FLOOD RISK ASSESSMENT

UK Greetings
Bretton Park
Dewsbury

Reference	**6359-JPG-XX-XX-RP-D-0620-S2-P01**
Date	**28 February 2025**
Author	**BT**

5 John Charles Way
LEEDS
LS12 6QA

Tel: 0113 263 1155
admin@jpg.group
www.jpg.group

CONTENTS

APPENDICES

CONFIDENTIALITY STATEMENT

This report is addressed to and may be relied upon by the following:

UK Greetings Limited
Mill Street East
DEWSBURY
West Yorkshire
WF12 9AW

This report has been prepared for the sole use and reliance of the above-named party. This report shall not be relied upon or transferred to any other parties without the express written authorisation of JPG (Leeds) Limited. No responsibility will be accepted where this report is used, either in its entirety or in part, by any other party.

DOCUMENT HISTORY

Revision	Date	Revision Details	Status	Author(s)	Approved
P01	28.02.2025	First Revision	Information	BT	RMR

1.0 INTRODUCTION

JPG (Leeds) Limited (JPG) has been instructed by UK Greetings Limited to prepare a Flood Risk Assessment for a proposed office extension on the existing UK Greetings Warehouse, Dewsbury.

The report will review the flood risk issues associated with the proposed development and recommend any mitigation which should take place as part of the development.

A separate Drainage Impact Assessment Report will cover the detailed drainage strategy document reference 6359-JPG-XX-XX-RP-0621. This document should be read in conjunction with the Flood Risk Assessment Report.

This document is prepared in accordance with the requirements of the Planning Practice Guidance & National Planning Policy Framework (NPPF) which states that a site specific flood risk assessment should be carried out by (or on behalf of) the developer or those proposing development.

The assessment should demonstrate to the decision-maker how flood risk will be managed now and over the development's lifetime, taking climate change into account, and with regard to the vulnerability of its users.

The objectives of a site-specific flood risk assessment are to establish:

- whether a proposed development is likely to be affected by current or future flooding from any source.
- whether it will increase flood risk elsewhere.
- whether the measures proposed to deal with these effects and risks are appropriate.
- the evidence for the local planning authority to apply (if necessary) the Sequential Test, and.
- whether the development will be safe and pass the Exception Test, if applicable.
- Satisfying the local planning authority that any flood risk to the development or additional risk arising from the proposal will be successfully managed with the minimum environmental effect, to ensure that the site can be developed and occupied safely.

Note the Sequential and Exception Tests are not cover in this Flood Risk Assessment report and if required will be undertaken by other consultants. The NPPF defines flood zones as follows:

- Zone 1 – Low Probability – Land having less than 1 in 1000-annual probability (< 0.1%) of river or sea flooding in any year.
- Zone 2 – Medium Probability – Land having between a 1 in 100 and 1 in 1000-annual probability (1% - 0.1%) of river flooding or land having between a 1 in 200 and 1 in 1000-annual probability of sea flooding (0.5% - 0.1%) in any year.

- Zone 3a – High Probability – ~Land having a 1 in 100 or greater annual probability (> 1%) of river flooding or land having a 1 in 200 or greater annual probability of flooding from the sea (>0.5%) in any year.
- Zone 3b – The Functional Floodplain – This zone comprises land where water from rivers or the sea has to flow or be stored in times of flood. The identification of functional floodplain should take account of local circumstances and not be defined solely on rigid probability parameters. Functional floodplain will normally comprise:
- Land having a 1 in 30 or greater annual probability of flooding (3.3%), with any existing flood risk management infrastructure operating effectively; or
- land that is designed to flood (such as a flood attenuation scheme), even if it would only flood in more extreme events (such as 1 in 1000 (0.1%) annual probability of flooding).

The local planning authorities should identify in their Strategic Flood Risk Assessments areas of functional floodplain and its boundaries accordingly, in agreement with the Environment Agency. (Note Zone 3b is not separately distinguished from Zone 3a on the Flood Map).

A site-specific flood risk assessment should be provided for all development in Flood Zones 2 and 3. In Flood Zone 1, an assessment should accompany all proposals involving: sites of 1 hectare or more; land which has been identified by the Environment Agency as having critical drainage problems; land identified in a strategic flood risk assessment as being at increased flood risk in future; or land that may be subject to other sources of flooding, where its development would introduce a more vulnerable use.

The NPPF Annex 3 splits development into five "Flood Risk Vulnerability Classifications" as follows:

- Essential Infrastructure.
- Highly Vulnerable.
- More Vulnerable.
- Less Vulnerable.
- Water Compatible Development.

The Sequential Test should be applied first to guide development to the lowest flood risk areas.

Table 2 in the NPPF guidance document details which development vulnerability classifications are incompatible with the different flood zones.

Where developments contain different elements of vulnerability, the highest vulnerability category should be used for assessment, unless the development is considered in its component parts.

Table 2 is below:

Table 2: Flood risk vulnerability and flood zone 'incompatibility'

Flood Zones	Flood Risk Vulnerability Classification				
	Essential infrastructure	Highly vulnerable	More vulnerable	Less vulnerable	Water compatible
Zone 1	✔	✔	✔	✔	✔
Zone 2	✔	Exception Test required	✔	✔	✔
Zone 3a †	Exception Test required †	X	Exception Test required	✔	✔
Zone 3b *	Exception Test required *	X	X	X	✔ *

Key:

✔ Exception test is not required

X Development should not be permitted

"†" In Flood Zone 3a essential infrastructure should be designed and constructed to remain operational and safe in times of flood.

"*" In Flood Zone 3b (functional floodplain) essential infrastructure that has passed the Exception Test, and water-compatible uses, should be designed and constructed to:

- Remain operational and safe for users in times of flood.
- Result in no net loss of floodplain storage.
- Not impede water flows and not increase flood risk elsewhere.

2.0 THE SITE

2.1 Location

The site is located approximately 1.5km south of Dewsbury town centre. The approximate centre of the site is located at NGR 425278 420001.

A location plan is provided in Appendix A.

2.2 Site Description and Topography

The site comprises a rectangular shaped parcel of land, located adjacent to the existing warehouse building to the northwest. The site measures approximately 18m along its northwest to southeast axis and approximately 60m along its northeast to southwest axis, occupying an area of 0.12 hectares.

The site comprises a landscaped area with a strip of gravel along the side of the building. The site is flat and level.

The wider site area is accessed off Bretton Park Way through a gated access to the west.

The boundaries to the wider site area are formed by post and mesh fencing.

The site is located within an industrial estate. Land to the north comprises the existing UK Greetings warehouse and offices. Car parking associated with the existing warehouse building is located to the south and west.

3.0 EXISTING DRAINAGE NETWORK

3.1 Watercourses and Land Drainage

There are no known or visible existing water courses or land drainage systems located within the site boundary or immediately outside the site adjacent to the boundary.

The River Calder is located approximately 0.25km to the east.

There is no direct access to these watercourses from the site without passing through third party land and it is unlikely that a gravity connection would be possible.

3.2 Public Sewer Network

Public sewer records have been obtained from Yorkshire Water (YW) and indicate public sewer assets outside of the boundary in Bretton Park Way.

Based on the Yorkshire Water record drawing there is a public foul water sewer and public surface water sewer as detailed below:

- 750dia. Surface Water Public Sewer (material concrete).
- 150dia. Foul Water Public Sewer (material vitrified clay).

The law regarding responsibility for drains and sewers changed on the 1 October 2011. From this date the Government transferred the majority of drainage pipes that are either outside a property's boundary or are shared with other buildings to the Sewage/Water companies. The sewer records may not show all of the transferred sewers.

An extract from Yorkshire Water sewer record plan is provided in Appendix C.

3.3 Private Drainage Systems/Network

There is an extensive existing private drainage system which serves the existing building, car park, service yards and access roads.

A schematic private plot drainage layout plan is located in Appendix C.

It is proposed to connect into the existing drainage system for the office development, the private drainage has eventual outfall to the adopted sewers in Bretton Park Way.

4.0 DEVELOPMENT PROPOSALS

It is proposed to develop the site for an office development associated with the existing warehouse and distribution centre located on the wider site.

A proposed site layout plan showing the location of the proposed extension is referenced below, a copy of which is presented in Appendix A of this report.

KPP Architects. Proposed Site Plan. Bretton Park. Job no. 2157-01. Project 2003. Dated January 2025.

