

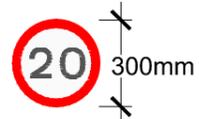
**Terminal Signs**

Sign 1

Sign 2

**Repeater Signs**

Sign 3

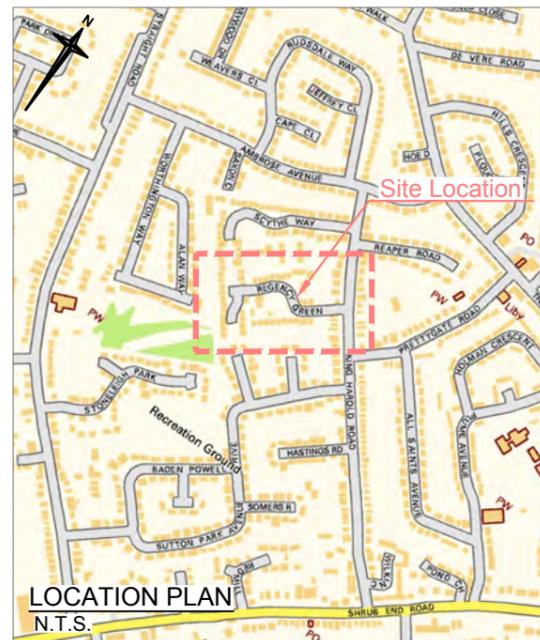


Sign Reference	670 - T - 600mm Dia.
Height	600mm
Width	600mm
Area	0.28 sq.m
Material	Class RA2 (12899-1:2007)
Mount Height	2200

Sign Reference	670 - R - 300 Dia.
Height	300mm
Width	300mm
Area	0.07 sq.m
Material	Class RA2 (12899-1:2007)
Mount Height	2200

POST(S) & FOUNDATION DESIGN (BS 873*)		
Mounting Height	2200mm	Bases
Number	1	Base Width
Size	76.1x3.2CH5	Base Length
Length	3450mm	Base Depth
Centres	N/A	Base Vol. o/a
Illumination	No	Earth Cover

**SIGN SCHEDULE**



**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 Department for Transport Specification for Highway Works and Essex County Council Specifications and Standard Construction Drawings.
3. All traffic signs and lines are to comply with The Traffic Signs Regulations and General Directions 2002.
4. Location of all new signs to be verified on site prior to erection. The absolute minimum clearance from the sign plate to the edge of carriageway shall be 600mm. Following erection of signs any overhanging trees or bushes shall be lopped or trimmed to ensure proper visibility to the sign. Where such trees or bushes are located in private property the Contractor shall not trim or lop the trees or bushes until the permission of the owner has been obtained for these works.
5. Signs to be installed using standard mounting bracket and back to back channel clips to ensure back to back signs are level.
6. Signs to be installed in accordance with marking out on site, sign locations in drawing are indicative.
7. Works team to adjust mount height of terminal signs on site where necessary to ensure both sides of the road at a consistent and level height on sides.

**Legend**

- Highway Boundary
- New Post/New Sign
- Existing Lamp Column/New Sign

Rev	Date	Description of revision	Drawn	Checked	Reviewed	Approved
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**CHECK PRINT**

**FEASIBILITY**



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County Hall A2 Annex, Chelmsford, CM1 1QH  
Tel: 0845 6037631 © Essex County Council

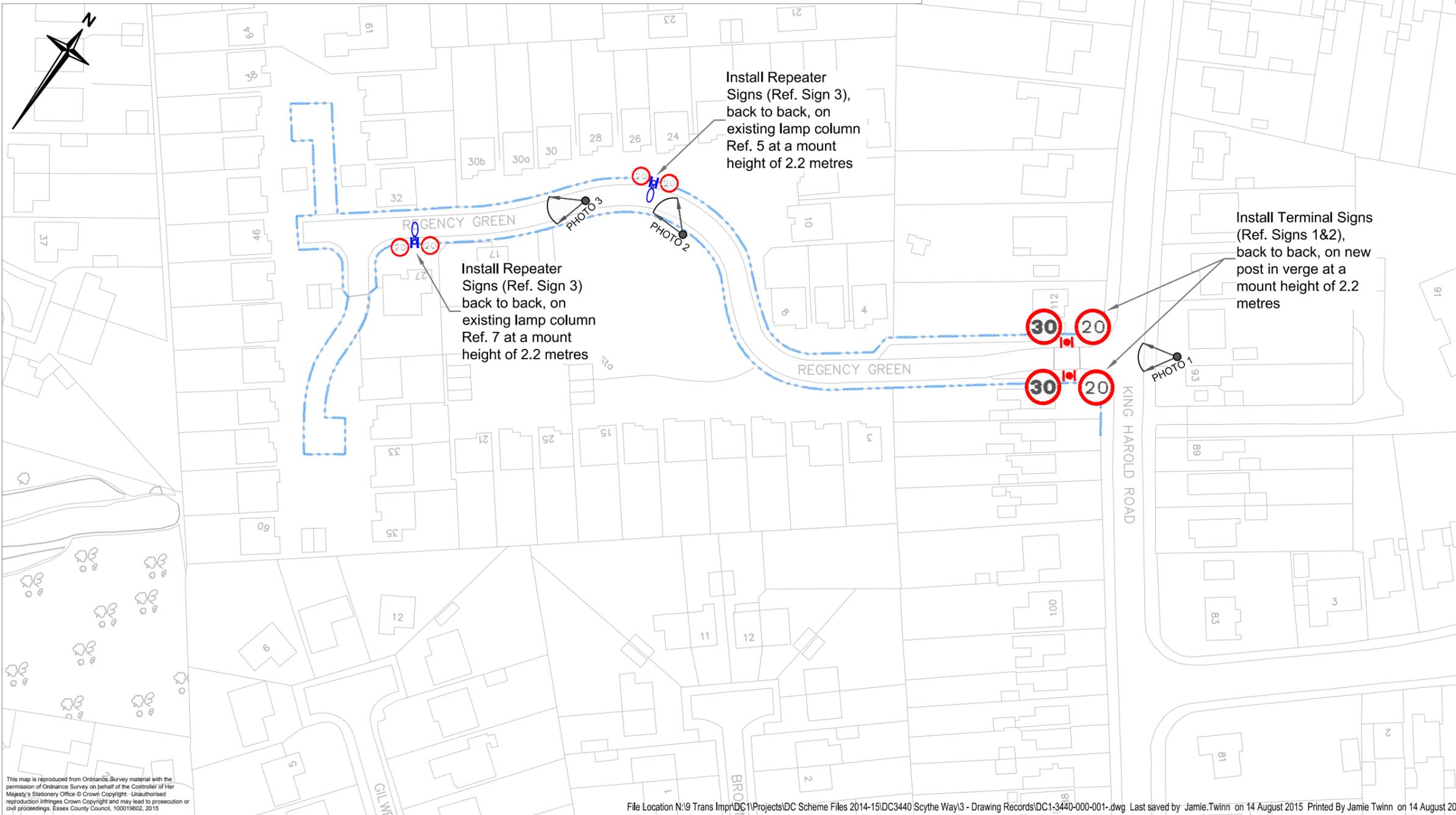
**LOCAL HIGHWAY PANEL  
DC3440 REGENCY GREEN  
LCOL142006**

