



WBLR Phase 3 (Brookleigh, Burgess Hill)

DESIGN PRINCIPALS STATEMENT

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Contents

1. Introduction	1
1.1 Background.....	1
1.2 Purpose of this Report	3
2. Highway Design	4
2.1 Standards.....	4
2.2 Carriageway width and edge details.....	4
2.3 Carriageway width and edge detail - Proposed.....	6
2.3.1 The A2300:	7
2.3.2 A273, Triangle Roundabout to WBLR Phase 1 A273 Roundabout:.....	8
2.3.3 A273, WBLR Phase 1 A273 Roundabout to Gatehouse Lane:.....	9
2.3.4 Geometric Design and Visibility.....	9
3. Verges and Landscaping	10
3.1.1 A2300 North Side.	10
3.1.2 A2300 South Side.....	10
3.1.3 A273 West Side – Triangle Roundabout to A273 Roundabout.	11
3.1.4 A273 West Side – A273 Roundabout to Gatehouse Lane.	11
4. Non-motorised User (NMU) Facilities	12
4.1 Design Principals	12
4.1.1 A2300 North Side.	12
4.1.2 A2300 South Side.....	12
4.1.3 A273 West Side.	12
4.2 Widths	12
4.2.1 Baseline Widths.	12
4.2.2 Additional Clearances.....	13
4.2.3 Separation.....	15
5. Location of Other Features	17
5.1 Side Road Junctions.....	17
5.2 Bus Stops.....	17
5.3 Crossing Points.....	17
6. Drainage Design Parameters	19
7. Traffic	20
8. Conclusion	21

Figures

Figure 1: Application Site Boundary – RMA	2
Figure 2: Application Site Boundary – Full application	2
Figure 3: Extract from DMRB CD127 Cross-sections and headrooms: Rural mainline single carriageway.....	5
Figure 4: Existing A2300 Carriageway, looking west near the Triangle Roundabout	5
Figure 5: Existing A273 Carriageway, looking north towards the Triangle Roundabout.....	6
Figure 6: Extract from DMRB CD127 Cross-sections and headrooms: Urban mainline single carriageway.	6

Contents

Figure 7: Sketch of Existing A2300 carriageway layout (left side of image = south side).....	7
Figure 8: Sketch of Proposed A2300 carriageway layout (left side of image = south side).....	7
Figure 9: Sketch of Existing A273 carriageway layout (left side of image = west side).....	8
Figure 10: Sketch of Proposed A273 carriageway layout (left side of image = west side)	8
Figure 11: Existing A273 Carriageway, looking north at Gatehouse Lane Pegasus crossing	9
Figure 12: Extract from WSCC Cycling Design Guide: 'Table 2a Additional clearances to maintain effective widths for cycle users'	13
Figure 13: Green Super Highway cycle track split to pass around large sign post.....	13
Figure 14: Kerb unit proposed over short distance at UKPN electrical sub-station land constraint.....	14
Figure 15: Layout where shared use footway passes beneath large direction sign.	14
Figure 16: Example of shared use footway passing beneath large sign.....	15
Figure 17: Crossing Points within and adjacent to WBLR Phase 3.....	18

1. Introduction

1.1 Background

The Brookleigh (formerly the Northern Arc) Development has passed through an Outline Planning process resulting in outline planning permission (Application Reference: DM/21/3279).

As part of this planning process a Street Design Adoption Manual (SDAM) was developed and agreed with Mid Sussex District Council (MSDC) as planning authority and West Sussex County Council (WSCC) as highway authority, to guide and inform the future design of the development as its various Phases are brought forward through the planning process.

The SDAM is referenced in Condition 4 of the Outline Planning Permission (OPP). Several revisions of the SDAM have been produced, with revision 9 (220613 SDAM R9 FINAL.pdf, issued to Waterman on 19/01/23) the current version at the time of preparing this statement.

Whilst some aspects of the SDAM are relevant to the Western Bridge and Link Road Phase 3 scheme ('WBLR Phase 3' or 'the scheme'), the scheme proposals are for the addition of pedestrian and cycle facilities, primarily alongside existing sections of the A2300 and A273 carriageway, to provide active travel links between the new built-up areas of development and the existing town. It is noted that the SDAM is primarily concerned with the proposed built-up areas of development and does not specifically cover works to existing highway acting as connections between the development areas and the existing town.

WBLR Phase 3 comprises two areas separated by the WBLR Phase 1 A273 Jane Murray /Way Roundabout (A273 Roundabout):

- To the south of the A273 Roundabout, extending south to the Gatehouse Lane Pegasus crossing facility. This section is progressing via a Full Planning Application as it falls outside of the OPP red line boundary.
- To the north of the A273 Roundabout, extending north to the Triangle Roundabout, then west to the WBLR Phase 1 A2300 Roundabout (A2300 Roundabout). This section is progressing via a Reserved Matters Planning Application as it falls within of the OPP red line boundary.

The WBLR Phase 3 red line boundaries (the application site boundaries) for the RMA and Full planning applications are shown in **Figures 1 & 2** respectively, with labelling of key locations referred to throughout this report.

