

Agenda Item	6.
Report No	SCC/14/21

HIGHLAND COUNCIL

Committee: Sutherland County Committee

Date: 16 August 2021

Report Title: Speed Limit Review Bonar Bridge to Ardgay

Report By: Executive Chief Officer Infrastructure, Environment & Economy

1. Purpose/Executive Summary

- 1.1 The communities of Bonar and Ardgay have requested that the speed limit between the villages be reduced from the current national speed limit to 30mph. This report outlines the assessment of the speed limit on this route and provides recommendations based on current guidance and best practice.

2. Recommendations

2.1 Members are asked to:-

- i. Agree a reduction in the 60mph speed limit to 30mph by extending the Bonar Bridge 30mph speed limit by 270m or thereby generally westwards towards Ardgay; and
- ii. Agree the remainder of the national speed between Bonar Bridge and Ardgay be reduced to 50mph.

3. Implications

- 3.1 **Resource** - The funding and installation of a new speed limit order will be funded from the Sutherland Area Road Revenue Budget.
- 3.2 **Legal** - Speed limits require to be supported by a Road Traffic Regulation Order.
- 3.3 **Community (Equality, Poverty and Rural)** - Lower vehicle speeds aim to reduce the risks for vulnerable road users.

- 3.4 **Climate Change / Carbon Clever** - Reduced vehicle speeds have the aim of increasing active travel choices and thus reducing the number of vehicles, and as a result emissions, on the roads.
- 3.5 **Risk** - Speed limit reductions should be designed to be self-enforcing as a result monitoring will be required after installation to ensure compliance.
- 3.6 **Gaelic** - There are no Gaelic Implications.

4. Background

- 4.1 The communities of Bonar and Ardgay have requested that the speed limit between the villages be reduced from the current national speed limit to 30mph.
- 4.2 Speed limits are set in accordance with the guidance provided in DfT 01/2013 "Setting Local Speed Limits".
- 4.3 Speed limits should be evidence-led and self-explaining and seek to reinforce people's assessment of what is a safe speed to travel. They should encourage self-compliance. Speed limits should be seen by drivers as the maximum rather than a target speed.

5. Analysis

- 5.1 The A836 is a through road with local access function, it is a single carriageway varying in width from 5.5m to 6.5m with its principal function being to convey through traffic.
- 5.2 The current Road traffic Regulation Order applies over a length of 2.4km.
- 5.3 There is 1 junction with the C1136 Ardgay Link Road and 5 accesses serving the Public toilets carpark, Kyle river access, Industrial estate, Hub access and Ardgay Game. All accesses are within 257m or thereby from the termination of the 30mph speed limit leaving Bonar Bridge travelling south towards Ardgay.
- 5.4 The analysis of the road under the Design Manual for Roads and Bridges assesses the design speed of the road geometry between the current 30mph limits to be within the current 100kph (62mph) speed limit design.
- 5.5 The mean average speed of vehicles using this road is 49mph westbound and 50mph eastbound which is within the acceptable range for a 60mph limit. The most up to date speed analysis figures are attached in **Appendix A** and reflect the current speeds of traffic during the NC500 season.
- 5.6 The mean average speed would indicate that the current road geometry and density of development along with other visual effects is insufficient to justify a 30mph limit.
- 5.7 The mean average speeds do not sit within the range where a reduction of the speed limit from 60mph to 30mph would be sustainable or achievable without significant engineering cost. This would be required to change the geometry of the road to ensure the new 30 mph speed limit is self-enforcing.

5.8 An analysis of the factors to be considered when analysing a proposed reduction of speed limit is attached in **Appendix B**. This shows overwhelmingly that a blanket reduction in the speed limit from 60 mph to 30 mph on this section of road is not supported by the analysis.

5.9 While the guidelines do not support a blanket lowering of the speed limit to 30mph throughout the length of the current 60mph limit it does make allowance for local mitigation measures to ensure pedestrian safety and to take into account local user opinion.

6. Conclusion

6.1 Due to the collection of amenities and businesses on the north end of the route an extension to the Bonar Bridge 30mph limit of 270m or thereby south would be appropriate with a suitably enhanced gateway. Appendix C

6.2 Given this section is a link route between the villages of Bonar Bridge and Ardgay with public support for a reduced limit to improve the perception of safety on this route a reduced speed limit of 50mph would be possible. This limit is taking into account the current mean average speeds of 49mph along this route which suggests the 50mph speed limit would be self-enforcing without any requirement to reengineers the route.

