

## Carlisle Southern Link Road TAG Stage 1 Addendum

September 2017

## Quality Management

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<b>Prepared by</b>	Warren Rocca	Signature	
<b>Checked by</b>	Katie Jackson	Signature	
<b>Approved by</b>	Warren Rocca	Signature	

## Revision Status / History

Revision	Date	Purpose	Prepared	Checked	Approved
<b>P01</b>	2017-09-06	S2 Initial draft report	WR	JD	WR
<b>P02</b>	2017-10-05	S2 amended following comments	WR	JD	WR
<b>P03</b>	2017-10-10	S2 Final	WR	JD	WR
<b>P04</b>	2017-10-11	S2 Final. Includes minor change to recommendation text.	WR	JD	WR

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# 1. Introduction

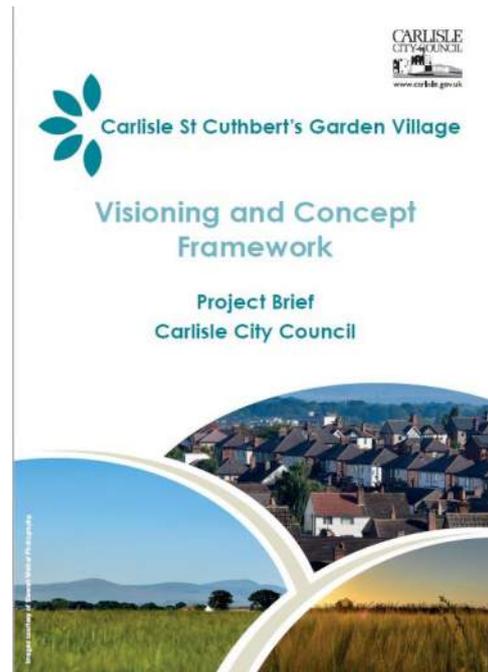
## 1.1. Background to addendum

- 1.1.1. As part of developing an improved road network, in and around Carlisle, Cumbria County Council are exploring the possibility of a Southern Link Road for Carlisle. The need to improve east to west connectivity was identified in the Local Enterprise Partnership (LEP) Cumbria Infrastructure Plan (2016) and in Carlisle City Council's recently adopted Carlisle District Local Plan 2015-2030. The link road would be an essential requirement to unlock land for the successful delivery of the planned St Cuthbert's Garden Village.
- 1.1.2. A transport appraisal Stage 1 report (titled *TAG Part 1 / DMRB Stage 1 Report*, document ref CSDR-CAP-ZZ-00-RP-Z-0001\_P004) was completed in June 2016 by consultants Capita. Since that work was undertaken an emerging draft vision for St Cuthbert's Garden Village has been developed. The Stage 1 report has been revisited to review that the conclusions of the report are still robust and that the route options recommended in the report continue to support the emerging vision for St Cuthbert's.
- 1.1.3. This addendum updates the original June report to take account of these changes.

## 1.2. Study background

- 1.2.1. The study background remains the same as the original report except that St Cuthbert's Garden Village has been successful in gaining government support, and initial draft thinking on the vision has been published. The emerging draft vision for St Cuthbert's is:
  - St Cuthbert's Garden Village will be a thriving new community on the edge of Carlisle, with excellent accessibility to the historic city centre for cultural and shopping experiences and to the wider countryside for leisure and recreation - it will feel like living in the countryside, with the amenities of a city on the doorstep.
  - St Cuthbert's will be a place for people to enjoy a healthy lifestyle, with well managed and maintained attractive, safe cycle and walking networks across the new community; into the city; and out to the countryside, making use of the river corridors and the improved footpath/cycle network. Sustainable living will be a key component with space to grow food and provide energy and local facilities that meet the everyday needs of residents. The greenspaces will allow views to the Lake District World Heritage site, the North Pennines, Scottish Southern Uplands and back towards the iconic landmarks of the City, whilst providing sustainable links between the community facilities within St Cuthbert's.

- St Cuthbert's will have a high quality built and natural environment, shaped through creative ideas from the community. There will be space for people to realise their hopes and aspirations for the future, with room for innovation and flexibility in employment and housing offer, making St Cuthbert's a key regional location to live, work, play and be creative and where aspiring entrepreneurs will be supported. Residents and visitors to St Cuthbert's will be reminded of the unique civic and industrial heritage of the City, with parts of the site providing views of the Castle and the listed Dixons chimney. Distinctive character areas will celebrate the best of Carlisle's historical urban grain and form including design cues from existing villages within the area, with a modern and contemporary interpretation encouraged where appropriate. An interesting variety of house types, styles and tenures will be available throughout, creating housing for all with space for individuality to provide a genuine choice for future and existing residents. There will be opportunities for both large and small-scale builders to construct homes, which will in turn provide creativity and variety of housing. Parks and more formal open spaces will demonstrate innovation and creativity in their form and layout, whilst also making the most of the natural features within the locality.



### 1.3. Stakeholder consultation

- 1.3.1. Ahead of commencing Stage 2 design development, the route options recommended at Stage 1 were reviewed in light of the further information available on St Cuthbert's Garden Village. As part of this review a workshop was held with Statutory Stakeholders on 20<sup>th</sup> July 2017 to establish key issues and to determine if any of the routes generated significant problems. A number of issues were raised but no individual route stood out as a particular concern (minutes of the workshop are included in Appendix A).

## 2. Context and need for intervention

### 2.1. Context

2.1.1. As discussed in the original Stage 1 report, consideration of the need for additional transport improvements in the city has stemmed from the emerging and substantial growth proposals to the south of the current urban boundary. St Cuthbert's Garden Village as a major mixed-use development will form the basis of the next phase of Carlisle's growth opportunities beyond the site-specific allocations provided within the adopted Local Plan.

