

- Legend**
- Study Area Extent
  - Terrain Zone
  - 1** Terrain Zone Number
  - 1 BGS Landslide Number
  - ★ Landslide
  - Failure location
  - Boulders
  - Scarp
  - Channels
  - Multiple small channels
  - Incised channels
  - Mass movement deposits
  - Possible failure area
  - Tension cracks, multiple scarps
  - Possible soil creep
  - Debris and Boulders
  - Rock crags and Rock scarps
  - Rock crags and Boulders
  - Southwest facing slopes of Beinn Luibhean

C02	29/04/2021	Issued to Client	RL	FCC	HJR	DR
Rev.	Rev. Date	Purpose of revision	Orig/Dwn	Checkd	Rev'd	Apprv'd

**Jacobs AECOM**

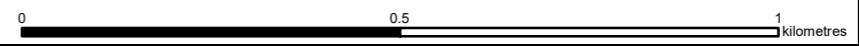


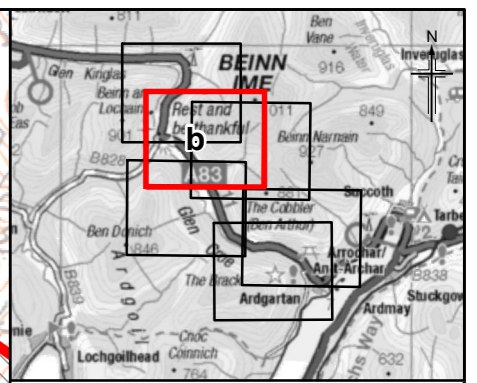
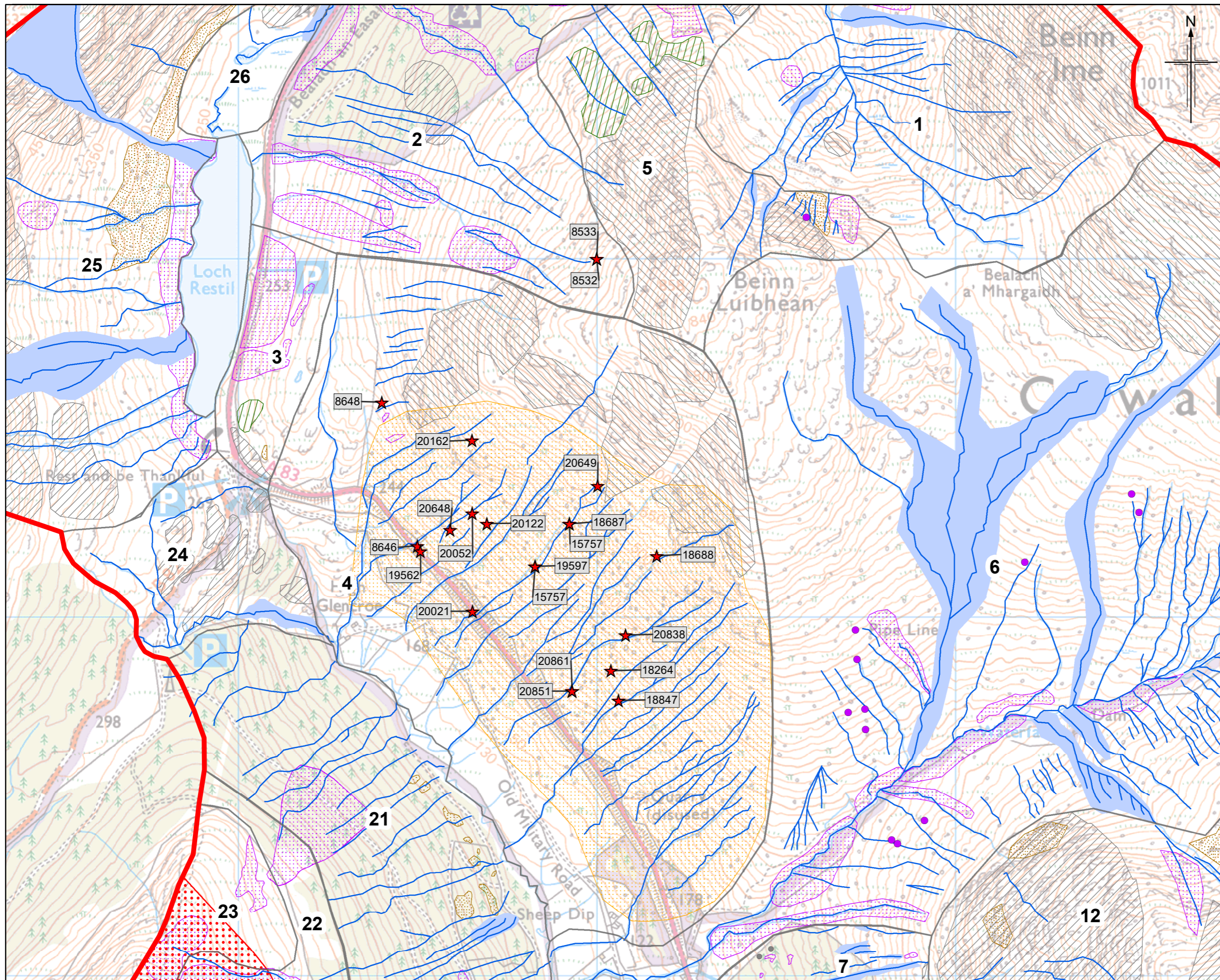
Client  
Project  
Drawing title  
**DMRB STAGE 1 ASSESSMENT  
FIGURE 9A  
GEOTECHNICAL CONSTRAINTS PLAN**

