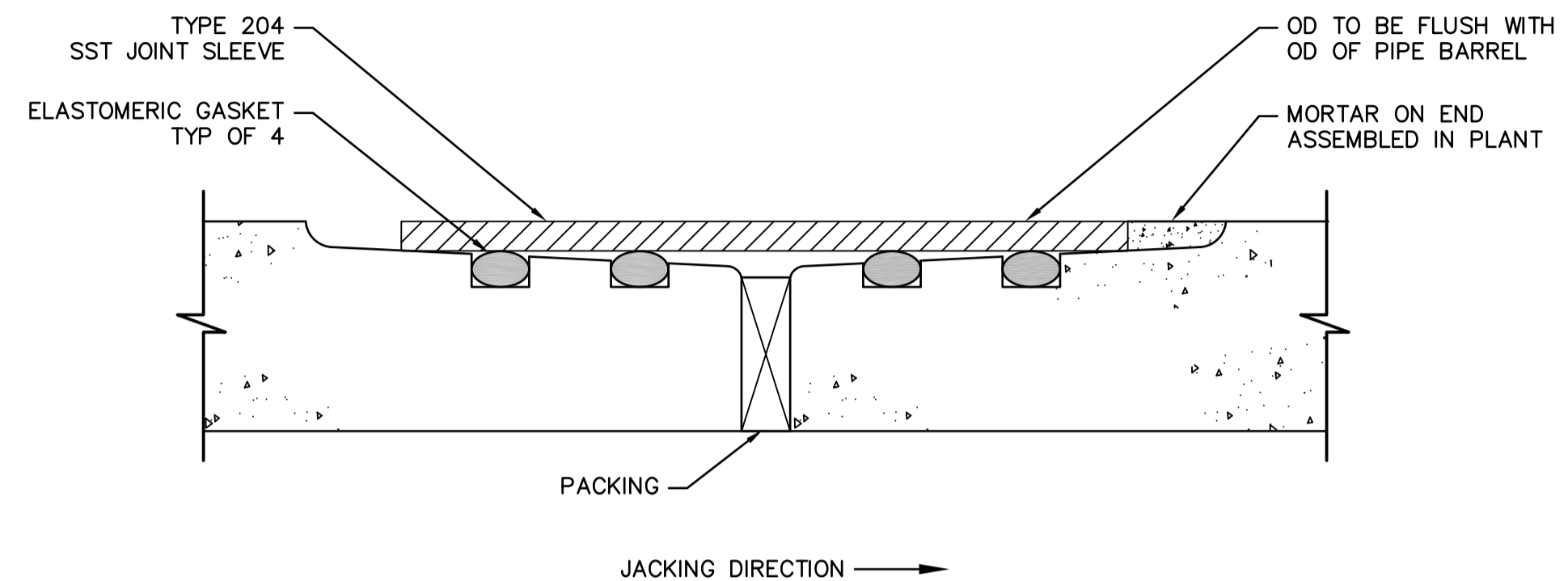
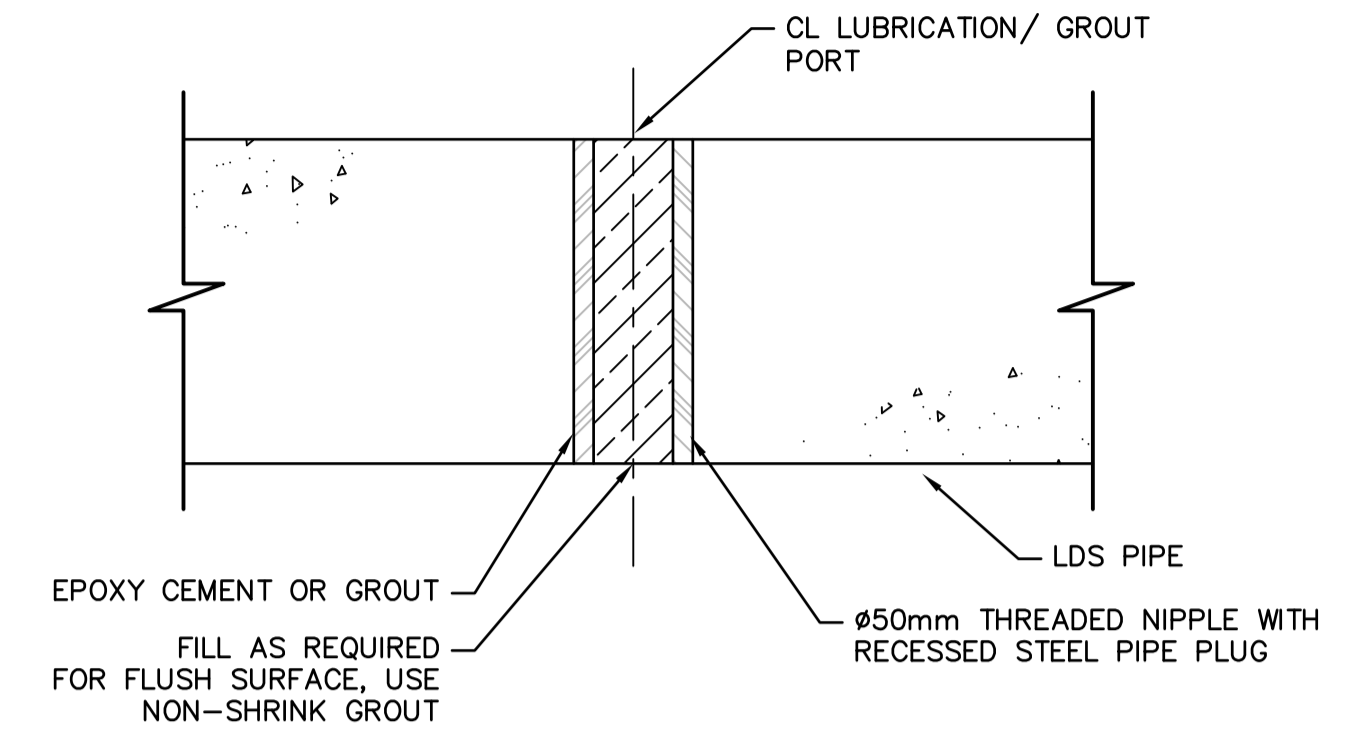


