

The background of the top half of the page is an artist's rendering of the E.L. Smith Solar Farm project site. It shows a wide, open landscape with green fields, a dirt road, and several utility poles with power lines stretching across the scene. In the distance, there are trees and a body of water under a cloudy sky.

# E.L. SMITH SOLAR FARM PROJECT UPDATE

Artist rendering: Looking northeast from Anthony Henday Drive (located southwest of project site)

In June 2017, we sent you information about the E.L. Smith Solar Farm project. As we are now in the process of finalizing our Facility Application to the Alberta Utilities Commission (AUC), we are writing to update you on what has changed and ask for your feedback.

## **In this newsletter, you'll find information about:**

- What we heard during personal consultations
- How that feedback was used to inform project details
- Changes to the project boundary and an updated project map
- Next steps in the consultation process
- Project timeline updates
- How to contact us

## **Project Overview**

EPCOR is proposing to build a solar farm on our property just south of the existing E.L. Smith Water Treatment Plant (located just below the Anthony Henday/Cameron Heights turn-off, at 3900 E.L. Smith Road).

If approved by the AUC and the City of Edmonton, the solar farm will generate locally produced renewable energy to help power the water treatment plant.

# THANK YOU TO EVERYONE WHO HAS PARTICIPATED IN THE CONSULTATION PROCESS TO DATE.

Over the past eight months, we've talked to the following individuals and groups about our project:

- Property Owners
- Residents
- Indigenous Communities
- Community Leagues
- Special Interest Groups
- Local Businesses
- Elected Officials
- Government Agencies
- General Public

The input they provided has been used to inform our project design and will continue to be used as we move forward.

Please contact us if you have not yet provided your feedback, or if you have additional input you would like us to consider.

## MORE INFORMATION

If you would like more information about the E.L. Smith Solar Farm project, please visit our website at [epcor.com/elsmithsolarfarm](http://epcor.com/elsmithsolarfarm). Under "more information", you can find resources like:

- Display boards from our July 19, 2017 open house
- Our initial project newsletter from June 2017
- More information about the E.L. Smith Water Treatment Plant
- Links to additional resources, like the City of Edmonton's *The Way We Green: Environmental Strategic Plan*

## Project Update

Since distributing our initial project newsletter in June 2017, we have been discussing the project with residents and other parties located around the proposed solar farm to learn more about how this project may affect them.

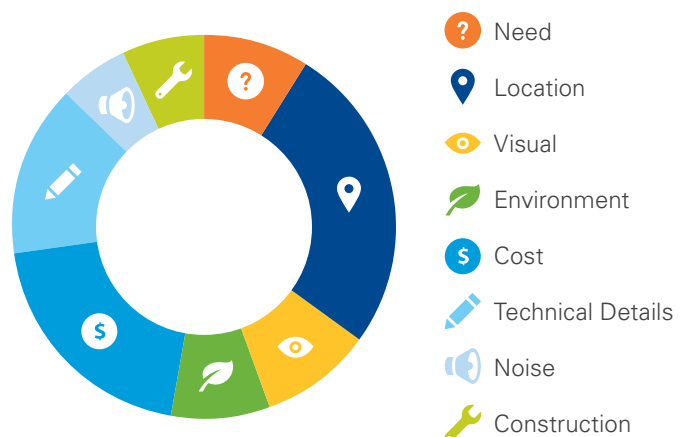
We held an open house for the project in July 2017 that was attended by more than 80 people who provided their feedback, asked questions and spoke to members of our project team. Later that summer, project team members attended the Cameron Heights Family Fun Day to provide attendees with information about the project. In September and October 2017, we also visited the South West Terwillegar Farmers' Market.

To date, we have had over 750 conversations about the project and have compiled and assessed all of the information we have received. This feedback has been used in combination with field studies and other information to reduce potential impacts to the environment and inform our project planning decisions.

## What We Heard

A variety of topics, concerns and questions were brought up during our conversations with the public about the project. While many people were excited about the commitment to renewable energy, others had concerns. Where possible, we worked to mitigate issues that were raised. As we move forward, we will continue to involve you in the process, and respond to your questions or concerns.

**To date, the comments and concerns we have heard most frequently relate to the following topic areas:**



## ? **Need**

A number of people asked us why the project is needed. We are committed to the City of Edmonton's objective to become a leader in energy efficiency and conservation. The purpose of this project is to establish a secure source of renewable energy to help power the E.L. Smith Water Treatment Plant and its water treatment and distribution processes.

