CHESTERTON STATION INTERCHANGE

Screening Opinion Report
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Figure 1  Screening Option Plan

Figure 2  Potential Chesterton Station Interchange Layout
          (For illustration purposes only)
1. Introduction

1.1. The County Council proposes to submit an application under Regulation 3 of the Town & County Planning General Regulations 1992 to develop a new station and public transport interchange at the existing Chesterton Sidings, in north Cambridge. The County Council intends to extend the Busway from Milton Road along the final section of the former St Ives Branch Line to connect to the station interchange as shown on the site location plan under the existing powers of the Cambridgeshire Guided Busway Order 2005.

1.2. It is considered that the application comprises development listed under Paragraph 2 Column 10 Infrastructure Projects of Schedule 2 of the Town and Country Planning (Environmental Impact Assessment) regulations 2011, necessitating formal screening.

1.3. This document provides information intended to assist the Planning Authority in determining whether the application should be supported by an Environmental Statement under Schedule 2 of the Regulations.

2. The Site

2.1. The site lies within the administrative boundaries of both Cambridge City Council and South Cambridgeshire District Council. Chesterton Sidings is owned by Network Rail. Cowley Road is the site’s only existing approach road, and is part owned by Cambridgeshire County Council and Cambridge City Council. The proposed development covers an area of approximately 12.04 hectares of land which will encompass the land uses summarised in the paragraphs below.

2.2. The site location plan is shown on the attached Figure 1.

2.3. The Chesterton Station Interchange application proposes a new railway station, and an interchange facility providing access onto the wider public transport and highway network. Chesterton Interchange will enable travellers to switch between all modes with access for pedestrians and cyclists, bus users, car drivers and passengers, and heavy rail users. The interchange will be linked into the existing Busway network by a short length of new guide way.

2.4. The interchange would incorporate a main station building of approximately 450m², passenger waiting facilities, toilets, and a ticket
office retail and amenity space. Two main line platforms and a bay
platform are proposed.

2.5. A footbridge would provide access from the station building to the
platforms over the main line and an operational freight access siding.
Lift and stairs would be provided on each platform and at the station.

2.6. A 450 space car park and 1000 space cycle parking is proposed to
serve the station and interchange, together with new cycle and
pedestrian links to the surrounding area.

2.7. The interchange would also cater for access by other public bus
services, and the facility would be linked in to the surrounding walking
and cycling networks directly serving the northern parts of Cambridge
and surrounding northern fringe villages.

2.8. It is anticipated that the railway station would operate between the hours
of 05.30 and 01.00 every day, noting that trains already pass the site of
the interchange outside of these hours.

Station building
2.9. The proposed station building (NR Category C2 station building) is
expected to have a building footprint of approximately 450m² with built in
future passive capacity for expansion, and would include:

- Staffed ticket office
- Waiting area
- Public toilets
- Rail staff accommodation and facilities
- Retail and refreshments space

Railway facilities
2.10. The proposed platform layout includes two main line platforms and a
single bay platform along with a footbridge that would provide the
passenger access between the station building and the platforms, and
would comprise as follows.

- Pedestrian/Cycle over bridge to platforms
- Lift and stair access to platforms via bridge
- Waiting shelters on platforms
- High specification communications and security equipment;
2.11. Indicative rail works layout diagrammatic:

Interchange facilities would include:

2.12. Highway access to the interchange would be gained from Milton Road via Cowley Road. This would require a new junction on the Network Rail land and possible limited improvements to Cowley Road and Milton Road junction.

2.13. For illustrative purposes only a potential layout plan is shown on the attached Figure 2.

2.14. Access to the site will also be provided by an extension to the Busway together with and in addition to, new pedestrian and cycle access to the site from surrounding areas. The interchange would most likely include:

- Car, bus, taxi and other vehicular access along Cowley Road and new station access road
- Interchange facilities for public transport (including dedicated facilities for guided buses, and separate dedicated facilities for buses and taxis) to include suitable stops, shelters, ticket machines, real time and other passenger information
- Landscaped 450 space car park
- 1000 Cycle parking spaces
- A combined cycle and pedestrian access along the existing Network Rail maintenance track parallel and segregated from Cowley Road

Cycle and pedestrian access from the residential estates to the south via Discovery Way / Pippin Drive /Ribston Way/ Long Reach Road and through the Bramblefields public Local Nature Reserve and separately Moss Bank. Also similar access arrangements are proposed from Nuffield Road industrial estate and alongside the existing Nuffield Road allotment entrance.

