## EAST WEST RAIL COMPANY CONSULTATION ON ROUTE OPTIONS BETWEEN BEDFORD AND CAMBRIDGE

То:	Economy and Environment				
Meeting Date:	14 March 2019				
From:	Graham Hughes, Executive Director, Place and Economy				
Electoral division(s):	The five route options travel through Cambourne, Duxford, Gamlingay, St Neots East & Gransden, Hardwick, Melbourn & Bassingbourn, Papworth & Swavesey, Sawston & Shelford and Trumpington divisions				
	Potential strategic implications across all divisions				
Forward Plan ref:	Key decision: No				
Purpose:	To consider the County Council's response to the East West Rail company's consultation				
Recommendation:	Members are asked to:				
	<ul> <li>a) Confirm the Council's strong support for the delivery of East West Rail central section</li> <li>b) Support Option A via Bedford South, Sandy and Bassingbourn as the Council's preferred option</li> <li>c) Confirm that the Council agrees that the central section should enter Cambridge from the south</li> <li>d) Confirm the vital importance of the early delivery of Cambridge South station and four tracking between Cambridge Station and the Shepreth Branch junction</li> <li>e) Comment on and approve the appended draft response to the consultation</li> <li>f) Delegate to Executive Director Place and Economy in consultation with the Chairman of the Economy and Environment Committee, the authority to make minor changes to the response; and</li> <li>g) Confirm the Council's strong support for the development and delivery of the East West Rail eastern section</li> </ul>				

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## 1. BACKGROUND

- 1.1 On 28<sup>th</sup> January 2019, the East West Rail (EWR) Company launched a consultation (see <u>https://eastwestrail.co.uk/haveyoursay</u>) on options for a new railway line between Bedford and Cambridge. The consultation sets out five potential route options, all of which are in a broad route corridor between Bedford and Cambridge via Sandy.
- 1.2 The East West Rail Consortium was formed in 1995 with the objective of promoting and securing a strategic railway connecting East Anglia with Central, Southern and Western England. The EWR Consortium brings together local authorities, enterprise partnerships, Network Rail and the Department for Transport to support the development and delivery of EWR. Cambridgeshire County Council is a member of the EWR Consortium.



1.3 The three sections of EWR are shown below.

- 1.4 Phase 1 of the western section between Oxford and Bicester opened in 2016. In 2017, the Government formed the East West Rail Company to accelerate the delivery of the scheme. The Company is currently undertaking the detailed planning and consents processes for the delivery of phase 2 of the western section between Bicester and Bedford, and is consulting on route options for the central section.
- 1.5 In February 2019, the EWR Consortium published a prospectus (see <u>https://www.eastwestrail.org.uk/eastern-section-prospectus/</u>) for the eastern section of EWR between Cambridge, Ipswich and Norwich. While the eastern section is not the subject of the current consultation, choices in relation to the central section could impact on it, and are noted in this report.

# 2. STRATEGIC CONTEXT

2.1 The five route options are shown in the Figure A1 in **Appendix A** to this report, which includes a detailed commentary on the key impacts and issues raised by the route options under consideration. A draft response to the consultation is set out in **Appendix B**.

# Points of principle

- 2.2 In considering the response to the recommendations, officers have used the following broad points of principle to inform the proposed County Council response to the consultation:
  - That the Council strongly supports the delivery of the EWR central section.
  - That the Council wishes to see a route that:
    - provides fast connectivity between the East of England and Central, Southern and Western England; and
    - supports housing and economic growth planned in the Oxford to Cambridge arc.
  - That the EWR central section should not duplicate already planned capacity to provide for the transport demand from planned housing and economic growth, and should deliver capacity that allows for additional growth consistent with national and local policy.

# The strategic case for investment

- 2.3 EWR will support the continued economic growth in the Oxford Milton Keynes Cambridge arc in sectors that are critical to the continued success of the economy of the UK as a whole.
- 2.4 There is a significant imbalance between supply and demand for housing in the Greater Cambridge area. Along with other interventions including the A428 Black Cat to Caxton Gibbet improvement and the wider programme of schemes being delivered by the CPCA and the Greater Cambridge Partnership (GCP), the EWR central section will help correct this imbalance.
- 2.5 In catering for longer regional trips from East Anglia, EWR will reduce pressure on congested routes into and out of London that currently provide for them. It will also provide the opportunity for rail freight journeys, providing for growth at the ports of Felixstowe, Harwich and London Gateway, and again taking pressure of rail routes into and through London.
- 2.6 There are two other very large major transport schemes that are planned to provide for the transport demand of planned and future development to the west of Cambridge.
  - The Greater Cambridge Partnership's (GCP) Cambourne to Cambridge scheme, at a cost of £157M, will provide for the transport demand of currently planned development in the Cambourne area, and have the capability to cater for much higher levels of growth if such growth is considered acceptable.
  - Highways England's A428 Black Cat to Caxton Gibbet scheme will provide additional capacity to the west of Cambourne, and allow for reliable public transport journeys between St Neots and Cambridge in concert with the Cambourne to Cambridge scheme.

2.7 The EWR central section options that serve development in the Tempsford, St Neots and Cambourne areas would also provide for the transport demand of this growth towards Cambridge, to the detriment to the Business Cases of all three schemes.

# 3. CONSIDERATION OF A RECOMMENDED PREFERRED OPTION

3.1 The following paragraphs briefly summarise the different transport characteristics of the five route options. More detailed commentary is provided in paragraphs 11 to 39 of Appendix A to this report. Table 1 sets out the costs, transport benefits and journey times for the five route options presented.

	Cost	Estimated	Journey Time		
		total transport benefits	Oxford to Cambridge	Bedford to Cambridge	
Route A	£2.0B	£0.6B	76 min	23 min	
Route B	£2.6B	£0.6B	80 min	27 min	
Route C	£2.5B	£0.5B	80 min	27 min	
Route D	£2.6B	£0.7B	83 min	25 min	
Route E	£3.4B	£0.7B	82 min	24 min	

# Table 1Costs and transport benefits of the five route options in the<br/>'baseline' growth case

# **Option A**

for Option D.

(Bedford South – Sandy – Bassingbourn)

3.2 Of the five route options presented, Option A is the cheapest and would provide the lowest journey times between Oxford and Cambridge. Bedford South station would provide interchange with the Midland Main Line and would serve the Wixams development. There would be a journey time penalty for rail trips between Bedford Midland and Cambridge as interchange would be required at Bedford South. Option A would provide for development in the Bassingbourn area, should such development be considered acceptable.

# Option B (Bedford South – St Neots south / Tempsford / Sandy north – Cambourne) Option E (Bedford Midland – St Neots south / Tempsford – Cambourne)

- 3.3 Option B is more expensive than Option A and has longer journey times for the same level of assessed transport benefits. Option E is significantly more expensive than all of the other options, and has only marginally higher assessed benefits than Options A and B. Journey times are almost as long as
- 3.4 Options B and E would be competing with the A428 Black Cat to Caxton Gibbet scheme and the Cambourne to Cambridge scheme as noted in paragraphs 2.6 and 2.7 above. The additional cost of Options B and E via Cambourne compared to Option A via Bassingbourn are significantly greater than the cost of the GCP's Cambourne to Cambridge scheme.

**Option C** (Bedford South – Tempsford – Sandy – Bassingbourn) **Option D** (Bedford Midland – Tempsford – Sandy – Bassingbourn)

- 3.5 Option C is assessed as catering for higher levels of growth than Option A, but is more expensive, has a lower level of assessed benefits and longer journey times. Option D has a slightly higher level of assessed benefits than Option A, but has the longest journey times of all of the options and is significantly more expensive than Option A.
- 3.6 As with Option A, Options C and D would provide for development in the Bassingbourn area, should such development be considered acceptable. The additional growth that Options C and D would cater for compared to Option A is in the Tempsford / St Neots south area. Options C and D would be competing with both the A428 Black Cat to Caxton Gibbet scheme and the Cambourne to Cambridge as noted in paragraphs 2.6 and 2.7 above.

