Appendix A

ROUTE OPTION STUDY





CULLOMPTON TOWN CENTRE RELIEF ROAD

Route Options Report



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Mid Devon District Council Phoenix House Phoenix Lane Tiverton EX16 6PP







CULLOMPTON TOWN CENTRE RELIEF ROAD

Route Options Report

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NEXT STEPS

INTRODUCTION





1 INTRODUCTION

1.1 BACKGROUND

Traffic congestion within Cullompton has been a long-term issue resulting in poor air quality, constraints on development and associated restrictions on the future economic growth of the area. There is a single arterial route for vehicular traffic running north/south through the centre of the town, where carriageway width is less than 6.5m in places with typically narrow footways.

A high proportion of the working population in Cullompton and the surrounding area commute to work via the M5 motorway, accessing and egressing the M5 at junction 28 either heading south towards Exeter and beyond or northwards towards Taunton.

In the morning peak traffic queues back from the motorway junction along Station Road and onto the High Street and Higher Street sections south and north of Station Road respectively. In the evening traffic peak there are queues back from the signalised junction of High Street/Higher Street/Station Road that extend back onto the Junction 28 northbound off-slip.

A Relief Road east of the Town Centre has been included within the Local Plan since 2013, and before that in the Allocation and Infrastructure Development Plan Document in 2011, to divert north-south traffic away from Fore Street and through the town centre. Such a relief road would reduce queuing on both the local and national road networks with consequent improvements to air quality, whilst also permitting sustainable growth of the town.

1.2 PURPOSE OF THIS REPORT

The purpose of this Route Options Report (ROR) is to identify the existing issues, problems and constraints, define the main objectives of the scheme, and to present and provide high level appraisal of the viable options considered to address the issues and meet the objectives.

This Report is intended to be considered by MDDC Cabinet and DCC Members, to seek approval from both councils to proceed to public consultation on the options.

Following public consultation, a further report recommending a preferred route will be prepared reporting on and drawing on the consultation responses and high-level assessment. Further investigations, surveys and design may be undertaken prior to completion of the preferred route report, to inform the recommendation.

1.3 STUDY AREA

The Study Area is shown in Appendix A, extracted from the Local Plan.

1.4 METHODOLOGY

WebTAG (Web-based Transport Appraisal Guidance) is the Department for Transport's overarching guidance for the appraisal of proposed transport schemes.

The WebTAG Transport Analysis Guidance includes the following elements:

- Understand the current context of the study area
- Understand the future context of the study area
- Establish the need for intervention



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- Identify intervention-specific objectives within a defined geographic area
- Generate options
- Undertake an initial sift
- Develop and assess potential options and undertake public consultation
- Document the option development process within an Options Appraisal Report
- Clarify the methodology for further appraisal within an Appraisal Specification Report

This ROR covers the elements set out above, except for public consultation and the last 2 bullet points. Public consultation will follow the ROR, subject to MDDC and DCC approvals to proceed with consultation

The initial sift of options will be undertaken through assessment of each of the options against the objectives, with those that are assessed not to substantially meet the objectives and/or are not technically viable due to other identified issues, excluded from further consideration.

UNDERSTANDING THE CURRENT SITUATION: POLICY CONTEXT





2 UNDERSTANDING THE CURRENT SITUATION: POLICY CONTEXT

2.1 INTRODUCTION

This Chapter presents an understanding of local, regional and national policies affecting the study area. In addition to establishing the strategic policy context in the area, this understanding also helps to identify the local and strategic issues, and define the objectives of the scheme

2.2 NATIONAL POLICY

The National Planning Policy Framework (NPPF) was adopted by the UK Government on 27th March 2012. The NPPF sets out national policy, which is a material consideration in the determination of planning applications. A revised version of the NPPF was adopted in July 2018. Table below considers the parts of the 2018 NPPF relevant to the proposal.

Table 2.1: Relevant 2018 NPPF References

Policy or Paragraph Number	Policy Text	Relevance to Scheme
Paragraph 14- Sustainable Development	At the heart of the NPPF is a presumption in favour of sustainable development, which should be a golden thread running through both plan-making and decision taking.	The new relief road will address existing congestion in the transport network. Easing this congestion will contribute to social well-being through reduced journey times and has the potential to result in economic benefits through consequential effects in terms of increased productivity. The new relief road aims to improve conditions for all travellers via the reduction of traffic passing through the town centre, the provision of new highways, footways and cycle ways and the general improvement of road safety and infrastructure.
Paragraph 91 - Promoting Healthy and Safe Communities	Enable and support healthy lifestyles, especially where this would address identified local health and well-being needs.	Due to congestion the current air quality levels in Cullompton are very poor and could impact human health. The new relief road would reduce vehicle movements through the town centre directly improving air quality.
Paragraph 80 – Building a strong, competitive economy	Seek to address potential barriers to investment, such as inadequate infrastructure, services or housing, or a poor environment.	Improving accessibility to and within economic centres improves the local economy which in turn attracts further investment. It also allows the town to grow sustainably, accommodating new housing and attract more financial investment.
Paragraph 102 – Promoting Sustainable Transport	Transport issues should be considered from the earliest stages of plan-making and development proposals, so that: a) potential impacts of development on transport networks can be addressed;	The proposed relief road is a viable option to achieve sustainable development. The road will have pedestrian and cycle paths running in both directions. Any planning application submitted will be accompanied by the relevant

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b) opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised – for example in relation to the location or density of development that can be accommodated; scale.

c) opportunities to promote walking, cycling and public transport use are identified and pursued;

d) the environmental impacts of traffic and transport infrastructure can be identified, assessed and considered – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and

e) patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places. environmental assessment work outlining mitigation and enhancement measures.

Paragraph 103 – Promoting Sustainable Transport The planning system should actively manage patterns of growth in support of these objectives. Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions, and improve air quality and public health. However, opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making.

The proposed relief road will help to promote the sustainable growth of Cullompton. Cullompton has been recognised along with Crediton and Tiverton as suitable urban areas for sustainable expansion.

The relief road would incorporate cycleways and footways providing greater connectivity and improved provision for non-motorised users. The relief road will significantly reduce congestion on the existing primary bus routes through Cullompton, shortening journey times with the potential for resultant more frequent services.

2.3 REGIONAL POLICY

2.3.1. Local Transport Plan – Devon and Torbay Strategy 2011-2026 (April 2011)

The Local Transport Plan 3 (LTP3) is a 15-year plan, covering the period 2011-2026. It aims to deliver a transport system that can meet economic, environmental and social challenges

Over the next 15 years Devon and Torbay will need to diversify and grow the economy, but just as importantly develop a low carbon transport system that offers choice and encourages sustainable travel behaviour. To achieve Devon and Torbay's vision the strategy has five key objectives:

- i Deliver and support new development and economic growth
- Make best use of the transport network and protect the existing transport asset by prioritising maintenance
- Work with communities to provide safe, sustainable and low carbon transport choices
- Strengthen and improve the public transport network
- Make Devon the 'place to be naturally active'

Devon and Torbay's Strategic Connections Strategy states pressures on the transport network because of increased employment and housing growth will be minimised by:

Managed maintenance of the transport network



- Proactively addressing congestion and increased demand
- Supporting low carbon measures
- Promoting sustainable communities

The plan explains several priority schemes listed for Targeted Capital Interventions. One of these schemes is the "Cullompton Town Centre Relief Road - the objective is to improve air quality, street environment and traffic congestion within the town centre."

2.4 LOCAL POLICY

The current local plan for Mid-Devon consist of the following plans:

- Core Strategy 2026 (adopted 2007)
- Allocations and Infrastructure Development Plan (adopted 2010)
- Local Plan Part 3: Development Management Policies (adopted 2013)

A new Local Plan, the Local Plan Review 2013-2033 is currently at Examination by the Planning Inspectorate. Initial hearings are due to take place in late September 2018, but at time of writing this report dates have not yet been set for the examination of the remainder of the plan. Subject to the outcome of the examination process, adoption of the new plan is expected in the first half of 2019.

Due to the new Local Plan's scheduled adoption next year policies from the emerging plan have been assessed in this report. Due to timing, it is likely that any future planning application submitted will be assessed against the new Local Plan policies. These have been included in Table 1

The adopted policy AL/CU/14 of the Allocations and Infrastructure Development Plan Document 2011 expresses the aspiration to provide a relief road for the town.

A neighbourhood plan for Cullompton is also being progressed, but has not yet been submitted for examination. At this stage in its production, it's emerging policies may be subject to further amendment and are referred to below to give local context. Draft policy SD07 seeks the phasing of major development in tandem with the coordinated provision of infrastructure to help support sustainable growth and ensure that an unacceptable strain is not placed on the existing infrastructure. Draft policy HT01 relates to proposals to ensure that junction 28 of the M5 functions efficiently and safely and states that they will be supported. Also relevant is draft policy WL02 relating to Cullompton Community Association Fields which are described as an important resource for the local community. A series of criteria for proposals to develop part of the CCA Fields to provide a relief road for Cullompton are set out with the intention of minimising potential impact.

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Table 1.2: Relevant Local Plan Policies

POLICY	POLICY TEXT	RELEVANCE TO SCHEME
S1- Sustainable Development Priorities	The following strategic priorities outline what will need to be achieved to deliver the Vision and address the key issues that have been identified in Mid Devon. All development will be expected to support the creation of sustainable communities by: a) A development focus at Tiverton, Cullompton and Crediton as Mid Devon's most sustainable settlements, with long-term growth to the east of Cullompton and a limited level of development in identified villages; b) Building a strong, competitive economy through access to education, training and jobs, infrastructure, the creation of new enterprise, economic regeneration and flexibility of uses to respond to changing circumstances; c) Promoting sustainable transport by delivering appropriate infrastructure, reducing the need to travel by car, integrating public transport and other forms of sustainable travel such as walking and cycling, and providing safe environments while recognising Mid Devon's rural locality; d) good sustainable design that respects local character, heritage, surroundings and materials, creates safe and accessible environments, designs out crime and establishes a strong sense of place.	The new relief road would help to achieve the sustainable development priorities which include Cullompton. The relief road would provide infrastructure for growth and help to future proof the town. The relief road would improve accessibility helping to attract business and investment to the town. The new relief road would reduce traffic flows through the centre of Cullompton allowing the promotion of sustainable modes and regeneration in the town centre. The new road would also have dual pedestrian/ cycle routes running in both directions.
S2- Amount and disruption of development	The development needs of the community will be met through the provision of approx. 7,860 dwellings and 147,000sqm if commercial floorspace between 1st April 2013- 31st March 2033. Development will be concentrated at Tiverton, Cullompton and Crediton, to a scale and mix appropriate to their individual infrastructures, economies, characters and constraints.	New housing is planned for Cullompton. The new relief road is future proofing for an increase in vehicle movements in and around Cullompton.
S8- Infrastructure	The location, scale and form of development will be guided by the need for community facilities and any existing infrastructure deficiencies. The Council will work with providers and developers to ensure that new development is served by necessary infrastructure in a predictable, timely and effective fashion. Development and transport planning will be coordinated to improve accessibility for the whole community and promote the use of sustainable modes of transport. The Council will set out key infrastructure and facility requirements for new development in an Infrastructure Plan, taking account of existing provision and cumulative impact of new development.	The new relief road is vital for improving accessibility and increasing economic investment into Cullompton. Mid Devon District Council has already highlighted the relief road as important for future growth.



S9- Environment

Development will sustain the quality, character and diversity of Mid Devon's environmental assets and minimise the impact of development on climate change through:

- a) High quality sustainable design which reinforces the character and distinctiveness of Mid Devon's historic built environment, mitigates and adapts to climate change and creates attractive places;
 b) The efficient use and conservation of natural
- b) The efficient use and conservation of natural resources of land, water and energy, minimising pollution and preserving the quality and productivity of the best and most versatile agricultural land wherever possible;
- c) measures to reduce the risk of flooding to life and property, requiring sustainable drainage systems including provisions for future maintenance, guiding development to locations of lowest flood risk by applying a sequential test where appropriate, and avoiding an increase in flood risk elsewhere;
- d) Renewable energy in locations where there is an acceptable local impact, including visual, on nearby residents, landscape character and wildlife, balanced with the wider sustainability benefits of renewable energy;
- e) preservation and enhancement of the distinctive qualities of Mid Devon's natural landscape, supporting opportunities identified within landscape character areas. Within or adjoining the Blackdown Hills Area of Outstanding Natural Beauty, and Exmoor and Dartmoor National Parks, the primary objective will be to protect the special qualities of that landscape and its setting;
- f) protection and enhancement of designated sites of international, national and local biodiversity and geodiversity importance. On both designated and undesignated sites, development will support opportunities for protecting and enhancing species populations and linking habitats, providing mitigation and compensation measures where appropriate; and g) The preservation and enhancement of Mid Devon's cultural and historic environment, and the protection of sites, buildings, areas and features of recognised national and local importance such as listed buildings, conservation areas, scheduled monuments and local heritage assets.

Although the new relief road could potentially result in the loss of green open space, it will improve the existing built form by reducing traffic flows through the centre of the town and improving air quality. This in turn will make the town more attractive.

Any application submitted will be supported by the relevant environmental survey and assessment work. An Environmental Impact Assessment will identify potential risks so suitable mitigation and enhancement measures can be implemented through sustainable design.

It is recognised that the new relief road could result in the loss of public open green space which is enjoyed by the local community. Mid-Devon and DCC would work hard to establish compensation areas and work towards a net gain in biodiversity and future habitats.

There is potential that Priority Habitats will be lost. Extensive ecology/ biodiversity surveys will be undertaken to establish the existing baseline and how any negative impacts can be mitigated.

There are a limited number of listed heritage assets within the Study Area. The preservation of those present would be considered in the design. There is likely to be an impact on the setting of the Conservation Area which lies south west of the site. However, there will also be improvements as traffic movements within the Conservation Area are reduced.

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S11- Cullompton

Cullompton will develop as a fast-growing market town with a strategic role in the hierarchy of settlements in Mid Devon. The town will become the strategic focus of new development reflecting its accessibility, economic potential and environmental capacity. This strategy will improve access to housing through urban extensions and expanded employment opportunities. There will be significant improvements to the town's infrastructure and connectivity, including the reopening of the railway station, and improved services for its population and nearby rural areas. Proposals will provide for approximately 3,930 dwellings, of which 1,100 will be affordable, and 73,500 gross square metres of commercial floor space over the plan period. The council will guide high quality development and other investment to:

- a) Make any necessary improvements to the M5 motorway including junction 28 to maintain highway capacity and safety;
- c) Continue measures to support the implementation of the Cullompton Air Quality Action Plan including the construction of new highway links to relieve the town centre and enhanced walking and cycling opportunities around the town;
- d) Manage the town centre so that economic regeneration and heritage reinforce each other by promoting new homes, shops, leisure, offices and other key town centre uses which are well designed and contribute to vitality and viability;
- e) Provide community infrastructure such as education and enhanced open space to support new development proposals;
- f) Enhance the tourism and visitor role of the town and surrounding area; and
- g) Reduce flood risk within Cullompton and make provision for green infrastructure.

The new relief road would directly support the future growth targets for Cullompton.

The new relief road would allow traffic to exit the M5 motorway quickly and safely reducing congestion on the north bound off slip in the evening peak.

It would reduce the amount of vehicle emissions in the town centre by reducing traffic movements through the town. It would promote economic investment by improving accessibility.

The new relief road would be vital infrastructure to help create a sustainable future for Cullompton allowing the town and local community to cope with future growth.

CU7- East Cullompton

A site of 160 hectares to the East of Cullompton is allocated for mixed use development subject to the following:

1,750 dwellings within the plan period and further development of at least 850 dwellings post-2033; 28% affordable housing to include extra care housing and at least ten pitches for gypsies and travellers, subject to viability:

5% of housing to be provided as serviced plots for sale to self-builders;

20,000 square metres commercial floorspace within the plan period and a further 12,000 post-2033, to include a care home or retirement complex, appropriately scaled retail development and other suitable uses such as offices and a hotel or leisure development;

Provision of at least 40 hectares strategic green infrastructure:

Transport provision to ensure appropriate accessibility for all modes, including a new or

To meet the needs of future population growth, Cullompton needs to provide land for new housing.

Land to the east of the M5 has been identified as a future growth area for housing and mixed-use developments. The government has also granted Garden Village status establishing the principle for future development of this type in the area.



	improved access and egress onto the M5 motorway and pedestrian and cycling links across the motorway to the existing town; Environmental protection and enhancement and noise mitigation where necessary; Assessment of land contamination and remediation if necessary; Land and facilities for community use including a new primary school to meet local needs arising; Contributions towards expansion of local secondary education facilities to meet needs arising; Carbon reduction and air quality improvements; Archaeological investigation and appropriate mitigation; phasing strategy to bring forward development and infrastructure in step and retain the overall viability of development; and Master planning of the development including at least two stages of public consultation and adoption of the Masterplan as a Supplementary Planning Document, before any planning application is determined.	
CU8- East Cullompton Transport Provision	As part of the development of East Cullompton, contributions towards or delivery of the following transport infrastructure will be provided by all new development within the site: a) Provision of mitigation measures to ensure only acceptable impacts occur to J28 of the M5 because of traffic generated from the site; b) highway improvements on roads around the development to ensure any unacceptable traffic impacts are mitigated; c) Reopening of Cullompton Railway Station; d) network of streets linking to the existing highway network, and appropriate mitigation to reduce impacts on the existing road network such as Honiton Road; e) bus, pedestrian and cycle routes at appropriate locations throughout the development, creating an attractive, permeable network for non-car modes; f) Safe and attractive cycle and pedestrian links to and from the town centre and within the mixed-use urban extension;	The new relief road would directly support this policy by improving the local road network and accessibility. Routes will be provided for pedestrians and cyclists along the new relief road.
CU10- East Cullompton Community Facilities	As part of the development of East Cullompton, the following community infrastructure will be provided at the expense of all new development within the site: a) A site of 2.5 hectares for a new primary school at no cost to the Local Education Authority; b) A site of 2 hectares for a shopping and community centre, and the provision of a multi-purpose community building for youth, children and other community uses; c) Construction costs for a primary school; d) Contributions towards the expansion of secondary education facilities in the local area; e) Contributions towards the expansion or improvement of local library services; and	The new relief road would help to alleviate new traffic flows generated by future community facilities.

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	f) Contribution towards sporting and leisure facilities.	
CU19 – Cullompton Town Centre Relief Road	A relief road, providing traffic relief to the town centre, will be provided subject to the following: a) Public consultation exercise before the route of the road is determined; b) Provision of replacement open space and sporting facilities elsewhere in Cullompton if these are affected; c) Provision of a shared use foot and cycleway; and d) Measures to protect and enhance trees, hedgerows and other environmental features which contribute to the character and biodiversity, maintaining a wildlife network on the affected alignment and linking to the surrounding countryside. Appropriate noise measures to mitigate the effects from the relief road including the provision of landscaping Provision of landscaping to mitigate the effects of noise from the relief road; and e) Archaeological investigation and appropriate mitigation.	The new relief road directly supports this policy. All appropriate mitigation and enhancement measures will be incorporated into the design.
CU20- Cullompton Infrastructure	The Council will promote the reopening of the Cullompton Railway Station. A site for a new railway station north of Station Road is allocated for this purpose. The Council will use developer funding via planning obligations and the Community Infrastructure Levy where appropriate, seek external sources of funding and work with partners to deliver the following: a) Provision of a Town Centre Relief Road and implementation of other measures in the Cullompton Air Quality Action Plan; b) Mitigation to reduce traffic impacts on the Trunk and Local Road network in association with the East Cullompton Urban Extension and other Cullompton allocations; c) Town centre regeneration and enhancement; d) Extra care housing provision; e) Expansion of library facilities; f) Primary and secondary education facilities; g) Public open space and green infrastructure; h) Bus service enhancements; i) Provision of railway and bus interchange; j) Expansion of emergency fire and rescue services; k) Provision of healthcare facilities; l) Community facilities including sports and leisure facilities; and m) Provision of works to reduce flood risk.	The new relief road is specifically identified in the policy and would help to deliver improved air quality (a), mitigate traffic impacts from developments (b) and provide the potential to enhance the town centre.
DM3- Transport and air quality	Development must ensure safe access to the transport network. Development proposals that would give rise to significant levels of vehicular movement must be accompanied by an integrated Transport Assessment, Travel Plan, traffic pollution assessment	Any planning application for the new relief road would be supported by the required transport and emissions assessment work.

