



**Advance**  
Consulting Engineers Ltd

**NEW CONSTRUCTION ACCESS ONTO  
GOTHERS ROAD AT TRELAVOUR QUARRY,  
ST DENNIS, ST AUSTELL, PL26 8DL**

Access Appraisal

*for*



Cornish Lithium

November 2023

# DOCUMENT CONTROL SHEET

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## Project Summary

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A	Preliminary	Harry Skinner	Marc Jones	Mark Rowe	08/08/2023	DRAFT - For Client Team Comment
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## 1. INTRODUCTION

### 1.1 Overview

1.1.1 This Access Appraisal (AA) has been prepared by Advance Consulting Engineers Ltd on behalf of Cornish Lithium and is intended to support a retrospective application for a new construction access point via an existing access onto Gothers Road at Trelavour Quarry, St Dennis, St Austell, PL26 8DL.

1.1.2 The AA is structured to provide details on the following key sections: -

- Planning History;
- Transport Policy / Guidance;
- Site Location, Existing Conditions & Highway Safety;
- Cornish Lithium, Access Arrangements & Swept Path (Vehicle Tracking) Analysis; and
- Summary & Conclusions.

1.1.3 Overall, the content set out within this AA seeks to provide the Local Planning Authority (LPA) and the Local Highway Authority (LHA), both being Cornwall Council (CC), with the reassurance that safe and suitable access can be achieved onto Gothers Road and why there would be no material highways matters that would preclude the new construction access from being approved on highways grounds.

### 1.2 Planning History

1.2.1 The historic planning history associated with Trelavour Quarry is briefly summarised below: -

- **NR/07/00474/ROMPS:** Determination of new conditions on existing mineral planning permissions;
- **C2/07/01349:** Determination of new conditions on existing mineral planning permissions;
- **PA12/04447:** Application for postponement of the first review data under Paragraph 5 of Schedule 14 to the Environmental Act 1995;
- **PA12/11746:** Scoping opinion for future development;
- **PA13/01142:** St Austell China Clay ROMP Review; and
- **PA21/00733:** EIA Scoping Opinion Request for St Austell China Clay Area ROMP.

### 1.3 Transport Policy & Guidance

1.3.1 The transport policy & guidance considered applicable to the new construction access point onto Gothers Road that have been considered / reviewed are summarised as follows: -

#### National Policy

- National Planning Policy Framework (NPPF) (July 2021); and
- Manual for Streets 1 & 2 (MfS / MfS2) (2007 / 2010).

#### Local Policy

- CC Local Plan (2010 - 2030) - Adopted 22<sup>nd</sup> of November 2016;
- CC Development Layout Design Guide (June 2012); and
- Cornwall Design Guide (December 2021).

## 2. SITE LOCATION & EXISTING CONDITIONS

### 2.1 Site Location

2.1.1 Trelavour Quarry comprises of the former ‘Operational Area 4A - Trelavour’ of the wider St Austell China Clay works. An extract from the ‘PA21/00733’ planning application is presented in **Figure 2.1**.

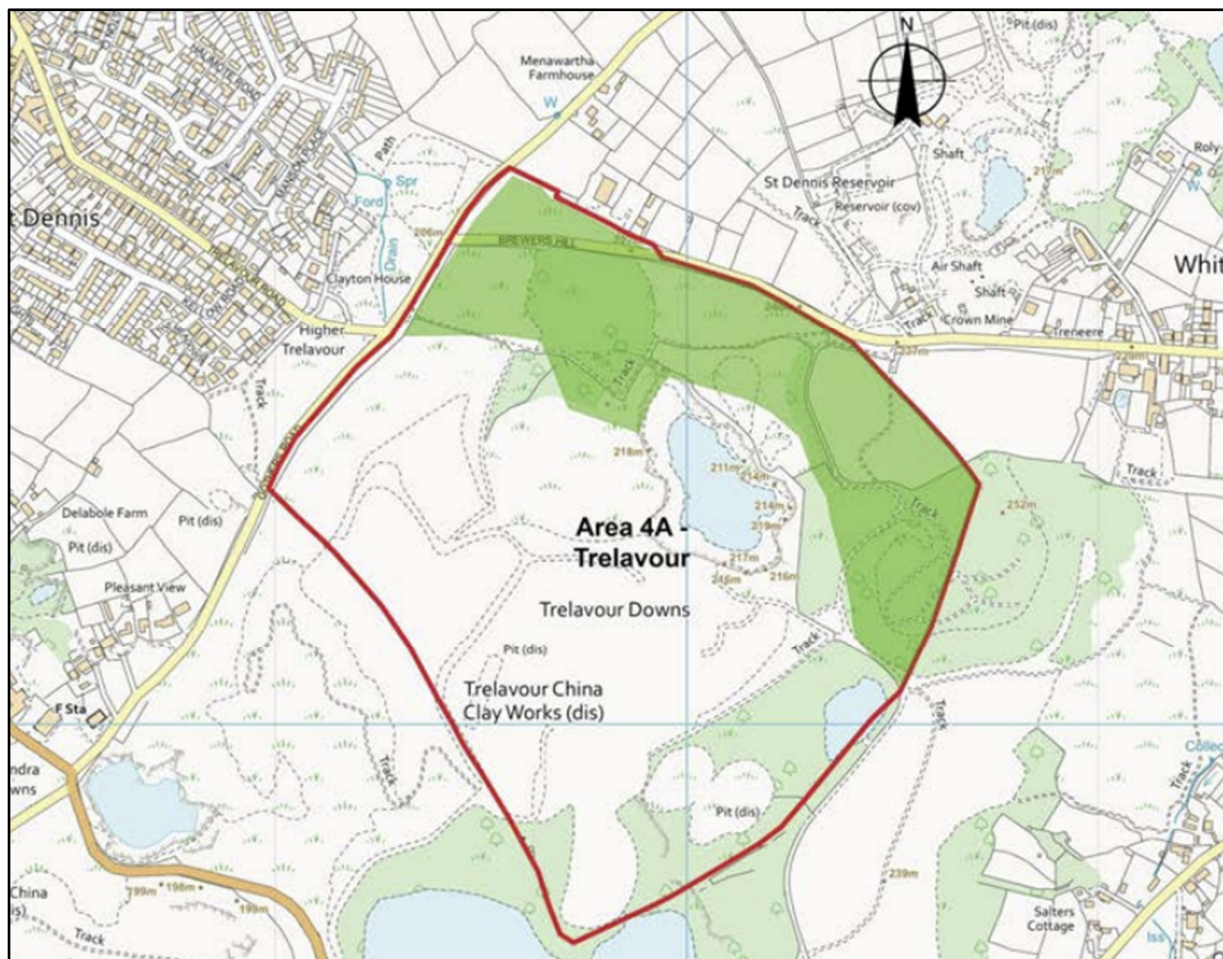


Figure 2.1: Operational Area 4A - Trelavour (Source: EIA Scoping Opinion, 2020)

2.1.2 Trelavour Quarry is bound to the north by Brewers Hill, to the east and south by a mixture of heathland, scrub & grassland and to the west by Gothers Road. The new construction access point onto Gothers Road has been provided at the western corner of the site, which formerly comprised of an existing & established gated access point surrounded by heathland for the former China Clay works.

