

Our Ref: 1326/SJG

Your Ref:

17th October 2023

J Walker Homes Limited
Joshua House
35 Joshua Lane
Middleton
Manchester
M24 2AY

Dear Jon,

Re: Proposed Residential Development at Greenhill Road, Middleton M24 2BB
Brief FRA and Outline Drainage Strategy

In accordance with the local authorities planning requirements, a surface water drainage strategy and SuDs assessment are required for major developments or 0.5 hectares in critical drainage areas. A Brief FRA and an outline drainage strategy has been carried out for the above site in accordance with Planning Policy Guidance ID7 Flood Risk and Coastal Change and SuDs guidance based on the development proposals provided.

The Environment Agency (EA) Flood Risk Maps indicate that the site is in Flood Zone 1. Flood Zone 1 is classified as having a low probability of flooding with a flood risk of less than 1 in 1000. The site is 0.62 hectares and is less than 1 hectare and therefore a Flood Risk Assessment shouldn't be required unless it is in a critical drainage area, this should be confirmed with the LLFA. The EA Surface Water Flood Risk Maps indicate very low risk of surface water flooding on the site.

In accordance with PPG ID7 and SuDs and surface water hierarchy guidance, surface water run-off from new developments should not exceed existing run-off rates and should provide a 30% or 50% reduction in flows dependant on whether it is in a critical drainage area and SuDs and greenfield run-off rates should be implemented where possible. Foul drainage should discharge to a public sewer and surface water drainage should discharge to sustainable urban drainage systems (SuDs), if these are not suitable to a nearby watercourse, if not present to a surface water sewer and if not present to a combined sewer.

With regards to the SuDs assessment, the use of sustainable drainage systems (SuDs) such as soakaways, permeable pavements, infiltration basins, ponds and swales should be incorporated where possible into the surface water drainage design to reduce surface water runoff from the development. Site Investigation should be carried out to confirm the ground conditions and soakaway tests should be carried out in accordance with BRE365 to determine infiltration co-efficients to confirm whether the site is suitable for infiltration methods of SuDs. Should these prove inadequate, permeable pavements, basins, ponds, swales and cellular attenuation should still be considered for attenuation and to slow down flows.

The foul drainage from the site should discharge to the nearest available public foul sewers which are the 225mm and 300mm diameter public combined sewers in Greenhill Road and Smethurst Street respectively. There are existing drains and sewers within the site that discharge to the public sewers and it may be possible to use these if they are suitable and these should be investigated.

A Phase 1 Desk Study and Phase 2 Site Investigation have been carried out and identified made ground and sand and clay drift deposits beneath the site. Two soakaway tests have been carried out and soakaway 1 was unsuitable due to made ground and groundwater identified and soakaway 2 identified poor infiltration rates. Further soakaways should be carried out after the removal of petrol tanks and remediation of the site if possible. The surface water drainage from the site should discharge to soakaways and permeable pavements SuDs subject to ground conditions and adequate infiltration co-efficients. Should these prove inadequate, permeable pavements and cellular storage SuDs should still be incorporated where possible into the drainage design and attenuation provided within the drainage system for storms up to 30 years plus a 40% allowance for climate change in accordance with United Utilities requirements and within the site for storms up to 100 year plus a 45% allowance for climate change in accordance with planning policy guidance. Should discharge into the ground not be possible, there are no watercourses or surface water sewers present in the vicinity, therefore, the surface water will have to discharge to the combined sewer and flow rates should be limited by flow control devices to the minimum flow of 5 l/s or the flow from a minimum 100mm size flow control to prevent blockages, to be agreed and subject to consent from the local authority and United Utilities.

A sewer connection application should be submitted to United Utilities for the foul and surface water discharge connections and/or if sewers are to be adopted a sewer adoption application should be submitted.

Residual overland flood routes should be assessed and emergency access and egress routes should be provided and these and the floor levels of the proposed properties should be set above residual flood levels to reduce the risk to homeowners and flooding of the properties.

Should you require any further information or if you would like to discuss anything please do not hesitate to contact me.

