

Calne Without Parish Council

Road Safety Feasibility Study (Stage 2)

Study Area 1 – Derry Hill and Studley (Sites 1, 2, 3, 4 and 5)

(Version 2)

September 2022



1.0 INTRODUCTION

In 2020, Calne Without Parish Council commissioned Entran to complete a Road Safety Feasibility Study for the parish. The Brief identified 16 locations and stated the problems that required investigating.

For each of the sites, the Brief requested options for addressing the problems, advice on whether the options would require consultation or traffic regulation orders (TRO), the likely effectiveness of measures, and the costs of each option.

The Brief requested an interim report identifying the key findings of the initial scoping and survey work and an outline of the anticipated outcomes. Entran completed site investigations for each of the site and carried out a number of workshops with CWPC and in October 2021 issued a document entitled 'Stage 1 report; Interim report – appraisal of evidence, initial findings and recommendations.

The purpose of the interim report was to allow CWPC to prioritise the schemes to be taken forward for further analysis. In our fee proposal, Entran identified that to fulfil the Brief for each of the 16 sites would be likely to exceed the PC's anticipated budget and so our proposed scope of work included a short-listing of sites at Stage 1 to assist the PC in taking around eight sites forward to Stage 2. Upon completion of Stage 1, it was agreed to take 10 sites forward to Stage 2

The sites were split into four study areas, consistent with the Stage 1 Workshops; these are as follows:

- Study Area 1 - Derry Hill and Studley (sites 1, 2, 3, 4 and 5)
- Study Area 2 – A4 (sites 13, 14, and 15)
- Study Area 3 – HGVs (sites 2, 7, 11, 12 and 16)
- Study Area 4 – Wider area (sites 6, 8, 9 and 10)

The Brief provided by CWPC was clear that the issues raised are “*real problems experienced by residents*” and that the study is aimed very clearly at improving safety and convenience for all road users. The Brief stated that in some locations standard solutions would be inappropriate and that environmentally sensitive alternatives should be explored rather than the more standard urban highway solutions. Clearly, given the purpose of the study, safety is paramount.

The Brief included the Hans Monderman quote “*If you want drivers to behave as they should in a village, make sure it feels like a village*”. This is taken from the publication Traffic in Villages which has informed the approach to this study, to improve safety for all highway users in the Parish.

This Stage 2 report should be read in conjunction with the Stage 1 report. This report covers Study Area 1, Derry Hill and Studley.



2.0 STUDY AREA 1 – Derry Hill and Studley

Derry Hill

The Stage 1 report identified that the traffic calming in Derry Hill is not effective. This should be augmented by additional measures such as visual thinning using contrasting materials, or further measures to enhance the presence of significant features such as the school, church, shop, junctions and gateways. Appropriate options have been taken forward to this Stage 2 report.

The issue of rat running is not constrained to the A4 and A342 routing but is a wider issue relating to the Calne bypass which directs north/south traffic on the A3102 to a point on the A4 closer to Derry Hill. Additional traffic calming or speed reduction measures are unlikely to deter through-movement; however, if speed and congestion (caused by indiscriminate parking) can be addressed, then the residual through traffic will cause fewer concerns for local residents.

Visibility at the Church Road / A342 junction can be improved. Traffic on the A342 is exceeding the posted 40mph speed limit which has an adverse effect on stopping sight distance. Speeds on the A342 could be reduced by appropriate measures to reinforce the existing 40mph speed limit. Appropriate options have been taken forward to this Stage 2 report.

Studley

Stage 1 speed surveys suggested that a 30mph speed limit in Studley would have little effect in reducing vehicle speeds. Indeed, for most of Studley 30mph would not allow drivers to stop in the available road ahead (Highway Code: Rule 154). A 20mph Zone would need to be self-enforcing and would therefore require speed reducing measures. Given the nature of the existing lanes (narrow, sinuous, high banks), conventional traffic calming measures are unlikely to have a material effect on driver speeds. Softer measures (gateways, highlighting features such as the Methodist Church, junctions etc) to alert drivers to the nature of the village may have a beneficial effect. A 20mph speed limit (as opposed to a Zone) would require additional signage in the form of repeater signs at regular intervals.

There is likely to be community support for a 20mph speed limit (or Zone) in Studley. This would require a TRO and would be subject to WC and Police approval.

During the Stage 1 study, the issue of HGVs using Studley Lane and Norley Lane was added to the issues to address. At that time there was a single advisory sign at Studley Crossroads stating that Studley Lane is unsuitable for HGVs. Since then, that sign has been replaced by a far more legible sign which is clear for all drivers entering the village from the A4.



3.0 SUGGESTED MEASURES

DH3 - Shop

The Village Shop is a key feature which informs drivers of the fact that they are in a village environment; it is also a location where drivers can expect to find pedestrians crossing the road and cars manoeuvring.

The principle of 'spill out' has been applied here so that the car parking area to the front of the shop is reflected in a contrasting material (muted buff coloured surface dressing) across the carriageway. This is augmented by string courses of granite setts highlighting the pedestrian crossing point.

This layout would be more effective if the car parking area were surfaced in a resin bound gravel or similar. We would therefore recommend that CWPC holds discussions with the shop owners about a co-ordinated approach to implementing these works.

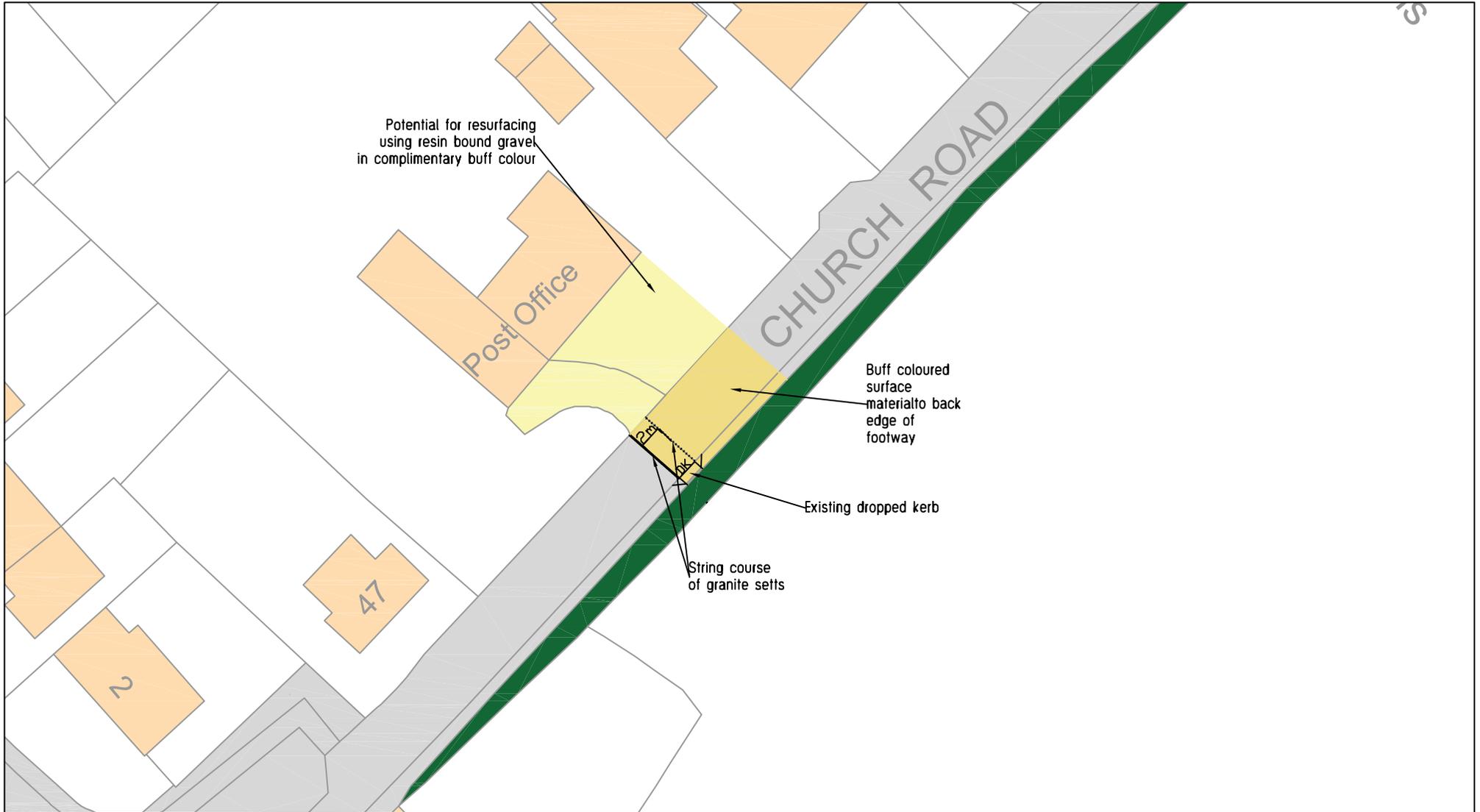
The proposed layout is shown in SK01.

