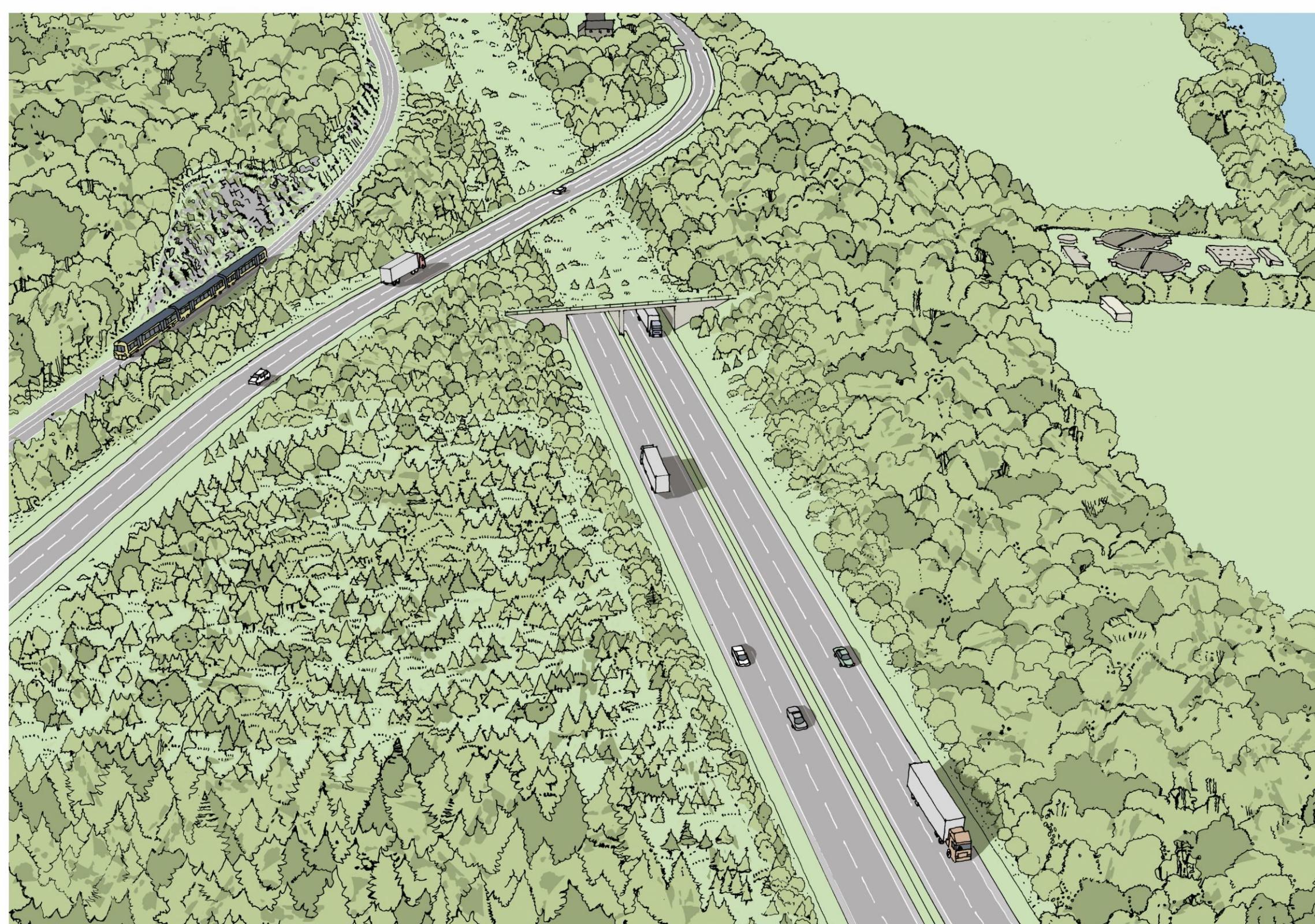


# Community's Preferred Route Option

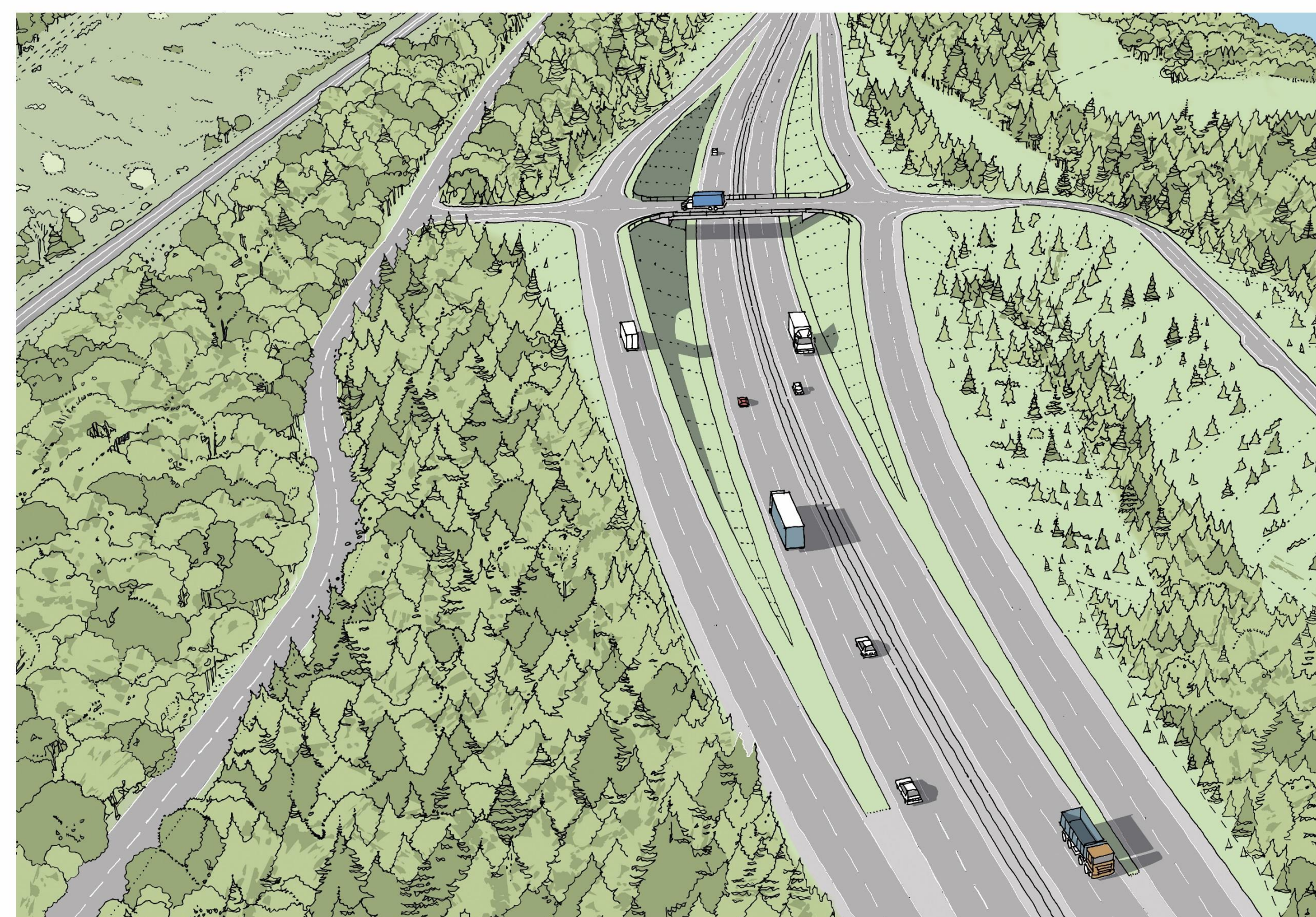
## Key Features

- On-line route, largely following the horizontal alignment of the existing A9 single carriageway.
- A9 dual carriageway in a cut and cover tunnel for approximately 1.5 kilometres, commencing at the southern extent in the locality of the existing Birnam Junction and terminating approximately 300 metres south of the existing Dunkeld Junction.
- Speed limit of 50 miles per hour required between southern extent of scheme and proposed Dunkeld Junction.
- Murthly Junction:
  - Grade separated junction in the locality of the existing private access to Murthly Castle.
  - Diamond layout, facilitating all vehicle movements. Overbridge provided across the A9, connecting to the B867 to the west.
  - Requires a connection of the B867 and Perth Road in the locality of the existing Birnam Junction, crossing the A9 at the southern extent of the cut and cover tunnel.
- Dunkeld Junction:
  - At-grade roundabout in the locality of the existing junction at Dunkeld, including a segregated left lane between the A923 and A9 south.
  - Provides connections to the A9 (north and south), A923, A822 and road to Inver.
- The Hermitage:
  - Left-in left-out junction on the northbound carriageway.
- Dalguise Junction:
  - Grade separated junction south of the existing junction with the B898.
  - Loops in the northbound direction and slip roads in the southbound direction, facilitating all vehicle movements.
