PLACE & CONNECTIVITY WORKS PHASE 1, BURGESS HILL



SURVEY & COMPLIANCE REPORT

PREPARED FOR: BURGESS HILL TOWN COUNCIL

PROJECT NO:23-017





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1. Introduction

- **1.1.** Iceni consulting have been commissioned by Burgess Hill Town Council to carry out a survey of the Place & Connectivity improvement works to the B2113 Burgess Hill. From Queen Elizabeth way in the west to Keymer Road in the east. To report on defects and noncompliance to current guidance and standards associated with these works.
- **1.2.** Information provided by BHTC is 3no. WSP GA Drawings70068318-100-001 Rev P02, 002 Rev P02 & 003 Rev P02 dated 11 June 2021, Western Gateway & Burgess Hill Schematic and Burgess Hill Place & Connectivity Programme overview plan.

2. <u>Description of Improvement Works</u>

- **2.1.** West Sussex County Council has programmed a series of works to provide improved pedestrian and cycle connectivity from London Road in the west, Queen Elizabeth Avenue, Station Road and Keymer Road in the west. It appears these improvements are to provide improved links to the Town centre and Train Station of Burgess Hill.
- **2.2.** Shared pedestrian and cycle facilities along this route is the chosen method including the apparent widening of existing footways and narrowing to the existing carriageways to accommodate these improvements.

2.3. It's noted that these works are still in progress and currently incomplete.



3. Survey

- **3.1.** Due to the extensiveness of the improvement works, the survey has been broken down into 15 areas to try focus on key points during the survey. Please see Site Survey Area Plans within Appendix A for location of areas.
- **3.2.** The survey was carried out on Monday 5th & Tuesday 6th June 2023. Weather conditions during the 2 days was dry and bright.
- **3.3.** The report has been presented in three sections, defects, compliance, and recommendations. Defects are any items that are found on site that require corrective attention as a result of the works and other sources.

 Compliance is a comparison of the constructed scheme to current guidelines and regulations.

Recommendation has been presented in priority order with the first recommendation as the highest importance to the last being the least.

4. Area 1, 2 & 3 - (London Road, Queen Elizabeth Avenue)

4.1. These works are currently under construction and fall outside this survey visit.

5. Area 4 – Puffin Crossing, Queen Elizabeth Avenue

5.1. Defects

- 5.1.1. White lining worn, requires refresh.
- 5.1.2. Polished surface course on approaches to Crossing point.

5.2. Compliance

- 5.2.1. Puffin Crossing should have upgraded signals to Diagram 4003.7 for a Toucan crossing due to connection of shared use foot/cycleway on both sides of crossing point.

 Unable to determine whether this is programmed to be upgraded.
- 5.2.2. No Signage to northern footway to Shared footway/cycleway (Diag. 956) or End of Route (965). Optional lining to Cycle Symbol (Diag. 1057).
- 5.2.3. Corduroy Slabs southern footway to be removed if upgrading to Toucan.
- 5.2.4. No Signage to footpath link to Diag. 956 If crossing upgraded to Toucan.
- 5.2.5. Red Tactiles southern footway should extend to back of footway, currently 3.6m. *Ref Guidance on the Use of Tactile Paving Surfaces 2.4.1.*

5.3. Recommendation

5.3.1. There is confusion with the signing, lining and tactile slabs as to what is occurring at this crossing point. Requires a revisit by designer to confirm what type of crossing this will be and upgrade in accordance with the TSRGD.



- 5.3.2. It's noted that the approaches to the crossing point will be resurfaced. The surface course material requires a high level of skid resistance in this location to a PSV of 68+. Ensure the correct surface course material is specified during surfacing operations. Ref CD 236 Table 3.3a.
- 5.3.3. Due to the significant width of highway available along Queen Elizabeth Avenue, there is an opportunity to install an off-carriageway cycle track (1.8m width) and pedestrian footway (2m width) on both sides of QEA. This type of arrangement is the recommended solution within LTN 1/20 when designing cycling networks.

