HERTFORDSHIRE COUNTY COUNCIL

ROYSTON URBAN TRANSPORT PLAN

Draft Stage 2 Report

APPENDIX 2D – HIGHWAYS & STREETS SCHEME PROFORMAS

THE TRANSPORTATION CONSULTANCY

APPENDIX 2D – HIGHWAYS & STREETS SCHEMES

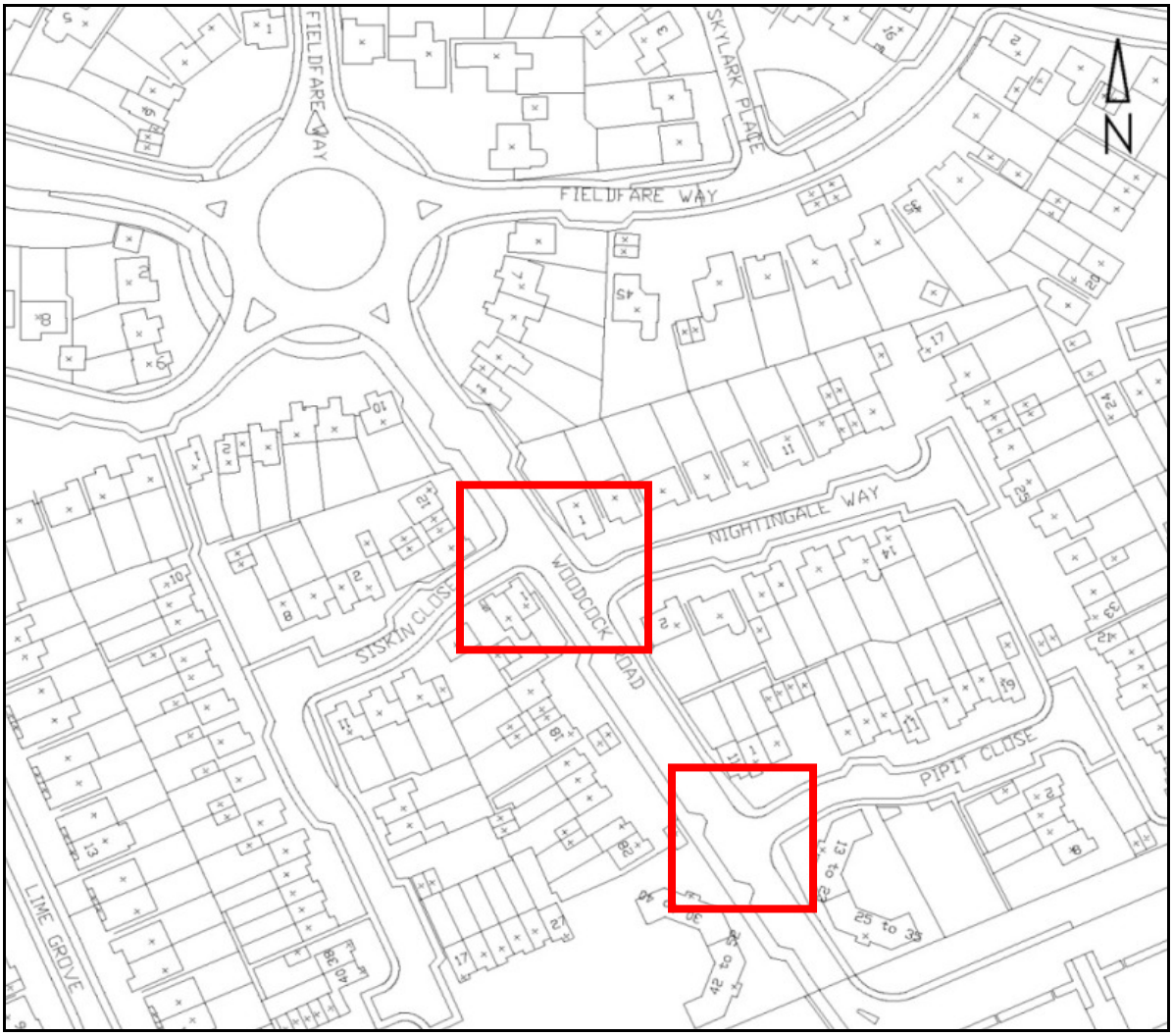
Reference	*Description*
	Short Term
D1	Refurbishment of traffic calming measures on Woodcock Road approaching the leisure centre
D2	Improvement of road markings at priory cinema roundabout
D3	Modifications to Old North Road from York Way roundabout to A505 roundabout to reduce speed and increase capacity
D4	Improve signing to London via the A10 and the A505
	Medium Term
D5	Modifications to A505 / A10 roundabout to reduce speeds and improve pedestrian and cyclist safety
D6	Introduce traffic calming measures on Green Drift and Tannery Drift
D7	Traffic incident operational plans for M11 and A505
D8	Investigation of need for and possible route of a SE Bypass
D9	Plan and safeguard access provision for new development