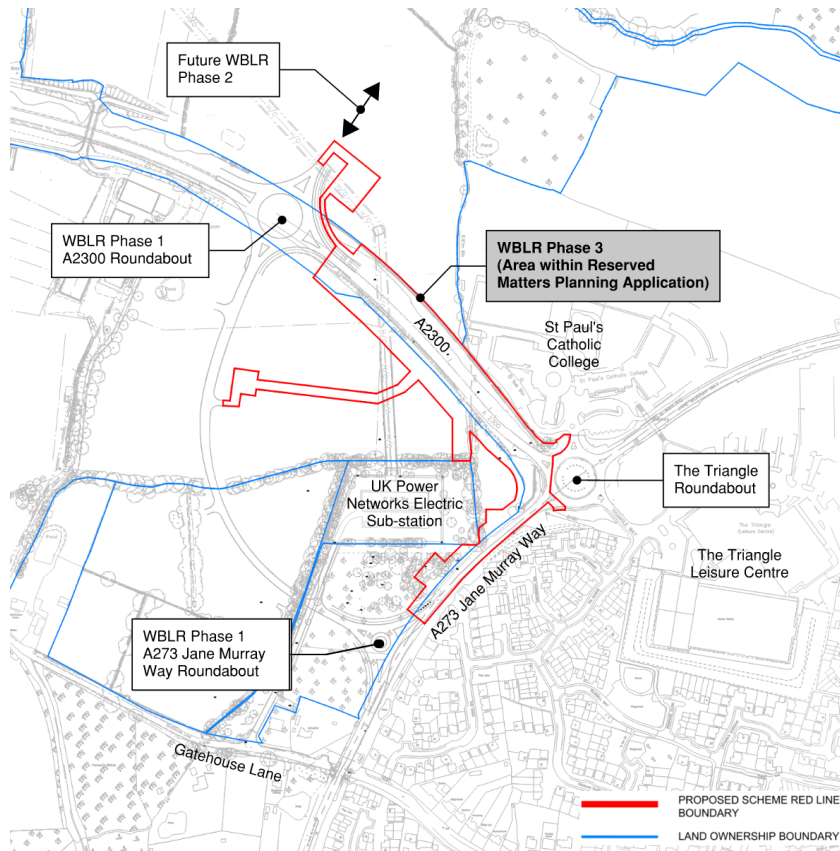


Figure 1: Application Site Boundary – RMA

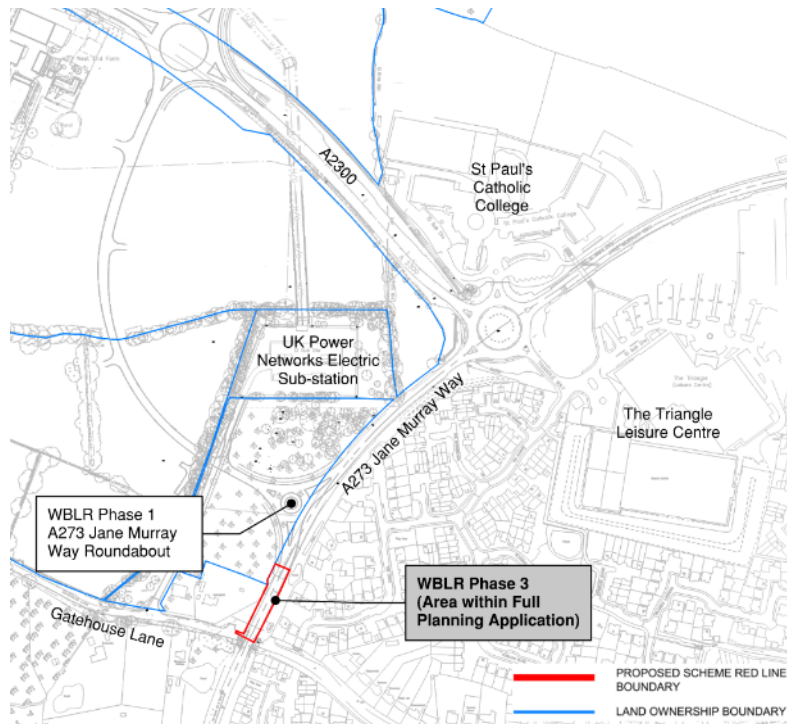


Figure 2: Application Site Boundary – Full application

1.2 Purpose of this Report

This report provides the background and assumptions in the selection of key parameters for use in the design. During the development of the WBLR Phase 3 design, numerous pre-application meetings and discussions have taken place with MSDC (the planning authority) and WSCC (the adopting highway authority) to discuss and agree key design decisions in advance of the planning application submissions. These agreed design principals are identified within this report.

2. Highway Design

2.1 Standards

The SDAM is the primary design guide for the Brookleigh Development and contains guidance relating to three tiers of new road /highway corridor being created by the development: primary, secondary and tertiary.

The SDAM road tiers do not however align completely with local or county highway network classifications. The SDAM 'primary' road corridor forms the main spine road of the development, has a 30mph speed limit and has numerous side junctions, and would be classified as a distributor road in the county highway network.

The existing sections of the A2300 and A273 however are 'primary' roads in the county highway network, having:

- higher traffic flows (including a higher percentage of HGVs),
- higher speed limit of 40mph (the A2300 section having been reduced from national speed limit by the construction of WBLR Phase 1),
- fewer junctions (primarily more substantial junctions such as roundabout or signal controlled junctions due to the higher traffic volumes and speed limit).

Where the SDAM does not cover design aspects appropriate to the existing A2300 and A273, or where additional guidance has been obtained, the following design standards have been used:

- Design Manual for Roads and Bridges, by National Highways
- West Sussex Cycling Design Guide
- LTN 1-20 Cycle Infrastructure Design, by The Department for Transport
- The Traffic Signs Manual, by The Department for Transport

Due to the speed and classification of the A273 and A2300, the DMRB guidance by National Highways is considered more appropriate and has been applied in favour of the Manual for Streets guidance by The Department for Transport.

2.2 Carriageway width and edge details

The existing A2300 and A273 carriageway within WBLR Phase 3 generally have a layout typical of a rural all-purpose mainline single carriageway road, as shown by DMRB design standard CD127 'Cross-sections and headrooms' figure 2.1.1N1e, an extract of which is shown in **Figure 3** overleaf.

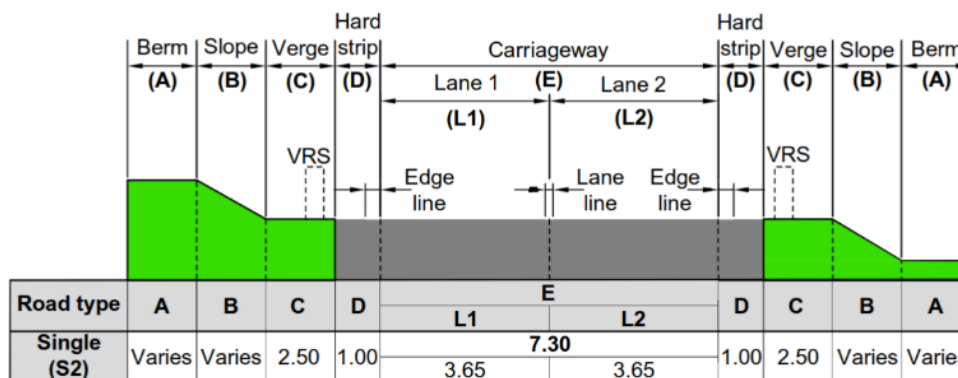


Figure 3: Extract from DMRB CD127 Cross-sections and headrooms: Rural mainline single carriageway.