### 2.2 Local, Primary & Strategic Road Network (SRN)

2.2.1 Gothers Road comprises of a single carriageway ‘C-Road’, which forms the western boundary of Trelavour Quarry. Gothers Road extends in a north-east to south-west alignment between Cleers Hill to the north-east and the B3279 (Hendra Road) to the south-west.

2.2.2 Gothers Road is subject to the National Speed Limit (NSL), which reduces to a 50mph speed limit where Gothers Road adjoins the B3279 (Hendra Road) at the crossroads junction arrangement with Rostowrack Downs. Gothers Road provides an average carriageway width of 5.5m in the immediate vicinity of the new construction access point.

2.2.3 The nearest point of access onto the A30(T), which forms part of the SRN, is provided approximately 4.4km (2.7 miles) to the north-west via the via Highgate Hill Roundabout. Access is also available approximately 9.2km (5.7 miles) to the north-east via the Victoria Interchange.

2.2.4 **Figure 2.2** illustrates the location of Trelavour Quarry in relation to the surrounding area and highway network.

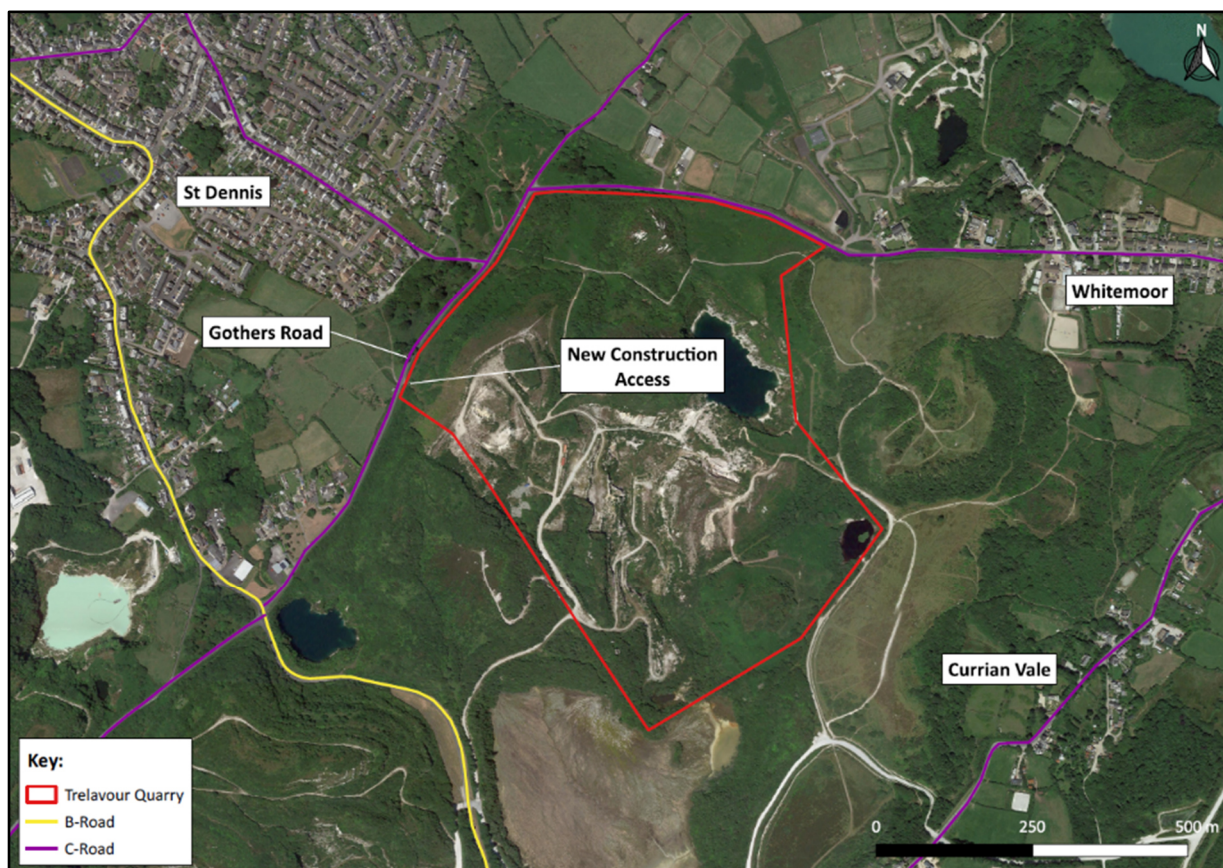


Figure 2.2: Site Location & Highway Network

## 2.3 Highway Safety

2.3.1 A brief review of Personal Injury Accident (PIA) data has been undertaken in close proximity to Trelavour Quarry covering the latest available five-year period (2017 - 2021). It is apparent that no PIA incidents have occurred upon Gothers Road along the western boundary of Trelavour Quarry.

2.3.2 Therefore, it is evident that the local highway network operates in a low-risk manner that is unlikely to be exacerbated by a new construction access point onto Gothers Road.

## 3. CORNISH LITHIUM, PROPOSED ACCESS ARRANGEMENTS & VEHICLE TRACKING

### 3.1 Overview

3.1.1 This section will assess the new construction access point onto Gothers Road to ensure that access arrangements are suitable to serve the lithium works on-site. Any site access will be approximately designed within the site ownership associated with the Trelavour Pit.

3.1.2 **Figure 3.1** illustrates the Trelavour Pit Lease Boundary (red) and the Trelavour Pit Additional Lease Area (blue), provided by our client, Cornish Lithium.



Figure 3.1: Trelavour Pit Boundary (Source: Cornish Lithium, 2023)

## 3.2 Trelavour Hard Rock Lithium Project

3.2.1 The Cornish Lithium Trelavour Hard Rock Project is identified as follows: -

*“The Trelavour Project repurposes a former kaolin pit near St Austell where lithium is present in mica minerals within the granite.”*

3.2.2 Cornish Lithium commenced on-site surface exploration during 2018 & 2019, following initial work identifying Trelavour Quarry as a ‘high-priority’ site for lithium exploration and development. Initial drilling in 2020 confirmed the presence of pervasive lithium mineralisation. Cornish Lithium plan to initiate production in 2026.

