42 St Pancras Way
Baseline Flood Risk Review

Prepared for Youngs & Co Brewery Plc

November 2021 - Rev C



1926/220/DB 10/11/21

42 St Pancras Way

Baseline Flood Risk Review - Rev C

1.0 Introduction

Alan Baxter have been appointed by Youngs & Co Brewery Plc to undertake a baseline review of flood risk and drainage considerations in relation to 42 St Pancras Way, NW1 0QT. The site proposals are generally limited to internal alterations and a small, one storey extension at ground floor level. This review is based on publicly available flood maps, a drawing showing the location of the local Thames Water sewers and existing and proposed drawings provided by Sampson Associates.

2.0 Existing Site

42 St Pancras way is occupied by a four storey Public House called The Constitution. The site is bounded by St Pancras Way to the west, the Regent Canal to the south and a residential development to the north and east.

The lowest level within the building 'the basement' is at the level of the towpath to the Regent Canal. The 'ground floor' is at the level of St Pancras way which locally rises up adjacent to the site to bridge over the canal.

The building on the site includes some basement vaults extending out under St Pancras Way. At basement level there is an access to the Regent Canal Towpath and at ground floor level there is a large external terrace to the east.

Based on a visual review of the site it appears that that foul and surface water from the site both drain to the basement level. It is assumed that the foul water drains to the local Thames Water foul sewer to the north-west (see appendix A). The surface water from the site probably drains either to the Thames Water surface water sewer to the north west or directly into the Regents Canal.

Geological maps indicate that the site is underlain by London Clay without any superficial deposits.

3.0 Flood Risk Considerations

As part of this initial study we have reviewed a number of published flood maps.

3.1 Fluvial Flooding

Figure 01 shows the fluvial flood map from the .Gov website. The site is shown to be in Flood Zone 1 (the lowest fluvial flood zone). The nearest area of elevated fluvial flood zone is shown to be around 3.5km to the south. As such the site is not considered to be at risk of fluvial flooding.



Figure 01 Fluvial Flood Risk Map from .Gov Website

3.2 **Surface Water Flooding**

Figures 02 & 03 show the surface water flood map from the .Gov website and the London Borough of Camden Strategic Flood Risk Assessment. These maps show the theoretical route and depth that surface water might be expected to take during an extreme rainfall event once the below ground drainage infrastructure has been overwhelmed. The maps indicate that there is an elevated surface water flood risk particularly associated with the Regents Canal. The maps seem to show that surface water in the local area would tend to drain into the canal and that it could reach a depth of over 0.9m above the existing towpath level in an extreme event adjacent to the site. Some shallower surface water flooding is also shown on St Pancras Way. The flood hazard map shown in figure 04 indicates that flood water adjacent to the site in the Regent Canal could reach more than 2.5m deep in an extreme 1:1000 year event.

If the scenario shown on these theoretical maps were to occur it's hard to see how water from the canal would not flood the basement level of the building on the site and it is possible that some shallow water could flow into the ground floor from St Pancras Way.

