

TECHNICAL NOTE

Job Name: Kings Meadow View, Reading

Job No: 332110588

Note No: TN003

Date: May 2025

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Reviewed By: Simon Speller

Subject: **Transport Response to Consultee Responses by Reading Borough Council**
Transport Development Control and Active Travel England

1. Introduction

- 1.1. This Technical Note (TN) has been prepared by Stantec UK in connection with the development proposals at Forbury Retail Park, known as Kings Meadow View (Ref. PL/24/0958).
- 1.2. As part of the planning submission, a Transport Assessment (TA) was prepared to assess the development's transport and highways impacts, as well as a Framework Travel Plan (FTP). This TN provides a response to the Reading Borough Council's comments by the Transport Development Control Officer on highways and transport matters dated March 20th, 2026, and Active Travel England's comments dated March 2nd 2026.
- 1.3. The RBC Transport Development Control comments included a number of comments and queries relating to the Parameter Plans and Design Code, which are part of the controls on the application. This note does not address those matters, which will be addressed separately.

2. Active Travel

Walking and Cycling Trip Generation and Assignment

- 2.1. ATE stated in their comments that:

“ATE is pleased with aspects of the trip generation, especially the assumed distribution of walking and cycling trips. However, ATE requests this to be broken down to provide an hourly distribution for both walking and cycling instead of just relying on peak time figures. This is particularly important to ensure school journeys are accounted for correctly.”

Stantec Response:

Tables 2-1 and 2-2 below provide hourly distributions for walking and cycling trips under the proposed scheme, which are in accordance with the distribution percentages shown in TA Table 8.3, and the routes are shown in **Figure 2-1**. This shows a demand for active travel across the day, including the early afternoon school period.

Time Period	Forbury Road (West)	Across Vastern Road	Across Forbury Road	Forbury Road (South)	Napier Road	Kenavon Drive	Total
07:00-08:00	23	11	11	23	23	23	92
08:00-09:00	44	22	22	44	44	44	176
09:00-10:00	49	24	24	49	49	49	195
10:00-11:00	55	27	27	55	55	55	220
11:00-12:00	63	31	31	63	63	63	251
12:00-13:00	72	36	36	72	72	72	287
13:00-14:00	66	33	33	66	66	66	265
14:00-15:00	68	34	34	68	68	68	273
15:00-16:00	67	34	34	67	67	67	270

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16:00-17:00	72	36	36	72	72	72	286
17:00-18:00	74	37	37	74	74	74	298
18:00-19:00	61	31	31	61	61	61	244

Table 2-1: Proposed Development Walking Trip Generation - Distribution

Time Period	Forbury Road (West)	Across Vastern Road	Across Forbury Road	Forbury Road (South)	Napier Road	Kenavon Drive	Total
07:00-08:00	2	1	1	2	2	2	9
08:00-09:00	3	1	1	3	3	3	11
09:00-10:00	2	1	1	2	2	2	7
10:00-11:00	2	1	1	2	2	2	7
11:00-12:00	2	1	1	2	2	2	6
12:00-13:00	2	1	1	2	2	2	9
13:00-14:00	2	1	1	2	2	2	8
14:00-15:00	2	1	1	2	2	2	8
15:00-16:00	2	1	1	2	2	2	7
16:00-17:00	2	1	1	2	2	2	10
17:00-18:00	3	2	2	3	3	3	13
18:00-19:00	3	1	1	3	3	3	11

Table 2-2: Proposed Development Cycling Trip Generation – Distribution

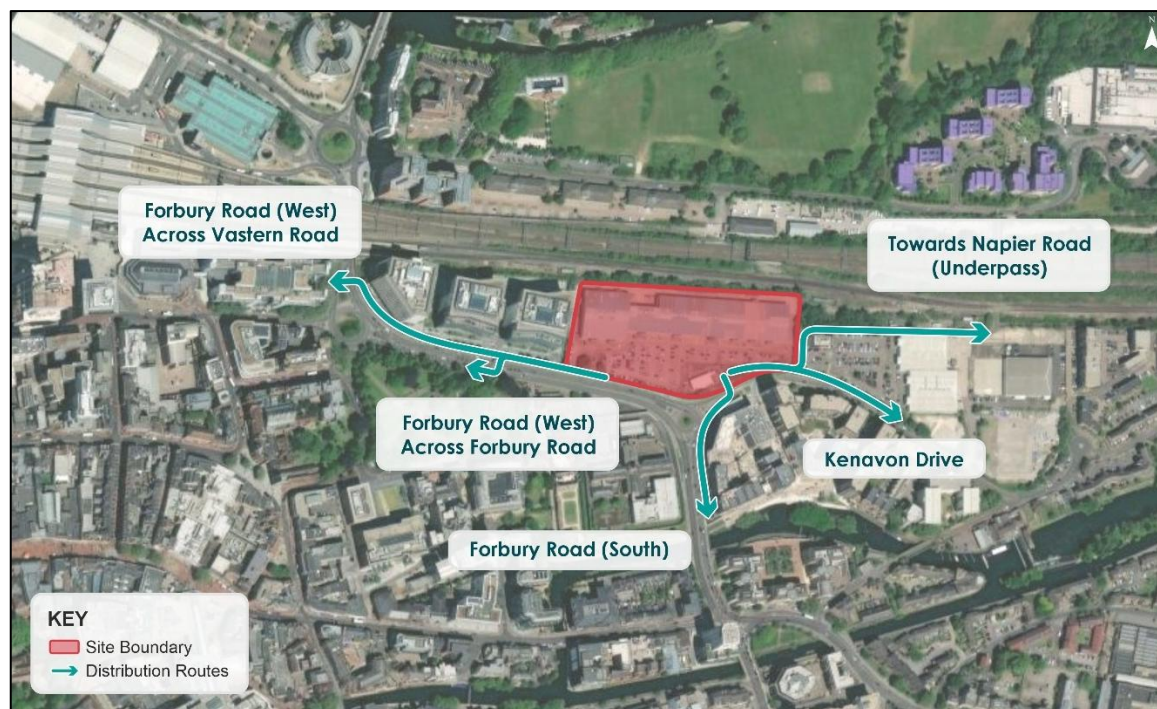


Figure 2-1: Active Travel Distribution Routes

2.2. ATE stated in their comments that:

“Whilst ATE is satisfied with the active travel audit in terms of its presentation and details, especially regarding walking routes to schools, it is regarded that the assessment is based on a minimum viable provision. ATE encourages the applicant to consider interventions which can be used to increase active travel mode share and notes that given the urban context of the development site it is important to consider a 'vision-led' approach (as outlined by NPPF 109)”

Stantec Response:

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A Framework Travel Plan (FTP) was submitted with the Transport Assessment. The FTP sets out several aims, one of which is to “encourage greater use of more sustainable means of travel, particularly cycling and walking.” This is supported by the outline parameter plan and design code for the Site, which includes a mix of land use with local retail provision, as well as an active travel link across the site. Further provision is made to cross Kenavon Drive for onward travel via the new development at Huntley Wharf to the canal. There are targets to monitor progress towards this Travel Plan objective.

As part of the Reserved Matters Applications (RMAs), a Detailed Travel Plan will be submitted to provide further details on implementation and monitoring to increase, where possible, the proportion of active travel trips generated by the proposed development.

2.3. ATE stated in their comments that:

“ATE considers the 2011 Census for the travel plan targets to be outdated and requests the use of the DfT National Travel Survey (2024.)

Whilst the targets show a reasonable mode share for active travel and public transport, ATE considers 20.4% car modal share to still be high considering the city centre location and connectivity of this site, as well as the limited parking spaces. Whilst it is accepted that a certain percentage of car journeys is unavoidable, ATE encourages the applicant to be more ambitious in this regard considering that there will only be 130 car spaces available for 700 units (roughly 18%) and it should be assumed that most of those with access to a car are unlikely to use it for every journey.”

And RBC state in their comments that:

“In terms of the proposed mode share, the applicant has applied Census 2011 Travel to Work data. However, the Highway Authority requests that the applicant bases the proposed mode share on the most up-to-date and representative dataset available to reflect current travel behaviour. The applicant is therefore required to undertake a comparison assessment using the DfT National Travel Survey (2024) to ensure that the proposed mode share reflects post-pandemic travel patterns. While it is acknowledged that the National Travel Survey does not capture all details of onward or multi-modal journey stages, the applicant may also strengthen the evidence base by undertaking local survey assessments for comparable sites.”

Stantec Response:

A comparison assessment using the DfT National Travel Survey (NTS) (2024) and the Census 2011 Travel to Work data has been undertaken and is presented in **Table 2-3**. The Census data has been selected as the Middle Super Output Area (MSOA) in which the Site is located. NTS data have been selected based on the Region of Residence and the Rural-Urban Classification for comparison.

Mode	2011 Census	2024 National Travel Survey	
	QS701EW	NTS9903a	NTS9903b
	MSOA: E02003399	By Rural-Urban Classification of Residence: Urban - Nearer to a major town or city	By Region of Residence: South East
Walk	29%	30%	28%
Cycle	3%	2%	2%
Car Driver	30%	37%	42%
Car Passenger	3%	20%	20%
Motorcycle	0%	0%	0%
Bus	11%	5%	3%

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Train	20%	4%	3%
Other	1%	2%	2%
Total	100%	100%	100%

Table 2-3: 2011 Census (QS701EW) and 2024 NTS (9903a/b) Mode Shares

It is acknowledged that the Census 2011 Travel to Work data does not capture post-pandemic travel patterns, and the 2021 Census Travel to Work data cannot be used as it was asked within a period significantly impacted by Covid, however, the 2011 Census provides a valuable source of local data based upon the location of the development as opposed to the NTS which is a much less localised and broader dataset.

Both data sets show the same level of active travel, with 32% of journeys by walking or cycling.

The NTS data shows low levels of public transport use: 5% by bus and only 4% by train. This site is close to a wealth of bus services in the town centre and also within walking distance of the station. This is reflected in the census data with more appropriate proportions against those modes.

The car driver mode share is lower for the census than the NTS. This better reflects the site's location and is considered a lower, more appropriate car mode share. The NTS (given its limitations) results in a higher car mode share, fails to reflect the site's location and car parking level proposals, and is contrary to ATE's stated position.

Stantec consider the NTS does not provide a representative basis for the residential mode share for the proposed development, as the data is not area-specific, unlike the Census 2011 data. It is also not reflective of the proposed development's mode share, as it indicates a higher car driver and car passenger mode share, which is not related to the Site's sustainable location and low parking provision. The low parking provision reflects the site's sustainable location and will not enable a higher car driver mode share, as shown in the NTS data.

Following the comparison of NTS and Census data, Stantec are satisfied that the Census data provides the most suitable data source to inform the modal split targets and assessment. The targets will be revisited and refined, if needed, once the site is occupied and the initial travel survey has been conducted and reviewed. The refined targets will be suitably ambitious to achieve the aims and objectives of the Framework Travel Plan and reflect the local active travel and public transport infrastructure. The assessment also provides a robust basis for assessing the impacts of the proposals on the local highway network in line with the low levels of parking provided.

2.4. ATE stated in their comments that:

"ATE requests that specific remediation measures be provided at this stage to be enacted if the travel plan targets are not met. This could take the form of additional funding for active travel delivered to the LHA for example."

Stantec Response:

Framework Travel Plan Section 7.3 states, *"remedial measures would only be required if the development consistently fails to meet the targets set out within the TP. The remedial measures would consider why the targets have not been met and introduce new measures to address them"*.

Any remedial measures will only be required if targets are not being met and will need to be proportionate to the extent of the difference that arises and whether the impacts of this are material; it is impractical to define the scope and scale of remedial measures before the Site is operational, and any evidence of non-compliance has been gathered. The measures will need to be agreed upon between the TPC and RBC. It is considered premature to attempt to define remedial measures within a Framework Travel Plan. Further details will be provided in the detailed Travel Plan with the reserved matters applications.

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Cycling

2.5. ATE stated in their comments that:

"Fornaby Road [Forbury] is designated as an "Orbital" cycle route as part of the Reading LCWIP, but it is unclear how this will be delivered. The carriageway is very wide with four lanes of traffic making on carriageway cycling unsafe, however there is plenty of available space. ATE would like to see this be addressed in conjunction with the LHA and would like to reiterate that shared use is generally not considered appropriate as per LTN 1/20, especially in such an urban area with high expected pedestrian and cyclist flows"

Stantec Response:

The proposals will provide a new cycle route through the southern side of the site and within the site. This is in addition to the shared use provision on Forbury Road, which would be retained.

The LCWIP describes the orbital proposals as being either "Light touch segregation (where possible)" or "Shared use facilities where segregation is not possible".

There is a shared-use provision on Forbury Road.

RBC, as the highway authority, would need to promote any wider scale and more significant re-provision of road space for cycling, as this would require a significant remodelling of the local roads. However, this does not appear to be in line with the LCWIP.

2.6. RBC stated in their comment that:

"The application includes a cycle route that runs along the site's internal southern edge. The cycle path will route between the east and west site accesses, with improvements to the western access point to allow pedestrians and cyclists to access the site. It is stated that one TPO tree will have to be removed to facilitate the indicative cycle route and changes to the eastern access junction. Drawing 50582-STN-HGN-SW-DR-CH-0011-P02 in Appendix C of the Transport Assessment illustrates how the indicative cycle route could be delivered in accordance with the Parameter Plans.

However, LTN 1/20 establishes that a two-way cycle track should generally be at least 3.0 m wide. This width must be increased where flows are high or where there are vertical obstructions (such as walls, fences, railings, tree lines, or other fixed features), as additional space is required to maintain safe passing distances and avoid conflict. Therefore, the proposed design does not comply with these requirements."

Stantec Response:

The **Appendix A** design is indicative. It is 2.3m in width, which meets and exceeds the minimum width of 2.0m in LTN1/20. It also does not route the cycle route against vertical obstructions. The flows for cycling are not high from the development (as it is easier and quicker to walk shorter distances, such as to the station). The indicative design meets the standards.

2.7. RBC stated in their comments that:

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"Further, the cycle path terminates before it reaches the eastern access road with no safe transition between the proposed off carriageway cycle facility and the on-carriageway cycle route on Kenavon Drive. The indicative cycle route connection onto the eastern access road creates confusion and forces cyclists to merge into traffic unexpectedly. Therefore, the cycle path should be extended across the access road to meet the on-carriageway cycle route to provide a clear, continuous connection and establish safe priority across the access road. A compliant raised table design would provide a continuous surface to indicate cycle and pedestrian priority while reducing vehicle speeds and improving safety. The cycle route would need to be part of the detailed design as this would form part of the full element of the planning application as access is a material consideration. The Highway Authority requests that revised plans are submitted illustrating a 3m (plus clearance) continuous cycle link across the eastern access road with an appropriate transition onto the on-carriageway cycle route in accordance with LTN 1/20. Visibility splays should also be illustrated to ensure cyclists have a clear line of vision before crossing the eastern access road without being impacted by trees or vegetation."

Stantec Response:

At present, there is no cycle provision to the east of the eastern access, as the cyclists would return to the highway, as shown in the indicative design. However, RBC have allocated the site to the east for future redevelopment, and once that is delivered, there would be scope for a raised table crossing to be provided to tie into that site. A drawing has been prepared showing an indicative potential future raised table crossing when the Site to the east of Forbury Retail Park were to come forward for redevelopment. The drawing also indicates visibility splays as requested. This is included in **Appendix B**.

The Applicant is willing to commit to providing a connection to the allocated site to the east if it has come forward at the time of construction. If these proposals have not come forward, the originally proposed cycle layout is more appropriate given the context. The indicative layout serves as a starting point but is subject to change depending on the development proposals of the allocated site.

2.8. ATE stated in their comments that:

"Within the site, ATE requests cycle and pedestrian provision to be separated to reduce the risk of conflict, and ensure the route is LTN 1/20 compliant to allow people to use it as an onward connection."

Stantec Response:

The active travel provision is separated, comprising a cycleway 2.3m wide and a footway 2.2m wide, with a combined width of 4.5m for the active travel corridor. This is shown in the indicative drawings in **Appendix A**.

The indicative cycle route is compliant with LTN 1/20. It is a constrained route and exceeds the absolute minimum of 2.0m at constraints as set out in LTN 1/20 Table 5.2. The cycle route design is indicative and will be reviewed and updated once the detailed layout is available as part of the reserved matters application. If further width is possible, this will be provided.

The proposed development, as shown in **Table 2-2**, will generate a peak of 13 two-way cyclists an hour, while neighbouring sites and communities will generate trips; it is expected that this will not exceed the 300 cyclist thresholds presented in LTN 1/20 Table 4.2.

Furthermore, LTN 1/20 Table 6-3 states that for shared-use routes with cyclist and pedestrian flows up to 300, a minimum width of 3.0m is required; for flows over 300, a minimum width of 4.5m is required. The indicated design for the proposed active travel route meets those dimensions.

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As such, the proposed route and indicative design is considered to align with LTN 1/20. If there is an opportunity to increase its width further, this will be investigated as part of the reserved matters stage, once the design of the buildings is fully understood.

2.9. ATE stated in their comments that:

“Furthermore, ATE would welcome the widening of the eastern connection towards the railway underpass to provide a segregated pedestrian/cycle link in line with LTN 1/20 principles. The current path is narrow and contained and invites pedestrian and cyclist conflict. This provides access to the Tesco supermarket and further connections to the north.”

Stantec Response:

The access route along the western and northern boundaries of McDonald's is not within the Site or our client's ownership. It is in third-party ownership. That site is allocated for future redevelopment, and when this arises, it will offer the opportunity to deliver these improvements.

The site proposals include a food supermarket which would provide for new residents as well as residents of the adjacent developments.

2.10. RBC stated in their comments that:

“The Highway Authority has reviewed the observations provided by Active Travel England regarding cycling infrastructure in the vicinity of the site. It is noted that the principal route connecting the site to the train station contains sections of constrained width, which create potential conflict between pedestrians and cyclists. Furthermore, there is currently no safe or continuous cycle route to the south providing a crossing over the River Kennet.

