



DRAINAGE STRATEGY

ISSUE 2

June 2026

New Cricket Pavilion

Combe Lane

Goatacre

Wiltshire

Document Control

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APPENDIX	TITLE	PRODUCED BY
Appendix A – Drawings by DC	Proposed Drainage Strategy	Dixon Civils
Appendix B – Drawings by others	Proposed Site Layout	Fowler Architecture & Planning
Appendix C – Sewer Records		
Appendix D – Wallingford Greenfield Runoff Tool Results		
Appendix E – Calculations		

1.0 Introduction

This drainage strategy report has been prepared on behalf of Calibre Homes for the proposed new cricket pavilion and associate car park on land north of Combe Lane, Goatacre. This report will introduce the foul and surface water design and demonstrate how the appropriate means of sustainable drainage (SuDS) will be achieved for the development site in line with national guidance.

Access to the site is via an existing field entrance off Combe Lane, which will be improved to make suitable for the proposed increase in traffic volume. Refer to the Proposed Site Plan (250522-21 C) prepared by Fowler Architecture and Planning within Appendix B this report.

2.0 The Existing Site

The application site covers 1305m² (0.131ha) of land occupied by animal pens and the boundary of the existing cricket pitch.

The site is located within flood zone 1 and is bounded to the north by Goatacre Animal Sanctuary and Café, to the east by Goatacre Cricket Club's cricket pitch, to the west by open field and to the south by Combe Lane. The site is located on the southern edge of Goatacre and land use in the vicinity is predominantly residential and agricultural.

The site falls gently from north east to south west, toward the site entrance and drainage ditch along the western boundary.

2.1 Existing ground conditions

British Geological Survey (BGS) mapping indicates that the site is located over Stanford Formation – Limestone.

Defra's Multi-Agency Geographic Information for the Countryside (MAGIC) map indicates that the geology underlying the site is classified as a Secondary A aquifer within Source Protection Zone 2c – subsurface activity, with high groundwater vulnerability and soluble rock risk.

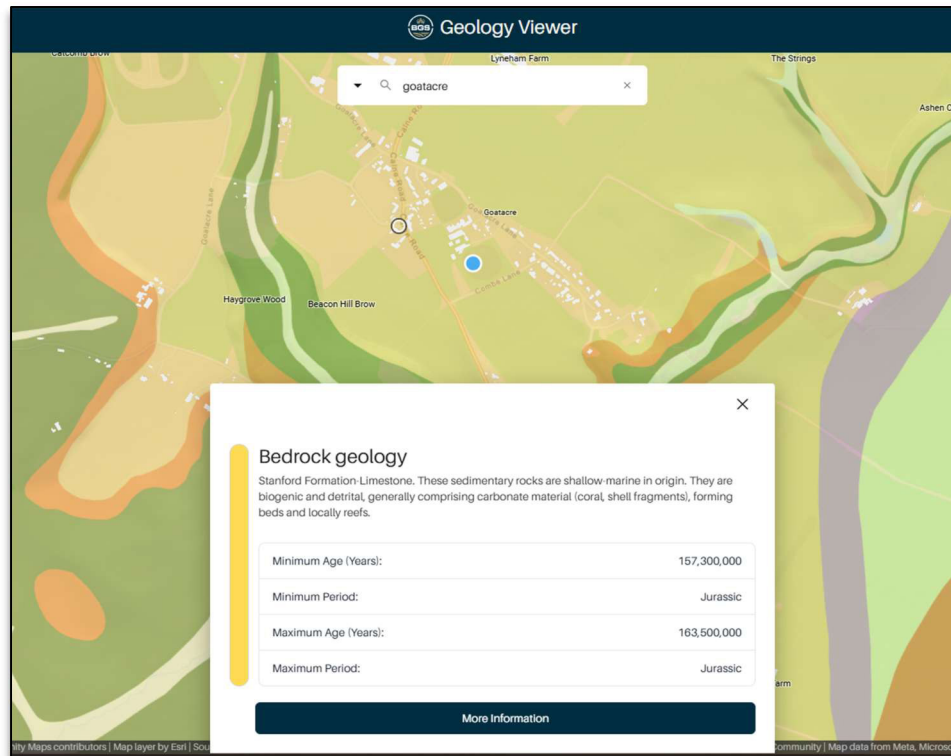


Figure 1: Bedrock Geology - Extract from British Geological Survey Geology of Britain Viewer
Source: <https://www.bgs.ac.uk/map-viewers/bgs-geology-viewer>

2.2 Intrusive Site Investigations

An intrusive site investigation, comprising two trial pits excavated to a depth of 1.5m below ground level was undertaken on site in April 2026. Infiltration testing to BRE365 standard was initiated within each test pit.

Standard practice as recommended in BRE 365 is to fill each soakaway pit and allow to drain to near empty three times. The water level should fall below 25% effective storage depth to allow the test to be analysed.

Soakaway tests were left to drain over a 24-hour period and showed no signs of draining to the 25% depth, therefore it is not possible to calculate a soil infiltration rate.

The investigation confirmed that the site is underlain by brashy soils but with a large content of clay. Groundwater was not encountered within the trial pit.



Picture 1 – Start of test



Picture 2 – After 24-hour duration

2.3 Existing Watercourses and Drainage Features

The western perimeter of the site is bounded by a drainage ditch running from north to south. This ditch is connected via a 450mm diameter pipe to the ditch on the western side of the A3102 and continues south until it reaches the unnamed watercourse at the bottom of Snow Hill approximately 650m away.

Asset records obtained from Wessex Water indicate the presence of a public gravity foul water sewers at each end of Combe Lane. There are no foul sewers within the site or surface water sewers in the vicinity.

Refer to Wessex Water sewer records within Appendix C of this report.

2.4 Existing surface water drainage arrangement

The site is currently greenfield in nature and not formally drained. Surface water runoff is assumed to partially soak away directly ground and overflow to the adjacent ditch in storm events.

