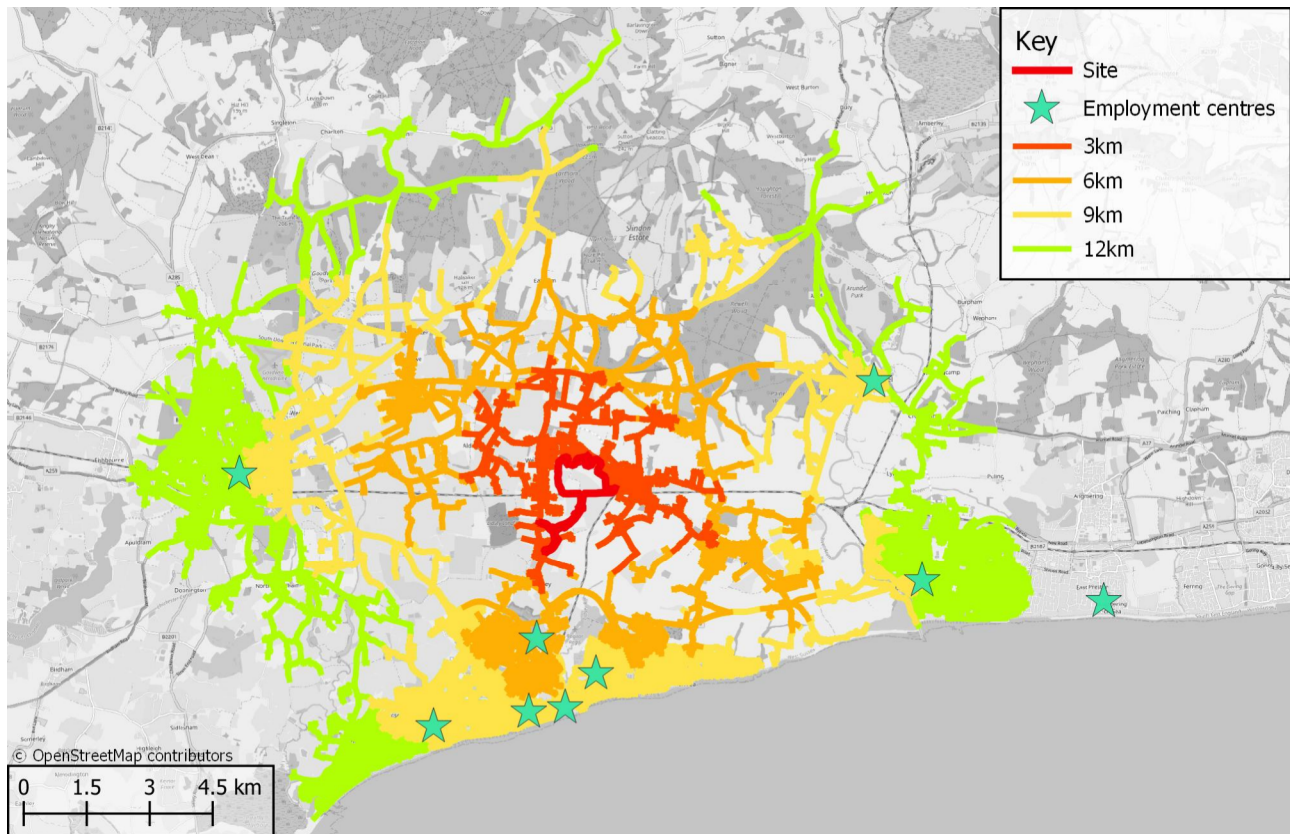


Figure 3.14: Employment centres within 12km

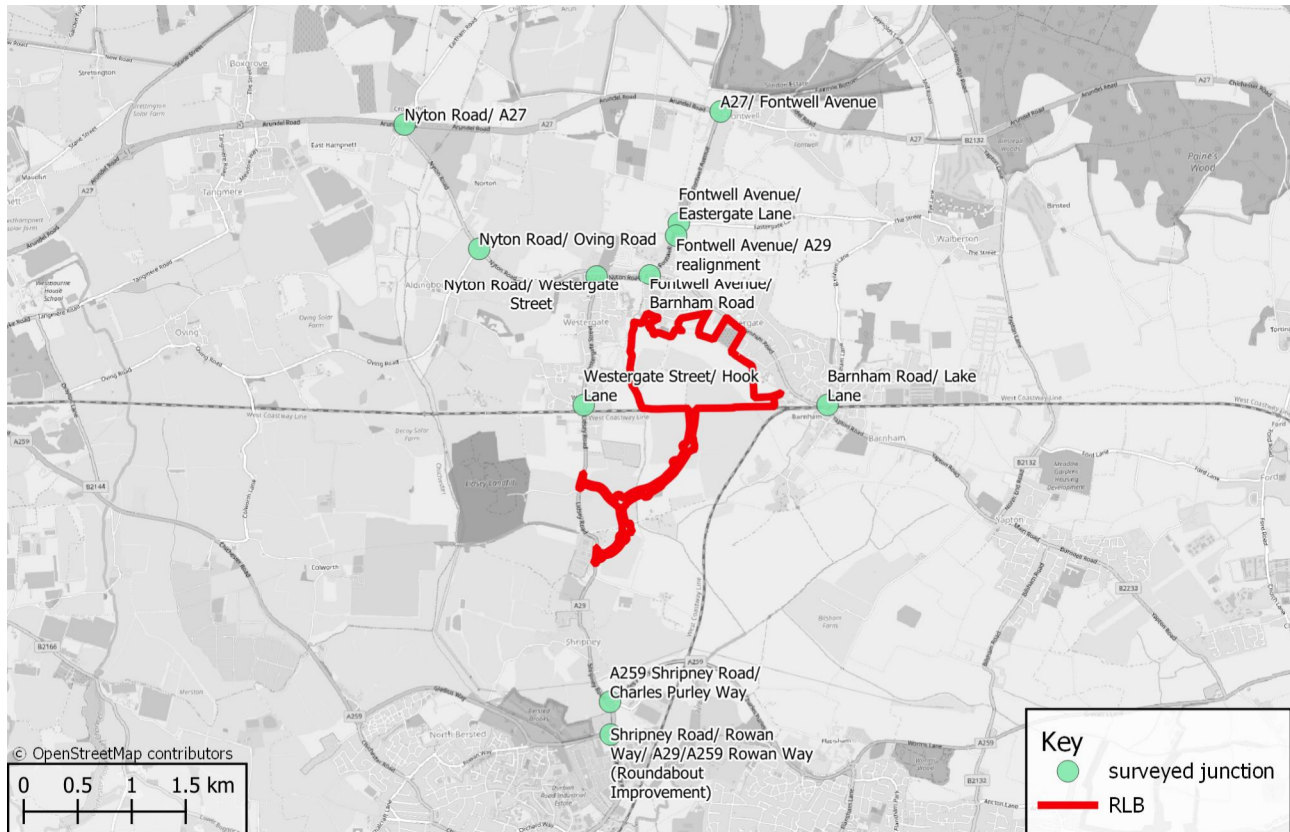


3.8 Existing traffic flows

A set of traffic surveys of the local and wider highway network around the Site were commissioned by Pell Frischmann in November 2019 prior to the scoping of the transport assessment.

These surveys included manual classified counts, automatic traffic counts and queue length surveys and were undertaken to enable an understanding of existing traffic patterns and to support the junction analysis work detailed within Chapter 6 of this report. The junctions surveyed are shown in Figure 3.15. The survey data is included in Appendix A .

