

Damaged Utility Infrastructure

Recommendation

That the October 27, 2020, City Operations report CR_8387, be received for information.

Previous Council/Committee Action

At the June 22/23, 2020, City Council meeting, the following motion was passed:

That Administration provide a report on the following:

1. How the City manages and responds to citizen reports about damaged utility infrastructure both owned by the City of Edmonton and other Utility providers in the City of Edmonton boundaries.
2. How Administration inventories all utility infrastructure both owned and maintained by the City of Edmonton and utility infrastructure owned and maintained by other Utility Providers and any suggested improvements to tracking, managing and maintaining this inventory.

Executive Summary

The City enables private utility installations on road right-of-way through two municipal access agreements:

1. Franchise Agreement; and
2. Right-of-Way Consent and Access Agreement (RCAA).

The City plays a role in ensuring that all utility infrastructure is maintained, clean, safe and in good condition through provisions in these agreements and standard operating procedures.

The City owns, operates and maintains utilities such as street lights and traffic signals and is responsible for the maintenance and repair of those assets. Notifications for City-owned infrastructure are received through 311 and are directed to the appropriate department for repair.

Concerns regarding private infrastructure can be reported directly to the utility companies or through 311. Administration assesses and inspects all 311 notifications

associated with damaged privately owned utility infrastructure to confirm ownership and the details of the damage. Administration then notifies the owner within 17 days and repairs are typically completed within two weeks of notification.

While the City tracks information on the location and type of utility situated on road right-of-way through its Geographic Information System (GIS), each utility company has its own system for identifying infrastructure in the field and its own asset management system which supports maintenance and repair work.

The municipal access agreements also require utility operators to participate in the Geo Edmonton Utility Right-of-Way Alliance. The intent of this alliance is to share accurate and current underground utilities information between members, which allows for better coordination and reduces the risk of damage during construction, operations and maintenance activities.

Report

Edmontonians value well maintained utility infrastructure and the City supports this need through the ownership, operation and maintenance of utilities such as street lights and traffic signals. It also enables private utility installations on road right-of-way through two municipal access agreements:

1. Franchise Agreement; and
2. Right-of-Way Consent and Access Agreement (RCAA).

Administration plays a role in ensuring that all utility infrastructure, whether municipally or privately owned, is maintained, clean, safe and in good condition through provisions in the agreements and standard operating procedures. A recent inquiry regarding delays repairing damaged utility infrastructure initiated a review of the existing infrastructure management processes and administration confirmed roles, responsibilities and processes to ensure damaged utility infrastructure is addressed in a timely manner.

Damaged Utility Infrastructure Management and Response

The City tracks the location and type of utility situated on road right-of-way through its Geographic Information System (GIS). However, each utility company has its own system for identifying infrastructure in the field and its own asset management system supporting maintenance and repair work. Administration is responsible for managing and servicing all City of Edmonton-owned utility infrastructure (e.g., street light poles and traffic control devices) and each private utility company is responsible for its own infrastructure (e.g., pipes, wires, pedestals and boxes supporting their utility services). The terms of the Franchise Agreements and RCAAs require private infrastructure to

be maintained to a standard agreed upon by the City and require that all repairs be completed in a timely manner.

In some cases, resident concerns regarding private infrastructure are reported directly to the utility companies; however when the utility owner cannot be identified, 311 is often the first point of contact. 311 agents are provided with scripts to respond to concerns which are updated on a regular basis. Improvements to the 311 app occur through ongoing process improvement and updates.

311 inquiries about City owned infrastructure (e.g., streetlights) have specific service categories in the 311 system to allow the resident to identify a specific location on a map and upload photos. Concerns related to privately owned or unidentified utilities are typically captured through the Graffiti and Vandalism service category including the location of the utility and any additional information that describes the concern.

Once the request is captured in the 311 system, notifications about City-owned infrastructure are redirected to the appropriate department so that internal operations and maintenance protocols can be initiated.

Private Utility Providers

Notifications on private or unidentifiable infrastructure are forwarded to Administration to assess damage, confirm ownership and capture the details of the damage. This includes reviewing the GIS utility databases, field visits to validate extent of damage, and in some cases following up with the reporter to clarify the concern. Current service standards are to initiate an assessment within five business days of receipt of notification.

Administration forwards notifications for privately owned infrastructure, including any supplemental information determined during the assessment, directly to the utility company for their action within a maximum of 17 days. Confirmation from the utility is requested upon work completion. Repairs are typically completed within two weeks but can take longer depending on the nature of the damages and associated construction and maintenance activities required to rectify the issue.

The Franchise Agreements and RCAAs include provisions that enable Administration to conduct repairs on behalf and at the sole expense of the utility company if there is a delay or default on the work.

Utility Inventory System

The municipal access agreements (Franchise and/or RCAA) that facilitate installation, operations and maintenance of private utilities require the utility operators to participate in the Geo Edmonton Utility Right-of-Way Alliance. The alliance is

managed through an agreement that is administered by the Parks and Road Services branch. The key members of the alliance include:

- EPCOR (Water, Drainage, and Power)
- ATCO Gas
- Telus
- Shaw
- Bell Canada
- Rogers
- The City of Edmonton
 - Parks And Roads Services Branch (street light, signals, paint lines, parcels, and curbs)
 - Open City and Technology Branch (City's fibre optic lines)
 - Edmonton Transit Branch (LRT infrastructure and bus shelters)

In addition, there are approximately 50 small scale, site-specific utilities whose utility data is managed through individual uploads into the GIS database.

The intent of the Geo Edmonton Utility Alliance is to share accurate and current underground utilities information with its members, which enables better coordination and reduces the risk of damage during construction, operations and maintenance activities. Each external member pays an annual fee (\$27,500 in 2019) to support operation and maintenance of the system. The system offers 24 hour access and updated data is transferred to the City's GIS maps and databases on a daily basis. The information in the system is also available for use by all areas of administration through the City's GIS applications and, where applicable to the public, via requests through the Spatial Data Management group (mapdesk).

Next Steps

Administration will continue to work collaboratively with utility partners to ensure damaged utility infrastructure is addressed in a timely manner. 311 scripts and the 311 app are updated on a regular basis to ensure accuracy and an excellent customer experience. Council is encouraged to forward concerns from constituents regarding damaged infrastructure to Administration for action.

Corporate Outcomes and Performance Management

Corporate Outcome(s):The City of Edmonton has sustainable and accessible infrastructure.

Outcome(s)	Measure(s)	Result(s)	Target(s)
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Private utility infrastructure is maintained in clean, safe and good condition supporting citizen access to utility services.	Time to resolve complaints related to damaged private utilities	2019: 59% of tickets closed within 17 days. 2020 YTD: 78% of tickets closed within the 17 day standard	Close 311 notifications and transfer work to the responsible utility company within 17 business days.
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Others Reviewing this Report

- M. Persson, Deputy City Manager and Chief Financial Officer, Financial and Corporate Services
- C. Owen, Deputy City Manager, Communications and Engagement
- J. Meliefste, Acting Deputy City Manager, Integrated Infrastructure Services
- S. McCabe, Deputy City Manager, Urban Form and Corporate Strategic Development
- B. Andriachuk, City Solicitor