

Technical Note

Project No: ITB14679
Project Title: Ford Lane & Street Buildings, North End Road
Title: Transport Statement
Ref: DS/GT/ITB14679-009 TN
Date: 5 March 2021

SECTION 1 Introduction

1.1.1 Redrow Homes has appointed i-Transport LLP to provide transport and highways advice relating to the planning application for 100 dwellings on land to the south of Ford Lane, Yapton. The outline planning application (ref: Y/80/16/OUT) was consented by the Planning Inspectorate in January 2018 and an application in relation to the site access was submitted to ADC in November 2020 (ref: Y/131/20/DOC) to discharge Planning Condition 7, which required:

"No development shall commence until detailed scheme, design and construction drawings for the means of access / egress onto Ford Lane as shown on the submitted Drg: 130431-10A (including street lighting) and the proposed improvements to North End Road as shown on the submitted Drg Nos. 130431-04B and 130431-05B within the Transport Assessment of June 2014, including bus stops, pedestrian facilities and street lighting along and across North End Road, have been submitted to and approved in writing by the LPA and no part of the development shall be commenced until these means of access have been constructed in accordance with the approved detailed design and construction drawings."

1.1.2 The Transport Assessment submitted as part of the original outline consent has already assessed the development against the three key transport tests set out within paragraphs 108 and 109 of the NPPF, demonstrating that:

- The opportunities for sustainable travel are appropriately taken up given the type of development and its location;
- Safe and suitable access is provided for all users; and
- The development will not have a severe residual cumulative impact on the local highway network.

1.1.3 To facilitate the occupation of the affordable units within the development during the construction of the wider site, a temporary access is proposed that will be in situ for a period of circa 3 years. While the main site access will still be provided from Ford Lane, during this interim period an access is to be

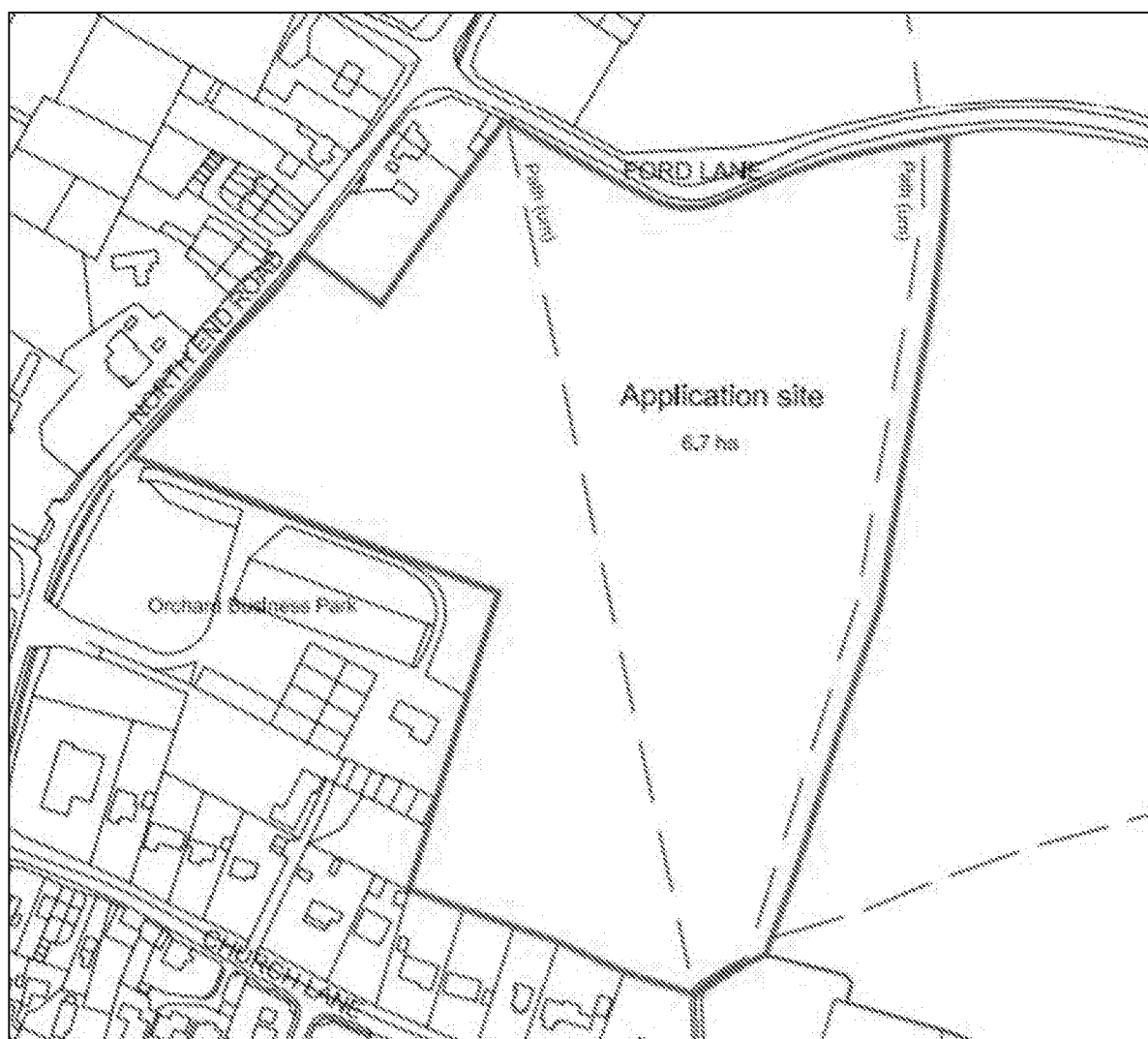
provided from North End Road to provide access to 16 units. The purpose of this Transport Statement (TS) is to assess whether the temporary site access will provide safe and acceptable access for all users (the second key transport test in the NPPF). The remainder of the TS is structured as follows:

- Section 2: Provides a summary of the existing highway conditions;
- Section 3: Provides the details of the temporary site access; and
- Section 4: Summarises the TS.

SECTION 2 Existing Highway Conditions

- 2.1.1 North End Road forms the western boundary, as shown in **Image 2.1**, and is subject to a 30mph speed limit.

