

Application Ref: 2019/2626/L – Platforms 7-11 (Package 3) Method Statement

King's Cross Remodelling Project

Document Reference: 152319-NWR-STM-EMF-000004

Revision: 1.0 Date: April 2021





Contents

- •1.0 Letter of Appointment
- •2.0 Scope of Works
- •3.0 Methodology
- •4.0 Drawings
- •5.0 Supporting Photographs



Glossary of Terms

Term	Definition
OLE	Overhead Line Equipment
MEP	Mechanical Electrical Plumbing
SISSS	Station Information and Security Systems
SPT	Signal Base Telephone
AFC	As for Construction
IEP	Intercity Express Programme



1.0 Letter of Appointment

OFFICIAL



Network Rail Harrison House Goods Way, London N1C 4UR

Pod-Trak Limited Woodrow Way Thames Trading Estate Irlam, Manchester M446NN

FAO: Andy Gardner Date: 10th March 2021

Project No: 152319

Contract Title: NR8 Kings Cross Remodelling Platform Modifications GRIP 6-8

NR Letter Ref: 152319-NWR-LTR-CCA-000212

Contractors Letter Ref: N/A

Dear Sirs,

Subject: Contract Option Platforms 1-11 Letter of Intent

Further to correspondence 152319-NWR-ERI-CCA-000183, Network Rail requests Pod-Trak Limited proceed with delivery of remaining Contract options for Platform 1-11 reconfiguration.

All works are to be undertaken under the Kings Cross Platforms NR8 conditions of contract. Network Rail thanks Pod-Trak Limited for their support to date with this key programme of work.

Yours faithfully, For and on behalf of Network Rail Infrastructure Limited

Jim Scholes

Employer's Representative Assistant



2.0 Scope of Works

2.1 Introduction

Network Rail is upgrading the infrastructure in the King's Cross throat which is life expired and requires renewing. The scope of the project is to install a new Permanent Way alignment and subsequent coper realignment to improve stepping and gauging at King's Cross Station. The remodelling project will reduce journey times, simplify the station approach, support an enhanced timetable that also improves operational performance, maintenance, and faulting.

King's Cross Station is a Grade I listed building. All works will be subject to the requirements of Historic England in general, and specifically conditions associated with Listed Building Consent 2019/2626/L (approved) to cover this scheme. Network Rail expects that the successful contractor will be experienced in working within and around a Grade 1 listed building.

2.2 Platforms

The platforms are numbered 0 - 11. The scope is split into three packages. Package 1 contains Platform 0, package 2 platforms 1-6 and package 3 platforms 7-11.

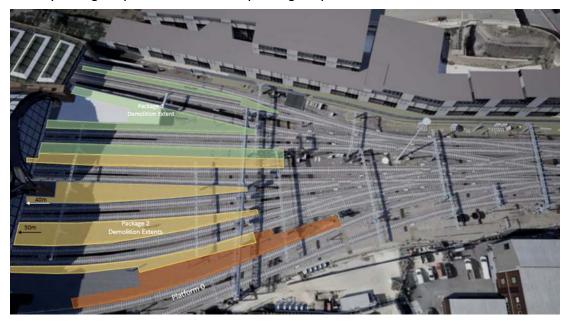


Figure 1. Platform layout split by package

This document refers to the platform 7-11 (Package 3) construction and the describes the scope of work associated.

The construction of platform 7 to 11 will be undertaken during a partial closure of Kings Cross Station with full closure and isolation in place for roads 7 to 11. Platform 0 - 6 will be operational (outside planned possessions & isolations) and open to traffic during the duration of package 3.

The works are due to commence on 23rd April 2021 for a duration of 6 weeks. The completion of platforms 7 to 11 is 7th June 2021. The work will be carried out in line with this method statement and in conjunction with details approved under Listed Building Consent



2020/5763/L approved 1st April 2021 (for Alterations to Platforms 8 & 9 on the North Side of the Station).

2.3 Scope

Alteration to King's Cross station platforms 7-11 to accommodate the revised track alignment and locally extended to achieve 10 car IEP platform lengths.

