

Option E's Planning Blight

Nov/Dec 2020

*East West Rail Co's
Preferred Route:
CBRR's alternative to
EWR's Option E*

East West Rail - Central Section
CBRR's route v EWR's Option E

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Title (see also CamBedRailRoad's website at <http://www.cambedrailroad.org/> or by 'Googling' "CBRR")

Topics and Presenters

Topics

1. Logic for CBRR's solution re Existing and Approved Settlements
2. Enhancing effect of GC Local Plan submissions
3. Phasing of construction and interface with CAM Metro
4. 14+ arguments for entering Cambridge at Cambridge North
5. Suggest strategy for cooperative action

Presenters

Sebastian Kindersley

&

Brian Bell

East West Rail - Central Section
CBRR's route v EWR's Option E

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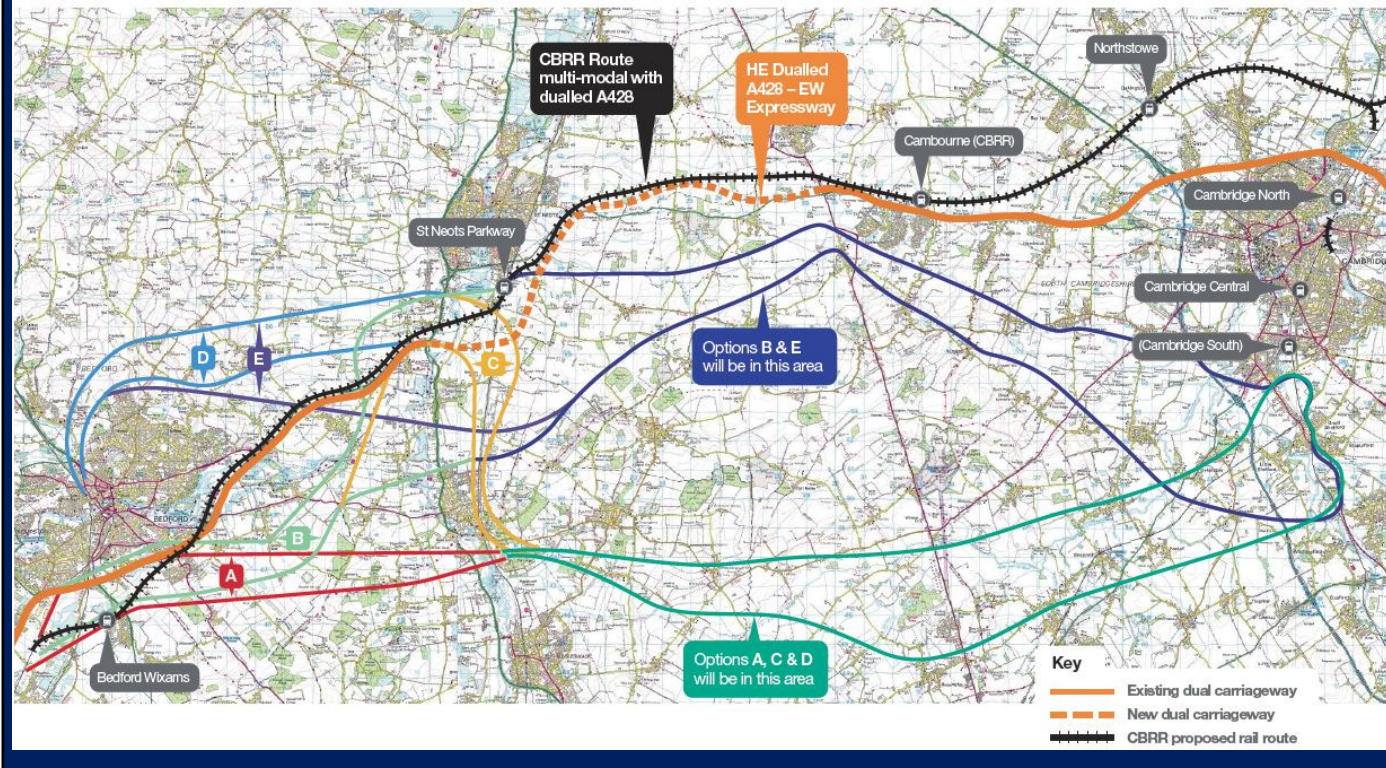
Here are the topics we'll cover.

EWR's Non-statutory Consultation Options & CBRR Route

EWR Co's Options A–E.

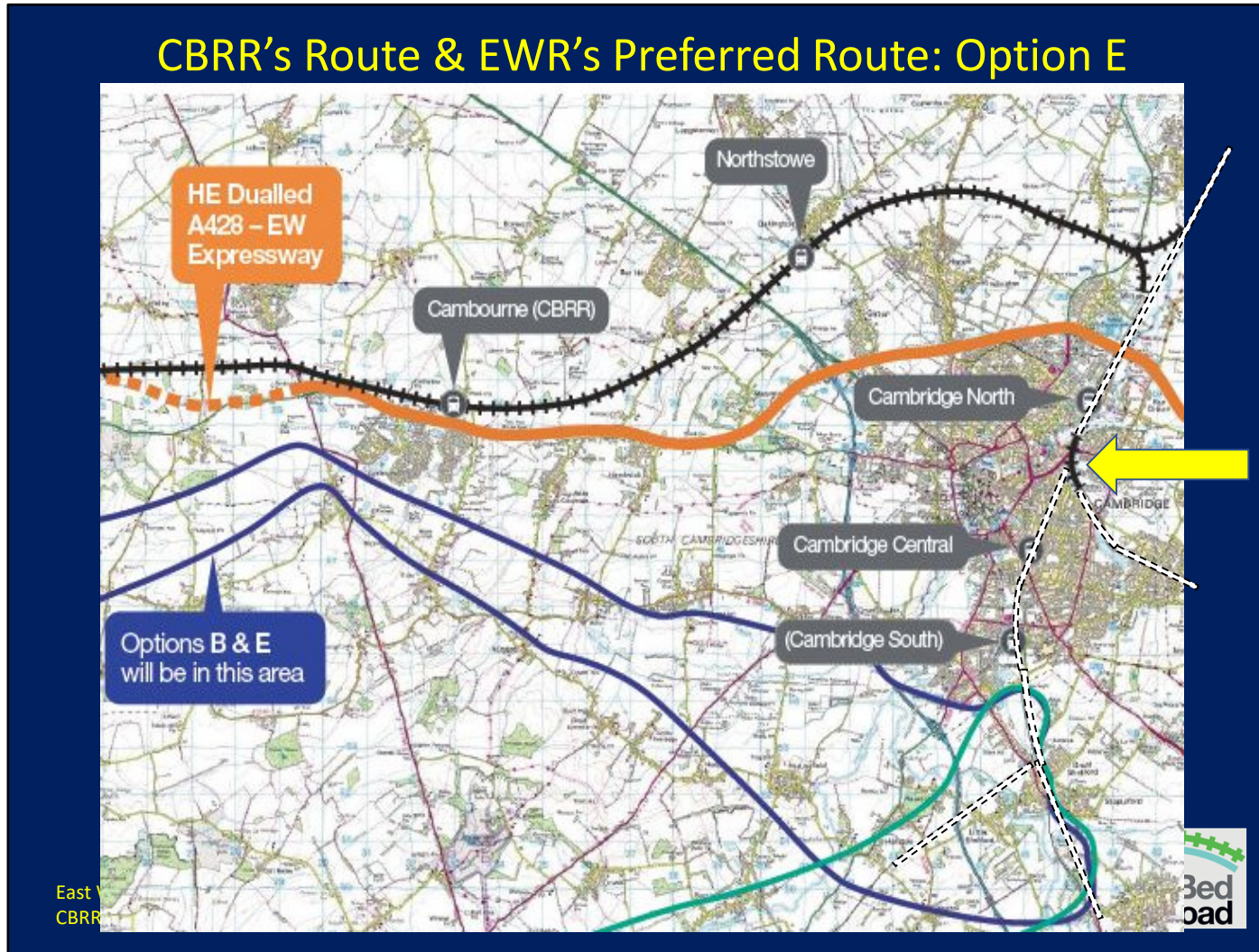
HE's new A428 Expressway, dualled.

