Access & Design Statement for installation of new footbridge at Bolton on Dearne railway station

In line with the requirements of the amended Town & Country Planning (General Development Procedure) Order 1995 this statement gives an outline of the design and access principles adopted by the application.

The Proposal

The proposed works involve the erection of a simple steel girder bridge with associated staircases and elevated footways to cross the railway line at Bolton on Dearne. This will allow for the closure of the current foot crossing and elimination of the associated risks on a 75mph railway. The bridge has to be designed to comply with the Disability Discrimination Act 1995 in that mobility impaired people should be able to use the bridge.

Normally such works would be permitted development under Part 11 of the General Permitted Development Order 1995 but as part of the scheme lies outwith the limits of deviation of the enabling Act a planning consent is required for the scheme.

The reduction of risk at level crossings is a fundamental policy of the Company. The foot crossing at Bolton on Dearne is identified as the eighth highest crossing in the whole country in terms of risk and near misses and its elimination is a matter of high priority.

Design Considerations

The location of the bridge is at the southern end of the station. This is principally because there is no physical room to locate a DDA compliant bridge at the northern end of the station given the close proximity of housing to the existing level crossing, and the associated reduction of residential amenity such a large structure would have on surrounding properties. Accordingly a series of options were analysed in relation to the possible location of ramps at the southern end of the site. These options are fully discussed in the appendix attached to this Statement.

The bridge is a simple box girder structure 4.9m above rail level carrying a 2m wide footway. The approach footpaths, at a gradient of 1:21, remove the need for landings and returns as would be the case under DDA legislation. The footway and staircase of the eastern side of the railway follows the wide swathe of scrub immediately behind the platform, with very few trees or bushes to be cleared (see drawing B50034-210). The length of the footway is approx. 90m. On the western side of the station the proposal is to have a return staircase down to platform level with a footway running parallel to Lowfield Road and then returning back towards the platform along the station approach road. This latter footway would be an approximate distance of 87m.

It has to be acknowledged that the area of amenity woodland to the south west of the site will be affected by the proposal. The preferred option for the bridge/walkway, utilising the existing natural contours as far as possible in a triangular format is the least visually intrusive of the various options, and allows for substantial planting to take place within the remaining wooded area. To build alternative ramped structures

either parallel or perpendicular to the railway would create a more visually intrusive structure, particularly in respect of the outlook from the rear of the properties on Manor Way, be significantly more costly to build and from the sustainable point of view will require more resources, be more difficult to maintain, and may still attract an element of anti-social behaviour. It would also remove the only reasonably healthy trees (in the centre of the copse, as identified by the tree report).

Policy Considerations

i UDP

Given the very early stages of the emerging LDF we have taken as a template the relevant policies of the UDP as applicable to the site. These are given below:
The UDP was adopted in 2000 to cover the period 1986 to 2001. In this respect, the UDP is somewhat dated, notably in terms of employment allocations, although a number of policies have been saved and remain pertinent to the Scheme.

The Proposals Map for the Dearne Community Area shows the majority of the Site located within the settlement boundaries of Bolton on Dearne, but the eastern side of the station lies within the Green Belt. The UDP policies in relation to these allocations are addressed below followed by other policies that are relevant to the Scheme.

Transport & Accessibility For All Policies T9, T10

The proposal is comfortably in accord with policies T9 and T10 of the UDP (Public Transport Developments and Bus/Rail Infrastructure). Specifically the provision of the footbridge will support clause T9 (e), which states that

"development of the public transport network.....will be pursued to meet the following aims:
(e) maintenance and improvement of mobility for disadvantaged groups".

It is also in accord with Policy T10 (Bus & Rail Infrastructure), specifically Clause T10 (g) with its commitment to include proposals for *the "incorporation and modification of facilities for special needs groups in proposed and existing public transport developments".*

Woodland, Hedgerows & Trees Policies GS22, 22a & 22b

Although the copse adjacent to the northbound platform is covered by a tree preservation order there will be some inevitable loss of tree cover to accommodate the staircase and walkway. We have demonstrated in this statement why the preferred option for the development has been chosen, one key consideration of which has been the desire to retain those trees which are considered to be the ones in best health, in accord with policy GS22a.

Design Policy BE6, BE6a & 6b

The design of the footbridge as far as possible follows the design policy BE6 but it must be remembered that here are a set of basic group industry standards that have to

be followed for railway footbridge design. These include such items as solid bridge parapets, lighting and surface treatment. By definition the bridge has to be accessible for mobility impaired people (policy BE6B) and it is a conscious decision to keep to a footway approach at a slope of 1:21 precisely because of the significant visual impact a bridge with a steeper gradient would have on the local environment.