### Consideration of growth issues

3.7 The consideration of new growth locations is led by the development of Local Plans. It will be for the Local Planning Authorities on the central section route in Cambridgeshire and Bedfordshire, in collaboration with the transport, highway and other relevant authorities to consider what growth might be appropriate on any of the route options.

## **Environmental and Local Community impacts**

- 3.8 As the route options are currently defined as broad corridors, it is not possible to assess in detail the impact of the routes on local communities and the environment in detail at this stage. The Technical Report accompanying the consultation states that "Route alignments would be developed to avoid direct impacts on significant environmental features".
- 3.9 Paragraphs 40 to 57 of Appendix A to this report provide more detail on these issues and set out the further requirements of the Council in relation to them as the EWR Company takes forward the development of the central section.

# Recommendation of a preferred route option

- 3.10 Given the following, officers therefore recommend that Option A via Bedford, Sandy and Bassingbourn should be the Councils preferred route option.
  - The strategic rationale supports delivery of a regional railway linking East Anglia to Central, Southern and Western England.
  - Option A provides lower journey times compared to Options B, C, D and E.
  - The transport demand towards Cambridge of growth in the Cambourne, St Neots and Tempsford areas over and above current plans could be accommodated by the Cambourne to Cambridge and A428 Black Cat to Caxton Gibbet schemes. EWR Options B, C, D and E would be competing with these schemes to provide for this transport demand, to the detriment to the Business Cases of all three schemes.
  - Options B, C, D and E cost significantly (£500M £1.4B) more than Option A, and that this additional cost is also far greater than the cost of the Cambourne to Cambridge scheme (£157M).

• Options B, C, D and E do not deliver significant benefits over Option A.

## **Route into Cambridge**

3.11 The consultation asks for views on whether the EWR Company is right to focus on routes that enter Cambridge from the south. Paragraphs 17 and 18 of Appendix A to this report set out why officers recommend that the Council confirm that it agrees that the EWR central section should enter Cambridge from the south.

## 4. ALIGNMENT WITH CORPORATE PRIORITIES

### 4.1 Developing the local economy for the benefit of all

The implications for this priority are set out in paragraphs 2.3 and 2.4 above, and in paragraphs 7 to 10 and 32 to 39 of Appendix A.

### 4.2 Helping people live healthy and independent lives

See commentary in paragraph 5.6 below.

### 4.3 Supporting and protecting vulnerable people

There are no significant implications for this priority.

## 5. SIGNIFICANT IMPLICATIONS

### 5.1 **Resource Implications**

There are no significant implications within this category.

### 5.2 Statutory, Risk and Legal Implications

There are no significant implications within this category.

### 5.3 Equality and Diversity Implications

There are no significant implications within this category.

### 5.4 Engagement and Consultation Implications

There are no significant implications within this category.

### 5.5 Localism and Local Member Involvement

The report above and Appendix A below set out details of significant implications throughout.

### 5.6 Public Health Implications

At this stage the public health implications of each route are unknown. However, transport programmes have the opportunity to impact on the health and wellbeing of residents, including through:

- reducing poor air quality,
- supporting and enabling active travel,
- reducing road accidents,

- creating or reducing community severance,
- enabling residents to access jobs and services including health care, and
- enabling residents to access social opportunities.

It is anticipated that Public Health would be consulted further as the scheme is developed.

# SOURCE DOCUMENTS

Source Documents	Location
East West Rail Bedford to Cambridge Route Option Consultation Document East West Rail Bedford to Cambridge Route Option Technical Report	Room 301, Shire Hall, Cambridge And <u>https://eastwestrail.co.uk/haveyoursay</u>

Implications	Officer Clearance
Have the resource implications been cleared by Finance?	Yes Sarah Heywood
Have the procurement/contractual/ Council Contract Procedure Rules implications been cleared by the LGSS Head of Procurement?	Yes Paul White
Has the impact on statutory, legal and risk implications been cleared by LGSS Law?	Yes Name of Legal Officer: Fiona McMillan
Have the equality and diversity implications been cleared by your Service Contact?	Yes Elsa Evans
Have any engagement and communication implications been cleared by Communications?	Yes Sarah Silk
Have any localism and Local Member involvement issues been cleared by your Service Contact?	Yes Andy Preston
Have any Public Health implications been cleared by Public Health	Yes Iain Green

# APPENDIX A. COMMENTARY ON ISSUES RAISED BY THE CONSULTATION

1. The following paragraphs address the key impacts and issues raised by the route options under consideration, which are shown in Figure A1 below.

## Role of the East West Rail route

### Passenger services

- 2. The East West Rail (EWR) route was originally envisaged as a fast (125mph) regional railway connecting East Anglia with Central, Southern and Western England. It would provide significant journey time advantages for medium to longer distance trips (for example, 60 minutes journey time between Oxford and Cambridge) when compared to the same trip on existing routes through London or cross country.
- 3. The current proposals are for a railway that is more focussed on economic and housing growth and local commuting patterns. In reality, the Council would welcome a railway that could fulfil both of these roles, and a lower speed railway (90-100mph, 76-83 minutes between Oxford and Cambridge) would still provide significant journey time savings over the alternative routes.
- 4. The transport assessment assumes three trains per hour in each direction:
  - A fast service between Cambridge and Oxford
  - A stopping service between Cambridge and Oxford
  - A service between Cambridge and Bletchley

### Freight capability

- 5. The EWR Consortium local authority partners are keen to see capability and capacity for freight movements on the route, taking pressure off the Felixstowe to Nuneaton Line, the A14 and the A428, and also the North London Line, the A12 and the M25. The costs provided in the consultation material are based on the provision of the capability to cater for all kinds of freight.
- 6. The EWR Company will review whether costs could be reduced by reducing the capability of the route to cater for the heaviest freight trains, but retaining the capability to cater for intermodal freight (container) trains. Intermodal freight capability may be appropriate, particularly given that growth at the ports at Felixstowe, Harwich and London Gateway is focussed in this sector. Nonetheless, it is important that the review of freight capability is not dictated by narrow scheme specific financial considerations, and should take account of the direct and indirect costs on the transport network as a whole and specifically the rail and road routes noted above.

### The strategic case for investment

 EWR will provide direct rail services between Oxford and Cambridge for the first time since 1967. It will support the continued economic growth in the Oxford – Milton Keynes – Cambridge arc in sectors that are critical to the continued success of the economy of the UK as a whole.

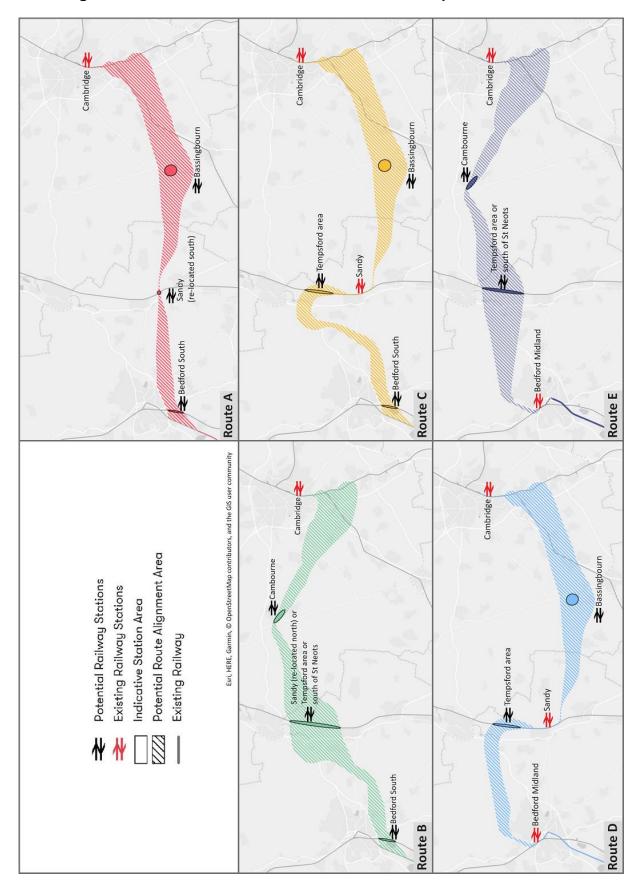


Figure A1 East West Rail central section route options

- 8. The National Infrastructure Commission's (NIC's) report, "Partnering for Prosperity: a new deal for the Cambridge-Milton Keynes-Oxford Arc" (see <u>https://www.nic.org.uk/publications/partnering-prosperity-new-deal-cambridge-</u> <u>milton-keynes-oxford-arc/</u>) made recommendations on how to realise the potential of the arc, which include the delivery of EWR.
- 9. There is a significant imbalance between supply and demand for housing in the Greater Cambridge area. Along with the A428 Black Cat to Caxton Gibbet improvement and the wider programme of schemes being delivered by the CPCA and the Greater Cambridge Partnership (GCP), the EWR central section will help correct this imbalance by supporting housing growth.
- 10. EWR is also important as a strategic link providing very significant journey time benefits for trips between East Anglia and Central, Southern and Western England. In catering for these trips, it will reduce pressure on the congested routes into and out of London that currently cater for them.

