



ICE District

STANTEC TOWER FEATURE LIGHTING/ MAJOR
DIGITAL SIGN

June 1, 2018

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INTRODUCTION

Digital Sign and Feature Lighting Report

Project Team:

CLIENT
ICEJV

ARCHITECT
Stantec Architecture Ltd

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EXECUTIVE SUMMARY

The proposed Major Digital Sign meets the intent of both the Capital City Downtown Plan and the AED Zone. The Capital City Downtown Plan speaks to creating a vibrant downtown that will be a regional, national and international centre for arts, culture, festivals and entertainment. Lighting and signage play a very important role in place-making, defining an area as special or unique. Similar strategies have been incorporated in New York's Times Square, Toronto's Yonge-Dundas Square, London's Picadilly Circus or many streets in Asia.

The signage and lighting strategies in the aforementioned places have made these areas famous and unique within their respective cities and recognizable on the world stage. One of the common denominators for these internationally-renowned locations is that these are the areas within their respective cities that are the most tourist and entertainment oriented. The quantity and quality of the digital signs is intended to create energy and drama, and add to local and regional place-making. Our proposed signage seeks to enhance and confirm the unique characteristics of ICE District, both locally and on the world stage.

The overall plan for ICE District provides a pedestrian-friendly street environment, innovative signage, iconic architecture, vibrant architectural lighting and exceptional urban design to create a strong sense of place. The proposed Major Digital Sign is a component of this larger project and needs to be reviewed in the larger context. The Major Digital sign helps to create a sense of excitement and arrival to ICE District with wayfinding properties which extend beyond the site. ICE District is a unique entity within the City, region and even the Province and the sign contributes to the identity of this unique area.

The proposed application conforms with the general intent of the urban design guidelines of the AED zone in terms of the architectural style and urban character of the area. The sign blends seamlessly into the design of the building itself; contains sustainable features in terms of LED lights; adds to the signature of the tower top (including variations in colour); and has the ability to work with signage and lighting in the rest of the district to mark special seasons, weather, events, themes, etc. The Major Digital Sign also contributes to the signature of the building and the City's skyline with its ability to provide visual interest at the tower top and variation in colours.

The Comprehensive Sign Design Plan will be updated to incorporate the proposed Major Digital Sign.

The AED Zone provides opportunities for Theatrically Programmed Environment signage to be incorporated in different areas throughout the site. Including and not limited to publicly accessible open space and the facades and/or roof structures of buildings. The proposed Major Digital Sign is located on the façade of a building, in line with this regulation.

The area is a hybrid between an entertainment district and an urban village with its mix of allowable uses. The technology of the Major Digital Sign can be adjusted accordingly in terms of intensity of lighting, messaging, or turned off at certain hours such that illumination is minimized beyond the boundaries of the site, limiting and/or preventing potential light pollution and intrusion. The sign is also located on the north face of Edmonton Tower which is not directly oriented towards the hotel or residential development.









Rexall
Rexall Drugstore

Happy
New Year

ICE
DISTRICT

DP APPROVED CONCEPT & DIAGRAMS | 1.0

DP APPROVED PLAN

Tower E Stantec Tower: Lighting Concept

Diagram

Specific to our AED zoning: section 910.12 (4)(g):

Major/Minor Digital Signage is a 'discretionary' use class in the zoning regulations meaning it must be approved directly at the discretion of the Development Permit Officer.

Theatrically Programmed Environment (TPE System) signage can be incorporated into publicly-accessible open space, the facades and/or roof structures of buildings within the AED Zone as a Sign Use Class, most notably Major and Minor Digital Signs. The TPE System may include, but is not limited to, features such as:

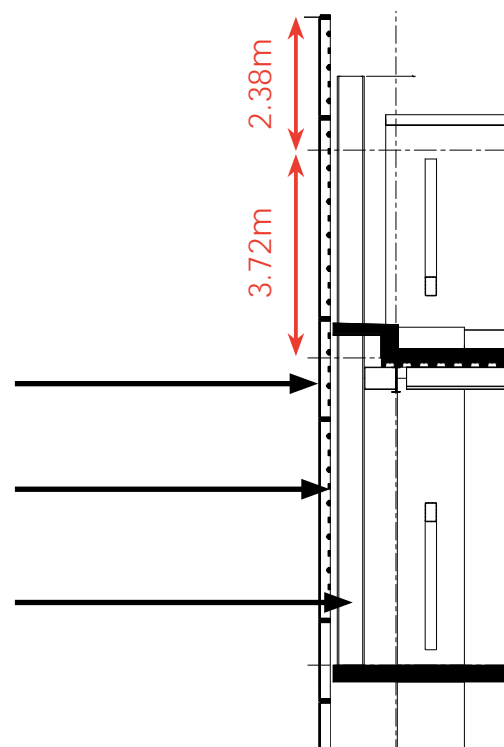
- Full running video;
- Projection systems on architectural surfaces;
- LED lighting embedded into structures/buildings (i.e. nightscaping);
- Interactive multi-media technologies; and
- Environmental effects (i.e. special effects with the use of water and light).

