



A G E N D A

JOINT TRANSPORTATION BOARD

Monday 20 April 2015 at 6.00 pm
Council Chamber, Royal Tunbridge Wells, Kent TN1 1RS

Borough Members:	Councillors Rogers (Chairman), Backhouse, Bulman, Neve, Scott and Woodward
County Members:	Councillors King (Vice-Chairman), Davies, Hoare, Holden, Oakford and Scholes
Parish Member	Councillor Mackonochie
Quorum:	4 Members (2 KCC members and 2 TWBC members)

- 1 **Apologies:** Apologies for absence as reported at the meeting.
- 2 **Declaration of Interest (in accordance with the Members' Code of Conduct, Part 6):** If a Member has a prejudicial interest, this should be declared at the start of the meeting.

Personal interests may be declared at this point or alternatively can be declared at the time when the specific item is being discussed, if a Member wishes to speak on an item in which s/he has a personal interest.

Members in doubt about such a declaration are advised to contact the Legal Services Manager/Monitoring Officer before the date of the meeting.
- 3 **Notification of Visiting Members wishing to speak (in accordance with Cabinet Procedure Rule 5.3)** Members should indicate which item(s) they wish to speak on and the nature of their concern/question/request for clarification.
- 4 **To receive the Minutes** of the meeting dated 19 January 2015. (Pages 1 - 10)
- 5 **Tunbridge Wells Tracker System** Updated as at 9 April 2015. (Pages 11 - 16)
- 6 **Reports of Tunbridge Wells Borough Council**
 - (a) Waiting Restrictions Review, Tunbridge Wells and Rusthall Common (Pages 17 - 24)
 - (b) Review of Waiting Restrictions 2015 (Pages 25 - 26)
 - (c) Innovative Transport Solutions (Pages 27 - 40)

7 Reports of Kent County Council

- (a) Highway Drainage (Pages 41 - 54)
- (b) Update on LGF funded improvements to reduce congestion at the Yew Tree Road/London Road Junction & Speldhurst Road/St Johns Road Junction in Southborough (Pages 55 - 78)
- (c) Tunbridge Wells Highways Works Programme (Pages 79 - 92)
- (d) Highway Improvement Scheme Progress Report (Pages 93 - 98)
- (e) Petition requesting a pedestrian crossing or central refuge in Crescent Road, Royal Tunbridge Wells (Pages 99 - 100)

8 **Topics for Future Meetings** There can not be any substantial debate/discussion or any decision on any reports raised, but the agreement of the Board that the topic may come forward to the Board as a report to the next or future meeting would be required. Prior notice of the topic should be sent to the Chairman and Committee Administrator.

9 **Date of Next Meeting:** 20 July 2015, at 6.00pm

Cheryl Clark
Democratic Services Officer
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ROYAL TUNBRIDGE WELLS
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Notes on Procedure

- (1) A list of background papers appears at the end of each report, where appropriate, pursuant to the Local Government Act 1972, section 100D(i). Items marked * will be the subject of recommendations by Cabinet to full Council; in the case of other items, Cabinet may make the decision, subject to call-in (Overview and Scrutiny Procedure Rule 12).
- (2) Members seeking factual information about agenda items are requested to contact the appropriate Service Manager prior to the meeting.
- (3) Members of the public and other stakeholders are required to register with the Committee Section if they wish to speak on an agenda item at a meeting. Places are limited to a maximum of four speakers. The deadline for registering to speak is 4.00 pm the last working day before the meeting. Each speaker will be given a maximum of 3 minutes to address the Committee.
- (4) Please note that this meeting may be recorded or filmed by the Council for administrative purposes. Any other third party may also record or film meetings, unless exempt or confidential information is being considered, but are requested as a courtesy to others to give notice of this to the Committee Administrator before the meeting. The Council is not liable for any third party recordings.

Further details are available on the website (www.tunbridgewells.gov.uk) or from the Committee Section.

- ◇ If you require this information in large print, Braille, on audiotape or in any other format, please contact us on 01892 526121

- ◇ **Accessibility into and within the Town Hall - In response to the requirements of the Disability Discrimination Act 1995, the Council has provided the following features to overcome physical barriers to access.**

There is a wheelchair accessible lift by the main staircase, giving access to the first floor where the committee rooms are situated. There are a few steps leading to the Council Chamber itself but there is a platform chairlift in the foyer.

- ◇ **Hearing Loop System - The Council Chamber and all the Committee Rooms have been equipped with hearing induction loop systems. The Council Chamber also has a fully equipped audio-visual system.**

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JOINT TRANSPORTATION BOARD

MONDAY, 19 JANUARY 2015

MINUTES of the Joint Transportation Board held at the Council Chamber, Royal Tunbridge Wells, Kent TN1 1RS on Monday, 19 January 2015

PRESENT: **Borough Councillors** Backhouse, Bulman, Neve, Scott and Woodward
 County Councillors King (Vice-Chairman), Hoare, Holden, Oakford and Scholes
 Parish Councillor Mackonochie

OTHER MEMBERS PRESENT: Councillors Rankin, McDermott and Tompsett

OFFICERS: Earl Bourner (District Manager for Tunbridge Wells, Kent Highways & Transportation), David Candlin (Head of Economic Development), Steven Noad (Traffic Engineer, Kent Highways & Transportation) and Nick Peeters (Democratic Services Officer)

APOLOGIES: Councillor Nicholas Rogers and County Councillor John Davies

DECLARATION OF INTEREST

TB29/14 There were no declarations made by members at the meeting.

NOTIFICATION OF VISITING MEMBERS WISHING TO SPEAK (IN ACCORDANCE WITH CABINET PROCEDURE RULE 27.4)

TB30/14 No notifications were received.

TO RECEIVE THE MINUTES

TB31/14 Borough Councillor Neve asked that minute TB28/14 be amended to reflect that St Barnabas School was in **Quarry Road**, Tunbridge Wells.

RESOLVED: that, subject to the amendment above, the minutes of the previous meeting, dated 20 October 2014, be accepted as an accurate record of the meeting.

Matters arising:

Borough Councillor Neve referred to TB28/14 'Grosvenor Bridge repair schedule' (also included in item 5 on the agenda - Tracker System). Councillor Neve advised that the top of the bridge was again damaged.

At the Chairman's discretion, Borough Councillor Rankin was allowed to address the Board and she expressed the following views:

Councillor Rankin referred to minute TB22/14 which detailed the discussion at the last meeting on the Carr's Corner roundabout, Tunbridge Wells. Councillor Rankin highlighted the disappointment felt by many at the lack of prominence given to the signage advising traffic to slow down. She did not think its position on the roundabout made it particularly visible. Councillor Rankin noted that the sign displayed the figure of an elderly person. She added, however, that it was not just the elderly whose safety was at risk, but

all pedestrians who chose to cross at this point. Councillor Rankin considered the works carried out so far to be palliative measures and she questioned their effectiveness. Councillor Rankin felt that, as well as the particular issue of crossing at Carr's Corner, the wider issue of the size of vehicles travelling on the stretch of road leading to the roundabout and on into the centre of the town should be addressed. Councillor Rankin further noted that part of the roundabout had recently been damaged and that it was likely the damage had been caused by a large vehicle.

Borough Councillor Bulman endorsed the views expressed by Councillor Rankin. He did not think that, from either the perspective of traffic flow, or pedestrian safety, that a satisfactory solution had been reached and he felt the accident referred to by Councillor Rankin served to highlight the need for action.

Borough Councillor Backhouse had brought up the issue (highlighted to him by residents) of signage on the roundabout at previous meetings. He had also approached Kent County Council (KCC) and had been informed that the programmed work had been completed. Councillor Backhouse had been advised by residents that they wanted more visible, road based signage, closer to the roundabout.

KCC Highways Engineer, Steven Noad, advised the Board that he was happy to take comments from members back to KCC and look again at the issue. Mr Noad cautioned however, that any further work would have to be carried out using existing funds, of which there were very little. He also welcomed the views of the Town Forum. Mr Noad acknowledged members' concerns regarding the flow of traffic through the town centre, including large vehicles and asked for their thoughts' on alternative routes and how this would be achieved.

County Councillor Scholes said that, if the measures discussed were achievable, he would consider using his member highway fund for further improvements.

The Chairman, County Councillor King, asked that, in response to the Town Forum's question as to how it would feed back to KCC, a report be made available for the next meeting of the Board.

TUNBRIDGE WELLS TRACKER SYSTEM

TB32/14 The Board considered the updates on the Tunbridge Wells Tracker System as at 19 January 2015. The following additional comments were made:

1. St John's Road - Kent County Council (Highways District Manager), Earl Bourner, advised that Borough Councillor Scott had received the plans he had previously requested and the programme of works was due to start in 2015. Councillor Scott thanked KCC officers for the update that had eventually been received but asked for it to be noted that additional work needed to be done to the corner in question and that this should be reflected in the plans. Councillor Scott was concerned that this issue would not be addressed and asked that his views be reflected in further updates.
2. Longfield Road North Farm Industrial/Retail Park – Mr Bourner advised that work at the site was ongoing and any further questions would be taken back to the relevant KCC officer. Councillor Scott asked members

to note that the Borough Council's Urban Design Officer, Alan Legg, had experienced difficulties in engaging the various stakeholders who were responsible for providing the larger conduit needed for water features in North Farm. Councillor Scott felt there had been some foot dragging in this area and wanted to see the issue progressed. Mr Bourner agreed to feed Councillor Scott's comments back to the relevant KCC officer and report back to him directly. The Borough Council's Head of Economic Development, David Candlin, advised the Board that the signage had changed at North Farm to indicate that the completion date for works was now anticipated to be Summer 2015. He added that KCC had discovered some uncharted services, which had caused delays, however the County Council was working to get the programme back on track.

3. Borough Transport Strategy – Mr Candlin advised members that an offer had been received from KCC, to undertake further technical work and in particular around the A26 and A264, to strengthen the evidence base for the transport strategy. Mr Candlin further advised that the bid for £1 million funding had been sought through the 'local growth fund' and the investigative work KCC was offering to do should be welcomed as it would strengthen both this bid and the Transport Strategy itself. Mr Candlin further advised that County and Borough Council officers were meeting on-site to look at the additional work to be undertaken. Mr Candlin asked members to note however, that although the Borough Transport Strategy itself would be delayed as a result of the offer from KCC, the Borough Council was continuing to progress individual schemes.

Councillor Scott hoped that work would not be delayed, as he continued to receive complaints from residents in areas where roads were being heavily used by traffic, to bypass the North Farm works. Mr Candlin reiterated his earlier point, in that work was continuing and in particular, a scheme being progressed to look at the Pembury Road issue as an active work-stream. He added that this had been shortlisted by the Local Enterprise Partnership as one of the schemes going forward to round two of bidding. Mr Candlin further added that the Council was actively seeking solutions, rather than focusing solely on production of the Borough Transport Strategy, in its own right.

4. Identifying Schemes – Mr Bourner advised that the full report was to follow. However, there were additional comments within the Tracker System, which explained how: the capital funding budget was divided - via kilometre lengths of carriageways and footways per district; and the revenue budget – using kilometre lengths. Consideration of the number of customer enquiries received per year was also taken into account. Mr Bourner went on to notify members that he had recently received the list of over 30 sites where micro-surfacing or surface dressing was due to be undertaken in 2016. Mr Bourner highlighted a number of roads included in the list and advised that the full list could be made available for Board members.

Borough Councillor Bulman asked if, under 'distribution of resources', whether the full report would take the condition of roads into account. Councillor Bulman felt this point needed highlighting, as he asserted that the condition of roads in West Kent and Tunbridge Wells in particular, to be in a worse state than other parts of Kent. Mr Bourner advised that, from an operational point of view, the road condition was not a factor.

However, from the data collection survey, referred to in the Tracker System, the condition of the road would be included as part of the assessment. Mr Bourner added that the resources for road resurfacing was finite.

Borough Councillor Neve asked members to note that, he had raised the issue of the poor road conditions in Tunbridge Wells by comparison to other areas of the County, ten years previously. Councillor Bulman felt that input from local members should be included in the assessment. Mr Bourner advised that the views of local members were not currently part of the assessment but he would note comments made by Board members. The Chairman felt it was important that the views of the Board be taken into account and that resulting actions from those views be seen to take place.

5. White lining refreshment programme - Mr Bourner advised that a full report on white line refreshment was to follow. However, he could confirm that KCC was continuing to refresh white lines, when incidents of deterioration were reported and he confirmed that KCC had responded recently to a request for this work from the Borough Council. In response to a question from Councillor Neve, Mr Bourner confirmed that white 'dog bone' lines on dropped curbs were still included in the programme.

7. Redbrick Update – Mr Bourner advised that a follow-up report had not been produced and following rejection of KCC's previous report on the issue, it had been agreed that all future redbrick footways schemes, would be subject to a full consultation prior to a decision on the most appropriate materials. Mr Bourner added that the length of schemes (meterage) could reduce due to cost factors and additional methods of funding in these instances could be explored. Mr Bourner went on to advise that the recommendations in the original report would be adopted by the County Council and they had already been endorsed by the County Council Cabinet member for Environment and Highways, Councillor Brazier. Mr Bourner informed members that the County Council was adopting a common sense approach to the scheme and in the majority of instances redbricks footways would be replaced with like for like. However, there would be instances where only a small percentage of the footway would be redbrick and in these cases, the redbricks would be stored for later use and tarmac used as a replacement. Mr Bourner highlighted the impact of austerity measures on areas such as reactive maintenance.

Councillor Scott felt the retention of redbrick in all areas was more of a common-sense approach as the bricks lasted longer and he asked that Highways note the longevity of redbrick pavements in Tunbridge Wells, with little maintenance required. He added that a proportionate and appropriate amount of KCC's budget should be allocated to towards the Town's redbrick pavement. Councillor Scott referred to the Board's original wishes which were, not only that existing redbrick pavements be maintained, but that they be expanded to areas now tarmacked.

Councillor Neve supported the views expressed by Councillor Scott and added that the issue was not just about the cost, but also about quality and providing value for money, which he considered would be better provided by maintaining and reusing redbricks. Councillor Neve had been advised that Tunbridge Wells had an experienced team who could replace

bricks efficiently and make the process as cost effective as laying tarmac. Councillor Neve referred to Hilbert Road and Queens Road where a mixture of tarmac and redbrick allowed cars to park.

Mr Bourner reiterated that in most cases, bricks would be retained but there were areas, such as around tree roots and where cars parked on redbricks, that continued to cause problems. He further added that KCC would try its best to save redbrick footways areas, both in and outside of the conservation areas.

8. Street Lighting Review - Mr Bourner advised that a full review would be carried out in 2015 and that any borough members that had concerns should raise them directly with KCC. Borough Councillor Backhouse highlighted complaints he had received from Sherwood residents following criminal damage to vehicles as a result of the reduction in street lighting. Councillor Backhouse said the residents had not received a satisfactory response from KCC and he looked forward to positive feedback as a result of the review. Councillor Scott also highlighted a serious assault in Chandos Road where identification by witnesses had proved difficult as there was no street lighting.

Democratic Services Officer, Nick Peeters, provided members with an update on the petition for pedestrian crossings on Major York's Road and Langton Road which had been omitted from the tracker. Members were advised that feasibility, design and costing works would be undertaken during 2015/16 by KCC, as part of a Local Transport Plan bid and both schemes would go forward for investigation and design funding in the next round of bids. Members were asked to note that the number of schemes throughout Kent outstripped the level of funding available and that success could not be guaranteed.

RESOLVED: That the 'Tracker System' for monitoring the progress of the Joint Transportation Board recommendations be noted.

PETITION REQUESTING A PEDESTRIAN CROSSING OR CENTRAL REFUGE IN CRESCENT ROAD, ROYAL TUNBRIDGE WELLS

TB33/14 The Chairman, County Councillor King introduced the report which informed members of the receipt of two petitions by Kent County Council (KCC) that were organised by a parishioner from St Augustine's Church. The petitions, both paper and Internet based, contained a total of 1,027 responses and asked for a pedestrian-crossing or refuge in Crescent Road, to allow residents accessing the multi-story car park to cross the road safely.

Mr Gerard Garcia, a member of the St Augustine Parish Council, addressed the Board and expressed the following views:

- Up to 12,00 people visited the church at weekends and it had visitors during the week also. Visitors to the town also accessed Calverley Grounds from the car-park, via Crescent Road.
- The church parish was asking the Council for urgent assistance in providing a safe crossing or traffic calming measures for visitors to the church, from the public car-park opposite.

Agenda Item 4

- Drivers approached the corner often in excess of the 30mph speed limit, leaving pedestrians stranded in the middle of the road. Mr Garcia had been struck himself by a vehicle when trying to cross the road.
- The church parish was not asking the responsible authority for a costly solution, but that serious consideration be given to the issue of pedestrian safety. If it was decided that a pelican crossing was too expensive, the church would welcome alternative measures, that provided a refuge for pedestrians and assured safety.

At the Chairman's discretion, Borough Councillor Rankin addressed the Board and expressed the following views.

- The petition and concerns of the church users demonstrated how inappropriate the level and speed of traffic on the stretch of road was. There was inadequate provision for a pedestrians crossing at this point.
- A community existed in this part of town and consideration needed to be given to the impact of a major through road running through it.
- Large vehicles which were travelling on to other areas of the borough seemed to take precedent over pedestrians and there was a need to redress the balance by providing crossings along Crescent Road.

County Councillor Hoare, who had raised the issue at a previous meeting of the Board, gave some background to the concerns of the church parish and reminded members that the issue had been looked at in previous years. Councillor Hoare went on to say that St Augustine's was a large parish, with the church well attended; five masses were held on Sundays with baptisms and funerals throughout the week. Councillor Hoare added that, with this level of attendance next to a large arterial road with heavy traffic, a crossing was needed. Councillor Hoare also pointed out that the wider community would benefit from a safe crossing and he reiterated Mr Garcia's point, that visitors were often left stranded in the middle of Crescent Road when trying to access either the church, or Calverley Grounds.

Borough Councillor Bulman supported the proposals in the petition as he felt that, even at 30mph, the road was dangerous to cross. He also thought the issue needed to be considered within the context of Carr's Corner. He asked for consideration to be given to 20mph speed restriction zones on Crescent Road and whether the road was a suitable candidate for this type of scheme.

County Councillor Scholes felt there was a problem to be solved, as when crossing from the car-park side of the road, pedestrians were unsighted. He had also observed that vehicles were travelling at an inappropriate speed along the stretch of road and if suitable he would, in principal, look at his Member Highway fund to support a 20mph speed restriction zone.

Borough Councillor Neve asked Mr Garcia for clarification as to whether the provision of a central refuge solely, would be acceptable to the church parish. Mr Garcia said the parish understood the current economic conditions and although a central refuge would be acceptable, he asked the Council to be mindful of the potential technical difficulties that could arise from a refuge being sited near to two car-park entrances and exits. Following on from this, Councillor Neve supported further investigation into the provision of a central

refuge. Councillor Hoare also supported this proposal.

Councillor Scholes advised that, should he consider providing member highway funds to a scheme, he would need assurances that the provision of a central refuge would provide a safer environment for pedestrians and not add to current difficulties.

Borough Councillor Scott advised that there were a number of residents with disabilities from Cadogan Gardens who crossed Crescent Road and he also supported any proposals that made crossing the road safer.

