



Cottam Parkway Railway Station

Environmental Statement

Volume 2: Main Statement

Chapter 2: Background

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2 Background

ES Chapter Number	Environmental Topic	Relevant Appendices
2	Background	Appendix 1-3.1: Options Report Appendix 1-3.2: Planning Policy Reference Document Design and Access Statement

2.1 Introduction

- 2.1.1 This chapter describes the background to the Scheme and its origins within the various adopted plans, strategies and agreements of Lancashire County Council, Central Lancashire and Preston City Council. The search for alternatives to the Scheme are described here in the context of the wider planning aspirations for the area.

2.2 Historic Context of the Scheme

- 2.2.1 It is important to establish the historical context of the Scheme and surrounding area, known as 'North West Preston' in order to understand how this scheme has been considered and introduced as a whole.

Central Lancashire Core Strategy:

- 2.2.2 The Central Lancashire Core Strategy was adopted in 2012 by Preston City Council, South Ribble Borough Council and Chorley Council. This strategic document highlighted the need for both new highway infrastructure and sustainable modes of transport to deal with the predicted future increases in

traffic volumes and to support strategic sites for development, one of which is North West Preston.

- 2.2.3 The Central Lancashire Core Strategy sets out certain criteria to assist in the delivery of the strategic requirements for North West Preston as identified in Policy 1: Locating Growth.

Preston Local Plan:

- 2.2.4 The Preston Local Plan was adopted in July 2015 which identifies North West Preston as a strategic location for growth and investment. Policy MD2 of the Local Plan is the key policy for the North West Preston strategic location and sets out the required infrastructure and the specific criteria for assessing development proposals in the area.

- 2.2.5 Initially, a specific planning policy for Cottam Railway was included within Preston's Local Plan (known as IN4). However, the planning inspectorate concluded that this policy should be removed because the policy was added prematurely as a specific site area for the new station had not been determined. It was understood, however, that negotiations with Network Rail would be on-going and the potential for a new railway station could be considered later.

Preston City Transport Plan:

- 2.2.6 The Preston City Transport Plan (PCTP) was adopted in October 2019 and is intended to create a 20-year vision for movement and connectivity in the city. It presents a long-term strategy for reducing congestion, providing better public transport and transforming the city and the wider sub-regions streets and spaces. Within this Transport Plan, a proposed new railway station: Cottam Parkway is mentioned as a 'Key Proposal' and is intended to serve around 6,500 new homes in North West Preston and would link in with the Preston Western Distributor Road and East West Link Road (PWDR/EWLR).

2.3 Consideration of Alternatives

- 2.3.1 Schedule 4 of the Infrastructure Planning (Environmental Impact Assessment (EIA)) Regulations 2017 requires an Environmental Statement (ES) to provide *‘A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects.’* This chapter addresses this requirement.
- 2.3.2 A number of alternative options were explored by Network Rail for the location of the railway station platforms and by Lancashire County Council whilst designing the access road alignment.
- 2.3.3 The constraints and criteria that have helped guide the decision-making process are detailed in the Options Report in Appendix 1-3.1 in volume 3 of this ES.

Railway Station Location

- 2.3.4 Five railway station siting options were considered initially. This gave rise to five potential layouts, with all railway station buildings located on the northern side of the Preston Fylde Junction to Blackpool North Line.
- 2.3.5 The location for the possible siting of the railway station was an area bounded by the Lancaster Canal to the north, Lea Road to the east, the PWDR to the west and the Preston Fylde Junction to Blackpool North Line to the south.
- 2.3.6 The five options for railway station siting were as follows:

Table 2.1: Railway Station location options

Option	Location
1	Located partly below the Preston Western Distributor Viaduct and the overhead power lines
2	Situated closest to Lea Road
2a	Situated adjacent to Darkinson Lane/Sidgreaves Lane
2b	Situated between option 2 and 2a and is an optimised version of these two options
3	Located on a curved portion of the track in the centre of the area and situated to the west of Darkinson Lane

Figure 2.1: Visual representation of Railway Station location options

2.3.7 Option 2b was considered as the preferred option.

2.3.8 The five railway station siting location options considered have some similarities:

- The constraints for all of the options are similar in terms of siting due to the nature of the local topography and the relationship of the locale to the railway line.
- All have the same effect on the number of OLE stanchions (8no.) that need to be redesigned and replaced as all proposed platform lengths are the same.
- All will have to re-route signals cabling and probably drainage runs.
- Access requirements are preferred from the north. However, options for the access route do vary.