This rural arrangement does not include any pedestrian footway or off-carriageway cycle provision, typically does not have edge kerb lines and instead includes edge of traffic lane road markings (solid white line) with 1m hard strip beyond. Where needed, surface water run-off is typically captured at the edge of the hard strip, in concrete channels or stone filled drainage trenches.

The A273 carriageway (both sides) and a section of the A2300 (north side), differs slightly from the above typical rural arrangement as they include a kerb line to the rear of the hard strip. This in part helps to direct surface water run-off to road gullies located within the read edge of the hard strips

The existing carriageway cross section changes on the approaches to the roundabouts, where kerb lines are introduced and the hard strips end.

Surface water run-off from the A2300 is in part collected via a concrete V-shaped drainage channel along the southern side of the carriageway. Towards the Triangle Roundabout, the cross fall of the road switches over to fall towards the north, where a kerb line is introduced to direct water to carriageway gullies spaced along the rear of the hard strip.

Along the A237, the carriageway crossfall is to the east side of the carriageway where a kerb line directs surface water run-off to carriageway gullies spaced along the rear of the hard strip.

Figure 4 below shows the existing A2300 layout, looking west near the Triangle Roundabout. The concrete V-shaped drainage channel starts on the left side of the photo (southern side of the carriageway) approximately halfway to the white car, however it is full of detritus and has a covering of grass and other vegetation so is not visible.



Figure 4: Existing A2300 Carriageway, looking west near the Triangle Roundabout

Figure 5 below shows the existing A273 layout looking north towards the Triangle Roundabout, showing kerb lines at the rear of both hard strips. The carriageway crossfall is to the right (east) where surface water run-off is collected by drainage gullies.



Figure 5: Existing A273 Carriageway, looking north towards the Triangle Roundabout

2.3 Carriageway width and edge detail - Proposed

The Brookleigh Development as a whole (expanding the town to the north / northwest), and the WBLR Phase 3 proposals to add footway and off-carriageway cycle provision to both sides of the A2300 and west side of the A273, reduces the rural nature of these sections of carriageway.

Where footways are provided alongside the carriageway, it is typical to introduce a kerb line to help deflect errant vehicles back into the carriageway, with the kerb lines placed at the edge of traffic lane. The typical arrangement for an urban all-purpose mainline single carriageway is shown by DMRB design standard CD127 ‘Cross-sections and headrooms’ figure 2.1.1N1g, an extract of which is shown in Figure 6.

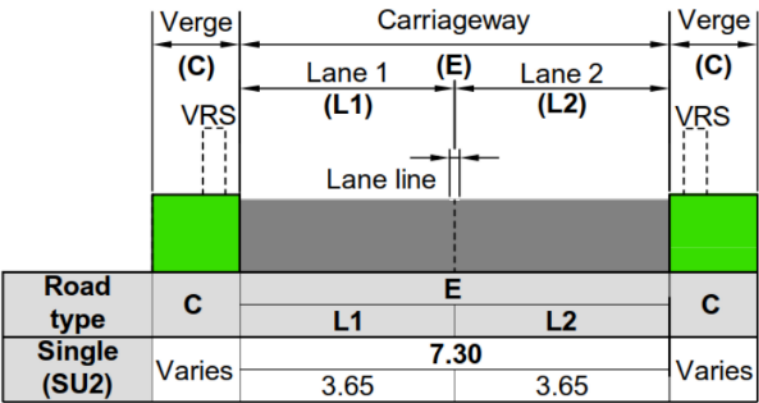


Figure 6: Extract from DMRB CD127 Cross-sections and headrooms: Urban mainline single carriageway.

In both rural and urban layouts, the standard DMRB width of carriageway (the two opposing traffic lanes) totals 7.3m which closely matches the A273 and A2300 existing traffic lane widths.

The principals used in the design have been discussed with MSDC and WSCC during the planning pre-application consultation process and are understood to be acceptable.

2.3.1 The A2300:

The following sketches (Figures 7 & 8) were discussed with MSDC and agreed as the preferred proposal for the A2300 carriageway:

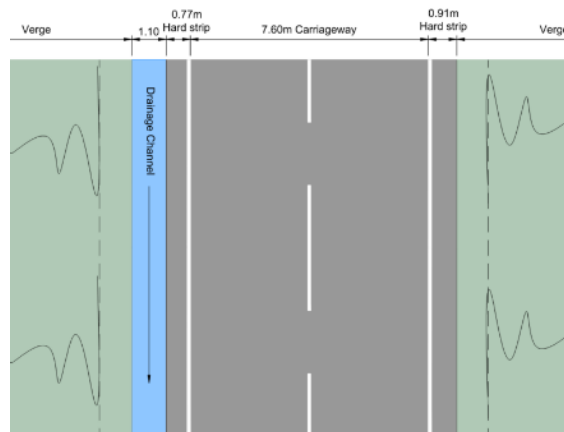


Figure 7: Sketch of Existing A2300 carriageway layout (left side of image = south side)

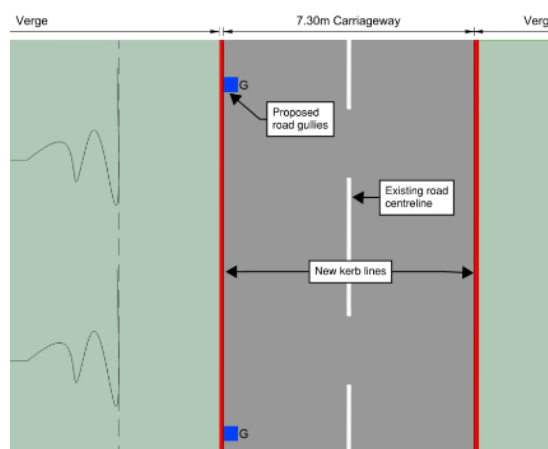


Figure 8: Sketch of Proposed A2300 carriageway layout (left side of image = south side)

The carriageway centreline and alignment are unaffected by the proposals and remains as existing. New kerb lines are proposed at the edge of the existing traffic lanes (approximately where the existing white edge markings are). The hard strip areas behind the new kerb lines are converted to soft landscaped verge.

