



Existing
M/H
C/L
197.651

DRAINAGE NOTES:

- DRAINAGE SYSTEMS TO COMPLY WITH THE FOLLOWING STANDARDS:
 - BS EN 752:2008
 - BUILDING REGULATIONS APPROVED DOCUMENT PART H, 2015 EDITION
 - NHBC STANDARDS CHAPTER 5.3, 2017 EDITION
 - NHBC STANDARDS PLUS, 2017
- ALL COMPONENTS USED IN DRAINAGE SYSTEMS TO COMPLY WITH THE FOLLOWING: BS EN 476:2011
- ALL DRAINAGE SYSTEMS AND COMPONENTS TO BE CONSTRUCTED AND TESTED TO THE FULL SATISFACTION OF BOTH BUILDING REGULATIONS AND WARRANTY PROVIDER INSPECTORS
- ALL DRAINAGE TO BE CONSTRUCTED AND TESTED IN ACCORDANCE WITH BS EN 1610:2015
- V.C. DENOTES VITRIFIED CLAY, VITRIFIED CLAY PIPES AND FITTINGS TO COMPLY WITH THE RELEVANT PROVISIONS OF BS EN295-1:2013, 2-2013, 3-2012 AND BS 65 RESPECTIVELY AND BE KITEMARKED. ALL PIPES SHALL BE EXTRA STRENGTH TO BS 65 OR EQUIVALENT BS EN295 PIPE CRUSHING STRENGTH.
- LATERAL DRAIN CONNECTIONS (PIPES CONNECTING INTO ADAPTABLE SEWERS) TO BE VITRIFIED CLAY. WHERE COVER IS LESS THAN 1.2m TO GROUND LEVEL PIPE PROTECTION IS REQUIRED IN THE FORM OF A CONCRETE COVER SLAB.
- PVC-U DENOTES UNPLASTICISED POLYVINYL CHLORIDE. PVC-U PIPES AND FITTINGS TO COMPLY WITH THE RELEVANT PROVISIONS OF BS EN1472 AND BS4460:1989/2000 RESPECTIVELY AND BE KITEMARKED.
- PRECAST CONCRETE MANHOLES TO BE IN ACCORDANCE WITH BS EN 1917:2002 AND BS 5911-3:2010-4:2002 AND TO BE KITEMARKED. PRECAST CONCRETE RINGS AND COVER SLABS TO CONCRETE PIPES TO BE JOINED WITH CEMENT MORTAR UNLESS NOTED OTHERWISE.
- INSITU AND PRECAST CONCRETE UNITS SHALL HAVE SULPHATE RESISTING PORTLAND CEMENT TO BS EN 197-1:2011.
- POLYPROPYLENE INSPECTION CHAMBERS TO COMPLY WITH BS EN 13598-1:2010, 2:2016 AND BS 7158:2001 AND TO BE KITEMARKED.
- MANHOLE COVERS AND FRAMES SHALL COMPLY WITH THE RELEVANT PROVISIONS OF BS EN 124-1 TO 6:2015. MANHOLE COVERS AND FRAMES TO BE OF A NON-ROCKING DESIGN WITH CUSHION INSERTS AND KITEMARKED. LOAD CLASS A15 COVERS TO BE USED IN AREAS INACCESSIBLE TO VEHICLES; LOAD CLASS B125 COVERS TO BE USED IN FOOTWAYS; LOAD CLASS D400 COVERS TO BE USED IN PRIVATE ROADS. ALL COVERS TO BE BADGED 'FW' OR 'SW' AS APPROPRIATE. MANHOLE COVER SLABS AND ACCESS TO BE IN ACCORDANCE WITH CONCRETE PIPE ASSOCIATION TECHNICAL BULLETIN ISSUED SEPTEMBER 2001.