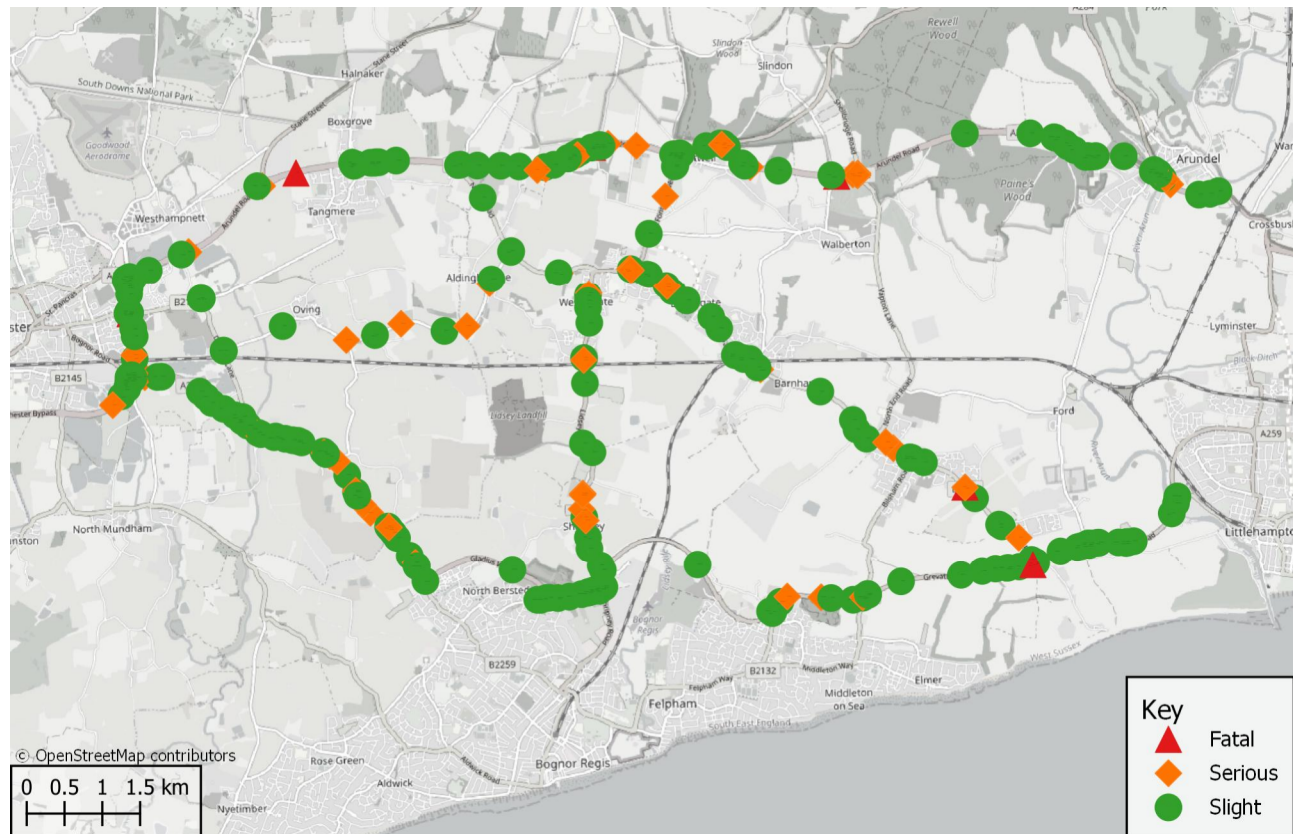
Figure 3.15: Surveyed junctions in relation to the Site



3.9 Collision data review

There were 804 collisions found within the scope, which includes both modelled junctions and IDP junctions, in the last 10 years (01/08/2010 – 31/07/2020). They are shown on the map in Figure 3.16.

Figure 3.16: All collisions for 10 previous years



Within this timeframe, there were 13 fatal collisions, 145 serious collisions, and 646 slight collisions.

- The collisions analysis note considered all junctions within the scope of the traffic modelling.
- 26 junctions were discussed as part of the modelling scope and of these, 10 had one or more serious collisions within a 50 metre radius
- The collisions analysis reviewed the causation factors and none of the collisions were due to the junction geometry

The full collision data is available at 0.

4 Development Proposals

4.1 General

The scope of the transport assessment and the A29 design has been discussed with WSCC throughout the pre-application process. Preliminary designs of the A29 scheme have been shared with WSCC, with comments received in March 2021 and July 2021, and incorporated where appropriate. An A29 Design Statement accompanies this planning application, and this sets out the design standards and principles for the section between Barnham Road and the existing A29 Lidsey Road.

The location of the Site is identified in Figure 4.1.

