Attachment 1

Proposed Town of Aurora Electric Vehicle Charging Station Policy



You're in Good Company

Administrative Policies & Procedures

Policy No. CORP XX – Electric Vehicle Charging Station Policy

Topic:	Electric Vehicle Charging Station Policy	Affects:	Town properties
Section:	Insert section based on numbering system	Replaces:	N/A
Original Policy Date:	March 23, 2021	Revision Date:	N/A
Effective Date:	March 23, 2021	Proposed Revision Date:	2023
Prepared By:	PDS-Engineering	Approval Authority:	Council

1.0 Purpose

This policy governs how the Town establishes and manages the electric vehicle (EV) charging station infrastructure at Town properties which allows for consistent deployment of infrastructure to support the viability of electric vehicles for the Town's fleet and the community.

2.0 Scope

This policy applies to all existing and planned electric vehicle charging infrastructure, including its associated management and use, at all Town properties (Facilities and parking lots), applicable equally to personal vehicles owned by Town staff, fleet and the public.

3.0 Definitions

Charging Station may include the electric vehicle charging station pillar, electronic or physical parts, plug, and the parking space designated for use when charging an electric or plug-in hybrid vehicle.

Charging station data includes time and usage data for chargers and excludes identifying information, which is not to be collected.

Fleet vehicles are electric or plug-in hybrid vehicles owned by the Town and used by staff for the purposes of carrying out Town business.

Level 1 charging station (Slow Charge) is the simplest method of charging and uses 115 volt single-phase AC power, 15 amps and a maximum of 1.8 kilowatt of power.

Level 2 charging station (Fast Charge) is the currently the most practical and economical charging station level, using 208 to 230 volt multi-phase AC power, 32 to 80 amps and a maximum of 7.7 to 22 kilowatt of power.

Level 3 charging station (Rapid Charge) is currently the fastest type of charger available and is considerably more expensive. The charge uses DC power, unlike the Level 1 and Level 2 chargers that use AC power. The Level 3 charger uses 400 to 850 volt DC power at 25 to 350 kilowatt.

Level 3 charging station (Tesla Rapid Charge) is a DC power charger only compatible with Tesla car models, although the Tesla EVs can also use the Level 1 and Level 2 chargers with an adaptor.

SAE J1772 Connector is a universal charging station plug type that all EV car models can plug into and charge.

Payment Card Industry (PCI) Standards were created to increase controls around cardholder data to reduce credit card fraud. Noncompliance dramatically increases the chances of getting hacked by criminals and thieves.

Process refers to *Electric Vehicle Charging Station Process#XX* and governs the operation and usage of the charging infrastructure, including specific guidelines related to use of the charging station and its management.

Public includes members of the public using charging stations for personal vehicles.

EV Charger Service Provider is a third-party organization that supplies and or operates the electric vehicle charging station.

Open Charge Point Protocol (OCPP) is an application protocol for communication between EV charging stations and a charging station network. This allows EV charger service providers to connect their systems with an EV charging station, regardless of the initial vendor.

Service capacity refers to the ability to power EVs compared to the amount of power available by the building or facility.

Users are the people who use an EV charging station.

Utilization rate is measured as a percentage value referring to the connection time of

the EV charger relative to the EV charger's charging capacity during facilities' peak usage hours.

Partial EV Infrastructure (Low) Requirement: is a requirement that electrical conduit from an electrical room to a parking space be installed. This does not include providing electrical capacity allocation to serve EV loads, but may include providing adequate physical space in an electrical room to ensure electrical equipment can be retrofitted or added to serve EV loads at a later date.

Partial EV Infrastructure (High) or EV Capable Requirement: is a requirement that electrical conduit from an electrical room to a parking space be installed and that electrical capacity allocation be provided in an electrical room to serve EV loads calculated as a function of the number of EV parking spaces served by Level 1, 2 or 3 charging stations. This includes providing adequate space on electrical panels for the EV loads.

Energized electrical outlets or EV Ready Requirement: is a requirement that parking spaces feature a complete electrical circuit terminating in an electrical outlet for the purpose of EV charging. Installation of above ground charging equipment is not required.

