



**FLOOD RISK ASSESSMENT
FOR THE
PROPOSED DPV BLOCK
HEINEKEN, MANCHESTER**



SEPTEMBER 2020



ENGINEERING



ARCHITECTURE



PROJECT MANAGEMENT



CDM SERVICES



Document Control

Project Title	DPV Block Heineken, Manchester		Project No.	8540	
Document Title	Flood Risk Assessment				
Revision	Date	Filename	Flood Risk Assessment		
P01	September 2020	Description	Flood Risk Assessment		
			Prepared	Checked	
		Name	AF	RP	
		Signature	A. Fox		
		Filename			
		Description			
			Prepared	Checked	
		Name			
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TABLE OF CONTENTS

	Page No.
1 INTRODUCTION	1
2 SITE INFORMATION	2
2.1 Existing Site	2
2.2 Proposed Development	2
2.3 Flood Zone Classification	3
3 POSSIBLE SOURCES OF FLOODING	4
3.1 Fluvial (Rivers)	4
3.2 Tidal	4
3.3 Surface Water	4
3.4 Ground Water	5
3.5 Infrastructure Failure	5
4 DEVELOPMENT DRAINAGE	7

APPENDICES

Appendix A – Site Location Plans

Appendix B – Existing Topographical Survey and DPV Block Location

Appendix C – Proposed Layout Plans

Appendix D – Flood Mapping Information

Appendix E – United Utilities Sewer Records

1 Introduction

This Flood Risk Assessment (FRA) has been produced in accordance with the 2018 National Planning Policy Framework (NPPF) and the associated Technical Guidance (TG), both contained within the 2018 Planning Practice Guidance (PPG).

The FRA has been produced on behalf of Heineken in respect of the proposed DPV Block, at their existing site off Denmark Road in Manchester.

The comments and opinions contained in this report including the conclusions and recommendations are based on the following information:

- (i) Existing OS plans.
- (ii) Topographical survey of existing levels.
- (iii) Government flood mapping.
- (iv) United Utilities sewer record plans.

This report is prepared solely for the use of Heineken and their advisers.

2 Site information

2.1 Existing Site

The existing Heineken factory is located off Denmark Road, Manchester. A site location plan is attached under **Appendix A**.

The site is bound by Princess Road to the west with a supermarket and retail park beyond. To the north, the site is bounded by Greenheys Lane with a residential area beyond. Charles Halle Road and Denmark Road run adjacent to the eastern boundary with residential housing beyond, along with a primary school and a commercial unit. To the south the site is bounded by Moss Lane East, with a number of churches, social clubs and commercial units beyond.

The Bridgewater Canal runs approximately 1.75Km to the north west of the site and the River Irwell runs approximately 1.85Km to the north west of the site.

Both vehicular and pedestrian access can be taken into the site via Denmark Road.

The Heineken site is approximately 7.5 Ha in area and accommodates the main factory and production buildings, along with the main office building. The remainder of the site is used as car parking, lorry parking and storage. The site is covered in impermeable surfacing, being a mixture of concrete and asphalt pavements, with the exception of a relatively small area of landscaping at the site entrance and to some boundaries.

The proposed DPV block is located towards the south end of the site, adjacent to an existing administration block and other vessels.

An existing site layout plan showing the location of the DPV block and existing ground levels is attached under **Appendix B**.

2.2 Proposed Development

The proposed development consists of a new DPV block, consisting of a single storey building with an 8 no. vertical Dual Purpose Vessel (DPV) installation. The proposal also includes an adjacent open access vertical escape ladder and overhead pipe bridge/walkway to link to the adjacent vessels.

The DPV block accommodates an area of approximately 430m². The development area is flat lying having a ground level between approximately 32.90m AOD and 32.75m AOD and is currently occupied by a mix of tarmac and concrete service yard and road.

Both vehicular and pedestrian access into the site will continue to be taken via Denmark Road.

Proposed site layout plans are attached under **Appendix C**.

2.3 Flood Zone Classification

Flood mapping for Rivers has been obtained from the Environment Agency website and a copy of the Environment Agency Flood Map is attached under **Appendix D**.

The Environment Agency flood mapping for Rivers shows that the proposed DPV Block is located within a Low Risk Flood Zone 2 area which has an annual probability of flooding from rivers of between 1 in 100 and 1 in 1000 (a 1% - 0.1% chance of flooding in any given year).

There are no allocated flood storage areas shown within the vicinity of the site area.

The proposed re-development, being the DPV Block, is considered to be classed as 'general industry' and would therefore be classed as a Less Vulnerable development in accordance with Table 2 : Flood Risk Vulnerability Classification, of the PPG, associated with the NPPF. Table 3 : Flood Risk Vulnerability and Flood Zone Compatibility, of the PPG, associated with the NPPF shows that, an exceptions test is not required and the development is appropriate for a Less Vulnerable development within Flood Zone 2.

3 Possible Sources of Flooding

3.1 Fluvial (Rivers)

Fluvial sources of flooding include the inundation of floodplains from rivers and watercourses, inundation of areas outside the floodplain due to the influence of bridges, embankments and other features which artificially raise water levels, overtopping or breaching of defences, blockages of culverts, flood channels or flood corridors.

The Bridgewater Canal runs approximately 1.75Km to the north west of the site and the River Irwell runs approximately 1.85Km to the north west of the site.

The Government long term flood risk mapping shows that the proposed DPV Block is located within a Flood Zone 2 area which has an annual probability of flooding from rivers of between 1 in 100 and 1 in 1000 (a 1% - 0.1% chance of flooding in any given year).

The DPV Block will replace an existing concrete service road and yard and the proposals are to provide a relatively small amendment to the current site arrangement. It is considered that the provision of the DPV Block will have no notable effect on the site during a flood event.

3.2 Tidal

The area and associated Rivers are not subject to tidal events.

3.3 Surface Water

Flooding from surface water can include sheet run off from adjacent land and surcharged sewers being combined, foul or surface water sewers.

The site is bound by Highway land to all sides and it is considered that as the drainage systems within these roads are adopted, they will be adequately maintained. Should some flooding occur in the adjacent carriageways, it is considered that this will be held within the kerbing of the adjacent carriageways.

The Government long term flood risk information service shows that the area of the proposed DPV block has a low risk of flooding due to surface water. A low risk of flooding means that it has a chance of flooding of between 0.1% and 1% each year. It is noted that the government website providing this information states that it is difficult to predict flooding from surface water as rainfall location and volume area difficult to

forecast. In addition, local features can greatly affect the chance and severity of flooding.

The site has no history of flooding from surcharged sewers or sheet run off and is shown to be at low risk of flooding. Due to the flat lying nature of the site, and surface water collection would be relatively uniform and distributed and dissipated over a larger area. As such, the site is considered not to be at a significant risk from flooding from surface water.

3.4 Ground Water

Flooding from groundwater can include the water table rising above ground level after prolonged rainfall, remote from a watercourse, low lying areas underlain by permeable rock (aquifers), seepage directly into properties, and groundwater recovery after pumping has ceased from mining or industry.

There is no evidence of groundwater issues on the site.

3.5 Infrastructure Failure

Flooding from the failure of reservoirs, canals, industrial processes, burst water mains, blocked sewers or failed pumping stations.

A 2450mm brick combined sewer and a 750mm by 1020mm brick combined sewer run in a westerly direction within the carriageway of Moss Lane East. These sewers are shown to have a depth to invert of approximately 8m and 3.5m respectively.

620mm by 960mm brick culvert combined sewer runs in a southerly direction within Princess Road. The sewer records do not provide a depth for the sewer. The sewer connects onto the 2450mm combined sewer indicated above to continue to run in a westerly direction away from the site

A 610mm by 930mm combined sewer runs in a southerly direction within the site on its eastern side. This sewer is shown to have a depth to invert of approximately 3m and runs into the 750mm by 1020mm brick combined sewer indicated above. This sewer also serves the adjacent residential development located to the east of the site.

