The City of Bradford Metropolitan District Council (A650 Hard Ings Road Improvement, Keighley) (Side Roads) Order 2017

-and-

The City of Bradford Metropolitan District Council (A650 Hard Ings Road Improvement Scheme, Keighley)
Compulsory Purchase Order 2017

THE HIGHWAYS ACT 1980

-and-

THE ACQUISITION OF LAND ACT 1981

THE HIGHWAYS (INQUIRIES PROCEDURE) RULES 1994
COMPULSORY PURCHASE (INQUIRIES PROCEDURE) RULES 2007

National Transport Casework Team (REFERENCE: NATTRAN/YH/LAO/130)

In the matter of

a highway improvement scheme involving highway alterations to facilitate and widen the A650 Hard Ings Road, Keighley, from its junction with the A629 Beechcliffe Roundabout, generally eastwards to a point 75 metres west of its junction with Bradford Road, Roundabout, Keighley in the County of West Yorkshire

Supplemental Rebuttal Proof of Evidence

of:

RICHARD BRUCE B.Eng (Hons)., C.Eng., MICE, MCIHT PRINCIPAL ENGINEER HIGHWAY SERVICES CITY OF BRADFORD METROPOLITAN DISTRICT COUNCIL

by way of rebuttal to further representations and objection by Mr Tariq Ghafoor on behalf of The City of Bradford Metropolitan District Council

to

Local Public Inquiry – 30th January 2018

CONTENTS

- 1. Personal details
- 2. Scope of evidence
- 3. Compulsory Purchase Order objections
- 4. Conclusion
- 5. Declaration

1 PERSONAL DETAILS

- My name is Richard Bruce a Principal Engineer within the City of Bradford Metropolitan District Council Highway Services whose address is Britannia House, Hall Ings, Bradford BD1 1HX. My evidence is given on behalf of the acquiring Authority.
- 1.2 I graduated in 1978 with a B.Eng (Hons) degree in Civil Engineering. I am a Chartered Engineer (C.Eng) and a member of the Institution of Civil Engineers (MICE) and the Chartered Institution of Highways and Transportation (MCIHT). I have 39 years experience in the development, design and delivery of highway engineering projects.
- 1.3 I am a Principal Engineer within the Council's Highways Service and project manager for the Hard Ings Road Improvement Scheme.

2 SCOPE OF EVIDENCE

2.1 This Rebuttal Proof of Evidence has been prepared in response to an additional objection submitted by Mr Tariq Ghafoor, Hard Ings Motor Company, 1st December 2017. A copy of Mr Ghafoor's supplemental grounds of objection (Objections by Mr Tariq Ghafoor) is included in Appendix 1. Land is required from the Hard Ings Motor Company site for the highway widening and works will include the reconfiguring of private accesses / egresses, regrade the forecourt and modify the boundary treatment.

3 COMPULSORY PURCHASE ORDER OBJECTIONS

- 3.1 An additional objection has been received on 1st December from Mr Tariq Ghafoor trading as "Hard Ings Motor Company", situate off Hard Ings Road, Keighley, West Yorkshire, submitted by Mr Tariq Ghafoor. The objection relates to the future use of the site, the compensation offered and the effect of the scheme on traffic delays and congestion.
- 3.2 The Council has considered the letters of objection and remains satisfied as to the justification of the Orders and the extent of the Order Land.

Background to Objections

3.3 The background to Mr Ghafoor's objection is described in Appendix 1, (Objections by Mr Tariq Ghafoor), paragraphs 2.2 and 2.3.

3.4 The draft site access plans (included in Appendix 2) forwarded to Gately Hamer, 6th December 2016, indicate a new widened entrance at the eastern end of the frontage (this locates it furthest away from the proposed signalised junction at Lawkholme Lane / pedestrian crossing located near the pedestrian exit to Keighley Cougars, to prevent potential conflicts in this locality). To allow a right turn into the site, it was also proposed to shorten the extent of the central reserve, terminating immediately to the west of the proposed entrance to the site. Incorporation into the preferred scheme is subject to the ongoing negotiations.

