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Our ref: 23/0602

21 August 2023

Your ref:

J Ayoade
136a Church Road
Croydon
Surrey
CR0 1SE

Dear Ms Ayoade,

136a Church Road, Croydon, CR0 1SE
Floor Risk Assessment

This letter report summarises the flood risk at the above site to support a planning application for prior approval to convert part of the building into a residential unit. The site is located in Flood Zone 3 and is for a minor development, however, a flood risk assessment needs to be provided to prove that flood risk has been considered as part of this planning application. A contoured site plan is included in Appendix A

Flood Risk Assessment

Fluvial

There are no watercourses located within the site however, it does fall within the flood plane of the River Wandle.

The site is located in Environment Agency Flood Zone 3. Areas within flood zone 3 have been shown to be at between a 1% and 3.3% probability of flooding from rivers each year. The risk of fluvial flooding is therefore considered to be moderate to severe. An extract from the EA Flood Map for Planning is enclosed within Appendix B.

Surface Water

Surface water flooding refers to flooding caused when the intensity of rainfall, particularly in urban areas, can create runoff which temporarily overwhelms the capacity of the local drainage systems or does not infiltrate into the ground. The water ponds on the ground and flows towards low-lying land. This source of flood risk is also known as ‘pluvial’.

The EA surface water mapping is on the GOV.UK website and has been included at Appendix C. The mapping shows that the site is at ‘high’ risk of surface water flooding. This indicates

that the area has a chance of flooding of greater than 3.3% each year. The depths associated with this flooding on the site are below 300mm however, there are some areas immediately adjacent to the river which show flood depths between 300-900mm.

The surface water risk is therefore two-fold firstly from an overland flowpath running in a south easterly direction across the site, following the contours of the land, and secondly from overtopping of the river.

Groundwater

The Croydon Council's Strategic Flood Risk Assessment (SFRA) indicates that the site does falls within an area of medium risk from surface water flooding (1%AEP) although they have no record of surface water flooding within the immediate environs of your property.

The EA groundwater vulnerability mapping located in MAGIC Maps (available at: http://magic.defra.gov.uk/MagicMap.aspx) shows that the site is on a medium to high risk strata and is therefore within a Source Protection Zone.

There are no reported incidents of groundwater flooding within the SFRA and given that the proposals will have no impact on groundwater flows therefore there is no additional risk as a result of the proposals.

Conclusions

This letter report has been prepared to support the application for the conversion of first floor and part ground floor of 136a Church Road from office /storage to residential use.

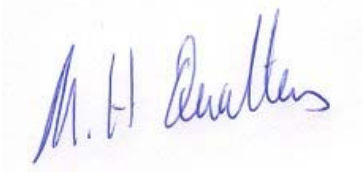
Surface water and fluvial flooding have been shown to be a risk to the development site. However, it is considered that certain precautions taken in the design and the construction of the conversion should allow the construction to proceed with little risk of flooding to the finished property. It is understood that there have been no instances of flooding to the existing building over the last ten years. Therefore, if the following mitigation measure are implemented the flood risk will be minimised to an acceptable level.

- The construction of the ground floor and substructure should be of concrete construction

- The level of the ground floor slab should be set to that of the level 150mm above the external ground level on the site. This should result in a finished slab level above the anticipated floor level.

- All electrical outlets within the ground floor of the proposed residential area should be set at a high level.

