

**Independent Reporter**

**Office of Rail Regulation and Network Rail  
Initial Review**

Kings Cross Redevelopment Project 2009

Executive Summary  
March 2009

**Halcrow Group Limited**

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### **Kings Cross Redevelopment Project 2009**

#### **Executive Summary**

19<sup>th</sup> March 2009

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## **1 Executive Summary**

### **1.1 Scope of Review**

The Independent Reporter (IR) was instructed by Network Rail and ORR to undertake an Initial Review of the Kings Cross Redevelopment Project (KSRP). The IR was mandated to:

- provide ORR with a current ‘snapshot’ of the KXRP.
- to provide a constructive, forward-looking, peer review of the KXRP to
- constructively challenge Network Rail’s delivery

### **1.2 Approach**

The project has been reviewed by the IR through a series of Lines of Inquiry seeking evidence that Key Challenges have been met in view of the future schedule and the IR’s assessment of the project’s current maturity. In undertaking this review the IR has sought to distinguish between Critical and Secondary issues in relation to the delivery of the project’s objectives.

### **1.3 Objectives and Scope**

Kings Cross Station is a Grade 1 listed building and this programme brings together a number of different work streams which were previously managed as separate projects, with significant interface issues. The key objectives are:

- Enhancements: (60% of the budget ):
  - new western concourse and refurbishment of the western buildings;
  - new shared service yard and vehicular access ramp,
  - new footbridge including escalator and lift access to the platforms;
  - shortening of platforms 5-8 in order to extend the existing concourse;
- Renewals:
  - refurbishment and modernisation of the eastern buildings;
  - major repairs/refurbishment of the main and suburban train shed;
  - repair/refurbishment and/or reconstruction of the platforms;

- Construction of a new platform (Platform Y) below the Eastern Range;
- Provision of new, upgrade power supply, with separate feed points form the grid (for security of supply);
- Asset Protection (ASPRO) of NR infrastructure.

The Business Case outlines the financial benefits of the project over 60 years, to support the chosen single solution will achieve the predicted passenger throughput for the next 50 years. The IR has recommended that the benefits be re-assessed in view of the increased budget.

## **1.4 Governance and Stakeholders**

In the IR's view programme governance is well defined in terms of management structure and defined roles and responsibilities. The project stems from two separate programmes of work initiated by NR, for Enhancements and Renewals. The Sponsors' Remits reflect this split and funding is also provided on this basis.

The key documents that show evidence of Stakeholder agreement are the Sponsors' Remits. A Tripartite Agreement between NR, DfT and Argent (local Property developer), addresses property and boundary issues.

The other major Stakeholders are the Train Operating Companies (TOCs), in particular National Express and First Capital Connect (FCC). English Heritage continues to have a significant influence in approval of materials in the Refurbishment work for the Grade 1 listed aspects.

Whilst the Network and Station Agreements have been approved in principle with the TOCs, there are on-going discussions with regard to the operational aspects of the station, particularly during the sequence of platform refurbishments.

## **1.5 Funding and Cost**

The NR Board approved £413m (2005 prices) in 2007, based on GRIP 4 estimate, then uplifted to £488m AFC by the NR Investment Panel to include inflation (equivalent of 2.9% per annum). An on-going challenge has been to bridge the gap between predicted AFC cost which peaked at £547m and the initial approved budget. There has been a wide ranging Value Engineering programme to identify savings. In January 2009 the NR Board approved a new budget of £526.9m AFC.

With the majority of contracts placed or close to signing at the current time, the IR is of the opinion that the project is seeking to manage within the capped funding budget but still faces challenges to control costs. The IR also notes that the opportunities for reducing costs are becoming more limited.

The budget is split between “Enhancements” which is ultimately funded by DfT (via RAB) and NR (the latter funding Platform Y) and the “Renewals” which are funded by NR. Risk and contingency have been based on Monte

Carlo simulation analysis, applying a blended contingency with the P80 (80% probable outcome) figure being applied to the Enhancements, whilst P50 is applied to the Renewals. For each package a “blended” contingency figure is calculated, based on the percentage split between Enhancements and Renewals.

