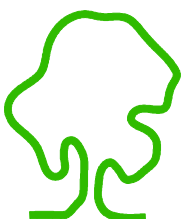


LAND AT NEW BARN FARM – ADDITIONAL DWELLING
CAPEL ROAD, RUSPER, HORSHAM, WEST SUSSEX, RH12 4PZ

Flood Risk and Drainage Assessment

May 2026



eas ltd

Environmental Assessment Services Ltd

REPORT DATA SHEET

Requirement	Data
Report Reference	891b/LDVArchitecture/NewBarnFarmDwelling/FRA&D
Date	May 2026
Client	Steve Lamb
Report type	Flood Risk Assessment and Drainage Strategy
Purpose	Planning
Revisions	-
Prepared by	Xanthe Lyford BSc (Hons) Signed 
Approved by	Eur Ing Malcolm McKemey BSc (Hons), CEng, Cenv, MICE, MCIWEM, MIEnvSc Signed 

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LAND AT NEW BARN FARM, CAPEL ROAD, RUSPER, HORSHAM, WEST
SUSSEX, RH12 4PZ

Flood Risk Assessment and Drainage Strategy

May 2026

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SUSSEX, RH12 4PZ

Flood Risk Assessment and Drainage Strategy

May 2026

1. BACKGROUND, EXISTING SITE & PROPOSED DEVELOPMENT

- 1.1 The site is currently used as the as a portacabin style dwelling with a shipping container adjacent and to the north. The ground surrounding the existing dwelling is permeable road planings and the land to the rear is non-permeable tarmac. The site is located on New Barn Farm - stud farm, Rusper. The site is accessed from the public highway, Capel Road to the north, by an existing gateway. The site area (redline boundary) is approximately 0.05 ha. The Ordnance Survey map reference for the centre of the site is TQ 18487 37514. The site elevation for the centre of the site is approximately +103 m OD. See Appendix A Figure 1 for the site location plan and Figure 2 for the existing site layout.
- 1.2 It is proposed to redevelop the site, after the demolition of the existing building and removal of the shipping container, into a three-bedroom residential dwelling with a garden. See Figure 3 in Appendix A for the proposed development.

2. GEOLOGY & HYDROGEOLOGICAL CONSIDERATIONS

- 2.1 According to the British Geological Survey website the site lies on Weald Clay Formation-Limestone. Mostly clay with a band of limestone running through.
- 2.2 The Department for Environment, Food and Rural Affairs (Defra) online mapping (MAGIC) shows the northern boundary of the site to be lying on a Secondary A bedrock aquifer and unproductive superficial drift. DEFRA classify the soil type as “*slightly acid but base-rich loamy and clayey soils*”. The site lies on an area of ‘high’ groundwater vulnerability, the site does not lie in a groundwater source protection zone (SPZ).

3. FLOOD RISK ASSESSMENT

3.1 Outline Flood Risk

- 3.2 According to the Environment Agency’s Flood Maps for Planning, the site lies in Flood Zone 1 (low risk of flooding from fluvial sources where defences are not considered / <0.1% AEP of flooding in any given year). The site is not shown to be at risk of surface water flooding in the 1 in 30-year, 1 in 100-year

or 1 in 1000-year scenarios. Groundwater and reservoir flooding at the site is considered unlikely at this location. See Appendix B for the flood maps for the site.

3.3 Defences

- 3.1 Flood defences can help reduce the chance of flooding but cannot completely prevent it. They can fail, or water could spill over the top if it is deep enough. There is one record of a main watercourse onsite: Boldings Brook in the upper operational catchment of the River Arun. However, this is at a significantly lower elevation than the area to be developed and the site is not considered to be at risk of flooding from fluvial sources.

4 ALTERNATIVE SOURCES OF FLOODING

An assessment of alternative sources of flooding potentially affecting the site has been made from a review of the EA online flood mapping and from the Horsham District Council Level 1 Strategic Flood Risk Assessment (SFRA 2010). The SFRA addresses alternative sources of flooding including fluvial flooding, surface water flooding, groundwater flooding and flooding from sewers and reservoirs.

4.1 Surface Water Flooding

- 4.1.1 Surface water runoff (or 'pluvial' flooding) is most likely to be caused by intense downpours e.g. thunderstorms and is exacerbated by blocked culverts and areas of nonpermeable surfacing.
- 4.1.2 The EA flood maps for planning show that the site is not at risk of surface water flooding in the 1 in 30-year, 1 in 100-year or 1 in 1000-year scenarios. The EA's long-term flood prediction indicates that the risk of surface water flooding at the site is 'very low' risk (<0.1 % risk per year) and is expected to remain 'very low' in the 2040-2060 prediction. See Appendix B for the long-term surface water flood risk map for the site.

4.2 Sewer Flooding

- 4.2.1 There is no foul sewer provision at the site and none in the immediate vicinity. Although there have been records of sewer flooding within the Rusper area, there are no records of sewer flooding at the site itself. See Appendix F for the Southern Water Sewer letter for a previous application on the wider site.

4.3 Groundwater Flooding

- 4.3.1 Groundwater flooding occurs when the water table rises above the surface of the ground, normally as a result of persistent rainfall over a prolonged period. Increased levels of development in an area can increase the risk of groundwater flooding. The flood maps for planning classifies the site as unlikely to be at risk

from groundwater flooding. There are no records of the site being impacted by groundwater flooding.

5 HISTORY OF FLOODING

- 5.1 According to the SFRA (2010), there are several recorded incidents of flooding within the Horsham District area. Most notably in the winter of 1993-1994, and Autumn 2000. No records of historic flood events directly affecting the site, or its immediate surroundings, have been found.
- 5.2 The design flood level is usually derived from the Environment Agency Product 4 for the site. The Environment Agency's flood risk data (Product 4) was ordered from the EA on 26 February 2026. The EA stated that there was no modelled data available for the site and its immediate surroundings. See Appendix G for the EA's Product 4 letter.

6 PLANNING STATUS WITH RESPECT TO FLOODING

- 6.1 The site is shown on the current Environment Agency (EA) flood risk mapping as being within Flood Zone 1 (<0.1 % probability of flooding in any year). The site is not at risk of flooding from surface water. See Appendix B for the Environment Agency Flood maps for planning.
- 6.2 The Sequential Test is intended to steer more vulnerable development to land in a lower Flood Zone, in this case the site lies in Flood Zone 1 and is not at risk of surface water flooding. There is no requirement for a Sequential Test, and the Exception Test will not be required.
- 6.3 The existing building and shipping container, lie on permeable hardstanding (road plantings), the land to the rear of the dwelling and shipping container is non-permeable tarmac, this is to be replaced with a garden surrounding the proposed dwelling. The creation of a lawned garden area and the inclusion of permeable paving in the patio areas (SuDS measures) will help to reduce the amount of impermeable surfacing on the site, reducing the runoff from the site and infiltrating and attenuating the surface water. It is also proposed to include rainwater harvesting for toilet flushing and garden watering. These sustainable drainage measures will reduce the flood risk from surface water elsewhere.

7 RISK TO PROPERTY

- 7.1 The site to be developed lies in Flood Zone 1 (low risk of flooding from fluvial waters where defences are not considered) and is not at risk of flooding from surface water. The proposed dwelling is not considered to be at risk from flooding.
- 7.2 The areas of non-permeable hardstanding on the site at present is to be replaced (excluding the area of the roof of the proposed dwelling) by a permeable paved patio and garden. These SuDS measures will reduce surface water runoff and

make the developed site more sustainable. The proposed dwelling is not considered to be at risk of flooding.

8 RISK TO USERS OF THE PROPOSED DEVELOPMENT

- 8.1 The site lies in Flood Zone 1 (low risk of fluvial flooding where defences are not considered) and is at not at risk of surface water flooding. The proposed development will decrease the amount of non-permeable hardstanding at the site by the inclusion of a garden and permeable paving in the patio areas. The site lies in an area with a long history of residential and agricultural development. It can be considered that the future users of the site will not be at risk of flooding.

9 LIKELY IMPACT ON FLOOD RISK ELSEWHERE

- 9.1 The site, as existing, is largely impermeable surfacing (the roofs of the dwelling and the shipping container and the tarmac surfacing to the rear/east). The proposed development will decrease the impermeable surface area of the site by approximately 170 m² and therefore decrease the surface water runoff leaving the site. The inclusion of a garden area and permeable paving in the patio areas will infiltrate and slow the runoff from the site and the inclusion of a rainwater harvesting tank will further reduce the runoff from the site, in line with SuDS recommendation.

10 EXISTING SITE DRAINAGE

- 10.1 The site was visited on the 5th and 12th of March and the 7th April 2026.
- 10.2 The wider site currently drains its surface water to attenuation storage discharging via a 2 l/s flow control device into the watercourse to the south of the site, Highams Gill. There is no public foul sewer at the site or in Capel Road and the existing foul sewage system from the wider site is managed by a package sewage treatment plant with the treated effluent flowing into the abovementioned watercourse. See Appendix E for photographs of the watercourse to the south and Appendix F for the Southern Water sewer letter for a previous application at the wider site.

11 SURFACE WATER DRAINAGE OPTIONS

- 11.1 There is a general requirement that new drainage systems should be sustainable (SuDS) and that flow leaving the site should not exceed the Greenfield flow rate, including both surface water and sewage effluent.
- 11.2 The area of impermeable surface will be decreased by the proposed redevelopment due to the replacement of the tarmac with a garden area and permeable patio area.

- 11.3 The proposed development will have an impermeable surface area of approximately 143 m² comprising the roof of the proposed dwelling. The inclusion of a garden and permeable patio in the design will reduce the impermeable surface area to be drained and therefore the surface water runoff from the developed site, making the development more sustainable. Additionally the use of a rainwater harvesting tank for toilet flushing will further reduce the surface water runoff.
- 11.4 The Greenfield runoff rate for the site has been calculated using the UK SuDS tools. The results are shown in See Appendix C and summarised in Table 11.1 below:

TABLE 11.1
GREENFIELD RUNOFF RATES

Return period	Flow rates (l/s)
Qbar	0.3
1 in 1 year	0.2
1 in 2 year	0.3
1 in 10 year	0.5
1 in 30 year	0.7
1 in 100 year	0.9
1 in 200 year	1.1

- 11.5 The current non-statutory guidance indicates that the maximum discharge permitted to leave the site from the drained area post development should not exceed the 1 in 1 year return period flow rate (0.2 l/s), or as near as practicable. To reduce the impact on the local watercourses the flow is proposed to be reduced to 2 l/s. Flow controlled vortex valves or orifices exist that can control the flow to as low as 2 l/s. See Appendix C for the HR Greenfield Flow Rate tool data.
- 11.6 According to the SuDS manual, UK runoff from the development shall be discharged to the following final destinations, to the maximum extent practicable, in accordance with the below hierarchy:
- *priority 1: collected for non-potable use*
 - *priority 2: infiltrated to ground*
 - *priority 3: discharged to an above ground surface water body*
 - *priority 4: discharged to a surface water sewer, or another piped surface water drainage system*
 - *priority 5: discharged to a combined sewer*
- (priority 1 is the highest priority and priority 5 is the lowest.)*
- 11.7 Rainwater harvesting for use in toilet flushing and garden watering has been included in the design for the proposed dwelling - *collection for the non-potable use*. This will reduce the runoff from the roof. The inclusion of a garden area

and permeable paved patio will allow some of the surface water to *infiltrate to the ground*, making the development more sustainable.