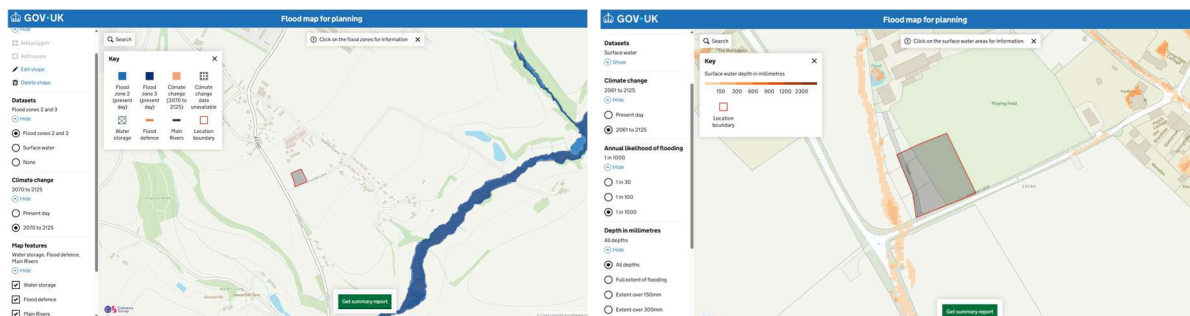
3.0 Flood Risk Summary

As the site lies within Flood Zone 1 and covers an area of less than 1 hectare, a full Flood Risk Assessment is not required. Nevertheless, potential flood risks affecting the site have been considered and are summarised in the table below.

3.1 Summary of Flood Risk

Source of Potential Flooding to the Development Site	Flood Risk	Mitigation/Comments
Fluvial	Low	EA mapping indicates that the site is located within Flood Zone 1 (Low Risk).
Public Sewers / Drains	Low	Wessex Water records indicate there are no surface sewers in the vicinity of the site. Foul water sewer located in Combe Lane to the south of the site is at a lower level than the site and contained within the highway, therefore any sewer failure would not result in flooding of the building.
Overland Flow	Low	EA mapping indicates the site is at Low risk of flooding from this source.
Groundwater	Low	Wiltshire Council SFRA Data Explorer indicates that the site is in a region where surface manifestation of groundwater is unlikely.
Artificial Sources	Low	EA Mapping confirms that the site is not located within an area at risk of flooding from this source.

3.2 Food Maps



Fluvial Flood Map

Surface Water Flood Map

Source: <https://flood-map-for-planning.service.gov.uk>

3.3 Section 19 Records

Wiltshire Council provide a record of historic flooding events within Wiltshire through 'Section 19' reporting, available to view on the [Wiltshire.gov.uk](https://wiltshire.gov.uk) website. Each report has been reviewed and does not list the application site or surrounding vicinity within any of the reports.

4.0 Surface Water Drainage Proposals

Refer to DC Drawing 1260-01-01 [Proposed *Drainage Strategy*] in Appendix A.

This section of the report addresses how flood risk generated as a result of developing the site will be managed using sustainable control measures to ensure that flood risks are not increased on and off the site and how surface water is managed post development.

4.1 Drainage Hierarchy

The surface water drainage strategy for the site has been prepared according to the drainage discharge hierarchy from CIRIA C753 The SuDS Manual, where the first available option will be utilised as follows.

Technique		Summary
1	Infiltration to the maximum extent that is practical	Impermeable soils prevent the use of infiltration devices. Confirmed by on-site testing. Permeable surfaces and sub-bases wrapped in geotextiles will utilise any pockets of infiltration available.
2	To surface water body	Proposed solution – Attenuated flows restricted to a 30% betterment of greenfield rate, connected to adjacent ditch.
3	To a surface water sewer, highway drain or another drainage system	Not required – No surface water sewers within the vicinity of the site.
4	To a combined sewer	Not required.

4.2 Attenuation Design

Poor infiltration properties of the soils below the site, evidenced by failed BRE365 testing, precludes the use of soakaways and infiltration devices as the main source of surface water discharge. Permeable surfaces and sub-bases will however be utilised where possible to maximise any available pockets of infiltration, before discharging at a restricted rate to the adjacent ditch network, mimicking the existing arrangement.

Wiltshire Council's surface water runoff policy for greenfield developments requires a 30% betterment over existing greenfield discharge rates. Refer to the existing greenfield runoff calculations within appendix D, generated by HR Wallingford's Greenfield runoff rate estimation tool, which calculates the current peak discharge rate from the site for the 100 year storm event at 1.5l/s.

A 30% reduction of this value is 1.05 l/s, and is the target value for the proposed development.

Calculations indicate SuDS attenuation of 82.3m³ will be required to accommodate roof water flow from the cricket pavilion and permeable car park for all storm events up to and including the 100year +45% climate change event with a peak outflow rate of 1.0 l/s. This volume will be stored within a porous surfaced car park with a minimum 450mm deep clean stone sub-base.

Refer to the proposed drainage calculations enclosed within Appendix E of this report.

Storm Return Period	Existing Flow Rate (l/s)	30% reduction target (l/s)	Designed outflow rate (l/s)	Betterment Provided (%)
100 year	1.5	1.05	1.0 (Including 45% climate change increase)	33

4.3 Design Exceedance

Should the drainage system and SuDS fail under extreme events or blockages, floodwaters will follow the natural topography from the northeast to southwest along the porous car park toward the boundary ditch line, mirroring the existing development arrangement.

4.4 Water Quality

Whilst roof water is considered fairly uncontaminated, runoff from roads and parking areas can be susceptible to hydrocarbon contamination, which in this instance will be intercepted within permeable stone and textiles that make up the sub-base construction of the car park, before discharging to the ditch network.

Water quality has been assessed in line with the Simple Index approach from Chapter 26 of CIRIA C753 The SuDS Manual:

1. Step 1 – Allocate suitable pollution hazard indices for the proposed land use.
2. Step 2 – Select SuDS with a total pollution mitigation index that equals or exceeds the pollution hazard index.

Pollution Hazard Indices

Below figures are obtained from Table 26.2 CIRIA C753 The SuDS Manual '*Pollution hazard indices for different land use classifications*'

Land use	Pollution hazard level	Total suspended solids (TSS)	Metals	Hydrocarbons
Roofs	Very Low	0.2	0.2	0.05
Non-residential car parking with infrequent change (eg schools, offices) ie< 300 traffic movements/day	Low	0.5	0.4	0.4

Pollution Mitigation Indices

Below figures are taken from Table 26.3 & 26.4 CIRIA C753 The SuDS Manual '*Indicative SuDS mitigation indices for discharge to surface waters and groundwater*'

SuDS Feature	Total suspended solids (TSS)	Metals	Hydrocarbons
Permeable Pavement	0.7	0.6	0.7

The pollution mitigation indices for the proposed drainage system therefore exceed the pollution hazard indices and provide suitable pollutant removal.

4.5 Adoption

The onsite drainage components will remain private and be the maintenance responsibility of the property owners.

4.6 Maintenance

Regular inspection and maintenance are important for the effective operation of the SuDS systems as designed. The regular maintenance of SuDS should be carried out in line with C753 The SUDS Manual (CIRIA, November 2015) or as per manufacturer's specification.

