Modelled Flood Outlines: Victoria Mill, Watt Street, Sabden, Clitheroe, BB7 9EG

Produced: 5th September 2017
Our Ref: CL57155
NGR: SD 77581 37271

Key

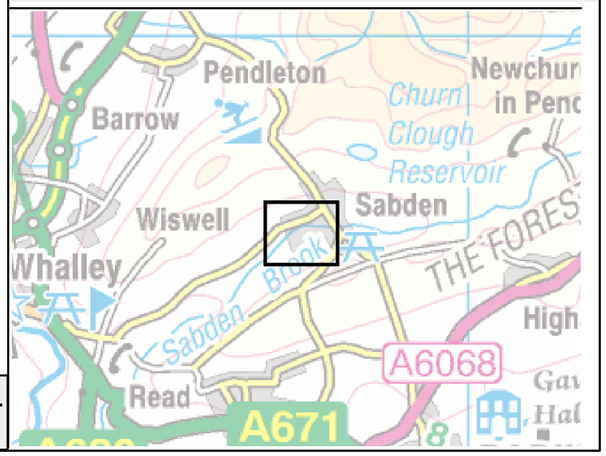
Main River

1 in 100 Year Modelled Flood Outline

Flood Zone 3 shows the area that could be affected by flooding:
- from the sea with a 1 in 200 or greater chance of happening each year
- or from a river with a 1 in 100 or greater chance of happening each year.

Flood Zone 2 shows the extent of an extreme flood from rivers or the sea with up to a 1 in 1000 chance of occurring each year.

ABDs (Areas Benefiting from Defences) show the area benefiting from defences during a 1 in 200 tidal, or 1 in 100 fluvial flood event.



Contact Us: National Customer Contact Centre, PO Box 544, Rotherham, S60 1BY. Tel: 03708 506 506 (Mon-Fri 8-6). Email: enquiries@environment-agency.gov.uk

Modelled Flood Outlines: Victoria Mill, Watt Street, Sabden, Clitheroe, BB7 9EG

Produced: 5th September 2017
Our Ref: CL57155
NGR: SD 77581 37271

Key

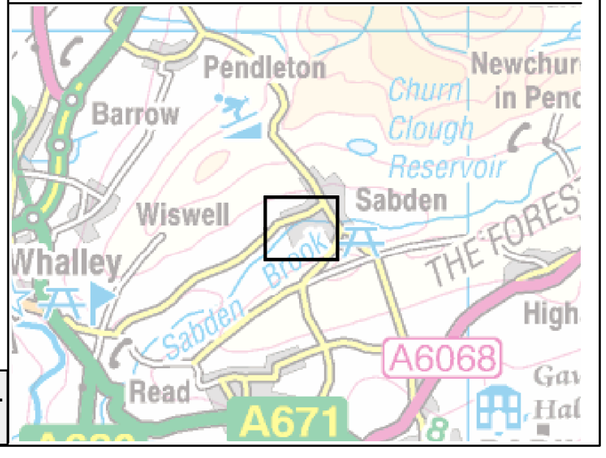
Main River

1 in 200 Year Modelled Flood Outline

Flood Zone 3 shows the area that could be affected by flooding:
- from the sea with a 1 in 200 or greater chance of happening each year
- or from a river with a 1 in 100 or greater chance of happening each year.

Flood Zone 2 shows the extent of an extreme flood from rivers or the sea with up to a 1 in 1000 chance of occurring each year.

ABDs (Areas Benefiting from Defences) show the area benefiting from defences during a 1 in 200 tidal, or 1 in 100 fluvial flood event.



