

# CONSTRUCTION TRAFFIC MANAGEMENT PLAN

**Cloghroe Development  
Cloghroe  
Cork  
December 2021**

FOR: LONGVIEW ESTATES LTD.



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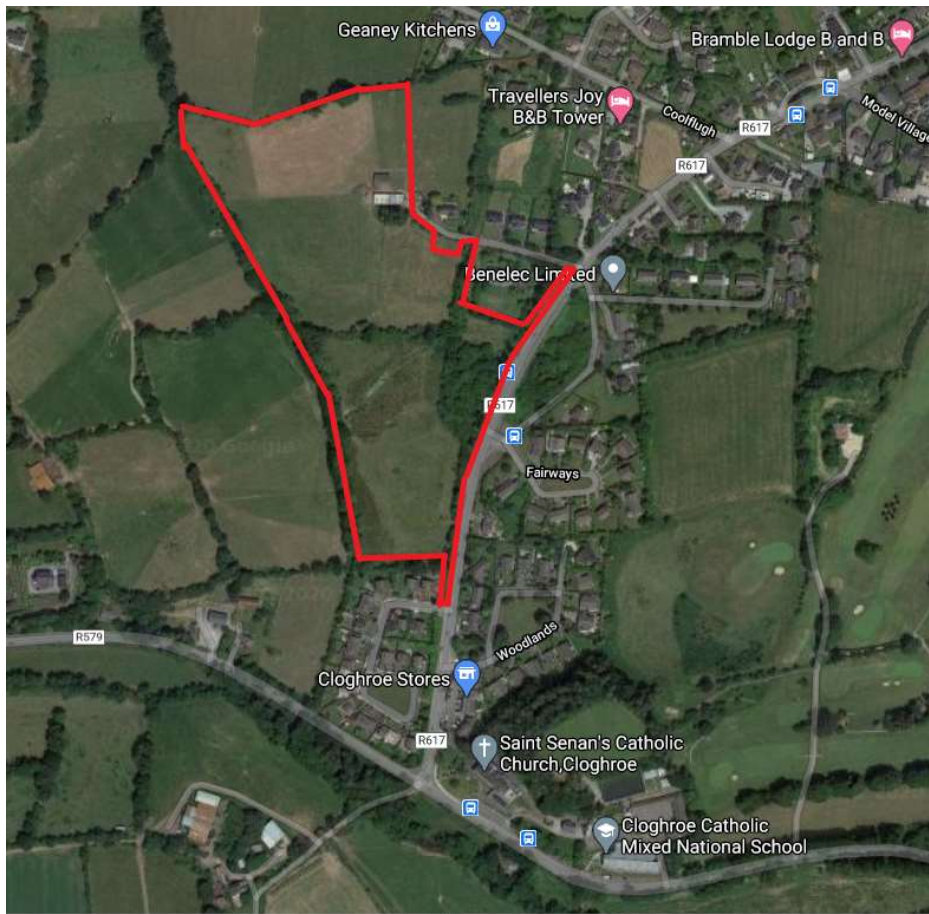
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### 1.0 INTRODUCTION

MHL & Associates Ltd. have prepared this traffic management submission in support of a planning application for the Cloghroe Development in Cloghroe, Co. Cork. It is proposed that during the construction phase of the works, a traffic management plan be implemented for vehicles entering and exiting the site.

### 2.0 LOCAL ROAD NETWORK

The proposed site is located adjacent to the R617 as shown in **Figure 2.1**. The R617 regional road has an 50kmph speed limit and is approximately 7.5m wide as it runs alongside the development boundary. The proposed construction entrance will be via the future residential development entrance off the R617 at a location approximately 1km south of the village of Tower (refer **Figure 2.2**). The sightlines for the entrance, at a location 2.4m back from the stop line in accordance with TII Publication *DN-GEO-03060, Geometric Design of Junctions (priority junctions, direct accesses, roundabouts, grade separated and compact grade separated junctions)*, are shown in Figure 2.3.