Green Belt Policies DE7, GS7, GS8 and GS9

A minority of the Site is located within the Green Belt (Policy DE7). The primary purpose of Green Belt is to keep land open and one of its objectives is to prevent the built up areas of the Borough merging with neighbouring settlements. However in this particular instance the element of the proposal within the green belt is but one part of the overall bridge and walkway, and does not significantly intrude into the openness of the Green Belt. In any case the special justification for setting aside Green Belt policy is the legal obligation to provide station access which complies with the Disability Discrimination Act.

Policy GS7 'Development within Green Belt' states that, subject to some other relevant policies (not relevant in this instance) development in the Green Belt will not be permitted unless it maintains the openness of land and does not conflict with the purposes of including land in the Green Belt.

Policy GS9 advises that development within the Green Belt should not by reason of its siting, materials or design result in significant harm to the visual amenity of the Green Belt. Because of the location of the eastern part of the footbridge walkway being at the very extreme edge of the Green Belt, and by virtue of its association with the station it is considered that there is no significant visual impact on the green belt.

ii. LDF

The emerging Barnsley LDF is still in its early stages and carries very limited weight. The BMBC LDF will cover a period up to 2021. Three Preferred Options Development Plan Documents (DPDs) were published in October 2005. These are: Core Strategy Preferred Options, Policies Preferred Options and Employment Sites Preferred Options. A Preferred Options Proposals Map was also published in October 2005.

All three draft DPDs have not progressed beyond the Preferred Options stage and BMBC are considering progressing Revised Preferred Options in due course.

The Preferred Options Proposals Map DPD designates the site as being within the settlement boundary with the exception of the easternmost part, which is in the Green Belt. Draft Policy GB1 identifies a list of uses which are considered acceptable in the Green Belt as long as they do not conflict with the purposes of the Green Belt and do not have a negative effect on the openness or appearance of the Green Belt. The proposal is considered to be justified in terms of the special circumstances that apply in providing a safe and accessible means of crossing the railway.

Draft policy GB2 also applies:

Development near to the green belt

Development near to the green belt will not be allowed if it has a negative effect on the appearance of the green belt.

The reasoned justification goes on to state that the green belt plays an important role in protecting and improving landscapes. Development near to the green belt should be carefully positioned and designed so that it does not harm the appearance of the green belt. Because of its nature the bridge can only be located in a specific position. However use of earth embankments for the approach footways is important in minimising the effect on the surrounding area and therefore will not have a negative effect on the Green Belt.

Other relevant LDF policies include D1 (General Design Standards) and D3 (Safe Spaces).

Policy D1: General design standards

All buildings and the spaces around and between them must have a high standard of design. We will assess all planning applications for built development against the following criteria.
1 Layout
a The layout of buildings must clearly take account of the site and surrounding buildings and land.
b Make sure there is good convenient pedestrian and public transport access into and out of the site.
2 Scale
a The size and shape of buildings must relate to the local area.
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3 Materials
a All materials must be of a high quality appropriate to the setting of the site and use of the building proposed.
4 Detail
a All architectural and detailed design features must be of a high quality and contribute positively to the overall design of the building proposed.
5 Space around and between buildings
All spaces around and between buildings must be designed to:
a achieve high-quality co-ordinated landscaping, including planting, surface materials and other features;
b make sure open space is part of the design; and
c make sure a safe and pleasant environment is provided.
6 Managing waste
a Measures must be taken to make sure that waste is managed in a way that avoids a poor appearance or any negative effect on living conditions or nearby uses.
We will refuse applications that do not meet these criteria.

The application is for a particularly specific element of railway infrastructure. Being a new footbridge to serve an operational railway we are limited in the elements we can design into the scheme since it has to comply with both group railway standards and with the requirements of the Disability Discrimination Act 1995. The need to provide safe and accessible access for all is the main objective, but in recognising the desire of the local authority to retain as much of the group of amenity trees by the station as far as possible the approach walkway has been designed to have minimum impact on the trees and allow scope for additional planting in the middle of the copse to improve he tree and ground cover. As such we consider it complies with draft LDF policy D1.

Policy D3: Safe places
Development should be designed in a way that reduces the risk of crime and the fear of crime. New development must meet the following criteria.
a Public spaces, including parking areas, pedestrian routes and play spaces, should be well lit, overlooked by other buildings and public areas, and avoid dark corners.
b Public and private spaces should be clearly separated.

The footbridge and footways have been designed with passenger safety in mind – this is why, for example, a steel construction footway through the middle of the site has been discarded as it would create safety issues (being hidden from Lowfield Road by existing trees) and creating an area beneath for anti-social behaviour to occur. Accordingly the design is compliant with Draft Policy D3.

Access Considerations

The bridge is specifically designed to be compliant with the DDA and the design is taken into account to provide accessibility for mobility impaired people.

A.Rivero
Network Rail
November 2008

Appendix

Option Selection for footbridge location

Bolton-Upon-Dearne Planning Application Supporting Documentation
Ramp Alternatives

1 Tree Management

It has been noted in the attached report by Expertrees commissioned by Network Rail that there has been a Tree Preservation Order put in place at the triangular parcel of land by Bolton-Upon-Dearne station. The report details the impact that would be made on the local environment by the submitted scheme.

