Eastwood
CONSULTING ENGINEERS

APPENDIX 3

Monks Barton

77m

LONGSIGHT ROAD

A59

Green Nook Woodland (Retained)

LAP

LEAP

Indicative provision for Langho Station

WHITE HALGH LANE

BUSHBURN DRIVE

MOORLAND ROAD

N

0 25 50 75 m

Key:

- Site Boundary (19.88ha)
- Indicative residential dwellings
- Indicative private amenity space
- Proposed public open space
- Proposed BNG area (high value land- no public access)
- Proposed attenuation basins
- Proposed LEAP/LAP
- Existing vegetation
- Proposed vegetation
- Existing Public Right of Way
- Existing pedestrian access
- Indicative informal pedestrian and cycle routes
- Proposed vehiclular access
- Proposed pedestrian/cycle access
- Indicative tree lined primary street (adoptable)
- Indicative Private Drives
- Safeguarded for possible future improvement to railway station

Land Use Summary:

Red Line Boundary Area: 20.013ha

Net Developable Area: 9.00ha

Public Open Space: 10.84ha

Station Car Park: 0.159ha

Station Safeguarded Land: 0.01ha

Drawing Title
ILLUSTRATIVE MASTERPLAN

Project
LAND AT LONGSIGHT ROAD, LANGHO

Date	Scale	Drawn by	Approved by
20/02/2025	1:1000@A1	EF/SN	JB

Project No	Drawing No	Revision
333101612	0104	D

Client
HALLAM LAND

Stantec

Stantec UK Limited

100 Barbirolli Square
Manchester
M2 3PW
T: 0161 245 8900

stantec.com\uk

Eastwood
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APPENDIX 4

Flood map for planning

Your reference	Location (easting/northing)	Created
49343	**370192/434424**	**7 Nov 2024 12:17**

Your selected location is in flood zone 1, an area with a low probability of flooding.

You will need to do a flood risk assessment if your site is **any of the following:**

- bigger that 1 hectare (ha)
- In an area with critical drainage problems as notified by the Environment Agency
- identified as being at increased flood risk in future by the local authority's strategic flood risk assessment
- at risk from other sources of flooding (such as surface water or reservoirs) and its development would increase the vulnerability of its use (such as constructing an office on an undeveloped site or converting a shop to a dwelling)

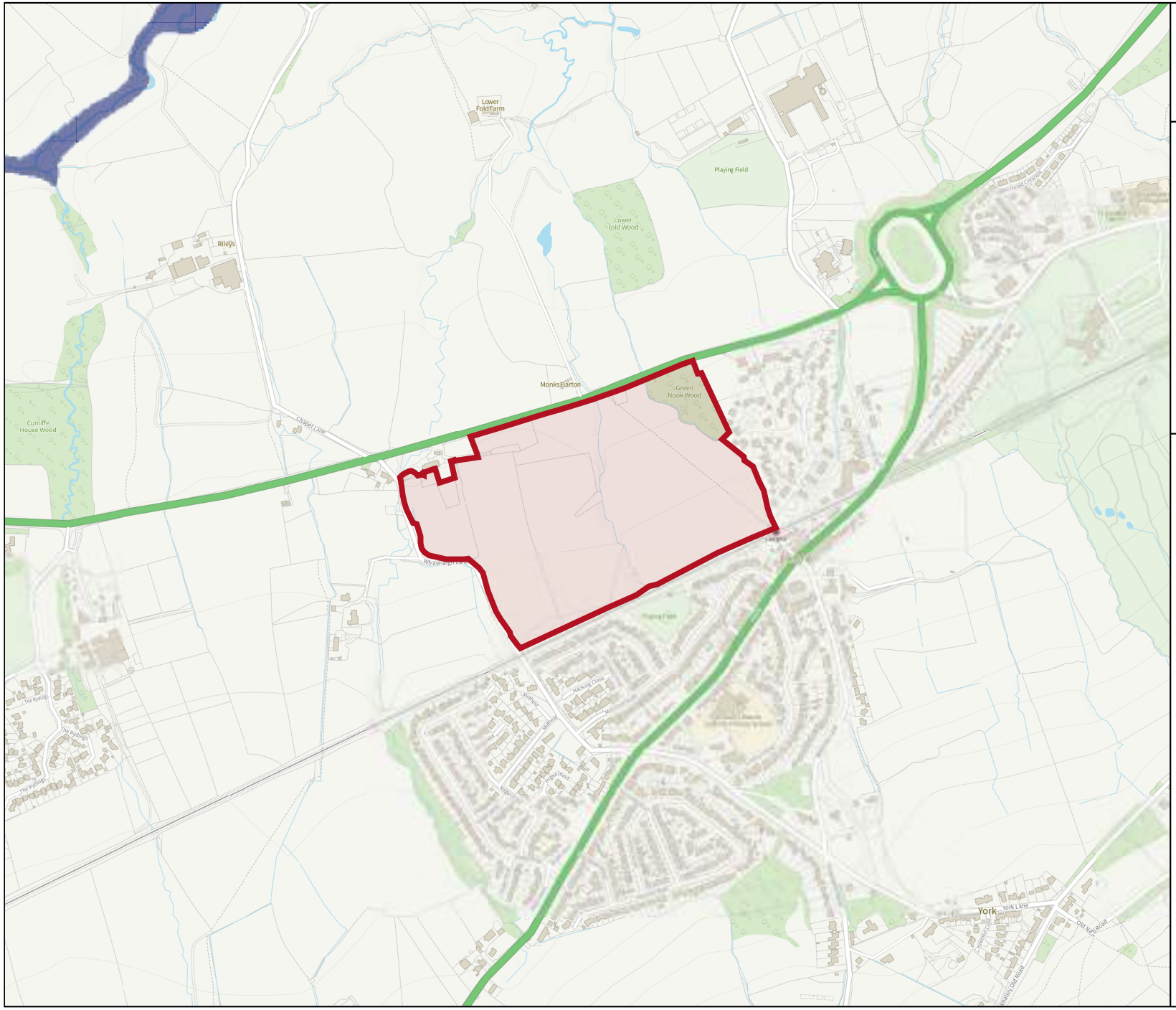
Notes

The flood map for planning shows river and sea flooding data only. It doesn't include other sources of flooding. It is for use in development planning and flood risk assessments.

This information relates to the selected location and is not specific to any property within it. The map is updated regularly and is correct at the time of printing.

Flood risk data is covered by the Open Government Licence **which** sets out the terms and conditions for using government data. https://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/

Use of the address and mapping data is subject to Ordnance Survey public viewing terms under Crown copyright and database rights 2024 OS AC0000807064. https://flood-map-for-planning.service.gov.uk/os-terms



Environment Agency

Flood map for planning

Your reference
49343

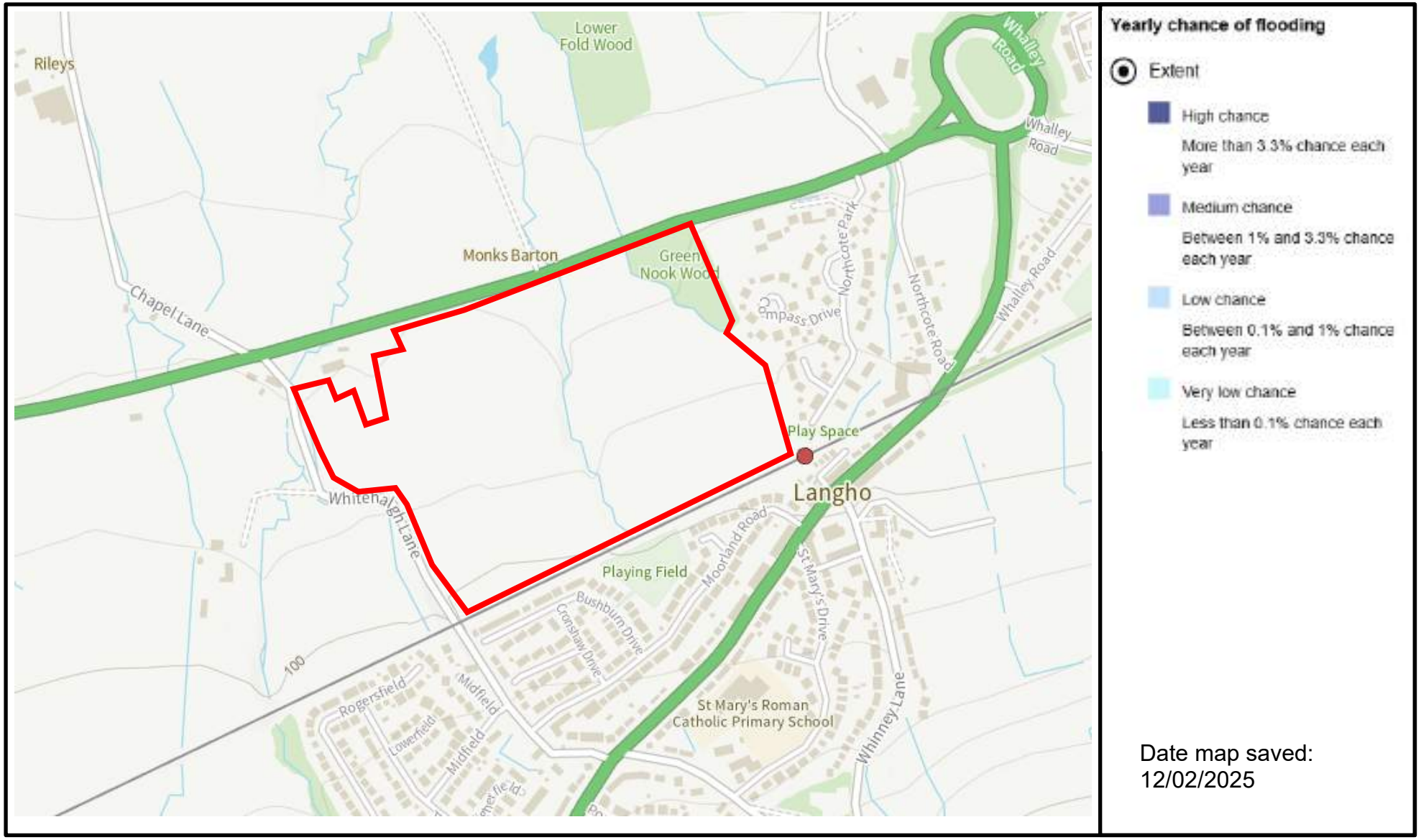
Location (easting/northing)
370192/434424

Scale
1:10000

Created
7 Nov 2024 12:17

- Selected area
- Flood zone 3
- Flood zone 2
- Flood zone 1
- Flood defence
- Main river
- Water storage area

0 100 200 300m


Yearly chance of flooding
Extent
High chance
More than 3.3% chance each year
Medium chance
Between 1% and 3.3% chance each year
Low chance
Between 0.1% and 1% chance each year
Very low chance
Less than 0.1% chance each year
Date map saved:
12/02/2025
Riley's
Lower Fold Wood
Whalley Road
Monks Barton
Green Nook Wood
Chapel Lane
Northcote Park
Northcote Road
Play Space
Langho
Whitehalgh Lane
Playing Field
Moorland Road
St Mary's Drive
Bushburn Drive
Cronshaw Drive
Rogersfield
Midfield
Lowerfield
St Mary's Roman Catholic Primary School
Whinney Lane
100

