

JCDecaux Rail

Network Rail



Kings Cross Station

Listed Building Consent Submission
Proposed Advertisement Development

September 2015

JCDecaux Rail
Make the right connections

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Station Entrance 1912



2014

Introduction

Nature of Application

This document accompanies an application for Listed Building Consent relating to internal works within the new western concourse extension to Kings Cross Station. The works applied for will alter the Customer Information Screens (CIS) by the installation of two additional advertising screens.

The physical works and uses associated with the proposal are entirely confined to the inside of the station building. Advertisements in this location would not require express *advertisement consent* by virtue of the Control of Advertisements 2007 Regulations, as they are exempted under Class A (part 2a) and I of Schedule 1 of the Regulations.

The western concourse forms part of Kings Cross Station a Grade I Listed Building and therefore the proposed works are subject to application for Listed Building Consent in order for an assessment to be undertaken as to the likely effect of the development on the historic and architectural aspects of the station building and to ensure those interests are not harmed by insensitive and unsympathetic additions.

Recent Application History

In 2007 Planning permission was granted for alterations, refurbishment and extensions to King's Cross Station to provide for new operational railway purposes and passenger facilities, including the construction of the Western Concourse building, and other alterations, operations and extensions in connection with new uses and facilities... etc etc etc..... under LPA ref 2006/3387/P-

In 2011, pursuant to condition 16 of that permission, the details for signage & advertising within the main train shed and in the western concourse and southern square on Euston Road were approved. The existing signage and advertising displays within the western concourse include digital screens set within the CIS and a number of freestanding monolith structures at various points within the station used to display commercial and passenger information.

The Proposed Works

This application proposal entails the installation of two additional screens affixed to either end of the CIS as illustrated in the enclosed details.

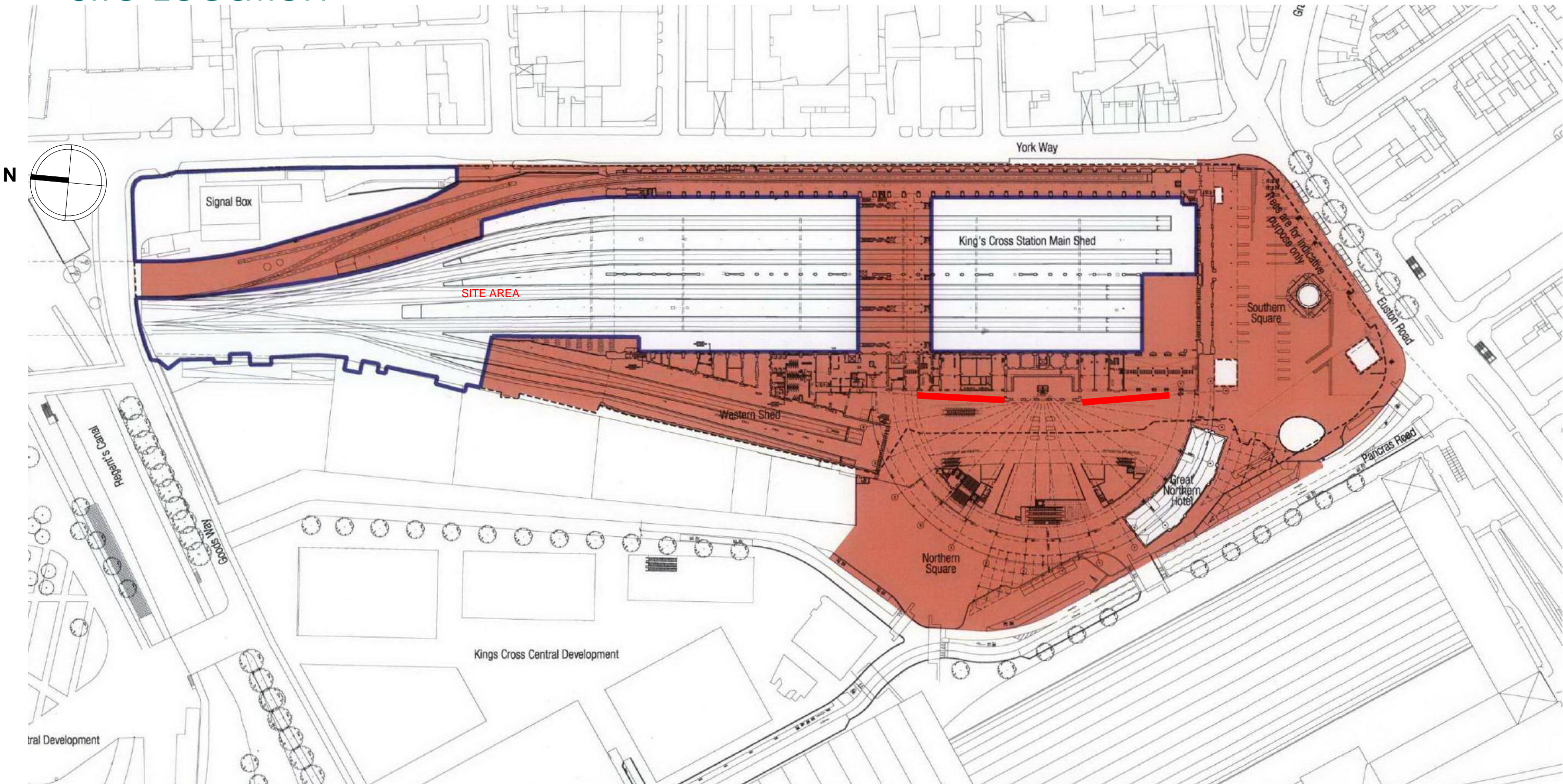
Each new screen will be identical in design and dimensions of the existing screens providing an area of display of approximately 7.5m² for each. The screens will create a "bookend" effect for both existing CIS unit and carefully designed to integrate into the design and appear as an intentional aspect of the horizontal information screens.