Schedule 59H regulations are applied to Discretionary Signs in the AED Zone

Glass Exterior . The use of transparency to reflect the sky from some angles and show structure from others

Secondary Structure . Support the pixeldome lighting and horizontal elements

Primary Structure . Structural supports



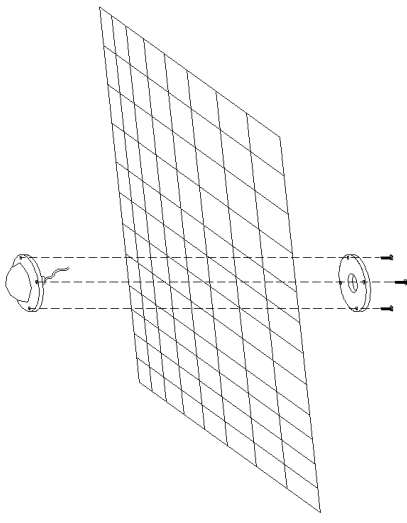
DP APPROVED PLAN

Tower E Stantec Tower: Lighting Concept

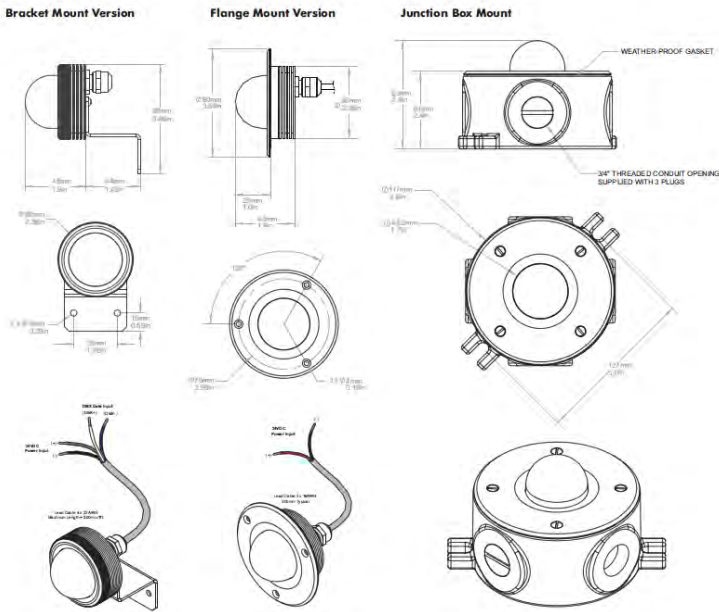
Crown/ Feature Lighting



Pixel Dome Fixture/
GVA

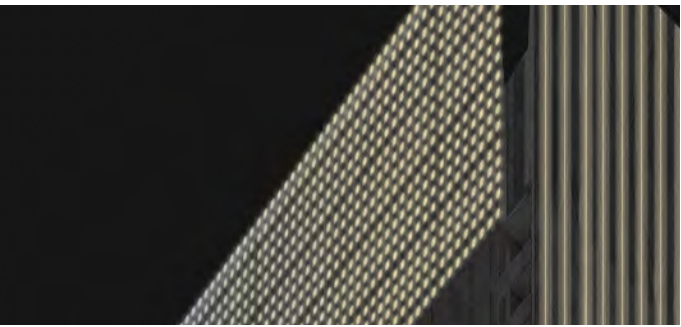


Assembly System/ Steel Mesh
by Carl Stahl (or similar to
attach to building structure)