Pipework and Catchpits

It is not envisaged that silt build up within the pipework systems will require rigorous maintenance. Notwithstanding this, a suitable maintenance regime for the systems will comprise of routine inspection (every six months) and silt removal as necessary.

Permeable Paving/Surfacing

Permeable surfaces need to be regularly cleaned of silt and other sediments to preserve the infiltration capability of the surface. Suggested brushing regime would be at the end of winter to collect winter debris, mid-summer to collect dust, vegetation and grass-type deposits and after autumn leaf fall.

Drainage Element	Schedule	Maintenance Requirement	Frequency
Permeable Paving	Regular	Brushing and vacuuming over whole surface	Once a year, after autumn leaf fall
	Occasional	Removal of weeds	As required
	Remedial	Remedial work to any depressions or cracked or broken blocks considered a hazard to end users or detrimental to performance. Rehabilitation of surface and upper sub-structure by remedial sweeping	As required Every 10 – 15 years, or as required
	Monitoring	Initial inspection Inspect for evidence of weed growth or poor operation Inspect silt accumulation rates Monitor inspection chambers	Monthly for 3 months after installation Three monthly, 48 hours after large storms in first six months Annually Annually
Pipework and Catchpits	Regular	Inspect for accumulation of silt Inspect for debris and litter Inspect inlets and outlets for blockages	Every six months
	Occasional	Remove debris and litter Remove silt	As required

5.0 Foul Water Drainage Proposals

Refer to DC Drawing 1260-01-01 [*Drainage Strategy*] in Appendix A.

5.1 Proposal

It is proposed to connect foul water flows from the site into the public foul water sewer network within Combe Lane at the junction with the A3102.

5.2 Sewer Capacity

A pre-planning capacity enquiry has been submitted to Wessex Water to confirm available network capacity, and a response is currently awaited.

5.3 Adoption

The foul water drainage components will remain private and be the maintenance responsibility of the property owners.

6.0 Conclusion

The proposed cricket pavilion development on land north of Combe Lane will increase impermeable surface area when compared to existing. Surface water runoff from the buildings and external porous car park surfaces will be attenuated within the clean stone sub-base below the proposed car park and released to the adjacent ditch network at a rate providing a 30% betterment over the existing greenfield runoff.

The porous surface SuDS car park sub-base has been designed to accommodate the 1 in 100 year storm event, including a 45% allowance for climate change, in accordance with NPPF guidance.

Foul water generated by the pavilion will be connected to the Wessex Water sewer network within Combe Lane.

The proposed SUDS and all other foul and surface water drainage components will be maintained by the owners of the property.

These proposals demonstrate that the development is achievable without worsening of flood risk to the site and local area, while providing an improvement over existing arrangements with the introduction of sustainable drainage systems.

Dixon Civils Ltd

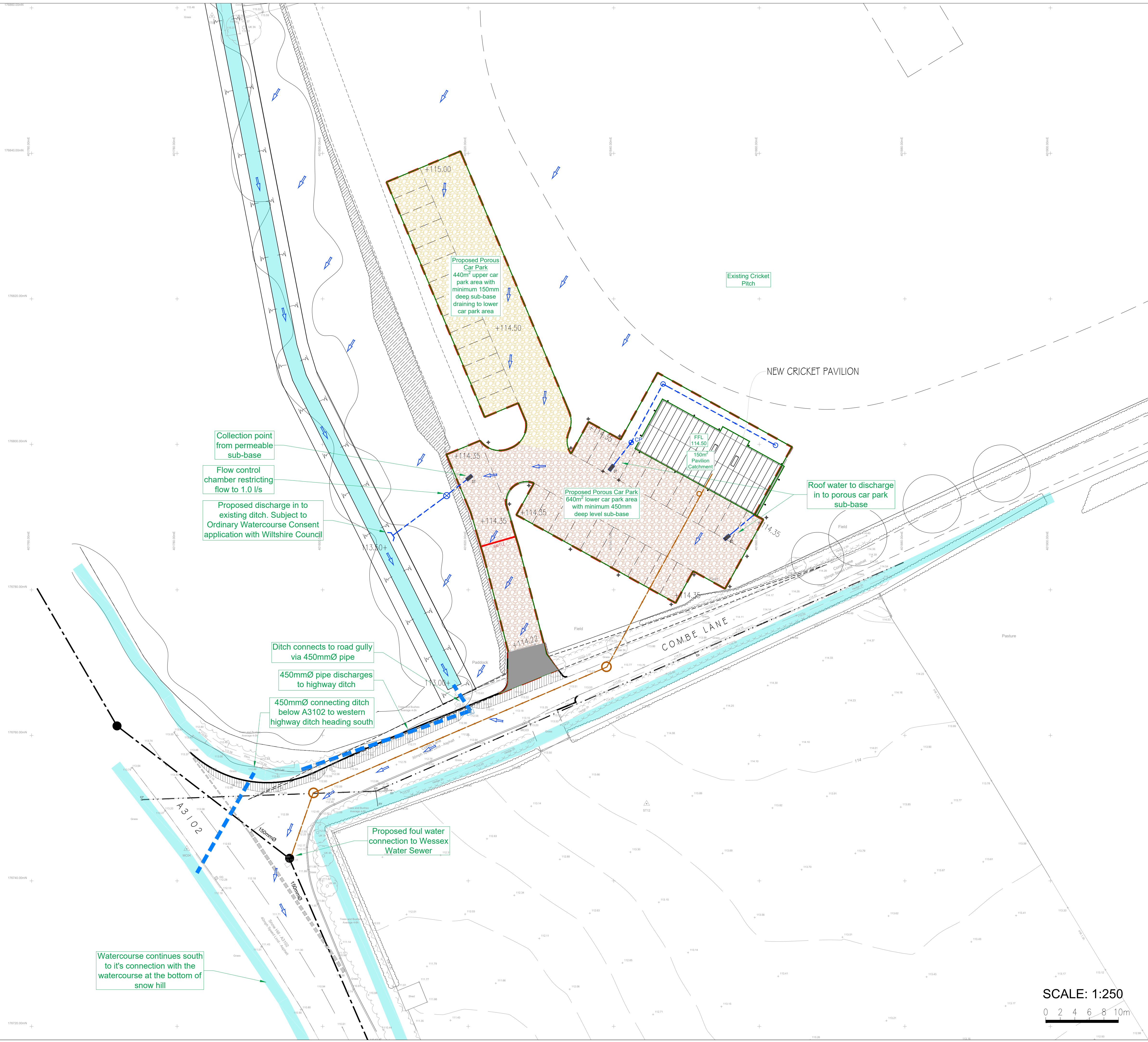
Issue 2 - June 2026

APPENDIX A

Drawings by Dixon Civils

Drawing ref. 1260-01-01 A

Drainage Strategy Layout



- KEY:**
- Approximate Route Of Existing Foul Water Sewer
 - Proposed Private Foul Water Drain
 - Proposed Private Surface Water Drain
 - Proposed Permeable Paving Distribution Tank
 - Flood Flow Route (Over 1:100yr+45% storm event)
 - Permeable Surfacing with Clean Stone Sub-Base
 - Proposed Surface Water Headwall
 - Proposed Flow Control Chamber
 - Proposed Surface Water Catchpit Chamber

- NOTES:**
- Drawing issued for planning purposes only, not for construction.
 - Do not scale from this drawing. Work only from stated dimensions or setting out details.
 - This drawing shall be read in conjunction with all relevant scheme drawings and specifications.