- 11.8 Discharge to soakaway requires suitably permeable ground. The soil at the site is Weald Clay Formation (variable-poor permeability), and unsuitable for soakaway drainage, as evidenced by the use of attenuation storage for the surface water drainage from the existing buildings on the wider site.
- 11.9 The alternative to drainage to soakaway is drainage to attenuation storage where excess surface water (exceeding the capacity of the rainwater harvesting tank) is stored on site, either in a pond, gully, swale or underground attenuation storage unit. The surface water is allowed to discharge at a maximum of the Greenfield 1 in 1-year flow rate (or as near as practicable) via a flow-control vortex valve or orifice plate into a nearby watercourse. In this case Highams Gill to the south of the site (*above ground surface water body*).
- 11.10 It is proposed to drain the excess surface water from the developed site to underground attenuation storage crates discharging via a flow-controlled device (limiting the flow to 2 l/s) to the existing watercourse that lies to the south of the site, Highams Gill, as with the existing scenario across the wider site. This is the preferred method of disposal of surface water from the developed site in line with the SuDS hierarchy. The use of rainwater harvesting for toilet flushing and watering the garden has further reduce the runoff from the site.
- 11.11 A suitable area to locate a sealed, underground attenuation crate for the building would be under the permeable track to the east of the site. The attenuation store will overflow into the watercourse to the south, Highams Gill. The attenuation crate would need to accept any surface water runoff from the roof of the proposed dwelling that exceeded the capacity of the rainwater harvesting storage tank; discharging at a rate of 2 l/s via a flow control orifice.
- 11.12 A suitable sized sealed underground attenuation crate would be 4.5 m x 5 m x 0.4 m deep as calculated by the MasterDrain drainage network model. The surface water runoff from the roof of the dwelling will be drained into the harvesting tank and once at full capacity will drain to the attenuation storage crates, then discharging via a flow-controlled device, limiting the flow to 2 l/s into the watercourse to the south of the site. The proposed drainage layout is shown in Figure 4 and output from the drainage design model can be seen in Appendix D.

11.13 Design Storm

The surface water drainage system has been designed for the 30-year return period event plus a 35% allowance for climate change and tested for surcharge for the 1 in 100-year return period event (1% Annual Exceedance Probability) plus a 45% allowance for climate change. See Appendix A, Figure 4 for the proposed drainage design and Appendix D for pipe and chamber layout and sizing of the drainage field from the MasterDrain model.

11.14 Drainage Design Model

The rainwater harvesting tank has been sized at 5000 l using the *Rainwater Harvesting Ltd* calculator, as detailed below:

TANKS SIZE CALCULATOR

The tank size calculator service is provided by RainWater Harvesting so you can establish the size of tank you might decide to install. You will need to know the approximate dimensions of your house in metres. If in doubt, just pace out the house length and width.

COLLECTABLE ROOF AREA (M ²)			
Main Building	Width: 10	Length: 12	Rain Collection Area: 120 m ²
Extension one	Width: 5.4	Length: 4.4	Rain Collection Area: 23.760000000000005 m ²
Extension Two	Width:	Length:	Rain Collection Area: 0 m ²
Extension Three	Width:	Length:	Rain Collection Area: 0 m ²
Or the total roof area, if you already know it:	0		Total area of collectable roof space: 143 m ²
Select Your Region	England SE & Central		Average rainfall per year in your region: 64 L
Collectable rainwater per annum in litres - discounted by 20% to account for water loss			72216 L

USE OF RAINWATER IN THE BUILDING

Number of people or bedrooms in the building -	people: 3	bedrooms: 3
✓ Number of clothes washing cycles per day (50 litres each)	1.00 Cycles	50.00 L
✓ Number of toilet flushes per day (4.42 flushes per person, average 5 litres each)	17.68 Flushes	88.40 L
Outdoor use in litres, per person per day (recommended 5 litres per person per day)	5	20.00 L
Amount of water you require every day	158.4 L	
Amount of water you require every year	DEMAND	57816 L

FINAL FIGURES

How many days drought protection do you need? (typically 21 (18 minimum))	21
Capacity of water storage in litres required for drought protection	3326.40 L
The lesser of YIELD (blue) or DEMAND (green) per annum	57816 L
Therefore, volume of rainwater storage required	3326 L

CONCLUSION

Is there sufficient roof water available:	YES
Recommended tank size from our shallow dig range:	F-Line Range: 5000 LITRE F-LINE TANK

Rainwater Harvesting is the process of collecting and storing rainwater. Typically, water is directed down the downpipes into either an underground or above ground tank. This water can then be used for toilets, washing machines, gardening and outdoor use. In this case an underground harvesting storage tank has been opted for due to the amount of available space.

The attenuation crate is to be a sealed unit (wrapped in non-permeable membrane) and as such will not need to adhere to the 'not less than 5 m from the edge of the nearest building and 2.5 m from the nearest boundary' rule. The chosen location is in the existing permeable track to the east of the site. See Figure 4 in Appendix A for the suggested drainage arrangement.

The attenuation crate consists of modular, high-strength plastic structures designed for underground stormwater management. They form a robust, lightweight, interlocking grid that creates a large, high-void ratio (over 95%) underground reservoir. These crates temporarily store rainwater, releasing it slowly into a watercourse (in this case Highams Gill to the south of the site). The crates are wrapped in a non-permeable membrane to create a sealed unit. The size of the attenuation storage unit has been reduced due to the use of the

rainwater harvesting system. The attenuation crate has been sized at 4.5 m x 5 m x 0.4 m deep.

The drainage arrangement has been designed using the MasterDrain network drainage model.

11.17 Hydrological Data

Hydrological data for the site as used in the MasterDrain model is given in Appendix D.

11.18 Extreme Event

An extreme event, which overwhelmed the drainage system, would likely result in water flowing south across the surface of the ground with the topography of the land towards the existing watercourse, Highams Gill.

12 PROPOSED FOUL DRAINAGE

- 12.1 In the absence of a mains sewer in the immediate vicinity of the site, the existing dwellings on the wider site drain their foul water to a package sewage treatment plant, with the treated effluent draining to the watercourse to the south, Highams Gill. It is proposed to treat the foul water from the proposed dwelling onsite via the same method. See Appendix F for the Southern Water sewer letter from a previous application at the site and Figure 4 in Appendix A for the suggested drainage layout.

13. DRAINAGE DESIGN SUMMARY

- 13.1 The surface water chamber sizes, invert levels and pipe sizes from the MasterDrain model are summarised in Table 13.1 below:

TABLE 13.1
SURFACE WATER CHAMBERS

No.	Dia (mm)	Cover level (mAOD)	Invert level (mAOD)	Pipe dia (mm)
Rainwater Harvesting Tank	-	103.11	102.61	100
SW1	600	103.20	102.11	100
Attenuation Crate	-	103.20	101.61	100
SW2 (2 l/s Flow)	600	101.81	101.11	100

- 13.2 The foul sewage chamber sizes, invert levels and pipe sizes are given in Table 13.2 below:

TABLE 13.2
FOUL SEWAGE CHAMBERS

No.	Dia (mm)	Cover level (mAOD)	Invert level (mAOD)	Pipe dia out (mm)
FW1	450	103.68	102.24	100
FW2	450	100.43	99.60	100
Sewage Treatment Plant	-	97.84	97.34	100

14 OPERATION AND MAINTENANCE OF THE SYSTEM

- 14.1 The drainage system will generally require minimal operational input once construction has been completed. However, it will require some regular maintenance.

- 14.2 Items requiring maintenance will include:

- Chambers (including any flow control devices) will require regular removal of any debris likely to obstruct and checking for any structural damage to the chamber or cover. Cleaning requires removing sediment, silt, and obstructions, using high-pressure water jets or manual clearing. Ensure covers are secure and airtight to prevent odour, rodent, or water ingress. Maintenance should be carried out annually at the time of year after most leaf fall has occurred.
- Any gullies, pipes and channels will need regular removal of accumulated debris and silt. Annual cleaning (or 3-6 months for high-debris areas) to remove leaves, sediment, and litter, to prevent blockages, odours, and flooding. Preventative measures like silt traps or drain guards will aid maintenance.
- The permeable surfacing will require regular cleaning to prevent clogging and ensure drainage, typically involving annual inspections, brushing to remove debris, and vacuuming or pressure washing to clear joints of moss and debris and ensure the permeability is maintained.
- The attenuation crate will need annual inspections and cleaning of inlet and outlet pipes to remove accumulated silt, debris and pollutants, prevent clogging and to check for and repair any structural issues.

- The sewage treatment plant will require regular annual inspection and maintenance by a specialist company.
- The filter of the rainwater harvesting tank will require annual inspection and removal of debris.

15. SUMMARY OF CONCLUSIONS

- 15.1 The site is currently used as the as a portacabin style dwelling with a shipping container adjacent and to the north. The ground surrounding the existing dwelling is permeable road planings and the land to the rear is non-permeable tarmac. The site area (redline boundary) is approximately 0.05 ha.
- 15.2 It is proposed to redevelop the site, after the demolition of the existing building and removal of the shipping container, into a three-bedroom residential dwelling with a garden and permeable paved patio area. See Figure 3 in Appendix A for the proposed development.
- 15.3 According to the British Geological Survey website the site lies on Weald Clay Formation - Limestone. The north of the site lies on a Secondary A bedrock aquifer with undifferentiated superficial drift. The site does not lie in a groundwater SPZ.
- 15.4 According to the Environment Agency's Flood Maps for Planning, the site lies in Flood Zone 1 (Low risk of flooding from fluvial sources where defences are not considered / <0.1% AEP of flooding in any given year). The site is not shown to be at risk of surface water flooding. Groundwater and reservoir flooding at the site is considered unlikely at this location. See Appendix B for the flood maps for the site.
- 15.5 The proposed development includes permeable surfacing the patio areas of the building and a garden area laid to lawn, as well as a rainwater harvesting tank for use in toilet flushing and garden watering. These measures will help keep the impact of the development on flood risk elsewhere to a minimum, making the development more sustainable in line with the SuDS hierarchy.
- 15.6 The preferred method for the disposal of excess surface water (any water that exceeds the capacity of the rainwater harvesting tank) is drainage to a sealed underground attenuation storage crate, draining via a flow-controlled device limiting the flow to 2 l/s and draining into the existing watercourse that lies to the south of the site, Highams Gill. The attenuation crate is to be located in the existing track to the east of the building. A suitable sized attenuation crate for the residences would be 4.5 m x 5 m x 0.4 m deep. This will discharge into the watercourse to the south of the site as with the existing scenario for the wider site. This is the preferred method for the disposal of surface water in line with the SuDS hierarchy.
- 15.7 An extreme event overtopping the system would likely follow the topography of the land and flow south towards Highams Gill as with the existing scenario.

- 15.8 As there is no mains sewage system in close proximity to the site, the foul water from the existing dwellings on the wider site is currently drained into a sewage treatment plant with the treated effluent discharging into the watercourse to the south of the site, Highams Gill. It is proposed to treat the foul water from the new proposed dwelling onsite via the same method. See Figure 4 in Appendix A for the drainage design and Appendix D for the MasterDrain drainage design calculation data.

