



Environment and Infrastructure Ltd

STUDY – IMPACT OF HS2 ON THE A619 REGENERATION ROUTE

January 2014

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IMPACT OF HS2 ON A619 REGENERATION ROUTE

1. EXECUTIVE SUMMARY

- 1.1 The current HS2 proposals include provision for an Infrastructure Maintenance Depot (IMD) at Staveley.
- 1.2 This study assesses the impact of the IMD on proposals for the A619 Chesterfield – Staveley Regeneration Route (CSRR). It looks at alternatives and suggests possible adjustments to the IMD location together with a feasible alternative route that could satisfy the concerns of interested parties. Derbyshire County Council (DCC) is fully committed to joint working with all groups including Chesterfield Borough Council (CBC), landowners such as Chatsworth Settlement Trustees (CST) and Rhodia Ltd and HS2 Ltd to achieve a satisfactory solution for all parties.

2. INTRODUCTION

- 2.1 The proposed route of HS2 through North Derbyshire includes provision for an IMD at Staveley. The proposed site conflicts with CBC proposals for housing and employment development and, in places, with plans for the restoration of the Chesterfield Canal. DCC, with support from CBC, has commissioned a study of the economic impact of the proposed depot from Volterra partners. CST have commissioned a study from Ove Arup and Partners (Arup) to identify the potential for adjusting the site boundaries to provide a better fit with current and potential development opportunities. HS2 Ltd has indicated that whilst they have a strong preference for this location there is some flexibility in the site boundaries.
- 2.2 There are long-standing proposals for the provision of major highway infrastructure in this corridor. A scheme originally known as the Brimington-Staveley By-Pass, but later as the Regeneration Route, has been safeguarded for some considerable time. A series of changes including a new Junction 29a on the M1 and the preparation of an Area Action Plan led to the County Council recognising the need to re-examine the alignment of the route. This study is required to assess the impact of the proposed IMD and the proposals from CST and CBC contained in the Staveley and Rother Valley Corridor Area Action Plan [SRVCAAP] for the route and the feasibility of adopting an alternative alignment that provides a better fit with emerging proposals.
- 2.3 Given the limited time available the study concentrates on establishing the impact of the current proposals on the indicative SRVCAAP route and the viability of any alternative alignments, together with an assessment of the associated risks. The report has been informed by a meeting held by Derbyshire County Council, Chesterfield Borough Council and Chatsworth Settlement Trustees with HS2 Ltd on 7th January 2014.

3. CONTEXT

- 3.1 The CSRR is needed to relieve congestion on the A619, provide a strategic link between Chesterfield and the M1 [Junction 29a] and support regeneration of the Staveley area.
- 3.2 The proposed HS2 IMD will occupy land suggested for an alternative alignment to the current Regeneration Route within the emerging SRVCAAP. That alignment would maximise the potential for regenerative benefits from comprehensive redevelopment of the area and avoid or mitigate negative impacts that would be associated with the currently protected alignment.
- 3.3 The Volterra report concludes that “the IMD will have a positive impact on the area and should be supported but it is important to undertake further work and continue discussions with HS2 Ltd in order to ensure that it is made as compatible as possible with the existing regeneration plans.”

The Route

- 3.4 The new route is a long standing infrastructure objective for both CBC and DCC. An alignment was protected within the adopted Replacement Chesterfield Borough Local Plan (2006). This protection has been ‘carried over’ to the Chesterfield Local Plan: Core Strategy (adopted 2013). However within the Core Strategy it has been recognised that the currently protected alignment would not maximise regeneration benefits and an alternative route, such as shown within the emerging SRVCAAP is now preferred.
- 3.5 The route is also supported by the local highway authority and is named in the Derbyshire Local Transport Plan (LTP3). See the attached Technical Note at Appendix A for full details.
- 3.6 Traffic congestion along the A619 corridor remains a major problem affecting local communities and is the primary source of emissions resulting in the inclusion of the corridor in Air Quality Review and Assessment procedures. The new route would provide the strategic link from Chesterfield to the M1 (J29a) reducing congestion and also having potential to assist in bringing a large area of derelict land into productive use. The growing role of the Chesterfield Canal in leisure, accessibility and biodiversity and the support it provides for the regeneration of the area must also feature in the consideration of an alignment.

