PODER SUBSTATION
SUBESTACIÓN PODER

WELCOME TO OUR PUBLIC OPEN HOUSE
BIENVENIDOS A NUESTRA JORNADA DE PUERTAS ABIERTAS

Please sign in at the welcome table

Regístrese en la mesa de recepción

Spanish/English translators available

Traductores Español/ Inglés disponibles

Take a comment form and contact information card

Tome un formulario de comentarios y una tarjeta de contacto

Enjoy Refreshments

Disfrute de unos aperitivos

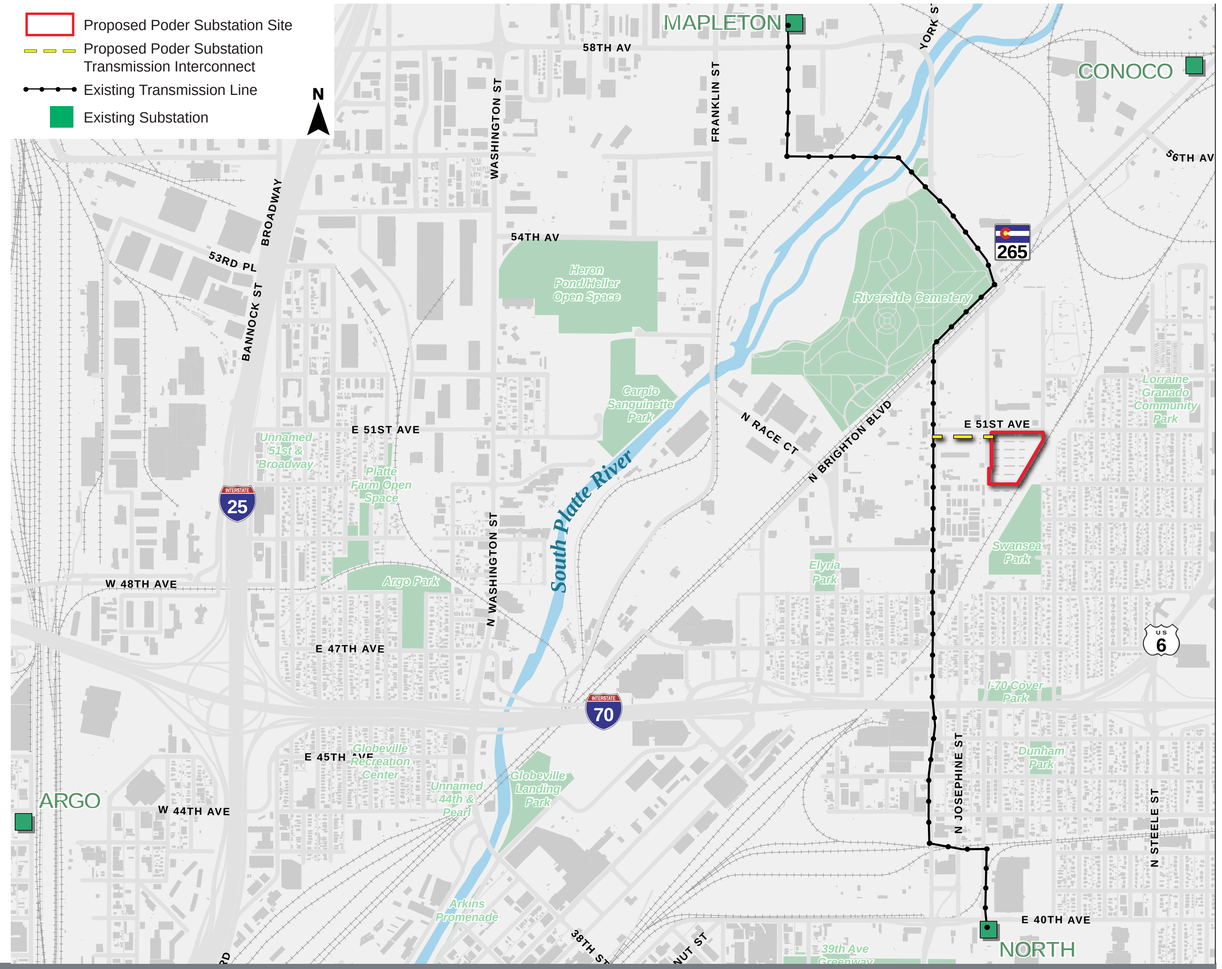
No formal presentation is planned. Please review materials and let us know if we can answer any questions.

No está prevista ninguna presentación formal. Revise el material y consúltenos si tiene alguna pregunta.