**SIGNING ARRANGEMENT**

DESIGNED	DRAWN	CHECKED	REVIEWED	APPROVED
JT	IT	AD	CB	CB
DATE	DATE	DATE	DATE	DATE
AUG 15	AUG 15	AUG 15	AUG 15	AUG 15

DRAWING UNITS IN O. DIMENSIONS IN MILLIMETRES LEVELS IN METRES SCALE AT A3 (420x297mm) 1:1000

DRAWING No. **DC1-3440-RG-1200-001** REV. -



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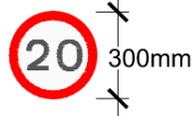
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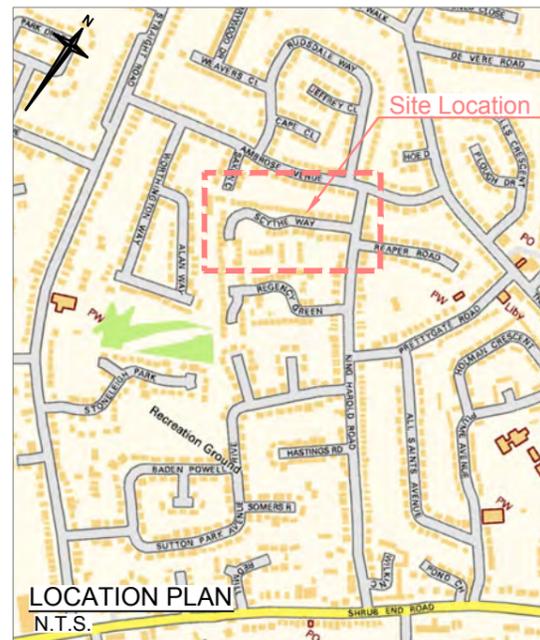


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Sign Reference 670 - R - 300 Dia.	
Height	300mm
Width	300mm
Area	0.07 sq.m
Material	Class RA2 (12899-1:2007)
Mount Height	2200

POST(S) & FOUNDATION DESIGN (BS 873*)		
Mounting Height	2200mm	Bases Individual
Number	1	Base Width 350mm
Size	76.1x3.2CH5	Base Length 350mm
Length	3450mm	Base Depth 600mm
Centres	N/A	Base Vol. o/a 0.074 m3
Illumination	No	Earth Cover 150mm

**SIGN SCHEDULE**



**Notes**

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- New Post/New Sign
- ⊕ Existing Lamp Column/New Sign

Rev	Date	Description of revision	Drawn	Checked	Reviewed	Approved
<b>CHECK PRINT</b>						

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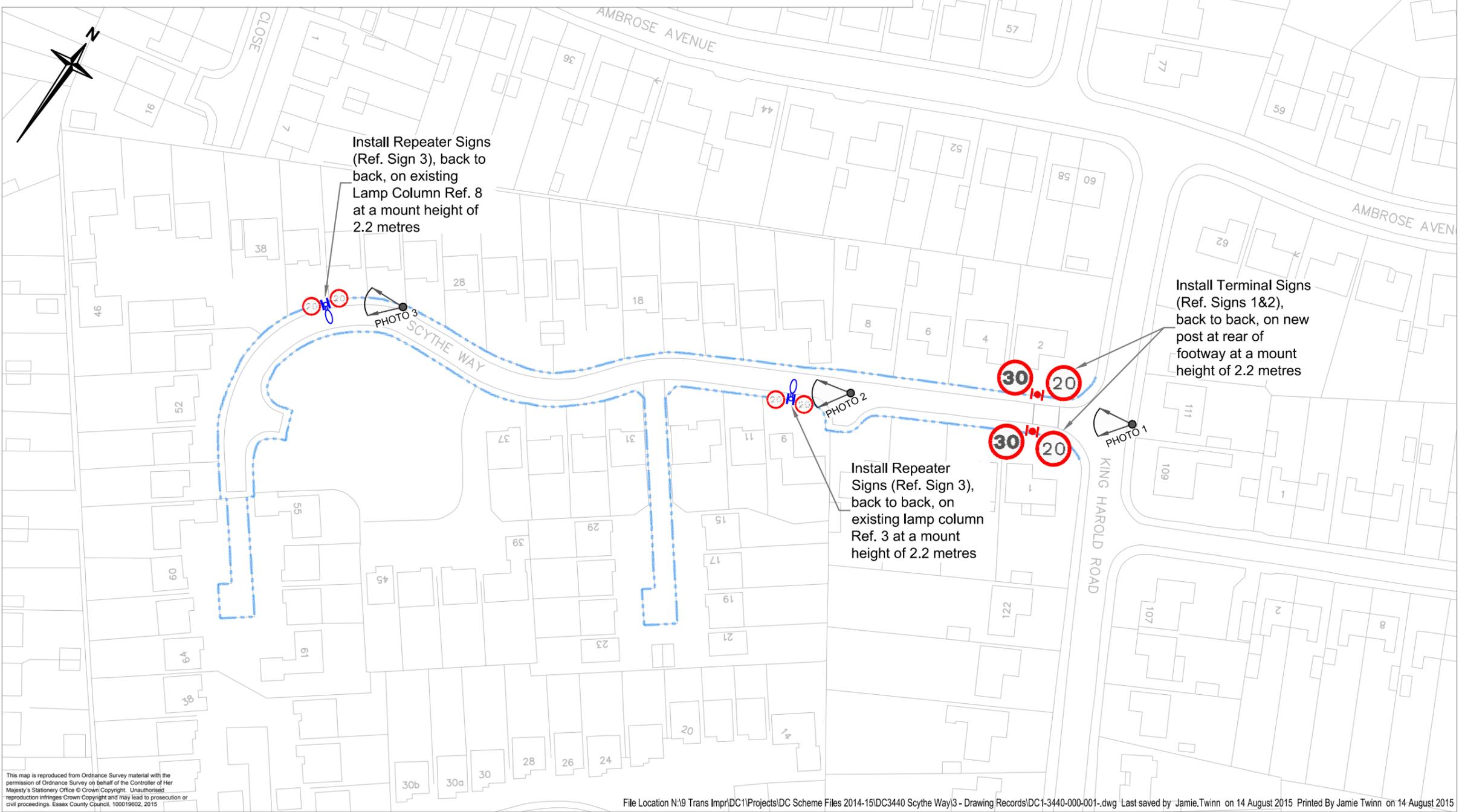
**LOCAL HIGHWAY PANEL  
DC3440 SCYTHE WAY  
LCOL142006**

