



**North Yorkshire County Council  
Skipton and Ripon Constituency Committee – 6 September 2019  
A629 Kildwick Roundabout**

**1.0 Purpose of the Report**

- 1.1 The purpose of this report is to apprise the Committee of the results and findings of traffic surveys carried out at the A629 roundabout, Kildwick in response to concerns raised about traffic congestion caused by the rail level crossing.

**2.0 Background**

- 2.1 As Members will be aware there have been long standing concerns about the impact on traffic flow on the A629 and surrounding highway network in result of the time and frequency the level crossing barriers are in operation.
- 2.2 Following a request from County Councillor Barrett investigations have been undertaken to determine what measures could be taken to improve the situation.

**3.0 Study**

- 3.1 In order make an initial assessment it was necessary to undertake traffic surveys on the A629 roundabout and adjoining road network to understand exactly what impact is being caused to traffic flows when the level crossing is in operation.
- 3.2 Junction turning count and queue length surveys were arranged and carried out in March 2019.

**4.0 Results**

- 4.1 Having analysed the results of the recent junction turning count and queue length surveys it has been possible to determine the following key outcomes, please see attached plan for reference;
- The level crossing barriers are activated throughout the day affecting the southbound lane of Skipton Road (A6068). This queuing traffic extends to reach the A629 roundabout on a regular basis with the greatest queue lengths exhibited during the afternoon peak hours between 1600hrs and 1800hrs.
  - The results indicated that during the survey period the queue doesn't appear to affect the flow on the A629 for the likely reason motorists intending to exit left onto Skipton Road and then right onto Keighley Road, take the alternative route via B6172 on seeing the extent of the queue. It is however understood that local observations are to the contrary of this which is accepted.
  - Traffic entering Riparian Way from the A629/Skipton Road is at its highest during the morning peak at 40% of the link flow. Interestingly, when the queues are at their most significant in the afternoon peak only 10% of vehicles are turning left into Riparian Way. Very few motorists turn right at the roundabout to use the western exit to that part of the industrial estate.

- The results of the survey suggest a third lane between the A629 and Riparian Way could reduce the queue lengths slightly but not significantly. During the afternoon peak (two hour period) there is likely to be little change on the basis that 90% of traffic entering Skipton Road travels straight ahead at the roundabout and through the level crossing.
- Any reduction in queue length would likely be replaced by the level of demand with the minor benefit realised at the B6172 and Keighley Road junction.
- Although widening the link between the A629 and Riparian way could provide some assistance, it is likely that the cost of such a scheme would outweigh the benefit. Rather than introduce an additional lane it may be better to improve the junction access onto Keighley Road from the B6172 which could result in fewer motorists using A6068 Skipton Road to access Keighley Road. This could reduce congestion and possibly improve air quality in the area.

## 5.0 Conclusion

- 5.1 The left turn demand from for the industrial estate is at its greatest when queuing is at its lowest and conversely, has least demand at the busiest times. The construction of a third lane on Skipton Road between the A629 and Riparian Way is roughly calculated at being in the region of £250k (this could increase significantly should there be statutory undertakers apparatus in the verge) and unlikely to achieve an acceptable Benefit Cost Ratio.

## 6.0 Next Steps

- 6.1 It is understood through communications with Network Rail that there are potential time savings to be made reducing the time the barriers are in operation. At this stage such work requires detailed analysis and traffic modelling to evaluate the actual benefit to traffic flow and the financial cost of realising any of the potential time saving. Officers intend to explore this further with colleagues from Network Rail and provide members with an update in due course.