The existing drainage collection system (a concrete v-channel out falling to gullies on the south side, and gullies along the edge of existing hard strip on the north side) will be removed and replaced by road gullies along the new kerb lines. The type of gully arrangement will be agreed with the Highway Authority during the detailed design and technical approval of the scheme. Where the long fall of the carriageway edge results in an unusually close spacing of gullies (typically when spacing reduces below 10m), a combined kerb / drainage system will be proposed as has been utilised at the WBLR Phase 1 A2300 Roundabout.

The above alterations are intended to give the carriageway an urban character and will be closely aligned to **Figure 6**.

2.3.2 A273, Triangle Roundabout to WBLR Phase 1 A273 Roundabout:

The following sketches (**Figures 9 & 10**) were discussed with MSDC and agreed as the preferred proposal for this section of the A273 carriageway:

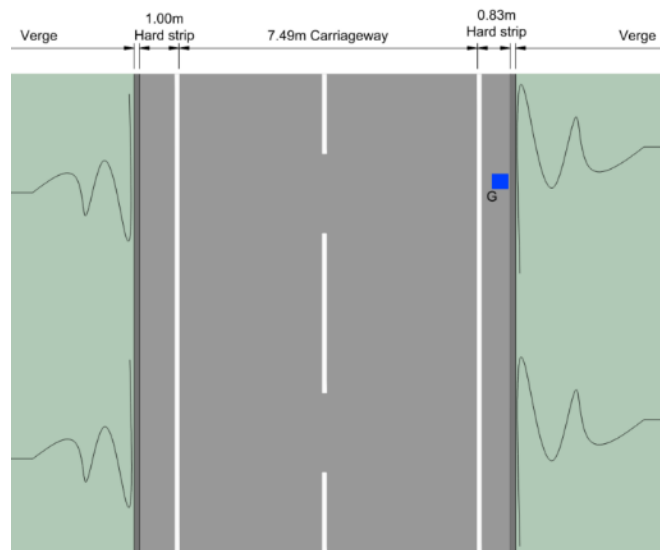


Figure 9: Sketch of Existing A273 carriageway layout (left side of image = west side)

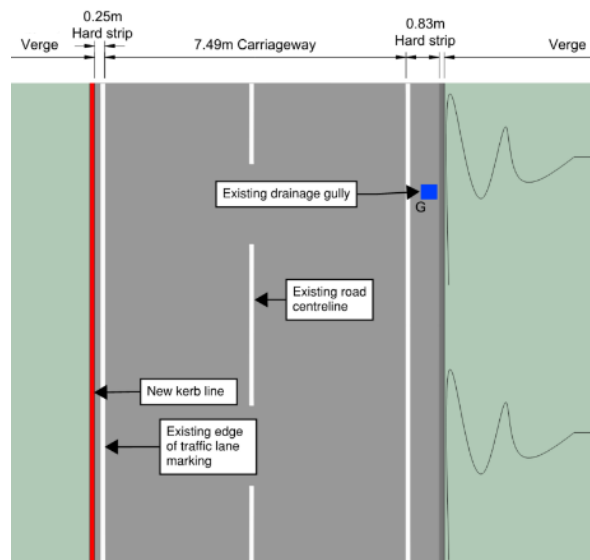


Figure 10: Sketch of Proposed A273 carriageway layout (left side of image = west side)

The carriageway centreline and alignment are unaffected by the proposals and remain as existing.

The WBLR Phase 3 scheme proposals are for a shared use footway to the west side of the carriageway only. It is proposed to install a new kerb line along the west side, approximately 0.25m behind the existing edge of traffic lane solid white road marking. This results in no change to the carriageway traffic

lane widths, however it reduces the overall paved width as the circa 0.8m width of paved hard strip is converted to soft landscaped verge.

2.3.3 A273, WBLR Phase 1 A273 Roundabout to Gatehouse Lane:

Gatehouse Lane is a popular walking, cycling and equestrian route. Where Gatehouse Lane crosses the A273 carriageway, a Pegasus crossing (traffic signal-controlled crossing suitable for use by pedestrians, cyclists and equestrians) has recently been installed. At the crossing, the carriageway kerb lines have been built out to locally remove the hard strips on either side of the carriageway, improving visibility along the road for users of the crossing and reducing the carriageway width to be crossed, as shown in [Figure 11](#).



Figure 11: Existing A273 Carriageway, looking north at Gatehouse Lane Pegasus crossing

The proposed shared use footway along the western side of the carriageway, within the WBLR Phase 3 scheme, will provide a connection between the new Pegasus crossing at Gatehouse Lane, and the facilities constructed under WBLR Phase 1.

There are existing land constraints along this section of the A273 due to the fence line of a residential property.

A design similar to the proposal between the Triangle Roundabout and A273 Roundabout ([section 2.3.2](#) above (to keep the edge of traffic lane solid white road marking and install the new kerb line in the existing hard strip space) was discussed with WSCC for this section. However, due to the land constraints and a need to retain a bench and bus stop sign, WSCC confirmed a preference to remove the existing hard strip all together and to place the new kerb line along/replacing the current edge of traffic lane marking, in order to maximise the available space for pedestrians and cycles.

2.3.4 Geometric Design and Visibility.

There are no changes proposed to the existing carriageway centrelines or alignment. All other aspects including visibility will be designed to National Highway's DMRB and The Department for Transport's Traffic Sign's Manual.

3. Verges and Landscaping

Initial design work took place based on MSDC's desire to have an avenue of regularly spaced trees lining the carriageway, in 2.75m wide verges, like that being created along the Brookleigh development spine road.