Whilst commercial advertising provides a vital income for Network Rail, it is recognised that within the assets of a Grade I listed station, this needs to be handled with care. The location and design of the proposed displays have been carefully considered and will not obstruct views of the historic buildings that form the western range that are visible from within the western concourse. Thought has also been given to the technologies and sizes used as to not distract from the historic building but to appear as sympathetic and seamless additions to the existing modern interventions.

The screens will comprise the latest digital display technology with the ability to show both commercial and passenger information messaging together to news items in real time.

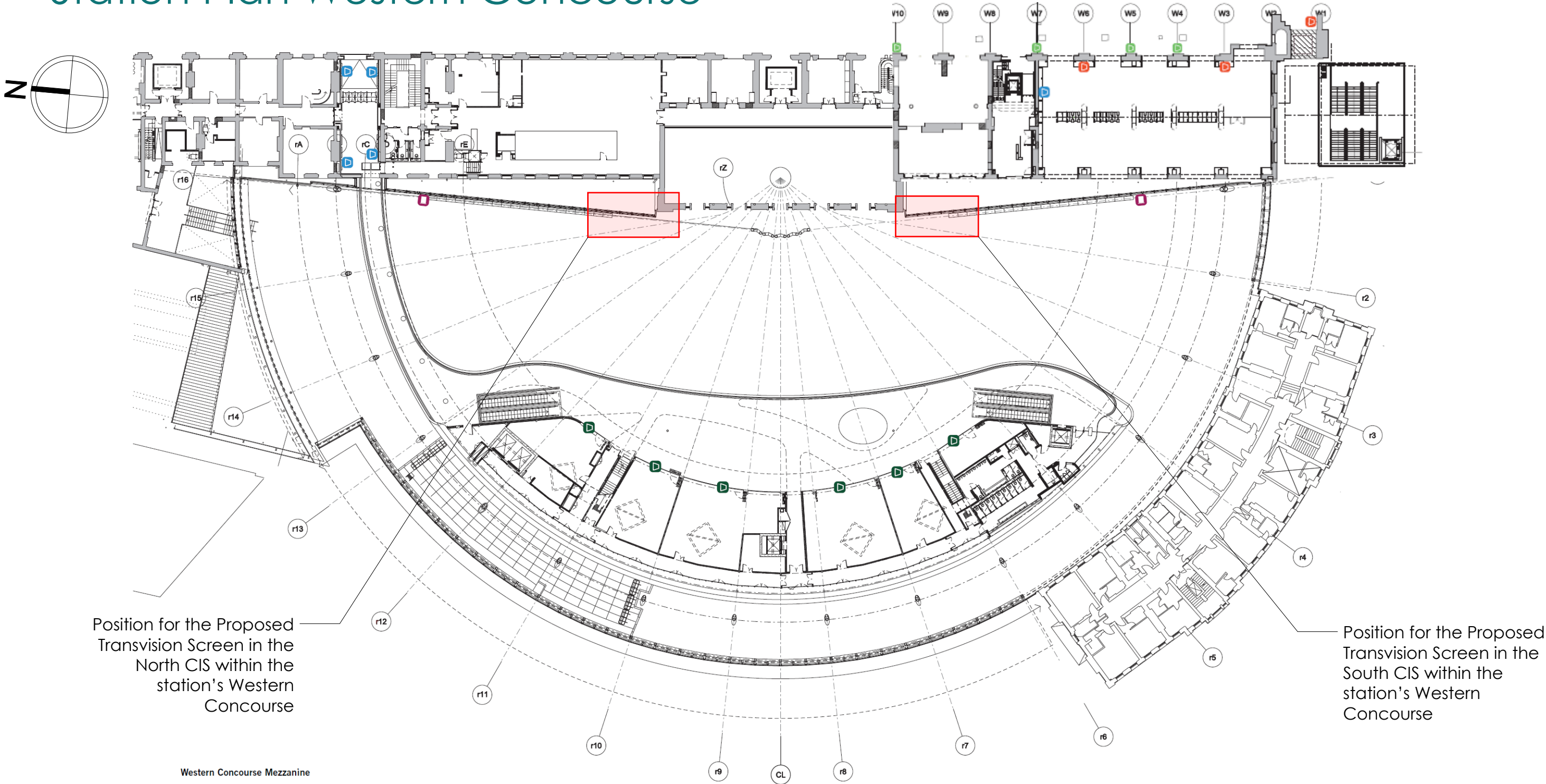
The primary audience for the advertisement displays will be passengers waiting or travelling through the concourse as they move from the various entrance points to their desired platform. Due to the position of the CIS and enclosed nature of the concourse, the displays will only be clearly visible from within this area and not from any part of the public realm external to the station building.

