

Proposed Residential Development - Land off Greenvale, Bamford (Within JPA 17 Allocation)

Transport Technical Note 4: Response to TfGM 2 - JPA17 Transport Mitigation Strategy including Schedule of Works and Contribution Strategy

Project Number:	784-B068938	Office:	Manchester
Date:	18/06/2026	Prepared by:	M Thompson
Status:	For Submission	Checked by:	M Connolly
Revision:	02	Approved by:	M Thompson

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1.0 Introduction

- 1.1 Tetra Tech (Tt) has been appointed by Wain Homes (North West) Ltd to provide transport planning advice in relation to a proposed development on Land off Greenvale, Bamford, Rochdale.
- 1.2 In June 2025, the application for 45 dwellings was submitted in detail to Rochdale Metropolitan Borough Council (RMBC), planning ref (25/00405/FUL).
- 1.3 A Transport Assessment (TA) and Travel Plan Framework (TPF) have been submitted alongside the planning application (both prepared by Tt and dated June 2025).
- 1.4 A first set of TfGM comments were provided in 2025 and responded to in Tt's TTN3. A significant number of those comments have now been resolved.
- 1.5 This Transport Technical Note 4 (TTN4) responds to outstanding matters from the 2nd set of TfGM comments (9th April 2026), see **Appendix TTN4-1**.
- 1.6 Within the TfGM comments, there are requests for:
 - Pedestrian accessibility to be audited;

- An additional crossing point on Norford Way (it should be noted that a puffin crossing is already proposed, see the Tt TA);
 - Additional detail of cycle infrastructure;
 - Additional details in relation to the mitigation set out in the Places for Everyone (PfE) policy;
 - An explanation of how the Wain Homes proposals will provide a proportionate contribution to the listed mitigation.
- 1.7 On 9th June 2026, Tt met with RMBC planners and Northstone and iTransport (Northstone’s transport consultants), who currently have emerging proposals on the wider JPA17 site, to discuss the Allocation’s overall masterplanning and mitigation strategy with particular regard to sustainable travel improvements.
- 1.8 On 10th June 2026, Tt met with iTransport to expand and finalise the mitigation schedule for the site.
- 1.9 The Sustainable Travel Improvements Schedule (including Costings) is provided in **Appendix TTN4-2** and has also been provided to TfGM via email. This is referred to as “the Schedule” hereafter.
- 1.10 As a final point, TfGM have requested the trip distribution in Excel format. This was provided to TfGM on 17th November 2025 and is again provided alongside this TTN.

2.0 Pedestrian Route Improvements for the Wain Homes Site including a new Crossing Point on Norford Way

- 2.1 The Wain Homes proposals are contained within a parcel of land on the northern edge of the JPA17 site. Consequently, pedestrians are expected to walk along Greenvale and/or the nearby PRoWs to access the nearby bus stops and Bamford Precinct. These walk routes have been audited, and the following improvements have been identified, as shown in **Table 1** below.

Table 1 – Identified Improvements following Audit

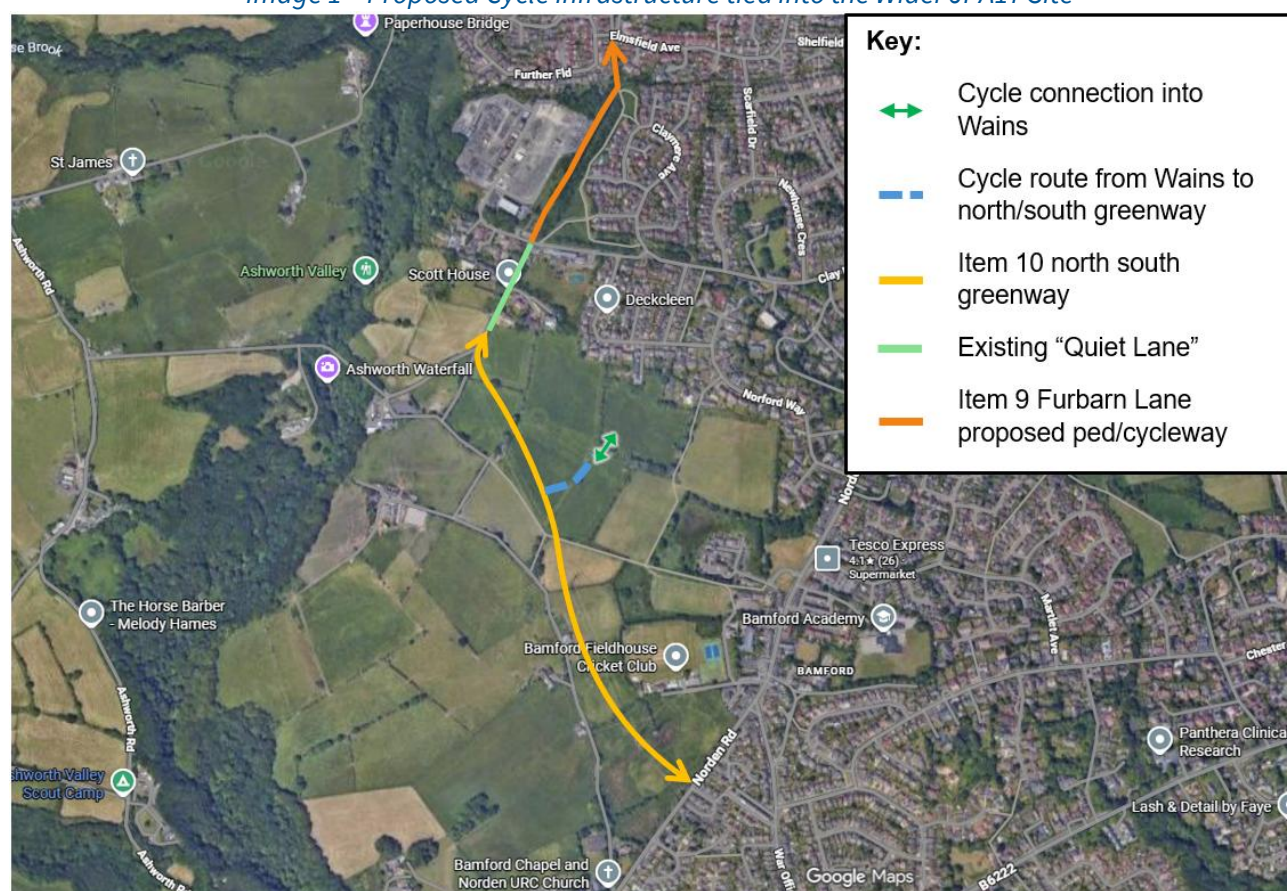
The Schedule Item Ref:	Infrastructure:
1	Dropped kerb tactile paved crossing point (Norford Way / The Springs)
2	Dropped kerb tactile paved crossing point (Norford Way / Norford Way)
3	Dropped kerb tactile paved crossing point (Across Norford Way just to the east of Greenvale)
4	Dropped kerb tactile paved crossing point (Across Norden Road just north of Norford Way)
5	Dropped kerb tactile paved crossing point (Spring Bank Lane)

- 2.2 Given that these pedestrian improvement items relate to the walk route from the Wain Homes Scheme, it is proposed that these works are secured via a planning condition and that Wain Homes deliver them via the S278 process. These improvements are shown on the Tt drawing in **Appendix TTN4-3**.
- 2.3 Item 4 provides a new crossing point on Norden Road, specifically addressing one of the TfGM comments.

3.0 Wain Homes Cycle Infrastructure and Connection to Wider Site

3.1 TfGM have requested additional information in relation to cycle infrastructure, and RMBC planners have queried how the Wain Homes proposals will tie into cycle infrastructure within the wider JPA17 site. In response to these comments, the Wain Homes site layout has been updated to include a pedestrian and cycle connection in the southwestern corner, into the wider JPA17 site, as shown in **Appendix TTN4-4**. From this point, RMBC can seek to require the adjacent landowner to promote a cycle route broadly following the alignment of the blue line shown in **Image 1** below, which will tie into the North / South Greenway (yellow line) which will then connect to the Furbarn Road cycle route (**Schedule Item 9** described later).

Image 1 – Proposed Cycle Infrastructure tied into the Wider JPA17 Site



3.2 As per the previous TTN3, all dwellings within the Wain Homes Scheme will have provision for cycle parking (**Schedule Item 11**). This item will be secured by planning condition relating to each site.

4.0 Places for Everyone Mitigation

4.1 At the time of the PfE allocation the following mitigations were envisaged:

- Norden Road / War Office Road – modifications to traffic circulation and local junction improvements;
- Norden Road – new pedestrian crossing;

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- Bus stop upgrades at the Norden Road / War Office Road junction;
 - Active travel improvements, including Furbarn Road improvements and the North / South Greenway corridor through the site.

- 4.2 **Norden Road / War Office Road:** The traffic analysis contained within TTN3 has demonstrated that the highway improvement at the Norden Road / War Office Road is no longer justified.
- 4.3 **Norden Road pedestrian crossing:** As set out in the TA, a puffin crossing on Norden Road is proposed. This has been drawn up indicatively (location tbc) and costed. It is included within the Schedule as Item 8. The drawing is shown in **Appendix TTN4-5**.
- 4.4 **Norden Road / War Office Road bus stop upgrades:** As set out in the TA, upgrades to the northbound and southbound bus stops on Norden Road / War Office Road are proposed. These have been drawn up and costed. They are included within the Schedule as Items 6 and 7 respectively. The drawings are shown in **Appendix TTN4-6**.
- 4.5 **Furbarn Road active travel improvements:** Furbarn Road is an existing route between the northwestern corner of the site and the A680. It generally has a corridor width of at least 3.5m. Between the northwestern corner of the site and Clay Lane, it is a designated quiet lane with good surfacing. The remainder of the route (725m) to the north to Ashbourne Street (just south of the A680) has generally poor surfacing. This 725m section is proposed for improvements, which would be implemented through funding provided by each developer via their respective S106 agreements. The improvement is included as Schedule Item 9.
- 4.6 **North / South Greenway corridor through the site:** North / South Greenway will be provided as part of the on-site design of the Northstone and wider site. This can be secured by the local planning authority in relation to the future planning applications at those sites. The Wain Homes scheme can connect to this as described in Section 3 of this note.

5.0 Securing the Mitigations and Delivery Mechanisms

- 5.1 The aforementioned sustainable travel mitigation is shown on **Image 2**.

Image 2 – Overview of Sustainable Travel Mitigation



5.2 The proposed method for securing the mitigations and the delivery mechanisms are as per the Schedule (See **Appendix TTN4-2**). A brief version of the Schedule focusing on the Wain Homes aspect of the allocation is provided in **Table 2**.

Table 2 – Extract of the Schedule

Ref:	Infrastructure:	Associated With	Cost	Wain Homes Weighting	Delivery Mechanism	Wain Homes Cost
1	Dropped kerb tactile paved crossing point (Norford Way / The Springs)	Wain Homes	£2,530	100%	S278	£2,530
2	Dropped kerb tactile paved crossing point (Norford Way / Norford Way)	Wain Homes	£1,869	100%	S278	£1,869
3	Dropped kerb tactile paved crossing point (Across Norford Way just to the east of Greenvale)	Wain Homes	£2,049	100%	S278	£2,049
4	Dropped kerb tactile paved crossing point (Across Norden Road just north of Norford Way)	Wain Homes	£1,956	100%	S278	£1,956
5	Dropped kerb tactile paved crossing point (Spring Bank Lane)	Wain Homes	£1,113	100%	S278	£1,113
6	Northbound Bus Stop at War Office Road junction	All	£17,811	10%	S106	£1,781
7	Southbound Bus Stop at War Office Road Junction	All	£8,124	10%	S106	£812
8	Pedestrian Crossing (Puffin) across Norden Road south of War Office Road	Northstone/ Mills	£104,875	0%	S106	£0
9	Furbarn Rd Ped / Cycleway Improvements	All	£203,112	10%	S106	£20,311
10	North / South Greenway (on-site within certain parcels of land)	Northstone/ Mills	Absorbed into site delivery		Planning Condition	
11	Cycle Parking Provision at all dwellings	All	Absorbed into site delivery		Planning Condition	
Total			£343,440			£32,421

5.3 The estimated cost of the off-site transport works (excluding access) for Wain Homes to deliver via Section 278 is £9,517.

5.4 The Wain Homes Section 106 Contribution identified as a proportionate contribution to wider JPA17 Transport Improvements is £22,905.

6.0 Summary and Conclusions

6.1 This TTN4 has been prepared to respond to the TfGM comments on the detailed application for 45 dwellings which has been submitted to Rochdale Metropolitan Borough Council, planning ref (25/00405/FUL).

6.2 This TTN4 provides a comprehensive Transport Mitigation Package and set out the delivery mechanisms. The Wain Homes proposals are brought forward in line with the allocation policy and do not prejudice the delivery of the wider site.

6.3 The proposals accord with both the NPPF and local plan transport policies.

6.4 In view of the above positive findings, it is considered that the proposed development is acceptable in highway, traffic and transport terms.

