

AGRARIAN DEVELOPMENT HOLDINGS LTD

LAND SOUTH OF THE A5, HINCKLEY

WALKING, CYCLING AND HORSE-RIDING REVIEW REPORT

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project number: ADC1839			report reference: ADC1839-RP-Y
version	date	author	comments
1	13/07/2022	see team statement	review at end of preliminary design stage
2	26/01/2024	see team statement	updated review at end of preliminary design stage

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8815-L-30 Rev M	Development illustrative masterplan

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1.0 INTRODUCTION

- 1.1 ADC Infrastructure Ltd is commissioned by Agrarian Development Holdings Ltd to provide transport advice regarding their proposed employment development known as Land South of the A5, Hinckley.
- 1.2 The development proposals include a new traffic signal controlled access junction onto the A5 Watling Street, alterations to the A5 Watling Street/A47 Dodwells Road/B4666 Coventry Road gyratory (known as Dodwells Roundabout) and carriageway lowering works of a section of the A5 at the Watling Street Railway Bridge, to increase the high clearance to a minimum of 5.11m, from its existing clearance of 4.6m.
- 1.3 All locations are part of the strategic road network (SRN). Therefore, in accordance with DMRB GG 142 the Walking, Cycling and Horse-Riding Assessment and Review (WCHAR) process applies.
- 1.4 This report has been updated to capture the requirements of Condition 11 of the planning permission for the development, which states:

“Prior to commencement of any development, detailed plans for the provision of a pedestrian footway along the northern side of the A5 between the Nutts Lane Rail Bridge to a point directly opposite the site access must be submitted and supported by a Road Safety Audit stage 1 and Walking, Cycling and Horse-Riding Assessment, and approved in writing by the Local Planning Authority, in consultation with National Highways and Leicestershire County Council”.

2.0 BACKGROUND AND HIGHWAY SCHEME DESCRIPTION

Background

- 2.1 The development proposals comprise up to 136,350sqm (circa. 1,470,000sqft) of employment development on land to the south of the A5, Hinckley. The proposals also include new walking and cycling routes, associated landscaping, drainage and infrastructure works.
- 2.2 The highway scheme has been identified by the Lead Assessor as a 'large highway scheme' and therefore a WCHAR Review Report is required at the end of the preliminary design stage and before commencement of the detailed design, followed by a review report at the end of the detailed design phase (before construction commences).
- 2.3 The review report covers the end of the preliminary design stage before commencing the detailed design.

Proposed highway scheme

- 2.4 The highway mitigation strategy associated with the development proposal includes the following:
 - a new traffic signal controlled junction on the A5 Watling Street that would establish the access to the Proposed Development.
 - an improvement scheme at Dodwells Roundabout, including widening the A5 westbound approach to provide additional capacity to reduce delay and queueing and introducing Toucan crossing facilities on the A5 west arm.
 - the existing A5 Watling Street railway bridge is stuck by over-height HGVs approximately once every two weeks, causing serious disruptions to traffic flow on the A5 and local areas as traffic is diverted. Hence, there is an inherent issue with regards to journey time reliability which can have a major impact on the distribution industry. Therefore, carriageway lowering works are proposed to the A5 to increase the height clearance from the current 4.6m to 5.11m, thereby allowing HGVs to pass safely under the A5 Watling Street Railway Bridge.
 - To address requirements of Condition 11, a new section of footway is proposed alongside the northern side of the A5 between the proposed site access and the Nutts Lane railway bridge.
- 2.5 The drawings listed below show the proposed highway works.

Drawing	Title
ADC1839-DR-014-P4	Proposed access junction layout
ADC1839-DR-007-P5	Proposed Dodwells Roundabout improvement scheme
ADC1839-DR-011-P4	Existing and Proposed PRowS
<i>ADC1839-DR-100-P4</i>	<i>A5 lowering railway bridge general arrangement</i>
<i>ADC1839-DR-693-P5</i>	<i>Typical bridge section at Bridge Centre Trief Kerbing</i>
ADC1839-Z01-DR-120 P02	Discharge of Planning Condition 11
8815-L-08 Rev V	Development Parameters Plan
8815-L-30 Rev M	Development illustrative masterplan

Note: those drawings updated from version 1 of this WCHAR Review Report are highlighted in *italics*. **Bold** indicates a new drawing.

Review team

- 2.6 Details of the Review Team, including the Lead Assessor and Design Team Leader, are given at Section 5. Since the preceding Assessment Report the Design Team Leader has changed.

WCHAR study area

- 2.7 In accordance with Table 2.2.1N of GG 142, the scale of the scheme has been assessed by the Lead Assessor, informed by consultation with NH, as a ‘large highway scheme’.
- 2.8 The study area for assessment therefore covers a 5km isochrone from the scheme. The 5km isochrone is shown at **Figure 1**. The scheme extents along the A5 Watling Street from the railway bridge to northwest of Dodwells roundabout, which includes the proposed site access junction with the A5 Watling Street, is shown in red at **Figure 2**, along with the development site area.



Figure 1: WCHAR study area based on 5km catchment



Figure 2: improvement scheme extents

3.0 REVIEW OF WALKING, CYCLING AND HORSE-RIDING ASSESSMENT OPPORTUNITIES

Review of Assessment Report

- 3.1 At the end of the preliminary design stage, a review of the Walking, Cycling and Horse-riding Assessment is required and any material changes to the information contained therein noted. This has been undertaken and no material changes to the Assessment Report are noted.

Review of opportunities against scheme proposals

- 3.2 The opportunities presented in the Assessment Report have been reviewed and a detailed analysis is presented below. This is presented in the tables below together with a review of whether each opportunity can be considered to have been raised in the preliminary design stage.

General opportunities

- 3.3 One general opportunity was identified.

General			
Ref	Opportunity	Realised?	Review against the preliminary design
1	Consider a footway or shared footway/cycleway along the northern carriageway of the A5 Watling Street between the site access and the railway bridge, where the verge is being used by a small number of pedestrians and cyclists.	Y	Following agreement of version 1 of this WCHAR Review Report with National Highways, Opportunity 1 was further discussed with National Highways and Leicestershire County Council, in combination with the local planning authority, during meetings on 19 December 2022 and 31 January 2023. Leicestershire County Council supported the provision of a new footway alongside the A5 connecting the site access and the railway bridge, to accommodate the existing demand (as evidenced by the worn path on the highway verge and NUM surveys presented in the WCHAR Assessment Report), and potential additional demand that could be generated by the proposed development. National Highways also confirm their support for the provision of the footway subject to a Stage 1 RSA and WCHAR. In accordance with CD 143, and the 50mph speed limit for this section of the A5, a footway should provide a 1.5m separation from the carriageway and shall be an absolute minimum of 2m. Drawing ADC1839-Z01-DR-120 P02 shows provision of the footway link between the site access and the railway bridge in accordance with these requirements. There is a restricted cross section under the A5 Watling Street railway bridge. The current service margins adjacent to the A5 under the railway bridge are approximately 1.6m on the northern

			side and 1.2m on the southern side. Therefore, there is insufficient space available to provide a footway in accordance with CD 143, which should provide a 1.5m separation from the carriageway and shall be an absolute minimum of 2.5m (2m + 0.5m due to the bridge abutment). As recorded in version 1 of this WCHAR Review Report, it was previously considered and discussed with National Highways whether the alignment of the A5 carriageway under the railway bridge could be altered to provide greater clearance between the carriageway edge and the bridge abutment on the northern side of the road, at the expense of reducing the clearance between carriageway and the bridge abutment on the southern side. However, this would bring the carriageway closer to the bridge abutment, which would be a further departure on an already non-compliant cross section and would introduce additional safety risks. The proposals at the railway bridge have therefore been amended to include for a short section of footway under the railway bridge. The footway does not meet the required minimum footway width or recommended separation distance from the carriageway. Drawing ADC1839-DR-693 P5 shows the proposed provision under the railway bridge, which would provide a 1.18m wide footway for an approximately 20m length, with a 0.47m separation from the carriageway. The proposals include the provision of pedestrian guard rail between the footway and the live carriageway for the section of footway beneath the railway bridge.
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Site, site access and A5 Watling Street opportunities

3.4 Four opportunities relating to the site, site access and A5 Watling Street were identified.

Site, site access and A5 Watling Street			
Ref	Opportunity	Realised?	Review against the preliminary design
2	Divert and extend public footpath R282 to provide a continuous route around the perimeter of the site.	Yes	Drawing ADC1839-DR-011-P4 shows the route of the extended and diverted PRoW R282. This route is also shown in the Parameters Plan.
3	To encourage pedestrian travel, suitable facilities	Yes	Drawing ADC1839-DR-014-P5 shows that a shared footway/cycleway would be provided on

	should be provided along site access road, linking the development with A5 Watling Street.		the eastern side of the access road, linking with the proposed Toucan crossing facilities on the A5.
4	Consider appropriate pedestrian and cycle crossing facilities on the A5 Watling Street.	Yes	Drawing ADC1839-DR-014-P5 shows that Toucan crossing facilities would be provided on the A5.
5	Consider an appropriate footway/cycleway connection between the site access junction and the pedestrian/cycle link to Applebees Meadow.	Yes	Drawing ADC1839-DR-014-P5 shows an off-road shared footway/cycleway is proposed linking the proposed Toucan crossing Applebees Meadow.