**Figure 2.1 Site location**

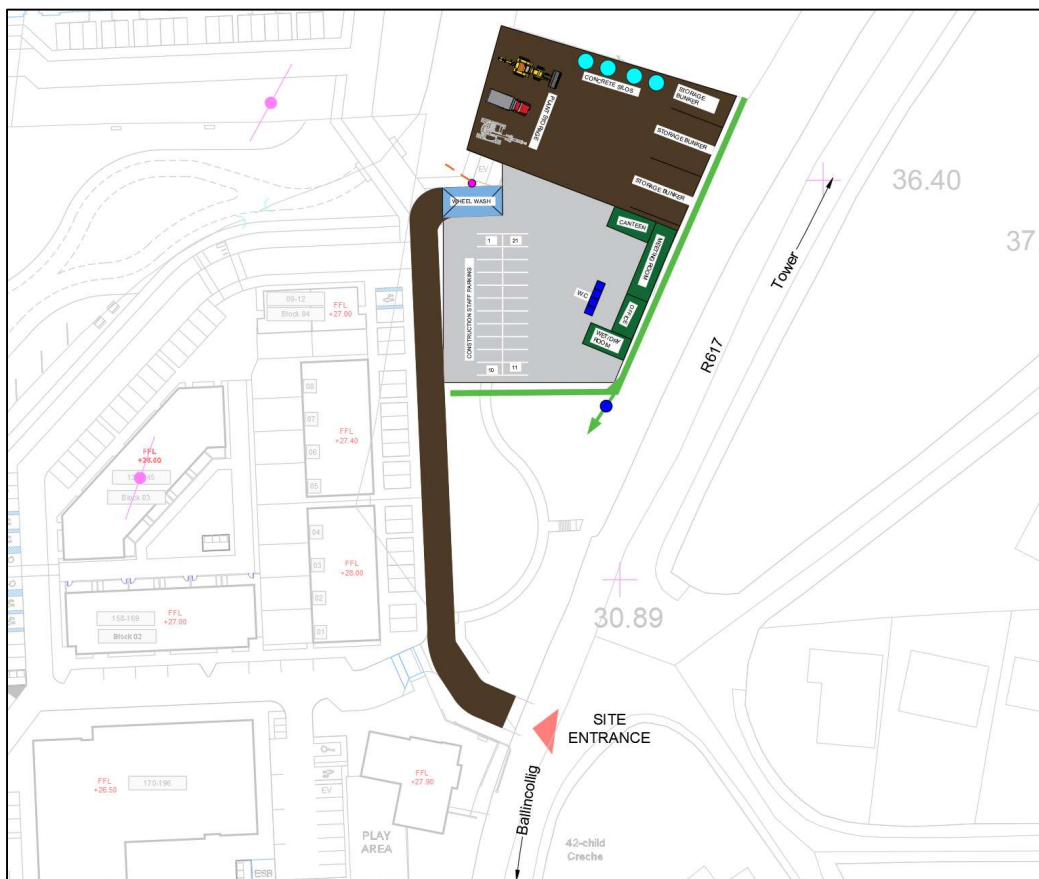


Figure 2.2: Construction Compound and Site Entrance location

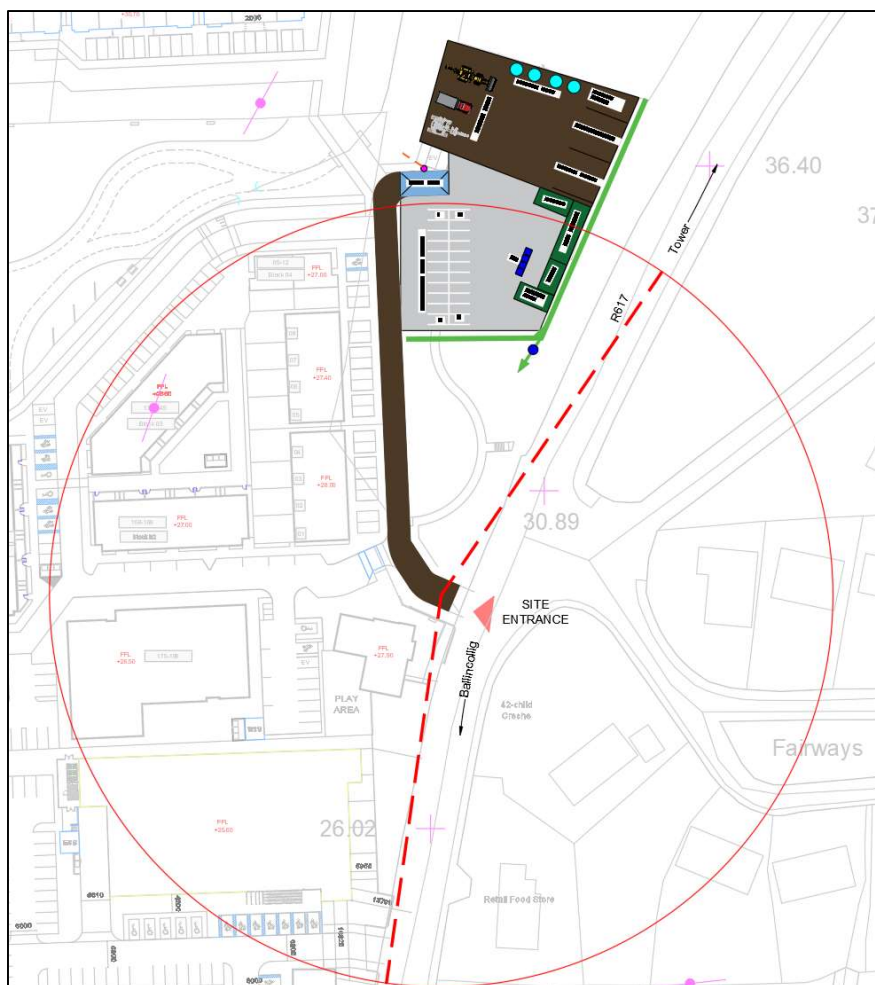


Figure 2.3: Sightlines at Site Entrance

### 3.0 TRAFFIC MANAGEMENT PLAN

#### 3.1 CONSTRUCTION STAGE

The R617 regional road adjoining the site has a speed limit of 50kmph and so the traffic management requirements shall be in accordance with *Table 8.2.2.4* of the Traffic Signs Manual, shown in **Figure 3.1** below:

