

Prepared  
JP

Reviewed  
SN

Date  
May 22

Key

Bromsgrove District

All Education

Secondary / Post16 Education

All Healthcare

**3b - cluster groups - outline**

Cluster Group 12

Cluster Group 13

Sub-cluster includes employment

**Opportunities**

Potential Local Centres  
(+2km)

**Bus stops (+400m)**

existing

new

**Bus Routes**

Existing

Proposed

**Proposed Active Mode Routes**

Enhanced

New

Crossing

  
a company of Royal HaskoningDHV

Client

Bromsgrove District Council

Project

Bromsgrove DPR  
Transport Assessment

Figure title

Cluster Group 13 Transport  
Opportunities

Revision  
A

Project number  
3578

Figure number  
Figure 6-13

Date  
May 2022

Table 6-18: Cluster Group 13 Transport Opportunities

| ID  | Mode                             | Improvement Description   | Costs   |
|-----|----------------------------------|---|---|
| WY1 | Active Travel / Public Transport | Provide a new local centre to enable people to stay within the neighbourhood for access to daily amenities and services.  | Incorporated within the cost of the development for WY02 and WY04 |
| WY2 | Active Travel / Public Transport | Within the new local centre provide suitable public realm to make the environment inviting for pedestrians and provision of sustainable transport infrastructure to connect into the centres shared paths for active travel, secure cycle parking close to amenities, bus stops and shelters, shared micro-mobility parking provision.  | Low (<£1m)  |
| WY3 | Traffic Management / Signage     | Consider restricting car access through the new local centre (along Lea Green Road) to create a safer, more inviting environment for walking, cycling, and scooting trips. Infrastructure to restrict vehicle access.   | Low (<£1m)  |
| WY4 | Traffic Management / Signage     | Route cars travelling north / south along Lea Green Road via Houndsfield Road and onto the A354 with new signage.   | Low (<£1m)  |
| WY5 | Active Travel                    | Provide a segregated cycle route and pavements south from the new local centre to Wythall rail station (Lea Green Road) to encourage walk/cycle journeys. Approx. 0.7km   | Medium (between £1m and £5m)                                      |
| WY6 | Active Travel / Public Transport | Improve on-site transport infrastructure at the Wythall Rail Station to account for increased use from the surrounding new developments. New/improved secure cycle parking, signage into the new local centre for pedestrians and cyclists, micro mobility bays for possible future shared improvements, upgraded bus stop and shelter. | Low (<£1m)  |



| ID   | Mode             | Improvement Description   | Costs   |
|------|------------------|---|---|
| WY7  | Active Travel    | Extend segregated cycle route from Wythall Rail Station along Station Road west towards the A435 roundabout and the WY05 residential and employment site. Divert south before reaching the roundabout to avoid major junction and route through the development. Will provide continuous active travel route from new local centre to new employment locations. Approx. 1.7km | Medium (between £1m and £5m)                        |
| WY8  | Public Transport | New bus stops within WY05 for the existing 150 bus route to provide connections along the A435 from Birmingham to Redditch.   | Low (<£1m)  |
| WY9a | Public Transport | New bus stops at the western edge of WY04 on the A345 to link the existing service.   | Low (<£1m)  |
| WY9b | Public Transport | Improve the frequency of the existing 150 bus service from Birmingham to Redditch from every hour to every 30mins to provide a regular connection to access to / from employment at the site.   | Medium – <i>To be verified by operators and WCC</i> |
| WY10 | Active Travel    | Crossing point for pedestrians and cycling to avoid segregation of Alcester Road  | Low (<£1m)  |
| WY11 | Active Travel    | Plan for internal connections within WY04. To the west there should be walk connections to the new bus stops, to the east new walk/cycle routes to the local centre and to the south-east walk/cycle routes to the rail station.  | Incorporated within the cost of the development     |
| WY12 | Active Travel    | Plan for internal connections within WY02 to provide walk/cycle connections to the west to the new local centre, north-east towards Whitlock's End rail station.  | Incorporated within the cost of the development     |
| WY13 | Active Travel    | Improved cycle infrastructure and public realm around Whitlock's End station on the western side of the rail line (closest WY02) to include new/expanded cycle storage, pedestrian signage into the new development, EV charging.   | Low (<£1m)  |

| ID   | Mode             | Improvement Description  | Costs   |
|------|------------------|--|---|
| WY14 | Active Travel    | Internal provision of walking and cycling routes within WY03 to the south-east of the development towards Whitlock's End rail station and towards the west where there will be new bus stops along Hollywood Road for the diverted leg of the 150-bus service. | Incorporated within the cost of the development |
| WY15 | Public Transport | A new bus route or a diversion of every other service of the 150-bus route along Hollywood Lane to provide a direct public transport connection through all the WY subclusters to the new local centre, Birmingham, and Redditch. Approx. 4km                  | Medium – <i>To be verified by operators</i>     |

### Phasing

- 6.216 Within this cluster group there is theoretical potential to provide up to 3,650 new homes across the four sub-clusters. It is anticipated that, if allocated, not all sub-clusters would be delivered at the same time, which means there needs to be a balance between infrastructure delivery relative to the scale of the homes being delivered.
- 6.217 The new local centre is core to internalising trips. In 'Phase 1' WY02, WY03 and 04 would all need to be allocated to provide sufficient scale to support a new local centre. If this were not possible it is likely that trips would continue to be made to surrounding local centres. The introduction of the new local centre would also trigger investment in public realm, on-street sustainable transport infrastructure, active travel connectivity to the rail station and diversion of a bus service through the development.
- 6.218 If just one of the three sub-clusters were bought forward alone, for example WY04, small-scale infrastructure improvements could be made to Wythall rail station to improve pedestrian and cyclist access and also potentially improve service frequency of the bus service at Wythall rail station, but these small-scale improvements in isolation are unlikely to create large scale adoption of sustainable transport.
- 6.219 If Phase 1 (as described above) were to be pursued in full, Phase 2 would expand the sustainable transport provision to connect with WY05 at the edge of the Cluster Group with the rail station, bus services and facilities within the new local centre.



Table 6-19: Cluster Group 13 Phasing

| Phase | Sub-Clusters     | Homes | Transport Improvements   | Rationale   |
|-------|------------------|-------|--------------------------|---|
| 1     | WY02, WY03, WY04 | 2,762 | 1, 2, 3, 4, 5, 6, 12, 13 | Focused development around a new local centre with associated improvements to sustainable travel infrastructure                               |
| 2     | WY05             | 900   | 7, 8, 9a, 9b, 10         | Expansion of the settlement to include the mixed-use development. Sustainable transport provision is extended to connect to new local centre. |

## Cluster Group 14: Redditch North

- 6.220 Cluster Group 14 is made up of one sub-cluster (RED03) on the northern edge of Redditch, just west of the village of Beoley, with the A441 and River Arrow running through its western side. It could deliver up to 2,500 homes.
- 6.221 There are bus services of varying frequencies along the A441 and the B4101, along the western side and southern edge of the development, respectively. The southern side of the development is about 2km from Redditch rail station, and the northern side is about 2.5km from Alvechurch rail station.

### Vision

- 6.222 Due to the cluster group's proximity to Redditch town centre and the existing amenities and public transport connections from this district centre into the conurbation, the transport vision is to provide sustainable transport connections to this district centre. As much of the transport infrastructure needed to connect with Redditch is within Redditch Borough Council's administrative boundary, the opportunities for improving sustainable transport connectivity would need to be delivered in collaboration.

### Local Facilities

- 6.223 Redditch town centre is the nearest district centre to RED03 and consists of a number of shops and restaurants, alongside four healthcare facilities. In addition to these town

centre healthcare facilities, there is another medical practice in Church Hill, about 1km from the south-eastern corner of the development.

- 6.224 Within 2km of the town centre are nine primary schools and one secondary school, but none of these are within comfortable walking distance for small children (500m) of the development. There are also four primary schools in the Church Hill area, but, again, none of them are within a child's comfortable walking distance, and further still from much of the development to the west.
- 6.225 Redditch town centre is beyond a comfortable walk (2km) for most people, but is within cycling distance. A small neighbourhood centre with a convenience store, healthcare, and education facilities near the proposed mini mobility hub (see Public Transport: Bus) could provide local access to essential amenities, given the number of potential new homes and the isolation of much of the development from any existing facilities.

### Pedestrians & Cycling

- 6.226 Some cycle routes have been identified to the north of Redditch, but currently there is no infrastructure or wayfinding to make this apparent to cyclists. However, there is potential to connect the district centre of Redditch and its railway station with the RED03 development and beyond with a high quality shared-use path. An active travel route through the centre section of cluster could be considered, to the east of the A441, which could be incorporated into a design for the main road through the development. There is the potential for this to connect with the shared-use path within the Cluster Group 19 employment sites to the east.
- 6.227 Two other active travel routes could form part of the development, to the west of the A441, with one route either side of the River Arrow. Although the river is not very wide, for the section that passes through the development, it is wide enough to require a bridge to connect the east and west sides. Unless another bridge is planned for the development, cyclists will need to use the existing A441 road bridge to cross the river.
- 6.228 A segregated cycle path could also connect the west side of the RED03 development to the north side of the RED02 development.

### Public Transport: Bus

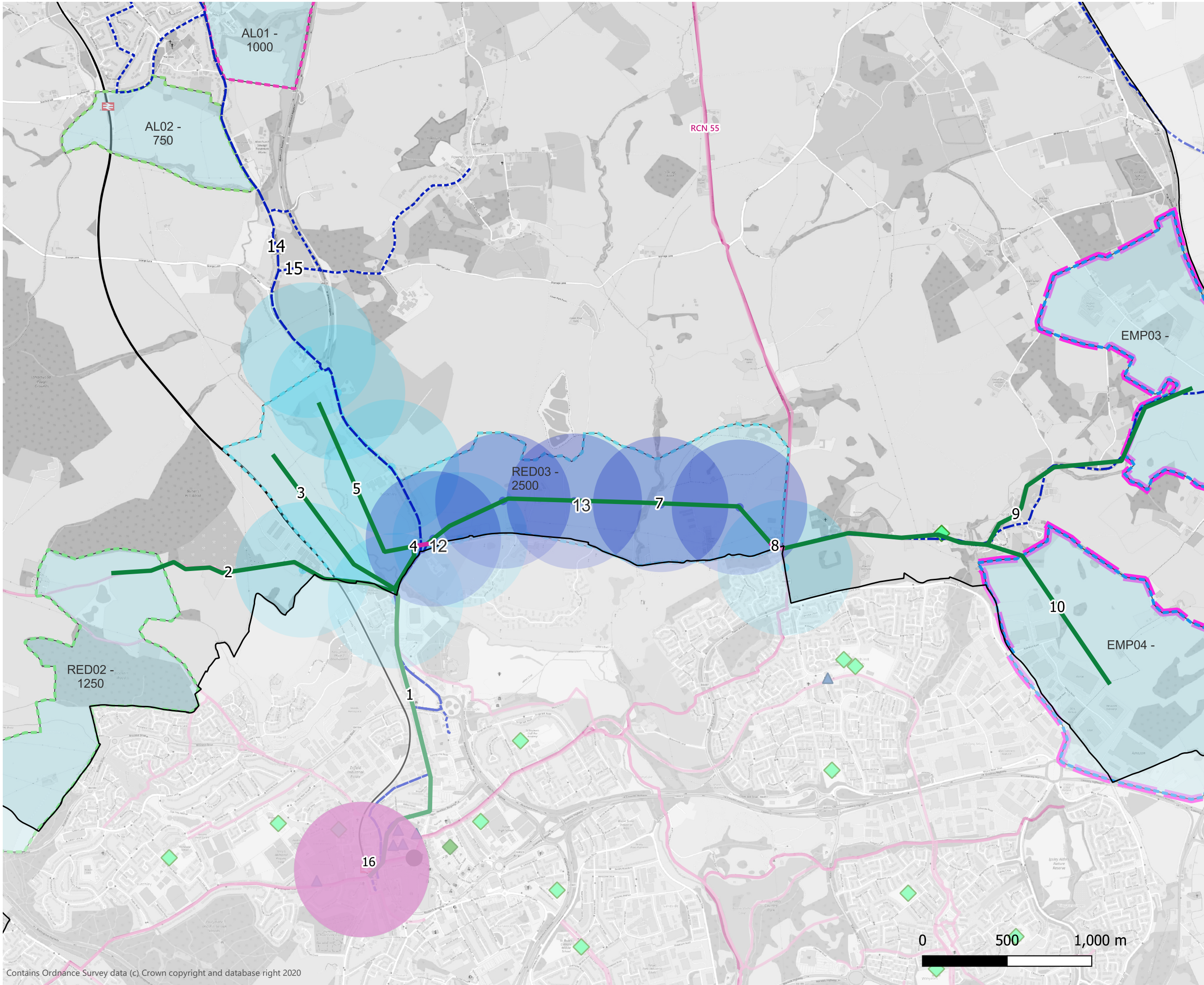
- 6.229 The 517 Redditch to Stratford-On-Avon bus service is the closest bus service to RED03 however, not all of the cluster group would be within 400m away of this service. A diversion of the 517 through the centre of the eastern part of RED03 could enable all residents to access this service, without adding a substantial amount of journey time.

