

1. DRAINAGE DESIGN AND CONSTRUCTION IS IN ACCORDANCE WITH SEWERS FOR ADIPTION 7TH EDITION, WELSH MINISTERS STANDARDS AND THE REQUIREMENTS OF THE STATUTORY UNDERGROUND.
2. ALL SWP, RWP AND BIG CONNECTIONS ARE INDICATIVE AND MUST BE CONFIRMED BY ARCHITECT
3. PIPE GRADIENTS OUT OF BUILDING TO CONNECTING MANHOLE TO BE LAID AN 1:40 IN ACCORDANCE WITH PART H OF THE 2002 BUILDING REGULATIONS. TABLE 6 ALL INVERTS TO SWP WITHIN 3 STOREY OF GRADE LEVEL MUST BE 750mm IN ACCORDANCE WITH BUILDING REGULATIONS.
4. TOLERANCES IN PIPE LAYING TO BE IN ACCORDANCE WITH SEWERS FOR ADIPTION 7TH EDITION CLAUSE 4.5.9
5. FOR PIPES 150-450mm DIA. ALL ROCKER PIPES TO BE IN ACCORDANCE WITH 'SEWERS FOR ADIPTION' 7TH EDITION.
6. ENGINEERING BRICKS SHALL NOT CONTAIN FROGS OR HOLES.
7. BRICKWORK TO MANHOLES TO BE ENGLISH BOND.
8. WHERE PIPES SURROUNDED IN CONCRETE, FLEXIBILITY TO BE MAINTAINED AT PIPE JOINTS BY THE USE OF SUITABLE 'COMPRESSIBLE MATERIAL' 'FLEXIBLE' OR 'FIBREBOARD'.
9. MANHOLE COVERS AND FRAMES MUST COMPLY WITH BS EN124 COVERS IN PIPES TO BE GRADE 400 AND BE 150mm DEEP. MANHOLE COVERS IN CAR PARKING AREAS AND DRIVES TO BE GRADE 400. WHILE NOT UNDESIRABLE, THEY MAY BE GRADE A15. ALL TO BE SIZED IN ACCORDANCE WITH PART H OF BUILDING REGULATIONS 2002, TABLES 11 & 12.
10. PIPEWORK MATERIALS AS SPECIFIED WITHIN SEWERS FOR ADIPTION 7TH EDITION.
 - 10a. CLAY PIPES SEE E2 18 SFA 7th.
 - 10b. PLASTIC PIPES SEE E2 21 SFA 7th.
 - 10c. CONCRETE PIPES SEE E2 18 SFA 7th.
11. GRANULITIC BENCHING TO MANHOLES TO BE 40mm THICKNESS MINIMUM.
12. PRECAST CONCRETE CHARGE RINGS TO BE SUITABLE.
13. THE SLOPE OF BENCHING IN ALL CASES SHOULD BE 1 IN 30.
14. MANHOLES SHALL NOT INCORPORATE DOUBLE SQUARE OR DOUBLE OBLIQUE CHANNEL JUNCTIONS IN THEIR INVERTS.
15. ALL INCOMING PIPES SHALL BE SURROUNDED WITH 150mm OF CONCRETE TO THE FACE OF THE COLLAR OF THE FIRST FLEXIBLE JOINT AND THE OUTGOING PIPE SHALL ALSO BE SURROUNDED TO 150mm OF THE FIRST FLEXIBLE JOINT AND A COMPRESSIBLE FILLER USED AS A FORMER BETWEEN THE CONCRETE SURROUND AND DOWNSTREAM PIPE COLLAR.
16. ALL UNDERGROUND SERVICES TO BE CONFIRMED BY CONTRACTOR TO BE LAYED OUT ON SITE. ANY DISCREPANCIES TO BE REPORTED TO ENGINEER.

17. THE MINIMUM DEPTH OF COVER TO THE CROWN OF GRAVITY PIPES WITHOUT PRECISION SHOULD BE AS FOLLOWS:
 - a) DOMESTIC AREAS AND PATHWAYS WITHOUT ANY POSSIBILITY OF VEHICULAR ACCESS, 0.35m;
 - b) DOMESTIC DRIVEWAYS, PARKING AREAS AND YARDS WITH HEIGHT RESTRICTIONS TO PREVENT ENTRY BY VEHICLES WITH A GROSS VEHICLE WEIGHT IN EXCESS OF 7.5 TONNES, 0.5m;
 - c) DOMESTIC DRIVEWAYS, PARKING AREAS AND NARROW STREETS WITH DRIVEWAYS (e.g., MEWS DEVELOPMENTS) WITH LIMITED ACCESS FOR VEHICLES WITH A GROSS VEHICLE WEIGHT IN EXCESS OF 7.5 TONNES, 0.9m;
 - d) OTHER CULTURAL, LAND AND PUBLIC OPEN SPACE, 0.9m;
 - e) OTHER HIGHWAYS AND PARKING AREAS WITH UNRESTRICTED ACCESS TO VEHICLES WITH A GROSS VEHICLE WEIGHT IN EXCESS OF 7.5 TONNES, 1.2m.
18. ROAD GULLIES TO BE TRAPPED FOR CONNECTION TO PROPOSED COMBINED SEWER.
19. NO DEEP OR WIDE ROUTED TREES TO BE PLANTED WITHIN CLOSE PROXIMITY OF THE PROPOSED AND EXISTING PUBLIC SEWER SYSTEM.