# General comments on the five route options

- 11. The five route options are shown in Figure A1 above, and are differentiated from each other in three main areas:
  - The route taken through Bedford
  - The crossing of and interchange with the East Coast Main Line
  - The route taken through South Cambridgeshire
- 12. Station locations served by the five route options are shown in Table A1 below. All five route options would serve the planned Cambridge South Station. The route options are shown as broad areas that are in places several kilometres wide. They do not show an exact route alignment on which the line would run. The EWR Company intends to identify a preferred route option informed by this consultation and by further assessment work. It would then commence further development of a preferred route alignment.

 Table A1
 Station locations for the five route options

		Station Locations										
		BedfordInterchange on theAreaEast Coast Main Line			e	South Cambs.		Cambridge				
		Bedford South	Bedford Midland	St Neots South	Tempsford	Sandy (relocated north)	Sandy (existing)			Cambridge South	Cambridge	
u	Α	$\checkmark$						$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$
Option	В	$\checkmark$			$\checkmark$					$\checkmark$	$\checkmark$	$\checkmark$
	С	$\checkmark$			$\checkmark$		$\checkmark$		$\checkmark$		$\checkmark$	$\checkmark$
Route	D		$\checkmark$		$\checkmark$		$\checkmark$		$\checkmark$		$\checkmark$	$\checkmark$
Ř	Ε		$\checkmark$	~	/					$\checkmark$	$\checkmark$	$\checkmark$

Cambridge South Station and four tracking between Cambridge Station and Shepreth Junction

- 13. Cambridge South Station is referred to in the consultation material but is not shown on the maps showing the five route options. The early delivery of the station ahead of the rest of the central section of EWR is critical to support the continued rapid growth of the internationally important Cambridge Biomedical Campus, and provide vital new transport capacity into the area.
- 14. A separate project, funded by the Department for Transport, the Greater Cambridge Partnership, the Cambridgeshire and Peterborough Combined Authority and Astra Zeneca is taking forward proposals for the delivery of Cambridge South Station and the four tracking of the West Anglia Main Line between Cambridge Station and Shepreth junction.
- 15. EWR requires the four tracking to provide capacity for the additional EWR services into Cambridge. In practical terms, the current tracks into Cambridge from the south will be full in 2020 without any EWR services. Services would be unlikely to be able to stop at a Cambridge South station without four tracking due to the severe timetabling constraints that operating the current line at or near its practical capacity brings.
- 16. Further platform capacity at Cambridge Station and additional track capacity between Cambridge Station and the Newmarket Branch junction and between Cambridge and Newmarket may also be needed to cater for EWR services.

### Route into Cambridge

- 17. There has been local lobbying for the EWR central section to enter Cambridge from the north. All five route options presented enter Cambridge from the south, and the consultation material sets out the rationale for this. The consultation asks for views on whether the EWR Company is right to focus on routes that enter Cambridge from the south.
- 18. The reasons put forward in the consultation material support entering Cambridge from the south. Officers would particularly note that:
  - A route option entering Cambridge to the north would involve significant additional route miles, and significant additional cost over and above the route options presented in the consultation.
  - Journey times on the EWR central section would be longer than for the route options presented in the consultation.
  - The ability of EWR services to effectively serve the planned Cambridge South station and provide for the very significant planned economic and housing growth in the south of the city including at the Cambridge Biomedical Campus, would be significantly reduced if the central section entered Cambridge from the north.
  - The central section of EWR is a part of a longer route linking East Anglia to Central, Southern and Western England, and an option that entered Cambridge to the north would need to reverse at Cambridge or Cambridge South to travel onwards to Ipswich or Norwich. Again, this would add to journey times on EWR services.
  - There would be additional costs to provide capacity through Cambridge

over and above that required to cater for the five options presented in the consultation, as trains making onward trips onto the eastern section would need to make two movements through Cambridge rather than one.

• Public transport infrastructure provision is already in place or planned to address the needs of housing and economic growth to the north and northwest of Cambridge that could be served by a route that entered Cambridge from the north.

## Assessment of costs and benefits

Published costs, transport benefits and journey times

19. Table A2 below sets out costs, transport benefits and journey times for each route option in the 'baseline' growth scenario.

	Cost	Estimated	Journey Time		
		total transport benefits	Oxford to Cambridge	Bedford to Cambridge	
Route A	£2.0B	£0.6B	76 min	23 min	
Route B	£2.6B	£0.6B	80 min	27 min	
Route C	£2.5B	£0.5B	80 min	27 min	
Route D	£2.6B	£0.7B	83 min	25 min	
Route E	£3.4B	£0.7B	82 min	24 min	

 Table A2
 Costs and transport benefits of the five route options

- 20. Under the 'baseline' growth scenario, none of the five route options under consideration are assessed as having transport benefits that would strongly justify the level of investment needed. While the consultation material does not quantify benefits that might be seen in the 'intermediate' and 'higher' growth scenarios, it does note that:
  - the 'intermediate' scenario would lead to a 30% uplift in benefits compared to the 'baseline' scenario; and
  - the 'higher' growth scenario would lead to a "very significant" increase in user benefits.
- 21. The absence of information on the quantum of growth in the 'intermediate' and 'higher' growth scenarios is unhelpful, but in the context of consideration of the EWR central section and other planned transport capacity (see discussion in paragraphs 23 to 37 below), does not markedly impact on the assessment of a preferred route option at this stage.
- 22. Nonetheless, there will be a need as the scheme is developed further to understand the growth assumptions that underlie the assessment of the 'intermediate' and 'higher' scenarios, and therefore the capability of the areas served by the EWR central section route to accommodate (or not) those levels of growth. The growth context is discussed in more detail in paragraphs 32 to 39 below.

## Interaction with the other proposals

## Highways England's A428 Black Cat to Caxton Gibbet scheme

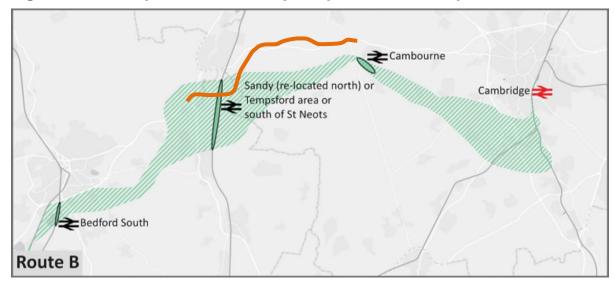
23. In February 2019, Highways England announced a preferred route for the A428 Black Cat to Caxton Gibbet scheme, which is shown in Figure A2 below. The A428 scheme is addressing growth in the same area as would be served by EWR central section Options B and E, and in the Tempsford / St Neots South area, also by Options C and D. Figure A3 shows the A428 preferred route superimposed on EWR Option B.