Scheme Name	Refurbishment of traffic calming measures on Woodcock Road approaching the leisure centre	
Scheme Reference	D1	
Problem Reference(s)	H5	Speeding is seen to be a major problem in residential areas, particularly en route to the leisure centre
Scheme Status	This scheme is included in the UTP	

Description

Painting of approach lines and 'Saw Tooth' triangles on the two speed tables on Woodcock Road, approaching the leisure centre. Speed tables are at Siskin Close/Nightingale Way, and Pipit Close.

Location Plan



Supporting Photograph	
	
Speed Table on Woodcock Rd and Siskin Close with lack of road markings	Speed Table on Woodcock Road and Nightingale Close with lack of road markings

Contribution to Objectives / Targets	UTP Objectives	6 – Reduce excessive vehicle speeds at targeted hotspots throughout the urban network
	LTP Indicator	• Cycle Trips

Outline Cost Analysis		
Works Element	***Est. Cost***	***Notes***
Pavement Marking	£2,500	Including Scheme Drawings
Total Cost For Delivery	**£2,500**	

Deliverability Assessment	
Can the scheme be delivered within the highway boundary?	Yes
Can the scheme be delivered without third party involvement?	Yes
Do all elements of the scheme involve standard work processes?	Yes
Can the scheme be delivered in the short term?	Yes

Scheme Name	Improvement of road markings at priory cinema roundabout	
Scheme Reference	D2	
Problem Reference(s)	H4	Problems at Priory Cinema roundabout – markings for two lanes but only used as one lane
Scheme Status	This scheme is included in the UTP	

Description

Inappropriate and worn line marking on the approaches to this roundabout creating potentially unsafe conditions therefore it is intended to repaint the line marking and introduce hatching to provide clearer single lane alignment on the approaches to the stop lines at the roundabout.

Location Plan

Supporting Photograph	
	
Priory Roundabout, with Melbourn Street approach in the foreground, and A10 Melbourn Road approach in the background.	Priory Roundabout, with A10 Priory Lane approach in the foreground, and Newmarket Road approach in the background.

Outline Cost Analysis		
Works Element	***Est. Cost***	***Notes***
Pavement Marking	£3,500	Including Scheme Drawings
Total Cost For Delivery	**£3,500**	

Deliverability Assessment	
Can the scheme be delivered within the highway boundary?	Yes
Can the scheme be delivered without third party involvement?	Yes
Do all elements of the scheme involve standard work processes?	Yes
Can the scheme be delivered in the short term?	Yes

