OPTIMA
Intelligent Highways Solutions

Blackmoorfoot Road, Huddersfield
Proposed Internal Layout (Vistry Parcel)
Stage 1 Road Safety Audit

October 2025 (Initial Issue)

Prepared on behalf of

Vistry Yorkshire

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Quality Management

Blackmoorfoot Road, Huddersfield - Stage 1 Road Safety Audit Project No: 24040				
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Remarks	Final			
Date	29th October 2025			
Prepared by	M Whittaker			
Checked by	J Stackhouse			
Authorised by	M Whittaker			

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Content

1. Introduction and Background 1
2. Items Raised at Stage 1 Road Safety Audit 5
3. Audit Team Statement 12

APPENDICES

Appendix A Road Safety Audit Brief
Appendix B Problem Location Plan

1. Introduction and Background

1.1 PROJECT DETAILS

Table 1.1 Project Details

Report title	Stage 1 Road Safety Audit
Date	29th October 2025
Document reference and revision	251029 Initial Issue
Prepared by	Optima Highways
Overseeing Organisation	Kirklees Council
On behalf of	Vistry Yorkshire

1.2 INTRODUCTION

1.2.1 The objective of the road safety audit process is to provide an effective, independent review of the road safety implications of engineering interventions for all road users and to suggest modifications that could improve road safety. The road safety audit process is not a technical check of compliance with design standards.

1.2.2 Highway schemes subject to the Road Safety Audit process are conducted at the following design stages:

Stage 1 – Completion of Preliminary Design;

Stage 2 – Completion of Detailed Design;

Stage 3 – Completion of Construction; and

Stage 4 – Post-Opening Monitoring.

1.2.3 Optima Highways and Transportation Consultancy Ltd (Optima) has been appointed by Vistry Yorkshire to undertake a Stage 1 Road Safety Audit of the internal layout of their land parcel, within a larger residential development on land off Blackmoorfoot Road and Felks Stile Road, Huddersfield.

1.2.4 The Road Safety Audit has been carried out by experienced Road Safety Engineers employed by Optima, who are independent from the design. The Road Safety Audit Team membership has been approved by Adam Darwin of Kirklees Council (Overseeing Organisation), which consisted of:

Martin Whittaker FIHE MSoRSA (Membership Number P000075996)

Road Safety Audit Team Leader (Director, Optima)

James Stackhouse BA (Hons) MCIHT AMSoRSA (Membership Number P000093999)

Road Safety Audit Team Member (Senior Transport Planner, Optima)

1.3 PREVIOUS ROAD SAFETY AUDITS

1.3.1 Optima undertook a Stage 1 Road Safety Audit in May 2025 of the proposed access arrangements to the development via both Blackmoorfoot Road and Felks Stile Road.

1.3.2 A subsequent Stage 1 Road Safety Audit was prepared by Optima in August 2025 of the internal layout of the Miller Homes parcel.

1.4 DEPARTURE FROM STANDARD

1.4.1 The following departures from standard are referenced within the Road Safety Audit Brief contained at Appendix A:

- The 'x' distance setback used for the pedestrian crossing point visibility splays at junctions is 1m rather than 1.5m. This is considered to be adequate for most users, and exceeds that indicated in Manual for Streets (that indicates these measurements from the kerb edge). A 'y' distance of 17m, measured up to 1m in the carriageway has also been used at junction crossings, which takes account of the slower speed of turning traffic. There is one location, at the junction of M4/M6, where the carriageway offset for the pedestrian crossing visibility splay slightly exceeds 1m, due to the presence of a parking layby. However, this is considered to be acceptable as no approaching vehicle (including two wheeled vehicles) would be fully obstructed by a parked vehicle, and so the crossing point should still be able to be used safely.
- The 'x' distance setback used for the cycle / pedestrian crossing points is 1.5m rather than 2.4m. As previously stated, this is considered to be adequate for standard cycle types, and has been shown to demonstrate where vertical obstructions (e.g. street trees and high boundary treatments etc.) need to be avoided. In practice, a higher level of visibility will be achieved in most cases, but potentially with some spot obstructions.
- The 'x' distance setback for the cycle to cycle off street provision is 1.5m rather than 2.4m (See above bullet point for justification for this departure).
- The 'y' distance on some pedestrian / cycle visibility splays have been measured at 1m maximum into the carriageway rather than the channel line. This is considered to be acceptable, as an offset of up to 1m will still allow all approaching vehicles (including two wheeled vehicles) to be observed, based on their likely driving/riding position.
- Some shared use pedestrian/cycle routes have a gradient in excess of 1:20, due to the site topography. This has been mitigated by limiting the maximum gradients to 1:15, and by providing reduced gradient sections at regular intervals and on approach to transitions with the adoptable highway. Signage requesting cyclists to ride courteously along the paths through the public open space areas will also be provided.

1.5 SCHEME DETAILS

1.5.1 The scheme includes the internal estate streets that are proposed to be offered for adoption via S38 agreement within the Vistry Yorkshire parcel of the larger residential development. The scheme includes a mixture of road types, including a Primary Loop Road (Type A classification), Secondary Loop Road (Type B classification) and Shared Surface Streets (Type C classification).

1.5.2 The following drawings set out within Table 1.2 were provided to the Road Safety Audit Team for the purposes of the Audit:

Table 1.2 Drawings

Designer	Drawing No.	Rev	Title
Nineteen47	N2114V 008-01	L	Technical Planning Layout
Nineteen47	N2114V 009	L	Presentation Layout - Vistry
AMA	AMA-22224-SK-050	P10	Proposed Parallel Crossing Facility
AMA	AMA-22224-SK-085 2.3	P08	Active Travel Infrastructure Plan
AMA	AMA-22224-SK-085 3.3	P08	Active Travel Infrastructure Plan
AMA	AMA-22224-SK-094 1.2	P05	All Vehicular Visibility Splays
AMA	AMA-22224-SK-094 2.2	P05	All Vehicular Visibility Splays
AMA	AMA-22224-SK-097 1.2	P04	Swept Path Analysis 3.5t Panel Van
AMA	AMA-22224-SK-097 2.2	P04	Swept Path Analysis 3.5t Panel Van
AMA	AMA-22224-SK-098 1.2	P04	Indicative Double Yellow Line and Bus Stop Clearway Plan
AMA	AMA-22224-SK-098 2.2	P04	Indicative Double Yellow Line and Bus Stop Clearway Plan
AMA	AMA-22224-SK-100 1.3	P06	Swept Path Analysis KC Design Refuse Vehicles Pass Parked Cars
AMA	AMA-22224-SK-100 2.3	P06	Swept Path Analysis KC Design Refuse Vehicles Pass Parked Cars
AMA	AMA-22224-SK-100 3.3	P06	Swept Path Analysis KC Design Refuse Vehicles Pass Parked Cars
AMA	AMA-22224-SK-101 1.3	P06	Swept Path Analysis KC Design Refuse Vehicles Passing Cars on Bends
AMA	AMA-22224-SK-101 2.3	P06	Swept Path Analysis KC Design Refuse Vehicles Passing Cars on Bends
AMA	AMA-22224-SK-101 3.3	P06	Swept Path Analysis KC Design Refuse Vehicles Passing Cars on Bends
AMA	AMA-22224-SK-102 1.3	P06	Swept Path Analysis Double Decker Bus on PLR and Design Vehicles Using Turning Heads
AMA	AMA-22224-SK-102 2.3	P04	Swept Path Analysis Double Decker Bus on PLR and Design Vehicles Using Turning Heads
AMA	AMA-22224-SK-102 3.3	P04	Swept Path Analysis Double Decker Bus on PLR and Design Vehicles Using Turning Heads

1.5.3 The following additional information set out within Table 1.3 has also been supplied to the Road Safety Audit Team.

Table 1.3 Additional Information

Author/Designer	Report/Drawing Title	Date
AMA	Stage 1 Road Safety Audit Brief	17th October 2025
Nineteen47	N2114 420 rev M Movement Plan	17th October 2025
Adept	08.24007-ACE-00-ZZ-D-C- 2610 Footpath and Cycle Route Plan	7th October 2025
AMA	Highway Technical Note	23rd December 2024
AMA	GG 119 Road Safety Audit Response Report (Proposed Access Arrangements)	12th August 2025
AMA	GG 119 Road Safety Audit Response Report (Millers Parcel)	12th October 2025

1.6 TERMS OF REFERENCE AND AUDIT DETAILS

1.6.1 This Road Safety Audit has been undertaken in accordance with GG 119 and a Road Safety Audit brief prepared by Andrew Mosely Associates (Design Organisation) and approved by the Overseeing Organisation, which is contained at Appendix A.

1.6.2 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.

1.6.3 A Site visit was carried out by the Road Safety Audit Team on Friday 2nd May 2025 between the hours of 13:30 and 14:45, during the preparation of the Stage 1 Road Safety Audit of the proposed access arrangements. A further site visit was carried out by the Road Safety Audit Team on Wednesday 13th August 2025 between the hours of 15:30-16:00 to consider both the Millers and Vistry internal layouts. The weather was fine/dry. Moderate traffic volumes were observed along both Blackmoorfoot Road and Felks Stile Road, with a limited number of pedestrians and cyclists.

1.6.4 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.

1.6.5 Any 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.

1.6.6 The reference and location of problems have been indicated on the plan contained at Appendix B, where appropriate.

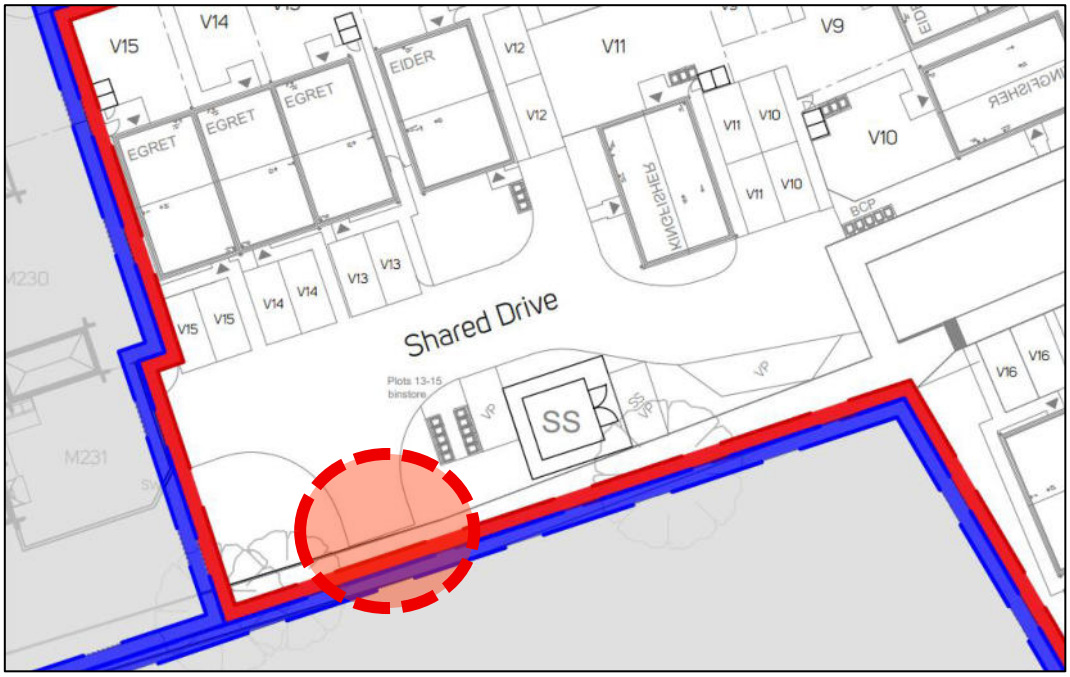
2. Items Raised at Stage 1 Road Safety Audit

Table 2.1 Problem 1

PROBLEM	
Location	Private drive serving plots 10-15 (at the head of Road V3).
Summary	The proximity of the turning head may conflict with users of the shared footway/cycleway.

A private drive serving plots 10-15 forms a turning facility immediately adjacent to the shared footway/cycleway connecting the Millers parcel with Road V3.

The proximity of the turning head to the path may result in larger vehicles reversing back onto or overhanging the shared footway/cycleway and increases the risk of a collision with a pedestrian or cyclist.



