

Project: Land South of Radwinter Road (East of Griffin Place), Saffron Walden

Planning Reference: UTT/21/2509/OP

Client: Rosconn Strategic Land

Technical Note: Outstanding Highways Matters

Project No: CTP-20-1142

Date: January 2022

1. Introduction

- 1.1 Cotswold Transport Planning (CTP) has been appointed by Rosconn Strategic Land (the Applicant) to provide transport and highways advice in relation to an outline planning application for up to 233 new dwellings on a site to the south of Radwinter Road (East of Griffin Place), in Saffron Walden (UDC Planning Ref: UTT/21/2509/OP).
- 1.2 The planning application was supported by a Transport Assessment (TA) and Travel Plan (TP) prepared by CTP.
- 1.3 The Local Highway Authority (LHA), Essex County Council (ECC) provided its formal response to the planning application on 24 November 2021. The LHA recommendation was for the application to be refused for several reasons which are summarised below:
 - Access – the submitted application has not demonstrated that safe and suitable access for all users has been achieved;
 - Capacity – it cannot be determined from the submitted application that the residual, cumulative impact on the road network is acceptable;
 - Accessibility – the submitted application has not demonstrated that pedestrian and cycle movement with neighbouring areas have been given priority;
 - Mitigation – the submitted application has not demonstrated that the mitigation proposed in the application will be deliverable or effective; and



- Travel Plan – it has not been demonstrated that the Travel Plan will be effective in promoting sustainable modes of transport and reducing car trips.
- 1.4 For ease of reference, the full consultation response from the LHA is presented in **Appendix A**.
- 1.5 CTP responded to the comments from the LHA in December 2021 and again for ease of reference a copy of the full response is presented in **Appendix B**.
- 1.6 In short, the CTP response concluded that:
- The site can be considered a sustainable location and opportunities for travel by non-car modes are provided as part of the development;
 - Limited weight can be attributed to aspirations for future development of land to the south of the site, but the proposed development has been designed to facilitate this and would not prevent it coming forward;
 - The approach to the assessment of the highway network was agreed with the LHA as part of the pre-application discussions and is based on traffic flow data and junction models that have been accepted by the LHA previously.
 - The proposed off-site highway mitigation has been developed in sufficient detail at this stage to demonstrate they are deliverable and suitable to provide additional highway capacity. In addition, a Stage One Road Safety Audit has been commissioned to identify any issues that might need to be addressed at this stage; and
 - The Travel Plan contains a commitment to reduce car trips at the site and a package of measures to promote the use of sustainable modes of travel.
- 1.7 Following submission of the CTP response a meeting was arranged with ECC to discuss the outstanding highways matters and seek to understand what additional and / or amended information could be provided that would allow ECC to offer no objection to the application. The meeting, which took place on 16 December 2021, was attended by the LHA, the Applicant and CTP. A copy of the meeting record is presented in **Appendix C**.
- 1.8 There were a number of actions arising from the meeting which in the main were requests from the LHA for further information to help address the reasons for refusal as set out in their formal consultation response. Details of the actions arising from the



meeting together with further work that has been undertaken to address the comments of the LHA are set out below.

- 1.9 It should also be noted that in advance of the meeting, a further Technical Note was submitted by CTP which set out details of revised electric vehicle charging provision for all dwellings with on-plot parking and presented a series of traffic surveys undertaken in October 2021 which reinforce the robustness of the base traffic flows used for assessment purposes within TA.

2. Requests for Further Information

Meeting with Saffron Walden Town Council

- 2.1 The Applicant has maintained from the outset of the project that it would use all reasonable endeavours to help facilitate a pedestrian and cycle link to adjacent land to the west to encourage sustainable travel, notwithstanding that its delivery is reliant on crossing land within two other land ownerships. The option that was initially explored was a link to the Linden Homes site, via the area of Public Open Space (POS) that lies immediately adjacent to the application site.
- 2.2 It is understood that this area of POS is to be transferred to the ownership of Saffron Walden Town Council. Initially, the Town Council raised concerns with such a link and indicated they would not support the proposal. However, it is understood that at a meeting with the LHA in December 2021, the Town Council indicated that it was not opposed to the idea of a link but had concerns about the topography of the area of public open space between the two sites.
- 2.3 To investigate the potential of providing a link, the Applicant suggested that a site meeting be arranged and accordingly a meeting was arranged for 19 January 2022. The meeting was attended by the Town Council, the LHA, the Applicant and CTP. The outcome of the meeting is summarised below.
- 2.4 Ownership of the area of public open space has not yet been transferred to the Town Council, but it is understood that it is in its finished state and therefore it was acknowledged by all parties that the provision of a link between the two sites will need to work within the constraints of the existing topography. It was agreed that this effectively precludes a link onto Sativus Close as the gradients through the main area of public open space would be too steep.



- 2.5 The Applicant has requested that the case officer at Uttlesford District Council for the application advises when the POS will be transferred to the Town Council and a response is awaited.
- 2.6 Following a walkover of the public open space and the potential points of connection to the application site, it was agreed by all parties that there are three potential routes that the link could practicably take in view of the topography between the two sites. The routes, which are shown indicatively below, are located at either end of the area of public open space where the level difference between the two sites is much less pronounced.



Figure 2.1: Potential Pedestrian / Cycle Link

- 2.7 The southernmost route would connect into the Redrow site for which a reserved matters application was submitted in December 2021. The LHA has expressed some ongoing concerns regarding the proposed layout at the eastern end of the Redrow site although any proposed changes to the layout would need to maintain the ability to create a pedestrian / cycle link to the Application site. The LHA indicated that their



consultation response to the Redrow scheme is imminent and that it will strongly suggest that Redrow seeks to work with the Applicant to secure a pedestrian / cycle link between the two sites.

- 2.8 The potential of connecting into the road at the southern edge of the Linden site was identified as a second option. However, at its eastern end this is a shared private drive where pedestrians and cyclists may not have a right of access. The LHA agreed to check the status of the private drive to establish if it could be used as part of a pedestrian / cycle link.
- 2.9 The northern route would connect onto Griffin Place via the area of public open space to the north of the balancing pond and the strip of land between the eastern edge of the Linden development and the existing industrial buildings and yard to the south of Griffin Place.
- 2.10 The LHA confirmed that any link would need to be 3.5m wide, surfaced and lit. The LHA also suggested that because the roads within the Linden development are relatively lightly trafficked, they are suitable for cyclists and provide direct links to the Tesco foodstore and the Shire Hill Industrial Estate beyond.
- 2.11 The Applicant has indicated that there is a strip of land that runs along the western edge of its site that is in a second third party ownership. The proposed pedestrian / cycle link would need to cross this strip of land and now that there is a broad 'in principle' agreement to the indicative alignment of three potential routes between the Application site and the adjacent Linden and Redrow sites, the Applicant will approach the second third party landowner and use its best endeavours to secure an agreement to the link.
- 2.12 It was agreed that if delivered, the pedestrian / cycle link would help improve the permeability of the Application site and contribute significantly towards satisfying the needs of the LHA and the Town Council in respect of the accessibility of the site for pedestrians and cyclists.
- 2.13 In summary, to take this forward there are a number of issues that need to be confirmed including establishing a route that is acceptable to the LHA and deliverable in technical terms, i.e., provision of a 3.5m route through appropriate topography. The LHA also needs to confirm if a link onto a shared private drive is acceptable. There are also issues around land ownership including the timing of the transfer of the POS



to Saffron Walden Town Council and securing agreements with Redrow and the intervening land owner.

Local Plan Review and Potential Future Relief Road

- 2.14 CTP has confirmed that sufficient space has been reserved around the site access on Radwinter Road to provide a suitably sized roundabout if required to accommodate a relief road in the future. To demonstrate this, a sketch showing a roundabout with an ICD of 40m has been overlayed on the latest version of the Masterplan and is presented in **Appendix D**.
- 2.15 The sketch demonstrates that the roundabout is deliverable within land owned by the Applicant or land within the adopted highway maintainable at the public expense and that it would not impact upon the SuDS that is proposed on the strip of land between Radwinter Road and the built-up area of the development, or indeed on any of the identified development parcels.
- 2.16 In addition, the masterplan also makes allowance for the widening of the primary route carriageway if required in the future through provision of enhanced verge widths. A strip of land has also been reserved at the southern end of the site to provide a connection into the adjoining land if required. This is detailed in the Design and Access Statement (DAS) that accompanies the planning application, and an extract from the DAS showing a typical cross-section of the primary route with wide verges is provided at **Appendix E**. As such, it has adequately been demonstrated that the proposals will not prohibit the development of further land to the south in the future, in the event that these wider development aspirations come to fruition.

Site Access Issues

- 2.17 An independent Stage 1 Road Safety Audit (RSA) has been undertaken by TMS and a Designers Response has been prepared by CTP. Both documents are presented in **Appendix F**. The focus of the RSA was the proposed site access arrangements as well as three off-site junction improvements where mitigation measures were proposed within the TA. This section focuses on issues pertaining to the site access and it is confirmed that all the recommendations made by the RSA have been accepted and will be considered further at detailed design.



- 2.18 The LHA also raised a number of other concerns relating to pedestrian visibility splays, whether the footway on the southside of Radwinter Road and to the west of the access could be provided within highway land or land that is controlled by the Applicant, and the lack of a widened footway on the northside of Radwinter Road between the proposed pedestrian refuge island and the eastbound bus stop.
- 2.19 The site access drawing has been updated to reflect the RSA comments and those raised by the LHA and the revised drawing is presented in **Appendix G**. The only physical change proposed at the junction is a widened footway on the north side of Radwinter Road between the proposed pedestrian refuge island and the eastbound bus stop. Visibility splays at the proposed crossing point and forward visibility around the bend to the east are now shown on the drawing.
- 2.20 It is therefore considered that all of the comments raised by the LHA and within the RSA have been addressed and the site access is safe and suitable to serve the proposed development.
- 2.21 During the site meeting on 19 January 2022 to discuss the potential for a pedestrian / cycle link between the Application site and the adjacent land to the west, the LHA together with the Applicant and CTP also visited the section of Radwinter Road where the site access and associated pedestrian improvements are proposed. The LHA raised no additional concerns regarding the proposals during the site visit and were content that the works are deliverable either within land under the Applicant's control or land within the adopted highway boundary.

Assessment of the Highway Network

Application of TEMPro

- 2.22 At the meeting to discuss the outstanding highways matters in December 2021, the LHA suggested that comments had been made on the application of TEMPro to calculate traffic growth forecasts and agreed to send the comments for CTP to check its calculations. The main concern relates to the adjustments made to the planning data to reflect the high level of committed development in Saffron Walden. The comments have been received and read as follows:

Alternative assumptions in TEMPro for Uttlesford 002 allows for 580 houses for the 2018 to 2026 time period (from 5890 to 6470). Therefore, the maximum that can be removed is 580 as you cannot remove more



than the Base Housing total and you are also removing background growth. The remaining 82 dwellings would need to be added as committed development in excess of the predictions in TEMPro and alternative assumptions only taken to the base housing figure for 2018.

- 2.23 During the pre-application scoping discussions with the LHA, it was agreed that TEMPro should be used to reflect the growth in background traffic between the base and future assessment years. This is despite an earlier suggestion from the LHA at the first scoping meeting that no background traffic growth should be applied given that nearly all the growth within Saffron Walden will come from the consented housing schemes that are already being included in the assessment as committed development sites.
- 2.24 Notwithstanding, to ensure a robust assessment it was agreed that TEMPro growth should be applied but that it should be adjusted using the 'Alternative Assumptions' function to remove the number of consented dwellings from the future housing supply in the Uttlesford Authority Area. In the TA it was suggested that the future housing supply in the Uttlesford 002 MSOA was also adjusted but this was not the case as this does not cover all of Saffron Walden and one of the committed development sites, the Ashdon Road site, is in Uttlesford 001 MSOA.
- 2.25 The consented dwellings that were removed from the future year housing supply of the Uttlesford Authority Area are set out below:
- Linden Homes – 200
 - Land East of Thaxted Road (Bellway) – 150
 - Land North of Shire Hill Farm (Redrow) – 100
 - Little Walden Road – 85
 - Land at Ashden Road – 127
 - **Total – 662**
- 2.26 The allocation of Land at Ashden Road is for 167 dwellings. However, it is estimated that at the time of the collection of the base traffic data in 2018, approximately 40 would have been occupied and therefore for robustness the occupied dwellings were not removed from the future housing supply.
- 2.27 The resultant TEMPro growth rates are set out in Table 7.4 of the CTP Transport Assessment for the scenarios both with and without the consented link road. The



calculated growth rates used in the TA between 2018 and 2026 are 1.0427 in the AM peak and 1.0431 in the PM peak.

- 2.28 In the Uttlesford Authority Area there are 35,577 houses in the base year housing supply and 39,027 in the future year housing supply. To establish the adjusted TEMPro growth rate, 662 houses were removed from the future year housing supply resulting in a revised figure of 38,365 which is well above the base year housing supply. At this level, i.e., the Uttlesford Authority Area, it is therefore appropriate to remove all of the consented dwellings from the future year housing supply.
- 2.29 If as suggested, the growth factors had been calculated using Uttlesford 002 MSOA, and 580 dwellings had been removed from the future year housing supply, the resulting growth factors between 2018 and 2026 would be 1.0261 in the AM peak and 1.0242 in the PM peak.
- 2.30 These are lower than the rates used in the TA which are based on the Uttlesford Authority Area and therefore the approach adopted in the TA can be considered robust.

Base Traffic Data

- 2.31 For the 'With Link Road' scenario it was agreed with the LHA that the base flows could be extracted from the Transport Addendum – Link Road Assessment (dated September 2018), that was prepared by Peter Brett Associates (PBA) for Land East of Thaxted Road – now referred to as the Bellway site (Planning Ref: 18/0824/OP).
- 2.32 At Appendix F of the PBA report, there are AM and PM peak traffic flows diagrams showing the 2023 Forecast Year Cumulative Link Road scenario. These include the reassignment of background traffic to the consented link road together with committed development traffic from the Bellway, Dianthus Land (now Redrow), and Linden Homes sites. These flows were presented in Appendix C of the CTP TA.
- 2.33 The traffic flows for the 'Without Link Road' scenario were extracted from the Highways Impact Assessment (dated April 2018) prepared by Iceni on behalf of Dianthus Land. (Planning Ref: 17/2832/OP). The observed base traffic flows are presented in Appendix A3 of the above Iceni report and reproduced in the CTP TA as Appendix D.



2.34 On the basis that these traffic flows have previously been accepted for use by ECC, there is no reason why they should not also be acceptable to assess the impact of this development, as was agreed with ECC during pre-application discussions. The additional traffic count data presented in the previous CTP Technical Note (dated December 2021) demonstrates that traffic flows recorded in October 2021 are comparable with these base flows such that they again remain valid for use.

2.35 On the basis that assessment of these Base traffic flows has previously been undertaken by both PBA and Iceni, and subsequent future year modelling undertaken, it is considered that there is no requirement to model base traffic flows again, and so only forecast year modelling was presented in the TA.

Internal & External Development Trips

2.36 Traffic flow diagrams for the 'With Link Road' scenario showing development trips only split between internal and external trips are presented in Appendix E of the CTP TA (Figures 5.1 to 5.4).

2.37 The corresponding diagrams for the 'Without Link Road' scenario were not presented in the TA but for completeness are presented in **Appendix H** of this note.

Junction Models – Geometric Parameters

2.38 A table providing details of the source of the geometric parameters that were used for junction modelling as part of the CTP TA is presented in **Appendix I**. For each junction the planning reference and details of where in the relevant document that the geometric parameters can be found is provided.

2.39 With the exception of the proposed site access and the three proposed off-site mitigation schemes, which are based on CTP drawings, all geometric parameters for input into ARCADY, PICADY and LinSig models were taken from TAs prepared for the three consented residential developments to the west of the Application site.

2.40 They have therefore already been accepted by the LHA as being suitable for modelling purposes. Where site specific slope and intercept corrections were applied to the original junction models these have also been applied to the CTP models to ensure the level of validation that was agreed previously was included as part of the updated modelling undertaken by CTP.



- 2.41 As such, it is considered that the models have been previously accepted by ECC and so there is no reason why they should not again be acceptable for us in assessing the proposed development.

Off-Site Mitigation

- 2.42 The LHA is concerned that the proposed off-site junction improvements may not be deliverable particularly at the High Street / Church Street junction where there are narrow footways and utilities that may need to be diverted.
- 2.43 CTP has stated that the level of detail provided in the junction design drawings is appropriate for the planning application stage but at the request of the LHA has undertaken a design audit against the requirements of the DMRB. The updated drawings and a table setting out the CTP design specification against the requirements of the DMRB are presented in **Appendices J and K** respectively. It should be noted that the drawings have also been updated to reflect the comments in the RSA.
- 2.44 Following the site meeting to review the potential for a pedestrian / cycle link between the Application site and the Linden site, two of the off-site junctions where mitigation is proposed were also visited – the Radwinter Road / Thaxted Road / East Street / Chaters Hill junction and the High Street / Church Street junction. The LHA did not consider it necessary to visit the Thaxted Road / Peaslands Road junction as there are considered to be few constraints in the vicinity of the junction that could affect the deliverability of the proposed improvement.
- 2.45 At the Radwinter Road / Thaxted Road / East Street / Chaters Hill junction several observations were made about the safety and efficiency of the existing junction layout. These are summarised below:
- A single car waiting to turn right from East Street to Thaxted Road blocks the eastbound ahead movement which has a detrimental impact on the capacity of the East Street arm.
 - Some eastbound vehicles mounted the footway on the north side of East Street to avoid vehicles waiting to turn right. The footway in this location is narrow and there is a controlled pedestrian crossing where pedestrians gather while waiting to cross the road. Vehicles mounting the footway to avoid the



right turn queue represent a significant risk to pedestrian safety in this location.

- When two opposing vehicles are waiting to turn right into Thaxted Road and Chaters Hill respectively, the visibility to through traffic on the main east-west road is restricted. From observation the issue is most acute for vehicles waiting to turn into Chaters Hill. The problem is exacerbated by the lack of road markings in the centre of the junction channelling vehicles to an appropriate place to wait to turn right.

2.46 Referring to Drawing No. CTP-20-1142 SK10 Rev A in Appendix I, it can be seen that the proposed improvements will help to alleviate the issues identified above. The provision of road markings in the centre of the junction will encourage right turning vehicles to wait in a position that improves both the efficiency and safety of the junction.

