DRAWING TO BE USED FOR PLANNING PURPOSES ONLY

Wensley

Cnwc-y-cadno

Glamorgan Terrace

Pembe

ATTENUATION TANK 3
BASE: 21.70
DEPTH: 1.0m
AREA: 208m²

CULVERT OUTLET INTO EXISTING HEADWALL IL 21.00

HYRO-BRAKE 3
DISCHARGE RATE: 5.5lit/sec
COVER LEVEL: 23.00
INVERT LEVEL: 21.50
HEAD: 1.200m

OVERFLOW GULLY

BASIN 3
CREST LEVEL: 23.00
MAX WL: 22.70
BASE: 22.10
SIDE SLOPE 1:3
600/750mm HIGH TODDLER PROOF FENCE REQUIRED

SWALE OUTLET IL 24.60

HYRO-BRAKE 2
DISCHARGE RATE: 6.0lit/sec
COVER LEVEL: 27.50
INVERT LEVEL: 25.35
HEAD: 1.850m

OVERFLOW GULLY

BASIN 2
CREST LEVEL: 27.50
MAX WL: 27.20
BASE: 26.60
SIDE SLOPE 1:3
600/750mm HIGH TODDLER PROOF FENCE REQUIRED

ATTENUATION TANK 2
BASE: 25.35
DEPTH: 1.0m
AREA: 135m²

DIVERTED CULVERT TO BE OPENED AND FLOW THROUGH A PROPOSED SWALE

CULVERT INLET IL 29.50

OVERFLOW GULLY

HYRO-BRAKE 1
DISCHARGE RATE: 9.5lit/sec
COVER LEVEL: 30.25
INVERT LEVEL: 28.10
HEAD: 1.850m

BASIN 1
CREST LEVEL: 30.25
MAX WL: 29.95
BASE: 29.35
SIDE SLOPE 1:3
600/750mm HIGH TODDLER PROOF FENCE REQUIRED

ATTENUATION TANK 1
BASE: 28.10
DEPTH: 1.0m
AREA: 154m²

UNADOPTED STORM SEWER DIVERTED THROUGH PROPOSED DEVELOPMENT SITE AND OFFERED FOR SAB ADOPTION

PUBLIC SEWER DIVERTED ALONG THE HIGHWAY THROUGH PROPOSED DEVELOPMENT SITE

EXISTING CULVERT DIVERTED UNDER AN OWC APPLICATION THROUGH PROPOSED DEVELOPMENT SITE

DRAINAGE STRATEGY

- ROOF RUNOFF TO DISCHARGE DIRECTLY INTO THE PERMEABLE DRIVEWAY PIPEWORK.
- SURFACE WATER WITHIN SUBBASE IS COLLECTED VIA PERFORATED PIPES & CONNECTED INTO THE HIGHWAY SYSTEM.
- SURFACE WATER TO BE ATTENUATED IN A COMBINATION OF BASINS AND ATTENUATION TANK.
- ATTENUATED CONNECTION FROM THE DEVELOPMENT SITE INCLUDING THE PREVIOUS PHASE TO DISCHARGE INTO THE OFFSITE CULVERT CONNECTION.
- DISCHARGE RATE HAS BEEN CALCULATED USING THE HR WALLINGFORD GREENFIELD RUNOFF RATE ESTIMATION TOOL. THE GREENFIELD RATE, 6.66LIT/SEC PER HA, BASED ON A HARD PAVED AREA OF 0.82HA RESULTS IN A FINAL DISCHARGE OF 5.5LIT/SEC

S1
- REUSE – SURFACE WATER RUN- EACH RESIDENTIAL PROPERTY TO INCLUDE FOR A WATER BUTTS.
- INFILTRATION- FOLLOWING SITE INVESTIGATION DATED MARCH 2023, IT IS EVIDENT THAT INFILTRATION IS NOT VIABLE FOR THIS DEVELOPMENT SITED.
- WATER BODY – DIRECT CONNECTION INTO NEARBY WATERCOURSE AT AN ATTENUATED RATE IS PROPOSED AT GREENFIELD RUNOFF RATE.
- SURFACE WATER SEWER – NOT REQUIRED FOR THIS DEVELOPMENT
- COMBINED SEWER – NOT REQUIRED FOR THIS DEVELOPMENT.

S2
- FIRST 5MM WILL BE CATERED FOR IN THE INITIAL ABSORPTION OF THE PERMEABLE PAVING SUB-BASE, RAINGARDENS, AND BASINS.
- SURFACE WATER SYSTEM TO BE DESIGNED TO FOR A RETURN PERIOD OF 100YRS + 30% CLIMATE CHANGE.