Figure 4.1: Strategic Site Location Plan



The Site is allocated in the Arun Local Plan 2011-2031 under policy H SP2c, as part of strategic allocation SD5 Barnham/Eastergate/Westergate. The application is for:

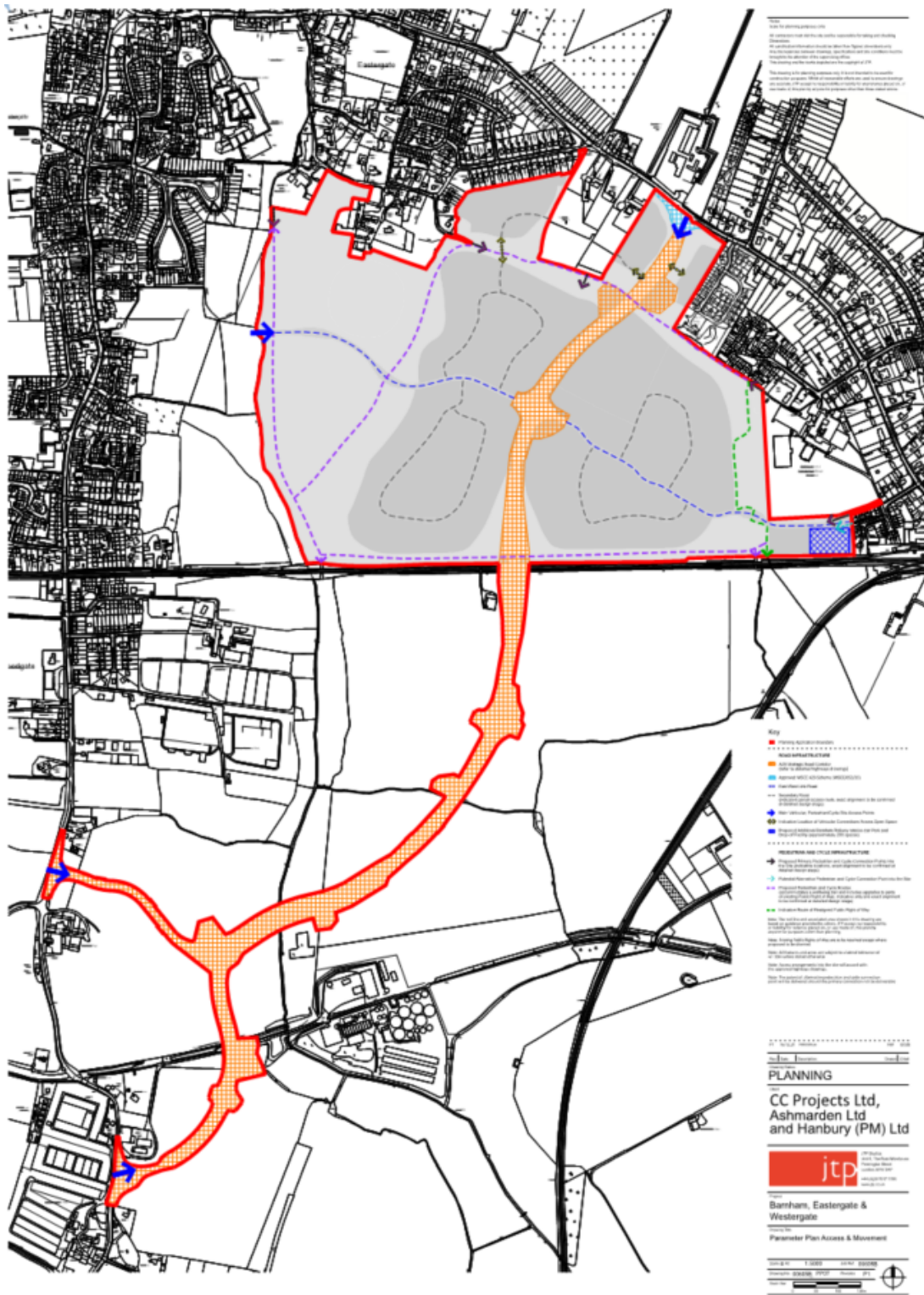
Outline planning permission (with all matters reserved except for the A29 realignment) for the demolition of existing structures and mixed use development to provide residential dwellings (Use Class C3), care home/senior living accommodation (Use Classes C2/C3), flexible retail and community floorspace (Use Classes E/F2/sui generis), a primary school, plus associated open space, landscaping, drainage and all other associated ancillary works; and realignment of the A29 and early connection to existing A29, including construction of a new road carriageway, junctions and associated infrastructure.

