



STATUE HOMES

LAND OFF STATION ROAD

MARKET BOSWORTH

CV13 0NP

FLOOD RISK ASSESSMENT

DECEMBER 2024

FW2526_FRA_001_V2

REVISION HISTORY

Revision	Reason for Issue	Author	Checker	Approved	Date
V1	First Issue	JR	JD	EC	13.12.2024
V2	Amended to address the comments raised by: LLFA dated 01/04/2025, and EA dated 08/04/2025	CF			20.04.2025
V3	Updated with client comments received 23/06/2025	CF			28.06.2025
V4	Updated with client comments received 01/07/25	AP			14.07.2025

EXECUTIVE SUMMARY

1. The site is at **NO** quantifiable risk of flooding from tidal events. Given the updated LIDAR flood mapping data used by the Environment Agency for the Kyngs Golf and Country Club site and update of the red line application site for 126 golfing holiday lodges bringing the entirety of the now proposed application site into Flood Zone 1 and in line with the proposed Golf Wellness Spa & Leisure Centre.
2. The area of the site designated for the proposed golf wellness spa & leisure centre is identified within the Environment Agency Flood Risk mapping as being at a **Very Low 0.1%** risk of flooding from Rivers and Seas.
3. The area designated for the proposed holiday lodges is identified within the Environment Agency Flood Risk mapping as being at a **Very Low** risk of flooding from Rivers and Seas.
4. The area designated for the proposed golf wellness spa & leisure centre is identified by the Environment Agency as having a **Low** chance of flooding from overland Surface Water.
5. The area designated for the proposed holiday lodges is identified by the Environment Agency as having a **Low** chance of flooding from overland surface water.
6. Both the areas proposed for the golf wellness spa & leisure centre and the holiday lodges are considered to be at a **Low** quantifiable risk of flooding from groundwater sources due to the filling undertaken at the site under previous planning applications.
7. Both the areas proposed for the golf wellness spa & leisure centre and the holiday lodges are identified by the Environment Agency as being at **NO** quantifiable risk of flooding from manmade lakes within the topographical catchment of the site.
8. Both the areas proposed for the golf wellness spa & leisure centre and the holiday lodges are at a negligible risk of flooding from the existing sewerage at the site.
9. The site is at a negligible risk of flooding from its own private drainage connections however and this can be mitigated by regular maintenance by the applicant to ensure the ongoing performance of the system.

10. The proposed drainage strategy is for the surface water runoff will be restricted by sedum roof system on each cabin to migrate to ground following the topography of the site to the open ditch to the north while the foul water drainage will be captured on site in tanks with regular disposal off site.

CONTENTS

1.0	INTRODUCTION	1
1.1	BRIEF	1
2.0	SITE DETAILS	3
2.1	SITE LOCATION	3
2.2	SITE DESCRIPTION	3
2.3	TOPOGRAPHY	3
2.4	HYDROLOGICAL CONTEXT	6
2.5	GEOLOGICAL CONTEXT	5
2.6	GROUNDWATER VULNERABILITY	6
2.7	EXISTING DRAINAGE	7
2.8	ARTIFICIAL WATER BODIES	7
3.0	ASSESSMENT OF FLOOD RISK	8
3.1	FLUVIAL	8
3.2	TIDAL OR COASTAL	11
3.3	GROUNDWATER FLOODING	11
3.4	ARTIFICIAL WATER BODIES FLOODING	11
3.5	SURFACE WATER FLOODING	12
3.6	EXISTING SEWER FLOODING	13
4.0	FLOOD MITIGATION STRATEGY	15
4.1	PRINCIPLES FOR MITIGATION STRATEGY	15
4.2	SEQUENTIAL APPROACH	16
4.3	FINISHED FLOOR LEVELS	16
4.4	SAFE ACCESS	16
5.0	SEQUENTIAL AND EXCEPTION TESTS	17
5.1	SEQUENTIAL TEST	20
5.2	EXCEPTION TEST	ERROR! BOOKMARK NOT DEFINED.
6.0	CONCLUSIONS & RECOMMENDATIONS	21
6.1	CONCLUSIONS	21

APPENDICES

APPENDIX A – SITE LOCATION PLAN

APPENDIX B – DEVELOPMENT PROPOSALS

APPENDIX C – TOPOGRAPHICAL SURVEY

APPENDIX D – HISTORIC PHASE 1 & 2 GEO-ENVIRONMENTAL ASSESSMENT

APPENDIX E – SEVERN TRENT WATER SEWER RECORDS

TABLES

Table 1 – Extract from NPPG 2023 (Table 3) 15

Table 2 - Flood Impact Table.....17

Table 3 - Environment Agency Flood Warning Levels18

FIGURES

Figure 1 – Extract from EA Flood Map for Planning (April 2025) 9

Figure 2 – Extract from EA Flood Map for Planning (April 2025) with application boundary..... 10

Figure 3 – Extract from EA Mapping Risk of Flooding from Reservoirs (December 2024) 12

Figure 4 – Extract from EA Mapping Risk of Surface Water Flooding (December 2024) 13

Figure 5 – Extract from DEFRA FD2320 showing Table 13.1 17

Figure 6 - Flood Risk Matrix.....17

1.0 INTRODUCTION

1.1 BRIEF

1.1.1 Farrow Walsh Ltd have been commissioned by Statue Homes, the applicant, to undertake the Flood Risk Assessment in support of a hybrid planning application for a golf wellness spa & leisure centre with associated works and up to 126 holiday lodges off Station Road in Market Bosworth. The purpose of this document is to report on the Flood Risk for the proposed development.

1.1.2 The proposals for the site include for the construction of a new 25,000ft golf wellness spa & leisure centre with associated works to the centre of the site and up to 126 new holiday lodges situated to the northern boundary. An updated hybrid site location plan is included within Appendix A and the development proposals can be found within Appendix B.

1.1.3 This report considers the flood risk associated with a development proposal of this type and considers both mitigation measures and safe evacuation to ensure user safety.

1.1.4 The Flood Risk Assessment (FRA) report has been informed by the guidance contained within The National Planning Policy Framework (December 2023, Department for Levelling Up, Housing & Communities) (NPPF).

1.1.5 Reference has been made to the updated basic flood maps contained within the Environment Agency websites and the Environment Agency Standing Advice for Local Planning Authorities.

1.1.6 In consulting the Environment Agency website this report examines the following:

- Assessment of Flood risk and the likely sources of flooding
- Managing Residual Flood Risk
- Managing surface water
- Remedial Measures

1.1.7 This FRA examines the flood implications of the proposed development based on the following objectives, set out within the NPPF.

- Appraising risk
- Managing risk
- Reducing risk
- A partnership approach

1.1.8 This report has been prepared using the following guidance documentation:

- National Planning Policy Guidance (NPPG)
- Ciria C753 – The SUDs Manual
- Flood and coastal risk projects, schemes and strategies: climate change allowances (EA – May 2022)
- Non-Statutory Technical Standards 2015
- Written Ministerial Statement regarding Sustainable Drainage (HCWS161) 2014
- The Water Framework Directive (2000)
- Building Regulations Part H 2015
- Hinckley & Bosworth Local Plan 2020 – 2041 (July 2024)
- Strategic Flood Risk Assessment for Hinckley & Bosworth Borough Council Level 1 (July 2019)
- Hinckley & Bosworth Borough Council Level 2 Strategic Flood Risk Assessment (May 2020)

1.1.9 In consulting with key stakeholders and policies this report aims to assess the risk of flooding both to the site and the impact of any development on the downstream network.

1.1.10 The flood management strategy, including consideration of safe access / egress (the application site is entirely in Flood Zone 1) to and from the site and flood resilience measures, is based on relevant British Standards (BS8533), the standing advice provided by the Environment Agency and on best engineering judgement. The approach for the FRA is based on the requirements of the Environment Agency and Hinckley & Bosworth Borough Council.

1.1.11 Any comments and opinions expressed in this report, including any conclusions are based on the information available to Farrow Walsh Limited at the time of writing. The conclusions therefore could differ if the information is found to be inaccurate, incomplete or misleading. Farrow Walsh Limited accepts no liability should this be proven to be the case, or, if additional information is made available with respect to this site.

2.0 SITE DETAILS

2.1 SITE LOCATION

- 2.1.1 The proposed application site is located off Station Road, Market Bosworth, a market town situated to the West of Leicester City centre and to the North of Hinckley town centre.
- 2.1.2 A hybrid site location plan can be found within Appendix A and proposed development plans are included in Appendix B.

2.2 SITE DESCRIPTION

- 2.2.1 The site area for the proposed golf wellness spa & leisure centre is rectangular in shape and covers an area of approximately 0.2323 Hectares or 2,323m².
- 2.2.2 The site area for the proposed holiday lodges is irregular in shape and covers an area of approximately 3.58 Hectares or 35,800m².
- 2.2.3 Both the site area for the proposed holiday lodges and the golf wellness spa & leisure centre are currently classified as greenfield/ Leisure & Tourism in their entirety with the land forming part of the existing golf course, through construction, substantially raising and contouring the previously sloping and flat land with 1.5 million tonnes of inert fill as part of the implemented 02/00685/COU now extant planning consent, a land use obtained under previous planning permission.
- 2.2.4 Vehicular access to the site is currently gained to the South through the existing gated access road off the Station Road public highway.