Infrastructure Maintenance Depot

- 3.7 HS2 Ltd made the site their preferred location for the IMD because it fits the standard depot specification including;
- It is approximately midway between Birmingham and Leeds (the eastern leg of Phase 2).
 - It is around 1km long by 0.25km wide and is flat and straight.
 - It is close to conventional rail and the proposed high speed network.
 - It is a 'brownfield' site that offers environmental and regeneration benefits.
 - There is a good link to the M1 motorway.

4. APPROACH AND METHODOLOGY

- 4.1 The report that CST commissioned from consultants Arup has been produced four different development scenarios within the SAAP. From these alternatives the two that least affected the development area were selected as the basis for the alternative routes below. These are referred to as scenarios S1 and S4 in the Arup report.
- 4.2 Derbyshire County Council has already compromised on the route within the SRVCAAP. The proposed alignment is now a dual purpose one, acting as both a strategic route and yet providing access to development. This has meant a lower design speed than normally expected for a 'strategic route' and there has been an acceptance that the route is less short and direct than originally envisaged. However the route must still meet DCC strategic objectives of design speed and directness and be able to serve as the principal road in the corridor - and these have now been stretched to their fullest extent.
- 4.3 Route A, based on Arup scenario S1, passes to the north of the proposed depot and route B, based on Arup scenario S4, passes to the south. Both routes have a 40mph design speed. The southern route is achieved by relocating the area of proposed IMD further north and even then it slightly impinges on the IMD. See enclosed plans no 47068060/HS2/A619/1 and /2 at Appendix B. A corridor of land 20 metres wide is shown.

Potential Solutions

- 4.4 Route A leaves the existing Hall Lane roundabout at Staveley in a north-westerly direction and then turns west to run parallel to the current railway line before joining the proposed SRVCAAP alignment to the east of Works road and its roundabout junction. There is a minimum radius curve to the alignment

requiring super elevation to enable the route to turn west and the vertical alignment would need careful consideration as it crosses the proposed IMD near Hall lane, requiring a bridge structure. Where it closely parallels the mineral railway there may be requirements for safety fencing/ protection to the railway. Access to the IMD site could come from the new route, although this does not allow access to development land to the south of the IMD and a separate access road would be needed.

- 4.5 The southern route (B) leaves Hall Lane roundabout in a south-westerly direction following the line of the original regeneration route for a short distance before turning west to take a line parallel to the south edge of the resited proposed IMD location and then skirting the west side to join the existing SRVCAAP route at Works Road. A roundabout junction would be required as it crosses Works Road. A bridge crossing of the River Rother would be needed, but otherwise this is a relatively straightforward alignment. However the route still passes through the south/west boundary of the IMD site and hence there is a pinch point at this location. To enable room for this route it would be necessary to move the IMD to the north and east and/or shorten the site length. However the route could be examined to slide the alignment slightly west, not sufficient to entirely remove it from the IMD footprint but possibly to enable the road to pass adjacent to a slightly modified IMD boundary. This would depend on further examination of the ground conditions, flood issues and the detailed alignment of the route. Access to the IMD should come from the east of the site, possibly off Hall Lane, or along the new SRVCAAP/regeneration route, to avoid traffic using unsuitable minor roads.

- 4.6 The alternative alignments considered have similar route lengths and likely structure requirements. The northern route has horizontal and vertical alignment issues from the Hall Lane roundabout for several hundred metres west. This makes it unattractive both from a cost and technical viewpoint. In addition there would need to be a completely separate access road to enable development of land to the south. The southern route will only be suitable if

the IMD is relocated and /or shortened. At this stage there is no reason to rule out either option from a purely highways perspective. However both routes come with extra costs in comparison to the original proposals through the SRVCAAP site.

- 4.7 The risk of developing one of these alternatives is mitigated by the fact that both solutions exist within the current SRVCAAP boundary. However as the area is 'Brownfield' land there may be as yet unforeseen costs involved with its development such as for remediation. There is also the need to mitigate any flood risk concerns that the Environment Agency may have.

5. CONCLUSIONS

- 5.1 The currently planned IMD proposals make undeliverable the alignment shown for the CSRR in the SRVCAAP. However there are options available that can make it work. In particular a route to the south of the IMD, based on a variation of option B, could deliver each party's requirements. HS2 Ltd should be urged to review the location and internal layout of their site with a view to facilitating provision of the CSRR and development proposals for the area. The parties should also investigate if some of the proposed route should be built at an early date in order to facilitate construction of the IMD, as road access to the site should come from the newly built A619 and not from any other existing roads.