Figure 1. String course of granite setts, set into carriageway



The feature of pedestrian crossing locations highlighted in a contrasting surface material with a string course of granite setts is repeated across the Study Area.

The palette of materials is kept to a minimum, comprising of muted buff or dark grey surface treatment and either single or double string courses of granite setts. This will therefore read as a consistent 'family' of features and will seek to enhance the village nature of Derry Hill and Studley rather than add standard urbanising features.



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PROJECT TITLE CWPC Road Safety Feasibility Study
 Stage 2; Derry Hill and Studley

DRAWING TITLE Post office DH3

DATE June 2022

SCALE 1:500 AT A4

STATUS PRELIMINARY

DRAWN RG

CHECKED RAF

APPROVED RAF

DRG SIZE A4

DRAWING NUMBER SK01

REV -



DH5/6 – Bus stops and School

The existing speed table in front of Derry Hill School is effective and was designed using blockwork to reflect the construction of the school. However, the school could ‘spill out’ into the street more if additional features were added. The proposal is to introduce four posts to highlight the table and for those posts to be shaped like pencils in primary colours. The width of the footways in this location means that the posts need to be located at the back edge of footway.

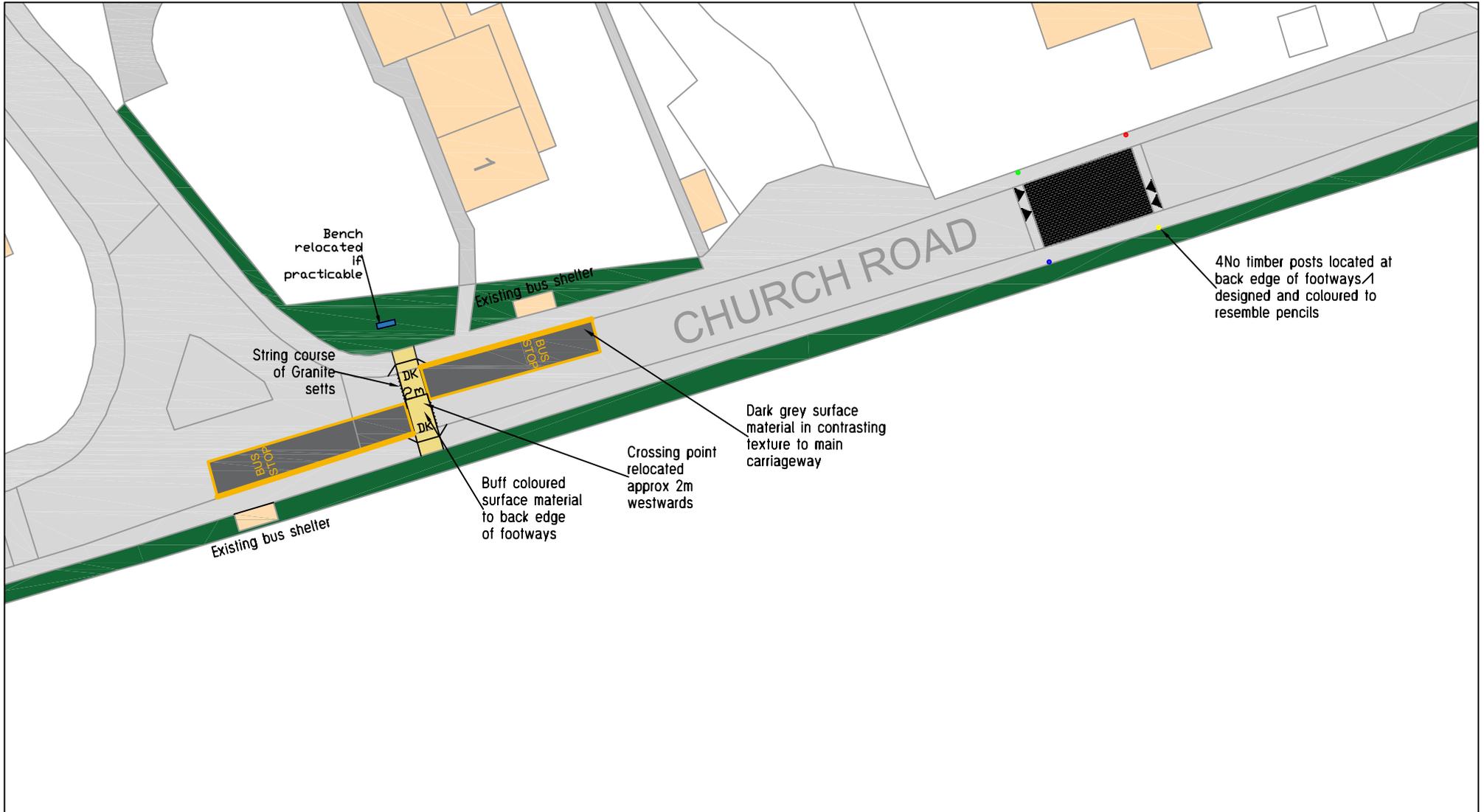
There is an existing pedestrian crossing point with dropped kerbs to the west of the school; however, this is located in the middle of the eastbound bus cage. The proposal therefore highlights the crossing location and adjusts the bus cages to suit. The bus cages will be highlighted in a dark grey contrasting surface material.

An existing bench is located within the hedge of Tile Court. Subject to discussions with the owners, it may be beneficial to relocate this bench further forward (and to re-plant the gap in the hedge) in order to add a further feature within the street to inform drivers of the place function rather than the movement function of Church Road.

The proposed layout is shown in SK02.

Figure 2. Example of ‘pencil’ posts (Bristol)





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	DRAWING TITLE Bus stops and School DH5 and DH6		
	DATE June 2022	SCALE 1:500 AT A4	STATUS PRELIMINARY
	DRAWN RG	CHECKED RAF	APPROVED RAF
	DRG SIZE A4	DRAWING NUMBER SK02	REV -



DH7/8 – Church and Layby

Christ Church is a very visible and prominent feature in Derry Hill. It has an ornate gateway with a dropped kerb; however, there is no matching dropped kerb on the opposite side of the road.

The layby opposite the church does not have individual spaces demarcated and on-site observations indicate that drivers tend not to park efficiently, leaving half-spaces unoccupied.