Contact Us: National Customer Contact Centre, PO Box 544, Rotherham, S60 1BY. Tel: 03708 506 506 (Mon-Fri 8-6). Email: enquiries@environment-agency.gov.uk

Modelled Flood Outlines: Victoria Mill, Watt Street, Sabden, Clitheroe, BB7 9EG

Produced: 5th September 2017
Our Ref: CL57155
NGR: SD 77581 37271

Key

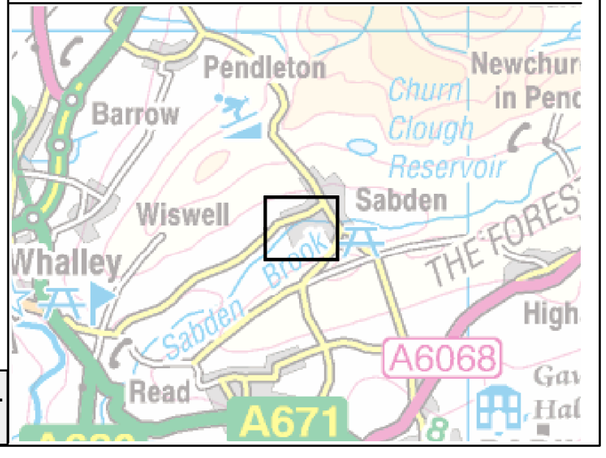
Main River

1 in 100 Year+Climate Change Modelled Flood Outline

Flood Zone 3 shows the area that could be affected by flooding:
- from the sea with a 1 in 200 or greater chance of happening each year
- or from a river with a 1 in 100 or greater chance of happening each year.

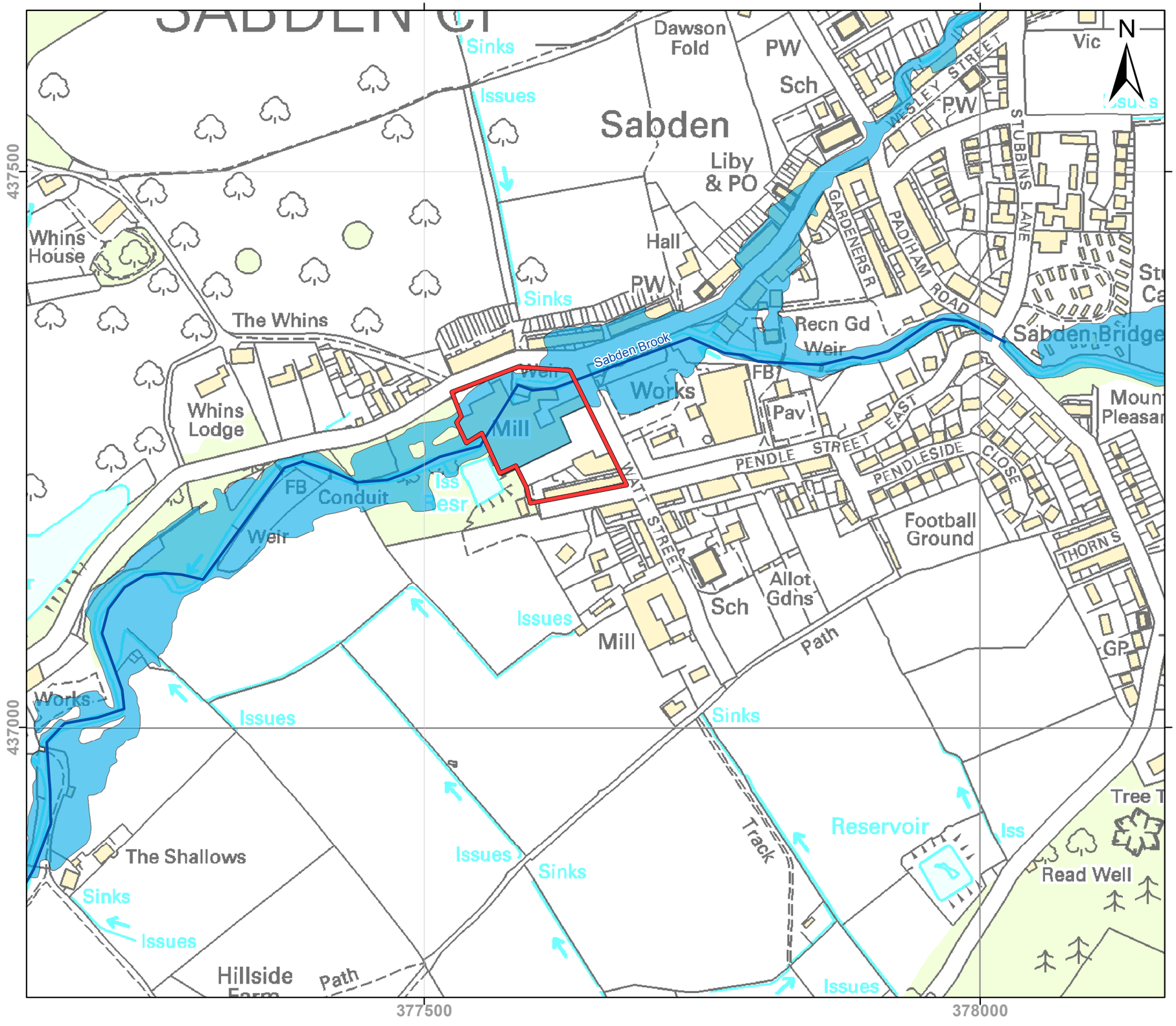
Flood Zone 2 shows the extent of an extreme flood from rivers or the sea with up to a 1 in 1000 chance of occurring each year.

