GENERAL NOTES:

1. ALL LEVELS ARE IN METRES UNLESS NOTED OTHERWISE.
2. ALL WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH "PART H OF THE BUILDING REGULATIONS " AND CIVIL ENGINEERING SPECIFICATION FOR THE WATER INDUSTRY 8th EDITION (CESWI)
3. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE ENGINEERS SPECIFICATION.
4. LOCATION SIZE AND DEPTH OF ALL CONNECTIONS TO EXISTING SEWERS TO BE CONFIRMED ON SITE PRIOR TO COMMENCING DRAINAGE WORKS.
5. ALL DRAINS TO BE LAID IN CLASS S GRANULAR BED AND SURROUND GENERALLY. DRAINS WITH LESS THAN 1200mm COVER TO HAVE CLASS Z GEN3 CONCRETE BED & SURROUND.
6. ALL FOUL DRAINAGE CONNECTIONS FROM BUILDINGS ARE TO BE 100mm Ø DIAMETER UNLESS NOTED OTHERWISE. FOUL CONNECTIONS SHOWN ON THIS DRAWING ARE INDICATIVE AND ARE TO BE DEVELOPED DURING THE DETAILED DESIGN PHASE.
7. SURFACE WATER DRAINAGE CONNECTIONS. RWP CONNECTIONS TO BE 100mm Ø. GULLY AND DRAINAGE CHANNEL CONNECTIONS TO BE 150mm Ø UNLESS NOTED OTHERWISE. CONNECTIONS SHOWN ARE INDICATIVE AND TO BE COORDINATED WITH ARCHITECT AND MANUFACTURERS SPECIFICATIONS FOR RWP'S AND CHANNEL'S RESPECTIVELY.
8. FOR ACCURATE LAYOUT AND SIZES OF ALL THROUGH SLAB DRAINAGE OUTLETS WITHIN THE BUILDINGS PLEASE REFER TO ALL RELEVANT M&E BUILDING SERVICES/ARCHITECTS DRAWINGS.
9. VENTING OF THE FOUL BUILDING DRAINAGE IS TO BE DESIGNED BY OTHERS
10. ALL FOUL BUILDING DRAINAGE TO HAVE ACCESS FITTINGS PRIOR TO GROUND FLOOR SLAB PENETRATIONS.
11. ALL EXTERNAL GULLIES AND CHANNEL DRAINS TO BE RODDABLE WITH APPROPRIATE SUMP UNITS FOR SILT CAPTURE.
12. SYPHONIC ROOF DRAINAGE SYSTEMS TO BE DESIGNED BY SPECIALIST.
13. FOR POSITIONS OF ALL EXISTING DRAINS AND EXISTING MANHOLES REFER TO TOPOGRAPHICAL SURVEY AND RECORDS DRAWINGS.
14. ALL PROPOSED SURFACE WATER AND FOUL WATER MANHOLES HAVE BEEN CO-ORDINATED USING THE TOPOGRAPHICAL SURVEY.
15. THE CONTRACTOR IS TO CONFIRM THE SIZE OF THE HYDROBRAKE UNIT AND HYDROBARAKE CHAMBER .
16. THE CONTRACTOR IS TO FOLLOW THE CONSTRUCTION & CONNECTION METHODS FOR THE ATTENUATION STORAGE TANK FROM THE TANK MANUFACTURERS. THIS IS TO BE MEMBRANE LINED AND VENTED.
17. ACCESS POINTS INTO TANKS ARE NOT SHOWN ON THIS DRAWING. THE CONTRACTOR IS TO ALLOW FOR PROVIDING SUITABLE MAINTENANCE ACCESS IN ACCORDANCE WITH THE CIRIA GUIDANCE AND SHOULD COORDINATE THIS WITH THE TANK SUPPLIER. FULL DETAILS ARE TO BE PROVIDED TO THE ENGINEER FOR COORDINATION PRIOR TO CONSTRUCTION
18. FOR ACCURATE LAYOUT AND SIZES OF FOUNDATIONS PLEASE REFER TO ALL RELEVANT STRUCTURAL DRAWINGS.
19. DRAINAGE CHANNEL AND SLOT DRAIN SIZES TO BE DETERMINED BY CONTRACTOR BASED ON RAIN FALL INTENSITY OF 75mm/h INCLUDING NUMBER OF OUTLET UNITS.
20. YARD DRAINAGE SHOULD BE PROVIDED AS LINEAR SLOT DRAINS RATED TO D400 LOAD CLASS. CHANNEL DRAINS SHOULD BE PROVIDED IN THE CAR PARK AREAS TO D400 LOAD CLASS. SUITABLE ACCESS UNITS FOR MAINTENANCE MUST BE PROVIDED TO ALL LINEAR DRAINAGE ALONG WITH APPROPRIATE SUMP OUTLET UNITS.
21. INTERCEPTORS TO BE ALARMED AND VENTED .
22. ABANDONED SEWERS TO BE GRUBBED UP OR GROUTED WHEN DEEPER THAN 1.5m.
23. PERMISSION AND COORDINATION FROM MANCHESTER AIRPORT GROUP REQUIRED TO INSTALL FOUL AND SURFACE WATER CONNECTIONS TO OUTFALL.
24. COORDINATION OF THE DRAINAGE WITH FOUNDATIONS & UNDERGROUND SERVICES WILL BE CARRIED OUT BY THE CONTRACTOR DURING STAGE 4.
25. MEMBRANE LINED CAR PARK PERMEABLE PAVING
26. EXISTING MANHOLES TO BE ABANDONED ARE TO BE GRUBBED UP TO 1m DEPTH, AS PER THE SITE CLEARANCE DRAWING.
27. FOR ABANDONED DRAINAGE RUNS REFER TO DRAWING 0505.
28. INTERCEPTOR MAY REQUIRE A REDUCER FOR COUPLING TO THE PIPEWORK.

