

DEVORAN VILLAGE

POSSIBLE HIGHWAY IMPROVEMENTS AND QUIET LANES - Feasibility Report

1.0 Brief

A request was received from Feock Parish Council to assess the feasibility of providing footways on Greenbank Road and beside the former A39, as well as considering a village wide 20mph speed limit and the redesignation of the Old Tram Road as a 'Quiet Lane'. Feock Parish Council confirmed that they would be the Client for the feasibility by self-funding this assessment (and possibly any consultation and/or construction works).

This Report is to be read in conjunction with the Feasibility Assessment Drawing – EDG0942-F01

2.0 Background

The main access points into Devoran village, from the A39, were at Greenbank Road (from the south-west) and Devoran Lane (from the north-east). Highways improvements on the A39 constructed an extension to the Carnon Downs by-pass creating a single entry point to the village, near the Greenbank Road junction - the Devoran by-pass was opened in October 2007. An alternative access route, from the east, along the Old Tram Road is also available.

Devoran is a creek-side village with slip-way access to the Carnon River. It has many of the typical Cornish local amenities, which generate pedestrian and vehicle demand throughout the village – Primary School, various places of worship, doctors surgery, village hall, light industrial units and residential properties.

A 20mph speed limit, to replace the 30/40mph limits, near the school vehicle and pedestrian entrances, along Quay Road and Old Tram Road was implemented in February 2008. A series of vertical traffic-calming features (ie, speed cushions) have been constructed along Devoran Lane between the A39 and the mini-roundabout junction with Edwards Road.

At present both scheduled public and school bus services detour from the A39 (between Truro and Falmouth) and loop around the village centre along Devoran Lane, Market Street and Greenbank Road.

The Mineral Tramways cycle route is from the A39 at Devoran, across the spine of Cornwall, at Scorrier, to Portreath on the north coast. The route does not extend into Devoran village (which is sign-posted along the way) but many cyclists continue along Greenbank Road and beside the creek along Old Tram Road to Point Quay.

Due to the lack of off-street parking many of the older roads in the village (Market Street, St Johns Terrace and Quay Road) are reduced to a single carriageway width due to parked vehicles

3.0 Pedestrian / Vehicle Counts and Accident Data

Average Annual Daily Traffic (AADT) vehicle counts were calculated for various of the roads in Devoran, with a base date of 2014. The AADT count for the former A39 is 1600 vehicles (inc. 50 Heavy Commercial Vehicle's) and Greenbank Road, Market Street and Devoran lane is 1100 vehicles (inc. 30 HCV's).

Speed readings using a 'RadarClass' static device have been undertaken at three different locations along Greenbank Road between January 2008 and December 2013. The most recent readings taken near Devoran Boatyard recorded an average speed of 23.8mph for vehicles travelling towards the A39 and an average speed of 22.1mph for vehicles travelling towards Quay Road/Market Street. The earlier readings, near Tallacks Reach and the pump house, have average speeds of approx. 25mph for vehicles towards the A39 and approx. 27mph for vehicles towards Quay Rd/Market St.

Under the current configuration, with the bypass, no speed readings have been taken on the section of former A39, between Greenbank Road and Devoran Lane. However it is expected that the speed of vehicles travelling in both directions would likely be, or in excess of, 30mph (the current speed limit).

Between 1st January 2009 and 31st March 2015 there were no vehicle related accidents reported within the boundary area of this study.

4.0 Assessments

This section of the Study assesses the feasibility for the four issues requested by Feock Parish Council as separate proposals, although more than one could be combined into a joint scheme.

- New footway on Greenbank Road
- New footway on former A39
- 20mph speed limit/zone throughout Devoran village
- Adopting 'Quiet Lane' status along length of Old Tram Road

4.1 Footway on Greenbank Road

The length of highway between the residential property Tallacks Reach and the junction with Quay Road/Market Street has a gentle bend with restricted forward visibility whilst the carriageway width varies between 4.8 and 5.4m. The length between Tallacks Reach and the former A39 junction is straight with good forward visibility and the carriageway width varies between 6.2 and 6.4m.

Generally the boundaries of the carriageway are between a stone hedge on one side and an over-grown verge (with dropping embankment) on the other. There is no existing footway on either side of the carriageway and there are no road markings. The highway is currently within a 30mph speed limit and is within the area covered by the series of street lighting.

Greenbank Road has residential properties, most with facilities for off-street parking, on the north-eastern side with light industrial units (boatyard, vehicle repairers, joiners, etc.) on the south-western side.