OVERVIEW

Poder Substation is a new electric substation to be located at East 51st Avenue and North Columbine Street. The substation will be connected to the existing transmission line along York Street, one block to the west. Poder Substation includes several components:

- A new substation located on approximately 7 acres
- Approximately 675 feet of overhead single-circuit 115-kilovolt electric transmission line interconnection
- Approximately 250 feet of distribution interconnection



Poder Substation will:

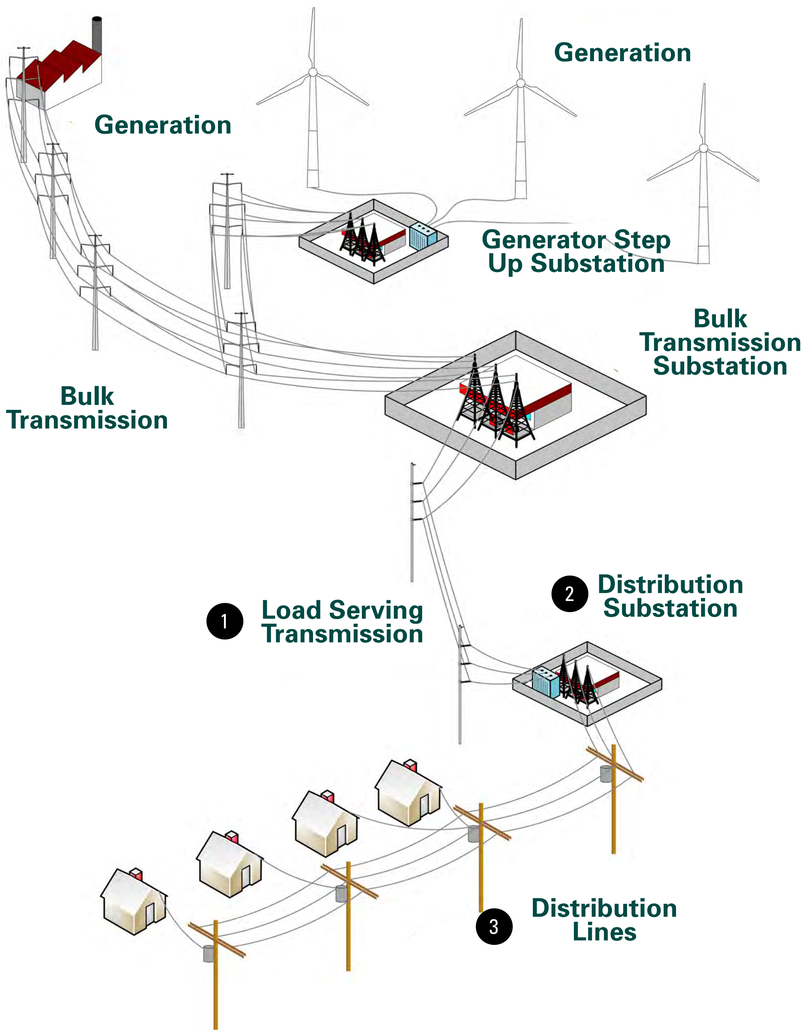
Improve overall system reliability and resilience in the Elyria-Swansea, Globeville, Five Points and other neighborhoods, and backup existing substations that are reaching capacity

Begin construction in 2024 and complete work in 2026, pending permit approvals

Connect to the existing transmission system to supply the Poder Substation with electricity to power the distribution feeders serving surrounding communities

NEED AND BENEFITS

Denver continues to experience residential, commercial, and industrial growth which has increased the demand for additional electricity. Xcel Energy is making upgrades to the electric system in this area to reliably serve the additional customer need anticipated for the future.



Poder Substation will:

- Provide additional system capacity
- Maintain adequate voltage to serve electrical demand
- Backup the existing Mapleton, Argo and North substations, which are reaching capacity
- Reliably serve customers' electric needs as commercial, residential and industrial demand increases

What does a substation do?

Distribution substations, like Poder Substation, reduce the voltage of electricity delivered from load serving transmission lines to a lower voltage that is delivered on distribution lines to power homes and businesses.

1. **Existing transmission lines**
2. **Poder Substation**
3. **Distribution lines will deliver power from the Poder Substation to local residences and businesses**

DEVELOPMENT PROCESS

Developing the Poder Substation involves a thorough process to plan and site the facilities; engage with the public and stakeholders; and design, permit, and construct.