Electric Vehicle Network: is an infrastructure system of charging stations and battery swap stations to recharge electric vehicles. Many government, car manufacturers, and charging infrastructure providers seek to create networks. Examples of networks in Ontario include: FLO, Circuit Electrique, Sun Country Highway and myEVroute.

Town of Aurora Corporate Network: is the Town's internal system of computers and software, all of which is owned, controlled and operated by the Town.

4.0 Responsibilities

Employees:

Staff are required to follow this Policy and the Process when using charging stations with their personal vehicles or Town-owned vehicles.

Planning and Development Services, Engineering Services:

Engineering Services (Energy and Climate Change Analyst) is responsible for the data collecting, reviewing, analyzing and reporting on utilization rates, revenues and program success, in addition to supporting the Facilities Manager on utility budgeting and forecasting.

Engineering is responsible for ensuring that an EV infrastructure needs and feasibility assessment is included in the scope of work for all new; reconstructing; or resurfacing Town parking lot projects.

Engineering (Transportation Analyst) is responsible for updating the Town's Parking Bylaw to include provisions for the use of EV charging stations, if applicable.

Community Services, Facilities:

Town Facilities is responsible for executing any capital project or service contract related to EV charging station infrastructure at Town facilities as well as any associated operational costs.

Facilities is responsible for ensuring new Town facilities and major construction at Town facilities include minimum EV infrastructure in the design as set in the Policy.

Operations:

Operations is responsible for the regular maintenance of the parking lots associated with EV charging station infrastructure.

Corporate Services, IT:

IT is responsible for evaluating and connecting any hardware, IT appliance, IoT device, mobile device, or any software that will be connecting to any of the Town's internal corporate networks.

IT will evaluate based on (but not limited to) these parameters. Reason for corporate network connectivity, use of corporate network resources, type of connection needed, what level of access is needed, and evaluate all cybersecurity concerns.

IT shall provide advisory services to any third party electric vehicle network agreement.

Corporate Services, By-law:

By-law is responsible for enforcing and issuing any penalties related to EV infrastructure misuse at Town-owned properties according to Town By-laws.

Finance:

Finance is responsible for communicating net revenues received from the GL accounts with Engineering Services for data reconciliation, as well as transferring any year-end net operating revenue from the program to the Green Initiatives Reserve.

5.0 Description

Charging Station

Charging stations installed shall be a minimum of Level 2, OCPP and PCI compliant. Due to the spike in electrical load, any Level-3 charging stations considered for installation shall be reviewed on a case-by-case basis.

EV charging station operating hours shall be decided on a site by site basis and maximized for public access based on the Town's bylaws.

All charging stations installed in publicly accessible locations shall have a usage fee, aligned with York Region fees, as detailed in the Process. Exceptions are for Fleet vehicles with access cards. Any charging station installed in publicly restricted areas do not require a usage fee and not do require OCPP or PCI compliance. Usage data should be collected if available to capture usage information.

Usage Requirements

Charging stations shall be for charging purposes only. Any vehicle parked in an allocated EV charging station parking space that is not actively charging, as defined under the Process, should be subject to additional user fees until disconnected.

Vehicles found at an EV charging station that are not actively charging are subject to penalties found under the Town's Parking Bylaw.

Users are required to be registered and active members of the EV Charger Service Provider's network to use the service.

Charging is available on a first-come first-served basis, including fleet vehicles.

Appropriate signage shall be erected for usage instructions, as described in the Process. Signage shall refer to this Policy and the Process, and made available on the Town's Website for users to access.

Data Requirements

All charger usage data shall be made available to Engineering Services for review and analysis, regardless of contract status and available in a form that it can be stored in the Town's records.

Revenue and Rates

Rates set for publicly accessible charging station shall be reviewed and adjusted annually. Rates should be based on the time the vehicle is connected to the charging station, as outlined in the Process.