Yours sincerely,



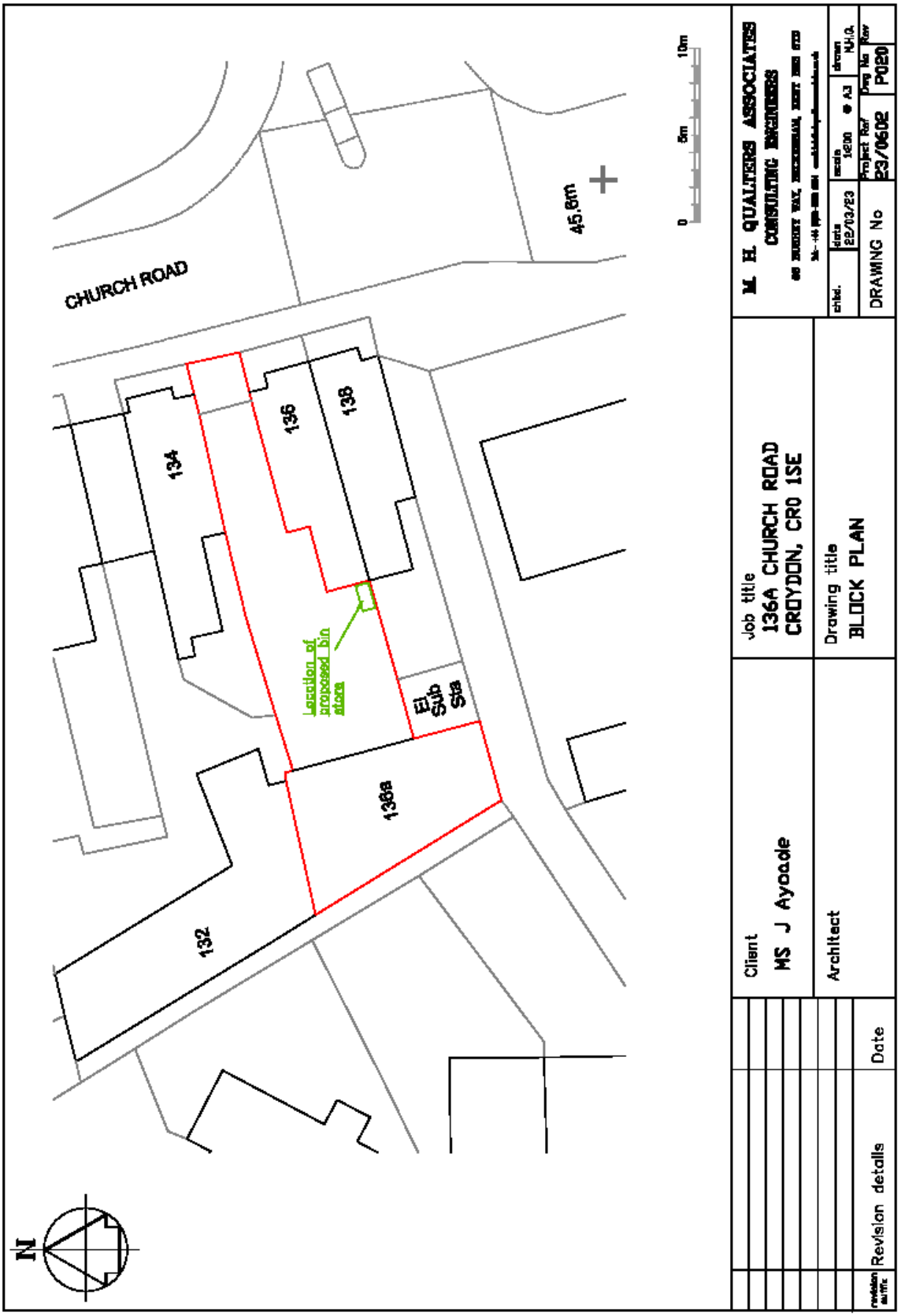
Martin Qualters

Enc,

Appendix A	Block Plan
Appendix B	Flood Map for Planning
Appendix C	Surface Water Floor Risk Maps