3.2.3 Further information regarding the Trelavour Hard Rock Lithium Project can be found at <https://cornishlithium.com/projects/lithium-in-hard-rock/trelavour/>.

## 3.3 Proposed Vehicular Access Arrangements

### Proposed Access Arrangements

3.3.1 Cornish Lithium undertook works to improve the existing gated access point to form a new construction access at the western corner of the site. Whilst the works have already been completed, this retrospective application will seek to improve the new arrangement in line with the requirements set out within the CC Development Layout Design Guide (June 2012).

3.3.2 The new construction access will provide a 7.7m carriageway width and a junction radii of 10.0m northern radius and 8.0m on the southern radius. Whilst the carriageway width slightly exceeds the 7.3m requirement for a major industrial access road, the proposed carriageway has been proposed to accord with the width of the recently constructed gated arrangement situated approximately 30.0m to the east of Gothers Road.

3.3.3 **Figure 3.2** illustrates the newly constructed gated access point.



Figure 3.2: Newly Constructed Access Gate (Source: Site Visit, June 2023)

3.3.4 The first 10.0m of the access road will not exceed a 1:20 gradient and the bellmouth of the junction will comprise of a tarmac / concrete apron to ensure that no loose material will enter the public highway. The remainder of the construction access will comprise of compacted gravel / aggregate.

3.3.5 A 1.5m concrete rumble strip will be provided to segregate the tarmac / concrete and compacted gravel / aggregate surface, which will also remove any loose material from vehicles departing the site before they adjoin Gothers Road.

3.3.6 As the existing gated access point was an established access which served the former China Clay works at Trelavour Pit, it is considered that the improved arrangements to form a new construction access are suitable to serve the new Cornish Lithium works on-site.

3.3.7 **Figure 3.3** overleaf illustrates the existing gated access point associated with the former China Clay works at Trelavour Pit.





Figure 3.3: Existing / Established China Clay Access (Source: Google Streetview, August 2009)

#### General Arrangement (GA) Plan

- 3.3.8 The 'General Arrangement (GA) Plan', which illustrates the improved construction access point onto Gothers Road in relation to the recently constructed arrangement, is shown on Drawing No. **C23105-TP001(B)** and is available to view within **Appendix A**.

#### 3.4 Swept Path Analysis

- 3.4.1 A swept path assessment demonstrates the ability of a 'Max Legal Length Articulated Vehicle (16.5m)' and a 'Low Loader (15.5m)' to enter and exit the new vehicular access point via Gothers Road in a forward gear. The 'Swept Path Analysis Plan', shown on Drawing No. **C23105-SPA001(A)**, is available to view within **Appendix B**.
- 3.4.2 Overall, the swept path analysis plans demonstrate that the new construction access arrangements are suitable to serve the lithium works on-site.

### 4. SUMMARY & CONCLUSIONS

- 4.1.1 This AA has been prepared by Advance Consulting Engineers Ltd on behalf of Cornish Lithium and is intended to support a new construction access point onto Gothers Road at Trelavour Quarry, St Dennis, St Austell, PL26 8DL.
- 4.1.2 Cornish Lithium undertook works to improve the existing gated access point to form a new construction access at the western corner of the site. Whilst the works have already been completed, this retrospective application will seek to improve the new arrangement in line with the requirements set out within the CC Development Layout Design Guide (June 2012).
- 4.1.3 The key points outlined and assessed within this AA are provided below: -



### Proposed Vehicular Access Arrangements

- The new construction access will provide a 7.7m carriageway width and a junction radii of 10.0m northern radius and 8.0m on the southern radius. Whilst the carriageway width slightly exceeds the 7.3m requirement for a major industrial access road, the proposed carriageway has been proposed to accord with the width of the recently constructed gated arrangement situated approximately 30.0m to the east of Gothers Road;
- The first 10.0m of the access road will not exceed a 1:20 gradient and the bellmouth of the junction will comprise of a tarmac / concrete apron to ensure that no loose material will enter the public highway. The remainder of the construction access will comprise of compacted gravel / aggregate;
- A 1.5m concrete rumble strip will be provided to segregate the tarmac / concrete and compacted gravel / aggregate surface, which will also remove any loose material from vehicles departing the site before they adjoin Gothers Road;
- As the existing gated access point was an established access which served the former China Clay works at Trelavour Pit, it is considered that the improved arrangements to form a new construction access are suitable to serve the new Cornish Lithium works on-site; and

### Swept Path Analysis

- A swept path assessment successfully demonstrates the ability of a 'Max Legal Length Articulated Vehicle (16.5m)' and a 'Low Loader (15.5m)' to enter and exit the new construction access point via Gothers Road in a forward gear. The swept path analysis demonstrates that the new construction access arrangements are suitable to serve the lithium works on-site.

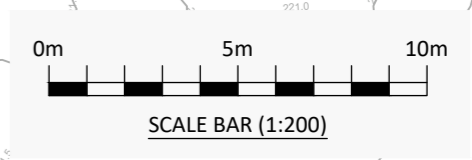
4.1.4 To conclude, this AA provides the LPA & LHA (CC) with the reassurance that safe and suitable access can be achieved at the site and why there would be no material highways matters that would preclude a new construction access point onto Gothers Road from being approved on highways grounds, in accordance with 'Policy 27: Transport and accessibility' of the Cornwall Local Plan and Paragraphs. 104, 110, 111 & 113 of the NPPF: -

*"Safe and suitable access to the site can be achieved for all users".*





**Advance Consulting Engineers Ltd**



# Appendix A General Arrangement (GA) Plan



**KEY PLAN**

-  Proposed Concrete / Tarmac Apron
-  Proposed Kerb Line
-  Site Ownership Boundary
-  Application Boundary

- NOTES**
1. All dimensions are to be checked on site before the commencement of works. Any discrepancies are to be reported to the Architect & Engineer for verification.
  2. This drawing is to be read in conjunction with all relevant Engineers' and Service Engineers' drawings and specifications. This drawing is copyright.
  3. All levels are shown in metres above ordnance datum.
  4. No liability is accepted for errors incurred through scaling from this drawing.
  5. Red line boundary provided by the client.

The bellmouth of the junction will comprise of a tarmac / concrete apron, which will ensure that no loose material will enter the public highway.