A 680mm brick combined sewer, shown to increase to a 620mm by 770mm sewer, runs in a northerly direction within the carriageway of Denmark Road, commencing at the site entrance. This sewer is shown to have a depth to invert of approximately 2.25m. This sewer is shown to have a 750mm combined spur running into the site which stops at a dead end.

A 300mm diameter, 560mm by 710mm, and 600mm diameter combined sewers run into the site from the Police Station to its eastern boundary. These sewers are shown to connect to each other and run in a westerly direction, but are shown to end within the site boundary.

A 1805mm by 3300mm surface water sewer is shown to run in a southerly direction adjacent to the western side of Denmark Road. The sewer is shown to have a depth to invert of approximately 4m and is shown to end at the site entrance.

A copy of the United Utilities sewer records, are attached under **Appendix E**.

As these drainage systems are adopted, it is considered that these systems are likely to be adequately maintained and monitored. Likewise, the on site private drainage network is adequately maintained and monitored by Heineken.

The Environment Agency have provided flood mapping for reservoirs which shows that the whole site will potentially be affected due to the failure of reservoirs. It is noted by the Environment Agency that the failure of a reservoir is very unlikely and that the maps provided reflect a credible worst case scenario for the purpose of emergency planning.

As such, the site is considered not to be a significant risk from infrastructure failure or flooding of existing sewers.

4 Development Drainage

An increase in formally drained impermeable area could increase flood risk to a wider catchment.

The existing site area which is to accommodate the DPV Block is covered by an impermeable hard standing material which is formally drained and discharged into the surrounding site drainage network.

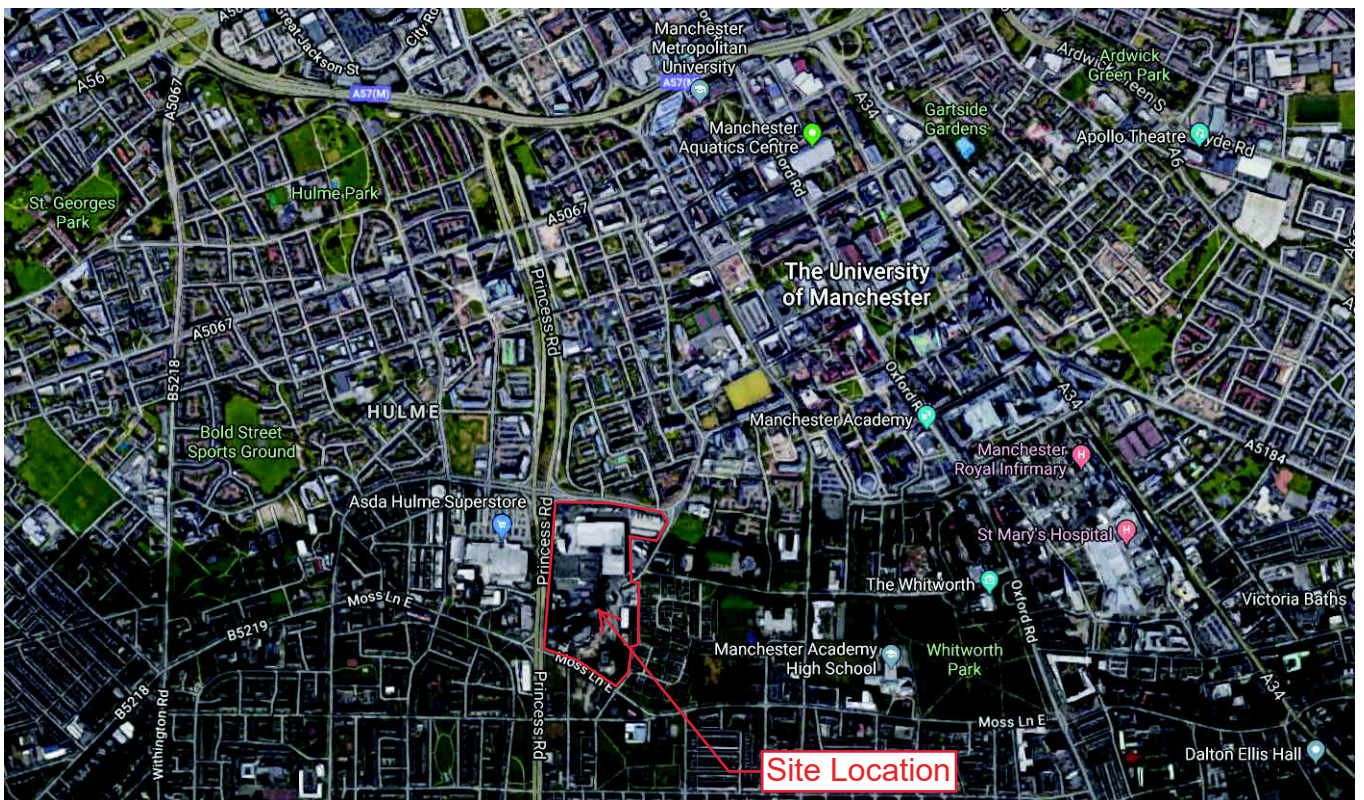
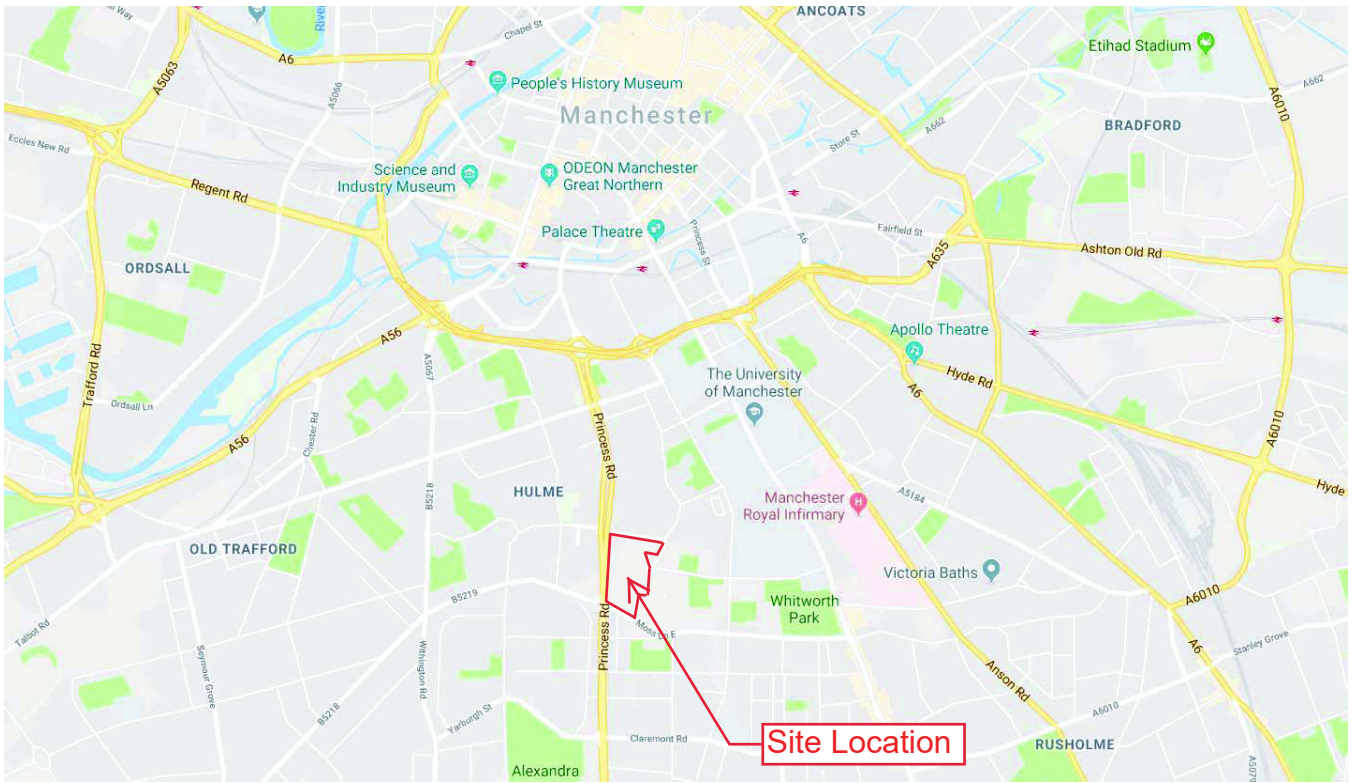
The DPV Block will have a flat roof and due to the potential risk of contamination the rainwater will be collected from the roof and discharged to the process water drainage system. Sustainable drainage systems are considered not appropriate and impractical due to the size and nature of the DPV Block.