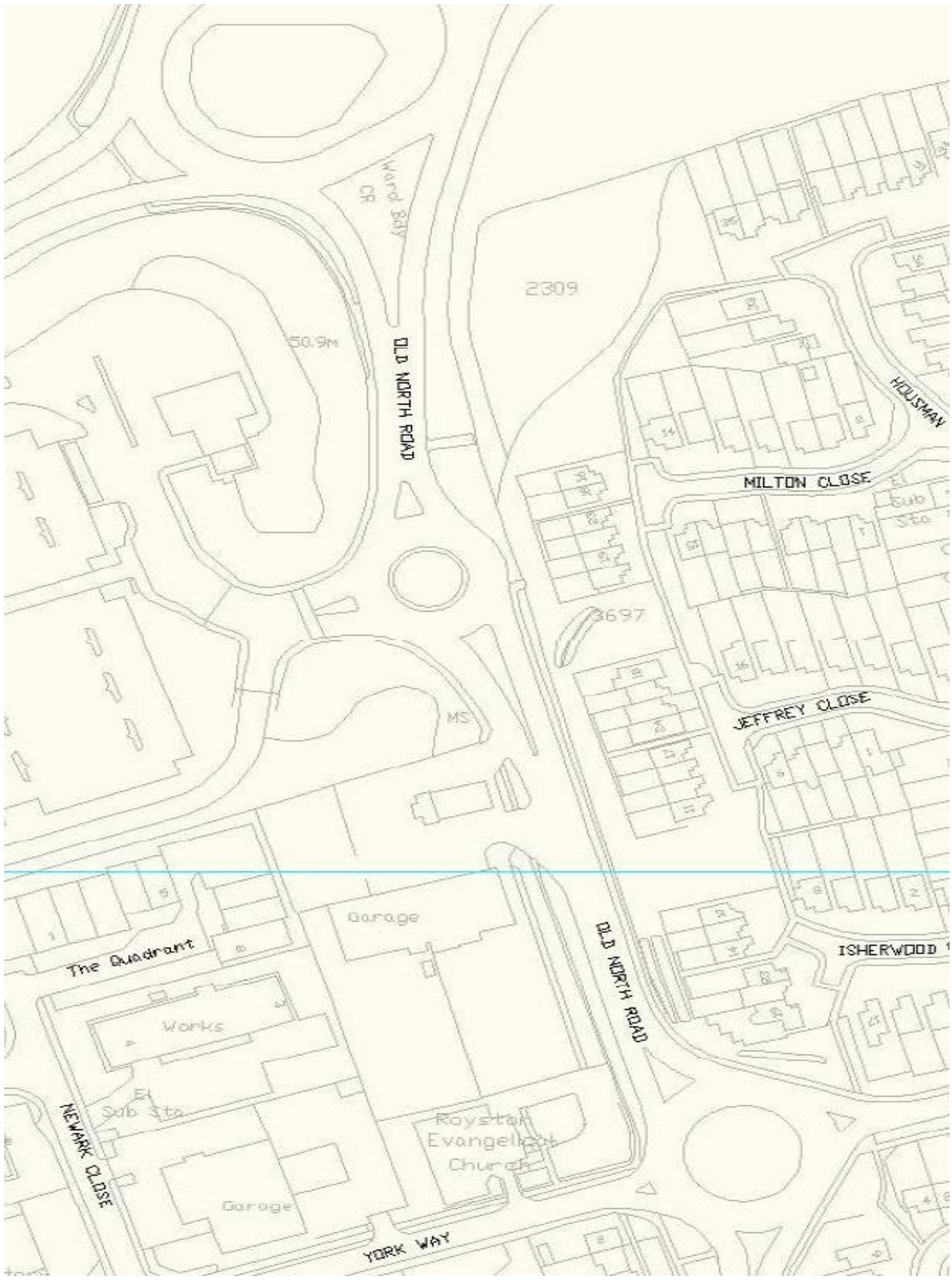
Scheme Name	Modifications to and widening of Old North Road from York Way roundabout to A505 roundabout to reduce speed and increase capacity	
Scheme Reference	D3	
Problem Reference(s)	H8	Old North Rd / York Way roundabout is too offset in one direction
Scheme Status	This scheme is included in the UTP	

Description

The Old North Road / York Way / Burns Road roundabout is currently offset to the Burns Road side, allowing vehicles travelling Northbound on Old North Road to pass through the roundabout at higher speeds. Additionally, considerable development is proposed in the Northwest sector of Royston, that will add considerable amounts of traffic to the roundabout, particularly the York Way arm. It is proposed to extend the Northbound cycle lane to the existing footpath crossing the South arm of the roundabout, creating an additional offset for the traffic approaching from this direction, in addition to widening this approach slightly to create 2 lanes approaching the stop line. A section of the central splitter island will be taken to create further deflection for the traffic on this approach. The North arm approach will also be widened to accommodate 2 lanes approaching the stop line to help increase the capacity of the junction. Currently, on street parking is permitted on York Way, up to approximately 42 meters from the stop line. This effectively narrows York Way to 1 lane when the South kerb is lined with parked vehicles, and during busier periods, vehicles exiting the roundabout have to queue to allow Eastbound vehicles to pass before being able to proceed Westbound. This queue potentially extends beck through the roundabout, reducing the capacity. It is proposed to extend the double yellow lines on York Way further West by a further 40 meters. Figure C1 shows the proposed improvements to the Old North Road / York Way roundabout.

It is also proposed to widen the section of Old North Road between the York Way roundabout, through the Tesco roundabout to the A505 roundabout to 2 lanes in each direction. This will provide continuity through this section rather than shifting between 1 lane and two between the roundabout approaches, whilst catering for the expected increase in traffic in this area due to dew commercial development off York Way in the future. Sections of reserve between the carriageway and footpath will reduced to cater for the wider carriageway. Figure C2 shows the concept of this element of the scheme. A new Toucan crossing will also be installed on Old North Road between York Way and Tesco roundabouts, under the Cycling network improvement scheme.