Yours sincerely,
Sarah Griggs

For and on behalf of Build Vision

PROPOSED RESIDENTIAL
DEVELOPMENT AT
GREENHILL ROAD,
MIDDLETON

LEGEND

TURFED AREAS

PRECAST CONCRETE PAVING

TARMACADAM PARKING

TREES TO BE REMOVED

TREES TO BE RETAINED

NEW TREE PLANTING
SUORBUS ACUPARIA 14-16CM

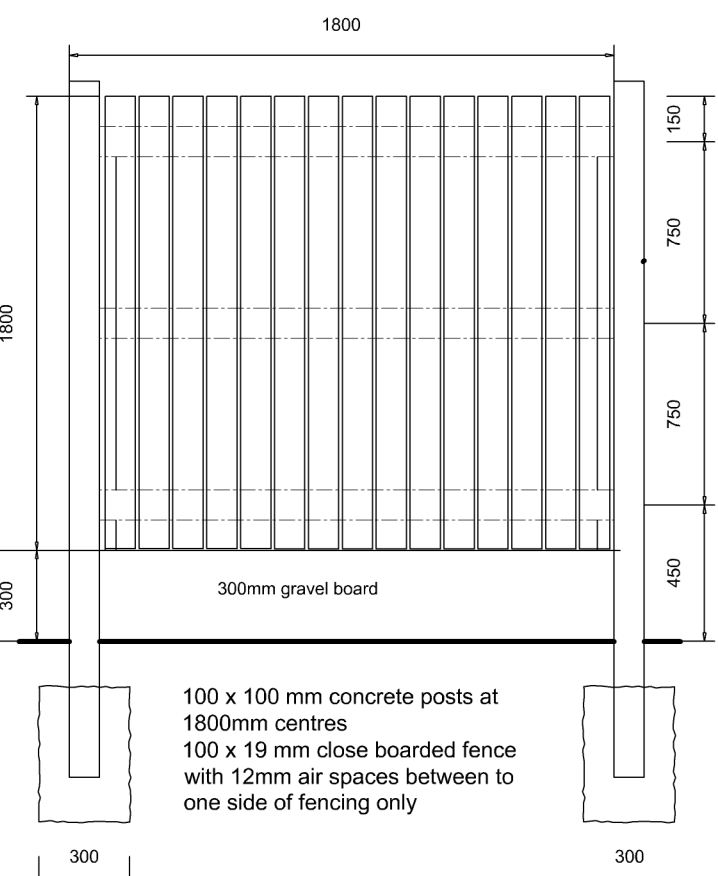
ORNAMENTAL PLANTING 5L

PRUNUS LUSITANICA
HEDGE 30-40cm

TARMACADAM HIGHWAY /
FOOTWAY

REFUSE CONTAINERS

EV CHARGING



BOUNDARY FENCE TYPE - 1 ①

BOUNDARY FENCE TYPE - 2 (1500mm High) ②

BOUNDARY FENCE TYPE - 3 (900mm High) ③

SITE LAYOUT Scale 1:200



Schedule of Accommodation

TYPE A	- 2 Bed 4 Person House	70.0 Sq.Metres	4No
TYPE B	- 3 Bed 5 Person House	82.0 Sq.Metres	20No
TOTAL			24No