As there is no increase in hard standing area there will not be an increased flood risk to the wider catchment from the development drainage. As the surface water is to be discharged into the process water system, there will be a reduction of surface water discharge into the surface water drainage network.

Appendix A – Site Location Plans

Heineken
Denmark Road, Manchester

Site Location Plan



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6. Subcontractor scope, such as for the purposes of site installation, take precedence over the dimensions indicated on the drawings. All surveys should ensure an accurate fit of the drawings.
7. Temporary works associated with the construction of the works shall be the responsibility of the contractor.
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Heineken Site Boundary
DPV Vessel Boundary

P1	01.09.20	Preliminary Issue	AF
REV	DATE	AMENDMENT	BY
CLIENT			

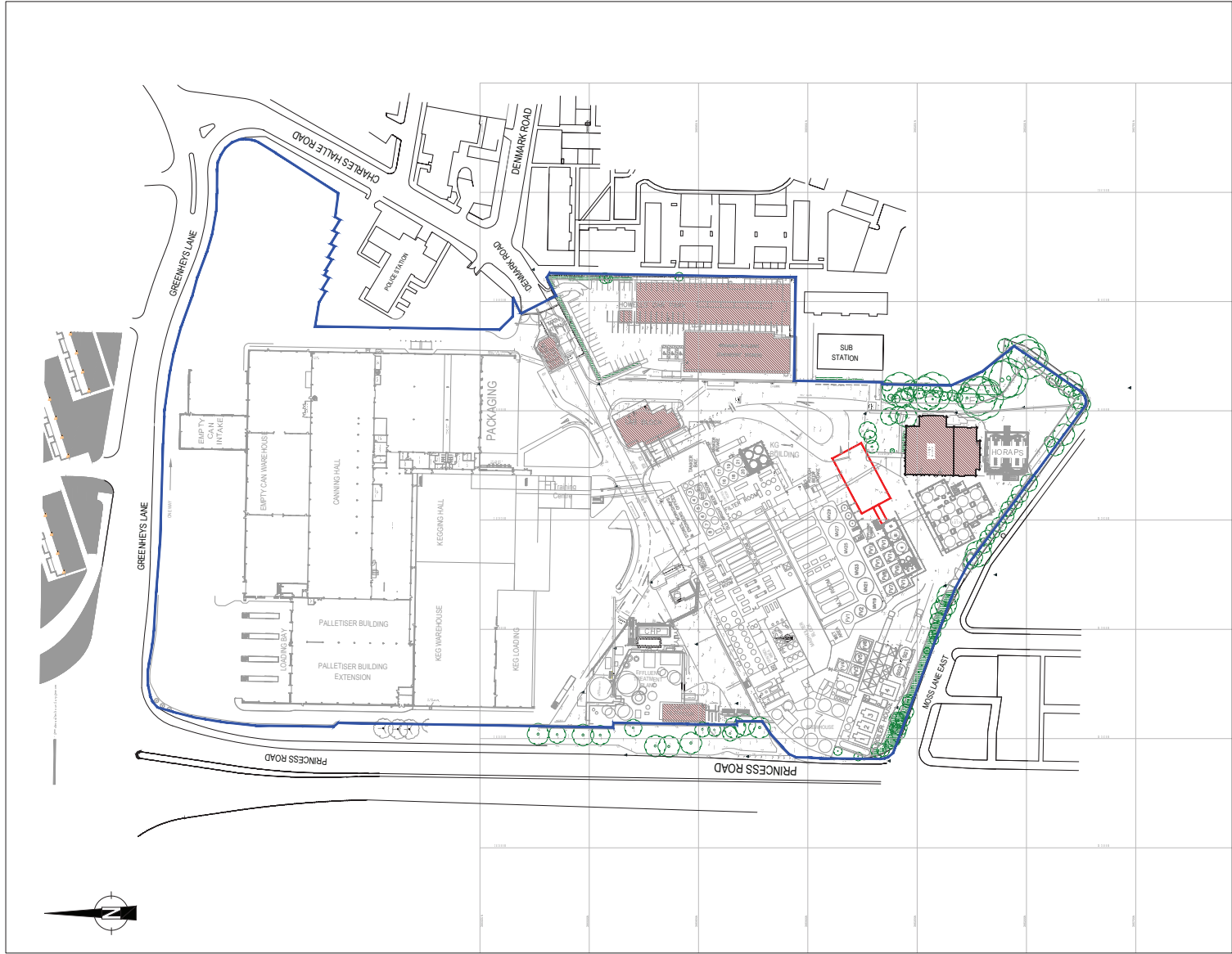


PROJECT
Manchester Brewery
New 8 Vessel DPV Block

DRAWING TITLE
Site Location Plan



SCALE	SHEET SIZE	A1
1:200	DRAWN	CHECKED
DATE	DATE	DATE
Sept 2020	AF	RSP
DRAWING NO.	REV	REV
8540-NDA-XX-XX-DR-C-1001	P1	P1



Appendix B – Existing Topographical Survey and DPV Block Location

Print Date and Time: 15/10/2017 14:05:53

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2. This drawing is to be read in conjunction with all other drawings and specifications.
3. Conflicting information shown on the NDA drawings or specifications shall prevail over any other drawings or specifications.
4. Dimensions must be taken from the NDA drawings or specifications.
5. Dimensions must be taken from the NDA drawings or specifications.
6. Subcontractor scope, such as for the purposes of framework installation, take precedence over the dimensions indicated on the drawings. All surveys should ensure an accurate fit of components.
7. Temporary works associated with the construction of the works shall be designed and constructed in accordance with BS 5975.
8. Where any temporary works are indicated on the drawings, they shall be designed and constructed in accordance with BS 5975.
9. The drawings and specifications shall be submitted to the Engineer for comment at least 10 days prior to the start of the works. The Engineer shall not be responsible for any design or construction errors.

