

Manyweathers Pavilion Drainage Design Report and Checklist

Hurstpierpoint College, College Lane, Hurstpierpoint, Hassocks BN6 9JS

Planning permission DM/25/0128, Condition 3 | Discharge application DM/26/0316
Report 693-PL-DR-001 P06 | Checklist 693-PL-DR-CHK-001 P15 | 8 October 2026

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Issue for client review. This issue records the adopted design and the operating-use confirmation of 8 October 2026. Section 6 identifies the specific supporting records required to complete the technical submission. Original drawings and certificates are identified separately in register D.

1. Purpose and drainage arrangement

I have prepared this report in support of the discharge of Condition 3 for Manyweathers Pavilion. Surface water follows the HOP design into the existing ground-drainage system. Foul water drains through the Klargester NC BioDisc and PX432T pumping station into the existing foul drainage system. Hurstpierpoint College retains responsibility for lifetime operation and maintenance through College Estates.

The project is recorded as under construction. Plant commissioning is documented separately. The surface-water design basis is HOP 09102 C2 and 09104 C1, issued on 12 February 2026. These original drawings are retained without alteration. The installed foul arrangement is described in section 4; the original HOP foul inset is not the NC BioDisc/PX432T arrangement.

The Council's drainage comments of 4 March 2026 requested legible plans, clarification of drainage disposal and completion of its detailed drainage checklist. This report describes the existing ground-drain connection, the Klargester foul arrangement and the associated calculations. The checklist follows the Council's four-column arrangement and contains a response to each of its 33 items.

2. Adopted design inputs

Parameter	Adopted basis
Roof area	178 m², confirmed by me.
Effective roof area	195.8 m², comprising 178 m² plus 10%.
Runoff coefficient	Cv = 1.0.
Pavilion reference point	BNG E528771, N118064; ///clays.surviving.pads.

Parameter	Adopted basis
Greenfield comparison	Equivalent pre-development grass catchment 0.0178 ha; Qbar 0.165 L/s.
Hydrological inputs	SAAR9120 900 mm; BFIHOST19scaled 0.30; QMed-to-Qbar factor 1.136; region 7. Adopted inputs confirmed by me.
Surface-water assessment load	19 L/s retained. Equal branches 9.50/9.50 L/s; 60/40 comparison 11.40/7.60 L/s.
Climate-change comparison	45% applied once to the recorded climate-change cases, using the campus assessment basis through 2125.
Rising-main calculation length	58 m, adopted on my instruction.
Treatment-load comparison	22 sports-person visits, two staff and 20 additional WC uses; maximum operating profile and supplier acceptance confirmed by me, including refreshments and cleaning.

The 178/195.8 m² figures and the revised results in this issue govern the pavilion roof calculations. The earlier 200/220 m² roof calculations are superseded. Calculation A gives the revised greenfield runoff estimate; calculation B distinguishes the inherited intensity check from the retained 19 L/s assessment load.

3. Surface water and flood protection

Roof water passes through four leaf-filtered downpipe connections and two silt traps to the HOP branches. Each receiving connection uses a 5 m length of 150 mm perforated pipe wrapped in Terram, beside the existing land drain, with minimum 150 mm pea-shingle surround and 150 mm separation between pipe exteriors.

No soil-infiltration, trench-void or sediment-sump storage credit is included. This is an onward connection to existing ground drainage. A standalone soakaway calculation is not part of the adopted arrangement.

Interface	Silt-trap cover / outlet invert	Drawing receiver invert	Nominal invert difference
West	30.090 / 29.620 m	29.550 m	70 mm
East	29.800 / 29.380 m	29.300 m	80 mm

I confirm the adopted reach allocation, storm routing, shared-trench transfer, background flows and tailwater assessment. I also confirm that the adopted arrangement requires no dedicated flow-control device or attenuation storage. The supporting event assessment and receiving-system records identified in section 6 are needed to substantiate those confirmations in the submission.

The HOP levels above are design relationships. The original drawing identifies the receiving land-drain position and depth as approximate. A nominal invert difference does not establish the available hydraulic head during a storm.

