Flood Exceedance Route

New Plots 449m²
Impermeable Surfaces 1,250m²
Total Contributing Areas 1,699m²



DRAINAGE STRATEGY

FOUL WATER

NEW FOUL DRAINS WILL BE PROVIDED TO SERVE ALL FOUL PRODUCING APPLIANCES WITHIN THE PROPOSED BUILDING. ALL DRAINS WILL BE DESIGNED IN ACCORDANCE WITH BS EN 752:2008 AND BUILDING REGULATIONS APPROVED DOCUMENT H.

FOUL DRAINAGE NETWORK FOR PLOTS 5-10 TO CONNECT INTO THE EXISTING COMBINED MANHOLE WHICH LEADS TO THE Ø450 SEWER IN ACRE STREET.
FOUL DRAINAGE NETWORK FOR PLOTS 1-4 TO CONNECT TO NEW COMBINED MANHOLE WHICH LEADS TO THE Ø300 SEWER IN VICTORIA STREET. CONNECTION VIA JUNCTION. SUBJECT TO YORKSHIRE WATER APPROVAL. METHOD AND MODE OF CONNECTION TO BE CONFIRMED.

SURFACE WATER

IN LINE WITH THE CIRIA SuDS DISCHARGE HIERARCHY THE SURFACE WATER WAS INITIALLY CONSIDERED TO BE DISCHARGED THROUGH INFILTRATION. PERCOLATION TESTS HAVE BEEN CARRIED OUT AND ARE DEEMED TO BE NOT ACCEPTABLE. NO WATER INFILTRATED OVER A PERIOD OF 12 HOURS. SEE DRAWING FOR LOCATIONS & PHOTOS.

THE NEXT STEP IN THE DISCHARGE HIERARCHY IS TO CONSIDER DISCHARGE TO A NEARBY WATERCOURSE. THE NEAREST WATERCOURSE IS LOCATED 2,000M TO THE EAST OF THE SITE. DISCHARGING TO THIS WATERCOURSE IS NOT POSSIBLE DUE TO CROSSING 3RD PARTY LAND & FINANCIAL PROHIBITIVE.

THE NEXT STEP IN THE HIERARCHY IS DISCHARGE TO A PUBLIC SURFACE WATER SEWER FOLLOWED BY DISCHARGE TO A COMBINED PUBLIC SEWER. THE ADJACENT PUBLIC SEWER IS A COMBINED SEWER IN VICTORIA STREET, SO IT IS PROPOSED THAT THE SURFACE WATER FROM THE SITE IS COMBINED WITH THE FOUL WATER FROM THE BUILDINGS AND DISCHARGED INTO THIS SEWER.

THE SURFACE WATER WILL BE RESTRICTED TO A PRACTICAL MINIMUM OF 2 l/S TO ENSURE THE OUTFALL IS LARGE ENOUGH (GREATER THAN 75mm DIAMETER) TO REDUCE THE RISK OF BLOCKAGES. ATTENUATION WILL BE PROVIDED WITHIN THE ATTENUATION TANK TO ACCOMMODATE THE 1 IN 100 YEAR RETURN PERIOD (+40% CLIMATE CHANGE) IN ACCORDANCE WITH YORKSHIRE WATER DESIGN CRITERIA. ALSO SEE 1572-001-005 DRAINAGE MAINTENANCE STRATEGY FOR FURTHER INFORMATION.

Foul Water Drainage Schedule

MH Nos	C.L.	I.L.	Depth	Type	Diam	Notes
CW MH1	196.40m	193.85m	2.55m	Concrete	Ø1200	
FW MH1	196.40m	193.95m	2.45m	Concrete	Ø1200	
FW MH2	198.37m	194.75m	3.62m	Concrete	Ø1200	
FW MH3	198.00m	195.65m	2.35m	Concrete	Ø1200	
FW IC1	196.85m	194.25m	2.60m	PPIC	Ø450	
FW IC2	197.35m	194.35m	3.00m	PPIC	Ø450	
FW IC3	197.35m	194.70m	2.65m	PPIC	Ø450	
FW IC4	197.95m	195.75m	2.20m	PPIC	Ø450	
FW IC5	197.95m	196.05m	1.90m	PPIC	Ø450	
FW IC6	197.35m	196.15m	1.20m	PPIC	Ø450	
FW IC7	197.35m	196.45m	0.90m	PPIC	Ø450	

