

Welcome

Norfolk-Stanton North Project Open House

September 2023

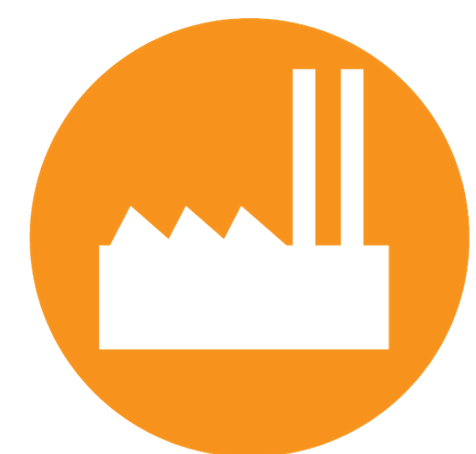


Nebraska Public Power District
Always there when you need us

Who We Are

Nebraska Public Power District is the state's largest electric generating utility and has been providing dependable and affordable electricity for more than half a century. NPPD currently serves all or parts of 84 of the state's 93 counties.

- Governed by an elected 11-member Board of Directors
- Serves both retail and wholesale customers
- Over 62% of Nebraska customer-generation resources are carbon-free
- Utilizes a diverse mix of generation resources including:



Coal



Wind



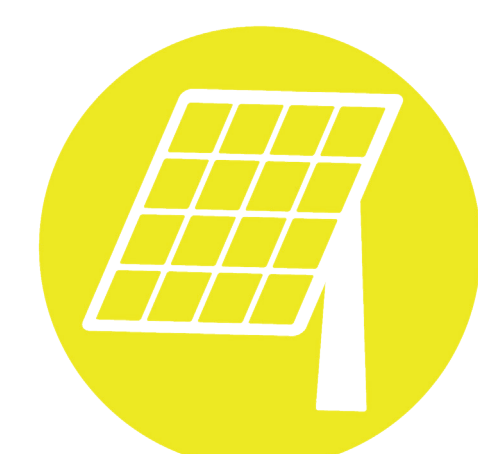
Nuclear



Diesel/other



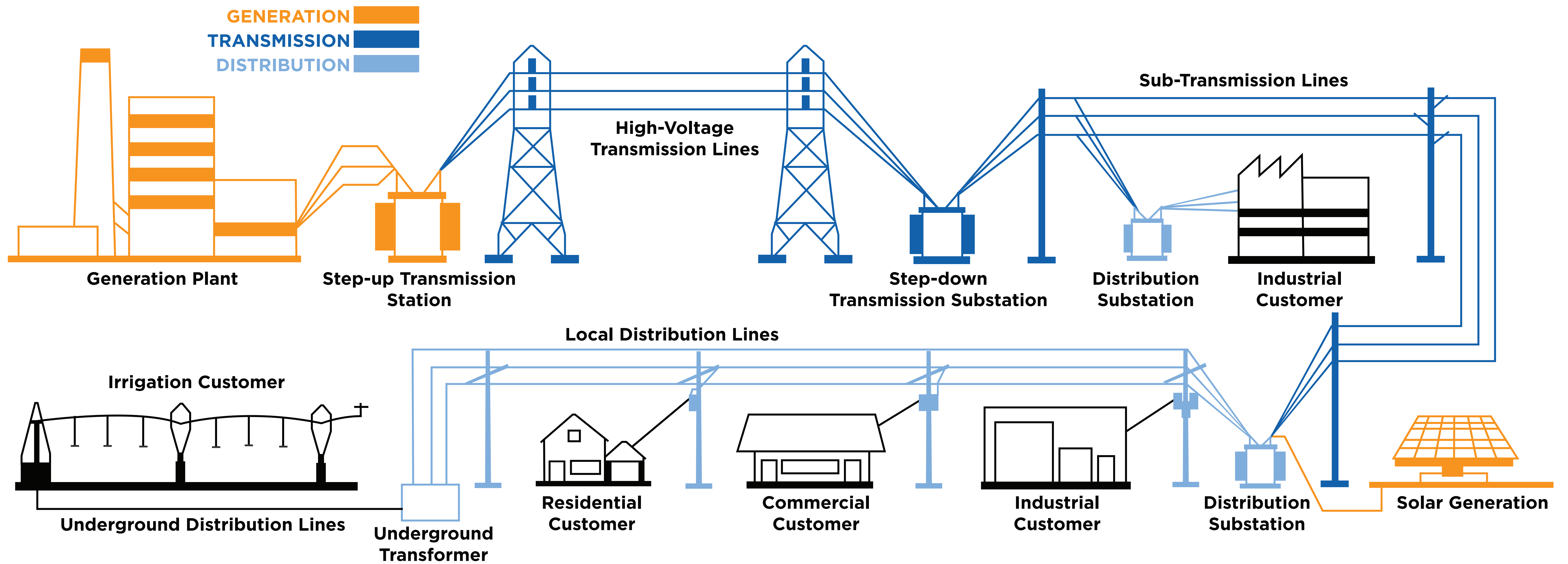
Hydroelectric



Solar



The Path of Electricity

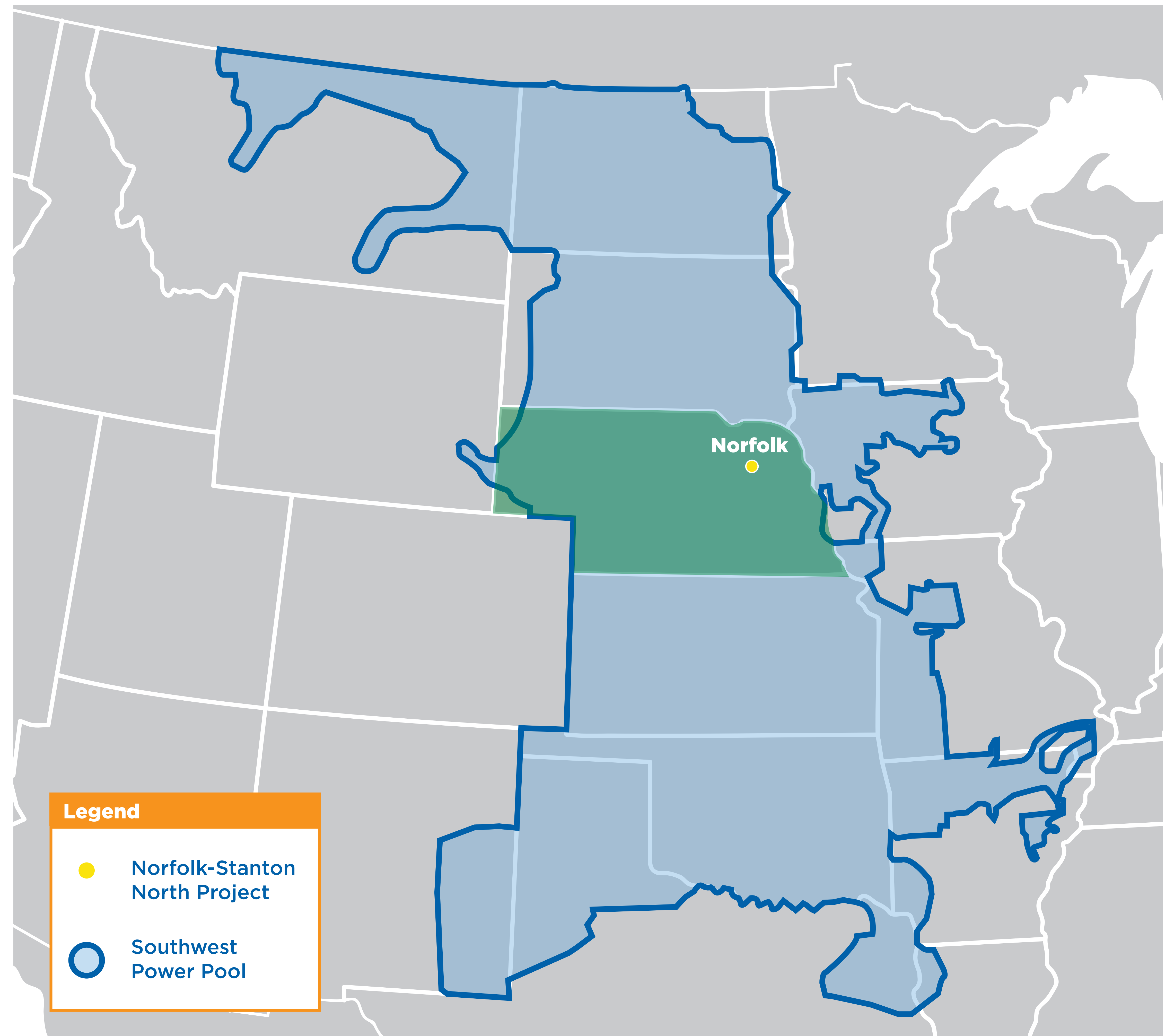


From the power plant, electric energy is delivered through a series of lines and substations where the voltage is reduced to the proper level for end-use customers.