2.3 PLANNING HISTORY

- 2.3.1 The site has been previously subject to the following planning applications.
- 2.4 In line with the permitted and now accepted established principle of development including

98/00963/COU

- Proposed golf course and ancillary facilities including club house
- Approved
- 09.11.2000

02/00685/COU

- Proposed golf course and ancillary facilities including siting of club house and associated parking
- Approved
- 30.04.2003

07/01287/FUL

- Erection of a greenkeepers store associated with the golf course
- Approved
- 21.12.2007

08/00217/FUL

- Retention of slab area
- Approved
- 09.04.2008

08/00750/FUL

- Erection of golf club house, new access and associated parking and managers flat
- Approved
- 24.09.2008

19/00230/FUL

- Change of use of vacant outbuilding to No. 1 holiday lodge and alterations to existing vehicular access onto Station Road to include the extension to the access drive
- Refused
- 23.10.2018 (allowed at appeal on 24.10.2019)

19/01437/FUL

- Erection of a multi-purpose golf clubhouse (D2), formation of new car parking areas and access roads and the erection of 6 Golf holiday homes (C1) and all associated ancillary works and landscaping
- Approved
- 15.06.2020

23/00273/DISCON

- Application to discharge conditions 13 (contamination) 16 (surface water management) 17 (drainage during construction) 18 (long term maintenance of drainage) 19 (Infiltration) 21 (habitat management plan) 24 (construction management plan) attached to planning permission 19/01437/FUL
- Split Decision - Discharge of Conditions
- 30.08.2023

23/00434/DISCON

- Application to discharge conditions 9 (Hard and Soft Landscaping), 10 (Levels), 15 (Land Contamination) and 22 (Footpath Management Plan) of planning application 19/01437/FUL
- Split decision – discharge of conditions

- 23.08.2023

23/00508/FUL

- Erection of 9 single storey holiday lodges with vehicle parking and associated works
- Refused (appeal dismissed on ecological grounds)

- 18.07.2023

24/00019/FUL

- Proposed erection of a 50x room golf and leisure accommodation facility with associated works (part revised scheme to 19/01437/OUT)
- Approved
- 12.04.2024

24/00026/FUL

- Erection of 2 subterranean golf holiday lodges with associated works
- Approved
- 07.06.2024

24/00513/FUL 4 lodges

- Erection of 4 golf holiday lodges and associated works
- Approved
- 09.05.2024

24/00769/FUL 9 lodges

- Awaiting approval decision notice

2.5 TOPOGRAPHY

2.5.1 The ground levels on the area for the golf wellness spa & leisure centre are recorded to Ordnance Survey datum as approximately 101.98m to 105.30mAOD with the surface topography within the area generally falling from the South to the North.

2.5.2 The ground levels on the area identified for the holiday lodges are recorded to Ordnance Survey datum as approximately 95.00m to 103.03mAOD with the surface topography within the area generally falling from South to North and East to West.

2.5.3 A copy of the topographical survey can be found within Appendix C.

2.6 HYDROLOGICAL CONTEXT

- 2.6.1 Online Ordnance Survey mapping indicates that the nearest watercourse to the site is an unnamed watercourse located offsite adjacent to the northern boundary, where the holiday lodges are proposed, and approximately 810m North of the proposed golf wellness spa & leisure centre.
- 2.6.2 The open channel flows in a South East to North West direction and is understood to be a tributary of the River Sense.
- 2.6.3 The nearest named watercourse to the site is the River Sense located approximately 3.40km to the North West of the proposed spa facility and 2.80km West of the proposed holiday lodges.
- 2.6.4 The River Sense is classified as a main river by the Environment Agency and generally flows in a North East to South West direction towards the River Anker and the River Tame all tributaries of the River Trent.

2.7 GEOLOGICAL CONTEXT

- 2.7.1 Whilst no current intrusive GI has been made available, a historic Ground Investigation will be used as a general guideline for the makeup of the existing ground in the area. The historic GI (IV.149.17), shows that TP4 was undertaken to the South of the proposed spa facility and this identifies that topsoil was encountered down to a depth of 0.55m, then very orange mottled grey very sandy clay down to a depth of 1.20m and finally firm blueish grey mottled brown clay to a depth of 3.00m.
- 2.7.2 A copy of the historic phase 1 & 2 geo-environmental assessment can be found within Appendix D.

2.8 GROUNDWATER VULNERABILITY

- 2.8.1 The bedrock stratum below both the area for the golf wellness spa & leisure centre and the holiday lodges is classified by the Environment Agency as a Secondary B aquifer by the Environment Agency with the superficial deposits classified as secondary (undifferentiated).
- 2.8.2 In terms of vulnerability, the ground is classified as **Low** risk.
- 2.8.3 The site does not lie within a Source Protection Zone.

2.9 EXISTING DRAINAGE

- 2.9.1 Severn Trent Water are responsible for maintaining the public sewers within the Market Bosworth area.
- 2.9.2 The historic sewer records indicate that a 300mm combined sewer runs in an East to West direction through the former golf course, passing the site at a distance of approximately 100m South of the site.
- 2.9.3 A copy of the Severn Trent Water sewer maps can be found within Appendix E.

2.10 ARTIFICIAL WATER BODIES

2.10.1 The Ashby de la Zouch Canal is the nearest artificial water body to the site and it is located approximately 145m to the West of the area designated for the proposed holiday lodges. This is separated from the North West corner of the site by the rail lines on embankment.

2.10.2 The nearest reservoir to the site is the Thornton reservoir located 7.75km North East of the site.

3.0 ASSESSMENT OF FLOOD RISK

3.1 FLUVIAL

3.1.1 The site lies within the management and operational catchment of Tame Anker Mease – secondary combined and within the Humber River Basin district.

3.1.2 The Environment Agency have derived flood maps of England from which it is possible to initially identify whether a site is located within an area that is at risk of fluvial flooding. The updated maps, which are available on the Environment Agency's website, categorise the updated proposed application site within the red line as land as being within Flood Zone 1, with Flood Zone 1 being all land falling outside of the flood plain.

3.1.3 The definitions of the Flood Zones extracted from the National Planning Policy Framework (NPPF) are described below:

- Flood Zone 1 – low probability. This zone comprises land assessed as having a less than 1 in 1000 annual probability of river or sea flooding (<0.1%).
- Flood Zone 2 – medium probability. This zone comprises land assessed as having between a 1 in 100 and 1 in 1000 annual probability of river flooding (15 – 0.1%) or between a 1 in 200 and 1 in 1000 annual probability of sea flooding (0.5% - 0.1%) in any year.
- Flood Zone 3a – high probability. This zone comprises land assessed as having a 1 in 100 or greater annual probability of river flooding (>1%), or a 1 in 200 or greater annual probability of flooding from the sea (>0.5%) in any year.
- Flood Zone 3b – the functional floodplain. This zone comprises land where water must flow or be stored in times of flood. Typically, land which would flood with an annual probability of 1 in 20 (5%) or greater in any year or is designed to flood in an extreme (0.1%) flood.

3.1.4 The extent of flooding on main rivers is indicated on the Environment Agency web site and an extract from the indicative flood maps can be seen in Figure 1. The areas of dark blue identify flooding probability of 1 percent (1 in 100 year) and the light blue areas are areas of extreme flood between the 1 percent and 0.1 percent (1 in 1000 year) probability.

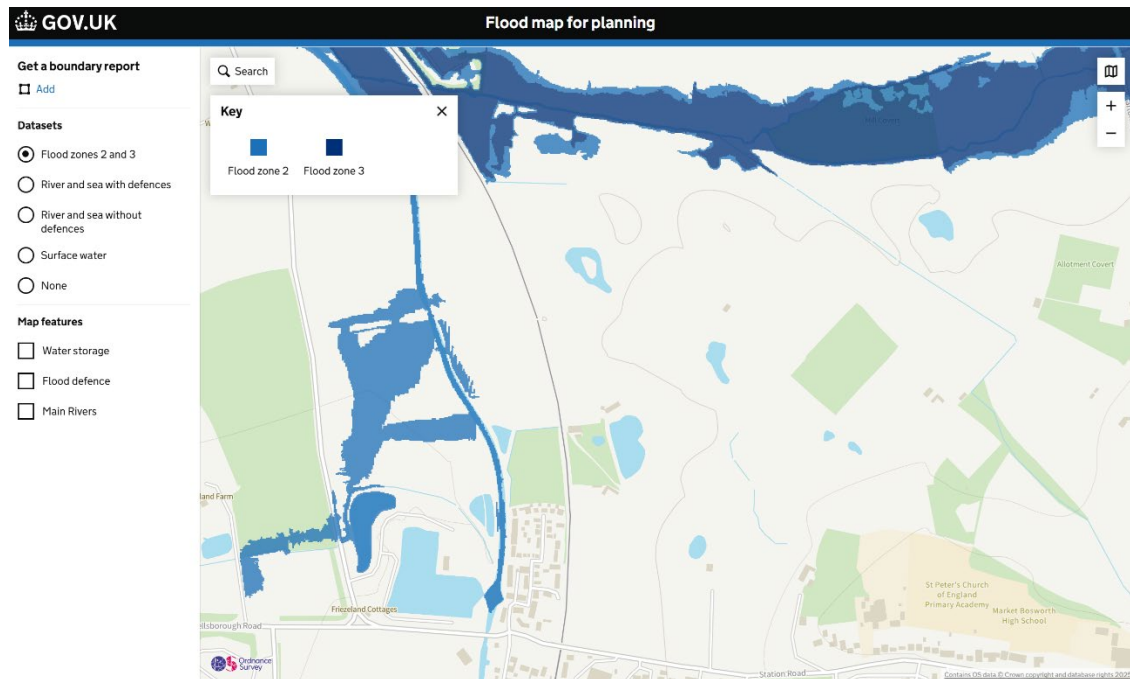


Figure 1 – Extract from EA Flood Map for Planning (April 2025)

- 3.1.5 Given the proximity of the site to the predicted flood outline, it is identified on the EA indicative planning flood mapping that the proposed lodges lie entirely in Flood Zone 1.