Appendices

Appendix TTN4-1: TfGM Comments 2

Your ref: 25/00405/FUL

Our ref: ROC/25/189

Rochdale Council, Economy Directorate
Planning and Development
Number One Riverside
Smith Street
Rochdale
OL16 1XU

09th April 2026

Location: **Land South Of Greenvale, Bamford Rochdale**

Development: **Demolition of existing dwelling and construction of a residential development for 43 no. dwellings with access and associated works**

Dear Sir / Madam

Thank you for consulting Transport for Greater Manchester (TfGM) on the above planning application. The following comments are offered as advice on transport issues for you to balance against other factors and are made in the context of TfGM's role in the planning process, as set out in the footnote below.

Background

TfGM provided comments on this application in June 2025. TetraTech have provided a technical note which responds to the comments made in the TfGM review. This document is a response to that technical note.

¹TfGM does not have any planning powers and is not a statutory consultee in the planning process. The purpose of the advice offered is to suggest the best way to improve land use / transport integration through the development proposals. Advice is based on the information provided by the applicant, and it is not TfGM's role to undertake detailed verification unless specifically commissioned to do so. ²TfGM control and manage the traffic signals in Greater Manchester, as such any schemes that alter signalised junctions need to be agreed with TfGM. Additionally, where developments impact on signalised junctions, TfGM have a duty of care to ensure that these impacts are satisfactorily mitigated as part of the planning process.



Response to Technical Note

Colleagues from within TfGM Highways have reviewed the technical note issued in support of the proposed development and have provided comments in respect of the relevant sections.

Public Transport

It is noted that a pedestrian connection has been provided as requested, which is welcomed.

In terms of active travel comments, following previous numbering, the first comment appears to have been missed in the response "In respect of Section 7.3 of the TA, the pedestrian accessibility should be audited in more detail relating to footway widths, surface quality, dropped kerbs, and tactile paving. This should relate to highway and off-highway routes. It is noted that Greenvale and Norford Way, which form a key pedestrian access to and from the site, lack dropped kerbs and tactile paving at several junctions.". Therefore, this comment still stands.

Our responses to the other numbered comments are as below:

1. Noted
2. Whilst it's noted that the traffic speeds and volumes are low, TfGM would request that more detail of the cycling conditions/infrastructure be provided, in line with LTN1/20 guidance, which extends beyond low speeds and volumes.
3. Noted
4. Noted
5. It is noted that there is an existing signalised crossing for the benefit of Bamford Precinct, but this is the only crossing on Norden Road. Additional provision could be to enhance pedestrian connections, such as the bus stop at Spring Bank Lane. A new pedestrian crossing is also part of the necessary transport interventions identified as part of the PfE modelling.
6. Noted
7. Noted

Travel Plan

TfGM would recommend that a detailed Travel Plan be conditioned to a planning approval.



Every journey. Every day.

Development Impact

Noted

Trip Distribution

We do not have the distribution gravity model on file, which may be an internal filing issue. Nevertheless, we would request that this file is provided for our review to the same email address please (landuse@tfgm.com).

Junction Modelling

Notes on the updated modelling are provided under the heading "Traffic Impact Assessment Update" below.

Mitigation

Previous comments have not been addressed as part of the response. TfGM have concerns that it is not possible to develop effective detailed mitigation until Masterplan work is completed and an associated Transport Assessment and Infrastructure Phasing and Delivery Strategy have been produced, it is not possible to determine what infrastructure would be required to facilitate individual parcels of development, when they would be required and how they will be funded or what environmental impact they would have.

In terms of mitigation, the following were suggested:

- Norden Road / War Office Road – modifications to traffic circulation and local junction improvements.
- Norden Road – new pedestrian crossing.
- Bus stop upgrades at the Norden Road / War Office Road junction.
- Active travel improvements including Furbarn Road improvements and North South Greenway corridor through the site.

These are noted but not addressed – it is appreciated that they were for the whole PfE site but how this development will provide a proportionate contribution to the listed mitigation should be detailed/explained.

Access Arrangements

Noted



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Traffic Regulation Orders

Noted

Construction Traffic Management Plan

TfGM would suggest that this is conditioned to a planning approval

Traffic Impact Assessment Update

The traffic modelling is now acceptable and will reflect the likely impact of the development traffic.

I hope you find these comments useful in the determination of this planning application. Should you wish to discuss any matter further please do not hesitate to contact the Landuse team via the details below.

Yours faithfully

Landuse Team
Highways Department
Transport for Greater Manchester
Email: landuse@tfgm.com



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Appendix TTN4-2: Sustainable Travel Improvement Schedule (Including Costings)

JPA17 - Sustainable Travel Infrastructure Improvements including costings

					Weighting			Delivery Mechanism	Cost			Notes
Item Ref:	Infrastructure:	Associated With	Drawing Ref	Cost	Wains	North stone	Mills		Wains	North stone	Mills	
1	Dropped kerb tactile paved crossing point (Norford Way / The Springs)	Wain Homes	B068938 TTE 00 XX DR O 006 P01	£2,530	100%	0%	0%	S278	£2,530	£0	£0	* Wains to deliver via S278
2	Dropped kerb tactile paved crossing point (Norford Way / Norford Way)	Wain Homes	B068938 TTE 00 XX DR O 006 P01	£1,869	100%	0%	0%	S278	£1,869	£0	£0	* Wains to deliver via S278
3	Dropped kerb tactile paved crossing point (Across Norford Way just to the east of Greenvale)	Wain Homes	B068938 TTE 00 XX DR O 006 P01	£2,049	100%	0%	0%	S278	£2,049	£0	£0	* Wains to deliver via S278
4	Dropped kerb tactile paved crossing point (Across Norden Road just north of Norford Way)	Wain Homes	B068938 TTE 00 XX DR O 006 P01	£1,956	100%	0%	0%	S278	£1,956	£0	£0	* Wains to deliver via S278
5	Dropped kerb tactile paved crossing point (Spring bank Lane)	Wain Homes	B068938 TTE 00 XX DR O 006 P01	£1,113	100%	0%	0%	S278	£1,113	£0	£0	* Wains to deliver via S278
6	Northbound Bus Stop at War Office Road junction	All	B068938 TTE 00 XX DR O 004 P01	£17,811	10%	45%	45%	S106	£1,781	£8,015	£8,015	These figures are for illustration only and dependant on the build out at each site
7	Southbound Bus Stop at War Office Road Junction	All	B068938 TTE 00 XX DR O 005 P01	£8,124	10%	45%	45%	S106	£812	£3,656	£3,656	
8	Pedestrian Crossing (Puffin) across Norden Road south of War Office Road	Northstone / Mills	B068938 TTE 00 XX DR O 003 P01	£104,875	0%	50%	50%	S106	£0	£52,438	£52,438	
9	Furbarn Rd Ped / Cycleway Improvements	All	-	£203,112	10%	45%	45%	S106	£20,311	£91,400	£91,400	
10	North / South Greenway (on-site within certain parcels of land)	Northstone / Mills	-	absorbed into site delivery				Planning Condition				
11	Cycle Parking Provision at all dwellings	All	-	absorbed into site delivery				Planning Condition				
Total	£343,440								£32,422	£155,509	£155,509	

Anticipated S278 costs for Wains

£9,517

S106 Contribution for Wains

£22,905

Drawing Schedule

Item Ref:	Drawing No.	Drawing File
1, 2, 3, 4, 5	B068938 TTE 00 XX DR O 006 P01	
6	B068938 TTE 00 XX DR O 004 P01	
7	B068938 TTE 00 XX DR O 005 P01	
8	B068938 TTE 00 XX DR O 003 P01	

PRELIMINARY COST ESTIMATE SUMMARY

Project: Land off Greenvale, Bamford Rochdale
Project Number: 784-B068938
Item: Dropped Kerbs Tactile Paving at Existing Crossing Point
Location: Norford / The Springs (VP1)
Date: 10/06/2026



ITEM DESCRIPTION		TOTAL	COMMENT
PRELIMINARIES			
PRELIMINARIES/TRAFFIC MANAGEMENT	20%	£293	
CIVILS COSTS			
SITE CLEARANCE		£130	
HEDGES		£0	
SAFETY FENCE, BARRIERS & PEDESTRIAN GUARD RAIL		£0	
DRAINAGE & SERVICE DUCT		£0	
EARTHWORKS		£87	
PAVEMENT FOUNDATION		£0	
PAVEMENT CONSTRUCTION		£0	
CONCRETE CARRIAGEWAY		£0	
KERBS, FOOTWAYS AND PAVED AREAS		£1,247	
TRAFFIC SIGNS & ROAD MARKINGS		£0	
STRUCTURAL CONCRETE		£0	
PROTECTION OF STEELWORK		£0	
WATERPROOFING FOR STRUCTURES		£0	
BRIDGE DECK EXPANSION JOINTS TO COMPLY WITH SHW SERIES 2300		£0	
COLUMNS		£0	
LANTERNS/LAMPS		£0	
CABLING		£0	
TOTAL CIVILS COST		£1,464	
TOTAL COST (INCULDING PRELIMINARIES)		£1,757	
CONTINGENCY/OPTIMISM BIAS	44%	£773	
TOTAL		£2,530	

Based on TT drawing ref. 784-B068938-TTE-00-XX-DR-O-006.P01

Prices based on SPON'S 2024 Booklet

Exclusions: Utility diversions, carriageway resurfacing, drainage alterations and Street lighting

Statutory undertakers works

Detailed design

PRELIMINARY COST ESTIMATE SUMMARY

Project: Land off Greenvale, Bamford Rochdale
Project Number: 784-B068938
Item: Dropped Kerbs Tactile Paving at Existing Crossing Point
Location: Norford Way at PRow (VP2)
Date: 10/06/2026



ITEM DESCRIPTION		TOTAL	COMMENT
PRELIMINARIES			
PRELIMINARIES/TRAFFIC MANAGEMENT	20%	£216	
CIVILS COSTS			
SITE CLEARANCE		£79	
HEDGES		£0	
SAFETY FENCE, BARRIERS & PEDESTRIAN GUARD RAIL		£0	
DRAINAGE & SERVICE DUCT		£0	
EARTHWORKS		£95	
PAVEMENT FOUNDATION		£0	
PAVEMENT CONSTRUCTION		£0	
CONCRETE CARRIAGEWAY		£0	
KERBS, FOOTWAYS AND PAVED AREAS		£907	
TRAFFIC SIGNS & ROAD MARKINGS		£0	
STRUCTURAL CONCRETE		£0	
PROTECTION OF STEELWORK		£0	
WATERPROOFING FOR STRUCTURES		£0	
BRIDGE DECK EXPANSION JOINTS TO COMPLY WITH SHW SERIES 2300		£0	
COLUMNS		£0	
LANTERNS/LAMPS		£0	
CABLING		£0	
TOTAL CIVILS COST		£1,082	
TOTAL COST (INCULDING PRELIMINARIES)		£1,298	
CONTINGENCY/OPTIMISM BIAS	44%	£571	
TOTAL		£1,869	

Based on TT drawing ref. 784-B068938-TTE-00-XX-DR-O-006.P01

Prices based on SPON'S 2024 Booklet

Exclusions: Utility diversions, carriageway resurfacing, drainage alterations and Street lighting

Statutory undertakers works

Detailed design

PRELIMINARY COST ESTIMATE SUMMARY

Project: Land off Greenvale, Bamford Rochdale
Project Number: 784-B068938
Item: Dropped Kerbs Tactile Paving at Existing Crossing Point
Location: Norford Way / Norford Way (VP3)
Date: 10/06/2026



ITEM DESCRIPTION		TOTAL	COMMENT
PRELIMINARIES			
PRELIMINARIES/TRAFFIC MANAGEMENT	20%	£237	
CIVILS COSTS			
SITE CLEARANCE		£105	
HEDGES		£0	
SAFETY FENCE, BARRIERS & PEDESTRIAN GUARD RAIL		£0	
DRAINAGE & SERVICE DUCT		£0	
EARTHWORKS		£87	
PAVEMENT FOUNDATION		£0	
PAVEMENT CONSTRUCTION		£0	
CONCRETE CARRIAGEWAY		£0	
KERBS, FOOTWAYS AND PAVED AREAS		£995	
TRAFFIC SIGNS & ROAD MARKINGS		£0	
STRUCTURAL CONCRETE		£0	
PROTECTION OF STEELWORK		£0	
WATERPROOFING FOR STRUCTURES		£0	
BRIDGE DECK EXPANSION JOINTS TO COMPLY WITH SHW SERIES 2300		£0	
COLUMNS		£0	
LANTERNS/LAMPS		£0	
CABLING		£0	
TOTAL CIVILS COST		£1,186	
TOTAL COST (INCULDING PRELIMINARIES)		£1,423	
CONTINGENCY/OPTIMISM BIAS	44%	£626	
TOTAL		£2,049	

Based on TT drawing ref. 784-B068938-TTE-00-XX-DR-O-006.P01

Prices based on SPON'S 2024 Booklet

Exclusions: Utility diversions, carriageway resurfacing, drainage alterations and Street lighting
Detailed design

PRELIMINARY COST ESTIMATE SUMMARY

Project: Land off Greenvale, Bamford Rochdale
 Project Number: 784-B068938
 Item: Dropped Kerbs Tactile Paving at Existing
 Location: Norden Road Crossing (VP4)
 Date: 10/06/2026