6. APPENDICES

APPENDIX A – TECHNICAL NOTE

APPENDIX B – PLAN DRAWING NUMBER 47068060/HS2/A619/1 - ROUTE A.

PLAN DRAWING NUMBER 47068060/HS2/A619/2 - ROUTE B

APPENDIX A

TECHNICAL NOTE

Technical Note: December 2013

Impact of HS2 on A619 Regeneration Route

Introduction

The current HS2 proposals include provision for an Infrastructure Maintenance Depot (IMD) at Staveley. The proposed site conflicts with Chesterfield BC proposals for housing and employment development and, in place, with plans for the restoration of the Chesterfield Canal.

The purpose of this note is to summarise the objectives of the regeneration route in terms of the local plan policy and current Derbyshire Local Transport Plan (LTP3).

Chesterfield Borough Council Local Plan (Core Strategy)

Chesterfield Borough Council adopted the Local Plan (Core Strategy) at a meeting of the full council on the 24th July 2013. This followed successful examination of the Core Strategy and its supporting documentation in early 2013. As such, the Core Strategy is a recent and robust planning document, which has been accepted by both the national planning inspectorate and local council members.

The Core Strategy sets out the strategy for development across the borough until 2031 and identifies which broad areas are suitable for development. As per prevailing legislation (including the Localism Act), the Core Strategy has been the subject of extensive consultation, including with the public of Chesterfield Borough, neighbouring local authorities, and the Highways Agency.

The Core Strategy states at paragraph 5.95 that:

“A number of major transport routes have been safeguarded in the local plan and identified in the Derbyshire County Local Transport Plan (LTP). The most significant of these is the Chesterfield-Staveley Regeneration Route.”

The Core Strategy also specifically safeguards the Chesterfield-Staveley Regeneration Route at Policy CS21.

CS21 Major Transport Infrastructure

The council will safeguard land for major new transport infrastructure including:

- Chesterfield-Staveley Regeneration Route
- Staveley Northern Loop Road Phase 2
- Chesterfield Town Centre Relief Road
- Rail Halt at Barrow Hill
- Rail Terminal at Markham Vale

The purpose of the Chesterfield-Staveley Regeneration Route is to support the redevelopment of the Staveley and Rother Valley Corridor (which in turn is expected to generate employment in the local area) and provide relief to the existing A619 corridor through Brimington. The Core Strategy states at paragraph 6.19:

“The Staveley and Rother Valley Corridor is the largest regeneration opportunity within Chesterfield Borough (covering approximately 150 ha) and, consequently, is the one ‘strategic site’ in the Core Strategy.”

The importance of the Staveley and Rother Valley Corridor is also set out in Policy PS5:

PS5 Staveley and Rother Valley Corridor

The borough council will publish an Area Action Plan for the Staveley and Rother Valley Corridor demonstrating how the area will be comprehensively redeveloped to create a sustainable urban extension in a landscape setting through a masterplanned approach.

The objectives of the masterplan will be to:

- a) Deliver a range of new housing opportunities (up to 2000 dwellings) focussed on the centre and western end of the corridor
- b) Create employment opportunities (up to 50ha) focussed on the Hall Lane end of the corridor and around Works Road
- c) Provide a new local centre to serve both the development itself and adjacent communities of Barrow Hill and Hollingwood
- d) Develop a sustainable community including on-site energy generation where possible and practicable.
- e) Enhance the quality of and access to the landscape and green infrastructure, particularly the Chesterfield Canal and River Rother waterways
- f) Deliver access and transport improvements, emphasising sustainable transport
- g) Improve water management on site
- h) Provide for the remediation and re-use of contaminated and unstable land where possible and practicable
- i) conserve and enhance the quality of the historic environment, taking account of designated and non-designated heritage assets within and closely related to the site.

Development proposals must be brought forward as part of a comprehensive masterplan for the area and must demonstrate how they will deliver the objectives of the Area Action Plan.

