



STATUE HOMES

LAND OFF STATION ROAD

MARKET BOSWORTH

FLOOD RISK ASSESSMENT

SEPTEMBER 2018

FW1219/FRA/001 – v2

REVISION HISTORY

Issue	Issued Date	Revision	Author	Chkd	Appd
01	31/05/17	-	cf	jd	
02	06/09/18	-	jd	bm	-

EXECUTIVE SUMMARY

1. The site is at **NO** quantifiable risk of flooding from tidal events due to its location being remote from any coastal areas.
2. The site has been identified to being located within Flood Zone 1 which is considered to have a low risk of flooding, in addition the EA maps confirm that the site is at **NO** risk of flooding from fluvial sources.
3. The Hinckley & Bosworth Borough Council, Blaby District Council, Oadby & Wigston Borough Council Joint Strategic Flood Risk Assessment October 2014 Final Report has identified the site to have a **Low** chance of flooding from groundwater sources. In addition, the EA maps identify the site to be outside of the flood risk zones for groundwater flooding.
4. The EA flood maps have identified that there is **NO** risk of flooding from surface water sources, however in the event of an extreme rainfall event it has been identified that overland flows would be directed along Greyfriars Lane which falls to the south and away from the site.
5. Severn Trent Water has yet to confirm that the combined sewer has capacity to accommodate proposed foul flows from the development.
6. The escape flows from the water main within the surrounding highway network have been considered and in the unlikely event of failure of the mains, the flows channel to the south.
7. The EA flood maps have identified that the site is at **NO** risk of flooding from artificial sources such as reservoirs or the Ashby de la Zouch canal situated 300 metres to the West of the site boundary.
8. The site is at a negligible risk of flooding from its own private drainage connections however this can be mitigated by regular maintenance to ensure the ongoing performance of the system.

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APPENDICES

Appendix A	Site Layout
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1.0 INTRODUCTION

- 1.1 This report has been prepared by Farrow Walsh Consulting, on behalf of the applicant to accompany a planning application for the proposed Golf and Leisure development on land off Station Road Market Bosworth.
- 1.2 This report considers the flood risk associated with the redevelopment proposals which comprise of the proposed erection of a multi-functional recreational building (including open plan function room, washrooms, bar, kitchen facilities, offices, staff accommodation and retail golf shop) erection of a golf simulator building, the erection of a golf buggy garage (including office, maintenance shop) the formation of a new car parking area, new access roads and the proposed erection of 15 golf/ holiday homes.
- 1.3 The report also details a strategy for the disposal, implementation & management of foul and surface water drainage that will be generated by the development.
- 1.4 The report has been prepared in accordance with the Department for Communities and Local Government's National Planning Policy Framework (NPPF) and Planning Practice Guidance, which provides advice on development and flood risk.

2.0 EXISTING SITUATION

2.1 SITE LOCATION AND TOPOGRAPHY

- 2.1.1 The site address is The Former Market Bosworth Golf Club, Station Road, Market Bosworth Leicestershire CV13 0PE. Coordinates X 439579 Y 303270.
- 2.1.2 The site is bounded to the North by agricultural land separated by field ditch, to the East agricultural fields separated by Barton Road, to the South by commercial and residential buildings separated by Station Road and to the West Bosworth Marina and the Ashby de la Zouch Canal separated by rail line.

2.2 SITE DESCRIPTION

- 2.2.1 The site is currently leisure use with 18 hole golf course and club house. The existing site layout is included in *Appendix A*.

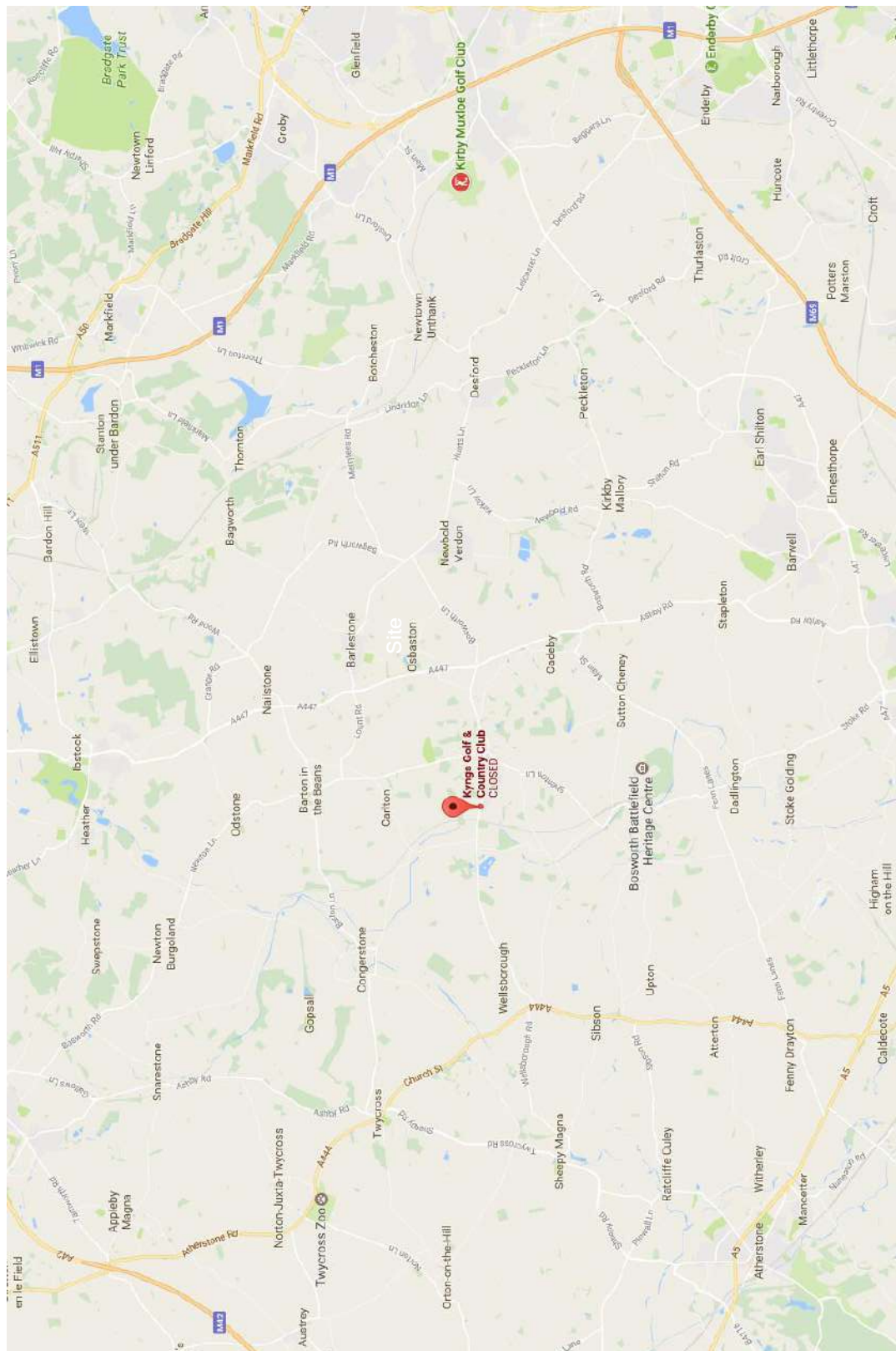


Figure 1: Site Location Plan



Figure 2 Aerial Photograph of Site

3.0 EXISTING DRAINAGE CHARACTERISTICS

- 3.1 The site topography tends from the North toward the South through the application site.
- 3.2 The surface water drainage system comprises partial natural infiltration with the clubhouse roof drainage discharging to existing ponds on site and car park running into the soils. There is an existing overflow pump system from the ponds which ultimately discharges into the existing ditch network within the site ownership.
- 3.3 The foul water drainage system comprises of a private connection from the clubhouse onto the 175mm diameter VC sewer within Station Road to the South. There is also a 300mm diameter VC Public Sewer running within the site along the western boundary.
- 3.4 A copy of Severn Trent's sewer records are included in Appendix C.