CBRR's Route multi-modal with new A428.



This is the shambles offered by EWR in 2018; compared with the logical route of CBRR which is based on population density, as we'll demonstrate. The National Infrastructure Commission recommended to Government that the Railway and the Road should be in the same transport corridor. From Bedford to Cambridge, CBRR's route (black) tries to match the revised A428 (orange) as closely as possible.

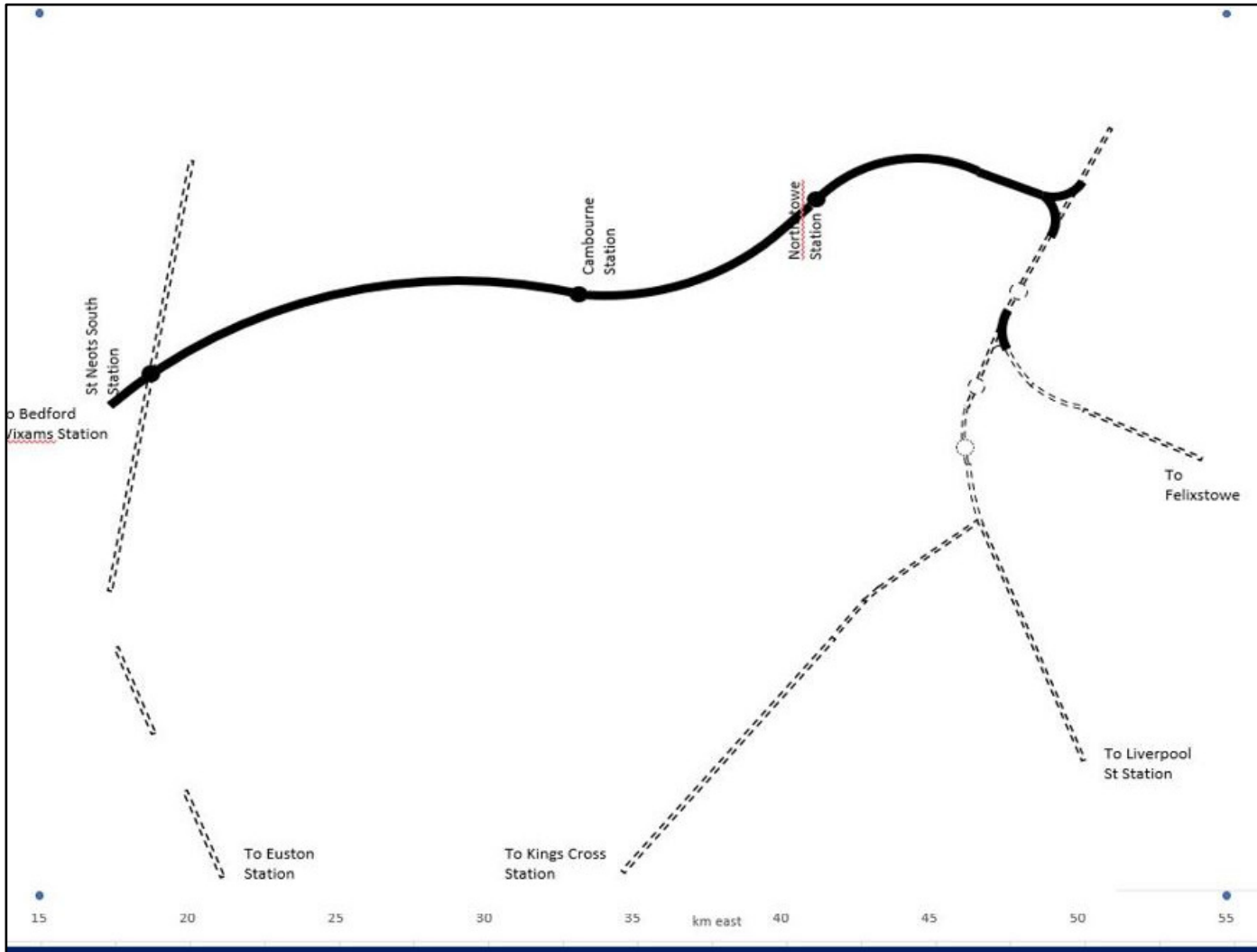
CBRR's Route & EWR's Preferred Route: Option E



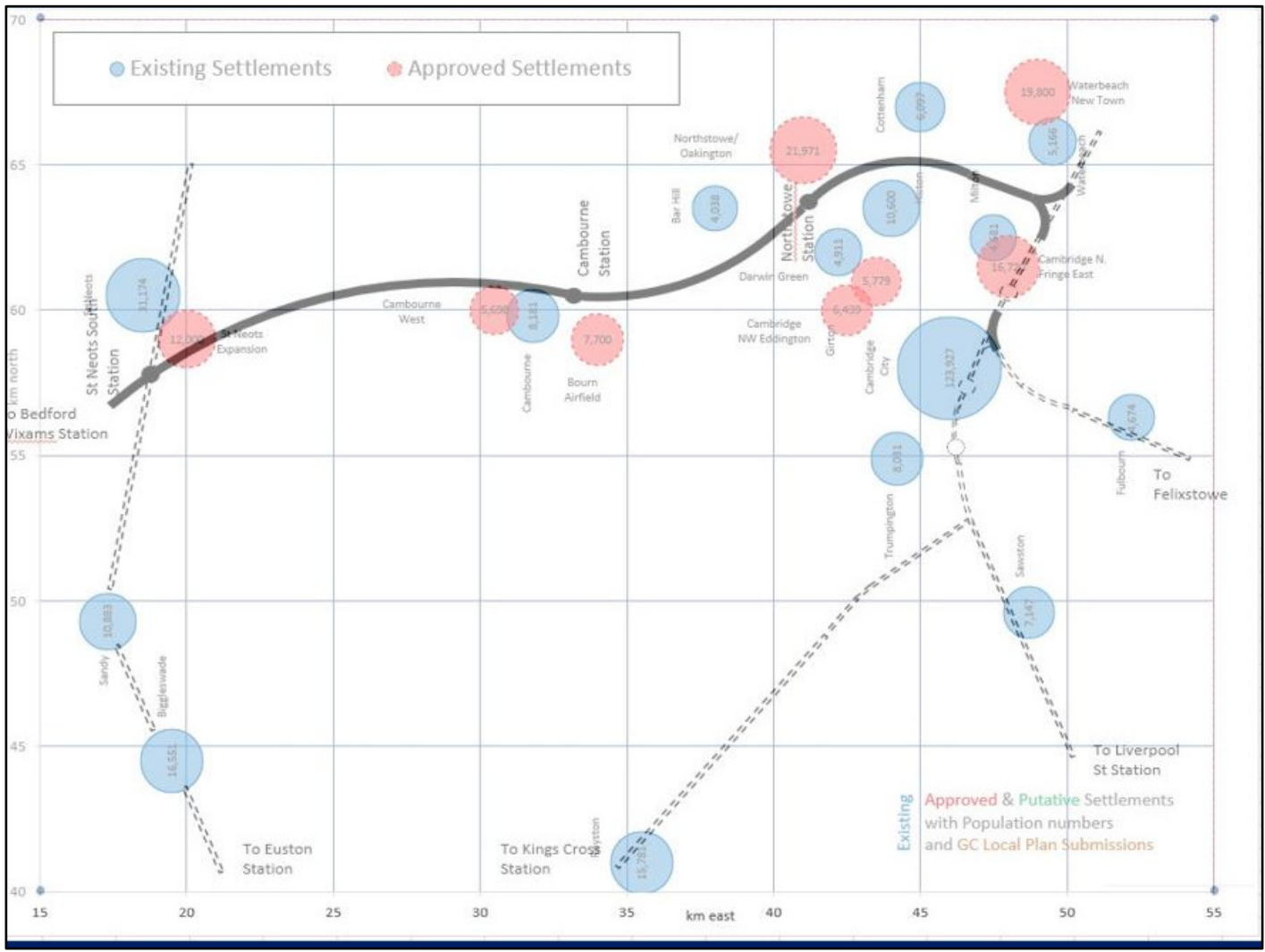
“Zooming into the last map east of Croxton, we see CBRR’s route &, by 2020, EWR’s blob of Planning Blight for Option E, now with existing NR tracks shown dotted in white. At the yellow arrow, note the large radius curve we’re proposing at Coldham’s Common for the quiet and quick passage of freight to/from Felixstowe, avoiding the current sharp bend, 20mph speed limit and intrusively noisy ‘flange squeal’.”