ITEM DESCRIPTION		TOTAL	COMMENT
PRELIMINARIES			
PRELIMINARIES/TRAFFIC MANAGEMENT	20%	£226	
CIVILS COSTS			
SITE CLEARANCE		£79	
HEDGES		£0	
SAFETY FENCE, BARRIERS & PEDESTRIAN GUARD RAIL		£0	
DRAINAGE & SERVICE DUCT		£0	
EARTHWORKS		£113	
PAVEMENT FOUNDATION		£0	
PAVEMENT CONSTRUCTION		£0	
CONCRETE CARRIAGEWAY		£0	
KERBS, FOOTWAYS AND PAVED AREAS		£940	
TRAFFIC SIGNS & ROAD MARKINGS		£0	
STRUCTURAL CONCRETE		£0	
PROTECTION OF STEELWORK		£0	
WATERPROOFING FOR STRUCTURES		£0	
BRIDGE DECK EXPANSION JOINTS TO COMPLY WITH SHW SERIES 2300		£0	
COLUMNS		£0	
LANTERNS/LAMPS		£0	
CABLING		£0	
TOTAL CIVILS COST		£1,132	
TOTAL COST (INCULDING PRELIMINARIES)		£1,358	
CONTINGENCY/OPTIMISM BIAS	44%	£598	
TOTAL		£1,956	

Based on TT drawing ref. 784-B068938-TTE-00-XX-DR-O-006.P01

Prices based on SPON'S 2024 Booklet

Exclusions: Utility diversions, carriageway resurfacing, drainage alterations and Street lighting

Detailed design

PRELIMINARY COST ESTIMATE SUMMARY

Project: Land off Greenvale, Bamford Rochdale
Project Number: 784-B068938
Item: Dropped Kerbs Tactile Paving at Existing Crossing Point
Location: Spring Bank (VP5)
Date: 10/06/2026



ITEM DESCRIPTION		TOTAL	COMMENT
PRELIMINARIES			
PRELIMINARIES/TRAFFIC MANAGEMENT	20%	£129	
CIVILS COSTS			
SITE CLEARANCE		£54	
HEDGES		£0	
SAFETY FENCE, BARRIERS & PEDESTRIAN GUARD RAIL		£0	
DRAINAGE & SERVICE DUCT		£0	
EARTHWORKS		£52	
PAVEMENT FOUNDATION		£0	
PAVEMENT CONSTRUCTION		£0	
CONCRETE CARRIAGEWAY		£0	
KERBS, FOOTWAYS AND PAVED AREAS		£538	
TRAFFIC SIGNS & ROAD MARKINGS		£0	
STRUCTURAL CONCRETE		£0	
PROTECTION OF STEELWORK		£0	
WATERPROOFING FOR STRUCTURES		£0	
BRIDGE DECK EXPANSION JOINTS TO COMPLY WITH SHW SERIES 2300		£0	
COLUMNS		£0	
LANTERNS/LAMPS		£0	
CABLING		£0	
TOTAL CIVILS COST		£644	
TOTAL COST (INCULDING PRELIMINARIES)		£773	
CONTINGENCY/OPTIMISM BIAS	44%	£340	
TOTAL		£1,113	

Based on TT drawing ref. 784-B068938-TTE-00-XX-DR-O-006.P01

Prices based on SPON'S 2024 Booklet

Exclusions: Utility diversions, carriageway resurfacing, drainage alterations and Street lighting

Statutory undertakers works

Detailed design

PRELIMINARY COST ESTIMATE SUMMARY

Project: Land off Greenvale, Bamford Rochdale
Project Number: 784-B068938
Item: Bus Stop Upgrade
Location: 59 Norden Road
Date: 28/03/2025



		TOTAL	COMMENT
PRELIMINARIES			
PRELIMINARIES/TRAFFIC MANAGEMENT	20%	£2,061	
CIVILS COSTS			
SITE CLEARANCE		£112	
HEDGES		£0	
SAFETY FENCE, BARRIERS & PEDESTRIAN GUARD RAIL		£10,000	Bus stop shelter
DRAINAGE & SERVICE DUCT		£0	
EARTHWORKS		£0	
PAVEMENT FOUNDATION		£0	
PAVEMENT CONSTRUCTION		£0	
CONCRETE CARRIAGEWAY		£0	
KERBS, FOOTWAYS AND PAVED AREAS		£0	
TRAFFIC SIGNALS, SIGNS & ROAD MARKINGS		£195	
STRUCTURAL CONCRETE		£0	
PROTECTION OF STEELWORK		£0	
WATERPROOFING FOR STRUCTURES		£0	
BRIDGE DECK EXPANSION JOINTS TO COMPLY WITH SHW SERIES 2300		£0	
COLUMNS		£0	
LANTERNS/LAMPS		£0	
CABLING		£0	
TOTAL CIVILS COST		£10,307	
TOTAL COST (INCLUDING PRELIMINARIES)		£12,369	
CONTINGENCY/OPTIMISM BIAS	44%	£5,442	
TOTAL		£17,811	

Based on TT drawing ref. B068938-TTE-00-XX-DR-O-004

Exclusions:

Statutory undertakers works

Detailed design

PRELIMINARY COST ESTIMATE SUMMARY

Project: Land off Greenvale, Bamford Rochdale
Project Number: 784-B068938
Item: Bus Stop Upgrade
Location: 99 War Office Road
Date: 28/03/2025



TETRA TECH

	TOTAL	COMMENT
PRELIMINARIES		
PRELIMINARIES/TRAFFIC MANAGEMENT	£2,500	
CIVILS COSTS		
SITE CLEARANCE	£193	
HEDGES	£0	
SAFETY FENCE, BARRIERS & PEDESTRIAN GUARD RAIL	£0	
DRAINAGE & SERVICE DUCT	£0	
EARTHWORKS	£221	
PAVEMENT FOUNDATION	£0	
PAVEMENT CONSTRUCTION	£0	
CONCRETE CARRIAGEWAY	£0	
KERBS, FOOTWAYS AND PAVED AREAS	£1,607	
TRAFFIC SIGNALS, SIGNS & ROAD MARKINGS	£1,122	
STRUCTURAL CONCRETE	£0	
PROTECTION OF STEELWORK	£0	
WATERPROOFING FOR STRUCTURES	£0	
BRIDGE DECK EXPANSION JOINTS TO COMPLY WITH SHW SERIES 2300	£0	
COLUMNS	£0	
LANTERNS/LAMPS	£0	
CABLING	£0	
TOTAL CIVILS COST	£3,142	
TOTAL COST (INCULDING PRELIMINARIES)	£5,642	
CONTINGENCY/OPTIMISM BIAS	44% £2,482	
TOTAL	£8,124	

Based on TT drawing ref. B068938-TTE-00-XX-DR-O-005

Exclusions:

Statutory undertakers works

Detailed design

PRELIMINARY COST ESTIMATE SUMMARY

**Project: Proposed Residential Development :Land
off Greenvale
(Puffin Crossing)
Project Number: 784-B068938
Date: 28/03/2025**



		TOTAL	COMMENT
PRELIMINARIES			
PRELIMINARIES/TRAFFIC MANAGEMENT	20%	£12,138	
CIVILS COSTS			
SITE CLEARANCE		£249	
HEDGES		£0	
SAFETY FENCE, BARRIERS & PEDESTRIAN GUARD RAIL		£0	
DRAINAGE & SERVICE DUCT		£0	
EARTHWORKS		£138	
PAVEMENT FOUNDATION		£0	
PAVEMENT CONSTRUCTION		£9,687	Anti Skid Surfacing
CONCRETE CARRIAGEWAY		£0	
KERBS, FOOTWAYS AND PAVED AREAS		£880	
TRAFFIC SIGNALS, SIGNS & ROAD MARKINGS		£49,737	
STRUCTURAL CONCRETE		£0	
PROTECTION OF STEELWORK		£0	
WATERPROOFING FOR STRUCTURES		£0	
BRIDGE DECK EXPANSION JOINTS TO COMPLY WITH SHW SERIES 2300		£0	
COLUMNS		£0	
LANTERNS/LAMPS		£0	
CABLING		£0	
TOTAL CIVILS COST		£60,692	
TOTAL COST (INCULDING PRELIMINARIES)		£72,830	
CONTINGENCY/OPTIMISM BIAS	44%	£32,045	
TOTAL		£104,875	

Based on TT drawing ref. B068938-TTE-00-XX-DR-O-003

Exclusions:

Statutory undertakers works

Detailed design

Project: Land off Greenvale, Bamford Rochdale

Project Number: 784-B068938

Item: Re-surfacing existing route for ped / cycles

**Location: Furbanr Road Between Clay Lane and
Ashbourne Street**

Length	775 m
Width	3.5 m
Area	2712.5 m ²

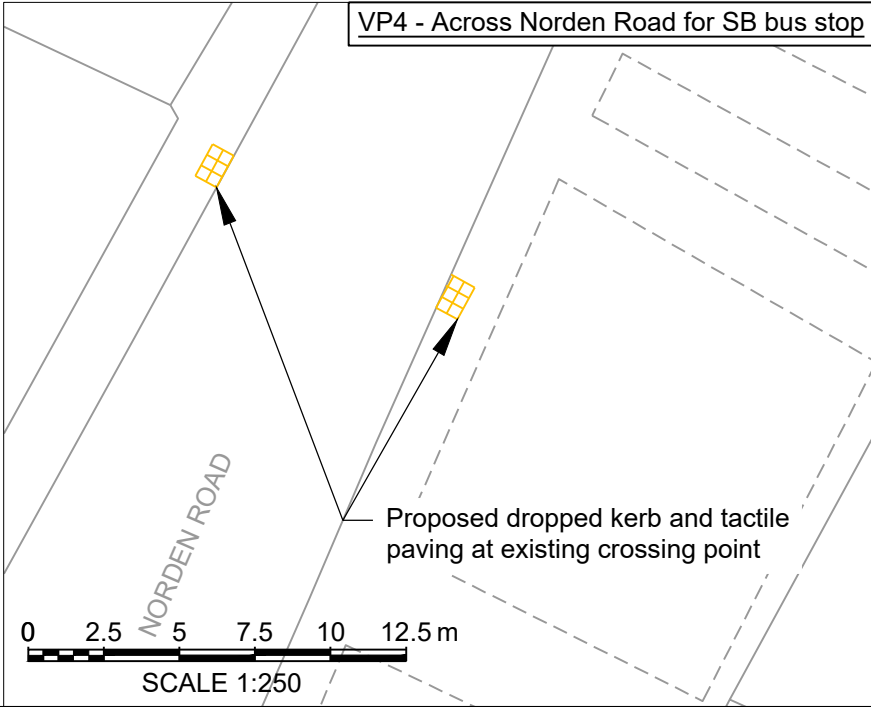
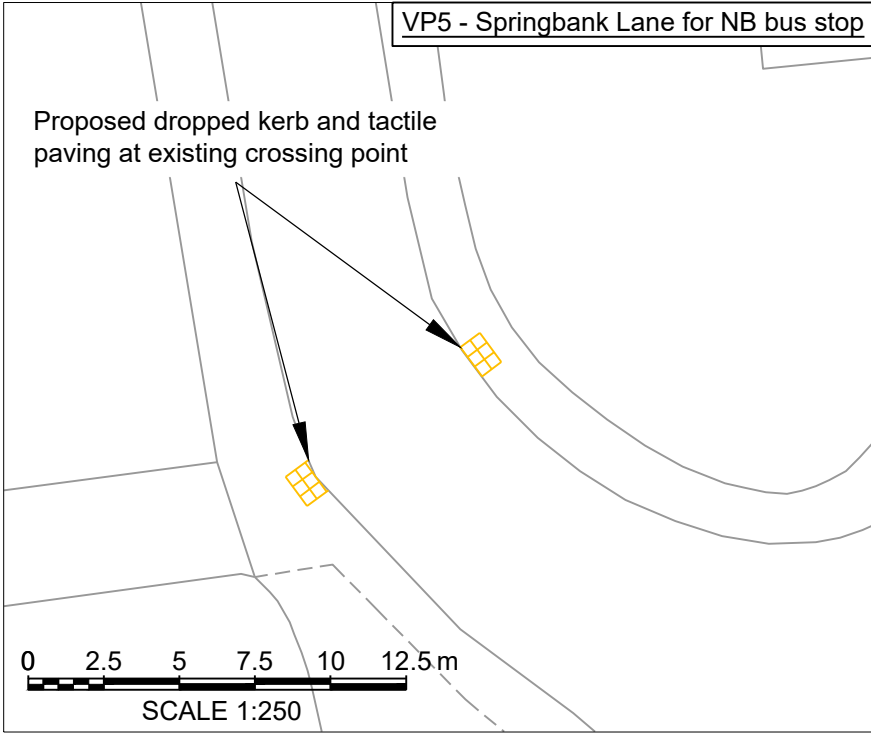
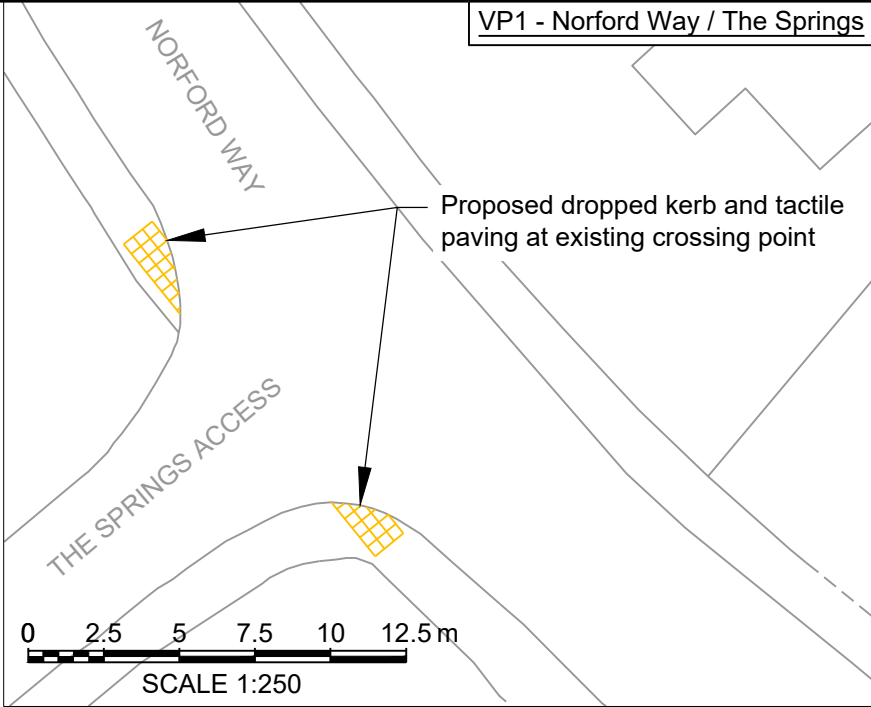
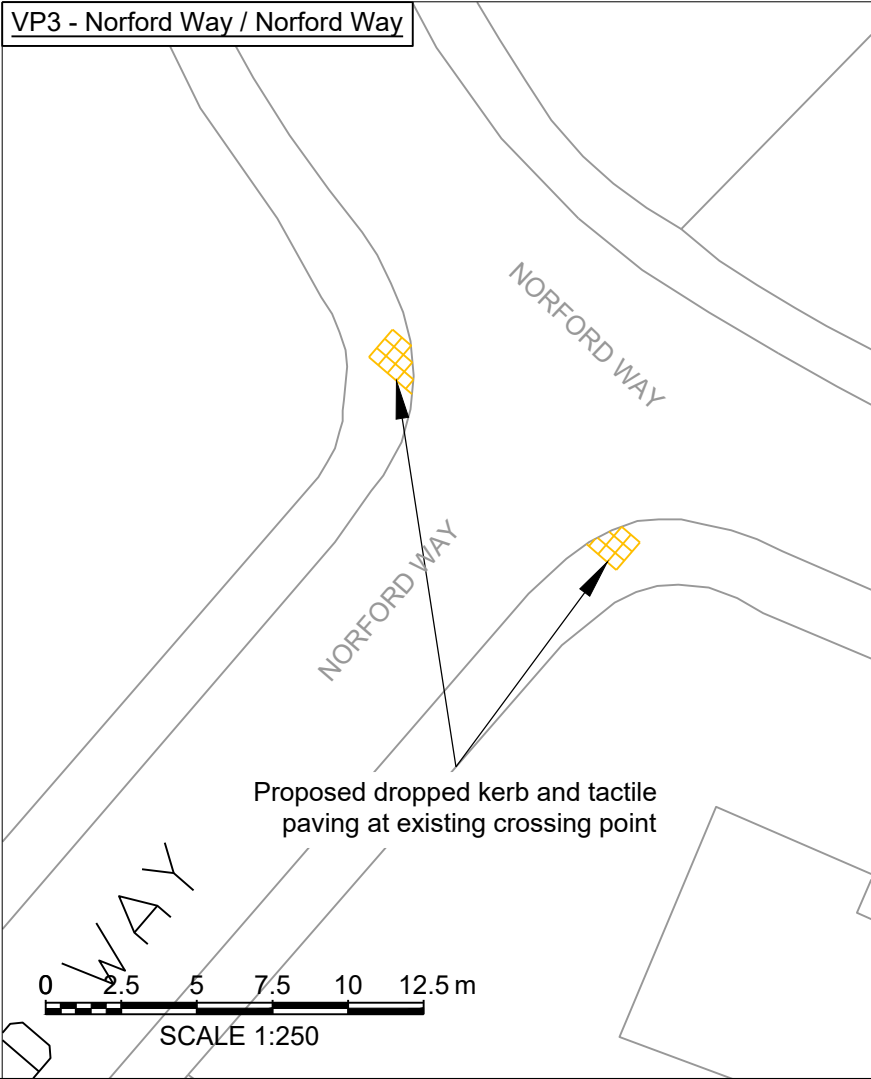
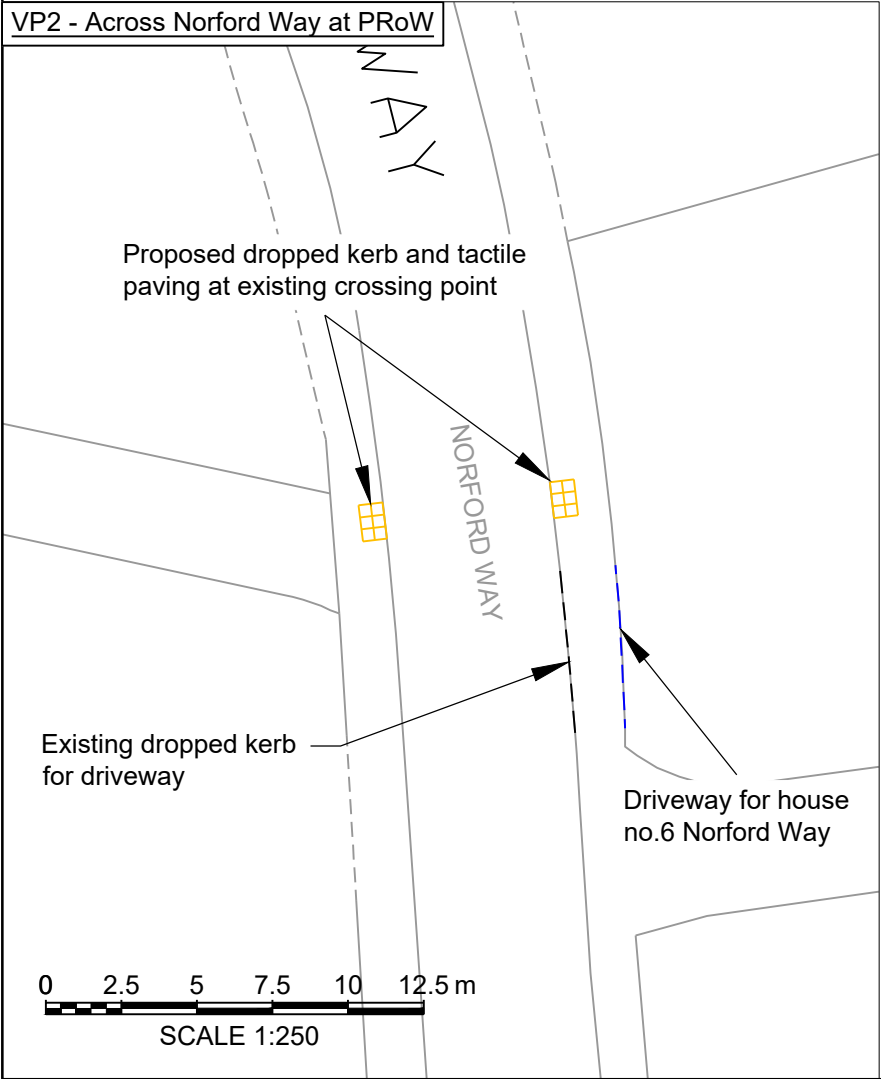
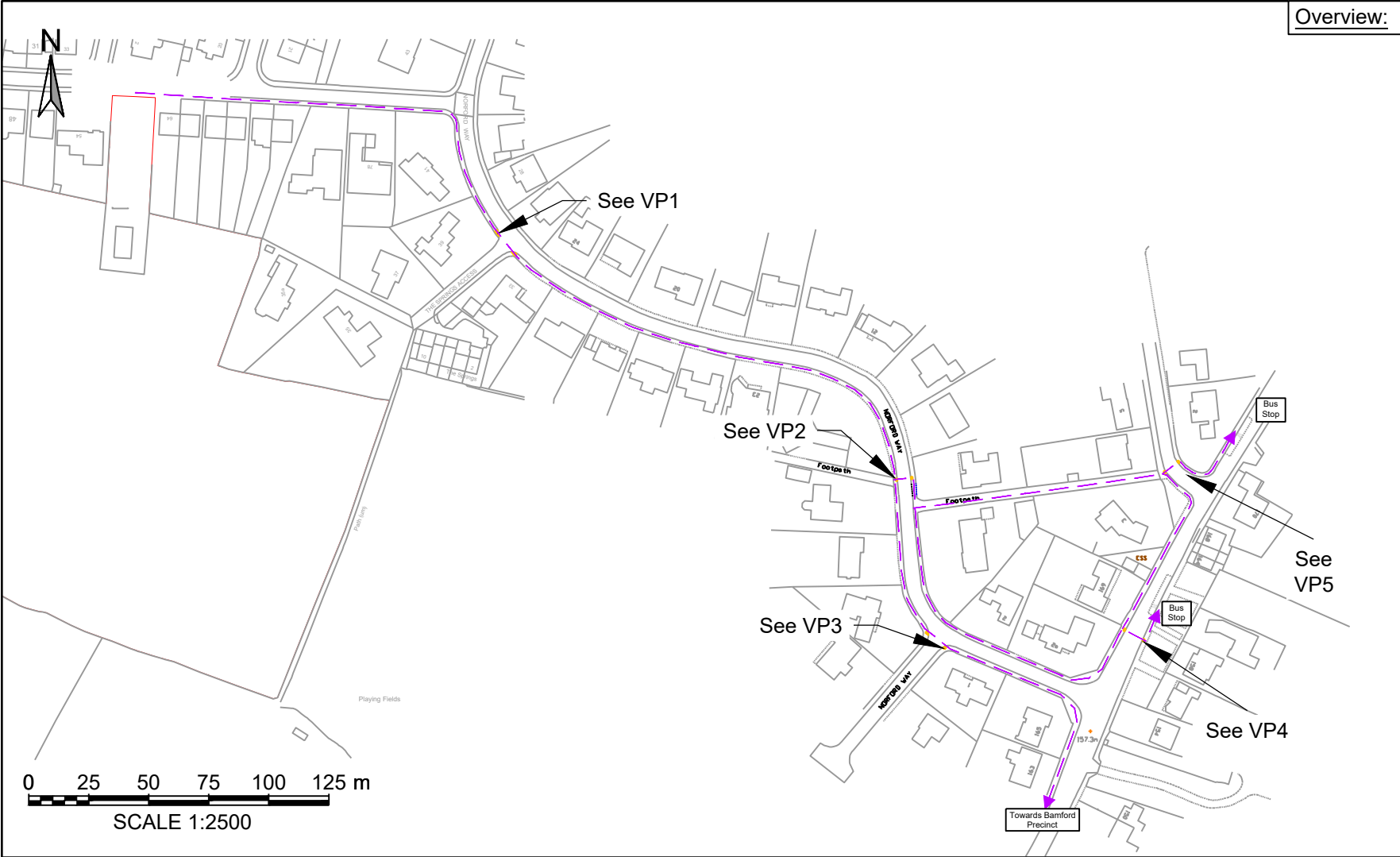
Full Recontruction

excavation	£7 per sqm
full construction	£45 per sqm
Total	£52 per sqm

CONTINGENCY/OPTIMISM BIAS	1.44
Total in Contingency	£74.88

Total Cost	£203,112
------------	----------

Appendix TTN4-3: Pedestrian Crossing Improvement Drawing



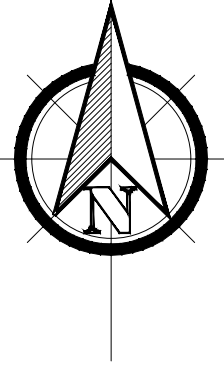
- Notes:
- This drawing is based on OS Mapping obtained from Emapsite Ltd. Tetra Tech does not take responsibility for any discrepancies.
 - All measurements are in metres unless stated otherwise
- Key:
- Approx site boundary
 - Tactile paving
 - Driveways
 - Pedestrian route

PRELIMINARY ISSUE

P01	PRELIMINARY FIRST ISSUE	10.06.2026	AB	MT	MT
Rev	Description	Date	Drawn	Checked	Approved
Document Control					
Issuing Office					
Tetra Tech Manchester					
11 York Street, Manchester, M2 2AW					
Tel: +44 (0)161 872 3223					
www.tetrattechurope.com					
Client					
Proposed Residential Development: Land off Greenvale, Bamford, Rochdale					
Sheet Title					
Proposed dropped kerb tactile paved crossing points					
TTE Project Number	Drawn By	Date	Checked By	Date	Approved By
784-B068938	AB	June '26	MT	June '26	MT
Client Project Number	Originator	Volume/System Level/Location	Type/Code	Role	Number
B068938	- TTE	- 00 - XX	- DR - O	- 006	P01
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TTE_MT_01					