Recommendation

It is recommended that a suitable vehicle restraint barrier is provided between the shared footway/cycle and the turning head. Alternatively, it is recommended that the layout/design of the turning facility is amended to provide adequate separation.

Table 2.2 Problem 2

PROBLEM	
Location	Shared footway/cycle between plots 16 and 10 (Road V3).
Summary	Cyclists may discharge into the carriageway into the path of oncoming traffic.

The shared footway/cycleway connecting the Millers parcel with Road V3 terminates opposite plot 16, where the traditional estate road meets a private drive. The private drive incorporates a formal visitor car parking space, which when occupied, may obstruct visibility to a cyclist when travelling eastbound parallel to one another.

Although it is acknowledged that vehicular speeds may be low, the restricted visibility between an eastbound vehicle emerging from the private drive and an eastbound cyclist (particularly a child), could increase the risk of a collision as the cyclists discharges onto the carriageway.



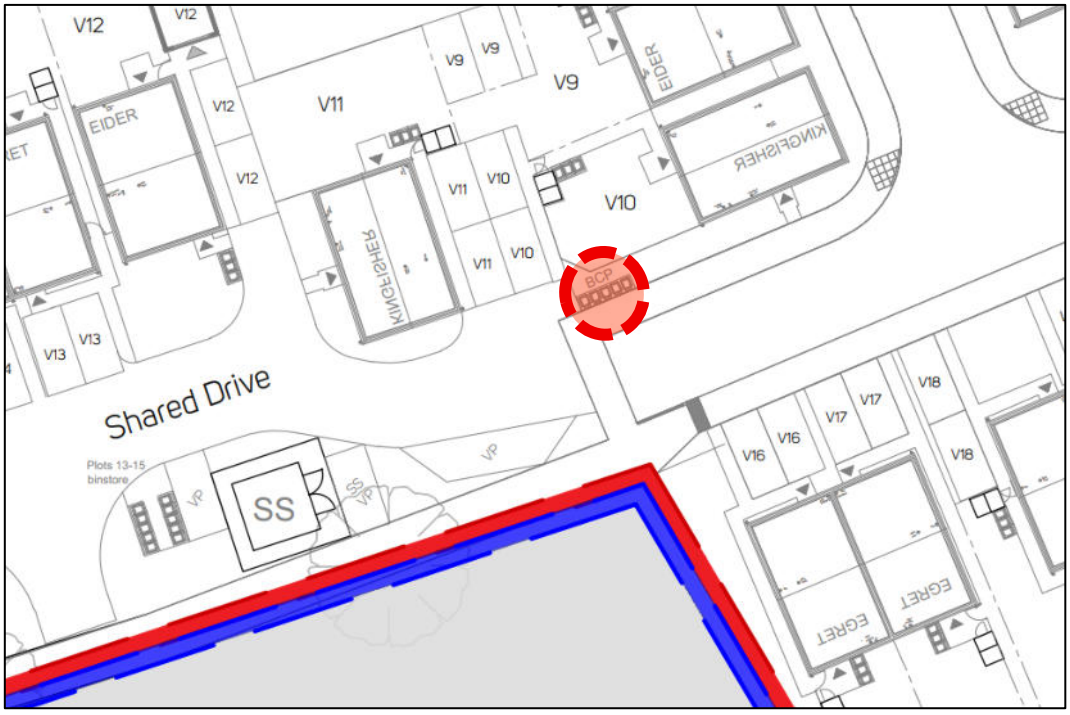
Recommendation

It is recommended that the visitor parking bay is relocated or removed to provide suitable intervisibility between the private drive and shared footway/cycleway.

Table 2.3 Problem 3

PROBLEM	
Location	Bin collection point adjacent to plot 10 (Road V3).
Summary	The bin collection point restricts visibility from the driveway.

A bin collection point is provided adjacent to plot 10, immediately to the east of the driveway. The bin collection point would be located within the pedestrian intervisibility splay. When occupied, the presence of the bins would likely block visibility between pedestrians on the footway and an emerging vehicle from the driveway, increasing the potential for a collision.



Recommendation

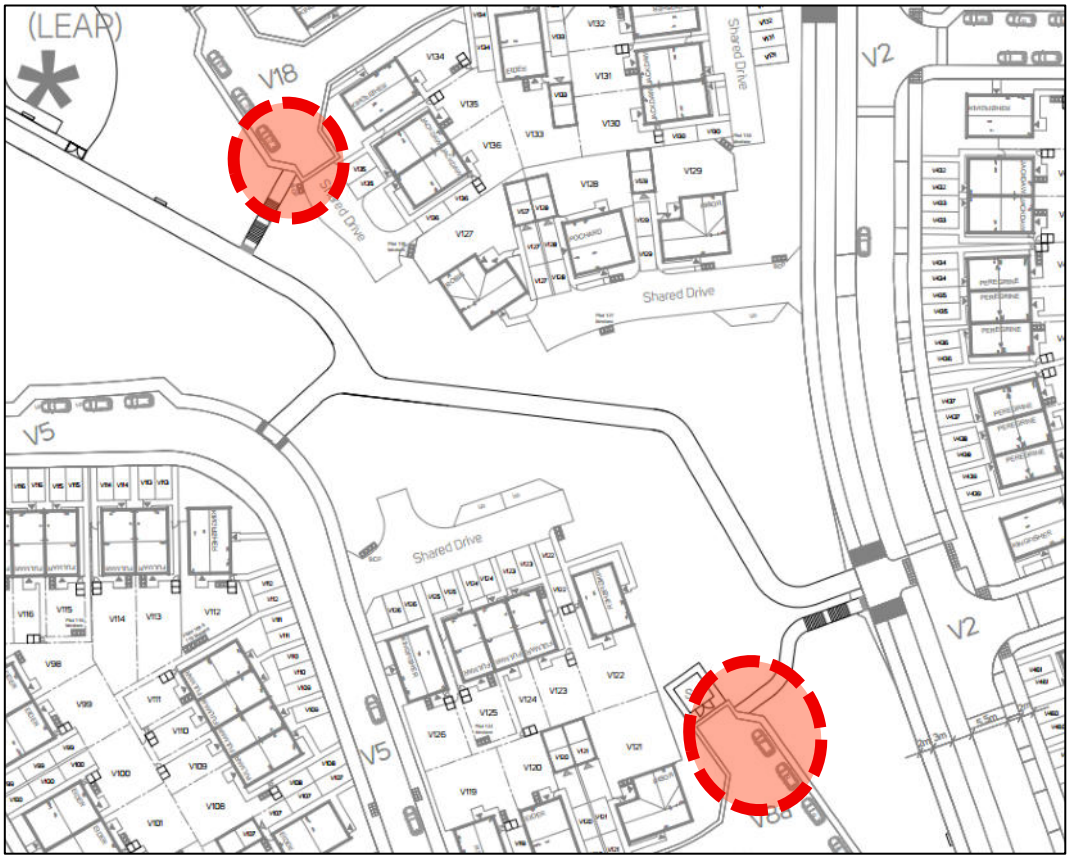
It is recommended that the bin collection point to the rear of the substation is enlarged to provide a single bin collection point for plots 10-15.