Annual reconciliation between usage data, set rates and program costs shall be performed and rates adjusted accordingly. Any year-end net operating revenue generated from the program should be transferred to the Green Initiatives reserve, if applicable. EV charging station program operational costs should access the Green Initiatives Reserve.

Program Expansion at Existing Town Facilities and Parking lots

Charger expansion shall seek available external funding, when possible and demonstrate lowest lifecycle cost.

At facilities with existing EV charging stations installed with utilization data available, the addition of EV charging stations should be considered based on minimum demand, as calculated in the Electric Vehicle Charging Station Process.

Parking lot surfacing projects located at Town facilities shall include a needs assessment of EV infrastructure within the project scope and consider the installation of EV chargers at a rate based on minimum requirements from the latest LEED version. An additional 10% of parking spaces should be made EV Capable to allow for future installation of EV infrastructure.

Program Expansion for New Facilities and Parking Lots and for Major Facility Building Renovations

The minimum number of EV chargers based on the minimum requirements from the latest LEED version will be considered for all new Town facilities and major facility renovations. An additional 10% of parking spaces should be made EV Ready to allow for future installation of EV infrastructure.

A needs and feasibility assessment of EV infrastructure will be undertaken for any new Town parking lot projects within the project scope and consider the installation of partial EV infrastructure (low) as a minimum.

Electrical Capacity and Asset Renewal

Capital planning shall consider electrical capacity increases for future EV charging stations at the time of asset replacement or upgrading.

Existing Stations

Existing stations installed prior to this Policy shall be networked to the same network as any expansion program, if applicable. Any chargers that cannot be networked shall be removed and repurposed when possible to avoid complications associated with free service (i.e. deemed taxable benefit). Un-networkable infrastructure shall be removed.

Leased Buildings

Installation of EV charging infrastructure at leased facilities shall be considered on a case-by-case basis.

Term

With EV technology evolving rapidly, this Policy and the associated Process should be reviewed every two years.

6.0 Regulatory/References/Codes/Standards

Bill 123, Reserved Parking for Electric Vehicle Charging Act, 2019. Town of Aurora Electric Vehicle Charging Station Process # Town of aurora Parking By-law Number 457 4-04

Attachment 2

Proposed Town of Aurora Electric Vehicle Charging Station Process



You're in Good Company

Administrative Policies & Procedures

Policy No. CORP XX – Electric Vehicle Charging Station Process

Topic:	Electric Vehicle Charging Station Process	Affects:	Town properties
Section:	Insert section based on numbering system	Replaces:	N/A
Original Policy Date:	March 30, 2021	Revision Date:	N/A
Effective Date:	March 30, 2021	Proposed Revision Date:	2023
Prepared By:	PDS-Engineering	Approval Authority:	Council

1.0 Purpose

This process document provides additional guidance in planning and implementing the Town's *Electric Vehicle Charging Station Policy*#XX and ensuring a successful Electric Vehicle Charging Station Program.

2.0 Scope

This process applies to all existing and planned electric vehicle (EV) charging infrastructure, including its associated management and use, at all Town properties (Facilities and parking lots), applicable equally to personal vehicles owned by Town staff, fleet and the public.

3.0 Definitions

Charging Station may include the electric vehicle charging station pillar, electronic/physical parts, plug, and the parking space designated for use when charging an electric or plug-in hybrid vehicle.

Charging station data includes time and usage data for chargers and excludes identifying information, which is not to be collected.

Fleet vehicles are electric or plug-in hybrid vehicles owned by the Town and used by staff for the purposes of carrying out Town business.

Level 1 charging station (Slow Charge) is the simplest method of charging and uses

115 volt single-phase AC power, 15 amps and a maximum of 1.8 kilowatt.

Level 2 charging station (Fast Charge) is the currently the most practical and economical charging station level, using 208 to 230 volt multi-phase AC power, 32 to 80 amps and a maximum of 7.7 to 22 kilowatt.

Level 3 charging station (Rapid Charge) is currently the fastest type of charger available and is considerably more expensive. The charge uses DC power, unlike the Level 1 and Level 2 chargers that use AC power. The level 3 charger uses 400 to 850 volt DC Power at 25 to 350 kilowatt.