5.0 FLOOD RISK ASSESSMENT

Flooding information was obtained from the Environment Agency (EA) website, which confirms the site lies within Flood Zone 2.

The Environment Agency Flood Mapping for surface water is in Appendix E.

Flood Zone 2 comprises land having between a 1 in 100 and 1 in 1000-annual probability (1% - 0.1%) of river flooding or land having between a 1 in 200 and 1 in 1000-annual probability of sea flooding (0.5% - 0.1%) in any year.

NPPF Technical Guidance states that less vulnerable development (such as an office) is appropriate in Flood Zone 2.

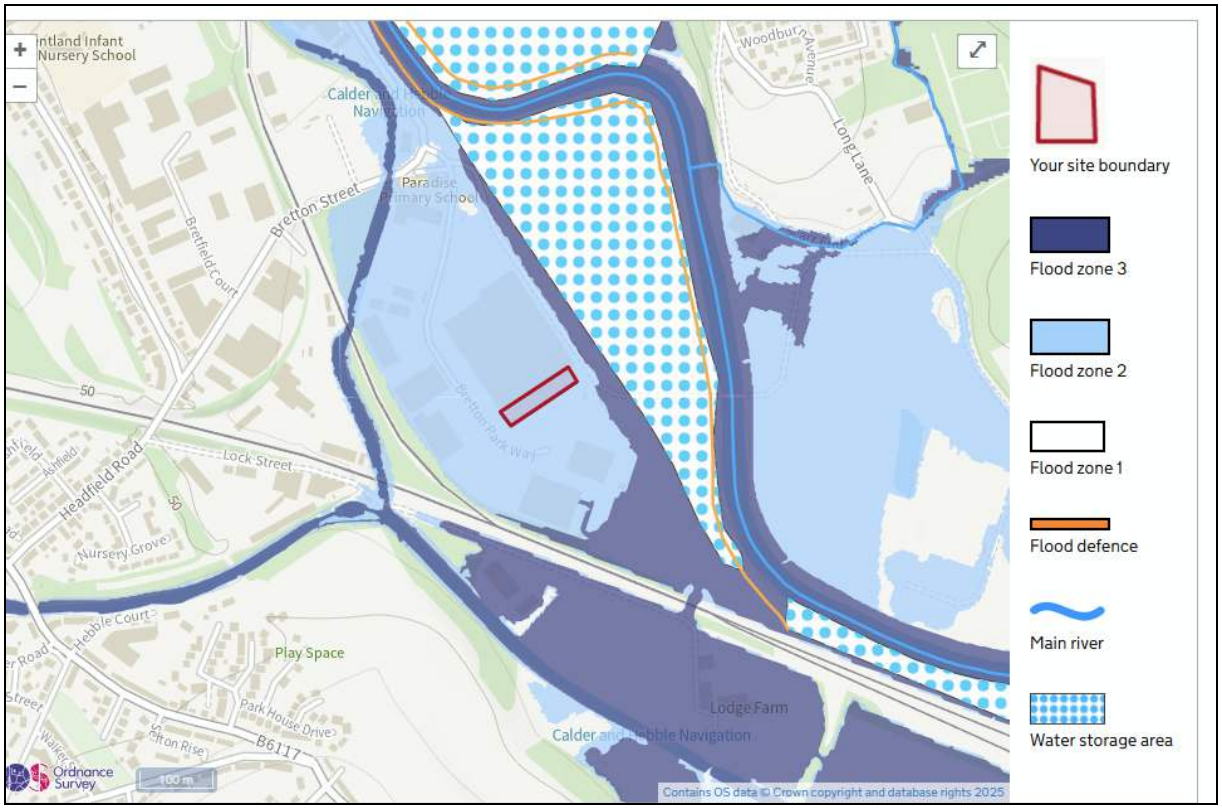
NPPF Technical Guidance states that flood risk should be considered from all sources, including:

- Rivers and sea (Fluvial).
- Adjoining land (Pluvial).
- Groundwater.
- Flooding from sewers and drains.
- Flooding from reservoirs, canals and other artificial sources.

5.1 Flooding from Rivers and Sea (Fluvial)

The River Calder is located approximately 0.25km to the east.

A copy of the map produced by the Environment Agency showing the extent of flooding from rivers and the sea is below.



The proposed development will not exacerbate the risk of flooding from this source. The risk to the development from this potential flooding source is considered to be low.

5.2 Flooding from Adjoining Land (Pluvial)

Overland flow/surface water flooding typically arises because of intense rainfall, often for a short duration. This is unable to soak into the ground or enter drainage systems. It can run quickly off land and result in localised flooding.

A copy of the map produced by the Environment Agency showing the extent of flooding from surface sources is below.

As indicated on the above Environment Agency flood map the majority of the proposed site is at none or low risk.

Based on the above assessment the risk to the development from this potential flooding source is considered to be low.

5.3 Flooding from Groundwater

A phase 2 Geo-environment Ground Investigation study has been undertaken on the site by JPG, refer to *"6359-JPG-XX-XX-RP-G-0603-S2-P01-Geoenvironmental_Ground_Investigation"* for further details.

The following ground conditions were encountered at the site as confirmed by the phase 2 ground investigation.

Made ground was encountered at all exploratory hole locations to a maximum depth of 5.30m BGL. The underlying residual soils were recorded as brown slightly silty sandy clay and orangish brown sandy gravel.

During the investigation, groundwater was encountered in BHRC101 and BHRC102 at depths of 5.50m and 5.00m bgl respectively. This was around the base of the made ground.

Monitoring wells were installed to the base of five boreholes on site and subsequently monitored for groundwater level. A summary of the monitored groundwater levels is presented in Table 4.7.

Table 4.7 – Summary of Monitored Groundwater Levels

Location	Water level during monitoring (m bgl)				
	27/01/2025	04/02/2025	12/02/2025	21/02/2025	26/02/2025
BHRC101	5.10	5.30	5.60	5.60	5.60
BHRC102	4.95	5.15	5.20	5.40	5.45
WS102	Dry	Dry	Dry	Dry	Dry
WS103	Dry	Dry	Dry	Dry	Dry
WS104	Dry	Dry	Dry	Dry	Dry

It should be noted that the groundwater conditions recorded are based on observations made at the time that site work was carried out. Groundwater levels are likely to vary owing to seasonal and weather-related effects.

Groundwater levels were generally steady in BHRC101 and BHRC102 during the period of monitoring. Water levels were recorded between 4.95m and 5.60m bgl.

The GI report indicates that the risk of groundwater flooding occurring on the site is negligible.

The overall risk to the development from this potential flooding source is considered to be low.

5.4 Flooding from Sewers and Drains

There are existing adopted foul and surface water drains to the west of site in Bretton Park Way.

Public sewers in the locality are maintained by Yorkshire Water and will be subject to regular inspection and maintenance as part of their asset management programme, therefore blockage of these sewers is unlikely.

Private plot drainage is maintained by the current owner. As part of the proposed development a "Drainage Maintenance and Management Plan" 6359-JPG-XX-XX-RP-D-0622 has been produced and will detail the ongoing maintenance for the site private drainage.