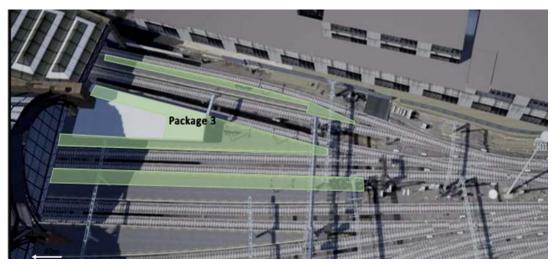


Figure 2. Package 3 works extent (green)

The principal items of work are as follows:

- The Contractor shall construct all ancillary civils works including all non-OLE concrete bases, platform cables routes and platform/canopy drainage.
- The Contractor shall carry out all necessary works to platforms 7-11 including the
 demolition of existing platforms, construction of platforms extensions for longer trains.
 Platform modifications to accommodate track realignment and slews, coperadjustments to improves stepping distances. Track will be installed to AFC prior to coper
 alignment works.
- The Contractor will carry out all necessary platform re-surfacing, white lining, platform Cable Management System (CMS) installation, ducting, platform drainage, platform SPT bases, ancillary bases for Customer Communication Information System (CCIS) routes & bases, SISS and lighting.
- The Contractor will adjust and re-instate tanking points, including MEP works, in their existing locations where these require attention.
- The Contractor will ensure platform end ramps are removed and steps provided with appropriate fencing and gates.
- The Contractor will construct OLE foundations, signal bases and blanking boards, as indicated in the AFC design.
- The Contractor shall install the foundation and alterations required to accommodate Gantry 249.

The delivery will be sent out as per the GRIP 5 designs which are available in section 4.0.



3.0 Methodology

3.1 Platform 8&9 Canopy Temporary Support

Scaffolding temporary works shall be erected in compliance with the accepted Temporary Works design, see 152319-POD-DRG-ECV-000012.

On completion of the erection of the scaffolding a qualified scaffold inspector shall sign on the structure as being fit for purpose. These inspections will continue at a frequency of 1 per week until the structure is removed. The scaff tag system will be used as a visual aid for inspection compliance.

Any amendments to the structure will only be done by a qualified scaffolder and then be subject to an additional inspection.

3.2 Platform Demolition & Site Clearance

Lighting columns, SPTs and other platform furniture are to be removed by others prior to main demolition works. Services within the platform 7 - 11 are to be decommissioned and recovered prior to main demolition works. "Welcome to Kings Cross" signs are to be removed and stored away for future reinstatement.

Platforms 8&9:

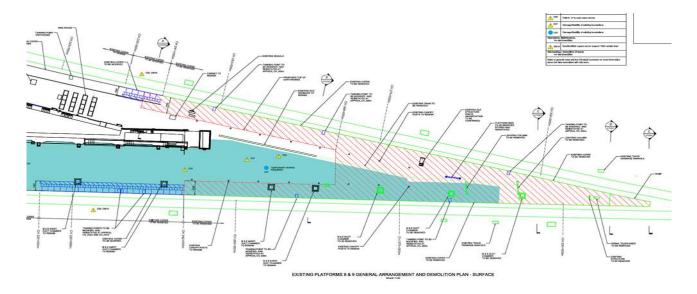


Figure 2. Existing Platform 8 & 9 Demolition Scope.

Temporary works installed for the stabilisation of the platform 8/9 platform canopy during construction works, see 3.1. Water Line supplying tanking points at Platform 8 & 9 is to be temporarily capped off.

Platform surfaces to be saw cut back to resurfacing extent. The lines are to be marked out by a shift engineer.



13t excavators are to be positioned on the footprint of the removed road 8. The machine equipped with a stone lifter removes copers. Tactile paving is to be removed and disposed onto a train.

Tarmac surface is to be removed following copers.

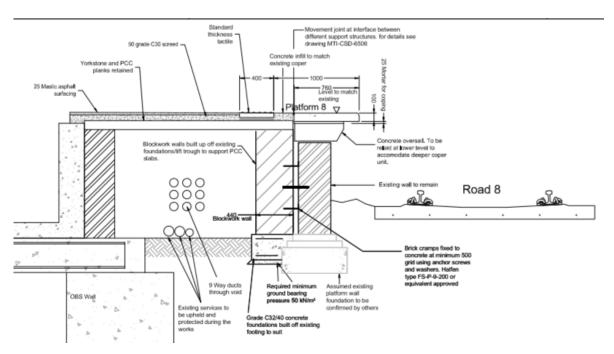


Figure 3. Cross Section of York Stone

Special attention to be paid to area of York Stone, which is to be marked out by a shift engineer. Surface cut to 50mm depth it is to be removed using handheld breaker.

