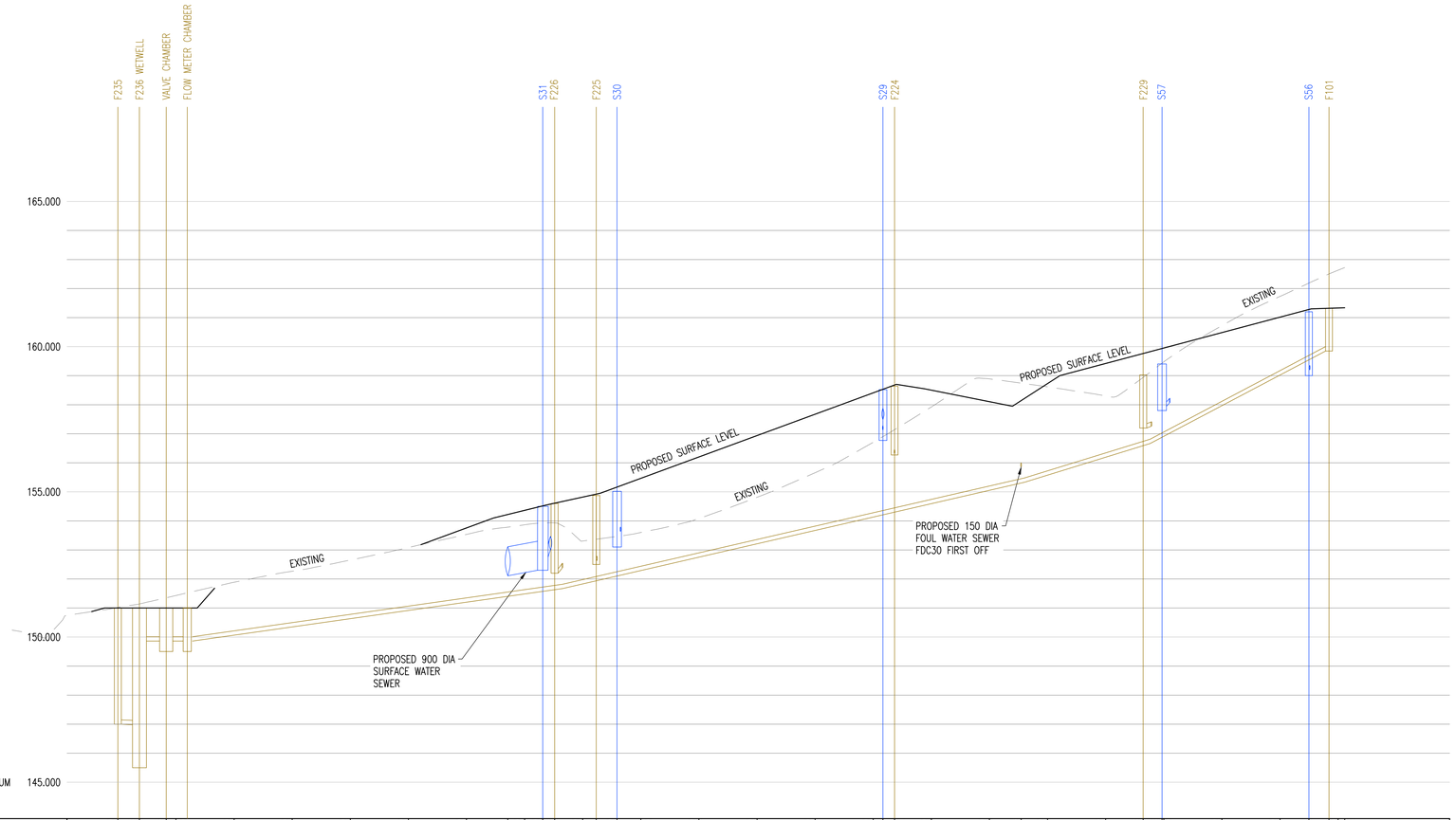

CHAINAGE	0.000	3.715	8.315	10.000	20.000	30.000	40.000	50.000	60.000	67.111	70.000	73.120	75.163	80.000	82.327	85.910	90.000	100.000	110.000	120.000	130.000	131.671	133.672	140.000	150.000	155.458	160.000	170.000	176.455	179.703	180.000	190.000	200.000	204.974	208.434	210.000	211.146
EXISTING GROUND LEVEL	151.021	151.140	151.351	151.430	151.885	152.267	152.650	153.083	153.534	153.786	153.921	153.931		153.369	153.466							156.902	157.142			158.743			158.938	159.433				162.188	162.505		162.722
PROPOSED GROUND LEVEL	151.000	151.000	151.000	151.000						154.222	154.500	154.600		154.921	155.164							158.518	158.636			158.144			159.763	159.935				161.279	161.318		166.34
SURFACE WATER COVER LEVEL											154.501				155.019							158.518							159.403					161.201			
SURFACE WATER INVERT										152.110	152.300				153.100							156.770							157.800					159.000			
FOUL WATER COVER LEVEL	151.000	151.000	151.000	151.000							154.600			154.873								158.636							159.028						161.318		
FOUL WATER INVERT	150.050	147.000	146.980	145.500	OL149.850	BL149.500	BL149.500	OL149.860			152.200			152.500								156.270				155.861			157.200					159.890	159.850		
FOUL WATER DETAILS					RISING MAIN OUTER DIA 110 (INTERNAL DIA 96.3) HPPE PE100 SDR17 (TO BE CONFIRMED) 1 IN 28									RISING MAIN OUTER DIA 110 (INTERNAL DIA 96.3) HPPE PE100 SDR17 (TO BE CONFIRMED) 1 IN 22														RISING MAIN OUTER DIA 110 (INTERNAL DIA 96.3) HPPE PE100 SDR17 (TO BE CONFIRMED) 1 IN 16					RISING MAIN OUTER DIA 110 (INTERNAL DIA 96.3) HPPE PE100 SDR17 (TO BE CONFIRMED) 1 IN 10						
FOUL WATER LENGTHS					65.734m									79.527m															21.613m					30.173m			