KCC Highways Engineer, Stephen Noad, thanked Board members for their comments. Mr Noad felt there was potential for an investigations that included outstanding concerns over Carr's Corner and he asked that KCC be given an opportunity to provide a report to a future meeting of the Board. Mr Noad stressed that he did not want to commit to a particular course of action until the issue and available options had been looked at thoroughly. He went on to say that he did not want to elements introduced that caused undue risks to be taken by pedestrians, who currently, were taking great care when crossing. In response to Councillor Bulman's question regarding the introduction of a 20mph zone, Mr Noad advised that, again, he would like to look at the available options before committing to further actions.

Councillor Scholes asked that an indication of available options be provided before the Board's next meeting in order that an early opportunity to consider funding could be looked at.

The Chairman asked that a report be made available for the next meeting of the Board.

HIGHWAY WORKS PROGRAMME

TB34/14 The Chairman, County Councillor King, introduced the report which provided an update to Members on the identified highways schemes approved for construction in 2014/15.

Kent County Council (KCC) District Highways Manager, Earl Bourner, advised members that the report was for information only and welcomed comments from Board members.

Borough Councillor Neve referred to page 21 of the agenda and the work programmed for Ferndale. Councillor Neve said the work had started, the tarmac was in good order and so far overall, was satisfactory.

County Councillor Holden referred to recent road works in Cranbrook which had caused three months of disruption and had been harmful to businesses in the village. He said this had been followed by further work in Carriers Way which was ongoing and due to last for several months also. Councillor Holden had spoken to local businesses in Cranbrook who said they had not applied for compensation because they considered the process to be too convoluted. Councillor Holden had received a response from KCC Cabinet member for Environment and Highways, County Councillor Brazier, addressing Councillor Holden's concerns. Councillor Holden urged, however, that future road work schemes be coordinated to minimise the impact on the village and its businesses. Councillor Holden went on to referred to anecdotal evidence that suggested workers on the schemes were from outside the county and were

finishing earlier than normal to avoid traffic when returning home. Mr Bourner advised that the schemes referred to were not KCC works, but statutory works that had been undertaken through licence and with permit regulations.

Mr Bourner said the companies had specific time frames for undertaking the work and could be subject to fines should they overrun. However, the companies had the right to undertake the work and as programmed works, KCC would be aware in advance. Mr Bourner added that, in these types of programmed works, other roads would be used as diversions and therefore roads could often only be dealt with one at a time. Mr Bourner further advised that he would take any concerns to the road works team.

RESOLVED to note the report.

HIGHWAY IMPROVEMENT SCHEME - PROGRESS REPORT

TB35/14 The Chairman, County Councillor King, introduced the report which summarised the progress to date and anticipated progress over the next three months of all programmed highway improvements and those schemes that were expected to be included in Kent County Council's 2014-15 Capital Programme.

Kent County Council District Highways Manager, Earl Bourner, advised members that the report was for information only and welcomed comments from the Board.

Borough Council Neve referred to page 33 of the agenda and asked for confirmation as to which County Councillor was funding the work on Sandrock Road and what progress was being made on the schemes for St Barnabus and St James's School.

Borough Councillor Hoare advised that the work on St Barnabus school would be underway by May 2015. In response to the question of funding for the Sandrock Road scheme - although not in his division, Councillor Hoare had funded the scheme in response to concerns from residents within his constituency, whose children attended St James's School.

County Councillor Scholes asked the Board to note the difficulties he had experienced in trying to fund schemes such as the proposals for Cornford Lane, which were based on cost estimates provided by KCC. Councillor Scholes advised that the eventual costs of other schemes had been grossly overestimated in the first instance and this, along with the length of time it was taking schemes to come to fruition, had left him in the difficult position of having funds from 2013/2014 which were yet to be allocated.

Councillor King felt this was an issue that had effected other County members' highway funds and he urged all KCC members to enter into discussion and then make a formal approach to the KCC Director of Highways and the cabinet member for Environment and Highways. Councillor King asked that the results of the discussions be brought back to the next meeting.

RESOLVED to note the report.

TOPICS FOR FUTURE MEETINGS

TB36/14 Board members asked for the following topics to be considered for future meetings:

Borough Councillor Scott asked for his proposals for a Driverless Transport System (tabled at the meeting) to be considered at the next meeting. Councillor Neve went on to provide some background to the topic and advised members that he considered traffic and congestion to be the number one issue in Tunbridge Wells and the main source of complaint from residents. Councillor Scott said his proposals were not the only concept that could be looked at. However, depending on funding, it was a realistic idea that would use existing technology and that addressed the town's traffic issues.

County Councillor Hoare asked members to consider proposals for the reopening of the disused Tunbridge Wells West rail line and for its linking up to the Brighton Mainline 2 rail line as a topic for future meetings. Councillor Hoare considered the proposals to be a strategic solution to the town's congestion issues, however, the scheme was dependent on housing not being built on the disused line.

Borough Councillor Backhouse asked for the Board to consider the repair and upgrading of the Tunbridge Wells Variable Messaging System (VMS). Councillor Backhouse explained that the VMS provided drivers with information on vacancies in the town's car parks and was available as a phone app. Councillor Backhouse advised that Sevenoaks Borough Council had upgraded its own system and he wanted to see Tunbridge Wells's VMS brought up to at least the same standard as Sevenoaks.

Borough Council Neve asked that the condition of the grass verges on King George VI (Pigs) Hill be looked at. Councillor Neve said the continual parking on the verges by commercial and large vehicles had damaged them considerably and he asked alternative solutions be looked at.

Borough Councillor Woodward asked that, following a request from residents of Neville Court, a scheme for extending double yellow lines at the junction of Neville Park and Major York Road be considered. Councillor Woodward said that limited site lines made the current situation dangerous for residents egressing from Neville Park into fast moving traffic, as well as drivers travelling on Major York's Road.

The Chairman, County Councillor King, advised members that, due to the number of items raised, it was likely they would be considered over the next two meetings of the Board.

NOTE: The meeting concluded at 7.05 pm.

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TUNBRIDGE WELLS JOINT TRANSPORTATION BOARD TRACKER
Updated for 20 April 2015 Meeting

	Location/Subject	Issues/Proposals	Latest position	
1	<p><i>St. John's Road</i> <i>Proposal changed from: extension of southbound bus lane and northbound cycleway to: Improvements to the footway and the northbound bus stop and cycle lane alongside the recent developments opposite the bus garage and St John's Church</i></p>	<p><i>Design work progressed, supporting developer S106 funding.</i></p>	<p><i>As a result of work starting on North Farm scheme and commitment to minimise impact on the road network, KCC Lane Rental team has placed an embargo on road works on strategic routes through Tunbridge Wells including the A26. This is likely to push the implementation of this scheme back to the summer of 2015.</i></p> <p><i>Looking to take any window of opportunity to implement the scheme before summer of 2015.</i></p>	Vicki Hubert
2	<p><i>Longfield Road & North Farm Industrial/Retail Park</i></p>	<p><i>Ongoing issues related to congestion and recent developments.</i></p>	<p><i>The scheme is making good progress and has recently been night working so that the more intrusive activities are carried out when there are lighter traffic flows, thereby minimising disruption to residents and businesses during normal working hours. Construction on the new roundabout at Knights Park will commence in the next few weeks. Extensive preparatory works are being carried out for the construction of a new roundabout at Kings Standing Way and a gyratory system at Great Lodge. Work completion is anticipated for late summer.</i></p> <p><i>The Project Team held public exhibitions over two evenings at the end of February so residents and shoppers could talk to us about what we are doing and also have the opportunity to ask any questions. News letters have been circulated to businesses on North Farm, the Borough Council and a vast array of other stakeholders that have expressed their interest in being kept updated on progress. In addition, there is close liaison with the Highways Agency and Balfour Beatty regarding the A21 works.</i></p> <p><i>With regard to the proposed water features, a quotation has been provided to Mr Legg. He is currently going through the process of releasing the funds but the Board should be informed that the Project Manager for the Scheme became aware of a similar proposal had been put forward in another County which scored negatively on a safety audit. The following note was sent to Mr Legg and the Project</i></p>	Andy Moreton

TUNBRIDGE WELLS JOINT TRANSPORTATION BOARD TRACKER
Updated for 20 April 2015 Meeting

Manager awaits the considered response:

“Whilst you are undertaking your processes, I thought I should advise that I have become aware that another authority had similar aspirations to install fountains on roundabouts.

I gather that a safety audit was undertaken and although I’m not aware of the final outcome, concern was raised over the distraction factor to drivers and also, overspray falling on to the carriageway, particularly during the winter months. I am told that this had a negative effect on the proposal.

I think it would be advisable to find out what the end result was as my concern is that although funds are available, ducts would be installed at a not insignificant cost, only for the proposals to fall foul of any safety audit that would need to be undertaken at a later date.

I have the contact details for the Officer concerned and am happy to follow this up and report back before you commit any further but will await your confirmation on how you wish to proceed.”

TUNBRIDGE WELLS JOINT TRANSPORTATION BOARD TRACKER
Updated for 20 April 2015 Meeting

	Location/Subject	Issues/Proposals	Latest position	
3	<i>Borough Transportation Strategy</i>	<i>Progress on Borough Transportation Strategy</i>	<i>KCC has agreed to undertake further technical work to support the Transport Strategy and bids for Local Growth Funding for the A26 and A264. Following this, the draft final Strategy will be brought to July JTB.</i>	<i>David Candlin</i>
4	<i>Extension of double yellow lines at Neville Park and Major York's Road Junction</i>	<i>Highway safety/congestion concerns. Extension to double yellow lines required.</i>	<i>Proposal to be advertised – see separate report.</i>	<i>KCC/TWBC</i>
5	<i>How Schemes are identified</i>	<i>Update of Scheme works</i>	<p><i>Highway Improvement schemes are identified using various methods which are all linked to achieving our transport objectives set out in the Local Transport Plan (LTP) for Kent. Schemes are identified which aim to achieve our strategic goals which are Growth without Gridlock, A Safer and Healthier County, Supporting Independence, Tackling a Changing Climate and Enjoying Life in Kent.</i></p> <p><i>The main sources of information and evidence used in identifying these schemes are the local transport strategies for the Districts & Boroughs, casualty data supplied by Kent Police and correspondence from key stakeholder groups such as Councillors and the general public. All schemes must meet with our objectives and the criteria laid out in the LTP to achieve funding.</i></p> <p><i>Two main elements of funding are available for minor highway engineering improvements (schemes under £5 million). These are Casualty Reduction Measures (CRM's) & Local Transport Plan (LTP) improvements. Currently about £2 million a year are spent on Casualty Reduction Measures & Local Transport Plan improvements countywide.</i></p> <p><i>CRM's schemes are identified using the casualty data supplied by Kent Police. Each year a computer programme analyses every road and crash in Kent and highlights crash cluster sites where a number of crashes are occurring. These sites are then assessed by an engineer to ascertain whether there's a recurring reason why the crashes are happening and whether engineering measures can</i></p>	<i>KCC</i>

TUNBRIDGE WELLS JOINT TRANSPORTATION BOARD TRACKER
Updated for 20 April 2015 Meeting

prevent them reoccurring. If this is the case the site will be visited by a safety / design engineer & police officer to agree on the measures to be implemented. Around 60 schemes a year are implemented via this process.

Other schemes not directly related to reducing casualties are collated annually from the sources described above and assessed accordingly to their benefits as detailed in the LTP. The ones with the highest cost / benefit ratio according to this system are then implemented according to the available budget.

All the schemes identified using these processes are reported to the local Joint Transportation Boards as part of the annual work programmes. Some minor highway improvements that do not meet with the priorities set out in the LTP but are locally important can be funded via the Members Combined Grant. Full details of the processes above can be found on the following page on the County's Website www.kent.gov.uk/about-the-council/strategies-and-policies/transport-and-highways-policies/local-transport-plan.

Major schemes (over £5 million) will generally be funded directly by the Government or by contributions from developers or a combination of both. In the Growth Deal announced in July 2014, the Government allocated £442 million from the Local Growth Fund (LGF) to capital projects across the South East Local Enterprise Partnership (SELEP) area. Of this, almost £100 million has been allocated to 21 transport schemes in Kent.

TUNBRIDGE WELLS JOINT TRANSPORTATION BOARD TRACKER
Updated for 20 April 2015 Meeting

	Location/Subject	Issues/Proposals	Latest position	
6	Grass verges on King George V Hill	Verge damage due to cars parking on the verges	<p>A joint scheme is being designed by KCC and Tunbridge Wells. A site visit has taken place and costings in place for the works.</p> <p>3 options either:</p> <ul style="list-style-type: none"> i. remove the grass verges and create a hard standing area for parking to continue; ii. lay grasscrete as an alternative surface for parking; or iii. preserve the grass verges, to stop the parking. <p>The schemes will ensure the red bricks are protected.</p>	KCC
7	Street Lighting Review	A review of the street column switch off	<p>Full review underway to include both the lighting and the switch off.</p> <p>Further report to follow at a future meeting.</p>	KCC
8	Grosvenor Bridge Repairs	Schedule of repairs for Grosvenor Bridge, Tunbridge Wells	<p>See Appendix D to item 7c of this JTB 20 April 2015 for detailed update.</p> <p>Works programmed September 2015 for 4 months. Programme is subject to Network Rail consent regarding access.</p>	David Brenton
9	Petition to install pedestrian crossings in Major York's Road and Langton Road	A petition was submitted to KCC, via the JTB, requesting the installation of pedestrian crossings on Major York's Road and Langton Road.	<p>feasibility, design and costing works to be undertaken during 2015/16 by KCC, as part of a Local Transport Plan bid and both schemes to go forward for investigation and design funding in the next round of bids.</p> <p>Members are asked to note that the number of schemes throughout Kent outstrips the level of funding available and the success of the scheme cannot be guaranteed.</p>	Steven Noad

TUNBRIDGE WELLS JOINT TRANSPORTATION BOARD TRACKER
 Updated for 20 April 2015 Meeting

	Location/Subject	Issues/Proposals	Latest position	
10	<i>Carr's Corner/Crescent Road/Calverley Road</i>	<p><i>Original work to introduce a casualty reduction scheme was completed (see report item 7d Appendix A JTB 20 April 2015).</i></p> <p><i>Subsequent damage to the roundabout has highlighted a number of ongoing issues regarding signage.</i></p> <p><i>The Town Forum has asked that it be able to provide its views to KCC. The Vice-Chairman of JTB suggested that the Town Forum submit its views at the next meeting of the Board.</i></p>	<i>The Tunbridge Wells Town Forum to provide its views to KCC officers for consideration.</i>	<i>Steven Noad</i>

Waiting Restriction Review, Tunbridge Wells and Rusthall Common

A report by the Borough Council's Head of Communities and Wellbeing to the Tunbridge Wells Joint Transportation Board on 20 April 2015

Introduction

1. At the January 2014 meeting, members of this Board endorsed proposals for the introduction of new areas of time limited waiting in Castle Road and Mount Edgumbe Road.
2. The restriction included an extension of existing Zone A permit parking into part of the newly restricted area.
3. Included within the recommendation was a request for a review of the effectiveness of the new restrictions after 6 months of operation.
4. This report provides a summary of that review and proposes minor amendments to the restrictions as a consequence.

Background Information

5. Restrictions were imposed on a number of roads around and across Tunbridge Wells Common following a request from the Commons Conservators. The issues raised included hazards at junctions, congestion caused by long stretches of parked vehicles, damage to the edge of the Common and roadside parking continually occupied by long stay users to the detriment of visitors.
6. Following advertisement of proposals and consideration of objections, this Board endorsed the introduction of a range of restrictions at its January 2014 meeting. These included stretches of double yellow lines at critical locations and a 4 hour limit on waiting in Mount Edgumbe Road and part of Castle Road.
7. The new restrictions came into effect in June 2014 and, as per members wishes that we review the restriction, parking behaviour has been observed in the following months. This has included visits on a frequent basis to establish general levels of use, a period of more detailed survey during the late summer of 2014 and contact with residents.
8. In addition to observation of the roads where restrictions had been imposed, visits were also made to other roads where it was thought long stay parkers may migrate to. This was in an effort to determine whether there had been any significant adverse impact elsewhere.

Parking Review

9. Observation in Castle Road and Mount Edgcumbe Road after introduction of the new restrictions showed, much as expected, that it took several weeks before casual visitors realised that parking space was more widely available than it had been for many years. As the summer progressed, better use was being made of the space and detailed surveys were undertaken in late September to better understand the patterns of use. The appendix to this report summarises the findings during the last full week of September 2014.
10. A significant concern during the lead up to introduction of new restrictions was where those vehicles displaced would subsequently park. To that end, general observations were carried out in a number of roads prior to the changes and similar observations were carried out in subsequent months.
11. In addition to this, comments have been made by residents of roads where parking is thought to have become worse. It is apparent from what has been seen during visits and the comments received, that levels of on street long stay parking have increased most noticeably in the Molyneux Park Road/Earls Road/Court Road area. Restrictions are proposed as part of another report on this agenda which cover the more problematical instances of bad parking. In the longer term, the emerging parking strategy will tackle the issue in greater depth.
12. Other areas, such as Clarendon Way, appear to have had some increase in non-resident parking but parking on-street does have a seasonal element so the actual change may be minimal.

Other Comments

13. Residents of Castle Road have expressed concern about a number of issues following the change in parking restrictions. Most notably, they have stated that the restriction introduced does not reflect what they thought had been agreed at JTB.
14. An officer suggestion at the meeting to the effect that the whole of Castle Road could possibly be covered by the same restriction, as opposed to the proposed limited section, was taken as having been agreed. In fact, no Member moved any alteration and the proposals as originally drafted were endorsed at that time.
15. To make the requested change would involve re-drafting the traffic regulation order to provide for a resident exemption within the whole road. This is possible, but it is recommended that this be done as part of other planned changes to areas of permit parking in Zone A. These are proposed to be advertised during the spring.
16. Comments have also been made about increased speed and non compliance with the No Entry signs at the Mount Edgcumbe Road junction. Since the Borough has no powers in respect of either of these matters, they have been forwarded to KCC Highways.

17. The Commons Conservators have expressed satisfaction with the new restrictions, saying that damage to the edge of the Common can now be repaired and that the greater availability of parking has been of benefit to visitors.
18. Aside from complaints received from residents of roads where extra parking has occurred since the restrictions were imposed, one comment was made to the effect that Zone C permit holders now have greater difficulty parking in this area because Mount Edgumbe Road previously offered free all day parking – Zone C abuts Zone A at the London Road/Mount Edgumbe Road junction - with a specific request that the 4 hour limit only apply Monday to Friday. It is not, however, considered that such a change would be appropriate at the present time, but this point can be considered again when the parking strategy is agreed and establishes priorities for further changes to zones and permits.

Conclusion

19. The restrictions introduced last summer appear to have achieved the stated aims in that less damage is occurring to the Common, repairs can be made and there is a turnover of parking which better suits visitors to the area.
20. Adjustments to the restrictions requested by local residents can be accommodated.
21. It was always expected that some long stay parking would migrate to other areas and this has possibly happened. Proposals outlined in a separate report are aimed at dealing with the worst aspects, but it is anticipated that further restrictions may be necessary in the future. Adoption of a parking strategy will help to deal with the less urgent parking issues.