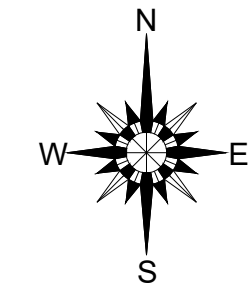
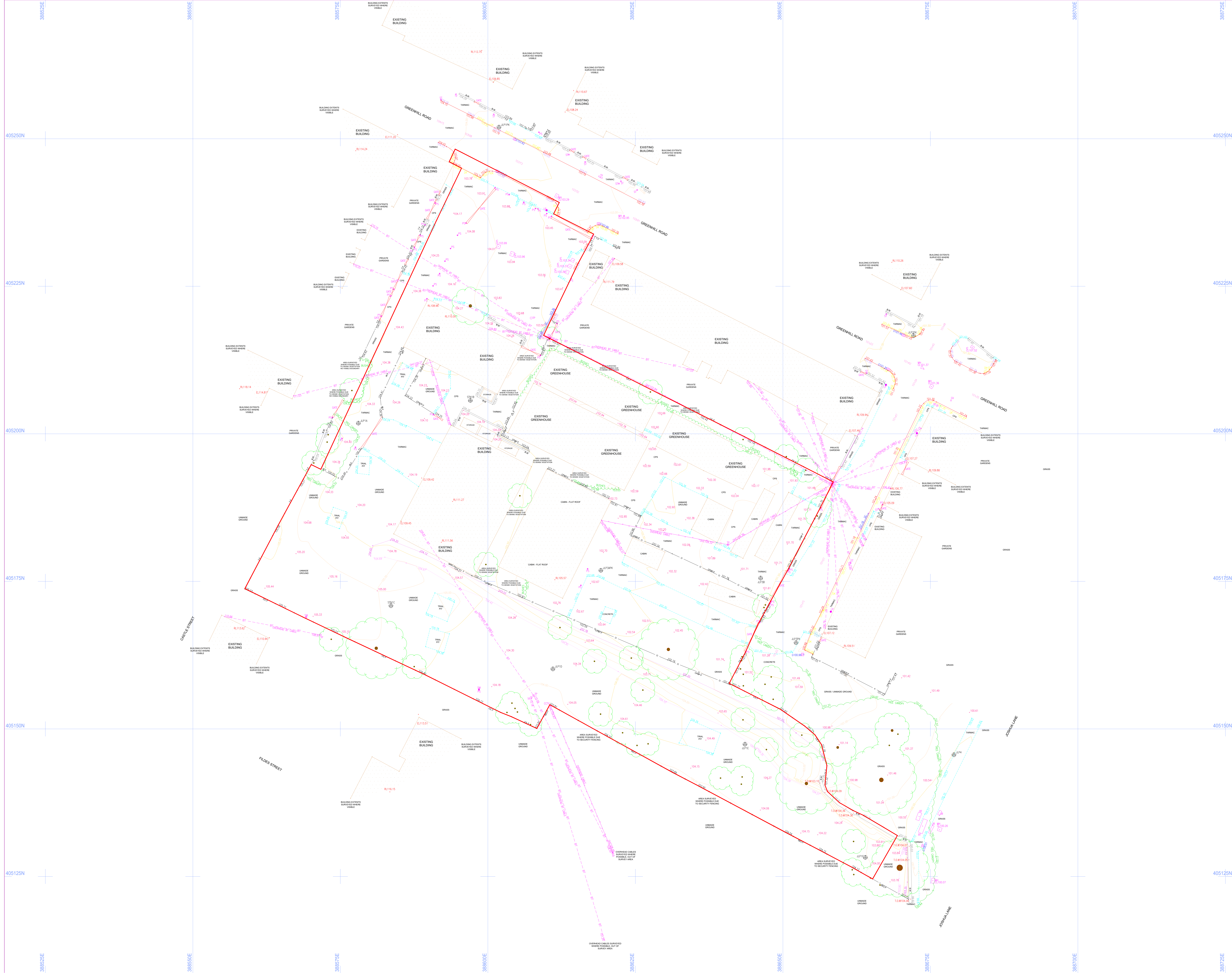
100% Car Parking 2 Bed Houses
200% Car Parking 3 Bed Houses

BOUNDARY TREATMENTS	
①	1800mm CLOSE VERTICAL BOARDED TIMBER FENCE WITH CONCRETE POSTS AND PLINTH PANEL
②	1500mm CLOSE VERTICAL BOARDED TIMBER FENCE WITH CONCRETE POSTS AND PLINTH PANEL
③	900mm CLOSE VERTICAL BOARDED TIMBER FENCE WITH CONCRETE POSTS AND PLINTH PANEL