ABDs (Areas Benefiting from Defences) show the area benefiting from defences during a 1 in 200 tidal, or 1 in 100 fluvial flood event.



Q100+CC=Q100+20%

Contact Us: National Customer Contact Centre, PO Box 544, Rotherham, S60 1BY. Tel: 03708 506 506 (Mon-Fri 8-6). Email: enquiries@environment-agency.gov.uk



Contact Us: National Customer Contact Centre, PO Box 544, Rotherham, S60 1BY. Tel: 03708 506 506 (Mon-Fri 8-6). Email: enquiries@environment-agency.gov.uk

Environment Agency

Modelled Flood Outlines: Victoria Mill, Watt Street, Sabden, Clitheroe, BB7 9EG

Produced: 5th September 2017
Our Ref: CL57155
NGR: SD 77581 37271

Key

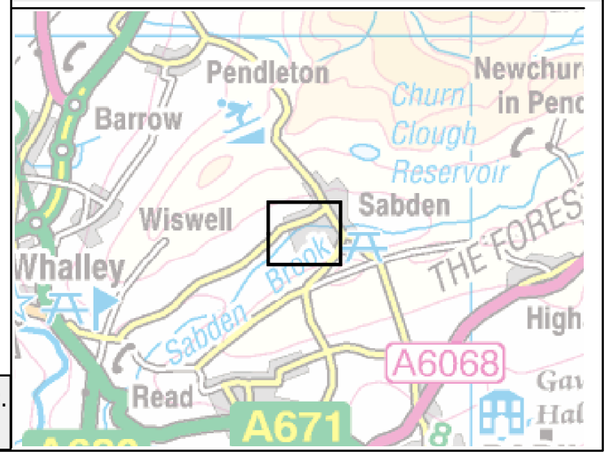
Main River

1 in 1000 Year Modelled Flood Outline

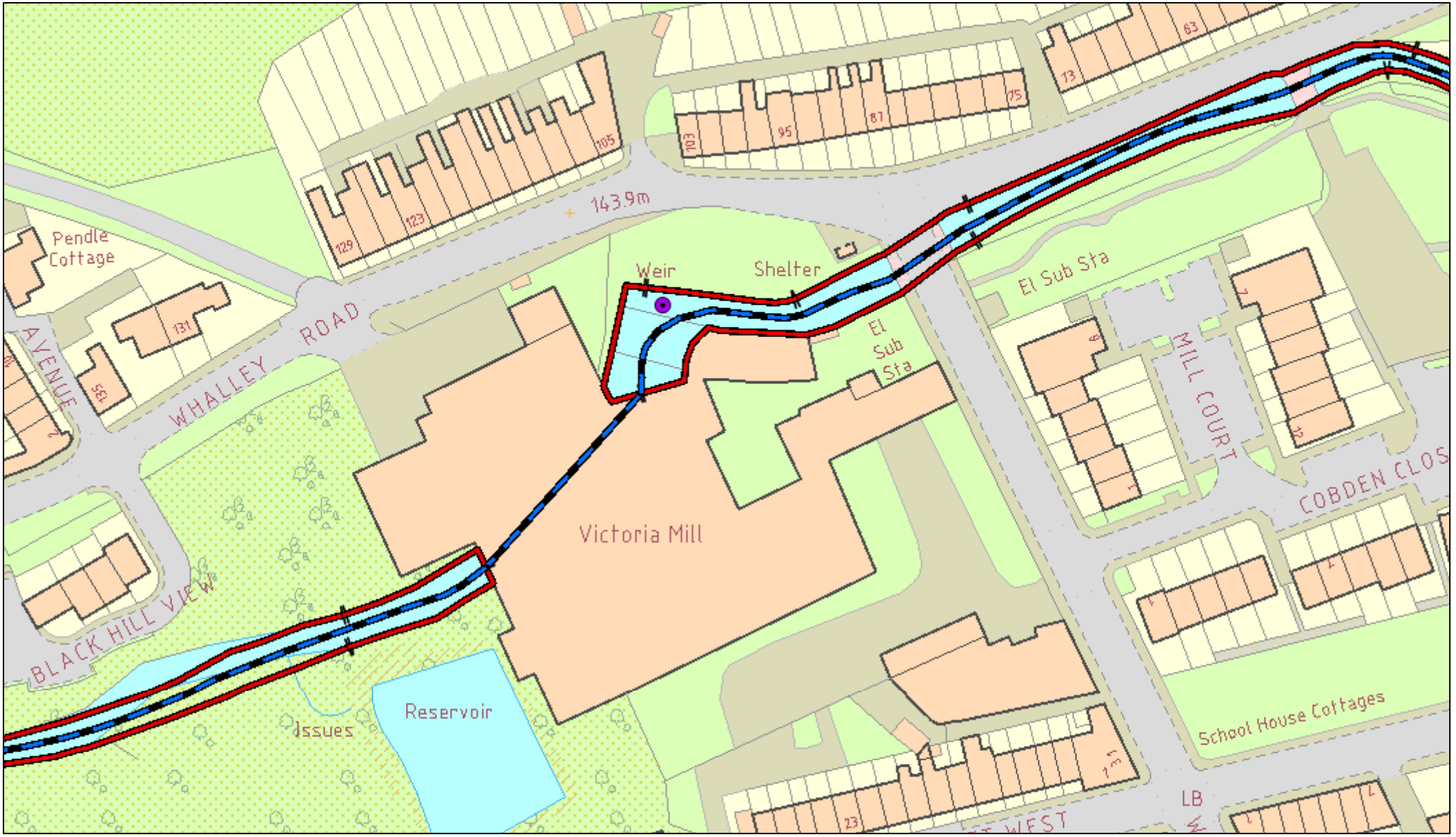
Flood Zone 3 shows the area that could be affected by flooding:
- from the sea with a 1 in 200 or greater chance of happening each year
- or from a river with a 1 in 100 or greater chance of happening each year.

Flood Zone 2 shows the extent of an extreme flood from rivers or the sea with up to a 1 in 1000 chance of occurring each year.

ABDs (Areas Benefiting from Defences) show the area benefiting from defences during a 1 in 200 tidal, or 1 in 100 fluvial flood event.



