

Manchester Oxford Road Station CCTV cable route

As part of the proposals for Manchester Oxford Road Station Capacity project, 3No. new CCTV cameras are required at the front of the station to provide coverage for the 2No. relocated ticket windows.

Whilst the number and location of these 3No. cameras has been agreed with the council there is an outstanding condition (No. 3) as below related to application number 137833/LO/2023, date of application 01/09/2023:

“3) Notwithstanding the approved drawings and documents within Condition 2 of this decision full details of the design, materials and colour of the 3no. CCTV cameras including a product specification, and full details of the associated fixing, cabling and cable containment for the approved cameras shall be submitted to and approved in writing by the City Council as local planning authority prior to the installation of the 3no. approved CCTV cameras and associated fixing, cabling and cable containment. The works shall be carried out fully and only in accordance with the approved details.

Reason - Because the proposed works affect a building that is within the curtilage of a building which is included in the Statutory List of Buildings of Special Architectural or Historic Interest so careful attention to building work is required to protect the character and appearance of this building in accordance with policies SP1, CC9, EN1, EN 3 and DM1 of the Adopted Core Strategy for the City of Manchester, the Design and Principle of the Guide to Development in Manchester SPD and saved policies DC18.1 and DC19.1 of the Unitary Development Plan for the City of Manchester.”

This document and associated drawing is to provide the information related to this condition and gain Council Agreement. The document is split into sections as follows:

1. Design, material and colour of the 3No. CCTV cameras including specification and fixing details.
2. Details for the associated cabling and cable containment for the new CCTV cameras.

1 CCTV cameras

The 3No. cameras proposed are IP Dome cameras - Hanwha XNV-6080 Dome Camera, the colour of the camera is “Ivory” and they have a base diameter of 160mm. See Figure 1 for an image of the new cameras.

These new cameras will match the aesthetics of the existing cameras present at the station within the same areas. See Figure 2 for photos of the existing cameras on site.

Each camera has three fixing points where the cameras base will be fixed to the station canopy (2No. cameras) or wall of boiler room (1No. camera), see Figure 3:

- Hole required in supporting surface i.e. canopy is 6mm diameter and 55mm deep
- Tapping screws are M4.5 and 50mm long

A total of 6No. 6mm diameter holes will be needed in the station canopy to allow the installation of the 2No. new cameras.



