

Scheme Summary

Name of Scheme:	Corridor Improvement Programme A660/A658 Dyneley Arms
PMO Scheme Code:	WYTF-PA4-038a-2
Lead Organisation:	Leeds City Council
Senior Responsible Officer:	Melanie Corcoran
Lead Promoter Contact:	Mark Philpott
Case Officer:	Chris Payne (Mott MacDonald)
Applicable Funding Stream(s)	West Yorkshire plus Transport Fund
Growth Fund Priority Area (if applicable):	Priority 4b – West Yorkshire plus Transport Fund
Approvals to Date:	Programme level at decision point 2 – June 2017
Forecasted Full Approval Date (Decision Point 5):	Forecasted full approval date: July 2019
Forecasted Completion Date (Decision Point 6):	Forecasted completion date: October 2019
Total Scheme Cost (£):	£2.747 million
Combined Authority Funding (£):	£2.747 million – West Yorkshire plus Transport Fund
Total other public sector investment (£):	£0
Total other private sector investment (£):	£0
Is this a standalone Project?	No
Is this a Programme?	No
Is this Project part of an agreed Programme?	Yes –Corridor Investment Programme (CIP) – Phase 1

Current Assurance Process Activity:



Scheme Description:

2.60 The A660/A658 Dyneley Arms project is part of Phase 1 of the Corridor Improvement Programme (CIP). This outline business case (OBC) details improvements to the Dyneley Arms junction with the A660 Leeds Road and A658 Pool Bank New Road in Bramhope. It is currently a four-arm traffic signal-controlled junction immediately adjacent to the Dyneley Arms public house that gives its name to the junction. All arms are signal controlled except for the north-to-east movement from the A658 Pool to the A660 towards Leeds, which is priority controlled.

Leeds City Council (LCC) has undertaken considerable work to identify an improvement scheme for Dyneley Arms. However, the junction presents several engineering challenges due to local topography, land ownership and property constraints. Traffic approaching the junction from Pool and the north does so on a very uphill steep gradient, and traffic from the south approaches on a (less steep) downhill gradient to the junction. The gradients complicate improvement options at the junction and significant engineering works are therefore required to achieve a scheme with appropriate capacity. A report to the Executive Board dated 20 September 2017 recognised these challenges and stated that an improved junction will require purchase of third party agricultural land.

This OBC details an interim, 'Quick Win' scheme that will provide the additional capacity required in the short and medium term to mitigate existing congestion, accommodate continued traffic growth and enable development, whilst recognising that a larger scheme is needed in the medium-to-long term.

It is anticipated this scheme will be a short-term intervention and a more significant improvement for the junction will be necessary in the medium-to-long term. Although this could be considered a risk to the investment of public money, any future scheme will seek to maximise the investment made under CIP Phase 1.

A 'Quick Win' scheme under CIP Phase 1 will ensure rapid delivery of a junction improvement in line with the funding objectives but limiting the potential exposure of the investment should the requirement for a larger intervention at a later date come to fruition.

Business Case Summary:

Strategic Case

The scheme seeks to address the need to alleviate current peak capacity. Leeds City Council (LCC) has conducted a junction hotspot exercise using Trafficmaster data (GPS sourced dataset providing detailed analysis of congestion) and the junction was ranked within the top 30 most congested junctions in the Leeds District. There is therefore the opportunity to provide a step change in traffic capacity at the junction and to improve journey times between Leeds and Harrogate and the intervening villages.