6. <u>Area 5 - RAB with Queen Elizabeth Ave/Civic Way/Station Rd (Station Rd</u> Approach Only)

6.1. Defects

- 6.1.1. Apparent reflective cracking from base course/subbase layers.
- 6.1.2. Unfinished Kerb works in south side channel. Quadrant kerb used at end of kerb run. Safer option would be to install a transition kerb.

6.2. Compliance

6.2.1. ADS requires raising. All sign within cycle route requires minimum mounting height of 2300mm. *Ref LTN 1/20 5.3.1*

6.3. Recommendation

- 6.3.1. Install temporary transition kerb.
- 6.3.2. Raise ADS to 2300mm.
- 6.3.3. Noted works are incomplete.
- 6.3.4. Noted carriageway width reduced to 6.6m but within guidelines for MfS. *Ref MfS 7.2 & MfS2* 8.6



7. Area 6 - Station Road Junction with Station Road

7.1. Defect

- 7.1.1. Detritus at bottom of ramp (SW Corner). Usually, a sign of ponding from surface water. Gully not located in low spot.
- 7.1.2. 3no. signpost extends beyond signs with no apparent end caps.
- 7.1.3. HRA carriageway surface plucking out at bottom of ramp.
- 7.1.4. Possible low spot within footway outside no.65 & 67 (Detritus build up).

7.2. Compliance

- 7.2.1. Blister Slabs require an extra row on both sides of junction. Min 1200mm to comply to guidance. *Ref Guidance on the Use of Tactile Paving Surfaces 2.4.2.*
- 7.2.2. Pedestrian guard rail (PGR) in place, against current guidance. Ref MfS 10.2.9
- 7.2.3. Road Hump warning sign (Diag. 557.1) Position of sign too close to ramp (hazard) 12m. Requires a minimum distance of 45m. Currently mounted at 1.96m to bottom edge of sign. Needs to be raised to a minimum of 2100mm. Must be accompanied by a plate. Ref: TSM 4 12.1 & Appendix A.
- 7.2.4. End of Route sign and Shared footway/cycleway Diag. 956 mounted at 1.96mm to bottom edge of sign. Needs to be raised to a minimum of 2100mm.
- 7.2.5. Cycle Route Ahead sign (Diag. 950) and Road Hump sign mounted on light signpost. Incorrect mounting height doesn't need to be light and sub plate with arrow required. *Ref: TSRGD*.

7.3. Recommendation

- 7.3.1. Raise and reposition signs in accordance with current regulations.
- 7.3.2. Wet weather visit required to determine low spots. Rectify if ponding occurs.
- 7.3.3. Removing PGR to increase footway width, assisting in capacity.
- 7.3.4. Monitor condition of carriageway surface course.

8. Area 7 - Delivery Access to Waitrose

8.1. Defect

8.1.1. None present during time of visit.

8.2. Compliance

8.2.1. Compliant.

8.3. Recommendation

8.3.1. None.



9. Area 8 - Station Road Junction with Queens Crescent

9.1. Defect

9.1.1. Outside 2A Queens Crescent, new asphalt surface course to layby has created a low spot when tying into existing levels in front of vehicle access. No gully present.

9.2. Compliance

- 9.2.1. No Signage to Shared footway/cycleway (Diag. 956) or End of Route (965). Optional lining to Cycle Symbol (Diag. 1057).
- 9.2.2. Blister slabs require an extra row on both sides of junction. Min 1200mm to comply to guidance.
- 9.2.3. Corduroy slabs missing from Shared Surface within Queens Crescent. *Ref Guidance on the Use of Tactile Paving Surfaces 3.3.*
- 9.2.4. Shared foot/cycleway width below the recommended 3m. Ref LTN1/20 6.5.7

9.3. Recommendation

- 9.3.1. Install signage, lining and tactiles slabs in accordance with current guidance/regulations.
- 9.3.2. Rectify drainage defect outside 2A. Queens Crescent.
- 9.3.3. Noted that shared foot/cycleway width is below the recommended LTN 1/20 of 3m at 2.7m. But this is above the minimum stated within CD 143 of 2m (ref E/3.5). An extra 0.5m would be required due to the locality of garden walls. Sustrans guidance is a minimum 2.5m.