☆☆☆☆☆☆

APPENDIX A:

- Figure 1: Site Location
- Figure 2: Site as Existing
- Figure 3: Proposed Development
- Figure 4: Suggested Drainage Arrangement



1 Location Plan
1 : 1250

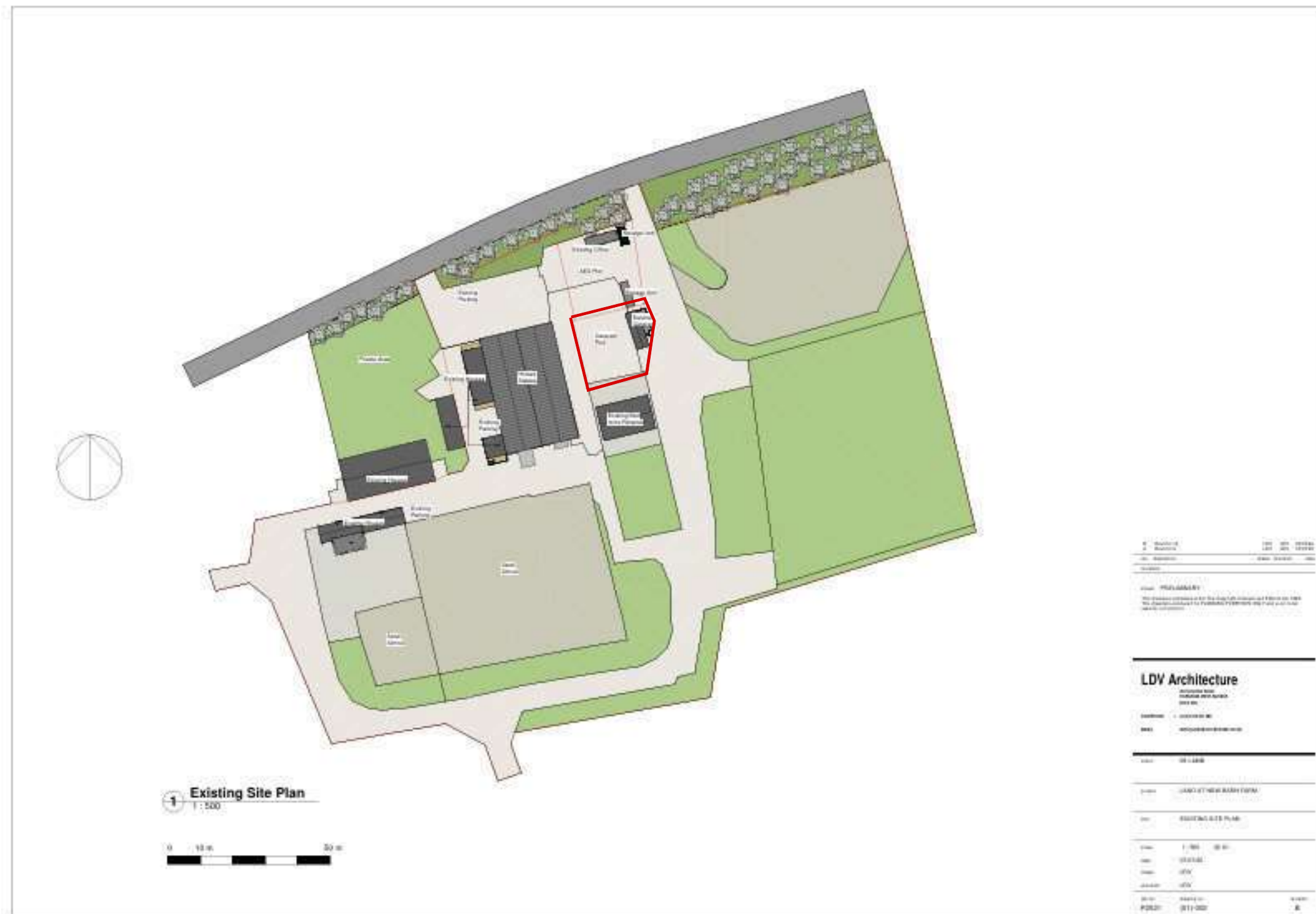


New Barn Farm
Capel Road, Horsham, West Sussex, RH12 4PZ

Figure 1: Location

Scale as shown

May 2026



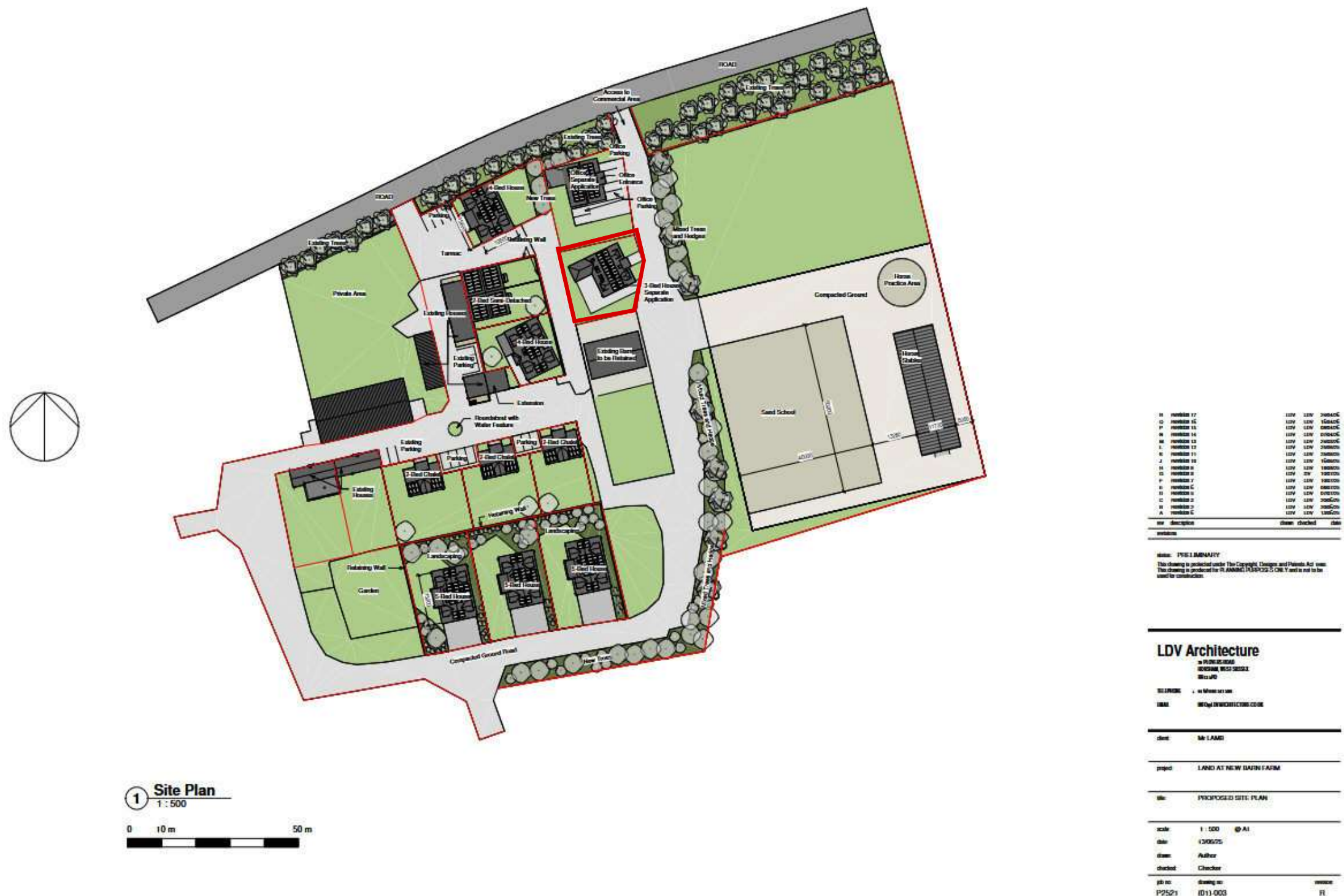
STEVE LAMB

Scale as shown

New Barn Farm, Capel Road, Horsham, West Sussex, RH12 4PZ

Figure 2: Existing Site

May 2026



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Scale as shown

New Barn Farm, Capel Road, Horsham, West Sussex, RH12 4PZ

Figure 3: Proposed Development

May 2026

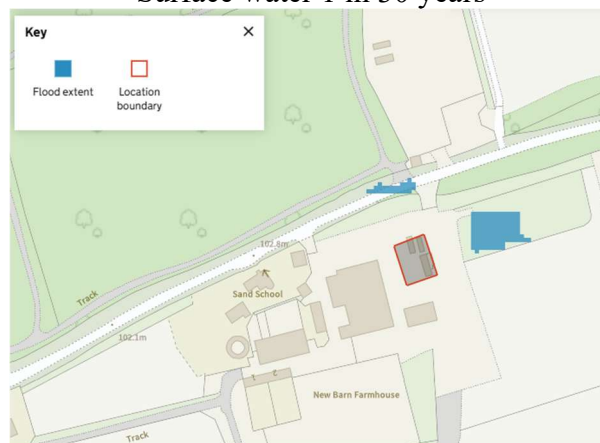
APPENDIX B:

ENVIRONMENT AGENCY FLOOD MAPS FOR PLANNING

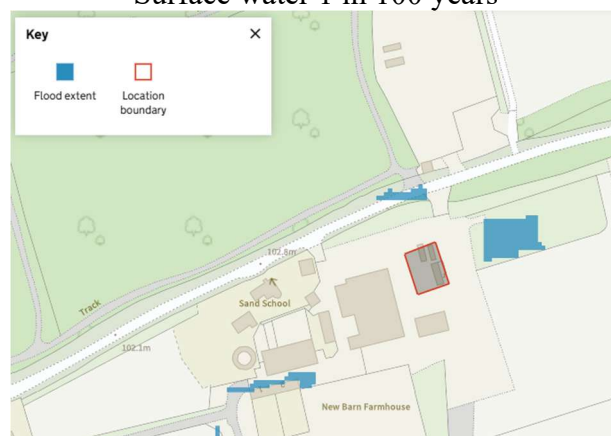
Flood Zone Map



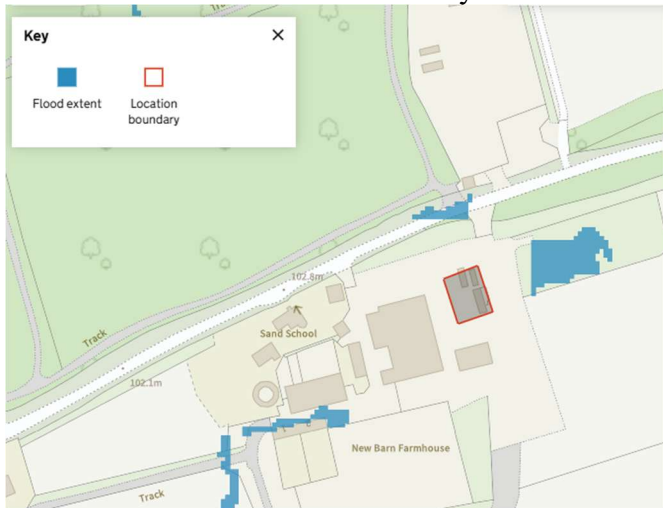
Surface water 1 in 30 years



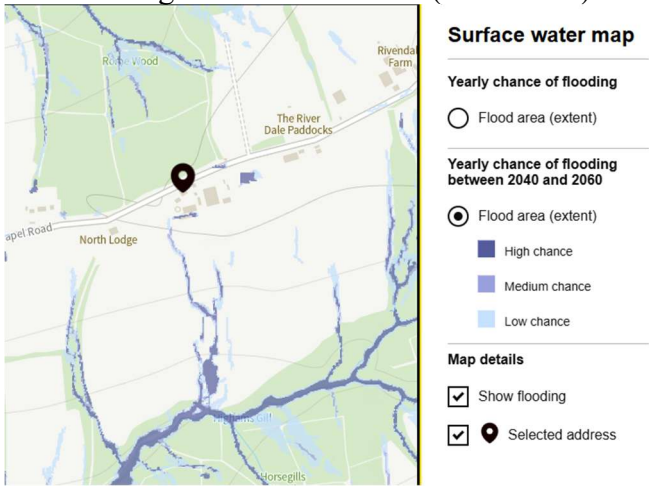
Surface water 1 in 100 years



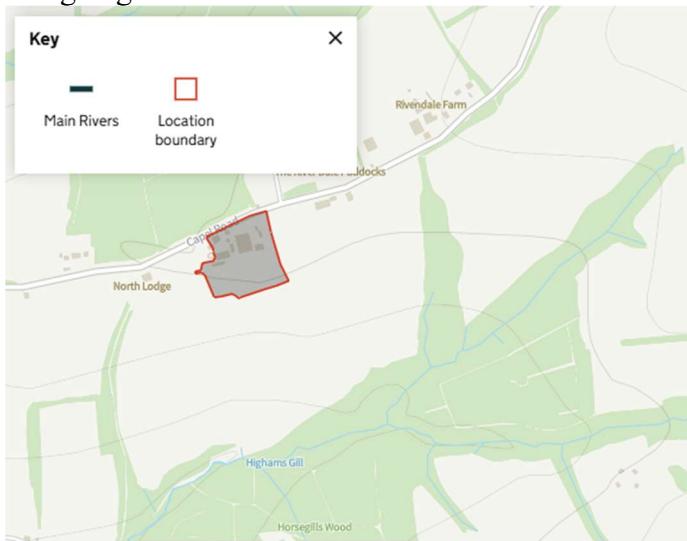
Surface water 1 in 1000 years



Long-term surface water (2040-2060)



Map showing Highams Gill watercourse to the south of the wider site



APPENDIX C:
HR WALLINGFORD GREENFIELD FLOW RATES

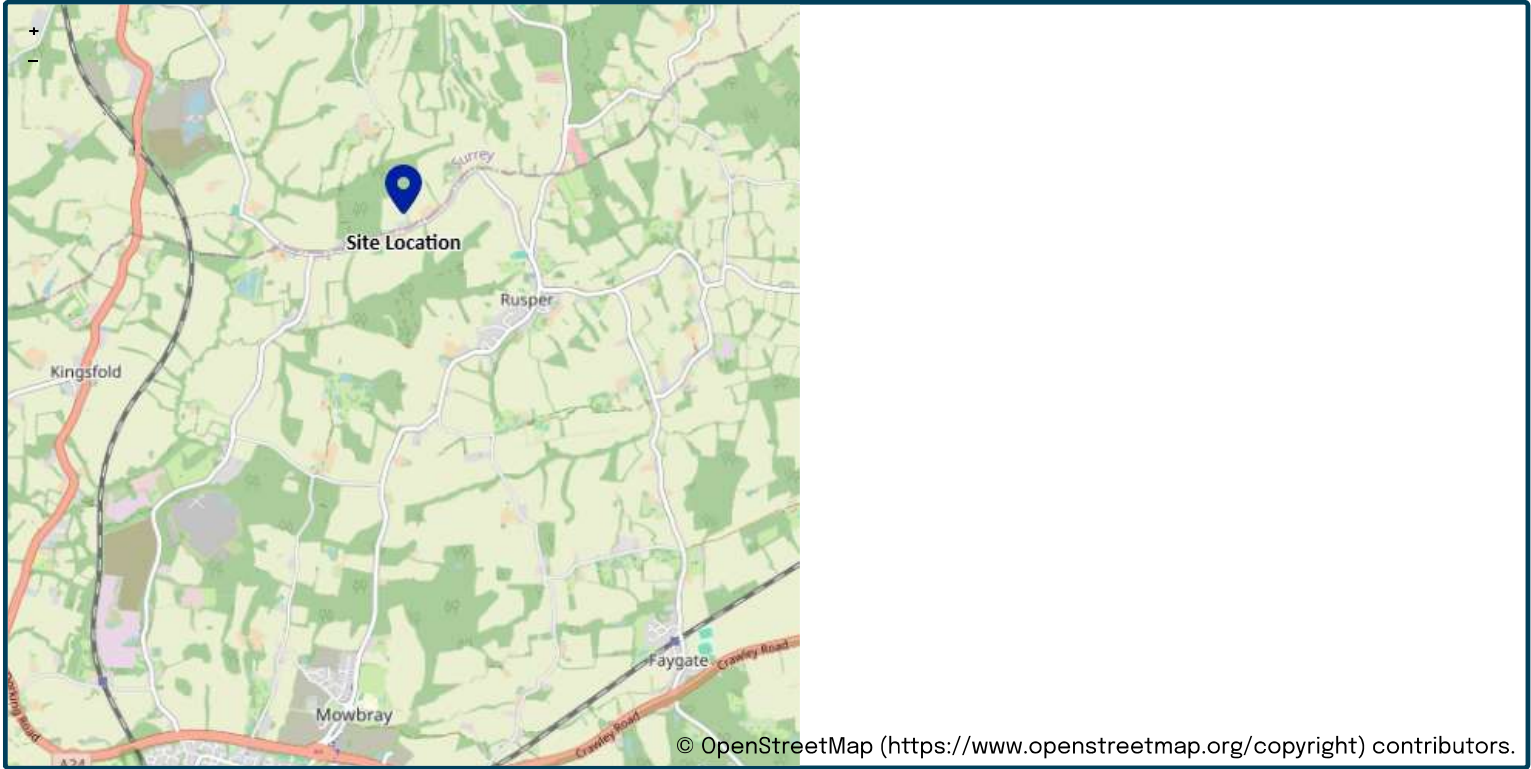
This is an estimation of the greenfield runoff rates that are used to meet normal best practice criteria in line with Environment Agency guidance “Rainfall runoff management for developments”, SC030219 (2013), the SuDS Manual C753 (CIRIA, 2015) and the non-statutory standards for SuDS (Defra, 2015). 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	15/05/2026
Calculated by	EAS LTD
Reference	981b
Model version	2.2.3

Location

Site name	New Barn Farm - Dwelling
Site location	Rusper



Site easting (British National Grid)	519443
Site northing (British National Grid)	137642

Site details

Total site area (ha)	0.05 ha
----------------------	-------------------------------

Greenfield runoff

Method

Method	IH124		
	<u>My value</u>		<u>Map value</u>
SAAR (mm)	805 mm		805
How should SPR be derived?	WRAP soil type		
WRAP soil type	4		4
SPR	0.47		
QBar (IH124) (l/s)	0.3 l/s		

Growth curve factors

	<u>My value</u>		<u>Map value</u>
Hydrological region	6		6
1 year growth factor	0.85		
2 year growth factor	0.88		
10 year growth factor	1.62		
30 year growth factor	2.3		
100 year growth factor	3.19		
200 year growth factor	3.74		

Results

Method	IH124
Flow rate 1 year (l/s)	0.2 l/s
Flow rate 2 year (l/s)	0.3 l/s
Flow rate 10 years (l/s)	0.5 l/s
Flow rate 30 years (l/s)	0.7 l/s
Flow rate 100 years (l/s)	0.9 l/s
Flow rate 200 years (l/s)	1.1 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 D:

OUTPUT FROM DRAINAGE DESIGN SOFTWARE AND
DRAINAGE FIELD INFILTRATION CALCULATIONS



MasterDrain
SW

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Job No. 891b		
Sheet no. 1		
Date 20/05/26		
By XL	Checked	Reviewed

Project New Barn Farm - Dwelling
Title Surcharge calcs (Sized at 30 yrs storm) for NEW BARN FARM DWELLING.SW CCF = 45%

Using in-line restrictors
Return period = 100 yrs
Climate change factor = 45

PEAK hydrograph values printed
Storm duration = 15 mins
No offline storage

Mean rain intens. 133.00 mm/hr
Storm profile = Summer
Using FSR data

Peak rain intens. 521.36 mm/hr
Sample period = 7.5 secs.

Entry No.	SECT. No.	MANHOLE REF	PIPE CAPACITY l/s	RATE FLOW l/s	PIPE SIZE mm	CHAMBER DIAM/LxW mm	INVERT LEVEL m	WATER LEVEL m	GRND LEVEL m	SURCHARGE fract.	Depth	EXCESS FLOW l/s	FLOODED VOL m³	DRAINED AREA (m²)	STATUS	
1	I	1.01	RAGE TANK	10.4	0.0	100	1200	102.61	102.61	103.11	0.00	0.00	0.00	0.000	0	OK
2	I	1.02	SW1	15.7	10.1	100	600	102.11	102.17	103.20	0.64	0.06	0.00	0.000	162	OK
3	I	1.03	TENUATION	9.6	10.1	100	1200	101.61	101.71	103.20	1.06	0.10	0.54	0.000	162	Surch.
4	I	1.04	SW2	35.3	2.0	100	600	101.11	101.12	101.81	0.06	0.01	0.00	0.000	162	OK



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Date 20/05/26		
By XL	Checked	Reviewed

Project	New Barn Farm - Dwelling
Title	Surcharge calcs (Sized at 30 yrs storm) for NEW BARN FARM DWELLING.SW CCF = 45%

Notes

Printout headings

- | | | |
|---|---|--|
| 1) Entry no - position in file | 2) Section no - pipe identifier | 3) Manhole ref - Manhole identifier |
| 4) Pipe cap - full bore capacity of that pipe | 5) Rate of flow - calculated flow rate (l/s) ‡ = flow restrictor. | 6) Pipe diam - outlet pipe diameter (mm) |
| 7) Chamber diam - chamber diam. at base of MH | 8) Invert level - invert level of manhole | 9) Water level - calculated peak water level. |
| 10) Grnd level - ground / cover level | 11) Surch. fract - calc.flow/pipe capacity | 12) Surch. depth - surcharge level above soffit |
| 13) Overflow - surcharged flow rate (l/s) | 14) Flooded vol - volume of water above cover | 15) Upstrm Vol - upstream pipe vol to previous manhole(s) |
| 16) Status - OK - outlet not surcharged | 17) Status - Surcharged - outlet surcharged | 18) Status - Warning - water level within 299mm of cover level |
| 19) Status - Flooded - cover over-topped | 20) § against diameter indicates throttle pipe used. | |

Title box

Hydrograph data

- | | | |
|---|--------------------------------------|--|
| 1) Ret. period - that used to calculate profile | 2) Duration - length of storm (mins) | 3) Profile - either Winter (75%) or Summer (50%) |
|---|--------------------------------------|--|