Site Location



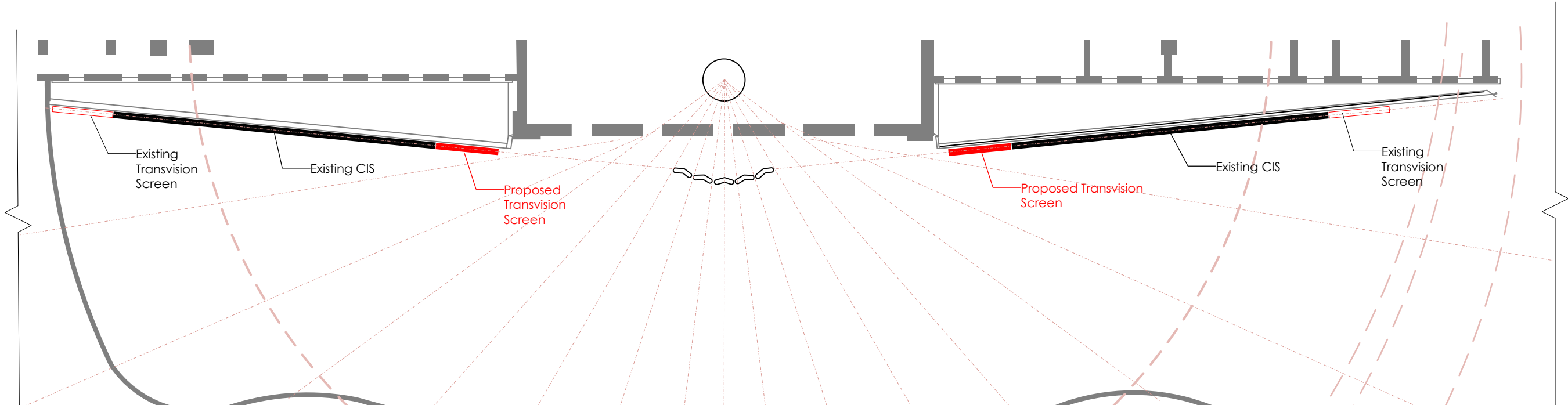
JOB	Kings Cross Station – Western Concourse Euston Road London N1 9AP
CLIENT	Network Rail
SCALE	NTS
DRAWING	OS Site Plan
REFERENCE	A00989/01

Station Plan Western Concourse



JOB	Kings Cross Station – Western Concourse Euston Road London N1 9AP
CLIENT	Network Rail
SCALE	NTS
DRAWING	Block Plan - First Floor Western Concourse
REFERENCE	A00989/02

A Customer Information Screens



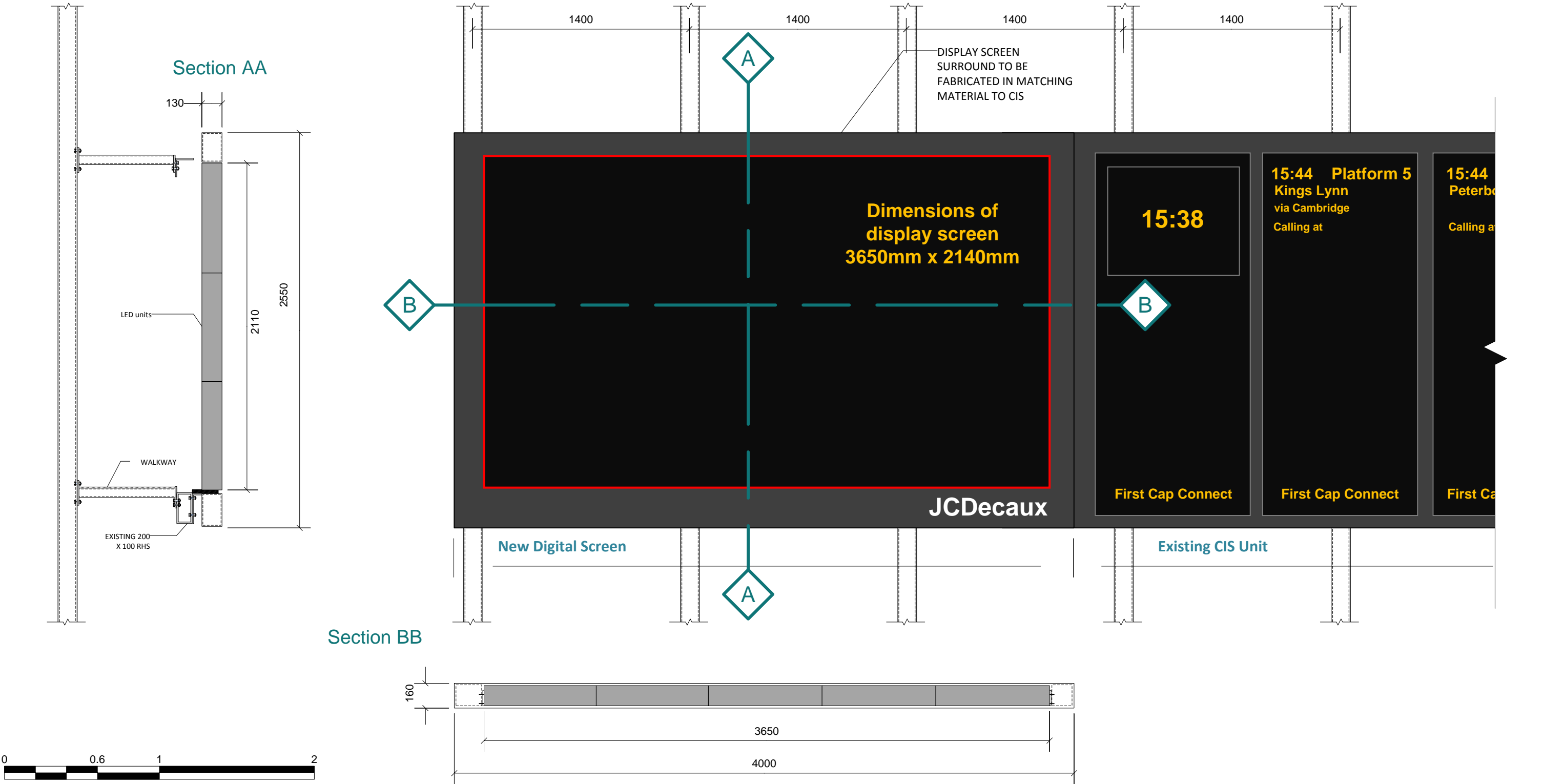
Impression of the proposed screen integrated within the northern CIS



