Option Name	Medium Term Solution (MTS) – Single Lane Forestry Track Upgrade
Brief Description	This option generally follows the route of the existing Glen Croe Lower Forestry Track as it rises up the south-west side of Glen Croe, on the lower slopes of Ben Donich. It commences at the original A83 Trunk Road/Old Military Road (OMR) junction and ends at the B828 Glen Mohr local road/ A83 Trunk Road junction.
	A single lane, approximately 3.5m wide would be provided in this option for the passage of vehicular traffic. 1.5m verges would be provided as well as a drainage channel to capture rainfall run-off from the adjacent earthworks cutting slopes and the carriageway.
	At its eastern end, this option would cross the Croe Water via a temporary structure such as a Bailey Bridge, and throughout its length this option purposely exhibits an earthworks cutting solution due difficulties associated with embankment construction on an existing hillside slope, with no specific geohazard mitigation provided either. The maximum depth of cutting is approximately 12m. There are no significant lengths of embankment within this option, with only small lengths of embankment proposed on each approach to the Croe Water structure and very localised lengths of embankment at pinch points where the width available across the existing track cross-section is at its narrowest. Through further design refinement a solution may be possible to further reduce or remove such instances of these short lengths of embankment by moving the alignment further into the hillside for example.
	This option exhibits steep gradients. The route starts to rise sharply, north of the proposed structure across the Croe Water, with the steepest gradient of approximately 14% present over a short section. After this steep section, the profile of the route is found on a more constant rise with uphill gradients ranging between approximately 7% to 11%, and a short length of 12%.
	This option crosses approximately 107 watercourses that would require water management works such as culvert replacement.
	Overall, the Single Lane Lower Forestry Track upgrade option is approximately 4.1 km long, measured between the two points at which it meets the A83 Trunk Road.
Option Pros	The key positive elements of this option are listed below:
	 The Single Lane Lower Forestry Access Track upgrade provides a further diversion route to the current OMR, potentially increasing resilience if it is operational, during times when the A83 Trunk Road and OMR and closed. This will be viewed as a positive, particularly by stakeholders and the public. This option would provide benefit for journey times compared to the northern diversion route, however the scale of benefit depends on journey origin and destination. This option could be developed to work in conjunction with the OMR interventions, in a loop arrangement. Wait times

	 arrangement in place, which would be seen positively by the public. Upgrading the forestry track may assist with access for construction of the longer term solutions being considered that are located on the south-west side of Glen Croe. There is support for this option from stakeholders and the public. This option largely avoids all known heritage assets (except at OMR tie-in). The section of the proposed route located on the Glen Croe Lower Forestry Track lies entirely within Scottish Ministers land. Therefore, it is not expected that any third-party land will be required; however, burdens will need to be checked prior to its implementation.
Option Cons	The key negative elements of this option are listed below:
	• This option does not include any geohazard mitigation and therefore there is a high likelihood of closure should a landslide or debris flow occur in the vicinity of the route. Any such closures could be of potentially significant duration.
	 This option requires notable cutting into the hillside through a potential relict landslide feature which could reactivate previously failed material.
	 This option still exhibits steep gradients as described in the option description.
	• The option will require a convoy operation, limiting vehicle speeds along the route to 10mph.
	 This option could not form part of a phased implementation of a longer term solution.
	 It is anticipated that this option, if it were operated in conjunction with the OMR interventions, will result in additional operational costs. This is due to the need for two pairs of convoy vehicles to allow the route to work as a 'loop' and the likely need for an additional pair of recovery vehicles should the situation arise that vehicle breakdowns occur concurrently on both the Single Lane Lower Forestry Track option and the OMR.
	• While the likelihood of a vehicle breakdown is uncontrollable, it is generally considered to be low; however, if there is a breakdown, this will have a significant impact on the route, where a temporary closure will be necessary until the vehicle can be recovered.
	• The Record of Determination (RoD) is likely to conclude that a full Environmental Impact Assessment Report (EIAR) is required. This is largely due to the fact that this is a c. 4km alignment option which lies entirely within Loch Lomond and The Trossachs National Park (a sensitive designation under the EIA Regulations), with the potential for significant landscape & visual effects.
	 This option would lead to the loss of a large area of plantation forestry (albeit FLS have plans to fell woodland in this area),

	reprofiling of the slope and introduction of significant embankments and cuttings. This cumulative effect is likely to have a significant visual impact on the landscape setting of the Loch Lomond and The Trossachs National Park, particularly in views from the A83 Trunk Road and potentially the Rest and Be Thankful viewpoint.
	• The loss of plantation forestry and slope reprofiling may also increase the potential for geohazard events, particularly landslide and debris flow, due to removal of trees which may be having a stabilising effect on the hillside slope and changing the existing slope conditions.
Time to Implementation	If progressed as a whole, depending on a number of factors such as decision to proceed, securing necessary rights over land, Ground Investigation, EIA Reporting and consultation requirements, this option has the potential to be open to traffic by autumn 2025.
Outline Construction Programme	It is estimated that the construction of this option would extend over a period of between 13 months to 19 months.
Scheme Costs	An initial estimated cost for this option is within the range of £21M- £28M at 2021 prices.
Caveats Identified	 The caveats associated with the above data at this stage are identified as following: Final determination on EIAR requirement yet to be reached. This option has been developed on the basis of minimising the earthworks and geotechnical solutions have only been proposed where required to deliver these earthworks. No geohazard mitigation would be provided for this option to protect the route. Earthworks design and costing have been prepared without the benefit of ground investigation data, therefore earthworks design and costs are preliminary estimates.