Objection No. 1 – Effect on the highway improvement scheme proposals on the site

3.5 Objection No. 1 is considered in Kate Okell's supplemental rebuttal proof, in paragraphs 4.5 to 4.15.

Objection No. 2 - Traffic Restrictions To and From the Site

- 3.6 Objection No. 2 is described in Appendix 1, (Objections by Mr Tariq Ghafoor), points 3.2.1, 3.2.2 and 3.2.5 and addressed in paragraphs 3.7 to 3.11 below. This objection is also considered in Kate Okell's supplemental rebuttal proof, in paragraphs 4.16 to 4.22.
- 3.7 At present there is only one vehicle accessible entrance located to the eastern side of the site. The other entrance is currently inaccessible to the public via the installation of hoop barriers.

- 3.8 The draft site access plans (included in Appendix 2) forwarded to Gately Hamer, 6th December 2016, indicate a new widened entrance at the eastern end of the frontage (this locates it furthest away from the proposed signalised junction at Lawkholme Lane / pedestrian crossing located near the pedestrian exit to Keighley Cougars to prevent potential conflicts in this locality). To allow a right turn into the site, it is proposed to shorten the extent of the central reserve, terminating immediately to the west of the proposed entrance to the site.
- 3.9 As indicated on this plan, a dedicated right turn lane into the site will not be provided. The provision of a right turn lane would require more land take, in the order of 3.0m, and would not eradicate a potential conflict between a vehicle turning right into the site at the same time another vehicle undertakes a right turn out of the site. With the road widening scheme, the proposed two lanes of traffic will permit a vehicle to wait to turn right into the site in the offside lane, whilst ahead traffic will use the nearside lane to pass or wait behind the stationary vehicle until safe to move into the left lane at busier times of the day, a scenario on many busy roads.
- 3.10 In the present scenario, right turns out of the site are difficult due to free flowing traffic outside of peak hours. At peak times, queuing traffic will on occasions leave a gap for a vehicle to turn right in / out of the car park. In the proposed scheme, the traffic signals at Beechcliffe roundabout, Lawkholme Lane and Bradford Road will be linked with each other. This gives greater

control over traffic flows, creating a platoon of moving vehicles and providing gaps in the traffic flow for vehicles to exit the site.

3.11 However, it is easier to undertake a right turn into the forecourt crossing two lanes of traffic compared with turning right out of the site, negotiating potentially 4 lanes of traffic. Right turns out of the site would not be permitted and enforced via signing and lining. This will prevent a potential conflict with a vehicle turning right into the forecourt at the same time a vehicle turns right out of the site. Vehicles exiting the site and intending to travel westwards will need to use Bradford Road roundabout. As the Objector states in his paragraph 3.2.5, he is not anticipating a high number of right turning vehicles leaving the site.

Objection No.3- Increasing the Capacity of Hard Ings Road

3.12 Objection No. 3 is described in Appendix 1 (Objections by Mr Tariq Ghafoor), points 3.3.1, 3.3.3 and 3.3.4, and addressed in section 3 of Andrew Bradshaw's supplemental rebuttal proof.

Objection No. 4- Traffic Growth Forecasts

3.13 Objection No. 4 is described in Appendix 1 (Objections by Mr Tariq Ghafoor), points 3.4.1 and 3.4.2, and addressed in section 4 of Andrew Bradshaw's supplemental rebuttal proof.

Objection No. 5- Trip Redistribution

3.14 Objection No. 5 is described in Appendix 1 (Objections by Mr Tariq Ghafoor),

paragraphs 3.5.1, 3.5.2, 3.5.3, 3.5.4, 3.5.5, 3 5.6, 3.5.7, 3.5.8 and 3.5.9.

With regard to the suggestion made in paragraphs 3.5.1, 3.5.2, 3.5.3, we have no record of a request to explore this option prior to receipt of Mr Ghafoor's supplemental grounds of objection (Objections by Mr Tariq Ghafoor).

