

BRADWELL B

Have your say



Public consultation begins

Bradwell B is a proposed new nuclear power station that would generate enough electricity to power around four million homes across the UK.

It would make a vital contribution to the UK's future need for low carbon, secure and affordable energy.

Bradwell B would create significant business and training opportunities and inject millions of pounds of investment into the local and regional economies.

The first stage of public consultation on the proposals for a new nuclear power station at Bradwell begins on 4 March 2020.

The purpose is to seek your views on our initial proposals and share information on progress to date.

The feedback we receive will play an important part in the development of our proposals, so we encourage you to play an active role in the consultation.

What is Bradwell B?

- Bradwell B, a new nuclear power station, would be built on land immediately to the south and west of the existing Bradwell power station, next to the Blackwater Estuary on the Dengie Peninsula
- The site is around 15km east of Maldon and the nearest villages are Bradwell-on-Sea and Bradwell Waterside
- Once operational, there will be long-term sustainable jobs for up to 900 people for at least 60 years
- Tens of thousands of jobs during construction, approximately 3,000 jobs at peak will be local
- Some associated developments will be needed to support construction, such as park and ride sites, accommodation campuses, marine transport facilities and road improvements

This newsletter includes some of the key facts about the Bradwell B proposals, which are outlined in the Stage 1 Consultation Summary Document. See the back page for details of our public exhibitions. Visit www.bradwellb.co.uk to download the documents or find out where to view hard copies. Responses to our proposals, briefly summarised in this newsletter, need to be received by 27 May 2020.



Bradwell B proposals

Bradwell B would build on the long-established history of nuclear power in the area, creating long-term employment opportunities and tens of thousands of jobs during construction, along with significant business and training opportunities.

Bradwell B would comprise of a number of components, each contributing to its safe and secure operation. Together, these components would form the 'permanent development'.

- Main power blocks - two UK HPR1000 reactor units each comprising a reactor containment building and a turbine hall;
- 'Balance of Plant' - facilities and equipment that facilitate the operation of the power station;
- Cooling water infrastructure - forebay, pump houses, water treatment, cooling towers and cooling water tunnels which extend out to the sea;
- Power transmission infrastructure - connection to a new 400kV substation to be provided by National Grid;
- Fuel and waste storage facilities - including interim storage for nuclear waste and spent fuel;
- Ancillary buildings - offices, welfare facilities, security and emergency response; and
- Security facilities - fencing, checkpoints to control access, as well as lighting.

Design and environment

We are proposing to locate the power station on the higher ground to the south and west of the existing Bradwell power station. The proposed layout takes account of the environmental constraints of the site and surrounds.

The sea defences have been designed to withstand flooding from 1 in 10,000 - year extreme weather events.

We have considered creating a new landscape which would provide ecological mitigation and make a positive contribution to biodiversity.

Cooling infrastructure

Heat energy from the nuclear reactors at Bradwell B would be used to create steam, driving turbines to generate electrical power. We are proposing to use an 'indirect' cooling system, where small volumes of sea water are circulated around the power station, with heat lost to the atmosphere via evaporation in low-plume hybrid cooling towers. This system is proposed to protect the ecology of the Blackwater estuary.

We are proposing to use modern, low-plume hybrid cooling towers. Our work suggests that a 50-60m high circular tower for each reactor would be the preferred approach as they perform better, occupy less land, and have less environmental impact than alternatives. Local meteorological data suggests the plume would only be visible around 18 days a year, on average.



KEY	NA
[Red outline]	Bradwell B main development site
[Blue outline]	Scenario 1: Temporary workers accommodation site
[Yellow]	Entrance plaza
[Orange]	Campus area
[Pink]	Caravan area
[Red]	Amenity facilities
[Green]	Sports facilities
[Light blue outline]	Scenario 2 potential expansion area for temporary workers accommodation
[Grey]	Drainage and soil storage area
[Hatched]	Landscape buffer

People and jobs

Building Bradwell B would create tens of thousands of jobs and deliver millions of pounds of investment in the local and regional economies. When completed, there will be around 900 permanent jobs in operating the power station. There will be opportunities for local businesses to benefit from Bradwell B's supply chain, including construction and site services contracts - from small and medium-sized engineering firms, to taxis and security companies, catering and accounting services.