A tree constraints plan was created to inform the tree layout design, comprising:

- Visibility splays, to signs, junctions, crossings etc.
- Street light locations and no tree zones in accordance with the WSCC requirement to not plant new trees within 10m of a column location.
- Underground utility no planting zones, with each utility owner / statutory undertaker being contacted to confirm their requirements regarding tree planting.

The resulting tree constraint plans illustrated that virtually all but a few very small slithers of proposed verge were constrained and could not be used for tree planting.

This resulted in a prolonged discussion and optioneering period considering:

- Reduced verge width to minimise loss of existing vegetation to the rear of the proposed cycle / footways; and
- An alteration of the shared use footway route to the south side of the A2300 to retain the existing narrow band of vegetation along the toe of the highway embankment.

3.1.1 A2300 North Side.

Following vegetation clearance works carried out by UK Power Networks for the under-grounding of the existing overhead power cables, it became evident that whilst the proposed 2.75m wide verges could not be planted with trees, their inclusion in the scheme was not resulting in any significant clearance of existing vegetation. Therefore it was agreed with MSDC to retain the wide verges along most of the length.

The only area where the wide verge impacts on existing vegetation is close to the Triangle Roundabout. Therefore, it was agreed to taper the verge width down from 2.75m to 1m on the approach to the roundabout, to retain more of the existing vegetation behind the proposed Green Super Highway.

3.1.2 A2300 South Side.

The highway is on a small embankment in this location and when the A2300 was constructed, a fence line was installed along the toe of the embankment slope and planted. This vegetation has not been maintained regularly and now comprises dense scrub undergrowth and a mix of relatively young trees along its length.

It was determined that even with a reduced 1m verge width, the proposed 3m shared use route, if placed up at carriageway level, required a widening on the existing embankment which would result in a complete loss of the existing vegetation.

To overcome this issue and retain the existing vegetation, options were investigated and reviewed with the adjacent plot developer, to locate the shared use route along the base of the highway embankment, in what is currently the adjacent field, but which will become a housing development and western neighbourhood centre.

The shared use route is required to raise back up to carriageway level to tie in with the existing uncontrolled pedestrian crossing of the A2300 at the Triangle Roundabout, and at the WBLR Phase 1

A2300 Toucan crossing. However, the embankment is not particularly high (approx. 1m-1.5m) therefore this can be achieved whilst maintaining a gentle slope along the shared use footway. This does mean that small areas of existing vegetation will require to be removed to allow the shared use route to punch through in two locations.

Options were then discussed with MSDC regarding their preferences for the existing vegetation, with options including:

- thinning it out, particularly the lower level scrub, and planting new specimen trees,
- hedge laying to create a more formal hedge line,
- retaining it largely untouched but with some additional tree planting where space allowed.

MSDC confirmed the last of the above options was their preference.

3.1.3 A273 West Side – Triangle Roundabout to A273 Roundabout.

This section of the scheme requires part removal of the existing vegetation to the rear of the proposed shared use route. It was confirmed with MSDC that a reduction of the proposed verge width from 2.75m down to 1m would reduce the loss of existing vegetation.

This reduced 1m verge width was confirmed by MSDC as the preferred option for this section of the scheme, with the verge width increasing on the approach to the A273 Roundabout, to tie in with the 2.75m wide verge at that location.

3.1.4 A273 West Side – A273 Roundabout to Gatehouse Lane.

As discussed in [Chapter 4](#) below, this section is constrained by a third-party land boundary and as such does not have space to incorporate a verge of tree planting.

4. Non-motorised User (NMU) Facilities

4.1 Design Principals

The NMU facilities proposed within WBLR Phase 3 have been discussed and agreed with MSDC during the pre-application consultation process. This has resulted in the following proposed provision:

4.1.1 A2300 North Side.

In agreement with MSDC, the Brookleigh Green Super Highway (segregated 3m cycle track and 2m footway) is now proposed to extend the full length between the A2300 Roundabout and Triangle Roundabout. This differs from the SDAM proposal which shows the route only continuing approximately halfway along the A2300 to a junction where it then turns north. This change has been instructed by the Client and has been amended on a revised Outline Planning Application parameter plan.

The WBLR Phase 3 scheme originally included an equestrian route alongside the Green Super Highway. However, the alignment of the equestrian route through Brookleigh has now been revised in discussion with MSDC and no longer passes through the WBLR Phase 3 scheme.

An existing public right of way footpath runs parallel to the A2300. Part of the route has already been officially diverted to be slightly closer to the carriageway but is still offset by some distance. On the advice of the Brookleigh Masterplanners, the footpath route will remain separate from the new paved footway of the Green Super Highway, and will remain an unpaved route running alongside the proposed WBLR Phase 3 scheme.

4.1.2 A2300 South Side.

The SDAM does not identify an NMU route along the south side of the A2300 however, to improve connectivity, a 3m wide shared use footway is proposed. This route was originally proposed as a 2m wide footway however at the request of MSDC, it was agreed to increase this route to a 3m shared use facility.

4.1.3 A273 West Side.

A 3m wide shared use footway is proposed south from the Triangle Roundabout, to tie in with the same facility constructed at the A273 Roundabout during WBLR Phase 1. This shared use facility is then continued south of the A273 roundabout to the recently constructed Pegasus crossing at Gatehouse Lane.

4.2 Widths

4.2.1 Baseline Widths.

The widths of the NMU facilities are generally in accordance with the SDAM, which advises in section 4.8:

- Combined width of shared footpath and cycleway to be a minimum of 3m.
- Combined width of footpath and segregated cycleway to be a minimum of 5m. Cycleway to be minimum of 3m for segregated cycleways and footpaths to be 2m.

These dimensions are achieved throughout, except for a short section near Gatehouse Lane where the width drops just below 3m (approx. 2.96m) due to the land constraints. This has been discussed with WSCC during the pre-app meetings and agreed through the Stage 1 Road Safety Audit process.