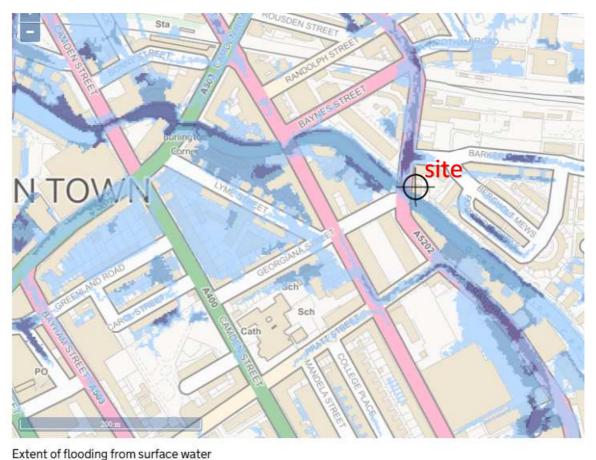




Figure 02 Surface Water Flood Risk Map from .Gov Website

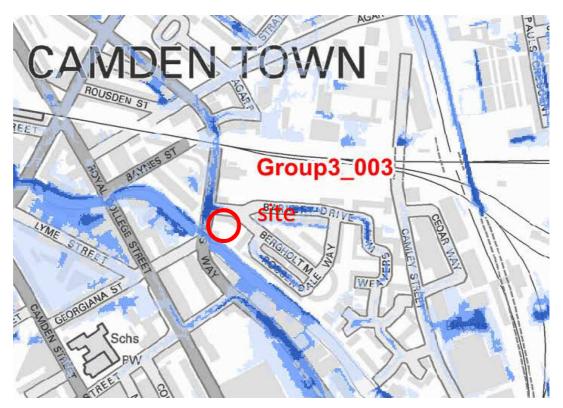


Figure 03 Surface Water Flood Risk Map from London Borough of Camden Strategic Flood Risk Assessment



Figure 04 Flood Hazard Map from London Borough of Camden Strategic Flood Risk Assessment

3.3 Reservoir Flooding

Figure 05 shows the reservoir flood map from the .Gov website. The site is not shown to be at risk from reservoir flooding.

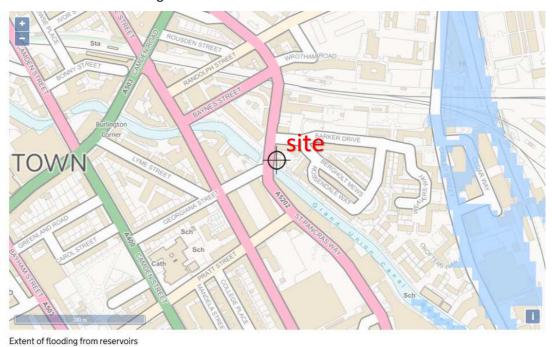


Figure 05 Reservoir Flood Risk Map from .Gov Website

3.4 Groundwater Flooding

Figure 06 shows the groundwater flooding risk map from the London Borough of Camden Strategic Flood Risk Assessment. The site is not shown to be at risk from groundwater flooding.

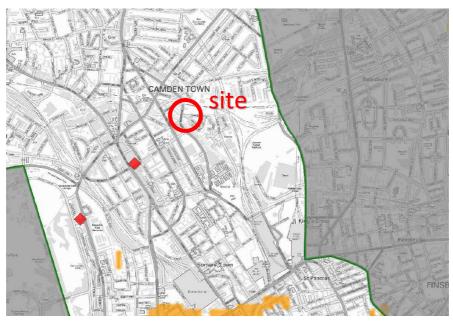


Figure 06 flood map London Borough of Camden Strategic Flood Risk Assessment.

3.5 Sewer Flooding

The map indicating the number of internal flooding incidents cause by sewers overtopping (figure 07) does not indicate any recorded incidents in the postcode that the site is located in. Furthermore, figure 08 shows that the site is not located within a critical drainage area. As such There is no reason to think that the site is at an increased risk of flooding from sewers. Having said that, any drainage connections on the site at basement level probably have an increased risk of backing up if the Thames Water sewers were to surcharge.

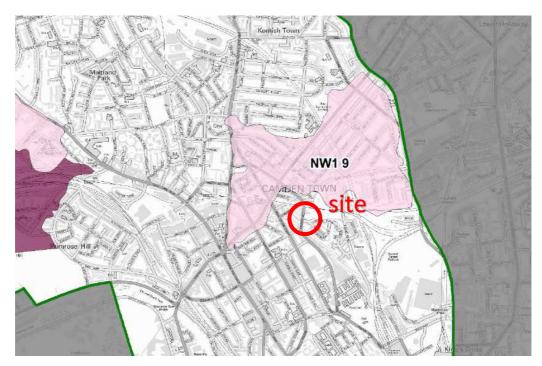


Figure 07 Sewer flooding incidents map from London Borough of Camden Strategic Flood Risk Assessment.