# Figure A2 A428 Black Cat to Caxton Gibbet preferred route

Papworth Everard Toseland Yelling New 2 tier junction linking to the existing A428 and A1198 New Toseland Road bridge over dual carriagewa 1 New 2 tier junction to link to the existing A428 rthan B1040 A428 B1428 Caxton Gibbet 1111 A428 Croxton Cambourne Eltisk St Neots B1040/Eltisley junction improvements. The existing A428 will pass over the new clual carriageway A428 A1 Caxton Wybostor New Roxton Road bridge over dual carriageway B1046 B1040 Little Barford A1198 New B1046 bridge over dual carriageway Abbotsley Great Gransden Little New Barford Road R Waresle bridge over dual carriage A421 Tempsford A1 Key New 3 tier junction at Black Cat roundabout Original Orange route presented at our consultation in 2017. . Proposed junction Bridge over new dual carriageway Proposed dual carriageway. This route has been amended following feedback from consultation. Existing A428 retained as a local road between St Neots and Caxton Gibbet. Ņ

The preferred route: **Orange** 

Figure A3 A428 preferred route superimposed on EWR Option B



## The Greater Cambridge Partnership's Cambourne to Cambridge scheme

- 24. The Greater Cambridge Partnership's (GCP) Cambourne to Cambridge proposals (see <u>https://www.greatercambridge.org.uk/transport/transport-projects/cambourne-to-cambridge/</u>) also address travel demand between Cambourne and Cambridge. The GCP scheme is addressing immediate local congestion issues and planned growth consistent with the EWR 'baseline' scenario. It will ultimately form part of the CAM network being planned by the Cambridgeshire and Peterborough Combined Authority and the GCP.
- 25. The Cambourne to Cambridge scheme will be capable of providing public transport capacity at much higher levels than are required to provide for currently planned housing and economic growth at Cambourne, Bourn Airfield and St Neots. The current cost estimate for the Cambourne to Cambridge scheme is £157M.

# Interaction between EWR, the A428 and the Cambourne to Cambridge schemes

- 26. There is a significant risk that the assessed transport benefits from economic and housing growth would be double counted by the A428 and EWR schemes for Options B, C, D and E. The A428 scheme will deliver significant additional capacity between the St Neots area and Cambridge.
- 27. There is a further risk that benefits will be double counted by the Cambourne to Cambridge scheme and EWR schemes for Options B and E and to a lesser extent Options C and D.
- 28. The Cambourne to Cambridge proposals will provide for public transport trips into Cambridge on the corridor between St Neots, Cambourne and Cambridge, avoiding the congested A1303 St Neots Road / Madingley Road. Services between St Neots and Caxton Gibbet that are currently unreliable in peak periods due to congestion on the A428 single carriageway section will have the opportunity for uninterrupted trips on either the new A428 dual carriageway or the old road.
- 29. EWR Option B via Cambourne would cost £600M more than Option A via Bassingbourn, and is assessed as delivering a similar level of benefits. Option E via Cambourne would cost £1.4B more than Option A and deliver only £0.1B of additional benefits.
- 30. The cost differential between EWR Option A and Options B and E is significantly greater than the cost of the proposed Cambourne to Cambridge scheme.
- 31. At Cambourne and St Neots, currently planned investment will provide transport capacity to address currently planned growth and with the capability to cater for further growth. Conversely, there is currently no significant infrastructure provision planned that would enable any significant levels of growth to be accommodated in areas served by Options A, C and D between Sandy, Bassingbourn and Cambridge.

## Housing growth assumptions

- 32. The assessment of the transport benefits of the scheme set out in the consultation material assumes a 'baseline' growth scenario, which is consistent with the growth assumptions in current and emerging Local Plan documents. Both EWR and the Oxford to Cambridge Expressway are being developed in the context of the NIC's "Partnering for Prosperity" report, and that report's proposals for significant additional growth over and above that in the 'baseline' growth case.
- 33. Annex A of the Technical Report accompanying the consultation states that 'intermediate' and 'higher' growth scenarios were tested. It does not provide detail of the quantum of growth assessed for these two scenarios, other than to note that the 'higher' growth scenario is based on the NIC's transformational growth scenario. Table A3 below summarises the assessment of the route options to cater for growth set out in section 9 of the Technical Report.

Table A3	Growth potential of the five route options as set out in the
	EWR Bedford to Cambridge Route Option Consultation
	Technical Report

	Growth potential				
	Bedford area	East Coast Main Line interchange	South Cambs.		
Route A	<b>Significant</b> (Wixams)	Limited (Sandy)	<b>Significant</b> (Bassingbourn)		
Route B	<b>Significant</b> (Wixams)	Significant (Sandy north / Tempsford / St Neots south)	<b>Significant</b> (Cambourne)		
Route C	<b>Significant</b> (Wixams)	Significant (Sandy north / Tempsford / St Neots south)	<b>Significant</b> (Bassingbourn)		
Route D	Limited (central Bedford	Significant (Sandy north / Tempsford / St Neots south)	<b>Significant</b> (Bassingbourn)		
Route E	Limited (central Bedford	Significant (Sandy north / Tempsford / St Neots south)	<b>Significant</b> (Cambourne)		

34. An "*illustrative 150,000 additional homes spread evenly across the five local authorities which the EWR central section might pass*" is referred to in Annex C of the Technical Report, in relation to the assessment of economic benefits of additional housing that might be supported by EWR. It is unclear whether this figure forms the basis of the transport assessment of either the 'intermediate' or 'higher' growth scenarios. It is made clear that the figure of 150,000 new homes is an assumption for economic modelling purposes and

"does not imply that these additional planning permissions and homes could be granted and supported without EWR."

- 35. The consideration of new growth locations is led by the development of Local Plans. The planning of new infrastructure does not pre-empt the Local Plan process, so the statement noted above **should not be interpreted as implying that the additional planning permissions and homes would be granted and supported with EWR**. This is a matter for the Local Planning Authorities on the central section route in Cambridgeshire and Bedfordshire, in collaboration with the transport, highway and other relevant authorities.
- 36. As noted in paragraphs 23 to 31 above, the GCP's Cambourne to Cambridge scheme will provide capacity that could provide for growth in the Cambourne area at greater levels than are included in current plans, and the A428 Black Cat to Caxton Gibbet scheme will address congestion issues that impact on the reliability of public transport services between St Neots and Cambourne. There is therefore a significant risk of EWR Options B, C, D and E and the A428 and Cambourne to Cambridge schemes double counting the growth benefits of the overall transport investment.
- 37. The current Cambridge and South Cambridgeshire Local Plans were adopted in 2018, and the emerging Huntingdonshire Local Plan is likely to be adopted in the summer of 2019. These plans contain growth consistent with the baseline scenario. At this time, the only growth scenario that can be relied upon in the assessment of route options is the 'baseline' scenario.

### Economic benefits of growth on the route

- 38. Annex C of the Technical Report accompanying the consultation details an analysis of developable land capacity that was undertaken for the EWR Company to allow for an assessment of the potential economic benefits of additional housing on the route.
- 39. The economic modelling assessed potential benefits of between £5 billion and £9 billion from an additional 150,000 dwellings spread equally across the five Local Authorities through which the central section passes in Bedfordshire and Cambridgeshire. It is important to note that this assessment does not discount the cost of other infrastructure and services (including education provision and local transport infrastructure) that would be needed.

### **Environmental impacts**

- 40. All five options may have impacts on areas with protected status. In Cambridgeshire, the consultation material notes that these include:
  - The River Cam and its flood zone (all routes)
  - The Eversden and Wimpole Special Area of Conservation (all routes)
  - The Wimpole Estate (routes A, C and D)
- 41. As the route options are currently defined as broad corridors, it is not possible to assess the impact of the routes on these sites in detail at this stage. The Technical Report accompanying the consultation states that "*Route*"

alignments would be developed to avoid direct impacts on significant environmental features".

42. The following paragraphs set out officer commentary on Ecology and Green Infrastructure, Flood Risk and Heritage impacts.