A	Updated to suit drainage strategy report issue 2	AD	12.06.26
-	FIRST ISSUE	AD	12.05.26
Rev	Description	Dm	Date



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Drainage & Infrastructure Design
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CLIENT

Calibre Homes

JOB TITLE

Cricket Pavilion
Goatacre

DRAWING TITLE

Drainage Strategy

DATE	MAY 2026	DRAWN	AD
DRAWING No.	1260-01-01	REV	A
ISSUED FOR	FOR APPROVAL		

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SCALE: 1:250 @ A1

0m

SCALE: 1:250
0 2 4 6 8 10m

APPENDIX B

Drawings by others

Drawing ref. 250522-21 C

Site Plan (Fowler Architecture & Planning)

KEY

New tree

Existing tree

Tree to be removed

Root Protection Area

New planting

Development Area - 0.08 hectare

BNG Area - 0.184 hectare

Modified grassland

Other neutral grassland

Low-level bollard lighting, downward facing output

Wall-mounted LED downlights



Bollard Light precedent



Wall Light precedent

External Lighting Design

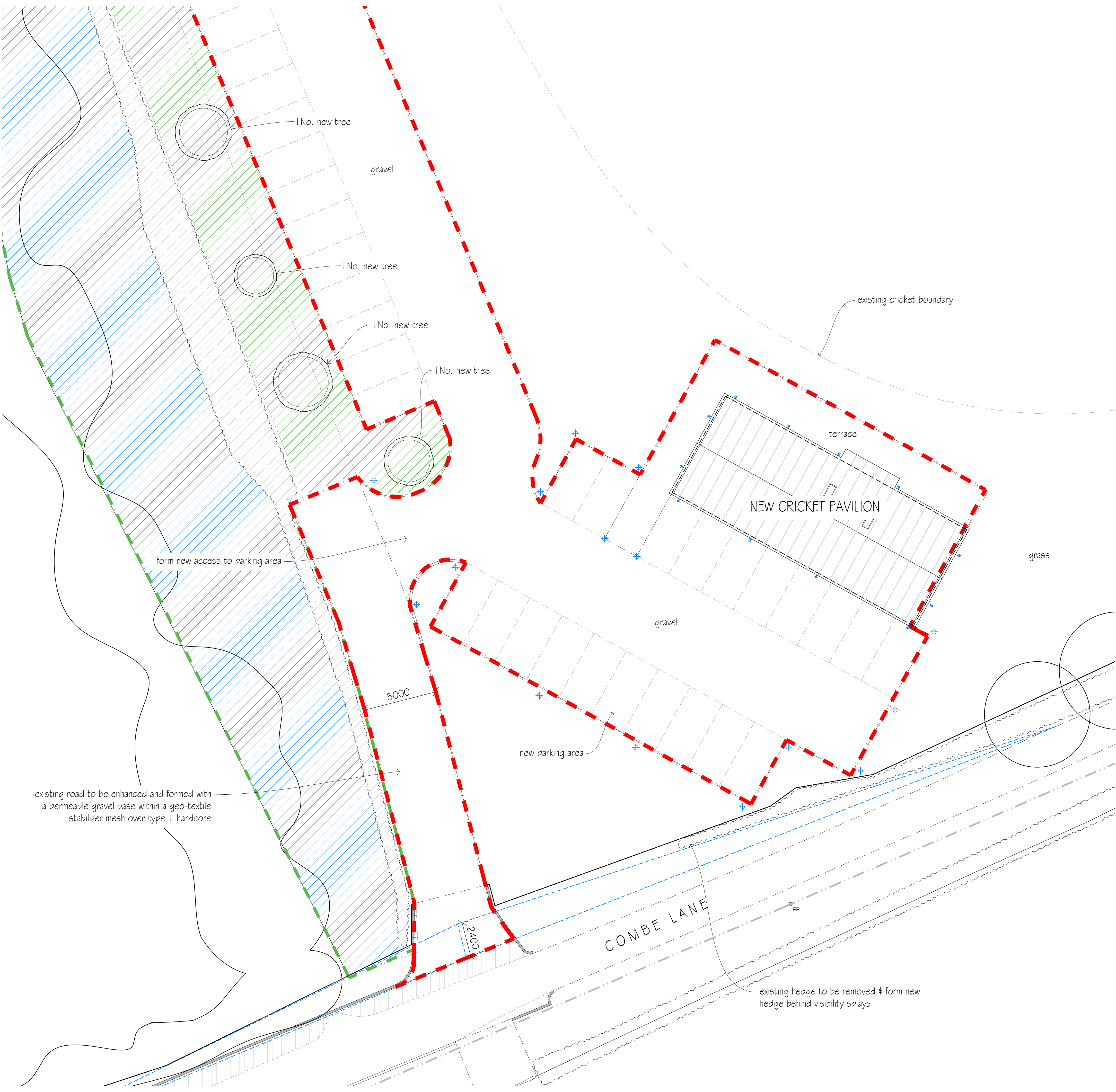
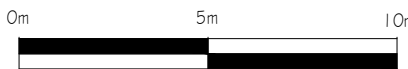
The external lighting scheme will be selected and installed to comply with the following guidance:

Be fixed downlights with a 0 degree tilt angle. Floodlights or units which can be tilted are not appropriate.

Have a 0% upward light ratio. Meaning that the only light produced by the unit is directed to the floor. Some units also emit light upwards or sideways, these are not appropriate.

Be fitted with a low wattage LED bulb (maximum 5W) with a warm white colour temperature not exceeding 2700K.

All lighting shall be triggered by a PIR motion sensor to limit disturbance.



C	New trees amended	BL	23.04.26
B	Consultation comments addressed	BL	24.02.26
A	CO comments addressed	BL	12.02.26
revisions		initial	date

Contractors, Sub Contractors and Suppliers are to check all relevant dimensions and levels of site and buildings before commencing any shop drawings or building work.