The remaining land within the site allocation will be delivered either by other landowners/promoters, or by a later planning application by the Southern Consortium (in relation to land south of the West Coastway railway line).

4.2 Internal roads

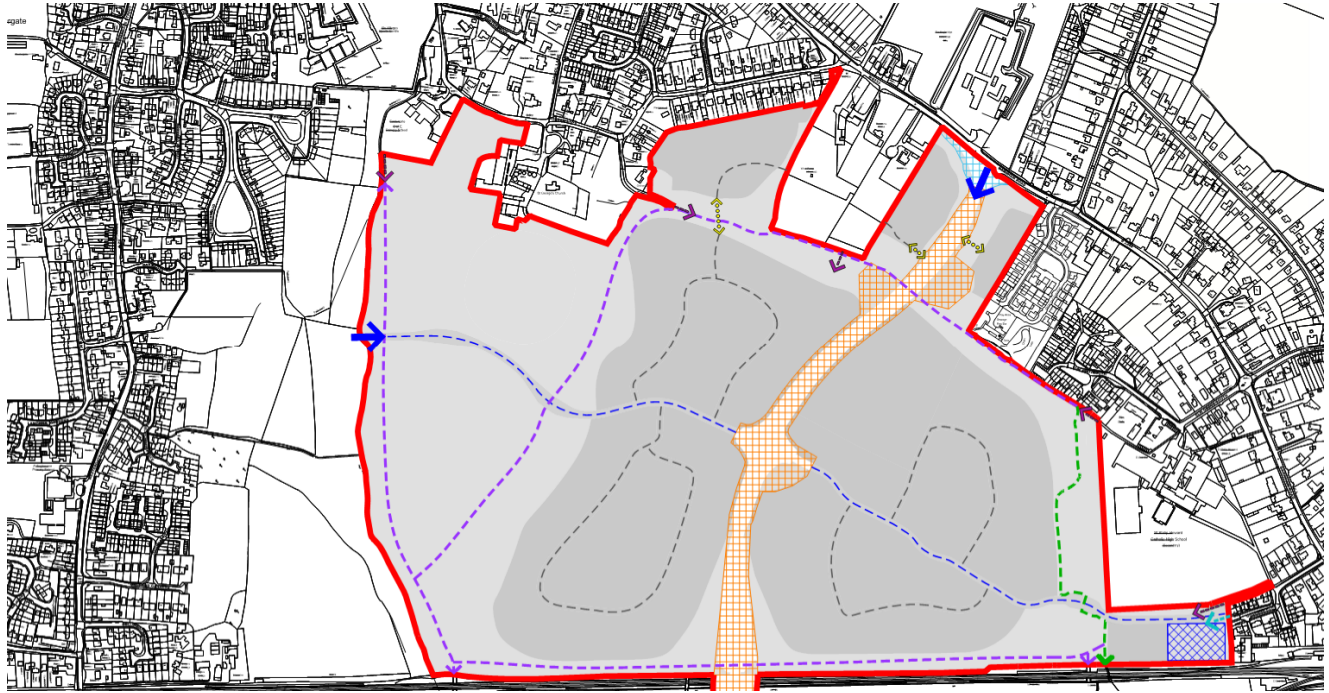
The Access and Movement parameter plan sets the parameters for the internal transport elements of the proposed development, and is shown in Figure 4.2.

Figure 4.2: Access and Movement Parameters Plan (by JTP)



Source: JTP

Figure 4.3: Section of Access and Movement Parameters Plan (by JTP)



Source: JTP

Cross-hatched in orange is the A29 Strategic Road Corridor, which is discussed later in this chapter under the heading 'Realigned A29 and access junctions'. The East-west link road is shaded grey with blue dashes. The western end of the link road connecting to the existing A29 will be designed by CALA and delivered as part of a planning application for the allocation land to the west of the Site.