Heineken Site
Boundary
DPV Vessel
Boundary

P1 01.09.20 Preliminary Issue AF
REV DATE AMENDMENT BY
CLIENT



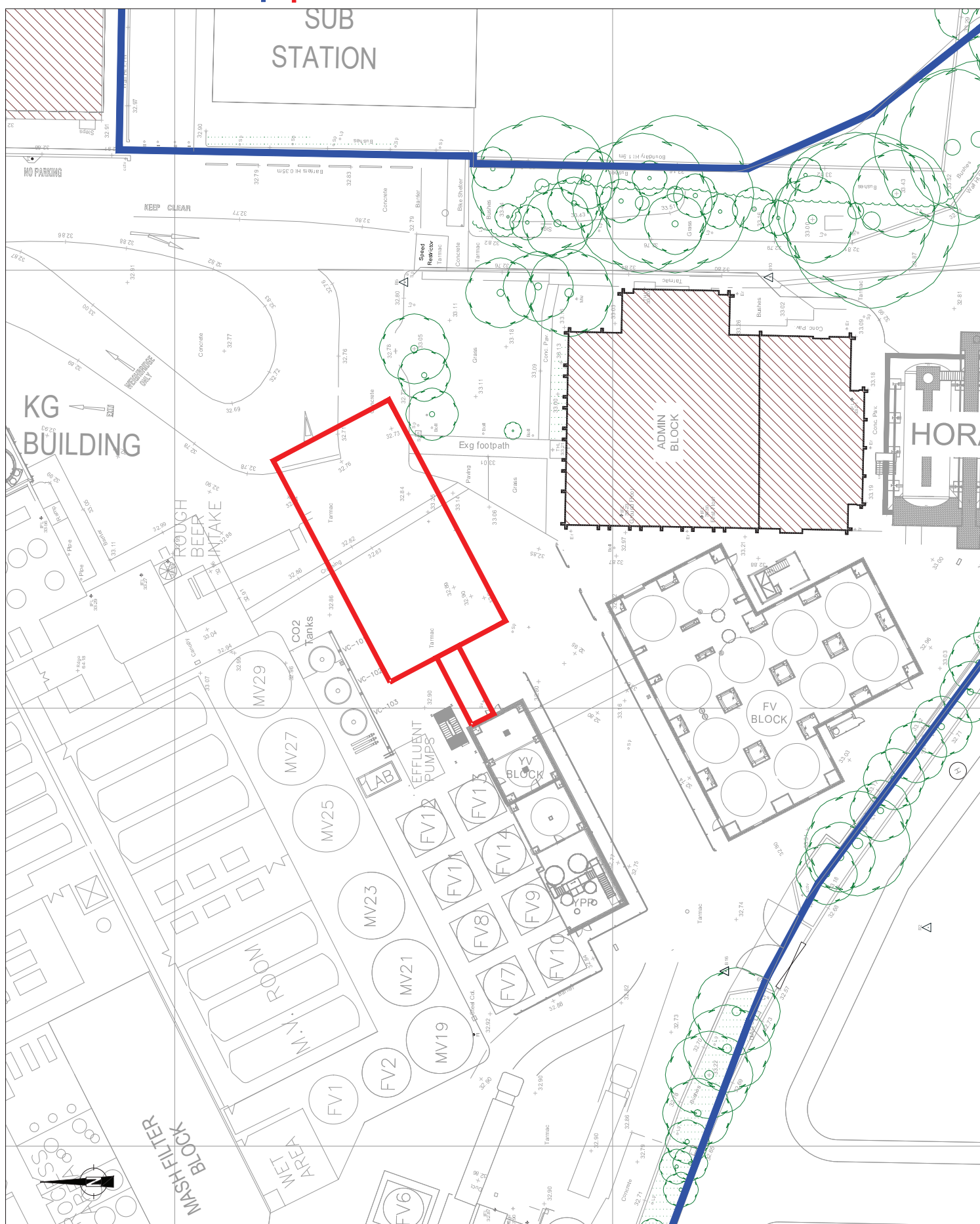
PROJECT
Manchester Brewery
New 8 Vessel DPV Block

DRAWING TITLE
Existing Topographical Survey



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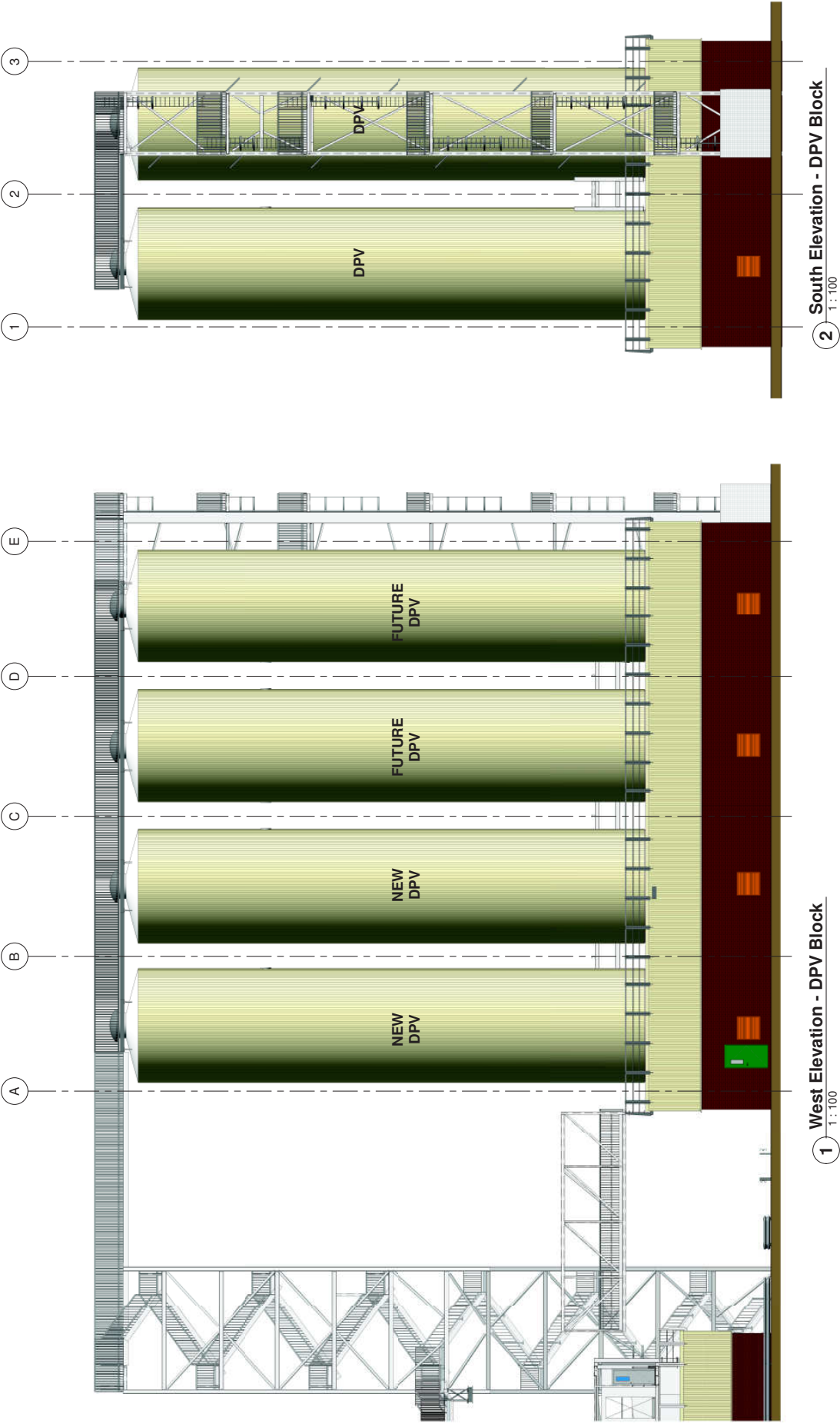
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DATE	CHECKED
Sept 2020	RSP
DRAWING NO.	REV
8540-NDA-XX-XX-DR-C-1002	P1



Appendix C – Proposed Site Layout Plans

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2. These drawings are for the use of the Contractor, relevant Architects, Engineers and specialist drawings, details and specifications.
3. The Contractor shall ensure that the NDA drawings and specifications are followed and that any discrepancies between the information given by NDA and that provided by others must be referred to NDA before any work is commenced.
4. Dimensions must not be scaled from this drawing.
5. Dimensions marked dimension to be site checked are to be checked by the Contractor before construction proceeds.
6. Subcontractor surveys, such as for the purposes of ensuring an accurate fit of components, shall be carried out by the Contractor in consultation of the Principal Contractor and shall be the responsibility of the Contractor.
7. The Contractor shall ensure that all dimensions indicated on this drawing. All surveys should be carried out in consultation of the Principal Contractor.
8. The Contractor shall ensure that all dimensions indicated on this drawing. All surveys should be carried out in consultation of the Principal Contractor.
9. Calculations and drawings of all Contractor designed components shall be submitted to the Engineer for comment at least 10 days prior to manufacture. Any components shall not be manufactured without the approval of the Engineer.