Appendix TTN4-4: Proposed Site Layout

GREENVALE, BAMFORD, ROCHDALE								
Code	House Type	Bed & Type	Storey	Parking	Unit No.	Build Sq/Ft	Total Build Sq/Ft	Mix %
Affordable								
GOR	Gorsefield	3B-4P Mews	2	2PS	3	970	2910	7%
OAK	Oakrise	4B-5P Semi	2.5	2PS	3	1294	3882	7%
Sub-Total					6	2264	6792	13%
Open Market								
PAR	Parkland	3B-4P Semi	2	2PS	5	1012	5060	11%
MEA	Meadowvale	3B-4P Semi / Detached	2	2PS	9	1094	9846	20%
HIG	Highstone	4B-7P Detached	2	2PS + SIG	7	1396	9772	16%
PEA	Peakridge	5B-8P Detached	2	2PS + SIG	6	1679	10074	13%
STA	Standish	5B-8P Detached	2	2PS + SIG	6	1907	11442	13%
CAP	Capstone	5B-8P Detached	2	2PS + DDG	6	2240	13440	13%
Sub-Total					39	9328	59634	87%
TOTAL					45	11592	66426	100%
Gross Site Area		6.66	Acres					
Nett Site Area		4.23	Acres					
Net Density		11	Units / Acre					
SqFt / Net Developable Acre		15704	SqFt / Acre					



General notes:

- All information on this drawing is copyright ©
- All sizes to be verified on-site
- No dimensions to be scaled off this drawing
- All dimensions to drawing in metres unless otherwise stated
- This drawing is to be read in conjunction with all other project drawings

In locations where it is not possible to erect a boundary treatment on the line of the legal ownership, an additional line will be identified on the above plan to illustrate the approximate fence location. The boundary fence will, therefore, be erected as close to the title boundary as possible without causing damage to the existing features. This may be a result of the following items:

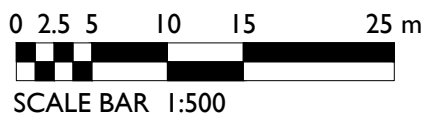
Existing hedgerows/trees and Woodland areas
Existing boundary fences and significant topographical features
Proposed and existing retaining structures and foundations.

The resident is responsible for maintaining all items within the plot boundary identified by the red edge boundary.

DRAWING TO BE PRINTED IN COLOUR.

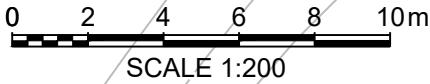
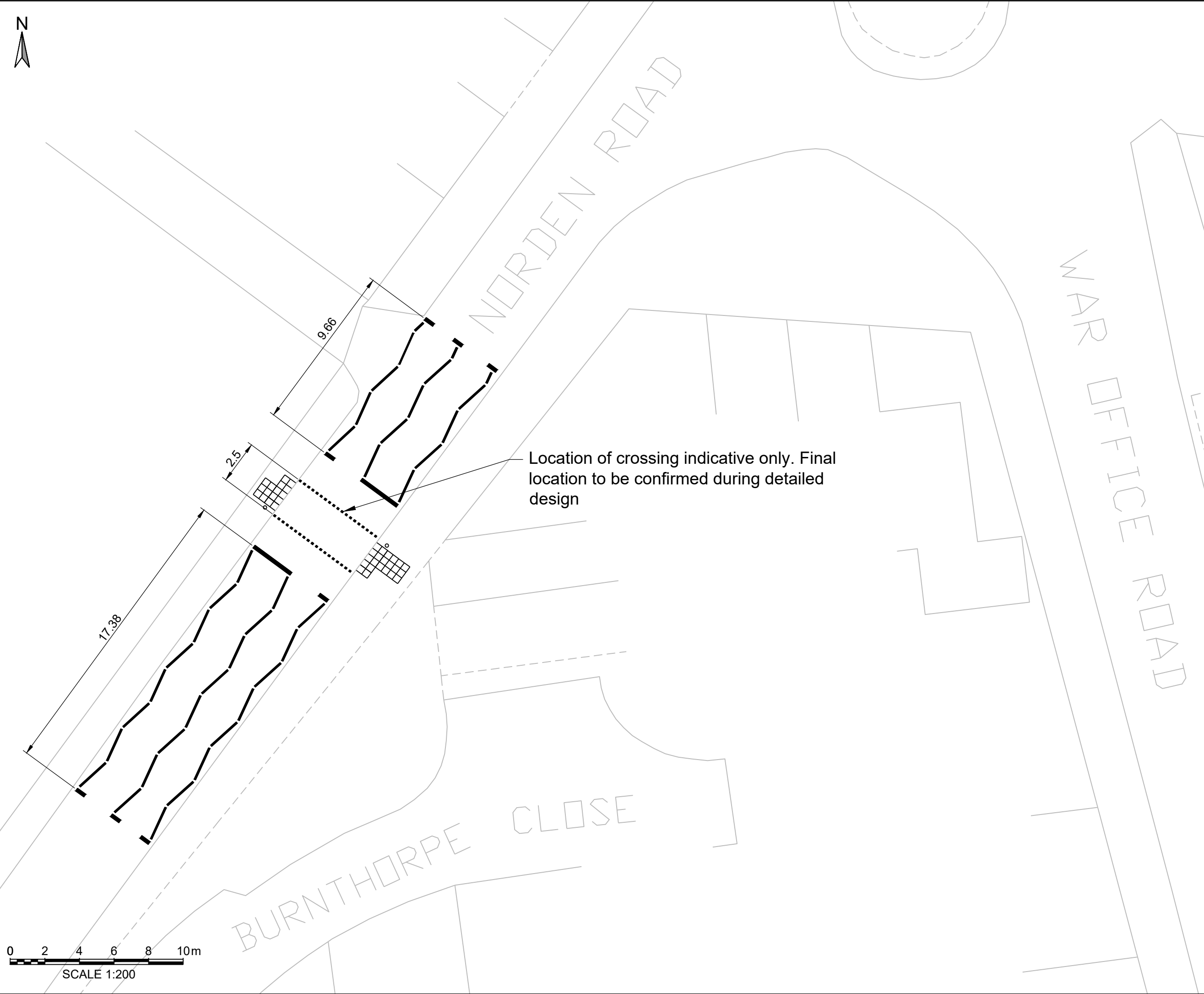
KEY	
	Red Edge Application Boundary
	Adopted Roads
	Adopted Roads (Red chipping)
	Adopted footpaths
	Shared Drives
	Parking Bays
	Private Paths
	Private Gardens
	Open Space
	Grasscrete / Bodpave ground reinforcement
	Pond / Attenuation Pond
	Self binding hoggin path
	Plot divisional boundaries
	Knee Rail
	Brick Pier Wall & Timber Infill
	Screen Wall R4
	Railings
	Service verge
	Feature Plot with dual aspect elevations
	Affordable Units
	Feather Edge Fencing & gate
	Denotes overhead line swing
	1.2M Estate Railing Gate (BT1201)
	Indicative Native Understorey Scrub mix
	Indicative Native Hedge Planting
	Indicative Ornamental Hedge Planting
	Indicative Ornamental Shrub Planting
	Indicative Tree Planting
	Removed Trees / Hedges
	Retained Trees / Hedges

REV	DATE	DESCRIPTION	BY
Project Title: GREENVALE BAMFORD ROCHDALE			
Drawing Title: PROPOSED SITE LAYOUT (JG Option 07)			
PLANNING			
Drawing No: WH-001-NW-A-401			
Scale: 1:500@A1	Date: Sep 2025	Site Code: 001	
Drawn by: JSG	Checked by: XX	Revision: R	



Existing trees to the southern boundary and just around the south-eastern corner removed, replaced with a new native species hedgerow and a number of larger stock trees, that will be located outside the private garden boundaries, within a linear 2m wide strip of land that is to be maintained by the management company.

Appendix TTN4-5: Norden Road Puffin Crossing Drawing



Notes:

1. All dimensions in metres unless stated otherwise.
2. This drawing should be read in relation to the subject of the title only. Other information shown on this drawing is to be considered indicative only. Reference should be made to appropriate drawing series / specifications for other information.
3. Tetra Tech does not take responsibility for any discrepancies with the base mapping data.

PRELIMINARY ISSUE

P01	PRELIMINARY FIRST ISSUE	28.01.2025	HM	AS	MT
Rev	Description	Date	Em	CR	App

Document Control

Issuing Office

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www.tetrateteurope.com

Client



Project Name

Proposed Residential Development:
Land off Greenvale

Sheet Title

Proposed Puffin Crossing on Norden Road

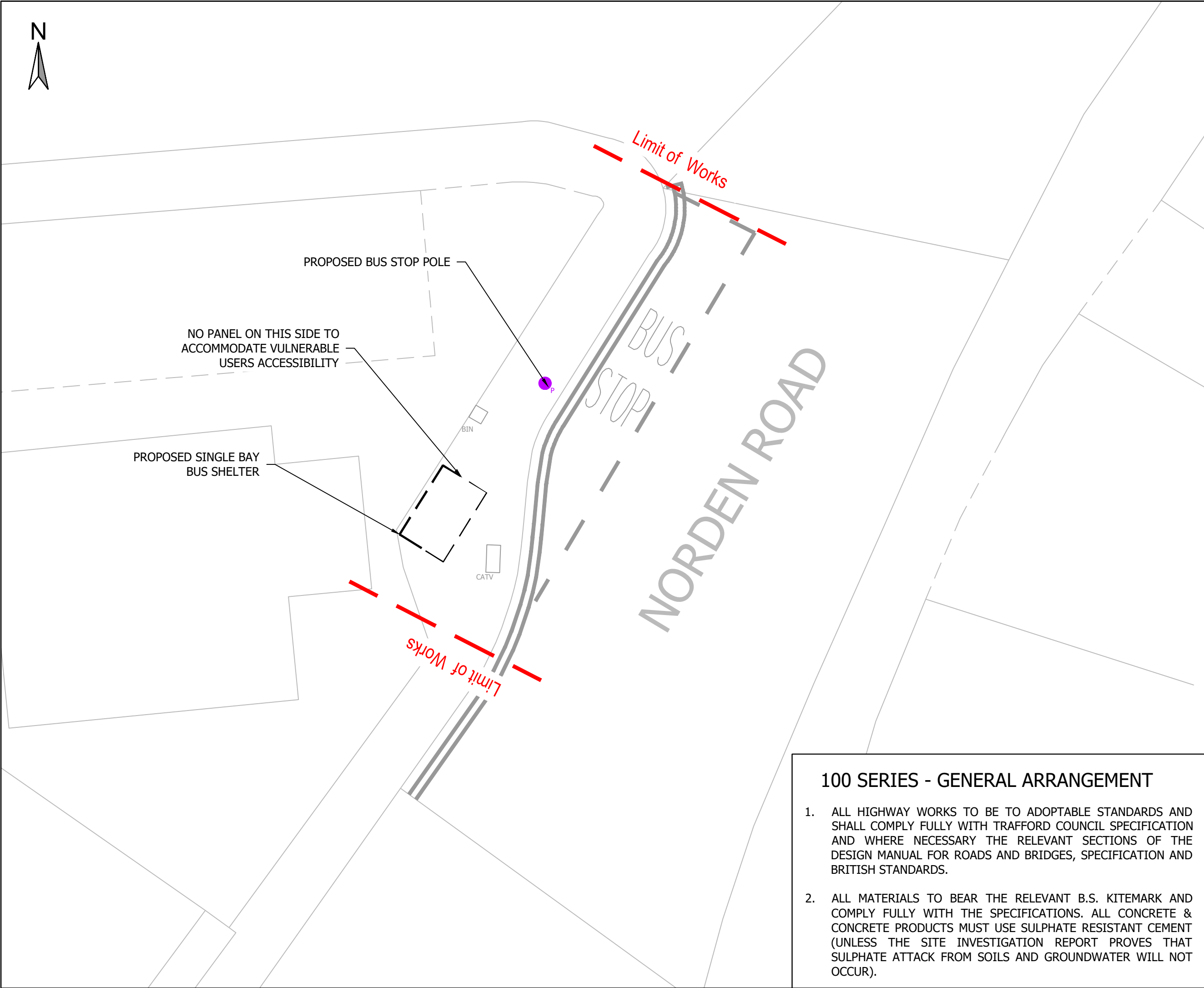
TTE Project Number	Drawn By	Date	Checked By	Date	Approved By	Date	Scale @ A3	Suitability
784-B068938	HM	Jan '25	AS	Jan '25	MT	Jan '25	As Shown	S0

Client Project Number	Originator	Volume/System Level/Location	Type/Code	Role	Number	Revision
B068938	- TTE	- 00 - XX	- DR - O	- 003	P01	