The access into the parcels (either side of the A29 Strategic Road Corridor) will be via access routes indicatively shown by the black dashed lines, known as the Secondary Roads (Indicative Parcel Access Routes).

4.3 Realigned A29 and access junctions

The A29 is being realigned through the development site in a north/south direction. Figure 4.2 above shows the alignment of the realigned A29. The new connection provided by the spine road will provide a benefit to the highway operation of the local area, in particular the existing A29. The route will be designed to comply with the principles of the Design Manual for Roads and Bridges (DMRB) and would be able to accommodate a bus service.

The northern section of the realigned road is being delivered by WSCC and is proposed as a 30mph single carriageway road. Planning permission for the northern section was granted in June 2021 (ref. WSCC/052/20). The southern section is proposed to be designed to the same principles, with a 30mph speed limit and to be a single carriageway road with localised widening for junctions and crossing points. Many design elements including pedestrian and cycle crossings, bus stops, and left-in/left out restrictions at priority junctions provide features which will manage speeds along the road network. The road will feature a grass/landscaped verge on both sides, separating the pedestrians and cyclists from the vehicles.

Earthworks will be required to implement the proposed A29 realignment and the extent of the earthworks will be determined at construction design stage. A proposed 'road zone' is therefore identified on the parameter plans:

- For the land north of the West Coastway railway line, where this zone is not required for earthworks, it will contain residential development along the length of the A29, except where in the location of the proposed primary school. This will likely consist of a mix of dwellings and landscape elements, enabling dwellings to sit close to the A29 road corridor and dwellings along this interface will have their primary elevation facing the A29.

- South of the West Coastway railway line, where the zone is not required for earthworks, temporary landscaping will be provided until development comes forward on the allocation land adjacent to the road.

The realigned A29 will connect to the internal access junctions and accommodate the forecast traffic movements. It will therefore form an extension to the local road network, assisting in improving its operation and alleviating congestion within the local area. Traffic modelling has been undertaken for future scenarios up to 2038 which assumes the development is fully occupied as well taking increases in background traffic growth into account.

The left-in left-out arrangement for priority junctions (and the introduction of the central island) will promote speed reduction due to the perception that the road is narrowing. Right turns are not proposed because the volume of traffic on the A29 will, according to the DMRB, require the priority junctions to be of a ghost island type, widening the A29 and in turn encouraging higher driving speeds. The proposed left-in left-out approach would thus maintain the 30mph speed more effectively.

Bus stops and crossings in locations that encourage residents to use the A29 active corridor will help in providing increased resident activity in the road zone. These are discussed further in the Walking and cycling and Public transport sections below.

There are east-west connections throughout the proposed development and these are designed based on the principles within Manual for Streets. Design drawings are included in 0.