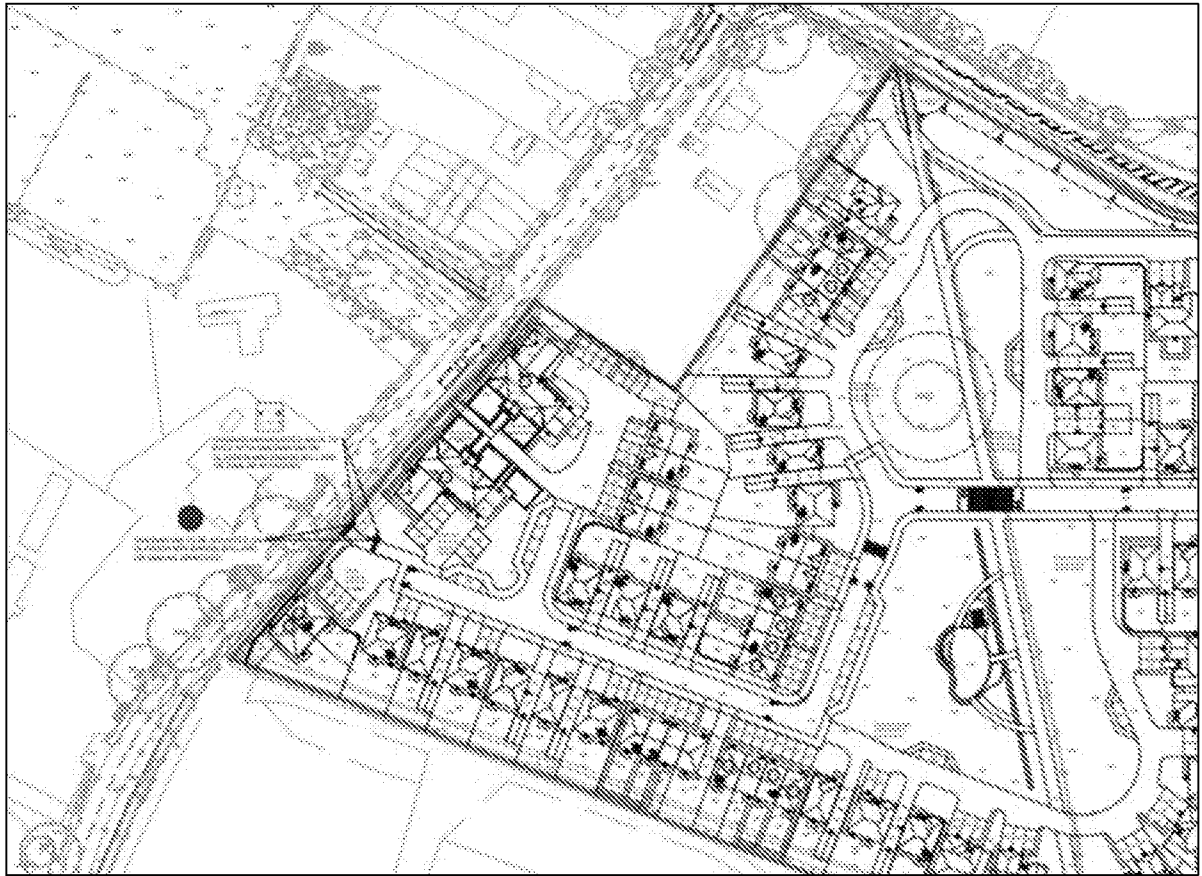
Image 2.1: Local Road Network



Source: Y/30/16

- 2.1.2 A footway is provided on the eastern side of the carriageway running parallel to the site boundary. Pedestrian and emergency vehicle access onto North End Road was approved as part of the outline consent and this has subsequently been carried through to the Movement and Access Plan submitted as part of discharge of condition application Y/131/20, as identified in the extract provided at **Image 2.2**.

Image 2.2: Extract of Movement and Access Plan

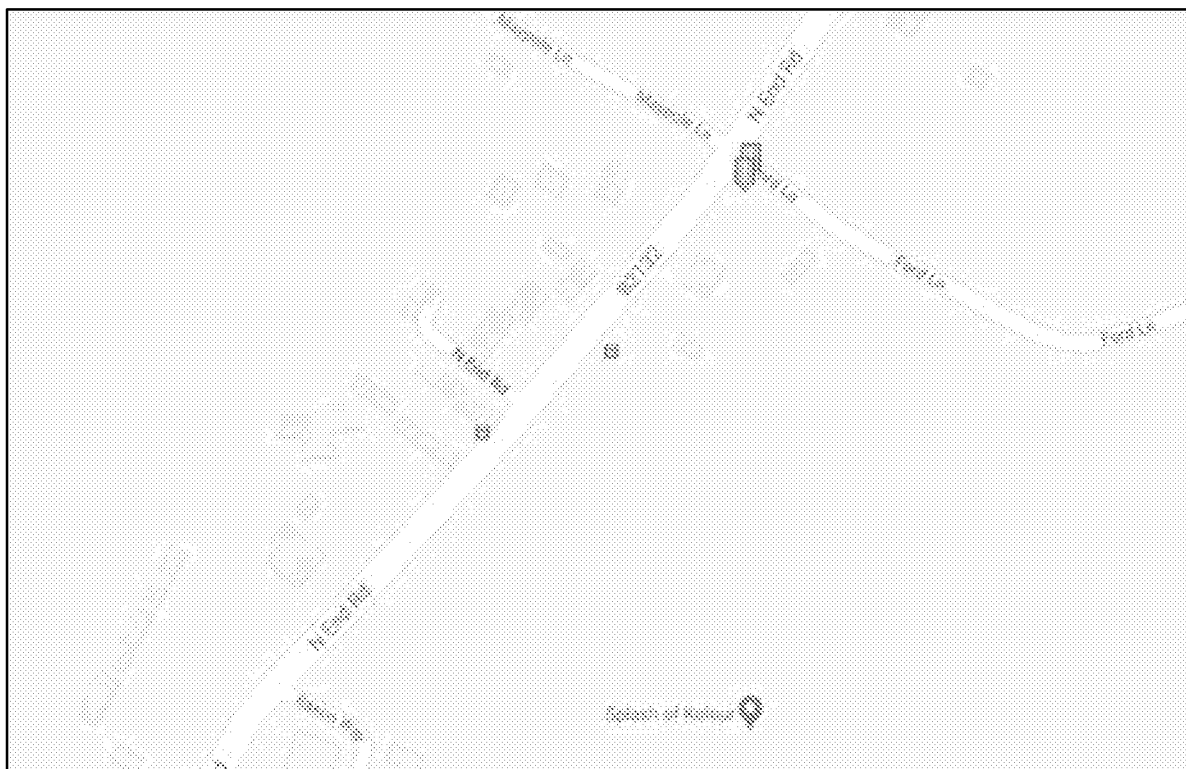


Source: Y/131/20

2.2 Highway Safety

- 2.2.1 A review of the Personal Injury Accident (PIA) history in the vicinity of the site for the most recent five-year period has been undertaken using the CrashMap database.
- 2.2.2 In total, two collisions were recorded within the study area during the assessment period. Both resulted in 'slight' injury. The first collision involved a vehicle turning right and collided with an oncoming cyclist. The second collision involved a vehicle colliding with a pedestrian who was walking in the carriageway. While any accident is regrettable, the assessments demonstrates that there are no accident trends identifying a defect in the highway network attributable to the causation of accidents.
- 2.2.3 The locations of the identified accidents are shown in **Image 2.3**, overleaf.

Image 2.2: PIA Map



Source: CrashMap

2.3 Trip Generation

- 2.3.1 Utilising the trip rates agreed as part of the outline consent, **Table 2.1** sets out the forecast traffic that would utilise the proposed temporary access.

Table 2.1: Forecast Movements Using Temporary Access

	AM Peak (08:00 – 09:00)	PM Peak (17:00– 18:00)	Daily
Trip Rate (per dwelling)	0.501	0.641	5.305
Movements (vehicles)	3	10	85