2.47 For example, at least two cars will be able to wait to turn right into Thaxted Road without impeding the eastbound ahead movement. This will improve the performance of the East Street arm and reduce the incidence of vehicles mounting the footway to avoid vehicles waiting to turn right.

2.48 The width of the right turn storage areas in the centre of the junction will also enhance the visibility to the opposing through movements between Radwinter Road and East Street. The positioning of the two cars waiting to turn right on the drawing presented in Appendix I, demonstrates that the driver will have an unobstructed view of an oncoming vehicle.

2.49 At the High Street / Church Street junction several observations were made about the safety and efficiency of the existing junction layout. These are summarised below:

- It was noted that particularly during the peak hours, long queues form on Church Street often extending to The Common some 350m to the east.
- The visibility for vehicles exiting Church Street is limited which results in vehicles having to extend beyond the give way line in order to see opposing vehicles on High Street.
- It was noted that there are no pedestrian facilities at or in the immediate vicinity of the junction. Coupled with the relatively high traffic flows passing through the junction this creates an unattractive pedestrian environment.



- 2.50 Referring to Drawing No. CTP-20-1142 SK12 Rev A in Appendix I and to the results of the capacity assessments presented in the CTP TA, it can be seen that the proposed improvements will help to alleviate the issues identified above.
- 2.51 Table 8.11 in the TA summarises the capacity results of the existing junction layout. In 2026 with the proposed development, the junction would be operating well above capacity with a queue of 119 vehicles on Church Street.
- 2.52 Table 8.12 summarises the capacity results of the proposed traffic signals and indicates that the junction would be operating within capacity during both peaks in 2026 with the proposed development. In the AM peak the queue on Church Street is predicted to fall from 119 without any improvements to 15 with the junction improvements.
- 2.53 It is evident that the proposed improvements will significantly enhance the performance of the junction and restore capacity at a junction that is already operating well above capacity. The improvements will also remove the existing visibility restriction on Church Street as it will have a separate signal stage and therefore not have to give way to opposing movements on High Street.
- 2.54 The proposed junction improvements include controlled pedestrian facilities on Church Street and the southern arm of High Street. This will significantly improve the pedestrian environment and provide much needed crossing facilities in an area where they are currently lacking. There are no crossings of High Street to the north of the junction and the nearest controlled crossing to the south is at the High Street / George Street junction approximately 135m to the south.
- 2.55 The LHA is concerned that the proposed off-site junction improvements may not be deliverable particularly at the High Street / Church Street junction where there are narrow footways and utilities that may need to be diverted.
- 2.56 CTP is satisfied that the level of detail provided at this stage is appropriate to support a planning application and demonstrates that the proposed improvements are deliverable. In addition, a design audit against the requirements of the DMRB has been undertaken and the drawings have been updated to reflect the comments of the RSA.



- 2.57 To provide further reassurance the Applicant has indicated that it could be prepared to accept a condition stating that technical approval of the detailed design is required as a pre-commencement condition. Delivery of the schemes would then be a pre-occupation condition.

Travel Plan

- 2.58 CTP has agreed to update the Travel Plan to reinforce the targets and timeframes and to provide more concrete actions. The LHA has provided contact details for the Travel Plan Team at ECC, and CTP will make contact to discuss their specific requirements.
- 2.59 It is anticipated that the requirement for a Travel Plan would be secured via planning condition / S106 obligation as part of any planning permission, with the full Travel Plan to be submitted by prior to occupation of the site. The full Travel Plan could therefore include revised targets and additional measures to promote sustainable travel.

Appendix A: LHA Consultation Response

Your Ref: UTT/21/2509/OP
Our Ref: HT/SD/KW//48984/4C
Date: 24/11/2021



CC: Cllr Paul Gadd
Cllr Martin Foley

Andrew Cook
Director for Highways and Transportation

To: Uttlesford District Council
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Recommendation of Refusal

Application No. UTT/21/2509/OP

Applicant Mr D Hatcher Rosconn Strategic Land & Thomas Eric Baker And Sally Rose Hall, The Executors Of Mr E C Baker And Mrs J Baker Rosconn House 1 Grove Road

Site Location Land South Of (East Of Griffin Place) Radwinter Road Swards End

Proposal Outline application for the erection of up to 233 residential dwellings including affordable housing, with public open space, landscaping, sustainable drainage system (SuDS) and associated works, with vehicular access point from Radwinter Road. All matters reserved except for means of access

This proposal is located at the extreme north western edge of Saffron Walden town and is over 2km away from many of the services there, it is considered that the majority of trips will be undertaken in the car and the planning authority should take this into account when considering the overall sustainability of the site.

The permeability of the site for active travel is also of concern there are limited opportunities for cyclists and no direct pedestrian or cycle routes to the adjacent developments and onwards.

The local plan is currently under consideration and options for Saffron Walden are being considered and evidence gathered. It has been acknowledged in the application that a relief road may be required. There is some intention to address this in the text, however it cannot be identified where this is illustrated on plans making this clear, either for the potential junction with Radwinter Road or safeguarded land for a future link. The potential route is through the residential area which may not be acceptable in the long term

From a highway and transportation perspective the impact of the proposal is NOT acceptable to the Highway Authority for the following reasons:

The applicant has not demonstrated to the satisfaction of this Authority that the impact on the local highway network caused by this proposal is acceptable in terms of highway safety, capacity and accessibility with particular regard to the following:

Access

1. The submitted application has not demonstrated that safe and suitable access for all users has been achieved because:
 - a. A safety audit and audit of the access and associated works against the standards in CD123 has not been provided for the access arrangements.
 - b. No visibility splays have been demonstrated for proposed pedestrian crossing to the east of the proposed access
 - c. Further information is required concerning the delivery of the scheme in relation to the level differences and changes to geometry of Radwinter Road on the bend. It is not clear that the vegetation shown on the topographical survey, which is likely to form the boundary for the highway, allows a 2m footway to be provided within the highway or land in control of the developer
 - d. The footway on the north side of Radwinter Road which links to the proposed bus stop and on to PROW 315/22 to Swards End is not to a current 2m standard width and will not accommodate 2 pedestrians passing.

Capacity

2. It cannot be determined from the submitted application that the residual, cumulative impact is on the road network is acceptable for the following reasons:
 - a. The historic traffic data used to produce the flow diagrams has not been provided.
 - b. The background growth applied with TEMPRO does not appear to be correct.
 - c. The rationale behind the internal trip assumptions requires further explanation and the percentage flows are required.
 - d. The base case includes committed development and link road which is not the current position.
 - e. ECC requires a scale drawing to be provided showing the geometric measurements for each of the junctions assessed in order for the models to be checked. The base models should be calibrated using the queue length surveys. These surveys should also be appended to the TA.

Accessibility

3. The submitted application has not demonstrated that pedestrian and cycle movement with neighbouring areas have been given priority.
 - a. There is no permeability from the site to allow easy access to the adjacent development and facilities for pedestrians and cyclists.
 - b. The quality of the key routes for pedestrians and cyclists has not been assessed and limited improvement is proposed for mitigation
 - c. The potential of the public right of way network to link the site to the adjacent village has not been assessed.

Mitigation

4. The submitted application has not demonstrated that the mitigation proposed in the application will be deliverable for effective for the following reasons
 - a. A safety audit and audit of the highway mitigation works against the standards in CD123 has not been provided for any of the mitigation schemes
 - b. It is not clear that the deliverability and cost of the schemes have been considered adequately.
 - c. Radwinter Road/Thaxted Road junction:
 - i. Space around this junction is very constricted and there are a number of utilities in the footway

- ii. The lane width for the head traffic from east to west is too does not reflect the future use by HGVs or buses
 - iii. The right turn arrow towards Chaters Hill send traffic into the kerb line
 - iv. The mitigation is to the detriment of pedestrians
- d. Thaxted Road Junction with Peasland Road
 - i. The lane widths should be appropriated in relation to bus/HGV numbers
 - ii. Crossings should be a consistent width
 - iii. The signals at the committed access should be taken into account when considering this scheme.
- e. Church Street High Street
 - i. The deliverability of this scheme has not been adequately demonstrated it will be difficult to add control to due to the narrow footways and carriageway. Position of the equipment and maintenance bay, the presence of vehicle crossings and cellars and deliveries to local businesses have not been taken into account.
 - ii. Any signal placed in this location would have to be linked to the existing signals on the high street, which may require refurbishment of the whole system.
- f. It has not been demonstrated that the Travel Plan will be effective in promoting sustainable modes of transport and reducing the car trips.
 - i. The objectives does not include reducing single occupancy vehicle use
 - ii. It does not contain the targets around increasing walking, cycling or bus travel
 - iii. The time frame and targets do not extend to the full occupancy of the development
 - iv. The action plan does not contain key actions to promote sustainable travel

The proposal is therefore contrary to the Highway Authority's Development Management Policies DM1, DM9, DM10 DM11, DM14, DM15 adopted as County Council Supplementary Guidance in February 2011, and the policy GEN 1 of the Uttlesford District Council Local Plan

F. Massie

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Appendix B: CTP Response to LHA Consultation Comments

**Project: Land South of Radwinter Road
(East of Griffin Place), Saffron Walden**

Client: Rosconn Strategic Land

Technical Note- Response to ECC Highways Comments

Project No.: CTP-20-1142

Date: December 2021

1. Introduction

- 1.1 Cotswold Transport Planning (CTP) has been appointed by Rosconn Strategic Land (the Applicant) to provide transport and highways advice in relation to an outline planning application for up to 233 new dwellings on a site to the south of Radwinter Road (East of Griffin Place) in Saffron Walden (UDC Planning Ref: UTT/21/2509/OP).
- 1.2 The planning application was supported by a Transport Assessment (TA) and Travel Plan (TP) prepared by CTP.
- 1.3 Following submission of the planning application, a highways consultation response has been received from Essex County Council (ECC). This Technical Note provides a response to the comments received from ECC. The comments received are reproduced in bold italics, followed by the CTP response.

2. General

This proposal is located at the extreme north western edge of Saffron Walden town and is over 2km away from many of the services there, it is considered that the majority of trips will be undertaken in the car and the planning authority should take this into account when considering the overall sustainability of the site.

- 2.1 There are a number of facilities within a 2km distance of the application site, including the Tesco store, Shirehill Industrial Estate and schools including Saffron Walden Nursery School and RA Butler Junior School. The proposed school within the Dianthus Land site will also be within 2km. The provision of a pedestrian link on Radwinter Road will allow future residents to access these facilities on foot. The



development also includes provision of a bus service with stops adjacent to the site on Radwinter Road that would also allow journeys to be undertaken by non-car modes. It is considered that the new footway link to the Linden site together with the proximity to new bus stops on Radwinter Road, will provide future residents with realistic opportunities to walk and travel by bus and play their part in reducing the number of single occupancy car trips.

- 2.2 Furthermore, the SHLAA assessment undertaken by UDC as part of the emerging Local Plan identifies the site as being within acceptable distance of a number of local facilities including a secondary school, hospital, retail, and employment centre.
- 2.3 As such, the site is considered to be a sustainable location with opportunities for travel by sustainable modes of travel.
- 2.4 It is also noted that when considering the adjacent Linden Homes site at outline planning application stage (UDC ref: UTT/13/3467/OP), UDC / ECC concluded that the site is a sustainable location, with particular reference to a number of local facilities including many of those listed above and Audley End station, which was noted within the UDC Committee report as being 5.9km from the site. It would therefore seem inconsistent to now conclude that the application site, which lies adjacent to this development, is not a sustainable location.

The permeability of the site for active travel is also of concern there are limited opportunities for cyclists and no direct pedestrian or cycle routes to the adjacent developments and onwards.

- 2.5 As set out within the TA, a link to the adjacent Linden Homes site has not been pursued as it is not supported by Saffron Walden Town Council who currently manage the area of public open space over which the link would pass. The proposed footway on Radwinter Road between the site and the Linden access is considered to provide an acceptable level of pedestrian connectivity.
- 2.6 Again, the site can be considered a sustainable location with opportunities for travel by sustainable modes of travel.

The local plan is currently under consideration and options for Saffron Walden are being considered and evidence gathered. It has been acknowledged in the application that a relief road may be required. There is some intention to address this in the text, however it cannot be identified where this is illustrated



on plans making this clear, either for the potential junction with Radwinter Road or safeguarded land for a future link. The potential route is through the residential area which may not be acceptable in the long term.

- 2.7 The new Local Plan is at an early stage in its development, and no potential options for future development have yet been put forward by Uttlesford District Council (UDC). It is understood that UDC is considering options for potential development of land to the east of Saffron Walden however this process is at a very early stage and so it is unclear how much weight can be afforded to any future aspirations at this stage.
- 2.8 Notwithstanding the above, the submitted masterplan has reserved land around the site access on Radwinter Road to allow future upgrading of this junction. This is demonstrated through there being no development within the vicinity of the junction, including any strategic infrastructure such as drainage features.
- 2.9 In addition, the masterplan also makes allowance for the widening of the primary route carriageway if required in the future through provision of enhanced verge widths. A strip of land has also been reserved at the southern end of the site to provide a connection into the adjoining land if required.
- 2.10 The route of the relief road through the residential parcels does not prevent it from functioning as a relief road, and this approach has been taken elsewhere. This is considered a preferred approach to placemaking rather than locating the road on the edge of the development with no interaction between the development and road corridor.
- 2.11 As such, the proposals will not prohibit the development of further land to the south in the future, in the event that these wider development aspirations come to fruition.

3. Access

The submitted application has not demonstrated that safe and suitable access for all users has been achieved because:

a. A safety audit and audit of the access and associated works against the standards in CD123 has not been provided for the access arrangements.

b. No visibility splays have been demonstrated for proposed pedestrian crossing to the east of the proposed access



c. Further information is required concerning the delivery of the scheme in relation to the level differences and changes to geometry of Radwinter Road on the bend. It is not clear that the vegetation shown on the topographical survey, which is likely to form the boundary for the highway, allows a 2m footway to be provided within the highway or land in control of the developer

d. The footway on the north side of Radwinter Road which links to the proposed bus stop and on to PROW 315/22 to Swards End is not to a current 2m standard width and will not accommodate 2 pedestrians passing.

- 3.1 Completion of a Stage 1 Road Safety Audit (RSA) could be conditioned as part of any planning permission if considered appropriate by ECC. Notwithstanding this, a Stage 1 RSA of the site access is to be undertaken and will be submitted once completed together with a designer's response.
- 3.2 Visibility splays at pedestrian crossings could be annotated on the access drawing and would be as part of the detailed design of the proposed highway works.
- 3.3 It is unclear what further information is required regarding the delivery of the scheme. The adopted highway data provided by ECC shows sufficient land to provide a footway to the west of the site and in this location, where there are no changes to the geometry of Radwinter Road or significant level differences between the carriageway and verge. To the east of the proposed access, a new 2m footway is proposed on the southern side of Radwinter Road to serve the westbound bus stop and the proposed uncontrolled pedestrian crossing which provides access to the eastbound bus stop. The footway terminates at the crossing point.
- 3.4 There is sufficient highway verge to widen the footway on the northern side to 2m between the pedestrian crossing and bus stop. Widening further to the east is not considered necessary on the basis that demand for pedestrian movement from the site to the east i.e., to Swards End will be very low. On this basis the existing footway between the site and Swards End is considered adequate.
- 3.5 Sufficient information has been provided to demonstrate that the proposed site access is safe and suitable to serve the site and that amendments can be made as part of the detailed design to include pedestrian visibility splays and widening of the footway on the northern side of Radwinter Road between the new uncontrolled pedestrian crossing and the eastbound bus stop.



4. Capacity

It cannot be determined from the submitted application that the residual, cumulative impact is on the road network is acceptable for the following reasons:

a. The historic traffic data used to produce the flow diagrams has not been provided.

b. The background growth applied with TEMPRO does not appear to be correct.

c. The rationale behind the internal trip assumptions requires further explanation and the percentage flows are required.

d. The base case includes committed development and link road which is not the current position.

e. ECC requires a scale drawing to be provided showing the geometric measurements for each of the junctions assessed in order for the models to be checked. The base models should be calibrated using the queue length surveys. These surveys should also be appended to the TA.

- 4.1 The historic traffic data used within the assessment was taken from the approved planning application for the Kier / Bellway and Dianthus Land sites and this approach was agreed with ECC as part of pre-application discussions in view of the ongoing COVID-19 restrictions at the time that prevented the collection of traffic flow data. In addition, the data collected as part of these planning applications is considered to remain valid for use.
- 4.2 Given this approach was agreed with ECC, it is not considered necessary to provide the historic traffic data, since this has previously been reviewed and considered acceptable for use.
- 4.3 It is unclear how ECC consider the background growth applied using TEMPRO to be incorrect. The TEMPRO growth factors were adjusted to take account of committed development, and so avoid double counting of future development, and this approach is an accepted approach to calculating traffic growth factors as acknowledged within DfT guidance. It is also noted that during pre-app discussions, ECC suggested not applying traffic growth, however the approach adopted was subsequently agreed.



- 4.4 The trip generation and distribution calculations were submitted to ECC as part of pre-app discussions and agreed by officers who responded to an initial submission with a request for amendments to the proportion of traffic to / from the east. No comments were received in relation to the internal trip assumptions, and on this basis, these were considered to be agreed for use within the TA. It is therefore unclear what further explanation is required at this stage.
- 4.5 As it was agreed with ECC that the traffic flow data that formed the basis of the assessment has been taken from previously approved planning applications, a 'base' case assessment (i.e. the current situation) has not been presented. Base case assessments were presented as part of these previous planning applications and accepted by ECC and therefore it is not considered necessary to present these again as part of this application.
- 4.6 Given the above, the junction models including geometric input parameters have also been taken from the previous planning applications and as such there is no need to re-validate the models. Validation of the models has been undertaken as part of these previous applications and subject to review and acceptance by ECC. The use of these previously accepted models therefore ensures a consistent approach to modelling with the previous approved assessment work undertaken.
- 4.7 It can be concluded that sufficient information has been presented, and that it is based on an approach that has been agreed with ECC. The overriding conclusion of the agreed approach is that the proposed development will not have a significant detrimental impact on the local highway network.

