

**MALDON DISTRICT
LOCAL HIGHWAYS PANEL
MEETING – 1 APRIL 2016
Council Chamber, Princes Road, Maldon – at 9.00AM**

Membership:

Essex County Council – Councillors R L Bass (Chairman), R G Boyce MBE and Mrs P A Channer
Maldon District Council – Councillors Mrs B D Harker, M W Helm, J V Keyes, Miss M R Lewis,
R Pratt (Vice-Chairman), Mrs M E Thompson

AGENDA

1. Apologies for absence.
2. Minutes of last meeting held on 15 January 2016 (copy enclosed).
3. Matters Arising from Minutes of the Previous Meeting
4. Approved Works Programme and APPENDIX 1 – Additional Information (copy enclosed)
5. Potential Schemes List 2015/16 and APPENDIX 2 – Additional Information (copy enclosed)
6. Highway Rangers Work Summary – February 2016 (copy enclosed).
7. Any other Urgent Business.
 - (i) Items requested by Panel Members.

Enquiries to: Stuart Jennings, Committee Services Manager/Highways Liaison Officer - tel 01621 875745 or email stuart.jennings@maldon.gov.uk or Helen Overton – tel 01621 875706 or email helen.overton@maldon.gov.uk
Jon Simmons - Essex County Council Customer Liaison Team – tel 0845 603 7631 or email jon.simmons@essex.gov.uk.

Maldon District Local Highways Panel - Approved Works Programme (March 2016)

Schemes Key	Completed	Cancelled	Update
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Ref. No.	Cost Code	Task Name	Parish	Finish	CMA approved	Scheme Type	Works Description	Allocated Budget	Comments
2014/15 Approved Schemes									
1	LMAL142003	Viking Road/Dorset Road/Wordsworth Road	Maldon	Apr 2016	15/04/2014	Traffic Management	Verge improvements to prevent parking	£23,000	Scheme brought forward from June 2016. Works started but Gang have reported issues on site installing scheme.
2	LMAL142004	B1021 Southminster Road/Tillingham Road Asheldham	Asheldham	Feb 2016	15/04/2014	Traffic Management	Asheldham bends improvements -detailed design works	£6,000	Detailed design completed -See Appendix 1. Phased approach designs and Scheme on Potential Schemes List - £974,285
3	LMAL142006	Fambridge Road, Maldon (Limebrook Way RAB to Royal Oak PH)	Maldon	On Hold	15/04/2014	Traffic Management	Detailed design of footpath	£6,000	Possible development in vicinity of scheme - Scheme On Hold, awaiting results of any development plans
4	LMAL142008	Maypole Road, Heybridge	Heybridge	Sep 2016	15/04/2014	Traffic Management	Drainage improvement scheme - Verge reconstruction, bollards, kerbing	£50,000	See Appendix 1 - Drainage report and scheme design
5	LMAL142002	B1026 Goldhanger Road, Heybridge Near Spicketts Brook	Heybridge	Aug 2016	15/04/2014	Traffic Management	Drainage improvement scheme - Verge reconstruction, bollards, kerbing	£50,000	See Appendix 1 - Technical Note
6	LMAL142010	Bridge nr Drapers Chase, Goldhanger Road, Heybridge	Heybridge	May 2016	15/04/2014	Traffic Management	Drainage improvement scheme - investigation/clearing vegetation	£4,000	Linked to LMAL142002 See Appendix 1 - Technical Note
7	LMAL142029	King Street/Queens Avenue, Maldon	Maldon	Nov 2016	25/06/2014	Traffic Management	Implementation of 20 mph speed limit	£12,000	Design Engineer advised insufficient space at Cross Road j/w King Street junction for 20mph signs, Engineer instructed to consider any alternatives
8	LMAL142022	B1022 Maldon Road Great Totham	Great Totham	Sep 2016	25/06/2014	Traffic Management	Implementation of Phase 2 of walkable verge	£22,000	Adjacent land owner had ploughed to edge of field and highway boundary. Land Owner disputing highway boundary, works on going to resolve the issue.
9	LMAL142018	Tolleshunt D'Arcy Road, Tolleshunt Major	Tolleshunt Major	May 2016	25/06/2014	Traffic Management	Scheme to pipe 20 m section of ditch to improve pedestrian safety	£7,500	Scheme completed, £7,500 top up agreed at January Panel meeting
10	LMAL142020	B1021 Tillingham Road, Tillingham	Tillingham	Oct 2016	25/06/2014	Traffic Management	Scheme to extend 30 mph speed limit needs speed survey and scheme to install additional bends signs/SLOW road markings	£4,210	Was Oct 2015, Highway Improvement Design team have stated following design works that a 30mph buffer is not feasible but a 40mph buffer is achievable. Parish Council have agreed to the 40mph buffer, scheme to progress.
11	LMAL142035	Maldon Road (the Grange to Beacons Chase) Bradwell on Sea	Bradwell on Sea	Nov 2016	25/06/2014	Traffic Management	Scheme for 30mph speed limit between jw B1021 and Delameres Farm and Give Way sign	£9,000	Was Dec 2015, Highway Improvement Design team has now established that location does not meet ECC or DfT criteria for a 30mph or 40mph speed limit buffer. Parish Council has been contacted for their views around cancelling the scheme Or pursuing it through a Cabinet Member Action. Awaiting Parish Council comments.
2015/16 Approved Schemes									
12	LMAL151001	2016/17 Casualty Reduction Scheme reports	Maldon	Mar 2016	25/03/2015	Safer Roads	To produce 2016/17 casualty reduction reports	£16,000	Completed
13	LMAL151004	Lower Burnham Road 600m west of j/w Rectory Lane - casualty reduction scheme	Latchingdon	Apr 2016	25/03/2015	Safer Roads	Feasibility study to alleviate danger posed by adjacent road side pond	£4,000	Scheme being progressed through partnering consultant
14	LMAL151005	Woodham Road jw Lower Burnham Road - casualty reduction scheme	South Woodham	Apr 2016	25/03/2015	Safer Roads	To improve signage, junction, traffic islands	£32,000	Design previously shared at January 2016 Panel meeting..
15	LMAL151007	Beckingham Road jw Festival Gardens -casualty reduction scheme	Tolleshunt D'Arcy	Apr 2016	25/03/2015	Safer Roads	To improve the junction	£3,000	
16	LMAL152001	Steeple Road jw Grange Avenue - study into junction improvements and possible RAB	Mayland	Jan 2016	25/03/2015	Traffic Management	Feasibility study into junction improvements and possible RAB	£10,000	See Appendix 1 - See Works Summary report. Design team arranged for vegetation in vicinity of junction to be cut back, Maintenance team dealing with replacement of missing Give-Way sign and replacement of road markings. These works should have improved the visibility at the junction.
17	LMAL152002	Fish Street - 20mph speed limit	Goldhanger	Nov 2016	25/03/2015	Traffic Management	To reduce the speed limit to 20mph, will require a CMA	£5,000	Was May 2016, currently cannot install 20mph signs at Fish Street j/w Head Street, Engineer investigating alternative measures.
18	LMAL152003	Braxted Park Road - VAS	Great Braxted	Jul 2016	25/03/2015	Traffic Management	To install a VAS near the entrance to Braxted Park Estate, will require a CMA	£8,500	Works issued to partnering consultant to progress scheme, CMA progressing.

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2015/16 Approved Schemes (Continued)									
19	LMAL152004	Walden House Road - Creation of lay-by	Great Totham	Jul 2016	25/03/2015	Traffic Management	Works to formalise parking on verge with lay-by	£25,000	UKPN diversion works complete, Exception report due to width of lay-by signed off. Scheme to progress
20	LMAL152005	Basin Road - Pedestrians in Road signage	Heybridge	Jan 2016	25/03/2015	Traffic Management	Scheme to remove existing column/bend warning sign and replace with new column/pedestrian in Road sign with external illumination	£8,000	Completed
21	LMAL152006	Burnham Road - VAS	Latchingdon	Jun 2016	25/03/2015	Traffic Management	To install a VAS on Burnham Road, will require a CMA	£8,500	Scheme being progressed through partnering consultant.
22	LMAL152009	Burnham Road jw Maldon Road - Improvements to advanced give-way signage	Mundon	Apr 2016	25/03/2015	Traffic Management	Improvements to advanced give-way signage at A1 Corner	£3,000	Scheme being progressed through partnering consultant.
23	LMAL152010	Fambridge Road (Lower Burnham Road to Rectory Road) - Study into provision of footway	North Fambridge	Apr 2016	25/03/2015	Traffic Management	Feasibility Study to consider provision of new footway/walkable verge	£5,000	Scheme being progressed through partnering consultant.
24	LMAL152011	The Avenue - Study into widening of footway	North Fambridge	Apr 2016	25/03/2015	Traffic Management	Feasibility Study into widening of footway	£3,000	
25	LMAL152012	High Street/Station Road/North Street/Burnham Road - 20mph speed limit	Southminster	Oct 2016	25/03/2015	Traffic Management	To reduce speed limit to 20mph, will require a CMA	£10,000	Scheme now progressing following additional automatic traffic counts, though Station Road does not meet criteria for a 20mph .
26	LMAL152013	Main Road - improvements to traffic calming	St Lawrence	Apr 2016	25/03/2015	Traffic Management	Installation of solar lighting at existing priority working	£10,500	Clarification being sought from Parish Council as the electricity supply here appears to be a Parish one.
27	LMAL152014	Woodham Road j/w Martins Lane - Study into drainage improvements	Stow Maries	Jun 2016	25/03/2015	Traffic Management	Feasibility study into drainage improvements	£5,000	Drainage Engineer now progressing scheme.
28	LMAL152015	Church Lane (Nr Four Elms/Glebelands - Study into carriageway improvements	Stow Maries	Feb 2016	25/03/2015	Traffic Management	Feasibility study into carriageway improvements to address drainage issues as properties at lower level to carriageway	£3,000	Completed See Appendix 1 for Feasibility Study, kerbing scheme option now added to Potential Scheme List.
29	LMAL152017	Church Street - dropped kerbs	Tollesbury	Jul 2016	25/03/2015	Traffic Management	Dropped kerbs to improve access to bus stop	£6,500	
30	LMAL152018	Parish Rooms Church Street - Study into improved access/surfacing	Tollesbury	Apr 2016	25/03/2015	Traffic Management	Feasibility Study into improved access/surfacing	£3,000	
31	LMAL152020	Beckingham Street/Tolleshunt D'Arcy Road - Study into junction improvements	Tolleshunt Major	Feb 2016	25/03/2015	Traffic Management	Feasibility Study into junction improvements	£3,000	See Appendix 1 - feasibility study recommends removal of bennett junction an installation of standard T-junction. Now a scheme on Potential Scheme List.
32	LMAL152022	Maldon Road nr Does Corner - Study into drainage improvements	Ulting	May 2016	25/03/2015	Traffic Management	Feasibility Study into drainage improvements	£3,000	Drainage Engineer now progressing scheme.
33	LMAL152023	Crouchman's Farm Road - Study into drainage improvements	Ulting	Apr 2016	25/03/2015	Traffic Management	Feasibility Study into drainage improvements	£3,000	Drainage Engineer now progressing scheme.
34	LMAL152025	Witham Road/The Street/Maypole Road/Kelvedon Road/Beacon Hill - SID poles and SID	Wickham Bishops	Aug 2016	25/03/2015	Traffic Management	To provide SID poles and SID, will require a CMA	£17,500	CMA progressing
35	LMAL152026	Mill Road - Bus Priority Improvements	Maldon	Cancelled	25/03/2015	Traffic Management	To improve the bus priority measures to prevent vehicles driving across adjacent forecourt to avoid restriction	£16,500	MDC granted planning permission for redevelopment of former garage site granted on 22/10/15 under FUL/MAL/15/00760. Proposed development would build out over forecourt, scheme not required..

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36	LMAL152044	Charity Farm Bends, Maldon Road, Goldhanger - Bend Improvements (Signs & Lines)	Goldhanger	Aug 2016	30/06/2015	Traffic Management	Change of Scope for Drainage Improvement Schemes - LMAL142012, LMAL142013, LMAL142014 - original CMA signed 15/04/14. These Drainage Improvement schemes have now been covered by works carried out by Highway Maintenance Team. Panel has now made a recommendation to allocate monies from the three Drainage Improvement Schemes to a Bend Improvement scheme at Charity Farm Bends, Goldhanger.	£12,000	
37	LMAL151008	Woodrolfe Road Tollesbury - Feasibility Study/Design into improvements to existing 30mph speed limit	Tollesbury	Feb 2016	30/06/2015	Safer Roads	On a section of Woodrolfe Road there is a lack of street lighting/repeater signs to show the 30mph speed limit. Feasibility Study/Design to consider improvements to ensure the 30mph speed limit is clear to all road users.	£3,000	See scheme drawing in Appendix 2, signing scheme now added to Potential Schemes List
38	LMAL156001	Tollesbury Primary School, East Street - SCP infrastructure	Tollesbury	Apr 2016	25/03/2015	School Crossing Patrol	To install dropped kerbs/tactile paving/swap school sub-plate to patrol and clear vegetation	£4,000	School Crossing Patrol (SCP) team advise that despite several request a Volunteer SCP officer has not been found. Suggestion is to withdraw the scheme.
39	LMAL158001	Bridleway 25 - drainage/surface improvements	Tolleshunt D'Arcy	Sep 2016	25/03/2015	Public Right of Way	To improve bridleway drainage/surface for 300m	£10,800	Flood team working with land owners to get them to clear their ditches and maintain them. Essex & Suffolk Water and land owners to contribute to surface improvements.
Revenue Funded Schemes									
40	LMAL152033	Surveys	Various	Mar 2016	24/04/2015	Traffic Management	Ad Hoc Survey Works - Automatic Traffic Counts/Degree of Pedestrian Conflict Surveys/Road Safety Assessments to feed into scheme validations	£10,000	Spend to date -Twenty Eight Automatic Traffic counts and two Degree of Pedestrian Conflict Surveys now carried out to feed into Scheme Validations

Maldon District Local Highways Panel

April 2016

Appendix 1 – Approved Works Programme (March 2016)

Additional Information

Page 2 to 4 – AWP Scheme 2

LMAL142004 – B1021 Southminster Road/Tillingham Road, Asheldham

Design of bend improvements, in three phased approach

Page 5 to 17 - AWP Scheme 4

LMAL142008 – Maypole Road, Heybridge

Report and design for drainage/verge improvement scheme

Page 18 - AWP Scheme 5

LMAL142002 – B1026 Goldhanger Road, Heybridge

Technical Note on drainage improvement scheme.

Page 19 to 25 - AWP Scheme 16

LMAL152001 – Steeple Road j/w Grange Avenue, Mayland

Works Summary report

Page 26 to 41 - AWP Scheme 28

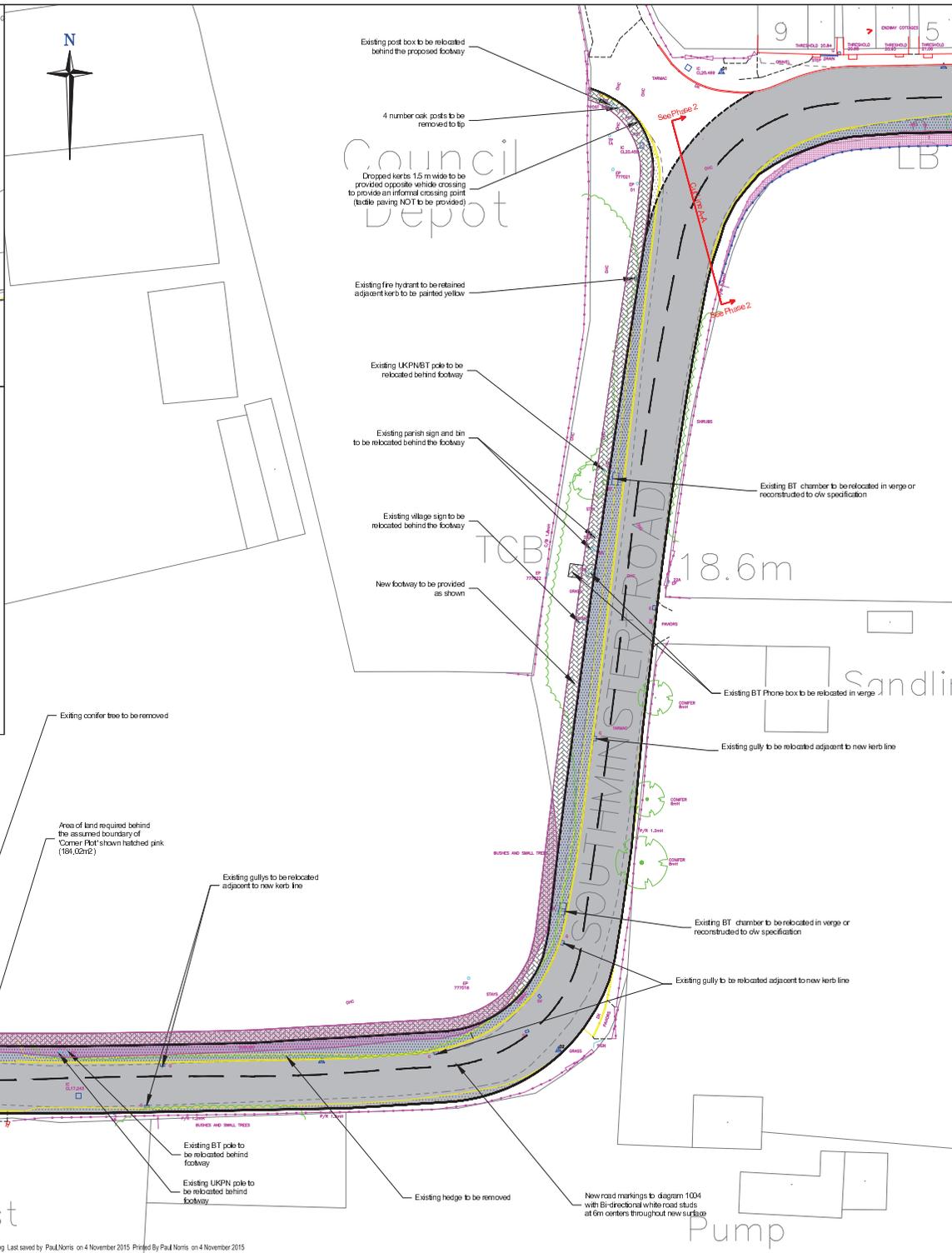
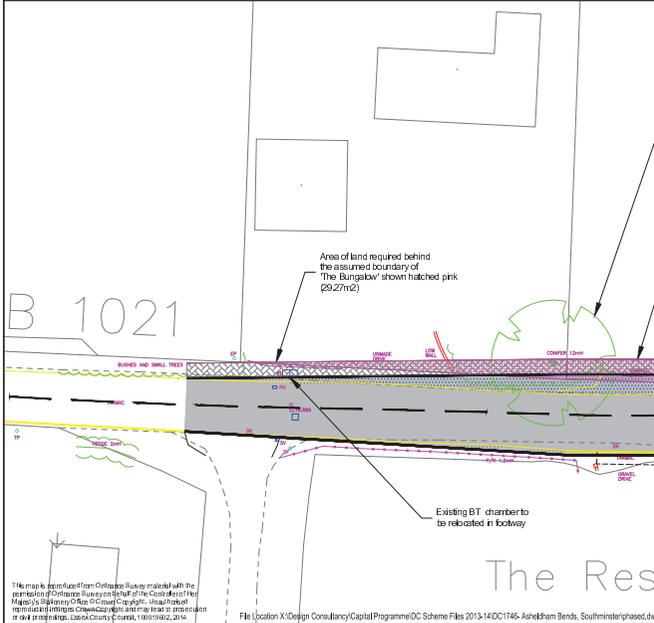
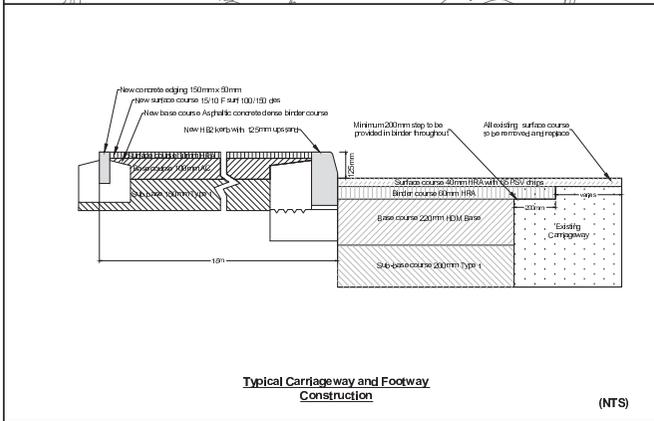
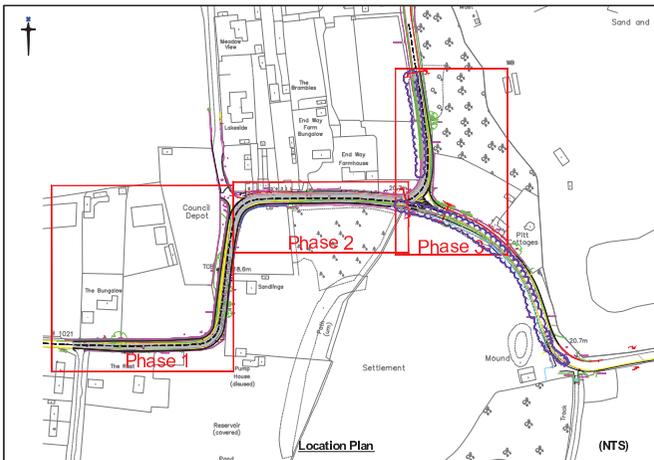
LMAL152015 – Church Lane Stow Maries

