



**Town of Aurora
General Committee Report No. CMS19-026**

Subject: Library Square – Veil
Prepared by: Robin McDougall, Director of Community Services
Department: Community Services
Date: October 15, 2019

Recommendation

- 1. That Report No. CMS19-026 be received; and**
- 2. That the Veil Design (Muntz Bronze) be approved and incorporated into the final design of the 22 Church Street School Addition.**

Executive Summary

The Library Square project has continued through the detailed design phase with one main element requiring Council direction. The veil is a large visual architectural feature that is important to the overall image of the project.

- The recommended veil design (Muntz Bronze) is in support of the historic nature of the school house through its colour and patinating quality
- Ontario Heritage Trust support the veil design and its patina
- Lighting of the veil is an important feature that will highlight the building at night
- Veil design will result in minimal maintenance requirements

Background

For the past year and a half, the Library Square design has evolved to include various components (i.e. bridge, café, and corridor). Throughout that time, the exterior design of the addition to 22 Church Street has depicted a veil. The mesh design was determined to be the most suitable due to the results of accommodating the footprint limitations of the site and the special functionality (black box theatre) design of the building. The unique structure created a largely featureless massing, one that was not complementary to the existing Heritage building on the site.

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Through the design development, the architects were seeking a design (materials, colour, massing) that would be complimentary to the historic school and yet create a celebrated feature for the new addition.

Analysis

The recommended veil design (Muntz Bronze) is in support of the historic nature of the school house through its colour and patinating quality

Through research of different options and materials (Attachment #1), the architects determined the most suitable design was a mesh veil. The next task was to consider the materials the veil was made from. They sought to add an aging, or patinating, quality to the material, to allude to the historical context of the building, so that the veil will age gracefully over time.

Options for consideration were a copper or bronze material as they both age over time changing their colour. The architects considered both materials and based on the patinating quality, the historical context of the building being celebrated by aging gracefully and the material being consistent with the aesthetic and finishes throughout the interior of the building, the Muntz Bronze is the preferred option (Attachment #2).

Ontario Heritage Trust support the veil design and its patina

The project team shared the veil design with the Ontario Heritage Trust (OHT) in order to obtain their feedback and approval of the veil in the context of the heritage impact assessment.

The Trust reported that they support either material for the expanded metal mesh that will clad the addition. Both materials have a different look to them and more so as they age and patina which will complement the historic building in different ways.

Lighting of the veil is an important feature that will highlight the building at night

Architects have been exploring locating an LED light strip along the outriggers that support the panels, pointed inward (toward each-other), as the building face is not always directly behind the veil. Attachment #3 provides a sample of the lighting images. They intend to determine the frequency of the LED strips (one vs. two per panel) once they have a full-size mock-up of the veil assembly. Once Council confirms the desired material, the architects will proceed to finalize the lighting plan.

Veil design will result in minimal maintenance requirements

All power supply for the lighting would be located inside the building in an access panel or above on the T-bar ceiling areas. Due the low usage of the exterior lighting (a couple of hours per day) the linear LED life can last up to 10 to 15 years without requiring any maintenance. Even in the case of maintenance, the mesh could be removed from the front to access the luminaires. The typical fastening method will allow for maintenance staff to remove the mesh panels for access in behind.

Regarding bird nesting, to date, the manufacturer has not received any complaints or comments about bird nesting issues with the mesh systems. A mock-up study for the New Museum of Contemporary Art, New York City confirmed that birds did not like to rest on the mesh as it does not have a flat surface area to comfortably grab a hold onto. A typical strategy is to use the Nixalite system that would work on the large outriggers that may be a nesting area for birds.

Regarding window cleaning, where windows are proposed to be behind the veil, a tilt and turn type window are specified. These windows can open inward and allow the windows to be cleaned from indoors.

Advisory Committee Review

Staff and architects attended the June 3, 2019 Heritage Advisory Committee meeting. The latest design was shared with the committee. Their feedback was shared in staff report CMS19-19.

Legal Considerations

Not applicable

Financial Implications

The cost of the veil is included in the draft project budget.

Communications Considerations

This report will be posted to the website to keep residents informed of plans and any future direction from Council will be shared via Council Highlights, Town website and

social media. Additional consideration may be provided for public meetings and open houses.