Building a solar farm at E.L. Smith aligns with the objectives of the City of Edmonton's *The Way We Green: Environmental Strategic Plan* by converting a portion of EPCOR's energy use to locally produced, renewable sources. If approved, the project will result in a real reduction in our greenhouse gas emissions, comparable to taking over 2,500 vehicles off the road each year. It also gives us the opportunity to contribute to the Government of Alberta's goal to have 30 per cent of Alberta's energy come from renewable sources by 2030.

## 📍 **Location**

We also heard concerns about the proposed location of the project. Some people wanted to know why we are proposing to construct the solar farm in the North Saskatchewan River Valley instead of outside city limits. In selecting this site for our proposed solar farm, we considered a range of factors, including:


- proximity to the E.L. Smith Water Treatment Plant
- land size
- land orientation

- land ownership
- legislation
- operations and maintenance
- environmental impacts
- cost

Some people told us that a larger separation was needed between the proposed solar farm and the river for wildlife movement, while others felt that the site should be used for recreational use due to its close proximity to Edmonton's river valley trail system.

Based on this feedback, we evaluated our plans and have reduced the overall project footprint in an effort to address concerns relating to aesthetics, land reclamation, environment and wildlife. At the narrowest point, the fence line will be set back at least 100 metres (previously 30 metres) from the river. The new boundary and fence line are shown on the project map in dark blue and, after the new fence is constructed, will increase the amount of natural area along the river than is currently present.

EPCOR has also agreed to provide the City of Edmonton with access through our property (outside the solar farm fence line) for future recreational trails to ensure connectivity of the surrounding trail system. For more information about the City's plans for trails in the area, please contact the City representative listed at: [edmonton.ca/elsmithsolarfarm](https://edmonton.ca/elsmithsolarfarm)



Artist rendering: Looking west from recreational trail (located east of project site, across river)



Artist rendering: Potential early morning glare from the solar farm on a spring day (looking northeast from the recreational trail located southwest of the project site)

### **Visual**

Some participants indicated that the proposed solar farm would negatively impact the view in the area. Others advised that the proposed fence type was visually unappealing. As a result of these conversations, EPCOR will evaluate the potential for landscaping or other screening options along the southern boundary of our fence line during our detailed design process.

We also heard a number of questions about glare from the proposed solar farm. Solar panels are designed to absorb as much light as possible and are constructed with anti-reflection coating. Panels currently available on the market reflect as little as two percent of incoming sunlight, about the same as water. However, in certain situations, the glass surfaces of the panels can produce some glint and glare.

In order to better understand the potential of glare occurrence, EPCOR engaged a third party to model our proposed installation. The results of the study told us that the project is expected to have either no glare or low levels of glare at most locations, including the residences along the east and west ridges of the North Saskatchewan River Valley. Along the recreational trail located south and west of the project site which overlooks the proposed solar farm, up to 45 minutes of glare per day may occur on clear, sunny mornings between March and September. The study results indicate that looking at the solar farm from the trail during these times will be similar to looking at the sun reflecting off a lake. At these times, the reflection from the panels could cause you to glance away or temporarily experience spots in your vision. The glare study also identified that drivers using Anthony Henday Drive will not experience glare from the solar farm. Please contact

us (see back page for contact details) if you have questions or concerns about the potential for glare from the proposed solar farm.

### **Environment**

People told us that it is important to minimize potential impacts to the environment. In May 2017, EPCOR contracted a third-party consultant to conduct a number of environmental surveys to assess the impact of the project on wildlife, wetlands, soils, vegetation and historical resources. Some of these studies will continue into 2018.

The studies conducted to date show that the potential adverse effects associated with project activities can be mitigated using a combination of standard and project-specific environmental protection measures. EPCOR is committed to minimizing the impact of our activities on the environment and, where possible, will follow the recommended mitigation measures to ensure no significant lasting environmental impacts result from project activities. If the project is approved, we will also develop an environmental protection plan prior to construction and a monitoring plan for post-construction.

The results of the environmental studies, as well as the feedback that we receive from the public, will be included in our Facilities Application that we submit to the AUC to request approval to construct and operate the solar farm. The AUC will review our application in a public process, and determine whether the project is in the public interest. Our environmental evaluation will be available for public review as part of this process. For more information about how you can participate in the process, please visit the AUC's website: [www.auc.ab.ca/AUCPublicInvolvement](http://www.auc.ab.ca/AUCPublicInvolvement)

## **S Cost**

We heard a variety of questions and comments about the cost and financing of the solar farm. The cost of the solar farm project is included in the water rates charged to EPCOR's customers in the City of Edmonton. People also asked how water rates are set. EPCOR applies for approval of its water rates to the City of Edmonton (our regulator) every five years under Performance Based Regulation (PBR), which ties our rates to performance. This project was included in EPCOR's 2017-2021 PBR Application, which was approved by City Council in October 2016.