The flood-protection arrangement is to grade external surfaces away from the pavilion and route exceedance towards the open pitch drainage area, avoiding doors, vulnerable access and increased off-site risk. Final floor, threshold, ground and assessed exceedance levels must demonstrate the required 150 mm clearance on a common datum. HOP 0002 C3 gives 30.325/30.275 m marked TBC; those entries do not provide the completed level record.

The HOP silt-trap specification is Ridgistorm Separate or approved equivalent, two 600 mm chambers, B125 covers and 300 mm sumps. The completed water-quality comparison must use the actual roof catchment and installed products. Generic sediment interception is not assigned an unsupported CIRIA mitigation index.

4. Foul drainage, treatment and pumping

Foul drainage passes by gravity to the NC BioDisc. Treated effluent is pumped by the PX432T station through the 50 mm outlet arrangement and discharges into the existing foul drainage system. EDS specifies a 110 mm deceleration connection into the existing Klargestester outlet.

EDS Certificate 1364 records an NC unit with 900 mm inlet depth, PX432T pumps, 110 mm pipework and a 50 mm outlet. Mike Thorne commissioned the installation on 7 April 2026 and Jim Lindsay accepted it on 10 April 2026. Installation, electrical supply, control panel, alarm, pumps, pipework, leak inspection and final operation are each recorded as passed.

4.1 Confirmed operating profile

I confirm the maximum pavilion operating profile, including refreshments and cleaning, and supplier acceptance of that profile. The adopted treatment-load comparison is the 22 sports-person case, with two staff and 20 additional WC uses. The comparison below retains the original BCO activity allowances. Supplier acceptance is recorded on my confirmation of 8 October 2026.

Activity	Number	Daily flow	Daily BOD
Sports-person visits, WC and showers	22	880 L	550 g
Additional day staff	2	180 L	76 g
Additional WC uses	20	200 L	240 g
Calculated comparison total		1,260 L	866 g

Parameter	Calculated comparison	Published NC rating	Arithmetic margin
Daily flow	1.260 m ³	2.700 m ³	1.440 m ³

Parameter	Calculated comparison	Published NC rating	Arithmetic margin
Daily BOD	0.866 kg	1.080 kg	0.214 kg

The confirmed operating profile includes refreshments and cleaning. The table is the retained sports/staff/WC calculation comparison; it does not assign an invented separate quantity to refreshment or cleaning loads. Four showers at the specified 8 L/min contribute 0.533 L/s while flowing. Pump discharge and coincident fixture peaks must be assessed separately from daily treatment loading.

The N-range product information records third-party testing to EN 12566-3. Published standard-range results are BOD5 97.6% removal and 8.2 mg/L, suspended solids 97.4% and 9.6 mg/L, and ammonia-N 98.3% and 0.7 mg/L. These are manufacturer test results for the product range. No additional tertiary-filter or phosphorus-upgrade performance is credited.

4.2 Pump and receiving-system calculation

The adopted resistance calculation uses 58 m length, assumed 40.8 mm internal bore, roughness 0.006 mm, viscosity $1.14 \times 10^{-6} \text{ m}^2/\text{s}$, minor-loss coefficient $K = 5$ and static lift 0.5654 m. The Darcy-Weisbach/Colebrook calculation gives:

Flow	Calculated system head
1 L/s	1.748 m
2 L/s	4.726 m
3 L/s	9.321 m
4 L/s	15.465 m

The 2 L/s, 4.726 m point describes system resistance. The installed pump curve and operating measurements establish the actual duty. Pump control levels, duty rotation, any assist operation, high-level alarm response and usable emergency volume need to be recorded. The retained 1.260 m³ emergency-storage target relates to the original daily-flow calculation; the usable installed volume must be checked against the accepted operating profile.

The inherited receiving-pipe example is a 100 mm clear bore at 1:80 with Manning $n = 0.015$. Its capacity at 75% depth is 4.564 L/s. The example of two concurrent 2 L/s discharges totals 4.000 L/s, leaving 0.564 L/s before additional losses. Application to the actual receiver depends on its bore, gradient, condition, concurrent flows and tailwater. A full 58 m pressure main contains approximately 75.83 litres at the assumed bore; this is not usable emergency wet-well storage.