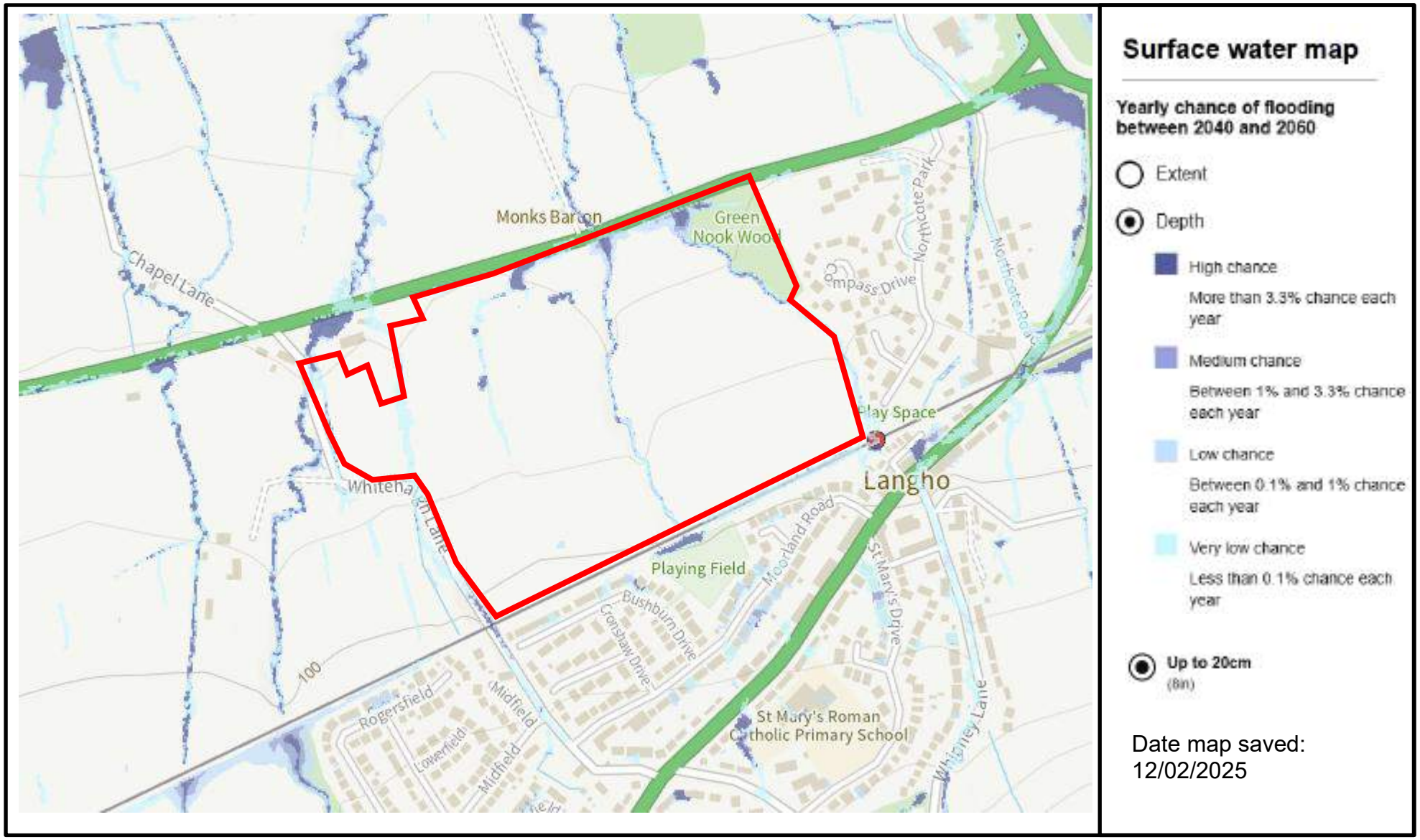
Surface water map

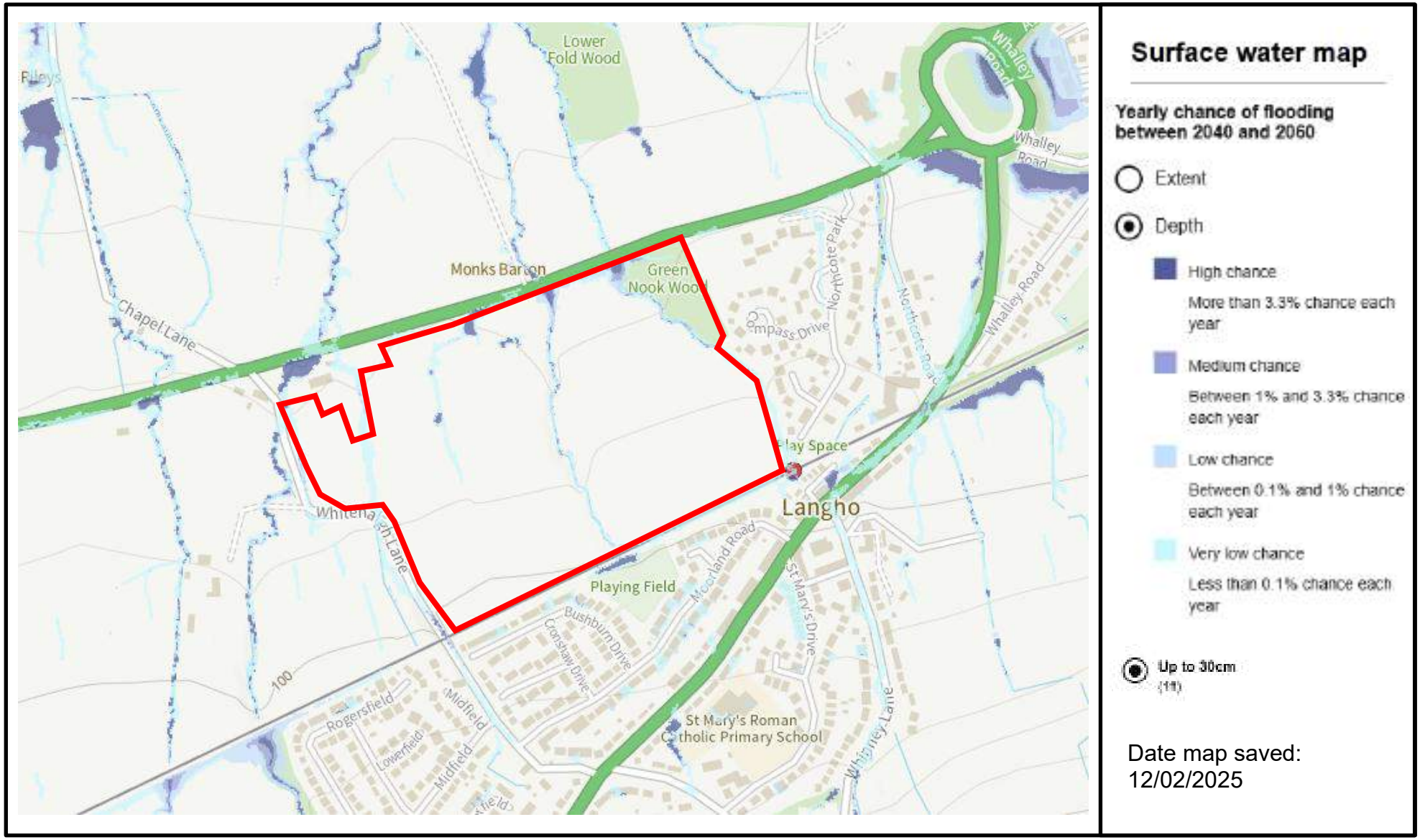
Yearly chance of flooding between 2040 and 2060

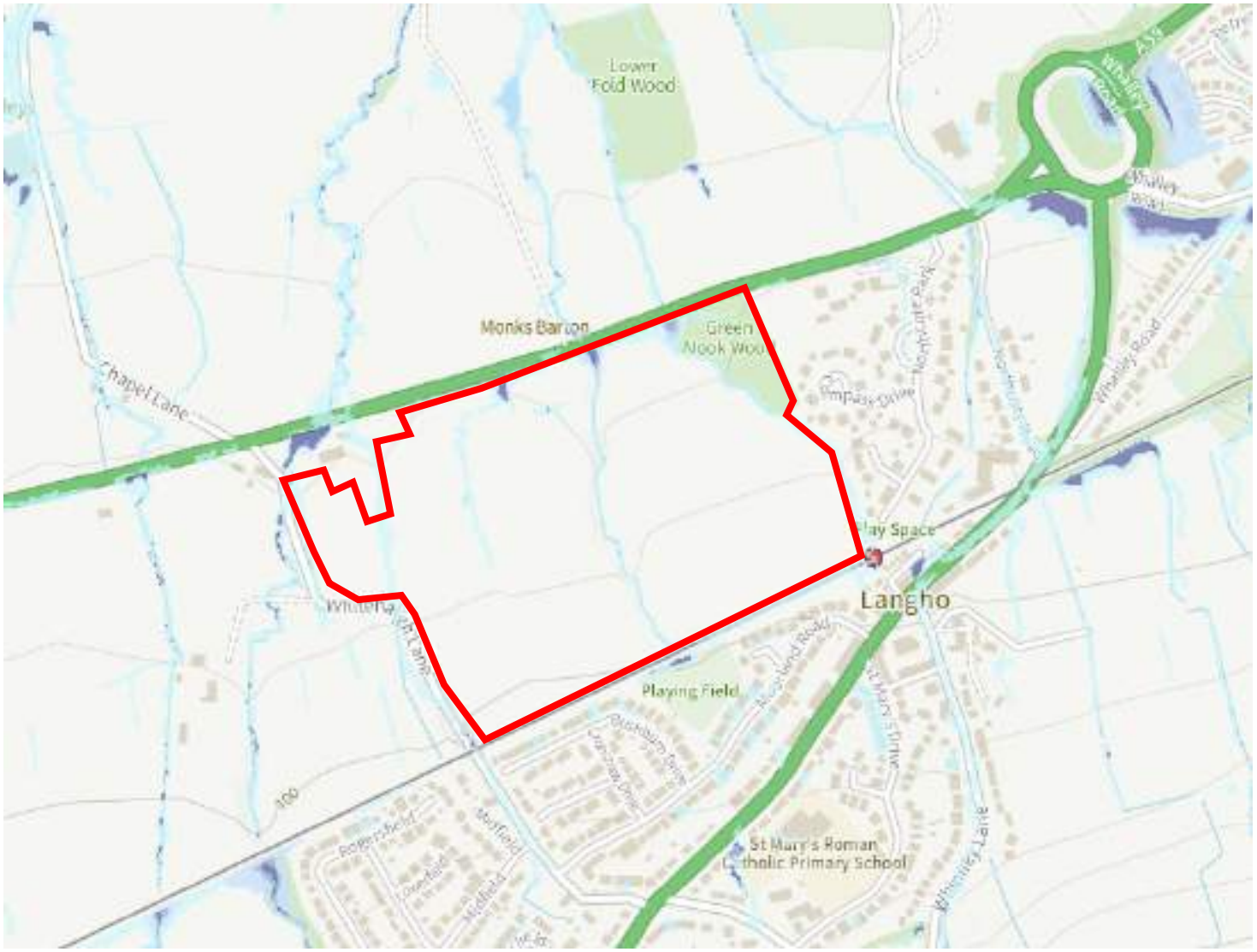
Extent

- High chance
  More than 3.3% chance each year
- Medium chance
  Between 1% and 3.3% chance each year
- Low chance
  Between 0.1% and 1% chance each year

Date map saved:
12/02/2025


Surface water map
Yearly chance of flooding between 2040 and 2060
Extent
Depth
High chance
More than 3.3% chance each year
Medium chance
Between 1% and 3.3% chance each year
Low chance
Between 0.1% and 1% chance each year
Very low chance
Less than 0.1% chance each year
Up to 20cm
(8in)
Date map saved:
12/02/2025
Monks Barton
Green Nook Wood
Chapel Lane
Northcote Park
Northcote Road
Play Space
Langho
Whitehall Lane
Playing Field
Moorland Road
St Mary's Drive
Bushburn Drive
Cronshaw Drive
Rogersfield
Lowerfield
Midfield
St Mary's Roman Catholic Primary School
Whalley Lane
100


