Peaks Nook, Carrington

Proposed Industrial Development

Flood Risk and Drainage Strategy Review

For: Peel Land & Property Group Management Ltd.

DRAFT

Environmental Geotechnical Highways Structural Civil

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By: NS

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1. INTRODUCTION

1.1 Integra Consulting has been commissioned by Peel Land & Property Group Management Ltd. to undertake a Flood Risk and Drainage Strategy Review for their site at Peaks Nook, Carrington. This document has been prepared to support the pre-application advice request in relation to the proposed industrial development of the site (refer to Appendix 8 for details).

1.2 The objective of the Flood Risk and Drainage Strategy Review is to identify potential flooding issues and any consequent implications on the proposed site development. The proposed drainage strategy for the development site is also considered.

1.3 This pre-application stage review has been undertaken in accordance with the pro-forma guidance contained in:

- Department for Communities and Local Government document 'National Planning Practice Guidance: Flood Risk and Coastal Change'

- Manchester City, Salford City and Trafford Councils Hybrid SFRA – Level 1 by JBA Consulting dated March 2011

- Manchester City, Salford City and Trafford Councils Hybrid SFRA – Level 2 by JBA Consulting dated March 2011

- DEFRA / Environment Agency publication SC030219 'Rainfall Runoff Management for Developments' dated October 2013.

1.4 To date, consultations have been undertaken with the Environment Agency (EA).

2. STANDARDS AND LIMITATIONS

This report has been prepared solely for use by Peel Land & Property Group Management Ltd.

It shall not be relied upon or transferred to any other party without the prior written authorisation of Integra Consulting.

The findings and opinions in the report are based on information derived from a variety of different sources. Integra Consulting do not accept any liability for the accuracy or otherwise of any information provided by third parties.

It should be noted that some of the aspects considered in this study may be subject to change with time. Therefore, if the development is delayed or postponed, consideration may need to be given to reviewing such issues to confirm that no changes have taken place, either at the site or within relevant legislation.

Further consultations with statutory bodies are likely as the scheme progresses. It should be noted that even where responses have been received from Regulators, these could be subject to change at a later date.

3. CURRENT SITUATION

3.1 Site Location and Description

The 12.3 hectare site comprises land at the former Peaks Nook landfill site to the west of Manchester Road (A6144) in Carrington and is located at National Grid reference 372439, 392665 as shown on the site plan in Appendix 1.

The site has been partly recolonised by grassland and shrubs and is surrounded by woodland along each border. The site is bound by a former quarry site and Carrington Power Station to the north, open land to the east, Saica Paper Mill to the south and the Manchester Ship Canal to the west. A small-scale 20MW electricity generation plant is located at the southern end of the site.

Site levels rise from circa 11.5m AOD in the west of the site adjacent to the Manchester Ship Canal up to a central raised area of the site at circa 27m AOD. This central area of the site accommodates the existing electricity generating plant at its south end at circa 26m AOD with levels over the central site area varying locally between 24m and 28.6m AOD. Towards the eastern site boundary, levels fall from the central raised site area at circa 26m/27m AOD down to 18m/19.5m AOD at the eastern boundary. The existing topographical survey can be found in Appendix 2.

3.2 Hydrology and Flooding

Current Environment Agency flood data indicates the site to lie almost wholly within Flood Zone 1 with only the lower level western fringe of the site adjacent to the Manchester Ship Canal lying in Flood Zone 2 (refer to Appendix 3 for details).

Private surface water drainage culverts are located to the north east corner of the site which form part of the local stream system and discharge to the Manchester Ship Canal (refer to Appendix 6 for details).

The site is raised up in relation to the surrounding ground with the proposed site development area lying at between 24m and 28.6m AOD – this level range compares with the 1 in 1000 year risk level of approximately 16m AOD as derived from both current EA flood data from their 2010 model and also from the Manchester and Salford Strategic Flood Risk Assessment (refer to Appendices 4 and 5 for details).

EA / DEFRA flood mapping indicates very localised areas of the site at a low to medium risk of surface water flooding – in the post-development situation, a positive drainage system will be designed to ensure that these site areas will not have any surface water flooding issues.

Reservoir flood risk mapping is generally from public reservoirs which are maintained to a 1 in 10,000 year standard - the EA / DEFRA mapping indicates no reservoir flooding at the site.

3.3 Existing Sewers

A study of the United Utilities sewer maps in the vicinity of the site indicate that there is no adopted sewer infrastructure in the local area (refer to Appendix 7 for details).

Enquiries are in the process of being made with regard to current foul water discharge strategies being employed at the neighbouring sites.

4. PROPOSED DEVELOPMENT

4.1 Development Proposals

It is proposed to undertake industrial development of the application site with access from Manchester Road via the existing private road that lies to the south of the site (refer to Appendix 8 for details).

4.2 Surface Water Drainage

The issue of surface water drainage to the proposed development has been considered with reference to the hierarchy of surface water disposal as noted in the Building Regulations H3:

i) Sustainable Urban Drainage Systems (SUDS)
ii) Discharge of surface water off site direct to watercourse
iii) Discharge to adopted sewer

SUDS are made up of one or more structures built to manage surface water runoff. They are used in conjunction with good management of the site to prevent flooding and pollution. There are four general methods of control:

- Filter strips and swales
- Filter drains and permeable surfaces
- Infiltration devices
- Basins and Ponds

At this stage, post-development infiltration techniques are deemed unlikely to be successful given the anticipated extensive landfill deposits present at the site.

Accordingly, it is proposed to discharge suitably attenuated site surface water to the Manchester Ship Canal which forms the western boundary to the site, all subject to detailed drainage design. There are local stream culverts that extend through the north eastern section of the site and currently discharge to the Manchester Ship Canal and the intention would be to discharge suitably attenuated post-development surface water to this existing stream culvert network that ultimately discharges to the Manchester Ship Canal (refer to the existing stream culvert network sketch plan in Appendix 6).

This post-development surface water drainage strategy would naturally need to be agreed in principle with the relevant statutory drainage consultees including the Trafford Council LLFA office.

In terms of the post-development surface water drainage design, this will need to store run off and release it at greenfield run off rates in line with the requirements of SC020319 'Rainfall Runoff Management for Developments'. It is anticipated that on-site surface water storage will be provided in the form of an attenuation pond and / or underground storage crates within each development plot.

The post development surface water drainage system will be designed to ensure that:

- Surface water flows up to a 1 in 30 year event remain in below ground storage.
- Surface water flows remain on site up to a 1 in 100 year + 35% climate change storm event. Sufficient surface water storage and shallow ponding volume will be available to ensure there is no risk to property.

4.3 Foul Water Drainage

As noted in section 3.3 above, a study of the United Utilities sewer maps in the vicinity of the site indicate that there is no adopted sewer infrastructure in the local area.

Enquiries are in the process of being made with regard to current foul water discharge strategies being employed at the neighbouring sites. If, following further investigation, it is apparent that there is no nearby adopted foul / combined sewer infrastructure then post-development foul water flows may require on-site treatment plant prior to discharge to the Manchester Ship Canal.

4.4 National Planning Policy Framework and Technical Guidance

The industrial site development proposals are classed as 'less vulnerable' in Table 2 of the Flood Risk and Coastal Change guidance.

'Less vulnerable' developments in Flood Zone 1 are classed as appropriate according to Table 3 of the Flood Risk and Coastal Change guidance.

Proposed post development levels will be engineered in order to protect the development and not provide any increased flood risk elsewhere.

Types of flooding that could affect the site are:
River - the site lies predominantly in Flood Zone 1
Sea – there is no risk of flooding from the sea
Land – there are no undrained land slopes towards the site
Groundwater – there are no springs or weep areas on the site
Sewers – there have been no local reports of sewer surcharge

4.5 Strategic Flood Risk Assessment & EA Mapping Review

From our review of the Manchester City, Salford City and Trafford Councils Hybrid SFRA by JBA Consulting dated March 2011, the site does not lie in a Critical Drainage Area.

There are no groundwater protection zones in the vicinity of the site and there is negligible residual fluvial risk. The site is not noted to lie within a flood warning area.

4.6 Safe Access and Egress

Safe access / egress from the site in extreme conditions will be via the existing private road at the south of the site that extends onto Manchester Road.

5.0 CONCLUSIONS

5.1 Flooding

Following review of the Environment Agency flood maps and data, it has been confirmed that the site lies almost wholly within Flood Zone 1.

There are to be no off site surface water flood routes generated by the development during an enhanced 1 in 100 year storm. All surface water run-off will remain on site in the 1 in 100 year + 35% climate change event.

5.2 Site Surface Water Drainage

It is proposed to discharge suitably attenuated site surface water to the Manchester Ship Canal which forms the western boundary to the site, all subject to detailed drainage design.

There are local stream culverts that extend through the north eastern section of the site and currently discharge to the Manchester Ship Canal and the intention would be to discharge suitably attenuated post-development surface water to this existing stream culvert network that ultimately discharges to the Manchester Ship Canal.

Post-development greenfield runoff rates will apply and it is anticipated that on-site surface water storage will be provided in the form of an attenuation pond and / or underground storage crates within each development plot.

5.3 Site Foul Water Drainage

United Utilities sewer maps in the vicinity of the site indicate that there is no adopted sewer infrastructure in the local area and it is therefore possible that post-development foul water flows may require on-site treatment plant prior to discharge to the Manchester Ship Canal.

5.4 Flood Risk Management Measures

There will be a site management Health and Safety document prepared in respect of the site.

5.5 Off Site Impacts

All roofed and paved areas are to be formally drained into the site surface water drainage system. The design of the site surface water system will ensure that no off site flood flows are generated by the proposed development in the 1% plus climate change event.

5.6 Residual Risk

With careful design of the drainage elements as described above, there will be no residual flood related risks remaining after the development has been completed.

The proposed building envelopes will naturally all lie in Flood Zone 1.

A post-development safe emergency access can be maintained at all times during a flood event. Emergency access will be from the existing private road at the south of the site that extends onto Manchester Road.

APPENDIX

APPENDIX 1

SITE LOCATION PLAN

The scaling of this drawing cannot be assured

Revision	Date	Drn	Ckd
-	-	-	-

N

LEGEND

Site Boundary (c.12.31ha)

Project
Peeknook, Carrington
Trafford

Drawing Title
Site Boundary

Date	Scale	Drawn by	Check by
14.02.19	1:2000@A2	MD	SW

Project No	Drawing No	Revision
29976	BW01	-

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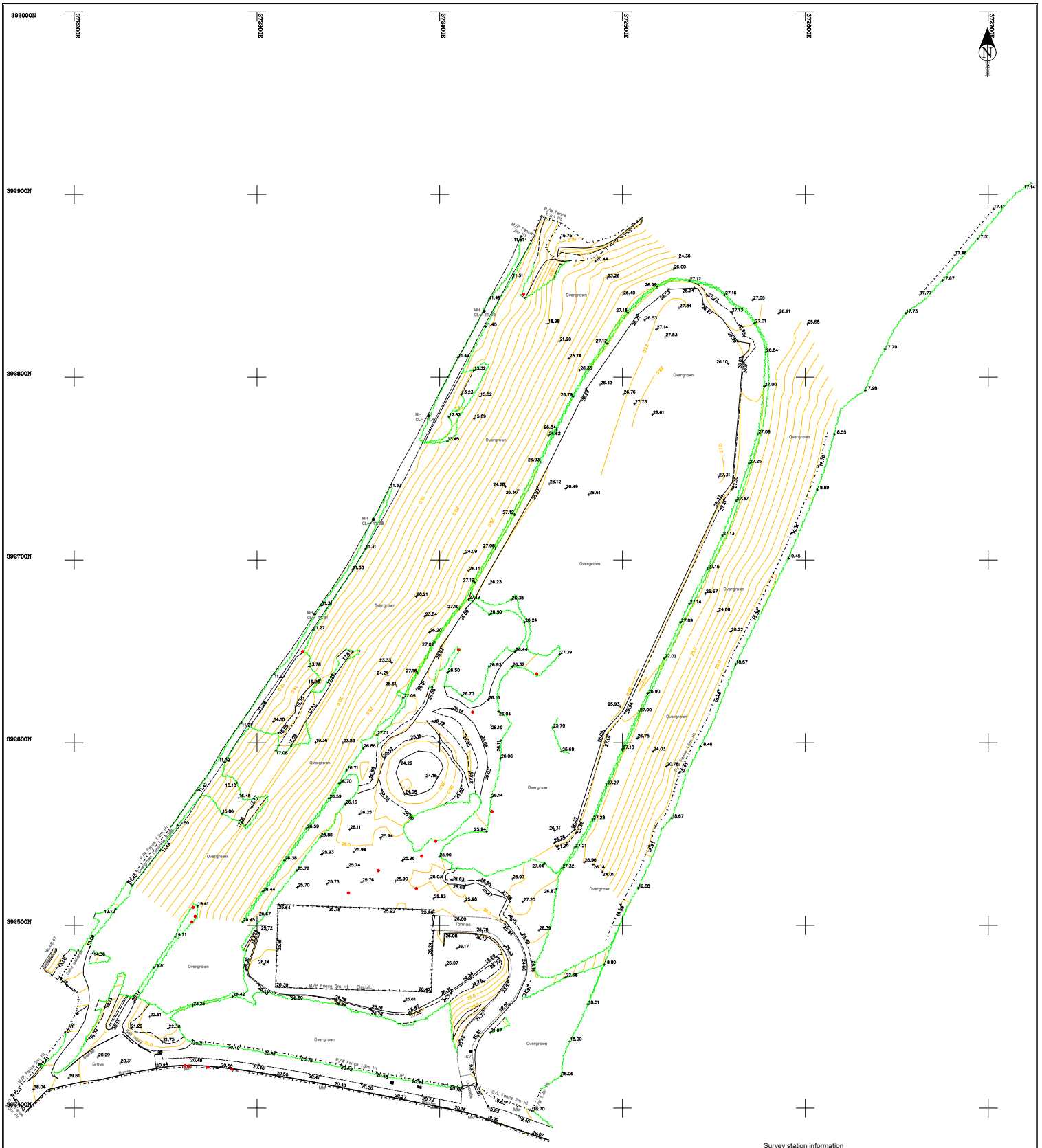
\\SRVMRVFILES1\Files\JOBS\29000\29976 - Peasnook, Carrington\A4 - Drawings & Registers\Masterplanning\29976-MR-M-01A-Site Boundary.dwg - A2(1_2000)