Design Parameter	Type A > 12 hours	Type B < 12 hours	Type C < 15 mins
<b>Advance Warning Signage</b>			
Sign Size (mm)	600	600	-
Sign Visibility (m)	50	50	50
Number of Signs	2	2	-
Cumulative Distance (m)	40	40	-
Distance between Advance Warning Signs (m)	20	20	-
<b>Taper</b>			
Lane Taper Rate <sup>A</sup>	1 in 5	1 in 5	-
Hard Shoulder Taper Rate <sup>A</sup>			-
<b>Cones</b>			
Cone Height (mm)	750	750	-
Taper Spacing (m) <sup>B</sup>	3	3	-
Longitudinal Spacing (m) <sup>B</sup>	3	3	-
<b>Lamps (unlit areas only)</b>			
Taper Spacing (m)	6	6	-
Longitudinal Spacing (m)	6	6	-
<b>Safety Zones</b>			
Longitudinal (m)	5	5	-
Lateral (m)	0.5	0.5	-
<b>Lanes</b>			
Lane Width (m) <sup>C</sup>	3 (2.5)	3 (2.5)	-
Two-way Roadway Width (m)	5	5	-

**Figure 3.1: Table 8.2.2.4 from Chapter 8 of the Traffic Signs Manual**

The traffic management plan to be in place during the construction works is provided in drawings *RL1-TMP-P01, P02, & P03* included in **Appendix A**. The warning signs along the road will remain in place for the duration of the site works. The use of stop-go measures will only be used in implements when necessary. The associated signage should only be employed when required. These measures will greatly reduce the risk associated with the construction of the development works.

Given the width of the existing R617 as it runs adjacent to the works, a temporary centre line will be introduced to facilitate existing traffic flow during construction.

The construction phase will accommodate for pedestrians via a lateral safety zone along the length of the public realm works. A temporary pedestrian crossing will be provided at the site entrance to facilitate safe crossing for pedestrians accessing the existing bus stop to the north of the entrance.

**Figure 3.2** below shows the traffic management plan proposed at the site entrance.

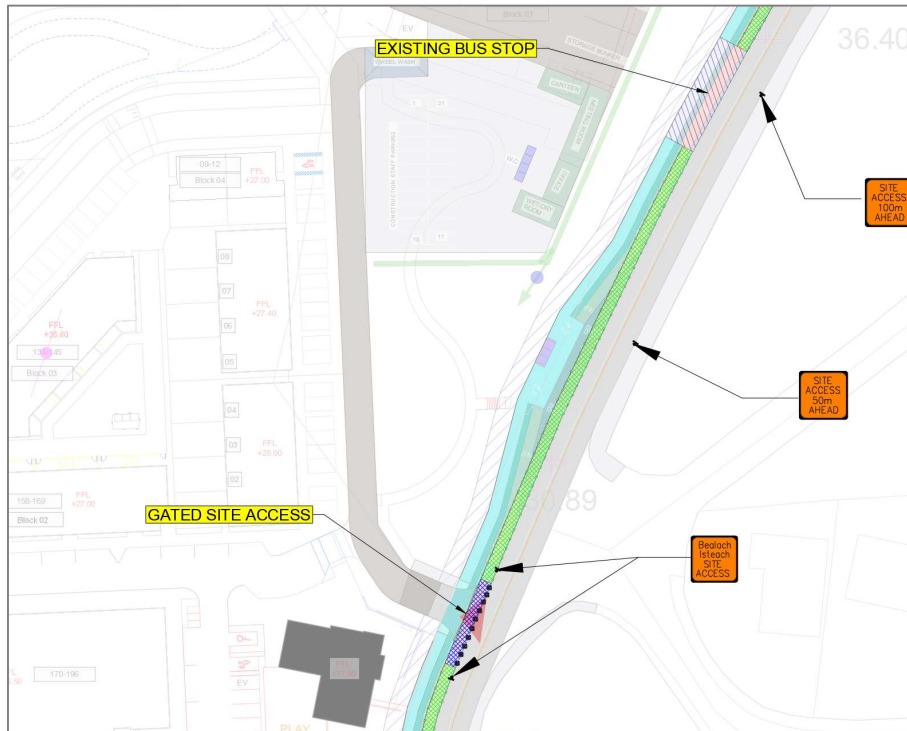


Figure 3.2: Traffic Management Plan at site entrance and public realm works (full details in Appendix A)

To ensure that a HGV can safely manoeuvre into the site, a swept path analysis was completed for the turning movements coming from both the Tower and Ballincollig directions. The completed analysis is shown in drawing *RL1-SPA-P01* included in **Appendix A**.