Location Plan



Supporting Photographs

Old North Rd South approach with cycle lane to be extended and traffic lane to be widened to 2 lanes

Old North Rd North approach to be widened to 2 lanes on the approach

York Way approach, with insufficient space to allow widening to 2 lane approach

York Way approach, with double yellow lines to be extended to remove on street parking close to the roundabout

Links to Other UTP Schemes	B2 – Completions of measures linking the new rail underpass and the implementation of the town-wide cycling network	
Contribution to Objectives / Targets	UTP Objectives	3 – Improve connectivity and continuity of the cycle network 6 – Reduce excessive vehicle speeds at targeted hotspots throughout the urban network 7 – Improve accessibility of key employment and residential destinations for all transport modes
	LTP Indicator	• Cycling Trips • Unclassified Road Condition

Outline Cost Analysis		
Works Element	***Est. Cost***	***Notes***
Design	£20,000	
Extension of Cycle Lane	£2,000	
Civil Works	£10,000	North & South approaches
Civil Works	£40,000	Widening to 2 lanes
Pavement Marking	£3,000	
Supervision	£5,000	
Misc	£10,000	
Total Cost For Delivery	£90,000	

Deliverability Assessment	
Can the scheme be delivered within the highway boundary?	Yes
Can the scheme be delivered without third party involvement?	Yes
Do all elements of the scheme involve standard work processes?	Yes
Can the scheme be delivered in the short term?	Yes

Figure C1

Scheme Name	Improve signing to London via the A10 and the A505	
Scheme Reference	D4	
Problem Reference(s)	D2	Future growth in and around Royston and issues on the M11 will result in more through traffic.
	H7	Signing for London is unclear.
	O2	Inappropriate freight access
Scheme Status	This initiative is included in the UTP	

Description

This initiative is to conduct a brief review of the primary route (Green-backed signing) strategy in and around the town. Traffic on the A505 bound for London is directed southwards through Royston on the A10. Traffic using Melbourn Street and seeking the London direction is also directed south down the A10. Reaching London on this route takes traffic alongside extensive housing frontages, a school, the Town Hall, Market Square and the bus station and then southwards via long sections of single carriageway through villages to Hertford and beyond. As London can be reached from the Royston section of the A505 via the more strategic and faster routes of the M11 and the A1(M), there is a case for amending the strategic route signing to London at least along and across the A505.

Design Considerations	***Proposed Solutions***	
Standard signing practice		
Links to Other UTP Schemes	D7 - Traffic incident operational plans for M11 and A505	
Contribution to Objectives / Targets	UTP Objectives	6 - Reduce excessive vehicle speeds at targeted “hot spots” throughout the urban network

Outline Cost Analysis		
Works Element	***Est. Cost***	***Notes***
Revise strategy	£1500	
Implementation	£3500	
Total Cost For Delivery	£5,000	

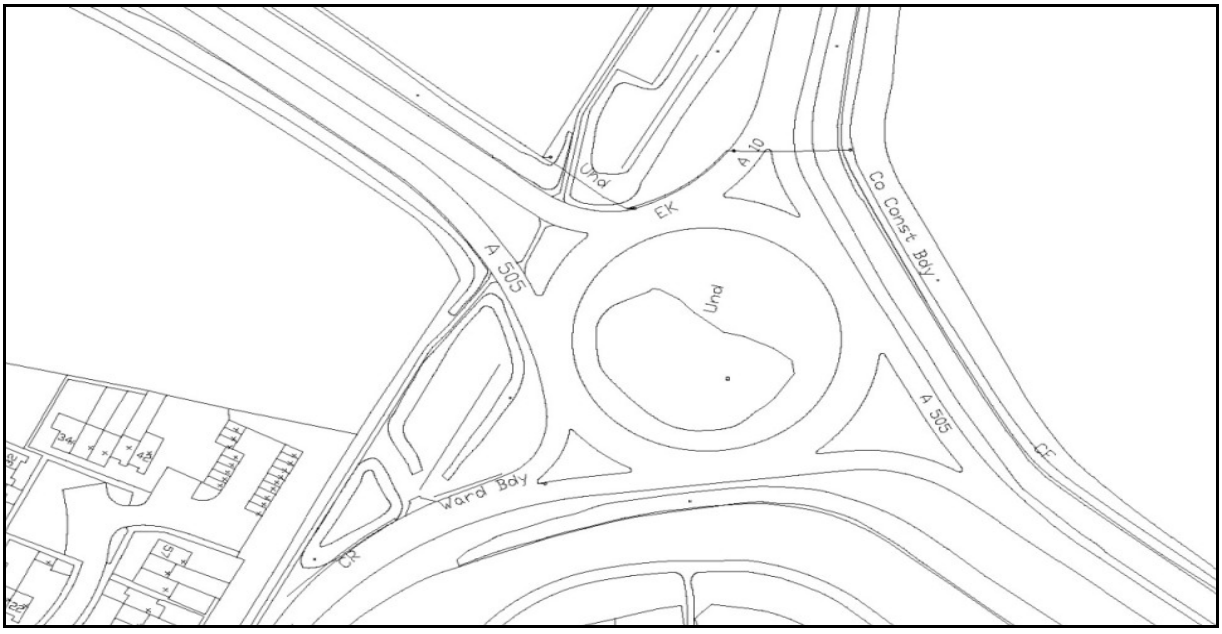
Deliverability Assessment	
Can the scheme be delivered within the highway boundary?	Y
Can the scheme be delivered without third party involvement?	Y
Do all elements of the scheme involve standard work processes?	Y
Can the scheme be delivered in the short term?	Y
Where ‘N’ details for overcoming deliverability risk:	