Sheet 01 of 06

Drawing Status	<b>A1 - ACCEPTED - BRIEF</b>	Suitability	<b>A1</b>
Scale	<b>1:10,000 @ A3</b>	DO NOT SCALE	
Jacobs No.	<b>B2356701</b>		
Client No.			
Drawing number	<b>A83AAB-JAC-HGT-COR_01-DR-CE-0004</b>	Rev	<b>C02</b>

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C02	29/04/2021	Issued to Client				
		Purpose of revision	Orig/Dwn	Checkd	Rev'd	Apprv'd

**JACOBS AECOM**

Client: **TRANSPORT SCOTLAND**  
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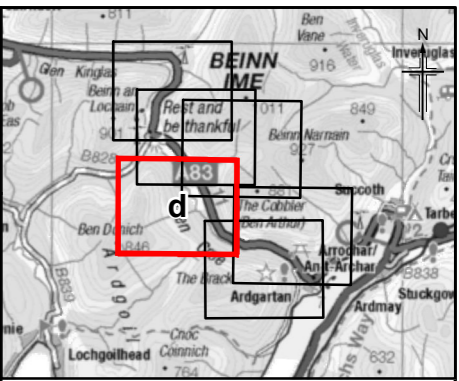
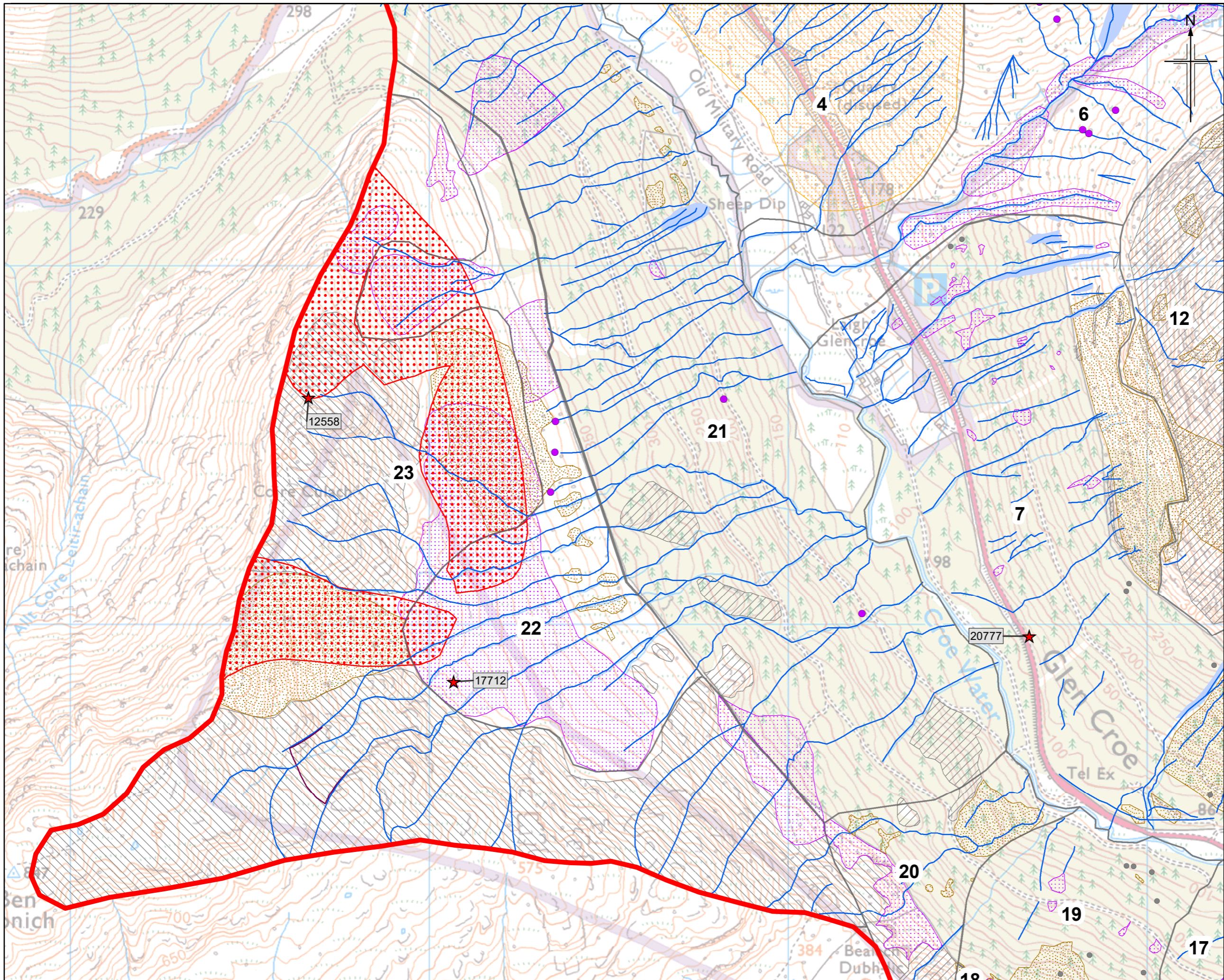
Project: **ACCESS ARGYLL & BUTE [A83]**

Drawing title: **DMRB STAGE 1 ASSESSMENT  
FIGURE 9B  
GEOTECHNICAL CONSTRAINTS PLAN**

Sheet 02 of 06

Drawing Status: <b>A1 - ACCEPTED - BRIEF</b>	Suitability: <b>A1</b>
Scale: <b>1:10,000 @ A3</b>	<b>DO NOT SCALE</b>
JACOBS No. <b>B2356701</b>	
Client No.	
Drawing number: <b>A83AAB-JAC-HGT-COR_01-DR-CE-0005</b>	Rev: <b>C02</b>