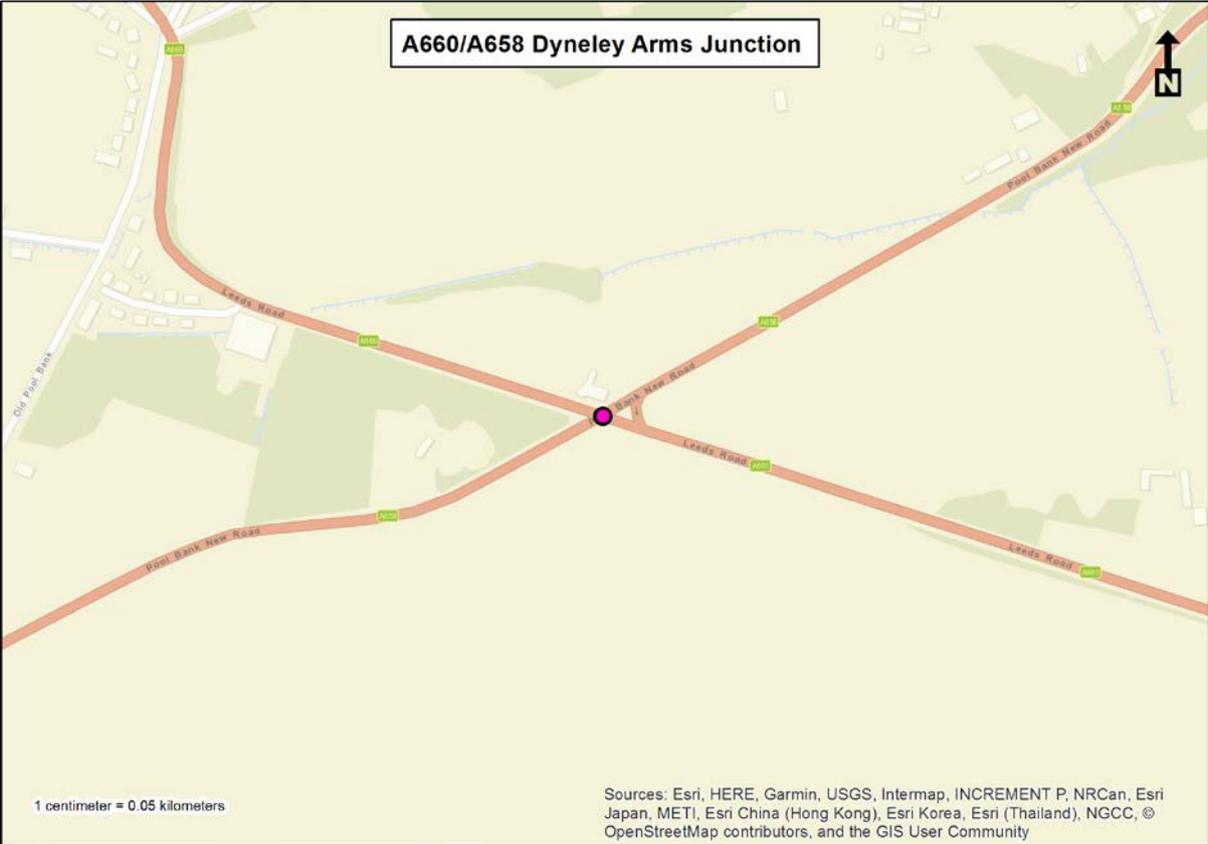
Dyneley Arms acts as a crucial intersection connecting Wharfedale, North Yorkshire, A1 Corridor, LBA and Leeds. While there are no immediately

	<p>adjacent development sites, improvement to Dyneley Arms will facilitate access and increased demand to and from the surrounding urban areas. This includes 36.23 hectares of employment land at Leeds Bradford Airport and several housing developments in Bramhope and east of Otley amounting circa 1,200 new houses.</p> <p>There is also an opportunity from new housing developments to secure S106 developer contributions towards this scheme. The east of Otley housing will be funding the east of Otley relief road which has circa £7 million of Housing Infrastructure Framework funding from Ministry of Housing, Communities and Local Government.</p> <p>The project's main contribution to the Leeds City Region Strategic Economic Plan is towards Priority Area 4, but there are also consequent benefits on Priority Areas 1-3 in terms of facilitating business growth, improving access to jobs and improving air quality.</p> <p>The Dyneley Arms scheme improves capacity at a key strategic junction. Improvements to the junction will reduce congestion, improve connectivity and also unlock development.</p> <p>In summary the scheme:</p> <ul style="list-style-type: none"> • Helps SEP objectives to be achieved through connecting people to employment and skills opportunities. • Improves accessibility between Leeds and Harrogate and Otley. This in turn will boost business growth, productivity, exports and business. • Facilitates accessibility to employment growth sites that will assist Leeds in delivering more jobs. • Provides journey time enhancements to key bus routes between Leeds and Harrogate and Otley, increasing the potential for residents to access new skills and increase opportunities for career progression. • Reduces congestion, leading to environmental improvements and localised air quality improvements. • Improves journey times and increases journey reliability.
<p>Commercial Case</p>	<p>The existing traffic signal-controlled junction is heavily trafficked during weekday peak periods. The resultant queues and delays impact on journey time reliability and creates adverse localised environmental issues such as increased noise and particulate matter emissions, also contributing to issues within the Pool AQMA (Air Quality Management Area) designated north of the junction.</p> <p>Based on traffic data, the existing layout is overcapacity in the morning peak hour with existing flows approaching capacity during the afternoon peak. The causes of queues and delays at the junction are in large part caused by right turning vehicles delaying those trying to continue ahead through the junction, this especially so for the southbound movement from Pool.</p> <p>These traffic flows were used to produce a junction model, where it was found that the Ahead/Right lane on the A658 from Pool was over capacity.</p> <p>The preferred option will;</p> <ul style="list-style-type: none"> • Address existing operational issues at the junction to improve throughput and delay currently experienced.