- 3.15 With regard to paragraph 3.5.4, two lane exits are provided from Beechcliffe roundabout and along the full length of Hard Ings Road, to avoid two to one lane merges at any point and queues blocking back through junctions from these merges.
- 3.16 With regard to paragraph 3.5.5, to provide one lane eastbound plus a hardstrip to allow vehicles to pass a broken down vehicle, would require a similar footprint to two lanes eastbound as proposed, with possibly a small width saving of 1.5m.
- 3.17 With regard to paragraph 3.5.6, the scheme has not been designed / developed to meet an existing cycling demand, but to encourage cycle usage and improve connections to other cycle routes in the area, as discussed in the email from Kate Okell, 23rd November 2017 (included in Appendix 3).
- 3.18 With regard to paragraph 3.5.9, Royd Ings Avenue is built as an industrial standard access road with corresponding link and junction design standards, servicing a range of businesses (manufacturing, warehousing and distribution) and a household waste site, with many direct accesses. These

types of use require access for mainly HGV's with the road width and waiting restrictions / keep clear markings helping to provide unobstructed access and manoeuvring space. Royd Ings Avenue is also part of a wider network cycle route. If this route was to be designated a parallel major route, this would impact the current cycle facility, with an off carriageway solution necessary, similar to the proposals on Hard Ings Road.

- It is likely that both Royd Way and Royd Ings Avenue would need full re-3.19 construction of the carriageway to accommodate the large increase in vehicle flows. Major junction alterations would also be necessary at Royd Way / Hard Ings Road and either Royd Ings Avenue / Alston Road or Royd Ings Avenue / Bradford Road (depending on the route to Bradford Road roundabout). The existing priority junctions at Royd Way / Royd Ings Avenue and Royd Ings Avenue / Alston Road would need improving to UAP3 standards and reprioritising as the main through route. This would require significant land take in the vicinity of these junctions to allow larger vehicles to negotiate these 90 degree bends at higher speeds than those at a priority junction where vehicles are expecting to stop / slow down. The existing Bradford Road roundabout would also need significant junction alterations, i.e. replacement of existing signalled roundabout with a larger more complex signalised junction, possibly involving additional land take, to accommodate the reassigned traffic flows on Alston Road.
- 3.20 There are many businesses located off Royd Ings Avenue, Royd Way and Hard Ings Road who would be significantly affected in terms of access and

through the need to acquire land and property. The primary objective of the West Yorkshire Plus Transport Fund is to: 'Increase employment and productivity by completion of transport schemes across West Yorkshire by improving connectivity' and therefore, ensuring the continued operation of local businesses is an essential part of the Scheme. Considering the high potential scheme cost, this alternative option is discounted in cost / benefit terms.

Objection No. 6- Toucan Crossing Facility

- 3.21 Objection No. 6 is described in Appendix 1 (Objections by Mr Tariq Ghafoor) paragraphs 3.6.1, 3.6.2, 3.6.3, 3.6.4, 3.6.6, 3.6.7, 3.6.8 and 3.6.9.
- 3.22 With regard to point 3.6.1, the considerations for a footbridge / subway have been forwarded to Mr Ghafoor in an email from Kate Okell, 23rd November 2017 (included in Appendix 3).
- 3.23 Consideration is given to the provision of either a subway or a pedestrian bridge where stopping traffic is not an option and where the number of users justify the costs.
- 3.24 Pedestrian overpasses over highways are expensive, especially when long ramps for wheelchair users are required. Without ramps, people with mobility issues will not be able to use the structure. One significant barrier to the use of a pedestrian bridge is the distance added to the pedestrian/bicyclist's route. Because of the need to get up above cars and HGV's, straight or spiral

ramps are typically used that will be very long to achieve the necessary ramp gradients for wheelchair users. Most pedestrians tend to view the extra distance as a burden that will cause too much delay to them with the additional effort to climb up the bridge and go over it, and instead will cross at grade at the nearest convenient location sometimes jaywalking to avoid the obstacle of the bridge. However, there may be of benefit to cyclists who may generally use them to avoid having to stop and wait for a signal to cross.