**SIGNING ARRANGEMENT**

DESIGNED	DRAWN	CHECKED	REVIEWED	APPROVED
JT	JT	AD	CB	CB
DATE	DATE	DATE	DATE	DATE
AUG 15	AUG 15	AUG 15	AUG 15	AUG 15

DRAWING UNITS IN O. DIMENSIONS IN MILLIMETRES  
LEVELS IN METRES

SCALE AT A3 (420x297mm) 1:1000  
DRAWING No. **DC1-3440-SW-1200-001** REV. -



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# Spring Lane and Bakers Lane Route study Highway Improvements

September 2015



## Document Control Sheet

Document prepared by: Paul Norris

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<b>Report Title</b>	Spring + Bakers Lane Route Study
<b>Project Number</b>	DC3330
<b>Status</b>	Final
<b>Revision</b>	-
<b>Control Date</b>	September 2015

## Record of Issue

Issue	Status	Author	Date	Check	Date	Authorised	Date
1	final	PJN	10/15	NF	11/15	NF	12/15

## Distribution

Organisation	Contact	Number of Copies
HLO	Sonia Church	1
Network Management	Vicky Duff	1

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# Executive Summary

This route is narrow and the carriageway is in poor condition, however improving the infrastructure significantly may lead to an increase in traffic speeds and therefore the attractiveness of the route which could result in an increase in the rat running we have been asked to address.

The personal injury collision record for this route is low and therefore significant measures are not justified on casualty reduction grounds.

This aside, the route would benefit from routine maintenance to ensure that all a collision record does not develop.

The scheme has been discussed with the maintenance department and is to be included in next year's maintenance programme

A number of the signs along the route are very dirty and require cleaning and some are obscured by vegetation. It is recommended that the rangers are employed to clean the signs and improve visibility by trimming back vegetation where possible.

# **1 Review of the existing route**

## **1.1 Collision record**

During the last 5 years, only 3 personal injury collisions have been recorded along the route between the junction with the A133 and Braiswick

Two of these collisions were nose to tail collisions for southbound vehicles at the roundabout, and the third involved a vehicle reversing into a pedal cycle to allow an oncoming vehicle to pass.

To quantify this data the current investigatory level for a casualty reduction site is 4 collisions in a 5 year period within a 50 m radius, the route is approximately 2000m long.

It should be noted that the route was closed to through traffic for a number of months whilst the Lexden Bridge was replaced, however even with this in mind the personal injury collision data recorded for this location is significantly less than the current investigatory level

The collision details have been provided in Appendix 1

## **1.2 Speed and volume data**

Speed and volume data has been collected and is provided in Appendix 2.

The data was taken at two locations (either side of the golf club entrance)

The average weekday daily flow volumes were 2164 south of the entrance and 1970 north of the entrance suggesting that around 100 vehicles a day access the golf club from the south.

These flows give an average over the 24 hour period of 1 vehicle every 5 minutes.

Even in the peak hour the maximum vehicle flow is southbound and 140 vehicles which is 1 every 25 seconds.

Speeds were also low with an average of 21.6mph south of the entrance and 29.7 to the north

### 1.3 Highway boundary information

Boundary information has been requested and has been provided in Appendix 3. All shaded sections (yellow, blue and purple) are considered to be highway. It would appear that much of the encroaching vegetation is in highway ownership.

### 1.4 Site observations

#### Carriageway and Road markings

The Carriageway surface and road markings are in poor condition throughout the route.

The mini roundabout markings at the north end junction have been completely worn away and the lane markings on the urban section are in a similar state.



**Urban section – lane markings almost lost longitudinal and transverse cracking suggesting composite carriageway**

Also within the urban section there is regular transverse and longitudinal cracking which can be seen on the carriageway surface. This cracking suggests

that the original construction of the road may have been concrete, which has been overlaid with black top micro surfacing product in subsequent years.

The rural section appears to be black top throughout, however this section has been subject to a significant number of patch repairs which suggests it also has some issues with structural integrity.



**Rural section – edge markings almost lost – multiple patching throughout**

On the rural section there are many patches some of which have deteriorated along the edges. The number of different materials used and the amount of patching suggest that these ad hoc repairs have been undertaken over a number of years.

## Signing

Many of the existing warning signs are very dirty and need to be cleaned so that they are suitably visible and provide the proper retro-reflectivity. Generally they appear to be in reasonable condition and relatively new however the condition cannot be properly assessed until they have been cleaned.



**Roundabout warning sign approaching Spring Lane roundabout**



**Chevron sign near Mill House**

Some signs are also obscured by vegetation, and therefore do not have the recommended forward visibility.

