



Land South of Wixams, Bedford – Wixams End  
Response to Call for Sites Site Assessment Pro  
Forma and Transport Access Assessment

Client: Wates Developments

i-Transport Ref: TW/JW/ITB15565-003b

Date: 26 August 2021

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**i-Transport LLP**

The Square  
Basing View  
Basingstoke  
Hampshire  
RG21 4EB

Tel: 01256 637940

[www.i-transport.co.uk](http://www.i-transport.co.uk)

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## Quality Management

Report No.	Comments	Date	Author	Authorised
ITB15565-003	First Draft	18/08/2021	JW	-
ITB15565-003a	Client Draft	20/08/2021	JW/TW	TW
ITB15565-003b	Issue	26/08/2021	JW/TW	TW

File Ref: Y:\Projects\15000 Series\15565ITB Wixams Wates Developments\Admin\Report and Tech

Notes\ITB15565-003b - Response to Call for Sites .docx

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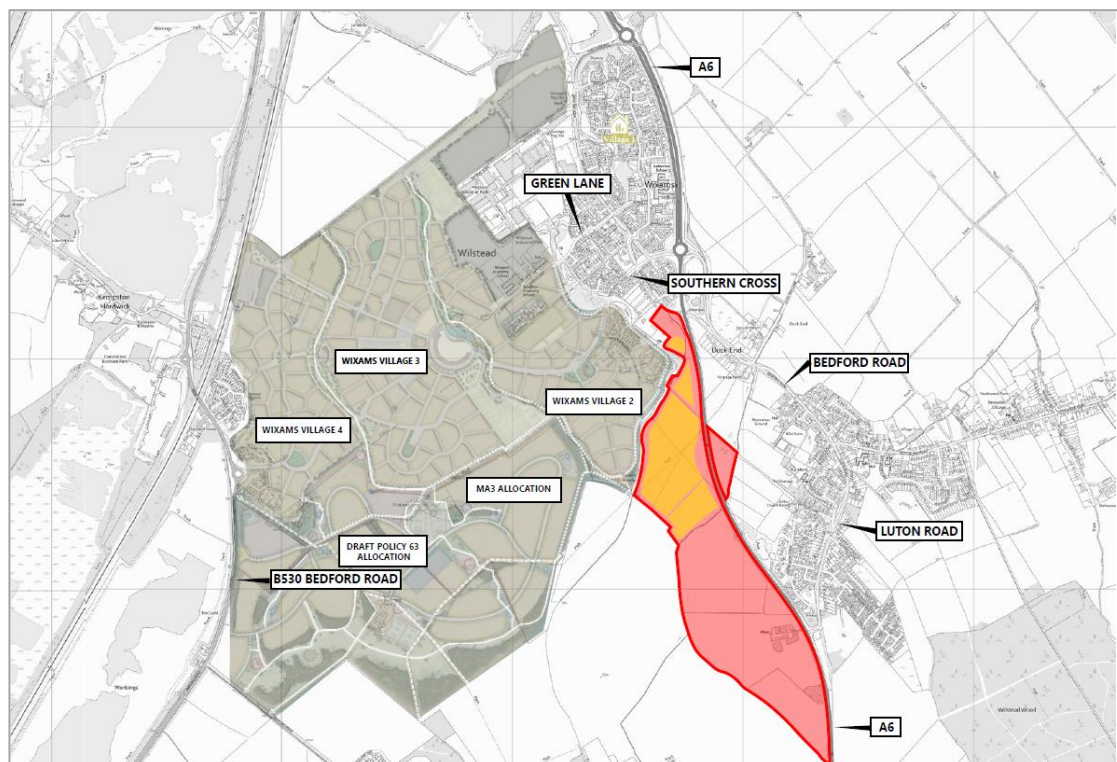
## Drawings

<b>ITB15565-GA-01</b>	<b>Proposed Site Access Arrangements</b>
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## SECTION 1 Introduction

1.1 Wates Developments is promoting Land to the South of Wixams, Bedford (Wixams End), for residential development. The site can deliver around 415 dwellings as a sustainable extension to Wixams and is being promoted to the Bedford Borough Local Plan 2040. The site location, in the context of the wider existing / planned Wixams development is shown in **Image 1.1**.

**Image 1.1: Site Location Plan**



1.2 To support the promotion of the site, a Baseline Transport Appraisal was prepared and submitted in August 2020 which demonstrated that the site is deliverable in transport terms.

1.3 Bedford Borough Council (BBC) has carried out a review of all of the development sites proposed for consideration in its Local Plan and in transport terms has presented a scoring assessment of each site considered against five assessment criteria within its 'Transport Access Assessment':

- Vehicle access constraints
- Conflicts with traffic/highway capacity
- Public transport accessibility
- Pedestrian access/footway connectivity
- Cycle route connectivity

1.4 The summary scoring results for the Land South of Wixams Site are shown in **Image 1.2**, which overall rates the site as Amber (scoring 2.4 out of 5):

**Image 1.2 – BBC Transport Pro-Forma Scoring – Land South of Wixams**

Assessment Scores (each out of 5)					Maximum possible score (weighted)	Site assessment score (weighted average)	All mitigation feasible? (1=Yes, 0=No)	RAG Assessment Result
Vehicle access constraints	Conflicts with traffic/highway capacity	Public transport accessibility	Pedestrian access/footway connectivity	Cycle route connectivity				
25.0%	25.0%	20.0%	20.0%	10.0%				
3	3	3	1	1	5	2.4	1	Amber

1.5 The assessment has not considered various important considerations which affect the evaluation of the site and underscores the scheme against the assessment criteria.

1.6 This report sets out why the BBC ‘Transport Access Assessment’ scores do not reasonably reflect the transport aspects / deliverability of the proposed site. Additional information is presented alongside an alternative scoring assessment of the scheme, which concludes that the site should be considered as a deliverable site, and therefore attract a Green RAG rating.