### 2.2. Identified need for the intervention

2.2.1. The original report documented the following:

- Constraints on London Road and air quality issues.
- Travel congestion between east and west of the city and poor resilience, relying on two bridges over the Caldew
- Potential for increased congestion in the south of Carlisle as result of development.

2.2.2. In addition to these, it is recognised that Carlisle fulfils an important role as a strategic transport hub for the wider sub-region. The strategically important M6 passes through the District from south to north and links to Scotland beyond, as well as important east and west connections to Newcastle and the Northeast and West Cumbria including the Port of Workington and Britain's Energy Coast. The provision of a good quality link between the east and west is especially important given the scale of the nationally significant and thus strategic energy and employment proposals along the west coast of Cumbria, and the need to link these with the labour pool and supply chain to support delivery and to ensure wider economic benefits are maximised.

2.2.3. Conceptual work on the Garden Village has also started with initial traffic modelling work indicating that, without intervention, the local road network would be a limiting factor on the success and potential growth of the Garden Village as the majority of the junctions on the radial routes into Carlisle would be over capacity, resulting in delay and congestion.

2.2.4. The context and need for intervention therefore remains substantially unchanged, with only the additional detail of the emerging St Cuthbert's Garden Village vision adding to the future context.

### 2.3. Project Objectives

2.3.1. The project had 3 objectives when the Stage 1 study was undertaken. The Stage 1 objectives were:

- Enable development at Carlisle South;
- Reduce congestion on southern radial routes and in the city centre; and
- Assist east/west movement.

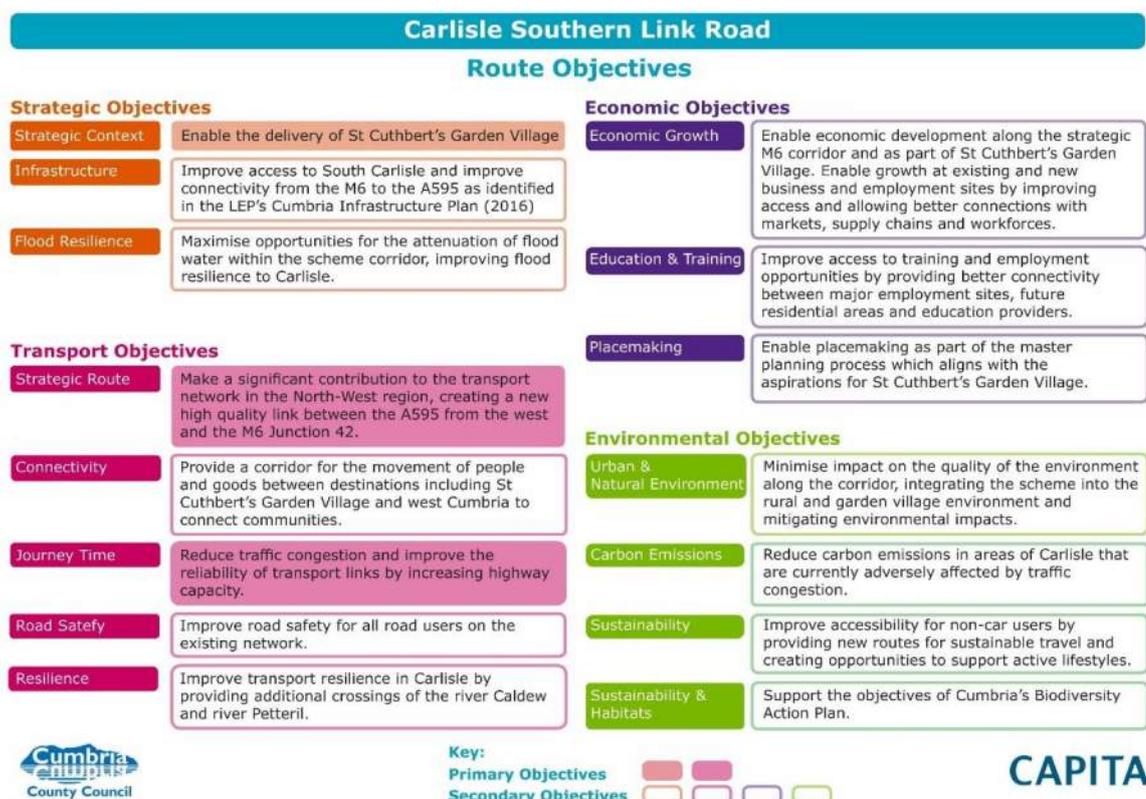
2.3.2. The Stage 1 objectives remain broadly unchanged although with amended wording and are: -

- Enable the delivery of St Cuthbert's Garden Village,
- Reduce traffic congestion and improve the reliability of transport links by increasing highway capacity,
- Make a significant contribution to the transport network in the north-west region, creating a new high-quality link between the A595 from the west and the M6 Junction 42.

2.3.3. The Stage 1 objectives have been expanded by a further 12 objectives to reflect the current stage of development, to recognise the areas Garden Village status and to ensure that the development of the scheme takes into account the importance of the environment, road safety and Cumbria County Council sustainability objectives . The objectives are grouped under the following 4 headings and are shown in Figure 1:-

- Strategic
- Transport
- Economic
- Environmental

Figure 1 CSLR Route Objectives



## 3. Intervention Options

### 3.1. Option generation

3.1.1. The Stage 1 report documented the following interventions options: -

- Carlisle Southern Link Road,
- On-line highway improvements on radial routes and in the city centre,
- Sustainable Transport Improvements,
- Park and ride,
- Light rail.