Rev.	Date	Description

nicol thomas
architects project managers construction cost consultants CDM
co-ordinators
Registered in England and Wales, Reg No. 2140639
Quality Assured to BS EN ISO 9001:1994 Certificate Number GB 4723
Heyside House Blackshaw Lane Heyside Royton Oldham OL2 6NS
t:01706 290088 f:01706 290099 e:oldham@nicolthomas.com
Also at Birmingham (Registered office)
Do not scale from this drawing. All dimensions must be checked and
verified before preparing production drawings or commencing works.
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Client:	J WALKER HOMES
Job:	GREENHILL ROAD, MIDDLETON
Drawing title:	PROPOSED SITE LAYOUT
Drawing Number: (Job number)	M4996.PL.01
Scale:	1:200 @ A1
Date:	July 2023
Drawn by/ checked by:	S



SURVEY ORIENTATED TO OS GRID (OSGB36-15)

FEATURES		SURVEY ANNOTATIONS	
TOP OF BANK		AV	AIR SURVEY
BOTTOM OF BANK		BL	BULLDOG
SURVEY STATION		BS	BUSH STATION
TREE		CS	CONCRETE CURB/PAVING SLABS
EDGE		CR	CORNER
TREE CANOPY		DC	DECK
BUSHES		EC	ELECTRICITY CONTROL BOX
VEGETATION		EL	ELECTRICITY, C/L
BOUNDARY ANNOTATIONS		EM	ELECTRICITY MILE
BARB WIRE FENCE		EP	EARTH ROAD
CHAIN LINK FENCE		FI	FIRE HYDRANT
CONC POST AND PANEL		FL	FLAG POLE
CONC TMB POST PANEL		GL	GALV
IRON RAIL FENCE		GR	GREENHOUSE
PERMANENT FENCE		GP	GATE POST
PERMANENT FENCE		GV	GAUZE VALVE
MISCELLANEOUS FENCE		HC	HOLE
IRON RAIL FENCE		JK	JUNCTION BOX
MISCELLANEOUS FENCE		KL	KIDNEY CURB/PAVING WEED
CONC POST AND PANEL		LM	LAND
CONC TMB POST PANEL		LP	LAND POST/LOGSTOCK COLUMN
IRON RAIL FENCE		MA	MANHOLE
PERMANENT FENCE		MP	MONITORING POST
PERMANENT FENCE		NP	NAMES PLATE
MISCELLANEOUS FENCE		OC	ONCH OVERHEAD CABLE
IRON RAIL FENCE		PD	POLE
MISCELLANEOUS FENCE		PM	PARKING METER
CONC POST AND PANEL		PL	PLANT
CONC TMB POST PANEL		PL	ELECTRICITY PLUG/E
IRON RAIL FENCE		PK	POCKET
PERMANENT FENCE		RD	ROAD SIGN
PERMANENT FENCE		RS	RAMP WATER VALVE
MISCELLANEOUS FENCE		SC	SEWER
IRON RAIL FENCE		SE	SEWER SERVICE MANHOLE
PERMANENT FENCE		SM	STOP SIGN
PERMANENT FENCE		SV	STOP VALVE / ALLIGATOR VALVE
MISCELLANEOUS FENCE		TE	TELEPHONE
CONC POST AND PANEL		TE	TELEPHONE PLATE
CONC TMB POST PANEL		TE	TELEPHONE MAST
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PERMANENT FENCE			

DISCLAIMER

ONLY MANHOLES AND SERVICES SHOWN WERE VISIBLE AT THE TIME OF SURVEY.

MAN ENTRY TO SEWERS HAS NOT BEEN UNDERTAKEN, DEPTHS, PIPE SIZES ETC ARE MEASURED FROM GROUND LEVEL.

DRAINAGE INFORMATION MUST BE CHECKED AND VERIFIED PRIOR TO ANY WORK COMMENCING.

BOUNDARIES SHOWN ARE PHYSICAL AND MAY NOT REPRESENT LEGALLY CONVEYED OWNERSHIP.