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project
GOATACRE CRICKET CLUB
Goatacre

drawing
Site Plan
New Cricket Pavilion

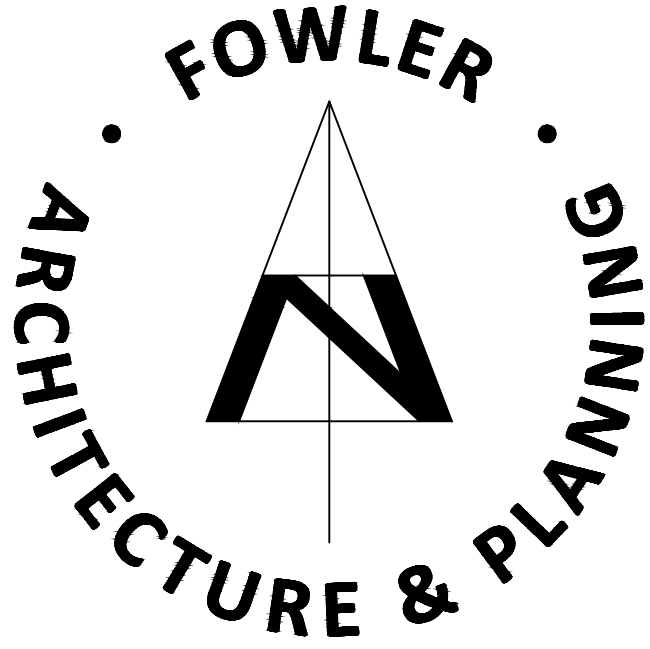
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drawn by
BL