Source: Y/80/16

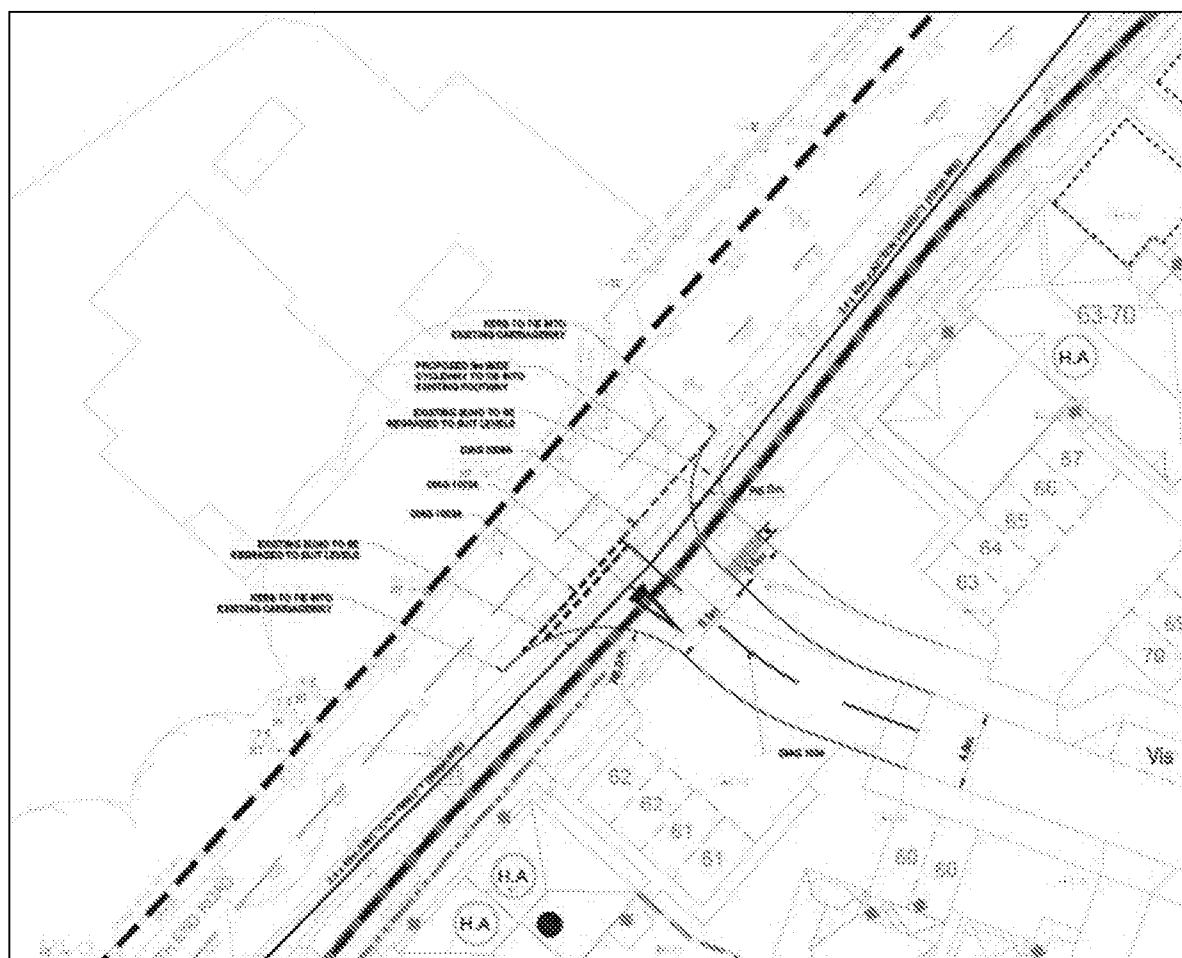
- 2.3.2 The assessment demonstrates that the junction would be lightly trafficked, with circa 1 movement through the junction every 6-8 minutes on average during peak network conditions.

SECTION 3 Temporary Site Access

Vehicular Access

- 3.1.1 It is proposed to provide a temporary vehicular access in the south western corner of the consented site to serve 16 affordable dwellings from North End Road for a circa three-year period whilst the remainder of the site is under construction. This will prevent the delay of providing important affordable dwellings in the area.
- 3.1.2 Pre-application advice has been sought from WSCC to inform the design of the temporary access. An initial access design, comprising a simple priority junction arrangement consistent with the consented arranged onto Ford Lane, formed of a 5.5m wide access road with an 8m kerb radius on the southern side of the access and a 6m radius on the northern side of the access was submitted to WSCC for comment (ref: PRE-15-21). An extract of the drawing submitted for pre-application advice is shown at **Image 3.1**.

Image 3.1: Extract of Initial Temporary Access Arrangement



Source: Drawing 18-344/1000

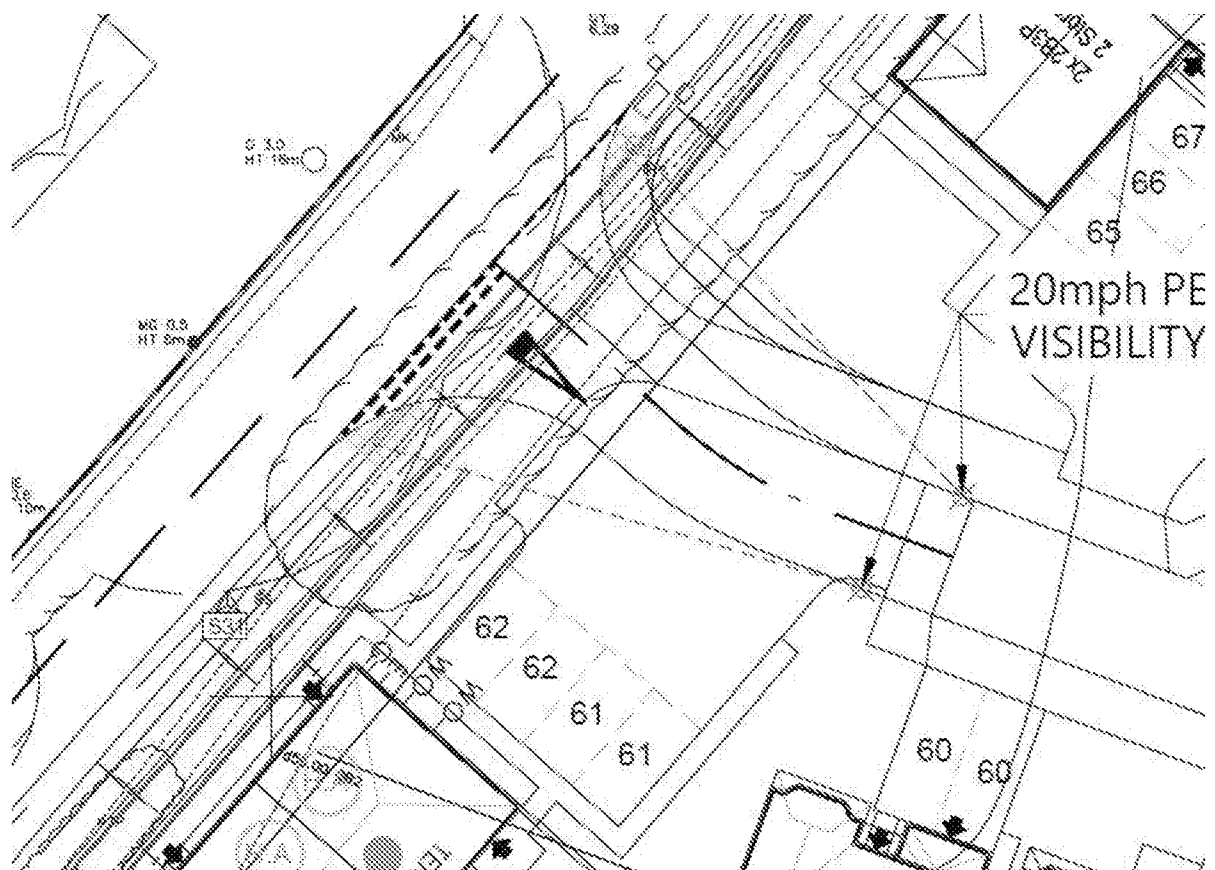
3.1.3 North End Road is subject to a 30mph speed limit and therefore MfS standards have been applied to the design of the access. Visibility splays of 2.4m x 43m in each direction have been annotated on the access arrangement drawing, whereas the splays extend beyond this in practice.