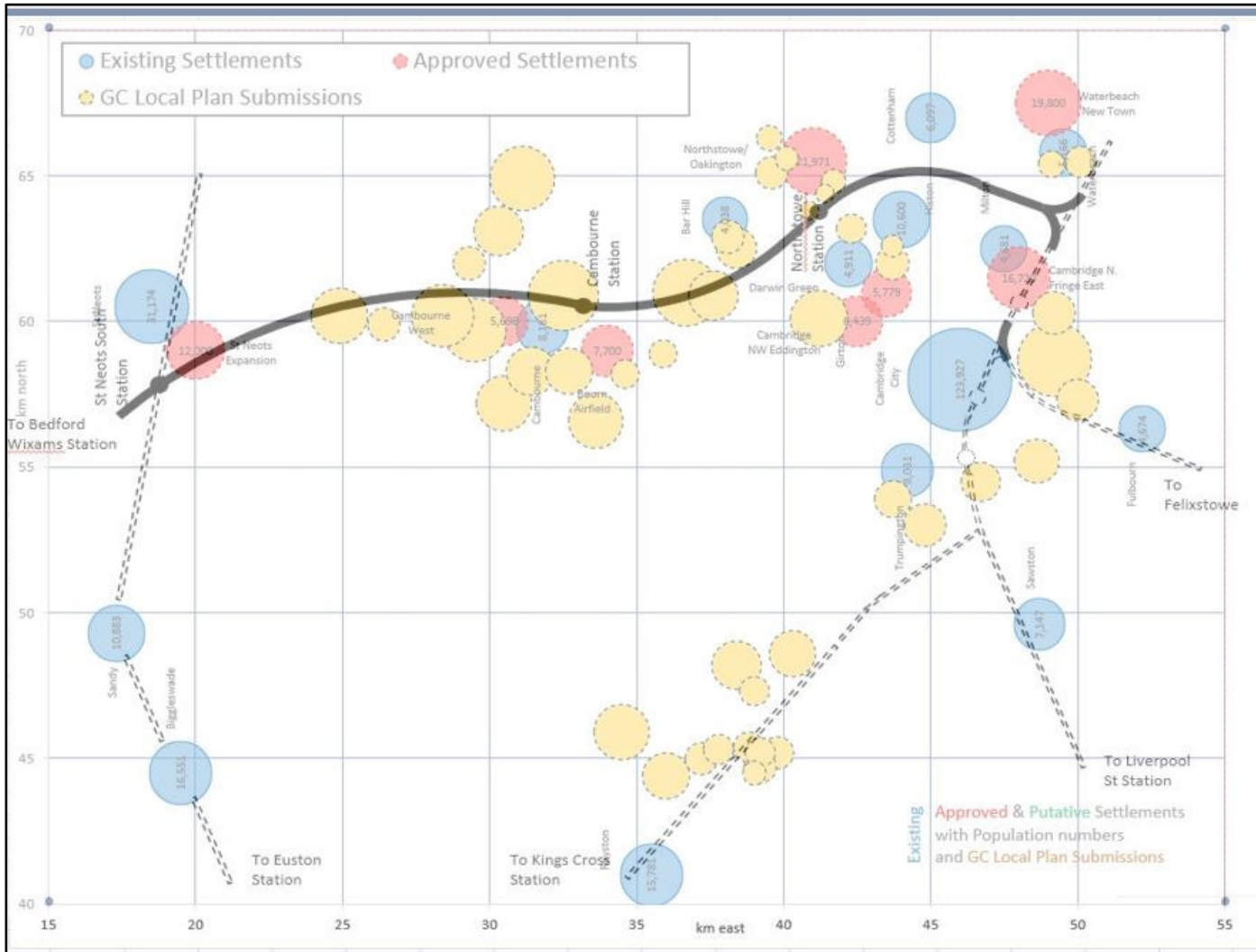
The National Infrastructure Commission also recommended to Government that the Railway should meet the needs of the population along the route. We have therefore based our route on their distribution. In solid blue, you can see the Existing Settlements, with the areas of the circles being proportional to the population at the last Census. In dotted red, you can see those Settlements already Approved by SCDC.



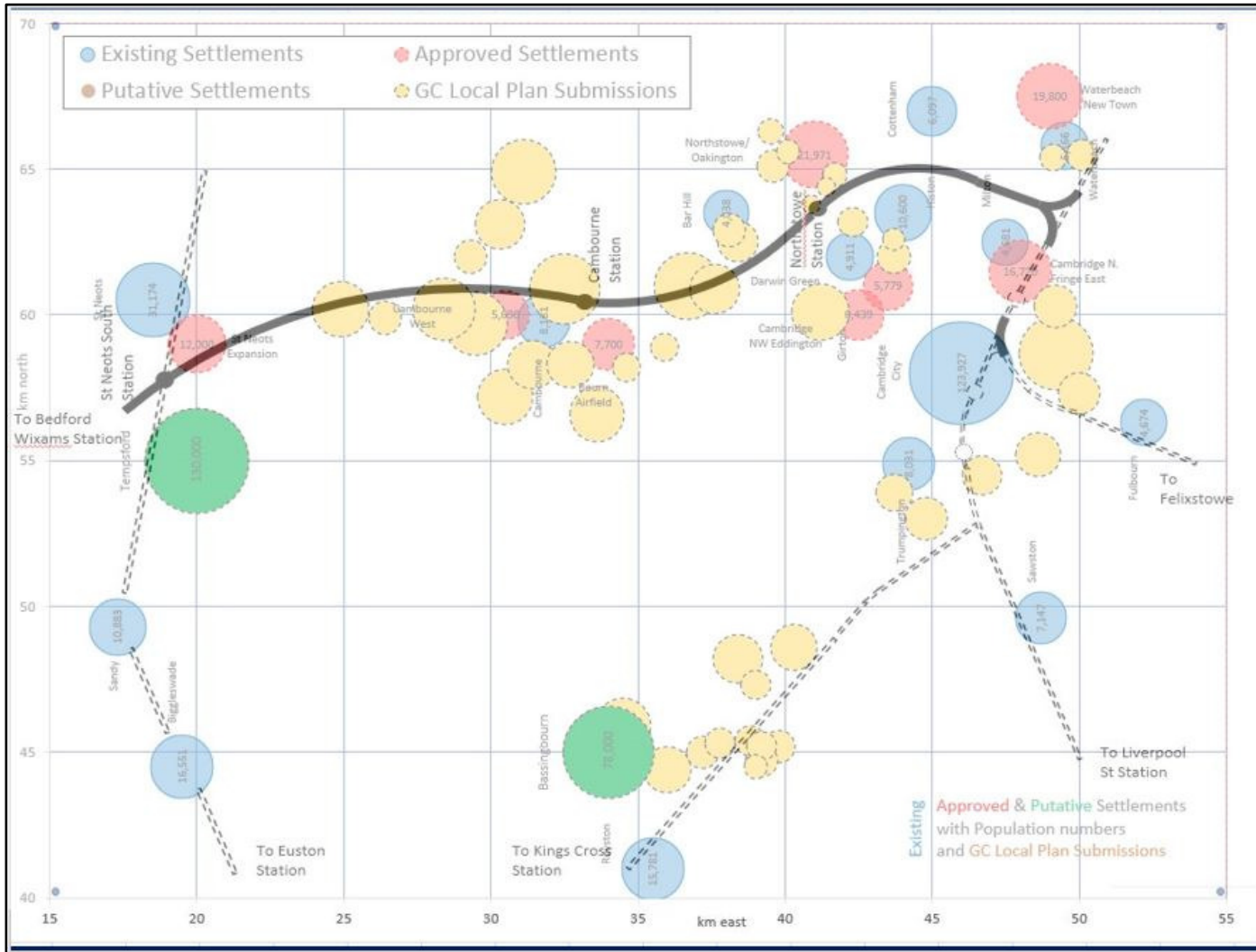
In 2018, CBRR proposed a route which benefits as many as possible, with new stations at St Neots South, Cambourne North and Northstowe.



