

Our Ref: 784-B041101

Glen Beattie
Alpha Design
By email only

22 November 2022

Dear Glen

**SUBJECT: DESIGNER'S RESPONSE TO STAGE 1 RSA AT STATION YARD, MOOR
ROW**

I write following the Stage 1 Road Safety Audit undertaken by Nicholson Sloan Consultancy of the proposed new access and associated works for the proposed residential development at Station Yard, Moor Row.

The Audit, which is attached, makes a total of 5 recommendations. The recommendations are all minor in nature; they are accepted and can be included either within amendments to the proposals now or incorporated at the detailed design stage. Where relevant, amendments have been made to the layout drawing, as shown in 784-B041101-TTE-00-XX-DR-O-0001-P03, which is attached. Our Designer's Response to the points raised is summarised in the table below.

Yours sincerely

Eleanor Bunn

Senior Transport Planner
Highways & Transport Planning

Tetra Tech Group Limited. Registered in England number: 6595608

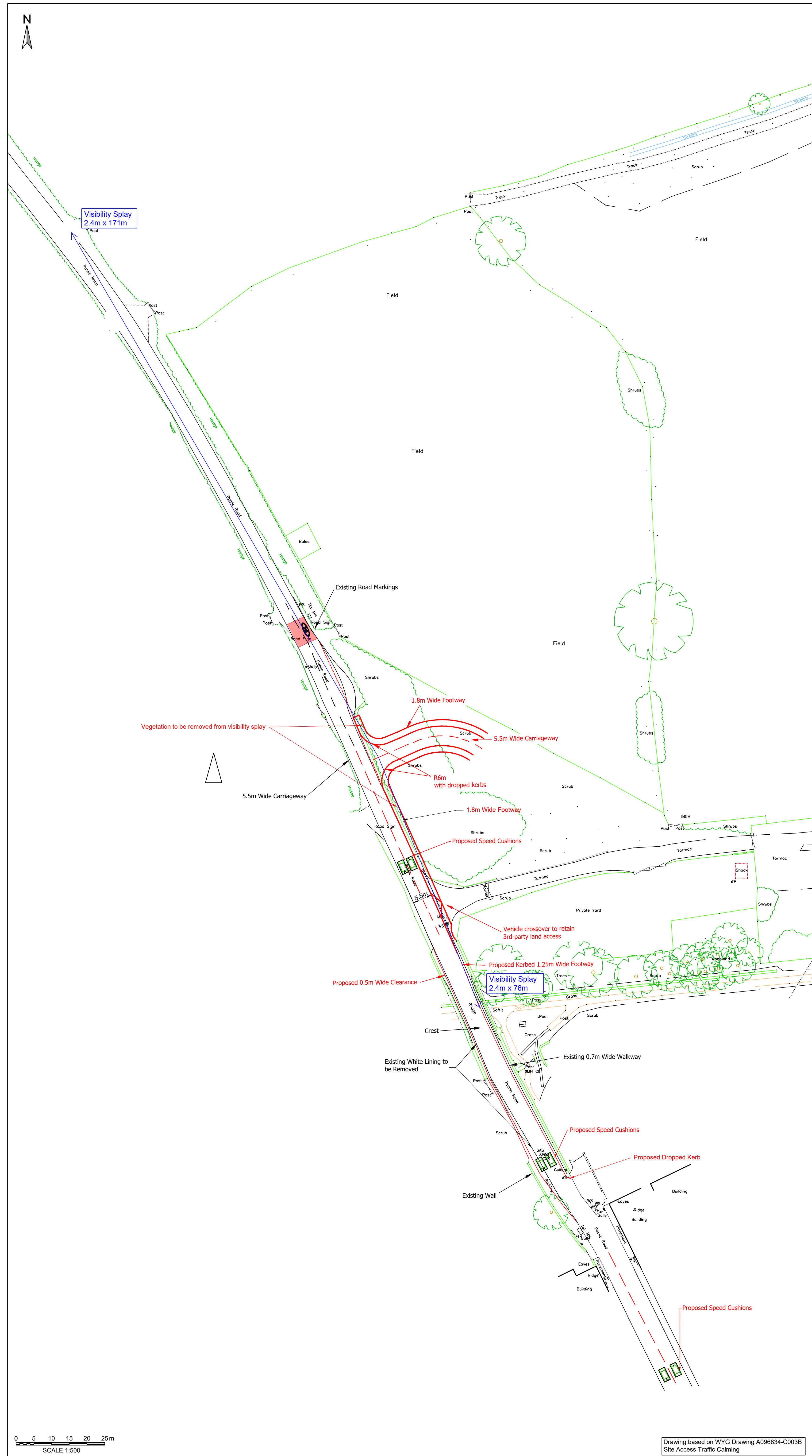
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784-B041101