Figure 2 – Extract from EA Flood Map for Planning (April 2025) with application boundary

- 3.1.6 Given the proximity of the site to the predicted flood outline, it is identified on the EA indicative planning flood mapping that the proposed golf wellness spa & leisure centre lie entirely within Flood Zone 1.
- 3.1.7 The Strategic Flood Risk Assessment indicates that no historic fluvial flood events have been recorded within the vicinity of the site.
- 3.1.8 Based on Table 1 of the NPPF the area proposed for the golf wellness spa & leisure centre and holiday lodges has a Low probability of flooding due to main rivers within the extents outlined within Figure 2.
- 3.1.9 The Environment Agency has confirmed that they do not hold detailed flood data of the ordinary water course, and it is likely that the flood extents have been created using lidar levels data obtained from airborne survey sweeps. Hydraulic data is then imposed to create the flood extents shown by the EA on the public website.

3.1.10 Previous planning applications have focused on the raising of surface levels within the site through the placement of imported materials and it is understood that levels on the site have not yet been fully implemented (raised) to the levels permitted under the historic planning permissions.

3.2 TIDAL OR COASTAL

3.2.1 The ground levels on the area for the golf wellness spa & leisure centre are recorded to OS datum as approximately 101.98 to 105.98mAOD with the topography within the area generally falling from south to north.

3.2.2 The ground levels on the area for the holiday lodges are recorded to Ordnance Survey datum as approximately 95.00m to 103.03mAOD with the topography within the area generally falling from South to North and from East to West.

3.2.3 A copy of the topographical survey can be located within Appendix C.

3.2.4 The site is geographically remote from any coastline., the site lies within the management and operational catchment of the Tame Anker and Mease and lies within the Humber River Basin district.

3.2.5 The site is indicated by mapping as being remote from the areas at risk of tidal flooding with the existing coastal defences intact or removed.

3.2.6 The site is therefore considered comprehensively free from risk from tidal or coastal flooding effects, being horizontally and vertically remote from such influences at present, and after consideration of climate change effects.

3.3 GROUNDWATER FLOODING

3.3.1 Groundwater flooding activity occurs because of rising water from underlying aquifers or from water flowing from abnormal springs. This tends to occur after long periods of sustained high rainfall, and the areas at most risk are often low-lying where the water table is more likely to be at a shallow depth. Groundwater flooding is known to occur in areas underlain by major aquifers, although it is increasingly being associated with localised floodplain sand and gravels.

3.3.2 The site is classed by the Environment Agency as being at Low risk from groundwater flooding. This will further be mitigated by raising of the site levels through the import of soils permitted under historic and extant planning permission 02/00685/COU so that any groundwater drains away from the location proposed for the properties.

3.4 ARTIFICIAL WATER BODIES FLOODING

3.4.1 There are no reservoirs or manmade lakes within the vicinity of the site.

3.4.2 The Environment Agency online mapping indicates that there are no areas within the vicinity of the site at risk of flooding from reservoirs.

3.4.3 The failure of the water mains running along Station Road to the South of the application site is considered statistically remote.

3.4.4 We conclude that the risk of failure of the water main is remote. It must however be noted that for a failure adjacent to the site the nature of the escape and probable pressurized column of water could itself cause some local flood damage, this however is beyond practical mitigation.

3.4.5 The SFRA indicates that there have been no recorded historic incidents of flooding due to artificial sources.

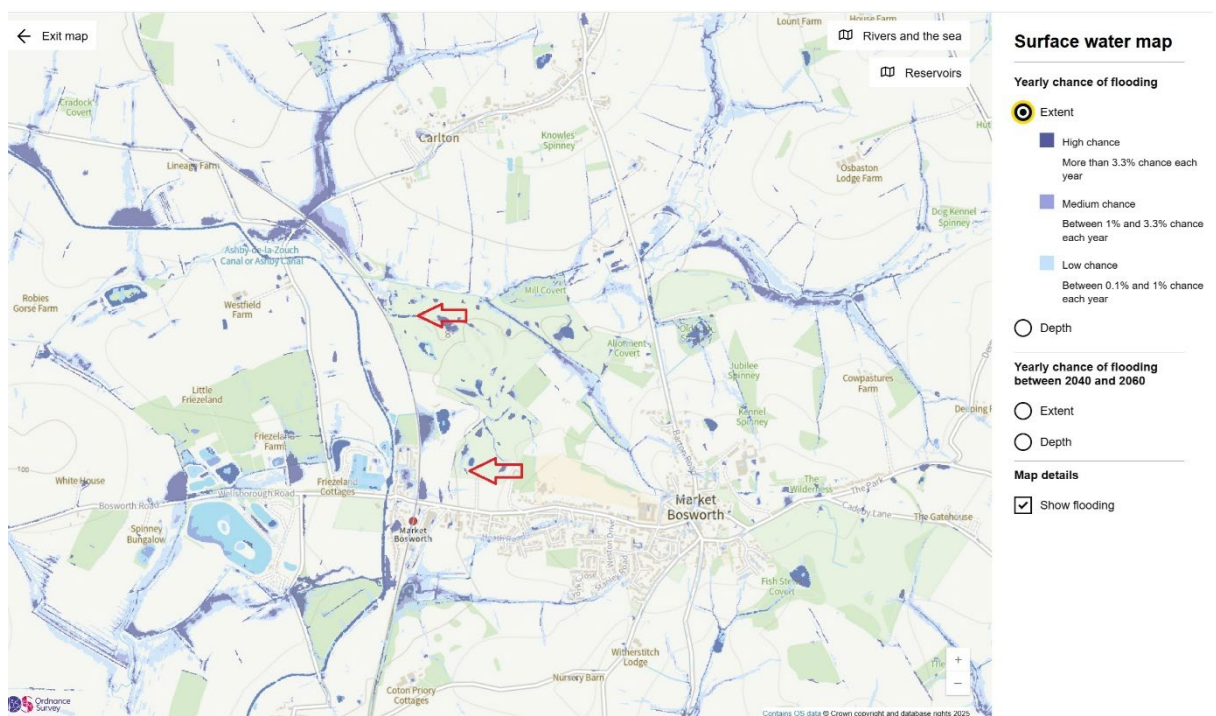


Figure 3 – Extract from EA Mapping Risk of Flooding from Reservoirs (December 2024)

3.5 SURFACE WATER FLOODING

3.5.1 Surface water flooding occurs when natural and engineered systems drainage network capacity is exceeded and thus cannot accommodate the volume of rainfall / runoff. Surface water flooding occurs often in urban areas during extreme, high intensity, low duration rainfall events which overwhelm the local surface water drainage systems. In rural areas this type of flooding can occur during medium intensity, long duration events where saturated ground conditions prevent natural infiltration into the subsoils below the surface. Flood water arising from such events is then conveyed above ground following the topography of the surrounding land.

3.5.2 The Environment Agency have modelled locations along critical flow paths and areas situated in topographic depressions, which could flood following an extreme rainfall event when drainage capacity has been exceeded. Figure 4 indicates the predicted surface water flood risk map taken from the Environment Agency's website.

3.5.3 The area designated for the proposed golf wellness spa & leisure centre and the holiday lodges is considered to be at very low risk from overland flows by the EA.

3.5.4 Generally, due to the site levels and those of the surrounding areas it is considered that surface water would follow the natural topography and drain towards the nearby unnamed ordinary water courses and ditches.

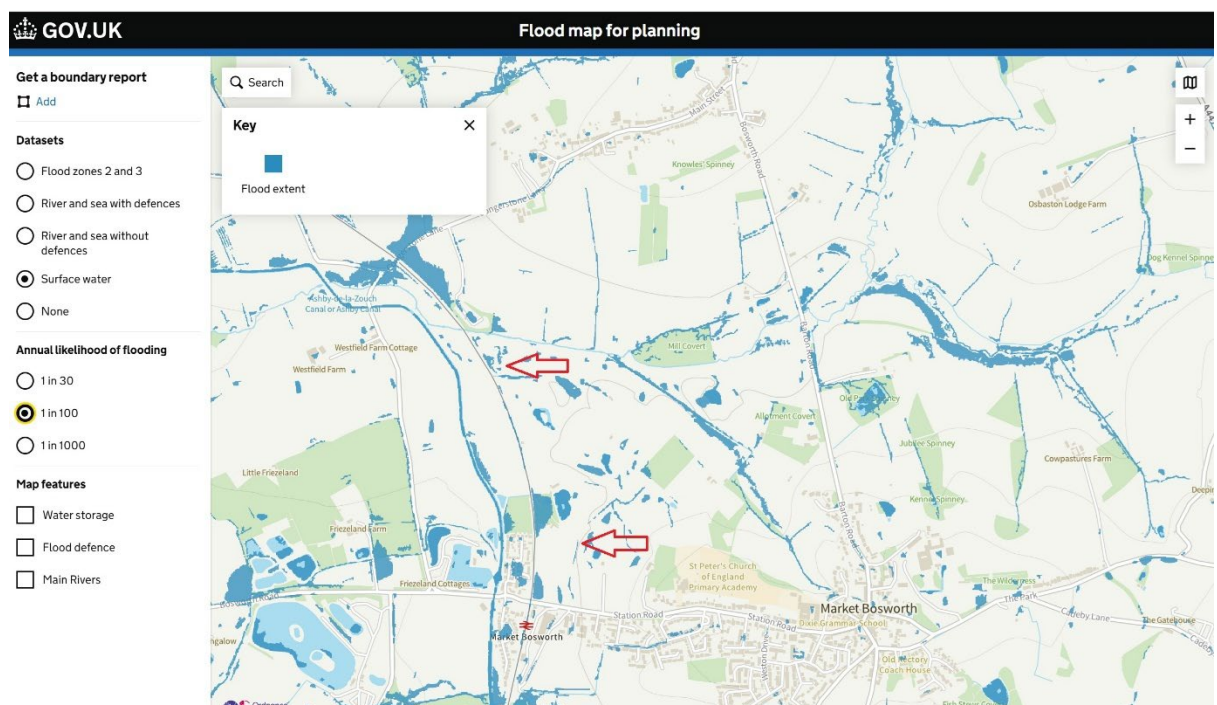


Figure 4 – Extract from EA Mapping Risk of Surface Water Flooding (April 2025)