Dodwells Roundabout opportunities

3.5 Three opportunities relating to Dodwells Roundabout were identified.

Dodwells Roundabout			
Ref	Opportunity	Realised?	Review against the preliminary design
6	Provide a direct pedestrian and cycle connection to the existing off-site network at Dodwells roundabout.	Yes	The Parameters Plan (8815-L-08 Rev V) shown the proposed shared footway/cycleway connection within the site to link with Dodwells Roundabout. Drawing ADC1839-DR-007-P5 shows that off-road shared footway/cycleway would be provided around the southern extent of the junction, connecting with the link within the development and the proposed Toucan crossing on the A5 western arm.
7	Consider crossing facilities on the A5 Watling Street west arm of Dodwells roundabout to improve the sustainable transport infrastructure at the junction and improve the connectivity between the site and the bus stops on the A5.	Yes	Drawing ADC1839-DR-007-P5 shows that a Toucan crossing would be provided on the western arm of the junction. In additional, the Parameters Plan shows that a footpath link would be provided for the development to the bus stop for westbound travel on the southern side of the A5.
8	Consider crossing facilities on Coventry Road and the A5 Watling Street east arm of Dodwells roundabout to improve the sustainable transport infrastructure.	Considered by not taken forward	This is considered at Appendix A 'A5 Dodwells Roundabout Crossing Assessment'. It is concluded that Development users travelling to and from the east of the site would be able to access the development via the proposed controlled crossing at the site access junction, linking with the B4666 Coventry Road via

			Applebees Meadows. The proposed controlled crossing on the A5 (west) arm of Dodwells Roundabout would cater for pedestrian and cyclist demand generated to and from the A5 (west) and A47 Dodwells Road and would provide a suitable (although slightly longer) route for any development users travelling to and from the B4666 Coventry Road via Dodwells Roundabout instead of travelling via the site access junction. Should some development users choose to access the site via the eastern side of Dodwells Roundabout, there would be acceptable gaps in traffic for most able-bodied users to cross the B4666 Coventry Road and the A5 (east) arm using the existing uncontrolled crossing facilities. Users that required longer gaps would be able to use the controlled crossing facilities on the A47 and the proposed controlled crossing on the western side of the junction. There are safety concerns regarding the provision of a controlled crossing on the A5 eastbound exit from Dodwells Roundabout and it has been concluded a controlled crossing should not be implemented. Given these factors, and the alternative provision to be provided on the western side of the junction, it was decided not to provide a controlled crossing on the A5 (east) arm of the junction. Given the very low additional user demand that would be generated by the development and the absence of an existing PIA problem at the B4666 Coventry Road uncontrolled crossing facility, there is not a strong justification for providing a controlled crossing facility on this arm of the junction. To do so may risk encouraging users to cross the B4666 Coventry Road using a controlled crossing facility, to then leave them with crossing the A5 using the existing uncontrolled facility, rather than use the alternative route via the existing controlled crossing facility on the A47 and the proposed controlled crossing on the A5 western arm. Therefore, it was concluded not to provide a controlled crossing on the B4666 Coventry Road arm of the junction. National Highways have confirmed that they are satisfied with this proposal.
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4.0 WALKING, CYCLING AND HORSE-RIDING REVIEW TEAM STATEMENT

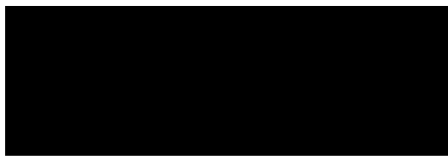
4.1 As Lead Assessor, I confirm that this Walking, Cycling and Horse-Riding Review Report has been compiled in accordance with DMRB GG 142 and thus records all design team deliberations and decisions relating to walking, cycling and horse-riding issues and opportunities.

4.2 The walking, cycling and horse-riding review was undertaken by the following team:

Walking, Cyclist and Horse-Riding Lead Assessor

Mark Higgins MEng (Hons)
Associate Director, ADC Infrastructure Ltd

Signed:



Dated: 26/01/2024

Walking, Cyclist and Horse-Riding Assessor

Stuart Dunhill BEng (Hons), PhD, CEng, MICE
Director, ADC Infrastructure Ltd

4.3 As design team leader I confirm that the assessment has been undertaken at the appropriate stage of the highway scheme development.

4.4 I confirm that in my professional opinion the appointed Lead Assessor has the appropriate experience for the role making reference to the expected competencies contained in GG 142.

Design Team Leader

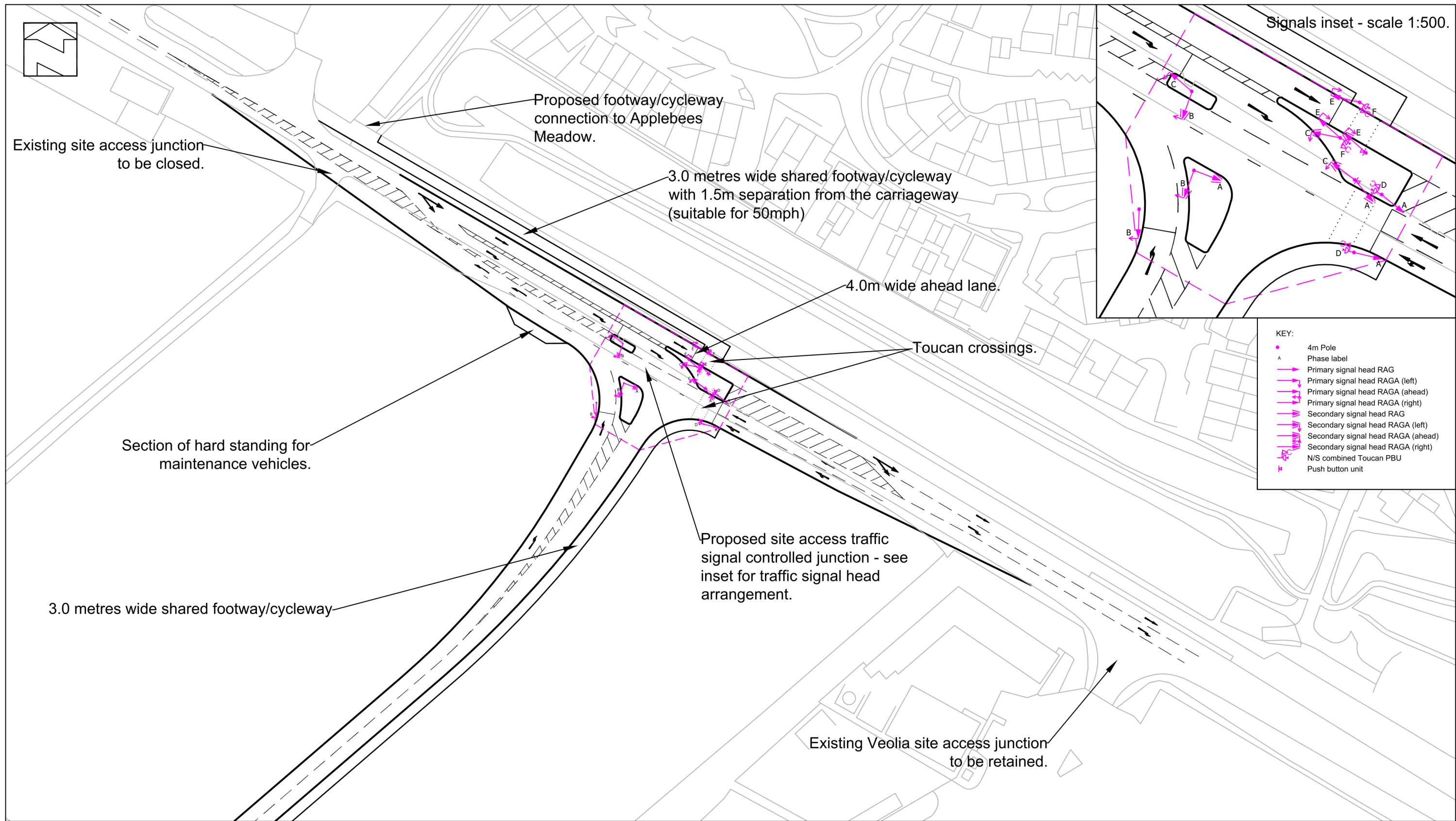
Phil Walker BEng (Hons)
Technical Director, ADC Infrastructure Ltd

Signed:



Dated: 26/01/2024

DRAWINGS



© ADC Infrastructure Limited

			Project: Proposed development at Watling Street, Hinckley	Client: Cuvette	ADC		
p4	Revised following Stage 1 RSA	05/07/22	Title: Proposed Access Junction Layout		Drg Size:	Scale:	Date:
p3	Revised following NH comments	28/02/22			A3	1:1000	02/11/2020
p2	Revised following NH comments	13/01/22					
Rev	Description	Date					



Swept path of a 16.5m long articulated
HGV traveling from the A5 east in lane 2
Scale - 1:1000

Swept path of a 16.5m long articulated
HGV traveling from the A5 east in lane 1
Scale - 1:1000

Swept path of a 16.5m long articulated
HGV performing a U-turn from A5 east
Scale - 1:1000

Tie back into existing
carriageway

Toucan crossings

Droppd kerbs to
allow cyclists onto
the carriageway

Additional lane to
facilitate U-turning site
traffic

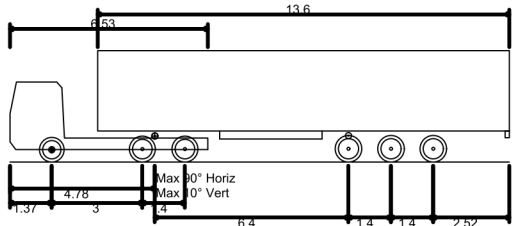
3.0 metres wide shared footway/cycleway
with 1.0m separation from the carriageway
(suitable for 40mph)

Emergency access with gate

Widening to provide 3 x 3.65 metres wide entry
lanes on westbound approach as 3 lanes for 60
metres and 2 lanes for 100 metres.

Droppd kerbs to allow
cyclists off the carriageway

3.0 metres wide shared footway/cycleway
with 1.5m separation from the carriageway
(suitable for 50mph)



Copy Of Max Legal Length (UK) Articulated Vehicle (16.5m)
Overall Length 16.500m
Overall Width 2.550m
Overall Body Height 3.681m
Min Body Ground Clearance 0.411m
Max Track Width 2.500m
Lock to lock time 6.00s
Kerb to Kerb Turning Radius 6.530m

P5	Revised following Stage 1 RSA	05/07/2022
P4	Revised following NH comments	22/02/2022
P3	Revised following NH comments	13/01/2022
P2	Additional circulating lane added	15/12/2021
Rev	Description	Date

Client:

Cuvette

Project:

Padge Hall Farm, Hinckley

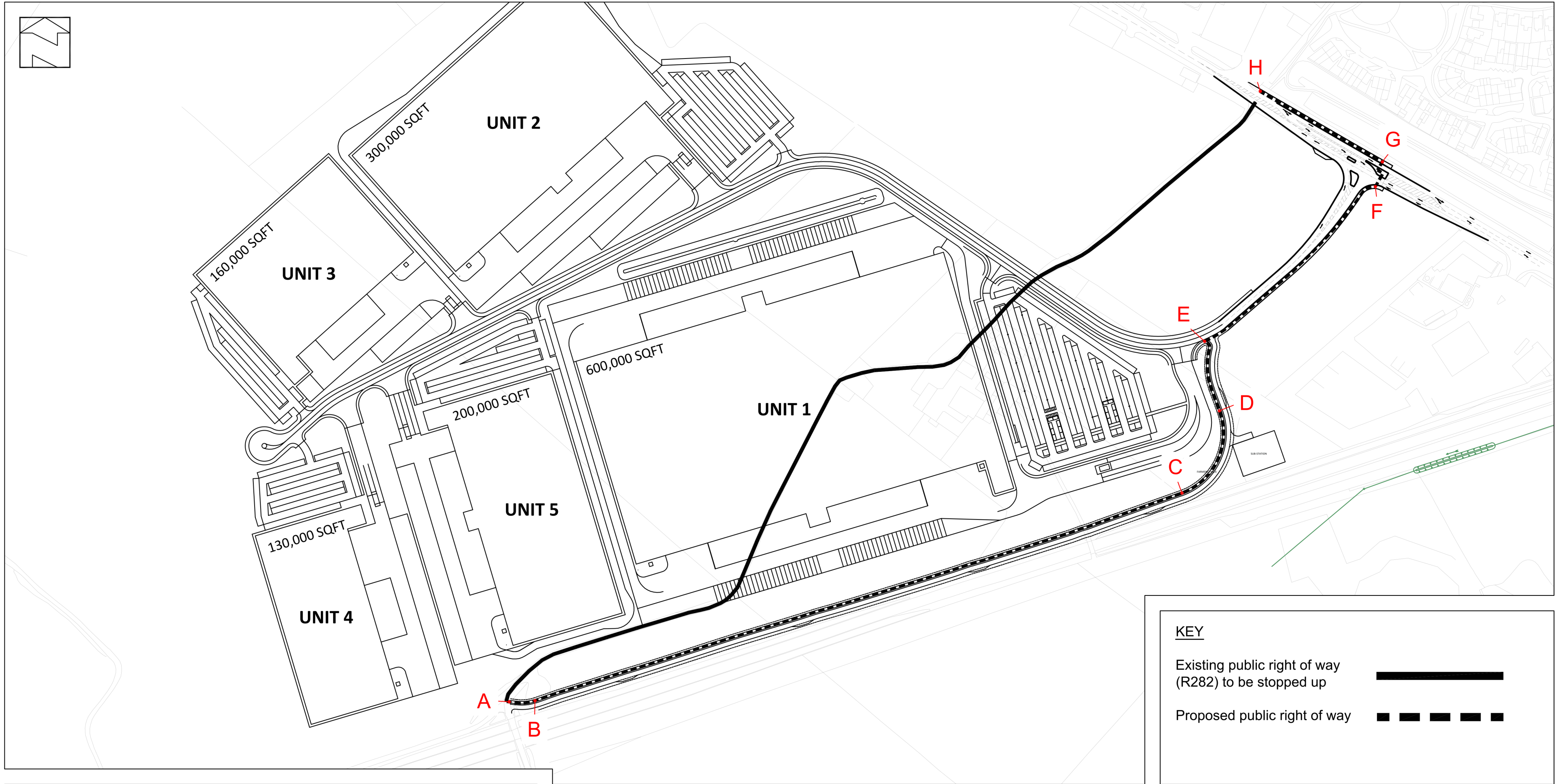
Title:

Proposed Dodwells Roundabout
Improvement Scheme (shown
without HE dualling)



Drq Size:	Scale:	Date:
A2	1:500	20/04/2021

Drq No:	Rev:
ADC1839-DR-007	P5



KEY

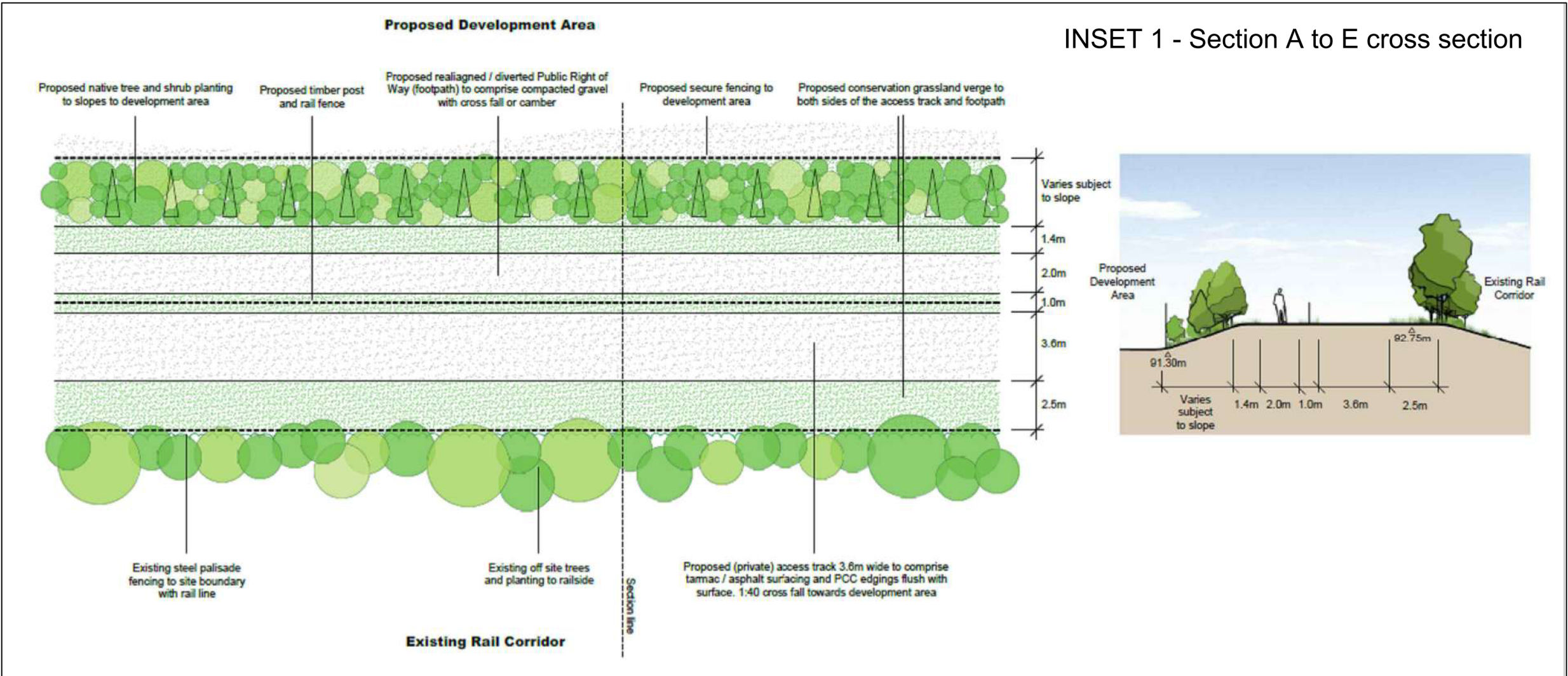
- Existing public right of way (R282) to be stopped up
- Proposed public right of way