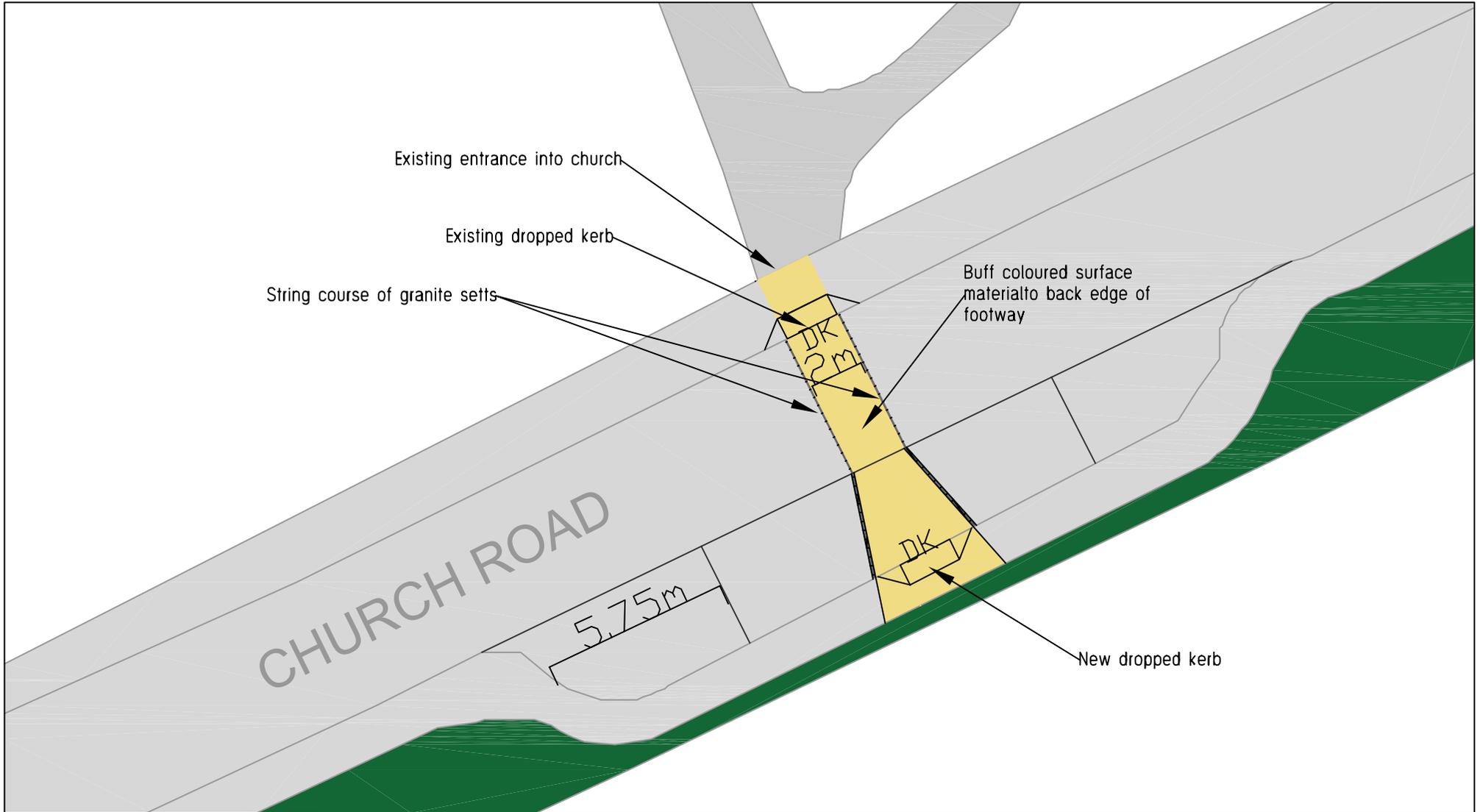
The proposal is to introduce a new dropped kerb on the southern site of Church Road and to highlight the crossing location. This provides a safe crossing, particularly for those with pushchairs or with mobility impairments, but will also highlight the presence of the church entrance for drivers as they pass along Church Road.

This would remove 2m of available parking space; however, by demarcating four individual spaces (each 5.75m long) there would be no loss of parking spaces in practice. The spaces can be demarcated using single granite setts in order to minimize the palette of materials.

The proposed layout is shown in SK03.

Figure 3. Example of inefficient parking in layby





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PROJECT TITLE : CWPC Road Safety Feasibility Study
 Stage 2; Derry Hill and Studley

DRAWING TITLE Church Layby DH7 and DH8

DATE June 2022

SCALE 1:200 AT A4

STATUS PRELIMINARY

DRAWN RG

CHECKED RAF

APPROVED RAF

DRG SIZE

A4

DRAWING NUMBER

SK03

REV

-



DH10 – Memorial

The War Memorial offers an opportunity for additional ‘spill out’ into the street, to reinforce the nature of the village. The proposal is to introduce concentric circles using the same muted buff surface treatment as shown in SK04. This would cause drivers to acknowledge the memorial but would also be a pleasant feature on Remembrance Day when villagers congregate around the memorial.

The concentric circles are necessarily centered on the entrance gate rather than the memorial itself in order to limit the radii. Circles centred on the memorial would extend too far and could cause confusion at the adjacent junctions.

DH11 Gateway

Studley Crossroads forms a gateway into Derry Hill and into Studley.

The existing 20mph gateway into Derry Hill is inefficient as there is an element of clutter (too many road signs) and the carriageway widens rather than narrows. CWPC have proposals to introduce planters into the village. This would be an ideal location for such planters. Depending on the nature of the planters, the 20mph signs can be located on, or immediately behind the planters. This would be a stronger gateway than the existing signs. See SK05.

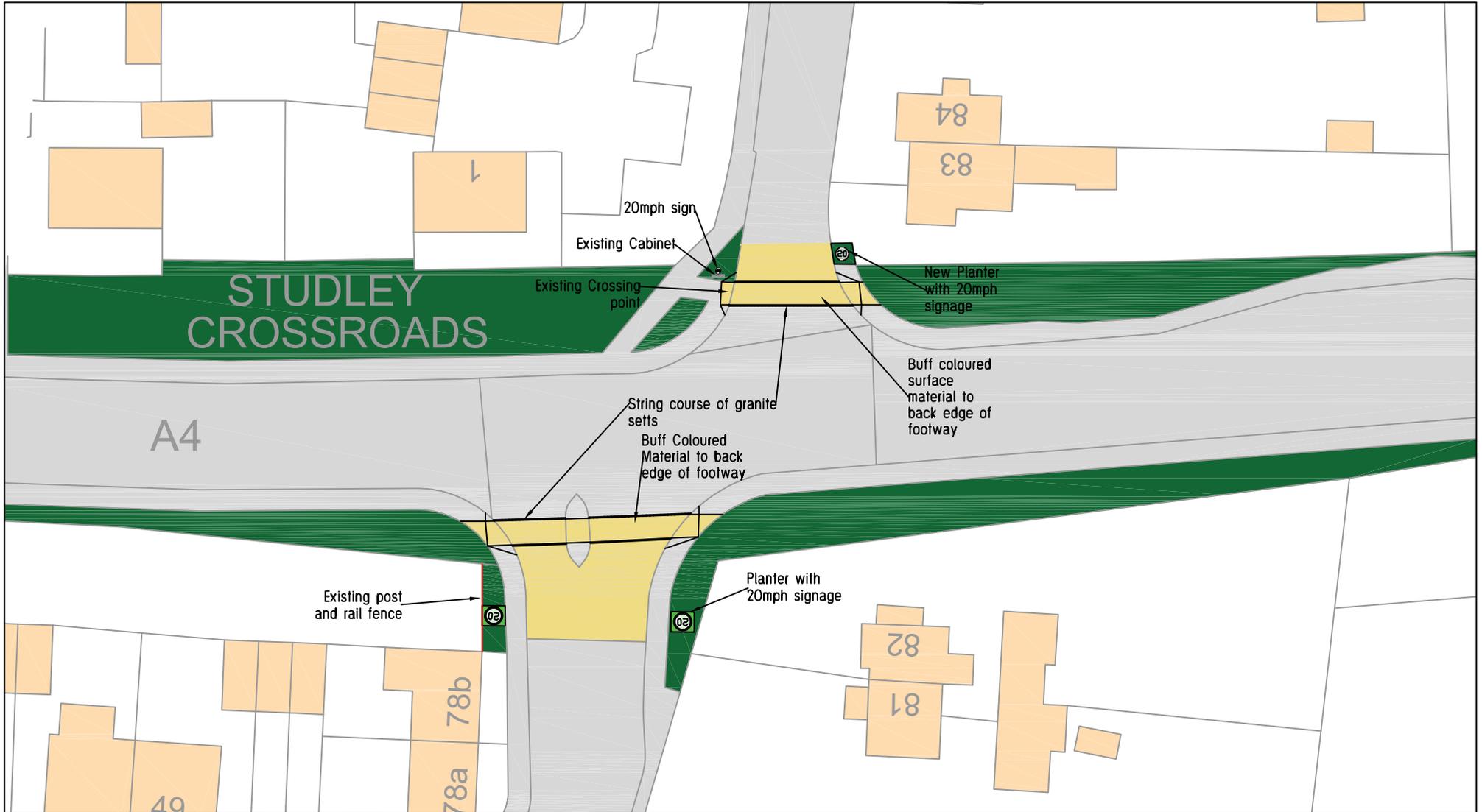
Figure 4. Example highway planters (Avebury)





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PROJECT TITLE		CWPC Road Safety Feasibility Study Stage 2; Derry Hill and Studley			
DRAWING TITLE		War Memorial DH11			
DATE	June 2022	SCALE	1:500 AT A4	STATUS	PRELIMINARY
DRAWN	RG	CHECKED	RAF	APPROVED	RAF
DRG SIZE	A4	DRAWING NUMBER	SK04	REV	-



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PROJECT TITLE		CWPC Road Safety Feasibility Study Stage 2; Derry Hill and Studley	
DRAWING TITLE		Studley Crossroads DH11 & St1	
DATE	June 2022	SCALE	1:500 AT A4
STATUS		PRELIMINARY	
DRAWN	RG	CHECKED	RAF
APPROVED		RAF	
DRG SIZE	A4	DRAWING NUMBER	SK05
REV		-	



St1 – Gateway

The proposal is to highlight the existing pedestrian crossing using muted buff surface treatment and granite setts. This would be consistent with the crossings in Derry Hill but would also provide a threshold for any new 20mph zone in Studley.