Surface water map
Yearly chance of flooding between 2040 and 2060
Extent
Depth
High chance
More than 3.3% chance each year
Medium chance
Between 1% and 3.3% chance each year
Low chance
Between 0.1% and 1% chance each year
Very low chance
Less than 0.1% chance each year
Up to 30cm
(11)
Date map saved:
12/02/2025
Lower Fold Wood
Monks Barton
Green Nook Wood
Chapel Lane
Whalley Road
Northcote Park
Northcote Road
Compass Drive
Play Space
Langho
Playing Field
Moorland Road
St Mary's Drive
Bushburn Drive
Cronshaw Drive
Rogersfield
Midfield
Lowerfield
St Mary's Roman Catholic Primary School
Whitehough Lane
100



Surface water map

Yearly chance of flooding between 2040 and 2060

- ○ Extent
- ◉ Depth

- **High chance**
  More than 3.3% chance each year
- **Medium chance**
  Between 1% and 3.3% chance each year
- **Low chance**
  Between 0.1% and 1% chance each year
- **Very low chance**
  Less than 0.1% chance each year

◉ **Up to 60cm**
(2ft)

Date map saved:
12/02/2025

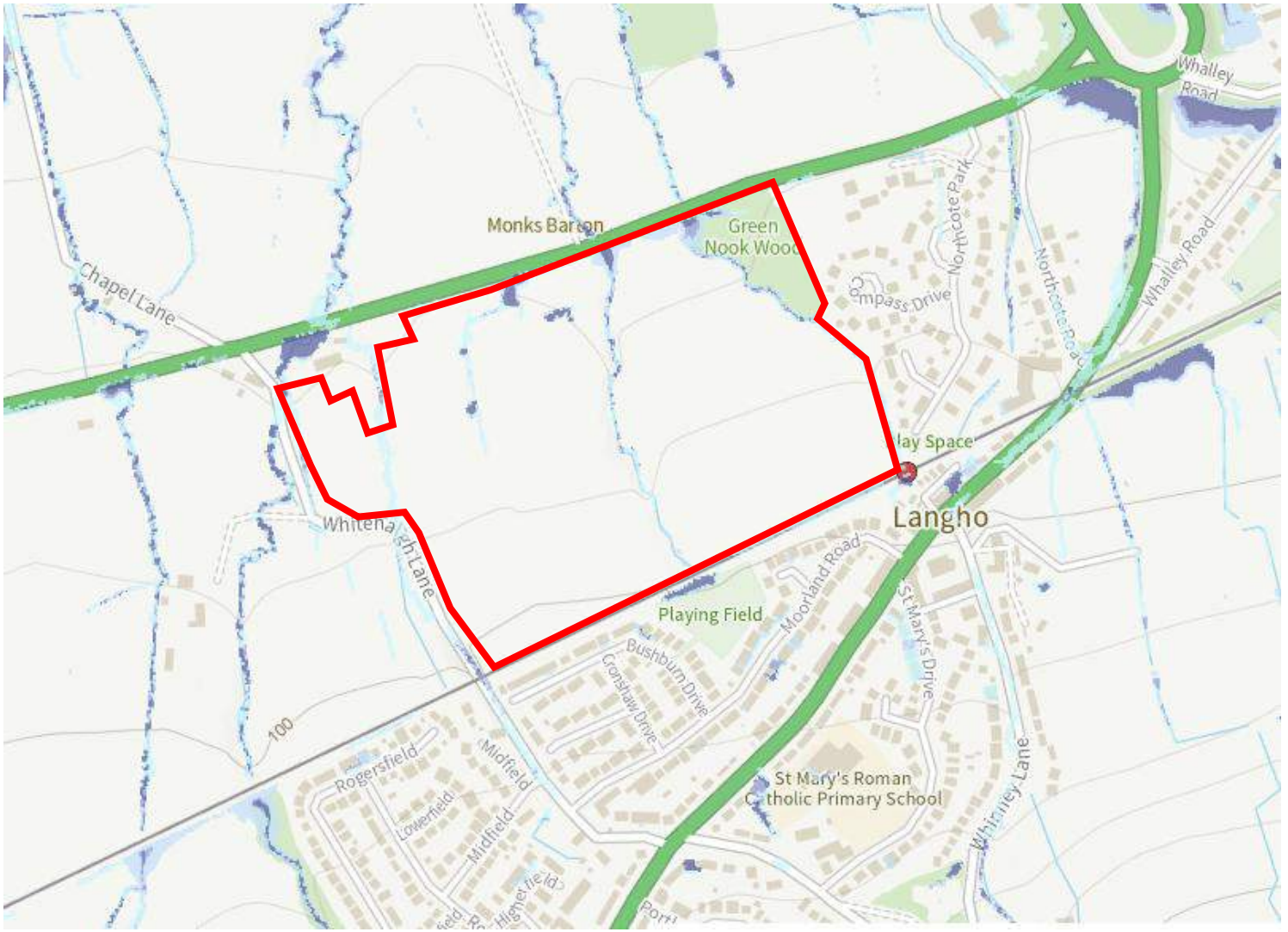
Surface water map

Yearly chance of flooding

Extent

- High chance
  More than 3.3% chance each year
- Medium chance
  Between 1% and 3.3% chance each year
- Low chance
  Between 0.1% and 1% chance each year

Date map saved:
12/02/2025



Surface water map

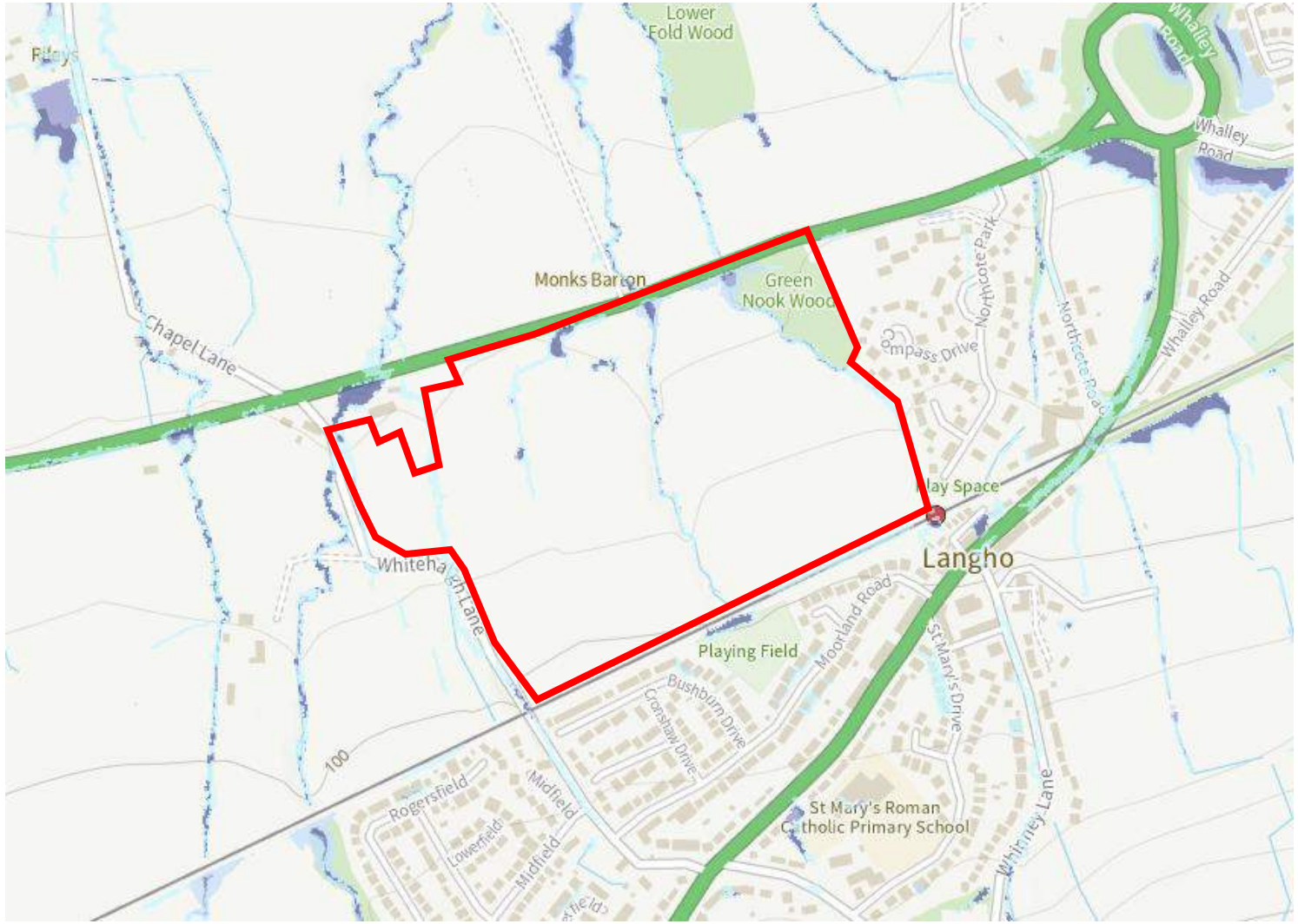
Yearly chance of flooding

- ○ Extent
- ◉ Depth

- High chance
  More than 3.3% chance each year
- Medium chance
  Between 1% and 3.3% chance each year
- Low chance
  Between 0.1% and 1% chance each year
- Very low chance
  Less than 0.1% chance each year

◉ **Up to 20cm**
(8in)