Impression of the proposed screen integrated within the southern CIS

JOB	Kings Cross Station – Western Concourse Euston Road London N1 9AP
CLIENT	Network Rail
SCALE	NTS
DRAWING	Images
REFERENCE	A00989/03

Screen Elevations – South CIS



Do not scale drawing. Contractor to check dimensions on site. Drawing is copyright and not to be reproduced or copied without the permission of the author

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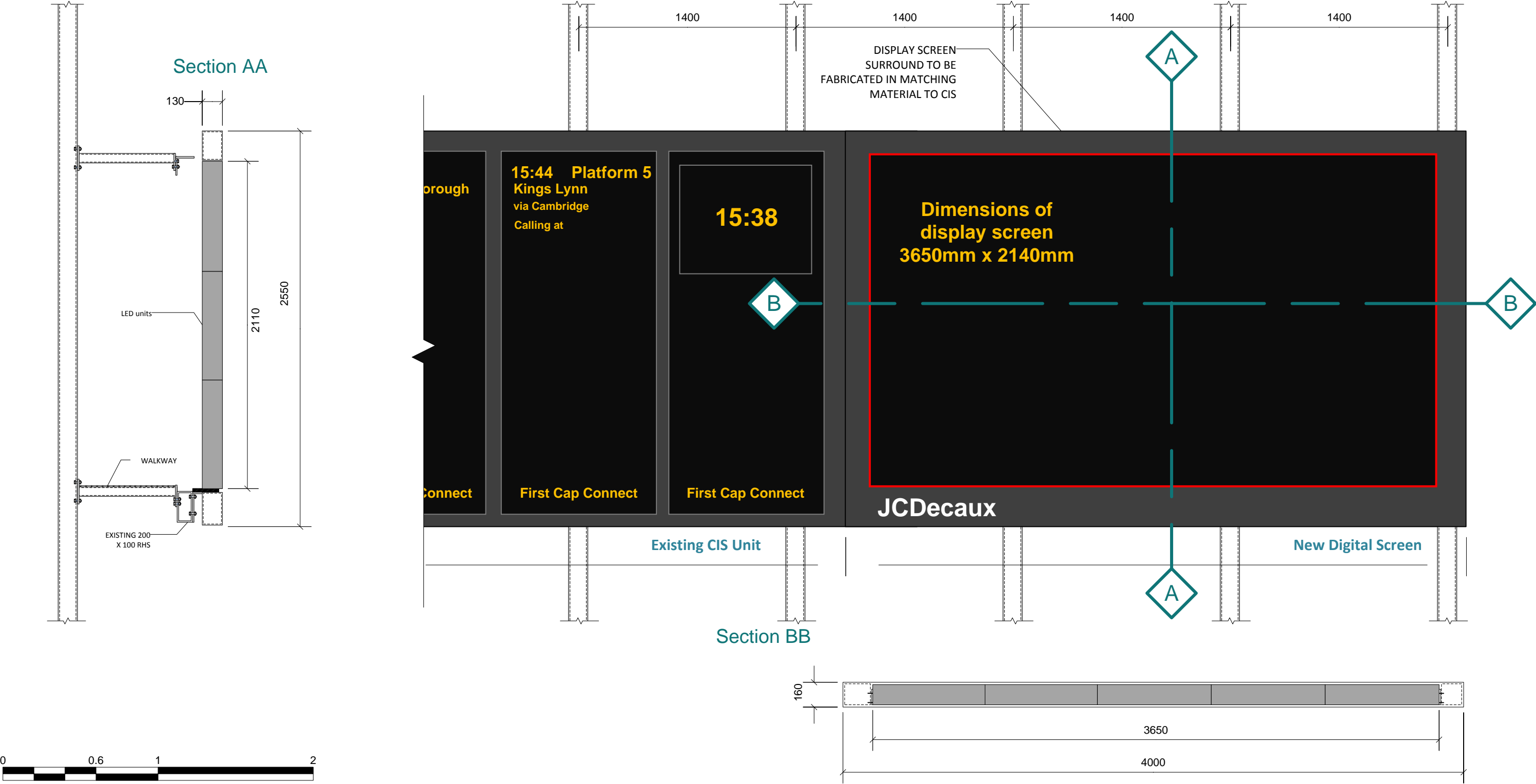
JOB	Kings Cross Station – Western Concourse Euston Road London N1 9AP		
CLIENT	Network Rail		
SCALE	1:25 @ A3 Refer to scale frame		
DRAWING	Screen Elevation South CIS	Section AA and BB	
REFERENCE	A00989/04		

