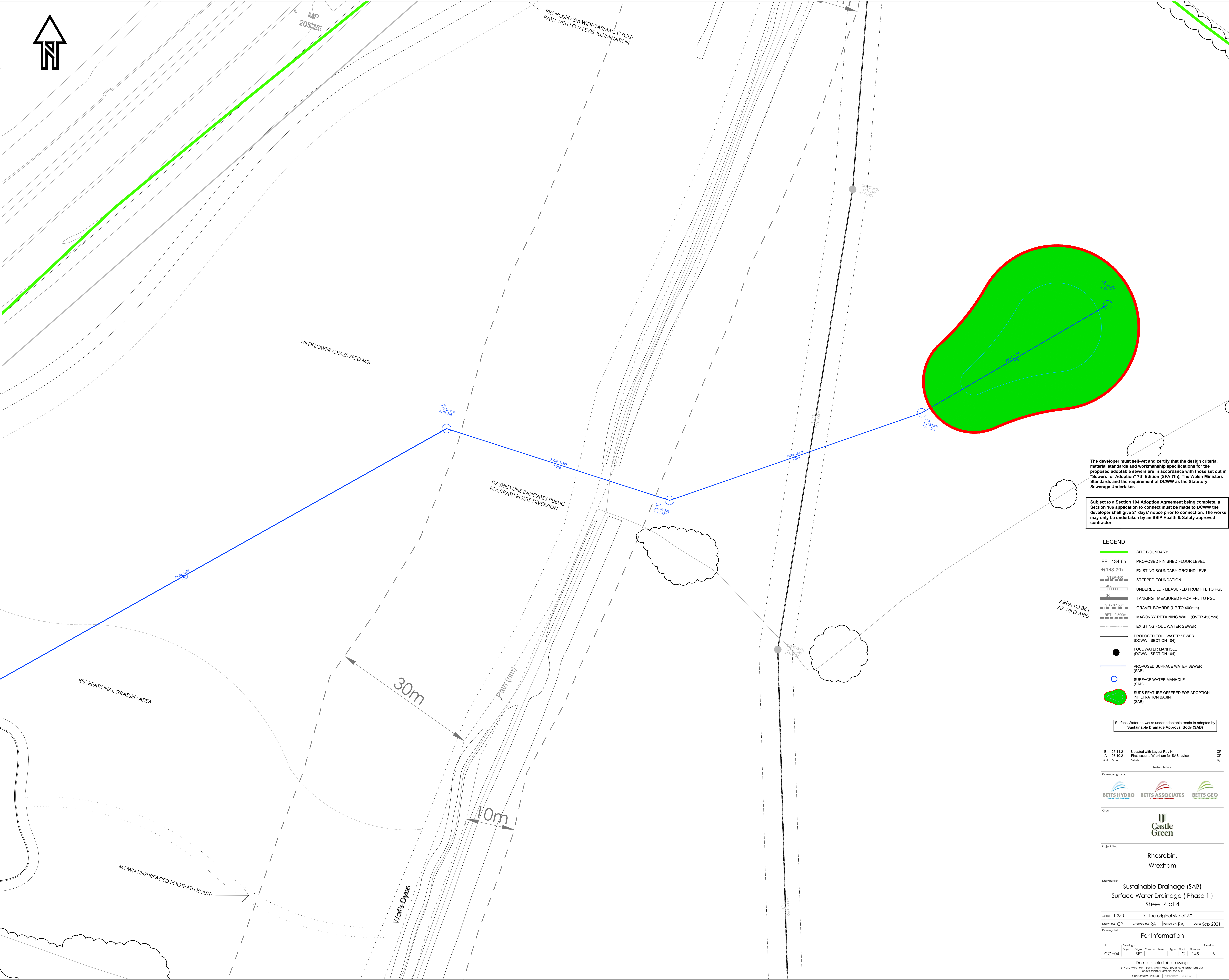


1. DRAINAGE DESIGN AND CONSTRUCTION IS IN ACCORDANCE WITH SPECIFICATIONS FOR ADOPTION 7TH EDITION, WELSH MINISTERS OF THE ENVIRONMENT AND THE REQUIREMENTS OF THE STATUTORY UNDERTAKER.
2. ALL SPV, RWP AND BIG CONNECTIONS ARE INDICATIVE AND MUST BE CONFIRMED BY ARCHITECT
3. PIPE GRADIENTS OUT OF BUILDING TO CONNECTING MANHOLE TO BE LAID AN 1:40 IN ACCORDANCE WITH PART 4 OF THE 2002 BUILDING REGULATIONS, TABLE 6. ALL INVERTS TO SPV WITHIN A STOREY BOUNDARY MUST BE 750mm IN ACCORDANCE WITH BUILDING REGULATIONS.
4. TOLERANCES IN PIPE LAYING TO BE IN ACCORDANCE WITH SEWERS, FOR ADOPITION 7TH EDITION CLAUSE 4.5.9
5. FOR PIPES 150-450mm DIA. ALL ROCKER PIPES TO BE IN ACCORDANCE WITH "SEWERS FOR ADOPTION" 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 JOINT POINTS BY THE USE OF SUITABLE COMPRESSIBLE MATERIAL, eg "FLEMSIC" OR "FIBREBOARD".
9. ALL MANHOLE COVERS AND TRAVELERS MUST COMPLY WITH BS EN254. CONCRETE ROADWAYS 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 4 OF BUILDING REGULATIONS-2002, TABLES 11 & 12.
10. PIPEWORK MATERIALS AS SPECIFIED WITHIN SEWERS FOR ADOPTION 7th.
 - 10a. CLAY PIPES SEE E2 18 5FA 7th.
 - 10b. PLASTIC PIPES SEE E2 18 5FA 7th.
 - 10c. CONCRETE PIPES SEE E2 18 5FA 7th.
11. GRANULITIC BENCHING TO MANHOLES TO BE 40mm THICKNESS MINIMUM.
12. PRECAST CONCRETE CHAMBER DEVS 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. THE OUTGOING PIPE SHALL ALSO BE SURROUNDED WITH 150mm OF THE FIRST FLEXIBLE JOINT AND A COMPRESSIBLE FILLER USED AS A FORTHER BETWEEN THE CONCRETE SURROUND AND THE OUTGOING PIPE.
16. ALL UNDERGROUND SERVICES TO BE CONFIRMED BY CONTRACTOR PRIOR TO COMMENCEMENT ON SITE, ANY DISCREPANCIES TO BE REPORTED TO ENGINEER.
17. 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 VEHICLE ACCESS 0.30m
 - 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, 0.30m