Report and design for drainage improvement scheme

Page 42 to 56 – AWP Scheme 31

LMAL152020 – Beckingham Street/Tolleshunt D'Arcy Road, Tolleshunt Major

Design attached for the information of the Panel.



- Notes**
- Do not scale. This drawing is to be read in conjunction with all other contract drawings and documents.
 - All works to be in accordance with the Specification for Highway Works and Essex County Council Specifications and Standard Construction Drawings.
 - The positions of apparatus given on this drawing are indicative only and the contractor must confirm the location of plant prior to any excavation.
 - All traffic signs and lines are to comply with The Traffic Signs Regulations and General Directions 2002. Markings are to be white thermoplastic screed with applied solid glass beads unless otherwise stated.
 - Location of all new signs to be verified on site prior to erection. When erected sign plates shall have a desirable clearance of 1.0m from the edge of the carriageway. The absolute minimum clearance from the sign plate to the edge of carriageway shall be 450mm.
 - All existing signs to be retained unless stated otherwise. Existing signs to be cleaned and any overhanging trees or bushes to be lopped or trimmed to maintain proper visibility to signs. Any defects to existing signs and/or posts noted by the Contractor during the works to be reported to the Engineer.
 - Drainage details are indicative only and outfall directions are to be clarified once a drainage survey has been undertaken.
 - Land is required for the widening scheme, it should be noted that no agreement has been reached with land owners at this stage of the project and thus the areas shown hatched pink.

- Key**
- Existing kerb line (surveyed) to be retained
 - Existing kerb line (surveyed) to be replaced
 - Existing Kerb line (OS)
 - Existing hedge line
 - Proposed new kerb line
 - Proposed area of carriageway widening
 - Proposed area of land required
 - New footpath
 - New surface course
 - Existing fencing
 - Proposed fencing

Rev. Date Description of revision Drawn Checked Reviewed Approval

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DRAWING STATUS

FOR COSTING

Essex Highways

Ringway Jacobs working in partnership with

Mark Rowe, Service Director, Essex Highways
County Hall, Chelmsford, CM1 1QH
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SCHEME TITLE

ASHELDHAM VILLAGE BEND IMPROVEMENTS LML001006

DRAWING TITLE

GENERAL ARRANGEMENT PHASE 1

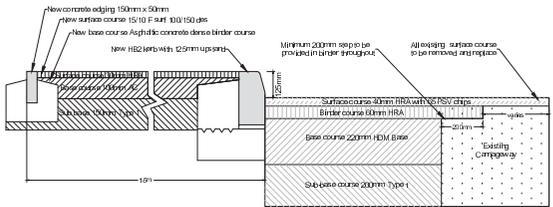
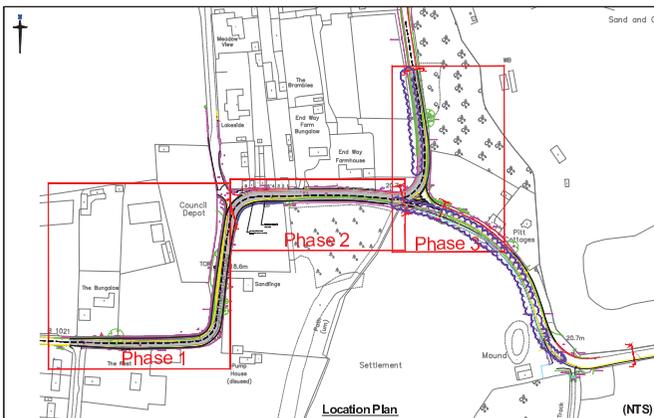
DESIGNED	DRAWN	CHECKED	REVIEWED	APPROVED
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DRAWING DIMENSIONS IN MILLIMETRES (SCALE 1:1) (60:30000)

DIMENSIONS IN MILLIMETRES LEVELS IN METRES 1250

DRAWING NO. DC1746-2

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Typical Carriageway and Footway Construction (NTS)



- NOTES**
1. Do not scale. This drawing is to be read in conjunction with all other contract drawings and documents.
 2. All works to be in accordance with the Specification for Highway Works and Essex County Council Specifications and Standard Construction Drawings.
 3. The positions of apparatus given on this drawing are indicative only and the contractor must confirm the location of plant prior to any excavation.
 4. All traffic signs and lines are to comply with The Traffic Signs Regulations and General Directions 2002. Markings are to be white thermoplastic screened with applied solid glass beads unless otherwise stated.
 5. Location of all new signs to be verified on site prior to erection. When erected sign plates shall have a desirable clearance of 1.0m from the edge of the carriageway. The absolute minimum clearance from the sign plate to the edge of carriageway shall be 450mm.
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 7. Drainage details are indicative only and outfall directions are to be clarified once a drainage survey has been undertaken.
 8. Land is required for the widening scheme, it should be noted that no agreement has been reached with land owners at this stage of the project and thus the areas shown hatched pink.

- Key**
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 - Existing Kerb line (CG)
 - Existing hedge line
 - Proposed new kerb line
 - Proposed area of carriageway widening
 - Proposed area of land required
 - New footpath
 - New surface course
 - Existing fencing
 - Proposed fencing

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SCHEME TITLE
**ASHELDHAM VILLAGE
 BEND IMPROVEMENTS
 LMAL001006**

DRAWING TITLE
**GENERAL ARRANGEMENT
 PHASE 2**

DESIGNED	DRAWN	CHECKED	REVIEWED	APPROVED
PJN	PJN	PJN	PJN	PJN
DATE	DATE	DATE	DATE	DATE
MAR 15	MAR 15	MAR 15	MAR 15	MAR 15

DRAWING UNITS UNDO:
 DIMENSIONS IN MILLIMETRES
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Maypole Road Safety Improvements Highway Improvements Design Team

JANUARY 2016



Document Control Sheet

Document prepared by: Highway Improvements Design Team

Paul Norris Engineer	Highways County Hall A2 Annexe Chelmsford Essex. CM1 1QH	T E W	0845 603 7631 paul.norris@essexhighways.org www.essex.gov.uk/highways
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Report Title	Maypole Road Safety Improvements
Project Number	DC1817
Status	Approved
Revision	-
Control Date	February 2016

Record of Issue

Issue	Status	Author	Date	Check	Date	Authorised	Date
1	Approved					MBS	FEB16

Distribution

Organisation	Contact	Number of Copies

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 - 3.3 Why will the development help? 6**
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- 5 Conclusions 10**

Appendix 1: Short Term Proposed Measures

Appendix 2: Collision Data

1 Executive Summary

The Local Highways Panel (LHP) is concerned regarding the proximity of the open ditch to the carriageway along Maypole Road and the risk of vehicles entering the ditch as a result.

Extensive investigation was undertaken in 2015 into piping the ditch – however this concluded that piping this in its entirety is not currently an option as it will further increase the flood risk to Holloway Road (see cover picture).

Removing the ditch will also have other detrimental impacts such as loss of capacity, ecological benefits, and ease of access for maintenance.

Partial piping may be an option to reduce the risk of vehicles entering the ditch. However the implementation of such infrastructure will result in the installation of solid structures (headwalls) that could significantly increase the severity of injury if a collision did occur.

A major housing development is proposed which will bisect Maypole Road and provide a significant flood alleviation scheme. This scheme will divert run off from both the surface water system in Maypole Road and Holloway Roads.

Once the flood alleviation work has been completed (proposed for 2017/18) it will be possible to pipe the ditch in its entirety without increasing the flood risk downstream.

The development has now received outline permission thus is expected to be in place and operational within two years. (Jan 2018).

In light of this development and the timescales involved a low cost interim measure to directly address the issue identified has been proposed.

This solution involves the creation of an upstand along the existing verge with the use of soil filled sand bags to protect the ditch.

The cost of this proposal has been estimated at £45,000.

2 Scheme Brief

A request was received from the Maldon Local Highways Panel (LHP) to complete a feasibility study to investigate measures to improve safety at the edge of carriageway along the southern section of Maypole Road. The request was made following a series of incidents where vehicles left the carriageway and drove into the adjacent ditch.

2.1 Collision data

The latest 3 year collision data ending 31/12/15 was considered for the route and this showed that no there have been no recorded personal injury collisions (PIC's) on this section of Maypole Road within this period.

The investigation period was increased to the last 10 years, and this showed only 4 recorded collisions within the section, the most recent of which was in May 2009 (almost 7 years ago).

Of these 4 collisions only 1 resulted in vehicles ending up in the ditch, this occurred in February 2006 (10 years ago) and resulted in a slight injury.

This collision involved a southbound car overtaking a pedal cycle, in the path of a northbound vehicle and although the pedal cycle and the overtaking vehicle ended up in the ditch, this feature was not a contributing factor which led to the collision. Overtaking without looking properly and excessive speed were reported by Essex Police.

The collision data has been provided in Appendix 2.

With such a low collision rate and only 1 personal injury collision recorded in the 10 year period involving the ditch it is difficult to justify significant expenditure.

3 Discussion on piping the ditch

3.1 Why can not the whole ditch be piped now?

The ditch due to the vegetation in the bottom is considered to be rough which slows the water as it flows around the roots and other vegetation – if the ditch were to be piped with a large diameter pipe (required for capacity) the speed of flow would increase as the pipe is smooth without obstructions.

This would have the effect of delivering the water to the Holloway Road culvert quicker and therefore increasing the likelihood of flooding in Holloway Road. This risk is already significant with a number of flood events in recent years.

If a smaller pipe were used (to reduce the flow reaching the Holloway Road culvert) the run off from the fields would be too great and the excess water would run down the carriageway which would again result in an increased flood risk downstream.

Essex County Councils current policy is against the piping of ditches unless absolutely necessary, this is for a number of reasons including loss of capacity, loss of ecological habitat, ease of future access for maintenance and monitoring, and open ditches also provide a level of water treatment of the water passing through which pipes do not provide.

Given these factors piping the ditch as a whole has been discounted, until the surface water run-off has been reduced by the development.

3.2 Why is partial piping being considered?

Piping only sections of the ditch will allow the flow to still be 'slowed' but allow for some storage of water in the ditch sections between the piped sections during significant rain events, and will maintain the benefits of open ditches, detailed above in these sections.

However this design has been based on a theoretical model and would require flow monitoring over an appropriate time period to ensure that the assumptions made and conclusions reached regarding flood risk are sound.

The ECC Flood Management Team have not been able to recommended a time period for this monitoring as it will need to encompasses a significant measurable rain event, and these cannot be predicted.

The benefit of partial piping must also be assessed, the risk presented by the height difference between the carriageway and the bottom of the ditch will only be removed in parts, i.e. vehicles could still leave the carriageway on the un-piped sections.

Also head walls will be required at the start and end of each piped section and this will introduce solid structures which could increase the severity of injuries if vehicles did enter the ditch.

If partial piping is implemented and if the remainder of the water course is to be piped on the completion of the North Heybridge development, the pipe size will need to be consistent or access chambers will be required at each change in diameter – this will result in an increased overall cost.

3.3 Why will the development help?

The development proposals include a large earth bund and drainage system which will collect much of the water which currently runs off the surrounding land. This will then be diverted west into the River system, therefore significantly reducing the run off into the Maypole Road ditch.

This will significantly reduce the capacity required adjacent to Maypole Road and therefore provide alleviation for the Holloway Road system which has capacity issues downstream.

In light of the development and the reduction in surface water run off which will result, a low cost interim measure could be considered in the short term, and full piping in the medium term.

Any works post development will require the run-off to be recalculated to account for the reduced area, so that an appropriate pipe size can be designed.

Proposed Heybridge North Garden Suburb



- 1** The proposed relief road will connect Langford Road, Maypole Road and Broad Street Green Road and provide access to the new development
- 2** High quality landscaped gateways will be created to articulate the arrival to the new neighbourhood
- 3** The Avenue is the primary circulation route with a strong green character as created through generous verges and landscaping, in the form of large trees and hedgerows that frame views down the road and provide sense of enclosure
- 4** The Crescent is a new central green offering a high quality open space with attractive landscape and a children's' play area
- 5** Heybridge North Centre provides an attractive centre for the new and existing residents providing land to accommodate local shops/services, a doctors surgery and a one form entry primary school
- 6** Green corridors create continuous green spaces providing biodiversity and ecology value. These corridors will also accommodate circular walking and cycling routes to encourage healthier and active lifestyles; and form parks, gardens and children's play spaces to create opportunities for social interaction. They will also accommodate sustainable urban drainage systems to attenuate surface water
- 7** Heybridge Wood
- 8** The woodland edge will create a buffer between Heybridge Wood and the proposed development. It will also form part of the network of green corridors
- 9** Playing fields and allotments are provided within a short walk of the majority of the new and existing residents of Heybridge
- 10** The green northern boundary will provide the transition between the development and the new relief road offering a high quality landscape corridor and small open spaces
- 11** Green spaces are provided adjacent to the proposed additional new housing sites at Holloway Road and Broad Street Green Road to create a soft and attractive transition with existing and new developments, and provide opportunities to accommodate walking and cycling
- 12** Walking and cycling access is provided wherever possible to link the Garden Suburb with surrounding neighbourhoods
- 13** Strategic flood alleviation will manage water flows from surrounding areas
- 14** Allotments located at a location which provides access to existing and new neighbourhoods

4 Short term measures

Although the personal injury collision data does not identify the ditch as a contributory factor, there have been a further two damage only accident recorded by Essex Police within the section. The detail of these is limited, however the ditch was not mentioned in either incident.

It is possible, however that there are further unrecorded damage only incidents, along this section of Maypole Road which along with the perceived risk, have led the request from the LHP for measures to be provided.

Unfortunately, as the ditch is so close to the carriageway kerbing the verge is not possible as there is insufficient verge width to support the kerb and backing (it's likely to fall in the ditch and cause an obstruction to the flow – particularly if struck by a vehicle).

Hazard marker posts are also often used to highlight road side hazards however these must have 450mm clearance from the carriageway edge is not currently available throughout the length.

Therefore at this location a bespoke solution is required, a plan showing the proposed short term measures has be provided in Appendix 2.

The proposal is to use topsoil filled sand bags covered with a wild flower seed mat, to provide a 'green' upstand at the edge of the carriageway which will knit in with the existing verge vegetation to achieve a 'buffer' between the carriageway and the ditch.

The wild seed flower mat which is to be laid over the top of the sand bags should establish quickly providing both visual and environmental benefits for the area.

The planting should be well established by the time the development has been completed and therefore should continue to enhance the verge if the ditch is piped in the future.

Increasing the verge height and width should also allow further hazard marker posts to be provided, these have been detailed on the scheme drawing.



Typical hazard marker post

5 Conclusions

Piping the ditch in its entirety is not an option at this time as it WILL increase the flood risk in Holloway Road as explained in section 2.1.

Partial piping will only partially address the issue and has been estimated to cost £200,000.

Post completion of the measures to divert the run off which will be constructed as part of the development, a smaller pipe diameter would be required and this could be provided throughout the ditch length.

These factors lead to the conclusion that it would not be prudent to pipe the ditch at this time.