4.3.1 Junctions along the re-aligned A29

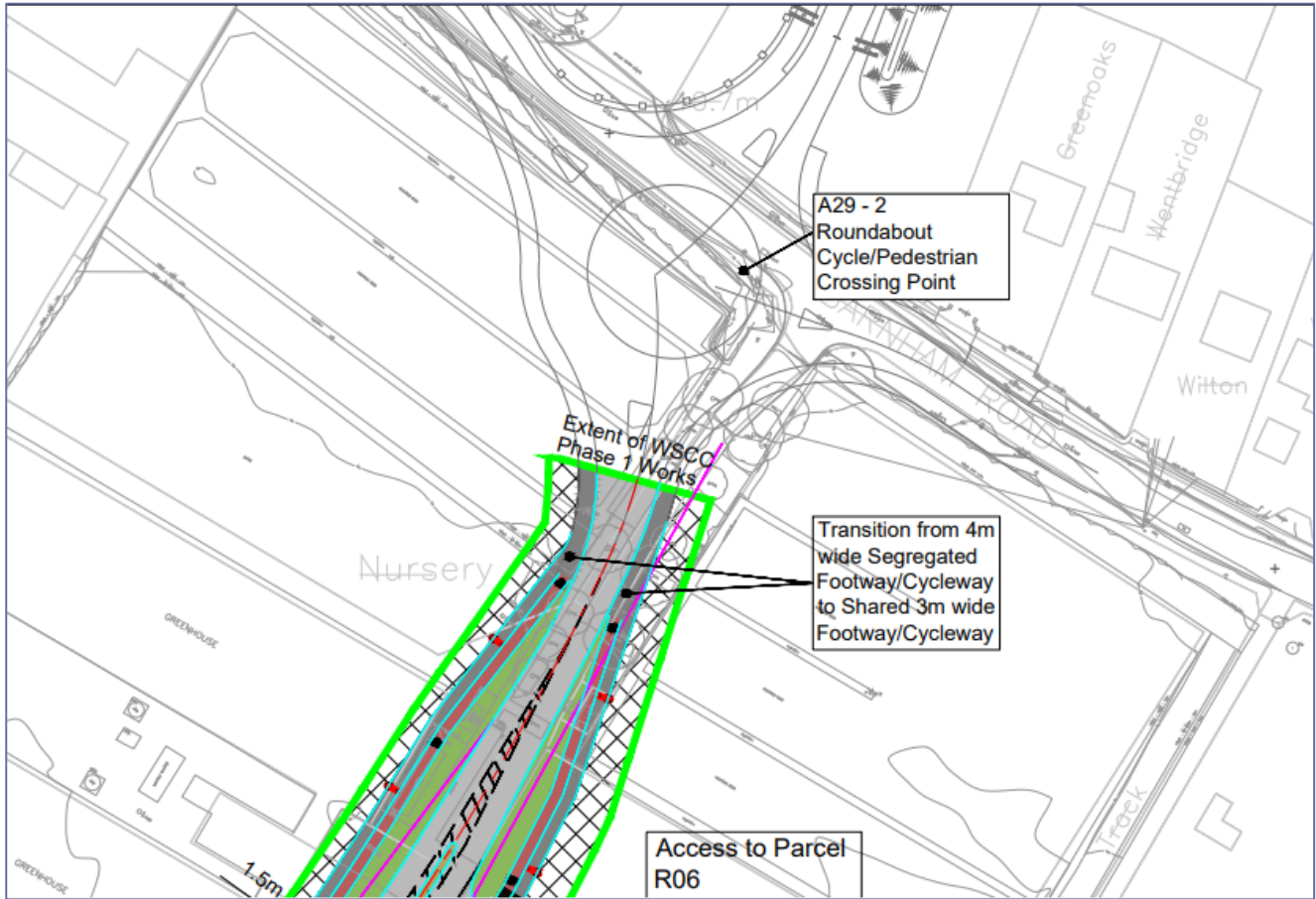
The realigned A29 will provide the primary route through the Site, enabling access to dwellings and other land uses. The junctions included within the scheme include:

- Barnham Road / A29 Realignment
- Realigned A29 / East-west link road Roundabout
- Realigned A29 / Link to Woodgate Roundabout A
- Realigned A29 / Link to Woodgate Roundabout B
- Realigned A29 / Links to southernmost roundabout
- Lidsey Road / A29 Realignment

4.3.1.1 Barnham Road / A29 Realignment

A roundabout is being provided as part of the WSCC A29 realignment scheme north of Barnham Road. The section of the new A29 south of Barnham Road ties into this junction.