Recommendation

22. That the report be noted and an amendment to the permit parking arrangements for Castle Road be endorsed.

Contact Officer: Nick Baldwin 01892 526121

APPENDICES

- APPENDIX A** - Castle Road Survey Summary
- APPENDIX B** - Mount Edgumbe Road Survey Summary

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Castle Road Survey 23/09/14 - 29/09/14

12 surveys over 4 days - Tuesday, Thursday, Saturday and Monday

Survey only includes vehicles within 4 hour restriction

112 vehicles recorded

79 vehicles (70.5%) parked during 1 recorded period.

17 vehicles (15%) parked during 2 recorded periods - 11 of those consecutive

6 vehicles (5%) parked during 3 recorded periods - 3 of those consecutive

4 vehicles (3.5%) parked during 4 recorded periods - 1 of those consecutive

1 vehicle (1%) parked during 5 recorded periods - 2 different events

2 vehicles (2%) parked during 6 recorded periods - 1 of these consecutive

2 vehicles (2%) parked during 10 recorded periods - 1 x 2 events, 1 x 3 events

1 vehicle (1%) parked during all 12 recorded periods.

11 vehicles (10%) parked for periods in excess of 4 hours

10 vehicles (10%) parked for short periods on different days

9 vehicles with Zone A permits were recorded

2 of those 9 were residents of Castle Road

Average number of vehicles recorded was 16.25. High of 22, low of 12.

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Mount Edgcumbe Road Survey 23/09/14 - 29/09/14

12 surveys over 4 days - Tuesday, Thursday, Saturday and Monday

Survey only includes vehicles within 4 hour restriction

124 vehicles recorded

99 vehicles (80%) parked during 1 recorded period.

21 vehicles (17%) parked during 2 recorded periods - 11 of those consecutive

4 vehicles (2%) parked during 3 recorded periods - 3 of those consecutive

1 vehicle (1%) parked during 4 recorded periods - 1 of those consecutive

0 vehicles parked for periods in excess of 4 hours

6 vehicles (5%) parked for short periods on different days

No vehicles with Zone A permits were recorded

Average number of vehicles recorded was 13. High of 16, low of 11.

6 vehicles parked in both Castle Road and Mount Edgcumbe Road at least once during survey period. Of these 3 were recorded once in each road, 2 were recorded twice in one and once in the other and one was recorded 4 times in one and twice in the other. None of these were Zone A permit holders.

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Review of Waiting Restrictions 2015

A joint report by the County Council's Traffic Schemes and Member Highway Fund Manager and the Borough Council's Head of Communities and Wellbeing to the Tunbridge Wells Joint Transportation Board on 20 April 2015

SUMMARY

1. Following requests from members of the public for additional waiting restrictions, issues raised have been discussed between County and Borough officers with a number of new proposals being suggested.

Background/Introduction

2. Since the last review of waiting restrictions in 2014, a number of further requests have been made in respect of parking issues, predominantly in Tunbridge Wells.
3. The majority of the concerns being expressed relate to either safety or movement on the highway. As such, the responsibility for assessing problems and making proposals rests with the highway authority – KCC.
4. Since many of these issues are first raised with the Borough, and the Borough will ultimately undertake enforcement of any restrictions, there is an element of involvement by Borough staff when considering what action should be taken.

Proposals and Process

5. The locations involved, the nature of the problem and suggested actions are detailed below
 - **Major York's Road, TW** – Two issues have been raised, the first being vehicles parking near the junction with Nevill Park and obstructing visibility for drivers leaving the side road. The second issue concerns parking on the approach to the Langton Road junction where the carriageway becomes narrowed. There are fears that this creates a highway safety hazard. **Proposal** - extend double yellow lines from existing termination point past the Nevill Park junction by an additional 15m.
 - **Clarendon Way, TW** – proposals advertised last year received a high level of objection. The current intention, to deal with parking which obstructs through traffic and impacts on access to dwellings, is to scale this down to the minimum needed for highway safety purposes. **Proposal** – change restriction as requested.
 - **Molyneux Park Road, TW** – vehicles parked near the Earls Road junction restrict visibility. **Proposal** – extend existing double yellow lines to afford better visibility.
 - **High Brooms Road, TW** – vehicles parked near junction with Wolseley Road restrict visibility when leaving side road. **Proposal** – introduce double yellow lines at junction to provide improved visibility.

- **King George V Hill, TW** – vehicles parked at top of hill and near junction with Hilbert Road cause potential conflict points. **Proposal** – provide double yellow lines at bend in King George V Hill and around junction with Hilbert Road.
 - **Barden Road, Speldhurst** – Parish Council request that limited waiting be provided in vicinity of post office. **Proposal** – provide approximately two time limited waiting bays.
 - **Buckingham, Grecian, Norfolk and Arundel Road's, TW** – Following last year's proposals for Claremont Road, amendments are now proposed for these four residential streets which would see additional resident priority parking bays created through shortening of double yellow lines. **Proposal** – Reduce extent of double yellow lines in each street by approximately one vehicle length.
6. Concerns were also raised in respect of other roads but insufficient evidence of a problem was found and these have not been pursued at the present time. Amongst the roads which fall into that category are Frant Road, Sandhurst Road, Park Road, TW and Yew Tree Road, Southborough. The issues identified will continue to be monitored.
 7. Most of the above proposals have arisen from requests or suggestions made by members of the public and some of the proposals will be discussed in more detail with those concerned to ensure that their specific concerns are addressed before advertising any definitive proposals.
 8. Statutory notice will then be given and a period of consultation will follow. Any unresolvable objections to the proposals can then be referred back to this Board for a final decision.

Conclusions

9. The issues listed in this report have caused a number of complaints and relatively simple solutions are available. Properly detailed proposals can be advertised during the mid part of 2015 with any unresolvable objections being referred back to this Board at its next meeting in July.

RECOMMENDATION:

1. That the report be noted.

Contact Officers: Steven Noad, Kent County Council 03000418181; Nick Baldwin, Tunbridge Wells Borough Council 01892 526121

Innovative Transport Solutions

A report by the Borough Council's Head of Economic Development to the Joint transportation Board on 20 April 2015

SUMMARY

At the 19 January 2015 JTB meeting it was requested that a report about innovative transport solutions for Tunbridge Wells be brought to the next meeting for further discussion. The paper in Appendix A has been prepared by consultants DHA Planning. Further exploratory work on the more viable innovative options is required with a view to gathering a sound evidence base relating to passenger demand, capital and revenue costs, potential funding sources, operating models, and planning constraints to inform future decision-making.

Report status

For recommendation.

BACKGROUND/INTRODUCTION

At the 19 January JTB meeting, Cllr Scott presented a paper on driverless transport solutions for Tunbridge Wells. It was agreed that this would be a topic for further discussion at the April JTB meeting and a further paper on this was requested.

In response to this request, TWBC commissioned DHA Planning to prepare a discussion paper on innovative transport solutions in order to further the debate and assist in establishing a way forward for this work. The paper is attached as Appendix A to this report.

The paper sets out information about a number of innovative transport solutions. It questions whether Tunbridge Wells and its hinterland exhibits the necessary urban form, development density or travel behaviour to support rail or guideway-based transport solutions. It notes that the configuration of the town's highway network, around which its architectural and cultural heritage has developed, provides limited opportunities for the more innovative bus-based mass transit systems to be implemented to the extent required to achieve meaningful modal shift and congestion reduction. In addition, it points out that the ready availability of low cost or free long-stay car parking within close proximity of the town centre remains a barrier to delivering viable public transport solutions.

However, the paper acknowledges that the preparation of the Tunbridge Wells Borough Local Plan and Transport Strategy presents the Borough Council, its residents and stakeholders with the opportunity to reflect on these constraints and to consider the extent to which there is the desire and capability to overcome them in the medium to long term. A detailed appraisal of the more viable options available is required in order to gather a sound evidence base relating to passenger demand, capital and revenue costs, potential funding sources, operating models, and planning constraints to inform future decision-making.

The current draft Transport Strategy which will be presented to JTB in July has been reviewed and amended as a result of the consultation carried out in 2013/14 and further supporting technical work. The Strategy makes clear the timeframe it is seeking to address (to 2026) but highlights that schemes and opportunities not deliverable in this timeframe will continue to be reviewed. Specifically, the following is set out in the strategy:

...Additionally, proposals for innovative solutions for public and private transport (for example driverless cars and personal rapid transit systems) will be kept under review as potential schemes for the future.

CONCLUSION

TWBC Members are supportive of the work being undertaken by Cllr Scott and colleagues to explore options relating to personal rapid transit. However, there are not the staff or financial resources available to take this work forward at present at the Borough Council.

RECOMMENDATIONS

It is recommended that JTB:

1. Endorses the inclusion in the Borough Transport Strategy referring to the need to explore innovative transport solutions for the future (as outlined above);
2. Asks Cllr Scott and colleagues to continue their exploration of ULTRA and other driverless solutions and accepts that whilst TWBC Cabinet are supportive of this work, the Borough Council is unable to offer up staff or financial resource at the present time; and
3. Agrees that any future Local Plan Review and Transport Strategy Review, is accompanied by further technical work and support from KCC, to ensure that there is transport infrastructure to support future development within the Borough.

Contact Officer: Hilary Smith, Economic Development Manager, x3295 (01892 554433).

Name of Director

Jonathan MacDonald, Deputy Chief Executive

APPENDICES

APPENDIX A - Innovative Solutions to Traffic Congestion in Tunbridge Wells Discussion Document – DHA Planning

Innovative Solutions to Traffic Congestion in Tunbridge Wells Discussion Document

Background

The Tunbridge Wells Town Forum and Joint Transportation Board have each requested that Kent County Council (KCC) and Tunbridge Wells Borough Council (TWBC) carry out an assessment of driverless and/or innovative transport systems as a means of easing the impact of traffic congestion on the town. It was requested that primary consideration be given to the relief of the A264 Pembury Road between Tunbridge Wells Hospital and the town centre.

Members will be aware that the Tunbridge Wells Transport Strategy will be presented to the Joint Transportation Board for final consideration in July of this year. The Strategy proposes a number of interventions to address existing congestion problems in and around the urban area, as well as to mitigate the impact of the housing and economic growth proposed by the Borough Council's emerging Local Plan. This report does not seek to pre-empt the outcome of Members' debate on those issues but has instead been prepared to prompt a high-level discussion around the potential opportunities and constraints relating to new and emerging technology in the field of urban transport systems, which could form the basis of further study work over the coming months.

Transport is widely acknowledged as a vital ingredient of any credible strategy for the sustainable development of urban areas because of the fundamental role it plays in promoting economic development, quality of life and wellbeing. Although it has undisputedly transformed overall quality of life in many ways, concerns over the limitations and external impacts of private car transport (not least traffic congestion, environmental degradation and social exclusion) have for many years stimulated various initiatives designed to mitigate and/or reverse these impacts. These have mainly centred around promoting modal shift towards public and 'active' forms of transport by enhancing related infrastructure and services and restricting the availability of road space and car parking. However, these interventions have often proved unpopular, particularly during the recent economic downturn, when it was widely claimed that measures to restrict car use in towns and cities were exacerbating the impact of the recession on High Street traders.

During the early part of the 21st Century, when economic conditions were more favourable, the Government and local authorities invested heavily in new urban transport systems, including light rail and metro networks. These projects not only sought to tackle the environmental and social disbenefits of car travel but they were generally considered to be stylish additions to the urban realm that were popular amongst policy makers, planners, economic development professionals and the wider public alike.

Today, as local authorities throughout the UK prepare their spatial strategies for the next 15 to 20 years and levels of capital investment begin to grow once more, an important opportunity is presented to reconsider the case for promoting new and innovative forms of urban transport and to assess the role that new technology can play in solving the challenge of delivering sustainable development in a manner which is affordable, deliverable and broadly acceptable.

Driverless cars

The advent of 'autonomous' technology in vehicles has recently made national headlines and offers significant opportunities with regard to road safety, more efficient management of road space, and the reduction of emissions. It also raises the possibility that human error could be reduced or even eliminated as a contributory factor in road accidents and that associated efficiency gains could lead to lower costs for road users and less energy consumption. Vehicles with greater levels of autonomy could improve mobility for those unwilling or unable to drive, thereby enhancing their quality of life. However, there are evidently risks associated with this embryonic technology, including the practical considerations of safety, ensuring legal certainty for its users and the matter of social and public attitudes and acceptance.



Figure 1: A Google prototype driverless car (courtesy of Google and The Guardian)

The Government announced in its 2013 Autumn Statement that the Department for Transport (DfT) would conduct a review of the legislative and regulatory framework for developing and testing driverless cars in the UK. It also announced that £10 million would be awarded to towns or cities to develop testing grounds for driverless cars. The results of these trials will be used to inform policy development and direction and to understand public perception and the impact that such vehicles would have on society. In December 2014, it was announced that four cities had been selected to undertake formal trials that will last between 18 and 36 months from January 2015, namely:

- Greenwich;
- Milton Keynes and Coventry (working together on a single project); and
- Bristol.

The Greenwich research project brings together representatives from Imperial College, the University of Greenwich and the Transport Research Laboratory, with contributions from the Royal College of Art, General Motors, the AA and the RAC, and is aiming to commence its

first trial of automated shuttles conveying members of the public in May of this year. These shuttles will be tested on closed roads and in simulation facilities. The Greenwich project will also test cars that can drop off passengers, park themselves and return on command. In Milton Keynes and Coventry, a consortium consisting of Ford, Jaguar Land Rover and consultants Arup will test both self-driving cars on the road as well as self-driving pods within pedestrianised areas. This project will focus on car-to-car and car-to-road communication and the infrastructure required. In Bristol, the City Council, South Gloucestershire Council, AXA, Williams Advanced Engineering, Fusion Processing, the Centre for Transport and Society, the University of the West of England, the University of Bristol and the Bristol Robotics Laboratory will manage the trial. This will involve tests investigating legal and insurance issues, as well as public reaction to self-driving cars. The three projects will be linked by an external monitor who will coordinate all of the data arising from them.

These trials will yield rich and valuable information about the key barriers and opportunities relating to the widespread introduction of driverless vehicles to the streets of Britain. Indeed, similar trials have already been underway for several years in the laboratories of the global automotive and automation industries. Yet as the DfT has acknowledged, much more exhaustive testing will need to be undertaken before this technology can be given the go-ahead for general sale to the public. It will also be necessary to reconcile it with the long-accepted standards around driver testing and licensing, driver behaviour, vehicle standards, insurance and liability. Moreover, like other new technologies in the field of urban transportation, it poses fundamental questions about the existing and future design of towns and cities which may be less palatable in historic centres such as Tunbridge Wells than they are in more modern and evolving settlements such as Milton Keynes. The extent to which it can tackle existing peak time congestion problems is also questionable on the basis of the information currently available, as it does not represent a particularly efficient mass transit option.

Ultra Personal Rapid Transit

The Ultra Personal Rapid Transit (PRT) system is an automatic on-demand transport system that utilises small electric vehicles (or 'pods') that travel on dedicated, often elevated, guideways. Stations have level entry and are located off-line, which allows the vehicles to operate on a non-stop basis from origin to destination. The vehicles typically seat between six and eight passengers, are battery powered and based on conventional automotive technology. PRT offers low or no passenger waiting times, a more personal and private service than other forms of mass transit, predictable travel times and significant local environmental benefits. Where non-linear networks are implemented, the time penalty associated with interchange between routes – which can often be significant for conventional mass transit systems – can be significantly reduced or even eliminated.

PRT guideways are constructed with standardised dimensions, which allows for flexibility and variety of usage. They generally consist of open steel or a concrete beam and overhead rails of 1.4 metres in width. Stations can be small and are easily adaptable for disabled persons.

The world's first commercial application of Ultra at London Heathrow Airport Terminal 5 (connecting the business car park to the terminal) has been operational since 2011. It incorporates three stations, 21 vehicles and a total of 3.8 km of one-way guideway. To date,

it has carried over 700,000 passengers and in May 2013 it surpassed its 1 millionth autonomously driven mile.¹



Figure 2: Ultra PRT system at London Heathrow Terminal 5 (courtesy of Ultra Global PRT)

PRT is not a new concept. In fact, the first large-scale system – serving the separate campuses of the West Virginia University and the Morgantown Central Business District in the United States – opened in 1975. The system today consists of five stations and 8.7 lane miles of guideway and was originally operated by 71 vehicles. To date, the system has completed over 67 million passenger trips without injury and has made a significant contribution to managing congestion on the public roads that join the University's three campuses. It should be noted, however, that the system primarily serves the University's students and staff, with just 6.5% of the passengers surveyed in November 2008 falling outside of these user groups.²



Figure 3: PRT system at West Virginia University (courtesy of West Virginia University)

¹ See <http://www.ultraglobalprt.com/wheres-it-used/heathrow-t5/>

² See <http://assets.slate.wvu.edu/resources/1610/1404928039.pdf>

It is notable that there have been relatively few applications of PRT in the intervening period and that none of those systems that have been introduced has involved retrofitting the technology into historic urban environments, as would be necessary in the case of Tunbridge Wells. Indeed, having initially considered it as an option for inclusion in its transport strategy for the regeneration of land around Temple Meads Station, Bristol City Council recently dismissed it on these grounds; PRT having typically only been applied in controlled environments such as airports, shopping malls, university campuses, hospitals, business parks and tourist attractions, where it is often used to perform a park and ride function. Bristol City Council also cited the significant capital cost estimate of £60 million to £100 million, which would not be paid back for at least 30 years, the capacity limitations of PRT and the potential impact of its associated structures on the quality of the built environment.³ These concerns are considered to be equally applicable to Tunbridge Wells, in view of the rich and sensitive nature of the town's architecture and public realm, the limited opportunities to modify the geometry of existing highways to accommodate the necessary infrastructure, and the potentially limited demand for such a system of mass transit relative to its significant capital and operating costs.

Light Rail Transit

Light Rail Transit (LRT) has recently been adopted by a number of urban areas in the UK (including Croydon, Manchester, Birmingham, Nottingham, Sheffield and Edinburgh), as well as many more in Continental Europe, as a potential intermediate public transport solution. LRT offers a number of advantages over other public transport options, including:-

- Ability to penetrate town and city centres with generally acceptable infrastructure;
- Delivery of predictable, regular and fast journey times, providing a high capacity service on simple and easily understood routes;
- High level of reliability due to segregation from other traffic and priority at junctions;
- Accessible, well equipped and visible stops;
- High ride quality;
- Permanence of infrastructure, vehicles and operations, promoting confidence amongst individuals and businesses to make long-term locational and investment decisions that drive sustainable patronage growth.⁴

Like PRT however, LRT has a significant capital and operating cost and as such is generally only feasible in medium-sized cities where full metro systems are inappropriate. Whilst smaller cities and large towns may also have corridors where the application of LRT may be considered, such schemes are only likely to be practical in cases where there are significant tourist and/or retail attractions drawing large numbers of visitors, or disused railway routes which might reduce the cost of provision, for example.

The construction of the Edinburgh LRT, which was completed last year, also highlighted a number of significant issues with regard to the delivery of such projects in city centre environments. The total scheme outturn cost was double the initial estimate (amounting to some £375 million) and the duration of the construction phase was twice as long as originally

³ See <http://www.bristolpost.co.uk/Plug-pulled-automated-pods-ferrying-people-car/story-20830805-detail/story.html>

⁴ Luke, S., *Public Transport Mode Selection: A Review of International Practice*

anticipated. This led to widespread criticism from businesses regarding the impact on trade and is currently the subject of a judge-led inquiry.