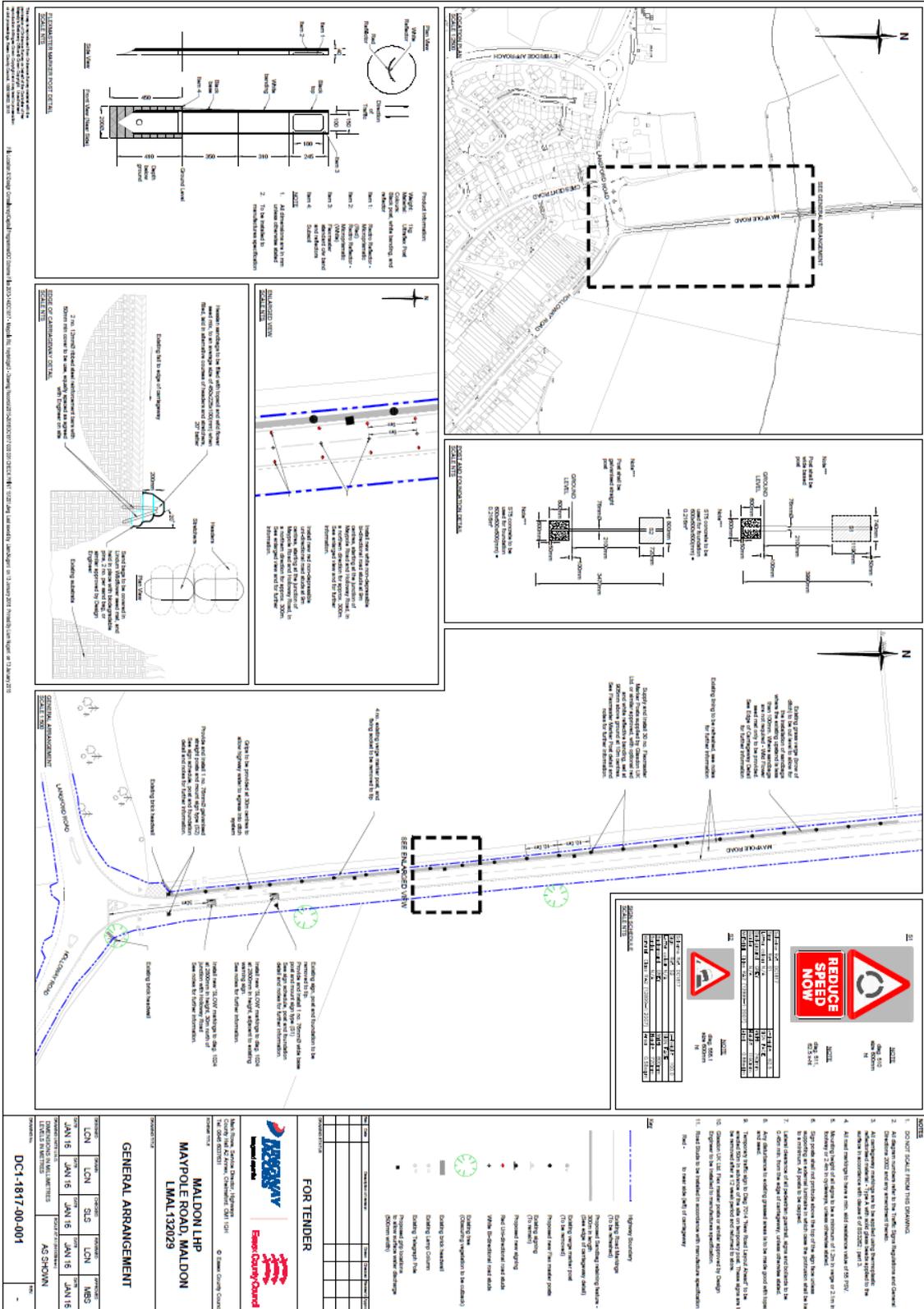
The short term measures proposed should cost around £45k which is only around 20% of the cost of partial piping, and therefore felt to be justifiable expenditure to address the identified issue and enhance the local environment, both environmentally and visually, pre and post development.

As this is a bespoke solution it is recommended that first a trial should be undertaken on a short section to ensure the design is practicable and performs as intended.

If the short term measures are particularly successful it may remove the need to pipe the ditch at all which would be beneficial for the local wildlife which will suffer some habitat lost from the development.

The wild flowers would have a better chance of establishing if planted in the spring, therefore completing the scheme in April/May 2016 is recommended.

Appendix 1 – Short Term Measures



Appendix 2: Collison Data

Please refer to the attached accident data.

Technical Note

The Maldon Local Highway Panel (LHP) has funded a feasibility/options study for drainage improvements on B1026 Goldhanger Road, Heybridge, between its junction with Lawling Avenue and Basin Road.

The SMO2 Highway Improvements Design Team (HIDT) have been commissioned through a design brief to investigate the following:-

- Arrange meeting with Maintenance Revenue team to discuss works undertaken to date and any remaining maintenance issues.
- Arrange meeting with Flood Management team to discuss scope of drainage improvements undertaken and confirm any future scheme proposals
- Arrange meeting with enforcement team to discuss any identified issues with water draining from adjacent land, unmaintained ditches and hedges.
- Visit site to identify areas where flooding of highway continue to occur.
- Obtain Highway Boundary and confirm ditch ownership along area of interest
- Produce a costed option report for presentation to LHP.
- Obtain stats
- Update Senior Engineer and Programme Coordinator on scheme progress

Following discussions with the Flood Management team, it has been identified that some work is being undertaken to improve the flooding issues on Wagtail Drive, although this was deemed to have no direct impact on the flooding issues further downstream on Goldhanger Road.

An initial site investigation has been undertaken to determine what apparatus currently exists on site, with the view to see what condition they are in. A camera survey and cleaning operation is currently being organised to assist with determining the current situation.

Members of our enforcement team have been in touch with the land owners, whose field currently run adjacent to Goldhanger Road, to politely remind them of their responsibility to maintain their watercourse. We are currently in process of organising a meeting with the land owners and our colleagues from enforcement to discuss the next steps of this process.

Once the jetting/camera survey has been completed, a clearer picture can be established, regarding exactly what apparatus there is within the site, and what condition it's in, judgment and decisions can then be made to determine the correct solution.

HI4009 Steeple Road jw Grange Avenue, Mayland

Summary Note

Background and summary of validation report and actions taken

The requirement for this investigation was set out in the scheme validation report dated 07/01/2014.

The scheme validation request from the Parish Council identified that road users were having difficulty emerging from the junction due to the speed of traffic along the Steeple Road. Their proposal was to install a mini roundabout to slow vehicles on the main road and allow vehicles to exit Grange Avenue.

The subsequent validation identified that a mini roundabout would not be supported by Essex Highways as Steeple Road is classified as a PR2 route. PR2s perform an essential traffic management distributor function between the local network and Priority One County Routes where priority is given to vehicular traffic on the major road. Furthermore, Grange Avenue forms a link between two PR2 routes and introduction of a mini roundabout would encourage further rat running than what is already occurring.

Finally, Steeple Road is also subject to a 40mph speed limit so a mini roundabout would also be against national guidelines.

Other issues raised in the scheme validation report were as follows:

- a) Cut back vegetation on approach to junction (open up visibility)
- b) Cut back vegetation obscuring signage

Vegetation along the nearside of Grange Avenue has been cut back and the damaged give-way sign at the junction replaced.

Also noted during the site inspection was that road markings are in poor condition along Steeple Road, particularly the give-way markings at the junction. This has been reported to maintenance however, is currently viewed as low priority, and given that the give-way sign has also been replaced and forward visibility to the junction cleared of vegetation, there is considered to be minimal risk of somebody overshooting the junction.

Image 1 – BEFORE – Grange Avenue at junction with Steeple Road (vegetation on nearside)



Image 2 – Photo taken from similar position on 07/03/2016



The validation report also states that visibility to right from Grange Avenue is obscured by a shrub, presumably self seeded rather planted as stated in the validation report, which is growing next to the utility pole. Image 1 shows that this is well away from the visibility splay of vehicles turning out from the junction and is not considered to be an issue at present - that said, it has been reported and is to be removed in due course.

Considered more of an issue is the hedge on the opposite side of Steeple Road where the carriageway rounds to the left opposite the bus shelter. Vegetation has been cut back to the highway boundary but is likely to continue to be an issue in future but is the responsibility of the adjacent landowner to maintain (image 3 and 4 show extent of vegetation at back of footway).

Image 3 – View from Grange Avenue to right

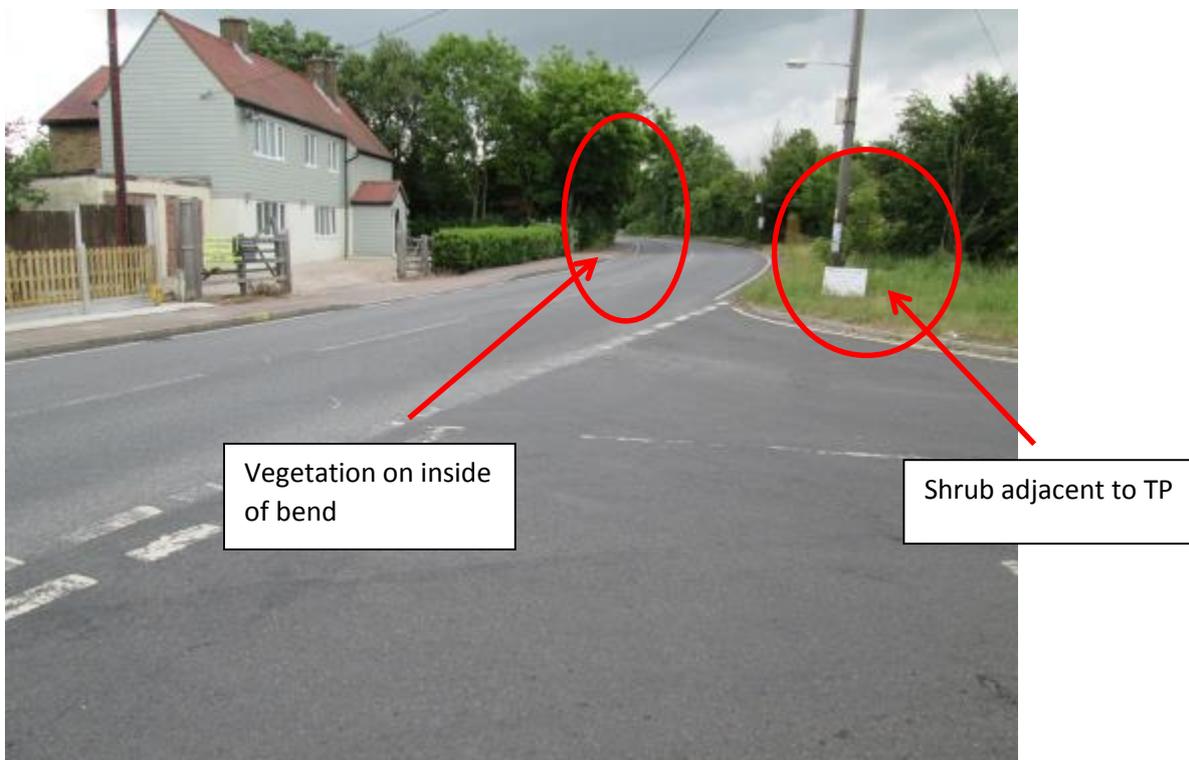


Image 4 – BEFORE - Vegetation at rear of footway



Image 5 – Image taken 07/03/2016 showing vegetation cut back to rear of footway



Vegetation has been cut back from in front of warning signs to maximise their effectiveness. Again, it is the responsibility of adjacent landowners to maintain this (see image 6 and 7).

As a matter of course, where vegetation is responsibility of adjacent landowners, this has been reported to Essex Highways enforcement team to monitor in future as this is likely to be ongoing.

Image 6 – BEFORE – Westbound approach to Grange Avenue, forward visibility to warning signs obstructed by vegetation



Image 7 – Photo taken 07/03/2016, vegetation cut back in advance of sign



Conclusion & Recommendation

All of the points raised in the scheme validation have been addressed therefore it is recommended that the job is closed down and any remaining funds reallocated to other schemes.

Church Lane, Stow Maries

Feasibility Study

Highway Improvements Design Team (SMO2)

March 8, 2016



Date: 08 March 2016
Author: Liam Nugent (HIDT SMO2)

Scheme Reference: HI4018
Feasibility Study
Church Lane, Stow Maries



Document Control Sheet

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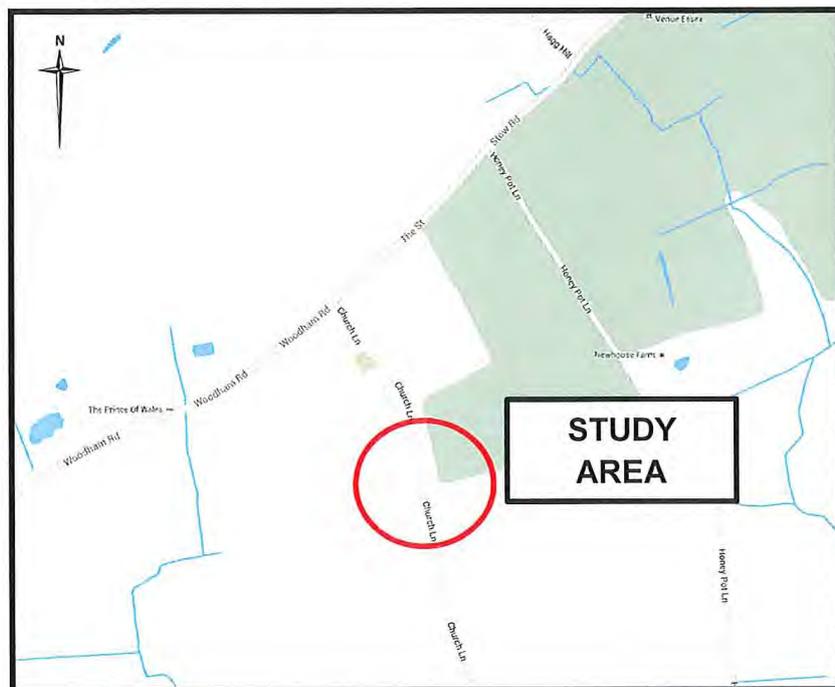
Distribution

Organisation	Contact	Number of Copies
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Date: 08 March 2016
Author: Liam Nugent (HIDT SMO2)

Introduction

- This note has been written for and on behalf of Essex County Council (ECC) as part of the Local Highways Panels (LHP) which have been established in all 12 districts of Essex.
- These panels consist of County and District/Borough Members who meet on a quarterly basis to discuss and mutually consider Highways expenditure within their local district or borough boundaries.
- This note is to be presented to the Maldon LHP to review and comment, propose further actions, feasibility of the options and report the findings back to ECC.
- Initial discussions have taken place with the Essex County Council Network Management Team.



Site Location Plan

Church Lane, Stow Maries (outside properties; Glebelands, Four Elms, and Treboeth)

Post code: CM3 6SJ
Grid reference: (Easting) 583480
(Northing) 199256

Date: 08 March 2016
Author: Liam Nugent (HIDT SMO2)

Background to the scheme

The Maldon LHP has funded a feasibility study for drainage and kerbing improvements on Church Lane, Stow Maries.

The SMO2 Highway Improvements Design Team (HIDT) have been commissioned through a design brief to investigate the following:-

- Review scheme validation and historical information.
- Site visit(s) to confirm extent of works and any site issues, site inventory.
- Develop route feasibility study.
- Outline design of drainage/kerbing improvements and arrange RSA1.
- Arrange for budget estimates to be completed for this scheme.
- Prepare final report for presentation to LHP
- Subject to the approval of the LHP scheme to implemented.

Stow Maries Parish Council has identified an area on Church Lane near Four Elms and Glebelands, where several properties are at a lower elevation to the existing carriageway which has caused water run-off from the carriageway to accumulate on three residential properties (Four Elms, Glebelands, Treboeth). The resulting water pools in the properties garages and a drainage investigation and feasibility is required.

Site Characteristics

Church Lane is classified as a local road in the Essex County Council (ECC) functional route hierarchy. This section of highway is subject to a 40mph speed limit.

There are currently no footways running adjacent or independently to the carriageway.

The site was visited on several occasions to obtain data and highway use to assist with design for this scheme. On each site visit it was observed that the area was used by local traffic and residents, with the occasional motorist using this as a route.

Church Lane is a residential route, however it is part of the link that connects Maldon, in the north, South Woodham Ferrers in the West and Burnham-on-Crouch in the west.

There are no existing bus stops or services along either Church Lane.

Service covers to statutory undertaker apparatus were observed throughout the area, further details can be found through the appropriate statutory undertakes records.

There is existing overhead electrical cables observed throughout the area in question, therefore a GS6 will be required if any construction work is to occur.

There were no existing carriageway road gullies or visible drainage issues observed at the time of the site visit. The proposed work will impact upon drainage within Church Lane and consideration has been given within the outline design to address the removal of standing water from the carriageway.

There is currently no street lighting system present at this location. Advice shall be sort from the Street lighting team at SMO2 Depot, Springfield.

The property frontages on both the eastern and western side is the extents of the public highway. The highway boundary for this scheme is shown in Figure 1 (Appendix B).

At the time of the site visit, it was observed there is limited available width for car to park on the carriageway at this location.

Date: 08 March 2016
Author: Liam Nugent (HIDT SMO2)

There are existing vehicle crossings on both the western and eastern side of the carriageway, and these serve adjacent properties.

There are no pedestrian crossing facilities with associated tactile paving within the study area.

The current situation allows surface water run-off from the carriageway, this travels towards several properties that are at a lower elevation to the existing carriageway. This causes water to accumulate on three residential properties.

There is an existing longitudinal fall running from north to south along Church Lane, Stow Maries. The current fall encourages surface water to run towards the three properties identified within the scheme brief.



Church Lane, Stow Maries, longitudinal fall
running north to south

Considerations

As a result of the initial site visit and observations made, it has been determined that there is a solution that will assist surface water run-off and encourage the flow to continue in a southern direction, and away from the 3 adjacent properties.

This scheme involves installing new kerbing across the vehicle crossing areas, with a 25mm up stand.

This will provide the water with an obstruction that prevents a certain amount of surface water entering the 3 adjacent properties and allows the water to travel in a southern direction (downhill).