The bend warning signs and speed limit change signing has been supplemented with 'jiggle bars' which are strips of surfacing which 'shake' the road user and hopefully draw their attention to the warning sign. Although this form of traffic calming is no longer specified, it is felt that at this location they should be retained/ reinstated as they may be contributing to the low collision rate.



**Priority working sign (nearside) at Bakers Bridge**

The regulatory sign for the priority working at Bakers Bridge is partially hidden by vegetation which is of particular concern as there are no supporting give way markings. This could result in an increase in the risk of head on collisions.

## 2 Possible improvements

### 2.1 Surface condition

The carriageway surface and road markings are in poor condition throughout the route, and although this does not appear to be reflected in the collision data currently, it may appear as a common factor in the future.

As the existing surface is so worn it is suggested that replacing this should be undertaken by the Maintenance Team rather than the Improvements Team and thus the cost of this works should be borne by the Maintenance Team budget rather than the Local Highway Panel.

The two sections of Calcined Bauxite (High Friction Surfacing) surface within the route provide increased skid resistance but again are showing signs of deterioration as much of it is stripped off.



This surfacing has been installed to provide an increased skid resistance on the bends and as there are not any personal injury collisions recorded at either bend it appears to be working.

The most economical treatment for the route as a whole would be surface dressing, however there are so many patches on the route that this is unlikely to last as long as it should and thus a surface dressing treatment has been discounted.

Given the existing condition of the road a plain and in-lay treatment is recommended, this will require the existing surface course to be removed to a depth of 40mm and replaced with a new wearing course of the same depth, this approach will improve the structural integrity, skid resistance and shape of the surface.

It is also recommended that the increased skid resistance is maintained with the bends as it is now, however rather than replacing the surface applied Calcined Bauxite treatment, plaining out of the existing wearing course to a depth of 40mm and replacing with a 65 PSV chip material is recommended, this will provide the increased skid resistance and should have a longer life than the surface applied treatment.

The scheme has been discussed with the Maintenance Team, and it has been agreed to include the site in next year's maintenance programme. (The scheme reference number is 167566)

There is however an existing ongoing drainage issue outside number 14 Bakers Lane which the Maintenance Team are working on needs to be resolved before the resurfacing in case excavation is required.

Post resurfacing it has been agreed that all existing lining should be refreshed with lane markings on the urban section and edge markings on the rural (no lane marks due to the width). It has also been agreed that the give way markings are provided in conjunction with the priority working system, and that the mini roundabout markings are refreshed also.

## **3 Conclusions**

### **3.1 Surface and lining**

The lining and surface are poor throughout – both of these operations are much easier to complete during good weather, and there is little point in refreshing the lining before the surface is replaced – therefore it is recommended that the surface is replaced under maintenance as part of next year’s resurfacing programme and that the lining is replaced following the resurfacing.

Generally the lines provided appear adequate and should be refreshed as currently shown, with the exception of Bakers Bridge where the addition of markings to diagram 1003 (give way transverse marking ) and a marking to 1023. (give way triangle) should be provided to reinforce the need to give way.

The mini roundabout markings at the Bakers Lane/ Braswick junction should also be refreshed when the lining crew are on site.

### **3.2 Signs and Vegetation**

All the signs along the route would benefit from a clean and vegetation trimming to improve the forward visibility it is recommended that these works are undertaken by the rangers as soon as possible with Bakers Bridge signing being given the highest priority.

A general cutting back of the overhanging vegetation along the route would improve inter visibility for all road users and the benefit of this could be maintained by contacting land owners along the route and reminding them of their responsibility to trim any vegetation which overhangs the highway

### **3.3 Future Monitoring**

It is recommended that the speed and volume data is collected at regular intervals moving forward to quantify if there has been increases in usage and or speeds. This would help to justify any future measures.

The collision rates should also be regularly reviewed to ensure that if a collision pattern develops it is addressed as soon as possible

# Feasibility Report

## HI4180 – Fordham All Saints Church of England School, Mill Road, Fordham – Traffic Management Improvements

### 1.0 Brief

Study to ascertain what improvements can be made outside Fordham All Saints Church of England Primary School to improve safety due to speeding of vehicles outside the school.

### 2.0 Site Description

Mill Road is a rural road leading into the village of Fordham. It lies to the south of Church Road and to the north of Fiddlers Hill. Mill Road is subject to a 30mph speed limit and is classified as a PR2.

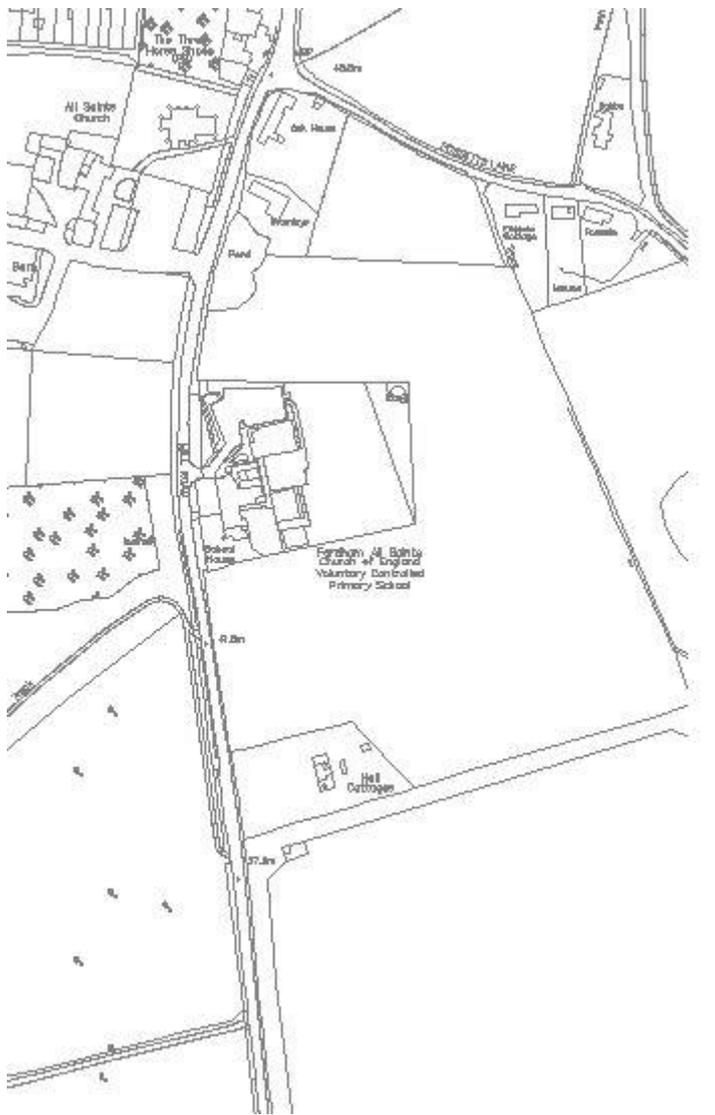
The school is located on the eastern side of Mill Road close to where it meets Church Road. Mill Road is bounded by verges on both sides and hedges. There are overhead power lines and poles positioned at the rear of verges. The measured width of the Mill Road adjacent to the school entrance is 5.9m