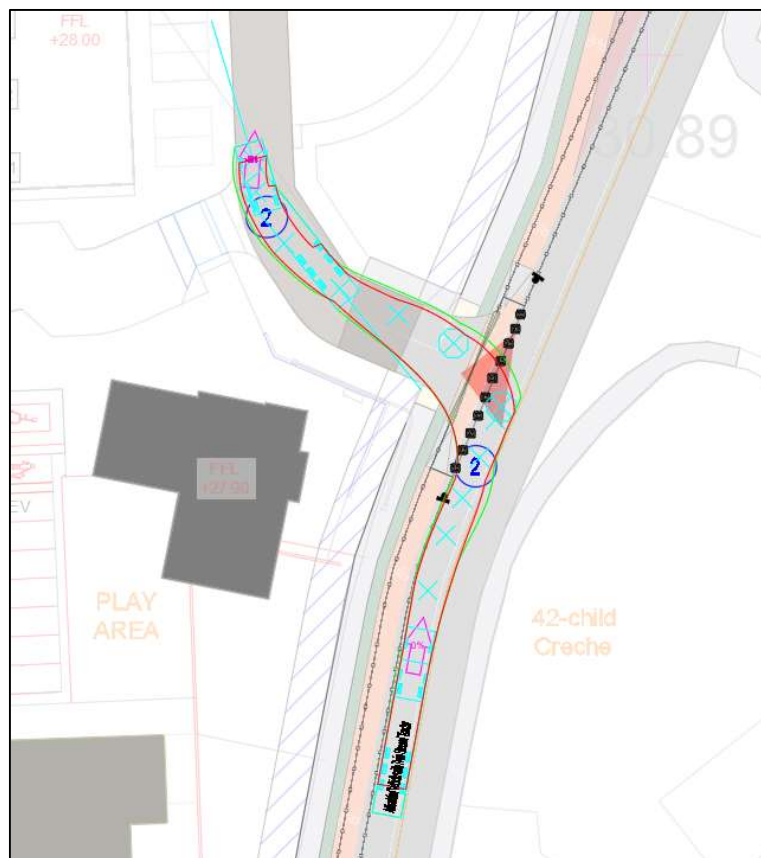


Figure 3.3: HGV swept path during a left turn movement into site

All deliveries will be controlled at the identified construction compound location. Materials will be offloaded within the proposed site compound using a teleporter and there will be a temporary lay down area used for the duration of the offload. The Contractor is to inform and educate all regular suppliers and all sub-contractors

and delivery drivers of the basic protocols. Site access, and the delivery of construction materials, will be carefully planned and managed throughout the construction works.

When delivery trucks enter the compound, the material can be delivered to the correct location within the site compound. Following unloading, the vehicle can then leave the site via the internal road network at a safe speed ensuring there is no risk of incidents involving pedestrians or other road users upon exit.

Similar practices shall be put in place for trucks removing excavated material / demolition waste from site. Provision for parking cars / vans etc. has been made within a designated area within the site compound (ref. **Figure 2.2**).

The Contractor will ensure that deliveries are coordinated on site so that trucks do not block the road outside the site. Delivery drivers will wear full PPE as per the site rules and sign the delivery rules at the controlled entrance gate. The site will be fenced and sealed with access gates secured at all times to prevent unauthorised access.

The following shall be applicable for the duration of the works:

- The contractor will be responsible for and make good any damage to existing roads or footpaths caused by his own contractor's or suppliers transport to and from the site.
- Wheel washing and road sweeping facilities shall be provided to ensure all public and private roads, footpaths are entirely free of excavated materials, debris, and rubbish at all times.
- The contractor must confine their activities to the area of the site occupied by the works and the construction compound during any particular phase of the development.
- Haul routes to and from the site will be defined and agreed with the Local Authority.
- No other entrance and egress points to the construction site, other than the designated entrance, will be used to minimize impact on external traffic.
- Where traffic signals are not in place, flagmen must be used to control the exit of construction vehicles from the site onto the public road where appropriate.
- Existing fire hydrants are to remain accessible.

Due regard will be paid to minimising any impacts by construction vehicles on the surrounding area. Particular emphasis will be on the following:

- Construction and delivery vehicles must be instructed to use only the approved and agreed means of access; and movement of construction vehicles must be restricted to these designated routes;
- Warning signs / Advanced warning signs to be installed at appropriate locations as shown in drawings RL1-TMP-P01, P02, & P03, in advance of the construction access locations;
- Speed limits of construction vehicles to be managed by appropriate signage, to promote low vehicular speeds within the site;
- Appropriate vehicles to be used to minimise environmental impacts from transporting construction material, for example the use of dust covers on trucks carrying dust producing material;
- Parking of site vehicles must be managed by the Contractor and must not be permitted on public road;
- A road sweeper is to be employed to clean the public roads adjacent to the site of any residual debris that may be deposited on the public roads leading away from the construction works;
- On site wheel washing will be undertaken for construction trucks and vehicles to prevent any debris from falling on the local roads;
- All vehicles are to be suitably serviced and maintained to avoid any leaks or spillage of oil, petrol, or diesel. Spill kits must be available on site. All scheduled maintenance carried out off-site must not be carried out on the public highway; and
- Safe and secure pedestrian facilities are to be provided along the R617 as shown in drawings RL1-TMP-P01, P02, & P03. The existing bus stop is to remain operational and protected from construction traffic up until a time when the new bus stop is completed/becomes operational.