1. Greenbank Road – looking south-east, from former A39



2. Greenbank Road – looking north-west, towards A39

It is the intention of Feock Parish Council to make a footway provision on the length of highway between Tallacks Reach and the Market Street junction. The verge to the south-western side of Greenbank Road is not identified as highway or a Cornwall Council asset which removes the possibility of this location being used to construct an off-carriageway facility, without the land being made available by the current owner. Whilst it would be physically possible to construct a footway on either side of the carriageway this would reduce the width to as narrow as 3.0m, which with the restricted forward visibility, would be unacceptable. An alternative type of footway is a 'virtual' one – using an applied coloured surfacing and a wide edge line on the carriageway. A virtual footway retains the existing carriageway width and would allow for a vehicle to use this space if passing other vehicles, subject to pedestrians and/or other vulnerable road-users.



3. Greenbank Road – looking south-east, towards Market Street

If the virtual footway option is preferred it will be appropriate to provide a start feature - probably in the form of a build-out with appropriate signs and marker posts. This will allow approaching drivers to recognise the presence of the 'footway' whilst negotiating and slowing for this feature as a form of traffic-calming.

Prior to the preparation of this report Feock Parish Council obtained several estimates from Cormac for alternative possible footway layouts, between Tallacks Reach and Market Street – widening the carriageway on the south-west side and constructing a footway on the north-east (£32-34,000), construct a new footway in the verge to the south-west (£20-21,000), construct a new footway in south-west verge for 2/3rd and a virtual footway on existing carriageway for 1/3rd (£15-16,000) and a virtual footway for the length (£5-6,000).



4. Greenbank Road – looking north-west, from Market Street

Due to the lack of carriageway width and avoiding any issues with the questions of obtaining additional land the consideration of a 1.5m wide virtual footway (of coloured surfacing and wide edge-line) and build-out feature at the start near Tallacks Reach is the most appropriate option.

Estimated Construction Costs (including fees) - £14250 for virtual footway with initial build-out

4.2 Footway on former A39

This is a straight section of carriageway having two through lanes and a central ladder-marking, which used to form part of the A39 between Truro and Falmouth prior to the construction and opening of the by-pass in 2007.

The carriageway width widens from 7.4m near the junction with the A39 link road up to 9.4m wide near the mini-roundabout junction with Devoran Lane. The south-eastern side of the carriageway has a grass verge, between 2.6 – 3.2m wide.

Trample evidence in the south-east grass verge indicates that this is being used on a regular basis by pedestrians between Greenbank Road and Devoran Lane. The verge is wide enough to allow for the construction of a footway, retaining the existing kerbs. Alternatively with the existing ladder-marking removed a virtual footway (of coloured surfacing and wide edge-line) could be provided on the carriageway, beside the verge. A 1.5m wide virtual footway would reduce the carriageway width to 5.9m at its narrowest point, near the A39 link road. Either option would require careful consideration for joining with the existing footways, especially at Devoran Lane.



5. Former A39 – looking north-east, from Greenbank Road



6. Former A39 - looking south-west, from Devoran Lane

An alternative use of the available width would be to provide a 1.5m wide with-flow advisory cycle lane for up-hill cyclists. It would be necessary to remove the central ladder marking and to provide the necessary advisory cycle-lane road marking. This would link the emergent Mineral Tramways cycle route, at Devoran , with the start of the shared-use cycle/pedestrian facility by Devoran Lane, linking through towards Carnon Downs.

Unfortunately there is insufficient carriageway width to provide both a virtual footway and an advisory cycle-lane.

Estimated Construction Costs (including fees) - £25550 for real footway, within verge // £8500 for virtual footway

4.3 20mph Zone / Speed Limit

Parts of Devoran village (along Quay Road and near the accesses to the School – approximately 40% of the village) as well as Old Tram Road to Point are covered by an existing 20mph speed limit. Vehicle speeds are either near the speed limit or traffic calming features have been constructed to reduce the speed of through vehicles. Elsewhere through the village a 30mph speed limit is in place.



7. St Johns Terrace – looking west, from Old Quay Inn

If a 20mph Zone were to be considered, the most appropriate proposal would be to revoke the existing 20mph speed limit on Devoran Lane, by the school entrance, with side roads (Tremayne Close, Edwards Road, Carnon Terrace and Perran Close) as well as the speed limit along Quay Road to St Johns Terrace. Old Tram Road, from Devoran to Point, would remain as part of the existing 20mph speed limit (although see item 4.4 Quiet Lane). The extents of the proposed Zone would

then cover the built-up area of Devoran village, from the junctions with the A39, through to the western end of Old Tram Road.



8. Devoran Lane, by Church of St John & St Petroc – looking south-east

The provision of an encompassing 20mph Zone will have local and community benefits improving the quality of life by reducing air and noise pollution, lowering vehicle congestion and improving accessibility. An added benefit may be the encouragement of a healthier life-style (more cycling and walking) and other changes towards the use of sustainable modes of transport.