And here they are, together.



The benefits of CBRR's Route become even more apparent.



Their Chairman has publicly stated EWR's dependence for funding on the increase of Land Value as a result of switching from Agricultural to Housing use.

Northern Approach

- 1 EWR left the door OPEN for an approach to Cambridge North, even after announcing Route E as their Preferred Route.
- 2 Our Barry Johnson, who devised the details of CBRR's route, has collated 14 arguments why North Cambridge is technically feasible (and often superior): see CBRR's website.
- 3 There are many other positive factors which apply.

Northern Approach: 14 Arguments

Northern Approach

an approach to Cambridge North, Options B and E as their Preferred Route.

I have analysed the details of CBRR's route, and Cambridge North Cambridge is technically feasible. See CBRR's website. I will list the factors which apply.

EWR Co Consultation Jan 2019
Arguments for a Northern Approach into Cambridge (augmented)


CBRR has been proposing a more northerly route for the central section of EWR Co in order to serve the greater and rapidly expanding population along the route of the A421/A428 Expressway. EWR Co's Options B and E would provide some of the benefits of the CBRR proposal, but still enter Cambridge from the south. These notes consider the benefits of a northern approach into Cambridge North Station as recommended by CBRR.

- A new station could be built at Northstowe to serve its rapidly expanding population and that of the surrounding area, with much greater capacity for future growth than a guided busway.
- The 23 km route-distance from CBRR's Cambourne to Cambridge North by the northern route is not very different from the 24 km from EWR Co's Cambourne to Cambridge South using the southerly boundary of Options B and E. As both routes have engineering challenges a cost comparison is not straightforward. The extra station at Northstowe would increase passenger numbers and improve the Benefit/Cost Ratio for the northern approach.
- About twice as many trains per hour currently use the twin tracks to the south of Cambridge as use the twin tracks to the north. There should therefore be sufficient capacity for the EWR Co trains coming in from the north without the quadrupling of tracks required by Network Rail as a result of EWR Co's additional traffic if coming in from the south. The combined budgets are of course funded by the same taxpayers.
- Further savings to the taxpayer are gained by the Northern Approach replacing many of the functions of the proposed CAM or new guided busway, to Northstowe, Cambourne and beyond along the A428 / A421 corridor, with far greater capacity to absorb future growth.
- There is space around Cambridge North to develop it as a transport hub for the area providing good links to other areas of the city including the Science Park and the rapidly expanding University sites, rich in employment, in the west of Cambridge which would be directly reached by an approach from the south. EWR Co passengers could be encouraged to transfer to other modes of transport there instead of at the already over-congested Cambridge Station. Interchange with the Guided Busway and future Metro would be straightforward, and ample car parking with easy access to the A14, A428 and M11 can be provided.
- It is envisaged by CBRR that of three EWR Co trains arriving at Cambridge North per hour, one would terminate there, one would continue to Ipswich and the other would continue via Cambridge South to Stansted Airport. CBRR have suggested to EWR Co how Cambridge North could be adapted fairly easily so that passengers on EWR Co trains that are not through trains to Cambridge South could change easily at Cambridge North to continue their journey to there, without having to use the footbridge to change platforms.
- EWR Co trains to Ipswich would not have to reverse at Cambridge if the new, large-radius chord at Coldhams Common proposed by CBRR is built. This would reduce the journey time to Ipswich and also reduce congestion at Cambridge Station. The Coldhams Common chord could also be used by East-West freight trains to and from Felixstowe to avoid them having to pass through Cambridge and round the very tight existing curve onto the Ipswich line.

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East of Cambridge - EWR Co's Option E
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Footer



Northern Approach: 14 Arguments: page 1

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We list below a summary of our developed views as to why Route Option B not only could but should approach Cambridge from the north:

1. A station north of Cambourne (instead of to the south as Option B) will have better access by road from the surrounding area and can serve West Cambourne and Bourn Airfield approved developments. It will also encourage expansion of Harbourn north of the Expressway (A428).
2. CBRR's proposed station at Northstowe both serves the expanding population and stimulates further development in the area.
3. Keeping the rail line close to the expressway will maximise potential development in that corridor.
4. The existing twin tracks north of Cambridge North should have capacity for 3 EWR trains per hour without quadrupling (currently 5 trains per hour on two tracks north of Cambridge and 10 trains per hour through twin track junction south of Cambridge).
5. Through trains to Ipswich via Cambridge North and a chord at Coldham's Common will have reduced journey time, and no need for reversing (non-EWR trains to Ipswich can still start at Cambridge).
6. Freight trains to/from Felixstowe can use Coldham's Common chord to bypass Cambridge and avoid tight radius curve.
7. Northern entry to Cambridge allows EWR trains to continue to Stansted Airport without reversing.
8. Cambridge North can be modified to allow cross-platform interchange (of benefit to all but particularly to PRMs *) with frequent trains between Cambridge North and Cambridge South.
9. Cambridge North has excellent potential for development as a transport hub with interchange between modes of transport (including guided buses and CAM) serving most areas of Cambridge.
10. Developing a transport hub at Cambridge North will reduce pressure on the grossly overcrowded roads around Cambridge Station.
11. Cambridge South is less suitable for use as a transport hub due to poorer links to main roads and the important landscape value of Magog Down and Gog Magog Hills.
12. The development potential to the north and west of Cambridge will move the centre of population closer to Cambridge North.
13. The cost of infrastructure will be reduced if EWR shares a corridor with the new A428 between St Neots and Caxton Gibbet in order to pass to the north of Cambourne.
14. Quicker planning resolution and earlier product delivery, with reduced cost to the taxpayer, if under the aegis of DfT EWR Co submits with HE a joint TWAO and DCO application for that portion of EWR - CS from St Neots to Caxton Gibbet.