10. Area 9 - Parking outside shops Station Road

10.1. Defects

- 10.1.1. Poor tie in repair to surface course (in front of kerbs) Northern footway.
- 10.1.2. Concrete infills required around base of post.
- 10.1.3. Carriageway surface course within Layby in poor state of repair. Temporary surface?
- 10.1.4. Areas of blocks require sanding between joints.

10.2. Compliance

10.2.1. No Signage to Shared footway/cycleway (Diag. 956) or End of Route (965). Optional lining to Cycle Symbol (Diag. 1057).

10.3. Recommendation

- 10.3.1. Install signage, lining and tactiles slabs in accordance with current guidance.
- 10.3.2. Noted concrete blocks laid in stretcher course pattern. Most common pattern for concrete blocks within the highway is either 45° or 90° Herringbone pattern which provides greater load bearing capacity. Note WSCC Standard Construction Detail states 90° Herringbone pattern \$278/38/05 Rec.
- 10.3.3. Note Laybys are within guidelines. Ref MfS 8.3.48



11. Area 10 - Signalised Junction - Station Road/Church Road/Mill Road

11.1. Defects

- 11.1.1. Cycle Stands require concrete infills around base of stands.
- 11.1.2. Uneven blocks outside 23 & 25 Station Road.
- 11.1.3. Areas of Blocks require sanding between joints.
- 11.1.4. Carriageway surface at crossing point outside no.24 uneven.
- 11.1.5. Carriageway surface throughout junction in poor state of repair
- 11.1.6. Lack of gullies at the junction of Church Road.
- 11.1.7. Potential trip hazard due to level difference within footway adjacent to crossing point opposite no.31 Station Road.
- 11.1.8. Gully located within Ramp, Mill Road, should be relocated to bottom of ramp.
- 11.1.9. Ramp located within Mill Road requires corrective works as it doesn't appear to have been constructed correctly.

11.2. Compliance

- 11.2.1. Unfinished Cycle crossing facility. Unable to establish how this connects into the network. How does cyclist return from Church Road into foot/cycleway?
- 11.2.2. Slotted drain used within foot/cycleway. Possibility of Cyclist catching wheel and losing control. Continuing to use ACO's in this area would have been the preferred option. *Ref LTN 1/20 15.2.34*.
- 11.2.3. Lack of pedestrian connectivity across Church Road. No uncontrolled crossing point.
- 11.2.4. No Signage to Shared footway/cycleway (Diag. 956) or End of Route (965). Optional lining to Cycle Symbol (Diag. 1057).

11.3. Recommendation

- 11.3.1. Resurface entire signalised areas. The surface is uneven at crossing points which is a potential trip hazard to pedestrians. The carriageway approaches to the signals and crossings points required a high level of skid resistance to PSV of 68+. Ref CD236 Table 3.3a.
- 11.3.2. Revisit and correct areas of blocks identified within footway and foot/cycleway.
- 11.3.3. Reconstruct ramp and associated drainage to Mill Road.
- 11.3.4. Replace slotted drain with ACO.
- 11.3.5. Before further works commence to cycle crossing facility, Designer to ensure crossing is simple to understand, ensure there is 2-way connectivity and meets the current guidance set out within LTN 1/20.
- 11.3.6. Install signage and lining in accordance with current guidance.
- 11.3.7. Designer to consider pedestrian connectivity across Church Road.
- 11.3.8. Wet weather visit required to ensure adequate drainage within this area.
- 11.3.9. It was noted on site during the pedestrian crossing phase that there was no audible sound to inform visually impaired persons of the green pedestrian signal. But Tactile signals are located on the underside of the push button units that have been installed, so compliant. This could be of benefit to all person using the crossing. Noise consideration would need to be given to residents living near the crossings.
- 11.3.10. There appears to be no Advance warning signs on the approaches to the signalised junction. It's felt that there is a benefit to the road user, especially as Mill Road is no entry.