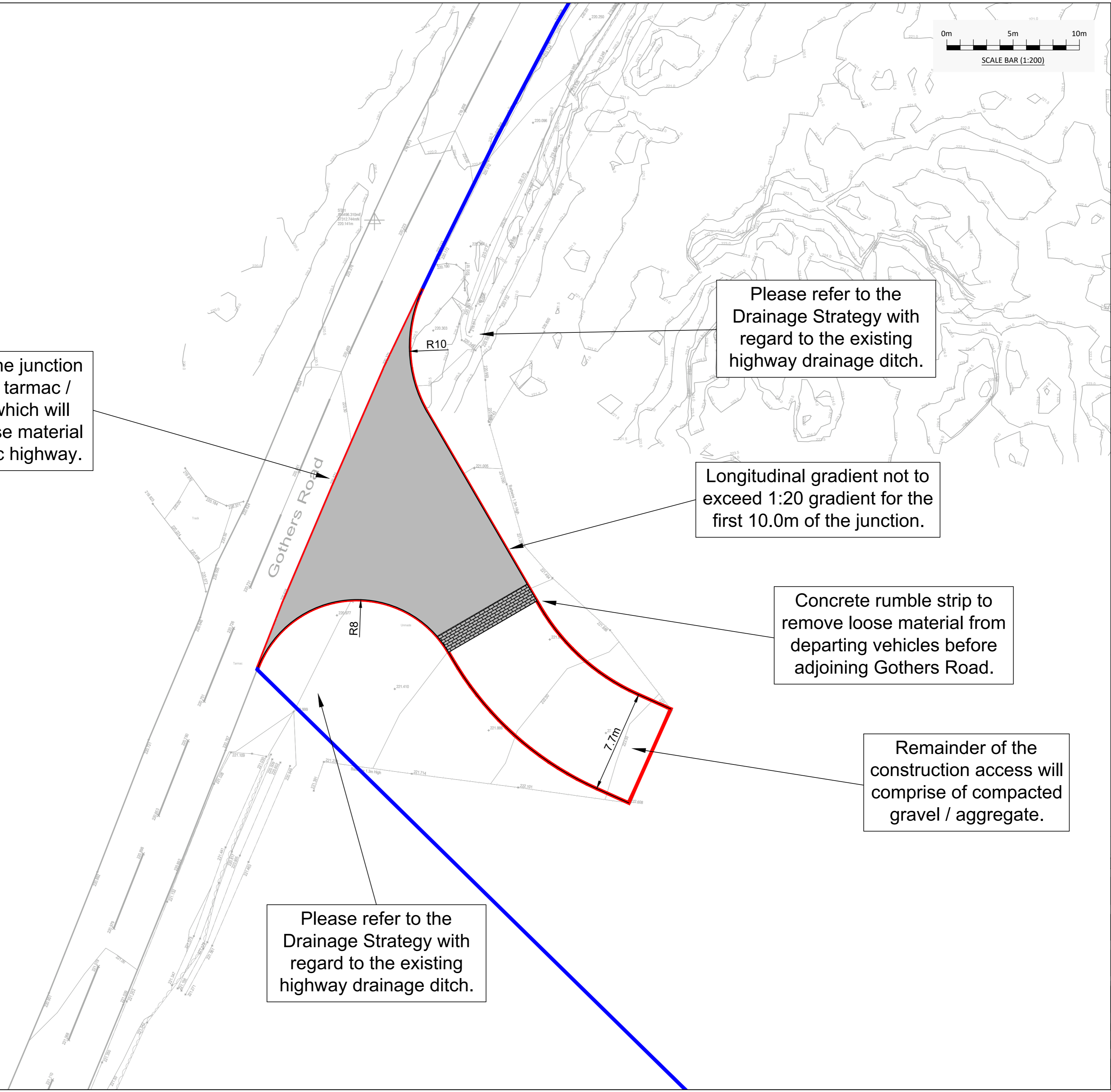
Please refer to the Drainage Strategy with regard to the existing highway drainage ditch.

Longitudinal gradient not to exceed 1:20 gradient for the first 10.0m of the junction.

Concrete rumble strip to remove loose material from departing vehicles before adjoining Gothers Road.

Remainder of the construction access will comprise of compacted gravel / aggregate.

Please refer to the Drainage Strategy with regard to the existing highway drainage ditch.



**REVISIONS**

ALTERATIONS TO THE APPLICATION & SITE OWNERSHIP BOUNDARIES			
B	H. SWINNEY	27/11/23	IN NOW
PRELIMINARY			
A	H. SWINNEY	08/08/23	IN NOW

REV	REVISION NOTES	DATE	APPROVED BY	DATE

**Advance**  
Consulting Engineers Ltd

**CLIENT**  
Cornish Lithium

**PROJECT**  
TRELAVOUR QUARRY, ST DENNIS,  
ST AUSTELL, PL26 8DL

**DRAWING TITLE**  
GENERAL ARRANGEMENT PLAN -  
PROPOSED CONSTRUCTION ACCESS  
POINT ONTO GOTHERS ROAD

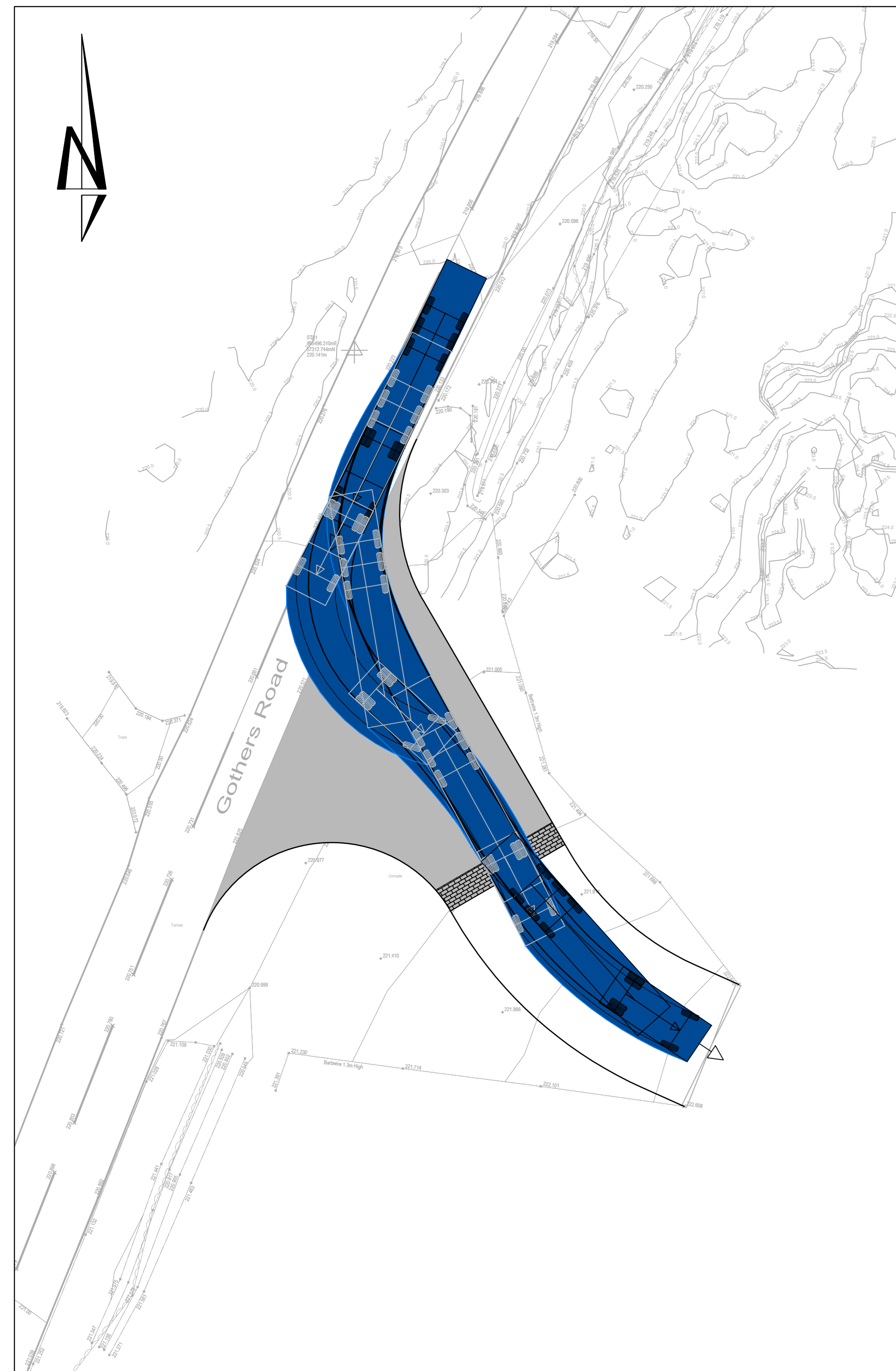
**PROJECT NO.** C23105      **SCALE @ AS** 1:200