Link to Strategic Plan

The development of Library Square supports the following Strategic Plan goals and key objectives:

Supporting an exceptional quality of life for all in its accomplishment in satisfying requirements in the following key objectives within these goal statements:

- **Invest in sustainable infrastructure**
- **Celebrating and promoting our culture**
- **Encourage an active and healthy lifestyle**
- **Strengthening the fabric of our community**

Alternative(s) to the Recommendation

1. Council may provide further direction.

Conclusions

The design of the Library Square project has been comprehensive with careful consideration of the area, amenities and the characteristics of the historic school. With the Ontario Heritage Trust in support of the veil design, the architects recommend the Muntz Bronze material for the veil.

Attachments

Attachment 1 - Memo - Veil Options

Attachment 2 - Memo - Preferred Veil Material

Attachment 3 – Sample images of Veil lighting

Previous Reports

CMS19-007 – Library Square - Addition to Church Street School

October 15, 2019

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CMS19-019 – Library Square Project - Next Steps

Pre-submission Review

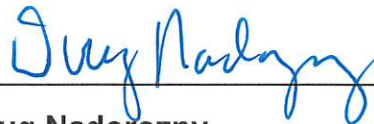
Reviewed by Agenda Management Team October 3, 2019

Departmental Approval

Approved for Agenda



Robin McDougall
Director
Community Services



Doug Nadorozny
Chief Administrative Officer



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Attachment 1

TO: Deepu Balaraman
Colliers Project Managers
Burlington, ON
L7L 6G4

CC: David Leinster - Planning Partnership
Robin McDougall - Town of Aurora

RE: Aurora Church Street School House Addition -
Building Veil Design Development

JULY 18, 2019

This Memo serves to provide clarity to the design process behind the choice of building envelope materials being presented for the Church Street School House Addition, specifically, that of the proposed 'veil', or secondary skin, as well as other options that were under consideration during the design process.

From the outset of the project, we understood that the proposed theatrical functions would result in a largely featureless façade, given the design requirements of the Multi-Purpose Room, and its associated infrastructure and services - such as Back-Of-House areas, Exit stairwells, Service Elevators and Storage/Loading areas.

This type of featureless character can be seen in Figure 1, below, which depict the unadorned, windowless, face of the Four Seasons Centre for the Performing Arts. A similar treatment of the Aurora project would result in a largely featureless and oppressive massing, given the lack of windows across the face of the building. A similar result would be produced if spandrel (non-transparent) glass were to be used across the face, again, given the building massing. Having considered these options, we believe that the building massing was going to have an oppressive presence, and one that was not complementary to the existing Heritage building on the site.



Figure 1 - Featureless Theatre Walls



We therefore began exploring a secondary skin to the Cultural Centre, which would resolve the significant building massing, and would also serve as a brilliant beacon for the Cultural Centre and for the Square. A variety of meshes/skins were explored, of the type that can be offset (hung) off a building face from behind. This design intent was also driven by a number of other parameters, including:

- a desire to resolve a number of transitions and diagonal jogs in the building face as a consequence of the various programs contained within the building, by adding a homogenous yet textural second skin, and while supporting an alignment of the massing of the proposing building to the School House building (see Figure 8), and
- an intent to support the use of natural light throughout the building in those rooms (Dance Studio, Crush Space) that are near the proposed veil, as well as a desire to allude to its theatrical functions (curtain/drapery), by including a diaphanous quality to the veil, which also serves to act as a beacon for the site when illuminated at night, and
- an intent to add a degree of depth to the veil, so as to provide a degree of light play (shading contrasted with brilliance), again - to allude to its theatrical functions, and finally,
- an intent to add an aging, or patinating, quality to the material, to allude to the historical context of the building, so that the material will age gracefully over time.

Over the course of the Schematic Design Phase, a number of options were explored, including a variety of Stainless Steel meshes produced by GKD. These meshes provided a degree of desired light play, as well as homogeneity, but required a substantial structural support system, as the Mesh is held in tension, as depicted in Figures 2 and 3, in such a way that detracted from the veil and added a degree of complexity to the building face where homogeneity was sought.