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and Low Emission Assessment. The traffic pollution assessment must consider the impact of traffic-generated nitrogen oxides on environmental assets including protected sites listed in Policy DM28, and propose mitigation measures where appropriate. The Low Emission Assessment shall include the following:

- a) Assessment of the impact on existing Air Quality Management Areas, or an impact likely to result in the declaration of an additional Air Quality Management Area, in cases where a demonstrable negative impact on ambient concentrations of air pollutants is considered likely;
- b) Modelling of local residual road transport emissions from the development without mitigation measures; and
- c) Onsite mitigation measures to reduce negative impacts on local air quality.

2.5 GARDEN VILLAGE STATUS

The government has confirmed garden village status (Culm Garden Village) for land to the east of the M5 motorway at Cullompton. The land relates to the objectives set out in policy CU7 of the emerging Local Plan (see section 2.5). The long-term plans for the garden village are to deliver up to 5,000 new homes, as well as employment, shops, schools, healthcare facilities and leisure opportunities including the potential for new sports facilities and country park. The relief road could provide sufficient highway capacity for the first phase of development of the garden village. Once established, further phase of the garden village would help to deliver M5 J28 motorway improvements and a potential new motorway junction. The garden village is also expected to provide benefits in terms of natural flood management together with sport and recreational opportunities. There is also an ambition to re-open Cullompton railway station and improve bus transport.

2.6 ALLOCATED SITES

Along with the Garden Village proposal for the east of Cullompton, other growth planned includes an urban extension site of approximately 100 hectares north west of the town centre. This is allocated for mixed -use development. The Local Plan Review allocates this for 1350 dwellings and 10,000 square metres commercial floorspace.

Planning permission has also been granted for the construction of new homes to the west of Cullompton off the Knowle Lane area. The Saxon Fields development is currently being built out.

The Local Plan Review Proposals Map showing the allocated sites can be viewed in Appendix A.

2.7 POLICY CONCLUSIONS

The analysis above demonstrates that the principle for developing a new relief road is supported at a national, regional and local level. The scheme has been identified at a regional and local level as being vitally important to the sustainable future growth of Cullompton, and is imperative for the delivery of housing allocations with the Local Plan and supports the proposed garden village. The relief road would provide the improvements to the local highway network to allow traffic to exit the motorway quickly and safely reducing safety implications from traffic queuing on the motorway. It is also key to reducing extremely poor air quality levels that are currently present which are likely to be affecting human health.

CULLOMPTON TOWN CENTRE RELIEF ROAD

UNDERSTANDING THE CURRENT SITUATION: NEED FOR INTERVENTION





3 UNDERSTANDING THE CURRENT SITUATION: NEED FOR INTERVENTION

3.1 INTRODUCTION

Chapter 2 has established the proposed scheme is in accordance with the relevant policies. This section details the specific requirement for the scheme to be progressed to enable the growth and connectivity referenced in the policies.

3.2 HIGHWAY NETWORK AND ISSUES

The B3181 is the primary road in Cullompton. It runs north/south through the centre of the town, leading to Exeter in the south and Willand to the north. A spur from the B3191 to the east, Station Road (also the numbered B3181), connects to the M5 motorway at Junction 28 and the A379 towards Honiton. The junction of the B3191 and Station Road is a signalised T-junction; there are two roundabout junctions on Station Road before the M5 motorway interchange.

In the AM peak the majority of traffic is leaving the town towards the M5 motorway, via the town centre and Station Road. Queuing occurs regularly back from the motorway junction into the town centre and can easily be significantly exacerbated if there are vehicle breakdowns, parking/unloading or stationary buses/coaches.

The PM peak is the reverse of the AM peak with the majority of Cullompton bound traffic exiting the M5 onto Station Road and then onto the B3181 through the town centre. Queuing is frequent and leads back on to the motorway off-slip, in extreme instances queues have stretched back onto the inside lane of the motorway. This is a safety critical issue as stationary traffic on the inside lane motorway increases the potential for vehicle collisions dramatically. As with the AM peak, congestion is regularly amplified by temporary obstructions.

DCC carried out multiple queue surveys in 2016 both east and west of Junction 28 and made the results available to the public through leaflets.

3.3 PLANNING OBJECTIONS AND APPEALS

In 2016 an outline planning application for 259 dwellings to the north of Cullompton at the village of Willand was submitted to Mid Devon District Council, followed in 2017 by a further three separate planning applications for a total of 600 dwellings for the first phase of development to the north west of Cullompton at the proposed urban extension.

Devon County Council as the local highway authority initially objected to all 4 applications on the basis that there was insufficient highway capacity to accommodate the developments; no improvements were proposed in the applications.

The application at Willand was refused by Mid Devon District and was subsequently taken to planning appeal by the applicant. The appeal for the development of 259 dwellings in Willand was considered by the Planning Inspectorate. Whilst the appeal was ultimately dismissed due to an issue unrelated to highway capacity the inspector did state in his report that the impact of additional traffic from the proposed development could not be considered significant, and would not be a valid reason for refusal.

As a consequence of the Inspector's report, Devon County Council withdrew their objections to the 3 other applications totalling 600 dwellings with the anticipation that the Town Centre Relief Road will be completed or underway prior to full occupation of the 600 dwellings. Without the relief road Devon County Council anticipate

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that once the additional 600 dwellings are constructed and occupied the local highway network will be at absolute capacity, and will review the situation after occupation of the first 300 homes.

Queuing on the Junction 28 M5 off-slip will also increase as a result of the additional dwellings and it is increasingly likely that Highways England will object to further developments unless the increased risk of vehicles queuing back beyond the off-slip onto the motorway is mitigated.

3.4 TRAFFIC MODELLING

Following the inspectors report, DCC has undertaken further traffic modelling to determine the impact of the development proposed in the Local Plan Review, and the potential highway improvements to accommodate them.

To assess the impacts, the existing Cullompton traffic model was used. This was initially built to assess the impact of the existing Local Plan development but has since been updated with new TEMPRO factors and development assumptions to match the Local Plan Review timetable. The existing network was also edited to replicate the observed queuing in the PM peak from the High Street to the motorway.

A number of developments are included in the existing Local Plan or have subsequently been granted planning permission. These are shown in Table below and are included in all the scenarios.

Table 3: Base Development

SITE	HOUSES	EMPLOYMENT (m²)
Venn Farm		12,000
Cummings Nursery	100	
Court Farm	76	
Exeter Road	45	
Padbrook	14	
Colebrook1	100	
Knowle Lane	334	
Week Farm		15,000

In addition to this, 600 dwellings currently at planning application stage at North West Cullompton have also been included.

Assigning this development to the current network resulted in some queuing building up on Station Road west bound in the PM peak but this does not extend back to the north bound off-slip or onto the M5 mainline. This model is only for a neutral weekday and it is not possible to model the impacts of parked cars and other disruptions in the High Street, so in reality the model would likely reach back to the off-slips more frequently than it currently does.

However, the east bound queue along Station Road in the AM peak extends back to the High Street and Higher Street, and this will cause air quality issues within the already designated Air Quality Management Area (AQMA).

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Adding in the Cullompton Town Centre Relief Road to this base of development provides an alternative road for the traffic in the AM peak to queue on outside of the AQMA. It also provides a bypass of the town in the PM peak so reduces the west bound queue along Station Road.

To assess the traffic benefits of the Town Centre Relief Road, a future 2033 development scenario, with the all the development shown in Table as well as the full Local Plan Review allocation at North West Cullompton of 1350 dwellings and 10,000m² employment floorspace was created. An early release of 500 houses on the Culm Garden Village site to the east of the M5 were also included.

Initially this resulted in queues on the northbound off-slip extending back onto the M5 mainline because there was a high traffic demand over the M5 bridge. However, by changing the signal timings of the eastern junction to hold some of the traffic on the Honiton Road eastbound approach, the queue on the northbound off-slip can be reduced and prevented from reaching the mainline. This does cause a large queue to build up on the Honiton Road approach but DCC is prepared to accept this outcome in the short term provided a strategic intervention is coming forward in the future.

Increasing the number of houses on the eastern side beyond the 500 modelled would result in additional queueing on the north bound off-slip. This could be mitigated by constraining the signal timings of the eastern junction further but this would result in an unacceptable queue on the Honiton Road approach. Devon County Council would therefore be very reluctant to permit any additional development to come forward without a strategic intervention.

3.5 SUMMARY

Without the intervention of a highway improvement reducing queuing in the AM and PM peaks, growth in Cullompton in line with the Local Plan is unlikely to be achieved. Beyond the 600 dwellings at North West Cullompton that have been submitted for outline approval, additional development would result in the queue on Station Road increasing which will have a negative impact air quality within the AQMA. The chance of the PM queue extending back down the off-slips into the motorway also increases and if this would reach the mainline there would be a significant safety issue.

The Town Centre Relief Road is expected to mitigate the issue by moving the queue out of the AQMA in the AM peak as well as providing an alternative route in the PM peak which would reduce the risk prevents of west bound queue on Station Road from extending back onto the motorway mainline. The Town Centre Relief Road scheme therefore unlocks the remaining 750 dwellings at NW Cullompton plus 500 dwellings to the east of the M5, together with certain other more minor housing development sites in advance of a more strategic motorway intervention. Beyond this level, there is a greater chance of queuing on the M5 mainline which is a safety issue, or the queue on Honiton Road becomes more significant.

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OBJECTIVES FOR FUTURE IMPROVEMENTS





4 OBJECTIVES FOR FUTURE IMPROVEMENTS

4.1 OVERARCHING STRATEGIC AIMS

The objectives for intervention have been developed based on an understanding of the current situation, the future situation and the identification of the causes of the poor connectivity of Cullompton. Policy has also been considered.

The key strategic aims of future interventions are:

- 1. To enhance the economic prosperity and competitiveness of Mid Devon, both nationally and in line with other areas of Devon; and
- 2. To support planned sustainable growth including housing and employment development opportunities in Cullompton.

To support the strategic objectives above, scheme objectives have been developed in conjunction with Mid Devon District and Devon County Councils, which reflect the differing issues identified.

4.2 SCHEME OBJECTIVES

The primary objectives are:

- 1A Reduction of queuing on the highway network. Mitigating queues extending back onto the motorway from the northbound off slip and queues extending back into the High Street in the other direction.
- Removal of traffic from Cullompton High Street which is an existing Air Quality Management Area (AQMA) resulting in improved air quality and town centre amenity;
- Delivery of a long-standing community aspiration for a town centre relief road to support economic and environmental regeneration of Cullompton High Street.

The secondary objectives are:

- Early delivery of the first part of the longer term strategic solution which will be required to unlock the full potential for homes and growth at Cullompton Garden Village;
- 2B Minimising impact to the Cullompton Community Association recreation grounds and facilities;
- 2C Compatibility with a longer term strategic solution to provide additional highway capacity to support the full potential for homes and growth at the identified Culm Garden Village site, through a new motorway junction.

The tertiary objectives are:

- 3A Compatibility with a potential future southern extension to the relief road;
- 3B Provision of an alternative route for traffic, avoiding Cullompton High Street, diverted from the M5 motorway during closures for both incidents and planned events.

CULLOMPTON TOWN CENTRE RELIEF ROAD

POTENTIAL IMPROVEMENTS





5 POTENTIAL IMPROVEMENTS

5.1 OPTION GENERATION

Several options have been considered within the corridor identified for the relief road within the Local Plan review, which draw on current policy, as well as previous strategies and studies.

This ROR considers all options, including combinations of the options listed in the 5. The drawings for each option are included within Appendix B.

Table 5: Summary of Options Considered

Option Name	Drawing Reference
Option A	70047809 – Option A
Option B	70047809 – Option B
Option C	70047809 – Option C
Option D	70047809 – Option D

5.2 OPTION PRINCIPLES

Each of the options considered has only been developed to a preliminary level of detail, for the purposes of seeking early stakeholder and public feedback. Consequently, the drawings showing the options do not show the finalised route that may be progressed further for a planning application submission.

The drawings indicatively show the highway alignments and junctions considered with key features annotated along with typical cross sections. Any option that is progressed as the preferred option will be subject to detailed design and assessment to optimise the alignment. Features such as crossing points, highway accesses and environmental mitigation measures, etc, would also be developed as part of a subsequent planning application.

5.2.1. Option A

This option alignment is entirely within the corridor between Cullompton Town Centre to the west and the rail/motorway corridor to the east. The route is broadly aligned to the east edge of the Town Centre, seeking to retain a large proportion of the current green open space to the east of the relief road.

At the southern extent of the route a new junction with Duke Street, just east of Meadow Lane would be the starting point for the relief road. The existing road layout would be revised at the junction, which would likely include making the Meadow Lane/Relief Road the priority and potentially either closing Duke Street west of Meadow Lane to prevent access or permitting one-way access only to Duke Street west of Meadow Lane. This would help increase junction capacity and reduce traffic using Duke Street to access the town centre from the relief road.

The route alignment would head roughly north from the junction with Duke Street with grass pastureland between the rear gardens of properties on Chestnut Avenue and a South West Water pumping station.

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Approximately 130m north of the junction with Meadow Lane the alignment crosses the Mill Leat watercourse and enters recreational land containing a children's play area bordered by a timber fence. The alignment continues northwards through the northern fence enclosing this land and proceeds through another recreational grassland area bordered by the Mill Leat watercourse to the west and a tree lined hedge to the east with the Cullompton Rangers Football Club main pitch beyond the hedge line.

The alignment continues north through the northern field boundary formed by trees and drainage ditch and enters an open grassland known as The Meadow with the Mill Leat to the west and a drainage ditch to the east. Approximately 150m north the alignment crosses from The Meadow to The Main Meadow recreational grassland area through a drainage ditch and line of trees forming the border between The Meadow and Main Meadow.

The route crosses through the main meadow northwards to its tree lined boundary with the grassland pasture immediately east of the Tesco superstore building. The alignment proceeds along the eastern boundary of this pasture with a potential new roundabout junction east of the Tesco car park, which could provide alternative routes to both the Tesco superstore to the west and the Longbridge Meadow Industrial Estate to the east.

The alignment continues north, between the Tesco petrol station and a mobile home and caravan site, concluding with a junction with Station Road (B3181) in the vicinity of the existing junction with Millennium Way. The junction shown is a new enlarged roundabout, offset west from the current junction. It should be noted that the precise design of the junction arrangement at the northern end is yet to be established and there is flexibility in junction arrangement options pending further discussions with landowners.

5.2.2. Option B

This option alignment is entirely within the corridor between the Cullompton Town Centre to the west and the rail/motorway corridor to the east. The route is broadly aligned towards the rail/motorway, seeking to minimise bisection of the open green space. The route would commence at its southern end with a realignment of a section of Duke Street east of its junction with Meadow Lane, between the pumping station and First Bridge over the Mill Leat watercourse.

The existing layout of the Meadow Lane / Duke Street junction would be revised to simplify the junction, making the Meadow Lane/Relief Road the priority and potentially either closing Duke Street west of Meadow Lane to prevent access or permitting one-way access only to Duke Street west of Meadow Lane. This would help increase junction capacity and reduce traffic using Duke Street to access the town centre from the relief road.

The alignment of the Relief Road then heads northwest deviating from Duke Street and crossing the Mill Leat upstream of First Bridge into a grassland pasture containing some small agricultural buildings. A new junction with Duke Street would be included in this location.

Continuing roughly northwest the route crosses through a tree lined hedge into a grass recreation area west of the access road to the sport facilities and whippet track. The alignment proceeds across the access road and whippet track into the Cullompton Cricket Club cricket pitch.

The alignment bisects the cricket field before turning northwards and entering the Cullompton Bowls Club bowling green at its southern boundary and continuing north adjacent to the rail line through the bowling club pavilion.

Proceeding north, the route stays parallel to the rail line passing to the east of the Cullompton Rangers Football club clubhouse and main pitch, passing through a football training pitch. Continuing north the alignment crosses over an attenuation pond surrounded by trees and proceeds through the southeast corner of a second football training pitch whilst keeping parallel with the rail line through a wooded area of mature trees.



At the northern extent of the wooded area the alignment deviates from the rail line and heads northwest through The Main Meadow recreation area to its northern tree lined boundary with the grassland pasture immediately east of the Tesco superstore building. The alignment proceeds northwest through this pasture until a potential new roundabout junction immediately east of the Tesco car park, that could provide alternative routes to both the Tesco superstore to the west and the Longbridge Meadow Industrial Estate to the east.

The alignment continues north, between the Tesco petrol station and a mobile home and caravan site, concluding with a junction with Station Road (B3181) in the vicinity of the existing junction with Millennium Way. The junction shown is a new enlarged roundabout, offset west from the current junction. It should be noted that the precise design of the junction arrangement at the northern end is yet to be established and there is flexibility in junction arrangement options pending further discussions with landowners.

5.2.3. Option C

This option alignment spans across the rail/motorway commencing at its southern extent west of the rail/motorway and concluding at its northern end east of the rail/motorway corridor. The route is seeking to minimise impact on the green spaces between Cullompton Town Centre and the rail/motorway.

At the southern extent of the route, a new junction with Duke St just east of Meadow Lane would be the starting point for the relief road. The existing road layout would be revised at the junction, which would likely include making the Meadow Lane/Relief Road the priority and potentially either closing Duke Street west of Meadow Lane to prevent access or permitting one-way access only to Duke Street west of Meadow Lane. This would help increase junction capacity and reduce traffic using Duke Street to access the town centre from the relief road.

The route alignment would head roughly northeast from the junction with Duke Street through grass pastureland between the rear gardens of properties on Chestnut Avenue and a South West Water pumping station. Proceeding northwest the route would cross the Mill Leat watercourse and pass through tree lined hedges either side of a field of grassland pasture with agricultural buildings to the south.

The route continues into a grass recreation area west of the access road to the sport facilities and whippet track. The alignment proceeds across the access road and whippet track before the alignment heads west on the boundary of the Cullompton Cricket Club land to the north and the Small Field recreation area to the south.

The alignment would then bridge over both the rail line, motorway and the river Culm before returning towards existing ground levels within agricultural land west of the River Culm. The alignment then proceeds northwest through a series of agricultural field separated by managed low-level hedges. This area is proposed for part of the Culm Garden Village.

The route alignment concludes with a junction with a new junction with Honiton Road (A373) between the property of 28 Honiton Road and the existing bridge over the unnamed tributary to the River Culm. It is shown as a T-junction on the drawing, but could be a roundabout subject to detailed design development.

5.2.4. Option D

This option alignment spans across the rail/motorway commencing at its southern extent west of the rail/motorway and concluding at its northern end east of the rail/motorway corridor. The route is seeking to minimise impact on the green spaces between Cullompton Town Centre and the rail/motorway and take a direct north south alignment east of the rail/motorway corridor.

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At the southern extent of the route a new junction with Duke St just east of Meadow Lane would be the starting point for the relief road. The existing road layout would be revised at the junction, which would likely include making the Meadow Lane/Relief Road the priority and potentially either closing Duke Street west of Meadow Lane to prevent access or permitting one-way access only to Duke Street west of Meadow Lane. This would help increase junction capacity and reduce traffic using Duke Street to access the town centre from the relief road.

The route alignment would head roughly northeast from the junction with Duke Street through grass pastureland between the rear gardens of properties on Chestnut Avenue and a South West Water pumping station.

Proceeding northwest the route would cross the Mill Leat watercourse and pass through tree lined hedges either side of a field of grassland pasture with agricultural buildings to the south.

The route continues into a grass recreation area west of the access road to the sport facilities and whippet track. The alignment proceeds across the access road and whippet track before the alignment heads west on the boundary of the Cullompton Cricket Club land to the north and the Small Field recreation area to the south.

The alignment would then bridge over both the rail line, motorway and the river Culm before returning towards existing ground levels within agricultural land west of the River Culm.

Once across the river Culm the alignment would head north, a junction is indicatively shown with a spur continuing east, and crossing the river Culm once again to continue north approximately parallel with the river Culm within grassland pasture. Before culminating with a new junction with Honiton Road (A373) immediately west of Stoneyford Bridge, the alignment would cross the River Culm for final time

5.3 OPTIONS DISCOUNTED

The Longmeadow Industrial Estate is included within the broad area identified for the Town Centre Relief Road in the emerging Local Plan Policy. Consideration was given to locating the northern section of an alignment through the Industrial Estate when generating route options. However, the current highway access to the industrial estate is in close proximity to the M5 junction 28 roundabout and is constrained by the Weary Traveller public house to the west and the River Culm to the east. It is consequently considered that a new highway junction in this location is not physically viable and would not provide highway capacity benefits, and therefore an alignment through the industrial estate is not included within the options presented in this report.