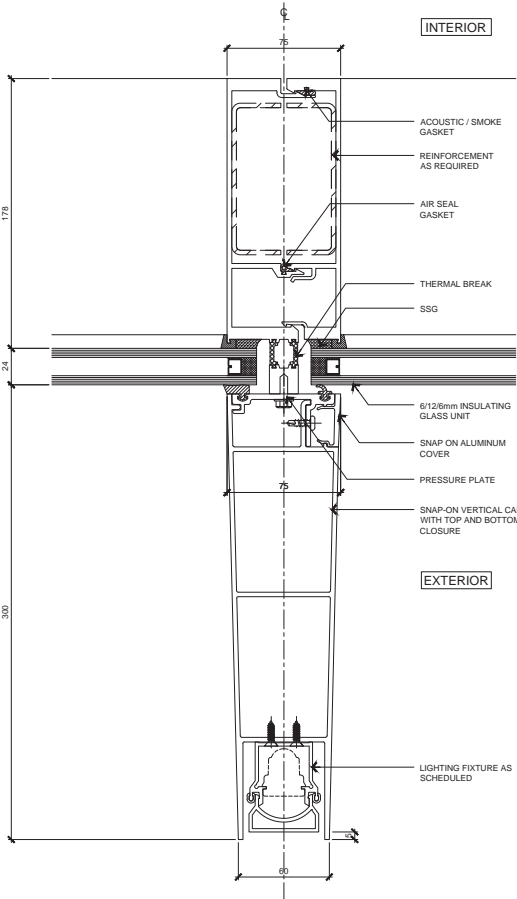


Dimensions / Pixel Dome Fixture

Tower Crown - East/West LED Fixtures



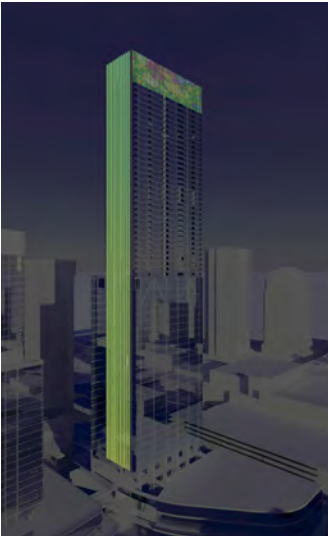
Tower Fins



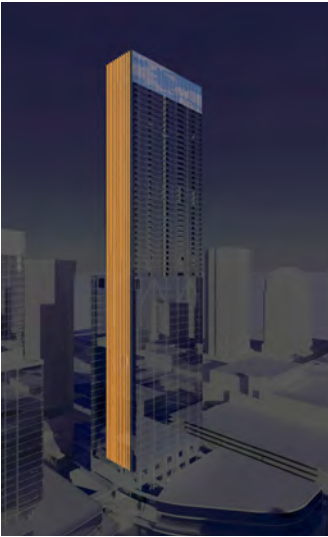
Typical Fin Light Detail



Winter



Spring



Summer



Autumn

The feature lighting presented at our formal review continues to be studied. The concepts of lit end cap mullions flowing up into the wash of the tower crown remains any important and defining element in the project. Full spectrum LED's have been explored as a method of executing the concept. Both fixtures currently being explored will facilitate a similar aesthetic of full spectrum controllable light. This canvas would be controlled by the ownership group and could potentially signal civil/ district events, changing of the season's and/or tenant signage.

TOWER DIGITAL SIGNAGE DRAWINGS | 2.0

Site Plan

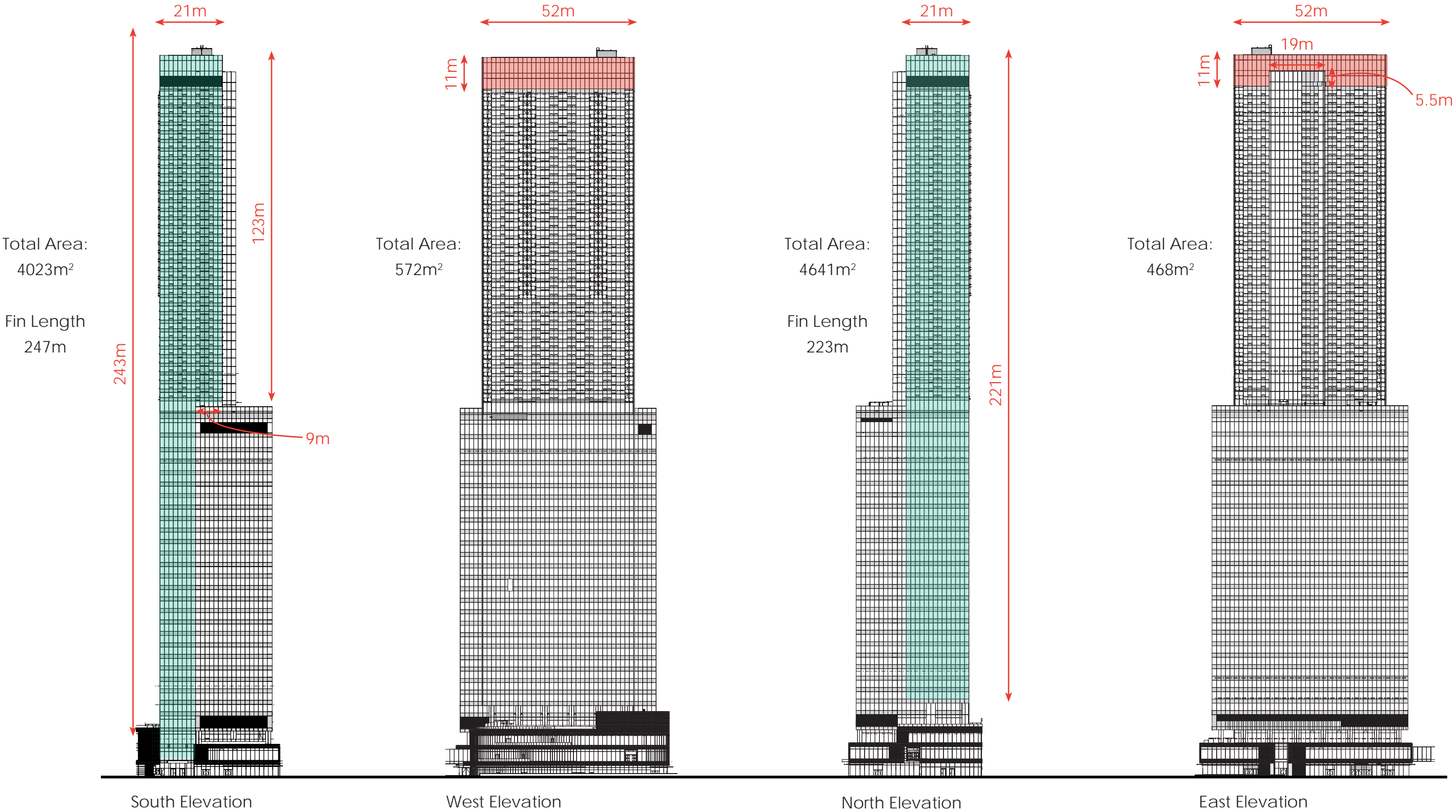


EXTENTS IDENTICAL TO CURRENT DP APPROVED PLANS

Tower E Stantec Tower: Digital Sign Extents

Elevations

- Area of Lighting Fins
- Area of Lighting Crown



TECHNICAL INFORMATION | 3.0

Specific sign manufacturer has not yet been selected. Manufacturer information will be supplied at time of selection, however Owner confirms sign brightness levels will be in conformance with the following:

1. Ambient light monitors shall automatically adjust the brightness level of the Copy Area based on ambient light conditions. Brightness levels shall not exceed 0.3 footcandles above ambient light conditions when measured from the Sign face at its maximum brightness, between sunset and sunrise, at those times determined by the Sunrise/ Sunset calculator from the National Research Council of Canada (Reference: Section 59.2(5)(a) of the Edmonton Zoning Bylaw 12800).
2. Brightness level of the Sign shall not exceed 400 nits when measured from the sign face at its maximum brightness, between sunset and sunrise, at those times determined by the Sunrise/ Sunset calculator from the National Research Council of Canada (Reference: Section 59.2(5)(b) of the Edmonton Zoning Bylaw 12800).

DP APPROVED

Tower Top Panel System

Pixel Dome LED Fixture

www.gvalighting.com

PixelDOME™ is an RGB Color Changing or Monochromatic pixel luminaire. It is designed to be used in an array for low resolution image creation or color changing effect lighting. Typical applications include ‘Architainment’, media façades, low resolution video displays and special effect lighting.

Each PixelDOME™ is a compact aluminum body and an opal acrylic dome. The dome lens provides viewers with a highly saturated body of light with an overall viewing angle of more than 180°. PixelDOME™ is IP66 rated for indoor and outdoor locations. Its design is optimized for thermal management and can operate at temperatures from -30°C to +50°C. Bracket Mount, Flange Mount and Junction Box Mounting options are available.

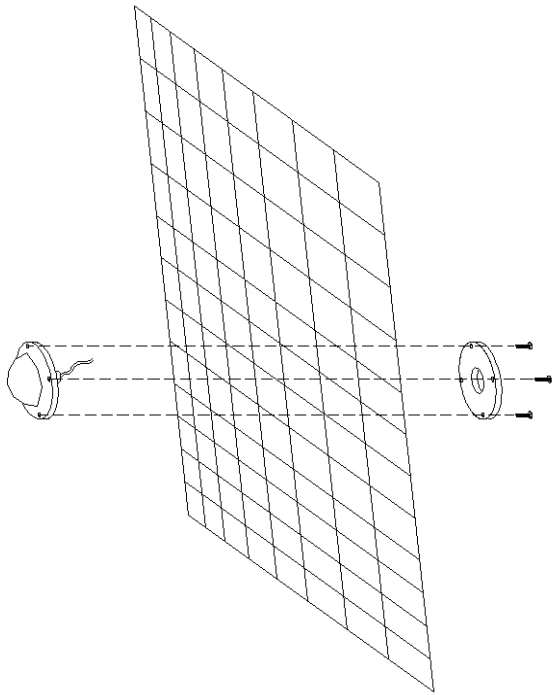
PixelDOME RGB models are controlled via DMX. Monochromatic versions can be supplied with DMX dimming input or with no control (no dimming, on/off).



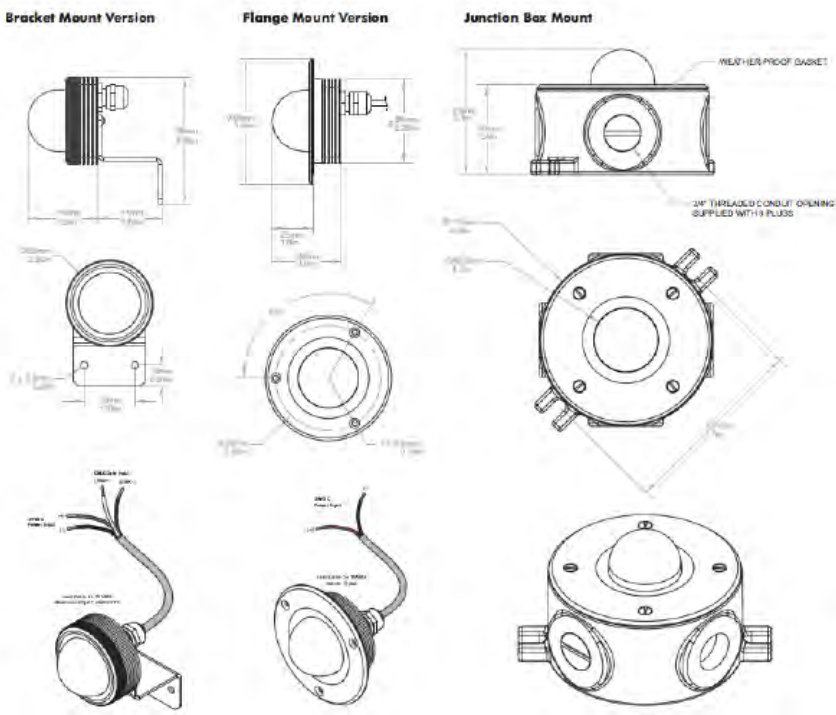
Precedent / National Library of Belarus / Minsk, Belarus



