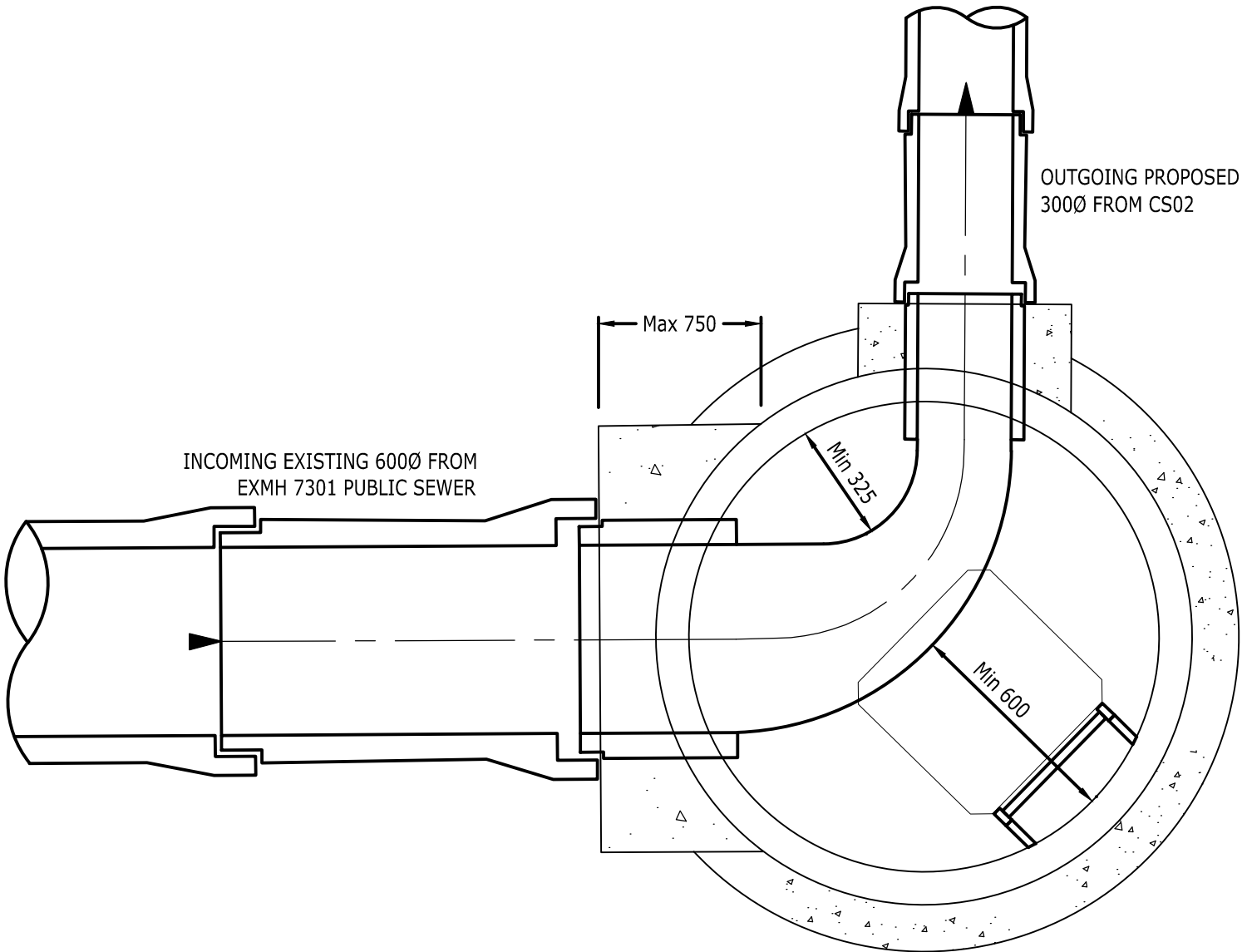


PUBLIC SEWER DIVERSION MANHOLE SCHEDULE												
Manhole No.	Approx. Cover Level (m)	Invert Level (m)	Depth to Invert (m)	Main Channel (mm)	Branches	Manhole Type	Chamber Size (mm)	Cover Size (mm)	Cover Loading	Manhole Type	Comment	Co-ordinates (mm) EastingNorthing
CS01	30.650	28.010	2.640	1500	1500 @ IL 28.010 In 1500 @ IL 28.010 Out	PCC	15000	600x600	D400	Type 1	-	383733872,397310107
CS02	30.900	26.680	4.220	3000	3000 @ IL 26.680 Out	PCC	15000	600x600	D400	Type 1	-	383771470,397320593
CS03	30.600	26.630	3.970	3000	3000 @ IL 26.630 In 1500 @ IL 26.780 In 3000 @ IL 26.630 Out	PCC	15000	600x600	D400	Type 1	-	383767701,397327799
CS04	30.650	26.635	4.015	3000	3000 @ IL 26.580 In 1500 @ IL 26.785 In 3000 @ IL 26.580 Out	PCC	15000	600x600	D400	Type 1	-	383772558,397330339
CS05	30.750	26.445	4.305	3000	3000 @ IL 26.425 In 3000 @ IL 26.425 In	PCC	15000	600x600	D400	Type 1	-	383799511,397344435
CS06	30.650	26.385	4.265	4500	3000 @ IL 26.385 In 4500 @ IL 26.385 Out	PCC	15000	600x600	D400	Type 1	Manhole to be built on line of existing sewer	383803505,397336798
CS07	33.100	31.600	1.500	3000	1500 @ IL 31.750 In 1500 @ IL 31.750 In 3000 @ IL 31.600 Out	PCC	15000	600x600	D400	Type 1	-	383806736,397236319
CS08	32.960	31.450	1.510	3000	3000 @ IL 31.450 In 1500 @ IL 31.600 In 1500 @ IL 31.600 In 3000 @ IL 31.450 Out	PCC	13500	600x600	D400	Type 1	-	383833336,397250191
CS09	32.750	28.785	3.965	3000	3000 @ IL 30.585 In 3000 @ IL 28.785 Out	PCC	13500	600x600	D400	Type 1	Backdrop into chamber	383842205,397254811
CS10	32.650	25.510	7.140	4500	3000 @ IL 27.310 In 1500 @ IL 27.160 In 4500 @ IL 25.510 In 4500 @ IL 25.510 Out	PCC	15000	600x600	D400	Type 1	Backdrop into chamber. Manhole built on line of public sewer.	383851073,397259431