1.1 Findings

The report details 21 No. trees suitable to be considered for retention in the area. The trees were found to be generally less than 20 years old and below 18.0 metres high. The report also found that many trees show damage and have a low Safe Useful Life Expectancy. There is no evidence of recent tree management. The report did not class any of the trees in Category A or B (BS5867:2005 Table 1, attached), i.e. likely to contribute to the surrounding area for more than 10 years.

1.2 Impact of submitted scheme on trees

The submitted scheme would remove 13 No. Category C and Category R trees.

1.3 Area misuse

The report noted that the area showed evidence of recent and regular anti-social behaviour; fly tipping, fires, drug misuse and dog fouling.

1.4 Recommendations

The report suggested that the Cherry and Aspen varieties which form the majority of trees found at the site are not suited to being retained alongside footways and particularly drainage systems. The report suggested that, where appropriate, better varieties be planted at this site to avoid area misuse include denser varieties such as Alder, Birch, Holly and Hawthorn. The proposal of the submitted scheme however is to retain the remaining 8 No. Category C trees.

2 Security

As identified by the Expertrees report, there is evidence of area misuse. A steel ramped solution such as the alternatives demonstrated below would provide additional areas underneath for badly lit 'meeting areas' for anti social behaviour.

The sumitted scheme includes a reinforced earth ramp would provide a solution which would minimise the risk of such access areas being created. The walkways would be fenced, the shallower sloped banks would be planted with Rosa Spinissisoma which is a thorny plant to discourage access and the tree area would not provide the same protection as it would be smaller and visible from all sides.

3 Alternative Ramp Options

3.1 Option 1- Parallel to Railway- Drawing No. B50034/214

a) Eyesore in winter, visible from road, car park and residential area.
b) Unattractive solution.
c) Steel ramps provide costly alternative that may prevent or delay implementation.
d) Maintenance issues, painting, structural assessment.
e) Structure may become central area for anti-social behaviour particularly below steel spans.
f) Budgetary requirements could delay approval of scheme.

3.2 Option 2- Perpendicular to Railway- Drawing No. B50034/215

a) Removal of important trees in the centre of the wooded area.
b) Poor utilisation of space.
c) Eyesore in winter, visible from road, car park and local residential area.
d) Unattractive solution.
e) Steel ramps provide costly alternative that may prevent or delay implementation.
f) Maintenance issues, painting, structural assessment.
g) Structure may become central area for anti-social behaviour particularly below the steel spans and in summer when the structure is bounded by trees.
h) Budgetary requirements could delay approval of scheme.

4 Submitted Ramp Option

4.1 Submitted Option- Drawing No. B50034/211

a) Removal of important trees in centre of wooded area.
b) Improved utilisation of space.
c) Grassed banks retain colour in winter.
d) More economic option
e) Low maintenance.
f) No under areas for anti-social gatherings.
g) Restricts access into remaining wooded area.
h) No hiding areas within wooded area, visible from all sides.

Bolton-Upon-Dearne Planning Application Supporting Documentation
Utilising the Northern Footway of Overbridge 73 at Lowfield Road

This document analyses the option of utilising the Overbridge as the pedestrian access from the station car park and town centre to the Up (East) Platform. The proposal would involve ramped access cutting into the bridge structure at the wide section over the bridge main span.



Benefits arising from this design option

a) No need to construct a full footbridge.

Difficulties arising from this design option:

a) Complexities of design around existing span and wingwalls. It is likely that the existing wingwalls would need to be reconstructed.
b) Rail-users would tend to use the narrow bridge footpath to access directly onto the highway on each side of crossing. It is important to note that there is also poor forward sight stopping distance due to the crest on the bridge.
c) Footpath along bridge approach embankments is non compliant and would need widening for general access to allow for this new traffic.



d) Existing footpath would need to be widened to 2m to be DDA compliant.
e) Pedestrian railings would be recommended for public safety and this could affect sighting distances. Position of these railings would be problematic.
f) Roadway is narrow and needs to be accessible for HGV traffic such as refuse and maintenance lorries in addition to industrial traffic because Lowfield Road is the only access to the East Side of the railway. There will be conflict with vehicles turning into Occupation Road.



g) The structural capacity of the existing bridge is not known.
h) Highway Authority consultation could complicate design and would delay the project. This project is particularly sensitive to programme due to the high level Risk Rating of the existing Barrow Crossing which is to be removed.
i) Location of buried services including gas within bridge deck could cause additional problems.
j) The design would not reduce the need for ramped access and other factors that are also required in other options.
k) Precludes future bridge and approach embankment widening.
l) Added complexity for strengthening/renewal of the highway bridge.
m) Bridge parapets would need to be modified to comply with height and anti-trespass requirements.