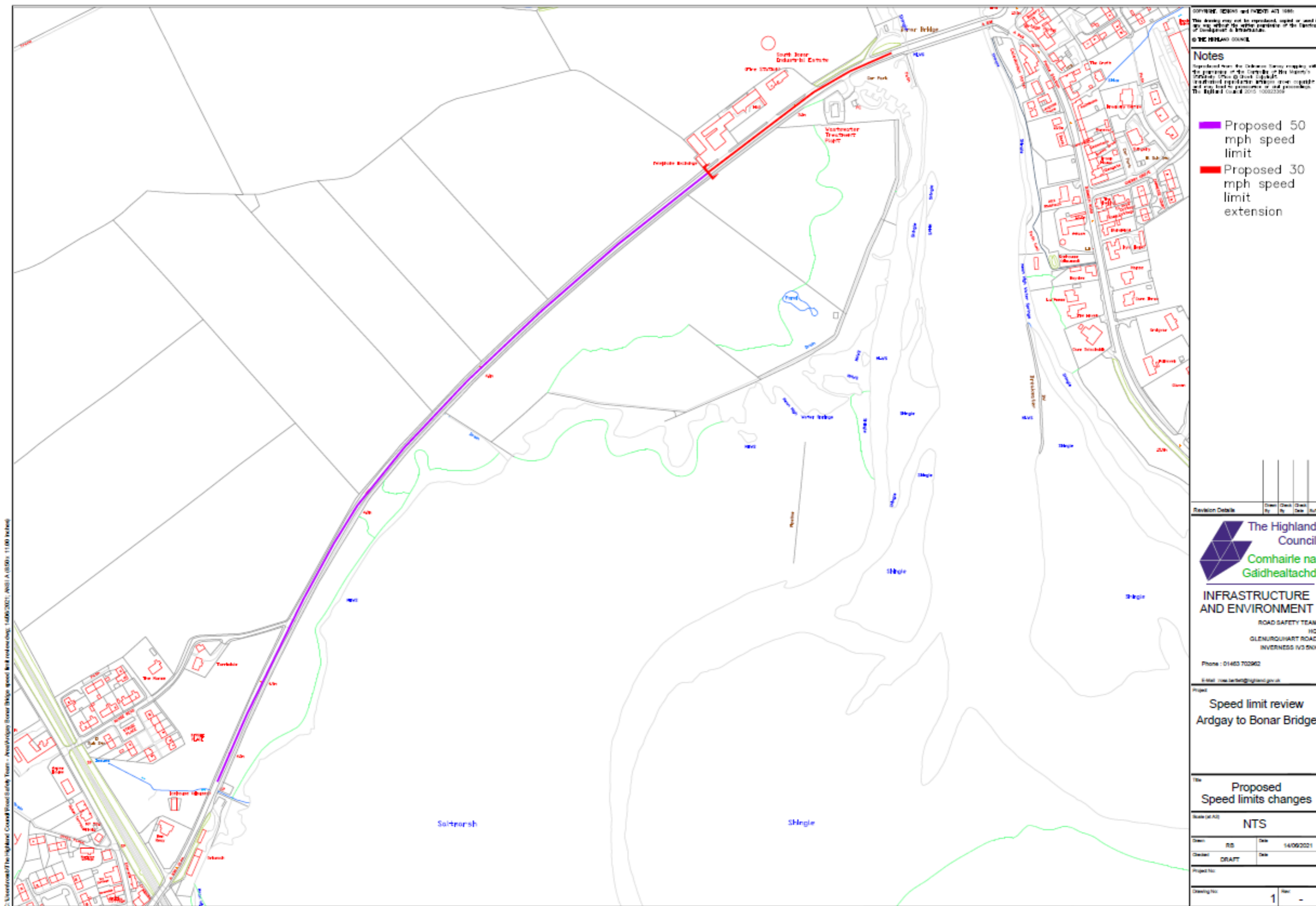
Designation: Executive Chief Officer Infrastructure, Environment & Economy

Date: 27 July 2021

Author: Joanne Sutherland, Road Operations Manager (Caithness & Sutherland)