CL57155 Victoria Mill, Sabden - Overview Map



August 17, 2017

Structures

Channels

Defences

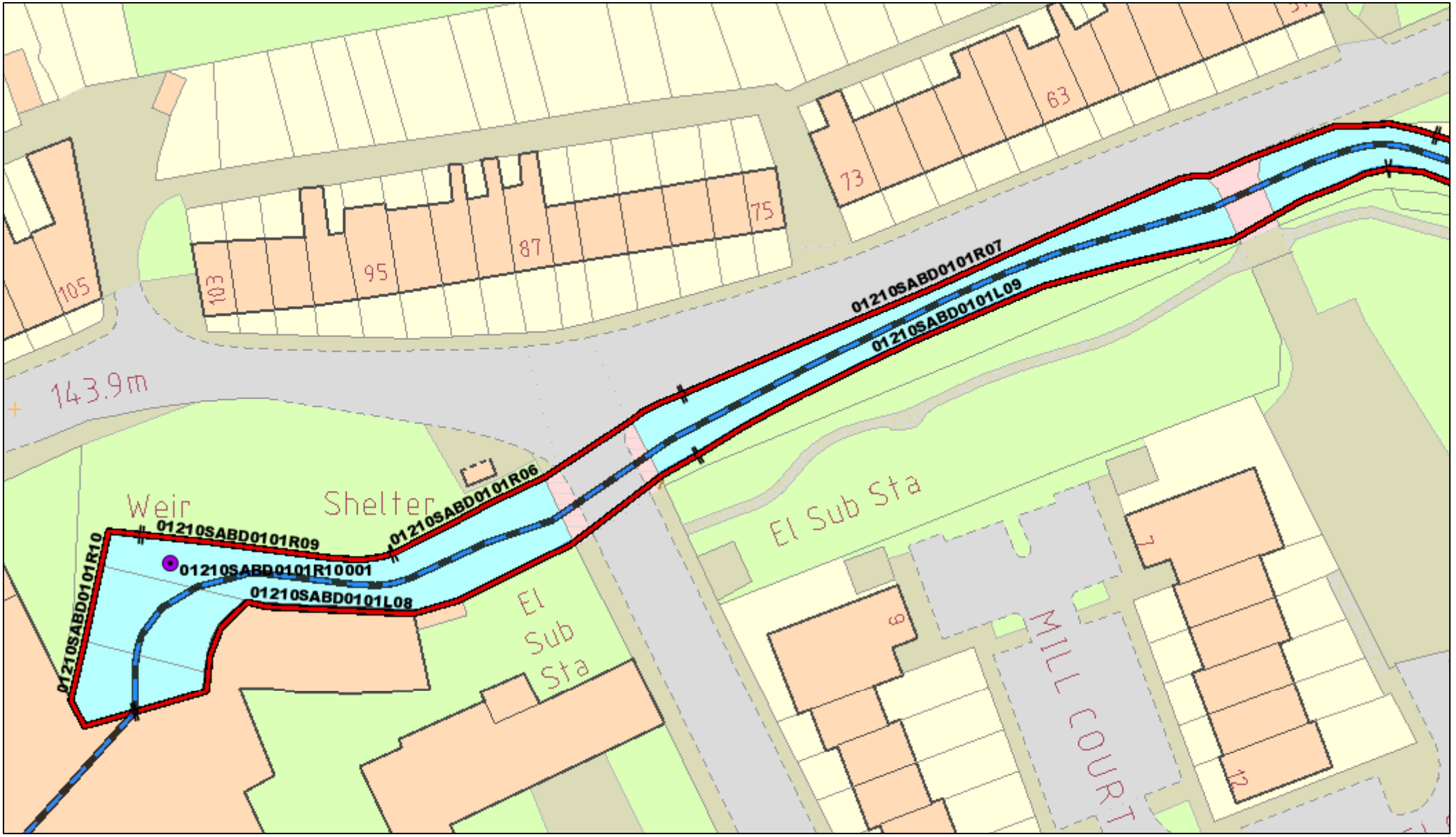
CARTO_TEXT

1:1,025

0 0.0075 0.015 0.03 mi

0 0.0125 0.025 0.05 km

CL57155 Victoria Mill, Sabden - Map 1



August 17, 2017

Structures

CARTO_TEXT

Channels

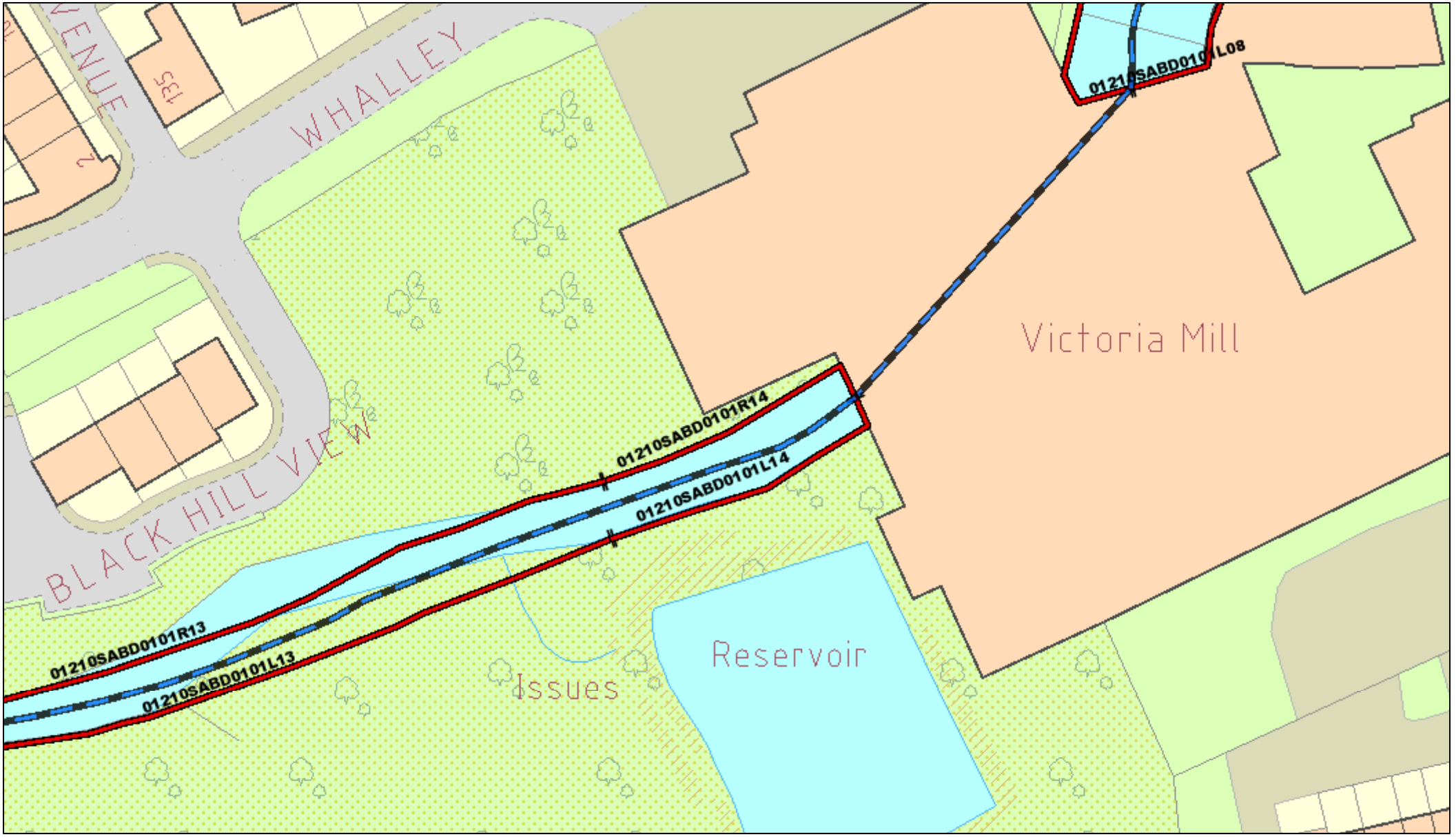
Defences

1:609

0 0.005 0.01 0.02 mi

0 0.0075 0.015 0.03 km

CL57155 Victoria Mill, Sabden - Map 2



August 17, 2017

Structures
Channels
Defences
CARTO_TEXT

1:577

0 0.00475 0.0095 0.019 mi

0 0.0075 0.015 0.03 km

Site Location	Victoria Mill, Sabden	CL57155

Fluvial Defences

Asset Ref.	National Grid Reference	Asset Type	Protection Type	Location	Maintained By	Design Standard (Return Period)	Overall Condition Grade (Excellent 1- 5 Very Poor)	Effective Crest Level (m)		E.C.L Data Quality (Reliable 1-4 Unreliable)	Length (m)	Height (m)
								UCL (mAOD)	DCL (mAOD)			
01210SABD0101R07	SD 77738 37359	Wall	Fluvial	Trib to Watt Street	Unknown	10	3	144.22	142.13	2	94.6	-
01210SABD0101L09	SD 77732 37355	Wall	Fluvial	Trib to Watt Street	Unknown	5	2	144.04	142.89	2	88	-
01210SABD0101R06	SD 77650 37329	High Ground	Fluvial	Watt Street to Downstream of Watt Street	Unknown	10	3	-	-	-	38.8	-