Prior to start of construction, this prepared Traffic Management Plan or revised thereof will be agreed with Cork City Council's Transportation Department & An Garda Siochana to mitigate any impact of construction on the surrounding road network. The Contractor will confirm the Construction Stage Traffic Management Plan in accordance with the following guidance documents for the temporary control of traffic at road works:

- Construction & Environmental Management Plan, prepared by MHL & Associates Ltd., September 2021
- Traffic Signs Manual Chapter 8 Temporary Traffic Measures and Sign Roadworks (2019);
- Traffic Management Guidelines, Department of Transport (2003);
- Requirements of Cork City Council.

### **3.2 OPERATIONAL STAGE**

The proposed future entrance has adequate sightlines to both east and west. A 90m sightline is achieved using a 2.4m set back from the road edge, as highlighted in figure 2.3. This sightline is appropriate for the R617's design speed of 60km/h (Ref. TII Publications *DN-GEO-03060, Geometric Design of Junctions (priority junctions, direct accesses, roundabouts, grade separated and compact grade separated junctions)*).

### **4.0 MEASURES TO MINIMISE CONSTRUCTION VEHICLE MOVEMENTS**

Construction vehicle movements are to be minimised through:

- Consolidation of delivery loads to/from the site and scheduling of large deliveries to site to occur outside of peak periods;
- Use of precast/prefabricated materials where possible;
- 'Cut' material generated by the construction works is to be re-used on site where possible, through various accommodation works;
- Adequate storage space on site will be provided;
- Car sharing among the construction staff following Covid-19 safety guidelines may be used to reduce traffic numbers.
- Public Transport: An information leaflet to all staff as part of their induction on site highlighting the location of the public transport services in the vicinity of the construction site.

### **5.0 CONCLUSIONS AND RECOMMENDATIONS**

It is recommended that the construction stage traffic management plan be implemented for the duration of the works. The improvements to the roadside boundary will serve to improve visibility to and from the entrance and will improve road safety at the location.

In support of the proposed scheme, it should be noted that the new operational entrance will have adequate sightlines for the design road speed of the R617.

In conclusion, the proposed construction and operational entrances will operate within required safety parameters.



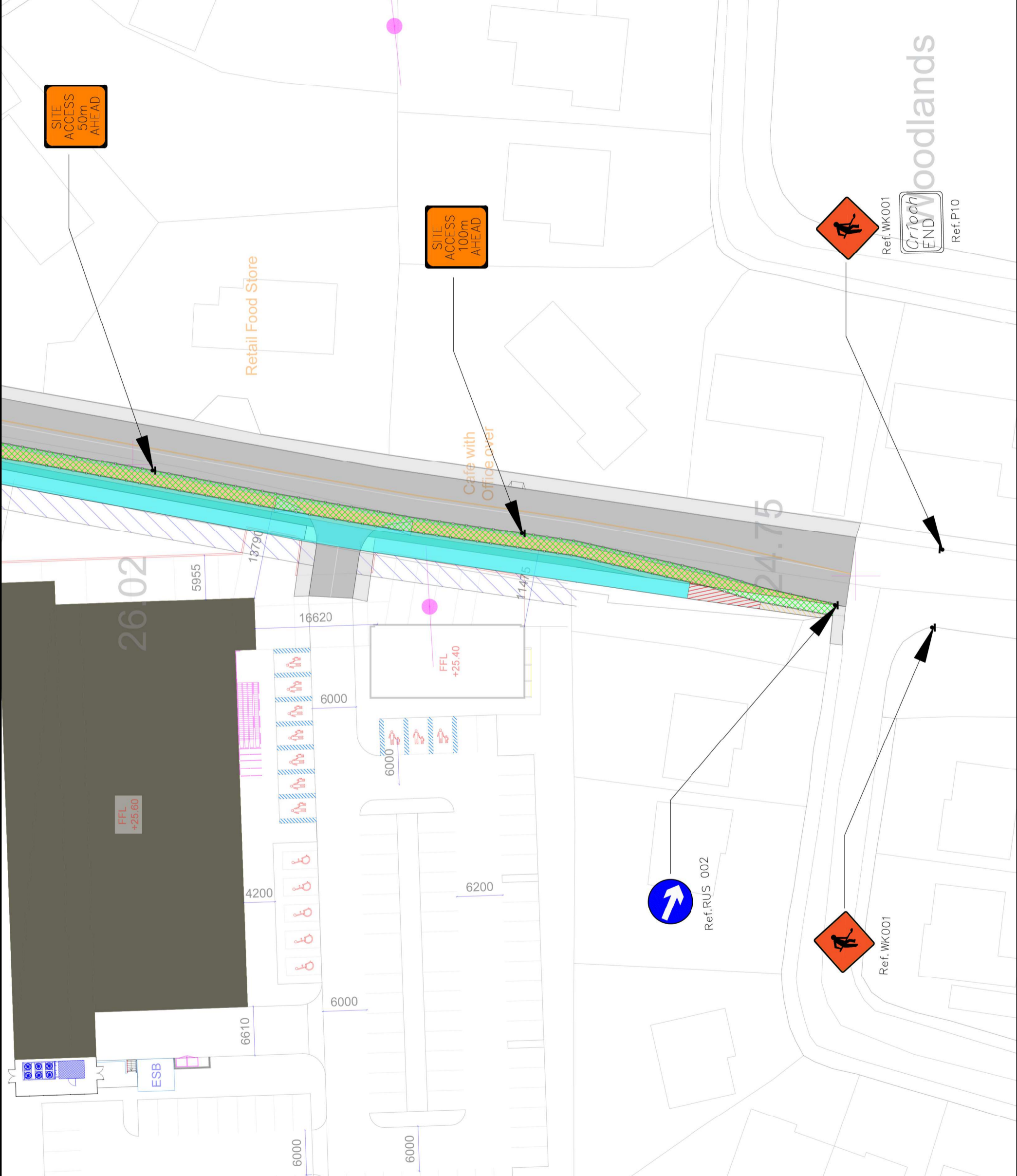
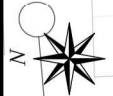
## **Appendix A – Drawings**