Figure 4: Edinburgh Tram on Princes Street (courtesy of express.co.uk)

Bus Rapid Transit

Bus Rapid Transit (BRT) is a high-quality public transport system that seeks to deliver fast, reliable, comfortable, low-cost and user-friendly urban mobility. BRT systems incorporate many of the following elements, several of which can also make a valuable contribution to improving regular bus services:-

- Dedicated bus corridors with physical separation from other traffic;
- High-quality waiting facilities with pre-board ticketing and cycle storage;
- High-capacity, comfortable buses with low-emission engines;
- Bus priority at junctions, either as signal priority or physical avoidance;
- Integrated ticketing that enables transfers between public transport operators and modes;
- Real-time information displays of expected bus arrival times;
- A commitment by the Local Planning Authority(ies) to Public Transport Oriented Development, with higher land-use densities around BRT stops;
- Park and Ride facilities (see below);
- Sophisticated marketing that encompasses branding, positioning and advertising.



Figure 5: Fastrack BRT system in Kent Thameside (courtesy of go-fastrack.co.uk)

In summary, BRT offers higher speed, higher frequencies, better information and greater comfort relative to regular bus services and seeks to offer many of the advantages associated with rail-based systems at a much reduced cost by utilising new technologies.

The majority of UK-based applications of BRT have been in areas experiencing large-scale, high-density housing and/or employment growth, which has provided the necessary political impetus, the necessary Government and third-party funding contributions and the necessary land availability to enable successful implementation. Examples include the *Fastrack* network within Dartford and Gravesend (Thames Gateway Growth Area), the Cambridgeshire Guided Busway (London-Stansted-Cambridge-Peterborough Growth Area) and the Luton-Dunstable Busway (Milton Keynes / South Midlands Growth Area). In the case of the latter two schemes, it is notable that the BRT service operates largely over the route of disused railway lines.

There are relatively few examples of BRT being implemented in existing urban areas in isolation of major new development schemes and international experience suggests that it is unlikely to be successful in low-density suburban areas or cities with inadequate road widths to accommodate the required infrastructure.⁵ Indeed, a feasibility report prepared for Tunbridge Wells Borough Council (TWBC) by Jacobs in 2009 concluded that: “there would appear to be little scope for a large scale completely segregated ‘tracked’ or bus-way system”. However the report did note that: “the application of a high quality look and feel to a set of core routes will provide the spirit of a BRT system and may be the first phase in improving inter-urban links and access to key locations such as health and leisure facilities”.⁶

⁵ See <http://www.theguardian.com/cities/2014/aug/27/buses-future-of-urban-transport-brt-bus-rapid-transit>

⁶ Jacobs (for TWBC), *Conceptual Design of a Bus Rapid Transit and Park and Ride Network for the Town and Urban Area*, September 2009.



Figure 6: Luton-Dunstable Busway (courtesy of Luton Borough Council)

It should be noted that the urban bus network within Tunbridge Wells already benefits from a number of the key features of BRT outlined above, including bus priority lanes on the A26 corridor to the north of the town centre, an increasing number of low emission vehicles and improved waiting facilities, and more sophisticated marketing initiatives by the principal commercial bus operators, including the use of social media and mobile phone applications. Collectively, these have driven patronage increases in recent years against a background of falling bus passenger numbers elsewhere in the UK. Nevertheless, bus modal shares remain low overall and it is clear that more robust interventions would be required in order to achieve significantly higher bus ridership, including restrictions on long stay car parking within the town centre and more overt bus priority measures on radial routes (see below).

Park and Ride

There have been two formal Park and Ride feasibility studies for Tunbridge Wells undertaken in recent years, with the aim of testing the potential for this concept to tackle peak period traffic congestion on the A264 Pembury Road and A26 London Road corridors in particular.

The first, prepared by Jacobs in 2009, recommended a phased approach to the development of a Park and Ride network for the town. Phase 1 would involve the provision of the permitted 300 to 400 space site adjacent to the Tesco superstore at Pembury, which would be served by a peak-time only high-frequency dedicated bus service and an inter-peak service consisting of improvements to Route 6 (Tunbridge Wells to Maidstone via Paddock Wood). To assist the viability of this service, it was recommended that potentially 'radical' bus priority measures would be required on the A264 Pembury Road, which could include a single bus lane catering for tidal flows during the morning and evening peak hours, or a segregated bus lane in one direction.

Phase 2 would involve the expansion of the Park and Ride service to Knights Park and Tunbridge Wells Hospital, while Phase 3 would involve the development of a further Park and Ride site at Mabledon, on the A26 corridor, subject to the outcome of more detailed feasibility studies.



Figure 7: Canterbury Park and Ride service (courtesy of Flickr)

An updated Park and Ride feasibility study was undertaken by Amey in 2014 to inform the emerging Tunbridge Wells Transport Strategy.⁷ This specifically focused on the viability of the Pembury Tesco and Mabledon sites (the Knights Park site having been dropped), as well as the additional measures that would be required to deliver a successful Park and Ride operation.

The study reported that the current availability of relatively low cost car parking within Tunbridge Wells Town Centre and the extensive free parking available within a 10-15 minute walk of the town centre would act to significantly undermine any Park and Ride service. This would need to be addressed by reducing the number of free on-street parking spaces within walking distance of the town centre (for example, by introducing and/or extending Resident Parking Zones) and closing or restricting long-stay car parking within existing car parks.

The study also emphasised the importance of bus priority measures on Park and Ride corridors to ensure that the service can offer a competitive journey time relative to the car. The multi-modal transport modelling undertaken by Amey to inform the feasibility study suggested that a 33% reduction in bus journey time would be required to ensure the success of any Park and Ride service. This would entail extensive bus priority measures between the Pembury Tesco and Mabledon sites and the town centre, which – like many of the other interventions considered in this report – would require radical changes to the streetscape of the A264 and A26 corridors, with potentially significant implications in terms of capital cost and local amenity.

With regard to the proposed Park and Ride sites themselves, the study noted that whilst access to the Pembury Tesco site is relatively straightforward, a new signalised or roundabout junction would be needed to serve the Mabledon site, which would incur considerable cost as well as introducing additional delay to through traffic on the A26.

⁷ Amey (for KCC and TWBC), *Tunbridge Wells Park and Ride Feasibility Study*, June 2014.

Summary and Conclusion

Transport for London (TfL) has produced a broad assessment of the primary public transport based options for urban areas, which usefully summarises the analysis contained within this discussion document (see Table 1).

	Bus	BRT	Busway	Tram	Light Rail	Heavy Rail
Maximum Capacity	2,500 pphpd*	4,000 pphpd	6,000 pphpd	12,000 pphpd	18,000 pphpd	30,000+ pphpd
Capital cost per km	< £1m	£1m-£2m	£1m-£20m	£15m-£20m	£10m-£45m	£45m-£250m
Operating cost per passenger place km	3.8p-8.8p	2.5p-5.8p	2.5p-5p	1p-2.1p	1p-1.4p	1.5p-1.8p
Average speed	10-14km/hr	14-18km/hr	15-22km/hr	15-22km/hr	18-40km/hr	18-40km/hr
Reliability	Improving	Medium	Good	Medium to Good	Good	Very Good
Roadspace allocation	Mixed running with traffic	Mixed running and on-road bus lanes	Totally segregated alignment	Mixed running and on-road tram lanes	Largely segregated alignments	Totally segregated
Land use 'best fit'	Lower density dispersed urban form	Lower density dispersed urban form	High demand corridors in medium to low density areas	Higher densities or connecting denser urban centres	Higher densities or connecting denser urban centres	Very high density urban development

*Passengers per hour per direction

Table 1: Characteristics of Primary Public Transport Modes (courtesy of TfL)

Based on the above information, it is apparent that Tunbridge Wells and its hinterland does not currently exhibit the necessary urban form, development density or travel behaviour to support rail- or guideway-based transport solutions. Moreover, the configuration of the town's highway network, around which its acclaimed architectural and cultural heritage has developed, provides limited opportunities for the more innovative bus-based mass transit systems considered in this report to be implemented to the extent required to achieve meaningful modal shift and consequent congestion reduction. These issues are exacerbated at present by the ready availability of low cost or free long-stay car parking within close proximity of the town centre.

The preparation of the Tunbridge Wells Borough Local Plan and Transport Strategy nevertheless presents the Borough Council, its residents and stakeholders with the opportunity to reflect on these constraints and to consider the extent to which there is the desire and capability to overcome them in the medium term. Should it be decided that further study and development work will be progressed, then it is recommended that a more detailed appraisal of the more viable options available be commissioned, with a view to gathering a sound evidence base relating to passenger demand, capital and revenue costs, potential funding sources, operating models, and planning constraints to inform future decision-making.

Notwithstanding these considerations, it is apparent that there are numerous transport solutions that can be implemented more readily during the period of the Tunbridge Wells Transport Strategy to address peak period traffic congestion in and around the town. These will be outlined in detail in the Strategy itself when it is presented to the Joint Transportation Board in July. However, the following provides a brief summary of the work that is already ongoing in this respect.

Highway Capacity Enhancements

Members will be aware that KCC recently secured £1.75 million from the Single Local Growth Fund (SLGF) for a scheme of highway capacity improvements to the A26 / Yew Tree Road / Speldhurst Road junction in Southborough, which is due to commence later this year. The County Council has advised that there is likely to be sufficient funding remaining following the implementation of this scheme to undertake further capacity improvements to the A26 within Southborough and these are currently the subject of a feasibility study. In order to ensure that the Borough is best placed to secure additional Government funding in future competitive bidding rounds, KCC and TWBC, together with their respective transport consultants, are currently undertaking a further feasibility study to identify opportunities to enhance the operational capacity of the A264 Pembury Road corridor. These studies will focus on low-risk, targeted junction capacity improvements that can be readily delivered in the short-term, as well as more expansive schemes whose delivery may need to be phased over a longer time period in order to assemble the necessary land and funding and to reduce construction impacts. The emphasis will be on maximising the use of existing highway assets wherever possible, as well as ensuring that the needs of vulnerable road users and air quality issues are fully addressed and that the ability to incorporate innovative transport technologies as part of any future upgrades is not precluded.

Cycling infrastructure

In addition to the award of SLGF funding for the A26 / Yew Tree Road / Speldhurst Road scheme, KCC has also secured a total of £4.89 million with which to establish a Local Sustainable Transport Fund for West Kent (encompassing Maidstone, Sevenoaks, Tonbridge and Malling and Tunbridge Wells), which will be allocated on a competitive basis from April 2015. TWBC is well placed to secure a significant proportion of this funding, having advanced proposals for Phase 2 of the Town Centre Public Realm Programme, as well as cycle route improvements for the A26 corridor between Tonbridge and Tunbridge Wells, which have been identified in partnership with the Tunbridge Wells Cycle Forum. Whilst it is acknowledged that levels of cycling in the Borough are relatively low at present, due to perceptions and barriers including topography, road safety, cycling competency and a lack of knowledge about routes and parking facilities, it is nonetheless clear that there is growing interest in cycling amongst groups and individuals and that it offers an increasingly important and low cost opportunity for modal shift.

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Highway Drainage

A report by the County Council's Head of Programmed Works and the Borough Council's Head of Communities and Wellbeing to the Tunbridge Wells Joint Transportation Board on 20 April 2015

Summary

1. To update Members on the approach to maintaining and improving the highway drainage system, whilst ensuring that the customer is provided with a quality service against a background of increasing severe weather events.
 2. This paper was reported to the Kent County Council Environment and Transport Cabinet Committee on 5 December 2014
-

Background/Introduction

3. The County Council is responsible for the maintenance of the 5,400 miles of public highway roads including 250,000 roadside drains (gullies) and associated drainage systems.
4. The primary objectives of the highway drainage system are:
 - a. Removal of surface water (from the carriageway) to maintain road safety and minimise nuisance,
 - b. Effective sub-surface drainage to prevent damage to the structural integrity of the highway and maximise its lifespan, and,
 - c. Minimise the impact of highway surface water on the adjacent environment including properties
5. In recent years, numbers of prolonged and heavy rainfall events have increased, notably the winter of 2013/14. As prolonged, heavy rainfall events have become more frequent, the number of customer enquiries has increased year on year. The volume of customer enquiries now stands at twice that of 2009. In the last 12 months, around 10,000 enquiries related to drainage and flooding have been received. Of these, 3,000 are related directly to highway flooding and 500 related to incidents of highway flooding that had resulted in damage to private properties.
6. The Highway Drainage service is split into two functions:
 - Maintenance
 - Repairs, renewals and improvements
7. The approach taken to delivering the service has been outlined in a document called "Asset Management in Drainage". In summary, this details the steps that we take to manage our drainage asset. The series of questions and answers emphasise the need to spend the right amount of money at the right time and explain our focus on sites where the risk to road users and residents is the highest. This document can be found at Appendix A.
8. This year, the County Council has increased capital investment in drainage infrastructure to £4.3m. This is enabling completion of an additional 120 drainage

improvement schemes in 2014/15. Investment has been prioritised on the basis of the following risks:

- Highway Safety
- Internal flooding of properties
- Network disruption

Financial Implications

9. The allocated budget for highway drainage cleansing is £2,408,300. This a saving of £300,000 made as part of the wider Highway, Transportation and Waste efficiencies for 2014/15. The maintenance regime outlined in this report has been developed on the basis of the current budget allocation and feedback from stakeholders to ensure a balance between the needs of the asset and the demands of the County Council's customers.
10. The approach outlined for capital investment in highway drainage infrastructure ensures that the allocated budget is spent effectively

Policy Framework

11. The approaches to service delivery outlined in this report fulfil the principle of achieving value for money.

12. The Report

Maintenance

13. In December 2010, a change of approach to cleaning highway drains was approved. There was a transition from providing a purely reactive service to delivering routine maintenance on a cyclical basis.
14. At the point of moving from a reactive to a planned approach information about the quantum and location of drainage assets was limited. An understanding of the quantum of assets and traffic management required to carry out maintenance activities has been developed. This data is being used to inform planning and programming and enhance service delivery at an operational and strategic level.
15. The departure from a predominantly reactive service combined with very wet weather throughout 2012 resulted in an initial decline in customer satisfaction. However this improved significantly and by April 2013 customer satisfaction had reached 87%.
16. In 2013, the annual Tracker Survey asked:

"How satisfied or dissatisfied are you that road drains/ gullies are kept clean and working in your local area?"

Comments and feedback indicated that blocked drains were continuing to be a hot topic for Members and Parish Councils, particularly in rural areas.
17. In response to the feedback from the Tracker Survey and in light of the need to make significant revenue savings, the way in which drainage maintenance is delivered was subject to a further review. The table below details cleansing activities undertaken from September 2011 and the frequencies currently being trialled.

Road Type/ Category	Risk	Road Length (miles)	Number of Gullies	Cleansing Frequency 2011	Cleansing Frequency 2014
Hotspots locations)	(250	NA	NA	Every 3-6 months	Every 3-6 months
High Speed Roads		160	8820	Every 6 months	Every 12 months
Strategic and Locally Important Routes		1370	41,191	Every 12 months	Every 12 months
Minor Urban ¹ Roads		2190	112,776	Every 2 years	Targeted Cleansing
Minor Rural Roads		1650	85,078	Every 2 years	Targeted Cleansing
Totals		5370	247,865	-	-

18. The frequency of cyclical cleansing on high speed roads was reduced from six monthly to annually to be consistent with the frequency of maintenance on the County's other main roads. This was part of a service wide saving that came into effect on 1 April and applied to all routine maintenance on the high speed road network.
19. Drains on minor urban roads are generally less prone to becoming blocked due to protection by kerb lines, the nature of the traffic using the roads, street sweeping undertaken by District Council and self-cleansing capabilities of the carrier pipes. Examining the data collected from routine walked inspections undertaken by the Highway Inspectorate between April and September has emphasised this point. Blocked drains were reported on less than 10% of the roads inspected.
20. A targeted approach to cleansing is now being trialled on minor urban roads. Rather than a cleansing crew attending every road once every two years, each road is inspected at least annually and resources are focused where the need is highest.
21. Drains on minor rural roads are often more prone to becoming blocked. Gullies can become overgrown by verges and hedge rows and are particularly vulnerable during peaks in agricultural activities or when silt is washed off fields during prolonged or heavy rainfall. It is not financially viable to increase the cleansing frequency and therefore a community lead approach is being trialled.
22. The principle behind this approach is to utilise the good relationships that have been fostered by Highway Stewards with Members and Parish Councils. Over the past three years, the Highway Stewards have developed a detailed knowledge of issues in their area. The intention here is to use this local knowledge of community issues to inform our programmes of gully cleansing.
23. Cleansing is now being undertaken in response to enquiries from Members, Parish Councils and customers. Each site is inspected by a highway steward, assessed and prioritised on the basis of highest risk first. The assessment criteria include, risk to highway safety and risk of internal property flooding.

Repairs, renewals and improvements

24. Highway flooding causes significant level of disruption; it affects movement of people and goods, therefore adversely affecting the local economy. It also causes significant damage to the highway network; at surface level, flood water scours the surface of the carriageway and footway, which will allow ingress of water to the layer below. In the short term it will result in cracking and development of potholes. Flood water also penetrates the lower layers of road construction washing away fine materials and in time results in large failures of the road structure which may require significant repairs or even reconstruction.
25. The weather last winter highlighted numerous pinch points in the drainage network. Some of these are being addressed by the implementation of an enhanced cleansing regime however in a large number of cases work is required to improve the functionality of the system.
26. The annual capital budget allocation in recent years has been around £2.7m. This has enabled the completion of around 800 priority minor repair and small improvements and a small number of larger improvement schemes each year. Nevertheless, there are many more sites that need attention and this has been demonstrated by the 3,500 enquiries received last winter.
27. Details of the schemes scheduled for completion by the 31 March 2015 can be found at Appendix B.

Conclusion

28. The regime adopted in September 2011 enabled us to develop a good knowledge of the drainage asset. Moving forward, we have taken on board feedback from stakeholders and tailored the service to respond to customer demand, asset need and the financial challenges.

RECOMMENDATION:

That Members note the report

APPENDICES

Appendix A - Asset Management in Highways
Appendix B - 2014/15 Drainage Improvement Schemes

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Behdad Haratbar, KCC Head of Programmed Works

Asset Management in Highways

What asset management means for drainage assets

Introduction

This short guide outlines the steps that we take to manage our 'drainage asset'. This includes roadside drains, soakaways, ponds, lagoons, pumping stations, highway ditches and thousands of kilometres of connecting pipe.

This guide is set out in a series of 12 questions and answers we have developed from discussing asset management with the Public, elected Members and Parish/Town Councils.

1. What is Asset Management?

Asset management is the term used to describe a common sense approach to maintenance and future investment decisions for all the parts that make up our highway. It is about spending the right amount of money at the right time to keep our assets working properly to meet the needs of our customers now and in the future.

For example, if we spend £1,000 cleaning a soakaway every two years it will keep working for up to 30 years. If we don't clean the soakaway, we may need to spend £30,000 replacing it after just 10 years.

2. What are drainage assets?

The drainage asset is made up of:

Asset	The amount we look after
Roadside drains	250,000
Ponds and Lagoons	250
Pumping Stations	15
Soakaways	8,500

3. Why do KCC need to know where all these assets are?

We continually collect information on all our new, replacement and improved drainage assets. This includes where they are as well as information about the asset itself such as the size of the drain and where it drains to.