### 3.2. Initial intervention sift

3.2.1. The Stage 1 report documented a sifting exercise to assess the generated scheme options. The schemes were assessed using the Department for Transport's Early Assessment and Sifting Tool (EAST). EAST is a decision support tool which is used to quickly summarise and present evidence on options in a clear and consistent format. It does not make recommendations on preferred schemes, but helps to refine options by highlighting the relative strengths and weaknesses of schemes, such as how they meet objectives or inherent assumptions or uncertainties.

3.2.2. The sifting exercise identified the **Carlisle Southern Link Road** as the preferred option. This option meets all of the scheme objectives and would most successfully support development at south Carlisle.

3.2.3. However, it was also recommended that the potential to implement some or all of the **Sustainable Transport Improvements** option should also be investigated to improve the sustainability and accessibility of St Cuthbert's Garden Village. The precise nature of these improvements would need to be developed alongside a masterplan for the area.

3.2.4. The initial sifting exercise has been revisited to review whether the conclusions of the assessment remain robust given consideration of the new objectives and the emerging vision for St Cuthbert's Garden Village. This review has not resulted in the generation of any additional options or a different result to the initial sift. The revised EAST is included in Appendix B.

### 3.3. Southern link road route options

3.3.1. The Southern Link road is still identified as the preferred intervention to provide a basis to achieve the scheme objectives. The initial generation of route options is still considered to be reasonable as the environmental constraints and topography in the area have not changed. Slight variations in the alignment of the routes will occur as surveys are completed, more information on constraints and consultation feedback are received, and as the design is developed.

- 3.3.2. The initial draft vision for St Cuthbert's Garden Village is published, and whilst this vision will evolve further through consultation and engagement, and development of the 'Visioning and Concept Framework' the objectives for the Southern Link Road are more closely linked to delivery of the Garden Village as well as providing a transport solution.
- 3.3.3. The initial route option sifting exercise carried out as part of the Stage 1 appraisal work has been revisited to determine if the Pink, Green and Blue routes are still the appropriate options to take forward to the Stage 2 assessment which will determine the preferred route.

## 4. Route Options Review

### 4.1. Introduction

4.1.1. A review of the original Stage 1 report was completed in August 2017. The overall aim of the initial route option sift in the original report was to reduce the number of options being considered in more detail to three. It is recognised that there was a marginal difference between the pink, green/red and orange options. The initial sift was redone using the new objectives, to identify any 'showstoppers' which are likely to prevent an option progressing at a subsequent stage in the process. The review involved the application of EAST to assist in the identification of options to be discarded that:

- would clearly fail to meet the key objectives identified for intervention;
- did not fit with existing local, regional and national programmes and strategies, and do not fit with wider government priorities; and
- would be unlikely to pass key viability and acceptability criteria (or represent significant risk) in that they are unlikely to be:
  - deliverable in a particular economic, environmental, geographical or social context e.g. options which would result in severe adverse environmental impacts which cannot be mitigated against or where the cost of doing so is too high;
  - technically sound;
  - financially affordable; and
  - acceptable to stakeholders and the public.

### 4.2. Nineties northern route

4.2.1. The revised objectives and review did not change the original assessment. The main reasons for discarding this option were noted as:

- Significant conflict with the scheme objectives;
- Negative environmental impact on the adjacent urban environment e.g. increased noise and air pollution;
- Perceived excessive land and compensation costs associated with acquiring properties developed along the route since the 1990s; and
- Likely low public acceptability.

4.2.2. Route remains as discarded.

### 4.3. Nineties southern route

4.3.1. The revised objectives and review did not change the original assessment. The main reasons for discarding this option were noted as:

- Conflict with the scheme objectives; and
- Inflexibility of the option i.e. the option is essentially a southern bypass of Carlisle for trunk road traffic.

4.3.2. Route remains as discarded.

#### 4.4. Green/Red route

- 4.4.1. The revised objectives and review did not change the original assessment. The main reasons for discarding this option were noted as the negative environmental impact on the natural environment:
- Visually intrusive crossing of Caldew Valley (proposal would not provide any benefits over more northern route proposals with shorter crossings of the valley);
  - Excessive excavation in the vicinity of Blackhall Wood and High Brownelson; and
  - Damage to Brownelson Wood (designated County Wildlife site and Ancient Woodland).
- 4.4.2. An additional reason for discarding this route is that at the western end the route was a significant distance away from the boundary of St Cuthbert's Garden Village, resulting in reduced connectivity for the Garden Village.
- 4.4.3. Route remains as discarded.

#### 4.5. Pink Route

- 4.5.1. The pink route was considered to be one of the three options to take forward into the next stage of assessment. Although it is recognised that it was only marginally better than other routes. This alignment was developed to provide a route which passed through the area of likely development on the south-east side of the city. As the emerging vision for St Cuthbert's Garden Village has now developed, Carlisle City Council's view is that the pink route would be too restrictive on the potential for achieving the vision due to the difficulties of successfully designing a development with a major road through the northern part of the development area. The pink crossing of the River Caldew and the railway line has also been revisited in more detail and considered to be less attractive in terms of environmental impact and engineering feasibility.
- 4.5.2. Route is now discarded.

#### 4.6. Orange route

- 4.6.1. This route was developed to connect the M6 at Junction 42 to the Carlisle Northern Development Route using the most direct alignment possible without crossing the Carlisle Racecourse.
- 4.6.2. The main reasons for discarding this option were noted as:
- Negative environmental impact on the adjacent communities of Brisco and Durdar e.g. increased noise and air pollution and severance;
  - Inflexibility of the option as the route must pass through pinch point on Brisco Road and Durdar Road; and
  - Likely low public acceptability.