Given that the proposed development is expected to increase both pedestrian and cycle movements in the surrounding area, the applicant is requested to propose appropriate improvements to the local cycling network. These should specifically address the issues highlighted by Active Travel England and be designed in accordance with the principles and standards set out in LTN 1/20.”

Stantec Response:

The forecast level and distribution of both walking and cycling to the station are summarised in this note for each hour. The provision of existing facilities is considered adequate to cater for the additional demand forecast. The proposals, therefore, are not expected to give rise to unacceptable impacts that would be required to be ameliorated in this regard. Some of this route has only been relatively newly redesigned with the delivery of the Offices fronting Forbury Road. Good crossing facilities are in place to meet the anticipated additional demand.

The proposed development provides an off-carriageway cycle route through the Site itself, a notable improvement from the lack of any cycle provision along the Site frontage, and an improved crossing point on Kenavon Drive, which allows for access to Huntley Wharf (Palmer Street), which connects to the northside of the River Kennet.

3. Crossing of Forbury Road

3.1. ATE stated in their comments that:

“ATE requests improvements to the western leg of the Forbury Road/Kenavon Drive roundabout to improve walking routes to the bus stop on Forbury Road. It is noted that this crossing is uncontrolled, has multiple wide lanes and lacks tactile paving. This position is supported by the LHA. A controlled crossing here would be preferable to cater for the desire line towards the bus stops and access to Kings Road.

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ATE supports a crossing on Kenavon Drive in the location outlined."

RBC also stated in their comments that:

"The Transport Assessment asserts in paragraph 6.7.1 that the possibility of additional pedestrian crossings across Forbury Road was investigated but it was concluded that there was no justification or need for further crossings given the existing crossings on Forbury Road. However, no evidence has been submitted by the applicant to justify why a formal crossing cannot be provided in this location.

It is the Highway Authority's view that improvements should be made to the western arm of the Forbury Road/Kenavon Drive roundabout to improve crossing facilities on the desire line for those accessing bus stops on Kings Road or other key destinations to the east of the town centre. This is supported by the response from Active Travel England states "ATE requests improvements to the western leg of the Forbury Road/Kenavon Drive roundabout to improve walking routes to the bus stop on Forbury Road. It is noted that this crossing is uncontrolled, has multiple wide lanes and lacks tactile paving. This position is supported by the LHA. A controlled crossing here would be preferable to cater for the desire line towards the bus stops and access to Kings Road".

Given that any required pedestrian crossings would need to be secured through a S106 Agreement, the feasibility of delivering a formal crossing in this location must be fully assessed as part of the application, and where appropriate, its provision should be secured through the planning process."

Stantec Response:

The site location is such that the clear desire lines from the site are west to the existing crossings on Forbury Road or east and south to the canal area or underpass crossing north under the railway, see **Figure 3-1**.

To the west of the roundabout is not considered to be a strong desire line, as it leads to the former prison and prison walls. The bus stop referred to has services that terminate in the town centre (see details below). It is unlikely many people would walk to that bus stop to catch a bus when the centre of the town is within a short walking distance, as that would not be attractive.

There is an existing crossing c.190m to the west of the informal crossing. This is provided on the desire line to access the town centre via Forbury Gardens Park.

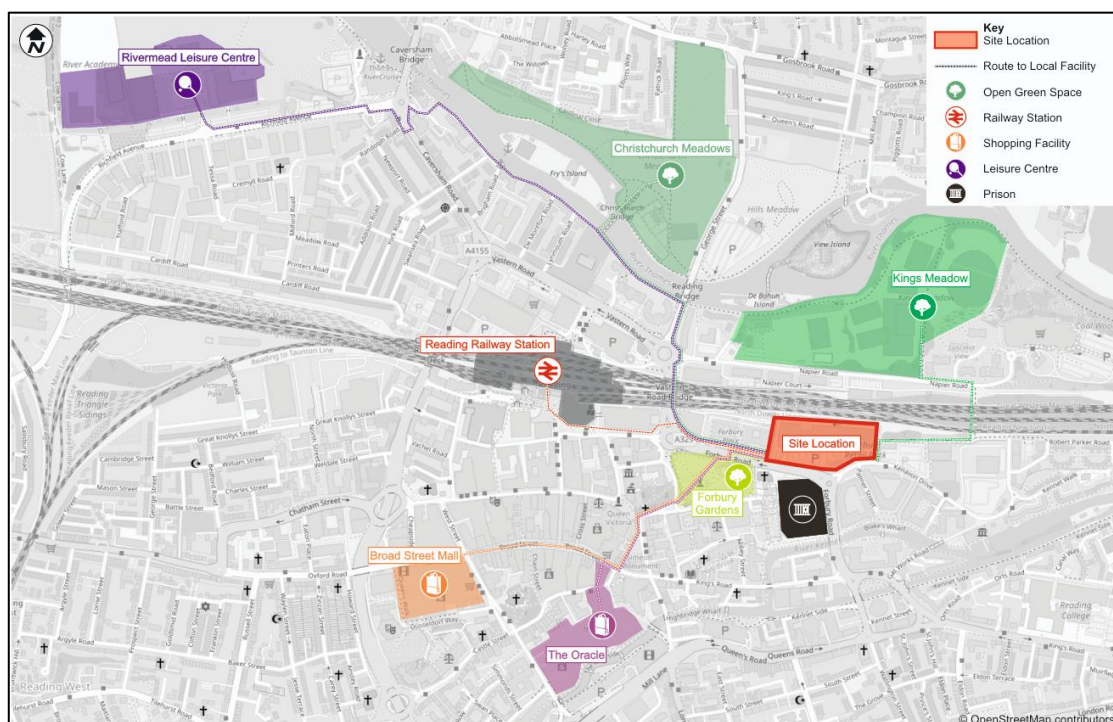


Figure 3-1: Site to Local Amenities Desire Lines

Stantec have undertaken some investigation of this issue in the past. This was summarised in a technical note, **Appendix C**, submitted to RBC and discussed in pre-application meetings in relation to the previous application on the site (application 230822). This note pre-dated the former prison's future being fully understood and was written when the rationale for crossing the road in this location would have been more relevant than it is now. None of the solutions to provide a crossing immediately west of the roundabout is able to deliver a crossing to the standard or agreed upon by RBC.

The layout and proximity of the roundabout provide safety challenges for the provision of a new formal crossing. In accordance with CD116, a signalised crossing should be 20m from the give way marking to enable sufficient storage space and reduce signal confusion. This would result in a proximity of less than c.180m to the existing crossing, and such proximity negates much of the benefit of any signalised provision in this location.

Given the very limited destination served, the bus stop would not serve residents in the way stated (as they would much more likely walk to the town centre on the desire lines), the prison walls mean that there is no wider destination served and the significant technical / safety constraints (see above), Stantec have concluded that this crossing would not be desirable. The crossing on Kenavon Drive is proposed as it is both deliverable and serves a desire line for new and existing residents. The development proposals include an improved crossing on Kenavon Drive that serves movements routing east and southeast of the Site.

The Huntley and Palmers (N-bound) bus stop of concern to ATE is served by bus services 12, 13 & 14 orange, 127, 128, 129 and 850.

- Service 12 – Reading town centre and Twyford.
- Services 13 and 14 – Circular services between Woodley and Reading town centre.
- Services 128 and 129 – Reading town centre, Woodley, Twyford and Wokingham.

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- Service 850 – Reading town centre, Twyford, Henley-on-Thames, Marlow and High Wycombe.

The Site is located c.650m from Reading Railway Station and on the edge of Reading town centre. The proposed development takes advantage of the location, and opportunities for sustainable travel and the desire lines are catered for by existing crossings on Forbury Road. As such, it is anticipated that trips to the town centre and railway station will be undertaken by active travel modes.

An improved crossing on the western arm of the Forbury Road / Kenavon Drive roundabout to accommodate pedestrian desire lines to the Forbury Road bus stop is not considered necessary and would provide limited benefit, given that the prison walls block onward travel, See **Figure 3-2** and the bus stop is northbound and only serves the town centre, which is more easily accessible by simply walking west.

Kings Road is not anticipated to be a major destination for residents to travel towards. The requested crossing would only serve Kings Road towards the River Kennet, as beyond this, travel through Forbury Gardens / Huntley Wharf would be more convenient. This area is mixed residential, with some small-scale retail, leisure and commercial provision. Higher quality and more abundant provision of all the King's Road provisions can be found in the town centre, which is in closer proximity to the site.

In addition, it would come with highlighted technical challenges and may require relaxations of standards. Bus services with destinations in the opposite direction are accessible using the crossings east of the roundabout. The development will be well served by the combination of existing provision and the proposed Kenavon Drive crossing.

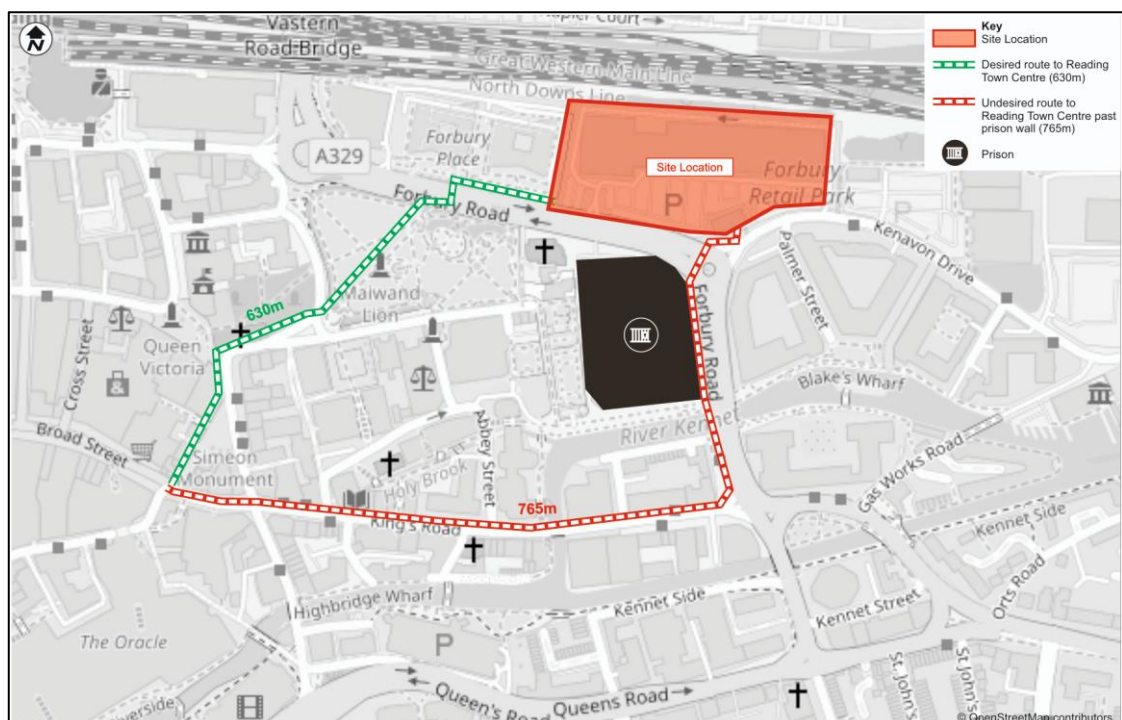


Figure 3-2 Desire Lines to Edge of Town Centre

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4. Public Transport

4.1. ATE stated in their comments that:

"A variety of bus services are available around 250m to the south on Forbury Road. ATE requests alterations to be made to ensure these bus stops meet LTN 1/24 Bus User Priority (6.10, p49-50) through the installation of a shelter, seating and real time bus information."

Stantec Response:

The bus stop on Forbury Road only has services that terminate in the town centre and walking the wrong way to this bus stop to then catch a bus to the town centre is not likely to happen, as discussed earlier. The nearest bus stops in the opposite direction are on Kings Road (Huntley & Palmer stop 4), and these have shelters.

5. Vehicle Access

5.1. RBC stated in their comments that:

"Visibility splays of 2.4m x 43m in both directions should be provided as the eastern access is now to be utilised as an entrance and exit whereby it has previously been utilised as an entrance only. The Highway Authority requests that the visibility splays are submitted for review."

Stantec Response:

An updated drawing has been prepared that provides visibility splays of 2.4m x 43m in both directions from the eastern access. This is included in **Appendix D**.

5.2. RBC stated in their comments that:

"The western portion of the Site will include a new food store. The Design Code (Section 5.3 Links and Connections) identifies that a 6m roadway and 2m footway service route will be provided from the eastern access point, along the service road to the rear of the commercial unit, where there will be a servicing area. The submitted swept-path analysis demonstrates manoeuvrability for a 12 m rigid vehicle with the intervisibility sight line shown by the blue dashed line. The intervisibility sight line will ensure that drivers on the internal road can see approaching vehicles. However, it appears from the tracking drawings that the give way line on the approach to the bend could be set back further to ensure vehicles waiting to enter the site do not conflict with vehicles exiting the site. Alternatively, the kerb line geometry could be amended to reduce the need for drivers to swing widely into opposing lanes or conflict areas."

Stantec Response:

In accordance with MfS, the visibility splay has been measured 2.4m from the give-way line to the front of the oncoming vehicle. The intervisibility splay indicates the combined sight lines. On this basis, the give-way lines are optimised and should not be revised. This was as set out and submitted as Appendix D to the Transport Assessment.

5.3. RBC stated in their comments that:

"Further clarification is requested regarding how day-to-day deliveries to the residential blocks—such as food delivery services, small parcel couriers, or taxis—are intended to operate. These types of deliveries typically seek to stop as close as possible to the building entrance. However, it is not clear from the Design Code or the Parameter Plans (including Parameter Plan 14 – Proposed Servicing and Access) how such short-stay, ad-hoc deliveries are to be routed within the development."

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Stantec Response

A Delivery & Servicing Management Plan will be submitted at the appropriate reserved matters stage, providing further clarification on this matter. Dedicated servicing areas are proposed along the southern edge of the service road.

6. Waste Strategy

6.1. RBC stated in their comments that:

"The Design Code states that a detailed waste management strategy is to be addressed within the subsequent RMA, and that refuse storage for all residential blocks should be provided at basement level. However, the Design Code does not clearly identify the servicing routes for deliveries or waste collection associated with these residential blocks."

The Transport Assessment (paras. 6.3.8–6.3.9) notes that, when required, servicing vehicles may enter the public realm to service the southern row of blocks, under management by the Estate Management Team. Nonetheless, the information provided within the Design Code, parameter plans and the supporting Waste Strategy document is insufficient to establish how servicing access will operate across the full extent of the residential development

The Waste Strategy document states that residential collections will be undertaken from a designated collection point and returned to the bin store area after collection. However, access for refuse collection vehicles (RCV) should be considered at the outline stage as this will impact on the design of the streets and the layout of the buildings. Further clarity and confirmed routing arrangements are therefore required to ensure that servicing can be safely and acceptably accommodated without compromising the functionality of the public realm. The pedestrian and cycling links must not be compromised by adjacent functions such as servicing, and appropriate serving/delivery bays must be identified within the Design Codes document."

Stantec Response:

Swept path analysis of a refuse collection vehicle was included in Appendix D of the Transport Assessment. Servicing bays are proposed on the southern edge of the servicing access route. The servicing route will not be available for general traffic. The Management Team will control and manage this. This will be set out in the Delivery & Servicing Management Plan, which will be submitted at the appropriate reserved matters stage, providing further clarification on this matter

6.2. RBC stated in their comments that:

"Emergency access is permitted via both vehicular accesses, with the commercial section provided through the western access point and the residential section provided through the eastern access. It is stated that emergency vehicles will access the development via the internal paths within the site to minimise the distance between the emergency vehicles and the residential tower blocks. This is deemed acceptable in principle however full swept path analysis will be required at the reserved matters stage to determine the footpath widths required. However, clarification is sought regarding how general vehicles would be prevented from using these internal paths for convenience or how deliveries would be made to the residential units given that delivery vehicles would attempt to get as close as possible for deliveries to the residential units."

Stantec Response:

As requested, a full swept path analysis will be provided at the reserved matters stage to determine the footpath widths required. Controls will be implemented to prevent general vehicles from using the internal paths. Possible controls could include physical bollards or gates, or the use of ANPR and signage. This will be defined at the reserved matters stage.

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7. Trip Generation

7.1. RBC stated in their comments that:

"The applicant contends that a significant proportion of movements will be wholly internal, with residents travelling directly between their homes and the on-site store. On this basis, an internalisation rate of 35% has been adopted. However, no evidence in the form of benchmarking against comparable mixed-use schemes or TRICS-based internalisation analyses has been submitted for review.

The Highway Authority requires the applicant to submit robust evidence to justify the proposed 35% internalisation rate, which is considered significantly optimistic for a development of this scale. While it is accepted that some residents will utilise the on-site food store for occasional top-up shopping, this alone does not substantiate such a high internalisation assumption for a scheme comprising up to 700 dwellings and circa 3,000 sqm of retail floorspace.

In the absence of robust supporting evidence, the Highway Authority cannot accept the proposed rate. The current submission provides no justification, and therefore the internalisation assumption must be treated as unreliable for the purposes of assessing trip generation.

Further clarification is required in relation to Table 7.5, which presents the internal and external person trip generation. It is not evident how the stated internalisation rate has been applied to the trip figures presented in Table 7.4. The methodology used to derive the values presented in Table 7.5 is unclear based on the information provided"

Stantec Response:

For absolute clarity, the 35% internalisation rate is not applied to all trips generated by the proposed residential blocks. The application of the 35% internalisation rate is only applied to those with the solo trip purpose "Shopping", which, as shown in Table 7.5 of TA equates to 7 and 13 two-way trips in the AM and PM Peak, respectively 2.6% and 4.3% of Total Residential People Trips.

The proportion of trips with the Trip Purpose of "Shopping" is from NTS, with the % varying by hour. The 35% internalisation rate is applied to these trips only, then subtracted from the total residential trip generation, as shown in Table 7.5 of the TA.

The 35% internalisation rate is a highly conservative assumption in our opinion, as residents completing a chain trip with the end destination being the proposed development will likely use the proposed food store as the logical place to complete their food shop. This will reduce the number of trips solely for the purpose of a food shop, which the majority of people are expected to complete using the proposed food store.