**DRAWING STATUS** PRELIMINARY

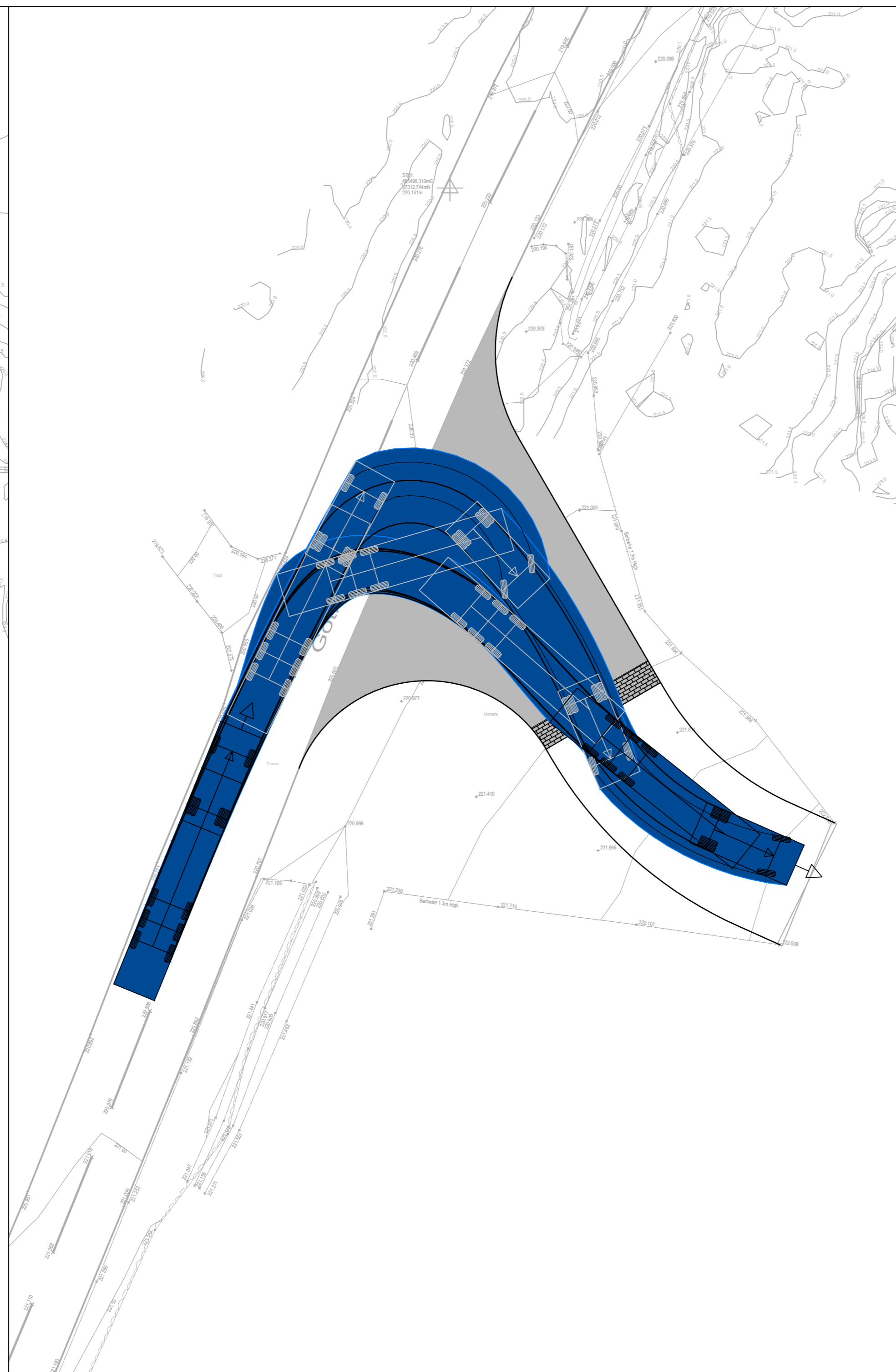
**DRAWING NO.** C23105-TP001      **REVISION** B



