TPS Transport Consultants Ltd Technical Note



Client: Story Homes Ltd
Project: Dowbridge, Kirkham

Our ref: P0646AD Date: May 2021

Introduction

This Technical Note has been prepared to consider an appropriate speed reduction scheme for the B5192 Dowbridge, Kirkham in the vicinity of the Story Homes site at Heaton Green.

Site Context

The site was granted planning permission in 2015 (ref 15/0547) for up to 170 dwellings at Brook Farm, Dowbridge, Kirkham. Associated with the consent is a planning condition which stated:

No more than 51 dwellings on the development hereby permitted shall be occupied until the developer has carried out a traffic speed review in the vicinity of the site access in accordance with details approved by the Local Planning Authority. The results of the review shall be provided to the Local Planning Authority and should the review indicate that the 85th percentile speeds are greater than 30 miles per hour in either direction then a scheme of further works designed to reduce speeds on Dowbridge shall be submitted to the Local Planning Authority for written approval together with a timescale to be approved as part of that submission. In the event that further works are required no more than 51 dwellings shall be occupied until such time as the timetable for implementation of the works has been approved in writing by the Local Planning Authority.

Following discussions with the Lancashire County Council Highways Officers, a speed survey was undertaken between Monday 26th April 2021 – Sunday 2nd May 2021. The Technical Note reporting the results of the speed survey is appended to this Note, for ease the results are summarised in **Table 1**.

Table 1: Speed Survey Summary

Direction		Total Number			
	2015		2021		of Vehicles Recorded
	Average	85 th Percentile	Average	85 th Percentile	(2021)
Eastbound	33.3	40.0	31.3	37.0	12,866
Westbound	32.3	38.3	28.8	32.7	14,455

(Source: Speed Survey)

As can be seen from **Table 1**, the 85th speeds along Dowbridge (2021), in the vicinity of the refuge island are 37.0mph eastbound and 32.7mph westbound, whilst the average speed are below the posted speed limit westbound at 28.8mph and slightly above the posted speed limit eastbound at 31.3mph. However, as the 85th percentile speeds are in excess of the 30mph

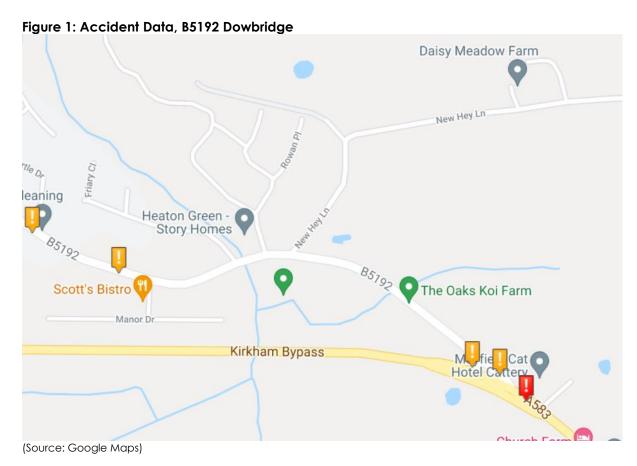
speed limit, based on the planning condition, there is a requirement to prepare a scheme of works on Dowbridge aimed at reducing speeds.



Lancashire County Council Highways Officers welcomed that there has been a reduction in speeds since the 2015 survey, likely as a consequence of the traffic calming impact of the pedestrian refuge island and vehicles slowing to enter the Story Homes site. Officers also noted that the 85th percentile speeds of vehicles travelling into Kirkham are closer to the posted speed limit at 32.7mph and it is the vehicles departing Kirkham that are travelling at a higher speed (37.0mph).

Road Safety

Consideration has been given to the road safety record on the B5192 Dowbridge. Accident data for 2015 - 2020 has been obtained from Crash Map for the network surrounding the site, this is shown on **Figure 1** below.



As can be seen in **Figure 1**, there have been no accidents recorded on the B5192 Dowbridge in the vicinity of the site since 2015. Whilst it is acknowledged that some vehicles are travelling in excess of the posted speed limit in the vicinity of the Story Homes site access, this has not resulted in the occurrence of road traffic accidents. Notwithstanding this, this Technical Note will consider what further measures can be introduced to encourage a further reduction in speeds on B5192 Dowbridge in the vicinity of the Story Homes site.

