Date: August 8th 2023

Attention: **Jaime Hope**

RE: Request for Comments

File No.: **A041-23**

Applicant: Ali Etemadi

Location 41 Garden Avenue

COMMENTS:

☐	We have reviewed the proposed Variance Application and have no comments or objections to its approval.
☒	We have reviewed the proposed Variance Application and have no objections to its approval, subject to the following comments (attached below).
☐	We have reviewed the proposed Variance Application and have the following concerns (attached below).

Alectra Utilities (formerly PowerStream) has received and reviewed the proposed Variance Application. This review, however, does not imply any approval of the project or plan.

All proposed billboards, signs, and other structures associated with the project or plan must maintain minimum clearances to the existing overhead or underground electrical distribution system as specified by the applicable standards, codes and acts referenced.

In the event that construction commences, and the clearance between any component of the work/structure and the adjacent existing overhead and underground electrical distribution system violates the Occupational Health and Safety Act, the customer will be responsible for 100% of the costs associated with Alectra making the work area safe. All construction work will be required to stop until the safe limits of approach can be established.

In the event construction is completed, and the clearance between the constructed structure and the adjacent existing overhead and underground electrical distribution system violates the any of applicable standards, acts or codes referenced, the customer will be responsible for 100% of Alectra's cost for any relocation work.

References:

- Ontario Electrical Safety Code, latest edition (Clearance of Conductors from Buildings)
- Ontario Health and Safety Act, latest edition (Construction Protection)
- Ontario Building Code, latest edition (Clearance to Buildings)
- PowerStream (Construction Standard 03-1, 03-4), attached
- Canadian Standards Association, latest edition (Basic Clearances)

If more information is required, please contact either of the following:

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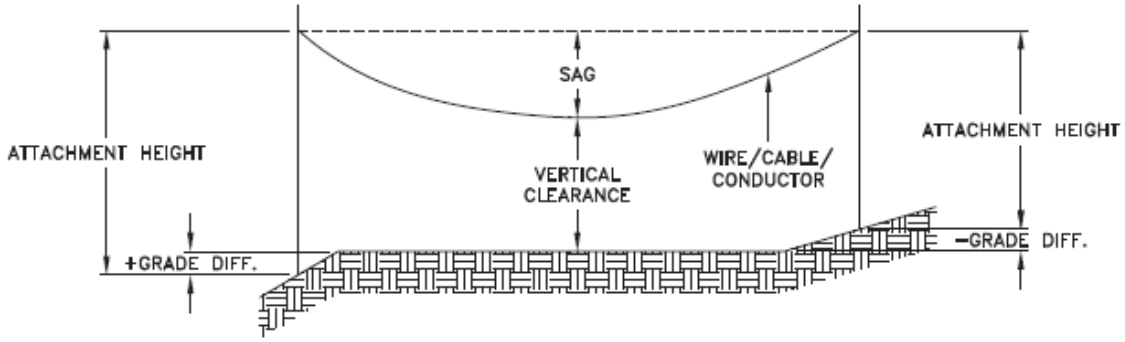
Power Stream
YOUR CURRENT CONNECTION

Construction Standard 03–1

LOCATION OF WIRES, CABLES OR CONDUCTORS	SYSTEM VOLTAGE			
	SPAN GUYS AND COMMUNICATIONS WIRES	UP TO 600V AND NEUTRAL	4.16/2.4kV TO 27.6/16kV (SEE NOTE 1)	44kV
	MINIMUM VERTICAL CLEARANCES (SEE NOTE 2)			
OVER OR ALONGSIDE ROADS, DRIVEWAYS OR LANDS ACCESSIBLE TO VEHICLES	442cm	442cm	480cm	520cm
OVER GROUND ACCESSIBLE TO PEDESTRIANS AND BICYCLES ONLY	250cm	310cm	340cm	370cm
ABOVE TOP OF RAIL AT RAILWAY CROSSINGS	730cm	730cm	760cm	810cm



MINIMUM ATTACHMENT HEIGHT = MAXIMUM SAG
+ MINIMUM VERTICAL CLEARANCE (FROM ABOVE TABLE)
± GRADE DIFFERENCE
+ 0.3m (VEHICLE OR RAILWAY LOCATION)
+ SNOW DEPTH (PEDESTRIAN LOCATION, SEE NOTE 3)

CONVERSION TABLE	
METRIC	IMPERIAL (APPROX)
810cm	27'–0"
760cm	25'–4"
730cm	24'–4"
520cm	17'–4"
480cm	16'–0"
442cm	15'–5"
370cm	12'–4"
340cm	11'–4"
310cm	10'–4"
250cm	8'–4"

NOTES:

1. THE MULTIGROUNDED SYSTEM NEUTRAL HAS THE SAME CLEARANCE AS THE 600V SYSTEM.
2. THE VERTICAL CLEARANCES IN THE ABOVE TABLE ARE UNDER MAXIMUM SAG CONDITIONS.
3. REFER TO CSA STANDARD C22.3 No.1, ANNEX D FOR LOCAL SNOW DEPTH VALUES.
4. ALL CLEARANCES ARE IN ACCORDANCE TO CSA STANDARD C22.3.