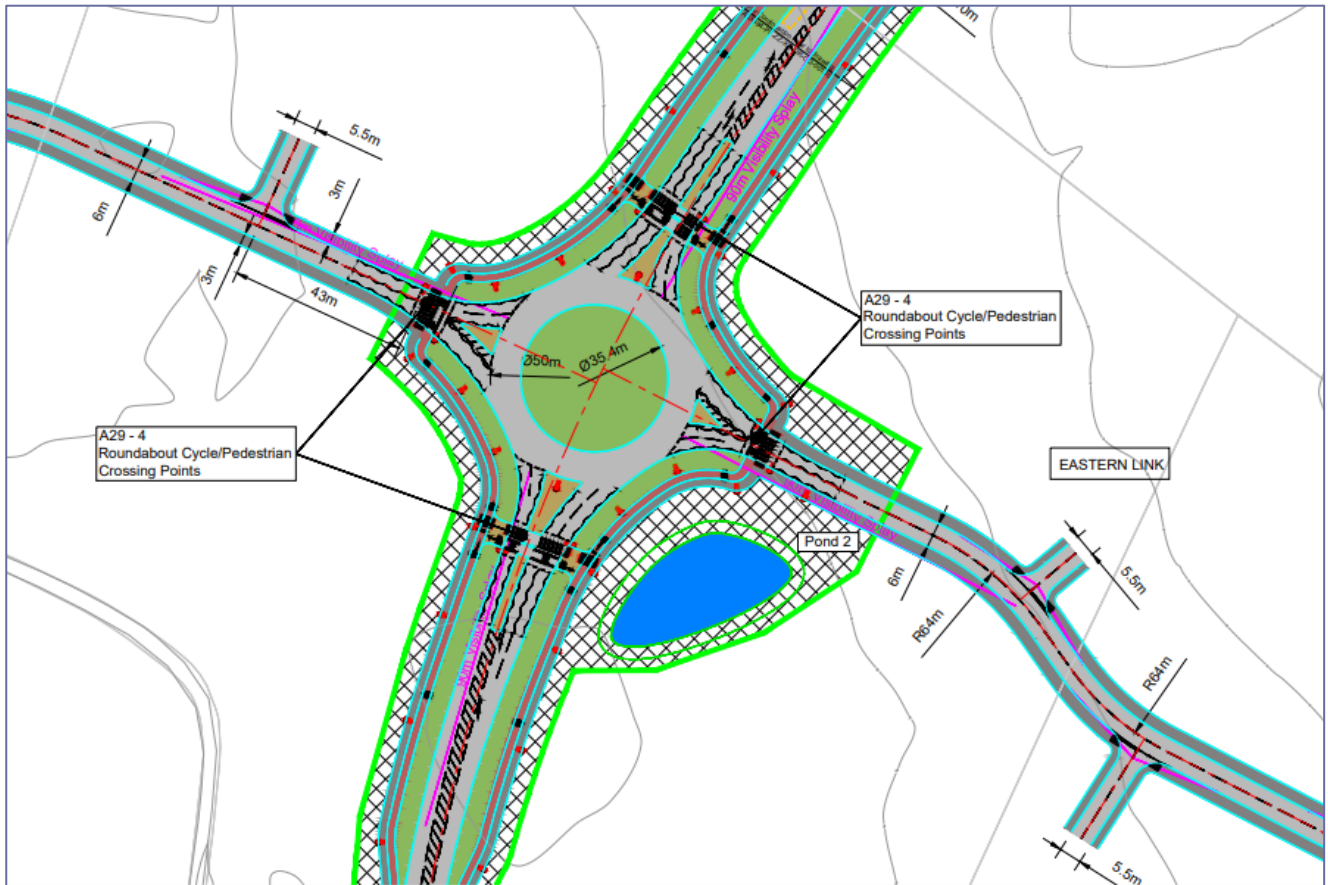
Figure 4.4: CD-00100 P03 (Barnham Road/ A29 roundabout)



4.3.1.2 Realigned A29 / East-west link road Roundabout

This roundabout's approaches and exits have one southbound lane and two northbound lanes on its northern arm, and two southbound lanes and one northbound lane on its southern arm. It has an Inscribed Circle Diameter (ICD) of 50 metres. It features parallel (tiger) crossings on each arm, so that cyclists and pedestrians can cross safely, quickly and easily.

Figure 4.5: Realigned A29 / East-west link road Roundabout (CD-00101 P03)



4.3.1.3 Realigned A29 / Link to Woodgate Roundabout A

This roundabout's approaches and exits have one southbound lane and two northbound lanes on its northern arm, and two southbound lanes and one northbound lane on its southern arm. It has an Inscribed Circle Diameter (ICD) of 50 metres. It features parallel (tiger) crossings on each arm, so that cyclists and pedestrians can cross safely, quickly and easily.