2.3.9 However, there are several constraints that separate the individual options and the effects they have on the operational railway. These relate to both the construction and maintenance throughout the lifespan of the railway station.

Table 2.2: Options for Railway Station Location and reasons for rejecting

Option	Main Reason/s for rejecting
1	<p>Option 1 would be located to the west of Sidgreaves Lane and has a straight piece of track partly below the future PWDr Viaduct and two existing high voltage overhead power lines. Whilst the location has the advantage of a straight track and relatively minor effect on the signalling, it has disadvantages in terms of the proximity to, and under, the existing power lines, which introduces an unnecessary element into the construction and future maintenance of the station and platforms. Future repairs would be restrictive particularly regarding any processes that require working at height. Signalling and OLE alteration works will also be required at this location. Additionally, future work programmes for both the highway and railway infrastructure have the potential to cause conflict and disruption to each other. Option 1 is not a preferred solution.</p>
<p>Option 2/2a/2b are located on a straight piece of track, but to the east of the site it is unhindered by any external infrastructure with the exception of the proximity to the golf course. This location provides three variations to mitigate clashes with signalling, viewing distances and proximity to the adjacent underbridge crossing over Lea Road, as follows:</p>	
2	<p>Option 2 would have required alterations regarding the railway signalling. To accommodate trains with up to 8 carriages would require one signal move. To accommodate up to 11 carriages, 2 signal moves would be required.</p>

2a	Station option 2a would require the move of 2 railway signals. This option would also require a reduction in contact wire height through part of the station area.
3	<p>Option 3 would be located on a curved portion of the track in the centre of the site. The separation of the locations as optional potential development areas is decided by the fact that the central location (Option 3) is located against a section of curved track. Whilst railway stations can be placed on curved track, this introduces unnecessary costs and increased maintenance and would not be considered as a preference if other viable options exist. Other considerations for a station on curved tracks include:</p> <ul style="list-style-type: none"> ▪ Maintenance – increased degree of technical expertise required to implement a tamping scheme (i.e. track maintenance and alignment) through site; ▪ Whether steel sleepers are on the Up Fylde then they would need to be replaced with concrete or timber for at least the length of the platform. A Steel sleepered track is difficult to align and move to ensure correct clearances; ▪ The platform edge must comply with gauging and stepping distances which is challenging to construct; ▪ Visibility considerations; ▪ Alteration to the cant (the amount by which one rail is raised above the other rail) would have cost implications and result in a change of contact position for the pantograph and contact wire; and,

- The follow-on effects for platform design and construction, e.g. platform width.

For these reasons, Option 3 is the least preferred option.