Substation Development from Inception to Energization

Plan

Identify substation need and area it will serve, transmission and distribution interconnection locations, permitting requirements and initiate Site Selection Study

Select Site

Determine the substation location based on technical requirements such as minimum parcel size and maximum distance to interconnections, and compare feasible sites

Engineer and Design

Develop design and construction plans for the site including site improvements such as stormwater management, site security features such as fencing or wall, and landscaping

Permit

Identify, develop, file and obtain required land use permits from Denver

Plan Construction

Finalize engineering and design plans, obtain construction permits, prepare the area for work crews

Construct

Grade the substation site, install necessary site improvements, add site security features, install electric equipment, construct transmission and distribution interconnections

Energize

Bring the substation in service to provide power to surrounding communities

Restore

Restore the work area

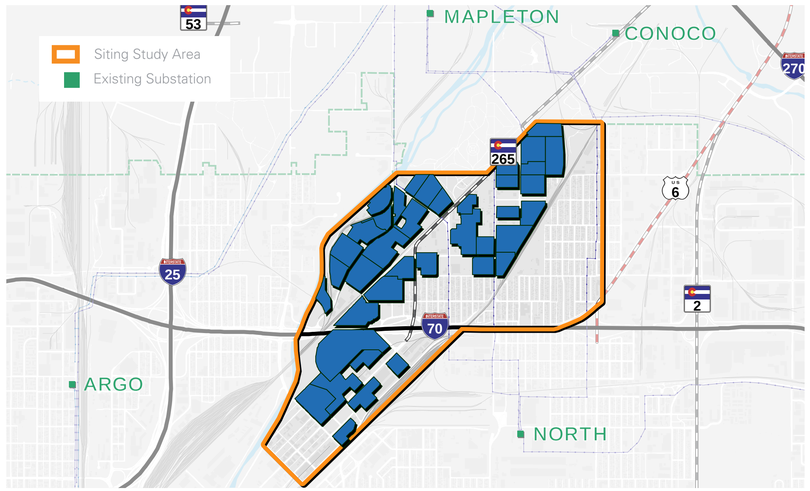
Community Engagement

Community engagement helps drive responsible development. Xcel Energy built a special project website for the Poder Substation project – XcelEnergyPoderSubstation.com – to inform customers about it and our progress. People may contact us at 800-957-9048 or PoderSubstation@xcelenergy.com with any questions or comments, and we will work with the community and Denver through all the phases of this needed project.

SITE SELECTION PROCESS

Xcel Energy®

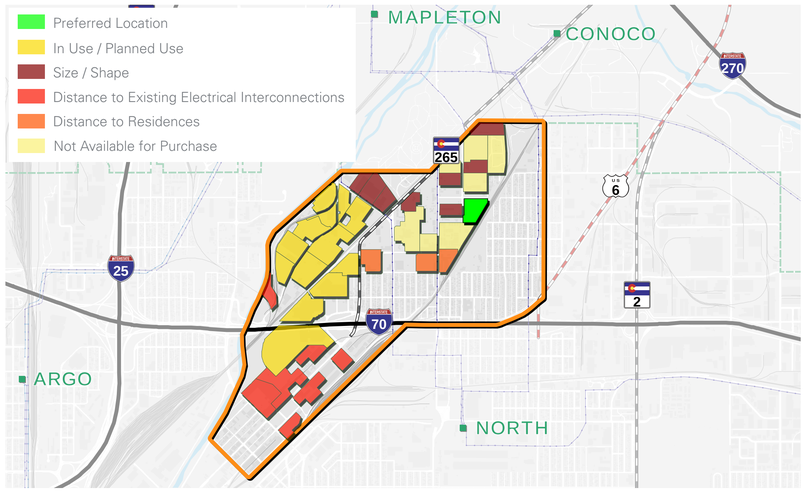
Site Selection Study Area



A Siting Study was completed for Poder Substation that evaluated and compared several sites using siting criteria to identify a preferred location.

The Siting Area was identified between existing substations where the necessary transmission and distribution interconnections could be made to provide power to the community. The site was selected because it is the appropriate size, proximate to the necessary transmission and distribution interconnection, within a compatible land use area and zone district, and available for purchase.