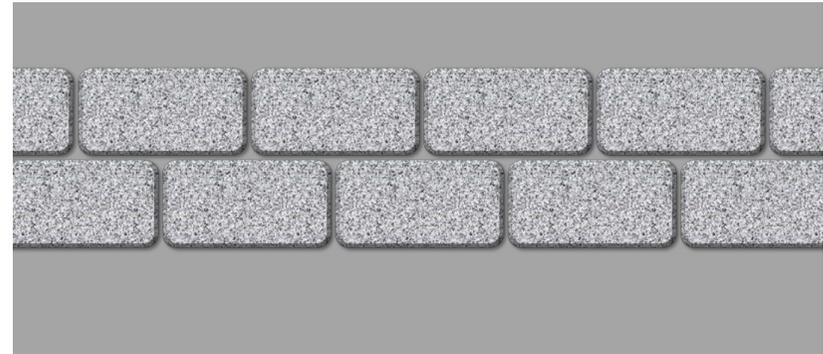
A new planter can be located to the east of the road on the redundant length of footway. As for DH11, depending on the nature of the planters, the 20mph signs can be located on, or immediately behind the planter. Unfortunately, existing cabinets on the western side of the road prevent a matching planter being located there; however, they will still provide an element of visual thinning when paired with a planter opposite. The proposed layout is shown in SK05.

St2 – Throttle.

Immediately to the north of the timber yard, Studley Lane narrows, creating a natural throttle. Observations on site indicate that the vast majority of drivers slow down naturally as they approach this throttle. The proposal is to introduce a double string course of granite setts to reinforce the transition. This could potentially be supported by a 20mph roundel painted on the road, but this is not essential if the decision is to minimise conventional signs and lines.

The proposal is shown in SK06.

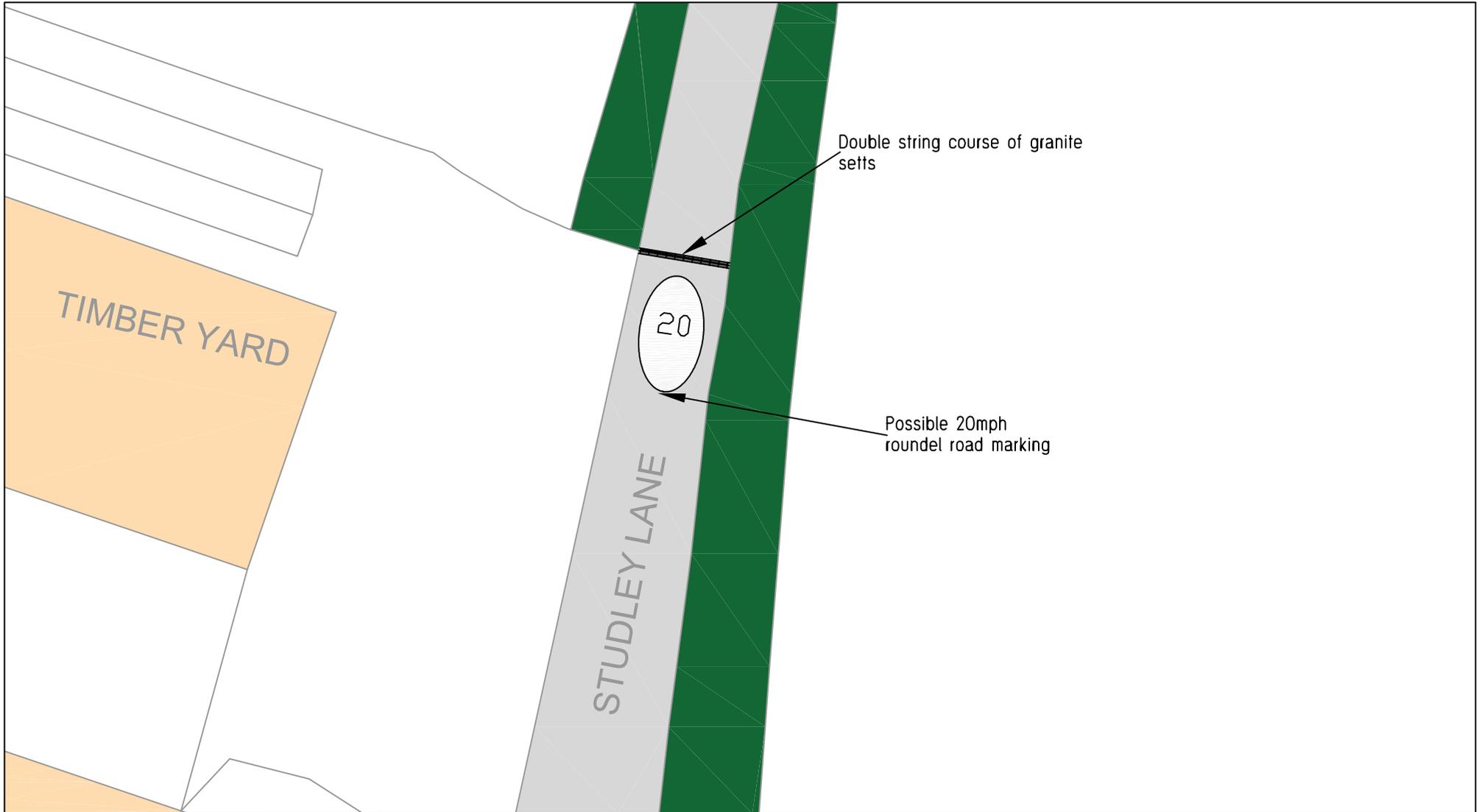
Figure 5. Double string course of granite setts



St3 – Methodist Church

Studley Methodist Church is a key feature in Studley which informs drivers of the fact that they are in a village environment; it is also a location where drivers can expect to find pedestrians in the carriageway and cars manoeuvring.

The recent introduction of a Parish notice board and dog bin within the verge opposite has given this somewhat of a village centre feel. The proposal is to demarcate this area using double string courses of granite setts and also to introduce an area of dark grey surface treatment. This will serve to regularize the parking which occurs occasionally in this location and will offer some visual thinning when there are no cars parked. This is shown on SK07



Double string course of granite setts

Possible 20mph roundel road marking



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PROJECT TITLE		CWPC Road Safety Feasibility Study Stage 2; Derry Hill and Studley		
DRAWING TITLE		Throttle St2		
DATE	June 2022	SCALE	1:200 AT A4	STATUS PRELIMINARY
DRAWN	RG	CHECKED	RAF	APPROVED RAF
DRG SIZE	A4	DRAWING NUMBER	SK06	REV -



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PROJECT TITLE		CWPC Road Safety Feasibility Study Stage 2; Derry Hill and Studley		
DRAWING TITLE		Methodist Church ST3		
DATE	June 2022	SCALE	1:500 AT A4	STATUS PRELIMINARY
DRAWN	RG	CHECKED	RAF	APPROVED RAF
DRG SIZE	A4	DRAWING NUMBER	SK07	REV -



St4 – Studley junctions

The junction of Studley Lane, Studley Hill and Norley Lane forms an island triangle with each point being a three-arm junction. All three have give-way road markings which are misleading and technically incorrect.

The proposal is to remove the road markings and to highlight the junctions using double courses of granite setts around the junction radii. This will highlight the junctions for drivers but will also appear to narrow the carriageway and reduce the junction radii, thereby reducing vehicle speeds at the same time as removing urbanizing road paint.

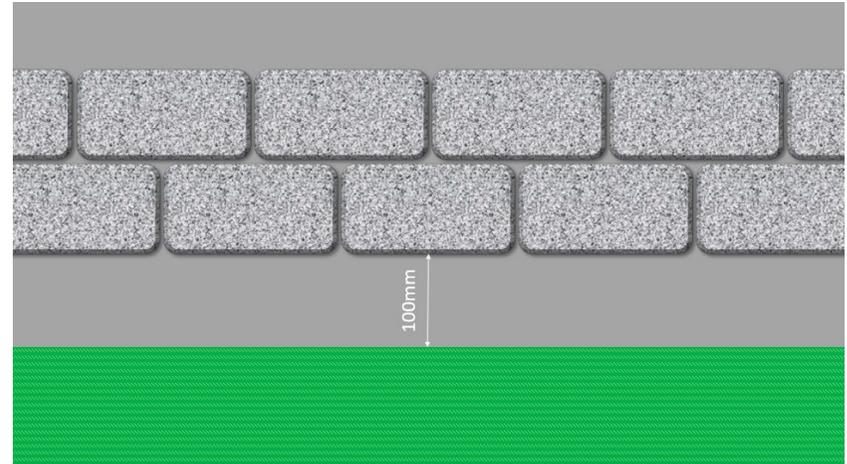
The setts will be off-set from the verge by 100mm in order to assist with drainage. The proposed layout is shown in SK08.