Southwest Power Pool

NPPD has been a member of the Southwest Power Pool (SPP) since April 2009. The SPP's primary focus is to ensure reliable power supplies, adequate transmission infrastructure, and competitive wholesale electricity prices. This project will help to strengthen the SPP electric system in locations where load use and projected growth is reaching critical levels.



Project Description

With the Norfolk-Stanton North Project, NPPD plans to build an approximate seven-to-nine-mile, 115 kV transmission line to provide a necessary path between a substation east of Norfolk and a substation northwest of Stanton.



The new line will increase the system's transmission capacity to meet increasing demand and further enhance reliability and resiliency in the Stanton, Cuming, and Burt County areas.



Purpose & Need

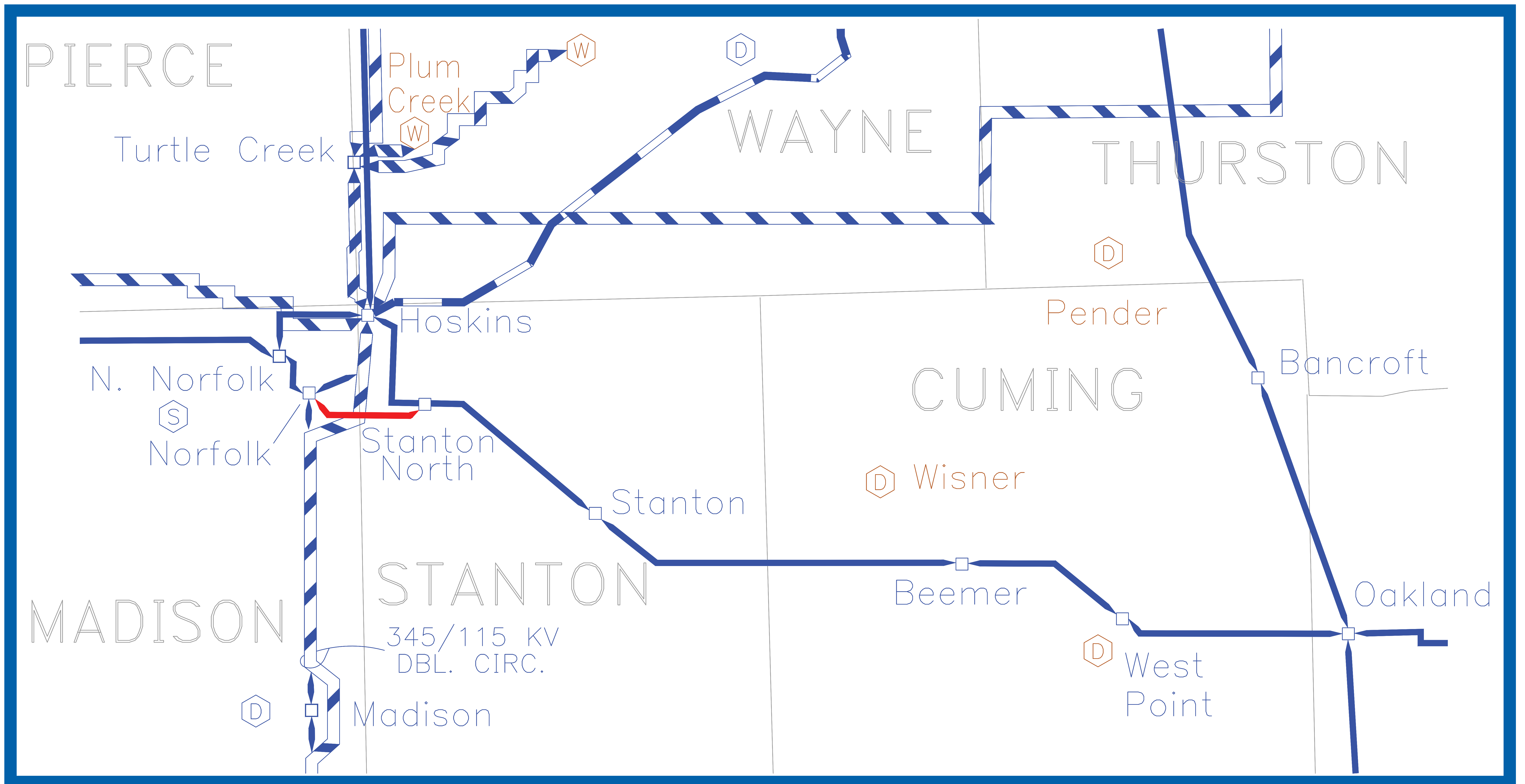
The electric load in the Stanton, Cuming, and Burt County areas continues to grow, and the existing 115 kV transmission system is facing high electrical demand. In