As stated on the Chesterfield Borough Council website, policies from the **2006 Replacement Chesterfield Borough Local Plan** have been retained until the adoption of the Local Plan (Sites and Boundaries) document. One such policy is TRS3 which is re-produced below:

TRS 3 CHESTERFIELD-STAVELEY REGENERATION ROUTE

THE DETAILED DESIGN OF THE CHESTERFIELD-STAVELEY REGENERATION ROUTE AND THE LOWGATES LINK MUST TAKE FULL ACCOUNT OF:

- (a) EITHER THE PROPOSED NEW JUNCTION 29A AND OTHER ROAD IMPROVEMENTS ASSOCIATED WITH THE MEGZ (MARKHAM VALE) DEVELOPMENT OR, IN THE ABSENCE OF A SIGNED CONTRACT FOR THE CONSTRUCTION OF THE PROPOSED NEW JUNCTION 29A, THE IMPACT OF TRAFFIC ON JUNCTION 30 AND THE A61;
- (b) THE EXISTING CHARACTER OF THE ROTHER VALLEY AND CHESTERFIELD CANAL AND MINIMISE ANY IMPACT ON THEIR NATURAL ENVIRONMENT;
- (c) THE POTENTIAL FOR ENHANCING THE RIVER AND CANAL CORRIDOR, IN PARTICULAR THE RESTORATION OF THE CANAL FOR NAVIGATION;
- (d) THE POTENTIAL FOR THE CREATION OF GREENWAY ROUTES TO REPLACE EXISTING RIGHTS OF WAY AFFECTED BY THE SCHEME;
- (e) THE AMENITY OF RESIDENTS IN THE NEIGHBOURING AREA.

PLANNING PERMISSION WILL ONLY BE GRANTED PROVIDED THAT THE SCHEMES ACCOMMODATE ANY DISTURBANCE TO THE RESTORED CANAL AND THE TRANS PENNINE TRAIL BY REPLACING THE FACILITIES TO AN EQUIVALENT OR IMPROVED STANDARD.

Derbyshire Local Transport Plan (LTP3)

The transport infrastructure within Chesterfield is the responsibility of Derbyshire County Council. The Derbyshire County Council Local Transport Plan (2011 to 2026 sets out the strategy for the management and improvement of the transport network). Within this document, the A619 Staveley – Brimington Bypass (Chesterfield to Staveley) is identified as being a scheme which the County will pursue in association with land-use developments.

As such, the A619 Staveley-Brimington Bypass (Chesterfield to Staveley) is fully supported by the local highway authority. [*Now known as Staveley Regeneration Route*]

Summary

The proposed HS2 IMD will occupy land intended for the Chesterfield-Staveley Regeneration Route and the redevelopment of the Staveley and Rother Valley Corridor.

Both these related schemes have a long history within relevant planning documentation, including in the recently adopted Chesterfield Local Plan (Core Strategy) and its immediate predecessor, the 2006 Replacement Chesterfield Borough Local Plan. These documents were approved and adopted in 2013 following extensive consultation and review by the relevant planning authorities.

The Chesterfield-Staveley Regeneration Route is also supported by the local highway authority, and is a named scheme in the Derbyshire Local Transport Plan.

