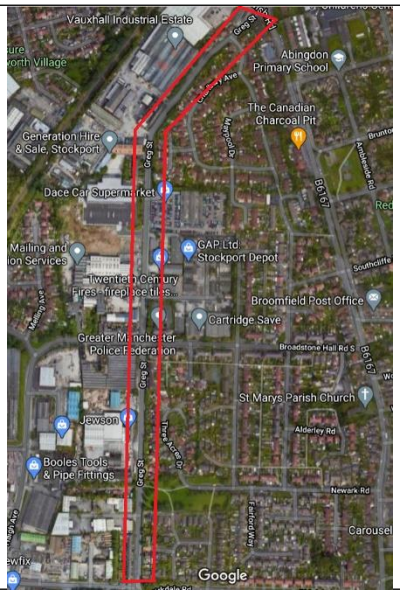
STOCKPORT
METROPOLITAN BOROUGH COUNCIL

SERVICES TO PLACE – HIGHWAYS & TRANSPORTATION – FEASIBILITY AND ROAD SAFETY TEAM

FEASIBILITY STUDY REPORT

4272 – Greg Street, Reddish



Signed

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1.0 Executive Summary

1.1 The Feasibility and Road Safety Team have been commissioned to review options to improve a highway layout at Greg Street, Reddish.

1.2 The report looks at alternative traffic calming measures/markings on the carriageway.

1.3 The layouts provided are indicative and are based on an OS background so as to gauge an understanding of the impacts of different highway layouts in order to make an informed decision on the preferred option.

1.4 No consultation has been carried out with any stakeholders and this would be required to confirm which design is feasible based on the feedback.

2.0 Introduction

Residents of Greg Street have expressed concerns about the speed of vehicles between Hibbert Street and the northerly part of Reddish Road. Despite there being no traffic incidents recorded by GM Police on these sections within the last three years, a speed survey in 2016 (near Jewson's premises) identified an Average 85% speed of 36.6mph (i.e. 15% of traffic was moving at above this speed). This reading is unusually high and therefore further measures could be deemed justified.

It has been recommended that a design and feasibility study is carried out to look at the different options available to alter the traffic calming measures between Hibbert Street and the northerly part of Reddish Road. The intention of altering the traffic calming measures is to encourage cautious driving. A sum of £750 pounds was approved by the Heatons & Reddish Area Committee on 20th July 2020 to undertake a design and feasibility study and identify what markings would be appropriate. All of the scheme costs discussed for each option in this report may change during the detailed design stage of the project.

3.0 Design Options

3.1 Option 1 – Installing white centre lining – F/4272/001

This option reviews the installation of white centre lining along Greg Street where there currently is none. Having white centre lining will help segregate the carriageway, and it will create the illusion for drivers that the carriageway is narrower and cause them to drive slower.

There are already multiple sections along Greg Street that have white centre lining. There is also a section on Greg Street between the junctions of Hibbert Street and Birkdale Road, that has white hatching, but includes a central island. When inspecting the area this proved to be an effective road narrowing example to reduce vehicle speed.

As discussed in 2.0, the speed survey carried out by the GM Police in 2016 was close to the Jewson's premises, which is between Hibbert Street and Broadstone Hall Road South. As stated, the 85% percentile speed recorded during the survey was 36.6mph, which is unusually high. This section of Greg Street does not currently have white centre lining. Furthermore, the section between Broadstone Hall Road South and the Dace Motor Company premises also does not have white centre lining. It was this straight section during the walkover survey, that vehicles appeared to accelerate their speed.

White centre lining would more likely be effective at reducing speeds if the spacing between the markings was kept to a minimal. This does however maximise the costing as there will be a greater coverage of road markings. It still potentially represents a cheap and effective method for calming traffic. A UK standard road marking with dimensional parameters that minimises the spacing has been used (4 metre lines with 2 metre spacing).