exploring several different options, NPPD and SPP determined a 115 kV transmission line from the Norfolk substation on the east side of Norfolk to the Stanton North substation northwest of Stanton will accommodate current and projected future loads. The new line will provide additional reliability and enhanced resiliency.



Transmission System



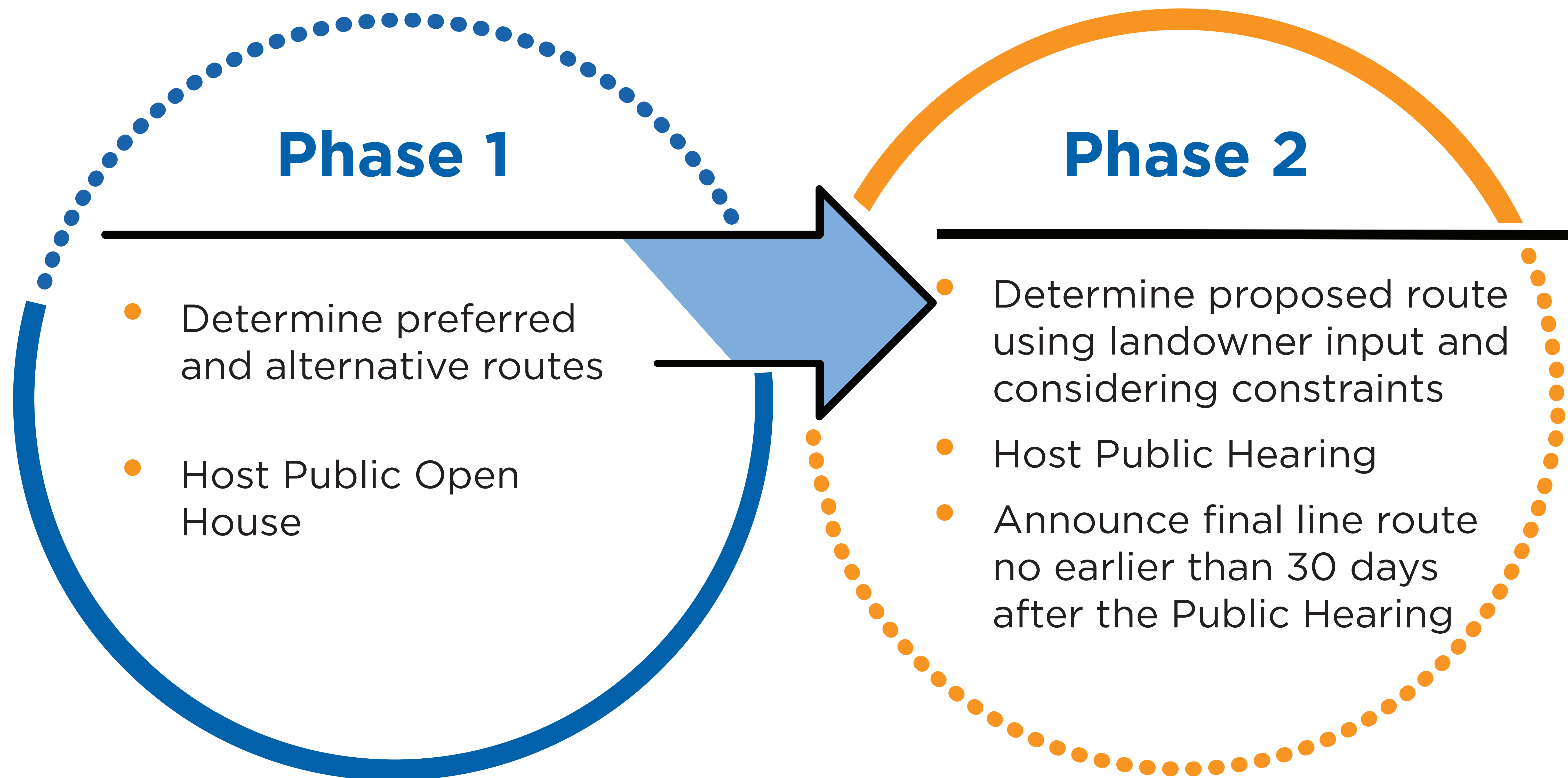
LEGEND

LINES				POWER PLANTS			
	NPPD	OTHER	FUTURE	WITH SUBS.	NPPD	OTHER	FUTURE
345 KV				WIND			
230 KV				HYDRO			
161 KV				FOSSIL			
115 KV				DIESEL			
SUBSTATIONS				GAS			
				NUCLEAR			
				SOLAR			

