

## **Introduction of 20mph Zones Strategy**

### **Report by John Blair, Director Corporate Resources**

#### **1 Purpose of Report**

The Midlothian Council Petitions Committee at its meeting of 25 June 2013 were advised of a petition containing 254 signatures from Janet Jerome, 2a Elm Row, Lasswade, in the following terms, viz:-

*“Plea*

*This petition seeks to create an enhanced and safe road environment for the residents of Midlothian's Conservation Village of Lasswade by, creating a "20's Plenty" speed limit on the A768 High Street and its adjacent feeder roads as outlined on the appended map.*

The decision of the meeting was to agree that *“After discussion, Councillor Russell, seconded by Councillor Baxter, moved that the petition be referred to the Director, Corporate Resources with the recommendation that a 20mph speed limit be introduced in Lasswade Village”.*

This report seeks to clarify the options to be considered for Lasswade and in the wider context detail a proposed strategy for the implementation of 20mph zones across the Midlothian Council area.

#### **2 Background**

##### **2.1 20mph Zones in Midlothian and other Local Authority areas:-**

###### **Twenty's Plenty**

In 2001 Midlothian Council took part in a pilot advisory (no traffic calming) 20mph zone trial in conjunction with SCOTS (Society of Chief Officers of Transportation Scotland) and The Scottish Government. The results of these trial zones indicated average speed reductions of 1.2mph. Whilst the trial was hailed as a success due to an average reduction in accidents, it was apparent that speeds crept up through time, the effect of the signs reduced and eventually traffic calming measures were required. The trial was carried out in residential areas only.

## **Schools**

In 2002 Midlothian Council received funding from Scottish Government for 20mph zones with traffic calming around schools and the Council were successful in implementing 20mph zones around most schools.

The Scottish Government awarded further funding, over a three year period to all Councils, which Midlothian Council used to enhance and expand the existing and new 20mph zones and safer routes to school. This included cycle paths, pedestrian crossings, cycle parking etc. In addition at all schools on or near a main route part-time 20mph limits applied apart from Beeslack High School on the A701. This was due to objections being lodged at the time. The objections were based on increased journey times on the Penicuik to Edinburgh Route. Like many A and B class roads in Midlothian, the A701 carries more traffic than the adjacent trunk road and provides a more direct route into Edinburgh city centre.

## **Lugton Brae Temporary 20mph Limit**

As part of the diversion through Lugton Brae while the A6106 is closed due to a landslide, a temporary 20mph speed limit has been imposed. This is a 'signs and lines only' limit, with no additional traffic calming measures. As well as the legally required signs at the start of the limit and upright repeater-signs, there are also speed limit roundel markings at 100m centres along the road, and two speed-activated flashing signs. Speed surveys indicate limited reduction in speeds compared with the previous 30mph limit, with average speeds being around 25mph. This 20mph limit will be removed when the diversion is removed and traffic patterns are restored.

## **Penicuik Town Centre**

Penicuik Town Centre road layout was drastically changed in 2009 by a supermarket being opened on the opposite side of the road from the central shopping area. In addition to this there was a busy bus terminus. As part of the planning process, the developer along with Council officers designed a scheme that would take account of a much increased pedestrian presence, the bus terminal and allow access to the existing carpark and a new carpark for the supermarket. The scheme included three raised zebra crossings, a raised roundabout accessing the car parks and allowing buses to turn and a bus stop lay-by for terminating buses. This is the first and only town centre 20mph zone in Midlothian and was put in place to reflect increased pedestrian activity and traffic calming allowed for the 20mph zone to be implemented and self enforcing. Initially pedestrians were not confident about using the zebra crossings but, as time has passed, the scheme appears to be effective and accepted.

## **2.2 Edinburgh 20mph zone trial**

A map of a proposed trial Edinburgh scheme is shown in appendix A. The Edinburgh trial area involves 20mph signs on entry to streets with repeater signs throughout. No traffic calming is involved. This approach is similar in character to the scheme introduced in Midlothian in 2001. It is important to note that the map shows a network of 30mph streets throughout the zone which are main routes. When travelling either North/South or East/West through the zone there are several options to remain on a 30mph route. This scheme would effectively be similar to furthering existing Midlothian 20mph limits and zones to include residential streets but not through roads this would not include Lasswade Road or Polton Road.