The developer must self-vet and certify that the design criteria, material standards and workmanship specifications for the proposed adoptable sewers are in accordance with those set out in "Sewers for Adoption" 7th Edition (SFA 7th), The Welsh Ministers Standards and the requirement of DCWW as the Statutory Sewerage Undertaker.

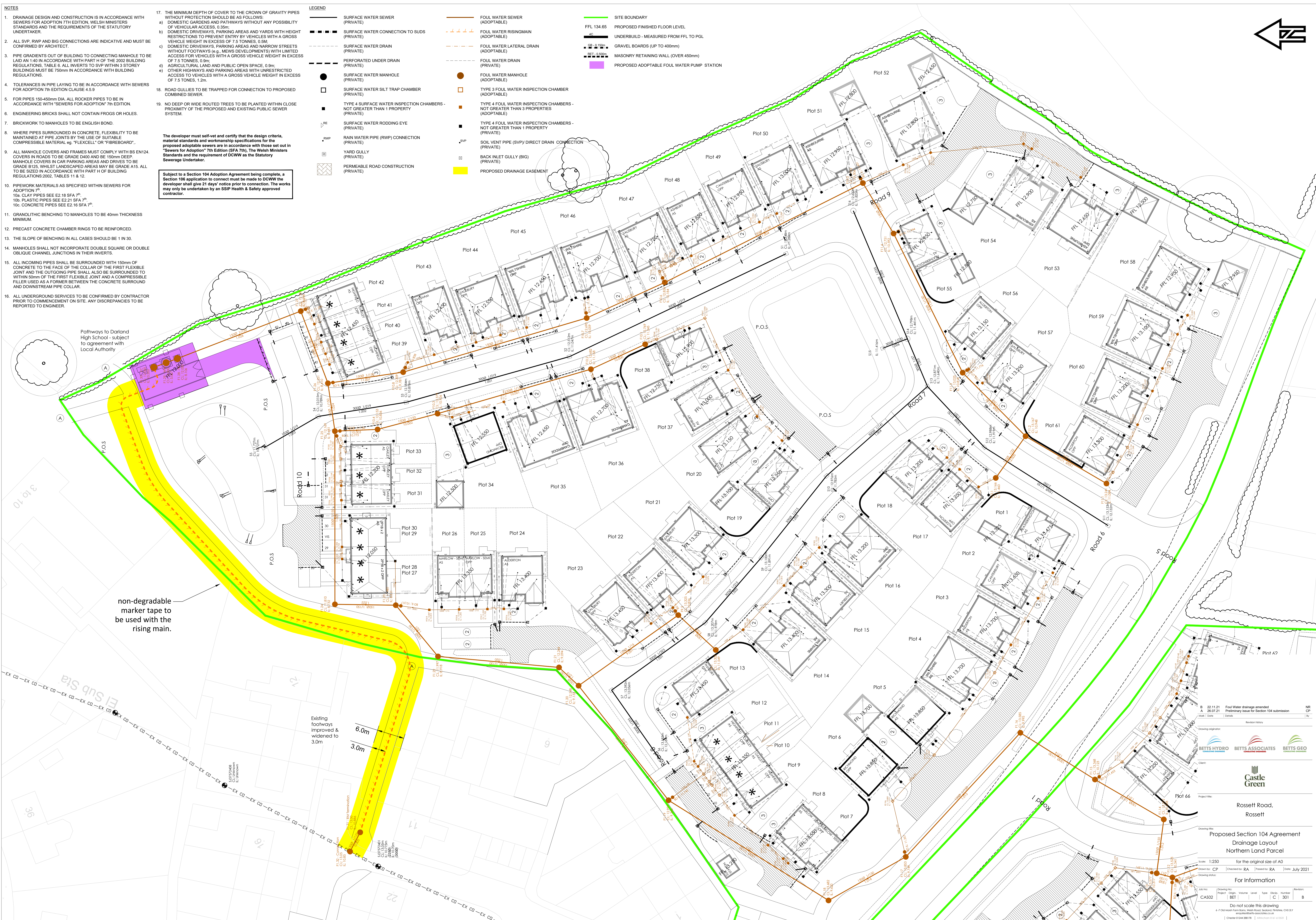
Subject to a Section 104 Adoption Agreement being complete, a Section 106 application to connect must be made to DCWW the developer shall give 21 days' notice prior to connection. The works may only be undertaken by an SSIP Health & Safety approved contractor.