At this early stage, we estimate around 9,100 construction workers would be needed during the busiest stage of construction - around 3,000 of these would be filled by local people already living in the area.

Construction would also bring new workers to the area and we are developing proposals to manage the effects of a temporary increase in the local population.

Accommodation - We are proposing to provide high-quality temporary workforce accommodation, phased to cater for up to 4,500 people during the busiest construction period. We have explored two development scenarios for the temporary accommodation close to the proposed site:

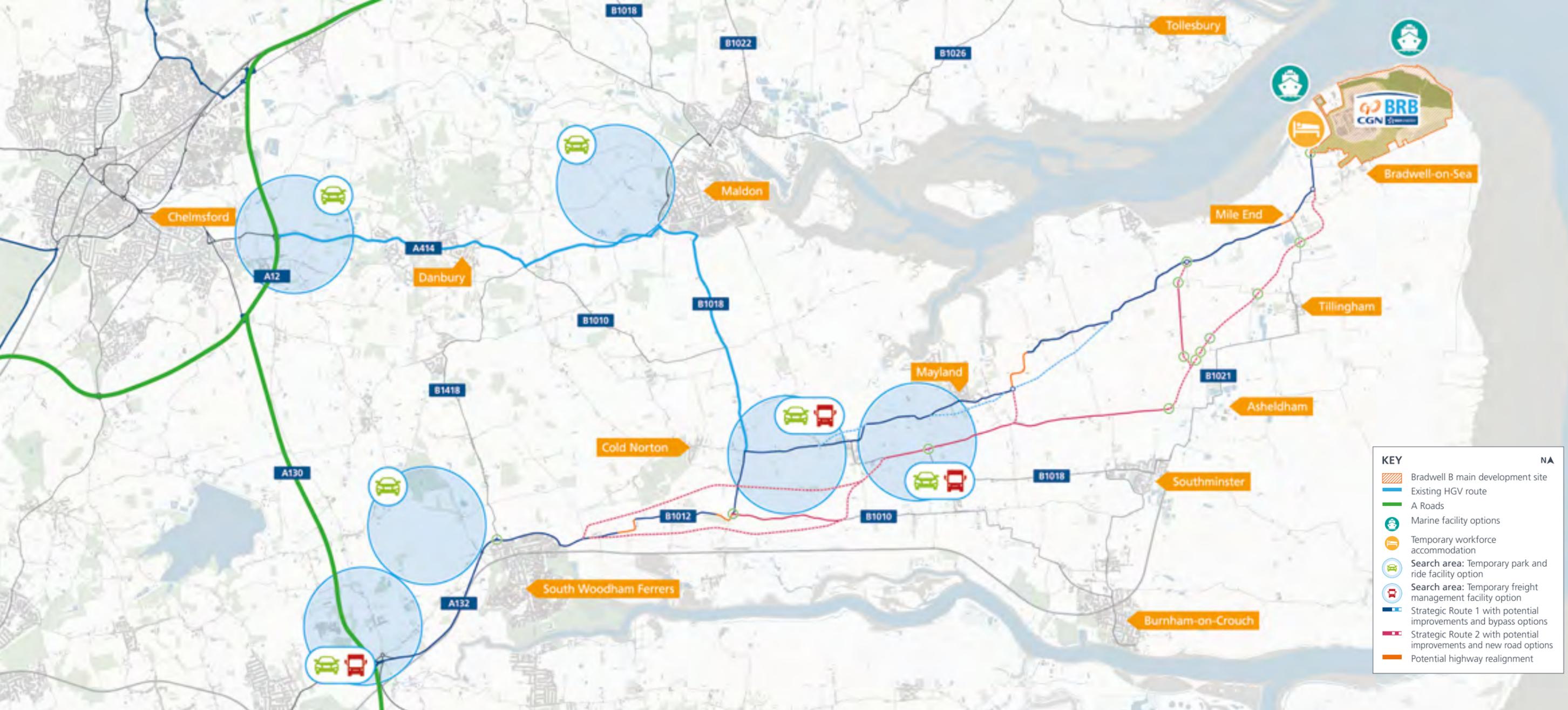
Scenario 1: Land west of the existing Bradwell power station site