Figure 1: Mill Road section in front of School

# Feasibility Report

## 3.0 Site Location Plan



## 4.0 Site Observations

A 7 day speed survey was carried out at the school to check for both northbound and southbound speeds. The 7 day average speed was as follows:

Northbound:35.8mph

Southbound:38.2mph

Which are both higher than the speed limit of 30mph. The following were also observed:

1. It was noted there was 2 school warning signs (one yellow backed) on the northbound approach to the school. The first warning sign encountered as one travels north has a 600mm height with a 'School' subplate (235mm height). Please see figure 2. The second warning sign which is yellow backed also has 600mm height with a 'School' sub plate. Please see figure 3.
2. The presence of a School Crossing Patrol Unit (wig wag) adjacent to school entrance for northbound vehicles. The wig wag signal comes on at school opening and closing times to warn

drivers of the presence of school crossing patrols.

3. There was a School Crossing Patrol Unit for southbound vehicles but this was some distance from the patrol site, currently located at the Church Road Junction with Fiddlers Hill.
4. The lack of guard railing outside the pedestrian entrance to the school.
5. A school warning sign on the southbound approach to the school
6. 2 sets of School Zig Zags have currently been installed on the road to cover both entrances to prohibit vehicles parking at such entrances as seen in Figure 1.
7. Vegetation obscuring School warning signs.
8. Overhead BT and UKPN cables.



Figure 2: First warning sign for northbound vehicles



Figure 3: Second warning sign currently hidden behind vegetation



Figure 4: Existing Patrol sign with wig wag adjacent to school entrance



Figure 5: Pedestrian entrance into school



Figure 6: Proposed VAS supplied by Westcotec

# Feasibility Report

<p>5.0</p>	<p><b><u>Considerations</u></b></p> <p>The following solutions have been considered:</p> <ol style="list-style-type: none"> <li>1. Increasing the sizes of school warning signs for north bound vehicles.</li> <li>2. Installing new School Crossing Patrol Unit for southbound vehicles to bring it closer to the patrol.</li> <li>3. Installing a pedestrian guardrail at the pedestrian entrance to the school to prevent children leaving the school from walking or running directly onto the road.</li> <li>4. Relocating the school zig zags to incorporate School Crossing Patrol site.</li> <li>5. Installing a VAS sign for northbound vehicles.</li> <li>6. Providing additional SLOW markings adjacent to all signs to Diagram 545.</li> <li>7. Providing 2 No 'gateway' style repeaters and 30 roundels in carriageway to emphasise speed limit on southbound approach.</li> <li>8. Clearance of all vegetation around signs.</li> </ol>
<p>6.0</p>	<p><b><u>Recommendations</u></b></p> <p>It is recommended that the following measures be implemented to improve safety, particularly measures numbered 1,2,4 and 5 below:</p> <ol style="list-style-type: none"> <li>1. It is recommended that the 2No. school warning signs and posts for north bound vehicles be removed as their size of 600mm is inadequate for traffic speeds at these locations. They should be replaced by 2No. New grey backed school warning signs (750mm height) and posts as per guidelines in TSM Chapter 4 to help increase conspicuity of these signs to motorists.</li> <li>2. The School Crossing Patrol Unit for southbound vehicles is currently too remote from the patrol to be relevant. Also the size of this sign (600mm) and mounting height is considered to be inadequate for the traffic speeds at these locations. It is therefore recommended that the sign and post be removed. A new grey backed Patrol sign and wide based post should be installed at a distance of 55m from the patrol as per guidelines in TSM Chapter 4, this will be at the western verge adjacent to the entrance into Bramleys. This location also offers the best visibility to motorists. Existing wig wag to be attached to the post at its new location. It is also recommended to install new grey backed school warning sign for southbound vehicles at eastern verge north of Church Road junction with Fossett's Lane.</li> <li>3. It is recommended to install a pedestrian guardrail to EH110 with a panel layout staggered infill type PG3 at the pedestrian entrance to the school to prevent children leaving the school from walking or running directly onto the road. This will involve raising the kerb at this location and making good the footway surface.</li> <li>4. 2 sets of The School zig zags are currently installed. It is recommended that these Zig zags are relocated to ensure that they cover the Patrol point as well as the entrances into school.</li> <li>5. It is recommended to install a VAS sign for northbound vehicles near the Patrol sign with wig wags on the other side of road. It will also be possible to power the VAS from the mains power nearby.</li> <li>6. Provide additional SLOW markings adjacent to all signs to Diagram 545.</li> </ol>

# Feasibility Report

7. Provide 2 No 'gateway' style repeaters and 30 roundels in carriageway to emphasise speed limit on southbound approach.

8. Clear all vegetation around signs to increase their visibility to motorists.

Please refer to drawing HI-4180-00-001 for proposal details.

