

To whom it may concern,

Re: Crown Street Phase 2 - School RMA Solar Glare Desktop Review

GIA have been instructed to review the detail design proposals for Phase C (education facility / school) which received outline planning permission in August 2020 as part of the hybrid planning permission for Crown Street Phase 2 (approved under ref: 126668/FO/2020). GIA have considered the detailed proposals in relation to the Environmental Statement (ES) submitted and approved as part of the hybrid permission, and how the detailed design affects the findings and conclusions of the Solar Glare ES chapter. This letter should be read alongside Chapter 8 - Solar Glare of the ES Volume 1 submitted and approved as part of the hybrid planning permission.

The potential effects outlined within Chapter 8 relate to all detailed plots of Phase 2 however as the detailed facades design of the school was not known, it was not technically assessed for potential glare and not included in the EIA scenarios tested. Owing to the small scale of the proposed school, it would only be visible within 30° of the driver's line of sight at one or more viewpoint at the following junctions, all other viewpoints assessed within the 2020 ES would be unaffected by the school:

- Chester Road Eastbound Junction 1;
- Dawson Street Southbound Junction 1; and
- Deansgate Interchange Southbound Junction.

At the above junctions, only the elevations identified in the mark-up below would be visible from any of the viewpoints.





Proposed South Elevation



Proposed West Elevation

1:100

As demonstrated in the above drawings, the proposed elevations of the school comprise narrow punched windows within solid brick facades. Whilst there is the potential for reflections to occur from these windows towards drivers at the aforementioned junctions, due to the small size of the apertures and the predominantly solid nature of the facades, any reflections would be for a very short period of time, they would reflect only a portion of the solar disc so would be low intensity and would be very broken up so would be unlikely to result in an instance of glare.

Chester Road Eastbound Junction 1 (CHE1)

At this junction, the school would be visible within only one of the two viewpoints assessed in the 2020 ES, CHE1b. At this viewpoint, the full west elevation would be visible between 15° to 22° of a drivers direct line of sight and the full south elevation would be visible between 22° to 25°. Reflections occurring outside 20° of a drivers direct line of sight are considered unlikely to result in any concern from a solar glare perspective. As such, no significant reflections could be generated from the school that could impact driver visibility at this junctions and the overall effects remain Negligible, as per the 2020 ES.

Dawson Street Southbound Junction 1 (DS1)

At this junction, the school would be visible within both viewpoints assessed in the 2020 ES, DS1a and DS1b. At DS1a, part of the west elevation would be visible between 10° to 16° of a drivers direct line of sight, whilst at DS1b, part of the west elevation would be visible between 5° to 11°. The reflections would occur in the evenings during summer. Given the size of the apertures and their location within the drivers field of view, any reflections that occur would be

considered Minor Adverse. As such, no significant reflections could be generated from the school that could impact driver visibility at this junctions and the overall effects remain Minor Adverse, as per the 2020 ES.

Deansgate Interchange Southbound Junction (DGI2)

At this junction, the school would be visible within all seven viewpoints assessed in the 2020 ES, DGI2a, DGI2b, DGI2c, DGI2d, DGI2e, DGI2f and DGI2g. At viewpoints DGI2a, DGI2c and DGI2d part of the west elevation would be visible outside 20° of a drivers direct line of sight and so would not cause any concern from a glare perspective. At viewpoint DGI2b part of the west elevation would be visible between 15° to 20° and at DGI2f part of the west elevation would be visible between 10° and 18°, reflections occurring within this areas of the field of view are considered Minor Adverse. At viewpoint DGI2g, part of the west elevation would be visible between 6° to 12°, reflections occurring within this area of the field of view are considered Moderate Adverse however owing to the small size of the windows and broken up nature of the reflections, any reflections from the school would be Minor Adverse within this viewpoint. At viewpoint DGI2e, part of the west elevation would be visible between 0° to 6°, reflections occurring within this area of the field of view are considered Major Adverse however owing to the small size of the windows and broken up nature of the reflections, any reflections from the school would be Minor to Moderate Adverse within this viewpoint. The reflections would occur in the evenings during summer when the suns intensity is lower and the likelihood of the sun shining is low.

It should be noted that the 2020 ES included an assessment of the resultant shading that implementation of the school had on Major Adverse effects at viewpoint DGI2e. We confirm that given the RMA massing of the school aligns with the approved outline massing, the Major Adverse effects from the C4 tower will continue to be reduced to Moderate Adverse with implementation of the school as reported in the 2020 ES. Temporary mitigation in the form of non-reflective screening to a small area of the C4 tower was proposed to mitigate the Major Adverse in the instance that the C4 elevations were installed but the school had not yet been implemented. Once the shell of the school has been constructed it is no longer necessary for the screening on the C4 tower to be in place.

The 2020 ES reported Moderate Adverse effects overall resulting from the proposed development at this junction, this conclusion does not alter as a result of the detailed facade design of the school being considered.

Therefore, whilst reflections may occur from the school towards drivers, due to the small size of the apertures and the predominantly solid nature of the facade, any reflection would be for a very short period of time, they would reflect only a portion of the solar disc and would be very broken up so would be unlikely to results in an instance of glare and we do not consider full technical assessment is required. The potential solar glare effects outlined within Chapter 8 of the 2020 EIA would remain valid and no additional adverse effects would arise from the RMA facade design of the school.

Kind regards,



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