APPENDIX 2

EXISTING TOPOGRAPHICAL SURVEY



Survey station information

Survey data obtained by GPS observations.

STATION	EASTING	NORTHING	HEIGHT
-	-	-	-
-	-	-	-

TerraConsult

Bold Business Centre, Bold Lane, Sutton, St Helens WA9 4TX

Client

Peel LAND & PROPERTY

Site

Peaksnook, Carrington

Title

Topographical Survey

General notes

Grid and levels have been aligned with OS National Grid OSGB36 (15). All dimensions and levels are in metres unless noted otherwise.

This plan should only be used for its original purpose. JPP accepts no responsibility if supplied to any other party than the original client.

Certain areas of the site may have been inaccessible due to dense vegetation, vehicles etc. on site at the time of the survey, therefore not all services may be identified on the survey drawing.

The spread of vegetation shown is approximate only. Where canopy spread is critical then this shall be regularly checked. Generally, only trees with a girth greater than 0.1m will be shown on the drawing.

Key

AV	Air Valve	FL	Flood Light	P/R	Post & Rail Fence
Bol	Bollard	FW	Foul Water	P/W	Post & Wire Fence
BH	Borehole	g	Gully	RE	Rodding Eye
BL	Bed Level	GV	Gas Valve	RS	Road Sign
BT	BT Cover	Ht	Height	rwp	Rainwater Pipe
CATV	Cable TV Cover	IC	Inspection Chamber	SV	Stop Valve
C/B	Close Boarded Fence	IL	Invert Level	svp	Soil & Vent Pipe
C/L	Chain Link Fence	I/R	Iron Railing	S/W	Surface Water
CL	Cover Level	ko	Kerb Outlet	TL	Traffic Light
Col	Column	LP	Lamp Post	TP	Telegraph Pole
El	Elec	MH	Manhole	T/W	Top of wall
ER	Earth Rod	Mkr	Marker Post	utl	Unable To Lift
EP	Electricity Pole	O/H	Overhead	VP	Vent Pipe
FH	Fire Hydrant	PB	Post Box	WL	Water Level
FL	Floor Level	Po	Post	WM	Water Meter
				wo	Wash Out

Scale	1:1,000 @ A1
Drawing No.	4261.0/099

Rev	Date	Description

File	4261.0/099 TopographicalSurvey.dwg
Date	01/19
Engineer	TCL
Drawn	PP/GH
Checked	DRAFT

APPENDIX 3

ENVIRONMENT AGENCY FLOOD MAPPING

Environment Agency

Flood map for planning

Your reference	Location (easting/northing)	Created
Peaksnook	**372434/392653**	**2 Aug 2020 8:41**

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

This means:

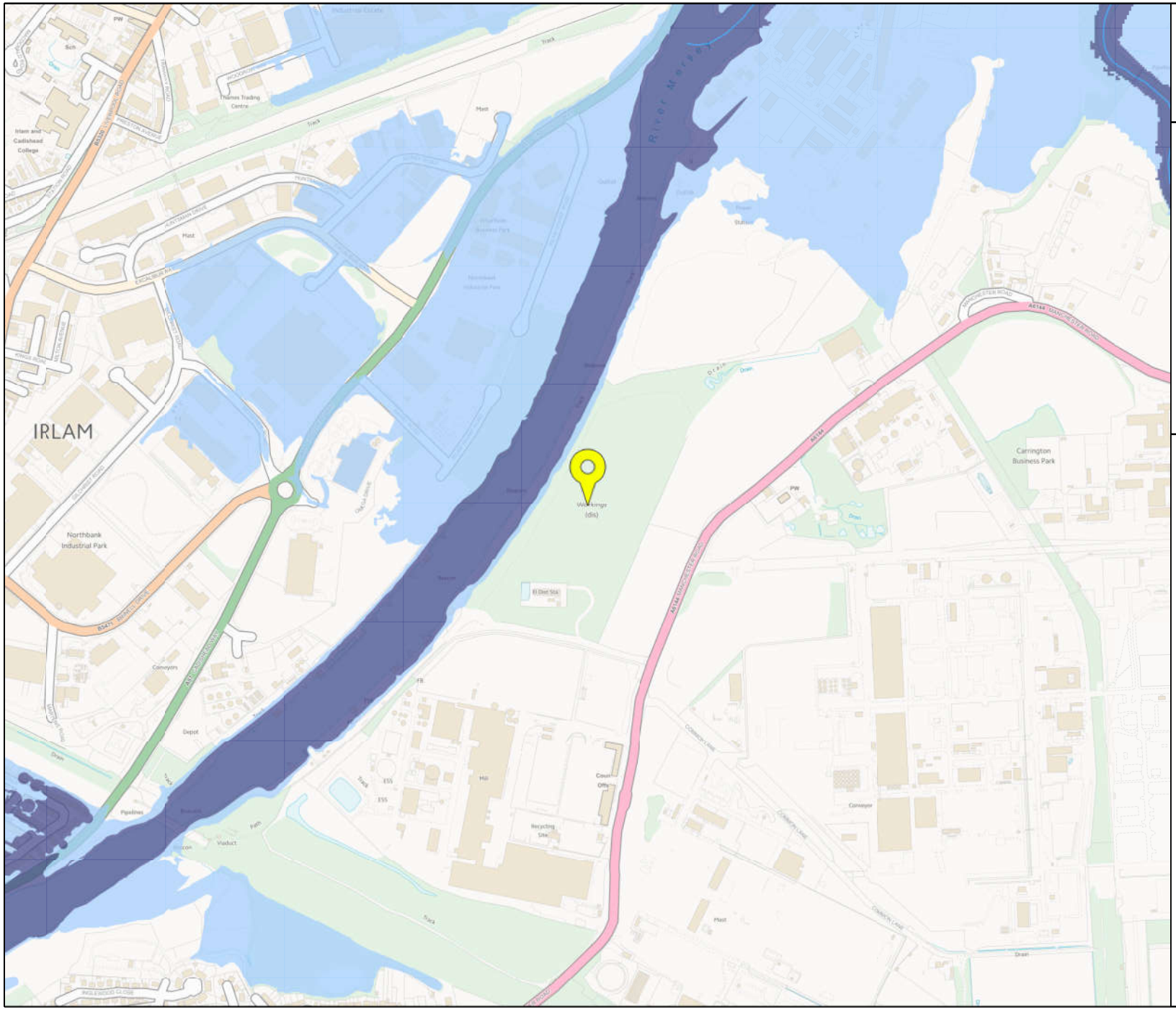
- you don't need to do a flood risk assessment if your development is smaller than 1 hectare and not affected by other sources of flooding
- you may need to do a flood risk assessment if your development is larger than 1 hectare or affected by other sources of flooding or in an area with critical drainage problems

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.

The Open Government Licence sets out the terms and conditions for using government data.
https://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/



Environment Agency

Flood map for planning

Your reference
Peaksnook

Location (easting/northing)
372434/392653

Scale
1:10000

Created
2 Aug 2020 8:41

- Selected point
- Flood zone 3
- Flood zone 3: areas benefitting from flood defences
- Flood zone 2
- Flood zone 1
- Flood defence
- Main river
- Flood storage area

0 100 200 300m

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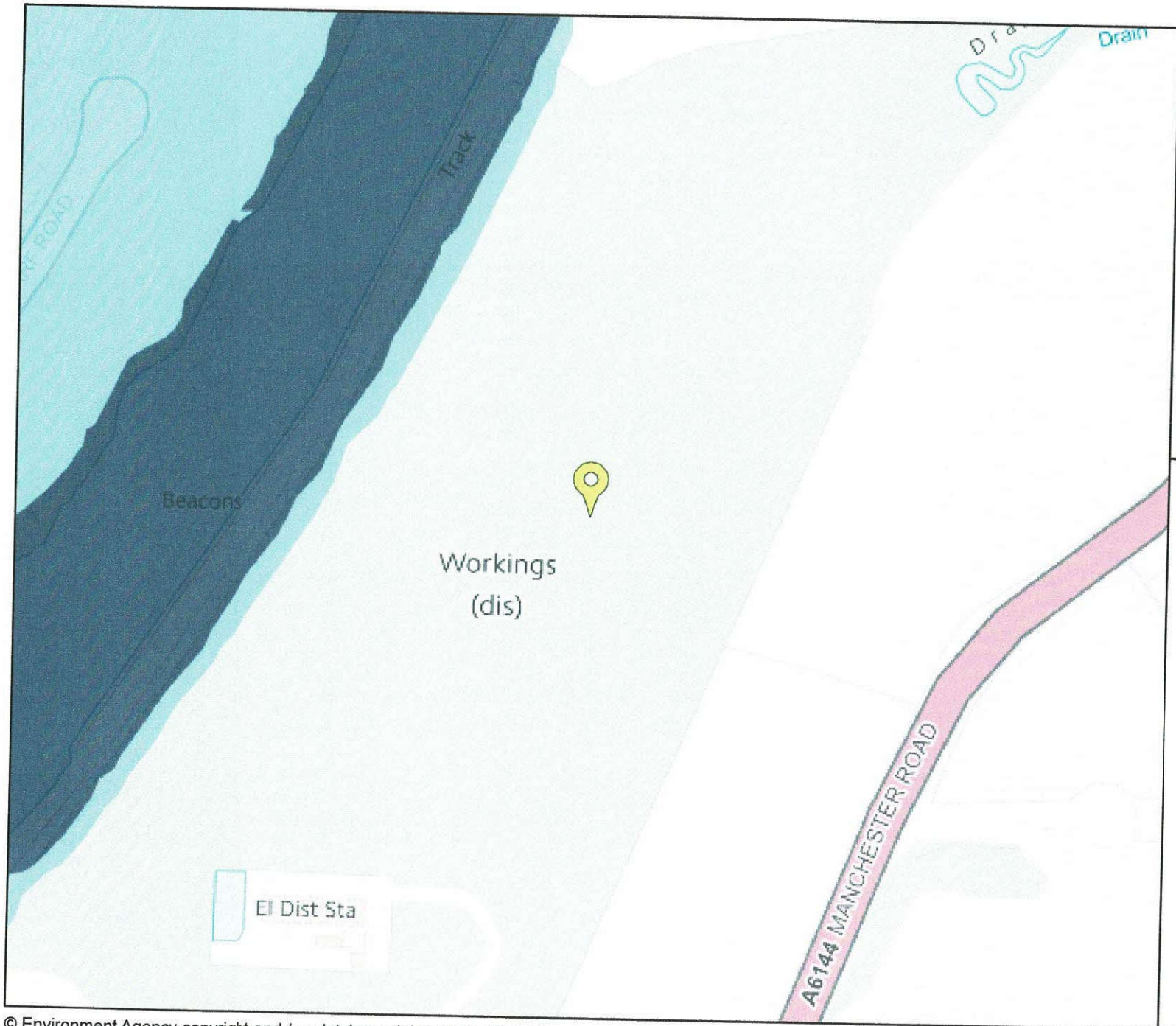