01 Pixel Dome Fixture / GVA



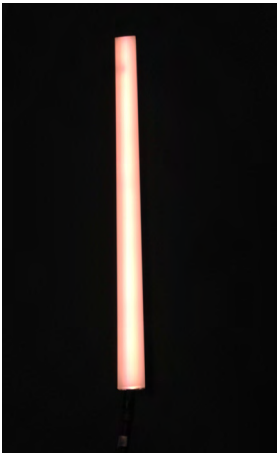
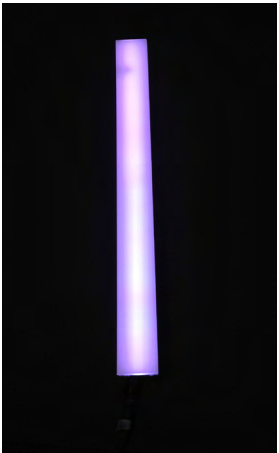
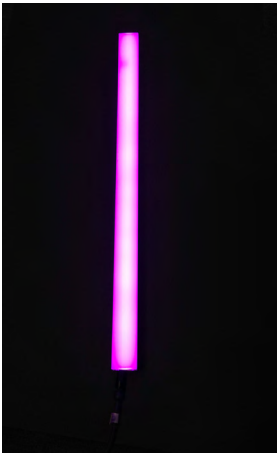
02 Assembly System/ Steel Mesh by Carl Stahl or similar to attach to building structure



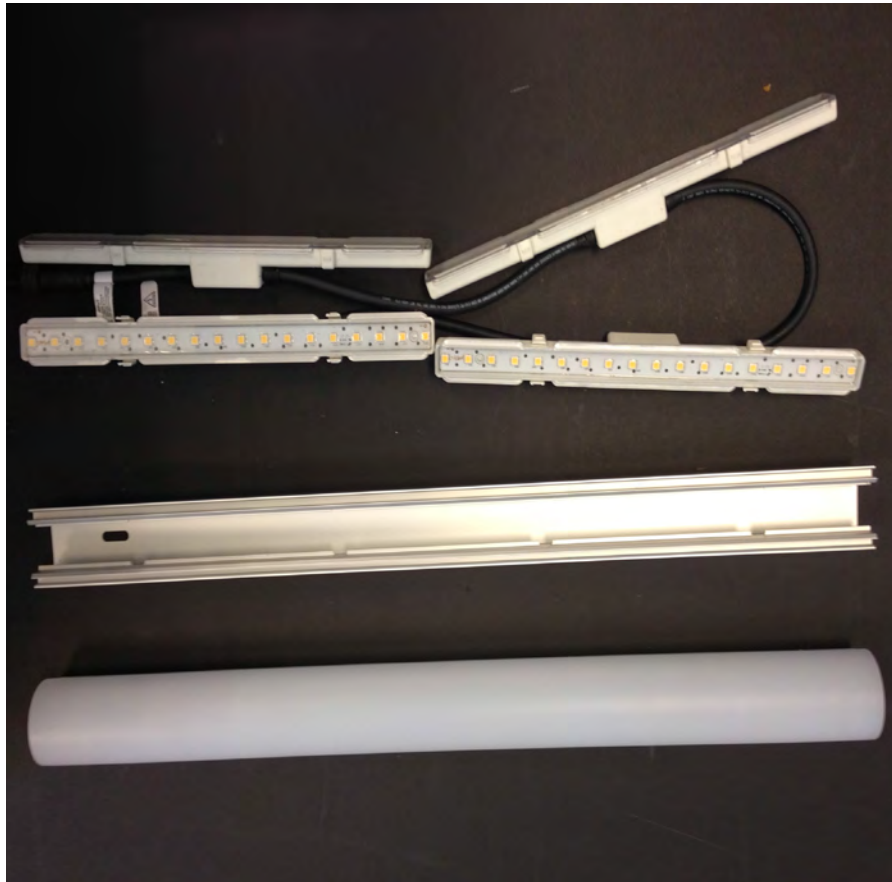
03 Dimensions / Pixel Dome Fixture

DP APPROVED
Tower Fins

Images

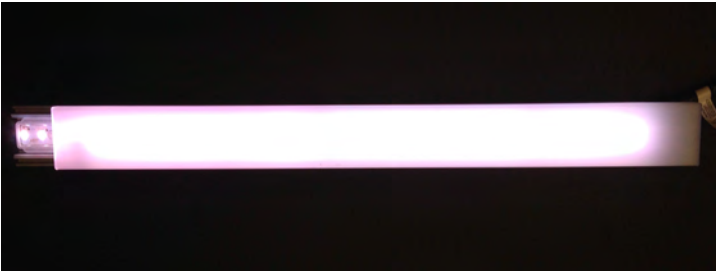


WIDE RANGE OF COLOURS



2-FOOT MODULE - DIMENSION (WXH) 1 1/2" X 1 5/8"

I. LIGHT PARTS



II. ASSEMBLED



III. POWER AND CONTROLLER

LIGHTING THEMES | 4.0

Proposed Signage Content Themes:

- #1 - Approved lighting (colour/ Aurora Borealis)
- #2 - Community themes / public art
- #3 - Corporate Advertising (Major Digital Sign)

Our proposal includes for 'corporate advertising' to be a permitting 'signage theme' in order to offer the ability to display themes #1 and #2. Expanded details including hours of operation, duration/speed of transitions, and full technical operating requirements will be made available once the concept in principle can be reviewed and approved.