- 6.230 Improving the frequency of the 517 bus service has been proposed for Cluster Group 19, to cater for EMP03 and EMP04. Improving the frequencies of the 146 and 182 services to half-hourly during peak times would help residents of Alvechurch, Barnt Green, and possibly Catshill and areas further north to commute to Redditch and the employment sites of Cluster Group 19 by bus.
- 6.231 These services could be connected by a mobility hub in the eastern part of the development near the A441-B4101 junction, which would enable residents in Alvechurch and Barnt Green to travel to the employment sites to the east of the RED03 development. The mobility hub would also include cycle parking infrastructure to allow residents from all parts of the development to cycle to more readily access the bus services.

### Public Transport: Rail

- 6.232 Although active travel routes to Redditch railway station could be enhanced, the station is only just within comfortable walking distance for the southern side of the development near the River Arrow. Therefore, the enhanced bus services are key to increasing rail connectivity to the development.
- 6.233 Whilst the railway station is relatively far from RED03, it would be worth considering implementing a mobility hub here, to enable greater rail connectivity for the development and, thus, broaden the range of employment options for residents.
- 6.234 One train leaves every half hour to Birmingham all day on weekdays, which is an appropriate frequency for the size of the town. Although, the development might benefit from a slightly higher frequency of services around the morning and evening peaks.
- 6.235 The opportunities for improving sustainable transport connectivity have been visualised in Figure 6-14 and detailed in Table 6-20.





Key

- Bromsgrove District
- Rail stations
- Rail Stations Enhanced (+400m)
- All Education
- All Healthcare
- Local Centre
- Cluster Group 14
- Route 517 - upgraded frequency
- Bus route 146 - upgraded frequency
- Bus route 182-183 - upgraded frequency
- Bus stops (+400m)**
  - Existing
  - New
- Proposed Active Mode Routes**
  - Enhanced
  - New
  - Crossing



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Client  
Bromsgrove District Council

Project  
Bromsgrove DPR Transport Assessment

Figure title  
Redditch North Opportunities

|          |                |
|----------|----------------|
| Revision | Project number |
| A        | 3578           |

|               |          |
|---------------|----------|
| Figure number | Date     |
| Figure 6-14   | Jun 2022 |



Table 6-20: Cluster Group 14 Transport Opportunities

| ID | Mode             | Improvement Description  | Costs            | Phase |
|----|------------------|--|------------------|-------|
| 1  | Active Travel    | A 2.2km shared walking and cycle path instead of the current footpath along the A441 between the rail station and the Weights Lane roundabout.                             | Low (<£1m)       | 1     |
| 2  | Active Travel    | A 1.7km segregated cycle lane built into design of widened road (current road would be too narrow to support traffic of a new residential development).                    | Low (<£1m)       | 3     |
| 3  | Active Travel    | A 1.1km on-road separated cycle lane along an arterial road through the western side of the development and west of the River Arrow.                                       | Low (<£1m)       | 1     |
| 4  | Active Travel    | A 300m shared walking and cycle path instead of the current footpath along the A441 (a continuation of improvement 1) between the Weights Lane roundabout and the B4101.   | Low (<£1m)       | 1     |
| 5  | Active Travel    | A 1.1km on-road separated cycle lane along another arterial route through the western side of the development, but east of the River Arrow.                                | Low (<£1m)       | 1     |
| 6  | Active Travel    | A toucan crossing at the current signalised junction of the A441 and B4101 to provide a safe crossing for both cyclists and pedestrians.                                   | Medium (£1m-£5m) | 1     |
| 7  | Active Travel    | A 2.2km on-road separated cycle lane along an arterial road through the side of the development to the east of the A441.   | Low (<£1m)       | 1     |
| 8  | Active Travel    | An active travel crossing from the RED03 development onto the south side of the B4101 at the Icknield street junction.   | Low (<£1m)       | 1     |
| 9  | Active Travel    | A 2.9km widened current footpath into a shared-use path on the south side of Church Hill (B4101) between RED03 and EMP03.  | Low (<£1m)       | 3     |
| 10 | Active Travel    | A 1.1km shared-use path to connect B4101 to the centre of EMP04.   | Low (<£1m)       | 3     |
| 11 | Public Transport | A diversion of the Route 517 bus through the RED03 development (which is likely to be increased frequency as suggested for Cluster Group 19 to cater for EMP03 and EMP04). | -                | 1     |

| ID | Mode             | Improvement Description   | Costs      | Phase |
|----|------------------|---|------------|-------|
| 12 | Public Transport | A Mobility Hub Micro with real time information to provide a bus interchange for the 146 and 182/183 bus routes to connect with Route 517 on the edge of the RED03 development near the A441 and B4101 junction. This would allow residents in Catshill, Barnt Green and even as far north as Edgbaston to travel to Redditch and the new employment sites at Cluster Group 19. If an extension to the e-scooter scheme were to be introduced in the Redditch area, this could be used as a main docking station. | Low (<£1m) | 2     |
| 13 | Public Transport | 4 bus stops (in addition to the Mobility Hub Micro) along the arterial road through the development to ensure all residents on the side of the development to the east of A441 are within 400m of a bus stop for the 517 service.   | Low (<£1m) | 1     |
| 14 | Public Transport | Route 146 bus frequency increased to half hourly at morning and evening peaks.  | -          | 1     |
| 15 | Public Transport | Route 182 bus frequency increased to half hourly at morning and evening peaks.  | -          | 1     |
| 16 | Public Transport | A large mobility hub with real time information at the rail station for cycle parking and connections to other forms of transport.  | Low (<£1m) | 2     |

## Phasing

6.236 Three phases have been recommended for this cluster group to reflect the varying priorities of the improvements. The first phase is made up of light-touch interventions which would be easily and quickly implemented in the short-term; the second phase is dedicated to the mobility hub, which would need to be constructed in the medium- to long-term; and the final phase includes active travel routes that are not essential for the site but could add significant value.

6.237 The first phase aims to provide high-quality, direct active travel connections from RED03 to Redditch town centre, to provide sustainable access to amenities from the development for the first residents of RED03. The improvement of bus frequencies is also key to provide a user-friendly connection to the town centre, and also to employment opportunities further to the north (for instance EMP01 site at Barnt Green) and to the east (EMP03 and EMP04).

6.238 The second phase would complement and enhance these improvements, but the mobility hubs would take longer to build and require more investment, so they would be less of a priority than the Phase 1 improvements.



The third phase would complete the local active travel network, connecting the gaps to the western edge of Redditch and the employment sites to the east.

Table 6-21: Phasing for Cluster Group 14

| Phase | Sub-Clusters | Homes | Transport Improvements | Rationale  |
|-------|--------------|-------|------------------------|--|
| 1     | RED03        | 2,500 | 1, 3-7, 11, 13-15      | Active modes route from Redditch town centre through the development required urgently. Most public transport interventions are easily implemented and will have a big impact. |
| 2     |              |       | 12                     | Mobility Hub will take time to construct and implement, but it will greatly enhance connectivity to and around the site.   |
| 3     |              |       | 2, 9, 10               | Additional active mode routes could provide a connected cycle network between both RED02 and RED03, and the employment sites to the east (EMP03 and EMP04).                    |

## Cluster Group 15: Redditch West

6.239 Cluster Group 15 is made up of one sub-cluster (RED02) with the potential to deliver approximately 1,250 homes. It is located on the western edge of Redditch, separated from the Batchley and Enfield areas by the B4184.

6.240 The centre of RED02 is about 2km from the Redditch town centre and rail station; this is within cycling, but not walking, distance of the cluster. An hourly bus service along the B4184 and two circular route services of varying frequencies operating around the Batchley and Enfield neighbourhoods connect into the town centre. There is one cycle route to the south-west of the cluster which connects Bromsgrove and Redditch.

### Vision

6.241 Due to the cluster group's proximity to Redditch town centre and the existing amenities and public transport connections from this centre, the transport vision is to provide sustainable transport connections to this district centre. As much of the transport infrastructure needed to connect with Redditch is within Redditch Borough Council's administrative boundary, the opportunities for improving sustainable transport connectivity would need to be delivered in collaboration.

## Local Facilities

- 6.242 Redditch town centre is the nearest district centre to the RED02, with numerous retail, leisure and hospitality venues. There are four healthcare facilities in the town centre, with a hospital located on the southern edge of the town, over 5km from the RED02 site. There was previously a more local GP surgery in the nearby Batchley neighbourhood, but this has been closed since 2018. A new influx of potential patients from RED02 may attract new professionals to reopen the surgery, although perhaps it would need some renovation or to even change location.
- 6.243 Within 2km of the town centre are nine primary schools and one secondary school, but none of these are within comfortable walking distance for small children (500m) of the development, although there is one primary school in Batchley, around 1km away. Therefore, it may be necessary to consider additional provision or public transport connectivity to existing primary schools.
- 6.244 A new neighbourhood centre focussed on the existing primary school and a regenerated GP surgery could provide RED02 with local amenities without the need for entirely new facilities on the development site itself.

## Pedestrians & Cycling

- 6.245 There is an existing cycle route through the Batchley neighbourhood which could be upgraded into a high-quality cycle route with some maintenance, additional road markings and wayfinding signage to join up the existing stretches of cycle lanes.
- 6.246 The northern part of RED02 also has a cycle route running through it into Redditch, but there is little supporting infrastructure along the route. Currently, the road nearest the proposed cluster is a quiet and very narrow country lane. It is anticipated that this would need to be widened to cater for the trips generated from the cluster. Assuming this is the case, a segregated cycle lane could be built into the designs of the new road to connect with an existing cycle lane passing a roundabout in the Enfield area. Similar infrastructure would be useful for other roundabouts along the route, along with a shared-use path to continue from the existing roundabout. This would require double yellow lines and a slightly wider path. Both of these routes will connect the site to the district centre and provide a better connection to the rail station, where a metro transport hub could offer cyclists a place to store their bikes whilst completing the rest of their journey by train.
- 6.247 The arterial route through the development would also connect to the proposed cycle route for the RED03 development to the north-east, which would again connect to the town centre.