Selected Site



Siting Criteria	Land Acquisition	Land Use	Engineering	Environmental and Cultural Resources	Regulatory Compliance
Consideration	• Developable land • Available for purchase • Existing easements	• Current and future land use • Residences • Parks, trails, and recreation centers • Public institutions and buildings • Railroads and other transportation infrastructure	• Parcel size and dimension • Distance to existing electrical system interconnections • Accessibility for construction and operation • Proximity to existing buildings and structures	• Historic landmark districts and structures • Denver Storm Detention and Water Quality Areas • EPA-registered sites	• Local, state and federal permitting requirements and approvals • Allowable uses in zone district

LOCATION

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The East 51st Avenue and Columbine Street site was ultimately selected because:

- Appropriately sized for substation
- Takes into consideration residences, cultural and historic resources, schools, parks, railroads, wetlands, and existing and planned development
- Near transmission and distribution interconnections, minimizing construction impact
- In an industrial area, which will remain industrial per Elyria and Swansea Neighborhoods Plan
- Located in the area that the substation will serve
- Allowable use in zone district
- Available for purchase

Legend

- Proposed Poder Substation Site
- Proposed Poder Transmission Interconnect
- Existing Transmission Line
- Park

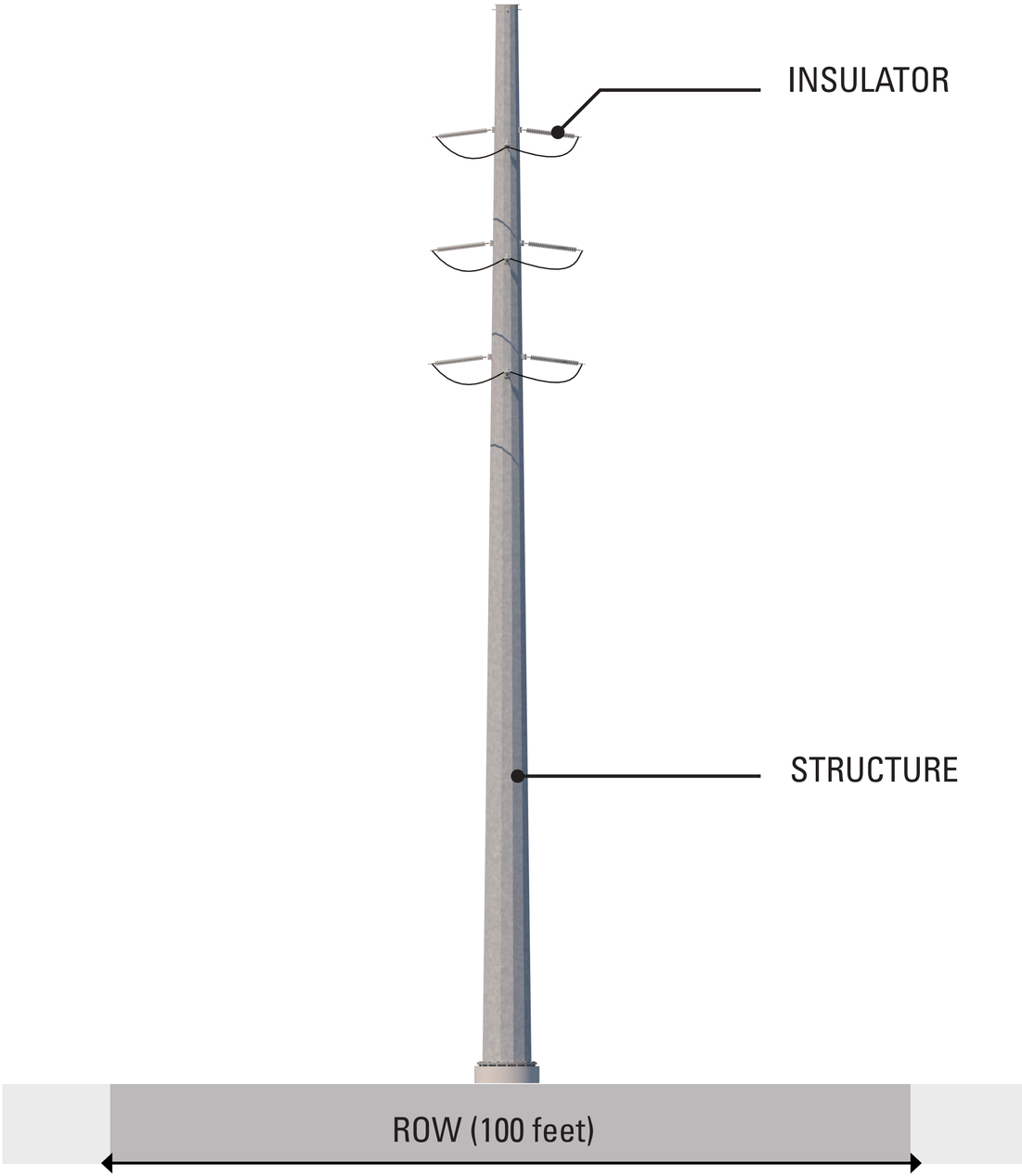
SUBSTATION SAFETY

Poder Substation will be built and maintained to meet or exceed national safety standards, such as those specified by the National Electrical Safety Code and the North American Electric Reliability Corporation.