7.2. RBC stated in their comments that:

"Table 7.6 presents the net change in external people trips. However, no table has been provided showing the existing people trip generation for the site. While existing car trip generation is shown in Table 7.1, the equivalent baseline people trip data is absent. The applicant is therefore requested to clarify the source of the baseline people trip generation figures used in Table 7.6."

Stantec Response:

The total number of people trips generated by the existing retail park not unknown, as the survey completed was an MTC survey as presented in the TA.

The results shown in TA Table 7.6 are the difference between the Existing Total Vehicle trip generation and the Proposed Total People Trip Generation, see **Table 7-1**.

TECHNICAL NOTE

Time Period	Arrivals	Departures	Two-way
Existing Total Vehicle Trip Generation (MTC Survey June 2025)			
AM Peak (08:00 – 09:00)	17	12	29
PM Peak (17:00 – 18:00)	68	65	133
Daily (07:00 – 19:00)	748	687	1,435
Proposed Total People Trip Generation (External Trips – See TA Table 7.5)			
AM Peak (08:00 – 09:00)	173	269	442
PM Peak (17:00 – 18:00)	362	317	649
Daily (07:00 – 19:00)	3,099	3,127	6,226
Net Change (See TA Table 7.6)			
AM Peak (08:00 – 09:00)	156	257	413
PM Peak (17:00 – 18:00)	294	252	546
Daily (07:00 – 19:00)	2,351	2,440	4,791

Table 7-1: Total People Trip Generation – Existing / Proposed / Net Change

This is deemed appropriate as the existing retail park will have the majority of its trips generated being completed by vehicles due to the nature of the development, which consists of furniture shops and a drive-thru fast-food restaurant on the IDR. While trips may be completed by active travel modes, these will be a small minority, as the existing development has a lot of free car parking and is not a destination or type of land use visited by pedestrians or cyclists.

Even if active travel trips had been captured in the baseline survey, it is likely there would still be an increase in Total People trip generation from the existing to the proposed development.

7.3. RBC stated in their comments that:

“Table 7.7 presents the proposed mode share proportions with a food store (adjusted column). It is currently unclear how the percentage reductions have been applied and what assumptions underpin these adjustments. Clarification is required.”

Stantec Response:

The potential food store's external mode share has been estimated by using modal split data from the TRICS sites outlined in TA Section 7.4 and then adjusting this to reflect that these proposals, unlike the TRICS sites, will have a significant level of flats above and in the near proximity (those at Huntley Wharf and proposed to the east). The car driver and passenger mode shares have been halved to 29.5% and 12.4%, respectively, while the walking mode share has increased to 54.5%. The store is located to serve the new and existing residents in this part of the town. This adjustment is considered to be appropriate on that basis.

7.4. RBC stated in their comments that:

“Paragraph 7.7.4 applies a 35% pass-by rate on the basis that the site lies on a commuting route; however, no evidence has been provided to substantiate this assumption. Without site-specific survey data or justification, the Highway Authority cannot accept the proposed pass-by and diverted trip reductions. The applicant is requested to supply appropriate evidence to support the percentage applied.”

The applicant has made reference to TRICS Research Report 14/1 Pass-By & Diverted Trips and it is anticipated that the applicants use of 35% is linked to the below paragraphs:

MacIver recommends that the following general rules are used for determining the proportions of pass-by trips at superstore developments in the United Kingdom:

For superstores located on major commuting routes in larger urban areas, the pass-by proportion may range between 25-35% depending on the levels of traffic flow. It may be assumed that more populous urban areas will generate higher levels of pass-by trips;

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On other less significant commuting routes, in out-of-town locations and in urban areas with smaller populations the pass-by proportion can be assumed to be in the range of 15 to 25%;

In town centres and on non-primary routes the proportion will be approximately 10%; and

In locations with little propensity to generate pass-by trips can be as low as 5%.

The methodology used to devise these percentages is not provided within MacIver's report. However, it is stated that extreme care must be taken when assigning pass-by trips to the road network.

The first thing to note here is that the application site does not include a superstore albeit that a smaller food store could be provided. However, this is likely to have a completely different profile of user. There is also the possibility that the commercial use is implemented as a unit which sells food and drink mainly for consumption on site or even use class E(c) financial/professional services which again would have a completely different profile

The applicant must therefore assess the wider use classes to ensure a robust assessment is undertaken.

In addition, as can be seen from paragraph 6.41 the TRICS report is clear that extreme care must be taken this is continued further at paragraphs 11.1-11.3 (below).

The proportion of trips that are pass-by and diverted should be considered as part of the TA Scoping Process. A generic standard reduction is no longer applicable – instead a level of reduction should be determined on a site-by-site basis.

Steps on how this should be done are illustrated in a process diagram contained within this report. Before starting the process, it is important that the developer and all parties have a clear understanding of the definition of distinction between pass-by and diverted trips. Different development characteristics will produce different trip types.

It is important to note that this explanatory note does not contain any definitive pass-by and diverted trip percentages that would be used as a standard deduction in trip generation.

The document clearly advises that any reduction must be dealt with in a site by site basis which requires surveys of comparable sites and that the report does not contain blanket percentages to which applicants can utilise to reduce trips from developments. The Highway Authority cannot therefore accept the reduction in trips by 35% as proposed by the applicant.

It is disappointing that this has still not been addressed given that it was originally stipulated to the applicant in the pre application response in May 2023 and within the application response for application 230822."

Stantec Response:

The proposed food store is not a destination store; it will mainly be used by the future residents of the Site, those of neighbouring developments, such as Huntley Wharf (majority of which will be active travel), and it will capture a proportion of its consumers from those already driving past on the IDR, a major commuting route for traffic around Reading Town Centre.

The TRICS Research Paper 14/1 sets out a 25-35% pass-by factor for commuter routes in larger urban areas, to be used with due consideration to the nuance of each site in terms of location, population and traffic levels. The Site is located on a major route in and around Reading town centre, the IDR, a heavily trafficked road that is notably busy during peak periods, distributing traffic around Reading.

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As such, the 35% pass-by trips are, in our opinion, a conservative estimate; this equates to 38 and 67 arrival trips in the AM and PM peak, respectively, which is 4.2% and 6.7% of vehicles travelling eastbound along Forbury Road turning into the proposed food store. For comparison, the existing retail park, through its two accesses, captures 11 (1.2%) and 60 (6.0%) arrivals in the AM and PM Peak, respectively, which, while less than the proposed it is broadly in line, especially the PM Peak.

It does not seem logical that, by RBC's own definition, a smaller shop that is not a superstore would generate more new trips and attract fewer pass-by trips. The site will be well located to intercept pass-by traffic, and it is undeniable that this will be a proportion of those who drive to the store, as is the case for any store located on a main route. It will not be a destination-sized store that would attract people from across the town.

Similarly, if there were on-site food and drink offerings, this would have a different travel profile but would likely be lower during the peak hour anyway. Such a use would also likely have some degree of pass-by use.

Stantec has applied the range in the research with care, noting that the site is located on a busy route with many vehicles already passing on the IDR during their commutes.

7.5. RBC stated in their comments that:

"Table 7.10 presents the proposed development car net change but the figures in daily column are incorrect."

Stantec Response:

Table 7.2 shows the Existing, proposed and Net Change for car trips. The daily net change for car trips is consistent with that shown in TA Table 7.10.

Time Period	Arrivals	Departures	Two-way
Existing Car Trip Generation (MTC Survey June 2025)			
AM Peak (08:00 – 09:00)	11	7	18
PM Peak (17:00 – 18:00)	56	54	110
Daily (07:00 – 19:00)	640	592	1,232
Proposed Development Car Trip Generation			
AM Peak (08:00 – 09:00)	40	74	114
PM Peak (17:00 – 18:00)	89	74	163
Daily (07:00 – 19:00)	709	726	1,435
Net Change			
AM Peak (08:00 – 09:00)	29	67	96
PM Peak (17:00 – 18:00)	33	20	53
Daily (07:00 – 19:00)	69	134	203

Table 7-2: Existing, Proposed & Net Change Car Trips (TA Table 7.10)

7.6. RBC stated in their comments that:

"The Saturday assessment does not include any trips from the residential element of the development due to limited TRICS data for residential uses on Saturdays. If the applicant does not intend to undertake additional surveys to establish Saturday residential trip generation for the peak hour (13:00–14:00), then the PM peak residential car trip generation figures from Table 7.9 should be applied as a worst-case scenario."

Stantec Response:

A comparison between the weekday total proposed development PM Peak car trip generation and that of the Existing site Saturday Peak (13:00 – 14:00) is shown in **Table 7-3**. There is a reduction in traffic.

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Time Period	Arrivals	Departures	Two-way
Existing Saturday Peak (13:00 – 14:00)	140	114	254
Total Proposed Weekday PM Peak (17:00 – 18:00)	89	74	163
Net Difference	-59	-40	-99

Table 7-3: Proposed Weekday Peak / Existing Saturday Peak Comparison

8. Parking

Class E Parking

8.1. RBC stated in their comments that:

“Policy TR5 states that development should provide car parking and cycle parking that is appropriate to the accessibility of locations within the Borough to sustainable transport facilities, particularly public transport. Local parking standards are set out in the RBC, Revised Parking Standards and Design Supplementary Planning Document (SPD) which takes into account the accessibility of the site. In accordance with the Council’s adopted parking standards, the proposed new Class E food store would require 1 car parking space per 40sqm which would equate to 75 car parking spaces.

The Transport Assessment asserts that the Parameter Plan 14 allows for 53 car parking spaces, a ratio of 1 space per 30sqm for the commercial uses although it is not clear how this figure has been calculated nor has an indicative layout of the car parking been submitted.

The Transport Assessment asserts that the Parameter Plan 14 allows for 53 car parking spaces which is below the Council’s adopted standards. It is stated that the proposed Class E food store is expected to function as a neighbourhood facility serving nearby residents, many of whom are likely to walk or cycle given low car ownership levels. Given its scale (compared with larger destinations such as Tesco Extra on Napier Road), the Transport Assessment asserts that the proposed level of car parking is considered proportionate to the size of the store and its local catchment.

However, no evidence has been submitted to substantiate the proposed level of car parking. Given that the provision falls below the Council’s adopted standards, this position is not acceptable without robust justification. The applicant is therefore required to submit comprehensive supporting evidence, including a detailed parking-accumulation assessment using appropriately matched TRICS sites, or verifiable on-site parking-demand surveys from a comparable food store. Without this evidence, the reduced parking provision cannot be supported.”

Stantec Response:

Table 8-1 displays the weekday car parking accumulation for the 53-space commercial car park. This has been calculated using the TRICS data submitted as part of the TA that informed the trip generation assessment, and then the internalised shopping purpose trips have been removed. The proposed (adjusted) car driver mode share for the food store (29.5%) was applied to the total people trip generation assessment to calculate the parking demand and accumulation.

Time Range	Arrive	Depart	Parking Accumulation	Occupancy
06:00-07:00	4	0	4	8%
07:00-08:00	6	1	9	17%
08:00-09:00	33	21	21	39%
09:00-10:00	44	38	27	52%
10:00-11:00	52	47	32	61%
11:00-12:00	62	59	35	66%
12:00-13:00	64	64	35	65%

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13:00-14:00	59	63	30	57%
14:00-15:00	66	61	35	66%
15:00-16:00	66	64	37	69%
16:00-17:00	62	63	35	66%
17:00-18:00	56	59	32	61%
18:00-19:00	45	49	28	53%
19:00-20:00	34	42	21	39%
20:00-21:00	24	30	14	27%
21:00-22:00	10	16	8	15%

Table 8-1: Food Store Car Park Accumulation (weekday)

Table 8-2 displays the Saturday car parking accumulation.

Time Range	Arrive	Depart	Parking Accumulation	Occupancy
06:00-07:00	5	1	4	8%
07:00-08:00	9	2	11	20%
08:00-09:00	38	29	20	37%
09:00-10:00	54	47	27	51%
10:00-11:00	79	69	37	71%
11:00-12:00	95	89	43	81%
12:00-13:00	91	97	37	70%
13:00-14:00	90	87	39	74%
14:00-15:00	91	92	38	72%
15:00-16:00	86	92	33	62%
16:00-17:00	82	81	33	63%
17:00-18:00	64	66	32	60%
18:00-19:00	43	51	24	45%
19:00-20:00	30	39	14	27%
20:00-21:00	17	21	10	19%
21:00-22:00	9	13	7	12%

Table 8-2: Food Store Car Park Accumulation (Saturday)

Tables 8-1 & 8-2 demonstrate that the car park would have adequate capacity for the envisaged levels of demand per vehicle. It should be acknowledged that the accumulation presented is limited due to the TRICS data being provided in an hourly band, as opposed to a 30-minute band. As the proposed store is not a superstore, it is likely that many visits would be less than an hour, and there would be a greater likelihood of turnover of car parking spaces.

Given that the maximum occupancy is within operational capacity, it is considered that the level of parking is appropriate.

8.2. RBC stated in their comments:

"In terms of disabled parking facilities, a minimum provision of 3 disabled spaces plus 4% of the total capacity should be provided for the retail use."

In addition, a 10% of communal car parking spaces within a non-residential development should be provided with EV charging points."

Stantec Response:

This is noted and will be defined at the reserved matters stage. Regarding EV charging, this was noted in Paragraph 2.4.1 of the Transport Assessment.

TECHNICAL NOTE

Residential Parking

- 8.3. RBC stated in their comments that:

"The proposed scheme proposes to provide a maximum of 130 spaces for up to 700 units, a ratio of 0.19 spaces per unit. Residential car parking is to be provided in a basement car park although the parameter plans do not include an indicative layout of the residential car parking."

Stantec Response:

A layout of the proposed residential car parking will be provided for agreement at the appropriate reserved matters application.

- 8.4. RBC stated in their response that:

"The provision of parking for disabled motorists is a key element of all developments. For the residential element, the number of disabled spaces must be provided based on the level of units proposed for disabled persons."

Stantec Response:

This is noted and will be defined at the appropriate reserved matters application.

- 8.5. RBC stated in their response that:

"In addition, electric vehicle (EV) charging points must be provided within the residential parking area, in accordance with the requirements of current Building Regulations. Provision should meet or exceed the standards set out in Part S (Infrastructure for Charging Electric Vehicles), ensuring that appropriate active and passive charging infrastructure is delivered at the outset and integrated into the design of all parking spaces."

Stantec Response:

EV charging provision will be provided within the residential parking area in accordance with Building Regulations Part S (Infrastructure for Charging Electric Vehicles).

Visitor Parking

- 8.6. RBC stated in their comments that:

"The Council's Parking Standards and Design SPD requires visitor parking for residential development at a ratio of one space per four units. No dedicated visitor spaces are proposed for this scheme. The applicant has sought to justify this on the basis of the Site's close proximity to the railway station and local bus services and has provided a review of recently approved residential schemes where visitor parking was not required."

However, the applicant's review of recently approved schemes is not considered an appropriate comparator. Those schemes relate to wholly residential developments, whereas the current proposal comprises a mixed-use scheme incorporating a retail store. Visitor patterns for residential units within a mixed-use environment differ materially from those within stand-alone housing schemes. In this context, it is not reasonable or realistic to assume that all visitors will arrive via sustainable modes such as bus, rail, or cycling. The lack of dedicated visitor spaces would potentially result in residential visitor demand spilling over into parking areas intended for the retail element and the wider public realm."

The absence of dedicated visitor parking is therefore likely to result in increased parking stress and vehicle circulation within the site, reducing the availability of spaces for retail customers and creating conditions that may adversely affect the safe and efficient operation of the highway."

TECHNICAL NOTE

Stantec Response:

Section 4 of the TA sets out the Sustainable Access to the Site. This is applicable to all site users, including visitors.

Local roads such as Forbury Road and Kenavon Drive are subject to double yellow lines, which help prevent spillover visitor parking. There are local car parks within convenient walking distance of the Site that can be used by any visitors opting to travel by car.

The following car parks are within c.500m (as the crow flies) of the Site.

- NCP Reading Kenavon Drive: 50 spaces (260m, 3 mins walk)
- Kings Meadow Car Park: 95 spaces (600m, 8 mins walk)
- Reading Station Car Park: 1,591 spaces (600m, 8 mins walk)
- Queens Road Car Park: 700 spaces (750m, 10 mins walk)
- Hills Meadow Car Park: 298 spaces (800m, 11 mins walk)

Figure 9-1: Local Car Parks



Map Source: Google Maps

The approach to visitor parking is considered appropriate to the type and scale of development. The restrictions on local roads and the availability of car parks mean that any visitors opting to travel by car to the Site can be suitably accommodated in these locations without causing an adverse impact on highway safety through overspill parking.

TECHNICAL NOTE

Cycle Parking

- 8.7. ATE stated in their comments that:

"It is unclear how many units of each type are being proposed here, therefore ATE is not able to determine whether the cycle parking meets the Reading's cycle parking guidelines. However, ATE considers the 600 proposed spaces, whilst substantial, to be unambitious considering the expected number of residents, and instead recommends providing cycle parking of one space per bedroom in line with LTN 1/20 11.3. Considering the urban location of this development and very limited car parking, it is even more important to ensure enough cycle parking is available to provide a 'genuine choice of modes.' A minimum of 5% of cycle parking should accommodate non-standard cycles."

Stantec Response:

As stated in TA paragraph 6.4.2, the parking provision will be provided in accordance with Reading Borough Council Parking Standards 2011 (TA Table 2.2), and the design and detail of the parking provision will be detailed "at the appropriate Reserved Matter stage, with due consideration of guidance".

- 8.8. ATE stated in their comments that:

"ATE generally recommends against the sole use of two-tier racks due to accessibility concerns. If they are to be used, they should be supplemented with Sheffield stands for users who are not able to use the racks or have bikes which do not fit. This has been mentioned by the applicant and ATE expects to see this at the reserved matters stage. Cycle stores should also be secure."

Stantec Response:

This is noted and will be defined at the appropriate reserved matters stage.