11.3.11. During peak periods it was noted on occasions that vehicles travelling east bound would stop across the junction, blocking vehicles turning right into Church Road. This appeared to be a result of traffic cueing from the Puffin crossing located near the station and at the roundabout on Keymer Road. A Yellow box would be beneficial to assist traffic flows to right turn lane.

12. Area 11 Station Road Junction with Grove Rd & Wolstonbury Way

12.1. Defects

- 12.1.1. Loose Blocks out no.12 Station Rd, Food & Wine Store, adjacent to concrete slab.
- 12.1.2. Blister slabs require an extra row on both sides of junction. Min 1200mm to comply to guidance.
- 12.1.3. Yellow lining requires refreshing junction Grove Road.
- 12.1.4. Road Surface in very poor state of repair in. Entire section of surface course missing.
- 12.1.5. Bus Stop cage road marking completely missing, where footway has been widened.
- 12.1.6. Areas of blocks require sanding between joints.

12.2. Compliance

- 12.2.1. No Signage to Shared footway/cycleway (Diag. 956) or End of Route (965). Optional lining to Cycle Symbol (Diag. 1057).
- 12.2.2. Blister slabs require an extra row on both sides of junction. Min 1200mm to comply to guidance.
- 12.2.3. Bus Shelter within Visibility envelope of Wolstonbury Way. Advertising Board worsens the issue. Cantilever Shelter may have been the better option.

12.3. Recommendation

- 12.3.1. Designer to check visibility at junction and ensure compliance with MfS. Ref MfS 7.7
- 12.3.2. Install signage, lining and tactiles slabs in accordance with current guidance.
- 12.3.3. Designer/Contractor to revisit ramp within Wolstonbury Way to ensure ramp has been constructed to specification and ensure best possible outcome taking into consideration the existing levels to the carriageway and footway.



13. Area 12 – Outside Station, Station Road

13.1. Defects

- 13.1.1. Temporary asphalt ramps located within live carriageway. Potential to cause loss of control.
- 13.1.2. Down pipe adjacent to station entrance discharges directly on to new foot/cycleway surface. Hazardous to all users during wet weather and freezing temperatures.
- 13.1.3. Lining required to drop off area.
- 13.1.4. Areas of Blocks require sanding between joints.

13.2. Compliance

- 13.2.1. No Signage to Shared footway/cycleway (Diag. 956) or End of Route (965). Optional lining to Cycle Symbol (Diag. 1057).
- 13.2.2. Corduroy Slabs to warn visually impaired persons on exit of Station when entering shared foot/cycleway.
- 13.2.3. Road marking layout to Taxi and drop off area suggest Taxi's driving against flow of traffic. Potential point of conflict when entering and exiting.

13.3. Recommendation

- 13.3.1. Remove temporary ramps from live carriageway asap.
- 13.3.2. Provide drainage to foot/Cycleway in and around the entrance to the station. Advise a wet weather visit to ensure design picks up all surface water in this area.
- 13.3.3. Designer to revisit road marking layout to Taxi and drop off area to provide a safer design.
- 13.3.4. If the shared foot/cycleway passes the station entrance, Corduroy slabs should be installed to advise visual impaired person to be cautious when entering this area.
- 13.3.5. It is felt the improvements could have incorporated the northern section of footway and on road parking as part of the scheme to improve pedestrian movements and parking in this area.
- 13.3.6. Install signage and lining in accordance with current guidance.