Results of accident numbers or speeds are not yet available but there has been an article in the Edinburgh Evening News suggesting that Police surveys recorded 40% of drivers ignoring the new 20mph speed limit. The article also features residents campaigning for traffic calming measures.

Edinburgh Council have indicated that the next steps would be to roll out 20mph zones across the city then look at 'shopping streets'. This would include and involve consultation with the public.

## **2.3 Portsmouth Scheme**

Like the Edinburgh City Council scheme, the Portsmouth scheme deals with residential streets, in fact, it only includes streets where measured average speeds are between 20mph and 24mph. Where speeds are less than 20mph, it was decided that a reduced speed limit was not required, where speeds are more than 24mph, it was decided that the street did not support a 20mph limit without other changes. The scheme has been rolled out over the whole city and the criteria fairly transparent.

## **2.4 Designing Streets**

Designing Streets: A Policy Statement for Scotland was published in March 2010 by The Scottish Government. This is a policy document superseding historic road design and replacing it with public realm based design encouraging walking, cycling, children playing and social space. Shared surface and streets designed for 20mph speeds are highly featured. This approach discourages the use of signs and road markings and aims to reduce vehicle speeds by reducing their domination of streetscapes and in fact states a hierarchy where walking is at the top and private vehicles at the bottom. To this end traditional speed limits should not be required in new developments.

## 2.5 Setting Local Speed Limits

The Setting Local Speed Limits Guidance for Local Authorities:  
Enterprise Transport and Lifelong Learning Department Circular1/2006  
published by The Scottish Executive in August 2006

Some quotes from the guidance:-

‘Local speed limits should not be set in isolation, but as part of a package with other measures to manage vehicle speeds’

‘Indeed if a speed limit is set in isolation, or is unrealistically low, it is likely to be ineffective and lead to disrespect for the speed limit. As well as requiring significant and, and avoidable, enforcement costs, this may also result in substantial numbers of drivers continuing to travel at unacceptable speeds, thus increasing the risk of collisions and injuries’

‘The standard speed limit in urban areas is 30mph’

‘Successful 20mph zones and 20mph speed limits should be generally self enforcing’

‘20 mph speed limits are unlikely to be complied with on roads where vehicle speeds are subsequently higher than this.’

A full copy of the publication is available via the following link:  
<http://www.scotland.gov.uk/Publications/2006/08/14134225/0>

### **New English version 2013**

A new version of ‘Setting local Speed Limits’ has recently been published for England. The following paragraph appears on the front summary page. This paragraph appears to be encouraging local authorities to implement 20mph limits and zones.

‘Traffic authorities are asked to keep their speed limits under review with changing circumstances, and to consider the introduction of more 20 mph limits and zones, over time, in urban areas and built-up village streets that are primarily residential, to ensure greater safety for pedestrians and cyclists, using the criteria in Section 6.’

When however you read section 6 as referred to above, the guidance is similar to the existing Scottish version.

‘The standard speed limit in urban areas is 30 mph, which represents a balance between mobility and safety factors. However, for residential streets and other town and city streets with high pedestrian and cyclist movement, local traffic authorities should consider the use of 20 mph schemes.’

A copy of the publication is available via the following link:  
<https://www.gov.uk/government/publications/setting-local-speed-limits>

Both sets of guidance are very similar with the English version encouraging 20mph limits slightly more. An interpretation of this guidance might be that councils are encouraged to introduce 20mph limits or zones in residential areas and shopping streets (or other street with high volumes of pedestrians and cyclists) along with traffic calming if necessary to lower average speeds.

## **2.6 Possible 20mph Implementation Strategies**

A strategy would involve establishing 20mph limits and zones in a sequence that would make sense to drivers. For example if a through-road is made 20mph prior to residential side streets, not only are drivers likely to not run through side streets but 30mph signs would face drivers leaving a main route into a residential cul-de-sac or street, encouraging them to speed up. If 20mph limits are introduced in a strategic order it will be more acceptable to drivers and compliance will rise with the introduction of more schemes in time.

The guidance refers to factors including average speeds, numbers of pedestrians and cyclists and the function of the street.

Since the programme of 20mph around schools has already been implemented in Midlothian, it would seem sensible to start with nursery schools, then residential areas (not covered by schools or through routes), then shopping streets (high streets etc), and move on to through routes, villages etc at a later date when experience has been gained of compliance and further guidance has been issued.

