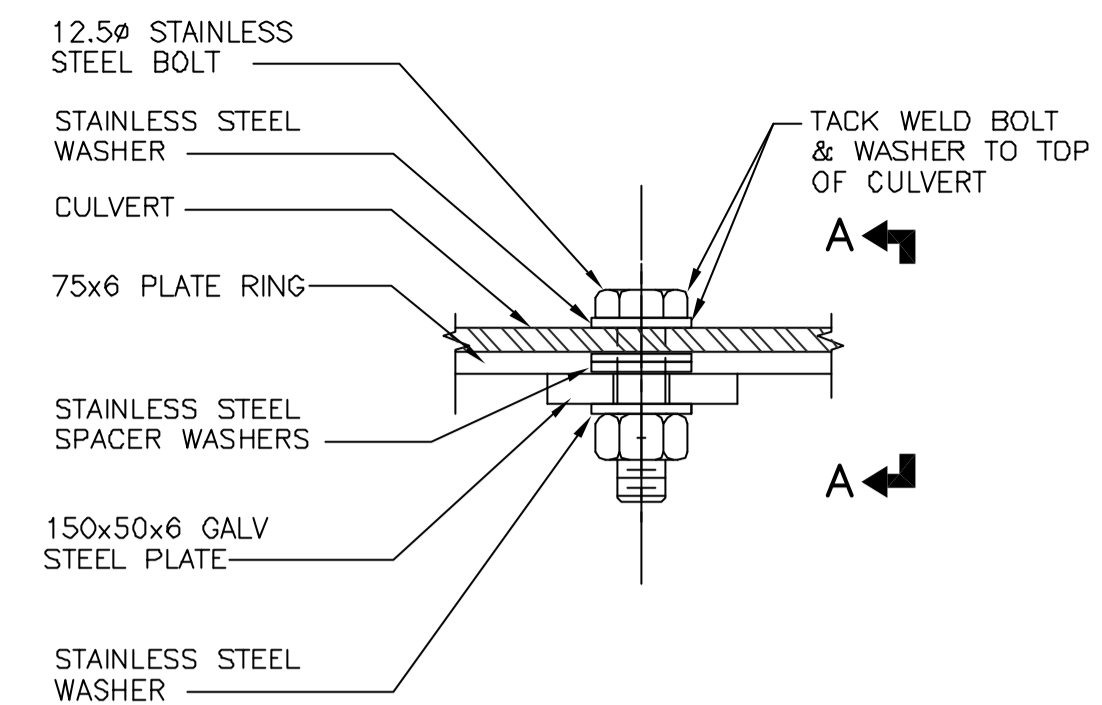


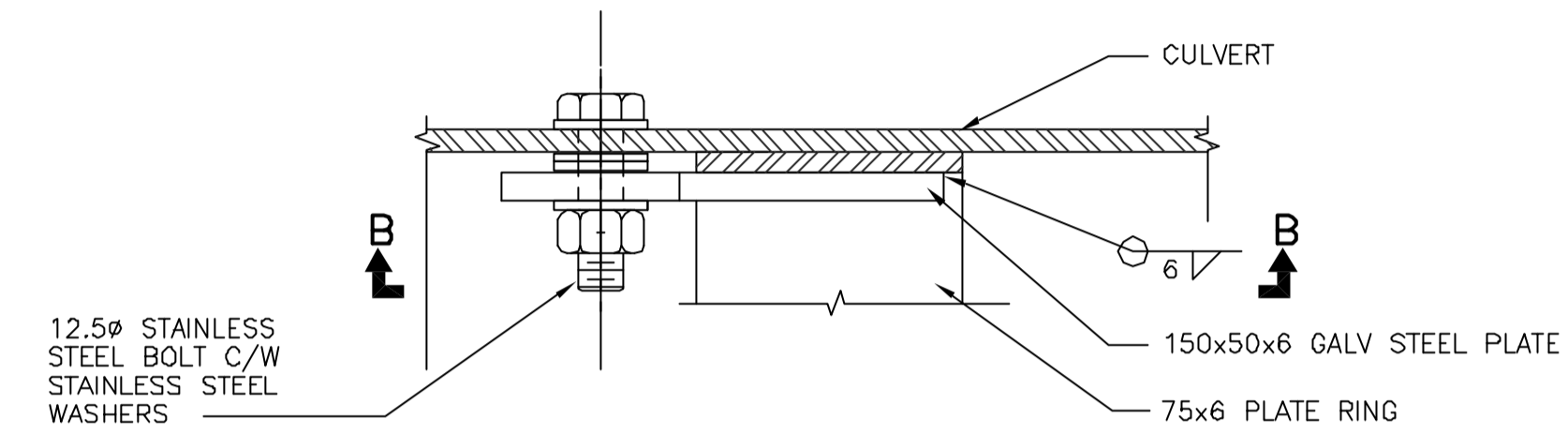
GRATING TYPE 'X'
SCALE: N.T.S.