Tower E Stantec Tower:
Lighting Themes



Feature Lighting Theme:
“Canada Day” Example



Feature Lighting Theme:
“Oilers” Example



Feature Lighting Theme:
“Pride” Example

Tower E Stantec Tower: Lighting Themes



Feature Lighting Theme:
“Oilers” Example

Tower E Stantec Tower:
Lighting Branding Themes/ Major Digital Sign



Feature Lighting Branding:
“Rogers” Example



Feature Lighting Branding:
“Ford” Example



Feature Lighting Branding:
“TD Bank” Example

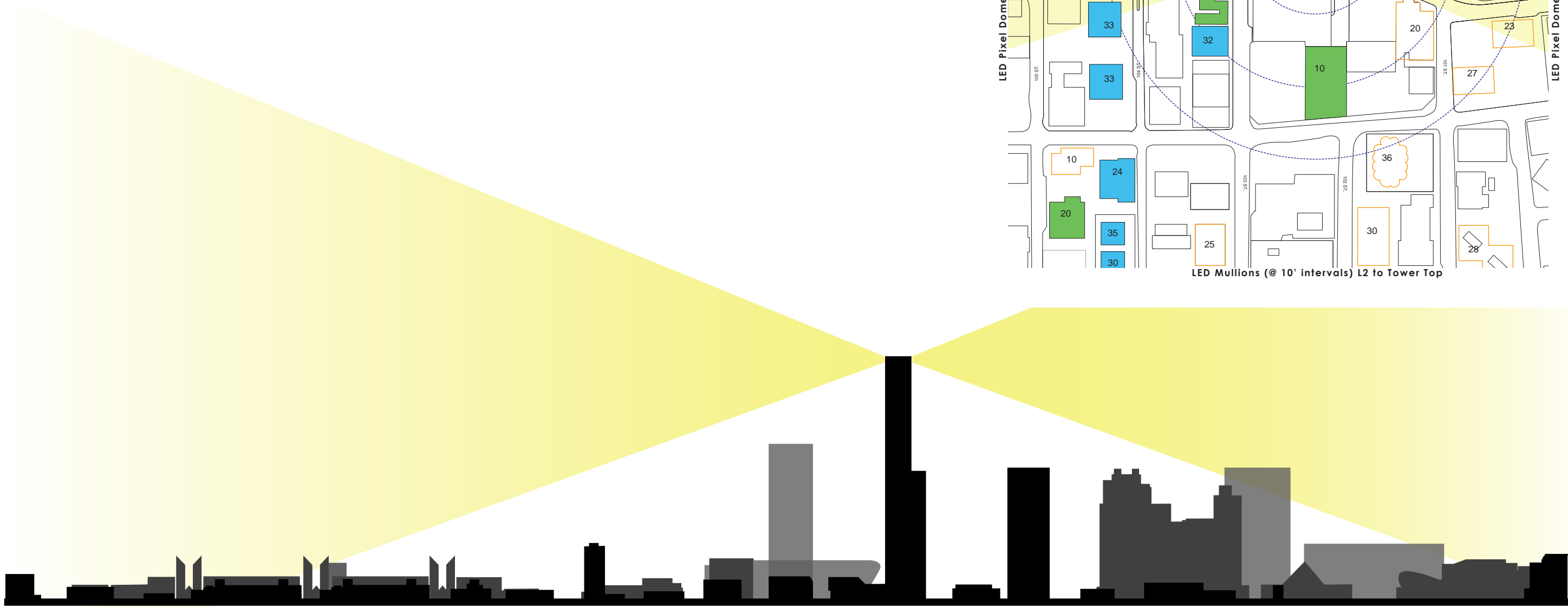
Tower E Stantec Tower: Lighting Branding Themes/ Major Digital Sign