01210SABD0101L08	SD 77651 37322	High Ground	Fluvial	Watt Street to Culvert Inlet at Victoria Mill	Unknown	5	3	-	-	-	78.6	-
01210SABD0101R09	SD 77616 37310	High Ground	Fluvial	Downstream of Watt Street to Weir	Unknown	5	3	-	-	-	29.6	-
01210SABD0101R10	SD 77587 37313	High Ground	Fluvial	Weir to Culvert Inlet at Victoria Mill	Unknown	10	3	-	-	-	33.7	-
01210SABD0101R14	SD 77554 37261	High Ground	Fluvial	Culvert Outlet at Victoria Mill to Start of Wall	Unknown	5	3	-	-	-	33.2	-
01210SABD0101L14	SD 77557 37255	High Ground	Fluvial	Culvert Outlet at Victoria Mill to Start of Wall	Unknown	25	3	-	-	-	34.5	-
01210SABD0101R13	SD 77527 37249	High Ground	Fluvial	Start of Wall to End of Allotment Gardens	Unknown	5	3	-	-	-	119.7	-
01210SABD0101L13	SD 77528 37242	High Ground	Fluvial	Start of Wall to End of Allotment Gardens	Unknown	5	3	-	-	-	121.1	-

Consent is REQUIRED for any works undertaken within 8 metres of these defences

Site Location	Victoria Mill, Sabden	CL57155

Fluvial Structures

Asset Ref.	National Grid Reference	Asset Type	Protection Type	Location	Maintained By	Design Standard (Return Period)	Overall Condition Grade (Excellent 1- 5 Very Poor)	Length (m)	Height (m)