* PRMs = Persons of Reduced Mobility, eg wheelchair users, luggage carriers, child minders

Cambridge North,
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EWR Co Consultation Jan 2019
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- The 23 km route distance from CBRR's Cam route is not very different from the 24 km using the southerly boundary of Options B challenges a cost comparison is not straightforward would increase passenger numbers and in approach.
- About twice as many trains per hour current Cambridge as use the twin tracks to the capacity for the EWR Co trains coming in required by Network Rail as a result of E south. The combined budgets are of course.
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We list below a summary of our developed view should approach Cambridge from the north:

- A station north of Cambourne (instead by road from the surrounding area and approved developments. It will also enter Expressway (A428).
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- The existing twin tracks north of Cambridge per hour without quadrupling (current Cambridge and 10 trains per hour through
- Through trains to Ipswich via Cambridge have reduced journey time, and no start at Cambridge).
- Freight trains to/from Felixstowe can avoid tight radius curve.
- Northern entry to Cambridge allow reversing.
- Cambridge North can be modified particularly to PRMs *) with frequency South.
- Cambridge North has excellent potential interchange between modes of transport areas of Cambridge.
- Developing a transport hub at Cambridge overcrowded roads around Cambridge
- Cambridge South is less suitable roads and the important land uses
- The development potential to the population closer to Cambridge
- The cost of infrastructure will be between St Neots and Caxton
- Quicker planning resolution or taxpayer, if under the aegis of application for that portion of

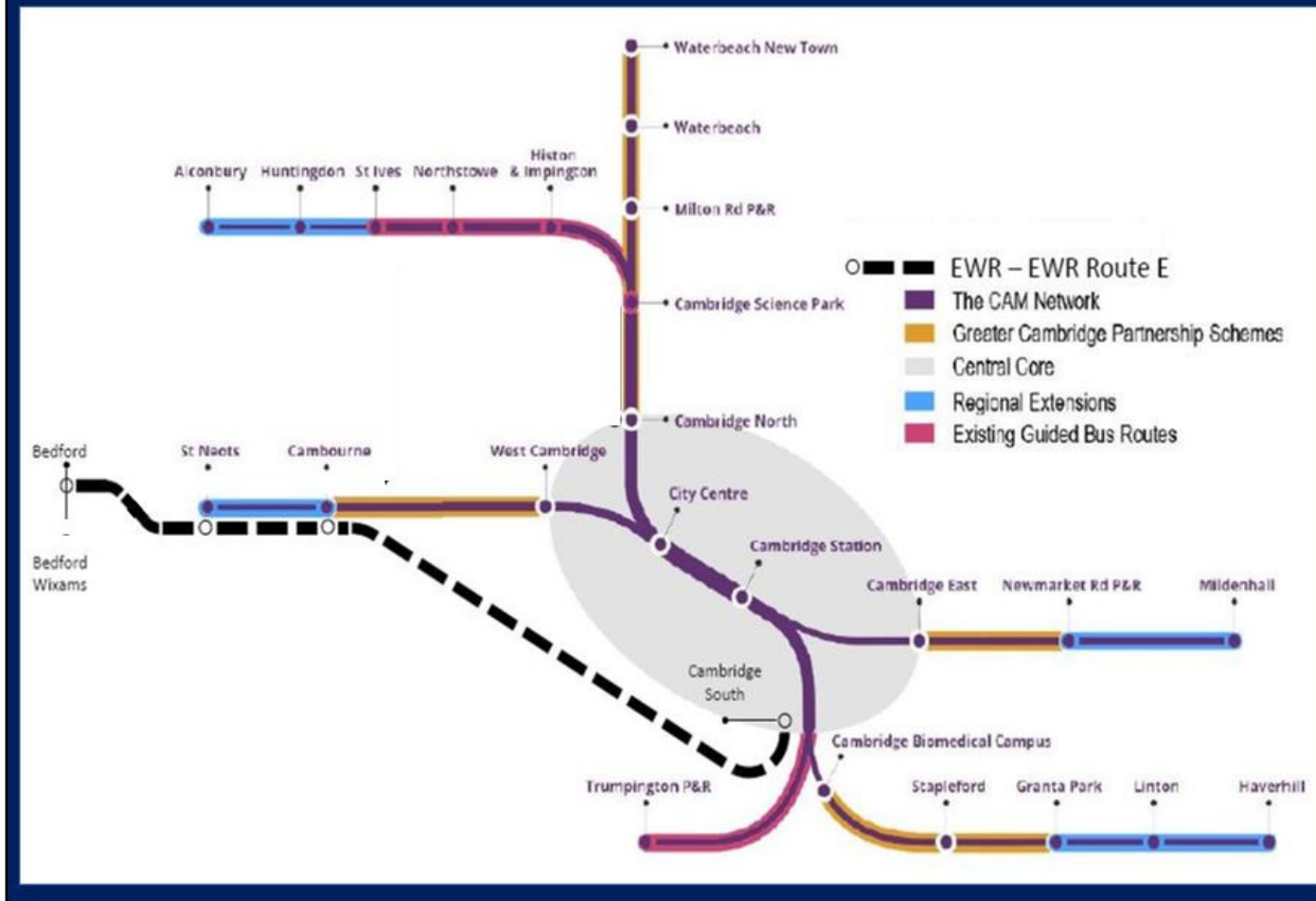
* PRMs = Persons of Reduced

CBRR, without claiming any knowledge or expertise in running a railway, offers some observations on the perceived options for through- or terminating-trains available to EWR Co in the Table below. (i/c = interchange. Not all Crossovers are shown.)

Options for EWR trains Approaching Cambridge from the North	Arriving at		
	Cambridge North	Cambridge Central (currently Cambridge)	Cambridge South (Addenbrooke's)
Through trains, including Heavy Freight (without reversing) onward to	Cambridge Central Cambridge South Stansted King's Cross Liverpool St Ipswich/Felixstowe stations	Cambridge South Stansted King's Cross Liverpool St stations	Stansted King's Cross Liverpool St stations
Terminating trains (driver changes ends) onward to	Return to Cambourne/Oxford Ely/Kings Lynn/ Norwich	Return to Cambridge North and onward	Return to Cambridge Central and onward
Facilities envisaged	Good opportunities: Transport Hub Pedestrian hospitality Cycle park Car park Local Bus i/c Guided Bus i/c Express Coach i/c Taxi i/c CAM i/c	Poor opportunities: as Cambridge North but seriously overstretched at present, so increased patronage not encouraged	Good opportunities (design in progress): as Cambridge North, but less space for Transport Hub and poorer access to main roads
Indicative platform/track usage for terminating trains			