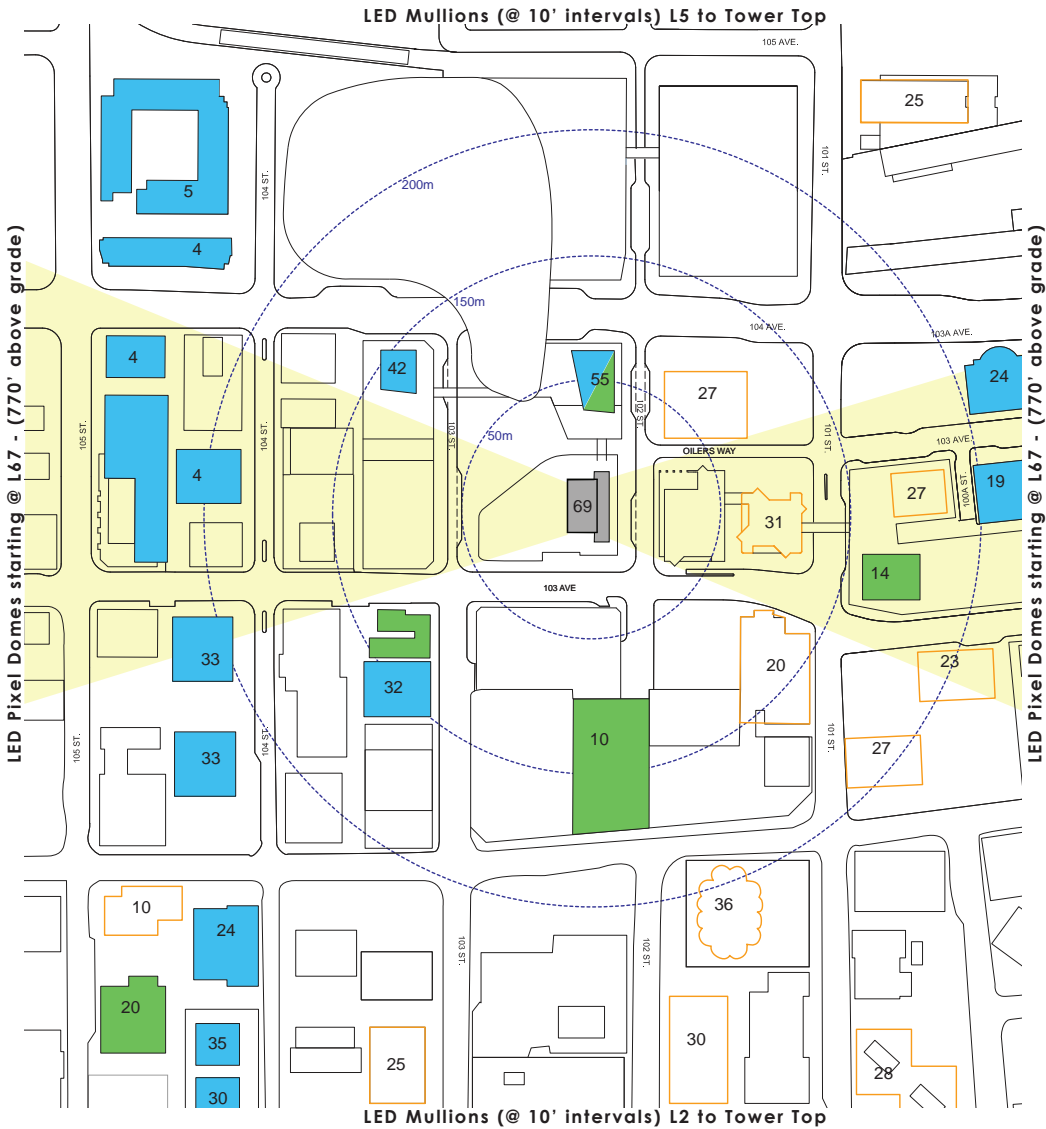
Feature Lighting Branding: "Rogers" Example