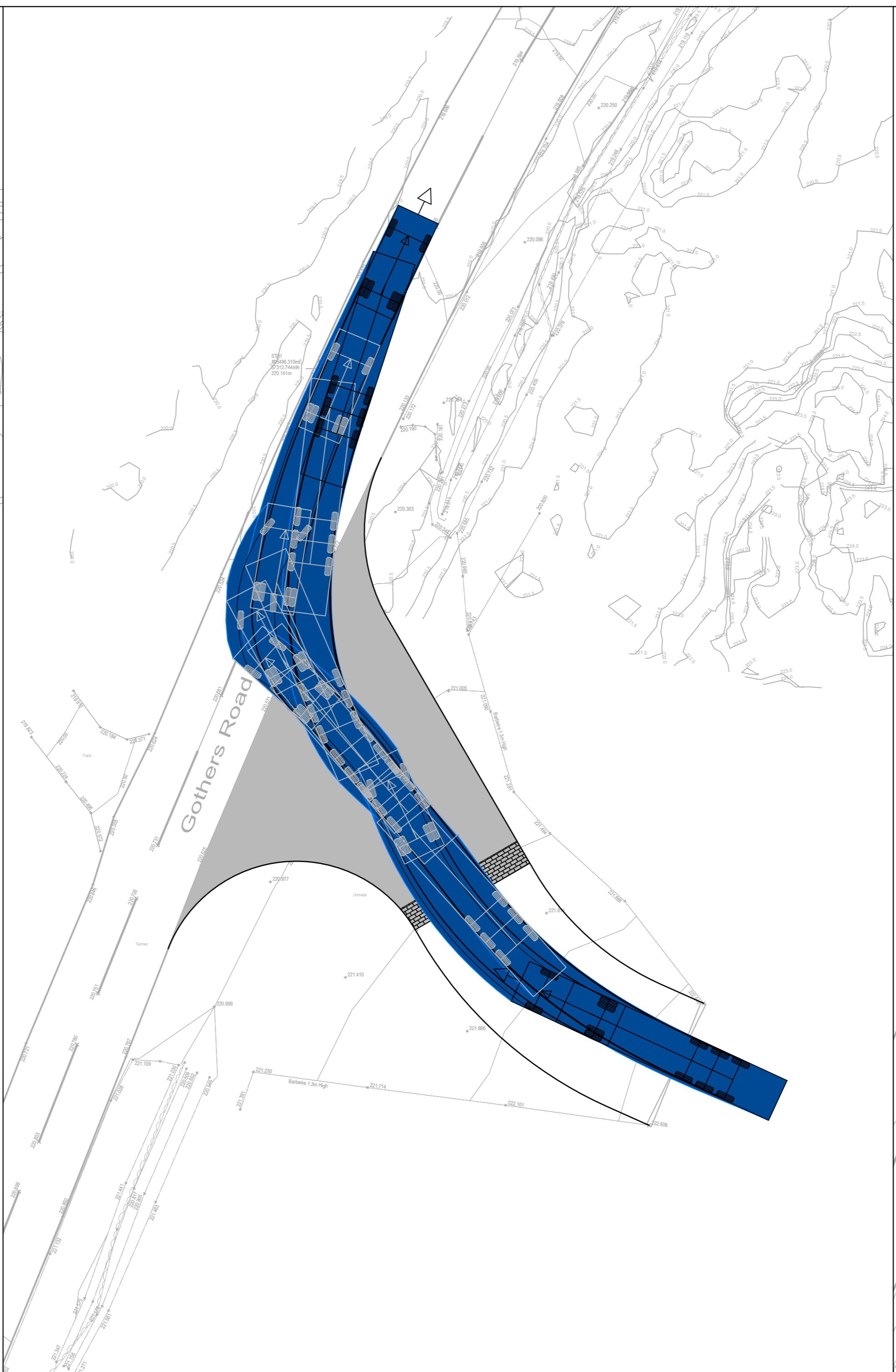
## Appendix B Swept Path Analysis Plan



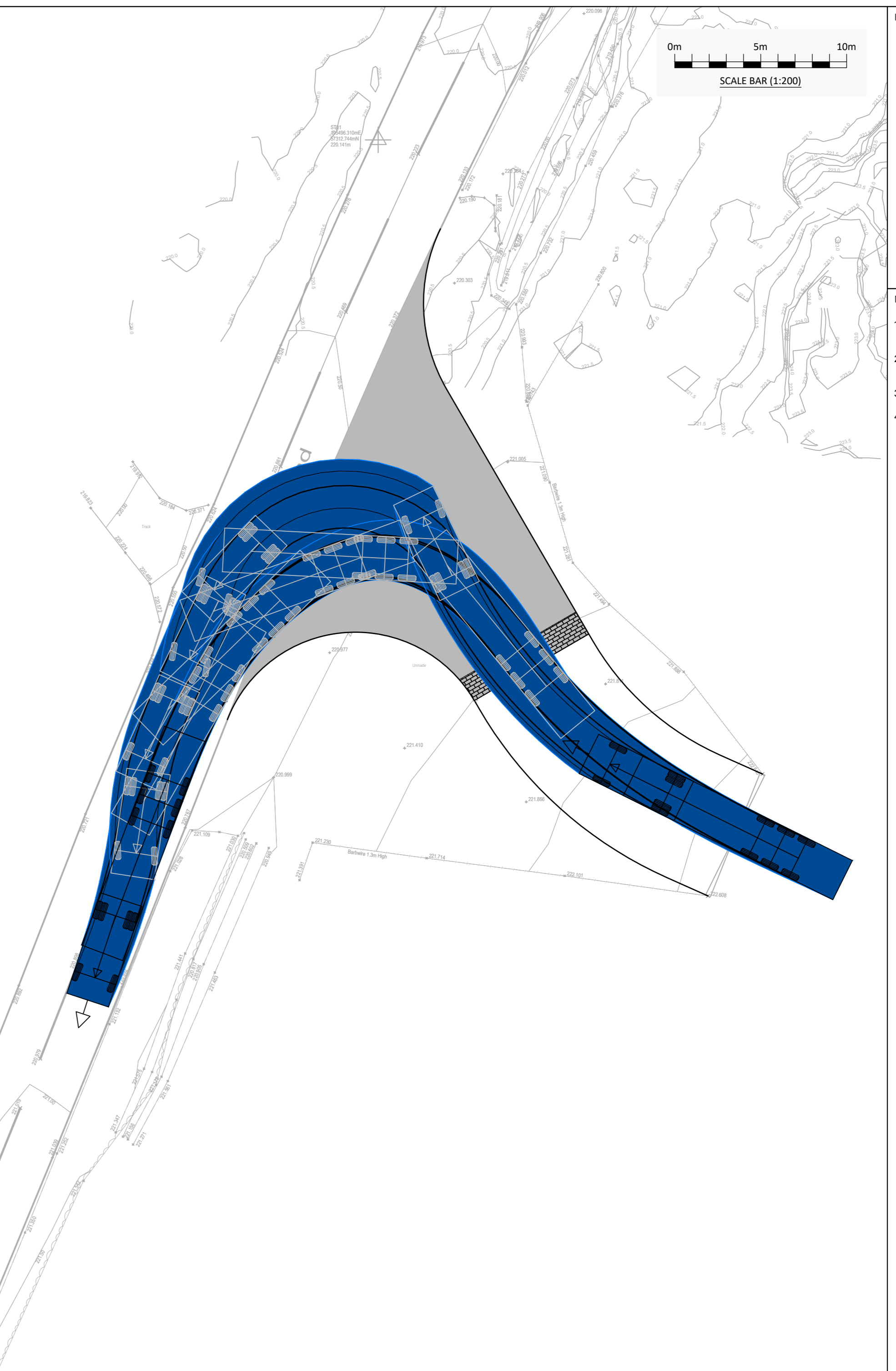
16.5m ARTICULATED VEHICLE ENTERING THE JUNCTION FROM THE NORTH.