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**Jacobs AECOM**

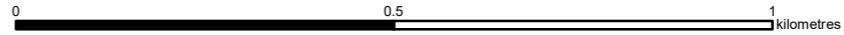


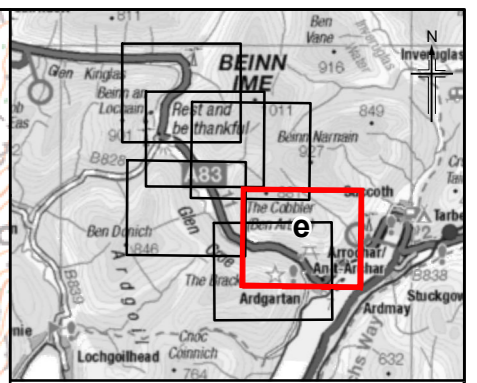
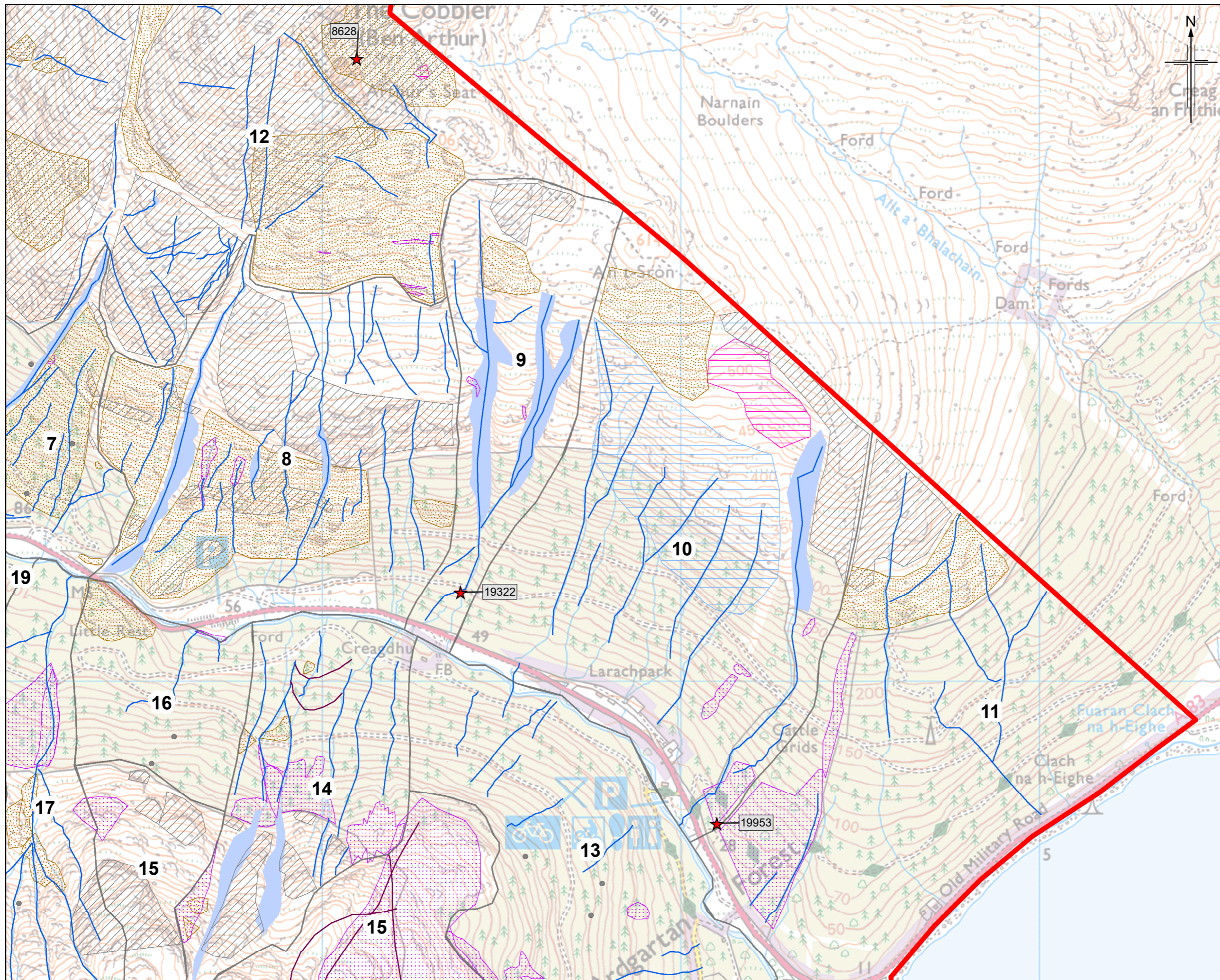
Client  
Project  
Drawing title  
**DMRB STAGE 1 ASSESSMENT  
FIGURE 9D  
GEOTECHNICAL CONSTRAINTS PLAN**