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Screen Elevations – North CIS



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JOB	Kings Cross Station – Western Concourse Euston Road London N1 9AP		
CLIENT	Network Rail		
SCALE	1:25 @ A3 Refer to scale frame		
DRAWING	Screen Elevation North CIS	Section AA and BB	
REFERENCE	A00989/05		

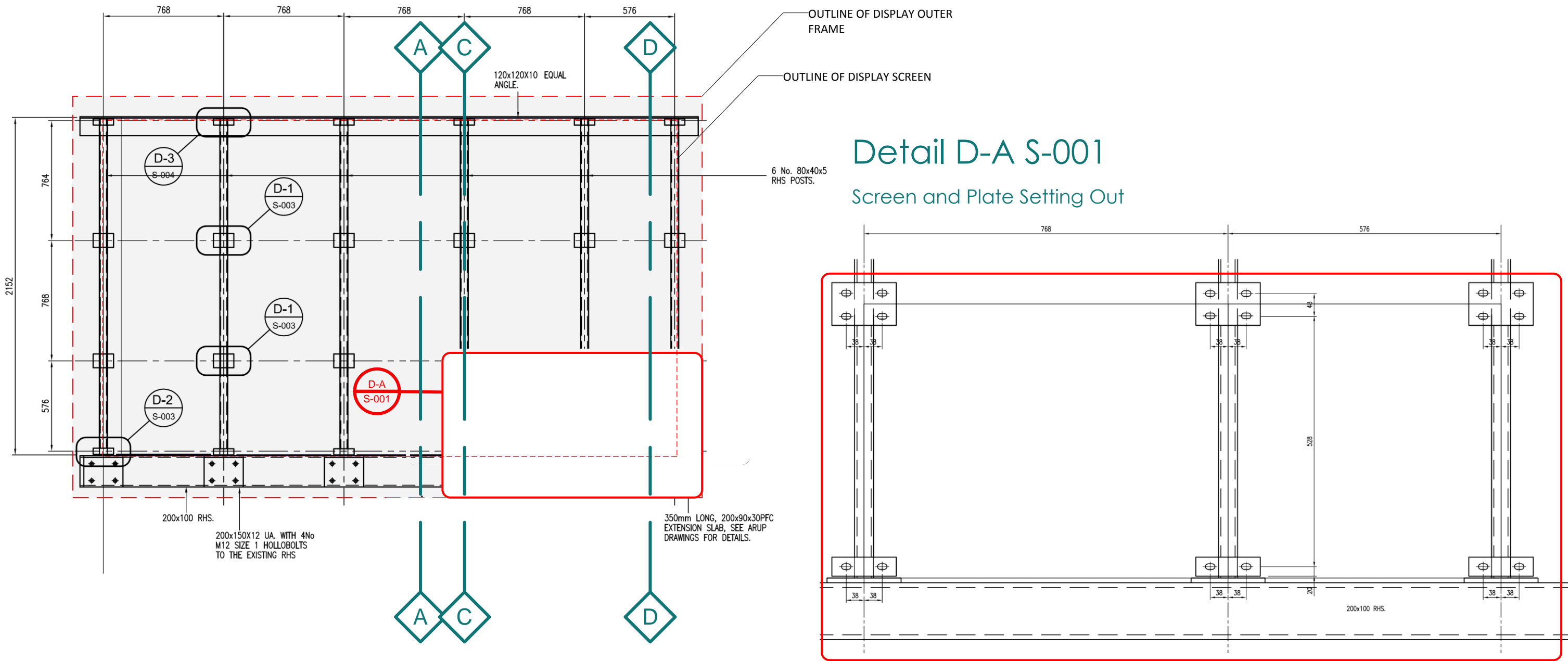
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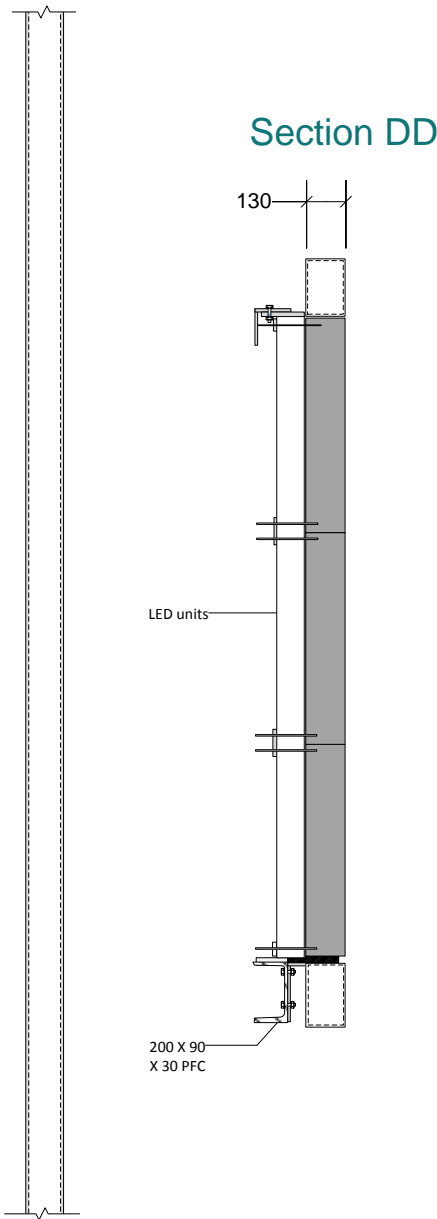
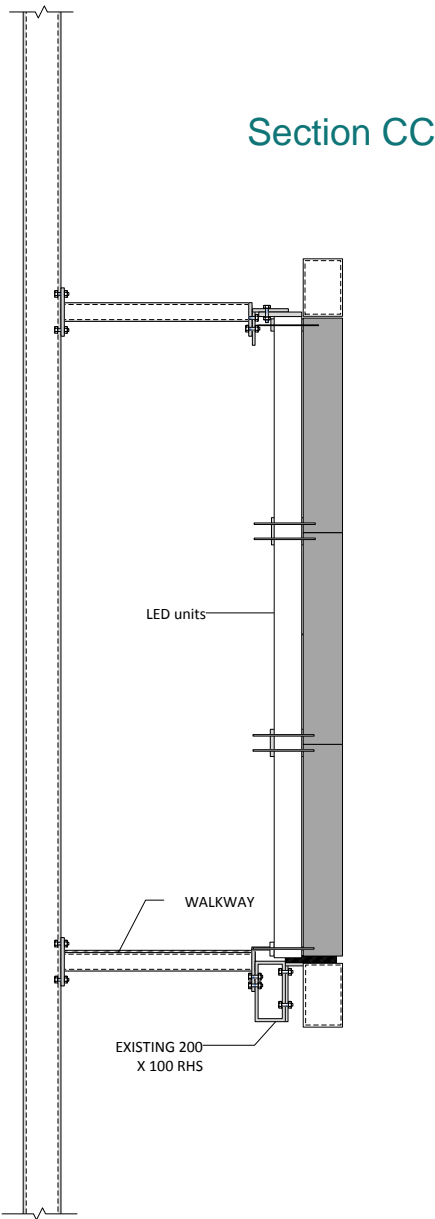