  - Realigned B898 crosses the A9 on an underbridge, connecting to a roundabout on the east of the A9, which also connects to the southbound slip roads.
- Construction cost estimated to be between £1 billion to £1.6 billion.

The commitment from the A9 Co-Creative Process is that the Community's Preferred Route Option will be presented to Scottish Ministers for consideration, along with the outcome of the DMRB Stage 2 assessment, if different from the Community's Preferred Route Option.



Southern Extent of Cut & Cover Tunnel



Grade Separated Junction (at Murthly), All Movements



A9 in 1.5 kilometre Cut & Cover Tunnel



At Grade Roundabout





# Additional Whole Route Option 1

## Lowered A9 at Station with Roundabout at Dunkeld

### Key Features

- On-line route, largely following the horizontal alignment of the existing A9 single carriageway.
- A9 dual carriageway lowered into a 150-metre-long underpass structure in the locality of Dunkeld & Birnam Station.
- Dunkeld & Birnam Station retained in its current position with Station Road re-connected to the station. Parking on top of underpass.
- Speed limit of 70 miles per hour throughout.
- Murthly / Birnam Junction, three options under consideration:
  - Option 1:
    - Grade separated junction in the locality of the existing private access to Murthly Castle.
    - Diamond layout, facilitating all vehicle movements. Overbridge provided across the A9, connecting to the B867 to the west.
    - Includes a connection of the B867 and Perth Road in the locality of the existing Birnam Junction, crossing the A9 via an underbridge.
  - Option 2:
    - Grade separated junction in the locality of the existing Birnam Junction.
    - Entry/exit loops in the northbound direction and an entry slip road in the southbound direction, with no southbound exit slip road.
    - B867 and Perth Road connected, crossing the A9 via an underbridge.
    - Includes an underbridge to connect the existing private access to Murthly Castle to the B867.
  - Option 3:
    - Grade separated junction in the locality of the existing Birnam Junction.
    - Entry/exit loops in the northbound and southbound directions, facilitating all vehicle movements.
    - B867 and Perth Road connected, crossing the A9 via an underbridge.
    - Includes an underbridge to connect the existing private access to Murthly Castle to the B867.
- Dunkeld Junction:
  - At-grade roundabout in the locality of the existing junction at Dunkeld, including a segregated left lane between the A923 and A9 south, facilitating all vehicle movements.
  - Provides connections to the A9 (north and south), A923, A822 and road to Inver.
- The Hermitage:
  - Left-in left-out junction on the northbound carriageway.
- Dalguise Junction:
  - Grade separated junction south of the existing junction with the B898.
  - Exit/entry loops in the northbound direction and slip roads in the southbound direction, facilitating all vehicle movements.
  - Realigned B898 crosses the A9 on an underbridge, connecting to a roundabout on the east of the A9, which also connects to the southbound slip roads.

### Reasons for Inclusion

This Whole Route Option has been considered for the following reasons.