## SECTION 2 Vehicle Access Constraint

### BBC 'Vehicle Access Constraint' Assessment Score: 3

- 2.1 The current assessment score for 'vehicle access constraint' is 3 out of 5, and the 'Transport Access Assessment' identifies that highway connection is 'uncertain', noting that the current access is unsuitable/requires improvement. Criteria 15e of the Site Assessment Pro-forma further considers access to be uncertain, stating "Potential access requiring mitigation".
- 2.2 The Baseline Transport Appraisal (August 2020) presented a feasibility design of the proposed site access arrangement, alongside a review of delivery constraints and operational performance, each demonstrating that access to the site can be satisfactorily achieved and is deliverable.
- 2.3 Access to the site would be delivered by the construction of a new 'normal' roundabout junction to the A6 on the immediate eastern boundary of the site. This is consistent with the various junctions that have recently been delivered on the A6 corridor to serve the wider Wixams community. The design conforms to all design standards (DMRB) and can be achieved either within land controlled by the promoters of the site, or the public highway.
- 2.4 **Image 2.1** presents the proposed access comprising of a new three arm roundabout to the A6 (Drawing **ITB15565-GA-001**) which has been designed in accordance with DMRB Standards.

#### Image 2.1: Proposed A6 Access Roundabout



Source: Drawing ITB15565-GA-001

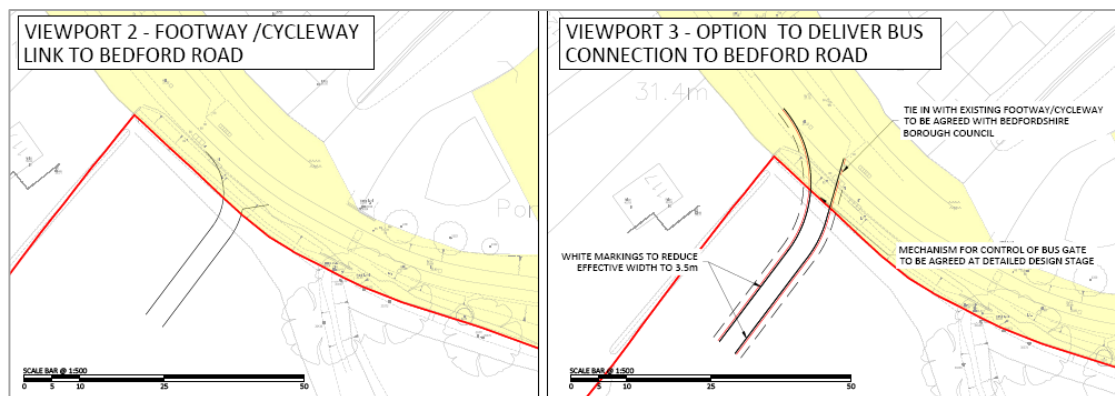
2.5 An appraisal of the future operation of the new roundabout was carried out using TRLs Junctions 9 software (repeated at **Table 2.1**) which demonstrates that the new junction would operate within capacity, with no material queuing or delay, and that the junction would operate under ‘Free Flow’ conditions (i.e. Level of Service ‘A’).

**Table 2.1 – Operational Assessment – Proposed A6 Access – 2032 Future Year**

Arm	AM Peak Hour				PM Peak Hour			
	RFC	Queue (veh)	Delay (s/veh)	LOS	RFC	Queue (veh)	Delay (s/veh)	LOS
A6 (North)	0.64	1.7	5.24	A	0.75	2.9	7.25	A
Site Access	0.75	2.9	7.81	A	0.69	2.1	6.31	A
A6 (South)	0.18	0.2	4.27	A	0.07	0.1	3.39	A

2.6 In addition to the new roundabout, a dedicated pedestrian and cycle and / or a ‘Bus Only’ connection has been considered on to Bedford Road, which would also double up as an emergency access to the scheme (**Image 2.2**). This will ensure that suitable access for all people, and all travel modes, can be secured as part of the development of the site and that it is within the control of the site promoters to deliver adequate access.

**Image 2.2: Indicative Non-Motorised Connection to Bedford Road**



2.7 The Site Assessment Pro-forma notes the proposed access strategy (i.e. a roundabout to the A6, emergency access to Bedford Road, and various pedestrian accesses). This further assessment has shown that access to the site is evidently achievable and deliverable, and that there should be no concerns or uncertainty about the potential to access the site.

**Revised ‘Vehicle Access Constraint’ Assessment Score: 5 out of 5**



## SECTION 3 Conflict with Traffic/Highway Capacity

### BBC 'Conflict with Traffic/Highway Capacity' Assessment Score: 3

- 3.1 BBC assess the site in relation to 'conflict with traffic/highway capacity' as a 3 out of 5. The Transport Access Assessment provides limited detail on how this assessment score is reached. The BBC Site Assessment Pro-forma at Criterion 15f states that "*potential capacity problem requiring mitigation*" and that "*more detailed review due to its scale and positive / negative impacts on surroundings*" is needed.
- 3.2 The Baseline Transport Appraisal submitted to BCC as part of the Call for Sites concludes that 40% of vehicle trips would be contained to Wixams and not travel outside of the town. Of traffic seeking to travel outside of Wixams, some 80% will seek to travel north towards Bedford and the A421, and 20% south towards Luton and other local destinations. This equates to around a 5% increase in traffic on the A6 to the north of Wixams and 1% to the south. These are not significant traffic flow changes and are unlikely to create material impacts on the wider network.
- 3.3 The Baseline Transport Appraisal also considers the potential traffic increases in the context of the assessed performance of local network junctions. The assessments demonstrated that local junctions on the A6 are likely to have sufficient capacity to accommodate development traffic.
- 3.4 It is identified that there are forecast capacity constraints at the A6 / A421 junction, but a mitigation scheme has been developed to improve operation of the network, and there are further opportunities to improve capacity if these are required. Development of Land South of Wixams can assist in bringing forward improvements (or mitigation) to the A6 corridor.
- 3.5 It is accepted that further, more detailed, assessments would need to be carried out as the proposals are developed and to consider the need for any further mitigation schemes. However, at this stage there is sufficient evidence available to conclude that there are no overriding highway capacity constraints to the delivery of the site.
- 3.6 In context, BBC has produced various traffic appraisals as part of its Local Plan Evidence Base (its consultants AECOM presenting various technical assessments). Whilst none consider specifically the impact of development of the Wixams End site, various spatial strategies are assessed which include further growth in Wixams. The assessments demonstrate that there are potential improvements available to address any significant impacts of the growth options, such that there should be no overall constraint to development in this area of the Borough.