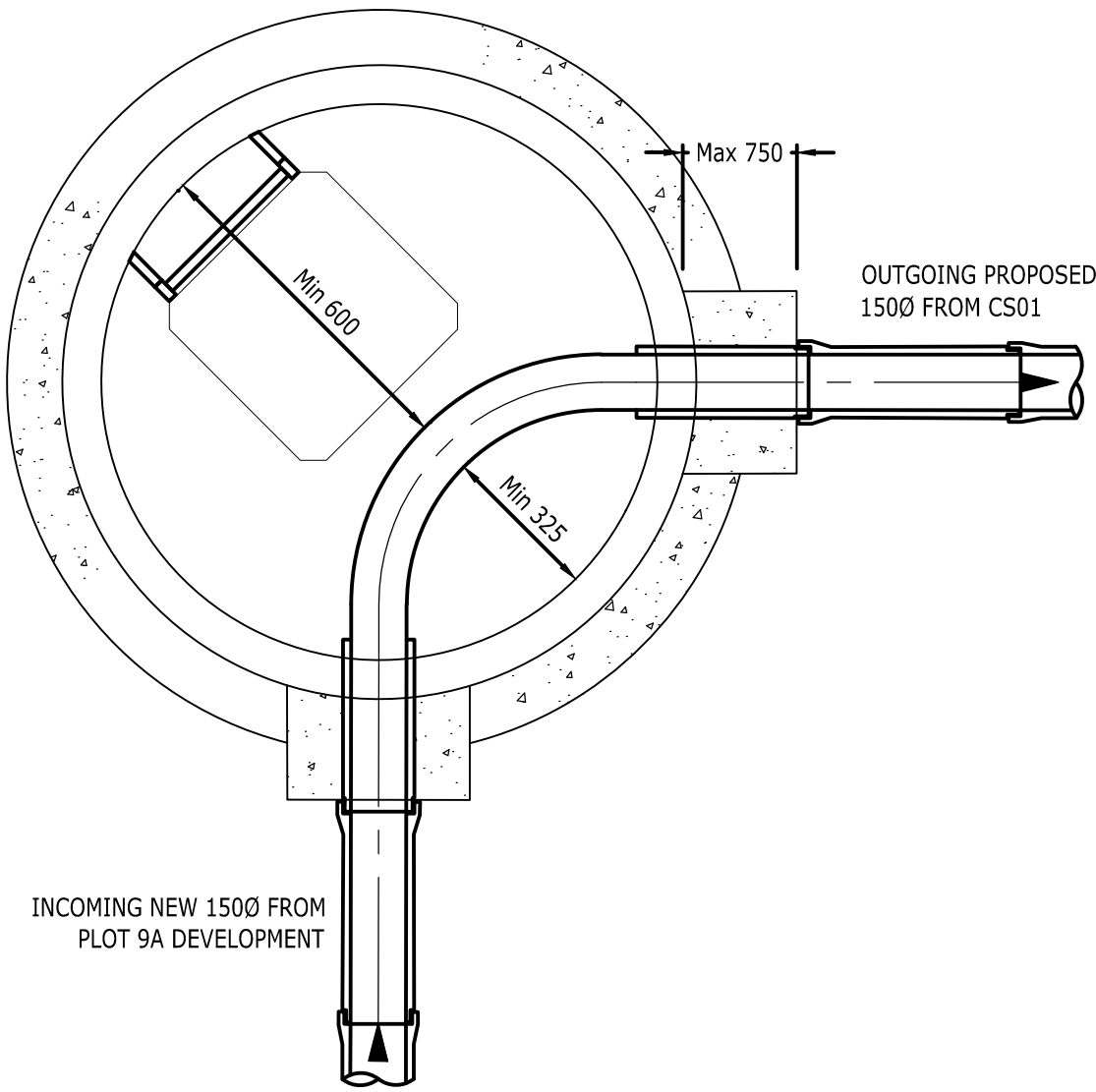
- PCC = PRECAST CONCRETE MANHOLE
- DN150 BRANCH CONNECTIONS TO DISCHARGE INTO MAIN CHANNEL AT HALF MAIN PIPE HEIGHT
- MANHOLE TYPE REFERS TO UNITED UTILITIES DEVELOPER SERVICES CONSTRUCTION DETAILS DRAWING STND/19/001 TO STND/19/012, REVISION A, DATED 15/04/2016
- FOR APPROPRIATE ROCKER PIPE LENGTHS REFER TO VARIABLE FEATURES TABLE ON STND/19/010
- CONFIRMATION OF CONSTRUCTION DETAIL REQUIRED FROM UNITED UTILITIES FOR CS10 AS MANHOLE IS IN EXCEEDANCE OF 6m.

CHANNEL DRAIN SCHEDULE							
REF.	MANUFACTURER & TYPE	DESIGNATION	COVER LOADING AND MINIMUM TYPE	NUMBER OF OUTLETS	OUTLET DIA (mm)	LENGTH (m)	DRAINED AREA (m²)
KD-1	MARSHALLS MINI BEANY	360 BASE UNIT	E600 HALF BATTERED TOPS, DROPPERS & CENTRES	2	150	133	1040
KD-1	MARSHALLS MINI BEANY	360 BASE UNIT	E600 HALF BATTERED TOPS, DROPPERS & CENTRES	2	150	133	1040