3.6 EXISTING SEWER FLOODING

3.6.1 The sewer network surrounding the development is owned and maintained by Severn Trent Water. A copy of the sewer records for the area can be found within Appendix E.

3.6.2 Generally, due to the site levels being higher than those of the surrounding areas it is considered that any breach of the sewers would follow the natural topography not entering the site and drain away from the application sites.

3.6.3 The site isn't considered as a critical drainage area by the SFRA.

3.6.4 No historic flooding within the vicinity of the site was recorded.

4.0 FLOOD MITIGATION STRATEGY

4.1 PRINCIPLES FOR MITIGATION STRATEGY

- 4.1.1 In accordance with Table 3 of NPPG (2023), a professional service use has a flood vulnerability classification of 'less vulnerable' whilst a residential use or Sites used for holiday or short-let caravans and camping, subject to a specific warning and evacuation plan has a flood vulnerability classification of 'more vulnerable'.

Flood Risk Vulnerability Classification					
Flood Zones	Essential Infrastructure	Highly Vulnerable	More Vulnerable	Less Vulnerable	Water Compatible
Zone 1	✓	✓	✓	✓	✓
Zone 2	✓	Exception Test Required	✓	✓	✓
Zone 3a	Exception Test Required	✗	Exception Test Required	✓	✓
Zone 3b	Exception Test Required	✗	✗	✗	✓

Table 1 – Extract from NPPG 2023 (Table 3)

- ✓ Denotes Development is appropriate.
✗ Development should not be permitted.

- 4.1.2 The findings of the FRA indicate that the area designated for the golf wellness spa & leisure centre and the area for the holiday lodges to be located within Flood Zone 1. Therefore, in accordance with National Planning Policy Guide the site is deemed appropriate for development.
- 4.1.3 The drainage design should account for any residual risk of flooding from surface water as a result of exceedance events.
- 4.1.4 The drainage will be designed to accommodate a surcharge outfall such that in extreme storm events the drainage system can accommodate the runoff.

4.2 SEQUENTIAL APPROACH

- 4.2.1 The designated area for the proposed spa facility is located within Flood Zone 1 and the area designated for the proposed holiday lodges is located within Flood Zone 1.
- 4.2.2 Surface water flooding is observed to the existing unnamed ordinary watercourse which runs adjacent to the northern boundary of the proposed holiday lodges and therefore all properties should be positioned outside of the existing surface water flood extents, where possible development is being located away from area of flooding and where this is not feasible, mitigation measures are provided.

4.3 FINISHED FLOOR LEVELS

- 4.3.1 Floor levels of the golf wellness spa & leisure centre are to be set that they are a minimum of 150mm above the finished ground levels.
- 4.3.2 Floor levels of the lodges are to be set such that they are a minimum of 300mm above the 100-year plus climate change peak flood levels. This will be achieved through the holiday lodges being set on stilts to the required levels affording permeability.

4.4 SAFE ACCESS

- 4.4.1 In accordance with current guidance and DEFRA FD2320 the entire red line application site and safe access is to be provided for the temporary residents is within Flood Zone 1
- 4.4.2 The EA online mapping indicates that the site access points lie within Flood Zone 1 and therefore have a Low probability of flooding. The access points lie outside the mapped extents of flooding caused by rivers and seas.
- 4.4.3 The golf wellness spa & leisure centre is also outlined to be within Flood Zone 1 and have a low probability of flooding.
- 4.4.4 The lodges are located entirely within Flood Zone 1 and the floor levels of the lodges are to be set 300mm above surface levels using stilts which allow the lodges to be dry. Further to this the proposed walkways to access the lodges is also in Flood Zone 1
- 4.4.5 In accordance with DEFRA FD2320 Table 13.1 shown in Figure 3 a flood depth of 300mm with a velocity of 0.25m/s would represent a danger to some, meaning the majority of users would be able to access and egress the site in all storm events with only the more vulnerable required to maintain a stay put approach.

Table 13.1 Danger to people for different combinations of depth and velocity

Velocity (m/s)	Depth of flooding (m)											
	0.05	0.10	0.20	0.30	0.40	0.50	0.60	0.80	1.00	1.50	2.00	2.50
0.00												
0.10												
0.25												
0.50												
1.00												
1.50												
2.00												
2.50												
3.00												
3.50												
4.00												
4.50												
5.00												

Key:

Danger for some

Danger for most

Danger for all

Figure 5 – Extract from DEFRA FD2320 showing Table 13.1

4.4.6 In extreme flood events above the 1 in 1000-year (0.1%) storm event the development would operate a 'stay put' approach in extreme flooding events for users categorised as more vulnerable. They would be advised to stay within the development and await assistance from emergency services.

4.5 FLOOD WARNING & EVACUATION

4.5.1 Whilst the site is in Flood Zone 1 and considered to have a low probability of flooding from all sources, and a stay put approach can be adopted for more vulnerable users, it is important that all users of the development are made aware of the flood warning procedures and evacuation points.

4.5.2 By utilising the flood warning systems available it is anticipated that the temporary residents will be able to egress from the site in a safe manner in advance of an extreme (1.0 – 0.1 percent probability) storm event occurring.

4.5.3 Flood warnings are published by the Met Office can be found here:

<https://flood-warning-information.service.gov.uk/warnings>

4.5.4 The Met Office Flood Forecasting Centre in conjunction with the Environment Agency publishes Flood Guidance Statements containing:

- General overview of the flood risk
- Assessment of the flood risk
- Weather warnings and flood warnings
- Specific area of concern map

4.5.5 The Met Office uses a Flood Risk Matrix (see Figure 4) to assess the likelihood against the potential impact and assigns a risk colour and level.

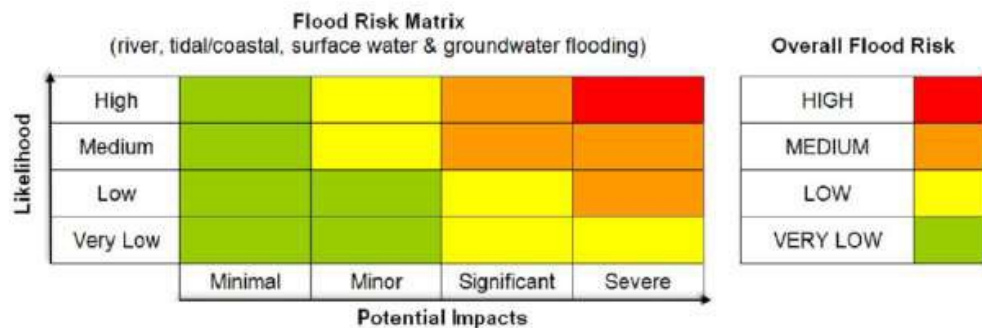


Figure 6 – Flood Risk Matrix

4.5.6 Typical examples of impacts from flooding aligned with the flood risk matrix are shown in Table 4.

Flood Impacts Table			
Minimal Impacts	Minor Impacts	Significant Impacts	Severe Impacts
Generally, no impact, however there may still be	Localised flooding of land and roads – risk of aquaplaning	Flooding affecting properties and parts of communities	Widespread flooding affecting significant numbers of properties and whole communities
Isolated and minor flooding of low-lying land and roads	Localised flooding could affect individual properties	Damage to buildings/structures is possible	Collapse of buildings/structures is possible
Isolated instances of spray/wave overtopping on coastal promenades	Individual properties in coastal location affected by spray and/or wave overtopping	Possible danger to life due to fast flowing/deep water/wave overtopping/wave inundation	Danger to life due to fast flowing/deep water/wave overtopping/wave inundation
Little or no disruption to travel although wet road surfaces could lead to difficult driving conditions	Localised disruption to key sites identified in flood plans (e.g. Railways, utilities)	Disruption to key sites identified in flood plans (e.g. railways, utilities, hospitals)	Widespread disruption or loss of infrastructure identified in flood plans (e.g. railways, utilities, hospitals)
	Local disruption to travel – longer journey times	Disruption to travel is expected. A number of roads are likely to be closed	Large scale evacuation of properties may be required
			Severe disruption to travel. Risk of motorists becoming stranded.

