

PLANS2EXTENDLTD

FLOOD RISK ASSESSMENT AND SUDS REPORT

PREPARED BY:

CHRISTOPHER DANIAL MARSDEN

PROJECT UNIT 2 WHITWORTH STREET EAST M11 2NQ

PLANNING APPLICATION REF: 127732/FO/2020

Dated; 10TH AUGUST 2020

1. INTRODUCTION

The Environment Agency flood zone map Fig 01/20 and Fig 02/20 shows that the site is located in low risk Zone for surface water flooding and very low risk from flooding from rivers and the sea.

In accordance with the NPPF and the latest Planning Practice Guidance for Flood Risk and Coastal Change document a detailed Flood Risk Assessment (FRA) would not be required for the site.

2. Policy EN 17 WATER QUALITY

Water Quality With reference to the Manchester-Salford-Trafford SFRA and other relevant documents: Development should avoid any adverse impact on water quality, including during the construction phase, and wherever possible should seek to enhance water quality, both chemical and ecological; Development should minimise surface water run-off from development and associated roads, and maximise the use of appropriate sustainable drainage systems, to minimise groundwater contamination, and to avoid pollutants reaching watercourses; Development close to a watercourse should also ensure that waste or litter cannot enter the watercourse from the site; Development should, where feasible and appropriate, seek to open up any culverted or hidden watercourse beneath the site to improve the ecological status of that watercourse.

3. DESCRIPTION OF THE SITE & PROPOSALS

SITE LOCATION

The site is located in the Smithfield Enterprise Zone. It is within the Clayton & Openshaw ward in the constituency of Manchester.

It is set on the left side of the one-way traffic system at the top end of Whitworth Street East. The application site is completely self-contained within a secured boundary, two other companies are set within the curtilage of the site. The courtyard is protected with a locked gated access and security fencing.

There are no residential properties within this business park. To the North of the application site is the A635 Ashton old Road, which runs parallel to Whitworth Street East.

The business park boasts a well-balanced layout of lawns trees and shrubbery which provides natural filtration and habitats for the local wildlife. The business park is well maintained with carefully position trees bordering

Professional planning and building control drawings designed within budget

A: The Print Centre, Johnson Street, Atherton, Manchester, M46 0RB
M: 07557 367769 | E: chris@plans2extend.co.uk | W: www.plans2extend.co.uk

Company No: 09784974

the busy A635 trunk road into Manchester. These trees help to reduce the impact of noise pollution from this main arterial route into the city centre, and other areas of interest. They also provide some assistance with natural filtration process.

The enclosed gated ground floor area finish is made up of a concrete aggregate. The proposed operation of the site is that of a M O T centre. We cannot see any way in which pollutants would be exposed to the site during the M O T checks, as none of the inspection procedures involve exposure to vehicle pollutants. The centre will not be offering any vehicle wash or cleaning facilities, so there will be no excess of water or water pollutants during the M O T process. In fact, vehicles can fail the M O T examination if the vehicle or number plates are dirty.

4. MAINTENANCE

The maintenance of the application site is covered by private insurance secured by the applicant with the lease holder. The responsibility of ensuring that the site complies with the L P A policy is that of the applicant who will be responsible for ensuring that the surface water flow does not pool and that the water is free to run into the correct direction and location. He will be responsible for ensuring that all contaminants and sediments are removed from areas at risk. He will also ensure that the gutters are free of sediments and obstructions, and that the grids and gullies are cleared of sediment on a regular basis. The R W P and gutters are industrial size, the gutters are 150mm the R W P are also 150mm the R W P are set below ground level and we assume run directly into the main drains of the surface water grids. All surface water waste also runs into the grids located on the site.

5. TOPOGRAPHY

The external ground level of the site slopes from East to West to within 5 metres of the application site, it then levels out with the flat surface area extending right up to the front of the building. , (Please refer to site drainage plans for layout details Fig 6)

The ground level from North to South within the courtyard was reasonable level with no obvious signs of previous contamination. The surrounding area of the application site has flat green areas of well-maintained land with mature trees set to the Northern end on Ashton Old Road. Below is a google map ref: Fig 1 of the area around the application site.

Fig 1



6. INSPECTION CHAMBERS AND GRIDS (see Fig 6)

Access into the inspection chambers was not possible as they are locked, so some assumptions had to be made.

