NOTE: ALL DRAINAGE CONNECTIONS SHALL BE SOFFIT TO SOFFIT UNLESS DETAILED/NOTED OTHERWISE

NOTE: NO ADOPTABLE WORKS SHALL BE CARRIED OUT UNTIL FULLY APPROVED BY ADOPTING AUTHORITY. ANY WORKS CARRIED OUT PRIOR TO APPROVAL WILL BE UNDERTAKEN AT CONTRACTORS RISK.

NOTE: CONCRETE PROTECTION SHALL BE GRADE GEN 3 (C16/C20) COMPLYING WITH BRE SPECIAL DIGEST 1.

NOTE:
PRIOR TO CONSTRUCTION THE CONTRACTOR IS TO ENSURE THAT THE PROPOSED DRAINAGE DOES NOT CLASH WITH THE EXISTING SERVICES. THE CONTRACTOR IS TO ALLOW FOR THIS PROVISION WITHIN THE TENDER SUM.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ATTAINING ALL NECESSARY APPROVALS FOR ANY SERVICE DIVERSIONS REQUIRED TO FACILITATE THE PROPOSED WORKS

GENERAL NOTES

DO NOT SCALE OFF THIS DRAWING

D2.1 ALL MAIN SEWERS TO BE CONSTRUCTED IN ACCORDANCE WITH THE 'DESIGN AND CONSTRUCTION GUIDANCE FOR FOUL AND SURFACE WATER SEWERS OFFERED FOR ADOPTION' AND UNITED UTILITIES STANDARD DETAILS.

D2.2 ALL MATERIALS TO BE MARKED WITH BSI KITE MARK WHERE APPLICABLE.

D2.3 ALL DRAINAGE UNDER VERGES WITH LESS THAN 900MM OF COVER AND DRAINAGE UNDER THE HIGHWAY WITH LESS THAN 1200mm OF COVER WILL REQUIRE 150mm THICK CONCRETE BED AND SURROUND.

D2.4 ALL PIPES TO HAVE CLASS 'S' GRANULAR SURROUND WITH BEDDING FACTOR OF 2.2 UNLESS STATED OTHERWISE ON THE LONGITUDINAL SECTIONS AND TO BE CLASS 2 SULPHATE RESISTANT. GRANULAR MATERIAL FOR SURROUND TO BE EITHER 10, 14 OR 20mm NOMINAL SINGLE SIZED.

D2.5 STONE BACKFILL IS REQUIRED TO ALL SEWER TRENCHES UNDER VEHICULAR AREAS. AS DUG MATERIAL MAY BE USED ON OTHER AREAS SUBJECT TO THE WRITTEN APPROVAL OF THE DRAINAGE AUTHORITY.

D2.6 ALL CONCRETE PRODUCTS MANUFACTURED OR CAST INSITU TO BE SULPHATE RESISTANT UNLESS PROVED OTHERWISE BY SITE INVESTIGATION OR SUBSEQUENT TESTING.

D2.7 SEWERS MUST HAVE 5 METRES CLEARANCE FROM TREES AND HEDGES, WHERE IT IS NOT POSSIBLE TO ACHIEVE THIS CLEARANCE CONCRETE BED AND SURROUND IS REQUIRED.

D2.8 THE CHAMBER SIZE OF MANHOLES WITH MORE THAN ONE CONNECTION MAY NEED TO BE INCREASED AN INCREMENT TO ACCOMMODATE THE CONNECTIONS AND BENDS.

D2.9 MANHOLE COVERS MUST HAVE A MINIMUM CLEAR OPENING OF 600MM AND SHALL BE CLASS D400 TO BS EN 124 WITH 150mm DEEP FRAMES IN HIGHWAYS. SOME MANHOLES MAY REQUIRE DOUBLE COVER ACCESS, REFER TO MANHOLE SCHEDULES TO CONFIRM SIZES.

D2.10 FILLED GROUND MUST BE FILLED AND CONSOLIDATED UNDER THE SUPERVISION AND TO THE SATISFACTION OF UNITED UTILITIES BEFORE ANY SEWER WORKS ARE CARRIED OUT.

D2.11 ADOPTABLE SEWERS SHOULD BE A MINIMUM OF 1m AND MANHOLES 0.5m FROM KERB FACES AND SERVICE MARGINS

D2.12 ALL ABANDONMENTS MUST BE WITNESSED BY A UU REPRESENTATIVE FOR THE STATUS OF THE PIPE TO BE CHANGED ON THE PUBLIC SEWER RECORDS. MINIMUM 72 HOURS NOTICE WILL BE PROVIDED.

D2.13 CONNECTIONS OF SEWERS TO BE ABANDONED TO THE LIVE SEWERS SHALL BE CAPPED TO THE APPROVAL OF THE UNITED UTILITIES REPRESENTATIVE.