SIFT 1 – ASSESSMENT OF OPTIONS AGAINST SCHEME OBJECTIVES





6 SIFT 1 – ASSESSMENT OF OPTIONS AGAINST SCHEME OBJECTIVES

6.1 OPTION ASSESSMENT

Table 6 shows a high-level assessment of each of the options against the scheme objectives. This exercise is intended to feed into a first sift of the options to assist in determining which are suitable for progressing to further assessment.

Table 6: High Level Option Assessment

Objective	Option A	Option B	Option C	Option D
1A – Highway capacity	VV	VV	VV	VV
1B – Air Quality	VVV	VVV	VV	VV
1C - Town Centre Regeneration	VV	VV	V	V
2A – Early delivery of infrastructure support Culm Garden Village	VVV	VVV	ХX	ХX
2B – Minimise impact to CCA fields	XXX	хх	X	X
2C – Compatibility with strategic M5 motorway junction improvement	VVV	VV	VV	VV
3A – Compatibility with potential future southern relief road extension	VVV	VV	VVV	VVV
3B – Alternative M5 diverted traffic route	~~	VV	VV	VV

✓ ✓ ✓: Objective largely achievable

✓ ✓: Objective partially achievable

✓: Objective slightly achievable

X: Objective slightly unachievable

X X: Objective partially unachievable

X X X: Objective largely unachievable

6.2 SUMMARY OF OPTION ASSESSMENT

6.2.1. 1A – Highway Capacity

Preliminary traffic modelling has been undertaken for all options to predict the impact on queuing and diverting traffic from the town centre, for the scenario described in section 3.4. Options A & B are predicted to result in a reduction of vehicle movements through the town centre of approximately 40% in the peak periods, when the 600 houses at NW Cullompton have been built and occupied. Options C & D are expected to result in a 30% reduction. All options would provide sufficient capacity for the first phase of the future growth of Cullompton proposed within the emerging Local Plan.

6.2.2. 1B – Air Quality

Improvement in Air Quality is linked primarily to the reduction of congestion and diversion of traffic from the town centre. Options A & B take more traffic out of the High Street so have a larger benefit to air quality.



6.2.3. 1C Town Centre Regeneration

As above, all options are expected to relief the town centre of both traffic and associated poor air quality, with Options A & B expected to have a greater impact than C & D. However, all options for the relief road alignment as susceptible to flooding in the vicinity of their proposed junctions with Duke Street. Consequently, the relief road would be closed during flood events and traffic would to revert back to passing through the town centre on those occasions. This is expected to limit, to some extent, the options to improve the street scene as part of regeneration. These issues are overcome if a southern extension to the relief road is added at some point in the future as this will raise the road out of the floodplain as described in section 6.2.7.

6.2.4. 2A – Early delivery of infrastructure supporting the Culm Garden Village

Options A & B are relatively low cost in comparison with Options C & D, both of which would require a significant structure, or structures, spanning over the rail line, motorway and river Culm. The associated cost of that structure(s) would require significant upfront funding that may be disproportional to the value of housing proposed in the first phase of the Garden Village.

6.2.5. 2B – Minimise Impact to the CCA fields

Options C & D have the least impact on the CCA fields, whilst still impacting on Long Meadow and Small Field south of the Cricket Club. The area of Option B within the CCA fields is reduced by being located through the Cricket Club and Bowling Club land, and is also aligned parallel with the rail line where possible to minimise segregation of the fields. Option A is considered to have the most significant impact on the CCA fields, with the largest footprint within CCA ownership and segregating the majority of the fields from the Town Centre.

6.2.6. 2C – Compatibility with strategic M5 motorway junction improvement

Drawings showing the arrangement of potential new motorway junctions connecting with the relief road options are contained in Appendix C. All options have considered to be compatible with a viable new motorway junction. It should be noted that the nature of the strategic improvement to the motorway is still subject to discussion with Highways England and whilst it may take the form of a new junction, this has yet to be finalised.

The new junction slip roads for Options B, C and D would need to be designed and constructed in a tight corridor adjacent the rail line to the west and River Culm to the east. The existing Duke Street motorway overbridge would also need to be removed or reconstructed. Option A would not require removal/replacement of the Duke Street overbridge, and the design and construction of the slip roads are less constrained by the rail line and river Culm.

Slip roads for a new motorway junction would only be provided for the northbound off-slip and southbound onslip. This is due to highway safety issues relating to merging and weaving traffic movements that would result from junctions in close proximity without limiting the vehicle movements.

6.2.7. 3A – Compatibility with potential future southern relief road extension

Drawings indicating the connection point for a southern extension to each option are included in Appendix C. All the option alignments connect to Duke Street, east of the junction with Meadow Lane. At their southern extent. Duke Street in this vicinity is prone to flooding and the relief road would need to be closed on those occasions. Extending the relief road further south would provide the potential for connection to the existing highway at a location above flood levels that would avoid such closures during flood events. This would be required if a new junction onto the M5 is accessed from the relief road.

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Options A, C & D could accommodate a southern extension through a simple T-junction with the proposed relief road, that wouldn't necessarily need to be signalised. A southern extension to Option B, if implemented alongside a new motorway junction, would be expected to result in a cross-road junction that would need to be signalised, and therefore not as compatible as Options A, C & D.

6.2.8. 3B – Alternative M5 diverted traffic route

All of the options would provide an alternative route for traffic diverted from the M5 during both planning roadworks and accidents/incidents. With 15 miles (23 kilometres) between Junction 29 and 27, motorway closures resulting in additional traffic through Cullompton are relatively frequent. The relief road would be expected to become the designated diversion route for motorway traffic, regardless of the option implemented.

6.3 SIFTED OPTIONS

All Options considered are assessed to be capable of achieving the majority of the objectives, and on that basis, all would be worth considering in more detail. However, early engagement with the Environment Agency has determined that Option D would not be viable due to flood risk. The alignment of Option D is adjacent to the river Culm and right through the deepest and fastest flowing flood water in storm conditions, and consequently the expected impact to flood risk would be unacceptable to the Environment Agency.

As a result of the advice from the Environment Agency, Option D was not taken forward to the Comparative Assessment stage.

6.4 OPTION SIFTING CONCLUSION

The following options have been progressed to this second sifting stage, having either met each of the scheme objectives to an acceptable level, complied with strategy and policy, and passed key technical viability criteria:

- Option A
- Option B
- Option C

COMPARATIVE ENVIRONMENTAL ASSESSMENT





7 COMPARATIVE ENVIRONMENTAL ASSESSMENT

This report provides a high level environmental appraisal for each of the route options within an appropriate Study Area.

The Environmental Routes Options Appraisal is intended to be qualitative and high-level and therefore will not provide a detailed or quantitative assessment of environmental issues. It does however, identify any key environmental constraints which may affect the deliverability, e.g. through risk, programme or cost.

This Environmental Routes Options Appraisal covers the following topic areas:

- Air Quality;
- Noise;
- ¡ Landscape / Townscape;
- Socio-economic;
- Geotechnical and contamination;
- Arboriculture; and
- Waste;
- Ecology;
- ¡ Historic Environment; and
- Water Environment

The environmental appraisal is based on publicly available desk-based data. Limited consultation has been undertaken with statutory and non-statutory organisations at this stage. As such, an appropriate level of consultation will undertaken at later stage to ensure that all available site specific and surrounding area data has been considered.

No detailed designs of the potential route option are available at this stage in the project and would only be prepared in connection with a planning application. Therefore, the assessment impacts in relation to construction and operation are high level. More detailed environmental impact assessments will take place at planning application stage.

7.1 SURROUNDING AREA

Cullompton is a historic town and civil parish in the district of Mid Devon and the County of Devon. The wider environment was assessed as semi-rural; dominated by agricultural fields and pasture with sporadic residential plots. A tributary of the River Culm runs through the site near the southern boundary, with the main river running east of the M5 motorway. Junction 28 of the M5 lies within the parish of Cullompton and a short distance from the town centre. Other major road links are the A373 to Honiton and the former A38 to Exeter which runs through the town and is now the B3181. The surrounding area includes a few recreational and sports ground facilities such as, the recreational playground, the cricket ground, the bowling green and the football ground.

7.2 METHODOLOGY

7.2.1. Desk Study

A desk study was carried out to establish possible statutory and non-statutory designations that may pose a constraint or be impacted by proposed route options.

The sources of information used to provide the baseline evidence were:

- The Multi-Agency Geographic Information for the Countryside (MAGIC) Map
- In-house GIS layers



- Environment Agency online data
- Devon County Council website
- Mid Devon District Council Website

Several other data sources have been consulted as part of this appraisal and identified within topic sections where relevant.

7.3 ENVIRONMENTAL STUDY AREA

The site is located north of Duke Street in the town of Cullompton (Grid Reference: ST 0237806718). The east boundary follows the line of an existing tributary to the River Culm on the eastern side of the M5 motorway. The north and west boundary are bordered by the town of Cullompton and the south is bordered by agricultural fields. The site is 13 miles north-east of Exeter and lies on a tributary of the River Culm.

The complete study area is shown on the accompanying Environmental Constraints Plan in Appendix D.

7.4 QUALITATIVE ENVIRONMENTAL APPRAISAL

A high-level appraisal for each route option was undertaken for each of the environmental topic areas identified within Section 8.1.

7.1 explains the qualitative appraisal scores applied to each option for each environmental topic area in **Table 2**.2. All of the assessments have assumed that no mitigation has been included in the design. Once a preferred route is chosen, appropriate mitigation will be incorporated in the design to minimise the impact on the environment and provide betterment if possible.

Table 7.1: Qualitative Appraisal Scores

Qualitative Appraisal	Threshold Description
High Adverse	Loss of resource and/or quality and integrity of resource; severe damage to key characteristics, features or elements
Moderate Adverse	Some measurable change in attributes, quality or vulnerability; minor loss of, or alteration to, one (maybe more) key characteristics, features or elements
Small Adverse	Very minor loss or detrimental alteration to one or more characteristics, features or elements
Negligible	No loss or alteration to key characteristics, features or elements
Small Beneficial	Very minor gain or beneficial alteration to one or more characteristics, features or elements
Moderate Beneficial	Some measurable beneficial change in attributes, quality, minor gain or beneficial alteration to key characteristic, features or elements
High Beneficial	Gain of resource and/or quality and integrity of resource; dramatic beneficial improvement to key characteristics, features of elements

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The likely impacts for the different environmental topics are presented below. The desk-based baseline gathered for the appraisal can be viewed in Appendix E.

7.5 AIR QUALITY

7.5.1. OPTION A

Likely Impacts

As a result of the realignment of traffic away from B3181, sensitive receptors along this route are likely to experience a moderate to high improvement. In addition, the roundabout to the north of the scheme is likely to result in more freely flowing traffic, reducing emissions per vehicle and thereby reducing pollutant concentrations at sensitive receptors to the north of Station Road.

To the south of the scheme, where the route alignment lies within 20m of properties along Chestnut Avenue, there is likely to be an increase in pollutant concentrations as a cause of the reduction in distance between pollutant sources and receptors. Similarly, properties to the south along Water Meadow are likely to experience an increase in pollutant concentration as a result of the likely change in vehicle flows in the vicinity of the junction of Meadow Lane with Duke Street. In addition, slight increases in pollutant exposure are likely to occur at residential properties along Rivermead and to the west of Lower Mill Lane, where the route brings traffic sources within 150m of these properties.

As such, a moderate to high improvement in air quality along B3181, the corridor of which encompasses many sensitive receptors and locations of relevant exposure to the air quality objectives, will be slightly offset by a moderate to low deterioration in air quality at approximately 10 properties to the south of the scheme.

Qualitive Appraisal Score – Moderate Benefit

7.5.2. OPTION B

Likely Impacts

Similarly, to Option A, sensitive receptors along the B3181 corridor are likely to experience a moderate to high improvement in air quality due to the rerouting of traffic flows away from the B3181. Slight improvements in air quality are also likely to occur at properties to the north near station road as a cause of more freely flowing traffic along this route.

At properties towards the north of meadow lane a slight deterioration in air quality may occur as a result of the increased traffic flow near the junction. However, due to the alignment of the southern section of the scheme in Option B routing traffic flows further from residential properties than under option A, any deterioration will be less significant than that under Option A and is likely to have a low impact on receptors in this area.

In addition, the increased distance between pollutant sources and receptors to the west of Rivermead under Option B will serve to limit any potential changes in air quality at these properties. While this alignment brings some proportion of traffic slightly closer to these receptors than traffic currently using the B3181, the distance between road traffic and residential properties in this area will result in only very slight changes in pollutant concentration.



The moderate to high improvement in air quality at the large number of sensitive receptors along the B3181, where air quality is currently poor, will be more beneficial under Option B than Option A due to less significant changes in pollutant concentration at properties to the west and south of the residential areas along the scheme.

Qualitive Appraisal Score – Moderate Benefit

7.5.3. **OPTION C**

Likely Impacts

Under Option C, a moderate to high improvement in air quality is likely at the large number of sensitive receptors along the B3181 corridor as a result of the rerouting of traffic in the area. This option is also likely to result in slight improvements in air quality to the north of the scheme along Station Road by cause of more freely flowing traffic in this area.

Due to the route alignment and introduction of a new junction on Honiton Road, residential receptors in this area are likely to experience a Low to Moderate increase in pollutant exposure. This slight increase is likely to occur at approximately 15 properties along Honiton Road and the impact will reduce with increasing distance from the scheme and the new junction. In addition, a slight increase in pollutant concentrations is likely to occur at sensitive receptors in Upton Lakes and Lodges, where the new route passes within approximately 100m of the receptors. Similarly, to Option A, a slight increase in pollutant exposure is also likely to occur at properties to the north of Meadow Lane and along Chestnut Avenue, though the impact of Option C is likely to be smaller than that of Option A due to the alignment moving pollutant sources nearer to a lower number of receptors.

Qualitive Appraisal Score – High Benefit

7.6 NOISE

7.6.1. Option A

7.6.2. Likely impacts

There is likely to be an increase in road traffic noise level at Noise Sensitive Receptors (NSRs) near the proposed route. Properties to the west of the route, on the eastern edge of Cullompton, are likely to experience an increase in road traffic noise due to the proximity of the new route. Recreation and outdoor amenity areas to the southern end of the route are also likely to experience an increase in noise levels.

There is likely to be a reduction in noise levels along Cullompton high-street.

It is likely that the use of mitigation measures in the form of noise barriers or earth bunds would have the potential to reduce predicted increase in road traffic noise levels.

Traffic data has yet to be used to model the impacts and therefore it is not possible to determine any likely change in noise levels, including decreases, which may occur as a result of changes to traffic flows on the wider road network as a result of the proposed scheme.

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Qualitive Appraisal Score – High Adverse



7.6.3. Option B

Likely Impacts

There is likely to be an increase in road traffic noise level at NSRs near the proposed route. Properties to the west of the route, on the eastern edge of Cullompton, are likely to experience an increase in road traffic noise due to the proximity of the new route. Recreation and outdoor amenity areas to the southern end of the route are also likely to experience an increase in noise levels.

There is likely to be a reduction in noise levels along Cullompton high-street.

It is likely that the use of mitigation measures in the form of noise barriers or earth bunds would have the potential to reduce predicted increase in road traffic noise levels.

Traffic data has yet to be used to model the impacts and therefore it is not possible to determine any likely change in noise levels, including decreases, which may occur as a result of changes to traffic flows on the wider road network as a result of the proposed scheme.

Qualitive Appraisal Score – High Adverse

7.6.4. Option C

Likely Impacts

There is likely to be an increase in road traffic noise level at NSRs near the proposed route, namely Upton Lake Lodges and East Culm Farm. Noise levels would also likely increase to the rear of properties on Honiton Road.

It is likely that the use of mitigation measures in the form of noise barriers or earth bunds would have the potential to reduce predicted increase in road traffic noise levels.

There is likely to be a reduction in noise levels along Cullompton high-street.

Traffic data has yet to be used to model the impacts and therefore it is not possible to determine any likely change in noise levels, including decreases, which may occur as a result of changes to traffic flows on the wider road network as a result of the proposed scheme.

Qualitive Appraisal Score – Moderate Adverse

7.7 LANDSCAPE/TOWNSCAPE

7.7.1. Option A

Likely Impacts

Permanent impacts:

- The new relief road is in close proximity to properties 1 10 Chestnut Avenue and 7 9 Water Meadow.
- Crossing of Mill Leat and loss of leat waterside vegetation and individual mature trees;
- Severance of 2 mature native species rich hedgerows;
- The new relief road passes through CCA playground;
- Severance of access track to sports fields;



- The new relief road passes through CCA meadows;
- Loss of young oak tree avenue in central meadow;
- Loss of semi natural mixed woodland;
- Impact on setting of Cullompton Conservation Area; and
- Impact on setting of St Andrew's Church.

Qualitive Appraisal Score - High Adverse

7.7.2. Option B

Likely impacts

Permanent impacts;

- The new relief road is in close proximity to properties 1 9 Water Meadow, Cullompton;
- The new relief road is near First Bridge, Grade II listed structure;
- Crossing of Mill Leat and loss of waterside vegetation and individual mature trees;
- Severance of vehicular access to CCA Fields and mature mixed specimen tree avenue;
- The new relief road passes through cricket ground, bowling green and east side of football ground;
- Impact on mature trees alongside east boundary of football fields and CCA meadows;
- The new relief road passes through CCA meadows;
- Impact on setting of Cullompton Conservation Area; and
- Loss of semi-natural mixed woodland.

Qualitative Appraisal Score – High Adverse

7.7.3. Option C

Likely Impacts

Permanent impacts:

- The new relief road is in close proximity of properties in Chestnut Avenue and Water Meadow;
- Visual impact of scale of embankment and structures to elevate the alignment over the railway and M5;
- Crossing of southern end of Mill Leat and loss of leat waterside vegetation and individual mature trees;

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- The new relief road passes through southern end of CCA meadows;
- Severance of vehicular access to CCA Fields and mature mixed specimen tree avenue;
- Loss of veteran landmark oak trees and hedgerow on southern boundary of cricket ground;
- New slip roads to/from the south would impact on motorway embankments and verges;
- Crossing of River Culm and loss of waterside vegetation and individual mature trees;
- The new relief road is near Upton Lakes and Lodges complex;
- The new relief road conflicts with local field pattern;
- Impact on setting of Cullompton Conservation Area; and
- Eastern extent of the new relief road is in close proximity to 27 29 Honiton Road.

Qualitative Appraisal Score – High Adverse



7.8 SOCIO-ECONOMIC

7.8.1. Option A

Likely Impacts

The loss of public green and recreational space would be a real loss to the local community. It is clear CCA land and remaining fields are popular with the public and are used by all ages of the community.

Option A would lead to direct loss of the existing CCA children's playground, a substantial amount of the associated community fields and would divide the recreational areas remaining. Implementing the scheme would also have a negative impact on tranquillity levels and the visual setting, making the area less appealing to the public. The loss of public open space will be viewed with significant negativity by the local community and strong opposition to the scheme is expected.

Option A would have a beneficial impact on poor air quality levels within Cullompton as explained in section 3.1. By reducing traffic flows through the town, especially the High-street, the relief road will improve air quality levels for residents and improve accessibility to existing shops and businesses. Improving accessibility to and within economic centres improves the local economy which in turn attracts further investment. It also allows the town to grow sustainably and benefit the character and appearance of the Conservation Area and wider attractiveness of the town centre.

Qualitative Assessment Score – High Adverse

7.8.2. Option B

Likely Impacts

Option B would lead to direct loss Cullompton Cricket Club, Cullompton Bowling Club and a substantial amount of the associated community fields.

Implementing the scheme would also have a negative impact on tranquillity levels and the visual setting, making the area less appealing to the public. The loss of public open space will be viewed with significant negativity by the local community and strong opposition to the scheme is expected.

Option B would have a beneficial impact on poor air quality levels within Cullompton as explained in section 3.1. By reducing traffic flows through the town, especially the High-street, the relief road will improve air quality levels for residents and improve accessibility to existing shops and businesses. Improving accessibility to and within economic centres improves the local economy which in turn attracts further investment. It also allows the town to grow sustainably and benefit the character and appearance of the Conservation Area and wider attractiveness of the town centre.

Qualitive Assessment Score – High Adverse

7.8.3. Option C

Likely Impacts

Sensitive receptors include Upton Lakes & Lodges which focuses on fishing holidays. Option C would pass within 50m of the lodges dramatically changing the tranquillity of the holiday site.



Option C would have a beneficial impact on poor air quality levels within Cullompton as explained in section 3.1. By reducing traffic flows through the town, especially the High-street, the relief road will improve air quality levels for residents and improve accessibility to existing shops and businesses. Improving accessibility to and within economic centres improves the local economy which in turn attracts further investment. It also allows the town to grow sustainably.