Audit Reference	Problem Summary and Recommendation	Designer's Response
3.1	<u>Location:</u> The junction of the development access road with Dalzell Street. <u>Summary:</u> Maintaining adequate visibility at the junction could reduce the risk of turning collisions. Although visibility splays are shown on the drawing, there is a substantial length of foliage along the development frontage. The treatment of the foliage should be specified in order to ensure that mutual visibility can be achieved between motorists turning out of the development access and those on Dalzell Street. <u>RECOMMENDATION:</u> It is recommended that, as the design progresses, the foliage is specified for removal or relocation where it lies within or close to the splays, taking into account the potential for re-growth.	<u>Response:</u> The recommendation is accepted. While the need to maintain a clear view along the visibility splay will form part of the planning condition, for the avoidance of doubt a label has been included on the layout drawing stating that vegetation must be removed from the visibility splay. This is shown on TT Drawing no. 784-TTE-00-XX-DR-0001-P03, attached.
3.2	<u>Location:</u> The proposed footways on the east side of Dalzell Street. <u>Summary:</u> The absence of dropped kerbs and tactile paving could lead to pedestrians tripping and falling or being struck by vehicles. At this stage, dropped kerbs and tactile paving are not shown on the footways across the existing access road to the north of the bridge, or to the north of No 1 Dalzell Street. The Audit Team are aware that Cumbria County Council have a policy to install tactile paving only in areas of significant pedestrian traffic (they were not present at other junctions in the village) but if dropped kerbs are not provided as a	<u>Response:</u> The recommendation is accepted. While the detailed design will include dropped kerbs, the current layout drawing has been amended to reflect this intention, as shown on TT Drawing no. 784-TTE-00-XX-DR-0001-P03, attached.

	minimum, wheelchair users could attempt to cross and find themselves stranded in the carriageway on the exit side, increasing the risk of collisions or of overturning. Visually impaired pedestrians could be confused as to where to cross, again increasing the risk of trips or of conflicts with vehicles. <u>RECOMMENDATION:</u> It is recommended that dropped kerbs are provided as a minimum, and that tactile paving is also installed if acceptable within the local policy.	
3.3	<u>Location:</u> Dalzell Street between the development and the northern end of the village. <u>Summary:</u> Providing street lighting could reduce the risks of trips and collisions. It is assumed that the internal roads of the development will be lit. If so, it would be beneficial to extend the system of lighting to the northern edge of the village to reduce the risk of pedestrian trips. In addition, it could reduce the risk of a number of collision types involving vehicles as motorists move between lit and dark sections of road. <u>RECOMMENDATION:</u> It is recommended that, if the development is to be lit, the system of lighting is extended to the northern edge of the village.	<u>Response:</u> The recommendation is accepted and will be incorporated at the detailed design stage.
3.4	<u>Location:</u> The speed cushions on Dalzell Street. <u>Summary:</u> The incorrect placing of the shark's tooth road markings could increase the risk of head on collisions and of conflicts with pedestrians.	<u>Response:</u> The recommendation is accepted. The shark's tooth marking has been amended, as shown on TT Drawing no. 784-TTE-00-XX-DR-0001-P03, attached.

	While perhaps schematic at present, the drawing show shark's tooth road markings on the same side of each of the pairs of speed cushions. If laid as such, northbound motorists unfamiliar with the area could be led to believe that they are on a one-way street and that they can drive in the 'offside' lane. This could increase the risk of collisions with opposing motorists and crossing pedestrians, neither of whom will expect vehicles to approach in that lane from that direction. <u>RECOMMENDATION:</u> It is recommended that the markings on the cushions are shown in the direction of travel only.	
3.5	<u>Location:</u> The approaches to the speed humps on Dalzell Street. <u>Summary:</u> The absence of warning signs could increase the risk of loss of control collisions. At this stage, there are no warning signs specified for the speed cushions. In their absence, drivers and riders could fail to notice the cushions, strike them at speed or brake suddenly and lose control. This can be particularly problematic for two-wheeled riders. <u>RECOMMENDATION:</u> It is recommended that signs to Diagram 557.1, together with appropriate supplementary plates, are erected on the approaches to the speed cushions.	<u>Response:</u> The recommendation is accepted and will be incorporated at the detailed design stage.