St5 – Gateway

The proposal for the Studley Hill gateway is a planter with 20mph sign and a double string course of granite setts. The most appropriate location is adjacent to the electricity sub-station where a verge can accommodate a planter.

The proposed layout is shown in SK09

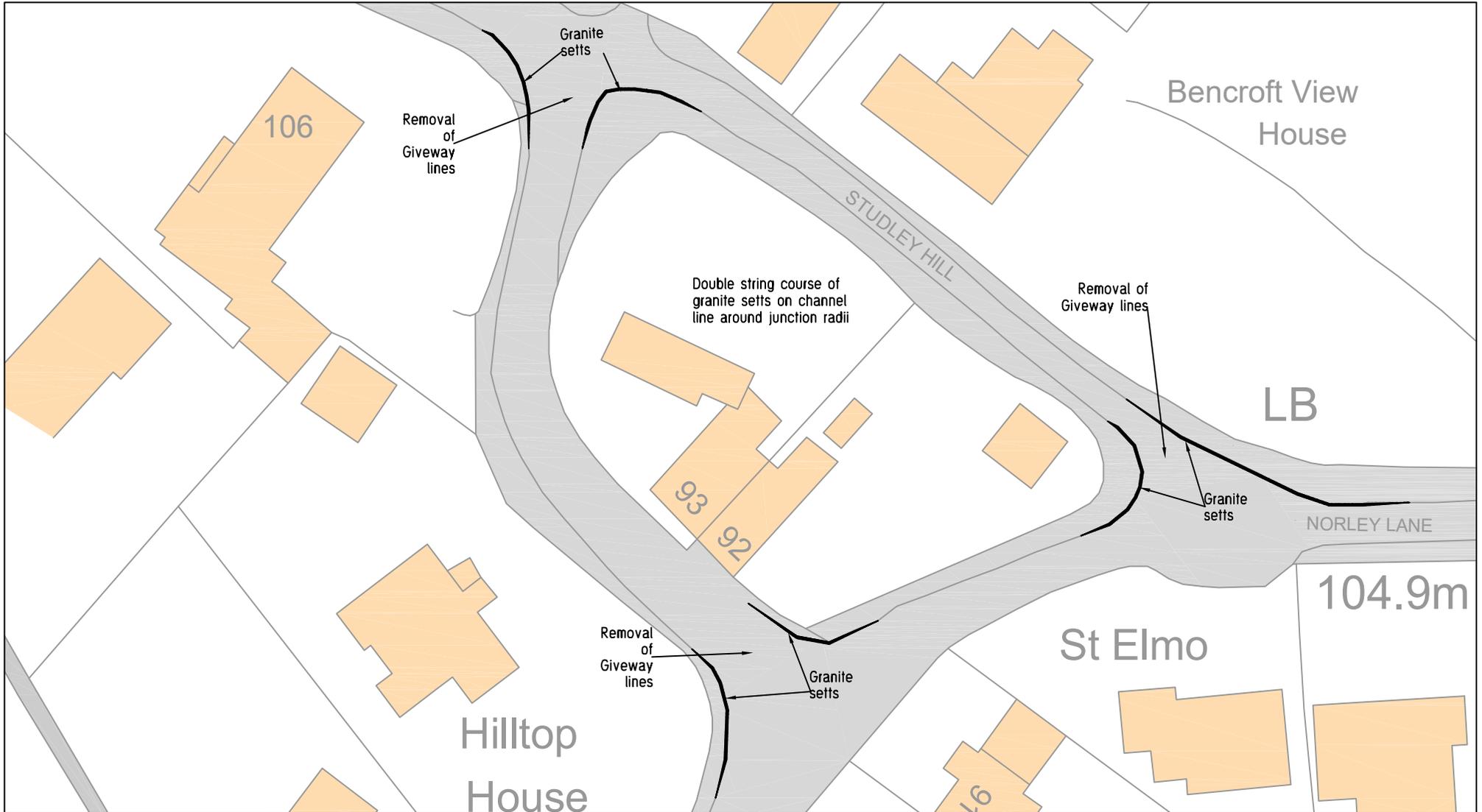
Figure 6. Double string course of granite setts, offset from verge at St4



St6 – Gateway

The proposal for the Northern gateway into Studley (from Hazeland) is a 20mph sign and a double string course of granite setts. There is insufficient space in this location to accommodate a planter.

The proposed layout is shown in SK10

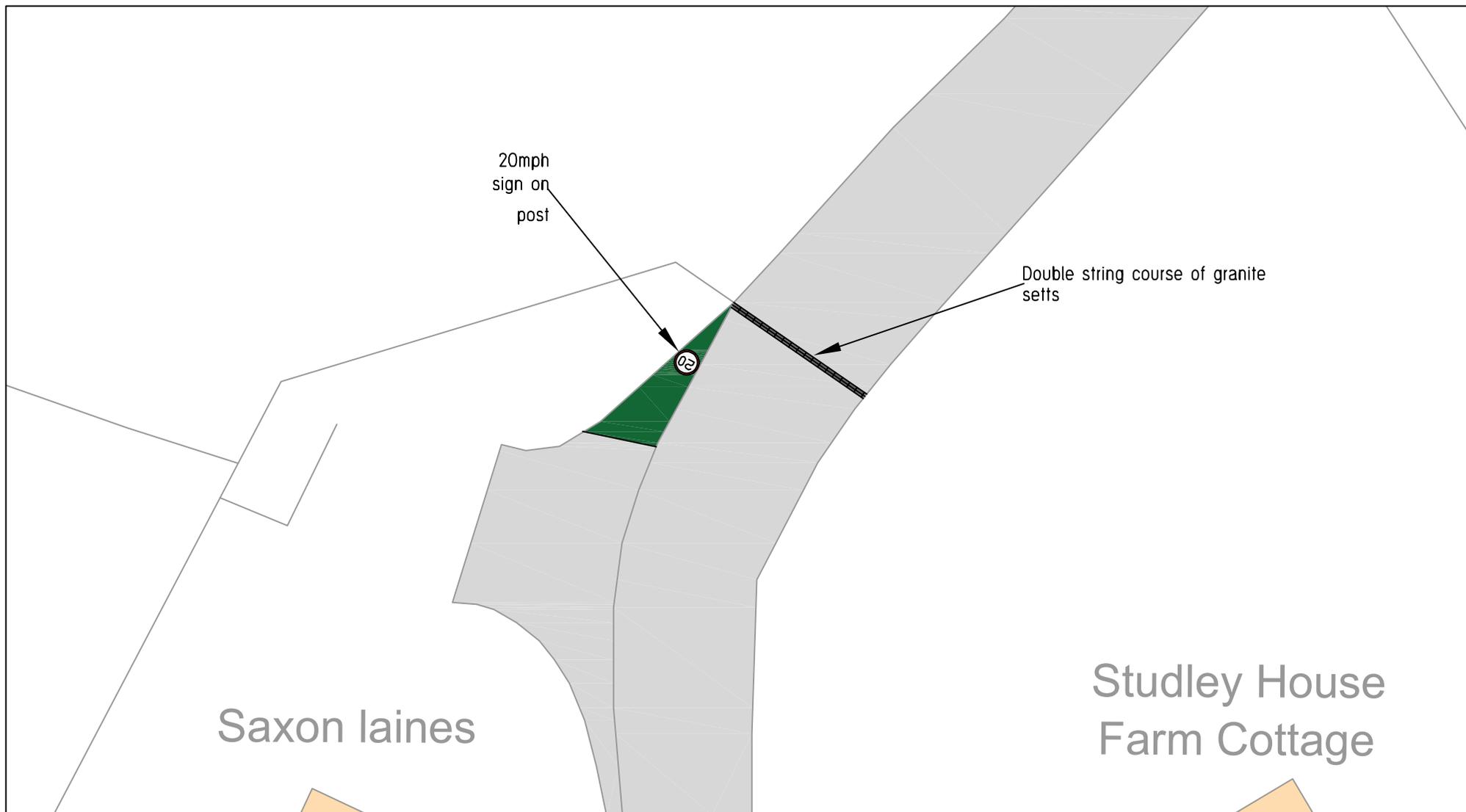


 <p>2nd & 3rd Floors Northgate House Upper Borough Walls Bath BA1 1RG TELEPHONE : 0117 937 4077</p>	PROJECT TITLE CWPC Road Safety Feasibility Study Stage 2; Derry Hill and Studley		
	DRAWING TITLE Studley Junctions ST4		
	DATE June 2022	SCALE 1:500 AT A4	STATUS PRELIMINARY
	DRAWN RG	CHECKED RAF	APPROVED RAF
	DRG SIZE A4	DRAWING NUMBER SK08	REV -