Table 2.4 Problem 4

PROBLEM	
Location	Footpath connection opposite plots 121 and 134.
Summary	A pedestrian may be struck when emerging from the footpaths.

A pedestrian footpath is provided between road V2 and V8a (opposite plot 121) and between road V18 and the play area (opposite plot 134). Both footpaths emerge onto shared surfaces in close proximity to parking laybys and a bin collection point is also located immediately to the east of the connection onto road V18.

When occupied, the parking laybys (and bin collection point) are likely to restrict visibility to/from the footpath connection, particularly to smaller children. Although it is acknowledged that speeds will be very low, as reversing vehicles will be a common occurrence within the turning heads, there is a risk of a collision between a pedestrian and reversing vehicles.



Recommendation

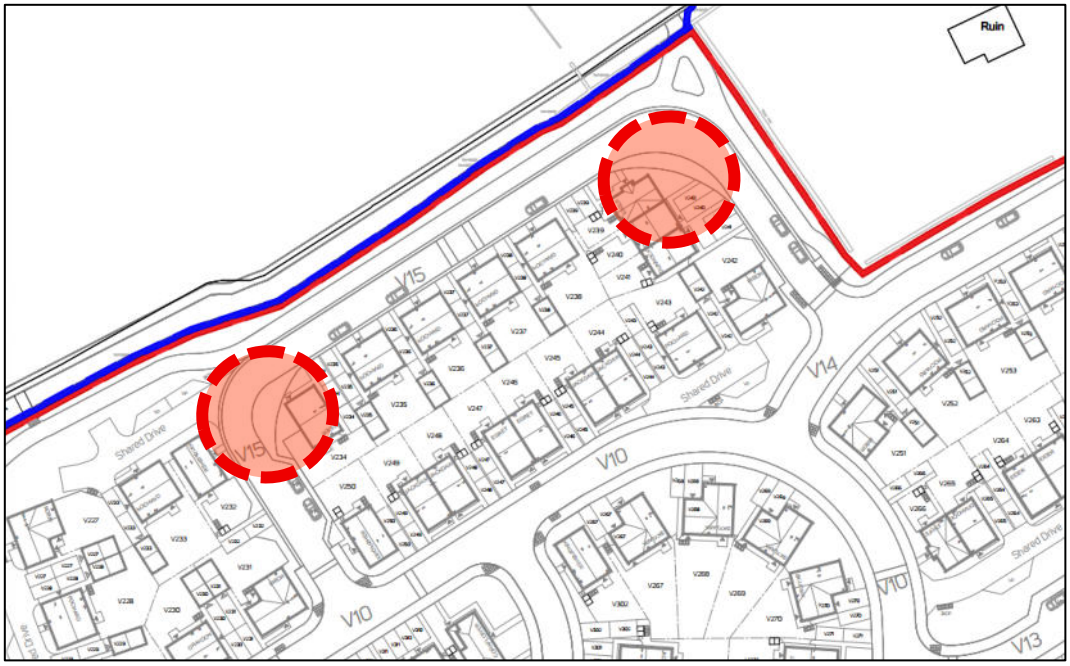
It is recommended that pedestrian visibility splays are provided from the crossing position and the visitor parking bays and bin collection point are relocated accordingly.

Table 2.5 Problem 5

PROBLEM	
Location	Shared surface road V15 opposite plots 234 & 239.
Summary	Parking may occur on the widened margins.

Widened hard margins have been provided on the inside of the two ninety degree bends along road V15, adjacent to plots 234 and 239 in order to accommodate forward visibility.

Based on the drawings provided, this appears to be a widened hard margin. The widened area, may be used for parking, which would restrict forward visibility and potentially obstruct larger delivery or refuse vehicles, resulting in a potential vehicle-vehicle or vehicle-pedestrian collision.