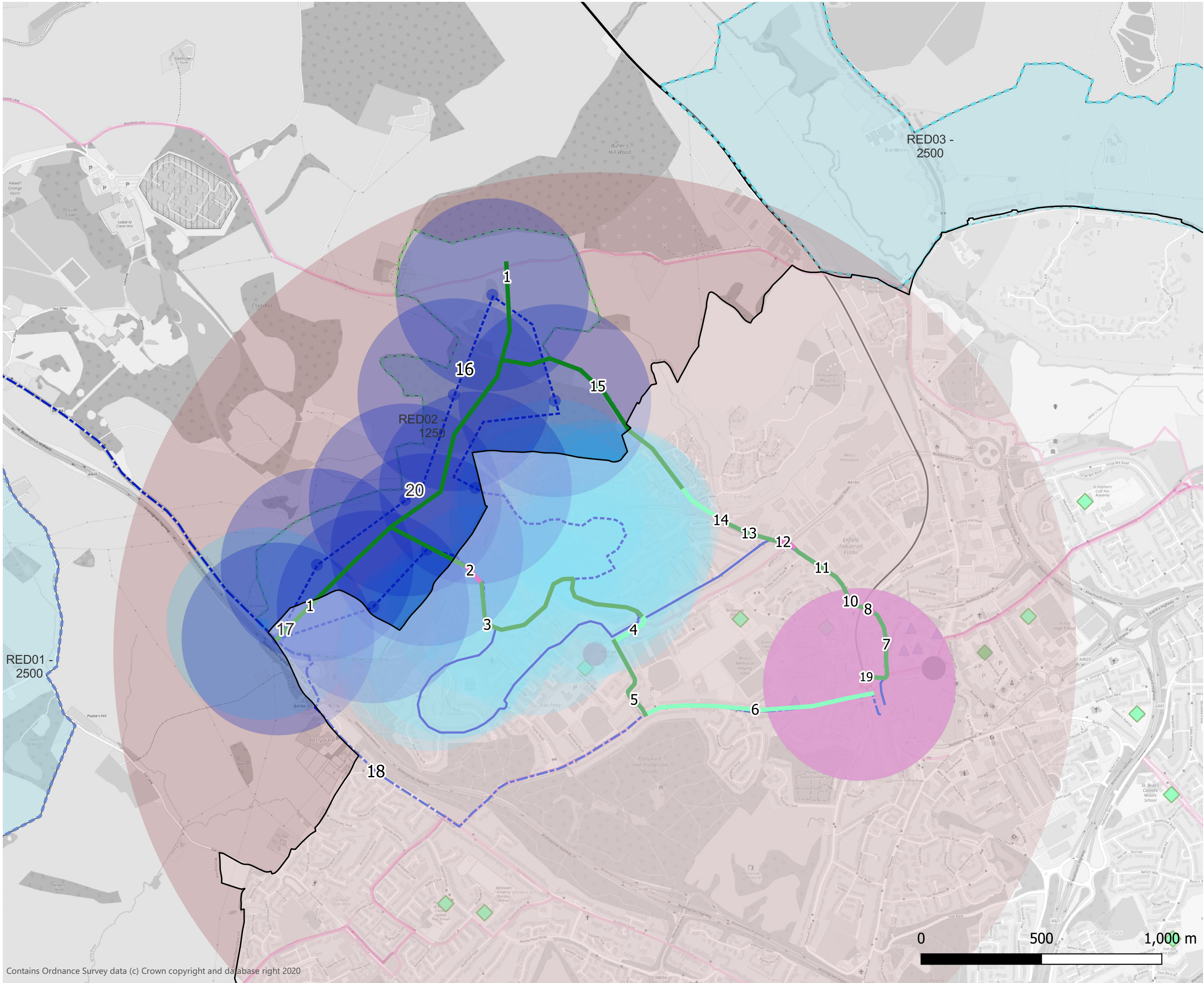
### Public Transport: Bus

- 6.248 There is already a high frequency circular route service from Redditch rail station to the Batchley neighbourhood (service 51) which could be extended into RED02. It could pass through a new mini transport hub (a bus interchange with cycle storage) on the B4184, near an existing stop for the 42 and 43 services. This would enable residents on the northern side of the development to travel to Bromsgrove and Kidderminster.
- 6.249 Along with the new mini transport hub, at least three more bus stops would be required to ensure that all residents in the RED02 development are within 400m of a bus stop, as the crow flies. However, with homes likely to be in the centre of the circular route, it is likely that some residents' actual journeys would be longer than 400m if bus stops were only placed on one side of the development. Therefore, eight new bus stops have been proposed in addition to the new mini transport hub, so that the diverted 51 service could be easily accessible from both sides of the development.
- 6.250 Real time information would be particularly useful at the new mini transport hub, to provide more information for passengers connecting from one service to another. If there are areas within the development with particularly high-density housing, it would be worth considering including real time information at stops near to these high-density areas. However, as buses can be expected every 12 minutes in the morning peak and the route is relatively short, it may not be necessary to have real time information at every stop along this route.

### Public Transport: Rail

- 6.251 Although active travel routes have been enhanced to Redditch rail station, much of the cluster would still be beyond a short walk from the station. Therefore, the enhanced bus services are key to improving the rail connectivity of the development.
- 6.252 One train leaves every half hour to Birmingham all day on weekdays, which is an appropriate frequency for the size of the town. Although, the development might benefit from a slightly higher frequency of services around the morning and evening peaks. As mentioned earlier, though, a metro mobility hub with cycle storage would enable more sustainable first and last mile journeys for rail commuters.
- 6.253 The opportunities for improving sustainable transport connectivity have been visualised in Figure 6-15 and detailed in Table 6-22.





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Prepared

TS

Reviewed

SN

Date

Jun 22

Key

Bromsgrove District

Rail stations

Rail Stations Enhanced (+400m)

All Education

All Healthcare

Local Centre

Cluster Group 15

Proposed local centre (+2km)

Bus Route 42 - upgraded frequency

Bus Route 51

Diverted

Existing

Bus stops (+400m)

Existing

New

Proposed Active Mode Routes

Enhanced

New

Crossing

a company of Royal HaskoningDHV

Client  
Bromsgrove District Council

Project  
Bromsgrove DPR Transport Assessment

Figure title  
Redditch West Opportunities

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Date  
Jun 2022



Table 6-22: Cluster Group 15 Transport Opportunities

| ID | Mode          | Improvement Description   | Costs      | Phase |
|----|---------------|---|------------|-------|
| 1  | Active Travel | A 2.3km on-road separated cycle lane along the new arterial route through the development.  | Low (<£1m) | 1     |
| 2  | Active Travel | Painted cycle lane around roundabout leading onto Lily Green Lane.  | Low (<£1m) | 1     |
| 3  | Active Travel | A 1.0km stretch of quiet streets along Lily Green Lane, Salters Lane and Oak Tree Avenue.   | Low (<£1m) | 1     |
| 4  | Active Travel | Maintenance of current painted cycle path along Batchley Road (200m) and painting of double yellow lines outside the shops next to the roundabout to make sure cars are not parked in the cycle lane. | Low (<£1m) | 1     |
| 5  | Active Travel | Connection of the painted on-street cycle lanes from Batchley Road and Bromsgrove Road (and double yellow lines where appropriate) for Willow Way (400m).   | Low (<£1m) | 1     |
| 6  | Active Travel | Maintenance of current painted cycle path and painting of double yellow lines (where appropriate) along 1.0km section of Bromsgrove Road between Willow Way and Redditch rail station.                | Low (<£1m) | 1     |
| 7  | Active Travel | A shared walking and cycle path instead of current footpath along 300m section of Hewell Road between Redditch rail station and Clive Road.   | Low (<£1m) | 2     |
| 8  | Active Travel | An off-road (or painted) cycle crossing at the roundabout between Clive Road and Hewell Road.   | Low (<£1m) | 2     |
| 9  | Active Travel | A shared walking and cycle path instead of the current footpath for the 50m section of Hewell Road between two roundabouts, passing over the rail line.   | Low (<£1m) | 2     |
| 10 | Active Travel | An off-road (or painted) cycle crossing at the roundabout between Elm Road and Hewell Road.   | Low (<£1m) | 2     |
| 11 | Active Travel | A shared walking and cycle path instead of the current footpath along the 300m section of Hewell Road between the Elm Road roundabout and the Windsor Road roundabout.                                | Low (<£1m) | 2     |
| 12 | Active Travel | An off-road (or painted) cycle crossing at the roundabout between Windsor Road and Hewell Road.   | Low (<£1m) | 2     |

| ID | Mode             | Improvement Description   | Costs      | Phase |
|----|------------------|---|------------|-------|
| 13 | Active Travel    | A shared walking and cycle path instead of the current footpath along the 300m section of Hewell Road between the Windsor Road roundabout and the existing off-road cycle path at the Salters Lane roundabout.  | Low (<£1m) | 2     |
| 14 | Active Travel    | Maintenance of current off-road cycle path and painting of double yellow lines (where appropriate) at the Salters Lane roundabout.  | Low (<£1m) | 2     |
| 15 | Active Travel    | A 1.0km on-road segregated cycle lane built into design of widened Brockhill Lane (as current road would be too narrow to support traffic of a new residential development).  | Low (<£1m) | 2     |
| 16 | Public Transport | A diversion of Route 51 bus from Salters Lane to the development via Lily Green Lane and Appletree Lane. The route consists largely of quiet residential roads, so there is no need for a bus lane.   | -          | 1     |
| 17 | Public Transport | A mini mobility hub with real time information at the south-western corner of the development adjacent to Hewell Lane to allow bus connections and cycle parking for those wishing to use the bus. (If an e-scooter scheme was adopted in the Redditch area, this could be used as a main docking station).   | Low (<£1m) | 2     |
| 18 | Public Transport | An improved frequency of the Route 42/43 bus to half hourly during morning and evening weekday peaks.   | -          | 1     |
| 19 | Public Transport | A large mobility hub with real time information at the rail station for cycle parking and connections to other forms of transport.  | Low (<£1m) | 2     |
| 20 | Public Transport | Eight new bus stops on the new circular road around RED02 to make sure all residents of the new development are within reach of the diverted Route 51 bus. (This could be reduced to 3 or 4 potentially if there were good active mode routes across the development so that bus stops could be accessed from both the west and east sides regardless of which side the bus stops were on). | Low (<£1m) | 1     |

## Phasing

6.254 With only one sub-cluster in this cluster group, only two phases are required. The first phase is made up of light-touch interventions which would be easily and quickly implemented in the short-term, and the second phase includes interventions that would need to be conducted in the medium to long-term.



6.255 Therefore, the southern cycle route interventions, which build upon an existing cycle route, are included in the first phase, whilst the northern cycle route interventions are included in the second phase, as they would require more infrastructure. Similarly, the upgraded bus frequencies are included in the first phase as the infrastructure required would be minimal, and the bus connectivity would be crucial to the development given its distance from the district centre. The mobility hubs would enhance the public transport services and attract new customers, but they would be difficult and time-consuming to implement.

Table 6-23: Phasing for Cluster Group 15

| Phase | Sub-Clusters | Homes | Transport Improvements | Rationale  |
|-------|--------------|-------|------------------------|--|
| 1     | RED02        | 1,250 | 1-6, 16, 18, 20        | There are already good foundations for a cycle route on the southern side of the site, so some light-touch interventions could have a quick and considerable impact. The upgraded bus routes are important for improved connectivity overall and would not require much infrastructure.                  |
| 2     |              |       | 7-15, 17, 19           | The cycle route to the northern side of the development would require a little more infrastructure but would still be important for connecting those residents. The mobility hubs would be more time-consuming and costly than the other public transport interventions but would add significant value. |

## Cluster Group 16: Tardebigge

6.256 Cluster group 16 (RED01) is located near the small village of Tardebigge. From the southern tip of the cluster group, it is around 5km to Bromsgrove rail station and approximately the same distance westwards of Redditch town centre from the eastern edge of the site. The site is bound to the north by the A448 and on all other sides is greenfield land. There is the potential to deliver 2,500 homes at this location.

6.257 With regards to existing sustainable transport provision, NCN 5 passes close to the southern boundary of the site providing route towards Bromsgrove and Redditch. However, it is beyond a reasonable cycling distance (5km) to reach either Bromsgrove or Redditch therefore any active travel trips could only be considered for short, internal

trips within the cluster group. There is an hourly bus service (52/52A) which operates from Redditch to Bromsgrove and Kidderminster. Bromsgrove and Redditch rail stations are equidistant from the cluster group, the former could be accessed directly from the 52/52A bus service. Given the proximity of the cluster group to the A448, the distance from the larger urban centres of Bromsgrove and Redditch and the poor existing sustainable transport links, there is the potential for this to be a car-dominated cluster group.

## Vision

- 6.258 Due to the relatively isolated location of the cluster group, the vision could be to establish a small new neighbourhood centre as a focal point for the cluster. Shops, café/pub and a community centre could be provided to establish a sense of place in the new neighbourhood. Beyond the cluster group, the vision could be to connect to Bromsgrove and Redditch with a high frequency, affordable bus service with journey times similar to driving. The bus services should call at rail stations in both towns to provide a direct connection to services outside of the District.
- 6.259 Even with a high frequency bus service to the nearby rail stations. It could be more challenging to achieve a high sustainable mode share in RED01 compared to other cluster groups because of the longer distance to a large district centre and rail stations; and close proximity to the major road network, making driving an attractive option.

## Local Facilities

- 6.260 The existing village centre of Tardebigge has a primary school, community hall, a pub and a café. There are no GP surgeries within the village, nor convenience shops or supermarkets. The small existing residential area is dispersed to the north and south of the A448 with no clear neighbourhood centre. Outside of Tardebigge village, Bromsgrove and Redditch, are the nearest district centres with amenities that would generate trips including, retail, hospitality, leisure and employment, as well as access to rail stations for travel out of the district.
- 6.261 As Bromsgrove and Redditch are beyond a reasonable walking and distance, a new neighbourhood centre should be considered within the cluster to facilitate access to basic amenities, infrastructure should be provided to encourage trips to these locations by active modes. Local centre provision at the yet to be developed Foxlydiate site could also provide some facilities in closer proximity to RED01, however these would not be at the scale or range associated with the District Centres of Bromsgrove and Redditch town centres.

## Pedestrians & Cycling

- 6.262 NCN5 is approximately 500m from the southern tip of RED01. The route extends along Copyholt Lane in both directions towards the rail station in Bromsgrove and on to the town centre. It also extends east towards Redditch town centre. There is no specific active travel infrastructure along the route, but it uses quite rural roads to connect the two towns. Small-scale infrastructure improvements such as wayfinding signage could be provided to help connect RED01 to the NCN route.
- 6.263 Shared walk/cycle paths could be provided throughout the cluster group to connect the new neighbourhood centre with the extents of the cluster group and onto the NCN route to the south and existing village centre to the north.