01210SABD0101R10001	SD 77590 37309	Weir	Fluvial	Victoria Mill	Unknown	-	3	-	-

Appendix E
Drainage Drawings and Calculations

NOTES:

1. COPYRIGHT IN THIS DOCUMENT BELONGS TO PAUL WAITE ASSOCIATES LIMITED & ALL RIGHTS IN IT ARE RESERVED BY THE OWNER.
2. NO PART OF THIS DRAWING MAY BE COPIED, TRANSFERRED, OR MADE AVAILABLE TO USERS OTHER THAN THE ORIGINAL RECIPIENT, INCLUDING ELECTRONICALLY, WITHOUT PRIOR PERMISSION FROM PAUL WAITE ASSOCIATES LIMITED.
3. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS & ENGINEERS DRAWINGS & SPECIFICATIONS.
4. ALL DIMENSIONS ARE SHOWN IN MILLIMETRES.
5. NO DIMENSIONS TO BE SCALED FROM THIS DRAWING.
6. ONLY PDF/HARD COPIES OF DRAWINGS SHOULD BE REFERRED TO FOR CONSTRUCTION USE, THE USE OF AUTOCAD DRAWINGS/DWG'S IS UNDERTAKEN ENTIRELY AT THE DEVELOPERS RISK AND ALL DIMENSIONS AND SETTING OUT MUST BE CHECKED IN CONJUNCTION WITH THE ARCHITECT AND ENGINEERS CONSTRUCTION DRAWINGS. ALL DRAWINGS SHOULD BE CONFIRMED AS LATEST ISSUE ON THE DOCUMENT ISSUE SHEET PRIOR TO COMMENCEMENT OF WORKS AND SHOULD BE USED ONLY FOR THEIR DEFINED DRAWING STATUS. ANY DISCREPANCIES BETWEEN THE ARCHITECT AND ENGINEERS DRAWINGS ARE TO BE IMMEDIATELY NOTIFIED TO ALL PARTIES.