Poder Substation will:

- Be monitored 24/7/365 by a staffed control center
- Be inspected regularly for damage, equipment needing repair or replacement, and anything else that might jeopardize safety
- Include a security wall to prevent unauthorized access
- Coordinate with local law enforcement and first responders about security concerns or access to substation facilities

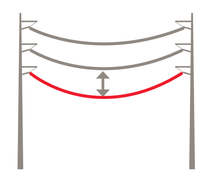
TRANSMISSION LINE



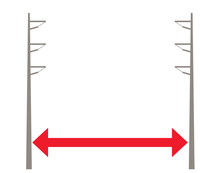
Anticipated Design

- Steel single-circuit transmission structure
- Single pole structures
- Each pole will be on a concrete foundation
- Poles range 80 to 95 feet above ground
- 100-foot-wide Right-of-Way (ROW)
- Typical span length of 950 feet between transmission structures
- Galvanized grey color

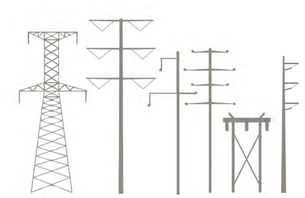
Transmission line structures vary in height depending on:



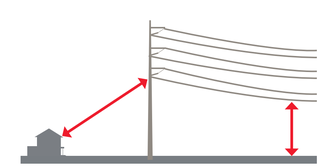
Sag of the conductor



Length of span between transmission structures



Structure type



Minimum clearance prescribed by the National Electric Safety Code

WHAT COULD THE SUBSTATION LOOK LIKE?

Thoughtful Design

Poder Substation will be designed to meet the needs of the community and Denver design requirements such as setbacks, fencing or walls, and waterwise landscaping. The substation equipment will be setback from property lines to accommodate greenspace including street trees and shrubs. Right-of-way improvements will be implemented as required by Denver that may include sidewalks to enhance neighborhood connectivity. Xcel Energy will work with the community during the design phase and throughout the duration of the Project.

Substation Site Design Considerations

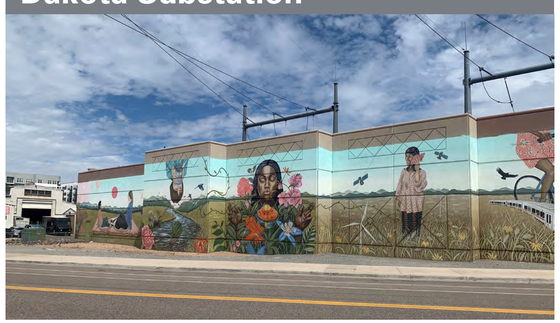
1. Security Fencing / Screening Wall
2. Site Design
   Includes drainage and stormwater control features
3. Landscaping
   Meet Denver design requirements and the needs of the community
4. Lighting
   Limited to emergency or maintenance activities and security
5. Private Access Drive
   Allows equipment to pull completely off the public street
6. Land Use Compatability
   Compatible with various surrounding land uses

Community Substations

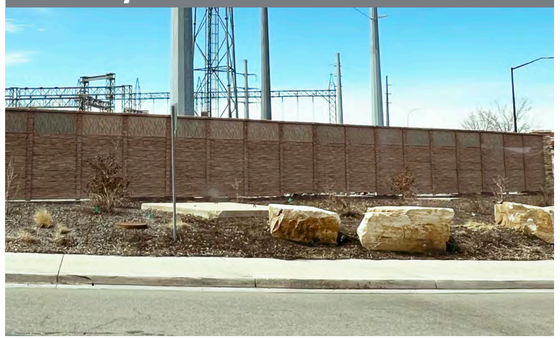
Xcel Energy has successfully developed substations within local communities around Colorado. Each substation site is designed to meet technical requirements, local development standards, and complement the surrounding area. A few examples of Xcel Energy community substations are pictured below.

