OPTIMA
Intelligent Highways Solutions

Transvaal Terrace/Carlinghow Hill, Batley
Proposed Residential Development
Stage 1 Road Safety Audit

January 2020 (Initial Issue)

Prepared on behalf of

Fernbrook Associates Ltd

Optima Highways and Transportation Consultancy Ltd
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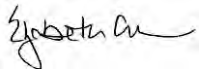
Quality Management

Transvaal Terrace/Carlinghow Hill, Batley - Stage 1 Road Safety Audit Project No: 19123				
File reference	O:\Transvaal Terrace, Batley RSA\TEXT\REPORTS\200130 Transvaal Terrace Stage 1 RSA.docx			
Issue/revision	**Initial Issue**	**Revision 1**	**Revision 2**	**Revision 3**
Remarks	Final			
Date	30th January 2020			
Prepared by	M Whittaker			
Signature				
Checked by	E Green			
Signature				
Authorised by	M Whittaker			
Signature				

Content

APPENDICES

1. Introduction and Background

1.1 PROJECT DETAILS

Table 1.1 Project Details

Report title	Stage 1 Road Safety Audit
Date	30th January 2020
Document reference and revision	200130 Initial Issue
Prepared by	Optima Highways
On behalf of	Kirklees Council

1.2 INTRODUCTION

1.2.1 Optima Highways and Transportation Consultancy Ltd (Optima) has been appointed to undertake a Stage 1 Road Safety Audit of the proposed access arrangements and internal highway layout of a proposed residential development comprising of 40 dwellings (20 houses and 20 apartments) on land off Transvaal Terrace, Batley.

1.2.2 The Road Safety Audit Team approved by Kirklees Council consisted of:

Martin Whittaker FIHE MSoRSA

Road Safety Audit Team Leader (Director, Optima)

Elizabeth Green BEng MSc CEng MICE FCIHT

Road Safety Audit Team Member (Associate Director, Optima)

1.2.3 A Site visit was carried out by the Road Safety Audit Team on Tuesday 28th January 2020 between the hours of 10:00 and 10:30. The road surface during the visit was wet. Low traffic and pedestrian volumes were observed on the local highway network. No cyclists were observed.

1.3 SCHEME DETAILS

1.3.1 This Audit considers the following:

- The Carlinghow Hill/Transvaal Terrace junction and Transvaal Terrace;
- The secondary site access via Carlinghow Hill; and
- Proposed internal highway layout of the residential development;

1.3.2 The following drawings were provided to the Audit Team for the purposes of the audit:

- Cora IHT drawing 003 rev B dated 09/01/20 – Proposed Site Access Improvements; and
- KUFIC drawing 18001-D03-C dated 10/01/20 – Proposed Site Plan.

1.3.3 The following additional background information has also been supplied to the Road Safety Audit Team.

- Accepted Road Safety Audit Brief dated 23rd January 2020 issued by Cora IHT; and
- Cora IHT Transport Statement dated September 2019.

1.3.4 The above plans and information have been examined prior to the site visit, analysed in detail on site and at the offices of Optima following the visit.

1.3.5 The Road Safety Audit considers and reports only on the safety implications of the proposed scheme as presented and has not examined or verified the compliance of the designs to any other criteria. Comments made in this report relate to points which are considered to be worthy of attention in respect of safety.

1.3.6 Recommendations included within this report are intended to identify proportionate means of eliminating or mitigating the concern raised and should not be regarded as being prescriptive design solutions. There may be alternative methods of addressing a problem that would be equally acceptable and these should be considered in full by the Designer.

1.3.7 The reference and location of problems have been indicated on the plans contained at Appendix A, where appropriate.

1.4 ITEMS RAISED AT PREVIOUS ROAD SAFETY AUDITS

1.4.1 The Road Safety Audit Team has not been made aware of any previous Road Safety Audits.

2. Items Raised at Stage 1 Road Safety Audit

Table 2.1 Problem 1

PROBLEM	
Location	Apartment access.
Summary	Existing boundary walls and vegetation restrict visibility and increases the potential for a collision between a vehicle emerging from the development and traffic travelling along Carlinghow Hill.

Junction visibility splays at the secondary access serving the apartments are not indicated on the drawings provided and no vehicle speed data has been supplied to the Road Safety Audit Team.