- 8.9. RBC stated in their comments that:

"The outline application proposes cycle parking at the ground level of the proposals in cycle stores, which could contain a mixture of two-tier racks and Sheffield Stands. Details of the cycle parking will be designed and detailed at the appropriate Reserved Matters stage, with a provision of 600 cycle parking spaces to be provided. Sheffield Stands will also be provided for visitors to use in the public realm of the residential section of the Site."

In principle this is acceptable to the Highway Authority, however, the comments made by ATE should also be reviewed in relation to the total provision and to ensure that parking provision is also made for non-standard cycles, such as accessible cycles, tricycles and cargo bikes. This should be a minimum of 5% of the total spaces as outlined in LTN 1/20 11.3.2."

Stantec Response:

Parking provision will be made for non-standard cycles. As stated in TA paragraph 6.4.2, the design and details of the provision will be detailed "at the appropriate Reserved Matter stage, with due consideration of guidance."

9. Travel Plan

- 9.1. RBC stated in their comments that:

"The trip generation for the Travel Plan has been based on the Census Travel to Work Data. However, the best approach is to base targets on the DfT National Travel Survey (2024) (which has also been requested by ATE in the formal response)."

TECHNICAL NOTE

Stantec Response:

A comparison exercise of travel mode shares identified through the DfT National Travel Survey (NTS) (2024) and the 2011 Census data has been undertaken. This is set out above, in **Table 2-3**.

The NTS lacks area-specific data. The low active travel and public transport mode shares in the NTS data are not reflective of the proposed scheme or the Site location. Census data is better suited for target identification, as it is available at the MSOA aggregate level.

9.2. RBC stated in their comments that:

"The modal share targets are set out to in Table 4.1. which aims for a reduction in car modal share to 20.4% at the end of year 5. However, a 20.4% car modal share is still high considering the town centre location and connectivity of this site, as well as the limited parking spaces. For clarity 20.4% target after 5 years equates to 143 travel to work vehicle trips whilst the application site provides just 130 car parking spaces. The proposed target is therefore not aspirational and is an arbitrary figure based on the travel to work mode share and is not representative of the application proposals.

Therefore, the Travel Plan targets should be revised to ensure they more accurately reflect the characteristics and context of the development. The current targets do not provide a realistic or aspirational framework for achieving meaningful modal shift towards sustainable travel choices."

Stantec Response:

It is agreed that the car parking provision will act as a constraint on the number of car trips the residential development will generate.

The basis of the calculation by RBC is flawed, as it assumes all trips are work trips in the peak hours. That is not the case. The TA Table 7.9 shows that neither peak hour has more than 90 two-way car movements in the residential development, even with a baseline car mode share of 30.4%. Reducing the car mode share for commuting by a further third will therefore provide an aspirational target.

The baseline mode share has been established using the 2011 Census data. Stantec agree that the Travel Plan targets should be revised to ensure they more accurately reflect the characteristics of the development, and as Paragraph 4.37 of the Framework Travel Plan states, *"the modal split targets within this section are indicative [and] will be refined once the initial travel survey has been conducted and reviewed."*

9.3. RBC stated in their comments that:

"The Highway Authority requests that specific remediation measures are identified at this stage to be implemented in the event that the Travel Plan targets are not achieved. Such measures could, for example, take the form of additional funding contributions towards active travel interventions or extending the annual review period until the modal shift targets are achieved.

The Travel Plan Framework should be updated to reflect the above"

Stantec Response:

It is a Framework Travel Plan, a Detailed Travel Plan will be submitted and agreed as part of the RMA process, which will reflect any necessary updates, including changes to the mode share targets and any specific remediation measures.

TECHNICAL NOTE

10. Conclusion

10.1. **Table 10-1** provides a summary of Stantec's response to ATE's and RBC's comments.

Theme	Comment	Action	Paragraph Ref.
<i>Active Travel</i>	Hourly distribution of walking and cycling trips.	Detail provided.	2.1
	Interventions to increase active travel mode share.	Framework Travel Plan and outline design of Site.	2.2
	Use of NTS instead of Census for mode share.	Comparison assessment undertaken.	2.3
	Identification of specific remediation measures.	Not appropriate for a Framework Travel Plan.	2.4
	LCWIP Forbury Road Orbital cycle route.	ATE to liaise with RBC (LHA) on this point.	2.5
	Indicative cycle route compliance with LTN 1/20.	Evidenced LTN 1/20 compliance.	2.6
	Raised table design at eastern access to provide continuous cycle connection.	Drawing demonstrates future potential.	2.7
	Cyclist visibility splays at eastern access.	Drawing demonstrates visibility splays.	2.7
	Separate cycle and pedestrian provision & LTN 1/20 compliance.	Detail provided.	2.8
	Widening of eastern connection to railway underpass.	Not within Site ownership.	2.9
	Propose appropriate cycle improvements to local cycling network.	Proposed scheme includes internal cycle route.	2.10
<i>Crossing of Forbury Road</i>	Improved pedestrian crossing on western arm of the Forbury Road / Kenavon Drive roundabout.	Not considered to be required. Proposed scheme includes improved crossing on eastern arm. No action.	3.1
<i>Public Transport</i>	LTN 1/24 bus stop compliance.	None.	4.1
<i>Vehicular Access</i>	Visibility splays at eastern access.	Drawing demonstrates visibility splays.	5.1
	Optimise northeast servicing corner.	Existing drawing demonstrates visibility 2.4m from give way line.	5.2
	Clarification of day to day deliveries to residential blocks.	To be defined at reserved matters.	5.3
<i>Waste Strategy</i>	Detail on servicing and routing arrangements.	To be defined at reserved matters.	6.1
	Clarification of general vehicles on internal paths.	To be defined at reserved matters.	6.2
<i>Trip Generation</i>	Evidence to justify 35% internalisation rate.	Detailed trip generation methodology set out.	7.1
	Clarification of baseline people trip generation.	Detailed trip generation methodology set out.	7.2
	Food store mode shares.	Detailed trip generation methodology set out.	7.3
	Justification 35% pass-by-rate.	Further justification provided.	7.4
	Incorrect figures on proposed development car net change.	Figures are correct.	7.5

TECHNICAL NOTE

	Saturday residential trip generation assessment.	Assessment done.	7.6
<i>Parking</i>	Justification of Class E parking provision.	Car park accumulation using TRICS done.	8.1
	Disabled provision.	To be defined at reserved matters.	8.2
	EV provision.	As noted in TA.	8.2
	Indicative layout of car parking.	To be provided at reserved matters.	8.3
	Disabled provision.	To be defined at reserved matters.	8.4
	EV provision.	To be defined at reserved matters.	8.5
	Visitor parking provision.	Further justification provided.	8.6
	Level of provision.	Provision in accordance with RBC standards.	8.7
	Non-standard cycle parking provision.	To be defined at reserved matters stage.	8.7
	Accessibility of cycle parking provision.	To be defined at reserved matters stage.	8.8
	Non-standard cycle provision.	Agreed. To be defined at reserved matters.	8.9
<i>Travel Plan</i>	Mode share targets from NTS not Census.	Comparison assessment done. No action.	9.1
	Revision of mode share targets.	To be adjusted following baseline surveys, as stated in FTP.	9.2
	Identification of specific remediation measures.	Not appropriate for a FTP.	9.3

	Indicates requested new information provided or agreement to be defined at RMA.
	Indicates justification of no action.
	Indicates information previously provided.
	Indicates clarification provided on approach taken.

- 10.2. This Technical Note has been prepared by Stantec to provide a comprehensive response to comments received from Active Travel England and Reading Borough Council. It has set out additional information where appropriate and has confirmed the provision of other information at appropriate reserved matter stages.

TECHNICAL NOTE

Appendix A – Indicative Cycle Route



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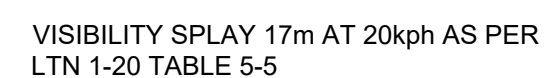
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Notes

UTILITIES NOTE: The position of any existing public or private sewers, utility services, plant or apparatus shown on this drawing is believed to be correct, but no warranty to this is expressed or implied. Other such plant or apparatus may also be present but not shown. The Contractor is therefore advised to undertake their own investigation where the presence of any existing sewers, services, plant or apparatus may affect their operations.

1. CYCLE LANE WIDTH IN ACCORDANCE WITH LTN 1-20 SECTION 5.5. CYCLE LANE DESIGNED AT 2.3m HOUR THE ABSOLUTE MINIMUM AT <300 CYCLES PER HOUR IS 2m.
2. PEDESTRIAN/ CYCLIST CROSSING AT WESTERN ACCESS IN ACCORDANCE WITH LTN 1-20 SECTION 10.5 PRIORITY JUNCTION. DESIGN FOLLOWING GUIDELINES OUTLINED IN FIGURE 10.15.
3. PEDESTRIAN CROSSINGS OVER CYCLE LANE IN ACCORDANCE WITH LTN 1-20 SECTION 6.2 PARAGRAPH 6.2.29 DETAILING THAT PEDESTRIANS SHOULD BE PROVIDED DESIGNATED CROSSINGS WITH TACTILE PAVING FOR TWO WAY CYCLE TRACKS.
4. CYCLIST VISIBILITY IN ACCORDANCE WITH LTN 1-20 TABLE 5-5 STOPPING SIGHT DISTANCES. DESIGNED AT 17m FOR A 20kph CYCLE LANE.
5. INDICATIVE CYCLE ROUTE TO BE REVIEWED AT DETAILED DESIGN.

KEY

 TACTILE PAVING PEDESTRIANS TACTILE PAVING CYCLISTS

BLOCK PAVING FOR RAISED CROSSING

P03_UPDATED DIMENSIONS	ML	SS	2026.04.29
P02_CLIENT REVIEW	BS	SS	2025.08.07
P01_FIRST ISSUE	ML	SS	2025.06.11
Issued/Revision	By	Appd	YYYY.MM.DD
	ML	ML	SS
	Dwn.	Dsgn.	Chkd.
			2025.06.11
			YYYY.MM.DD

Issue Status

S2 - FOR INFORMATION

This document is suitable only for the purpose noted above.
Use of this document for any other purpose is not permitted.

Client/Project Logo



Client/Project
abrdn

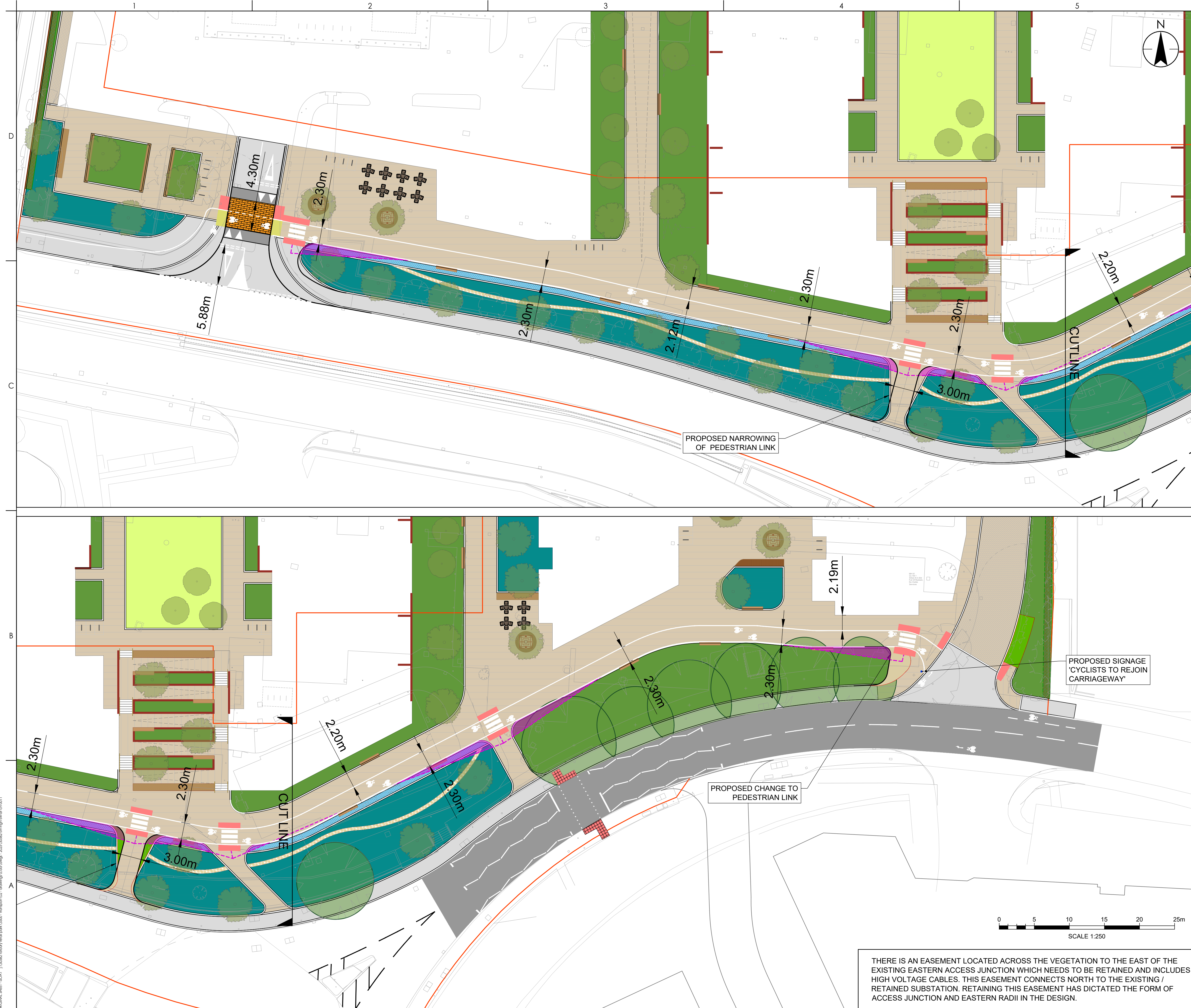
FORBURY RETAIL PARK

READING, UK

Title

FORBURY DEVELOPMENT
KINGS MEADOW VIEW - INDICATIVE
CYCLE ROUTE

Project No. 50582	AT Scale 1:250
Revision P03	Drawing No. 50582-STN-HGN-SW-DR-CH-0011



TECHNICAL NOTE

Appendix B – Indicative Future Potential Raised Crossing to Development East of Site

TECHNICAL NOTE

Appendix C – Technical Note submitted and discussed on crossing design Forbury Road - August 2021

TECHNICAL NOTE

Job Name: Forbury Retail Park
Job No: 50582
Note No: TN001
Date: August 2021
Prepared By: BH
Checked By: SRS
Subject: Forbury Road & Kenavon Drive Crossing Review

1. Introduction

- 1.1. This technical note (TN) has been produced by Stantec to assess the possible pedestrian crossing options to support the Forbury Retail Park site development site. This TN forms part of the scoping report and is intended to provide Reading Borough Council (RBC) with possible crossing options to form the basis for further discussion for pedestrian infrastructure improvements.
- 1.2. Each crossing option assessed will take into consideration existing on-site constraints, relevant technical design standards and future pedestrian desire lines. Consideration has been taken to ensure designs meet technical standards set out in the following guidance:
 - Design Manual for Roads and Bridges (DMRB);
 - Local Transport Note 2/95 (LTN); and
 - Traffic Signs Manual - Chapter 6 – Traffic Control (TSM6).
- 1.3. Where technical standards or guidance is not achievable in the design it has been noted as a departure from standard.

2. Development Proposals Context

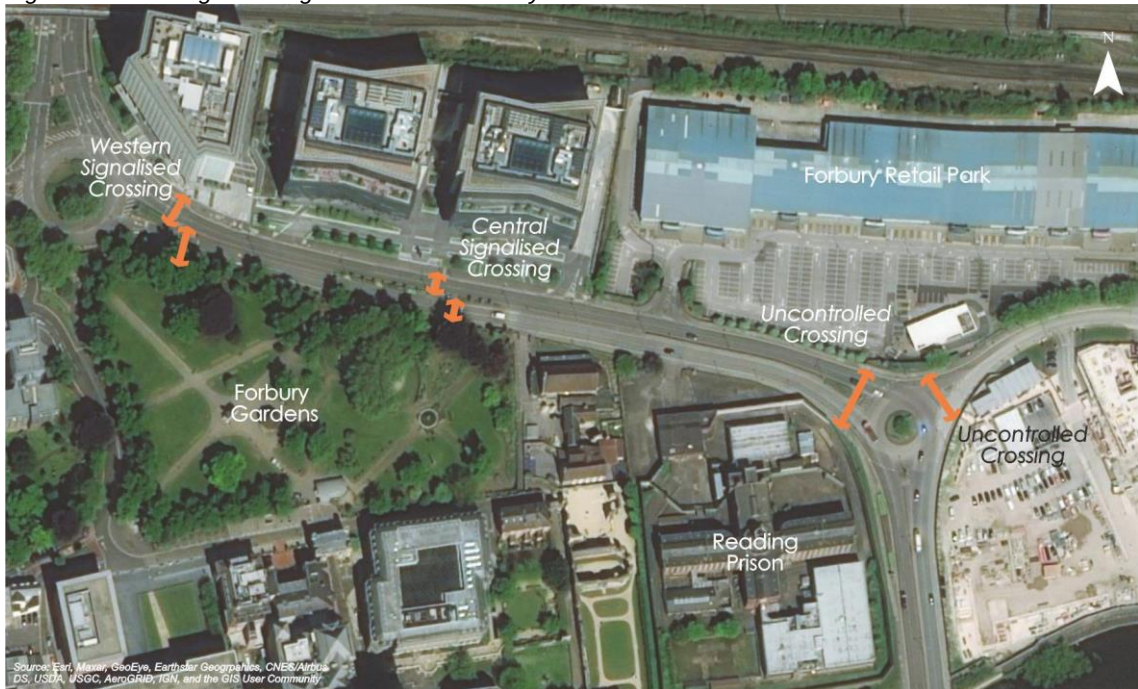
- 2.1. The Forbury Retail Park site emerging development proposals include approximately 850 residential flats and approx. 2,000sqm of food retail. It is anticipated that there will be increase pedestrian demand from the site due to the change in land uses from large scale retail units to predominately residential, and the limited level of parking provision provided at the site.
- 2.2. As part of the pre-application discussions with Reading Borough Council (RBC) it was raised that a review should be undertaken of the possibility to provide an additional formal crossing which would link the Forbury Retail Park development into the surrounding development areas such as across Kenavon Drive to the Huntley Wharf development and across Forbury Road to Reading Prison which is to be developed in the future.