Sheet 04 of 06

Drawing Status	<b>A1 - ACCEPTED - BRIEF</b>	Suitability	<b>A1</b>
Scale	<b>1:10,000 @ A3</b>	DO NOT SCALE	
Jacobs No.	<b>B2356701</b>		
Client No.			
Drawing number	<b>A83AAB-JAC-HGT-COR_01-DR-CE-0007</b>	Rev	<b>C02</b>

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C02	29/04/2021	Issued to Client	RL	FCC	HJR	DR
Rev.	Rev. Date	Purpose of revision	Orig/Dwn	Checkd	Rev'd	Apprv'd

**Jacobs AECOM**

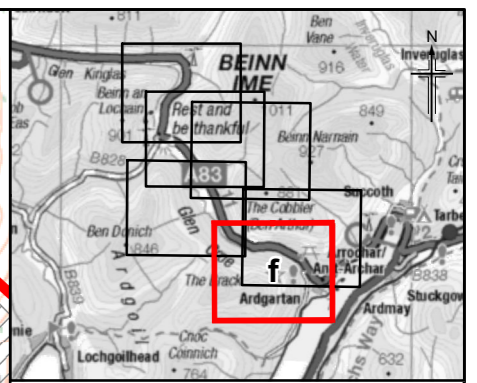
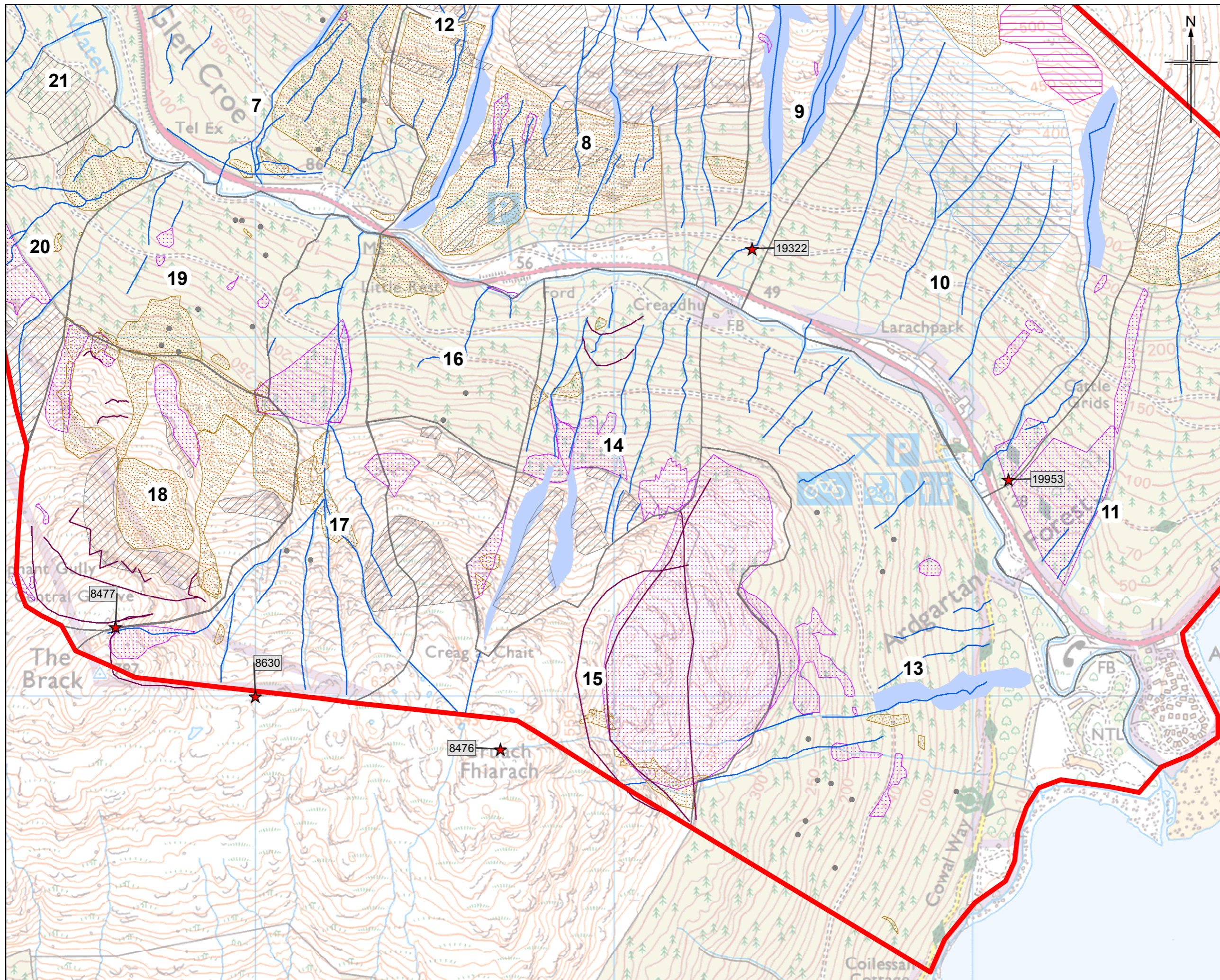
Client: **TRANSPORT SCOTLAND**  
CONFIDENTIAL ALBA

