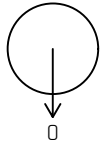
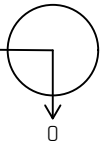
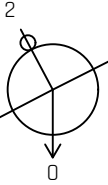
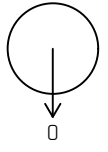
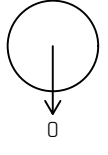
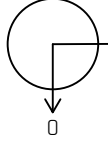
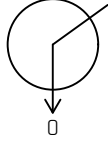
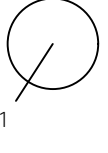
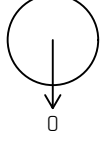
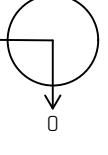
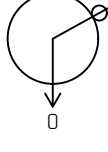
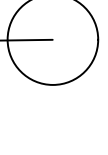


Manhole Number	Cover Level	Connections	Pipe			Manhole Size	Types	
Coordinates	Depth To Soffit		Code	Inverts	Diams		Manhole	Cover
F1	126.000							
E. 299967.440	0.900					600	4	Unspec
N. 518691.422			0	1.000	125.000	100		
F2	126.000		1	1.000	124.604	100		
E. 299988.155	1.296		0	1.001	124.604	100	600	4
N. 518703.044			0	1.001	124.604	100		
F3	126.000		1	1.001	123.958	100		
E. 300007.408	1.942		2	3.000	124.614	100	600	4
N. 518669.375			3	2.001	124.203	100		
F4	126.000							
E. 299987.529	0.900		0	3.000	125.000	100	450	4
N. 518657.446			0	3.000	125.000	100		
F5	126.000							
E. 300000.305	0.900		0	2.000	125.000	100	600	4
N. 518636.161			0	2.000	125.000	100		
F6	126.000		1	2.000	124.616	100		
E. 300020.037	1.284		0	2.001	124.616	100	600	4
N. 518648.047			0	2.001	124.616	100		
F7	125.800		1	1.002	123.665	100		
E. 300024.958	2.300		0	1.003	123.400	100	1050	3
N. 518670.271			0	1.003	123.400	100		
F8	125.400		1	1.003	123.238	100		
E. 300030.236	2.062					1200	3	Unspec
N. 518678.423								
F9	126.000							
E. 299973.438	0.900		0	4.000	125.000	100	600	Unknown
N. 518740.318			0	4.000	124.840	100		
F10	126.000		1	4.000	124.840	100		
E. 299981.809	1.060		0	4.001	124.840	100	600	Unknown
N. 518744.997			0	4.001	124.840	100		
F11	126.000		1	4.001	124.622	100		
E. 299988.278	2.300		0	4.002	123.600	100	600	Unknown
N. 518733.638			0	4.002	123.600	100		
F12	125.899		1	4.002	123.487	100		
E. 299995.086	2.312					1200	Unknown	Unspec
N. 518733.727								

FOUL Network 1									
Pipe Code	Diameter (mm)	Gradient (1:)	Pipe Length	Upstream Manhole		Downstream Manhole			
				Number	Invert	Number	Invert	Cover	Cover
1.000	100	60	23.753	F1	125.00	F2	124.60	126.00	125.00
1.001	100	60	38.785	F2	124.60	F3	123.96	126.00	125.00
1.002	100	60	17.573	F3	123.96	F7	123.66	126.00	125.80
1.003	100	60	9.711	F7	123.40	F8	123.24	125.80	125.40
2.000	100	60	23.035	F5	125.00	F6	124.62	126.00	125.00
2.001	100	60	24.787	F6	124.62	F3	124.20	126.00	125.00
3.000	100	60	23.184	F4	125.00	F3	124.61	126.00	125.00
4.000	100	60	9.590	F9	125.00	F10	124.84	126.00	125.00
4.001	100	60	13.072	F10	124.84	F11	124.62	126.00	125.00
4.002	100	60	6.809	F11	123.60	F12	123.49	126.00	125.90

STORM Network 1									
Pipe Code	Diameter (mm)	Gradient (1:)	Pipe Length	Upstream Manhole		Downstream Manhole			
				Number	Invert	Number	Invert	Cover	Cover
1.000	225	100	39.902	S3	125.32	S1	124.93	126.00	126.00
1.001	225	100	23.295	S1	124.93	S4	124.69	126.00	126.00
1.002	225	100	15.307	S4	124.69	S6	124.54	126.00	126.00
1.003	225	100	8.096	S6	124.54	S7	124.46	126.00	126.00
1.004	225	100	6.549	S7	124.46	S9	124.39	125.90	125.90
1.005	225	100	10.929	S9	124.39	S10	124.28	125.85	125.85
1.006	300	100	5.632	S10	124.21	S24	124.15	125.50	125.50
2.000	150	100	22.786	S2	125.40	S1	125.17	126.00	126.00
3.000	150	100	4.270	S5	125.40	S4	125.36	126.00	126.00
4.000	150	100	16.397	S8	125.40	S7	125.24	126.00	126.00
5.000	225	100	19.587	S11	125.32	S12	125.13	126.00	126.00
5.001	225	100	14.850	S12	125.13	S13	124.98	126.00	126.00
5.002	225	100	27.884	S13	124.98	S14	124.70	126.00	126.00
5.003	225	100	26.204	S14	124.70	S10	124.44	125.85	125.85
6.000	150	100	11.808	S26	125.35	S13	125.23	126.00	126.00
7.000	150	100	11.677	S15	125.40	S16	125.28	126.00	126.00
7.001	150	100	16.238	S16	125.28	S17	125.12	126.00	126.00
7.002	225	60	11.614	S17	125.05	S22	124.85	125.75	125.75
7.003	225	100	10.612	S22	124.80	S23	124.69	125.75	125.90
7.004	225	100	10.539	S23	124.69	S10	124.59	125.85	125.85
8.000	150	100	10.419	S18	125.40	S19	125.30	126.00	126.00
8.001	150	100	11.956	S19	125.30	S17	125.18	126.00	126.00
9.000	150	100	9.580	S20	125.40	S17	125.30	126.00	126.00
10.000	225	100	20.017	S21	125.00	S22	124.80	125.75	125.75