However much of the Renewals works in Kings Cross are far from repetitive or comparable to other projects and in the IR’s opinion should be treated in similar way to Enhancements. If the contingency for the Renewals works was allocated on a P80 basis the budget would be circa £7m higher.

As the total delivery programme will run to 2013, inflation is a key issue. As noted above, the original budget of £413M was uplifted for inflation by 18% to £488M, which equates to 2.9% annual inflation. The NR Board have instructed the project team to obtain an assessment of future inflation.

The IR agrees that future inflation should be reviewed, primarily as recent forecasts have predicted zero or negative inflation for the next two years. In addition, the potential effect of inflation is diminishing as the majority of the larger package contracts have been placed and many of these are on a fixed-price basis.

## **1.6 Procurement and Commercial**

The Detailed Procurement Strategy outlines the approach taken on the programme. The works have been divided into a series of separate packages, each with its own Project Management team. On the complex packages the control of design was retained in house.

The preferred procurement route has been to outsource engineering design prior to placing the Works Package Contracts. This approach, combined with early involvement of the preferred bidder, appears to have enabled meaningful value engineering, particularly on Package 6 which has now been awarded.

It is the IR’s opinion that the approach is working well, as some packages have already been completed on time for the Eastern Range.

## **1.7 Legal & Consents**

The evidence that has been provided demonstrates that major milestones have been achieved in securing planning permission and listed building consent for the programme. The consents and approvals required cover Section 106, Planning Approvals and Listed Building Approvals. There has been a regular dialogue with English Heritage and London Borough of Camden (LBoC) with regard to the Listed Building and Planning conditions but as yet no issues are critical.

There is also the Tripartite Agreement between NR, DfT and Argent which has provided a good basis to manage the two key interfaces. Based on the progress achieved so far, in terms of coordinating the adjacent works by

the various parties and joint funding arrangements, it is the IR's opinion that this legal framework has provided a good basis to working relationships.

## **1.8 Technical**

The KXRP Programme has a wide range of packages as outlined in the scope each one of which poses many technical challenges. The combination of an innovative steel structure (Western Range) with interfaces to Listed Buildings is but one example. With the majority of the packages at GRIP Stage 5, the major detailed design has been completed.

There has been a significant Value Engineering initiative discussed above, is referred to as the “Glidepath”. However the IR notes that much of the early design work was directed making “value for money” choices, some of which are not documented. In demonstrating an efficient approach the IR would recommend that NR should seek to gather relevant evidence to demonstrate its overall “value for money” approach.

The Technical Approvals process within NR is managed through the GRIP process. In this case, each Works Package is treated as a separate project and must apply for approval, both technical and financial, at each Stage Gate.

The majority of the Enhancement Packages are at GRIP 5 with the exception of Package 7, covering the redevelopment of the Southern Square. This package is at GRIP Stage 2 (feasibility) and is currently the subject of an Architectural Competition but with the financial constraint that the target price is capped at £6M for the works.

*Key parts of the Renewals work are at GRIP 3. Whilst the requirements for platform strengthening have been reduced, the material to be used for resurfacing has yet to be resolved. Similarly on Station lighting, particularly across the main platforms, is subject to an investigation. Both of these are expected to be resolved shortly.*

## **1.9 Delivery**

The entire programme will run from 2007 to 2013, with the key objectives being achieved before the 2012 Olympics. The current schedule shows completion of the majority of the works by December 2011. The original schedule sought to complete the majority of the works by December 2011 which is stated as a key objective in the Engineering Management Plan. The main exception programmed for 2013 at present is the South “Kings Cross Square”.

Schedule is a key challenge to the project and has been the subject of discussions between DfT and NR as to what is specifically required by 2012. Whilst NR recognises the importance of achieving this key outcome, NR is not prepared to achieve it at “any cost” (verbally confirmed by the

Programme Director, with support from the NR Board). The DfT is apparently of the opinion that there is a commitment to achieve this, as defined by a Ministerial Statement (yet to be confirmed by the DfT at the time of writing).

So far “Schedule Simulations” (SQRA) have only been carried out for critical possession works; a full SQRA on the programme is planned.

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