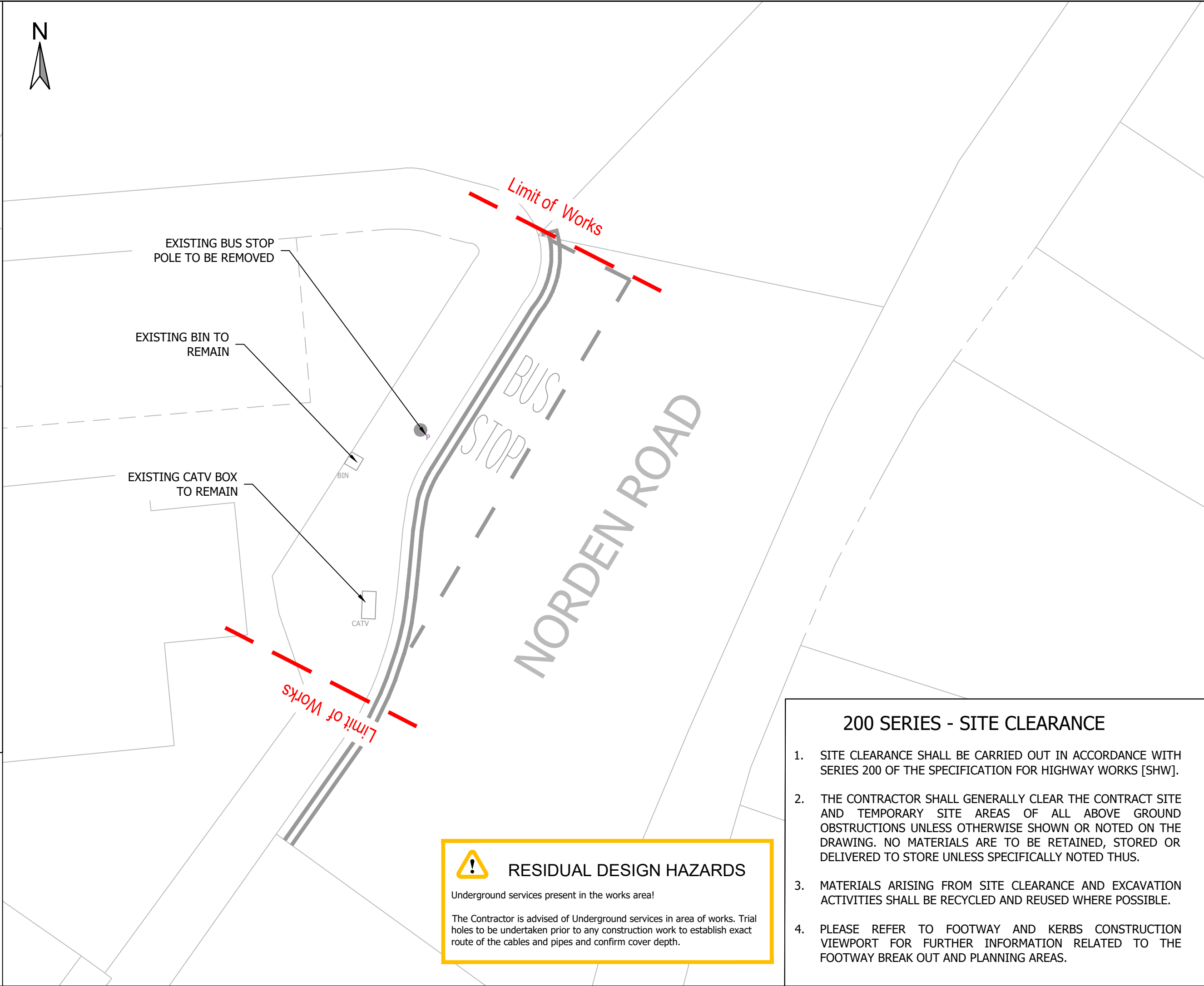
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Appendix TTN4-6: Norden Road / War Office Road Bus Stop Improvement Drawings

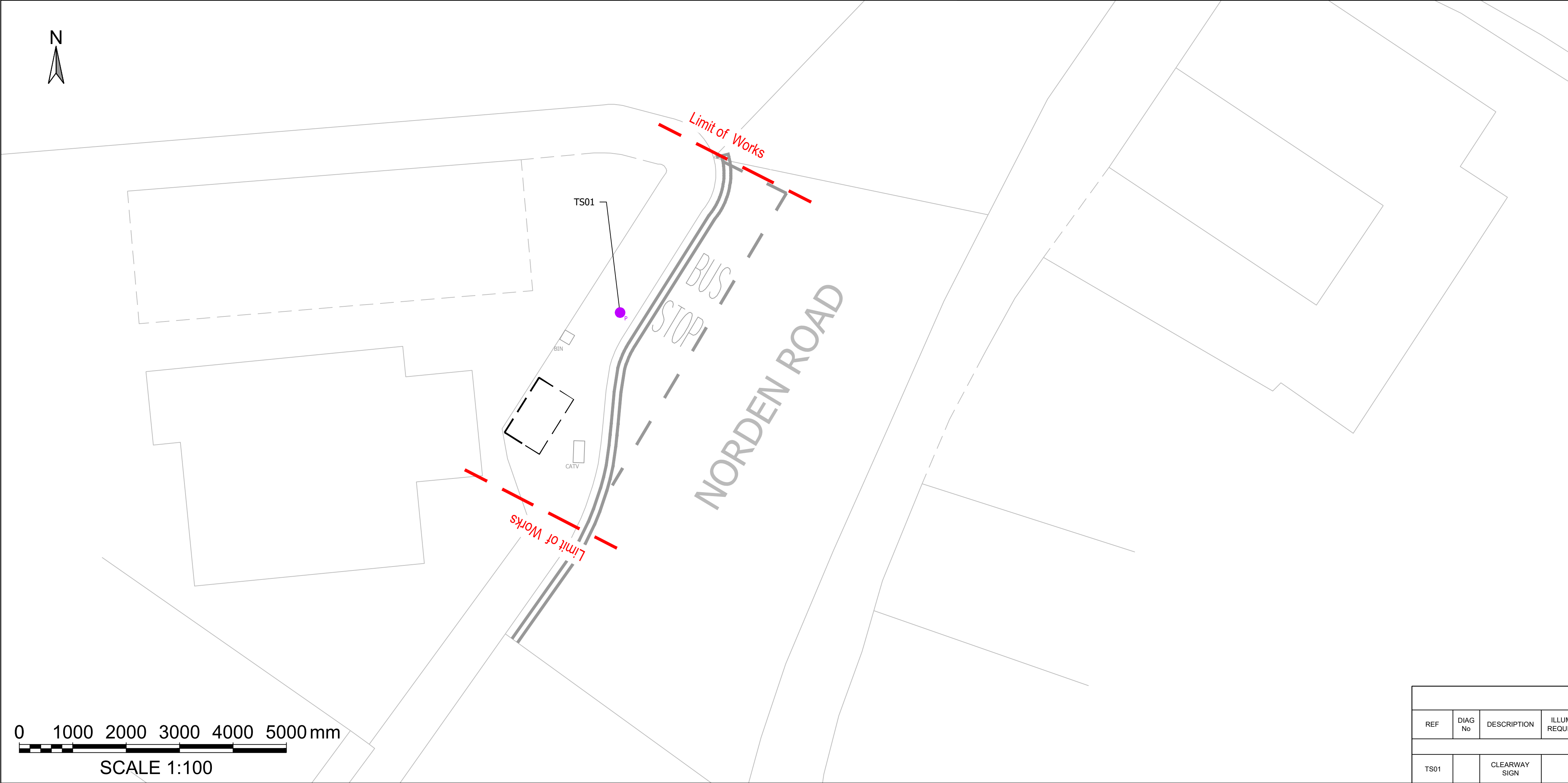


- ### 100 SERIES - GENERAL ARRANGEMENT
- ALL HIGHWAY WORKS TO BE TO ADOPTABLE STANDARDS AND SHALL COMPLY FULLY WITH TRAFFORD COUNCIL SPECIFICATION AND WHERE NECESSARY THE RELEVANT SECTIONS OF THE DESIGN MANUAL FOR ROADS AND BRIDGES, SPECIFICATION AND BRITISH STANDARDS.
 - ALL MATERIALS TO BEAR THE RELEVANT B.S. KITEMARK AND COMPLY FULLY WITH THE SPECIFICATIONS. ALL CONCRETE & CONCRETE PRODUCTS MUST USE SULPHATE RESISTANT CEMENT (UNLESS THE SITE INVESTIGATION REPORT PROVES THAT SULPHATE ATTACK FROM SOILS AND GROUNDWATER WILL NOT OCCUR).



RESIDUAL DESIGN HAZARDS
Underground services present in the works area!
The Contractor is advised of Underground services in area of works. Trial holes to be undertaken prior to any construction work to establish exact route of the cables and pipes and confirm cover depth.

- ### 200 SERIES - SITE CLEARANCE
- SITE CLEARANCE SHALL BE CARRIED OUT IN ACCORDANCE WITH SERIES 200 OF THE SPECIFICATION FOR HIGHWAY WORKS (SHW).
 - THE CONTRACTOR SHALL GENERALLY CLEAR THE CONTRACT SITE AND TEMPORARY SITE AREAS OF ALL ABOVE GROUND OBSTRUCTIONS UNLESS OTHERWISE SHOWN OR NOTED ON THE DRAWING. NO MATERIALS ARE TO BE RETAINED, STORED OR DELIVERED TO STORE UNLESS SPECIFICALLY NOTED THUS.
 - MATERIALS ARISING FROM SITE CLEARANCE AND EXCAVATION ACTIVITIES SHALL BE RECYCLED AND REUSED WHERE POSSIBLE.
 - PLEASE REFER TO FOOTWAY AND KERBS CONSTRUCTION VIEWPORT FOR FURTHER INFORMATION RELATED TO THE FOOTWAY BREAK OUT AND PLANNING AREAS.



- ### 1200 SERIES - TRAFFIC SIGNS AND ROAD MARKINGS
- ALL ROAD MARKINGS SHALL BE LAID IN ACCORDANCE WITH THE TRAFFIC SIGNS REGULATIONS AND GENERAL DIRECTIONS (TSRGD) 2016 AND TRAFFIC SIGNS MANUAL CHAPTER 5.
 - ALL EXISTING ROAD MARKINGS TO BE REMOVED IN ACCORDANCE WITH SUB-CLAUSE 1212.18 OF THE SPECIFICATION FOR HIGHWAY WORKS (SHW) ONCE THEY BECOME SUPERFLUOUS OR HAZARDOUS TO ROAD USERS USING HYDROBLASTING TECHNIQUE.
 - THE COLOUR OF PERMANENT ROAD MARKINGS SHALL BE AS IDENTIFIED IN THE ROAD MARKING SCHEDULE.
 - ALL PERMANENT WHITE ROAD MARKINGS SHALL BE OF APPLIED THERMOPLASTIC SCREED MATERIAL TO THE SHW AND BS 3262. APPLIED SCREED MARKINGS SHALL BE LAID 3MM THICK AND A MINIMUM OF 2MM. THIS THICKNESS IS EXCLUSIVE OF SURFACE APPLIED TO SOLID GLASS BEADS. THE METHOD OF THICKNESS MEASUREMENTS SHALL BE IN ACCORDANCE WITH BS EN 1436. MARKINGS SHOULD BE REFLECTORISED AS REQUIRED IN ACCORDANCE WITH TSRGD.
 - ALL SIGNS TO BE INSTALLED WITH A MINIMUM 450MM CLEAR OFFSET FROM THE CARRIAGEWAY EDGE. POSTS IN FOOTWAYS ARE TO BE LOCATED ONLY WITHIN THE FOLLOWING BANDS:
5.1. 450-750MM FROM FRONT OF FOOTWAY
5.2. WITHIN 450MM OF THE BACK OF FOOTWAY

- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DRAWINGS/INFORMATION
- THIS DRAWING SHOULD NOT BE SCALED AND ONLY USED FOR ITS INTENDED PURPOSE
- ALL DIMENSIONS ARE IN METERS UNLESS STATED OTHERWISE.
- THIS DRAWING IS BASED ON OS MAPPING DRAWING PROVIDED BY WAIN HOMES. TETRA TECH DOES NOT TAKE RESPONSIBILITY FOR ANY DISCREPANCIES.
- ALL ROAD MARKINGS ON THIS DRAWINGS ARE INDICATIVE ONLY.
- ALL STATUTORY CONSENTS, OPENING NOTICES ETC. AS REQUIRED UNDER HIGHWAYS ACTS AND WATER INDUSTRIES ACTS ARE TO BE OBTAINED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF THE WORKS (UNLESS OTHERWISE STATED).
- CONTRACTOR TO LIAISE WITH APPROPRIATE STATUTORY UNDERTAKER REGARDING REPLACEMENT OF ANY EXISTING COVER FOUND DURING COURSE OF WORKS TO BE DEFECTIVE.
- PRESENCE OF STATUTORY UNDERTAKERS EQUIPMENT IN THE HIGHWAY SHOULD BE VERIFIED BY THE CONTRACTOR ON SITE PRIOR TO STARTING ANY WORKS. THE CONTRACTOR SHOULD CONFIRM THE LOCATION OF ALL STATS PLANT BY HAND DUG TRIAL TRENCHES PRIOR TO COMMENCING ANY WORKS. ALLOWANCE FOR THE PRESENCE OF ALL STATS APPROPRIATE PROTECTION / DIVERSION MEASURES IS TO BE PUT IN PLACE BY THE CONTRACTOR (UNLESS STATED OTHERWISE) WHERE STATS EQUIPMENT ARE FOUND TO BE WITHIN THE AREA OF HIGHWAY WORKS. NECESSARY DIVERSION/PROTECTION REQUIREMENTS TO BE AGREED WITH SERVICE PROVIDER.
- ALL LEVELS TO BE CHECKED BY THE CONTRACTOR AT THE START OF WORKS AND ANY DISCREPANCIES NOTIFIED TO THE ENGINEER.
- LAYOUT IS INDICATIVE ONLY SUBJECT TO CONSULTATION WITH TFGM AND ROCHE DALE COUNCIL