The Local Context of the Site
2.15. To the north of the proposed site lie industrial development on Cowley Road and the former railway engineering depot sidings on part of which is now an active aggregates rail terminal and road stone coating plant. Between the industrial area and the A14 lies an extensive area of land occupied by Cambridge Sewage Works. Forming part of the eastern the east of the site boundary is the main West Anglia main line railway providing direct services to London and Stansted Airport to the south and Ely, Peterborough, Kings Lynn, Norwich and Birmingham to the north. On the eastern side of the railway there is some residential development and land in industrial uses accessed from Fen Road, Chesterton. To the west of the site boundary is the Cambridge Business Park. Lying to the south of the site are the Nuffield Road allotments and the wider residential area of East Chesterton. Cambridge Science Park lies 750 metres to the west with vehicular and cycle access to Milton Road.

3. Existing Environmental Conditions

3.1 In order to assist with the Environmental Impact Assessment screening opinion the following baseline information in relation to site conditions has been provided. This section deals with the existing situation in relation to ; Transport Landscape and Urban Design, Ecology, Archaeology and Heritage, Air Quality, Ground Contamination, Noise and Vibration Flooding and Drainage information currently available and prior to a full range of site surveys.

Transport

3.2 The development of the Chesterton Station Interchange is well located with good access to the primary highway network A14 from Milton Road serving Cambridge and the surrounding settlements.

3.3 There is an existing Network Rail maintenance track parallel to Cowley Road which has the potential for upgrade and use as combined cycle and pedestrian access route.

3.4 Milton Road is well served by public bus services including the Park & Ride services from Milton. The existing Guided Busway services also access Milton Road just south of the junction with Cowley Road. There is an existing Stagecoach depot on Cowley Road resulting in a significant number of bus movements.

Landscape and Urban Design

3.5 The Chesterton Sidings area is an extensive and long established area of railway freight sidings consisting of an extensive area of rail and surrounding yard with sparse naturally colonised vegetation within a rail ballast surface.

3.6 The site is flat and relatively well screened from the southern approaches due to the existing naturally colonised boundary growth of native species. The majority of the residential area to the south is further screened by Bramblefields Local Nature Reserve and Nuffield Road.
allotments. The remainder of the site, save for the Cambridge Business Park to the West, is overlooked by industrial land use.

**Ecology**

3.7 The site does not include any international or national designations. Adjacent to the site land has been designated as a Local Nature Reserve (LNR), part of which is open for public access. The Bramblefields LNR is recognised as an important county level site.

3.8 An ecological walkover survey of Chesterton Sidings was undertaken in 2002 by local ecologists and found the presence of Jersey Cudweed, a nationally rare and protected species to the north of the application site boundary.

3.9 An ecological walkover survey of Chesterton Sidings was undertaken in early April 2012.

3.10 This identified the main biodiversity characteristics as habitat suitable for breeding birds, the possible presence of bats within one small structure which would be demolished as part of the scheme and the existence of habitat suitable for foraging Bats, the Common Lizard, Slow Worm and invertebrates. No evidence of Badgers, Water Voles or Great Crested Newts was found.

3.11 Further follow on seasonal surveys will be undertaken in due course.

**Archaeology and Heritage**

3.12 The site may be considered as located in an area of high archaeological interest in so far as little previous investigation has been possible. In addition the railway sidings and associated structures, while not listed on the Cambridge Historic Environment Record (CHER), may be of some local history interest.

3.13 There are two known sites recorded on the CHER within the proposed development site - an Anglo-Saxon burial (AH no.2) and a prehistoric cremation burial (AH no. 3) - both discovered during quarrying between the 19th and 20th centuries. The latter also contained Roman pottery (AH no.3a) although this is most likely a result of later disturbance of the burial. However, the record of the Iron Age burial discovery can not be confidently verified and its original sitting may well be outside of the limits of the development site.

**Air Quality**

3.14 There are 2 Air Quality Management Areas within close proximity of the site. One covering Cambridge City centre for NO2 and one along the A14 in South Cambridgeshire for NO2 and PM 10. Both designated as a result of emissions from traffic.

**Ground Contamination**
3.15 It is anticipated that where railway and historic mineral extraction activity and infill has taken place over a considerable passage of time extended area of potentially polluted land of the railway track bed and surrounding soils could be present.

Noise and Vibration

3.16 The proposed development would be situated within an area already experiencing a level of noise and vibration associated with the operation of the main line railway and mineral aggregate processing storage and transportation facilities.

Flooding and Drainage

3.17 There are two drainage routes for surface water. The Public drain to the East. The Milton drain to the north. The River Cam which is sensitive to flooding is 1000 metres away to the eastern side of the site boundary and main line railway. The site is not within Flood Zone 3 (1% chance flooding each year).