PROPOSED IMPERMEABLE AREA

PROPOSED IMPERMEABLE AREA DRAINING TO SABDEN BROOK = 7,507m² (0.751ha)

ESTIMATED GROUP LOCATION

ESTIMATED TREE LOCATION

RDINATE SCHEDULE

NORTHING	LEVEL	DESCRIPTION
437321. 531	142. 638	HILTI NAIL IN PEG
437322. 006	142. 397	HILTI NAIL IN TARMAC
437302. 243	142. 419	HILTI NAIL IN TARMAC
437316. 876	142. 446	PK NAIL IN TARMAC
437334. 751	142. 633	PK NAIL IN TARMAC
437327. 711	144. 003	PK NAIL IN TARMAC
437299. 472	142. 876	PK NAIL IN TARMAC
437298. 586	141. 635	HILTI NAIL IN CONCRETE
437314. 971	141. 343	HILTI NAIL IN CONCRETE
437299. 432	141. 830	MAG NAIL IN SETTS
437289. 698	141. 802	MAG NAIL IN CONCRETE
437275. 640	142. 502	HILTI NAIL IN PEG
437229. 787	140. 219	PIPE NAIL IN CONCRETE
437239. 034	140. 788	HILTI NAIL IN PEG
437251. 880	139. 749	HILTI NAIL IN PEG
437281. 305	141. 083	HILTI NAIL IN PEG
437292. 881	142. 790	HILTI NAIL IN TARMAC
437251. 292	143. 998	HILTI NAIL IN TARMAC
437258. 153	142. 955	HILTI NAIL IN PEG
437269. 728	143. 117	HILTI NAIL IN PEG
437234. 341	142. 974	TEMPORARY STATION

Rev	Remarks	Date	By	Check
B	IMPERMEABLE AREAS UPDATED TO SUIT REVISED SITE LAYOUT.	20/07/18	LS	LS
A	IMPERMEABLE AREAS UPDATED TO SUIT REVISED SITE LAYOUT.	01/03/18	LMc	LMc

Paul Waite Associates
Consulting Civil , Structural & Geo-Environmental Engineers

Summit House, Riporian Way, The Crossings, Crosshills, Keighley, BD20 7BW
T - 01535 633350

E-Mail: info@pwaite.co.uk
Web Site: www.pwaite.co.uk

Client: SKIPTON PROPERTIES

Job: PROPOSED RESIDENTIAL DEVELOPMENT
FORMER VICTORIA MILL
SABDEN

Drawing: PROPOSED IMPERMEABLE AREA PLAN

Date:	Drawn By:	Checked By:	Drawing Number:	Rev.
13/10/17	IC	LMc	17140-C-SK.02	B
Status: PRELIMINARY	Scale: 1:250	Size: A1		

ICP SUDS Mean Annual Flood

Input

Return Period (years)	100	Soil	0.500
Area (ha)	0.751	Urban	0.000
SAAR (mm)	1053	Region Number	Region 10

Results l/s

QBAR Rural	6.7
QBAR Urban	6.7
Q100 years	13.9
Q1 year	5.8
Q30 years	11.3
Q100 years	13.9

Greenfield Runoff Volume

FSR Data

Return Period (years)	100
Storm Duration (mins)	360
Region	England and Wales
M5-60 (mm)	19.000
Ratio R	0.277
Areal Reduction Factor	1.00
Area (ha)	0.751
SAAR (mm)	1084
CWI	123.553
Urban	0.000
SPR	53.000

Results

Percentage Runoff (%)	57.39
Greenfield Runoff Volume (m^3)	297.509