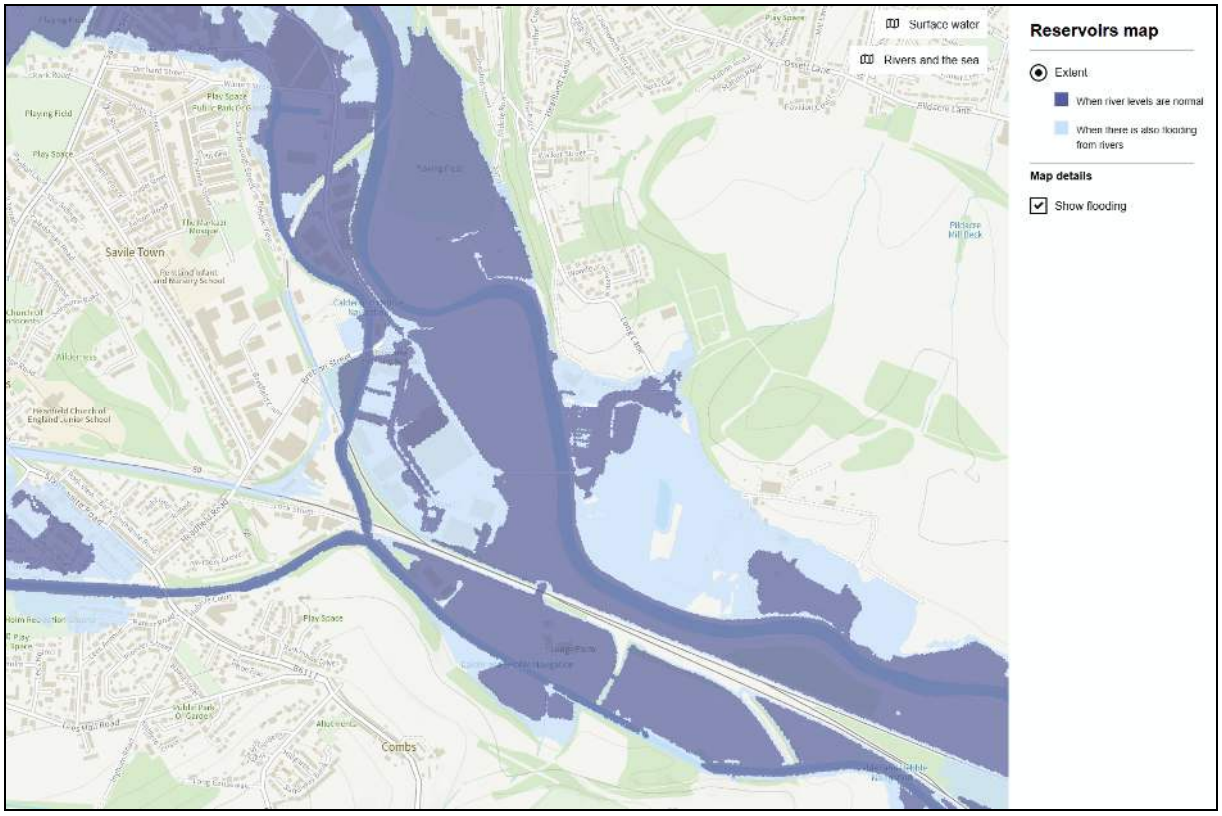
Copies of the private plot drainage and public sewer record drawings are located in Appendix C.

The overall risk to the development from this potential flooding source is considered to be low.

5.5 Flooding from Reservoirs, Canals and Other Artificial Sources

Review of the Environment Agency flood risk mapping from reservoirs shows that the site is in an area at risk from failure of a reservoir when there is also flooding from rivers.

A copy of the map produced by the Environment Agency showing the extent of flooding from reservoirs and other artificial sources is below.



This risk to the development from this potential flooding source is considered to be low.

6.0 CONCLUSIONS

This assessment has looked at the flood risk issues to support a planning application for a proposed office development associated with the existing warehouse and distribution centre park at UK Greetings, Bretton Parlk, Dewsbury.

This report shall be read in conjunction with the Drainage Impact Assessment report 6359-JPG-XX-XX-RP-D-0621 which contains the detailed drainage design and calculations.

This report shall also be read in conjunction with the Drainage Maintenance and Management Plan 6359-JPG-XX-XX-RP-D-0622 which recommend drainage maintenance activities and schedule.

The site is located within Flood Zone 2 and NPPF Technical Guidance states that industrial/commercial uses are considered less vulnerable in terms of flood risk and are appropriate in Flood Zone 2.

This report has considered all potential sources of flood risk at the site and can concluded that these are considered low from all sources.

Overall, this report demonstrates that flood risk to the development is considered to be low.

Appendix A Site Location Plan

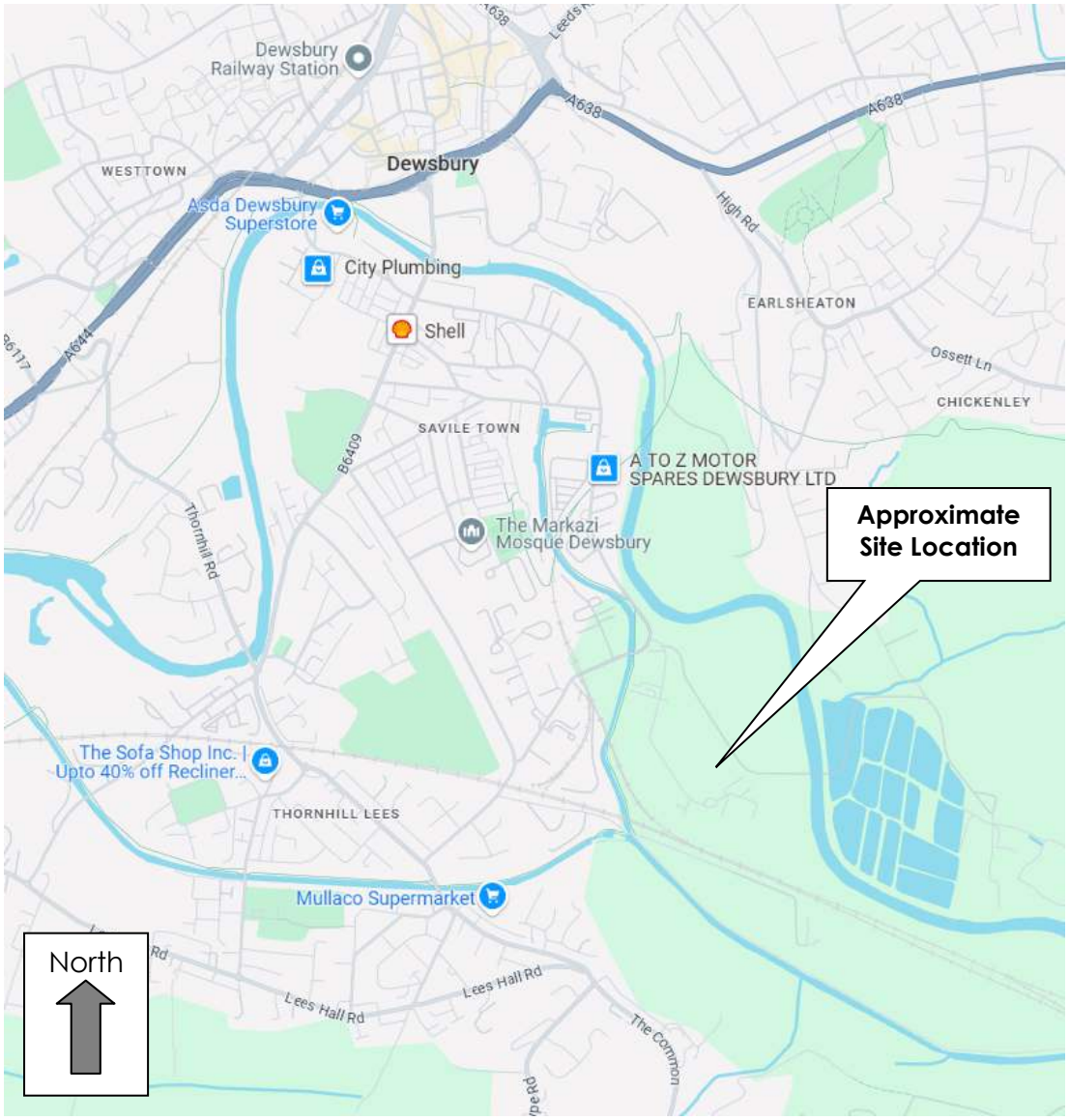
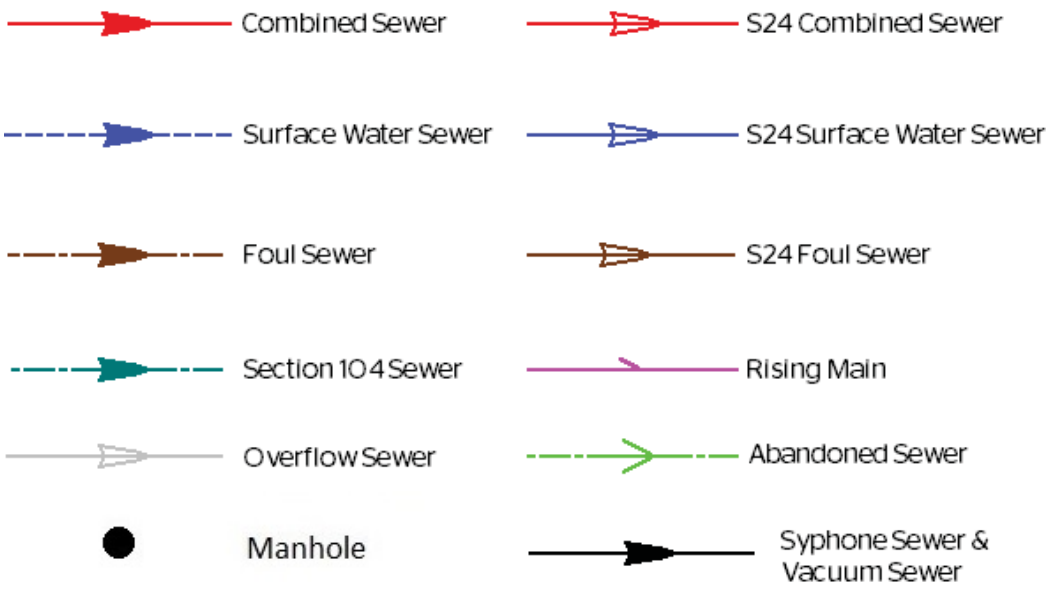


