ALL PROPOSED FFL'S SUBJECT TO ±250mm

DRAWING TO BE USED FOR PLANNING PURPOSES ONLY

DETENTION BASIN
1500 DEEP
300mm FREEBOARD
TODDLER-PROOF FENCE
600-750mm HIGH REQUIRED TO REDUCE RISK TO THE PUBLIC
COVER LEVEL 45.00
BASE LEVEL 43.50

1:8 GRADED ACCESS TO BASIN

BASIN MAINTENANCE PARKING AREA

PROPOSED FLOW CONTROL CHAMBER
CL 45.00
IL 42.45
HEAD 1.25m
2.9lit/sec

PROPOSED STORM CONNECTION INTO FIELD CUTOFF DRAIN HEADWALL
BASE LEVEL 42.75
OUTLET LEVEL 42.90

ACCESS PATH

PLOT 16 REAR GARDEN REDUCED TO ALLOW FOUL CONNECTION ROUTE

PROPOSED FOUL CONNECTION POINT (SURVEY REQUIRED TO CONFIRM)

CUTOFF DRAIN SERVING THE EXISTING FIELD TO BE GRUBBED UP POST DEVELOPMENT

EXISTING DCWW WATER MAIN

EXISTING GULLY TO BE REMOVED

PROPOSED GULLY CONNECTING INTO THE HIGHWAY EXISTING STORM DRAINAGE (SURVEY REQUIRED TO CONFIRM)

PROPOSED GULLY CONNECTING INTO THE HIGHWAY EXISTING STORM DRAINAGE (SURVEY REQUIRED TO CONFIRM)

Y Winllan

NEW MILL ROAD

HEOL Y WERN

LAP

A 487

Drain

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 3.72lit/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.

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 FEBRUARY 2022. 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. NO RIVER OR ORDINARY WATERCOURSE IS EVIDENT IN THE VICINITY OF THE SITE. IT IS PROPOSED TO UTILISE THIS SYSTEM AS THE DEVELOPMENT SURFACE WATER CONNECTION POINT.
- 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 WETLANDS, SWALES AND DETENTION BASINS.
- SURFACE WATER SYSTEM TO BE DESIGNED TO FOR A RETURN PERIOD OF 100YRS + 30% CLIMATE CHANGE.
- GIVEN SITE LEVELS, SHOULD THE FLOW CONTROL DEVICES BLOCK, RUNOFF WILL BE DIRECTED TOWARDS EXISTING CUTOFF DITCH AND NOT PROPOSED DWELLINGS.
- THE SUGGESTED SOIL INDEX FOR THE DEVELOPMENT SITE IS 2, DUE TO THE NEGLIGIBLE INFILTRATION RESULTS ACHIEVED ONSITE, IT IS PROPOSED TO INCREASE THE SOIL INDEX TO 3 TO CLOSELY REPRESENT ONSITE CONDITIONS.

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 IN HEOL Y WERN.

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

- DCWW ADOPTABLE FOUL DRAINAGE SYSTEM
- LA ADOPTABLE STORM DRAINAGE SYSTEM
- LA ADOPTABLE PERFORATED STORM DRAINAGE SYSTEM
- G HIGHWAYS ADOPTABLE SURFACE WATER GULLIES AND CONNECTING PIPEWORK
- PRIVATELY MAINTAINABLE STORM DRAINAGE SYSTEM
- PRIVATELY MAINTAINABLE PERFORATED STORM DRAINAGE
- G PRIVATE MAINTAINABLE SURFACE WATER GULLIES AND CONNECTING PIPEWORK
- PRIVATELY MAINTAINABLE ACO DRAINAGE CHANNEL
- PRIVATELY MAINTAINABLE POROUS DRIVEWAY SURFACE
- LA ADOPTABLE BIO-RETENTION SYSTEM COLLECTING HIGHWAY RUNOFF
- PRIVATELY MAINTAINABLE RAIN PLANTER COLLECTING RWP
- LA ADOPTABLE 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.

Rev.	Detail	By	Date
E	DRAWING REVISED TO SUIT UPDATED SITE LEVELS AND CHANGE IN LAYOUT.	DH	24.11.23
D	PLOT 3/4 & 28/29 FFL AMENDED	DH	24.08.23
C	UPDATED TO SUIT ARCHITECTS FENCE/GATE POSITIONS.	DH	16.08.23
B	UPDATED TO SUIT REVISED ARCHITECT LAYOUT.	DH	08.08.23
A	UPDATED TO SUIT REVISED ARCHITECT LAYOUT.	DH	19.07.23

Revisions

Reinforcement schedules nos.

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Client: Tai Wales & West Housing

Project: PROPOSED HOUSING DEVELOPMENT AT DOL Y DINTIR, CARDIGAN

Drawing Title: DRAINAGE STRATEGY PLAN

PRELIMINARY

Project No.	Drawing No.
C2014	C-SK05

Scales	Date	Revision
1:250	28.04.23	E
Drawn DH / Checked DF	Sheet Size A1	