Any strategy will likely consider whether to include traffic calming. Even if the signs only option is taken forward there will be requests for traffic calming in any street where there is non-compliance.

A strategy agreed by Council would reduce the adhoc requests for 20mph speed limits and also provide a clear explanation to, if and when, one may be implemented on any one street.

Whether this strategy involves traffic calming or not, there will be budget implications and a further report would be required detailing the actual costs involved depending on the measures introduced.

To allow council to gauge budget implications, estimated costs have been calculated for an example area, shown in Appendix D. An estimated cost has been calculated for a scheme with signs and lines only and also for a 20mph traffic calmed zone.

20mph speed limit with entry signs and repeater signs	£17,800
20mph traffic calmed Zone (sinusoidal road humps)	£97,000

It is estimated that approximately 50% of Midlothian's residential streets (not through roads) have traffic calming and a 20mph speed limit already. These have been put in place due to their proximity to schools.

## 2.7 Lasswade Village and Polton Road 20mph zones as proposed by Lasswade District Civic Society.

Appendix B details a map submitted as part of the petition highlighting areas that the author considered should be included in a 20mph speed limit. This included Lasswade Village and Polton Road.

### Traffic surveys, speed and volume, accident data

There have been a number of surveys conducted in these areas showing that current speeds are either “low” or “average” in Lasswade Village and along Polton Road for these types of road.

#### 21/03/11 to 28/03/11- near 20 Lasswade Road

Westbound	9922 vehicles	25.8mph average speed	30.0mph 85%ile speed
Eastbound	9968 vehicles	29.4mph average speed	34.3mph 85%ile speed

#### 31/07/12 to 06/08/12- Lasswade High Street South of the bridge

Westbound	9657 vehicles	21.0mph average speed	24.8mph 85%ile speed.
Eastbound	9778 vehicles	24.2mph average speed	28.6mph 85%ile speed.

#### 15/04/13 to 21/04/13- Polton Road at Eskdale Drive

Westbound	2715 vehicles	19.8mph average speed	24.6mph 85%ile speed.
Eastbound	2804 vehicles	20.5mph average speed	25.7mph 85%ile speed.

#### 24/01/12 to 31/01/12- Polton Road East of Cameron Crescent

Westbound	2020 vehicles	29.6mph average speed	36.5mph 85%ile speed.
Eastbound	1797 vehicles	26.2mph average speed	31.6mph 85%ile speed

There were 3 reported injury accidents within the 30mph limit on the A768 through Lasswade in the last 3 years (to end 31/12/2012). All the casualties had slight injuries. The rate of accidents is slightly below the Scottish average for non-trunk, built-up, A-class roads. There were no reported injury accidents on the section of Polton Road outlined in the petition.

The Council has assessed the volume of traffic, speed of traffic and injury accidents in Lasswade village and Polton Road and found none of these to be considered excessive.

As per the issues raised in 2.6 regarding the strategic implementation of 20mph limits and zones, Lasswade Village and/or Polton Road may well be suitable for 20mph limit after residential streets, nurseries etc are treated.

The order in which the streets are treated is important not only to ensure drivers are not exiting a 20mph street onto a 30mph street which may be narrower, residential and more suitable for a 20mph but also so that driver's behaviour alters as more 20mph limits appear and become more accepted.

If the 20mph speed limit was implemented as per requested at the petitions committee (Appendix B), the cost would be in the region of £16,000. This is including entrance signs, exit signs, poles, repeaters and roundels on the road.

## **2.8 Proposed road safety interventions for Lasswade Village**

Polton Road is already traffic calmed and the speeds and reduction of serious injury accidents shows this has been successful.

Although there have been injury traffic accidents at Lasswade Bridge these have been assessed as being caused by other factors not related to road layout. However due to community concerns, some low cost measures have been proposed for the village. Some of these have already been put in place.

Items already in place include; road markings to improve the angle at which vehicles approach the bridge and slow markings. Items planned in the near future include a chevron sign, and a barrier near the bridge. The barrier is proving difficult to design due to congestion of utilities in the road at the location. It is likely that if a barrier is installed it will be non-compliant and will only offer visual protection. The chevron sign will be located when the barrier has been installed.