- 4.6.3. It is recognised that any new road construction from the green, blue, pink and orange routes may impact on adjacent communities. However, with consideration of St Cuthbert's Garden Village emerging vision and the re-assessment of options, the ability of the of the orange route to meet the scheme objectives has increased compared to the pink and red/green route which have decreased. In addition, further design work indicates that the orange route may be a more cost-effective option than the pink route due to a better crossing alignment on the River Caldew. The Pink route crossing location would occur where the existing railway line was also on embankment, resulting in a new bridge at a more elevated level. This would mean the route would likely result in a larger visual impact and increased embankment approach costs.
- 4.6.4. It is noted that the orange route could still potentially constrain the land available for development of the St Cuthbert's Garden Village however it is considered worthwhile that the orange route is assessed in further detail as one of the final three options. This is because the orange route provides the shortest and most direct link between the A595 and the M6 at junction 42. It will also provide an alternative route to the north of Durdar, which if taken to public consultation offers a reduced environmental impact to properties on the southern side of Durdar and properties adjacent to the existing Dalston Road. The orange route also provides access for St Cuthbert's Garden Village on both sides, meaning the junctions may operate more effectively than the Green and Blue routes where the majority of the development land is on the northern side.
- 4.6.5. To be included in the next assessment stage.

## 4.7. Green Route

- 4.7.1. This route was developed to reduce the environmental impact of the Green/Red route over its westerly section by avoiding the deep cuttings required by the latter as it crosses the high ground at Blackhall Wood and High Brownelson.
- 4.7.2. The emerging vision for St Cuthbert's Garden Village would not be constrained by the Green route and it is still considered to be an appropriate route to carry forward into the next stage for a more detailed assessment.

## 4.8. Blue Route

- 4.8.1. This route was developed to maximise the reuse of existing infrastructure as specifically requested in the Client's Brief.
- 4.8.2. The emerging vision for St Cuthbert's Garden Village would not be constrained by the Blue route and it is still considered to be an appropriate route to carry forward into the next stage for a more detailed assessment.

## 5. Conclusions and recommendation

### 5.1. Conclusion

- 5.1.1. Since the Stage 1 assessment report was completed in 2016 further information has become available about the development to the south of Carlisle. The vision for St Cuthbert's Garden Village is now clearer.
- 5.1.2. The initial sift on the different modes of transport remains unchanged but the recommended routes to take forward to the next stage of assessment has changed.
- 5.1.3. The Pink route has been discarded due to its northerly location and the restriction on the development of St Cuthbert's in this area. The Orange route was initially discarded but is now recommended to take forward to the next stage as it offers a reduced impact on the development potential compared to the Pink route and will still provide a choice between a route north or south of the existing communities of Durdar.

### 5.2. Recommendations

- 5.2.1. The three routes Orange, Blue and Green are taken forward to the Stage 2 assessment, plan included in appendix C.
- 5.2.2. To avoid any inference of preference in the next stage, due to the colour reference, the routes are recommended to be renamed A, B and C as below.
  - Route Option A - Blue
  - Route Option B - Orange
  - Route Option C - Green

## 6. Appendices

## Appendix A - Stakeholders Workshop

## Meeting Minutes

<b>Project</b>	CSLR
<b>File Ref.</b>	CSLR-CAP-PJM-XX-MI-ZM-0002
<b>Meeting</b>	Regulatory Stakeholder Consultation Workshop 1
<b>Location</b>	Capita, Carlisle Training Room
<b>Date</b>	Thursday 20th July 2017
<b>Time</b>	10:00am

<b>Prepared</b>	Cristian Phillips
<b>Checked</b>	Katie Jackson
<b>Approved</b>	Katie Jackson

### Participants

Mr Iwan Lawton	Environment Agency
Neil Forsyth	Environment Agency
Ms Karen Slater	Natural England
Mr Jonathan Reade	Highways England
Mr Edward Page	Cumbria County Council (Planning)
Ms Helen Renyard	Cumbria County Council (Flood and Development Management)
Mr David Gibson	Cumbria County Council (Public Rights of Way)
Mr Warren Rocca	Capita (Project Manager)
Miss Katie Jackson	Capita (Assistant Project Manager)
Mr James Daplyn	Capita (Engagement Lead)
Mr Cristian Phillips	Capita (Project Support)
Mr Paul Landreth	Cumbria County Council (Assistant Project Manager)
Mrs Helen Jackson	Carlisle City Council (Planning)

### Apologies

Mr Michael Barry	Cumbria County Council (Local Plan Lead)
Mrs Nicola Parker	Cumbria County Council (Project Manager)
Mr Matthew Proudfoot	Carlisle City Council (Environmental Health)
Mr Julian Diaper	Cumbria County Council (Waste Management)
Mr Paul Hanby	Cumbria Fire and Rescue
Mr Robert Chambers	Environment Agency (CH2M)
Mr Chris Winfield	Network Rail
Mr Andrew Davidson	Historic England
Mr Mike Collins	Historic England
Mr Charles Ecroyd	Local Access Forum

### Key Notes and Actions

Item	Agenda Item	Action	Due Date
<b>1.0</b>	<b>Introductions &amp; Apologies</b>		
1.1	JD introduced the workshop and all attendees provided introductions.		
<b>2.0</b>	<b>Introduction to and purpose of the Consultation Workshop</b>		
2.1	JD outlined the objectives of the workshop which was to:		
	1. Introduce the CSSL project;		
	2. To Identify the project team to the key consultees, and consultees to each other;		
	3. Establish the likely key issues for each consultee (Constraints, Opportunities, Consents and Permissions/Processes);		
	4. Establish future lines and methods of communication.		
<b>3.0</b>	<b>Short Presentation on the Southern Link Project (Capita)</b>		
3.1	KJ and WR presented a 15 min slide show introducing the CSSL including the scheme development to date and moving forward. The presentation is attached.		
3.2	<b>Questions after presentation: KS</b> - Question: How long will it be before building of the road will commence? WR and PL responded stating the team will have a better understanding of construction timing later in the year however it is forecasted that the earliest start could be around 2021. This is not certain given the large scale of the project.		
	<b>JR</b> - Question: The TAG Stage 1 transport study was completed back in 2015. With the recently announced proposals for the Garden Village, have the intervention objectives changed? WR responded Capita will review the original assessment in light of the revised objectives. It is felt that the work completed at TAG Stage 1 is still largely valid as development to the south of Carlisle was already identified within the draft Carlisle Local Plan in 2015. PL noted he did not expect the outcome of the TAG assessment to change significantly.		