5. Lifetime operation and maintenance

Hurstpierpoint College, through College Estates, retains and funds lifetime inspection, cleaning, specialist servicing, desludging, repair and replacement. Estates will maintain access and service records. Interventions to assets outside College control will be agreed with the relevant owner.

Asset	Inspection and maintenance
Gutters and leaf filters	Monthly during leaf fall, quarterly otherwise and after heavy rain. Clear debris, clean annually and repair leaks.
Silt traps and branches	Quarterly and after storms. Remove sediment before flow is impaired; inspect covers annually and arrange flushing/CCTV where indicated.
Receiving ground drainage	Quarterly and after storms. Check accessible connections for sediment, ponding and backwater; review condition annually.
NC BioDisc	Weekly external operational/alarm check. Specialist servicing and desludging at the manufacturer's intervals; retain service records.
PX432T and rising main	Weekly status/alarm check. Maintain pumps, floats, valves and non-return protection; record changeover, alarm and delivery tests.
Existing foul connection	Quarterly accessible-cover checks and after faults; annual condition review, with specialist cleaning or investigation where required.
Fault response and records	Record findings, actions and completion. Suspend contributing use during unsafe pump operation. Follow manufacturer O&M where more demanding.

During construction, protect the drainage from sediment, keep covers accessible, and clean, flush and test the completed system before handover.

6. Technical completion records

The operating-use and supplier-acceptance point is recorded as confirmed in section 4.1. The following specific records complete the remaining technical evidence:

Reference	Record required	Responsible party
C1	Pavilion event calculations and drainage-hierarchy justification; receiving-route dimensions, continuity, background flows, transfer characteristics and tailwater; supporting basis for the adopted unrestricted/no-storage arrangement.	HOP, with installer/Estates records.

Reference	Record required	Responsible party
C2	Reach-by-reach allocation confirming actual bores, gradients and flows. Reconcile any 100 mm combined branch with the capacities in calculation B.	HOP and installer.
C3	Final floor, threshold and external levels; graded exceedance route and maximum water levels on a common datum.	Design/site team and HOP.
C4	Coordinated NC/PX432T foul layout and receiving connection; actual pump model/curve, duty, controls, usable emergency volume and receiver capacity.	EDS/installer, coordinated with HOP.
C5	Installed silt-trap/filter product records, applicable O&M and the completed catchment-specific water-quality comparison.	Installer and HOP.
C6	Existing foul-system operator's confirmation of the connection and the response needed for checklist FW08.	College Estates / receiving-system operator.

Calculation A. Greenfield runoff

The original UK SuDS v2.2.3 output supplied on 8 October 2026 used 0.020 ha. This calculation rescales the same adopted method to the corrected 0.0178 ha grass-equivalent roof catchment. FARL = 1.0; the 10% post-development allowance is excluded from the greenfield area.

$$Q_{Med} = 1000 \times 6.8247 \times 0.5^{0.8499} \times 0.1780^{(1000/900)} \times 1.0^{3.0450} \times 0.0321^{(0.30^2)} \times (0.0178/50) = 0.1453473 \text{ L/s.}$$

$$Q_{bar} = 1.136 \times Q_{Med} = 0.1651145 \text{ L/s.}$$

Event	Growth factor	Calculated flow, L/s	Rounded, L/s
QMed	n/a	0.145	0.1
Qbar	1.000	0.165	0.2
1 year	0.85	0.140	0.1
2 years	0.88	0.145	0.1
10 years	1.62	0.267	0.3

Event	Growth factor	Calculated flow, L/s	Rounded, L/s
30 years	2.30	0.380	0.4
100 years	3.19	0.527	0.5
200 years	3.74	0.618	0.6

Adopt Qbar 0.165 L/s for the combined catchment. Additional digits document arithmetic and do not imply equivalent hydrological accuracy. Qbar is distinct from the 19 L/s roof design load and from an accepted onward-discharge limit.