- Maintains a key principle from the A9 Co-Creative Process to re-connect Station Road to the station.
- While the option still has considerable construction complexity, it is less complex than the Community's Preferred Route Option, therefore reducing noise and visual impacts during construction.
- Partially addresses concerns from some local residents, businesses and key stakeholders about construction complexity and duration, with an expected duration of approximately 4 to 4 ½ years.
- No requirement for a 24-hour manned control room and other additional infrastructure associated with a tunnel.
- Improves the opportunity for sustainable re-use of the Category A Listed station building.
- Meets Transport Scotland's objectives to improve integration with Public Transport facilities.
- Permits a 70 miles per hour speed limit, which is consistent with the overall A9 Dualling Programme and partially reduces the safety concerns of a roundabout in unison with a tunnel, identified by emergency services.
- At-grade roundabout at Dunkeld obtained approximately 40% of the public vote at Stage 4 of the A9 Co-Creative Process and has reduced construction complexity, landscape and visual impacts and reduced impacts on residential properties, compared to a grade separated junction. A grade separated junction at Dunkeld, with an underbridge, cannot be accommodated as it does not allow a safe, compliant alignment over the realigned A822/A923. A grade separated junction, with an overbridge, would require significant retaining walls, extending to approximately 8.5 metres high on the west side adjacent to the railway and 12.5 metres high on the east side adjacent to residential properties, introducing significant construction complexity.
- Reduces the volume of materials required and is less expensive, both to construct and maintain, than the Community's Preferred Route Option.



# Additional Whole Route Option 2

## At-grade A9 with Grade Separated Junction at Dunkeld

### Key Features

- On-line route, largely following the horizontal and vertical alignment of the existing A9 single carriageway.
- Generally the same level as the existing A9 throughout.
- Dunkeld & Birnam Station retained in its current position.
- Birnam Industrial Estate acquired, and the land used to construct a car parking facility accessed from Station Road, incorporating approximately 50 spaces.
- A new pedestrian underpass structure, incorporating lifts, constructed below the proposed A9 dual carriageway, linking the new car park to the station.
- Speed limit of 70 miles per hour throughout.
- Murthly / Birnam Junction, three options under consideration:
  - Option 1:
    - Grade separated junction in the locality of the existing private access to Murthly Castle.
    - Diamond layout, facilitating all vehicle movements. Overbridge provided across the A9, connecting to the B867 to the west.
    - Includes a connection of the B867 and Perth Road in the locality of the existing Birnam Junction, crossing the A9 via an underbridge.
  - Option 2:
    - Grade separated junction in the locality of the existing Birnam Junction.
    - Entry/exit loops in the northbound direction and an entry slip road in the southbound direction, with no southbound exit slip road.
    - B867 and Perth Road connected, crossing the A9 via an underbridge.
    - Includes an underbridge to connect the existing private access to Murthly Castle to the B867.
  - Option 3:
    - Grade separated junction in the locality of the existing Birnam Junction.
    - Entry/exit loops in the northbound and southbound directions, facilitating all vehicle movements.
    - B867 and Perth Road connected, crossing the A9 via an underbridge.
    - Includes an underbridge to connect the existing private access to Murthly Castle to the B867.
- Dunkeld Junction:
  - Grade separated junction in the locality of the existing Dunkeld Junction.
  - Variation of a diamond layout, facilitating all vehicle movements.
  - A822 and A923 connected, crossing the A9 via an underbridge.
- The Hermitage:
  - Left-in left-out junction on the northbound carriageway.
- Dalguise Junction:
  - Grade separated junction south of the existing junction with the B898.
  - Entry/exit loops in the northbound direction and slip roads in the southbound direction, facilitating all vehicle movements.
  - Realigned B898 crosses the A9 on an underbridge, connecting to a roundabout on the east of the A9, which also connects to the southbound slip roads.

### Reasons for Inclusion

This Whole Route Option has been considered for the following reasons.

- Improves accessibility to the station for local residents, maintaining a key principle of the A9 Co-Creative Process.
- Significantly less complex than the Community's Preferred Route Option, therefore reducing noise and visual impacts during construction.
- Addresses concerns from some local residents, businesses and key stakeholders about construction complexity and duration, with an expected duration of approximately 2 ½ to 3 years.
- Eliminates significant works to Inchewan Burn, addressing possible impacts on water quality, geomorphology and species noted by the Scottish Environmental Protection Agency (SEPA) and Scottish Natural Heritage (SNH).
- No requirement for a 24-hour manned control room and other additional infrastructure associated with a tunnel.
- Provides opportunity for sustainable re-use of the station building, although not as effectively as the Community's Preferred Route Option.
- Meets Transport Scotland's objectives to improve integration with Public Transport facilities and improve the operational performance of the A9 and improve safety.
- Meets Transport Scotland's aspiration for a Category 7A standard of dual carriageway, with a 70 miles per hour speed limit, which is consistent with the overall A9 Dualling Programme and partially reduces the safety risks identified by emergency services.
- Meets the community's objective to provide better, safer access on and off the A9 from both sides of the road.
- Grade separated junction at Dunkeld addresses concerns from some key stakeholders and members of the public, who have noted concerns about the potential for increased road traffic accidents at roundabouts and the corresponding impact on the operation of the trunk road network.
- Reduces the volume of materials required and is less expensive, both to construct and maintain, than the Community's Preferred Route Option.



