Report to	Norwich Highways Agency committee	ltem
	07 June 2018	40
Report of	Head of city development services	10
Subject	Waggon and Horses Lane; proposed traffic management	_

Purpose

For members to consider an Experimental Traffic Regulation Order for a road closure on Waggon and Horses Lane to protect the property at 21 Elm Hill

Recommendation

To:

- (1) ask the head of city development to undertake the necessary statutory procedures and implement an Experimental Traffic Regulation Order (TRO) for the closure on Waggon and Horses Lane to through traffic.
- (2) agree to delegate to the head of city development services that within the first six months, three closure points may be trialled.
- (3) agree that within the first six months of the experiment, its effects will be monitored and appraised by officers and reported to a future meeting of Norwich Highways Agency committee for members to determine whether to further amend, end or make permanent the experiment.

Corporate and service priorities

The report helps to meet the corporate priority a safe, clean and low carbon city

Financial implications

The cost of the proposal is estimated to be £8,000. The proposal would be funded from the area manager's budget.

Ward/s: Thorpe Hamlet

Cabinet member: Councillor Stonard - Sustainable and inclusive growth

Contact officers

Kieran Yates, Transport Planner	01603 242471
Bruce Bentley, Principal Transport Planner	01603 212445

Background documents

None

Background

- 1. High sided vehicles have repeatedly struck the side flank corner of 21 Elm Hill at its junction with Waggon and Horses Lane. See Appendix 1 for photographic evidence of this issue.
- 2. To date, this has caused superficial damage but repeated or hard collisions potentially pose a structural risk to this fragile building, which is of significant concern for the occupants' safety and due to its historic value as Grade II listed building, to the character of the City Centre Conservation Area. The city council's conservation officers are naturally concerned about the potential damage to this important building.
- 3. There have already been several attempts to resolve this problem in recent years, by the installation of 'Unsuitable for HGVs' signs on the approach to Elm Hill and Waggon and Horses Lane, and by repositioning of wooden bollards outside 21 Elm Hill to align vehicles with the approach to the lane. As there appears to be a particular issue with supermarket home delivery vehicles, various supermarkets have been contacted to advise them of the issue, but not all replied. Satellite Navigation companies have also been advised but not all provide the option to register this issue.
- 4. As there are no restrictions on vehicular access on Waggon and Horses Lane, high sided vehicles continue to use it and strike the building. Consequently, 21 Elm Hill is still being struck by vehicles.

Description of the problem

- 5. 21 Elm Hill is at the junction of Waggon and Horses Lane and Elm Hill. See Appendix 2 for a diagram of the problem.
- 6. Waggon and Horses Lane, despite it narrowness, is in fact a two way street, that is accessed from Wensum Street (via Tombland) or via Elm Hill (via the Britons Arms café).
- 7. This junction of Waggon and Horses Lane and Elm Hill is very narrow at approximately 2.7metres, and is just wide enough for vehicles to pass through.
- 8. The complication is that the opening from Waggon and Horses Lane onto Elm Hill is on a slope with an adverse camber (the surface of the cobbled road is angled towards the adjacent tree more steeply), that means that the top of high sided vehicles tilts and strikes 21 Elm Hill and scrapes the building as it travels.
- 9. This is why 21 Elm Hill is being damaged by any passing high sided vehicle. There is no way of the driver avoiding this risk or knowing of it in advance.

Possible options

10. A range of potential options have been considered, which are listed below. Their pros and cons are described in Appendix 4. These are:-

- (a) Make Waggon and Horses Lane a one way street from Wensum Street towards Elm Hill.
- (b) Make Waggon and Horses Lane a one way street from Elm Hill to Wensum Street.
- (c) Vehicle height restriction.
- (d) Re-grading the carriageway of Elm Hill to remove the adverse camber.
- (e) Pedestrianisation of all local streets; including Waggon and Horses Lane, and Elm Hill on a full time basis.
- (f) Advisory signage e.g. Adverse Camber/ Overhanging building etc.
- (g) Notifying satellite navigation companies of problem.
- (h) Closure of Waggon and Horses Lane to traffic using a 'point closure'.

Preferred option

11. For reasons explained in the appendix, a point closure on Waggon and Horses Lane comprising of bollards and 'no through road except cycles' signs are recommended as the preferred solution to protect this important and vulnerable building.