4.0 PROPOSED SCHEME

- 4.1 The development will involve the proposed erection of a multi-functional recreational building (including open plan function room, washrooms, bar, kitchen facilities, offices, staff accommodation and retail golf shop) erection of a golf simulator building, the erection of a golf buggy garage (including office, maintenance shop) the formation of a new car parking area, new access roads and the proposed erection of 15 golf/ holiday homes.
- 4.2 Copies of the proposed floor plans received from Lucas Architects are included in *Appendix D*.

5.0 SOURCES OF FLOODING

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

- National Planning Policy Guidance (NPPG)
- Ciria C753 – The SUDs Manual
- Adapting to Climate Change: Advice for Flood and Coastal Erosion Risk Management Authorities (EA - February 2016)
- Hinckley & Bosworth Borough Council, Blaby District Council, Oadby & Wigston Borough Council Joint Strategic Flood Risk Assessment October 2014 Final Report

5.0.2 The possible flood risk associated with sources of flooding considered within this report has been reviewed under the headings as follows.

5.1 TIDAL/COASTAL FLOODING

5.1.1 The site is geographically remote from any coastal areas and therefore is not considered to be at risk of flooding from tidal or coastal sources.

5.2 FLUVIAL FLOODING

5.2.1 The EA has 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 tidal / fluvial flooding. The maps, which are available on the EA's website, categorise land as being within Flood Zone 1, Flood Zone 2 or Flood Zone 3, with Flood Zone 1 being all land falling outside of the floodplain and Flood Zones 2 and 3 being all land within the floodplain. Flood Zone 3 is split into two further categories, namely Flood Zone 3a and Flood Zone 3b with Flood Zone 3b considered to be the functional floodplain.

5.2.2 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 1,000 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 1,000 annual probability of river flooding (1% – 0.1%), or between a 1 in 200 and 1 in 1,000 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 has to 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.

5.2.3 The flood zone map in Figure 3, taken from EA's website, shows the site to be located outside of Flood Zone 2 and 3. The site is therefore considered to be in Flood Zone 1, which the NPPF defines as land assessed to be at low probability of tidal or fluvial flooding with less than a 1 in 1000 annual probability of flooding (<0.1%) in any year.

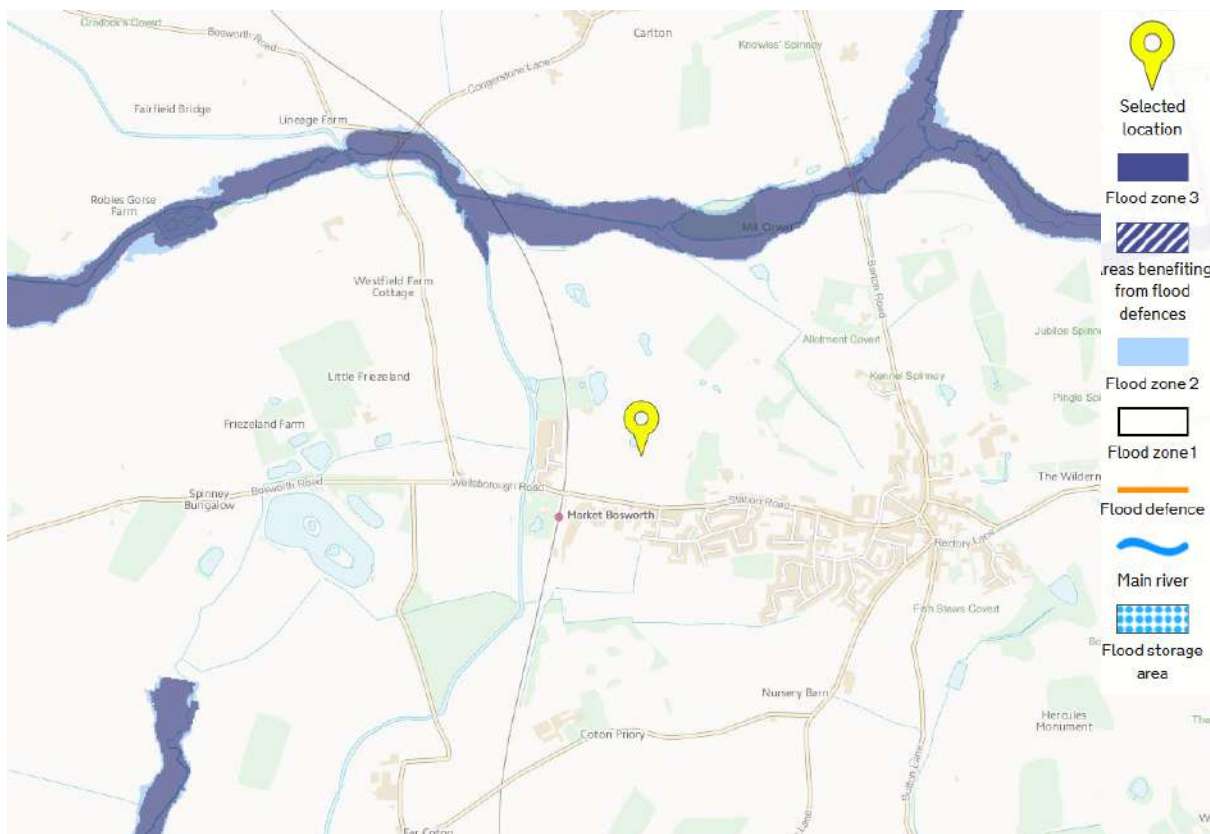


Figure 3 Extract from EA Flood Map – EA Flood Zone map

5.2.4 On a similar basis to the flood zone map, the below risk of river flood map taken from the EA's website shows the site to not be at risk of fluvial flooding.

