

DRAINAGE NOTES

- (THESE NOTES APPLY TO ALL ADOPTABLE DRAINAGE WORKS)
- ALL ADOPTABLE SEWER WORKS AND MATERIALS ARE TO BE IN ACCORDANCE WITH DESIGN AND CONSTRUCTION GUIDANCE (DCC) CODE FOR ADOPTION, THE RELEVANT BRITISH/EUROPEAN AND IWL'S STANDARDS/REQUIREMENTS/ADDITION TO THE MECHANICAL AND ELECTRICAL SPECIFICATION AND KITEMARKED.
 - MANHOLE COVERS SHALL HAVE A CLEAR OPENING OF 600mm AND SHALL BE CLASS D400 TO BS EN 124 WITH 150mm DEEP FRAMES IN HIGHWAYS.
 - FILLED GROUND MUST BE FILLED AND CONSOLIDATED UNDER THE SUPERVISION AND TO THE SATISFACTION OF IWL BEFORE ANY SEWER WORKS ARE CARRIED OUT.
 - IWL IS NOT OBLIGED TO ACCEPT FILTER DRAIN/LAND DRAINAGE RUN-OFF INTO THE PUBLIC SEWER NETWORK OR ADOPTABLE DRAINAGE SYSTEM (DIRECTLY OR IN-DIRECTLY). AN ALTERNATIVE METHOD OF DISPOSAL OF THE LAND DRAINAGE RUN-OFF WILL THEREFORE BE REQUIRED AND YOU WILL HAVE TO LIAISE WITH THE LOCAL AUTHORITY, LAND DRAINAGE SECTION WITH REGARD TO THE DISPOSAL OF THE FILTER DRAIN/LAND DRAINAGE RUN-OFF.
 - COVER SLABS MUST CARRY THE BS KITEMARK OR WILL BE REJECTED BY IWL INSPECTOR. WHERE THE CLEAR OPENING OF THE KITEMARKED PRODUCT IS DIFFERENT TO THAT OF THE COVER AND FRAME, A LOAD BEARING SLAB SHOULD BE FITTED ABOVE THE COVER SLAB TO BRING THE SIZE DOWN TO 600mm x 600mm FOR THE IWL SPECIFIED COVER SIZE.
 - SULPHATE RESISTANT CEMENT (C20-0C2) AND PRECAST CONCRETE PRODUCTS MUST BE USED OR A LABORATORY REPORT PROVIDED PROVING THAT SUCH PRECAUTIONS ARE NOT NECESSARY.
 - SEWERS MUST HAVE 3m CLEARANCE FROM TREES AND 1.5m FROM SHRUBS / BUSHES.
 - SEWERS TO BE LAID IN CLASS 'S' BEDDING AND SURROUND WHERE DEPTH OF COVER TO TOP OF THE SEWER IS LESS THAN 1.2m IN HIGHWAYS AND VERGES (OR LESS THAN 900mm IN NON VEHICULAR ACCESS AREAS) THEN A CONCRETE SLAB SHOULD BE PROVIDED ABOVE THE GRANULAR BED AND SURROUND.
 - BEDDING AND BACKFILL MATERIAL IS TO CONFORM TO THE REQUIREMENT OF WATER INDUSTRY SPECIFICATION 4-08-02 (TABLE A2).
 - THE CHAMBER SIZE OF MANHOLES WITH MORE THAN ONE CONNECTION IN THEM MAY NEED TO BE INCREASED TO ACCOMMODATE THE CONNECTIONS AND BENDS.
 - IWL POLICY IS THAT TYPE 'C' BRICK MANHOLES AND 1050mm DIA MANHOLE RINGS ARE NOT PREFERRED. INSTEAD IT IS PREFERRED THAT YOU USE A TYPE 'B' MANHOLE WITH 1200mm DIA OR 1500mm DIA RINGS, WITH THE OPENING SITED OVER THE CHANNEL WHERE DEPTH OF COVER TO PIPE SOFFIT IS BETWEEN 1-1.5m.
 - ADOPTABLE PLASTIC SEWER PIPES TO BE BS KITEMARKED (CERTIFIED TO BS 4-35-01 AND BS/EN13476) AND TO THE RELEVANT BRITISH STANDARDS (SOLID WALL PVC-U TO BS EN 1401, SPIRAL WOUND WELDED HOPE TO EN 13476 PARTS 1 & 2, STRUCTURE WALL, THERMOPLASTIC TO EN 13476 PARTS 1 & 2, POLYPROPYLENE TO BS EN 1852). ADOPTABLE PLASTIC SEWER PIPES ARE TO BE LAID IN MAXIMUM 3m LENGTHS UNLESS THERE IS A SPECIFIC OPERATIONAL NEED TO LAY LONGER LENGTHS. PLASTIC CHANNEL SECTIONS IN MANHOLES ARE NOT ACCEPTABLE AND IWL WOULD PREFER GLASSWARE CHANNELS IN MANHOLES. WE HAVE FOUND THAT PLASTIC CHANNELS ARE DIFFICULT TO SET IN CONCRETE BECAUSE THEY FLOAT AND A SATISFACTORY FINISH CANNOT BE OBTAINED ON THE BENCHING.
 - WHERE A G125 COVER AND FRAME HAS BEEN APPROVED, THIS MUST NOT BE COATED IN PLASTIC AND MUST HAVE LIFTING EYES SUITABLY SIZED TO ACCOMMODATE STANDARD LIFTING KEYS. SCREW DOWN COVERS ARE NOT ACCEPTABLE.