It is noted that the DMRB standard CD143 'Designing for walking, cycling and horse riding' states that a 2m wide unsegregated shared use route is suitable for up to 200 uses per hour. Similarly, the WSCC Cycle design guide (table 2a) states the desirable minimum effective width for a shared surface taking less than 150 NMU's per hour as 3m desirable and 2.5m as the absolute minimum. We have been advised by the Brookleigh master planners that even the highest forecast figures for this route indicate 260 uses per day.

4.2.2 Additional Clearances.

It is good practice to provide additional clearance or additional width where a cycle track runs alongside a vertical obstruction such as a fence line or a vertical drop such as a kerb line. **Figure 12** below shows Table 2b from the West Sussex Cycling Design Guide:

Type of edge constraint	Additional width required to maintain effective width of cycle track
Flush or near-flush surface	No additional width needed
Kerb up to 150 mm high	Add 200 mm
Vertical feature from 150 to 600 mm high	Add 250 mm
Vertical feature above 600 mm high	Add 500 mm

Figure 12: Extract from WSCC Cycling Design Guide: 'Table 2a Additional clearances to maintain effective widths for cycle users'

It is understood that this requirement applies to dedicated cycle tracks, where a cyclist is often confined to a narrower route (sometimes 1.5m wide) compared to a wider 2.5 to 3m shared use footway.

There are no locations within WBLR Phase 3 where a cycle track (as proposed along the north side of the A2300) is alongside an edge constraint or vertical obstructions. The layout of the cycle track has been developed to incorporate space for the large advance direction sign posts to be positioned whilst maintaining a 0.5m clearance between post and cycle track edge. To achieve this, the two-way cycle track splits into two, to pass either side of the post. The sign plate will then span above one half of the split cycle track with appropriate headroom. This arrangement is shown in **Figure 13**. This arrangement has been discussed with MSDC during the pre-application consultation process.

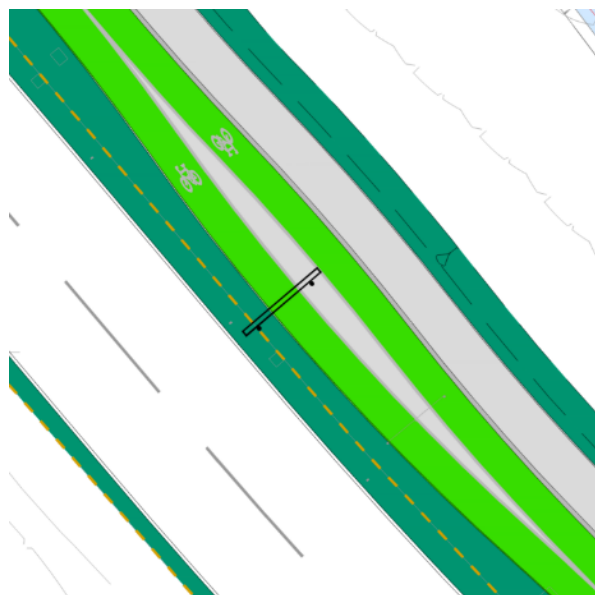


Figure 13: Green Super Highway cycle track split to pass around large sign post

There are three situations where a shared use footway is alongside an edge constraint:

A273 West Side – UK Power Networks (UKPN) electrical sub-station land constraint:

At this location it is proposed to utilise a kerb with 150mm kerb face / drop alongside the back edge of the share use path, as circled red in **Figure 14**, to reduce the earthworks width required and therefore avoid third party land. If preferred by WSCC during detailed design, a solid white road marking line can be added to the shared use footway 200mm, in from the back edge, to steer cyclists away from this edge. The remaining shared use footway width would still be 2.8m over this short length, above the 2.5m absolute minimum width stated in the WSCC Cycling design guide.

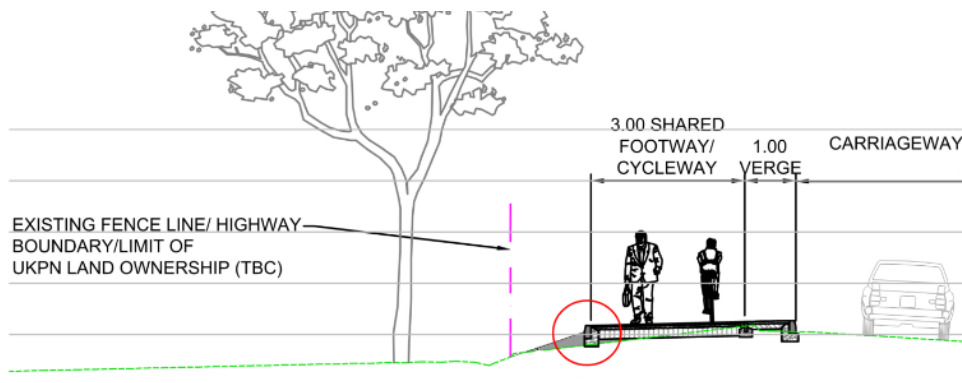


Figure 14: Kerb unit proposed over short distance at UKPN electrical sub-station land constraint.

A273 West Side – Advance direction sign (ADS) post locations:

The scheme requires the alteration / re-positioning of two large advance direction signs. It is proposed to re-design these signs onto two new posts each, one post located to the rear of the proposed filter drain (so more than 0.5m offset from the edge of shared footway) and one post located alongside the carriageway side of the shared footway, as indicated in **Figure 15**.

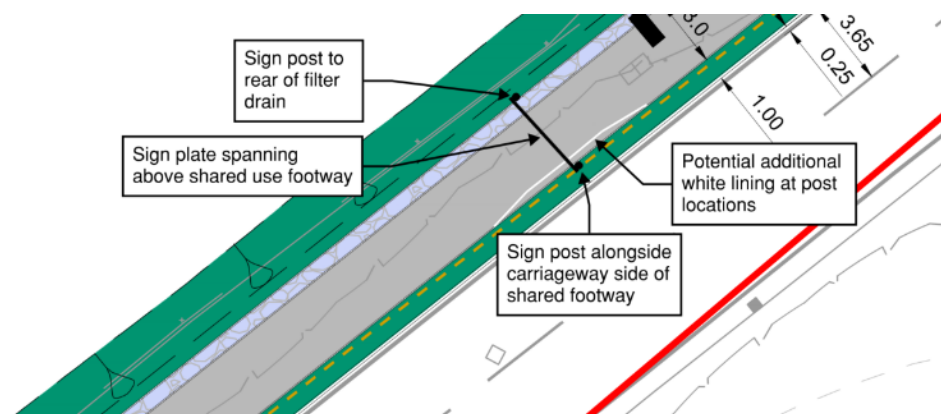


Figure 15: Layout where shared use footway passes beneath large direction sign.