Extra attention is to be paid not to damage York Stone under the screed layer. Once York Stone is exposed, joints between the stones are to be saw cut to ease lifting of the slabs. Due to the unknown element of these York stone cross slabs they will be exposed and then removed using the tracked excavator with either lifting straps or a log grab attachment, stored those away on pallets, ready for reinstatement.

Excavators will break the platform to required level, mean formation level is 1.2m below existing platform level. In addition, existing front wall foundation is to be removed as indicated in the AFC drawings. All excavations are to be battered back (40-degree batter). Historic cross walls will be propped and protected as best as feasibly possible when excavating, where not possible the historic walls will be carefully deconstructed, and the bricks will be retained on site and reused within the works.

The heritage sensitive area of platform 8 is proposed to be filled with Leca, a light weight aggerate and compacted to ensure historic cross wall arches are protected fully against damage, see 152319-MOS-SPS-ECV-002.



Platform 7:

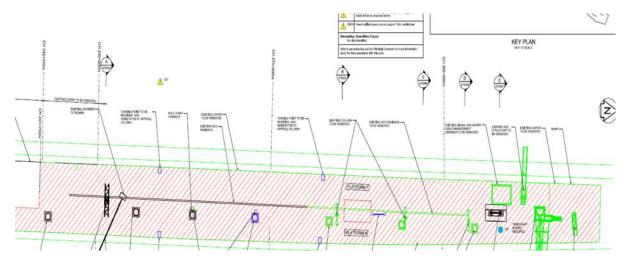


Figure 4. Existing Platform 7 Demolition Scope.

Temporary works hoarding splitting platform 6 & 7 amended. Rerouting of cable running along platform 7 wall. Point water lines supplying tanking points at platform 7 are to be temporarily capped off.

Existing platform coping stones and tactile pavers are to be removed. Platform surface is to be saw cut and removed. Copers are to be lifted with attending machinery. Pair of 13t excavators are to demolish front wall, the platform is to be removed down to 1.2m below existing platform level. Following the platform removal, front wall foundations are to be broken out.

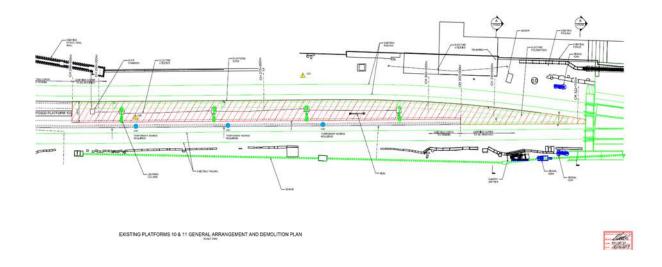


Figure 5. Existing Platform 10&11 Demolition Scope



Platform 10&11:

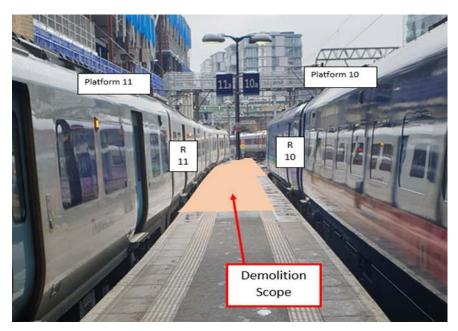


Figure 6. Platform 10 & 11 Demolition Arrangement

Asphalt surfacing is to be saw cut and removed to separate wagons. Front wall foundation is to be broken out and disposed onto a train accordingly.

For any detailed breakout concrete slab/ surface is to be saw cut prior to removal.

3.2 Earthworks and excavation for foundations

Final excavation within proposed platforms footprint is to be completed with 13t excavators to designed line and level. Foundations are to be excavated to line and level with small excavator.

3.3 Blockwork, oversail blocks, copers and tactile paving installation

Blockwork will be installed as per the AFC design. No blocks will be laid when the temperature is below 4 degrees when temperature is falling, or below 3 degrees when the temperature is rising. The blockwork shall be protected from inclement weather until the mortar is thoroughly set.

Blockwork is to be jointed and pointed with "weathered" or "bucket handle" joints not exceeding 10mm thick, with mortar flushed up solid in every course, including all cross and collar joints. Pointing is to be carried out as the work proceeds while the mortar is still green. No pointing carried out working overhand.

Oversail blocks are to be installed once platform front wall and fill are completed.