However, the existing boundary walls and vegetation to either side of the junction restrict visibility in both directions as shown within the images below.

Insufficient junction visibility could lead to a collision between a vehicle emerging from the development and those travelling along Carlinghow Hill.

Recommendation

It is recommended that the current level of visibility is compared against the recommended level of visibility, applying Manual for Streets guidance, based on the results of a vehicle speed survey. Should the level of visibility prove to be substandard, it is recommended that the existing boundary wall and vegetation is removed and set to the rear of the visibility splay or access to the front of the apartments is taken via Transvaal Terrace to enable this access to be permanently closed.

Table 2.2 Problem 2

PROBLEM	
Location	Proposed turning facilities.
Summary	The proposed turning facilities could result in the potential for a collision between a turning service vehicle and other road users.
The Transport Statement includes an extract of a swept path analysis using a 10m rigid vehicle turning within the apartment car park and the turning facility at the head of the cul-de-sac. Firstly, it is noted that the swept path analysis has been undertaken on an alternative layout fronting the apartments, which does not include 9 proposed car parking spaces, thereby reducing the available space. The swept path analysis has also been undertaken using a 10m rigid vehicle rather than a standard Kirklees refuse vehicle which is 11.85m in length. Based on the tracking exercise undertaken (which is not to a scale) it appears unlikely that this size of vehicle can enter and exit the development in a forward gear, leading to potential overrunning of driveways/margins/parking spaces or excessive reverse distances in conflict with other road users.	
Recommendation	
It is recommended that a swept path analysis of the proposed turning facilities is undertaken using a large refuse vehicle (specification included within the Kirklees Highway Design Guide SPD) and the turning areas are amended accordingly.	

Table 2.3 Problem 3

PROBLEM	
Location	Internal access road.
Summary	The footway provision may lead to pedestrians stepping out into the carriageway.
The initial circa 120m length of Transvaal Terrace is laid out as a traditional estate road with footways to both flanks. Beyond this a shared surface is provided serving the rear portion of the development. The existing footways over the initial length of Transvaal Terrace are approximately 2.0m wide between Carlinghow Hill and the apartment access, however beyond this point the footways vary in width between circa 1.2m and 2.0m fronting the new properties and rear apartment car park. A 2.0m wide footway is generally regarded as the minimum unobstructed widths for pedestrians. A footway width below 1.5m is insufficient to accommodate a wheelchair user/pram and a pedestrian side by side and therefore could result in pedestrians discharging into carriageway when passing, resulting in the potential conflict with oncoming road users.	
Recommendation	
It is recommended that consistent 2.0m wide footways are provided to both flanks of the proposed access road.	

3. Audit Team Statement

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

Road Safety Audit Team Leader

Name: Martin Whittaker FIHE MSoRSA

Position: Director

Organisation: Optima Highways & Transportation Ltd

Date: 30th January 2020

Signed:……..