14. Area 13 – Parking outside Shops, Keymer Road

14.1. Defects

- 14.1.1. Poor tie in repair to surface course (in front of kerbs) within layby.
- 14.1.2. Areas of blocks require sand in between joints.
- 14.1.3. No Signage to Shared footway/cycleway (Diag. 956) or End of Route (965). Optional lining to Cycle Symbol (Diag. 1057).
- 14.1.4. Steep gradient where footpath and foot/cycleway join (adjacent to no.1). Potential trip hazard for visually impaired and elderly persons.
- 14.1.5. End caps missing from top of signposts.

14.2. Compliance

- 14.2.1. Although the widths of the carriageway and laybys in this location are within the guidelines, there is an issue with parking and HGV's passing in this location that was witnessed firsthand by Engineer. It is believed the horizontal alignment approaching this area exacerbates the situation. There is a bend to the road when entering Keymer Road from the roundabout.
- 14.2.2. Shared foot/cycleway is below recommended 3m. *Ref LTN 1/20 6.5.7.* Although it is accepted that the footpath will be a more desirable route for pedestrians passed the shop fronts.
- 14.2.3. No Signage to Shared footway/cycleway (Diag. 956) or End of Route (965). Optional lining to Cycle Symbol (Diag. 1057).
- 14.2.4. Stop sign mounted at different heights. Both signs should be mounted at a minimum of 2300mm when located next to cycleway.
- 14.2.5. Stop lines to diag. 1002.1 and STOP line diag.1022 required when using Stop signs. *Ref TSM 3 2.17.*

14.3. Recommendation

- 14.3.1. Designer to revisit site to find a suitable solution that avoids conflict with large HGV's and parked vehicles in this area. Recommend widening parking bay. Hardstand could be reduced to 500mm and still comply to LTN 1/20. *Ref LTN 1/20 6.2.42*.
- 14.3.2. Designer and contractor to revisit site to find solution to reduce gradient where footpath joins foot/cycleway. Note cabinet could be relocated if required.
- 14.3.3. Gully serving 198m² within footpath in front of shops. This seems a large area for one gully to serve and could potentially risk flooding to shops should the one gully become blocked or overwhelmed by a heavy downpour. Recommend Designer to revisit design to ensure that adequate drainage for this area has been provided.
- 14.3.4. Relocate railings to top of wall (if possible). This would increase width to the foot/cycleway by 160mm. May also remove the temptation for Children to walk along wall. The wall is 1.37m (4 ½ foot) at its highest point.
- 14.3.5. Install signage and lining in accordance with current guidance.



15. Area 14 RAB Keymer Rd/Junction Rd/Silverdale Rd

15.1. Defects

- 15.1.1. Poor repair to surface course surround for gully.
- 15.1.2. Apparent low spot within foot/cycleway on (Keymer Road southern arm).
- 15.1.3. Yellow lining requires refreshing around junction of Silverdale Road and Junction Road.
- 15.1.4. Poor quality trench repair to light bollard on refuge island.
- 15.1.5. Pothole within circulatory of roundabout.

15.2. Compliance

- 15.2.1. No Signage to Shared footway/cycleway (Diag. 956) or End of Route (965). Optional lining to Cycle Symbol (Diag. 1057).
- 15.2.2. Corduroys required for visually impaired persons crossing from the north side of Keymer Road to the south into the shared foot/cycleway. Ref Guidance on the Use of Tactile Paving Surfaces 3.3.
- 15.2.3. Blister slabs required for uncontrolled crossing points at the Junction Road.

15.3. Recommendation

- 15.3.1. Noted works are incomplete.
- 15.3.2. Install signage, lining and tactile slabs in accordance with current guidance.
- 15.3.3. Carry out repair to carriageway surface course within circulatory.

16. Area 15 Puffin Crossing Keymer Road

16.1. Defects

- 16.1.1. East side Signal head obscured by overhanging Tree, requires cutting back.
- 16.1.2. Polished surface course on approaches to Crossing point.