NOTES

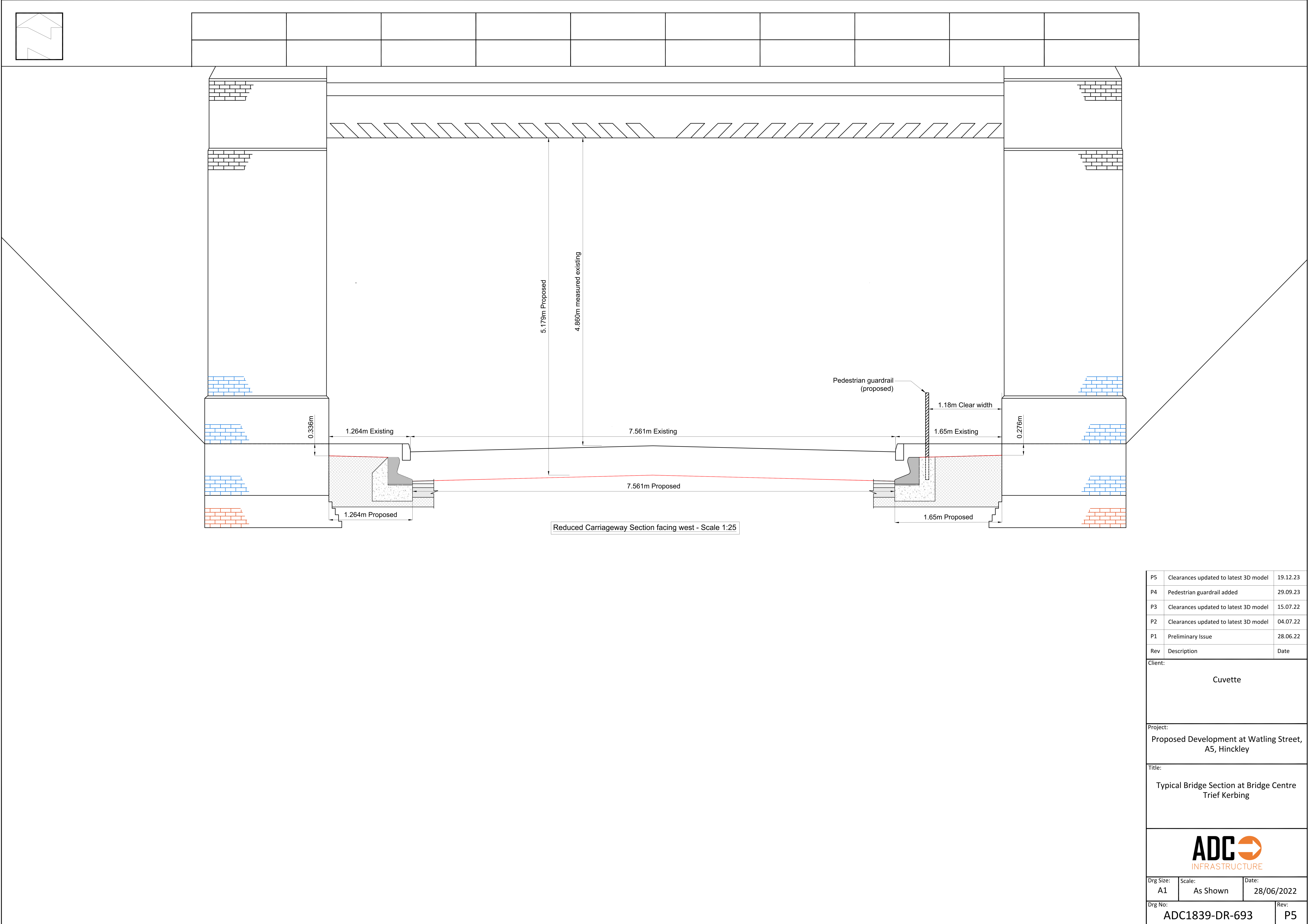
- Section A to E - public right of way shown at inset 1.
- Section E to F - public right of way along eastern side of the site access road carriageway. Typical footway/cycleway construction detail.
- Section F to G - staggered Toucan crossing facilities.
- Section G to H - public right of way along northern side of the A5 carriageway. Typical footway/cycleway construction detail.

Construction material: public right of way section A to E to be compacted gravel, section E to H to be tarmac.

Position	Latitude	Longitude	Easting	Northing	Grid ref.
A	52.528106	-1.4169579	439651	292408	SP396924
B	52.528112	-1.4166488	439672	292409	SP396924
C	52.529592	-1.4088752	440198	292578	SP401925
D	52.530191	-1.4084181	440229	292645	SP402926
E	52.530700	-1.4085877	440217	292701	SP402927
F	52.531822	-1.4065266	440356	292827	SP403928
G	52.532003	-1.4064405	440361	292847	SP403928
H	52.532526	-1.4078969	440262	292905	SP402929



P4	Updated Masterplan	24/03/22
P3	Re-aligned PRow	14/03/22
P2	Surfacing detail added	23/08/21
Rev	Description	Date
Client:		
Cuvette		
Project:		
Padge Hall Farm, Hinckley		
Title:		
Map 1: Proposed and existing public rights of way		
ADC INFRASTRUCTURE		
Drg Size: A2	Scale: 1:2500	Date: 19/08/2021
Drg No: ADC1839-DR-011	Rev: P4	



P5	Clearances updated to latest 3D model	19.12.23
P4	Pedestrian guardrail added	29.09.23
P3	Clearances updated to latest 3D model	15.07.22
P2	Clearances updated to latest 3D model	04.07.22
P1	Preliminary Issue	28.06.22
Rev	Description	Date

Client:

Cuvette

Project:

Proposed Development at Watling Street,
A5, Hinckley

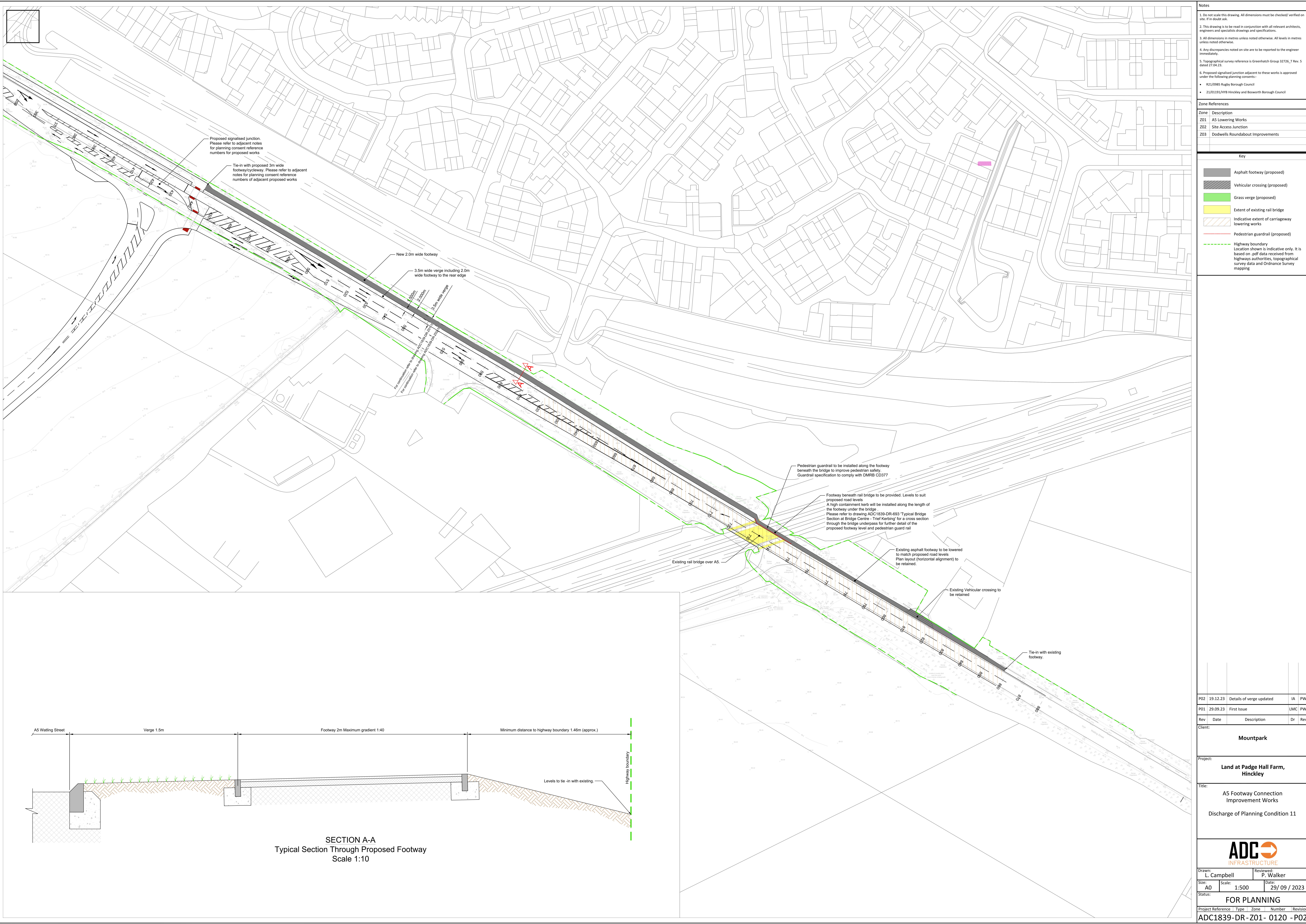
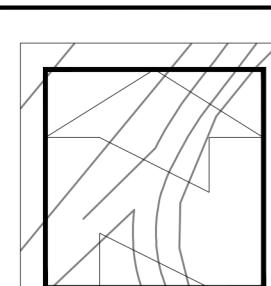
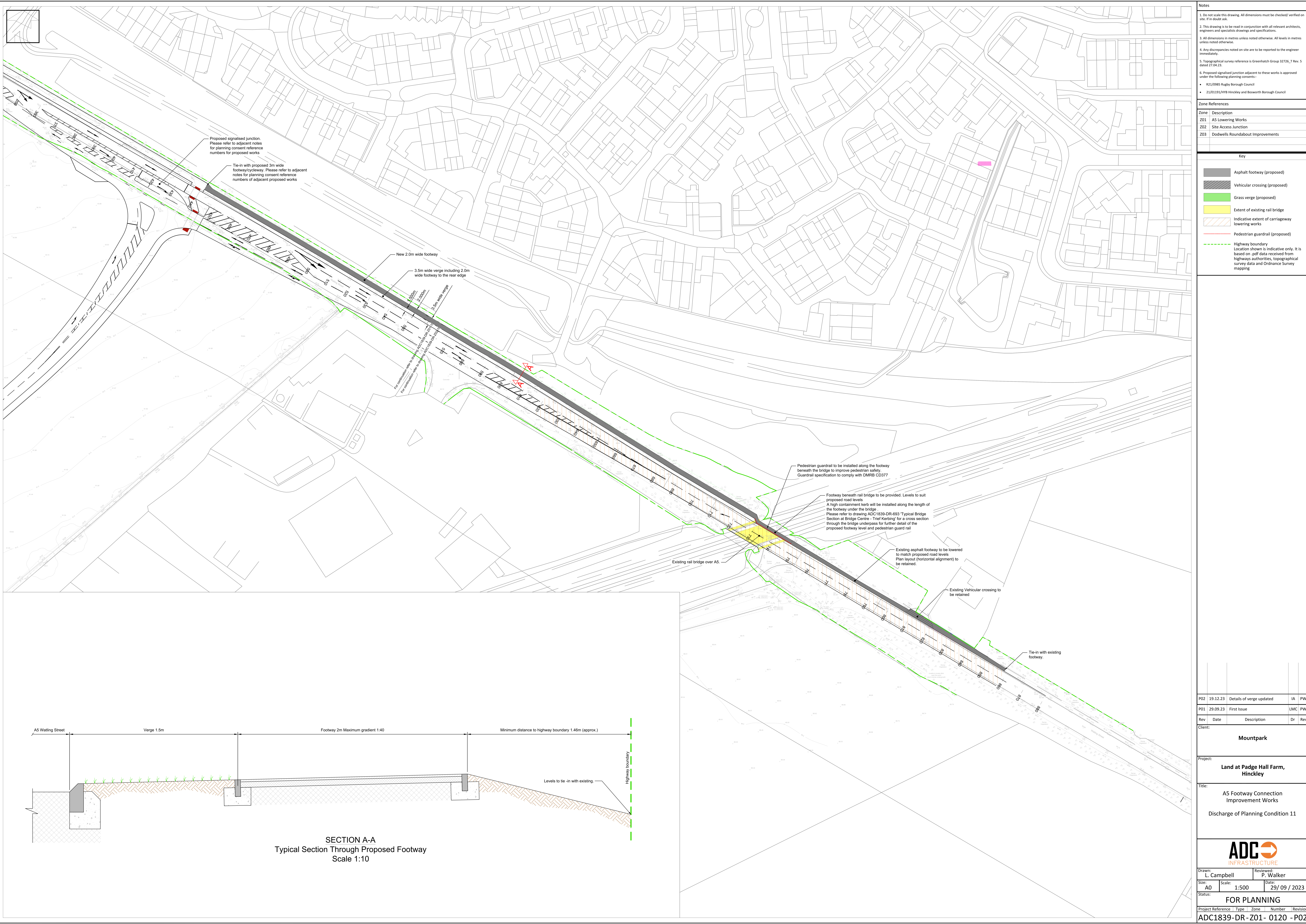
Title:

Typical Bridge Section at Bridge Centre
Trief Kerbing



Drg Size:	Scale:	Date:
A1	As Shown	28/06/2022

Drg No:	Rev:
ADC1839-DR-693	P5



- Notes
1. Do not scale this drawing. All dimensions must be checked/verified on site, if in doubt ask.
 2. This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.
 3. All dimensions in metres unless noted otherwise. All levels in metres unless noted otherwise.
 4. Any discrepancies noted on site are to be reported to the engineer immediately.
 5. Topographical survey reference is Greenhatch Group 32726_T Rev. 5 dated 27.04.23.
 6. Proposed signalised junction adjacent to these works is approved under the following planning consents:-
 - R21/0985 Rugby Borough Council
 - 21/01191/HYB Hinckley and Bosworth Borough Council

Zone References	
Zone	Description
201	A5 Lowering Works
202	Site Access Junction
203	Dodwells Roundabout Improvements

Key	
	Asphalt footway (proposed)
	Vehicular crossing (proposed)
	Grass verge (proposed)
	Extent of existing rail bridge
	Indicative extent of carriageway lowering works
	Pedestrian guardrail (proposed)
	Highway boundary
Location shown is indicative only. It is based on .pdf data received from highways authorities, topographical survey data and Ordnance Survey mapping	

PO2	19.12.23	Details of verge updated	IA	PW
PO1	29.09.23	First Issue	LMC	PW
Rev	Date	Description	Dr	Rev