Washington Substation

Dakota Substation



Greeley Substation



Isabelle Substation

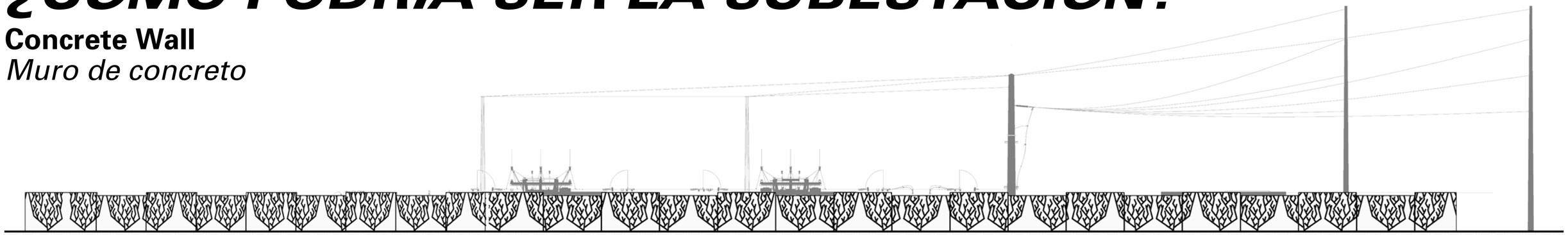
The above graphics are for reference purposes only. Site elements are not guaranteed to be final due to safety, security, operational interference and site specific requirements.

WHAT COULD THE SUBSTATION LOOK LIKE?

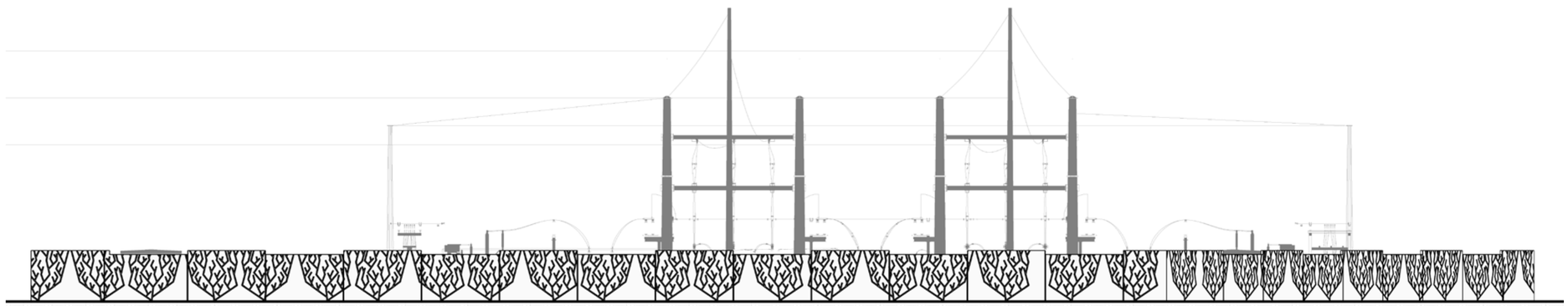
¿CÓMO PODRÍA SER LA SUBESTACIÓN?

Concrete Wall

Muro de concreto



Elevation East Side | *Elevación lado Este*

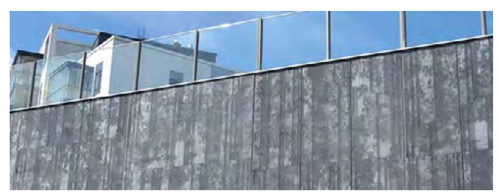


Elevation South Side | *Elevación lado Sur*

Foliage Textured Concrete Precast Wall
Muro prefabricado de concreto con textura Foliage

Mural on Smooth Tilt-Up Wall
Mural sobre pared lisa inclinada hacia arriba

Foliage Textured Concrete Tilt-Up Wall
Muro inclinado hacia arriba de concreto texturizado Foliage