Figure 1 – Site Location Plan	
Site	**UK Greetings, Bretton Park, Dewsbury**
Client	**UK Greetings Limited**
Job Number	**6359**
Scale	**NTS**

Appendix B Existing Private Drainage & Public Sewer Record Plans

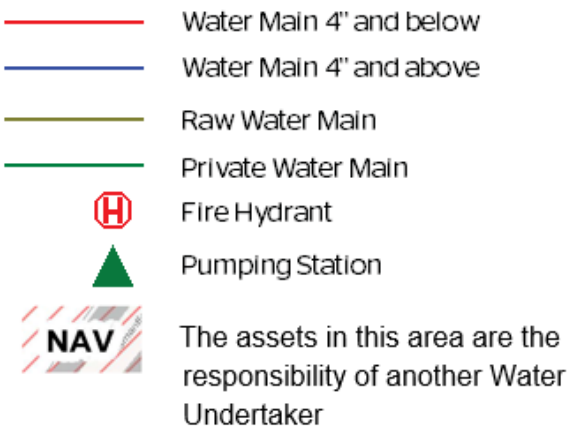
Property Identfier

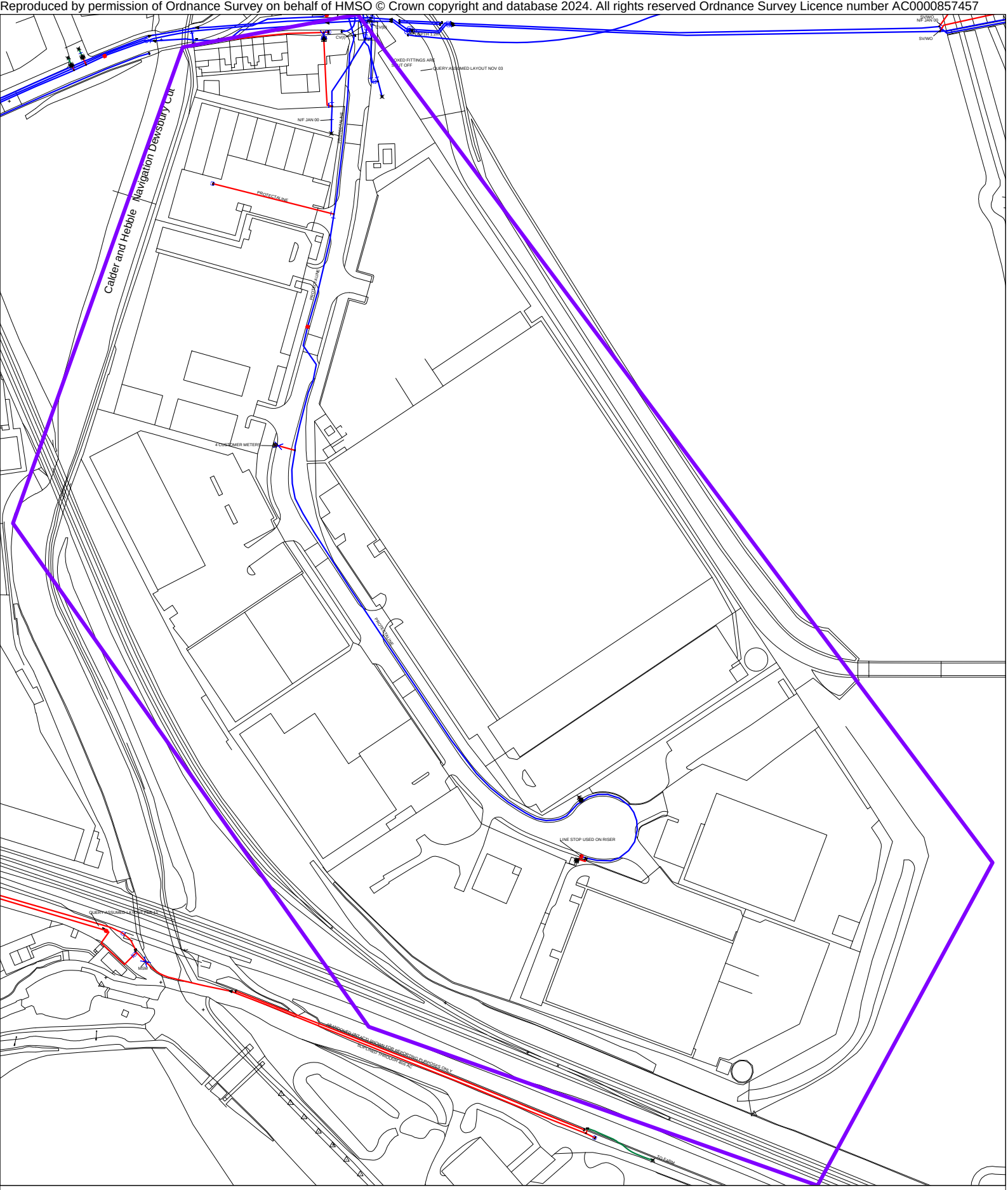
Sewer Legend



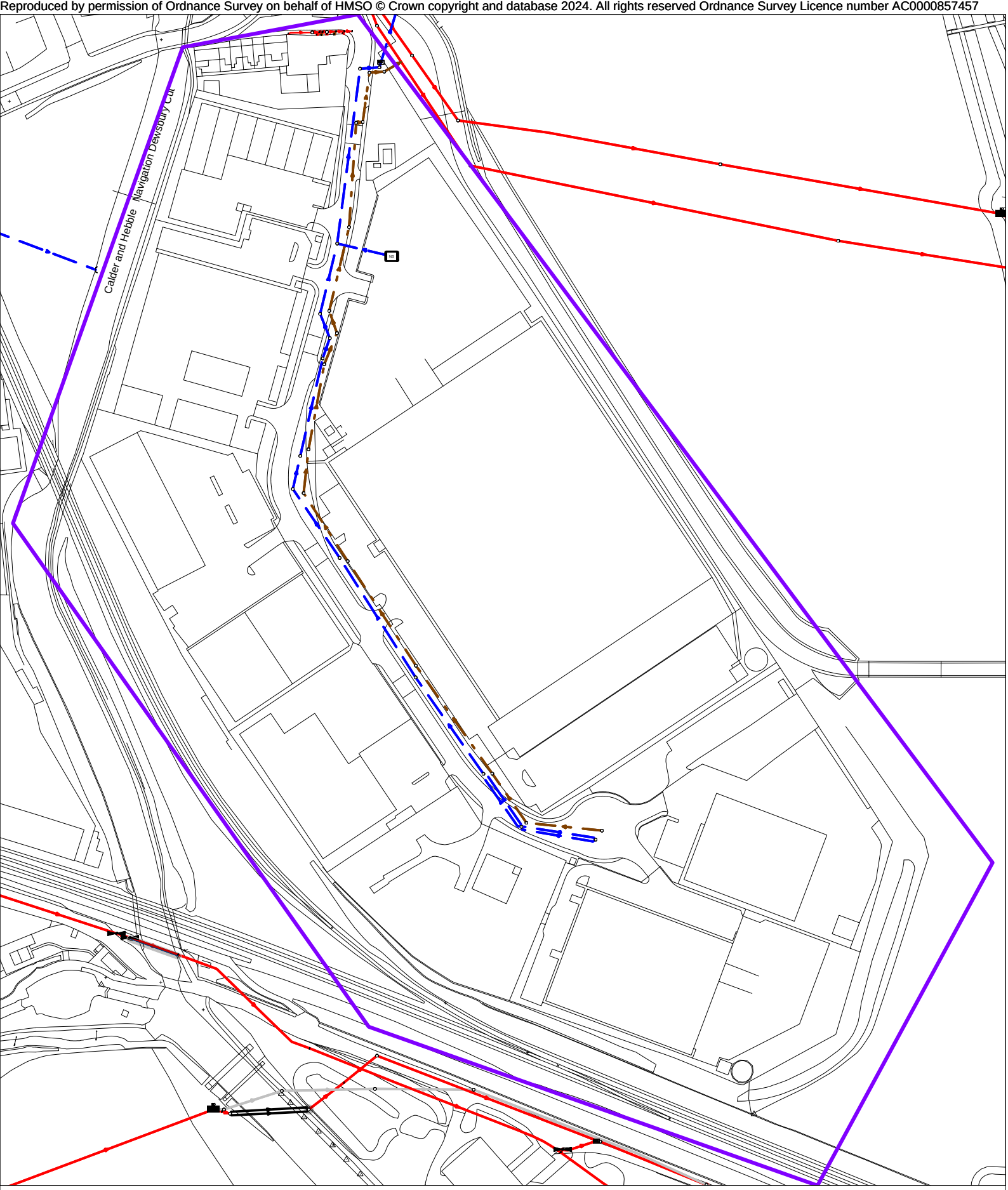
Please note that the direction of flow arrows may not always appear depending on the scale of the map.