	<ul style="list-style-type: none"> • Create improvements for the uphill route from Pool through the junction especially for larger vehicles (Bus / HGV), by reducing stop potential at the signals. • Maintain a well function junction in the short and medium term ensuring access to Leeds Bradford Airport in particular is not hindered. • To provide improvements to the AQMA in Pool. <p>The scheme will follow the Leeds Public Transport Infrastructure Fund (LPTIP) delivery partner approach, with all of the Leeds CIP schemes (Dawsons Corner and Fink Hill) are to be packaged together to make it more attractive to the market. The Council will use YORcivils framework to procure the delivery partner</p>
<p>Economic Case</p>	<p>Potential improvement schemes for the junction have been under consideration for a number of years. Provision of improved capacity at the Dyneley Arms junction is the fundamental driver for the proposed scheme.. Existing capacity issues mean that additional highways capacity will be needed in order to accommodate any future development.</p> <p>Due to the quick win nature of the scheme, its performance has been examined over a more limited appraisal period than would normally be expected. For most highway schemes, an assessment period of 60 years is used, as it is considered to be equivalent to the life of the scheme. However in this instance, an appraisal period of 7 years has also been presented, as it is anticipated that a more significant network improvement would be required in the longer term.</p> <p>Through the options assessment it was found that Option 4, ‘Quick Win’ , has a benefit cost ration (BCR) of 10:90:1 when assessed over a conventional 60 year appraisal period. Even when assessed over a shorter 7 year appraisal period, it still achieves a BCR of 1:59:1.</p> <p>.</p> <p>The scheme provides a significant capacity improvement at a relatively low financial and environmental cost.</p>
<p>Financial Case</p>	<p>The total project outturn costs is £2.747 million. The proposed scheme is to be wholly funded by the Combined Authority through the West Yorkshire plus Transport Fund. Funding will be used to pay for 100% of the scheme; including design and construction.</p> <p>In terms of section 106 contributions, as this is Quick Win scheme and comes in well under the £8 million larger scheme submitted at expression of interest stage, the Council has not considered any 106 contributions at outline business case stage.</p> <p>Further, any developer contributions which may come forward in the future may be more suited to the larger scheme and can be allocated against this..</p> <p>As the project moves into activity 4 (full business case) a project board will be established to oversee the management of the design and delivery of the three Leeds City Council (LCC) CIP schemes. The project board will set cost tolerances for the project manager for each scheme which fit within the grant funding available through the CIP programme. The project manager will escalate to the LCC project board if those tolerances are going to be exceeded. Should the costs exceed those approved for the scheme then the</p>

	project board will escalate the matter to the Combined Authority programme board.
Management Case	<p>The Corridor Improvement Programme is a programme managed by the Combined Authority. There is an established programme management board chaired by the Senior Responsible Owner (SRO) and supported by a Programme Manager. Both these roles along with the programme support are fulfilled by the Combined Authority.</p> <p>The board meets monthly and is attended by Project Managers from the Partner Districts who are developing schemes included in phase 1 and who provide highlight reports outlining progress, key risks / issues and financial forecasting on the individual projects.</p> <p>LCC has appointed WSP as technical consultants and senior suppliers. Other framework partners will be appointed to assist with delivery of detailed scheme design, developing the full business case and scheme construction.</p> <p>The scheme development commenced in March 2017 and it is anticipated that the scheme will be completed on site in October 2019.</p>

A660/A658 Dyneley Arms Junction



1 centimeter = 0.05 kilometers

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