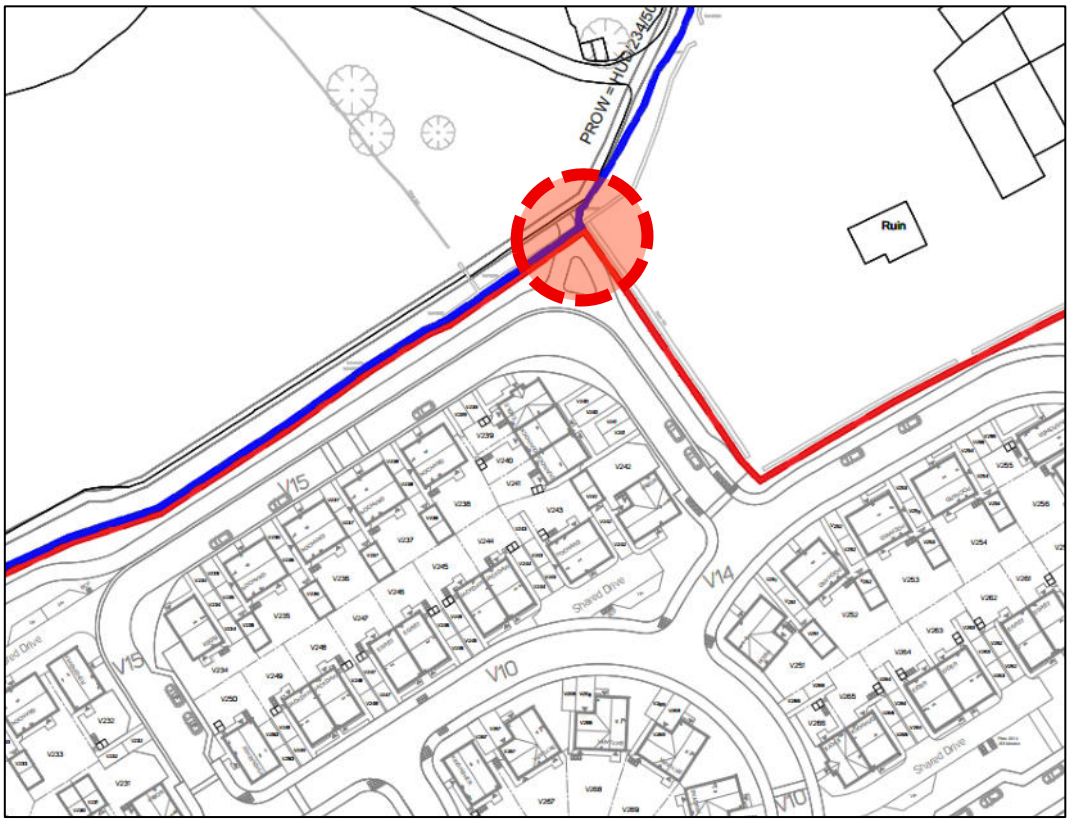
Recommendation

It is recommended that measures are introduced in order to prevent parking within the forward visibility splays at the detailed design stage.

Table 2.6 Problem 6

PROBLEM	
Location	Shared footway/cycleway connecting to PRoW HUD/234/50
Summary	Cyclists may use the footpath.

A shared footway/cycleway is provided at the northeastern corner of the development which connects to PRoW HUD/234/50, which is a footpath. No hazard warning paving has been provided, which may encourage cyclists to cycle along the footpath in conflict with pedestrians.



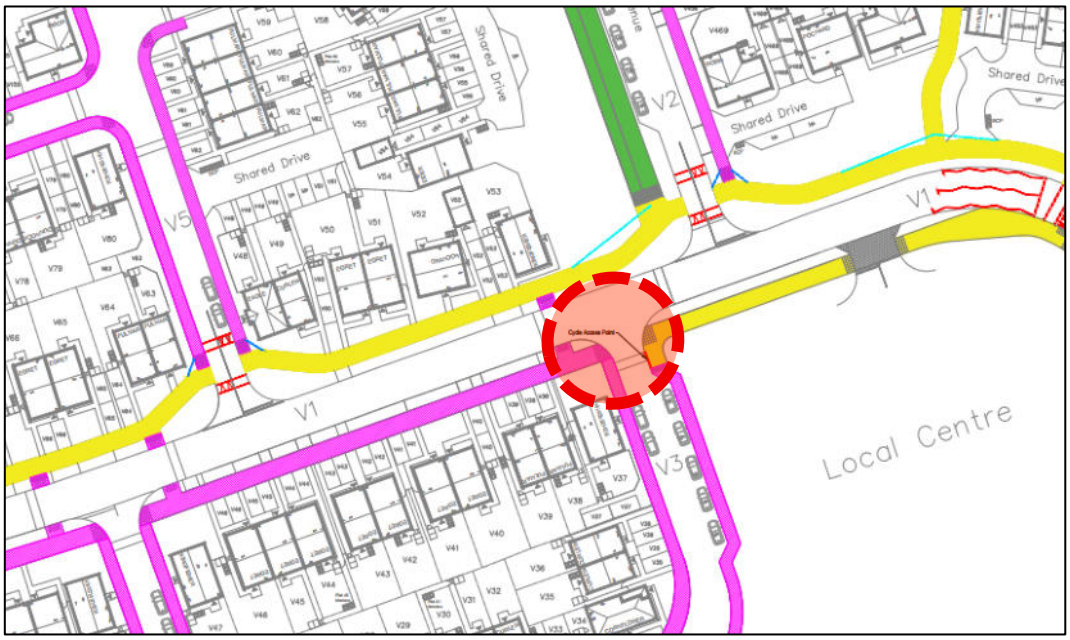
Recommendation

It is recommended that end of cycleway signage and hazard warning paving is provided at the detailed design stage.

Table 2.7 Problem 7

PROBLEM	
Location	Junction of road V1 and V3
Summary	Cyclists may continue along the footway.

A 3m wide shared footway/cycleway is provided along road V1 from its junction with Blackmoorfoot Road, around the local centre parcel and terminates where it meets road V3. Hazard paving is provided around the bend on the side road, however cyclists travelling westbound may be unaware that the facility has ended and could continue along the footway, which is laid out with the same 3m width. This could increase the risk of conflict between cyclists and pedestrians.



Recommendation

It is recommended that end of cycleway signage and hazard warning paving is provided in a suitable location to prevent use of the footway at the detailed design stage.

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 (Membership Number P000075996)

Position: Director

Organisation: Optima Highways & Transportation Ltd

Date: 29th October 2025



Signed:……..

Road Safety Audit Team Member

Name: James Stackhouse BA (Hons) MCIHT AMSoRSA (Membership Number P000093999)

Position: Senior Transport Planner

Organisation: Optima Highways & Transportation Ltd

Date: 29th October 2025



Signed:……..