**RL1-TMP-P01** Traffic Management Plan Sheet 1 of 3

**RL1-TMP-P02** Traffic Management Plan Sheet 2 of 3

**RL1-TMP-P03** Traffic Management Plan Sheet 3 of 3

**RL1-SPA-P01** Swept Path Analysis Sheet 1 of 1



**NOTES:**

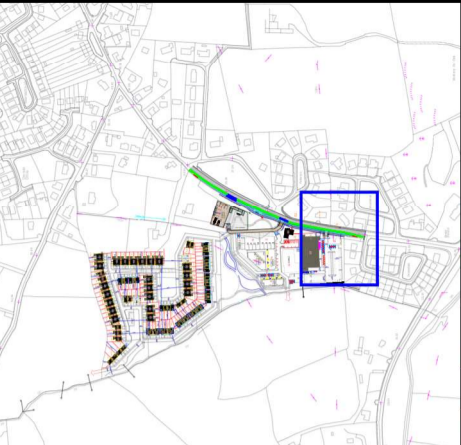
All dimensions in metres.  
Do not scale from drawing.  
For any discrepancies found please consult with design office.  
This drawing should be read in conjunction with all contract drawings, documents and specifications.

**Extents of contract**

- Taper Area
- Longitudinal Safety Zone
- Works Area
- Lateral Safety Zone
- Existing Bus Stop
- Safety Barriers
- Sign Symbol
- Temporary Centre Line
- Traffic Cone

Note: Signs to be 600 x 600 (Standard) and 1200 x 1000 (Non standard) and made from retro reflective material

**Key Plan**



Rev	By	Date	Description

**Drawing Status:** PLANNING  
NOT CERTIFIED FOR CONSTRUCTION

**Project Title:** Cloghroe Development

**Drawing Title:** Traffic Management Plan  
Sheet 1 of 3

**Client:** Cloghroe Development Limited



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**Designed:** SM    **Drawn:** SFM    **Checked:** xM

