

Transportation Planning : Infrastructure Design

Transport Statement

Proposed Residential Development

Oak Drive, Colwyn Bay Plot 4-14

Northfield Property Developments Ltd

September 2023

Doc Ref: AM/210046/TS/3b

Prepared by:	MC
	Matthew Cross MSc AMCIHT

Checked by:	MD
	Mark Devenish CEng FCIHT

Document Revision Control

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1	16.02.2021	PAC DRAFT	MC	MD
2	27.04.2022	Planning	AM	MD
3b	08.09.2023	Planning	AM	MD

**Colwyn Chambers
19 York Street
Manchester
M2 3BA**

T: 0161 832 4400

**E: info@scptransport.co.uk
W: www.scptransport.co.uk**



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1.0 INTRODUCTION

Overview

- 1.1 SCP have been instructed to provide transport planning consultancy services in relation to a proposed residential development on land to the north of Oak Drive in Colwyn Bay. The proposed development will provide 11 houses.
- 1.2 A pre-application enquiry was made to Conwy County Borough Council (CCBC) on an earlier wider version of the scheme, and they provided transport comments in a response dated 24th March 2020, which are included at **Appendix 1** and are addressed in this report. It should be noted that the apartments included in the previous scheme have been removed from the current proposals, which have now been separated into two applications with the other application considered in a separate Transport Statement..
- 1.3 This Transport Statement has been prepared as part of a planning application for units 1-3 of the scheme and seeks to address the comments made in the response to the previous pre-application enquiry, whilst reflecting the current proposals.

Structure of Report

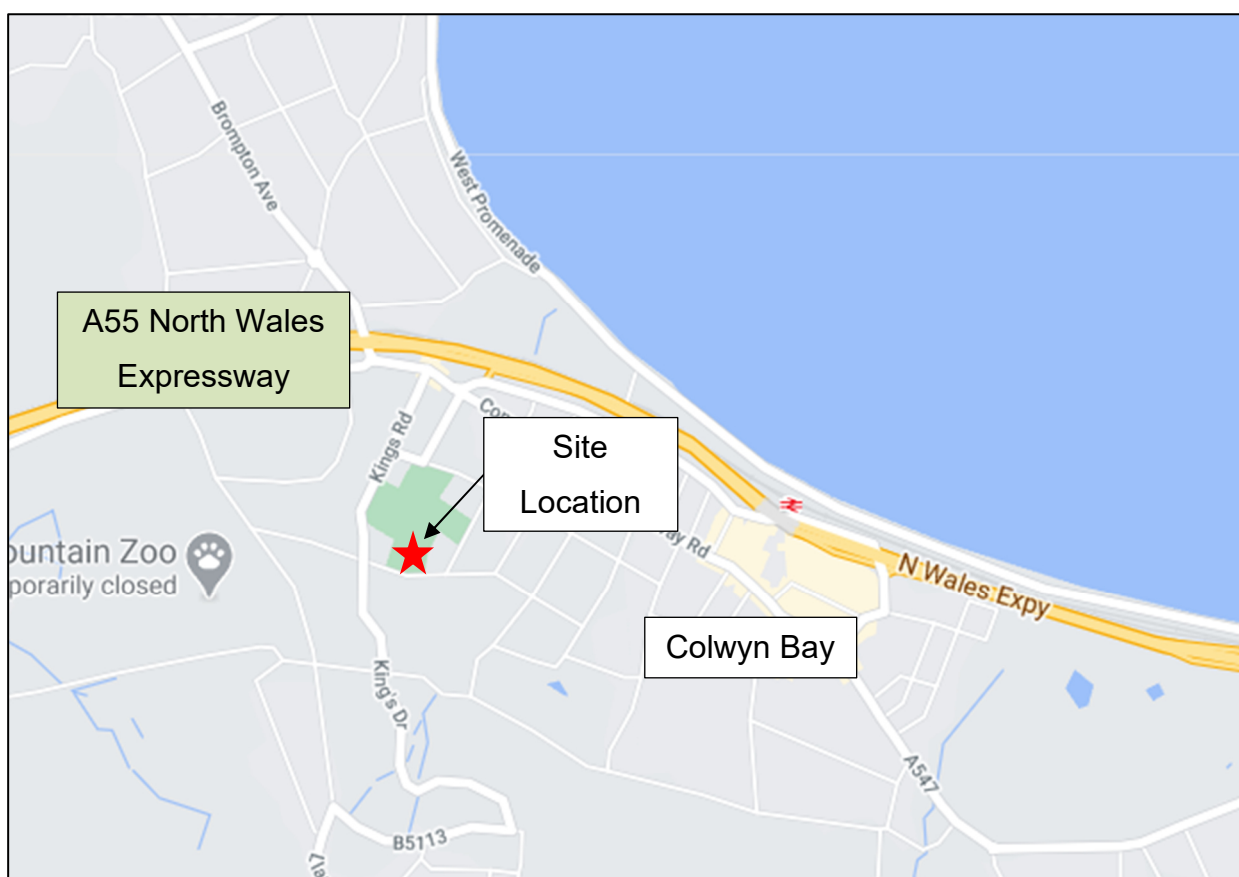
- 1.4 The structure of the TS is set out as follows:-
 - Chapter 2 - describes in detail the site location, surrounding area, local highway network, and road safety record;
 - Chapter 3 – defines the development proposals including the proposed access, servicing and car parking arrangements;
 - Chapter 4 – considers the location of the site with regard to the existing local sustainable transport infrastructure;
 - Chapter 5 – estimates the number of multimodal trips generated by the development compared to the previous use of the site and distributes these across the local highway network;
 - Chapter 6 – provides summary and conclusions to this TS derived from the analysis presented in the above chapters.

2.0 EXISTING CONDITIONS

The Site and Surrounding Area

- 2.1 The site is located to approximately 500m to the west of Colwyn Bay town centre and is shown in relation to the highway network on **Figure 2.1** below.

Figure 2.1: Site Location



Source: Google Maps

- 2.2 The site is located at the western edge of the town and is bordered by existing residential properties and sports fields to the north, Walshaw Avenue to the east, Oak Drive to the south and a residential property to the west.
- 2.3 **Figure 2.2** below shows the location of the proposed development in a more local context.