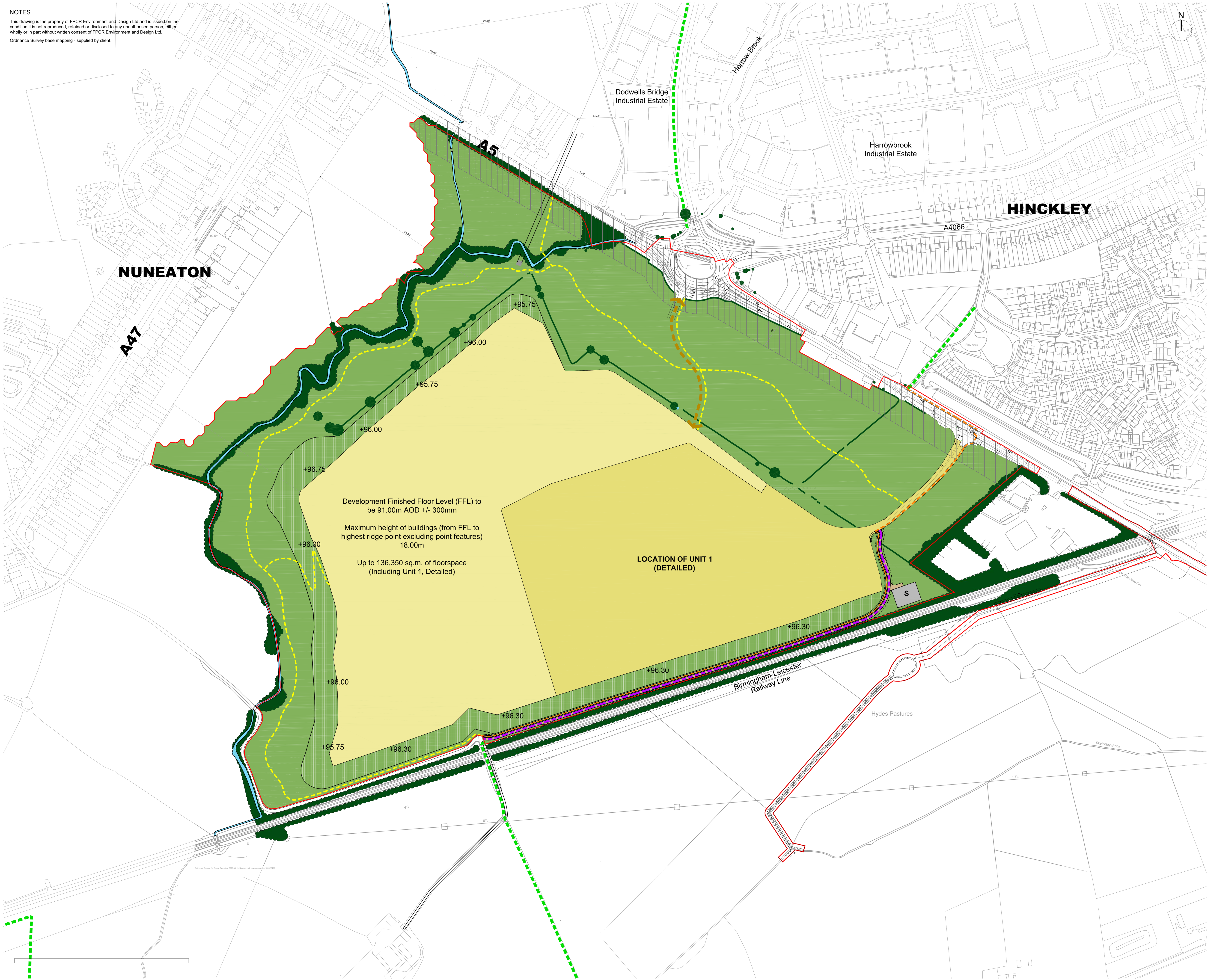
Client: **Mountpark**

Project: **Land at Padge Hall Farm, Hinckley**

Title: **A5 Footway Connection Improvement Works**
Discharge of Planning Condition 11

Drawn: L. Campbell	Reviewed: P. Walker
Size: A0	Scale: 1:500
Date: 29/ 09 / 2023	Status: FOR PLANNING
Project Reference: ADC1839-DR- Z01-	Zone: 0120 - P02

NOTES
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Ordnance Survey base mapping - supplied by client.



KEY

- Site boundary
- Proposed Employment (Including Sustainable Drainage, Roads and Landscape)
- Electricity Substation (Indicative Location)
- Highways / Access**
 - Proposed Primary Vehicular Access
Refer to highways plans for further details of the A5 junction arrangements
 - Emergency Access
 - A5 Future Road Corridor (Indicative Safeguarded Area)
 - Farmers Access Track
- Green Infrastructure**
 - Green Infrastructure (Including Sustainable Drainage, Mitigation mounding etc as below)
 - Existing trees, hedgerows and other planting
 - Existing Public Right of Way
 - Diverted Public Right of Way
 - Proposed public access routes (indicative alignment)
 - Proposed mitigation mounding
 - Spot heights along the top of the mitigation mounding (metres above ordnance datum (AOD)) Stated level +/- 300mm

V	04.04.2022	Final issue	MPS	TRJ
rev	date	description	dm	chkd

fpcr

- masterplanning
- environmental assessment
- landscape design
- urban design
- ecology
- architecture
- arboriculture

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client
Agrarian Development Holdings Ltd

project
Padge Hall Farm
Hinckley

drawing title
DEVELOPMENT PARAMETERS PLAN

scale
1:2500 @ A1

drawn / checked
CMW/TRJ

revision date
04th April 2022

drawing number
8815-L-08

rev
V

CAD file: K:\8800\8815\LANDSI\Plans\L-08-DEVELOPMENT PARAMETERS [V].dwg



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- Site Boundary
- Existing Trees and Hedgerows
- Existing Brook (Including Off-Site)
- Proposed Woodland / Structural Planting
- Proposed Individual Trees / Small Tree Groups
- Proposed Scrub
- Proposed Hedgerows
- Grassland / Open Space (Existing and Proposed)
- Proposed Ponds / Wetlands / Drainage Features
- Existing Public Right of Way (Off-Site)
- Proposed Footways / and / or Cycleways (Off-Road) (incorporating 'trim trail' equipment)
- Diverted Public Right of Way
- Farmers Access Track
- Easement for Existing Services
- A5 Future Road Corridor (Indicative Safeguarded Area)
- Electricity Substation (Indicative Location)

SCHEDULE OF PLANTING / FEATURES

(Approximate quantities)

- 49% of the total site for landscape and GI proposals
- Over 10,000 new native trees/ woodland plants
- Over 25,000 new native scrub and other plants
- Over 15,000 new native hedgerow plants
- Over 6,500m² of new water features and wetland habitats
- Over 15 hectares of new or enhanced conservation / meadow grassland
- Over 2.5 km new off-road footways and trim trails (with equipment)
- New footbridge over Harrow Brook
- New fencing/ access gates/ seating/ benches/ signage

client
Agrarian Development Holdings Ltd

project
Padge Hall Farm
Hinckley

drawing title
**ILLUSTRATIVE LANDSCAPE AND
GREEN INFRASTRUCTURE PLAN**

scale
1:2500 @ A1

drawing / figure number
8815-L-30

drawn
MPS/TMJ

issue date
04th April 2022

rev
M

APPENDIX A

DODWELLS CROSSING ASSESSMENT

A5 DODWELLS ROUNDABOUT CROSSING ASSESSMENT

Introduction

1. The purpose of this technical note is to consider whether the uncontrolled crossings on the B4666 Coventry Road and the A5 (east) arms of the junction should be replaced with controlled crossing facilities as part of the Land at Padge Hall Farm development proposals.

Existing pedestrian and cyclist conditions

2. **Figure 1** shows the existing junction layout.



Figure 1: A5/A47 Dodwells Roundabout (existing layout)

3. A controlled Toucan crossing is provided across the A47 arm of the junction, which links the off-road shared footway/cycleway that is provided on the A5 to the west of the junction, with the shared footway/cycleway that is provided along the northern side of the B4666 Coventry Road, and the shared footway/cycleway on the A47 Dodwells Road.
4. There is also a short section of shared footway/cycleway that runs along the A5 south of Dodwells Roundabout, providing dropped kerb facilities on the A5 on the westbound approach to the junction and westbound exit from the junction. This allows cyclists to exit and enter the A5 carriageway either side of the junction. There are uncontrolled pedestrian crossings with dropped kerbs and buff tactile paving on the A5 (east) and B4666 Coventry Road arms.
5. The B4666 Coventry Road has a footway on the southern side of the carriageway and a shared footway/cycleway along the northern side that extends into Hinckley. This facility links with the shared footway/cycleway which runs along the eastern side of the A47 Dodwells Road, which also has a footway on its western side, and the shared footway/cycleway on the A5 (west) of the junction.

6. The nearest bus stops to the proposed development site are located on the A5 Watling Street, a short distance to the northwest of Dodwells Roundabout (**Figure 3**). There are also bus stops located on the A47 Dodwells Road and on the B4666 Coventry Road.

PIA record

7. The analysis presented in Section 2 of the TA shows that in the five-year study period, eight PIAs occurred at Dodwells Roundabout. However, none of these eight PIAs involved pedestrians or cyclists.