A further significant benefit of reducing the speed of traffic is the reduction in collision and casualty frequency, as well as the severity of any injuries. Lower vehicle speeds reduce the risks. Considering the other sections included within this assessment (virtual footways) it would seem a positive step to include for the extension of the 20mph limit onto other roads in Devoran to create a Zone.

A 20mph Zone or speed limit needs to be self-enforcing with the speed of vehicles at this limit or are controlled to it with the use of traffic calming features, road markings and repeater signs, as a reminder of the limit. The Department for Transport (DfT) requires that features are no more than 100m apart. This distance has been seen to control vehicle speeds by having insufficient distance between each to allow for a significant increase above the desired set limit. The requirement and type of speed limit reminder/feature will need to be determined by location and existing speeds – although it is fairly certain that Greenbank Road and the former A39, at least, will require traffic calming features as vehicle speeds are currently above the required action level. There should be no expectation on the police to provide additional enforcement beyond their routine activity.



9. Market Street – looking south-west, from Devoran Lane



10. Market Street – looking north-east, from Greenbank Road



11. Former A39 – looking south-west, from Greenbank Road



12. Greenbank Road- looking north-west

For a 20mph Zone to be implemented it has been assumed that both Greenbank Road and the former A39 are the only sections of carriageway within Devoran where current speeds are likely to be significantly in excess of 20mph. Both of these roads would require a system of traffic-calming, probably in the form of vertical features (ie. speed-cushions similar to those on Devoran Lane) and/or horizontal features (ie. creating a chicane/gateway similar to the 'bus-gate' at the southern end of old A39 by the vehicle sales). Elsewhere in the village (namely Market Street, St Johns Terrace and Belmont Terrace) it is likely that the current speeds, due to on-street parking, are closer to a proposed 20mph limit (it will be necessary to confirm this prior to any formal consultation) and the use of road markings and/or repeater signing would be appropriate and sufficient. If the existing lengths of 20mph speed limit are to be revoked in favour of a 20mph Zone it will be necessary to confirm the current speed of vehicles using these roads and to include for any necessary additional traffic calming works – despite Devoran Lane already having a series of speed-cushions, between the mini-roundabout junctions with the former A39 and Edwards Road.

Estimate Construction Costs (including fees + TRO) - £31500

4.4 Quiet Lane

Old Tram Road is a narrow, quiet lane that runs along the northern shore of the Carnon River creek, between Devoran and Point. Because of the restricted forward visibility due to bends and narrow highway width vehicle speeds are low and this section is covered by a 20mph speed limit, with repeater signs at regular intervals and an 'except for access'/width restriction.



13. Old Tram road – looking east, from Quay Road



14. Old Tram Road – looking west, towards Quay Road



15. Old Tram Road – looking east



16. Old Tram Road – looking west

Old Tram Road is considered as an unmarked extension to the Mineral Tramway and because it is flat is used regularly by walkers, cyclists and horse-riders.

A designated Quiet Lane does not demand a lower speed limit but the Campaign to Protect Rural England (CPRE) encourage the implementation of 20mph speed limits. Quiet Lanes status could see the removal of non-essential signing and road-markings but it would be necessary to maintain warning and mandatory signs. The designation as a quiet lane does not provide the road with any additional legal protection and does not alter the highways authorities powers or responsibilities.

The term 'Quiet Lane' is more a state of being rather than engineering !! Drivers should proceed to the conditions and accept/appreciate that the highway is being used by many varied user groups - which seems to be the general case at the moment.

Therefore to designate Old Tram Road as a Quiet Lane would make negligible difference, as a 20mph speed limit already applies and vehicle speeds are probably at this, or lower (to be confirmed with speed-readings).

Estimate Construction Costs (including fees) - £5745

5.0 Summary

This Summary should be read in conjunction with the Feasibility Assessment Drawing – EDG0942-F01

Any proposals to be progressed will need to be subject to a formal consultation along with confirmation of funding being available (set aside) for the fees and construction works.

The estimated costs are for each issue as a separate stand-alone scheme. If two or more are combined into a single scheme then the likely costs could be reduced.

The proposal to re-designate Old Tram Road as a 'Quiet Lane' would not have a noticeable effect as the route is already quiet with a minimum of vehicle traffic. Also the provision of a footway on the former A39 is not thought necessary as the width of the carriageway and intervisibility between pedestrians and drivers is unobstructed for the whole length of the road.

The implementation of a 20mph Zone (with associated traffic calming features, etc.) and the provision of a virtual footway to the south-eastern end of Greenbank Road would be considered as suitable complementary schemes (total estimated cost, for construction and fees - £45750).