Figure 2.2: Site Location and Approximate Site Boundary



Source: Google Maps

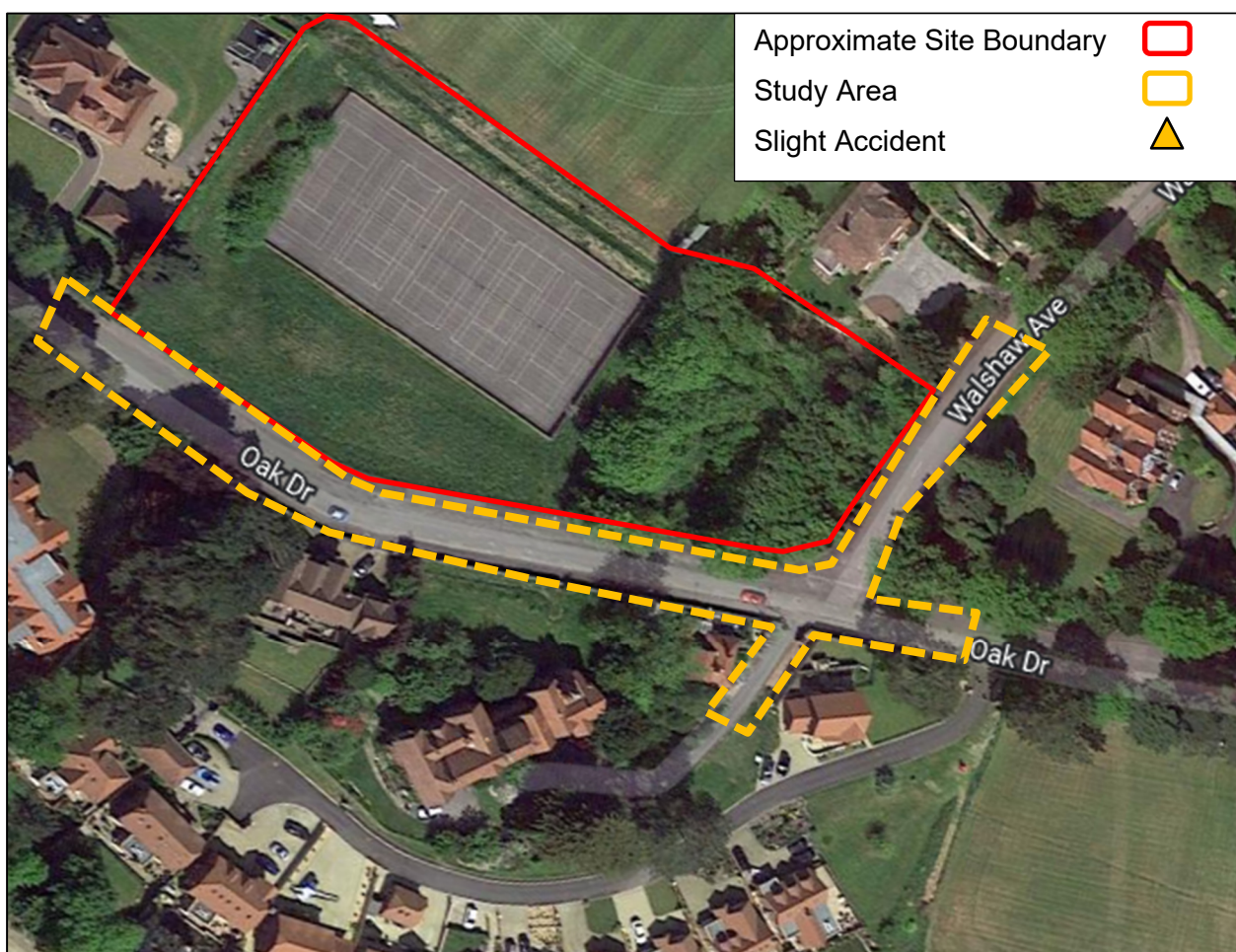
Local Highway Network

- 2.4 Oak Drive has a carriageway width of approximately 7m with wide footways along both sides of the carriageway in the vicinity of the site. Street lighting columns are present, and the speed limit is 30mph.
- 2.5 Oak Drive connects Llanrwst Road to the west and Pwllcrochan Avenue to the east. On the south-east corner of the site it forms the major arm of a major / minor simple priority junction. with Walshaw Avenue. Walshaw Avenue has a carriageway width of approximately 7.5m in the vicinity of the site and is flanked by wide footways to either side. Street lighting columns are provided, and the speed limit is 30mph.
- 2.6 To the east both Walshaw Avenue and Pwllcrochan Avenue link the site to Colwyn Bay town centre via.

Personal Injury Accident Records

2.7 The road safety record of the local highway network has been examined within the most recently available 5-year period (2017-2021) using the CrashMap database. The road safety record demonstrates that no accidents occurred near the proposed site access or on the surrounding highway. A plan showing the location of the accidents is shown in **Figure 2.4**.

Figure 2.4 – Accident locations



2.8 The analysis shows that no accidents were recorded in the study area during the 5-year study period.

2.9 The evidence presented above and illustrated in **Figure 2.4** demonstrates that the area in the vicinity of the site does not have any recurring highway safety problems that could be affected by the development proposals and that the existing on-street parking does not result in any highway safety issues for any road users.

3.0 PROPOSED DEVELOPMENT

Overview

3.1 The planning application proposes a total of 11 houses, comprising a mix of three-, and four-bedroom dwellings. The site layout drawing is included in [Appendix 2](#). The schedule of development is summarised below:

- 3 Bedroom Houses x 2
- 4 Bedroom Houses x 9

Proposed Access Arrangements

3.2 The site will be accessed via the minor arm of a new priority junction to the north of Oak Drive. The proposed site access has been designed to provide a 5.5m carriageway width with a 1.8m footway to the east and 6m kerb radii at the junction.

3.3 As shown in drawing SCP/210046/F01 REV D in [Appendix 3](#), 2.4m x 43m visibility splays are achievable to both the east and west of the proposed access which is commensurate with the 30mph speed limit of the road in line with the guidance contained within Technical Advice Note 18: Transport.

3.4 These are not the maximum visibility splays achievable, which are 2.4m x 119m to the east and 2.4m x 68m to the west as shown on SCP/210046/F02 REV D at [Appendix 4](#). These visibility splays are suitable for vehicle approach speeds of 40mph from the east and 37mph from the west, however lower speeds are likely given the bends in the carriageway at the limit of either splay.

3.5 Pedestrian and cycle access will be provided from the same location as the vehicular access.

3.6 A swept path analysis of a large refuse vehicle entering the access, turning within the site and exiting in forwards gear has been undertaken and is shown on drawing number SCP/210046/ATR01 REV D at [Appendix 5](#).

3.7 The access road will be constructed prior to the development being occupied.

Parking

- 3.8 Car Parking Standards for new developments are outlined in the Conwy Local Development Plan 2007 – 2022 Supplementary Planning Guidance LDP2: Parking Standards. The guidelines indicate maximum standards of 1 space per bedroom (maximum requirement 3 spaces) for residents and 1 visitor space per 5 units for houses in Zones 2-6, including the site location.
- 3.9 As shown on the site layout plan, contained in Appendix 2, the proposed development provides a level of parking in accordance with the Council's parking standards detailed above. Cycle parking is proposed within the curtilage of each dwelling.

4.0 ACTIVE TRAVEL (WALES) ACT 2013

4.1 The Welsh Government seeks to enable more people to walk, cycle and generally travel by more active methods so that:

- More people can experience the health benefits of active travel;
- We reduce our greenhouse gas emissions;
- We help address poverty and disadvantage and;
- We help our economy to grow by unlocking sustainable economic growth.

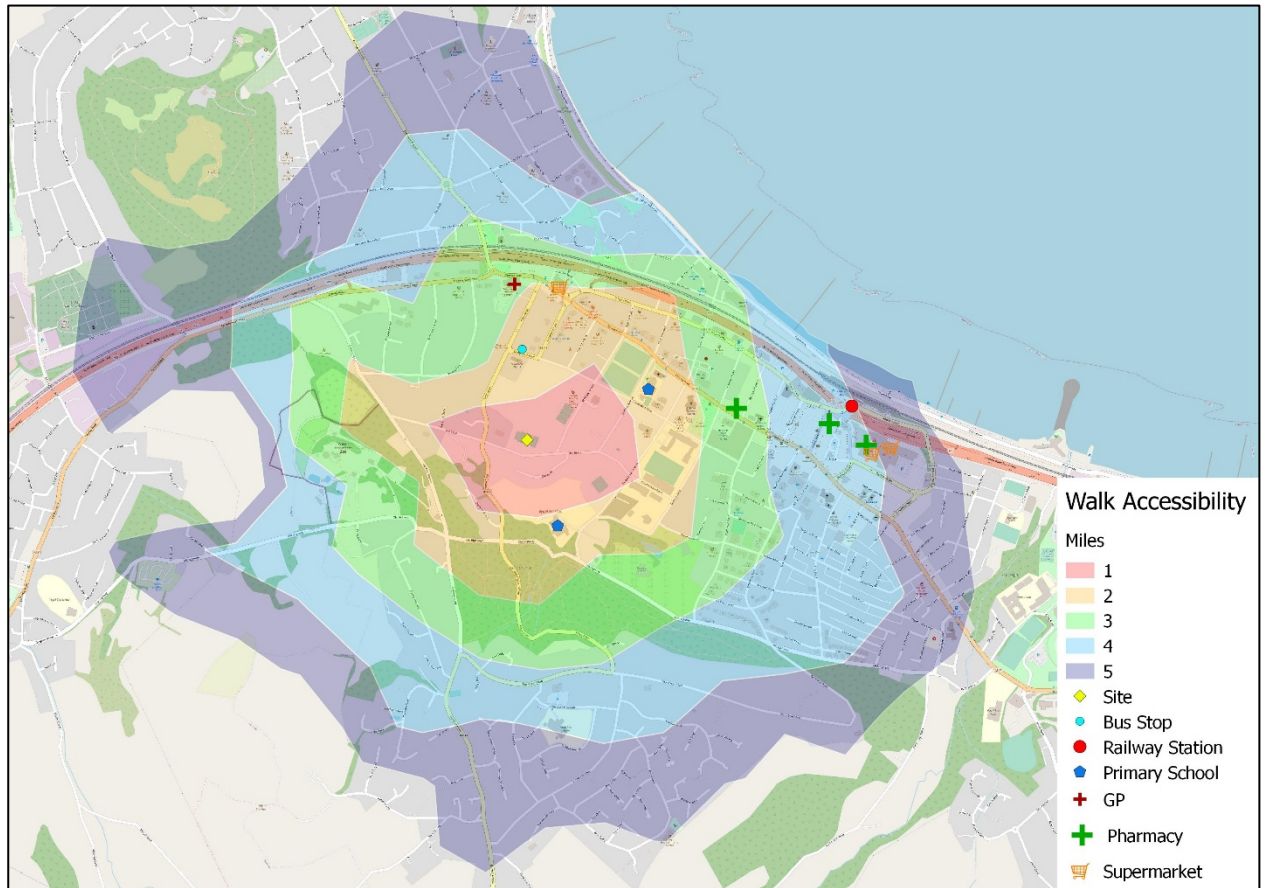
4.2 The Design Guidance: Active Travel (Wales) Act 2013 is statutory guidance and is published by the Welsh Government for use throughout Wales when designing and maintain active travel routes and facilities. It is intended to ensure that the requirements of the Active Travel Act are applied consistently and appropriately throughout Wales.