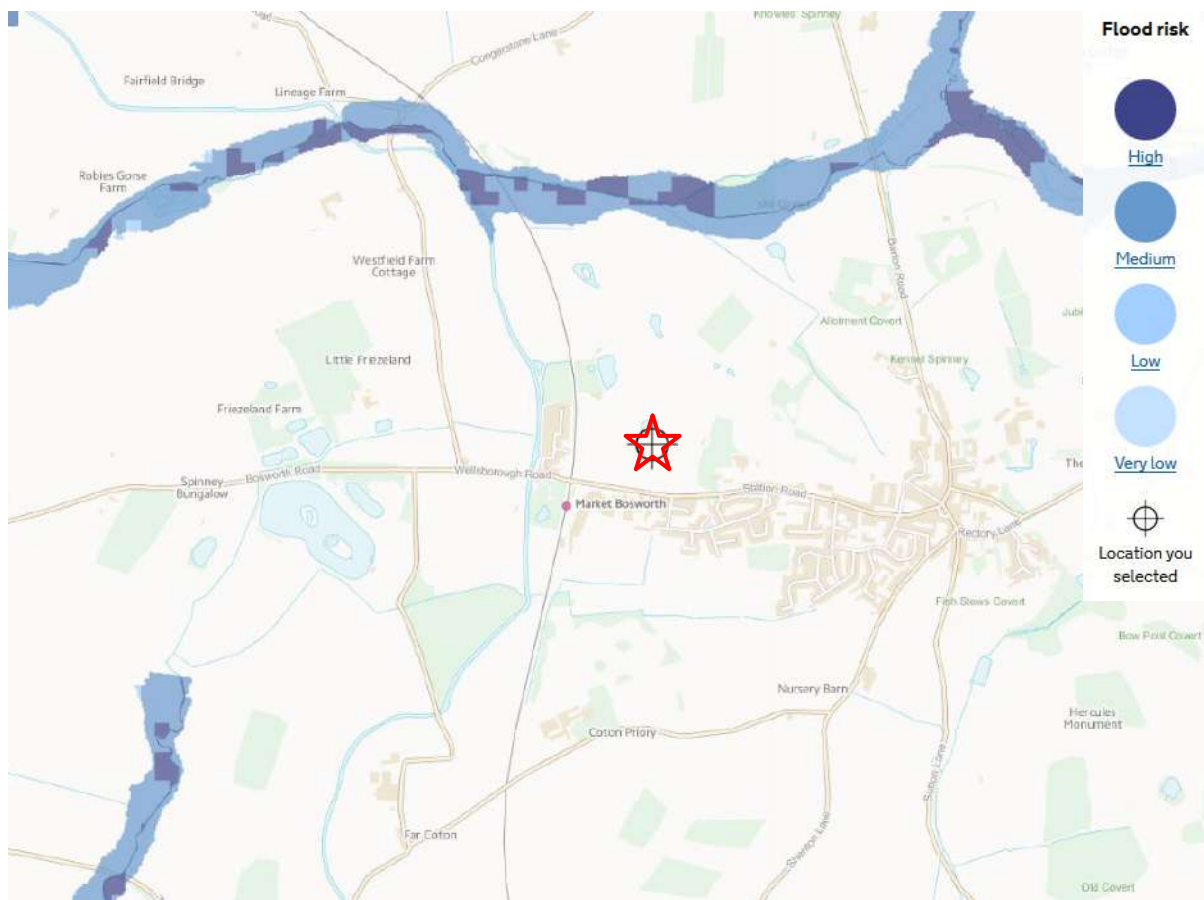


Figure 4 Extract from EA Flood Maps showing predicted Fluvial Flood Risk Levels

5.2.5 It should be noted that the Ashby de la Zouch canal is located approximately 300 metres to the West of the site, the site is considered to be at a sufficient distance away to be at risk from this source.

5.3 GROUNDWATER FLOODING

5.3.1 Figure 5 below taken from the Joint SFRA shows the likeliness of flooding caused by groundwater within Market Bosworth, this indicates that the site has a low chance of groundwater flooding (<25%).

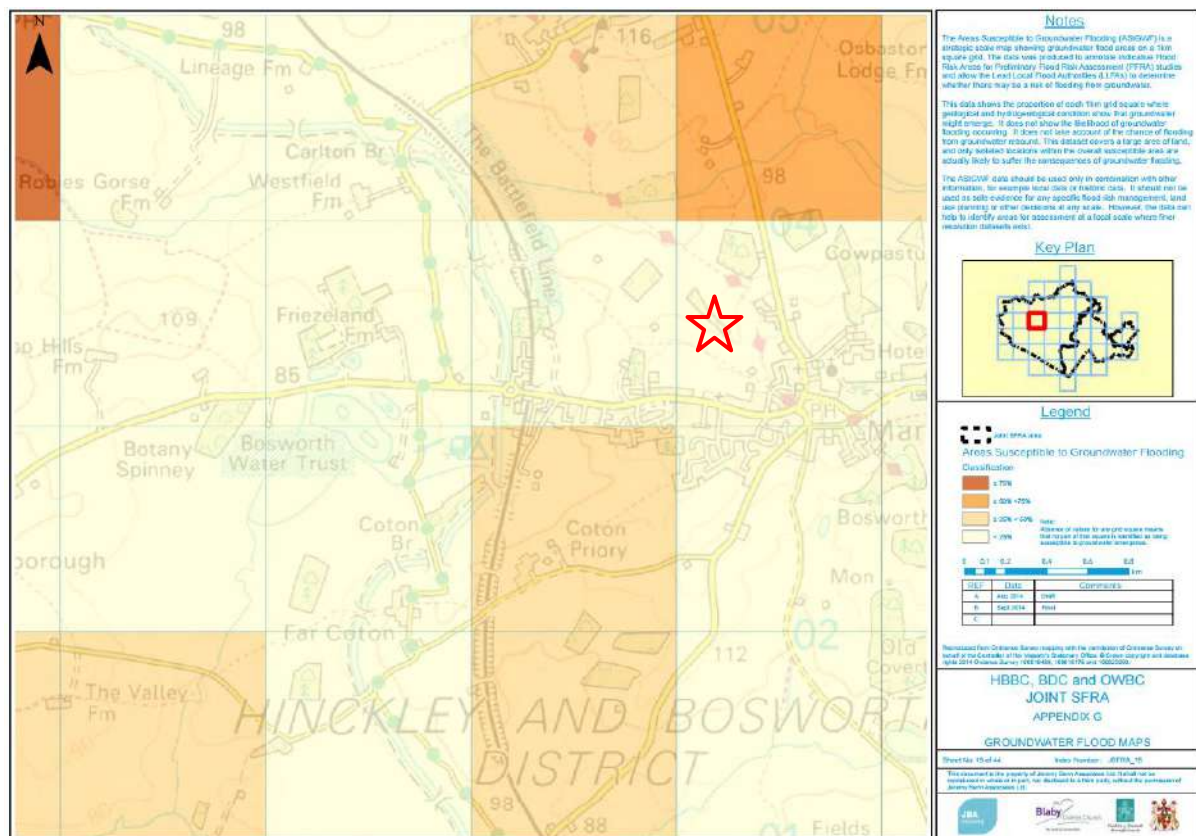


Figure 5 Extract from Joint SFRA,2014 showing areas susceptible to Groundwater flooding

5.3.2 In addition, the EA flood maps show that the site is located outside of the inner and outer zones at risk from groundwater flooding as shown in Figure 6 below.