During the site walk over it was noted that the Surface water runs into two grids sited within the levelled area with two inspection chambers which are also set to the front of the buildings. The inspection chamber to the application site are located 4 metres from the front main door of the application site, the foul waste from the two toilets are set below ground level and it is assumed they feed into the inspection chamber which then enter the main sewer system located on Whitworth Street East. The adjacent property also benefits from one inspection chamber which is located 6 metres from the front of the main door. It is assumed that the surface water from the two grids flows directly into the main sewer system located on Whitworth Street East. The owner of the adjacent Auto repair garage confirmed that there had been no flooding from surface water during his 4 years of tenancy. The building opposite the application site belongs to the Entwistle group and is

mainly used as a storage facility. One inspection chamber was located immediately to the front of this property.

7. RECOMMENDATIONS/ ADVISORY WORK FOLLOWING SITE INSPECTION

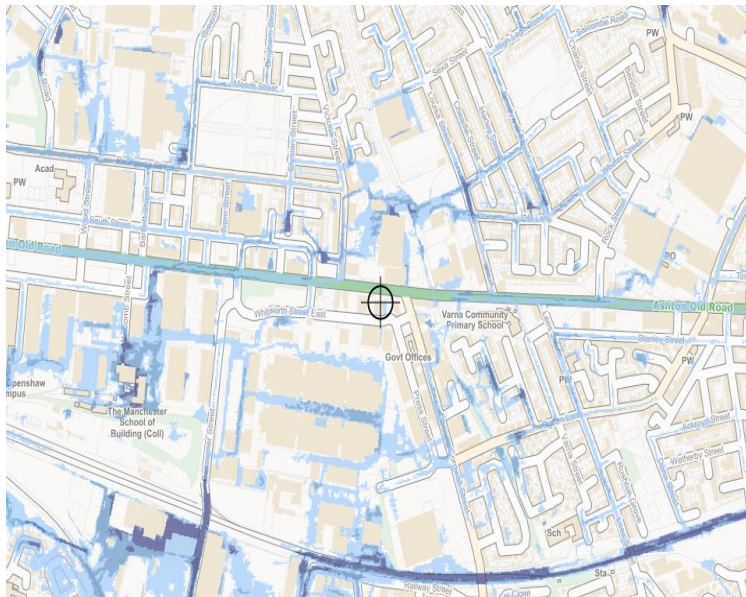
The applicant was advised at the time of the site walk around and inspection to replace a broken surface water grid. There was evidence of potholes that could hold water and could further degrade the surface area, the applicant was asked to repair any surface area that could cause pooling.

There was also evidence that the surface water grids had not been cleaned, silt was noted at the invert levels which could lead to the grid levels being overwhelmed the client was asked to clear the sediment.

The large commercial gutters have previously failed to carry the water flow and because of the build-up of silt and leaves the gutters have overflowed in places, the applicant was advised that the gutters required to be cleaned of any obstruction.

LOW RISK OF FLOODING TAKEN FROM UK GOV WEB SITE

Fig 2



8. The U K Government has provided the details of flood risk from flash flooding and from rivers and sea. Manchester city is 236ft above sea level. The flood map shows that the application site Whitworth Street East is classified as low risk from surface water flooding and very low risk from flooding from rivers and sea.

9. Flood Risk Summary for the area around:

Unit 2 Smithfield Enterprise Estate Whitworth Street East Manchester M11 2NQ

SURFACE WATER

Low risk

Surface water flooding, sometimes known as flash flooding: happens when heavy rain cannot drain away is difficult to predict as it depends on rainfall volume and location can happen up hills and away from rivers and other bodies of water is more widespread in areas with harder surfaces like concrete

RISK FROM FLOODING RIVERS AND SEAS

Very low risk

This flood risk summary is not proper specific.

Very low risk means that each year this area has a chance of flooding of less than 0.1%.

This service takes into account any flood defences.

This flood risk summary reports the highest risk from surface water within a 20-mile radius of this property.

Low risk means that each year this area has a chance of flooding of between 0.1% and 1%.

This information is suitable for identifying which parts of town or streets are at risk or have the most risk.

The approximate extent and depth of flooding

SURFACE WATER FLOOD RISK SHOWS:

Fig 3 TAKEN FROM UK GOV WEB SITE



SURFACE WATER FLOOD RISK SHOWS:

Water velocity in a low risk scenario.

Flood velocity (metres per second)

Dark blue = over 0.25 m/s

Light Blue = less than 0.25 m/s

Flow Direction

Crossed circle = site

location see fig 3

10. SURFACE WATER DRAINAGE PROPOSALS

The surface water drainage proposals are in accordance with BS 752-4 and the Building Regulation document H 2010, which indicates the following hierarchy for the disposal of surface water drainage by:

1. Discharge via infiltration.
2. Discharge to watercourse.
3. Discharge to sewer, these options are discussed in further detail below.