3.1.1 Option 1 – Scheme Costs

- Approximately 750 metres of road covered, with white centre line markings — £1,500.00
- Contingencies @ 15% — £225.00
- Fees (design and supervision Only @ 20%) — £300.00
- **Total** — **£2,025.00**

* The above fees do not include area consultation or submission of area committee reports

3.1.2 Stakeholders

Further consultation will be required with the following stakeholders

- Local businesses
- Local residents
- Ward Councillors

3.2 Option 2 – Re-structuring of single yellow line and installation of staggered parking on both sides of the road – F/4272/002

This option involves removing and adding sections of the single yellow line along Greg Street. Currently the single yellow line only runs along the east side of Greg Street from Broadstone Hall Road South to Reddish Road (north end). However, re-structuring the placement of the single yellow lines and also introducing staggered parking bays along Greg Street would encourage on-street parking on both sides of the carriageway.

With the current road layout, vehicle users can park along the west side of Greg Street, whereas the single yellow line on the east side prohibits vehicle users stopping there from 8am to 6pm, Monday to Saturday. With this being the case, the carriageway is still wide enough to make vehicle users feel comfortable to accelerate. If on-street parking is encouraged on both sides of the road, it would significantly narrow the width of the carriageway, or certainly give the illusion it has. This would cause vehicles users to reduce their speed, and even stop and give way to traffic travelling on the other side of the road. Furthermore, as can be seen in drawing F/4272/002, certain sections of the staggered parking can be designed in such a way that it creates a chicane effect. Any opportunity to cause the vehicle user to change the direction of the steering wheel will also cause them to slow down, as they will always want to remain in control of the vehicle.

Currently on Greg Street where there are sections of carriageway with no yellow lines, vehicle users are using these sections as an opportunity to park their vehicle. However, any on-street parking road markings that are introduced need to become exclusive for them to serve their purpose. To prevent vehicle users from parking in sections where there is not on-street parking marked out, there needs to be restrictions (such as single yellow lining). This would require providing additional single yellow lines along both sides of Greg Street's carriageway. In fact, in drawing F/4272/002, 370 cumulative metres of additional yellow lines is drawn up, and only 35 metres of yellow lines is removed.

During walkover survey, this technique could be observed along Broadstone Hall Road South, which has cars parked on both sides of the road. On this road it was evidential that vehicle users were driving with more caution and reducing their speed. This provided good visual proof that this is an effective technique for calming traffic.

Greg Street is a local distributor road built on an industrial estate and it has multiple entry points. Therefore, one factor that had to be considered when drawing up this option was placing the on-street parking in areas that would not significantly reduce visibility for vehicle users entering and exiting the different entry points. Fortunately, along Greg Street there is enough opportunity to provide sufficient on-street parking on both sides of the carriageway. Furthermore, even if there is a slight reduction in visibility due to the on-street parking, it will cause vehicle users to drive with more caution.

3.2.1 Option 2 – Scheme Costs

- TRO legal cost £600.00
- Removal and addition of yellow line road markings £1,000.00
- On-street parking road markings £800.00
- Contingencies @ 15% £360.00
- Fees (design and supervision Only @ 20%) £480.00

- **Total** **£3,240.00**

*The above fees do not include area consultation or submission of area committee reports

3.2.2 Stakeholders

Further consultation will be required with the following stakeholders

- Local businesses
- Local residents
- Ward Councillors

3.3 Option 3 – Combination of Option 1 and Option 2 – F/4272/003

This option involves the first two options discussed in 3.1 and 3.2 and applying them together to create a new road layout to help calm traffic on Greg Street.

This would unsurprisingly be the most expensive of the first three options, however it would provide everything that has been discussed in 3.1 and 3.2, therefore it would be the safest option out of the three with regards to calming the traffic on Greg Street.

Having vehicles parked on both sides of the road will narrow the carriageway, whilst the white centre lining will add to the illusion that the road is narrower, and furthermore help segregate vehicle users travelling in opposite directions to one another along Greg Street.