Flow restrictors

Manhole reference - SW2

Restrictor flowrate - 2 l/s



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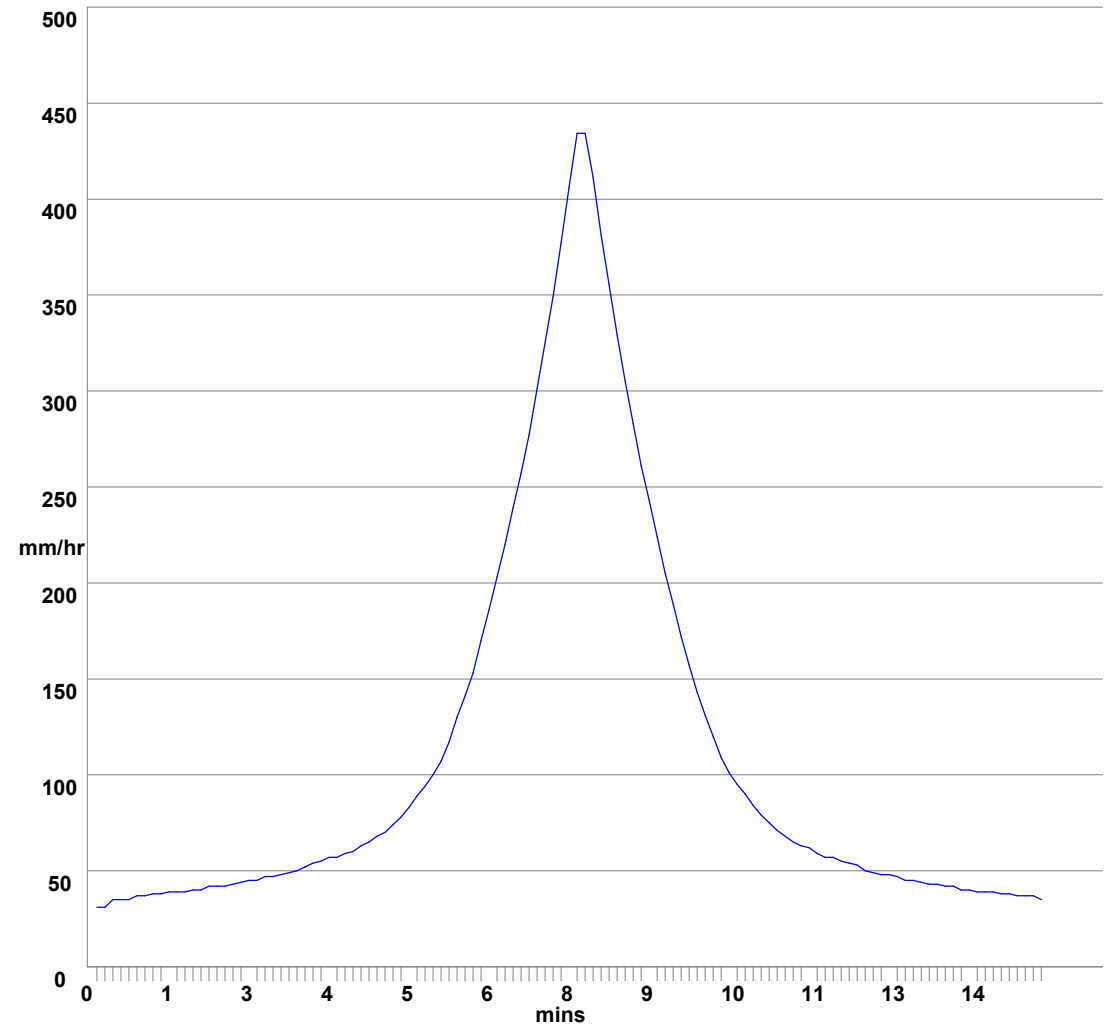
MasterDrain
SW

Project New Barn Farm - Dwelling
Title Surcharge calcs (Sized at 30 yrs storm) for NEW BARN FARM DWELLING.SW CCF = 45%

Time mins	Rain mm/hr	Time mins	Rain mm/hr	Time mins	Rain mm/hr
0:08	31.02	5:08	88.64	10:08	95.29
0:15	31.02	5:15	94.18	10:15	89.75
0:22	35.46	5:22	99.72	10:22	84.21
0:30	35.46	5:30	107.47	10:30	78.67
0:38	35.46	5:38	117.45	10:38	75.34
0:45	36.56	5:45	129.63	10:45	70.91
0:52	36.56	5:52	140.71	10:52	67.59
1:00	37.67	6:00	152.90	11:00	65.37
1:08	37.67	6:08	169.52	11:08	63.16
1:15	38.78	6:15	186.14	11:15	62.05
1:22	38.78	6:22	202.76	11:22	58.72
1:30	38.78	6:30	220.49	11:30	56.51
1:38	39.89	6:38	239.32	11:38	56.51
1:45	39.89	6:45	257.05	11:45	55.40
1:52	42.10	6:52	277.00	11:52	54.29
2:00	42.10	7:00	301.37	12:00	53.18
2:08	42.10	7:08	324.64	12:08	49.86
2:15	43.21	7:15	349.02	12:15	48.75
2:22	44.32	7:22	376.71	12:22	47.64
2:30	45.43	7:30	405.52	12:30	47.64
2:38	45.43	7:38	434.33	12:38	46.54
2:45	46.54	7:45	434.33	12:45	45.43
2:52	46.54	7:52	411.06	12:52	45.43
3:00	47.64	8:00	381.15	13:00	44.32
3:08	48.75	8:08	354.56	13:08	43.21
3:15	49.86	8:15	329.07	13:15	43.21
3:22	52.08	8:22	304.70	13:22	42.10
3:30	54.29	8:30	282.54	13:30	42.10
3:38	55.40	8:38	261.48	13:38	39.89
3:45	56.51	8:45	242.65	13:45	39.89
3:52	56.51	8:52	223.81	13:52	38.78
4:00	58.72	9:00	204.98	14:00	38.78
4:08	59.83	9:08	189.47	14:08	38.78
4:15	63.16	9:15	171.74	14:15	37.67
4:22	65.37	9:22	157.33	14:22	37.67
4:30	67.59	9:30	142.93	14:30	36.56
4:38	69.80	9:38	130.74	14:38	36.56
4:45	74.23	9:45	119.66	14:45	36.56
4:52	77.56	9:52	108.58	14:52	35.46
5:00	83.10	10:00	100.83	15:00	35.46

Hydrograph profile derived from data in the Flood Studies Report

Return period= 100 yrs Duration= 15 mins Profile - summer





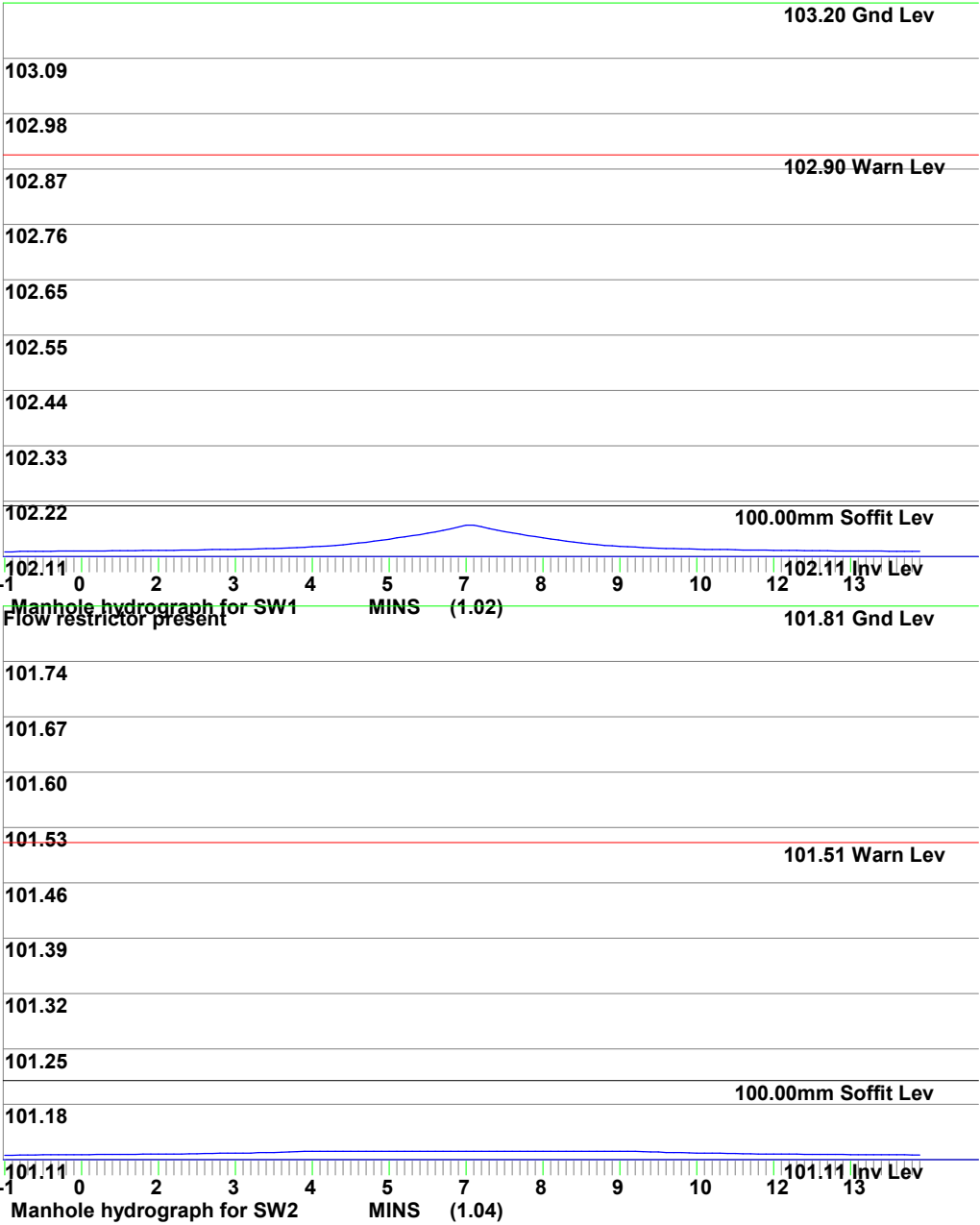
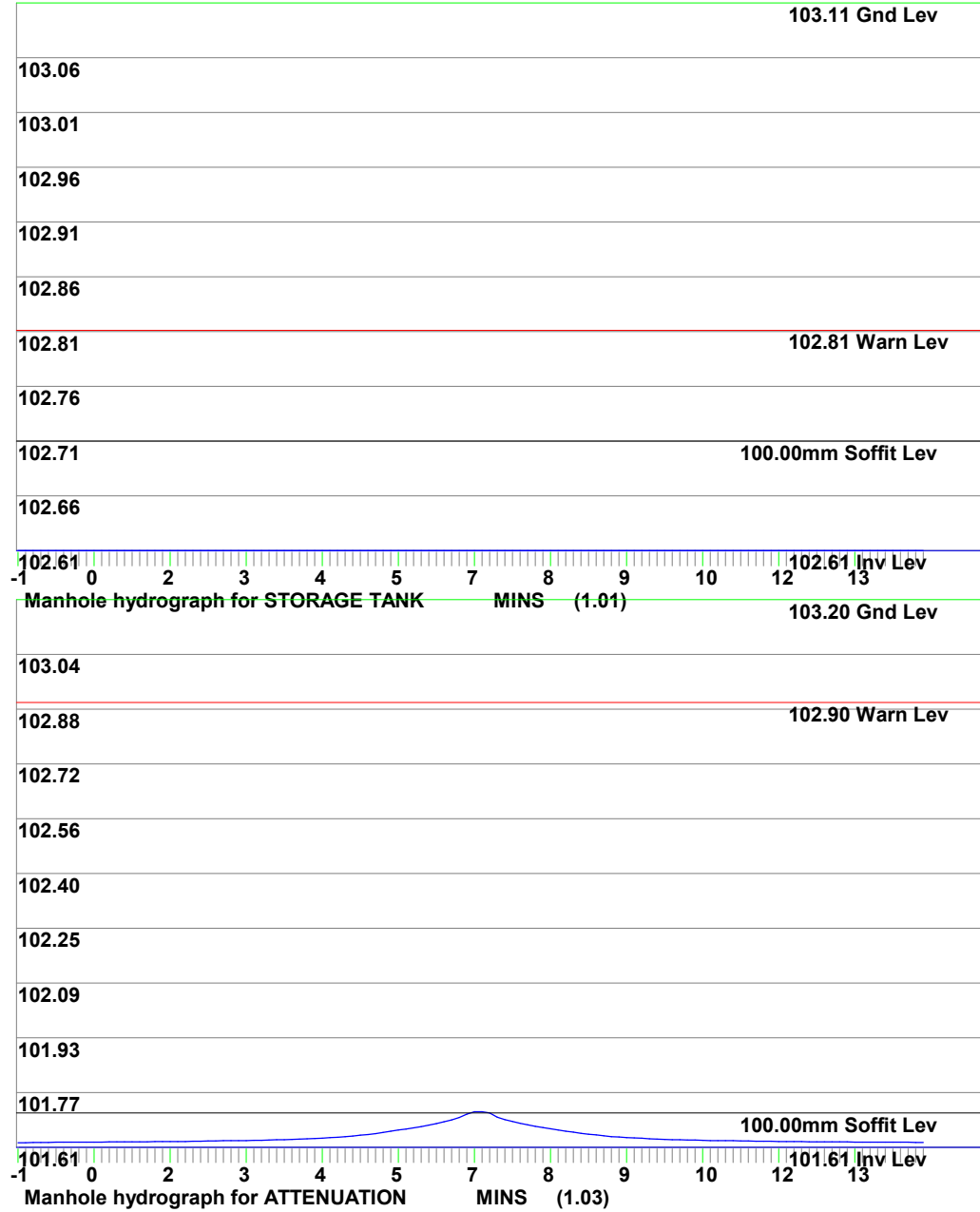
MasterDrain
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Job No. 891b		
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Project New Barn Farm - Dwelling	Title Surcharge calcs (Sized at 30 yrs storm) for NEW BARN FARM DWELLING.SW CCF = 45%





