DEVELOPMENT AT

THE NEW FLEURS PUBLIC GOUSE

PORTMANMOOR ROAD

CARDIFF

FOR

CARDIFF COMMUNITY HOUSING ASSOCIATION

JOB NUMBER : S.8106

FOUL AND SURFACE WATER DRAINAGE STRATEGY

1.0 FOUL WATER DRAINAGE

A search of the public sewer records confirmed that there are no existing DCWW public foul water sewers within the vicinity of the development site, however, there is an existing public 975mm x 600mm brick egg combined water pipe within Walker Road. An existing 225mmØ combined water connection from the public house connects to this system. It is therefore intended to utilise this existing connection for the proposed development foul water drainage, with a new combined water manhole constructed within the boundary of the development.

Although the foul water drainage for the proposed development will remain domestic, it will be designed in accordance with the specifications and criteria set out in Sewers for Adoption 7TH Edition.

2.0 SURFACE WATER DRAINAGE

It should be noted that the conclusions reached are based on the Site Investigation Report by Terra Firma ( Wales ) Limited, report ref TF-24-516-CA-GGR-01 undertaken in 2024.

In accordance with Standard S1 of the SuDS for Wales the surface water drainage hierarchy aims to ensure that the surface water runoff is treated as a valuable resource and in turn managed in a way that minimises flood risk to the development site and addresses the issue of water quality and associated ecology. The hierarchy of options needed to be investigated is as follows:

Priority Level 1

Surface water runoff is collected for re-use.

Priority Level 2

Surface water runoff is infiltrated to ground.

Priority Level 3

Surface water runoff is discharged to a surface water body.

Priority Level 4

Surface water runoff is discharged to a surface water sewer.

Priority Level 5

Surface water runoff is discharged to a combined sewer.

2.1 COMPLIANCE WITH POLICY

With reference to the hierarchy outlined in paragraph 2.0, the discharge of surface water has been investigated and outlined as follows:

Priority Level 1 :

The reuse of surface water / rainwater harvesting has not been considered by the H.A. client. Exception criteria has been demonstrated by the H.A. client for the non-use of rainwater harvesting systems. Refer to the letter by Cardiff Community Housing Association.

Priority Level 2 :

The Site investigation Report by Terra Firma ( Wales ) Limited, confirms that infiltration to ground is not a viable option for this development site.

Priority Level 3 :

There are no watercourses / water features within 1000m of the development site and therefore this option is unviable and not considered further.

Priority Level 4 :

There are no surface water sewers in the vicinity of the development site and therefore this option is unviable and not considered further.

Priority Level 5 :

As highlighted above, there is an existing public 975mm x 600mm brick egg combined water pipe within Walker Road. An existing 225mmØ combined water connection from the public house connects to this system. It is therefore intended to utilise this existing connection for the proposed development surface water drainage, with a new combined water manhole constructed within the boundary of the development.

2.2 SUDS & WATER QUALITY

The original public house covered the entire development site with no green features present, and as such it is a brownfield site. The proposed building takes up a large percentage of the development site. It is therefore intended to utilise a green / blue roof solution with SuDS features wherever possible at ground level. The discharge for the site will be restricted to a level giving at least 30% betterment on pre-development run off rates.

This will address water quality / quantity. The remainder of the development, apart from access paths, will be landscaped in accordance with the landscape designers requirements and specifications. This will greatly contribute to the amenity and enhance biodiversity.

The design of the surface water drainage for the development will need to

comply with the Flood and Water Management act 2010, schedule 3

sustainable drainage and as such approval will need to be sought from

the local authority SAB ( SuDS Approval Body ).

It is anticipated that the maintenance and operation of all on-site surface water drainage and associated SUDS features would be the responsibility of the Cardiff Community Housing Association.

Design, installation, operation and maintenance of the surface water system will be in accordance with the SUDS manual and the requirements of the SAB. Pre-SAB and / or Full SAB application will be progressed in line with the surface water strategy.

SMART ASSOCIATES

32 LAMBOURNE CRESCENT

LLANISHEN

CARDIFF

CF14 5GG

JOB NO. S.8106

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