- 3.7 Therefore, the BBC and Baseline Transport Assessments demonstrate that the potential impacts of the scheme on highway capacity are not likely to be significant, and moreover that any impacts are capable of being mitigated.
- 3.8 Despite this and recognising the additional work that would be required to confirm the details of any mitigation, the BBC scoring has been retained for the traffic capacity criteria.

**Revised 'Conflict with Traffic/Highway Capacity' Assessment Score: 3**

## SECTION 4 Public Transport Accessibility

### BBC 'Public Transport Accessibility' Assessment Score: 3

- 4.1 The current assessment score for 'public transport accessibility' is set at 3 out of 5. The Transport Access Assessment notes that there are bus stops less than 400m from the site. The Site Assessment Pro-forma suggests '*Stakeholder discussions with bus providers to provide new routes or extensions to serve the site*'.
- 4.2 The Baseline Transport Appraisal presents the existing bus service provision in the vicinity of the site including key destinations served and frequencies, which is reproduced in **Table 4.1**.

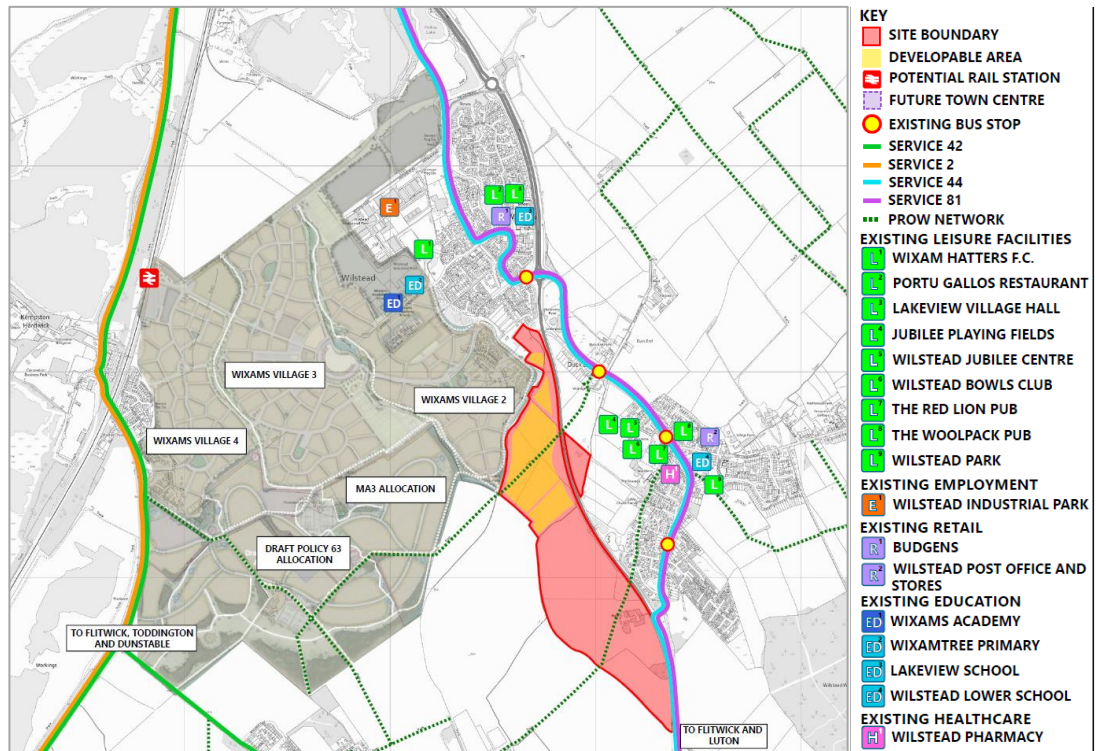
**Table 4.1: Summary of Local Bus Services**

Service	Route	Mon-Fri	Sat
44	Bedford – Clophill – Ampthill – Flitwick – Ampthill – Ampthill Heights	Hourly service	Hourly service
81	Bedford - Luton	Hourly service	Hourly service

Source: Traveline

- 4.3 The combined services offer half hourly services to Bedford, which is the key higher order settlement in the area, and connection to Luton, as well as other locally important destinations.
- 4.4 It is also noted that as part of the wider Wixams community several new bus routes are planned which will improve bus accessibility in the local area. The site offers the opportunity to develop bus service extension to integrate the site and to support existing and planned services. Measures to promote bus accessibility to the site will be developed as the site proposals emerge and there is good opportunity to deliver bus improvements as part of a comprehensive strategy for the continued development of Wixams. In line with the Site Assessment Pro-forma, the detail of any route extensions / new routes needed will be explored with bus operators and the Council.
- 4.5 The Baseline Transport Appraisal also identifies that Bedford St Johns is the closest railway station, located some 6.4km to the north of the site, with the railway station accessible by both bus service no. 44 and no. 81. Other rail opportunities are available at Flitwick, which can be reached via bus service no. 44. Connection to the rail network is therefore available and feasible.
- 4.6 As part of the new community at Wixams, a new railway station is being considered, although that is currently under review as part of the emerging proposals for the East-West rail project. If delivered, this would significantly enhance the accessibility of the area.
- 4.7 A public transport accessibility plan, identifying local facilities, was included in the Baseline Transport Appraisal and is reproduced in **Image 4.1**.

Image 4.1: Accessibility Plan



4.8 Overall, the site is well located to take advantage of existing and potential future public transport provision, which provides connections to key higher order settlements, as well as other locally important destinations. Engagement with BBC and bus operators offers a clear opportunity to enhance public transport connectivity in the future.

4.9 Despite this and recognising that further engagement is needed to determine the scope of improvements to services, the BCC scoring for the public transport criteria has been retained.