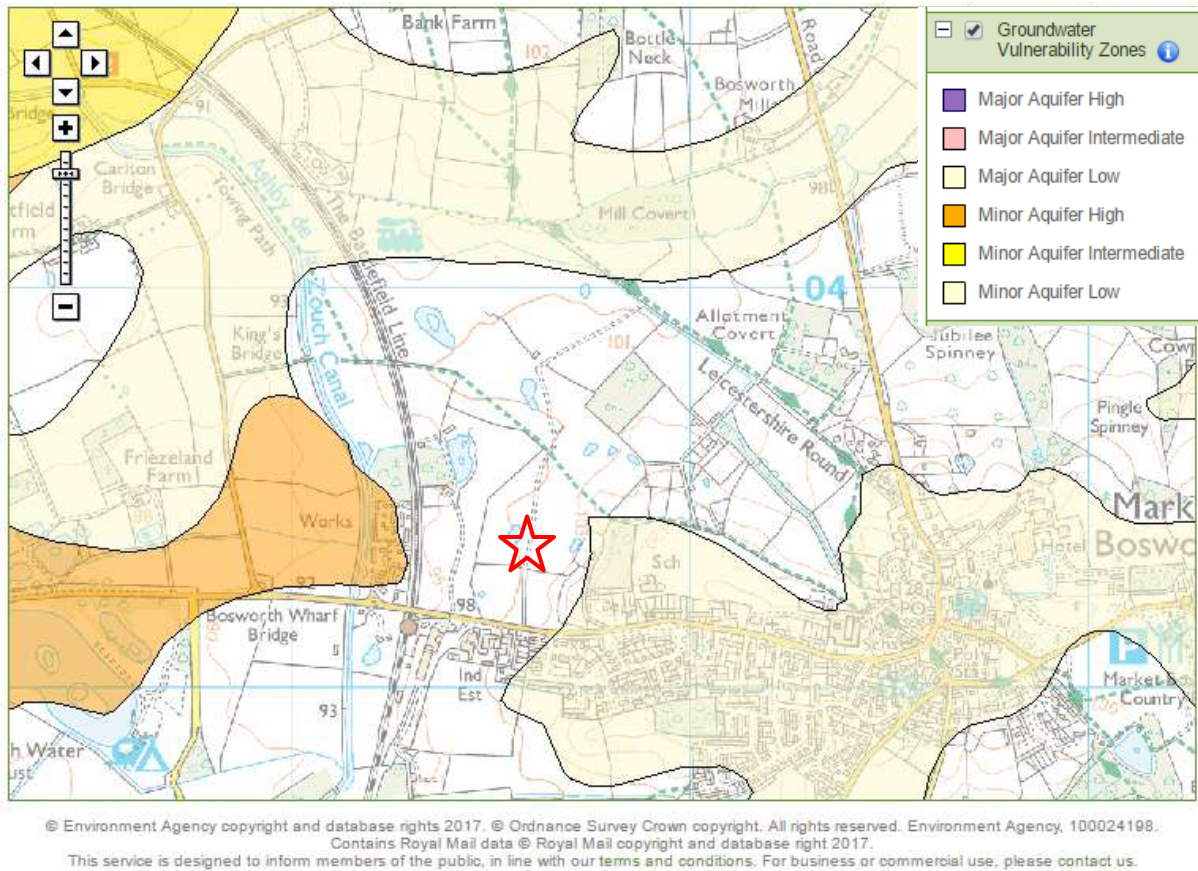


Figure 6 Extract from EA Flood Maps showing Groundwater Vulnerability Zones

- 5.3.3 In addition, the British Geological Survey (BGS) website show that the borehole tests that were carried out at Pipstrelle Drive (approximately 280 metres to the west of site) did not identify any groundwater for depths up to 10 meters.
- 5.3.4 Given the information provided within the SFRA as well as from the EA flood maps, the site is not considered to be at risk from Groundwater flooding.
- 5.4 SURFACE WATER FLOODING
- 5.4.1 The EA 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 7 below shows a surface water flood risk map taken.

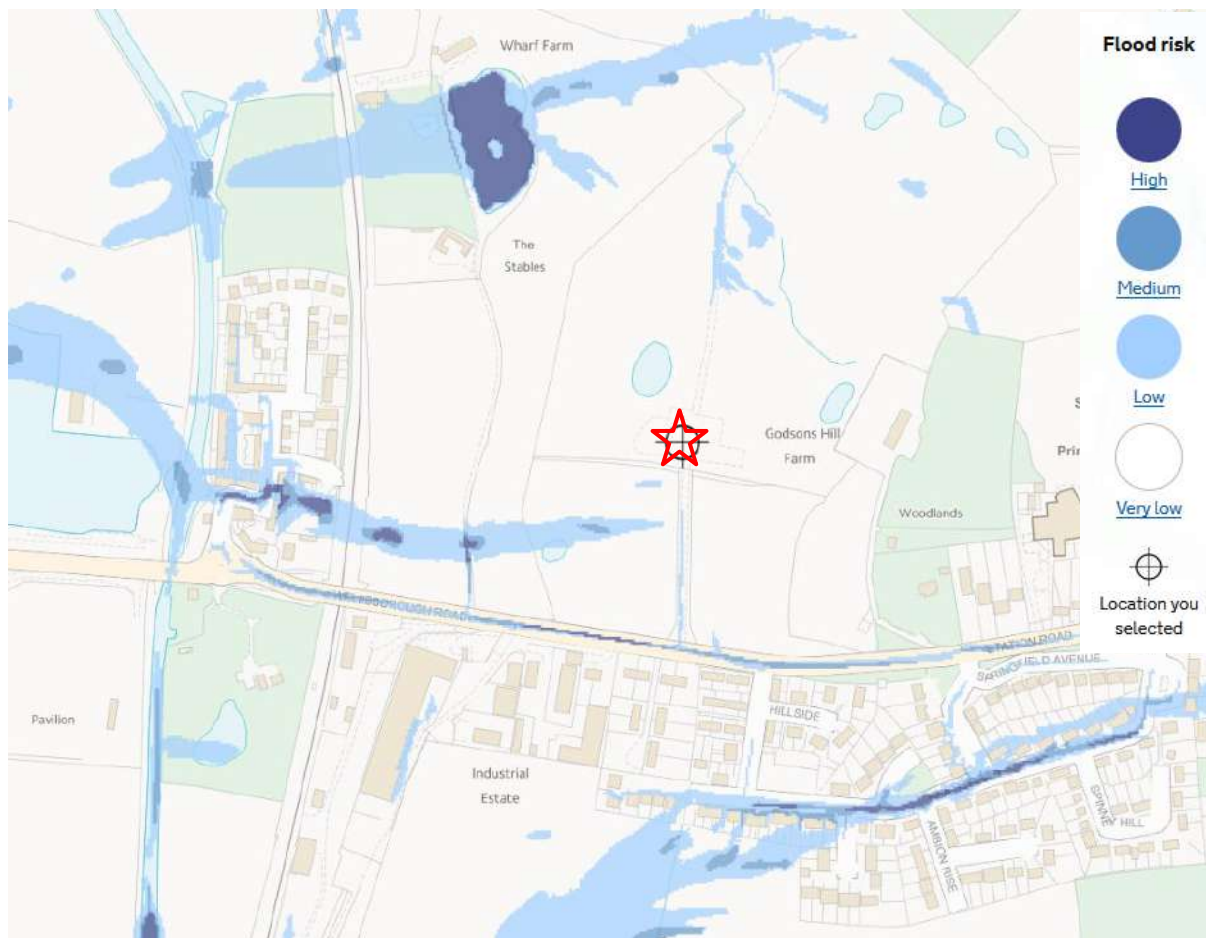


Figure 7 Extract from EA Flood Maps showing predicted Surface Water Flood Risk Levels

5.4.2 Figure 7 identifies the site not to be at risk of surface water flooding although flood routes have been identified to the North and South West. However, the site is located at a higher level topographically than the areas at risk and therefore we do not consider the site to be at risk of flooding from overland surface water flows.

5.5 SEWER FLOODING

5.5.1 Within the Joint SFRA 2014 references sewer flooding as 'Flooding caused by a blockage or overflowing in a sewer or urban drainage system'.

5.5.2 No reference is made to sewers adjacent to the site in Station Road encountering sewer flooding.

5.6 ARTIFICIAL SOURCES

5.6.1 Flooding from artificial sources, is most likely to result from burst water mains or from infrastructure failure in an artificial watercourse or water body, i.e. canals or other water features such as reservoirs. These systems are maintained, improved and regularly inspected by British Waterways (canals), Severn Trent Water (water mains) and EA (water bodies). Therefore, flood risk from these sources is generally considered to be low.

5.6.2 Flood maps associated with large reservoirs that hold over 25,000 cubic metres of water are available on the EA website. The maps identify areas that could potentially be affected by reservoir flooding and display a realistic worst case scenario of the largest area that may be flooded if a reservoir were to fail and release the water it holds.

5.6.3 The below Reservoir Flood Map taken from the EA's website shows the site and surrounding area to be unaffected by reservoir flooding, therefore, the site is not considered to be at risk of flooding from this source.



Figure 9 Extract from EA Flood Maps showing predicted Reservoir Flood Risk Levels

- 5.6.4 The Ashby de la Zouch Canal is located approximately 300 metres to the West of the site. There are no canals located within the immediate surrounding area of the site, therefore, it is considered unlikely that the site could be affected by flooding from this source.
- 5.6.5 In the unlikely event of a burst water main occurring, it is anticipated that flows would follow a similar pattern to overland surface water flood routes identified, therefore the development is not considered to be at risk from this source.

6.0 PROPOSED SURFACE WATER DRAINAGE STRATEGY

- 6.1. The site surface water drainage strategy can be found within document **FW1219/DS/001-v1** undertaken by Farrow Walsh Consulting Ltd in September 2018 submitted as part of the planning application.

7.0 PROPOSED FOUL WATER DRAINAGE STRATEGY

- 7.1 The site foul water drainage strategy can be found within document **FW1219/DS/001-v1** undertaken by Farrow Walsh Consulting Ltd in September 2018 submitted as part of the planning application.