date
Nov 2025

250522-21
drawing no

C
rev

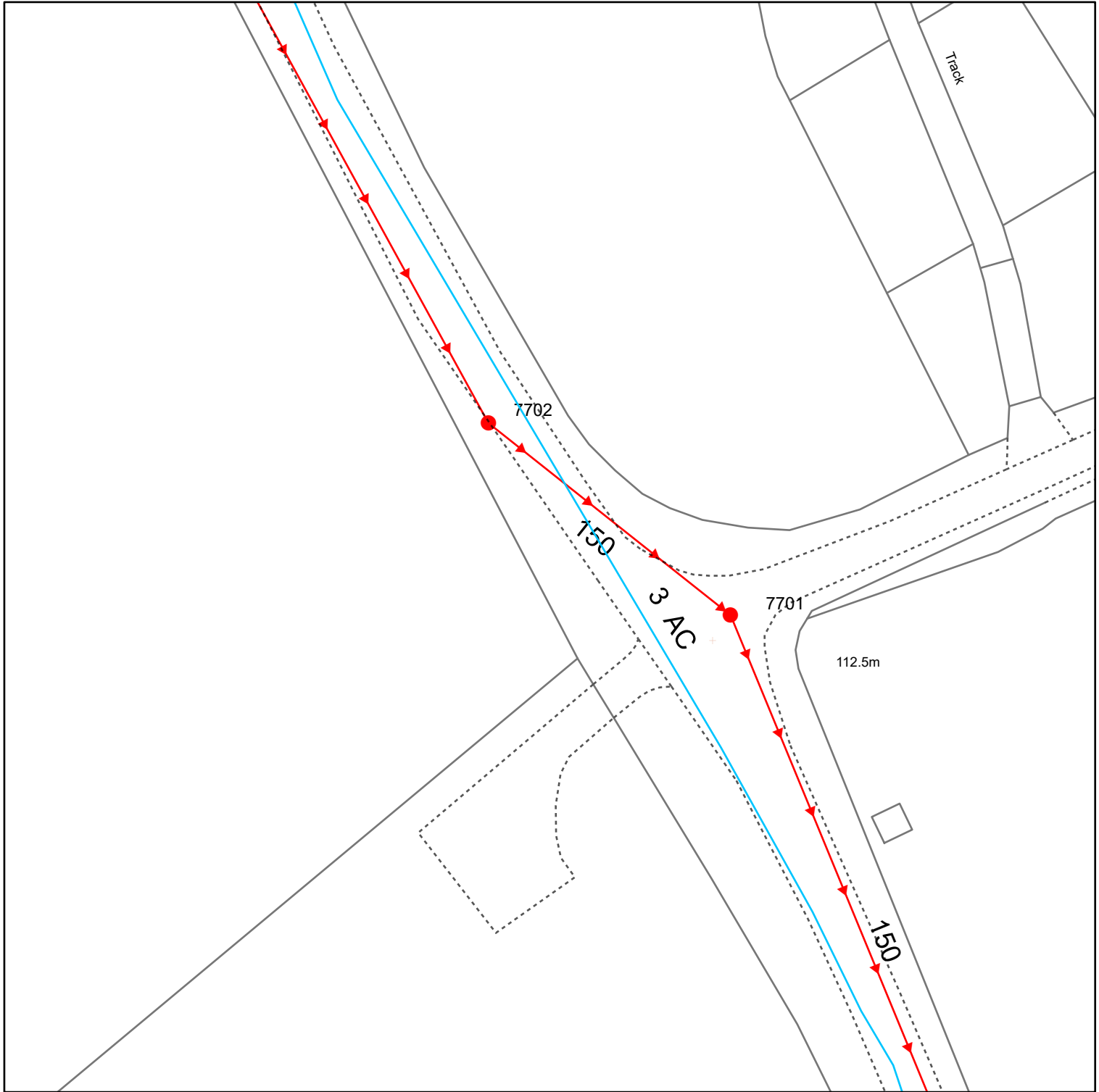


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APPENDIX C

Wessex Water Sewer Records

Wessex Water Network Map

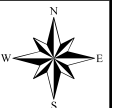


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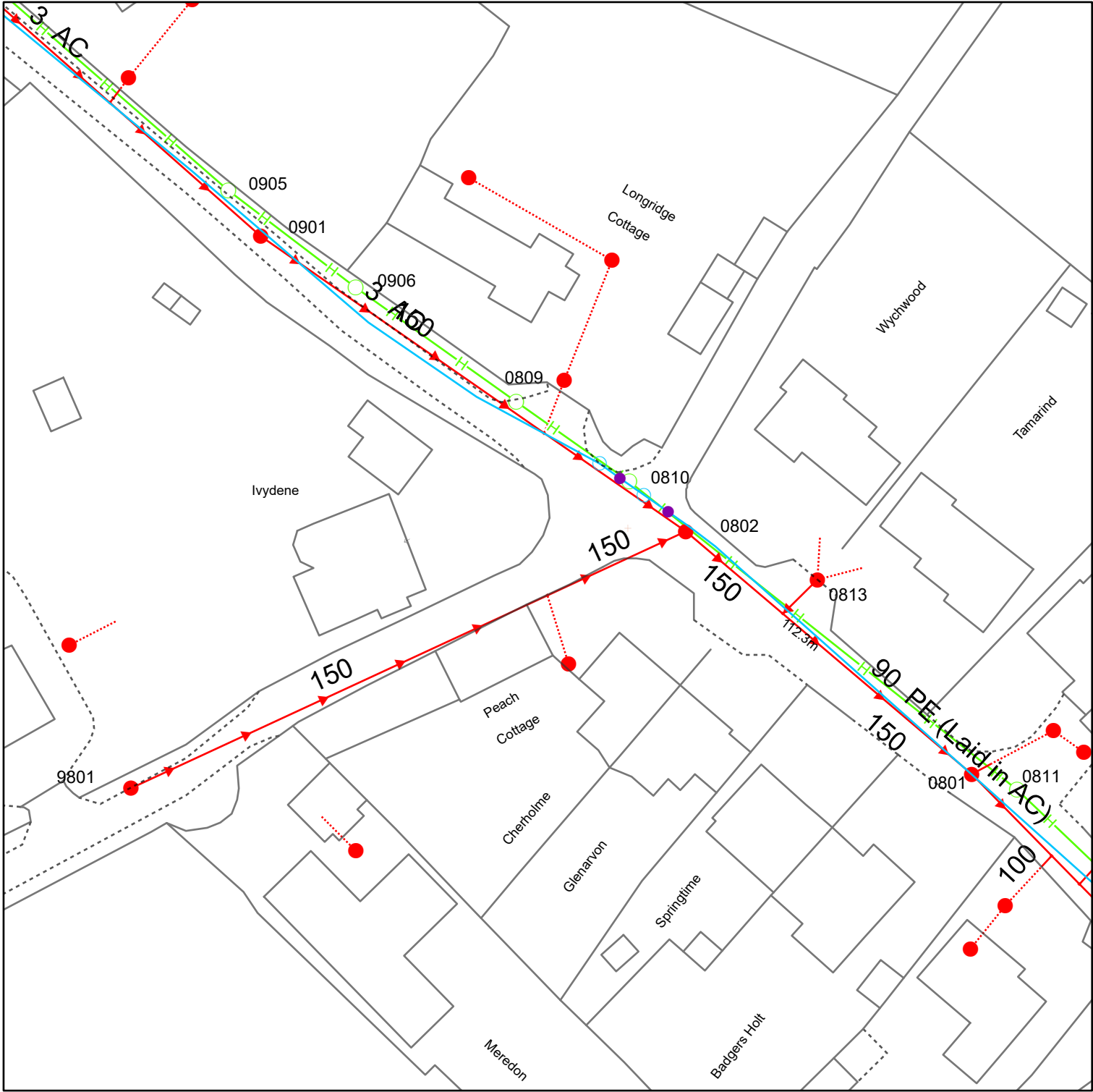
WATER MAINS		SEWERS		STRATEGIC		PUBLIC		PRIVATE		SECTION 104		OTHER WESSEX PIPES		NON-WESSEX / UNKNOWN	
	Distribution		Foul										Rising Mains		Private Rising Mains
	Washout		Surface										Standby Rising Mains		Culverted Watercourse
	Raw Water		Combined										EDM		Highway Drain
	Abandoned		Abandoned										Overflow		Use Unknown
	Private												Syphon		Status Unknown
Colours generally indicate the use of the sewer/drain (i.e Red - Foul, Dark Blue - Surface, Magenta - Combined/Dual Use, Light Green - Highway Drain, Mid Green - Overflow).															
Some styles of line and symbol are shown on the key in sample/typical colours.															
FITTINGS		STRUCTURES													
	Hydrant		Manhole - Foul		Pumping Station - Surface										
	Other		Manhole - Surface		Pumping Stn - Foul/Combined										
			Manhole - Combined		Gully										
			Inlet		Vent Column										
			Outfall		Rodding Eye										
			Lamphole		Catchpit										
			Bifurcation - Foul		Flushing Chamber										
			Bifurcation - Surface		Soakaway										
			Bifurcation - Combined		Non Return Valve										
			Combined Sewage Overflow		Air Valve		Hatch Box		Washout						
OTHER STRUCTURES Attenuation Tank Storage Tank Chamber Tunnel Interceptor															

Information in this map is provided for identification purposes only. No warranty as to accuracy is given or implied. The precise route of pipe work may not exactly match that shown. Wessex Water does not accept liability for inaccuracies. Sewers and lateral drains adopted by Wessex Water under the Water Industry (Schemes for Adoption of Private Sewers) Regulations 2011 are to be plotted over time and may not yet be shown. In carrying out any works, you accept liability for the cost of any repairs to Wessex Water apparatus damaged as a result of your works. You are advised to commence excavations using hand tools only. Mechanical digging equipment should not be used until pipe work has been precisely located. If you are considering any form of building works and pipe work is shown within the boundary of your property or a property to be purchased (or very close by) a surveyor should plot its exact position prior to commencing works or purchase. If you are proposing to build over or near Wessex Water's apparatus you should contact the Developer Services Team, tel: 01225 526633 or e-mail: developer.enquiries@wessexwater.co.uk to discuss your proposals. Details of assets within Wessex Water's land ownership are unavailable through this service.

Date: 08/05/2026
Centre: 401773E, 176756N
Scale: 1:625
(when printed at A4 size)



