



- 7 SEP 2017

Crossrail Act 2008

Crossrail Ltd

London Borough of Hillingdon

West Drayton Station

**Schedule 7 Plans and Specifications
Written Statement for Information**

Submission Ref: HIL/7/6/NR

CRL Doc No.: CRL1-NRI-T-QAP-CR045-50031

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1 Introduction

1.1 Background Information

Scheme	Crossrail
Applicant	Crossrail Limited
Applicant Address	25 Canada Square, Canary Wharf, London E14 5LQ (Correspondence c/o Jonathan Binks, Network Rail Crossrail Programme, Enterprise House, 167-169 Westbourne Terrace, London W2 6JX)
Site Address	West Drayton Station Station Approach West Drayton UB7 9DY
Description	Plans and Specifications submission under Schedule 7 of the Crossrail Act 2008 for works at West Drayton Station, authorised by the Act.

1.2 Terms of Reference

This written statement is compiled in accordance with the Crossrail Planning Forum Notes 1 and 2 as required by the planning regime established under Schedule 7 to the Crossrail Act 2008. This statement provides the London Borough of Hillingdon with information to assist with the determination of the Plans and Specifications submission in relation to the works at West Drayton Station.

1.3 Introduction to Crossrail

Crossrail is a major new cross-London rail link project that has been developed to serve London and the South East of England. Crossrail will support and maintain the status of London as a World City by providing a world class transport system. The project includes the construction of a twin-bore tunnel on a west-east alignment under central London and the upgrading of existing National Rail lines to the east and west of central London. The project will enable the introduction of a range of new and improved rail journeys into and through London. It includes the construction of seven central area stations, providing interchange with London Underground, National Rail and London bus services, and the upgrading or renewal of existing stations outside central London.

Crossrail will provide fast, efficient and convenient rail access to the West End and the City by linking existing routes from Shenfield and Abbey Wood in the east, with Reading and Heathrow in the west (see figure 1). Crossrail will be a significant addition to the transport infrastructure of London and the South East of England.

It will deliver improved services for rail users through the relief of crowding, faster journeys and the provision of a range of new direct journey opportunities. The project will also have wider social and economic benefits for London and the South East of England.



Figure 1: The Crossrail Route

1.4 The Crossrail Act 2008

The Crossrail Act 2008 provides powers for the construction and operation of Crossrail. Schedule 1 of the Act describes the 'scheduled works' that the nominated undertaker will be authorised to carry out.

For this work Crossrail Limited (CRL) is the nominated undertaker.

The Act deems planning permission is to be granted for the works authorised by it, subject to the conditions set out in Schedule 7. Schedule 7 includes conditions requiring various matters be subject to the approval of the relevant local authority.

This is therefore a different planning regime to that which usually applies in England (i.e. the Town and Country Planning Act) and is different in terms of the nature of submissions and the issues that the local planning authorities (LPAs) can have regards to in determining requests for approval.

There are two types of submission that can be made by the nominated undertaker under Schedule 7.

- Permanent works
- Temporary works.

The details of the permanent works that will be submitted are commonly referred to as 'plans and specifications' (reflecting the description within paragraphs 6, 15 and 21 of Schedule 7), whilst the temporary works details to be submitted are commonly referred to as 'construction arrangements' (reflecting the description in paragraphs 7, 16 and 22 of Schedule 7).



This document includes information supporting the Plans and Specifications submission in relation to the matters outlined in the table below:

Plans and Specifications (permanent works)	<ul style="list-style-type: none">• Construction works• Fences & Walls• Artificial Lighting
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1.5 Crossrail Construction Code

Paragraph 1.4 of the Crossrail Environmental Minimum Requirements (EMR) states that “any nominated undertaker will be contractually bound to comply with the controls set out in the EMR and as may be developed during the passage of the Act through Parliament”. The scope of the EMR encompasses the Crossrail Construction Code.



2 Location and Characteristics

2.1 Description of Site

West Drayton Station is located on the western route of the Crossrail Network between Hayes and Harlington and Iver Stations within the London Borough of Hillingdon. The station is locally listed, being one of the first Great Western Rail Stations, built in 1878 and currently consists of a station building (main entrance) a southern entrance building and four operational platforms.

The main entrance is situated on Station Approach to the south of the Grand Union Canal, east of the High Street and on the northern side of the railway line. It is constructed of buff brick with red brick banding. It has two tall chimneys and a crown of ironwork at the centre of the roof.