3.1.4 In response to the pre-application submission, WSCC has requested the design be modified to accommodate the following amendments:

- All necessary tactile and corduroy paving be provided;
- Further consideration be given to the cycle interface; and
- The provision of pedestrian intervisibility splays.

3.1.5 the amended arrangement is presented in **Drawing ITB14679-GA-003**, an extract of which is provided at **Image 3.2**.

Image 3.2: Temporary Site Access Arrangement Following Pre-App Advice



Source: ITB14679-GA-003

3.1.6 The section of shared-use footway/cycleway has been removed from the temporary access and all cyclists will be retained on-carriageway, given that the shared route section required cyclists to unnecessarily transition between carriageway and shared use for a short duration. The shared use

section of footway/cycleway will instead be introduced as part of the permanent arrangement. The arrangement now ties the North End Road footway, agreed through Section 27B Agreement, into the on-site infrastructure by a 2m wide footway. A short section of the 3m wide footway has been retained in order to assist with future construction of the permanent arrangement.

- 3.1.7 Tactile paving has been introduced at the site access, with dropped kerbs, to assist crossing manoeuvres over the site access. All corduroy paving has been removed from the design given that cycle journeys will now be accommodated on carriageway.
- 3.1.8 Pedestrian visibility splays of 2m x 20m have been identified at the site access and will be kept clear of obstruction above a height of 600mm.
- 3.1.9 It is intended that the temporary access will be in-situ for a period of 3 years. Once the temporary access is no longer required, the access will be stopped up to provide a parking area for two dwellings and converted to the permanent arrangement, which provides for a 3m wide pedestrian/cycle access onto North End Road.

3.2 Swept Path Analysis

- 3.2.1 Swept path analysis has been undertaken of the temporary site access arrangement to demonstrate a refuse vehicle can access and egress the site safely in forward gear. In accordance with West Sussex County Council (WSCC) guidance, an 11m long refuse vehicle has been used for the swept path analysis. **Drawing 18-344-1001**, provided at the end of this TS, presents the tracking of the refuse vehicle accessing and egressing the site to both the north and west of the access. It should be noted that the arrangement is presented on the original iteration of the site access arrangement, however, the geometry of the access is unchanged, and the tracking is for information purposes only.
- 3.2.2 The tracking demonstrates that a refuse vehicle will cross the centre line of the carriageway within the site. However, such movements are infrequent (e.g. weekly) and given the lightly trafficked nature of the access, as well as the size of a refuse vehicle making it a prominent presence on the network, the manoeuvre would not have an adverse impact on highway safety. Such a manoeuvre is a common occurrence in such locations.

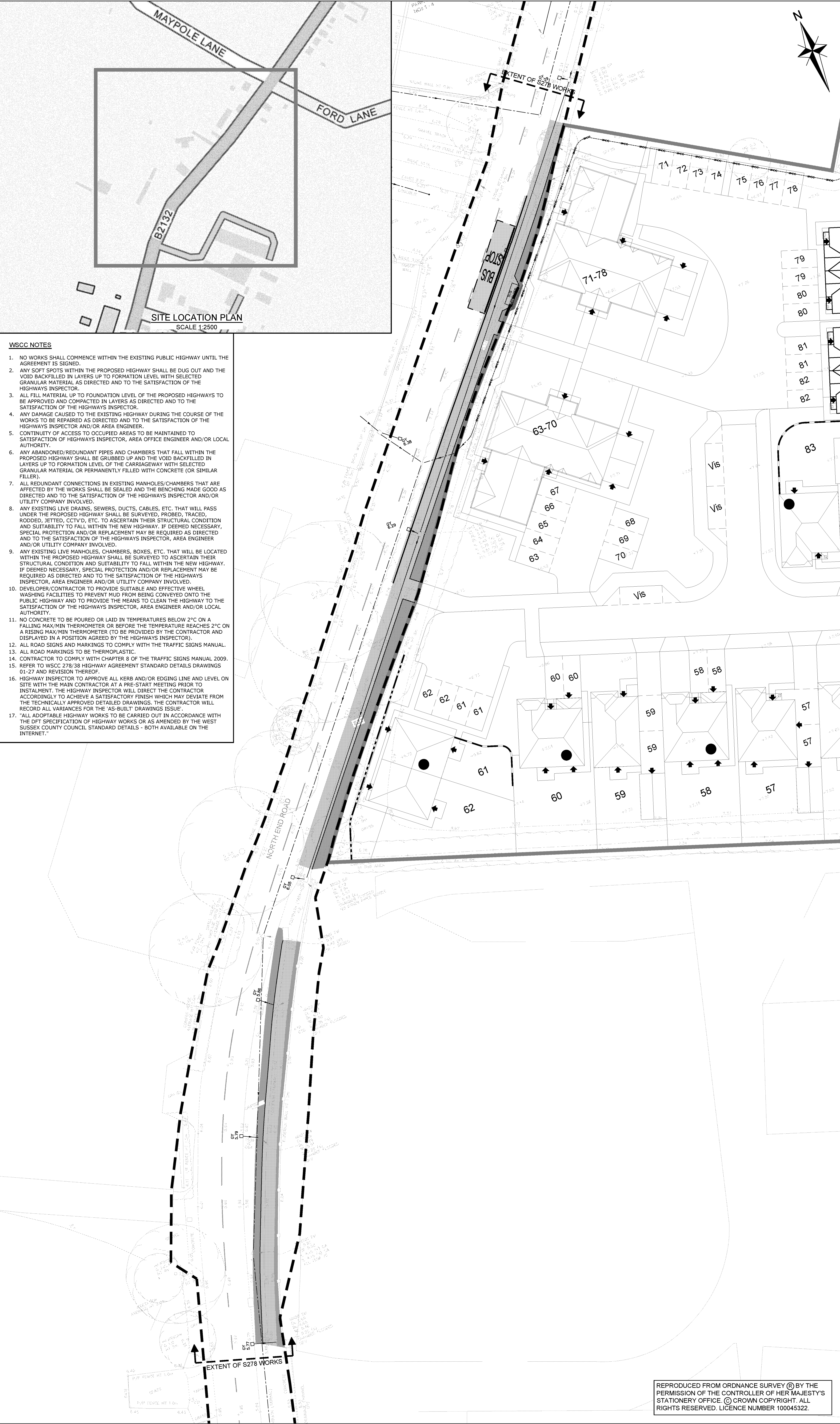
SECTION 4 Summary and Conclusions

- 4.1.1 Redrow Homes has appointed i-Transport LLP to provide transport and highways advice relating to the planning application for 100 dwellings on land to the south of Ford Lane, Yapton. The outline planning application (ref: Y/80/16/OUT) was consented by the Planning Inspectorate in January 2018.
- 4.1.2 The Transport Assessment submitted as part of the original outline consent has already assessed the development against the three key transport tests set out within paragraphs 108 and 109 of the NPPF, demonstrating that:
- The opportunities for sustainable travel are appropriately taken up given the type of development and its location;
 - Safe and suitable access is provided for all users; and
 - The development will not have a severe residual cumulative impact on the local highway network.
- 4.1.3 To facilitate the occupation of the affordable units within the development during the construction of the wider site, a temporary access is proposed that will be in situ for a period of circa 3 years. While the main site access will still be provided from Ford Lane, during this interim period an access is to be provided from North End Road to provide access to 16 units.
- 4.1.4 A review of the Personal Injury Accident (PIA) history in the vicinity of the site for the most recent five-year period has been undertaken using the CrashMap database. In total, two collisions were recorded within the study area during the assessment period. Both resulted in 'slight' injury. While any accident is regrettable, the assessments demonstrates that there are no accident trends identifying a defect in the highway network attributable to the causation of accidents.
- 4.1.5 Utilising trip rates agreed as part of the outline application, the junction is forecast to serve 8-10 movements during peak network conditions, equating to 1 movement every 8-10 minutes, on average.
- 4.1.6 The access has been designed in accordance with Manual for Streets parameters and informed by pre-application advice provided by WSCC Highways. The junction comprises a simple priority arrangement with a 5.5m access road and visibility splays extending 43m from a setback of 2.4m; in practice, the splays extend beyond 43m due to the alignment of the road.
- 4.1.7 Swept path analysis has been undertaken for an 11m refuse vehicle. The assessment demonstrates that a refuse vehicle can manoeuvre through the junction. While the vehicle does cross the centre line of

the carriageway within the site, this is a common occurrence in such locations and the lightly trafficked nature of the access coupled with the infrequent attendance of a refuse vehicle (e.g. weekly) means that this will not result in a highway safety issue.