Scheme Name	Modifications to A505 / A10 roundabout to reduce speeds and improve pedestrian and cyclist safety	
Scheme Reference	D5	
Problem Reference(s)	H2	Incidents on the A505 cause traffic to completely block the local road system
	C5	Roundabouts are very difficult to negotiate on Old North Road and the A505 Bypass
	W10	Crossing the A505 Bypass at the A1104 and A10 roundabouts is dangerous for walkers and cyclists due to the speed of the traffic
Scheme Status	This scheme is included in the UTP	

Description

Currently, there is a sub standard pedestrian crossing point across the West arm of the A10 roundabout on the A505 bypass. This path provides a link between Royston and Cambridge for both walkers and cyclists. Apart from the poorly marked crossing point, the alignment of the exit from the roundabout allows vehicles to accelerate at speed out of the roundabout Westbound through the crossing point. Proposed development in this area will increase pedestrian activity at this location also. It is proposed to realign the A505 Westbound exit lanes on this arm of the roundabout as shown in Figure C3, to help reduce the speeds at which vehicles leave the roundabout, and to provide a safer and more visible pedestrian and cyclist crossing point. It is also proposed to realign the Eastern A505 approach to the roundabout to create a larger deflection into the roundabout with the aim of slowing traffic on this approach. This realignment is also illustrated on Figure C3.

Location Plan



Supporting Photographs	
	
Poor visibility on the pedestrian approach to the A505 crossing point from the South	A505 Westbound exit alignment and pedestrian crossing point

Links to Other UTP Schemes	B6 – Provision of cycle facilities along and across the A505	
Contribution to Objectives / Targets	UTP Objectives	3 – Improve connectivity and continuity of the cycle network 6 – Reduce excessive vehicle speeds at targeted hotspots throughout the urban network
	LTP Indicator	• Cycle Trips • Rights of Way

Figure C2

Figure C3

Outline Cost Analysis		
Works Element	***Est. Cost***	***Notes***
Design	£15,000	
Materials	£5,000	
Civils	£20,000	
Supervision	£7,500	
Misc	£20,000	
Total Cost For Delivery	**£67,500**	