Water Legend



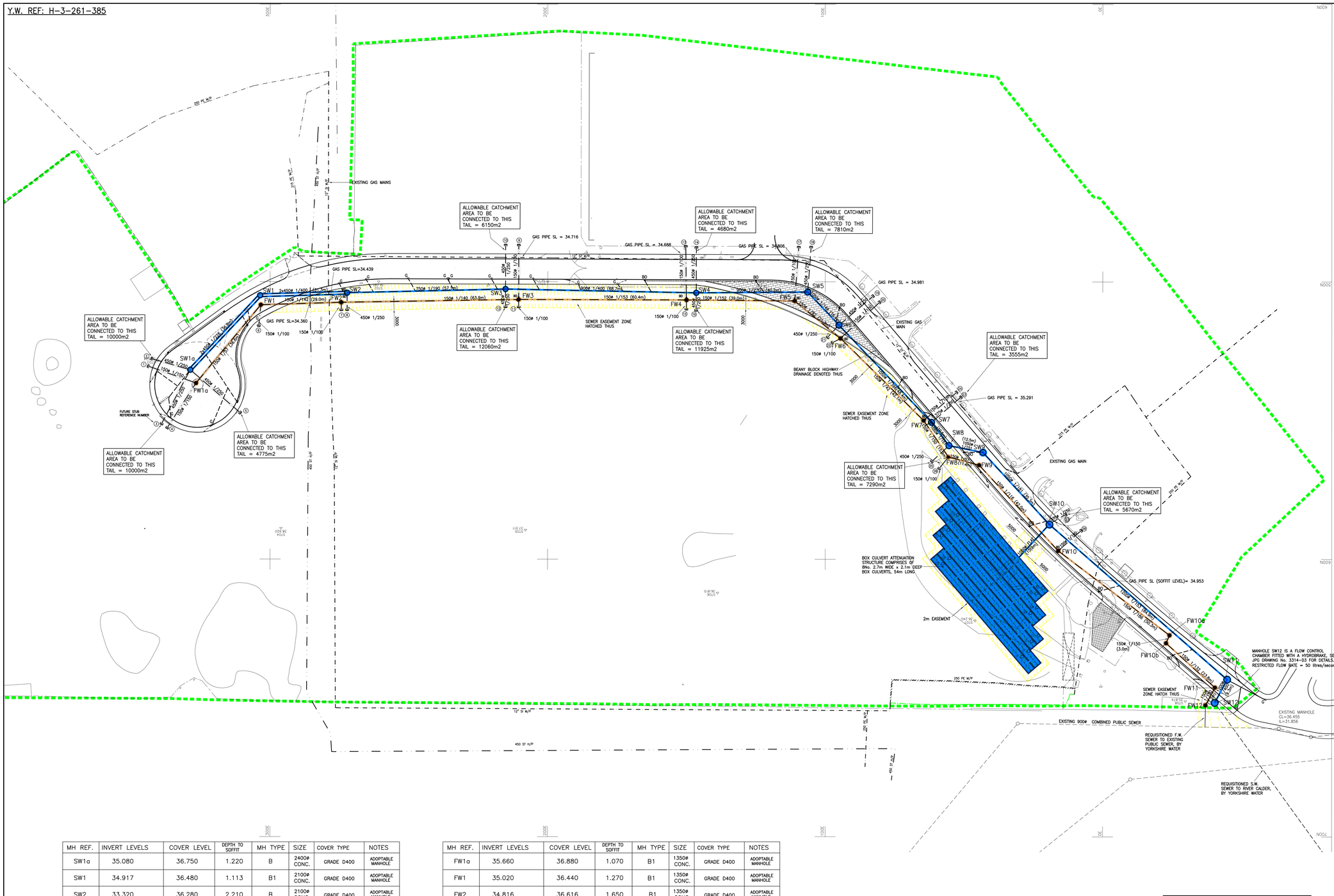


Public Clean Water Network 12/02/2025 10:15:31 OS Grid Coordinates: 424982 : 419751 Map Name : SE2419NE svcGISSafeMovePD



Public Waste Water Network 12/02/2025 10:15:32 OS Grid Coordinates: 424982 : 419751 Map Name : SE2419NE svcGISSafeMovePD

Y.W. REF: H-3-261-385



MH REF.	INVERT LEVELS	COVER LEVEL	DEPTH TO SOFFIT	MH TYPE	SIZE	COVER TYPE	NOTES
SW1a	35.080	36.750	1.220	B	2400ø CONC.	GRADE D400	ADOPTABLE MANHOLE
SW1	34.917	36.480	1.113	B1	2100ø CONC.	GRADE D400	ADOPTABLE MANHOLE
SW2	33.320	36.280	2.210	B	2100ø CONC.	GRADE D400	ADOPTABLE MANHOLE
SW3	33.020	36.230	2.310	B	2100ø CONC.	GRADE D400	ADOPTABLE MANHOLE
SW4	32.849	36.310	2.560	B	2400ø CONC.	GRADE D400	ADOPTABLE MANHOLE
SW5	32.700	36.550	2.800	B	2400ø CONC.	GRADE D400	ADOPTABLE MANHOLE
SW6	32.590	36.580	2.940	B	2400ø CONC.	GRADE D400	ADOPTABLE MANHOLE
SW7	32.468	36.218	2.700	B	2400ø CONC.	GRADE D400	ADOPTABLE MANHOLE
SW8	32.398	36.208	2.760	B	2400ø CONC.	GRADE D400	ADOPTABLE MANHOLE
SW9	32.315	36.130	2.765	B	2400ø CONC.	GRADE D400	ADOPTABLE MANHOLE
SW10	32.130	36.000	2.670	B	2400ø CONC.	GRADE D400	ADOPTABLE MANHOLE
SW11	31.575	35.710	2.935	B	2400ø CONC.	GRADE D400	ADOPTABLE MANHOLE
SW12	31.552	36.140	3.388	B	2400ø CONC.	GRADE C250	CONTROL CHAMBER ADOPTABLE MANHOLE

SURFACE WATER MANHOLE SCHEDULE.