1 DIRECT-JACKED PIPE DETAIL
1:25



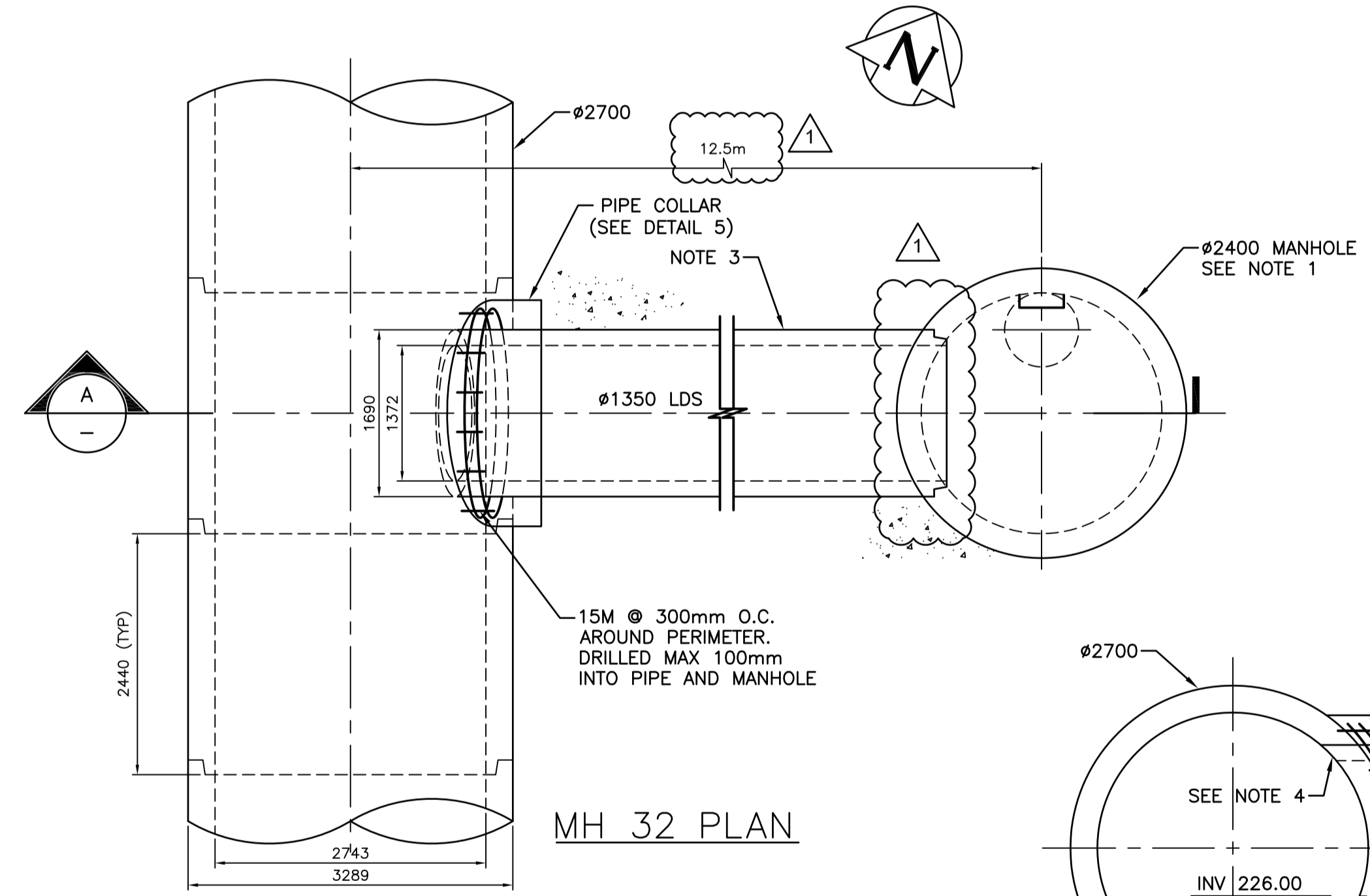
NOTE:
CONTRACTOR SHALL SELECT APPROPRIATE PIPE JOINT TO BE COMPATIBLE WITH PLANNED TUNNELING OPERATIONS.