MANHOLE SCHEDULE - Box 4 Storm

STRUCTURE NAME	EASTING	NORTHING	COVER LEVEL	INVERT LEVLS AND SIZES	CHAMBER DIA (mm) & CHAMBER TYPE	CHAMBER TYPE	Opening Size	Lid Grade
1CD	381117.608	384562.259	67.349	66.442 (225Ø)	200mm DIA	Channel Drain Connection	N/A	N/A
2	381136.130	384575.666	67.456	66.065 (225Ø) 65.990 (300Ø)	1500mm DIA	Concrete Ring	1200x675	D400
3CD	381136.302	384602.970	66.778	66.002 (225Ø)	200mm DIA	Channel Drain Connection	N/A	N/A
4	381138.682	384600.554	66.854	65.868 (225Ø) 65.718 (375Ø)	1500mm DIA	Concrete Ring	1200x675	D400
5	381159.250	384581.844	67.231	65.594 (300Ø) 65.474 (375Ø) 65.399 (450Ø)	1500mm DIA	Concrete Ring	600x600	D400
6	381189.156	384611.286	67.236	65.199 (450Ø) 65.199 (450Ø)	1500mm DIA	Concrete Ring	600x600	D400
7	381197.523	384650.761	67.342	65.077 (450Ø) 65.384 (225Ø) 65.077 (450Ø)	1500mm DIA	Concrete Ring	600x600	D400
7CD	381198.733	384652.599	67.388	66.406 (225Ø)	200mm DIA	Channel Drain Connection	N/A	N/A
9	381201.544	384677.428	67.690	64.983 (450Ø) 64.983 (450Ø)	1500mm DIA	Concrete Ring	600x600	D400
10CD	381105.380	384575.579	67.528	66.628 (225Ø)	200mm DIA	Channel Drain Connection	N/A	N/A
11	381101.822	384584.924	67.626	66.277 (225Ø) 66.127 (375Ø)	1500mm DIA	Concrete Ring	600x600	D400
12CD	381080.197	384601.156	67.531	66.628 (150Ø)	200mm DIA	Channel Drain Connection	N/A	N/A
13 Junc	381077.309	384609.808	67.626	65.894 (375Ø) 65.894 (375Ø) 66.119 (150Ø)	200mm DIA	Junction (No Chamber)	N/A	N/A
14	381045.105	384642.499	67.646	65.588 (375Ø) 65.588 (375Ø)	1500mm DIA	Concrete Ring	600x600	D400
15	381109.277	384687.402	67.937	65.126 (375Ø) 65.126 (375Ø)	1500mm DIA	Concrete Ring	600x600	D400
17	381151.627	384728.100	67.874	64.869 (375Ø) 64.869 (375Ø)	1500mm DIA	Concrete Ring	600x600	D400
18	381168.496	384710.977	67.873	64.729 (450Ø) 64.804 (375Ø) 64.729 (450Ø)	2100mm DIA	Concrete Ring	600x600	D400
19INT	381172.722	384715.140	67.752	64.629 (450Ø) 64.529 (450Ø)	1200mm DIA	Interceptor	N/A	D400
20 Man	381175.835	384718.207	67.799	64.505 (450Ø) 64.505 (450Ø)	2400mm DIA	Manifold Chamber	600x600	D400
21TI	381177.866	384720.208	67.830	64.481 (450Ø) 64.481 (450Ø)	200mm DIA	Tank Connection	N/A	N/A
22 Sy	381123.715	384698.275	68.000	66.075 (450Ø)	2100mm DIA	Syphonic Chamber	1200x675 VENTED	D400
22CP -BD	381193.434	384710.161	67.873	66.246 (300Ø) 64.766 (300Ø) 66.246 (300Ø)	1800mm DIA	Catch Pit	600x600	D400
23TI	381190.627	384713.010	67.873	64.481 (300Ø) 64.481 (300Ø)	200mm DIA	Tank Connection	N/A	N/A
24 Man -BD	381165.555	384738.460	67.906	65.425 (450Ø) 64.638 (300Ø)	1800mm DIA	Manifold Chamber	600x600	D400
25 TI	381167.116	384736.875	67.874	64.481 (300Ø) 64.481 (300Ø)	200mm DIA	Tank Connection	N/A	N/A
26Sy	381199.274	384674.493	67.719	66.698 (300Ø)	1800mm DIA	Syphonic Chamber	600x600 VENTED	D400
30TO	381183.593	384725.850	67.917	64.476 (450Ø) 64.476 (300Ø) 64.476 (300Ø) 64.476 (450Ø)	200mm DIA	Tank Connection	N/A	N/A
31 HYDRO	381185.384	384727.614	67.949	64.445 (450Ø) 64.445 (450Ø)	2400mm DIA	Flow Control	1200x675	D400
32 Connection	381202.930	384743.380	67.748	64.299 (450Ø)	1800mm DIA	Concrete Ring	600x600	D400
CP01	381158.361	384727.638	67.777	66.870 (300Ø)	1200mm DIA	Concrete Ring	600x600	D400
CP02	381191.680	384693.555	67.772	66.632 (300Ø) 66.632 (300Ø)	1200mm DIA	Concrete Ring	600x600	D400
MAG 1	381122.510	384560.044	67.300	64.954 (150Ø)	1500mm DIA	Concrete Ring	600x600	D400
MAG CD 1	381104.450	384574.607	67.300	66.500 (150Ø)	200mm DIA	Channel Drain Connection	N/A	N/A