Should the council deem it necessary, a flashing warning sign could be installed on Elm Row, facing traffic coming into the village, showing a bend and narrowing. This is the direction vehicles were travelling when they have hit the bridge. A flashing sign costs in the region of £4,000.

An alternative would be a warning sign similar to those shown in Appendix C with a recommended 20mph speed. These could be installed on both approaches to the bridge.

## **2.9 Police Enforcement**

The DCR has been advised that the Police Scotland Senior Management are developing a policy decision across Scotland regarding enforcement of 20mph limits.

Historically Lothian and Borders Police did not enforce 20 mph limits. Local police are taking a view that every site which is identified as a 20 mph limit should be selected in terms of risk, and engineered in such a way that it is largely self enforcing, and that this is sustainable.

The ability of the police to regularly enforce 20 mph limits which are not self enforcing will be dependent on other priorities.

### **3 Report Implications**

#### **3.1 Resource**

Costs are indicated for implementing a 20mph speed limit, with and without traffic calming, in an example area, within the body of the report. Costs are also indicated for implementing a 20mph speed limit in Lasswade Village and Polton Road. Should council wish to progress with a 20mph speed limit strategy a further report will detail cost implications.

#### **3.2 Risk**

The risk of putting in place a 20mph limit as proposed at the petitions committee is that a) drivers are speeding up on exiting the zone into streets where speed is potentially more hazardous. b) as this street is less suitable than many others (residential cul-de-sacs) for a 20mph drivers will not comply with this or indeed 20mph limits in other locations. c) requests will be generated for many more limits in other zones with no structured criteria for putting them in place. There are accidents risks and financial risks associated with the above.

#### **3.3 Single Midlothian Plan and Business Transformation**

Themes addressed in this report:

- ☒ Community safety
- ☐ Adult health, care and housing
- ☐ Getting it right for every Midlothian child
- ☐ Improving opportunities in Midlothian
- ☒ Sustainable growth
- ☐ Business transformation and Best Value
- ☐ None of the above

#### **3.4 Impact on Performance and Outcomes**

A strategic plan of putting in place 20mph limits may reduce accidents and hence improve performance on casualty reduction targets. It should also improve the environment for walking and cycling and improve performance in Midlothian of increasing sustainable transport and reducing road traffic.



### **3.5 Adopting a Preventative Approach**

20mph limits are about safe environments for walking and cycling. If behavioural change is achieved by strategically implementing them, road casualties could be prevented.

### **3.6 Involving Communities and Other Stakeholders**

If further reports are required, community and stakeholder consultations will be conducted and included in the report to council.

### **3.7 Ensuring Equalities**

There are no equalities issues associated with this report

### **3.8 Supporting Sustainable Development**

20mph limits are about safe environments for walking and cycling. Walking and cycling are sustainable forms of transport and contribute to this objective.

### **3.9 IT Issues**

There are no IT issues associated with this report.

## **4 Recommendations**

### **Cabinet is recommended to:-**

- a) Agree that Lasswade Village and Polton Road are not subject to a 20mph speed limit until a strategic implementation process has been agreed.
- b) Request that the Director, Corporate Resources bring forward a report detailing a comprehensive strategy for the introduction of 20mph zones across Midlothian.