- 4.1.8 Upon closure of the temporary access at the end of the circa 3-year period, the access will be stopped up and the permanent pedestrian and cycle access implemented.
- 4.1.9 It has been demonstrated that the proposed site access satisfies the requirements of the National Planning Policy Framework, in that safe and suitable access is provided.

DRAWINGS



- WSCC NOTES**
1. NO WORKS SHALL COMMENCE WITHIN THE EXISTING PUBLIC HIGHWAY UNTIL THE AGREEMENT IS SIGNED.
 2. ANY SOFT SPOTS WITHIN THE PROPOSED HIGHWAY SHALL BE DUG OUT AND THE VOID BACKFILLED IN LAYERS UP TO FORMATION LEVEL WITH SELECTED GRANULAR MATERIAL AS DIRECTED AND TO THE SATISFACTION OF THE HIGHWAYS INSPECTOR.
 3. ALL FILL MATERIAL UP TO FOUNDATION LEVEL OF THE PROPOSED HIGHWAYS TO BE APPROVED AND COMPACTED IN LAYERS AS DIRECTED AND TO THE SATISFACTION OF THE HIGHWAYS INSPECTOR.
 4. ANY DAMAGE CAUSED TO THE EXISTING HIGHWAY DURING THE COURSE OF THE WORKS TO BE REPAIRED AS DIRECTED AND TO THE SATISFACTION OF THE HIGHWAYS INSPECTOR AND/OR AREA ENGINEER.
 5. CONTINUITY OF ACCESS TO OCCUPIED AREAS TO BE MAINTAINED TO SATISFACTION OF HIGHWAYS INSPECTOR, AREA OFFICE ENGINEER AND/OR LOCAL AUTHORITY.
 6. ANY ABANDONED/REDUNDANT PIPES AND CHAMBERS THAT FALL WITHIN THE PROPOSED HIGHWAY SHALL BE GRUBBED UP AND THE VOID BACKFILLED IN LAYERS UP TO FORMATION LEVEL OF THE CARRIAGEWAY WITH SELECTED GRANULAR MATERIAL OR PERMANENTLY FILLED WITH CONCRETE (OR SIMILAR FILLER).
 7. ALL REDUNDANT CONNECTIONS IN EXISTING MANHOLES/CHAMBERS THAT ARE AFFECTED BY THE WORKS SHALL BE SEALED AND THE BENCHING MADE GOOD AS DIRECTED AND TO THE SATISFACTION OF THE HIGHWAYS INSPECTOR AND/OR UTILITY COMPANY INVOLVED.
 8. ANY EXISTING LIVE DRAINS, SEWERS, DUCTS, CABLES, ETC. THAT WILL PASS UNDER THE PROPOSED HIGHWAY SHALL BE SURVEYED, PROBED, TRACED, RODDED, JETTED, CCTV'D, ETC. TO ASCERTAIN THEIR STRUCTURAL CONDITION AND SUITABILITY TO FALL WITHIN THE NEW HIGHWAY. IF DEEMED NECESSARY, SPECIAL PROTECTION AND/OR REPLACEMENT MAY BE REQUIRED AS DIRECTED AND TO THE SATISFACTION OF THE HIGHWAYS INSPECTOR, AREA ENGINEER AND/OR UTILITY COMPANY INVOLVED.
 9. ANY EXISTING LIVE MANHOLES, CHAMBERS, BOXES, ETC. THAT WILL BE LOCATED WITHIN THE PROPOSED HIGHWAY SHALL BE SURVEYED TO ASCERTAIN THEIR STRUCTURAL CONDITION AND SUITABILITY TO FALL WITHIN THE NEW HIGHWAY. IF DEEMED NECESSARY, SPECIAL PROTECTION AND/OR REPLACEMENT MAY BE REQUIRED AS DIRECTED AND TO THE SATISFACTION OF THE HIGHWAYS INSPECTOR, AREA ENGINEER AND/OR UTILITY COMPANY INVOLVED.
 10. DEVELOPER/CONTRACTOR TO PROVIDE SUITABLE AND EFFECTIVE WHEEL WASHING FACILITIES TO PREVENT MUD FROM BEING CONVEYED ONTO THE PUBLIC HIGHWAY AND TO PROVIDE THE MEANS TO CLEAN THE HIGHWAY TO THE SATISFACTION OF THE HIGHWAYS INSPECTOR, AREA ENGINEER AND/OR LOCAL AUTHORITY.
 11. NO CONCRETE TO BE POURED OR LAID IN TEMPERATURES BELOW 2°C ON A FALLING MAX/MIN THERMOMETER OR BEFORE THE TEMPERATURE REACHES 2°C ON A RISING MAX/MIN THERMOMETER (TO BE PROVIDED BY THE CONTRACTOR AND DISPLAYED IN A POSITION AGREED BY THE HIGHWAYS INSPECTOR).
 12. ALL ROAD SIGNS AND MARKINGS TO COMPLY WITH THE TRAFFIC SIGNS MANUAL.
 13. ALL ROAD MARKINGS TO BE THERMOPLASTIC.
 14. CONTRACTOR TO COMPLY WITH CHAPTER 8 OF THE TRAFFIC SIGNS MANUAL 2009.
 15. REFER TO WSCC 278/38 HIGHWAY AGREEMENT STANDARD DETAILS DRAWINGS 01-27 AND REVISION THEREOF.
 16. HIGHWAY INSPECTOR TO APPROVE ALL KERB AND/OR EDGING LINE AND LEVEL ON SITE WITH THE MAIN CONTRACTOR AT A PRE-START MEETING PRIOR TO INSTALLMENT. THE HIGHWAY INSPECTOR WILL DIRECT THE CONTRACTOR ACCORDINGLY TO ACHIEVE A SATISFACTORY FINISH WHICH MAY DEVIATE FROM THE TECHNICALLY APPROVED DETAILED DRAWINGS. THE CONTRACTOR WILL RECORD ALL VARIANCES FOR THE 'AS-BUILT' DRAWINGS ISSUE.
 17. "ALL ADAPTABLE HIGHWAY WORKS TO BE CARRIED OUT IN ACCORDANCE WITH THE DfT SPECIFICATION OF HIGHWAY WORKS OR AS AMENDED BY THE WEST SUSSEX COUNTY COUNCIL STANDARD DETAILS - BOTH AVAILABLE ON THE INTERNET."