2 SAMPLE JACKING PIPE JOINT DETAIL
NTS



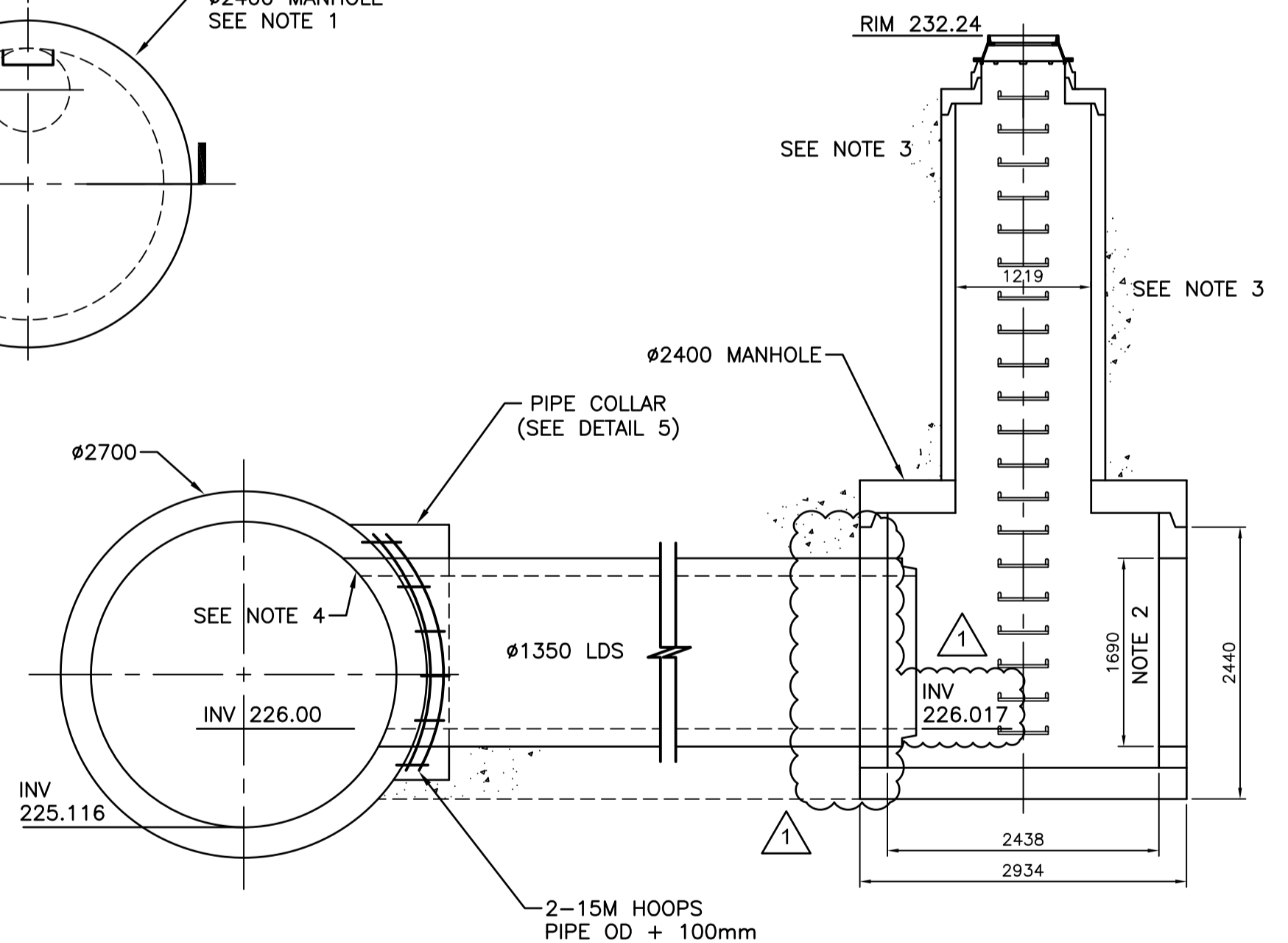
NOTE:
AFTER GROUTING, SEAL GROUT HOLE WITH RECESSED PLUG. INSTALL PLUG AND FILL REMAINING VOID FLUSH WITH THE INSIDE OF THE PIPE WITH A MIN. 25mm WITH NON-SHRINK GROUT, IN ACCORDANCE WITH SPECIFICATIONS.