Date map saved:
12/02/2025



Surface water map

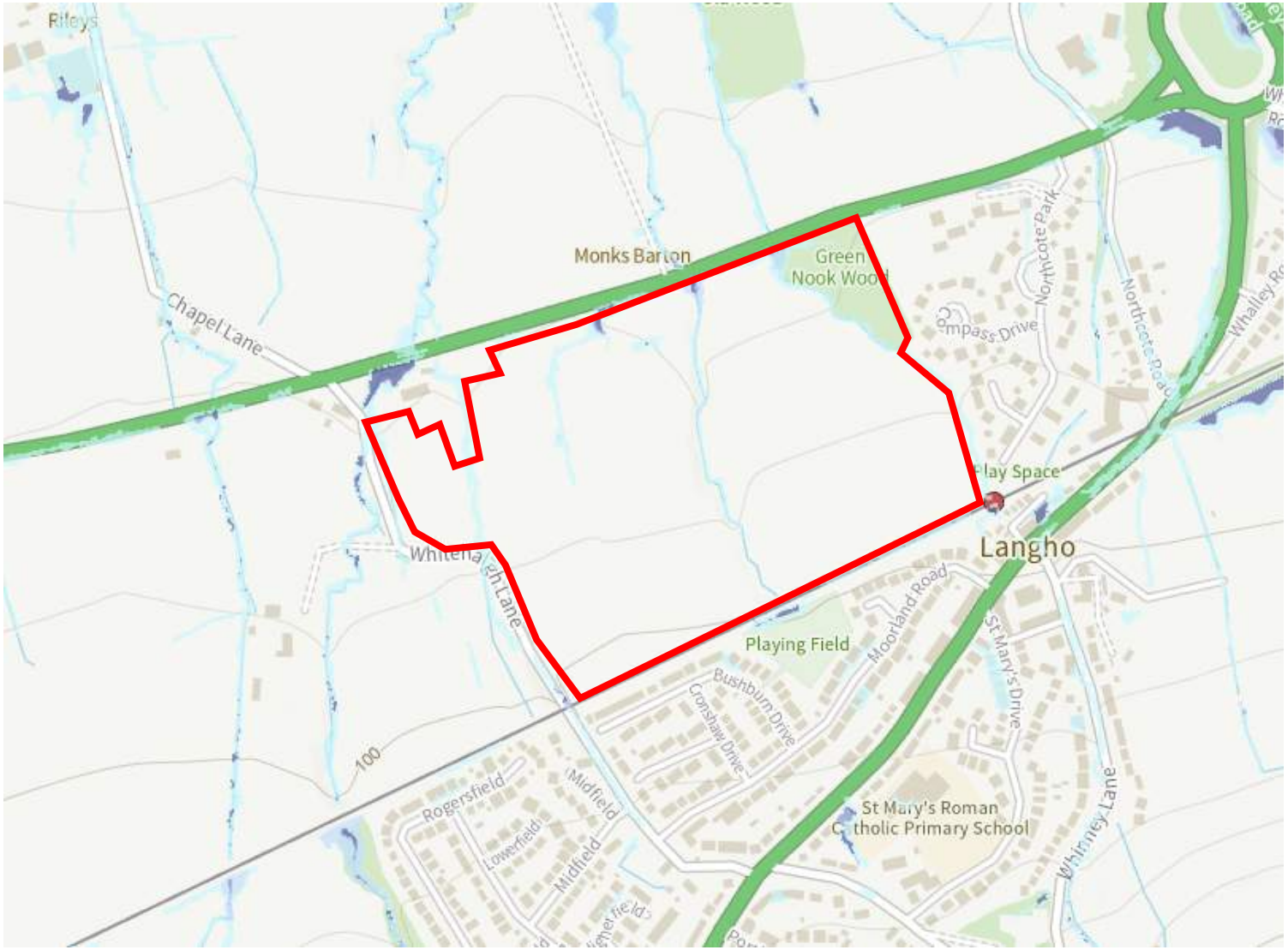
Yearly chance of flooding

- ○ Extent
- ◉ Depth

- High chance
  More than 3.3% chance each year
- Medium chance
  Between 1% and 3.3% chance each year
- Low chance
  Between 0.1% and 1% chance each year
- Very low chance
  Less than 0.1% chance each year

◉ **Up to 30cm**
(11)

Date map saved:
12/02/2025



Surface water map

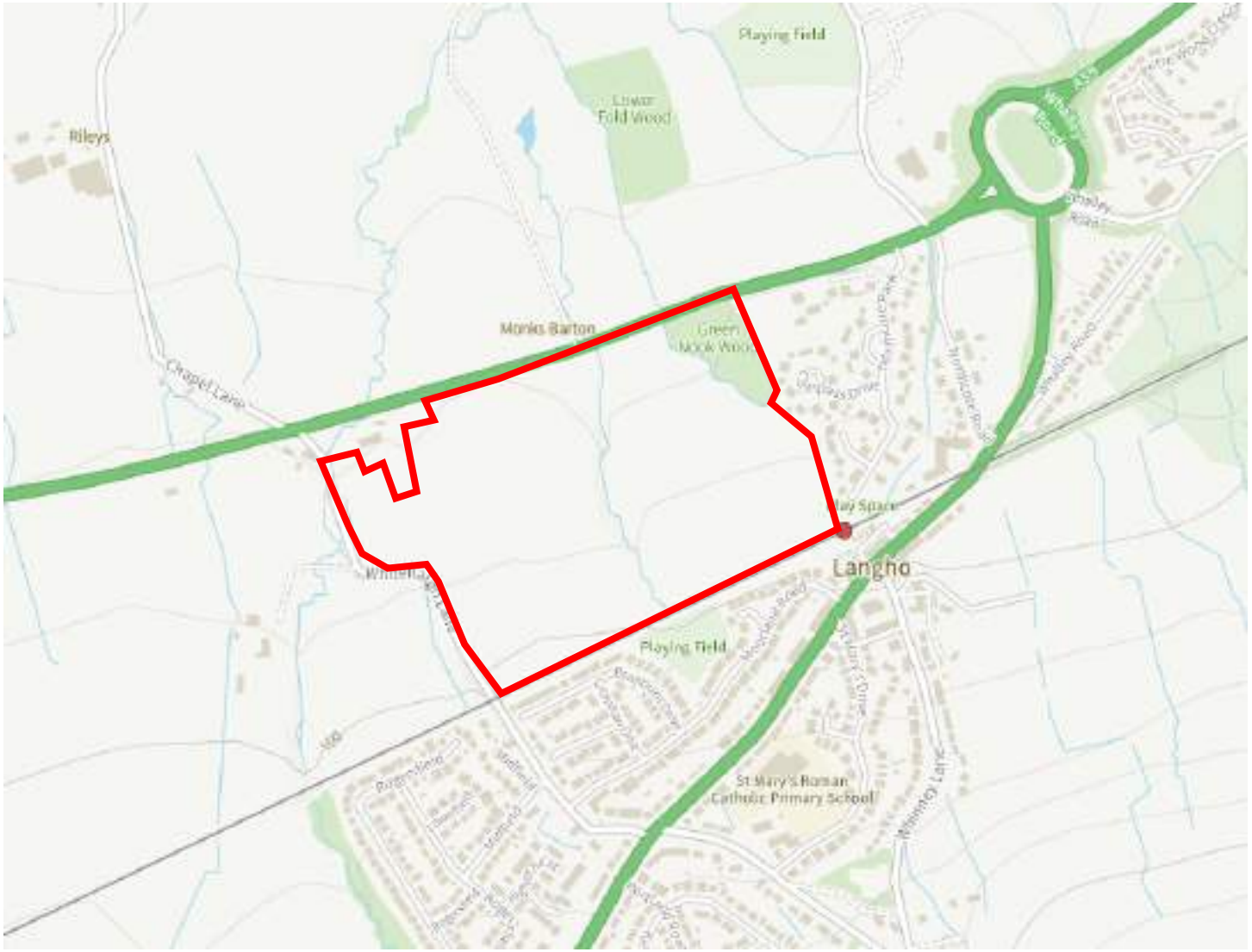
Yearly chance of flooding

- ○ Extent
- ◉ Depth

- High chance
  More than 3.3% chance each year
- Medium chance
  Between 1% and 3.3% chance each year
- Low chance
  Between 0.1% and 1% chance each year
- Very low chance
  Less than 0.1% chance each year

◉ **Up to 60cm**
(2ft)

Date map saved:
12/02/2025



Reservoirs

- Extent
- When river levels are normal
- When there is also flooding from rivers

Date map saved:
12/02/2025

Historic flood map

Historic flood extent

Date map saved:
24/02/2025

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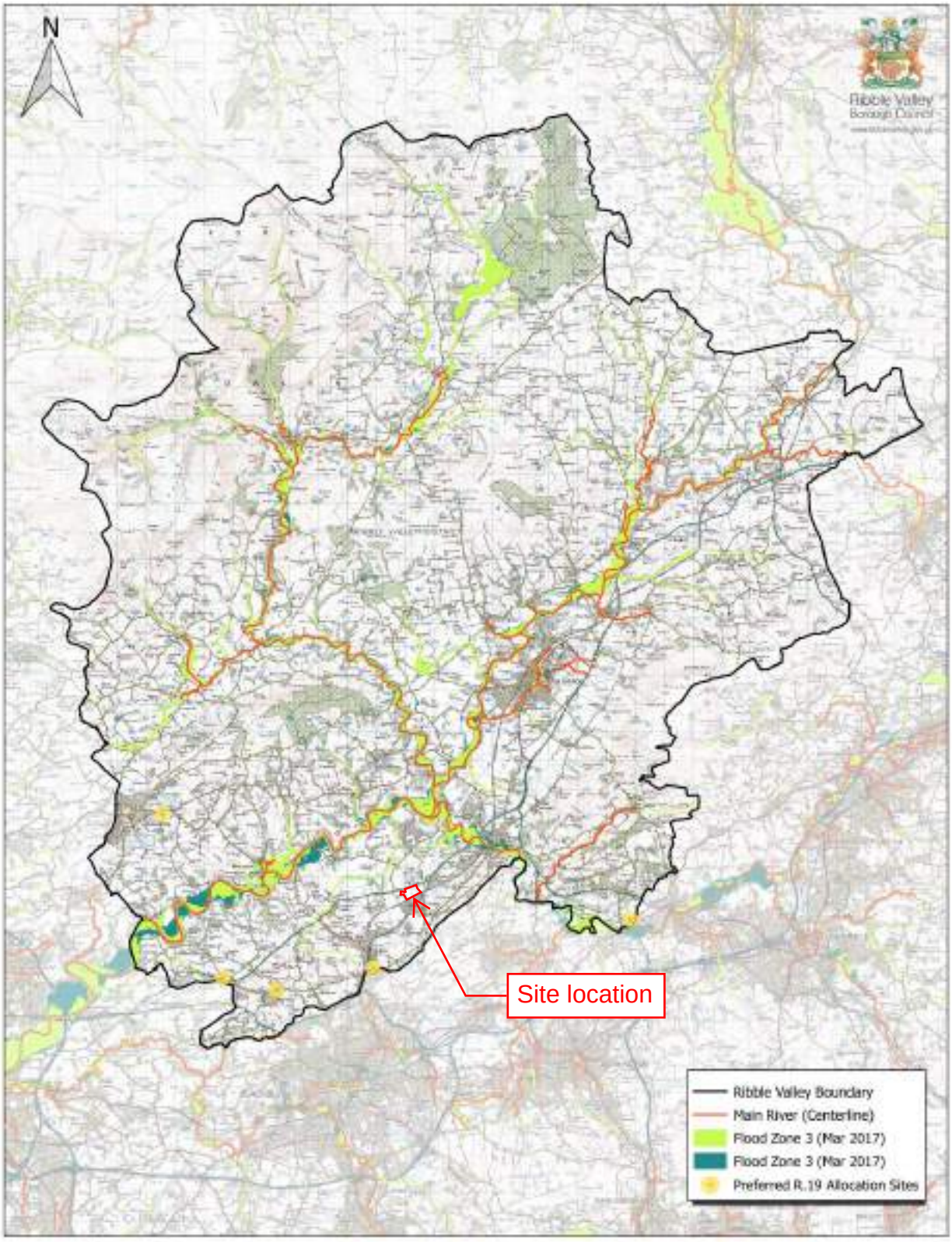
APPENDIX 5



Ribble Valley Strategic Flood Risk Assessment (Level 1)

Scale: 1:115,000
Date: 25 Apr 2017

Eastwood
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APPENDIX 6

The position of the underground apparatus shown on this plan is approximate only and is given in accordance with the best information currently available. United Utilities Water will not accept liability for any loss or damage caused by the actual position being different from those shown.