We use the information that we collect to plan routine maintenance work, make decisions about where to invest our money and set the levels of service that our customers can expect from us.

The number of drainage assets in Kent is currently increasing each year due to new housing and business developments being built.

4. Why do KCC need to know what condition assets are in?

Once we know what our assets are and where they are located, we need to know what condition they are in. This information helps us to make informed decisions about how often to maintain them and where we need to invest our money to make improvements and keep the drainage system functioning as it should.

Appendix A

We regularly inspect our assets and use information from customers to help assess their condition and understand what needs to be done to keep them functioning correctly in the most cost effective way. This helps us manage our future budget needs and understand what could happen if, for example, the budget we need is not fully available.

5. How often do KCC check what condition assets are in?

There are two types of checks, planned inspections and reactive inspections.

Planned inspections include highway safety inspections and condition checks carried out as part of our cyclical maintenance regime:

- Our team of 12 highway inspectors carry out visual checks to make sure the highway assets are in a safe condition. This includes checking that drain covers are not broken or missing. We carry out this kind of check at least once every 12 months.
- Our drainage cleansing crews look at the condition of the drains on main roads and test each one by filling it with water and checking that it is able to flow away. We carry out these kind of checks at least once every 12 months.

Reactive inspections are carried out in response to enquiries and generate ad hoc and emergency works, for example cleaning blocked drains that are causing the road to flood and repairing collapsed road drains.

6. How do KCC decide how much to spend on each asset?

When we are prioritising drainage works we think about the risk that flooding poses to road users and residents:

- What do we need to do to make sure that the road doesn't flood?
- If the road floods, does it create a hazard to road users?
- If the road floods, does it cause a lot of disruption?
- If the road floods, are people's homes affected?

We use the information we have collected about our drainage assets to help us answer these questions and decide what we need to do to keep the drainage system working and keep road users and people's homes as safe as we can from flooding.

Sometimes the weather can create an increased need demand for maintenance and reactive works such as flood clearance. We ensure that budget is available to respond to these situations.

When we don't have the budget to do everything that is needed, we prioritise works with the budget that we have.

7. Are some assets more important than others and does the type of road affect how much KCC spends on it?

All assets are important and we have a statutory duty to ensure that the highway is safe to use but, we have to work within our overall budget. We decided what work is needed and when it should be done by thinking about where the risk to road users and residents is the highest.

Some of the things we think about include the following:

Appendix A

- The type of road, for example, whether it is a high speed road, a main road, an estate road or a country lane
- The amount of traffic that uses the road, for example is it a main route in and out of a town or is it a minor road only used by a handful of drivers each day
- The impact if the road is closed, for example, the road might only be used by a handful of people but it may also be the only route to get to their homes
- The impact on residential property, for example, when the drains are blocked do homes get flooded

8. How do KCC decide when repairs are needed?

Whilst we know we need to react and fix dangerous situations quickly, this is not a cost effective way of working as we have to send crews specifically to these locations and more time is spent travelling rather than fixing.

We can clearly get more done for our budget if we plan the work that need to be done. By planning ahead and maintaining the assets at the right time, it means we can do more with less and keep the asset at its required condition for longer.

9. How do KCC let customers know what service they can expect?

Our response to emergency or dangerous situations is the same across all our assets – we arrive on site within 2 hours.

For more routine enquiries we normally respond in 28 days

Other more complex requests will take us time to investigate and arrange remediation works.

The levels of service we can deliver is clearly linked to the 'need' of the assets, maintaining safety and the share of the budget it is allocated.

We aim to meet customer expectations wherever possible. We do however welcome support and help from community groups and parishes.

Our aim is to be clear to customers the levels of service they can expect from us for each asset.

10. Where do KCC publish the level of service?

We will publish on the KCC website the work we plan to do during the year so customers can see how drainage assets are looked after, the levels of service you can expect and when work will be carried out.

11. How can customers contact KCC to help look after assets?

If you see a drain that is causing a problem please report it to us using our online web form or if you are concerned about dangerous flooding call our contact centre which is available 24/7 on 03000 41 81 81. We have also put information on the website entitled "how you can help" if you want to look drains near you. We encourage local communities to help enhance the level of service we deliver and we have produced guidance which is also published on the KCC website.

It is helpful if you can give us as much information as possible when reporting a problem. We need:

Appendix A

- The number or name of the house the problem is outside or another landmark to help us locate it.
- The name of the road
- The name of the town or village
- What is wrong, for example " the drain is blocked and causing flooding across half the width of the road"

The more information we have when the fault is reported, the quicker we can deal with it.

12. How do KCC let customers know what has been done each year?

Each year we will report and publish on the main KCC information about how we have spent our budget. We want to be open, honest and clear about how we look after our assets in Kent, where we spend our budget and what levels of service customers can expect.

Appendix B

2014/15 Drainage Improvement Schemes

Location	Description of Works	Order Value	Status
Nash Road, Margate	Installation of new soakaway	£34,215.50	Complete
Harvel Road, Meopham	Installation of new soakaway	£9,270.96	Works ordered
Pilgrims Way, Otford	Installation of new soakaway	£18,101.26	Works ordered
Milton Street, Swanscombe	Extension of lagoon and additional soakaway	£30,000.00	Works ordered
Knoll Hill, Aldington	Installation of French drains and resurfacing	£15,925.00	Scheduled
Stowing Hill, Stowing	Outfall extension and resurfacing	£15,916.00	Complete
Canterbury Road, Bramling	Upgrading existing drainage system	£6,061.19	Scheduled
Cranbrook Road, Speldhurst	Installation of new gullies, chambers and pipework	£22,782.58	Complete
Wrotham Road, Meopham	Installation of new Soakaways	£18,997.31	Complete
Mackenders Lane, Aylesford	Installation of new drainage system	£18,937.68	Complete
Feather Bed Lane, Mersham	Upsize existing culvert and install new culvert to link drainage ditches under highway	£4,779.42	Complete
Stockham Lane, Swingfiled	New gullies and drainage	£8,027.00	Complete
Wingham Rd, Ickham and Well	Kerbing and gullies	£4,969.00	Scheduled
London Rd, West Kingsdown	Installation of new soakaways, gullies and pipework	£41,206.00	Complete
Higham Road, Tonbridge	Ditch improvements	£20,967.00	Scheduled
Wallbridge Lane, Upchurch	New drainage system	£22,697.86	Complete
Hockers Lane, Thurnham	Installation of new soakaway	£7,805.50	Complete
Saxons Drive, Maidstone	New Soakaway	£8,679.61	Scheduled
Westwood Lane, Broadstairs	New drainage system	£9,699.12	Scheduled
The Lane, Guston	New drainage system	£9,463.92	Scheduled
Elms Vale Road, Dover	Installation of new Soakaways	£26,190.98	Scheduled
Canterbury Road, Hawkinge	Pond improvements	£28,538.62	Scheduled
Willesborough Road, Ashford	Installation of new Catchpits	£8,147.92	Works ordered
Sole Street, Cobham	Installation of new Soakaways	£9,897.14	Works ordered
Lower Hartlip Road, Hartlip	Dredge Pond and bank protection	£48,434.31	Complete
Snodland Bypass	Installation of french drainage and grips	£20,248.07	Complete
Forge Lane, East Farleigh	Proposed construction of soakaway	£3,899.95	Complete
High st, Eastchurch	New gullies and drainage	£10,579.00	Complete

Appendix B

Cooting Road, Aylesham	Installation of new Soakaways	£19,261.56	Complete
Otterham Quay Lane	Installation of new drainage system	£21,818.75	Complete
Watling Street, Stone	Installation of new 3 stage interceptor	£8,255.76	Complete
Green Lane, Whitfield	Installation of new Soakaways	£10,401.63	Complete
Seabrook Road, Hythe	Replace linear drainage at the junction of Cliff Road and investigate and repair any defects restricting water flow in culvert	£5,998.41	Complete
Maidstone Road, Hadlow	200m section of ditch requires major dig out, weeding and disposal of waste	£2,044.00	Complete
Sutton Valence Hill, Maidstone	Installation of filter Drain	£2,911.07	Complete
Canterbury Road, Molash	Repair defective pipework and regrade verge	£724.70	Complete
Ballards Hill, Goudhurst	Repair Works	£2,072.86	Complete
Deans Bottom, Bredgar	Installation of new gullies and soakaways	£23,383.97	Complete
South Street, Selling	Installation of new soakaways and additional drainage	£27,164.70	Further work required
Langton Road, Tunbridge Wells	Upgrade existing drainage system	£2,273.53	Complete
Hatham Green Lane, Stansted	Dredge Pond and install overflow soakaway	£9,875.27	Complete
Station Road, Aylesford	Installation of new drainage system	£13,574.87	Complete
Canterbury Road, Brooksend	Installation of new drainage system and pond clearance	£10,000.19	Complete
Canterbury Road, Brabourne	Installation of gullies and discharge into disused chalk pit	£5,270.41	Complete
Shalloak Road, Sturry	Installation of new gullies and channel system	£6,121.78	Complete
Church Walk, East Malling	Replace culvert	£1,703.29	Complete
Scragged Oak Road, Detling	Installation of new soakaway and deep bore	£17,270.05	Complete
Slough Road, Rodmersham	Installation of new soakaway	£28,149.71	Complete
Heath Road, East Farleigh	Installation of new soakaway	£16,405.26	Complete
Hythe Road, Mersham	Installation of new soakaway	£29,904.35	Complete
Ashford Road, Bethersden	Replace blocked or broken pipework	£2,200.85	Complete
Bull Lane, Stockbury	Installation of new soakaways and additional drainage	£13,149.11	Complete
High Street, Sittingbourne	Repair Works	£4,690.71	Complete
Forge Lane, Whitfield	Installation of new drainage system	£1,582.98	Complete
Plaxdale Green Road	Installation of new soakaway	£9,504.79	Complete
Hamptons Road, Shipbourne	Replace existing sytem due to roots	£8,348.80	Complete
Wootton Lane, Denton	Pond improvements	£9,778.91	Complete

Appendix B

Church Lane, Detling	Installation of new soakaway	£23,767.78	Complete
London Road, Aylesford	Scoping exercise	£18,386.33	Complete
Church Road, Ashford	Installation of Additional Gullies	£5,018.23	Complete
Caring Road, Leeds	Replacement Culvert	£4,309.68	Complete
Cranbrook Road, Tenterden	Pipe spring water to nearest highway gully	£3,891.65	Scheduled
Kingsdown Road, Walmer	Install gullies and a small soakaway at each location	£11,750.47	Complete
Ranalagh Road, Deal	Installation of new gullies and upgrade existing system	£2,411.96	Complete
Harriet Wood, East Farleigh	Divert existing discharge Point	£21,963.95	Complete
Heathfield Road, Maidstone	Installation of new soakaway	£13,168.54	Complete
Castle Hill Avenue, Folkestone	Renew gullies on roundabout	£2,780.04	Complete
Teston Lane, West Farleigh	Replace existing drainage system due to damage	£2,994.90	Complete
Honey Lane, Otham	Install drainage pipework to collect floodwater	£16,270.26	Complete
New Road Hill, Ashford	Install new gullies and connect into ditch	£3,634.79	Complete
Knockwood Lane, Molash	Installing new gullies	£4,770.05	Complete
Lucks Lane, Paddock Wood	Upgrade Existing Culvert	£13,638.44	Complete
Warmlake Road, Chart Sutton	Installation of new soakaway	£20,066.41	Complete
Sandwich Road, Ramsgate	Ditch improvements	£14,157.26	Complete
London Road, Tonge	Adjustment for scheme	£48,765.18	Complete
Watery Lane, Petham	EA Grant	£18,196.19	Complete
Bramble Lane, Wye	Installation of new gullies	£8,666.41	Complete
Dennne Manor Lane, Chilham	Installation of new soakaway	£15,161.95	Complete
Horselees Road, Boughton	New drainage system	£17,582.94	Complete
Manor Way, Swanscombe	Installation of new pumping station	£23,161.44	Complete
Swanton Lane, Swingfield	Installation of Soakaways and bank protection works	£23,092.41	Complete
The Street, Wickambreux	Upgrade of existing drainage system	£1,042.01	Complete
Manor Way, Swanscombe	Pumping Station	£48,318.81	Complete
Strakers Hill, Sutton	Installation of new soakaway	£10,523.29	Complete
Royal Engineers Road, Maidstone	Gully cover replacements	£5,949.04	Complete
Tonbridge Rd, Leigh	New drainage system	£8,314.00	Complete
Tonbridge Rd, Leigh	New drainage system	£812.00	Complete

Appendix B

Rolvenden Hill, Rolvenden	New drainage system	£20,219.00	Complete
The Orchard, Bearsted	Installation of new soakaway	£17,865.48	Complete
Homestead Lane, Dover	Installation of new drainage system and pond clearance	£17,226.47	Scheduled
Warden Road, Eastchurch	Installation of new pond	£41,172.60	Scheduled
Church Hill, Sutton	Pond improvements	£13,020.69	Scheduled
Warden Road, Eastchurch	Ditch improvements	£11,207.51	Scheduled
Swanley Hill, Eastchurch	Ditch improvements	£11,207.51	Scheduled
SANDOWN RD, SANDOWN	Ditch improvements	£6,135.00	Scheduled
Bobb Dunn Way	Installation of new system (Pumping Station)	£100,000.00	Works ordered
Cherry Garden Lane, Folkestone	Install additional pipework to bypass existing system and take water directly to watercourse	£25,000.00	Design
Tunstall Road, Tunstall	Installation of new soakaways and additional drainage	£21,101.65	Scheduled
Hythe Road, Lymnpe	Installation of French Drains and culverts	£25,000.00	Design
South Bush Lane, Upchurch	Installation of new soakaway	£25,000.00	Design
Tonbridge Road, Teston	Overflow system	£15,000.00	Design
Dering Road, Bridge	Installation of new soakaway	£25,000.00	Scheduled
Ashford Road, Lenham	Repairs and improvements to existing drainage, clearance of ditches to west and replacement of failed soakaways in Northdown Close	£25,000.00	Design
Boxted Lane, Newington	Installation of new soakaways and additional drainage	£24,000.00	Design
Furnace Lane, Lamberhurst	Installation of new drainage system	£1,416.64	Complete
Sea Wall, Dymchurch	Install linear drainage and connect existing system in Sea Wall to highway drainage in the High Street	£7,500.00	Design
Claxfield Road, Lynstead	Installation of new soakaway	£25,000.00	Design
Knock Hill, Stone	Installation of French drains and culverts	£15,000.00	Design
High street, Lydd	Install new gullies and connect to existing highway drainage	£5,000.00	Design
Griffin Hill, Dover	Installation of new soakaways and additional drainage	£20,000.00	Scheduled
Lucks Hill, West Malling	Investigation and improvement of ditches	£30,000.00	Design
Adelaide Road, Dover	Installation of new gullies into existing system	£1,225.92	Works ordered
Standen Street, Benenden	Re-configuration of drainage system and clearing of ditches to use as attenuation during high flows as outfall pipe to rear of property cannot cope with peak flows	£2,462.97	Scheduled
Hambrook Lane, Chilham	Repair pipe and extend it to discharge onto uncultivated land	£3,500.00	Design
Bradbourne Lane, Ditton	Investigate feasibility of trench soakaway and construct	£10,000.00	Scheduled
Church Road, Tonge	New drainage system	£8,821.61	Scheduled

Appendix B

Crockham Lane, Hernhill	New drainage system	£8,155.15	Scheduled
Nursery Fields, Acol	Installation of new soakaway	£11,942.53	Scheduled
Church Road, Smeeth	Pond improvements	£15,757.32	Complete
High Street, Lyminge	Pond improvements	£7,660.00	Complete

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Update on LGF Funded Improvements to reduce congestion at the Yew Tree Road/London Road Junction & Speldhurst Road/St Johns Road junction in Southborough

A report by the County Council's Traffic Schemes and Members Highway Fund Manager to the Tunbridge Wells Joint Transportation Board on 20 April 2015

Background

This report provides an update to the Board for further information on the progress of a Local Growth Funded (LGF) scheme to increase capacity on the A26 in Southborough through the Yew Tree Road and Speldhurst Road junctions.

A copy of the junction modelling summary report and initial outline design drawing is attached for information in appendices A & B.

Progress

Kent County Council commissioned Amey to undertake traffic surveys and model two options for the Yew Tree Road junction with London Road and Speldhurst Road junction with St Johns Road, in Southborough. The options modelled were (1) Removal of the existing traffic signal controlled junctions and replacement with two mini roundabouts with off line zebra crossings to cater for pedestrian movements through the junctions, (2) Improvements to the existing traffic signal controlled junctions to include formal pedestrian crossing facilities allowing removal of the existing standalone Puffin crossing on London Road and removal of the Bus priority signals on St Johns Road. Both options have been modelled using traffic count data recorded in December 2014 and using a forecasted growth in traffic volumes over a ten year period, with a view to reducing the current peak time traffic congestion and increasing capacity through the junctions.

The junction modelling has concluded the following scenarios:

1. **Do nothing** – Operational capacity will decrease in proportion to the natural growth in traffic resulting in a continued increase in peak time delays.
2. **Do something (mini roundabouts)** – Modelling identified that this option would create increased congestion at peak times from the existing layout in all scenarios that have been modelled.
3. **Do something (Improvements to the existing traffic signals)** – The option modelled showed that with predicted growth the junction would operate with some spare capacity in 2026.

A pedestrian staggered crossing has been considered on the Speldhurst Road junction with St Johns Road as part of the modelling report. This option would offer a small additional increase in capacity in the future. However, the option would require the procurement of a significant portion of land from an adjacent business premises. It is considered the additional costs to procure land and the detrimental effect this may have on the business considered against the small benefit in capacity precludes any benefit of carrying out this aspect of the proposed scheme.

The option detailed in scenario 3 from the list above is considered to offer improved capacity at both junctions and a reduction in peak time congestion modelled over a 10 year period based on predicted growth.

The LGF funding for this project will need to be spent within the 2015/16 financial year and the projected construction period is programmed to commence in January 2016. The delivery of this scheme has been programmed to avoid conflict with existing works on Longfield Road and the predicted increase in traffic during the run up to Christmas.

Recommendation

1. That members note the report; and
2. Support the proposed improvements detailed in scenario 3 being taken forward to detail design and implementation stage.