**Revised 'Public Transport Accessibility' Assessment Score: 3**

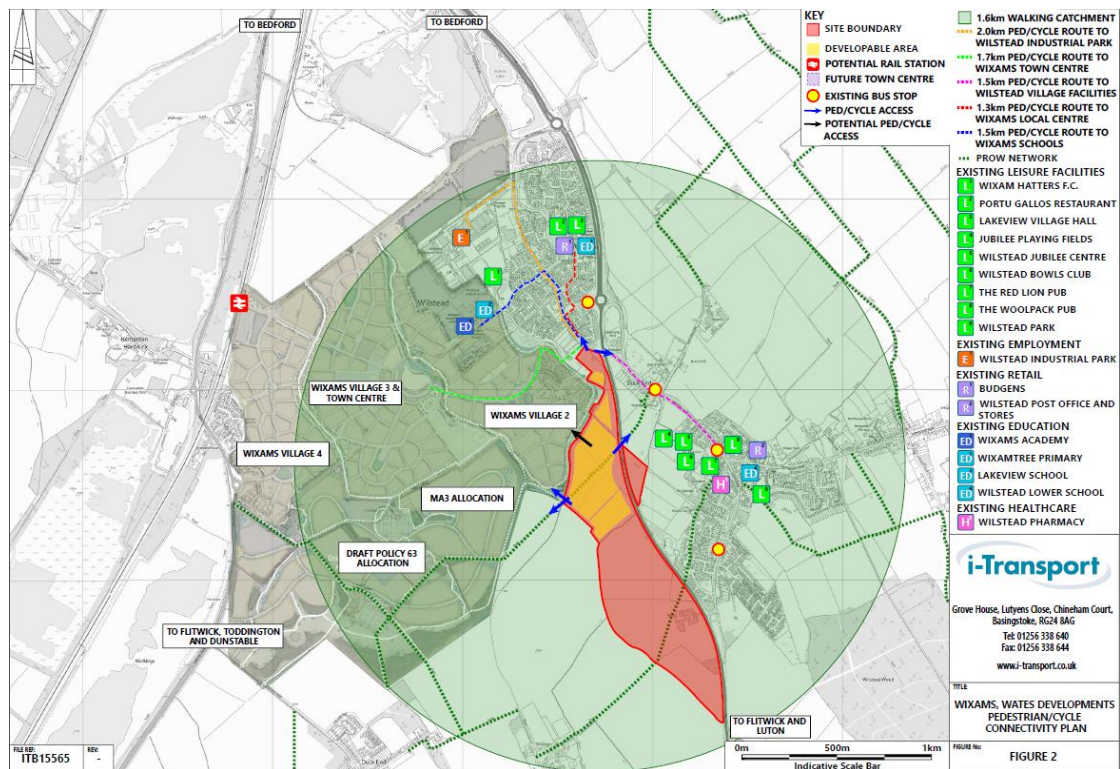
## SECTION 5 Pedestrian Access/Footway Connectivity

### BBC 'Pedestrian Access/Footway Connectivity' Assessment Score: 1

- 5.1 The current assessment score for 'pedestrian access/footway connectivity' is set at 1 out of 5. The BBC Transport Access Assessment notes that there are various pedestrian access points, and that '*accessibility was thoroughly described in the Transport Assessment*'. In addition, the Site Assessment Pro-forma states that '*the A6 would require investment in order to provide for improved pedestrian and/or cycle access*'. It is this later statement which appears to have resulted in an unrealistically low score being attributed to the site for this criterion.
- 5.2 The Baseline Transport Appraisal and Section 4 above sets out the accessibility of the site, which identifies that walking accounts for around 80% of all journeys up to one mile (1.6km), as well as over 30% of journeys up to two miles (3.2k) (NTS 2019). Within realistic walking distances of the site are the key facilities provided (and to be provided) at Wixams and in Wilstead, offering good opportunities for walking trips to be promoted as part of the scheme.
- 5.3 The site proposes to provide a new dedicated pedestrian/cycle access point to the north of the site to Bedford Road (**Image 2.2**). This access will provide connection to the existing footway network and access to Village 1 of the Wixams development and its associated local facilities, and beyond to wider Wixams and Wilstead. Drawing **ITB15565-GA-001** presents the indicative arrangement of this pedestrian access.
- 5.4 Village 1 includes a mixed use local centre, middle school, nursery, creche, village hall and sports facilities. The local centre provides a good range of everyday facilities, including food store, restaurant, primary school and village hall, within ~1km of the site, a 10-12 minute walk, making key facilities fully accessible by foot. A further primary school and secondary school have also been constructed to the west of Village 1, which are ~1.4km walk from the centre of the site.
- 5.5 The connection to Bedford Road will also provide a link to the existing footway to Wilstead village to the east of the A6. This includes a dedicated pedestrian / cycle underpass that travels eastwards under the A6 and a continuous footway provision, with street lighting, to the west of Bedford Road. Wilstead village includes a range of everyday facilities including pharmacy, post office, playing fields and primary school.
- 5.6 Potential pedestrian and cycle connections can be delivered from the western boundary of the site to Wixams Village 2, connecting to the green ring. This will help community connectivity and provide alternative routing for access to local services and facilities.

- 5.7 A further direct pedestrian connection is also proposed to the west of the site into Village 2 of the Wixams development from Footpath 3 of the existing Public Rights of Way (PRoW) network. Improvements will be made to Footpath 3 to ensure the site is well connected to the services and facilities. Village 2 will provide a local centre, which would be ~0.7-1.2km walk from the site.
- 5.8 Footpath 3 also provides a connection to between the site and Bedford Road to the east of the A6. Improvements to enhance the connection across the A6 can be considered as part of the scheme to enhance the attractiveness of the route to Wilstead village.
- 5.9 A pedestrian and cycle connectivity plan, identifying local facilities, is shown in **Image 5.1**. This includes the proposed pedestrian connection points, walking catchment and key walking routes.