 - c) DOMESTIC DRIVEWAYS, PARKING AREAS AND NARROW STREETS WITHOUT FOOTWAYS (e.g. MARKET DEVELOPMENTS) WITH LIMITED ACCESS TO VEHICLES WITH A GROSS VEHICLE WEIGHT IN EXCESS OF 7.5 TONNES, 0.50m;
 - 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 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 HIGHWAY 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.

FL 134.65
(133.70)

STEP-450
[Diagram showing a cross-section of a step with dimensions]

3C
[Diagram showing three circles representing manholes]

GEL = 0.15m
RET = 0.02m
[Diagram showing a retaining wall section with labels]

[Diagram showing a green area representing vegetation]

SITE BOUNDARY

PROPOSED FINISHED FLOOR LEVEL

EXISTING BOUNDARY GROUND LEVEL

STEPPED FOUNDATION

UNDERBUILD - MEASURED FROM FFL TO PGL

TAKING - MEASURED FROM FLG TO PGL

GAVEL BOARDS (UP TO 400mm)

MASONRY RETAINING WALL (OVER 450mm)

EXISTING FOUL WATER SEWER

PROPOSED FOUL WATER SEWER
(DCWW - SECTION 104)

FOUL WATER MANHOLE
(DCWW - SECTION 104)

PROPOSED SURFACE WATER SEWER
(SAB)

SURFACE WATER MANHOLE
(SAB)

SUDS FEATURE OFFERED FOR ADOPTION -
INFILTRATION BASIN
(SAB)

Surface Water networks under adoptable roads to adopted by **Sustainable Drainage Approval Body (SAB)**

B	25.11.21	Updated with Layout Rev N	CP
A	07.10.21	First issue to Wrexham for SAB review	CP
Work	Date	Details	By

Revision History

Drawing original



osrobin,
rexham

Drawing title:
Sustainable Drainage (SAB)
Surface Water Drainage (Phase 1)
Sheet 4 of 4

1:250 for the original size of 80

Drawn by: CP | Checked by: PA | Passed by: PA | Date: Sep 20

Drawing status:

For information

Job No:	Drawing No:							Revision:
	Project	Origin	Volume	Level	Type	Discip.	Number	

CGH04		BEI				C	145	B
-------	--	-----	--	--	--	---	-----	---

Do not scale this drawing

enquiries@bets-associates.co.uk