APPENDICES

Appendix A - Junction Modelling Summary Report

Appendix B – Yew Tree Road Signals

Sources of Information:

Kent County Council Highways,
Transportation & Waste

Contact Officer(s):

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**Director of Highways,
Transportation & Waste**

John Burr



Junction Modelling Summary Report

A26 London Road/Yew Tree Road/Speldhurst Road Junction

CO04300268/001 Revision 00

February 2015



Document Control Sheet

Project Name:	A26 London Road/Yew Tree Road/Speldhurst Road Junction
Project Number:	CO04300268
Report Title:	Junction Modelling Summary Report
Report Number:	001

Issue Status/Amendment	Prepared	Reviewed	Approved
00	Name: Sahil Zutshi Signature: Date: 29/01/2015	Name: Steve Whittaker Signature: Date: 30/01/2015	Name: Steve Whittaker Signature: Date: 02/02/2015
	Name: Signature: Date:	Name: Signature: Date:	Name: Signature: Date:
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Contents

1	Introduction	1
2	Assessment Objective	2
3	Existing Site	3
3.1	Introduction	3
3.2	Traffic Count Data	3
3.3	Site Observations	4
3.4	Existing Junction Assessment (Base 2014 Traffic Signals).....	4
3.5	Existing Junction Modelling Results	6
4	Proposals	9
4.1	2026 Do Nothing Future Year Scenario Assessment.....	9
4.2	2026 Do Something Future Year Scenario Assessment – Revised Signals Arrangement.....	12
4.3	2026 Do Something Future Year Scenario Assessment – Double Mini- Roundabouts.....	16
5	Conclusions and Recommendations	17
	Appendix A – Revision to existing junction arrangements	18
	Appendix B – Alternative revision to existing junction arrangements	19
	Appendix C – Proposed double mini-roundabouts	20
	Appendix D – Traffic survey information	21
	Appendix E – Signal controller information	22
	Appendix F – Traffic flow diagrams	23
	Appendix G – Existing junction modelling outputs	24
	Appendix H – 2026 proposed junction modelling outputs	25

1 Introduction

- 1.1.1 Amey have been commissioned by Kent County Council (KCC) to investigate and assess schemes for potential improvements to the A26 London Road/Yew Tree Road/Speldhurst Road signalised junction in Tunbridge Wells.
- 1.1.2 It is understood that the existing junction arrangement is sensitive in capacity terms, particularly during highway peak hours. As stated within the project brief, the impact of implementing a double mini-roundabout arrangement or making alterations to the existing traffic signal timings and pedestrian crossing arrangements will be assessed in relation to junction operations.
- 1.1.3 It should be noted that the assessment examines the operation of the junction in isolation and does not consider its interaction with the surrounding road network. It was observed during site visits that queues on the A26 regularly queue back into the junction (particularly northbound in the AM peak period) causing exit blocking.
- 1.1.4 The assessment of the junction for the existing and proposed scenarios is to be undertaken using LinSig and ARCADY traffic signal junction modelling software, produced by the JCT Consultancy and TRL, respectively.
- 1.1.5 This report represents a deliverable identified in the project brief setting out the findings of the modelling work and traffic models for the existing and proposed scenarios.

2 Assessment Objective

- 2.1.1 During the concept design process, the following options for capacity improvements at the junction were identified:
- 2.1.2 Option 1 – Alterations to the existing pedestrian crossings to provide staggered crossing arrangements and appropriate revisions to the current signal arrangements, as shown at Appendix A.
- 2.1.3 Option 2 - As Option 1 with a non-staggered pedestrian crossing arrangement on the Speldhurst Road arm of the junction, as shown at Appendix B
- 2.1.4 Option 3 - Replace the existing traffic signal control with a double mini-roundabout arrangement, as shown at Appendix C.
- 2.1.5 The aim of this assessment is to establish the forecast operation of the proposed junction options in terms of highway capacity and to aid KCC in identifying a preferred option for the junction.
- 2.1.6 The assessment considers a 2026 Do-minimum scenario – existing junction arrangements with 2026 forecast traffic flows and, a 2026 Do-something scenario – proposed improvements with forecast traffic flows.

3 Existing Site

3.1 Introduction

- 3.1.1 The A26 represents one of the main arterial routes into Tunbridge Wells town centre and provides a link to the strategic road network, the A21, and the town of Tonbridge to the north.
- 3.1.2 It is understood that continuing severe traffic congestion on the A26 London Road corridor is inhibiting existing business and preventing further economic growth in Tunbridge Wells. Development over the years in Tunbridge Wells has created demand on the local road network, particularly on the arterial routes (A26 London Road, A264 Pembury Road and Longfield Road) connecting Royal Tunbridge Wells to the A21.
- 3.1.3 A key element of the Transport Strategy for Tunbridge Wells is to reduce congestion and improve traffic flow on the three arterial routes.
- 3.1.4 The A26 London Road/Yew Tree Road/Speldhurst Road junction has been identified as one of the most critical junctions along the corridor. However, to realise the full benefits of any capacity improvements at the junctions, downstream constraints must also be addressed.
- 3.1.5 The existing junction arrangements have been modelled in order to provide a robust base for forecasting and to provide a benchmark for comparative purposes between the existing situation and the proposed junction arrangements.

3.2 Traffic Count Data

- 3.2.1 Manual Classified Counts (MCC) surveys at 15 minute intervals were carried out in December 2014 at the A26 London Road/Speldhurst Road and A26 London Road/Yew Tree Road junctions between the hours of 08:00 – 10:00 and 15:00 – 19:00 to provide the basis for the assessments and determine the network peak hours on a typical weekday and the peak shopping period on weekends.
- 3.2.2 Queue length surveys (counts at 5 minutes intervals), for the purpose of traffic model calibration, were undertaken on all approaches to the two junctions during the same time period.

3.2.3 Analysis of the traffic survey data determined the weekday AM peak hour to be 08:00-09:00 and the PM peak hour to be 17:00-18:00. The Saturday peak hour was determined to be 12:30-13:30.

3.2.4 A copy of the MCC survey counts are attached as Appendix D to this report.

3.3 Site Observations

3.3.1 A site visit was undertaken on 21st and 22nd January 2015 to measure average signal timings, note the frequency of buses on the A26 and observe general traffic conditions and operation at the junction.

3.4 Existing Junction Assessment (Base 2014 Traffic Signals)

3.4.1 The A26 London Road/Speldhurst Road junction and A26 London Road/Yew Tree Rd junction have been modelled, using industry standard LinSig 3 software, as a staggered crossroads junction.

3.4.2 The junction currently has four formal controlled pedestrian crossing facilities, one across each side road and two across the A26. Site observations indicate that there is significant pedestrian footfall using these crossings, in particular as there is a school in close proximity to the south of the junction.

3.4.3 It is understood that the junction currently operates under Vehicle Actuation (VA) control. Due to the fact that the junction operates under VA, the cycle time of the signals is constantly variable based on vehicle demand. The junction is, however, heavily used due to its location with the maximum timings being demanded on the majority of cycles.

3.4.4 Signals controller information for the junction was provided by KCC and is attached as Appendix E to this report.

3.4.5 An average cycle time of 178 seconds was calculated based upon site observations to reflect the situation on ground.

3.4.6 The existing phases, stage sequence and intergreen matrix used within the assessment are shown within Figure 3.1 and Figure 3.2 and Figure 3.3 respectively below:

Figure 3.1: Phases

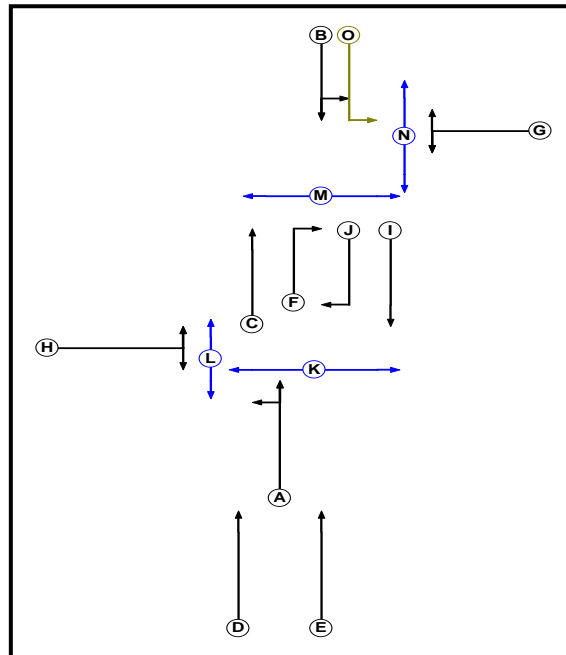


Figure 3.2: Existing Method of Control (from the controller information sheet and site observations)

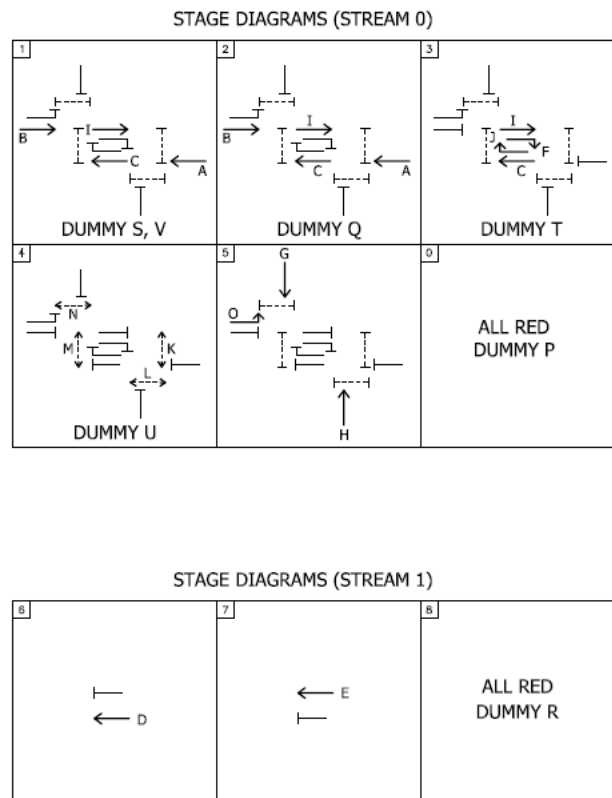


Figure 3.3: Intergreen Matrix

		Starting Phase														
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
Terminating Phase	A	-	-	-	-	-	-	-	9	-	4	5	7	-	-	-
	B	-	-	-	-	-	4	9	-	-	-	-	-	7	7	-
	C	-	-	-	-	-	-	5	-	-	-	-	-	5	7	-
	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	F	-	5	-	-	-	-	5	-	-	-	-	-	5	7	5
	G	-	5	5	-	-	5	-	-	-	-	-	-	6	5	-
	H	5	-	-	-	-	-	-	-	5	5	7	5	-	-	-
	I	-	-	-	-	-	-	-	5	-	-	6	7	-	-	-
	J	5	-	-	-	-	-	-	5	-	-	6	7	-	-	-
	K	13	-	-	-	-	-	-	13	13	13	-	-	-	-	-
	L	11	-	-	-	-	-	-	11	11	11	-	-	-	-	-
	M	-	12	12	-	-	12	12	-	-	-	-	-	-	-	-
	N	-	13	13	-	-	13	13	-	-	-	-	-	-	-	13
	O	-	-	-	-	-	5	-	-	-	-	-	-	-	7	-

3.5 Existing Junction Modelling Results

3.5.1 The 2014 baseline assessments undertaken to model the existing junction operations and traffic situation were carried out using LinSig v3 and made use of traffic count data from surveys undertaken in December 2014. Traffic flow diagrams showing the survey flows at the junction are shown at Appendix F.

3.5.2 As the junction assessments have been based upon junction turning counts which represent traffic flows which have discharged through the junction during the peak period, , in theory, given that this junction is known to be operating over capacity during peak periods, the Degree of Saturation (DoS) should be near to 100% on the main approaches.

- 3.5.3 The degree of saturation (DoS) is the measurement of demand that a junction is experiencing when compared to its total capacity and it is expressed as a ratio of demand to capacity on each approach to the junction. A value of 100% means that demand and capacity are equal and no further traffic is able to progress through the junction. Generally, values over 85% are regarded as suffering from capacity issues and vehicle queuing.
- 3.5.4 The tables below indicate that the existing junction is currently operating near to or over capacity during the busier AM and PM peak highway periods. During the AM peak period all links within the junction are operating below the saturation point of 100%, however, a number of links have a degree of saturation of over 90%. The situation during the PM peak is worse with two links of the junction having a degree of saturation of over 100%. Full modelling outputs are attached as Appendix G to this report.

Table 3.1: Existing Junction - AM Peak Period Modelling Results

Junction	Arm	DoS %	Delay (sec/PCU)	MMQ (PCU's)
St. John's Rd/London Rd/Speldhurst Rd	St. John's Rd Left Ahead	57.1	6.3	24.4
	Speldhurst Rd Right Left	106	255.3	29.3
	London Rd S/B Ahead	48.2	3.1	0.9
	London Rd S/B Right	47.8	83.6	4.8
	Ahead from Central Reserve	53.7	26.3	19.2
	Bus Lane	2.6	36.1	0.6
London Rd/Yew Tree Rd	London Rd S/B Left Ahead	84.4	38.1	39.2
	London Rd N/B Ahead	44.7	9.8	16.9
	London Rd N/B Right	55.4	102	5.6
	Yew Tree Rd Left Right	98.8	178	20.1

*Cycle Time – 178 Seconds

Table 3.2: Existing Junction - PM Peak Period Modelling Results

Junction	Arm	DoS %	Delay (sec/PCU)	MMQ (PCU's)
St. John's Rd/London Rd/Speldhurst Rd	St. John's Rd Left Ahead	63.4	6.8	28.4
	Speldhurst Rd Right Left	106.7	264.4	29.3
	London Rd S/B Ahead	49.5	5.8	10.6
	London Rd S/B Right	80.3	118.3	9.1
	Ahead from Central Reserve	60.4	28.2	23
	Bus Lane	1.7	33.5	0.4
London Rd/Yew Tree Rd	London Rd S/B Left Ahead	81.6	35.9	36.5
	London Rd N/B Ahead	57.3	12.6	27.7
	London Rd N/B Right	39.7	91.6	3.9
	Yew Tree Rd Left Right	107.4	282.8	31.5

Table 3.3: Existing Junction - Saturday Peak Period Modelling Results

Junction	Arm	DoS %	Delay (sec/PCU)	MMQ (PCU's)
St. John's Rd/London Rd/Speldhurst Rd	St. John's Rd Left Ahead	60.4	6.4	26.4
	Speldhurst Rd Right Left	77.4	96.8	8.7
	London Rd S/B Ahead	45	3.3	1.5
	London Rd S/B Right	44.2	86.5	4.4
	Ahead from Central Reserve	57.3	27.3	21.2
	Bus Lane	1.9	33.5	0.5
London Rd/Yew Tree Rd	London Rd S/B Left Ahead	72.5	30.6	28.7
	London Rd N/B Ahead	52.7	10.2	24.1
	London Rd N/B Right	35.2	88.3	3.4
	Yew Tree Rd Left Right	119.5	460.6	49.6

*Cycle Time – 178 Seconds

- 3.5.5 The results of the Base 2014 scenario indicate that in the AM peak period Speldhurst Rd (DoS 106%) and Yew Tree Rd (DoS 98.8%) are operating at full capacity. During the PM peak period the DoS percentage values are 106.7% and 107.4%, respectively. Similarly, the DoS for the Saturday peak period exceed 85% on only one lane, Yew Tree Road – DoS 119.5%.
- 3.5.6 The above results suggest that the junction is currently sensitive during the busier highway peak periods and any major changes to the junction will have a significant impact on its operation.

4 Proposals

4.1 2026 Do Nothing Future Year Scenario Assessment

4.1.1 The phases and stage sequence and intergreen matrix used for the future assessment are shown within Figure 4.1 and Figure 4.2 and Figure 4.3 respectively, below.

Figure 4.1: Phases

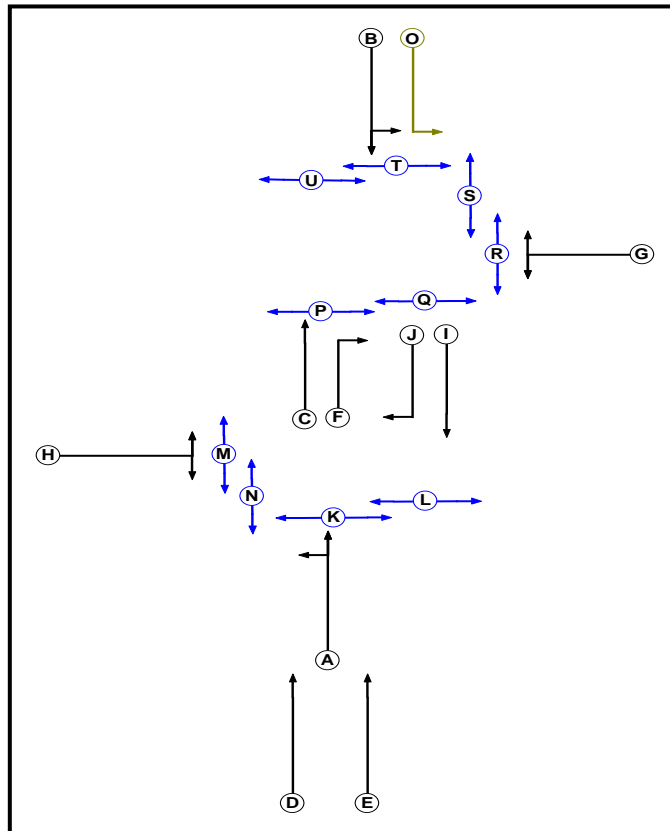


Figure 4.2: Stages

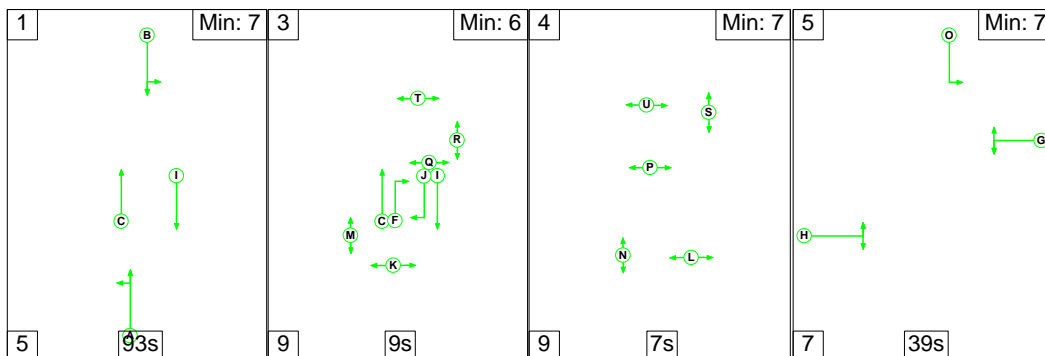


Figure 4.3: Intergreen Matrix

		Starting Phase																						
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U		
Terminating Phase	A	-	-	-	-	-	-	-	9	-	4	5	-	-	5	-	-	-	-	-	-	-		
	B	-	-	-	-	-	4	9	-	-	-	-	-	-	-	-	9	-	-	5	-			
	C	-	-	-	-	-	-	5	-	-	-	-	-	-	-	-	5	-	-	-	-	9		
	D	-	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	E	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	F	-	5	-	-	-	-	5	-	-	-	-	-	-	-	-	5	5	-	-	6	-	-	
	G	-	5	5	-	-	5	-	-	-	-	-	-	-	-	-	-	-	6	5	-	-	7	
	H	5	-	-	-	-	-	-	-	5	5	-	7	5	-	-	-	-	-	-	-	-	-	-
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	T	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	8	-	-	-	-	-	-	-
U	-	-	7	-	-	-	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

4.1.2 Modelling was undertaken with existing junction arrangements with 2026 forecast traffic flows. The base survey flows (2014) have been “growthed” using NTM growth factors obtained from TEMPRO v6.2, in accordance with WebTAG unit 3.15 for Tunbridge Wells, Kent. TEMPRO software has been used to derive the local adjustment factors to modify NTM growth.