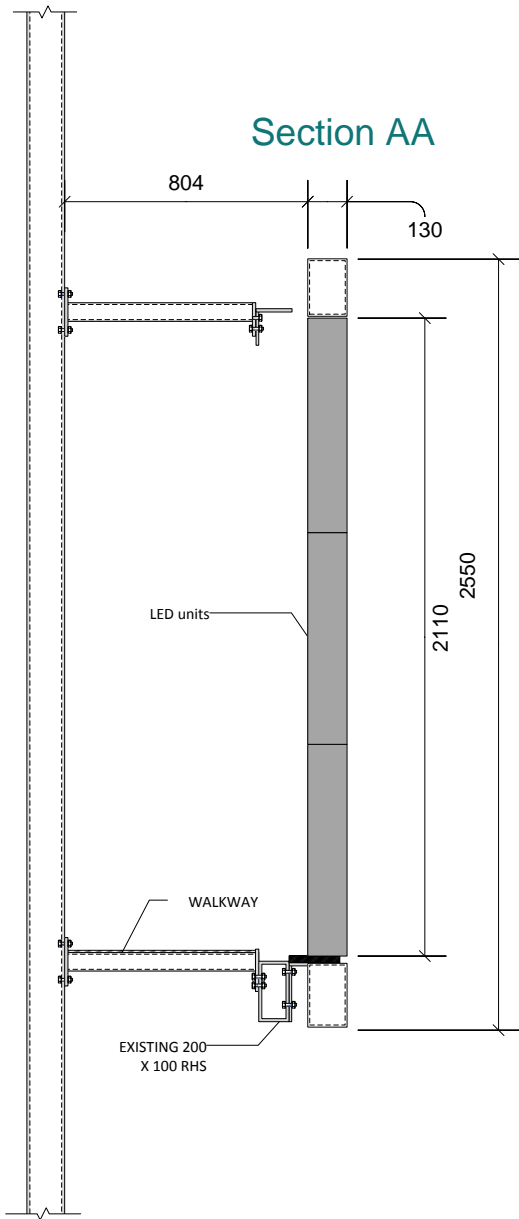


Screen Frame and Elevations – North and South CIS



JOB	Kings Cross Station – Western Concourse Euston Road London N1 9AP
CLIENT	Network Rail
SCALE	1:25 @ A3 Refer to Scale Frame
DRAWING	Screen Frame and Plate Setting Out Detail
REFERENCE	A00989/06

Screen Frame and Elevations



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JOB	Kings Cross Station – Western Concourse Euston Road London N1 9AP
CLIENT	Network Rail
SCALE	1:25 @ A3 Refer to Scale Frame
DRAWING	Display Frame Sections
REFERENCE	A00989/07