RESIDENTIAL LIGHTING IMPACT | 5.0

Tower E Stantec Tower: Residential Lighting Impact

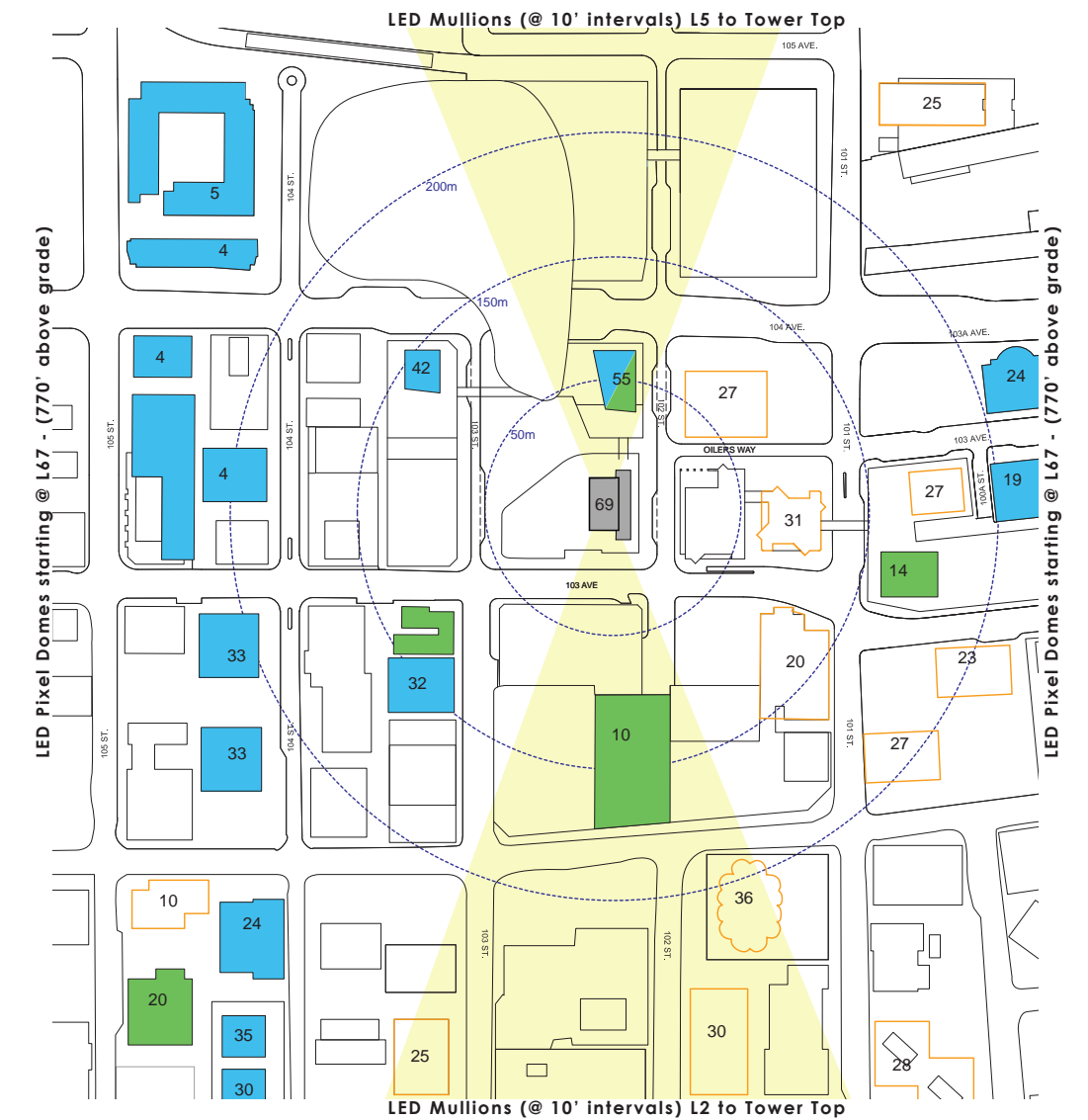
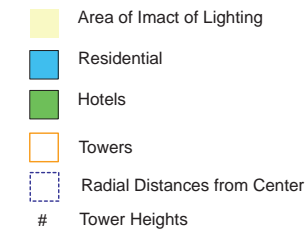


- Area of Impact of Lighting
- Residential
- Hotels
- Towers
- Radial Distances from Center
- Tower Heights



North Section

Tower E Stantec Tower: Residential Lighting Impact



West Section

APPLICATION LETTERS OF SUPPORT | 6.0

The following groups were sent copies of the proposal as summarized in this package and have provided letters of support and/or acknowledgement of review;

1. Downtown Business Association
2. NAV Canada

Tower E Stantec Tower: Letters of Support

From: Ian O'Donnell [mailto:iodonnell@edmontondowntown.com]
Sent: Monday, December 04, 2017 9:01 AM
To: Lew, Yolanda <Yolanda.Lew@stantec.com>
Subject: Ice District

Good morning Ms. Lew,

Thank you for providing the Ice District Feature Lighting package for our review. We have reviewed it in its entirety and have no issues with what is being presented. It aligns with our Winter City Strategy to bring additional appropriate lighting to our buildings and entertainment/civic areas, to help illuminate darker months.

The AED zone is a unique area within our Downtown/City; this will help enhance its signature architecture and bring a new sense of vibrancy to the area.

Sincerely,

Ian O'Donnell
Executive Director
10121 Jasper Avenue
Edmonton, Alberta
T5J 4X6
(780) 426-8575

To Support, Connect, & Enrich Edmonton's Downtown Community



November 12, 2017

Your file
LDA17-0481 (10111-104 Avenue NW)
Our file
17-3769

Mr. Sean Lee
City of Edmonton
6th Floor Edmonton Tower, 10111-104 Avenue NW
Edmonton AB
T5J 0J4

RE: Development Proposal/Plans: Re-Zoning - Edmonton, AB
(N53° 32' 44.8" W113° 29' 41.3" / 436.6798' AGL / 2625.6562' AMSL)

Mr. Lee,

NAV CANADA has evaluated the captioned proposal and has no objection to the project as submitted.

NAV CANADA does not require notification of construction; however, if you should decide not to proceed with this project, please advise us accordingly so that we may formally close the file. If you have any questions, contact the Land Use Department by telephone at 1-866-577-0247 or e-mail at landuse@navcanada.ca.

NAV CANADA's land use evaluation is valid for a period of 12 months. Our assessment is limited to the impact of the proposed physical structure on the air navigation system and installations; it neither constitutes nor replaces any approvals or permits required by Transport Canada, Industry Canada, other Federal Government departments, Provincial or Municipal land use authorities or any other agency from which approval is required. Industry Canada addresses any spectrum management issues that may arise from your proposal and consults with NAV CANADA Engineering as deemed necessary.

Yours truly,

Gheorghe Adamache | NAV CANADA
Manager - AIM IFP Service Delivery

cc NOPR - Northern and Prairie Region, Transport Canada
 CFH7 - (ROYAL ALEXANDRA HOSPITAL)(HELI)
 CEW7 - UNIV OF ALBERTA (STOLLERY CHILDREN'S HOSP MAHI)(HELI)
 CMC2 - MISERICORDIA (COMMUNITY HOSPITAL)(HELI)