Scenario 2: Land west of the existing Bradwell power station site with extension sites

Our initial plan for Scenario 1 includes two zones for accommodation blocks of up to six storeys, comprising en-suite single bedrooms and shared kitchen/communal facilities. The provision of static and touring caravan accommodation is also included, along with amenity facilities, car parking and recreation. Scenario 2 includes additional land - which may not all be required - to provide the same number of bed spaces and facilities in a lower density development over a larger area.

View from East End Road





Transport

Building Bradwell B would involve the daily movement of large numbers of construction workers and significant amounts of materials.

The Bradwell B site is located away from major roads and there is no existing rail or port infrastructure close to the site. We are developing a transport strategy which aims to address this challenge.

We are aiming to:

- maximise the use of marine and/or rail transport over road transport for movement of freight;
- reduce the distance our construction workforce needs to travel by car;
- provide park and ride and freight management facilities to reduce traffic on local roads; and
- carry out highway improvements to increase capacity, improve safety, and reduce environmental impacts.

Rail - We have studied the rail network around the site to understand inland and port-based rail freight interchange facilities from which freight could be moved by road or sea. We understand that there are significant capacity constraints and upgrades required. Discussions with Network Rail are ongoing to confirm the potential for moving freight to the site via rail.

Freight management facilities - We are considering the use of one or more freight management facilities to serve as holding areas for HGVs, helping to regulate timing and flow of vehicles to the Bradwell B site.

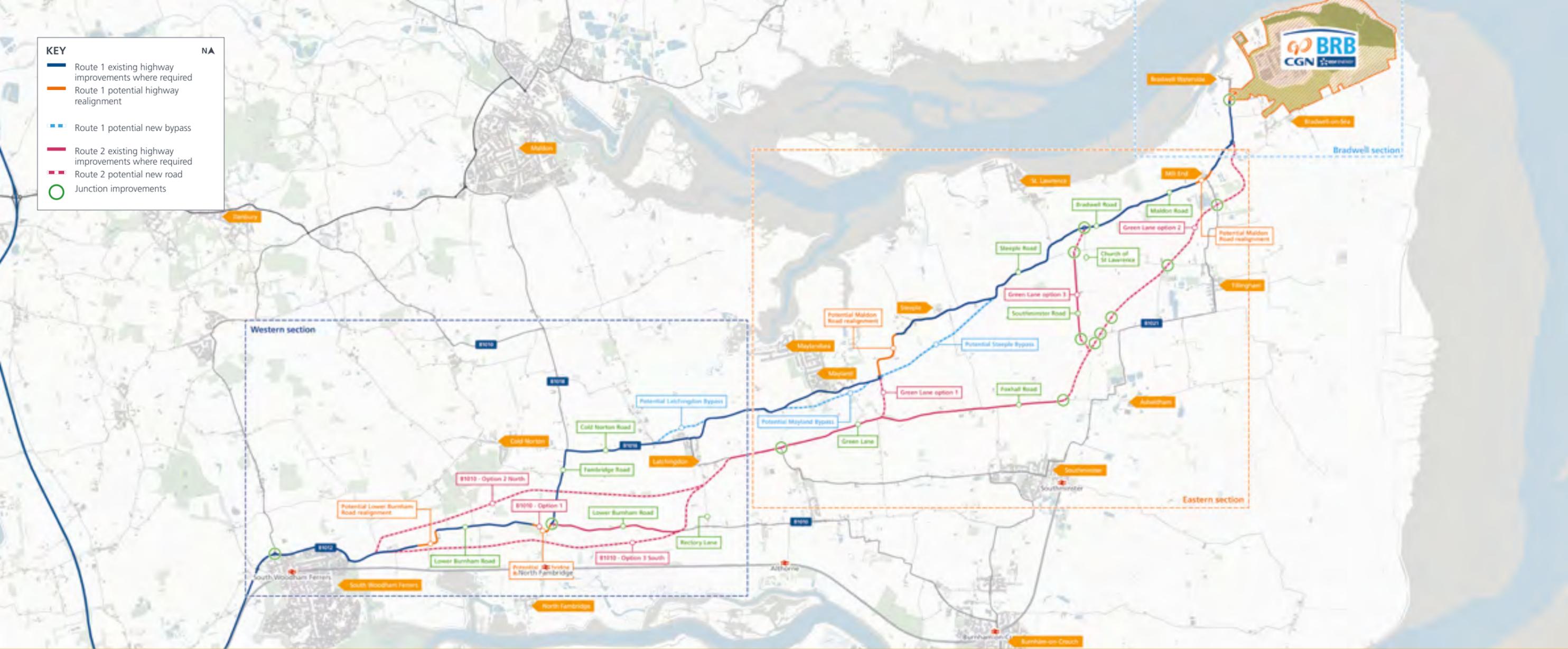
With parking for approximately 100 HGVs, we have identified three search areas where freight management facilities could be located (see map above).