- Copers installation is to be undertaken once final alignment on adjacent track to a wall has been achieved.
 - 1. Copers are to be laid onto 25mm solid layer of mortar.



- 2. Typical overhand of copers is 135mm and it shall not exceed 150mm as specified on the Design Drawings.
- 3. 10mm joints between copers along the platforms. Fixed joints are to be pointed flush to face of coper & surface of the platform.
- 4. Every 5 copers along the platform to have 10mm joint with non-biodegradable fillers board sealed with 20mm deep light grey polysulphide sealant finished flush with platform surface and pointed flush to face of coper.

Tactile paving is to be installed on adequate layer of mortar to match platform surface level.

3.4 Pipework, ductwork and chambers installation

Excavation of the chambers once front wall foundations are constructed. Chamber concrete bases shall be 300mm thick and grade ST5 as per the specification.

Circular Track Drainage chamber, solid section of pipe installed during front wall foundation excavation. Pipe set to designed gradient and backfilled as per specification for track drainage carrier pipe.

- 1. Once front wall foundation constructed, the section of pipe is to be exposed and part cut off to accommodate circular chamber.
- 2. Concrete base and surround to the inlet & outlet pipes constructed as per the design detail
- 3. Pre-cast concrete segmental manhole units shall be handled and assembled in accordance with the manufacturer's instructions.

Platforms 7-11 excluding 8 heritage area will be backfilled with ST1 concrete.

3.5 Finishing works:

Platform furniture is to be reinstated as per design drawings. Any furniture stored away at the start of the package 3 is to be cleaned prior to reinstatement.

Remaining platform surface to be tarmacked with 6mm DBM.

End of platform fencing & stairs are to be installed as per design drawing.



4.0 Drawings

Document Number	Title
152319-MOS-DRG-ECV-070104	Platform Extension and Modification Proposed Platforms GA - Platform 6/7
152319-MOS-DRG-ECV-070105	Platform Extension and Modification Proposed Platforms GA - Platform 8/9
152319-MOS-DRG-ECV-070106	Platform Extension and Modification Proposed Platforms GA - Platform 10
152319-POD-DRG-ECV-000012	Platform 8/9 Canopy Support General Layout
152319-MOS-SPS-ECV-002	Platform 8 – Front Wall Design Section Through Cross-wall

5.0 Appendix

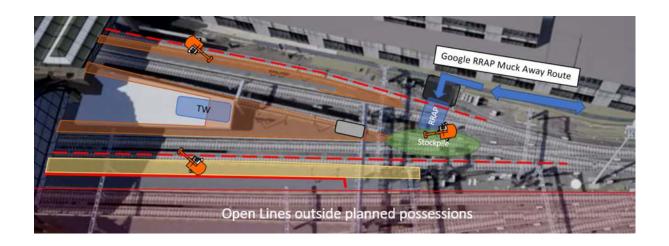


Figure 6 . Stockpile arrangement during front wall foundation excavation (Platforms 7 – 10).

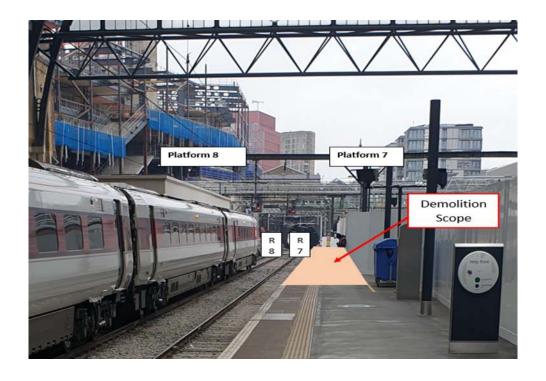


Figure 7. Platform 7 Demolition Arrangement



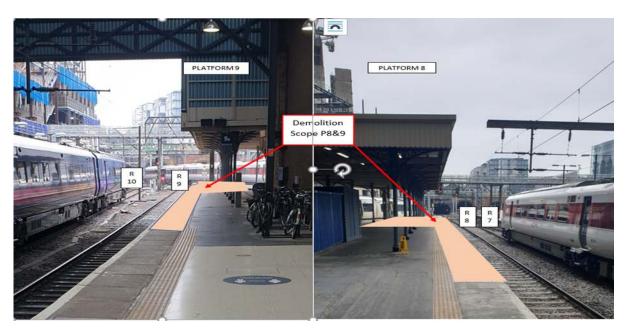


Figure 8. Platform 8&9 Demolition Arrangement

