

## REPORT

To: Bellshill LOCAL AREA PARTNERSHIP		Subject: FARMGATE SQUARE ROUNDAABOUT, BELLSHILL – ABNORMAL LOADS
From: Head of Roads and Transportation		
Date: 25 October 2012	Ref: <u>GM</u>	

## 1. Purpose of Report

- 1.1 The purpose of this report is to advise on amendments to the Farmgate Square Roundabout works to accommodate abnormal loads.

## 2. Background

- 2.1 The Farmgate Square / Hamilton Road East Roundabout forms part of the works contained within Option 8 of the Bellshill Town Centre Action Plan as approved by the Planning & Environment Committee in January 2002. The roundabout is required to improve traffic flow and safety on Hamilton Road, Bellshill from the junction of the A725 towards the town centre. The roundabout was designed by ID Consultants, and they were supervised by the Planning Service. The design was approved by the roads service in accordance with the Design Manual for Roads and Bridges (DMRB) - a national design standard. This standard accommodates vehicles of dimensions within the Construction Use Regulations (2.9m overall width, 18.3m rigid length or 44,000kgs gross weight).
- 2.2 Planning undertook local public consultation in September 2011. This included an advert in the Bellshill Speaker, letters to 100 local residents, and letters to the local Police, Fire Service and other local partners and local members. Further publicity took place in February 2012 (approx 100 letters delivered to local residents, through website, and an article in Bellshill Speaker on 9<sup>th</sup> February) setting out the timetable for the proposed works. It may be noted that the local consultation letters did not go to M&D Leisure who were out with the "local" consultation area.
- 2.3 Works began on site 13 February 2012. M&D Leisure first contacted the council on 15 May 2012 expressing concern that their large vehicles could not drive through the roundabout. At that time the roundabout central island was constructed, kerbing was completed and the surface round the roundabout was being laid. Planning wrote to M&D's on 24 May advising the roundabout was designed to the DMRB and therefore was able to accommodate normal large vehicles and further advising that abnormal loads should be notified to the roads authority.
- 2.4 Initially the roads service suspected that heavy vehicles were affected by the temporary traffic management coning and this, along with the as-built roundabout dimensions and design, was checked and found to be compliant with design codes.
- 2.5 The council's abnormal loads records were examined. This involved opening 3000 emails received over the last twelve months of abnormal load notifications, of which it was established that 6 travelled through Farmgate Square and 3 involved moving the 8 axle vehicle that was later used to determine the revisions to the roundabout. The computer design was re-run for abnormal loads and this showed that the abnormal loads contained in the computer UK design data could drive through the roundabout.

- 2.6 A site meeting with M&D's was organised on 12 June 2012 and this established that the largest abnormal load ( 8 axle load) took up significantly more road space than the standard UK vehicle and the council were advised that this vehicle was one of two of its kind in Europe. The service was also advised that there were other abnormal loads that although not as large, could also not pass the roundabout. It was agreed to undertake a trial drive through to see if the 8 axle vehicle could pass by removing street furniture and mounting the footways – this is an accepted practice in moving abnormal loads. The vehicle was due back at the yard on the 13 June and the trial which took place later that evening showed that the only way to accommodate the vehicle was by lowering the central island that had been constructed back in early May. Further examination by roads staff established that this 8 axle vehicle is not included in the UK abnormal load computer design data tables. There were 3 abnormal load notifications received for 12 June but these did not include the 8 axle vehicle which was last notified as moving on 29 September 2011.
- 2.7 The Community Council representative was informed of the required amendments and had no objections. A report was submitted to the Bellshill Local Area Partnership on 16 August advising that the works to amend the roundabout were anticipated to be carried out at the earliest time possible during the current financial year. The works to lower the central island commenced on 20 August after the completion of the roundabout contract utilising the "Carriageway Reconstruction South Area Contract 2012/13".

### **3 Considerations**

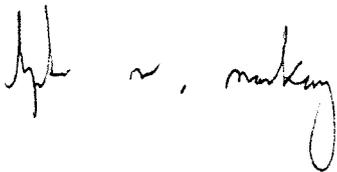
- 3.1 Alternative routes were considered as an option however these required a diversion round Bellshill Town centre passing Mossend and Holy Family primary schools or driving through Motherwell town centre. Although these alternatives were being used during construction of the roundabout, the roads service decided it was better, in the long term, to accommodate vehicles through the roundabout in the interests of maintaining road safety.
- 3.2 The option of stopping the roundabout contract and later amending it was considered but not progressed, due to this option not representing best value. In order to carry out the works required to accommodate the abnormal load at as low a cost as possible, it was decided to complete the roundabout contract and undertake remedial works using a separate contract. At the time of M&D's first approach, the roundabout centre island was already constructed and as it was only this central island that had to be lowered to accommodate the abnormal loads, there was no reason to delay or suspend completion of the roundabout. Adding additional works to the roundabout contract would have caused further delay (the contract was already running late). This would have resulted in delay and disruption costs, in addition to the works costs, and this would not represent good value.
- 3.3 Abnormal loads can be routed on any road and these loads are checked by the roads service structures team with a view to primarily checking bridge weight limits and clearances. In future procedures will be put in place to require the designer of roundabouts to consult with the structures team to ascertain regular abnormal routes. It is also proposed that the location and routes to local businesses that regularly move abnormal loads should be plotted onto a map based record in preference to having to examine the 3000 notifications received each year. Local businesses will then be asked to ensure robust notification of all movements. If the information on the abnormal load notification sheet is not adequate to undertake a design, the designer will also require to contact the operator of the vehicle to determine the size and turning circles. A letter will be issued to M& D's to clarify that all movements are notified and to obtain and check vehicle dimensions to allow the roads service to better manage the assessment of movement notifications. In the case of Farmgate Square, it should be noted that even if this had taken place before the construction it would still have not been possible to accurately design the roundabout as there are only two vehicles of this type in Europe and there is no computer design template for this vehicle. This process included checks on world wide templates. In order to pre-determine the path of this vehicle a site trial during construction would be required, as took place on 13 June. The service has contacted the design software company to ask for development of a design facility that will allow designers to input additional vehicle templates.

#### **4 Financial**

- 4.1 The roundabout construction costs (including Public Utility works and professional fees) was £413,755. The cost of the works to accommodate the abnormal loads was £59,347

#### **5 Recommendation**

- 5.1 It is recommended that the roads service amends procedures to inform the designer of regular abnormal load movements, contacts the abnormal vehicle operators to check and obtain further vehicle information in order to allow the service to better manage the assessment of abnormal load movements and contacts the roundabout software company to request the introduction of a facility for designers to input additional vehicle templates.

A handwritten signature in black ink, appearing to read 'G. Mackay'.

**GRAHAM MACKAY  
HEAD OF ROADS AND TRANSPORTATION**

Local Government Access to Information Act: for further information about this report, please contact Graham Mackay on 01236632652.