**Image 5.1: Pedestrian / Cycle Connectivity Plan**



- 5.10 The lack of footways on the existing alignment of the A6 appear to have been given significant weight in forming the current low BBC scoring and site assessment.
- 5.11 Whilst it is noted that no footways are present on the A6 within the vicinity of the site, given the strategic nature of the A6 and the composition of traffic flows and speeds, provisions for pedestrians along the A6 are less desirable than the delivery of direct, traffic free and attractive connections to Bedford Road, Wilstead and Wixams which are proposed as part of the access strategy. As a result, it not considered necessary to improve pedestrian access directly from the A6 and this should not weigh against the site in the manner currently assessed.

5.12 The Transport Appraisal demonstrate that the site is well located to local facilities and services being delivered as part of Wixams and Wilstead Village. The site would form a natural, well integrated and cohesive extension to Wixams with good pedestrian connectivity.

**Revised 'Pedestrian Access/Footway Connectivity' Assessment Score: 4**

## SECTION 6 Cycle Route Connectivity

### BBC 'Cycle Route Connectivity' Assessment Score: 1

- 6.1 The current assessment score for 'cycle route connectivity' is set at 1 out of 5, with the Transport Access Assessment noting accessibility was thoroughly described in the Baseline Transport Appraisal. In addition, the Site Assessment Pro-forma noted that *'Wixams has a small cycle infrastructure network which could be expanded'* and that the *'A6 would require investment in order to provide for improved cycle access'*.
- 6.2 The emerging masterplan demonstrates a new dedicated pedestrian/cycle access point to the north of the site to Bedford Road. Drawing **ITB15565-GA-001** presents the indicative arrangement of this pedestrian access. This access will provide connection onto quieter alternative routes to the A6, through Village 1 of the Wixams development, which currently provides a number of local facilities, including a mixed use local centre, middle school, nursery, creche, village hall and sports facilities, and connecting to wider Wixams beyond.
- 6.3 The connection to Bedford Road will also provide a connection to existing cycle route to Wilstead village to the east of the A6. This includes a dedicated pedestrian / cycle underpass that travels eastwards under the A6. Wilstead village includes a range of everyday facilities including pharmacy, post office, playing fields and primary school.
- 6.4 These facilities within Village 1 of the Wixams development and Wilstead village are between 1.0-1.5km from the site. LTN 1/20 sets out the national Cycle Infrastructure Design and states that a distance of 5 miles (8.0km) is an achievable distance to cycle for most people, while NTS 2019 showed that the average cycle journeys is 3.3 miles (5.3km). It is therefore considered that Village 1 of the Wixams development and Wilstead village, are within a very comfortable cycle distance, with Bedford Road providing a quiet and safe cycle route.
- 6.5 Given the strategic nature of the A6, provisions for cycle facilities along the A6 are less desirable than the proposed routing through Village 1 of the Wixams development. As a result, it not considered necessary to improve cycle access directly from the A6, nor should this weigh against the delivery of the site when alternative and more suitable connections can be achieved.
- 6.6 The wider Wixams development will deliver further key facilities including:
- A new Town Centre (Village 3) – 1,850m (7 minute cycle)
  - Sports Facilities (Village 2 and 3) – 1,650m – 2,050m (6 minute cycle)
  - Strategic Employment Area – 2,350m (10 minute cycle)



- 6.7 The Baseline Transport Appraisal and further details set out above demonstrate that the site is well located to local facilities and services being delivered as part of Wixams and Wilstead Village, by quiet and safe routes. The site can deliver appropriate, attractive and direct cycle connectivity to the wider area and key destinations to ensure that the scheme offers good connectivity by cycling. Moreover, the scheme offers the opportunity to enhance cycle infrastructure, and to provide improved routes through the site.