The southern entrance to the station is located in Warwick Road and is a two storey brick built structure giving access to a subway which and provides stepped access to all platforms. The site is lined to the south by mature trees behind residential properties.

2.2 Highway Network

Station approach is accessed from the High Street, which connects with the A408 to the north and east, providing access to the M4 (Jct 4B) and M25. Other local roads are predominantly residential in nature.

2.3 Adjacent Land Uses

The station is surrounded by a mixture of land uses. To the south is a mainly residential area, to the west Station Road/High Street runs north to south containing high street shops with further residential and small commercial uses beyond. To the north is mainly residential, with some small commercial enterprises, whilst to the east is a large Business and Industrial park and a large site, which has been redeveloped for residential.



3 Description of Crossrail Works

Key Work Streams

There have been four previous Schedule 7 approvals for works at West Drayton Station:

HIL/7/2/NR Council Reference: 31592/APP/2012/1739 Approved 6th September 2012 for:

- Platform 1 Extension
- Associated Fencing & Lighting

HIL/7/3/NR Council Reference: 31592/APP/2014/2542 Approved 22 September 14 for:

- Canopy cut-backs and replacement roofs to buildings on platforms 4/5
- Extensions to platforms 2/3 and 5
- Construction of new retaining wall and fence

HIL/7/4/NR Council Reference: 31592/APP/2015/186 Approved 25 March 2015 for:

- Station extension providing covered walkway
- New covered walkway
- New entrance canopy
- Lighting
- New footbridge and lifts
- Platform extensions

HIL/7/5/NR Council Reference: 1592/APP/2015/3871 Approved 14 December 2015

- New escape footbridge on platform 5
- New platform 4/5 canopy.

Following these approvals, the station building, the footbridges, lifts and the station platform canopies have been through a further design review which has resulted in changes to the previously approved plans and some additional works. Approval therefore is sought for revised plans in relation to these works:

- Revised location for the station concourse/entrance building and changes to the proposed materials, materials are listed within section 4.
- Minor alterations to the existing Southern Entrance Building
- Revised station entrance canopy structure
- Revised footbridge and lifts
- Revised new platform 4/5 canopy
- Alterations to the waiting room on platform 4
- Installation of a substation building
- Revised lighting position



Changes to the Station entrance/concourse building

- The new station concourse/entrance building is proposed to be rotated by approximately 4.5 degrees to align with the existing station ticket office building. The angle of the extended footbridge to meet the existing footbridge has been altered as a result.
- The new canopy structure to the existing station entrance building is to be supported from a new column inserted inside the existing building. This structure is to be above the existing ceiling level with 2 no. new circular columns placed discretely inside the building, adjacent to the northern external wall.
- An additional doorway is to be added to the new station entrance building within the southern elevation, providing access into the service and maintenance area. (Drg 720510).
- It is proposed to remove most of the ground floor easternmost 'external' wall of the station entrance building, as a result of the works to the subway and to provide direct line-of-site from the existing ticket office facility, in the interests of security.
- The position of the concourse external lighting heads has been altered following the movement of the concourse building. The lighting specification has not been altered from the previously approved scheme.

Minor Alterations to the Existing Southern Entrance Building:

- To the east of the entrance building a new 'double gated opening' (1600mm x 2100mm) is proposed within the curved fair-faced brickwork wall. This will provide access to Network Rail land where a new DNO facility is proposed to be located, along with the provision of a new substation (requiring 24 hour access) and supporting retaining walls. Without this opening access cannot be guaranteed to this area of the land (Drg 720552).
- Towards the western elevation of the entrance building, a new high level platform is proposed adjacent to the new lift Motor Room (LMR) providing access to platform 1. This will require the modification of an existing opening to this area. Access to an LMR room at ground level is difficult to provide due to the existing embankment.

Minor alterations to the Platform 4 waiting room

- A new external door will be created to accommodate internal remodelling to the interior partitioning of the existing platform 4 waiting and toilet area (in the westernmost building) to provide for both male and female DDA compliant toilets, as well as Baby Changing facilities in each.

Accompanying Drawings

The drawings which accompany this submission reflect the new station design; they have been labelled to show where the station has been altered from the previously approved scheme (31592/APP/2015/186).

On all drawings; the 'approved' labels represent features which have been granted permission by the LB of Hillingdon under previous schedule 7 applications, features labelled as 'existing' represent the station as constructed and as existing prior to Crossrail development. Features labelled as 'proposed' constitute changes for which consent is sought within this submission.