NOTES

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2. DO NOT SCALE FROM THIS DRAWING. WORK FROM FIGURED DIMENSIONS ONLY.
3. ALL DIMENSIONS SHOWN ON THIS DRAWING ARE IN METRES.
4. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH DRAWINGS:
 - 18-344/401 GENERAL ARRANGEMENT
 - 18-344/402 CONSTRUCTION MAKEUP
 - 18-344/403 SITE CLEARANCE
 - 18-344/404 EXISTING SERVICES

LEGEND

- HIGHWAY BOUNDARY
- DEVELOPMENT BOUNDARY
- PROPOSED S278 CARRIAGEWAY
- PROPOSED S278 FOOTWAY
- PROPOSED S38 FOOTWAY
- PROPOSED S278 VERGE
- PROPOSED S38 VERGE
- EXISTING HIGHWAY GULLY AND DRAIN
- EXISTING SOUTHERN WATER FOUL SEWER
- EXISTING FOUL WATER RISING MAIN

FOR CONSTRUCTION
SUBJECT TO TECHNICAL
APPROVAL

KEY PLAN
NOT TO SCALE

C	UPDATED IN ACCORDANCE WITH WSCC COMMENTS DATED 25.09.20	SG	LH	LH	02.10.20
B	UPDATED IN ACCORDANCE WITH WSCC COMMENTS DATED 01.04.20	SG	LH	LH	16.06.20
A	UPDATED TO SUIT WSCC COMMENTS DATED 14.01.20	JA	SG	LH	04.03.20

Rev	Amendments	Drn	Chk	App	Date
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Job Title

**FORD LANE, YAPTON
BUS STOP/ FOOTWAY WORKS**

Drawing Title

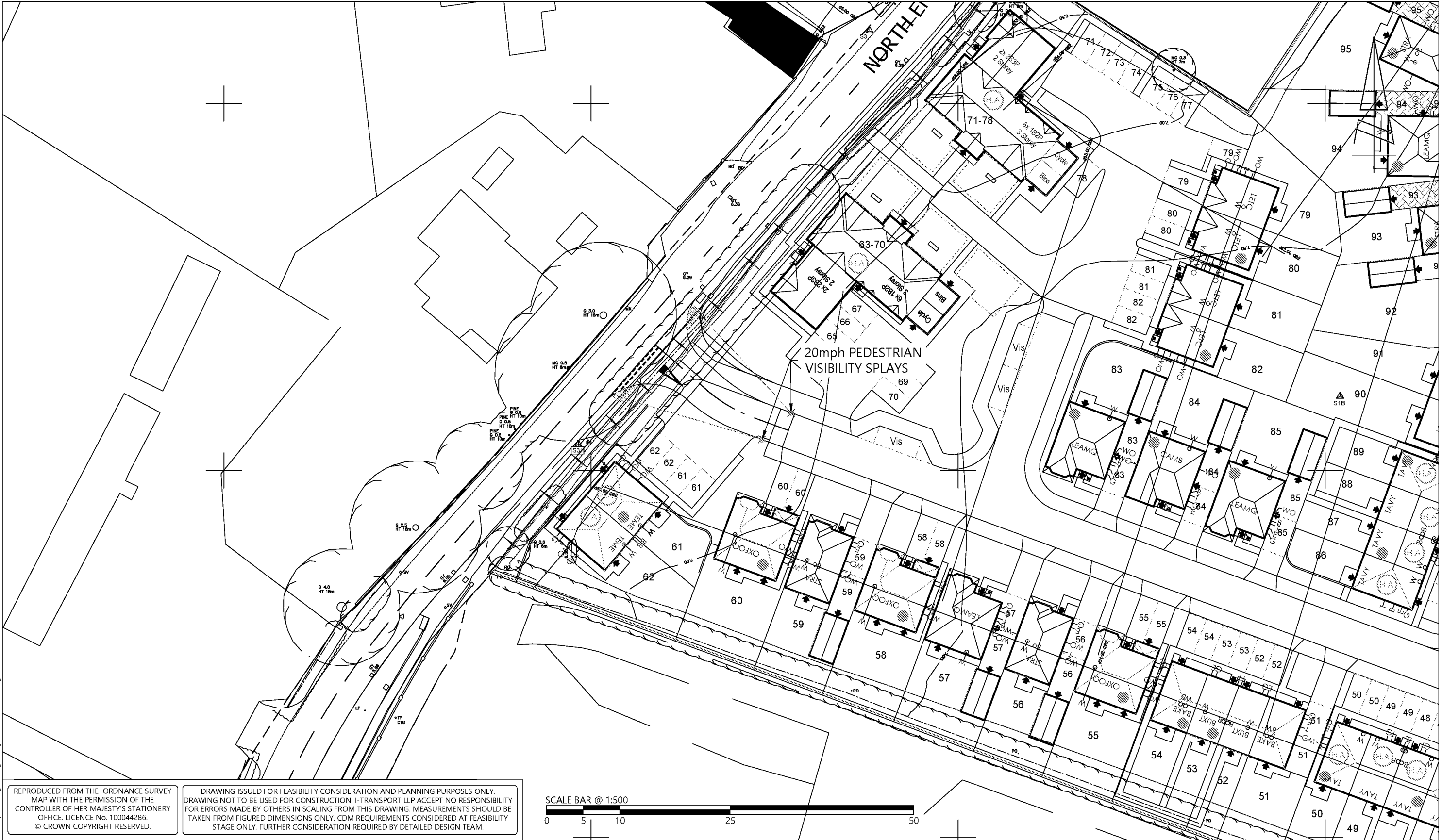
**SECTION 278
AGREEMENT PLAN**

Client

REDROW

Scale	1:250 @A1	Date	OCT 19	Designed	
Drawn	JA	Checked	SG	Approved	LH
Job No	18-344	Drawing No	18-344/400	Rev	C