The sign plate will then span between these two posts above the shared footway, providing a minimum of 2.3m headroom. This layout will be discussed further with WSCC during detailed design and may include the addition of a white line marking in the footway to guide pedestrians and cyclists away from the post location.

This arrangement is common practice. The example shown in **Figure 16** shows a shared use footway passing beneath a sign in the recent scheme to dual the adjacent section of A2300 (to the west of the

WBLR Phase 1). The sign plate is larger than needed, by incorporating a grey area to allow it to span the required distance.



Figure 16: Example of shared use footway passing beneath large sign.

A273 West Side – third party land fence line and kerb line:

A length of the scheme between Gatehouse Lane and the A273 Roundabout is constrained by a boundary fence to a residential property. The proposed layout at this constrained location has been discussed with WSCC to agree the preferred arrangement. The design principal at this location is to maximise the space available to pedestrians and cyclists. The proposal is to:

- construct the back edge of the shared use footway as close to the fence line as is practical, which has been set at 0.3m offset from the fence line.
- Position the kerb line forming the front edge of the shared use footway along the edge of the existing traffic lane, thereby completely removing the existing hard strip.

This results in a paved footway width of approximately 3m (2.96m min.) and is considered enough to allow cyclists to position themselves away from the fence and kerb line. If preferred during detailed design, a solid white road marking could be added along the shared footway surface 0.2m inside from the kerb face to highlight the edge.

The other features including signposts, lighting columns and the seat at the existing bus stop will all be positioned as close to the fence line as is practical to minimise any obstruction caused.

4.2.3 Separation.

Separation refers to the distance between the edge of live traffic and the edge of the cycle facility.

The SDAM does not refer to separation specifically, however the approach is generally to include verges or parking between the NMU routes and traffic lanes.

The West Sussex Cycling Design Guide states that on 40mph and above roads, 'cycle tracks should be separated from the carriageway by verge space or hedge', however it does not provide guidance on the distance to be provided.

LTN 1-20 Cycle Infrastructure Design (Department for Transport) refers to a separation between carriageway and cycle tracks (routes for cycling that are physically separated from motor vehicles and pedestrians). Table 6-1 in LTN1-20 advises a desirable separation of 1m and absolute minimum of 0.5m for a 40mph speed limit, and 0.5m desirable and 0m absolute minimum for 30mph.

The DMRB standard CD143 'Deigning for Walking, Cycling and Horse riding' states: for walking routes, the separation from the carriageway should be at least 0.5m on roads with speed limits of 40mph or less. It is noted that the verb 'should' has a specific meaning in the DMRB of 'indicates advice expressed as a recommendation'. Not confirming to this 'should' advice does not constitute a departure, as would be the case if 'must' or 'shall' had been used.

Most of the scheme provides at least the 1m desirable separation through the inclusion of a verge width of 1m or greater. The only location this is not achieved is the constrained section of shared use footway between Gatehouse Lane and the A273 Roundabout.

It was originally proposed to reduce the shared use footway width in this location to around the 2.5m absolute minimum width stated in the WSCC Cycle Design Guide. This allowed the new kerb line to be positioned approx. 0.5m inside the existing hard strip which would then be retained and is an acceptable form of separation. In discussion with WSCC however, this proposal was altered to the current 'no hard strip' layout, primarily due to the need to retain the existing bus stop and bench which forms a localised narrowing of the effective width and therefore a desire to maximise the width of the shared use footway.

It is expected that traffic speeds at this location will be significantly less than the 40mph speed limit due to the presence of the traffic signals and Pegasus crossing, and the proximity to the A273 Roundabout,

Whilst discussing the layout options with WSCC, the forecast NMU figures and bus stop usage figures were considered. This is discussed in the stage 1 Road Safety Audit Designers Response, in summary:

- Using the highest forecast figures, the shared use footway is forecast to have approximately 24 cyclists per hour in the peak period of a day, whereas the West Sussex guidance of 3m desirable and 2.5m absolute min. is suitable for up to 150 cyclists per hour.
- The bus stop within this section served 59 passengers during July 2024, approximately 2 passengers per day, and this figure is not expected to change much as the Brookleigh Development is completed, as there are new bus stops provided within and more convenient to the development.

It is therefore considered that the proposed provision in this constrained location, whilst not fully achieving the 'desired' dimensions, will still be of great benefit to NMU's and is preferable to the alternative of cyclists sharing the carriageway.

5. Location of Other Features

5.1 Side Road Junctions

The SDAM and original Outline Planning Application parameter plan 004 'Access and Movement' indicates an access off the A2300 to the Brookleigh Western Neighbourhood Centre. Design work commenced on this junction however, following pre-applications with MSDC, the Brookleigh master planners, and the developer of the neighbourhood centre plot, this access is now omitted in favour of providing the access to the neighbourhood centre from the slower 30mph development spine road constructed during WBLR Phase 1. It is understood that this change has been captured via the submission of a revised Outline Planning parameter plan.

5.2 Bus Stops

There are no new bus stops proposed within the WBLR Phase 3 scheme. New bus stops are instead proposed along the Brookleigh spine road to serve the new development. An existing bus stop on the A273 northbound carriageway near Gatehouse Lane is retained.

5.3 Crossing Points

There are no new crossing points proposed within WBLR Phase 3.