3 LUBRICATION/ GROUT PORT DETAIL
NTS

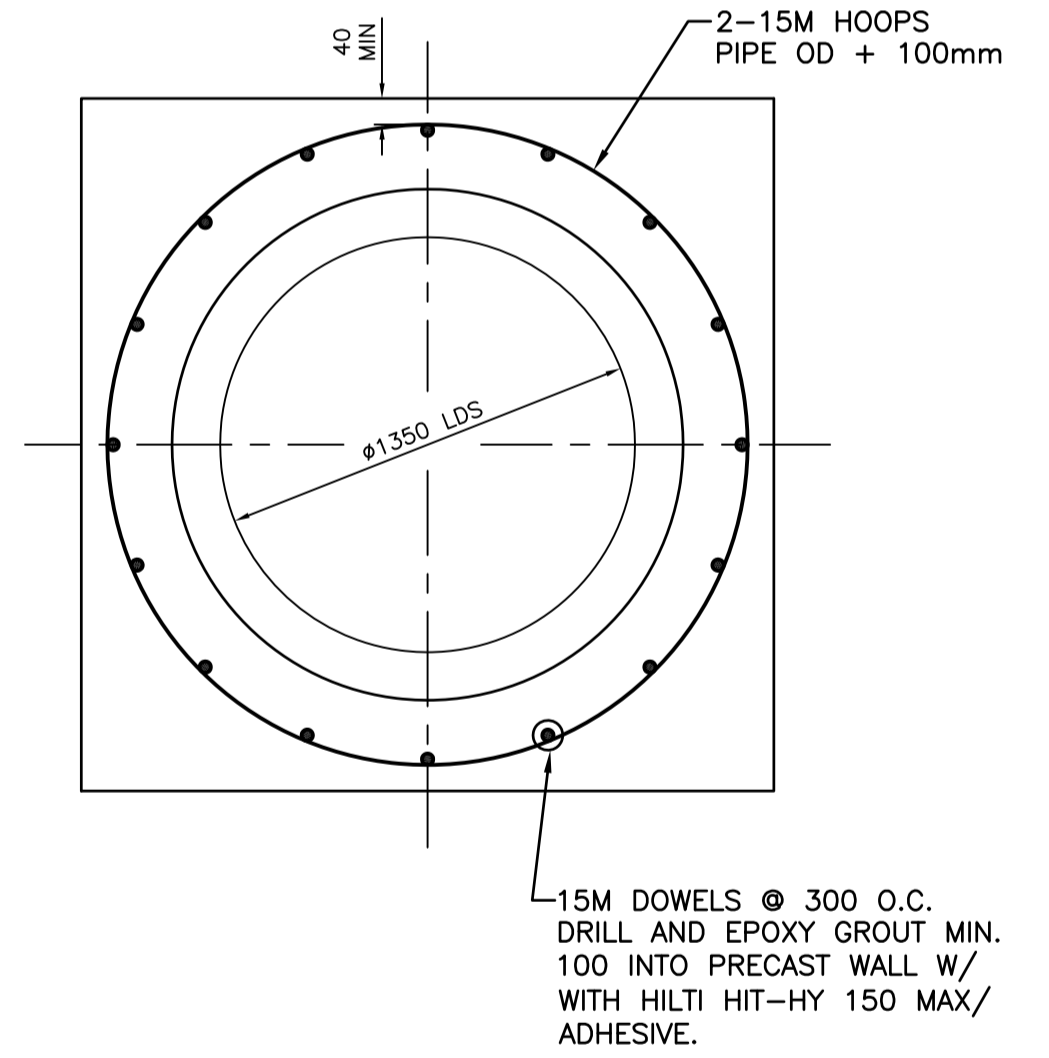