**2 August 2013**

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### **Background Papers:**

**Appendix A**

**Appendix B**

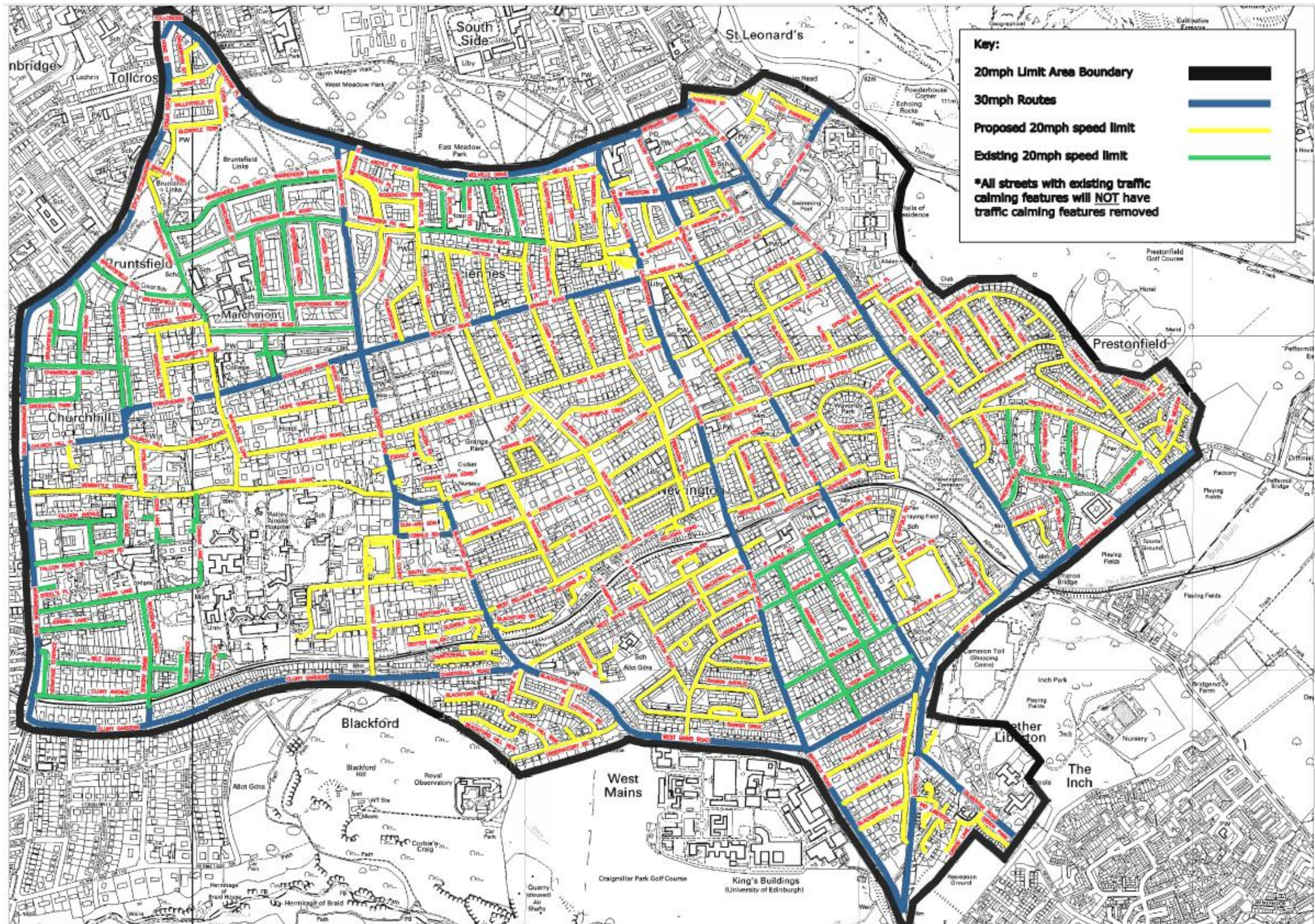
**Appendix C**

**Appendix D**

## Appendix A – Edinburgh 20mph Zone Trial

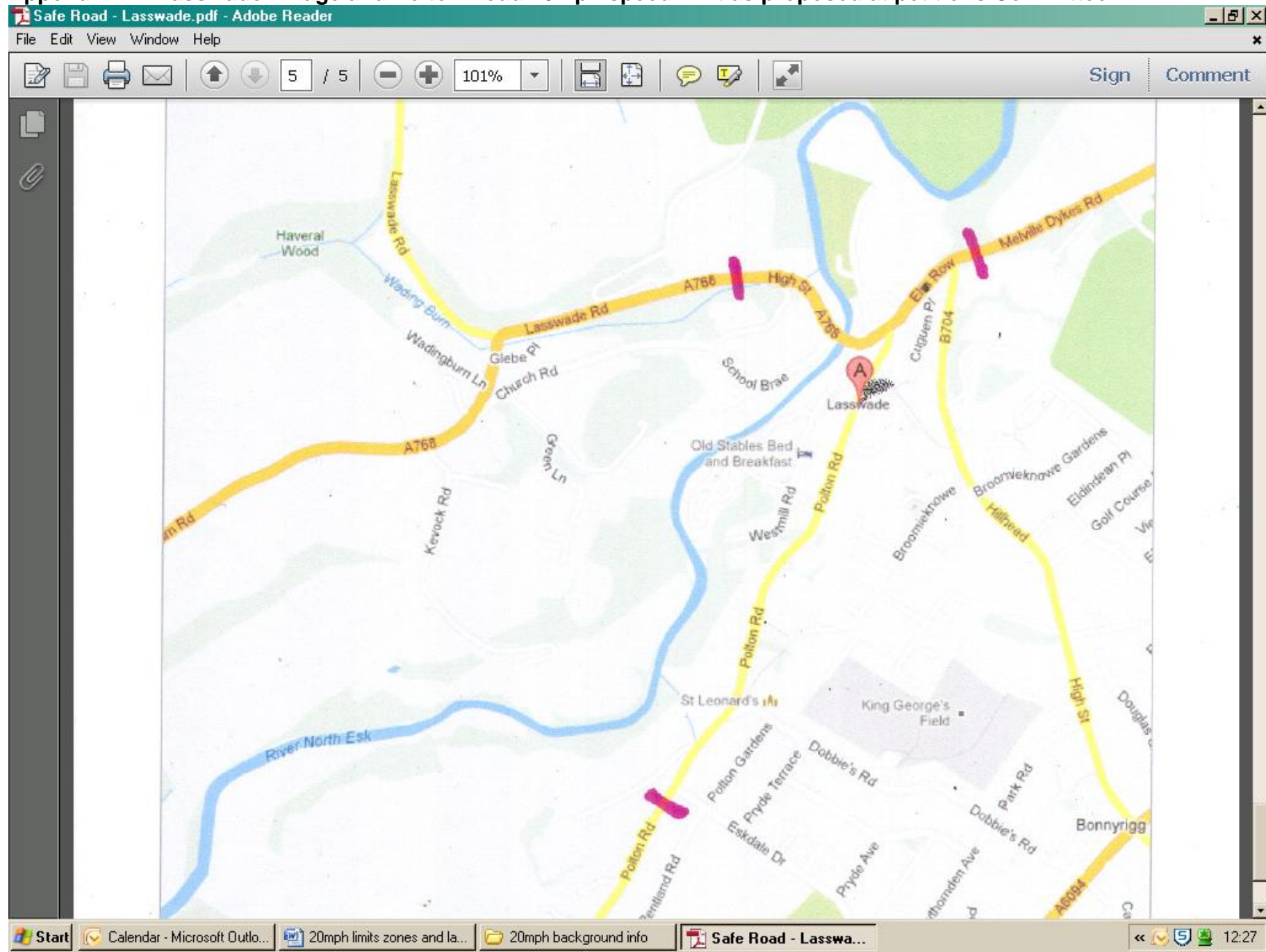
## Annex 2







Appendix B – Lasswade Village and Polton Road 20mph speed limit as proposed at petitions Committee



 Start of 20mph section.

**Appendix C – Example hazard warning signs with advisory maximum speed.**

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**Warning sign with advisory 20mph maximum speed at Newbattle Road**



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**Warning sign with advisory 20mph maximum speed at Lothian Road**



## **Annex 2**

### **Appendix D – Example residential area for cost estimate purposes**



Andrew Dodd's Avenue, Mayfield - Google Maps - Microsoft Internet Explorer provided by Midlothian Council

https://maps.google.co.uk/

File Edit View Favorites Tools Help

★ Favorites ★ Free Hotmail

Andrew Dodd's Avenue, Mayfield - Google Maps

+You Search Images **Maps** Play YouTube News Gmail Drive Calendar More

Google Andrew Dodd's Avenue, Mayfield

SIGN IN

Satellite Traffic

1000 ft  
200 m

Map data ©2013 Google - Edit in Google Map Maker Report a problem

Done

Internet 100%

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16:54



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- ☐ *All resource implications have been addressed. Any financial and HR implications have been approved by the Head of Finance and Human Resources.*
- ☐ *All risk implications have been addressed.*
- ☐ *All other report implications have been addressed.*
- ☐ *My Director has endorsed the report for submission to the Council Secretariat.*

*For Cabinet reports, please advise the Council Secretariat if the report has an education interest. This will allow the report to be located on the Cabinet agenda among the items in which the Religious Representatives are entitled to participate.*

*Likewise, please advise the Council Secretariat if any report for Midlothian Council has an education interest. The Religious Representatives are currently entitled to attend meetings of the Council in a non-voting observer capacity, but with the right to speak (but not vote) on any education matter under consideration, subject always to observing the authority of the Chair.*