8.0 SEQUENTIAL TEST

- 8.1 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 Authority Planning Authority.
- 8.2 The NPPF indicates that for a more vulnerable land use within Flood Zone 1 development is appropriate. The site is identified within FZ1 as defined by the NPPF, identified on the EA Indicative Flood Map and also in the within the Strategic Flood Risk Assessment.
- 8.3 The site is in rural area where residential and commercial properties dominate the surrounding areas. Surface water runoff is unrestricted to the existing sewer network and the area is not susceptible to groundwater flooding.
- 8.4 In view of the facts as identified the applicant does not own other sites considered to be more suitable for leisure use in the immediate vicinity.
- 8.5 The above clearly demonstrates that the sequential test would be satisfied provided it can be demonstrated that flood water will not pose excessive risk to the development, safe ingress and egress can be created and the development will not increase risk of flooding elsewhere.
- 8.6 The NPPF defines what type of development is appropriate in an individual location and seeks to guide development generally away from areas of flood risk. It nevertheless accepts implicitly that some development in areas of higher potential risk may be appropriate or indeed essential, and seeks to classify zones of risk, types of development and development suitability.

9.0 EXCEPTION TEST

- 9.1 The National Planning Policy Framework (NPPF) encourages a sequential risk-based approach to determine the suitability of land for development in flood risk areas. It advises local planning authorities to demonstrate that there are no reasonably available sites in areas with a lower probability of flooding that would be appropriate to the type of development or land use proposed.
- 9.2 The site has been identified to be located within Flood Zone 1 where the annual probability of flooding from rivers or sea is less than 1 in 1000 in any given year (<0.1%). In areas at risk of river flooding, NPPF advises that preference be given to new development in Flood Zone 1. Therefore as shown in Table 3 within NPPF, the site is deemed appropriate for use as a more vulnerable land use.
- 9.3 Wider sustainable benefits to the community include:
- The regeneration of land previously used for leisure activity.
 - Provides accommodation for patrons of the facility.
- 9.4 The FRA demonstrates safety and flooding sustainability by:
- Maintaining floor levels.
 - Ingress and egress routes for pedestrians being available from the land to the South.
 - Dry means of escape exists for residents.
- 9.5 As the impermeable area of the site is increasing, there will be no increase in the level of surface water runoff over the current land use as surplus flows will remain on site.
- 9.6 In view of the above the exception test is deemed to have passed.

10.0 CONCLUSION

- 10.1 It has been established that the site is located in Flood Zone 1, which is an area not considered to be at risk of tidal or fluvial flooding. The site was also identified to not be at risk of flooding from other sources considered in the SFRA available on the Planning Authorities website, which included surface water, groundwater, sewer and artificial sources.
- 10.2 Regarding the sequential test, the proposed development is considered to an appropriate development as it would be located in Flood Zone 1, which is considered suitable for all forms of development in terms of flood risk.
- 10.3 In terms of flood risk it is concluded that the development can be occupied and operated safely and that there will be no increase in the level of flood risk to the site or neighbouring sites as a result of the development

Appendix A Site Layout



Notes

Measurements not to be scaled from this drawing. All dimensions to be checked and confirmed prior to commencement of work. Contractors to notify architects of site variations affecting information on this drawing. The information in this drawing is copyright of Hickman & Smith Architects Ltd.

Measurements are based on previous drawings provided by the client and as such the site boundary area is to be confirmed by the client.

Date	Rev	By	Details
20.04.18	/	DG	Issued for Client Comments
27.04.18	A	DG	Issued for Client Comments
30.04.18	B	DG	Issued for Client Comments

Location Key

→

DRAFT

INFORMATION

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e: info@hickmanandsmith.co.uk

Project

Market Bosworth Golf Leisure and Country Club

Client

FAO Mr George Denny

Statue Homes Ltd

Drawing Title

Proposed Site Plan

Date	Scale	Checked
30.04.18	1:1000@A1 1:2000@A3	AS
Project Ref.	Drawing No.	Revision
0196	A-PL-001	B

Appendix B Severn Trent Water Sewer Records

SK4003NW

SK3903SE

SK4003SE

SK4002NW

- ✕✕✕✕ 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

□

Outfall

□

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

Sewer Node		Sewer Pipe Data									
REFERENCE	COVER LEVEL	R/W LEVEL UPSTR	R/W LEVEL DOWNSTR	PURP	MATL	SHAPE	MAX SIZE	MIN SIZE	GRADIENT	YEAR LAID	
SK4003001	123.70	nil	nil	S	VC	nil	300	nil	0.00	nil	
SK40030101	121.92	120.07	116.76	F	VC	C	175	nil	43.44	nil	
SK40031001	124.91	122.98	121.83	S	VC	C	nil	nil	46.89	nil	
SK40031002	124.86	123.18	123.55	S	VC	C	nil	nil	125.23	nil	
SK40031003	125.38	124.44	123.76	F	VC	C	nil	nil	102.53	nil	
SK40031101	123.83	121.70	120.98	F	VC	C	175	nil	30.75	nil	
SK40031102	125.79	123.89	nil	F	VC	C	nil	nil	0.00	nil	
SK40031103	nil	nil	121.71	F	VC	C	nil	nil	0.00	nil	
SK40031104	125.04	124.26	123.26	S	VC	C	nil	nil	92.78	nil	
SK40032001	127.07	125.80	125.11	S	VC	C	150	nil	98.49	nil	
SK40032002	127.16	125.76	nil	S	VC	C	150	nil	0.00	nil	
SK40032003	127.28	125.78	nil	F	VC	C	nil	nil	0.00	nil	
SK40032004	127.38	125.96	125.80	F	VC	C	150	nil	95.19	nil	
SK40032005	127.51	126.28	125.80	S	VC	C	150	nil	31.31	nil	
SK40032006	127.80	126.52	126.29	S	VC	C	150	nil	81.22	nil	
SK40032007	127.91	126.52	126.00	F	VC	C	150	nil	58.48	nil	
SK40032008	128.40	127.22	126.54	F	VC	C	150	nil	39.81	nil	
SK40032009	128.39	126.94	126.53	S	VC	C	150	nil	83.46	nil	
SK40032010	127.12	126.24	nil	S	VC	C	150	nil	0.00	nil	
SK40032011	127.01	125.72	nil	F	VC	C	nil	nil	0.00	nil	
SK40032401	109.03	107.13	106.72	C	VC	C	300	nil	77.39	nil	
SK40032402	109.40	107.92	107.28	C	VC	C	150	nil	51.94	nil	
SK40033001	129.08	127.24	123.75	F	VC	C	nil	nil	45.07	nil	
SK40033002	129.10	127.43	126.33	F	VC	C	150	nil	75.55	nil	
SK40033101	125.14	124.42	125.20	F	VC	C	150	nil	0.00	nil	
SK40033102	123.71	123.31	123.29	F	VC	C	nil	nil	2384.00	nil	
SK40033103	123.84	122.84	122.70	S	VC	C	150	nil	185.86	nil	
SK40033104	126.92	125.18	123.33	F	VC	C	150	nil	1.21	nil	
SK40033105	123.73	122.66	122.55	S	VC	C	150	nil	192.82	nil	
SK40033202	115.07	113.08	110.11	F	VC	C	225	nil	41.02	nil	
SK40033203	114.96	113.70	112.35	S	VC	C	300	nil	4.19	nil	
SK40033301	111.72	110.11	107.15	F	VC	C	300	nil	31.30	nil	
SK40033401	110.39	nil	107.93	C	VC	C	150	nil	0.00	nil	
SK40034001	128.61	126.30	123.71	F	VC	C	150	nil	11.59	nil	
SK40034002	128.36	126.99	nil	S	VC	C	300	nil	0.00	nil	
SK40034003	128.43	127.41	126.31	F	VC	C	150	nil	32.84	nil	
SK40034004	128.61	127.15	126.35	F	VC	C	150	nil	63.10	nil	
SK40034005	128.73	127.39	nil	S	VC	C	225	nil	0.00	nil	
SK40034006	130.71	129.07	128.14	F	VC	C	150	nil	70.94	nil	
SK40034007	129.75	128.03	nil	S	VC	C	225	nil	0.00	nil	
SK40034101	124.05	123.68	122.87	F	VC	C	nil	nil	98.06	nil	
SK40034103	123.98	123.28	122.92	F	VC	C	nil	nil	69.44	nil	
SK40034104	124.16	122.83	122.57	F	VC	C	nil	nil	50.15	nil	
SK40034105	123.75	122.15	121.67	F	VC	C	nil	nil	48.65	nil	
SK40034108	123.81	121.30	113.81	S	VC	C	300	nil	14.30	nil	
SK40034109	123.92	122.32	nil	S	VC	C	150	nil	0.00	nil	
SK40034110	123.83	122.53	122.34	S	VC	C	150	nil	121.53	nil	
SK40034201	123.18	121.58	120.01	F	VC	C	nil	nil	15.62	nil	
SK40034202	121.39	119.98	115.98	F	VC	C	nil	nil	14.14	nil	
SK40034203	117.35	114.88	113.17	F	VC	C	150	nil	28.21	nil	

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...

