NOTES

1. DRAINAGE DESIGN AND CONSTRUCTION IS IN ACCORDANCE WITH SEWERS FOR ADOPTION 7TH EDITION, WELSH MINISTERS STANDARDS AND THE REQUIREMENTS OF THE STATUTORY UNDERTAKER.
2. ALL ADOPTABLE MATERIALS AND WORKMANSHIP TO CONFORM TO PART E OF SEWERS FOR ADOPTION 7TH EDITION.
3. ALL SVP, RWP AND BIG CONNECTIONS ARE INDICATIVE AND MUST BE CONFIRMED BY ARCHITECT.
4. 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 SVP WITHIN 3 STOREY BUILDINGS MUST BE 750mm IN ACCORDANCE WITH BUILDING REGULATIONS.
5. TOLERANCES IN PIPE LAYING TO BE IN ACCORDANCE WITH SEWERS FOR ADOPTION 7th EDITION CLAUSE 4.5.9
6. FOR PIPES 150-450mm DIA. ALL ROCKER PIPES TO BE IN ACCORDANCE WITH "SEWERS FOR ADOPTION" 7th EDITION.
7. ENGINEERING BRICKS SHALL NOT CONTAIN FROGS OR HOLES.
8. BRICKWORK TO MANHOLES TO BE ENGLISH BOND.
9. WHERE PIPES SURROUNDED IN CONCRETE, FLEXIBILITY TO BE MAINTAINED AT PIPE JOINTS BY THE USE OF SUITABLE COMPRESSIBLE MATERIAL eg. "FLEXCELL" OR "FIBREBOARD",.
10. ALL MANHOLE COVERS AND FRAMES MUST COMPLY WITH BS EN124. COVERS IN ROADS TO BE GRADE D400 AND BE 150mm DEEP. MANHOLE COVERS IN CAR PARKING AREAS AND DRIVES TO BE GRADE B125, WHILST LANDSCAPED AREAS MAY BE GRADE A15. ALL TO BE SIZED IN ACCORDANCE WITH PART H OF BUILDING REGULATIONS:2002, TABLES 11 & 12.
11. PIPEWORK MATERIALS AS SPECIFIED WITHIN SEWERS FOR ADOPTION 7th
    10a. CLAY PIPES SEE E2.18 SFA 7th.
    10b. PLASTIC PIPES SEE E2.21 SFA 7th.
    10c. CONCRETE PIPES SEE E2.16 SFA 7th.
12. GRANOLITHIC BENCHING TO MANHOLES TO BE 40mm THICKNESS MINIMUM.
13. PRECAST CONCRETE CHAMBER RINGS TO BE REINFORCED.
14. THE SLOPE OF BENCHING IN ALL CASES SHOULD BE 1 IN 30.
15. MANHOLES SHALL NOT INCORPORATE DOUBLE SQUARE OR DOUBLE OBLIQUE CHANNEL JUNCTIONS IN THEIR INVERTS.
16. 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.
17. ALL UNDERGROUND SERVICES TO BE CONFIRMED BY CONTRACTOR PRIOR TO COMMENCEMENT ON SITE. ANY DISCREPANCIES TO BE REPORTED TO ENGINEER.
18. THE MINIMUM DEPTH OF COVER TO THE CROWN OF GRAVITY PIPES WITHOUT PROTECTION SHOULD BE AS FOLLOWS:
    a) DOMESTIC GARDENS 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 WITHOUT FOOTWAYS (e.g., MEWS DEVELOPMENTS) WITH LIMITED ACCESS FOR VEHICLES WITH A GROSS VEHICLE WEIGHT IN EXCESS OF 7.5 TONNES, 0.9m;
    d) AGRICULTURAL 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 TONES, 1.2m.
19. ROAD GULLIES TO BE TRAPPED FOR CONNECTION TO PROPOSED COMBINED SEWER.
20. 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.

The Landscaping arrangements & Drainage design conforms to the requirements setout in B3.1.13 of SFA 7th.

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.

LEGEND

- SITE BOUNDARY
- FFL 134.65 — PROPOSED FINISHED FLOOR LEVEL
- 4C — UNDERBUILD - MEASURED FROM FFL TO PGL
- GB - 0.150m — GRAVEL BOARDS (UP TO 400mm)
- RET - 0.500m — MASONRY RETAINING WALL (OVER 450mm)
- FOUL WATER SEWER (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)
- SVP — SOIL VENT PIPE (SVP)/ DIRECT DRAIN CONNECTION (PRIVATE)
- BACK INLET GULLY (BIG) (PRIVATE)
- PROPOSED DRAINAGE EASEMENT
- THIRD PARTY LAND
- SURFACE WATER SEWER (PRIVATE)
- SURFACE WATER CONNECTION TO SUDS (PRIVATE)
- SURFACE WATER DRAIN (PRIVATE)
- SURFACE WATER MANHOLE (PRIVATE)
- SURFACE WATER SILT TRAP CHAMBER (PRIVATE)
- TYPE 4 SURFACE WATER INSPECTION CHAMBERS - NOT GREATER THAN 1 PROPERTY (PRIVATE)
- RE — SURFACE WATER RODDING EYE (PRIVATE)
- RWP — RAIN WATER PIPE (RWP) CONNECTION (PRIVATE)
- YARD GULLY (PRIVATE)
- PERMEABLE ROAD CONSTRUCTION (PRIVATE)
- IMPERMEABLE/STANDARD ROAD CONSTRUCTION (DCWW SERVICE CORRIDORS)
- IMPERMEABLE/STANDARD ROAD CONSTRUCTION

All private drives to be impermeable, standard construction

DCWW service corridors (standard road construction - Impermeable)

Sheared Drive/Access to be Impermeable *(standard road construction)*

Feature Table to be Impermeable *(standard road construction)*

DCWW service corridors (standard road construction - Impermeable)

Sheared Drive/Access to be Impermeable *(standard road construction)*

DCWW service corridors (standard road construction - Impermeable)

Footpath Link

Footpath Link

Rossett Road

Harwood's Lane

Adjacent Dwelling

Dwelling

P.O.S

Mark	Date	Details	By
I	28.11.23	Inspection chambers shown at start and end of underdrains, for inspection & maintenance	CP
H	09.10.23	Updated following SAB@Wrexham comments	CP
G	21.08.23	SAB Design amended	CP
F	21.07.22	Green colouring removed from earthworks line work	CP
E	12.07.22	Updated following DCWW comments	CP
D	10.03.22	Updated following review (F1.8 & F6.4)	CP
C	09.02.22	Drawing reviewed following S104 Comments	CP
B	22.11.21	Foul Water drainage amended	NR
A	26.07.21	Preliminary issue for Section 104 submission	CP

Revision history

Drawing originator:

BETTS HYDRO CONSULTING ENGINEERS · BETTS ASSOCIATES CONSULTING ENGINEERS · BETTS GEO CONSULTING ENGINEERS

Client:

Castle Green

Project title:

Rossett Road,
Rossett

Drawing title:

Proposed Section 104 Agreement
Drainage Layout
Southern Land Parcel

Scale:	1:250	for the original size of A0			
Drawn by: CP	Checked by: RA	Passed by: RA	Date: July 2021		
Drawing status:	For Information				

Job No:	Drawing No: Project	Origin	Volume	Level	Type	Discip.	Number	Revision:
CA502		BET				C	302	I

Do not scale this drawing

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