Surface Water Drainage Schedule

MH Nos	C.L.	I.L/Sump	Depth	Type	Diam	Notes
SW MH1	196.45m	I.L. TO 300m Sump 193.45m	3.00m Deep	Concrete	Ø1200	Flow Control 2.7l/s Head 1.29m
SW MH2	197.10m	194.40m	3.10m	Concrete	Ø1200	Silt Trap Sump 193.50m
SW MH3	198.40m	195.50m	2.90m	Concrete	Ø1200	
SW MH4	196.50m	195.60m	2.90m	Concrete	Ø1200	
SW MH5	198.00m	196.05m	1.95m	Concrete	Ø1200	
SW MH6	197.10m	196.30m	0.80m	Concrete	Ø1200	
SW MH7	199.60m	198.40m	1.20m	Concrete	Ø1200	
SW IC1	196.85m	195.65m	1.20m	PPIC	Ø450	
SW IC2	196.85m	195.80m	1.05m	PPIC	Ø450	
SW IC3	197.35m	196.15m	1.20m	PPIC	Ø450	
SW IC4	197.35m	196.30m	1.05m	PPIC	Ø450	
SW IC5	197.95m	196.10m	1.85m	PPIC	Ø450	
SW IC6	197.95m	196.25m	1.70m	PPIC	Ø450	
SW IC7	197.35m	196.30m	1.05m	PPIC	Ø450	
SW IC8	197.35m	196.45m	0.90m	PPIC	Ø450	

DO NOT SCALE

NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT SSS, ARCHITECTS AND M&E CONSULTANTS DRAWINGS AND PROJECT SPECIFICATIONS.

2. ALL BUILDING DRAINAGE WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH BS EN:752 DRAINAGE AND SEWER SYSTEMS OUTSIDE BUILDING, THE CURRENT BUILDING REGULATIONS AND THE LOCAL AUTHORITY BUILDING CONTROL SPECIFICATIONS AND REQUIREMENTS.

3. ANY DRAINAGE AS DESIGNATED OUTSIDE OF THE SITE TO BE PUT FORWARD FOR ADOPTION SHALL BE CONSTRUCTED TO SEWERS FOR ADOPTION 6th EDITION' AND ANY SPECIFIC REQUIREMENTS OF THE ADOPTING AUTHORITY.

4. ALL INSITU AND PRECAST CONCRETE PRODUCTS SHALL COMPLY WITH THE RELEVANT PROVISIONS OF BS8500 AND BRE SPECIAL DIGEST 1 FOR SULPHATE EXPOSURE. FOR THE EXPOSURE CLASS REFER TO THE RECOMMENDATIONS OUTLINED IN THE SITE INVESTIGATION REPORT.

5. PRECAST CONCRETE PRODUCTS SHALL COMPLY WITH THE RELEVANT PROVISIONS OF BS 5911:2002, BS EN 1916:2002, AND BS EN 1917:2002 AND BE KITEMARKED. CONCRETE PIPES TO BE CLASS 120 UNLESS NOTED OTHERWISE AND COMPLY WITH THE REQUIREMENTS OF NOTE 4 ABOVE.

6. VITRIFIED CLAY PIPES AND FITTINGS SHALL COMPLY WITH THE RELEVANT PROVISIONS OF BS EN295 AND BS 65 RESPECTIVELY AND BE KITEMARKED. ALL PIPES SHALL BE CLASS 120 TO BS EN295.

7. ALL PLASTIC PIPES AND FITTINGS UPTO AND INCLUDING 110mm DIA. SHOULD BE PVC-U OSMADRAIN WITH FLEXIBLE JOINTS AND SMOOTH BORE TO BS4660 AND BS EN 1401 AND BE KITE MARKED (FOR FW & SW USE) 160mm, 225mm AND 300mm DIA PIPE SHOULD BE ULTRARIB PVC-U TO WIS4-25-01 SPECIFICATIONS WITH FLEXIBLE JOINTS AND SMOOTH BORE. PIPES SHOULD BE WATER INDUSTRY CERTIFIED AND KITEMARKED (FOR FW & SW USE) PLASTIC PIPES LARGER THAN 300mm DIA AND UP TO 600mm DIA SHOULD BE THERMOPLASTIC STRUCTURED WALL PIPES (TWIN WALL) TO WIS4-35-01 SPECIFICATION AND BE KITEMARKED. (FOR SURFACE WATER USE ONLY).

8. GULLY GRATES AND FRAMES SHALL COMPLY WITH THE RELEVANT PROVISIONS OF BS EN:124 AND BE OF NON-ROCKING DESIGN WITH CAPTIVE HINGE ACCESS AND BE KITEMARKED. LOAD CLASS D400 IN INDUSTRIAL ESTATE ROADS AND AREAS CARRYING REGULAR HEAVY TRAFFIC AND LOAD CLASS C250 IN ESTATE ROADS AND CAR PARKING AREAS. IN ALL ROAD LOCATIONS, THE GRATE SHALL BE HINGED ON THE SIDE OF THE TRAFFIC DIRECTION (LEFT HAND OPENING).