### Ecology and Green Infrastructure

- 43. The route options to the north via Cambourne and south via Bassingbourn pass through areas with significant biodiversity interest, including irreplaceable habitats. It is essential that proposals protect and enhance sites, habitats and species of biodiversity value, including those of local importance (e.g. priority species / habitats, County Wildlife Sites and Cambridgeshire & Peterborough Additional Species of Interest). Best practice mitigation hierarchy should be followed, with the route avoiding the greatest impacts on biodiversity selected, with any residual impacts minimised and adequately mitigated.
- 44. This scheme, along with other infrastructure and housing development within Cambridgeshire, will cause significant fragmentation of the landscape and result in isolation of biodiversity assets. It is critical, in line with the National Planning Policy Framework, that the scheme seeks to establish coherent ecological networks that are more resilient to such pressure including protect and buffer existing wildlife sites, extending existing networks of natural habitats and enhancements for species / habitats of local interest.
- 45. It is essential, in accordance with National Planning Policy Framework, that the scheme seeks to deliver biodiversity net gain which contributes to county-wide strategies / projects, including:
  - Cambridgeshire Green Infrastructure Strategy (2011);
  - Wildlife Trust's Living Landscape Project (see <u>www.wildlifebcn.org/living-</u> <u>landscapes</u>), including West Cambridgeshire Hundreds and Cambridgeshire Chalk; and
  - Cambridgeshire and Peterborough Habitat Opportunities map (expected to be published in late February 2019, contact biodiversitypartnership@wildlifebcn.org)

### Flood Risk Management

- 46. The route options to the north via Cambourne and south via Bassingbourn pass through areas with significant flood risk. It is essential that the scheme considers the risk from all sources of flooding (i.e. including risk from surface water runoff, ordinary watercourses and groundwater as well as main rivers) and avoids or manages the risks appropriately.
- 47. Where possible, in line with the National Planning Policy Framework, the scheme should explore opportunities to provide a reduction in flood risk to existing communities as well as ensuring that the route itself is sustainability designed. This could include exploring the use of natural flood risk management solutions on a catchment scale, providing betterment along the corridor. This would also enable a more holistic approach to managing the corridor environment integrating green infrastructure, biodiversity and flood risk management measures. Taking this kind of approach might also enable

external funding and contributions to be drawn in from partners to support the delivery of high quality infrastructure.

48. All of the proposed routes would require the crossing of a number of watercourses. These watercourses form an essential part of water level management across Cambridgeshire and the wider catchment. Therefore consultation with Cambridgeshire County Council should be undertaken to ensure any crossings are designed appropriately and sustainably. The consent of the Council is required before changes can be made to the watercourses.

### <u>Heritage</u>

49. Both proposed routes will have a significant impact on the historic environment. Numbers of both designated and non-designated heritage assets, excluding conservation areas, in the county Historic Environment Record are detailed in Table A4 below. Appropriate identification, assessment and management of impacts to these sites must be taken into consideration in the route planning and design and early engagement with the council's Historic Environment Team is strongly recommended.

	Locally and nationally designated sites i Cambridgeshire				
	Options A, C and D via Bassingbourn	Options B and E via Cambourne			
Monuments	1,713	1,807			
Fieldwork sites	385	422			
Listed buildings	725	598			
Scheduled monuments	23	28			
Registered Parks & Gardens	3	4			

## Table A4 Locally and nationally designated sites in Cambridgeshire

- 50. In addition, and from a broader landscape perspective, the route corridors pass through a number of Historic Environment Character Areas (HECA) noted below:
  - HECA 13 (Cambridgeshire Claylands)
  - HECA 14 (Central Claylands),
  - HECA 20 (Cam/Granta Valley)
  - HECA 21 (Gamlingay Heath)
  - HECA 22 (The Cam Valley)

### Impacts on Local Roads and Public Rights of Way

### Local Roads

51. As a new railway, there will be a presumption against the introduction of new level crossings. It is therefore expected that local roads on all route options would be taken over or under the railway. However, it is also possible that the EWR Company might wish to consider whether they could close some roads.

Early discussion of any such proposals with the County Council as Highway Authority and the Cambridgeshire and Peterborough Combined Authority as Transport Authority will be needed.

### The A10 and Foxton Level Crossings

- 52. The central section will need to cross the A10 or A1309 at some point before it joins the West Anglia Main Line. For Options A, C and D (and possibly for Options B and E) there would be an opportunity for EWR to address or reduce the issues at the one road and two pedestrian level crossings where the Shepreth Branch crosses the A10 at Foxton.
- 53. The Council is also strongly supportive of the use of Foxton Station as a Park and Ride facility for traffic on the A10 as part of onward trips into Cambridge South, Cambridge and Cambridge North Stations, avoiding highly congested sections of the A10, M11 and A14.

### Public Rights of Way

54. The route options to the north via Cambourne and south via Bassingbourn intersect with the routes of the Public Rights of Way (PROW) listed in the table at the end of the draft consultation response in **Appendix B**. Guiding Principle 3 from the County Council's Rights of Way Improvements Plan (ROWIP), April 2016 states that:

"New development should not damage countryside provision, either directly or indirectly. New settlements should be integrated into the rights of way network, and improved provision made for the increased population. Where appropriate, development should contribute to the provision of new links and/or improvement of the existing rights of way network."

55. In accordance with the ROWIP, the Council will seek to ensure that countryside provision is not damaged by the EWR central section. Any PROW that are proposed for diversion or extinguishment will require appropriate mitigation proposals, while enhancements to the PROW network will be sought where possible.

### Impact of the EWR central section on settlements in Cambridgeshire

- 56. The five route options cover in part or whole a number of settlements in Cambridgeshire. It is not possible to consider potential impacts in detail at this stage of the scheme's development, but it can be noted that in most areas the broad corridors shown would appear to allow for the route options to avoid direct impact on settlements.
- 57. It is understood that current consideration of route options through the Shelfords would be likely to involve either an alignment on or adjacent to the current Shepreth Branch or a route that joined the West Anglia Main Line to the south of Great Shelford.

# APPENDIX B PROPOSED CONSULTATION RESPONSE

- 1. Cambridgeshire County Council wishes to make the following representation in response to the EWR Company's consultation of route options for the central section of EWR between Bedford and Cambridge.
- 2. Firstly the Council wishes to confirm its strong support for the delivery of the central section, and highlight the opportunities it will bring to address some of the challenging issues facing the Greater Cambridge area that have been brought by continuing economic growth and a successful economy that is competing in a number of key sectors on a world stage.
- 3. The provision of infrastructure to support that growth at a local level is essential. It will help address fundamental issues such as the continued affordability and attractiveness of the Greater Cambridge area as a place where global talent adds massive value to the economy.
- 4. Similarly, the regional links across the Oxford-Milton Keynes-Cambridge Arc and onward links including to Swindon, Bristol, Cardiff and Swansea can only assist the economies of Cambridgeshire and East Anglia.
- 5. Secondly, whilst appreciating that it is not the subject of this consultation the council wishes to restate its strongest possible support for the early delivery of Cambridge South Station and the four tracking of the section of railway between Cambridge Station and the Shepreth Branch junction. Not only is this infrastructure critical for the central section of EWR, but it is needed as early as possible to support current and continued growth on the Cambridge Biomedical Campus and in the south of Cambridge.

# Preferred route corridor

6. The Council can confirm that it continues to support the broad corridor between Bedford and Cambridge as the most appropriate route for the central section.

# Choosing a preferred route option: main factors

7. All of the factors noted have a level of importance that needs to be assessed in detail as part of the ongoing development of proposals for the central section, and the Council does not feel able to give them a simple numerical rating. All five are very important. Considering them in turn:

### 'Supporting economic growth' and 'Supporting delivery of new homes'

- 8. In the context of growth in Cambridgeshire and the major infrastructure schemes planned including EWR, the consideration of these two factors cannot be divorced; both are critical to the continued success of the area.
- 9. Very strong economic growth over a long period, but particularly over the past twenty years has led to a situation now where there is a significant imbalance between supply and demand of housing in the Greater Cambridge area, with resulting affordability and transport problems. In addressing housing growth pressures, an intervention such as the central section of EWR will support economic growth.

### Cost and overall affordability

- 10. While this is ultimately a matter for government, the Council would ideally wish to see a scheme that was assessed as delivering high value for money in transport terms. However, traditional metrics used by the Department for Transport do not translate well to the assessment of new transport capacity required by growth, as they are often dominated by the theoretical benefits of journey time savings when in far more straightforward terms, new capacity is what is needed and journey time reliability is more important to the end user.
- 11. It is therefore vitally important that affordability is considered in the context of the wider economic benefits of investment in the Greater Cambridge / East Anglia / Oxford-MK-Cambridge Arc to the national economy, rather than in narrow transport economic terms.