5. Accessibility

3. The submitted application has not demonstrated that pedestrian and cycle movement with neighbouring areas have been given priority.

a. There is no permeability from the site to allow easy access to the adjacent development and facilities for pedestrians and cyclists.

b. The quality of the key routes for pedestrians and cyclists has not been assessed and limited improvement is proposed for mitigation

c. The potential of the public right of way network to link the site to the adjacent village has not been assessed.



- 5.1 As set out above, the link to the adjacent development site cannot be provided. The proposed footway link on Radwinter Road provides for pedestrian connectivity between the site and the adjacent development, as well as connectivity with the existing pedestrian network further to the west.
- 5.2 The existing pedestrian routes to the west are considered suitable to allow future residents of the site to undertake journeys on foot. Whilst it is acknowledged that there are no dedicated cycle facilities on Radwinter Road, this is not considered a barrier to cycling for future residents since they could cycle on-carriageway.
- 5.3 It is also noted that no off-site pedestrian and cycle improvements were required as part of the development of the Linden Homes site, and that the Uttlesford District Cycling Action Plan proposes no improvements on Radwinter Road. It is acknowledged that there are limited opportunities for significant improvements to cycle infrastructure on Radwinter Road due to the limitations of the existing highway network, particularly carriageway / footway width which would preclude provision of dedicated cycle facilities.
- 5.4 Pedestrian demand from the site to the east will be low, particularly demand to Seward's End. Pedestrian demand will be to destinations in Saffron Walden to the west. On this basis it is not considered necessary to provide any improvements to the PRow network to the east of the site.
- 5.5 It can be concluded that the application makes adequate provision for pedestrians and cyclists within the context of the existing highway network such that future residents will have opportunities to undertake journeys by non-car modes of travel.

6. Mitigation

4. The submitted application has not demonstrated that the mitigation proposed in the application will be deliverable for effective for the following reasons:

a. A safety audit and audit of the highway mitigation works against the standards in CD123 has not been provided for any of the mitigation schemes

- 6.1 Consideration of the deliverability of these schemes has been undertaken to a level of detail typical to support a planning application. The design of the proposed works would be developed further at detailed design stage.



- 6.2 Completion of a Stage 1 Road Safety Audit (RSA) at each junction could be conditioned as part of any planning permission if considered appropriate by ECC. Notwithstanding this a Stage 1 Road Safety Audit (RSA) of the proposed off-site highway works is to be undertaken and will be submitted once completed together with a designer's response.

c. Radwinter Road/Thaxted Road junction:

- i. Space around this junction is very constricted and there are a number of utilities in the footway***
- ii. The lane width for the head traffic from east to west is too does not reflect the future use by HGVs or buses***
- iii. The right turn arrow towards Chaters Hill send traffic into the kerb line***
- iv. The mitigation is to the detriment of pedestrians***

- 6.3 As set out above, the design of the proposed works would be developed further at detailed design stage. This would include consideration of the location of existing utilities and any diversion works that may be required.
- 6.4 The lane widths at the Radwinter Road approach reflect the maximum achievable to deliver the proposed improvements and are considered consistent with DMRB guidance which permits lane width of 2.5m. It is recognised that there would be a minor reduction in capacity as HGVs use the junction, but this would be low, particularly during the critical peak periods.
- 6.5 The right turn arrow for vehicles turning right into Chaters Hill is positioned to ensure stacking capacity for vehicles turning right into Thaxted Road is maximised. An amended kerbline on the northern side of the junction is proposed to accommodate the path of vehicles turning right into Chaters Hill. As Chaters Hill is one-way northbound, there would no risk of vehicles being in conflict with opposing vehicles.
- 6.6 It is recognised that the pedestrian crossing of Thaxted Road is to be relocated to the south of its current position however this is not a significant deviation from the current pedestrian route. In addition, the crossing of Radwinter Road (E) is lengthened but again this is not a significant increase over the existing crossing length. These amendments are required to deliver the highway capacity



improvements and are not considered to result in a significant detrimental impact to pedestrian movements at the junction.

- 6.7 As set out above, the design of the proposed works would be developed further at detailed design stage and any opportunities to reduce the impact on pedestrians further would be considered. The proposed works would not have a significant detrimental impact on pedestrian movements and would provide additional highway capacity. Sufficient information has been provided at this stage to demonstrate that the proposed works are deliverable and could be conditioned as part of any planning permission for the development.

d. Thaxted Road Junction with Peaslands Road

i. The lane widths should be appropriated in relation to bus/HGV numbers

ii. Crossings should be a consistent width

iii. The signals at the committed access should be taken into account when considering this scheme.

- 6.8 The lane widths are dictated by land availability and the need to provide sufficient capacity at the junction, and are considered consistent with DMRB guidance, which permits lane width of 2.5m. It is acknowledged that there would be a minor reduction in available capacity as HGVs / Buses use the junction, but the number of these vehicle movements would be low, particularly during peak hours.
- 6.9 The width of crossings can be amended as appropriate and would be reviewed as part of the detailed design of the proposed works.
- 6.10 The signals at the access to the Bellway site are approx. 190m to the south, so there should be no interaction between the two junctions that would require further consideration at this stage.
- 6.11 As such, it is considered that the proposed junction amendments are appropriate and would provide both additional capacity at the junction as well as controlled crossing facilities for pedestrians such that there would be an overall benefit to these being secured as part of any planning permission for the development. Sufficient information has been provided at this stage to demonstrate that the proposed works are deliverable and could be conditioned as part of any planning permission for the development.



e. Church Street High Street

i. The deliverability of this scheme has not been adequately demonstrated it will be difficult to add control to due to the narrow footways and carriageway. Position of the equipment and maintenance bay, the presence of vehicle crossings and cellars and deliveries to local businesses have not been taken into account.

ii. Any signal placed in this location would have to be linked to the existing signals on the high street, which may require refurbishment of the whole system.

- 6.12 Again, the design of the proposed works has been developed to a level of detail typical of a planning application, and this would be subject to further development at detailed design stage. Whilst it is acknowledged that footways around the junction are of limited width, there is already existing infrastructure including traffic signs that could be rationalised to assist in reducing the impact of the required traffic signal equipment on pedestrian amenity.
- 6.13 In addition, existing loading restrictions already prevent businesses in the vicinity of the junction from undertaking deliveries in this location.
- 6.14 There is only one other set of traffic signals on the High Street and given the distance between these junctions (over 130m) it is not considered that linkage would be required for these two junctions to operate satisfactorily.
- 6.15 The proposed mitigation would provide additional capacity at the junction and sufficient information has been presented at this stage to demonstrate that the proposed works are deliverable and could be conditioned as part of any planning permission for the development.

f. It has not been demonstrated that the Travel Plan will be effective in promoting sustainable modes of transport and reducing the car trips.

i. The objectives does not include reducing single occupancy vehicle use

ii. It does not contain the targets around increasing walking, cycling or bus travel

iii. The time frame and targets do not extend to the full occupancy of the development



iv. The action plan does not contain key actions to promote sustainable travel

iv. The action plan does not contain key actions to promote sustainable travel

- 6.16 The Travel Plan contains a commitment to reduce the number of vehicle trips at the site, which would include those undertaken by single occupancy vehicle.
- 6.17 Specific targets for an increase in the use of other modes were not included since the main objective is to reduce SOV trips. Any reduction here would result in an increase in the use of other modes and so there is no need to set specific targets for each mode of travel, although this could be incorporated into the full Travel Plan if considered to be required by ECC.
- 6.18 The Travel Plan does contain a commitment for the TPC to be in place for 5 years from occupation of the final dwelling, although the targets do not cover this full period. The Travel Plan targets could be amended as part of the submission of a full Travel Plan if required by ECC.
- 6.19 The Travel Plan contains a number of measures to promote sustainable travel including welcome packs and travel vouchers. It is therefore unclear what key actions are not included. Again, the full Travel Plan could include additional actions as appropriate.
- 6.20 It is anticipated that the requirement for a Travel Plan would be secured via planning condition / S106 obligation as part of any planning permission, with the full Travel Plan to be submitted prior to occupation of the site. The full Travel Plan could therefore include revised targets, and additional measures to promote sustainable travel.

7. Summary and Conclusions

- 7.1 This Technical Note has been prepared in response to the highways consultation response received from ECC in response to the submitted planning application. Having considered the ECC comments, it can be concluded that:
- The site can be considered a sustainable location and opportunities for travel by non-car modes are provided as part of the development.



- Limited weight can be attributed to aspirations for future development of land to the south of the site, but the proposed development would not prevent this coming forward. The illustrative site masterplan has been developed to ensure that future upgrading of the site access, and widening of the primary route carriageway can be undertaken in the future, whilst a strip of land has also been reserved at the southern end of the site to provide a connection into the adjoining land if required.
- The approach to the assessment of the highway network was agreed with ECC as part of pre-application discussions and is based on traffic flow data and junction models that have been accepted by ECC previously. As such, there is no requirement to present an assessment of base traffic flow or re-validate previously agreed models and the information presented is sufficient to ensure a robust assessment of the highway network. This demonstrates that the development will not have a severe impact on the local highway network.
- The proposed off-site highways mitigation has been developed in sufficient detail at this stage to demonstrate they are deliverable and suitable to provide additional highway capacity. In addition, a Stage One Road Safety Audit has been commissioned to identify any issues that may need to be addressed at this stage.
- The Travel Plan contains a commitment to reduce vehicle trips at the site and a package of measures to promote the use of sustainable (non-car) modes of travel. A full Travel Plan would be secured as part of any planning permission that could incorporate any additional measures or amendments as required by ECC.

7.2 In conclusion, it is considered that the proposed development is acceptable in transport and traffic terms and meets the policy requirements as set out in paragraph 110 of the NPPF as:

- Appropriate opportunities to promote sustainable transport modes will be taken up;
- Safe and suitable access to the site can be achieved for all users; and
- The design of streets, parking areas and other transport elements reflects current guidance; and
- There will be no significant impacts from the development on the transport network in terms of both capacity and congestion.

7.3 As such, the development will not result in an unacceptable impact on highway safety and the residual cumulative impact on the road network will not be severe



such that there are no highways and transport reasons why the proposed development cannot be granted planning permission.



Appendix C: Record of Meeting to Discuss Outstanding Highways Matters



Meeting Record - Confidential

Project: Land South of Radwinter Road, Saffron Walden

Client: Rosconn Group

Title: Meeting to Discuss ECC Highways Comments

Job Code: CTP-20-1142

Date: Thursday 16 December 2021 **Time:** 10am

Attendees: Katherine Wilkinson – Essex County Council

Daniel Hatcher – Rosconn

Chris Elliott - CTP

Jon Ashcroft - CTP

Item	Description	Action
1.0	General	
	It was agreed that the highways consultation response of 24 th November 2021 provided by ECC would be used as the agenda for the meeting.	
	CTP summarised a recent Technical Note that was submitted on Wednesday 15 December 2021. The note confirmed that all new homes with on-plot parking will be provided with a standard electric vehicle charge point and that new traffic flows undertaken in October 2021 reinforced the robustness of the base flows and junction capacity assessments presented in the Transport Assessment (TA). CTP confirmed that the October 2021 counts were undertaken between 15-22 October and therefore avoided the Autumn fuel shortages. ECC to review the note in the New Year and provide any comments.	ECC
2.0	Site Sustainability	
	ECC is concerned about the connectivity between the Application Site and the Linden site and reiterated a request for a pedestrian / cycle link between the two sites. Cyclists using Radwinter Road is a particular concern and a link would allow the use of low trafficked routes through the Linden development. Rosconn confirmed that the area of open space within the adjacent Linden development where a potential connection could be made has or is due to be transferred to the Town Council and that initial discussions had taken place with them, but their reaction to the proposal for a link had been unenthusiastic.	



Item	Description	Action
	<p>ECC recently met with the Town Council who indicated that they were not opposed to the idea of a link but that they are concerned about the topography between the two sites.</p> <p>Rosconn confirmed that it is happy to revisit the link and ECC suggested that a site meeting is arranged for the New Year to establish if there is a solution.</p> <p>Rosconn confirmed that it is happy to meet but identified a second third party landowner who owns a strip of land between the two sites adding to the complexity of the negotiations.</p> <p>ECC repeated the importance of the link to promote the sustainability of the site and stated that the ideal solution would be to provide a link to Sativus Close within the Linden site.</p> <p>Rosconn agreed that it would arrange a site meeting in the New Year and that it would delay talking to the second third party landowner until the meeting has taken place and an agreement in principle had been secured about the exact siting of the link between the 2 sites.</p> <p>ECC confirmed that site sustainability is not a reason for refusal but whilst it accepts the site is accessible to nearby facilities such as the Tesco, it is concerned that moving the town boundary further east limits the opportunity for sustainable trips. Any measures to maximise the permeability of the site would therefore be welcomed.</p>	Rosconn/CTP
3.0	Local Plan Review and Potential Future Relief Road	
	<p>There was a discussion about the potential future relief road of Saffron Walden and CTP confirmed that sufficient space has been reserved around the site access on Radwinter Road to provide a suitably sized roundabout if required to accommodate the relief road. CTP to provide a sketch layout of the roundabout to confirm deliverability.</p> <p>CTP also confirmed that the main spine road through the site could be widened to accommodate a 7.3m carriageway if required to accommodate the relief road. A strip of land has also been reserved to provide a highway link to the southern boundary of the site.</p> <p>Rosconn is of the view the current layout does not prejudice the potential future growth to the south and that the main spine road could be adjusted to provide the first part of any future relief road, if and when any proposals are formalised through the Local Plan review.</p> <p>ECC, whilst again confirming that this was not a reason for refusal, stated that it would prefer the main spine road to be located at the eastern edge of the site thus forming a boundary to the town. CTP stated that the topography is very</p>	CTP



Item	Description	Action
	<p>challenging in this part of the site that would result in the road being in cutting.</p> <p>There are also good placemaking reasons for the road to pass through the heart of the development and Rosconn identified that there are many other factors to consider in terms of harm for the wider development including heritage. Rosconn referred ECC to Pages 42-45 of the Design and Access Statement which provide further information precluding a link on the eastern fringe of the site.</p> <p>ECC confirmed that a Microsimulation model (VISSIM or Paramics) is being developed to assess the impact of the potential wider development and relief road on the town. ECC to confirm when the results of this modelling will be available.</p> <p>ECC indicated they were still awaiting a masterplan from UDC regarding draft proposals for a wider urban extension to the east of the town. Rosconn confirmed that UDC's Urban Design Officer (Jack Bennett) had recently advised the Saffron Walden Stakeholder Board of the latest Programme regarding the Masterplanning exercise, which expects a masterplan for the wider development to be prepared between June 2022 and Summer 2023.</p>	ECC
4.0	Site Access Issues	
	<p>CTP confirmed that a Stage 1 Road Safety Audit has been commissioned and will be undertaken by TMS. ECC does not have a preferred list of safety auditors and using TMS is acceptable.</p> <p>In response to a query from ECC, CTP tabled the site access drawing and confirmed that pedestrian visibility splays could be easily provided and that there is sufficient space to provide a 2.0m footway on the south side of Radwinter Road to the west of the site within highway land or land that is controlled by the Applicant. The plan also confirmed that the footway would not affect the ditch which is outside the highway boundary.</p> <p>CTP confirmed that the short section of existing footway on the north side of Radwinter Road between the proposed pedestrian refuge island and the eastbound bus stop was proposed to be widened to 2.0m to improve the pedestrian route to the bus stop.</p> <p>CTP confirmed that based on the likely low level of demand, it was considered that pedestrian links between the Application site and Swards End were not justified in planning terms. ECC suggested that a Public Rights of Way (PROW) contribution may be appropriate but in general it was agreed that it is more critical to improve links to the west of the site.</p>	