Pedestrian Accessibility

4.3 Reference has been made to the Walking and Cycling Strategy for Wales, dated December 2003, which indicates that the practical distance for journeys on foot are up to 1 mile.

4.4 The pedestrian accessibility of the development has been modelled using Geographical Information System (GIS) software to produce isochrones mapping. The purpose of the isochrones is to demonstrate the areas within an acceptable walk distance of the site, as shown on **Figure 4.1** as follows. It is noted that the isochrones extend into the sea in error slightly due to an anomaly in the GIS software.

Figure 4.1: Walk Accessibility



4.5 Numerous facilities are located within Colwyn Bay town centre (approximately 0.7 miles walking distance) to the north east of the application site including retail, health, employment and leisure amenities. A selection of those facilities includes the following:

Table 4.1: Accessibility to Local Facilities from the Development Site

Detail	Approximate Distance from the Centre of the Site
The Old Convent Nursing Home	0.2 miles
Bus Stops Lansdowne Road	0.3 miles
Rydal Penrhos Primary School	0.4 miles
Cohens Chemist	0.5 miles
HSBC	0.6 miles
Colwyn Bay Post Office, Station Road	0.7 miles
KFC Colwyn Bay	0.7 mile
Morrisons Super Market	0.8 mile
Colwyn Bay Train Station	0.8 mile
Ysgol Eirias Road	1.2 miles

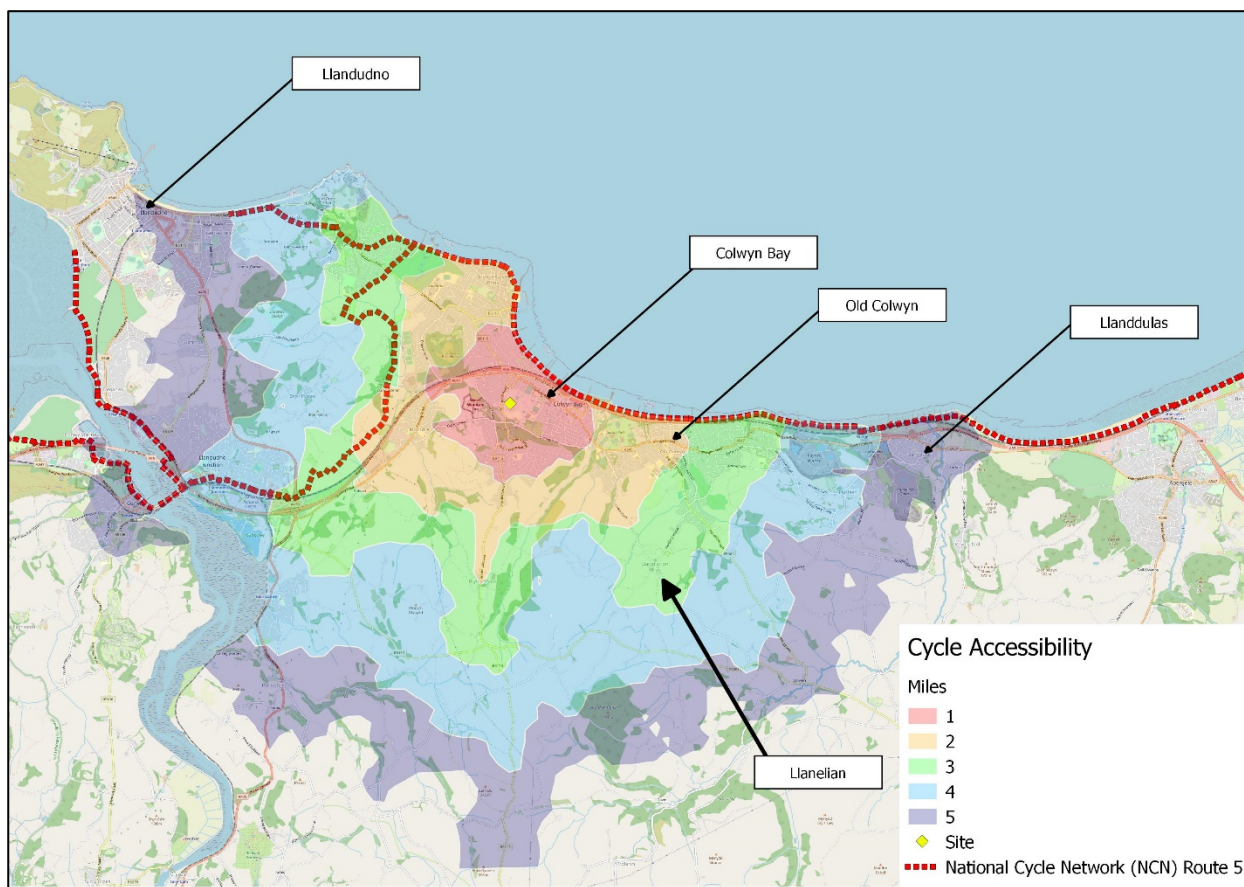
4.6 Generally, the topography of the area is conducive to walking. Well surfaced and street-lit footways are provided along both sides of Oak Drive, Walshaw Avenue, Pwllrychan Avenue and Conway Road, which connect the site with Colwyn Bay town centre approximately 0.5 miles walk from the site.

Cycling

4.7 Reference has been made to the Walking and Cycling Strategy for Wales, dated December 2003, which indicates that the practical distance for cyclist are up to 5 miles.

4.8 GIS software has been used to model a 5-mile cycle catchment from the site and is shown on **Figure 4.2** below. The plan demonstrates that all of Colwyn Bay and the surrounding areas of Old Colwyn, Mochdre, Penrhyn Bay and Rhos on Sea are within acceptable cycle distance of the site.

Figure 4.2: 5-mile Cycle Accessibility



4.9 As shown in **Figure 4.2**, National Cycle Route (NCR) 5 is located approximately 0.9 miles to the northeast of the site and provides a traffic free route to nearby locations including Colwyn Bay, Penrhyn Bay, Llandudno, Rhyl and Prestatyn.