APPENDIX B

PLAN DRAWING NUMBER
47068060/HS2/A619/1 –

ROUTE A

PLAN DRAWING NUMBER
47068060/HS2/A619/2 –

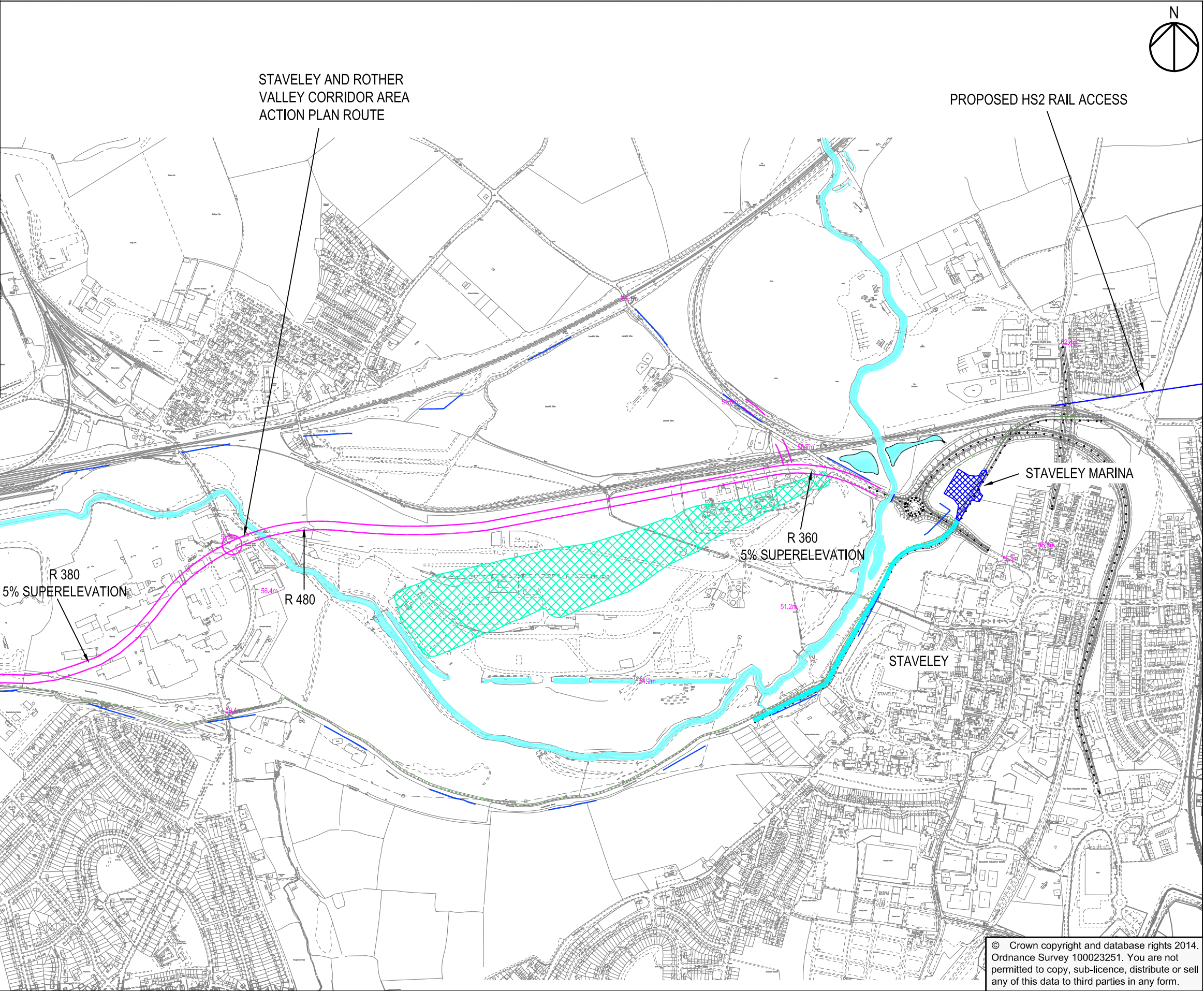
ROUTE B

NOTES

1. Length of Proposed Route Within Staveley Area Action Plan Boundary = 3045m
2. 40MPH Design Speed

- Possible Roundabout Location
- Staveley Marina
- Proposed Infrastructure Maintenance Depot (IMD)
- Staveley Area Action Plan Boundary
- 51.2m

Spot Heights
- Trans Pennine Trail



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New Route Title	JPH JC	28/01/14	C
DCC Title Changed	JPH MD	24/01/14	B
Minor Amendments	SA MD	16/01/14	A
Revision Details	By Check	Date	Suffix



MIKE ASHWORTH
Strategic Director – Economy, Transport and Environment

Client	Project & Drawing Title
	HS2 - A619 Staveley Regeneration Route Options ROUTE A TO NORTH OF IMD







Purpose of issue				
FOR INFORMATION				
Designed JC	Drawn SA	Checked MD	Approved JC	Date JAN 14
URS Internal Project No. 47068060			Suitability	
Scale @ A3 N.T.S.			MOU Number 3247	

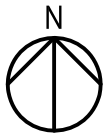
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NOTES