3.3.1 Option 3 – Scheme Costs

- Option 1 costs £1,500.00
- Option 2 costs £2,400.00
- Contingencies @ 15% £585.00
- Fees (design and supervision Only @ 20%) £780.00
- **Total** **£5,265.00**

* The above fees do not include area consultation or submission of area committee reports

3.3.2 Stakeholders

Further consultation will be required with the following stakeholders

- Local businesses
- Local residents
- Ward Councillors

3.4 Option 4 – Installation of speed cushions along Greg Street – F/4272/004

This option reviews the construction of speed cushions along Greg Street to help calm the traffic. It is worth noting that in the scoping document, speed humps were deemed inappropriate in the previous Committee due to the noise and vibration it causes to HGVs. However, speed cushions are designed differently to speed humps, and they are more accommodating to buses and HGVs due to their dimensional design and the fact they do not stretch across the full width of the carriageway. Therefore, the noise and vibration issue discussed in the scoping document would not be as problematic with speed cushions.

Speed cushions are arguably not as effective at calming traffic as speed humps, however as they are a form of vertical measure, and they still provide the driver with an obligation to slow down. The spacing between each set of speed cushions along the road also plays a part in the effectiveness of calming the traffic. The shorter the spacing, the more frequent the driver will have to slow down, therefore decreasing the 85-percentile average speed. The average spacing between speed cushions is typically around 60 to 80 metres. Using this spacing, 8 sets of speed cushions can be implemented along Greg Street between Dace Motor Company and Hibbert Street as shown by the drawing F/4272/004. Greg Street is wide enough to install 3 speed cushions for each set, whilst maintaining the transverse gap standards. Therefore, this option proposes a total of 24 speed cushions.

One drawback of speed cushions is that they are relatively expensive; 3.4.1 will demonstrate this, and this is something that may need to be considered when assessing the options. Speed cushion warning signs will need to also be installed. This is because Greg Street is a 30mph road, and vehicle users need to be aware they are entering an area that has speed cushions. Currently at the junction with Broadstone Hall Road and Greg Street there is a junction table, which is where the road is slightly elevated to slow vehicles down when approaching the junction. For this there is only one speed hump warning sign when approaching, and that is on Greg Street and heading in a southernly direction. Therefore, another warning sign needs to be placed heading north on Greg Street before the junction table. There also needs to be two more speed cushion warning signs on Greg Street, one at each start point of the speed cushion stretch. Underneath the signs there needs to be a distance in yards of how long this stretch is to alert any vehicle users travelling through. This is approximately 650 yards.

3.4.1 Option 4 – Scheme Costs

- Installation of speed cushions along proposed section of Greg Street and installation of 3 new speed hump warning signs (one out of the four required is already existing) £40,000.00
- Contingencies @ 15% £6,000.00
- Fees (design and supervision Only @ 20%) £8,000.00
- **Total** **£54,000.00**

* The above fees do not include area consultation or submission of area committee reports and any potential statutory undertaker's diversions/alterations.

3.4.2 Stakeholders

Further consultation will be required with the following stakeholders

- Local businesses
- Local residents
- Ward Councillors
- Statutory Undertakers

4.0 Conclusions

The Feasibility and Road Safety Team recommends Option 3 as the most feasible option in calming traffic along Greg Street. This is because encouraging cars to park on both sides of road will narrow the carriageway dimensionally, and the white centre lining will narrow the carriageway deceptively. Overall, this will provide the driver with an obligation to drive safer and slower.

This is quite an expensive option, therefore for a more cost-effective option, the Feasibility and Road Safety Team recommends Option 2. This is because any method that can be used to narrow the carriageway is typically the most efficient method to causing vehicle users to drive with more caution. Furthermore, during the walkover survey, there were cars parked on both sides of the road along Broadstone Hall Road South, and it could be observed that vehicle users were driving with more caution, in comparison to Greg Street.