11. GRANULOTITE BENCHING TO MANHOLES TO BE 40mm THICKNESS MINIMUM.
12. PRECAST CONCRETE CHAMBER RINGS TO BE REINFORCED.
13. THE SLOPE OF BENCHING IN ALL CASES SHOULD BE 1 IN 30.
14. MANHOLES SHALL NOT INCORPORATE DOUBLE SQUARE OR DOUBLE OBLIQUE CHANNEL JUNCTIONS IN THEIR INVERTS.
15. ALL INCOMING PIPES SHALL BE SURROUNDED WITH 150mm OF CONCRETE TO THE FACE OF THE COLLAR OF THE FIRST FLEXIBLE JOINT AND THE OUTGOING PIPE SHALL ALSO BE SURROUNDED TO WITHIN 50mm OF THE FIRST FLEXIBLE JOINT AND A COMPRESSIBLE FILLER USED AS A FORMER BETWEEN THE CONCRETE SURROUND AND DOWNSTREAM PIPE COLLAR.
16. ALL UNDERGROUND SERVICES TO BE CONFIRMED BY CONTRACTOR PRIOR TO COMMENCEMENT OF WORK ON SITE. ANY DISCREPANCIES TO BE REPORTED TO ENGINEER.

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|  | SURFACE WATER SEWER
(PRIVATE) |
|  | SURFACE WATER CONNECTION TO SU
(PRIVATE) |
|  | SURFACE WATER DRAIN
(PRIVATE) |
|  | PERFORATED UNDER DRAIN
(PRIVATE) |
|  | SURFACE WATER MANHOLE
(PRIVATE) |
|  | SURFACE WATER SILT TRAP CHAMBER
(PRIVATE) |
|  | TYPE 4 SURFACE WATER INSPECTION
NOT GREATER THAN 1 PROPERTY
(PRIVATE) |
|  | SURFACE WATER RODDING EYE
(PRIVATE) |
|  | RAIN WATER PIPE (RWP) CONNECTION
(PRIVATE) |
|  | YARD GULLY |
|  | PERMEABLE ROAD CONSTRUCTION
(PRIVATE) |

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- | | |
|--|---|
| | FOUL WATER SEWER (ADOPTABLE) |
| | FOUL WATER RISING MAIN (ADOPTABLE) |
| | FOUL WATER LATERAL DRAIN (ADOPTABLE) |
| | FOUL WATER DRAIN (PRIVATE) |
| | FOUL WATER MANHOLE (ADOPTABLE) |
| | TYPE 3 FOUL WATER INSPECTION CHAMBER (ADOPTABLE) |
| | TYPE 4 FOUL WATER INSPECTION CHAMBERS - NOT GREATER THAN 3 PROPERTIES (ADOPTABLE) |
| | TYPE 4 FOUL WATER INSPECTION CHAMBERS - NOT GREATER THAN 1 PROPERTY (PRIVATE) |
| | SOIL VENT PIPE (SVP) DIRECT DRAIN CONNECTION (PRIVATE) |
| | BACK INLET GULLY (BIG) (PRIVATE) |
| | PROPOSED DRAINAGE EASEMENT |

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- LEGEND:**
- SITE BOUNDARY
 - FFL 134.65
 - 40
 - GR - 0.150m
 - GB - 0.400m
 - RET - 0.500m
 - PROPOSED ADOPTABLE FOUL WATER PUMP STATION
- PROPOSED INFRASTRUCTURE:**
- PROPOSED FINISHED FLOOR LEVEL
 - UNDERBUILD - MEASURED FROM FFL TO PGL
 - GRAVEL BOARDS (UP TO 400mm)
 - MASONRY RETAINING WALL (OVER 450mm)
 - PROPOSED ADOPTABLE FOUL WATER PUMP STATION
- Plot 49**



non-degradable
marker tape to
be used with the
rising main.

Existing
footways
improved &
widened to
3.0m

B	22.11.21	Foul Water drainage amended	NR
A	26.07.21	Preliminary issue for Section 104 submission	CP
✓ Mark	Date	Details	By

Client

 Castle Green

Rossett Road,

Drawing title:
Proposed Section 104 Agreement
Drainage Layout
Northern Land Parcel

For Information									
Job No:	Drawing No:	Project	Origin:	Volume	Level	Type	Discp.	Number	Revision:
CAS02			BET				C	301	B

Do not scale this drawing

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