Figure 1 - Hanwha XNV-6080 Dome Camera

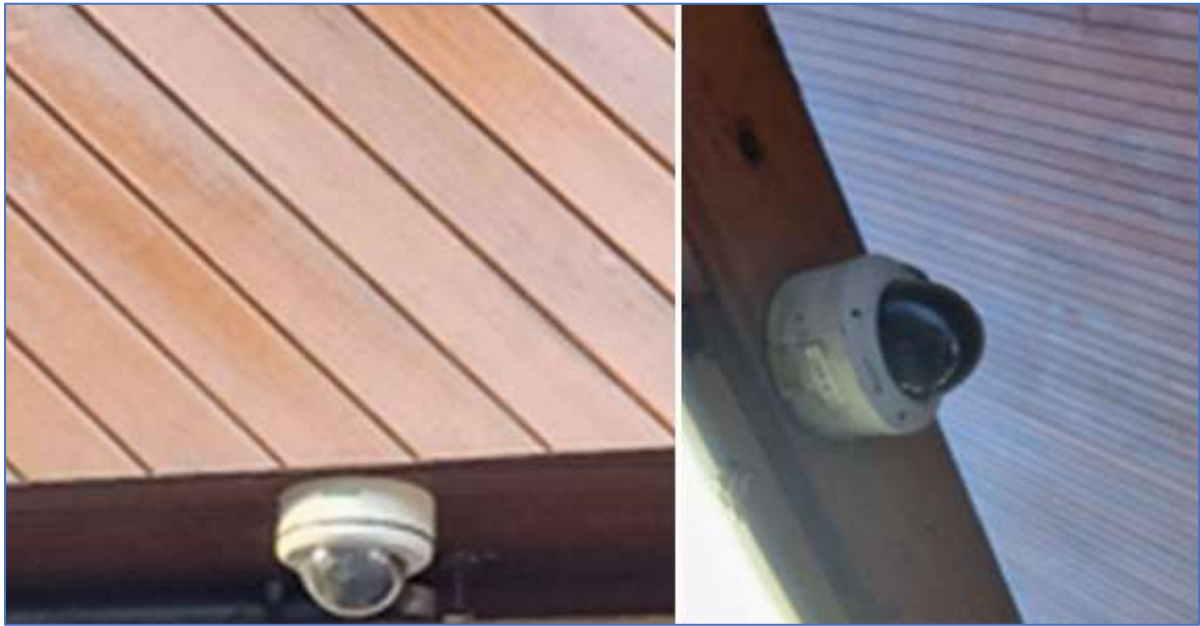


Figure 2 - Existing CCTV cameras at Manchester Oxford Road Station

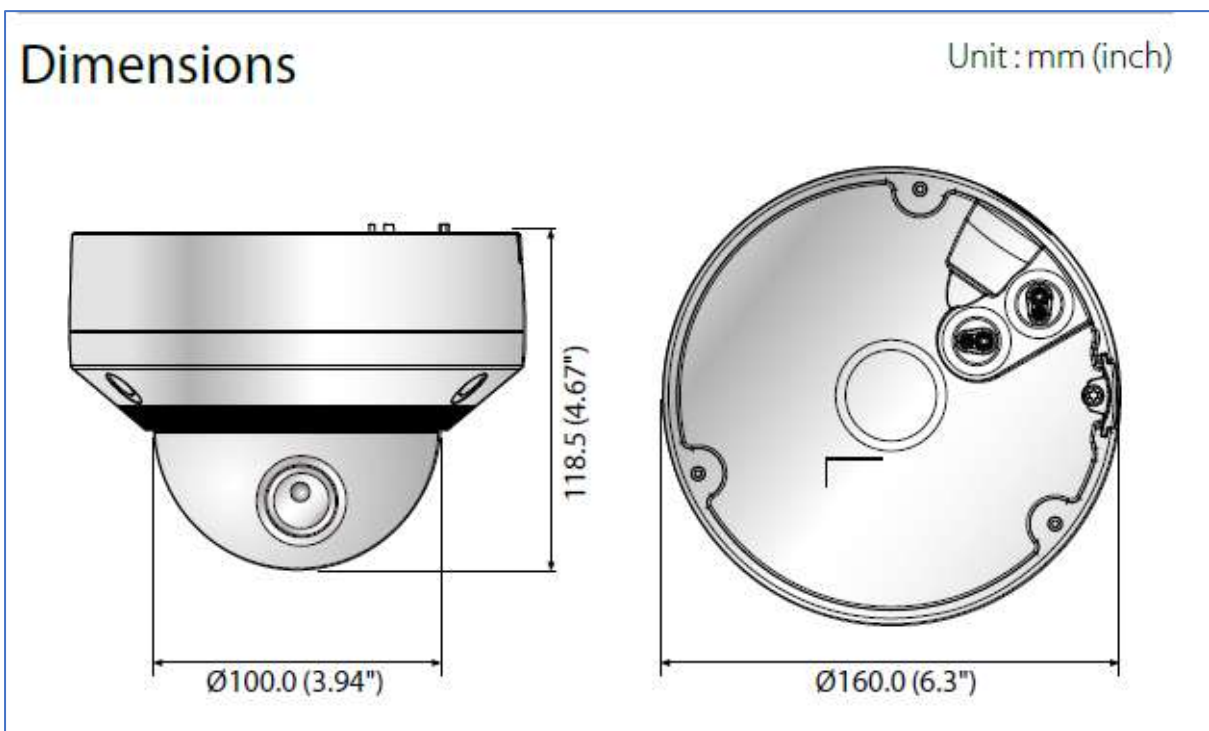


Figure 3 - Camera dimensions and fixing locations

2 CCTV cabling

To accommodate the installation of the 2No. new CCTV cameras on the station canopy new CCTV cables need to run to the cameras from the main ticket office building.

At the time of the Listed Building Consent application and receipt of condition No.3 the exact route and details of the cabling was unconfirmed however we now have a definitive proposal.

Cables are required to run between the station security room to the new cameras and this route will be broken into five sections with associated photos to aid understanding.

1. Security room to ticket office roof;
2. Ticket office roof;
3. Ticket office roof to boiler room roof;
4. Boiler room roof to station canopy;
5. Station canopy to cameras.

2.1 Security room to ticket office roof

Between the station security room and the ticket office roof (Referred to as the “Lozenge building”) the cables will run above the existing station doors. The route will not be visible from the concourse or station exterior and this area accommodate many existing cable routes. The route is highlighted in Figure 4 with a red dashed line.

The route of the new cables will be as per existing routes which is the least visually intrusive option.



Figure 4 - Cable route above station entrance doors (security room at bottom of image, behind camera)

2.2 Ticket office roof

The cables will travel along the station ticket office roof as per several other cables and will be hidden from view from concourse and station exterior.

The route of the new cables will be as per existing routes which is the least visually intrusive option.

2.3 Ticket office roof to boiler room roof

There is existing cable containment between the ticket office roof (“lozenge building”) and the boiler room as per below (see Figure 5). This containment will be utilised for the new CCTV cables via removal of an existing redundant cable. Any other cables will also be relocated into this cable trough where

possible whilst on site to aid with aesthetics. Note that the troughing is already in use and carries many cables not associated with our works.

The route of the new cables will be as per existing routes which is the least visually intrusive option.



Figure 5 - Existing cable containment (boiler room on left and ticket office on right)

2.4 Boiler room roof to station canopy

The new cables will follow the same route as existing cables:

- Across the boiler room roof and hidden from view from the station exterior and platform surface.
- Down the side of the boiler room wall using existing containment.
- Into the station platform surface using existing ducts and chambers – all of which are below surface, existing and hidden from view.
- Into the base of cable containment that is fixed to the inside face of the platform 4 station canopy support column, continuing up this existing containment to the rear face of the main station canopy where it joins the circular galvanized steel conduit that supplies the existing CCYV camera. The cables will be hidden from view in containment which accommodates other cables not associated with these works.