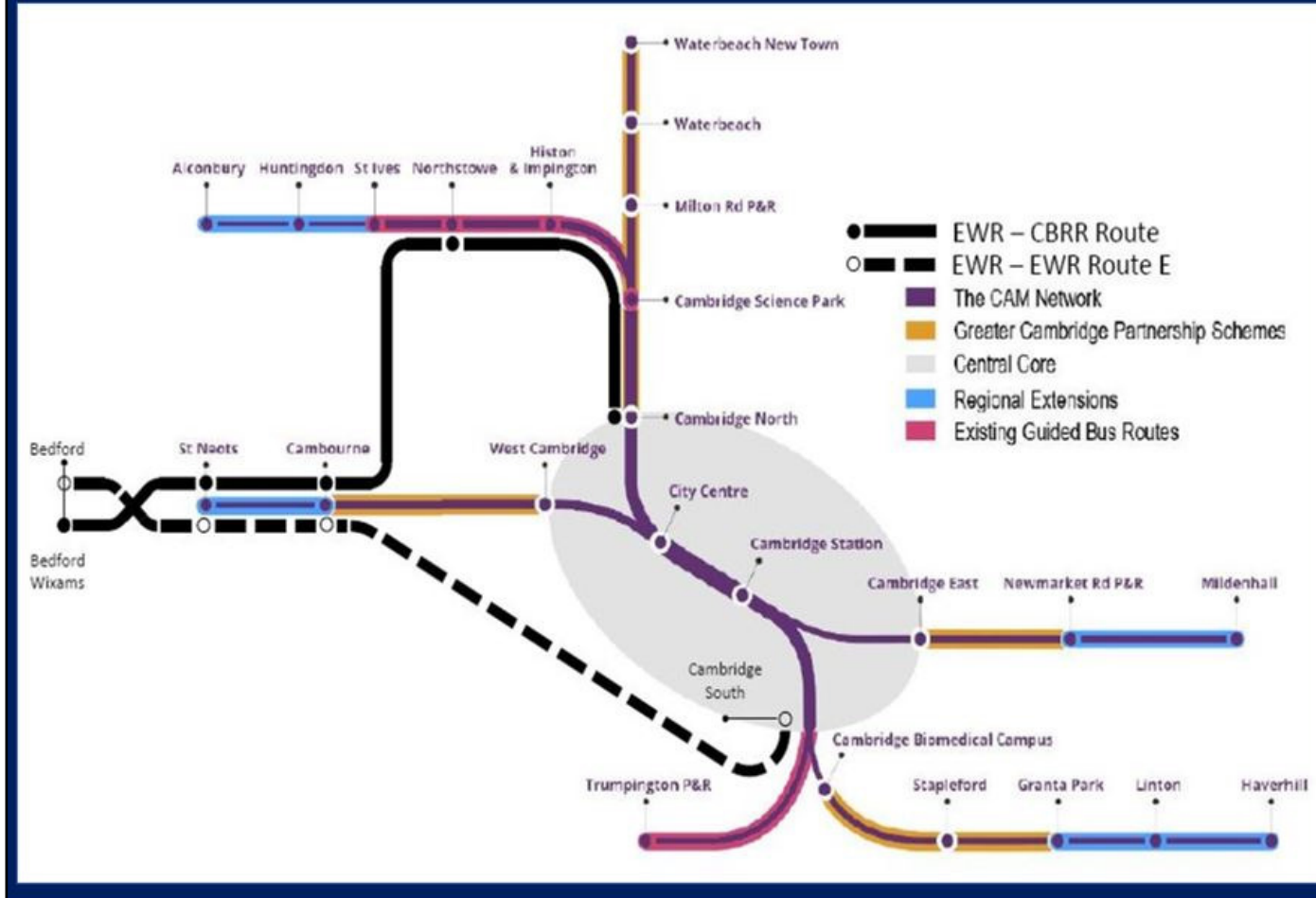
Northern Approach: 14 Arguments: page 3

CBRR Route & CAM

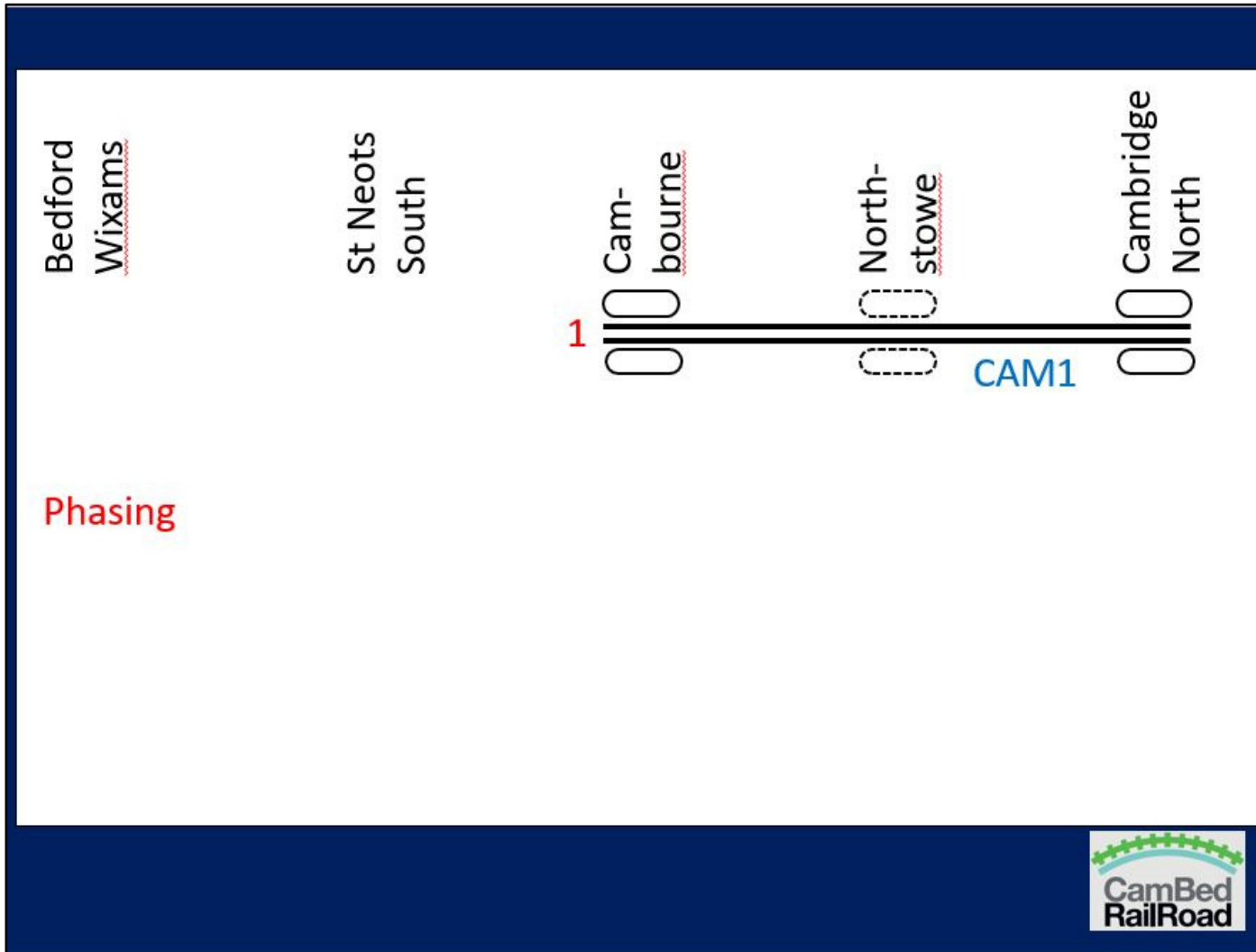


On a parallel subject, here's the coloured Tube Map for the Mayor's proposed Cambridge Autonomous Metro (CAM) scheme, with EWR now added, using Option E's route to Cambridge South (in dotted black), with no further stations on it.