Option C would also open land parcels to support Policy CU7-CU12 in the emerging local plan. More housing is required to satisfy growth targets. the land identified in policy CU7-CU12 could form the first phase of the garden village. The aim of Culm Garden Village:

- Deliver 5,000 new homes, as well as employment, shops, schools, healthcare facilities and leisure opportunities including the potential for new sports facilities;
- The garden village will help to deliver the M5 J28 motorway improvements and the town centre relief road, and will also provide benefits of natural flood management.
- Part of the garden village will be allocated for development under the Mid Devon Local Plan Review (1,750 houses to 2033) but wider ambition is to create a new community of up to 5,000 homes; and
- It will be locally led.

Option C would provide vital infrastructure to support the above social expansion which in turn would boost the local economy.

Qualitative Assessment Score – Small Benefit

7.9 GEOTECHNICAL AND CONTAMINATION

7.9.1. Option A and B

Likely Impacts

If either Option A or B is developed, the new relief road would be a potential source of contamination to the remaining green field areas and existing water courses. Any incident could also have a negative impact on existing wildlife and vegetation.

Qualitative Assessment Score – Moderate Adverse

7.9.2. **Option C**

Likely Impacts

- Loss of good quality agricultural land.
- Potential negative impact on existing Nitrate Vulnerable Zone.
- Potential for future contamination of existing water sources through surface run off and fuel leakages.

Qualitative Assessment Score - Moderate Adverse



7.10 ARBORICULTURE

7.10.1. Option A

Likely Impacts

- Crossing of Mill Leat and loss of leat waterside vegetation and individual mature trees;
- Loss of young oak tree avenue in central meadow; and
- Loss of semi natural mixed woodland.

Qualitative Assessment Score - High Adverse

7.10.2. Option B

Likely Impacts

- Crossing of Mill Leat and loss of waterside vegetation and individual mature trees;
- Severance of vehicular access to CCA Fields and mature mixed specimen tree avenue;
- i Impact on mature trees alongside east boundary of football fields and CCA meadows; and
- Loss of semi-natural mixed woodland.

Qualitative Assessment Score - High Adverse

7.10.3. Option C

Likely Impacts

- Crossing of southern end of mill leat and loss of leat waterside vegetation and individual mature trees;
- Severance of vehicular access to CCA Fields and mature mixed specimen tree avenue;
- Loss of veteran landmark oak trees and hedgerow on southern boundary of cricket ground; and
- Crossing of River Culm and loss of waterside vegetation and individual mature trees.

Qualitative Assessment Score - Moderate Adverse

7.11 WASTE

7.11.1. Option A

Likely Impacts

Option A is the shortest of the three route options (985m), therefore construction is likely to produce the least amount of waste and the build will require the least amount of material.

Qualitative Assessment Score - Moderate Adverse

7.11.2. Option B

Likely Impacts

Option B is the second longest of the three route options (1150m), therefore construction is likely to produce the second largest amount of waste and the build will require the second largest amount of material.

Qualitative Assessment Score - Moderate Adverse



7.11.3. Option C

Likely Impact

Option A is the longest of the three route options (1500m), therefore construction is likely to produce the most amount of waste and the build will require the largest amount of material. Option C will also require the construction of a rail and motorway bridge unlike the other two options.

Qualitative Assessment Score – High Adverse

7.12 ECOLOGY

7.12.1. Option A

Likely Impacts

Option A runs through cultivated/ disturbed land – amenity grassland. The amenity grassland consists of play areas and sports fields and the habitat had low botanical diversity and value for protected species is limited.

The option runs through mixed woodland which is semi-natural. At this site, mature mixed woodland is present and comprises of deciduous and leyllanli trees that are used as curtilage between playing fields and screening from the motorway and the railway line.

The route also cuts through hedges with trees that are species rich. The hedgerows comprise of mature well-established trees and are identified as adding significant ecological value to the site. There is a tributary of the River Culm that traverses the west boundary and south-west section of the site. This stream is heavily lined and shaded by deciduous trees on both banks, here the proposed route crosses over the stream.

The wider environment was assessed as high value for bats with a large network of fields, hedgerows and woodland, as well as roosting opportunities in nearby structures. The grassland and woodland provided moderate potential for foraging bats, with the mature trees having high potential for roosting bats.

The site was also assessed as having a moderate to high value for birds, with the scrub, grassland and woodland providing suitable nesting and feeding opportunities.

The site location was assessed as having a moderate value for reptiles, (the grassland tussocks and scrub fringes) and invertebrates (white clawed crayfish). There was no sign of badgers on site, however the overall site was assessed to hold potential for foraging badgers, hedgehogs and the River Culm had the potential to support otter and water voles. The pond on site provided potential for breeding habitat for great crested newts.

Direct impact on Priority Habitats.

Qualitative Assessment Score – Moderate Adverse

7.12.2. Option B

Likely Impacts

Option B also runs through hedgerows that are species rich with mature well-established trees that are identified as adding a significant ecological value to the site. This proposed route also runs through mature mixed

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woodland that comprises of deciduous and leyllanli trees that are used as curtilage between playing fields and screening from the motorway and the railway line

There is a tributary of the River Culm that traverses the west boundary and south-west section of the site. This stream is heavily lined and shaded by deciduous trees on both banks.

The wider environment was assessed as high value for bats with a large network of fields, hedgerows and woodland, as well as roosting opportunities in nearby structures. The grassland and woodland provided moderate potential for foraging bats, with the mature trees having high potential for roosting bats.

The site was also assessed as having a moderate to high value for birds, with the scrub, grassland and woodland providing suitable nesting and feeding opportunities.

The site location was assessed as having a moderate value for reptiles, (the grassland tussocks and scrub fringes) and invertebrates (white clawed crayfish).

There was no sign of badgers on site, however the overall site was assessed to hold potential for foraging badgers, hedgehogs and the River Culm had the potential to support otter and water voles. The pond on site provided potential for breeding habitat for great crested newts.

Direct impact on Priority Habitats.

Qualitative Assessment Score - Moderate Adverse

7.12.3. OPTION C

Ecology surveys are currently being undertaken and not yet available to inform this report.

7.13 HISTORIC ENVIRONMENT

7.13.1. Option A and B

Likely Impacts

Potential direct impact on the Grade II Listed First Bridge located where the proposed routes begin and crosses over the tributary of the River Culm.

Likely to be visual impacts on the setting of the Grade I Listed St Andrew's Church which sits 100m west of the site and the Cullompton Conservation Area.

There is the potential for below ground archaeology in the area. Further survey work would be required to establish any future impact.

Qualitative Assessment Score - Moderate Adverse

7.13.2. Option C

Potential direct impact on the Grade II Listed First Bridge located where the proposed routes begin and crosses over the tributary of the River Culm.



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Likely to be visual impacts on the setting of the Grade I Listed St Andrew's Church which sits 100m west of the site and the Cullompton Conservation Area. However, these visual impacts will not be as server as those for Options A and B.

There is the potential for below ground archaeology in the area. Further survey work would be required to establish any future impact.

Qualitative Assessment Score - Small Adverse

7.14 WATER ENVIRONMENT

The implications for flood risk and mitigation measures are considered in more detail in Section 9.2.

7.14.1. Option A, B & C

Likely Impacts

Flood risk assessment for all 3 options are currently being prepared, but are not available to inform this report



7.15 SUMMARY OF ENVIRONMENTAL ROUTE OPTIONS APPRAISAL

The table below provides a summary:

Table 2: Summary of Environmental Route Options Appraisal

Topic	Route Option (A,B,C)	Qualitative Appraisal High/Moderate/Low/Negligible
Air Quality	Option A	Moderate Benefit
	Option B	Moderate Benefit
	Option C	High Benefit
Noise	Option A	High Adverse
	Option B	High Adverse
	Option C	Moderate Adverse
Landscape /	Option A	High Adverse
Townscape	Option B	High Adverse
	Option C	High Adverse
Socio-economic	Option A	High Adverse
	Option B	High Adverse
	Option C	Small Adverse
Geotechnical & Contamination	Option A	Moderate Adverse
	Option B	Moderate Adverse
	Option C	Moderate Adverse
Arboriculture	Option A	High Adverse
	Option B	High Adverse
	Option C	Moderate Adverse
Waste	Option A	Moderate Adverse
	Option B	Moderate Adverse
	Option C	High Adverse
Ecology	Option A	Moderate Adverse
	Option B	Moderate Adverse
	Option C	Awaiting information
Historic Environment	Option A	Moderate Adverse
	Option B	Moderate Adverse



	Option C	Small Adverse
Water Environment	Option A	Awaiting information
	Option B	Awaiting information
	Option C	Awaiting information

8

COMPARATIVE DELIVERY ASSESSMENT





8 COMPARATIVE DELIVERY ASSESSMENT

8.1 **LAND**

8.1.1. Option A

The proposed layout of Option A will affect approximately 7 known areas of registered and unregistered land according to the Land Registry information provided.

The initial proposed area of the scheme is 27,800m2; the proposed route primarily affects areas of greenfield where little development currently exists, though these areas are currently for reactional purposes for the town. Further information on the impact of the scheme can be seen in Appendix F.

8.1.2. Option B

The proposed layout of Option B will affect approximately 12 known areas of registered and unregistered land according to the Land Registry information provided.

The initial proposed area of the scheme is approximately 28,400m2, the majority of which, as in Option A, falls within little developed recreational areas for the town. Further information on the impact of the scheme can be seen in Appendix F.

8.1.3. Option C

The proposed layout of Option C will affect approximately 11 known areas of registered and unregistered land according to the Land Registry information provided. The majority of these areas are greenfield or agricultural land, with the exception of the proposed crossing of the railway and the M5 corridor.

The total estimated area of the scheme is approximately 40,000m2; further information on the impact of the scheme can be seen in Appendix F.

8.2 FLOOD RISK

The alignments of Options A & B are entirely within Flood Zone 3b, which have a high probability of flooding and are effectively part of the functional flood plain where water flows or is stored during flood events. Approximately 50% of the alignment of option C is within flood zone 3, from its commencement at Duke St until it crosses over the rail line, motorway and river Culm to the east of the flood plain

Development within flood zones is restricted with only essential infrastructure permitted within flood zone 3b. Where infrastructure is proposed within flood zone 3 the proposals have to be considered against the requirements of both a sequential and exception test.

8.2.1. Sequential Test

NPPF and the associated Flood Risk and Coastal Change Planning Practice guidance sets out the requirements in relation to flood risk. NPPF requires Local Planning Authorities (LPAs) to take a sequential risk-based approach to determine the suitability of land for development when allocating sites in the Local Development Framework (LDF) or determining planning applications.

National planning guidance on flood risk articulates a presumption in favour of locating new development in Flood Zone 1 (low probability). If there are no reasonably available sites in Flood Zone 1, the flood vulnerability



of the proposed development can be considered in locating development in Flood Zone 2 (medium probability) and then Flood Zone 3 (3a high probability and 3b functional floodplain).

8.2.2. Exception test

If the sequential test establishes the need to locate the proposed development in the flood zone, it is then appropriate to apply the exception test, as set out in paragraphs 102-104 of the National Planning Policy Framework.

The exception test requires that the following questions are answered with supporting evidence:

- a) Would the proposed development provide wider sustainability benefits to the community? If so, could these benefits be considered to outweigh the flood risk to and from the proposed development?
- b) How can it be demonstrated that the proposed development will remain safe over its lifetime without increasing flood risk elsewhere?
- c) Will it be possible to for the development to reduce flood risk overall (e.g. through the provision of improved drainage)?

8.2.3. Option A

As stated above the whole of the Option A alignment is within flood zone 3b. Whilst it would be possible to raise most of the alignment length above flood levels, at the tie-ins to the existing highway network at Duke St and Station Road the alignment would need to return to exiting highway levels.

Duke Street, at the southern location where Option A is proposed to connect, is predicted to flood in the 50% flood scenario which equates to a probability of flooding once every 2 years.

Station Road at the northern location where Option A is proposed to connect, is predicted to flood in the 1% flood scenario, which equates to a probability of flooding once in every 100 years.

Whilst flooding of the proposed connection point on Station Road is predicted infrequently and to a depth of less than 200m, with Duke Street susceptible to frequent flooding with depths over 500mm there would be periods when the road would need to be closed.

Whilst these periods of closure are expected to be short term, it would necessitate that advance warning signs and barriers closing the road for these periods are installed as part of the works. Similarly, there is potential the relief road would be closed in parallel with the M5 motorway, and therefore diverted traffic would still need to use Fore Street. This would potentially limit options for regeneration of the town centre.

The remainder of the highway alignment is generally close to the western edge of the flood zone, which is predicted to be less disruptive to water flows and storage during flood events. Therefore, mitigation and compensatory measures are expected to be less extensive than options that cut across the flood zone.

8.2.4. Option B

As with Option A the whole of the Option B alignment is within flood zone 3b. Whilst it would be possible to raise most of the alignment length above flood levels, at the tie-ins to the existing highway network at Duke Street and Station Road the alignment would need to return to existing highway levels.



Duke Street, at the southern location where Option B is proposed to connect, is predicted to flood in the 50% flood scenario which equates to a probability of flooding once every 2 years.

Station Road at the northern location where Option B is proposed to connect, is predicted to flood in the 1% flood scenario, which equates to a probability of flooding once in every 100 years.

Whilst flooding of the proposed connection point on Station Road is predicted infrequently and to a depth of less than 200m, with Duke Street susceptible to frequent flooding with depths over 1m there would be periods when the road would need to be closed.

Whilst these periods of closure are expected to be short term, it would necessitate that advance warning signs and barriers closing the road for these periods are installed as part of the works. Similarly, there is potential the relief road would be closed in parallel with the M5 motorway, and therefore diverted traffic would still need to use the Fore Street. This would potentially limit options for regeneration of the town centre.

The alignment of Option B cuts transversely across the flood zone east to west towards its southern extent north of Dukes St and then west to east deviating from the rail line towards the Tesco supermarket further north. Flood water flows will be significantly impeded and disrupted as a consequence, and significant mitigation and compensation measures are anticipated to be required to avoid increasing flood risk.

8.2.5. Option C

As stated above approximately 50% of the Option C alignment is within flood zone 3. However, the route alignment commences at the proposed new junction with Duke St in the same location as Option A. Therefore, the route is predicted to flood in the 50% flood scenario, which equates to a probability of flooding once in every 2 years.

From the junction with Duke St the Option C alignment leads west cutting transversely across the floodplain on both the west and east sides of the motorway. The alignment will need to be rising significantly above existing levels to provide sufficient clearances to the rail line and motorway. The supporting structures to the highway will impede the flood water flow and storage including the areas east of the motorway where the flow is fastest and storage at its deepest. It is therefore expected that flood mitigation and compensation measures would be the most substantial of the 3 options.

8.2.6. Potential Future Motorway Junction and Southern Relief Road Extension

As all of the Option alignments are susceptible to flooding at their junctions with Duke Street, the full benefits of the relieving the town centre are not achievable as the road is expected to be closed due to flooding during flood events. In those instances, traffic would be diverted back through the town centre.

Potential future provision of a southern extension to the relief road would provide the opportunity for a new highway connection above flood levels that would permit the road to remain open in all but the most extreme flood events. The currently proposed relief road alignments are within the area identified on the Local Plan Review map, and a southern extension would be beyond those extents and consequently hasn't been considered in detail by this report.

The viability of a future new motorway junction connecting with the relief road is also considered to be linked with the provision of a southern extension. The financial investment required for a new motorway junction would necessitate that the local highway infrastructure connecting with the new junction is resilient to flooding.

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8.2.7. Flood Risk Assessment

As part of the Mid Devon Local Plan review a Flood Risk Assessment (FRA) has been undertaken for local plan purposes, for a scheme which includes the Option A proposed alignment of the relief road along with the potential new M5 motorway junction as indicated on plan Option A1 within Appendix C. The FRA is available through MDDC's website in the Local Plan Review section (https://www.middevon.gov.uk/residents/planning-policy/local-plan-review/), along with a letter from the Environment Agency confirming based on the FRA that the principle of construction proposed is acceptable subject to further detailed design.

The FRA produced is necessary to support the Local Plan review, confirming the Town Centre Relief Road and potential connection motorway junction is viable. However, it does not necessitate that the alignment assessed within the FRA is taken forward and any alignment taken forward will need to be subject to a further FRA based on the more detailed proposals included within a planning application submission.

In parallel with the preparation of this report and the proposed public consultation, further FRAs are being prepared based on the alignments of Options B & C, along with Option A independent without the motorway junction. They will be completed prior to determination of a preferred route and will therefore be considered as part of the determination process.

8.3 BUILDABILITY CONSTRAINTS

8.3.1. Option A

The proposed route of Option A lies predominately within a greenfield location, thereby minimising the number of third party approvals required for the construction due to its location in comparison to the other scheme layouts. The most significant impact of the layout will be the amendments to the existing roundabout location on Station Road. During the construction, traffic management requirements will be key to maintaining the flow of traffic from the M5 into Cullompton and vice versa.

Due to the amendments to the current layout, access to 'The Weary Traveller' will be required to be maintained both during construction and within the design of the final arrangement to minimise impact on the business. Access to the CCA fields for both vehicles and non-motorised users will need to be maintained throughout construction and upon completion of the scheme through the design.

The proposed new roundabout at chainage 780m will need to be reviewed with the supermarket owners due to its proximity and potential impact on access for customers and deliveries to the store. To the South of the scheme, the proposed junction onto Duke Street will need to be considered in accordance with the flood risk strategy and South West Water to ensure that there are minimal impacts to the pumping station location during construction. Consultation with the EA will be required to the construction location within the floodplain and to agree a strategy of directing water flow of the drain and the Mill Leat both during construction and with the final design.

8.3.2. Option B

The proposed layout of Option B is similar in its alignment to Option A, and therefore has a similar impact to the existing location with regards to the north of the scheme, and the impact on the super market. The amendments to the alignment of Option B will require consultation with the National Rail authority due to its proximity to the existing railway line to the East of the proposed development.

The alignment of Option B also requires to the demolition of the existing bowling, cricket ground and some of the associated buildings such as the club house and pavilions. Building surveys will be required to ensure that these are removed in accordance with the appropriate building regulations. Public consultations will also



ascertain the impact on the scheme on the existing whippet track which the proposed layout severs at approximately chainage 150m. Access to the CCA fields for both vehicles and non-motorised users will need to be maintained throughout construction and upon completion of the scheme through the design.

As with Option A, Option B will require consultations with the EA due to the impact of the scheme within the area of flood risk, as well as the impact on diverting the flow of the Mill Leat, as well as the impact on the First Bridge where the proposed scheme joins Duke Street. During the construction period, and after the proposed scheme is constructed, access to the football ground will need to be taken into consideration, as well as the traffic management requirements during the construction phase of the works on Duke Street.

8.3.3. Option C

Much of the proposed alignment of Option C is located within greenfield space or agriculture land. Traffic management requirements will need to be considered at the junction of Duke Street and Honiton Road. Consultation with the National Rail authority and Highways England will be required to the proximity of the works, overhead, to the existing rail network and the M5 to connect both the east and west sections of the scheme.

To the West of the M5 crossing, access will need to be maintained both within the final design and the construction phase for the football ground, and bowling green. As with Option B, public construction will also ascertain the potential impacts of the scheme on the existing whippet track. To the east of the M5 crossing, access will need to be negotiated with the land owner across the farm land for both the design and construction of the proposed alignment.

Access to the CCA fields for both vehicles and non-motorised users will need to be maintained throughout construction and upon completion of the scheme through the design.

Option C benefits of a minimal amount of disruption to the existing roundabout and therefore traffic flow during construction by The Weary Traveller will not be affected. However, additional consultation requirements with the National Rail authority and Highways England will be required in relation to the bridge, or bridges, over both the rail line and motorway. As with Option A and B, Option C will also require construction with the EA due to the development being located with a flood plain for considerations during the construction phase, as well as crossings of the Mill Leat and the River Culm to the east of the M5 corridor.

8.4 COST

Due to the indicative nature of the route options detailed cost estimates of construction cost cannot be produced on the information available at this stage of scheme development. To provide comparative information on construction cost the anticipated primary elements of each option have been determined, such as length of carriageway, number and type of structures, number and type of junctions.

Estimated costs from similar projects have then applied, along with allowances for identified risks and constraints to produce a construction cost estimate for each option. For all options the estimates have been prepared on the assumption the highway will be constructed above flood levels wherever possible.

Land purchase and mitigation/compensation costs have not been estimated as there is insufficient information available at this stage and would be subject to negotiation. The anticipated primary mitigation/compensation cost elements are identified but not costed at this stage.