9. ALL EXTERNAL PIPEWORK TO BE LAID WITH A CLASS 'S' PIPE BEDDING DETAIL WITH 1.2M MINIMUM COVER TO THE PIPE BARREL UNDER VEHICULAR TRAFFICKED AREAS, 0.9m COVER UNDER FIELDS AND 0.6m COVER UNDER FOOTWAYS AND GARDENS, UNLESS OTHERWISE NOTED ON THE DRAWING WHERE COVER IS LESS THAN THAT STATED ABOVE, A CLASS 'Z' PIPE BEDDING DETAIL SHALL BE USED.

10. WHERE CONCRETE PROTECTION IS REQUIRED TO PIPEWORK, THE CONCRETE SHALL BE DISCONTINUED AT EACH PIPE JOINT OVER THE FULL CROSS SECTION OF THE CONCRETE BY MEANS OF A SHAPED COMPRESSIBLE FILLER.

11. WHERE TWO PIPELINES CROSS WITH LESS THAN 300mm BETWEEN PIPES, EACH PIPE SHOULD BE SURROUNDED WITH A FULL CONCRETE BED AND SURROUND (CLASS 'Z' DETAIL) FOR NOT LESS THAN 1m CENTERED ON THE CROSSING AND EXTENDED AS REQUIRED TO WITHIN 150mm OF THE NEAREST FLEXIBLE JOINT.

12. NO MECHANICAL COMPACTION OF FILL MATERIAL SHALL BE PERMITTED WITHIN 300mm ABOVE THE BARREL/CROWN OF THE PIPE.

13. UNDER TRAFFICKED AREAS BACKFILL ABOVE THE PIPE BEDDING MATERIAL SHALL BE IMPORTED HARD CLEAN GRANULAR MATERIAL UP TO FORMATION LEVEL (I.E. CRUSHED ROCK) ALL CRUSHED ROCK TO BE USED IN BACKFILL SHALL MEET THE FOLLOWING GRADING:-

125mm SIEVE 100% PASSING
100mm SIEVE 85-100% PASSING
37.5mm SIEVE 0-10% PASSING

14. IMPORTED GRANULAR BACKFILL MATERIAL SHALL BE PLACED IN LAYERS NOT EXCEEDING 225mm (LAYER THICKNESS TO BE DETERMINED BY THE CONTRACTOR TO SUIT COMPACTION PLANT, NUMBER OF PASSES, MATERIAL CLASSIFICATION AND LAYER THICKNESS ETC). EACH LAYER IS TO BE COMPACTED TO FORM A STABLE TRENCH BACKFILL.

15. UNDER LANDSCAPING AREAS BACKFILL ABOVE THE PIPE BEDDING MATERIAL SHALL BE SUITABLY SELECTED MATERIAL CONSISTING OF UNIFORM SOIL FREE FROM STONES LARGER THAN 40mm, CLAY LUMPS LARGER THAN 75mm, TREE ROOTS, ORGANIC MATTER AND FROZEN SOIL. BACKFILL MATERIAL IS TO BE PLACED IN LAYERS NOT EXCEEDING 150mm THICKNESS. SHOULD THE EXCAVATED MATERIAL BE UNSUITABLE OR WEATHER CONDITIONS AFFECT THE MATERIALS STABILITY, THEN A SUITABLE HARD GRANULAR MATERIAL SHALL BE USED UP TO FORMATION LEVEL. REFER TO NOTE13.

REV		BY	DATE
0		MH	-
0		MH	-
A	Updated Attenuation & Flow Control	MH	10/12/25

Status: Drawing Issue

Notes: Positions & levels related to OSTN15/OSGM15 (unless stated otherwise)

Survey Site Solutions Ltd
Land & Measured Building Surveys, Drainage Design
First Floor Swan House
20 Swan Street
Manchester
M4 5JW
TEL:-07563 539856
Email:-sss_ltd@btinternet.com

Survey Site Solutions Ltd
Land, Measured & Volumes Surveys
Site Setting Out & Site Engineering

Title: Proposed Drainage Details

Site: Acre House, Lindley

Client: North Point Living Development Ltd

Scale:	Date:	Drawn:	Checked:
N.T.S	10/12/25	MH	MH

Project No:	Drawing No:	Sheet:
1572	1572 001 003	1 of 1