Level 3 charging station (Tesla Rapid Charge) is a DC power charger only compatible with Tesla EVs by design, although the Tesla EVs can also use the Level 1 and Level 2 chargers with an adaptor.

SAE J1772 Connector is a universal charging station plug type that all EV car models can plug into and charge.

Payment Card Industry (PCI) Standards were created to increase controls around cardholder data to reduce credit card fraud. Noncompliance dramatically increases the chances of getting hacked by criminals and thieves.

Process refers to *Electric Vehicle Charging Station Process#XX*, which governs the operation and usage of the charging infrastructure, including specific guidelines related to use of the charging station and its management.

Public includes members of the public and Town staff using charging stations for personal vehicles. This includes personal vehicles being used for Town business.

EV Charger Service Provider is a third-party organization that supplies and/or operates the electric vehicle charging station.

Open Charge Point Protocol (OCPP) is an application protocol for communication between EV charging stations and a charging station network. This allows EV charger service providers to connect their systems with an EV charging station, regardless of the initial vendor.

Service capacity refers to the ability to power EVs compared to the amount of power available by the building or facility.

Users are the people who use an EV charging station.

Utilization rate is measured as a percentage value referring to the connection time of

the EV charger relative to the EV charger's charging capacity during facilities' peak usage hours, as determined by the Manager of Facilities.

Partial EV Infrastructure (Low) Requirement: is a requirement that electrical conduit from an electrical room to a parking space be installed. This does not include providing electrical capacity allocation to serve EV loads, but may include providing adequate physical space in an electrical room to ensure electrical equipment can be retrofitted or added to serve EV loads at a later date.

Partial EV Infrastructure (High) or EV Capable Requirement: is a requirement that electrical conduit from an electrical room to a parking space be installed and that electrical capacity allocation be provided in an electrical room to serve EV loads calculated as a function of the number of EV parking spaces served by Level 1, 2 or 3 charging stations. This includes providing adequate space on electrical panels for the EV loads.

Energized electrical outlets or EV Ready Requirement: is a requirement that parking spaces feature a complete electrical circuit terminating in an electrical outlet for the purpose of EV charging. Installation of above ground charging equipment is not required.

Licensed Electrical Contractor (LEC) In Ontario, any business that offers or performs electrical work must be licensed by the Electrical Safety Authority. The Licensed Electrical Contractor employs qualified electricians and a designated master electrician, and must abide by the Ontario Electrical Safety Code, the Occupational Health and Safety Act, Workplace Safety and Insurance Act, and other applicable laws.

NEMA (National Electrical Manufacturer Association) provides standards for the types of environments where an electric enclosure can be used. NEMA Type 3 enclosures are constructed for either indoor or outdoor use certifying a degree of protection from harmful effects on equipment due to the elements.

Open Application Program Interface (API) is a set of clearly defined methods of communication, which allows access to charging station information from an EV charger service provider's database, supporting the use of apps, dashboards and fleet management systems.

Alternative payment options include methods such as RFID cards to authenticate and authorize charging of an EV (e.g. for fleet vehicles).

Gateway refers to the communication gateway that relays EV charging station

information to the EV charger service provider's server through a wireless communication.

Power sharing is a function of the charging station that intelligently manages the available power to the charging station enabling to maximize the number of charging stations they can install at a particular location.

Power limiting is a function of the charging station that minimizes and even offsets the effect of electricity demand charges by limiting power transfer to EVs during the building's peak demand.

Power management software uses customizable algorithms to intelligently share power among stations so every car charges as fast as possible, without ever exceeding the rated electrical capacity for the site.

Barrier-free parking is an unobstructed area exclusive of any aisle or driveway for the temporary parking of a vehicle for persons with disabilities.

Electric Vehicle Network: is an infrastructure system of charging stations and battery swap stations to recharge electric vehicles. Many government, car manufacturers, and charging infrastructure providers seek to create networks. Examples of networks in Ontario include: FLO, IVY Charging Network, Circuit Electrique, Sun Country Highway and myEVroute.