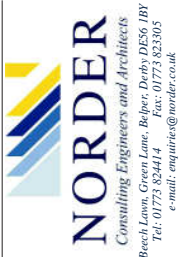


REV	DATE	AMENDMENT	BY
P1	27/08/20	Issued by Client for construction	SW



PROJECT
Manchester Brewery
New 8 Vessel DPV Block

DRAWING TITLE
Proposed DPV Block Building
Elevations 2 of 2



SCALE	SHEET SIZE A1	CHECKED	REV
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27 August 2020	SW		
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General Notes:

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P1 27.08.20	Issued for Client comment's approval.	SW



PROJECT Manchester Brewery
New 8 Vessel DPV Block

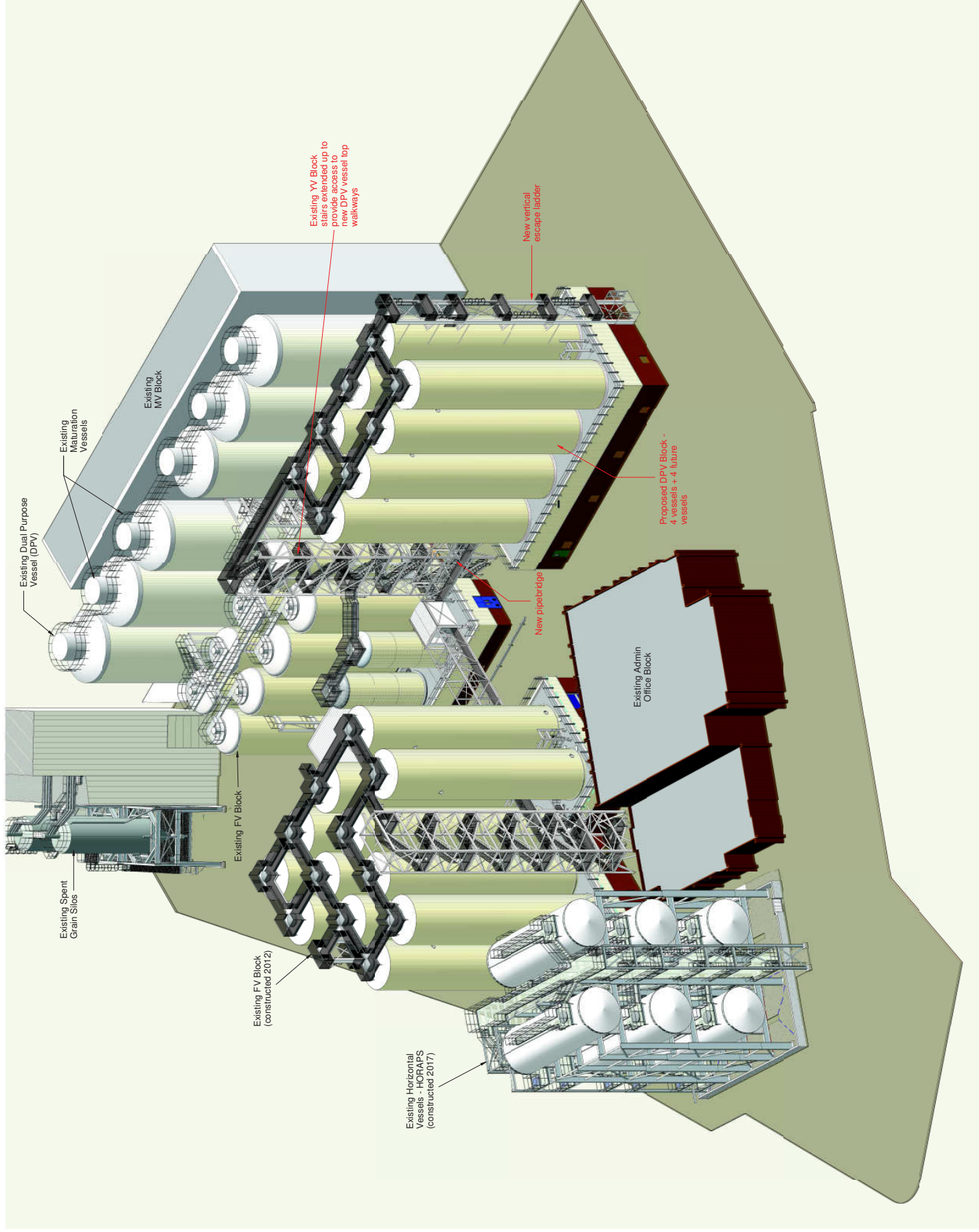
DRAWING TITLE

Proposed 3D View

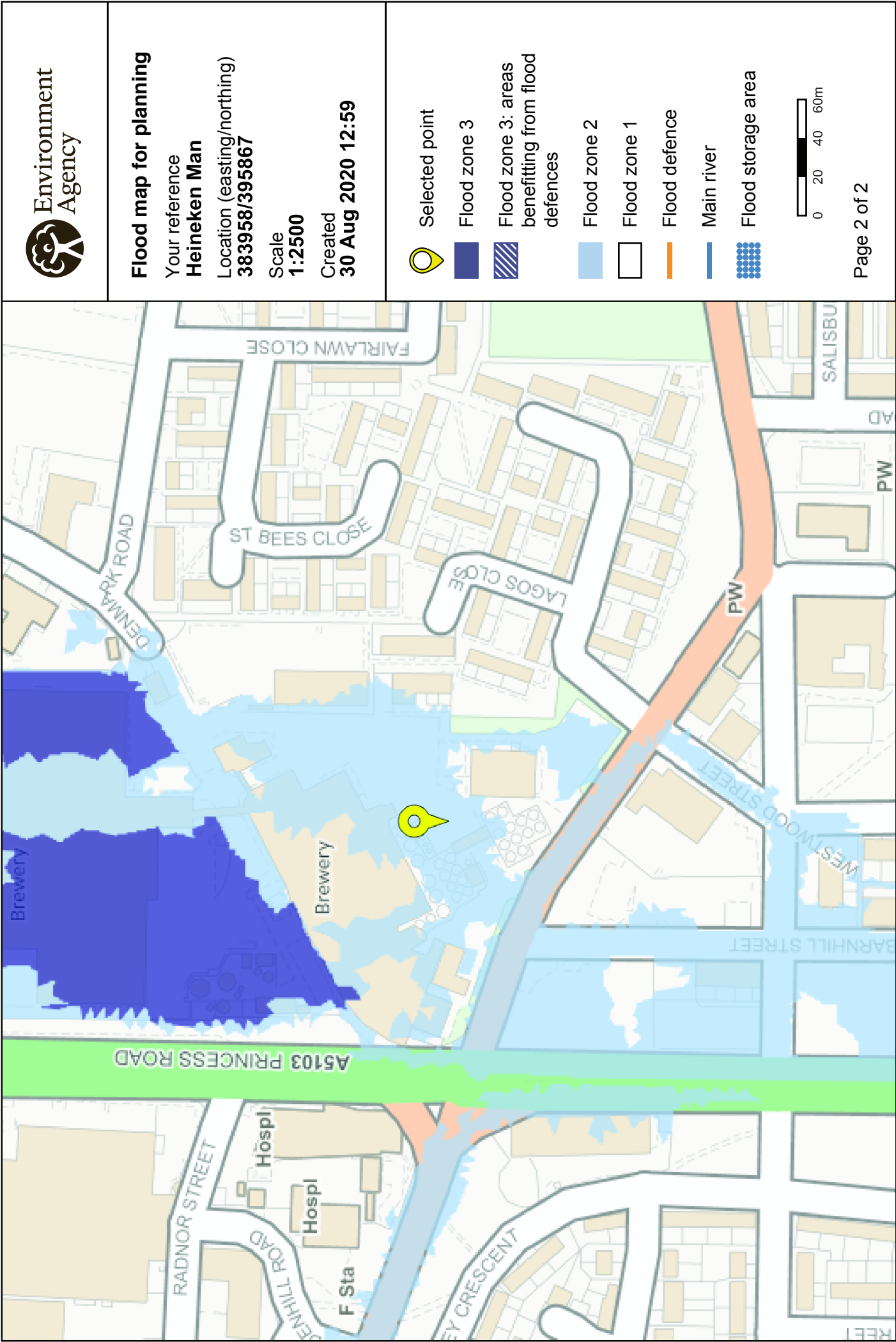


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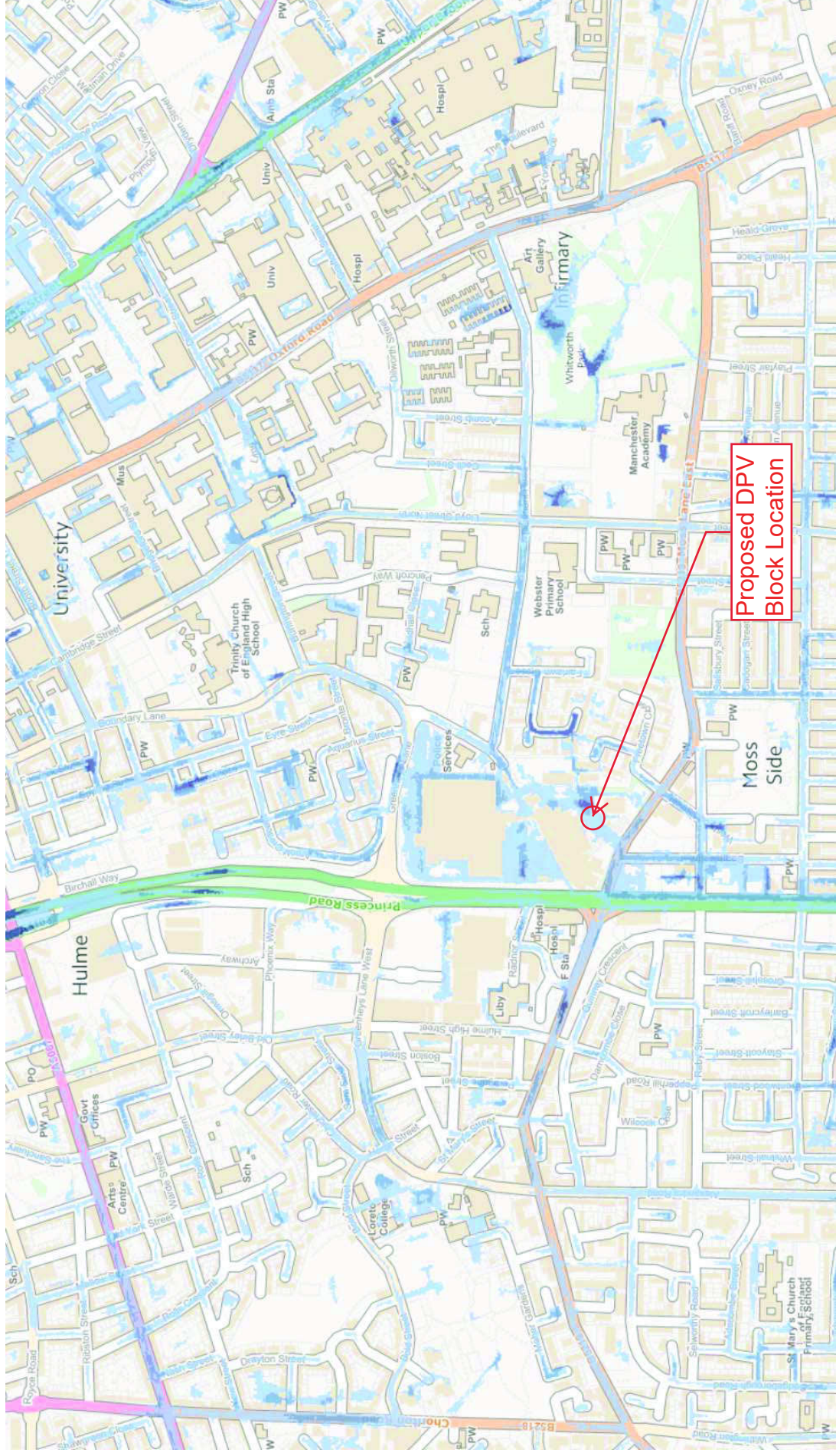


Appendix D – Flood Mapping Information



Heineken Brewery Manchester

Flood Risk From Surface Water



Reservoir Flood Map



The area within the red circle could be at risk of flooding from the following reservoirs:

Reservoir Name	Reservoir Owner	Location	Local Authority	Environment Agency Office
Gorton Lower	United Utilities Water plc	399386, 396041	Manchester	Environment Agency - Greater Manchester, Merseyside
Gorton Upper	United Utilities Water plc	399893, 396254	Manchester	Environment Agency - Greater Manchester, Merseyside
Audenshaw No. 3	United Utilities Water plc	390934, 396835	Tameside	Environment Agency - Greater Manchester, Merseyside
Audenshaw No. 2	United Utilities Water plc	391643, 396083	Tameside	Environment Agency - Greater Manchester, Merseyside
Audenshaw No. 1	United Utilities Water plc	391852, 396483	Tameside	Environment Agency - Greater Manchester, Merseyside

Note - this map provides a general indication of the largest area that might be flooded if a reservoir were to fail and release the water it holds. It is taken from a national assessment and displays a worst case scenario. The map is only intended as a guide and is not a prediction of what will happen.