16.2. Compliance

- 16.2.1. No Signage to Shared footway/cycleway (Diag. 956) or End of Route (965). Optional lining to Cycle Symbol (Diag. 1057).
- 16.2.2. Existing studs should be a maximum of 3m from Stop Line at crossing point. Currently at 3.2m. *Ref TSM 6 15.8.18*.
- 16.2.3. Corduroys required for visually impaired persons using Puffin crossing from the east side of Keymer Road to the west side into the shared foot/cycleway. Ref Guidance on the Use of Tactile Paving Surfaces 3.3.
- 16.2.4. Lack of cycle connectivity for cyclist wanting to join the carriageway heading south on Keymer Road. There is an opportunity to upgrade Puffin crossing to a Toucan crossing an install a short section of Shared use foot/cycleway on the eastern footway. This would allow cyclist to join Keymer Road on the correct side of the road. The width available is 2.8m, 200mm below current guidance. But it's believed that the benefit would outweigh the risk in this location.



16.3. Recommendation

- 16.3.1. Install signage, lining and tactile slabs in accordance with current guidance.
- 16.3.2. Cut back vegetation around signal head.
- 16.3.3. Designer to revisit site and establish possible upgrade of Puffin crossing and footway.

17. Conclusion

Although some of the matters below have been highlighted during the report it was felt useful to summarise the specific matters of interest requested by BHTC.

- 17.1. Road widths are within guidelines as highlighted within MfS. This is less than DMRB CD 127 standard which requires 6.75m, but this is for trunk roads. MfS2 states standard UK Lane widths as 3.65m (12 feet) in total 7.3m, but not to be taken as preferred value. MfS provides illustrations of vehicles widths, 3m for HGV which can be used as a minimum guide. To caveat minimum lane widths, the designer needs to consider the alignment and any other factors that may impact them. The outcome of the survey found that the shortest width of carriageway, 6.5m, which was outside the parking bays for the shops within Keymer Road. This was also the location of the narrowest parking bays, 2m in width (still within guidance), which is possibly a contributing factor why there is an issue with large vehicles passing in this location. Ref MfS 7.2 & MfS2 8.6
- **17.2.** Layby widths are taken from the Manual for Streets. Recommended sizes are 2m in width and 6m in length. All the laybys surveyed were within the guidelines. *Ref MfS 8.3.48*
- 17.3. Concrete Block paving is an accepted material to be used within a cycle path, *Ref MfS* 15.2.16. Mfs also states that a good quality machine laid surface offers greater accessibility and safety for other users such as wheelchair user and visually impaired persons Ref MfS 15.2.2.

Note statement within Inclusive Mobility A Guide to Best Practice on Access to Pedestrian and Transport Infrastructure Dec 21, 4.8 'When small paving bricks (paviours) are used, care should be taken to ensure that they are evenly laid; any unevenness can cause problems for some people, including wheelchair users and cane users'.

Following the above, the quality of construction for the block paving is below standard in some areas, particular within Area 10, Signalised junction. But in other areas the workmanship is good.

17.4. The shared use foot/Cycleway constructed within these improvement scheme does conform to the current guidance. The DMRB CD 143 states that a shared 3.0m is desirable width to a minimum of 2.0 m depending on level of use per hour. Sustrans desirable width is 3.0m with an absolute minimum 2.5m. LTN 1/20 request a minimum of 3.0m with up to 300 cyclist per hour. Ref LTN 1/20 6.5 for guidance on the use of shared use.

Within Inclusive 'Mobility A Guide to Best Practice on Access to Pedestrian and Transport Infrastructure', 4.6 Shared use routes, it states.