DO NOT SCALE

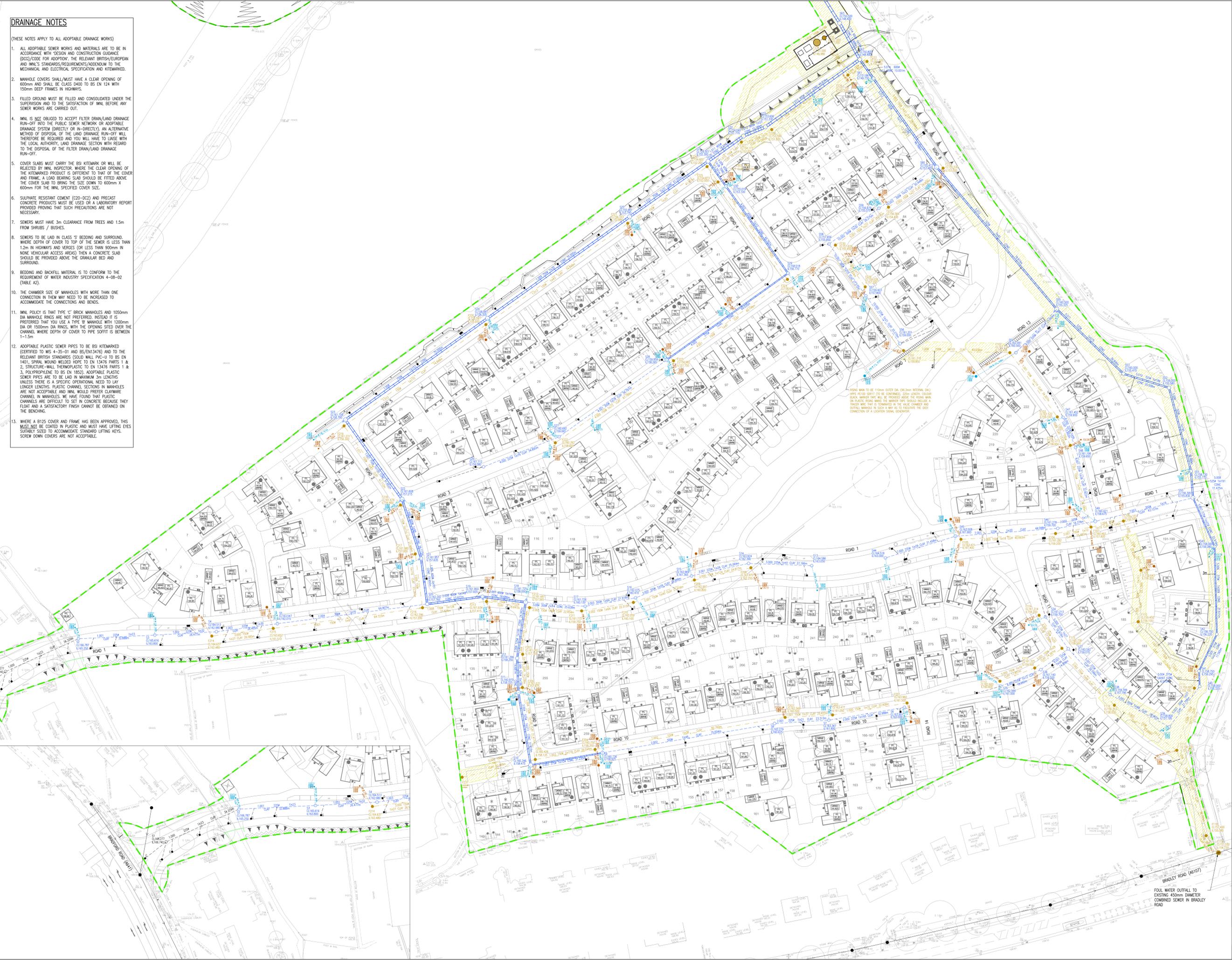


GENERAL NOTES

- THIS DRAWING IS BASED UPON REDROW HOMES SITE LAYOUT REFERENCE BYF-16-02-03 - PROPOSED SITE LAYOUT, AND MET GEO-ENVIRONMENTAL TOPOGRAPHICAL SURVEY DRAWING REFERENCE P16-01196 DATED FEB 2019.
- ALL LEVELS AND DIMENSIONS SHALL BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF ANY WORKS. ANY DISCREPANCIES SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER. IF IN DOUBT, ASK.
- ALL DRAINAGE WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH IWL'S SPECIFICATIONS/SPECIAL REQUIREMENTS.
- ALL BUILDING DRAINAGE WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH BS EN 752:2008 BUILDING REGULATIONS AND THE LOCAL AUTHORITY BUILDING CONTROL SPECIFICATIONS AND REGULATIONS.
- THE CONTRACTOR SHALL ALLOW FOR THE PROTECTION, TEMPORARY AND PERMANENT SUPPORT & DIVERSION WORKS AS NECESSARY TO ALL EXISTING SERVICES TO THE SATISFACTION OF THE PUBLIC UTILITY COMPANIES.
- THE CONTRACTOR SHALL ALLOW FOR OBTAINING ALL RELEVANT APPROVALS FROM THE RELEVANT AUTHORITIES WHEN WORKING IN THE PUBLIC HIGHWAY AND ON SEWERAGE SYSTEMS.
- UPON COMPLETION OF THE WORKS, THE CONTRACTOR SHALL CLEAN ALL DRAINAGE BY JETTING, REMOVING ALL DEBRIS FROM SITE. NO DEBRIS SHALL BE PERMITTED TO ENTER THE PUBLIC DRAINAGE OR WATERCOURSE SYSTEM. ALL DRAINS SHALL BE CCTV SURVEYED WITH THE DVD/CD PASSED TO THE ENGINEER FOR REVIEW.