# Additional Whole Route Option 3

## At-grade A9 with Roundabout at Dunkeld

### Key Features

- On-line route, largely following the horizontal and vertical alignment of the existing A9 single carriageway.
- Generally the same level as the existing A9 throughout.
- Dunkeld & Birnam Station retained in its current position.
- Birnam Industrial Estate acquired, and the land used to construct a car parking facility accessed from Station Road, incorporating approximately 50 spaces.
- A new pedestrian underpass structure, incorporating lifts, constructed below the proposed A9 dual carriageway, linking the new car park to the station.
- Speed limit of 70 miles per hour throughout.
- Murthly / Birnam Junction, three options under consideration:
  - Option 1:
    - Grade separated junction in the locality of the existing private access to Murthly Castle.
    - Diamond layout, facilitating all vehicle movements. Overbridge provided across the A9, connecting to the B867 to the west.
    - Includes a connection of the B867 and Perth Road in the locality of the existing Birnam Junction, crossing the A9 via an underbridge.
  - Option 2:
    - Grade separated junction in the locality of the existing Birnam Junction.
    - Entry/exit loops in the northbound direction and an entry slip road in the southbound direction, with no southbound exit slip road.
    - B867 and Perth Road connected, crossing the A9 via an underbridge.
    - Includes an underbridge to connect the existing private access to Murthly Castle to the B867.
  - Option 3:
    - Grade separated junction in the locality of the existing Birnam Junction.
    - Entry/exit loops in the northbound and southbound directions, facilitating all vehicle movements.
    - B867 and Perth Road connected, crossing the A9 via an underbridge.
    - Includes an underbridge to connect the existing private access to Murthly Castle to the B867.
- Dunkeld Junction:
  - At-grade roundabout in the locality of the existing junction at Dunkeld, including a segregated left lane between the A923 and A9 south.
  - Provides connections to the A9 (north and south), A923, A822 and road to Inver.
- The Hermitage:
  - Left-in left-out junction on the northbound carriageway.
- Dalguise Junction:
  - Grade separated junction south of the existing junction with the B898.
  - Entry/exit loops in the northbound direction and slip roads in the southbound direction, facilitating all vehicle movements.
  - Realigned B898 crosses the A9 on an underbridge, connecting to a roundabout on the east of the A9, which also connects to the southbound slip roads.

### Reasons for Inclusion

This Whole Route Option has been considered for the following reasons.

- Improves accessibility to the station, maintaining a key principle of the A9 Co-Creative Process.
- Significantly less complex than the Community's Preferred Route Option, therefore reducing noise and visual impacts during construction.
- Addresses concerns from some local residents, businesses and key stakeholders about construction complexity and duration, with an expected duration of approximately 2 ½ to 3 years.
- Eliminates significant works to Inchewan Burn, addressing possible impacts on water quality, geomorphology and species noted by the Scottish Environmental Protection Agency (SEPA) and Scottish Natural Heritage (SNH).
- No requirement for a 24-hour manned control room and other additional infrastructure associated with a tunnel.
- Provides opportunity for sustainable re-use of the station building, although not as effectively as the Community's Preferred Route Option.
- Meets Transport Scotland's objectives to improve integration with Public Transport facilities.
- Permits a 70 miles per hour speed limit, which is consistent with the overall A9 Dualling Programme and partially reduces the safety risks identified by emergency services.
- At-grade roundabout at Dunkeld obtained approximately 40% of the public vote at Stage 4 of the A9 Co-Creative Process and has reduced construction complexity, landscape and visual impacts and reduced impacts on residential properties, compared to a grade separated junction.
- Reduces the volume of materials required and is less expensive, both to construct and maintain, than the Community's Preferred Route Option.