Existing Crossing Facilities

- 2.3. There is currently four (formal and informal) crossings provided within the study area, with three located on Forbury Road and one on Kenavon Drive. **Figure 2-1** demonstrates the existing crossing provisions surrounding the site.

TECHNICAL NOTE

Figure 2-1: Existing Crossing Provision on Forbury Road

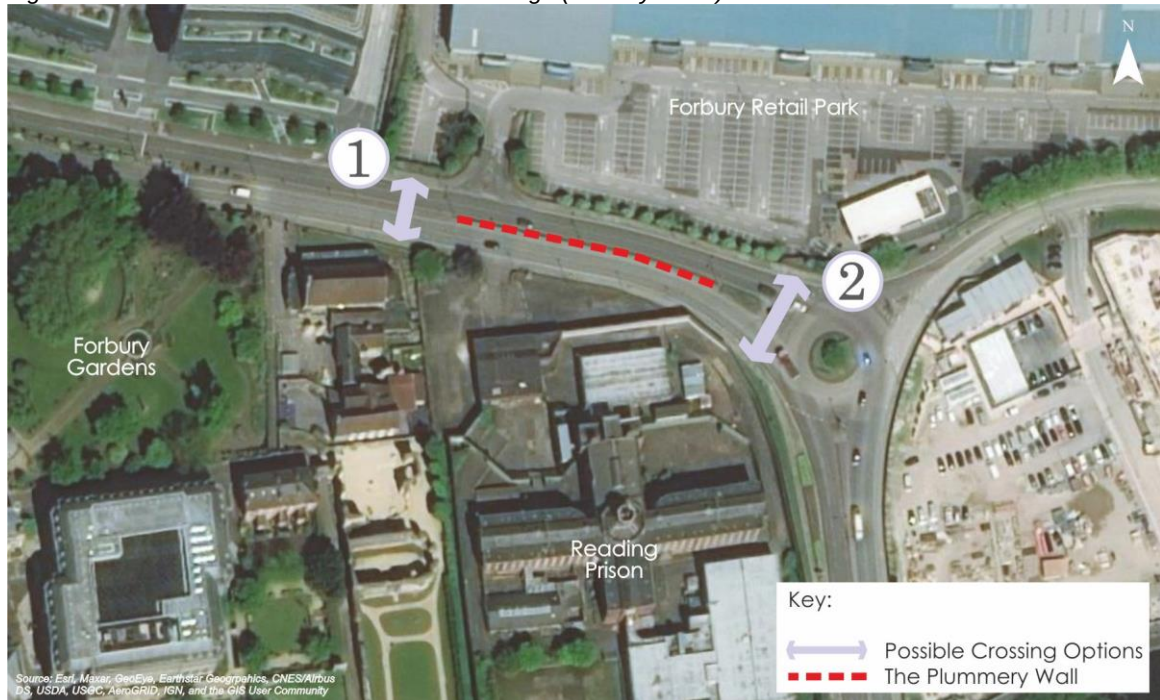


- 2.4. Forbury Road does not allow for informal crossing due to the central reserve which includes a retained heritage feature; pedestrians are therefore required to use one of the dedicated crossings locations to cross. At Kenavon Drive there is currently opportunity for informal crossing across the road given the nature of the road.

3. Forbury Road Crossing Options

- 3.1. Given the increase in pedestrian and cyclists demand generated by the development proposals an additional crossing may be beneficial to allow for easier connection to Reading Town Centre and to the future Reading Prison site (when redeveloped).
- 3.2. In determining possible crossing options, a number of key considerations have been identified. The most challenging constraint in providing a crossing on Forbury Road is The Plummery Wall situated within the central reserve between the eastbound and westbound traffic lanes. This wall is Grade 2 listed and can therefore not be removed or altered. Therefore, all potential crossing options will need to be offset from this constraint.
- 3.3. Given this constraint, two locations on the Forbury Road could be suitable to provide a formal crossing to maintain the pedestrian desire line between the development and Reading Prison. Each location has pros and cons, and associated constraints which be discussed later in this TN. The two possible crossing locations are shown in **Figure 3-1**.

Figure 3-1: Possible Locations for Future Crossings (Forbury Road)



Forbury Road Crossing Location 1 (West of Site Access)

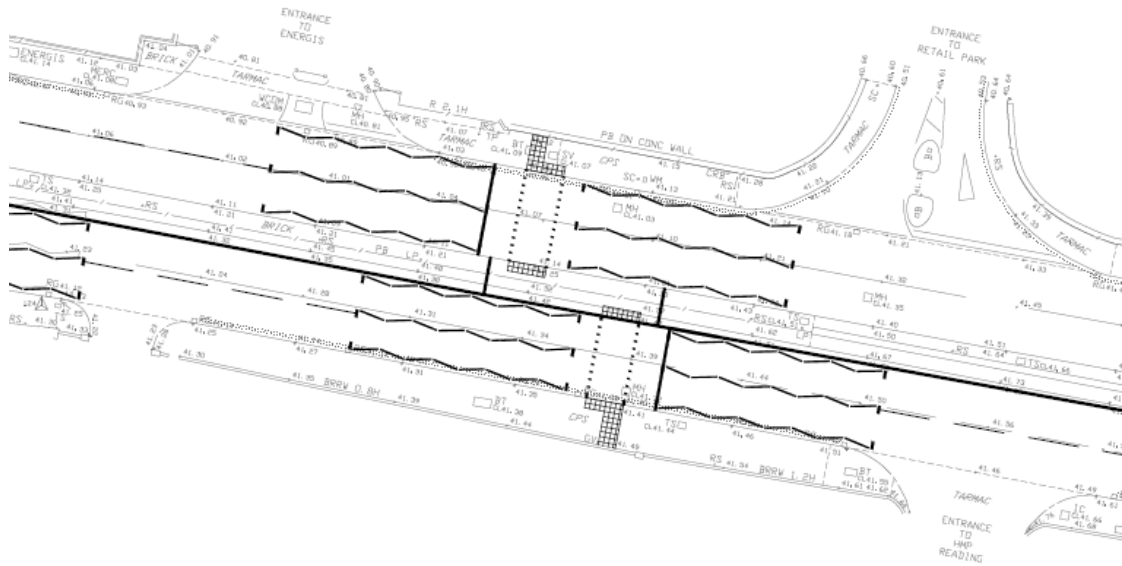
- 3.4. At crossing location 1, the main constraint is the adjacent priority junctions on both the north and south of Forbury Road. Although there is no formal guidance regarding this, careful consideration into the interaction between a pedestrian crossing and these junctions has been undertaken to ensure the crossing does not detriment swept paths, and adequate visibility is achievable.
- 3.5. For location 1, a total of four crossing options have been reviewed. A description of each is provided with a commentary on the pros and cons and departures from standards. A figure is provided of each option design (which is not to scale). The associated technical drawings at 1:500 scale (at A2) can be found in **Appendix A**.

TECHNICAL NOTE

Option 1A – Staggered Signalised Crossing (left-right)

- 3.6. Crossing Option 1A consists of a signalised crossing with the left-right stagger configuration. The design is shown in **Figure 3-2**.

Figure 3-2: Option 1A – Staggered Signalised Crossing (left-right)



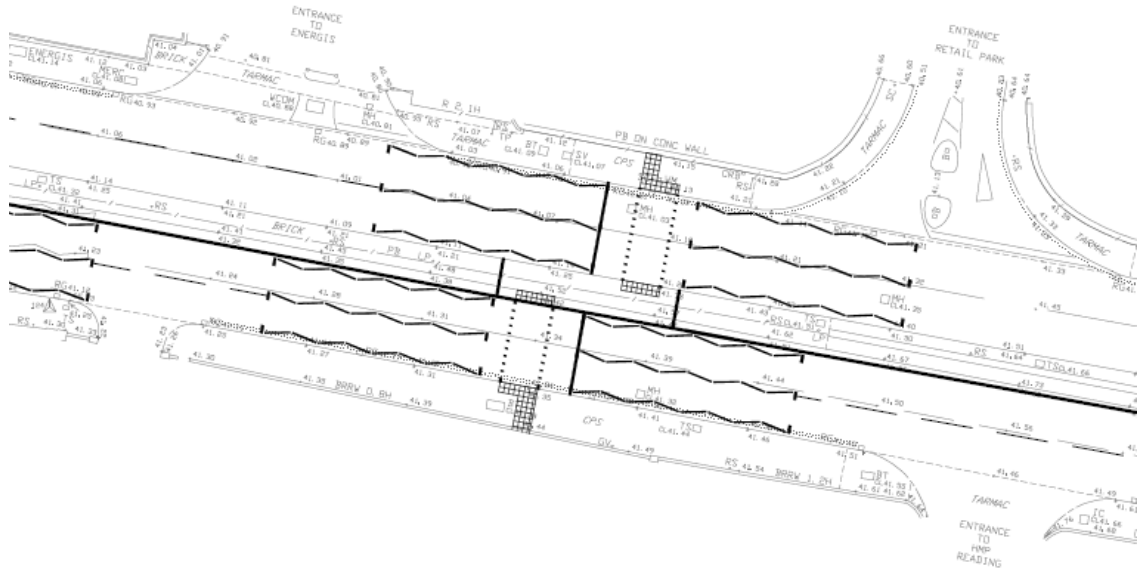
- 3.7. The following comments have been raised as part of this review:
- Crossing meets relevant design standards, with no departures from standards required;
 - Crossing format follows the suggested/preferred left-right stagger (As per (TSM6);
 - Kerb works required to widen the central refuge to 3.0m (The absolute minimum is 2.5m but given guard railing is likely to be required, 3.0m is highly recommended. See paragraph 11.17.2 in TSM6);
 - Pedestrian visibility is achievable at 30mph (1.5m back from centre of tactile, 90m for DMRB & 40m for TSM6);
 - Proposed crossing is in close proximity to surrounding priority junction accesses. Vehicle swept paths have confirmed a 'large car' can exit both Reading Prison and SSE accesses and be straight at the stop-line.
 - Crossing may be off the pedestrian desire line coming from the Retail Park going to the Prison.
 - There may not be much benefit for pedestrians walking towards Reading given there is already a crossing on Forbury Road in close proximity (circa 75m). Having two crossings this close may also cause disruption to the vehicle network.

TECHNICAL NOTE

Option 1B – Staggered Signalised Crossing (right-left)

- 3.8. Crossing Option 1B consists of a signalised crossing with the right-left stagger configuration. The design is shown in **Figure 3-3**.

Figure 3-3: Option 1B – Staggered Signalised Crossing (right-left)



- 3.9. The following comments have been raised as part of this review:

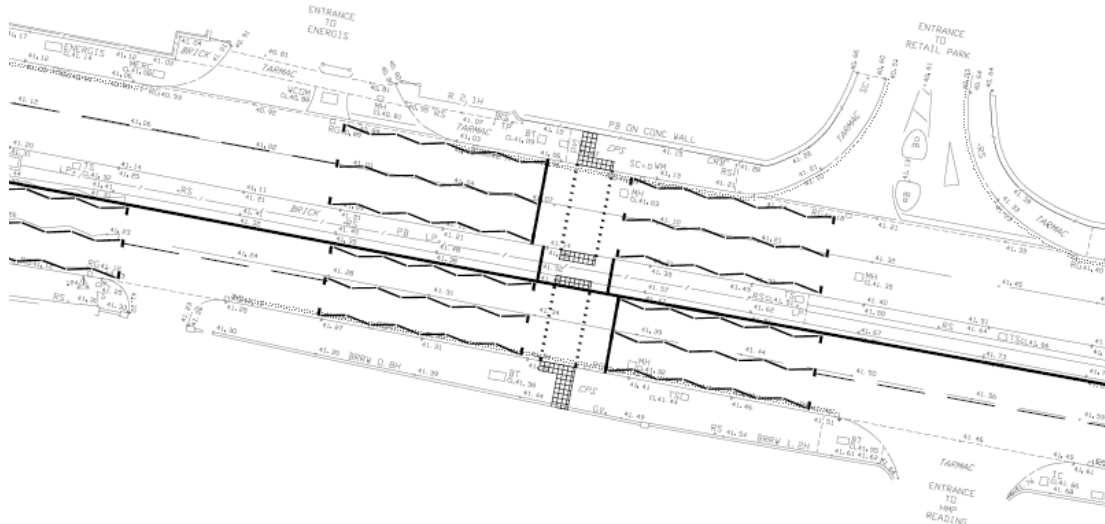
- Crossing does not follow the suggested/preferred left-right stagger. TSM6 Paragraph 18.3.5 states “*Staggered crossings generally have a left-handed stagger so that pedestrians on the central refuge are guided to face approaching traffic, but a right-handed stagger may be appropriate depending on site circumstances*”. Given the proximity to the SSE access, this stagger configuration may be deemed appropriate to benefit swept paths.
- Kerb works required to widen the central refuge to 3.0m (The absolute minimum is 2.5m but given guard railing is likely to be required, 3.0m is highly recommended. See paragraph 11.17.2 in TSM6);
- Pedestrian visibility is achievable at 30mph (1.5m back from centre of tactile, 90m for DMRB & 40m for TSM6);
- Proposed crossing is in close proximity to surrounding priority junction accesses. Vehicle swept paths have confirmed a ‘large car’ can exit both Reading Prison and SSE accesses and be straight at the stop-line.
- Crossing may be off the pedestrian desire line coming from the Retail Park going to the Prison.
- There may not be much benefit for pedestrians walking towards Reading given there is already a crossing on Forbury Road in close proximity (circa 75m). Having two crossings this close may also cause disruption to the vehicle network.

TECHNICAL NOTE

Option 1C – Straight Across Signalised Crossing

- 3.10. Crossing Option 1C consists of a straight-across signalised crossing. The design is shown in **Figure 3-4**.

Figure 3-4: Option 1C – Straight Across Crossing



- 3.11. The following comments have been raised as part of this review:

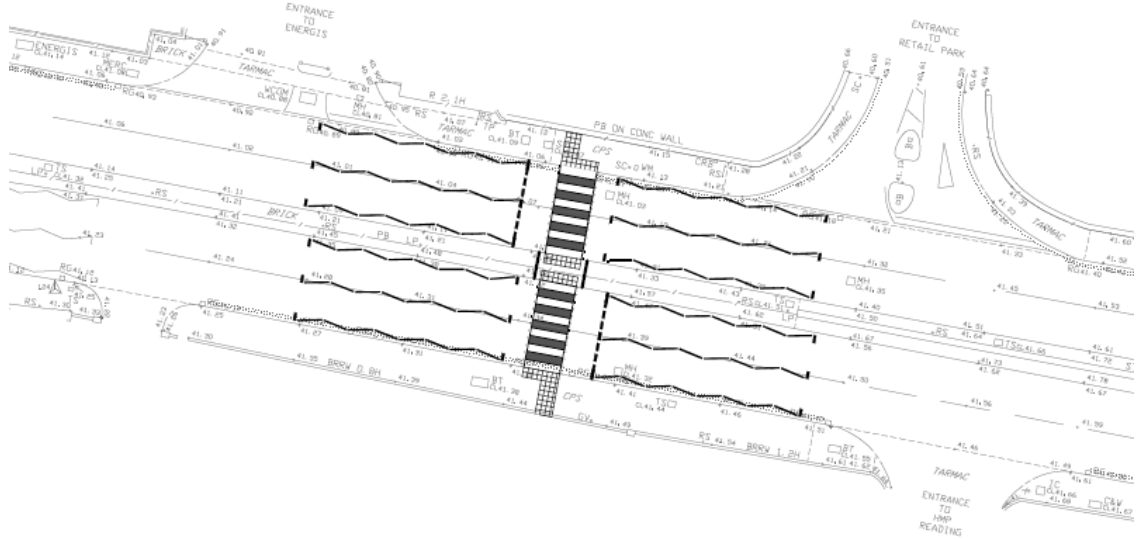
- Straight ahead signal crossings should not be considered where the road width exceeds 15.0m as per LTN Paragraph 5.2.3. This would require a departure from standard, however may be suitable given the proximity to the SSE access to benefit swept paths;
- Kerb works required to widen the central refuge to 3.0m;
- Pedestrian visibility is achievable at 30mph (1.5m back from centre of tactile, 90m for DMRB & 40m for TSM6);
- Proposed crossing is in close proximity to surrounding priority junction accesses. Vehicle swept paths have confirmed a 'large car' can exit both Reading Prison and SSE accesses and be straight at the stop-line;
- Crossing may be off the pedestrian desire line coming from the Retail Park going to the Prison;
- There may not be much benefit for pedestrians walking towards Reading given there is already a crossing on Forbury Road in close proximity (circa 75m). Having two crossings this close may also cause disruption to the vehicle network;

TECHNICAL NOTE

Option 1D – Zebra Crossing

- 3.12. Crossing Option 1D consists of a straight-across zebra crossing. The design is shown in **Figure 3-5**.

Figure 3-5: Option 1D – Zebra Crossing



- 3.13. The following comments have been raised as part of this review:

- No speed data for Forbury Road is available at this time, however based on local knowledge whilst the road is limited to 30mph, drivers often travel at the speed limit or exceed this given the limited frontage etc. TSM6 states "Where there is a need for a crossing, pedestrian numbers and vehicle flows are moderate, and the 85th percentile traffic speed does not exceed 35 mph, then a Zebra crossing may be suitable". A zebra crossing may therefore not be deemed suitable. Confirmation of speeds required;
- Crossing designed to TSM6 standards with no departures required (other than <35mph 85th percentile speed concern);
- Pedestrian visibility is achievable at 30mph (1.5m back from centre of tactile, 90m for DMRB & 40m for TSM6);
- Proposed crossing is in close proximity to surrounding priority junction accesses. Vehicle swept paths have confirmed a 'large car' can exit both Reading Prison and SSE accesses and be straight at the stop-line;
- Crossing may be off the pedestrian desire line coming from the Retail Park going to the Prison;
- There may not be much benefit for pedestrians walking towards Reading given there is already a crossing on Forbury Road in close proximity (circa 75m). Having two crossings this close may also cause disruption to the vehicle network; and
- Given the possible high level of pedestrian demand for the crossing a zebra may cause significant distribution to the vehicle network.

