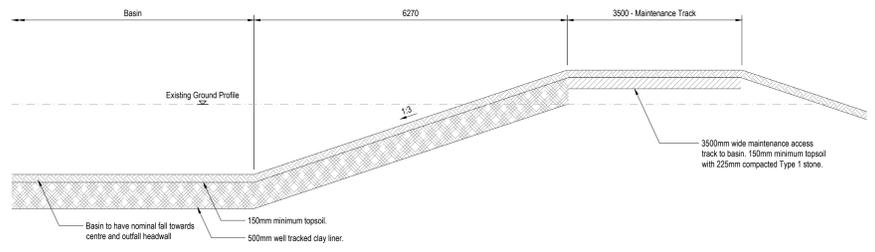


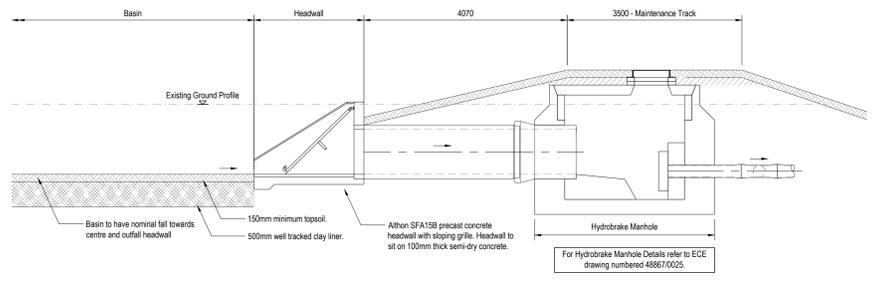
PLAN ON SUDS BASIN
SCALE 1:200

S14 Flow Control
SHE-0176-1750-1750
Flow: 17.500l/s
Head: 1.750m
24000 manhole

Surface Water Attenuation Basin
100 year + 40% CC + 5% UC
1.65m depth storage depth
300mm freeboard
2949m³ capacity
IL: 82.258m
TWL: 83.845m
Access track level: 84.208m

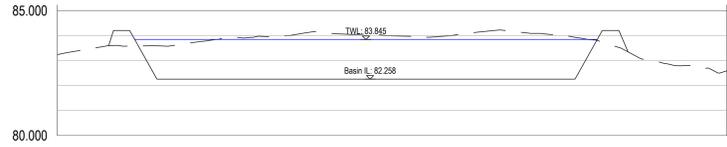


TYPICAL SECTION THROUGH SUDS BASIN
SCALE 1:50



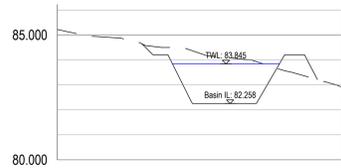
TYPICAL SECTION THROUGH OUTFALL HEADWALL
SCALE 1:50

Water levels of storm events:
1 in 1 year: 82.584
1 in 30 year: 83.083
1 in 100 year + 45% CC: 83.845



CHAINAGE	0.000	10.269	20.000	30.000	40.000	50.000	60.000	70.000	80.000	90.000	100.000	110.000	114.283	120.000	130.000	134.107
ADOPTABLE BASIN LEVEL		83.596	82.258	82.258	82.258	82.258	82.258	82.258	82.258	82.258	82.258	84.208	83.348			
TOPO LEVEL	83.244	83.590	83.591	83.794	83.966	84.120	84.049	83.976	84.039	84.201	84.024	83.680	82.974		82.697	82.594

BASIN SECTION A-A
Scale 1:500V 1:100H



CHAINAGE	0.000	10.000	16.943	20.000	30.000	40.000	50.000	52.078	57.022
BASIN LEVEL			84.644	84.208	82.258	82.305	83.756	83.714	
TOPO LEVEL	85.222	84.909	84.521	84.170	83.923	83.332	82.909		