Public Transport

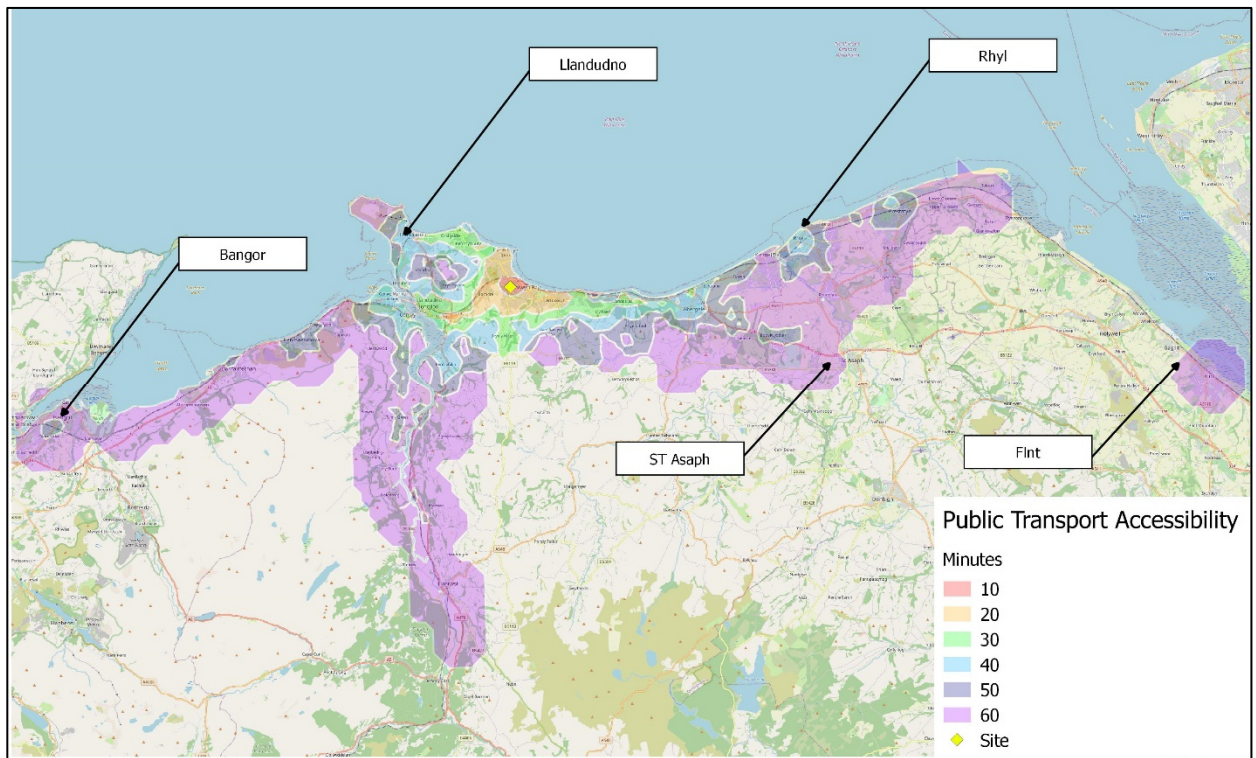
4.10 As mentioned previously, the nearest bus stops to the site are located on Lansdowne Road 0.3 miles north of the site. These stops are served by bus services 21 and 23 and a summary of these timetables is provided below:

Table 4.2: Bus Accessibility from the Development Site

Number	Operator	Route	Core Frequency of Services		
			Monday to Friday	Saturday	Sunday
21	M & H Coaches	Colwyn Bay – Betws Yn Rhos – Rhyd-Y-Foel - Abergele	1 Service: 11:08	1 Service: 11:08	-
23	Arriva	Old Colwyn – Colwyn Bay	First Bus – 08:03 Last Bus – 18:18 Average Bus every:60mins	First Bus – 08:03 Last Bus – 18:18 Average Bus every:60mins	-

- 4.11 It should also be noted that bus service 23 provides access to Colwyn Bay and Old Colwyn town centre which provides the opportunity for interchange and access to a number of additional services offering access to a wider range of destinations. The stops on Conway Road provide access to a wider range of services and are within 0.4 miles walk of the site.
- 4.12 Colwyn Bay Railway Station is located approximately 0.8 miles from the site and is therefore within an acceptable cycling distance. Secure cycle parking with CCTV for up to 10 cycles is provided at the station.
- 4.13 Colwyn Bay Railway Station is served by Arriva Trains Wales and Virgin Trains and provides regular services throughout the week to locations including Shrewsbury, Rhyl, Holyhead, Chester, Warrington, Cardiff, Manchester, Manchester Airport and Birmingham.
- 4.14 **Figure 4.3** below illustrates the distance that can be travelled within 60 minutes by public transport. The time includes the walk to the bus stops and railway station and demonstrates that Llandudno, Prestatyn, St Asaph, Bangor and Rhyl are within a 60-minute public transport journey. It is noted that the isochrone around Flint extends into the sea slightly in error due to an anomaly in the GIS software.

Figure 4.3: Public Transport Accessibility



Accessibility Summary

- 4.15 The site is within an acceptable walk and cycle distance of a range of local amenities and facilities, in particular those in Colwyn Bay Town Centre.
- 4.16 There is a good level of public transport including an effective service by both bus and access to rail services within cycling distance.
- 4.17 Based on the above factors, the proposed development would provide good opportunities for sustainable travel.

5.0 TRIP GENERATION

Proposed Residential Development Trip Generation

5.1 To estimate the trip generating potential of the development, the TRICS 7.7.4 Database has been interrogated for surveys of residential developments.

5.2 The selection criteria for the TRICS-based trip rates is as follows:-

- Land use Residential – Houses Privately Owned
- London and Ireland sites excluded;
- Edge of Town and Suburban locations only (considered robust given the proximity of the site to the town centre); and
- Selection by No. of Dwellings.

5.3 **Table 5.1** below provides the peak hour trip rates for the proposed residential development (11 dwellings) for the weekday AM and PM peak periods. The full TRICS outputs are included in **Appendix 6**.

Table 5.1: Estimated Weekday AM and PM Peak Hour Multi Modal Trip Rates

	Weekday AM Peak (0800 – 0900)		Weekday PM Peak (1700 – 1800)	
	Arrivals	Departures	Arrivals	Departures
Vehicles	0.21	0.41	0.314	0.213
Cyclists	0.01	0.029	0.022	0.01
Pedestrians	0.095	0.26	0.092	0.06
Public Transport	0	0.029	0.019	0.01

5.4 The above trip rates have been applied to the 11 houses to determine the multi-modal trip generation for the development, as summarised in **Table 5.2**.

Table 5.2 – Residential Use Trip Generation (Per Dwelling)

	Weekday AM Peak (0800 – 0900)		Weekday PM Peak (1700 – 1800)	
	Arrivals	Departures	Arrivals	Departures
Vehicles	2	5	3	2
Cyclists	0	0	0	0
Pedestrians	1	3	1	1
Public Transport	0	0	0	0

5.5 To create a robust assessment, the adjacent proposed units 1-3, as part of a separate application, have also been assessed with their trip generation shown in **Table 5.3**.

Table 5.3 – Residential Use Trip Generation, 3 Dwellings

	Weekday AM Peak (0800 – 0900)		Weekday PM Peak (1700 – 1800)	
	Arrivals	Departures	Arrivals	Departures
Vehicles	2	4	3	2
Cyclists	0	0	0	0
Pedestrians	1	3	1	1
Public Transport	0	0	0	0

5.6 For the combined application the total trip generation expected can be seen in **Table 5.4**.

Table 5.4 – Residential Use Trip Generation, 14 dwellings.

	Weekday AM Peak (0800 – 0900)		Weekday PM Peak (1700 – 1800)	
	Arrivals	Departures	Arrivals	Departures
Vehicles	3	5	4	3
Cyclists	0	0	0	0
Pedestrians	1	4	1	1
Public Transport	0	0	0	0

- 5.7 The total development is predicted by TRICS to generate 8 vehicle trips two-way in the AM peak hour and 7 vehicle movements in the PM peak hour. Volumetrically, this equates to an average of around one additional vehicle trip every 7-9 minutes on the surrounding highway network in the AM and PM peak hours.
- 5.8 The proposed development would therefore represent a negligible impact in terms of traffic movements on the local highway network.

6.0 SUMMARY AND CONCLUSIONS

- 6.1 SCP have been instructed to provide transport planning consultancy services in relation to a proposed residential development on land to the north of Oak Drive in Colwyn Bay. The proposed development will provide 11 houses.
- 6.2 The development will be accessed from a new priority junction from Oak Drive. Pedestrian / cycle access will be provided from the same location as the vehicular access.
- 6.3 Visibility splays from the proposed site access are in line with the required standards, whilst swept path analysis has been provided demonstrating a large refuse vehicle can enter and exit the site in a forward gear.
- 6.4 The proposed car parking provision is below the local authority's maximum standards but is considered appropriate in relation to the sustainable location of the site in taking the opportunity to promote sustainable transport modes. Cycle parking is proposed within the curtilage of each dwelling.
- 6.5 It has been demonstrated that the development is in a sustainable location with the facilities of Colwyn Bay Town Centre within walking and cycling distance and access to local rail and bus services available.
- 6.6 The personal injury road traffic accident data for the most recently available five-year period in the vicinity of the site has been reviewed and shows no accidents have been recorded in the vicinity of the site.
- 6.7 The development is predicted by TRICS to generate 8 vehicle trips two-way in the AM peak hour and 7 vehicle movements in the PM peak hour. Volumetrically, this equates to an average of around one additional vehicle trip every 7-9 minutes on the surrounding highway network in the AM and PM peak hours.
- 6.8 For the reasons set out above, the application proposals are therefore considered acceptable with regard to transport.