**Revised 'Cycle Route Connectivity' Assessment Score: 3**

## SECTION 7 Summary and Conclusion

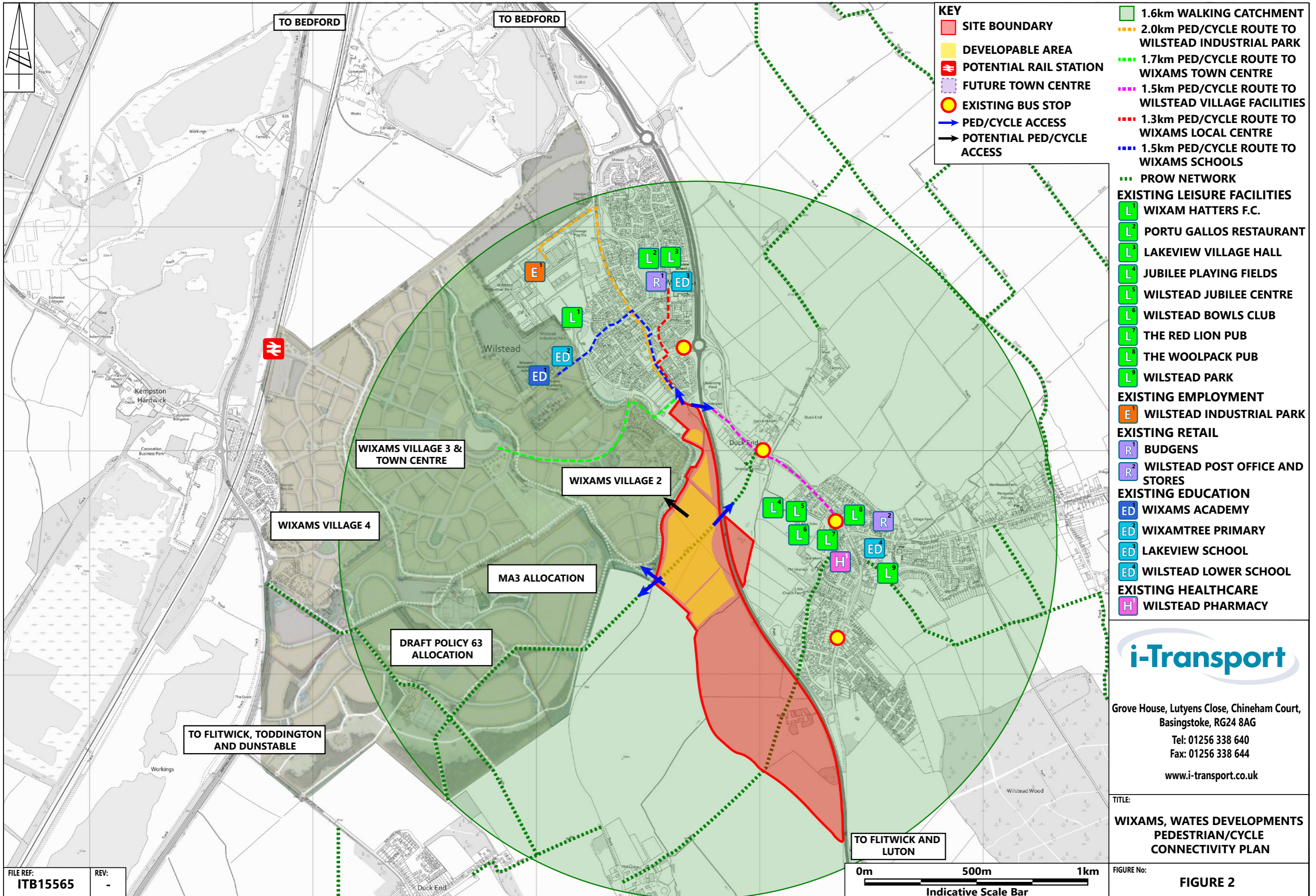
- 7.1 This report provides a response to the BBC 'Call for Sites Site Assessment Pro-Forma' and 'Transport Access Assessment' of Land to the South of Wixams, Bedford (Wixams End) which is being promoted for residential development by Wates Developments. The site is expected to deliver around 415 dwellings as a sustainable extension to Wixams. The BBC assessments scores the site 2.4 out of 5 (weighted) and attributes an Amber RAG status to the scheme.
- 7.2 This report sets out the reasons why the current BBC assessment does not fully address the scheme proposals or opportunities for access and sustainable movement. The site is located in a well connected location, devoid of significant access constraints and can be intuitively integrated into the existing urban fabric of Wixams. The scheme offers a good opportunity to deliver sustainable development and a revised assessment of the scheme has been considered.
- 7.3 The current Transport Access Assessment scores, and the suggested revised scores are summarised in **Table 7.1**.

**Table 7.1: Current and Suggested Assessment Scores**

Criteria	Access	Highway Capacity	Public Transport	Pedestrian Connectivity	Cycle Route Connectivity	Total
<i>Weighting</i>	25%	25%	20%	20%	10%	
BBC Assessment	3	3	3	1	1	2.4
Revised Assessment	<b>5</b>	3	3	<b>4</b>	<b>3</b>	<b>3.7</b>

- 7.4 Considering the evidence and assessment presents a revised assessment score for the site is 3.7 out of 5, which would represent a change in the overall assessment, moving from Amber to Green in the RAG Assessment. This more reasonably reflects the scheme proposal and site opportunity and demonstrates that in transport terms, the scheme should be considered positively.

## FIGURE



- KEY**
- SITE BOUNDARY
  - DEVELOPABLE AREA
  - POTENTIAL RAIL STATION
  - FUTURE TOWN CENTRE
  - EXISTING BUS STOP
  - ➔ PED/CYCLE ACCESS
  - ➔ POTENTIAL PED/CYCLE ACCESS

- 1.6km WALKING CATCHMENT
- 2.0km PED/CYCLE ROUTE TO WILSTEAD INDUSTRIAL PARK
- 1.7km PED/CYCLE ROUTE TO WIXAMS TOWN CENTRE
- 1.5km PED/CYCLE ROUTE TO WILSTEAD VILLAGE FACILITIES
- 1.3km PED/CYCLE ROUTE TO WIXAMS LOCAL CENTRE
- 1.5km PED/CYCLE ROUTE TO WIXAMS SCHOOLS

- EXISTING LEISURE FACILITIES**
- L<sup>1</sup> WIXAM HATTERS F.C.
  - L<sup>2</sup> PORTU GALLOS RESTAURANT
  - L<sup>3</sup> LAKEVIEW VILLAGE HALL
  - L<sup>4</sup> JUBILEE PLAYING FIELDS
  - L<sup>5</sup> WILSTEAD JUBILEE CENTRE
  - L<sup>6</sup> WILSTEAD BOWLS CLUB
  - L<sup>7</sup> THE RED LION PUB
  - L<sup>8</sup> THE WOOLPACK PUB
  - L<sup>9</sup> WILSTEAD PARK
- EXISTING EMPLOYMENT**
- E<sup>1</sup> WILSTEAD INDUSTRIAL PARK
- EXISTING RETAIL**
- R<sup>1</sup> BUDGENS
  - R<sup>2</sup> WILSTEAD POST OFFICE AND STORES
- EXISTING EDUCATION**
- ED<sup>1</sup> WIXAMS ACADEMY
  - ED<sup>2</sup> WIXAMTREE PRIMARY
  - ED<sup>3</sup> LAKEVIEW SCHOOL
  - ED<sup>4</sup> WILSTEAD LOWER SCHOOL
- EXISTING HEALTHCARE**
- H<sup>1</sup> WILSTEAD PHARMACY

**i-Transport**

Grove House, Lutyens Close, Chineham Court,  
Basingstoke, RG24 8AG  
Tel: 01256 338 640  
Fax: 01256 338 644  
www.i-transport.co.uk