Town of Aurora Corporate Network: is the Town's internal system of computers and software, all of which is owned, controlled and operated by the Town.

4.0 Responsibilities

Employees:

Staff are required to follow this Process and the *Electric Vehicle Charging Station Policy#XX* when using charging stations with their personal vehicles or Town-owned vehicles.

Planning and Development Services, Engineering Services:

Engineering Services (Energy and Climate Change Analyst) is responsible for reviewing and evaluating the charger program's success, reporting to Council if required, expansion planning, financial reconciliation, and supporting any Town reporting requirements, based on charger utilization data.

Engineering Services (Energy and Climate Change Analyst) is responsible for providing

the Town's Facilities Manager with forecasted electricity use and operating costs of EV charging stations, based on previously collected EV charging station data, to support the Facilities Manager annual budget forecasting.

Engineering Services (Energy and Climate Change Analyst) is responsible for reviewing the overall EV charging station program operational costs, usage and revenue. Engineering Services is also responsible for determining hourly usage rate(s) for the EV charging stations together.

Engineering Services is responsible for providing engineering review for all EV charging station projects. Engineering Services is to include an EV infrastructure needs and feasibility assessment within the project scope for all new; reconstruction; or resurfacing parking lot design projects.

Engineering Services (Transportation Analyst) is responsible for updating the Town's Parking By-law Number 457 4-04 to include EV charging station provisions as per under section 30.2 of the *Highway Traffic Act*.

Community Services, Facilities:

Town Facilities is responsible for executing any capital project or service contract on behalf of the Town for the installation of any EV charging station when located at Town-owned facilities.

Town Facilities is responsible for the operating costs associated with the electricity consumption from Town EV Charging Stations at Town Facilities. A separate Budget Line item should identify budget associated with this activity; electricity consumption and any other operating costs associated with the program such as service agreements. Forecasted electricity use and cost will be provided by the Engineering Service, based on previous year's EV charging station data.

Town Facilities is responsible to received and store all installation certificates and commissioning documentation to keep in their records.

Town Facilities is responsible to provide expertise during any planning for EV charging infrastructure to ensure technical specifications are met at each location, like sufficient electrical capacity, charger locations relative to electrical panel, etc.

Town Facilities is responsible to ensure adequate lighting at each EV charging station.

Operations:

Town Operations staff are responsible for regular parking lot snow removal, and any

regular parking lot maintenance, such as cleaning and painting of parking lot spaces.

Operations staff are responsible to install appropriate EV charging station signage at each charger, with operating hours.

Corporate Services, IT:

IT is responsible for evaluating and connecting any hardware, IT appliance, IoT device, mobile device, or any software that will be connecting to any of the Town's internal corporate networks.

IT will evaluate based on (but not limited to) these parameters. Reason for corporate network connectivity, use of corporate network resources, type of connection needed, what level of access is needed, and evaluate all cybersecurity concerns.

IT shall provide advisory services to any third party electric vehicle network agreement.

Corporate Services, By-law:

Town By-law staff are responsible for enforcement of the provisions from the Town's Parking Bylaw in cases of noncompliance.

Finance:

Finance is responsible for managing the cost centre for the program, revenue from the EV charging stations and ensuring revenue funds are received. An annual financial reconciliation will be performed of the account's revenue and submitted to Engineering Services for analysis.

Finance is responsible for transferring any year-end net operating revenue generated from the program to the Green Initiatives reserve, if applicable.

5.0 Procedure

Administration

1. Installation requirements

- A. Installation shall be in compliance with all with the latest rules and regulations of all authorities having jurisdiction including but not limited to:
 - Electrical Safety Association
 - Ontario Electrical Safety Code
 - Local Distribution Companies