S|C|P

APPENDIX 1

MEMO

At / To	Development and Building Control Manager Regulatory Services
Copi / Copy To	
Oddi Wrth / From	Head of Service Environment, Roads & Facilities
Ffôn / Tel	01492 574177
E-Bost / E-Mail	jeff.hernandez@conwy.gov.uk
Fy Nghyf / My Ref	DC/ENQ/29367
Eich Cyf / Your Ref	DC/ENQ/29367
Dyddiad / Date	24 Mawrth 24 th March 2020

Planning Application Ref: DC/ENQ/29367

Residential development comprising of 11 detached dwellings and a block of 18 apartments.

Former Tennis Courts Oak Drive Colwyn Bay LL29 7YN

Due to the Coronavirus (COVID-19) outbreak, the Highway Authority has ceased all none-essential travel. Site visits linked to planning applications has been deemed to fall into that category. The below comments are therefore based on a desk top study only. No site visits have been made and therefore the Highway Authority reserves the right to amend the below once the restriction on none-essential travel is lifted.

I refer to the above pre-application and have the following comments to make from a traffic and highway perspective.

As with previous highways comments and given the size of the proposal the applicant should submit a Transport Statement (TS) to support the application at this time. Transport issues to be addressed should include the following main subjects:-

Traffic Impact on the Highway Network

Vehicle trip generations in particular those associated with the development peak must be identified i.e. between the hours of 8am – 9am and 5pm – 6pm and should be based on an interrogation of the TRICS database. Trip rates (85th percentile Trip rate data should be used). The analysis should identify how these trips would impact on the highway network.

Driver's visibility

In terms of both vehicle access points – Oak Drive and Walshaw Avenue driver's visibility must be identified on plan and be commensurate with the vehicle speeds on each road.

The minimum visibility distances available for vehicles emerging from a proposed access / junction shall be “y” metres in each direction at a height of 1.05 metres, measured to a point 0.6 metres above the nearer running edge of the main carriageway. These visibility distances shall be available from a point 2.4m metres from the nearer running edge of the main road, measured along the centreline of the access road / junction, to all intervening points along the running edge of the main carriageway. The whole visibility splay envelope so formed shall be free of any growth or obstruction, which would interfere with the minimum visibility requirements. Drivers’ visibility should be secured at appropriate splays and demonstrated on a proposed layout drawing.

Pedestrian Safety/Active Travel

The TS must include a review of the accident record for the most recently-available 5 year period, the developer must propose the study area for written approval from the Highway Authority prior to executing this work. The developer must also include a separate developer prepared safety assessment of the local highway within a specific radius of the development site which must consider aspects such as visibility, pinch points and existing non-motorised user network constraints which would assist the Highway Authority in reviewing the proposed development impact on the area.

The TS must also include a review of the accessibility of the site by non-motorised modes and a review of facilities in the vicinity of the development site (exact area / routes to be agreed in writing by the Highway Authority prior to production of the TS). This will include route assessments of non-motorised users to local amenities, bus stops and the like highlighting locations where existing highway crossing facilities are below current standards or not in place which the majority of non-motorised user traffic generated by the development will use.

The review must also take into account Active Travel Wales Act Duties/Design requirements along with links to existing route maps and Integrated Network Maps routes. Each and every development must work with Highway Authorities in line with Active Travel Wales Act and provide a lasting legacy to the area to improve non-motorised modes in the area (regardless of distance from development).

Clarity is required on the legacy proposed by this development to the area and each and every development must work with the Highway Authority in line with Active Travel Wales Act. As a minimum we would expect the developer to provide uncontrolled pedestrian crossings with tactile paving at the new accesses - bellmouth/junction and within the area subject to audit.

Such highway improvements will form part of a 278 agreement with the Council as Highway Authority and should be detailed on drawings at this time.

Car Parking and Servicing

The TS must include a full appraisal of the proposed off street parking provision including details of: the level of proposed parking facilities for the proposed development in particular for cars, servicing arrangements and swept path analysis plans for exiting the development site in forward gear.

Parking space dimensions must adhere to SPG LDP2 in this case 4.8m x 2.6m. Parking space levels must adhere to SPG LDP2, **although the applicant has suggested a requirement that does not comply with the SPG.** This will need looking at again where the number of spaces per bedroom for each unit of accommodation complies with policy.

A full parking assessment must be supplied complying with the requirements/specifications detailed in SPG LDP2: Parking Standards. As further clarity to what the Highway Authority

will accept as “local facilities” within the sustainability review, these must be facilities where persons will regularly visit for a prolonged period, such facilities may include food store, schools, large employment areas. Prior to producing a parking assessment the facilities used in the assessment must be to the written approval of the Highway Authority.

Public Transport

The TS must review the different public transport available locally to the proposed development site. The facilities available must be clearly labelled on a simple map with a complimentary table details all elements of the service which must include as a minimum: distance from agreed location within the proposed development to a facility, what services are available, their frequency, start and end times, at what time would the development generate the highest level of demand for public transport use / indication of anticipated development modal split to confirm demand for public transport etc.

The review must identify clear routes to the service link e.g. bus stops/train stations detailing the actual distance to the facility from an agreed location within the proposed development along existing route and not in a direct line (as agreed with Highway Authority). The review must also suggest direct routes to these facilities identifying any lack of highway crossing facilities to non-motorised users along the proposed routes and/or other hazards/highway safety issues the routes might have which may impact non-motorised users.

If any off-site works are required to make the development satisfactory in highway terms, the TS must identify them and put forward suitable plans for their consideration.

Highway adoption

The applicant must let us know if the proposal will be put forward for highway adoption or will remain private/unadopted?

Amendments

In terms of geometric layout (ref: drawing 5779 SK01 Rev. X) design the following must be adhered to:-

- I. A minimum 5.5m carriageway width plus a 2m wide footway either side of the carriageway must be catered for throughout the site.

The applicant must address the above details in full and submit their TS the above is not an exhaustive list. The Highway Authority is open to discuss any of the above requirements before the application moves forward towards a full planning application.

Please keep me informed of any progress in this regard.

For and on behalf of:



Victor Turner
Traffic and Network Manager

S|C|P

APPENDIX 2

Refer to EngAssist drawings 5001 to 5002 for site long sections
 Refer to EngAssist drawing 5005 for site levels and setting out