Figure 2 - GKD Mesh Structure Visible

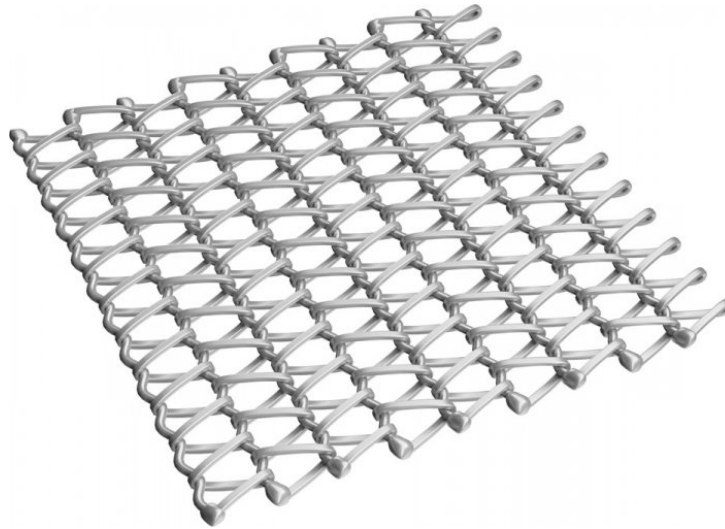


Figure 3 - The GKD Helix 24 Mesh

Following up from this path of research, we began exploring a material which did not require such substantial structure, as it is not held in tension. Our Theatre consultant, MCLD, pointed to a project which they had worked on, the Ottawa Art Gallery, which employed an expanded metal mesh. See Figures 4 and 5 for reference.



Figure 4 - The OAG's Expanded Metal Mesh at Day



Figure 5 - The OAG at Night

This system employs a series of thin outriggers that support the veil at regular intervals. These elements do not detract, and instead reinforce, the homogeneity and illuminance of the veil. See Figure 6.

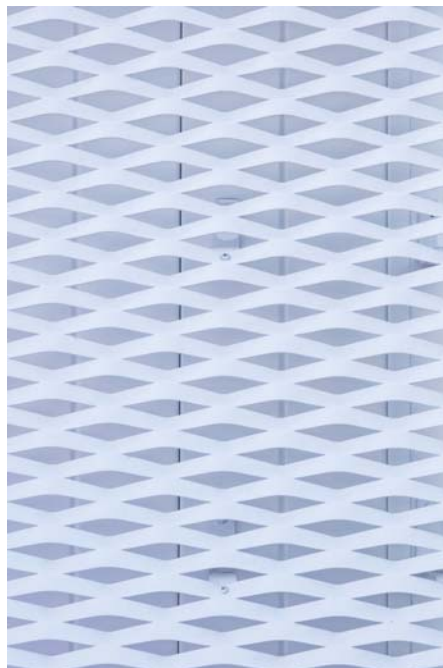


Figure 6 - Expanded Metal Mesh



We were similarly inspired by the aesthetic evinced by the New Museum in New York, which sought to create a seamless aesthetic across a façade which moved about across its height based on programmatic requirements. See Figure 7.



Figure 7 - The New Museum, NYC - Expanded Metal Mesh

We also sought to use this material, and coordinate the building massing, to support an alignment of the massing of the proposing building to the brick orders of the School House building (see Figure 8), an approach which was strongly supported by the Heritage consultant. This approach is in deference to the School House's simple massing, with brick ornamentation, as the proposed veil adds ornamentation to the building, while providing homogeneity to the building massing.



Figure 8 - Application of the Veil over the façade



The native format of this mesh is in aluminum, and is also available in painted finishes, which we did initially consider, however, we sought to add an aging, or patinating, quality to the material, to allude to the historical context of the building, so that the veil will age gracefully over time. We therefore began exploring metals that developed an appreciable patina over time, specifically those which could be produced as a mesh. Copper and Muntz Bronze were selected, each patinating differently as they aged, while fulfilling the above-noted design intents and parameters. See figures 9 through 12. We believe that either of these materials will be a significant and supportive design feature to the building and its functions.