Existing Lining and Signing

Drawing D-1000, appended to this Technical Note, illustrates the existing lining, and location of the pedestrian refuge island, in the vicinity of the Story Homes site access. In addition to this, **Figure 2** below illustrates the location of signing and lining, designed to reduced speeds, on B5192 Dowbridge within 250m of the access.

Figure 2: Existing Signing and Lining on B5192 Dowbridge

Heaton GreenStory Homes

Pedestrian refuge

Dragon's Teeth road markings for westbound traffic

Thr Is Kol Farm

30mph roundel with red road surfacing for westbound traffic

rkham Bypass

(Source: Google Maps)

Kirkham Bypass

Proposed Speed Reduction Scheme

It was agreed with the Lancashire County Council Highways Officers that, in the first instance, considering the recorded speeds, the reduction that has been achieved so far, and the accident data, that a scheme considering further signing and lining would be proposed aimed at reducing speeds further on B5192 Dowbridge.

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Narrowing lanes, using traffic islands and / or road markings can give the impression of a more confined road and result in reduced speeds. Indeed, the speed survey has shown that the provision of the pedestrian refuge has already impacted on speeds recorded on B5192 Dowbridge.

Drawing D-1001, appended to this Technical Note illustrates the proposed scheme, this can be summarised as:

- Extension of the central hatching from the existing ghost island arrangement at Oxford Drive to the west, terminating prior to the Glebe Lane junction. This gives the visual impact of reduction the lane widths from 4.2m to 3.1; and
- 30mph roundels on B5192 Dowbridge to the immediate east of the New Hay Lane junction and 80m west of the Oxford Drive junction.

It was agreed with the Lancashire County Council Highways Officers that a further speed survey would be undertaken in 6-12 months, to monitor the speeds on B5192 Dowbridge, and identify the impact this further speed reduction scheme has had.