Figure 17 provides an overview of the crossing locations within and adjacent to the WBLR Phase 3 scheme. In summary:

- There are signalised crossings of both the A273 and A2300, just beyond the proposed WBLR Phase 3 scheme.
- There are two uncontrolled crossings of the Triangle Roundabout, across the A273 and A2300 arms. The A2300 crossing is being widened to 2.8m, the A273 crossing western tactile paving and kerb line is being renewed.
- There is an uncontrolled crossing of the A273 roundabout on the new development spine road arm.

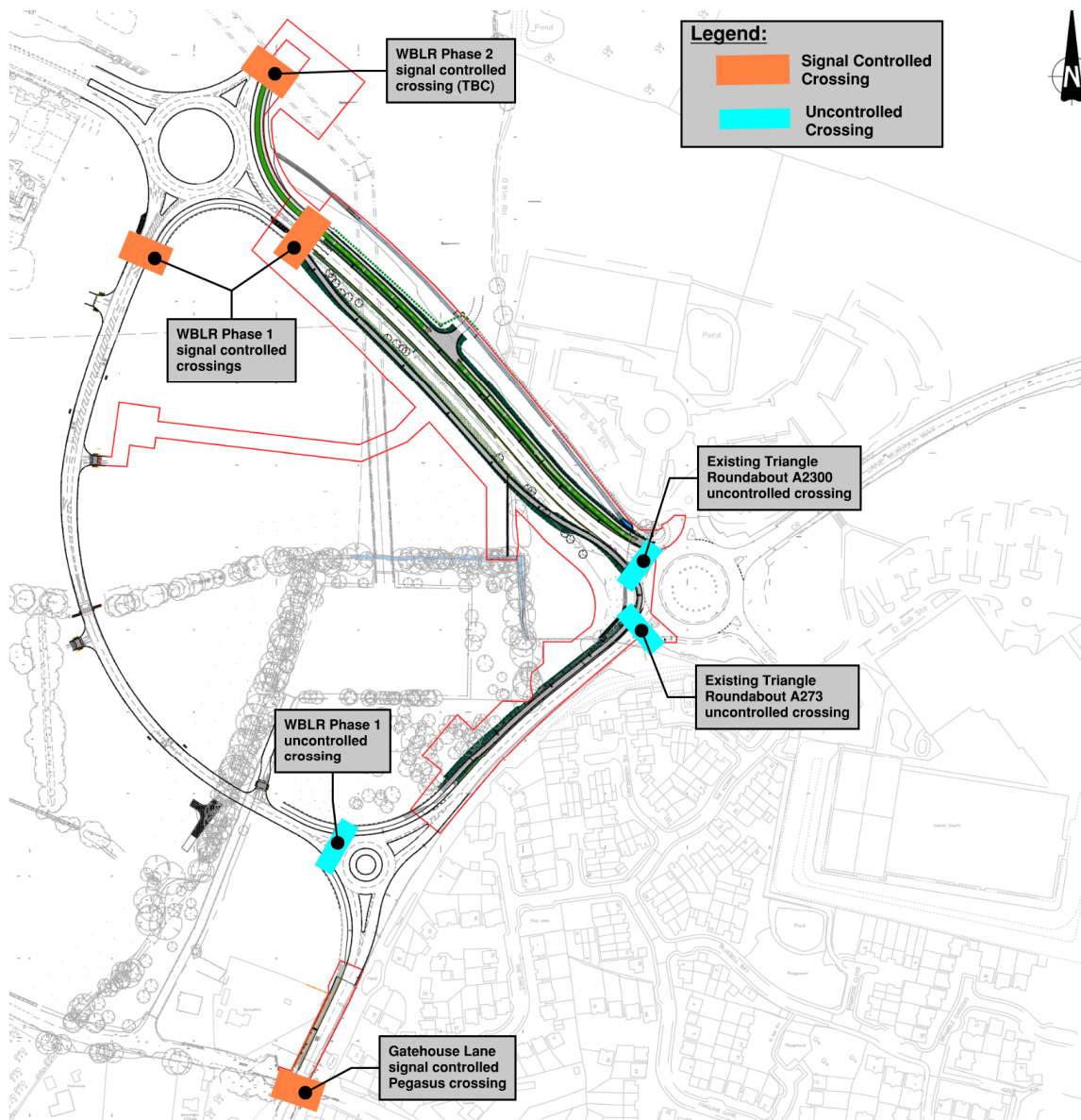


Figure 17: Crossing Points within and adjacent to WBLR Phase 3

6. Drainage Design Parameters

The proposed drainage design parameters are covered in detail within the WBLR Phase 3 Drainage Strategy and Maintenance Statement by Waterman (report ref: [WIE19442-100-R-5-1-4](#)).

7. Traffic

A Transport Assessment and Transport Assessment Addendum were prepared for the Brookleigh Outline Planning Application.

The assessment did not identify the need for any highway mitigation measures to the sections of carriageway within WBLR Phase 3 and Waterman's scope of works has not included any carriageway / traffic related improvements.

The WBLR Phase 3 scheme aims to improve active travel connectivity between the Brookleigh development and the existing town. The width of the pedestrian and cycle facilities, and their resulting capacities have been agreed with both MSDC and WSCC.

The capacity of the proposed facilities are considered sufficient. The Department for Transport LTN1-20 Cycle Infrastructure Design guidance advises that a 3m shared use footway is suitable for up to 300 pedestrians per hour and 300 cyclists per hour (which equates to one cyclist every 12 seconds). To put this into context, in the December 2018 Brookleigh Transport Assessment prepared by AECOM, table 69 'Proposed Completed Development Adjusted Multi-Modal Trip Generation' gives a peak hour (8am-9am) cycle trip generation for the entire Brookleigh development of 44 arrivals and 41 departures, therefore 85 cycle movements in one hour. A single 3m shared use footway could therefore in theory accommodate the entire cycle flows from a development 3.5 times larger than Brookleigh (in the unlikely scenario that every cyclist opted to use the same single shared use footway).

8. Conclusion

The scheme proposals have been developed in close consultation with both MSDC and WSCC during the pre-application consultation process, and in discussion with the Brookleigh master planners, Homes England and adjacent plot developers. It is therefore assumed that the design principals set out in the report are as previously discussed and agreed and will allow the scheme to gain planning approvals and progress to detailed design and technical approval stage.

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