Proposed Access Road

Proposed Buildings

Retaining Walls



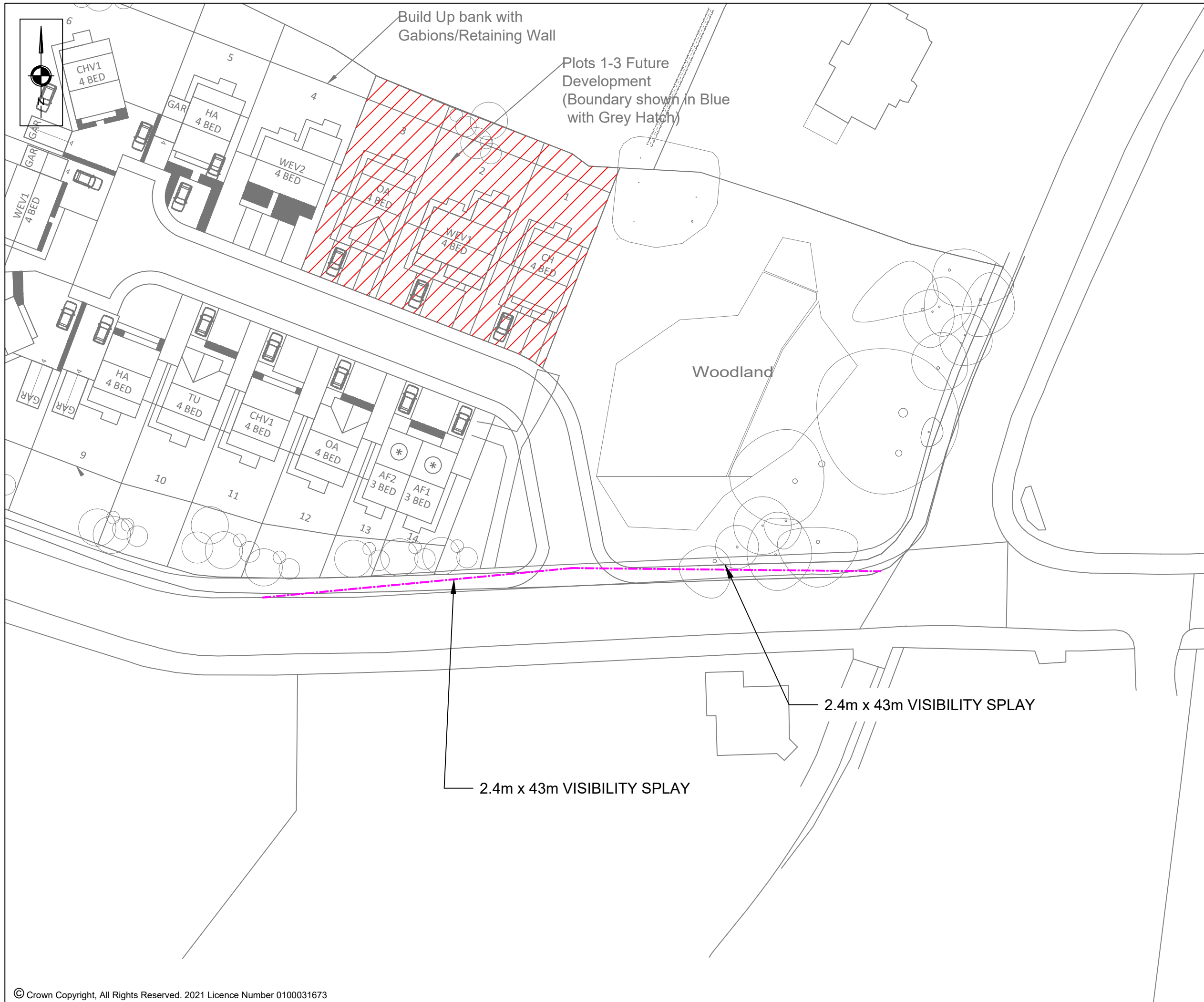
Site General Arrangement
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Client Northfield Property Developments Ltd	Project Oak Drive, Colwyn Bay - Plot 4 to 14	Drawing Title Site General Arrangement	Drawing Number ODL-ENA-XX-XX-DR-C-5000				
			Purpose of Issue Planning				
			Revision P3				
			Status P				
			P3	11.08.23	DRB	DRB	Planning Drawing Issue
			Rev	Date	Drm	Chk	Details

Eng Assist
 STRUCTURAL AND CIVIL ENGINEERING ASSISTANCE
 Phone : 07763993213
 Email : dave.barwell@engassist.co.uk
 Website : engineeringassist.co.uk

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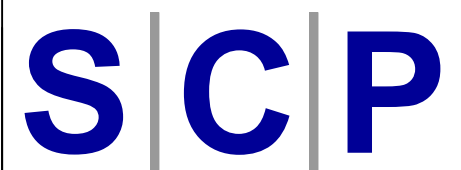
APPENDIX 3



NOTES

REVISIONS

REV	DESCRIPTION	DATE	BY
A	-NEW SITE LAYOUT UNDERLAID	11.02.21	MC
B	UPDATED SITE PLAN	27.04.2022	AM
C	UPDATED SITE PLAN	01.06.2022	AM
D	UPDATED SITE PLAN	25.08.2023	AM



Transportation Planning : Infrastructure Design

Colwyn Chambers, 19 York Street, Manchester, M2 3BA, Tel 0161 832 4400, www.scptransport.co.uk, Email info@scptransport.co.uk

Client Name:
NORTHFIELD PROPERTY DEVELOPMENTS LTD

Project Title:
OAK DRIVE, COLWYN BAY

Drawing Title:
VISIBILITY SPLAYS
PLOT 4-14

Drawn By: AM Date: 27.04.2022

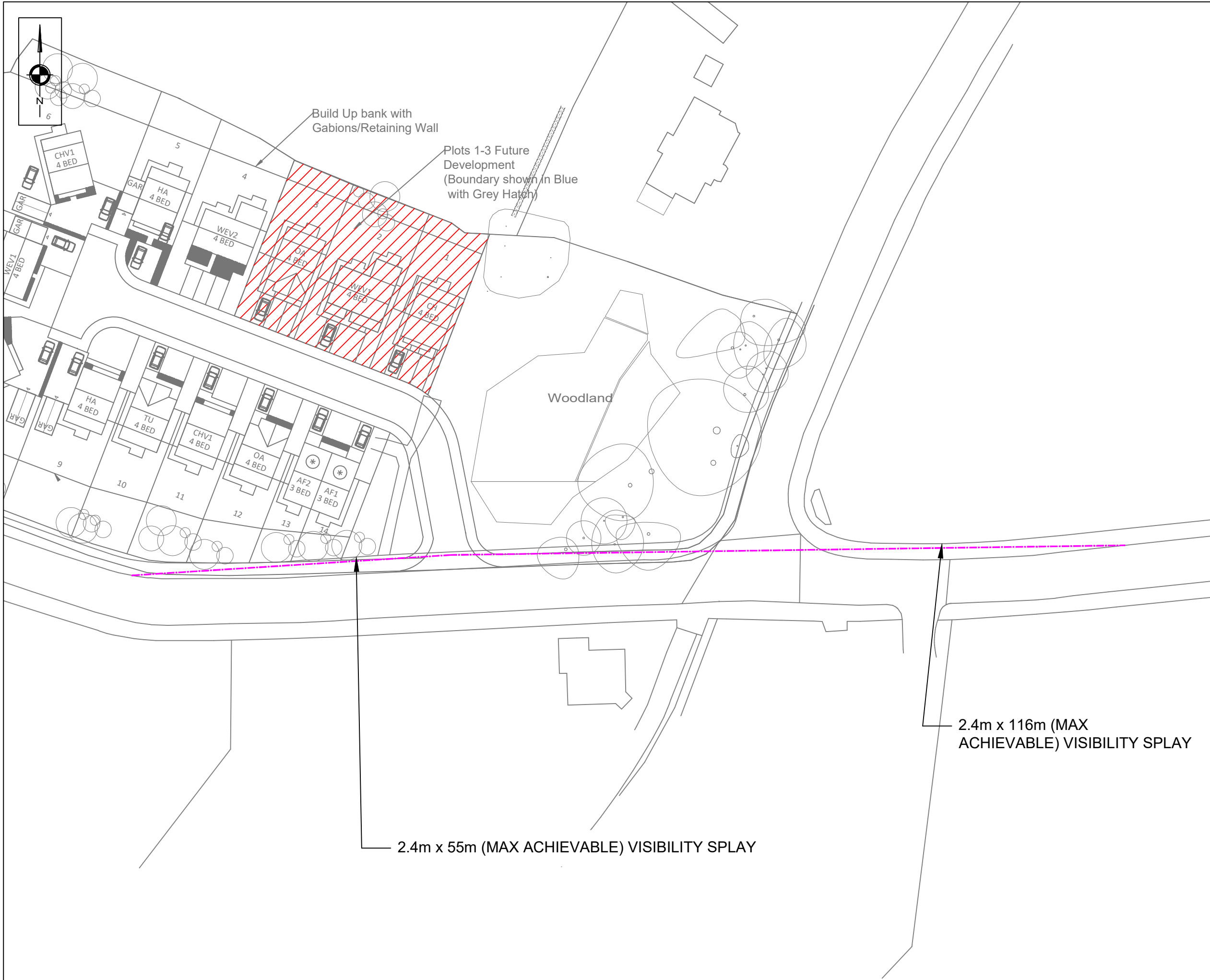
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Status: PLANNING Approved/Unapproved: -

Drawing No. SCP/210046/F01 Rev. D

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APPENDIX 4



NOTES

REVISIONS

REV	DESCRIPTION	DATE	BY
A	-NEW SITE LAYOUT UNDERLAID	11.02.21	MC
B	UPDATED SITE PLAN	27.04.2022	AM
C	UPDATED SITE PLAN	01.06.2022	AM
D	UPDATED SITE PLAN	25.08.2023	AM



