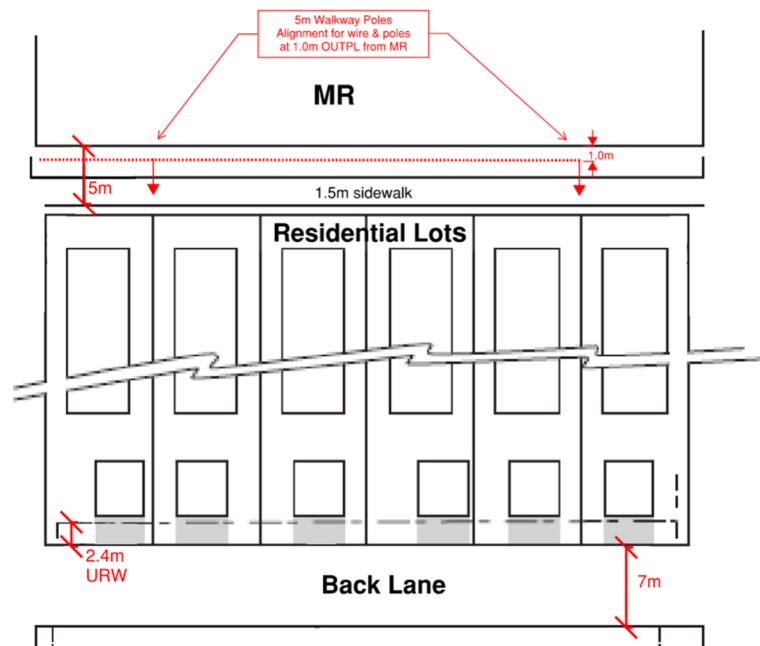




City of Calgary – Mobility Street Lighting Division
MEMO: Street Light Design Revisions & Best Practices
April 2023

URD/Offsite specific:

1. MR Fronting (“garden”) lots are to have both the SL and wire at 1.0m from the MR Property Line, using 5m walkway poles, facing towards the 1.5m monowalk and addressing of the “front” of the houses. No lighting will be provided in the paved lane. The illuminance requirement will be standardized as Local/Low with 4.0 avg lux and 1.0 minimum lux (no uniformity ratio is required). With this standard, lights will be placed approximately every 4-5 lots.



2. A Design Incremental Cost Data Sheet (DDS) is required for all subdivision phases, including those with non-decorative lighting. The estimated capital cost is to include the costs of the entire design/build (including but not limited to material costs, design costs and construction costs). All sections of the DDS must be filled out except for the Decorative Lighting Incremental Cost Calculation for standard lighting phases, as this will be \$0. If any information required for the DDS is unknown at construction (for example the construction costs or the Development

Agreement Number), it may be submitted with the approval package containing blank sections or "TBD". However, CCC will not be awarded until this document is amended and re-submitted with all sections filled out accurately and completely.

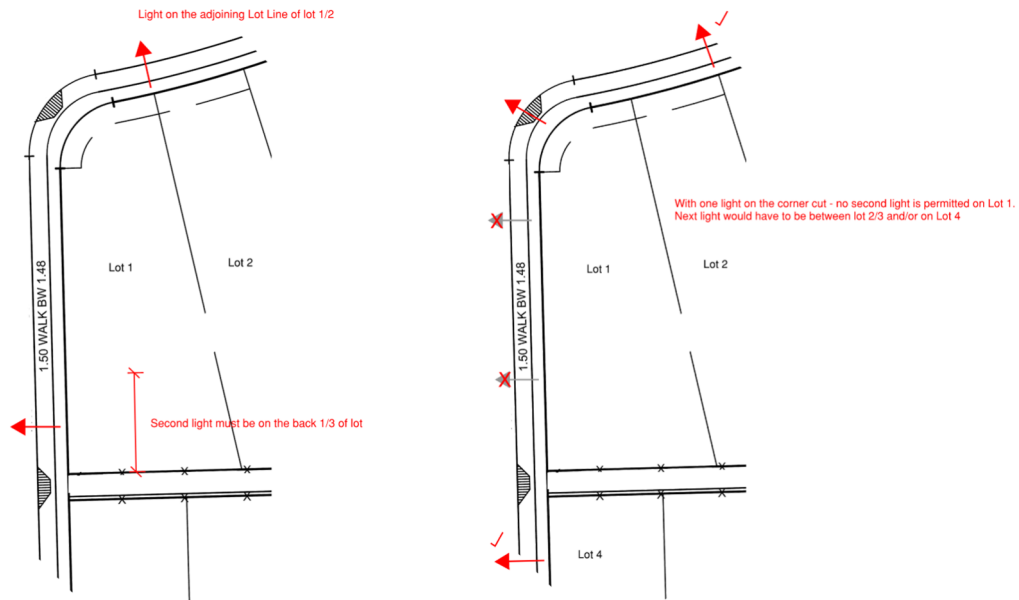
3. Adjacent existing phases must be clearly marked with the subdivision name and phase number. Add map number to this note if known.



4. When connecting to an adjacent subdivision phase where HDPE was stubbed out for future use, the existing HDPE alignment (as-built and as-recorded) must be confirmed before the new phase design is submitted. The APRCON and AS-BUILT submission of the new phase must clearly show the new HDPE connects to the existing HDPE.