Ridged Concrete Tilt-Up Wall
Muro inclinado hacia arriba de concreto rugoso

Sloped Tilt-Up Wall Top
Borde inclinado del muro inclinado hacia arriba

Stone Textured Tilt-Up Wall
Muro inclinado hacia arriba con textura de piedra

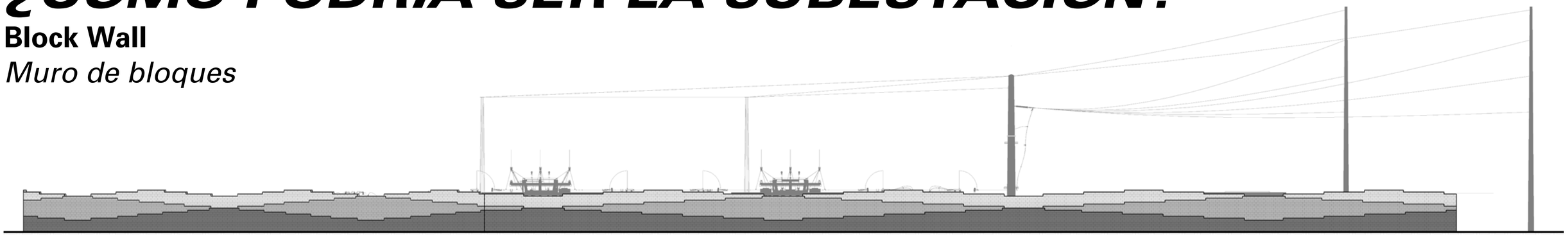
These examples are not exhaustive. All or parts of any example may be used in the Poder Substation wall.
Los ejemplos no son exhaustivos. Cualquier ejemplo puede utilizarse en su totalidad o en parte en el muro de la subestación Poder.

WHAT COULD THE SUBSTATION LOOK LIKE?

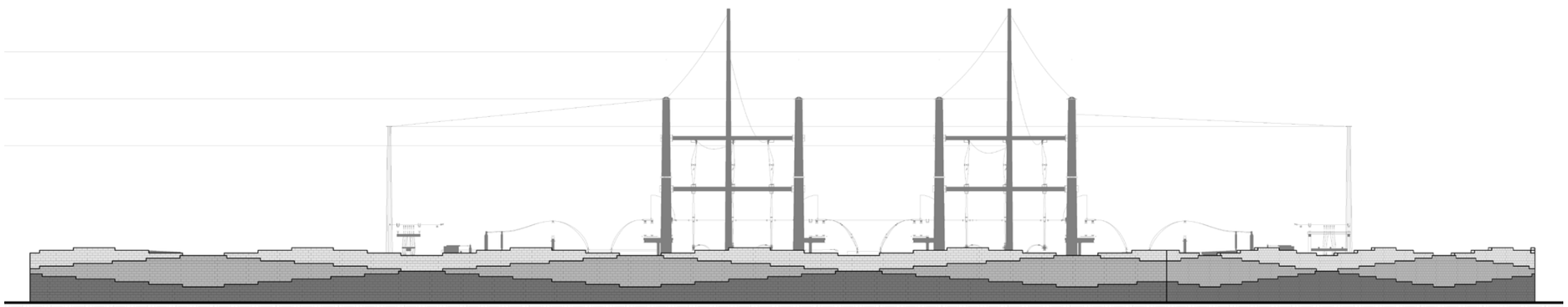
¿CÓMO PODRÍA SER LA SUBESTACIÓN?

Block Wall

Muro de bloques



Elevation East Side | *Elevación lado Este*



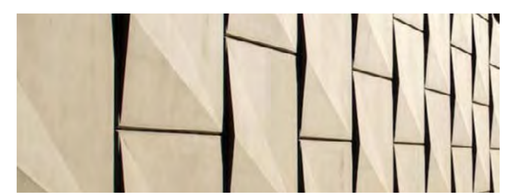
Elevation South Side | *Elevación lado Sur*

Split-Faced CMU Brick Wall
Muro de ladrillos CMU de dos caras

Varied CMU Brick Wall
Muro de ladrillos CMU variados

Alternating Brick + CMU Wall
Muro de ladrillos alternados + CMU

Rough-Cut Stone Brick Wall
Muro de ladrillos de piedra gruesa



Faceted Precast Brick Wall
Muro de ladrillos prefabricados facetados

Staggered Split-Face + Smooth CMU Wall
Muro escalonado, liso y de dos caras de CMU

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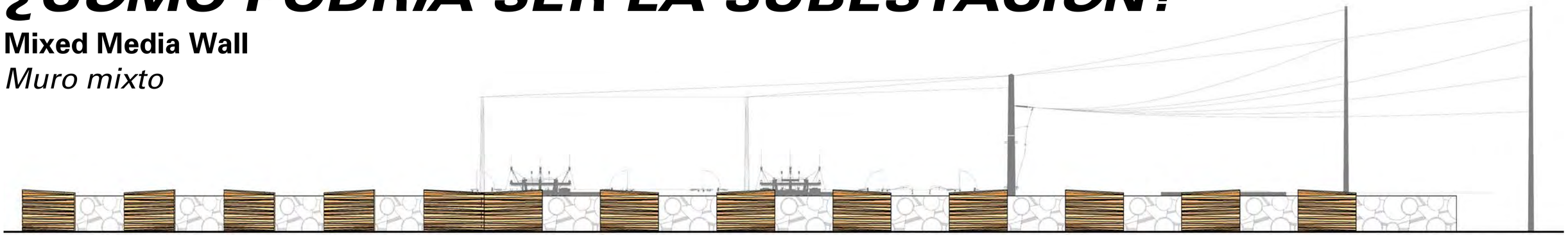
WHAT COULD THE SUBSTATION LOOK LIKE?