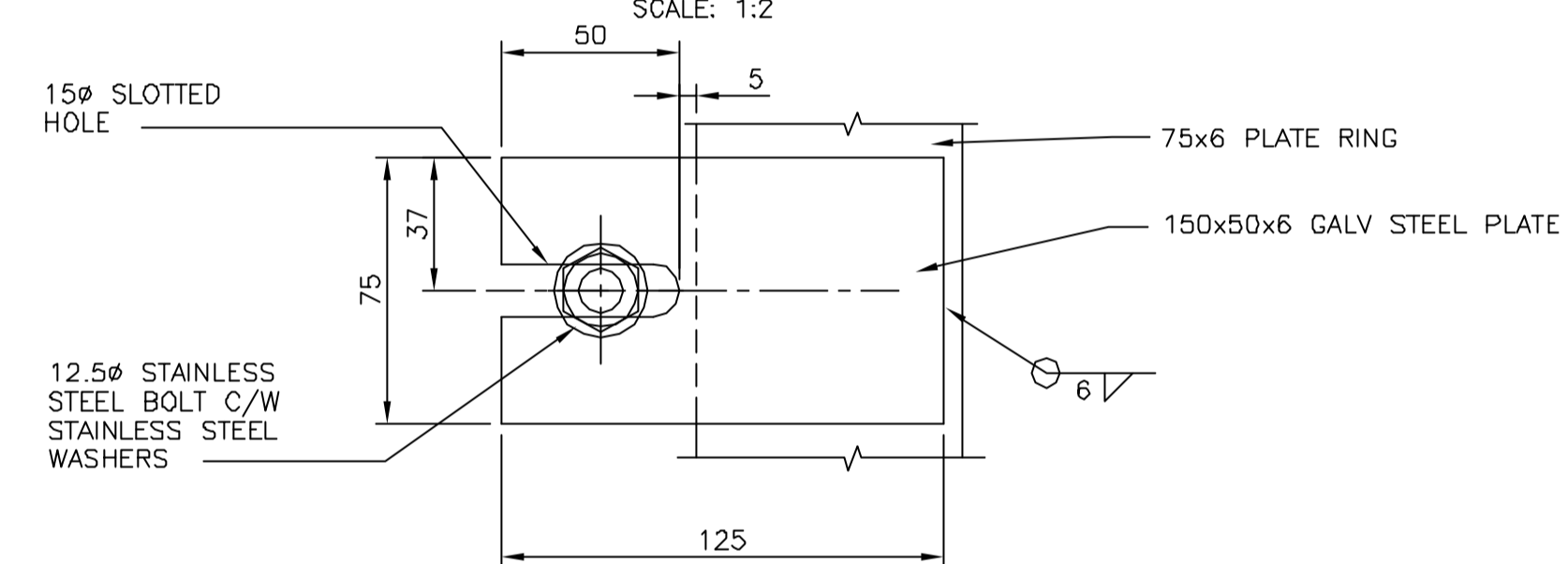
END CONDITION '1'
SCALE: N.T.S.