Table 2 – Flood Impact Table

4.5.7 The Environment Agency constantly monitors rainfall, river levels and sea conditions to forecast the possibility of flooding. If necessary, the Environment Agency can be contacted:

Incident hotline 0800 80 70 60 (24hrs) and Floodline 0345 988 1188

4.5.8 The Environment Agency Flood Warning Levels:

Warning type		Meaning	When it is used
	Flood Alert	Flooding is possible. Be prepared.	Two hours to two days in advance of flooding
	Flood Warning	Flooding is expected. Immediate action required	Half an hour to one day in advance of flooding
	Severe Flood Warning	Severe Flooding. Danger to life.	When flooding poses a significant threat to life.

Table 3 – Environment Agency Flood Warning Levels

5.0 SEQUENTIAL AND EXCEPTION TESTS

5.1 SEQUENTIAL TEST

- 5.1.1 For clarity the aim of the sequential test is to steer new development to areas with the lowest probability of flooding. Furthermore, approval of the Sequential Test lies with the Local Planning Authority.
- 5.1.2 The NPPF indicates that for a less vulnerable land use within Flood Zone 1, development is appropriate.
- 5.1.3 Environment Agency mapping and the Strategic Flood Risk Assessment both indicate that the area designated for the proposed golf wellness spa & leisure centre lies within Flood Zone 1.
- 5.1.4 Environment Agency mapping and the Strategic Flood Risk Assessment both indicate that both the Spa facility and the 126 holiday lodges are both within flood zone 1, identified by the Environment Agency as having a Low chance of flooding

6.0 CONCLUSIONS & RECOMMENDATIONS

6.1 CONCLUSIONS

- 6.1.1 The site proposed for development is free of potential risk of flooding from tidal events.
- 6.1.2 The area designated for the proposed golf wellness spa & leisure centre is outside the extents of the mapped flood plain of main river systems while being classified as a low risk area.
- 6.1.3 The area designated for the proposed holiday lodges is also outside the extents of the mapped flood plain of main river systems while being classified as a low risk area.
- 6.1.4 The area designated for the proposed golf wellness spa & leisure centre is at low risk of flooding from overland flow routing from surface water.
- 6.1.5 The area designated for the proposed holiday lodges is also at low risk of flooding from overland flow routing from surface water.
- 6.1.6 The application site is at no risk of flooding from manmade lakes.
- 6.1.7 The escape flow route from the strategic water mains has also been considered. In the unlikely event of failure of the mains the flows would not reach the proposed properties.
- 6.1.8 The site is at no risk of flooding from existing sewerage systems for the same reason as the water mains issue.
- 6.1.9 We therefore conclude the hybrid application site lies within Flood Zone 1 as defined in the NPPF Table 1 should be permitted.