### Benefits for transport users

12. Dissatisfaction of transport users with their current transport options or limited financial choices as a result of transport and housing cost constraints are warning signals of fundamental issues that will constrain national and local growth objectives if not addressed. In this context, user satisfaction is an important consideration.

### Environmental impacts and opportunities

13. The importance of these issues, and of impacts on local communities should not be underestimated. Further details on the Council's views in these areas are detailed below.

### Views on the route options

- 14. Cambridgeshire County Council prefers Option A between Bedford South and Cambridge via Sandy and Bassingbourn.
- 15. It considers that in the context of currently planned and potential future growth, and currently planned infrastructure to address that growth, Option A gives the best opportunity for additional growth whose transport demand would not otherwise be catered for.
- 16. In more detail, with the Greater Cambridge Partnerships Cambourne to Cambridge scheme and Highways England's A428 Black Cat to Caxton Gibbet scheme, the corridor between Tempsford, St Neots, Cambourne and Cambridge has planned transport capacity that could provide for growth beyond that contained in current Local Plans. Further growth in the area served by Option A would be genuinely additional as a result of infrastructure provision whose absence would effectively rule it out.
- 17. Given that Option A also gives the best journey times between Cambridge and Oxford, and between Cambridge and the Bedford area, and has the lowest cost of the options presented, it is at this stage of scheme development the Council's preferred option.

# The route Into Cambridge

- 18. The County Council can confirm that it strongly agrees that the EWR Company was right to prioritise route options that approach Cambridge from the south. In detail the Council would particularly note that:
  - A route option entering Cambridge to the north would involve significant additional route miles, and significant additional cost over and above the route options presented in the consultation.
  - Journey times on the EWR central section would be longer than for the route options presented in the consultation.
  - The ability of EWR services to effectively serve the planned Cambridge South station and provide for the very significant planned economic and housing growth in the south of the city including at the Cambridge Biomedical Campus would be significantly reduced if the central section entered Cambridge from the north.
  - The central section is a part of the longer EWR route linking East Anglia to Central, Southern and Western England. An option that required trains entering Cambridge from the north to reverse at Cambridge or Cambridge South to travel onwards to Ipswich or Norwich would add to journey times on EWR services.
  - There would be additional costs to provide capacity through Cambridge over and above that required to cater for the five options presented in the consultation, as trains making onward trips onto the eastern section would need to make two movements through Cambridge rather than one.
  - Public transport infrastructure provision is already in place or planned to address the needs of housing and economic growth to the north and northwest of Cambridge that could be served by a route that entered Cambridge from the north.

# General feedback

# Environmental impacts

- 19. All five options may have impacts on areas with protected status. In Cambridgeshire the consultation material notes that these include:
  - The River Cam and its flood zone (all Routes)
  - The Eversden and Wimpole Special Area of Conservation (all Routes)
  - The Wimpole Estate (Routes A, C and D)
- 20. As the route options are currently defined as broad corridors, it is not possible to assess the impact of the routes on these sites in detail at this stage. The Technical Report accompanying the consultation states that "Route alignments would be developed to avoid direct impacts on significant environmental features".
- 21. The following paragraphs set out officer commentary on Ecology and Green Infrastructure, Flood Risk and Heritage impacts.

## Ecology and Green Infrastructure

- 22. The route options to the north via Cambourne and south via Bassingbourn pass through areas with significant biodiversity interest, including irreplaceable habitats. It is essential that proposals protect and enhance sites, habitats and species of biodiversity value, including those of local importance (e.g. priority species / habitats, County Wildlife Sites and Cambridgeshire & Peterborough Additional Species of Interest). Best practice mitigation hierarchy should be followed, with the route avoiding the greatest impacts on biodiversity selected, with any residual impacts minimised and adequately mitigated.
- 23. This scheme, along with other infrastructure and housing development within Cambridgeshire, will cause significant fragmentation of the landscape and result in isolation of biodiversity assets. It is critical, in line with the National Planning Policy Framework, that the scheme seeks to establish coherent ecological networks that are more resilient to such pressure including protect and buffer existing wildlife sites, extending existing networks of natural habitats and enhancements for species / habitats of local interest.
- 24. It is essential, in accordance with National Planning Policy Framework, that the scheme seeks to deliver biodiversity net gain which contributes to county-wide strategies / projects, including:
  - Cambridgeshire Green Infrastructure Strategy (2011);
  - Wildlife Trust's Living Landscape Project (<u>www.wildlifebcn.org/living-landscapes</u>), including West Cambridgeshire Hundreds and Cambridgeshire Chalk; and
  - Cambridgeshire and Peterborough Habitat Opportunities map (expected to be published in late February 2019, contact <u>biodiversitypartnership@wildlifebcn.org</u>)

# Flood Risk Management

- 25. The route options to the north via Cambourne and south via Bassingbourn pass through areas with significant flood risk. It is essential that the scheme considers the risk from all sources of flooding (i.e. including risk from surface water runoff, ordinary watercourses and groundwater as well as main rivers) and avoids or manages the risks appropriately.
- 26. Where possible, in line with the National Planning Policy Framework, the scheme should explore opportunities to provide a reduction in flood risk to existing communities as well as ensuring that the route itself is sustainability designed. This could include exploring the use of natural flood risk management solutions on a catchment scale, providing betterment along the corridor. This would also enable a more holistic approach to managing the corridor environment integrating green infrastructure, biodiversity and flood risk management measures. Taking this kind of approach might also enable external funding and contributions to be drawn in from partners to support the delivery of high quality infrastructure.
- 27. All of the proposed routes would require the crossing of a number of watercourses. These watercourses form an essential part of water level management across Cambridgeshire and the wider catchment. Therefore

consultation with Cambridgeshire County Council should be undertaken to ensure any crossings are designed appropriately and sustainably. The consent of the Council is required before changes can be made to the watercourses.

## <u>Heritage</u>

28. Both proposed routes will have a significant impact on the historic environment. Numbers of both designated and non-designated heritage assets, excluding conservation areas, in the county Historic Environment Record are detailed in the table below. Appropriate identification, assessment and management of impacts to these sites must be taken into consideration in the route planning and design and early engagement with the Council's Historic Environment Team is strongly recommended.

	Locally and nationally designated s in Cambridgeshire			
	Options A, C and D via Bassingbourn	Options B and E via Cambourne		
Monuments	1,713	1,807		
Fieldwork sites	385	422		
Listed buildings	725	598		
Scheduled monuments	23	28		
Registered Parks & Gardens	3	4		

- 29. In addition, and from a broader landscape perspective, the route corridors pass through a number of Historic Environment Character Areas (HECA) noted below:
  - HECA 13 (Cambridgeshire Claylands)
  - HECA 14 (Central Claylands),
  - HECA 20 (Cam/Granta Valley)
  - HECA 21 (Gamlingay Heath)
  - HECA 22 (The Cam Valley)

### Impacts on Local Roads and Public Rights of Way

- 30. Experience with Network Rail's recent Anglia Level Crossing Reduction Transport and Works Act Order has shown that it is vital for rail scheme promoters to consult with the County Council's Highways Service early and extensively in order to agree workable solutions and help minimise objections.
- 31. For the EWR central section the number of roads and PROW affected is large, and will require a great amount of work to assess the impact and potential solutions. The EWR Company is therefore strongly advised to consult the County Council as early as possible as the scheme is developed further, and certainly prior to the formalisation of any proposals.
- 32. The EWR Company will need to agree with the County Council a plan for approval of changes to the highway network, including the handover of all

relevant asset information in order to enable the Council to update its legal records and undertake ongoing maintenance.

## Local Roads

33. As a new railway, there will be a presumption against the introduction of new level crossings. It is therefore expected that local roads on all route options would be taken over or under the railway. However, it is also possible that the EWR Company might wish to consider whether they could close some roads. Early discussion of any such proposals with Cambridgeshire County Council as Highway Authority and the Cambridgeshire and Peterborough Combined Authority as Transport Authority will be needed.

