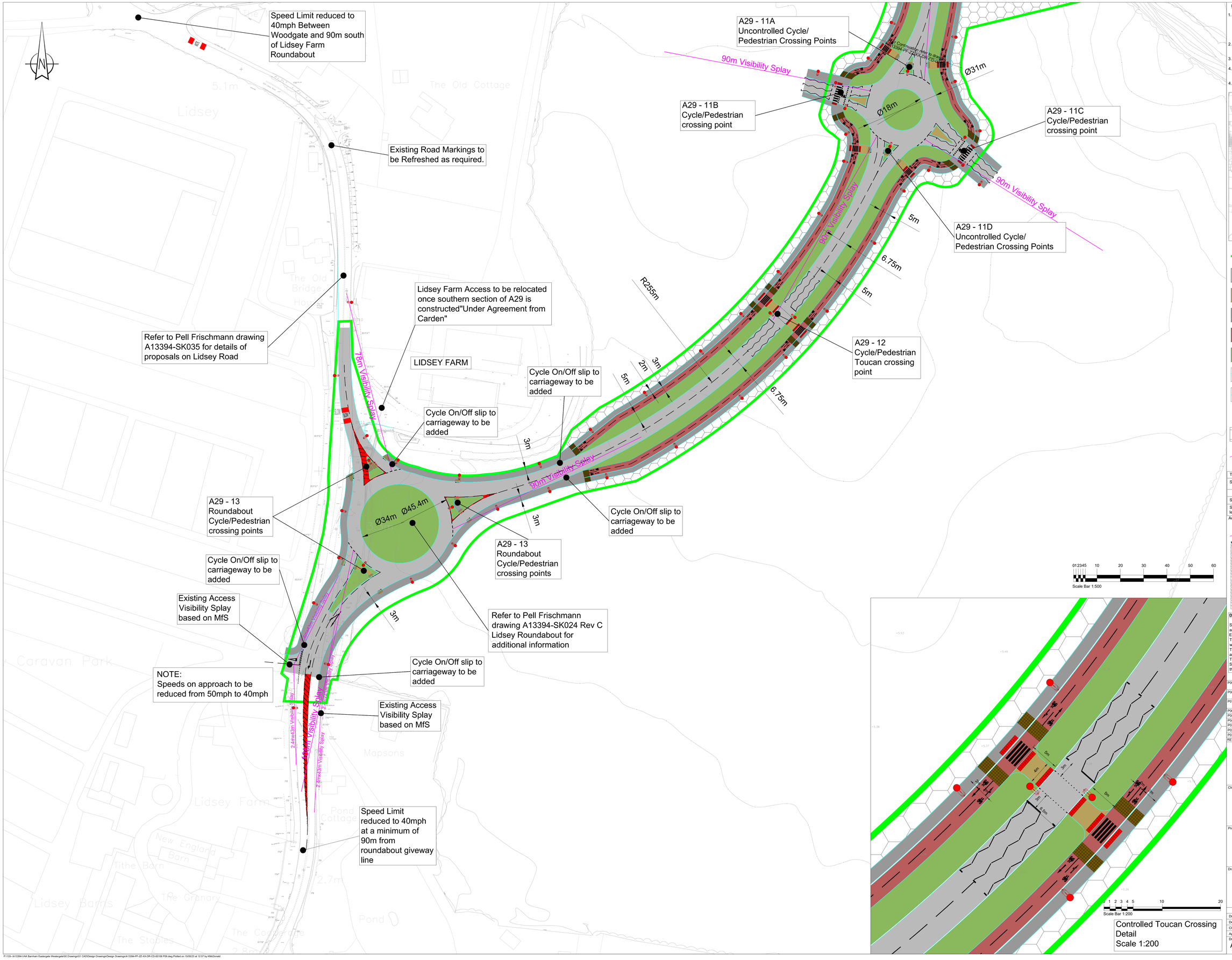
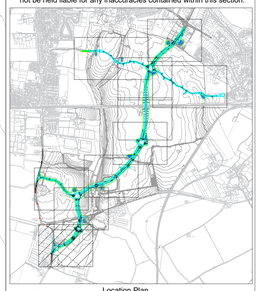


Controlled Toucan Crossing Detail
Scale 1:200

NOTES:

1. Where the Contractor undertakes or engages a third party to undertake temporary works design, or varies the Pell Frischmann design in any way, then the Contractor will take full responsibility and liability for all design aspects, including a Design Risk Assessment. The Contractor shall inform Pell Frischmann of any proposed variances to the design.
2. This drawing shall be read in conjunction with all other Electrical, Mechanical, Public Health & Architectural Drawings & The Specification.
3. Topographical Information was provided by 3D Engineering Surveys and Pell Frischmann will not be held liable for any inaccuracies.
4. Barnham Road Roundabout and Northern Link Road designed by WSP, Pell Frischmann will not be held liable for any inaccuracies contained within this section.
4. Partial Western Link Road designed by CALA, Pell Frischmann will not be held liable for any inaccuracies contained within this section.