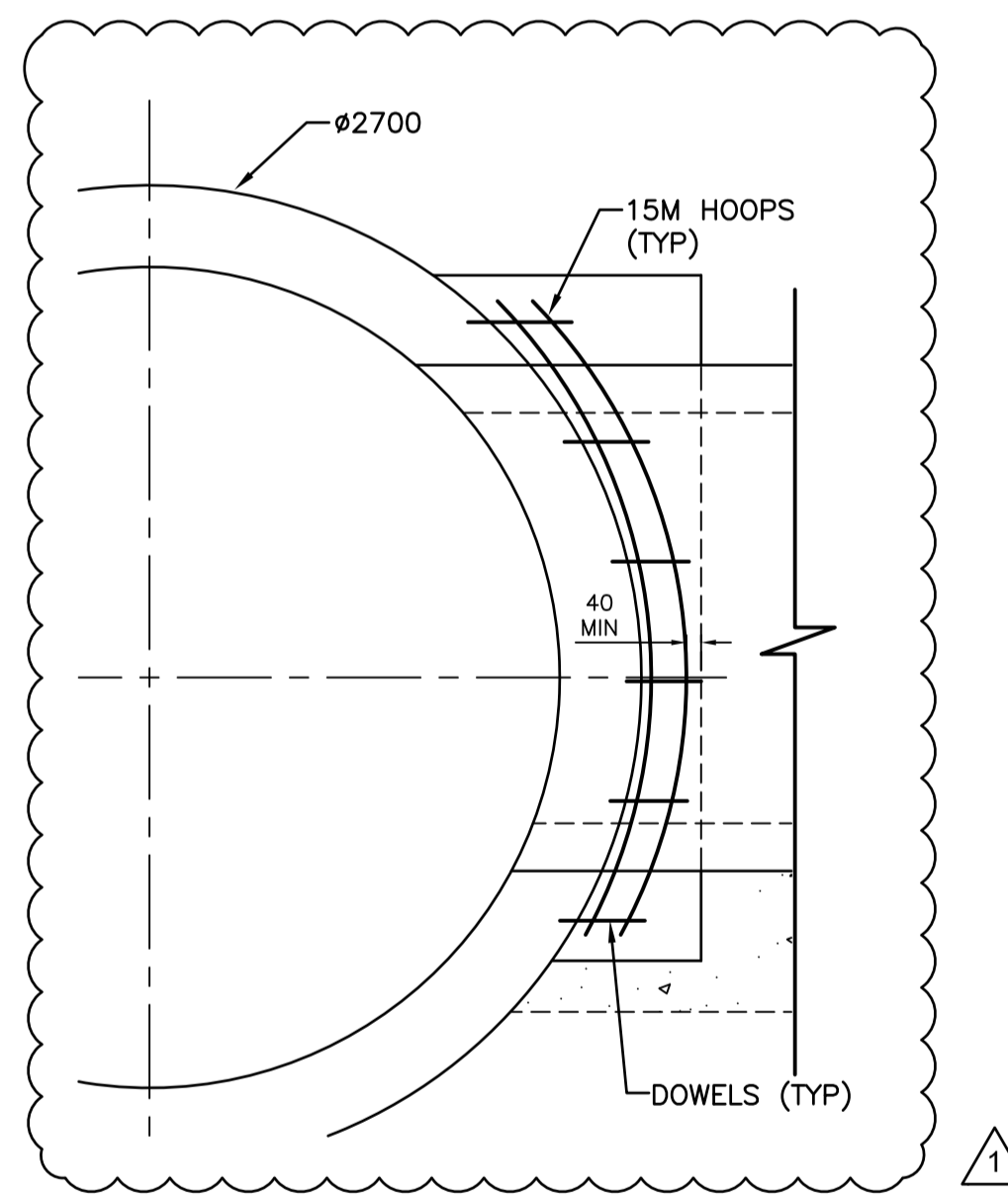