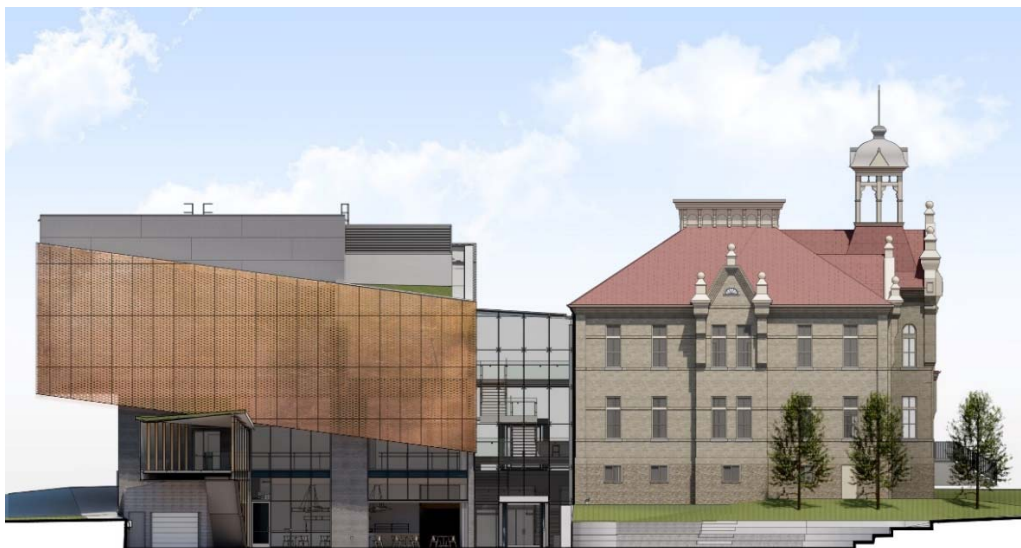


Figure 9 - West Elevation with New Copper

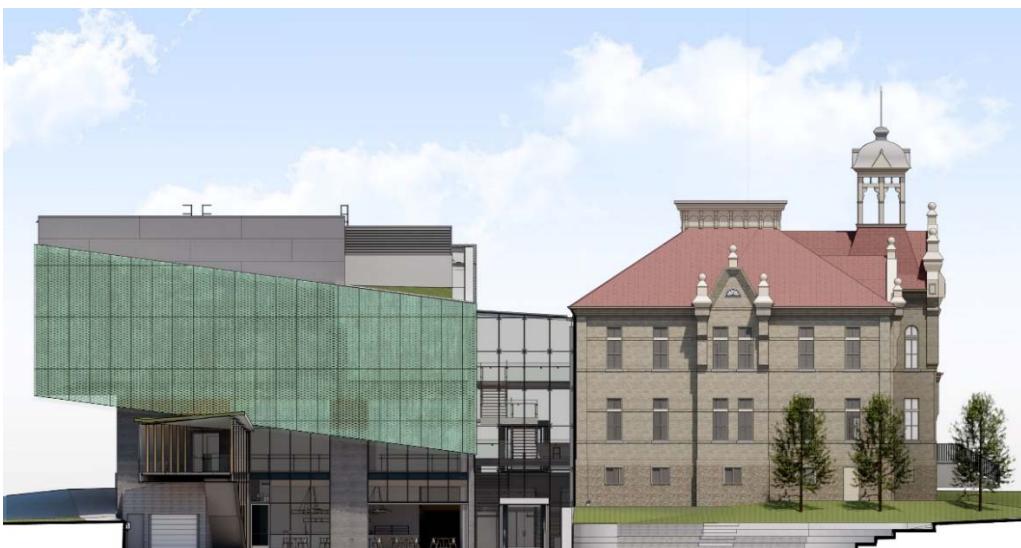


Figure 10 - West Elevation with Aged Copper



Figure 11 West Elevation with New Muntz Bronze

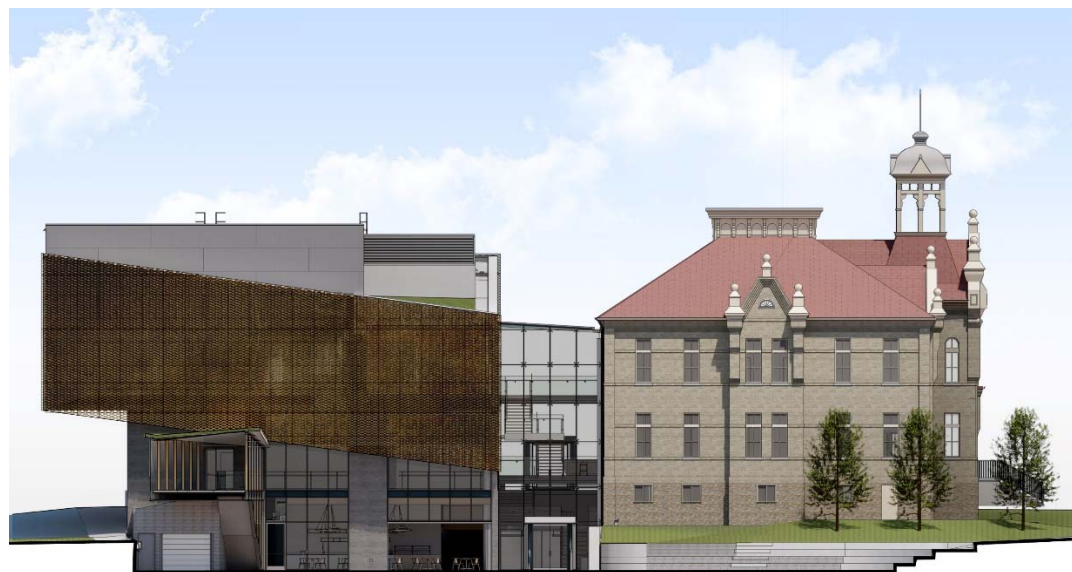


Figure 12 - West Elevation with Aged Muntz Bronze

We trust that this adds some clarity to the matter of material selection for the Church Street School House Addition – as to how they supported the design intent, the building massing as a result of the various programs compacted within the small footprint, and the relationship of the new building to the existing Heritage structure. We are open to exploring these materials with the Town and would be happy to present samples of the various materials that were explored during the Schematic Design process.



Yours Sincerely,

Roland Rom Colthoff OAA, MRAIC, AAA, LEED AP
Director, RAW Design



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Attachment 2

TO: Deepu Balaraman
Colliers Project Managers
Burlington, ON
L7L 6G4

CC: David Leinster - Planning Partnership
Robin McDougall - Town of Aurora

RE: Aurora Church Street School House Addition -
Building Veil Design Development

SEPTEMBER 25, 2019