Transportation Planning : Infrastructure Design

Colwyn Chambers, 19 York Street, Manchester, M2 3BA, Tel 0161 832 4400, www.scptransport.co.uk, Email info@scptransport.co.uk

Client Name:

NORTHFIELD PROPERTY DEVELOPMENTS LTD

Project Title:

OAK DRIVE, COLWYN BAY

Drawing Title:

VISIBILITY SPLAYS PLOT 4-14

Drawn By:

AM

Date:

27.04.2022

Checked:

MD

Scale:

1:NOT TO SCALE @ A3

Status:

PLANNING

Approved/Unapproved:

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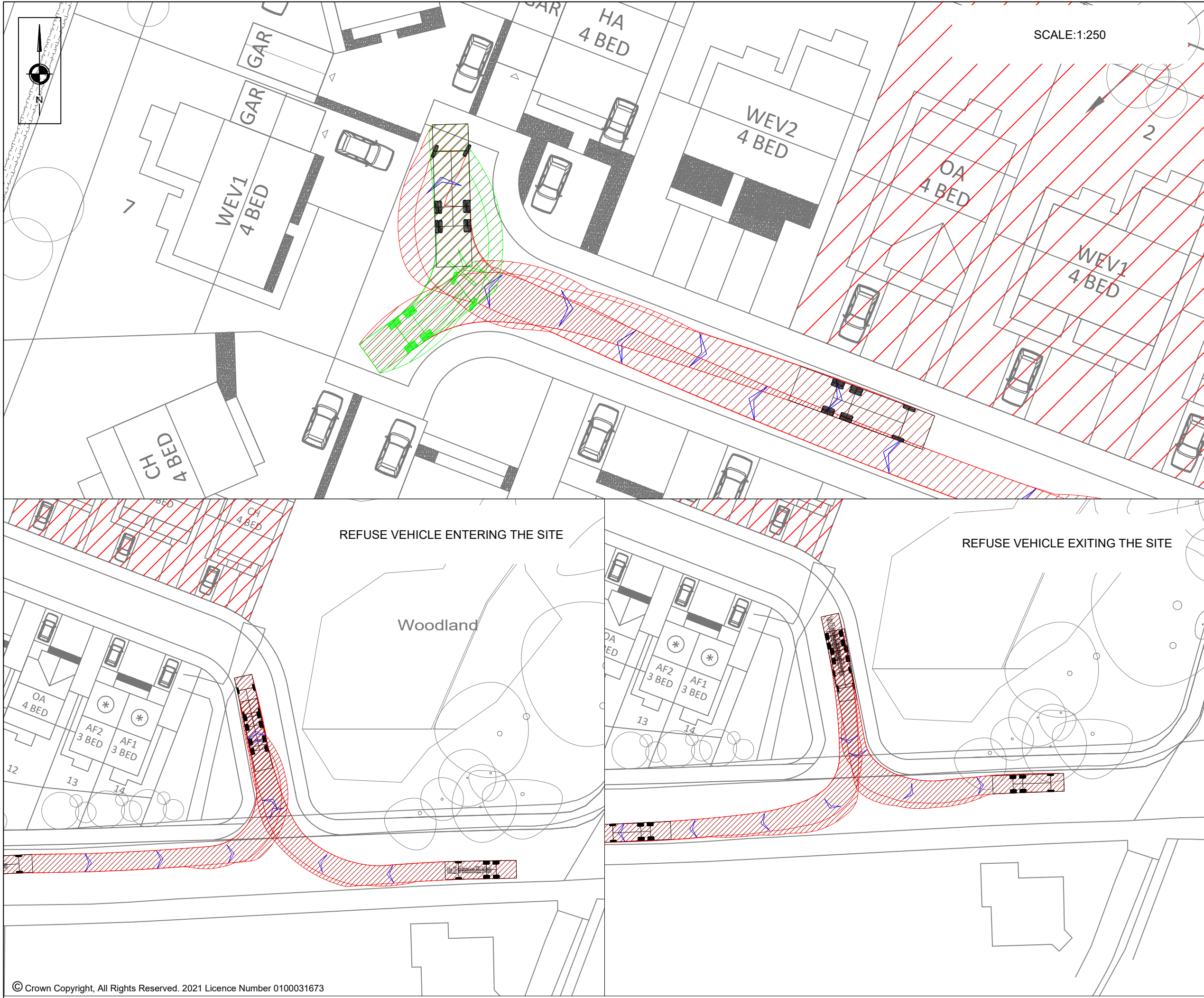
SCP/210046/F02

Rev.

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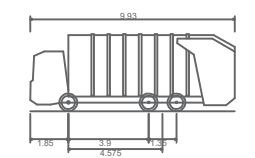
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APPENDIX 5



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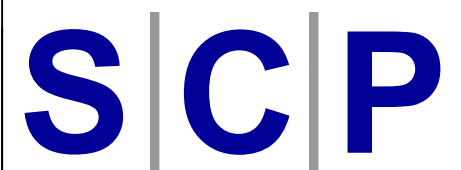
NOTES



Vulture 2225 (with Mercedes Econic 2628LL 6x4 chassis)
 Overall Length 9.930m
 Overall Width 2.490m
 Overall Body Height 3.749m
 Min Body Ground Clearance 0.302m
 Track Width 2.490m
 Lock to lock time 4.00s
 Wall to Wall Turning Radius 9.100m

REVISIONS

REV	DESCRIPTION	DATE	BY
A	-NEW SITE LAYOUT UNDERLAID	11.02.21	MC
B	UPDATED SITE PLAN	27.04.2022	AM
C	UPDATED SITE PLAN	01.06.2022	AM
D	UPDATED SITE PLAN	25.08.2023	AM



Transportation Planning : Infrastructure Design
 Colwyn Chambers, 19 York Street, Manchester, M2 3BA, Tel 0161 832 4400.
 www.scptransport.co.uk, Email info@scptransport.co.uk

Client Name:
NORTHFIELD PROPERTY DEVELOPMENTS LTD

Project Title:
OAK DRIVE, COLWYN BAY

Drawing Title:
SWEPT PATH ANALYSIS PLOT 4-14

Drawn By: AM Date: 27.04.2022

Checked: MD Scale: 1:500 @ A3

Status: PLANNING Approved/Unapproved: -

Drawing No. SCP/210046/ATR01 Rev. D

S|C|P

APPENDIX 6

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
 Category : K - MIXED PRIV HOUS (FLATS AND HOUSES)

MULTI-MODAL TOTAL VEHICLESSelected regions and areas:

02 SOUTH EAST		
ES	EAST SUSSEX	1 days
HC	HAMPSHIRE	1 days
WS	WEST SUSSEX	2 days
03 SOUTH WEST		
CW	CORNWALL	1 days
04 EAST ANGLIA		
CA	CAMBRIDGESHIRE	2 days
05 EAST MIDLANDS		
DS	DERBYSHIRE	1 days
NT	NOTTINGHAMSHIRE	1 days
06 WEST MIDLANDS		
ST	STAFFORDSHIRE	1 days
07 YORKSHIRE & NORTH LINCOLNSHIRE		
NE	NORTH EAST LINCOLNSHIRE	1 days
09 NORTH		
CB	CUMBRIA	2 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: No of Dwellings
 Actual Range: 15 to 618 (units:)
 Range Selected by User: 15 to 618 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/12 to 23/05/19

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	3 days
Tuesday	2 days
Wednesday	1 days
Thursday	6 days
Friday	1 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	13 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	6
Edge of Town	7

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Industrial Zone	2
Residential Zone	10

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:

Use Class:

C3 13 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,001 to 5,000	1 days
5,001 to 10,000	5 days
10,001 to 15,000	2 days
15,001 to 20,000	1 days
20,001 to 25,000	2 days
25,001 to 50,000	2 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

25,001 to 50,000	5 days
50,001 to 75,000	1 days
75,001 to 100,000	2 days
125,001 to 250,000	3 days
250,001 to 500,000	2 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	5 days
1.1 to 1.5	7 days
1.6 to 2.0	1 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	3 days
No	10 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	13 days
-----------------	---------