4. Possible Environmental Effects

Transport

4.1 It is anticipated that the proposed development would bring about highly significant improvements to all modes of transport within Cambridge City and Northern Fringe. It would provide and improve sustainable transport provisions in Cambridge and the surrounding area.

Impact on traffic flow from cars and buses

4.2 The development may cause a small increase in car traffic accessing the site from Milton Road, and a slight increase in bus movements along Cowley Road from its junction with the Milton Road, noting that there are already large numbers of bus movements to and from the Stagecoach depot. Overall the number of car journeys across the city is expected to be reduced.

Impact on wider highway network

4.3 There is likely to be a slight adverse impact on existing barrier down times and traffic/pedestrian flow on Fen Road as a result of extending the one off-peak hourly service from Cambridge City Station to the proposed new station.

4.4 Extension of the Busway maintenance track / cycleway will provide an extra facility for cyclists and pedestrians, and link directly from the new station into the Science Park, National Cycle Network 51, and other existing routes in Cambridge. Numbers of pedestrians and cyclists accessing the Station Interchange is expected to increase.

4.5 A re modelled design of the existing signalised Busway junction on Milton Road would be subject to a discharge of condition by Cambridge City Council under the present planning consent of the Cambridgeshire Guided Busway Order 2005
Landscape and Urban Design

4.6 The impacts on the landscape will occur mainly through the proposed development of this brownfield site and through the introduction of lighting at the building and car parking facility. Measures would be provided to mitigate any potential impact on residential properties particularly those to the east of the site which are bordered by the railway and do not currently have the extensive screening vegetation of those to the south.

4.7 The proposed scheme would significantly enhance the value of landscape and amenity from the direction of the Cambridge Business Park to the West of the site boundary. While the retention of the existing Chesterton Sidings boundary screening to the south of the site boundary would mitigate visual impact of the proposed low level development from this direction.

Ecology

4.8 A seasonally based assessment of the impacts of the scheme has been commissioned by the applicant.

4.9 Mitigation or compensatory measures would be proposed as required to protect biodiversity. For example; new habitat replacement; protection of breeding birds; translocation of nationally scarce plants to suitable receptors; protection and restoration of habitats temporarily affected by construction works; measures to protect protected species by means of licensed approval from the relevant regulatory bodies.

4.10 These measures would inform the ecological mitigation management of the proposed development as required.

Archaeology and Heritage

4.11 Further evaluation regarding the extent, character and significance of any remaining archaeological features has been commissioned by the applicant with input from the County Archaeologist.

4.12 The railway sidings and associated structures, while not listed on the CHER, are of some local history interest and will also be considered within a scheme of mitigation which may include recording prior to any removal.

Air Quality

4.13 An air quality assessment will examine how the scheme might affect local air quality, mainly due to emissions from construction traffic. Air quality may well be improved as a result of development by the reduction of traffic movements in and across the City.

4.14 The removal of one existing freight line and resulting reduction of use of diesel locomotives in Chesterton Sidings combined with the continuation of use of electric power passenger trains on the exiting main line railway is likely to have slight positive impact.
Ground Contamination

4.15 The impact of the proposed development on soils and groundwater conditions will be assessed and measures to prevent, reduce or offset any adverse impact will be proposed. This may include the removal of grossly contaminated soils encountered during the construction which would have a beneficial effect upon the existing ground conditions and measures to reduce the movement of the contamination through the ground resulting in a beneficial effect upon the groundwater resource in the area.

4.16 A survey of the site has been commissioned by the applicant who has also been in discussion with the relevant responsible Local Authority officers.

Noise and Vibration

4.17 An assessment is to be carried out of the potential noise and vibration impacts of the scheme on sensitive receptors during construction and operation and mitigation proposed as appropriate.

4.18 The retention of the existing Chesterton Sidings boundary vegetation screening to the south of the site boundary in addition to the Nuffield Road Allotments and Bramblefields Local Nature Reserve would mitigate the noise impact of the proposal to residential properties to the south.

4.19 The existence of the main West Anglia line railway forming the eastern site boundary is likely to lead to a neutral impact in relation to noise for the residential properties to the east of the site boundary and on the opposite side of the main line railway.

4.20 The reduction of the use of diesel locomotives and removal of railway line in Chesterton Sidings would reduce the current vibration of freight and mineral rail traffic.

Flooding and Drainage

4.21 The proposal would involve creating fairly extensive areas of hard standing which will create an increased amount of run-off. Run-off will require attenuation by storage and sustainable drainage methods.

4.22 Initial work has identified a number of mitigation measures which would be put in place to limit the effects of the station interchange both during construction and operation.

4.23 The continuation of this assessment work and consultation with the relevant bodies will provide proposed mitigation management for the development.