Statutory Undertakers equipment in Mill Road include:

Anglian Water (Potable) = in eastern verge

UKPN Power = in both verges

National Grid GAS = in eastern verges

BT = Overhead + in western verge but then crosses into eastern verge at north of School

Anglian Water Foul Sewer = runs under the carriageway

## Economic Analysis

It is estimated the cost to deliver the above mentioned recommendations will be £14840. The breakdown of this cost are as follows:

1. Removing 2 No. existing and replacing with 2No. new warning signs and posts for northbound vehicles-£840
2. Installing a new School Crossing Patrol Unit including electrical supply and school warning sign-£1850
3. Installing a pedestrian guardrail including raising kerbs and footway surfacing-£1200
4. Relocating zig zags-£1900 (1.5 day shift for all lining work)
5. Install VAS with data collection unit including electrical supply -£3100
6. Provide SLOW markings- included in lining works costs
7. Provide 2 No. repeaters and 30 roundels-£680
8. Clear vegetation-£70
9. Traffic Management and maintenance-£640

This makes a total of £10280. Addition of a 10% RJ Overhead, 10% Contingency Allowance, and other RJ fees brings total estimated cost to £14840.

Prepared by:	Kwabena Adu-Gyamfi	Date:	21 October 2015
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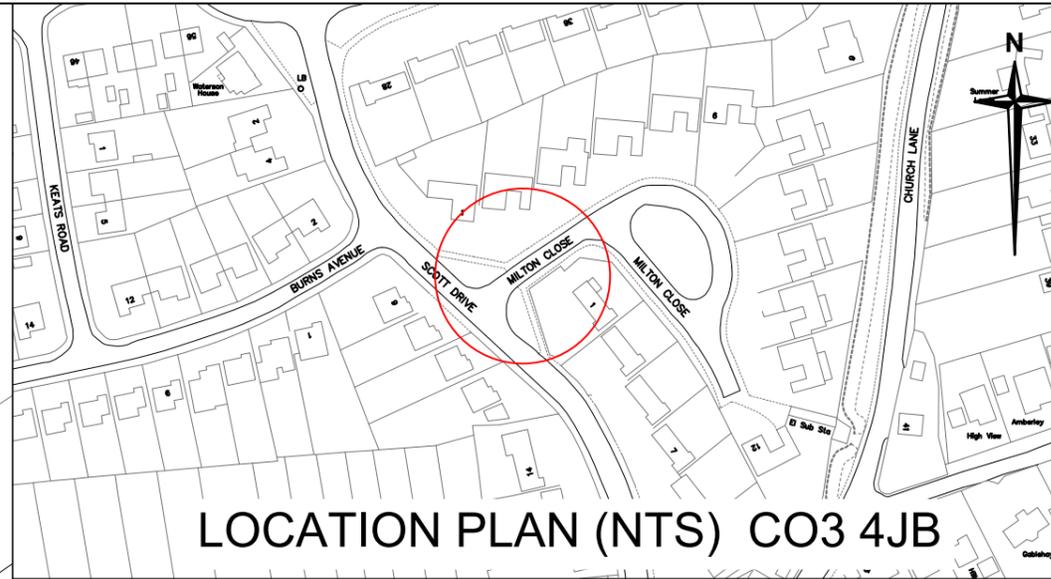


New 1.8m BN kerb laid with 0mm to 6mm upstand with 1x transition kerb (HB2 to BN) either side.

1.9m<sup>2</sup> new buff coloured tactile paving (cut to fit) and 11m<sup>2</sup> of existing grass verge to be constructed as footway. 5.4m long concrete edging to be installed between new footway surface and existing grass verge.

1m<sup>2</sup> (0.25m wide strip) of carriageway surface to be replace in-front of new kerbs.

Existing 6m<sup>2</sup> verge area to be re-instated with top soil and grass seed (1m wide).



**Notes**

1. Do not scale from this drawing.

New footway makeup to be 275mm deep:

- 25mm AC 6 dense surf
- 100mm AC 20 dense bin
- 150mm Type 1 GSB



Existing grass verge to be converted to footway

Tactile paving to be 2 whole tiles deep and cut widthwise to fit within new 1.8m wide BN kerbs. Tactile area to be laid at 1 in 20 gradient on 25mm sharp sand bed and 200mm Type1 GSB.

**LOCATION PLAN (NTS) CO3 4JB**

New 1.8m BN kerb laid with 0mm to 6mm upstand with 1x transition kerb (HB2 to BN) either side.

2.3m<sup>2</sup> new buff coloured tactile paving (cut to fit) and 9m<sup>2</sup> of existing grass verge to be constructed as footway. 5.2m long concrete edging to be installed between new footway surface and existing grass verge.

1m<sup>2</sup> (0.25m wide strip) of carriageway surface to be replace in-front of new kerbs.

Existing GPO marker to be removed to tip.

Existing 5.7m<sup>2</sup> verge area to be re-instated with top soil and grass seed (1m wide).

Rev	Date	Description of revision	Drawn	Checked	Reviewed	Approved

DRAWING STATUS  
**FOR CONSTRUCTION**



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Tel: 0845 6037631 © Essex County Council

SCHEME TITLE  
**Milton Close Junction with Scott Drive, Lexden (LCOL142104)**

DRAWING TITLE  
**Proposed Pedestrian Crossing Point**

DESIGNED	DRAWN	CHECKED	REVIEWED	APPROVED
JMc	JMc	IJ	JMc	NF
DATE	DATE	DATE	DATE	DATE
Oct 15	Oct 15	30Nov15	01Dec15	01Dec15

DRAWING UNITS U.N.O. AS SHOWN SCALE AT A3 (420x297mm) NTS

DRAWING No. **HI4287-11-001** REV. -

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# Maldon Road Tiptree Proposed Footway Highway Improvements Team

November 2015



## Document Control Sheet

Document prepared by: Highway Improvements Team

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<b>Report Title</b>	Maldon Road Tiptree
<b>Project Number</b>	DC1977
<b>Status</b>	Final
<b>Revision</b>	-
<b>Control Date</b>	December 2015

## Record of Issue

<b>Issue</b>	<b>Status</b>	<b>Author</b>	<b>Date</b>	<b>Check</b>	<b>Date</b>	<b>Authorised</b>	<b>Date</b>
1	Final	PJN	Dec 15	JH	Jan 16	Nigel Finch	Jan 15

## Distribution

<b>Organisation</b>	<b>Contact</b>	<b>Number of Copies</b>
HLO	Joe Hazelton	Electronic
HLO	Sonia Church	Electronic
Network Management	Tim Olley	Electronic

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**Appendix A: Revised Design**

**Appendix B: Historic Land Purchase Documents**

**Appendix C: Access Request Letter**

## **Executive Summary**

The setting out of the highway boundary confirmed that to achieve the desired footway width of 2 metres land dedication will be required from 4 properties.