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PROJECT TITLE		CWPC Road Safety Feasibility Study Stage 2; Derry Hill and Studley			
DRAWING TITLE		Studley western Gateway ST5			
DATE	June 2022	SCALE	1:200 AT A4	STATUS	PRELIMINARY
DRAWN	RG	CHECKED	RAF	APPROVED	RAF
DRG SIZE	A4	DRAWING NUMBER	SK09	REV	-



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 TELEPHONE : 0117 937 4077

PROJECT TITLE CWPC Road Safety Feasibility Study Stage 2; Derry Hill and Studley			
DRAWING TITLE Studley Northern Gateway ST6			
DATE June 2020	SCALE 1:200 AT A4	STATUS PRELIMINARY	
DRAWN RG	CHECKED RAF	APPROVED RAF	
DRG SIZE A4	DRAWING NUMBER SK10	REV	-



St7 – Norley Lane visual thinning

A high hedge on the northern side of Norley Lane currently provides an element of visual thinning which coincides with a bend in the road. The proposal is to further highlight this by introducing a 500mm wide strip of dark grey surface treatment on the northern side, adjacent to the hedge. The carriageway will remain the same width by the contrasting surface treatment will enhance the visual thinning provided by the hedge.

The proposed layout is shown in SK11

St8 – Gateway

The proposal for the eastern gateway is a pair of planters with 20mph signs and for the existing pedestrian crossing point to be highlighted in a contrasting surface material and granite setts, in keeping with the Studley Crossroads gateway. a double string course of granite setts. The most appropriate location is adjacent to the electricity sub-station where a verge can accommodate a planter.

The proposed layout is shown in SK12

Site 5 – Church Road j/w A342

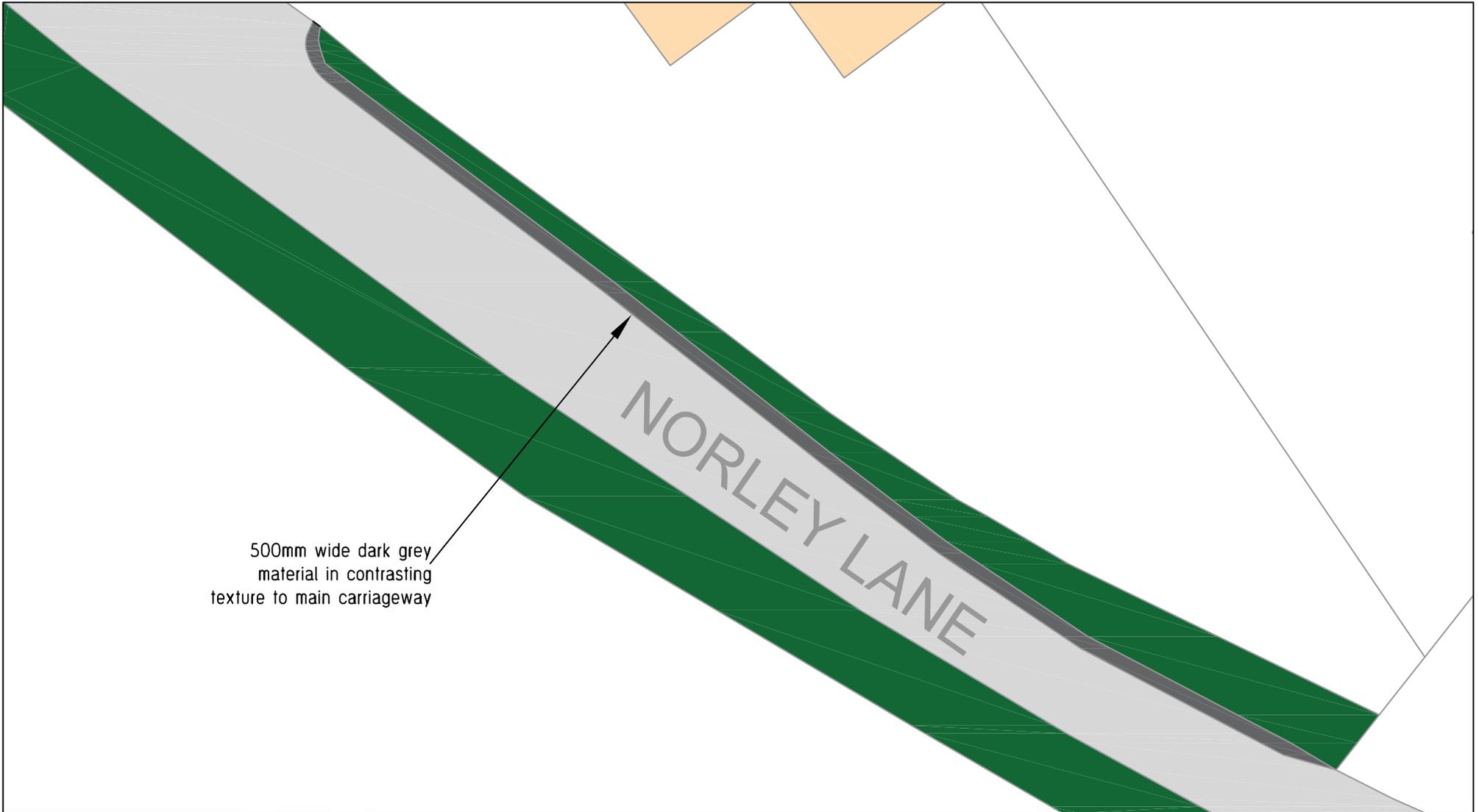
The required visibility at the junction is 2.4m x 120m (for a 40mph approach speed). The available visibility to the south can be improved by introducing low maintenance, low level landscaping within the verge for the extents of this visibility splay so that no vegetation would exceed 600mm in height.

Traffic on the A342 is exceeding the posted 40mph speed limit which has an adverse effect on stopping sight distance. Speeds on the A342 could be reduced by appropriate measures to reinforce the existing 40mph speed limit.

The proposal is to reinstate the worn gateway markings which comprise two sets of red surface treatment with contrasting yellow thermoplastic bands and a further area of red surface treatment with a painted 40mph roundel at the start of the 40mph limit.

An additional pair of 40mph roundel markings should be introduced immediately to the south of the Bowood golf course exit as this is a natural threshold where the frequency of houses increases.

The additional and replacement markings set out above should be supported by regular use of a mobile Speed Indicator Device (SID) where practicable.



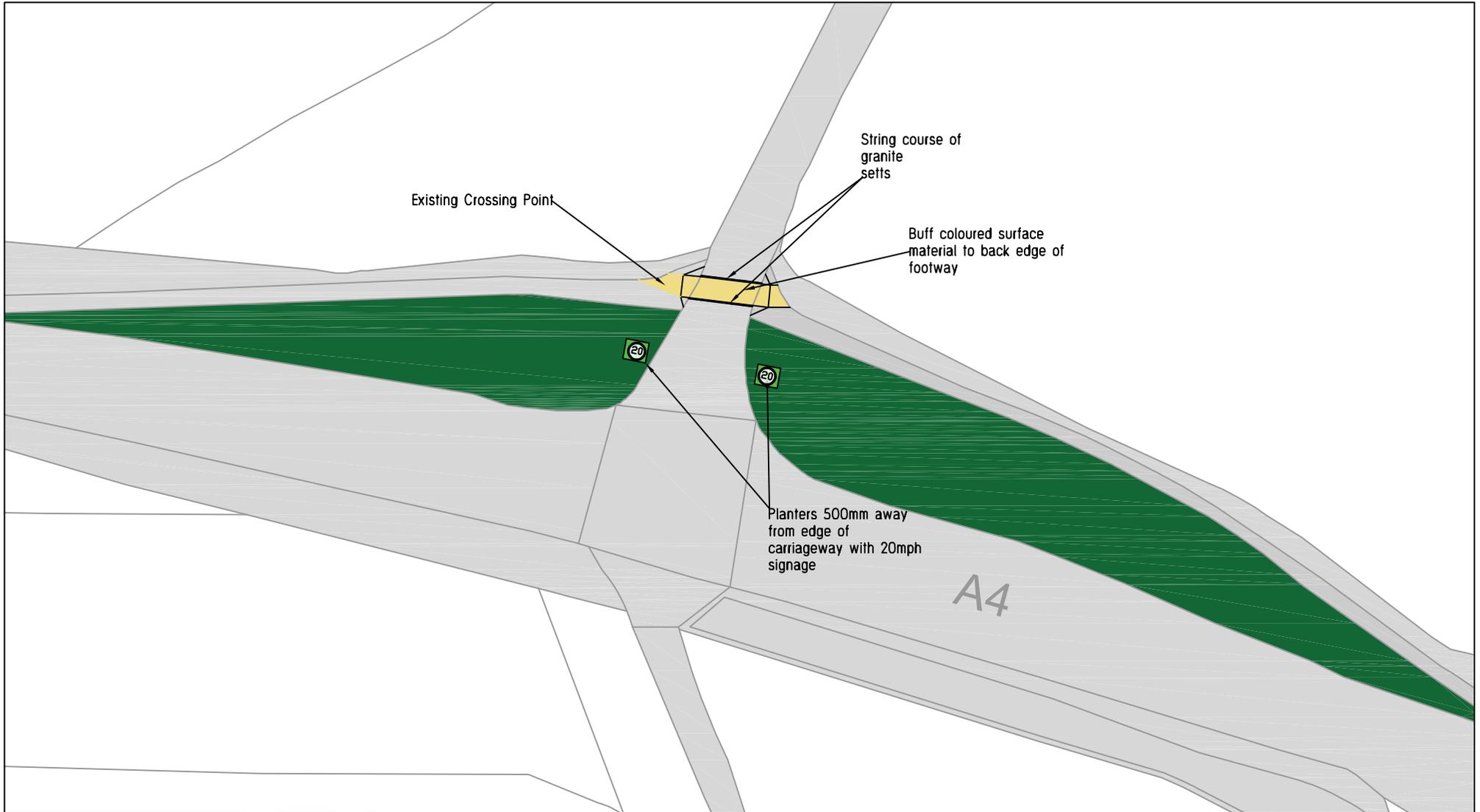
500mm wide dark grey material in contrasting texture to main carriageway