TREE SPREADS ARE SYMBOLIC ONLY AND ARE REPRESENTATIVE OF THE AVERAGE SPREAD, THE TREE CANOPY LAYER DENOTES THE TREES EXTREMITY.

SURVEY NOTES

ALL LEVELS ARE RELATED TO O.S. DATUM (08G836-15)
ESTABLISHED AT SE1 USING THE LEICA SMARTNET GPS NETWORK

— SITE BOUNDARY EXTENTS AS PER DESIGN 5716.15M

SURVEY STATIONS			
Name	Easting	Northing	Height
LPIA	388678.053	405201.803	104.369
LPI10	388611.022	405160.167	104.276
LPI1E	388643.578	405178.578	104.376
LPI1F	388666.994	405128.222	104.015
LPI1PK	388601.878	405251.958	103.854
LPI2PK	388672.149	405216.632	101.431
LPI3PK	388618.146	405178.863	102.450
LPI3B	388646.229	405175.508	101.651
LPI3PK	388652.237	405164.608	101.815
LPI4	388678.969	405143.623	100.429
STN1B	388697.032	405143.625	100.429
STN1C	388683.576	405170.878	100.003

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SITE BOUNDARY AREA CALCULATED	B	01.09.23	0H	-
SCALE FACTOR AMENDED TO 1:200@A0	A	24.04.23	0H	-
DESCRIPTION	REV	DATE	DRWN	APPR



14 GREEN MILL
WESTHOUGHTON
BOLTON
LANCS
BL5 3GE
TEL/FAX: 0800 772 3040
MOB: 07550069993
info@surveying.co.uk

CLIENT
J WALKER HOMES

PROJECT TITLE
GREENHILL ROAD, MIDDLETON

DRAWING DETAIL

TOPOGRAPHICAL LAND SURVEY

PROJECT ENGINEER	JLP	DATE	03.04.2023
DRAWN	LG	SCALE	1:200@A0
DRAWING NUMBER			REVISION
JWH.TS.02			B

Flood map for planning

Your reference
<Unspecified>

Location (easting/northing)
388609/405188

Created
17 Oct 2023 13:42

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

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

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

Notes

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

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

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

Use of the address and mapping data is subject to Ordnance Survey public viewing terms under Crown copyright and database rights 2022 OS 100024198. <https://flood-map-for-planning.service.gov.uk/os-terms>