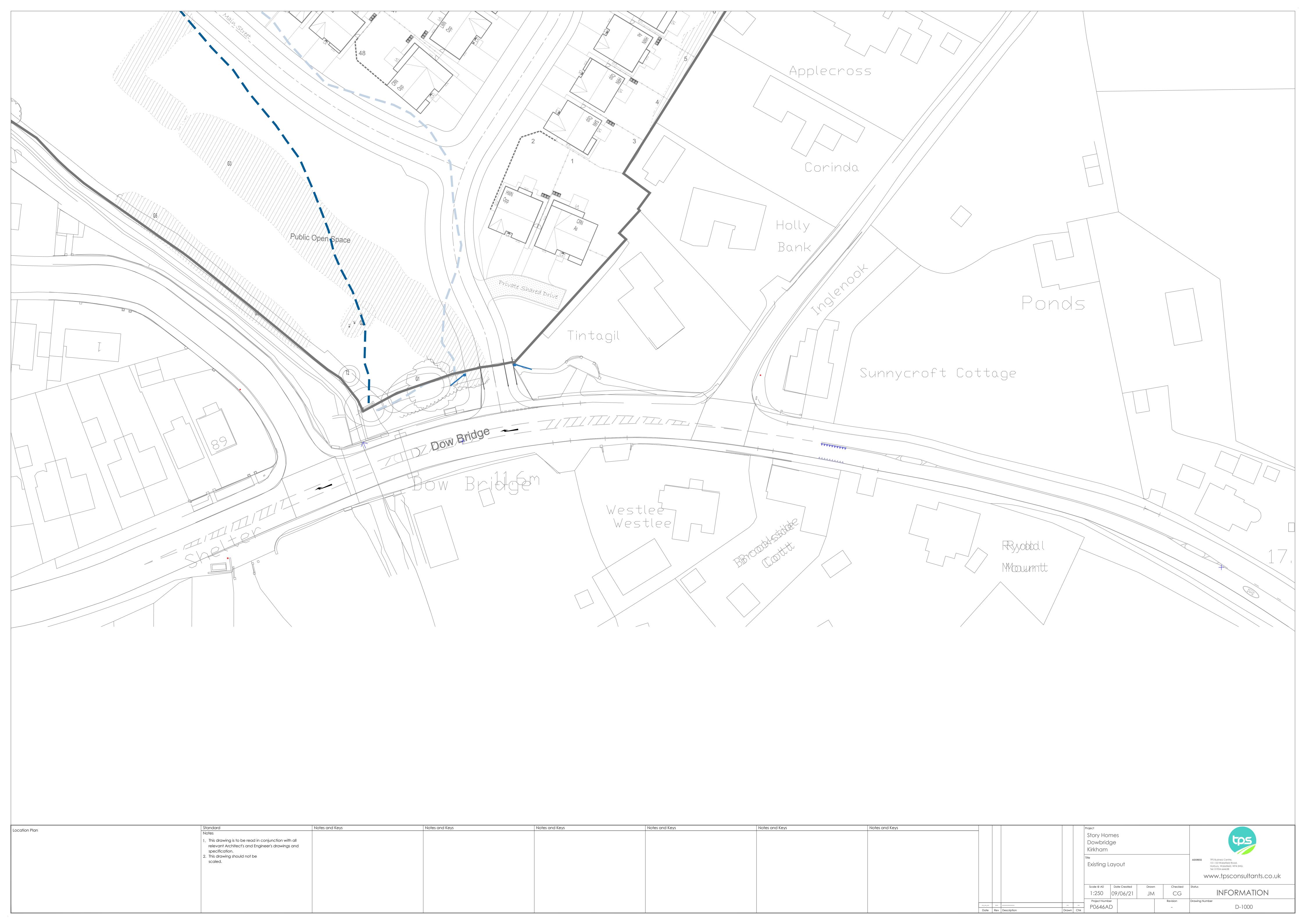
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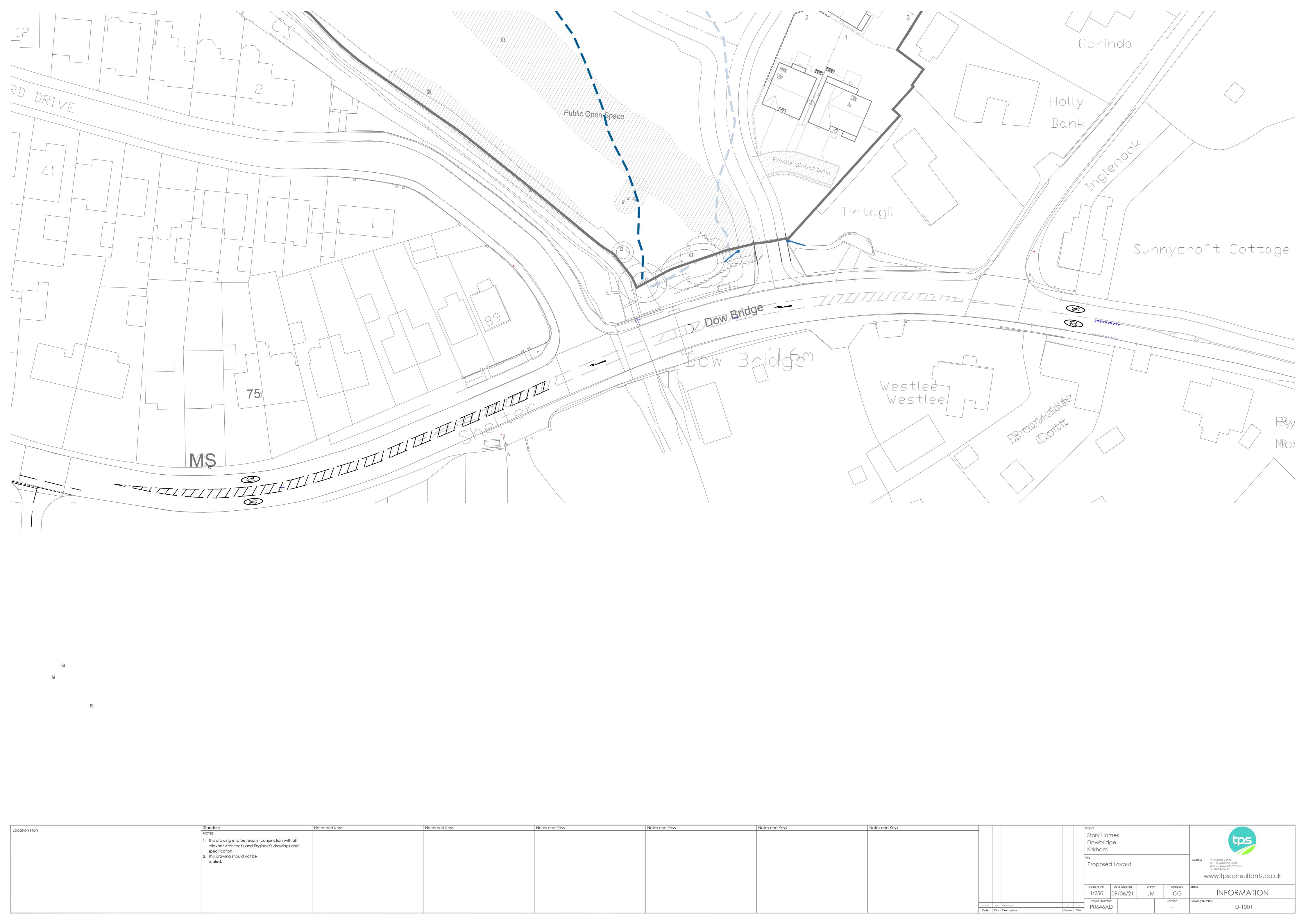