Refno	Cover	Func	Invert	Size x	Size y	Shape	Matl	Length	Grad
9906	110.43	SW	109.5	150			VC	28.79079	1 in 19
9906	110.43	SW	109.5	150			VC	28.79079	1 in 19
9906	110.43	SW	109.5	150			VC	28.79079	1 in 19
8001	106.65	SW	104.35	225			CO	3.807072	1 in 14
8001	106.65	SW	104.35	225			CO	3.807072	1 in 14
8901		SW		100			VC	10.26985	
8901		SW		100			VC	10.26985	
0000	104.39	FO	100.57	225			VC	23.62864	
0000	104.39	FO	100.57	225			VC	23.62864	
0011		FO	0	150			VC	22.71202	
0011		FO	0	150			VC	22.71202	
0011		FO	0	150			VC	22.71202	
0106		FO	0	225			VC	14.95483	
0106		FO	0	225			VC	14.95483	
9912		FO		100			VC	9.303029	
9912		FO		100			VC	9.303029	
9912		FO		100			VC	9.303029	
0009		FO	0	150			VC	30.13442	
0009		FO	0	150			VC	30.13442	
0009		FO	0	150			VC	30.13442	
0010		SW	0	150			VC	13.31877	
0010		SW	0	150			VC	13.31877	
0010		SW	0	150			VC	13.31877	
0105		SW	0	300			VC	11.46231	
0105		SW	0	300			VC	11.46231	
9902	111.62	FO	110.05	150			VC	52.23259	1 in 16
9902	111.62	FO	110.05	150			VC	52.23259	1 in 16
9902	111.62	FO	110.05	150			VC	52.23259	1 in 16
9900	114.19	FO	112.31	150			VC	66.47861	1 in 15
0004	109.42	SW	107.27	150			VC	30.10279	
0004	109.42	SW	107.27	150			VC	30.10279	
0004	109.42	SW	107.27	150			VC	30.10279	
0104	96.79	FO	95.64	225			VC	50.33454	1 in 252
0104	96.79	FO	95.64	225			VC	50.33454	1 in 252
0900	115.17	FO	113.5	150			VC	51.05569	1 in 15
0103	98.11	FO	96.36	225			VC	69.15684	1 in 100
0107		FO	0	225			VC	10.02119	
0107		FO	0	225			VC	10.02119	
0902	115.15	SW	113.12	225			VC	26.88227	1 in 15
0003	104.35	SW	101.96	300			VC	34.83129	104.35
0003	104.35	SW	101.96	300			VC	34.83129	
9903	114.42	SW	112.27	225			VC	36.99326	1 in 16
0001	109.41	FO	107.21	150			VC	31.36057	
9904	109.54	SW	107.63	225			CO	45.46642	1 in 14
9904	109.54	SW	107.63	225			CO	45.46642	1 in 14
9007		SW		0			VC	10.93256	
9007		SW		0			VC	10.93256	
0007	109.85	SW	107.93	150			VC	21.12019	1 in 35
0007	109.85	SW	107.93	150			VC	21.12019	1 in 35
0007	109.85	SW	107.93	150			VC	21.12019	1 in 35
0108		SW	0	650			MAR	19.3161	
9905	111.52	SW	109.56	225			CO	23.35217	1 in 15
9905	111.52	SW	109.56	225			CO	23.35217	1 in 15
9905	111.52	SW	109.56	225			CO	23.35217	1 in 15
9002	104.98	FO	101.42	150			VC	26.06696	1 in 32
9002	104.98	FO	101.42	150			VC	26.06696	1 in 32
9002	104.98	FO	101.42	150			VC	26.06696	1 in 32
0006	109.81	FO	107.81	150			VC	18.97182	1 in 37
0006	109.81	FO	107.81	150			VC	18.97182	1 in 37
0006	109.81	FO	107.81	150			VC	18.97182	1 in 37
0008		SW	0	150			VC	34.40472	
0008		SW	0	150			VC	34.40472	
0008		SW	0	150			VC	34.40472	
9901	109.67	FO	107.91	150			VC	49.84311	
9901	109.67	FO	107.91	150			VC	49.84311	
9001	105.67	FO	103.77	150			VC	64.64919	1 in 29
9001	105.67	FO	103.77	150			VC	64.64919	1 in 29
9005	105.06	SW	102.68	225			VC	23.18766	1 in 37
9005	105.06	SW	102.68	225			VC	23.18766	1 in 37
8000	106.49	FO	104.34	150			VC	58.6549	1 in 103
8000	106.49	FO	104.34	150			VC	58.6549	1 in 103
9000	108.41	FO	106.72	150			VC	40.08686	
9000	108.41	FO	106.72	150			VC	40.08686	
9004	105.66	SW	104.05	225			VC	66.06764	1 in 50
9004	105.66	SW	104.05	225			VC	66.06764	1 in 50
9016		FO		100			VC	21.96757	
9016		FO		100			VC	21.96757	
9003	108.32	SW	106.51	225			VC	46.25089	1 in 19
9003	108.32	SW	106.51	225			VC	46.25089	1 in 19

Refno	Cover	Func	Invert	Size x	Size y	Shape	Matl	Length	Grad

LEGEND

Abandoned / Foul / Surface Water / Combined

- Public Sewer
- Private Sewer
- Section 104
- Rising Main
- Sludge Main
- Overflow
- Water Course
- Highway Drain

All point assets follow the standard colour convention:
red - combined blue - surface water
brown - foul purple - overflow

- Manhole
- Head of System
- Extent of Survey
- Rodding Eye
- Inlet
- Discharge Point
- Vortex
- Penstock
- Washout Chamber
- Valve
- Air Valve
- Non Return Valve
- Soakaway
- Gully
- Cascade
- Flow Meter
- Hatch Box
- Oil Interceptor
- Summit
- Drop Shaft
- Orifice Plate
- Side Entry Manhole
- Outfall
- Screen Chamber
- Inspection Chamber
- Bifurcation Chamber
- Lamp Hole
- T Junction / Saddle
- Catchpit
- Valve Chamber
- Vent Column
- Vortex Chamber
- Penstock Chamber
- Network Storage Tank
- Sewer Overflow
- Ww Treatment Works
- Ww Pumping Station
- Septic Tank
- Control Kiosk
- Change of Characteristic

MANHOLE FUNCTION

FO	Foul
SW	Surface Water
CO	Combined
OV	Overflow

SEWER SHAPE

CI	Circular	TR	Trapezoidal
EG	Egg	AR	Arch
OV	Oval	BA	Barrel
FT	Flat Top	HO	HorseShoe
RE	Rectangular	UN	Unspecified
SQ	Square		

SEWER MATERIAL

AC	Asbestos Cement
BR	Brick
PE	Polyethylene
RP	Reinforced Plastic Matrix
CO	Concrete
CSB	Concrete Segment Bolted
CSU	Concrete Segment Unbolted
CC	Concrete Box Culverted
PSC	Plastic / Steel Composite
GRC	Glass Reinforced Plastic
DI	Ductile Iron
PVC	Polyvinyl Chloride
CI	Cast Iron
SI	Spun Iron
ST	Steel
VC	Vitrified Clay
PP	Polypropylene
PF	Pitch Fibre
MAC	Masonry, Coursed
MAR	Masonry, Random
U	Unspecified

Address or Site Reference:

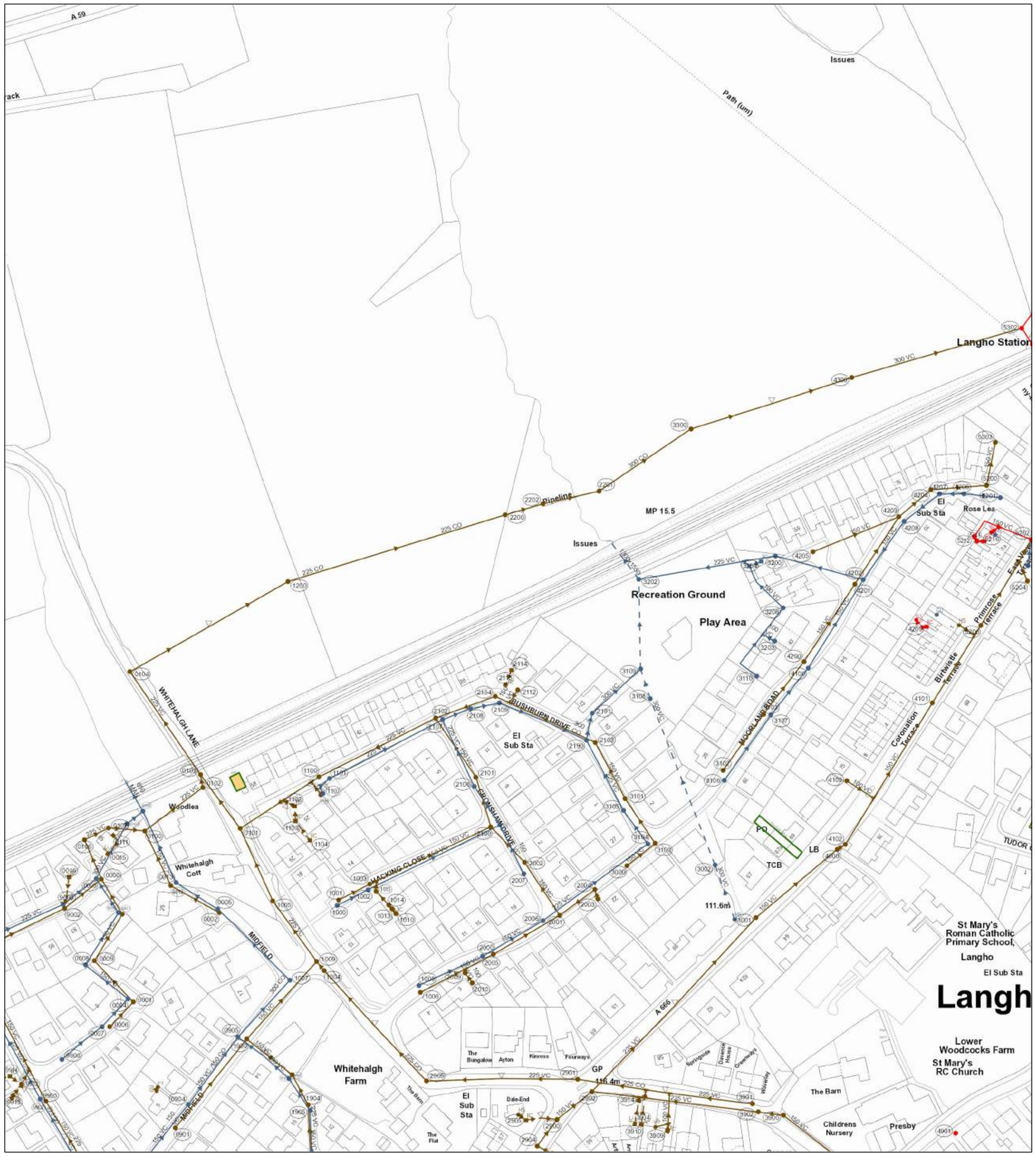
44714,

OS sheet Number: SD6934SE
Scale: 1:1250 **Date:** 06/12/2019
Nodes: 79
Sheet: 3 of 7

Printed by: Property Searches

SEWER RECORDS

United Utilities — helping life flow smoothly



The position of the underground apparatus shown on this plan is approximate only and is given in accordance with the best information currently available. United Utilities Water will not accept liability for any loss or damage caused by the actual position being different from those shown.