Surface water discharge via infiltration.

From information available to date, it would appear that the ground conditions are not sufficient to support this, hence the use of infiltration is considered not to be feasible.

Surface water discharge via water course. There are no existing watercourses in the vicinity of the site, therefore this proposal is considered not to be feasible.

Surface water discharge to existing United Utilities sewer.

It is proposed that surface water will discharge into the existing sewer system set out on Whitworth Street East, see Fig 6

The drainage strategy put forward in this report is based on the assumption that surface water discharge can pass into the existing public surface water sewer in Whitworth Street East.

The velocity rate is set out in Fig 3 HEADED SURFACE WATER FLOOD RISK.

In a low risk scenario, the surface water velocity will be less than 0.25ms in an high risk setting it will be over 0.25ms.

11. LEVEL ASSUMPTIONS.

The site falls gently towards unit two then levels out 5 metres from the application site. We have no survey information to identify exact levels.

We have had to assume a connection level for all connections to the public sewers.

Foul water will still discharge into the existing public sewer on Whitworth Street East.

Fig 4 layout plans for unit 2 M11 2NQ

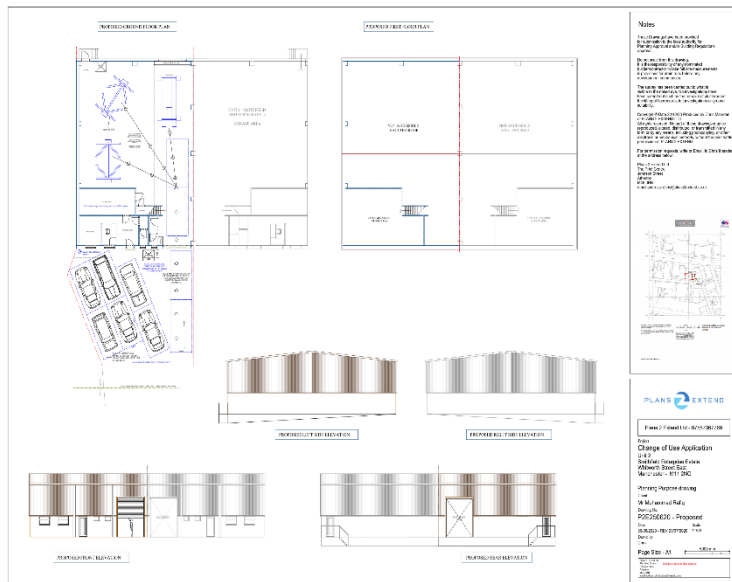
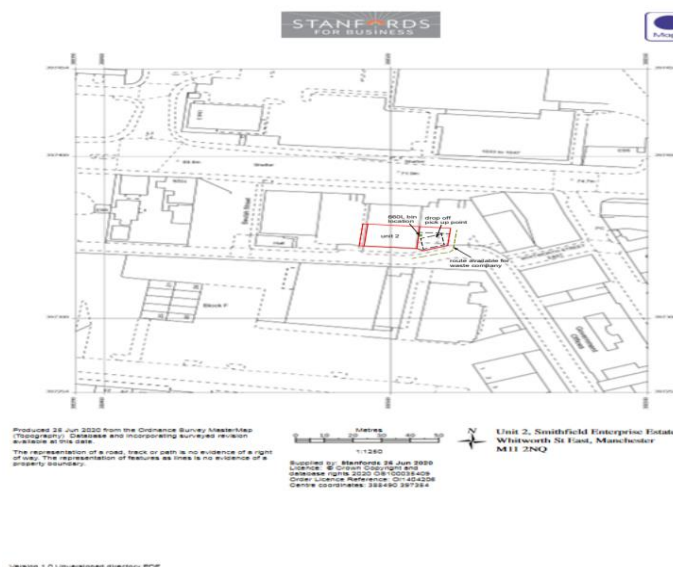


FIG 5 Location plans for M11 2NQ



12.STATUS REPORT

ON THE 5th OF AUGUST, THE APPLICANT STATED THAT THE LANDLORD WAS ARRANGING FOR ALL THE WORKS DETAILED IN FIG 6 TO BE COMPLETED WITHIN THE NEXT TEN DAYS

Fig 6. SURFACE WATER RUN OFF PLANS

Professional planning and building control drawings designed within budget

A: The Print Centre, Johnson Street, Atherton, Manchester, M46 0RB
M: 07557 367769 | E: chris@plans2extend.co.uk | W: www.plans2extend.co.uk

Company No: 09784974

Date: 10th of August 2020