This Memo serves as a record of RAW's recommended veil material for the Church Street School House Addition as **Muntz Bronze**.

Having reviewed the two materials under consideration, RAW recommends the Muntz Bronze material for use on the building's veil. It is our determination that this material will best represent the patinating quality that will speak to the historical context of the building. We believe that the material will age gracefully, presenting increasing visual interest over time [see Figures 1 & 2]. In addition, we believe that the Muntz Bronze material is consistent with the aesthetic and finishes throughout the interior of the building, which hosts Bronze accents on doors, door handles and signage, along with warm Maple wood finishes in the public spaces [see Figure 3]. In addition, for the Town's consideration, this material represents a cost and weight savings for the project.

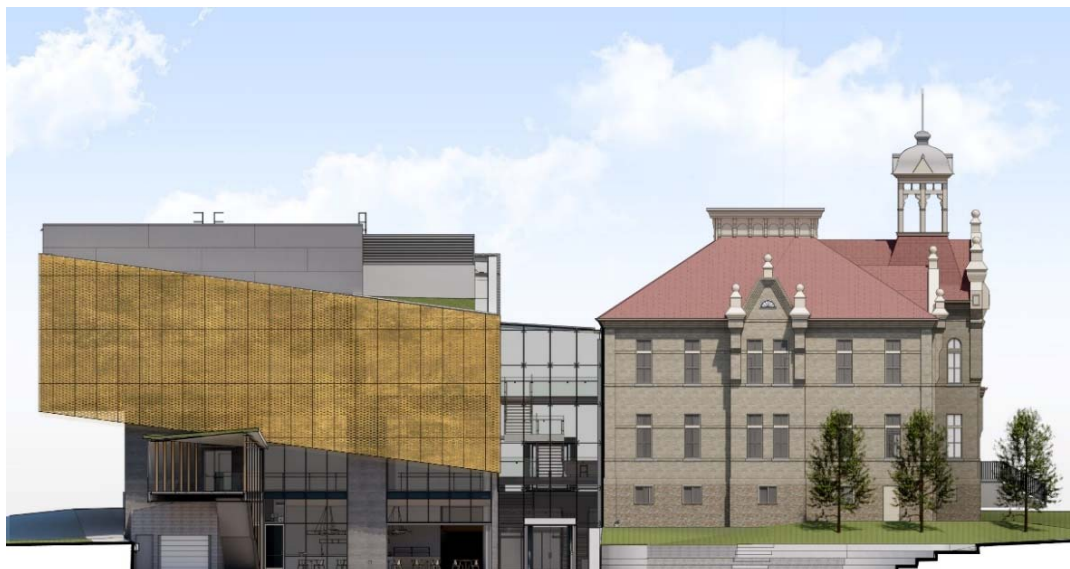


Figure 1 - West Elevation with New Muntz Bronze



Figure 2 - West Elevation with Aged Muntz Bronze



Figure 3 - Interior Rendering depicting Bronze elements including doors and door handles

Yours Sincerely,

A handwritten signature in black ink, appearing to be 'RRC'.