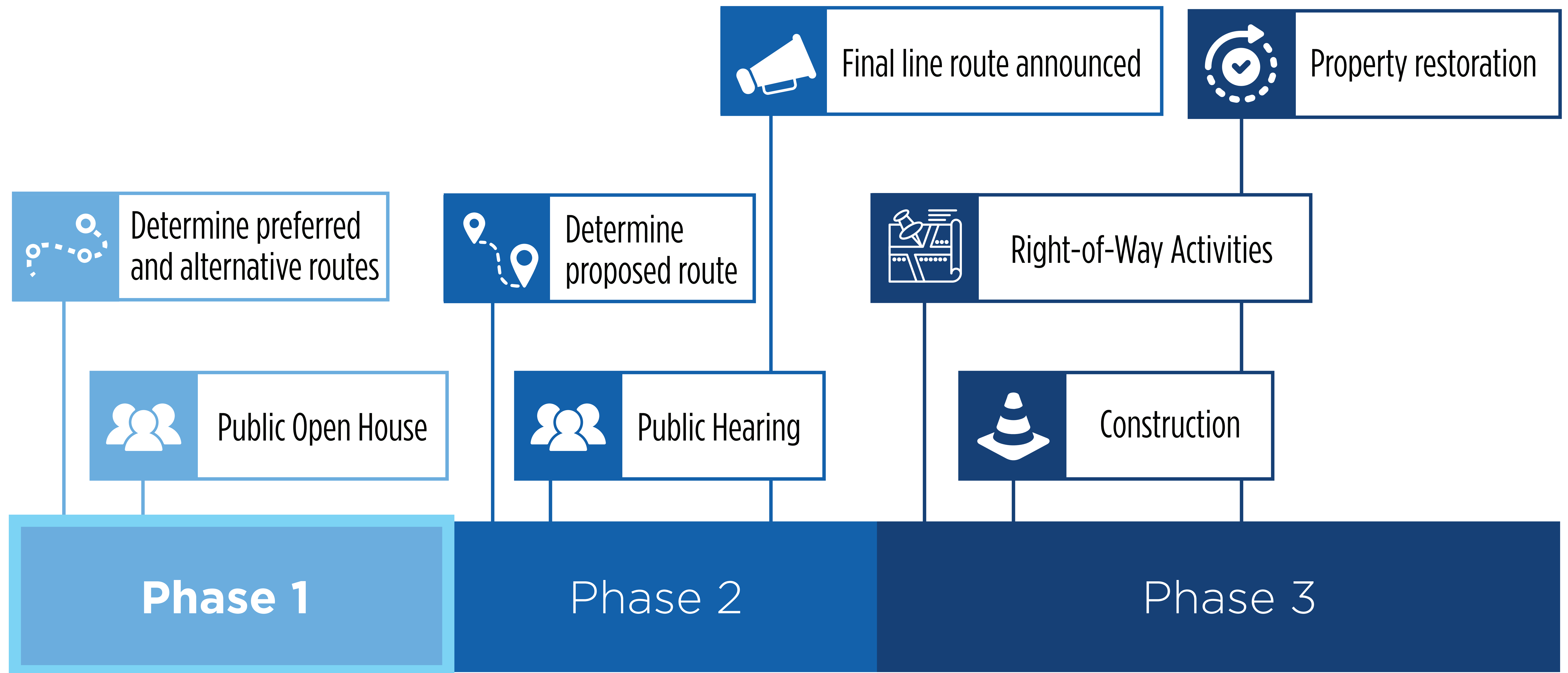


Routing, Siting, and Public Involvement

Routes for a transmission project are typically developed over the course of multiple phases and are then narrowed down to a final route. For this project, we will determine the route over the course of two phases:



Project Approach



Norfolk-Stanton North Project Map



Routing & Siting Evaluation Criteria

Transmission line routing involves trade-offs between a variety of factors called routing criteria. The most promising route options balance each of the three types of criteria, which are social, environmental, and engineering.

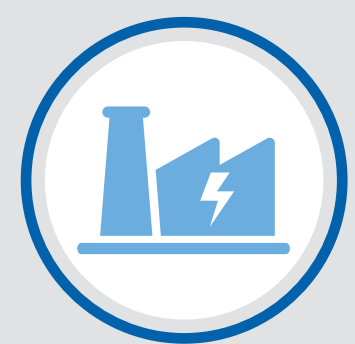
Social



Businesses



Cemeteries



Commercial/
Industry



New/Plotted
Developments



Residences/
Homes



Places of
Worship



Agriculture



Schools



Parks &
Recreation

Environmental



Floodplains



Wooded
Areas



Wetlands/
Waterways



Conservation
Areas



Federal &
State Lands



Historic &
Archaeological
Sites



Threatened &
Endangered
Species

Engineering



Airports



Railroads



Irrigation/
Pivots



Wells



Existing
Infrastructure



Site
Topography



Constructability



Highways



Structures
(other)



Existing/Planned
Utilities



Cost



Environmental Resources

NPPD coordinates with federal, state, and local agencies and organizations such as:

- Federal Aviation Administration
- U.S. Fish and Wildlife Service
- U.S. Army Corps of Engineers
- Nebraska Game and Parks Commission
- Nebraska Department of Environment and Energy
- Nebraska Department of Transportation
- Natural Resource Districts
- History Nebraska
- Local Airport Authorities
- Private Non-Government Organizations