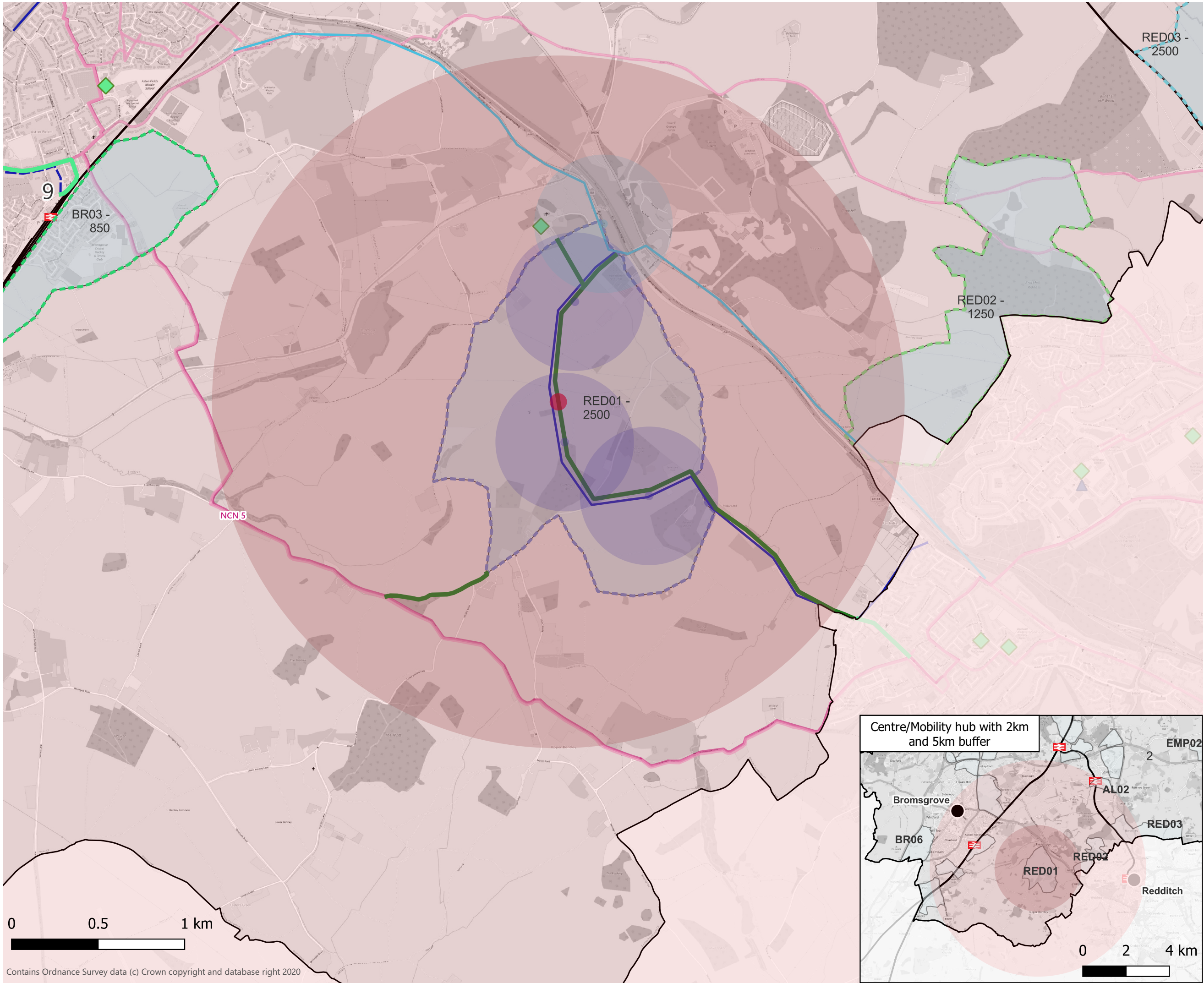
## Public Transport: Bus

- 6.264 Dimond Buses' 52/52A service provides an hourly service to Redditch, Bromsgrove, and Kidderminster. This long-distance service has limited stops along the route however negotiations could be undertaken with the bus operator to understand opportunities for diverting this route through the cluster group and also improving the frequency from hourly to half hourly.
- 6.265 To mitigate the potential impact of the diversion on the journey time for the 52/52A services, the service could enter the cluster near the Alcester Road junction and run parallel to the proposed active travel path towards the neighbourhood centre. A diversion along Cur Lane running along Foxlydiate Lane, and back up through the A448 has been proposed to enable access via bus directly to the neighbourhood centre. This bus route is crucial to connecting the site sustainably to the larger town centres of Bromsgrove and Redditch.

## Public Transport: Rail

- 6.266 Bromsgrove and Redditch rail stations are the closest to RED01. From the closest point in the cluster group, the rail stations are around 5km from RED01, which would increase from the proposed neighbourhood centre. It is beyond reasonable cycling distance for everyday journeys to the rail station, therefore connecting to the rail station by bus will be critical. There is currently no direct service to Redditch rail station, therefore service diversions or extensions could be explored to provide this.
- 6.267 There are no proposed infrastructure improvements or capacity enhancements to the rail station related to this cluster group.
- 6.268 The opportunities for improving sustainable transport connectivity have been visualised in Figure 6-16 and detailed in Table 6-24.





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|          |          |         |
|----------|----------|---------|
| Prepared | Reviewed | Date    |
| JP       | SN       | June 22 |

Key

Bromsgrove District

**3b - cluster groups - outline**

Cluster Group 1

Cluster Group 14

Cluster Group 15

Cluster Group 16

All Education

Secondary / Post16 Education

All Healthcare

National Cycle Network (NCN)

Local Cycle route

Rail stations

railway line

**Opportunities**

Neighbourhood Centre (+2km+5km)

**Bus Stops (+400m)**

existing

opportunity stop

**Bus Routes**

existing

Potential diversion

Potential additional route

**Active Travel**

Enhanced

New

Crossing

a company of Royal HaskoningDHV

Client  
Bromsgrove District Council

Project  
Bromsgrove DPR  
Transport Assessment

Figure title  
Cluster Group 16 -  
Opportunities

|          |                |
|----------|----------------|
| Revision | Project number |
| A        | 3578           |

|               |           |
|---------------|-----------|
| Figure number | Date      |
| Figure 6-16   | June 2022 |



Table 6-24: Cluster Group 16 Transport Opportunities

| ID | Mode             | Improvement Description   | Costs  | Phase |
|----|------------------|---|--|-------|
| 1  | Active Travel    | Incorporate a neighbourhood centre within the cluster provide better access to amenities and services like a convenience store, gym, eateries, etc. which mitigates the necessity of needing to travel over 4km in either direction to Bromsgrove or Redditch town centres.                     | Subject to consultation with local developers      | 1     |
| 2  | Public Transport | Increase the frequency of the bus service along Alcester Road all the way past the railway station towards Bromsgrove town centre to enable frequent access by bus to Bromsgrove town centre.   | Subject to consultation with bus operators and WCC | 1     |
| 3  | Active Travel    | Propose an active travel path running through the cluster which curves from Cur Lane and up towards the A448.   | Low = Less than £1mil                              | 1     |
| 4  | Public Transport | Propose a diversion from the A448 bus route down Foxlydiate Lane down Cur Lane, following the same route as the proposed active travel path, acting as a bus gate/active travel dual pathway.   | Subject to consultation with bus operators and WCC | 1     |
| 5  | Public Transport | Incorporate a bus stop in the cluster at the proposed neighbourhood centre which resides on the dual path for active travel and bus diversion.  | Low = Less than £1mil                              | 1     |
| 6  | Active Travel    | Propose a linking signed cycle path from RED01 along Copyholt Lane and connected to the existing network along Black Lake Lane, which connects the development via active travel to the cycling network in place running in both directions to both Bromsgrove as well as Redditch town centre. | Low = Less than £1mil                              | 1     |

## Cluster Group 17: Frankley

6.269 Cluster group 17 is to the north of Bromsgrove District on the edge of the conurbation near Frankley. It is bordered on the west by the M5 and to the east by the edge of the conurbation. The cluster group comprises of a single large sub-cluster with potential for up to 3,500 homes. It has been considered separately due to its scale and geographical separation from any other clusters.

- 6.270 The village of Frankley Green is at the heart of Cluster Group 17 however there are limited local facilities which means that daily trips are likely to be made from the village to the nearest local centres of Northfield or Longbridge for access to supermarkets, gyms and indoor leisure sites, cafes/pubs and faith centres.
- 6.271 Northfield and Longbridge rail stations are both within 3km of the eastern edge of the cluster group, but there are currently no cycle routes to connect to these stations. There are no bus services that currently serve the development, or in the streets surrounding it, therefore diversions would need to be made to existing services to support public transport use.

### Vision

- 6.272 Due to the scale of the cluster group, there is potential for a new local centre to be created in the heart of the community, this could be centred on the existing village of Frankley Green. This would create a focus for trips within the cluster group, providing access to local facilities, aid the internalisation of local trips by walking and cycling and provide a centre for the diversion of public transport routes through the cluster group. Sustainable travel connections to the larger centres of Northfield or Longbridge could also be considered to provide access to rail services.

### Local facilities

- 6.273 Various schools are located along the northern, eastern, and southern boundary of the cluster however, there are no schools within the cluster group itself hence depending on the size of development and capacity of local schools, new primary and potentially secondary schools may be appropriate within the cluster area. To the north of the cluster lies Newman University in Bartley Green.
- 6.274 Several open spaces are located within or close to the cluster group, including:
- Frankley Beeches - a small woodland situated within the cluster and managed by the National Trust.
  - Waseley Hills – a Country Park maintained by Worcestershire County Council and providing a public bridleway from the cluster group to Rubery or to Chapmans Hill.
  - Bartley Reservoir – Provides picnic areas and woodlands along the northwestern edge and a track suitable for cycling along this side of the reservoir. There is no cycle route along the opposite side of the reservoir and no footpaths on surrounding roads (Scotland Lane / Frankley Lane). There is opportunity here to create high quality walking and cycling provision to serve the Bluebell Woods, and Bartley Green

Reservoir Picnic Area, tying in with the development. Even though Bartley Reservoir is located within the cluster, it is not within Bromsgrove district's administrative area.

### Active travel

- 6.275 The proposed new local centre should have a key focus on creating high quality public realm to encourage pedestrian and cycling movement. This could include covered, secure cycle storage with segregated cycle routes through the development to connect with Northfield, the reservoir and Country Park. Currently, roads through the cluster group do not have footpaths, and so considerable attention should be given to ensure there are sufficient footpaths and crossings throughout the cluster.
- 6.276 Walking and cycling infrastructure could be invested along Gannow Green Lane, leading to the Country Park to create a more seamless journey from Gannow Green Lane, along Boleyn Road to the proposed new local centre. There is currently around 1km of cycle lane at the bottom of Boleyn Road, at the junction to Gannow Green Lane, which could be significantly extended to create an active travel corridor between existing housing developments and cluster group 17. At the bottom of Frankley Hill Lane, the proposed cycleway is around 0.3km away from Frankley Health centre.
- 6.277 To utilise the proposed cycle infrastructure scheme along the A38, between Selly Oak and Longbridge, there could be a segregated cycle way connecting the local centre via Egghill Lane, to Northfield. Along Egghill Lane, from the proposed local centre to Northfield is around 3.8km.
- 6.278 Finally, there is another opportunity for a cycle corridor between the bottom of Egghill Lane and St. Leonard's Church, Frankley. This would create an active travel corridor in the section of the cluster which would not be covered within a 400m distance of a bus service yet would still connect to the cycle infrastructure at Northfield, as well as the 202 and 61 services at the bottom of Egghill Lane. Secure cycle storage and parking should be introduced at the local centre and potentially at the bottom of Egghill Lane to enable easy mode transition.

### Public transport: Bus

- 6.279 There are several nearby bus services which could provide access to the district centres out of the cluster group; as well as employment and nearby rail stations. These diversions would need to be scoped and discussed with bus operators and the County Council to determine their viability. Potential changes to bus routes could include:
- Reroute and extend the X22 National Express West Midlands service south, into the cluster group. The extension is ~1.9km, and serves the proposed local centre, as well

as being rerouted slightly around Woodgate, to serve the area in a more efficient way after the extension is considered.

- Reroute and extend the 61 National Express West Midland service north, into the cluster group. The extension is ~3km and serves the proposed local centre, as well as being rerouted marginally around the King Edward VI Balaam Wood Academy, before running North to the proposed local centre, and down to serve part of the potential new development. This service will stop within 0.16km of Frankley Health Centre.
- Increase the frequency of the 202(S) Diamond Bus service. Frequency is currently hourly but could be increased to every 10minutes to connect the cluster group to Bromsgrove and Halesowen for connections across the Black Country via the bus station in the town.

6.280 A SPRINT corridor extension is already proposed along the A38 between Longbridge and Birmingham. This could benefit cluster group 17 through the proposed changes to the 61-bus route, which runs along this corridor. The service is currently ~every 6mins in the interpeak period, which could provide a frequent and reliable journey to the city centre of Birmingham, and to Northfield.

6.281 Along part of the corridor for the 202(S) service, a new cycle route could be installed, along Egghill Lane, to join at Northfield to provide access on the cycle superhighway into Birmingham on the A38.

6.282 Bus lanes could be built with a focus on the proposed local centre in Frankley Green, running both north to south, and east to west to provide buses with priority in the proposed local centre. The estimated total length of this would be around 2km.