- 3.25 Throughout the Bradford district, subways are being removed and replaced with surface crossings where it is feasible to do so. Similar to footbridges, subways can cause pedestrian detours and lengthen journeys on foot due to the length of ramps necessary to be accessible to disabled people. The design of subways removes any natural surveillance which can act as a precursor to crime problems or fear of crime. Both outcomes can in turn reduce the number of journeys on foot. Subways provide a point of shelter which can result in anti-social and / or criminal behaviour, as well as a point for collecting wind borne rubbish thus making them unattractive to use.
- 3.26 There is also the additional land take to take into consideration for the provision of the installation of the ramps / steps to either a footbridge or a subway, which would have to be accommodated within a significantly widened footway on both sides of Hard Ings Road, probably in the region of an additional 6.0 metres adjacent to the extent of the ramp / steps structure. However, some land take would be saved by providing a reduced central island to accommodate traffic signals only and not a pedestrian refuge, in the

region of approximately 1.0m.

- 3.27 Taking into consideration the above, both a pedestrian footbridge and subway options have been discounted at the Hard Ings Road / Lawkholme Lane junction. Instead, choosing to incorporate an at grade pedestrian crossing facility at the signalised junction designed to aid turning vehicles at this junction.
- 3.28 With regard to point 3.6.3, Mr Ghafoor has been provided with the September 2017 pedestrian survey data, on 6th December 2017, via Kate Okell (included as Appendix 4).
- 3.29 A pedestrian survey was undertaken throughout the length of Hard Ings Road in 2014 (to input into the traffic model) indicates a total of 40 pedestrians cross Hard Ings Road between 07.00-10.00 and 88 cross the road between 16.00 19.00 on a typical weekday. Although, the number of pedestrians crossing Hard Ings Road is relatively low, for the reasons given above, it is advantageous to incorporate an at grade pedestrian crossing, since we are providing a signalised junction anyway at this location, and taking into consideration we are removing the existing pedestrian refuge at Hard Ings Road in the vicinity of Byrl Street.
- 3.30 A more recent pedestrian survey count was conducted between 07:00 to 19:00 on a weekday (21st September 2017) and Saturday (23rd September 2017) along Hard Ings Road. The results show a total 205 number of

pedestrian crossing Hard Ings between time period 07:00-19:00 on weekday and a total 134 pedestrian crossing Hard Ings Road between 07:00-19:00 on Saturday. The detailed break down is as follows:

Weekday:

07:00-10:00 45 number of pedestrians crossing Hard Ings Road 10:00-16:00 124 number of pedestrian crossing Hard Ings Road 16:00-19:00 36 number of pedestrian crossing Hard Ings Road Saturday:

07:00-10:00 19 number of pedestrians crossing Hard Ings Road10:00-16:00 74 number of pedestrian crossing Hard Ings Road16:00-19:00 41 number of pedestrian crossing Hard Ings Road

- 3.31 The scheme has not been designed / developed to meet an existing cycle demand, but to encourage future cycle usage and improve connections to other cycle routes in the area, as discussed in the email from Kate Okell, 23rd November 2017 (included as Appendix 3).
- 3.32 With regard to paragraph 3.6.4, we have attended meetings with Keighley Cougars who have confirmed access arrangements at Cougar Park. There is a pedestrian entrance via the car park to Keighley Cricket Club off Hard Ings Road and an exit only provided immediately adjacent to the Hard Ings Motor Company site, as well as an entrance off Royd Ings Avenue.
- 3.33 With regard to point 3.6.5, Mr Ghafoor has been provided with the September 2017 pedestrian survey data, on 6th December 2017, via Kate Okell (included

in Appendix 4). This data is also discussed in section 3.30 above.