TECHNICAL NOTE

Forbury Road Crossing Location 2 (At Roundabout Refuge Island)

- 3.14. At crossing location 2, the main constraints are the Plummery Wall to the west, and the adjacent roundabout to the east on Forbury Road. The crossing options reviewed at this location include signalised and zebra pedestrian crossing. Due to the constraints, each design at this location includes some element of a departure from standard. Where applicable the design has attempted to minimise the impact of the departure as much as possible. More details are provided for each respective design.
- 3.15. A total of four crossing options have been reviewed. A figure is provided of each option design which is not to scale along. A list of comments for each design is then provided. The associated technical drawings at 1:500 (at A2) can be found in **Appendix A**.

Key Design Standards from CD116

- 3.16. A number of key design standards are applicable for each of the following designs at location 2 from the DMRB CD116 document. These have been listed below and will be referenced later when providing comments on each design.
- Paragraph 8.1.3 - *“Where the speed limit within 100 metres of the give way line on all approaches is less than or equal to 40 mph, Table 8.1.3 below provides suggestions on what crossing facilities may be provided for pedestrians”*

Table 8.1.3 Suggested pedestrian crossing facilities on roundabouts where the approach roads have a speed limit of 40 mph or less

Highest class of road on any approach	Highest two-way AADT on any approach	Suggested pedestrian crossing provision
Single	< 8000	Uncontrolled
	8000 - 12000	Uncontrolled / Zebra
	> 12000	Zebra
Dual	< 16000	Uncontrolled / Zebra
	16000 - 25000	Zebra / Signal-controlled
	> 25000	Signal-controlled

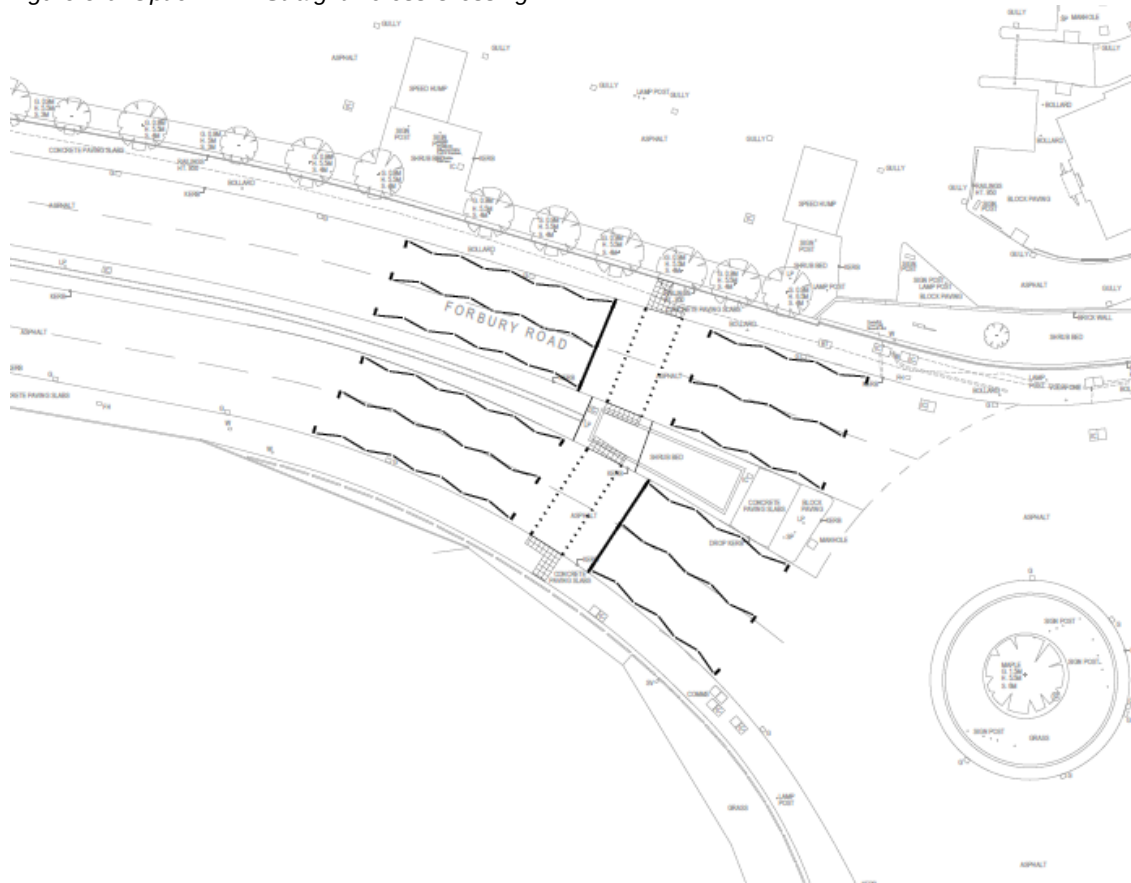
- Paragraph 8.2.3 – *“When signal-controlled pedestrian crossing facilities are incorporated on the exit arms on signal-controlled and non-signal-controlled roundabouts, storage length should be provided to avoid traffic queuing back onto the circulatory carriageway.”*
- Paragraph 8.2.3 – *“Non-staggered signal-controlled crossings should be sited either at 20 metres or more than 60 metres from the roundabout entry give way line.”*
- Paragraph 8.2.3 (NOTE 1) – *“On the approach to the roundabout, a distance of 20 metres for a signal-controlled crossing can reduce the likelihood of drivers confusing the signal with one controlling flow into the roundabout and it leaves sufficient storage space for vehicles waiting to enter the roundabout.”*
- Paragraph 8.2.3 (NOTE 2) – *“On the exit, a distance of 20 metres reduces the likelihood that 'blocking back' can occur where traffic queues extend onto the circulatory carriageway and it helps to ensure that drivers are still travelling slowly as they approach the crossing.”*
- Paragraph 8.2.3 (NOTE 3) – *“Where the crossing is staggered, the part of the crossing on the entry arm can be within the 20 metres to 60 metres zone.”*

TECHNICAL NOTE

Option 2A - Straight Across Signalised Crossing

- 3.17. Crossing Option 2A consists of a straight-across signalised crossing. The design is shown in **Figure 3-6**.

Figure 3-6: Option 2A – Straight Across Crossing



- 3.18. The following comments have been raised as part of this review:

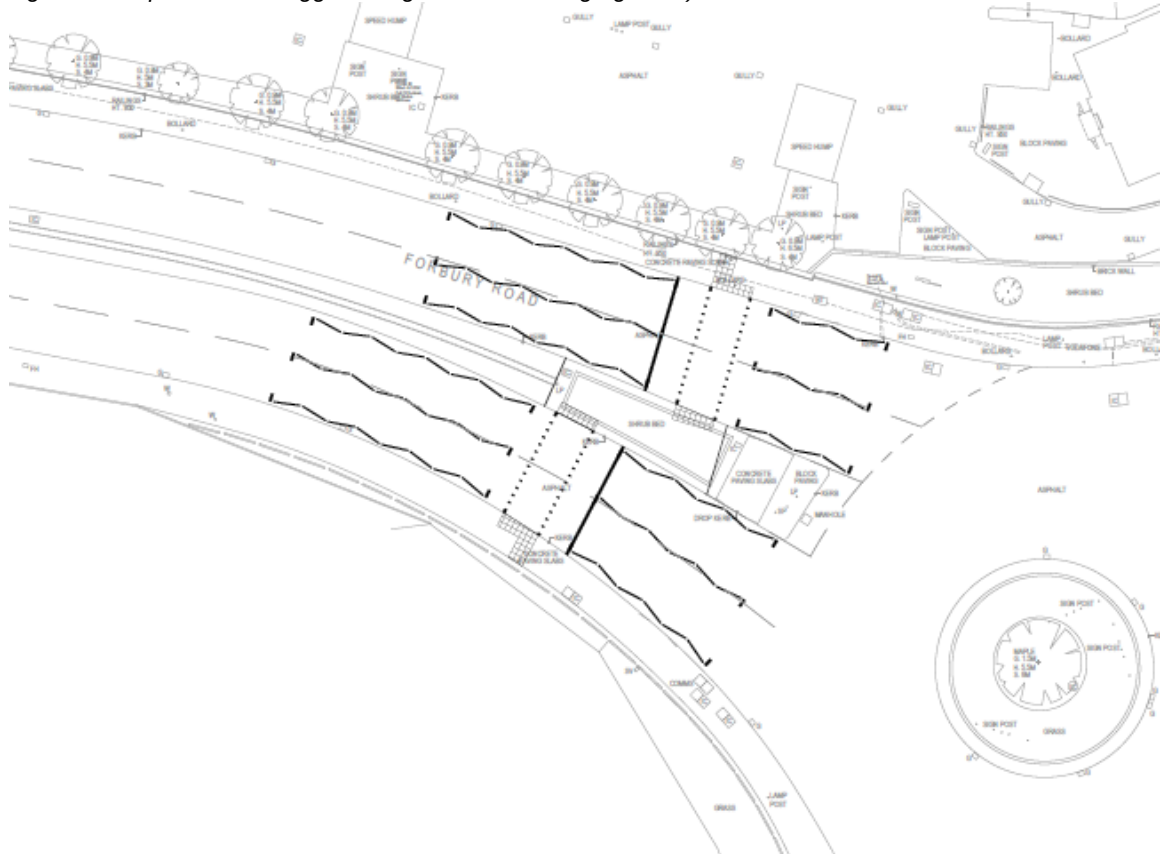
- Straight ahead signal crossings should not be considered where the road width exceeds 15.0m as per LTN Paragraph 5.2.3. This would require a departure from standard.
- DMRB CD116 suggests the stop line should be a minimum of 20.0 from the roundabout give-way. This is achieved on the eastbound lanes, but on the westbound (roundabout exit) only 16.0m can be achieved. This is substandard and may lead to blocking back into the circulatory of the roundabout;
- Pedestrian visibility is not achievable at 30mph on the northern side of the carriageway as the splay passes through the Flummery Wall (both 90m for DMRB & 40m for TSM6);
- Crossing location is on the main future pedestrian desire line coming from the Retail Park going to the former prison site and would be beneficial.

TECHNICAL NOTE

Option 2B - Staggered Signalised Crossing (right-left)

- 3.19. Crossing Option 2B consists of a signalised crossing with the right-left stagger configuration. The design is shown in **Figure 3-7**.

Figure 3-7: Option 2B – Staggered Signalised Crossing right-left



- 3.20. The following comments have been raised as part of this review:

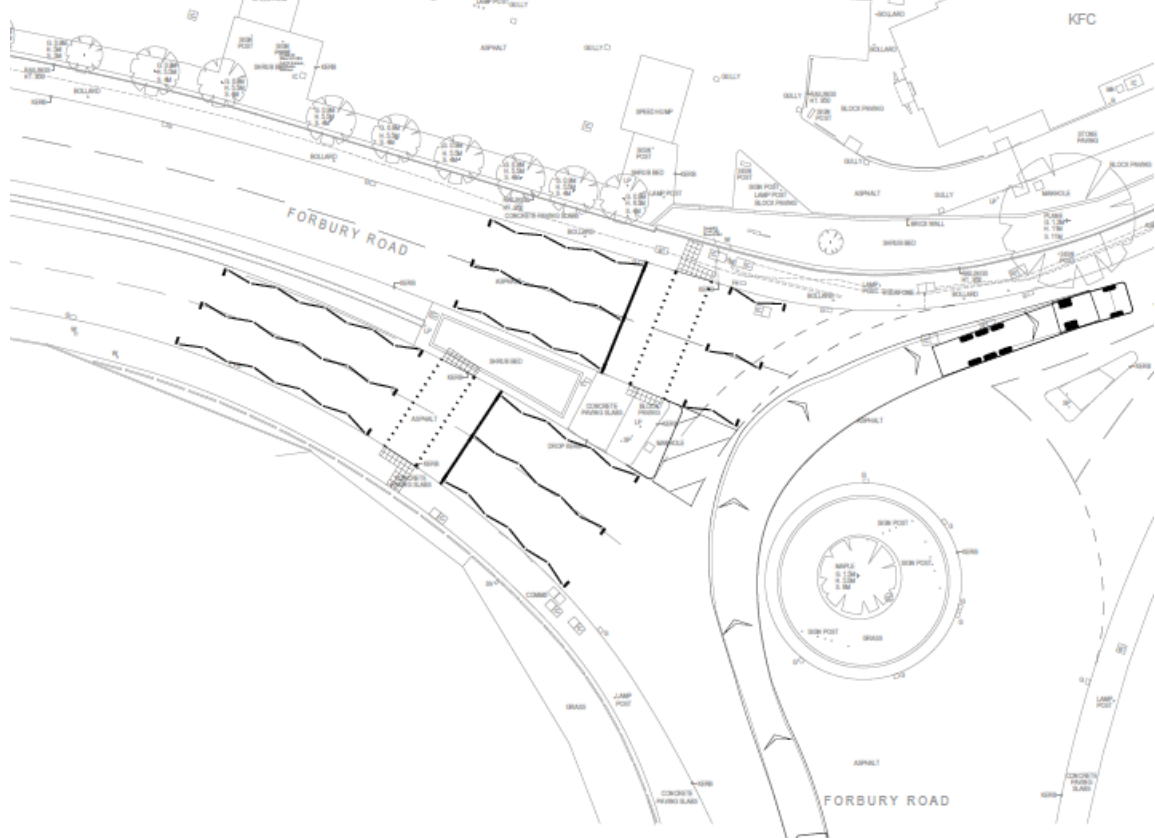
- Crossing does not follow the suggested/preferred left-right stagger as per TSM6.
- DMRB CD116 suggests the stop line should be a minimum of 20.0 from the roundabout give-way. This achieved on the eastbound lanes, but on the westbound (roundabout exit) there is only 16.0m can be achieved. This is substandard and may lead to blocking back into the circulatory of the roundabout.
- Pedestrian visibility is not achievable at 30mph on the northern side of the carriageway as the splay passes through the Plummary Wall for DMRB & TSM6 requirements;
- Crossing location is on the main future pedestrian desire line coming from the Retail Park going to the former prison site and would be beneficial.

TECHNICAL NOTE

Option 2C - Staggered Signalised Crossing (right-left) with Amendments to Roundabout

- 3.21. Crossing Option 2C consists of a signalised crossing with the right-left stagger configuration with additional amendments to the roundabout to improve visibility to the northern section of the crossing. The design is shown in **Figure 3-8**.

Figure 3-8: Option 2B – Staggered Signalised Crossing right-left)



- 3.22. The following comments have been raised as part of this review:

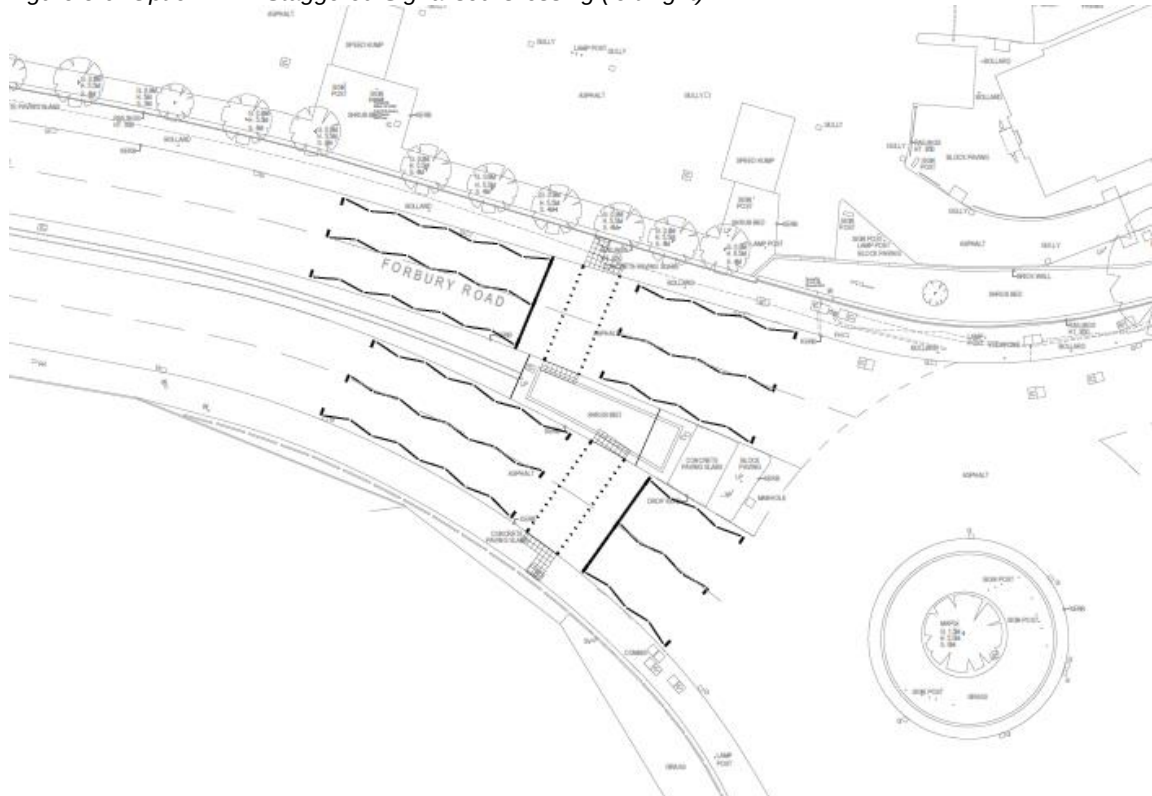
- Crossing does not follow the suggested/preferred left-right stagger as per TSM6.
- DMRB CD116 suggests the stop line should be a minimum of 20.0 from the roundabout give-way. This achieved on the eastbound lanes, but on the westbound (roundabout exit) there is only 16.0m can be achieved. This is substandard and may lead to blocking back into the circulatory of the roundabout.
- With the northern section of the crossing moved further to the east, the Pedestrian visibility is achievable at 30mph on the northern side of the carriageway to TSM6 requirements. This location however does not meet 30mph DMRB splay requirements;
- Crossing location is on the main future pedestrian desire line coming from the Retail Park going to the former prison site and would be beneficial.

