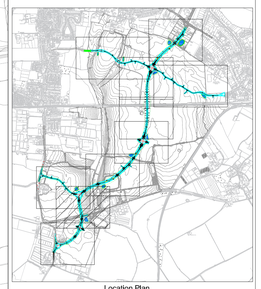
Design Summary Document Appendix A dwg -00105 P06

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	VURB
Stopping sight distance (metres)							
Desirable minimum	295	215	160	120	90	70	-
Absolute minimum	215	160	120	90	70	50	-
Horizontal curvature (metres)							
Minimum R* with adverse cambber and without transitions	2880	2040	1440	1000	720	530	0
Minimum R* with superelevation of 2.5%	2040	1440	1020	710	510	360	7.47
Minimum R* with superelevation of 5.0%	1440	1020	720	505	360	255	10
Overtake minimum R (superelevation 5%)	1020	720	510	360	255	180	14.14
One step below Overtake Minimum R (superelevation 5%)	720	510	360	255	180	127	20
Absolute minimum R (maximum radius (superelevation 5%)	510	360	255	180	127	90	28.28
Vertical curvature							
Overtake minimum* crest K value	182	100	55	30	17	10	-
One step below Overtake min crest K value	100	55	30	17	10	5.5	-
Overtake minimum sag K value	37	26	20	20	13	9	-
Overtaking sight distances							
Full overtaking sight distance FOSD (metres)		560	490	420	360	298	-
Minimum length of FOSD (metres)		400	350	300	250	200	-

* Not recommended for use in the design of single carriageways (see Section 5)

The VPD values shown above simply represent a convenient means of identifying 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 7.3m, 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 4m wide Segregated Footway/Cycleway, running parallel with the alignment of the Carriageway.

REV	DESCRIPTION	DRN	CHK	APR	DATE
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	Minor Layout amendments	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 5 of 10

	Name	Date	Scale	1:500 @ A0
Drawn	KM	Apr 2021	File No.	A13394-PF-ZZ-XX-DR-CD-00105 P06.dwg
Designed	KM	Apr 2021		
Checked	TM	Apr 2021	Drawing Status	Preliminary
Approved	TM	Apr 2021		

Drawing No. A13394-PF-ZZ-XX-DR-CD-00105

Revision P06