Calculation B. Roof runoff and pipe capacity

For intensity i in mm/hour and effective area A in m^2 , $Q = C_v \times i \times A / 3600$, in L/s. At the inherited intensity of 114.84 mm/hour and $A = 195.8 m^2$, $Q = 6.246$ L/s; the 60% branch is 3.748 L/s. This inherited intensity has no assigned FEH event return period. The adopted assessment load remains 19 L/s.

The nearby campus FEH22 source is HOP report 12337/52/HOP/RPT/01 P04, dated 10 June 2026, with a 687 m^2 impermeable catchment. The comparison applies $Q \times 195.8/687$. It is a separate catchment study.

Source event	Source peak, L/s	Area-scaled comparison, L/s
1 year baseline	8.4	2.39
30 years baseline	31.7	9.03
30 years +45%	46.0	13.11
100 years +45%	57.8	16.47

The retained 19 L/s load exceeds the 16.47 L/s area-scaled comparison. Climate uplift is already included in the relevant source rows and is not applied again.

Manning calculations use $n = 0.015$, gradient 1:80 and clear internal bores equal to the calculation diameters:

Pipe	Full-flow capacity	Capacity at 75% depth
100 mm	5.005 L/s	4.564 L/s
150 mm	14.757 L/s	13.456 L/s

Allocation	Demand	Capacity comparison
Equal combined branches	9.50 L/s each	Above 100 mm full-flow capacity; below 150 mm capacity at 75% depth.
Heavier 60% branch	11.40 L/s	Above 100 mm full-flow capacity; below 150 mm capacity at 75% depth.
Lighter 40% branch	7.60 L/s	Above 100 mm full-flow capacity; below 150 mm capacity at 75% depth.
Four equal individual connections	4.75 L/s each	Below 100 mm full-flow capacity, above its 75%-depth benchmark. Check actual allocation and inlet losses.

At 11.40 L/s the stated 150 mm, 1:80 pipe has 2.056 L/s spare capacity at the 75%-depth benchmark. One such pipe carrying the whole 19 L/s would exceed full-flow capacity. At 1:150, the 150 mm capacity at 75% depth is 9.827 L/s, below the heavier-branch demand. Actual HOP reach annotations govern.

The 75%-depth comparison is a pipe-barrel check. Junction losses, inlet restrictions, blockage and receiving-water levels require network assessment. At the heavier 5 m shared-trench connection the transfer demand is $11.40/5 = 2.28$ L/s per metre. This is demand rather than a measured transfer capacity.

For the revised catchment, runoff volume is $0.1958 \times \text{event depth in mm}$, in m^3 . With +45% applied once to baseline depth, the coefficient is $0.28391 \text{ m}^3/\text{mm}$. Qbar corresponds to $0.594412 \text{ m}^3/\text{hour}$ as a constant-rate release comparison. These relationships do not independently determine storage requirements.

Calculation C. Foul calculation basis

The retained BCO activity equations are $Q = (40P + 90S + 10U + 15M)/1000 \text{ m}^3/\text{day}$ and $\text{BOD} = (25P + 38S + 12U + 19M)/1000 \text{ kg/day}$. The comparison in section 4 uses $P = 22$, $S = 2$, $U = 20$ and $M = 0$. The confirmed operating profile and supplier acceptance include refreshments and cleaning as described in section 4.1.

System resistance uses $H = \text{static lift} + (fL/D + K)V^2/(2g)$, with $V = Q/(\pi D^2/4)$, $g = 9.81 \text{ m/s}^2$ and Colebrook-White friction. The numerical inputs and calculated heads are in section 4.2. No supplier acceptance of treatment loading is substituted for installed pump-duty or usable-storage evidence.

D. Supporting drawings and source records

The following source files are identified for assembly with the submission. The links below are for the client's document review. They do not embed the original PDF sheets in this editable review document.