Wessex Water Network Map



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WATER MAINS	SEWERS	STRATEGIC PUBLIC	PRIVATE	SECTION 104	OTHER WESSEX PIPES	NON-WESSEX / UNKNOWN
- Distribution - Washout - Raw Water - Abandoned - Private	- Foul - Surface - Combined - Abandoned	Colours generally indicate the use of the sewer/drain (i.e. Red - Foul, Dark Blue - Surface, Magenta - Combined/Dual Use, Light Green - Highway Drain, Mid Green - Overflow).	Colours generally indicate the use of the sewer/drain (i.e. Red - Foul, Dark Blue - Surface, Magenta - Combined/Dual Use, Light Green - Highway Drain, Mid Green - Overflow).	Colours generally indicate the use of the sewer/drain (i.e. Red - Foul, Dark Blue - Surface, Magenta - Combined/Dual Use, Light Green - Highway Drain, Mid Green - Overflow).	- Rising Mains - Standby Rising Mains - EDM Effluent Disposal - Overflow - Syphon	- Private Rising Mains - Culverted Watercourse - Highway Drain - Use Unknown - Status Unknown
FITTINGS - Hydrant - Other	STRUCTURES - Manhole - Foul - Manhole - Surface - Manhole - Combined - Inlet - Outfall - Lamphole - Bifurcation - Foul - Bifurcation - Surface - Bifurcation - Combined - Combined Sewage Overflow	- Pumping Station - Surface - Pumping Stn - Foul/Combined - Gully - Vent Column - Rodding Eye - Catchpit - Flushing Chamber - Soakaway - Non Return Valve - Air Valve - Hatch Box - Washout	- Pumping Station - Surface - Pumping Stn - Foul/Combined - Gully - Vent Column - Rodding Eye - Catchpit - Flushing Chamber - Soakaway - Non Return Valve - Air Valve - Hatch Box - Washout	- Pumping Station - Surface - Pumping Stn - Foul/Combined - Gully - Vent Column - Rodding Eye - Catchpit - Flushing Chamber - Soakaway - Non Return Valve - Air Valve - Hatch Box - Washout	- OTHER STRUCTURES - Attenuation Tank - Storage Tank - Chamber - Tunnel - Interceptor	- OTHER STRUCTURES - Attenuation Tank - Storage Tank - Chamber - Tunnel - Interceptor

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Date: 08/05/2026
Centre: 402041E, 176872N
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APPENDIX D

Wallingford Greenfield Runoff Estimation Tool Results

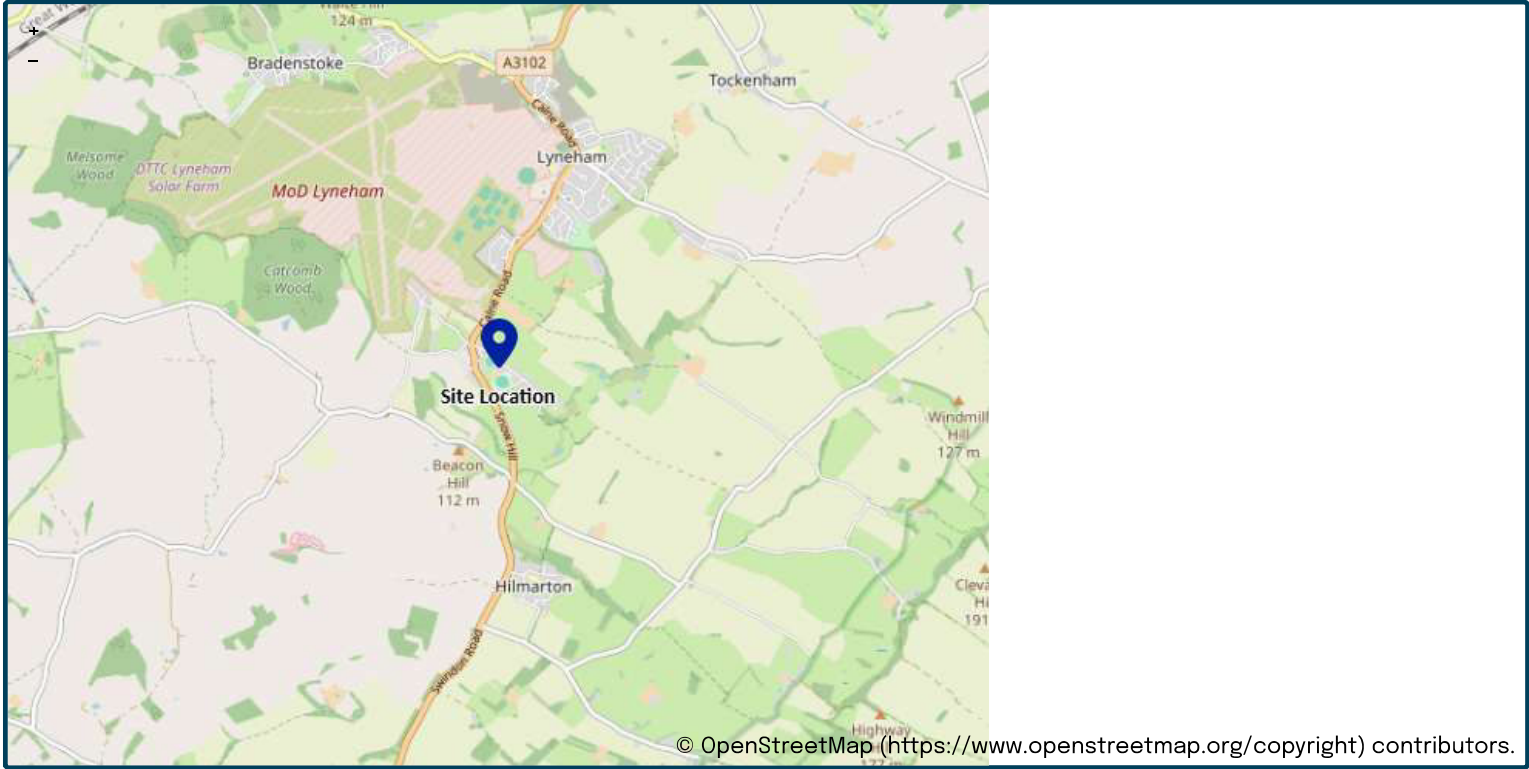
This is an estimation of the greenfield runoff rates that are used to meet normal best practice criteria in line with Environment Agency guidance “Rainfall runoff management for developments”, SC030219 (2013), the SuDS Manual C753 (CIRIA, 2015) and the non-statutory standards for SuDS (Defra, 2015). This information on greenfield runoff rates may be the basis for setting consents for the drainage of surface water runoff from sites.

Project details

Date	01/05/2026
Calculated by	ALAN DIXON
Reference	DC1260
Model version	2.2.3

Location

Site name	Cricket Pavilion
Site location	Goatacre



Site easting (British National Grid)	401847
Site northing (British National Grid)	176800

Site details

Total site area (ha)	.13	ha
----------------------	----------------------------------	----

Greenfield runoff

Method

Method	IH124
--------	-------

IH124

	<u>My value</u>		<u>Map value</u>
SAAR (mm)	709 mm		709
How should SPR be derived?	WRAP soil type		
WRAP soil type	4		4
SPR	0.47		
QBar (IH124) (l/s)	0.6 l/s		

Growth curve factors

	<u>My value</u>		<u>Map value</u>
Hydrological region	8		8
1 year growth factor	0.78		
2 year growth factor	0.93		
10 year growth factor	1.49		
30 year growth factor	1.95		
100 year growth factor	2.43		
200 year growth factor	2.78		

Results

Method	IH124	
Flow rate 1 year (l/s)	0.5 l/s	
Flow rate 2 year (l/s)	0.6 l/s	
Flow rate 10 years (l/s)	0.9 l/s	
Flow rate 30 years (l/s)	1.2 l/s	
Flow rate 100 years (l/s)	1.5 l/s	
Flow rate 200 years (l/s)	1.8 l/s	

Please note runoff estimation is subject to significant uncertainty. Results are therefore normally reported to only 1 decimal place. Where 2 decimal places are provided, this does not indicate accuracy to this level, it has been adopted to prevent ‘zero’ figures from being reported. Outputs less than 0.01 l/s are reported as 0.01 l/s.