PURPOSE

- C

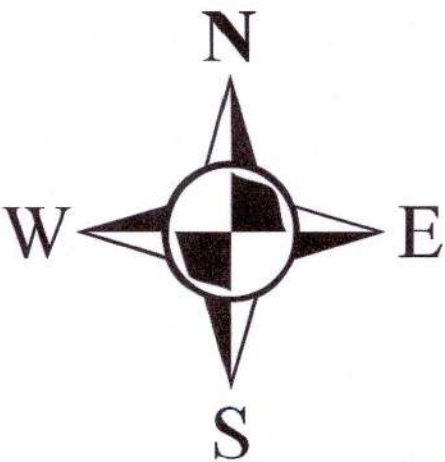
- COMBINED
- E

- 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:

SK4003SW

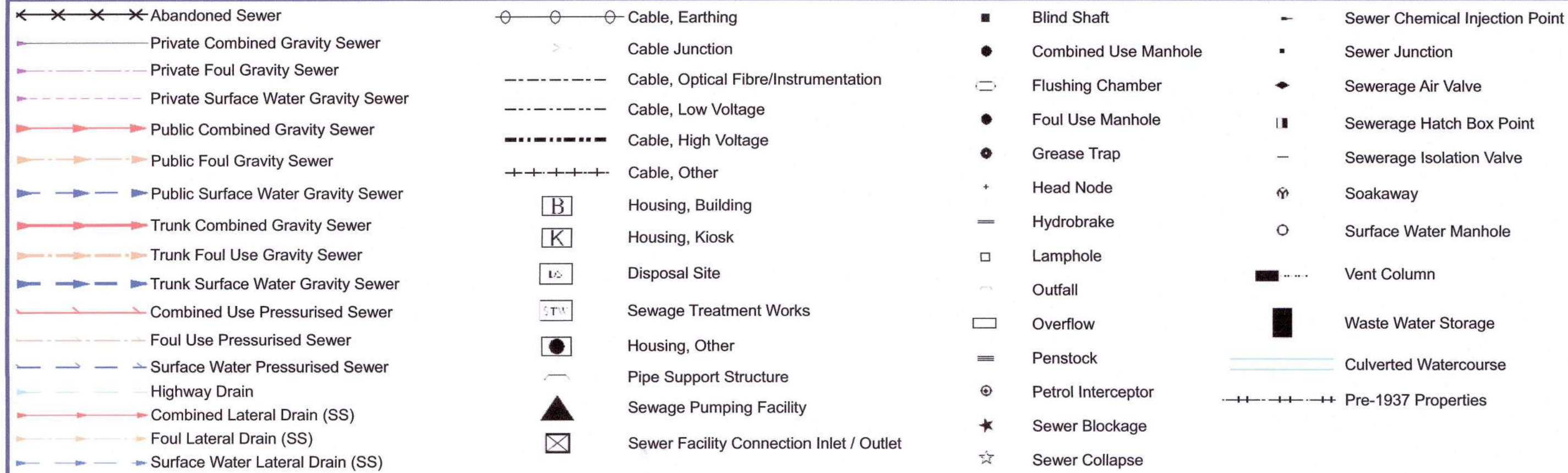
Disclaimer Statement:

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SK4003NE



SK4002NE



Sewer Node		Sewer Pipe Data									
REFERENCE	COVER LEVEL	INV LEVEL UPSTR	INV LEVEL DOWNSTR	PURP	MATL	SHAPE	MAX SIZE	MIN SIZE	GRADIENT	YEAR LAID	
SK40035001	130.64	129.01	128.82	F	VC	C	150	nil	93.68	nil	
SK40035002	130.77	129.20	129.02	F	VC	C	150	nil	81.39	nil	
SK40035003	130.33	128.79	128.81	F	VC	C	150	nil	36.09	nil	
SK40035004	130.72	129.01	128.83	F	VC	C	150	nil	62.11	nil	
SK40035005	130.24	128.06	127.42	F	VC	C	150	nil	67.55	nil	
SK40035101	124.12	122.28	122.20	F	VC	C	nil	nil	555.25	nil	
SK40035102	124.25	122.43	122.35	F	VC	C	nil	nil	520.25	nil	
SK40035103	130.47	128.05	121.45	S	VC	C	225	nil	20.35	nil	
SK40035104	124.01	122.80	122.57	F	VC	C	150	nil	1195.00	nil	
SK40035105	130.77	128.49	128.08	F	VC	C	150	nil	86.49	nil	
SK40035106	130.58	128.72	128.52	F	VC	C	150	nil	92.20	nil	
SK40035401	122.42	120.49	119.29	C	VC	C	nil	nil	51.87	nil	
SK40035402	121.72	119.28	111.50	C	VC	C	nil	nil	15.35	nil	
SK40036001	131.01	129.46	129.28	S	VC	C	150	nil	230.22	nil	
SK40036002	130.43	128.58	127.36	F	VC	C	150	nil	24.61	nil	
SK40036003	131.36	129.58	nil	F	VC	C	150	nil	0.00	nil	
SK40036005	130.88	129.59	128.93	S	VC	C	150	nil	33.88	nil	
SK40036006	131.10	129.65	129.63	S	VC	C	150	nil	200.00	nil	
SK40036101	129.05	127.17	126.28	C	VC	C	150	nil	82.03	nil	
SK40036102	129.87	128.90	127.18	C	VC	C	225	nil	17.84	nil	
SK40036103	131.45	129.85	127.20	C	VC	C	150	nil	26.47	nil	
SK40036201	128.84	126.24	123.68	C	VC	C	nil	nil	25.79	nil	
SK40036202	131.45	129.62	128.28	C	VC	C	150	nil	21.47	nil	
SK40036203	122.83	121.43	123.42	S	VC	C	nil	nil	0.00	nil	
SK40036301	125.41	123.65	122.36	C	VC	C	nil	nil	27.63	nil	
SK40036302	124.76	nil	nil	S	VC	nil	225	nil	0.00	nil	
SK40036303	124.20	122.35	120.50	C	VC	C	nil	nil	42.74	nil	
SK40036304	124.77	123.53	122.38	C	VC	C	nil	nil	9.37	nil	
SK40037001	131.48	129.90	129.48	S	VC	C	150	nil	79.14	nil	
SK40037102	132.79	131.08	129.65	C	VC	C	150	nil	36.10	nil	
SK40037103	134.02	132.38	131.10	C	VC	C	150	nil	45.72	nil	
SK40038001	133.09	131.75	130.93	S	VC	C	150	nil	37.65	nil	

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

CATEGORIES

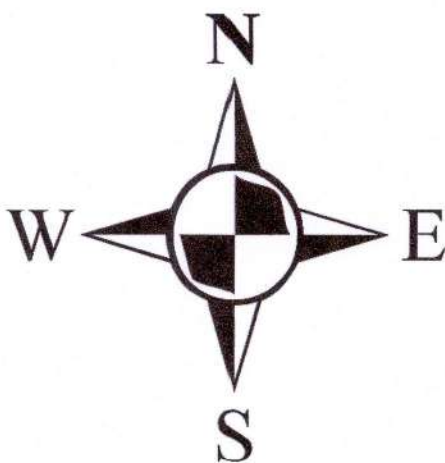
W	- WEIR
C	- CASCADE
DB	- DAMBOARD
SE	- SIDE ENTRY
FV	- FLAP VALVE
BD	- BACK DROP
S	- SIPHON
HD	- HIGHWAY DRAIN
S104	- SECTION 104
C	- CIRCULAR
E	- EGG SHAPED
O	- OTHER
R	- RECTANGLE
S	- SQUARE
T	- TRAPEZOIDAL
U	- UNKNOWN