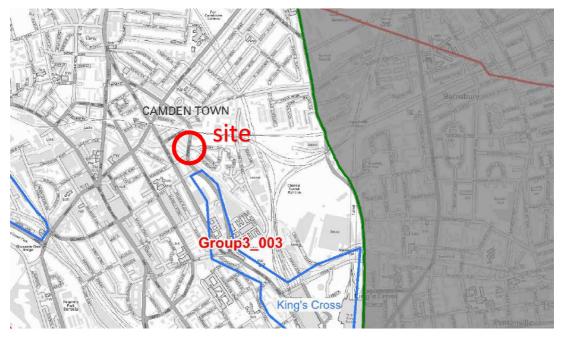


Figure 08 Critical Drainage Area map from London Borough of Camden Strategic Flood Risk Assessment.

4.0 Flood Risk Mitigation

The main theoretical flood risk that has been identified is that from surface water flowing down the Regents Canal and entering the basement. The proposals will not increase the risk or consequence of such a scenario taking place. Unimpeded safe internal access will need to be provided from the basement to the ground floor level. Consideration should also be given to flood resilience measures and ways that might help to prevent flood water entering the basement if the canal were to flood. Flood protection doors at the basement access to the tow path should be provided if possible.

The provision of non-return valves and or pumps should be considered in the below ground drainage design to reduce the risk of the sewers backing up into the basement.

4.1 **SuDS**

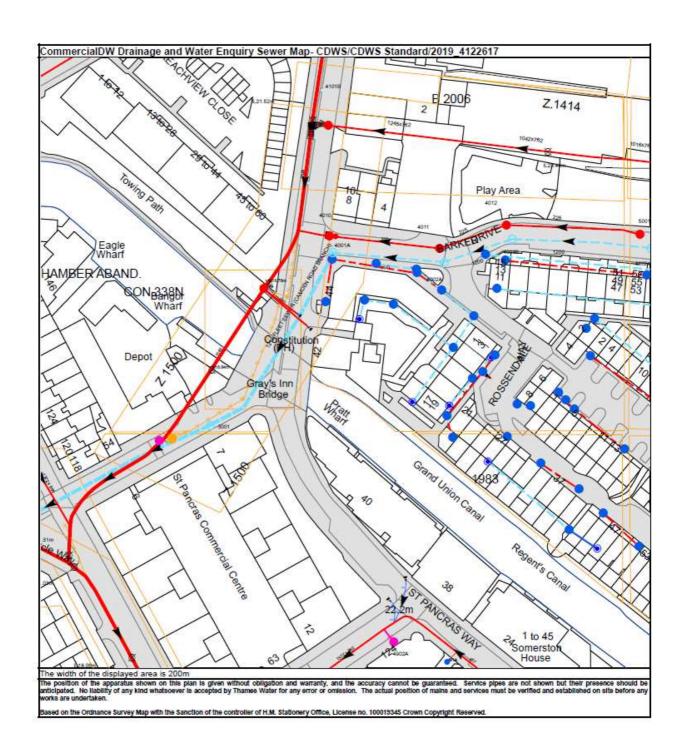
As the site is within a conservation zone and the proposed works are limited to relatively minor internal alteration and a small extension, it does not seem appropriate to incorporate any significant SuDS measures. However, some betterment can be achieved with the provision of some water buts on rain water downpipes and providing external planters where possible. The proposed ground floor extension will be finished with a biodiverse green roof which will help to reduce surface water runoff from the site.

5.0 Conclusion

The main theoretical flood risk that has been identified is that from surface water flowing down the Regents Canal and entering the basement. The proposals will not increase the risk or consequence of such a scenario taking place. Unimpeded safe internal access will need to be provided from the basement to the ground floor level. Consideration should also be given to flood resilience measures and ways that might help to prevent flood water entering the basement if the canal were to flood. Flood protection doors at the basement access to the tow path should be provided if possible.

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Prepared by David Bowles
Reviewed by JGa – Rev c
Issued Nov 21

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