

March 28, 2014

Calgary Drop-in & Rehab Centre 1 Dermot Baldwin way S.E. Calgary, AB • T2G 0P8

Attention: Brian Pratt

RE: DESIGN REPORT

For 4800 Centre

SMP Project No.: 14-01-0154

1 BASIS OF LIGHTING DESIGN

1.1 Parking lot area:

- 1. The parking lot area around building falls into the category of 'Residential Complex Parking,' with a 'Medium' activity level. The average minimum recommended light levels being between 6-24 Lux with a uniformity of 4:1 according to the IESNA (Illuminating Engineering Society of North America). Due to the security requirements of the client the design is based on a 19-24 Lux light level. With higher levels required at security monitored entrances.
- 2. LED type luminaires were selected for all site lighting applications based on the following attributes:
 - i) Longevity of luminaire (50,000hrs).
 - ii) Lower wattage than conventional HID options.
 - iii) Better light distribution control than convention HID options.

The LED type luminaires lower maintenance and operation costs as well as lower construction costs as fewer luminaires are required.

- 3. LED pole mounted luminaries are to be used to provide lighting to the parking lot area situated away from the building. LED fixtures mounted to the wall are to be used to light the parking areas close to the building.
- 4. Parking lot poles are to be 25' tall.
- 5. All luminaires are to be 'Dark Sky Compliant.'
- 6. Any luminaires situated along property lines shall come complete with back side shield and light distribution pattern that prevents light trespass onto adjacent properties.
- 7. Luminaires are not to be installed in such a way that they are aimed off of the property.
- 8. Parking area luminaires are to be controlled via combination of photo cell and time clock.

1.2 Secure Entrances, Walkways & Specialty Areas:

- 1. These areas are illuminated above typical parking lot lighting levels to allow for visual recognition of people in these areas.
- 2. Luminaires in these areas are to be controlled by photo cells, timers and motion sensors.

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2 BASIS OF SECURITY DESIGN

- 2.1 Parking Lot Area CCTV Cameras:
 - 1. CCTV cameras are to be affixed to parking lot light standards at a minimum height of 4200mm above grade, to prevent vandalism of cameras.
 - 2. Cameras are to be aimed and focused so as to not record any activity taking place on the neighboring properties.
 - 3. The CCTV camera layout is preliminary and provides coverage for the building and site. Additional consultation between the owner and a security consultant is required to design a complete and functioning system that will address all the owners' needs.
- 2.2 Secure Entrances, Walkways & Specialty Areas CCTV Cameras:
 - 1. CCTV system to provide cameras complete with cabling at building entrances, exterior walk ways and in exterior gather places (smoking patio).
 - 2. Cameras providing coverage in these areas will be a mix of pole and wall mount.
- 2.3 Card/keypad access and security:
 - 1. To meet the client's needs for security and entry control of this property a card access system along with door monitoring is suggested. The system should perform the following functions:
 - i) Secure and monitor all doors for intrusion.
 - ii) Allow access by combination of time schedule and electronic access.
 - iii) Allow security personal to have remote control of selected doors.
 - iv) Be integrated with the CCTV camera system.
 - v) Be complete with alerting system if intrusion takes place.

Yours truly,

David Reid

SMP Engineering



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