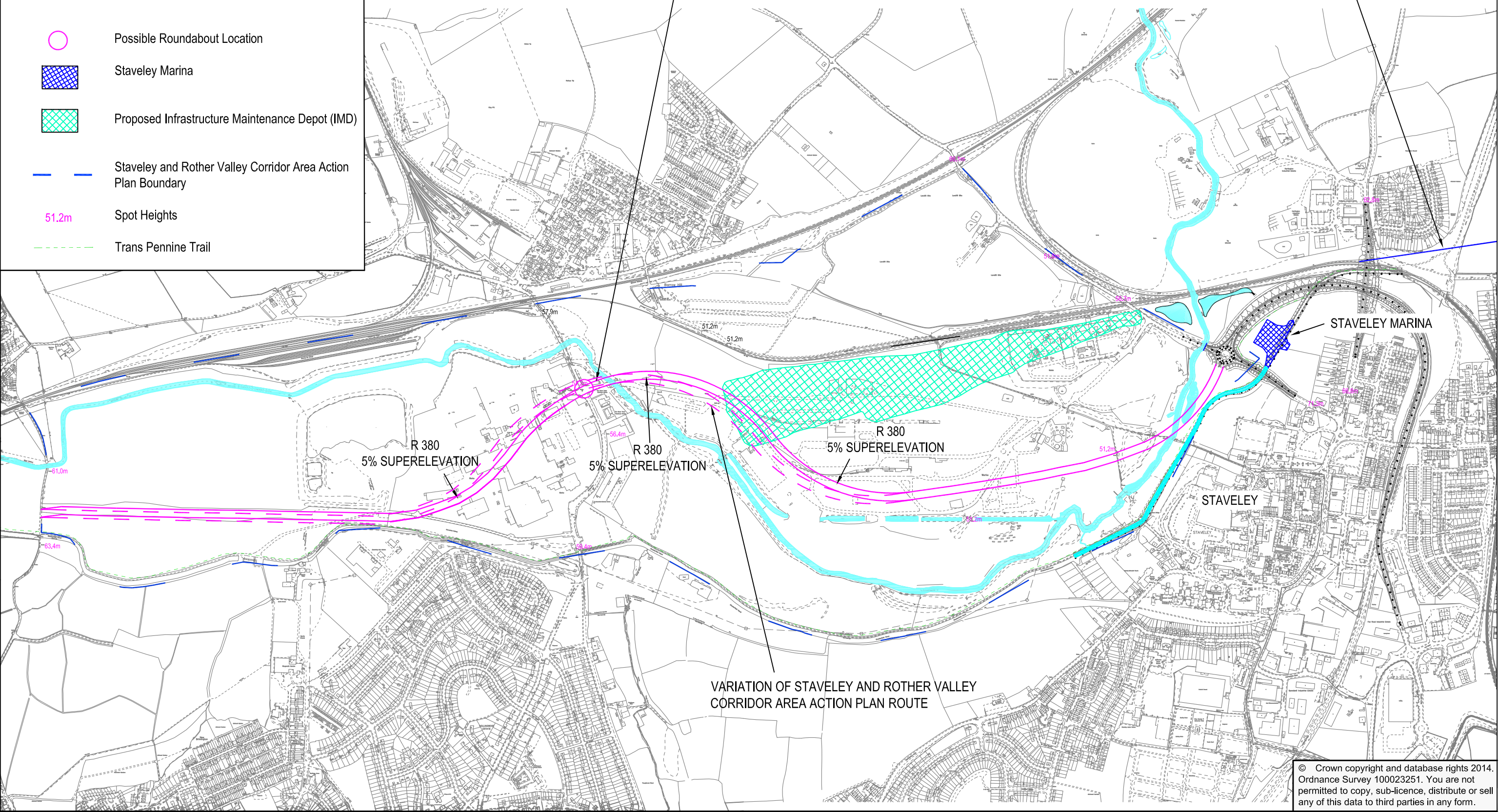
- 1. Length of Proposed Route Within Staveley Area Action Plan Boundary =3300m
- 2. 40MPH Design Speed

-  Possible Roundabout Location
-  Staveley Marina
-  Proposed Infrastructure Maintenance Depot (IMD)
-  Staveley and Rother Valley Corridor Area Action Plan Boundary
-  51.2m Spot Heights
-  Trans Pennine Trail



PROPOSED HS2 RAIL ACCESS


STAVELEY AND ROTHER VALLEY
CORRIDOR AREA ACTION PLAN ROUTE



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Added variation on route	SA MD	28/01/14	C
DCC Title Changed	JPH MD	24/01/14	B
Minor Amendments	SA MD	16/01/14	A
Revision Details	By Check	Date	Suffix

Client



MIKE ASHWORTH
Strategic Director – Economy, Transport and Environment

Project & Drawing Title

HS2 - A619 Staveley
Regeneration Route Options
ROUTE B TO SOUTH OF
REPOSITIONED IMD

Purpose of issue

FOR INFORMATION

Designed JC	Drawn SA	Checked MD	Approved JC	Date Jan 14
URS Internal Project No. 47068060		Suitability		
Scale @ A3 N.T.S.		MOU Number 3247		

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