## chapmanbdsp

## **Design Note: New Roof Plant**

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Project No 61968 Revision 01

Date 25<sup>th</sup> March 2024 Doc. Ref M001

## 1. Introduction

This design note provides an overview of the new supplementary roof plant for Google X1 at 22 Handyside Street.

## 2. New Roof Plant

As part of the refurbishment and fit out works at X1 22 Handyside Street for Google, it is intended to provide a new VRF (Variable Refrigerant Flow) system to supplement the existing landlords air conditioning systems on levels 1 and 2.

At present these floors are served by an landlords underfloor displacement type air conditioning system with trench heating and cooling to the perimeter. The new VRF system is being provided where areas are cellularised (i.e. meeting rooms and offices).

VRF systems have already been provided in the building as part of a previous fit out (serving the ground floor and various comms. rooms) with the associated outdoor units located in plant enclosure at roof level.

The new outdoor units associated with the level 1 and 2 fit out will be located in a new plant enclosure at roof level which will match the existing.

In order to accommodate the new plant enclosure it will be necessary to relocate some of the existing PV panels onto a part of the roof that is currently not being utilised ensuring that there is no change to the current number of PV panels on the roof and the associated energy that they provide.

Plant selections will be reviewed by an acoustic consultant to ensure they meet the required noise criteria.