

# File Note

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Project title    Camden Town Hall

Job number

261250-00

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File reference

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Date

11 October 2019

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Subject        Greywater recycling with rainwater top-up – Pre-commencement File Note

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## Introduction

The following file note provides extracts of the MEP Particular specification CTH-ARP-XXX-SP-50-N-0002 with clauses in relation to the Grey water and rain water harvesting systems.

## Greywater Recycling with Rainwater Top-up for the Provision of Non-potable Water Supply

Greywater shall be collected from only the hand wash basins in the west above ground WCs and basement showers.

Greywater pipework from the west above ground WCs shall be routed within the WC service void via gravity to high level basement and into a packaged greywater recycling plant, with a dedicated vent pipe that will route at high level basement, run within public health service zones from basement to high level at level 3, and terminate to atmosphere via vent cowl at roof level. A digital spot sensor leak detection in the greywater recycling plantroom linked to the BMS to help mitigate leakage risks.

The greywater recycling plant is located in the northwest corner of the building and is topped up with harvested rainwater and boosted cold water supply when capacity allows. The rainwater harvesting tank is located in a dedicated plantroom adjacent to the northwest comms intake room. The greywater is then treated and boosted to feed all WCs within the building and L3 external terrace bib taps via non-potable cold water supply pipework.

Greywater from the basement showers shall route below ground into a packaged GRP sump pump via an internal manhole before being pumped into the greywater recycling plant. Refer to AKT-II civil engineering drawings and specifications for buried drainage.

A dedicated vent pipe from the packaged sump pump shall route at high level basement, run within public health service zones from basement to high level at level 3 within the southwest toilet core, and terminate to atmosphere via vent cowl at roof level.

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A dedicated vent pipe from the packaged greywater recycling plant shall route at high level basement, run within public health service zones from basement to high level at level 3 within the northwest toilet core, and terminate to atmosphere via vent cowl at roof level.

Greywater stacks shall be installed with primary vent pipes and terminate to atmosphere above roof level via vent cowls.

All new greywater stacks are to be in cast iron with HDPE branches.

Access points are to be provided to all stacks, branches, horizontal drainage runs, changes of direction and changes of pipe size to ensure the system is fully accessible for future maintenance.

To avoid cross connection, potable cold water will be in copper and non-potable cold water services will be in HDPE.

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## DOCUMENT CHECKING (not mandatory for File Note)

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