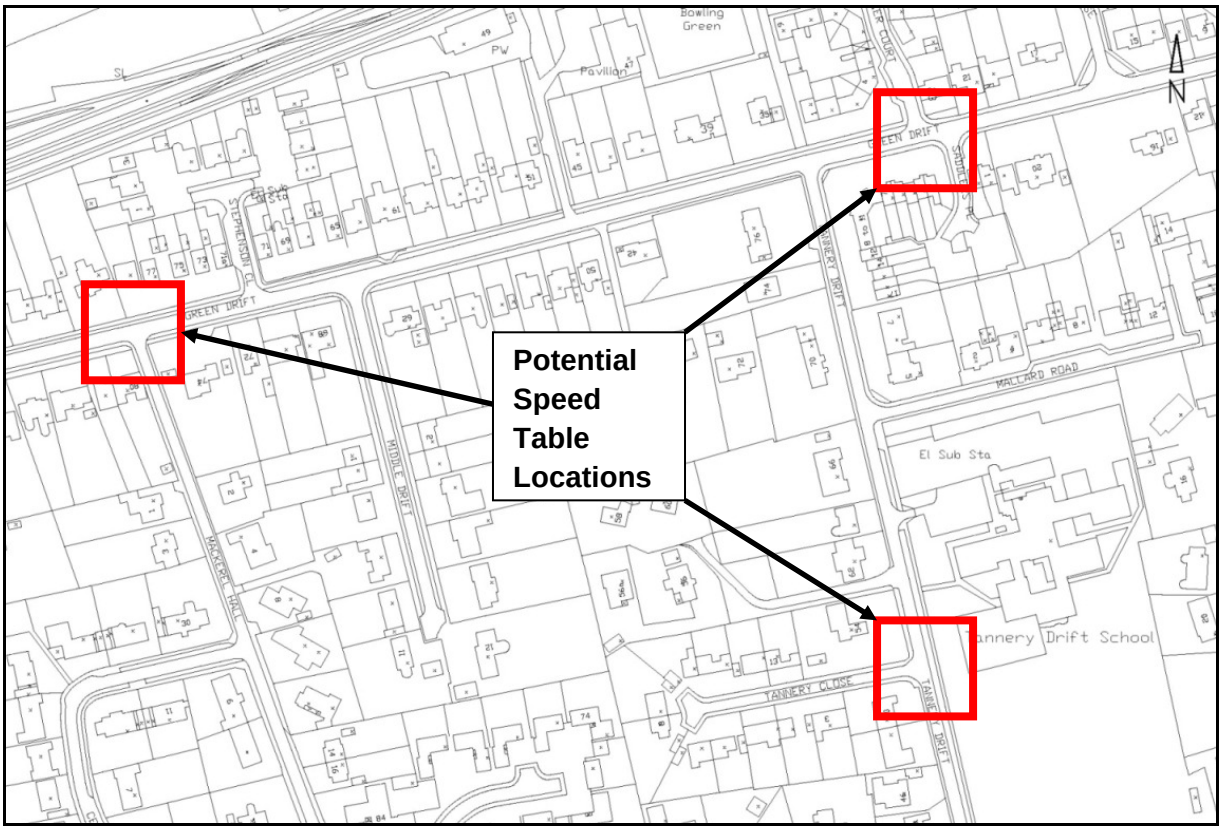
Deliverability Assessment	
Can the scheme be delivered within the highway boundary?	Yes
Can the scheme be delivered without third party involvement?	Yes
Do all elements of the scheme involve standard work processes?	Yes
Can the scheme be delivered in the medium term?	Yes

Scheme Name	Consider the Introduction of traffic calming measures on Green Drift and Tannery Drift	
Scheme Reference	D6	
Problem Reference(s)	H5	Speeding is seen to be a major problem in residential areas, particularly en route to the leisure centre
Scheme Status	This scheme is included in the UTP	

Description

Depending on results from a speed survey on Green Drift and Tannery Drift, it is proposed to install 2 speed tables on Green Drift, and 1 speed table on Tannery Drift, to reduce speeds on these residential streets where there is a large pedestrian movement due to the school on Tannery Drift. If the average speeds are greater than 30mph on these streets, the locations of the two speed tables on Green Drift are proposed to be at the intersections with Middle Drift and Farriers Court / Saddlers Place. The location of the speed table on Tannery Drift is proposed to be at the Tannery Close junction.

Location Plan



Supporting Photograph	
	
Farriers Court / Saddlers Place intersection on Green Drift	Tannery Drift and Tannery Close intersection

Links to Other UTP Schemes	A9 Demonstration Project to encourage walking to shops	
Contribution to Objectives / Targets	UTP Objectives	6 – Reduce excessive vehicle speeds at targeted hotspots throughout the urban network
	LTP Indicator	• Speed Limit Compliance (dependant of speed survey results)

Outline Cost Analysis		
Works Element	***Est. Cost***	***Notes***
Speed Surveys & Analysis	£5,000	
Design	£10,000	
Materials	£10,000	
Civils	£15,000	
Misc	£20,000	
Total Cost For Delivery	**£60,000**	

Deliverability Assessment	
Can the scheme be delivered within the highway boundary?	Yes
Can the scheme be delivered without third party involvement?	Yes
Do all elements of the scheme involve standard work processes?	Yes
Can the scheme be delivered in the medium term?	Yes

Scheme Name	Traffic incident operational plans for M11 and A505	
Scheme Reference	D7	
Problem Reference(s)	H1	M11 issues (capacity problems or accidents) create congestion in Royston.
	H2	Accidents on the A505 cause traffic to completely block the local road system.
Scheme Status	This scheme is included in the UTP	

Description

A protocol is to be drawn up to minimise the traffic impacts in Royston caused by occasional incidents on the local sections of the A505 and the M11 (between Junctions 8 and 11). The protocol would be prepared by HCC with inputs from the Highways Agency and NHDC. The protocol would include an operational strategy embracing the following

- Diversion routes for A505 traffic
- Diversion routes for M11 traffic
- Diversion routes when a blockage might occur affecting both routes e.g. at Junction 10 on the M11
- HA/HCC mobile patrol presence in Royston during any incident e.g. to man traffic signal and other junctions
- Enforcement presence in Royston during any incident to clear local obstructions e.g. vehicles parked or loading
- Local routes for emergency services

Design Considerations	***Proposed Solutions***	
Possible supply of diversion signing and storage for signing		
Contribution to Objectives / Targets	UTP Objectives	7. improve accessibility of key employment and residential destinations for all transport modes
	LTP Indicators	• Accessibility
Links to other UTP Schemes	B2 - Completion of measures linking the proposed rail underpass and implementation of town-wide cycling network to improve connectivity and permeability for cyclists throughout the town.	