Materials

The materials as demonstrated by the following images were approved as part of the original station submission HIL/7/4/NR (LPA ref: 31592/APP/2015/186). The external finishes to the station are not proposed to be altered materially from the previously approved scheme.

Some minor alterations are proposed to the external materials and these are listed below within this section.



Frame : Steel composite columns and beams

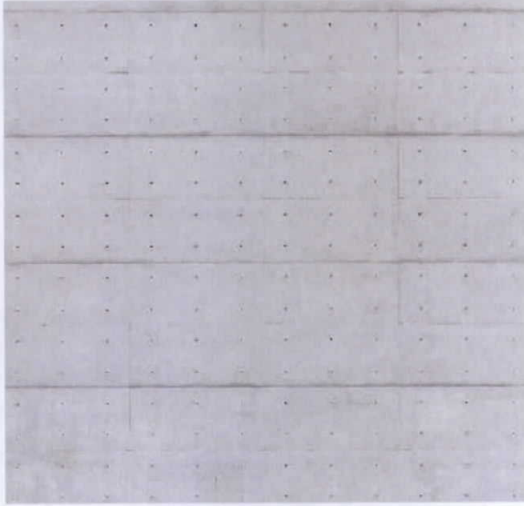




Soffit : Painted seamless insulated synthetic resin panel



Glazing : Schüco curtain wall system

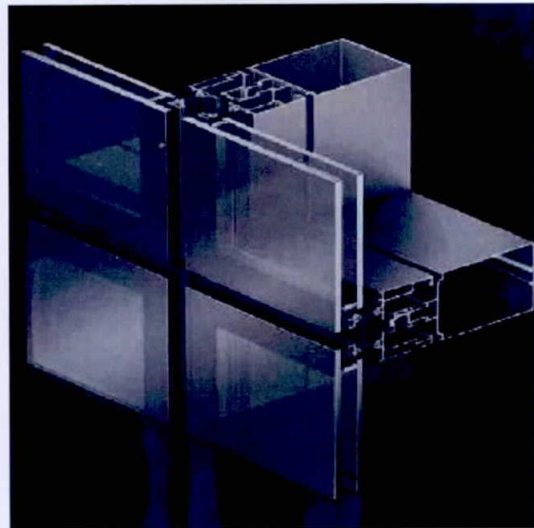
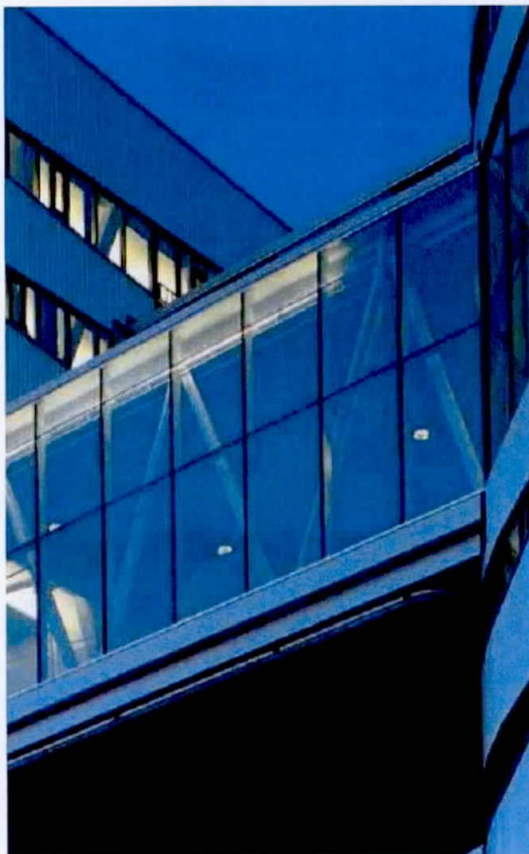