For each option the comparative construction cost estimate is given below, with a summary of the key differentiators from the other options.

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8.4.1. Option A

The estimated construction cost for Option A is £10m, and is the lowest of the 3 options. The route has the shortest overall length of highway construction and as it is on the fringe of the floodplain is expected to require less flood mitigation and compensation. More pedestrian/cycle crossing points are expected to be required in comparison to the other Options as the alignment segregates the majority of the recreational and sporting areas from the town centre.

The alignment is entirely within green field and recreational areas, and is therefore not anticipated to necessitate abnormal land compensation/mitigation costs.

8.4.2. Option B

The estimated construction cost for Option B is £12m, approximately £2m greater than Option A. The primary differences are that the Option B alignment length is over 15% longer and the alignment cuts transversely across the flood plain and is expected to require more extensive flood compensation and mitigation consequently.

The Option B alignment would significantly impact Cullompton Cricket Club, Cullompton Bowls Club and to a lesser extent Cullompton Rangers Football Club. Significant costs associated with compensation and/or mitigation are expected beyond the construction costs and typical land purchase prices. Land to relocate the affected sports clubs would be expected to be required.

8.4.3. Option C

The estimated construction cost for Option C is £50m. The primary cost element resulting in the substantial increase in relation to Options B & C is the structure, or potentially series of structure, that would be required to span over the rail line, motorway and river Culm. In addition to the cost of structure(s), that would need to satisfy the requirements of Network Rail, Highways England and the Environment Agency, the alignment cuts transversely across the flood plain on both sides of the rail/motorway corridor.

The floodplain area to the east of the motorway is the most sensitive with the fastest and deepest flows in flood conditions. Significant additional flood compensation/mitigation measure in comparison to Options A & B are anticipated.

The alignment is in proximity to the southern boundary of the Cullompton Cricket Club land and may impact on the viability of maintaining the current land use either temporarily during construction or possibly permanently. Therefore, costs associated with compensation and/or mitigation are expected beyond the construction costs and typical land purchase prices.

9

SUMMARY, NEXT STEPS AND FUNDING





9 SUMMARY, NEXT STEPS AND FUNDING

9.1 SUMMARY

This report concludes that 3 alignment options for the Cullompton Town Centre relief road meet most of the identified objectives and provides a high-level comparative assessment of those options in terms on environmental impact and viability of delivery.

9.2 NEXT STEPS

9.2.1. Public Consultation

Subject to MDDC cabinet and DCC member approval, it is proposed to undertake public consultation on Options A, B and C based on the plans and information contained within this report.

Public consultations events are expected to be scheduled to provide the maximum practical opportunities for the public to attend. Multiple dates in different locations are proposed to include morning, afternoon, evening and weekend sessions to provide the maximum practical opportunity for public attendance.

Members of the project team from MDDC, DCC and consultant WSP will be in attendance at each consultation event to provide guidance on the proposals and answer questions. A leaflet will be produced providing summary details and an internet link address to provide consultation responses. Consultation responses will also be accepted via post and in person at the consultation events.

9.2.2. Preferred route option determination and development

Following public consultation, the project team will collate and review the consultation responses along with the completed flood modelling and environmental survey work. The objective of the review will be to establish a preferred route that provides the best balance of public acceptability, environmental impact, value for money and deliverability.

The project team will identify route(s) to be taken forward for further investigation in order to identify a preferred route to be taken forward to a planning application.

9.2.3. Planning application

A planning application for the preferred route would be expected to be submitted to MDDC as the Local Planning Authority. Due to both the area of the proposed planning application and environmental sensitivity of the study area, an Environmental Impact Assessment (EIA) would be required. An EIA constitutes a detailed assessment of all the environmental impacts of a scheme, that is undertaken in parallel with the design to minimise impacts and incorporate mitigation measures.

A full detailed flood risk assessment would also be prepared and accompany the application including flood compensation/defence mitigation measures that may be required.

A series of public exhibitions would be held prior to the planning application submission providing details of the proposals. Following submission of the application, there will also be a 30-day period for the public to provide comments on the application.



9.3 FUNDING

9.3.1. Housing Infrastructure Fund

In 2017 MDDC submitted a bid to the Homes Infrastructure Fund - Marginal Viability Fund (HIF MV) established by Homes England as part of their £2.3 billion of financing of infrastructure to unlock housing delivery. MDDC submitted 2 bids to Homes England for HIF MV funding, including £10m towards improvement of Junction 28 of the M5 to increase capacity through construction of an additional lane on the bridge over the M5, new footbridges and full signalisation of the western junction.

In February 2018 Homes England announced both of MDDC's bids were successful, subject to completion of due diligence confirming value for money and delivery viability.

Since the submission of the MV HIF bid in February 2018 announcement of the intended funding allocation, the principal project partners (MDDC, DCC and Highways England) continued to progress with detailed analysis of the proposals and associated refinement and clarification of the most beneficial and deliverable set of immediate, short-term interventions within the context of the longer-term growth ambitions and potential strategic solutions.

This process identified that moving straight to the immediate provision of the Town Centre Relief Road will deliver the same outcomes (in terms of releasing planned homes and growth) as the previously proposed scheme of improvements to J28 (as described in the original HIF submission). Furthermore, the highways authorities both now consider that the scheme as originally submitted for HIF funding will not achieve the envisaged benefits to traffic flows and the operation of J28. They have also expressed strong concerns with the likely major disruption and adverse effects on traffic movements during construction, as well as expressing doubts over the ability to physically construct and deliver that scheme as currently proposed.

Consequently, the project partners have been in discussion with Homes England regarding the potential to reallocate the funding from the proposed Junction 28 improvement to the Town Centre Relief Road. To date those discussions have been positive and the expectation is that provided the value for money and deliverability are demonstrable Homes England will authorise the change in the nature of the transport intervention under the current intending funding allocation.

HIF MV funding must be fully expended and the benefits of the scheme realised by March 2021, which would require the Town Centre Relief Road to be substantial completed by that date for that obligation to be met. It is considered that Options A and B could meet that criteria. However, Option C is not thought viable to be substantially completed by March 2021 due to the planning, permissions, design and construction complexities of the structure(s) over the rail line, motorway and River Culm.

9.3.2. Other sources of funding

Section 106 payments from developments associated with the housing unlocked by the scheme would be expected to contribute to the scheme costs. The scale of development is not sufficient to fund the full scheme costs through Section 106 contributions, hence the successful application for HIF MV funding.

If the preferred route selected is not compatible with the HIF time constraints or the funding allocation is not confirmed for other reasons, other funding sources for the relief road would need to be considered as there is no significant funding available from either MDDC or DCC.

The Department for Transport has allocation £900 million of funding to Highways England over a 6 year spending period between 2015 and 2021. £100m of this funding is allocated to the Growth and Housing Fund to bridge funding shortfalls for highway schemes that can enable the delivery of jobs and homes wherever possible.

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The Growth and Housing Fund is not currently open to new applications/bids and the timescale for spending the funding and realising the benefits is March 2021, matching the HIF MV requirements. The Growth and Housing Fund is unlikely to be a source of funding for the relief road.

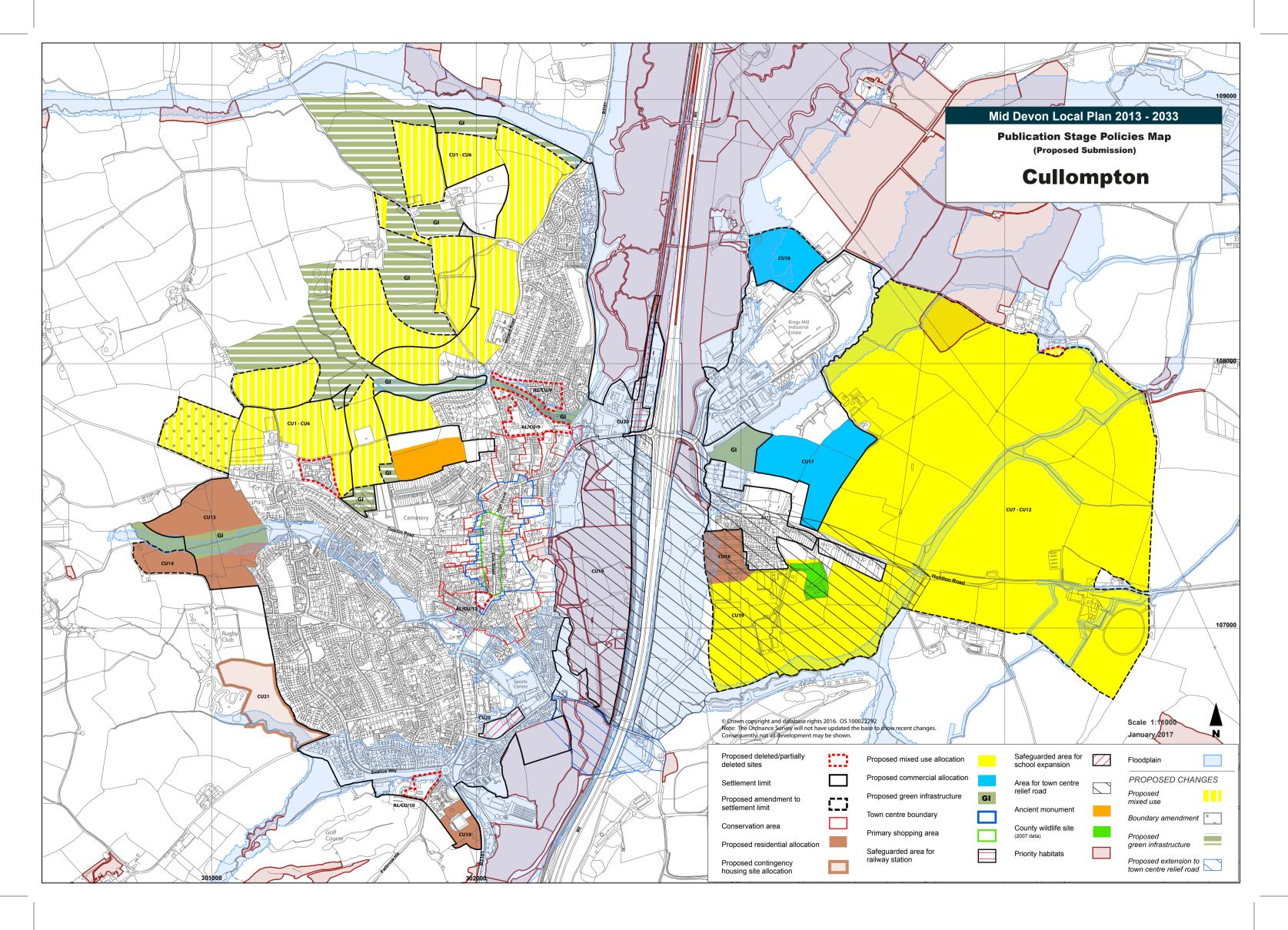
There are currently no other identified sources of funding for the scheme. If HIF MV funding is not secured it is likely development of the scheme would be dependent on new sources of funding becoming available which are most likely to come forward after 2021 when the current government spending plans expire.

Appendix A

SUBMISSION LOCAL PLAN:

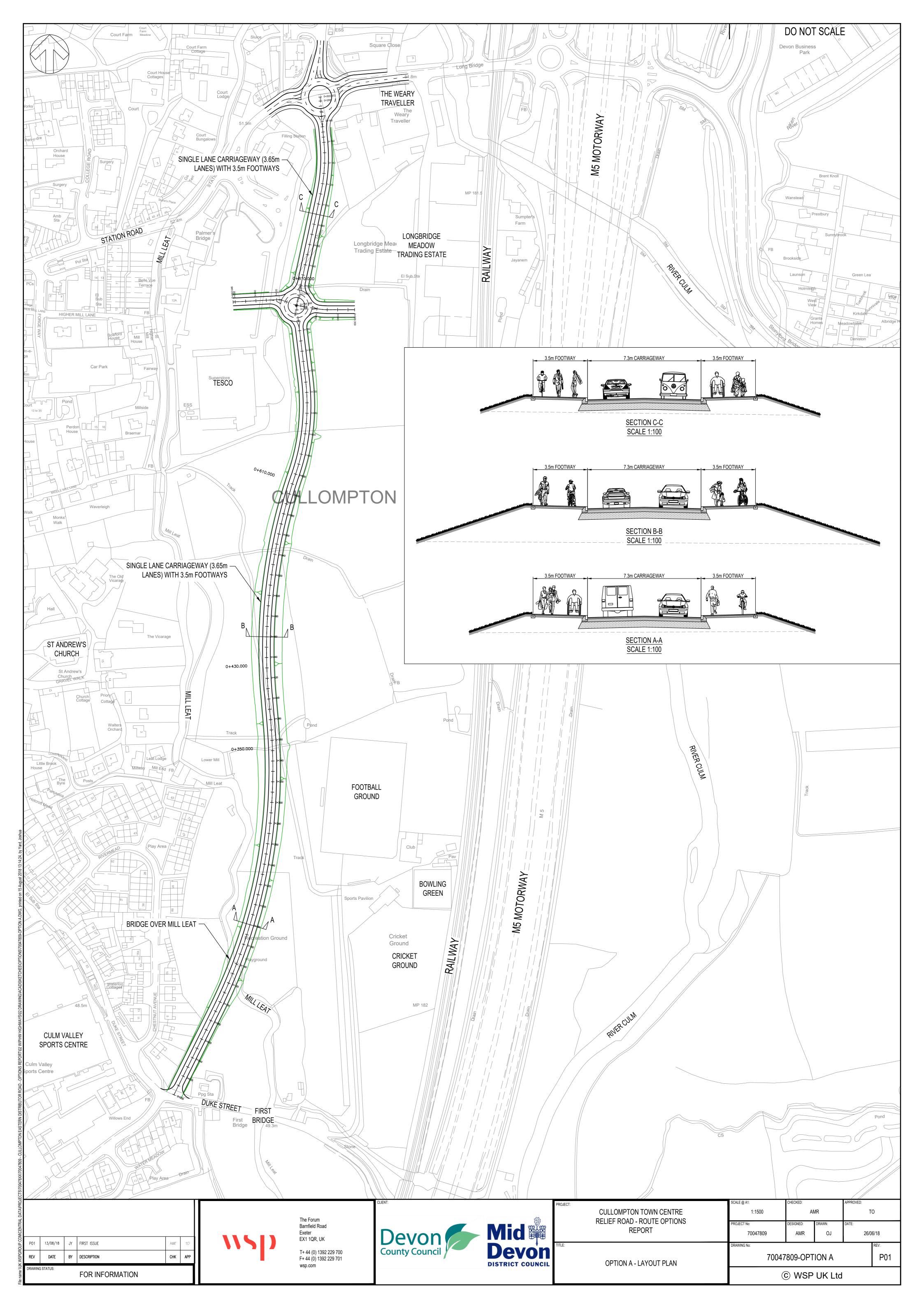


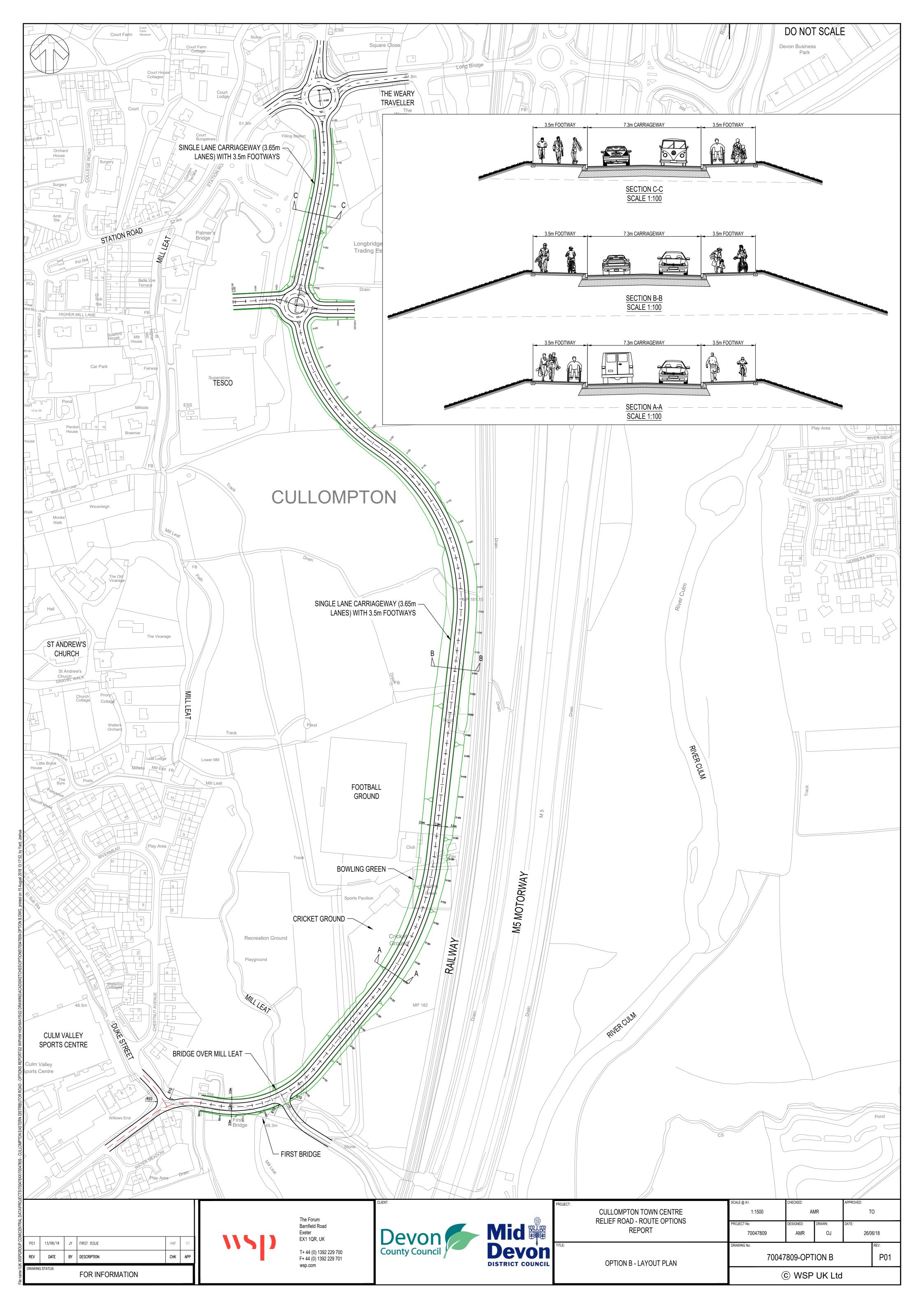
CULLOMPTON EXTRACT MAP

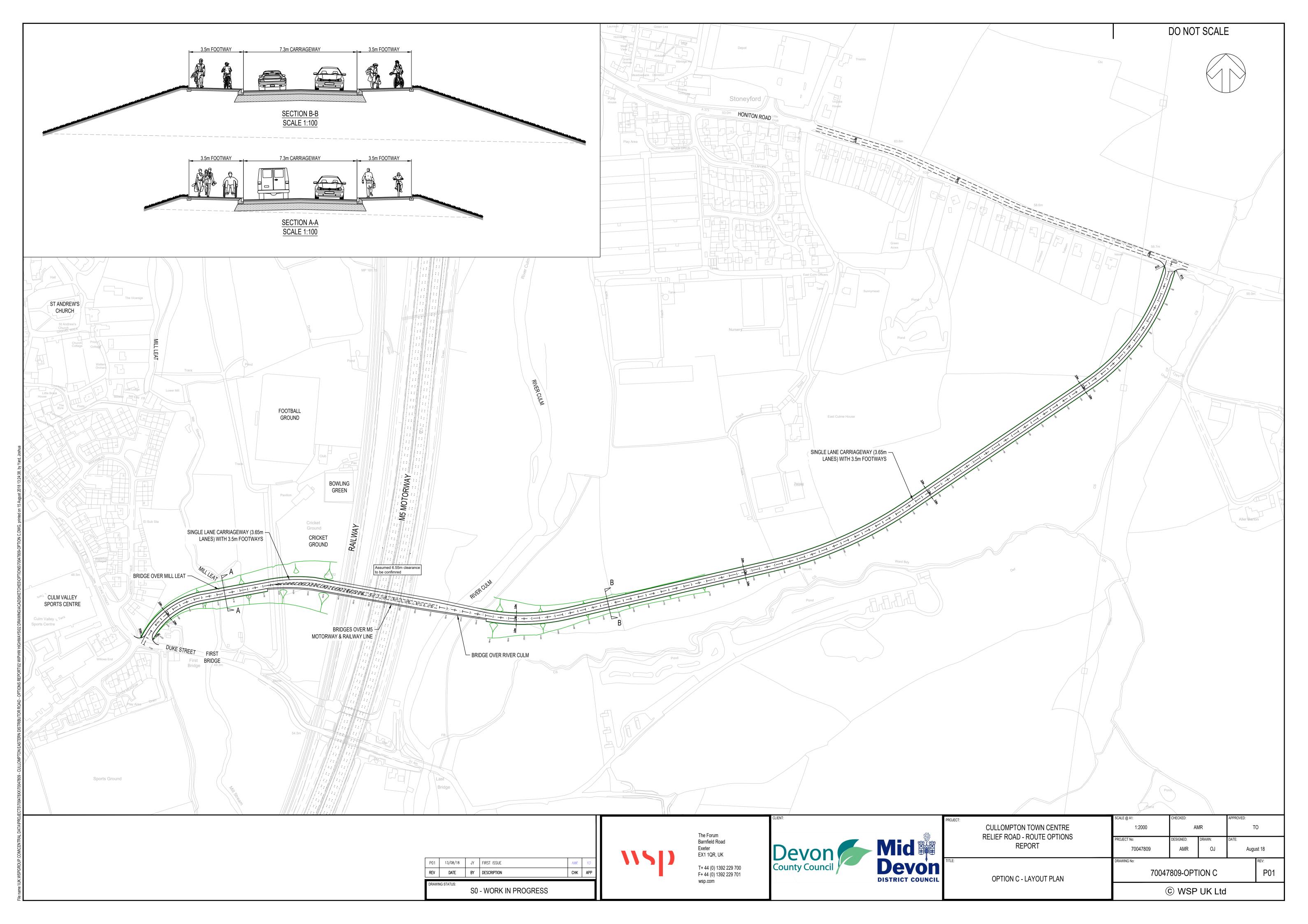


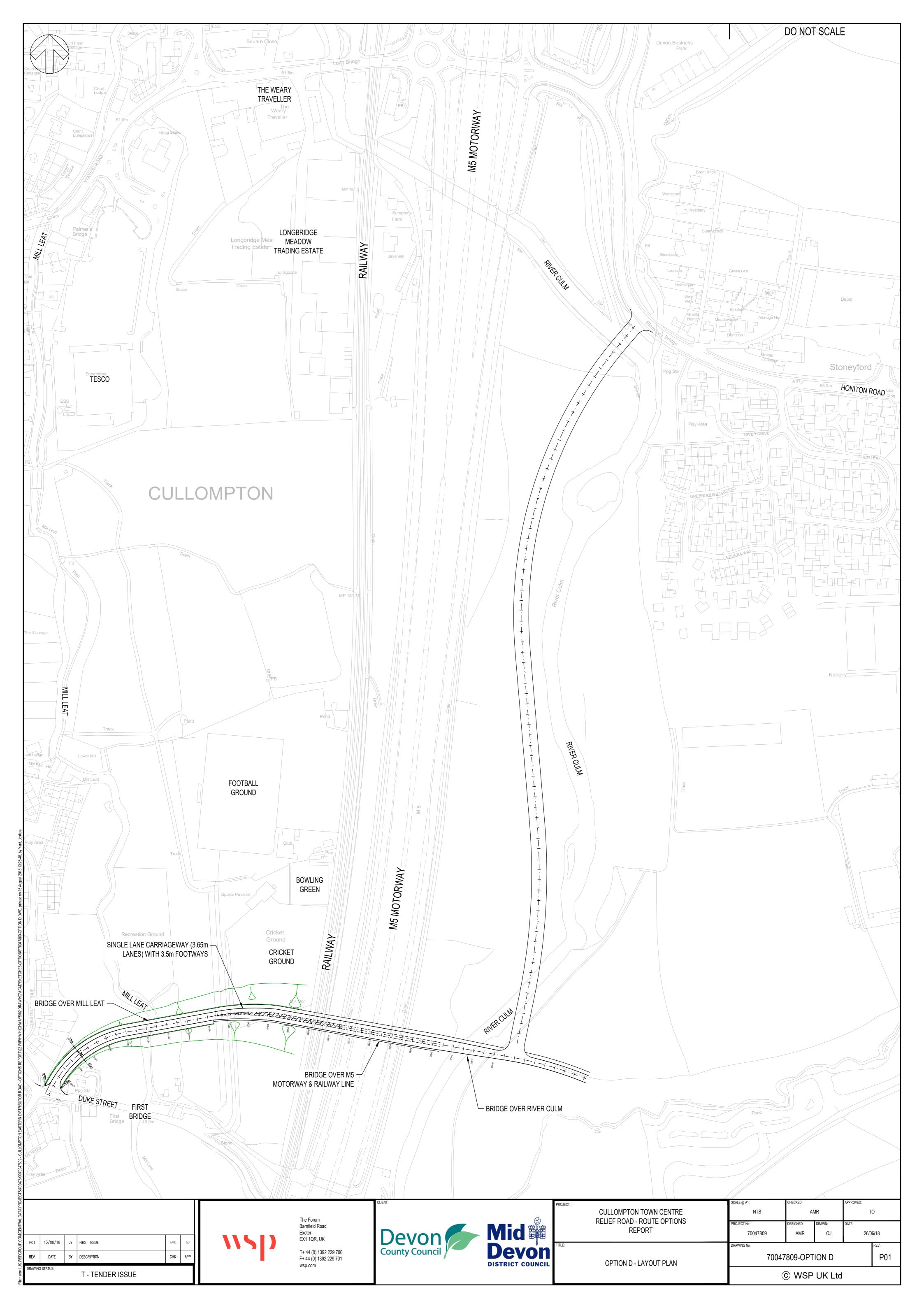
Appendix B

ROUTE OPTION LAYOUT PLANS







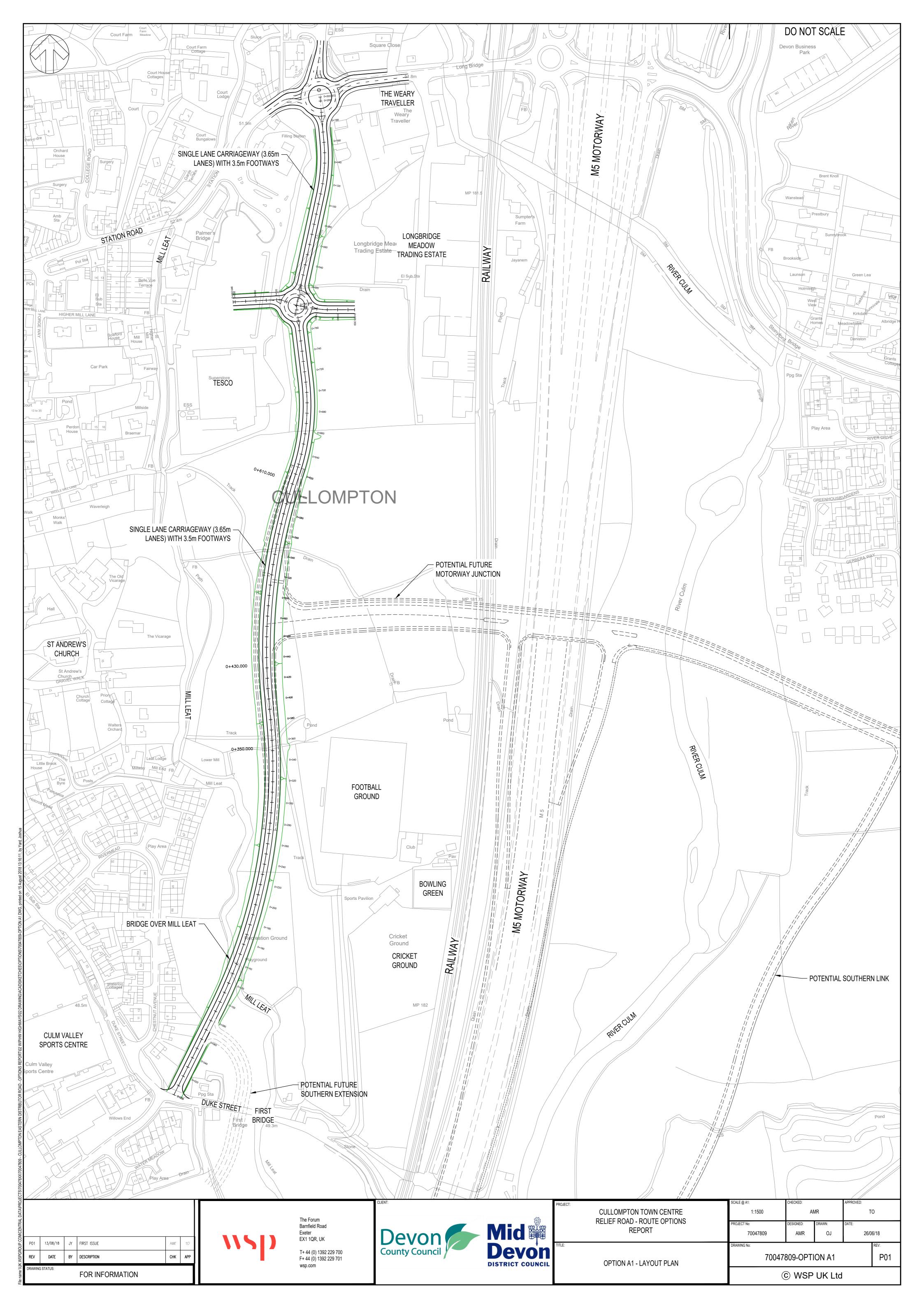


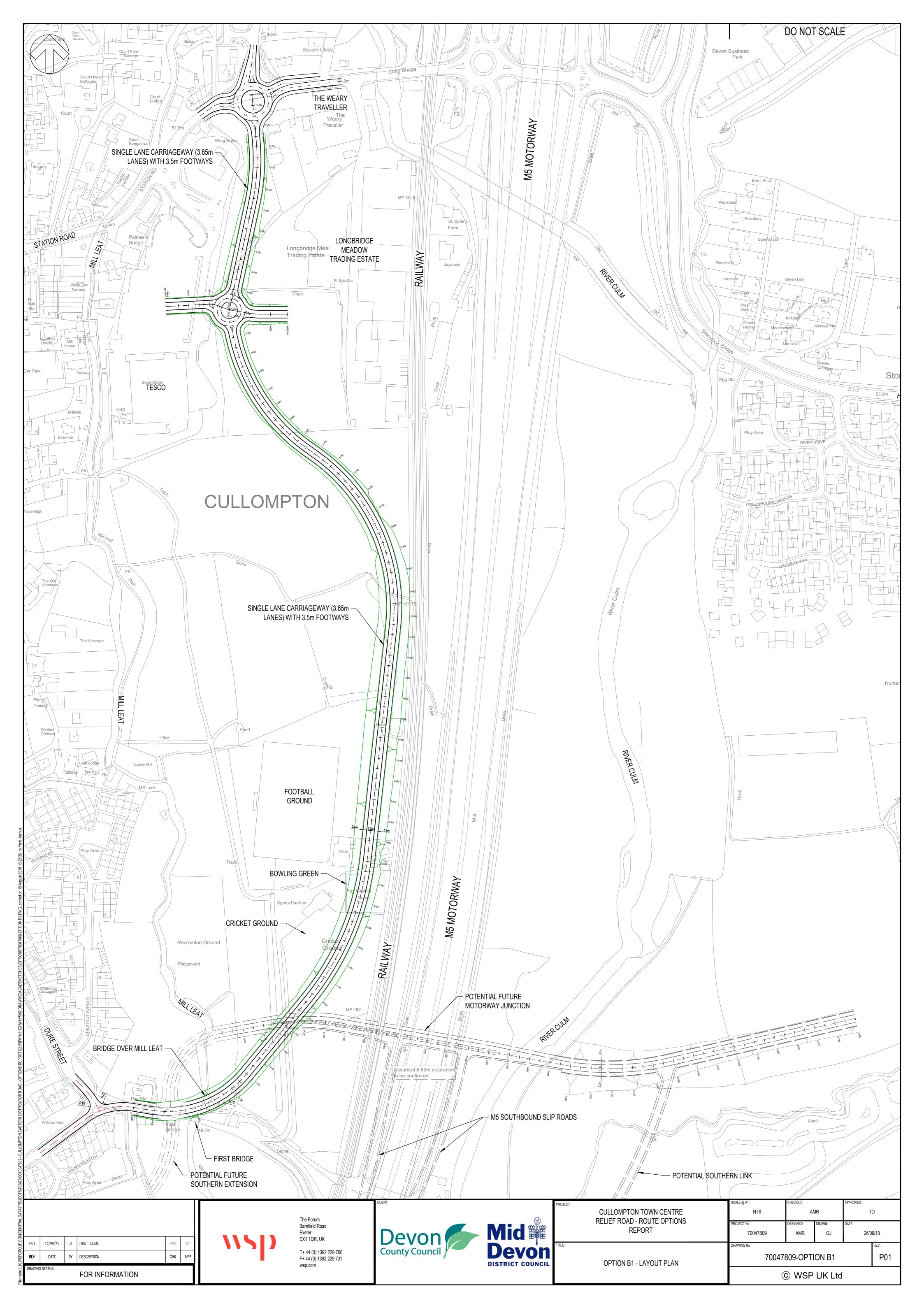
Appendix C

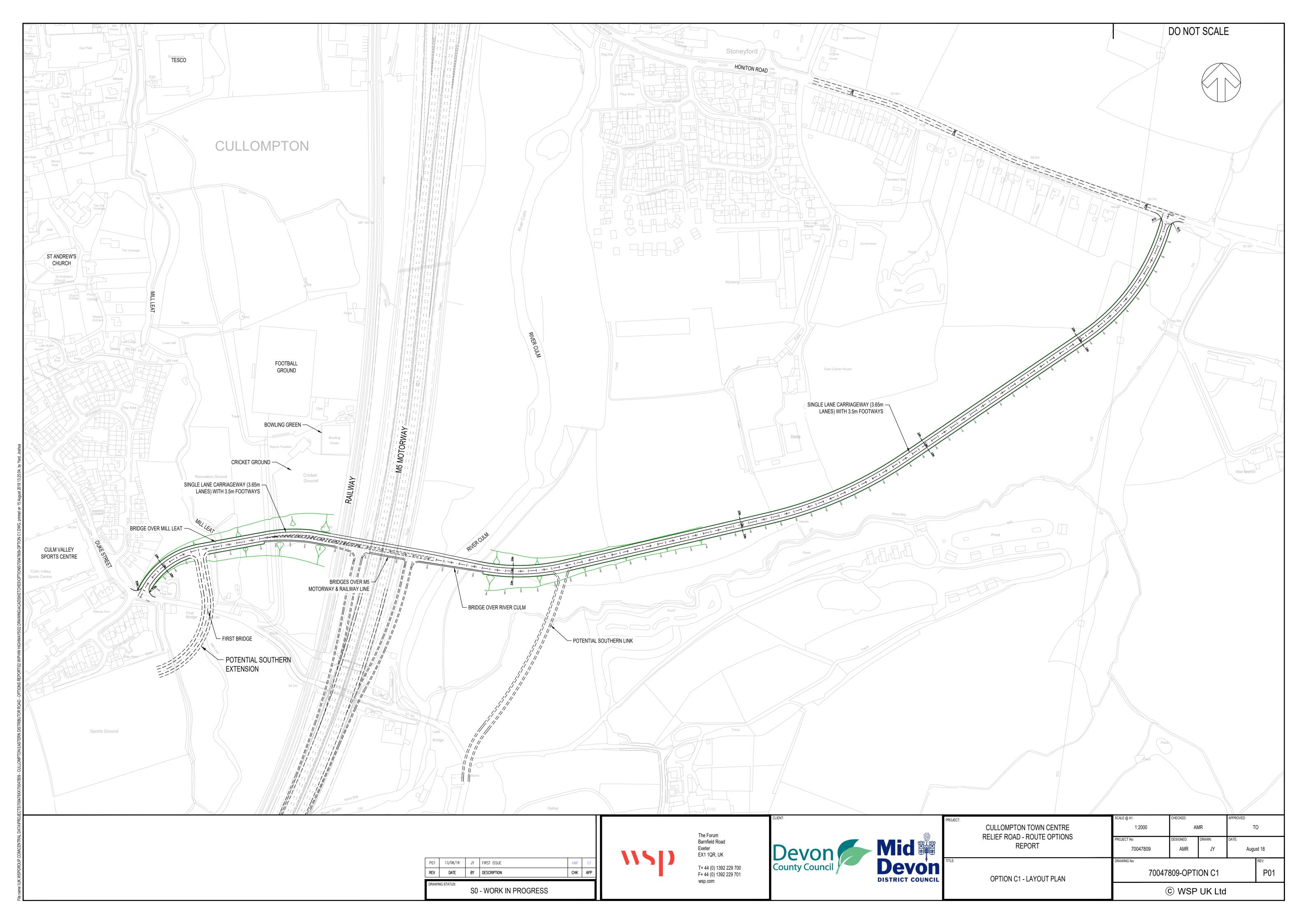
ROUTE OPTIONS CONNECTIVITY

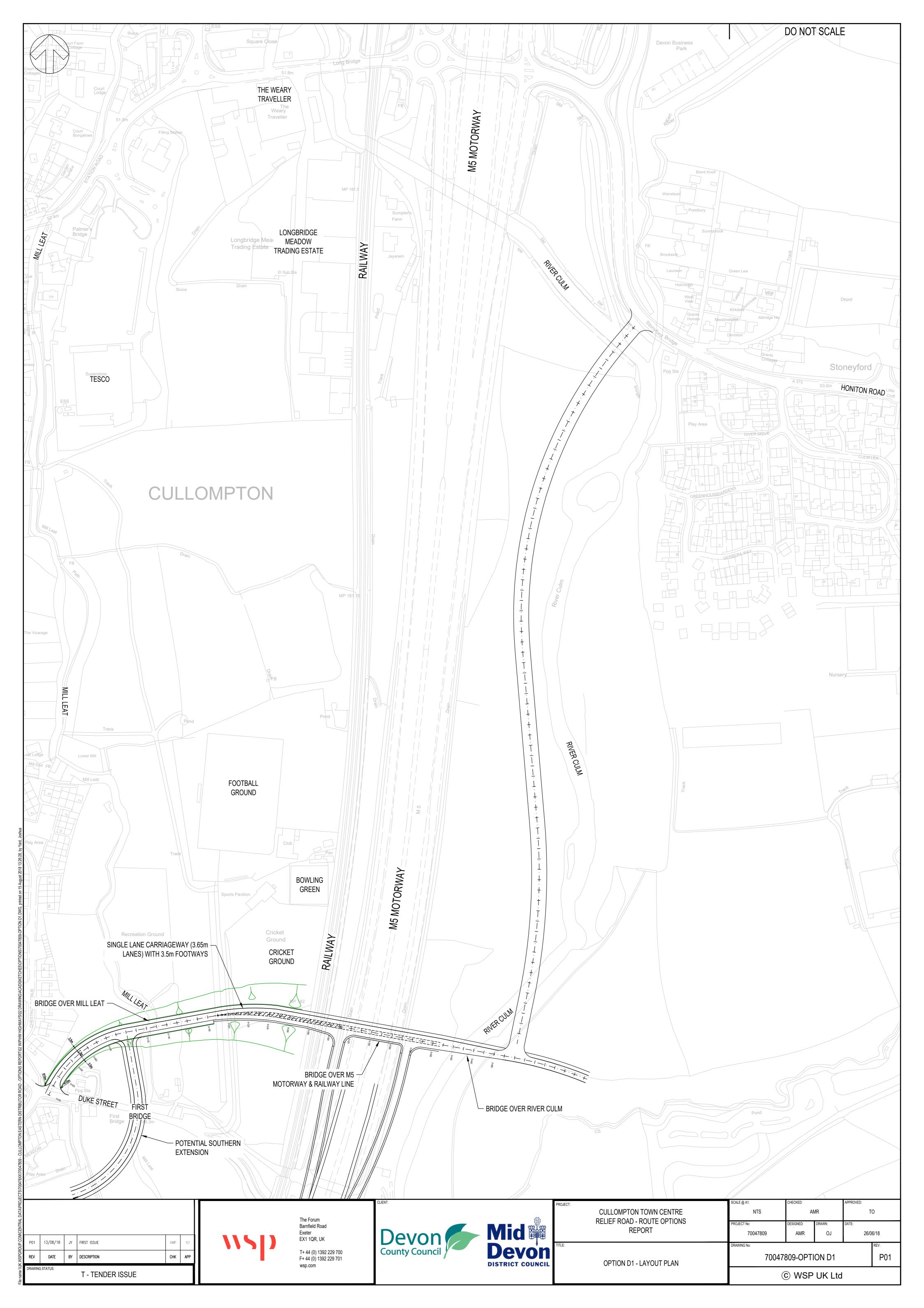
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PLANS