Outline Cost Analysis		
Works Element	***Est. Cost***	***Notes***
Staff time only	£3,000	Time also required from HA and police personnel
Diversion signing	0	Assumed to be available already
Total Cost For Delivery	£3,000	

Deliverability Assessment	
Can the scheme be delivered within the highway boundary?	Y
Can the scheme be delivered without third party involvement?	N
Do all elements of the scheme involve standard work processes?	N
Can the scheme be delivered in the medium term?	Y
Where 'N' details for overcoming deliverability risk: The HA, HCC and NHDC are all involved in drawing up the protocol and in executing the traffic management plan and parking/loading enforcement	

Scheme Name	Investigation of need for and possible route of a SE Bypass	
Scheme Reference	D8	
Problem Reference(s)	D2	Future growth in and around Royston and issues on the M11 will result in more through traffic.
	D3	Limits on highway capacity and physical development will restrict growth
	D4	Concerns over the subject of a possible North/South bypass, i.e. developer offering to build the bypass in exchange for housing
	H1	M11 issues (capacity problems or accidents) create congestion in Royston
	O2	Inappropriate freight access
Scheme Status	This initiative is included in the UTP	

Description

The concept of a SE Bypass derives both from the possible longer term development of sites yet to be identified beyond the present limits of urbanisation at the south eastern edge of the town and the traffic relief afforded by such a scheme to the A10. A SE Bypass would serve to provide a clear boundary to the town as does the A505 to the North. The A10 passes through the town skirting the town centre at Market Hill resulting in the relative isolation of the island site between Barkway Street and Priory Lane and the separation of the bus station from the centre. The A10 on Melbourn Road takes north-south through traffic past the Town Hall and St Mary's school and between substantial residential areas. The proposed investigation would seek to demonstrate the need or otherwise for a SE Bypass in the longer term and to investigate possible alignments. The strength or weakness of the case for such a scheme would be tested via an enhanced traffic model or possibly the potential to do a run using the East of England Regional Model to assess the likely amount of traffic diverting onto a bypass and the results used to safeguard a route or to abandon it entirely. With the latter outcome there would be the benefit of the removal of any planning blight. It would be proposed that local enhancement of the EERM strategic SATURN traffic model would be undertaken for option testing and assessment of the likely diversion to this route.

Design Considerations	***Proposed Solutions***	
Traffic demand forecasting and modelling of impacts on the town's roads	Use of enhanced traffic forecasting model for Royston	
Treatment of any relieved sections of the A10 in Royston	Traffic reduction and environmental management scheme drawn up	
Links to Other UTP Schemes	D9 - Plan and safeguard access provision for new development	
Contribution to Objectives / Targets	UTP Objectives	6 - Reduce excessive speeds at targeted "hot spots" throughout the urban network 7 - Improve accessibility of key employment and residential destinations for all transport modes

Outline Cost Analysis		
Works Element	***Est. Cost***	***Notes***
Study	£40,000	
Total Cost For Delivery	£40,000	

Deliverability Assessment	
Can the scheme be delivered within the highway boundary?	Y
Can the scheme be delivered without third party involvement?	N
Do all elements of the scheme involve standard work processes?	N
Can the scheme be delivered in the medium term?	Y/N
Where 'N' details for overcoming deliverability risk: The study may require the determination of land ownership boundaries The assessment of the scheme would need to address costs and funding sources from third parties. The assessment can be carried out in the short term. Any scheme, if progressed, could only be delivered in the longer term	

