Start of works exhibition

Find out about the work that Highways England are undertaking to create a new interchange junction 700 metres east of junction 10 over the M20, a dual carriageway link road to the existing A2070 Bad Munstereifel Road, a replacement pedestrian footbridge and a connection to the A20 Hythe Road.

www.highwaysengland.co.uk/M20J10a
M20j10Aimprovements@highwaysengland.co.uk
0300 123 5000

Part funded by:
The new junction 10a will accommodate the planned growth in the region, which includes education, leisure, retail and commercial developments as well as better travel options and sustainable transport links.

**Key dates:**
- March 2016 Development Consent Order (DCO) application submitted
- February–May 2017 DCO hearing
- December 2017 DCO approved by the Secretary of State
- January 2018 Start of works
- Autumn 2019 Open for traffic
- Summer 2020 Scheme completion
M20 junction 10a
Junction improvement scheme

Features of the proposed design

- New interchange junction 700 metres east of junction 10 over the M20.
- New dual carriageway link road to the existing A2070 Southern Orbital Road (Bad Munstereifel Road).
- Connection to the A20 Hythe Road from Junction 10a.
- Replacement and upgrade of ageing structures:
  - New footway linking A20 Hythe Road
  - A replacement footbridge across the A2070
  - Lacton Culvert
  - Swatfield Culvert
  - Kingsford Street footbridge

The new M20 junction 10a gyratory features

- A new three-lane gyratory roundabout connected to a new southern link road and the existing A20 Hythe Road. Partially signalised with new east and west facing slip roads.
- Street lighting on the gyratory and on the four slip roads.
- New Kingsford Street footbridge and cycleway.
- Kingsford Street improvements to include a new safety barrier, 350 metre footway, acoustic barrier and planting.
- Demolition of Highfield Lane bridge. The new Kingsford Street footbridge across the motorway will be built before the existing bridge is closed.

Scheme layout

M20 j10a General arrangement drawing
M20 junction 10a
Junction improvement scheme

Scheme layout

M20 junction 10 features

- East facing slip roads will become redundant.
- Traffic signals, white lining and signing will be amended following slip road removal.
- No access to the M20 going south east towards Folkestone and no access to junction 10 from the M20 London-bound carriageway.

A2070 Southern Orbital Road features

- A new dual carriageway link road with a 40mph speed limit located between the proposed new junction 10a and the A2070.
- A new three armed roundabout joining the new link road to the existing A2070.
- The existing A2070 is realigned where it joins the link road.
- New Church Road footbridge/cycleway replacing the old bridge.
- Minor improvements to Barrey Road junction.
Newts and dormouse have been protected using the following methods:

- Vegetation clearance is carried out methodically and slowly with a licenced ecologist present to advise on local wildlife. This encourages the animals to move away from the work areas.
- A dead hedgerow is used to create a barrier to guide animals away from the works area. This barrier is densely packed to make it impenetrable but also very thin so that it does not attract nesting birds. The branches used to form the barrier are recovered from the trees and bushes cut down during the wider site clearance works.
- Construction of two ponds that will provide habitat for the great crested newts as well as helping to balance and control the drainage of the finished scheme.

Our work has taken into consideration populations of dormouse and great crested newts within the area. Natural England has been consulted along with specialist ecologists to minimise disturbance.

Newts and dormouse have been protected using the following methods:

- Environmental specialists and ecologists have worked carefully to consider the number of trees and foliage that need to be removed.
- Fingertip searches are conducted prior to scrub clearance to ensure that wildlife is not harmed.
- A large number of trees will be planted once construction has been completed.
**M20 junction 10a**  
Junction improvement scheme

**Construction timetable**

<table>
<thead>
<tr>
<th>Phase</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1</td>
<td>Carefully planned site clearance with a focus on Ecology. Haul road created for utilities.</td>
</tr>
<tr>
<td>Phase 2</td>
<td>Temporary diversion of the A20 to allow earthworks to be carried out for the new alignment. Work will start on the A2070 roundabout and construction elements of the new Junction 10a.</td>
</tr>
<tr>
<td>Phase 3</td>
<td>The placing of the bridge beams and deck on the main gyratory and the construction of the balancing ponds.</td>
</tr>
<tr>
<td>Phase 4</td>
<td>Work to complete the link road between the new junction 10a and the A2070.</td>
</tr>
</tbody>
</table>
General traffic phases

M20
The M20 with two lanes open to traffic through the works area during the construction phase.

A2070 Bad Munstereifel Road

- Phase 1a

- Phase 1b

- Phase 2

- Phase 3
M20 junction 10a
Junction improvements scheme

M20
The M20 with two lanes open to traffic through the works area during the construction phase.

A2070 Bad Munstereifel Road

- **Phase 1a** Off-peak daytime lane closures to carry out site clearance, trial holes and site set up.

- **Phase 1b** Lane closures north-bound and south-bound to install crossover points in the central reserve. Close right turn into Barrey Road.

- **Phase 2** Install 1 x 1 contraflow north-bound. Right turn closure into Barrey Road remains in place. Construct tie ins.

- **Phase 3** Close A2070 north-bound and south-bound. Remove footbridge and switch traffic onto new alignment in contraflow. Barrey Road right turn remains closed. Close A2070 north-bound and south-bound to install new footbridge.

- **Phase 4** Lane closures to A2070 north-bound and south-bound. Complete tie ins and finishing works. Barrey Road right turn re-opens and the new roundabout open.
The core working hours for the M20 j10a scheme are:

- 7.00am to 6.00pm Monday to Friday
- 7.00am to 1.00pm on Saturdays

There will be occasions when work must be carried at nights and weekends. Lifting the new footbridge into place over the Bad Munstereifel road is one such operation. There will be advanced warning signs of any night or weekend work.

Facts:

- 6000m$^3$ of concrete to be used on the structures. This is around 1000 lorries of concrete per structure.
- There will be approximately 750 tonne of reinforcement used in the structures, which is approximately the weight of 125 male African elephants.
- 102.8k m$^2$ of top soil used on the scheme. This is equal to 14½ times the size of Old Trafford football pitch.
- Construction of 3 balancing ponds with a combined volume of 107m litres of water which would be about 428m cups of tea.
- Grubbing out of approximately 2 Olympic running tracks worth of ditching.
- Enough water from the balancing ponds to fill 42.8 Olympic sized swimming pools.
- We will be installing 10.8km of drainage, equivalent to 3.7x the span across the Dartford Crossing.
The Initial Road safety audit highlighted an issue with insufficient distance between the link roundabout westbound and the right turn lane for Barrey Road. Due to the high volumes of traffic experienced during peak times, the northbound left-turn deceleration lane into Barrey Road would have soon reached capacity with vehicles stopped in Lane 1 and as a result visibility for the traffic turning left from Barrey Road may have become obscured.

The intention remains to signalise this junction, however before formalising the junction design Highways England need to complete a Roads Safety Audit stage 2 which is standard practice under the Design Manual for Roads and Bridges (DMRB), it is expected that this will be completed in May 2018.

The works are programmed to take place alongside the M20 J10a works and are likely to be installed in 2019 based on the current programme.