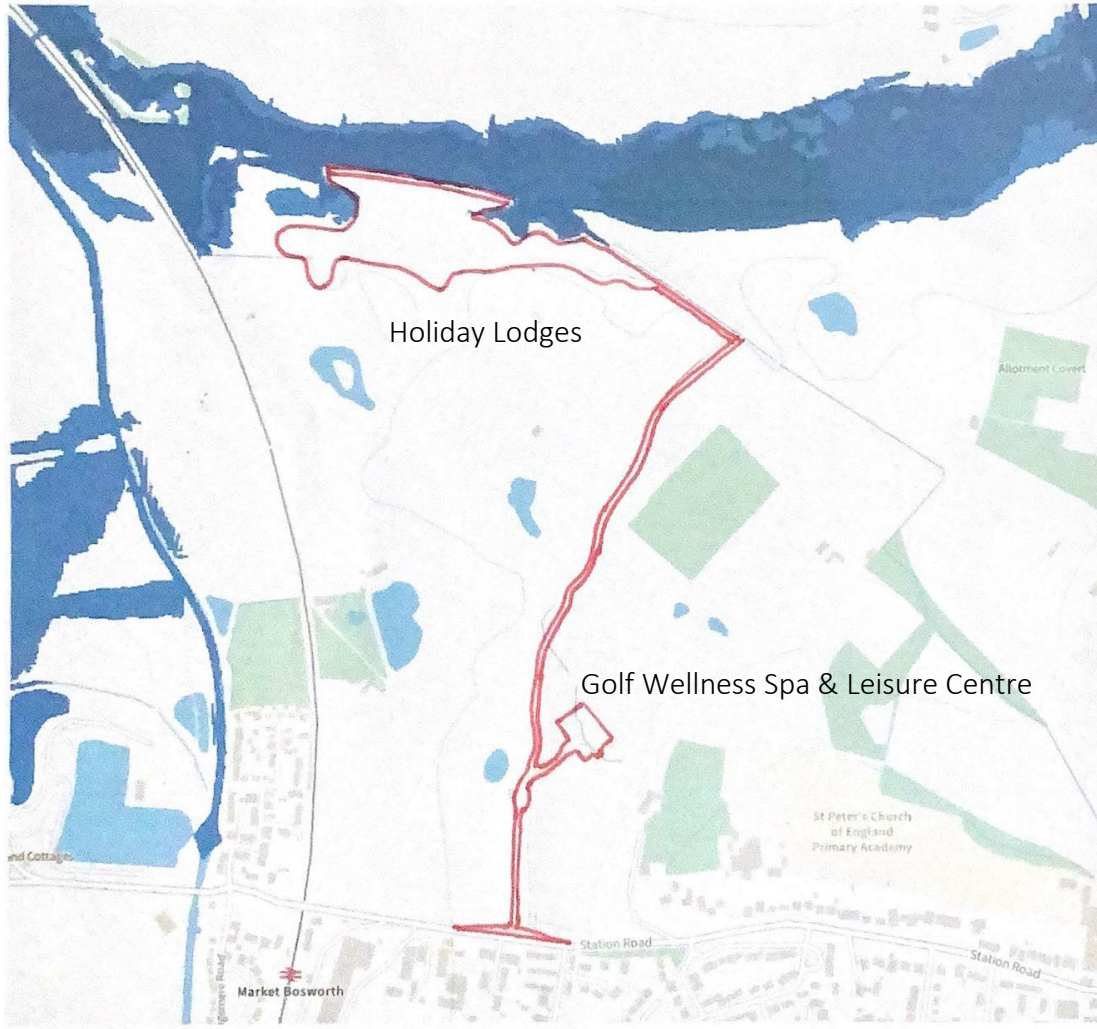
APPENDICES

APPENDIX A – SITE LOCATION PLAN

SITE LOCATION PLAN

FW2526 / Land Off Station Road, Market Bosworth

X439627 Y303672

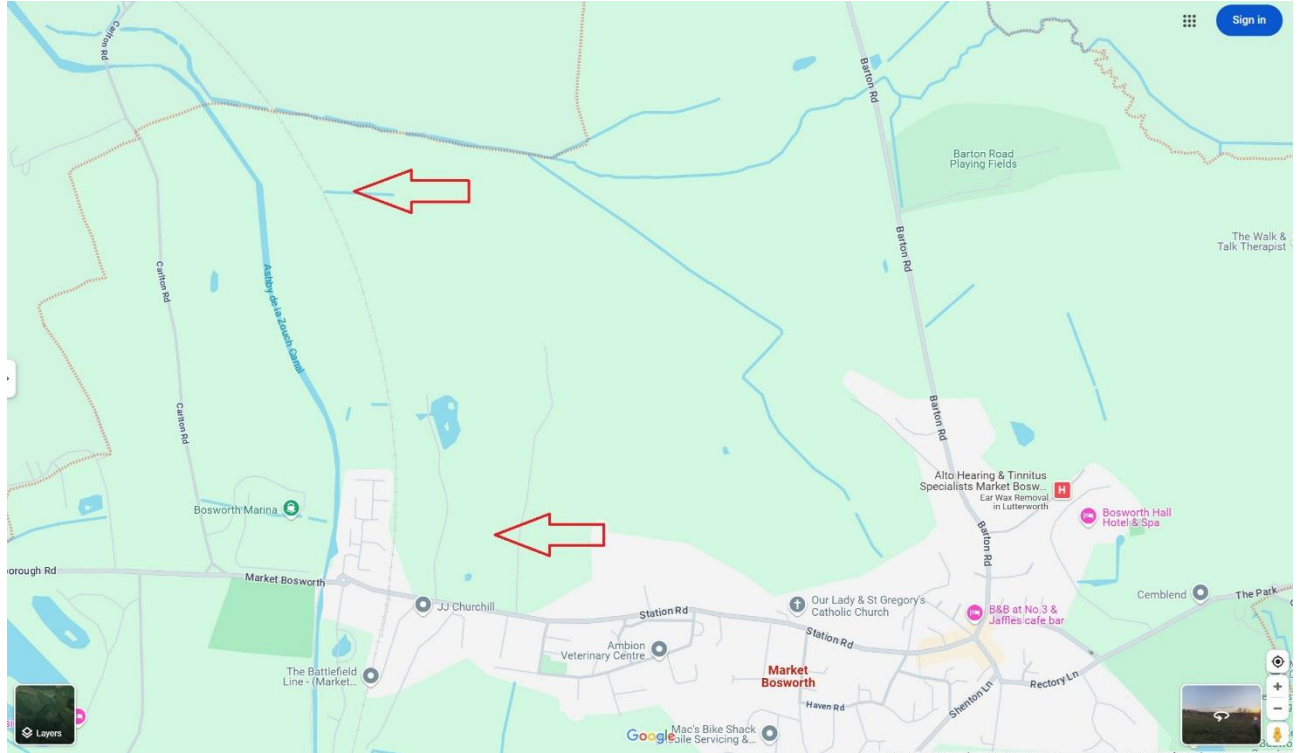


Site Location – with planning application boundary

SITE LOCATION PLAN

FW2526 / Land Off Station Road, Market Bosworth

X439627 Y303672



Site Location – with topography arrows

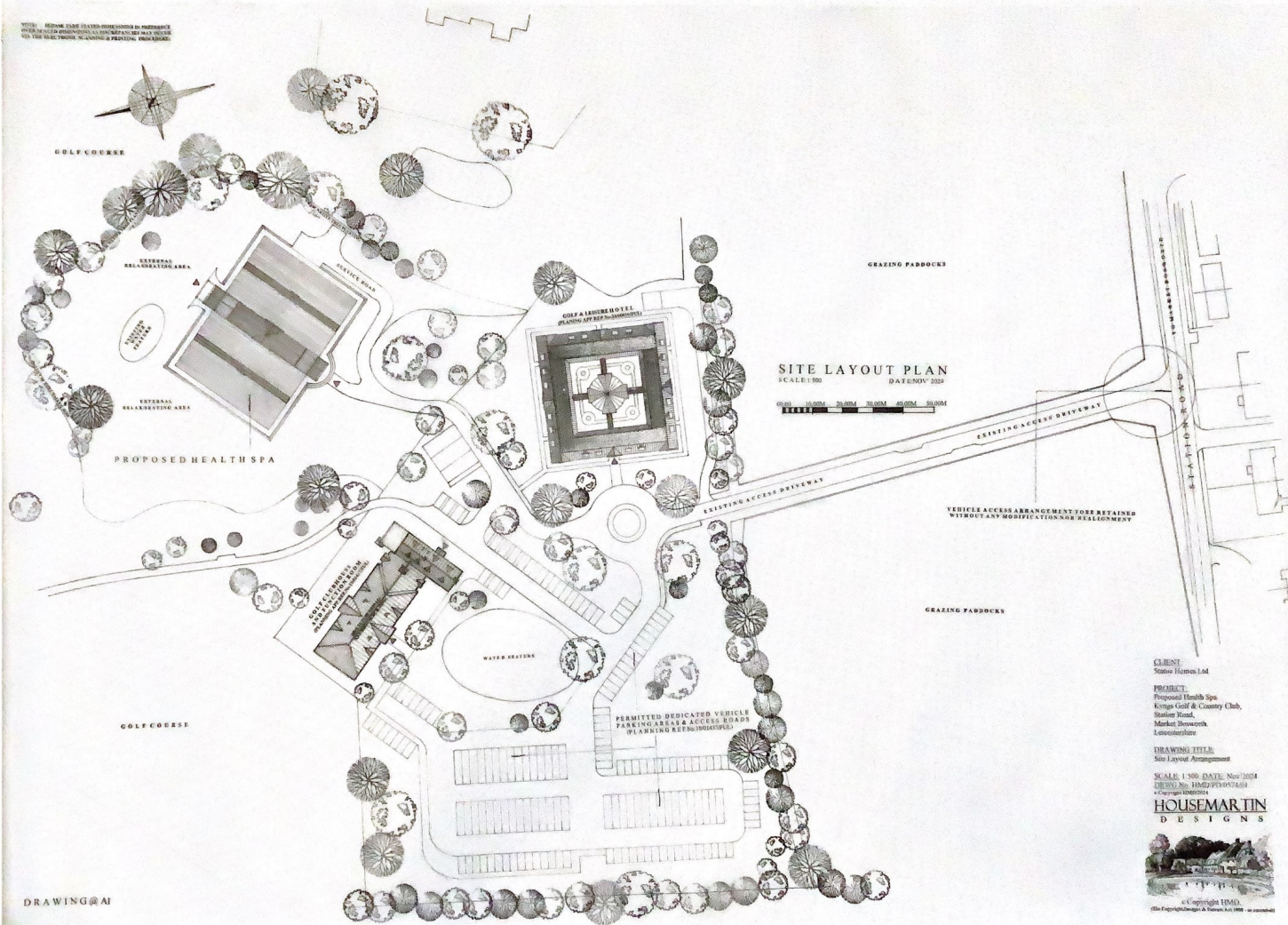
SITE LOCATION PLAN

FW2526 / Land Off Station Road, Market Bosworth

X439627 Y303672

APPENDIX B – DEVELOPMENT PROPOSALS

NOTES: - REFERENCE TO THE LAYOUT OF THE PROPOSED SPAS AND HEALTH SPAS IS FOR INFORMATION ONLY. THE LAYOUT OF THE SPAS AND HEALTH SPAS IS SUBJECT TO THE LAYOUT OF THE SPAS AND HEALTH SPAS.



SITE LAYOUT PLAN

SCALE: 1:500 DATE: NOV 2024

0 10 20 30 40 50 60 70 80 90 100

CLIENT
Statens Høsten Ltd

PROJECT
Proposed Health Spa
Kings Golf & Country Club,
Station Road,
Market Bosworth,
Leicestershire

DRAWING TITLE
Site Layout Arrangement

SCALE: 1:500 DATE: Nov 2024
DRAWING NO: HMD/P1057404

HOUSEMARTIN
DESIGNS



© Copyright HMD.
(All Copyrights Reserved & Patent Act 1988 - in force)

PROPOSED (up to) 126 GOLF HOLIDAY LODGES

APPLICATION SITE

PROPOSED GOLF & LEISURE HEALTH SPA



LOCATION PLAN

SCALE: 1:2500 @A3 DATE: DECEMBER 2024

KYNGS GOLF & COUNTRY CLUB

STATION ROAD

STATION ROAD

HOUSEMARTIN
DESIGNS



APPENDIX C – TOPOGRAPHICAL SURVEY



LEGEND			
	Buildings		Overhead Cable
	Wall		Concrete edge
	Kerb line		Tarmac edge
	Line marking		Grass verge
	Drop kerb		Canopy/Overhang
	Centre line		Verge
	Bank Top		Bank Bottom
	Station and Name		Station Level
	Tree / Bush / Sapling		Area of Undergrowth
	Hedge		Ridge Level
	Eaves Level		Flat Roof Level
	Gate		Interwoven
	Wire Mesh		Post & Rail
	Chain Link		Wooden Panels
	Concrete Panels		Steel Palisade
	IC		Inspection chamber
	Pipe Invert		Illuminated bollard
	Gully		Rubbish bin
	Down pipe		Vent pipe
	Pipe above ground		Ground light
	Manhole		Litter box
	Water level		Stile
	Flood light		Internal floor level
	Lamp post		Threshold level
	Telegraph post		Sign post
	Electricity post		Triathole
	Traffic light		Borehole
	Bus		Electric
	Stop valve		British Telecom
	Stop tap		Control box
	Earth rod		Inspection chamber
	Water meter		Retaining wall
	Gas valve		Unable to lift
	Air valve		Tree canopy level
	Wash out		Girth
	Rodding eye		Multi Bowl
	Bellsha beacon		Tree Stump
	Cable tv		Cover level
	Marker post		Invert level
	Gas marker post		Soffit

NOTES

This plan should only be used for its original purpose. Axis Surveys accepts no responsibility for this plan if supplied to any party other than the original client.
Do not scale, all dimensions should be checked on site prior to design and construction.

Drainage information (where applicable) has been visually inspected from the surface and therefore no allowance has been made for any sub surface entry into manholes, chambers or voids. Therefore any details relating to depths, sizes, ETC will be approximate only.

The contractor is to check and verify all building and site dimensions, levels and sewer invert levels at connection points before work starts.

Should there be any conflict between the details indicated on this drawing and those indicated on other drawings, the engineer should be informed prior to construction on site.

It is important to note that the same accuracies implied by the plotting scale are equally applicable to digital data supplied for CAD

Every effort if made to identify all visible above ground features, however is it should be borne in mind that there may be items obscured at the time of survey.

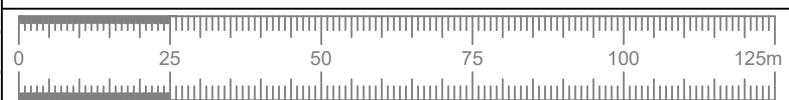
Visible features in the vicinity of the boundaries, as shown on this survey may not represent the extent of legally conveyed ownership.

THIS SURVEY HAS BEEN ORIENTATED TO THE ORDNANCE SURVEY (O.S) NATIONAL GRID (OSGB36) VIA GLOBAL NAVIGATION SATELLITE SYSTEMS (GNSS) AND THE O.S. ACTIVE NETWORK (OS NET).