Appendices

Appendix A Road Safety Audit Brief

Road Safety Audit brief template (DMRB GG119)

Table C.1 Project Summary

Date:	*22th October 2025*
Document Reference:	*RSA Brief Stage 1 – Blackmoorfoot Road, Huddersfield - Rev 2*
Prepared by:	*AMA*
On behalf of:	*Kirklees Council*
AUTHORISATION SHEET	
Project:	*Internal layout of the residential development served from Blackmoorfoot Road and Felks Stile Road (Vistry Yorkshire land parcel).*
Report title:	*RSA Stage 1 – Blackmoorfoot Road, Huddersfield*
PREPARED BY:	
Name:	*Alex McGarrell*
Signed:	
Organisation:	*AMA*
Date:	*22th October 2025*
I APPROVE THE RSA BRIEF AND INSTRUCT THE RSA TO TAKE PLACE ON BEHALF OF THE OVERSEEING ORGANISATION	
Name:	*Adam Darwin*
Signed:	*Adam Darwin*
Organisation:	*Kirklees Council*
Date:	*22th October 2025*

Table C.2 General Details

<table>
<tr><td colspan="5">General Details</td></tr>
<tr><td colspan="2">Highway scheme name and road number:</td><td colspan="3">Residential development served from Blackmoorfoot Road and Felks Stile Road.</td></tr>
<tr><td>Type of scheme:</td><td colspan="4">Residential</td></tr>
<tr><td rowspan="2">RSA stage tick as appropriate.</td><td>1✓</td><td>~~2~~</td><td>~~3~~</td><td rowspan="2">~~1/2~~</td></tr>
<tr><td colspan="3">~~Interim~~</td></tr>
<tr><td colspan="2">Overseeing Organisation details</td><td colspan="3">Design organisation details</td></tr>
<tr><td colspan="2">Kirklees Council
Civic Centre 1
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15 St Paul’s Street
Second Floor
Leeds
LS1 2JG

Design Lead
Alex McGarrell
alex@amatp.co.uk</td></tr>
<tr><td colspan="2">Police contact details</td><td colspan="3">Maintaining agent contact details</td></tr>
<tr><td colspan="2">Police are not required at RSA 1</td><td colspan="3">Kirklees Council
Civic Centre
Huddersfield
HD1 1BY</td></tr>
<tr><td colspan="5">RSA team membership</td></tr>
<tr><td colspan="5">Optima
Martin Whittaker (Team Leader TL)
James Stackhouse (Team Member TM)</td></tr>
<tr><td colspan="5">Terms of reference</td></tr>
<tr><td colspan="5">KC Highways Design Guide SPD, Manual for Streets and LTN 1/20</td></tr>
</table>

Table C.3 Scheme Details

Scheme description/objective

General

It is proposed to construct a new housing development (700 dwellings, 70 bed care home and local centre) on land served from Blackmoorfoot Road and Felks Stile Road. These accesses will be connected by an internal spine road (Primary Loop Road), which will accommodate a new bus route.

A Secondary Loop Road will then run through the centre of the development in a 'U' shape from north-south. Off the Secondary Loop Road there will be a series of tertiary streets that serve the remainder of the development. A number of these will be shared surface streets.

This Stage 1 RSA Brief relates to the internal estate streets that are proposed to be offered for adoption via S38 agreement. The site access works on to Blackmoorfoot Road and Felks Stile Road will be subject to a separate S278 agreement, and have already been subject to a separate Stage 1 RSA. As such, no additional Stage 1 RSA comments are required in relation to the S278 site access proposals, except where there is a direct interaction with the S38 works.

The development is to be built by two separate developers (Miller Homes and Vistry Yorkshire). This RSA Brief covers the Vistry Yorkshire parcel only. However, the Movement Framework Plan included for information with this RSA Brief shows how the roads and paths that link between the two site parcels interact.

Separate Stage 1 RSA's have been undertaken for the development site access works (S278) and the proposed S38 works within the Miller Homes development parcel. These Stage 1 RSA's have been closed out, with copies of both Road Safety Audit Response Reports included with this RSA Brief for information purposes only.

The developments Primary Loop Road has been designed in accordance with the Type A classification (classification from the Kirklees Highway Design Guide SPD) with a design speed of 25mph. The Secondary Loop Road and a number of the streets accessed from it have been designed in accordance with Type B classification streets, which have a design speed of 20mph. The shared surface streets have been designed in accordance with Type C classification streets, which have a design speed of 15mph. The carriageway width of the Primary Loop Road has been designed at 6.75m wide, which is sufficient to accommodate the proposed bus route. The Secondary Loop Road and other Type B streets have been designed

at 5.5m wide. The Type C shared surface streets have also been designed at 5.5m wide. The centreline radii across the site accords with local standards (See Table 1 of the Kirklees Design Guide SPD).

The vehicular forward visibility around bends, vehicular visibility splays at junctions, as well as pedestrian visibility splays at junctions and on links are shown on drawings no. AMA-22224-SK-094 (Drawings 1.2 - 2.2). It has been agreed with Kirklees HDM that pedestrian visibility splays at dropped crossings at junctions can be measured at 1m (rather than 1.5m) x 17m to a point up to 1m from the edge of carriageway. On links, it has been agreed that pedestrian / cycle visibility splays can be measured at 1.5m x 33m on the Primary Loop Road and 1.5m x 25m on the Secondary Loop Road, as well as other Type B streets. This 'x' distance is a departure from the guidance in LTN 1/20 that recommends an 'x' distance of 2.4m. This has been accepted by Kirklees HDM, as the splays have been indicated to demonstrate where vertical features should not be installed (e.g. street trees, high landscaping and fences etc), ensuring that minimum levels of unobstructed visibility will be maintained. In practice, higher levels of visibility will be available in most cases. The 1.5m set back distance is considered to be an acceptable minimum standard that will accommodate most standard cycle types. Cycles that require a longer set back distance (e.g. cargo bikes and recumbents) are unlikely to be a frequent occurrence, and should still be able to safely use the facilities if ridden with care and considerately for others.

The movement of pedestrians and cyclists has been considered across the site and a strategy has been agreed with KC HDM. LTN 1/20 has been taken into account when designing the pedestrian and cycle infrastructure. Beyond the Primary Loop Road, it has been established that cyclists could use the carriageway, therefore, the infrastructure provided on the Secondary Loop Road is beyond the minimum requirements set out in LTN 1/20.

There will be a parallel crossing facility on the Primary Loop Road as shown on Drawing No. AMA-22224-SK050 providing a controlled point for pedestrians and cyclists to cross on the bend at the eastern extent of the main route into and out of the site from Blackmoorfoot Road.