TECHNICAL NOTE

Option 2D - Staggered Signalised Crossing (left-right)

- 3.23. Crossing Option 2D consists of a signalised crossing with the left-right stagger configuration. The design is shown in **Figure 3-9**.

Figure 3-9: Option 2D – Staggered Signalised Crossing (left-right)



- 3.24. The following comments have been raised as part of this review:

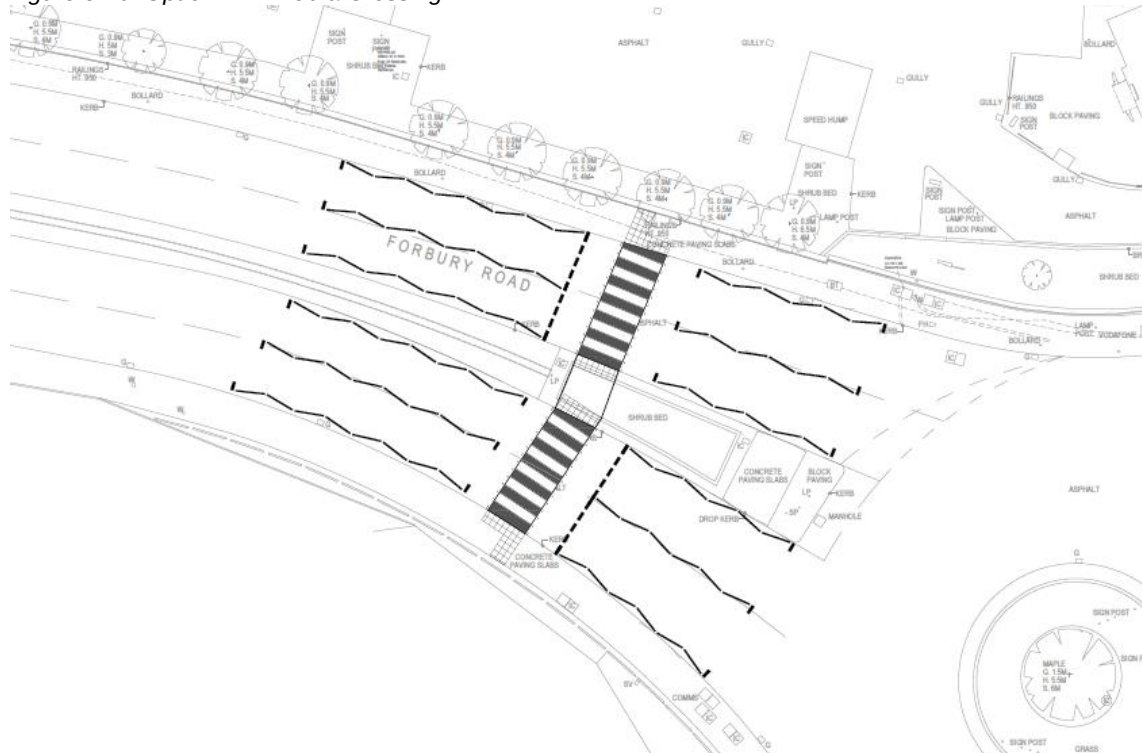
- Crossing format follows the suggested/preferred left-right stagger As per TSM6;
- DMRB CD116 suggests the stop line should be a minimum of 20.0 from the roundabout give-way. This achieved on the eastbound lanes, but on the westbound (roundabout exit) there is only 10.0m can be achieved. This is substandard and may lead to blocking back into the circulatory of the roundabout.
- Pedestrian visibility is not achievable at 30mph on the northern side of the carriageway as the splay passes through the Plummary Wall for DMRB & TSM6 requirements;
- Crossing location is on the main future pedestrian desire line coming from the Retail Park going to the former prison site and would be beneficial.

TECHNICAL NOTE

Option 2E – Zebra Crossing

- 3.25. Crossing Option 2E consists of a zebra crossing configuration. The design is shown in **Figure 3-10**.

Figure 3-10: Option 2E – Zebra Crossing



- 3.26. The following comments have been raised as part of this review:

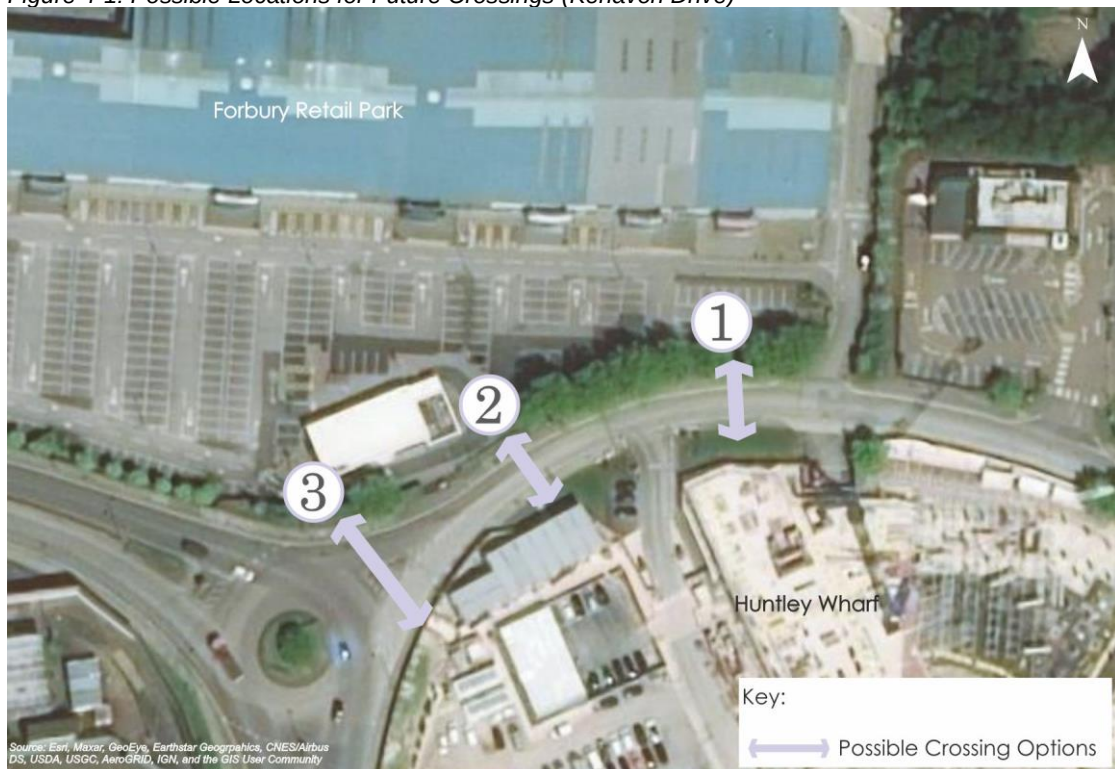
- Analysis of Department for Transport (DfT) traffic statistics on Forbury Road (site number 99741) show that road has exhibited an Annual Average Daily Flow (comparable to AADT stated in DMRB) of 20,934 vehicles. No speed data for Forbury Road is available at this time, however based on local knowledge the Road is limited to 30mph, although the nature of the road means drivers often drive at or above the limit, albeit this may be less of an issue close to the roundabout. TSM6 states "Where there is a need for a crossing, pedestrian numbers and vehicle flows are moderate, and the 85th percentile traffic speed does not exceed 35 mph, then a Zebra crossing may be suitable". A zebra crossing may therefore not be deemed suitable. Confirmation of speeds required;
- DMRB CD116 suggests the zebra give-way line should be a minimum of 20.0 from the roundabout give-way. This achieved on the eastbound lanes, but on the westbound (roundabout exit) there is only 16.0m can be achieved. This is substandard and may lead to blocking back into the circulatory of the roundabout;
- Pedestrian visibility is not achievable at 30mph on the northern side of the carriageway as the splay passes through the Plummary Wall for DMRB & TSM6 requirements;
- Crossing location is on the main future pedestrian desire line coming from the Retail Park going to the former prison site and would be beneficial.

TECHNICAL NOTE

4. Kenavon Drive

- 4.1. Given the increase in pedestrian and cyclists demand generated by the development proposals an additional crossing may be beneficial to allow for easier connection to the Huntley Wharf development and to the River Kennet.
- 4.2. Three crossing locations have been considered to provide a crossing point for pedestrians. There are a number of constraints include visibility, proximity to site access junctions and utilities that have been considered and will require further investigation following this review. The location of the three crossing options on Kenavon Drive are shown in **Figure 4-1**.

Figure 4-1: Possible Locations for Future Crossings (Kenavon Drive)

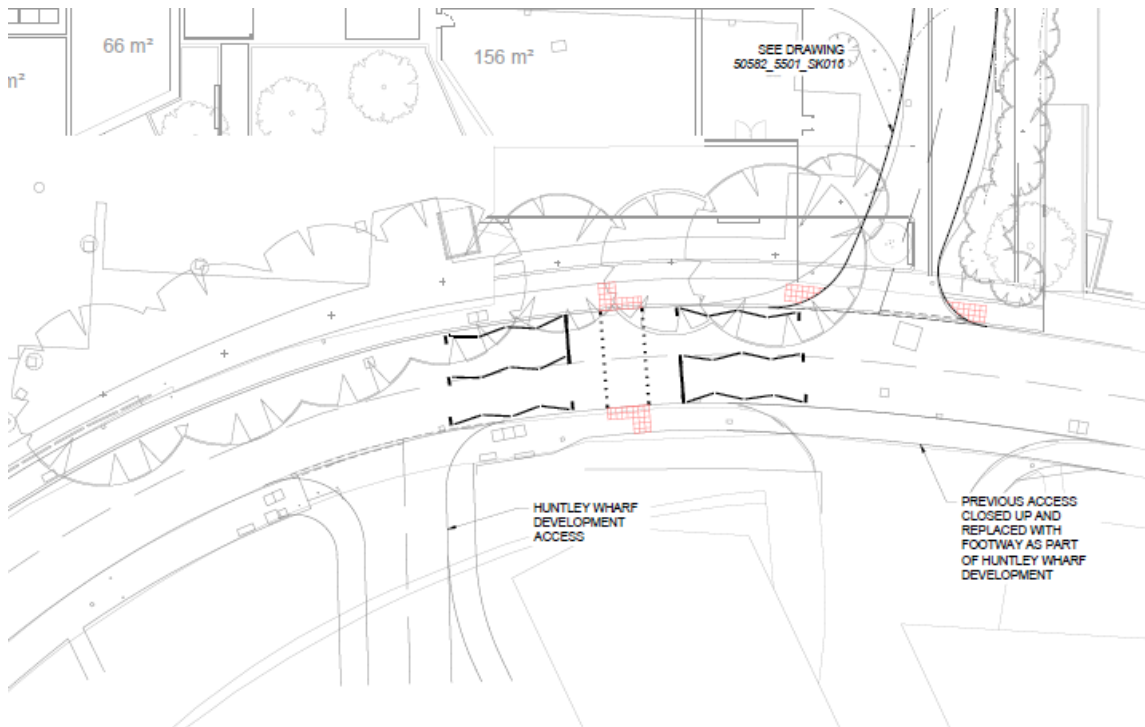


TECHNICAL NOTE

Option 1 – Signalised Crossing (between Site Access and Huntley Wharf Access)

- 4.3. Crossing Option 1 consists of a signalised crossing between Forbury Retail Park site access and Huntley Wharf access. The design is shown in **Figure 4-2**.

Figure 4-2: Option 1 – Signalised Crossing (between Site Access and Huntley Wharf Access)



- 4.4. The following comments have been raised as part of this review:

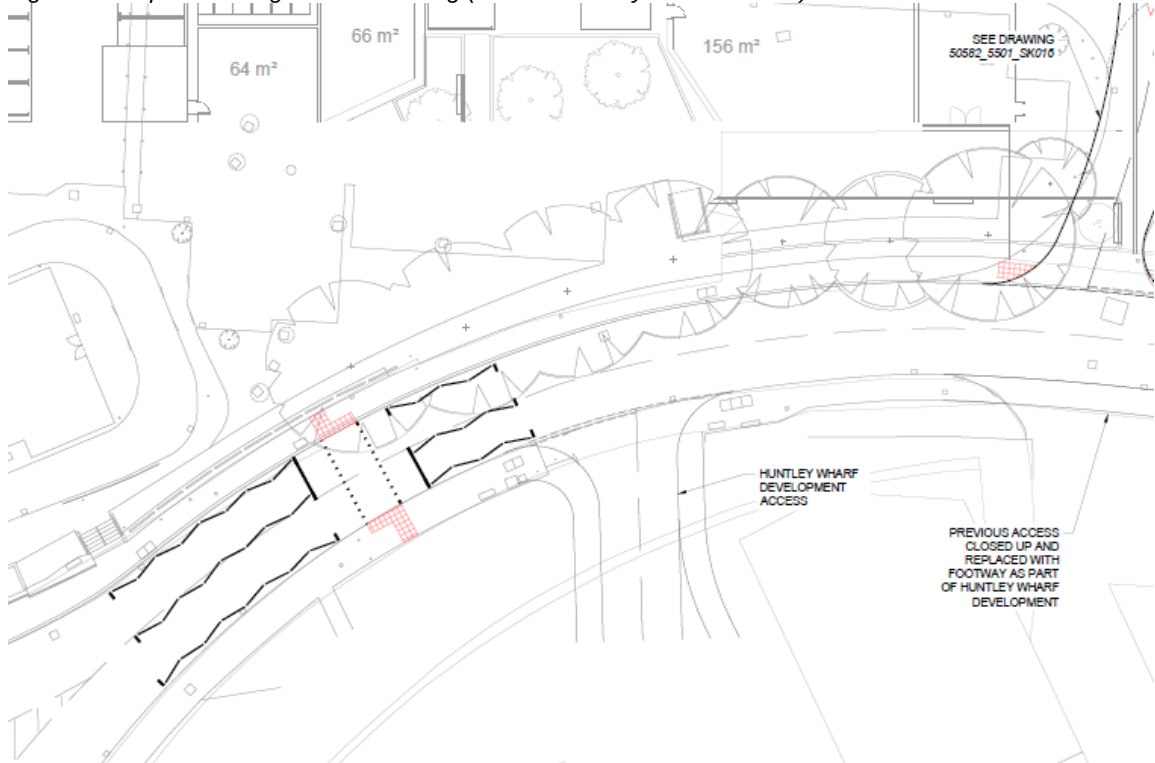
- Straight ahead signal crossings is applicable in this location as the road does not exceed 15.0m as per LTN Paragraph 5.2.3.
- Pedestrian visibility is achievable at 30mph on the northern side for 40m as per TSM6 requirement, however on the southern side a maximum of circa 33m is achievable as the 40m splay passes through the Huntley Wharf site boundary due to the curvature of the road. DMRB splays have been reviewed as not applicable in this location.
- Crossing is located in close proximity to two junctions. Swept paths have confirmed large cars can exit each respective junction and wait at the stop line, however there may be overhang across the carriageway with larger HGV's;
- There are various utilities, a lamp column and signage located in this location (on the southern side of the carriageway). Further investigation is required.
- Crossing location is on the future pedestrian desire line into the Huntley Wharf development site access and to the River Kennet.

TECHNICAL NOTE

Option 2 – Signalised Crossing (West of Huntley Wharf Access)

- 4.5. Crossing Option 2 consists of a signalised crossing to the west of the Huntley Wharf access. The design is shown in **Figure 4-3**.

Figure 4-3: Option 2 – Signalised Crossing (West of Huntley Wharf Access)



- 4.6. The following comments have been raised as part of this review:

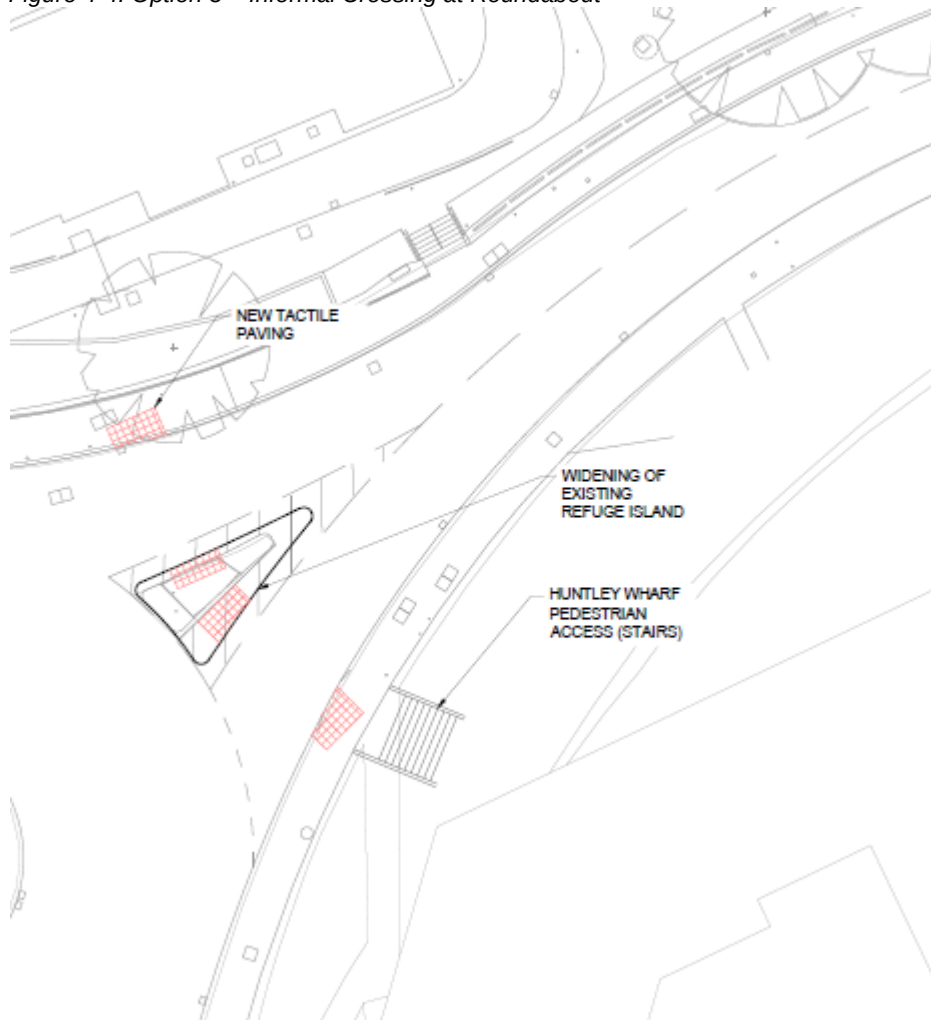
- Straight ahead signal crossings is applicable in this location as the road does not exceed 15.0m as per LTN Paragraph 5.2.3.
- Pedestrian visibility is achievable at 30mph on the northern side for 40m as per TSM6 requirement, however on the southern side a maximum of circa 33m is achievable as the 40m splay passes through the Huntley Wharf site boundary due to the curvature of the road. DMRB splays have been reviewed as not applicable in this location.
- Crossing is located in close proximity to Huntley Wharf access. Swept paths have confirmed large cars can exit the junction and wait at the stop line, however there may be overhang across the carriageway with larger HGV's;
- There are various utilities, a lamp column and signage located in this location (on the southern side of the carriageway). Further investigation is required.
- Crossing location is on the future pedestrian desire line into the Huntley Wharf development site access and to the River Kennet.