The benefits of using an Experimental Traffic Regulation Order

- 12. The council has the choice of a permanent or experimental TRO. Both have the same end result; the difference is in the process.
- 13. A permanent TRO requires a statutory 21 day consultation period and objections reported to NHAC. If an amendment proposal is required, this can also require consultation. The process can take several months to conclude before anything is changing on street.
- 14. In this case, there is a need for some urgency as 21 Elm Hill is at significant risk of further damage, and there are a number of potential locations of the point closure on Waggon and Horses Lane that could be trialled before making it permanent.
- 15. An experimental TRO can be implemented swiftly as a trial. As soon as it is implemented, the consultation period commences. The experiment may last for up to 18 months and the actual effects of the experiment can be monitored, and swiftly modified, for example, by moving the point closure to see which offers the best solution. This ability to respond quickly is not available with a permanent TRO, but officers do need delegated responsibility to alter the experiment if that proves necessary.
- 16. For these reasons an experimental TRO is the preferred way forward.

The proposed experiment

17. A point closure on Waggon and Horses Lane is recommended. This would prevent all through traffic, except cycles, from using it. There are three possible locations for the point closure and these are shown on the plan in Appendix 3. They are, in order of preference:

Option 1: adjacent to 21 Elm Hill

(at the junction of Waggon and Horses Lane and Elm Hill; adjacent to Mandells Gallery, so that all traffic servicing Waggon and Horses Lane would go to and from via Wensum Street)

Option 2: adjacent to the Del Ballroom

(so that traffic accessing Waggon and Horses Lane would be split 50/50 via Elm Hill and by Wensum Street.

Option 3: adjacent to Samson Court

(west of its site access, so that all traffic serving this site would go to and from Wensum Street)

- 18. It is recommended that the first trial is with the point closure adjacent to 21 Elm Hill for a minimum of 2 months. If project objectives are not achieved or there are significant negative issues to it, then the other two closure points would be trialled for a minimum of 1 month each in turn.
- 19. Should a closure point achieve the objectives of the experiment, it is proposed that this arrangement be considered to be made permanent without the need to trial further closure point locations, in the interest of avoiding wasted resources and disruption.
- 20. During the period of the experiment, we will observe the effects on traffic based on periodic site visits and check to see if any further damage has occurred to 21 Elm Hill. We will also log written representations received.
- 21. The city council's refuse collection team has confirmed that refuse lorries do not use Waggon and Horses Lane, so there is no additional issues surrounding domestic refuse collection. The operational commercial properties are situated at each end of Waggon and Horses Lane, so do not require a collection vehicle to pass all the way through.
- 22. We will notify all addresses on Princes Street, Elm Hill, Waggon and Horses Lane and Wensum Street by letter of the experiment. There will also be temporary signs explaining the experiment that will direct interested parties to more information, and the ability to comment on our website.
- 23. The experiment can run for up to 18 months, but a decision to further amend the experimental measures in a way other than that recommended in this report and the associated Experimental TRO must be made within the first six months. A decision to end or make permanent the experiment can be made at any time within the 18 month period. A report will be taken to NHAC for members to determine the recommended course of action.

Integrated impact assessment



Report author to complete				
Committee:	Norwich Highways Agency Committee			
Committee date:	7 June 2018			
Director / Head of service	Andy Watt			
Report subject:	Waggon and Horses Lane; proposed traffic management			
Date assessed:	09./05/2018			

		Impact		
Economic (please add an 'x' as appropriate)	Neutral	Positive	Negative	Comments
Finance (value for money)				
Other departments and services e.g. office facilities, customer contact				
ICT services				
Economic development				
Financial inclusion				
Social (please add an 'x' as appropriate)	Neutral	Positive	Negative	Comments
Safeguarding children and adults				
S17 crime and disorder act 1998				
Human Rights Act 1998				
Health and well being				

		Impact		
Equality and diversity (please add an 'x' as appropriate)	Neutral	Positive	Negative	Comments
Relations between groups (cohesion)	\square			
Eliminating discrimination & harassment				
Advancing equality of opportunity	\square			
Environmental (please add an 'x' as appropriate)	Neutral	Positive	Negative	Comments
Transportation				The effects of the experiment will be monitored to understand traffic displacement to adjacent roads and access within Waggon and Horses Lane. Should there be negative effects the experiment may be amended or ended if necessary. However any negative effects will be weighed up with regard to the protection of 21 Elm Hill.
Natural and built environment		\square		If the experiment is successful 21 Elm Hill would be protected from risk of vehicle strikes.
Waste minimisation & resource use	\boxtimes			
Pollution	\square			
Sustainable procurement				
Energy and climate change				

	Impact			
(Please add an 'x' as appropriate) Neutral Positive Negative		Comments		
Risk management				Management of risk of listed buildings and Conservation Areas is a statutory responsibility of the Local Planning Authority. This project by the council as Highway Authority would contribute towards these duties.