- POLYPROPYLENE INSPECTION CHAMBER COVERS AND FRAMES SHALL COMPLY WITH THE RELEVANT PROVISIONS OF BS EN 124-1 TO 6:2015. COVERS AND FRAMES TO BE OF A NON-ROCKING DESIGN WITH CUSHION INSERTS AND KITEMARKED. LOAD CLASS A15 COVERS TO BE USED IN AREAS INACCESSIBLE TO VEHICLES; LOAD CLASS B125 COVERS TO BE USED IN FOOTWAYS; LOAD CLASS D400 COVERS TO BE USED IN PRIVATE ROADS.
- ROAD GULLY GRATES AND FRAMES SHALL COMPLY WITH THE RELEVANT PROVISIONS OF BS EN 124-1 TO 6:2015 AND BE OF A NON-ROCKING DESIGN WITH LEFT HANDED CAPTIVE HINGE ACCESS AND BE KITEMARKED. LOAD CLASS D400 GRATES TO BE USED IN PRIVATE ROADS. TYPE D400/450 GRATE AND FRAME. MINIMUM AREA OF WATERWAY TO BE 1010cm².
- DRAINAGE CHANNELS TO BE ACO M1000 0.0 MULTIDRAIN CHANNEL (0.5A) FITTED WITH SLOTTED DUCTILE IRON GRATING. GRATES SHALL COMPLY WITH THE RELEVANT PROVISIONS OF BS EN 124-1 TO 6:2015 AND BE KITEMARKED. LOAD CLASS A15 GRATES TO BE USED IN AREAS INACCESSIBLE TO VEHICLES; LOAD CLASS B125 GRATES TO BE USED IN FOOTWAYS; LOAD CLASS D400 GRATES TO BE USED IN PRIVATE ROADS, SUMP UNIT AND SILT BUCKET UNITS TO BE USED ON ALL GULLIES.
- CLASS Z BEDDING DETAIL SHALL BE PROVIDED:
 - WHERE COVER TO PIPE BARREL IS:
 - i) <1.2m IN VEHICULAR TRAFFICKED AREAS
 - ii) <0.9m IN AREAS INACCESSIBLE TO VEHICLES.
 - AT ALL ROAD GULLY, RWP, SVP AND DRAINAGE CHANNEL BRANCHES.
 - AREAS OF DEEP ROOTING VEGETATION.
 - PIPE RUNS NEAR BUILDINGS IN ACCORDANCE WITH TYPICAL SECTIONS ON AWP DRAWING 1003.
 - WHERE TWO PIPES CROSS WITH A CLEAR GAP OF <300mm, CLASS Z SURROUND TO EXTEND A MINIMUM OF 1.0m FROM THE CENTRE OF THE CROSSING POINT & EXTENDED TO WITHIN 150mm OF THE NEAREST FLEXIBLE JOINT, WHERE REQUIRED.
- CLASS 'Y' BEDDING DETAIL TO BE PROVIDED TO ALL PIPEWORK BENEATH BUILDING FOOTPRINT WITH ROCKER PIPES PROVIDED AS CLOSE AS POSSIBLE TO BUILDING STRUCTURE WHERE PIPE EXITS
- NO MECHANICAL COMPACTION OF FILL MATERIAL WITHIN 300mm OF THE CROWN OF ANY PIPE.

THE VERSIONS OF BRITISH STANDARDS AND OTHER PUBLICATIONS LISTED ABOVE ARE CURRENT AT THE TIME OF THE DRAWING ISSUE. HOWEVER IF THESE HAVE BEEN REVISED OR UPDATED THEN THE NEWER VERSIONS SHOULD BE USED. ANY DISCREPANCIES SHOULD BE NOTIFIED TO AWP IMMEDIATELY.

NOTES:

- THESE NOTES ARE INTENDED TO AUGMENT DRAWINGS AND SPECIFICATIONS. WHERE CONFLICT OF REQUIREMENTS EXIST THE ORDER OF PRECEDENCE SHALL BE AS SHOWN IN THE SPECIFICATION. OTHERWISE THE STRICTEST PROVISION SHALL GOVERN.
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ENGINEERS AND ARCHITECTS DRAWINGS.
- DRAWINGS NOT TO BE SCALED. ALL DIMENSIONS TO BE CHECKED ON SITE BY THE CONTRACTOR. ANY DISCREPANCIES TO BE NOTIFIED TO THE ENGINEER AND FURTHER INSTRUCTIONS OBTAINED BEFORE WORK IS COMMENCED.
- ALL LEVELS ARE AOD (ABOVE ORDNANCE DATUM) UNO.

KEY

- DEVELOPMENT BOUNDARY
- PROPOSED SURFACE WATER DRAINAGE
- PROPOSED RAINWATER PIPE
- PROPOSED GULLY
- PROPOSED S104 ATTENUATION TANK
- PROPOSED FOUL WATER DRAINAGE
- PROPOSED MINI ACCESS CHAMBER
- PROPOSED SOIL VENT PIPE
- PROPOSED WASH HAND BASIN
- PROPOSED TOILET
- PROPOSED BACK INLET GULLY
- PROPOSED S104 SURFACE WATER DRAINAGE
- PROPOSED S104 FOUL WATER DRAINAGE
- EXISTING SURFACE WATER SEWER
- EXISTING SURFACE WATER CHAMBER
- EXISTING FOUL WATER SEWER
- EXISTING FOUL WATER CHAMBER
- 2.5m STAND-OFF DISTANCE

POP-UP LOCATIONS SHOWN INDICATIVELY TO BE CONFIRMED BY ARCHITECT PRIOR TO CONSTRUCTION.

P2	GENERALLY UPDATED	24.06.26	HD	SC	--
P1	FIRST ISSUE	12.05.26	MJC	SC	--
Rev	Description	Date	By	Ck	App

Alan Wood & Partners
www.alanwood.co.uk

Locations:
Hull
Leeds
Lincoln
Scarborough
Sheffield
Stockton-on-Tees
York

Issuing Office:
Hull Office
341 Beverley Road
Hull
HU5 1LD

eng@alanwood.co.uk
T. 01482 442138

Project:	PROPOSED DEVELOPMENT AT LAND OFF WATERMILL GARDENS, PENISTONE				
Client:	MULGRAVE PROPERTY GROUP LTD				
Drawing:	PRIVATE DRAINAGE LAYOUT				
Role:	CIVIL ENGINEER				
Drawing Status:	FOR APPROVAL				Suitability Code: S4
Job no.:	47480	Scale@ A1:	AS NOTED	Rev.	P2
Project Originator	Zone	Level	Type	Role	Number
MDL	- AWP	- ZZ	- XX	- D	- C - 3350