### The A10 and Foxton Level Crossings

- 34. The central section will need to cross the A10 or A1309 at some point before it joins the West Anglia Main Line. For Options A, C and D (and possibly for Options B and E) there would be an opportunity for EWR to address or reduce the issues at the one road and two pedestrian level crossings where the Shepreth Branch crosses the A10 at Foxton. The County Council considers that the resolution of the issues at the level crossings at Foxton should fall within the scope of the EWR central section scheme.
- 35. The Council is also strongly supportive of the use of Foxton Station as a Park and Ride facility for traffic on the A10 as part of onward trips into Cambridge South, Cambridge and Cambridge North Stations, avoiding highly congested sections of the A10, M11 and A14.

# Public Rights of Way

- 36. The five route options for the EWR central section intersect with the routes of the Public Rights of Way (PROW) listed in the table below. As the Highway Authority, Cambridgeshire County Council is the statutory body with responsibility for maintaining these PROW and the legal records related to them, in the form of the Definitive Map and Statement. The proposed works will severely impact upon the PROW network in the specified development corridors.
- 37. In accordance with the County Council's Rights of Way Improvement Plan (ROWIP) (see <u>https://www.cambridgeshire.gov.uk/residents/travel-roads-and-parking/transport-plans-and-policies/local-transport-plan/</u>) and the Cambridgeshire Health & Well-Being Strategy (see <u>https://cambridgeshireinsight.org.uk/jsna/health-and-wellbeing-strategy/</u>), the Council's approach is that:
  - It will seek to ensure that countryside provision is not damaged by new development, and that, where possible, it is enhanced for the physical and mental well-being of communities.
  - In principle, public rights of way should remain open on their existing alignment, and diversion or extinguishment will only be considered where it can be demonstrated that there is no alternative.
  - Any routes that are proposed for diversion or extinguishment will require appropriate mitigation proposals (including consideration of convenience of

users and enjoyment).

- In addition, enhancements to the PROW network should be provided where possible both to help mitigate any losses, and to make use of the development as an opportunity to bring benefit to local communities, e.g. through upgrading the status of a right of way to bridleway for more inclusive access by equestrians and cyclists.
- 38. Guiding Principle 3 from the ROWIP states that:

"New development should not damage countryside provision, either directly or indirectly. New settlements should be integrated into the rights of way network, and improved provision made for the increased population. Where appropriate, development should contribute to the provision of new links and/or improvement of the existing rights of way network."

## Potentially impacted PROW in Cambridgeshire

-	A, C and D via singbourn	Options B and E via Cambourne		
Parish	PROW	Parish	PROW	
Abington Pigotts	Abington Pigotts Bridleway 10	Abbotsley	Abbotsley Footpath 9	
Abington Pigotts	Abington Pigotts Bridleway 11b	Abbotsley	Abbotsley Bridleway 1	
Abington Pigotts	Abington Pigotts Bridleway 9	Abbotsley	Abbotsley Byway 7	
Abington Pigotts	Abington Pigotts Footpath 11	Abbotsley	Abbotsley Footpath 2	
Abington Pigotts	Abington Pigotts Footpath 3	Abbotsley	Abbotsley Footpath 3	
Abington Pigotts	Abington Pigotts Footpath 7	Abbotsley	Abbotsley Footpath 4	
Abington Pigotts	Abington Pigotts Footpath 8	Abbotsley	Abbotsley Footpath 4	
Bassingbourn Cum Kneesworth	Bassingbourn Cum Kneesworth Bridleway 16	Abbotsley	Abbotsley Footpath 5	
Bassingbourn Cum Kneesworth	Bassingbourn Cum Kneesworth Byway 14	Abbotsley	Abbotsley Footpath 5	
Bassingbourn Cum Kneesworth	Bassingbourn Cum Kneesworth Byway 22	Abbotsley	Abbotsley Footpath 6	
Bassingbourn Cum Kneesworth	Bassingbourn Cum Kneesworth Footpath 1	Barton	Barton Bridleway 11	
Bassingbourn Cum Kneesworth	Bassingbourn Cum Kneesworth Footpath 10	Barton	Barton Byway 13	
Bassingbourn Cum Kneesworth	Bassingbourn Cum Kneesworth Footpath 11	Barton	Barton Footpath 12	
Bassingbourn Cum Kneesworth	Bassingbourn Cum Kneesworth Footpath 12	Barton	Barton Footpath 8	
Bassingbourn Cum Kneesworth	Bassingbourn Cum Kneesworth Footpath 13	Barton	Barton Footpath 9	
Bassingbourn Cum Kneesworth	Bassingbourn Cum Kneesworth Footpath 19	Bourn	Bourn Bridleway 15	
Bassingbourn Cum Kneesworth	Bassingbourn Cum Kneesworth Footpath 2	Bourn	Bourn Byway 16	
Bassingbourn Cum Kneesworth	Bassingbourn Cum Kneesworth Footpath 20	Bourn	Bourn Byway 17	
Bassingbourn Cum Kneesworth	Bassingbourn Cum Kneesworth Footpath 21	Bourn	Bourn Footpath 18	

Options A, C and D via		Options B and E via Cambourne	
Bassingbourn		Derich	
Parish	PROW	Parish	PROW
Bassingbourn Cum Kneesworth	Bassingbourn Cum Kneesworth Footpath 23	Bourn	Bourn Footpath 19
Bassingbourn Cum	Bassingbourn Cum		
Kneesworth	Kneesworth Footpath 3	Bourn	Bourn Footpath 2
Bassingbourn Cum	Bassingbourn Cum	Daura	Dourn Footpath 22
Kneesworth	Kneesworth Footpath 4	Bourn	Bourn Footpath 22
Bassingbourn Cum	Bassingbourn Cum	Caldecote	Caldecote Bridleway 4
Kneesworth	Kneesworth Footpath 5		
Bassingbourn Cum Kneesworth	Bassingbourn Cum	Caldecote	Caldecote Footpath 5
Bassingbourn Cum	Kneesworth Footpath 6 Bassingbourn Cum		-
Kneesworth	Kneesworth Footpath 7	Caldecote	Caldecote Footpath 6
Bassingbourn Cum	Bassingbourn Cum	0-11	
Kneesworth	Kneesworth Footpath 8	Caldecote	Caldecote Footpath 7
Bassingbourn Cum	Bassingbourn Cum	Caldecote	Caldecote Footpath 8
Kneesworth	Kneesworth Footpath 8	Caluecole	
Bassingbourn Cum	Bassingbourn Cum	Cambourne	Cambourne Bridleway 2
Kneesworth	Kneesworth Footpath 9		-
Fowlmere	Fowlmere Footpath 1	Cambourne	Cambourne Bridleway 4
Foxton	Foxton Footpath 1	Cambourne	Cambourne Footpath 3
Foxton	Foxton Footpath 2	Cambourne	Cambourne Footpath 5
Foxton	Foxton Footpath 3	Cambridge	Cambridge Footpath 47
Foxton	Foxton Footpath 4	Caxton	Caxton Bridleway 5
Foxton	Foxton Footpath 5	Caxton	Caxton Footpath 15
Great Shelford	Great Shelford Footpath	Caxton	Caxton Footpath 17
Great Shelford	Great Shelford Footpath 3	Caxton	Caxton Footpath 22
Great Shelford	Great Shelford Footpath 4	Caxton	Caxton Footpath 4
Guilden Morden	Guilden Morden Byway 1	Caxton	Caxton Footpath 4
Guilden Morden	Guilden Morden Byway 8	Comberton	Comberton Byway 10
Guilden Morden	Guilden Morden Byway 9	Comberton	Comberton Byway 12
	Guilden Morden Footpath		
Guilden Morden	10	Comberton	Comberton Byway 7
Guilden Morden	Guilden Morden Footpath 11	Comberton	Comberton Footpath 11
Guilden Morden	Guilden Morden Footpath 12	Comberton	Comberton Footpath 8
Guilden Morden	Guilden Morden Footpath 13	Comberton	Comberton Footpath 9
Guilden Morden	Guilden Morden Footpath 14	Croxton	Croxton Footpath 5
Guilden Morden	Guilden Morden Footpath 2	Eltisley	Eltisley Bridleway 1
Guilden Morden	Guilden Morden Footpath 3	Eynesbury Hardwicke	Abbotsley Footpath 10
Guilden Morden	Guilden Morden Footpath 4	Eynesbury Hardwicke	Abbotsley Footpath 11
Guilden Morden	Guilden Morden Footpath 5	Grantchester	Grantchester Footpath 6
Guilden Morden	Guilden Morden Footpath 54	Great And Little Eversden	Great And Little Eversden Bridleway 1
Guilden Morden	Guilden Morden Footpath 54	Great And Little Eversden	Great And Little Eversden Footpath 2