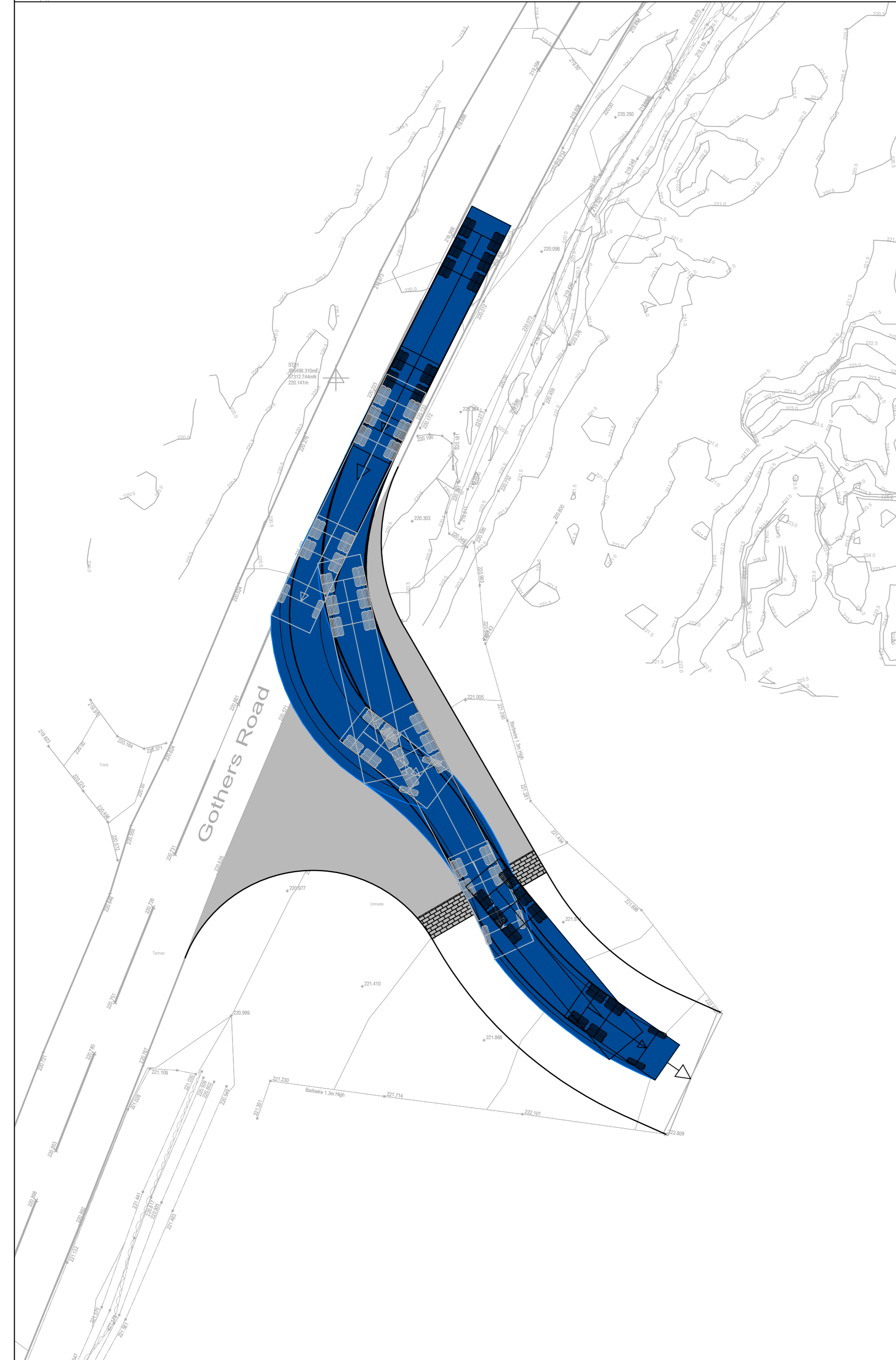
16.5m ARTICULATED VEHICLE ENTERING THE JUNCTION FROM THE SOUTH.



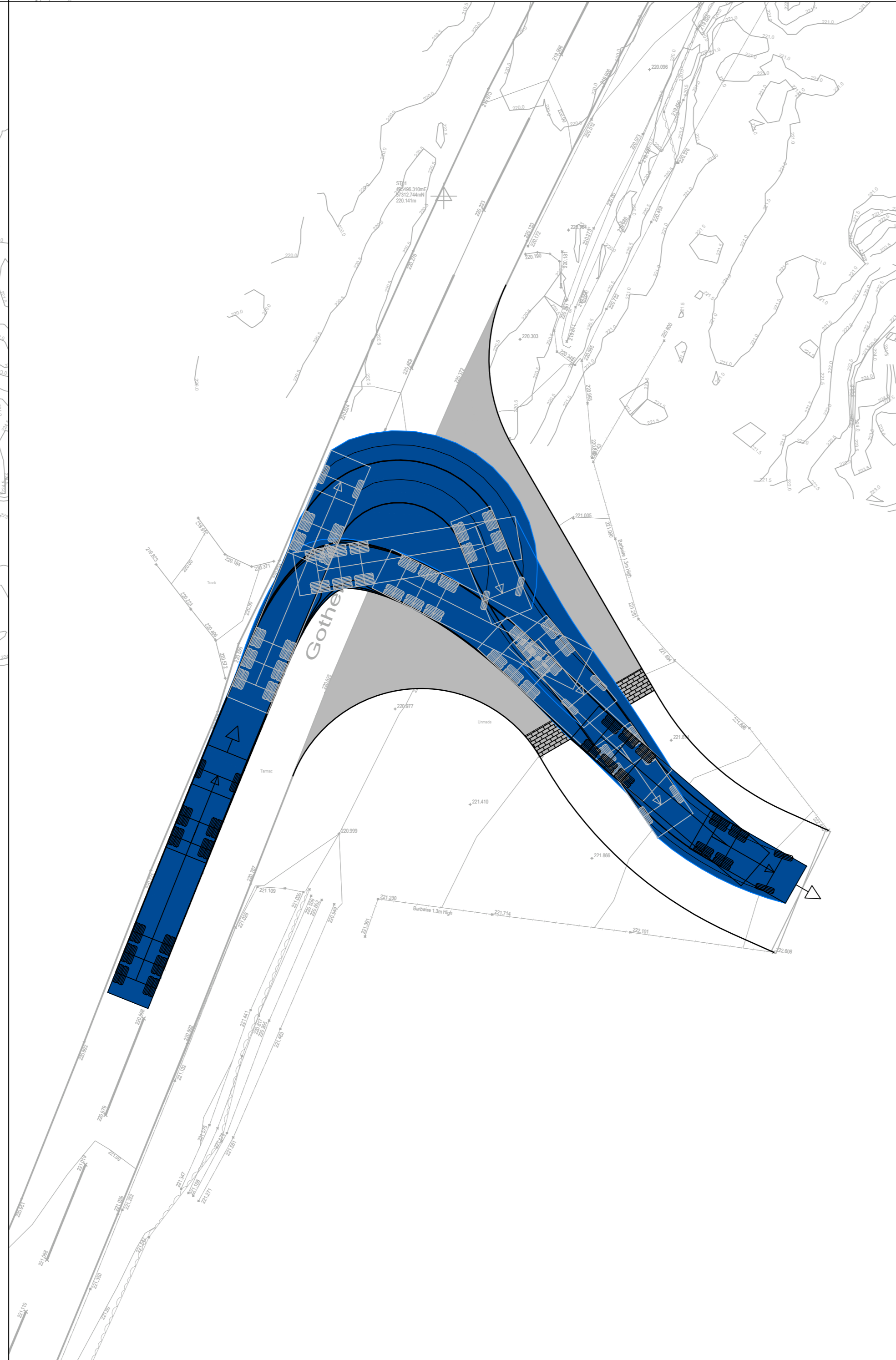
16.5m ARTICULATED VEHICLE EGRESSING THE JUNCTION TO THE NORTH.