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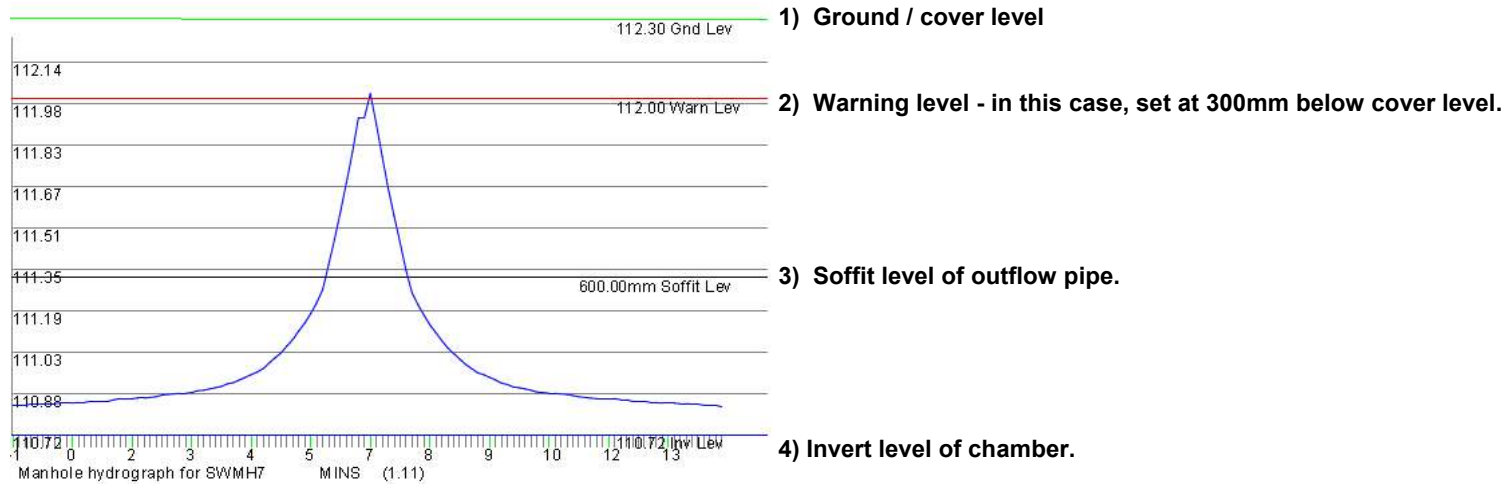
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Project New Barn Farm - Dwelling	By XL	Checked	Reviewed
Title Surcharge calcs (Sized at 30 yrs storm) for NEW BARN FARM DWELLING.SW CCF = 45%			



Notes

- Lower section of the graph shows the water depth filling the channel. Channel is assumed to be a full pipe diameter in depth.
- Upper section of the graph shows the water depth filling the chamber. Chamber has a greater width/diameter than the channel, so increases in depth are proportionally less.
- The top of the graph clips the warning level and would be marked thus on the printout.
- In many cases the invert of the offline storage is required to enter at the channel soffit level, meaning that the pipe will still surcharge but flooding risk reduced.
- The diagram above is a general one and is not part of the current calculation.



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Sheet no. 1			
Date 20/05/26			
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Project **New Barn Farm - Dwelling**

Title **Hydrograph storage analysis (Winter profile) for Rusper**

Data:-

FEH Hydrology:-

Location = Rusper

Grid reference = TQ2037

c = -0.0260

d1 = 0.3470

d2 = 0.3420

d3 = 0.3650

e = 0.3190

f = 2.4660

Return period = 100

Climate change = 45%

Percentage runoff = 95.0% (manual setting)

Imperv. area = 170 m²

Pervious area = 0 m²

Total area = 170 m²

Equiv area = 162 m² (Tot. area x % runoff).

Total runoff = 12.0 m³

Discharge rate = 2.000 l/s

Design Head = 0.4m

Peak flow = 2.00 l/s

Control device = R3

Orifice diam = 49.7 mm

Max. calc. depth = 0.4 m

Available depth = 0.0 m³

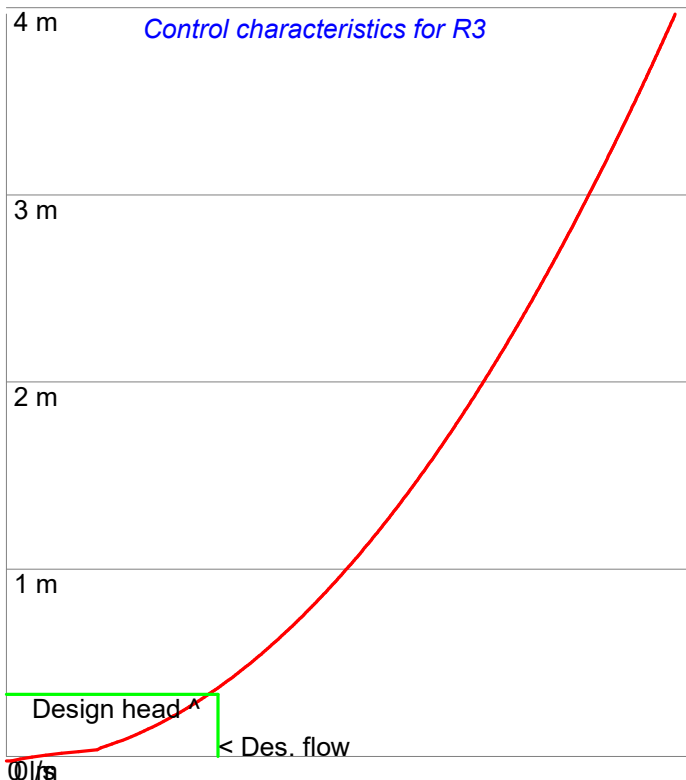
Mean discharge = 1.37 l/s

Available system storage = 0.00 m³ under a system plane at the design head level.

Offline storage = 0.0 m³

Total storage = 8.5 m³

Peak input flow = 8.31 l/s



Head (m)	Flow (l/s)	Head (m)	Flow (l/s)
0.01	0.05	2.01	4.48
0.05	0.52	2.05	4.53
0.10	1.00	2.10	4.58
0.15	1.22	2.15	4.64
0.20	1.41	2.20	4.69
0.25	1.58	2.25	4.74
0.30	1.73	2.30	4.80
0.35	1.87	2.35	4.85
0.40	2.00	2.40	4.90
0.45	2.12	2.45	4.95
0.50	2.24	2.50	5.00
0.55	2.35	2.55	5.05
0.60	2.45	2.60	5.10
0.65	2.55	2.65	5.15
0.70	2.65	2.70	5.20
0.75	2.74	2.75	5.24
0.80	2.83	2.80	5.29
0.85	2.92	2.85	5.34
0.90	3.00	2.90	5.39
0.95	3.08	2.95	5.43
1.00	3.16	3.00	5.48
1.05	3.24	3.05	5.52
1.10	3.32	3.10	5.57
1.15	3.39	3.15	5.61
1.20	3.46	3.20	5.66
1.25	3.54	3.25	5.70
1.30	3.61	3.30	5.74
1.35	3.67	3.35	5.79
1.40	3.74	3.40	5.83
1.45	3.81	3.45	5.87
1.50	3.87	3.50	5.92
1.55	3.94	3.55	5.96
1.60	4.00	3.60	6.00
1.65	4.06	3.65	6.04
1.70	4.12	3.70	6.08
1.75	4.18	3.75	6.12
1.80	4.24	3.80	6.16
1.85	4.30	3.85	6.20
1.90	4.36	3.90	6.24
1.95	4.42	3.95	6.28
2.00	4.47	4.00	6.32

Calculation data provided by Crown Water Ltd, SL5 7NT



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Date	20/05/26		
By	XL	Checked	Reviewed
Title			