- Canadian Standards Association
- Environmental Permits and requirements, if applicable
- Technical Standards and Safety Authority
- Building Code
- National Fire Code
- ASME/ANSI Codes
- ASHRAE
- Occupational Health and Safety Act
- Municipal by-laws and zoning requirements
- Other key stakeholder governance
- Ministry of Transportation
- Workplace Hazardous Material Information System
- B. Installation is required to be done by a Licensed Electrical Contractor (LEC)
- C. Sufficient space and capacity within the building electrical system/ room and in the parking area(s) shall be available to house EV infrastructure.
- D. The electrical tie serving the charging station shall have a minimum 208/240 volt electrical service on a 40 amperage breaker.
- E. Charging stations should be equipped with "power sharing" and "power limiting" technologies when possible.
- F. Charging stations should be commissioned as per EV charger service provider recommendations and operate and function within their recommended specifications.
- G. EV charger service provider should provide the Town with a completed and signed off site commissioning form confirming proper installation and function.
- H. EV charging station location: The EV charging station installer shall consult with both the Facilities Team and the Town's Accessibility Advisor on determining ideal EV charging station locations.
- 2. Revenue collection and pricing
 - A. The EV charger service provider manages all revenue collection on behalf of the Town and is responsible for:

- I. Handling the entire billing process, including payment processing, funds transfers, tax collections and remittance.
- II. All billing which shall be in Canadian funds and be tax compliant in the Province of Ontario.
- III. Ensuring availability of alternative payment options for different user types (i.e. public versus fleet, if applicable).
- B. Pricing
 - I. The user fee should be calculated based on the total time connected to the station, charged by the minute based on an hourly rate, not the duration of the charge or the total energy transfer.
 - II. Hourly charge rates should be based on the Regional averages, not to exceed the maximum average rates in Ontario. Level 3 EV charging stations should have a higher hourly rate than Level 2 chargers, due to their higher capital and operating costs.
 - III. The user shall be charged after charging is complete to encourage drivers to free up the parking space for other users.
 - IV. Engineering Services staff should review the rates annually.
- 3. Requirements for new public charging stations.
 - A. Existing Town Facilities and parking lots
 - I. At Town facilities with existing networked EV charging stations installed, expansion of EV chargers should be demand-based, where additional EV charging stations should be considered when utilization rates of existing chargers during normal business hours (8:30am to 4:30pm) exceed 80%.
 - II. Projects involving the replacement of existing parking lot asphalt shall consider installing the amount of EV chargers necessary to meet the latest LEED requirements. In addition to this requirement, 10% of the total vehicle parking capacity of the site should also be made EV Capable to allow for future installation of EV infrastructure. Level 2 chargers are currently the preferred charger type to be installed, but Level 1 and 3 may be considered on a project-per-project basis. The Town's project managers involved in

the replacement of parking lot asphalt projects shall confirm with the Town's Facilities and/or Engineering Services (Energy and Climate Change Analyst) what types of EV charger levels should be considered to be installed; where EV chargers should be installed; what funding is available; and overall feasibility of meeting the EV charging station policy requirements on a per project basis. A review of the current EV charger demands and operating costs should be considered in assessing the needs and feasibility of installing new or additional EV charging stations in a parking lot.

- B. New facilities and new parking lots
 - I. All new Town facilities and major facility renovations shall consider installing the minimum number of EV chargers as required under the latest version of LEED. An additional 10% of parking spaces should be made EV Ready to allow for future installation of EV infrastructure.
 - П. Any new Town parking lot projects shall include a needs and feasibility assessment of EV infrastructure within the project scope and consider the installation of partial EV infrastructure (low). The needs and feasibility assessment should be based on a project-perproject basis involving a review of the current EV charging station program demands, operating costs, funding and the latest LEED plus 10% of the total vehicle parking capacity of the site as the target to provide partial EV infrastructure (low). The Town's project managers involved in the design and/or construction of new Town parking lots shall confirm with the Town's Facilities and/or Engineering Services (Energy and Climate Change Analyst) what types of EV charger levels should be considered for future installation; where future EV chargers should be installed; what funding is available; and overall feasibility of meeting the EV charging station policy requirements on a per project basis.
- 4. EV charger features should include but not limited to:
 - A. Open Charge Point Protocol (OCPP) compliant systems
 - B. Network capacity to a private and secured connection using a cellular data network