Environment Agency

Flood map for planning

Your reference
peaksnook

Location (easting/northing)
372484/392676

Scale
1:2500

Created
5 Aug 2020 15:17

- Selected point
- Flood zone 3
- Flood zone 3: areas benefitting from flood defences
- Flood zone 2
- Flood zone 1
- Flood defence
- Main river
- Flood storage area

0 20 40 60m

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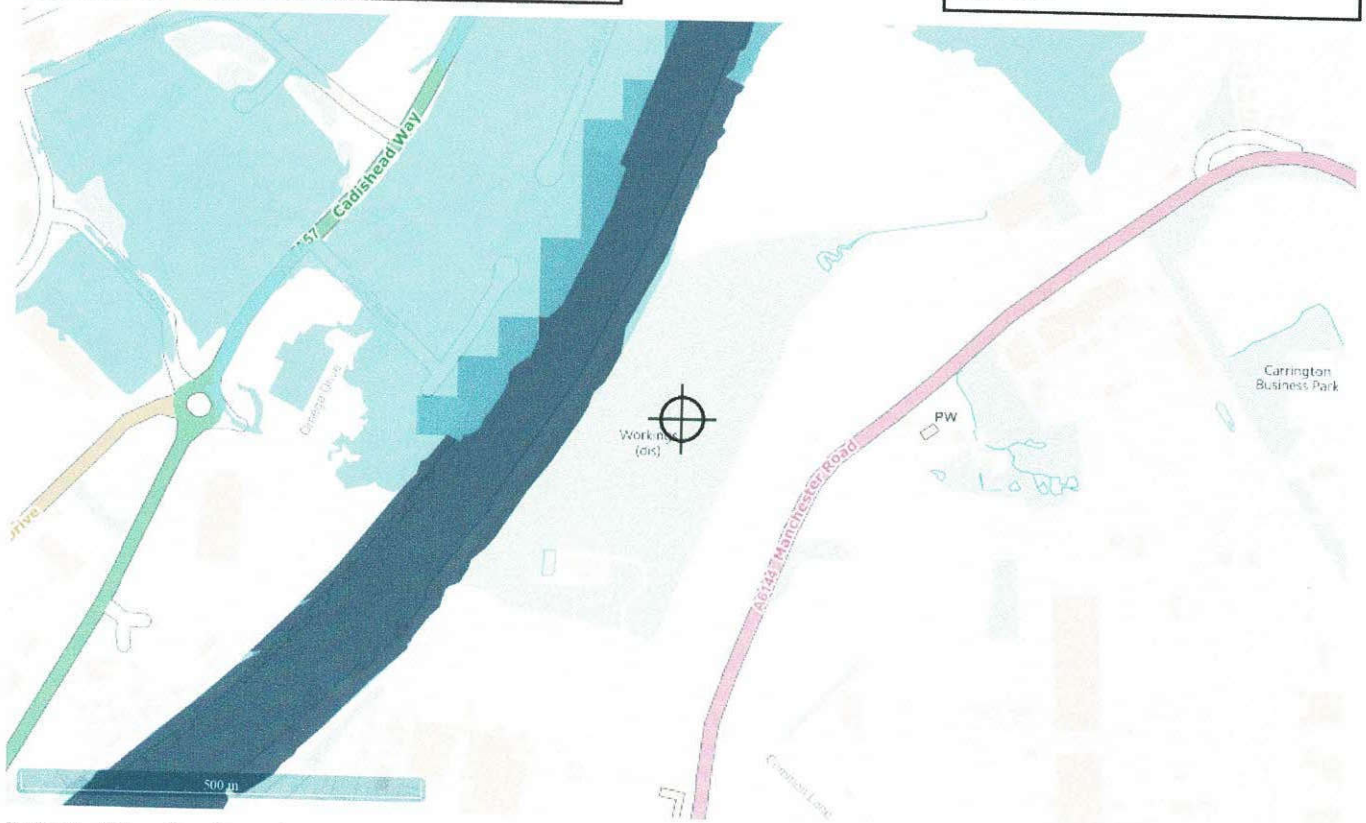
Learn more about this area's flood risk

Select the type of flood risk information you're interested in. The map will then update.

Extent of flooding

m31 4bw



Extent of flooding from rivers or the sea

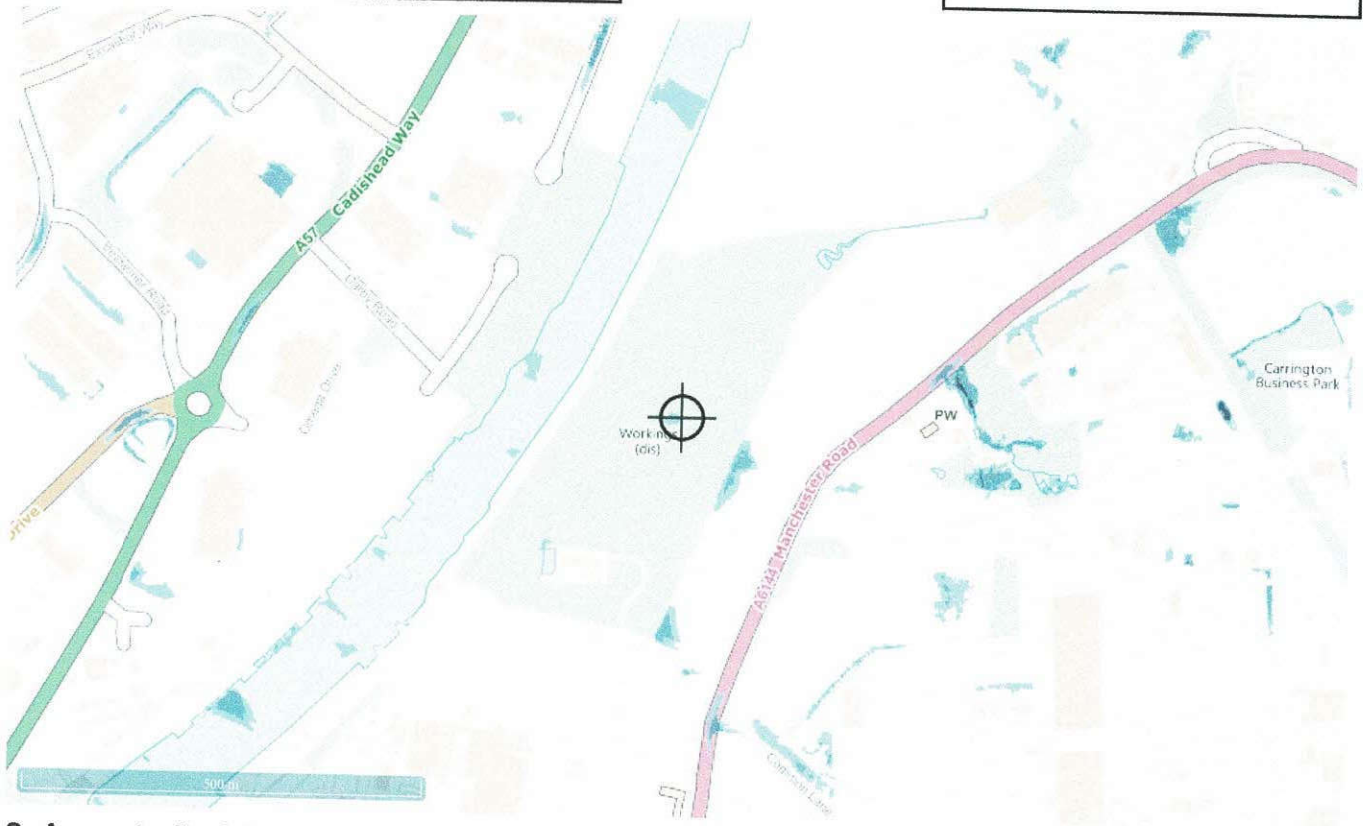
High Medium Low Very low Location you selected

Learn more about this area's flood risk

Select the type of flood risk information you're interested in. The map will then update.

High risk: depth

m31 4bw



Surface water flood risk: water depth in a high risk scenario
Flood depth (millimetres)

Over 900mm | 300 to 900mm | Below 300mm | Location you selected

Learn more about this area's flood risk

Select the type of flood risk information you're interested in. The map will then update.

Medium risk: depth

m31 4bw

Surface water flood risk: water depth in a medium risk scenario
Flood depth (millimetres)

Over 900mm | 300 to 900mm | Below 300mm | Location you selected

Learn more about this area's flood risk

Select the type of flood risk information you're interested in. The map will then update.

Low risk: depth

m31 4bw

Surface water flood risk: water depth in a low risk scenario
Flood depth (millimetres)

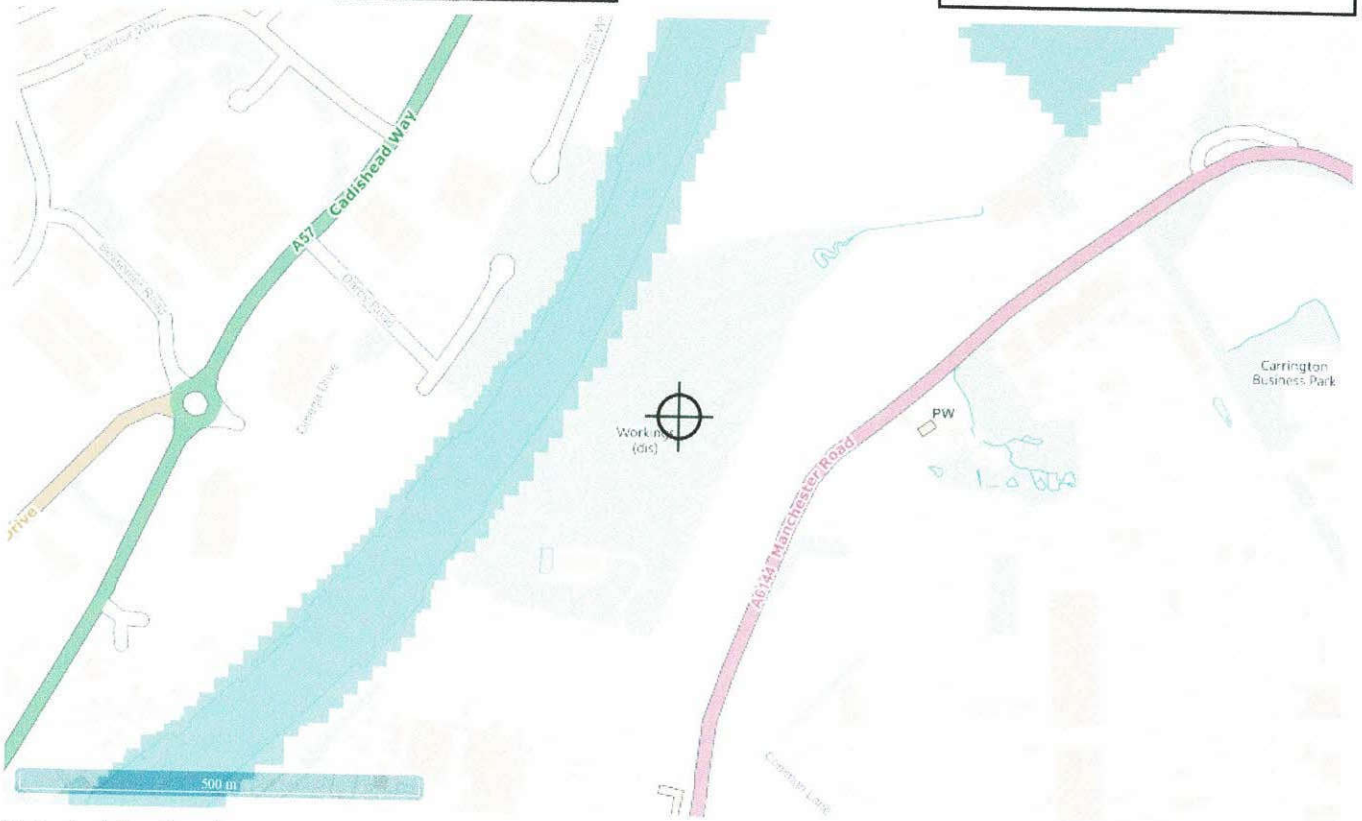
Over 900mm | 300 to 900mm | Below 300mm | Location you selected

Learn more about this area's flood risk

Select the type of flood risk information you're interested in. The map will then update.