FOR INFORMATION ONLY

P03	AMENDED FOLLOWING RSA STAGE 1	14.11.2022	EB	EB	NB
P02	AMENDED FOR ISSUE	03.11.2022	EB	EB	NB
P01	PRELIMINARY FIRST ISSUE	11.10.2022	JH	EB	EB
Rev	Description	Date	Drawn	Checked	Appr

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Client
NIGEL KAY HOMES LTD

Project Name
FORMER STATION YARD, MOOR ROW

Sheet Title
ACCESS ARRANGEMENTS

TTE Project Number	Drawn By	Date	Checked By	Date	Approved By	Date	Scale @ A1	Suitability
784-B041101	JH	Oct '22	EB	Oct '22	EB	Oct '22	As Shown	S2
Client Project Number	Originator	Volume/System Level/Location	Type/Code	Role	Number	Revision		
784-B041101	TTE	- 00 - XX	- DR - O -	0001	P03			

Tetra Tech

Former Station Yard, Moor Row, Cumbria
Proposed Residential Development
Access Arrangements



Stage 1 Road Safety Audit



REPORT CONTROL			
Document	Stage 1 Road Safety Audit		
Project	Former Station Yard, Moor Row, Cumbria Proposed Residential Development – Access Arrangements		
Client	Tetra Tech		
Report Number	NS22/788/RSA1		
Primary Author	Kevin Nicholson		
Reviewer	Nancy Sloan		
REVISION HISTORY			
Issue	Date	Status	Checked for Issue
1	03/11/22	Issued to Client	
2	11/11/22	Update following minor drawing amendments and issued to Client	



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1. INTRODUCTION

1.1. This report results from a Stage 1 Road Safety Audit carried out on the vehicular and pedestrian access arrangements associated with a proposed residential development of up to 80 units at the former Station Yard, Moor Row, Cumbria. Briefly, the improvements comprise the following: -

- a new access road with footways forming a simple priority junction with the east side of Dalzell Street;
- new footways of varying width on the east side of Dalzell Street, linking the development with the northern end of Moor Row;
- a system of speed cushions on Dalzell Street on the northbound approach to the new junction;
- the removal of the existing nearside white lining to the north of 66 Dalzell Street.

1.2. The Road Safety Audit was requested by Nick Bunn of Tetra Tech and was carried out during October and November 2022. The Audit Team visited the site together on the afternoon of Monday 31 October, during which the weather was cool with light cloud, and the road surfaces were damp following earlier rain. Traffic was light and free flowing, and a number of pedestrians were observed. In the vicinity of the works, Dalzell Street is subject to a 30mph speed limit and is unlit.

1.3. An investigation of the Crashmap database has revealed that there were no recorded collisions in the vicinity of the proposed works in the 5-year period 2017 to 2021 inclusive.

1.4. The Audit Team membership was as follows: -

Kevin Nicholson Nicholson Sloan Consultancy Limited (Audit Team Leader);

Nancy Sloan Nicholson Sloan Consultancy Limited (Audit Team Member).

1.5. The terms of reference for this audit are as described in GG 119 (Revision 2) in the Design Manual for Roads and Bridges. The Team has reported only on the road safety implications of the proposals and has not examined or verified the compliance of the design to any other criteria. However, and without being prescriptive, the Audit Team might refer to a design standard or technical guidance where this would help to clarify a safety problem or recommendation. In addition, there may be alternative methods of addressing a problem that would be equally acceptable in achieving the elimination or mitigation of a problem, and these should be considered in the light of the recommendations in this report.

1.6. The detail provided for the audit is shown in Section 5. All comments and recommendations are referenced to the design drawings and related documents and the locations of the items raised by the audit are shown on the plan in Section 6.



- 1.7. Where relevant within this report traffic signs will be described either by their reference numbers on the drawings or by their diagram number within the Traffic Signs Regulations and General Directions 2016 (TSRGD).
- 1.8. Within this report the generic term “pedestrians” can include walking pedestrians, wheelchair users, mobility scooter users, dismounted cyclists, the blind, partially sighted and mobility impaired. Reference may be made to specific groups where appropriate.
- 1.9. Some items in Section 3 refer to issues that might usually be raised as part of a Stage 2 (detailed design) Road Safety Audit. However, notwithstanding that this is a Stage 1 Audit, those issues are raised in order that they can be given due consideration as the detailed design progresses.



2. ITEMS RAISED BY PREVIOUS ROAD SAFETY AUDITS

- 2.1 The Audit Team are unaware of any previous Road Safety Audits carried out on the proposals.