- DRAINAGE NOTES**
- This drawing is to be read in conjunction with all relevant Architects drawings and drawings by Kingmoor Consulting Ltd.
 - All private drainage construction is to be in accordance with the manufacturers recommendations and Approved Document H from the Building Regulations 2000.
 - Invert levels shown on all incoming and outgoing pipes for manholes/inspection chambers indicate the invert levels at the intersection of the pipes within the manhole.
 - CONCRETE BENCHING AND PIPE SURROUND**
Concrete shall be placed in a single continuous operation from top of base slab to top of benching and pipe surround.
 - CONNECTION INTO MANHOLES**
Connections into manholes shall be constructed with the soffits at the same level unless detailed differently on the contract drawings.
 - METALWORK**
Ladders, handrailing and safety chains shall be constructed as shown on UU Standard Detail STND/01/002.
All components to be fabricated in Stainless steel grade X6 Cr Ni Mo Ti 17-12-2 to BS EN 10088-1. Refer to UU Standard Detail STND/01/002 for details.
 - CONCRETE SURROUND TO MANHOLES**
A concrete surround is not normally required to manholes unless installed in areas of unstable ground, under conditions of flotation or where subjected to exceptional or eccentric loads. In which cases a 150mm surround of at least 20N/mm² (GEN3) concrete shall be provided. Any joints should be staggered with pre-cast concrete joints.
 - MANHOLE ACCESSSES**
For manhole access options and details refer to UU Standard Detail STND/01/013.
Double steps shall be plastic encapsulated carbon steel to BS EN 1247-2 manhole steps.
Double steps shall not be used where cover-to-soffit dimension is >3.0m.
 - COVER AND FRAME**
150mm deep covers are to be used in Category 1, 2 & 3 Roads.
100mm deep covers are to be used in Category 4 Roads.
Double triangular covers are to be used in carriageway.
Road category to be designated by the Highway Authority.
Frame to be set as per manufacturers specification.
Manhole cover and frame to be in accordance with BS EN 124 Class D400, class M1 mortar bed and haunch, with minimum clear opening of 600x600 unless noted otherwise.
 - ROCKER PIPES**
Start of rocker pipe to be as close to face of manhole as possible and not greater than 750mm. Rocker pipes to be used until the pipe outside diameter exceeds the effective length of the rocker pipe.
Rocker pipe effective length shall be as follows:
600mm for pipes up to 600mm ø
 - BENCHING WIDTH**
Minimum benching widths shall be as follows:
For depth to soffit < 1.5m
225mm min for all pipe sizes
For depth to soffit ≥ 1.5m
600mm min for 150mm ø to 375m ø pipes
 - CHANNEL FITTINGS**
Proprietary channel fittings are to be used up to and including 300mm ø pipes, above which granolithic in-situ channels can be used. Incoming and outgoing 'T' junctions, square junctions and 90° bends are not acceptable especially on foul systems, to be replaced by 'Y' junctions, oblique junctions and 2 No. 45° bends respectively.

- GENERAL NOTES**
- ALL DIMENSIONS IN MILLIMETERS UNLESS NOTED AND NOT TO BE SCALED FROM DRAWINGS. USE WRITTEN DIMENSIONS ONLY AND CHECK ON SITE BEFORE ORDERING MATERIALS OR STEELWORK.
 - ALL DRAWINGS TO BE READ IN CONJUNCTION WITH DRAWINGS PRODUCED BY OTHERS AND ANY ERRORS TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO COMMENCEMENT OR INSTALLATION OF THE WORKS.
 - ALL MATERIALS AND WORKMANSHIP TO BE UNDERTAKEN IN ACCORDANCE WITH BEST PRACTICE AND THE RELEVANT CODES INCLUDING BRITISH STANDARDS AND BUILDING REGULATIONS.
 - THIS WORK MAY BE REQUIRED TO COMPLY WITH THE BUILDING SAFETY ACT 2023. IF WORK REQUIRES MORE THAN ONE CONTRACTOR TO UNDERTAKE THE WORKS, THE CLIENT IS REQUIRED TO APPOINT A PRINCIPAL DESIGNER TO COORDINATE DESIGN WORKS, AND ENSURE THAT ALL DESIGN AND WORKS ARE CONSTRUCTED IN ACCORDANCE WITH THE BUILDING REGULATIONS. IT CANNOT BE ASSUMED THAT KINGMOOR CONSULTING LTD ARE BY DEFAULT THE PRINCIPAL DESIGNER UNLESS APPOINTED SPECIFICALLY FOR THIS ROLE.

ENGINEER	 SUITE 4 ATLANTIC HOUSE, PARKHOUSE BUSINESS PARK, CARLISLE, CA3 0LJ T: 01228 915900 E: hello@kingmoorconsulting.co.uk		CLIENT
PROJECT PROPOSED INDUSTRIAL UNITS, JOE MCBAIN AVENUE, MORESBY PARKS			
TITLE MANHOLE AND PIPE SCHEDULES			
SCALE AS NOTED	STATUS FOR BUILDING CONTROL		
PAPER SIZE A1	DRAWN BY J GEMMELL	CHECKED AND APPROVED C AIMERS	
PROJECT PHASE BUILD	DATE NOVEMBER 2024	DATE NOVEMBER 2024	
DRAWING NUMBER 24-471-DWG007			REVISION A