

York Road station reopening

Report summarising output of pre-feasibility study – May 2005

1 Background

- 1.1 York Road disused station is located between King's Cross St. Pancras and Caledonian Road stations on the Piccadilly line. It was closed in 1932 owing to low usage and the need to speed up journeys following the extensions at both ends of the line. Much of the infrastructure, including the street level building, still survives intact.



Extract from tube map of 1931



View of 1906 vintage street level building in 2005

- 1.2 Pressure has been applied by local boroughs (especially LB Islington) for LU to consider reopening the station in order to assist with regeneration of area and meet the additional demand anticipated to be generated by nearby developments, notably King's Cross Central (KCC).
- 1.3 Funding for a pre-feasibility study was approved in November 2004 and Halcrow Ltd were appointed subsequently.

2 Brief

- 2.1 The key objectives as described in the brief were :-
- To assess the demand levels for the new station.
 - To estimate the quantified transport (dis)benefits of the station's provision.
 - To identify options for the station's reinstatement, compliant with LU standards but utilising existing infrastructure wherever possible.
 - To identify an order of costs (both capital and operating) associated with the scheme.
 - To review the case for implementation in the light of local authority and Mayoral development plans.
 - To formulate an overall business case for implementation of the scheme.

3 Scope

- 3.1 Halcrow undertook a desk-top exercise and site survey to ascertain the layout and condition of the station infrastructure. The original facilities comprised a street level ticket hall with four lifts (in two shafts) leading down directly to platform level, serving two side platforms – a near identical arrangement to the surviving station at Caledonian Road.