6.283 Currently, there are four bus stops in the cluster, two on Frankley Hill Lane (one in each direction), and one at the top of Scotland Lane, as well as one on Balmoral Road at the junction with Ravenhayes Lane. These two existing bus stops could facilitate a new interchange station at the intersection of Frankley Hill Lane/Ravenhayes Lane and Church Hill/Frankley Green Lane, as discussed below.

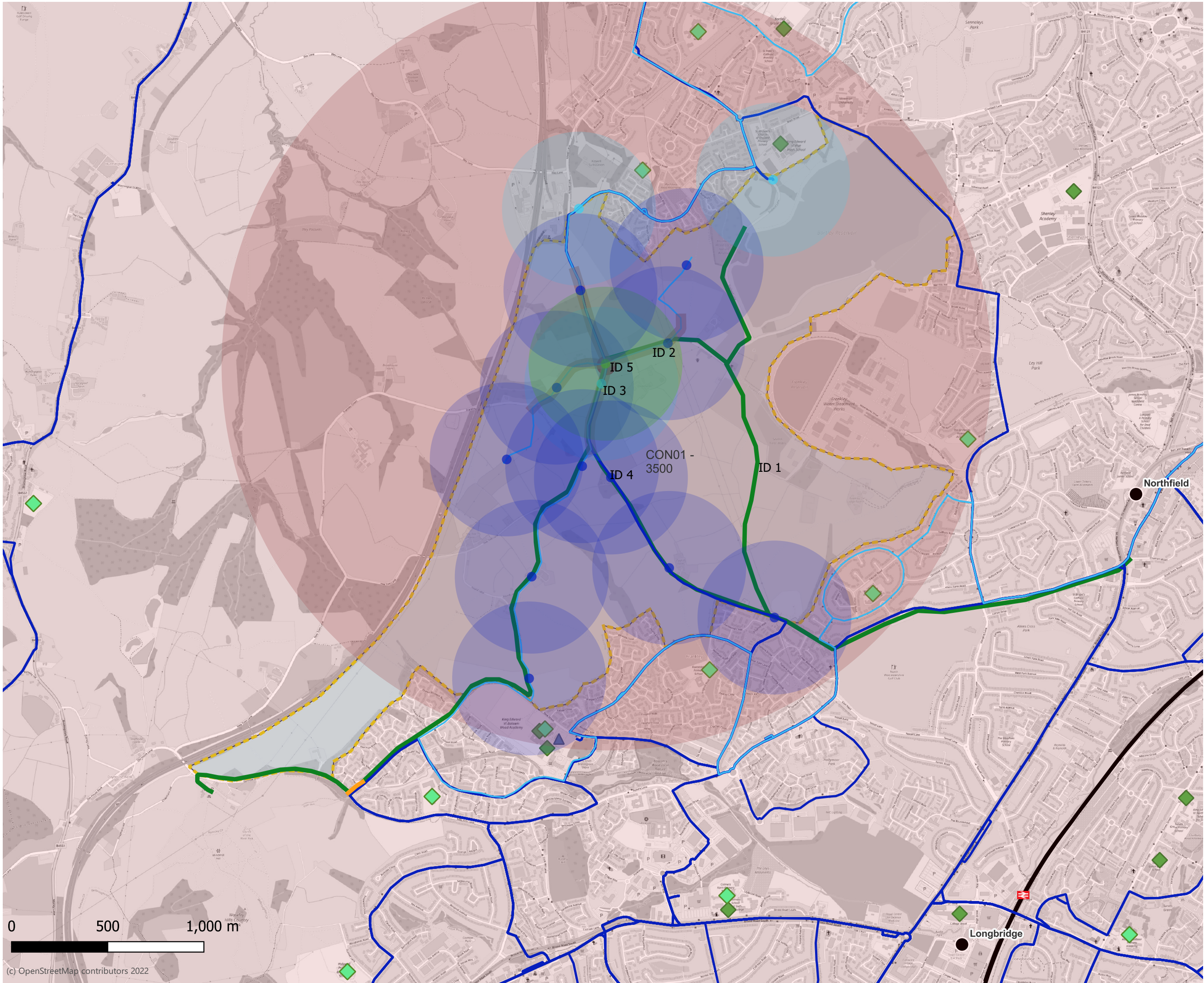
6.284 High quality bus infrastructure could be developed in the local centre, which will be key to providing the development with easily accessible links via public transport, due to the lack of railway stations within the cluster. A new bus interchange would enable people to transfer between services to Bromsgrove, Halesowen, and Birmingham city centre, alongside locations along the routes including Longbridge, and Northfield. Examples such as the nearby Halesowen bus station, which has a small land footprint, yet still provides covered waiting areas and passenger facilities, could be investigated further. This facility could include real time information, and toilet facilities.

- 6.285 It is estimated that 2 bus stops would be incorporated into the interchange, as discussed above and 22 new bus stops (11 pairs) created. Wherever possible, these should have high quality accessible waiting facilities, such as bus shelters, and real time information (RTI). Most of the new proposed bus stops could be shelters (18), and around 8 could contain RTI, excluding the interchange station. The RTI would be best situated along the 61 and X22 extended routes along Frankley Green Lane and Church Hill, whilst both alongside the 202(S) service could benefit from the RTI facilities at the interchange.
- 6.286 Integration with high quality cycling and pedestrian environments could form a successful and busy local centre.

### Public transport: Rail

- 6.287 The rail station at Northfield has facilities including a ticket office, step-free access, a car park, ticket machines, toilets and a taxi-rank. There is currently space for 24 cycles in the station storage facility, which is sheltered, covered by CCTV and accessible from the car park.
- 6.288 The rail station at Longbridge has similar facilities, including a ticket office, step-free access, a car park, ticket machines, toilets, and a taxi-rank. There is space for 34 cycles in the sheltered cycle storage, which is again covered by CCTV and accessible from the car park.
- 6.289 Both Northfield and Longbridge stations are served by public transport, with Northfield station around 1km away from the 61 bus service. The 61 continues to Selly Oak station, further up the bus route. Northfield station is also well served via the cycle infrastructure proposed to link in with the potential A38 cycleway extension.
- 6.290 The opportunities for improving sustainable transport connectivity described above have been summarised below, visualised in Figure 6-17 and detailed in Table 6-25.





**Key**  
**Cluster 17**

**Bus Stop Infrastructure**

- Existing
- New

**Proposed Bus Priority**

**Cycle Lane Infrastructure**

- New
- Existing

**Bus Service Improvements**

- 61 & X22

**Potential Local Centre**

**Healthcare - Primary & Secondary sites**

**Education - All primary, middle & secondary sites**

**Education - Secondary & Post-16**

**Existing Local Centres**

**Stage 3b - Sites and Clusters**

**Individual Clusters**

- Cluster17 - CON01

**TransportNetwork**

- Rail stations



a company of Royal HaskoningDHV

Client  
Bromsgrove District Council

Project  
Bromsgrove DPR Transport Assessment

Figure title  
Cluster 17 Transport Opportunities

|          |                |
|----------|----------------|
| Revision | Project number |
| A        | 3578           |

|               |          |
|---------------|----------|
| Figure number | Date     |
| Figure 6-17   | May 2022 |



Table 6-25: Cluster Group 17 Transport Opportunities

| ID | Mode                            | Improvement Description  | Costs                                 |
|----|---------------------------------|--|---------------------------------------|
| 1  | Active Travel, Public Transport | New local centre to enable people to stay within the neighbourhood for access to daily amenities and services.   | n/a                                   |
| 2  | Active Travel                   | Gannow Green Lane, leading to the Country Park from the proposed local centre (3.483km).   | Medium (between £1m and £5m)          |
| 3  | Active Travel                   | Segregated cycle way connecting the proposed local centre, via Egghill Lane, to Northfield (3.758km).<br>Segregated cycle way connecting Bartley Reservoir to the proposed local centre (1.529km).   | Medium (between £1m and £5m)          |
| 4  | Active Travel                   | From the bottom of Eggshill Lane and St. Leonard's Church, Frankley (1.335km).   | Low (<£1m)                            |
| 5  | Public Transport                | Bus priority lanes around the proposed local centre (1.932km)  | Low (<£1m)                            |
| 6  | Public Transport                | 18 new bus shelters  | Low (<£1m)                            |
| 7  | Public Transport                | 4 new bus stop pole, flag, and ground works  | Low (<£1m)                            |
| 8  | Public Transport                | 8 bus stop RTI displays, and maintenance   | Low (<£1m)                            |
| 9  | Public Transport                | 1 transport interchange  | Low (<£1m)                            |
| 10 | Public Transport                | Reroute and extend the X22 National Express West Midlands service south, into the cluster group. The extension is ~1.9km, and serves the proposed local centre, as well as being rerouted slightly around Woodgate, to serve the area in a more efficient way after the extension is considered. | To be confirmed with operator and WCC |

| ID | Mode             | Improvement Description   | Costs |
|----|------------------|---|-------|
| 11 | Public Transport | Reroute and extend the 61 National Express West Midlands service north, into the cluster group. The extension is ~3km and serves the proposed local centre, as well as being rerouted marginally around the King Edward VI Balaam Wood Academy, before running North to the proposed local centre, and down to serve part of the potential new development. This service will stop within 0.16km of Frankley Health Centre. |       |
| 12 | Public Transport | Increase the frequency of the 202(S) Diamond Bus service. Frequency is currently hourly but could be increased to every 10minutes to connect the cluster group to Bromsgrove and Halesowen for connections across the Black Country via the bus station in the town.  |       |

### Phasing

- 6.291 Due to the location of the proposed local centre, it may be logical to phase the northern and southern development of the cluster. The southern side of the cluster contains the 61 bus service, which would provide frequent services to the city and to the district centre at Northfield, as well as serving Selly Oak railway station directly.
- 6.292 If the southern section of the cluster was delivered first, then the X22 service could be diverted in phase 2, although the 202(s) service could still benefit from some frequency enhancements in phase 1 before increasing further in phase 2.
- 6.293 The cycle infrastructure could also be phased, although the majority of this infrastructure is focused on the southern side of the cluster. The 1.5km of cycleway connecting Bartley reservoir to the proposed local centre, and the 1.3km connecting Egghill Lane and St. Leonard's Church could form part of phase 2, whilst connections from the local centre to the Country park and Northfield would form part of phase 1.
- 6.294 The mobility hub and bus priority lanes used by the 202(S) and 61 could be delivered as part of phase 1, with the lanes served by the X22 delivered in phase 2.

### Cluster Group 18: Hagley

- 6.295 This cluster group is made up of five sub-clusters around the village of Hagley. Collectively the cluster group could theoretically deliver up to 2,550 homes.

6.296 Hagley lies close to the border of Bromsgrove District and Dudley Metropolitan District within the conurbation. It lies at the intersection of four main roads:

- Stourbridge Road / Hagley Road to the north (A491);
- Birmingham Road / Hagley Hill / Hagley Causeway to the east (A456);
- Stourbridge Road (A491) to the south; and
- Kidderminster Road / Worcester Road / Birmingham Road to the west (A456).

6.297 Hagley is well connected to the wider area by public transport via its local railway station, offering regular services to Kidderminster, Worcester, and Birmingham Moor Street. Bus services include the:

- 192 providing hourly services between Kidderminster and Halesowen.
- 318 between Stourbridge and Bromsgrove / Aston Fields.

## Vision

6.298 The vision for this cluster group is to build on the existing transport provision and local services. It focuses on drawing together the sub-clusters by sustainable modes and reducing the severance impacts of the main roads and the railway line, which split the sub-clusters.

## Local Facilities

6.299 Within Hagley there are currently two high schools with sixth forms, one primary school and one GP Surgery. A few shops and cafés also cluster around the B4187 (Worcester Road) in West Hagley with a few pubs along the main road (A456) and to the south around the Clent Hills. The presence of existing facilities would help to internalise trips within Hagley and limit impact on the wider network if any new development is effectively integrated.

## Pedestrians & Cycling

6.300 The distance of the built-up area of Hagley (east to west) is approximately 2.4km (straight line). Therefore, most trips within the village are feasible by active modes.

6.301 Existing cycle infrastructure provision is limited in Hagley. There are shared pedestrian and cycle paths alongside the A456, with signed routes to the Wychbury Fields Estate, railway station and village centre. The junction of A456 / Worcester Road / Western Road / Summervale Road includes an advance cycle stop box at the traffic lights. Signalised toucan crossing provision exists at a few locations and across the A456 and at the roundabout with the A491.