A TRUE OSGB36 COORDINATE HAS BEEN ESTABLISHED NEAR TO THE SITE CENTRE VIA A TRANSFORMATION USING THE OSTN15 & OSGM15 TRANSFORMATION MODELS. THE SURVEY HAS BEEN CORRELATED TO THIS POINT AND A FURTHER ONE OR MORE OSGB36 POINTS ESTABLISHED TO CREATE A TRUE O.S. BEARING FOR ANGLE

SURVEY STATION INFORMATION

A SCALE FACTOR OF 1.000000 HAS BEEN APPLIED TO THIS SURVEY.





axis
surveys



01283 550969



info@axis-surveys.com

www.axis-surveys.com

Laurus House, First Avenue, Centrum 100
Burton-on-Trent, DE14 2WH

CLIENT	G Denny		
PROJECT	Former Kyngs Golf and Country Club Station Road Market Bosworth		
TITLE	Topographical Survey		
SCALE	1:1250	DATE	June 2025
DRAWN	JL	CHECKED	LB
REF NO. 3917—A	STATUS		SHEET
	Final		1/1

APPENDIX D – HISTORIC PHASE 1 & 2 GEO-ENVIRONMENTAL ASSESSMENT

Due to file size a copy is available on request

APPENDIX E – SEVERN TRENT WATER SEWER RECORDS

SK3904SE

Sewer Node		Sewer Pipe Data									
REFERENCE	COVER LEVEL	INV LEVEL UPSTR	INV LEVEL DOWNSTR	PURP	MATL	SHAPE	MAX SIZE	MIN SIZE	GRADIENT	YEAR LAID	
SK39036501	100.35	98.79	98.31	C	VC	C	300	nil	253.31	nil	
SK39037501	102.08	100.48	98.79	C	VC	C	300	nil	63.78	nil	
SK39038601	104.92	102.24	100.48	C	GRP	C	300	nil	64.23	nil	
SK39039601	103.95	102.33	102.24	C	VC	C	300	nil	1205.78	nil	

SK3803NW

SK3903NW

SK3903SE

- ✕✕✕✕ Abandoned Sewer

Private Combined Gravity Sewer

Private Foul Gravity Sewer

Private Surface Water Gravity Sewer

Public Combined Gravity Sewer

Public Foul Gravity Sewer

Public Surface Water Gravity Sewer

Trunk Combined Gravity Sewer

Trunk Foul Use Gravity Sewer

Trunk Surface Water Gravity Sewer

Combined Use Pressurised Sewer

Foul Use Pressurised Sewer

Surface Water Pressurised Sewer

Highway Drain

Combined Lateral Drain (SS)

Foul Lateral Drain (SS)

Surface Water Lateral Drain (SS)

○—○—○ Cable, Earthing

> Cable Junction

----- Cable, Optical Fibre/Instrumentation

----- Cable, Low Voltage

----- Cable, High Voltage

+++++ Cable, Other

B

Housing, Building

K

Housing, Kiosk

LT

Disposal Site

STW

Sewage Treatment Works

●

Housing, Other

—

Pipe Support Structure

▲

Sewage Pumping Facility

⊠

Sewer Facility Connection Inlet / Outlet

■

Blind Shaft

●

Combined Use Manhole

○

Flushing Chamber

●

Foul Use Manhole

●

Grease Trap

+

Head Node

≡

Hydrobrake

□

Lamphole

□

Overflow

≡

Penstock

⊕

Petrol Interceptor

★

Sewer Blockage

☆

Sewer Collapse
- Sewer Chemical Injection Point
- Sewer Junction
- ◆

Sewerage Air Valve
- ||

Sewerage Hatch Box Point
- Sewerage Isolation Valve
- ⊕

Soakaway
- Surface Water Manhole
- Vent Column
- Waste Water Storage
- Culverted Watercourse
- +++++

Pre-1937 Properties

MATERIALS

- AC

- ASBESTOS CEMENT
- BR

- BRICK
- CC

- CONCRETE BOX CULVERT
- CI

- CAST IRON
- CO

- CONCRETE
- CSB

- CONCRETE SEGMENTS (BOLTED)
- CSU

- CONCRETE SEGMENTS (UNBOLTED)
- DI

- DUCTILE IRON
- GRC

- GLASS REINFORCED CONCRETE
- MAC

- MASONRY IN REGULAR COURSES
- MAR

- MASONRY RANDOMLY COURSED
- PE

- POLYETHYLENE
- PF

- PITCH
- PP

- POLYPROPYLENE
- PSC

- PLASTIC STEEL COMPOSITE
- PVC

- POLYVINYL CHLORIDE
- RPM

- REINFORCED PLASTIC MATRIX
- SI

- SPUN (GREY) IRON
- XXX

- OTHER

All Private Sewers are shown in magenta

All section 104 sewers are shown in green

All Sewers that have been transferred to Severn Trent Water after the 1st October 2011, but have not been surveyed and confirmed by Severn Trent Water are shown in orange

CATEGORIES

- W

- WEIR
- C

- CASCADE
- DB

- DAMBOARD
- SE

- SIDE ENTRY
- FV

- FLAP VALVE
- BD

- BACK DROP
- S

- SIPHON
- HD

- HIGHWAY DRAIN
- S104

- SECTION 104
- C

- CIRCULAR
- E

- EGG SHAPED
- O

- OTHER
- R

- RECTANGLE
- S

- SQUARE
- T

- TRAPEZOIDAL
- U

- UNKNOWN

TABULAR KEY

- A.

Sewer pipe data refers to downstream sewer pipe.
- B.

Where the node bifurcates (splits) X and Y indicates downstream sewer pipe.
- C.

Gradient is stated a 1 in...

PURPOSE

- C

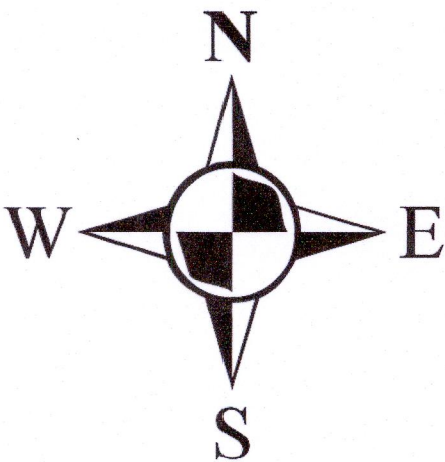
- COMBINED
- E

- FINAL EFFLUENT
- F

- FOUL
- L

- SLUDGE
- S

- SURFACE WATER



Severn Trent Water Limited
Asset Data Management
PO Box 5344
Coventry
CV3 9FT
Telephone: 0845 601 6616

SEWER RECORD (TABULAR)

O/S Map scale: 1:1250

Date of issue: 01.11.16

Sheet No. 1 of 1

This map is centred upon:
O / S Tile reference:

SK3903NE

Disclaimer Statement:

1. Do not scale off this Map.
2. This map and any information supplied with it is furnished as a general guide, is only valid at the date of issue and no warranty as to its correctness is given or implied. In particular this Map and any information shown on it must not be relied upon in the event of any development or works (including but not limited to excavations) in the vicinity of Severn Trent Water's assets or for the purposes of determining the suitability of a point of connection to the sewerage or distribution systems.
3. On 1 October 2011 most private sewers and private lateral drains in Severn Trent Water's sewerage area, which were connected to a public sewer as at 1 July 2011, transferred to the ownership of Severn Trent Water and became public sewers and public lateral drains. A further transfer takes place on 1 October 2012 (date to be confirmed). Private pumping stations, which form part of these sewers or lateral drains, will transfer to the ownership of Severn Trent Water on or before 1 October 2016. Severn Trent Water does not possess complete records of these assets. These assets may not be displayed on this Map.
4. Reproduction by permission of Ordnance Survey on behalf of HMSO. © Crown Copyright and database right 2004. All rights reserved. Ordnance Survey licence number 100018202. Document users other than Severn Trent Water business users are advised that this document is provided for reference purpose only and is subject to copyright, therefore, no further copies should be made from it.