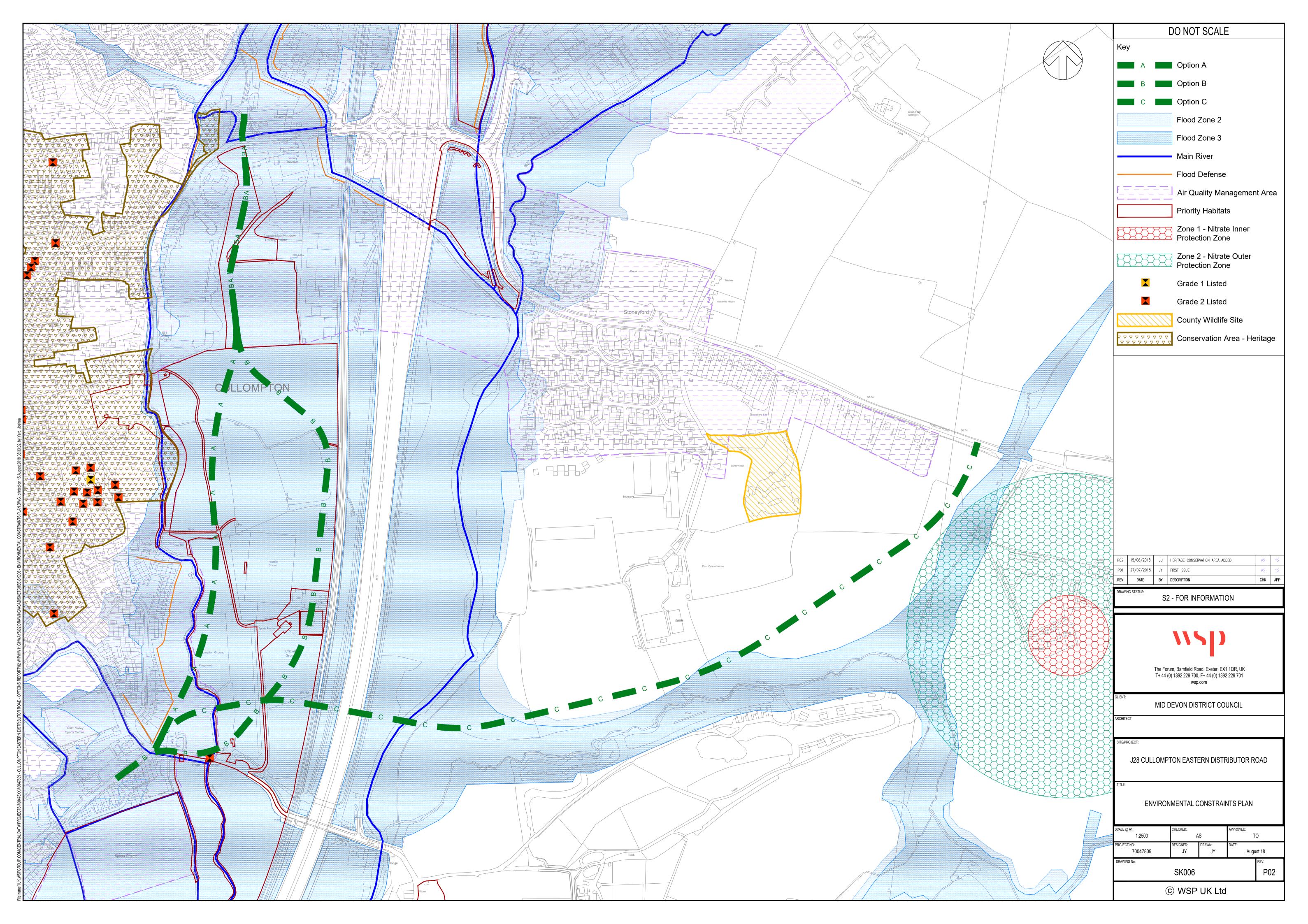


Appendix D

ENVIRONMENTAL CONSTRAINTS

WSD

PLAN



Appendix E

COMPARATIVE ENVIRONMENTAL

WSD

ASSESSMENT - BASELINE

1 COMPARATIVE ENVIRONMENTAL ASSESSMENT - BASELINE

1.1 AIR QUALITY

1.1.1. Baseline Conditions for all 3 Options

The Cullompton EDR is within the district of Mid-Devon. As part of the requirements of Local Air Quality Management (LAQM) as set out in Part IV of the Environment Act, Mid Devon District Council (MDDC) regularly review and assess air quality in the area and determine if the UK air quality objectives are likely to be achieved. Where an exceedance is considered likely the local authority must declare an Air Quality Management Area (AQMA) and prepare an Air Quality Action Plan (AQAP) setting out the measures it intends to put in place to move towards compliance with the UK objectives.

As a result of air quality monitoring and assessment across the region MDDC has declared two such AQMAs. In 2006, due to monitored exceedances of the annual mean objective for nitrogen dioxide (NO2) concentrations at roadside locations within Cullompton, MDDC declared the Cullompton AQMA which encompasses the entire built up area of Cullompton. As such, the northern and southern most sections of the scheme lie within the Cullompton AQMA. MDDC is acting to improve air quality in these areas and across the region. These actions are described in the councils Air Quality Action Plan which was adopted in 2009. The measures adopted include the ongoing programme of monitoring pollutant concentrations in the area.

The pollutant concentration at any location has two components, namely a contribution from local sources and a contribution from more distant sources and pollutant transport. Defra provide background pollutant concentrations as a 1km x 1km grid for the UK. The background pollutant concentrations for NO2 ($12\mu g/m3$, objective = $40\mu g/m3$), PM10 ($16\mu g/m3$, objective = $40\mu g/m3$) and PM2.5 ($10\mu g/m3$, objective = $25\mu g/m3$) are currently well within the relevant UK objectives for annual mean pollutant concentrations.

MDDC undertake nitrogen dioxide diffusion tube monitoring at 7 sites across Cullompton. The locations of these diffusion tubes, as well as the results of the monitoring undertaken, are presented in *Table 1*.

Table 1: MDDC Annual Mean NO2 monitoring results ($\mu g/m3$, UK objective = 40, exceedances shown in bold)

ID	Site Name	XY OS Grid Reference	Site Type	2012	2013	2014	2015	2016
DT 7	Cullompton (Culm Lea)	303005, 107418	Roadside	-	-	-	-	17.43
DT 8	Cullompton (Police Station, Station Road)	302187, 107549	Roadside	27.24	32.06	27.42	24	28.62
DT 9	Cullompton (49 Station Road)	302289, 107591	Roadside	26.14	28.98	26.08	24.4	26.87

DT 10	Cullompton (15 Higher Street)	302129, 107595	Roadside	22.91	29.21	28.05	24.56	27.06
DT 11	Cullompton (17 High Street)	302092, 107446	Roadside	25.65	27.41	25.12	25.12	26.82
DT 12	Cullompton (HSBC)	302050, 107359	Roadside	-	-	-	-	32.40
DT 13	Cullompton (8 Fore Street)	302056, 107296	Roadside	-	-	-	38.49	43.21
DT 14	Cullompton (45 Fore Street)	302071, 107199	Roadside	32.42	33.16	34.12	32.53	36.43

Concentrations are generally within the UK objective, except for elevated concentrations along Fore Street and a single exceedance of the UK objective at DT 13 as a result of road traffic and proximity of sensitive locations to the roadside. Concentrations are generally lower further north and are well within the objective to the east at DT7, though limited data are available at this location.

1.2 NOISE

1.2.1. Option A

Baseline and Sensitive Receptors

The closest noise important area (NIA) to Option A is approximately 2.2 km to the north and is detailed below:

IA ID 3468: HA M5 at Willand (B3181)

Given the proximity of the M5, road traffic noise is likely to be the dominant noise source in the area. The strategic noise map contours published by the Department for Environment, Food and Rural Affairs (DEFRA) indicate that the LAeq, 16h noise level is in the range of 60-65 dB from traffic on the M5. The Exeter to Bristol mainline railway runs along adjacent to the M5 to the east of the option A route.

The area immediately surrounding the Option A route is primarily open fields with some retail/light industrial units to northern end. There is existing noise sensitive receptors (NSRs) to the west of the scheme in Cullompton. To the southern end of the route there are several outdoor recreational areas and educational facilities within 300 m of the route option.

1.2.2. Option B

Baseline and Sensitive Receptors

The closest noise important area (NIA) to Option B is approximately 2.2 km to the north and is detailed below:

IA ID 3468: HA M5 at Willand (B3181)

Given the proximity of the M5, road traffic is likely to be the dominant noise source in the area. The strategic noise map contours published by the Department for Environment, Food and Rural Affairs

(DEFRA) indicate that the LAeq, 16h noise level is in the range of 60-70 dB from traffic on the M5. The Exeter to Bristol railway runs along adjacent to the M5 to the east of the option B route.

The area immediately surrounding the Option B route is primarily open fields with some retail/light industrial units to northern end. There is existing noise sensitive receptors (NSRs) to the west of the scheme in Cullompton. To the southern end of the route there are several outdoor recreational areas and educational facilities within 300m of the route option

1.2.3. Option C

Baseline and Sensitive Receptors

The closest noise important area (NIA) to Option C is approximately 2.5 km to the north and is detailed below:

IA ID 3468: HA M5 at Willand (B3181)

Given the proximity of the M5 and A373 (Honiton Road), road traffic is likely to be the dominant noise source in the area. The Exeter to Bristol railway runs parallel to the western side of the M5.

The area immediately surrounding the Option C route is primarily open fields. There are individual NSRs near the route. To the eastern end of the route, on Honiton Road, there are several residential properties.

1.3 LANDSCAPE/TOWNSCAPE

1.3.1. Option A

Baseline and Sensitive Receptors

The scheme area lies predominantly within open green space between the east edge of Cullompton and the north-south running mainline railway. This area of land is the Cullompton Community Association's (CCA) Fields, which cover 32 acres (13 ha) and are a major recreational area for the town. Formed in 1970, the CCA purchased the fields and water meadows that are used by recreational and sports clubs, and for a variety of regular events, which include shows, a circus, whippet racing and a fireworks display.

The Fields comprise formal marked pitches for football, hockey, cricket and bowls, a children's play area with equipment to suit a range of ages, and meadows with surfaced tracks and mown grass paths, which are well used for dog walking and informal recreation.

The traffic on the M5 is a source of constant background noise, with trains passing regularly on the Bristol to Exeter mainline railway adding to the intrusion. The well treed boundaries and dense mature hedgerows within the Fields offer some sense of relative tranquillity within the area.

Landscape Character: National Level

The area falls within National Character Area (NCA) 148: Devon Redlands. Key relevant characteristics of this NCA include:

- Hilly landscape of villages, hamlets, farmsteads, hedge banks and winding lanes, cut through by steep-sided valleys with wide floodplains;
- Extensive urban development, roads and railways on the lower valleys and coasts; and
- Open flood meadows with little tree cover in the lower valleys...

Landscape Character: Local Level

At the local level, the area immediately east of the town falls within Mid Devon Local Character Type (LCT) 3C: Sparsely settled farmed valley floors. Key relevant characteristic of this LCT include:

Low-lying flood plains of the lower reaches and broader parts of the river valleys. A medium
to small scale landscape, characterised by relatively narrow strips of gently sloping or level
land with a smooth surface topography.

Designations

St Andrew's Church, a Grade I listed building, is on the east edge of the town and the tower is a feature in many local views.

First Bridge, the Duke Street crossing of the Mill Leat, is Grade II listed.

Landscape Features

- The main branch of the River Culm flows north to south to the east of Cullompton and the M5. The Cullompton Leat, a mill leat that takes its water from the Sratford Stream, runs along the east edge of the town.
- There are several mature landmark oak trees, including some veteran trees, within the CCA Fields, both in hedgerows and as field trees.
- An oak tree avenue has been planted alongside the surfaced track running north to south through the central meadow.
- The vehicle access to the CCA Fields is lined by an avenue of mature tree specimens, including oak, sweet chestnut, robinia, and maples.
- Hedgerows in the area are mainly species rich with trees. Ash is the predominate species, with alder and willow near ditches and streams, and hazel, aspen, oak, hawthorn, field maple and sweet chestnut.
- There is an area of semi-natural woodland south of the B3181, east of the superstore.

Sensitive Receptors

Landscape receptors:

- Local landscape character;
- Mature trees, including landmark specimens and oak tree avenue;
- Meadowland; and
- Species rich hedgerows.

Visual receptors:

- Local residents in Chestnut Avenue, Rivermead, and WaterMeadow, Cullompton;
- Users of CCA recreational facilities; children's playground, football club, cricket club, hockey club, bowling club, army cadets, whippet club.
- Visitors to events on CCA Fields (e.g. dog shows/circus/whippet racing);
- Users of CCA informal open space, including dogwalkers on tracks, mown paths and meadows;
 and
- Users of public footpaths.

1.3.2. Option B

Baseline and Sensitive Receptors

The scheme area lies predominantly within open green space between the east edge of Cullompton and the mainline railway. This area of land is the Cullompton Community Association's (CCA) Fields, which cover 32 acres (13 ha) and are a major recreational area for the town. Formed in 1970, the CCA purchased the fields and water meadows that are used by recreational and sports clubs and for a variety of regular events, which include shows, a circus, whippet racing and a fireworks display.

The traffic on the M5 is a source of constant background noise, with trains passing regularly on the Bristol to Exeter mainline railway adding to the intrusion. The well treed boundaries and dense mature hedgerows within the Fields offer some sense of sense of relative tranquillity within the area.

Landscape Character: National Level

The area falls within National Character Area (NCA) 148: Devon Redlands. Key relevant characteristics of this NCA include:

- Hilly landscape of villages, hamlets, farmsteads, hedge banks and winding lanes, cut through by steep-sided valleys with wide floodplains;
- Extensive urban development, roads and railways on the lower valleys and coasts; and
 - Open flood meadows with little tree cover in the lower valleys...

Landscape Character: Local Level

At the local level, the area immediately east of the town falls within Mid Devon Local Character Type (LCT) 3C: Sparsely settled farmed valley floors. Key relevant characteristic of this LCT include:

Low-lying flood plains of the lower reaches and broader parts of the river valleys. A medium
to small scale landscape, characterised by relatively narrow strips of gently sloping or level
land with a smooth surface topography.

Designations

St Andrew's Church, a Grade I listed building, is on the east edge of the town and the tower is a feature in many local views.

First Bridge, the Duke Street crossing of the Mill Leat, is Grade II listed.

Landscape Features

- The Cullompton Leat, a mill leat that takes its water from the Sratford Stream, runs along the east edge of the town.
- There are several mature landmark oak trees, including some veteran trees, within the CCA Fields, both in hedgerows and as field trees.
- The vehicle access to the CCA Fields is lined by an avenue of mature tree specimens, including oak, sweet chestnut, robinia, and maples.
- Hedgerows in the area are mainly species rich with trees. Ash is the predominate species, with alder and willow near ditches and streams, and hazel, aspen, oak, hawthorn, field maple and sweet chestnut.
- There is an area of semi-natural woodland south of the B3181, east of the superstore.

Sensitive Receptors

Landscape receptors:

- Local landscape character;
- Mature trees, including landmark specimens and mixed specimen tree avenue;
- Meadowland: and
- Species rich hedgerows.

Visual receptors:

- Local residents in Water Meadow, Cullompton;
- Users of CCA recreational facilities; children's playground, football club, cricket club, hockey club, bowling club, army cadets, whippet club.
- Visitors to events on CCA Fields (e.g. dog shows/circus/whippet racing);
- Users of CCA informal open space, including dogwalkers on tracks, mown paths and meadows;
 and Users of public footpaths

1.3.3. Option C

Baseline and Sensitive Receptors

The scheme area lies within the southern end of the open green space between the east edge of Cullompton and the mainline railway. This area of land is the Cullompton Community Association's (CCA) Fields, which cover 32 acres (13 ha) and are a major recreational area for the town. Formed in 1970, the CCA purchased the fields and water meadows that are used by recreational and sports clubs and for a variety of regular events, which include shows, a circus, whippet racing and a fireworks display.

The main length of this option lies east of the M5, within pastoral farmland.

Landscape Character: Local Level

At the local level, the study area immediately east of the town falls within Mid Devon Local Character Type (LCT) 3C: Sparsely settled farmed valley floors. Key relevant characteristics of this LCT include:

 Low-lying flood plains of the lower reaches and broader parts of the river valleys. A medium to small scale landscape, characterised by relatively narrow strips of gently sloping or level land with a smooth surface topography.

East of the River Culm, the study area falls within Mid Devon Local Character Type (LCT) 3E: Primarily managed as arable farmland with some areas of improved grassland, this is a traditional Devon landscape where the Redlands

Characteristics are superimposed on the rolling landform of the Culm giving great soil fertility. Key relevant characteristic of this LCT include:

- An agrarian landscape with medium to large scale field patterns;
- Hedgerow trees are infrequent within the type. Individual trees within amalgamated fields indicate the positions of lost hedges; and
- Views are highly variable. The landscape is semi-open with some long extensive views afforded from on top of hilltops. Where hedges are high views are mostly framed or confined with glimpses into and out only present from field gate openings.

Designations

St Andrew's Church, a Grade I listed building, is on the east edge of the town and the tower is a feature in many local views.

First Bridge, the Duke Street crossing of the Mill Leat, is Grade II listed.

Landscape features

- The main branch of the River Culm flows north to south, to the east of Cullompton and the M5.
- There are several mature landmark oak trees, including some veteran trees, within the CCA Fields, both in hedgerows and as field trees.
- The vehicle access to the CCA Fields is lined by an avenue of mature tree specimens, including oak, sweet chestnut, robinia, and maples.
- Hedgerows in the area, including field hedges east of the M5, are mainly species rich with trees. Ash is the predominant species, with alder and willow near ditches and streams, and hazel, aspen, oak, hawthorn, field maple and sweet chestnut.

Sensitive Receptors

Landscape receptors:

- Local landscape character;
- Mature trees, including landmark specimens and formal avenue;
- Meadowland and pasture; and
- Species rich hedgerows.

Visual receptors:

- Local residents in Chestnut Avenue, 7 9 Water Meadow, Cullompton, and in properties alongside the A373, Honiton Road, Stonyford;
- Users of CCA recreational facilities; children's playground, football club, cricket club, hockey club, bowling club, army cadets, whippet club;
- Visitors to events on CCA Fields (e.g. dog shows/circus/whippet racing);
- Users of CCA informal public open space, including dogwalkers on tracks, mown paths and meadows;
- Visitors to Upton Lakes and Lodges;
- Users of public footpaths; and
- Travellers on the M5.

1.4 SOCIO-ECONOMIC

1.4.1. Option A and B

Baseline and Sensitive Receptors

As explained in the Landscape/ Townscape section above, the scheme area lies predominantly within open green space between the east edge of Cullompton and the north-south running mainline railway. 32 acres of this green space is owned by the CCA and are a major recreational area for the town. Desk-based research has revealed that the following people/ groups/ organisations use the space:

- Cullompton Ranger Football Club;
- Cullompton Cricket Club;

- Cullompton Bowling Club;
- Culm Valley Hockey Club;
- Devon & Somerset Whippet Club;
- Army Cadets;
- CCA children's playground;
- Community car boot sales;
- Touring circus; and
- Dog walkers.

The fields are used by many members of the community as a place for walking, relaxation and recreational activities.

The CCA has plans to make the area a wildlife haven and the fields are classed as Priority Habitat in the soon to be adopted Mid Devon Local Plan 2013-2033. The CCA have produced their own Biodiversity Action Plan which will help to achieve this.

A Tesco superstore and Longbridge Meadow Trading Estate are located either side of the northern section of the site. The Weary Traveller pub is also present.

Although the CCA are promoting the importance of the area it is designated for the Town Centre Relief Road under Policy CU19 of the emerging Local Plan.

1.4.2. Option C

Baseline and Sensitive Receptors

Option C would start in the same position as Option A and B, however would continue east over the M5 motorway. Land immediately east of the M5 is flood plain associated with the River Culm which flows north to south parallel to the M5. Beyond that is farmland, however the land is allocated for mixed use development in the emerging Mid Devon Local Plan 2013-2033 (Policy CU7-CU12).