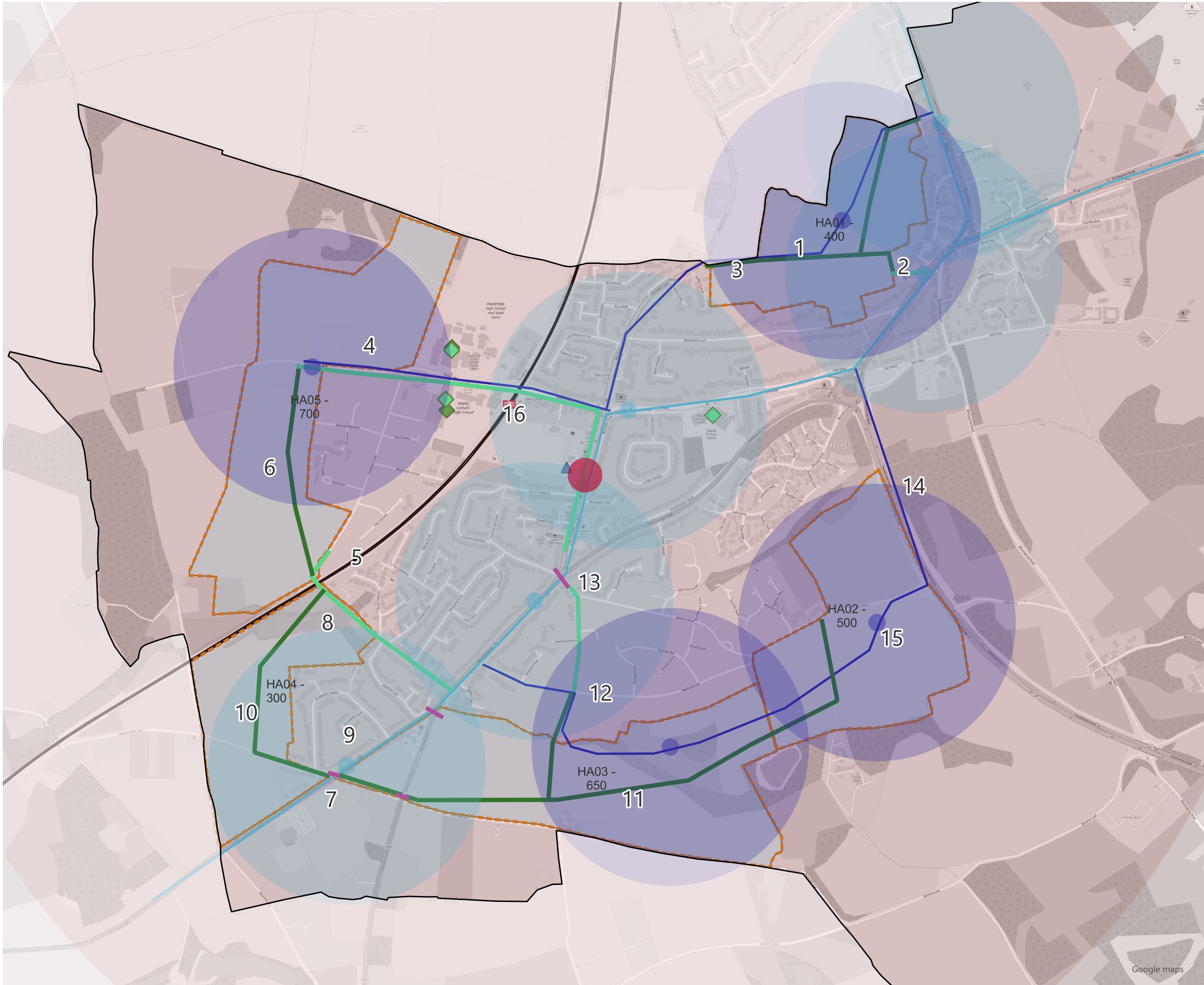
### Public Transport: Bus

- 6.302 Enhancing service frequencies could improve connections to/from Hagley village. The 318 for example, operated by 'Kev's coaches', operates every two hours between about 9am and 5pm through Hagley, into Bromsgrove and Stourbridge, Monday to Saturday. Extending operating hours of this service to evenings and some Sunday services in addition to improved frequency could aid a reduction in car use for existing and new residents of Hagley.
- 6.303 Connections to Halesowen are currently every hour, operated by Diamond Buses. Again, these operate six days per week.

### Public Transport: Rail

- 6.304 Hagley rail station is situated to the west of Hagley. Access to the station by car and active modes is from the east of the rail line. There is a waiting room and toilet facilities (open when the ticket office is open). A small car park offers 33 spaces for a fee and 16 (uncovered) cycle parking spaces with CCTV. The station has been classified as 'B3 step-free access' which means some areas have step-free access, and that step-free access could only be to one platform (of two).
- 6.305 Regular rail services to Kidderminster (8mins, 3 per hour), Worcester (30mins, 1 per hour) and Birmingham Moor Street (40mins, 3 per hour) mean the village is well connected to larger urban centres outside of the district for access to employment. It is likely that rail will be a more attractive public transport option, compared to the bus, for these journeys due to the more regular services and shorter journey times. Providing good active travel and bus connections from the sub-clusters to the rail station will be key to encouraging rail travel out of the district rather than private car.
- 6.306 The opportunities for improving sustainable transport connectivity have been visualised in Figure 6-18 and detailed in Table 6-26.





Key

Bromsgrove District

All Education

Secondary / Post16 Education

All Healthcare

**3b - cluster groups - outline**

Cluster Group 18

Existing Local Centre  
(+2km)

**Opportunities**

**Bus stops (+400m)**

existing

new

**Bus Routes**

Existing

Proposed

**Proposed Active Mode Routes**

Enhanced

New

Crossing

Table 6-26: Cluster Group 18 Transport Opportunities

| ID | Mode             | Improvement Description  | Costs                                | Phase |
|----|------------------|--|--------------------------------------|-------|
| 1  | Active travel    | Deliver cycle route across HA01 connecting Worcester Lane with A491 Stourbridge Road   | Low (<£1m)                           | 1     |
| 2  | Active travel    | Enhance existing active mode link through properties to Kidderminster Road A456  | Low (<£1m)                           | 1     |
| 3  | Public transport | Divert some existing bus services into sub-cluster HA01 with no high quality bus stop provision  | To be confirmed by operators and WCC | 1     |
| 4  | Active travel    | New signed cycle route across HA05 between Bakes Lane and rail bridge, extending beyond the sub-cluster to enhance active mode connections to schools, the rail station and other local facilities | Low (<£1m)                           | 2     |
| 5  | Active travel    | Enhance active mode connections across the railway   | Medium (between £1m and £5m)         | 2     |
| 6  | Public transport | Extend bus route to within HA05, with an additional bus stop to serve the sub-cluster  | To be confirmed by operators and WCC | 2     |
| 7  | Active travel    | New signalised toucan crossing over the A456 and appropriate active mode crossing over Worcester Road (A450)   | Low (<£1m)                           | 3     |
| 8  | Active travel    | Enhance active mode provision along Milestone drive and through to the A456, with signing and lighting improvements  | Low (<£1m)                           | 3     |
| 9  | Public transport | Enhance existing bus stops on A456 near to the sub-cluster with high quality provision to include real-time information  | Low (<£1m)                           | 3     |
| 10 | Active travel    | Alternative route option to provide active mode connections through the sub-cluster HA04 connecting A456 crossing point should phase 4 also be delivered   | Low (<£1m)                           | 3 & 4 |
| 11 | Active travel    | New segregated cycle connection across the two sub-clusters HA02 and HA03 – between A456 and existing residential area towards A491  | Low (<£1m)                           | 4     |
| 12 | Active travel    | Provide connecting routes into existing residential area to the north such as along South Road   | Low (<£1m)                           | 4     |

| ID | Mode             | Improvement Description  | Costs                                | Phase |
|----|------------------|--|--------------------------------------|-------|
| 13 | Active travel    | Improve active mode facilities crossing the A456 at junction of B4187, and potentially A450 if phase 3 is also delivered   | Low (<£1m)                           | 4     |
| 14 | Public transport | Divert some services through HA02 and HA03 between the A456 and A491, enhancing frequencies  | To be confirmed by operators and WCC | 4     |
| 15 | Public transport | Provide new bus stops within sub-clusters HA02 and HA03  | Low (<£1m)                           | 4     |
| 16 | Rail             | Enhance rail station accessibility, with step free access to all platforms, investigate potential for enhanced frequencies and improve 'last mile' connections with small mobility hub | Low (<£1m)                           | All   |

## Phasing

6.307 This cluster group could come forward in phases, with those sub-clusters that share a boundary (HA02 and HA03) to come forward together. Co-ordinated delivery of HA04 and HA05 to the west of the village centre could aid enhanced connections across the railway line which creates severance at this location. It is proposed that HA01 forms a separate phase due to the more limited potential for the benefits of co-ordinated improvements from other sub-clusters to be shared to the east of the existing settlement.

Table 6-27: Phasing for Cluster Group 18

| Phase | Sub-Clusters | Homes | Transport Improvements     | Rationale  |
|-------|--------------|-------|----------------------------|--|
| 1     | HA01         | 400   | 1, 2, 3, 16                | Physically separately from the other four sub-clusters so could be delivered independently, sits to the north of the A456 along with the existing facilities.            |
| 2     | HA05         | 700   | 4, 5, 6, 16                | Good connectivity with the rail station and existing key facilities. Connections with other phases hampered by the challenging location of the rail line.                |
| 3     | HA04         | 300   | 7, 8, 9, 10, 16            | Potential for connected delivery with phase 4 but connections with HA05 hampered by the challenging location of the rail line.   |
| 4     | HA03, HA02   | 1,150 | 10, 11, 12, 13, 14, 15, 16 | Potential for connected delivery between the two sub-clusters, providing more significant enhancements due to the scale of potential development to the south of Hagley. |

## Cluster Group 19: Employment A435

- 6.308 Together EMP03 and EMP04 cover an area of 250ha for potential employment land to the east of Bromsgrove District. Both sub-clusters are to the north-east of Redditch but EMP04 is closer to the main urban area which affords quicker journey times into the town centre (compared to EMP03) but not necessarily into the areas of the town with the greatest potential to connect with the local workforce. EMP04 has already begun to be developed, with Amazon already based south of the cluster group, as part of the new Redditch Gateway (North).

### Vision

- 6.309 The vision for this cluster aims to widen the employee base that could reasonably commute by sustainable transport to work by cycling and/or public transport. The opportunities include connections between the sub-clusters, with an enhanced active travel route and potential public transport connectivity. Wider connections consider active travel routes towards Redditch and the rail station utilising and enhancing existing networks to the south / west. It seeks to develop east / west public transport connections towards the centre of Redditch and enhance connections with Birmingham and the wider conurbation to the north.

### Local facilities

- 6.310 As a solely employment-focussed cluster, identifying a traditional local centre did not seem appropriate, as employees' daily needs to/from the sites would be different to residential cluster groups. However, as a potential trip generator, opportunities were considered to encourage sustainable commuting to the site from nearby residential areas, as well as opportunities to reduce the need to travel by providing on-site facilities. The provision of on-site facilities (cafés/gyms/open space) will help to reduce the need to travel off-site for lunch to internalise trips and also deliver employment sites that promote positive health and wellbeing.

### Active travel

- 6.311 An active travel route between EMP03 and EMP04 could reduce severance. This is particularly relevant for EMP03, being slightly further from Redditch urban area, and would connect EMP03 to further sustainable transport options at the proposed bus interchange at EMP04 and the proposed cycle route which would connect to existing cycle routes and lead to the Redditch rail station. This could require a combination of new and upgraded shared-use paths between EMP03 and EMP04. If a shuttle bus



between the two employment sites was to be implemented (see Public transport: Bus below), then a segregated cycle path could be designed alongside the connecting road that would need to be built between the two sites. However, if that option does not go ahead, there is an existing bridleway that connects the two sites but would need to be upgraded to a hoggins or tarmac path for cyclists and extended slightly at both the EMP03 and EMP04 ends. There is an existing shared walking and cycling route that is largely off-road and runs parallel but to the south of the A4023 between Ipsley Alders Nature Reserve and Arrow Valley Country Park. This provides a good potential basis for a longer shared-use route between Redditch town centre (specifically the railway station) and the two employment sites, via the bus interchange at EMP04. This would require cooperation with Redditch Borough Council to facilitate these improvements.