Extent of flooding

m31 4bw



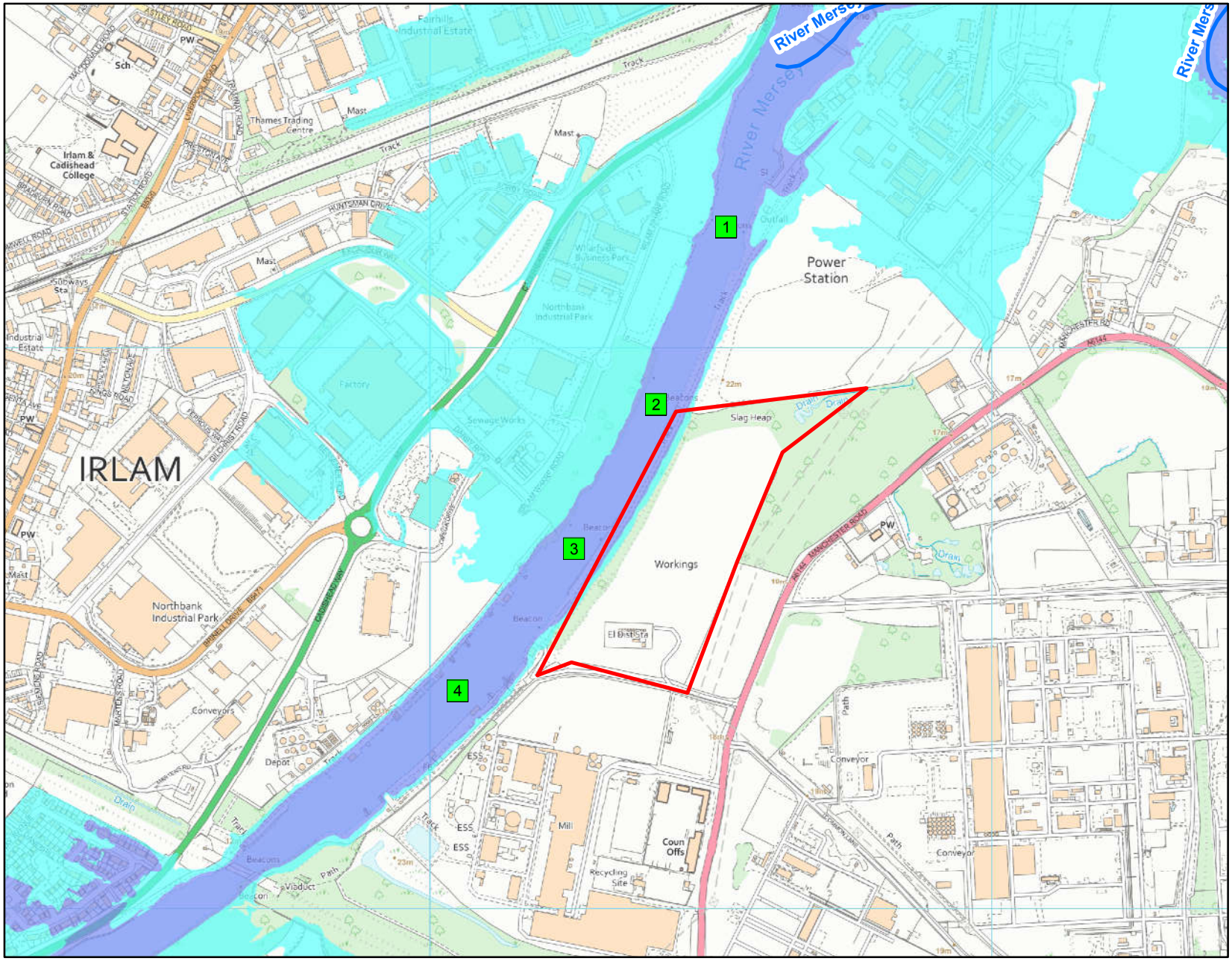
Extent of flooding from reservoirs

Maximum extent of flooding Location you selected

APPENDIX 4

ENVIRONMENT AGENCY PRODUCT 4 DATA – 2010 MODEL

Detailed Flood Map centred on Manchester Road, Carrington. Created on 20/03/2020 [GMMC165233AB]



Environment Agency

1:10,001

N

Legend

- Site Location
- Model Measurements
- Main River
- Flood Zone 3
- Flood Zone 2

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Contact Us: National Customer Contact Centre, PO Box 544, Rotherham, S60 1BY. Tel: 08708 506 506 (Mon-Fri 8-6). Email: enquiries@environment-agency.gov.uk

					Model run is representative of a single gate failure on every set of sluice structures. Maximum gate opening height is set to 2.4m.									Model run is representative of present conditions and all gates are operational as per the agreed automated protocol. Maximum gate opening height is set to 2.4m. This run is the same as used in the flood map products.								
Map Reference	Model Node Reference	Easting	Northing	Date	50 % AEP (1 in 2 year)	20% AEP (1 in 5 year)	4 % AEP (1 in 25 year)	2 % AEP (1 in 50 year)	1.3 % AEP (1 in 75 year)	1 % AEP (1 in 100 year)	1% AEP (1 in 100 year) + Climate Change*	0.5% AEP (1 in 200 year)	0.1 % AEP (1 in 1000 year)	50% AEP (1 in 2 year)	20% AEP (1 in 5 year)	4% AEP (1 in 25 year)	2 % AEP (1 in 50 year)	1.33 % AEP (1 in 75 year)	1% AEP (1 in 100 year)	1% AEP (1 in 100 year) + Climate Change*	0.5 % AEP (1 in 200 year)	0.1 % AEP (1 in 1000 year)
1	ea013_Mode1_MECC06_097	372527	393215	Modelled Water Level (m aodh)	10.10	10.77	11.70	12.07	12.28	12.44	13.20	12.62	15.49	10.10	10.78	11.69	12.09	12.29	12.46	13.26	12.87	15.47
				Modelled Flow (cumecs)	510.95	630.13	892.50	978.50	900.77	923.10	1072.68	996.11	1620.85	512.59	629.73	821.40	879.07	911.78	936.89	1087.09	1011.48	1612.62
2	ea013_Mode1_MECC06_103	372402	392899	Modelled Water Level (m aodh)	10.07	10.73	11.66	12.01	12.22	12.38	13.13	12.76	15.44	10.07	10.74	11.64	12.03	12.26	12.40	13.20	12.81	15.42
				Modelled Flow (cumecs)	512.03	629.45	796.39	897.61	893.05	923.07	1071.91	995.32	1618.04	512.02	629.18	809.03	867.62	902.95	936.17	1086.12	1010.65	1610.18
3	ea013_Mode1_MECC06_104	372256	392642	Modelled Water Level (m aodh)	10.05	10.72	11.63	11.99	12.20	12.36	13.11	12.73	15.38	10.05	10.72	11.61	12.01	12.23	12.38	13.17	12.79	15.37
				Modelled Flow (cumecs)	511.53	628.96	796.27	898.65	893.05	922.58	1071.25	994.69	1615.69	511.60	628.77	811.77	868.03	901.54	936.58	1085.31	1009.97	1608.14
4	ea013_Mode1_MECC06_107	372049	392389	Modelled Water Level (m aodh)	10.06	10.73	11.64	12.00	12.21	12.37	13.12	12.74	15.36	10.06	10.73	11.62	12.02	12.23	12.39	13.18	12.79	15.34
				Modelled Flow (cumecs)	510.96	628.22	798.00	893.41	892.43	921.92	1070.53	993.04	1614.61	510.99	628.03	805.06	863.63	900.27	936.86	1084.45	1008.18	1606.98

Model data taken from Manchester Ship Canal 2010

AEP - Annual Exceedance Probability

m aodh - metres above ordnance datum Newlyn

cumecs - cubic metres per second

Notes

*Climate Change Scenario - We only hold climate change measurements based on the previous climate change guidance (20% increase in flow). The new climate change guidance is available at https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances. The location of the site and the type (vulnerability) of development determine the climate change allowance to consider in any flood risk assessment.

For the Manchester Ship Canal Models, we provide the following two scenarios:

1. Model run is representative of present conditions and all gates are operational as per the agreed automated protocol. Maximum gate opening height is set to 2.4m. This run is the same as used in the flood map products.

2. Model run is representative of a single gate failure on every set of sluice structures. Maximum gate opening height is set to 2.4m.

APPENDIX 5

RELEVANT JBA STRATEGIC FLOOD RISK ASSESSMENT EXTRACTS

Figure 3-3 Differences in water levels - operation of sluice gates 1 in 100 year

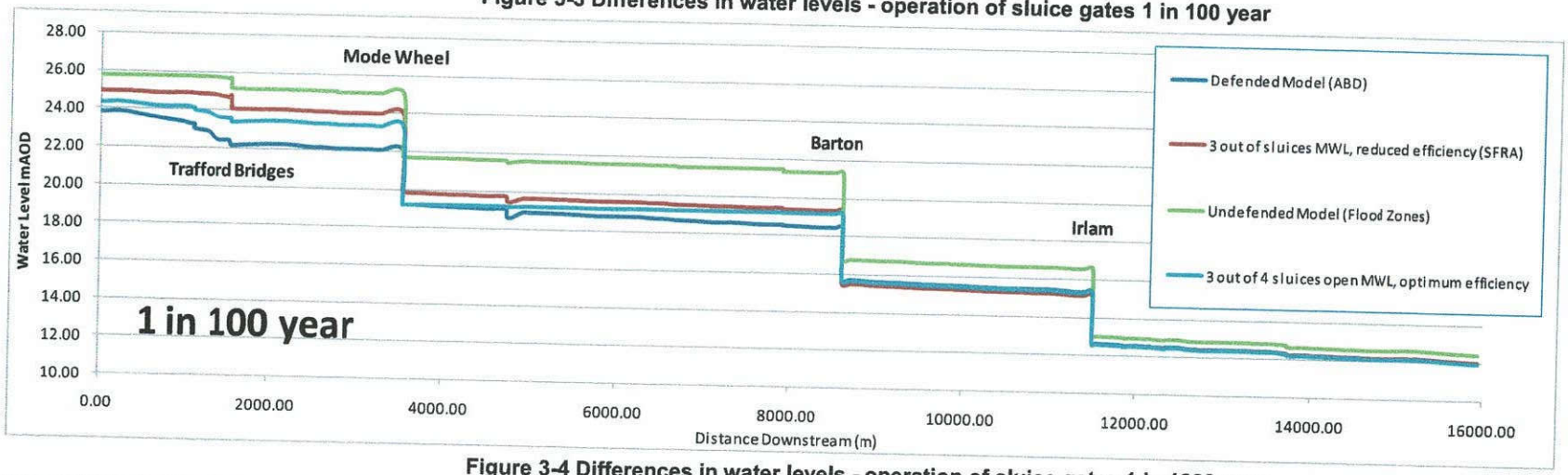
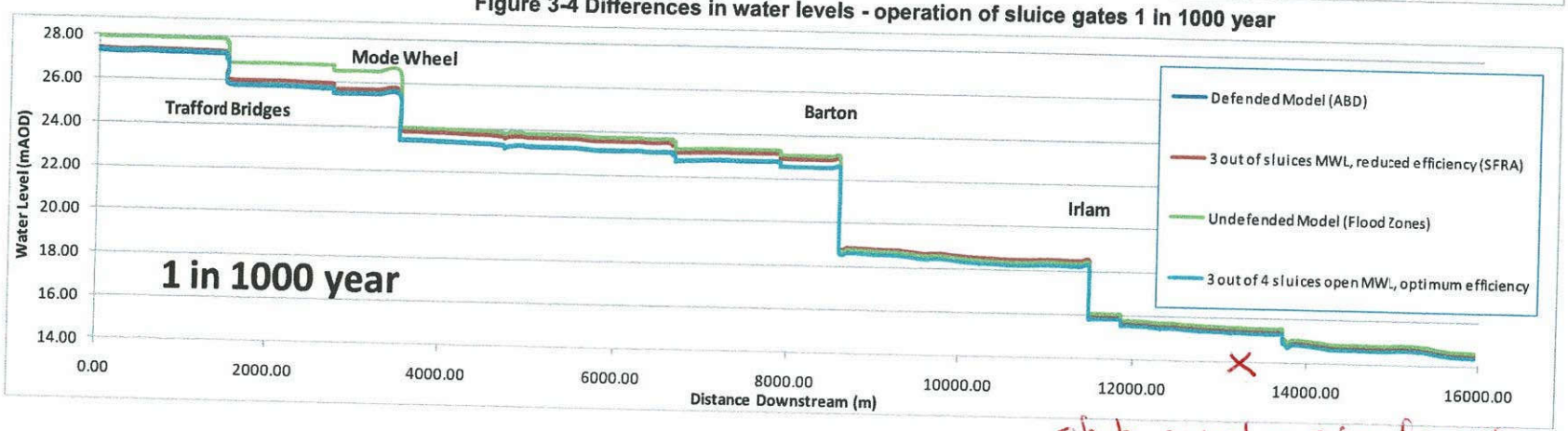