As part of the 2017-2021 PBR approval, City Council approved a special rate adjustment that covers the costs of two environmental initiatives: a Green Power Initiative and a North Saskatchewan River Monitoring Program. This project is included under the Green Power Initiative. The total combined charge for both environmental initiatives amounts to between 10 and 15 cents per month on an average residential water bill and began in April 2017.

If approved, the solar farm will generate enough energy to power over **2,800** Alberta homes each year.

## **Technical Details**

We received a number of questions about the technical details of the proposal, particularly relating to the potential for solar power generation in a northern Canadian climate. Due to the amount of sunlight in Alberta, solar power efficiency and output is much higher than in other geographical locations in Canada. We are using historical weather data to create a design that will maximize generation performance given our local weather conditions.

As we have progressed in our planning and design process, the following technical specifications have been updated:

- As a result of our geotechnical studies and varying soil conditions across the site, the piles will now range from three to ten metres in depth (formerly three to five metres).
- We are continually refining our design. As a result, up to 45,000 solar panels may be installed in the area shown in yellow on the project map, depending on the results of our detailed design.
- As described previously, we have reduced the project area in response to feedback from the public and to reduce potential impacts to the environment.

If approved, four inverter stations will be installed within the project area to collect and convert the electricity generated by the solar panels. The approximate locations of the inverter stations are shown on the map in dark blue. Each station will consist of up to two inverters and up to two transformers. These details will be finalized over the upcoming months during our detailed design process for the project.

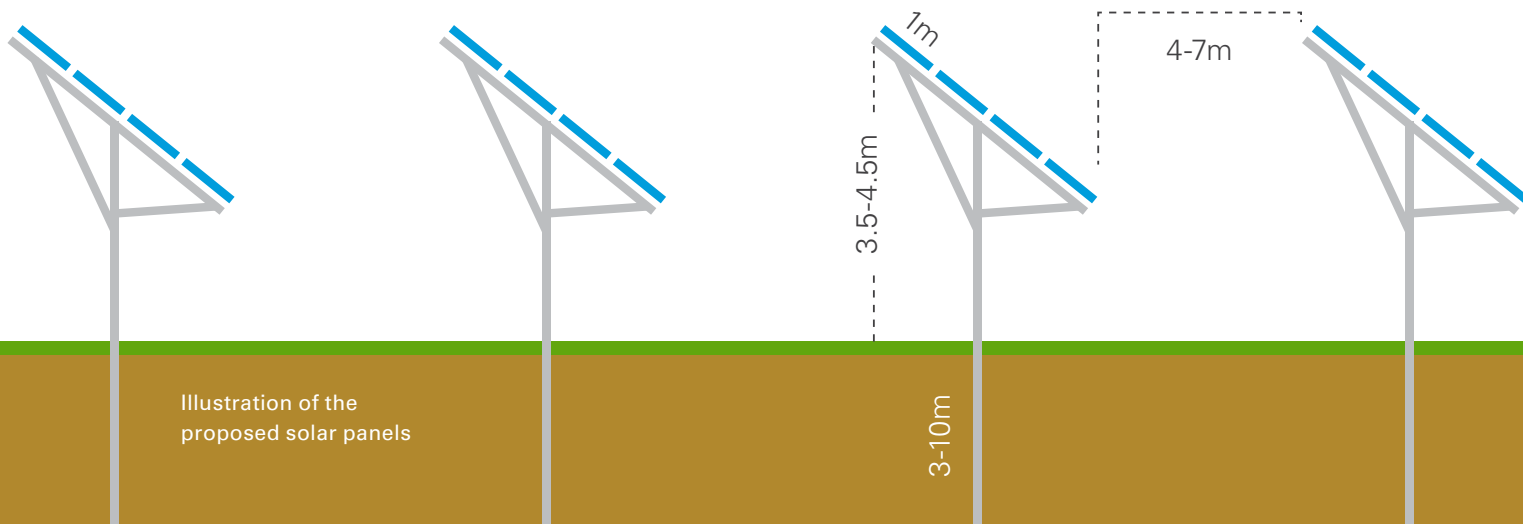
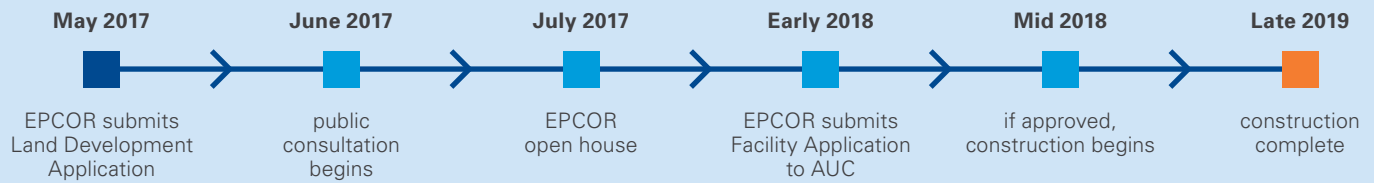