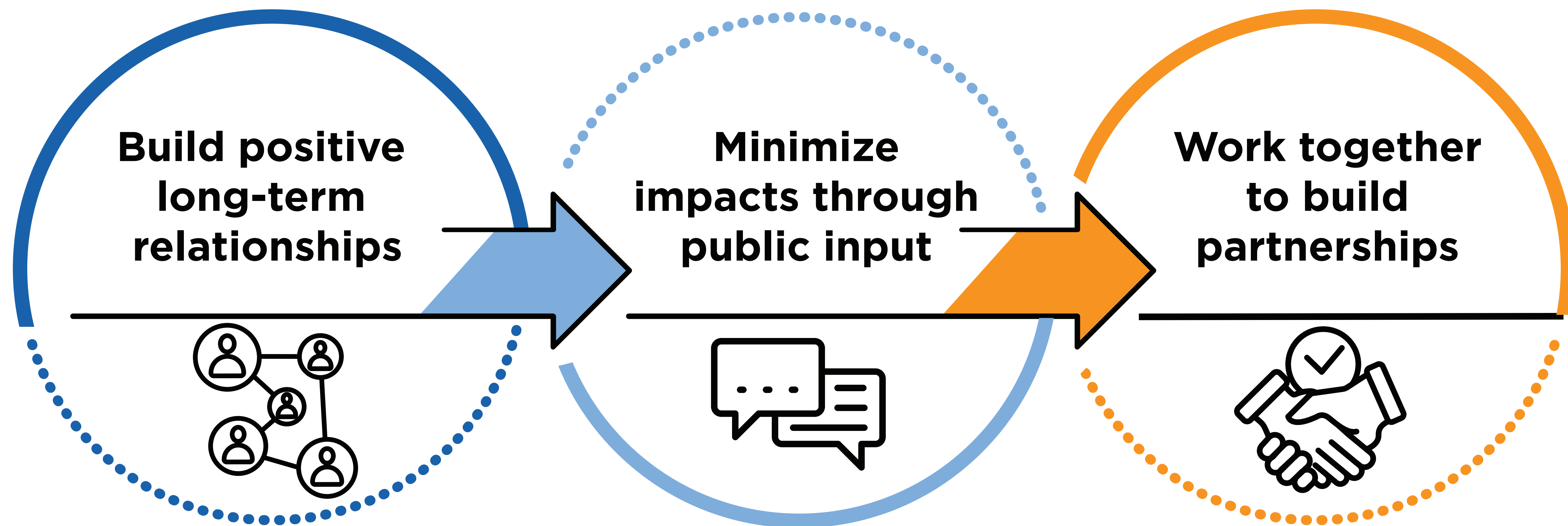
Criteria Prioritization Activity

Instructions: You have a total of three dot stickers. Please place them in the box(es) next to the criteria you believe should be prioritized as we determine the route for this transmission line.

Businesses
Cemeteries
Commercial/Industry
New/Plotted Developments
Residences/Homes
Places of Worship
Agriculture
Schools
Parks & Recreation
Floodplains
Wooded Areas
Wetlands/Waterways
Conservation Areas
Federal & State Lands
Historic & Archaeological Sites
Threatened & Endangered Species
Airports
Railroads
Irrigation/Pivots
Wells
Existing Infrastructure
Site Topography
Constructability
Highways
Structures (other)
Existing/Planned Utilities
Cost

Right-of-Way Activities

We strive to build positive, long-term relationships with landowners and tenants during right-of-way activities.



Right-of-Entry Agreement — If needed, will provide access for:

- Environmental assessments
- Appraisal work
- Survey activities
- Cultural and historical resource assessments
- Easement Acquisition:
 - Compensation
 - Terms and conditions
 - Right-of-way width
- Post Construction:
 - Construction damage compensation
 - Property restoration



Easement Compensation

Structure Payment

\$100

per single pole
(steel or wood)

\$250

per H-frame
(wood)

- Payment for the easement area will be determined by a Nebraska Licensed independent real estate appraiser.
- The appraiser will view all properties and provide a value for each individual tract of land.
- Payment for any special consideration, such as shelterbelts, fences, gates, etc., will be determined on a case-by-case basis.

Construction Damages

In addition to the easement payment, the property owner or tenant will be compensated for any damages to crops, fences or other property that may occur during construction or when maintenance is required in the future.