GRC Cladding – not materially different to approved precast panels

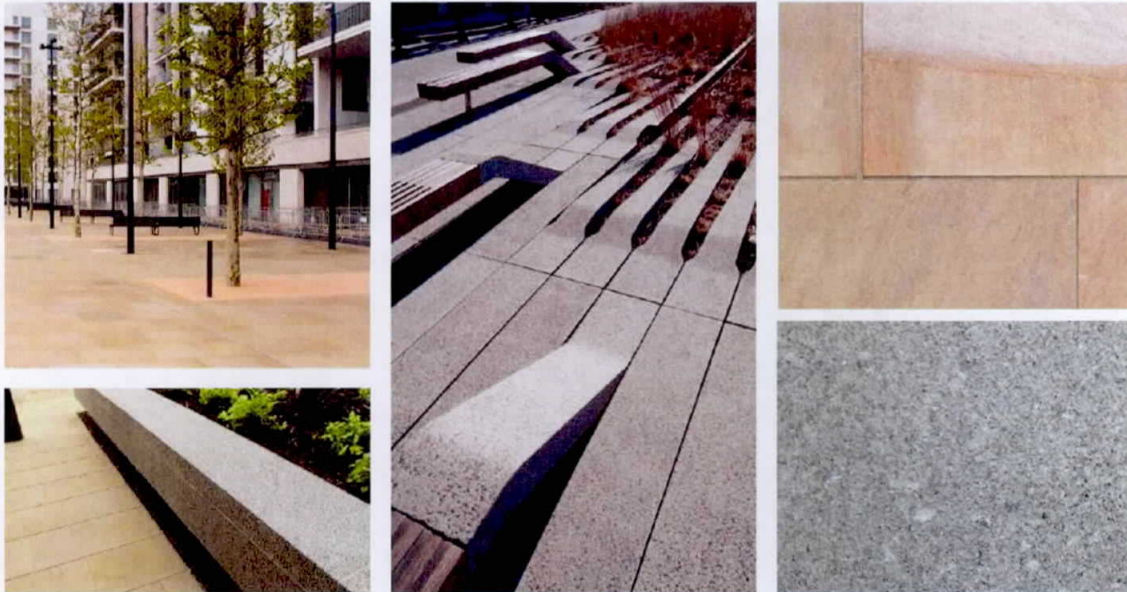




Column-mounted luminaires, double sided 'up-down' beam unit, floor recessed up-lighters, drive-over in-ground luminaire, clerestory uplight, recessed linear luminaire with colour effect option



Schüco SG system



Paving from Urban Realm forecourt continues through concourse to platform stairs. Urban Realm designed by others, final design to be agreed

Alterations to materials

The following represent proposed minor alterations to external finishes within this submission.

Lift Cladding (from concourse to footbridge)

Ground floor:

Within this submission Glass Reinforced Concrete (GRC) cladding is proposed in place of the approved precast concrete panels. In terms of character and appearance the GRC panels are not materially different to the precast concrete.

First floor (North, South and East façade of new overbridge and lift cladding):

At first floor; painted galvanised steel frame with aluminium infill panels are proposed to replace the previously approved metallic interlocking plank system. The proposed steel frame was modified to align with the spec for the new overbridge.

New Concourse building South Façade

Coursed brickwork with an external leaf was approved as part of the original schedule 7 approval. The brick colour was not specified within this submission and will now constitute 'blue engineering brick stack' bonded facing to the rear perimeter wall.

In addition various downpipes to the main façade, access ladders at the rear of the new concourse building and plant rooms to both sides of the existing Southern Entrance Building have been included, all of which had not previously been shown. These are demonstrated by the accompanying drawings.



Platform Canopy

The canopy roof materials have been clarified within this submission. They will consist of a composite insulated roof: Kingspan KS1000TRW trapezoidal insulated roof panel.

Other Alterations to Materials

Overall the external appearance of the proposed station is not proposed to be materially altered from the previous approval. This application provides clarifications to external materials where they were not included within the previous submission.

The roof materials and footbridge will consist of a composite insulated roof Kingspan KS1000TD single ply deck. Painted fabricated metal trims (RAL 7024) will form a perimeter roof fascia. A mild steel galvanised steel guardrail & metal access ladder is proposed to the roof of the building for maintenance access.

The new retaining walls to the south side will consist of yellow stock facing brick as discussed within the pre-application meeting held on the 10th July.



4 Design & Access Rationale

4.1 New Station Building

The decision to relocate the new station building at West Drayton has occurred due to operational factors. The original location of the new station entrance/concourse building was based upon outline design information regarding the location of the new Goods Loop track alignment, the associated new track support retaining wall and new Overhead Line Equipment (OLE) equipment (including support mast and wire positions).

Following a review of the finalised constructed track; OLE and new retaining wall location, the previous building location was found to be in conflict with the recently constructed structures on site. Unfortunately, it was not possible to locate the proposed new OLE mast to the south of the Goods Loop as this would have resulted in the mast location needing to be within the footprint of the existing station buildings on Platform 4/5. In addition, the new retaining wall structure constructed to suit the proposed new track and formation works was now also conflicting with the retaining wall and retaining wall base.