MH REF.	INVERT LEVELS	COVER LEVEL	DEPTH TO SOFFIT	MH TYPE	SIZE	COVER TYPE	NOTES
FW1a	35.660	36.880	1.070	B1	1350ø CONC.	GRADE D400	ADOPTABLE MANHOLE
FW1	35.020	36.440	1.270	B1	1350ø CONC.	GRADE D400	ADOPTABLE MANHOLE
FW2	34.816	36.616	1.650	B1	1350ø CONC.	GRADE D400	ADOPTABLE MANHOLE
FW3	34.360	36.630	2.120	B	1200ø CONC.	GRADE D400	ADOPTABLE MANHOLE
FW4	33.966	36.576	2.400	B	1200ø CONC.	GRADE D400	ADOPTABLE MANHOLE
FW5	33.710	36.680	2.820	B	1200ø CONC.	GRADE D400	ADOPTABLE MANHOLE
FW6	33.450	36.580	2.980	B	1200ø CONC.	GRADE D400	ADOPTABLE MANHOLE
FW7	32.446	36.126	3.530	A	1200ø CONC.	GRADE D400	ADOPTABLE MANHOLE
FW8	32.340	36.060	3.570	A	1200ø CONC.	GRADE D400	ADOPTABLE MANHOLE
FW9	32.140	36.010	3.720	A	1200ø CONC.	GRADE D400	ADOPTABLE MANHOLE
FW10	31.780	35.830	3.900	A	1200ø CONC.	GRADE D400	ADOPTABLE MANHOLE
FW10a	31.510	35.710	4..050	A	1200ø CONC.	GRADE D400	ADOPTABLE MANHOLE
FW10b	31.490	35.630	3.990	A	1200ø CONC.	GRADE D400	ADOPTABLE MANHOLE
FW11	31.310	35.940	4.480	A	1200ø CONC.	GRADE D400	ADOPTABLE MANHOLE
FW12	31.262	36.140	4.728	A	1200ø CONC.	GRADE C250	ADOPTABLE MANHOLE

FOUL WATER MANHOLE SCHEDULE.

KEY:
- PROPOSED FOUL DRAIN
- PROPOSED SURFACE WATER DRAIN
- 150mm CONCRETE BED & SURROUND
- FW PROPOSED FOUL MANHOLE
- SW PROPOSED SURFACE WATER MANHOLE
- G PROPOSED ROAD GULLY

NOTE:
THIS DRAWING TO BE READ IN CONJUNCTION WITH THE FOLLOWING DRAWING:
3314-D2 – DRAINAGE CONSTRUCTION DETAILS
3314-D3 – G.A. OF SURFACE WATER ATTENUATION STRUCTURE
3314-D4 – MANHOLE DETAILS (SHEET 1)
3314-D5 – MANHOLE DETAILS (SHEET 2)
3314-D6 – MANHOLE DETAILS (SHEET 3)
3314-D7 – FLOW CONTROL CHAMBER – G.A.

DO NOT SCALE

N O T E S

1. ALL GULLY CONNECTIONS TO BE 150 DIA WITH CONCRETE SURROUND.

2. ALL FUTURE STUBS TO BE SEALED WITH CIRCULAR PLY CUT TO SIZE AND CONCRETE IN.

YORKSHIRE WATER NOTES:

1. ALL ADOPTABLE SEWER WORKS & MATERIAL TO BE IN ACCORDANCE WITH "SEWERS FOR ADOPTION" 5th EDITION & YORKSHIRE WATER'S REQUIREMENTS.

2. MANHOLE COVERS SHALL HAVE A CLEAR OPENING OF 600mm & SHALL BE CLASS D400 TO BS EN 124 WITH 150mm DEEP FRAMES IN HIGHWAYS.

3. FILLED GROUND MUST BE FILLED & CONSOLIDATED UNDER THE SUPERVISION & TO THE SATISFACTION OF YORKSHIRE WATER BEFORE ANY SEWER WORKS ARE CARRIED OUT.

4. THE ADOPTABLE SEWERS SHOULD BE A MINIMUM OF 1m & MANHOLES 0.5m FROM KERB FACES & SERVICE MARGINS.

5. SEWERS MUST HAVE 5m CLEARANCE FROM TREES & HEDGES, WHERE IT IS NOT POSSIBLE TO ACHIEVE THIS CLEARANCE CONCRETE BED & SURROUND IS REQUIRED.

6. SEWERS TO BE LAID IN CLASS "S" BEDDING (150mm GRANULAR BED & SURROUND). WHERE DEPTH OF COVER TO TOP OF THE SEWER IS LESS THAN 1.2m IN HIGHWAYS & VERGES THEN 150mm CONCRETE BED & SURROUND SHALL BE USED.

7. THE CHAMBER SIZE OF MANHOLES WITH MORE THAN ONE CONNECTION MAY NEED TO BE INCREASED AN INCREMENT TO ACCOMMODATE CONNECTIONS & BENDS.

8. YORKSHIRE WATER POLICY IS NOT TO ACCEPT TYPE "C" BRICK MANHOLES & 1050ø MANHOLE RINGS, INSTEAD IT IS PREFERRED A TYPE "B" MANHOLE WITH 1200ø OR 1350ø RINGS ARE USED WITH THE OPENING SITED OVER THE CHANNEL, WHERE DEPTH OF COVER TO PIPE SOFFIT IS 1–1.5m.

9. GAS MAINS SOFFIT LEVELS INTERPOLATED FROM WEBFELL DRAWING 'GE524–003 REV 0'

REV	DESCRIPTION	DATE	BY
M	UPDATED "AS-BUILT"	06.08.09	AF
L	TAIL TO FWMH5 AMENDED FW9–FW12 INVERT LEVELS REVISED	05.08.05	PY
K	MANHOLE FW11,12 & SW11,12 COVER LEVELS REVISED	15.06.05	PY
J	CONSTRUCTION ISSUE SW10–SW12 INVERTS REVISED	24.05.05	AMF
H	STORAGE STRUCTURE REPOSITIONED TO SUIT SITE CONDITIONS. DRAINAGE UPDATED TO SUIT	22.04.05	PY
G	MANHOLE CO-ORDINATES ADDED	14.04.05	RAK
F	PIPE RUN MHSW3–SW4 RESIZED TO 900ø	04.04.05	PY
E	UPDATED TO SUIT YORKSHIRE WATER'S COMMENTS	21.03.05	PY
D	DRAINAGE UPDATED FOLLOWING GAS MAIN SURVEY	15.02.05	PY
C	CATCHMENT AREAS ADDED	06.01.05	AMF
B	UPDATED FOR SUBMISSION TO YORKSHIRE WATER	23.12.04	AMF
A	ROAD LAYOUT AND DRAINAGE UPDATED TO SUIT ARCHITECTS LATEST LAYOUT	01.12.04	PY

Job Title
BRETTON STREET
DEWSBURY

Drawing Title.
DRAINAGE LAYOUT

Architect
KILMARTIN PLOWMAN & PARTNERS

JORDAN PRITCHARD GORMAN
Consulting Civil & Structural Engineers
5 John Charles Way
Leeds LS12 6QD
Tel 0113 263 1155 Fax 263 0405

Checked	Date	Scale	Drawn
	05.10.04	1:500	AMF

Drawing No 3314–D1 M

DO NOT SCALE

N O T E S

DRAINAGE KEY:

- PROPOSED SURFACE WATER DRAIN
- PROPOSED FOUL DRAIN
- PIPES HATCHED THUS TO BE PROVIDED WITH 150mm CONCRETE BED & SURROUND
- FW PROPOSED FOUL WATER MANHOLE
- SW PROPOSED SURFACE WATER MANHOLE
- RE PROPOSED RODDING EYE
- AP PROPOSED TYPE 1 GATIC ACCESS POINT
- VP PROPOSED INTERCEPTOR VENT PIPE

NOTE:
ALL COVER LEVELS TO MANHOLES ARE APPROXIMATE & ARE TO SUIT FINISHED LEVEL SCHEME.

GATIC CHANNELS MANUFACTURED & SUPPLIED BY ELKINGTON GATIC–TEL 01304 203545. MANUFACTURERS TO DESIGN/SIZE UP CHANNELS

REFER TO ARCHITECT AND/OR ROOFING CONTRACTORS DRAWINGS FOR ALL ABOVE GROUND DRAINAGE DETAILS. ALL INTERNAL DRAINAGE TO ARCHITECTS DETAILS.

INTERCEPTORS:	
INTERCEPTOR No.	CATCHMENT AREA (m^2)
①	5800 m^2
②	7300 m^2
③	(WASHCEPTOR)

NOTES
ALL INTERCEPTORS TO HAVE 100mm STEP ACROSS INVERTS ALL INTERCEPTORS TO BE CLASS 1, BYPASS TYPE (UNLESS NOTED OTHERWAISE IN TABLE ABOVE). PROVIDE TURRET & FILTER EXTRACTION DEVICE EXTENSION TO ALLOW ACCESS FROM FINISHED GROUND LEVEL. INTERCEPTORS TO BE PROVIDED WTH AN OIL LEVEL MONITOR & ALARM, CONTRACTOR TO PROVIDE ELECTRIC SUPPLY TO MONITOR. INTERCEPTOR SUPPLIER MUST BE ON THE ENVIRONMENT AGENCY'S APPROVED LIST OF COMPLIANT MANUFACTURERS IN ACCORDANCE WITH THE 'CONSTRUCTION PRODUCTS REGULATIONS' 1991 AND PPG3.