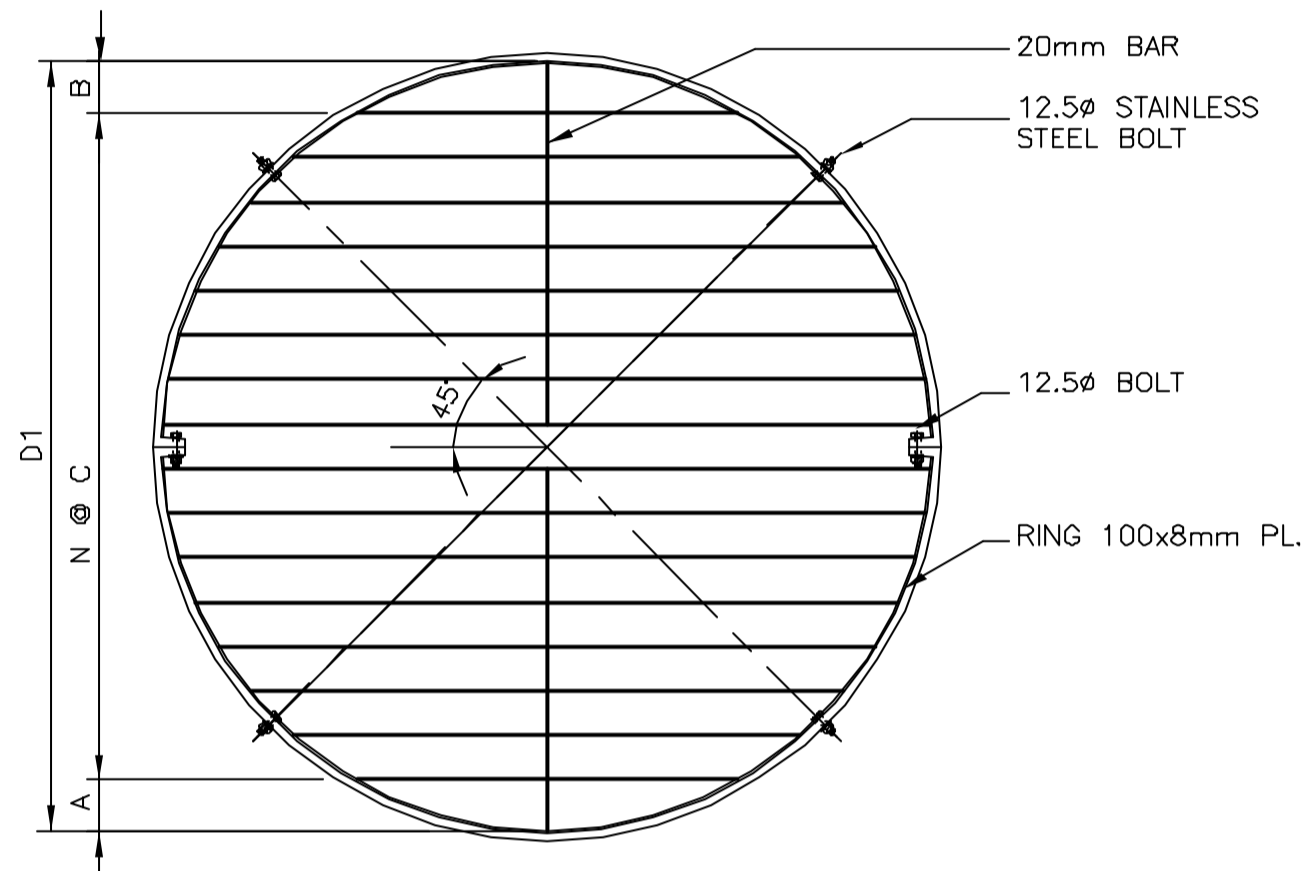
1 **DETAIL**
SCALE: 1:2



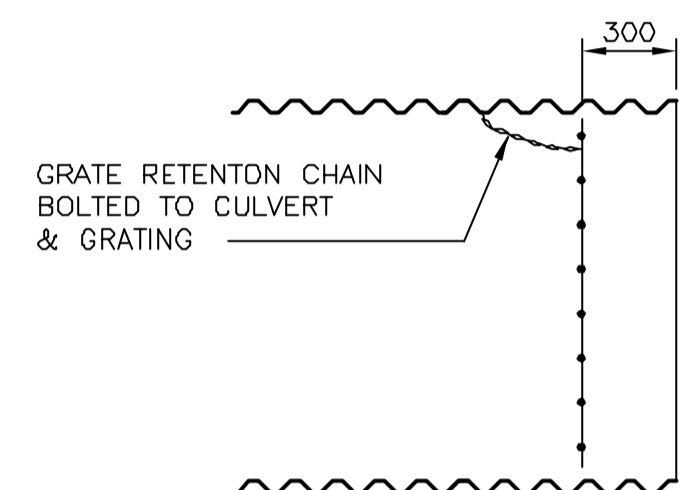
SECTION A-A
SCALE: 1:2



SECTION B-B
SCALE: 1:2



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



END CONDITION '2'
SCALE: N.T.S.

OUTFALL DEBRIS GRATING										
PIPE		END CONDITION	GRATING							
DIAMETER D	MATERIAL		DIAMETER D1	TYPE	BAR DIA.	A	B	C	N	WEIGHT (lbs)
1050	CSP	2	1035±	X	20	150	225	165	4	60
1220	CSP	2	1205±	X	20	150	150	130	7	72

NOTE:
ALL PLATES AND BARS ARE CSA G40.21-300W.
ALL COMPONENTS ARE GALVANIZED.

WARNING

IF POWER EQUIPMENT OR EXPLOSIVES ARE TO BE USED FOR EXCAVATION ON THIS PROJECT THE CONTRACTOR MUST:
1) NOTIFY THE GAS COMPANY OF THE PROPOSED LOCATION OF EXCAVATION.
2) TAKE PRECAUTION TO AVOID DAMAGE TO GAS COMPANY INSTALLATIONS.
SEE PROVINCIAL REGULATION 210/72 FOR DETAILS.



METRIC

WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES

THE CITY OF WINNIPEG
WATER & WASTE DEPARTMENT

OUTFALL REPAIRS
DEBRIS GRATE DETAILS
PROPOSED UPGRADING DETAILS

SHEET 06 OF 07
CAD FILE DRAWING NUMBER 03-107-05-DETAILS_rev1
CITY DRAWING NUMBER **LD-2988**

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.

NO.	REVISIONS	DATE	BY
1	ADDENDUM 1	15/01/04	DGG
0	ISSUED FOR TENDER	06/01/04	DGG
A	ISSUED FOR REVIEW	22/12/03	DGG

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

DESIGNED BY: D.G.G. CHECKED BY: R.J.H.
DRAWN BY: D.W. \A.M. APPROVED BY:
HOR. SCALE: AS NOTED
VERTICAL:
DATE: DECEMBER 2003

ENGINEER'S SEAL
D.G. GRAHAME
Member 22380
CONSULTANT DRAWING NO. 03-107-05_06

COWLEGGEND