

Crown St Development
C4 "The Blade"
Planning Ref 12668/FO/2020
Planning Condition 30

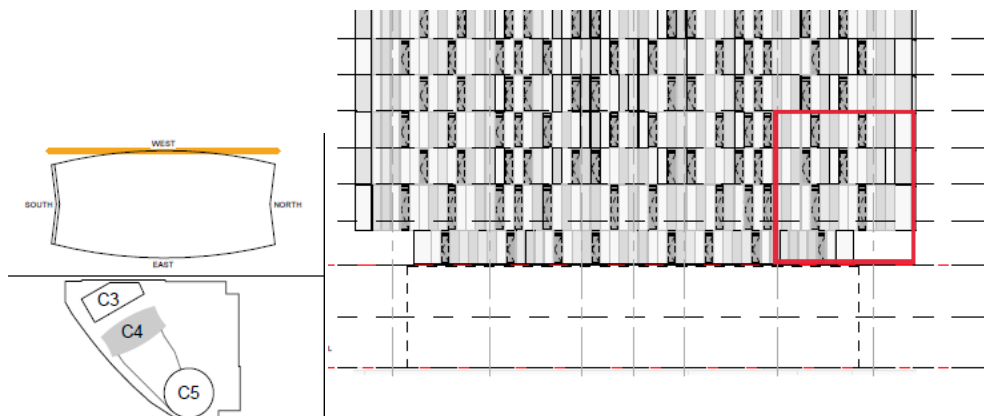
The below document has been prepared in order to discharge condition 30 of the planning approval ref 12668/FO/2020 for the Crown St Development.

Condition 30 States the following

"In the event that the external envelope of the school building forming Phase C of the development has not been completed prior to first occupation of Phase A, full details, including timings, of the façade wrap that shall be attached to the area of the elevation of Building C4 indicated in the marked up Tower C4 - West Elevation drawing reference number 10292-C4-SHP-G251-El-XX-005 P01 received by the City Council as local planning authority on 16 July 2020 shall be submitted to and approved in writing by the City Council as local planning authority before first occupation of Building C4 (Phase A). The façade wrap shall be fully implemented in accordance with the approved details."

Details and timings of the Façade Wrap

The extent of the façade wrap is highlighted on the following extract from a drawing of the West elevation of the C4 tower (Phase A)



We intend to install a graphic printed monoflex screen over the affected area, the exact details of the graphics will be developed and agreed nearer the time of installation.

To fix the screen, we will utilise the Building Maintenance Units restraint fixing points within the façade, these can be located at on any individual cladding panel and will be designed to be installed at the correct centres to safely support the screen, the screen will consist of eyelets and these will be fixed to the restraint pins via a cherry picker.

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The cladding will have been installed to this area by December 2021, the school construction is planned to be complete by July 2023, therefore the screen will need to be in place for March to May 2022, between August to September 2022 and between March to May 2023.

Specification of the Façade Wrap

The specification of the façade wrap was developed with the specialist façade contractor Focchi and issued to the daylight consultant GIA for approval. Following approval of this film, the film was applied to the Phase A building C4 façade.

Below is the data sheet for the proposed film that was issued to from the contractor to the consultant for approval.



Solar Performance of Contra Vision

The Table below provides estimates of the solar performance of Contra Vision® perforated window films at different transparencies. The data assumes the perforated window films are unprinted and applied to the exterior of the window.

System: Clear glass 3mm	Perforated window film transparency				
	No film	20%	30%	40%	50%
Visible light transmission	90%	18%	27%	36%	45%
Visible light reflection, exterior	8%	66%	58%	51%	44%
Visible light reflection, interior	8%	12%	11%	11%	10%
UV transmission	71%	14%	21%	28%	36%
Solar energy transmission	83%	17%	25%	33%	42%
Solar energy reflection	8%	66%	58%	51%	44%
Solar energy absorption (total)	9%	18%	17%	16%	15%
Glare reduction		80%	70%	60%	50%
g value	0.86	0.172	0.258	0.344	0.43
Shading coefficient (SC)	1	0.20	0.30	0.40	0.49

The feedback on the above proposed film specification from the specialist consultant has been provided below.

Thanks for sending these over, this is what we had in mind and will significantly lower the intensity of reflections occurring from the façade prior to the school being implemented. There will still be reflections that exceed the recommended threshold, albeit with a 10% probability of the sun shining at that time. As such, we would advise that we should seek to minimise the intensity as much as possible and therefore, the 20% transparency option is recommended, this being datasheet C4-FOC-G251-TS-XX-018 Rev.P01.

On the basis of the above feedback, the 20% film was applied to the building façade in the area's identified.

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The façade film as installed

An image of the façade with the film / wrap in place has been provided below with the area of film highlighted.



The Phase 3 Building Envelope

The current construction programme shows the Phase 3 “Great Jackson St Primary School” to have the building envelope to be substantially complete prior to first occupation of the Phase A Building. It is therefore likely that the film applied will not be required and can be removed.



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