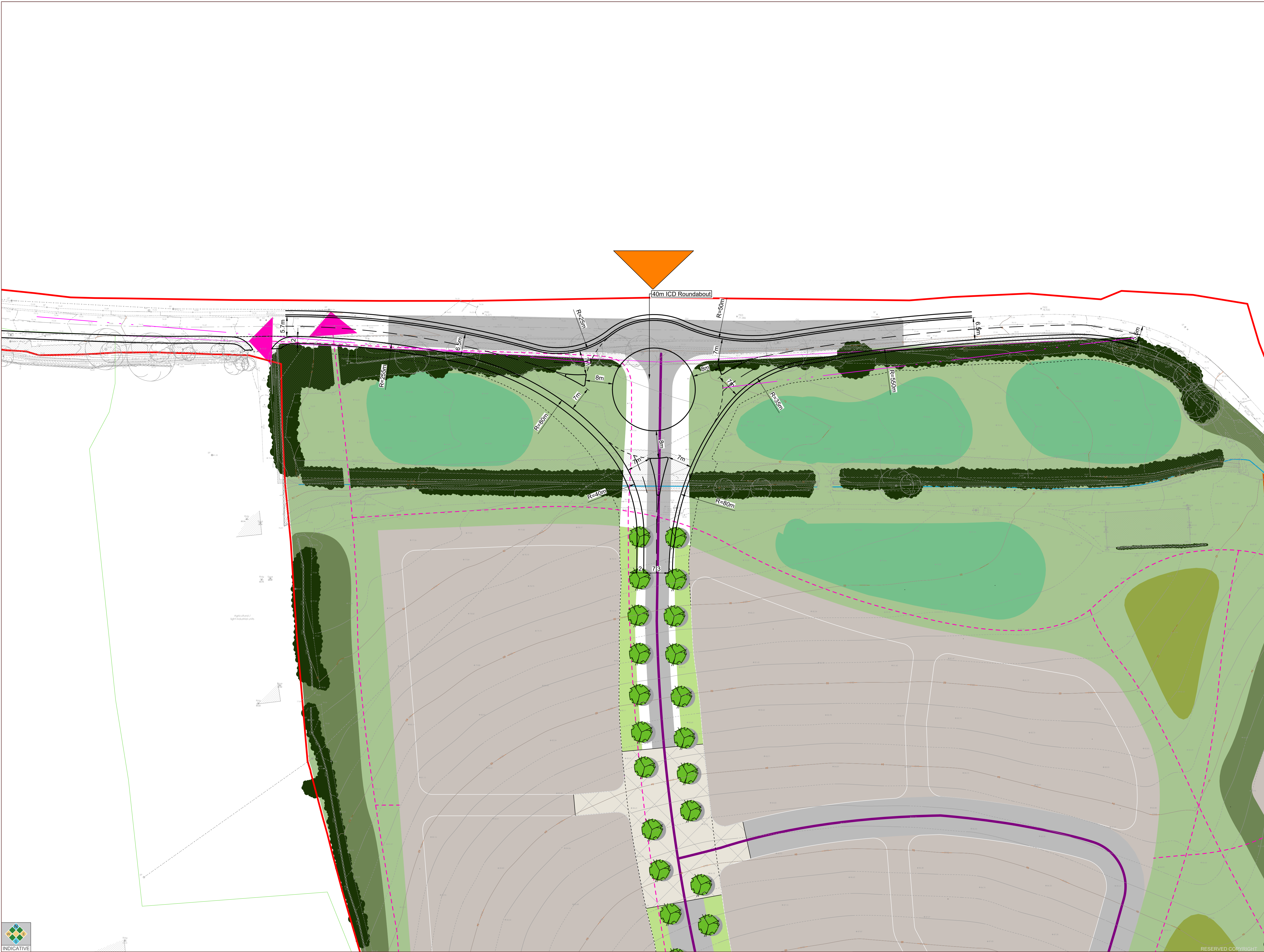
Item	Description	Action
	Rosconn confirmed that it does not own any land to the east of the Application site and is therefore unable to provide a link to Swards End in this location.	
5.0	Capacity	
	<p>ECC has commented on the application of TEMPro to calculate traffic growth forecasts and agreed to send the comments for CTP to check its calculations. The main concern is the adjustments made to the planning data to reflect the high level of committed development in Saffron Walden.</p> <p>ECC confirmed that it agreed to the use of traffic data collected for the Bellway and Redrow sites but would like to see the data to check its validity etc.</p> <p>CTP agreed to provide traffic flow diagrams showing development trips only both with and without development and split between internal / external trips.</p> <p>CTP agreed to prepare a note providing references to where the base traffic data and junction models are presented in the TAs that were prepared for the Bellway and Redrow sites and the requested traffic flow diagrams.</p>	<p>ECC</p> <p>CTP</p> <p>CTP</p>
6.0	Mitigation	
	<p>ECC is concerned that the proposed off-site improvements may not be deliverable particularly at the High Street / Church Street junction where there are narrow footways and utilities that may need to be diverted.</p> <p>CTP stated that the level of detail provided in the junction design drawings is appropriate for the planning application stage but agreed to undertake a more thorough design audit once the Safety Audit is completed. A design audit against the requirements of CD123 will also be undertaken.</p> <p>Rosconn indicated that it could be prepared to accept a condition stating that technical approval of the detailed design is required as a pre-commencement condition, but that scheme delivery is a pre-occupation condition.</p>	CTP
7.0	Travel Plan	
	CTP agreed to update the Travel Plan to reinforce the targets and timeframes and to provide more concrete actions. ECC to provide contact details for the Travel Plan team at ECC.	ECC/CTP
8.0	Summary	
	Rosconn confirmed that all other technical matters have now been resolved and matters relating to highways are the only issues outstanding. Rosconn and CTP to provide all the necessary additional information to demonstrate that the scheme is acceptable in highway terms.	



Item	Description	Action
	ECC indicated that all technical issues can be resolved and that the key issues are site permeability, deliverability of the mitigation and future proofing of the scheme so as not to prejudice any potential wider development to the south that may emerge through the Local Plan.	
Minutes prepared by Jon Ashcroft CTP 21/12/2021		



Appendix D: Drawing of Potential Roundabout at Site Access



- Notes:
- Do not scale from this drawing. All dimensions are in metres, unless stated otherwise.
 - This drawing is based on the Architects Masterplan received from Define on 19.01.2022.
 - Ordnance Survey, (c) Crown Copyright 2020. All rights reserved. Licence number 100022432.

B	21/01/22	Latest masterplan added	CE	JA
A	10/03/21	Footway link to the west added	MP	CE
Rev	Date	Details	Drawn By	Checked By



COTSWOLD
TRANSPORT
PLANNING

CLIENT:
Rosconn Group

PROJECT:
**Radwinter Road,
Saffron Walden**

TITLE:
**Site Access
Roundabout Junction Option**

STATUS:
PRELIMINARY

SCALE @ A1: 1:500	DATE: 12.02.21	DRAWN: MP	CHECKED: JA	APPROVED: JA
JOB NO: CTP-20-1142	DRAWING NO: SK07	REVISION: B		



Appendix E: Cross Section of Primary Vehicle Route



FIGURE 27 - PRIMARY STREET



FIGURE 28 - PRIMARY LOOP





Appendix F: RSA Stage 1 and Designers Response



safer roads for everyone

Land South of Radwinter Road (East of Griffin Place), Saffron Walden, Essex

Road Safety Audit Stage 1

**on behalf of Cotswold Transport Planning Ltd
for Rosconn Strategic Land Ltd**

TMS reference no: 16753
Date: 6th January 2022

Land South of Radwinter Road (East of Griffin Place), Saffron Walden, Essex

Road Safety Audit Stage 1

1. Introduction

1.1 This report describes a Stage 1 Road Safety Audit carried out on proposed highway works in Saffron Walden, Essex, on behalf of Cotswold Transport Planning Ltd for Rosconn Strategic Land Ltd. The audit was carried out on 5th January 2022 in the offices of TMS Consultancy.

1.2 The audit team members were as follows:

Audit Team Leader

Mark Steventon – LLM, EngTech, MSoRSA
Highways England Approved RSA Certificate of Competency
Principal Engineer, TMS Consultancy

Audit Team Member

Tara Jowett – MCIHT, FIHE
Associate, TMS Consultancy

1.3 The audit comprised an examination of the documents listed in **Appendix A**. The Road Safety Audit was undertaken in accordance with the Brief provided by Chris Elliot of Cotswold Transport Planning.

1.4 The site was visited by the Audit Team together between 11.45am and 2pm on Tuesday 4th January 2022. The weather was overcast and damp. Traffic flows were moderate. Pedestrian and cycle flows were moderate.

1.5 The terms of reference of the Road Safety Audit are as described in DMRB Standard GG 119. The team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the design to any other criteria.

1.6 All of the problems described in this report are considered by the audit team to require action to improve the safety of the scheme and minimise collision occurrence.

1.7 A scheme drawing is included in **Appendix B**, where the locations of specific problems are referenced. A location plan of the scheme is also included in **Appendix B**.

1.8 The scheme consists of a priority T-junction with sheltered right turn lane, providing all-purpose access to a proposed new housing development of up to 233 dwellings on land south of Radwinter Road, Saffron Walden. Two new bus stops on Radwinter Road are also proposed, together with associated footway links and an uncontrolled pedestrian crossing with refuge island. In addition, off-site works are also proposed as follows:

- An additional right turn lane on Radwinter Road at the existing signalised junction with Thaxted Road.
- Signalisation of the existing 3-arm mini-roundabout junction of Thaxted Road and Peaslands Road.
- Signalisation of the existing 3-arm priority junction of High Street and Church Street.

1.9 Road Safety Audit Response Report

Following the completion of the road safety audit, the design team should prepare a road safety audit response report in collaboration with the Overseeing Organisation.

The response report should incorporate the following:

- **Decision Log** spreadsheet, where each Problem and Recommendation in the Safety Audit report is reiterated.
- In the Decision Log, a response should be provided by the Design Team and Overseeing Organisation for each problem raised in the RSA report, together with an agreed action.

Further information is provided in **GG 119 Sections 4.11 to 4.19** and **Appendix F** (where a road safety audit response report template is available).

The response report should be produced and finalised within *one month* of the issue of the RSA report. A copy of the response report should be issued to the Safety Audit Team for information.

2. Items resulting from this Stage 1 Audit

Radwinter Road – development access

2.1 PROBLEM

Location – Radwinter Road – pedestrian crossing

Summary: The island presents an inconspicuous hazard

The proposed new pedestrian crossing is located within the national speed limit and outside of the existing street-lit area. It may not be conspicuous to approaching westbound drivers, who's vehicles could collide with the island, causing damage and loss of control.

RECOMMENDATION

The risk of collisions with the island should be mitigated, e.g. by extending the built-up area speed limit and street lighting to an appropriate point east of the proposed new refuge island and by providing illuminated or reflective bollards on the island.

2.2 PROBLEM

Location – Radwinter Road – eastbound bus stop

Summary: Level difference presents a risk to bus boarders

The existing footway on the north side of Radwinter Road, at the proposed location of the new bus stop, is significantly higher than the adjacent carriageway. Passengers attempting to board or alight from a bus may not be able to do so safely.

RECOMMENDATION

Footway levels and gradients should be adjusted to provide a safe boarding area.

2.3 PROBLEM

Location – Radwinter Road – eastern tie-in

Summary: Reduced forward visibility around bend

Realignment of the southern kerb line around the bend at the eastern end of the scheme could reduce forward visibility around the bend for westbound drivers, which could lead to shunt collisions. Forward visibility is currently restricted by dense vegetation on the south side of the highway, which will be closer to the realigned carriageway edge.

RECOMMENDATION

The design should ensure that adequate forward visibility around the bend is maintained, which may require some removal of existing vegetation.

2.4 PROBLEM

Location – Development access

Summary: Gradient at junction may present a hazard

There is an existing level difference between Radwinter Road and the proposed development land, which could result in a significant gradient in the development access road down to the junction. There is a risk of collisions involving vehicles approaching the junction along the development access road not being able to stop safely and emerging into the path of an approaching vehicle on the main road, especially in wet or icy weather.

RECOMMENDATION

A level dwell area should be provided in the development access road at the approach to the junction.

2.5 PROBLEM

Location – Radwinter Road – side road junctions

Summary: No crossing facilities shown

At this stage of the design, no dropped kerb crossing facilities are shown where the proposed new footway crosses existing side road junctions. In the absence of dropped kerbs, pedestrians with mobility impairment may not be able to cross the junctions safely.

RECOMMENDATION

Dropped kerbs and appropriate tactile paving should be provided where the footway crosses side road junctions.

Radwinter Road / Thaxted Road junction improvements

2.6 PROBLEM

Location – Thaxted Road – relocated crossing

Summary: Existing covers may disrupt tactile paving

There are existing CATV access covers in the footway at both sides of the road at the proposed location of the pedestrian crossing, which could disrupt the tactile paving and present a risk that sight impaired pedestrians may not be able to cross safely.



RECOMMENDATION

The crossing should be located clear of the existing access covers. If this is not practicable, recessed covers with inset tactile paving should be provided.

2.7 PROBLEM

Location – Thaxted Road and Chaters Hill – realigned junction radii

Summary: Manhole covers in carriageway

The proposed realignment of the NE and SE junction radii will result in manhole covers, which are currently located in the footway, being in the carriageway, where they could become loose, damaged or worn smooth by overriding vehicles and present a hazard, especially to turning two-wheeled vehicles.



RECOMMENDATION

Access chambers should be relocated clear of the carriageway.

2.8 PROBLEM

Location – Thaxted Road j/w Radwinter Road - SW corner of junction

Summary: Hazardous signposts

The existing local direction sign will straddle the proposed realigned footway, where the posts could present a hazard, especially to sight impaired pedestrians.



RECOMMENDATION

A cantilever mounting should be provided, with the post clear of the footway.

2.9 PROBLEM

Location – Radwinter Road – NE side of junction

Summary: Signal equipment may obstruct footway

The reduced width of the footway may not be sufficient to accommodate signal posts with adequate clearance for pedestrians, who may be obliged to walk in the carriageway where they could be struck by passing vehicles.

RECOMMENDATION

The design should ensure that adequate residual passage width for pedestrians is maintained.

2.10 PROBLEM

Location – Radwinter Road j/w Thaxted Road

Summary: Conflicting right turn movements

The existing signal staging permits simultaneous opposing right turns from Radwinter Road into Thaxted Road and Chaters Hill. The proposed right turn pocket layout in the centre of the junction will oblige a driver turning right into Chaters Hill to manoeuvre around the nearside of an opposing right turning vehicle which could obstruct the view of an oncoming eastbound vehicle, which could result in head-on collisions.

RECOMMENDATION

Signal staging should be adjusted to eliminate conflicting movements.

2.11 PROBLEM

Location – Radwinter Road j/w Thaxted Road

Summary: Inadequate illumination at night

The Audit Team did not survey the site during darkness, but existing street lighting at the junction appears to be poor. The proposed altered junction layout and the absence of street lighting is likely to increase the risk of collisions at night.

RECOMMENDATION

The junction should be adequately illuminated at night.

Thaxted Road / Peaslands Road junction improvements

2.12 PROBLEM

Location – Thaxted Road j/w Peaslands Road – all approaches to junction

Summary: Stop lines too close to pedestrian crossings

It is proposed to locate the stop lines 1.5m in advance of the pedestrian crossing studs, which presents the risk that a vehicle braking harshly or suddenly on the approach to the signals could overshoot the stop line and collide with a pedestrian using the crossing.

RECOMMENDATION

The stop lines should be relocated further back from the crossing studs (3m is recommended). In addition, the design should specify a carriageway surface material with a high skidding resistance on all three approaches.

2.13 PROBLEM

Location – Thaxted Road j/w Peaslands Road

Summary: Ironwork in the carriageway presents a slip hazard

There are several metal covers in the carriageway, which could be in the wheel track of vehicles accelerating, braking or turning through the junction and could present a risk of loss of control, especially to two-wheeled vehicles in wet or icy weather.

RECOMMENDATION

Metal covers in the carriageway should be replaced with non-slip covers.

2.14 PROBLEM

Location – Thaxted Road

Summary: Potential collapse of high bank

The proposed widening of the carriageway on the east side of Thaxted Road on the approach to the junction will cut into an existing earth bank at the boundary of adjacent private dwellings. Unless adequately retained, there is a risk that the earth bank could collapse across the footway and carriageway, resulting in injuries to pedestrians and a risk of collisions.



RECOMMENDATION

The detailed design should provide for adequate retention of the earth bank.

High Street / Church Street junction improvements

2.15 PROBLEM

Location – High Street j/w Church Street

Summary: Obstructed junction inter-visibility zone

The junction inter-visibility zone is compromised by existing buildings on both corners of Church Street. In the event of a signal failure, collisions could occur if drivers enter the junction without a clear view of other approaching vehicles.



RECOMMENDATION

The constraints of the site are acknowledged. The design should seek to maximise the JIZ whilst accommodating the swept path of essential vehicles.

2.16 PROBLEM

Location – High Street – north side of junction

Summary: pedestrian crossing conflicts with vehicle access

The west side of the proposed pedestrian crossing coincides with a dropped kerb vehicle crossing into a private access (Raynhams). There is a risk of collisions between pedestrians using the crossing and vehicles turning into or out of the access; the extended dropped kerb could be confusing for sight impaired pedestrians; and tactile paving laid at the crossing point is likely to be overrun and damaged by turning vehicles.



RECOMMENDATION

The pedestrian crossing should be relocated clear of the vehicle access.

2.17 PROBLEM

Location – High Street – south side of junction

Summary: pedestrian crossing conflicts with steps across footway

The east side of the proposed pedestrian crossing coincides with a narrow section of footway adjacent to some stone steps outside the door of No.16 High Street. The stone steps could present a trip hazard to pedestrians using the crossing and could restrict the tactile paving layout. Together with the proposed signal post, they will restrict the passage width along the footway such that a pedestrian may be obliged to walk in the carriageway where they could be struck by a passing vehicle.



RECOMMENDATION

The pedestrian crossing and signal post should be relocated clear of the stone steps.

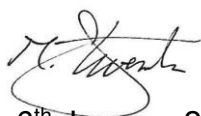
3. Audit Team Statement

We certify that the terms of reference of the road safety audit are as described in DMRB Standard GG 119.

Audit Team Leader

Mark Steventon – LLM, EngTech, MSoRSA
Highways England Approved RSA Certificate of Competency
Principal Engineer, TMS Consultancy

Signed



Date

6th January 2022

Audit Team Member

Tara Jowett – MCIHT, FIHE
Associate, TMS Consultancy

Signed



Date

6th January 2022

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Appendix A

Documents Examined:

- Drawing No. CTP-20-1142/SK01/C
- Drawing No. CTP-20-1142/SK10
- Drawing No. CTP-20-1142/SK11
- Drawing No. CTP-20-1142/SK12
- Drawing No. CTP-20-1142/SP03

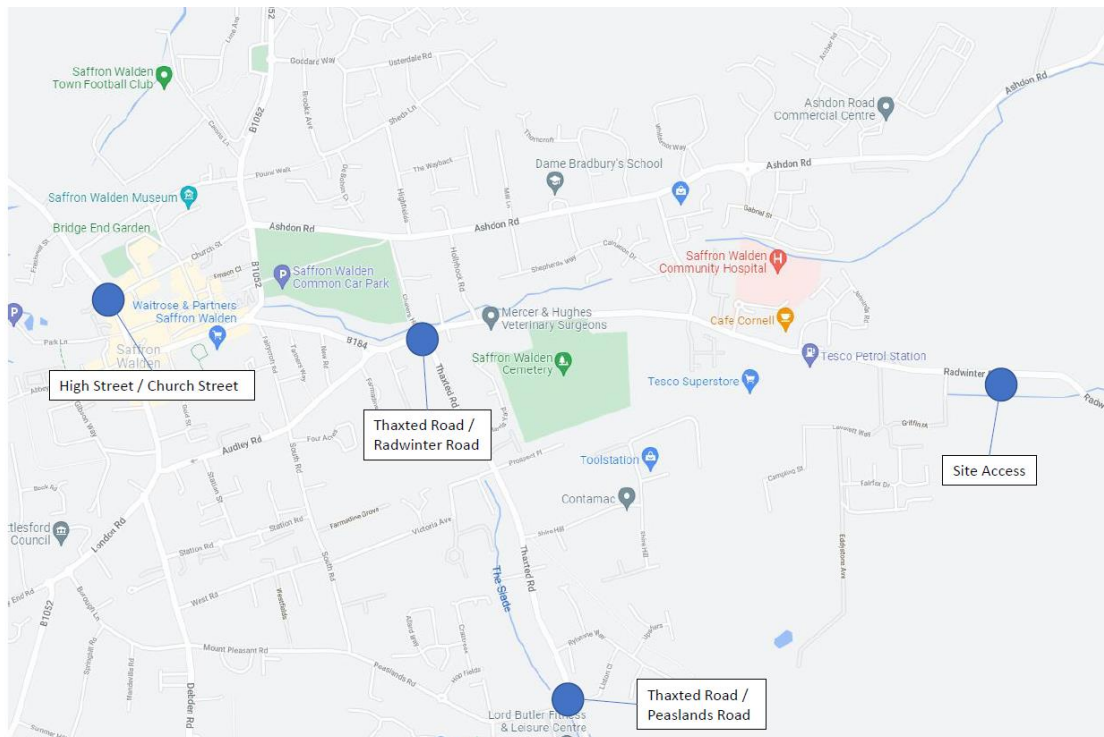
Other Information Provided:

- ATC Survey Results
- Collision Data
- Traffic Flows

Appendix B

Please refer to the following page for a plan illustrating the locations of the problems identified as part of this audit (location numbers refer to paragraph numbers in the report).