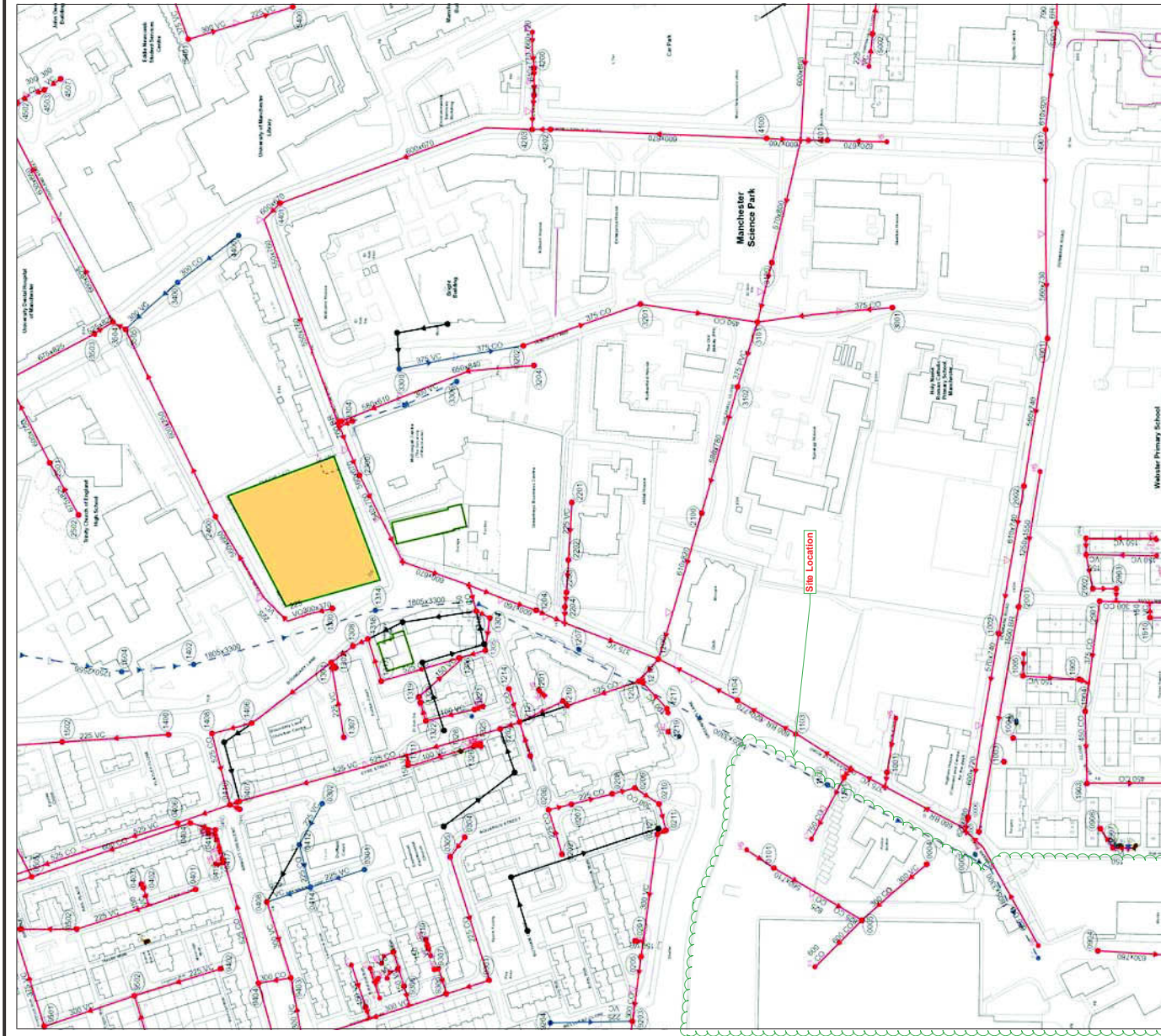
Important

- This map has been produced for emergency planning purposes and displays a worst case scenario.
- It is not suitable for use at an individual property scale due to the method used.
- This map does not give any information on the likelihood of reservoir flooding or on the depth or speed of floodwaters. It also does not include any smaller reservoirs (which hold less than 25,000 cubic metres of water) or reservoirs commissioned or registered after Spring 2009.
- The information should not be interpreted as stating that the location you are interested in will or won't actually flood, but simply that it is in or not in an area that could be affected by reservoir flooding as shown on the maps.

Maximum extent of flood

1:10,000

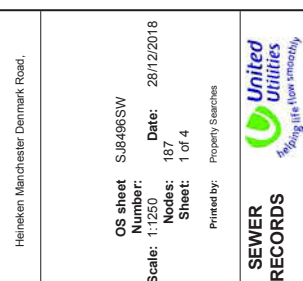
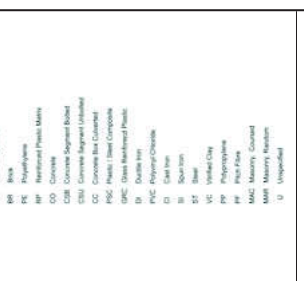
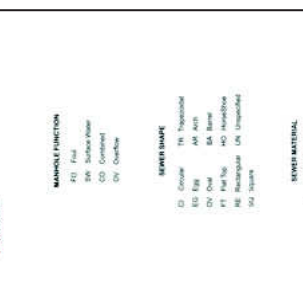
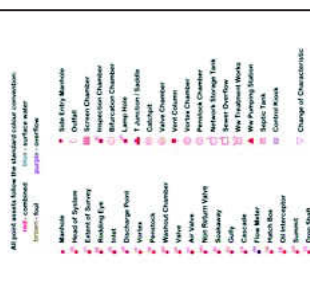
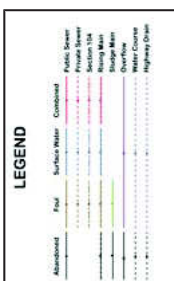
Appendix E – United Utility Sewer Record Plans



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 any loss or damage caused by the actual position being different from those shown.

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Node	Chainage	Depth	Size	Material	Notes
1.0	1.000	1.000	1.000	1.000	1.000
1.1	1.100	1.100	1.100	1.100	1.100
1.2	1.200	1.200	1.200	1.200	1.200
1.3	1.300	1.300	1.300	1.300	1.300
1.4	1.400	1.400	1.400	1.400	1.400
1.5	1.500	1.500	1.500	1.500	1.500
1.6	1.600	1.600	1.600	1.600	1.600
1.7	1.700	1.700	1.700	1.700	1.700
1.8	1.800	1.800	1.800	1.800	1.800
1.9	1.900	1.900	1.900	1.900	1.900
2.0	2.000	2.000	2.000	2.000	2.000
2.1	2.100	2.100	2.100	2.100	2.100
2.2	2.200	2.200	2.200	2.200	2.200
2.3	2.300	2.300	2.300	2.300	2.300
2.4	2.400	2.400	2.400	2.400	2.400
2.5	2.500	2.500	2.500	2.500	2.500
2.6	2.600	2.600	2.600	2.600	2.600
2.7	2.700	2.700	2.700	2.700	2.700
2.8	2.800	2.800	2.800	2.800	2.800
2.9	2.900	2.900	2.900	2.900	2.900
3.0	3.000	3.000	3.000	3.000	3.000
3.1	3.100	3.100	3.100	3.100	3.100
3.2	3.200	3.200	3.200	3.200	3.200
3.3	3.300	3.300	3.300	3.300	3.300
3.4	3.400	3.400	3.400	3.400	3.400
3.5	3.500	3.500	3.500	3.500	3.500
3.6	3.600	3.600	3.600	3.600	3.600
3.7	3.700	3.700	3.700	3.700	3.700
3.8	3.800	3.800	3.800	3.800	3.800
3.9	3.900	3.900	3.900	3.900	3.900
4.0	4.000	4.000	4.000	4.000	4.000
4.1	4.100	4.100	4.100	4.100	4.100
4.2	4.200	4.200	4.200	4.200	4.200
4.3	4.300	4.300	4.300	4.300	4.300
4.4	4.400	4.400	4.400	4.400	4.400
4.5	4.500	4.500	4.500	4.500	4.500
4.6	4.600	4.600	4.600	4.600	4.600
4.7	4.700	4.700	4.700	4.700	4.700
4.8	4.800	4.800	4.800	4.800	4.800
4.9	4.900	4.900	4.900	4.900	4.900
5.0	5.000	5.000	5.000	5.000	5.000
5.1	5.100	5.100	5.100	5.100	5.100
5.2	5.200	5.200	5.200	5.200	5.200
5.3	5.300	5.300	5.300	5.300	5.300
5.4	5.400	5.400	5.400	5.400	5.400
5.5	5.500	5.500	5.500	5.500	5.500
5.6	5.600	5.600	5.600	5.600	5.600
5.7	5.700	5.700	5.700	5.700	5.700
5.8	5.800	5.800	5.800	5.800	5.800
5.9	5.900	5.900	5.900	5.900	5.900
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6.1	6.100	6.100	6.100	6.100	6.100
6.2	6.200	6.200	6.200	6.200	6.200
6.3	6.300	6.300	6.300	6.300	6.300
6.4	6.400	6.400	6.400	6.400	6.400
6.5	6.500	6.500	6.500	6.500	6.500
6.6	6.600	6.600	6.600	6.600	6.600
6.7	6.700	6.700	6.700	6.700	6.700
6.8	6.800	6.800	6.800	6.800	6.800
6.9	6.900	6.900	6.900	6.900	6.900
7.0	7.000	7.000	7.000	7.000	7.000
7.1	7.100	7.100	7.100	7.100	7.100
7.2	7.200	7.200	7.200	7.200	7.200
7.3	7.300	7.300	7.300	7.300	7.300
7.4	7.400	7.400	7.400	7.400	7.400
7.5	7.500	7.500	7.500	7.500	7.500
7.6	7.600	7.600	7.600	7.600	7.600
7.7	7.700	7.700	7.700	7.700	7.700
7.8	7.800	7.800	7.800	7.800	7.800
7.9	7.900	7.900	7.900	7.900	7.900
8.0	8.000	8.000	8.000	8.000	8.000
8.1	8.100	8.100	8.100	8.100	8.100
8.2	8.200	8.200	8.200	8.200	8.200
8.3	8.300	8.300	8.300	8.300	8.300
8.4	8.400	8.400	8.400	8.400	8.400
8.5	8.500	8.500	8.500	8.500	8.500
8.6	8.600	8.600	8.600	8.600	8.600
8.7	8.700	8.700	8.700	8.700	8.700
8.8	8.800	8.800	8.800	8.800	8.800
8.9	8.900	8.900	8.900	8.900	8.900
9.0	9.000	9.000	9.000	9.000	9.000
9.1	9.100	9.100	9.100	9.100	9.100
9.2	9.200	9.200	9.200	9.200	9.200
9.3	9.300	9.300	9.300	9.300	9.300
9.4	9.400	9.400	9.400	9.400	9.400
9.5	9.500	9.500	9.500	9.500	9.500
9.6	9.600	9.600	9.600	9.600	9.600
9.7	9.700	9.700	9.700	9.700	9.700
9.8	9.800	9.800	9.800	9.800	9.800
9.9	9.900	9.900	9.900	9.900	9.900
10.0	10.000	10.000	10.000	10.000	10.000