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Screen Detail
Digital Display Screen

Aoto Unit using Modules supplied by Cree Inc USA

Presentation

The 'IT' TILE has been designed specifically for the fixed installation advertising market. The module is based on a 320mm x 320mm, IP67 platform that can be pre-built into super-sized modules that weigh under 44kg per square metre for speedy installation. User friendly options include front access maintenance and remote diagnostics with fault detection down to pixel level. Remote diagnostics with email/SMS reporting option

- IP67 protection
- Radiant calibrated system
- Choice of Nichia & Everlight LEDs
- Front access maintenance options
- Lightweight and slim to reduce installation costs
- Super-sized modules for quick and easy installation
- CE & UL certification



Robustness and Durability

Product specially designed for direct outdoor use in a wide range of environmental/temperature conditions and features. Brightness level not affected by extreme temperatures and does not degrade over time like other technologies. Best in class product in term of visibility in direct sunshine. Improved reliability and life through expert thermal and solar management design.

Certifications
CE

Manageability

Extensive monitoring capability through digital image verification that gives immediate feedback about display performance. Intelligent monitoring/control and maintenance features.

Modularity

Modular design for simple on-site service.

Vandalism

Screen front opened by the use of special keys. Screws and fixing gears are invisible. Panel composed of unalterable materials. Encrypted transmission between JCDecaux NOC and the digital displays. High quality materials and coating.

Screen Information

Pixel Spacing (mm)	6
Rows and Columns	440 x 620
Pixel Configuration	RGB LED
Calibrated Brightness	5500Cd Max
Lifetime ½ brightness	130,000 hours
Viewing Angle	
Horizontal	140°
Vertical	120°
Video Processing	ATIEC
Colour Processing	16 bit
Colour temperature	3500° – 9500° K
Dimming Capability	5 bit (32 levels)
LED Refresh Rate	1000Hz
Contrast Ratio	1000:1
Calibration	Full Depth LED to LED
Service Access	Front
Cabinet Depth	300mm
Cabinet Construction	All Aluminium
Overall Area	7.8m²
Display Dimensions	maximum 3650mm x 2140mm
Display Weight	335Kg
Power Requirements	
Max	15840 watts
Typical	4752 watts
Temperature Rating	-35° – 43° C

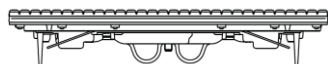
Weatherproofing
Ventilation
Graphics Capability
Data transfer to Display

Pixel Processing

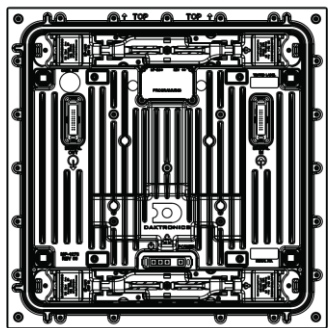
High Brightness

Rear: IP 55 Front: IP 65
Fan Filter
VGA/DVI to UXGA
Direct: Fibre Optic cable remote;
Internet/Network
Each pixel contains an independently controlled RGB LED for exceptional detail and colour accuracy
Used controlled intensity overcomes harsh lighting conditions even in direct sunlight

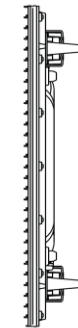
Module:
Top



Rear



Side



Front



JOB	Kings Cross Station – Western Concourse Euston Road London N1 9AP
CLIENT	Network Rail
SCALE	NTS
DRAWING	Digital Module Detail
REFERENCE	A00989/08

Historic Significance

Name: KINGS CROSS STATION

List Entry Number: 1078328

Location

KINGS CROSS STATION, EUSTON ROAD

The building may lie within the boundary of more than one authority.

County: Greater London Authority

District: Camden

District Type: London Borough

Parish:

National Park: Not applicable to this List entry.

Grade: I

Date first listed: 10Jun1954

Railway terminus. 185052.

By Lewis Cubitt (architect), and Sir William and Joseph Cubitt (engineers). Yellow stock brick. 2 train sheds (originally 1 for arrivals, the other for departure) closed by monumental plain brick screen of 2 glazed semicircular openings, framed with recessed arches (echoing the train sheds behind) with central and flanking towers; ground storey obscured by late C20 additions.

Central tower with rectangular clock turret with pyramidal roof, eaves cornice and weather vane. To the west, 3 storey 3 window office block with booking hall and service rooms at rear; 1st floor with thin, debased Venetian windows, cornice at 2nd floor level, 2nd floor

Segmental arched sashes (flanking bays tripartite), cornice. On east side, an extension with archway to the cab drive (now bricked up); rusticated surround to arch and quoins; cornice above which 3 tripartite sashes and parapet.

INTERIOR: train sheds separated by round arched brick colonnade. Originally, train shed roofs of laminated wood, inspired by the Crystal Palace, but these rapidly deteriorated and were replaced by the present iron ribbed roofs to the eastern shed 186970, to the western 18867. Laminated wood trusses successfully used at 26 Pancras Road (qv).

HISTORICAL NOTE: when opened as the terminus of the Great Northern Railway, was the largest station in England and is the earliest great London terminus still intact. The contrast of its functional simplicity with St Pancras Station next door (qv) is powerful. (Hunter M and Thorne R: Change at King's Cross: London: 1990: 5964).

