ALL PROPOSED FFL'S SUBJECT TO ±500mm

DRAWING TO BE USED FOR PLANNING PURPOSES ONLY

GENERAL NOTES
1. DO NOT SCALE THIS DRAWING.
2. CONTRACTOR TO CHECK ALL DIMENSIONS AND REPORT ALL ERRORS AND OMISSIONS TO THE ENGINEER.
3. ANY DISCREPANCY TO BE REPORTED IMMEDIATELY TO THE ENGINEER.
4. THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS, SUBCONTRACTORS AND SPECIALISTS DRAWINGS AND SPECIFICATIONS.

KEY
- EXISTING DCWW PUBLIC SEWER LOCATION TBC
- DCWW ADOPTABLE FOUL DRAINAGE SYSTEM
- STORM DRAINAGE SYSTEM 225mmø UNLESS STATED
- PERFORATED STORM DRAINAGE 225mmø UNLESS STATED
- G SURFACE WATER GULLIES AND CONNECTING PIPEWORK 150mmø UNLESS STATED
- ON PLOT STORM DRAINAGE 100mmø UNLESS STATED
- ON PLOT PERFORATED STORM DRAINAGE 100mmø UNLESS STATED
- ON PLOT POROUS ASPHALT DRIVEWAY SURFACE WITH TYPE 3 SUBABSE
- ON PLOT RAINGARDEN TAKING OVERLAND FRLOW FROM RWP
- DETENTION BASINS

DRAINAGE NOTES

1. 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 AND THE WELSH MINISTERS STANDARDS.
2. CONTRACTOR TO ALLOW FOR ALL NECESSARY STREET WORKS LICENSES ASSOCIATED WITH DRAINAGE SERVICE INSTALLATION IN EXISTING PUBLIC HIGHWAY.
3. ALL WORK TO BE CARRIED OUT IN CONNECTION WITH SEWERS AND MANHOLES TO BE IN ACCORDANCE WITH THE HEALTH AND SAFETY GUIDELINE NO. 2 'SAFE WORKING IN SEWERS AND SEWAGE WORKS'.
4. THE COVER AND INVERT LEVELS OF ANY EXISTING MANHOLES ARE TO BE VERIFIED ON SITE PRIOR TO THE COMMENCEMENT OF THE WORKS. ALSO TO INCLUDE VERIFICATION OF MANHOLE AND PIPE DIAMETERS.
5. ALL ADOPTABLE SEWERS OR LATERAL DRAINS ARE TO BE LAID AT A MINIMUM GRADIENT OF 1:80 FOR 100mmDIA PIPES, 1:150 FOR 150mmDIA PIPES AND A MAXIMUM GRADIENT OF 1:5. WHERE SITE LAYOUT DICTATES A RAMPED BACKDROP MAY BE UTILISED, ALTHOUGH STEEPER GRADIENTS ARE PREFERRED, AND SHOULD BE PROVIDED WHERE PRACTICABLE
6. LATERAL PIPEWORK WITHIN 1.2m TO THE FACE OF PROPOSED BUILDING TO COMPLY WITH THE REQUIREMENT OF CLAUSE B3.1.4 AND FIGURE B.1
7. MINIMUM CLEAR OPENING OF MANHOLE COVERS TO BE 600 X 600MM FOR FOUL WATER AND 675 X 675MM FOR SURFACE WATER.
8. PRIOR TO LAYING ANY MATERIAL THE SUBGRADE MUST BE INSPECTED AND ANY SOFT SPOTS REMOVED AND FILLED WITH TYPE 1 MATERIAL TO SHW CLAUSE 803-14.
9. RAINWATER BUTTS REQUIRED AT SELECTED RAINWATER DOWN PIPES TO EACH INDIVIDUAL PLOT. ARCHITECT TO CONFIRM PREFERRED LOCATIONS.
10. ADDITIONAL SURFACE DRAINAGE PROVIDED TO SERVE BANKING WITHIN PLOT BOUNDARY.

DCWW PUBLIC SEWER LINE TANKEN FROM HISTAURIC TOPO SURVEY. LOCATION TO BE CONFIRMED

SN42571603
CL:128.19
IL:127.43

PROPOSED FLOW CONTROL CHAMBER
CL: 128.00
IL: 127.00
HEAD: 1.00m
DETENTION BASIN
900mm DEEP
300mm FREEBOARD
COVER LEVEL 128.00
BASE LEVEL 127.10

PROPOSED FLOW CONTROL CHAMBER
CL: 127.25
IL: 125.50
HEAD: 0.9m
RATE: 2.2lit/sec

PROPOSED STORM CONNECTION POINT
OULTELT LEVEL: 125.40
ADDITIONAL TOPO SURVEY REQUIRED TO CONFIRM DITCH LEVEL.

CELLULAR STORAGE ATTENUATEION TANK
7mx23mx0.8m HIGH
BASE LEVEL: 125.60
SURFACE COVER TO BE REGRADED TO SUIT TANK LEVEL.