Project **New Barn Farm - Dwelling**

Title **Hydrograph storage analysis (Winter profile) for Rusper**

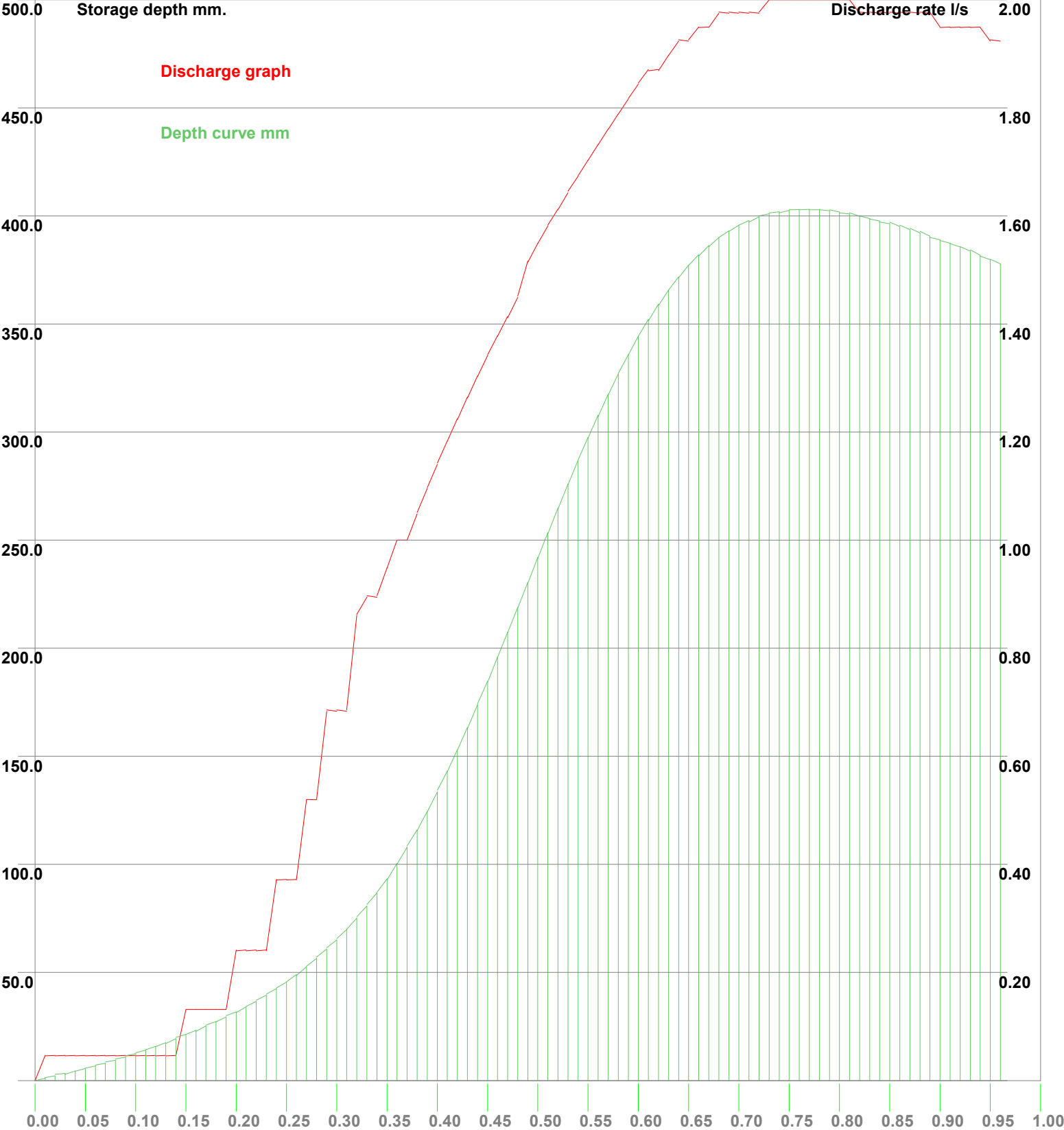
Storage curves for a 1 hours storm.

Storage depth mm.

Discharge rate l/s

Discharge graph

Depth curve mm





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		Date	20/05/26	
Project	New Barn Farm - Dwelling		By	Checked
Title	Hydrograph storage analysis (Winter profile) for Rusper		XL	Reviewed

Incremental rainfall figures.

Storm Mins	Storage Depth mm	Control Flow l/s	Storm Mins	Storage Depth mm	Control Flow l/s
0.6	1.1	0.05	30.6	253.5	1.58
1.2	2.2	0.05	31.2	264.8	1.61
1.8	3.3	0.05	31.8	276.0	1.64
2.4	4.4	0.05	32.4	287.0	1.67
3.0	5.5	0.05	33.0	297.6	1.70
3.6	6.8	0.05	33.6	307.8	1.73
4.2	8.0	0.05	34.2	317.6	1.76
4.8	9.4	0.05	34.8	327.0	1.79
5.4	10.9	0.05	35.4	335.9	1.82
6.0	12.4	0.05	36.0	344.3	1.84
6.6	14.1	0.05	36.6	352.1	1.87
7.2	15.8	0.05	37.2	359.2	1.87
7.8	17.6	0.05	37.8	365.8	1.90
8.4	19.4	0.05	38.4	371.8	1.92
9.0	21.4	0.13	39.0	377.2	1.92
9.6	23.3	0.13	39.6	382.0	1.95
10.2	25.2	0.13	40.2	386.3	1.95
10.8	27.3	0.13	40.8	390.0	1.97
11.4	29.4	0.13	41.4	393.1	1.97
12.0	31.7	0.24	42.0	395.7	1.97
12.6	34.1	0.24	42.6	397.8	1.97
13.2	36.7	0.24	43.2	399.6	1.97
13.8	39.5	0.24	43.8	401.0	2.00
14.4	42.5	0.37	44.4	401.9	2.00
15.0	45.6	0.37	45.0	402.6	2.00
15.6	49.0	0.37	45.6	402.9	2.00
16.2	52.7	0.52	46.2	403.0	2.00
16.8	56.5	0.52	46.8	402.8	2.00
17.4	60.8	0.68	47.4	402.4	2.00
18.0	65.1	0.68	48.0	401.8	2.00
18.6	69.9	0.68	48.6	400.9	2.00
19.2	75.2	0.86	49.2	399.9	1.97
19.8	80.7	0.89	49.8	398.8	1.97
20.4	86.8	0.89	50.4	397.6	1.97
21.0	93.3	0.95	51.0	396.4	1.97
21.6	100.4	1.00	51.6	395.1	1.97
22.2	107.9	1.00	52.2	393.7	1.97
22.8	116.0	1.05	52.8	392.2	1.97
23.4	124.5	1.10	53.4	390.7	1.97
24.0	133.6	1.14	54.0	389.1	1.95
24.6	143.1	1.18	54.6	387.4	1.95
25.2	153.1	1.22	55.2	385.6	1.95
25.8	163.3	1.26	55.8	383.8	1.95
26.4	173.9	1.30	56.4	381.8	1.95
27.0	184.8	1.34	57.0	379.8	1.92
27.6	196.0	1.38	57.6	377.8	1.92
28.2	207.4	1.41	58.2	375.7	1.92
28.8	218.9	1.45	58.8	373.6	1.92
29.4	230.5	1.52	59.4	371.5	1.92
30.0	242.0	1.55	60.0	369.4	1.90

Using the Get Max button causes the program to step through a series of storm durations until a maximum volume is obtained.

Each duration is sampled 600 times and the results recorded. The storm durations (hrs) are:-

0.25, 0.5, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 15, 18, 20, 24, 30, 36, 42, 48, 54, 60, 66, 72, 84, 96, 120, 150, 175, 200, 250, 300, 375, 500, 750, 1000, 1250, 1500, 1570, 2000, 2500, 3000, 3500, 4000

It should be noted that the six hour storm frequently requested rarely demonstrates the worst case for storage.



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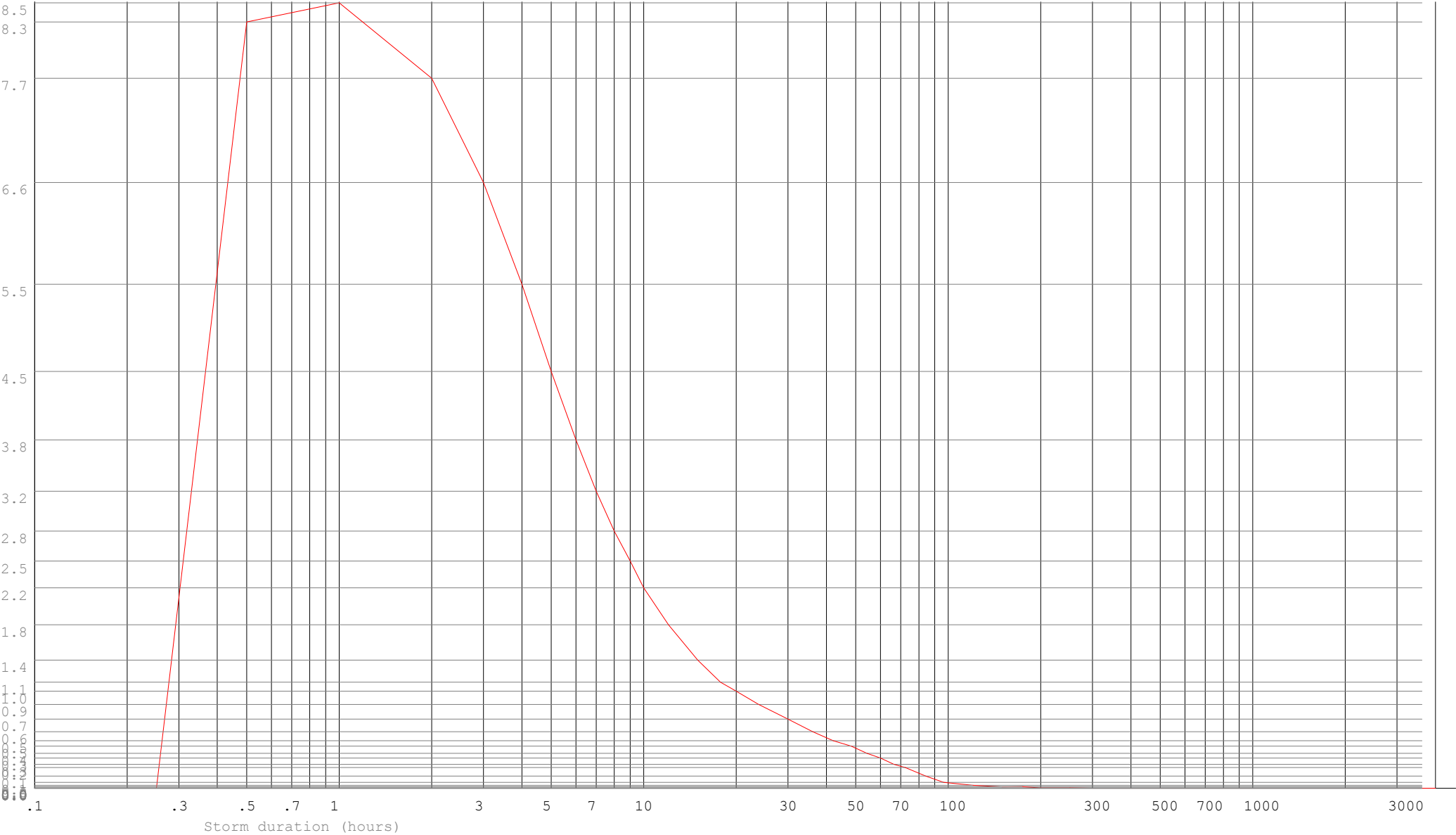
MasterDrain
SW

New Barn Farm - Dwelling

Title Hydrograph storage analysis (Winter profile) for Rusper

Sequential storage volume at specific storm durations.