If this can be agreed we would have the opportunity to provide a footway of the preferred width (2 metres) and improve the visibility for all residents when leaving their driveways.

Without land dedication the verge available for footway would be reduced to 0.75m at some locations which is significantly less than the recommended minimum, and therefore would present a safety concern.

It is recommended that this report is circulated to all affected residents so they are fully aware of the situation and then they can make an informed decision on the land dedication.

# 1 Scheme Brief

Tiptree Parish Council has received requests from local residents to provide a footway along the B1022 outside number 129-137. These requests have been compiled into a survey of support as the current situation results in residents crossing at unsuitable locations in the vicinity of West End Road whilst accessing local facilities including Tiptree Heath School.

## 1.1 Progress to Date

A report was produced last year for the LHP to investigate the options for providing a footway on this section – 3 options drawings were produced showing 3 possible widths; 2 metres, 1.5 metres, and 1 metre options – this was presented to the LHP who decided they wanted to progress the 2m option.

Following this decision the first stage was to establish exactly how much of the existing verge was subject to highway rights and then how much additional land would be required to achieve the desirable 2m footway.

A letter was delivered by hand to the affected properties on the 5<sup>th</sup> November, explaining the process, requesting permission to access their properties and inviting them to join us for the setting out of the boundary. A copy of this letter has been included at the back of the report in Appendix C.

During the setting out 4 property owners were met on site and their input has been detailed property by property in the following pages.

All residents reported that they had difficulty leaving their driveways due to the speed and volume of the through traffic and the lack of visibility arising from the road alignment and the visual obstructions, (walls hedges etc.). Properties 129 to 133 also reported significant flooding issues, with carriageway run off from the west end road junction entering their gardens.

Unfortunately the area of verge where highway rights are currently present is generally significantly less than the amount required to provide the 2m footway requested.

The amount of verge currently included in the extent of the highway and the site specific factors have been identified in section 2 of the report.

## 2 Frontage Details per Property

### 2.1 Property 129



This property has an open frontage finished with concrete, portions of which are imprinted, and elements of 'crazy paving'.

There is a dropped kerb throughout the access although the layout suggests that this may have been two separate accesses at one time which have been joined. Pedestrians are able to walk this section unimpeded and access the narrow footway which extends in an easterly direction. Although slightly uneven this frontages does not present an obstacle to pedestrians

The highway boundary was determined to be 1m back from the front face of the kerb throughout this property boundary. This is confirmed by a change of surface on site which tied in exactly with this measurement.

The footway fronting 127 just to the east of 129 is also 1 m, so this is helps to confirm the dimension as the properties are semi-detached and thus likely to have been constructed at the same time.



As the owner of 129 had expressed concerns about the proposals, and the effect they would have on the property, so we arranged to meet on site at 4pm on 17/11/2015 to explain the proposal and the legal position.

We explained that highway rights already existed on the 1 m strip, and that as a dropped kerb was already present for the length of the drive way so there was already the right to drive over the footway and this would not change if the footway was installed.

This addressed some of the owner's concerns, but not all, and concerns over parking and privacy remain.

The proximity of this property to the carriageway (just over 2m) results in the effect of a footway being far greater on this property than any of the others within the limits of the proposal.

Because of this, on all the options produced to date the footway fronting this property has been shown at 1m, and given the factors above and the footway to the north east of this point is 1m it would be difficult to justify any additional width at this location.

Although the owner was not directly asked if they would dedicate additional land for a footway, given the points above and the discussion with the resident it is extremely unlikely that additional width would be dedicated, and really it is felt that it would be unfair to ask.

Assuming acceptance of the point above and thus given the available width, the opportunity to provide back of footway drainage has been removed.

This means that fronting this property the footway will need to fall towards the carriageway to ensure that the highway water is not shed onto private property.

The water check on the existing bull nosed kerbs is non-existent and this currently results in some water ingress onto private property.

This problem is compounded by the run off from the west end road junction which is to be raised with the maintenance department for further investigation.

If a new footway is to be provided a minimum of a 25mm water check is recommended on the kerb face and a 2.5% cross fall on the footway towards the carriageway. These improvements would require the height to be increased at the back of the footway by 50mm relative to the current channel level. This would result in the need for accommodation works on the existing private drive to meet the new back of footway level.

The visibility to the north east leaving this driveway is significantly reduced by the fence and hedge fronting 127, and the boundary walls of 129a to 137 inclusive.

It would provide a significant improvement in visibility for all the properties if the fence and hedge fronting 127 were removed, this is a rental property and if the land lord was in agreement this removal could be included as part of the works.

## 2.2 Property 129a



This property has a 1.8m wall set back approximately 4 to 5 meters from the carriageway, and a further railing set back 0.2m from the carriageway. There is a small wall between the railings and the larger brick wall, which it would not be possible to negotiate with a push chair or wheel chair without entering the carriageway.



During the original site visit in 2014 the property resident approached the author, and explained that he had erected the low wall and the railing to address an issue with impatient drivers driving over the area to get round vehicles waiting to turn right into West End Road.

After further discussions with the resident it was agreed that as long as this issue was addressed and any new footway suitably protected he would be in support of a new footway and would dedicate land if required.

Since then the owner has rescinded on this previous statement. The owner was on site for the boundary investigation and although it was not possible for check measurements to be undertaken from the property, due to access refusal from the owner, it was concluded that the extent of the boundary was also 1m fronting 129a.

Historically the plot on which this property was constructed formed part of the curtilage of 129, and therefore it is likely that the portion of verge subject to highway rights is of the same dimension.

During the site visit the owner raised concerns about the speed and volume of traffic and the resulting difficulty he has leaving his driveway. He also reported that water run-off from the carriageway was also a concern and had installed his own kerbs to help alleviate this problem.

To the northeast the visibility from this drive is also obstructed by the hedge and fence fronting 127; the corner of the structure of property 129 also partially obstructs the view, but it should be noted that 129 significantly pre-dates 129a.