A shared use route is a route on which all or part of the footway has been converted to a cycle track, making it available for use by both pedestrians and cyclists. Where only part of



the footway has been converted, cyclists must only use that part of the route. Mixing pedestrians and cyclists should be avoided as far as possible, in order to reduce the potential for collisions or conflict, and shared use routes in streets with high pedestrian or cyclist flows should not be used. It is particularly important to protect those pedestrians who are most at risk and who, for example, might not be able to see or hear an approaching cyclist. Conversion of an existing footway to a shared use route should only be considered when options that reuse carriageway or other space have been rejected as unworkable. Even then, this option may only be acceptable if there is sufficient space available, with low pedestrian and cycle user numbers along the route, and low expectations that pedestrians will cross the path to access adjacent facilities, such as shops. For such cases, guidance on the accessible design of shared use routes is provided in Local Transport Note 1/20 Cycle Infrastructure Design.

Local Transport Note 1/20 is clear that shared use routes in streets with high pedestrian or cyclist flows should not be used. Where it cannot be avoided, shared use may be appropriate if well-designed and implemented and where pedestrian numbers are very low. Cycle tracks and footways should be designed to be perceived as wholly separate facilities. Where it is not possible to achieve this level of separation, and the footway and cycle track are immediately adjacent and parallel to one another, the guidance in this section should be followed. This will assist vision impaired people and will also be helpful to all other users.

It appears that there are areas within the scheme that a segregated cycle track could be constructed which is the preferred method within LTN 1/20. But there are also appears limited areas of highway available. In particular between the Civic Way RAB and Queens Crescent. Iceni Consulting cannot confirm whether the correct design has been implemented in this location as there a large number of factors that require consideration, for instance existing levels, highway boundary etc. It ultimately falls to the designer to ensure that they have found the right balance taking into consideration safety and needs to all users and local business.

- 17.5. It's noted that there were some noncompliance and defects within the area of the works that has not been identified within the scheme. When approaching improvements schemes within the existing highway, its good practise to rectify existing defects and upgrade and improve any noncompliance within the area of works, especially when traffic management is in place, as this limits disruption to the public.
- 17.6. Timings of the signalised junction were observed between the hours of 17:00 and 17:30hrs on Monday 5 June and 08:20 08:50 hrs Tuesday 6 June. Traffic flows were kept moving and cue lengths were kept to a minimum. The signalised system appears to be of a Microprocessor Optimised Vehicle Actuation (MOVA) type. MOVA is more responsive to traffic conditions and often leads to a significant increase in capacity at a junction. This is often a preferred method of signalised traffic control in most local Highway Authorities throughout the UK.



18. Appendices

- **18.1.** Appendix A Iceni Site Survey Report
- **18.2.** Appendix B -

23-017-DR-CE-2001 - Site Survey Area Plans Sheet 1

23-017-DR-CE-2002 - Site Survey Area Plans Sheet 2

23-017-DR-CE-2003 - Site Survey Area Plans Sheet 3

19. References

- **19.1.** The Traffic Sign Regulations and General Directions 2016 (TSRGD 2016).
- **19.2.** Traffic Sign Manual (TSM) 3 Regulatory Signs.
- **19.3.** Traffic Sign Manual (TSM) 4 Warning Signs.
- **19.4.** Traffic Sign Manual (TSM) 6 Traffic Control Signals.
- **19.5.** LTN 1/20 Cycle Infrastructure Design Dec 21.
- **19.6.** Guidance on the Use of Tactile Paving Surfaces Dec 21.
- **19.7.** Inclusive Mobility, A Guide to Best Practice on Access to Pedestrian and Transport Infrastructure December 2012.
- **19.8.** Manual for Streets 2007.
- **19.9.** Manual for Streets 2 2010.
- **19.10.** DMRB CD 109 Highway Link Design.
- **19.11.** DMRB CD 127 Cross-sections and headrooms.
- **19.12.** DMRB CD 143 Designing for walking, cycling and horse-riding.
- **19.13.** DMRB CD 195 Designing for cycle traffic.
- **19.14.** DMRB CD 236 Surface course materials for construction.
- **19.15.** West Sussex County Council S278/39 Agreement Standard Details.