S3
- THE AIM OF THE SURFACE WATER MANAGEMENT STRATEGY WITH REGARDS TO WATER QUALITY IS TO USE NATURAL PROCESSES THAT PROMOTE BIODIVERSITY AND LONG-TERM SUSTAINABILITY. AS SUCH, IT EMPLOYS A SUDS MANAGEMENT TRAIN APPROACH, PROVIDING DRAINAGE COMPONENTS IN SERIES INCLUDING: PERMEABLE PAVING, CONVEYANCE CHANNEL, & DETENTION BASIN.

S4
- THE PRIMARY AMENITY FOCUS OF THE SUDS SCHEME SHOULD BE TO IMPROVE THE HEALTH AND WELL-BEING OF THE USERS. THE SCHEME WILL NEED TO BE BASED ON NATURAL FORMS SUCH AS BIO-RETENTION AREAS & DETENTION BASINS THAT MIMIC NATURAL LANDSCAPES FOUND WITHIN THE REGION. OTHER KEY AMENITY BENEFITS SHOULD INCLUDE IMPROVING AIR QUALITY AROUND THE DEVELOPMENT, INCREASING CARBON SEQUESTRATION, AND IMPROVING WATER QUALITY THROUGH REMOVAL OF POLLUTANTS.

S5
- THE SUDS SCHEME BIODIVERSITY STRATEGY SHOULD REVOLVE AROUND THE CREATION OF SIGNIFICANT AND VARIED HABITAT TO INCREASE THE OVERALL BIODIVERSITY OF THE SITE AND ECOLOGICAL VALUE. THE INCLUSION OF PLANT SPECIES THAT WILL ENHANCE THE GENERAL ECO SYSTEM AND SIMULTANEOUSLY ACT AS A WATER FILTRATION SYSTEM TO CLEAN POLLUTANTS AND CONTAMINANTS SHOULD BE USED AND WHERE POSSIBLE PROVIDE MEANDERING SWALES AND A LARGE DETENTION BASIN TO MAXIMISE THE VARIETY OF HABITATS AVAILABLE

S6
- ALL ELEMENTS OF THE SURFACE WATER DRAINAGE SYSTEM SHOULD BE DESIGNED SO THAT THEY CAN BE CONSTRUCTED, AS WELL AS MAINTAINED AND OPERATED EASILY, SAFELY AND COST-EFFECTIVELY.

FOUL DRAINAGE
- S185, S104 & S106 WILL BE REQUIRED.

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
- ADOPTABLE FOUL DRAINAGE SYSTEM
- ADOPTABLE STORM DRAINAGE SYSTEM
- ADOPTABLE PERFORATED STORM DRAINAGE SYSTEM
- PRIVATELY MAINTAINABLE STORM DRAINAGE SYSTEM
- PRIVATELY MAINTAINABLE PERFORATED STORM DRAINAGE SYSTEM
- DIVERTED CULVERTED WATERCOURSE SUBJECT TO OWC APPLICATION
- G LOCAL AUTHORITY ADOPTABLE SURFACE WATER GULLIES AND CONNECTING PIPEWORK
- EXISTING SURFACE WATER SYSTEM
- EXISTING DCWW PUBLIC SEWER SYSTEM
- PROPOSED LINEAR CHANNEL
- ADOPTABLE HIGHWAY PERMEABLE PAVING
- PRIVATELY MAINTAINABLE PERMEABLE SURFACE CONSTRUCTION
- RAINGARDEN COLLECTING RWP'S, WITH A PERFORATED PIPE UNDERDRAIN AND OVERFLOW
- ADOPTABLE DETENTION BASIN, 900mm DEPTH OF WATER. 300mm FREEBOARD
- ADOPTABLE CELLULAR STORAGE ATTENUATION SYSTEM

Rev.	Detail	By	Date
B	DRAWING REVISED TO SUIT CURRENT ARCHITECT LAYOUT.	DH	28.06.23
A	DRAWING REVISED TO SUIT CURRENT ARCHITECT LAYOUT.	DH	16.06.23

Revisions

Reinforcement schedules nos.

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Client: OBSIDIAN DEVELOPMENT

Project: HOUSING DEVELOPMENT
AWEL Y MOR
ST DOGMAELS
PEMBROKESHIRE

Drawing Title: DRAINAGE STRATEGY PLAN

PLANNING

Project No.	Drawing No.
C1825	C-SK02
Scales: 1:500	Date: 26.01.23
Drawn: SG	Checked: DH
Sheet Size: A1	Revision: B

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