Disclaimer

This report was produced using the Greenfield runoff rate estimation tool (2.2.3) developed by HR Wallingford and available at uksuds.com (<https://www.uksuds.com/>). The use of this tool is subject to the UK SuDS terms and conditions and licence agreement, which can both be found at uksuds.com/terms-conditions (<https://www.uksuds.com/terms-conditions>). The outputs from this tool have been used to estimate Greenfield runoff rates. The use of these results is the responsibility of the users of this tool. No liability will be accepted by HR Wallingford, the Environment Agency, Centre for Ecology and Hydrology, Wallingford Hydrosolutions or any other organisation for the use of these data in the design or operational characteristics of any drainage scheme.

APPENDIX E

Calculations

Infodrainage Soakaway Calculations

Project: Cricket Pavilion Goatacre	Date: 12/05/2026		
	Designed by: AD	Checked by:	Approved By:
Report Details: Type: Inflows Storm Phase: Phase	Title: SW Attenuation Design		





Pavilion Catchment

Type : Catchment Area

Area (ha) 0.015

Preliminary Sizing

Volumetric Runoff Coefficient	0.750
Percentage Impervious (%)	100
Time of Concentration (mins)	5

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	0.750
Winter Volumetric Runoff	0.840
Time of Concentration (mins)	5
Percentage Impervious (%)	100



Car park Catchment

Type : Catchment Area

Area (ha) 0.108

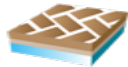
Preliminary Sizing

Volumetric Runoff Coefficient	0.750
Percentage Impervious (%)	100
Time of Concentration (mins)	5

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	0.750
Winter Volumetric Runoff	0.840
Time of Concentration (mins)	5
Percentage Impervious (%)	100

Project: Cricket Pavilion Goatacre	Date: 12/05/2026			
	Designed by: AD	Checked by:	Approved By:	
Report Details: Type: Stormwater Controls Storm Phase: Phase	Title: SW Attenuation Design			



Porous Paving

Type : Porous Paving

Dimensions

Exceedance Level (m)	114.350
Depth (m)	0.500
Base Level (m)	113.850
Paving Layer Depth (mm)	50
Membrane Percolation (m/hr)	1000.0
Porosity (%)	33
Length (m)	10.000
Long. Slope (1:X)	1000.00
Width (m)	60.000
Total Volume (m³)	89.100

Inlets

Inlet 1

Inlet Type	Lateral Inflow
Incoming Item(s)	Car park Catchment
Bypass Destination	(None)
Capacity Type	No Restriction

Inlet 2

Inlet Type	Point Inflow
Incoming Item(s)	Pavilion Catchment
Bypass Destination	(None)
Capacity Type	No Restriction

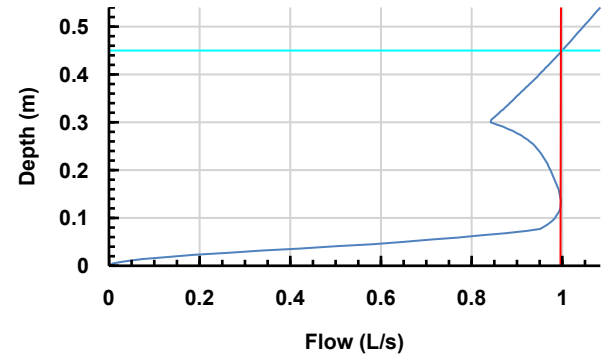
Project: Cricket Pavilion Goatacre	Date: 12/05/2026			
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Outlets

Outlet

Outgoing Connection	(None)
Outlet Type	Hydro-Brake®
Invert Level (m)	113.850
Design Depth (m)	0.450
Design Flow (L/s)	1.0
Objective	Minimise Upstream Storage Requirements
Application	Surface Water Only
Sump Available	☒

Unit Reference	SHE-0054-1000-0450-1000
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Advanced

Conductivity (m/hr)	1000.0
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Project: Cricket Pavilion Goatacre	Date: 12/05/2026			
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Report Title: Rainfall Analysis Criteria	Title: SW Attenuation Design			

Runoff Type	Dynamic
Output Interval (mins)	5
Time Step	Default
Urban Creep	Apply Global Value
Urban Creep Global Value (%)	0
Junction Flood Risk Margin (mm)	300
Perform No Discharge Analysis	☐

Rainfall

Project: Cricket Pavilion Goatacre	Date: 12/05/2026		
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Report Title: Rainfall Analysis Criteria	Title: SW Attenuation Design		

FSR

Type: FSR

Region	England And Wales
M5-60 (mm)	20.9
Ratio R	0.400
Summer	☒
Winter	☒

Return Period

Return Period (years)	Increase Rainfall (%)
1.0	0.000
30.0	0.000
100.0	45.000

Storm Durations

Duration (mins)	Run Time (mins)
15	30
30	60
60	120
120	240
180	360
240	480
360	720
480	960
600	1200
720	1440
960	1920
1440	2880
2160	4320
2880	5760
4320	8640
5760	11520
7200	14400
8640	17280
10080	20160

Project: Cricket Pavilion Goatacre	Date: 12/05/2026			
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Report Details: Type: Stormwater Controls Summary Storm Phase: Phase	Title: SW Attenuation Design			



Critical Storm Per Item: Rank By: Max. Avg. Depth

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Total Lost Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Half Drain Down Time (mins)	Percentage Available (%)
Porous Paving	FSR: 100 years: +45 %: 480 mins: Winter	114.272	114.270	0.412	0.420	9.1	82.344	0.000	0.000	1.0	47.025		7.582

Project: Cricket Pavilion Goatacre	Date: 12/05/2026			
	Designed by:	Checked by:	Approved By:	
	AD			
Report Details: Type: Stormwater Controls Summary Storm Phase: Phase	Title: SW Attenuation Design			

Status

OK



FOR MORE INFORMATION CONTACT US AT:

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