- 6.312 There is already a new, high-quality crossing across the A4023 which would connect pedestrians to the site entrance of EMP04 however, as this crossing is only suitable for pedestrians, it could be upgraded to a series of toucan crossings to better facilitate access to the site by bike. Given the current quality of the crossing and the fact that it has only recently been installed this is considered a lower priority measure as cyclists can comfortably dismount and navigate the crossing (as they are currently instructed to do when arriving from Redditch Gateway via the new shared-use path which connects with the site via the North entrance).
- 6.313 A new connection from the A4023 crossing to Far Moor Lane could link to the existing cycle route which starts at Ipsley Alders Nature Reserve. A new cycle path was under construction in 2021/22 however this path runs parallel to Far Moor Lane, rather than connect to it. A new painted crossing could better facilitate cyclists crossing from the existing path parallel to Far Moor Lane onto Kingham Close. Whilst these would be higher priority interventions, as there is currently a physical barrier preventing people on using active modes to get from the residential roads to the south of the A4023 to EMP04, the path through the wooded area would require significant construction. Land ownership and environmental impacts should also be considered.
- 6.314 Kingham Close connects to the existing shared-use path running through the Ipsley Alders Marsh Nature Reserve and the road is a quiet residential route, it would only need a low level of intervention to provide a clear connection to the rest of the path on Far Moor Lane. Signage at either end of Kingham Close and painted cycle symbols on the road for the section of Kingham Close creating a "quiet way" would create a clear connection between the two shared-use paths without the need for significant infrastructure instalments, given the low traffic speeds on a quiet residential road. The current path running through the Ipsley Alders Marsh Nature Reserve and the Arrow Valley Country Park already provides a good east-west, off-road connection running



south of and parallel to the A4023. However, some improvements could be made to make this a more popular route. At the Kingham Close end of the route, in addition to the wayfinding signage suggested above, the path should be widened to 2m. The underpass, sections of the path on either side of Alders Drive and Winyates Way could all have improved lighting. These improvements will help to form a “quiet way” between Far Moor Lane and Holloway Drive.

- 6.315 A painted crossing could be provided where the shared-use path meets Holloway Drive, to allow cyclists and pedestrians to cross safely onto Arthur Street. Arthur Street could form part of a “quiet way” cycle route with painted cycle symbols and wayfinding signage to bring users to the cycle lanes on Holloway Lane. Holloway Lane already has painted cycle lanes running along it, but they could use some maintenance.
- 6.316 Where Holloway Lane meets Burton Lane, the painted cycle lane stops. This section of Holloway Lane still appears to be wide enough for there to be a painted cycle lane on either side, so there could be opportunity to extend these cycle lanes along Holloway Lane to Ipsley Street. This would help with cyclists’ feeling of safety and aid there wayfinding, particularly over the roundabout which connects Holloway Lane with Ipsley Street. However, this could require a cycle crossing at the junction of Holloway Lane and Burton Lane, alongside the cycle lane would guiding cyclists over the roundabout onto Ipsley Street. To complete the link between EMP04 and Redditch town centre, a better crossing could be provided to take cyclists on the route all the way to the rail station.

#### Public transport: Bus

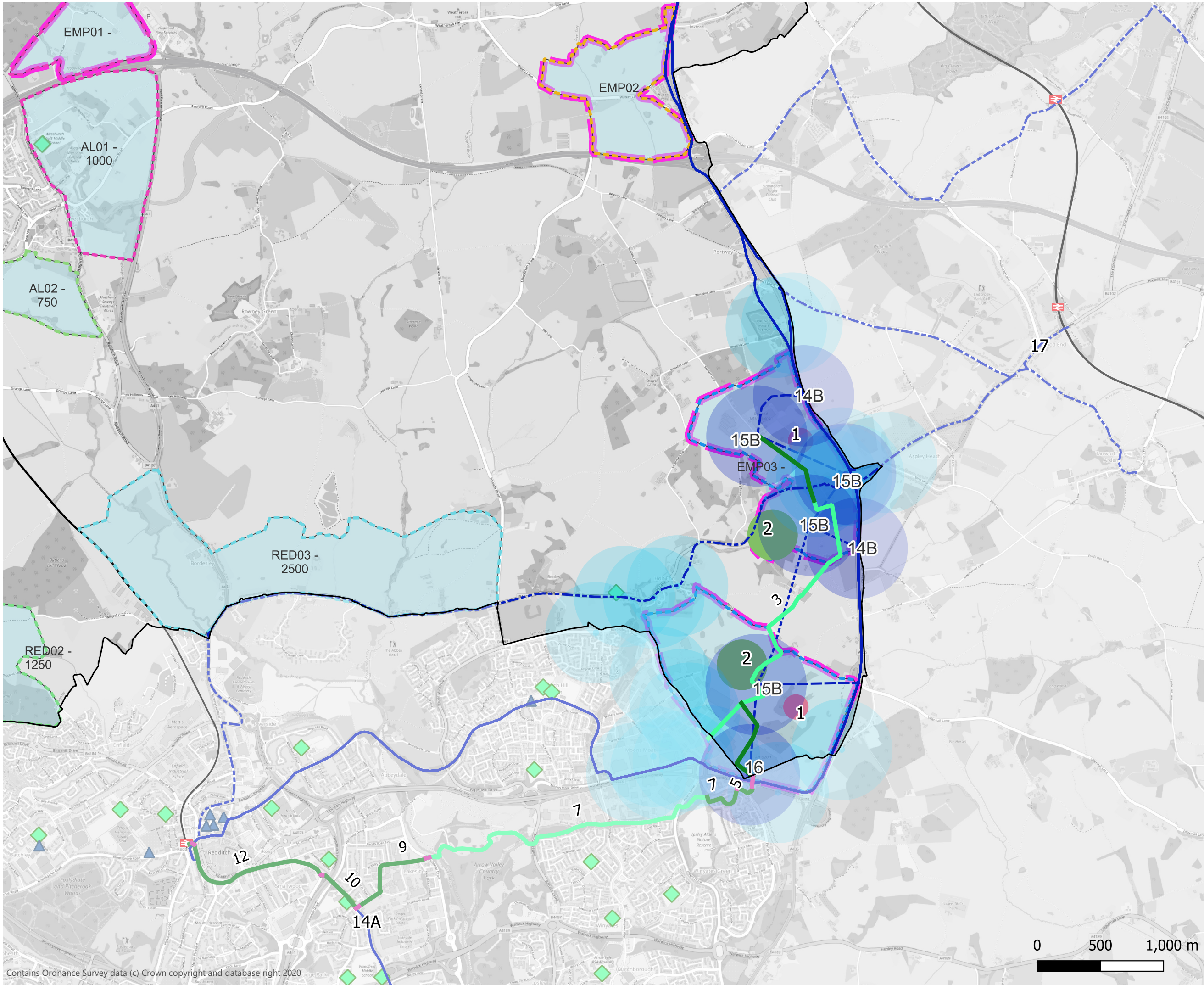
- 6.317 Both employment sites have potential for good public transport connectivity as they are located next to main roads leading to large residential conurbations. The bus route which already runs along the southern edge of EMP04 and the eastern edge of EMP03 (the 150 bus route run by Johnson’s Excelbus) is well placed to serve these two sites, as it largely uses the A435 and A4023, allowing for short journey times covering relatively large distances. The route also connects with Redditch railway station, broadening the potential catchment of passengers. There is an opportunity to increase the service frequency from hourly to at least a 30-minute frequency (but ideally more frequent, particularly between Wythall from the north and the employment sites), this would make public transport more attractive for commuting to the site. If the direct road linking EMP03 to EMP04 in the improvement below is not taken forward, then two new bus stops could be required on the A435 for EMP03; one at the southern end and one at the northern end. Whilst this does not involve significant infrastructure, it would require cooperation with the operator as well as the County and neighbouring authorities.

- 6.318 A shuttle bus between the two sub-clusters may also be useful for commuters, as the EMP04 site is currently better supported by bus, with more bus stops around its perimeter and more services passing close to it. It may be that commuters would be able to get to the EMP04 site with relative ease but would then struggle to continue onto EMP03. A shuttle bus either running along a new, direct road between the two sites or along the A435 would, therefore, help to reduce the severance of EMP03. If a new, direct road were to be built between the two employment sites, a new bus stop in the centre of EMP04 and three new bus stops forming a circular loop in EMP03 would help make increase the accessibility of both sites to public transport. This would require significant infrastructure investment, and it is not yet clear whether the demand would exist for such a service.
- 6.319 No matter whether a shuttle bus is run between the two employment sites, a new bus interchange station could be implemented on the southern edge of the EMP04 site, next to the A4023. This would allow the bus services that already pass close to the EMP04 site to exchange passengers and, thus, boost accessibility to the sites. The entrance of Redditch Gateway on the A4023 would be a good place to position this bus interchange, as it would then connect with the active travel routes to Redditch. Whilst this would involve some infrastructure costs, it could be carried out relatively independently of operators and other local authorities (if placed in the right position – it would be very close to the Bromsgrove District boundary).
- 6.320 A 500m diversion of the 517 bus service would connect Wood End railway station with EMP03, but the service frequency would have to be increased significantly from the current complete lack of buses during weekday mornings to at least one every 30 minutes.

### Public transport: Rail

- 6.321 With increased frequency of the 150 bus service and the cycling connection to the EMP04, Redditch rail station could become accessible for commuters. However, when factoring in train journey times and connecting journeys at the opposite end of the journey, the EMP04 and EMP03 sites would probably still be on the outer reaches of what would be considered a “commutable” distance for most people travelling by train to Redditch. Wood End railway station could be connected to the EMP03 site, but it would need to have a significantly increased frequency, which may not be feasible.
- 6.322 The opportunities for improving sustainable transport connectivity described above have been summarised below, visualised in Figure 6-19 and detailed in Table 6-28.





Key

Rail stations

Railway Line

Cluster Group 19

Sub-cluster includes employment

All Education

All Healthcare

Route 150 - Upgraded Frequency

Shuttle Bus - Option 1

Shuttle Bus - Option 2

Route 517b - Upgraded Frequency and Wood End Diversion

**Bus stops (+400m)**

Existing

New

**Proposed Active Mode Routes**

Enhanced

New

Crossing

Amenities

Green space

Bromsgrove District

a company of Royal HaskoningDHV

Client  
Bromsgrove District Council

Project  
Bromsgrove DPR Transport Assessment

Figure title  
Cluster Group 19 Transport Opportunities

|          |                |
|----------|----------------|
| Revision | Project number |
| A        | 3578           |

|               |          |
|---------------|----------|
| Figure number | Date     |
| Figure 6-19   | May 2022 |

Table 6-28: Cluster Group 19 Transport Opportunities

| ID | Mode            | Improvement Description   | Costs   |
|----|-----------------|---|---|
| 1  | Reducing Travel | Provide essential services within the employment sites, such as eateries and essential shops  | n/a   |
| 2  | Public Realm    | Maintain some green space/"mini parks" in the middle of employment clusters, so easily accessible to all  | Incorporated within the cost of the development |
| 3  | Active Travel   | Hoggin/tarmac shared-use paths between EMP03 and EMP04, either along existing leisure route between the two sites with short, new sections at each end to connect to employment locations, or along new shuttle bus route if that is taken forward. | Low (<£1m)                                      |
| 4  | Active Travel   | Upgraded crossing next to Redditch Gateway (North) A4023 entrance to a toucan junction crossing.  | Low (<£1m)                                      |
| 5  | Active Travel   | Connecting shared-use path between the A4023 crossing and Far Moor Lane, through wooded area.   | Low (<£1m)                                      |
| 6  | Active Travel   | Painted crossing across Far Moor Lane to connect shared-use path parallel to Far Moor Lane and Kingham close.   | Low (<£1m)                                      |
| 7  | Active Travel   | Quiet way improvements between Far Moor Lane and Holloway Drive (about 3km).  | Low (<£1m)                                      |
| 8  | Active Travel   | Painted crossing at junction of Holloway Drive and Arthur Street.   | Low (<£1m)                                      |
| 9  | Active Travel   | Painted cycle symbols along Arthur Street and some signage to create a "quiet way" for 800m.  | Low (<£1m)                                      |
| 10 | Active Travel   | Re-painting of cycle lanes along Holloway Lane up to Burton Lane junction (400m).   | Low (<£1m)                                      |
| 11 | Active Travel   | Cycle crossing at the junction of Burton Lane and Holloway Lane.  | Low (<£1m)                                      |
| 12 | Active Travel   | Continuing painted on-street cycle lanes from Holloway Lane to the rest of Holloway Lane, Ipsley Street and Station Way, and through the bus stop underneath the Kingfisher shopping centre (just over 1km).  | Low (<£1m)                                      |



| ID | Mode             | Improvement Description  | Costs                          |
|----|------------------|--|--------------------------------|
| 13 | Active Travel    | Improved crossing to accommodate cyclists travelling from underneath the Kingfisher shopping centre to the Redditch railway station.   | Low (<£1m)                     |
| 14 | Public Transport | Improve the frequency of the 150 bus route to at least one every 30 minutes. This may need to be accompanied by two new bus stops on the A435 (at the northern and southern ends of the A435).   | TBC with bus operators and WCC |
| 15 | Public Transport | Shuttle bus between EMP03 and EMP04, either along a new road between the two employment sites or along a new bus lane on the A435. If a new road is built between the two sites, one new bus stop in the centre of EMP04 and three bus stops spread around EMP03 will be required to make the employment sites truly accessible. | TBC with bus operators and WCC |
| 16 | Public Transport | A new bus interchange station/mobility hub connecting to the walking and cycling route towards Redditch on the southern edge of EMP04.   | Low (<£1m)                     |
| 17 | Public Transport | Small diversion of the 517 bus service to the Wood End railway station and increase of service frequency to one every 30 minutes at least.   | Low (<£1m)                     |

## Phasing

6.323 Due to its proximity to Redditch, sub-cluster EMP04 has greater opportunities for connecting sustainably to the urban area and potential labour markets. Considering this, the proposed transport opportunities have been phased relative to their location to EMP04 or EMP03, the level of investment and disruption that would be required implement the improvements.