The second element of this work will include installing surface water grips, these will be laid further downstream, at locations highlighted on site by the engineer. These grips will allow surface water to drain into the grass verge on the east, and an adjacent running ditch on the west.

The areas that currently site grass verges will remain with no kerbing or channel works, as this will allow for surface water to disperse, removing any standing water (water left on the carriageway).

See drawing number HI-4018-05-00 for further information.

Upon the review of the existing area and the proposal for new kerbing and drainage improvements, the following points are identified:

- There is no maintenance work scheduled for this area.
- It is recommended that some spot levels are taken if this scheme is to be commissioned for a detail designed to aid with the works and to ensure drainage is working.

Please refer to the drawing numbers specified in the appendices for further information.

Other Considerations

As a result of the initial site visit and observations made, it has been determined that there is a solution that will assist surface water run-off and encourage the flow to continue in a southern direction, and away from the 3 adjacent properties.

There are also other elements of work that can be considered as part of this study;

Drainage Channel

Whilst on site it was noted that there is a significant fall towards adjacent properties. Whilst installing a new vehicle crossing with a 25mm up stand will assist with surface water runoff, it will not remove all of the standing water currently sitting at the bottom of the vehicle crossing (most westerly point).

It may be worth considering installation a drainage channel at this location. The current longitudinal fall that will allow for the water to discharge.

There are a number of different channel that can be considered for this location;

- 1) A precast concrete dish channel
- 2) ACO MultiDrain MD Load class D 400 (Suitable for all vehicle types) – or similar approved.

Adjacent Water Course

Another element of work that will need to be considered will be the clearing of an adjacent water course. Advice will need to be sort from Essex County Council (ECC) Flood Management team, and the ECC Enforcement team, if the scheme is to be commissioned for detailed design.

Cost Estimate

Works estimate	£	2,500
Traffic Management	£	1,000
Safety Audit (Stage 2 and 3)	£	1,000
Design Fee/Supervision	£	500
Contingencies (10%)	£	500
<u>Total</u>	£	5,500

Road Safety Audit

Upon the completion of the outline design, a Road Safety Audit was undertaken. This has been completed and returned with no safety comments had been made.

Prepared by:	Liam Nugent	Date:	08 March 2016
Approved by:	Mike Shearcroft	Date:	08 March 2016

Date: 08 March 2016
Author: Liam Nugent (HIDT SMO2)

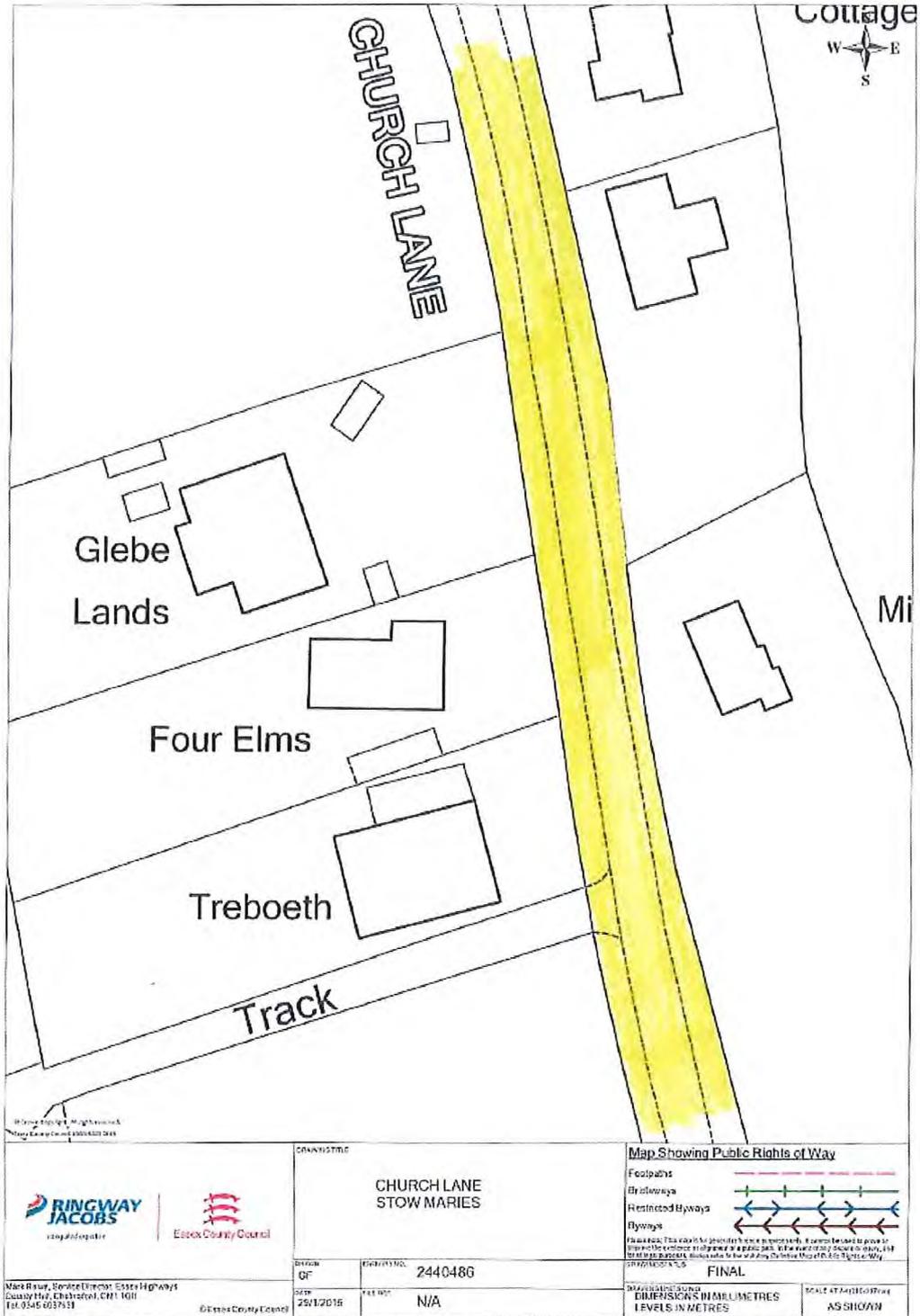
Appendix A – Drawing

Please refer to drawing number found below for further information regarding the outline design.

HI-4018-05-001	Outline Design – Drainage Improvements General Arrangement
----------------	--

Appendix B

Figure 1 – Highway Boundary



Date: 08 March 2016
Author: Liam Nugent (HIDT SMO2)

Photographs

Church Lane, Stow Maries, south of Treboeth, looking north



Church Lane, Stow Maries, north of Glebelands, looking south



Church Lane, Stow Maries, south of Glebelands, looking north



Church Lane, Stow Maries, south of Four Elms, looking north



Church Lane, Stow Maries, south of Treboeth, looking north



Church Lane, Stow Maries, outside Four Elms



Appendix C – Aco MultiDrain MD Specification

Introduction to ACO MultiDrain™ MD

ACO MultiDrain™ MD benchmarks a new approach in the planning, delivery and installation of general purpose channel drainage systems. Designed to provide an effective solution for a wide variety of applications, ACO MultiDrain™ MD system maximises functionality whilst using the minimum number of components.

What is ACO MultiDrain™ MD?

ACO MultiDrain™ MD channel drainage system is manufactured from Vientite™, ACO's sustainable high strength material. It is available in three widths; 100mm, 150mm and 200mm, and has a variety of depths and slopes.

The channel units are certified to BS EN 1433: 2002 Load Class D 400* and form the main components of the system.

Depending on the load class and application requirement, a wide range of gratings are available to complete the system. You can now chose from a range of traditional and discreet slot drainage gratings, solid covers and cross footpath drainage units to ensure all applications are catered for.

All gratings within the system are fitted with ACO Drainlock™, a bar-less locking device which reduces the risk of blockage and improves hydraulic capacity. The mechanism also provides for easy installation and maintenance of the system.

As standard, channels are manufactured with UltraSTEEL™ protective edge rails. The UltraSTEEL™ rails, with their unique patented design, provide optimum channel protection and improved bonding between channel sides and the surrounding pavement material.



ACO MultiDrain™ MD System can provide a channel drainage solution for many applications by simply selecting the appropriate channel depth and grating type. Some of the applications that can be catered for are listed below.

- ▶ Threshold drainage
- ▶ Public landscaping
- ▶ Car parking
- ▶ Light industrial
- ▶ HGV parking
- ▶ Petrol station forecourts
- ▶ SuDS

Discreet slot drainage

Apply the ACO Brickslot grating to the channel unit to form an unobtrusive drainage system. The off-set grating can be used as a solution for threshold drainage and also against buildings eliminating difficult installations. The gratings are suitable for BS EN 1433: 2002 Load Class C 250 and D 400* applications.

ACO Brickslot gratings are available for 100mm, 150mm and 200mm wide channels, in both galvanised or stainless steel. See page 31 for further details.

Services ducts

The ACO MultiDrain™ MD System includes a solid cover grating which when applied to the main channel unit provides a secure shallow trench with easy access to services and cabling.

Cross footpath drainage

Where roof drainage from down pipes is required to cross the footpath into the road gutter, a range of down pipes connectors, kerb outlets and shallow channels are available within the ACO MultiDrain™ MD System range. See page 36 for further details.

This system is only available in the ACO MultiDrain™ M1000 System.

Threshold drainage

The ACO MultiDrain™ MD System can be used to provide unobtrusive drainages around building entrances, compliant with the building regulations (England and Wales Part M, Scotland Section 4, Northern Ireland Part R). Simply select the appropriate grating to meet your aesthetic requirements.

Why choose ACO MultiDrain™ MD?

Made from sustainable materials

ACO MultiDrain™ MD channel elements are manufactured from Vienite™. Vienite™ is ACO's new high strength sustainable material that meets environmental and sustainability targets for construction products.

Vienite™ utilises high levels of post consumer recycled waste, but unlike some recycled materials does not compromise on strength or long term performance.

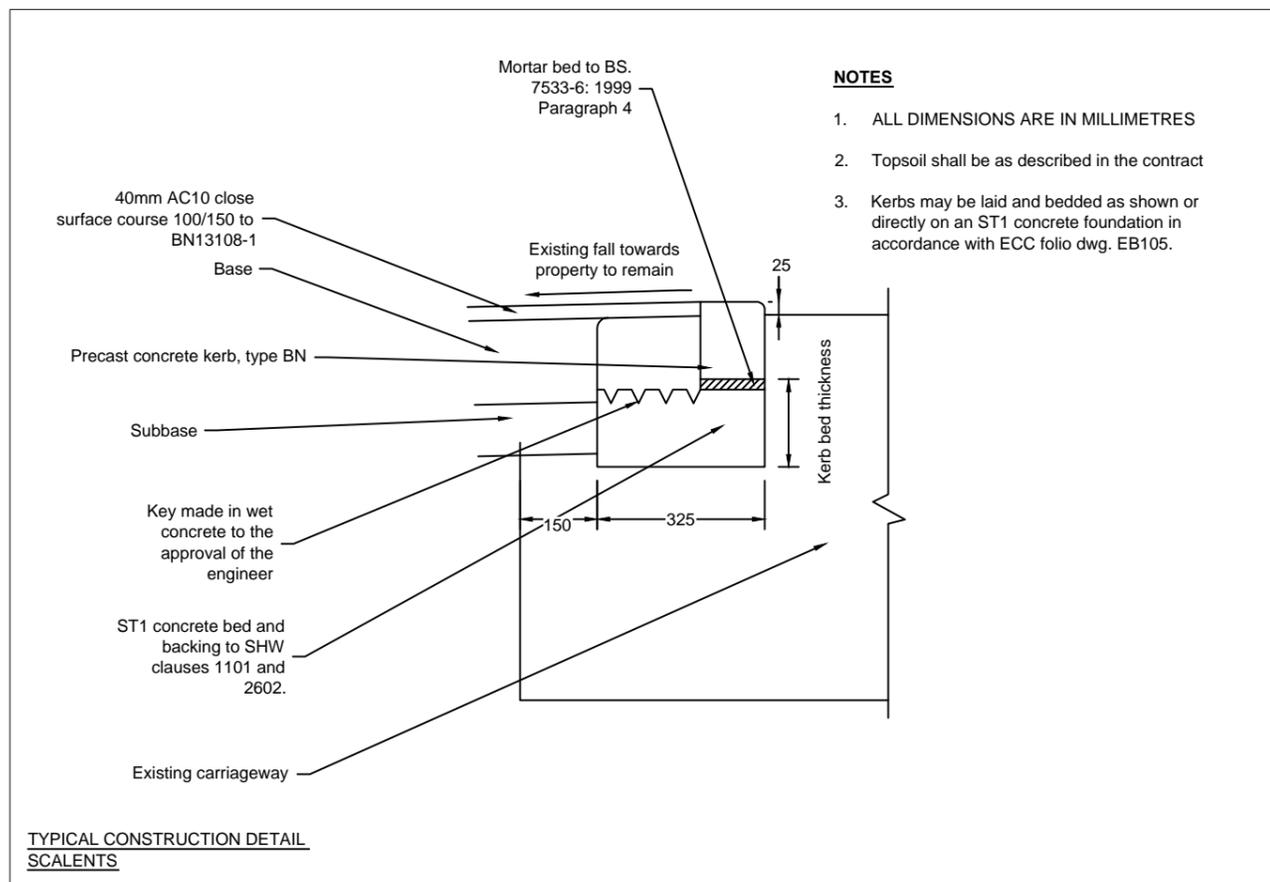
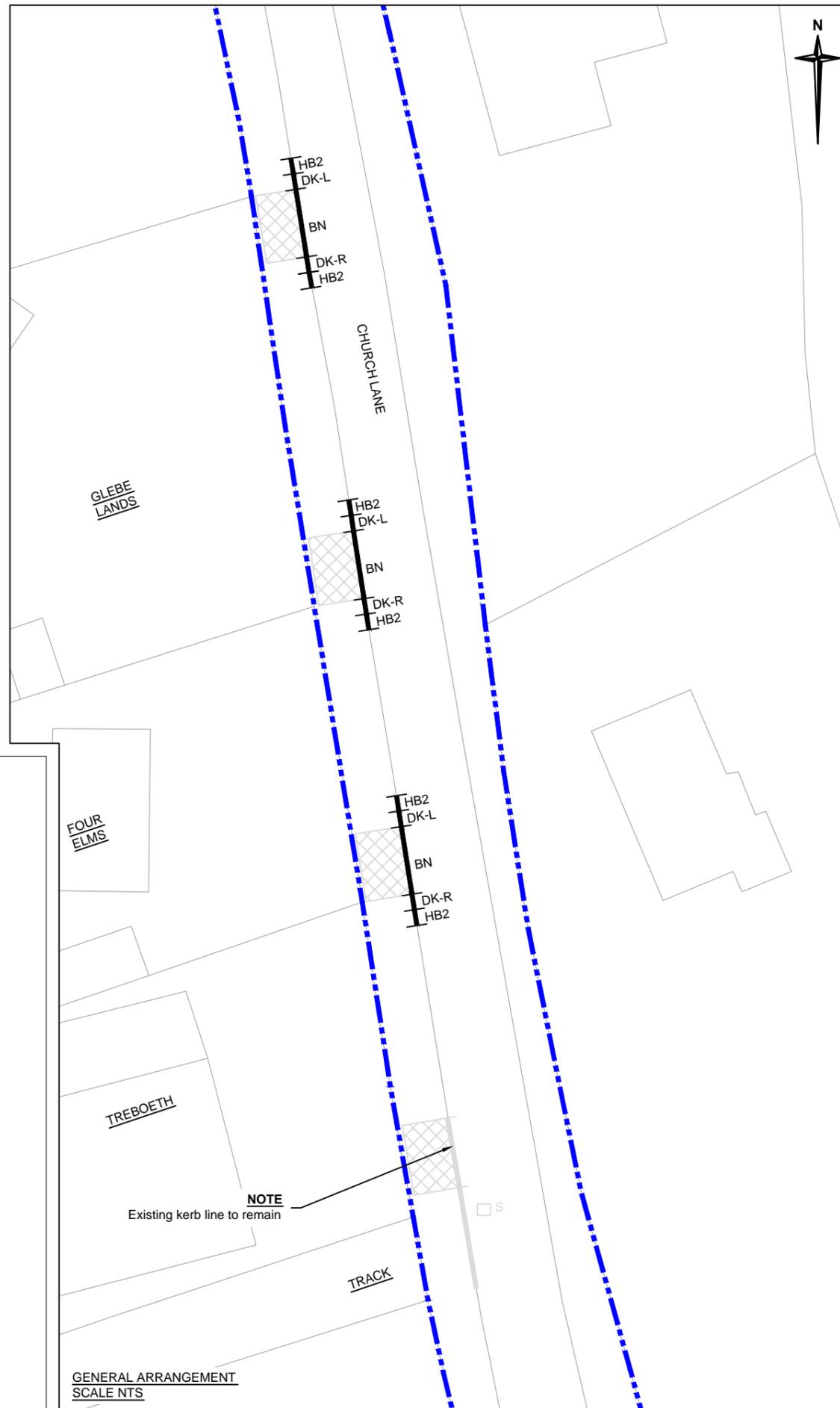
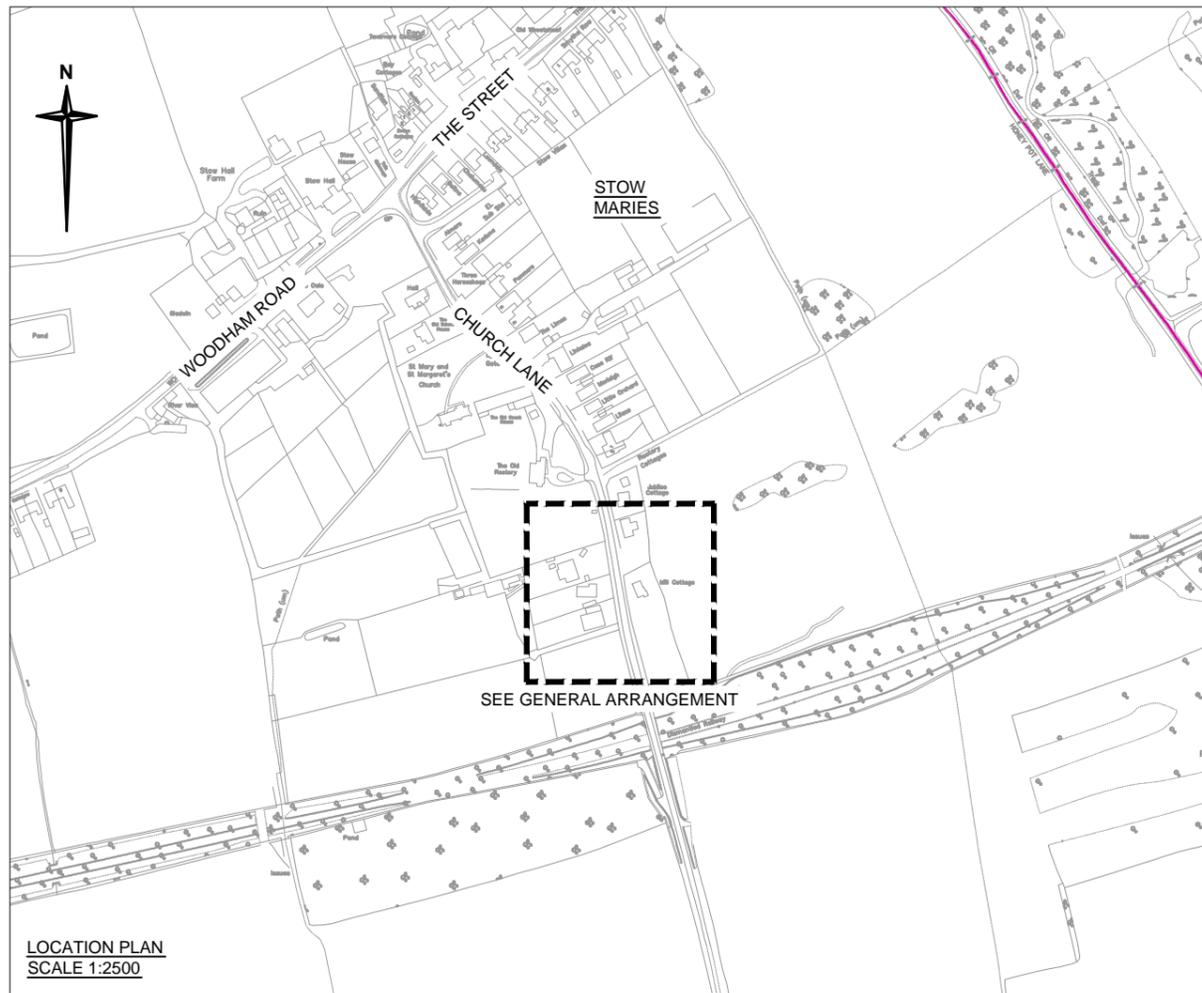
Vienite's high strength characteristics means the material is four times stronger than traditional concrete and has a low water absorption rate. It is also resistant to freeze thaw attack and has excellent chemical resistance.