4.1.3 The traffic impacts have been assessed for the future year of 2026. The table below indicates the growth factors used for this assessment:

Table 4.1: 2026 Growth Factors

NTM Growth Factors adjusted by local TEMPRO			
2014-2026	Weekday AM	Weekday PM	Saturday
Growth factor for Tunbridge Wells	1.1694	1.1743	1.1783

- 4.1.4 The results of the 2026 Do Nothing modelling scenario indicated that operational capacity has decreased in proportion to natural growth in traffic, as would be expected and summarised in the table below. Full modelling outputs are attached as Appendix H to this report.

Table 4.2: 2026 Do Nothing Future Scenario Modelling Results

Junction	Arm	2026 AM Peak			2026 PM Peak			2026 Saturday Peak		
		DoS %	Delay (sec/PCU)	MMQ (PCU's)	DoS %	Delay (sec/PCU)	MMQ (PCU's)	DoS %	Delay (sec/PCU)	MMQ (PCU's)
St. John's Rd/London Rd/Speldhurst Rd	St. John's Rd Left Ahead	77.7	10.3	39.2	81.4	11.1	43	78.5	9.9	40.1
	Speldhurst Rd Right Left	127.4	561.1	65.7	111	329.9	38.5	84.8	105.2	10.6
	London Rd S/B Ahead	55.6	4.6	8.2	56	7.1	15.2	51.2	5.2	10.6
	London Rd S/B Right	50.5	84.1	5	37.9	84.5	3.7	48.4	88.9	4.8
	Ahead from Central Reserve	73.7	33.4	32.1	78.4	36.6	35.9	75.3	34.9	33.3
	Bus Lane	2.4	33.5	0.6	1.9	32.9	0.5	2.3	32.9	0.6
London Rd/Yew Tree Rd	London Rd S/B Left Ahead	91.8	48.4	49	84.2	37.6	39	79.2	34.2	34.1
	London Rd N/B Ahead	55.4	6.9	12.6	69	11.6	32.1	66.6	10.7	29.5
	London Rd N/B Right	67.3	100.5	7.1	49.4	88.1	4.9	44	85.5	4.3
	Yew Tree Rd Left Right	102.2	212.8	23.6	117.4	428.3	49.1	130.2	598.4	70.6

*Cycle Time – 178 Seconds

4.2 2026 Do Something Future Year Scenario Assessment – Revised Signals Arrangement

- 4.2.1 This scenario involved alterations to the pedestrian phases to provide staggered crossing facilities and the associated intergreen times. By providing staggered pedestrian crossing this enables the phasing and staging of the junction to be configured more efficiently and reduces the intergreen times for the crossings as it takes pedestrians less time to cross. The signal timings and overall cycle times in the model were then optimised to suit the revised arrangement and 2026 predicted traffic flows.
- 4.2.2 The modelling results, as shown in the tables below, indicate that the junction would operate with spare capacity in all peak hour periods. The DoS percentage values for all lanes at the junction are below 85%. Full modelling outputs are attached as Appendix H to this report.

Table 4.3: 2026 Do Something Future Scenario Modelling Results

Junction	2026 AM Peak			2026 PM Peak			2026 Saturday Peak			
	Arm	DoS %	Delay (sec/PCU)	MMQ (PCU's)	DoS %	Delay (sec/PCU)	MMQ (PCU's)	DoS %	Delay (sec/PCU)	MMQ (PCU's)
St. John's Rd/London Rd/Speldhurst Rd	St. John's Rd Left Ahead	84.1	29.7	37.4	82.3	29.5	37.9	82.5	29.2	37
	Speldhurst Rd Right Left	83.7	86.4	17	81.3	85.7	14.5	57.5	67.1	7.3
	London Rd S/B Ahead	61.2	6.6	23.3	60.8	12.4	27.6	57.7	9.6	24.7
	London Rd S/B Right	60.7	94.6	5.3	58.3	109.7	4.2	74.2	124.7	5.8
	Ahead from Central Reserve	61.7	18.2	23.3	59.4	12.7	20.4	60	15.5	21.6
	Bus Lane	3.6	50.7	0.7	3.8	60.9	0.7	3.8	54.8	0.7
London Rd/Yew Tree Rd	London Rd S/B Left	22.3	6.8	4.2	20.1	5.9	3.5	16.9	5.7	2.9
	London Rd S/B Ahead	71	37.7	28.6	60.4	29.8	22.8	61.6	32.1	23
	London Rd N/B Ahead	63.1	12.7	22	74.7	18.6	38.6	73.2	16.6	35.5
	London Rd N/B Right	83.1	130.5	8.3	75.8	129.5	6	65.9	109.2	4.9
	Yew Tree Rd Left Right	63.8	72.3	12.5	82	88.5	16.6	82.2	85.4	18.2

*Cycle Time – 178 Seconds

- 4.2.3 An alternative scenario involving a non-staggered crossing on the Speldhurst Road arm has also been assessed. The revised option indicates that the overall junction would still operate with some spare capacity in 2026.
- 4.2.4 The overall operation of the junction is marginally worse than the scenario with a staggered crossing facility on Speldhurst Rd as summarised in the table below.
- 4.2.5 The phases, stage sequence and intergreen matrix used for the alternative future scenario assessment are shown within Figure 4.4 and Figure 4.5 and Figure 4.6, respectively.

Figure 4.4: Phases

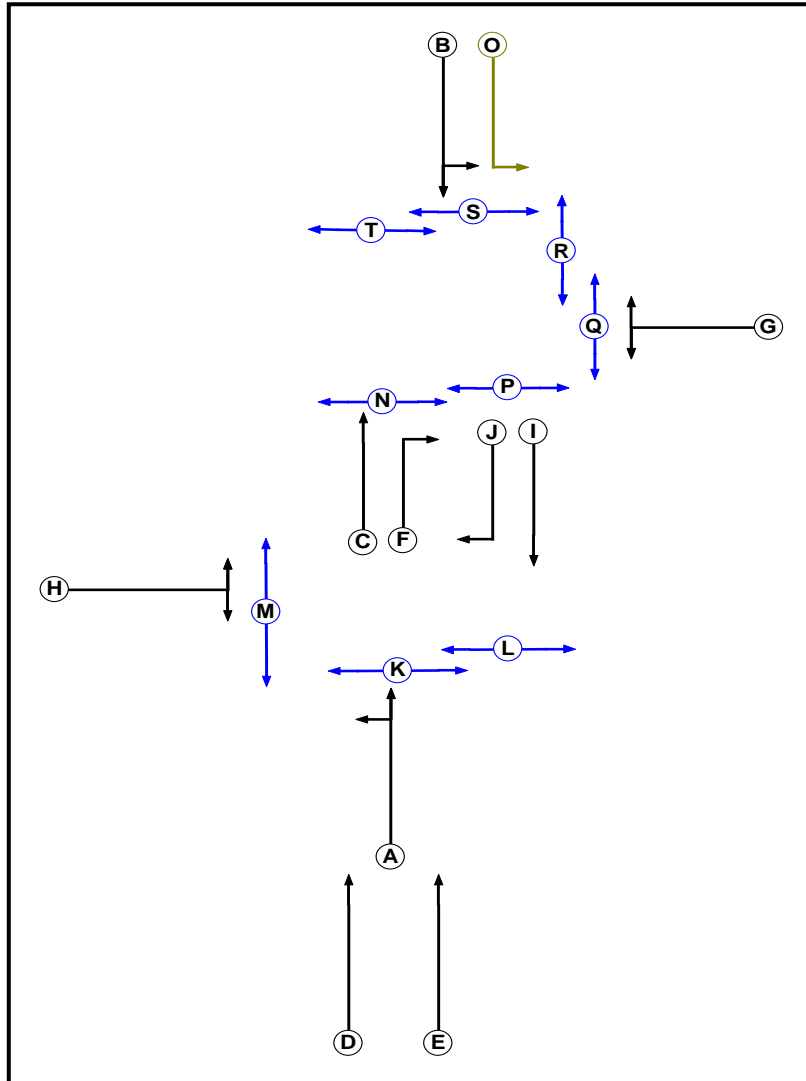


Figure 4.5: Stages

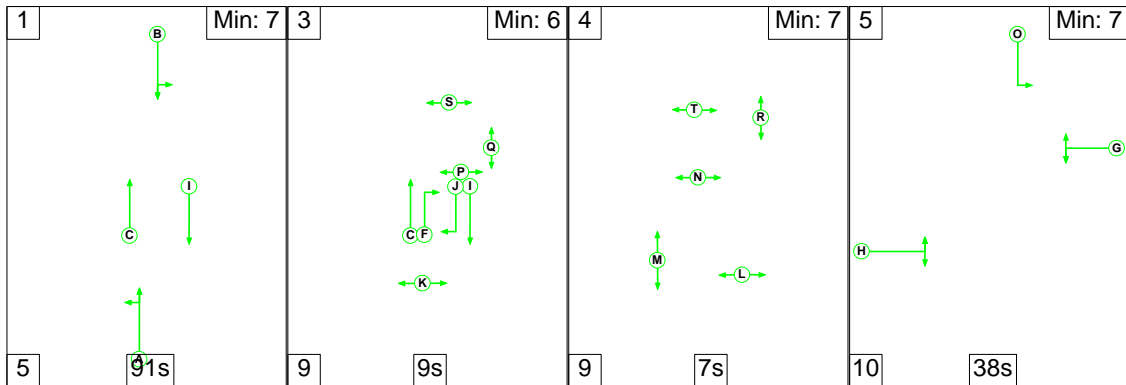




Figure 4.6: Intergreen matrix

		Starting Phase																			
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
A			-	-	-	-	-	-	9	-	4	5	-	7	-	-	-	-	-	-	-
B		-		-	-	-	4	9	-	-	-	-	-	-	-	9	-	-	-	5	-
C		-	-		-	-	-	5	-	-	-	-	-	-	5	-	-	-	-	-	9
D		-	-	-		4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E		-	-	-	4		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
F		-	5	-	-	-		5	-	-	-	-	-	-	5	5	-	-	6	-	-
G		-	5	5	-	-	5		-	-	-	-	-	-	-	6	5	-	-	-	7
H		5	-	-	-	-	-	-		5	5	-	7	5	-	-	-	-	-	-	-
I		-	-	-	-	-	-	5			-	-	7	-	-	-	-	-	-	-	-
J		5	-	-	-	-	-	5	-		-	-	7	-	-	-	-	-	-	-	-
K		7	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-
L		-	-	-	-	-	-	7	7	-		-	-	-	-	-	-	-	-	-	-
M		10	-	-	-	-	-	10	-	10	-		-	-	-	-	-	-	-	-	-
N		-	-	7	-	-	7	-	-	-	-		-	-	-	-	-	-	-	-	-
O		-	-	-	-	-	5	-	-	-	-	-		-	-	-	-	-	7	5	-
P		-	7	-	-	-	-	7	-	-	-	-	-		-	-	-	-	-	-	-
Q		-	-	-	-	-	-	7	-	-	-	-	-	-		-	-	-	-	-	-
R		-	-	-	-	-	6	-	-	-	-	-	-	-	-		6	-	-	-	-
S		-	8	-	-	-	-	-	-	-	-	-	-	-	-	8	-	-	-	-	-
T		-	-	7	-	-	-	7	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 4.4: Alternative 2026 Do Something Future Scenario Modelling Results

Junction	Arm	2026 AM Peak			2026 PM Peak			2026 Saturday Peak		
		DoS %	Delay (sec/PCU)	MMQ (PCU's)	DoS %	Delay (sec/PCU)	MMQ (PCU's)	DoS %	Delay (sec/PCU)	MMQ (PCU's)
St. John's Rd/London Rd/Speldhurst Rd	St. John's Rd Left Ahead	85.9	32.8	38.7	83.9	32.1	39.2	82.5	29.2	37
	Speldhurst Rd Right Left	85.5	90.4	17.4	83.1	89	14.9	61.1	71.1	7.7
	London Rd S/B Ahead	62.3	6.9	23.3	61.8	13	28.1	57.7	9.6	24.7
	London Rd S/B Right	60.7	93.1	5.3	58.3	108.5	4.2	74.2	124.7	5.8
	Ahead from Central Reserve	61.7	18.2	23.3	59.4	12.7	20.4	60	15.5	21.6
	Bus Lane	3.6	50.7	0.7	3.8	60.9	0.7	3.8	54.8	0.7
London Rd/Yew Tree Rd	London Rd S/B Left	22.3	6.8	4.2	20.1	5.9	3.5	16.9	5.7	2.9
	London Rd S/B Ahead	72.6	39.6	29.4	61.6	31.3	23.4	61.6	32.1	23
	London Rd N/B Ahead	64.3	12.8	22.4	76	18.9	39.2	73.2	16.2	35.5
	London Rd N/B Right	83.1	128.7	8.3	75.8	127.7	6	65.9	108.9	4.9
	Yew Tree Rd Left Right	60.9	69.2	12.2	78.3	82.3	16	82.2	85.4	18.2

*Cycle Time – 178 Seconds

4.3 2026 Do Something Future Year Scenario Assessment – Double Mini-Roundabouts

- 4.3.1 ARCADY 7 software has been used to model the proposed double mini-roundabout option with 2026 traffic flows.
- 4.3.2 The modelling results, as shown in table below, indicate that the proposed double mini-roundabout would over capacity in all the modelled scenarios. Full modelling outputs are attached as Appendix H to this report.
- 4.3.3 The A26, St. Johns Rd (NB) approach and the NB centre arm of the junction are predicted to operate with a Ratio of Flow/Capacity (RFC) of over 1.0 which indicates that the approach is over capacity during these peak time periods.

Table 4.5: 2026 Do Something Future Scenario ARCADY Modelling Results

Mini-RAB	Arm	2026 AM Peak		2026 PM Peak		2026 Saturday Peak	
		RFC	Max Q (PCU)	RFC	Max Q (PCU)	RFC	Max Q (PCU)
St. John's Rd/London Rd/Speldhurst Rd	St. John's Rd	0.90	8	0.90	8	1.03	20
	Speldhurst Rd	0.73	3	0.77	3	0.87	4
	London Rd	0.56	1	0.56	1	0.52	1
London Rd/Yew Tree Rd	London Rd (S)	0.80	4	1.03	28	0.98	13
	London Rd (N)	0.82	4	0.76	3	0.69	2
	Yew Tree Road	0.52	1	0.61	2	0.62	2

5 Conclusions and Recommendations

- 5.1.1 The existing junction is already sensitive in terms of its operational capacity; particularly during the busier AM and PM peak hour periods with significant queuing occurring.
- 5.1.2 The assessments indicate that, of the proposed options, the revised signal arrangement would provide more additional theoretical capacity at the junction when compared with the double mini-roundabout option.
- 5.1.3 The proposed option with the staggered crossing on Speldhurst Rd would be the optimum in terms of capacity if the pedestrian refuge can be physically accommodated; however, either crossing arrangement does not have too detrimental an impact on junction capacity.
- 5.1.4 It is important to note that the assessments have been undertaken from the perspective of operational capacity at the junction only.
- 5.1.5 The assessment does not take into account or consider other operational factors, such as, vehicle/pedestrian safety, design or cost practicalities.
- 5.1.6 The assessments do not include the operation of existing stand-alone pelican crossing to the north of the junction as the potential is considered equal to either proposed scenario.



0	DDMMYY				
Rev	Revision Date	Purpose of revision	Drawn	Checked	Approved



Kent County Council
Ashford Highway Depot
Henwood Industrial Estate
Ashford TN24 8AD
Tel: 03000 418181

Project
**YEW TREE ROAD
TUNBRIDGE WELLS**

Drawing title
PEDESTRIAN ISLAND UPGRADES

Scale	1:500 at A1	Do not scale
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Drawing number	KCC/LTP/YTR/001	Rev	0
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This drawing is not to be used in whole or part other than for the intended purpose and project as defined on this drawing. Refer to the contract for full terms and conditions.

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Tunbridge Wells Highway Works Programme

A report by the County Council's Traffic Schemes and Members Highway Fund Manager to the Tunbridge Wells Joint Transportation Board on 20 April 2015

Summary: This report updates Members on the identified schemes approved for construction in 2015/16

1. Introduction

This report provides an update and summarises schemes that have been programmed for delivery in 2015/16

1.1 Legal Implications

1.1.1 Not applicable.

1.2 Financial and Value for Money Considerations

1.2.1 Not applicable.

1.3 Risk Assessment

1.3.1 Not applicable.

RECOMMENDATION:

That members note the report.

Appendix A - Footway and Carriageway Improvement Schemes

Appendix B - Street Lighting

Appendix C - Traffic Systems

Appendix D - Bridge Works

Contact Officers:

The following contact officers can be contacted on 03000 41 81 81

Carol Valentine	Highway Manager (West)
Earl Bournier	Tunbridge Wells District Manager
Sue Kinsella	Street Lighting Manager
Neil Tree	Footway and Minor resurfacing Treatment
Alan Casson	Resurfacing Manager
Mary Gillett	Major Projects Planning Manager
Wendy Boustead	Carriageway Surface Treatment Team Leader
Byron Lovell	Machine Resurfacing Team Leader
Katie Lewis	Drainage Manager
Toby Butler	Intelligent Transport Systems Manager
Tony Ambrose	Structures Manager

Footway and Carriageway Improvement Schemes

The delivery of these schemes is weather dependent; should it prove not possible to carry out these works on the planned dates, new dates will be arranged and the residents will be informed by a letter drop to their homes.