KEY:

APPROXIMATE EXTENT OF PROPOSED WORKS

PROPOSED BUS STOP POLE

EXISTING BUS STOP POLE

PROPOSED BUS STOP SHELTER, WORKS ASSOCIATED WITH SHELTER LEVELS ADJUSTMENTS WILL BE ARRANGED BY TFGM PRIOR TO MAIN WORKS STARTING ON SITE

PRELIMINARY ISSUE

P01	PRELIMINARY FIRST ISSUE	30.01.2025	LJB	LB	LB
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Issuing Office

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Manchester, United Kingdom
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www.tetrattechurope.com

Client

Project Name

Proposed Residential Development:
Land off Greenvale

Sheet Title

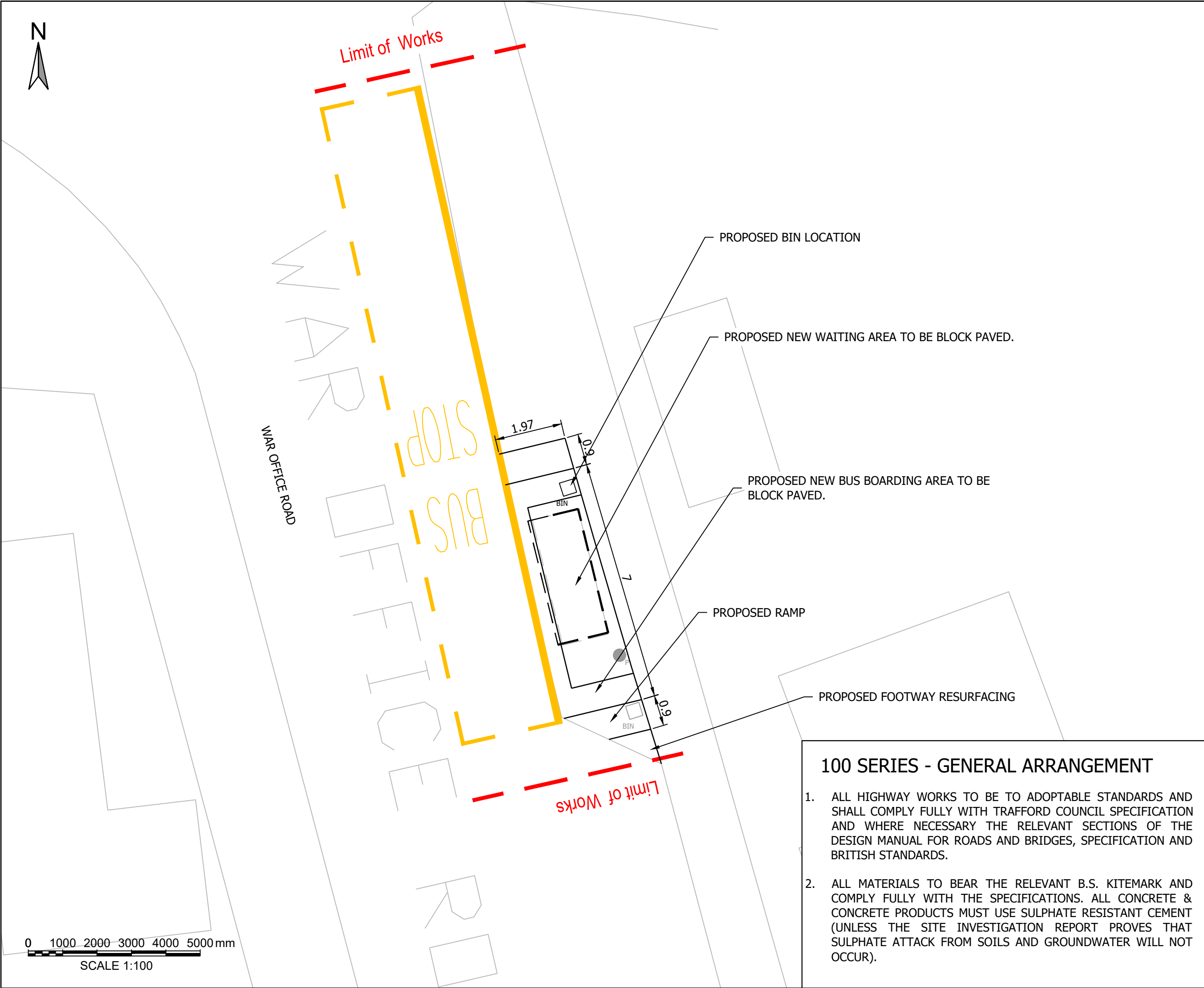
Bus Stop Upgrade: 59 Norden Road

REF	DIAG No	DESCRIPTION	ILLUMINATION REQUIREMENTS	SIGN PLATE	POSTS	MINIMUM MOUNTING HEIGHT	COMMENTS
TS01		CLEARWAY SIGN	N/A	NEW SIGN PLATE	PROPOSED BUS STOP POLE	2100mm	

TTE Project Number	Drawn By	Date	Checked By	Date	Approved By	Date	Scale @ A1	Suitability
784-B068938	LJB	Jan '25	LB	Jan '25	LB	Jan '25	1:200	S0
Client Project Number	Originator	Function	Spatial	Form	Role	Number	Revision	
B068938	- TTE	- 00	- XX	- DR	- H	- 004	P01	

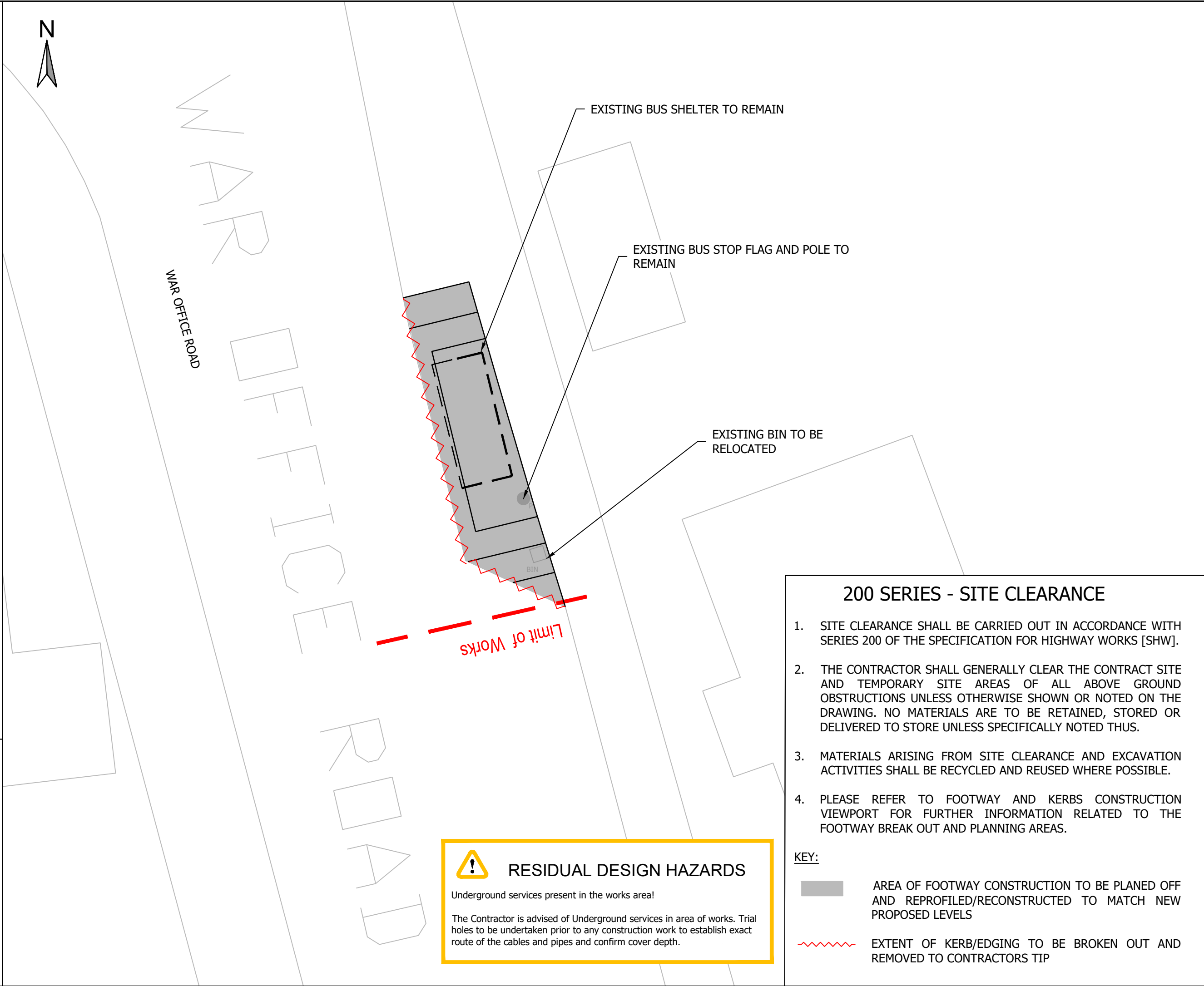
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100 SERIES - GENERAL ARRANGEMENT

- ALL HIGHWAY WORKS TO BE TO ADOPTABLE STANDARDS AND SHALL COMPLY FULLY WITH TRAFFORD COUNCIL SPECIFICATION AND WHERE NECESSARY THE RELEVANT SECTIONS OF THE DESIGN MANUAL FOR ROADS AND BRIDGES, SPECIFICATION AND BRITISH STANDARDS.
- ALL MATERIALS TO BEAR THE RELEVANT B.S. KITEMARK AND COMPLY FULLY WITH THE SPECIFICATIONS. ALL CONCRETE & CONCRETE PRODUCTS MUST USE SULPHATE RESISTANT CEMENT (UNLESS THE SITE INVESTIGATION REPORT PROVES THAT SULPHATE ATTACK FROM SOILS AND GROUNDWATER WILL NOT OCCUR).