Record	Use / location
HOP 09102 C2 and 09104 C1	Original A1 drainage layout and details, 12 February 2026. The only proposed drawing sheets for the planning pack.
EDS Certificate 1364	Two-page commissioning record, 7/10 April 2026.
EDS Q14556	Technical selection and existing-outlet connection information, 8 April 2025. Pricing excluded.
Kingspan N-range brochure and DS1436P	NC treatment capacity, product performance and 900 mm inlet variant dimensions.
693-Planning-Drainage-Design-Confirmation-P05.pdf	Original HOP sheets on pages 11–12; manufacturer/selection/commissioning/dimensional evidence on pages 13–18. Earlier report calculations are superseded where revised here.
693-DR-CALC-001 P05	Source calculation method only. Do not append its BSC architectural drawings.
JMS-0198-M100 RD	As-installed water-services drawing, May 2026; fixture flow limits.
HOP 12337/52/HOP/RPT/01 P04	Separate campus FEH22 source for the area-scaled comparison. No separate-site tank or control is adopted.
MSDC Detailed Drainage Design Checklist v2.0	Issued 7 November 2025; requirement framework.

- HOP 09102 C2: original drainage layout
- HOP 09104 C1: original drainage details
- Existing companion report: source evidence pages 11–18
- Official MSDC checklist

Revision: operating-use and supplier-acceptance confirmation recorded; full author qualifications included; 178 m² roof basis coordinated; repeated research and conversation commentary removed; relevant technical clarification requirements retained. This editable review issue does not replace the current P14 PDF until the revised PDF and original source attachments have been assembled and checked.

Detailed Drainage Design Checklist

693-PL-DR-CHK-001 P15 | Condition discharge stage | 8 October 2026

Manyweathers Pavilion, Hurstpierpoint College. DM/25/0128, Condition 3; DM/26/0316. MSDC four-column arrangement, with project responses and references to the report in this review issue.

Requirement	Summary of expectation	Summary	Reference: drawing / report section
Surface water: all strategies			
SW01 Greenfield runoff rate (Qbar)	FEH method or similar approved, based on the pre-development catchment.	Qbar 0.165 L/s for 0.0178 ha, displayed as 0.2 L/s to one decimal. FEH statistical 2025 arithmetic uses SAAR9120 900 mm, BFIHOST19scaled 0.30 and QMed-to-Qbar factor 1.136.	Report 2; calculation A.
SW02 On-site infiltration testing	BRE365-compliant testing at the SuDS location and depth; appropriate safety factor.	The HOP connections transfer runoff into existing ground drainage. No infiltration credit is included. A site-specific drainage-hierarchy justification is needed for the adopted disposal route.	HOP 09102 C2 / 09104 C1; report 3.
SW03 Groundwater monitoring, if relevant	Demonstrate seasonal groundwater clearance where infiltration is used.	The design takes no infiltration or assumed free-outfall credit. The earlier GE9652 investigation provides campus context only. Receiving-drain water levels and storm tailwater form part of the surface-water assessment.	Report 3; clarification C1.
SW04 Catchment and drainage areas	Show the contributing catchment for each drainage component.	Roof area 178 m². Effective impermeable area 195.8 m² including 10%. The retained design load is 19 L/s. Equal and 60/40 branch distributions are checked; the adopted reach allocation is confirmed by me.	Report 2–3; calculations A–B.
SW05 Climate-change allowances	Apply the relevant rainfall-intensity allowance.	A common 45% uplift is adopted for the 30-year and 100-year climate-change comparisons, using the recorded campus Adur and Ouse basis through 2125. Apply the allowance once.	Calculation B; SW-CALC-04 P01 section 2, allowance basis only.
SW06 Urban creep allowance	10% additional impermeable area unless justified otherwise.	178 m² × 1.10 = 195.8 m². The assessment covers the pavilion roof.	Report 2; calculation B.