Figure 3-4 Differences in water levels - operation of sluice gates 1 in 1000 year



ship canal – site downstream of irlam

Figure 3-5 Differences in water levels - efficiency of sluice gates 1 in 100 year

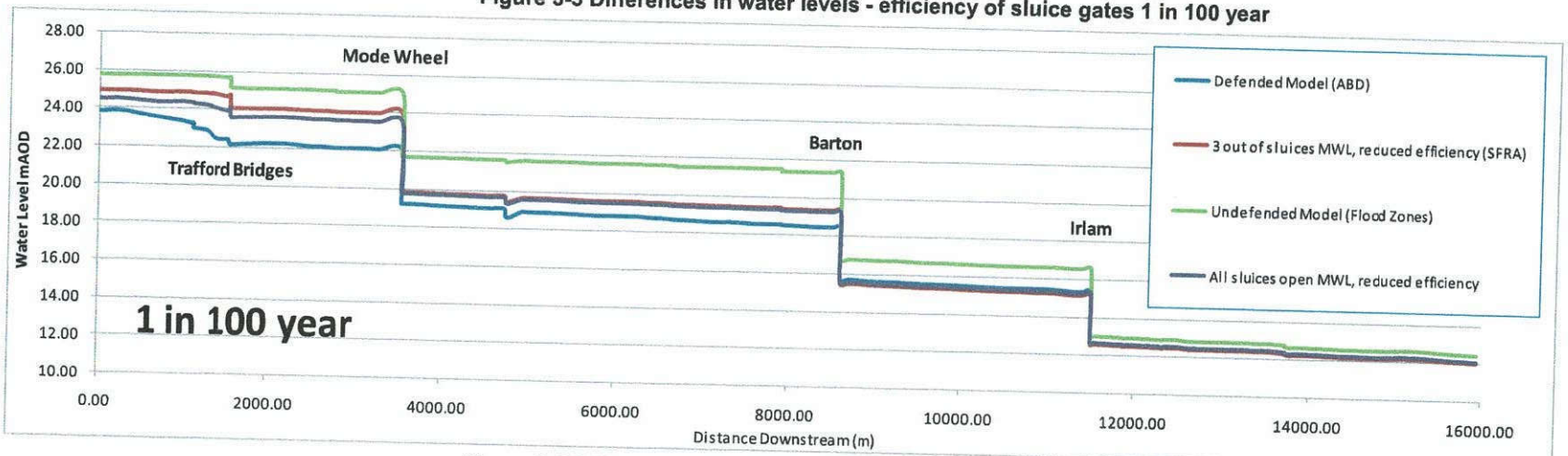
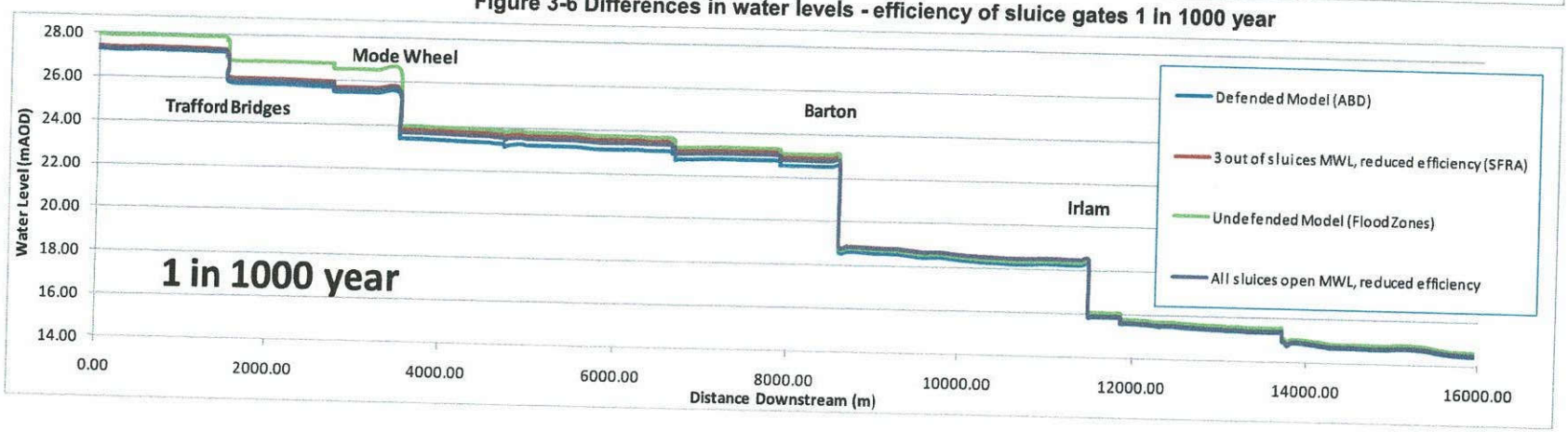
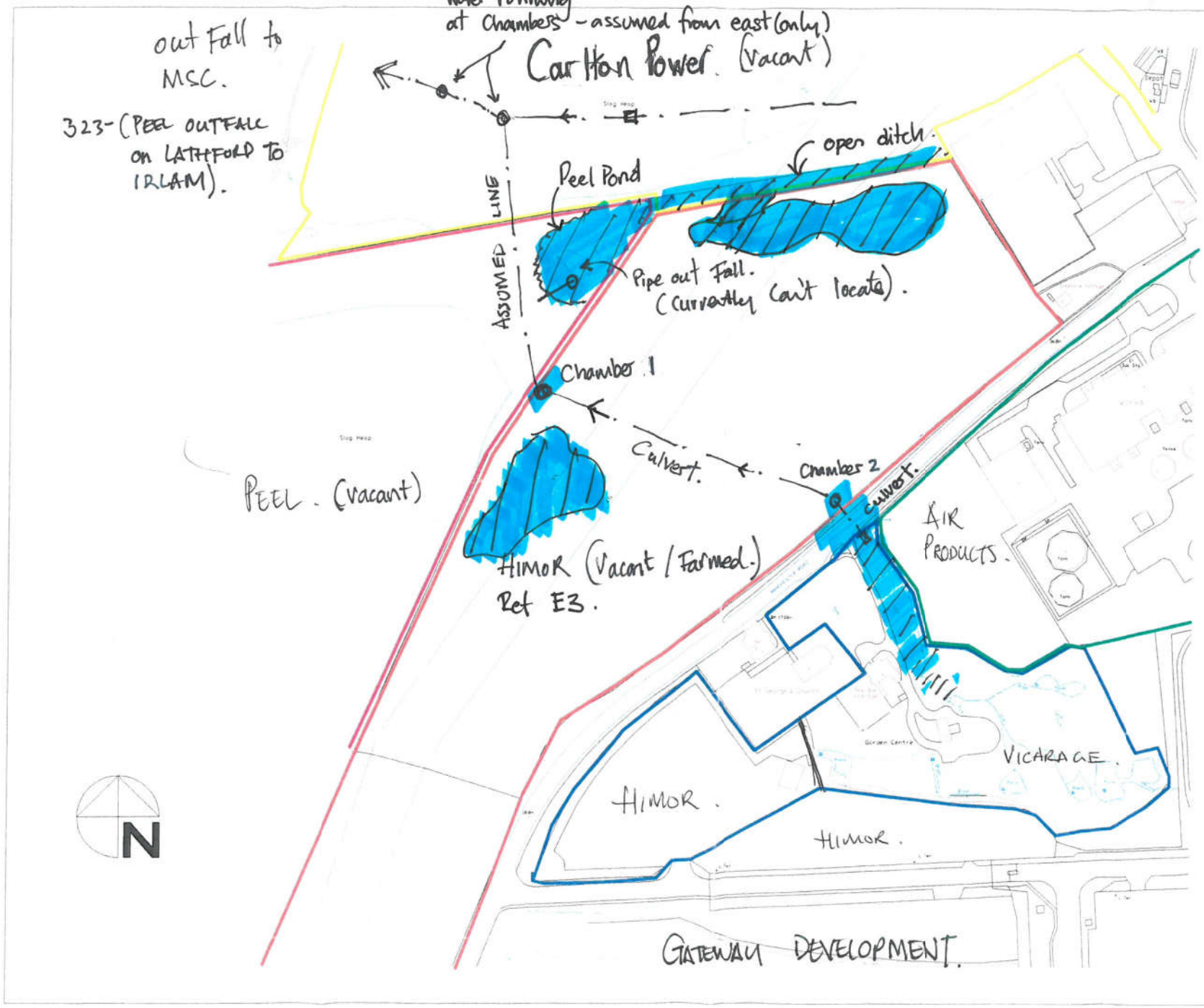


Figure 3-6 Differences in water levels - efficiency of sluice gates 1 in 1000 year



APPENDIX 6

EXISTING STREAM CULVERT NETWORK SKETCH PLANS



Appendix 2

Ownership

Key

- Vicarage Gardens
- HIMOR.
- AIR PRODUCTS.
- PEEL.
- CARLTON POWER

Notes by HIMOR
6 · 01 · 2020

Scale 1:2000

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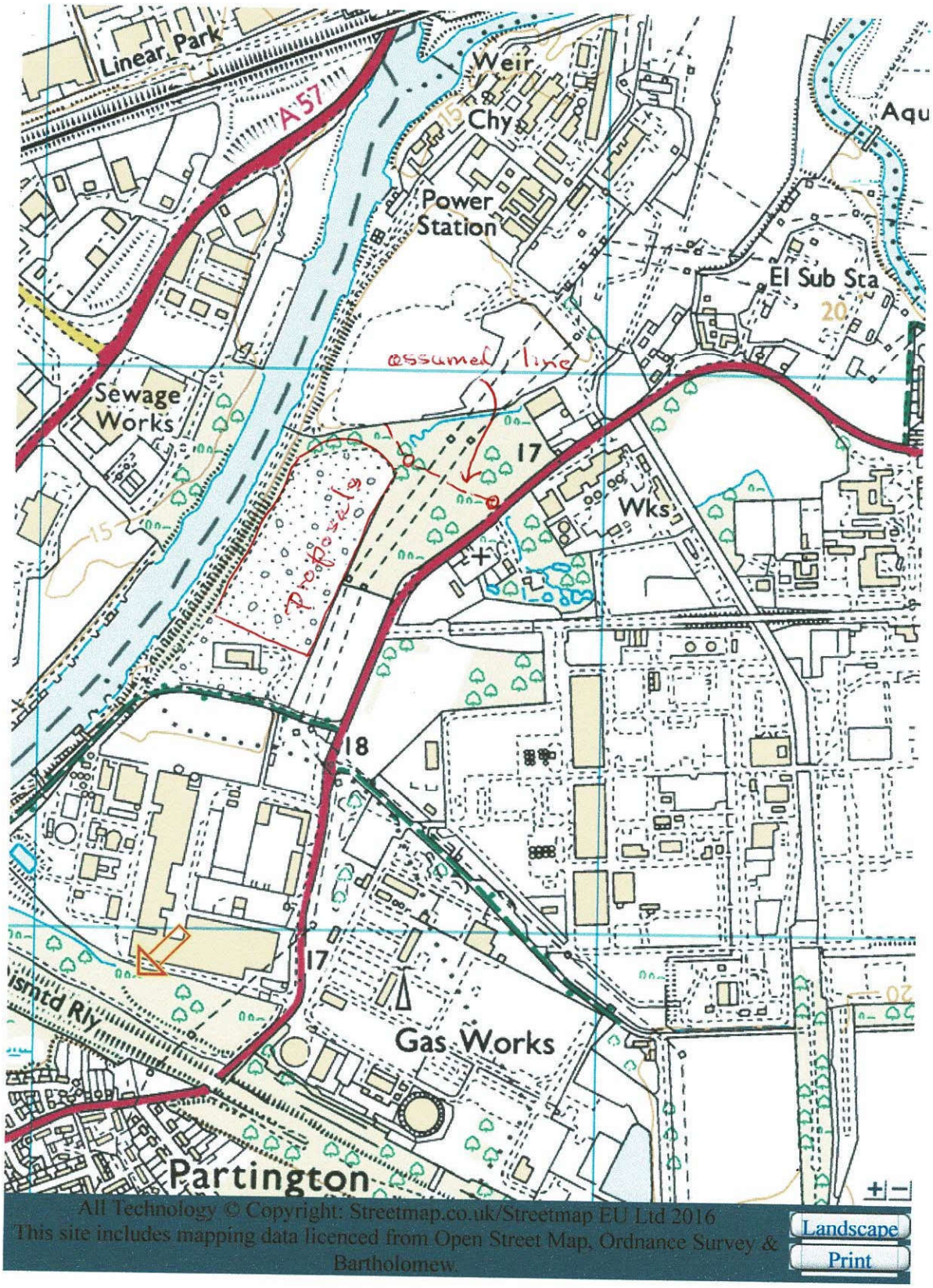
Linear Park
A 57
Weir
Chy
Power Station
Aqu
El Sub Sta
20
assumed line
Sewage Works
17
Wks
15
Proposed
18
17
Gas Works
Partington
+ −
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Landscape
Print

APPENDIX 7

UNITED UTILITIES SEWER PLANS

United Utilities
helping life flow smoothly

How to contact us:

United Utilities Water Limited
Property Searches
Haweswater House
Lingley Mere Business Park
Great Sankey
Warrington
WA5 3LP

Telephone: 0370 7510101

E-mail: propertysearches@uuplc.co.uk

Integra Consulting

14-32
Hewitt Street,
Manchester,
M15 4GB

FAO:

Your Ref: Peaksnook
Our Ref: UUPS-ORD-181833
Date: 07/08/2020

Dear Sirs

Location: Peaksnook

I acknowledge with thanks your request dated 02/08/2020 for information on the location of our services.