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



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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:

SK4003SE

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SK4004SW

Sewer Node		Sewer Pipe Data									
REFERENCE	COVER LEVEL	INV LEVEL UPSTR	INV LEVEL DOWNSTR	PURP	MATL	SHAPE	MAX SIZE	MIN SIZE	GRADIENT	YEAR LAID	
SK40030501	106.06	104.48	103.06	G	VC	C	300	nil	58.77	nil	
SK40030501	104.45	103.06	102.38	G	VC	C	300	nil	118.28	nil	
SK40031501	107.12	105.70	104.50	G	VC	C	300	nil	92.23	nil	
SK40034501	113.28	111.46	nil	G	VC	C	150	nil	0.00	nil	

SK4003NE

SK4103NE

SK4003SW

- 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

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

BR

CC

CI

CO

CSB

CSU

DI

GRC

MAC

MAR

PE

PF

PP

PSC

PVC

RPM

SI

XXX
- ASBESTOS CEMENT

- BRICK

- CONCRETE BOX CULVERT

- CAST IRON

- CONCRETE

- CONCRETE SEGMENTS (BOLTED)

- CONCRETE SEGMENTS (UNBOLTED)

- DUCTILE IRON

- GLASS REINFORCED CONCRETE

- MASONRY IN REGULAR COURSES

- MASONRY RANDOMLY COURSED

- POLYETHYLENE

- PITCH

- POLYPROPYLENE

- PLASTIC STEEL COMPOSITE

- POLYVINYL CHLORIDE

- REINFORCED PLASTIC MATRIX

- SPUN (GREY) IRON

- 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

C

DB

SE

FV

BD

S

HD

S104

SHAPE

C

E

O

R

S

T

U
- WEIR

- CASCADE

- DAMBOARD

- SIDE ENTRY

- FLAP VALVE

- BACK DROP

- SIPHON

- HIGHWAY DRAIN

- SECTION 104

- CIRCULAR

- EGG SHAPED

- OTHER

- RECTANGLE

- SQUARE

- TRAPEZOIDAL

- UNKNOWN

TABULAR KEY

- A.

B.

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

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

Gradient is stated a 1 in...

PURPOSE

- C

E

F

L

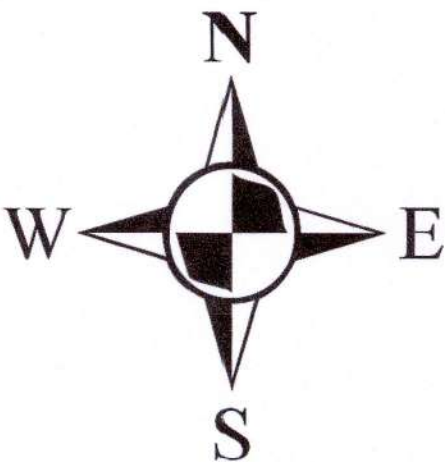
S
- COMBINED

- FINAL EFFLUENT

- FOUL

- SLUDGE

- SURFACE WATER



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SEWER RECORD (TABULAR)

O/S Map scale: 1:1250

Date of issue: 01.11.16

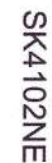
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This map is centred upon:
O / S Tile reference:

SK4003NW

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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.
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SK4002SW



CATEGORIES		TABULAR KEY	
W	- WEIR	A.	Sewer pipe data refers to downstream sewer pipe.
C	- CASCADE	B.	Where the node bifurcates (splits) X and Y indicates downstream sewer pipe.
DB	- DAMBOARD	C.	Gradient is stated a 1 in...
SE	- SIDE ENTRY		
FV	- FLAP VALVE		
BD	- BACK DROP		
S	- SIPHON		
HD	- HIGHWAY DRAIN		
S104	- SECTION 104		
SHAPE		PURPOSE	
C	- CIRCULAR	C	- COMBINED
E	- EGG SHAPED	E	- FINAL EFFLUENT
O	- OTHER	F	- FOUL
R	- RECTANGLE	L	- SLUDGE
S	- SQUARE	S	- SURFACE WATER
T	- TRAPEZOIDAL		
U	- UNKNOWN		



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SK4002NW

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 On **1 October 2012** the ownership of the Map and private lateral drains, private lateral drains, private sewerage areas, which were transferred 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).
 Any remaining status of assets which form part of these sewers or lateral drains, will transfer to the ownership of Severn Trent Water 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.
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SK3903NW

SK3803SE

SK3903SE

Sewer Node		Sewer Pipe Data									
REFERENCE	COVER LEVEL	INV LEVEL UPSTR	INV LEVEL DOWNSTR	PURP	MATL	SHAPE	MAX SIZE	MIN SIZE	GRADIENT	YEAR LAID	
SK39031301	nil	nil	nil	S	nil	nil	nil	nil	0.00	2004	
SK39032206	nil	nil	nil	S	nil	nil	nil	nil	0.00	2004	
SK39032207	nil	nil	nil	F	nil	nil	nil	nil	0.00	2004	
SK39032301	nil	nil	nil	F	nil	nil	nil	nil	0.00	2004	
SK39032301	nil	nil	nil	F	nil	nil	nil	nil	0.00	2004	
SK39032302	nil	nil	nil	F	nil	nil	nil	nil	0.00	2004	
SK39032303	nil	nil	nil	S	nil	nil	nil	nil	0.00	2004	
SK39032303	nil	nil	nil	S	nil	nil	nil	nil	0.00	2004	
SK39032304	nil	nil	nil	S	nil	nil	nil	nil	0.00	2004	
SK39032305	nil	nil	nil	S	nil	nil	nil	nil	0.00	2004	
SK39032306	nil	nil	nil	F	nil	nil	nil	nil	0.00	2004	
SK39032401	nil	nil	nil	S	nil	nil	nil	nil	0.00	2004	
SK39032402	nil	nil	nil	F	nil	nil	nil	nil	0.00	2004	
SK39032404	nil	nil	nil	S	nil	nil	nil	nil	0.00	2004	
SK39033101	nil	nil	nil	F	nil	nil	nil	nil	0.00	nil	
SK39034001	99.11	96.58	96.19	C	VC	C	300	nil	260.31	nil	
SK39034002	99.12	96.62	96.59	C	VC	C	300	nil	298.00	nil	
SK39034101	99.12	97.12	96.69	C	VC	C	nil	nil	225.28	nil	
SK39034101	99.12	nil	nil	C	VC	nil	nil	nil	0.00	nil	
SK39034102	nil	nil	97.29	F	VC	C	225	nil	0.00	nil	
SK39034103	99.13	97.12	97.07	C	VC	C	300	nil	117.00	nil	

SK3902NW

- 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

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

BR

CC

CI

CO

CSB

CSU

DI

GRC

MAC

MAR

PE

PF

PP

PSC

PVC

RPM

SI

XXX
- ASBESTOS CEMENT

- BRICK

- CONCRETE BOX CULVERT

- CAST IRON

- CONCRETE

- CONCRETE SEGMENTS (BOLTED)

- CONCRETE SEGMENTS (UNBOLTED)

- DUCTILE IRON

- GLASS REINFORCED CONCRETE

- MASONRY IN REGULAR COURSES

- MASONRY RANDOMLY COURSED

- POLYETHYLENE

- PITCH

- POLYPROPYLENE

- PLASTIC STEEL COMPOSITE

- POLYVINYL CHLORIDE

- REINFORCED PLASTIC MATRIX

- SPUN (GREY) IRON

- OTHER

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CATEGORIES

- W

C

DB

SE

FV

BD

S

HD

S104

SHAPE

C

E

O

R

S

T

U
- WEIR

- CASCADE

- DAMBOARD

- SIDE ENTRY

- FLAP VALVE

- BACK DROP

- SIPHON

- HIGHWAY DRAIN

- SECTION 104

- CIRCULAR

- EGG SHAPED

- OTHER

- RECTANGLE

- SQUARE

- TRAPEZOIDAL

- UNKNOWN

TABULAR KEY

- A.