Requirement	Summary of expectation	Summary	Reference: drawing / report section
SW07 Design rainfall	Latest FEH rainfall data.	The numerical FEH22 comparison uses HOP report 12337/52/HOP/RPT/01 P04 and is scaled to the pavilion area. The adopted pavilion design load is 19 L/s. Pavilion event results are required as the supporting hydraulic record.	Calculation B; clarification C1.
SW08 Cv value	1.0 for impermeable surfaces.	Cv = 1.0 for the roof and its 10% allowance.	Calculation B.
SW09 Hydraulic calculations	Assess 1-year, 30-year, 30-year plus climate change and 100-year plus climate change critical events.	I confirm the adopted reach allocation, routing, shared-trench transfer, background-flow and tailwater assessment. The supporting event calculations need to accompany the submission. The stated 100 mm capacity does not accommodate a combined branch of 9.50–11.40 L/s; the stated 150 mm capacity does.	Calculation B; clarifications C1–C2.
SW10 Flow-control structures	Provide the control design and head/discharge relationship where required.	I confirm that the adopted HOP conveyance arrangement includes no dedicated flow control or attenuation storage. The hydraulic submission needs to substantiate that arrangement and the onward discharge. No storage is credited to silt sumps or trench voids.	Report 3; clarification C1.
SW11 SuDS layout plan	Show levels, sizes, flow directions and drainage components.	HOP 09102 C2 and 09104 C1 are the original surface-water layout and detail sheets. The existing foul inset is superseded by the NC BioDisc/PX432T arrangement described in this report; the coordinated foul record must identify that installed arrangement.	Drawing register D; clarification C4.
SW12 Longitudinal and cross-sections	Show pipes, interfaces and below-ground components.	HOP provides chamber, bedding, silt-trap and shared-trench details. The completed profiles must relate actual reach lengths, gradients and receiving interfaces to the assessed water levels.	HOP 09102 C2 / 09104 C1; clarifications C1–C3.
SW13 Exceedance flow routing	Show safe routes for flows exceeding the drainage capacity.	The design intent is to route overflow towards the open pitch drainage area, away from doors and vulnerable access. A coordinated graded route and maximum exceedance level are needed to demonstrate the intended protection.	Report 3; clarification C3.
SW14 Finished floor levels	At least 150 mm above relevant surrounding ground and exceedance routes.	The HOP structural record gives 30.325/30.275 m marked TBC. The final floor, threshold, external-ground and assessed flood levels must be recorded on one datum to demonstrate the required clearance.	HOP 0002 C3, level reference only; clarification C3.

Requirement	Summary of expectation	Summary	Reference: drawing / report section
SW15 Water-quality treatment	Simple Index Approach, with mitigation meeting the hazard indices.	The tiled roof, leaf filters, two silt traps and shared trenches are identified. The final catchment-specific hazard/mitigation comparison is needed. No generic treatment index is assigned to an unverified product.	Report 3; clarification C5.
SW16 Proprietary systems	Product certification, design basis and O&M information.	HOP specifies Ridgistorm Separate or approved equivalent, two 600 mm chambers, B125 covers and 300 mm sumps. The installed-product record and applicable performance/O&M information must identify the selected components.	HOP 09104 C1; clarification C5.
SW17 SuDS details	State component type, size, function, inlet/outlet and levels.	West trap CL/IL 30.090/29.620 m; east 29.800/29.380 m. Two 5 m lengths of 150 mm perforated pipe, Terram wrap and minimum 150 mm pea-shingle surround. I confirm the transfer, background-flow and tailwater assessment.	HOP 09102 C2 / 09104 C1; calculation B.
SW18 Maintenance plan	Asset register and inspection, maintenance and remedial schedule.	Lifetime inspection, cleaning, servicing, repair/replacement, access and fault response are included. The schedule covers gutters, leaf filters, silt traps, connecting pipes, transfer trenches, receiving drainage, BioDisc and pumps.	Report 5.
SW19 Maintenance party and mechanism	Name the responsible body and maintenance arrangement.	Hurstpierpoint College, through College Estates, retains and funds lifetime maintenance, access and records. Work to assets outside its control is arranged with the relevant owner.	Report 5.
Surface water: infiltration			
SW20 Soakaway or infiltration design	Where applicable, size the infiltration feature and demonstrate drain-down.	No standalone soakaway or infiltration/storage credit is included. The HOP shared trenches connect to the existing ground drainage. Standalone-soakaway sizing and half-drain time are not applicable to this adopted assessment.	Report 3; SW02.
Surface water: discharge to watercourse			
SW21 Discharge to watercourse	Document the discharge, outfall and applicable restriction.	The immediate HOP connections are into existing ground drainage. Drawing receiver inverts are 29.550/29.300 m, giving nominal differences of 70/80 mm. I confirm receiving routing, transfer, background flows and tailwater; the supporting hydraulic record must identify the onward discharge and assessed boundary conditions.	Calculation B; clarification C1.