Please find enclosed plans showing the approximate position of United Utilities' apparatus known to be in the vicinity of this site.

The enclosed plans are being provided to you subject to the United Utilities terms and conditions for both the wastewater and water distribution plans which are shown attached.

If you are planning works anywhere in the North West, please read United Utilities' access statement before you start work to check how it will affect our network. http://www.unitedutilities.com/work-near-asset.aspx .

I trust the above meets with your requirements and look forward to hearing from you should you need anything further.

If you have any queries regarding this matter please contact us .

Yours Faithfully,

Karen McCormack
Property Searches Manager

United Utilities Water Limited
Registered In England & Wales No. 2366678
Registered Office Haweswater House, Lingley Mere Business Park,
Lingley Green Avenue, Great Sankey, Warrington, WA5 3LP

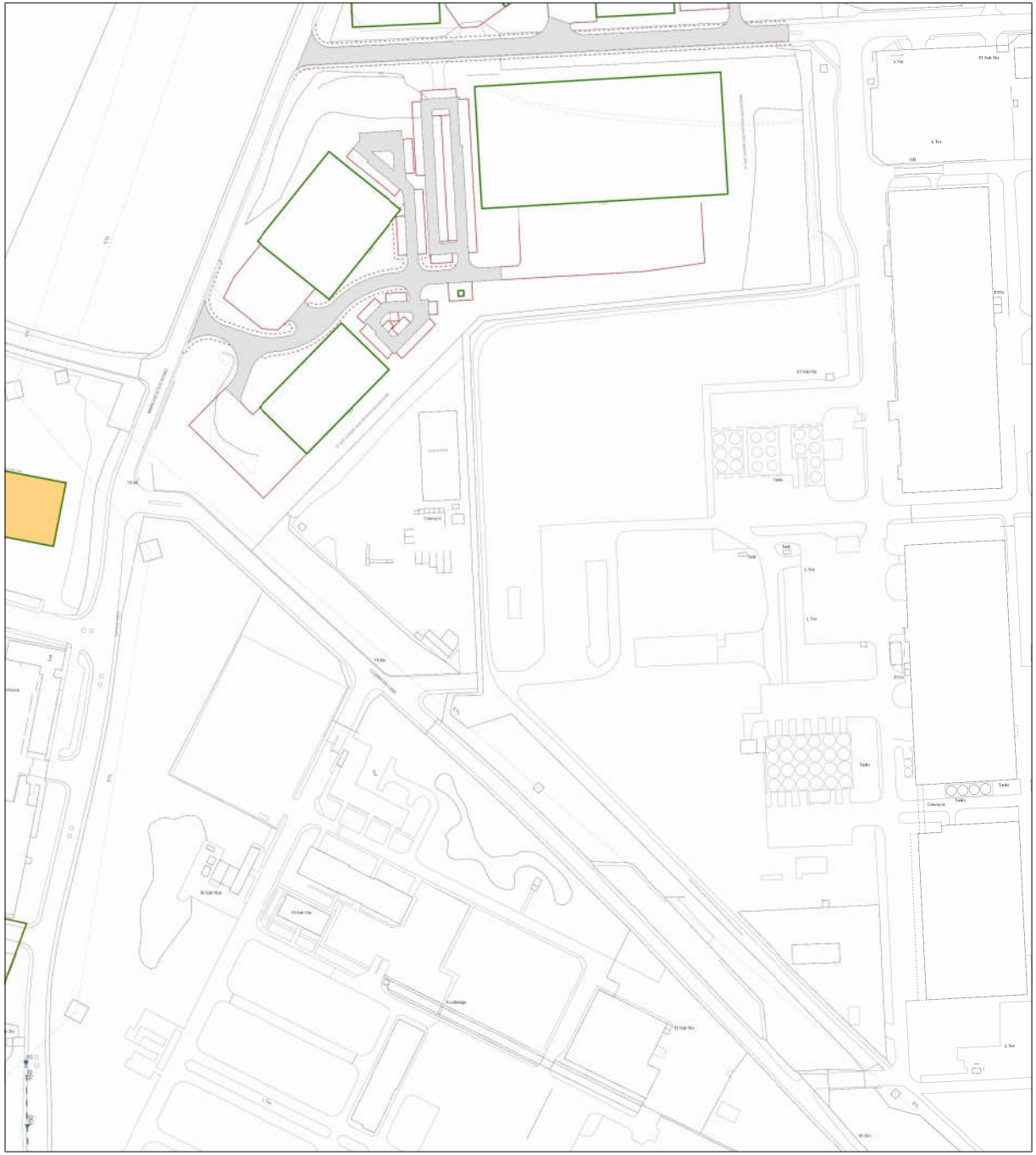
TERMS AND CONDITIONS - WASTEWATER AND WATER DISTRIBUTION PLANS

These provisions apply to the public sewerage, water distribution and telemetry systems (including sewers which are the subject of an agreement under Section 104 of the Water Industry Act 1991 and mains installed in accordance with the agreement for the self construction of water mains) (UUWL apparatus) of United Utilities Water Limited "(UUWL)".

TERMS AND CONDITIONS:

- This Map and any information supplied with it is issued subject to the provisions contained below, to the exclusion of all others and no party relies upon any representation, warranty, collateral contract or other assurance of any person (whether party to this agreement or not) that is not set out in this agreement or the documents referred to in it.
- This Map and any information supplied with it is provided for general guidance only and no representation, undertaking or warranty as to its accuracy, completeness or being up to date is given or implied.
- In particular, the position and depth of any UUWL apparatus shown on the Map are approximate only. UUWL strongly recommends that a comprehensive survey is undertaken in addition to reviewing this Map to determine and ensure the precise location of any UUWL apparatus. The exact location, positions and depths should be obtained by excavation trial holes.
- The location and position of private drains, private sewers and service pipes to properties are not normally shown on this Map but their presence must be anticipated and accounted for and you are strongly advised to carry out your own further enquiries and investigations in order to locate the same.
- The position and depth of UUWL apparatus is subject to change and therefore this Map is issued subject to any removal or change in location of the same. The onus is entirely upon you to confirm whether any changes to the Map have been made subsequent to issue and prior to any works being carried out.
- This Map and any information shown on it or provided with it must not be relied upon in the event of any development, construction or other works (including but not limited to any excavations) in the vicinity of UUWL apparatus or for the purpose of determining the suitability of a point of connection to the sewerage or other distribution systems.
- No person or legal entity, including any company shall be relieved from any liability howsoever and whensoever arising for any damage caused to UUWL apparatus by reason of the actual position and/or depths of UUWL apparatus being different from those shown on the Map and any information supplied with it.
- If any provision contained herein is or becomes legally invalid or unenforceable, it will be taken to be severed from the remaining provisions which shall be unaffected and continue in full force and affect.
- This agreement shall be governed by English law and all parties submit to the exclusive jurisdiction of the English courts, save that nothing will prevent UUWL from bringing proceedings in any other competent jurisdiction, whether concurrently or otherwise.

United Utilities Water Limited
Registered In England & Wales No. 2366678
Registered Office Haweswater House, Lingley Mere Business Park,
Lingley Green Avenue, Great Sankey, Warrington, WA5 3LP



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.

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

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
II	Unspecified

Address or Site Reference:

Peaksnook,

OS sheet Number: SJ7292SE

Scale: 1:1250 **Date:** 07/08/2020

Nodes: 0

Sheet: 1 of 9

Printed by: Property Searches

SEWER RECORDS

United Utilities — helping life flow smoothly

Refno	Cover	Func	Invert	Size x	Size y	Shape	Mat	Length	Grad
2003	17,95	SW	16,65	225				25,07867	1 in 104
2003	17,95	SW	16,65	225				25,07867	1 in 104
2001	17,83	SW	16,31	225				46,08526	1 in 263
2001	17,83	SW	16,31	225				46,08526	1 in 263
3002	18,87	SW	18,26	150				73,23033	1 in 86
3002	18,87	SW	18,26	150				73,23033	1 in 86
1002	17,32	SW	16,14	225			VC	35,8969	1 in 81
1002	17,32	SW	16,14	225			VC	35,8969	1 in 81
2002	18,26	SW	16,71	150				65,11528	1 in 407
2002	18,26	SW	16,71	150				65,11528	1 in 407
3001	18,66	SW	17,23	150				42,84409	1 in 82
3001	18,66	SW	17,23	150				42,84409	1 in 82
1001	17,12	SW	16,42	150				61,05735	1 in 218
1001	17,12	SW	16,42	150				61,05735	1 in 218

Refno	Cover	Func	Invert	Size x	Size y	Shape	Mat	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
- Combd 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
MRC	Masonry, Coursed
MRR	Masonry, Random
X	Unspecified

Address or Site Reference:

Peaksnook,

OS sheet Number: SJ7392NW

Scale: 1:1250 **Date:** 07/08/2020

Nodes: 14

Sheet: 2 of 9

Printed by: Property Searches

SEWER RECORDS

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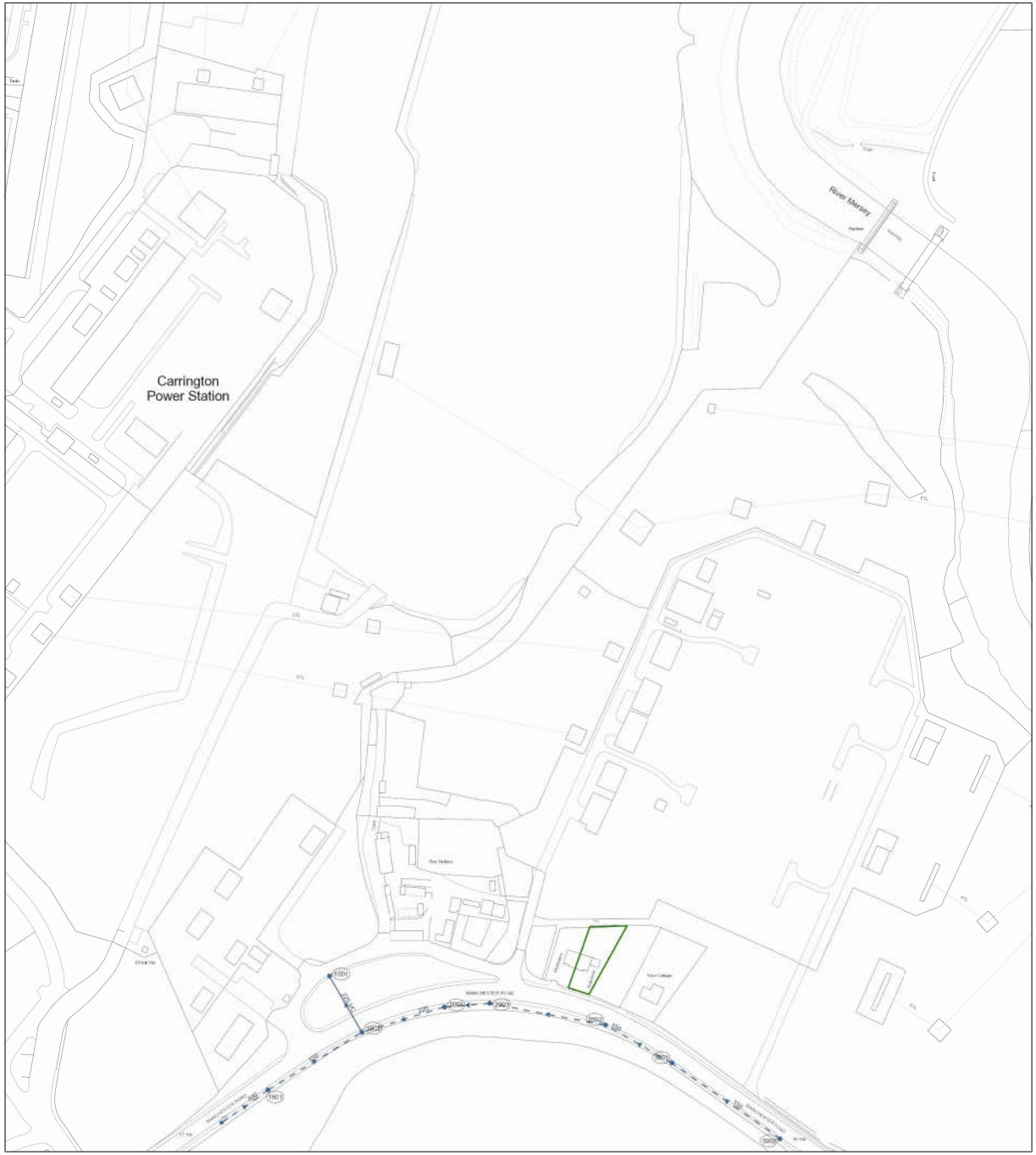