- C. Gateway enabling sufficient communication capabilities to multiple charging stations
- D. Mobile app enabling real time communication with the charging station(s)
- E. EV charging station shall be a minimum Level 2 (40 amps) using SAE Standard J1772.
- F. Level 3 charging stations should be conserved on a project-by-project basis due to their higher capital and operational costs.
- G. Capable of effective operation in outdoor temperatures and conditions experienced during all four seasons.
- H. Charge head to meet a minimum NEMA 3 standard
- I. Charging station components are corrosion resistant
- J. EV charging service provider's customer service hotline, posted in plain sight, for real-time assistance
- 5. Registration Requirements

All EV charging users require registration with membership directly with the corresponding charger network EV charger service provider through smartphone applications or dedicated radio-frequency identification (RFID) cards.

- 6. Public and Fleet Use of Charging Station
 - A. Public charging stations should be installed in easy identified locations and appear on the EV charger service provider's public map
 - B. EV charging stations should have both public and fleet charger options, enabling notices to be set as "Private" and "not available" to the public on web app where necessary.
- 7. Data Administration
 - A. The Town shall have access to the charger usage data. The EV charger service provider shall provide a complete history of EV charging session data for all the charging stations associated with the Town. This data should be accessible electronically with the ability to generate reports for specific dates, sites and/ or EV charging stations, including but not limited to:

- Energy transferred (kilowatt and kilowatt-hour)
- Connection time (hours: minutes)
- Time connected not charging (hours: minutes)
- B. The EV charger service provider shall obtain non user specific usage data, to assess future expansion needs.
- C. The Town should have access to real-time charging station status, including but not limited to:
 - Charging station availability
 - Charging station in use
 - Charging stations currently inoperable
 - Electricity use rate
 - The ability to produce detailed transaction reports for a given period
- 8. Complaint management protocols

All complaints shall be managed by the EV charger service provider and follow processes that are transparent to the Town.

- 9. EV charging station parking enforcement
 - A. Parking spaces designated for EVs shall be for charging purposes only. Any vehicle parked in an allocated EV charging station parking space that have completed charging activities, shall be subject to additional user fees until disconnected.
 - B. Vehicles found at an EV charging station that are not charging are subject to penalties found under the Town's Parking Bylaw.
 - C. The Aurora Parking By-law Number 457 4-04. T shall be updated to align with the the *Highway Traffic Act* under section 30.2:

"No person shall park a vehicle in an electric vehicle charging station that is identified by a sign that satisfies the prescribed requirements unless the vehicle is an electric vehicle and the vehicle is actively charging from the station's charging equipment."

Penalty shall be set, in line with the Reserved Parking for Electric Vehicle Charging Act, 2019.

10. EV Charging Station Process Term

The *EV Charging Station Process* #XX should be reviewed every two years or when required.

- 11. Accessibility considerations
 - A. All EV charging station parking dimensions shall be compliant with Type B dimensions (2.7mX5.3m), as per the Aurora Zoning By-law #6000-17, Section 5.8.1 Barrier-Free Dimension Requirements, in compliance with AODA legislation.
 - B. The Accessibility Advisor shall be consulted if any barrier-free parking spaces are affected by the installation of an EV charging station.
- 12. Operating hours

Operating hours shall be decided on a site by site basis and maximized for public access based on the Town's bylaws.

13. Security cameras

All EV charging station should have security cameras with appropriate signage to explain that users are being video monitored for unlawful activity.

14. Peak demand management

All EV charging stations should include peak shifting capabilities to allow for power demand management during peak hours, and reduce the costs of running the chargers during periods of higher costs.

15. Signage and Lighting

Signage shall be provided to explain parking enforcement rules, operating hours and proper use of the EV charging station, and appropriate outdoor lighting should be provided.

6.0 Regulatory/References/Codes/Standards

O. Reg. 332/12: Ontario Building Code (see sections 3.1.21 and 9.34.4) Bill 123, Reserved Parking for Electric Vehicle Charging Act, 2019. Town of Aurora *Electric Vehicle Charging Station Policy*#XX Town of Aurora Parking By-law Number 4574-04