1.0	1.000	1.000	1.000	1.000	1.000
1.1	1.100	1.100	1.100	1.100	1.100
1.2	1.200	1.200	1.200	1.200	1.200
1.3	1.300	1.300	1.300	1.300	1.300
1.4	1.400	1.400	1.400	1.400	1.400
1.5	1.500	1.500	1.500	1.500	1.500
1.6	1.600	1.600	1.600	1.600	1.600
1.7	1.700	1.700	1.700	1.700	1.700
1.8	1.800	1.800	1.800	1.800	1.800
1.9	1.900	1.900	1.900	1.900	1.900
2.0	2.000	2.000	2.000	2.000	2.000
2.1	2.100	2.100	2.100	2.100	2.100
2.2	2.200	2.200	2.200	2.200	2.200
2.3	2.300	2.300	2.300	2.300	2.300
2.4	2.400	2.400	2.400	2.400	2.400
2.5	2.500	2.500	2.500	2.500	2.500
2.6	2.600	2.600	2.600	2.600	2.600
2.7	2.700	2.700	2.700	2.700	2.700
2.8	2.800	2.800	2.800	2.800	2.800
2.9	2.900	2.900	2.900	2.900	2.900
3.0	3.000	3.000	3.000	3.000	3.000
3.1	3.100	3.100	3.100	3.100	3.100
3.2	3.200	3.200	3.200	3.200	3.200
3.3	3.300	3.300	3.300	3.300	3.300
3.4	3.400	3.400	3.400	3.400	3.400
3.5	3.500	3.500	3.500	3.500	3.500
3.6	3.600	3.600	3.600	3.600	3.600
3.7	3.700	3.700	3.700	3.700	3.700
3.8	3.800	3.800	3.800	3.800	3.800
3.9	3.900	3.900	3.900	3.900	3.900
4.0	4.000	4.000	4.000	4.000	4.000
4.1	4.100	4.100	4.100	4.100	4.100
4.2	4.200	4.200	4.200	4.200	4.200
4.3	4.300	4.300	4.300	4.300	4.300
4.4	4.400	4.400	4.400	4.400	4.400
4.5	4.500	4.500	4.500	4.500	4.500
4.6	4.600	4.600	4.600	4.600	4.600
4.7	4.700	4.700	4.700	4.700	4.700
4.8	4.800	4.800	4.800	4.800	4.800
4.9	4.900	4.900	4.900	4.900	4.900
5.0	5.000	5.000	5.000	5.000	5.000
5.1	5.100	5.100	5.100	5.100	5.100
5.2	5.200	5.200	5.200	5.200	5.200
5.3	5.300	5.300	5.300	5.300	5.300
5.4	5.400	5.400	5.400	5.400	5.400
5.5	5.500	5.500	5.500	5.500	5.500
5.6	5.600	5.600	5.600	5.600	5.600
5.7	5.700	5.700	5.700	5.700	5.700
5.8	5.800	5.800	5.800	5.800	5.800
5.9	5.900	5.900	5.900	5.900	5.900
6.0	6.000	6.000	6.000	6.000	6.000
6.1	6.100	6.100	6.100	6.100	6.100
6.2	6.200	6.200	6.200	6.200	6.200
6.3	6.300	6.300	6.300	6.300	6.300
6.4	6.400	6.400	6.400	6.400	6.400
6.5	6.500	6.500	6.500	6.500	6.500
6.6	6.600	6.600	6.600	6.600	6.600
6.7	6.700	6.700	6.700	6.700	6.700
6.8	6.800	6.800	6.800	6.800	6.800
6.9	6.900	6.900	6.900	6.900	6.900
7.0	7.000	7.000	7.000	7.000	7.000
7.1	7.100	7.100	7.100	7.100	7.100
7.2	7.200	7.200	7.200	7.200	7.200
7.3	7.300	7.300	7.300	7.300	7.300
7.4	7.400	7.400	7.400	7.400	7.400
7.5	7.500	7.500	7.500	7.500	7.500
7.6	7.600	7.600	7.600	7.600	7.600
7.7	7.700	7.700	7.700	7.700	7.700
7.8	7.800	7.800	7.800	7.800	7.800
7.9	7.900	7.900	7.900	7.900	7.900
8.0	8.000	8.000	8.000	8.000	8.000
8.1	8.100	8.100	8.100	8.100	8.100
8.2	8.200	8.200	8.200	8.200	8.200
8.3	8.300	8.300	8.300	8.300	8.300
8.4	8.400	8.400	8.400	8.400	8.400
8.5	8.500	8.500	8.500	8.500	8.500
8.6	8.600	8.600	8.600	8.600	8.600
8.7	8.700	8.700	8.700	8.700	8.700
8.8	8.800	8.800	8.800	8.800	8.800
8.9	8.900	8.900	8.900	8.900	8.900
9.0	9.000	9.000	9.000	9.000	9.000
9.1	9.100	9.100	9.100	9.100	9.100
9.2	9.200	9.200	9.200	9.200	9.200
9.3	9.300	9.300	9.300	9.300	9.300
9.4	9.400	9.400	9.400	9.400	9.400
9.5	9.500	9.500	9.500	9.500	9.500
9.6	9.600	9.600	9.600	9.600	9.600
9.7	9.700	9.700	9.700	9.700	9.700
9.8	9.800	9.800	9.800	9.800	9.800
9.9	9.900	9.900	9.900	9.900	9.900
10.0	10.000	10.000	10.000	10.000	10.000