Item	Agenda Item	Action	Due Date
4.0	<b>Round table attendee initial feedback - (Circa 5 mins per consultee)</b>		
4.1	JD introduced the workshop element of the meeting. The following questions were posed to each consultee:		
	1. What key issues could arise from the development of any of the proposed CSLR route options on your area of influence?		
	2. What statutory consents and procedures are you responsible for which require interaction between the project team and your organisation/department?		
	3. How do you wish to be involved in the CSLR development moving forward, in particular how would you like to be consulted over the next 18 months?"		
4.1.1	<b>Jonathon Reade (Highways England)</b> - Proposed that Capita/CCC should think more widely about traffic impacts citing the example of the CNDR. He raised the concern of the potential for traffic reassignment from the Northern Link Road to Southern Link Road. This would negatively impact on Junction 42. He proposed the idea of looking at both the Junction 44 and 42 to fully understand the movement of the extra 10,000 people (ref Garden city). The concern is that without public transport lots more people will be choosing to go on the motorway as it will likely be faster thus creating more demand. <b>Future communication:</b> The Highway Agency want to be involved in the cumulative impact assessment, modelling review and scenario testing. It was suggest by Warren Rocca that we could incorporate this into a peer review to streamline that part of the project. Scope of the traffic modelling to be reviewed.	Warren Rocca	Fri 18-Aug
4.1.2	<b>David Gibson (Rights of Way and Access, CCC)</b> - Stressed the importance of reviewing lessons learnt on CNDR and how wider connectivity wasn't considered at the early stages and access had to be retrofitted for desire lines. The Southern route and the way it's tied in with everything else should be considered in the early stages. There is an opportunity to link into Caldw Cycle Way near Peter Lane as it's something that would be difficult to do after the development. There should also be links into the future housing estates to promote sustainable transport. <b>Future Communication:</b> DG would like to be invited to any design workshops down the line. A separate meeting would also be useful to make sure were looking at the right assets and any claim routes are considered.	Warren Rocca / Katie Jackson	Fri 29-Sep
4.1.3	<b>Helen Renyard (CCC Flooding / Dev Mgmt)</b> - The main concerns relate to the development of the Garden Village as this type of development has the potential to increase the amount of surface water runoff. In terms of the road Capita need to be aware of the increase of surface water runoff and water quality making sure it's clean. Alterations to existing water courses should be minimised. <b>Future Communication:</b> Capita to arrange a 1 -1 meeting with CCC Flood team as the options develop further.	Warren Rocca	Fri 29-Sep
4.1.4	<b>Edward Page (CCC Planning)</b> - Was keen to explore how we are seeking to avoid impacts on local habitats citing key factors such as noise and acoustic screening. There are a number of archaeological and heritage features of interest which will require survey and recording to ensure potential impacts are avoided/minimised. Landscape fit - how will the development fit in with the existing landscape? – This was the main question to think about moving forward however, current appraisals were good so far. Raised the importance of keeping a log of decisions so it was clear what trade offs have been made. Assessments are likely to need to have some understanding of the distribution of houses. <b>Future Communications:</b> Ad hoc meetings as required. Suggested Capita contact Roger Higgins at the city council for historic building matters.	Katie Jackson	Fri 29-Sep
4.1.5	<b>Neil Forsyth (Environment Agency)</b> – From a broader perspective Capita should be aware of the issues and scale of their work on all main rivers. Whilst doing that both parties can work closely to maximise their opportunities with regards to mitigating flood risks but there needs to be clear sight of the project. Some concerns over the River Petteril as there is not much scope due to impounding levels, volume flood peaks. There are more opportunities on the River Caldw. However, Neil was keen to see if opportunities for flood attenuation/mitigation of flood risk develop. The project team need to fully consider the impacts of the Garden Village development as well. Flooding is high on the agenda for local residents. There are future Environment Agency meetings for Capita to be aware including a consultation towards the end of the year on a long list of options for upstream storage on the Caldw Petteril. As yet, no dates have been set however EA will issue an invite to Capita when known. <b>Future Communication:</b> Both the Capita project team and the EA need to keep each other updated going forward. A couple of half hour meetings would be useful once the options are developed further.	Katie Jackson / Environment Agency	Fri 29-Sep
4.1.6	<b>Karen Slater (Natural England)</b> - The main concern is adverse affects on the Special Area of Conservation. Opportunities for improvement to biodiversity and increasing the amount of wetland can be potentially added into the design. Once the preferred route has been selected Natural England want to be involved to look at any endangered protected species and protected woodlands. There is some concern of the stability of the banks/stopes at river crossing points and Natural England want be involved in these design elements. Natural England have Phase 1 survey information available and some geomorphological studies. Capita should contact Karen after the meeting to obtain this information. <b>Future Communication:</b> Carry on liaising with Natural England via the DAS (a contract could be set up for this project). Capita to add Carlisle Flood Action group to the list of consultees. The scheme is likely to require a Full HRA/Appropriate assessment.	Katie Jackson / James Daplyn	Fri 29-Sep
4.1.7	<b>JD raised the question regarding any other comments, groups to consult?</b>		
4.1.8	<b>Karen Slater:</b> Eden River Trust have been doing work on the river Caldw with various studies looking at possible river restoration which is something to consider. JD to add ERT to stakeholders. KJ to contact ERT for study information.	Katie Jackson / James Daplyn	Fri 29-Sep
4.1.9	<b>Jonathon Reade</b> was concerned about there being a lot of junctions in the plans. WR noted that the plans are still in the early stages and the amount on junctions are just proposed at this stage.		