TITLE:  
**WIXAMS, WATES DEVELOPMENTS  
PEDESTRIAN/CYCLE  
CONNECTIVITY PLAN**

FIGURE No:  
**FIGURE 2**

FILE REF:  
**ITB15565**

REV:  
-

0m 500m 1km  
Indicative Scale Bar

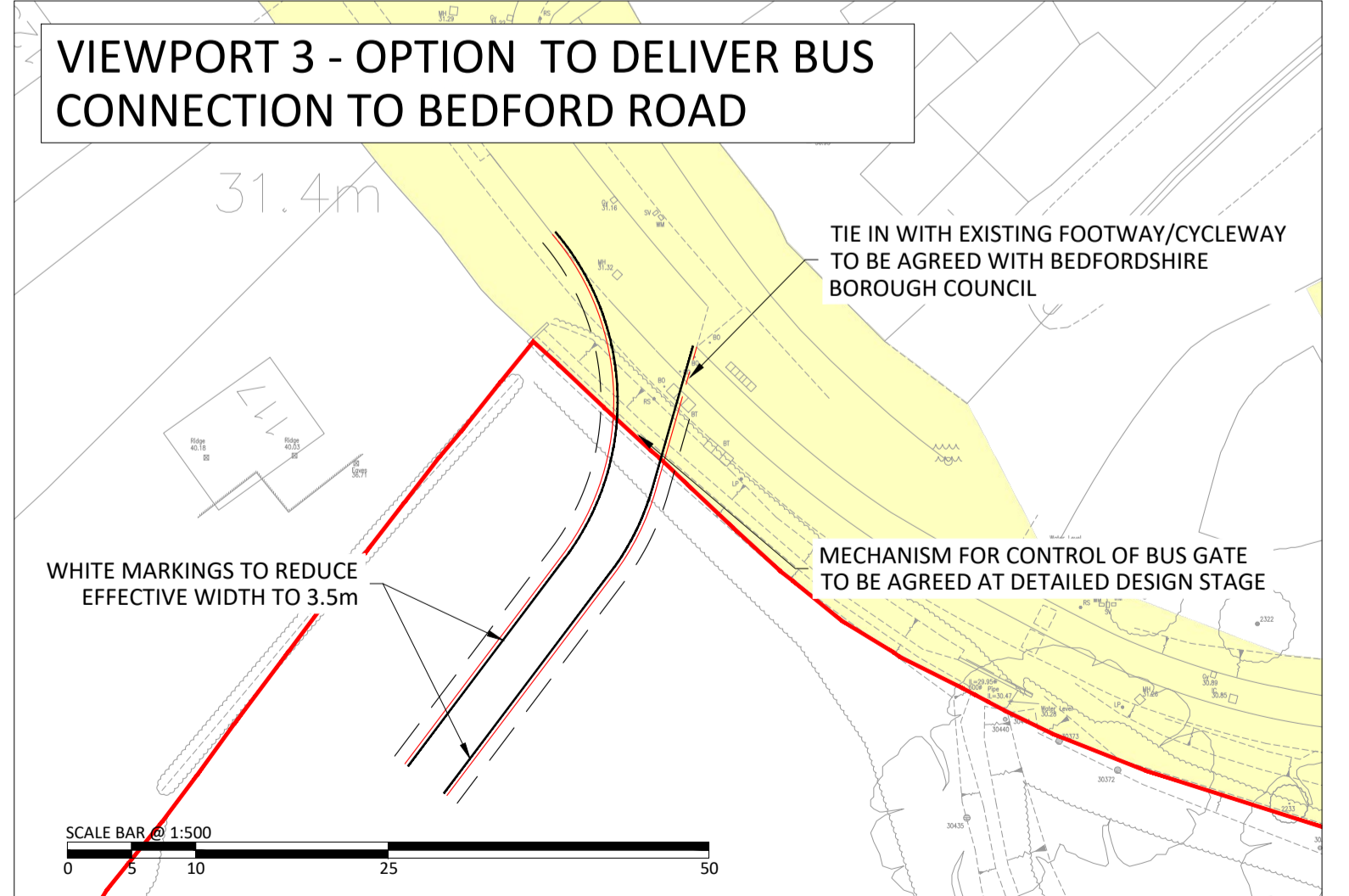
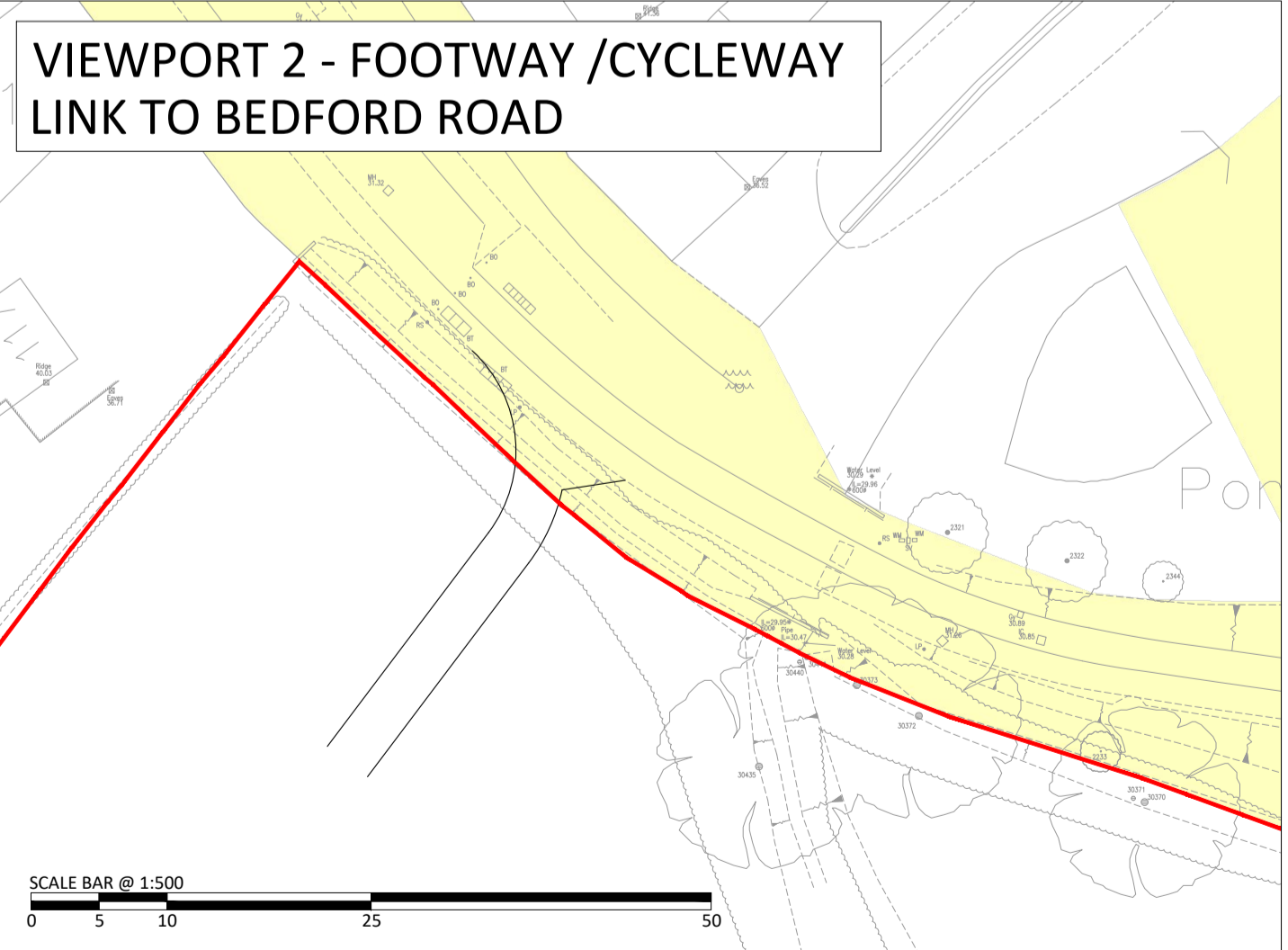
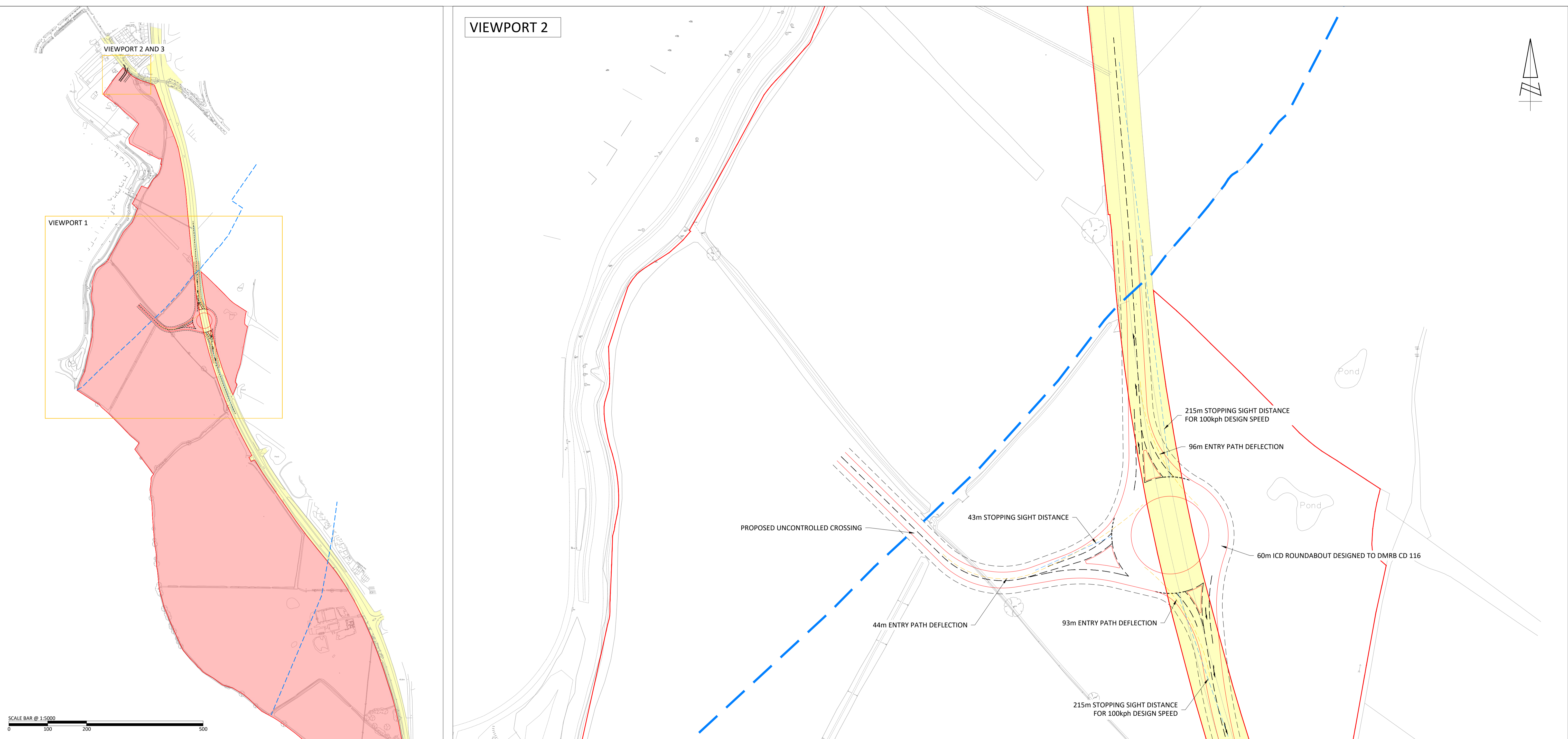
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# DRAWING

VIEWPORT 2

VIEWPORT 1

VIEWPORT 2 AND 3



- KEY:
- SITE BOUNDARY
  - EXTENTS HIGHWAY BOUNDARY
  - — — PUBLIC RIGHT OF WAY

REV	DATE	BY	DESCRIPTION	CHK	APP	PROJECT	CLIENT	DRAWN	CHECKED	APPROVED
			FOR INFORMATION			LAND EAST OF WIXAMS, WIXAMS	WATES DEVELOPMENTS	MC	MC	TW
PROJECT No: ITB15565								SCALE @ A1: AS SHOWN		DATE: 05.03.20
DRAWING No: ITB15565-GA-001								REV: -		