At the end of the products operational life, Vienite™ can be collected, processed and returned to production as a raw material.



System benefits

- ▶ Provides an efficient drainage solution for a wide variety of applications
- ▶ Range of constant, sloped and shallow depth channels
- ▶ Caters for a range of catchment areas
- ▶ Strong and robust channel design
- ▶ Patented UltraSTEEL channel edge rail for improved strength and durability
- ▶ CE Marked and BS EN 1433: 2002 certificated to Load Class D 400*
- ▶ Extensive choice of gratings and accessories for many applications
- ▶ Choice of outlet options, gullies, sumps or channel knockouts
- ▶ Unique ACO Drainlock grating fixing improves hydraulic capacity
- ▶ Lightweight design is simple and fast to install
- ▶ 100% recyclable
- ▶ Ideal for use against building facades or as a Part M threshold drainage solution when used with ACO MultiDrain™ Brickslot grating



- NOTES**
1. ALL DIMENSIONS ARE IN MILLIMETRES
 2. Topsoil shall be as described in the contract
 3. Kerbs may be laid and bedded as shown or directly on an ST1 concrete foundation in accordance with ECC folio dwg. EB105.

NOTES

1. DO NOT SCALE FROM THIS DRAWING.
2. Any disturbance to existing grassed areas is to be made good with topsoil and seed.
3. All kerbs to be laid in accordance with ECC folio dwg EB105.
4. Surface water grips to be provided and installed on site, location to be marked by designer during implementation.
5. Adjacent water course to be cleaned by land owner around the time of implementation, advice is to be sort from Essex County Council (ECC) enforcement team.

KEY

- Highway Boundary
- New kerbs
- Bullnose Kerb - Laid with 25mm upstand
- HB2 Kerb - Laid with 125mm upstand
- Dropped kerb - Left
- Dropped kerb - Right
- Existing Stats apparatus
- Existing vehicle crossing

Rev.	Date	Description of revision	Drawn	Checked	Reviewed	Approved

DRAWING STATUS
OUTLINE DESIGN



Mark Rowe, Service Director, Highways
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Tel: 0845 6037631 © Essex County Council

SCHEME TITLE
**MALDON LHP
CHURCH LANE, STOW MARIES
LMAL152015**

DRAWING TITLE
**DRAINAGE IMPROVEMENTS
GENERAL ARRANGEMENT**

DESIGNED	DRAWN	CHECKED	REVIEWED	APPROVED
LCN	LCN	SLS	LCN	MBS
DATE	DATE	DATE	DATE	DATE
FEB 16	FEB 16	FEB 16	FEB 16	FEB 16

DRAWING UNITS U.N.O.
DIMENSIONS IN MILLIMETRES
LEVELS IN METRES
SCALE AT A3 (420x297mm)
AS SHOWN

DRAWING NO.
HI-4018-05-001

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Tolleshunt D'Arcy Road Junction with Beckingham Street Tolleshunt Major

Junction Improvement Study

February 2016



Document Control Sheet

Document prepared by: **Paul Norris Design Engineer**

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1 Introduction

This report has been written for and on behalf of Essex County Council (ECC) as part of the Local Highways Panels (LHP) which have been established in all 12 districts of Essex.

These panels consist of County and District/Borough Members who meet on a quarterly basis to discuss and mutually consider Highways expenditure within their local district or borough boundaries.

This note is to be presented to the Maldon LHP to review and comment, propose further actions, feasibility of the options and report the findings back to ECC.

Tolleshunt Major Parish council have identified a problem with the junction of Beckingham Street / Tolleshunt D'Arcy Road / Witham Road Tolleshunt Major. They have stated that continuous damage is being caused by vehicles especially by HGV's turning at the junction (towards Beckingham Business Park). The Bennett Island at the junction is being overrun, kerbs are being damaged and the finger post is in need of repair. There is also concern here for pedestrians with an increased use of the nearby church rooms and the local playing field.

HGV Route Signing

The signed HGV route to Beckingham Business Park from the A12 is via Loamy Hill Road, The Street, and School Road and there is a directional sign at the Witham Road cross roads directing HGV's south away from the junction in question.



There is however a UKPN pole supporting overhead power cables and a mature tree on this area. The former would have cost implications and the later would be an environmental loss



UKPN pole and mature tree on western corner

The design sketches provided in section 3 have been based on ordinance survey data and therefore are indicative only, once the preferred option has been agreed, a full topographical survey will be required to develop the proposals into a detailed design for construction.

2. Site Observations

The route is well used by local traffic to access the primary road network and has a high proportion of HGV's accessing the business park. It was noted that the alignment of Tolleshunt D'Arcy Road relative to Witham road encourages higher speeds as this manoeuvre is almost straight – a few drivers did not even appear to look to check the road is clear when making this turn.

Evidence of over run at the island was noted on site particularly for the right turn into Witham road. Although there was also evidence along all carriageway edges of overrun.

There is a water supply service valve within the central island and therefore work on the statutory undertaker's plant is likely to be required to ensure that the plant is to carriageway specification before the island can be removed. There is also a finger post directional sign on the island, this will need to be relocated.

It was also noted that the visibility available for road users wishing to turn out of the church rooms' car park is extremely poor due to the proximity and size of the boundary wall



Church Rooms Entrance

Although no pedestrians were observed at the time of the visit walking to the park, this is of concern as there is no verge adjacent to the wall to provide a refuge, this issue is compounded by the speed of vehicles at this point as

detailed above and that drivers turning left may only look to the right before pulling out.



View for pedestrians heading west at the Junction

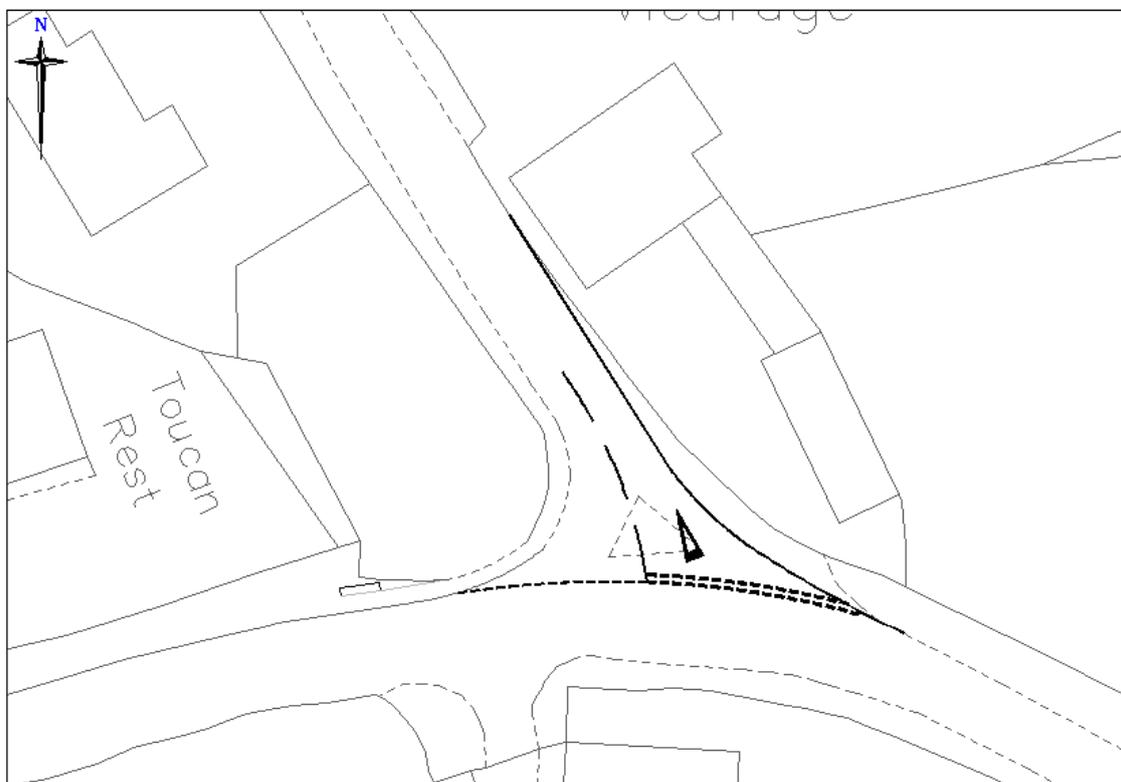
It was also noted that the footpath to the west of the junction around the radius is very narrow and would benefit from being increased in width.



Narrow footpath for pedestrians heading north at the Junction

3 Junction Options

3.1 Standard T Junction (Option 1)



Option 1 Standard T Junction

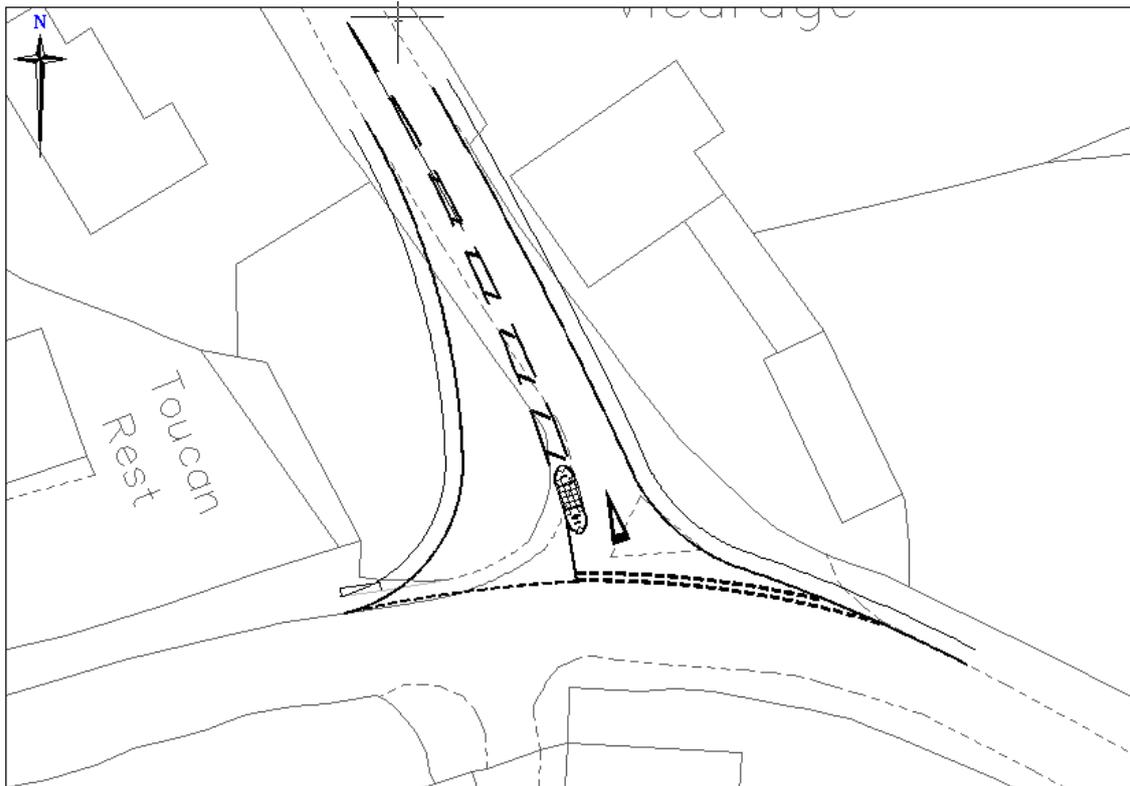
This option is achievable within the existing highway boundary – the Bennett Island has been removed and this allows a small area of footpath to be created adjacent to the church rooms.

This has a number of benefits, including creating a small area for pedestrians to wait, a slight improvement to the visibility at the church rooms, and a small amount squaring at the junction.

This option does not require land take thus the delays associated with land transfer /purchase would not apply. There would however still be an option to improve the western footway by increasing the width if land were to be available in the future.

The option is also cost effective as there is minimal new carriageway to be constructed, increasing the likelihood of funding being available.

3.2 Standard T Junction with Pedestrian Island (Option 2)



Option 2 Standard T Junction with Pedestrian Island

This is a development of the standard T junction to include a pedestrian refuge, this option would allow pedestrians to cross the road in two half's, and increase the visibility of the junction as it would include keep left bollards. The island would also prevent right turning vehicles from cutting the corner – however this results in a much larger junction to accommodate this manoeuvre

More verge has been created on the east side and this will further improve the visibility for vehicles leaving the church rooms and provide a useful area of verge/footway for pedestrians to wait, and improved visibility to cross.

This variation also allows the junction to be almost squared which should assist with reducing vehicle speeds.

It also has the disadvantage of requiring additional land which is a costly and time consuming process, and it should also be noted that there is a UKPN power networks pole.

3.3 Skewed T Junction (Option 3)



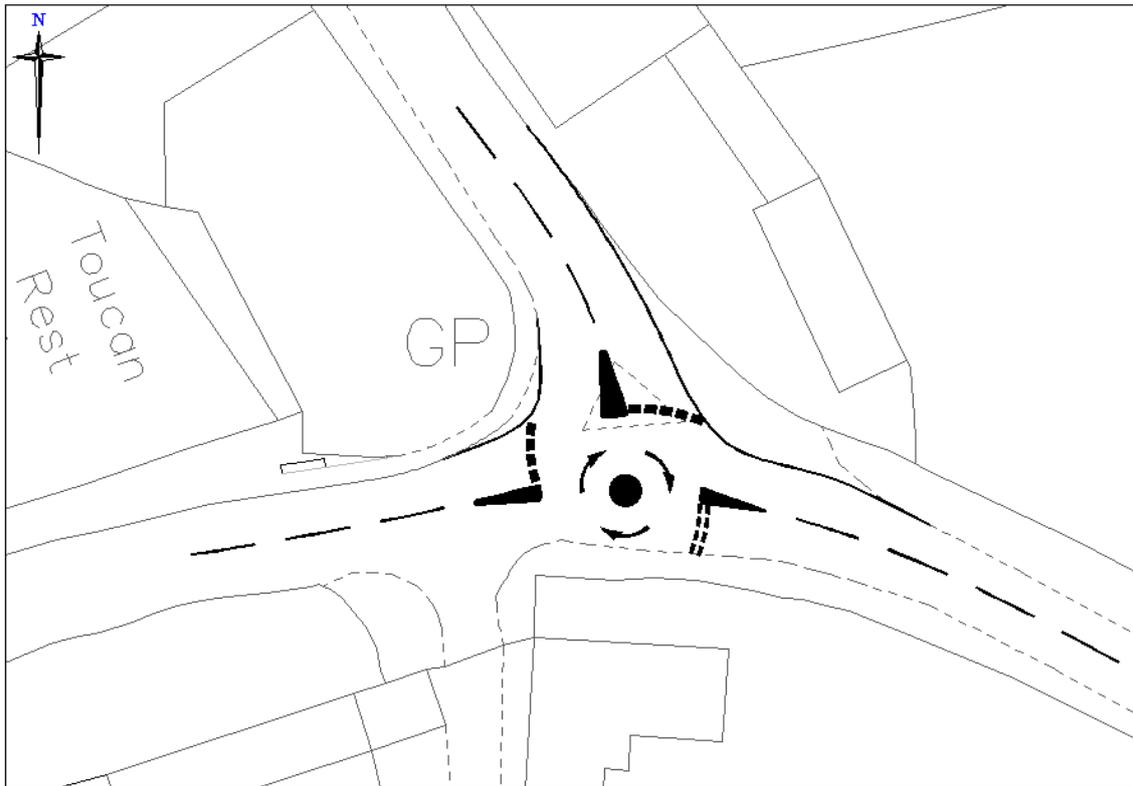
Option 3 Skewed T Junction

This option removes the island and skews the junction as far left as possible within the land available – this would improve the exit from the church rooms and the pedestrian movements even further, and force east bound vehicles to make a definite turn.