Project: **ACCESS ARGYLL & BUTE [A83]**

Drawing title: **DMRB STAGE 1 ASSESSMENT  
FIGURE 9E  
GEOTECHNICAL CONSTRAINTS PLAN**

Sheet 05 of 06

Drawing Status: <b>A1 - ACCEPTED - BRIEF</b>	Suitability: <b>A1</b>
Scale: <b>1:10,000 @ A3</b>	<b>DO NOT SCALE</b>
Jacobs No. <b>B2356701</b>	
Client No.	
Drawing number: <b>A83AAB-JAC-HGT-COR_01-DR-CE-0008</b>	Rev: <b>C02</b>



**Legend**

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C02	29/04/2021	Issued to Client				
Rev.	Rev. Date	Purpose of revision	Orig/Dwn	Checkd	Rev'd	Apprv'd

Sheet 06 of 06

**Jacobs AECOM**

Client: TRANSPORT SCOTLAND

Project: ACCESS ARGYLL & BUTE [A83]

Drawing title: **DMRB STAGE 1 ASSESSMENT  
FIGURE 9F  
GEOTECHNICAL CONSTRAINTS PLAN**

Drawing Status: <b>A1 - ACCEPTED - BRIEF</b>	Suitability: <b>A1</b>
Scale: <b>1:10,000 @ A3</b>	<b>DO NOT SCALE</b>
Jacobs No. <b>B2356701</b>	
Client No.	
Drawing number <b>A83AAB-JAC-HGT-COR_01-DR-CE-0009</b>	Rev <b>C02</b>