BASIN SECTION B-B
Scale 1:500V 1:100H

- Notes:
- To be read in conjunction with Eastwood Consulting Engineers drawings 48667
 - All pipes shall be either:
A - Vitrified clay to BS EN 256 with a minimum coating strength as follows -
1000 dia - 40 N/m²
225 dia - 43 N/m²
300 dia - 72 N/m²
B - PVC (certified to WIS 4-35-01 & BS EN 13476)
C - Class 120 concrete to BS 5911-1:2002/EN 1916
 - All pipes should always connect soffit to soffit unless noted otherwise.
 - All sewers to have BS kitemark manholes (certified to WIS 4-35-01 & BS EN 13476). Minimum pipe length to be 3m. Plastic channel sections in manholes are not acceptable. Clay channel sections shall be used.
 - Sewers to be laid in Class 2 bedding (150mm granular bed and surround). Where depth of cover to top of sewer is less than 1.2m in highways and verges (or less than 1000mm in some vehicular access areas) then a concrete slab should be provided above granular bed and surround. Bedding and backfill concrete to conform to the requirement of Water Industry Specification 4.86.07, Table A2.
 - Manhole covers shall have a clear opening of 600 and shall be class D400 to BS EN 124 with 150 deep frames in highways.
 - Pipes entering manholes and road gullies shall have a flexible joint with 600 of the inside the manhole or gully jointing with a short rocker pipe.
 - The adoptable sewers should be a minimum of 1m and manholes 0.5m from kerb faces and service margins.
 - Sewers must have 5m clearance from trees and hedges or the width of the canopy at mature height.
 - All trenches in roads and paved areas shall be backfilled with Type 1 DOT granular sub-base material or other granular material approved by the highway authority.
 - Filled ground must be filled and consolidated under the supervision and to the satisfaction of ICOSA Water before any sewer works are carried out.
 - All inlets concrete to be designated mix FN20 to BS 8000-1 unless agreed otherwise.
 - The invert levels at the proposed points of connection to existing public sewers shall be checked before any new drains are constructed. Any variation to the levels shown on the drawing shall be notified to Eastwood Consulting Engineers.
 - The chamber size of manholes with more than one connection to them may need to be increased an increment to accommodate the connections and bends.
 - Cover levels are indicative only. Covers to be set to suit camber/gradient of existing and proposed roads.
 - Cover slabs must carry the BS kitemark or will be rejected by ICOSA Water Inspectors. Where the clear opening of the kitemarked product is different to that of the cover and frame, a loading bearing slab should be fitted above the cover slab to bring the size down to 600mm x 600mm for the ICOSA Water specific cover size. Please refer to Concrete Pipe Systems Association (CPSA), 'Technical Bulletin' issued Autumn 2004 for kitemarked cover slab opening sizes.
 - All foul lateral sewers and drains to be 1500 unless noted otherwise.
 - Manhole covers shall have a clear opening of 600mm and shall be Class D400 to BS EN 124 with 150mm deep frames in highways.
 - Where a B125 cover and frame has been approved, this must not be coated in plastic and must have lifting eyes suitably sized to accommodate standard lifting keys. Screw down covers are not acceptable.
 - All adoptable sewer works and material to be in accordance with 'Code for Adoption'. The relevant British Standards and ICOSA Water's Standard Requirements Leaflet 'Practice for the Adoption of Small Submersible Pumps and Surface Water Pumping Stations and Kitemarked'.
 - ICOSA Water is not obliged to accept the drainage run-off into the public sewer network or adoptable drainage systems directly or indirectly. An alternative method of disposal of the land drainage run-off will therefore be required and you will have to liaise with the Local Authority, Land Drainage Section with regard to the disposal of the final drainage drainage run-off.
 - Sublime resistant cement (C20-C22) and precast concrete products must be used or a laboratory report provided proving that such products are not necessary.
 - Adoptable plastic sewer pipes to be BS kitemarked (certified to WIS 4-35-01 & BS EN 13476). Adoptable plastic sewer pipes to be set in maximum 3 metre lengths unless there is a specific operational need to be longer lengths. Plastic channel sections in manholes are not acceptable and ICOSA Water would prefer clayware channel in manholes.
 - There must be enough clearance at coverovers to accommodate bedding to both pipes, approx. 300mm. If coverover is near the rocker then the clearance needed may need to be increased.
 - All adoptable laterals to be 1500 and PVC unless stated otherwise.
 - All FFLs to be a minimum 150mm above external levels and drainage cover levels.

P04	Basin details amended to suit design calculations	AT	CH	19.06.2025
P03	Basin embankment reprofiled to avoid watercourse buffer zone	RJ	CH	02.08.2024
P02	Basin embankment reprofiled to avoid watercourse buffer zone	RJ	CH	30.07.2024
P01	First Issue	CTB	TB	06.06.2024
REV	DESCRIPTION	SIG	CHK	DATE

HARRON HOMES

MERCHANT FIELDS, CLECKEATON

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