Illustration of the proposed solar panels

## Project Timeline



### **Noise**

Some people asked about noise from the solar farm. Once constructed, we do not anticipate an increased level of noise in the area as a result of this project. If approved, the inverter stations that will be located throughout the project area are the only equipment that will generate some sound. To help mitigate this issue, we will house the inverters within enclosures. No noise will be generated from the solar panels themselves.

A noise study was conducted to ensure that the proposed equipment will meet the City of Edmonton's *Community Standards Bylaw for Noise Control* and the Alberta Utilities Commission (AUC) *Rule 012 for Noise Control*. Based on our preliminary design, the cumulative sound level for the project is below the permissible sound level specified by the AUC.

### **Construction**

People also asked us about construction impacts. If the project is approved, you will see activity that is typical to construction, including company or contractor vehicles and equipment along E.L. Smith Road. We understand that construction impacts can be challenging; however, they are generally short term in nature and our construction staff will work as quickly and safely as possible to minimize any potential inconvenience.

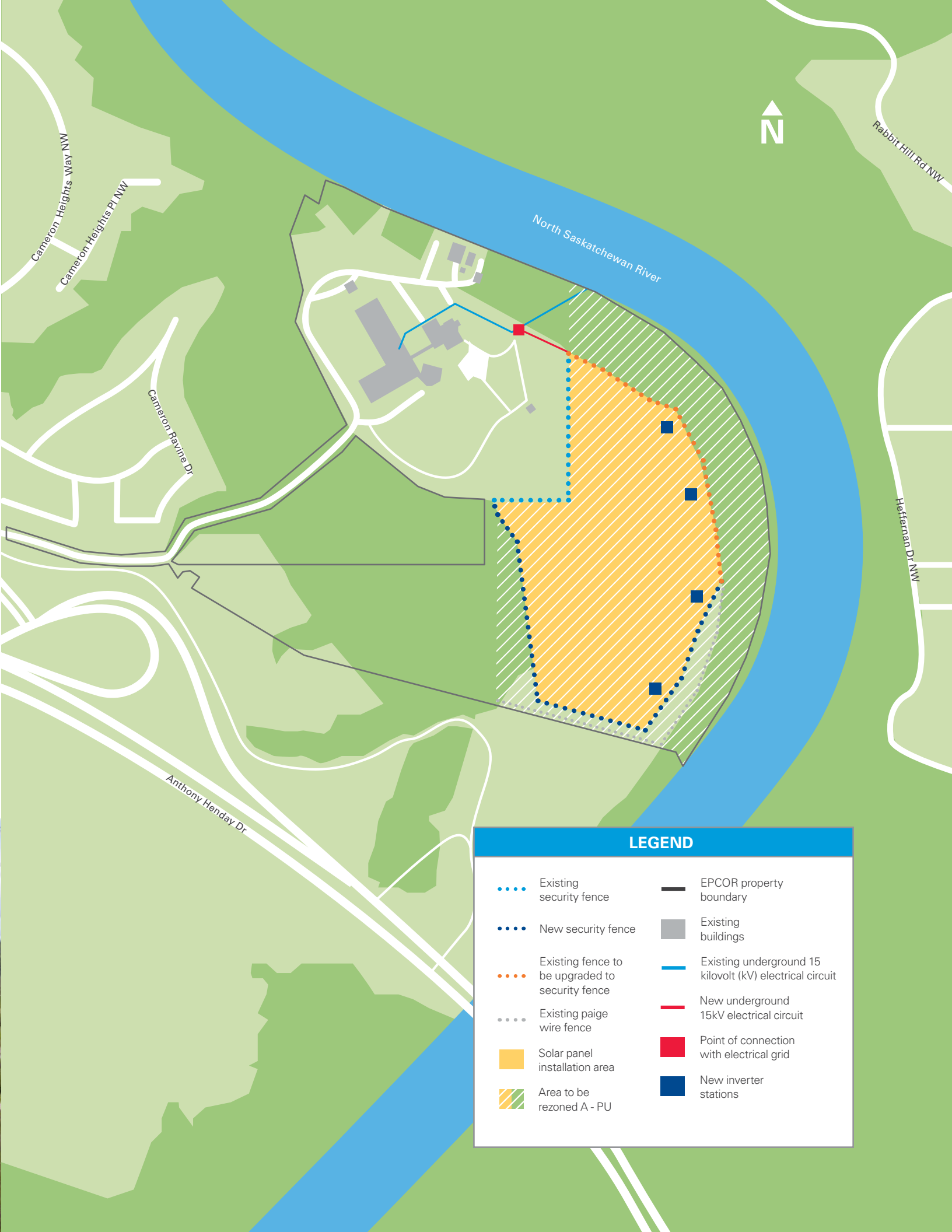
All of the proposed work will take place on EPCOR's property, and all work areas will be safe and secure. We will ensure that our construction activities comply with City of Edmonton bylaws, occupational health and safety requirements, as well as our internal standards. If the project is approved, we will provide you with more detailed information about potential construction impacts before starting any work.