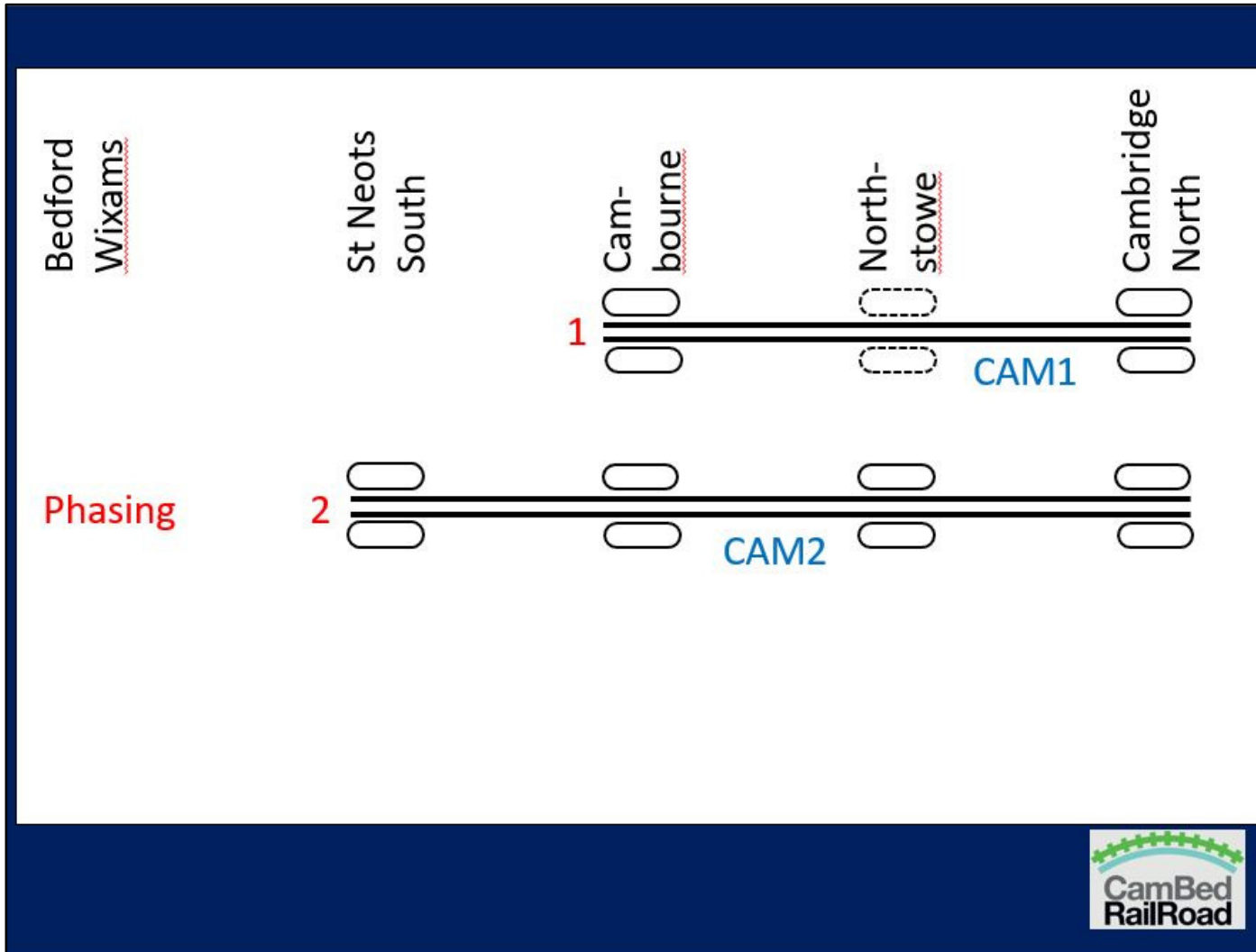
CBRR Route & CAM



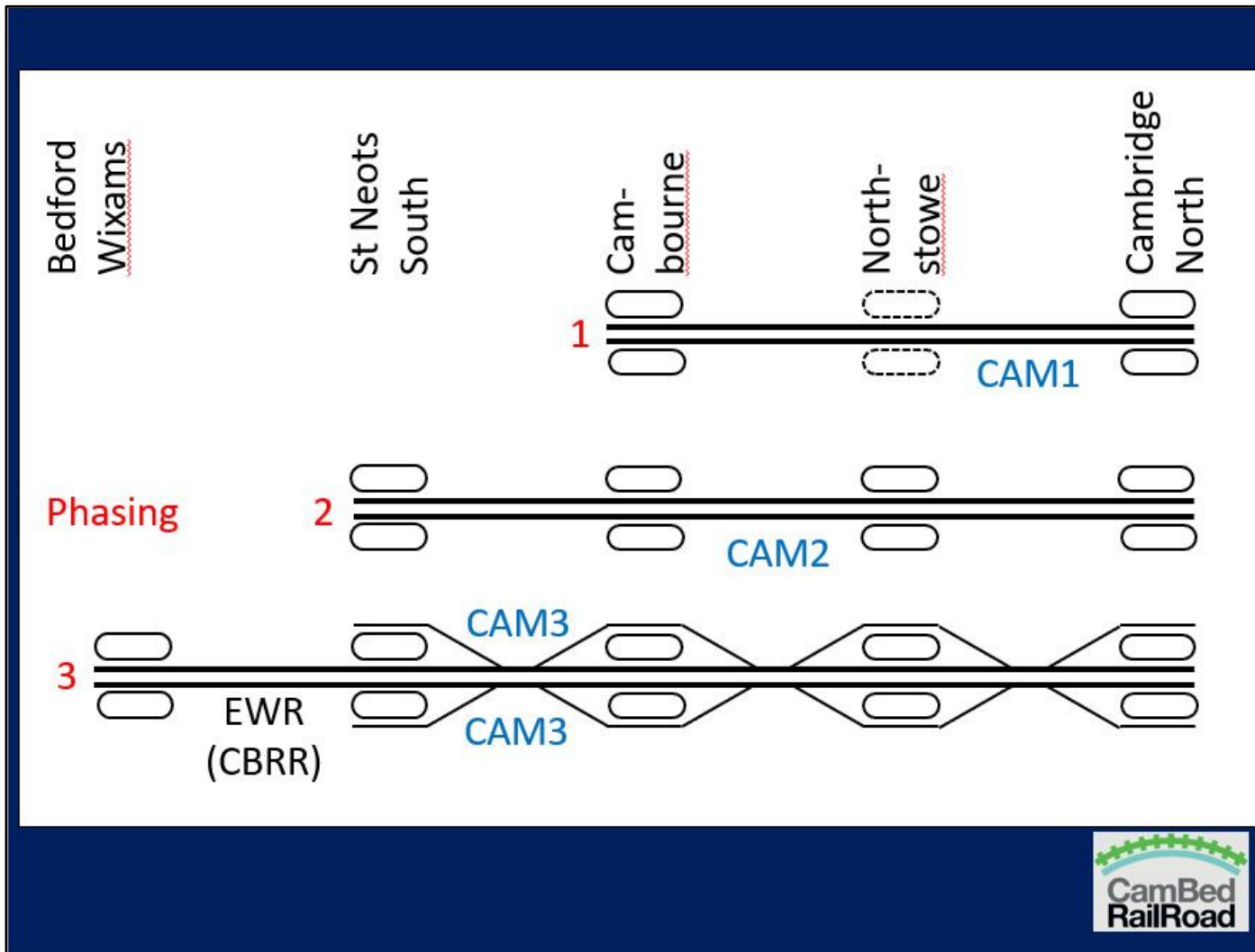
By contrast, you can see that CBRR's Route (in solid black) can take the place of one whole arm of the CAM proposal, all the way from St Neots. The main twin track can be built in heavy rail immediately, from Cambridge North to Cambourne, but, if appropriate, used by light rail cars, mobilising £0.4 bn of Treasury money already earmarked for CAM Metro (but withheld until the squabbling is settled.)



This could then become Phase 1 of CAM.



Phase 2 would be to add a station at Northstowe (if it hasn't been built already) and one at St Neots South.



Phase 3 would see the line extended to Bedford, to meet the EWR line from Bletchley (which Arup have just been commissioned to design). It would put light rail loops round the back of the stations, allowing fast trains through. Heavy & Light Rail can use the central tracks, while Light Rail have exclusive use of the loops. (CAM cars could be more cheaply ‘stabled’ at Little Barford than in Cambridge.) [OVERRUNS/CROSSOVERS NOT SHOWN.]”