D2.14 PIPE MATERIALS INDICATED ON THIS DRAWING ARE AS REQUIRED BY UNITED UTILITIES. ALTERNATIVE MATERIALS TO THOSE LISTED ON THIS DRAWING MAY BE OFFERED TO UNITED UTILITIES FOR APPROVAL.

S104 DRAINAGE KEY

- SITE BOUNDARY
- NEW S104 COMBINED SEWER
- NEW S104 SURFACE WATER SEWER
- NEW S104 FOUL WATER SEWER
- NEW MANHOLE - REFER TO PLAN FOR SIZE
- EX COM — EX COMBINED DRAIN/SEWER
- EX SW — EX SURFACE WATER DRAIN/SEWER
- EX FW — EX FOUL WATER DRAIN/SEWER
- SURFACE WATER PRIVATE DRAIN
- FOUL WATER PRIVATE DRAIN
- SEWER EASEMENT

Rev	Description	Date	By	Chkd
P02	AMENDED TO UU COMMENTS	13.04.26	MG	DS
P01	DRAINAGE AMENDED TO SUIT NEW SITE LAYOUT	17.02.26	KW	DS

Drawing Status
S4 TECHNICAL DESIGN

Sutcliffe
Structural & Civil Engineering
Geotechnical & Environmental Investigations
Building Surveying
Pre Planning Services
Liverpool Head Office: 0151 227 3155
Manchester Office: 0161 817 5160
North Wales Office: 01978 664 671
London Office: 020 8016 4320
www.sutcliffe.co.uk

Client
MOSSCARE ST.VINCENTS HOUSING

Project
ALDERFORD PARADE
CHEETHAM HILL
MANCHESTER

Drawing Title
S104 DRAINAGE LAYOUT

Date	Drawn By	Checked By
FEB. 2025	JW	DS

Scale at A1	Project Number
1:500	33716

Sheet Number: 33716-SUT-ZZ-XX-DR-C-6550
Revision: P02

DESIGN CONTINGENCY

FOR COST PURPOSES THE CONTRACTOR IS TO INCLUDE THE FOLLOWING CONTINGENCY (% OF PRIMARY CIVILS DESIGN COST) AT THE RELEVANT PROJECT STATUS INDICATED ON THE DRAWING.

RIBA STAGE 2 - CONCEPT DESIGN - 25%
RIBA STAGE 3 - SPATIAL COORDINATION - 15%
RIBA STAGE 4 - TECHNICAL DESIGN - 10%
RIBA STAGE 5 - PRODUCTION INFORMATION - 5%

SCALE BAR 1:500
0 10 20 30 40 50

N

ALDERFORD PARADE
WATERLOO ROAD
DEERHURST DRIVE
Baycliffe Walk
Newmill Walk
Boxgrove Walk
New road
Nursery
Sub-Station
Bollards
TAMERTON DRIVE
NEWPARK WALK
STARMOOR DRIVE
BRINSWORTH DRIVE
HEATHERDALE DRIVE
ALDERGLEN ROAD
Milston Walk
Open Space Retained
Communal Amenity Space
Bins/Cycles
blank gable

EX UU0741 CL: 61.23 IL: 56.66
EX UU0717 CL: 60.94 IL: 58.14
EX UU0701 CL: 60.53 IL: 58.08
EX UU1702 CL: 61.31 IL: 58.88
EX UU0508 CL: 58.51 IL: 56.08
EX UU9613 CL:59.65 IL:56.31 D:3.34

MH01 CL:60.657 IL:56.876
MH02 CL:60.741 IL:56.815
MH03 CL:60.397 IL:56.668
MH04 CL:59.524 IL:56.614
MH05 CL:59.283 IL:56.590
MH06 CL:59.382 IL:56.483
MH07 CL:59.626 IL:56.404

MH08
CL:59.67
IL:56.36
FLOW CONTROL MH
Q=5.0l/s @ 2.7m DESIGN HEAD
ORIFICE = 85mm
REF: SHE-0085-5000-2700-5000

PR DIV 01 CL: 59.503 IL: 56.81
PR DIV 02 CL: 59.205 IL: 56.597
PR DIV 03 CL: 58.775 IL: 56.233

1500 VC 1/1930 4.966m 1.007 BEDDING TYPE S
1200Ø CONC 1/400 17.541m 1.000 BEDDING TYPE S
1200Ø CONC 1/400 37.656m 1.000 BEDDING TYPE S
1200Ø CONC 1/400 42.620m 1.004 BEDDING TYPE S
1200Ø CONC 1/400 24.100m 1.000 BEDDING TYPE S
1200Ø CONC 1/400 56.626m 1.001 BEDDING TYPE S
1200Ø CONC 1/400 21.783m 1.002 BEDDING TYPE S
300Ø 1/70 25.50m 1.002 VC
300Ø 1/70 14.90m 1.001 VC