Item	Agenda Item	Action	Due Date
5.0	Summary of next steps in the development process an consultation process (WR/JD) - refer to presentation.		
6.0	Consultation closes		
7.0	Informal discussions as required by consultees with members of the project team.		
8.0	AOB		
11.0	Date of Next Meeting - TBC.		
END			

## Appendix B - EAST Assessment

Scale of impact

*To what extent does the option alleviate the identified problem?*

1	Very small overall impact	Would have a very small positive impact, possibly with undesirable consequences	90's Northern
2	Minor impact	Would have a modest overall impact	90's Southern Most Southern (Green/Red)
3	Moderate impact	Expected to have a reasonably significant impact on the problem identified	Southern (Green) Reuse ex Infrastructure (Blue)
4	Significant impact	Expected to significantly alleviate the problem	Middle (Orange) Northern (Pink)
5	Fully addresses the identified problem	Expected to fully solve the identified problem, without any undesirable consequences	

Fit with wider transport and government objectives

1	Poor fit	There is significant conflict with other policies/options affecting the study area which needs to be resolved.	
2	Low fit	There is some conflict with other policies/options or modes.	90's Northern
3	Reasonable fit	Overall the option fits well with other policies affecting the study area.	Most Southern (Green/Red) Reuse ex Infrastructure (Blue) Middle (Orange) Northern (Pink) Southern (Green)
4	Good fit	The option fits very well with other policies affecting the study area.	90's Southern
5	Excellent fit	Option complements other policies/proposals affecting study area, has no negative impacts on other modes or outcomes and demonstrates 'doing more with less'.	

## CSLR: EAST Summary updated September 2017

### Fit with other objectives

These will vary depending on how the tool is being used. This is an opportunity to draw out and highlight any relevant network or regional objectives specific to an option and to outline how it performs against any local or modal objectives.

1	Poor fit	There is significant conflict with the County and City's Objectives affecting the study area which needs to be resolved.	90's Northern 90's Southern
2	Low fit	There is some conflict with the County and City's Objectives	Northern (Pink)
3	Reasonable fit	Overall the option fits well with the County and City's Objectives affecting the study area.	Middle (Orange)
4	Good fit	The option fits very well with the County and City's Objectives affecting the study area.	Southern (Green) Most Southern (Green/Red) Reuse ex Infrastructure (Blue)
5	Excellent fit	Option complements other the County and City's Objectives affecting study area, has no negative impacts or outcomes and demonstrates 'doing more with less'.	

### Degree of consensus over outcomes

*What consultation has taken place with relevant stakeholders?*

1	Little or no consultation has taken place yet, or consultation has revealed a high level of disagreement about the option's ability to deliver the stated outcomes	All Routes
2	Little consultation and/or strong reasons to suggest the outcomes are controversial	
3	Some consultation has taken place with some agreement	
4	Wide consultation and broad agreement on the outcomes, possibly one or two areas of disagreement remaining	
5	Extensive consultation has taken place with a high degree of consensus on the outcomes	

**Economic Growth**

Connectivity

Will journeys get shorter, quicker and/or cheaper?

1	Very small overall impact	Would have a very small positive impact, possibly with undesirable consequences	
2	Minor impact	Would have a modest overall impact	90's Northern Southern (Green)  Most Southern (Green/Red)  Longest option
3	Moderate impact	Expected to have a reasonably significant impact on the problem identified	90's Southern  Northern (Pink)  Reuse ex Infrastructure (Blue)
4	Significant impact	Expected to significantly alleviate the problem	Middle (Orange) (Shortest Option)
5	Fully addresses the identified problem	Expected to fully solve the identified problem, without any undesirable consequences	

Reliability

*Will the option impact on the day to day variability in journey times or the average minutes of lateness? Will there be any impact on the number of incidents?*

All routes are almost identical at this stage.

Wider economic impacts

*At this stage, respondents are not expected to assess wider economic impacts, instead the questions are intended to screen whether there may be an impact that would need to be considered in more detail later on in the appraisal process, should the option progress.*

Resilience

*Does the option have an impact on the vulnerability of the network to terrorism, severe weather events or the effects of climate change?*

All routes are identical at this stage.

Delivery of housing

*In some cases, the need for new development in a specific location will mean that the development will require some form of transport development to support it. Respondents are asked to assess how their option will facilitate new housing. Propose we only assess against this impact i.e. how will this option facilitate new housing.*

Red	Prevent		
Red/Amber		90's Northern 90's Southern	
Amber	May facilitate	Northern (Pink)	Restricts potential of St Cuthbert's
Green/Amber		Middle (Orange)	Somewhat restricts potential of St Cuthbert's
Green	Required to meet planned developments	Reuse ex Infrastructure (Blue) Southern (Green) Most Southern (Green/Red)	

**Carbon Emissions**

We do not have any data to assess this impact.

All routes are almost identical at this stage.

**Socio-distributional Impacts and the Regions**

Regional imbalance

This is intended to identify the extent to which the proposal impacts on a region or sub-region which is underperforming when compared to other areas or to the country as a whole. This underperformance or 'weakness' will need to be defined in terms of economic and/or social indicators.

All routes are almost identical at this stage.