The locations of the scheme elements are shown below:



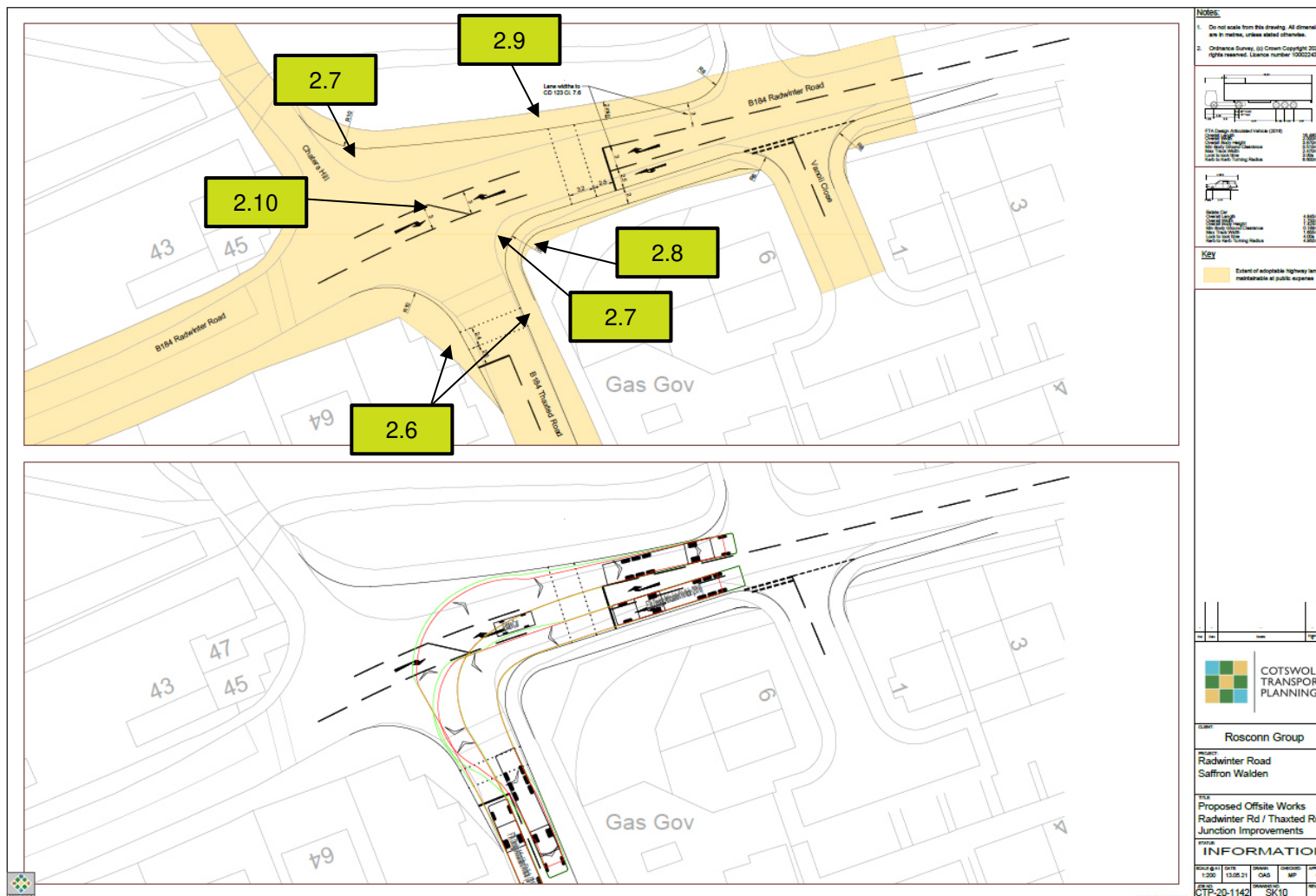
Scheme: Land South of Radwinter Road (East of Griffin Place), Saffron Walden, Essex





safer roads for everyone

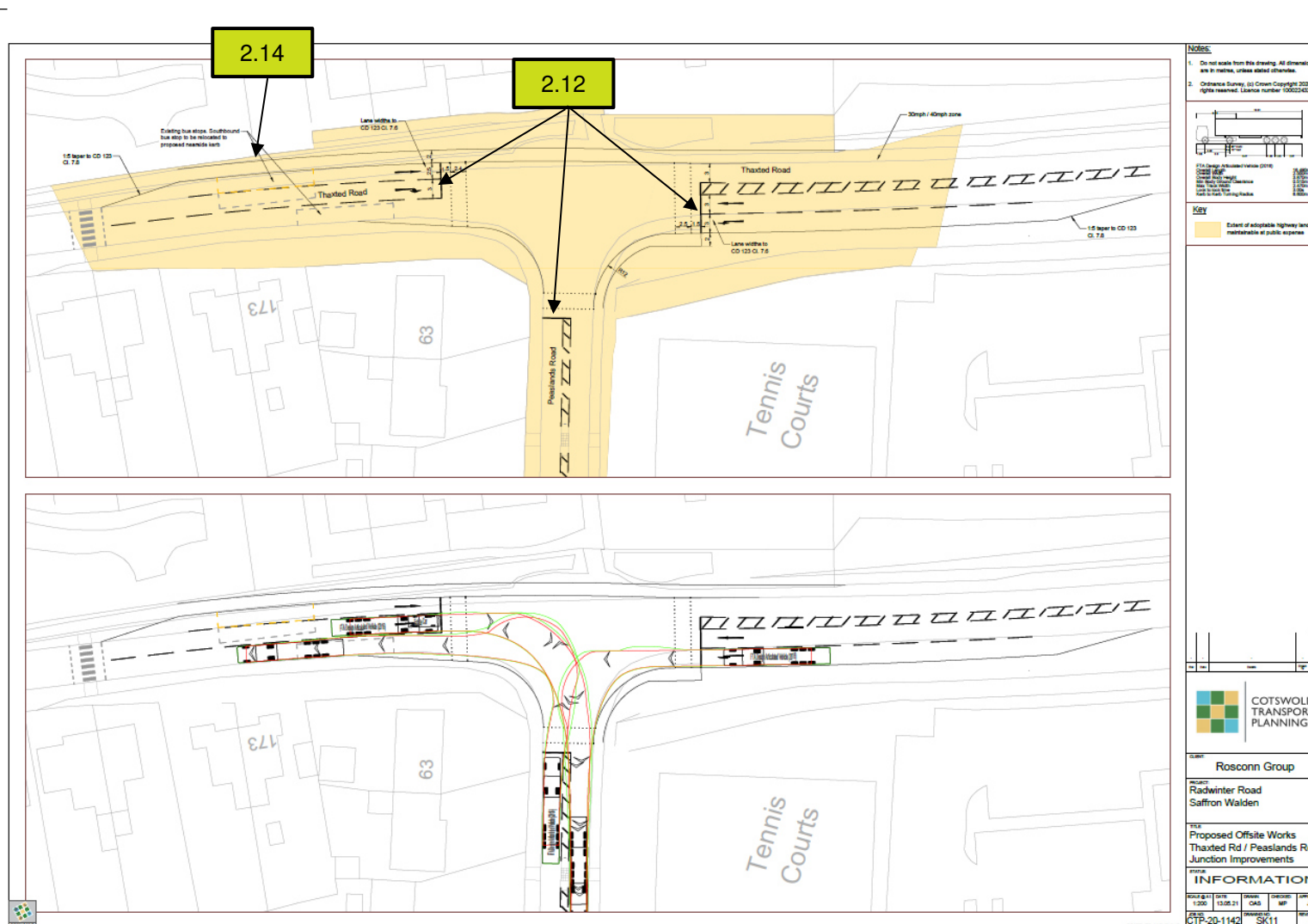
Client: Cotswold Transport Planning Ltd (Rosconn Strategic Land Ltd)
Scheme: Land South of Radwinter Road (East of Griffin Place), Saffron Walden, Essex





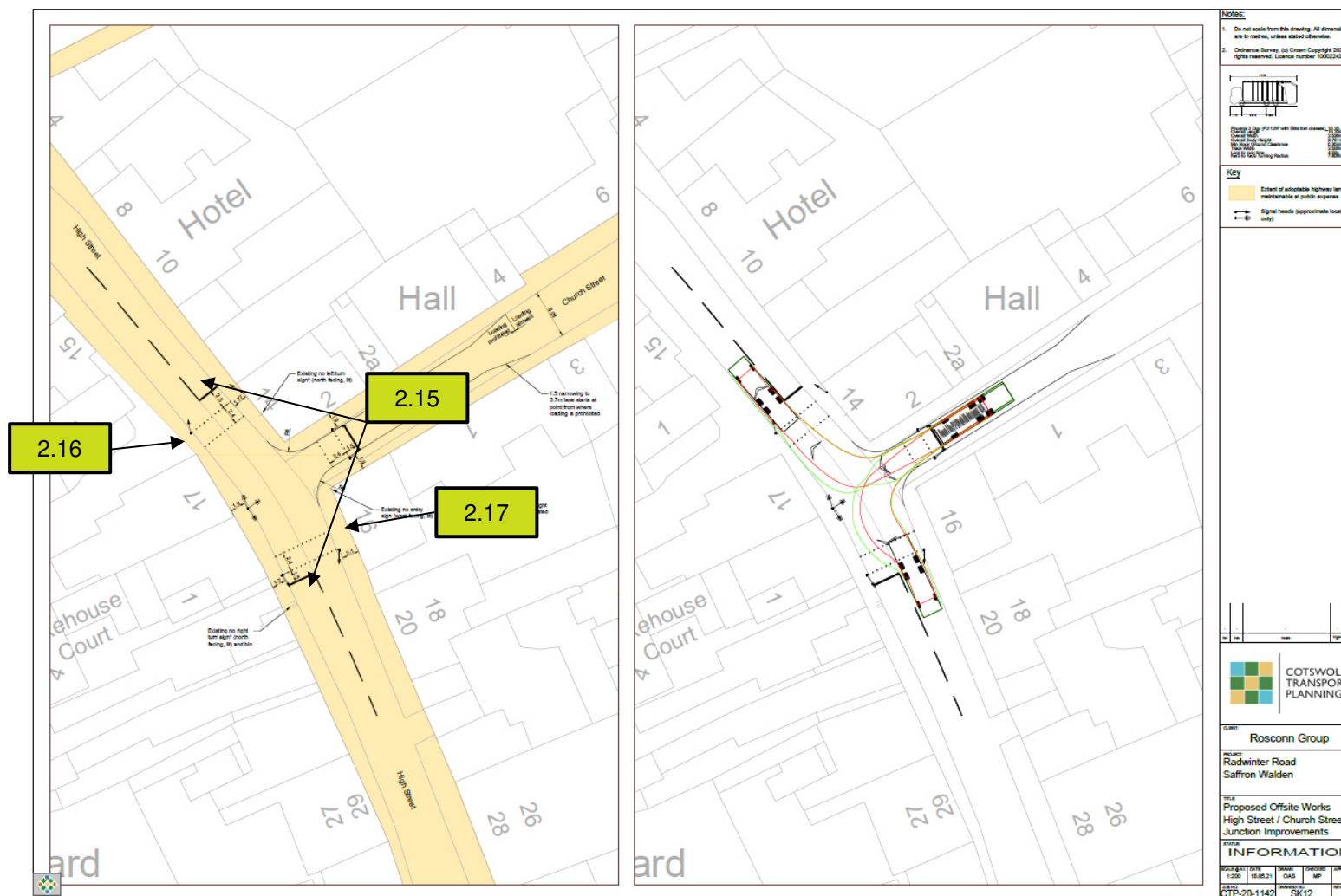
safer roads for everyone

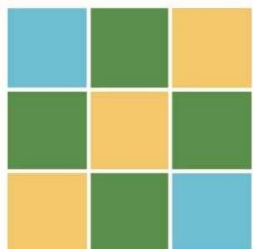
Client: Cotswold Transport Planning Ltd (Rosconn Strategic Land Ltd)
Scheme: Land South of Radwinter Road (East of Griffin Place), Saffron Walden, Essex



Client: Cotswold Transport Planning Ltd (Rosconn Strategic Land Ltd)

Scheme: Land South of Radwinter Road (East of Griffin Place), Saffron Walden, Essex





COTSWOLD
TRANSPORT
PLANNING

DESIGNERS RESPONSE TO STAGE 1 ROAD SAFETY AUDIT

SCHEME TITLE: **Land South of Radwinter Road (East of Griffin Place), Saffron Walden**
DRAWING NUMBER: **CTP-20-142 SK01 Rev C, CTP-20-1142
SK10, CTP-20-1142 SK11, CTP-20-1142 SK12**

Designers Response Completed by: Chris Elliott

Signature:

Date: January 2021

Paragraph Number	Problem	Accepted / Not Accepted	Recommendation	Designer's Response
Radwinter Road- Development Access				
2.1	<p>Location – Radwinter Road – pedestrian crossing</p> <p>Summary: The island presents an inconspicuous hazard</p> <p>The proposed new pedestrian crossing is located within the national speed limit and outside of the existing street-lit area. It may not be conspicuous to approaching westbound drivers, who's vehicles could collide with the island, causing damage and loss of control.</p>	Accepted	The risk of collisions with the island should be mitigated, e.g. by extending the built-up area speed limit and street lighting to an appropriate point east of the proposed new refuge island and by providing illuminated or reflective bollards on the island.	<p>It has been agreed in principle with ECC Highways that the speed limit on Radwinter Road can be reduced to 40mph between Saffron Walden and Swards End, and it would be the intention to seek to extend the 30mph speed limit area further to the east to include the proposed site access and bus stops.</p> <p>In addition, lighting provision will be reviewed as part of the detailed design.</p>
2.2	<p>Location – Radwinter Road – eastbound bus stop</p> <p>Summary: Level difference presents a risk to bus boarders</p> <p>The existing footway on the north side of Radwinter Road, at the proposed location of the new bus stop, is significantly higher than the adjacent carriageway. Passengers attempting to board or alight from a bus may not be able to do so safely.</p>	Accepted	Footway levels and gradients should be adjusted to provide a safe boarding area.	Footway levels and gradients will be reviewed as part of the detailed design of the proposed works and any adjustments required to provide safe boarding and alighting of buses will be incorporated into the design.

2.3	<p>Location – Radwinter Road – eastern tie-in</p> <p>Summary: Reduced forward visibility around bend</p> <p>Realignment of the southern kerb line around the bend at the eastern end of the scheme could reduce forward visibility around the bend for westbound drivers, which could lead to shunt collisions. Forward visibility is currently restricted by dense vegetation on the south side of the highway, which will be closer to the realigned carriageway edge.</p>	Accepted	<p>The design should ensure that adequate forward visibility around the bend is maintained, which may require some removal of existing vegetation.</p>	<p>A review of forward visibility has been undertaken and forward visibility will be provided in accordance with the existing achievable forward visibility. Existing vegetation will be trimmed back as required. This is shown on the revised site access drawing (CTP-20-1142-SK01 Rev D).</p>
2.4	<p>Location – Development access</p> <p>Summary: Gradient at junction may present a hazard</p> <p>There is an existing level difference between Radwinter Road and the proposed development land, which could result in a significant gradient in the development access road down to the junction. There is a risk of collisions involving vehicles approaching the junction along the development access road not being able to stop safely and emerging into the path of an approaching vehicle on the main road, especially in wet or icy weather.</p>	Accepted	<p>A level dwell area should be provided in the development access road at the approach to the junction.</p>	<p>As part of the detailed design of the proposed junction, the approach to Radwinter Road will be designed at a suitable gradient to meet ECC Highways design requirements.</p>

2.5	<p>Location – Radwinter Road – side road junctions</p> <p>Summary: No crossing facilities shown</p> <p>At this stage of the design, no dropped kerb crossing facilities are shown where the proposed new footway crosses existing side road junctions. In the absence of dropped kerbs, pedestrians with mobility impairment may not be able to cross the junctions safely.</p>	Accepted	<p>Dropped kerbs and appropriate tactile paving should be provided where the footway crosses side road junctions.</p>	<p>Dropped kerbs and tactile paving as requested have been shown on the revised site access drawing (CTP-20-1142-SK01 Rev D).</p>
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Radwinter Road / Thaxted Road Junction Improvements

2.6	<p>Location – Thaxted Road – relocated crossing</p> <p>Summary: Existing covers may disrupt tactile paving</p> <p>There are existing CATV access covers in the footway at both sides of the road at the proposed location of the pedestrian crossing, which could disrupt the tactile paving and present a risk that sight impaired pedestrians may not be able to cross safely.</p>	Accepted	<p>The crossing should be located clear of the existing access covers. If this is not practicable, recessed covers with inset tactile paving should be provided.</p>	<p>The position of access covers will be reviewed as part of the detailed design and relocated or replaced with inset covers as required to ensure adequate tactile paving is provided.</p>
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2.7	<p>Location – Thaxted Road and Chaters Hill – realigned junction radii</p> <p>Summary: Manhole covers in carriageway</p> <p>The proposed realignment of the NE and SE junction radii will result in manhole covers, which are currently located in the footway, being in the carriageway, where they could become loose, damaged or worn smooth by overriding vehicles and present a hazard, especially to turning two-wheeled vehicles.</p>	Accepted	Access chambers should be relocated clear of the carriageway.	The position of access chambers will be reviewed as part of the detailed design and relocated where possible.
2.8	<p>Location – Thaxted Road j/w Radwinter Road - SW corner of junction</p> <p>Summary: Hazardous signposts</p> <p>The existing local direction sign will straddle the proposed realigned footway, where the posts could present a hazard, especially to sight impaired pedestrians.</p>	Accepted	A cantilever mounting should be provided, with the post clear of the footway.	All signage at the junction that will be impacted by the proposed works will be reviewed as part of the detailed design. Where signage may straddle footways, cantilever mounting will be provided where possible.
2.9	<p>Location – Radwinter Road – NE side of junction</p> <p>Summary: Signal equipment may obstruct footway</p> <p>The reduced width of the footway may not be sufficient to accommodate signal posts with adequate clearance for pedestrians, who may be obliged to walk in the carriageway where they could be struck by passing vehicles.</p>	Accepted	The design should ensure that adequate residual passage width for pedestrians is maintained.	The design of the footway on the northern side of the junction has been reviewed to provide 2m clear footway width from the signal post to the back of the footway. ccccc

2.10	<p>Location – Radwinter Road j/w Thaxted Road</p> <p>Summary: Conflicting right turn movements</p> <p>The existing signal staging permits simultaneous opposing right turns from Radwinter Road into Thaxted Road and Chaters Hill. The proposed right turn pocket layout in the centre of the junction will oblige a driver turning right into Chaters Hill to manoeuvre around the nearside of an opposing right turning vehicle which could obstruct the view of an oncoming eastbound vehicle, which could result in head-on collisions.</p>	Partially Accepted	Signal staging should be adjusted to eliminate conflicting movements.	<p>The arrangement for right turning vehicles waiting within the centre of the junction is common at junctions where the signal staging permits simultaneous opposing right turns to maximise the capacity of the junction.</p> <p>Notwithstanding the above, the layout of the right turn arrangement within the centre of the junction has been reviewed and the right turn pocket widened to provide adequate visibility to oncoming vehicles for waiting right turners.</p> <p>This is shown on the revised layout (CTP-20-1142 SK10 Rev 10).</p> <p>It is not proposed to amend the signal staging as recommended as this would have a detrimental impact on junction capacity.</p>
2.11	<p>Location – Radwinter Road j/w Thaxted Road</p> <p>Summary: Inadequate illumination at night</p> <p>The Audit Team did not survey the site during darkness, but existing street lighting at the junction appears to be poor. The proposed altered junction layout and the absence of street lighting is likely to increase the risk of collisions at night.</p>	Accepted	The junction should be adequately illuminated at night.	The provision of lighting will be reviewed as part of the detailed design of the proposed works, however it is noted that this is an existing signal controlled junction.