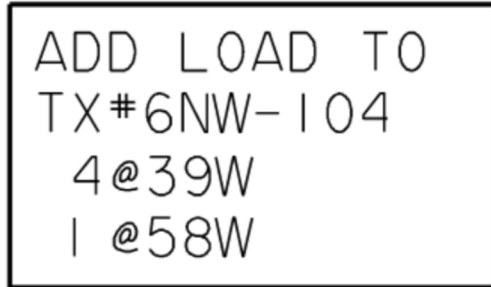
Street Light Design Revisions Applicable to All Projects:

1. The placement of two lights on a single lot is not permitted. The only exception is to have one light with a side yard placement at the back 1/3 of the lot and the second light placed on the adjoining lot line.



2. Any use of overhead cable for branch circuit street light designs requires prior approval from the City of Calgary. These overhead spans are limited to 38m in length. If required, an intermediate wood pole can be installed to meet the 38m rule, with prior City of Calgary approval.

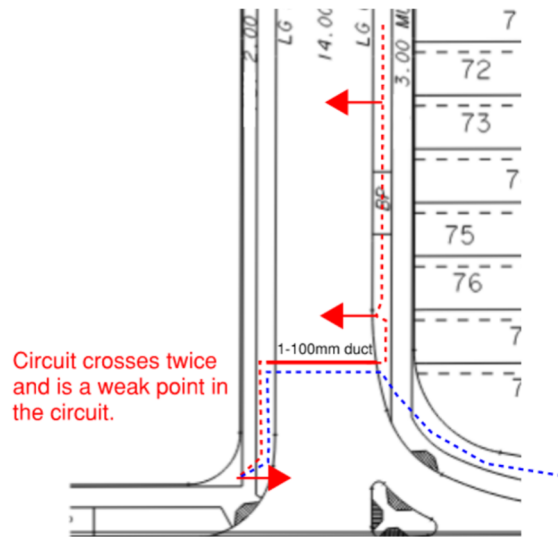
3. Add Load and Remove Load notes are to be placed beside every transformer on the design (or manhole in the downtown network) where lights will be added or removed on a circuit. The note should clearly indicate the transformer or manhole number. Do not provide the aggregate total, each wattage of light is to be specified individually.



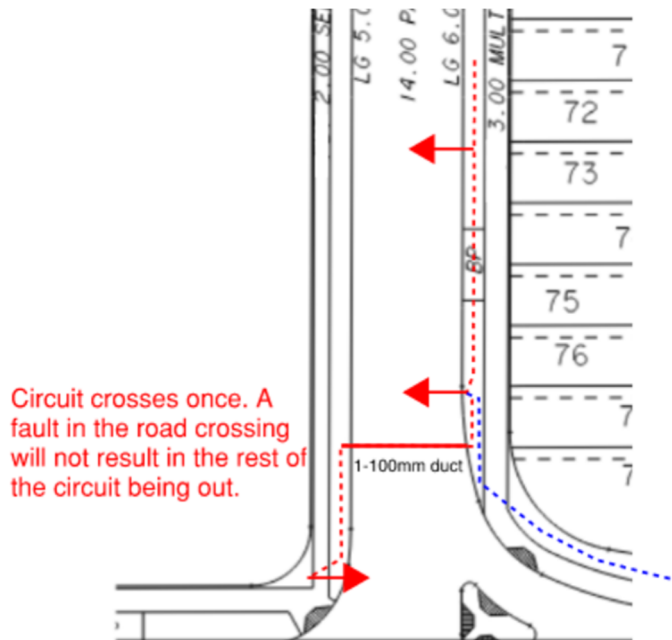
ADD LOAD TO
TX#6NW-104
4@39W
1 @58W

4. Each street light circuit is not to exceed 12 **davits**. Double davits can be included in the 12 davit maximum (i.e. 24 lights on 12 davits) as long as the design conforms to voltage drop regulations.
5. Design submissions are to include a voltage drop summary table and a copy of the design with each circuit highlighted to show the longest route and the voltage drop of that branch.
6. It is expected that a site visit will be performed to confirm existing conditions and circuitry in the field before completing a design.
7. Street names must be labelled for all streets located within the construction boundary.
8. Remove the deep utilities on the design pdf when submitting for review and approval. If the deeps are important for the construction contractor, provide two copies for review: one showing the deep utilities and one with this layer turned off.

9. Effort should be made to design the branch circuitry so that it does not cross the road twice (“double back” or “in and out”) in the middle of a circuit.



The crossing is a weak point and should be a separate branch so that a fault in the road crossing does not result in the rest of the circuit being out. A road crossing to feed a single light should be placed at the end of a branch.



Street Light Team Contacts:

Name	Title	Email	Phone Number	Area of Responsibility
Michael Gray	Team Leader	michael.gray@calgary.ca	403-801-1411	Citywide
David Berge	Street Light Design Supervisor	david.berge@calgary.ca	403-268-5653	Citywide
Gavin Marshall	Street Light Design Tech	gavin.marshall@calgary.ca	587-572-0628	South East subdivisions, development permits and projects
Mesfin Kassahun	Street Light Design Tech	mesfin.kassahun@calgary.ca	403-268-4575	North East Subdivisions, development permits, projects
Jocelyn Klyne	Street Light Design Tech	jocelyn.klyne@calgary.ca	403-268-4088	North West Subdivisions, development permits, projects
Sunny Sidhu	Street Light Design Tech	sunny.sidhu@calgary.ca	403-268-4628	South West Subdivisions, development permits, projects