The route of the new cables will be as per existing routes which is the least visually intrusive option.



Figure 6 - Existing cable route down side of boiler room (route shown in red)



Figure 7 - View of cable chamber and cable containment fixed to rear face of canopy support column



Figure 8 - Cable containment fixed to rear face of canopy support column



Figure 9 - View from ground level of cable containment on rear face of canopy support member meeting galvanized steel conduit for CCTV camera on underside of canopy

2.5 Station canopy to cameras.

The route from the existing cable troughing fixed to the canopy support member to the cameras will be via a 32mm circular, galvanized steel tubing conduit widely used for CCTV cameras such as these fixed to the underside of the wooden station canopy.

- There is existing 25mm diameter galvanized steel conduit that runs approximately 2m from the edge of the canopy to the existing CCTV camera (Camera is to be retained), this section will be replaced with a new 32mm conduit matching the appearance of existing to provide the internal space required for the additional cables. The route will be on the same alignment and have the same visual appearance as existing (albeit increased size). The conduit will sit to the rear of the existing strip lighting.
- A small 1.6m long new section of 32mm conduit is required to extend from the existing conduit termination point adjacent to the existing camera a to supply the new cameras.
- The 32mm conduit will be fixed to the station canopy via steel, galvanized, plain saddles which have 2 fixings per saddle as per the existing fixings.

The route of the new cables will be as per existing routes which is the least visually intrusive option. Noting that the strip lighting cannot accommodate the cables having checked with the supplier so a new route is needed.

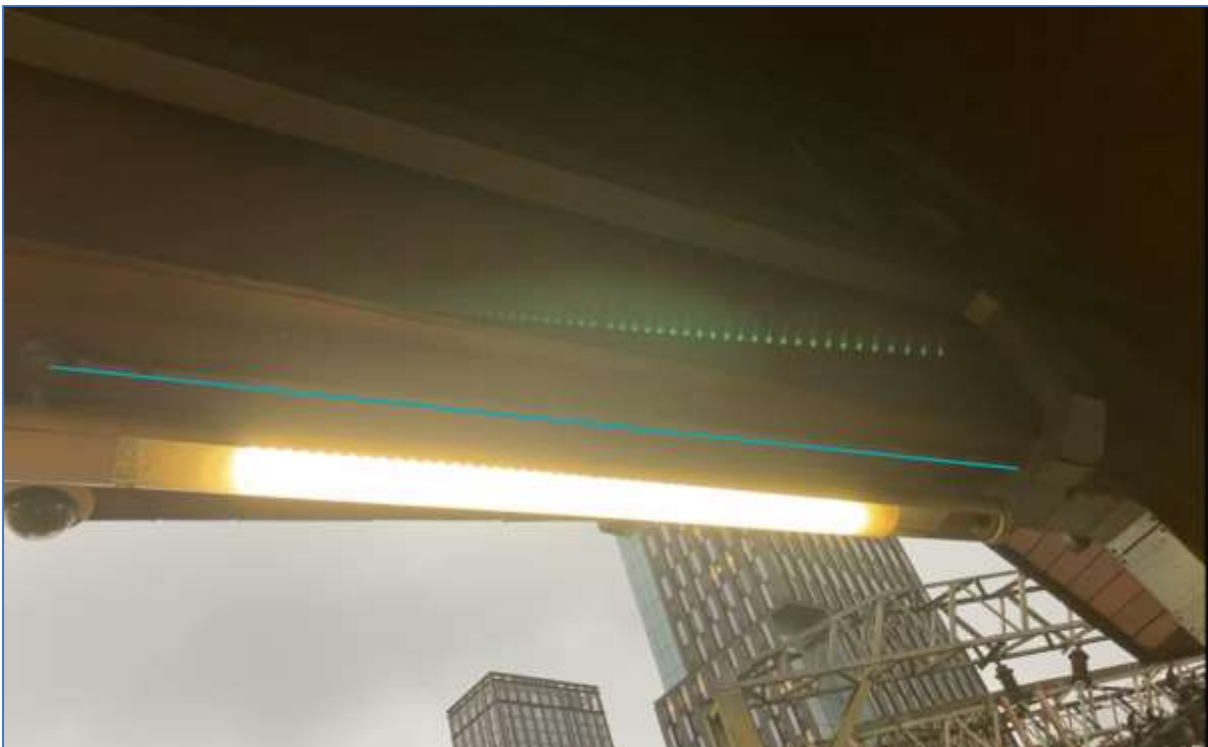


Figure 10 - Existing 25mm conduit to be replaced with 32mm conduit on same alignment (modified section shown in blue)



Figure 11 - Existing dome camera with conduit hidden from view behind existing strip lighting



Figure 12 - New and extended conduit