Location Plan

KEY:

- A29 ROAD CORRIDOR
- PROPOSED CARRIAGEWAY — HRA Carriageway Surfacing
- ASPHALT SPLITTER ISLAND/CROSSING POINTS
- SEGREGATED PEDESTRIAN FOOTWAY — Asphalt Footway Surfacing
- SEGREGATED CYCLEWAY — Contrasting asphalt finish to footway. Physical delineation strip to be Kerb or similar agreed at detailed design stage.
- GRASS VERGE/SWALE — Please Refer Landscaping Drawings for details
- PROPOSED KERBS
- FOOTWAY EDGING KERB
- STREET LIGHTING
- ROAD ZONE (SOUTH) — Potential earthworks zone necessary for the construction of the road. Extent of earthworks and road landscaping to be agreed via condition. Residual land to form part of development parcels

Junction Visibility Splays based on Table 7.1 from Manual for Street. This applies to Western Link, Barnham Station Link and the Hanbury Link.

Table 7.1 Derived SSDs for Streets (figures rounded)

Speed	Kilometres per hour	16	20	24	25	30	32	40	45	48	50	60
	Miles per hour	10	12	15	16	19	20	25	28	30	31	37
SSD (metres)		9	12	15	16	20	22	31	36	40	43	56
SSD adjusted for bonnet length. See 7.6.4		11	14	17	18	23	25	33	39	43	45	59

Additional features will be needed to achieve low speeds

Junction Visibility Splays based on Table 2.10 from DMRB CD 109. This applies to all junctions on A29 Link Road.

Table 2.10 Design speed related parameters

Design speed (kph)	120	100	85	70	60	50	50R
Stopping sight distance (metres)							
Desirable minimum	295	215	165	125	95	70	70
Absolute minimum	215	165	125	95	70	50	50
Horizontal curvature (metres)							
Minimum R with adverse camber and without transitions	2500	1415	1000	650*	725	520	0
Minimum R with superelevation of 2.5%	2400	1410	1000	710*	510	360	0 LP
Minimum R with superelevation of 5.0%	1440	1000	720	510	360	250	60
Minimum R with superelevation of 7.0%	1000	720	510	360	250	180	30 LP
Crest sag below desirable minimum (%)	13	10.0	6.5	3.5	2.0	0.5	0.5 LP
Sag sag below desirable minimum (%)	13	10.0	6.5	3.5	2.0	0.5	0.5 LP
Vertical curvature							
Desirable minimum* crest K value	182	100	55	30 *	17	7.0	
Crest sag below desirable min crest K value	185	55	30	17 *	20	10.5	
Desirable minimum sag K value	37	26	20	20	13	7 *	
Overtaking sight distance							
Full overtaking sight distance FOSD (metres)	-	540	470	410	345	290	
FOSD overtaking crest K value	-	400	285	215	150	100	

* Not recommended for use in the design of single carriageways (see Section 8)

The VPD values shown above simply represent a convenient means of overlaying the relative levels of design parameters, irrespective of design speed.

Design Principles

Standards of Highway design are based on DMRB CD 116 &CD 109 and Manual for Streets to Road Design Speed of 30 mph for A29. East/West link and other link roads based on 20mph
The Minimum Road width for A29 is 6.75m, allowing for the flow of two way traffic.
The Minimum Road width for East/West link and other link roads is 6m, allowing for the flow of two way traffic.
The A29 will have 5m Wide Verges with a 5m wide two way Segregated Footway/Cycleway, running parallel with the alignment of the Carriageway.

REV.	DESCRIPTION	DRN	CHK	APP	DATE
P09	Details amended following comments from WSCC 28th March 2023	KM	TM	TM	12.05.23
P08	Details amended following comments from WSCC 11th November 2022	KM	TM	TM	30.01.23
P07	Additional details added in accordance with WSCC comments June 2022	KM	TM	TM	26.07.22
P06	Client Reference Updated	KM	TM	TM	10.01.22
P05	Client Reference Updated	KM	TM	TM	05.11.21
P04	Minor amendments following comments from team	KM	TM	TM	05.10.21
P03	Minor amendments following comments from WSCC	KM	TM	TM	20.08.21
P02	Roundabout added to Alignment	KM	TM	TM	22.07.21
P01	Alignment amended in line with CD 109	KM	TM	TM	09.06.21

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Client
CC Projects
Ashmarden Ltd
Hanbury (PM) Ltd

Project
BEW Parcel SC1

Drawing Title
A29 Link Road
General Arrangement
Sheet 7 of 10

	Name	Date	Scale	1:500 @ A0
Drawn	KM	Apr 2021	File No.	A13394-PF-ZZ-XX-DR-CD-00106 P09.dwg
Designed	KM	Apr 2021		
Checked	TM	Apr 2021	Drawing Status	Preliminary
Approved	TM	Apr 2021		

Drawing No. A13394-PF-ZZ-XX-DR-CD-00106
Revision P09

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WSCC-00000-CD-DRG-B4-000-120-P01