Thaxted Road / Peaslands Road Junction Improvements				
2.12	<p>Location – Thaxted Road j/w Peaslands Road – all approaches to junction</p> <p>Summary: Stop lines too close to pedestrian crossings</p> <p>It is proposed to locate the stop lines 1.5m in advance of the pedestrian crossing studs, which presents the risk that a vehicle braking harshly or suddenly on the approach to the signals could overshoot the stop line and collide with a pedestrian using the crossing.</p>	Accepted	<p>The stop lines should be relocated further back from the crossing studs (3m is recommended). In addition, the design should specify a carriageway surface material with a high skidding resistance on all three approaches.</p>	<p>The stop lines have been relocated to provide 3m between the stop line and the crossing as shown on the revised layout drawing (CTP-20-1142 SK11 Rev A).</p> <p>The revised drawing also shows a high skidding resistance surface material on all approaches..</p>
2.13	<p>Location – Thaxted Road j/w Peaslands Road</p> <p>Summary: Ironwork in the carriageway presents a slip hazard</p> <p>There are several metal covers in the carriageway, which could be in the wheel track of vehicles accelerating, braking or turning through the junction and could present a risk of loss of control, especially to two-wheeled vehicles in wet or icy weather.</p>	Accepted	<p>Metal covers in the carriageway should be replaced with non-slip covers.</p>	<p>All covers within the carriageway will be reviewed as part of the detailed design and replaced with non-slip covers where required.</p>

2.14	<p>Location – Thaxted Road</p> <p>Summary: Potential collapse of high bank</p> <p>The proposed widening of the carriageway on the east side of Thaxted Road on the approach to the junction will cut into an existing earth bank at the boundary of adjacent private dwellings. Unless adequately retained, there is a risk that the earth bank could collapse across the footway and carriageway, resulting in injuries to pedestrians and a risk of collisions.</p>	Accepted	The detailed design should provide for adequate retention of the earth bank.	The earth bank will be reviewed as part of the detailed design and any retention required incorporated to ensure there is no risk of collapse across the footway and carriageway.
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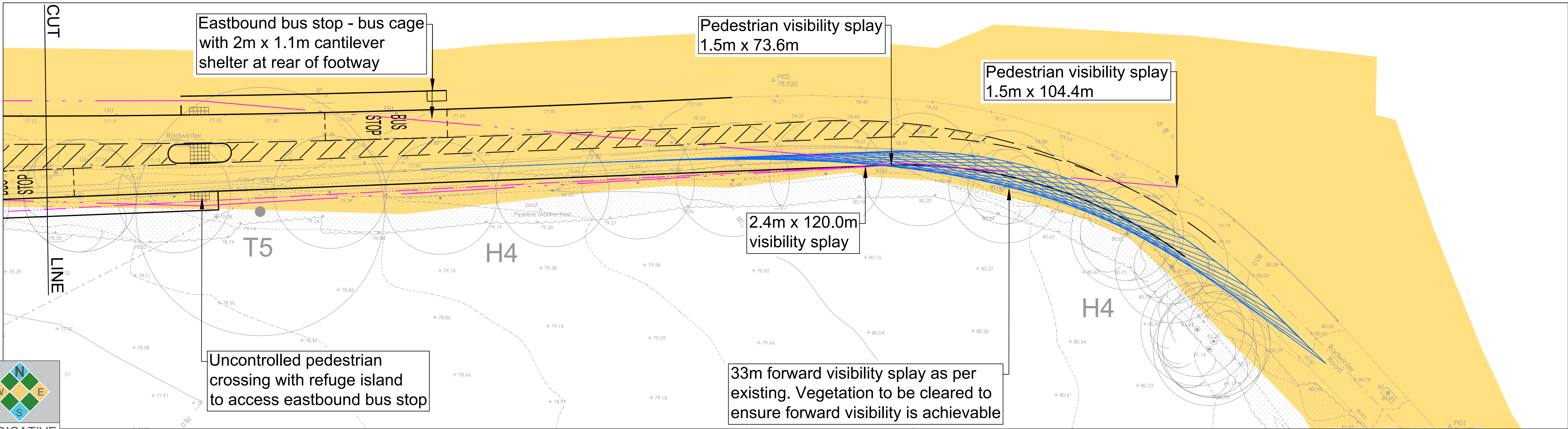
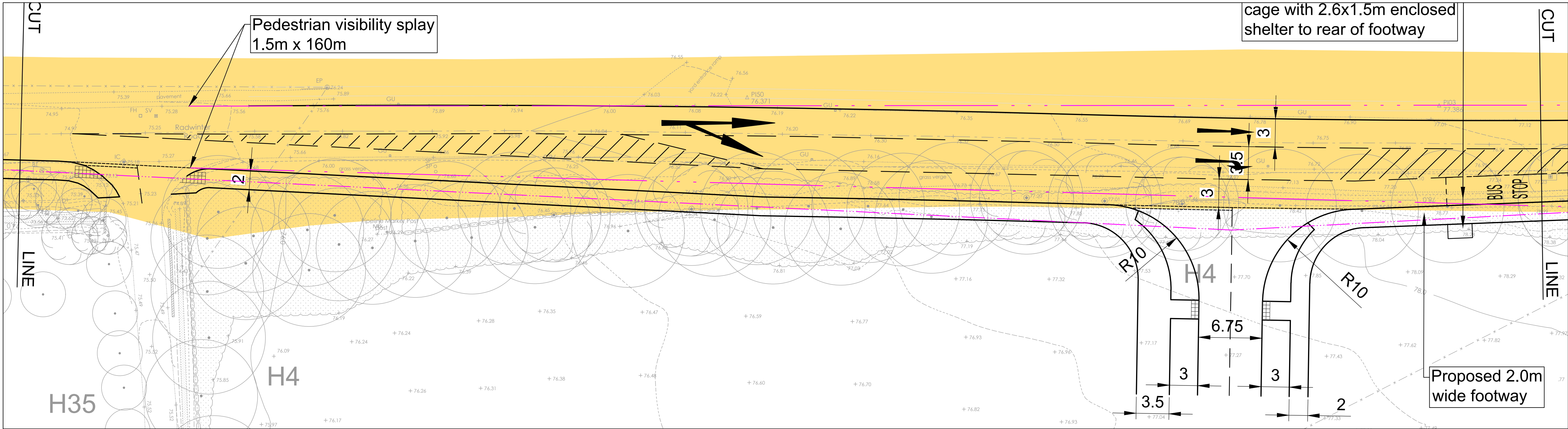
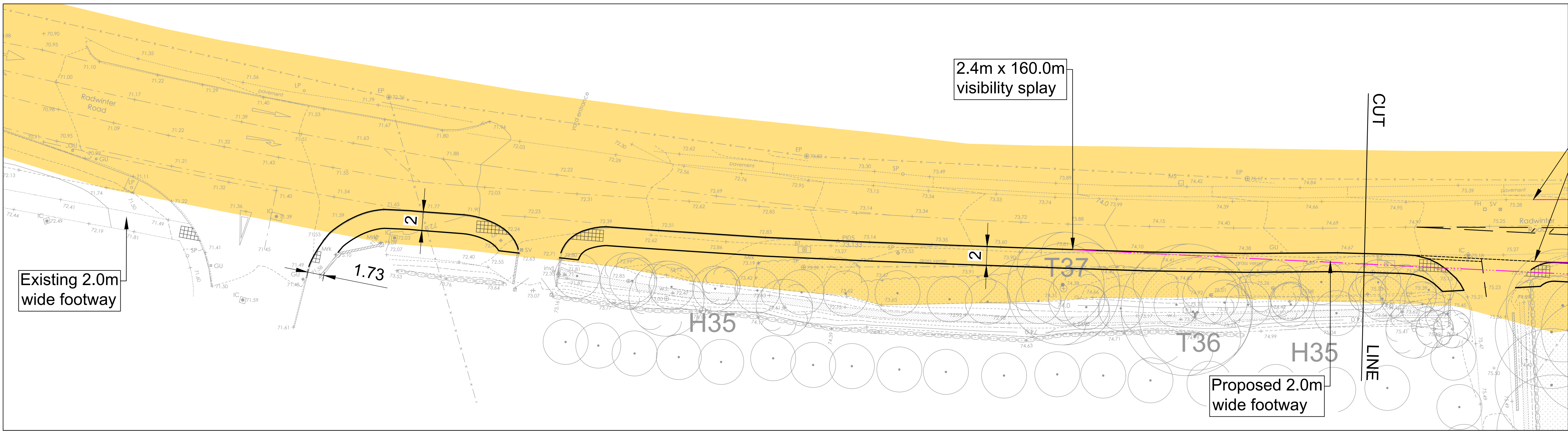
High Street / Church Street Junction Improvements

2.15	<p>Location – High Street j/w Church Street</p> <p>Summary: Obstructed junction inter-visibility zone</p> <p>The junction inter-visibility zone is compromised by existing buildings on both corners of Church Street. In the event of a signal failure, collisions could occur if drivers enter the junction without a clear view of other approaching vehicles.</p>	Accepted	The constraints of the site are acknowledged. The design should seek to maximise the JIZ whilst accommodating the swept path of essential vehicles.	<p>The visibility for vehicles exiting Church Street is currently severely limited and results in vehicles having to extend beyond the give way line to see opposing vehicles on High Street.</p> <p>The signalisation of the junction would address this issue by providing a separate signal stage for vehicles exiting Church Street.</p> <p>If a signal failure did occur the junction would likely default to a priority junction with vehicles on Church Street giving way to those on High Street as happens currently.</p> <p>The location of stoplines has been determined through vehicle swept path analysis. This would be reviewed further as part of the detailed design to determine if there are opportunities to maximise the junction inter-visibility zone further.</p>
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2.16	<p>Location – High Street – north side of junction</p> <p>Summary: pedestrian crossing conflicts with vehicle access</p> <p>The west side of the proposed pedestrian crossing coincides with a dropped kerb vehicle crossing into a private access (Raynhams). There is a risk of collisions between pedestrians using the crossing and vehicles turning into or out of the access; the extended dropped kerb could be confusing for sight impaired pedestrians; and tactile paving laid at the crossing point is likely to be overrun and damaged by turning vehicles.</p>	Accepted	The pedestrian crossing should be relocated clear of the vehicle access.	<p>It is not possible to relocate the pedestrian crossing clear of the vehicle access without also relocating the stopline, which would reduce the junction inter-visibility zone further.</p> <p>The pedestrian crossing has been removed from this approach to the junction. This is shown on the revised layout (Drawing No. CTP-20-1142 SK12 Rev A).</p> <p>Pedestrians would have controlled crossing facilities of the High Street on the southern arm of the junction. Currently there are no dedicated pedestrian crossing facilities at this junction.</p>
2.17	<p>Location – High Street – south side of junction</p> <p>Summary: pedestrian crossing conflicts with steps across footway</p> <p>The east side of the proposed pedestrian crossing coincides with a narrow section of footway adjacent to some stone steps outside the door of No.16 High Street. The stone steps could present a trip hazard to pedestrians using the crossing and could restrict the tactile paving layout. Together with the proposed signal post, they will restrict the passage width along the footway such that a pedestrian may be obliged to walk in the carriageway where they could be struck by a passing vehicle.</p>	Accepted	The pedestrian crossing and signal post should be relocated clear of the stone steps.	The position of the pedestrian crossing will be reviewed as part of the detailed design to seek to avoid conflict with the stone steps.



Appendix G: Revised Site Access Drawing



- Notes:**
1. Do not scale from this drawing. All dimensions are in metres, unless stated otherwise.
 2. Topographical Survey undertaken by Beacon Land Surveys dated January 2021.
 3. Drawing to be read in conjunction with all other drawings. Any discrepancies are to be reported to the engineer 5 working days in advance of undertaking any work.

Key

Extent of existing public highway from best fit overlay of Essex CC record drawing enquiry no. 2706257.

D	18.01.22	Amended to suit RSA 1	OAS	JA
C	27.04.21	Bus stops and crossing added. Access widths amended	MP	JA
B	08.03.21	Ghost Island redesigned based on recorded speeds	MP	JA
A	28.01.21	Footway along southern side Radwinter Road added	KPS	JA
Rev	Date	Details	Drawn by	Checked by



CLIENT:
Rosconn Group

PROJECT:
**Radwinter Road
Saffron Walden**

TITLE:
**Proposed Means of Access
Framework plan - Right Turn
Ghost Island Junction**