Sea transport - We are investigating opportunities for bringing bulk materials and other construction cargo to site by sea to reduce the number of HGVs on local roads. We are also proposing to use sea transport to move items that are too large or heavy to be moved by road.

Freight would need to be offloaded close to the site. Our initial assessments suggest that locations to the east and west of the existing Bradwell power station could be well suited for the marine facilities that would support this approach.

Park and Ride - We are considering a range of approaches aimed at reducing the number of daily traffic movements including temporary park and ride facilities and direct buses from locations on the Dengie.

We have identified six search areas where park and ride facilities could be located (see map above). We anticipate needing one large site, accommodating around 1,600 spaces, near Cold Norton or Mayland, and potentially one or more smaller facilities in the other search areas.



Road transport

While the use of sea transport would significantly reduce the number of HGV movements on local roads, we would still need to bring some freight to site by road.

During the early years of construction, we propose to use the existing highway network with improvements.

With more traffic needing to use the road network during the peak construction period, more significant measures will be required to manage the effects of construction. Our early assessment has identified two potential strategic routes for construction traffic to the site.

As some of the options would connect Strategic Route 2 with Strategic Route 1, our final proposed HGV route to the site could be a hybrid of both routes.

Strategic Route 1

Broadly follows existing roads from the A130/A132 junction via the South Woodham Ferrers ring road, Lower Burnham Road, Farnbridge Road, the B1018 and Steeple Road to the Bradwell B site.

Western and eastern sections

Our proposals for the western and eastern sections would include minor road realignments and junction improvements and a series of potential bypasses around sensitive communities.

The locations where we are considering bypasses are:

- Latchingdon (western section);
- Mayland (eastern section);
- Steeple (eastern section).

Bradwell section - Our proposals for the Bradwell section are the same for both routes. In addition to proposed improvements on parts of the existing roads, we are proposing a new section of road to the north of Trusses Road that would connect the B1021 Waterside Road directly to the site.

Strategic Route 2

Would be a combination of improvements to existing roads and new sections of road, with associated junction improvements. It would run from the A130/A132 junction via the South Woodham Ferrers ring road, Lower Burnham Road and the B1010 to link back into the eastern part of the Strategic Route 1 near the site.

Western section - B1010 options

We are considering three options for part of the B1010 in the western section of Strategic Route 2:

- **Option 1:** road widening and improvements to the existing road and a new road joining the B1010 with the B1018 Burnham Road;
- **Option 2 north:** a new northern section of road off the B1012 to the east of South Woodham Ferrers and connecting to the B1018 Burnham Road;
- **Option 3 south:** a new southern section of road off the B1012 to the east of South Woodham Ferrers, proceeding eastwards before re-joining the B1010.