**Scale:** 1:250 @ A1    **Date:** Sept 2021

**Job No:** 19083HD    **Drawing No:** RL1-TMP-P01    **Revision:** 00

Ref. WK001



Ref. P10

Ref. WK001

Ref. RUS 002

Retail Food Store

Cafe with Office over

26.02

24.75

FFL +25.60

FFL +25.40

5955

16620

6000

6000

6200

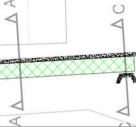
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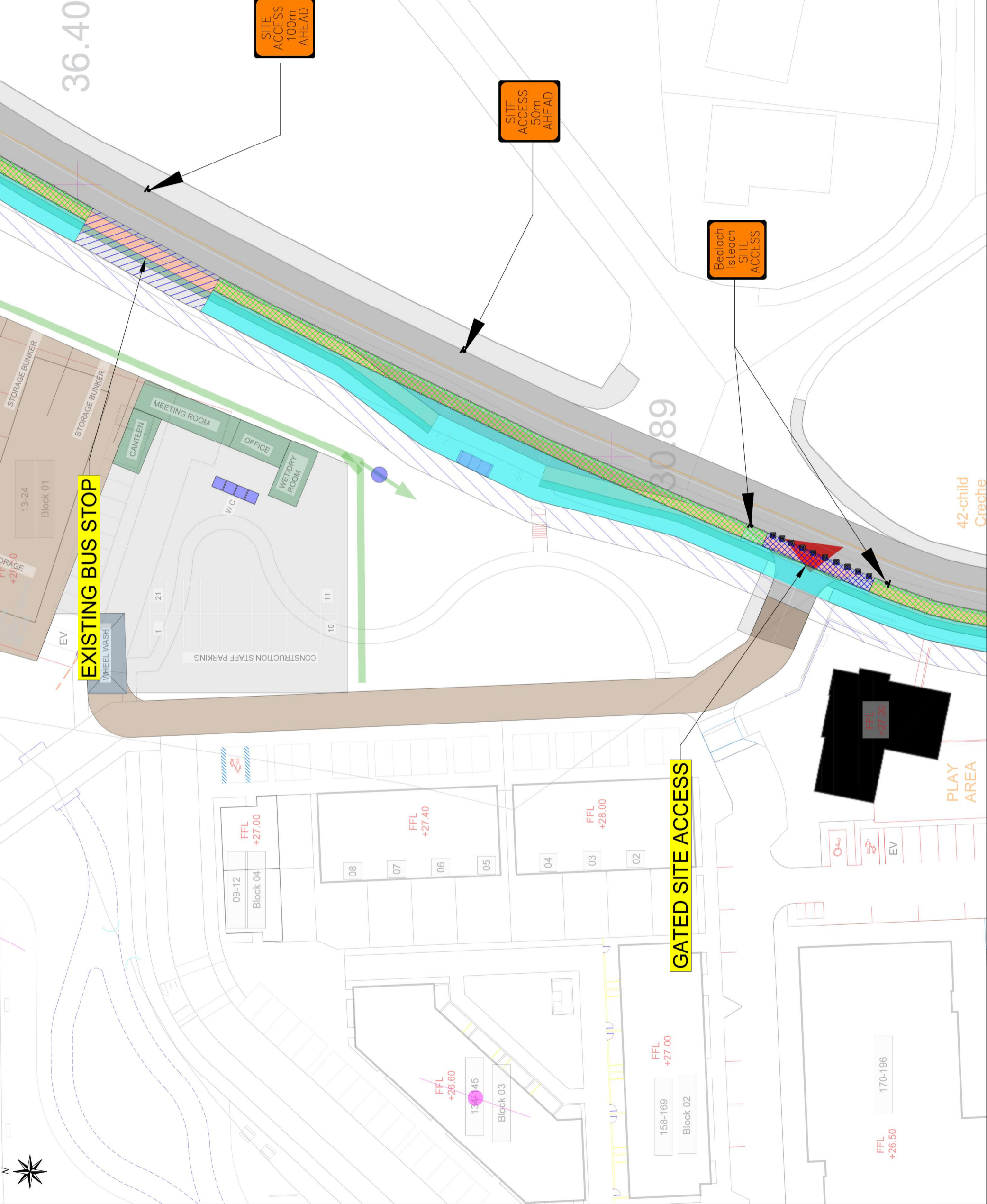
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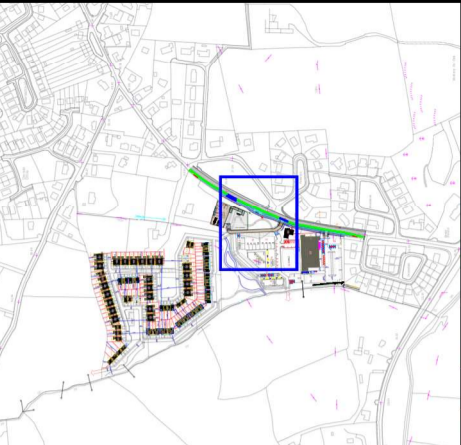
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**Extents of contract**

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- Lateral Safety Zone
- Existing Bus Stop
- Temporary Pedestrian Crossing
- Safety Barriers
- Sign Symbol
- Temporary Centre Line
- Traffic Cone

Note: Signs to be 600 x 600 (Standard) and 1000 x 1000 (Non standard) and made from retro reflective material

**Key Plan**



Rev	By	Date	Description

**Drawing Status:** PLANNING  
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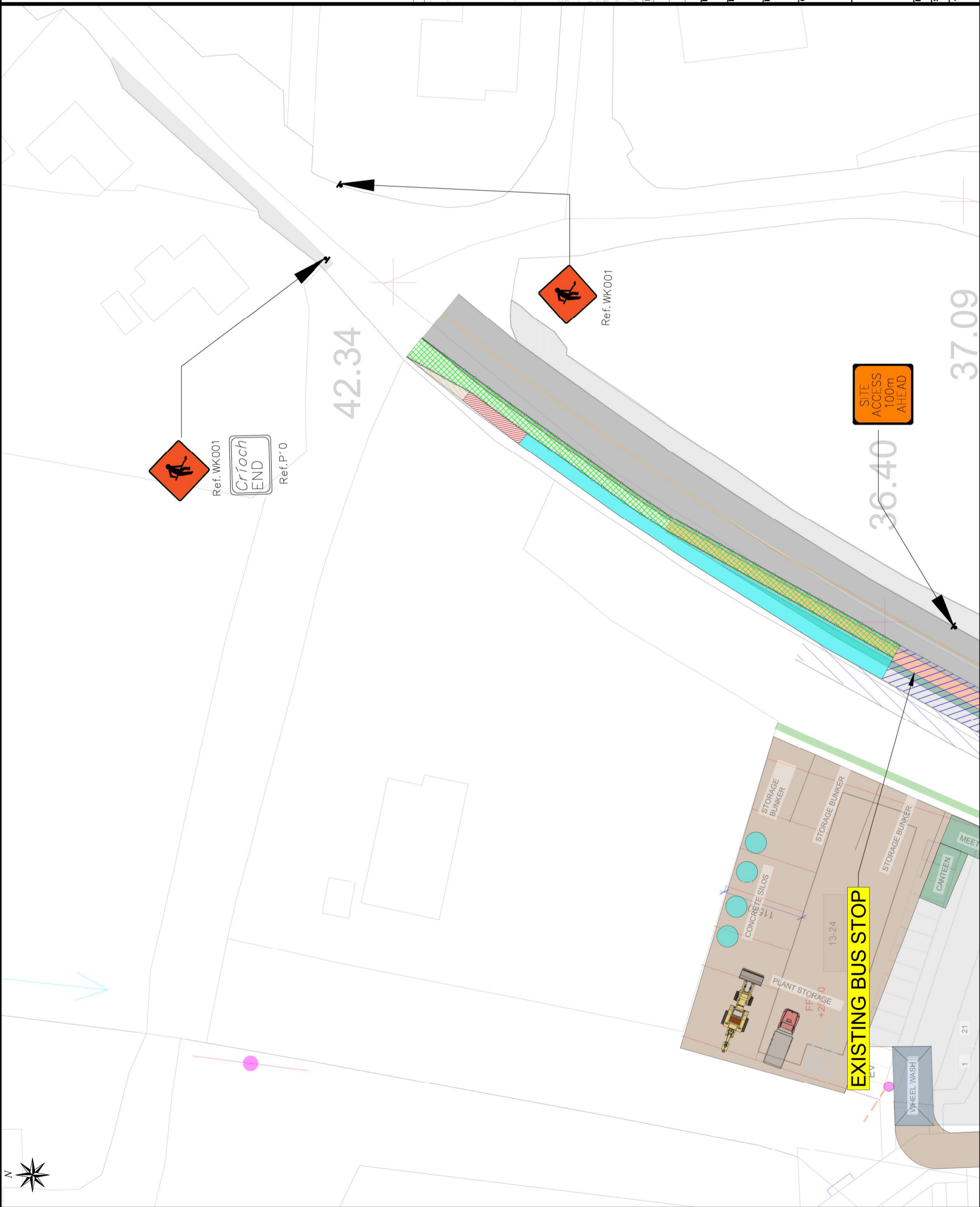
**Drawing Title:** Traffic Management Plan  
 Sheet 2 of 3