The issue with this is that the junction would be directly opposite the farm track which could create a 'see through' issue where drivers in poor visibility may fail to stop at the junction believing that the road continues straight ahead.

It also has the disadvantage of requiring additional land which is a costly and time consuming process.

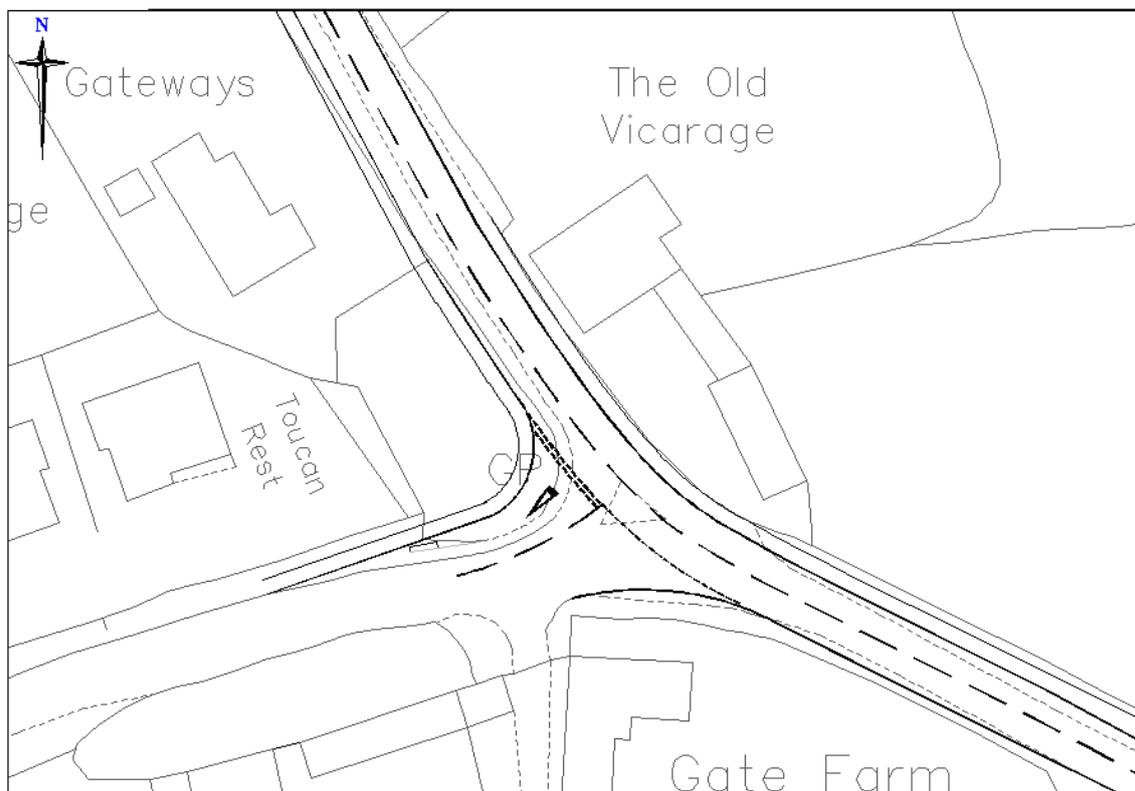
3.4 Mini Roundabout (Option 4)



Option 4 Mini Roundabout

A mini roundabout has also be explored however this is an urban feature which requires street lights, and due to the alignment of the side roads and the high proportion of HGV's over run is likely to occur – therefore this has also been discounted.

3.5 Changing Junction Priority (Option 5)



Option 5 Changing Priority

Although explored changing the junction priority is not recommended at this location. Given the site observations regarding the vehicle speeds for vehicles travelling north to east, this change is very likely to increase speeds through the village and on Tolleshunt D'Arcy Road.

For this reason this option has not been explored further.

4 The Preferred Option

Option 1 (simple T junction) is considered to be the best overall option for this junction, this will achieve most of the objectives of the scheme and therefore represents good value as it is also the lowest cost scheme, and should be relatively quick to deliver as all the land is in highway ownership. An order of cost has been prepared and for this option the cost has been estimated at £45,000

Option 2 (T junction with Pedestrian Island) would achieve all the objectives of the scheme, however the additional land, and significant areas of construction required would again result in this option being costly and difficult to deliver. It would also be difficult to justify this additional cost as the number of pedestrians crossing the junction is relatively low and even once the island is provided is unlikely to increase to significantly enough to warrant this additional expenditure. An order of cost has been prepared and for this option the cost has been estimated at £125,000

Option 3 (skewed T junction without an island) would achieve the objectives of the scheme, however the potential 'see through' issue which could develop is a significant concern, and the land requirements result in a costly scheme which would take time to undertake the land transfer and therefore implement. Given these issues this option has also been discounted. An order of cost has been prepared and for this option the cost has been estimated at £120,000

Option 4 and 5 (a mini roundabout and a change in priority) have already been discounted as detailed in section 3.

Therefore the conclusion following this study is to provide Option 1 – a simple t junction.

5 The Next Steps

Once the preferred junction format has been agreed a full topographical survey is recommended to ensure that the OS data is correct and allow surface level information to be collected.

The topographical survey data will allow the Detailed Design to be undertaken including drainage, surface levels, signs etc.

As soon as the detailed design has been completed the statutory undertakes can be contacted to provide estimates to move/lower there plant to suit the new junction.

In parallel with the stats estimates, the target costing of the scheme can also be completed and with the benefit of the detailed design this should provide some cost certainty.

Once completed the Target Cost and Stats Costs then can be used to seek the necessary funding from the Local Highway Panel to implement the scheme.

MALDON DISTRICT LOCAL HIGHWAYS PANEL

POTENTIAL SCHEMES LIST (Version 19)

As part of the Essex County Council 2016/17 budget, which was agreed at Full Council on 9 February 2016, it was announced that the budget for Local Highways Panels (LHP) would be halved. This means for Maldon District LHP the available 2016/17 capital funding will be £200,000. It is recommended in 2016/17 that the panel make further scheme funding recommendations to create an £320,000 rolling programme of works.

Currently within the rolling programme there are schemes which have been re-profiled from 2015/16 to the value of £228,800. With a £320,000 rolling programme this would for £91,200 of Capital monies the Panel can use to make further funding recommendations in 2016/17.

2016/17 Budget Summary	
Item	Amount
Capital Funding 2015/16	£200,000
Recommended Rolling Programme	£320,000
Programmed Works re-profiled from 2015/16 into 2016/17	£228,800
Capital funding available to make recommendations against 2016/17	£91,200

MALDON DISTRICT LOCAL HIGHWAYS PANEL

POTENTIAL SCHEMES LIST (Version 19)

This Potential Scheme List identifies all of the scheme requests which have been received for the consideration of the Maldon District Local Highways Panel. The Panel are asked to review the schemes on the attached Potential Scheme List, making funding recommendations against those they wish to see implemented and remove any schemes the Panel would not wish to consider for future funding.

Potential Schemes List (Version 19)		
Scheme Type	RAG	Total Estimated Costs
Safer Roads	G	£14,000
Traffic Management	G	£224,350
	A	£999,585
Walking	G	£6,000
Passenger Transport	G	£35,500
Public Rights of Way	G	£10,000
Sub Total	G	£289,850
	A	£999,585
Total		£1,289,435

On the Potential Schemes List the RAG column acknowledges the status of the scheme request as shown below:

RAG Status	Description of RAG status
G	A higher priority feasible scheme against strategic criteria
A	A lower priority feasible scheme against strategic criteria or may require additional Cabinet Member approval
R	A scheme which is against policy or where there is no appropriate engineering solution
TBC	A scheme pending validation

Maldon District Local Highways Panel - Potential Schemes List (Version 19)

Safer Roads

Total Value of schemes	£14,000
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Ref	Location	Description	Parish	Scheme Category	Scheme stage	Cost Code	Allocated Budget	Comments	RAG
1	Braxted Park road junction with Lea Lane, Great Braxted	Improvements at junction - side road ahead warning sign on SE approach, review position of finger post on central island at junction, provide hazard verge marker posts on both approaches to junction.	Great Braxted	Safer Roads	Total scheme	LMAL151009	£12,500	Validation - recommendation from Safer Roads team. See Appendix 2 for design	G
2	Woodrolfe Road Tollesbury - Feasibility Study/Design into improvements to existing 30mph speed limit	Signage improvements to highlight 30mph speed limit	Tollesbury	Safer Roads	Top up	LMAL151008	£1,500	Top up to allow implementation of scheme, following feasibility study. See Appendix 2 for design.	G

Maldon District Local Highways Panel - Potential Schemes List (Version 19)

Traffic Management

Total Value of schemes	£1,223,935
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Ref	Location	Description	Problem	Parish	Scheme Category	Scheme stage	Cost Code	Estimated cost	Comments	RAG
1	B1021 Southminster Road/Tillingham Road, Asheldham	Bend improvements	Narrow road, problems at bends when two goods vehicles try to pass each other	Asheldham	Traffic Management	Implementation	LMAL142004	£974,585	Draft Designs available in Appendix C - Feasibility Studies & Designs - Three phase approach - 1.£431,631, 2. £285,692 3. £257,262. The three phases would be a Major Scheme outside the remit of the Panel.	A
2	Waterside Road, Bradwell on Sea	Improved signage to prevent Goods Vehicles getting stuck	Road is a dead end with no turning facilities at end for Goods Vehicles	Bradwell on Sea	Traffic Management	Design	LMAL152041	£4,000	Validation - recommends detailed design of signage improvements, will require HGV survey	G
3	Southminster Road (Old Heath Road to Mangaps Manor) Burnham on Crouch	Walkable verge/footway	Lack of footway/walkable verge for pedestrians	Burnham on Crouch	Traffic Management	Total scheme	LMAL142037	TBC	In validation	
4	B1021 Church Road (Jw B1010 Maldon Road to j/w Marsh Road) Burnham on Crouch	Improved pedestrian crossing facilities	Lack of pedestrian crossing facilities to School	Burnham on Crouch	Traffic Management	Total scheme	LMAL152027	£45,000	Validation - Degree of pedestrian conflict survey carried out, (0.367 X 10 ⁸) and meets criteria for a Zebra Crossing. Update - Possible Third party funding being pursued.	G
5	B1010 Maldon Road, Burnham on Crouch	30 mph speed roundel road markings to enhance existing speed limit	Speed of traffic	Burnham on Crouch	Traffic Management	Total scheme	LMAL142023	£7,250	Validation - 30mph part by virtue of street lighting and part by order, roundels/repeaters are appropriate in the non-lit part.	G
6	B1021 Station Road/High Street, Burnham on Crouch	20 mph speed limit	Speed of traffic	Burnham on Crouch	Traffic Management	Total scheme	LMAL152056	NA	Validation - speed survey data 30mph speed limit Nr Hillside Road - South bound 24.3mph & North bound 24.1mph, Nr Coronation Road - South bound 24.2mph & North bound 24.0mph. Existing speeds show good compliance with speed limit. B1021 is a Priority Route 1 and a 20mph limit would be against policy.	R
7	Hermes Drive j/w Falklands Road, Burnham on Crouch	Measures to prevent vehicles over running footway	Vehicles damaging footway	Burnham on Crouch	Traffic Management	Total scheme	LMAL152073	TBC	In Validation	
8	Hackmans Lane, Cock Clarks	Extension of existing 30mph speed limit	Speed of traffic	Cock Clarks	Traffic Management	Total scheme	LMAL152030	TBC	In validation	

Maldon District Local Highways Panel - Potential Schemes List (Version 19)

Traffic Management

Total Value of schemes	£1,223,935
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Ref	Location	Description	Problem	Parish	Scheme Category	Scheme stage	Cost Code	Estimated cost	Comments	RAG
9	B1026 Maldon Road, Goldhanger	Traffic management improvements - VAS/carriageway speed roundels	Speed of traffic	Goldhanger	Traffic Management	Total scheme	LMAL152048	£10,250	Validation - Physical measures not supported on a Priority Route - alternative traffic calming measures recommended carriageway speed roundels and increased number of speed repeater signs	G
10	B1022 Maldon Road, Great Totham	Traffic Management Improvements	Speed of traffic on road	Great Totham	Traffic Management	Total scheme	LMAL142067	£21,250	Validation - speed data north of Hall Road - 30mph limit - southbound 31.0mph and northbound 32.2mph. South of Mill Road - 40mph limit - Southbound 36.6mph and Northbound 35.6mph. Majority of speeding appears to occur between 23:00 to 05:00hrs. Could install 30mph speed roundels on carriageway and review size/amount of 30mph repeater signs, may not address speeding issue during hours of darkness	G
11	Lawling Avenue, Heybridge	Traffic management improvements	Speed of traffic with poor visibility	Heybridge	Traffic Management	Total scheme	LMAL152054	TBC	In validation - speed survey data under review Nr Sandpiper Close 30mph limit - South bound 20.1mph and North bound 20.3mph. North of Goldhanger Road 30mph limit - Southeast bound 22.5mph and Northwest bound 22.4mph. Additional survey on Cooper Avenue being carried out.	
12	Goldhanger Road near Lawling Avenue, Heybridge	Pedestrian crossing improvements - request for zebra crossing	Speed of traffic - issues accessing bus stop	Heybridge	Traffic Management	Total scheme	LMAL152045	TBC	In validation	
13	Site 1 - Goldhanger Road, Site 2 - Broad Street Green, Site 3 - The Causeway, Site 4 - Heybridge Approach, Site 5 - Langford Road, Site 6 - Scraley Road Heybridge	Village gateway treatments (post/rail)	To highlight parish boundary to drivers	Heybridge	Traffic Management	Total scheme	LMAL152049	£30,000	Validation - recommends gateway features only at Site 1- Goldhanger Road, Site 2 - Broad Street green, Site 4 - Heybridge Approach, Site 5 - Langford Road . Gateways not recommended at Site 3 - The Causeway and Site 6 - Scraley Road	G

Maldon District Local Highways Panel - Potential Schemes List (Version 19)

Traffic Management

Total Value of schemes	£1,223,935
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Ref	Location	Description	Problem	Parish	Scheme Category	Scheme stage	Cost Code	Estimated cost	Comments	RAG
14	Lea Lane, Little Braxted	Extension of existing 30 mph speed limit	Speed of traffic	Little Braxted	Traffic Management	Total scheme	LMAL142076	£7,000	Validation - Speeds south 39.9mph and North 38.5mph, good compliance with existing speed limit. Suggestion is Gateway Signage treatment (may not be room for wooden gateways) to highlight change in speed limits to drivers	G
15	Kelvedon Road j/w Beacon Hill, Little Braxted	Verge improvements around War Memorial	Kerbing to stop vehicle over-run	Little Braxted	Traffic Management	Total scheme	LMAL152051	£4,600	Over-run areas Option 1 (Concrete) £4,000 Option 2 (Tarmac) £4,600	G
16	Bowling Club, Park Drive, Maldon	Traffic Management Improvements	Speed of traffic on road	Maldon	Traffic Management	Total scheme	LMAL142078	£8,500	Validation - Recorded speed data in 30mph speed limit (North) Southbound 27.5mph/Northbound 28.0mph and (South) Southbound 32.7mph/Northbound 29.7mph. A VAS would be outside of policy and against officer recommendation so if required it will need a CMA. Changes to existing parking restrictions outside remit of LHP and passed to Parking Partnership to investigate. UPDATE JULY 2015 - Town Council fully support installation of VAS.	A
17	Fambridge Road (Limebrook Way RAB to Royal Oak Public House), Maldon	Walkable verge/footway	Lack of footway between small hamlet/public house and Maldon Town	Maldon	Traffic Management	Total scheme	LMAL142006	TBC	Liaison on-going regarding nearby potential development	
18	London Road, (Cemetery to existing 30 mph speed limit), Maldon	Extension of existing 30mph speed limit/traffic management improvements	Speed of traffic	Maldon	Traffic Management	Total scheme	LMAL152031	£8,000	In validation - data from automatic traffic counts in 60mph limit at two locations East entrance to Cemetery East bound 34.3mph and Westbound 34.3mph. A414 over bridge Eastbound 36.4mph and Westbound 35.9mph. A 40mph buffer is feasible but suggestion is this would not alter existing drivers speeds/behaviour.	A
19	Tenterfield Road R/o Hardware Shop, Maldon	Traffic Management Improvements	Vehicles reverse out of shop yard onto Tenterfield Road	Maldon	Traffic Management	Total scheme	LMAL152032	TBC	In validation	

Maldon District Local Highways Panel - Potential Schemes List (Version 19)

Traffic Management

Total Value of schemes	£1,223,935
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Ref	Location	Description	Problem	Parish	Scheme Category	Scheme stage	Cost Code	Estimated cost	Comments	RAG
20	High Street, Maldon	Traffic management improvements	Traffic using High Street instead of by-pass	Maldon	Traffic Management	Total scheme	LMAL152063	TBC	Validation - Traffic Survey in 2009 (ANPR) showed at that time only a small percentage of traffic used the High Street as an alternative to the By-pass (6% on direction & 5% in other). Suggestion is to await impact of any housing development and repeat the survey.	
21	Wantz Road (Between j/w queens Street & J/w High Street) Maldon	One-way system to permit SEPP to install a Residents Parking Scheme	Lack of Parking	Maldon	Traffic Management	Implementation	LAML152069	£25,000	Feasibility Study previously carried out and shared with Panel	G
22	Steeple Road, Mayland	Improved Village gateway Treatments	Gateways in need of improving	Mayland	Traffic Management	Total scheme	LMAL152034	TBC	Possible Maintenance scheme	
23	The Drive junction with Steeple Road, Mayland	Request for a mini-roundabout	Vehicles trying to exit The Drive onto Steeple Road often face long delays	Mayland	Traffic Management	Feasibility	LMAL152036	£1,000	To fund a survey of traffic queues to feed into validation process	G
24	Village Hall, Steeple Road, Mayland	Signage for approaches to Village Hall	Hall set back from road, causes access/egress issues	Mayland	Traffic Management	Total scheme	LMAL152052	£3,000	Feasibility Study recommends signage opposite Village Hall and advanced signs on approaches.	G
25	Steeple Road near its junction with Grange Avenue and Mayland Green, Mayland	Traffic management improvements	Speed of traffic approaching hidden junctions	Mayland	Traffic Management	Total scheme	LMAL152064	TBC	In Validation	
26	Recreation Ground, Fambridge Road, North Fambridge	20 mph speed limit	Speed of traffic on road	North Fambridge	Traffic Management	Total scheme	LMAL142041a	£8,500	Validation - Speed data Southbound 33.3mph and Northbound 34.9mph. Speeds do not meet criteria for VAS but with Cabinet Member Approval this could be feasible.	A