1.5 GEOTECHNICAL AND CONTAMINATION

1.5.1. Option A and B

Baseline and Sensitive Receptors

- There is no recorded history of contamination or sensitive geological receptors.
- There are several water sources which are located within or flow through the site. A leat flows from north to south through the open green space. A flood relief stream for the leat flows from west to east through the middle of the green space. There is no recorded history of pollution incidents associated with these water courses.
- The southwest rail mainlines and M5 motorway form the eastern boundary of the site. These are both potential sources of contamination.
- The site sits within the River Culm flood plain.
- Historical mapping shows the land being used for farming.

1.5.2. Option C

Baseline and Sensitive Receptors

- There is no recorded history of contamination or sensitive geological receptors.
- The north-eastern section of the route is within 50m of Nitrate Vulnerable Zone.

- Land east of the M5 is Grade 3a agricultural Land.
- Historical mapping shows the land being used for farming.

1.6 ARBORICULTURE

1.6.1. Option A

Baseline and Sensitive Receptors

- There are several mature landmark oak trees, including some veteran trees, within the CCA Fields, both in hedgerows and as field trees.
- An oak tree avenue has been planted alongside the surfaced track running north to south through the central meadow.
- The vehicle access to the CCA Fields is lined by an avenue of mature tree specimens, including oak, sweet chestnut, robinia, and maples.
- Hedgerows in the area are mainly species rich with trees. Ash is the predominate species, with alder and willow near ditches and streams, and hazel, aspen, oak, hawthorn, field maple and sweet chestnut.
- There is an area of semi-natural woodland south of the B3181, east of the superstore.

1.6.2. Option B

Baseline and Sensitive Receptors

- There are several mature landmark oak trees, including some veteran trees, within the CCA Fields, both in hedgerows and as field trees.
- The vehicle access to the CCA Fields is lined by an avenue of mature tree specimens, including oak, sweet chestnut, robinia, and maples.
- Hedgerows in the area are mainly species rich with trees. Ash is the predominate species, with alder and willow near ditches and streams, and hazel, aspen, oak, hawthorn, field maple and sweet chestnut.
- There is an area of semi-natural woodland south of the B3181, east of the superstore

1.6.3. Option C

Baseline and Sensitive Receptors

- There are several mature landmark oak trees, including some veteran trees, within the CCA Fields, both in hedgerows and as field trees.
- The vehicle access to the CCA Fields is lined by an avenue of mature tree specimens, including oak, sweet chestnut, robinia, and maples.
- Hedgerows in the area, including field hedges east of the M5, are mainly species rich with trees. Ash is the predominant species, with alder and willow near ditches and streams, and hazel, aspen, oak, hawthorn, field maple and sweet chestnut.

1.7 ECOLOGY

1.7.1. Option A

Baseline and Sensitive Receptors

Option A runs through cultivated/ disturbed land – amenity grassland. The amenity grassland consists of play areas and sports fields and the habitat had low botanical diversity and value for protected species

was limited. The scheme runs through mixed woodland which is semi-natural. At this site, mature mixed woodland was present and comprises of deciduous and leyllanli trees that are used as curtilage between playing fields and screening from the motorway and the railway line. To the north of the site there is semi-improved grassland covering approximately 7 Ha that include common species such as greater plantain, ribwort plantain, perennial rye-grass, Yorkshire fog, and common sorrel. The route also cuts through hedges with trees that are species rich. The hedgerows comprise of mature well-established trees and are identified as having significant ecological value to the site. There is a tributary of the River Culm runs traverses the west boundary and south-west section of the site. This stream is heavily lined and shaded by deciduous trees on both banks, here the proposed route crosses over the stream.

The wider environment was assessed as high value for bats with a large network of fields, hedgerows and woodland, as well as roosting opportunities in nearby structures. The grassland and woodland provided moderate potential for foraging bats, with the mature trees having high potential for roosting bats. The site was also assessed as having a moderate to high value for birds, with the scrub, grassland and woodland providing suitable nesting and feeding opportunities. The site location was assessed as having a moderate value for reptiles, (the grassland tussocks and scrub fringes) and invertebrates (white clawed crayfish). There was no sign of badgers on site, however the overall site was assessed to hold potential for foraging badgers, hedgehogs and the River Culm had the potential to support otter and water voles. The pond on site provided potential for breeding habitat for great crested newts.

1.7.2. Option B

Baseline and Sensitive Receptors

Option B also runs through hedgerows that are species rich with mature well-established trees that are identified as having a significant ecological value to the site. This proposed route also runs through mature mixed woodland that comprises of deciduous and leyllanli trees that are used as curtilage between playing fields and screening from the motorway and the railway line. To the north of the site there is semi-improved grassland covering approximately 7 Ha that include common species such as greater plantain, ribwort plantain, perennial rye-grass, Yorkshire fog, common sorrel and patches of yellow rattle. The proposed scheme also cuts through hard standing concrete and a few buildings that are mostly used as changing facilities. There is a tributary of the River Culm runs traverses the west boundary and south-west section of the site. This stream is heavily lined and shaded by deciduous trees on both banks, here the proposed route crosses over the stream.

The wider environment was assessed as high value for bats with a large network of fields, hedgerows and woodland, as well as roosting opportunities in nearby structures. The grassland and woodland provided moderate potential for foraging bats, with the mature trees having high potential for roosting bats. The site was also assessed as having a moderate to high value for birds, with the scrub, grassland and woodland providing suitable nesting and feeding opportunities. The site location was assessed as having a moderate value for reptiles, (the grassland tussocks and scrub fringes) and invertebrates (white clawed crayfish). There was no sign of badgers on site, however the overall site was assessed to hold potential for foraging badgers, hedgehogs and the River Culm had the potential to support otter and water voles. The pond on site provided potential for breeding habitat for great crested newts.

1.7.3. Option C

AWAITING PHASE 1 ECOLOGY SURVEY FROM ETHOS. AVAILABLE OCTOBER 2018.

1.8 HISTORIC ENVIRONMENT

1.8.1. Option A, B and C

Baseline and Sensitive Receptors

First Bridge is a grade II listed structure that is located right where the proposed route begins and crosses over the tributary of the River Culm.

St Andrew's Church, a Grade I listed building, is on the east edge of the town and the tower is a feature in many local views.

A large portion of the built form of Cullompton to the west of the site forms the Cullompton Conservation Area.

1.9 WATER ENVIRONMENT

1.9.1. Option A, B and C

Baseline and Sensitive Receptors

AWAITING INFORMATION FROM ARCADIS

Appendix F

LAND IMPACT ASSESSMENT



1 LAND IMPACT ASSESSMENT

1.1 OPTION A

The proposed layout of Option A will affect approximately 7 known areas of registered and unregistered land according to the Land Registry information provided. The initial proposed area of the scheme is 27,800m², the majority of which is located within the CCA land; however, the scheme land take in this area is approximately 10% of the total area. An approximate impact on the affected land owners can be seen in Table 1.

Table 1: Option A Land Owner Summary

Land Owner	Approximate land take (m²)	Approximate % of land affected
3	365	12
4	8,950	15
5	4,000	30
6	140	5
7	40	100
10	500	7
18	14,000	10

The proposed layout primarily affects areas of greenfield where no development currently exists, though these areas are currently for reactional purposes for the town. The north of the proposed development has more impact on developed areas such as the existing roundabout expansion however these areas are not thought to have significant compensatory requirements

1.2 OPTION B

The proposed layout of Option B will affect approximately 12 known areas of registered and unregistered land according to the Land Registry information provided. The initial proposed area of the scheme is approximately 28,400m², the majority of which, as in Option A, falls within undeveloped recreational areas for the town. This Option also has a significant impact on the existing bowling and cricket grounds. An approximate impact on the affected landowners can be seen in Table 2.

Table 2: Option B Land Owner Summary

Land Owner	Approximate land take (m²)	Approximate % of land affected
1	100	15
2	650	23
3	365	12
4	9200	16
5	720	6
6	140	5

7	40	100
10	500	7.00
11	230	2
12	1300	70
18	15,000	11
19	3150	30

To the north of the proposed roundabout near the supermarket location, Option A and B have similar impacts on the existing developments. Option B has a lesser impact on the CCA fields to its alignment differences however it has significantly more impact on the existing bowling green, cricket ground, and associated buildings. These will be required to be demolished for the proposed alignment to be constructed and therefore will require more land compensatory requirements than Option A. Consideration will also be required for the impact on the whippet track and the access onto Duke Street the South West Water pumping station location.

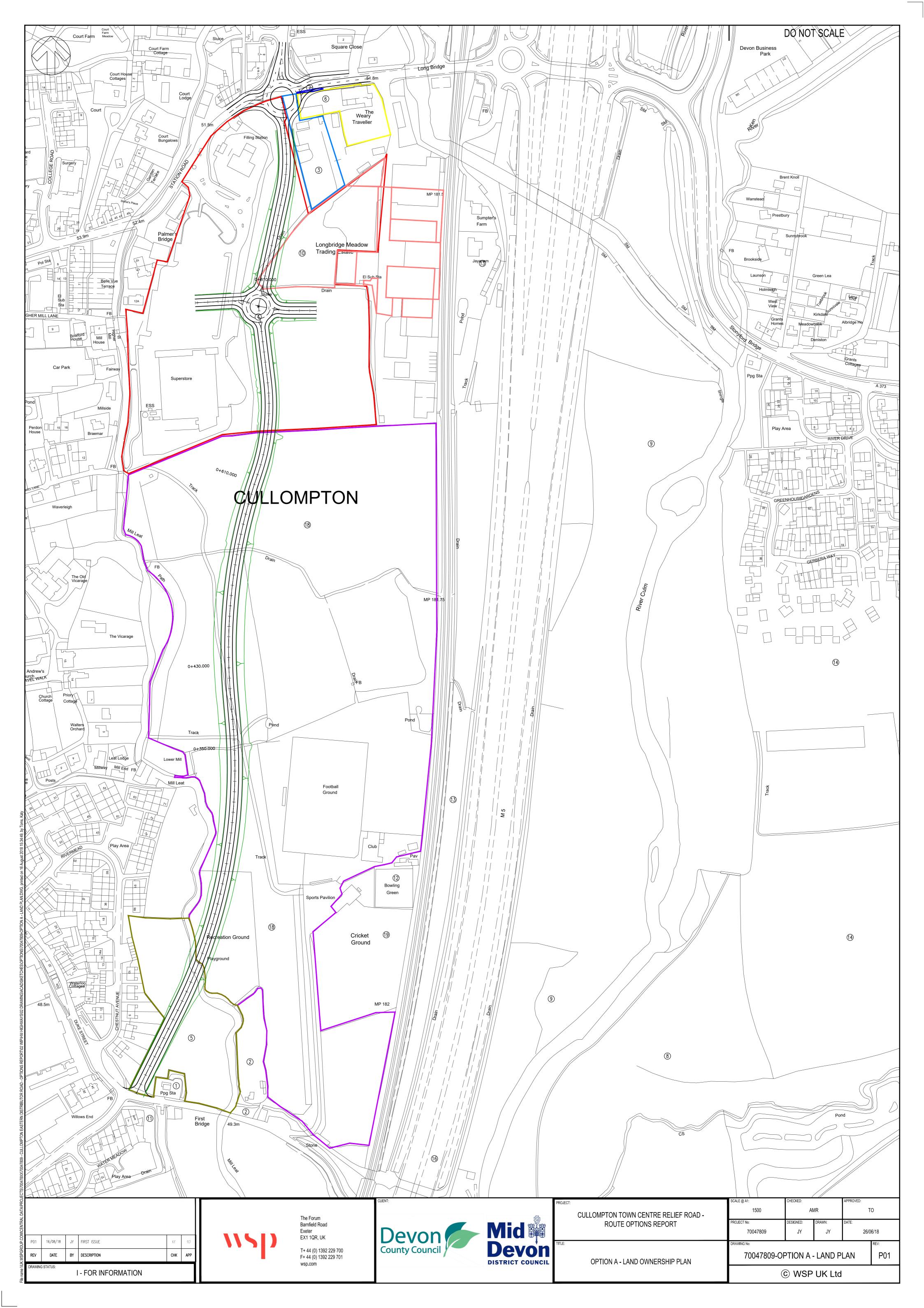
1.3 OPTION C

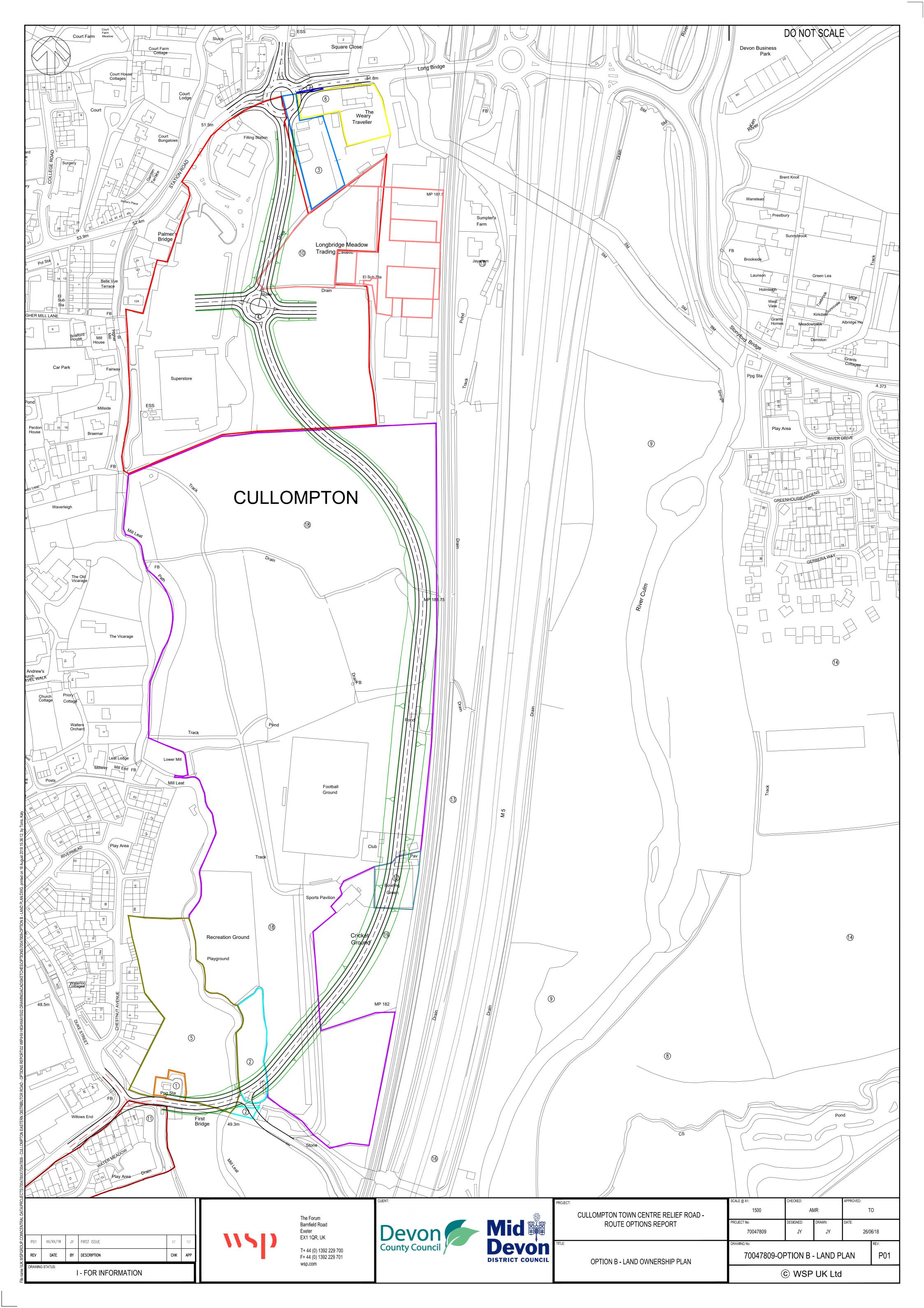
The proposed layout of Option C will affect approximately 11 known areas of registered and unregistered land according to the Land Registry information provided. Most of these areas are greenfield or agricultural land, with the exception of the proposed crossing of the railway and the M5 corridor. The total estimated area of the scheme is approximately 40,000m². An approximate impact on the affected landowners can be seen in Table 3.

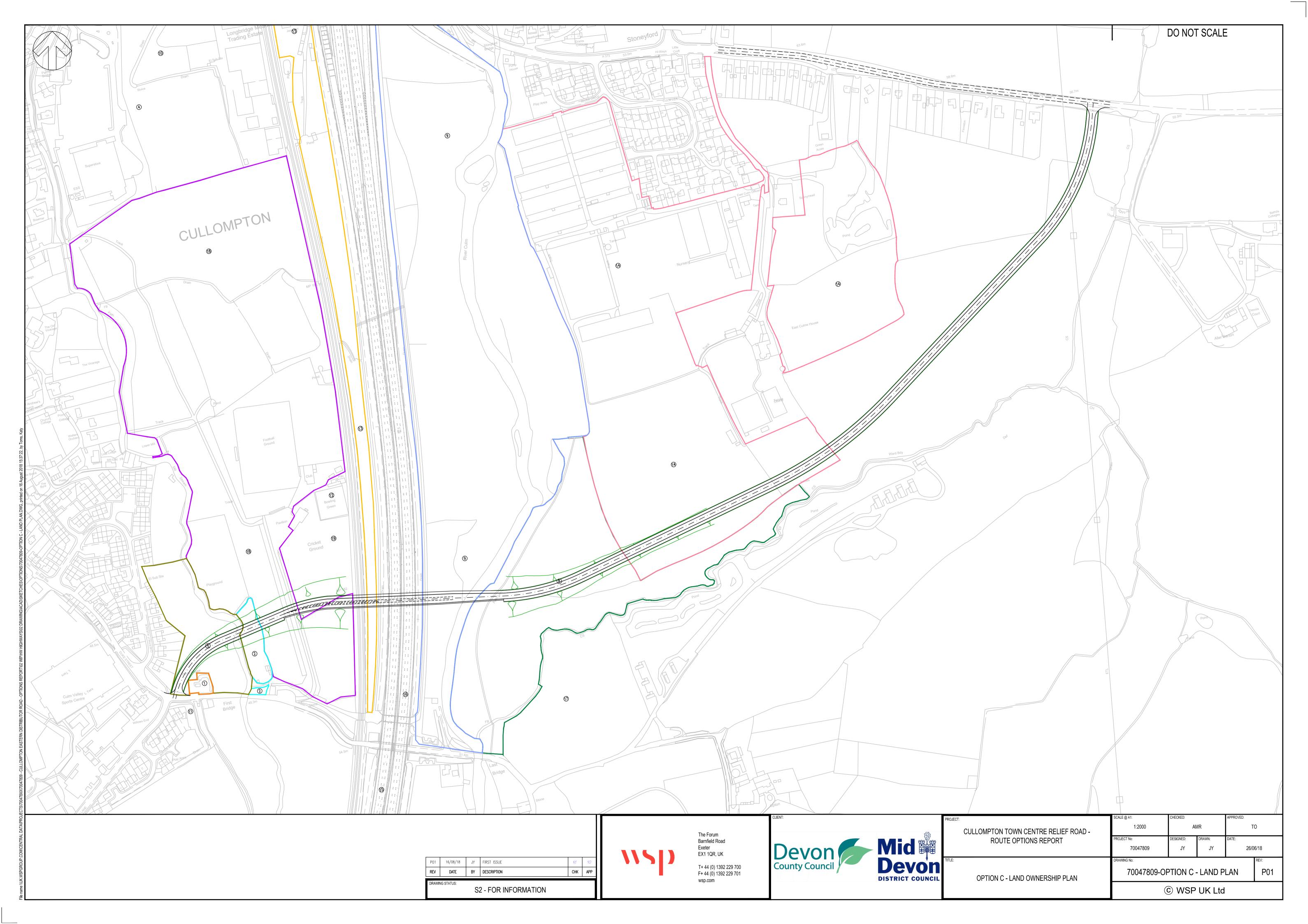
Table 3: Option C Land Owner Summary

Land Owner	Approximate land take (m²)	Approximate % of land affected
2	950	35
5	720	6
8	7000	14
9	2000	1.5
13	395	2
14	5300	3
15	2100	8
16	1200	13
17	2100	8
18	3900	3
19	2400	24
Unidentified	12000	N/A

The proposed layout primarily affects areas which are not developed or areas of agriculture and therefore compensatory requirements to the land owners will need to be agreed in accordance with the specific land uses. As with Option B, public consultation will also ascertain the impact of the scheme on the existing whippet track, and South West water will need to be consulted with regards to the location of the pumping station.









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