

DETENTION BASIN 1 DETAILS

MIN T.O.B (TOP OF BANK) LEVEL: 114.80mAOD
MAX WATER LEVEL (0.1% AEP + 25% CC EVENT): 114.50mAOD
IL: 114.30mAOD
FREEBOARD: 300mm
BASE AREA 119.8m²
AREA AT MAX WATER LEVEL: 157.2m²
AREA AT MIN T.O.B LEVEL: 2.18m²
STORED VOLUME IN 1.0% AEP + 25% CC EVENT: 27.2m³

NOTE 1

CHIEFTAIN OR SIMILAR APPROVED) HOUSING 150 HDPE PENSTOCK STOP VALVE WITH NITRILE SEAL (ALTHON PRA-G 150 OR SIMILAR APPROVED)

ALLOWS DRAINAGE SYSTEM TO SHUT OFF IN THE EVENT OF POLLUTANTS LEAKING INTO THE NETWORK. ENSURES NO DOWNSTREAM CONTAMINATION AFTER POLLUTANT EVENT OR DURING CLEAN-UP.

NOTE 2

SURFACING OF THE YARD COMPRISES OF MOT TYPE 2 STONE AS EXISTING. TO BE RETAINED WITH NO CHANGE OF SURFACING.
AREAS UPSTREAM OF THE PROPOSED BASIN WILL BE ADDED TO THE BASINS CATCHMENT AREA WITH AN APPROPRIATE RUN-OFF COEFFICIENT APPLIED.
THE REMAINDER OF THE MOT TYPE 2 AREA WILL DISCHARGE AS EXISTING.

DETENTION BASIN SIZED TO ACCOMMODATE THE 1 IN 100 YEAR RAINFALL EVENT WITH A 25% CLIMATE CHANGE ALLOWANCE.

NOTE

ROUTING OF EXISTING DRAINAGE TAKEN FROM AQUATECH DRAIN SERVICES CCTV SURVEY AND TOPOGRAPHIC SURVEY REF: RG22 2422

S5
OFCC450/1 ORFILO
ORIFICE FLOW CONTROL CHAMBER
INCLUDING DEBRIS SCREEN
CL 114.80
IL 114.20
ORIFICE DIAMETER 20mm

WEIR OVERFLOW WITH EROSION PROOF MATTING
OVERFLOW LEVEL AT 114.50mAOD
1.00m BASE-WIDTH
1:3 GRADIENT
IN THE EVENT OF DRAINAGE NETWORK FAILURE THE SURFACE WATER WILL OVERFLOW AT THIS POINT AND EVENTUALLY DISCHARGE INTO THE EXISTING DITCH.

200mm DEPRESSION UPSTREAM OF THE OUTFALL TO INTERCEPT SILT/ SEDIMENT
DEPTH 0.20m
BANK SLOPE 1:3
IL 114.10

1m WIDE BERM AT T.O.B LEVEL

IF THE SWALE OVERTOPS DURING AN EXCEEDANCE EVENT, THE SURFACE WATER WILL FLOW NORTH-EAST AND DISCHARGE INTO THE EXISTING DITCH.

S6
EMERGENCY SHUTOFF VALVE CHAMBER (ALTHON PRA-G 150 OR SIMILAR)
(SEE NOTE 1 FOR FURTHER DETAILS)
CL 114.80
IL 113.65
POSITIONED TO ACCOMMODATE A 150mm CONCRETE SURROUND

S7
CL 114.40
IL 113.63 (TBC)

S1.006 150Ø 1:117 PVC-U

S1.005 150Ø @ 1:150 PVC-U

S1.004 150Ø @ 1:2 PVC-U

REVETMENT HEADWALL (HW2)
IL 114.30

S4
SILT TRAP
CL 115.15
IL 114.35

S1.003 150Ø @ 1:38

S1.002 150Ø @ 1:109 PVC-U

S3
CL 115.35
IL 114.43

S2.001 150Ø @ 1:130 PVC-U

F1.000 100Ø @ 1:27 PVC-U

S1.001 150Ø @ 1:22 PVC-U

S1.000 150Ø @ 1:14 PVC-U

RE1
CL 116.00
IL 115.60

EXISTING SVP FOUL PAN CONNECTION WITHIN THE CONTAINER.

EXISTING HEADWALL
IL 114.68

EXRG1
CL 115.20

NEW CHAMBER TO BE CONSTRUCTED ON EXISTING FOUL DRAINAGE RUN SUBJECT TO INVERT LEVEL ACHIEVING DEPTH REQUIRED. IF EXISITNG DRAINAGE IS TOO SHALLOW, PROPOSED TO CONNECT TO EXFW3.

EXFW3
CL 114.00
IL 112.80

EXFW4

EXISTING KLARGESTER SEWAGE TREATMENT PLANT. LOCATION IS INDICATIVE. CONFIRMED CAPCITY FOR ADDITIONAL PROPOSED FOUL FLOW.

EXFW1

EXFW2 BURIED

EXISTING SURFACE WATER OUTFALL
IL 113.38

CULVERT SOFFIT 113.56
INVERT 113.38

EXISTING PRIVATE SURFACE WATER DRAIN

EXISTING PRIVATE FOUL WATER DRAIN

EXISTING DITCH

EXISTING CHAMBER

FLOOD EXCEEDANCE ROUTE

DRAINAGE TO BE MADE REDUNDANT

PROPOSED SPOT LEVEL

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