Flood map for planning

Your reference
<Unspecified>

Location (easting/northing)
388609/405188

Scale
1:2500

Created
17 Oct 2023 13:42

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

0 20 40 60m

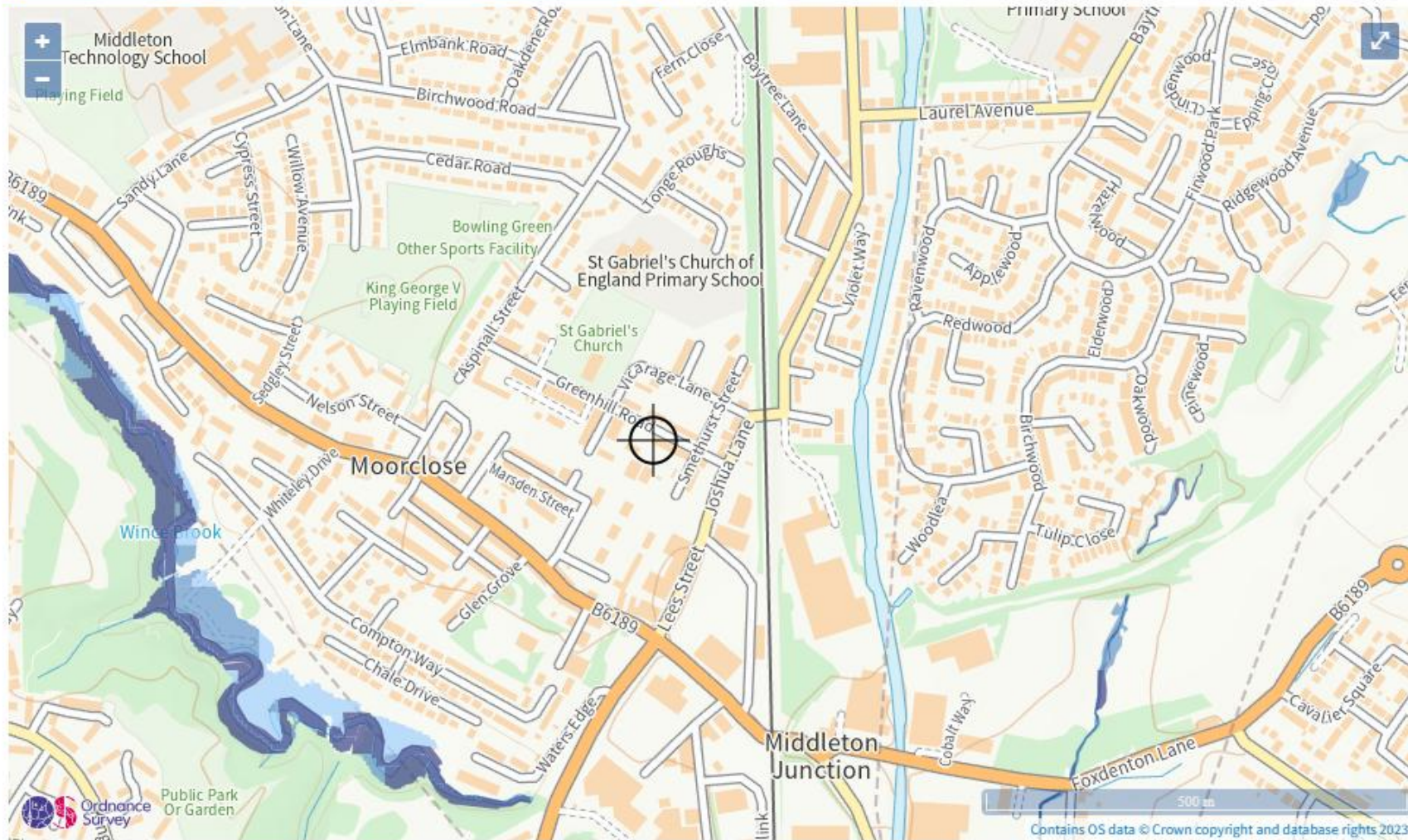


Flood risk

Extent of flooding

Location

Enter a place or postcode



Extent of flooding from rivers or the sea

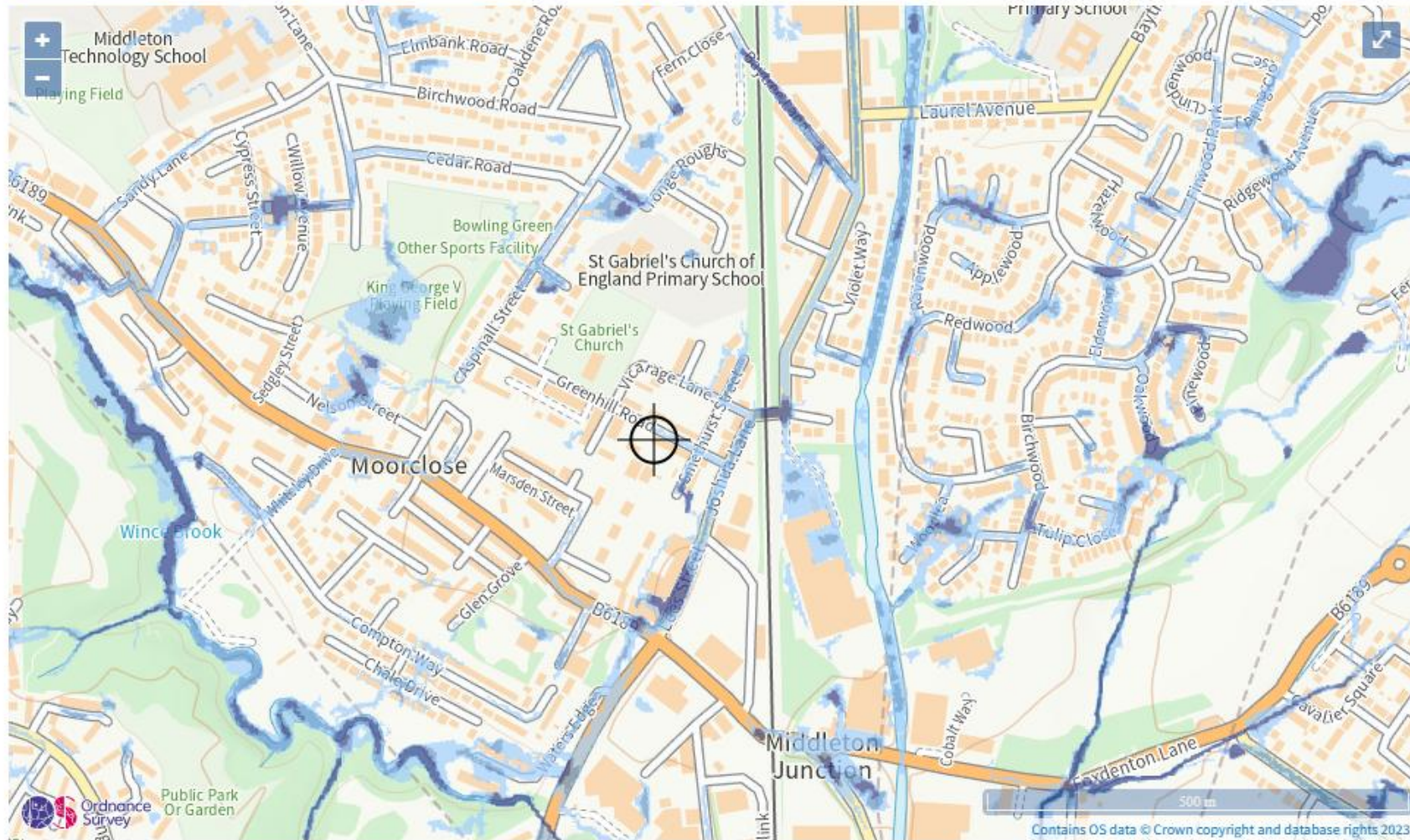
High Medium Low Very low Location you selected