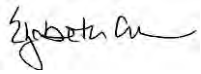
Road Safety Audit Team Member

Name: Elizabeth Green BEng MSc CEng MICE FCIHT

Position: Associate Director

Organisation: Optima Highways & Transportation Ltd

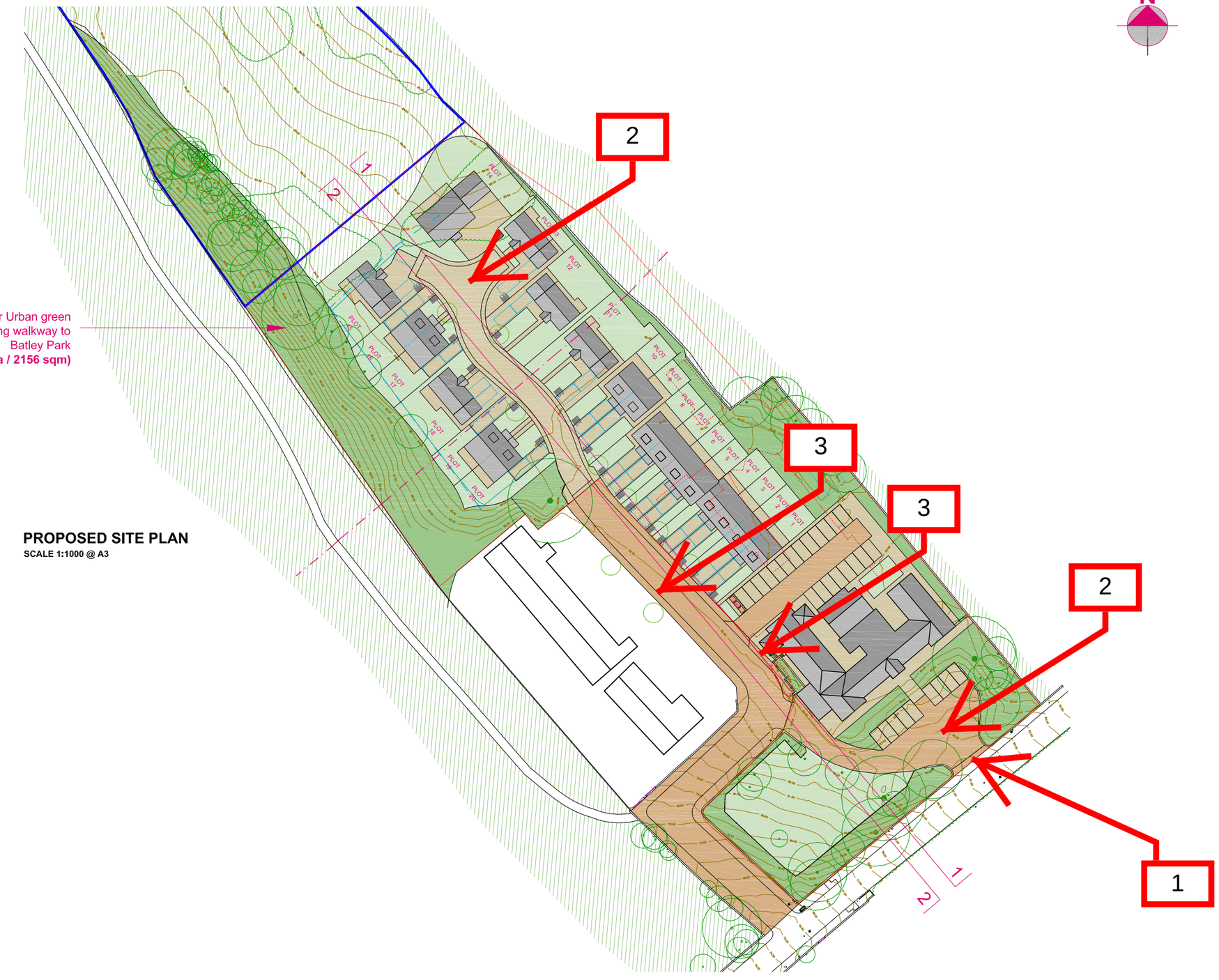
Date: 30th January 2020



Signed:……..

Appendices

Appendix A Problem Location Plan



PROPOSED SITE PLAN
SCALE 1:1000 @ A3

N

Key:

- Extent of greenbelt
- Extent of previously developed land within greenbelt
- Demolition
- Soft Landscaping
- Grass
- Hard Landscaping

SCHEDULE:

Houses
Detached Units - 6
Semi-Detached Units - 6
Town Houses - 8
Total - 20

Flats
1 Bed - 9
2 Bed - 6
3 Bed - 5
Total - 20

No. of units in GB (brownfield) - 7
No. of units outside GB (brownfield) - 13+20=33

Total site area - 1.22 Ha (12200 sqm)

Existing Gross Floorspace - 4062sqm
Gross Floorspace lost to demolition - 2187 sqm
Existing Gross Floorspace converted to 20 Apartments - 1875 sqm
Proposed Gross Floorspace of 20 New Build Dwellings - 2234 sqm

NOTES:
REV B 04/12/2019 - UPDATED PARKING LAYOUT, FOOTWAY ADDED TO RAMP, BIN STORES ADDED
REV B 10/01/2020 - BIN STORE MOVED

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DRAWN BY: HD	STAGE: DESIGN	DATE: 10/01/20
LOCATION:	CARLINGHOW HILL, BATLEY	
TITLE:	RESIDENTIAL DEVELOPMENT	
DESCRIPTION:	**PROPOSED SITE PLAN**	
REF:	**18001-D03-C**	