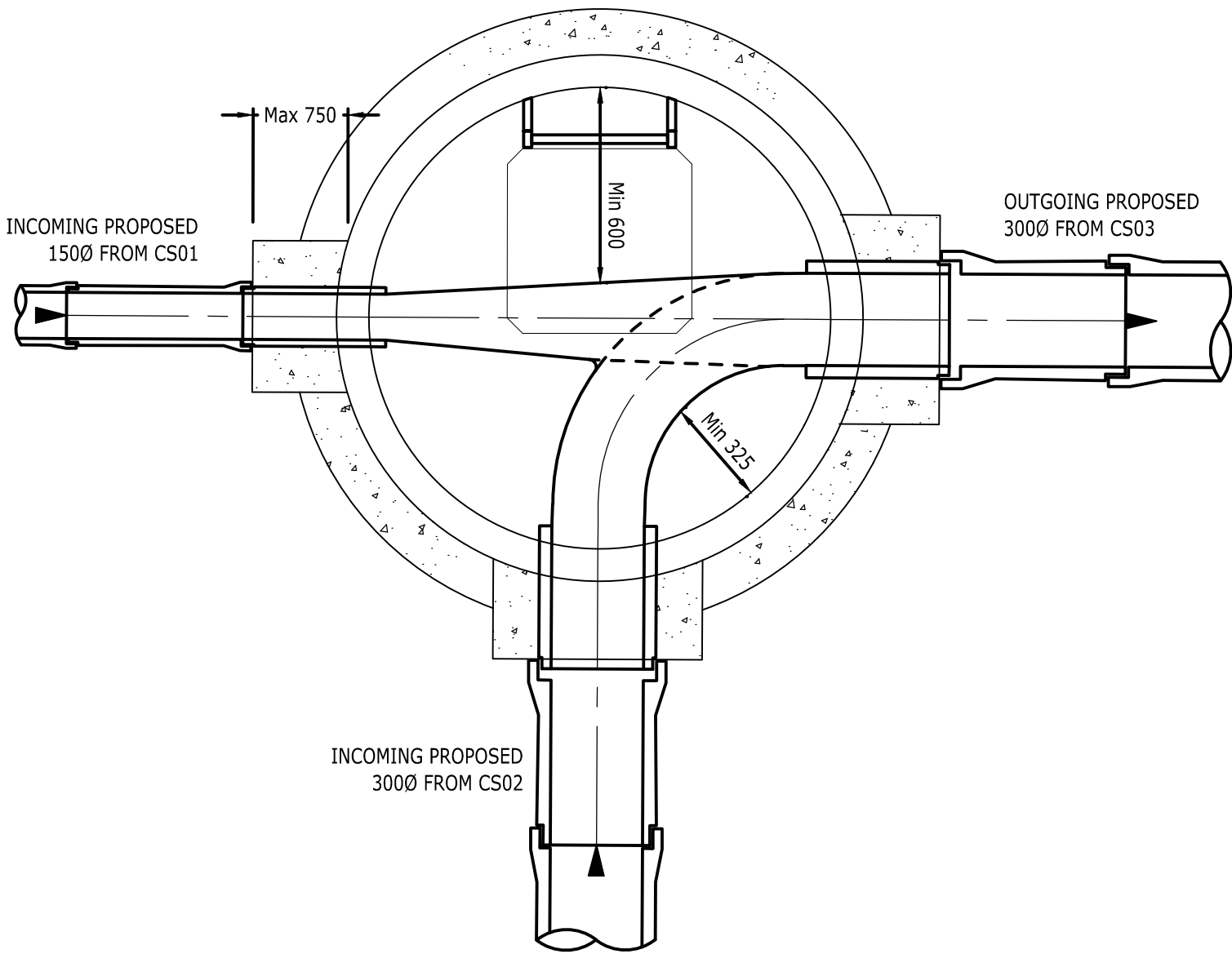
ALL CHANNELS HAVE BEEN DESIGNED FOR A DESIGN RAINFALL INTENSITY OF 110mm/hr (1in5yr EVENT +40% CLIMATE CHANGE, WITH A RISK CATEGORY 3)
ALL OUTLETS TO BE INLINE SIDE OUTLET OUTFALLS WITH CONCRETE TRAPPED OUTFALL, SILT BOX & CAST IRON BEANY ACCESS COVER