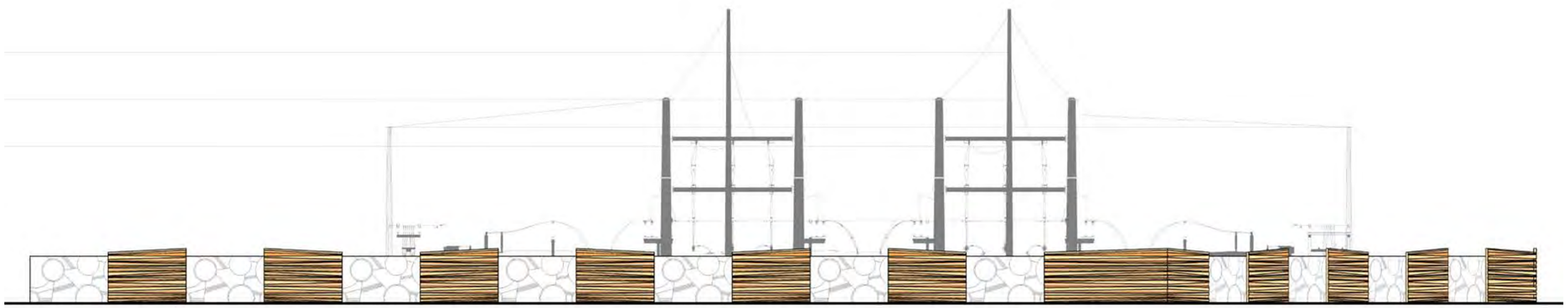
¿CÓMO PODRÍA SER LA SUBESTACIÓN?

Mixed Media Wall

Muro mixto



Elevation East Side | *Elevación lado Este*

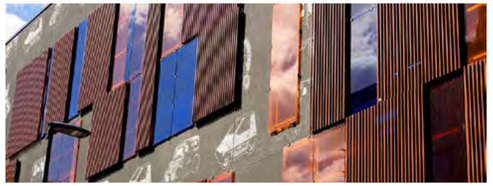


Elevation South Side | *Elevación lado Sur*

Mural on Corrugated Steel Wall
Mural sobre muro de acero corrugado

Alternating Wood Slat + Tilt-Up Wall
Tablas de madera alternadas + muro inclinado hacia arriba

Corten Steel Panel Wall
Muro de paneles de acero Corten



Mirrored and Metal Slat Panels on Wall
Paneles de espejo y láminas metálicas en el muro

Tilt-Up Wall with Rough Finish
Muro inclinado hacia arriba con acabado rugoso

Metal Mesh Panels on Wall
Paneles de malla metálica en el muro

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WHAT COULD THE SUBSTATION LOOK LIKE?

¿CÓMO PODRÍA SER LA SUBESTACIÓN?

Photo Point 01 - View From Swansea Park Playground

Photo Point 01 - Vista desde el parque infantil Swanesa

Existing View | *Vista actual*

View Location | *Ubicación de la vista*

Proposed View | *Vista propuesta*

WHAT COULD THE SUBSTATION LOOK LIKE?

¿CÓMO PODRÍA SER LA SUBESTACIÓN?

Photo Point 02 - View From Fillmore Street and E. 51st Avenue
Photo Point 02 - Vista desde Fillmore Street y E. 51st Avenue

Existing View | *Vista actual*

View Location | *Ubicación de la vista*

Proposed View | *Vista propuesta*

WE WANT TO HEAR FROM YOU

QUEREMOS CONOCER SU OPINIÓN

We're looking for community input on substation design, including wall materials and other design elements.

Queremos conocer la opinión de la comunidad sobre el diseño de la subestación, incluidos los materiales de los muros y otros elementos del diseño.

Explore wall design and landscaping options

Explore las opciones de diseño de paredes y paisajismo

Please fill out a comment form

Por favor complete un formulario de comentarios

At one of our comment stations at this meeting

en una de nuestras estaciones de comentarios en esta reunión

OR

Using this QR Code

escaneando este código

Contact us with questions or comments in one of the following ways:

Si tiene alguna pregunta o comentario, puede contactarnos de una de las siguientes maneras:

E-mail | Correo electrónico
PoderSubstation@XcelEnergy.com

Website | Sitio web
XcelEnergyPoderSubstation.com

Phone | Teléfono
800-957-9048