STATUS:
INFORMATION

SCALE @ A3: 1:500	DATE: 26.11.20	DRAWN: AB	CHECKED: CE	APPROVED: CE
JOB NO: CTP-20-1142	DRAWING NO: SK01	REVISION: D		



Appendix H: Development Traffic Flows for 'Without Link Road' Scenario

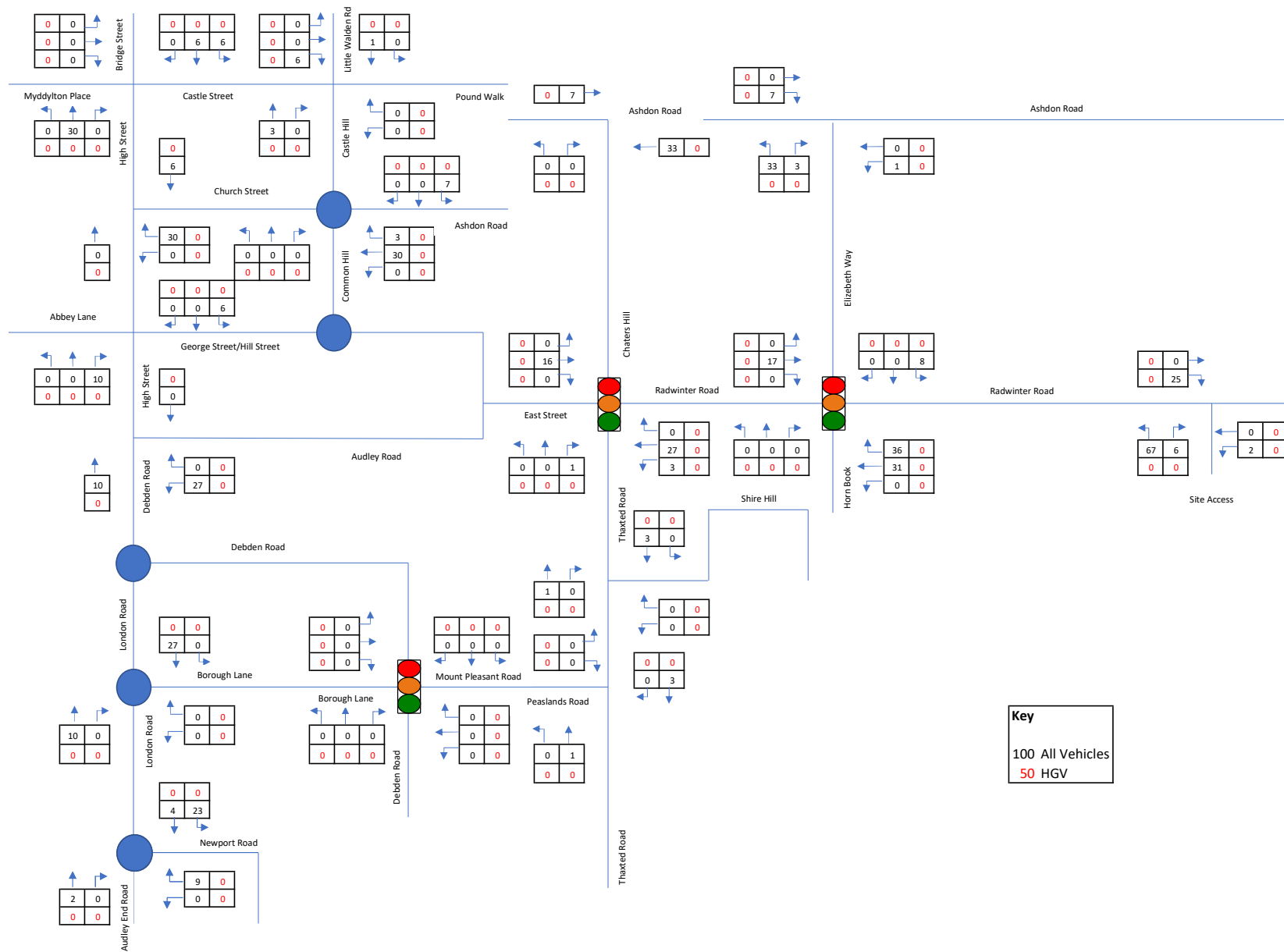


Figure H1: External Development Trips AM Peak Without Link Road

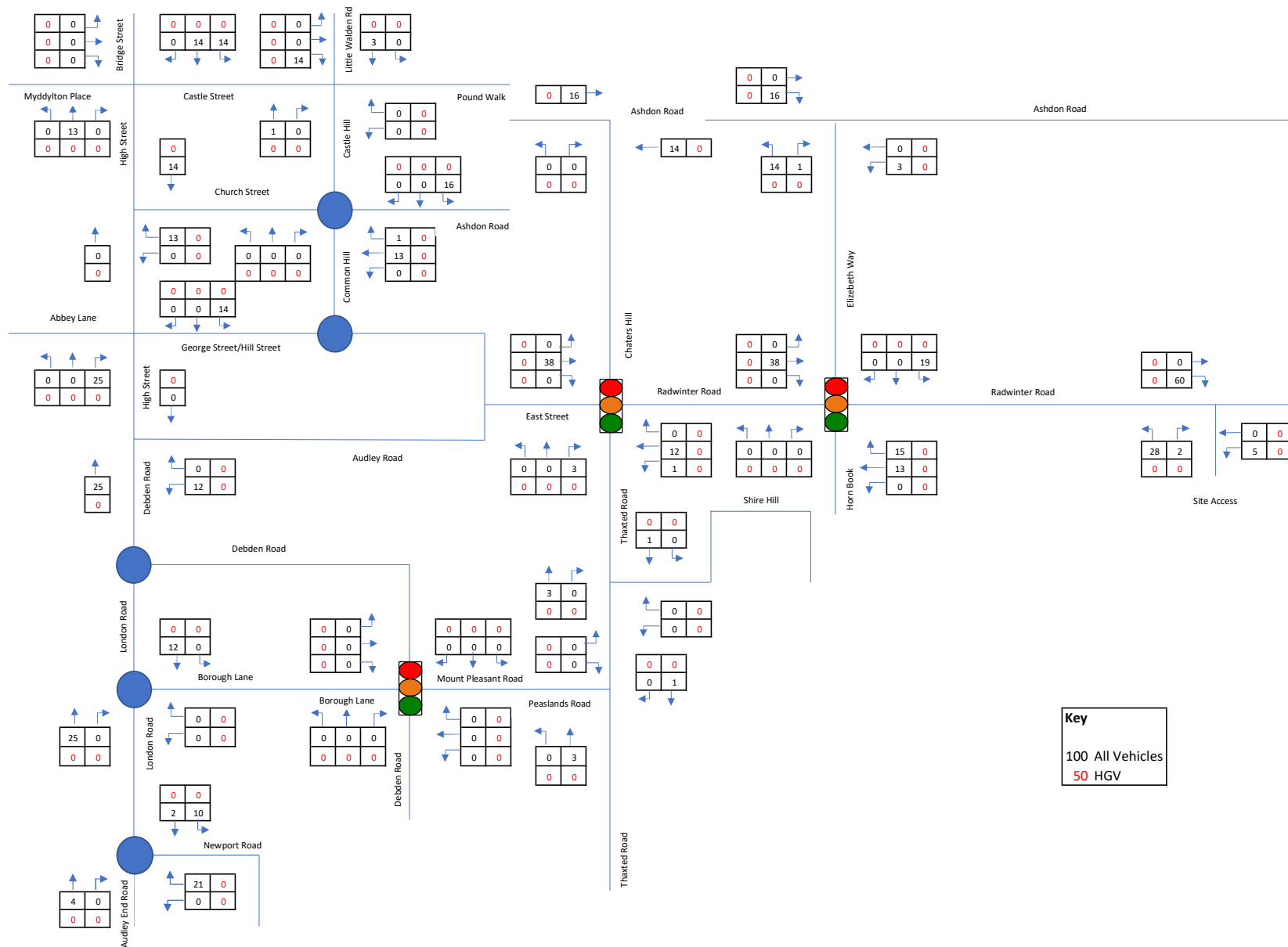


Figure H2: External Development Trips PM Peak Without Link Road

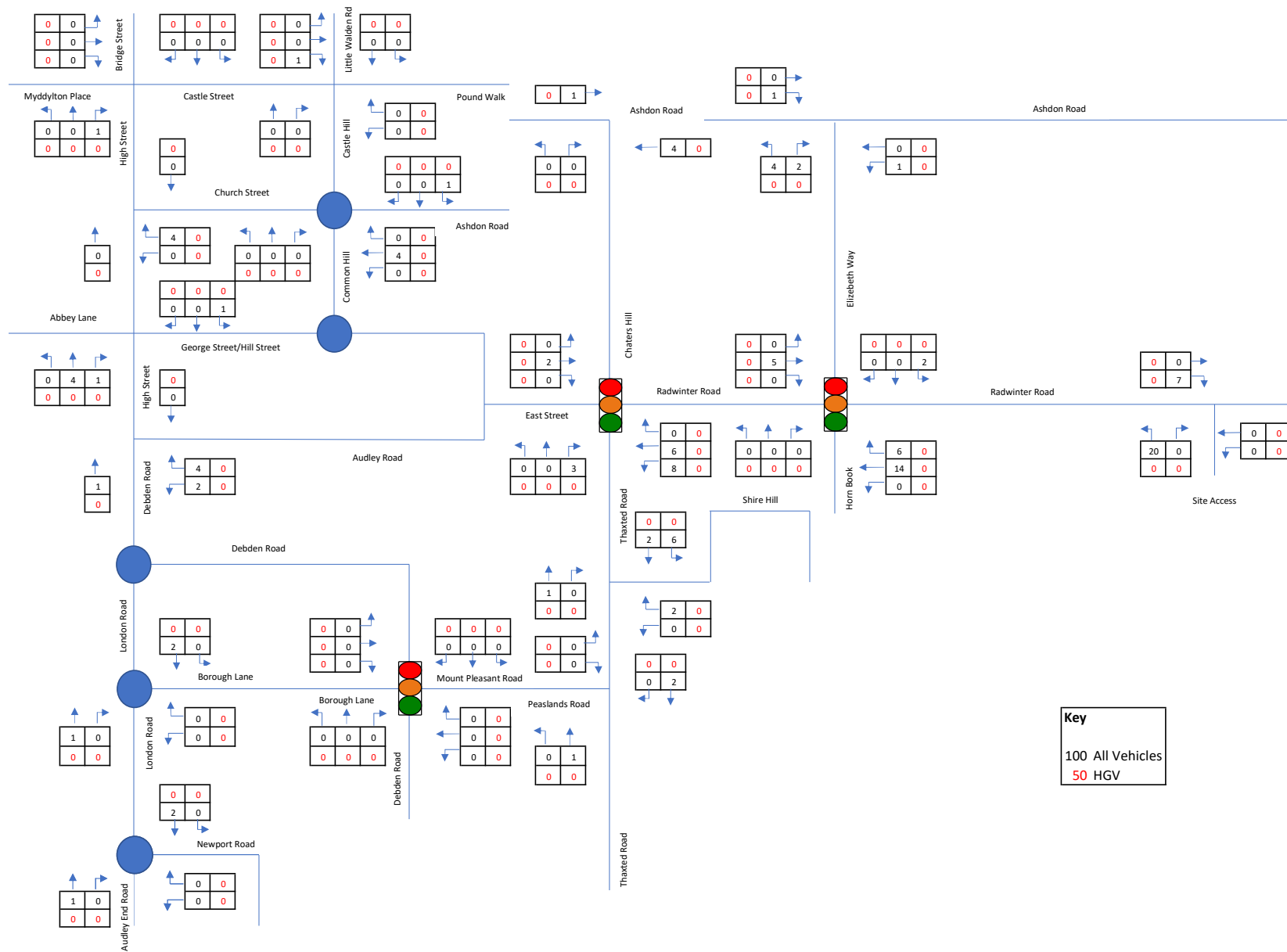


Figure H3: Internal Development Trips AM Peak Without Link Road

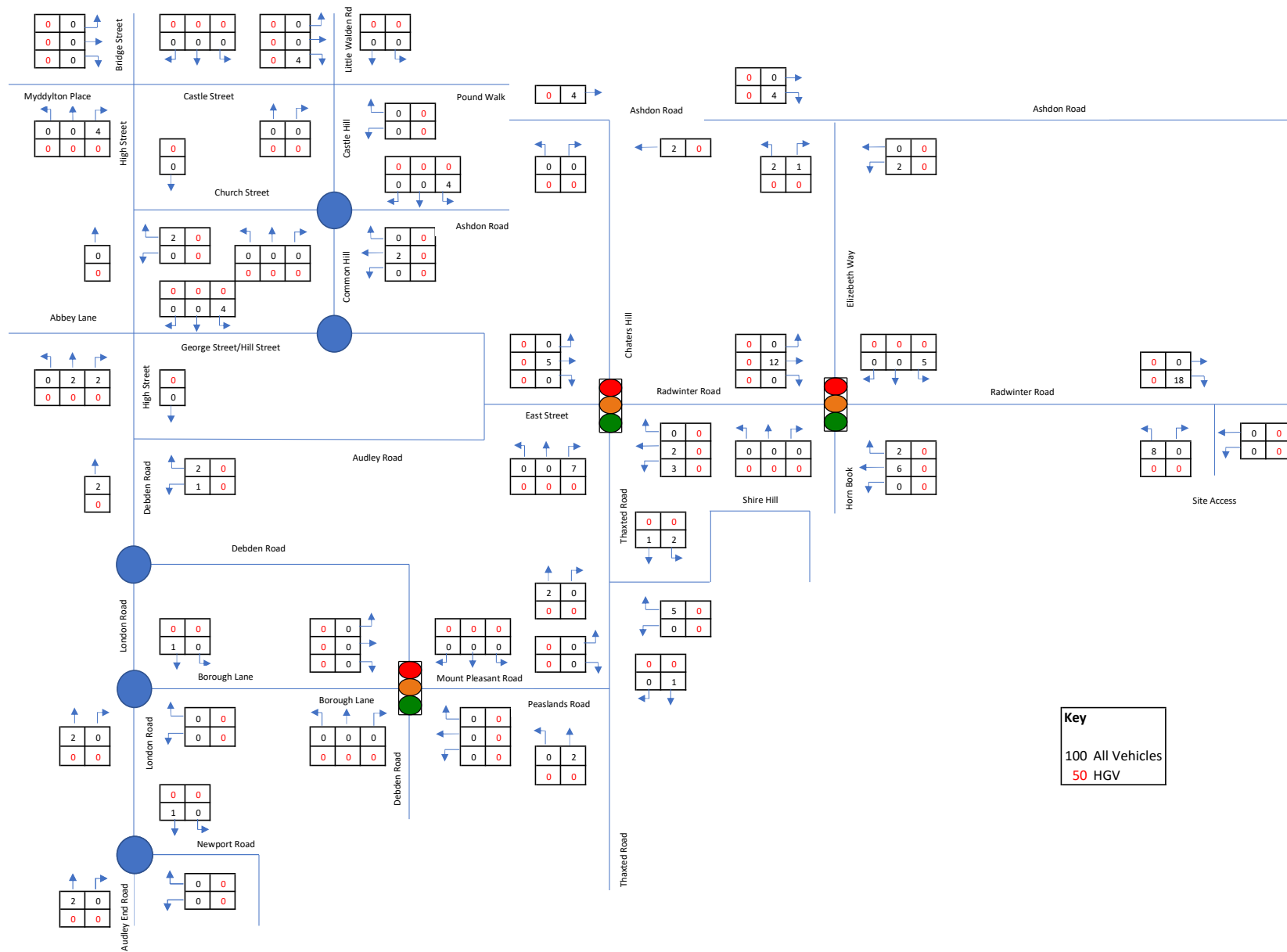


Figure H4: Internal Development Trips PM Peak Without Link Road



Appendix I: Geometric Parameters Used for Junction Modelling

Map Reference	Junction Name	Junction Type	Source of Geometric Parameters
1	Radwinter Road / Proposed Site Access	3-arm priority junction	CTP Drawing (CTP-20-1142 SK01 Rev C) Proposed Means of Access Framework Plan – Ghost Island Junction – Appendix H Land South of Radwinter Road (East of Griffin Place), Saffron Walden, Transport Assessment July 2021 (Planning Ref UTT/21/2509/OP)
2	Radwinter Road / Linden Access	3-arm priority junction	Planning Ref: UTT/13/3467/OP – Proposed Residential Development, Land off Radwinter Road, Saffron Walden – Appendix W of Transport Assessment prepared by JPP Consulting, December 2013
3	Radwinter Road / Elizabeth Road / Horn Brook	4-arm traffic signals	Traffic signal data including details of the phasing, staging and intergreen times provided by Essex Highways. Geometric parameters for input to LinSig, such as lane widths and turn radii, taken from Transport Assessments prepared by PBA and Iceni for Land East of Thaxted Road and Land North of Shire Hill Farm respectively.
4	Radwinter Road / Thaxted Road / East Street / Chaters Hill	Existing 4-arm traffic signals – Chaters Hill exit only	Traffic signal data including details of the phasing, staging and intergreen times provided by Essex Highways. Geometric parameters for input to LinSig, such as lane widths and turn radii, taken from Transport Assessments prepared by

Map Reference	Junction Name	Junction Type	Source of Geometric Parameters
			PBA and Iceni for Land East of Thaxted Road and Land North of Shire Hill Farm respectively.
		Proposed improvements to traffic signals	Appendix P (Drawing No. CTP-20-1142 SK10) Land South of Radwinter Road (East of Griffin Place), Saffron Walden, CTP Transport Assessment July 2021 (Planning Ref JUTT/21/2509/OP)
5	Thaxted Road / Consented Link Road	3-arm traffic signal junction	Traffic signal data including details of the phasing, staging and intergreen times provided by Essex Highways. Geometric parameters for input to LinSig, such as lane widths and turn radii, taken from Transport Assessment prepared by PBA for Land East of Thaxted Road
6	Thaxted Road / Peaslands Road	Existing 3-arm mini roundabout	Planning Ref: UTT/18/0824/OP – Land East of Thaxted Road, Saffron Walden – Appendix G of Transport Addendum, Link Road Assessment prepared by PBA, September 2018
		Proposed 3-arm traffic signals	Appendix Q (Drawing No. CTP-20-1142 SK11) Land South of Radwinter Road (East of Griffin Place), Saffron Walden, CTP Transport Assessment July 2021 (Planning Ref JUTT/21/2509/OP)

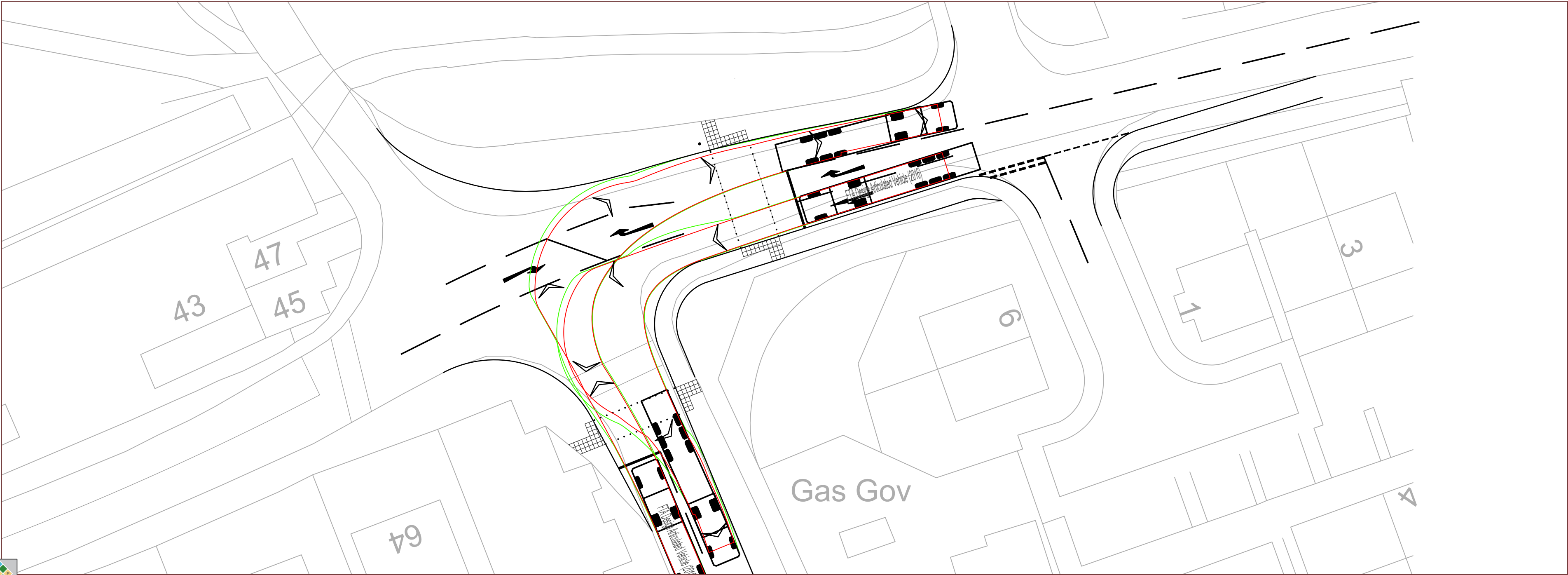
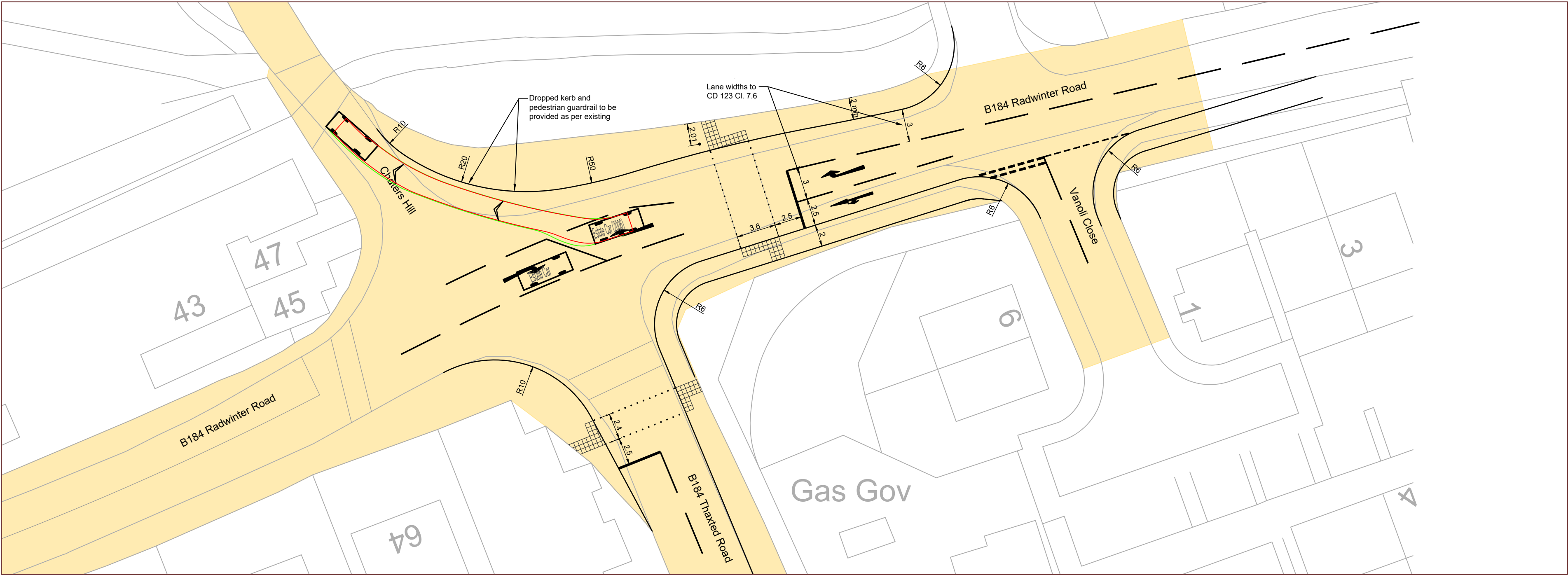
Map Reference	Junction Name	Junction Type	Source of Geometric Parameters
8 ¹	London Road / Borough Lane	3-arm mini roundabout	Planning Ref: UTT/17/2832/OP – Land North of Shire Hill Farm, Saffron Walden – Appendix A5 of Highway Impact Assessment prepared by Icen, April 2018
9	London Road / Audley End Road / Newport Road	3-arm mini roundabout	Planning Ref: UTT/18/0824/OP – Land East of Thaxted Road, Saffron Walden – Appendix G of Transport Addendum, Link Road Assessment prepared by PBA, September 2018
12	High Street / George Street / Abbey Lane	4-arm traffic signals – George Street & Abbey Lane exits only	Traffic signal data including details of the phasing, staging and intergreen times provided by Essex Highways. Geometric parameters for input to LinSig, such as lane widths and turn radii, taken from Transport Assessments prepared by PBA and Icen for Land East of Thaxted Road and Land North of Shire Hill Farm respectively.
13	High Street / Church Street	Existing 3-arm priority junction – Church Street entry only	Planning Ref: UTT/18/0824/OP – Land East of Thaxted Road, Saffron Walden – Appendix G of Transport Addendum, Link Road Assessment prepared by PBA, September 2018
		Proposed 3-arm traffic signal junction	Appendix R (Drawing No. CTP-20-1142 SK12) Land South of Radwinter Road (East of Griffin Place), Saffron Walden, CTP Transport Assessment