Options A, C and D via Bassingbourn		Options B and E via Cambourne	
Parish	PROW	Parish	PROW
Guilden Morden	Guilden Morden Footpath 55	Great And Little Eversden	Great And Little Eversden Footpath 26
Harston	Harston Byway 6	Great Gransden	Great Gransden Footpath 7
Harston	Harston Footpath 4	Great Shelford	Great Shelford Footpath 1
Harston	Harston Footpath 5	Great Shelford	Great Shelford Footpath 2
Hauxton	Hauxton Byway 3	Great Shelford	Great Shelford Footpath 3
Litlington	Litlington Footpath 1	Great Shelford	Great Shelford Footpath 4
Little Shelford	Little Shelford Bridleway 3	Harston	Harston Bridleway 1
Little Shelford	Little Shelford Footpath 1	Harston	Harston Byway 6
Little Shelford	Little Shelford Footpath 2	Harston	Harston Footpath 2
Little Shelford	Little Shelford Footpath 4	Harston	Harston Footpath 3
Melbourn	Melbourn Byway 2	Harston	Harston Footpath 4
Melbourn	Melbourn Footpath 3	Harston	Harston Footpath 5
Melbourn	Melbourn Footpath 4	Haslingfield	Haslingfield Bridleway 1
Melbourn	Melbourn Footpath 4	Haslingfield	Haslingfield Bridleway 14
Melbourn	Melbourn Footpath 7	Haslingfield	Haslingfield Bridleway 2
Meldreth	Meldreth Byway 11	Haslingfield	Haslingfield Byway 12
Meldreth	Meldreth Footpath 1	Haslingfield	Haslingfield Byway 6
Meldreth	Meldreth Footpath 10	Haslingfield	Haslingfield Footpath 10
Meldreth	Meldreth Footpath 13	Haslingfield	Haslingfield Footpath 10
Meldreth	Meldreth Footpath 14	Haslingfield	Haslingfield Footpath 13
Meldreth	Meldreth Footpath 2	Haslingfield	Haslingfield Footpath 3
Meldreth	Meldreth Footpath 3	Haslingfield	Haslingfield Footpath 4
Meldreth	Meldreth Footpath 4	Haslingfield	Haslingfield Footpath 5
Meldreth	Meldreth Footpath 5	Haslingfield	Haslingfield Footpath 7
Meldreth	Meldreth Footpath 5	Haslingfield	Haslingfield Footpath 8
Meldreth	Meldreth Footpath 5	Haslingfield	Haslingfield Footpath 9
Meldreth	Meldreth Footpath 6	Hauxton	Hauxton Bridleway 2
Meldreth	Meldreth Footpath 6	Hauxton	Hauxton Byway 3
Meldreth	Meldreth Footpath 6	Hauxton	Hauxton Byway 3
Meldreth	Meldreth Footpath 7	Hauxton	Hauxton Footpath 1
Meldreth	Meldreth Footpath 8	Hauxton	Hauxton Footpath 4
Meldreth	Meldreth Footpath 9	Hauxton	Hauxton Footpath 5
Newton (South Cambs)	Newton (Cambridge) Bridleway 2	Kingston	Kingston Footpath 17
Newton (South Cambs)	Newton (Cambridge) Footpath 1	Kingston	Kingston Footpath 6
Newton (South Cambs)	Newton (Cambridge) Footpath 3	Kingston	Kingston Footpath 7
Orwell	Orwell Footpath 10	Kingston	Kingston Footpath 8
Sawston	Sawston Footpath 1	Kingston	Kingston Footpath 9
Sawston	Sawston Footpath 2	Little Shelford	Little Shelford Bridleway 3
Shepreth	Shepreth Footpath 1	Little Shelford	Little Shelford Footpath 1
Shepreth	Shepreth Footpath 10	Little Shelford	Little Shelford Footpath 2
Shepreth	Shepreth Footpath 11	Little Shelford	Little Shelford Footpath 4
Shepreth	Shepreth Footpath 12	Newton (South Cambs)	Newton (Cambridge) Bridleway 2

Options A, C and D via Bassingbourn		Options B and E via Cambourne	
Parish	PROW	Parish	PROW
Shepreth	Shepreth Footpath 2	Newton (South Cambs)	Newton (Cambridge) Footpath 1
Shepreth	Shepreth Footpath 3	Sawston	Sawston Footpath 1
Shepreth	Shepreth Footpath 4	Sawston	Sawston Footpath 15
Shepreth	Shepreth Footpath 5	Sawston	Sawston Footpath 2
Shepreth	Shepreth Footpath 6	Sawston	Sawston Footpath 2
Shepreth	Shepreth Footpath 7	Toft	Toft Bridleway 11
Shepreth	Shepreth Footpath 8	Toft	Toft Byway 12
Shepreth	Shepreth Footpath 9	Toft	Toft Footpath 1
Shepreth	Shepreth Restricted Byway 1	Toft	Toft Footpath 10
Shingay Cum Wendy	Shingay Cum Wendy Bridleway 4	Toft	Toft Footpath 13
Shingay Cum Wendy	Shingay Cum Wendy Footpath 1	Toft	Toft Footpath 13
Shingay Cum Wendy	Shingay Cum Wendy Footpath 2	Toft	Toft Footpath 14
Shingay Cum Wendy	Shingay Cum Wendy Footpath 3	Toft	Toft Footpath 15
Shingay Cum Wendy	Shingay Cum Wendy Footpath 5	Toft	Toft Footpath 16
Shingay Cum Wendy	Shingay Cum Wendy Footpath 7	Toft	Toft Footpath 17
Steeple Morden	Steeple Morden Bridleway 33	Toft	Toft Footpath 18
Steeple Morden	Steeple Morden Byway 1	Toft	Toft Footpath 19
Steeple Morden	Steeple Morden Footpath 2	Toft	Toft Footpath 2
Tadlow	Tadlow Bridleway 13	Toft	Toft Footpath 20
Tadlow	Tadlow Bridleway 2	Toft	Toft Footpath 3
Tadlow	Tadlow Footpath 16	Toft	Toft Footpath 3
Tadlow	Tadlow Footpath 22	Toft	Toft Footpath 4
Tadlow	Tadlow Footpath 23	Toft	Toft Footpath 5
Whaddon	Whaddon Bridleway 3	Toft	Toft Footpath 5
Whaddon	Whaddon Footpath 10	Toft	Toft Footpath 6
Whaddon	Whaddon Footpath 11	Toft	Toft Footpath 7
Whaddon	Whaddon Footpath 12	Toft	Toft Footpath 8
Whaddon	Whaddon Footpath 2	Toft	Toft Footpath 9
Whaddon	Whaddon Footpath 4	Waresley	Waresley Restricted Byway 1a
Whaddon	Whaddon Footpath 5	Waresley	Waresley Restricted Byway 1b
Whaddon	Whaddon Footpath 6	Waresley-Cum- Tetworth	Waresley-Cum-Tetworth Bridleway 5
Whaddon	Whaddon Footpath 7	Waresley-Cum- Tetworth	Waresley-Cum-Tetworth Bridleway 6
Whaddon	Whaddon Footpath 8		
Whaddon	Whaddon Footpath 9		
Whittlesford	Whittlesford Footpath 5		
Whittlesford	Whittlesford Footpath 6		