Machine Resurfacing – Contact Officer Byron Lovell			
Road Name	Parish	Extent of Works	Current Status
Angley Road	Cranbrook	From its junction with Wheatfield Way to its junction with Quaker Lane	Completed
A26 Eridge Road	Tunbridge Wells	At the junction with Broadmead	Programmed to start May 2015
A26 Eridge Road	Tunbridge Wells	Broadwater Lane to Nevill Terrace	Programmed to start May 2015
A262 Goudhurst Road	Cranbrook	o/s Brieley Coach Works	Programmed to start May 2015
B2160 Maidstone Road	Paddock Wood	Jct with Badsell Road	Programmed to start June 2015
A229 Hawkhurst Road	Cranbrook	Double bends north of Limes Grove.	Programmed to start June 2015
A26 London Road	Tunbridge Wells	A26 London Road / Eridge Road / Nevill Street	Programmed to start Summer 2015
A268 Rye Road	Sandhurst	A28 Hastings Road to Lomas Lane	Programmed to start Summer 2015
Footway Improvement - Contact Officer Neil Tree			
Road Name	Parish	Extent and Description of Works	Current Status
Ferndale	Tunbridge Wells	Whole length.	Works on site.
Burslem Road	Tunbridge Wells	Whole length of western footway. (Footway reconstruction).	To be Programmed.
Church Close	Brenchley	Entire Length (Footway	To be programmed. (works are subject to specialist contractor

Appendix A

		protection treatment).	assessment and approval)
Leighton Close	Tunbridge Wells	Entire length (Footway protection treatment).	To be programmed. (works are subject to specialist contractor assessment and approval)
Angley Court	Horsmonden	Entire Length (Footway protection treatment).	To be programmed (works are subject to specialist contractor assessment and approval)
Coach Road	Rusthall	Entire Length (Footway protection treatment).	To be programmed (works are subject to specialist contractor assessment and approval)

Micro Surfacing - Contact Officer Wendy Boustead

Road Name	Parish	Extent of Works	Current Status
Tudeley Road	Capel	From its junction with Catts Corner to its junction with The Levels	Programmed to start 13 – 14 April 2015
Maidstone Road	Brenchley	From its junction with Bramble Reed Road to its junction with Chestnut Lane	Programmed to start 20 – 22 April 2015
Goudhurst Road	Horsmonden/Goudhurst	From its junction with Forstal Farm to its junction with Spelmonden Road	Programmed to start 26 – 30 July 2015
Ferndale	Tunbridge Wells	From its junction with Hilbert Road to its junction with Sandrock Road	Programmed to start 14 – 15 April 2015
Sandhurst Road	Tunbridge Wells	Whole length	Programmed to start 15 – 20 April 2015
Shandon Close	Royal Tunbridge Wells	Whole adopted length	Programmed to start 20 April 2015
Turnden Road	Cranbrook	Centre section under trees	Programmed to start 22 – 23 April 2015
Rolvenden Road	Benenden	From its junction with Walkhurst Road to its junction with Beacon Hall	Programmed to start 23 – 24 April 2015

Surface Dressing - Contact Officer Wendy Boustead

Road Name	Parish	Extent of Works	Current Status
Horsmonden Road	Horsmonden/Lamberhurst	From its junction with A262 Goudhurst Road to High Friction Surfacing at its junction with Tong Lane	Programmed to start 11 May 2015
Maidstone Road	Horsmonden/Collier Street	From its junction with Kirkins Hill to its junction with Gaffords Bridge Cottages	Programmed to start 11 – 12 May 2015
Lamberhurst Road	Horsmonden	From its junction with Tong Lane to its junction with Pullens Farm	Programmed to start 11 May 2015

Appendix A

		bends	
Prospect Road	Royal Tunbridge Wells	From its junction with Bayhall Road to its junction with Camden Hill	Programmed to start 11 May 2015
Gills Green	Hawkhurst	200yds north of Slip Mill Lane to its junction with Water Lane	Programmed to start 10 May 2015
Green Lane	Benenden	From its junction with Goddards Green Road (Biddenden Hospital) to its junction with Halden Lane	Programmed to start 10 May 2015

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Street Lighting

Structural testing of KCC owned street lights has identified the following as requiring replacement this financial year. Programme dates are identified for those still requiring replacement.

Street Lighting Column Replacement – Contact Officer Sue Kinsella			
Road Name	Column Ref	Location	Status
WOODHILL PARK, Pembury	LWCE005	O/S 7	Completed apart from column ciphering
WOODHILL PARK, Pembury	LWCE007	O/S 17/19	Completed apart from column ciphering
WOODHILL PARK, Pembury	LWCE008	O/S 30/32	Replacement of remaining elderly columns in road – planned march/apr 2015
WOODHILL PARK, Pembury	LWCE010	O/S 39	Replacement of remaining elderly columns in road – planned march/apr 2015
WOODHILL PARK, Pembury	LWCE012	O/S 49	Replacement of remaining elderly columns in road – planned march/apr 2015
THE PADDOCK, Pembury	LTBB001	O/S 4/5	Completed about from column ciphering
THE PADDOCK, Pembury	LTBB002	O/S 9	Column installed – but not yet in light
THE PADDOCK, Pembury	LTBB004	O/S 16/17	Completed apart from column ciphering
THE PADDOCK, Pembury	LTBB005	O/S 22	Completed about from column ciphering
RUSTHALL HIGH ST, Rusthall	LHCE006	Jw Gladstone Rd	Replacement of elderly column March/April 2015
WOODHILL PARK, Pembury	LWCE021	O/S 72	hedge now cut back – awaiting column to be erected mar/april 2015
THE PADDOCK, Pembury	LTBB007	O/S 31	Completed apart from column ciphering
WARWICK PARK Tunbridge Wells	LWAH002	OPP 2	Planned replacement of aged column Mar/April 2015
WARWICK PARK Tunbridge Wells	LWAH003	O/S 5	Planned replacement of aged column Mar/April 2015
WARWICK PARK Tunbridge Wells	LWAH004	O/S 8/10	Planned replacement of aged column Mar/Apr 2015
WARWICK PARK Tunbridge Wells	LWAH005	OPP 18	Planned replacement of aged column Feb/Mar 2015

Appendix B

WARWICK PARK Tunbridge Wells	LWAH006	O/S 22/24	Planned replacement of aged column Feb/Mar 2015
WARWICK PARK Tunbridge Wells	LWAH024	O/S 92	Planned replacement of aged column feb/mar 2015
WARWICK PARK Tunbridge Wells	LWAH033	OPP 104	Planned replacement of aged column feb/mar 2015
WARWICK PARK Tunbridge Wells	LWAH038	O/S 114	Planned replacement of aged column feb/mar 2015
WARWICK PARK Tunbridge Wells	LWAH042	OPP 99	Planned replacement of aged column feb/mar 2015
WARWICK PARK Tunbridge Wells	LWAH043	Junct with Forest Road	Planned replacement of aged column feb/mar 2015
BROADWATER LANE Tunbridge Wells	LBEA005	Cnr SHOWFIELDS	Completed apart from column ciphering
BROADWATER LANE Tunbridge Wells	LBEA008	jw THE GOODWINS	Completed apart from column ciphering
SUMMERVALE RD Tunbridge Wells	LSES003	o/s 4/6	Completed apart from column ciphering
SUMMERVALE RD Tunbridge Wells	LSES014	o/s 62/62A	Completed apart from column ciphering
DUDLEY ROAD Tunbridge Wells	LDBB006	o/s 52	Completed apart from column ciphering
KNIGHTSBRIDGE CL Tunbridge Wells	LKAQ001	1 st in cul de sac	Completed apart from column ciphering
KNIGHTSBRIDGE CL Tunbridge Wells	LKAQ003	o/s 2	Completed apart from column ciphering
KNIGHTSBRIDGE CL Tunbridge Wells	LKAQ004	o/s 4/5	Completed apart from column ciphering
MAIDSTONE RD Paddock Wood	LMAJ031	o/s 81/83	Planned replacement of aged column feb/mar 2015
MAIDSTONE RD Paddock Wood	LMAJ040	Opp Hop Pocket PH	Planned replacement of aged column feb/mar 2015
MAIDSTONE RD Paddock Wood	LMAJ042	Cnr SHOWFIELDS	Planned replacement of aged column feb/mar 2015
WALLACE CLOSE Tunbridge Wells	LWAC004	o/s 9	Completed apart from column ciphering
WALLACE CLOSE Tunbridge Wells	LWAC002	o/s 3/4	Completed apart from column ciphering
WALLACE CLOSE Tunbridge Wells	LWAC001	o/s 1	Completed apart from column ciphering
GREENLEAS Pembury	LGBV002	o/s 6	Completed apart from column ciphering

Appendix B

GREENLEAS Pembury	LGBV003	o/s 16	Completed apart from column cipheryng
GREENLEAS Pembury	LGBV005	o/s 21	Completed apart from column cipheryng
GREENLEAS Pembury	LGBV006	o/s 29	Completed apart from column cipheryng
RIDGEWAY Pembury	LRAY013	On footpath o/s 33/35	Completed apart from column cipheryng
RIDGEWAY Pembury	LRAY012	On footpath o/s 45/47	Completed apart from column cipheryng
RIDGEWAY Pembury	LRAY014	o/s 53	Completed apart from column cipheryng
RIDGEWAY Pembury	LRAY008	Opp 13	Completed apart from column cipheryng
BROADWATER RISE Tunbridge Wells	LBEB001	Jw BROADWATER DOWN	Planned replacement of aged column mar/apr 2015
BROADWATER RISE Tunbridge Wells	LBEB002	o/s 53	Planned replacement of aged column mar/apr 2015
BROADWATER RISE Tunbridge Wells	LBEB003	o/s 30	Planned replacement of aged column mar/apr 2015
BROADWATER RISE Tunbridge Wells	LBEB004	o/s 47	Planned replacement of aged column mar/apr 2015
BROADWATER RISE Tunbridge Wells	LBEB005	o/s 43	Planned replacement of aged column mar/apr 2015
BROADWATER RISE Tunbridge Wells	LBEB006	Opp 41	Planned replacement of aged column mar/apr 2015
BROADWATER RISE Tunbridge Wells	LBEB007	o/s 35	Planned replacement of aged column mar/apr 2015
BROADWATER RISE Tunbridge Wells	LBEB008	Opp CLARENDON WAY	Planned replacement of aged column mar/apr 2015
BROADWATER RISE Tunbridge Wells	LBEB009	Opp Broad Oak Close	Planned replacement of aged column mar/apr 2015
HASTINGS ROAD Pembury	LHAU401	Belisha beacon	Planned replacement of aged column mar/apr 2015
HASTINGS ROAD Pembury	LHAU402	Belisha beacon	Planned replacement of aged column mar/apr 2015
BROADWATER DOWN Tunbridge Wells	LBDZ037	Opp Broadwater Rise	Planned replacement of aged column mar/apr 2015
BROADWATER DOWN Tunbridge Wells	LBDZ036	o/s 14A	Planned replacement of aged column mar/apr 2015
BROADWATER DOWN Tunbridge Wells	LBDZ035	Opp 14	Planned replacement of aged column mar/apr 2015

Appendix B

BROADWATER DOWN Tunbridge Wells	LBDZ034	o/s 16	Planned replacement of aged column mar/apr 2015
BROADWATER DOWN Tunbridge Wells	LBDZ033	o/s 23/25	Planned replacement of aged column mar/apr 2015
BROADWATER DOWN Tunbridge Wells	LBDZ032	o/s 18A	Planned replacement of aged column mar/apr 2015
BROADWATER DOWN Tunbridge Wells	LBDZ031	o/s 27	Planned replacement of aged column mar/apr 2015
BROADWATER DOWN Tunbridge Wells	LBDZ038	o/s 12	Planned replacement of aged column mar/apr 2015
BROADWATER DOWN Tunbridge Wells	LBDZ039	o/s 9/11	Planned replacement of aged column mar/apr 2015
BROADWATER DOWN Tunbridge Wells	LBDZ040	o/s 8	Planned replacement of aged column mar/apr 2015
BROADWATER DOWN Tunbridge Wells	LBDZ041	o/s 5	Planned replacement of aged column mar/apr 2015
FUGGLES CLOSE Paddock Wood	LFCF007	On path o/s 24	Planned replacement of aged column mar/apr 2015

Traffic Systems

There is a programme of scheduled maintenance to refurbish life expired traffic signal equipment across the county based upon age and fault history. The delivery of these schemes is dependent upon school terms and holiday periods; local residents, businesses and schools will be informed verbally and by a letter drop of the exact dates when known.

Traffic Systems - <i>Contact Officer: Toby Butler</i>		
Location	Description of Works	Current Status
No traffic signal refurbishment work being carried out this year		

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Bridge Works – Contact Officer Tony Ambrose			
Road Name	Parish	Description of Works	Current Status
Grosvenor Bridge	Tunbridge Wells	<p><i>Timing and outline of the works are as follows:</i></p> <ul style="list-style-type: none"> • 2015/16 programmed work is for the reconstruction of 2 concrete piers/supports below the bridge. • The piers have suffered serious deterioration of the concrete and need replacing to maintain the support to the bridge/road. • Works are currently programmed to start September 2015 for approximately 4 months but may be delayed as the works in part affect the railway line below and are dependent on Network Rail confirming access to the track. • Presently a significant area of loose, spalling concrete has been removed from the pier faces, in part for public safety and in part to prevent roosting by bats, which would otherwise detrimentally affect the works. • These are the first and most urgent works of what is expected to be a programme of ongoing refurbishment to the bridge over future years. 	<p>Works programmed September 2015 for 4 months.</p> <p>Programme is subject to Network Rail consent regarding access.</p>
Clayhill Road	Lamberhurst	Structural Repairs to Hoathley Bridge (no traffic restrictions anticipated)	Minor Works programmed for completion by end of June /July 2015 but weather/water level dependent.
C107, Bodiam Road	Sandhurst	Structural Repairs to Bodiam Mill bridge. Road closure likely to be required	Works programmed Winter 2015/16

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HIGHWAY IMPROVEMENT SCHEME PROGRESS REPORT

A report by the County Council's Traffic Schemes and Member Highway Fund Manager to the Tunbridge Wells Joint Transportation Board on 20 April 2015.

Executive Summary

This report describes the progress to date and anticipated progress over the next three months of all programmed highway improvements and those schemes that are expected to be included in Kent County Council's 2014-15 Capital Programme.

Background and Discussion

- 1 This report gives details of the specific schemes which are expected to be progressed in Tunbridge Wells.
- 2 Appendix A summarises the schemes and gives an overview of the progress to date and anticipated progress prior to the next meeting of this Board.
- 3 Appendix B summarises the schemes committed under Kent County Council's Member Highway Fund for each County Member as well as details of applications which are currently being progressed.

RECOMMENDED:

That Members note the progress of programmed highway improvements.

Appendices

A- Highway Improvement Schemes

B – Combined Members Fund

Sources of Information: Circular Roads 1/2013 Setting Local Speed Limits. The background papers pertaining to the report are held on file.

Contact Officers: Christopher Cordrey-Moore, Kent County Council
Steven Noad, Kent County Council
Tara O'Shea, Kent County Council
03000 41 81 81

Head of Transportation: Tim Read – Kent County Council
03000 41 81 81

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Appendix A - Highway Improvement Programme: Tunbridge Wells Borough 2014-15

Location	Description of Works	Current Progress	Anticipated Actions for next 3 months (Prior to next JTB)	Original Allocation 2014-15	Forecast Out-turn 2014-15	KCC Highways, Transportation & Waste
B2079 North Road junc. Ballard's Hill Goudhurst	Casualty reduction works – improvements to junction layout, signage and road markings.	Works completed		£5k	£6.5k	Tara O'Shea 03000 41 81 81
A229 Cranbrook Road junc. Heartenoak Road	Casualty reduction works – minor improvements to junction signage.	Works completed		£500	£500	Tara O'Shea 03000 41 81 81
A228 Colts Hill	Casualty reduction works – maintenance of previous CRM works.	Scheme designed and costed	Programme date awaited	£10k	£10k	Steven Noad 03000 41 81 81
Carr's Corner Royal Tunbridge Wells	Installation of additional pedestrian warning signs on the approaches to roundabout	Works completed		£3k	£3k	Steven Noad 03000 41 81 81

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Appendix B – Combined Member Fund**Combined Member Grant programme update for the Tunbridge Wells District**

The following schemes are those which have been approved for funding by both the relevant Member and by the Director of Highways and is up to date as of 26th March 2015.

The details below are for Highway Schemes only and do not detail contributions Members have made to other groups such as Parish or District Councils.

More detail on their schemes can be accessed by each Member via the online database or by contacting their Highway Project Engineer.

2013/14/15 Combined Member Grant Highway Schemes**John Davies – Tunbridge Wells West**

Scheme	Cost	Status
Mount Ephraim Zebra Crossing	£20,550	Programmed 30 th March 2015

Sean Holden - Cranbrook

Scheme	Cost	Status
Implement changes to the junction layout at Waterloo Road j/w Angley Road A229 to give traffic priority on the main A road. Works include extension to the centre island, new signing and lining, relocation of lit street furniture and double yellow line parking restrictions	£21,250	Awaiting programme date
A229 Angley Road, Cranbrook – 40mph speed limit	£3,030	Public Consultation Stage

Christopher Hoare – Tunbridge Wells East

Scheme	Cost	Status
Installation of parking restrictions in the vicinity of St Philips Court, Sandhurst	£1,000	Complete
5 Day Gang Hire – Sherwood Parish	£4,330	Awaiting programme date
St Barnabus School, Quarry Road, Tunbridge Wells – 20mph proposal	£6,000	Programmed for May half term
Gang Work and path clearance – Pembury Parish	£4,669	Complete
Sandhurst Road near St Philip's Court – Installations of Elderly persons crossing sign	£1,000	Awaiting programme date
Heron's Way, Pembury – Installation of salt bin	£306	Complete
Ridgway and Forest way, Pembury – Installation of DYLS	£2,000	Public Consultation Stage (TWBC to progress)
Pembury High Street, Pembury – Removal of planters and replace with trees	£7,000	Awaiting programme date (November)

Alex King – Tunbridge Wells Rural

Scheme	Cost	Status
Highway Mirror – A262 Cranbrook Road/B2084	£1,045	Complete
Brenchley Road, Matfield – Install bollards at junction with Maidstone Road	£3,220	Complete
Brenchley Road, Brenchley - Install Interactive sign near Brenchley and Matfield Primary School	£8,000	Design stage
Brick Kiln Lane, Horsmonden – Installation of salt bin	£306	Complete
Brenchley Road and Coppers Lane, Brenchley – Installation of 30mph	£2,300	Public Consultation Stage

Peter Oakford – Tunbridge Wells North

Scheme	Cost	Status
Installation of parking restrictions outside the Bike Shop and Hairdressers on A26 London Road, Southborough	£2,500	Complete
St Johns Road, Southborough – Installation of advanced direction sign on approach to the service road	£935	Awaiting programme date
Chestnut Avenue, Southborough – Installation of DYLS	£2,200	Public Consultation Stage (TWBC to progress)
Powder Mill Lane, High Brooms – Installation of School advisory 20mph	£10,220	Awaiting programme date

James Scholes – Tunbridge Wells South

Scheme	Cost	Status
Claremont Primary School, Claremont Road, Tunbridge Wells – 20mph proposal	£4,500	Programmed for April Easter holidays
St James Church of England School, Sandrock Road, Tunbridge Wells – 20mph proposal	£4,500	Programmed for April Easter holidays
Hall's Hole Road, Tunbridge Wells – Signing and lining improvements	£8,750	Awaiting programme date
Warwick Road, Tunbridge Wells – Planting of 3 trees	£1,395	Complete
Major York's Road, Tunbridge Wells – Installation of DYLS	£2,000	Public Consultation Stage (TWBC to progress)

Petition requesting a pedestrian crossing or central refuge in Crescent Road, Royal Tunbridge Wells

A report by the County Council's Traffic Schemes & Member Highway Fund Manager to the Tunbridge Wells Joint Transportation Board on 20 April 2015.

Background

This report follows the receipt of two petitions by Kent County Council that were organised by Mr Richard Pooley of St Augustine's Church. These petitions, paper and Internet based contained a total of 1,027 respondents and were discussed at the January 2015 meeting (TB33/14). The area where a crossing point has been requested is on the A264 Crescent Road, this road runs generally east/west between Carr's Corner and the junctions of Church Road/Mount Pleasant Road.

The location where the crossing point/refuge has been requested is in the immediate vicinity of several vehicle accesses to/from the multi-story car park, Calverley Park and Calverley Park Crescent. This area is clearly going to limit the options available for such facilities to be provided due to the need to maintain unobstructed access.

There may however be some scope to further explore the feasibility options for a central traffic separator island and/or kerb build-out in the immediately west of St Augustine's Church, or if this is not practicable then look at the option to provide a new refuge between this point and the existing one near to Calverley Terrace.

Recommendation

Kent County Council request that the Board note this report and endorse a dialogue with the local County Councillor for the area should there be options available to fund this work.

Sources of Information:

Kent County Council Highways,
Transportation & Waste

Contact Officer(s):

Steven Noad – 03000 41 81 81

Tim Read
Head of Transportation

Andy Corcoran
Traffic Schemes & Member Highway Fund Manager

Roger Wilkin
Interim Director of Highways, Transportation & Waste

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