**Social and distributional**

Social and distributional impacts need to be considered when assessing the impact of options on noise, air quality, severance, accessibility, security, accidents, user benefits and personal affordability. Respondents will need to consider whether the expected impact of their option (both positive and negative) is either significant in extent or concentrated in terms of the people groups or spatial areas affected, or both.

*Does the option have an impact on accessibility, affordability, availability, acceptability for vulnerable groups.*

All routes are almost identical at this stage.

Regeneration

*Does the option have an impact on a targeted regeneration area where poor transport been identified as a constraint and, if so, what is the impact likely to be*

Red	Negative	
Red/Amber		
Amber	No change	90's Southern Most Southern (Green/Red)
Green/Amber		Southern (Green) Reuse ex Infrastructure (Blue) Middle (Orange) Northern (Pink) 90's Northern
Green	Positive	

**Local environment**

Air Quality

Respondents should note whether their option impacts on any AQMAs (No)

All routes are almost identical at this stage.

Noise

Assess whether their option is likely to impact on a noise problem area (No)

All routes are almost identical at this stage.

*Does this option reduce absolute disturbance from noise?*

All routes are almost identical at this stage.

Natural environment, heritage and landscape & Streetscape and urban environment

*What is the overall impact on the natural and urban environment?*

Red	Negative	90's Northern Most Southern (Green/Red) Northern (Pink)
Red/Amber		Middle (Orange) Southern (Green) Reuse ex Infrastructure (Blue)
Amber	No change	90's Southern
Green/Amber		
Green	Positive	

**Well being**

**Physical activity**

The impact the option has on physical activity

All routes are almost identical at this stage.

**Injury or Deaths**

The impact on the number of people killed or injured in transport accidents should be assessed as well as the impact on the risk of travelling.

No available data at this stage.

**Crime**

Options that address perceptions of crime and those that demonstrably reduce crime.

All routes are almost identical at this stage.

**Enjoying access to a range of goods, services, people and places**

Will it have an impact on the number of incidents?

Does the option make it easier for people to access key locations (doctors, hospitals, supermarkets etc)?

Does it make leisure trips quicker or cheaper?

Does it make leisure trips more reliable?

All routes are almost identical at this stage.

**Severance**

Respondents should consider the impact on pedestrian movement, for example, whether there will be hindrance to pedestrian movement, whether some people (particularly children and old people) are likely to be dissuaded from making journeys on foot, or they will be less attractive to others or whether people will be deterred to the extent that they reorganise their activities?

*Does it increase possibility of cross street/corridor connections between neighbourhoods?*

Red	Negative	90's Northern
Red/Amber		Middle (Orange) Northern (Pink)
Amber	No change	90's Southern Most Southern (Green/Red) Southern (Green) Reuse ex Infrastructure (Blue)
Green/Amber		
Green	Positive	

*Will more or less people be outside the public realm as a result?*

Red	More	90's Northern
Red/Amber		Middle (Orange) Northern (Pink) 90's Southern Most Southern (Green/Red) Southern (Green) Reuse ex Infrastructure (Blue)
Amber	No change	
Green/Amber		
Green	Less	

**Expected VfM category**

No available data at this stage.

**Implementation timetable from inception to delivery**

All routes are almost identical at this stage.

**Public acceptability**

*An assessment of whether there are likely to be any issues around public acceptability of the option. For example, will the option require a long period for public consultation?*

1	Low	90's Northern
2		Most Southern (Green/Red)
3		Middle (Orange) Southern (Green) Reuse ex Infrastructure (Blue) Northern (Pink)
4		90's Southern
5	High	

**Practical feasibility**

*Has the option been tested and proven to be practical and effective?*

1	Low	90's Northern
2		
3		Middle (Orange) Northern (Pink)
4		90's Southern Most Southern (Green/Red) Southern (Green)
5	High	Reuse ex Infrastructure (Blue)

**Quality of the supporting evidence**

All routes are identical at this stage.

**Affordability**

The issue of affordability needs to be put in the context of the available budget and relevant budget period. Some options that are unaffordable in the immediate budget period may be affordable in later years.

1	Not affordable	90's Northern
2		90's Southern Most Southern (Green/Red)
3		Southern (Green) Middle (Orange) Northern (Pink)
4		Reuse ex Infrastructure (Blue)
5	Affordable	

**Capital Cost**

Capital costs should include all the costs involved in setting up the option and getting it up and running. In some cases cost information may be very uncertain. Respondents need to provide their best estimate.

1	£250m to £200m	
2	£150m to £200m	90's Southern 90's Northern Most Southern (Green/Red)
3	£100M to £150M	Middle (Orange) Southern (Green) Northern (Pink)
4	£50M to £100M	Reuse ex Infrastructure (Blue)
5	Upto £50M	

**Revenue Costs**

All routes are almost identical at this stage.

**Overall Cost Risk**

1	High Risk	
2		90's Northern 90's Southern
3		Northern (Pink) Most Southern (Green/Red) Reuse ex Infrastructure (Blue)
4		Southern (Green) Middle (Orange)
5	Low Risk	

**Flexibility of option**

To what extent can the option be scaled up or down depending on the level of funding available? How easily could the scheme be amended to fit with changing circumstances?