B.

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

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

Gradient is stated a 1 in...
- PURPOSE

C

E

F

L

S
- COMBINED

- FINAL EFFLUENT

- FOUL

- SLUDGE

- SURFACE WATER



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SEWER RECORD (TABULAR)

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Sheet No. 1 of 1

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SK3903SW

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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	101.03	S	CO	C	375	nil	54.43	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	104.52	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	102.50	S	CO	C	200	nil	56.15	nil	
SK39036101	107.80	105.86	105.04	S	VC	C	150	nil	31.91	nil	
SK39036211	107.30	105.26	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	107.61	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	108.73	F	VC	C	150	nil	21.66	nil	
SK39038006	111.03	109.46	108.73	F	VC	C	150	nil	46.36	nil	
SK39038007	112.79	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	118.06	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	118.63	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	116.48	115.31	114.06	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

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

PVC - PLASTIC STEEL COMPOSITE

PWC - 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

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

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- MATERIALS
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SI - SPUN (GREY) IRON

XXX - OTHER
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All section 104 sewers are shown in green
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- CATEGORIES
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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

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U - UNKNOWN
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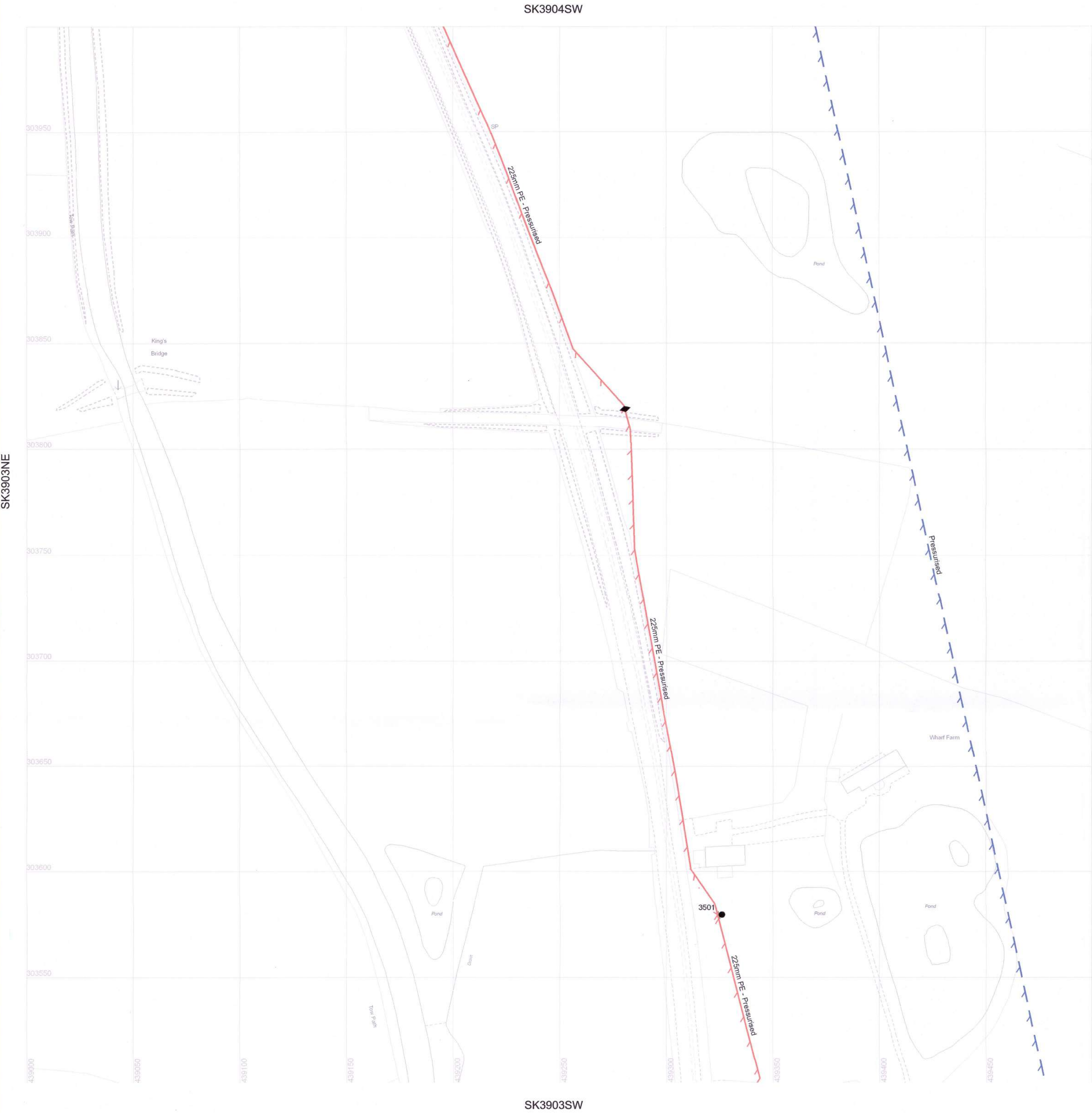
C. Gradient is stated a 1 in...
- PURPOSE
- C - COMBINED

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:
- SK3903SE
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- ✕✕✕✕ 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

L

Disposal Site

T

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

—

Overflow

—

Penstock

⊕

Petrol Interceptor

★

Sewer Blockage

☆

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

Sewerage Air Valve
- ||

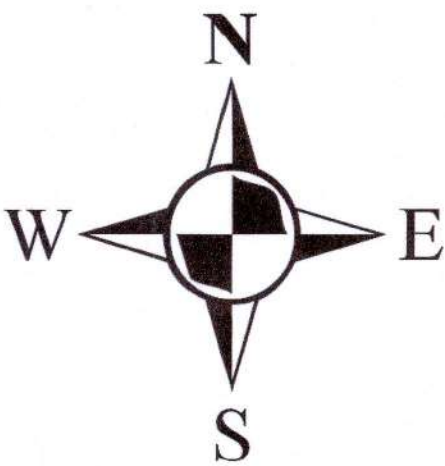
Sewerage Hatch Box Point
- Sewerage Isolation Valve
- ⊕

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)
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PE	- POLYETHYLENE
PF	- PITCH
PP	- POLYPROPYLENE
PVC	- PLASTIC STEEL COMPOSITE
RPV	- 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 1 st 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
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 as 1 in...
PURPOSE	
C	- COMBINED
E	- FINAL EFFLUENT
F	- FOUL
L	- SLUDGE
S	- SURFACE WATER



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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:

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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	104.32	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

L

Disposal Site

TV

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
- Cable, Earthing
- Cable Junction
- Cable, Optical Fibre/Instrumentation
- Cable, Low Voltage
- Cable, High Voltage
- Cable, Other
- B

Housing, Building
- K

Housing, Kiosk
- L

Disposal Site
- TV

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

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Penstock

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Petrol Interceptor

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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

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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

PURPOSE

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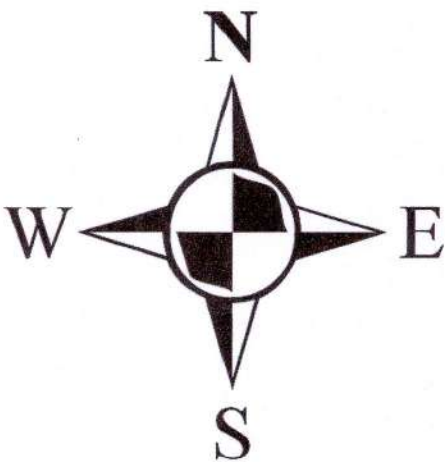
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SEWER RECORD (TABULAR)

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Sheet No. 1 of 1

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