Refno	Cover	Func	Invert	Size x	Size y	Shape	Matl	Length	Grad
3102	105.55	FO	103.64	150			VC	38.3317	1 in 25
2001	109.75	FO	107.84	150			VC	35.23737	1 in 22
0005	106.92	SW	105.31	300			CO	27.27949	
0012		FO	0	150			VC	33.69905	
2904		FO	0	150			VC	18.57603	
1904		FO	0	150			VC	18.8632	
0013		SW	0	300			CO	43.70781	
0009		FO	0	150			VC	30.13442	
0009		FO	0	150			VC	30.13442	
0009		FO	0	150			VC	30.13442	
4200	103.48	FO	101.5	150			VC	51.37227	1 in 89
0010		SW	0	150			VC	13.31877	
0010		SW	0	150			VC	13.31877	
0010		SW	0	150			VC	13.31877	
2900	117.62	FO	115.55	150			VC	24.70208	
3002		SW		300			VC	99.17101	
2000	111.06	FO	108.85	150			VC	42.67538	1 in 45
1001	108.87	FO	107.52	150			VC	19.28566	1 in 43
5204	102.22	FO	100.21	150			VC	11.60845	
5204	102.22	FO	100.21	150			VC	11.60845	
0901	113.83	FO	111.73	150			VC	63.11325	1 in 32
0103	98.11	FO	96.36	225			VC	69.15684	1 in 100
2010		FO		100			VC	6.872562	
3202		SW		1300				25.83201	
0902	115.15	SW	113.12	225			VC	26.88227	1 in 15
5200	100.25	FO	98.55	150			VC	24.28536	
5200	100.25	FO	98.55	150			VC	24.28536	
1100	104.64	FO	100.54	225			VC	52.13778	1 in 2607
5206	103.82	FO	0	150			VC	41.0225	
5206	103.82	FO	0	150			VC	41.0225	
1005	106.87	FO	104.92	225			VC	43.96923	1 in 10
4206	100.28	SW	99.16	150			VC	13.5803	1 in 104
4206	100.28	SW	99.16	150			VC	13.5803	1 in 104
2004	108.83	FO	108.06	150			VC	24.15776	1 in 151
0007	109.85	SW	107.93	150			VC	21.12019	1 in 35
0007	109.85	SW	107.93	150			VC	21.12019	1 in 35
0007	109.85	SW	107.93	150			VC	21.12019	1 in 35
3203		SW		100			VC	7.579982	
2102	103.24	FO	100.89	225			VC	72.50292	1 in 259
0108		SW	0	650			MAR	19.3161	
2201	95.82	FO	94.19	300			CO	61.58193	1 in 181
9002	104.98	FO	101.42	150			VC	26.06696	1 in 32
9002	104.98	FO	101.42	150			VC	26.06696	1 in 32
9002	104.98	FO	101.42	150			VC	26.06696	1 in 32
3001	112.18	FO	110.05	150			VC	58.92071	1 in 21
3901	116.63	FO	114.41	225			VC	48.75964	1 in 69
1003	108.53	FO	107.04	150			VC	74.27203	1 in 26
3902	116.48	FO	114.55	225			VC	92.86987	1 in 90
0008		SW	0	150			VC	34.40472	
0008		SW	0	150			VC	34.40472	
0008		SW	0	150			VC	34.40472	
4300	96.54	FO	93.59	300			VC	98.18643	1 in 118
5205	101.86	SW	101.06	150			VC	14.60349	1 in 11
5205	101.86	SW	101.06	150			VC	14.60349	1 in 11
9906	110.43	SW	109.5	150			VC	28.79079	1 in 19
9906	110.43	SW	109.5	150			VC	28.79079	1 in 19
9906	110.43	SW	109.5	150			VC	28.79079	1 in 19
3107	104.36	SW	0	150			VC	33.39645	
1013		FO		100			VC	3.212783	
2104	102.63	FO	101.07	225			VC	35.279	1 in 220
3106	105.56	SW	0	150			VC	44.3218	
0002	106.9	FO	105.65	150			VC	30.67809	
3200	101.61	SW	98.17	225			VC	76.93964	
4201	102.84	FO	100.91	150			VC	44.59406	1 in 37
1004	109.4	FO	107.72	225			VC	6.536367	1 in 20
1007	109.82	SW	107.38	300			CO	56.19754	1 in 27
3900	116.1	FO	114.67	150			VC	14.18381	1 in 177
1006	111.76	FO	109.91	150			VC	45.67727	1 in 47
9902	111.62	FO	110.05	150			VC	52.23259	1 in 16
9902	111.62	FO	110.05	150			VC	52.23259	1 in 16
9902	111.62	FO	110.05	150			VC	52.23259	1 in 16
2009		FO		100			VC	2.336993	
2112		FO		150			VC	8.620085	
1000	108.9	SW	107.09	150			VC	19.21802	1 in 41
0904	113.44	SW	110.84	150			VC	23.5725	1 in 30
2007	108.13	SW	106.06	150			VC	30.12563	1 in 15
3105	105.95	SW	103.29	225			VC	43.98835	1 in 57
0003	104.35	SW	101.96	300			VC	34.83129	
0003	104.35	SW	101.96	300			VC	34.83129	
0001	109.41	FO	107.21	150			VC	31.36057	
2901	115.81	FO	112.95	225			VC	42.15162	1 in 50
2901	104.39	FO	99.2	225			VC	40.17606	1 in 23
2005	111.27	SW	108.37	150			VC	38.90879	1 in 37
1108		FO		150			VC	8.89665	
2202	95.26	FO	94.29	300			CO	31.76491	
1107		SW		150			VC	11.3114	
1009	109.18	FO	107.33	225			VC	41.56939	1 in 18
2100	106.82	FO	104.12	150			VC	28.73287	
1008	111.83	SW	109.46	150			VC	38.82469	1 in 36
3110		SW		100			VC	50.59472	
0101	102.36	FO	100.49	225			VC	37.14573	1 in 9
4204	100.77	FO	99.03	150			VC	30.95474	1 in 67
4204	100.77	FO	99.03	150			VC	30.95474	1 in 67
0000	104.39	FO	100.57	225			VC	23.62864	
0000	104.39	FO	100.57	225			VC	23.62864	
0905	111.65	SW	109.35	300			CO	42.69387	1 in 23
5201	100.54	SW	99.28	150			VC	20.22039	1 in 225
5201	100.54	SW	99.28	150			VC	20.22039	1 in 225
9912		FO		100			VC	9.303029	
9912		FO		100			VC	9.303029	
9912		FO		100			VC	9.303029	
4101	106.25	FO	104.08	150			VC	50.6467	1 in 21
4101	106.25	FO	104.08	150			VC	50.6467	1 in 21
1002	108.41	SW	106.6	150			VC	81.44424	1 in 48
0105		SW	0	300			VC	11.46231	
0105		SW	0	300			VC	11.46231	
0004	109.42	SW	107.27	150			VC	30.10279	
0004	109.42	SW	107.27	150			VC	30.10279	
0004	109.42	SW	107.27	150			VC	30.10279	
0104	96.79	FO	95.64	225			VC	50.33454	1 in 252
0104	96.79	FO	95.64	225			VC	50.33454	1 in 252
4202	102.71	SW	98.51	225			VC	50.40372	1 in 163
3100	107.54	FO	105.13	150			VC	29.92886	1 in 12
3103	104.49	FO	102.1	150			VC	36.89299	1 in 66
1903		FO	0	150			VC	32.06831	
4103		FO		100			VC	17.84291	
1101	104.57	SW	102.9	225			VC	70.70905	1 in 71
4102	109.3	FO	107.48	150			VC	92.18355	1 in 30
4100	103.39	SW	101.85	150			VC	57.82398	1 in 18
5202	101.64	CO	99.48	150			VC	23.29617	1 in 22
5202	101.64	CO	99.48	150			VC	23.29617	1 in 22
2200	95.86	FO	94.76	300			CO	21.7912	1 in 46
5211		CO		150			VC	2.989794	
5211		CO		150			VC	2.989794	
1905	114.01	SW	112.32	225			VC	21.09275	
1015		FO		100			VC	5.623276	
2105	106.71	SW	103.98	150			VC	25.6411	1 in 19
5302	93.85	CO	92.71	300			VC	101.8201	1 in 35
5302	93.85	CO	92.71	300			VC	101.8201	1 in 35
3101	105.73	FO	102.53	150			VC	35.30177	1 in 56
4205	101.84	FO	100.14	150			VC	51.45163	1 in 143
2191	103.6	SW	101.26	300			VC	36.37677	
1200	97.59	FO	95.21	225			CO	126.0018	1 in 360
2003	109.05	FO	108.31	150			VC	5.518061	1 in 29
1900	111.59	FO	109.76	150			VC	57.88701	1 in 25
2101		FO	0	150			VC	39.68903	
2002	107.97	FO	106.21	150			VC	27.23432	1 in 33
3208		SW		100			VC	34.156	
0011		FO	0	150			VC	22.71202	
0011		FO	0	150			VC	22.71202	
0011		FO	0	150			VC	22.71202	
2902	115.79	FO	0	225			VC	66.08918	
0106		FO	0	225			VC	14.95483	
0106		FO	0	225			VC	14.95483	
3104	107.31	SW	104.35	225			VC	22.95855	1 in 22
4207	100.68	SW	99	150			VC	24.78779	1 in 496
4207	100.68	SW	99	150			VC	24.78779	1 in 496
2107	103.47	SW	101.89	225			VC	16.55482	1 in 50
3108		SW		300			VC	17.33594	
0900	115.17	FO	113.5	150			VC	51.05569	1 in 15
0107		FO	0	225			VC	10.02119	
0107		FO	0	225			VC	10.02119	
2109	102.57	SW	101.29	225			VC	26.94831	1 in 128
2905	113.77	FO	111.1	225			CO	41.70231	1 in 24
1014		FO		100			VC	10.41596	
2103	103.9	FO	101.34	225			VC	61.00719	1 in 265
2108	102.89	SW	101.54	225			VC	16.42279	1 in 75
0102	98.71	FO	97.44	225			VC	7.199035	1 in 12
4000	109.39	FO	107.19	150			VC	5.368091	
3109		SW		300			VC	49.6987	
3300	96.18	FO	93.83	300			CO	46.97535	1 in 427
3000	107.96	FO	106.28	150			VC	19.87984	1 in 18
4203	101.5	FO	99.65	150			VC	23.3009	1 in 41
9905	111.52	SW	109.56	225			CO	23.35217	1 in 15
9905	111.52	SW	109.56	225			CO	23.35217	1 in 15
9905	111.52	SW	109.56	225			CO	23.35217	1 in 15
2190	104.19	SW	100.99	300			CO	8.726953	
4208	101.63	SW	98.87	150			VC	39.57629	1 in 128
2006	109.94	SW	107.29	225			VC	72.02003	1 in 44
0006	109.81	FO	107.81	150			VC	18.97182	1 in 37
0006	109.81	FO	107.81	150			VC	18.97182	1 in 37
0006	109.81	FO	107.81	150			VC	18.97182	1 in 37
1902		SW	0	300			VC	19.32139	
2106	105.58	SW	102.59	225			VC	41.01265	1 in 60
5212		CO		150			VC	38.28185	
5212		CO		150			VC	38.28185	
9004	105.66	SW	104.05	225			VC	66.06764	1 in 50
9004	105.66	SW	104.05	225			VC	66.06764	1 in 50
9001	105.67	FO	103.77	150			VC	64.64919	1 in 29
9001	105.67	FO	103.77	150			VC	64.64919	1 in 29
9005	105.06	SW	102.68	225			VC	23.18766	1 in 37
9005	105.06	SW	102.68	225			VC	23.18766	1 in 37

Refno	Cover	Func	Invert	Size x	Size y	Shape	Matl	Length	Grad

LEGEND

Abandoned · Foul · Surface Water · Combined

- Public Sewer
- Private Sewer
- Section 104
- Rising Main
- Sludge Main
- Overflow
- Water Course
- Highway Drain

All point assets follow the standard colour convention:
red - combined · blue - surface water
brown - foul · purple - overflow

- Manhole
- Head of System
- Extent of Survey
- Rodding Eye
- Inlet
- Discharge Point
- Vortex
- Penstock
- Washout Chamber
- Valve
- Air Valve
- Non Return Valve
- Soakaway
- Gully
- Cascade
- Flow Meter
- Hatch Box
- Oil Interceptor
- Summit
- Drop Shaft
- Orifice Plate
- Side Entry Manhole
- Outfall
- Screen Chamber
- Inspection Chamber
- Bifurcation Chamber
- Lamp Hole
- T Junction / Saddle
- Catchpit
- Valve Chamber
- Vent Column
- Vortex Chamber
- Penstock Chamber
- Network Storage Tank
- Sewer Overflow
- Ww Treatment Works
- Ww Pumping Station
- Septic Tank
- Control Kiosk
- Change of Characteristic

MANHOLE FUNCTION

FO	Foul
SW	Surface Water
CO	Combined
OV	Overflow

SEWER SHAPE

CI	Circular	TR	Trapezoidal
EG	Egg	AR	Arch
OV	Oval	BA	Barrel
FT	Flat Top	HO	HorseShoe
RE	Rectangular	UN	Unspecified
SQ	Square		