REFERENCES	
SAGS AND TENSIONS	SECTION 02

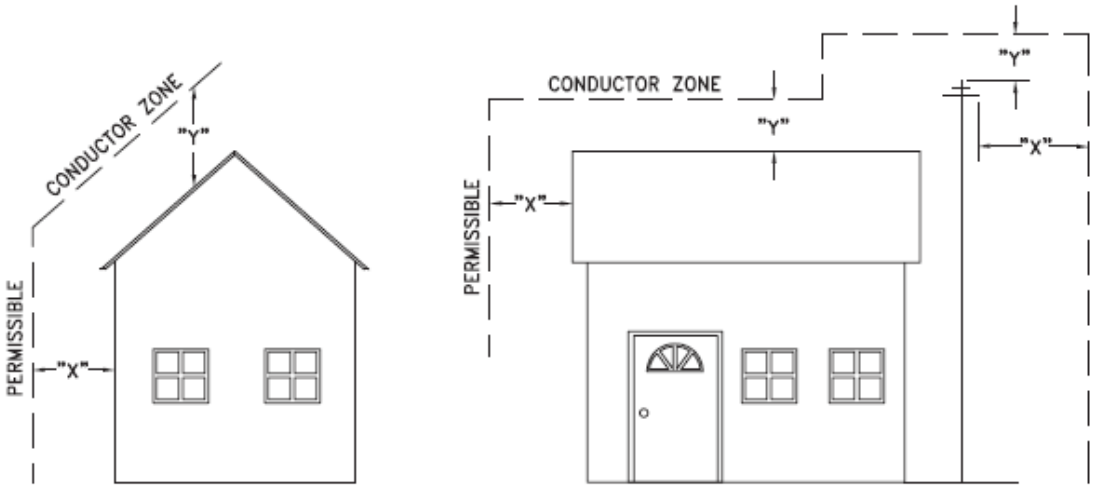
MINIMUM VERTICAL CLEARANCES OF WIRES, CABLES AND CONDUCTORS ABOVE GROUND OR RAILS

Certificate of Approval
This construction Standard meets the safety requirements of Section 4 of Regulation 22/04

Joe Crozier, P.Eng.	2012-JAN-09
Name	Date
P.Eng. Approval By:	Joe Crozier

ORIGINAL ISSUE DATE: 2010–DEC–24 REVISION NO: R1 REVISION DATE: 2012–JAN–09

Construction Standard 03–4



VOLTAGE	MINIMUM HORIZONTAL CLEARNACE UNDER MAXIMUM SWING CONDITIONS DIMENSION "X" (SEE NOTES 1, 3 & 4)	MINIMUM VERTICAL CLEARANCE UNDER MAXIMUM DESIGN SAG CONDITIONS DIMENSION "Y" (SEE NOTES 1, 2, 4 & 5)
0–600V AND NEUTRAL	100cm	250cm
4.16/2.4 TO 44kV	300cm	480cm

NOTES

1. UNDER NO CIRCUMSTANCES SHALL A CONDUCTOR BE PERMITTED TO PENETRATE THE ENVELOPE SHOWN BY THE DOTTED LINE.
2. THE VERTICAL CLEARANCES ARE UNDER CONDITIONS OF MAXIMUM DESIGN SAG.
3. THE HORIZONTAL CLEARANCES ARE UNDER CONDITIONS OF MAXIMUM SWING. WHERE THE CONDUCTOR SWING IS NOT KNOWN A HORIZONTAL CLEARANCE OF 480CM SHALL BE USED.
4. BUILDINGS THAT EXCEED 3 STOREYS OR 15M IN HEIGHT, THE MINIMUM HORIZONTAL CLEARANCE OF THE SECONDARY CONDUCTORS SHOULD BE INCREASED TO 300cm WHERE IT IS NECESSARY TO ALLOW FOR THE RAISING OF LADDERS BY LOCAL FIRE DEPARTMENTS.
5. IN SITUATIONS SUCH AS MULTI–LEVEL GARAGES, WHERE ROOFS ARE NORMALLY USED BY PERSONS AND VEHICLES, THE VERTICAL CLEARANCES OF POWERSTREAM STANDARD 03–1 SHALL APPLY.
6. DISTRIBUTION LINES CONSTRUCTED NEAR BUILDINGS SHALL BE BUILT TO AVOID OVERHANG WHEREVER POSSIBLE. WHERE LINES MUST BE CONSTRUCTED OVER OR ADJACENT TO BUILDINGS THE APPLICABLE HORIZONTAL AND VERTICAL CLEARANCES SHALL BE AT CONDITIONS OF MAXIMUM CONDUCTOR SWING AND MAXIMUM SAG. THE ABOVE CLEARANCES ARE DESIGNED TO PREVENT PERSONS ON OR IN BUILDINGS AS WELL AS EXTERNAL MACHINERY USED IN CONJUCTION WITH A BUILDING TO COME IN CONTACT WITH CONDUCTORS. EFFORTS SHOULD BE MADE TO INCREASE THESE CLEARANCES WHERE POSSIBLE.
7. ALL CLEARANCES ARE IN ACCORDANCE TO CSA C22.3 NO.1–06 (TABLE–9).

CONVERSION TABLE	
METRIC	IMPERIAL (APPROX)
480cm	16'–0"
300cm	10'–0"
250cm	8'–4"
100cm	3'–4"

MINIMUM VERTICAL & HORIZONTAL CLEARANCES OF CONDUCTORS FROM BUILDINGS OR OTHER PERMANENT STRUCTURES (CONDUCTORS NOT ATTACHED TO BUILDINGS)

Certificate of Approval
This construction Standard meets the safety requirements of Section 4 of Regulation 22/04

Debbie Dadwani, P.Eng. — Name
2010-MAY-05 — Date
P.Eng. Approval By: *D. Dadwani*

ORIGINAL ISSUE DATE: 2010–MAY–05 REVISION NO: REVISION DATE:

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