Several options were explored; to try and address these issues; however the line is now operational and the OLE is live and the final option to rotate the building was chosen as it provides suitable clearance to the retaining wall and the existing OLE, including clearances required for the safe maintenance of the roof and roof glazing. This option had the benefit of providing a linear relationship with the existing station building and allowing a station staff access route behind the building, such that the gateline staff had a safe place to retreat. The new linear design provides a direct line-of-site from the existing ticket office facility, in the interests of security.

The revised design allows an access for maintenance around the rear of the building which avoids the need for track and OLE isolations for access. OLE isolations occur when maintenance or repairs are required to be carried out to Overhead Line Equipment. Power to the OLE is required to be isolated to allow railway staff to carryout works without an electrical hazard.

The other proposed changes are a result of the design evolution which has occurred between the initial architectural designs and a further engineering review; this has resulted in the required changes listed within section 3.

4.2 Other Changes

The remaining changes from the approved scheme represent minor alterations following a further engineering review of the design. A substation and DNO equipment facility are required for the operation of railway equipment and is now been addressed within the new design.

The remaining alterations represent additional doorways, structural alterations and the revision of internal layouts as described within section 3.



5 Plans and Specifications

5.1 Plans for approval

The following plans comprise the submission for approval which is included under separate cover.

Plans:

Plan Reference	Title
WSN3F-EAR-DRG-ARC-720500	Site Plan
WSN3F-EAR-DRG-ARC-720501	Proposed Building Plan Subway
WSN3F-EAR-DRG-ARC-720502	Proposed Building Plan Concourse
WSN3F-EAR-DRG-ARC-720503	Proposed Building Plan Platform
WSN3F-EAR-DRG-ARC-720504	Proposed Building Plan Footbridge
WSN3F-EAR-DRG-ARC-720505	Proposed Building Plan Roof
WSN3F-EAR-DRG-ARC-720510	Building Elevations North & South
WSN3F-EAR-DRG-ARC-720511	Proposed Building Sections Across Platforms
WSN3F-EAR-DRG-ARC-720550	Proposed Bay Study Glazed Link
WSN3F-EAR-DRG-ARC-720551	Proposed Canopy Sections
WSN3F-EAR-DRG-ARC-720552	Building Elevations South Entrance
WSN3F-EAR-DRG-ARC-720553	Proposed Bay Study Concourse Lift Link
WSN1B-CNS-PLD-NCA-000013	Concourse Lighting Specification



6 Constraints

The following general constraints are recognised as being relevant to the project:

- The need to minimise disruption to the operation of railway;
- Locally listed station building.



7 Timescales

In order to minimise disruption to the operation of the railway, the works will be undertaken in a number of stages within short closures (possessions) of the railway.

The high level construction programme is set out below.

Activity	Quarter
New station opening	Q4 2019



8 Other consent approvals/notifications

In addition to the Plans and Specifications approval discussed in this statement, a number of other approvals will be required and will be sought by CRL under the appropriate statutory and legal framework. These include:

8.1 Environment

- Section 61 consent for works; and
- Schedule 17 consent for works.

8.2 Highways

- Highways consents for works to public highways associated with the works.

9 Appendix A - Undertakings and Assurances made to the London Borough of Hillingdon

The following table consists of all the Undertakings and Assurances given to the London Borough of Hillingdon. The complete Register of Undertakings and Assurances is available on the Crossrail website:

<http://www.crossrail.co.uk/railway/getting-approval/crossrail-act-register-undertakings-assurances>

No.	Type	Date Given	Subject	Summary
168	Undertaking	20/06/2006	Carp Ponds and Broad Dock Site	
169	Assurance	April 2006	OHLE – fixing to bridges in Hillingdon	If this is the case then the Promoter will consult with the petitioner regarding the fixing that is to be used.
170	Assurance	April 2006	Hayes and Harlington Station – parking	Such parking controls are the responsibility of the petitioner and the Promoter therefore undertakes to work closely with the petitioner to review the operation of these controls at Hayes and Harlington Station.
382	Assurance	20/06/2006	Retention of Brunel Bridges	The Minister has confirmed his agreement to the decision on the bridges as set out below: Leigh Road (grade II listed) - Retain by track slewing and lowering; Wexham Road – Retain by track slewing and lowering; St Mary's Road (grade II listed) - Retain by track slewing and lowering; and Thorney Lane - Retain by track slewing and lowering.
530	Assurance	28/03/2008	Hayes and Harlington Station	Works to the structure of Hayes and Harlington Station, carried out by the Promoter in connection with Crossrail, will be constructed in such a manner as to have no material impact on Station Road Bridge in respect of the London Borough of Hillingdon's maintenance obligations.