Recommendations from impact assessment
Positive
Proceed with the road closure of Waggon and Horses Lane as an experiment to monitor its effects
Negative
None
Neutral
Proceed with the road closure of Waggon and Horses Lane as an experiment to monitor its effects
Issues
None

21 Elm Hill damage evidence



Diagram and photo illustrating the problem with high side vehicles passing 21 Elm Hill that poses an inherent risk to the building due to the adverse camber.





Proposed locations of possible road closure points

- Adjacent to 21 Elm Hill
 Adjacent to the Del Ballroom
 Adjacent to Samson Court



Option	Pros	Cons
a) Make Waggon and Horses Lane a one way street; from Wensum Street towards Elm Hill.	Prevents vehicles from passing by 21 Elm Hill on approach from Elm Hill.	By forcing all traffic to travel in one direction, all vehicles that service Waggon and Horses Lane would be forced to pass by 21 Elm Hill, including commercial vehicles servicing the restaurant on Wensum Street. One way streets can encourage traffic as they provide ease of flow, we don't want to encourage any more traffic into Elm Hill, and for this reason making Waggon and Horses Lane one way in this direction would be problematic. The restrictions will need to be signed at both ends of Waggon and Horses Lane, at Elm Hill it would require a 'one way except cycles' sign. This adds to street clutter.
b) Make Waggon and Horses Lane, a one way street from Elm Hill towards Wensum Street.	Prevents vehicles passing by 21 Elm Hill from the direction of Wensum Street.	This option has similar problems to above, it also forces all traffic servicing Waggon and Horses Lane through Elm Hill. At present the restaurant vehicles are likely to enter and leave via Wensum Street, this option may actually make the vehicle collision risk with 21 Elm Hill worse than at present.

Option	Pros	Cons
c) Vehicle height restriction.	Would prevent high sided vehicles from entering Waggon and Horses Lane.	 This restriction would require signage at both ends of Waggon and Horses Lane. Enforcement of this restriction type relies on police enforcement, this rarely if ever occurs. Such signage would merely have a deterrent effect and is unlikely to be effective. Legitimate access needs by high sided vehicles would be prevented. Sign clutter is problematic.
d) Regrading the carriageway to remove the adverse camber	By levelling the road surface next to 21 Elm Hill the risk of tilting vehicles is eliminated.	Regrading the highway surface is a complicated exercise and would affect the setting of the listed buildings and character of Elm Hill. For this reason primarily, and its cost, this option is not acceptable.
e) Pedestrianisation of all local streets; including Waggon and Horses Lane, and Elm Hill on a full time or part time basis.	By prohibiting vehicles at any time, there is no risk of vehicles damaging 21 Elm Hill.	Exclusion of all motorised traffic at any time on Waggon & Horses Lane and Elm Hill is seen as desirable by some to improve the amenity and historic character of these streets. The fundamental difficulty with this option is that these streets are living streets where people live and work that requires access 24/7. Exclusion of all traffic by making it a pedestrian precinct is not a feasible option. Even if traffic were excluded part time, for some of the day, the risk of vehicle damage to 21 Elm Hill would remain.

Option	Pros	Cons
f) Advisory signage e.g. Adverse Camber Overhanging building etc	Advisory signage can assist with informing drivers of unsuitable vehicles to take alternative routes	Advisory signs are not enforceable and delivery drivers tend be instructed by sat navs or are in a hurry and tend to ignore advisory signs.
g) Notifying sat navs of problem.	Assists with compliance of avoiding hazard	Sat nav companies have been contacted, but they have very limited options to notify users of such a specific issue and sat nav users are not inclined to update their software
h) Closure of Waggon and Horses Lane to traffic using a 'point closure'	Point closures are a simple traffic management technique that prevents motor vehicles to pass through, whilst allowing pedestrians and cyclists access. It would entail use of bollards. Bollards are 100% effective at preventing unauthorised access by vehicles, unlike signage that can easily be ignored. Vehicles would still be able to enter Waggon and Horses Lane either side of the point closure, enabling access to businesses and homes. The total of amount of traffic on Waggon and Horses Lane would decrease as through traffic would not be allowed. Costs are low, and the visual impact is low. Minimal signage for a 'no through road except cycles' sign is required at either end of the road.	Point closures can result in the displacement of traffic to other streets, in this case a small amount of traffic would be diverted to Princes Street and Elm Hill. The exact location of the point location would need to be carefully decided to ensure the maximum benefits and minimum problems are experienced. There may be difficulties for larger vehicles who enter Waggon and Horses Lane to exit, as they would need to reverse out of the road. However over time this risk is likely to diminish as drivers opt to park and load on adjacent streets e.g. the loading bay on Tombland.