SEWER MATERIAL

AC	Asbestos Cement
BR	Brick
PE	Polyethylene
RP	Reinforced Plastic Matrix
CO	Concrete
CSB	Concrete Segment Bolted
CSU	Concrete Segment Unbolted
CC	Concrete Box Culverted
PSC	Plastic / Steel Composite
GRC	Glass Reinforced Plastic
DI	Ductile Iron
PVC	Polyvinyl Chloride
CI	Cast Iron
SI	Spun Iron
ST	Steel
VC	Vitrified Clay
PP	Polypropylene
PF	Pitch Fibre
MAC	Masonry, Coursed
MAR	Masonry, Random
U	Unspecified

Address or Site Reference:

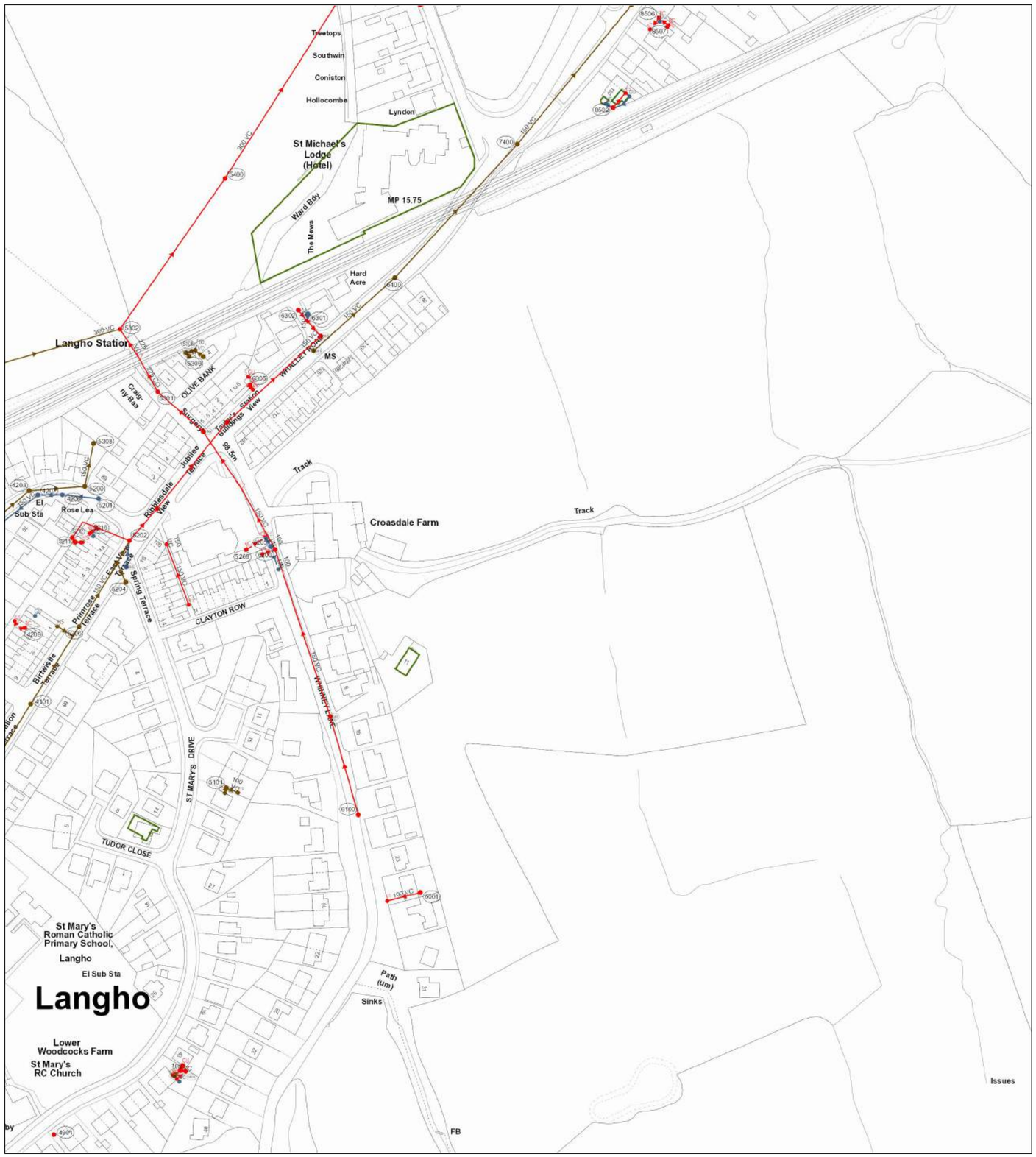
44714,

OS sheet Number: SD7034SW
Scale: 1:1250 **Date:** 06/12/2019
Nodes: 182
Sheet: 4 of 7

Printed by: Property Searches

SEWER RECORDS

United Utilities — helping life flow smoothly



The position of the underground apparatus shown on this plan is approximate only and is given in accordance with the best information currently available. United Utilities Water will not accept liability for any loss or damage caused by the actual position being different from those shown.

Refno	Cover	Func	Invert	Size x	Size y	Shape	Matl	Length	Grad
5902		CO		100			VC	3.134233	
4300	96.54	FO	93.59	300			VC	98.18643	1 in 118
5205	101.86	SW	101.06	150			VC	14.60349	1 in 11
5205	101.86	SW	101.06	150			VC	14.60349	1 in 11
5300	98.61	CO	94.36	225			CO	33.39001	1 in 71
4204	100.77	FO	99.03	150			VC	30.95474	1 in 67
4204	100.77	FO	99.03	150			VC	30.95474	1 in 67
5304	98.25	CO	0	150			VC	70.64705	
5201	100.54	SW	99.28	150			VC	20.22039	1 in 225
5201	100.54	SW	99.28	150			VC	20.22039	1 in 225
4101	106.25	FO	104.08	150			VC	50.6467	1 in 21
4101	106.25	FO	104.08	150			VC	50.6467	1 in 21
6101	106.37	CO	105.06	150			VC	97.76237	1 in 21
5101		FO		100			VC	7.336361	
4207	100.68	SW	99	150			VC	24.78779	1 in 496
4207	100.68	SW	99	150			VC	24.78779	1 in 496
5204	102.22	FO	100.21	150			VC	11.60845	
5204	102.22	FO	100.21	150			VC	11.60845	
5203	100.65	CO	98.42	150			VC	61.6866	
5400	91.26	CO	89.79	300			VC	117.3694	1 in 36
5400	91.26	CO	89.79	300			VC	117.3694	1 in 36
6205		SW		100			UN	13.54252	
5308		FO		100			PVC	5.159397	
6301	95.44	SW	94.12	150			VC	4.013191	
5200	100.25	FO	98.55	150			VC	24.28536	
5200	100.25	FO	98.55	150			VC	24.28536	
5206	103.82	FO	0	150			VC	41.0225	
5206	103.82	FO	0	150			VC	41.0225	
5301	96.94	CO	93.87	225			CO	20.39042	1 in 42
6400	91.81	FO	0	150			VC	100.5006	
6200	101.78	CO	100.35	150			VC	38.01911	1 in 12
6100	108.55	CO	107.13	150			VC	56.49229	1 in 28
4102	109.3	FO	107.48	150			VC	92.18355	1 in 30
6001		CO		100			VC	19.0008	
5202	101.64	CO	99.48	150			VC	23.29617	1 in 22
5202	101.64	CO	99.48	150			VC	23.29617	1 in 22
4206	100.28	SW	99.16	150			VC	13.5803	1 in 104
4206	100.28	SW	99.16	150			VC	13.5803	1 in 104
5211		CO		150			VC	2.989794	
5211		CO		150			VC	2.989794	
6300	95.4	FO	93.05	150			VC	60.53537	
8502		CO		100			PVC	10.55326	
8502		CO		100			PVC	10.55326	
6302	95.53	CO	93.97	150			VC	7.897525	
5302	93.85	CO	92.71	300			VC	101.8201	1 in 35
5302	93.85	CO	92.71	300			VC	101.8201	1 in 35
4203	101.5	FO	99.65	150			VC	23.3009	1 in 41
5306		FO		100			PVC	5.79951	
7400	88.4	FO	85.93	150			VC	99.85457	1 in 68
7400	88.4	FO	85.93	150			VC	99.85457	1 in 68
5212		CO		150			VC	38.28185	
5212		CO		150			VC	38.28185	

Refno	Cover	Func	Invert	Size x	Size y	Shape	Matl	Length	Grad

LEGEND

Abandoned / Foul / Surface Water / Combined

- Public Sewer
- Private Sewer
- Section 104
- Rising Main
- Sludge Main
- Overflow
- Water Course
- Highway Drain

All point assets follow the standard colour convention:
red - combined, blue - surface water, brown - foul, purple - overflow

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- Head of System
- Extent of Survey
- Rodding Eye
- Inlet
- Discharge Point
- Vortex
- Penstock
- Washout Chamber
- Valve
- Air Valve
- Non Return Valve
- Soakaway
- Gully
- Cascade
- Flow Meter
- Hatch Box
- Oil Interceptor
- Summit
- Drop Shaft
- Orifice Plate
- Side Entry Manhole
- Outfall
- Screen Chamber
- Inspection Chamber
- Bifurcation Chamber
- Lamp Hole
- T Junction / Saddle
- Catchpit
- Valve Chamber
- Vent Column
- Vortex Chamber
- Penstock Chamber
- Network Storage Tank
- Sewer Overflow
- Ww Treatment Works
- Ww Pumping Station
- Septic Tank
- Control Kiosk
- Change of Characteristic

MANHOLE FUNCTION

FO	Foul
SW	Surface Water
CO	Combined
OV	Overflow

SEWER SHAPE

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EG	Egg	AR	Arch
OV	Oval	BA	Barrel
FT	Flat Top	HO	HorseShoe
RE	Rectangular	UN	Unspecified
SQ	Square		

SEWER MATERIAL

AC	Asbestos Cement
BR	Brick
PE	Polyethylene
RP	Reinforced Plastic Matrix
CO	Concrete
CSB	Concrete Segment Bolted
CSU	Concrete Segment Unbolted
CC	Concrete Box Culverted
PSC	Plastic / Steel Composite
GRC	Glass Reinforced Plastic
DI	Ductile Iron
PVC	Polyvinyl Chloride
CI	Cast Iron
SI	Spun Iron
ST	Steel
VC	Vitrified Clay
PP	Polypropylene
PF	Pitch Fibre
MAC	Masonry, Coursed
MAR	Masonry, Random
U	Unspecified

Address or Site Reference:

44714,

OS sheet Number: SD7034SE
Scale: 1:1250 **Date:** 06/12/2019
Nodes: 52
Sheet: 2 of 7

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SEWER RECORDS

United Utilities — helping life flow smoothly

Eastwood
CONSULTING ENGINEERS

APPENDIX 7

EASTWOOD & PARTNERS (Consulting Engineers) Ltd.