16.5m ARTICULATED VEHICLE EGRESSING THE JUNCTION TO THE SOUTH.



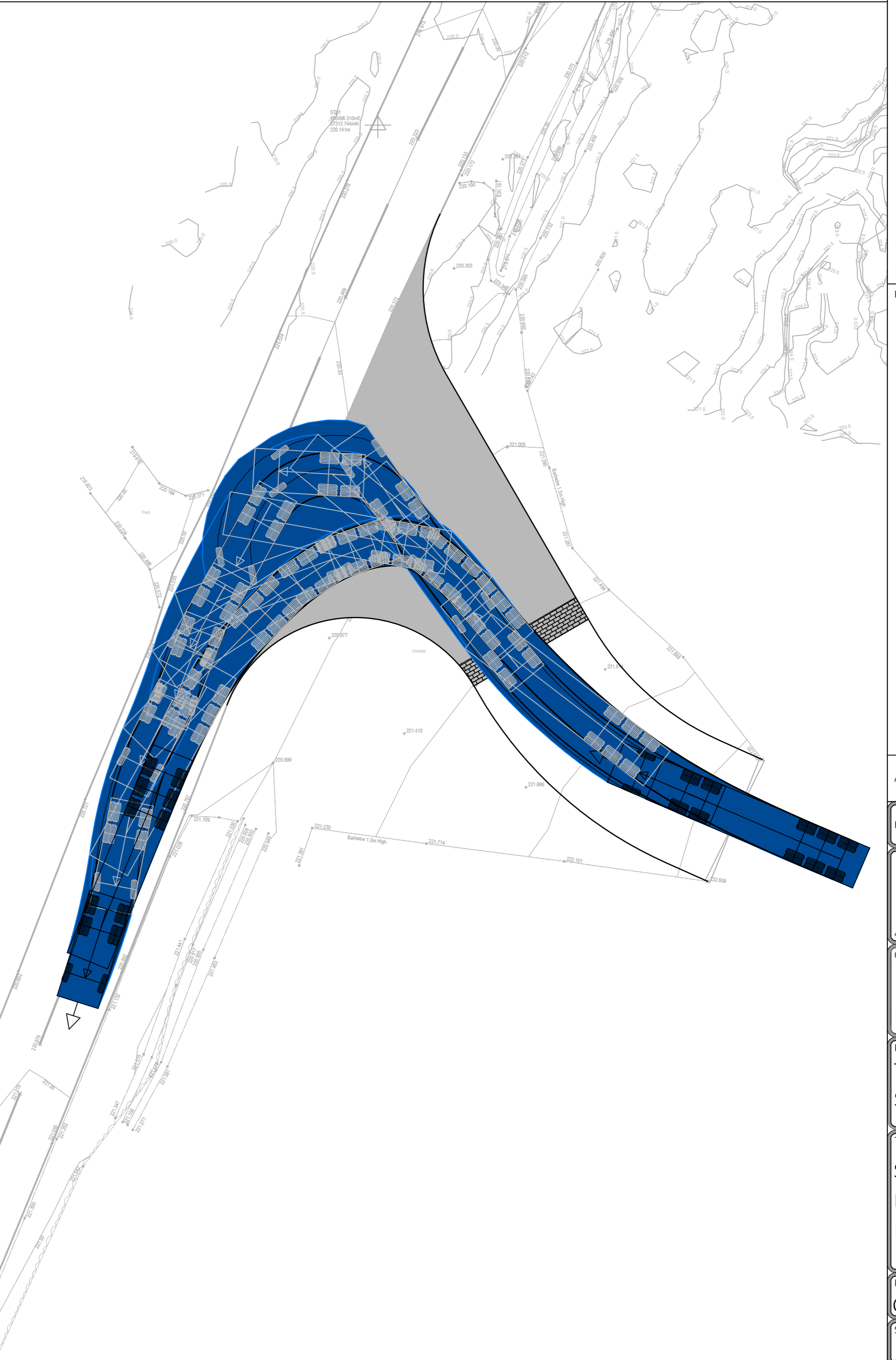
15.5m LOW LOADER VEHICLE ENTERING THE JUNCTION FROM THE NORTH.



15.5m LOW LOADER VEHICLE ENTERING THE JUNCTION FROM THE SOUTH.



15.5m LOW LOADER VEHICLE EGRESSING THE JUNCTION TO THE NORTH.



15.5m LOW LOADER VEHICLE EGRESSING THE JUNCTION TO THE SOUTH.

KEY PLAN

- NOTES
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REVISIONS

NO.	DESCRIPTION	DATE	BY	APP'D

PRELIMINARY	06/06/23	M. ROWE	06/06/23
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DRAWN BY	DATE	APPROVED BY	DATE

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**Project**  
TRELAVOUR QUARRY, ST DENNIS,  
ST AUSTELL, PL26 8DL

**Title**  
SWEEP PATH ANALYSIS PLAN -  
PROPOSED CONSTRUCTION ACCESS  
POINT ONTO GOTHERS ROAD

PROJECT NO. C23105 SCALE @ A0 1:200

STATUS DESCRIPTION PRELIMINARY

DRAWING NO. C23105-SPA001 REVISION A