National Grid Reference: TQ 30269 83130

The original station was completed in 1852 to the designs of Lewis Cubitt, for the Great Northern Railway Company, to serve Lincolnshire, Yorkshire and Scotland. The station is one of the earliest major termini, built at a time of considerable expansion of the railways and employing innovative construction technology, similar to that used on the main transept of the Crystal Palace, constructed a year earlier for the Great Exhibition.

The station is familiar on a national level, appearing regularly in literary fiction and as backdrop for countless film and television productions. As a place of arrival and departure, and greeting and parting, the station has a place in national association and individual memory. Although remarkably intact, many changes have taken place at the station in its 150-year history the most significant and relevant being permission in 2007 to undertake a comprehensive restoration of the main train shed and for the erection of a western extension to create a contemporary and complementary addition to meet the needs of the travelling public in the 21st Century.

This application is concerned only with the interior of the western concourse and will not touch any part of the historic buildings. The enclosed space does however form part of the Listed Building and therefore it is necessary that the proposed changes are assessed in terms of the impact upon the special architectural and historic interest of the station.

Impact of Development on the Station

This application is submitted on behalf of Network Rail for Listed Building Consent for the alterations to the interior of the extension station building and the installation of two advertising screens within the existing modern customer information screen located within the western concourse. The physical works proposed are confined to the interior of the station building and would not therefore constitute development requiring planning permission. The proposed advertising use similarly will be contained in the building and is thereby exempt under the 2007 Advertisement Regulations and would not require advertisement consent.

Kings Cross Station is a Grade I listed building and is therefore of significance as a heritage asset. A substantial amount of the original historic fabric remains extant, however the facilities provided by the Station have evolved to meet the changing needs of the transport operator and the travelling public to create a modern and efficient service whilst retaining the original character of the building. It is a busy operational station that has had to evolve and develop to be competitive with other transport operators. The protection of the fabric of an historic building and the provision of a modern, efficient rail operation are not opposing objectives and indeed the successful redevelopment and extension of the station demonstrates the best approach to renovation and restoration of a functioning heritage asset. The continuance and encouragement of a profitable and efficient transit operation within a historic context is arguably the most sustainable and effective guarantee of continued maintenance and protection of the historic building.

In the case of display screen and the location within the station careful thought has been given to the protection of the historic fabric of the building and to avoid any form of development that would interfere with important views or introduce a modern element that would appear alien in its context. The character of the Western Concourse is very different to the main train shed building in design, appearance and commercial extent. Whilst the main train shed interior is very restrained and limited in retail elements and overt commercial advertising, the western concourse contains a significant amount of retail outlets within modern units on ground and first floor. With the curved mezzanine and distinctive roof structure designed by John McAslan and Partners, the western concourse is a contemporary interpretation of a busy central station.

The distinctive central steel stalk support and innovative spreading roof canopy is located centrally in the western concourse in front of the brick façade of the western range of buildings, the only visible connection with the historic main station. The juxtaposition of these elements successful

Conclusion

combines the old with the new. Either side of the central element are horizontal customer information screens (CIS) with departure and arrival details and also a digital screen integral to the complete CIS structure. This modern element is seen within the design of the western concourse extension and is an expected and common feature in all rail termini. As such the integral digital screens and also the proposed screens at either end of the CIS do not appear as disconnected but as seamless parts of the whole and as such would not negatively impact on the historic fabric of the station.

The screens will be affixed to the existing horizontal steel frame to which the CIS is attached and which itself is a modern intervention. The steel beam is part of the extensions framework. No part of the western range of buildings will be altered as a result of this proposal and uninterrupted views of this part of the building will be maintained and will continue to be enjoyed by the travelling public.



It is clear from the experience at King's Cross that Network Rail invests heavily in the refurbishment and maintenance of the rail network and clearly recognises the importance of the built railway heritage in enhancing the passenger experience. Network Rail is a trusted guardian of the Nations heritage assets and understands its role in protecting such assets from damaging and inappropriate developments. Network Rail recognises the need to protect its estate whilst also provide a modern and viable network with the type of facilities, such as concourse retailing, dining and fast track ticketing that maximises the travellers comfort and convenience. The income derived by Network Rail from the proposed screens is a valued income to enable the continued maintenance of the heritage assets in its care and it is recognised that advertising is a modern use that can be successfully integrated in the historic environment with care to enhance vitality and ensure viability.

The size of the proposed screens are comparable to the size of advertisement panels found within the station and other modern transport hubs. The screens will be entirely affixed to a modern part of the building and will not require any physical alteration to the historic fabric of the station. The original station reflects the period of innovative in which it was constructed and the western extension in its architecture and modern elements such as media screens and modern retailing is a natural evolution of the technology and design applied to the provision public transport in the 21st Century. The proposal represents a form of development that is sensitive to the historic significance of the building whilst incorporating modern elements and technological innovation. The alterations will not undermine nor harm the intrinsic value or quality of the historic asset or the station as a whole.

Overall, it is considered that the proposal is an appropriate contemporary response using modern materials and technology which would serve to preserve the special architectural and historic interest of this listed building. As such, the proposal would not conflict with guidance provided in the National Planning Policy Framework or within Local Policies, which are protective of the special attributes of listed buildings and have been taken into account as material considerations in the formulation of this proposal.