Project:	**49343**	Sheet	1.00
location	**Longsight Road**	Job No.	49343
town	**Langho**	Date	04/02/2025
Subject:		Designed	JSS
	Surface Water Drainage	Checked	KBE
	Storage Estimates	Revision	B

Site Details :

Location : Longsight Road, Langho, West
Grid Ref : 370282E, 434509N

Total Site Area	**8.665**	ha
Deduct areas to soakaways	0.000	ha
Effective Drainage Area	**8.665**	ha

Total Impermeable	**2.052**	ha	24%
Allow for Urban Creep	**0.103**	ha	10% (10% of roof area only)
Total Impermeable	**2.154**	ha	

PIMP	24.9%	
PR	20.5	Equation 7.3
Cv	0.82	Equation 7.21
Default Cv	**1.00**	Designer to insert to override calculated Cv

Information From Wallingford Maps :

M5-60	**20.0**	mm
r	**0.30**	
SAAR	**1148**	mm
UCWI	120	(Fig. 9.7)
Soil Type	**4**	
SOIL	0.45	(Section 7.4)

Design Return Period **100** **Years**

Max. Branch Length	**100**	metres
Approx. Time of Flow	**1.7**	mins

Percentage Increase For Climate Change: **50%**

Details of Restricted Discharge :

Maximum Permitted Rate of Flow from the System		Litres/sec.ha
	18.3	Litres/sec
Assumed Average Flow as a Proportion (Estimate)	**85**	%
Average Rate of Flow	**15.6**	Litres/sec

Calculation of Critical Duration and Storage Volume Required :

Trial Durations (mins)	**670**	**720**	**740**	**760**	**780**	**800**	**820**
Average Point Intensity (mm/hr)	7.4	7.0	6.9	6.7	6.6	6.5	6.4
Volume of Run-off for the period = Area x Cv x i x D (m3)	1775.8	1809.3	1822.1	1834.7	1847.0	1859.0	1870.8
With climate change	2663.7	2713.9	2733.2	2752.0	2770.5	2788.5	2806.3
Volume of Out-flow for the period = Ave. flow x (D+Tf)(m3)	626.9	673.5	692.2	710.9	729.5	748.2	766.9
Storage Volume for this Duration (m3)	**2037**	**2040**	**2041**	**2041**	**2041**	**2040**	**2039**

Storage Volume Reqired for

100 Year Return Period = 2041 m^3

Is this the worst case (ie. Critical Duration)? 1 (1 = Yes, 0 = No)

EASTWOOD & PARTNERS (Consulting Engineers) Ltd.

Project:	**49343**	Sheet	1.00
location	**Longsight Road**	Job No.	49343
town	**Langho**	Date	04/02/2025
Subject:		Designed	JSS
	Surface Water Drainage	Checked	KBE
	Storage Estimates	Revision	B

Site Details :

Location : Longsight Road, Langho, West
Grid Ref : 370282E, 434509N

Total Site Area	**11.434**	ha
Deduct areas to soakaways	0.000	ha
Effective Drainage Area	**11.434**	ha

Total Impermeable	**3.064**	ha	27%
Allow for Urban Creep	**0.153**	ha	10% (10% of roof area only)
Total Impermeable	**3.217**	ha	

PIMP	28.1%	
PR	23.2	Equation 7.3
Cv	0.83	Equation 7.21
Default Cv	**1.00**	Designer to insert to override calculated Cv

Information From Wallingford Maps :

M5-60	**20.0**	mm
r	**0.30**	
SAAR	**1148**	mm
UCWI	120	(Fig. 9.7)
Soil Type	**4**	
SOIL	0.45	(Section 7.4)

Design Return Period **100** **Years**

Max. Branch Length	**543**	metres
Approx. Time of Flow	**9.1**	mins

Percentage Increase For Climate Change: **50%**

Details of Restricted Discharge :

Maximum Permitted Rate of Flow from the System		Litres/sec.ha
	33.7	Litres/sec
Assumed Average Flow as a Proportion (Estimate)	**85**	%
Average Rate of Flow	**28.6**	Litres/sec

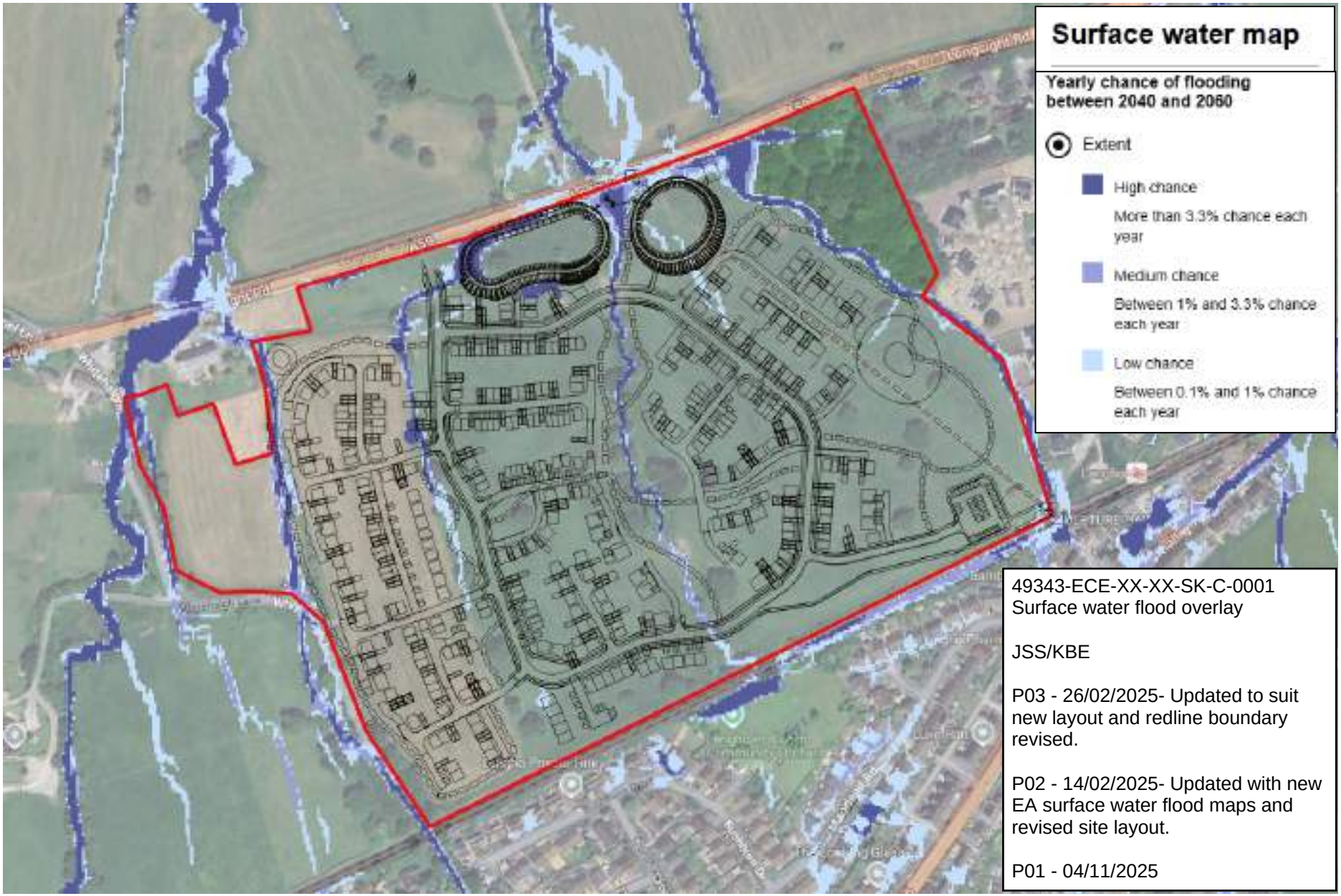
Calculation of Critical Duration and Storage Volume Required :

Trial Durations (mins)	**540**	**560**	**580**	**600**	**620**	**640**	**660**
Average Point Intensity (mm/hr)	8.7	8.4	8.2	8.0	7.8	7.6	7.5
Volume of Run-off for the period = Area x Cv x i x D (m3)	2506.6	2530.8	2554.2	2577.0	2599.2	2620.9	2641.9
With climate change	3760.0	3796.2	3831.3	3865.5	3898.8	3931.3	3962.9
Volume of Out-flow for the period = Ave. flow x (D+Tf)(m3)	943.7	978.0	1012.4	1046.8	1081.1	1115.5	1149.9
Storage Volume for this Duration (m3)	**2816**	**2818**	**2819**	**2819**	**2818**	**2816**	**2813**

Storage Volume Reqired for

100 Year Return Period = 2819 m^3

Is this the worst case (ie. Critical Duration)? 1 (1 = Yes, 0 = No)



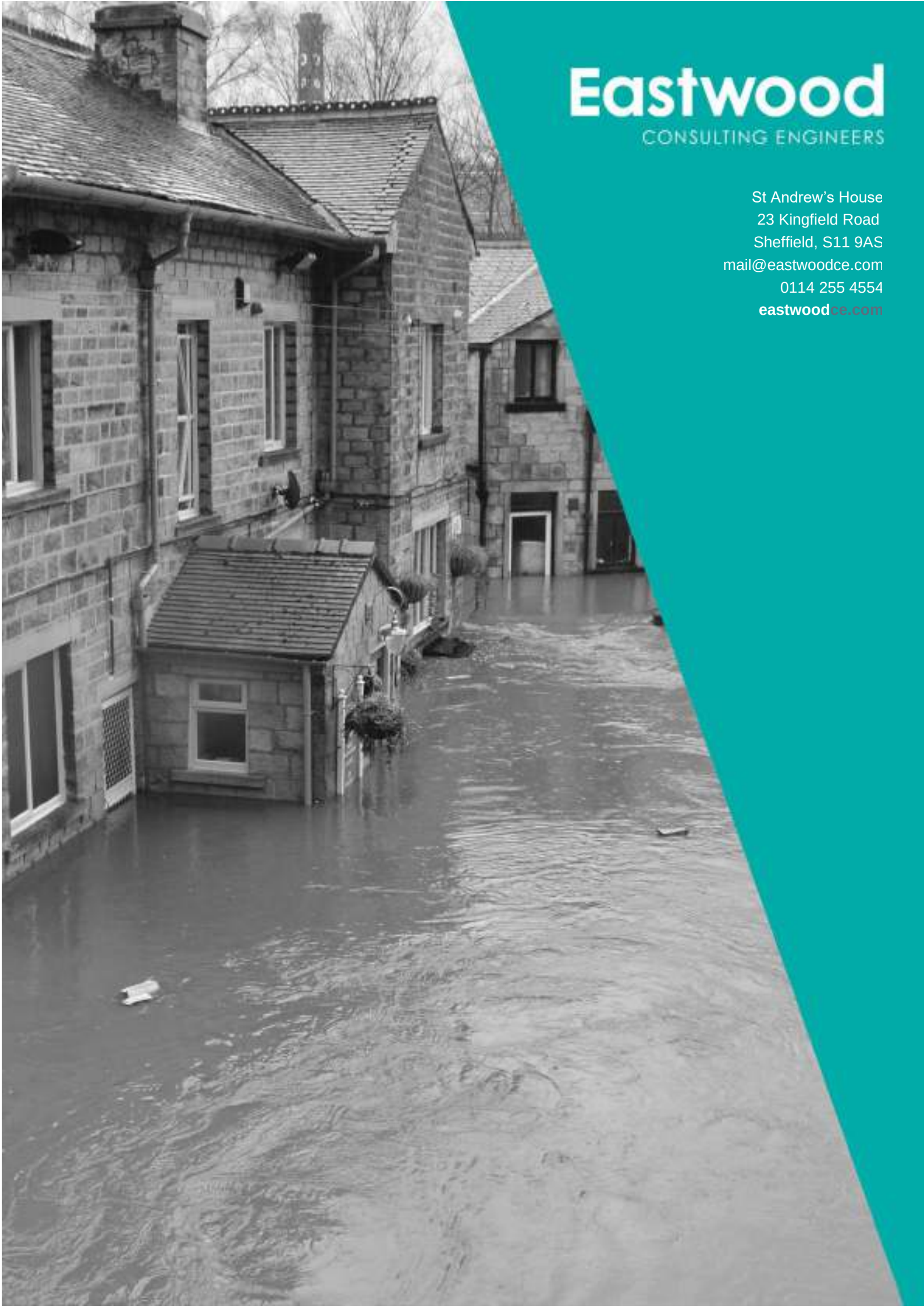
49343-ECE-XX-XX-SK-C-0001
Surface water flood overlay

JSS/KBE

P03 - 26/02/2025- Updated to suit new layout and redline boundary revised.

P02 - 14/02/2025- Updated with new EA surface water flood maps and revised site layout.

P01 - 04/11/2025



Eastwood

CONSULTING ENGINEERS

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