NORLEY LANE



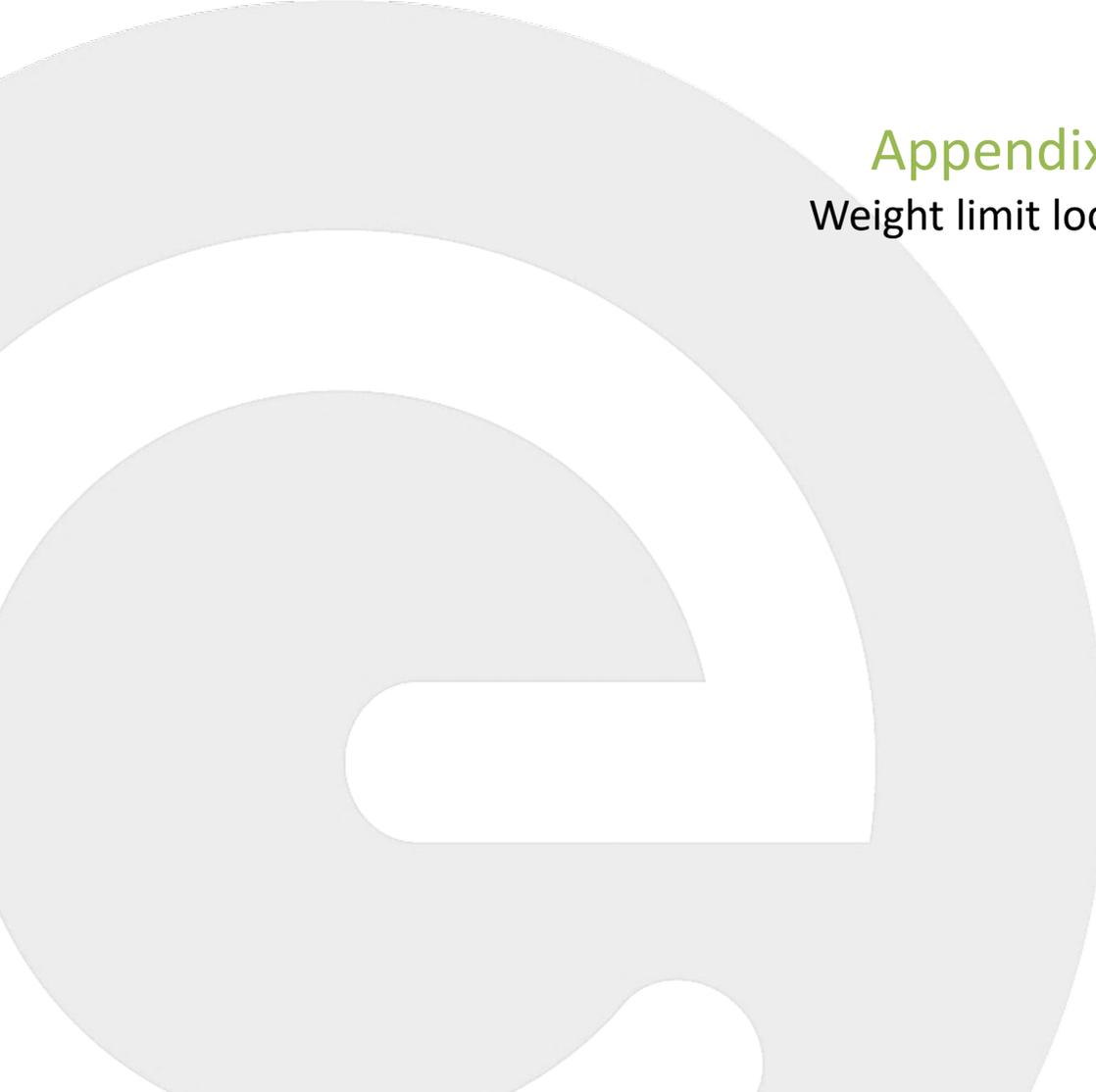
2nd & 3rd Floors | Northgate House | Upper Borough Walls | Bath | BA1 1RG
TELEPHONE : 0117 937 4077

PROJECT TITLE		CWPC Road Safety Feasibility Study Stage 2; Derry Hill and Studley			
DRAWING TITLE		Norley Lane, visual thinning			
DATE	June 2022	SCALE	1:200 AT A4	STATUS	PRELIMINARY
DRAWN	RG	CHECKED	RAF	APPROVED	RAF
DRG SIZE	A4	DRAWING NUMBER	SK11	REV	-



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PROJECT TITLE		CWPC Road Safety Feasibility Study Stage 2; Derry Hill and Studley			
DRAWING TITLE		Studley easterly gateway ST8			
DATE	June 2022	SCALE	1:500 AT A4	STATUS	PRELIMINARY
DRAWN	RG	CHECKED	RAF	APPROVED	RAF
DRG SIZE	A4	DRAWING NUMBER	SK12	REV	-