NOTES:
1. MANHOLE TO BE LOCATED EITHER NORTH OR SOUTH OF PROPOSED LOCATION TO ALLOW CONNECTION POINT TO BE ALIGNED TO AVOID PIPE JOINTS BY MINIMUM OF 450mm.
2. INSTALL KNOCKOUT FOR FUTURE 1350 LDS CONNECTION ON THE EAST SIDE OF MH 32 AND PROVIDE WATER TIGHT SEAL.
3. BACKFILL TO BE LOW STRENGTH CONCRETE FILL AROUND PIPE AND MANHOLE (MAX. STRENGTH 1 MPa).
4. 1350 LDS PIPE TO BE CUT FLUSH AND NOT PROTRUDE INTO 2700 LDS PIPE.
5. 300mm THICK PIPE COLLAR IN 35MPa CONCRETE (MIN. 40mm COVER TO REBAR).

4 SPARLING AVENUE CONNECTION (MH 32)
1:50



5 TYPICAL COLLAR DETAILS
NTS



File name C:\pw_workdir\ch2mhill_wbg\jortez\0204776\

150 WM	WATER MAIN	150 WM	HYDRO	150 WM	WATER MAIN	150 WM
+	HYDRANT	+	M.T.S.	+	HYDRANT, VALVE	+
○	VALVE	○	CONCRETE	○	LAND DRAINAGE SEWER	○
○	LAND DRAINAGE SEWER	○	ASPHALT	○	WASTE WATER SEWER	○
○	WASTE WATER SEWER	○	SIDEWALK	○	CENTRELINE	○
○	MANHOLE	○	PLANNING	○	NORTH/WEST GUTTER	○
○	CATCH BASIN	○	PROPERTY LINE	○	SOUTH/EAST GUTTER	○
○	CURB INLET	○	SURVEY BAR	○	N/W, S/E R'S	○
○	BEND	○	GAS	○		○
○	REDUCER	○	CURB STOP	○		○
○		○	TEE	○		○
○	EXISTING	○	LEGEND-PLAN	○	EXISTING	○
○	LEGEND-PLAN	○	PROPOSED	○	LEGEND-PROFILE	○
○		○		○		○

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. ELEV.	NO.	REVISIONS	DATE	BY
	1	ISSUED FOR ADDENDUM NO. 2	01/2017	JBC
	0	ISSUED FOR TENDER	01/2017	JBC

KGS GROUP CONSULTING ENGINEERS

DESIGNED BY: SDG
DRAWN BY: JBC

CHECKED BY: MD
APPROVED BY:

HOR. SCALE: AS NOTED
VERTICAL: -

RELEASED FOR CONSTRUCTION: DATE

ENGINEER'S SEAL
2017/01/23
E. J. SHARP
REGISTERED PROFESSIONAL ENGINEER

CONSULTANT DRAWING NO. C-503

THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT

PROJECT TITLE: COCKBURN AND CALROSSIE COMBINED SEWER RELIEF WORKS - CONTRACT 4

SPARLING AVENUE CONNECTION AND JACKING PIPE DETAILS

SHEET OF 12 OF 12
COMPUTER FILE NAME: C-503.dwg
CITY DRAWING NUMBER: LD-7898

APEGIN
Certificate of Authorization
CH2M HILL Canada Ltd.
No. 1441