

City of Calgary – Mobility Street Lighting Division MEMO: Street Light Design Revisions & Best Practices September 2024

URD/Offsite specific:

- A markup of the proposed design (street light locations, rough circuitry and AGi) must be
 provided to the City of Calgary a minimum of 5 business days before the Co-Location Meeting.
 The City of Calgary will provide a review and request changes within 2 business days. City of
 Calgary changes/comments must be incorporated into the Concept Design. Any deviations that
 arise from the Co-Location Meeting must be reviewed and approved by the City of Calgary
 before they are incorporated into the IFR.
- 2. Median lighting is strongly discouraged due to the new cross-sections and tree clearance requirements. Multiple crossings into medians are prohibited with a maximum of two crossings allowed (one on either end) to complete the circuit in and out of the median. If the developer is only completing one side of the road, boulevard lighting will be installed on the developed side, but designed for the ultimate road. Design should indicate future light locations marked "future", and circuitry is not required for future lights. The second developer that completes the ultimate road, will be responsible to meet lux minimums for the entire road. Any discrepancies from the original design's "future" locations affecting lux levels for the ultimate design will be reviewed by the City of Calgary as required. Moving in and out of the median between intersections is prohibited. Location changes from the median or the boulevard should be done at intersections only.
- 3. One-sided lighting is preferred on local residential roads. Staggered lighting is acceptable but must be designed to minimize road crossings. Multiple unnecessary road crossings used only to minimize single-party trench is prohibited.
- 4. Correction to Page 34 of the Design Guidelines Illuminance for Intersections Collector/Local Low shall have a minimum Illuminance of 10.0 lux/0.9 fc as per IES Table 12-1
- 5. All correspondence Approvals, CCC requests, Material Request etc. must be directed to streetlighting@calgary.ca. After uploading drawings to the SFTP site, streetlighting@calgary.ca must be cc'd on the drafting notification sent to IISAIM-Traffic-StreetLighting@calgary.ca

Street Light Design Revisions Applicable to All Projects:

- 1. The enhanced galvanized 9m davit is the only pole stocked at City Stores and has a drafting code of 22. Replace all code 9's with code 22 for all designs. Update on As-builts for any outstanding projects.
- 2. TRACEID (as described in the Aug 2022 Design Bulletin) is mandatory for all circuits and must follow the format PER-P1 (P2 etc. for multiple relays), CAB-C1 (C2 etc.) at the power source and TRACE-P1, TRACE-C1 at the lights (all lights on each circuit). For multiple circuits in Cabinets, they can be labelled as Trace-C1-A, TRACE-C1-B for each branch circuit if you have named your circuits with letters, or TRACE-C1-1,3, TRACE-C1-2,4 if you are keeping the breaker numbers as per the panel.
- 3. Correction to 2021 Design Memo The use of cabinets is prohibited on residential local roads. On collector roads and higher classifications, a cabinet or relay is acceptable.
- 4. 3C#8Cu (RBG) is the only acceptable wire size for branch circuits.
- 5. Installation of the 90-Degree Connector for new PER connections is mandatory and can be obtained from City Stores.
- 6. Required information for NavCan and Transport Canada when designing in the vicinity of aerodromes:

<u>NAV CANADA Land Use Program</u> Aviation - Land Use in the Vicinity of Aerodromes - TP 1247 (canada.ca)

7. Effective January 1, 2025, all designs must be completed using the City of Calgary Drafting Template (attached).

Street Light Team Contacts:

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Jon Richards	Street Light Design Tech	jonathan.richards@calgary.ca	403-369-4309	South East subdivisions, development permits and projects
Sunny Sidhu	Street Light Design Tech	sunny.sidhu@calgary.ca	403-268-4628	Downtown development permits, projects

NOTES 1. ALL PIPE SIZES ARE IN MILLIMETRES AND ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE NOTED. 2. ALL COORDINATES AND DISTANCES ARE BASED ON 3TM COORDINATE SYSTEM (NAD 83). 3. TRACE ID IS REQUIRED FOR ALL CIRCUITS AND MUST FOLLOW THE FORMAT OF PER-P1 (P2,...ETC FOR MULTIPLE RELAYS), CAB-C1 (C2,...ETC) AT THE POWER SOURCE, AND TRACE-P1, TRACE-C1 (TRACE C1-A, TRACE C1-B FOR MULTIPLE POWER SUPPLIES COMING OUT OF THE CABINET) AT THE LIGHTS. 4. POWER SUPPLY DETAIL MUST BE PROVIDED WHEN THE PER OR CABINET IS NOT SHOWN WITHIN THE LIMITS OF THE DRAWING. NAD 83 COORDINATES #### DATE BY APPD DESCRIPTION #### #### #### #### #### SAVANNA BV NE SEC: #### - TWP: #### - RGE: #### - W ####th M 15N-XXX SHEET TITLE SL CABINET SIDEWALK #### #### #### 119 123 EXCAV PRMT NO. EXPIRY DATE (YYYY-MM-DD) START DATE (YYYY-MM-DD) MPULA NO. DSGN FILE CHKR ID NO. EXPIRY DATE (YYYY-MM-DD) SUBMISSION DATE (YYYY-MM-DD) FILE NO. ENG DWG NO. SAMPLE.dwg ADDRESS: 123 SAVANNA BV NE SHEET NO. SHEET ID. POWER SUPPLY DETAIL (CABINET) DATE (YYYY-MM-DD) #### NOT TO SCALE PROFILE NO. SHEET SIZE ANSI D 25 mm

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ADDRESS: BESIDE 151 BERMUDA DRIVE NW

POWER SUPPLY DETAIL (RELAY)

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