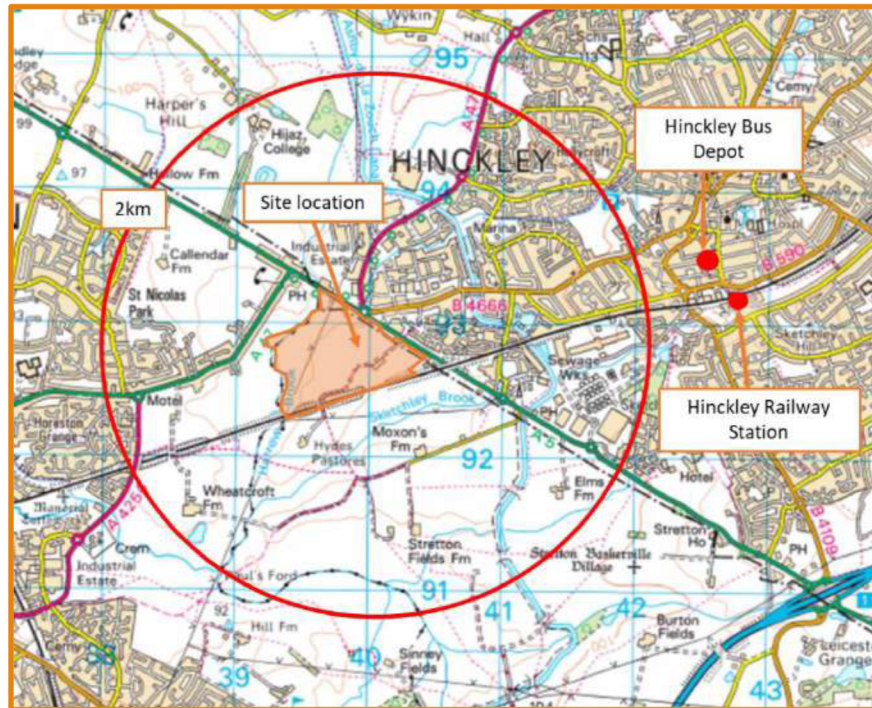
Proposed layout

8. A controlled Toucan crossing is proposed on the A5 (west) arm of Dodwells Roundabout that would link with the on-site footway/cycleway facilities. The Toucan crossing would allow pedestrians and cyclists access to the existing footway/cycleway on the A5 (west) arm, and via the existing Toucan crossing on the A47 Dodwells Road arm, the off-road facilities on the A47 Dodwells Road and the B4666 Coventry Road. It would also provide convenient access to the nearby bus stops on the A5 and A47.
9. **Figure 3** summarises the accessibility of the site via sustainable travel modes. It shows the proposed Toucan crossing and footway/cycleway link at the proposed site access junction on the A5 that would provide an alternative and more direct access from the B4666 Coventry Road, via Applebees Meadow, for development users travelling to and from the east of the site. This route would also provide the most direct access to the bus stops on the B4666 Coventry Road, which could be accessed using the existing controlled crossing on this section of Coventry Road.



Figure 3: accessibility by sustainable travel modes

10. Paragraph 4.8 of the Transport Assessment calculates a peak hour demand of 22 pedestrians and 25 cyclists associated with the proposed development. Figure 5 of the TA (reproduced at **Figure 3**) shows the pedestrian catchment area based on a 2km maximum walking distance. Figure 7 of the TA (reproduced at **Figure 4**) shows the cyclist catchment based on a 5km cycle distance.



The map shows the proposed site location in the Hinckley and Nuneaton area. A red circle indicates a 5km radius around the site location. The map includes labels for various towns and roads. Key locations marked include Fenny Drayton, Stoke Golding, Barwell, Hinckley, Nuneaton, Weddington, St Nicolas Park, Kibby Green, Horeston Grange, Burton Hastings, Whitestone, Collycroft, and Walsley. Roads shown include A5, A47, A4254, A4255, A4256, A4257, A4258, A4259, A4260, A4261, A4262, A4263, A4264, A4265, A4266, A4267, A4268, A4269, A4270, A4271, A4272, A4273, A4274, A4275, A4276, A4277, A4278, A4279, A4280, A4281, A4282, A4283, A4284, A4285, A4286, A4287, A4288, A4289, A4290, A4291, A4292, A4293, A4294, A4295, A4296, A4297, A4298, A4299, A4300, A4301, A4302, A4303, A4304, A4305, A4306, A4307, A4308, A4309, A4310, A4311, A4312, A4313, A4314, A4315, A4316, A4317, A4318, A4319, A4320, A4321, A4322, A4323, A4324, A4325, A4326, A4327, A4328, A4329, A4330, A4331, A4332, A4333, A4334, A4335, A4336, A4337, A4338, A4339, A4340, A4341, A4342, A4343, A4344, A4345, A4346, A4347, A4348, A4349, A4350, A4351, A4352, A4353, A4354, A4355, A4356, A4357, A4358, A4359, A4360, A4361, A4362, A4363, A4364, A4365, A4366, A4367, A4368, A4369, A4370, A4371, A4372, A4373, A4374, A4375, A4376, A4377, A4378, A4379, A4380, A4381, A4382, A4383, A4384, A4385, A4386, A4387, A4388, A4389, A4390, A4391, A4392, A4393, A4394, A4395, A4396, A4397, A4398, A4399, A4400, A4401, A4402, A4403, A4404, A4405, A4406, A4407, A4408, A4409, A4410, A4411, A4412, A4413, A4414, A4415, A4416, A4417, A4418, A4419, A4420, A4421, A4422, A4423, A4424, A4425, A4426, A4427, A4428, A4429, A4430, A4431, A4432, A4433, A4434, A4435, A4436, A4437, A4438, A4439, A4440, A4441, A4442, A4443, A4444, A4445, A4446, A4447, A4448, A4449, A4450, A4451, A4452, A4453, A4454, A4455, A4456, A4457, A4458, A4459, A4460, A4461, A4462, A4463, A4464, A4465, A4466, A4467, A4468, A4469, A4470, A4471, A4472, A4473, A4474, A4475, A4476, A4477, A4478, A4479, A4480, A4481, A4482, A4483, A4484, A4485, A4486, A4487, A4488, A4489, A4490, A4491, A4492, A4493, A4494, A4495, A4496, A4497, A4498, A4499, A4500, A4501, A4502, A4503, A4504, A4505, A4506, A4507, A4508, A4509, A4510, A4511, A4512, A4513, A4514, A4515, A4516, A4517, A4518, A4519, A4520, A4521, A4522, A4523, A4524, A4525, A4526, A4527, A4528, A4529, A4530, A4531, A4532, A4533, A4534, A4535, A4536, A4537, A4538, A4539, A4540, A4541, A4542, A4543, A4544, A4545, A4546, A4547, A4548, A4549, A4550, A4551, A4552, A4553, A4554, A4555, A4556, A4557, A4558, A4559, A4560, A4561, A4562, A4563, A4564, A4565, A4566, A4567, A4568, A4569, A4570, A4571, A4572, A4573, A4574, A4575, A4576, A4577, A4578, A4579, A4580, A4581, A4582, A4583, A4584, A4585, A4586, A4587, A4588, A4589, A4590, A4591, A4592, A4593, A4594, A4595, A4596, A4597, A4598, A4599, A4600, A4601, A4602, A4603, A4604, A4605, A4606, A4607, A4608, A4609, A4610, A4611, A4612, A4613, A4614, A4615, A4616, A4617, A4618, A4619, A4620, A4621, A4622, A4623, A4624, A4625, A4626, A4627, A4628, A4629, A4630, A4631, A4632, A4633, A4634, A4635, A4636, A4637, A4638, A4639, A4640, A4641, A4642, A4643, A4644, A4645, A4646, A4647, A4648, A4649, A4650, A4651, A4652, A4653, A4654, A4655, A4656, A4657, A4658, A4659, A4660, A4661, A4662, A4663, A4664, A4665, A4666, A4667, A4668, A4669, A4670, A4671, A4672, A4673, A4674, A4675, A4676, A4677, A4678, A4679, A4680, A4681, A4682, A4683, A4684, A4685, A4686, A4687, A4688, A4689, A4690, A4691, A4692, A4693, A4694, A4695, A4696, A4697, A4698, A4699, A4700, A4701, A4702, A4703, A4704, A4705, A4706, A4707, A4708, A4709, A4710, A4711, A4712, A4713, A4714, A4715, A4716, A4717, A4718, A4719, A4720, A4721, A4722, A4723, A4724, A4725, A4726, A4727, A4728, A4729, A4730, A4731, A4732, A4733, A4734, A4735, A4736, A4737, A4738, A4739, A4740, A4741, A4742, A4743, A4744, A4745, A4746, A4747, A4748, A4749, A4750, A4751, A4752, A4753, A4754, A4755, A4756, A4757, A4758, A4759, A4760, A4761, A4762, A4763, A4764, A4765, A4766, A4767, A4768, A4769, A4770, A4771, A4772, A4773, A4774, A4775, A4776, A4777, A4778, A4779, A4780, A4781, A4782, A4783, A4784, A4785, A4786, A4787, A4788, A4789, A4790, A4791, A4792, A4793, A4794, A4795, A4796, A4797, A4798, A4799, A4800, A4801, A4802, A4803, A4804, A4805, A4806, A4807, A4808, A4809, A4810, A4811, A4812, A4813, A4814, A4815, A4816, A4817, A4818, A4819, A4820, A4821, A4822, A4823, A4824, A4825, A4826, A4827, A4828, A4829, A4830, A4831, A4832, A4833, A4834, A4835, A4836, A4837, A4838, A4839, A4840, A4841, A4842, A4843, A4844, A4845, A4846, A4847, A4848, A4849, A4850, A4851, A4852, A4853, A4854, A4855, A4856, A4857, A4858, A4859, A4860, A4861, A4862, A4863, A4864, A4865, A4866, A4867, A4868, A4869, A4870, A4871, A4872, A4873, A4874, A4875, A4876, A4877, A4878, A4879, A4880, A4881, A4882, A4883, A4884, A4885, A4886, A4887, A4888, A4889, A4890, A4891, A4892, A4893, A4894, A4895, A4896, A4897, A4898, A4899, A4900, A4901, A4902, A4903, A4904, A4905, A4906, A4907, A49

