
Part 1 General**1.1 RELATED REQUIREMENTS**

- .1 Section

1.2 REFERENCE STANDARDS

- .1 CSA Group (CSA)
 - .1 CSA C22.1-[09], Canadian Electrical Code, Part 1 (21st Edition), Safety Standard for Electrical Installations.
 - .2 Underwriters Laboratories of Canada (ULC)
 - .3 CSA Standard: Infection Control during Construction or Renovation of Health Care Facilities, CSA Z317.13, latest edition.

1.3 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Product Data:
 - .1 Provide manufacturer s printed product literature, specifications and datasheet and include product characteristics, performance criteria, and physical size.

1.4 DELIVERY, STORAGE AND HANDLING

- .1 Deliver materials to site in original factory packaging, labelled with manufacturer s name, and address.
- .2 Storage and Handling Requirements:
 - .1 Store materials indoors in a dry location and in accordance with manufacturer s recommendations in a clean, dry, well-ventilated area.
 - .2 Store and protect LED lamps from nicks, scratches, and blemishes.
 - .3 Replace defective or damaged materials with new.
- .3 Develop a Construction Waste Management Plan related to the Sustainability Work of this Section. Submit the Construction Waste Management Plan to the Authority for approval.
- .4 Packaging Waste Management: remove for reuse pallets, padding, packaging materials, and crates in accordance with the developed Waste Management and Disposal Plan.
- .5 Divert unused metal materials from landfill to metal recycling facility.
- .6 Disposal and recycling of fluorescent lamps as per local regulations.

1.5 BACKGROUND

- .1 The scope of work for this project will include the requirement of dust control during the construction as, dust particles carrying bacteria and fungi are dispersed. This dispersion can pose serious health risks for patients, staff, and visitors. Therefore, it is the responsibility of the Project Co to ensure critical and strict measures are taken to control dust throughout the construction process.
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1.6 SCOPE

- .1 The scope of work is to replace 40,000 existing fluorescent lamps throughout the Royal Inland Hospital campus with new 10W, LED lamps as directed by the Authority.
- .2 The work is to be completed prior to April 30, 2020
- .3 The Electrical Division to take note that the removal of existing fluorescent lamps and the replacement with new LED lamps will be done on a staged basis in a building that is operational 24 hours a day, seven days a week, year round.
- .4 Project Co to issue a scheduled of work and shutdown times to the Authority for approval and coordinate the installation of the new LED lamps as appropriate. Schedule to be provided 15 days in advance of the work commencing. It is anticipated toe work will be completed in multiple phases.
- .5 When installing new LED lamps if the existing lens is cracked and or damaged during the removal and replacement the Project Co shall replace damaged lens with new.
- .6 As fluorescent lamps vs LED lamps of the same colour temperature do not produce the same illumination (perceived brightness) the Project Co shall provide new test LED lamps in several different colour temperatures (Kelvin) for mock-up and review by the Authority. Colour temperatures to be mocked-up are 3000K, 3500K and 4100K as confirmed by the Authorities' representative.

Part 2 Products**2.1 LAMPS**

- .1 LED lamps to be - 10 Watt, 25,000 hour lamp life, 3500-4100 K, (Colour temperature to be confirmed by the Authority) CRI 82 minimum.
- .2 All applicable rebates will be returned in full to Interior Health.

Part 3 Execution**3.1 INSTALLATION**

- .1 Locate and install new LED lamps in existing luminaires (fixtures) as indicated.
- .2 Disconnect and remove existing fluorescent lamps and dispose in accordance with Waste Management Plan.
- .3 Install new LED lamps.
- .4 Replace all damaged lenses with new.

3.2 CLEANING

- .1 Remove surplus materials, excess materials, rubbish, tools and equipment.
- .2 Waste Management: separate waste materials for reuse, and recycling in accordance with the Waste Management and Disposal Plan.

END OF SECTION