The Active Travel Infrastructure Plan (AMA-22224-SK-085, Drawings 2.3 - 3.3) shows the proposed footways (pink), footpaths (blue), shared footways / cycleways (yellow) and a segregated footway / cycleway (green). The active travel provision has been carefully considered to ensure that the routes provided are on key desire lines across the site. This includes:

- Pedestrian/cycle links to the primary accesses on to Blackmoorfoot Road and Felks Stile Road;
- Pedestrian/cycle link to the northeast corner of the site. This will initially connect to the PROW network (HUD/234/50), with cyclists being required to wheel bikes along the footpath before continuing their journey from Crossland Hills Road (via the PROW on Quarry Road). This is expected to be improved in future to a continuous pedestrian/cycle link once the remaining part of the site allocation (HS23) is progressed.
- A number of pedestrian connections are proposed to the PROW network (HUD/234/50, HUD/234/40 and HUD/234/20) to the north. This includes improvements to an existing (but not formally recorded) footpath link that heads west towards Linthwaite from the existing PROW network.
- Pedestrian/cycle links to the public open spaces and play/games areas.
- Street V9 has been designed to allow a pedestrian/cycle link to be created to the adjacent Local Plan site HS20 to the east in future.

A controlled parallel crossing is proposed on the Primary Loop Road toward the eastern extent of the site. Other uncontrolled crossings are also provided on the Primary Loop road, which incorporate raised plateaux's.

Set-back footway / cycleway crossing points have been provided across the minor arms of the three main junctions on the northern side of the Primary Loop Road (two of which are included within the Vistry Homes site). These crossings have been designed without design priority for pedestrian / cyclists, which is a strategic decision. This approach has been taken, as the cycle route has a relatively steep 1:15 gradient and is two-way. Therefore, defined priority was not considered to be a suitable approach in this situation. However, the crossings have been inset into the minor arms and include raised plateaux's, to provide good quality crossing points in accordance with LTN 1/20 design principles.

The points at which cyclists can enter and exit the cycle infrastructure are identified on the Active Travel Infrastructure Plan (AMA-22224-SK-085). This includes flush dropped kerbs to allow cyclists to safely traverse on and off the carriageway. The uncontrolled pedestrian crossing points on the Secondary Loop Road have been designed at 3.6m wide (4 kerb lengths) rather than a standard 1.8m pedestrian crossing width, to allow cyclists to enter / exit the carriageway. Cyclists will also be able to access the shared cycle footway at other points, including at private drive crossings. Corduroy paving has been indicatively shown on the plans,

at all transition points between footways and cycle tracks (including shared use routes). The cycle route has been designed to include a minimum 4m turning radius for cyclist in all locations, including at transitions and crossing points.

At points where cycle routes meet pedestrian routes, visibility splays of 2m x 2m have been provided. At points where cycle routes meet, visibility splays of 1.5m x 17m have been provided. These are shown on drawing no. AMA-22224-SK-085 (Drawings 2.3 - 3.3) and AMA-22224-SK-094 (Drawings 1.2 - 2.2). Again, the 1.5m 'x' distance is a departure from the 2.4m distance set out within LTN 1/20.

The indicative road markings have been shown on drawing no. AMA-22224-SK-098, with Double Yellow Lines (DYLs) proposed along the full extent of the Primary Loop Road to prevent parking. DYL's are provided at all internal road junctions for the initial 10m. This is to prevent on-street parking issues, as there are some streets with limited on-street parking provision. These are shown indicatively on Drawing No. AMA-22224-SK-098 (Drawings 1.2-2.2), which also includes indicative bus cage markings and the proposed bus shelter locations.

The site layout has been designed to ensure that the KC Design refuse vehicle can pass a parked car when manoeuvring around the site. The turning heads have also been designed to accommodate a KC Design refuse vehicle. The KC Design refuse vehicle Swept Path Analysis is shown on Drawing No. AMA-22224-SK-100 (Drawings 1.3, 2.3 & 3.3), AMA-22224-SK-101 (Drawings 1.3, 2.3 & 3.3) and AMA-22224-SK-102 (Drawings 1.3, 2.3 & 3.3).

Design standards applied to the scheme design

Kirklees Highway Design Guide SPD and S38 Guidance notes.
LTN 1/20
Traffic Signs Manual
TSRGD

Design Speeds

Based on local guidance in the Kirklees Highway Design Guide SPD and LTN 1/20, the following design speeds have been utilised:

- Primary Loop Road (Type A Street) – 25mph, with traffic calming features at 100m intervals;
- Secondary Loop Road and other Type B streets – 20mph, with traffic calming features at 60m intervals;
- Shared surface (Type C streets) – 15mph, with traffic calming features at 40m intervals.

• Cycle tracks (including shared use and segregated tracks) – 20kph
Speed Limits
The speed limit across the site is likely to be 30mph. However, a reduced 20mph speed limit may be considered at the detailed design stage.
Existing traffic flows / queues
n/a
Forecast traffic flows
Forecast traffic flows within the site are available in the Highway Technical Note by AMA dated 23/12/24, which is included with this RSA Brief.
Pedestrian, cyclist and equestrian desire lines
Cyclists and pedestrians have been considered as part of the design and associated housing development and described in the 'General' section of the RSA Brief above. Also see drawings no. AMA-22224-SK-085 (Drawings 2.3 & 3.3) – Active Travel Infrastructure Plan(s).
Environmental constraints
There are level constraints across the site that have impacted upon the site layout. In particular, this has required some of the street and path gradients to be higher than desirable. However, all gradients have been kept to a maximum of 1:15 on vehicular routes, to ensure they can function safely.

Table C.4 Locality

Description of locality
Edge of existing urban area
General description
The site is to the southwest of Huddersfield.
Relevant factors which may affect road safety
n/a

Table C.5 Analysis

Collision data analysis
n/a
Departures from standards
• The 'x' distance setback used for the pedestrian crossing point visibility splays at junctions is 1m rather than 1.5m. This is considered to be adequate for most users, and exceeds that indicated in Manual for Streets (that indicates these measurements from the kerb edge). A 'y' distance of 17m, measured up to 1m in the carriageway has

also been used at junction crossings, which takes account of the slower speed of turning traffic.