TECHNICAL NOTE

Option 3 – Informal Crossing at Roundabout (Upgrades to existing facility)

- 4.7. Crossing Option 3 consists of upgrades to the existing informal crossing at the roundabout refuge island on Kenavon Drive. This includes localised widening of the refuge island and the addition of tactile paving. The design is shown in **Figure 4-4**.

Figure 4-4: Option 3 – Informal Crossing at Roundabout



- 4.8. The following comments have been raised as part of this review:

- An informal crossing already located at this location in the form of dropped kerbs. This option would seek to create an improved informal crossing arrangement and localised widening to improve the safety for pedestrian waiting in the refuge island.
- Tactile Paving will improve facility for vulnerable users and formalise the crossing arrangement.
- Crossing location provides direct connection into the Huntley Wharf development at a stair access point.
- A limitation of this crossing location however is there is no level access at this point with only stairs provided meaning parents with prams or disabled users would have to walk back to the Huntley Wharf site access to get into the development.

TECHNICAL NOTE

5. Next Steps

- 5.1. This note has looked at a number of options to provide formalised crossing provision locally to the Forbury Retail Park site across both Forbury Road and Kenavon Drive
- 5.2. All of the options on Forbury Road are constrained by retaining the listed Plummery Wall in situ. RBC are requested to provide guidance as to whether any of the designs investigated are worthy of progressing in the context of both the noted limitations and of the existing crossings being available just a short distance to the west of the site on the desire line to the town centre and railway station.
- 5.3. The Kenavon Drive crossing options are less constrained but need to function alongside the accesses to both Forbury Retail Park and Huntley Wharf. Again, RBC are asked to provide their views on whether these are considered feasible and if so, which option is preferred.
- 5.4. It is suggested that further discussion is undertaken with RBC as part of the scoping engagement to understand based upon this review, the preferred crossing option(s) to serve the site and agree the way forwards.

TECHNICAL NOTE

Appendix A – Forbury Road Crossing Options

- 50582_5501_SK001 – OPTION 1A
- 50582_5501_SK002 – OPTION 1B
- 50582_5501_SK003 – OPTION 1C
- 50582_5501_SK004 – OPTION 1D
- 50582_5501_SK005 – OPTION 2A
- 50582_5501_SK006 – OPTION 2B
- 50582_5501_SK007 – OPTION 2C
- 50582_5501_SK008 – OPTION 2D
- 50582_5501_SK009 – OPTION 2E

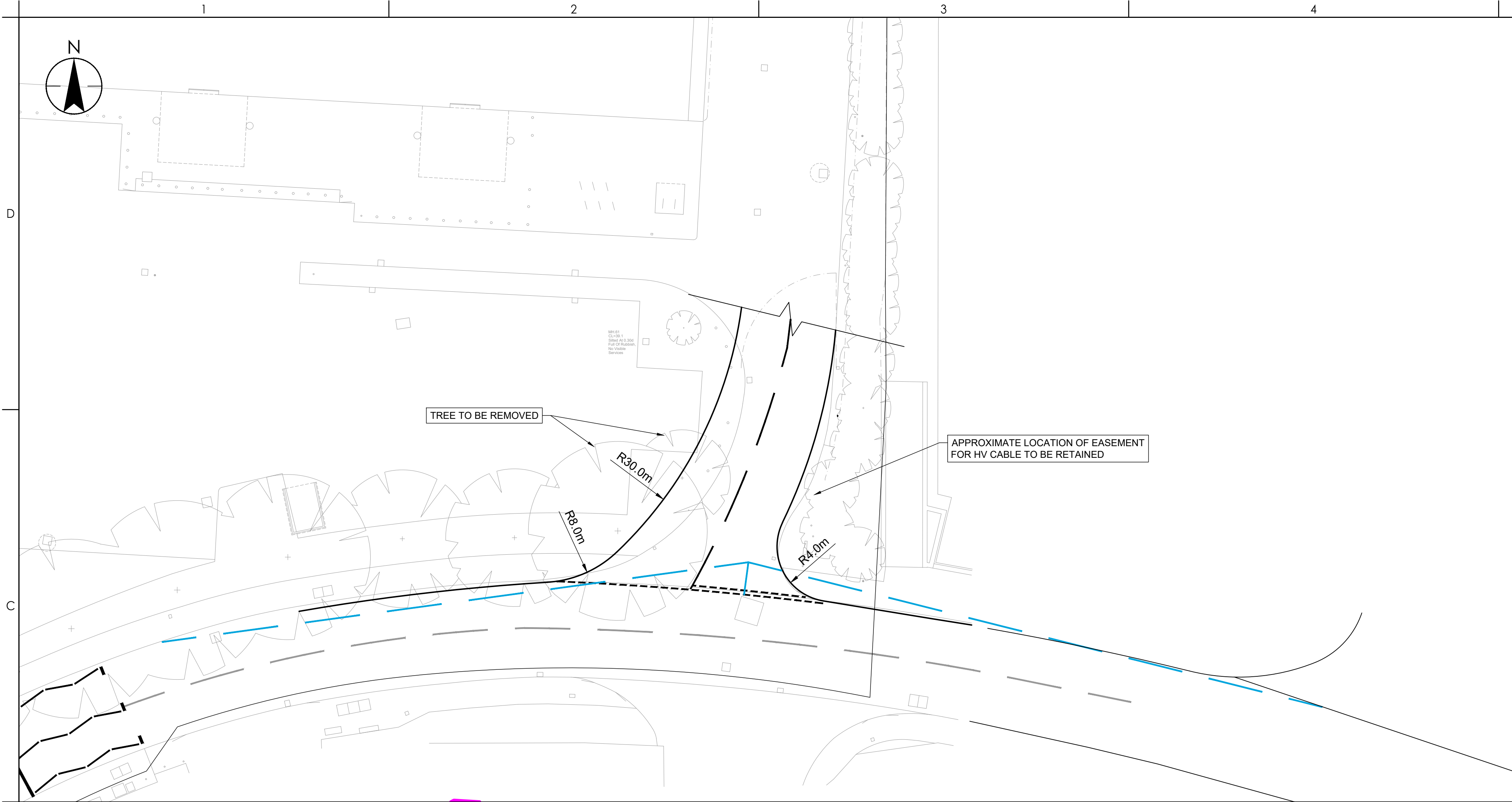
TECHNICAL NOTE

Appendix B – Kenavon Drive Crossing Options

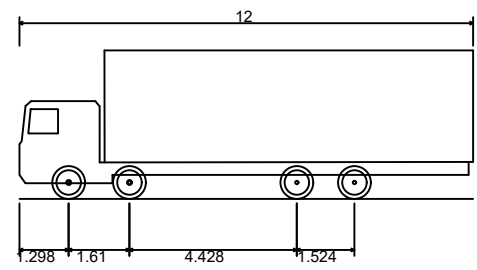
- 50582_5501_SK017 – OPTION 1
- 50582_5501_SK018 – OPTION 2
- 50582_5501_SK019 – OPTION 3

TECHNICAL NOTE

Appendix D – Eastern Access



VEHICLE PROFILE



Rigid Truck	12.000m
Overall Length	2.500m
Overall Width	3.928m
Overall Body Height	0.412m
Min Body Ground Clearance	2.471m
Track Width	6.00s
Lock to lock time	11.900m
Kerb to Kerb Turning Radius	

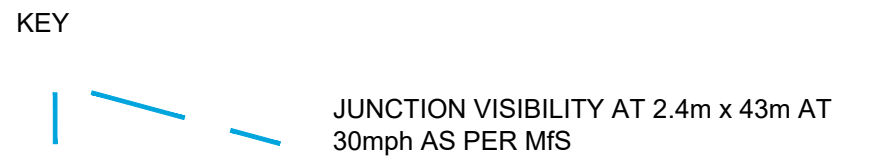


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Caversham Bridge House, Waterman Place
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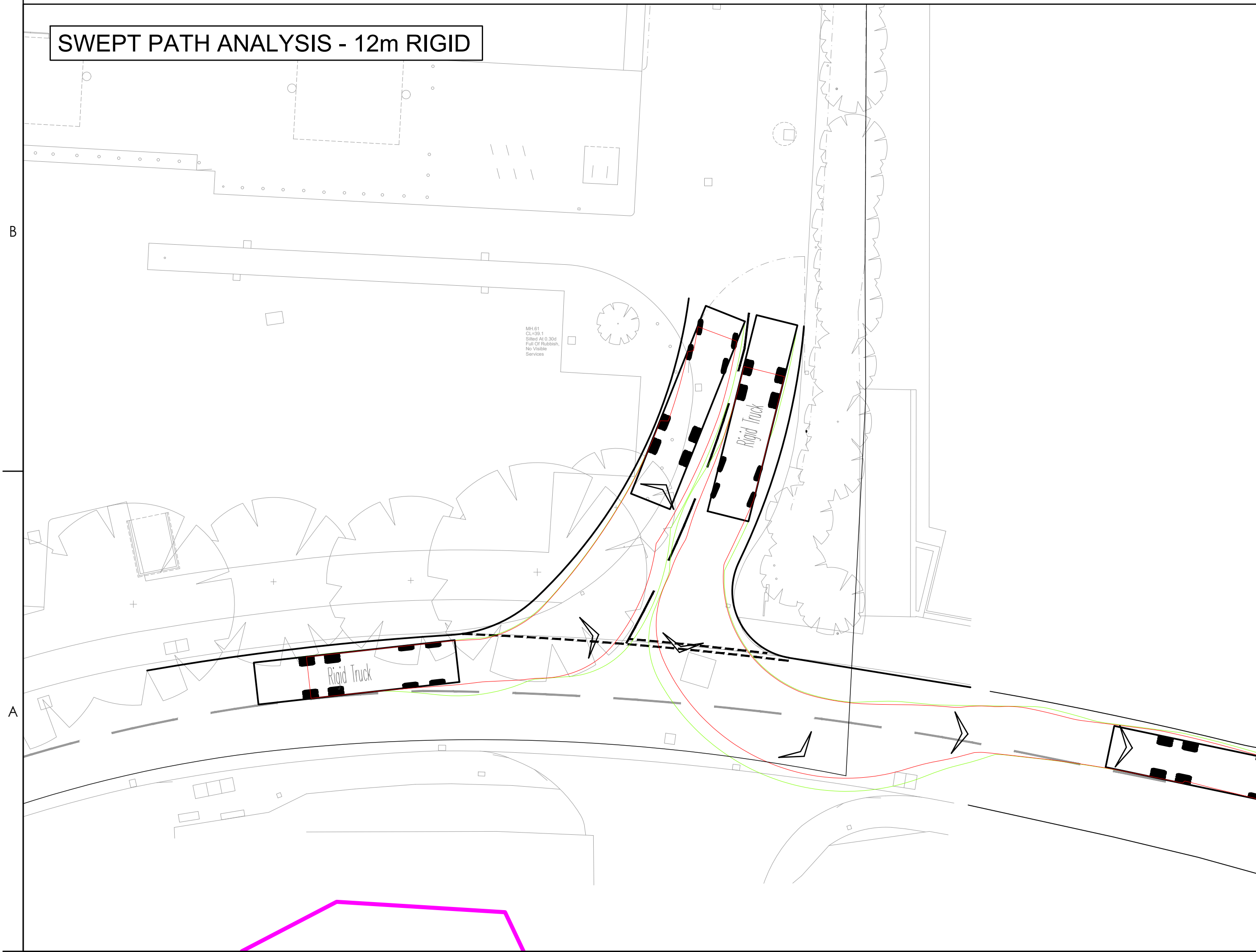
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Notes
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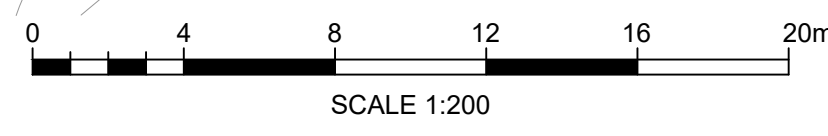
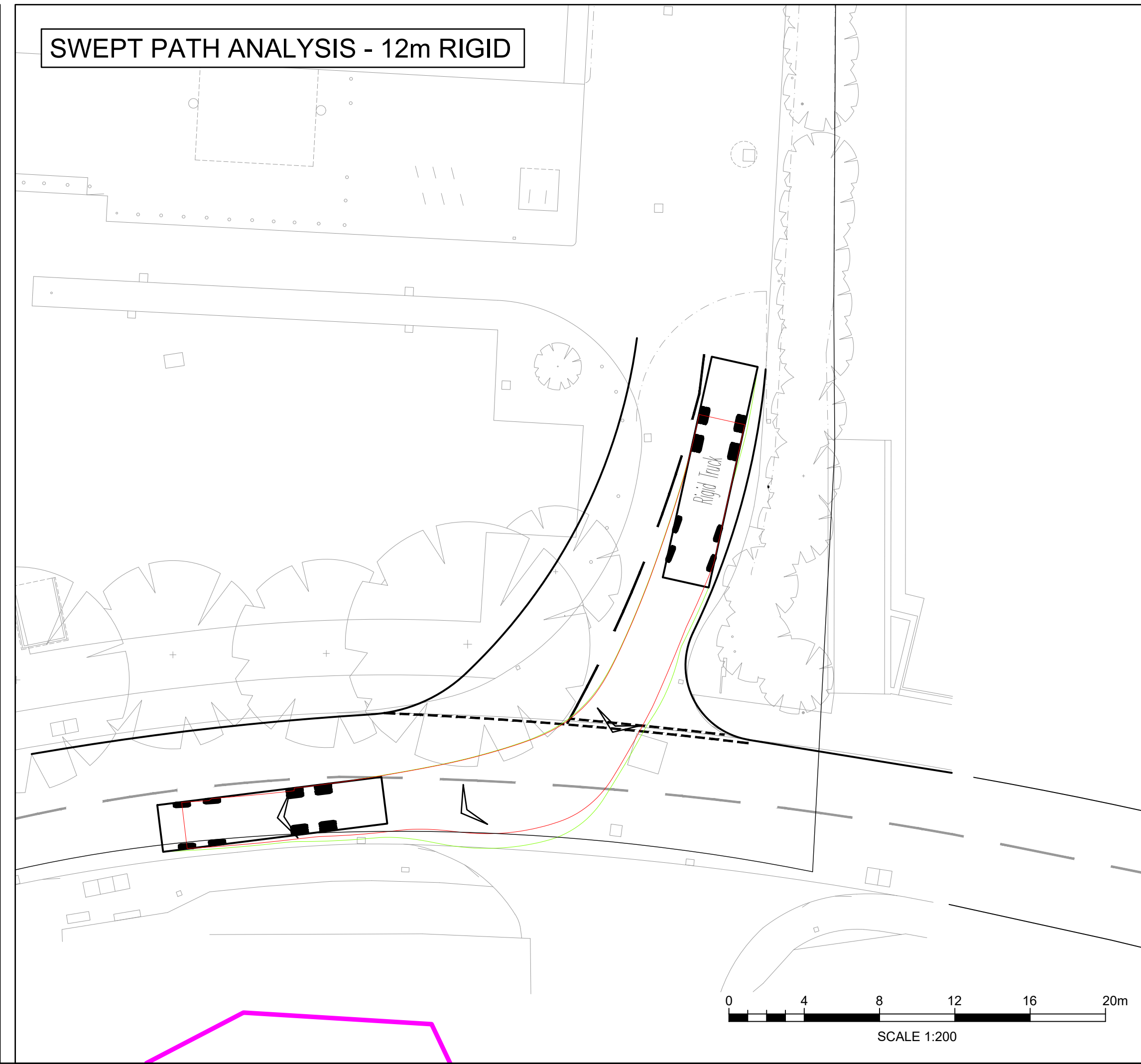
ON SITE LAYOUT SUBJECT TO RESERVED MATTERS APPLICATION



SWEPT PATH ANALYSIS - 12m RIGID



SWEPT PATH ANALYSIS - 12m RIGID



P03 FOR INFORMATION	ML	SS	2026.04.30
P02 DRAFT - CLIENT REVIEW	BS	SS	2025.08.07
P01 FIRST ISSUE	ML	SS	2025.06.11
Issued/Revision	By	Appd	YYYY.MM.DD
	ML	ML	SS 2025.06.11
	Dwn.	Dsgn.	Chkd. YYYY.MM.DD

Issue Status

S2 - FOR INFORMATION

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Client/Project Logo



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abrdn

FORBURY RETAIL PARK

READING, UK

Title
FORBURY DEVELOPMENT
ACCESS ARRANGEMENT

Project No.	A1 Scale
50582	1:200
Revision	Drawing No.
P03	50582-STN-HGN-SW-DR-CH-0001

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Drawing: 0001.dwg
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