¹ Junction 8 & 9 have been modelled together to represent the potential for interaction between the two junctions

Map Reference	Junction Name	Junction Type	Source of Geometric Parameters
			July 2021 (Planning Ref JUTT/21/2509/OP)
14	High Street / Bridge Street / Castle Street / Myddylton Place	4-arm priority junction – Castle Street exit only	Planning Ref: UTT/18/0824/OP – Land East of Thaxted Road, Saffron Walden – Appendix G of Transport Addendum, Link Road Assessment prepared by PBA, September 2018
15	Church Street / Castle Hill / Ashdon Road / Common Hill	4-arm mine roundabout – Castle Hill exit only	Planning Ref: UTT/13/3467/OP – Proposed Residential Development, Land off Radwinter Road, Saffron Walden – Appendix E of Transport Assessment Addendum prepared by JPP Consulting, February 2014
17	Ashdon Road / Chaters Hill	3-arm priority junction – Chaters Hill entry only	Planning Ref: UTT/13/3467/OP – Proposed Residential Development, Land off Radwinter Road, Saffron Walden – Appendix E of Transport Assessment Addendum prepared by JPP Consulting, February 2014
18	Ashdon Road / Elizabeth Way	3-arm priority junction	Planning Ref: UTT/13/3467/OP – Proposed Residential Development, Land off Radwinter Road, Saffron Walden – Appendix E of Transport Assessment Addendum prepared by JPP Consulting, February 2014



Appendix J: Off-Site Mitigation – Updated Drawings



Notes:

- Do not scale from this drawing. All dimensions are in metres, unless stated otherwise.
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FTA Design Articulated Vehicle (2016)

Overall Length	16.480m
Overall Width	2.550m
Overall Body Height	3.870m
Min Body Ground Clearance	0.515m
Max Track Width	2.470m
Lock to lock time	3.00s
Kerb to Kerb Turning Radius	6.600m

Estate Car (2006)

Overall Length	4.710m
Overall Width	1.804m
Overall Body Height	1.442m
Min Body Ground Clearance	0.207m
Max Track Width	1.756m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	5.950m

Key

Extent of adoptable highway land maintainable at public expense

A	18.01.22	Amended to suit RSA 1	OAS	JA
Rev	Date	Details	Drawn by	Checked by

**COTSWOLD
TRANSPORT
PLANNING**

CLIENT:

Rosconn Group

PROJECT:

**Radwinter Road
Saffron Walden**

TITLE:

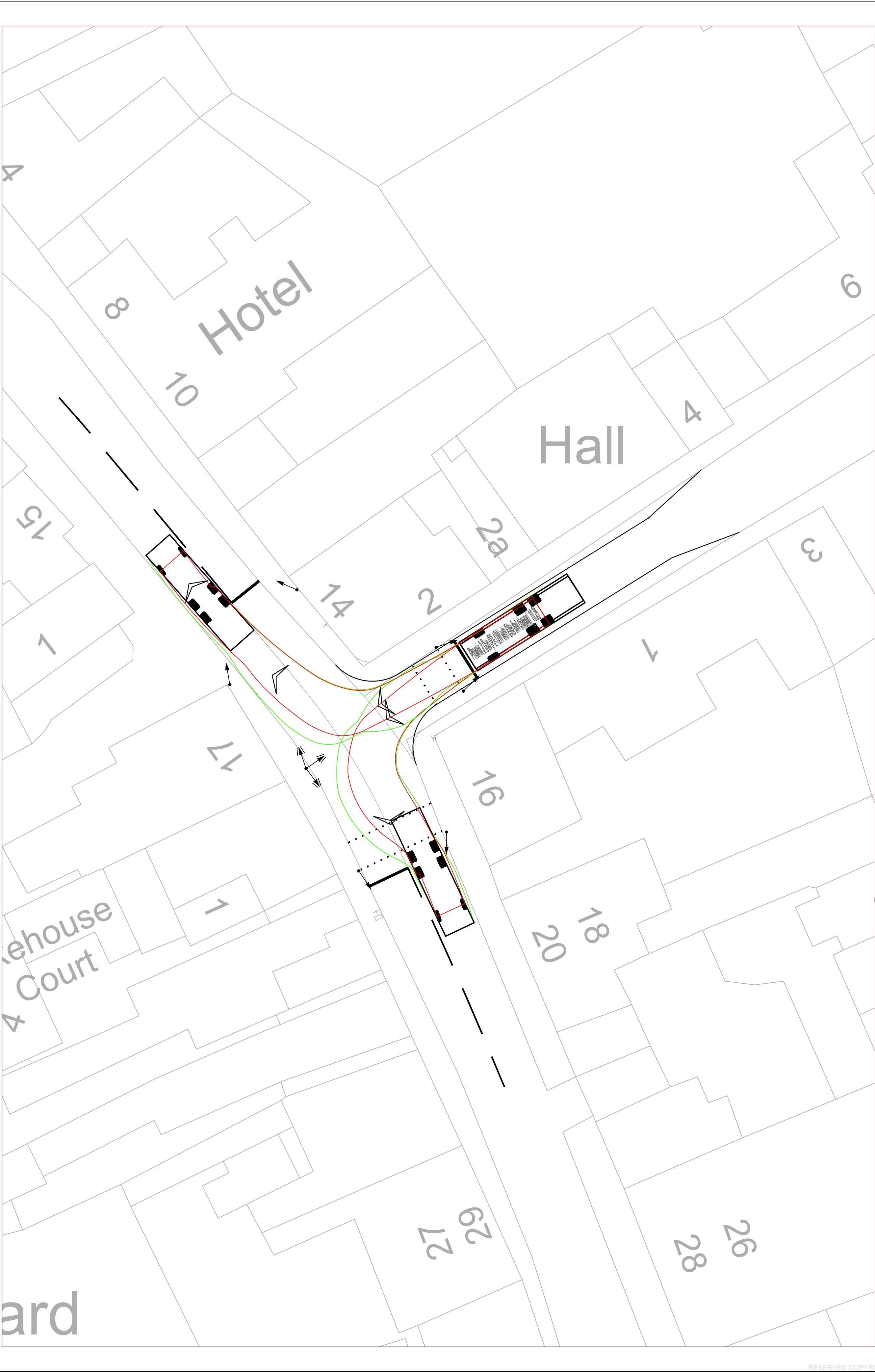
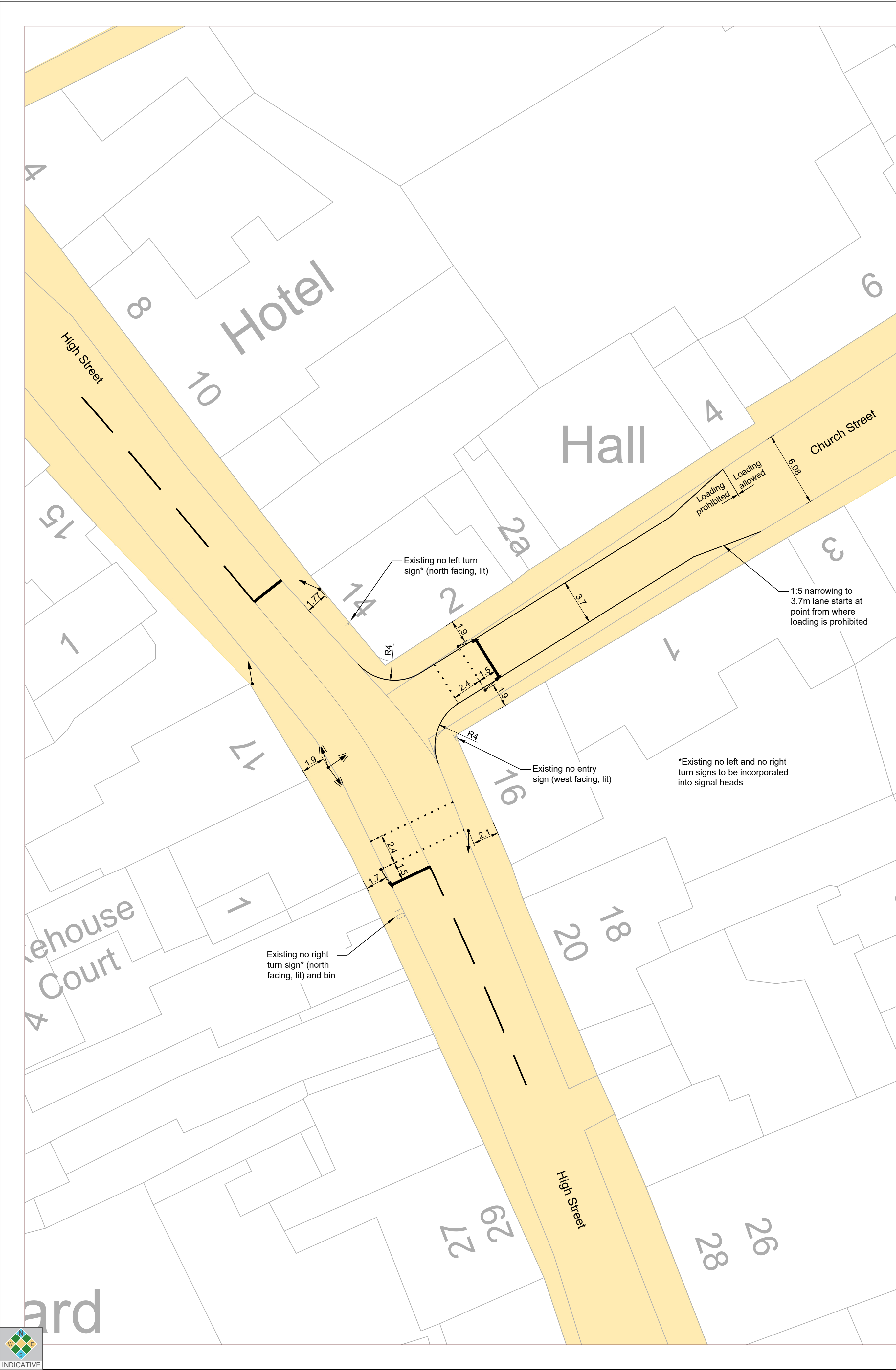
**Proposed Offsite Works
Radwinter Rd / Thaxted Rd
Junction Improvements**

STATUS:

INFORMATION

SCALE @ A1:	DATE:	DRAWN:	CHECKED:	APPROVED:
1:200	13.05.21	OAS	MP	CE
JOB NO:	DRAWING NO:	REVISION:		
CTP-20-1142	SK10	A		





Notes:

- Do not scale from this drawing. All dimensions are in metres, unless stated otherwise.
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Key

- Extent of adoptable highway land maintainable at public expense
- Signal heads (approximate location only)

Phoenix 2 Duo (P2-12W with Elite 6x4 chassis)

Overall Length	10.25m
Overall Width	2.530m
Overall Body Height	3.751m
Min Body Ground Clearance	0.304m
Track Width	2.500m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	7.600m

Information

Rev	Date	Details	Drawn By	Checked By
A	18.01.22	Amended to suit RSA 1	OAS	JA

COTSWOLD TRANSPORT PLANNING

CLIENT: Rosconn Group

PROJECT: Radwinter Road Saffron Walden

TITLE: Proposed Offsite Works High Street / Church Street Junction Improvements

STATUS: INFORMATION

SCALE @ A1:	DATE:	DRAWN:	CHECKED:	APPROVED:
1:200	18.05.21	OAS	MP	JA

JOB NO: CTP-20-1142 **DRAWING NO:** SK12 **REVISION:** A



Appendix K: Design Specification Against DMRB Requirements

		DMRB Requirements	CTP Design Specifications
Location+D8D11A3:D9A3:D9A3:D16A3:	Drawing No.		
Site Access	CTP-20-1142 SK01	<p>CD 109 Table 2.10: SSD for a design speed of 85kph is 160m and for 70kph is 120m</p> <p>CD 123 Cl. 3.8: The minimum distances used to locate point X and therefore generating the visibility splay shall be 2.4m for simple priority junctions</p> <p>CD 143 Table E/5.2: Visibility splay "x" distances for pedestrians should be an absolute minimum of 1.5m</p>	<p>Visibility splays of 2.4 x 160m and 2.4 x 120m at the site access</p> <p>Visibility splays of 1.5 x 160m to the west, and achievable visibility splays of 1.5 x 73.6m and 1.5 x 105.8m respectively at the pedestrian crossing.</p>
		CD 123 Cl. 6.8: At ghost island junctions on roads other than WS2+1 roads, the through lane widths in each direction shall be a minimum of 3.0 metres and a maximum of 3.65 metres wide, exclusive of hard strips.	Through lane widths in each direction of 3.0 metres
		CD 123 Cl. 6.10: The width of the right turning lanes for new junctions, excluding WS2+1, shall be a minimum of 3.0 metres. The width of the right turning lane at new and existing junctions should be 3.5 metres. On rural roads, with design speeds above 85 kph or where hard strips are present, the width of the right turning lane at new and existing junctions should not exceed 3.65 metres.	Right turn lane width of 3.5m
		CD 123 Table 6.1.1: Tapers for central islands on single carriageways with a design speed of 85kph is 1:25	1:25 taper for central ghost island
		CD 123 Table 5.22: Diverge taper and right turn lane lengths for a design speed of 85kph should be 15m and 55m respectively	Diverge taper length of 15m and right turn lane length of 55m
		CD 123 Cl. 6.4: The turning length shall be a minimum of 10 metres	10m turning length
Radwinter Rd/Thaxted Rd Junction	CTP-20-1142 SK10	CD 123 Cl. 7.6 (2) and 7.6.1: Straight ahead lane widths shall be a minimum of 2.5m at existing junctions where the 85th percentile approach speed exceeds 56kph (35mph) and/or it is necessary to make provision for HGVs. Also, straight ahead lanes with widths of 2.5m or less should only be used where the provision of them will allow for additional lane(s) to be provided on that particular arm.	Minimum 2.5m straight ahead lane widths
		CD 123 Cl. 7.7: Dedicated lanes for left or right turning traffic shall be a minimum of 3 metres wide	Minimum 3m right turn lane widths
Thaxted Rd/Peaslands Rd Junction	CTP-20-1142 SK11	CD 123 Cl. 7.6 (2) and 7.6.1: Straight ahead lane widths shall be a minimum of 2.5m at existing junctions where the 85th percentile approach speed exceeds 56kph (35mph) and/or it is necessary to make provision for HGVs. Also, straight ahead lanes with widths of 2.5m or less should only be used where the provision of them will allow for additional lane(s) to be provided on that particular arm.	Minimum 2.5m straight ahead lane widths
		CD 123 Cl. 7.7: Dedicated lanes for left or right turning traffic shall be a minimum of 3 metres wide	Minimum 3m right turn lane widths
		CD 123 Cl. 7.8: Dedicated lanes for left turning traffic shall be developed with tapers of 1 in 5	1 in 5 tapers provided on Thaxted Road
High St/Church St Junction	CTP-20-1142 SK12		