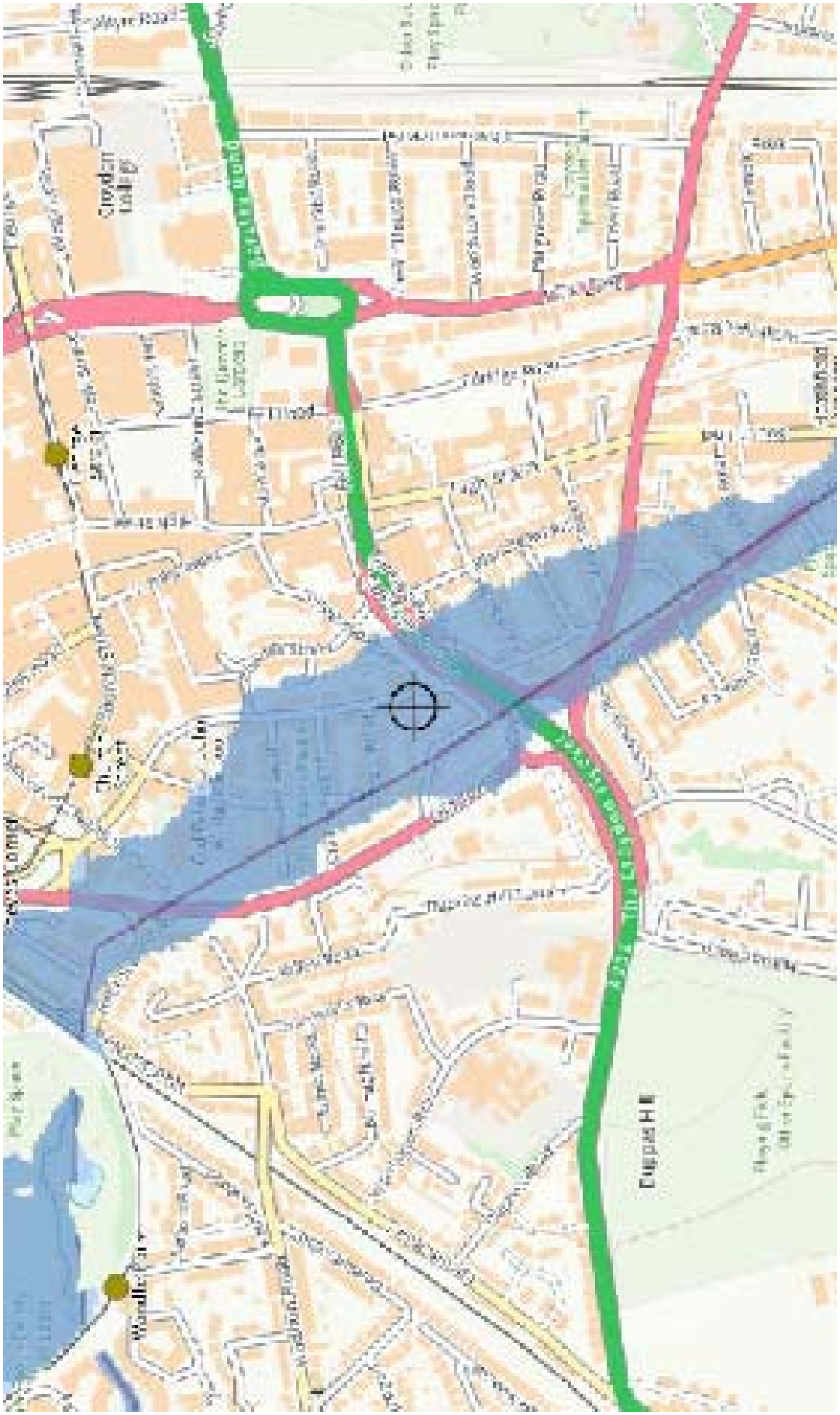
Appendix A

Site Plan


CHURCH ROAD
45.6m
134
136
138
136a
132
El Sub Sta
Location of proposed bin store
0
5m
10m
N
M H QUALTERS ASSOCIATES
CONSULTING ENGINEERS
Job title
136A CHURCH ROAD
CROYDON, CR0 1SE
Client
MS J Ayoade
Architect
Drawing title
BLOCK PLAN
DRAWING No
P020
Revision details
Date

Appendix B

Flood Map for Planning



Appendix C

Surface Water Flood Risk Maps


Barclay Road
George Street
Church Street
Croydon College
Duppas Hill
Wandle Park
A232 The Croydon Flyover