Refno	Cover	Func	Invert	Size x	Size y	Shape	Matl	Length	Grad
2003	17,95	SW	16,65	225				25,07867	1 in 104
2003	17,95	SW	16,65	225				25,07867	1 in 104
2001	17,83	SW	16,31	225				46,08526	1 in 253
2001	17,83	SW	16,31	225				46,08526	1 in 253
3002	18,87	SW	18,26	150				73,23933	1 in 86
3002	18,87	SW	18,26	150				73,23933	1 in 86
1902	17,32	SW	16,14	225			VC	35,8469	1 in 81
1902	17,32	SW	16,14	225			VC	35,8469	1 in 81
2002	18,26	SW	16,71	150				65,11528	1 in 407
2002	18,26	SW	16,71	150				65,11528	1 in 407
3001	18,96	SW	17,23	150				42,54409	1 in 82
3001	18,96	SW	17,23	150				42,54409	1 in 82
1901	17,12	SW	16,42	150				61,05735	1 in 218
1901	17,12	SW	16,42	150				61,05735	1 in 218

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
- We Treatment Works
- We Pumping Station
- Septic Tank
- Combd 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
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CC	Concrete Box Culverted
PSC	Plastic / Steel Composite
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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
II	Unspecified

Address or Site Reference:

Peaksnook,

OS sheet Number: SJ7393SW

Scale: 1:1250 **Date:** 07/08/2020

Nodes: 14

Sheet: 3 of 9

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SEWER RECORDS

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El Sub Sta
Tank
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Conveyor
Tanks
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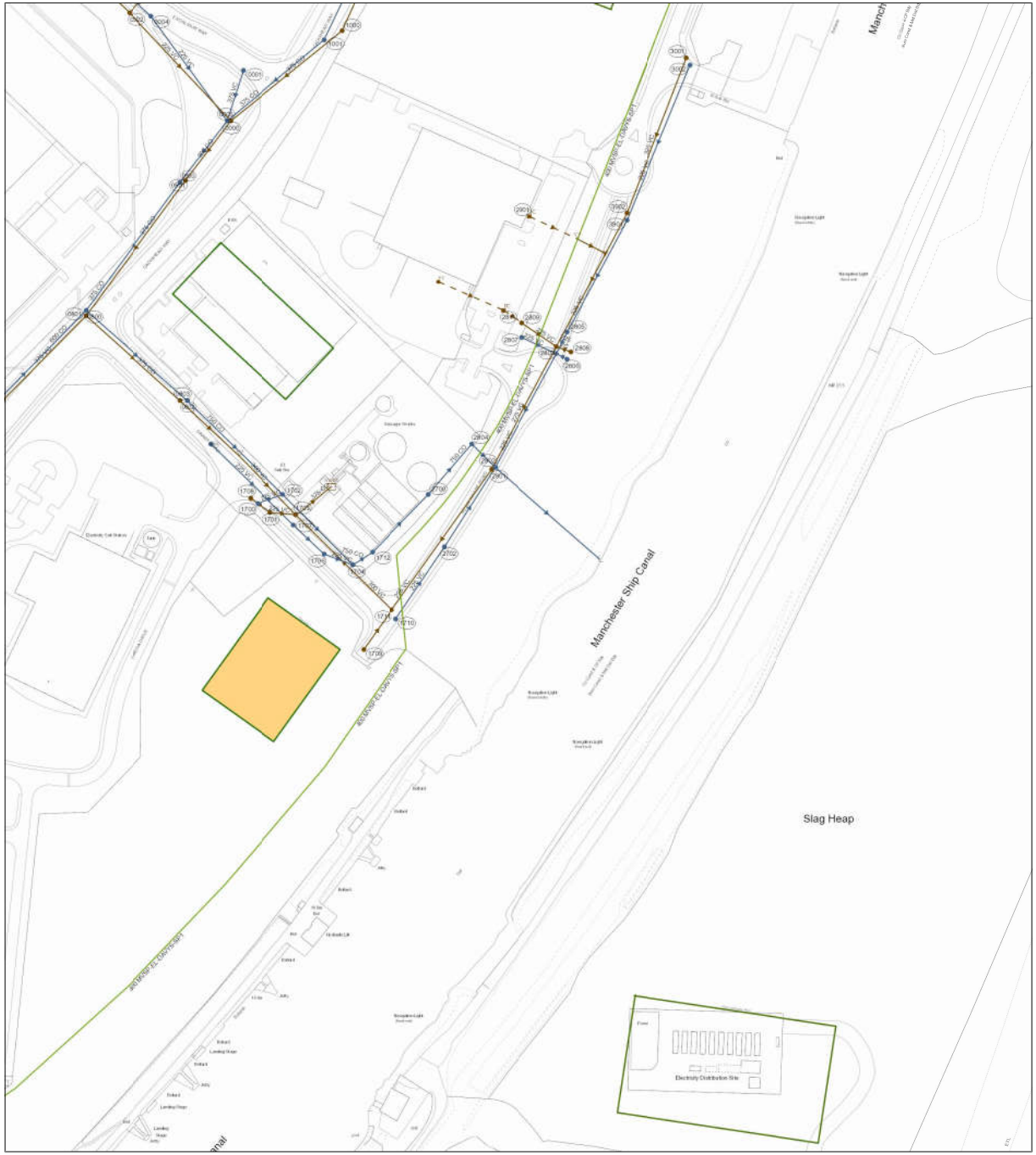
Tank
Tank

Manchester Ship Canal
Partington North Basin
Electricity Distribution Site
Paper Mill
Council Yard
Tyre Recycling Facility
Tanks
Tank
Jetty
Bollard
Landing Stage
Hydraulic Lift
Navigation Light
Footbridge
Weighbridge
Refreshment House
Drainage Ditch
Fence
Gate
Hedge
Wall
Path
Road
Track
Steps
Ramp
Pipe
Culvert
Weir
Sluice
Pump
Chy
Cut
Embankment
Cutting
Bridge
Footway
Cycle Track
Level Crossing
Railway
Sidings
Buffer Stop
Signal
Point
Platform
Station
Building
Shed
Hut
Office
Factory
Warehouse
Chimney
Stack
Mast
Pylon
Tower
Crane
Gantry
Hoist
Conveyor
Silo
Bunker
Hopper
Weighbridge
Scale
Measure
Boundary
Fence
Wall
Hedge
Tree
Shrub
Grass
Garden
Yard
Car Park
Parking
Road
Lane
Footway
Path
Track
Bridge
Culvert
Drain
Ditch
Channel
Weir
Sluice
Pump
Tank
Reservoir
Lake
Pond
Water
River
Canal
Navigation
Towpath
Bank
Embankment
Cutting



Refno	Cover	Func	Invert	Size x	Size y	Shape	Mat	Length	Grad
0601	15,03	FD	6,74	375			CO	93,20538	
0601	15,03	FD	6,74	375			CO	93,20538	
2808		SW	0	225			VC	6,709204	
1708	14,91	SW	11,53	225			VC	17,28991	1 in 142
1709		FD	0	225			VC	27,02093	
1711	14,01	FD	10,24	300			VC	70,19927	1 in 175
0604		SW	0	225			VC	71,81005	
0604		SW	0	225			VC	71,81005	
0603	15,04	FD	11,81	225			VC	13,85392	1 in 79
2805	14,1	SW	11,77	225			VC	13,45941	
0600	15,04	SW	11,75	375			CO	88,20968	1 in 183
0600	15,04	SW	11,75	375			CO	88,20968	1 in 183
1702	14,92	SW	10,47	750			CO	53,15633	1 in 689
1001		SW	0	375			CO	70,29224	
1001		SW	0	375			CO	70,29224	
2803	14,06	FD	10,85	225			VC	80,6188	1 in 562
2702	14,22	SW	12,2	225			VC	57,15393	1 in 217
1000	15,08	FD	10,1	375			CO	79,64623	
1000	15,08	FD	10,1	375			CO	79,64623	
0602	15,09	FD	10,93	225			VC	62,27314	
0602	15,09	FD	10,93	225			VC	62,27314	
2802	14,07	SW	9,63	750			CO	77,23341	
3601	14,31	SW	11,99	225			VC	70,23532	1 in 351
3601	14,31	SW	11,99	225			VC	70,23532	1 in 351
1703	14,83	FD	7,4	375			CO	28,11627	
0600	14,96	SW	10,85	750			CO	75,07733	1 in 1251
0605		FD	0	300			CO	41,49348	
0605		FD	0	300			CO	41,49348	
0602	15,07	FD	9,1	375			CO	45,27992	1 in 906
0600		SW	0	375			CO	42,20187	
0600		SW	0	375			CO	42,20187	
1708	14,89	FD	12,11	225			VC	13,80147	1 in 97
1704	15,05	SW	10,26	750			CO	13,0384	
0604	14,87	SW	12,68	225			VC	64,3506	1 in 107
1104		SW	0	375			VC	93,40633	
9113	14,83	SW	13,21	225			VC	90,38141	
2700		SW	0	750			CO	36,27918	
1712		SW	0	750			CO	44,85334	
1710	13,91	SW	12,26	225			VC	46,25971	1 in 965
0601	14,99	FD	0	375			CO	70,0928	
0603	15,04	SW	10,77	750			CO	74,24948	1 in 265
1701	15,05	FD	11,9	225			VC	14,25398	1 in 475
3002		SW	0	225			VC	92,24934	
3002		SW	0	225			VC	92,24934	
1707	14,83	SW	11,76	225			VC	33,24524	1 in 111
1700	15,01	SW	11,74	225			VC	14,26907	1 in 18
0604		SW	0	750			CO	64,3506	
0601		SW	0	375			CO	29,41098	
0601		SW	0	375			CO	29,41098	
1101	15,83	FD	10,22	375			CO	58,98015	1 in 582
9113	14,86	FD	13,54	225			VC	79,03747	1 in 130
2809		FD	0	225			VC	23,07173	
2803	14,13	FD	11,28	225			VC	79,94154	1 in 179
2808		FD	0	225			VC	6,594303	
2807		SW	0	225			VC	21,0238	
3001		FD	0	225			VC	92,11406	
3001		FD	0	225			VC	92,11406	
3602	15,86	FD	13,24	225			VC	93,54907	1 in 43
3602	15,86	FD	13,24	225			VC	93,54907	1 in 43

Refno	Cover	Func	Invert	Size x	Size y	Shape	Mat	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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- Inlet
- Discharge Point
- Vortex
- Penstock
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- 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
- We Treatment Works
- We Pumping Station
- Septic Tank
- Control Kiosk
- Change of Characteristic

MANHOLE FUNCTION

- FO Foul
- SW Surface Water
- CO Combined
- OV Overflow

SEWER SHAPE

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

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
- MRC Masonry, Coursed
- MRR Masonry, Random
- U Unspecified

Address or Site Reference:

Peaksnook,

OS sheet Number: SJ7292NW

Scale: 1:1250 **Date:** 07/08/2020

Nodes: 59

Sheet: 6 of 9

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SEWER RECORDS

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

Refno	Cover	Func	Invert	Size x	Size y	Shape	Mat	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
- Combd 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
II	Unspecified

