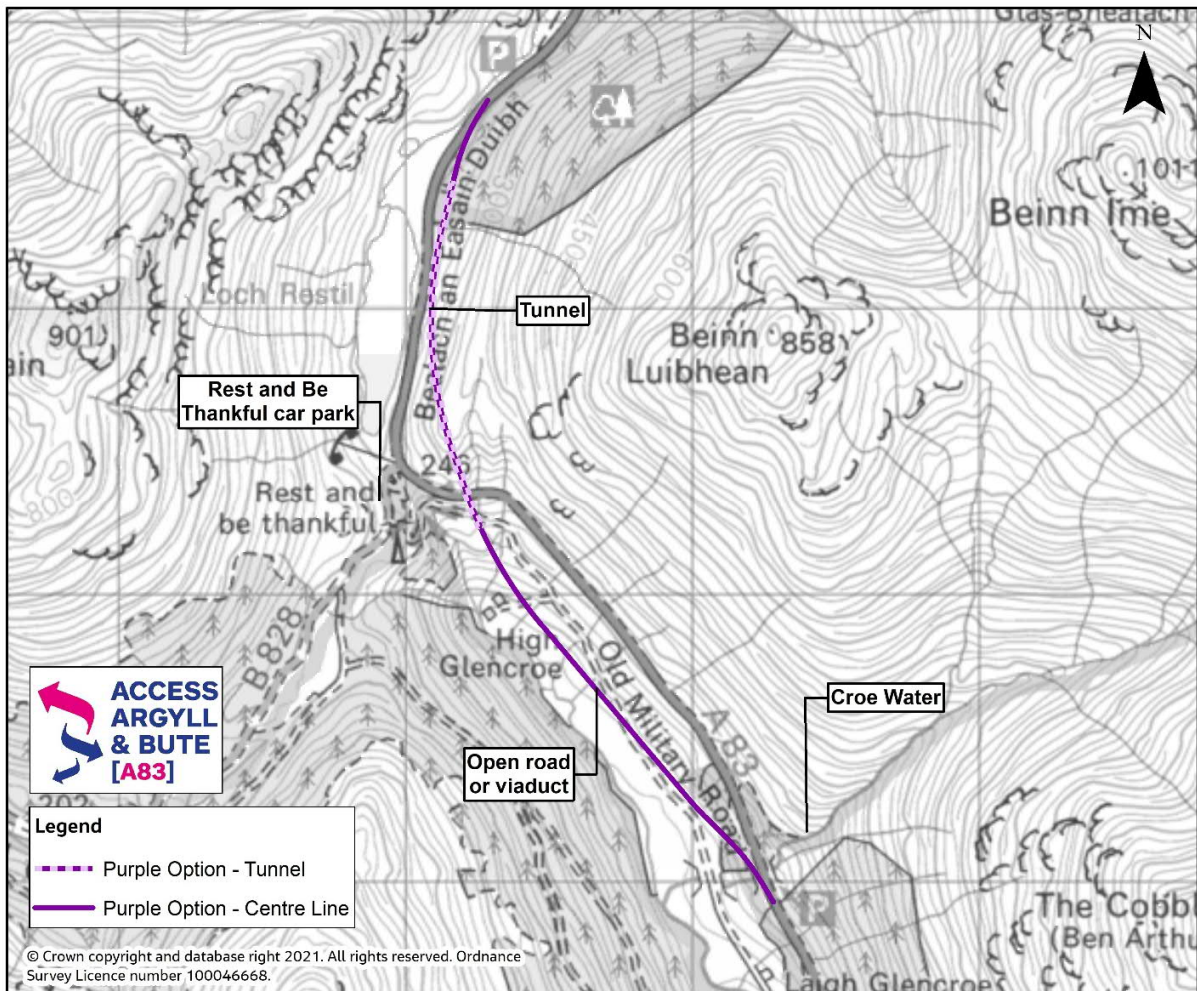


Purple Possible Route Option (Open Road and Shorter Tunnel in Base of Valley)



The Purple route option would involve the construction of a new single carriageway road, approximately 3.2km long located along the valley floor of Glen Croe. This possible route would run from the existing A83 Trunk Road at a point south of the existing Croe Water bridge, gradually dropping down the side of the slope towards the valley floor before crossing the existing Old Military Road along an embankment.

The route would then run generally north-west between the Old Military Road and Croe Water as either an open road and along an embankment of up to 50m in height above the existing ground, or alternatively along a viaduct. With the viaduct option, the piers would require deflector structures to afford protection from any future landslides or debris flows in that area. The route would then enter a tunnel approximately 1.2km long passing under the Old Military Road and the A83 Trunk Road near High Glen Croe. The tunnel would climb from High Glen Croe and the road would re-emerge next to the junction

between the A83 Trunk Road and an existing access track north of Loch Restil, before rejoining the existing A83 Trunk Road.

The tunnel portals (entrance/exit) will be positioned to take account of the landslide and debris flow hazards within the area and these, along with the sections of the road on the approaches to the tunnel, may require additional measures to mitigate the hazard. For this possible option, the B828 local road would likely be extended to the north tunnel portal by using part of the existing A83 Trunk Road from the Rest and Be Thankful car park and a new junction created between the A83 Trunk Road and B828 local road.

Advantages

- Affords protection of the trunk road from up-slope landslide and debris flow hazard.
- Construction is further downslope of the zone of highest landslide/debris flow hazard susceptibility compared to the brown and yellow options.
- Smaller impact on surface-level natural assets than most other options due to the use of the tunnel.
- Construction areas are offset from the existing A83 with greater flexibility with respect to traffic management and workforce protection compared to some other options.
- More of the route may be on embankment rather than structures which will improve constructability of parts of the route.

Disadvantages

- Includes a length of tunnel which will take time to construct and is a considerable cost element. At this stage it is anticipated that the partial tunnel option (purple option) would typically take over a year longer than the quickest option (green option).
- Likely to require measures to mitigate landslide/debris flow hazard along parts of the open road section and at tunnel portals.
- Construction works will require careful planning and implementation with respect to landslide/debris flow hazard susceptibility.
- Construction works in proximity to the Old Military Road in places, requiring careful consideration of traffic management.
- This option has the most potential negative environmental effects in terms of population and human health, use of materials, bedrock geology, peat, cultural heritage and landscape and visual effects - although with careful design and mitigation the landscape and visual effects could be reduced or even made beneficial.
- Greater level of greenhouse gas emissions predicted than most other route options.
- Tunnel portal construction will be required on sloped hillsides which will be challenging for access and stabilisation works.

- Increased design requirements relating to accommodating hazardous loads, abnormal loads and non-motorised users within the tunnel.
- Future tunnel operational and maintenance requirements.