MANHOLE SCHEDULE - Box 4 Foul

STRUCTURE NAME	EASTING	NORTHING	COVER LEVEL	INVERT LEVLS AND SIZES	CHAMBER DIA (mm) & CHAMBER TYPE	CHAMBER TYPE	Opening Size	Lid Grade
F1	381131.693	384706.696	67.973	67.230 (150Ø)	450mm DIA	PPIC	450 DIA	D400
F2	381147.196	384721.595	67.971	66.880 (150Ø) 66.880 (150Ø)	450mm DIA	PPIC	450 DIA	D400
F3	381157.304	384711.306	67.974	66.640 (150Ø) 66.640 (150Ø)	450mm DIA	PPIC	450 DIA	D400
F4	381172.434	384695.923	67.974	66.400 (150Ø) 66.400 (150Ø)	450mm DIA	PPIC	450 DIA	D400
F5	381186.269	384681.879	67.971	66.242 (150Ø) 66.242 (150Ø)	450mm DIA	PPIC	450 DIA	D400
F6	381198.794	384669.164	67.974	66.095 (150Ø) 66.095 (150Ø)	450mm DIA	PPIC	450 DIA	D400
F7	381198.721	384664.286	67.953	66.062 (150Ø) 66.062 (150Ø)	450mm DIA	PPIC	450 DIA	D400
F8	381184.418	384650.106	67.954	65.928 (150Ø) 65.928 (150Ø)	1200mm DIA	Concrete Ring	600x600	D400
F9	381167.499	384576.333	67.025	64.520 (150Ø)	1200mm DIA	Concrete Ring	600x600	D400

MANHOLE/ CHAMBER REFERENCES

CP = CATCH PIT
CD = CONNECTION FROM CHANNEL/SLOT DRAINS
JUNC = JUNCTION (NO CHAMBER REQUIRED)
INT = INTERCEPTOR
MAN = MANIFOLD CHAMBER
TI/TO = CONNECTION IN AND OUT OF THE TANK - NO CHAMBER REQUIRED
SY = SYPHONIC BREAK CHAMBER WITH VENTED LIDS
2nd = SYPHONIC SECONDARY COLLECTION POINT - (TBC)
HYDRO = FLOW CONTROL CHAMBER
BD = BACK DROP

DEPTH OF LIDS TO BE MIN 100mm IN CAR PARK, FOOTWAYS AND LANDSCAPE AREAS AND 150mm IN CONCRETE YARD AND HGV AREAS.

CONSTRUCTION ISSUE

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SCALE 1:500

Client: COLUMBIA THREADNEEDLE INVESTMENTS

Project Name: BOX 4

Sheet Title: DRAINAGE MANHOLE SCHEDULE CAT A

Rev	Description	Date	Drn	Chk	App
C03	ALIGNED TO DRAINAGE GA 0500 REV C03 BACKDROP NOTATION ADDED AND LID DEPTH NOTE.	20.02.2024	DJH	DJH	NM
C02	ALIGNED TO DRAINAGE GA 0500 REV C02	18.08.2024	DJH	DJH	NM
C01	CONSTRUCTION ISSUE	31.07.2024	MA	DJH	NM

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