- 3.34 With regard to point 3.6.6, the proposed cycling facilities at Hard Ings Road have not been designed to meet an existing demand, but are included to encourage cycle usage and improve connections to other cycle routes in the area and have been developed in liaison with Bradford's cycling group BSpoke. There is a general national and local strategy to encourage cycling alongside integrated transport. The proposed Toucan crossing enables cyclists to cross from the proposed cycleway on the northern side of Hard Ings Road to the proposed cycle way on the southern side of Hard Ings Road, and vice versa.
- 3.35 With regard to point 3.6.7, since we are providing a signalised junction anyway at this location for the reasons given in our response to objection No.7, in sections 3.43 to 3.50, it is advantageous to incorporate an at grade pedestrian crossing, taking into consideration we are removing the nearby existing pedestrian refuge at Hard Ings Road in the vicinity of Byrl Street.
- 3.36 The traffic signals at Lawkholme Lane on the proposed eastbound carriageway will only be called when a pedestrian uses the crossing adjacent to the access to Keighley Cougars. Throughout the week we would expect this to be an irregular occurrence, being used mainly at times when rugby matches take place at Cougars.
- 3.37 With regard to paragraphs 3.6.8 to 3.6.12, the proposed Toucan crossing is

located approximately 100m's westwards of the existing pedestrian refuge in the vicinity of Mr Ghafoor's suggested proven desire line, and closer to the Lawkholme Lane residential area. An upgrade of the existing pedestrian island in its current position will require more land take, taking into consideration the proposed 4 lanes of traffic, compared with the current road layout.

3.38 With regard to paragraph 3.6.13, this is dealt with in section 5 of Andrew Bradshaw's supplemental rebuttal proof.

Objection No. 7- Traffic Signal Controlled Junction with Lawkholme Lane

- 3.39 Objection No. 7 is described in Appendix 1 (Objections by Mr Tariq Ghafoor), paragraphs 3.7.1, 3.7.3, 3.7.4, 3.7.5 and 3.7.6.
- 3.40 Mr Ghafoor has been provided with this data, on 6th December 2017, via Kate Okell (included in Appendix 4). The signalised junction at Lawkholme Lane has been designed to provide a safe right turn into Lawkholme Lane from Hard Ings Road and a left turn out of Lawkholme Lane into Hard Ings Road. Loop detection is to be provided within the right turn lane on Hard Ings Road on the approach to the signalised junction with Lawkholme Lane. When the queue of traffic exceeds a designed queue length, this will call the signal on the westbound carriageway, stopping the traffic on this side of the road and permitting vehicles to turn right into Lawkholme Lane and left out of Lawkholme Lane.

3.41 The signalised junction between Hard Ings Road and Lawkholme Lane works with two phases. In Phase-1, the movement of the main stream traffic along Hard Ings Road, and in Phase-2, the traffic is turning left out of Lawkholme Lane and traffic taking right turn into Lawkholme Lane from Hard Ings Road. The pedestrian phase will operate on demand only, i.e. only be called when a pedestrian uses the crossing. Throughout the week we would expect this to be an irregular occurrence, being used mainly at weekends when rugby matches take place at Cougars.

Phase-1 Phase-2

3.42 Any delay associated with the crossing has been taken into account in the modelling, which shows significant benefits in terms of reduced delay. The crossing would operate on demand (for pedestrians / cyclists crossing the eastbound carriageway) and has been assumed to operate every cycle (60s). If there was less demand as suggested by the Objector, then the crossing would be called less frequently and the scheme would provide greater benefits than those reported.

3.43 Queue Length Data post scheme:

The mean queue length for traffic turning out of Lawkholme Lane into Hard Ings Road (westbound Direction): 1 vehicle in morning peak time & 2 vehicles

Supplemental Rebuttal Proof of Evidence 9 January 2018

in the evening peak time.

The mean queue length for right turning traffic into Lawkholme Lane from Hard Ings Road: 1 vehicle in morning peak time & 2 vehicles in the evening peak time.

The mean queue length for traffic along Hard Ings Road (Westbound Direction): 1 vehicle in morning peak time & 1 vehicle in the evening peak time.