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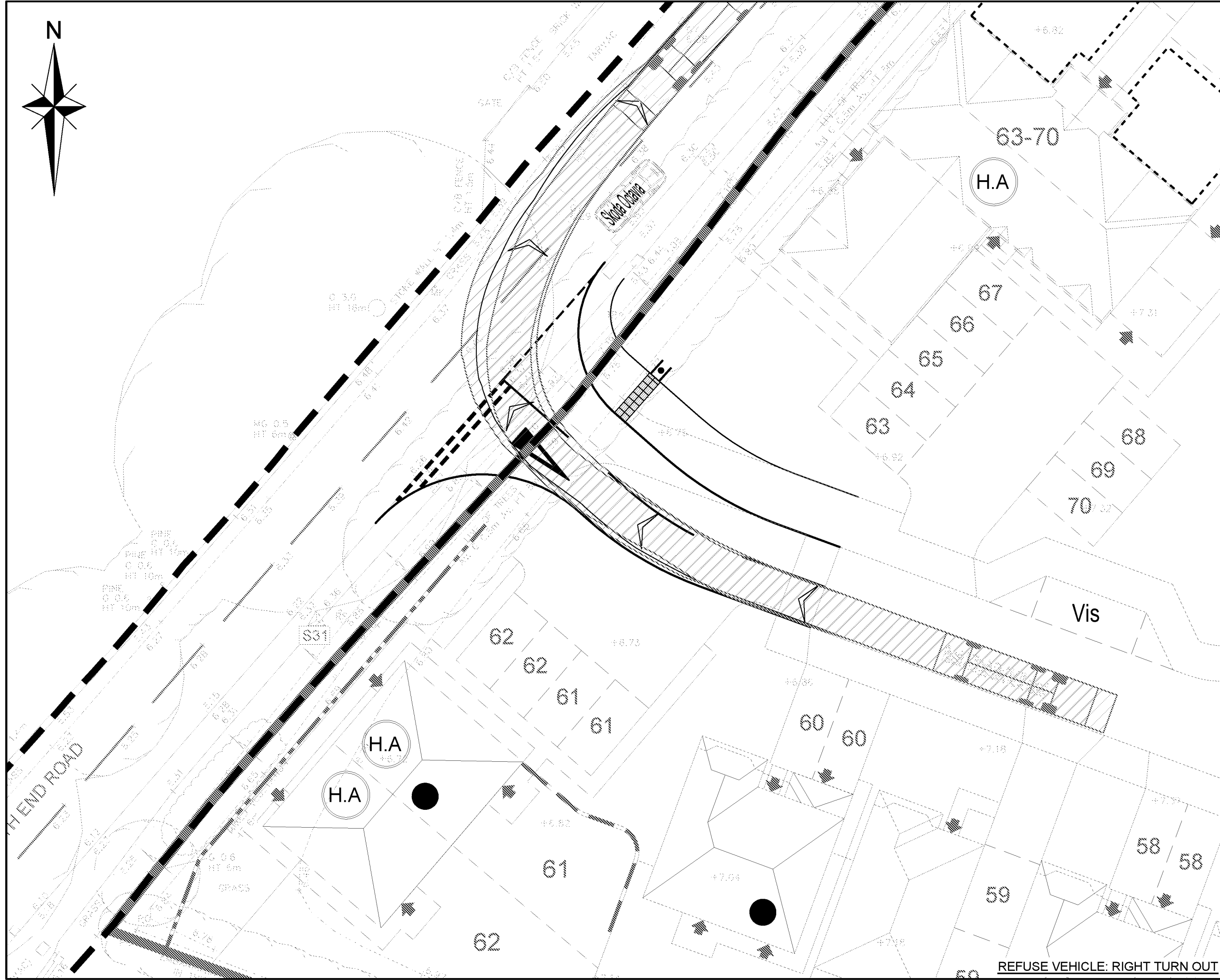
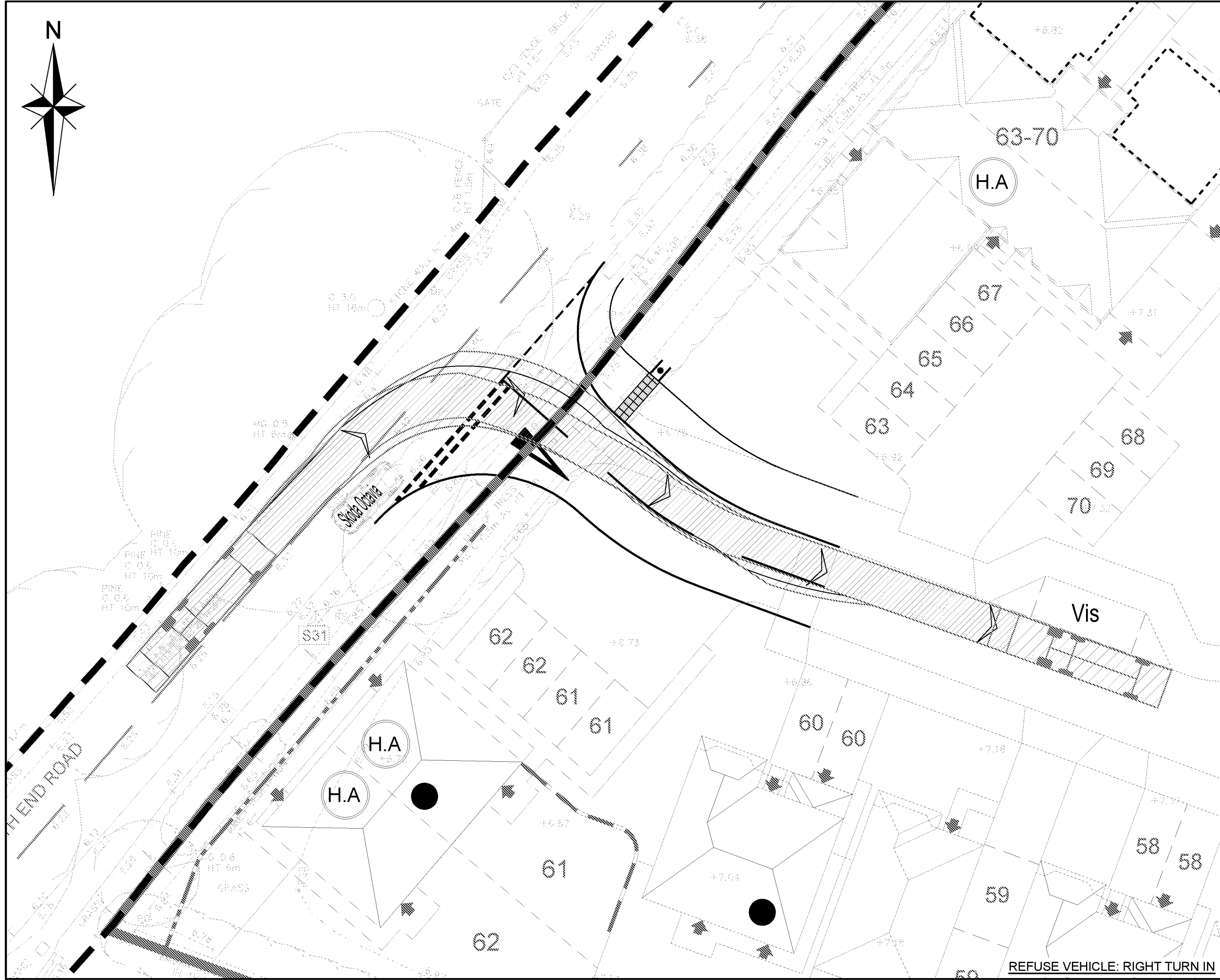
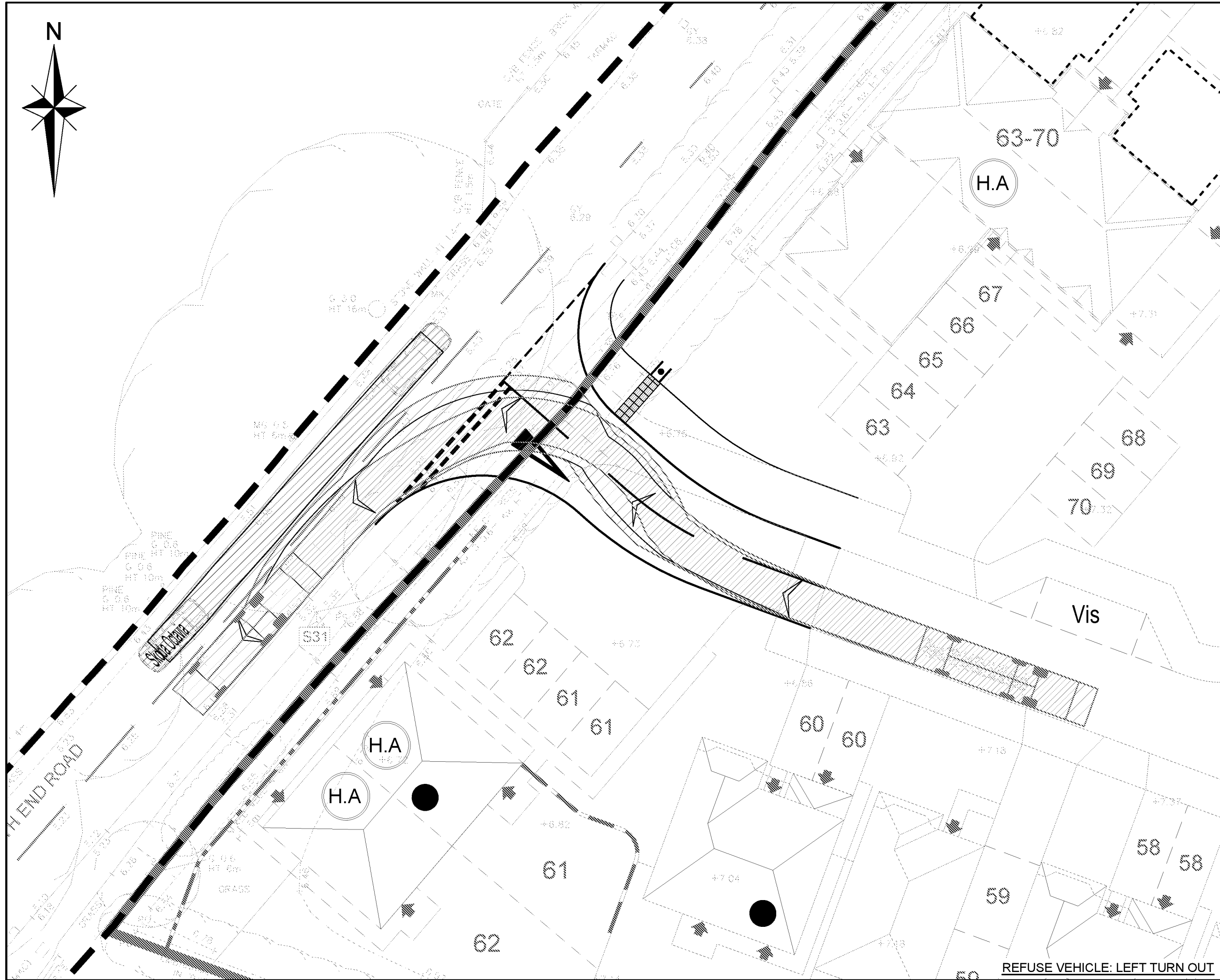
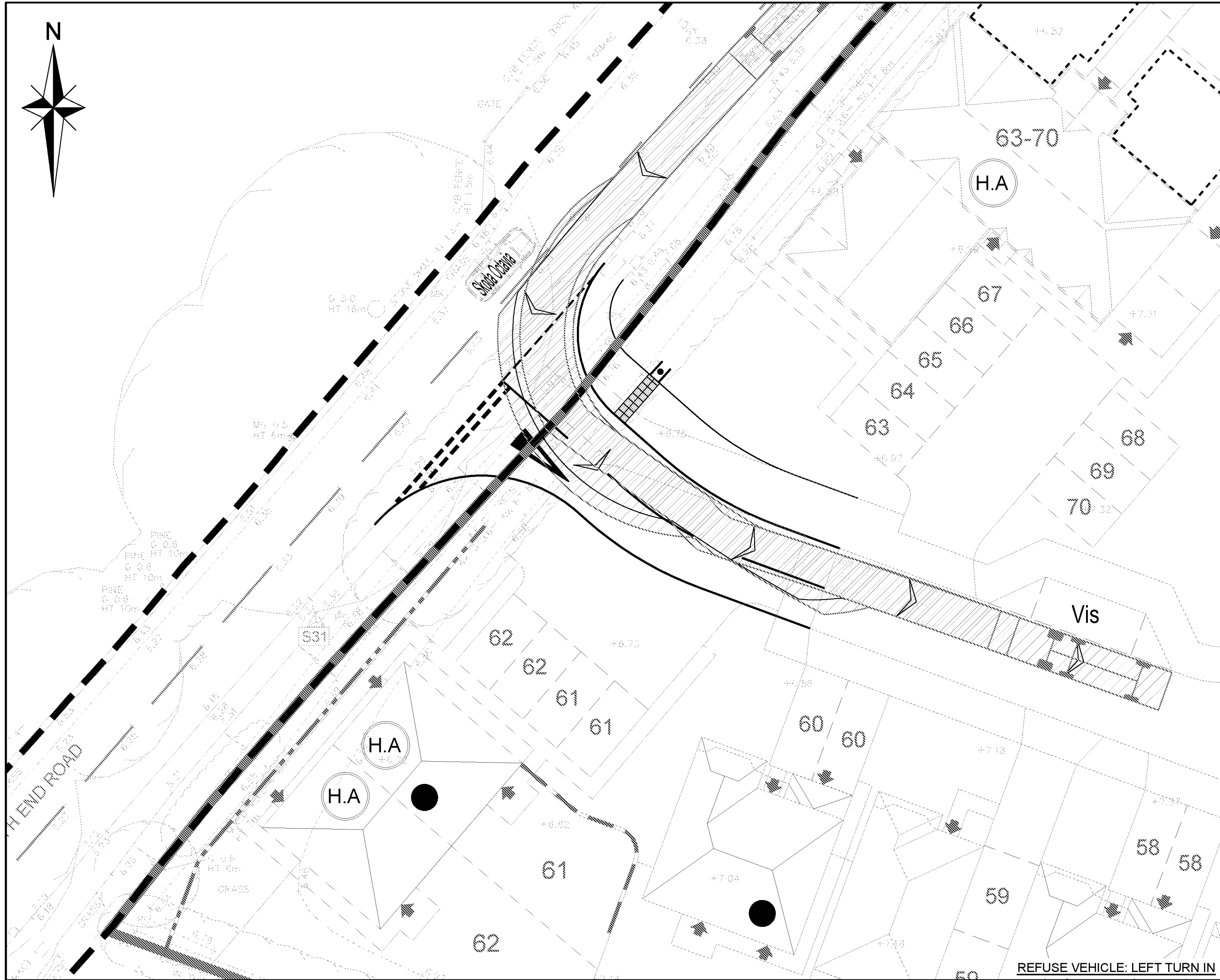