m³

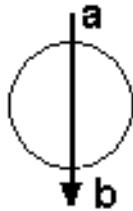
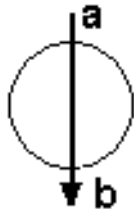
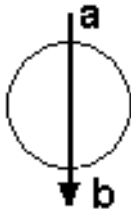
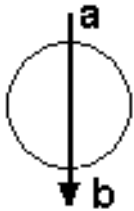


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			Sheet no. 1	
			Date 20/05/26 11:04	
Project New Barn Farm - Dwelling		By XL	Checked	Reviewed
Title Manhole printout for NEW BARN FARM DWELLING.SW				

Manhole ref.	X ref	Y ref	Form	Cham diam. or length	Rect. width	Chamb. height	Shaft height	MH Volume	Exit Diam	Exit Crown	Exit Invert	Chamb const	Slab level	Cover Level	Dwnstr MH
TORAGE TANK	115.71	41.95	circ	1200	N/A	0.50		0.57	100	102.735	102.610	N/A	102.560	103.110	SW1
SW1	132.32	46.45	circ	600	N/A	1.09		0.31	100	102.235	102.110	N/A	102.060	103.200	ION CRATE
ATTENUATION	139.92	45.33	circ	1200	N/A	1.59		1.80	100	101.735	101.610	N/A	101.560	103.200	SW2
SW2	152.31	29.84	circ	600	N/A	0.70		0.20	100	101.235	101.110	N/A	101.060	101.810	TERCOURSE

All manholes to be as per 'Sewers for Adoption'

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				Date 20/05/26 11:04	
Project New Barn Farm - Dwelling				By XL	Checked
Title Manhole printout for NEW BARN FARM DWELLING.SW					



MH = STORAGE TANK = SW1
a=head
b = 100

a= 100
b = 100

MH = ATTENUATION MH = SW2
a=head
b = 100

a= 100
b = 100

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				Sheet no. 3		
				Date 20/05/26 11:04		
Project	New Barn Farm - Dwelling			By XL	Checked	Reviewed
Title	Manhole printout for NEW BARN FARM DWELLING.SW					

These explanatory notes should be read in conjunction with the Manhole printout

- 1) Manhole ref - the reference for the manhole in question
- 2) Form - either circular or rectangular
- 3) Chamber diam or length - diameter of chamber if circular, or length if rectangular - in metres
- 4) Rectangular width - if form is rectangular, this gives the width of the chamber
- 5) Chamber height - height of chamber from invert
- 6) Shaft height - height of access shaft if applicable, from top of chamber to ground level
- 7) Manhole volume - cubic capacity of manhole chamber
- 8) Exit diameter - diameter of pipe leaving this manhole
- 9) Exit crown - crown level of pipe leaving this manhole
- 10) Exit invert - invert level of pipe leaving this manhole
- 11) Chamb const - manhole construction :-
 - N/A - not specified
 - Conc - concrete rings
 - Poly - polypropylene rings surrounded by selected fill
 - Poly/conc - polypropylene rings surrounded by concrete
 - Brick - brick built with waterproof render
 - In situ - concrete cast in situ
- 12) Slab level - surface level of base slab (if no sump, this is placed at 50mm below exit invert to allow levels manipulation).
- 13) Manhole diameters of 9999 have exceeded the sizes available in SfA
- 14) Manhole diameters may have to be modified due to the number of branches



MasterDrain
Foul 11.5

Environmental Assessment Services Ltd http://www.easltd.co.uk		London Rd, Hickstead Haywards Heath, West Sussex, RH17 5LZ Tel: 01444 882552 email: info@easltd.co.uk		Job No. 891b		
				Sheet no. 0		
				Date 20/05/26		
Project New Barn Farm - Dwelling				By XL	Checked	Reviewed
Title Manhole printout for NEW BARN FARM DWELLING. FL.FL						

Manhole ref.	Form	Cham diam. or length	Rect. width	Chamb. height	Shaft height	MH Volume	Ent. Diam	Ent. Crown	Ent. Invert	Exit Diam	Exit Crown	Exit Invert	Chamb const	Cover Level	Dwnstr MH
FW1	circ	450	N/A	1.44		0.23	Head	----	----	100	102.365	102.240	N/A	103.680	FW2
FW2	circ	450	N/A	0.83		0.13	100	0.000	0.000	100	99.725	99.600	N/A	100.430	ENT PLANT
TMENT PLANT	circ	1200	N/A	0.50		0.57	100	0.000	0.000	100	97.465	97.340	N/A	97.840	TERCOURSE

All manholes to be as per 'Sewers for Adoption'

Levels calculated for level inverts



MasterDrain
Foul 11.5

Environmental Assessment Services Ltd

<http://www.easltd.co.uk>

London Rd, Hickstead
Haywards Heath,
West Sussex, RH17 5LZ
Tel: 01444 882552
email: info@easltd.co.uk

Job No. 891b		
Sheet no. 0		
Date 20/05/26		
By XL	Checked	Reviewed

Project	New Barn Farm - Dwelling
Title	Manhole printout for NEW BARN FARM DWELLING. FL.FL

These explanatory notes should be read in conjunction with the Manhole printout

- 1) Manhole ref - the reference for the manhole in question
- 2) Form - either circular or rectangular
- 3) Chamber diam or length - diameter of chamber if circular, or length if rectangular - in metres
- 4) Rectangular width - if form is rectangular, this gives the width of the chamber
- 5) Chamber height - height of chamber from invert
- 6) Shaft height - height of access shaft if applicable, from top of chamber to ground level
- 7) Manhole volume - cubic capacity of manhole chamber
- 8) Exit diameter - diameter of pipe leaving this manhole
- 9) Exit crown - crown level of pipe leaving this manhole
- 10) Exit invert - invert level of pipe leaving this manhole
- 11) Manhole diameters of 9999 have exceeded the sizes available in Sfa
- 12) Manhole diameters may have to be modified due to the number of branches

APPENDIX E: PHOTOGRAPHS

Entrance gateway to Capel Road



Existing dwelling and shipping container



Existing manhole leading from sewage treatment plant



Highams Gill watercourse to the south (flowing west)



APPENDIX F

SOUTHERN WATER SEWER PLANS LETTER



Directorate of Planning
Horsham District Council
Parkside
Chart Way
Horsham
West Sussex
RH12 1RL

Developer Services
Southern Water
Sparrowgrove House
Sparrowgrove
Otterbourne
Hampshire
SO21 2SW

Tel: 0330 303 0119

Email: southernwaterplanning@atkinsglobal.com

Your Ref

DC/17/2835

Our Ref

PLAN-021583

Date

09/02/2018

Dear Sirs,

Proposal: Conversion of commercial equestrian buildings into 10 dwellings together with a corner shop, partial demolition of main equestrian building to create courtyard and replacement of all concrete hardstanding with permeable surfacing and landscaping.

Site: Sports Horses International Ltd, Stud Farm, New Barn Farmhouse, Capel Road, Rusper, Horsham West Sussex RH12 4PZ.

DC/17/2835

Thank you for your letter of 22/01/2018.

There is no public foul sewer in the vicinity of the site. The applicant is advised to examine alternative means of foul sewage disposal.

The Environment Agency should be consulted directly regarding the use of a private wastewater treatment works or septic tank drainage which disposes of effluent to sub-soil irrigation. The owner of the premises will need to empty and maintain the works or septic tank to ensure its long term effectiveness.

The Council's Building Control officers or technical staff should be asked to comment on the adequacy of soakaways to dispose of surface water from the proposed development.

Due to changes in legislation that came in to force on 1st October 2011 regarding the future ownership of sewers it is possible that a sewer now deemed to be public could be crossing the above property. Therefore, should any sewer be found during construction

Southern Water Sparrowgrove House Otterbourne Winchester Hampshire SO21 2SW www.southernwater.co.uk

Southern Water Services Ltd Registered Office: Southern House Yeoman Road Worthing BN13 3NX Registered in England No.2306670

[illegible]

Requested By:

APPENDIX G

ENVIRONMENT AGENCY PRODUCT 4 INFORMATION

Our reference: EIR2026/10168

Thank you for your request of 27th February 2026 to use Environment Agency Product 4 data for the site at 519225,137531 (easting and northing coordinates).

Response to your request

The Environment Agency's records indicate that the above site is located in Flood Zone 1 (land assessed as having less than 0.1% (1 in 1,000) chance of flooding in any given year from **rivers or the sea**). Therefore, the likelihood of flooding from rivers and sea in this area is estimated as 'very low'.

Proximity to Flood Zones 2 or 3

The above site is approximately 490m away from Flood Zone 3. We are therefore unable to provide data from our detailed fluvial or tidal models which is relevant to your site.

More information on Flood Zones can be found on the GOV.UK website:

<http://planningguidance.planningportal.gov.uk/blog/guidance/flood-risk-and-coastal-change/flood-zone-and-flood-risk-tables/table-1-flood-zones/>

Surface water flooding

Our mapping indicates that this site **is** at risk of surface water flooding.

For information on flooding from all other sources, such as surface water, please contact the Lead Local Flood Authority, which in this case is West Sussex County Council. A link to their information available online is shown below:

<https://www.westsussex.gov.uk/fire-emergencies-and-crime/dealing-with-extreme-weather/dealing-with-flooding/flood-risk-management/local-flood-risk-management-strategy/>

Please note that the above is a link to an external website which the Environment Agency does not control or maintain. Therefore, the link may not be the most up-to-date at the date of this letter. If the link does not work, and you are unable to find the information about surface water flooding on the relevant website, please contact the authority named above directly.

Where you can find further information

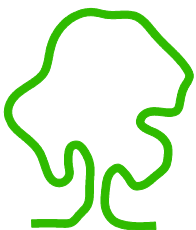
- Detailed long-term flood information and maps can be found on the GOV.UK website:
<https://flood-warning-information.service.gov.uk/long-term-flood-risk/>
- Flood maps for planning can be found on the GOV.UK website:
<https://flood-map-for-planning.service.gov.uk/>
- Please be aware that in February 2016 the Environment Agency updated its guidance on climate change allowances. The standard allowance of adding 20% to peak flows – as per previous guidance in the National Planning Policy Framework, may not be applicable for the purposes of informing development proposals. It is possible that our current modelling has under estimated flood risk when taking climate change into consideration. This does not however have an effect on Flood Zones 2 or 3. For further information please visit:
<https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances>
- Further details about the Environment Agency information supplied can be found on the GOV.UK website:
<https://www.gov.uk/browse/environment-countryside/flooding-extreme-weather>
- If you have requested this information to help inform a development proposal, then you should note the information on GOV.UK on the use of Environment Agency information for Flood Risk Assessments:
<https://www.gov.uk/planning-applications-assessing-flood-risk>
<https://www.gov.uk/government/publications/pre-planning-application-enquiry-form-preliminary-opinion>

If you have any queries or would like to discuss the content of this letter further please call us on 03708 506 506, or reply to the email sent to you with this letter attached.

Please get in touch if you have any further queries or contact us within two (2) months if you would like us to review the information we have sent.

For information on what you can expect from us and our full service commitment to you, please click on this link:

<https://www.gov.uk/government/publications/environment-agency-customer-service-commitment--2/environment-agency-customer-service-commitment>



eas ltd

Environmental Assessment Services Ltd

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West Sussex, RH17 5JT

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