KEY

- DEVELOPMENT BOUNDARY
- EXISTING PUBLIC COMBINED DRAINAGE
- EXISTING PUBLIC SURFACE WATER DRAINAGE
- EXISTING PUBLIC FOUL WATER DRAINAGE
- PROPOSED FOUL WATER SEWER/MANHOLE (S104)
- PROPOSED SURFACE WATER SEWER/MANHOLE (S104)
- PROPOSED SURFACE WATER SEWER/MANHOLE >300 DIA (S104)
- PROPOSED HIGHWAY DRAINAGE
- PROPOSED FOUL WATER BACKDROP
- PROPOSED SURFACE WATER BACKDROP
- PROPOSED FOUL WATER LATERAL/DEMARCATION CHAMBER
- PROPOSED SURFACE WATER LATERAL/DEMARCATION CHAMBER
- PROPOSED FOUL RISING MAIN (S104)
- ROAD/HIGHWAY GULLY (DG DENOTES DOUBLE GULLY)
- DRAINAGE EASEMENT
- PROPOSED SERVICE MARGIN
- PROPOSED FINISHED FLOOR LEVEL



SUBJECT TO THE APPROVAL OF KIRKLEES COUNCIL

SUBJECT TO THE APPROVAL OF THE IWL

REV	DATE	BY	DESCRIPTION	APPROVED
D	JUNE 2023	MA	GULLIES ADDED TO PROVIDE MAX 1800mm DIA PIPES 1000mm DIA MANHOLE TO PLASTIC	MA
C	MAY 2023	MA	AMENDED TO PRIVATE DRAINAGE DESIGN	MA
B	NOV 2022	MA	AMENDED TO INCLUDE GULLIES NOT ACC	MA
A	NOV 2022	MA	AMENDED FOLLOWING INTERNAL REVIEW	MA



PROJECT:	BRADLEY VILLA FARM HUDDERSFIELD		
FILE:	S104 ADOPTABLE DRAINAGE LAYOUT SHEET 1 OF 2		
SCALE @:	1:500	DESIGN/DRAWN:	MML
PROJECT NO:	4607	APPROVED:	MMK
		DATE:	JAN 22
		REV:	D

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