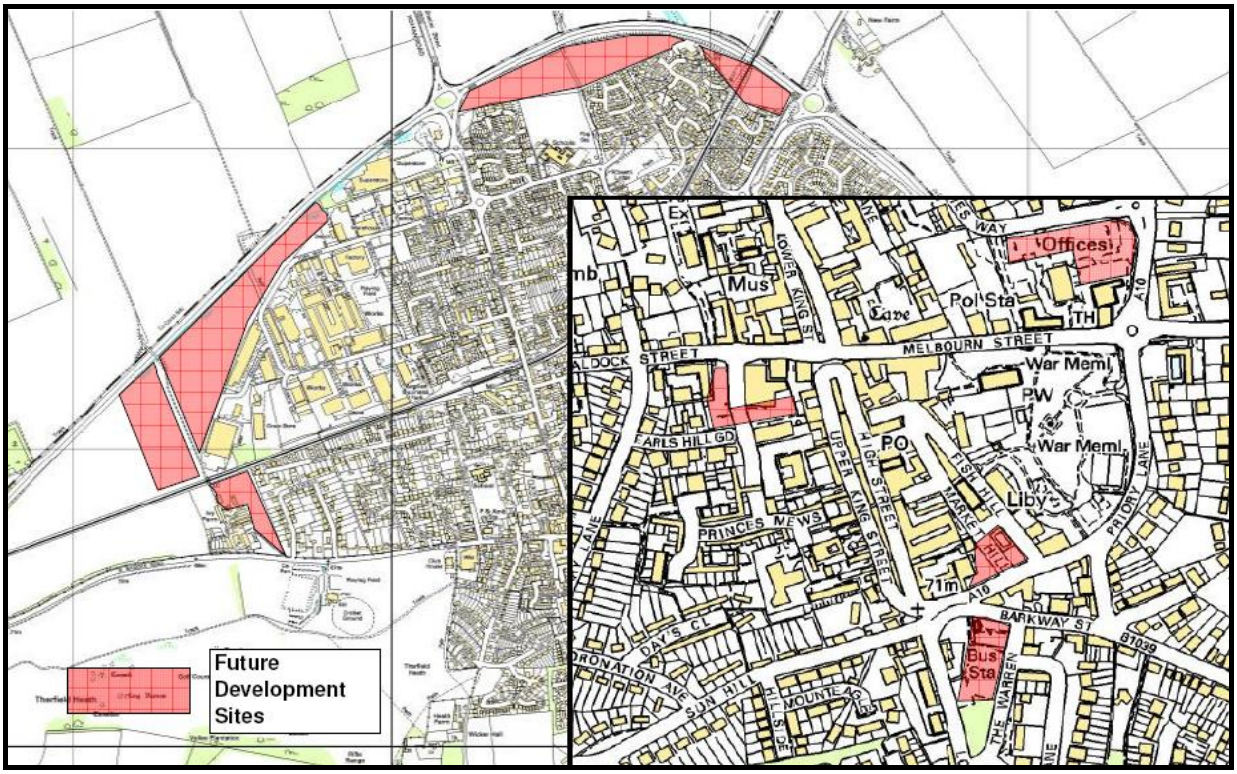
Scheme Name	Plan and safeguard access provision for new development	
Scheme Reference	D9	
Problem Reference(s)	D2	Future growth in and around Royston and issues on the M11 will result in more through traffic.
	D3	Limits on highway capacity and physical development will restrict growth.
	H11	There are concerns that the likely scale of housing and employment growth will place strains on the transport provision and particularly on the town's roads as there are no clear access plans for the development areas
Scheme Status	This initiative is included in the UTP	

Description

This initiative is to enable the planning authority to identify and, as may be necessary, to safeguard access to sites ear-marked for new development. Access solutions for the larger peripheral sites and for the Opportunity Sites in the town centre are needed for all modes of transport. Solutions are needed that minimise traffic impacts on environmentally sensitive roads. The minimum requirement would be for HCC and NHDC to scope development briefs for these sites in consultation with their owners

Analysis carried out in preparing the UTP has identified the broad traffic impacts of the development of these sites. An example of significant traffic impact would be the additional flows generated by an expansion of the employment area using York Way and the development of further housing just inside the A505 on York Way and the Old North Road. The provision of new slip roads on and off the A505 to serve such developments would reduce the traffic impacts on the town's roads

Location



Design Considerations	***Proposed Solutions***	
Land uses and development densities to be assumed for outline transport assessments and traffic impacts	Access options to minimise impacts on the town's roads and to encompass all transport modes	
Links to Other UTP Schemes	D8 - Investigation of need for and possible route of a SE Bypass	
Contribution to Objectives / Targets	UTP Objectives	3 - Improve connectivity and continuity of the cycle network 7 - Improve accessibility of key employment and residential destinations for all transport modes
	LTP Indicators	• Accessibility

Outline Cost Analysis		
Works Element	***Est. Cost***	***Notes***
Consultant Study	£10,000	
Total Cost For Delivery	£10,000	

Deliverability Assessment	
Can the scheme be delivered within the highway boundary?	N
Can the scheme be delivered without third party involvement?	N
Do all elements of the scheme involve standard work processes?	Y
Can the scheme be delivered in the medium term?	Y
Where 'N' details for overcoming deliverability risk: Access solutions will cross the highway boundaries. Sites are owned by NHDC and by private individuals and companies	