Figure 4: cycle catchment area

11. Based on the catchment areas, the majority (estimated 80%) of pedestrian trips would be to and from Hinckley, while cyclist trips would be more evenly split between Hinckley and Nuneaton (estimated 50%/50% split). Hence, approximately 18 pedestrian trips and 13 cyclist trips might be expected to travel to and from the site and Hinckley during a peak hour. These would be split between the B4666 Coventry Road and the A47 Dodwells Road.
12. The shortest route for development users arriving and departing via the A47 Dodwells Road and the site would be via the proposed Toucan crossing on the western side of the junction (135m using this facility vs 175m via the uncontrolled crossings on the eastern arms). Development users travelling to and from the site via the B4666 Coventry Road would be able to use the existing controlled crossing on Coventry Road near the bus stops and the proposed link to Applebees Meadow and the new Toucan crossing facility on the A5 that is proposed at the site access junction. Hence, the development generated demand for crossing the B4666 Coventry Road and the A5 (east) at Dodwells Roundabout would be very low.
13. Any existing demand to cross Coventry Road is currently accommodated via the uncontrolled crossing facility or the signal-controlled facility that is provided approximately 300m to the east Dodwells Roundabout. There is no development on the southern side of the roundabout and hence existing demand to cross the A5 eastern arm of the roundabout is very low.
14. The WCHAR Assessment Report includes details of surveys undertaken at the junction. As shown in Figure 1 of the WCHAR Assessment Report during the daytime 12-hour period between 0700 and 1900 hours there was a demand of only 10 pedestrians and 1 cyclist crossing from the southern to northern side of Coventry Road, and a demand of 8 pedestrians and 6 cyclists crossing from the north to the south. This is in contrast to an eastbound demand on the shared footway cycleway on the northern side of Coventry Road of 91 pedestrians and 56 cyclists, and a westbound demand of 58 pedestrians and 41 cyclists.
15. Figure 8 of the WCHAR Assessment Report shows a recorded demand during the daytime 12-hour period between 0700 to 1900 hours of only 2 pedestrians and no cyclists crossing from the northern to the southern side of the A5 (east) arm, which zero demand for pedestrians or cyclist to cross in the opposite direction.

Gap availability

16. An acceptable gap from kerb to kerb, or kerb to refuge, varies from person to person. A gap of 4-6 seconds may be acceptable at normal urban traffic speeds, and shorter gaps where traffic is slower. Other groups may require larger gaps of 10-12 seconds or longer.¹
17. Uncontrolled crossings are provided on the B4666 Coventry Road and the A5 (east) arms of Dodwells Roundabout and therefore pedestrians and cyclists are able to cross the entries while the approach arms are on red, and can cross the exits during the junction intergreen periods (plus vehicle travel time to conflict points) and at other times when acceptable gaps are identified.
18. Considering first the uncontrolled crossings for the B4666 Coventry Road and A5 (east) entries, the table below calculates a robust crossing time based on the crossing distance for the mitigated junction and an average walking speed of 1.2m/s. The table then contrasts the walk times with the length of time that the approaches in question are at 'red', demonstrating that there would be more than enough time for pedestrians to cross during these periods.

¹ Traffic Signs Manual Chapter 6, paragraph 13.5.2. DfT, 2019, which replaces guidance in withdrawn LTN 1/95.

Crossing point	Walking distance (m)	Speed (m/s)	Walk time (s)	Average red period (s)
B4666 Coventry Road entry	8.8	1.2	7.3	36
A5 (east) entry	11.5	1.2	9.6	32

19. For the uncontrolled crossings for the B4666 Coventry Road and A5 (east) exits, the first table below calculates a robust crossing time based on the crossing distance for the mitigated junction and an average walking speed of 1.2m/s. The second table considers the 2031 'with development and mitigation' traffic flow turning left from the A46 Dodwells Road to the B4666 Coventry Road and from the B4666 Coventry Road to the A5 (east) for the morning and evening peak hours. These traffic movements are considerably lighter than the traffic movements exiting the roundabout from the circulating carriageway and it is therefore more likely that there would be appropriate gaps for pedestrians to cross during the green times for those respective entries.

Crossing point	Walking distance (m)	Speed (m/s)	Walk time (s)	Intergreen (s)
B4666 Coventry Road (exit)	7.4	1.2	6.2	5
A5 (east) exit	9.2	1.2	7.7	5

Crossing point	Peak	Left-turn flow (pcu)	Left-turn per cycle	Left-turn green time (s)	Clearance time per pcu (s)	Remaining green (s)	Remaining green + intergreen (s)
B4666 Coventry Road exit	AM	116	1.5	17	3	14	20.0
	PM	98	1.2	15	2.4	12.6	18.6
A5 (east) exit	AM	98	1.2	9	2.4	6.6	11.6
	PM	90	1.1	9	2.2	6.8	11.8

20. The above table shows that on average there would be 1.5 or less left-turning vehicles per cycle conflicting with the B4666 Coventry Road and A5 (east) exit crossings in all 2031 peak hour flow groups. The table demonstrates that based on a vehicle discharge rate of 2 sec/pcu, on average there would be significant remaining green for pedestrians to cross, especially when also adding the following intergreen period.
21. Users that required longer gaps would be able to use the controlled crossing facilities on the A47 and the proposed controlled crossing on the western side of the junction.

Safety concerns of providing controlled crossings

22. NH have raised the following safety concerns regarding the provision of controlled crossing facilities on the A5 eastern arm of the junction.
- concern regarding visibility to the crossing and the impact on an already short and narrow merge.
 - risk that traffic released from the upstream circulatory may become caught at the end of the red at the exit crossing, leading to sudden braking and shunt type collisions.
23. To improve visibility to the A5 (east) exit crossing and reduce its impact on the operation of the merge, it was suggested that the alignment of the A5 east approach could be amended. This would involve pushing it further south to increase the length of the merge and locate the crossing further along the A5 such that queuing vehicles would not block back to the circulating carriageway.

24. NH have also raised the existing issue of substandard entry path curvature on the A5 (east) approach and have requested that the proposals be amended to improve this where possible. This has been achieved by increasing the size of the central island. It was found that realigning the A5 (east) arm between Dodwells and the third-party land constraint (car-showroom located south of the A5) could not be reasonably achieved whilst also improving the entry path curvature.
25. Further, relocating the exit crossing further east along the A5 would reduce the available visibility at the crossing.
26. Hence, as the A5 (east) approach could not be suitably realigned to improve the A5 eastbound merge, and visibility at the crossing could not be improved without shortening the available space for queueing vehicles, the controlled crossing should not be implemented.

Impact of controlled crossing on journey time

27. The provision of additional controlled crossings on the B4666 Coventry Road and A5 eastern arms of the junction would lead to a slight increase in journey time for vehicles through the junction.

Summary and conclusions

28. Development users travelling to and from the east of the development would be able to access the development via the proposed controlled crossing at the site access junction, linking with the B4666 Coventry Road via Applebees Meadows. The proposed controlled crossing on the A5 (west) arm of Dodwells Roundabout would cater for pedestrian and cyclist demand generated to and from the A5 (west) and A47 Dodwells Road and would provide a suitable (although slightly longer) route for any development users travelling to and from the B4666 Coventry Road via Dodwells Roundabout instead of travelling via the site access junction.
29. Should some development users choose to access the site via the eastern side of Dodwells Roundabout, there would be acceptable gaps in traffic for most able-bodied users to cross the B4666 Coventry Road and the A5 (east) arm using the existing uncontrolled crossing facilities. Users that required longer gaps would be able to use the controlled crossing facilities on the A47 and the proposed controlled crossing on the western side of the junction.
30. There are safety concerns regarding the provision of a controlled crossing on the A5 eastbound exit from Dodwells Roundabout and it has been concluded a controlled crossing should not be implemented. An assessment of demand has also shown that there would be insufficient demand generated by the proposed development to warrant the provision of a controlled crossing facility.
31. Given these factors, and the alternative provision to be provided on the western side of the junction, it is not proposed to provide a controlled crossing on the A5 (east) arm of the junction. Given the very low additional user demand that would be generated by the development and the absence of an existing PIA problem at the B4666 Coventry Road uncontrolled crossing facility, there is not a strong justification for providing a controlled crossing facility on this arm of the junction. To do so may risk encouraging vulnerable users to cross the B4666 Coventry Road using a controlled crossing facility, to then leave them with crossing the A5 using the existing uncontrolled facility, rather than use the alternative route via the existing controlled crossing facility on the A47 and the proposed controlled crossing on the A5 western arm. Therefore, it is not proposed to provide a controlled crossing on the B4666 Coventry Road arm of the junction.