INTERCEPTOR TABLE

PLOT 800
FFL = 36.950

INTERCEPTOR No1
300ø 1/11 APPROX
SW1
SW2
300ø 1/17
GATIC OUTLET. CL = 36.405 IL = 35.200
GATIC CHANNEL REF: 24m UNISLOT S13325
GATIC DRAINAGE CHANNEL
GATIC CHANNEL REF: 36m UNISLOT S13310 57m UNISLOT S13315 48m UNISLOT S13320
EXISTING 150ø 1/100 TAIL TO BE EXTENDED TO NEW FW MANHOLE
FW2
FW6
150ø 1/32
FW1
GATIC UNIVERSAL CHANNEL CONNECTOR PIPE
A.P.
NOTE: PROPOSED SWMH BUILT AT END OF EXG. TAIL CONTRACTOR TO CONFIRM POSITION AND LEVEL
EXTENT OF FUTURE EXTENSION
SW7
600ø 1/37
EXISTING 450ø 1/250 TAIL TO BE EXTENDED TO NEW SW MANHOLE
SW6
SRWP
NEW CONNECTION TO BE MADE TO EXISTING SW MANHOLE
SWMH BUILT OVER END OF EXG. TAIL CONTRACTOR TO CONFIRM POSITION AND LEVEL
GATIC CHANNEL REF: 15m ULTRASLOT S13310
525ø 1/22
SW5
225ø 1/35
GATIC CHANNEL REF: 21m ULTRASLOT S13310 6m ULTRASLOT S13315
INTERCEPTOR No2
SW10
450ø 1/37
SW9
450ø 1/8
FW5
GATIC OUTLET. CL = 35.740 IL = 34.575
GATIC OUTLET. CL = 35.710 IL = 34.435
EXISTING 150ø 1/29 TAIL TO BE EXTENDED TO NEW FW MANHOLE
GATIC CHANNEL REF: 15m ULTRASLOT S13305
450ø 1/187
150ø 1/29
FW4
150ø
RWP (CANOPY)
SW4
GATIC CHANNEL REF: 21m ULTRASLOT S13310 24m ULTRASLOT S13315 24m ULTRASLOT S13320
150ø 1/72
150ø
RWP (CANOPY)
300ø 1/162
SW3
UNDERGROUND CONCRETE BOX CULVERT SURFACE WATER ATTENUATION STRUCTURE. TOP LEVEL OF CULVERTS 34.875
150ø
FW3
HEAVY DUTY GALVANISED SILT TRAP WITH TWIN REMOVABLE GRATES (BY WATERCLEAR) TO VEHICLE WASH.
INTRECEPTOR 3 2000 LITRE 2 STAGE WASHCEPTOR BY WATERCLEAR SOLUTIONS LTD. (TEL 0191 377 8020)

MH REF.	INVERT LEVELS	COVER LEVELS	DEPTH TO SOFFIT	TYPE	SIZE	COVER TYPE	NOTES	SET–OUT COORDINATES
SW1	① 35.078	36.530	1.152	E	1200ø CONC.	C250		E256.984, N510.308
SW2	① 33.600	36.530	2.630	B	1200ø CONC.	C250		E273.055, N510.278
SW3	① 34.615	35.965	1.050	C	1240x750 BRICK	D400	OPEN GRATE COVER	E88.901, N643.040
SW4	① 34.420	35.965	1.095	E	1200ø CONC.	D400	OPEN GRATE COVER	E88.842, N611.426
SW5	① 34.160	36.113	1.428	E	1200ø CONC.	D400	OPEN GRATE COVER	E88.751, N562.932
SW6	① 33.346	36.760	2.814	B	1500ø CONC.	D400	OPEN GRATE COVER	E97.565, N535.876
SW7	① 32.914 EX TAIL ② 32.914	36.800	3.286	A	1500ø CONC.	C250		E101.850, N522.715
~~SW8~~	~~① 33.985~~	OMITTED	~~1.315~~	~~E~~	~~1200ø CONC.~~	~~D400~~	OMITTED	~~E71.638, N601.697~~
SW9	① 33.391 ② 33.616	35.750	1.909	B	1200ø CONC.	D400		E71.586, N573.764
SW10	① 33.000 EXG ② 33.000	35.815	2.212	B	1200ø CONC.	D400		E59.447, N566169

SURFACE WATER SCHEDULE

MH REF.	INVERT LEVELS	COVER LEVELS	DEPTH TO SOFFIT	TYPE	SIZE	COVER TYPE	NOTES	SET–OUT COORDINATES
FW1	① 34.952	36.575	1.473	E	1200ø CONC.	C250		E124.494, N519.448
FW2	① 34.187	36.530	2.193	B	1200ø CONC.	C250		E150.417, N517.587
FW3	① 34.360	36.195	1.685	B	1200ø CONC.	D400		E29.358, N646.355
FW4	① 33.575	35.742	2.017	B	1200ø CONC.	D400		E65.647, N603.182
FW5	① 32.616	35.742	2.976	B	1200ø CONC.	D400		E65.512, N575.242
FW6	① 34.267	36.535	2.118	B	1200ø CONC.	D400		E146.555, N517.862

FOUL WATER SCHEDULE

REV	DESCRIPTION	DATE	BY	CK
G	AS BUILT ISSUE	27.11.08	MdP	
F	GATIC CHANNEL REFERENCES ADDED.	12.05.08	RAK	
E	SURFACE WATER DRAINAGE IN SERVICE YARD REVISED, MANHOLE SCHEDULE ALSO UPDATED.	07.05.08	RAK	
D	MANHOLE SCHEDULE UPDATED TO SUIT REVISED LEVELS IN SERVICE YARD, SW8 OMITTED AND GATIC OUTLET POSITION AMENDED.	11.04.08	RAK	
C	SW6 AMENDED TO SUIT NEW SRWP POSITIONS, SW6 & SW7 MANHOLE SIZE AMENDED TO 1500ø, FW6 ADDED & FW1 RE–POSITIONED TO SUIT INTERNAL DRAINAGE, POSITON OF DOCK LEVELLER WALL AMENDED TO SUIT LATEST ARCHITECTS PLAN.	02.04.08	RAK	
B	MANHOLE COVER AND SOFFIT LEVELS AMENDED TO SUIT REVISED LEVELS. NEW GULLY ADDED TO ENTRANCE AND ACCESS POINT OF GATIC AMENDED, SHOWN CLOUDED.	26.03.08	RAK	
A	CONSTRUCTION ISSUE. GATIC CHANNEL MOVED TO AVOID GAS MAIN.	13.03.08	RAK	