Roland Rom Colthoff OAA, MRAIC, AAA, LEED AP
Director, RAW Design



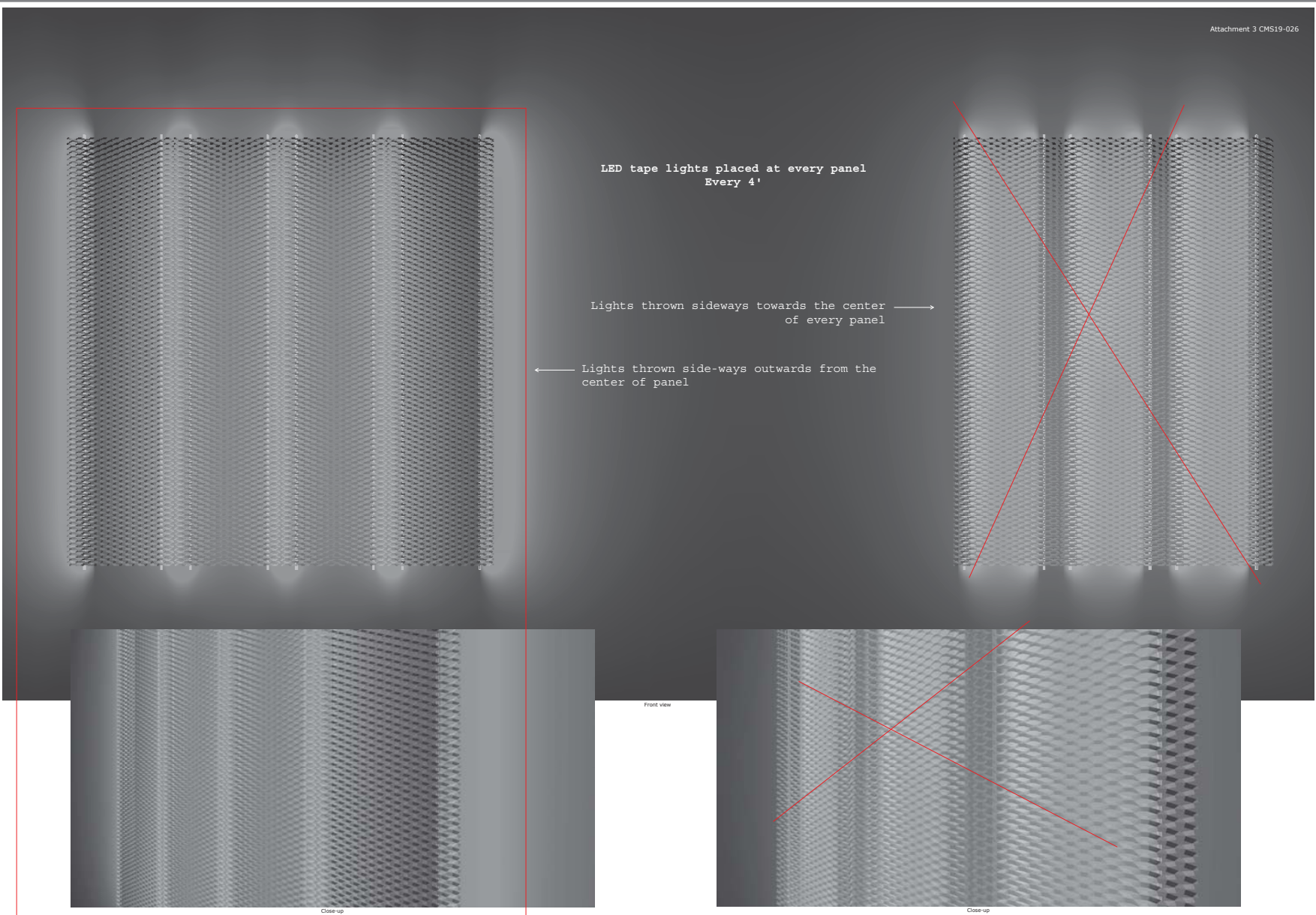
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Town of Aurora
Exterior Veil
Lighting Options

Attachment 3

Designer _____
Date 01/10/2019
Scale Not to Scale
Drawing No. _____
Summary _____

1 of 1

Attachment 3 CMS19-026





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Town of Aurora
Exterior Veil
Lighting Options

Designer
Date
01/10/2019
Scale
Not to Scale
Drawing No.
Summary

1 of 1