3. ITEMS RAISED BY THIS STAGE 1 ROAD SAFETY AUDIT

3.1 PROBLEM

Location: The junction of the development access road with Dalzell Street.

Summary: Maintaining adequate visibility at the junction could reduce the risk of turning collisions.

Although visibility splays are shown on the drawing, there is a substantial length of foliage along the development frontage. The treatment of the foliage should be specified in order to ensure that mutual visibility can be achieved between motorists turning out of the development access and those on Dalzell Street.

RECOMMENDATION

It is recommended that, as the design progresses, the foliage is specified for removal or relocation where it lies within or close to the splays, taking into account the potential for re-growth.

3.2 PROBLEM

Location: The proposed footways on the east side of Dalzell Street.

Summary: The absence of dropped kerbs and tactile paving could lead to pedestrians tripping and falling or being struck by vehicles.

At this stage, dropped kerbs and tactile paving are not shown on the footways across the existing access road to the north of the bridge, or to the north of No 1 Dalzell Street. The Audit Team are aware that Cumbria County Council have a policy to install tactile paving only in areas of significant pedestrian traffic (they were not present at other junctions in the village) but if dropped kerbs are not provided as a minimum, wheelchair users could attempt to cross and find themselves stranded in the carriageway on the exit side, increasing the risk of collisions or of overturning. Visually impaired pedestrians could be confused as to where to cross, again increasing the risk of trips or of conflicts with vehicles.

RECOMMENDATION

It is recommended that dropped kerbs are provided as a minimum, and that tactile paving is also installed if acceptable within the local policy.

3.3 PROBLEM

Location: Dalzell Street between the development and the northern end of the village.

Summary: Providing street lighting could reduce the risks of trips and collisions.



It is assumed that the internal roads of the development will be lit. If so, it would be beneficial to extend the system of lighting to the northern edge of the village to reduce the risk of pedestrian trips. In addition, it could reduce the risk of a number of collision types involving vehicles as motorists move between lit and dark sections of road.

RECOMMENDATION

It is recommended that, if the development is to be lit, the system of lighting is extended to the northern edge of the village.

3.4 PROBLEM

Location: The speed cushions on Dalzell Street.

Summary: The incorrect placing of the shark's tooth road markings could increase the risk of head on collisions and of conflicts with pedestrians.

While perhaps schematic at present, the drawing show shark's tooth road markings on the same side of each of the pairs of speed cushions. If laid as such, northbound motorists unfamiliar with the area could be led to believe that they are on a one-way street and that they can drive in the 'offside' lane. This could increase the risk of collisions with opposing motorists and crossing pedestrians, neither of whom will expect vehicles to approach in that lane from that direction.

RECOMMENDATION

It is recommended that the markings on the cushions are shown in the direction of travel only.

3.5 PROBLEM

Location: The approaches to the speed humps on Dalzell Street.

Summary: The absence of warning signs could increase the risk of loss of control collisions.

At this stage, there are no warning signs specified for the speed cushions. In their absence, drivers and riders could fail to notice the cushions, strike them at speed or brake suddenly and lose control. This can be particularly problematic for two-wheeled riders.

RECOMMENDATION

It is recommended that signs to Diagram 557.1, together with appropriate supplementary plates, are erected on the approaches to the speed cushions.



4. AUDIT TEAM STATEMENT

We certify that this Road Safety Audit has been carried out in accordance with GG 119.

ROAD SAFETY AUDIT TEAM LEADER

Kevin Nicholson BSc, CMaths, MCIHT, FSoRSA,
HE Certificate of Competency
Director, Nicholson Sloan Consultancy Limited
Cherry Tree Cottage
Hayton, Brampton, Cumbria, CA8 9HT

Signed:

Date: 11/11/22

ROAD SAFETY AUDIT TEAM MEMBER

Nancy Sloan MCIHT, MSoRSA
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Signed:

Date: 11/11/22



5. DRAWINGS AND DOCUMENTS PROVIDED

DRAWING OR DOCUMENT NUMBER	PROJECT AND TITLE	DATE
784-B041101-TTE-00-XX-DR-O-0001 REVISION P02	FORMER STATION YARD, MOOR ROW ACCESS ARRANGEMENTS	03.11.22
-	DALZELL STREET, MOOR ROW AUTOMATIC CLASSIFIED TRAFFIC COUNTS	13.03.22 - 19.03.22

6. LOCATION PLAN OF ITEMS RAISED BY THIS AUDIT