Maldon District Local Highways Panel - Potential Schemes List (Version 19)

Traffic Management

Total Value of schemes	£1,223,935
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Ref	Location	Description	Problem	Parish	Scheme Category	Scheme stage	Cost Code	Estimated cost	Comments	RAG
27	Recreation Ground, Fambridge Road, North Fambridge	20 mph speed limit	Speed of traffic on road	North Fambridge	Traffic Management	Total scheme	LMAL142041b	£1,500	Validation - Speed data Southbound 33.3mph and Northbound 34.9mph. Install Playground warning sign on north bound approach	G
28	B1010 Fambridge Road (The Wash to Roundbush Public House), Purleigh	Speed reduction measures	Narrow road with passing places, speed of traffic	Purleigh	Traffic Management	Feasibility	LMAL142031	£3,000	Validation - Feasibility study recommended into speed reduction measures - possible extension of 40mph speed limit/existing passing places and potential for more/signage review.	G
29	B1018 Fambridge Road, The Wash Purleigh to Oak Corner Maldon	Traffic management improvements/speed reduction	Speed of vehicles on B1018	Purleigh	Traffic Management	Total scheme	LMAL152061	TBC	In Validation	
30	Green Lanes/Highlands Hill/Foxhall Road, Southminster	HGV route signage around Southminster	Lack of HGV route signage	Southminster	Traffic Management	Total scheme	LMAL152068	£6,000	Scheme to implement signage following feasibility study	G
31	Main Road, St Lawrence	Traffic management improvements - speed of vehicles	Speed of traffic on road	St Lawrence	Traffic Management	Total scheme	LMAL142028	TBC	In validation	
32	The Street, Steeple	30mph repeater signs & carriageway roundels	Speed of vehicles through village	Steeple	Traffic Management	Total scheme	LMAL152059	NA	Validation - speed limit is by means of Street Lighting and policy does not allow repeater roundels. Scheme under LMAL152062 has merit and should be considered	R
33	The Street, The Sun & Anchor to The Star P/H, Steeple	Remove centre white line and add edge of carriageway road markings	Narrow section of road	Steeple	Traffic Management	Total scheme	LMAL152062	£2,000	Validation - Carriageway width approximately 7m, sufficient width to install edge of carriageway markings which would give the impression of a narrower road. Not recommended to remove cats eyes as this could result in significant scarring and deterioration of the surface. When roads is resurfaced this would be the time to not replace the cats eyes.	G

Maldon District Local Highways Panel - Potential Schemes List (Version 19)

Traffic Management

Total Value of schemes	£1,223,935
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Ref	Location	Description	Problem	Parish	Scheme Category	Scheme stage	Cost Code	Estimated cost	Comments	RAG
34	Honey Pot Lane, Stowe Maries	Drainage improvements	Drainage issues	Stowe Maries	Traffic Management	Total scheme	LMAL142045	TBC	In validation	
35	The Street/Woodham Road, Stowe Maries	Traffic Management Improvements	Speed of traffic on 30 mph road	Stowe Maries	Traffic Management	Total scheme	LMAL142065	£12,000	Validation - speed data in 30mph limit - The Street - Northeast bound - 40.1mph & South west bound - 41.3mph & Woodham Road - Northeast bound - 37.3mph & South west bound - 38.4mph . Recommendation to install 30mph carriageway roundels to highlight speed limit and review size/number of speed limit repeater signs.	G
36	The Street & Woodham Road, Stowe Maries	Physical traffic calming	Speed of vehicles following reduction to 30 mph	Stowe Maries	Traffic Management	Total scheme	LMAL152028		See LMAL142065	
37	Hagg Hill, Stowe Maries	Not suitable for HGV signage	HGV using unsuitable route	Stowe Maries	Traffic Management	Total scheme	LMAL152029	£5,000	Validation - review existing signage/positioning and install "Unsuitable for HGV" signage	G
38	Church Lane (Nr Four Elms/Glebelands), Stowe Maries	Kerbing improvements and cutting grips to prevent water ingress onto properties	Feasibility Study carried out into measures to address drainage issues as properties are at a lower level to the carriageway	Stowe Maries	Traffic Management	Implementation	LMAL152076	£5,000	Option resulting from Feasibility Study, See Appendix 1	G
39	North Street/South Street, Tillingham	Renew all road markings including centre lines and bus stops	Road markings faded	Tillingham	Traffic Management	Implementation	LMAL152065	NA	Scheme suggestion following feasibility study into Traffic Management Improvements, this would be a Maintenance issue	R
40	Brook Road/Tolleshunt D'Arcy Road, Tolleshunt Knights	"Kill your Speed" signs	Speed of traffic/Improvements to signage	Tolleshunt Knights	Traffic Management	Total scheme	LMAL142077	£6,500	Validation - Mean average speed data Brook Road Westbound 31.7mph, Eastbound 34.6mph. Tolleshunt D'Arcy Road Southbound 33.9mph, Northbound 32.7mph. "Kill your speed" signs not a prescribed highway sign. Recommendation is to improve speed limit repeater signs and road markings	G

Maldon District Local Highways Panel - Potential Schemes List (Version 19)

Traffic Management

Total Value of schemes	£1,223,935
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Ref	Location	Description	Problem	Parish	Scheme Category	Scheme stage	Cost Code	Estimated cost	Comments	RAG
41	Factory Hill/Brook Road/D'Arcy Road, Tolleshunt Knights	Review of mini-roundabout	Speed of traffic turning left from Factory Hill onto Brook Road	Tolleshunt Knights	Traffic Management	Feasibility	LMAL152055	£3,000	Validation - recommends feasibility study to investigate improvements, considering if kerb line can be extended/domed RAB/directional signage	G
42	Beckingham Street/Tolleshunt D'Arcy Road, Tolleshunt Major	Traffic Management Improvements at entry/exit points of Village	Village entry/exit points need improvements to highlight Village	Tolleshunt Major	Traffic Management	Total scheme	LMAL142072	£5,000	Validation - Mean average speed data Beckingham Street Eastbound 25.39mph, Westbound 26.2mph. Tolleshunt D'Arcy Road Eastbound 27.1mph Westbound 25.7mph. Though small proportion of drivers exceeding 35mph. Recommendation is to carry out signage improvements to repeater Speed limit signs (larger/more frequent)	G
43	Loamy Hill Road/Plains Road, Tolleshunt Major	New signs to Business Park and cut back vegetation	Improvements need to direct HGV's to Business Park	Tolleshunt Major	Traffic Management	Total scheme	LMAL152067	£2,500	Scheme suggestion following feasibility study into Sign Improvements	G
44	Hatfield Road, Ulting	SID/VAS	Speed of traffic on road	Ulting	Traffic Management	Total scheme	LMAL142081	£12,000	Validation - it is possible to replace the two Speed Indicator Devices	G
45	Witham Road/Church Road/Beacon Hill, Wickham Bishops	Village entry points - white gates	Lack of gates at village entry points	Wickham Bishops	Traffic Management	Total scheme	LMAL142060	TBC	In validation	
46	Church Road (To junction with Mope Lane), Wickham Bishops	Extension of 30 mph speed limit	Speed of traffic on road	Wickham Bishops	Traffic Management	Total scheme	LMAL142062	£2,500	Proposal for extension of existing 30 mph speed limit on Church Road to 10m east of Mope Lane	G
47	Church Road (Holt Drive to Blacksmiths Lane) and Arbour Lane (Blacksmiths Lane to Grange Road), Wickham Bishops	Footways	Lack of pedestrian access to the Village Library	Wickham Bishops	Traffic Management	Total scheme	LMAL153002	TBC	In validation	

Maldon District Local Highways Panel - Potential Schemes List (Version 19)

Traffic Management

Total Value of schemes	£1,223,935
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Ref	Location	Description	Problem	Parish	Scheme Category	Scheme stage	Cost Code	Estimated cost	Comments	RAG
48	The Street (Near The Mitre Public House), Wickham Bishops	Traffic management improvements - coloured carriageway surfacing	Speed of traffic	Wickham Bishops	Traffic Management	Feasibility	LMAL152037	NA	Validation - coloured surfacing would not highlight pedestrians crossing at this location. Update September 2015 - PV ² survey score 0.103x10 ⁸ , not high enough to warrant a pedestrian crossing and insufficient space to install a pedestrian refuge island. found	R
49	The Street junction with Great Totham Road, Wickham Bishops	Improved signage to Sports Field on Great Totham Road	Lack of signage for visiting users of sports facilities	Wickham Bishops	Traffic Management	Total scheme	LMAL152040	NA	Validation - existing post already has a lot of destinations on it, one more may further confuse drivers. Also post obscured by telegraph pole on one side. Not recommended to proceed with request.	R
50	Witham Road, Maypole Road, The Street, Kelvedon Road, Wickham Bishops	"Road Narrowing" at entry points to Village	Speed of Traffic	Wickham Bishops	Traffic Management	Total scheme	LMAL142059	TBC	Validation - There is evidence of some speeding vehicles, there is an agreed scheme for SID's though the village. Recommendation is for speed surveys 6 months after the installation of the SID sites and then review this request.	
51	Herbage Park Road/Church Hill/Rectory Road, Woodham Walter	Speed Indicator Device and three poles for rotation	Speed of traffic	Woodham Walter	Traffic Management	Total scheme	LMAL152057	TBC	In validation	
52	B1010 Burnham Road near its junction with Marlpits Road, Woodham Walter	Traffic management improvements	Difficulty turning into Marlpits Road from B1010	Woodham Walter	Traffic Management	Total scheme	LMAL152060	NA	Validation - Maintenance team instructed to replace missing junction warning sign for north-west bound traffic and cut back vegetation to improve visibility. Once the suggested works have been carried out, the junction should be reviewed to assess the impact of them. Any engineering solution would involve a major junction realignment.	R

Maldon District Local Highways Panel - Potential Schemes List (Version 19)

Walking

Total Value of schemes	£6,000
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Ref	Location	Description	Problem	Parish	Scheme Category	Scheme stage	Cost Code	Estimated cost	Comments	RAG
1	B1010 Chelmsford Road (Spar Lane to Edgeware Veterinary Practice), Purleigh	Extension of existing footway	Lack of safe route for pedestrians	Purleigh	Walking	Feasibility	LMAL153001	£6,000	Validation - recommendation for feasibility study into footway/walkable verge, with pedestrian video survey and road safety audit. Though implementation costs could be around £50k	G

Maldon District Local Highways Panel - Potential Schemes List (Version 19)

Passenger Transport

Total Value of schemes	£35,500
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Ref	Location	Description	Problem	Parish	Scheme Category	Scheme stage	Cost Code	Estimated cost	Comments	RAG
1	Burnham Road, Latchingdon	Wooden bus shelter	Stop ID 1500LATCHG2 - metal shelter needs replacing	Latchingdon	Passenger Transport	Total scheme	LMAL155016	£9,000	Validated by Passenger Transport team	G
2	Milton Road, Maldon	New metal shelter	Stop ID 15004006008 - Change in bus route warrants new shelter	Maldon	Passenger Transport	Total scheme	LMAL155015	£6,000	Validated by Passenger Transport team	G
3	Imperial Avenue, Maylandsea	Bus cage	Vehicles parking at bus stop and obstructing it	Maylandsea	Passenger Transport	Total scheme	LMAL155008	£2,500	Validation - A bus cage would require a consultation with residents/businesses	G
4	Fambridge Road, North Fambridge	Wooden bus shelter	Stop ID 1500IM2085- North Fambridge Shelter - replacement needed	North Fambridge	Passenger Transport	Total scheme	LMAL155013	£9,000	Validated by Passenger Transport team	G
5	The Avenue, North Fambridge	Wooden bus shelter	Stop ID 1500IM2536 - Ferry Corner Shelter - replacement needed	North Fambridge	Passenger Transport	Total scheme	LMAL155014	£9,000	Validated by Passenger Transport team	G

Maldon District Local Highways Panel - Potential Schemes List (Version 19)

Public Rights of Way

Total Value of schemes	£10,000
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Ref	Location	Description	Problem	Parish	Scheme Category	Scheme stage	Cost Code	Estimated cost	Comments	RAG
1	Footpath 36 (over railway , off Foundry Lane), Burnham on Crouch	Surface improvements - resurfacing 48 sqm	Footpath is in an urban area and is well used - surface worn/uneven, puddles form after rainfall	Burnham on Crouch	Public Rights of Way	Total Scheme	LMAL158005	£6,000	Validated by PRoW team	G
2	Footpath FP4 (Kelvedon to Goat Lodge Roads), Great Totham	Surface improvements, planings/timber edging for 200m	Footpath needs surface improvements	Great Totham	Public Rights of Way	Total scheme	LMAL158004	£4,000	Validated by PRoW team	G
3	Handley's Lane, between Kelvedon Road and Handley's Lane roadway, Wickham Bishops	Surface improvements to byway to allow all round year usage	Byway often inaccessible due to flooding /surface condition	Wickham Bishops	Public Rights of Way	Total scheme	LMAL158003	TBC	In validation	

Maldon District Local Highways Panel

April 2016

Appendix 2 – Potential Schemes List (Version 19)

Additional Information

Page 2 – Safer Roads Scheme 1

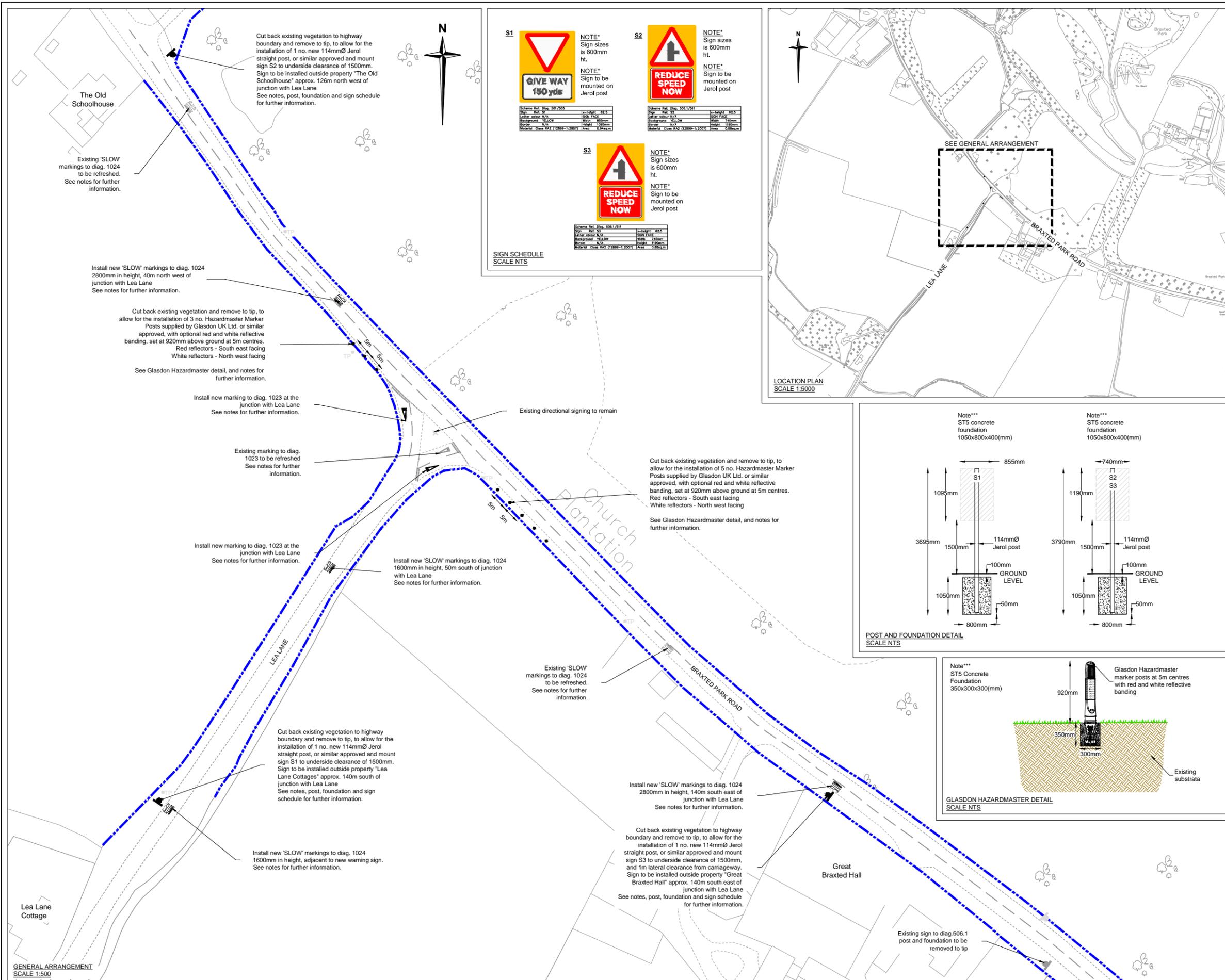
LMAL151009 – Braxted Park road j/w Lea lane, Great Braxted