## DID YOU KNOW?













The cumulative sound level incorporates the ambient sound level for the whole site. This includes the E.L. Smith Water Treatment Plant, third-party facilities in the area (like Anthony Henday Drive), as well as the proposed solar farm.



Artist rendering: Looking northeast from Anthony Henday Drive (located southwest of project site)



### LEGEND

- |   |   |   |  |
|---|---|---|--|
|  | Existing security fence                         |  | EPCOR property boundary                                  |
|  | New security fence                              |  | Existing buildings                                       |
|  | Existing fence to be upgraded to security fence |  | Existing underground 15 kilovolt (kV) electrical circuit |
|  | Existing paige wire fence                       |  | New underground 15kV electrical circuit                  |
|  | Solar panel installation area                   |  | Point of connection with electrical grid                 |
|  | Area to be rezoned A - PU                       |  | New inverter stations                                    |

## NEXT STEPS

The consultation process for this project is ongoing, and will continue throughout the life of the project.

Please contact us if you have questions, concerns or would like to request a personal consultation. Your feedback regarding this project is important to us and will be directly incorporated into the Facility Application that we file with the Alberta Utilities Commission (AUC) to request approval to construct and operate the proposed solar farm.

For more information about the project, or to provide us with feedback, please contact us:

**greenproject@epcor.com**  
**(780) 412-3599**  
**epcor.com/elsmithsolarfarm**

As described in our June 2017 project newsletter, this project requires two sets of approvals before we can construct the project:

1. Approval of our Land Development Application from the City of Edmonton
2. Approval of our Facility Application from the AUC

### Land Development Application

In May 2017, we submitted a Land Development Application to the City of Edmonton for approval to rezone the area shown in white hatching on the project map to public utility use. This included an amendment to the *North Saskatchewan River Valley Area Redevelopment Plan (Bylaw No. 7188)* to expand the public utility zone to include solar farm use. In early 2018, we will also submit an *Environmental Impact Assessment* as part of this process. The City of Edmonton is currently soliciting public feedback on the proposed rezoning, after which City Council will review our application in a public hearing. For more information about the land rezoning process for this project, please contact:

**City of Edmonton**  
**edmonton.ca/elsmithsolarfarm**  
**edmonton.ca/rezoning**

### Facility Application

In the upcoming weeks, EPCOR will submit a Facility Application to the AUC for approval to construct and operate the proposed solar farm. Once we have submitted our application, the AUC will issue a public notification and provide key dates, contacts and information on how to participate in their regulatory process. For more information about this process, please contact:

**Alberta Utilities Commission (AUC)**  
**(780) 427-4903 (for toll-free access,**  
**dial 310-0000 before the 10 digit number)**  
**consumer-relations@auc.ab.ca**  
**auc.ab.ca**



EPCOR respects your right to privacy. Any personal information we collect about you, including your name, address, phone number and email address will be used only in regards to this project. In accordance with AUC Rule 007, this information will be filed with the AUC and may be available to the public through their website during the regulatory proceeding for this project. Please visit [www.auc.ab.ca/AUCPublicInvolvement](http://www.auc.ab.ca/AUCPublicInvolvement) for more information about the AUC's public involvement process for proposed utility developments. For information about EPCOR's Privacy Policy, visit [epcor.com/privacy](http://epcor.com/privacy).