Eastern section - Green Lane options

Within the eastern section of Strategic Route 2 we are considering three options between Green Lane and where the route connects to the Bradwell section:

- **Option 1:** a new road running north-east from Green Lane (near the junction with Mayland Hill) to connect with the existing highway to the west of Steeple or the Steeple bypass; or
- **Option 2:** a new road running north-east from Foxhall Road and connecting to the junction of the B1021 with Maldon Road; or
- **Option 3:** a new road running north-east from Foxhall Road and connecting to Bradwell Road to the north of the Church of St Lawrence. This option would also require improvements to Southminster Road.

Public exhibitions

We hope you can join us at one of our exhibitions where you can find out more about our proposals, speak to members of our project team and share your feedback.

Exhibitions will be held at:

Venue	Date	Time
Steeple Village Hall , Garden Fields, Steeple, CM0 7JY	Thur 5 th March	2:00pm - 8:00pm
Maldon Town Hall , Market Hill, Maldon, CM9 4RL	Fri 6 th March	2:00pm - 8:00pm
Mersea Island School , Barfield Road, West Mersea, CO5 8QX	Sat 7 th March	11:00am - 4:00pm
Bradwell Village Hall , South Street, Bradwell-on-Sea, CM0 7QJ	Tue 10 th March	2:00pm - 8:00pm
Southminster Memorial Hall , High Street, Southminster, CM0 7DE	Wed 11 th March	2:00pm - 8:00pm
Jacks Centre Bowls Club , Burnham Road, Latchingdon, CM3 6EX	Thur 12 th March	2:00pm - 8:00pm
North Fambridge Village Hall , Ferry Road, North Fambridge, CM3 6LS	Fri 13 th March	11:00am - 4:00pm
Tillingham Village Hall , Vicarage Lane, Tillingham, CM0 7SD	Sat 14 th March	12:30pm - 4:30pm
Tollesbury Community Centre , East Street, Tollesbury, CM9 8QD	Tue 17 th March	2:00pm - 8:00pm
Great Baddow Parish Hall , 19 Maldon Road, Great Baddow, CM2 7DW	Fri 20 th March	12:00pm - 5:00pm
William de Ferrers School , Trinity Square, South Woodham Ferrers, CM3 5JU	Sat 21 st March	11:00am - 4:00pm
Colne Yacht Club , Waterside, Brightlingsea, CO7 0AX	Tue 24 th March	2:00pm - 8:00pm
Royal Burnham Yacht Club , The Quay, Burnham-on-Crouch, CM0 8AU	Wed 25 th March	2:00pm - 8:00pm
Rawreth Village Hall , Church Road, Rawreth, SS11 8SH	Fri 27 th March	2:00pm - 8:00pm
Parish Church of St John the Baptist , 55 Main Road, Danbury, CM3 4NG	Sat 28 th March	11:00am - 4:00pm

How to respond to this consultation

Stage One consultation will run for 12 weeks and ends on 27 May.

To learn about our proposals:



Read the **Stage One Consultation Summary Document**



Find out more detail in the **Stage One Consultation Document**



Attend our exhibitions



Check out the website: www.bradwellb.co.uk



Call **01621 451 451** during normal office hours



Follow us on twitter [@CGNBradwellB](https://twitter.com/CGNBradwellB)

Respond to the consultation:



Post your written responses to **Freepost Bradwell B Consultation** (no stamp or further address required)



Email your comments to: feedback@bradwellb.co.uk



Complete a questionnaire at: www.bradwellb.co.uk or in hard copy and post it to our freepost address



Call **01621 451 451** during normal office hours

Following Stage One consultation, we will consider all responses and feedback we have received and use it to inform the development of our proposals. We will then share our proposals and preferred options in a Stage Two consultation.

We are inviting comments from local communities, including all those living in, working in or otherwise using the local area around the Bradwell B site and associated development site options or search areas.

We also welcome feedback from all organisations with an interest, as well as from landowners who may be affected by the proposals.