OVERFLOW GULLY TO BYPASS FLOW CONTROL DEVICE

PROPOSED FOUL CONNECTION POINT

SN42571602
CL:123.85
IL:122.63

SN42571601
CL:122.63
IL:121.18

DRAINAGE STRATEGY

SURFACE WATER

SURFACE WATER RUNOFF WILL BE COLLECTED WITHIN A POSITIVE SYSTEM AND DISCHARGED INTO AN EXISTING CUTOFF DITCH SERVING THE EXISTING FIELD AT A DISCHARGE RATE OF 8.5lit/sec/ha. MULTIPLE SuDS FEATURES ARE PROPOSED ACROSS THE SITE, INCLUDING A SOFT LANDSCAPE CONVEYANCE SYSTEM TO COLLECT HIGHWAY RUNOFF, RAINWATER BUTTS AT EACH PLOT, PERMEABLE DRIVEWAYS AND A FINAL DETENTION BASIN/ ATTENUATION TANK.

IN ACCORDANCE WITH THE SAB STANDARDS

STANDARD 1
- REUSE – SURFACE WATER RUN-OFF TO BE COLLECTED WITHIN SOFT LANDSCAPED AREAS, REUSED BY THE HYDRATION OF PLANTING. WATER BUTTS ARE PROPOSED AT EACH INDIVIDUAL PROPERTY.
- INFILTRATION – INFILTRATION TESTING WAS CARRIED OUT IN MAY 2025. NEGLIGIBLE DROP IN WATER LEVEL OBSERVED AS SUCH INFILTRATION IS NOT VIABLE FOR THE DEVELOPMENT SITE.
- WATER BODY – A CUTOFF DITCH IS EVIDENT FROM TOPOGRAPHICAL SURVEY ALONG THE SOUTH WEST BOUNDARY OF THE DEVELOPMENT SITE CONVEYING THE FIELD RUNOFF OFFSITE. A CONNECTION IS PROPOSED INTO THE EXISTING DRAINAGE DITCH.
- SURFACE WATER SEWER – NOT REQUIRED FOR THIS DEVELOPMENT
- COMBINED SEWER – NOT REQUIRED FOR THIS DEVELOPMENT

STANDARD 2
- FIRST 5mm OF RAINFALL FROM THE IMPERMEABLE AREAS WILL BE INTERCEPTED AND STORED WITHIN A VARIETY OF SuDS FEATURES, INCLUDING RAINGARDENS, DETENTION BASINS AND POROUS SUBBASE.
- SURFACE WATER SYSTEM TO BE DESIGNED TO FOR A RETURN PERIOD OF 100YRS + 30% CLIMATE CHANGE + 10% URBAN CREEP.
- GIVEN THE SITE TOPOGRAPHY, ANY EXCEEDANCE FROM PLOT WILL DISCHARGE ONTO THE HIGHWAY. SHOUD THE FLOW CONTROL CHAMBER BLOCK AND THE OVERFLOW FAIL, RUNOFF WILL BE DIRECTED TOWARD THE DISCHARGE DITCH.

STANDARD 3
- WATER QUALITY WILL BE ACHIEVED VIA VARIOUS SUDS TECHNIQUES, INCLUDING CONVEYANCE SOFT LANDSCAPE, PERMEABLE HARD SURFACES & DETENTION BASINS.

STANDARD 4
- DETENTION BASINS AND SOFT LANDSCAPE AREAS ARE AN IMPORTANT PART OF THE LANDSCAPE DESIGN. THESE FEATURES WILL BE PLANTED AS PER THE LANDSCAPE ARCHITECTS SPECIFICATION AND WILL PROVIDE AMENITY CONTRIBUTION.

STANDARD 5
- RAINGARDENS, DETENTION BASINS AND SOFT LANDSCAPE AREAS WILL BE PLANTED WITH NATIVE PLANT SPECIES TO PROVIDE DENSE AND DURABLE COVER OF VEGETATION THAT CREATES APPROPRIATE HABITAT FOR INDIGENOUS SPECIES.

STANDARD 5
- THE SuDS FEATURES SERVING THE PROPOSED ADOPTABLE ACCESS ROAD, AND SHARED DRIVEWAYS WILL BE PROPOSED FOR ADOPTION BY THE LOCAL AUTHORITY INCLUDING THE 2 DETENTION BASINS.

FOUL WATER
- A GRAVITY FOUL SYSTEM IS PROPOSED FOR THE DEVELOPMENT SITE DISCHARGING INTO THE EXISTING LINE BISECTING THE SOUTHERN SECTION OF THE SITE.
- THE FOUL DRAINAGE ARRANGEMENT IS SUBJECT TO A S104 AND 106 ADOPTION REQUIREMENT WITH DCWW.

Rev.	Detail	By	Date
A	UPDATED TO SUIT ARCHITECT LAYOUT	DH	01.07.25

Revisions

Reinforcement schedules nos.

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Client: Tai Wales & West Housing

Project: RESIDENTIAL DEVELOPMENT AT HAULFRYN LLANARTH

Drawing Title: DRAINAGE STRATEGY PLAN

PRELIMINARY

Project No.	Drawing No.
C2290	C-SK02

Scales	Date	Revision
1:200	16.06.25	A

Drawn	Checked	Sheet Size
DH	TE	A1