Design of junction improvements

Page 3 – Safer Roads Scheme 2

LAML151008 – Woodrolfe Road, Tollesbury

Design of signing improvements to highlight 30mph speed limit



SIGN SCHEDULE
SCALE NTS

S1

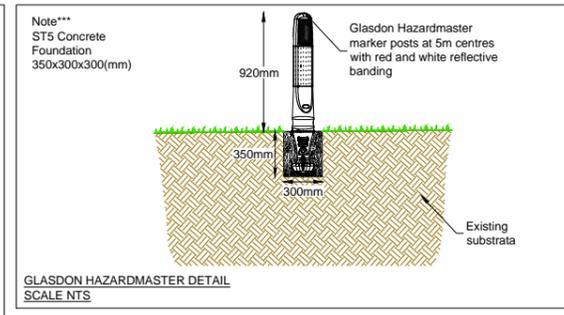
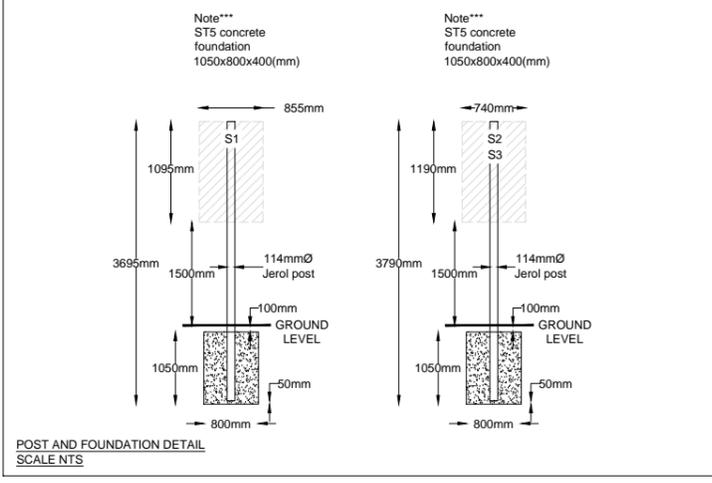
 NOTE* Sign sizes is 600mm ht.
 NOTE* Sign to be mounted on Jerol post
 Scheme Ref. Diag. 507/203
 Sign Ref. S1
 Letter colour B/A
 Background W/LC
 Shape S/A
 Material Class S42 (12899-1-2007) Area 0.88m²
 H-height 62.5
 Sign Face 1500mm
 Sign Post 1500mm

S2

 NOTE* Sign sizes is 600mm ht.
 NOTE* Sign to be mounted on Jerol post
 Scheme Ref. Diag. 506/1/211
 Sign Ref. S2
 Letter colour B/A
 Background W/LC
 Shape S/A
 Material Class S42 (12899-1-2007) Area 0.88m²
 H-height 62.5
 Sign Face 1500mm
 Sign Post 1500mm

S3

 NOTE* Sign sizes is 600mm ht.
 NOTE* Sign to be mounted on Jerol post
 Scheme Ref. Diag. 506/1/211
 Sign Ref. S3
 Letter colour B/A
 Background W/LC
 Shape S/A
 Material Class S42 (12899-1-2007) Area 0.88m²
 H-height 62.5
 Sign Face 1500mm
 Sign Post 1500mm



- NOTES**
- DO NOT SCALE FROM THIS DRAWING.
 - All carriageway markings are to be applied using thermoplastic reflective material - Type A with solid glass beads applied to the surface in accordance with clause 6 of BS3262 : part 3.
 - All road markings to have a min. skid resistance value of 55 PSV.
 - All diagram numbers refer to the Traffic Signs Regulations and General Directions 2002 and any amendment thereto.
 - Mounting height of all signs to be a minimum of 1.2m in verge or 2.1m in footway or 2.4m in cycleways, unless otherwise stated.
 - Sign posts shall not protrude above the top of the sign face unless supporting an external luminaire in which case the protrusion shall be kept to a minimum. All posts to be capped.
 - Lateral clearance of all pedestrian guardrail, signs and bollards to be 0.45m min. from the edge of carriageway, unless otherwise stated.
 - Any disturbance to existing grassed areas is to be made good with topsoil and seed.
 - Temporary traffic sign to Diag 7014 to be erected 50m in advance of the junction on existing street lighting columns. These signs are to be removed after a 12 week period and returned to store.
 - All carriageway marking from "The Old Schoolhouse" to "Great Braxted Hall" to be refreshed.
 - Any obstructing/obscuring vegetation to be cutback and removed to tip in advance of warning signs.
 - Hazardmaster Marker Post or similar approved by engineer to be supplied by Glasdon UK Ltd, and installed to manufactures specification.

- Key**
- Highway Boundary (to be refreshed)
 - Existing lining (to be refreshed)
 - New lining
 - Existing Telegraph pole
 - Existing sign location (to remain)
 - Existing sign location (to be removed)
 - New sign location
 - New hazardmarker post

Rev.	Date	Description of revision	Drawn	Checked	Reviewed	Approved
B	JAN 16	Amendments to Glasdon Hazardmaster Marker posts	LCN	SLS	LCN	MBS
A	JAN 16	Inclusion of Glasdon Hazardmaster Marker posts	LCN	SLS	LCN	MBS

DRAWING STATUS

FOR TENDER

Mark Rowe, Service Director, Highways
 County Hall A2 Annex, Chelmsford, CM1 1QH
 Tel: 0845 6037631
 © Essex County Council

SCHEME TITLE

**CRS - MALDON LHP
 BRAXTED PK RD J/W LEA LANE
 LMAL141002
 DRAFT**

DRAWING TITLE

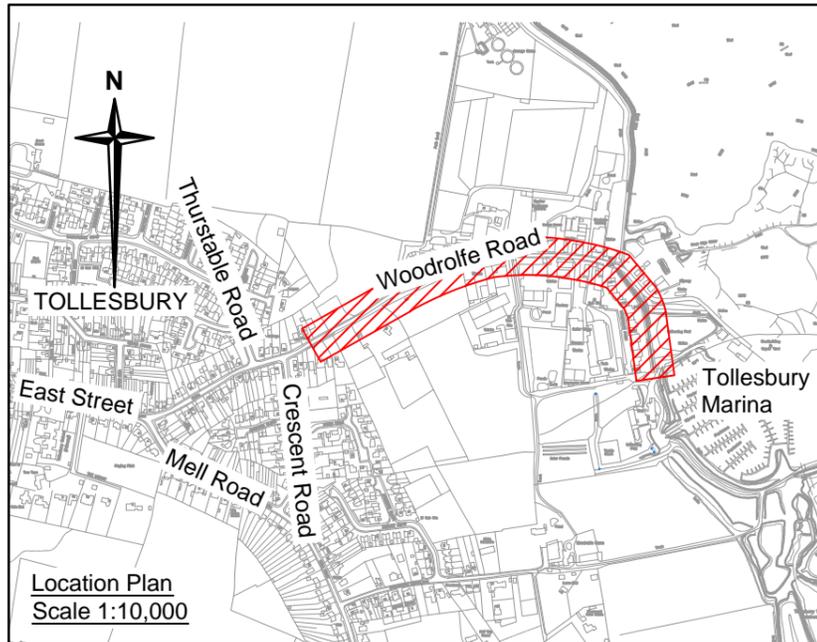
**SIGNING AND LINING
 GENERAL ARRANGEMENT**

DESIGNED	DRAWN	CHECKED	REVIEWED	APPROVED
LCN	LCN	SLS	LCN	MBS
DATE DEC 15				

DRAWING UNITS U.N.O. DIMENSIONS IN MILLIMETRES LEVELS IN METRES

SCALE AT A1 (841x304mm) AS SHOWN

DRAWING No. **HI-4332-12-001** REV. **B**



S1



Sign Reference	670-30
Height	300mm
Width	300mm
Area	0.07 sq.m
Material	Class RA2 (12899-1:2007)
Mount Height	Varies

Sign Schedule
NTS

Signage - Notes

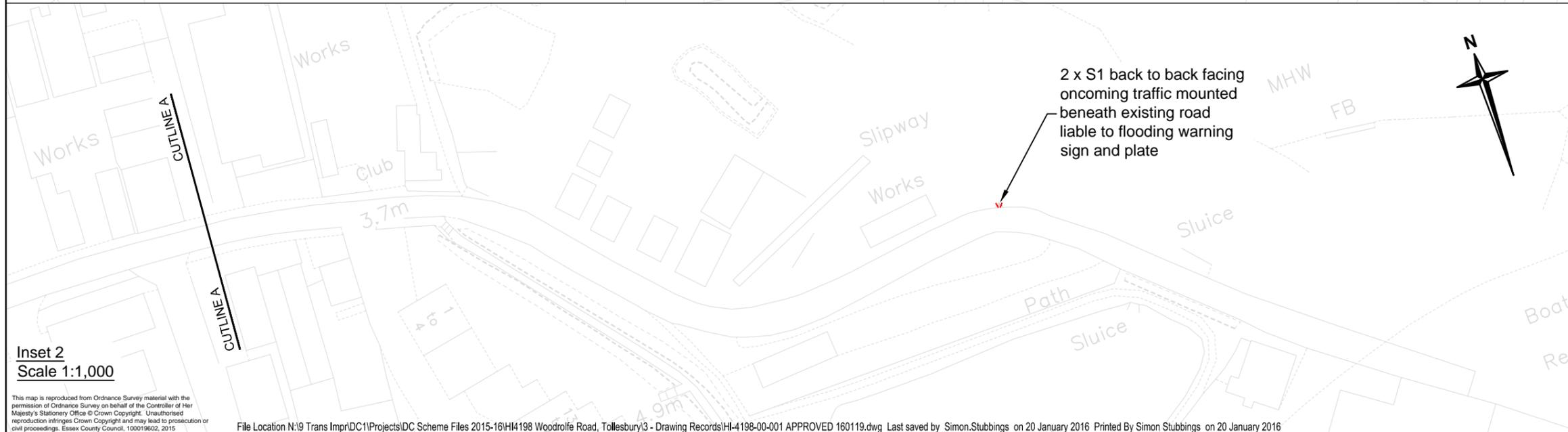
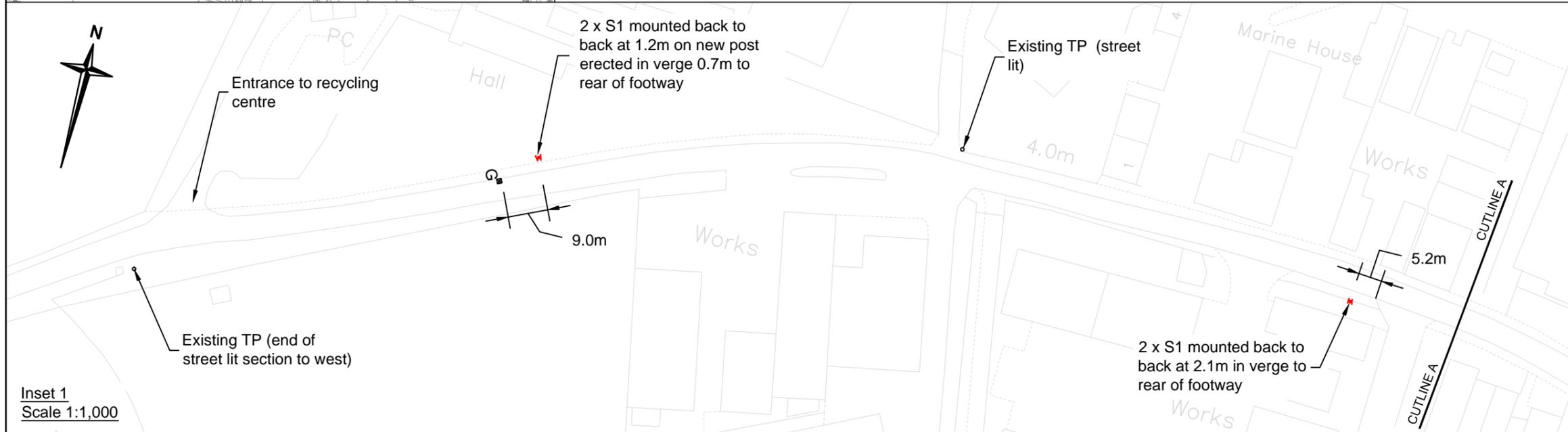
1. Foundations to be 600mm x 600mm x 600mm ST5 concrete with 150mm cover.
2. Diagram 670-30 repeater signs mounted back to back on 76mm post.
3. Sign posts shall not protrude above the top of the sign face and should be capped.
4. Location of proposed signs to be marked out on site by Engineer prior to works.

Notes

1. Do not scale.

Key

- Area of interest
- Proposed sign and post
- Existing gully



Rev.	Date	Description of revision	Drawn	Checked	Reviewed	Approved

DRAWING STATUS

DETAILED DESIGN



Mark Rowe, Service Director, Highways
County Hall A2 Annex, Chelmsford. CM1 1QH
Tel: 0845 6037631 © Essex County Council

SCHEME TITLE
**WOODROLFE ROAD, TOLLESBURY
SPEED LIMIT FEASIBILITY STUDY
LMAL151008**

DRAWING TITLE
GENERAL ARRANGEMENT

DESIGNED	DRAWN	CHECKED	REVIEWED	APPROVED
SLS	SLS	PN	SLS	MBS
DATE	DATE	DATE	DATE	DATE
19JAN16	19JAN16	19JAN16	19JAN16	19JAN16

DRAWING UNITS U.N.O.
DIMENSIONS IN MILLIMETRES
LEVELS IN METRES

SCALE AT A3 (420x297mm)
As Shown

DRAWING No.
HI-4198-00-001

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Maldon District Local Highways Panel - Highway Rangers Works Summary

Maldon District Highway Rangers Works Summary - February 2016								
Job Ref.	Date	Parish	Location	Street	Works	Date Completed	Requested by	
836	07/12/15	North Fambridge	Adjacent to Byfleet House	Fambridge Road	Plainings/top soil to eroded verge	16/12/15	ECC	
837	07/12/15	Maldon	Near 1	Midguard Way	Strim/cut back vegetation	16/12/15	ECC	
838	09/12/15	Maldon	O/s 4 & near 7	St Marys Lane	Clear out gullies	15/12/15	ECC	
MDC324		Maldon	Footpath Essex Road to Morrison, Morrison to Wycke Hill		Strim/cut back vegetation	08-11/12/2015	MDC	
MDC325		Latchingdon	Latchingdon	Rectory Lane	Cut up/remove tree	15/12/15	MDC	
MDC326		Mayland	Mayland	Steeple Road	Strim/cut back vegetation	15/12/15	MDC	
MDC327		Southminster	Play area	Southfields	Strim/cut back vegetation	17/12/15	MDC	
MDC328		Mundon/Woodham Walter	Blind Lane/Oak farm Road		Strim/cut back vegetation	22/12/15	MDC	
MDC329		Southminster	New Moor Crescent to Station Road		Street furniture maintenance	23/12/15	MDC	
MDC330		Maldon	Downs Road to Chandler's Quay		Cut up/remove tree	29/12/15	MDC	
MDC331		Heybridge	A414 to B1018		Sign maintenance	31/12/15	MDC	
MDC332		Maldon	Stock Chase		Strim/cut back vegetation	31/12/15	MDC	
839	13/01/16	Southminster	Lamp column 48 - no.7	Hall Road	Strim/cut back vegetation	18/01/16	ECC	
MDC339		Maldon	Promenade Park	Park Drive	Cut up/remove tree	19/01/16	MDC	
MDC340		Heybridge	Heybridge	Drapers Chase	Street furniture maintenance	19/01/16	MDC	
823	14/10/15	Heybridge	Between Ash Grove/ Wood Road	Broad Street Green	Clear debris from ditch	20/01/16	ECC	
MDC341		Southminster	Southminster	High Street	Street furniture maintenance	21/01/16	MDC	
MDC342		Mundon	Various	Fambridge Rd, Lower Burnham Rd, The Endway to Tinkers Hole, Rectory Lane	Street furniture maintenance	22/01/16	MDC	
MDC343		Maldon	Promenade Park	Park Drive	Cut up/remove tree	26-27/01/16	MDC	
	01/02/16	Training Course					01/02/2016	MDC

Maldon District Local Highways Panel - Highway Rangers Works Summary

Maldon District Highway Rangers Works Summary - February 2016							
Job Ref.	Date	Parish	Location	Street	Works	Date Completed	Requested by
MDC344		Burnham	Burnham On Crouch	Junction of Coronation Rd & Station Rd BOC	Street furniture maintenance	28/01/16	MDC
MDC345		Maldon	Bergen Court		Street furniture maintenance	29/01/16	MDC
841	27/01/16	Heybridge	O/S HE Hill + 50m /No.5	The Square/ Heybridge Street roundabout	Clear out channel/gully	29/01/16	ECC
MDC346		Burnham	Fairway Drive		Sign maintenance	02/02/16	MDC
840	20/01/16	Mayland	Side of No.1	Tern Close	Strim/cut back vegetation	03/02/16	ECC
MDC347		Various	Fambridge Road/Lower Burnham Road/End Way/Rectory Lane		Sign maintenance	05/02/16	MDC
MDC348		Heybridge	Cemetery	Goldhanger Road	Strim/cut back vegetation	05/02/16	MDC
MDC349		Maldon	Iceland's Car Park	White Horse Lane	Strim/cut back vegetation	10/02/16	MDC
843	09/02/16	Maldon	Outside no.68 Takeaway	Mill Road	Strim/cut back vegetation	12/02/16	ECC
844	11/02/16	Maldon	O/S no.40 near J W Bates Rd	The Causeway	Clean out footway gully	15/02/16	ECC
845	11/02/16	Maldon	O/S no.7 S/W Mill Lane	Fullbridge	Clean out footway gully	15/02/16	ECC
846	11/02/16	Heybridge	O/S Residential Home	The Street	Clean out footway gully	15/02/16	ECC
MDC350		Maldon	A414		Street furniture maintenance	16/02/16	MDC
MDC351		Maldon	Beeleigh Rd, Fambridge Rd		Street furniture maintenance	16/02/16	MDC
MDC352		Fambridge	Fambridge Road		Street furniture maintenance	17/02/16	MDC
MDC353		Maldon	Beeleigh Road		Cut up/remove tree	17/02/16	MDC
MDC354		Fambridge	Ferry Road to Lower Burnham Road		Sign cleaning	18/02/16	MDC
MDC355		Heybridge	Harvest Way		Strim/cut back vegetation	19/02/16	MDC
MDC356		Langford	Whole of Parish		Sign cleaning	22/02/16	MDC
MDC358		Maldon	Maldon		Street furniture maintenance	23/02/16	MDC
MDC359		Heybridge	Scraley Road		Sign/Post maintenance	24/02/16	MDC

Maldon District Local Highways Panel - Highway Rangers Works Summary

Maldon District Highway Rangers Works Summary - February 2016							
Job Ref.	Date	Parish	Location	Street	Works	Date Completed	Requested by
MDC360		Heybridge	Whole of Parish		Sign/Post maintenance	24-25 /02/2016	MDC
MDC361		Maldon	Promenade Park	Dump Road	Sign/Post maintenance	26/02/16	MDC

Key

ECC - Essex County Council/Essex Highways	MDC - Maldon District Council	TC/PC - Town/Parish Council
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