Address or Site Reference:

Peaksnook,

OS sheet Number: SJ7292NE

Scale: 1:1250 **Date:** 07/08/2020

Nodes: 0

Sheet: 7 of 9

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SEWER RECORDS

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Refno	Cover	Func	Invert	Size x	Size y	Shape	Matl	Length	Grad
4201		SW	0	850			CO	03-24355	
4202		SW	0	850			CO	27.91353	
4202		SW	0	850			CO	27.91353	

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
- Combd 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
X	Unspecified

Address or Site Reference:

Peaksnook,

OS sheet Number: SJ7293SE

Scale: 1:1250 **Date:** 07/08/2020

Nodes: 3

Sheet: 8 of 9

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SEWER RECORDS

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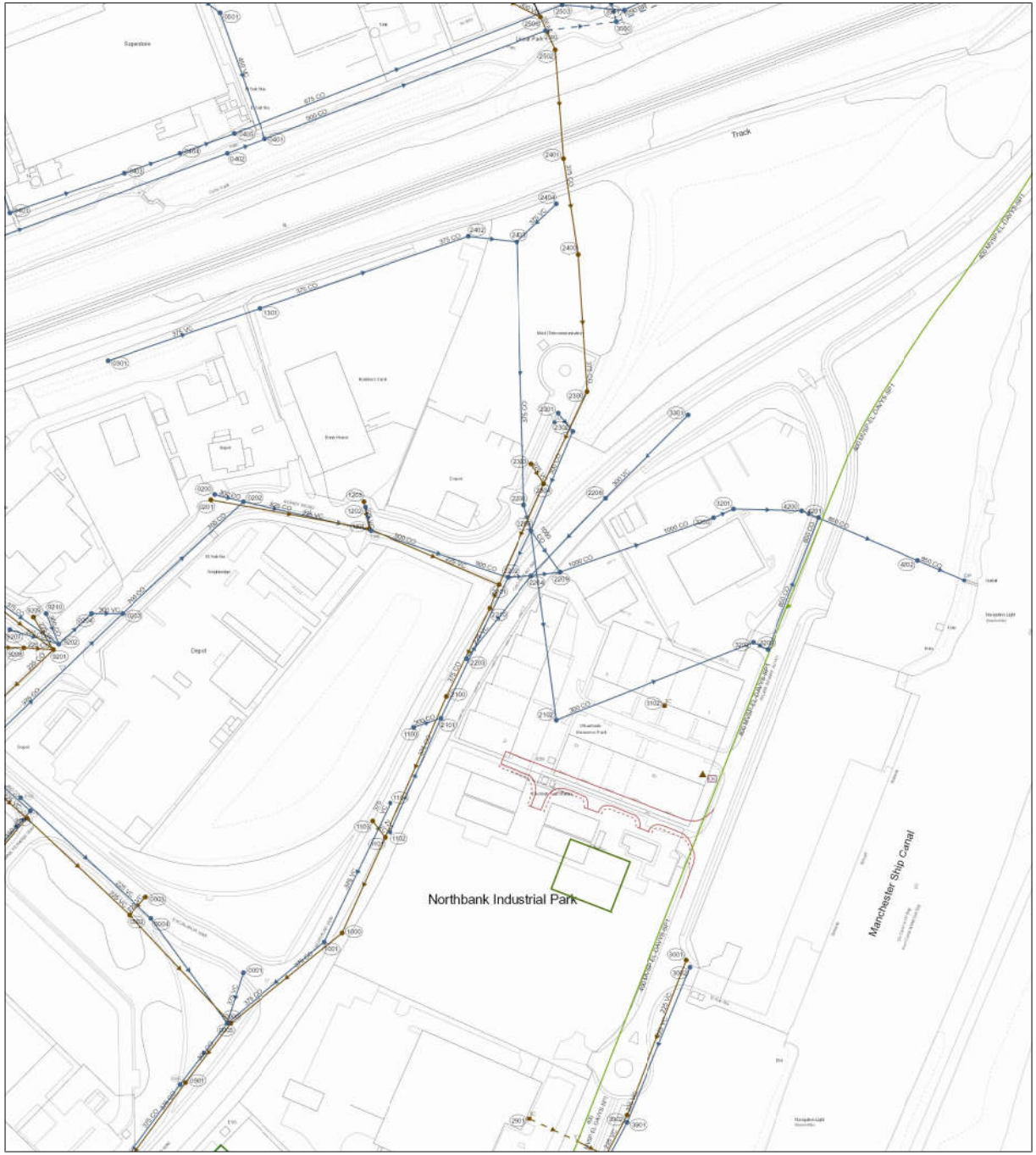

Refno	Cover	Func	Invert	Size x	Size y	Shape	Matl	Length	Grad
2210		FO	0	375			CO	54,56169	
2500		SW	0	900			CO	35,31921	
2205		SW	0	300			CO	105,8292	
0034		SW	0	225			VC	71,61005	
0034		SW	0	225			VC	71,61005	
0002	15,24	FO	11,41	225			VC	15,45352	1 in 79
0000	15,24	SW	11,75	375			CO	85,00598	1 in 193
0000	15,24	SW	11,75	375			CO	85,00598	1 in 193
3501		SW	0	675			CO	334,0456	
1001		SW	0	375			CO	70,20224	
1001		SW	0	375			CO	70,20224	
1201	14,97	FO	11,41	225			VC	75,36570	1 in 96
2301	15,15	SW	12,02	300			CO	13,86025	
3002		SW	0	300			CO	5,944072	
3400		FO	0	375			CO	76,7613	
2000		SW	0	1000			CO	10,08539	
3901	14,21	SW	11,99	225			VC	70,20532	1 in 351
3903	14,21	SW	11,99	225			VC	70,20532	1 in 351
2003	14,29	SW	12,61	225			VC	59,41232	1 in 177
2000		SW	0	1000			BR	142,2428	
3201		SW	0	850			CO	36,21416	
0035		FO	0	300			CO	41,40048	
0035		FO	0	300			CO	41,40048	
2204	14,23	SW	10,29	900			CO	16,13452	
0202	14,24	SW	10,77	675			CO	26,87918	1 in 207
2309		SW	0	1000			CO	86,13878	
0200		SW	0	375			CO	42,60197	
0200		SW	0	375			CO	42,60197	
0405	13,85	SW	11	675			CO	195,6553	1 in 544
1104		SW	0	375			VC	85,42833	
4201		SW	0	850			CO	63,24355	
3301	14,24	SW	11,14	300			VC	65,05363	1 in 159
9115	14,20	SW	13,21	225			VC	66,36141	
6208	15,23	FO	13,06	225			CO	16,21423	1 in 85
0501	14,7	SW	0	450			VC	74,33328	
9114	14,76	SW	12,49	450			CO	11,54927	1 in 96
9401	14,24	SW	12	675			CO	66,7308	1 in 267
1203	14,95	FO	11,66	225			VC	15,26706	1 in 51
3032		SW	0	225			VC	52,44934	
3002		SW	0	225			VC	52,44934	
0404	14,28	SW	11,55	675			CO	51,61309	1 in 58
9201	14,84	FO	12,65	225			CO	55,34602	1 in 257
9210	15,19	SW	13,28	300			CO	16,39478	1 in 77
0202	14,20	SW	13,76	375			CO	24,75884	1 in 413
0401	14,76	SW	9,82	900			CO	167,1407	
2205		SW	0	1000			CO	26,91765	
2201	15,03	FO	12,22	375			CO	26,08375	1 in 592
2203		SW	0	375			CO	26,08375	
2203	15,12	FO	13	225			VC	13,0384	1 in 87
4200		SW	0	850			CO	15,08851	
9113	14,96	FO	11,54	225			VC	75,03747	1 in 130
0801	15,03	FO	9,74	375			CO	93,05539	
0801	15,03	FO	9,74	375			CO	93,05539	
3401		FO	0	375			CO	53,86037	
9209	15,17	FO	13,76	225			VC	21,06502	1 in 254
2402		SW	0	375			CO	27,16618	
1102	15,84	SW	12,94	375			CO	68,942	1 in 73
2202		FO	0	375			CO	60,03896	
4202		SW	0	850			CO	21,91363	
4202		SW	0	850			CO	21,91363	
2102		SW	0	300			CO	117,1751	
0201	14,26	FO	12,69	225			VC	85,44272	1 in 97
2100	14,89	FO	10,47	375			CO	85,08819	1 in 387
0204	15,03	SW	12,06	300			VC	17	1 in 213
1030	15,26	FO	10,1	375			CO	75,94923	
1030	15,26	FO	10,1	375			CO	75,94923	
9112	14,73	SW	12,34	450			CO	43,81445	1 in 107
1202	14,89	SW	12,32	300			CO	13,34106	1 in 222
0301		SW	0	375			VC	86,86597	
0002	15,69	FO	10,93	225			VC	52,07314	
0002	15,69	FO	10,93	225			VC	52,07314	
1301		SW	0	375			CO	102,1029	
1200	14,98	SW	10,48	900			CO	83,32434	1 in 669
1103	15,22	FO	11,37	225			VC	11,46775	1 in 71
3403		SW	0	375			CO	140,0548	
9203	15,29	SW	13,21	225			VC	16,45645	1 in 49
2202		SW	0	300			CO	59,81543	
2300	15	SW	0	375			CO	14,95032	
2300	15,3	FO	11,8	375			CO	56,36498	1 in 170
2308	13,82	SW	10,71	300			VC	59,4134	1 in 170
0402	13,46	SW	8,85	900			CO	21,4772	1 in 582
2304	15,13	FO	11,77	375			CO	81,20899	1 in 307
2101	15,04	SW	11,3	375			CO	86,33076	1 in 87
2506	14,02	FO	12,68	300			AC	19,79487	
0203	15,08	SW	11,36	700			CO	91,28527	1 in 156
2603	14,26	SW	10,83	675			CO	34,2149	
1101	15,17	SW	13,22	300			CO	15,81138	1 in 59
2202	14,72	SW	10,36	900			CO	13,0384	1 in 217
0031		SW	0	375			VC	26,41098	
0031		SW	0	375			VC	26,41098	
2301	14,75	FO	10,88	375			CO	13,93539	
2404		SW	0	375			VC	35,41361	
3203		SW	0	850			CO	76,37753	
0200	14,95	SW	12,5	300			CO	16,46242	1 in 103
0403	14,41	SW	11,75	675			CO	52,88577	1 in 150
3902	15,08	FO	13,24	225			VC	83,54807	1 in 43
3902	15,08	FO	13,24	225			VC	83,54807	1 in 43
3001		FO	0	225			VC	92,11406	
3001		FO	0	225			VC	92,11406	

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

LEGEND

Abandoned | Foul | Surface Water | Combined

- Public Sewer
- Private Sewer
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- Highway Drain

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

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- Bifurcation Chamber
- Lamp Hole
- T Junction / Saddle
- Catchpit
- Valve Chamber
- Vent Column
- Vortex Chamber
- Penstock Chamber
- Network Storage Tank
- Sewer Overflow
- We Treatment Works
- We 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
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RE	Rectangular	UN	Unspecified
SQ	Square		

SEWER MATERIAL

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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:

Peaksnook,

OS sheet Number: SJ7293SW

Scale: 1:1250 **Date:** 07/08/2020

Nodes: 99

Sheet: 9 of 9

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SEWER RECORDS

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APPENDIX 8

PROPOSED SITE PLANS

The scaling of this drawing cannot be assured

Revision	Date	Drn	Ckd
-	-	-	-

N

LEGEND

- Site Boundary (c.12.31ha)
- Proposed Employment Parcel (c. 5.29 ha)
- Green Infrastructure (c. 6.66 ha)
- Proposed Access Road (c. 0.36 ha)

Development Area
Parcel 1 : c.1.51 ha
Parcel 2 : c.1.42 ha
Parcel 3 : c.1.33 ha
Parcel 4 : c.1.03 ha

Overall Development Area : c. 5.65 ha

Project
Peeknook, Carrington
Trafford

Drawing Title
Proposed Development Parcels

Date	Scale	Drawn by	Check by
14.02.19	1:2000@A2	MD	SW

Project No	Drawing No	Revision
29976	BW03	

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The scaling of this drawing cannot be assured

Revision	Date	Drn	Ckd
-	-	-	-

Legend

N

Project
Peeknook, Carrington
Trafford

Drawing Title
Illustrative Layout Plan

Date	Scale	Drawn by	Check by
14.02.19	1:2000@A2	MD	SW

Project No	Drawing No	Revision
29976	BW02	- A

0 20 40 60 80 100m

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