Works would commence following the discharge of the planning condition, staring in September 2021 and to be completed within 12 weeks (i.e. December 2021).

Summary and Conclusion

The 2021 speed survey suggested that the 85th percentile speeds on the B5192 Dowbridge, as it passes the refuge island are in excess of 30mph, as such further consideration has given to a scheme designed to reduce speeds on Dowbridge in consultation with and for approval by Lancashire County Council. The scheme includes the provision of white lining to give the impression of a more confined road and further 30mph roundels in the carriageway in both directions to the east and west of the Story Homes access. As agreed with Lancashire County Council, a further speed survey would be undertaken in 6-12 months.





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Introduction

This Technical Note has been prepared to report measured speed on B5192 Dowbridge, Kirkham in the vicinity of the Story Homes site at Heaton Green.

Planning History

The site was granted planning permission in 2015 (ref 15/0547) for up to 170 dwellings at Brook Farm, Dowbridge, Kirkham. Associated with the consent is a planning condition which states:

No more than 51 dwellings on the development hereby permitted shall be occupied until the developer has carried out a traffic speed review in the vicinity of the site access in accordance with details approved by the Local Planning Authority. The results of the review shall be provided to the Local Planning Authority and should the review indicate that the 85th percentile speeds are greater than 30 miles per hour in either direction then a scheme of further works designed to reduce speeds on Dowbridge shall be submitted to the Local Planning Authority for written approval together with a timescale to be approved as part of that submission. In the event that further works are required no more than 51 dwellings shall be occupied until such time as the timetable for implementation of the works has been approved in writing by the Local Planning Authority.

Speed Survey

Through discussion with the Highways Officer at Lancashire County Council it was agreed that the speed survey should reflect the methodology of the previous survey undertaken in 2015 in support of the planning application (ref 15/0547). The 2015 speed survey was undertaken "to the east of the site access on Dowbridge" over a 24 hour period.

It was agreed that the 2021 speed survey would be undertaken at the same location, over the course of a neutral week. The ATC speed survey was undertaken between Monday 26th April 2021 – Sunday 2nd May 2021 avoiding the school Easter holidays and May Day Bank Holiday. The counter gathered data on vehicle numbers and speeds by direction. The location of the ATC is shown in **Photograph 1**.



Photograph 1: ATC Location



Dowbridge is subject to a 30mph speed limit. **Table 1** summarises the observed average and 85th percentile speeds and total number of vehicles recorded by direction. A comparison to the 2015 survey is also provided.

Table 1: Speed Survey Summary

Direction		Total Number			
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(Source: Speed Survey)

As can be seen from **Table 1**, the 85th speeds along Dowbridge (2021), in the vicinity of the refuge island are 37.0mph eastbound and 32.7mph westbound. Whilst there has been a reduction in speeds since the 2015 survey, 85th percentile speeds are in excess of the 30mph speed limit and therefore based on the planning condition, there would be a requirement to prepare a scheme of works on Dowbridge aimed at reducing speeds.

Summary

The 2021 speed survey suggests that the 85th percentile speeds on the carriageway, as it passes the refuge island are in excess of 30mph, as such further consideration will be given to a scheme designed to reduce speeds on Dowbridge in consultation with and for approval by Lancashire County Council.