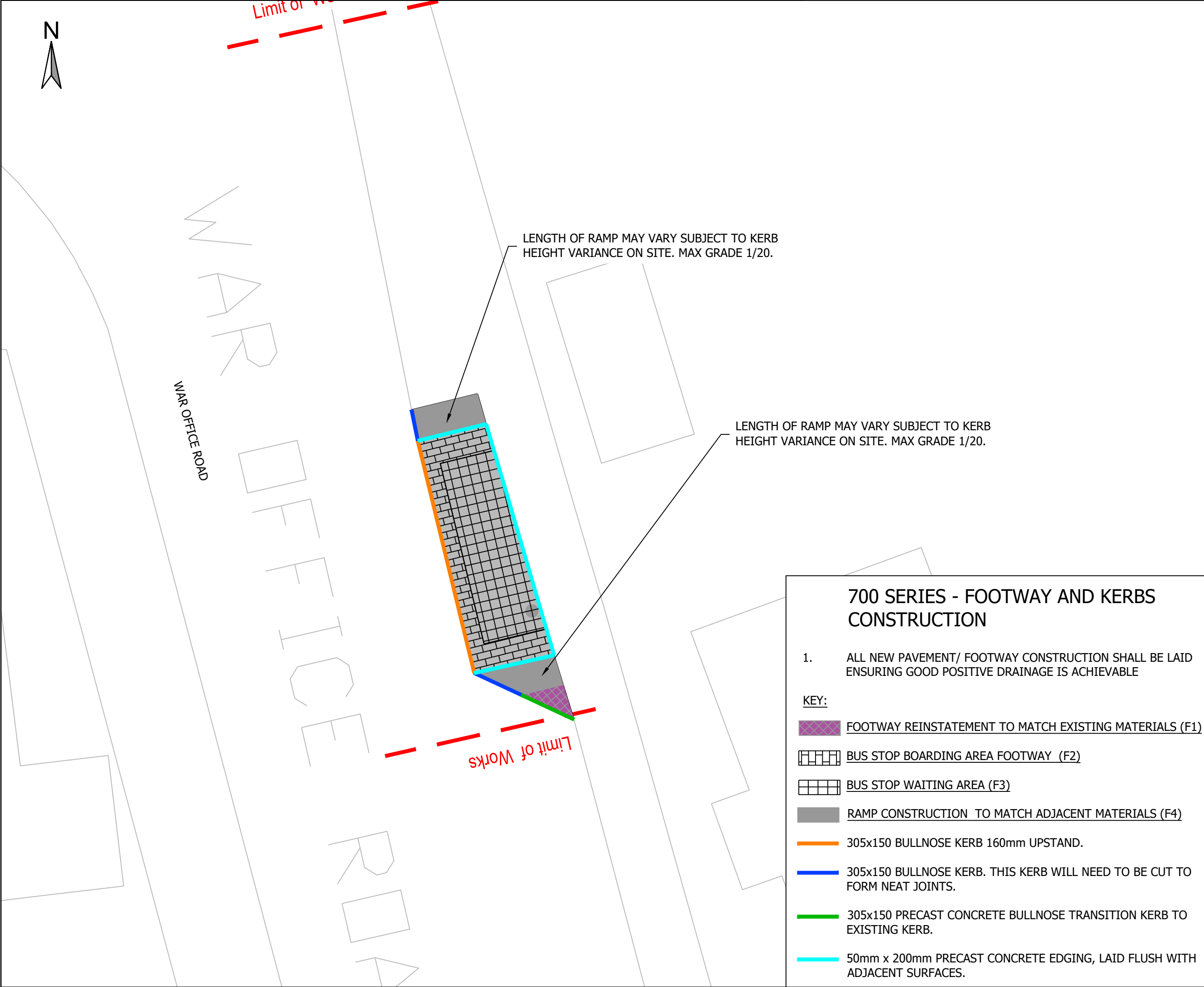


200 SERIES - SITE CLEARANCE

- SITE CLEARANCE SHALL BE CARRIED OUT IN ACCORDANCE WITH SERIES 200 OF THE SPECIFICATION FOR HIGHWAY WORKS [SHW].
- THE CONTRACTOR SHALL GENERALLY CLEAR THE CONTRACT SITE AND TEMPORARY SITE AREAS OF ALL ABOVE GROUND OBSTRUCTIONS UNLESS OTHERWISE SHOWN OR NOTED ON THE DRAWING. NO MATERIALS ARE TO BE RETAINED, STORED OR DELIVERED TO STORE UNLESS SPECIFICALLY NOTED THUS.
- MATERIALS ARISING FROM SITE CLEARANCE AND EXCAVATION ACTIVITIES SHALL BE RECYCLED AND REUSED WHERE POSSIBLE.
- PLEASE REFER TO FOOTWAY AND KERBS CONSTRUCTION VIEWPORT FOR FURTHER INFORMATION RELATED TO THE FOOTWAY BREAK OUT AND PLANNING AREAS.

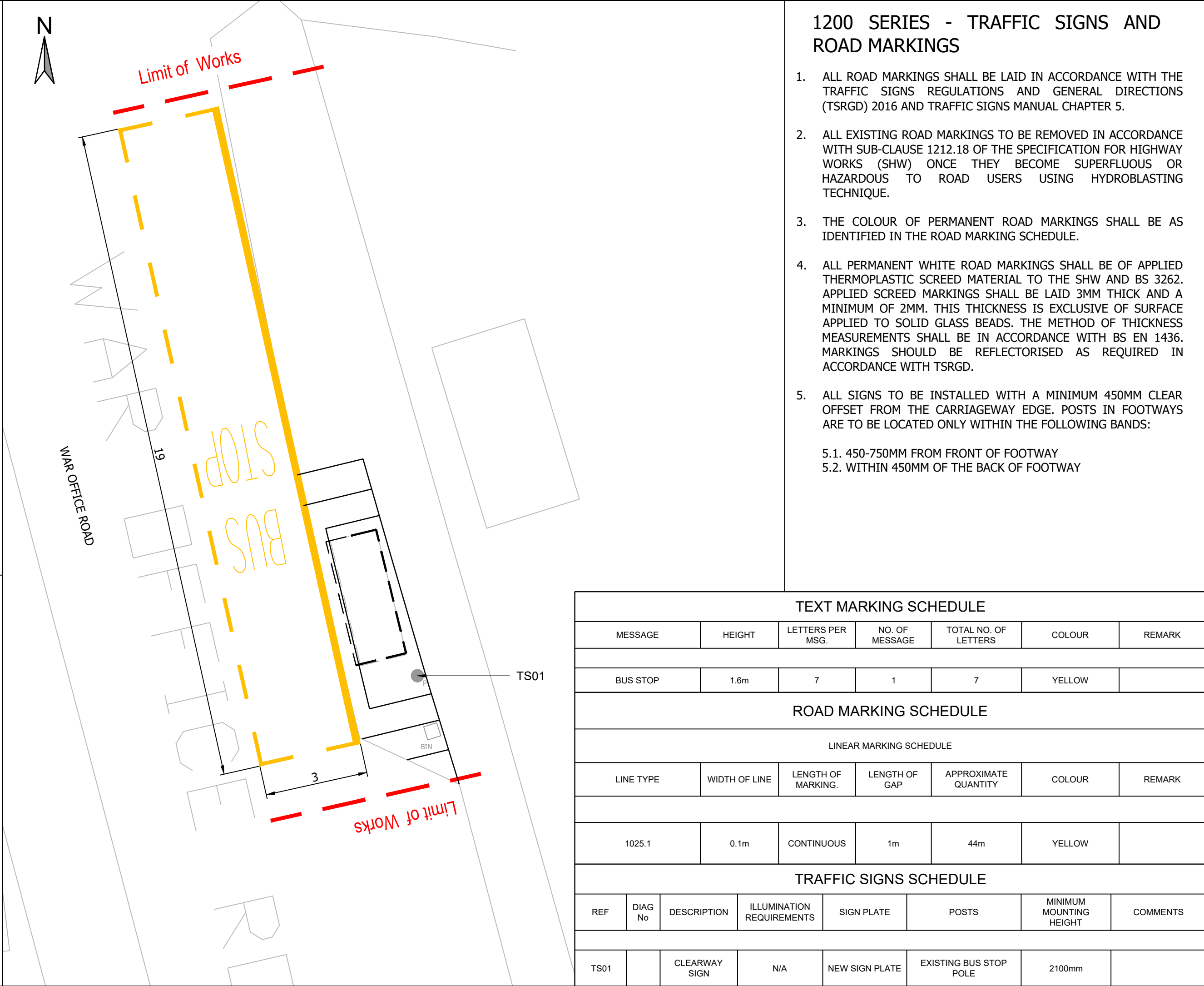
KEY:

- AREA OF FOOTWAY CONSTRUCTION TO BE PLANED OFF AND REPROFLED/RECONSTRUCTED TO MATCH NEW PROPOSED LEVELS
- EXTENT OF KERB/EDGING TO BE BROKEN OUT AND REMOVED TO CONTRACTORS TIP



700 SERIES - FOOTWAY AND KERBS CONSTRUCTION

- ALL NEW PAVEMENT/ FOOTWAY CONSTRUCTION SHALL BE LAID ENSURING GOOD POSITIVE DRAINAGE IS ACHIEVABLE
- KEY:
- FOOTWAY REINSTATEMENT TO MATCH EXISTING MATERIALS (F1)
 - BUS STOP BOARDING AREA FOOTWAY (F2)
 - BUS STOP WAITING AREA (F3)
 - RAMP CONSTRUCTION TO MATCH ADJACENT MATERIALS (F4)
 - 305x150 BULLNOSE KERB 160mm UPSTAND.
 - 305x150 BULLNOSE KERB. THIS KERB WILL NEED TO BE CUT TO FORM NEAT JOINTS.
 - 305x150 PRECAST CONCRETE BULLNOSE TRANSITION KERB TO EXISTING KERB.
 - 50mm x 200mm PRECAST CONCRETE EDGING, LAID FLUSH WITH ADJACENT SURFACES.



1200 SERIES - TRAFFIC SIGNS AND ROAD MARKINGS

- ALL ROAD MARKINGS SHALL BE LAID IN ACCORDANCE WITH THE TRAFFIC SIGNS REGULATIONS AND GENERAL DIRECTIONS (TSRGD) 2016 AND TRAFFIC SIGNS MANUAL CHAPTER 5.
- ALL EXISTING ROAD MARKINGS TO BE REMOVED IN ACCORDANCE WITH SUB-CLAUSE 1212.18 OF THE SPECIFICATION FOR HIGHWAY WORKS (SHW) ONCE THEY BECOME SUPERFLUOUS OR HAZARDOUS TO ROAD USERS USING HYDROBLASTING TECHNIQUE.
- THE COLOUR OF PERMANENT ROAD MARKINGS SHALL BE AS IDENTIFIED IN THE ROAD MARKING SCHEDULE.
- ALL PERMANENT WHITE ROAD MARKINGS SHALL BE OF APPLIED THERMOPLASTIC SCREED MATERIAL TO THE SHW AND BS 3262. APPLIED SCREED MARKINGS SHALL BE LAID 3MM THICK AND A MINIMUM OF 2MM. THIS THICKNESS IS EXCLUSIVE OF SURFACE APPLIED TO SOLID GLASS BEADS. THE METHOD OF THICKNESS MEASUREMENTS SHALL BE IN ACCORDANCE WITH BS EN 1436. MARKINGS SHOULD BE REFLECTORISED AS REQUIRED IN ACCORDANCE WITH TSRGD.
- ALL SIGNS TO BE INSTALLED WITH A MINIMUM 450MM CLEAR OFFSET FROM THE CARRIAGEWAY EDGE. POSTS IN FOOTWAYS ARE TO BE LOCATED ONLY WITHIN THE FOLLOWING BANDS:
 - 5.1. 450-750MM FROM FRONT OF FOOTWAY
 - 5.2. WITHIN 450MM OF THE BACK OF FOOTWAY

TEXT MARKING SCHEDULE

MESSAGE	HEIGHT	LETTERS PER MSG.	NO. OF MESSAGE	TOTAL NO. OF LETTERS	COLOUR	REMARK
BUS STOP	1.6m	7	1	7	YELLOW	

ROAD MARKING SCHEDULE

LINER MARKING SCHEDULE

LINE TYPE	WIDTH OF LINE	LENGTH OF MARKING.	LENGTH OF GAP	APPROXIMATE QUANTITY	COLOUR	REMARK
1025.1	0.1m	CONTINUOUS	1m	44m	YELLOW	

TRAFFIC SIGNS SCHEDULE

REF	DIAG No	DESCRIPTION	ILLUMINATION REQUIREMENTS	SIGN PLATE	POSTS	MINIMUM MOUNTING HEIGHT	COMMENTS
TS01		CLEARWAY SIGN	N/A	NEW SIGN PLATE	EXISTING BUS STOP POLE	2100mm	

- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DRAWINGS/INFORMATION
- THIS DRAWING SHOULD NOT BE SCALED AND ONLY USED FOR ITS INTENDED PURPOSE
- ALL DIMENSIONS ARE IN METERS UNLESS STATED OTHERWISE.
- THIS DRAWING IS BASED ON OS MAPPING DRAWING PROVIDED BY WAIN HOMES. TETRA TECH DOES NOT TAKE RESPONSIBILITY FOR ANY DISCREPANCIES.
- ALL ROAD MARKINGS ON THIS DRAWINGS ARE INDICATIVE ONLY.
- ALL STATUTORY CONSENTS, OPENING NOTICES ETC. AS REQUIRED UNDER HIGHWAYS ACTS AND WATER INDUSTRIES ACTS ARE TO BE OBTAINED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF THE WORKS (UNLESS OTHERWISE STATED).
- CONTRACTOR TO LIAISE WITH APPROPRIATE STATUTORY UNDERTAKER REGARDING REPLACEMENT OF ANY EXISTING COVER FOUND DURING COURSE OF WORKS TO BE DEFECTIVE.
- PRESENCE OF STATUTORY UNDERTAKERS EQUIPMENT IN THE HIGHWAY SHOULD BE VERIFIED BY THE CONTRACTOR ON SITE PRIOR TO STARTING ANY WORKS. THE CONTRACTOR SHOULD CONFIRM THE LOCATION OF ALL STATS PLANT BY HAND DUG TRIAL TRENCHES PRIOR TO COMMENCING ANY WORKS. ALLOWANCE FOR THE PRESENCE OF ALL STATS APPROPRIATE PROTECTION / DIVERSION MEASURES IS TO BE PUT IN PLACE BY THE CONTRACTOR (UNLESS STATED OTHERWISE) WHERE STATS EQUIPMENT ARE FOUND TO BE WITHIN THE AREA OF HIGHWAY WORKS. NECESSARY DIVERSION/PROTECTION REQUIREMENTS TO BE AGREED WITH SERVICE PROVIDER.
- ALL LEVELS TO BE CHECKED BY THE CONTRACTOR AT THE START OF WORKS AND ANY DISCREPANCIES NOTIFIED TO THE ENGINEER.
- LAYOUT IS INDICATIVE ONLY SUBJECT TO CONSULTATION WITH TGM AND ROCHDALE COUNCIL

KEY:

- APPROXIMATE EXTENT OF PROPOSED WORKS
- EXISTING BUS STOP POLE
- EXISTING BUS STOP SHELTER, WORKS ASSOCIATED WITH SHELTER LEVELS ADJUSTMENTS WILL BE ARRANGED BY TGM PRIOR TO MAIN WORKS STARTING ON SITE

PRELIMINARY ISSUE

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Client
Wain Homes

Project Name
**Proposed Residential Development:
Land off Greenvale**

Sheet Title
Bus Stop Upgrade: 99 War Office Road

TTE Project Number	Drawn By	Date	Checked By	Date	Approved By	Date	Scale @ A1	Suitability
784-B068938	LJB	Jan '25	LB	Jan '25	LB	Jan '25	1:200	S0
Client Project Number	Originator	Function	Spatial	Form	Role	Number	Revision	
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