After considerable discussion the owner did agree that a 1m footway could be provided fronting his property as long as steel bollards are provided behind to protect his frontage from overtaking.

This would require either dedication of approximately a further 150mm or the owner to take ownership of the bollards once installed.

Before the design is finalized however I would like to offer the owner of 129a an alternative option of a 1.5m footway with the bollards set 450mm back from the kerb face this would increase the distance between the 1.8m brick wall and the bollards to 3.55m at the narrowest point, rather than 3 m with the agreed design.

## 2.3 Property 131



This property has a boundary wall set back approximately 5m from the carriageway, however there is a BT pole set back 0.75m back from the kerb face. A shoot gully with associated access chamber is also present.

The highway boundary was found to be 1m back from the kerb face, this was discussed with the residents, and they were under the impression that highway rights existed over the whole width of the verge in-front of the boundary wall.

The residents were in support of the footpath and would consider dedicating some additional land to allow a greater width to be provided, however they do use the grass verge area to turn around so we need to ensure that the new lay out does not prevent this manoeuvre from being undertaken.

Flooding issues were also reported from the residents and at the time of the visit had temporary measures in place to divert the water from his garage which regularly floods.

Again the water check on the bull nose kerb is less than the recommended 25mm and providing this or even greater up stand should help to address the water run off issue the owners are experiencing.

We need to consider the best course of action for the BT post, if it were left in situ the footpath could be diverted around the back, or the post relocated behind the new footpath. Relocating the pole would of course have cost implications.

## 2.4 Property 133



This property has a substantial brick boundary wall, approximately 0.75m to 1m back from the kerb face, the brick work does not match the rest of the wall and therefore appears to have been erected at a later date.

We had permission from the landowner to access the property to set out the highway boundary and this confirmed that the wall had been constructed on private land, and had not encroached.

This location presents the narrowest section of verge and the wall features in the visibility splay of a number of properties.

However apart from the email agreeing to access for the highway boundary we have not had the opportunity to discuss the scheme with the owner and it is recommended that this is undertaken as a priority as if an agreement cannot be reached with regard to this property the benefit of the scheme would be reduced.

Between this property and number 131 there is what appears to be the remains of a headwall suggesting that a ditch once existed around 3m behind the kerb line. There are also two further shoot gullies within this frontage which appear to lead back towards the property and therefore the assumed ditch location which was hopefully piped before it was backfilled.

If land dedication could be agreed, and if this ditch is still operational this could be used as part of the back of footway drainage system.

## 2.5 Property 135



This property originally had a small picket fence but this has relatively recently been changed to a brick wall



This wall is set back 1.3m from the carriageway and although this does provide a small refuge area for pedestrians this is below the recommended minimum width of 1.5m

Our records show that an area of land fronting this property was purchased in 1938, for £10. There was an application to 'Stop Up' a portion of the land in 1979/1980 (remove highway rights). However this proposed stopping up order stated that at least 2.5m should be retained for highway purposes. There are no records that this proposed stopping up was ever completed and therefore it would appear that the full extent on the land detailed on these documents remains in highway ownership.

Copies of the documents have been provided in Appendix B

## 2.6 Property 137



Property 137 has a low privet hedge and an in-out drive, the hedge is only set back around 400mm from the carriageway. There is a further BT pole which is around 500mm back from the carriageway within the hedge.

There is a slot drain and an access chamber approximately 3 m back from the carriageway, again this is likely to discharge into the piped ditch.

At the southwest egress there is a small section of carriageway which forms an egress/lay-by.

The highway boundary was agreed to be 1.2m north east end and 1.7m at the southwest end increasing to 5.5m where the lay-by is situated.

Although the hedge is largely within the highway, the root of the hedge is on the boundary and thus it appears to have grown into the highway over time.

My colleagues spoke to the resident and he agreed that as long as the hedge was replaced with a wall he would consider dedicating additional land.

Again we need to consider the best course of action for the BT post, if it were left in situ the footpath could be diverted around the back, or the post relocated behind the new footpath. Relocating the pole would of course have cost implications.

## 2.7 Property Quinces



The verge outside this property is around 5.5m in width, there is an existing bus stop set 1 m back from the carriageway and a lamp column set 1.7m back

The highway boundary was confirmed to be 5.5m back from the edge of carriageway at this location, therefore land dedication is not required, and the desirable width of 2m can be provided entirely within highway land.

### **3.0 The Design**

Option 1 – A Recommended minimum width footway (2.0m) was the option preferred by the LHP following the previous report.

It has now been confirmed that this would require land dedication from 129a 131, 133, and 137. Accommodation works will also be required at all properties except for Qunices.

The proposals show all the new boundary walls located at a consistent width (2.7m) back from the highway. As well as providing the recommended footway width, this set back would also improve the visibility for all residents when egressing their driveways, which is currently substantially less than desirable. It is recommended that the new walls are restricted to a maximum height of 750mm, which should allow drivers to still see over the top.

Although usually the footway would fall towards the carriageway, at this location following this design principal would increase the accommodation works required to the driveways significantly, therefore the footway has been shown with back fall, however to ensure highway water is not shed into private properties a drainage system has been provided at the back of the footway.

To deal with the issue of overtaking outside 129a steel bollards have been provided at the minimum set back 450mm – these will prevent impatient drivers using the footway to undertake vehicles waiting to turn right into West End Road, whilst being low enough not to obstruct the visibility of vehicles.

The revised design has been provided in Appendix A.

Please note this has been based on OS data, a full topographical survey is required before the scheme can progress to detailed design.

## **4.0 The Way Forward**

Some residents felt that they should have been better informed regarding the design progress, therefore it would be prudent to issue this report to all affected residents.

The scheme can only progress if **all** residents agree to the land dedication and thus in light of the clarification of land ownership it is recommended that a meeting is held by the Parish Council, possibly in the pub opposite, where the proposals can be discussed

Once all residents understand the options private meetings should be arranged to discuss if residents will be will to dedicate land or not.

Following these agreements a full topographical and drainage survey should be undertaken, and a survey of the existing and the design should be revised in accordance with the agreed land dedication and the survey information, to produce a detailed design including all accommodation works.

The detailed design should then be agreed with residents and then be progressed to costing with a view to implementing the project in 16/17.