Access Road location

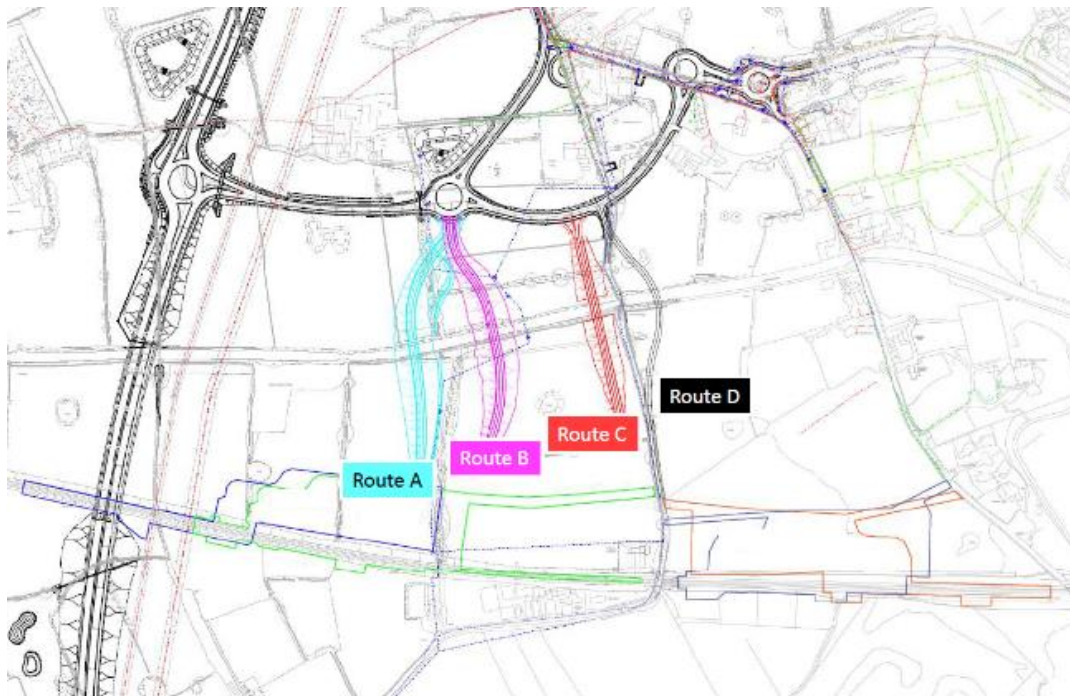
2.3.10 One of the main considerations for the access road was that the route alignment would commence from the PWDR via the Cottam Link Road. The Cottam Link Road was designed with a junction intended to facilitate the access route (feeder route) to the Scheme.

2.3.11 As a result, four alignment options for the feeder road are presented within this chapter as: Route A, Route B, Route C, and Route D.

2.3.12 Route A and Route B assumed a connection from the Cottam Link Road junction whereas Route C and Route D propose a more eastern connection to the Cottam Link Road itself. Owing to Option 2b being proposed for the station location the eastern routes were preferred with Option C having the benefit of allowing a more westerly located station facility.

2.3.13 For further information, please refer to Options Report (Appendix 3.1).and Design and Access Statement.

2.3.14 The evaluated options are illustrated within Figure 2.1.

Figure 2.2: Location of access road options

Access Road Bridge

2.3.15 The access road bridge over the Lancaster Canal has been set as far as possible from Quaker Bridge, which is a listed building, to minimise impact on its setting.

2.3.16 Three similar bridge configurations were considered as follows:

- Option 1 - 3 span precast concrete arch with reinforced concrete abutments and piers. The spandrel walls and parapets will be brick clad. The main centre arch spanning the canal, the 2 smaller flanking arches spanning farm access tracks.
- Option 2 - 3 span pre-stressed beam with reinforced concrete deck supported on reinforced concrete piers located between the canal and farm tracks.
- Option 3 - Single span reinforced concrete, pre-stressed beam bridge over the canal with pre-cast concrete box culverts for the farm access tracks.

- Option 4 - Steel girder bridge with reinforced concrete deck slab. Single or multi-span depending on steel girder size required for the span and allowable construction depth of bridge. Intermediate supports to reduce overall beam depth.

2.3.17 For further information, please refer to Options Report (Appendix 3.1). and Design and Access Statement.

2.3.18 The chosen bridge arrangement would be Option 1, a 3-span structure. It was chosen due to benefits including:

- Being more aesthetically pleasing
- The 3-span structure requires shallower construction depth for the deck over a single span structure, to fit within the limited construction envelope and reduces the extent of embankments required.
- Intermediate piers set back from edge of canal and towpath to maintain a more 'pleasant environment' along the canal.
- Limited maintenance throughout structure life
- Use of precast elements over the canal is simpler and reduces risk of polluting the watercourse. This form of construction would have a lesser impact on the operation of the canal.