Appendix B

Location					
A836 Bonar Bridge - Ardgay					
Route					
A836					
Speed limits are set in accordance with the guidance provided in DfT 01/2013 "Setting Local Speed Limits"					
Issue	Comment	Determination on Specific Issues	Conformance with Guidelines		
Road Function	A836 Through road with local access function.	Is not suitable for a reduction of speed limit to 30mph	None	Partial	Full
Road Geometry	Calculated using CD 109 Highway Link Design in the Design Manual for Roads and Bridges produces a design speed for the stretch of road within the national speed limit of 62mph or 100kph.		None		
Design speed	Design speed calculated at 100A. Suffixes A and / or B indicate the higher and lower categories of each band. This calculated speed translates to 62mph or 100kph.	Is not suitable for a reduction of speed limit to 30mph	None		
Public road junctions:	1 no. C1136 Ardgay Link Road	Is not suitable for a reduction of speed limit to 30mph	None		
Bends	1 no. bend with a horizontal curvature of 1494.7mR or thereby (Information gathered from ACAD & OS mapping) with a super elevation of 2.3%. CD 109 Highway Link Design - Table 2.10 Design speed related parameters stipulates that a road with a design speed of 100kph and a superelevation of 2.5% requires a horizontal curvature of 1440m.	Is not suitable for a reduction of speed limit to 30mph	None		
Accesses:	5 no. Public toilets carpark / Kyle river access / Industrial estate / Hub access / Ardgay Game access. All accesses within 257m or thereby from the termination of the 30mph limit leaving Bonar Bridge towards Ardgay.	Is not suitable for a reduction of speed limit to 30mph	None		
Road Environment					
Rural	No houses front the A836 in the National Speed limit section between Bonar Bridge - Ardgay. Industrial / public premises are present in this section, however these are built back from the edge of the road with open land in front of them. This section of road is currently subject to a National Speed limit and is illuminated by street lamps, while the 30mph signs into both villages are illuminated also.	Is not suitable for a reduction of speed limit to 30mph	None		
Development					
No houses front the A836	With reference to TAL 1/04 this section of the A836 between Bonar Bridge - Ardgay does not fall into the 'village' category and a therefore 30mph speed limit is not appropriate.	Does not meet 'village' criteria	None		
Traffic Composition					
Traffic Survey June 2020	The mean speed is 49mph which is below the posted National Speed limit.	Could be considered for a 50 mph, as mean speed is below 50 so lower limit does not interfere with traffic flow.		Partial	
Accident and Casualty Savings					
	Recorded accidents Between 05/01/2016 - 04/01/2021 there has been 2 RTC's: 1x slight in June 2017 - not speed related. 1x fatal in December 2019 - not speed related.	The A836 has been given a Road Assessment Programme Risk Rating of a Low - medium risk road. This information is from the Road Safety Foundation.			
Traffic Flows and Emissions					
Traffic Survey June 2020	5 day average = 1583 vehicles (combined for both directions) No noticeable effect on traffic flows will occur should a speed limit be imposed.	Speed limit would see no change to traffic flows. Speed limit would see slight reduction in CO2 emissions.		Partial	
Journey Times for Motor Vehicles					
	A reduction to 30mph over 1202.8m or thereby (length of National Speed limit) will result in an additional 20.1 seconds to the journey time.	Speed limit reduction will increase journey time by around 20 seconds.	None		
Journey Time Reliability					
	No change in journey time reliability would be expected	No impact anticipated.			
Environmental Impact					
	A reduction in speed would see a decrease in CO2 emissions, although this is considered to be minimal. There would be a cost for the manufacture and erection of new signs but again this is thought to be minimal. Additional signage would create a minimal visual impact.	A reduction in the speed limit would result in a slight benefit. New infrastructure would create slight visual pollution.			
Public Anxiety					
	Residents of Bonar Bridge & Ardgay have expressed levels of anxiety and a speed limit would help to allay their concerns.	A reduced speed limit would help alleviate concerns.		Partial	
Severance by fast moving traffic					
	N/A	Does not justify a speed limit			
Conditions/Facilities for Vulnerable Road Users					
	Illuminated, surfaced footpath runs alongside the South - West bound carriageway.	Speed limit would not improve facilities for vulnerable road users but would improve levels of anxiety in the community.	None		
Cost of Engineering Works					
	Introduction of 30mph limit - ?? Maintain existing limit £0	New speed limit signs and repeater signs and traffic order	None		
Visual Impact of the Works					
	Slight increase in visual pollution from additional signage.	Not a significant impact.			
Enforcement					
	Current speeds adhere to the 60mph limit. Lowering the speed limit to 30mph would require significant enforcement, given the current average speed of 49mph.	National Speed limit - little to no enforcement required. 30mph will require significant enforcement by Police Scotland.	None		



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 The Highland Council 2019 10002234

- █ Proposed 50 mph speed limit
- █ Proposed 30 mph speed limit extension

Revision Details			
Drawn By	Check By	Drawn Date	Check Date

The Highland Council
Comhairle na Gàidhealtachd

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Project
**Speed limit review
 Ardgay to Bonar Bridge**

Title
**Proposed
 Speed limits changes**

Scale (if A3)		NTS	
Drawn	RD	Date	14/06/2021
Checked	DRAFT	Date	
Project No.			
Drawing No.	1	Rev.	-

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