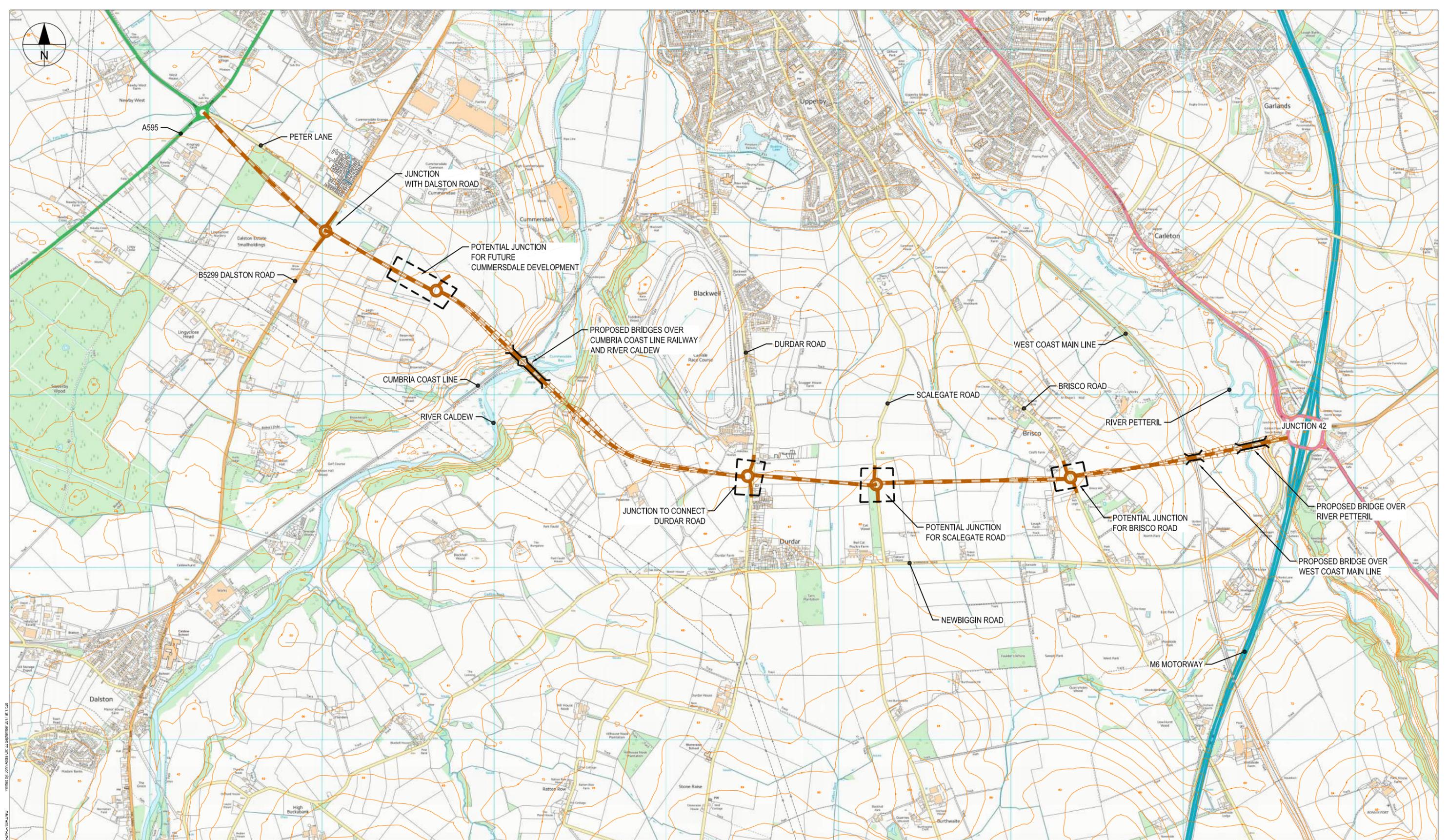
1	Static	90's Northern
2		90's Southern Most Southern (Green/Red) Northern (Pink) Middle (Orange)
3		Southern (Green)
4		Reuse ex Infrastructure (Blue)
5	Dynamic	

**Summary**

	Scale of Impact	Government Objectives	Local Objectives	Economic Growth	Delivery of Housing	Regeneration	Socio	Natural Environment	Severence	Well Being	Public Acceptability	Practical Feasibility	Affordability	Capital Cost	Cost Risk	Flexibility	Totals
90's North	1	2	1	2	2	4	4	1	1	1	1	1	1	2	2	1	27
90's South	2	4	1	3	2	3	3	3	3	3	4	4	2	2	2	2	43
Green/Red	2	3	4	2	5	3	3	1	3	3	2	4	2	3	3	2	45
Green	3	3	4	2	5	4	4	2	3	3	3	4	3	3	4	3	53
Blue	3	3	4	3	5	4	4	2	3	3	3	5	4	4	3	4	57
Orange	4	3	3	4	4	4	4	2	2	2	3	3	3	3	3	2	49
Pink	4	3	2	3	3	4	4	1	2	2	3	3	3	3	3	2	45

## Appendix C - Plans





**Notes-**

- 1) Junction strategy yet to be decided.
- 2) Junction types yet to be decided.

**CAPITA**  
 Property and Infrastructure  
 Kingmoor Business Park, Carlisle, Cumbria, CA6 4SJ  
 01228 673000  
 www.capitaproperty.co.uk  
 Capita Property and Infrastructure Ltd.

Client  
 Cumbria County Council

Project  
 Carlisle Southern Strategic Link

Drawing  
 Route Option B - Orange Route

Purpose of Issue  
 S2 - Issued for Information

Classification  
 Commercial in Confidence

Scale at A1	Drawn	Checked	Approved
1:10000	JJA	WR	JG

Project No.	Date
CS092903	2017-09-11

Drawing Identifier  
 Project - Originator - Zone - Level - File Type - Role - Number  
 CSLR-CAP-HML-00-DR-C-7004



**Capita Property and Infrastructure Ltd**

The Capita Building  
Kingmoor Business Park  
Carlisle  
Cumbria  
CA6 4SJ

Tel +44 (0)1228 673000  
Fax+44 (0)1228 673111

[www.capita.co.uk](http://www.capita.co.uk)