Job Title
BRETTON STREET
DEWSBURY

Drawing Title.
PLOT 800
DRAINAGE LAYOUT

AS BUILT

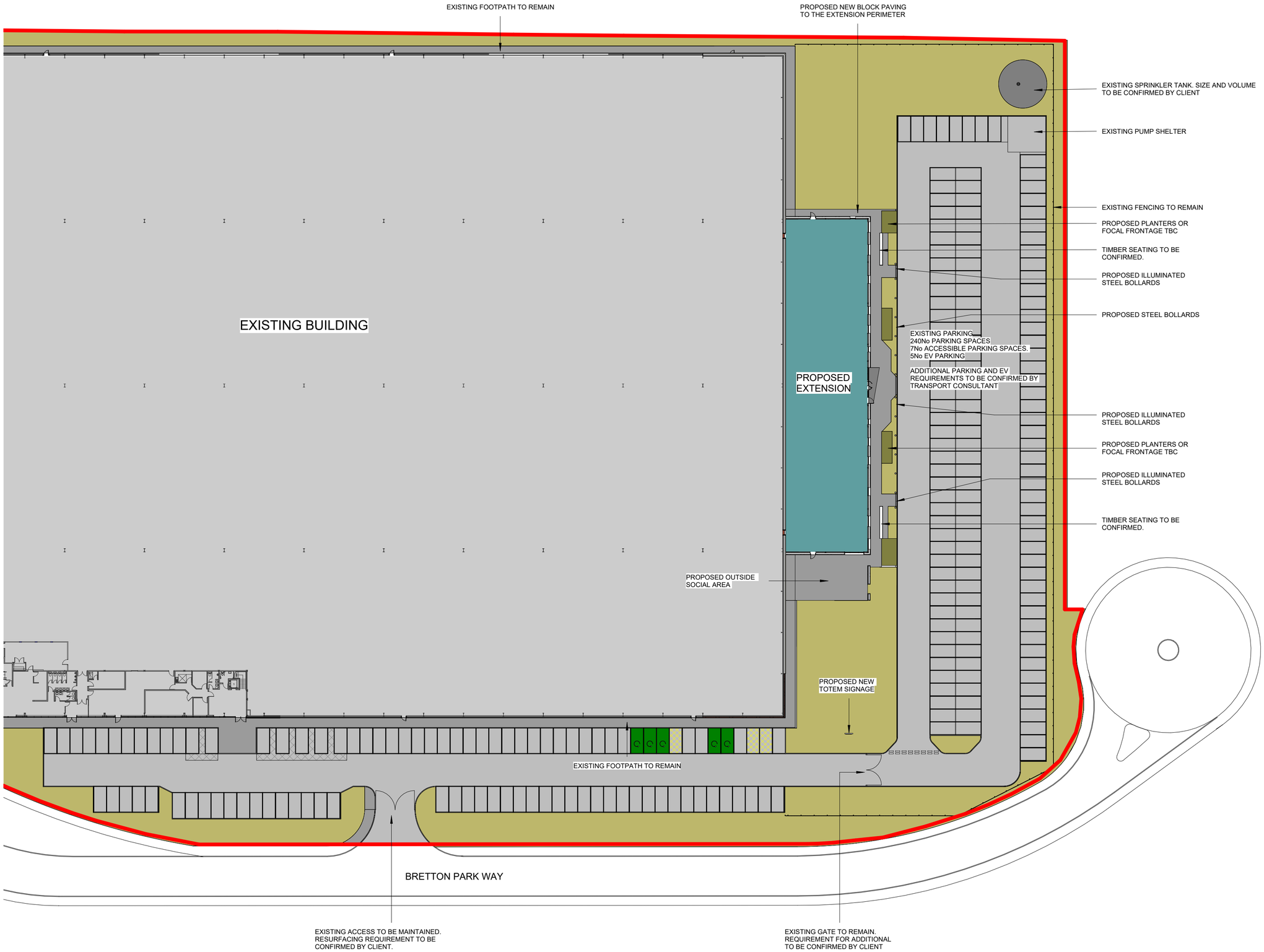
Architect
KILMARTIN PLOWMAN & PARTNERS

JORDAN PRITCHARD GORMAN
Consulting Civil & Structural Engineers
5 John Charles Way
Leeds LS12 6QD
Tel 0113 263 1155 Fax 263 0405

Checked	Date	Scale	Drawn
	06.11.04	1:500	MDT

Drawing No 3314–800–D1 G

Appendix C Proposed Site Layout Plan



North

TOTAL SITE AREA - 9.9 ACRES

PROPOSED EXTENSION:

GROUND FLOOR 10,000sq.ft

FIRST FLOOR 10,000sq.ft

SECOND FLOOR 10,000sq.ft

TOTAL - 30,000sq.ft

Rev	Description	By	Chkd	Date

Client

UK GREETINGS

Project Title

BRETTON PARK

Drawing Title

PROPOSED SITE PLAN

KPP ARCHITECTS

Lodge House
12 Town Street
Horsforth, Leeds LS18 4RJ

T : +44 (0) 113 2390460
E : architects@kpp-leeds.co.uk
W : www.kpp-leeds.co.uk

Scale	Size	Date	Drawn	Checked
1 : 500	A2	JAN'25	JB	DR

Status

PLANNING

KPP Job No.

2157-01

Revision

Project	Originator	Level	Type	Role	Class	Number
2003						

DRAFT

Appendix D Environment Agency Flood Mapping

Flood map for planning

Your reference	Location (easting/northing)	Created
<Unspecified>	**425276/420000**	**12 Feb 2025 11:03**

Your selected location is in flood zone 2, an area with a medium probability of flooding.

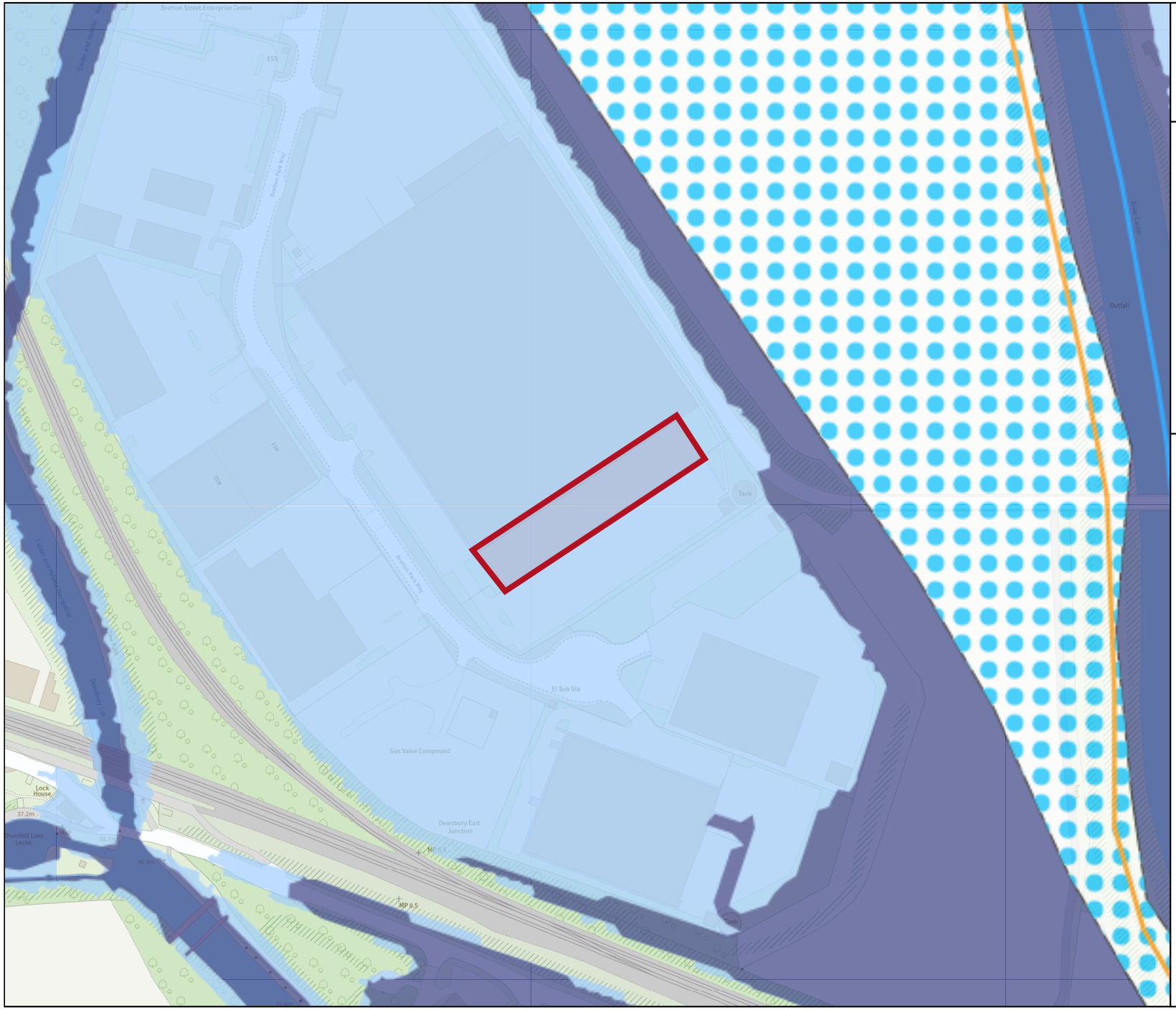
This means:

- you must complete a flood risk assessment for development in this area
- you should follow the Environment Agency's standing advice for carrying out a flood risk assessment (see www.gov.uk/guidance/flood-risk-assessment-standing-advice)

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.



Environment Agency

Flood map for planning

Your reference
<Unspecified>

Location (easting/northing)
425276/420000

Scale
1:2500

Created
12 Feb 2025 11:03

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

0 20 40 60m

5 John Charles Way
LEEDS
LS12 6QA

Tel: 0113 263 1155
admin@jpg.group
www.jpg.group