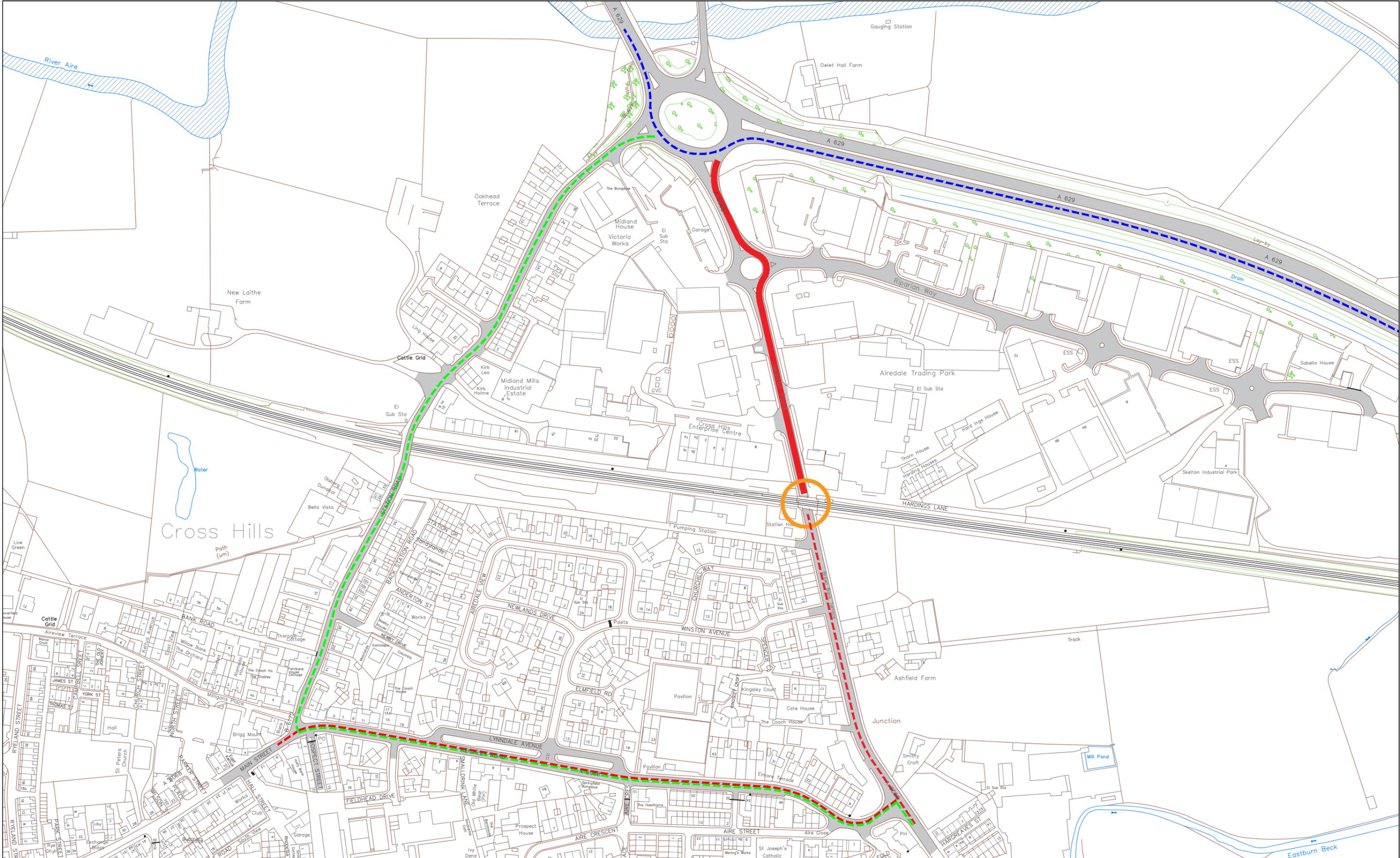
## 7.0 Recommendation

- 7.1 It is recommended that further monitoring is carried out and potential level crossing 'down time' saving opportunities are explored with Network Rail.

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**Notes:**

- MAXIMUM QUEUE LENGTH ON SKIPTON ROAD A6068 – 321 METRES
- ROUTE AFFECTED BY LEVEL CROSSING
- ALTERNATIVE ROUTE VIA STATION ROAD B6172 KEIGHLEY ROAD
- A629 TRAFFIC FLOW
- LEVEL CROSSING

This drawing is based upon Ordnance Survey map information with the permission of the controller, H.M. Stationary Office.  
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AREA NO. 5	 North Yorkshire County Council Business & Environmental Services Corporate Director: David Bowe
Rev. -	