- 3.44 The signal junction is required for safety reasons, as previously stated. The Objector states that the right turn into Lawkholme Lane should be banned, noting that traffic can "simply be directed to the roundabout and then back onto Hard Ings Road so it can turn left into Lawkholme Lane". Whilst championing such an arrangement, the Objector rejects similar arrangements for his own site.
- 3.45 The retention of a junction and conversion to traffic signal control at Lawkholme Lane maintains local accessibility and avoids the unnecessary diversion of local traffic, increased journey lengths and additional traffic loading at the Bradford Road junction leading to the necessary significant redesign of Bradford Road roundabout. It should also be noted that the right turn carries a reasonable level of traffic (163 and 210 vehicles in the AM and PM peak hours), which would be detrimental to operation of roundabout if they had to u-turn.
- 3.46 There are many businesses located off Hard Ings Road who would be

significantly affected in terms of access that would result with a full length dual carriageway option. The right turn is also on a bus route.

Objection No.8- Beechcliffe Roundabout

- 3.47 Objection No. 8 is described in Appendix 1 (Objections by Mr Tariq Ghafoor), paragraphs 3.8.2, 3.8.3, 3.8.4 and 3.8.5, and is addressed in Section 6 of Andrew Bradshaw's supplemental rebuttal proof.
- 3.48 The capacity of Beechcliffe roundabout is improved in the Scheme by the remodelling of the roundabout to provide additional lanes on the roundabout itself, the implementation of traffic signals on all arms and an additional traffic lane on the approach to the roundabout from the A629. Crucially, two lanes have also been allocated for the exit to the A650 Hard Ings Road from the roundabout, which will increase the capacity of the junction. This will eliminate the tendency for some motorists as described in the Objector's section 3.8.4, to use the right hand lane on the A629 approach to Beechcliffe Roundabout and travel around the roundabout to exit towards Hard Ings Road. current single lane exit to the A650 Hard Ings Road causes congestion to back up onto and through Beechcliffe Roundabout and beyond at peak times. The two lanes provided along the length of the A650 Hard Ings Road, enables the two lane exit to be provided and avoids the need for vehicles to merge into a single lane, which would result in congestion queuing back to the roundabout and poor lane usage.

4 CONCLUSION

In conclusion, I am of the view that the Council have advanced a compelling case to justify the Orders being confirmed in the public interest to ensure that the Council, acting on its behalf, will be able to use compulsory purchase powers, should the use of such powers be required as a last resort, to acquire for the purposes of the Orders, all the land and rights needed to promote, deliver and facilitate the proper construction to improve and widen the A560 Hard Ings Road, Keighley in the County of West Yorkshire, from its junction with the A629 Beechcliffe Roundabout, generally eastwards to a point 75 metres west of its junction with Bradford Road Roundabout.

5 EXPERT DECLARATION

- 5.1 I confirm that my duty to the Inquiry as an expert witness overrides any duty to those instructing or paying me, that I have understood this duty and complied with it in giving my evidence impartially and objectively and that I will continue to comply with that duty.
- I confirm that my expert evidence includes all facts which I regard as being relevant to the opinions I have expressed and that attention has been drawn to any matter that would affect the validity of those opinions.
- 5.3 I am not instructed under any conditional fee arrangement and have no conflict of interest.

- I confirm that I have made clear which facts and matters referred to in this proof of evidence are within my own knowledge and which are not. Those that are within my own knowledge I confirm to be true. The opinions I have expressed represent my true and complete professional opinions on the matters to which they refer.
- 5.5. I confirm my report complies with the requirements of The Institution of Civil Engineers and Chartered Institution of Highways and Transportation Codes of Professional Conduct.

APPENDIX 1

MR TARIQ GHAFOOR - SUPPLEMENTAL OBJECTIONS

"Objections by Mr Tariq Ghafoor"

Supplemental Rebuttal Proof of Evidence 9 January 2018

APPENDIX 2 DRAFT SITE ACCESS PLAN

APPENDIX 3

EMAIL TO KATE OKELL, 23rd NOVEMBER 2017

APPENDIX 4

EMAIL TO KATE OKELL, 6th DECEMBER 2017