Requirement	Summary of expectation	Summary	Reference: drawing / report section
SW22 Attenuation sizing, watercourse strategy	Demonstrate management of the 100-year plus climate-change event.	I confirm that dedicated attenuation is not required for the adopted HOP arrangement. The supporting event assessment must substantiate this conclusion. No infiltration, trench-void or silt-sump storage is credited.	Calculation B; clarification C1.
Surface water: discharge to sewer			
SW23 Discharge to sewer	Document any proposed surface-water sewer discharge and accepted rate.	Not applicable to the adopted arrangement: no new public surface-water sewer connection is proposed.	Report 3.
SW24 Sewer connection approval	Undertaker acceptance of rate and connection location where applicable.	Not applicable to the adopted arrangement: no new public surface-water sewer connection is proposed. Receiving-drain ownership and operation form part of the existing-system record.	Report 3; SW19/SW21.
SW25 Attenuation sizing, sewer strategy	Demonstrate storage where required for a sewer discharge.	Not applicable to a public-sewer strategy. The adopted surface-water arrangement is described under SW10 and SW22.	Report 3; SW10/SW22.
Foul water: all strategies			
FW01 Foul drainage layout	Show routes, inverts, sizes, gradients and connection points.	Installed NC BioDisc with 900 mm inlet depth, PX432T twin pumps, 110 mm pipework and 50 mm outlet are recorded by Certificate 1364. The specialist specifies a 110 mm deceleration connection to the existing outlet. Complete the coordinated installed route and common-datum level record.	Report 4; clarification C4.
FW02 System type	Gravity or pumped; pump design and calculations where applicable.	Gravity drainage to NC BioDisc, then pumped discharge into existing foul drainage. Eight commissioning checks are recorded as passed. The adopted 58 m system-resistance calculation gives 4.726 m head at 2 L/s. The installed duty, controls and usable emergency volume remain to be documented.	Report 4; calculation C; clarification C4.
FW03 Peak flow rate	Based on confirmed use, occupancy and discharge volumes.	I confirm the maximum pavilion operating profile, including refreshments and cleaning, and supplier acceptance of that profile. The adopted calculation comparison is 22 sports-person visits, two staff and 20 additional WC uses: 1.260 m ³ /day and 0.866 kg BOD/day. Four showers at 8 L/min contribute 0.533 L/s while flowing.	Report 4; operating-use confirmation, 8 October 2026; calculation C.

Requirement	Summary of expectation	Summary	Reference: drawing / report section
Foul water: discharge to sewer			
FW04 Public sewer connection	Identify any proposed public sewer connection.	No new public sewer connection is proposed. Treated effluent discharges into the existing foul drainage system. Record the receiving-system identity and connection in the coordinated layout.	Report 4; clarification C4/C6.
FW05 Undertaker correspondence	Connection acceptance where applicable.	No new public sewer connection is proposed. Generic building-near-sewers correspondence is not treated as design acceptance. The receiving-system operator's confirmation is required for the existing connection.	Report 4; clarification C6.
Foul water: non-mains systems			
FW06 Non-mains foul system	Justify the system and address applicable non-mains requirements.	The NC BioDisc/PX432T arrangement is supported by specialist selection, manufacturer information and commissioning. NC daily ratings are 2.700 m³ and 1.080 kg BOD. I confirm the maximum operating profile and supplier acceptance. Pump/receiver and coordinated layout records are addressed separately.	Report 4; calculations C; clarifications C4/C6.
FW07 Drainage-field infiltration	Infiltration tests where a new foul drainage field is proposed.	Not applicable. No new foul drainage field is proposed; treated effluent connects into the existing foul drainage system.	Report 4.
FW08 EA permit status	Provide the relevant confirmation for the discharge arrangement.	Treated effluent discharges into the existing foul drainage system. The receiving-system operator's confirmation is required to complete this checklist response.	Report 4; clarification C6.