MANHOLE CS02
SCALE 1:20



MANHOLE CS01
SCALE 1:20



MANHOLE CS03
SCALE 1:20

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- Notes
1. ALL DIMENSIONS ARE MILLIMETRES U.N.O.
 2. ALL LEVELS ARE IN METRES ABOVE ORDNANCE DATUM U.N.O.
 3. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.
 4. ANY DISCREPANCIES IN DIMENSIONS OR DETAILS ON OR BETWEEN DRAWINGS SHOULD BE DRAWN TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION.
 5. THIS DRAWING HAS BEEN DEVELOPED USING INFORMATION PROVIDED TO RAMBOLL BY A NUMBER OF THIRD PARTIES. RAMBOLL CAN ACCEPT NO RESPONSIBILITY FOR THE ACCURACY OF THE INFORMATION SHOWN OR THIRD PARTY INFORMATION.
 6. MANHOLES TO BE PRECAST CONCRETE RINGS IN ACCORDANCE WITH BS 5911-3 AND BS EN 1917, KITEMARKED, AGREEMENT CERTIFIED OR CE MARKED U.N.O.
 7. ALL COMBINED DRAINAGE TO BE PVCu SOLID WALL TYPE B TO BS EN 13476-1 AND -3, KITEMARKED, AGREEMENT CERTIFIED OR CE MARKED U.N.O.
 8. ALL SURFACE WATER PIPES TO BE STRUCTURED WALL HDPE TO BS EN 13476-1 AND -3, KITEMARKED, AGREEMENT CERTIFIED OR CE MARKED U.N.O.
 9. ALL DRAINAGE WORKS TO BE CARRIED OUT IN ACCORDANCE WITH SEWERAGE SECTOR GUIDANCE AND RELEVANT UTILITY COMPANIES STANDARD AND HEALTH AND SAFETY POLICES
 10. ANY DISCREPANCIES IN DIMENSIONS OR DETAILS ON OR BETWEEN DRAWINGS SHOULD BE DRAWN TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION
 11. CONCRETE FOR GENERAL DRAINAGE WORKS TO BE GEN3 TO BS 8500-1, BS EN 206-1 AND ENGINEERS SPECIFICATION
 12. PIPES ARE NOT DESIGNED FOR CONSTRUCTION TRAFFIC, CONTRACTOR WILL TAKE NECESSARY PRECAUTIONS TO PROTECT PIPES DURING CONSTRUCTION
 13. REFER TO SEWER ABANDONMENT GENERAL ARRANGEMENT ON DRAWING RAM-XX-XX-DR-C-10010
 14. REFER TO SEWER DIVERSION GENERAL ARRANGEMENT ON DRAWING RAM-XX-XX-DR-C-10100
 13. REFER TO SEWER DIVERSION LONG SECTIONS ON DRAWING SERIES RAM-XX-XX-DR-C-10250
 14. REFER TO UNITED UTILITIES DEVELOPER SERVICES CONSTRUCTION DETAILS AND DRAWING SERIES RAM-XX-XX-DR-C-10400 FOR STANDARD DETAILS DRAWINGS

P03	ISSUED FOR COMMENT	13/01 2023	CO SP	NM
P02	ISSUED FOR COMMENT	21/12 2022	CO SP	NM
P01	ISSUED FOR COMMENT	02/11 2022	CO SP	NM
Rev	Description	Date	By Chk	App

PRELIMINARY

PLOT 10A
FIRST STREET
MANCHESTER

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PROPOSED SEWER
DIVERSION SCHEDULES
& PLAN SECTIONS
SHEET 1

Project No:	Scale (@A1):	Drawn:	Date:
1620007819	AS SHOWN	CO	10/2022
Drawing No:	Rev:	App:	
RAM-XX-XX-DR-C-10200	P03		