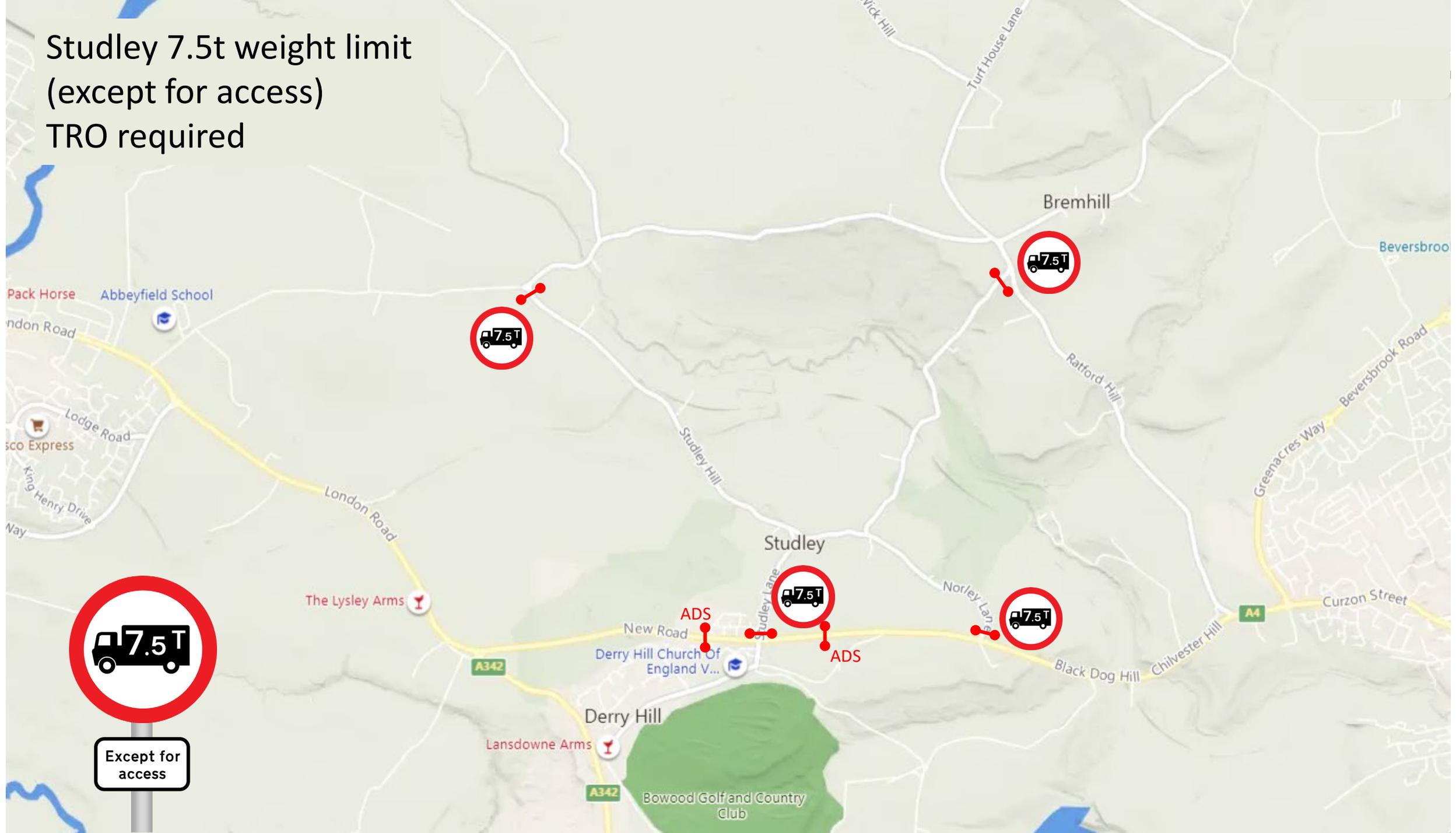
Appendix A

Weight limit locations

Studley 7.5t weight limit
(except for access)
TRO required



Except for
access





Appendix B

Initial Study Area 1 reference plans



CWPC
 Road Safety Feasibility Study
 Stage 2 (step 1)

Site 1 & 4 – Derry Hill
 Speed, rat-running, parking @ school

1. Gateway good
2. Throttle good.
3. Shop, parking area – bleed
4. Enhance junction – visual thinning
5. Bus stops – contrasting material (link 4)
6. School – table good – character furniture?
7. Church gateway – bleed
8. Layby contrasting material (link to 7)
9. Potential mini rbt
10. Memorial – bleed
11. Gateway poor. Sign audit. Contrasting material RTL+ thinning.



CWPC Road Safety Feasibility Study Stage 2 (step 1)

Site 2 – Studley 20mph speed limit

1. Studley Lane j/w A4 New Road. Transition from 50mph to 20mph. Replace NSL signs. Use uncontrolled ped xing as threshold. Potential for planter on east side.
2. Natural throttle north of Vastern Timer. Enhance with lateral marker.
3. Informal parking area outside chapel to form part of surface treatment. PC sign on green area creates mini village-centre. Enhance.
4. Replace give-way markings with shoulders to create thinning and enhance junction presence.
5. Query location for gateway. Closewood at bottom of hill, or settlement boundary at half way point.
6. Query gateway at Saxon Lains of jct.
7. Natural thinning due to high hedge. Use as intermediate measure. Enhance.
8. Norley Lane j/w A4. Transition from NSL into 20mph. Wide visi both sides. Potential for planters on both sides.



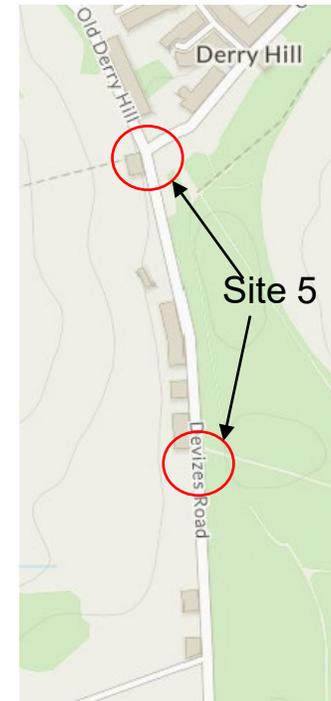
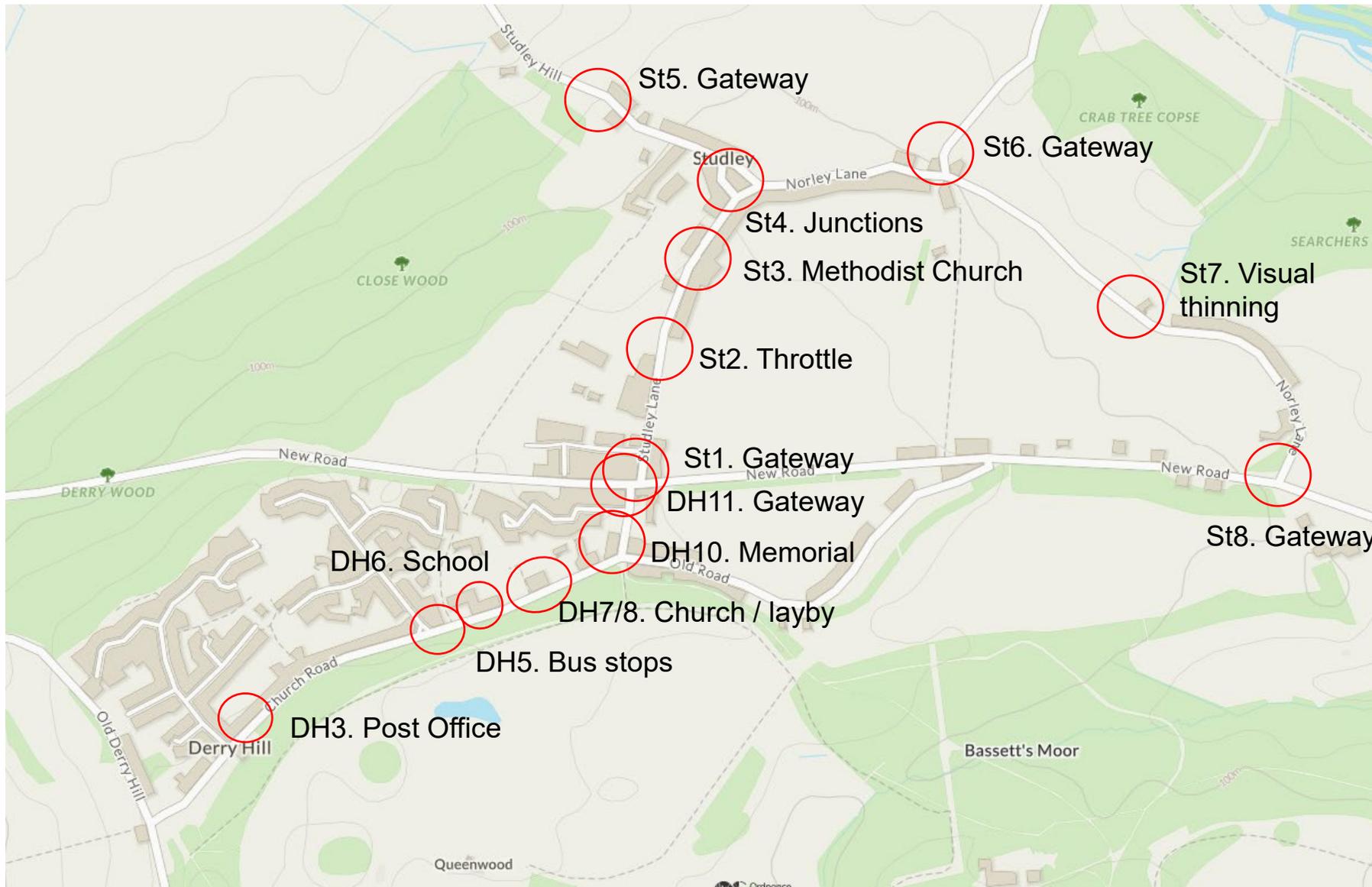
Appendix C

Derry Hill and Studley references

CWPC Road Safety Feasibility Study Stage 2

Sites 1, 2, 4 and 5 Derry Hill and Studley
(Reference Plan)

June 2022





Appendix D

A342 – 40mph auxiliary signage



CWPC
Road Safety Feasibility Study
Stage 2

Study Area 1 – Derry Hill and Studley

Site 5, A342

July 2022