Table 6-29: Phasing for Cluster Group 19

| Phase | Transport Improvements              | Rationale   |
|-------|-------------------------------------|---|
| 1     | 1 (EMP04), 6, 7, 10, 11, 12, 14, 16 | Priority improvements to facilitate sustainable travel access to EMP04                            |
| 2     | 1 (EMP03), 3, 5, 8, 13, 15, 17      | Improvements to facilitate sustainable travel access to EMP03 and further enhance access to EMP04 |
| 3     | 4 & 9                               | Upgrades to the quality of existing infrastructure.   |

## Cluster Group 20: Employment M42 J3

6.324 Cluster Group 20 consists of a single site, EMP02, south of Wythall. The approximately 250ha site is proposed for employment and is bounded by the M42 to the south and A435 to the east. Junction three of the M42 is located to the south-east of the cluster and provides access to the Strategic Road Network (SRN), likely making the site attractive to occupiers. The greenfield nature of the site means that existing public transport and active travel are limited.

### Vision

6.325 With such close proximity to the SRN, this site could become a car-dominated place without adequate interventions. The vision for this cluster is to provide a compelling alternative for the local workforce to use sustainable modes for their commute. The site is relatively rural, meaning links will likely need to be supported by public transport rather than active travel. With two train stations under 2km away and residential centres particularly to the north around Wythall and Hollywood, this would be possible.

### Local Facilities

6.326 As an employment site, linkages to healthcare and education sites are less pertinent. Similarly to Cluster Group 19, on-site facilities (café/restaurant/shop) could be considered, to help internalise trips and to reduce the need for employees to travel off-site on their lunchbreaks.

### Pedestrians & Cycling

6.327 Most of the cluster site is within 500m of Watery Lane which splits the cluster into two halves, the furthest point is approximately 750m (10-minute walk). The internal road layout should facilitate safe and direct cycling and walking routes. This is particularly important if the site is likely to have large vehicles egressing. All workplaces should include long-stay, weatherproof cycle parking which is secure and accessible for employees.

6.328 Beyond the site, active travel improvements to the south have been assessed. While improvements could be placed along Lilley Green Road to connect to the RCN55, this would be difficult given the size of the site. The distance of the urban area to the south (in North Redditch) is unlikely to create sufficient demand combined with the inability to widen or illuminate the narrow route which is shared with traffic.

6.329 A more prospective active travel connection is to the north. If Cluster Group 13 was brought forward, a cycle route using Middle Lane and Chapel Lane (or through site

WY05) would allow connection northward to the proposed Wythall local centre. The preferred, most direct link (Option A) would be reliant on land outside the cluster to be acquired. Otherwise, another option could use the existing Hill Lane and Watery Lane to provide access from the east (Option B).

- 6.330 Two rail stations are within cycling distance of the cluster: Wythall and Earlswood. Earlswood provides a more attractive option to develop as a cycling route, as the route to Wythall would involve using the highly trafficked A435. The link to Earlswood via Barkers Lane and Tanners Green Lane avoids these large traffic volumes and is also shorter at 2km, providing a 10-minute cycle connection. The route is narrow but could be promoted as a quiet route with suitable improvements.
- 6.331 A controlled pedestrian/cyclist crossing across the A435 at the north of the site would improve access to the Earlswood cycle link and bus stops. This access point should be limited to non-vehicular modes, creating permeability to the north of the site for bus users (from the Barker Street stops) as well as pedestrians and cyclists.

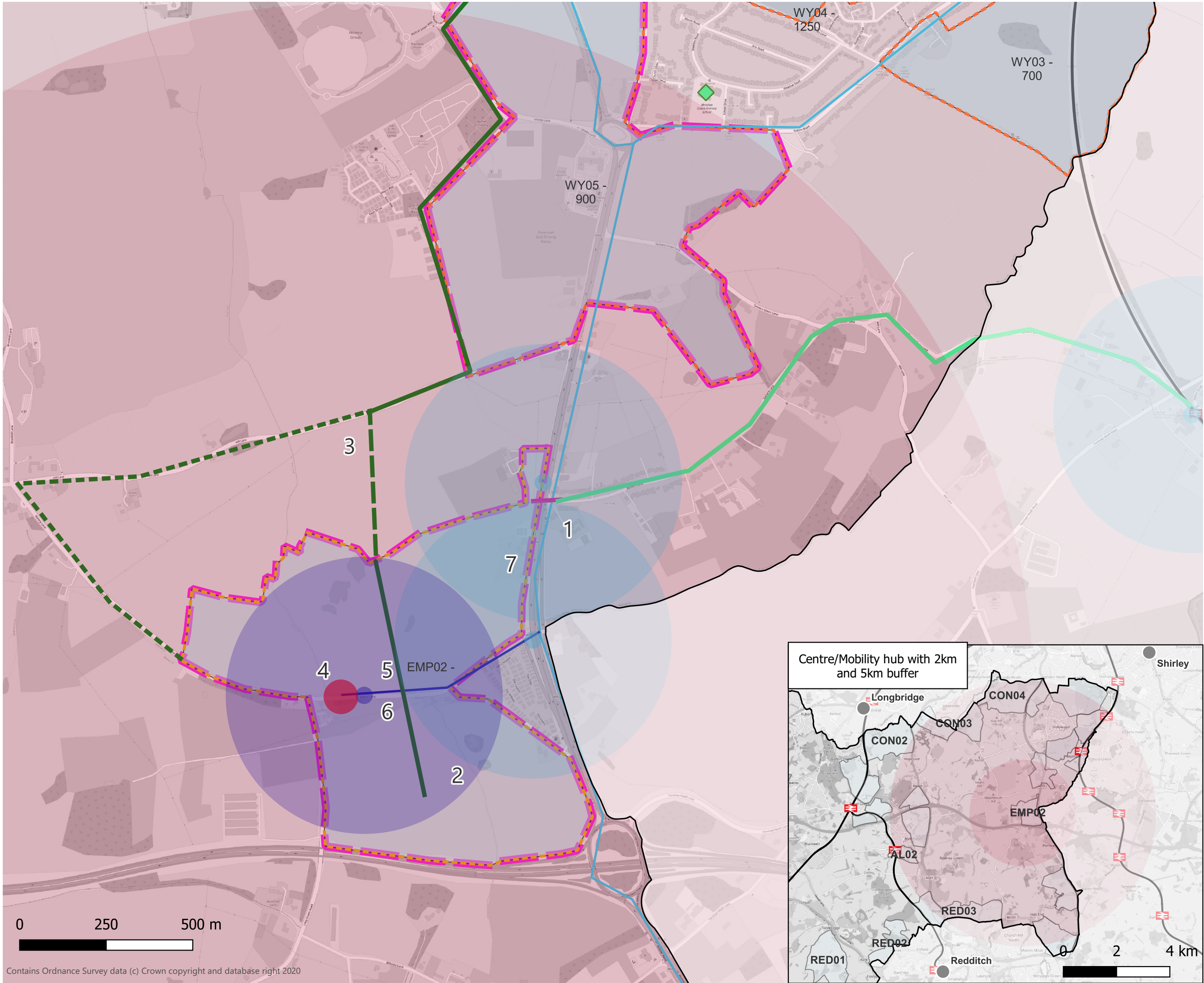
#### Public Transport: Bus

- 6.332 The 150 (operated by Diamond) and A4 (operated by LandFlight) provide the most frequent services to this area. Both services provide links to residential areas which could support a local workforce commute if improved.
- 6.333 The 150 route provides a connection between Redditch and Kings Heath, and currently stops adjacent to the edge of the cluster on Watery Lane. The service operates every two hours between 07:30 and 18:00. There could be an opportunity to increase the frequency of the route, providing a half-hourly service during peak periods. As a distribution/industrial site, consideration of extended shift patterns would need to be considered. The route could also be diverted via the site to provide more direct access.
- 6.334 The second route, the A4 begins at Watery Lane and continues to Wythall, Shirley and Solihull. This service is currently hourly between 07:30 and 18:00. Similar to the 150 route, it would be beneficial to improve the frequency of this corridor during peak periods. As the existing route terminates at Watery Lane, the route could be extended into the site to provide more direct access to the site facilities.
- 6.335 Both routes serve two existing bus stops, Watery Lane, and Barker Lane to the north of the cluster. As part the package of public transport improvements these stops should include upgraded bus shelters, lighting, and enhanced bus route information. Importantly, the routes should have good pedestrian links across the site, with consideration for lighting and safety. By providing a new bus stop in the centre of the site, the south of the site would be better served, and it would shorten journey times.

## Public Transport: Rail

- 6.336 As explored above, two rail stations (Wythall and Earlswood) are within 3km of the cluster, providing an opportunity for the workforce to commute via train. Services are hourly to both stations, serving multiple stations across the West Midlands on the route from Kidderminster to Stratford-upon-Avon. The cluster is unlikely to put a strain on capacity or provide a large enough increase to justify increased services when considered in isolation. However, providing a better connection to the station would facilitate it as an option for commuters.
- 6.337 As explored above, Earlswood station could have a good cycle link to the site. Meanwhile, Wythall Station is served by the A4 bus, which could serve the cluster directly if the route is extended. To provide an attractive link, bus services could operate on a timetable which allows for interchange at Wythall Station. In combination, if timed well, it would provide an easy link for commuters.
- 6.338 The opportunities for improving sustainable transport connectivity have been visualised in Figure 6-20 and detailed in Table 6-30.





- Key
- Bromsgrove District
  - All Education
  - 3b - cluster groups - outline**
  - Cluster Group 13
  - Cluster Group 20
  - Sub-cluster includes employment
  - Opportunities**
  - Potential Centre/Mobility Hub (+2km)
  - Bus stops (+400m)**
  - existing
  - new
  - Bus Routes**
  - Existing
  - Proposed
  - Proposed Active Mode Routes**
  - Enhanced
  - New
  - Crossing
  - Option A (subject to land ownership)
  - Option B



a company of Royal HaskoningDHV

Client  
Bromsgrove District Council

Project  
Bromsgrove DPR  
Transport Assessment

Figure title  
Cluster Group 20 -  
Opportunities

|          |                |
|----------|----------------|
| Revision | Project number |
| A        | 3578           |

|               |          |
|---------------|----------|
| Figure number | Date     |
| Figure 6-20   | May 2022 |

Table 6-30: Cluster Group 20 Transport Opportunities

| ID | Mode             | Improvement Description  | Costs   |
|----|------------------|--|---|
| 1  | Active Travel    | A 2km quiet route connecting Earlswood Station with the site. Include a toucan crossing at Barkers Lane.   | Low (<£1m)                                    |
| 2  | Active Travel    | Internal cycle and pedestrian routes that follow desire lines and connections to all bus stops.  | Low (<£1m)                                    |
| 3  | Active Travel    | A 2km (Option A) or 3.5km (Option B) quiet route connecting the site to Wythall and Cluster Group 13 improvements  | Low (<£1m)                                    |
| 4  | Public Realm     | Creation of amenities on site to internalise trips, and mobility hub for cycle/public transport  | Delivered as part of the internal development |
| 5  | Public Transport | Increase frequency of 150 route and divert route into the site   | To be confirmed by operators and WCC          |
| 6  | Public Transport | Increase frequency of A4 route during peak hours and extend route into the site  | To be confirmed by operators and WCC          |
| 7  | Public Transport | Upgrade four bus stops (either direction at Barker Lane and Watery Lane). New bus stop on site.  | Low (<£1m)                                    |
| 8  | Public Transport | Coordination between the A4 bus service and hourly rail service at Wythall to improve interchange.   | To be confirmed by operators and WCC          |
| 9  | Travel planning  | A workplace travel plan should be developed, understanding that some employees will still drive to the site, this could look at incentives to promote car sharing for example. | Low (<£1m)                                    |

## Phasing

6.339 This cluster is relatively small and as such would not require extensive phasing. Within the cluster, phasing could split north and south of Watery Lane, providing two separate sites. If this were to happen, the central work to improve the public realm along Watery Lane should be completed as part of the first phase to ensure infrastructure is ready for the first occupants. However, the potential transport opportunities identified above should come forward from the start of the employment development to be available to staff on occupation.

Table 6-31: Phasing for Cluster Group 20

| Phase | Sub-Clusters | Transport Improvements | Rationale   |
|-------|--------------|------------------------|---|
| 1     | EMP02 North  | 1-9                    | Delivered as an employment site that has the sustainable infrastructure to support it from the outset, ensuring it is an attractive option. |
| 2     | EMP02 South  | 2                      | Provide an extension to the initial site, ensuring integration with the northern phase.   |