SK3903NE



SK3902NE

Sewer Node		Sewer Pipe Data									
REFERENCE	COVER LEVEL	INV LEVEL UPSTR	INV LEVEL DOWNSTR	PURP	MATL	SHAPE	MAX SIZE	MIN SIZE	GRADIENT	YEAR LAID	
SK39035001	103.26	101.95	101.84	S	CO	C	375	nil	66.18	nil	
SK39035002	102.96	101.19	100.73	F	VC	C	150	nil	52.89	nil	
SK39035003	103.11	101.77	101.63	S	CO	C	375	nil	64.43	nil	
SK39035004	102.82	101.49	99.79	S	CO	C	450	nil	10.65	nil	
SK39035005	102.13	100.72	nil	F	VC	C	150	nil	0.00	nil	
SK39035006	nil	nil	98.88	F	nil	nil	nil	nil	0.00	nil	
SK39035008	100.32	98.87	96.43	F	VC	C	150	nil	48.22	nil	
SK39035201	98.77	97.51	97.12	C	VC	C	300	nil	272.54	nil	
SK39035401	99.35	97.94	97.51	C	VC	C	300	nil	259.47	nil	
SK39035402	99.76	98.31	97.94	C	VC	C	300	nil	294.22	nil	
SK39036001	108.02	106.04	105.89	S	VC	C	150	nil	33.33	nil	
SK39036002	108.08	105.74	105.28	F	VC	C	150	nil	36.96	nil	
SK39036003	106.60	105.02	103.30	S	VC	C	nil	nil	25.10	nil	
SK39036004	106.61	103.25	102.88	F	VC	C	150	nil	86.65	nil	
SK39036005	104.85	102.75	101.20	F	VC	C	150	nil	52.40	nil	
SK39036006	104.57	103.21	102.42	S	CO	C	300	nil	50.89	nil	
SK39036007	105.47	104.32	103.21	S	CO	C	300	nil	23.77	nil	
SK39036007	105.47	103.82	103.79	S	CO	C	375	nil	105.33	nil	
SK39036008	105.29	103.74	101.95	S	CO	C	375	nil	48.20	nil	
SK39036009	103.73	102.41	102.00	S	CO	C	300	nil	56.15	nil	
SK39036010	107.80	105.86	105.04	S	VC	C	150	nil	31.91	nil	
SK39036011	107.30	105.28	105.03	F	VC	C	150	nil	48.61	nil	
SK39036101	106.84	105.08	97.29	F	VC	C	175	nil	21.65	nil	
SK39037001	106.94	105.05	104.41	S	CO	C	300	nil	31.28	nil	
SK39037002	107.71	105.86	104.41	F	VC	C	150	nil	45.60	nil	
SK39037003	106.47	104.38	102.76	F	VC	C	nil	nil	33.48	nil	
SK39037004	106.25	104.37	103.82	S	CO	C	300	nil	67.67	nil	
SK39037005	107.83	106.23	105.05	S	CO	C	300	nil	39.19	nil	
SK39038001	109.28	107.59	106.26	S	CO	C	300	nil	32.57	nil	
SK39038002	109.95	107.84	107.64	S	VC	C	225	nil	36.05	nil	
SK39038003	110.73	108.67	107.81	S	CO	C	300	nil	23.30	nil	
SK39038004	110.26	108.69	105.87	F	VC	C	150	nil	21.80	nil	
SK39038005	111.04	109.46	106.73	F	VC	C	150	nil	21.66	nil	
SK39039006	111.03	108.56	108.73	F	VC	C	150	nil	46.36	nil	
SK39039007	113.79	110.34	107.89	S	VC	C	225	nil	20.10	nil	
SK39039101	116.50	114.43	110.54	S	VC	C	225	nil	17.43	nil	
SK39039102	118.54	115.78	105.14	F	VC	C	175	nil	21.15	nil	
SK39039000	nil	nil	nil	F	VC	U	150	nil	0.00	nil	
SK39039001	114.53	112.51	108.68	S	CO	C	300	nil	16.28	nil	
SK39039002	114.72	112.60	109.52	F	VC	C	150	nil	20.56	nil	
SK39039003	117.45	115.51	112.62	F	VC	C	150	nil	10.18	nil	
SK39039004	117.13	114.89	112.62	S	VC	C	225	nil	15.19	nil	
SK39039005	116.06	114.52	112.72	F	VC	C	150	nil	23.37	nil	
SK39039006	116.12	114.23	112.53	S	CO	C	300	nil	32.74	nil	
SK39039007	116.25	114.94	114.53	F	VC	C	150	nil	40.88	nil	
SK39039008	116.15	114.39	nil	S	VC	C	225	nil	0.00	nil	
SK39039009	117.17	115.71	nil	S	VC	C	150	nil	0.00	nil	
SK39039010	117.12	115.55	114.95	F	VC	C	150	nil	27.33	nil	
SK39039011	119.77	118.83	115.77	S	VC	C	150	nil	9.81	nil	
SK39039101	117.01	115.04	114.46	S	VC	C	150	nil	114.12	nil	
SK39039102	116.46	115.31	114.86	F	VC	C	150	nil	75.66	nil	
SK39039103	116.63	114.77	114.40	S	VC	C	225	nil	63.11	nil	
SK39039104	119.10	117.51	114.80	S	VC	C	150	nil	14.20	nil	
SK39039105	119.82	116.74	115.80	F	VC	C	175	nil	41.31	nil	
nil	nil	nil	nil	F	VC	nil	nil	nil	0.00	nil	

- Abandoned Sewer

Private Combined Gravity Sewer

Private Foul Gravity Sewer

Private Surface Water Gravity Sewer

Public Combined Gravity Sewer

Public Foul Gravity Sewer

Public Surface Water Gravity Sewer

Trunk Combined Gravity Sewer

Trunk Foul Use Gravity Sewer

Trunk Surface Water Gravity Sewer

Combined Use Pressurised Sewer

Foul Use Pressurised Sewer

Surface Water Pressurised Sewer

Highway Drain

Combined Lateral Drain (SS)

Foul Lateral Drain (SS)

Surface Water Lateral Drain (SS)

Cable, Earthing

Cable Junction

Cable, Optical Fibre/Instrumentation

Cable, Low Voltage

Cable, High Voltage

Cable, Other

Housing, Building

Housing, Kiosk

Disposal Site

Sewage Treatment Works

Housing, Other

Pipe Support Structure

Sewage Pumping Facility

Sewer Facility Connection Inlet / Outlet

Blind Shaft

Combined Use Manhole

Flushing Chamber

Foul Use Manhole

Grease Trap

Head Node

Hydrobrake

Lamphole

Outfall

Penstock

Petrol Interceptor

Sewer Blockage

Sewer Collapse

Sewer Chemical Injection Point

Sewer Junction

Sewerage Air Valve

Sewerage Isolation Valve

Soakaway

Surface Water Manhole

Vent Column

Waste Water Storage

Culverted Watercourse

Pre-1937 Properties
- MATERIALS

AC - ASBESTOS CEMENT

BR - BRICK

CC - CONCRETE BOX CULVERT

CI - CAST IRON

CO - CONCRETE

CSB - CONCRETE SEGMENTS (BOLTED)

CSU - CONCRETE SEGMENTS (UNBOLTED)

DI - DUCTILE IRON

GRC - GLASS REINFORCED CONCRETE

MAC - MASONRY IN REGULAR COURSES

MAR - MASONRY RANDOMLY COURSED

PE - POLYETHYLENE

PF - PITCH

PP - POLYPROPYLENE

PVC - PLASTIC STEEL COMPOSITE

PVG - POLYVINYL CHLORIDE

RPM - REINFORCED PLASTIC MATRIX

SI - SPUN (GREY) IRON

XXX - OTHER

CATEGORIES

W - WEIR

C - CASCADE

DB - DAMBOARD

SE - SIDE ENTRY

FV - FLAP VALVE

BD - BACK DROP

S - SIPHON

HD - HIGHWAY DRAIN

S104 - SECTION 104

SHAPE

C - CIRCULAR

E - EGG SHAPED

O - OTHER

R - RECTANGLE

S - SQUARE

T - TRAPEZOIDAL

U - UNKNOWN

PURPOSE

C - COMBINED

E - FINAL EFFLUENT

F - FOUL

L - SLUDGE

S - SURFACE WATER

TABULAR KEY

A. Sewer pipe data refers to downstream sewer pipe.

B. Where the node bifurcates (splits) X and Y indicates downstream sewer pipe.

C. Gradient is stated a 1 in...
- MATERIALS
- AC

- ASBESTOS CEMENT

BR

- BRICK

CC

- CONCRETE BOX CULVERT

CI

- CAST IRON

CO

- CONCRETE

CSB

- CONCRETE SEGMENTS (BOLTED)

CSU

- CONCRETE SEGMENTS (UNBOLTED)

DI

- DUCTILE IRON

GRC

- GLASS REINFORCED CONCRETE

MAC

- MASONRY IN REGULAR COURSES

MAR

- MASONRY RANDOMLY COURSED

PE

- POLYETHYLENE

PF

- PITCH

PP

- POLYPROPYLENE

PVC

- PLASTIC STEEL COMPOSITE

PVG

- POLYVINYL CHLORIDE

RPM

- REINFORCED PLASTIC MATRIX

SI

- SPUN (GREY) IRON

XXX

- OTHER
- CATEGORIES
- W

- WEIR

C

- CASCADE

DB

- DAMBOARD

SE

- SIDE ENTRY

FV

- FLAP VALVE

BD

- BACK DROP

S

- SIPHON

HD

- HIGHWAY DRAIN

S104

- SECTION 104
- SHAPE

C

- CIRCULAR

E

- EGG SHAPED

O

- OTHER

R

- RECTANGLE

S

- SQUARE

T

- TRAPEZOIDAL

U

- UNKNOWN
- TABULAR KEY
- A.

Sewer pipe data refers to downstream sewer pipe.

B.

Where the node bifurcates (splits) X and Y indicates downstream sewer pipe.

C.

Gradient is stated a 1 in...
-
-
- Severn Trent Water Limited
Asset Data Management
PO Box 5344
Coventry
CV3 9FT
Telephone: 0845 601 6616
- SEWER RECORD (TABULAR)
- O/S Map scale: 1:1250
- Date of issue: 01.11.16
- Sheet No. 1 of 1
- This map is centred upon:
- O / S Tile reference:
- SK3903SE
- Disclaimer Statement:
1. Do not scale off this Map.
2. This map and any information supplied with it is furnished as a general guide, is only valid at the date of issue and no warranty as to its correctness is given or implied. In particular this Map and any information shown on it must not be relied upon in the event of any development or works (including but not limited to excavations) in the vicinity of Severn Trent Water's assets or for the purposes of determining the suitability of a point of connection to the sewerage or distribution systems.
3. On 1 October 2011 most private sewers and private lateral drains in Severn Trent Water's sewerage area, which were connected to a public sewer as at 1 July 2011, transferred to the ownership of Severn Trent Water and became public sewers and public lateral drains. A further transfer takes place on 1 October 2012 (date to be confirmed). Private pumping stations, which form part of these sewers or lateral drains, will transfer to the ownership of Severn Trent Water on or before 1 October 2016. Severn Trent Water does not possess complete records of these assets. These assets may not be displayed on this Map.
4. Reproduction by permission of Ordnance Survey on behalf of HMSO. © Crown Copyright and database right 2004. All rights reserved. Ordnance Survey licence number 100018202. Document users other than Severn Trent Water business users are advised that this document is provided for reference purpose only and is subject to copyright, therefore, no further copies should be made from it.