Flood risk

Extent of flooding

Location

Enter a place or postcode



Extent of flooding from surface water

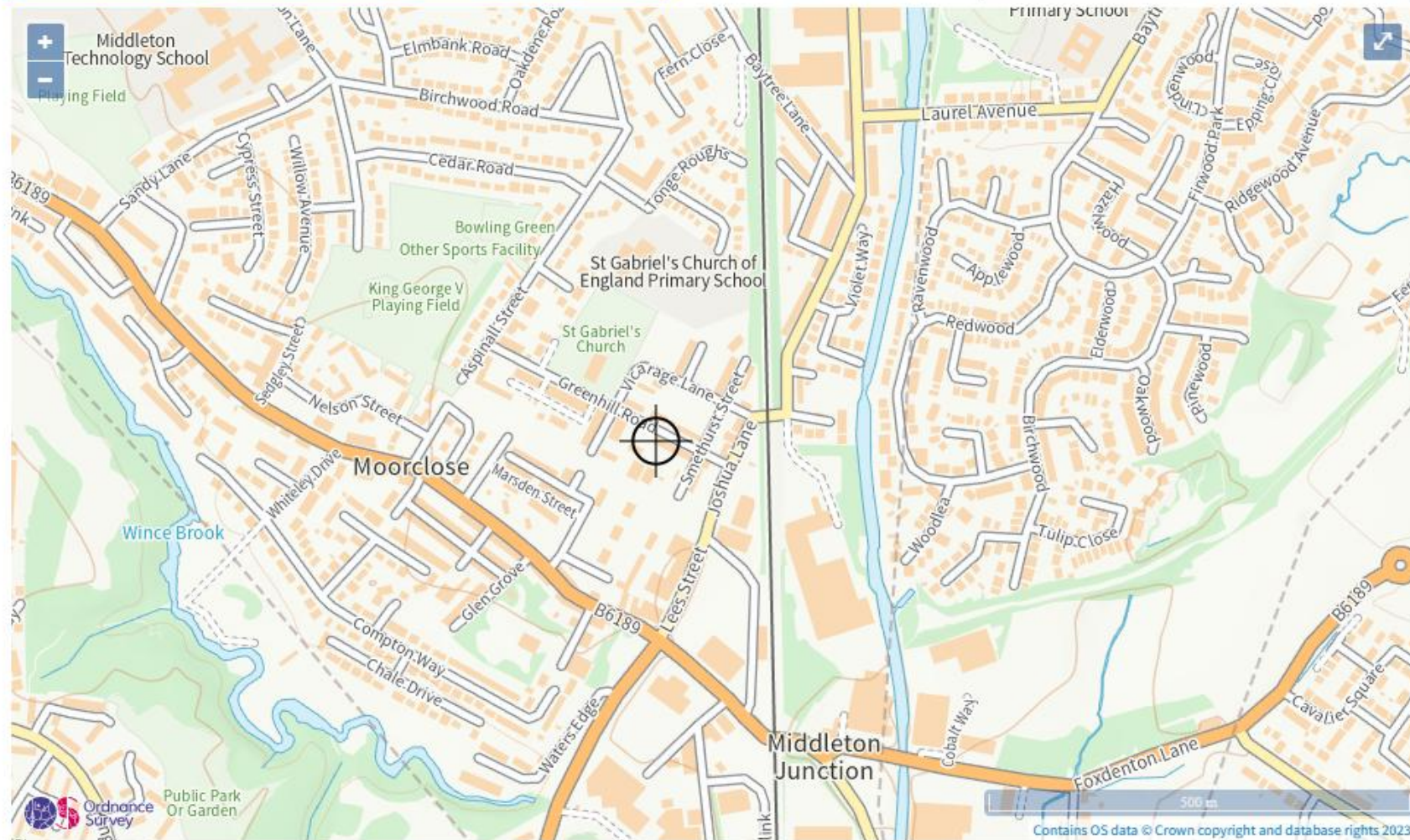
High Medium Low Very low Location you selected

Flood risk

Extent of flooding

Location

Enter a place or postcode



Maximum extent of flooding from reservoirs:

 when river levels are normal  when there is also flooding from rivers  Location you selected



SEWER RECORDS

Address or Site Reference

JWL Junction2,

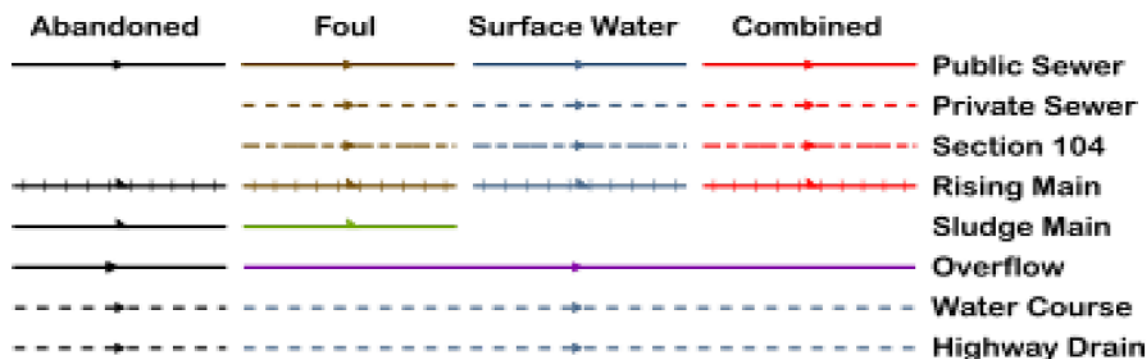
Scale: 1:1250
Date: 04/08/2022

Printed by: Property Searches

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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Wastewater Symbolology



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

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