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<b>Designed:</b> SM	<b>Drawn:</b> SFM	<b>Checked:</b> xM
<b>Scale:</b> 1:250 @ A1	<b>Date:</b> Sept 2021	<b>Revision:</b> 00
<b>Job No:</b> 19083HD	<b>Drawing No:</b> RL1-TMP-P02	



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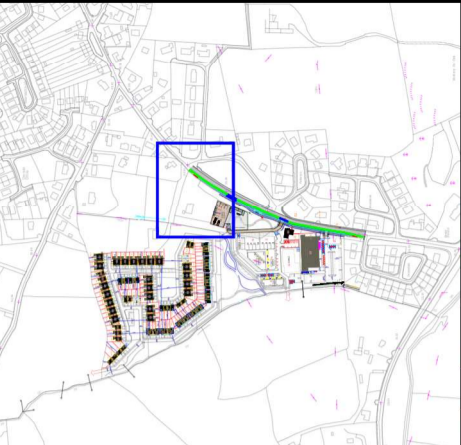
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**Extents of contract**

- Taper Area
- Longitudinal Safety Zone
- Works Area
- Lateral Safety Zone
- Existing Bus Stop
- Safety Barriers
- Sign Symbol
- Temporary Centre Line
- Traffic Cone

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**Key Plan**



**Rev By Date Description**

Rev	By	Date	Description

**Drawing Status:** **PLANNING**  
NOT CERTIFIED FOR CONSTRUCTION

**Project Title:** Cloghroe Development

**Drawing Title:** Traffic Management Plan  
Sheet 3 of 3

**Client:** Cloghroe Development Limited



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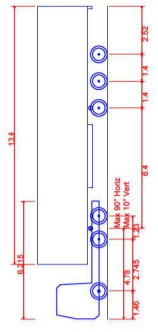
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**Scale:** 1:250 @ A1 **Date:** Sept 2021

**Job No:** 19083HD **Drawing No:** RL1-TMP-P03 **Revision:** 00

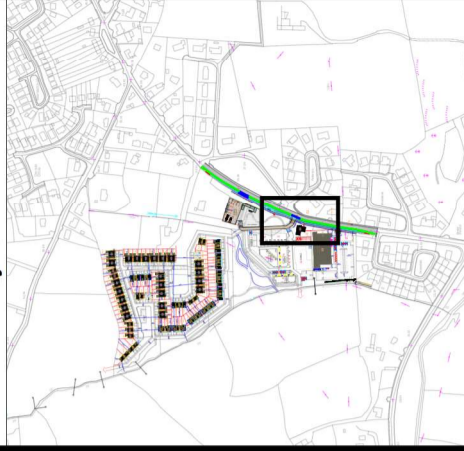
**NOTES:**

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Articulated Vehicle with Twin Steered Tractors  
 16.50m Overall Length  
 2.55m Overall Width  
 3.97m Overall Body Height  
 2.50m Max Track Width  
 6.00m Lock-to-lock Time  
 6.98m Curb to Curb Turning Radius

**Key Plan**



Rev	By	Date	Description

**Drawing Status:** PLANNING

NOT CERTIFIED FOR CONSTRUCTION

**Project Title:** Cloghroe Development

**Drawing Title:** Swept Path Analysis  
Traffic Management Plan  
Sheet 1 of 1

**Client:** Cloghroe Development Limited



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**Checked:** KM

**Scale:** 1:200 @ A1

**Date:** Sept 2021

**Job No:** 19083HD

**Drawing No:** RL1-SPA-P01

**Revision:** 00