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Symbology	Feature	Feature Description
	Landslide	Landslide, as recorded by the BGS in the National Landslide Database.
	Failure location	Location where failure has, or may have, occurred.
	Boulders	Boulder visible on aerial / street-level imagery. Note that visibility of isolated objects is dependent on the resolution of the available imagery. Smaller boulders etc may also be present which may not be visible on the aerial imagery and may not have been highlighted.
	Scarp	Scarp indicating possible head of former failure.
	Channels	Channels evident on aerial photography, including watercourses which are shown on OS mapping and additional, unmapped, channels. Varying degrees of incision and erosion along the channels are evident in areas without forestry cover. Within forested areas, visibility is obscured and channels have been provisionally identified based on breaks / lines in the forest cover; these features will require validation through site inspection.
	Multiple small channels	Areas where many small channels are present in close proximity.
	Incised channels	Channels where there is evidence of significant incision and/or instability along the channel sides or in localised sections of the channel. Potentially indicative of high flows, erosion of side walls of the channel leading to localised sidewall collapse and transportation of resulting debris within the watercourse.
	Mass movement	Mass movement deposits, as recorded by the BGS.
	Possible failure area	Area where aerial imagery indicates a failure has, or may have occurred. This may include relatively recent failures, or older events which have been partially obscured by subsequent vegetation growth and/or erosion. Also included are areas which contain multiple potential failures. Evidence may include but not be limited to: areas of exposed soil, scarps, lobes of deposited material, localised depressions or other changes in surface appearance or texture. These features are associated with varying levels of confidence in the interpretation as they are based predominantly on aerial imagery. Provisional interpretation of features will be subject to validation by site inspection.
	Tension cracks, multiple scarps	Area with tension cracks and /or multiple scarps indicating downslope movement of the superficial deposits.
	Possible soil creep	Area where aerial imagery indicates soil creep may have occurred.
	Debris and Boulders	Area with boulders / debris evident on the surface. Concentration of boulders may vary between significant deposits beneath rock crags to sparsely scattered boulders.
	Rock crags and Rock scarps	Area with continuous or numerous rock crags / exposures visible on aerial / street-level imagery. Includes crags and rock exposures of varying relief / prominence / rock mass conditions.
	Rock crags and Boulders	Area with numerous rock crags / exposures interspersed with frequent boulders.
	Southwest facing slopes of Beinn Luibhean	Area comprising numerous incised channels which have been subject to erosion and debris flow events. Changes in drainage regime result in variations in channel morphology and path; the channels presented in this zone are indicative and may have changed since the date of the aerial photography. Evidence of former failure areas of a range of ages, with varying degrees of revegetation and overprinting by later failure events.

General Note: These features have been identified by a review of aerial imagery (Google Earth) and, where applicable, street-level imagery (Google Streetview). Images of different ages have been reviewed and due to varying lighting conditions, cloud cover and image resolution, visibility of some features may have been affected or obscured. In particular, small features, e.g. boulders, may not be visible on aerial imagery. Dense forest cover also limits the visibility of surface features, and potential features of interest in these areas will be subject to validation by site inspection. In this type of dynamic environment, it is to be expected that changes will have occurred, and additional slips / failures may have occurred since the date of the aerial imagery. The interpretation of features from aerial imagery alone is subject to a degree of uncertainty. For clarity of presentation, features of a similar type but with varying certainty of identification have been grouped in the same category. For example, clearly visible former slope failures have been included in the same category as 'possible failure areas' for which the interpretation is less certain.

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**Jacobs AECOM**



Drawing title  
**DMRB STAGE 1 ASSESSMENT  
 FIGURE 9  
 GEOTECHNICAL CONSTRAINTS PLAN  
 KEY SHEET**

Drawing Status	<b>A1 - ACCEPTED - BRIEF</b>	Suitability	<b>A1</b>
Scale	<b>DO NOT SCALE</b>		
Jacobs No.	<b>B2356701</b>		
Client No.			
Drawing number	<b>A83AAB-JAC-HGT-COR_01-DR-CE-0010</b>	Rev	<b>C02</b>