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Grove House, Lutyens Close, Chineham Basingstoke, Hampshire, RG24 8AG www.i-transport.co.uk		Tel: 01256 338640				PROJECT No: ITB14679		SCALE @ A3: 1:500		DATE: 02.03.21	
STATUS: FOR INFORMATION				PROJECT: LAND SOUTH OF FORD LANE		CLIENT: REDROW HOMES		DRAWING No: ITB14679-GA-003		REV: -	



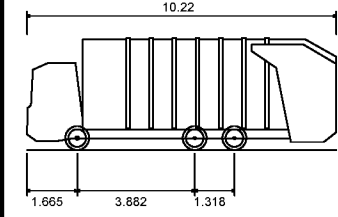
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LEGEND

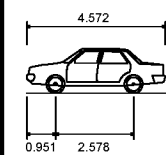
- DEVELOPMENT BOUNDARY
- HIGHWAY BOUNDARY

VEHICLE TRACKING DATA



Phoenix 2-17N (with Elite 2 6x2 ML chassis)

Overall Length	10.220m
Overall Width	2.250m
Overall Body Height	3.707m
Min Body Ground Clearance	0.249m
Track Width	2.250m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	10.550m



Skoda Octavia

Overall Length	4.572m
Overall Width	1.769m
Overall Body Height	1.488m
Min Body Ground Clearance	0.249m
Max Track Width	1.713m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	5.100m

DRAFT

Rev	Amendments	Dm	Chk	App	Date

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Job Title

FORD LANE, YAPTON
NORTH END ROAD TEMPORARY ACCESS

Drawing Title

VEHICLE SWEPT PATH ANALYSIS

Client

REDROW

Scale	Date	Designed
1:200 @A1	JAN 21	SOM
Drawn	Checked	Approved
SOM	SG	LH
Job No	Drawing No	Rev
18-344	18-344/1001	