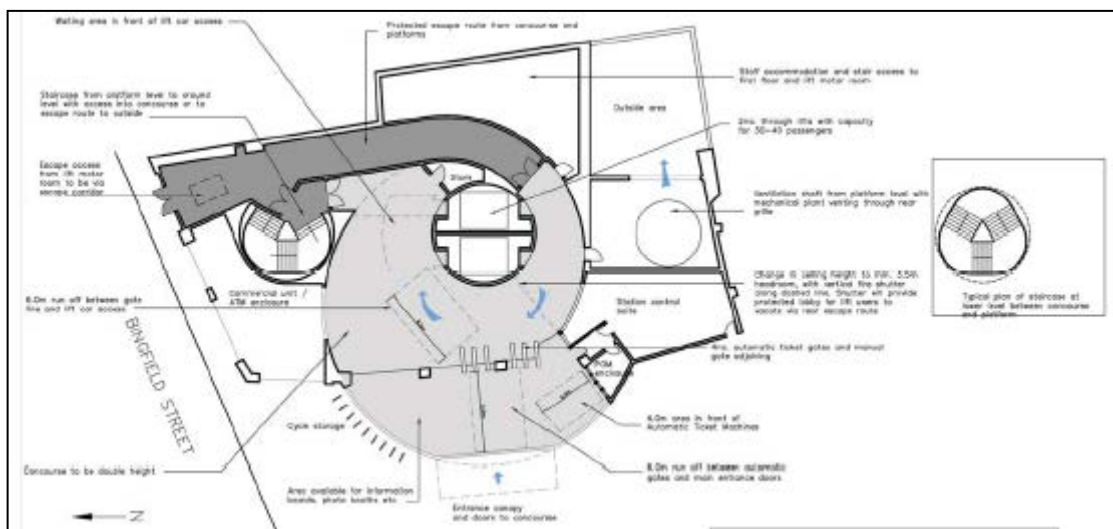


View up old lift shaft

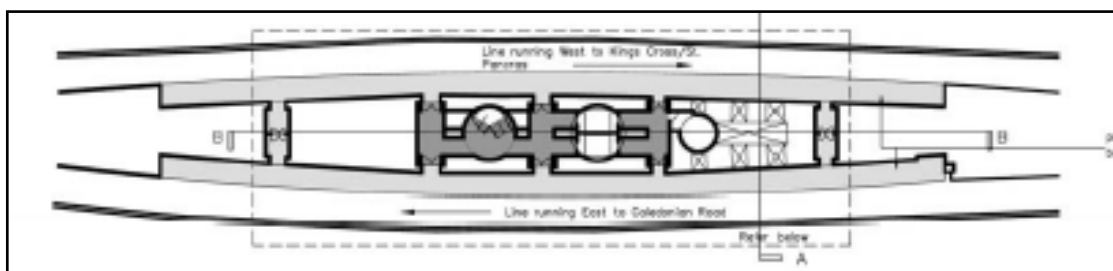
Original tiling at platform level

3.2 The proposals put forward by Halcrow included the following scope :-

- a) Creation of an enlarged ticket hall whilst retaining original building, served by POMs and a station control facility only (i.e. no staffed ticket office).
- b) Installation of two 50 person lifts in an old shaft down to platform level
- c) Installation of a staircase in the other lift shaft to provide emergency escape route between street and platform levels. [A sub-option exists for installation of two extra lifts in this shaft, with a new shaft built for emergency escape]
- d) Reinstatement of platforms, with fire-protected pressurised lobby between.



Proposed layout at ticket hall level (base scheme)



Proposed layout at platform level (base scheme)

4 Costs

- 4.1 The construction cost has been estimated by Halcrow's quantity surveyor consultants to be c.£21.5m for the base option (i.e. two lifts only). However, it should be noted that this figure includes a number of significant exclusions and assumptions and therefore the full construction cost is more likely to be c.£30-40m excluding optimism bias.
- 4.2 Operational and maintenance costs have been estimated to be c.£600k p.a. (£930k p.a. including optimism bias and contingency). The former assumes a requirement for 10 members of staff, allowing for shift patterns and cover.

5 Benefits and Disbenefits

- 5.1 Halcrow used Pedroute and Railplan models to determine the impact of the scheme on train and station customers.
- 5.2 The analysis indicates that c.9,200 customers could be expected to use York Road station during the morning three-hour peak period, with a roughly even split between those arriving and departing reflecting the mixed nature of the KCC development. 85% of the latter are predicted to have a destination within the KCC development.
- 5.3 The key benefits were identified as being :-
- a) Significant journey time benefits to users of the station compared to alternative modes or stations.
 - b) The station would act as a catalyst for regeneration of the area to the east of York Road.
- 5.4 The key disbenefits were identified as being :-
- a) Increased journey times for existing users of the eastern end of the Piccadilly line from the need for an additional stop.
 - b) Increased congestion at King's Cross St. Pancras from additional interchange movements (but reduced entry/exit movements).

6 Business case

- 6.1 The high capital and operating costs combined with low net quantified benefits gives an extremely poor overall business case – benefit : cost ratio of 0.03 : 1 (assuming the full 57% optimism bias on capital costs) : see table below.

	Base value (£000s)	Present value (£000s)
Capital costs	-21,500	-
Optimism bias @ 57% & contingency	-19,100	-
Sub-total	-40,600	-29,600
Operating/maintenance costs (p.a.)	-900	-12,200
Revenue generated (p.a.)	290	6,600
Income generated (p.a.)	20	290
Net financial effect	-	-34,910
Social benefits (p.a.)	42	900
Benefit : cost ratio	-	0.03 : 1

7 Summary and conclusion

- 7.1 The reinstatement of York Road station into operational use will be expensive (c.£30-40m) and has a poor business case, primarily because of the journey time disbenefits caused to existing users of the Piccadilly line. Therefore, there would be no imperative to progress with its implementation from a LU perspective.
- 7.2 However, there is clearly a strong desire by some key stakeholders to see such a scheme take place and therefore LU should be prepared for the possibility of political pressure being applied to proceed because of the regenerative benefits that may be incurred as a result, especially if a substantial contribution towards the costs could be found from the private sector.



Concept perspective drawing of ticket hall extension