Strategy

Suggested strategy for Parishes affected by EWR's Option E:

- Plan A = actively promote CBRR's route, for development by EWR Co

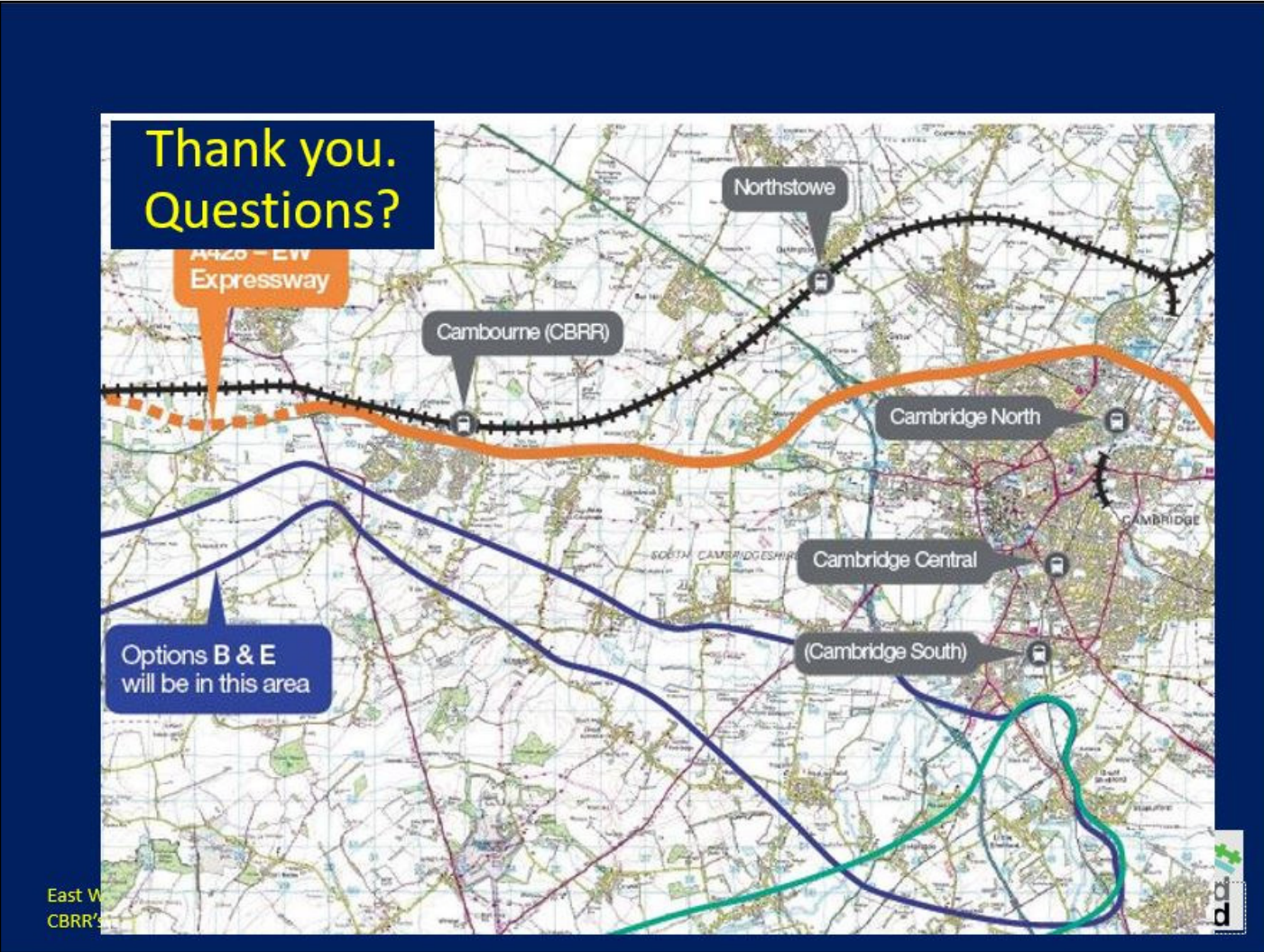
Plan A

Strategy

Suggested strategy for Parishes affected by EWR's Option E:

- Plan A = actively promote CBRR's route, for development by EWR Co
- Plan B = press EWR to determine the "least worst" route for Option E

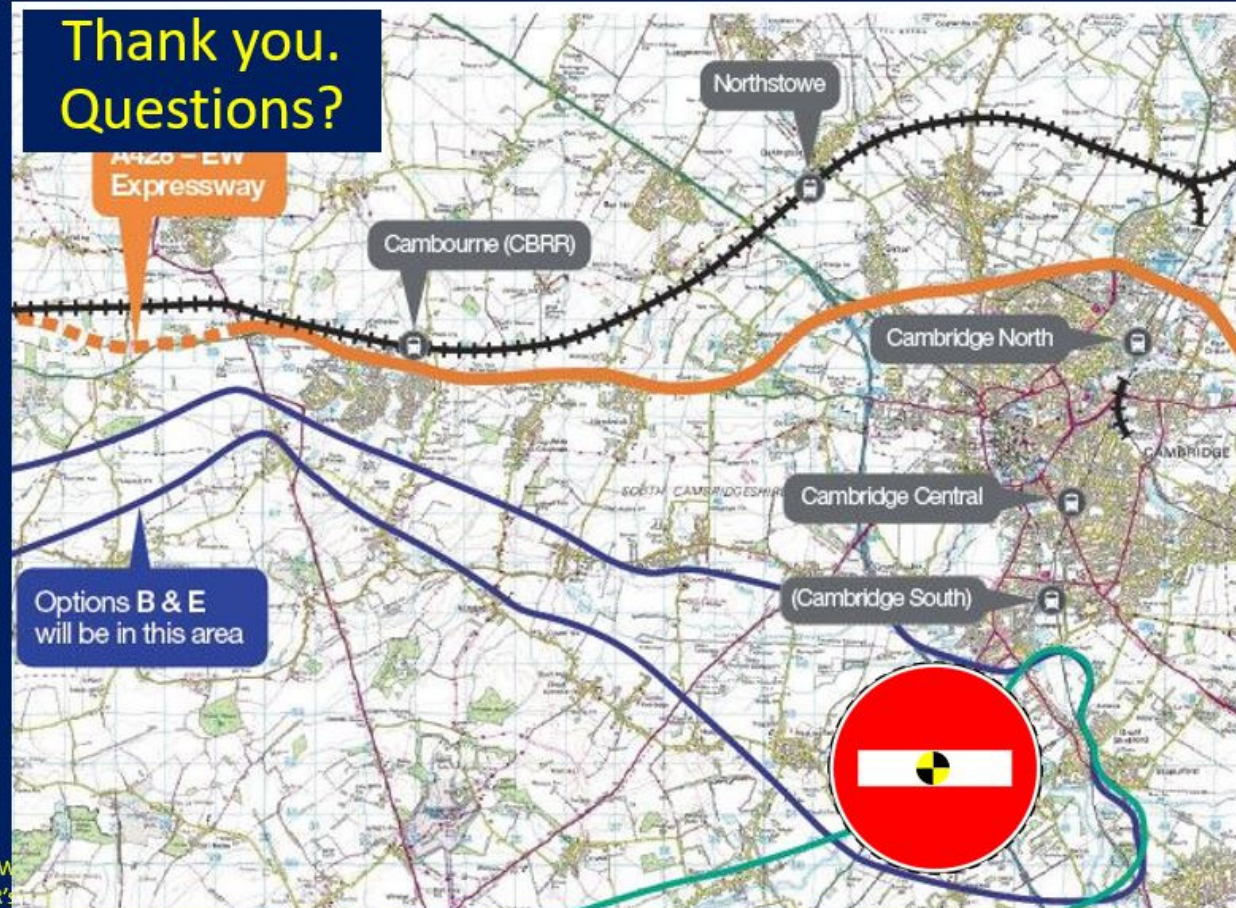
Plan B



Thank you. Any questions?

Plan A = "No!" to Option E

Thank you.
Questions?



East W
CBRR's

Plan A = "No!" to Option E