DRAINAGE NOTES

(THESE NOTES APPLY TO ALL ADOPTABLE DRAINAGE WORKS)

1. ALL ADOPTABLE SEWER WORKS AND MATERIALS ARE TO BE IN ACCORDANCE WITH 'DESIGN AND CONSTRUCTION GUIDANCE (DCG)/CODE FOR ADOPTION'. THE RELEVANT BRITISH/EUROPEAN AND IWNL'S STANDARDS/REQUIREMENTS/ADDENDUM TO THE MECHANICAL AND ELECTRICAL SPECIFICATION AND KITEMARKED.
2. MANHOLE COVERS SHALL/MUST HAVE A CLEAR OPENING OF 600mm AND SHALL BE CLASS D400 TO BS EN 124 WITH 150mm DEEP FRAMES IN HIGHWAYS.
3. FILLED GROUND MUST BE FILLED AND CONSOLIDATED UNDER THE SUPERVISION AND TO THE SATISFACTION OF IWNL BEFORE ANY SEWER WORKS ARE CARRIED OUT.
4. IWNL 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.
5. COVER SLABS MUST CARRY THE BSI KITEMARK OR WILL BE REJECTED BY IWNL 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 IWNL SPECIFIED COVER SIZE.
6. SULPHATE RESISTANT CEMENT (C20-DC2) AND PRECAST CONCRETE PRODUCTS MUST BE USED OR A LABORATORY REPORT PROVIDED PROVING THAT SUCH PRECAUTIONS ARE NOT NECESSARY.
7. SEWERS MUST HAVE 3m CLEARANCE FROM TREES AND 1.5m FROM SHRUBS / BUSHES.
8. 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 NONE VEHICULAR ACCESS AREAS) THEN A CONCRETE SLAB SHOULD BE PROVIDED ABOVE THE GRANULAR BED AND SURROUND.
9. BEDDING AND BACKFILL MATERIAL IS TO CONFORM TO THE REQUIREMENT OF WATER INDUSTRY SPECIFICATION 4-08-02 (TABLE A2).
10. THE CHAMBER SIZE OF MANHOLES WITH MORE THAN ONE CONNECTION IN THEM MAY NEED TO BE INCREASED TO ACCOMMODATE THE CONNECTIONS AND BENDS.
11. IWNL 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
12. ADOPTABLE PLASTIC SEWER PIPES TO BE BSI KITEMARKED (CERTIFIED TO WIS 4-35-01 AND BS/EN13476) AND TO THE RELEVANT BRITISH STANDARDS (SOLID WALL PVC-U TO BS EN 1401, SPIRAL WOUND WELDED HDPE TO EN 13476 PARTS 1 & 2, STRUCTURE-WALL THERMOPLASTIC TO EN 13476 PARTS 1 & 3, 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 IWNL WOULD PREFER CLAYWARE CHANNEL 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.
13. WHERE A B125 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.

SUBJECT TO THE APPROVAL OF KIRKLEES COUNCIL

SUBJECT TO THE APPROVAL OF IWNL

DO NOT SCALE

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GENERAL NOTES

1. THIS DRAWING IS BASED UPON REDROW HOMES SITE LAYOUT REFERENCE BVF-16-02-03 - PROPOSED SITE LAYOUT, AND MET GEO-ENVIRONMENTAL TOPOGRAPHICAL SURVEY DRAWING REFERENCE P18-01196 DATED FEB 2019.
2. 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.
3. ALL DRAINAGE WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH IWNL'S SPECIFICATIONS/SPECIAL REQUIREMENTS.
4. ALL BUILDING DRAINAGE WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH BSEN752:2008 BUILDING REGULATIONS AND THE LOCAL AUTHORITY BUILDING CONTROL SPECIFICATIONS AND REGULATIONS.
5. 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.
6. THE CONTRACTOR SHALL ALLOW FOR OBTAINING ALL RELEVANT APPROVALS FROM THE RELEVANT AUTHORITIES WHEN WORKING IN THE PUBLIC HIGHWAY AND ON SEWERAGE SYSTEMS.
7. 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.

REV	DATE	BY	DESCRIPTION	APPROVED
B	MAY 2023	MA	PS INFO UPDATED, FDC REFERENCE AMENDED TO FDC30	MA
A	NOV 2022	MA	AMENDED TO LATEST DRAINAGE DESIGN	MA

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MARKETING NAME:
-

PROJECT:
BRADLEY VILLA FARM
HUDDERSFIELD

TITLE:
LONGITUDINAL SECTION
RISING MAIN

SCALE @ A1:	DESIGN-DRAWN:	APPROVED:	DATE:
1:500H 1:100V	MML	MML	NOV 22

PROJECT No:	DRAWING No:	REV:
4607	4607-16-06-123	B

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