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	CA-03-K-01	MIXED HOUSES & FLATS	CAMBRIDGESHIRE
	WEASANHAM LANE		
	WISBECH		
	FENLAND		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	100	
	Survey date: MONDAY	07/09/15	Survey Type: MANUAL
2	CA-03-K-04	MIXED HOUSES & FLATS	CAMBRIDGESHIRE
	FORDHAM ROAD		
	SOHAM		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	65	
	Survey date: WEDNESDAY	11/07/18	Survey Type: MANUAL
3	CB-03-K-01	FLATS & TERRACED	CUMBRIA
	BRIDGE LANE		
	CARLISLE		
	Edge of Town		
	Industrial Zone		
	Total No of Dwellings:	66	
	Survey date: THURSDAY	12/06/14	Survey Type: MANUAL
4	CB-03-K-02	SEMI-DETACHED & FLATS	CUMBRIA
	NATLAND ROAD		
	KENDAL		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	15	
	Survey date: TUESDAY	21/06/16	Survey Type: MANUAL
5	CW-03-K-01	MIXED HOUSES & FLATS	CORNWALL
	TRELOWEN DRIVE		
	PENRYN		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	89	
	Survey date: THURSDAY	28/03/19	Survey Type: MANUAL
6	DS-03-K-01	MIXED HOUSES & FLATS	DERBYSHIRE
	PRIDE PARKWAY		
	DERBY		
	WILMORTON		
	Edge of Town		
	Industrial Zone		
	Total No of Dwellings:	618	
	Survey date: MONDAY	23/07/18	Survey Type: MANUAL
7	ES-03-K-01	MIXED HOUSES & FLATS	EAST SUSSEX
	LEWES ROAD		
	UCKFIELD		
	RIDGEWOOD		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	64	
	Survey date: THURSDAY	14/07/16	Survey Type: MANUAL
8	HC-03-K-06	HOUSES & FLATS	HAMPSHIRE
	ROMSEY ROAD		
	SOUTHAMPTON		
	MAYBUSH		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	91	
	Survey date: THURSDAY	02/10/14	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

9	NE-03-K-01	BLOCK OF FLATS	NORTH EAST LINCOLNSHIRE
	LADYSMITH ROAD		
	CLEETHORPES		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	67	
	Survey date: TUESDAY	06/05/14	Survey Type: MANUAL
10	NT-03-K-02	MIXED HOUSES	NOTTINGHAMSHIRE
	CASTLE BRIDGE ROAD		
	NOTTINGHAM		
	Suburban Area (PPS6 Out of Centre)		
	No Sub Category		
	Total No of Dwellings:	132	
	Survey date: MONDAY	07/11/16	Survey Type: MANUAL
11	ST-03-K-03	MIXED HOUSING & FLATS	STAFFORDSHIRE
	CLAREMONT ROAD		
	WOLVERHAMPTON		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	28	
	Survey date: FRIDAY	09/05/14	Survey Type: MANUAL
12	WS-03-K-03	MIXED HOUSES & FLATS	WEST SUSSEX
	LITTLEHAMPTON ROAD		
	WORTHING		
	WEST DURRINGTON		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	111	
	Survey date: THURSDAY	12/05/16	Survey Type: MANUAL
13	WS-03-K-04	MIXED HOUSES & FLATS	WEST SUSSEX
	HILLS FARM LANE		
	HORSHAM		
	BROADBRIDGE HEATH		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	371	
	Survey date: THURSDAY	28/06/18	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 03 - RESIDENTIAL/K - MIXED PRIV HOUS (FLATS AND HOUSES)

MULTI-MODAL TOTAL VEHICLES**Calculation factor: 1 DWELLS****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	13	140	0.058	13	140	0.237	13	140	0.295
08:00 - 09:00	13	140	0.088	13	140	0.285	13	140	0.373
09:00 - 10:00	13	140	0.101	13	140	0.139	13	140	0.240
10:00 - 11:00	13	140	0.106	13	140	0.127	13	140	0.233
11:00 - 12:00	13	140	0.101	13	140	0.102	13	140	0.203
12:00 - 13:00	13	140	0.122	13	140	0.113	13	140	0.235
13:00 - 14:00	13	140	0.123	13	140	0.122	13	140	0.245
14:00 - 15:00	13	140	0.114	13	140	0.129	13	140	0.243
15:00 - 16:00	13	140	0.174	13	140	0.132	13	140	0.306
16:00 - 17:00	13	140	0.189	13	140	0.112	13	140	0.301
17:00 - 18:00	13	140	0.263	13	140	0.127	13	140	0.390
18:00 - 19:00	13	140	0.238	13	140	0.132	13	140	0.370
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.677			1.757			3.434

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

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Parameter summary

Trip rate parameter range selected: 15 - 618 (units:)
Survey date range: 01/01/12 - 23/05/19
Number of weekdays (Monday-Friday): 13
Number of Saturdays: 0
Number of Sundays: 0
Surveys automatically removed from selection: 0
Surveys manually removed from selection: 0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/K - MIXED PRIV HOUS (FLATS AND HOUSES)

MULTI-MODAL CYCLISTS**Calculation factor: 1 DWELLS****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	13	140	0.007	13	140	0.020	13	140	0.027
08:00 - 09:00	13	140	0.009	13	140	0.028	13	140	0.037
09:00 - 10:00	13	140	0.004	13	140	0.007	13	140	0.011
10:00 - 11:00	13	140	0.006	13	140	0.007	13	140	0.013
11:00 - 12:00	13	140	0.004	13	140	0.003	13	140	0.007
12:00 - 13:00	13	140	0.007	13	140	0.002	13	140	0.009
13:00 - 14:00	13	140	0.002	13	140	0.002	13	140	0.004
14:00 - 15:00	13	140	0.006	13	140	0.003	13	140	0.009
15:00 - 16:00	13	140	0.014	13	140	0.011	13	140	0.025
16:00 - 17:00	13	140	0.010	13	140	0.006	13	140	0.016
17:00 - 18:00	13	140	0.013	13	140	0.006	13	140	0.019
18:00 - 19:00	13	140	0.013	13	140	0.004	13	140	0.017
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.095			0.099			0.194

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 03 - RESIDENTIAL/K - MIXED PRIV HOUS (FLATS AND HOUSES)

MULTI-MODAL PEDESTRIANS**Calculation factor: 1 DWELLS****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	13	140	0.014	13	140	0.058	13	140	0.072
08:00 - 09:00	13	140	0.032	13	140	0.110	13	140	0.142
09:00 - 10:00	13	140	0.034	13	140	0.036	13	140	0.070
10:00 - 11:00	13	140	0.020	13	140	0.038	13	140	0.058
11:00 - 12:00	13	140	0.028	13	140	0.035	13	140	0.063
12:00 - 13:00	13	140	0.030	13	140	0.030	13	140	0.060
13:00 - 14:00	13	140	0.042	13	140	0.047	13	140	0.089
14:00 - 15:00	13	140	0.037	13	140	0.051	13	140	0.088
15:00 - 16:00	13	140	0.096	13	140	0.056	13	140	0.152
16:00 - 17:00	13	140	0.077	13	140	0.037	13	140	0.114
17:00 - 18:00	13	140	0.096	13	140	0.036	13	140	0.132
18:00 - 19:00	13	140	0.071	13	140	0.040	13	140	0.111
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.577			0.574			1.151

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 03 - RESIDENTIAL/K - MIXED PRIV HOUS (FLATS AND HOUSES)

MULTI-MODAL PUBLIC TRANSPORT USERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	13	140	0.000	13	140	0.019	13	140	0.019
08:00 - 09:00	13	140	0.006	13	140	0.023	13	140	0.029
09:00 - 10:00	13	140	0.001	13	140	0.006	13	140	0.007
10:00 - 11:00	13	140	0.003	13	140	0.009	13	140	0.012
11:00 - 12:00	13	140	0.004	13	140	0.006	13	140	0.010
12:00 - 13:00	13	140	0.006	13	140	0.007	13	140	0.013
13:00 - 14:00	13	140	0.006	13	140	0.009	13	140	0.015
14:00 - 15:00	13	140	0.006	13	140	0.006	13	140	0.012
15:00 - 16:00	13	140	0.020	13	140	0.009	13	140	0.029
16:00 - 17:00	13	140	0.011	13	140	0.006	13	140	0.017
17:00 - 18:00	13	140	0.015	13	140	0.003	13	140	0.018
18:00 - 19:00	13	140	0.018	13	140	0.003	13	140	0.021
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.096			0.106			0.202

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.