- The ‘x’ distance setback used for the cycle / pedestrian crossing points is 1.5m rather than 2.4m recommended in LTN 1/20. As previously stated, this is considered to be adequate for standard cycle types, and has been shown to demonstrate where vertical obstructions (e.g. street trees and high boundary treatments etc.) need to be avoided. In practice, a higher level of visibility will be achieved in most cases, but potentially with some spot obstructions.
- The ‘x’ distance setback for the cycle to cycle off street provision is 1.5m rather than 2.4m (See above bullet point for justification for this departure).
- The ‘y’ distance on some pedestrian / cycle visibility splays have been measured at 1m maximum into the carriageway rather than the channel line. This is considered to be acceptable, as an offset of up to 1m will still allow all approaching vehicles (including two wheeled vehicles) to be observed, based on their likely driving/riding position.
- Some shared use pedestrian/cycle routes have a gradient in excess of 1:20, due to the site topography. This has been mitigated by limiting the maximum gradients to 1:15, and by providing reduced gradient sections at regular intervals and on approach to transitions with the adoptable highway. Signage requesting cyclists to ride courteously along the paths through the public open space areas will also be provided.

Previous road safety audit stage reports, road safety audit response reports and evidence of agreed actions

None

Strategic decisions

As previously identified, the pedestrian/cycle crossings provision of the minor junction arms on the Primary Loop Road have not been provided with defined priority. This is due to the gradient being up to 1:15, and as the shared use cycle/footway is to be used two-way, with both factors likely to increase the risk of collisions if defined priority for pedestrian/cyclists were provided (See LTN 1/20 that provides further advice on this matter). Therefore, instead the junction crossings have been provided with plateaux’s and inset uncontrolled pedestrian/cycle crossing points, which will still provide good quality crossing provision for pedestrians and cyclists, but without defined priority.

List of included documents and drawings

<u>Drawings subject to this Stage 1 RSA:</u>

- n2114V_008L Technical Planning Layout
- n2114V_009L Presentation Layout
- AMA-22224-SK050-P10 Proposed Parallel Crossing

- AMA-22224-SK-085-P08 Active Travel Infrastructure Plan (Vistry) 2.3 and 3.3
- AMA-22224-SK-097-P04 Panel Van Turning Heads (Vistry) 1.2 and 2.2
- AMA-22224-SK-094-P05 All Visibility Splays (Vistry) 1.2 and 2.2
- AMA-22224-SK-098-P04 'Indicative Double Yellow Line and Bus Stop Clearway Plan' (Vistry) 1.2 and 2.2
- AMA-22224-SK100-P06 SPA1 (Vistry) - 1.3, 2.3 & 3.3
- AMA-22224-SK101-P06 SPA2 (Vistry) - 1.3, 2.3 & 3.3
- AMA-22224-SK102-P06 SPA3 (Vistry) - 1.3, 2.3 & 3.3

Drawings provided for information purposes:

- n2114_420M Movement Framework Plan
- 08.24007-ACE-00-ZZ-D-C- 2610 – P3 - Footpath and Cycle Route Plan

Documents provided for information purposes:

- Highway Technical Note by AMA dated 23/12/24
- Stage 1 RSA Response Report (S278 Site Access works) Rev 2 dated 12/08/25
- Stage 1 RSA Response Report (Miller Homes S38 Works) Rev 2 dated 22/10/25

Table C.6 Checklist

Tick all that are included and provide reasons for those that are not included			
Site Location Plan	x	Scale layout plans	✓
Departures and relaxations from standards	✓	Construction / typical details	x
Previous RSA reports	x	Previous RSA response reports and evidence of agreed actions	x
Collision data and collision data analysis	x	Road traffic collision plot	x
Traffic signal staging	(N/A)	Traffic counts	x
Speed surveys	(N/A)	Pedestrian, cyclist and horse-riding desire lines and volumes	(N/A)
Walking, cycling and horse riding assessment and reviews	(N/A)	Items outside the scope of the RSA/ strategic decisions	✓
Other factors that may impact on road safety	(N/A)	Design speeds / speed limits	✓
Design standards used	✓	Adjacent land uses	(N/A)

Appendix B Problem Location Plan

Key

- Application boundary
- Other land
- Existing vegetation to be retained
- Proposed path (refer to detailed landscape plan)
- TPO
- Existing stone walls
- Proposed bin storage point
- Proposed bin collection point
- 1.8m high close boarded timber gate
- 1.8m high timber fence
- 1.8m high screen wall
- Space within rear garden for cycle storage
- Storage tanks
- LAP / LEAP

Miller Application

Local Centre Application

Care Home Application

Long Wood

Quarries (disused)

Workings (dis)

Depot

Works

Tanks

Matlock House

The Sands House (PH)

Felks Stile Cottage

Club House

Play Area (NEAP)

MUGA

Play Area (LAP)

Play Area

Storage Tank

Football Ground

Play Area

Path (um)

Track

PROW = HUD/234/10

PROW = HUD/234/20

Trans Pen Way

Felks Stile Road

Blackmoorfoot Road

SANDS HOUSE LANE

GREYSTONE COVER

MASON COVER

OAKSHAW HILL ROAD

BARTON MANOR

Path (um)

Path

Track

Stone

Stone

Ruin

Shared Drive

El Sub Sta

251.8m

242.6m

231.0m

224.3m

228.9m

219.5m

213.4m

211.5m

208.5m

205.6m

202.7m

199.3m

197.5m

198.4m

1

2

3

4

5

6

Vistry Accomodation Schedule			
House Type Name	Storey	Bedrooms	Number
Cornflower	2	1	15
			15
Curlew	2	2	54
Dunlin	2	2	7
Fulmar	2	2	72
Dunnock	2	3	41
Eagle	2	3	7
Jackdaw	2	3	41
Egret	2	3	65
Kittiwake	2	3	3
Kingfisher	2	3	49
Peregrine	3	3	9
Eider	2	4	38
Skylark	2	4	9
Pochard	2	4	20
Robin	2	4	16
Site Total			463

0 10 50 m

Vistry Group

nineteen47
CHARTERED TOWN PLANNERS & URBAN DESIGNERS

Project: Blackmoorfoot Road, Huddersfield

Drawing Title: Technical Planning Layout - Vistry

Project Code	Drawing Nr	Rev.	Drawing Scale
n2114V	008-01	L	1:1000 @ A0