Transmission Line Structures

There are two typical types of structures that would be used on this project:

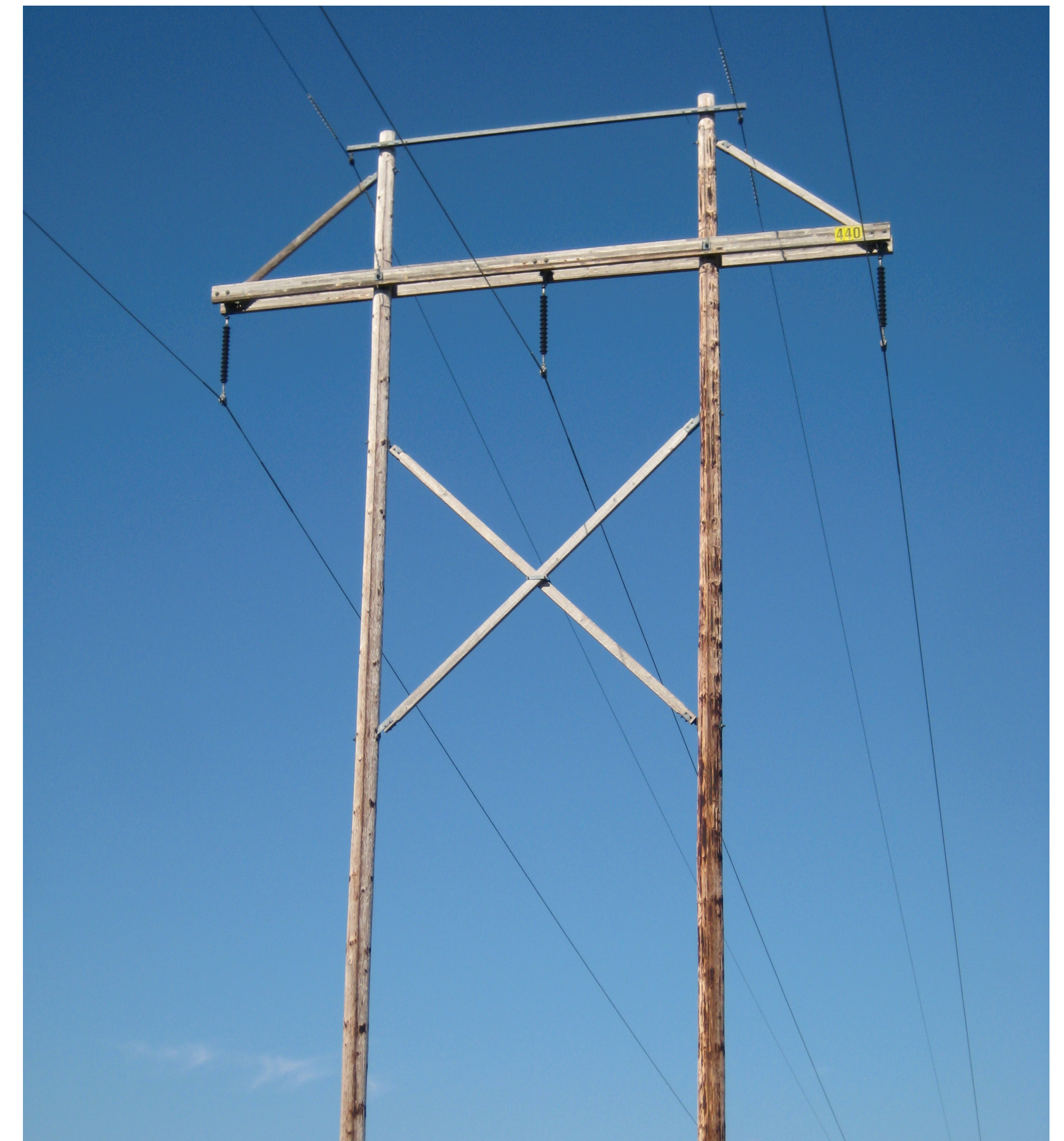
- 115 kV single-pole wood or steel structure
- 115 kV H-frame wood structure



**TYPICAL SINGLE-POLE
WOOD STRUCTURE**



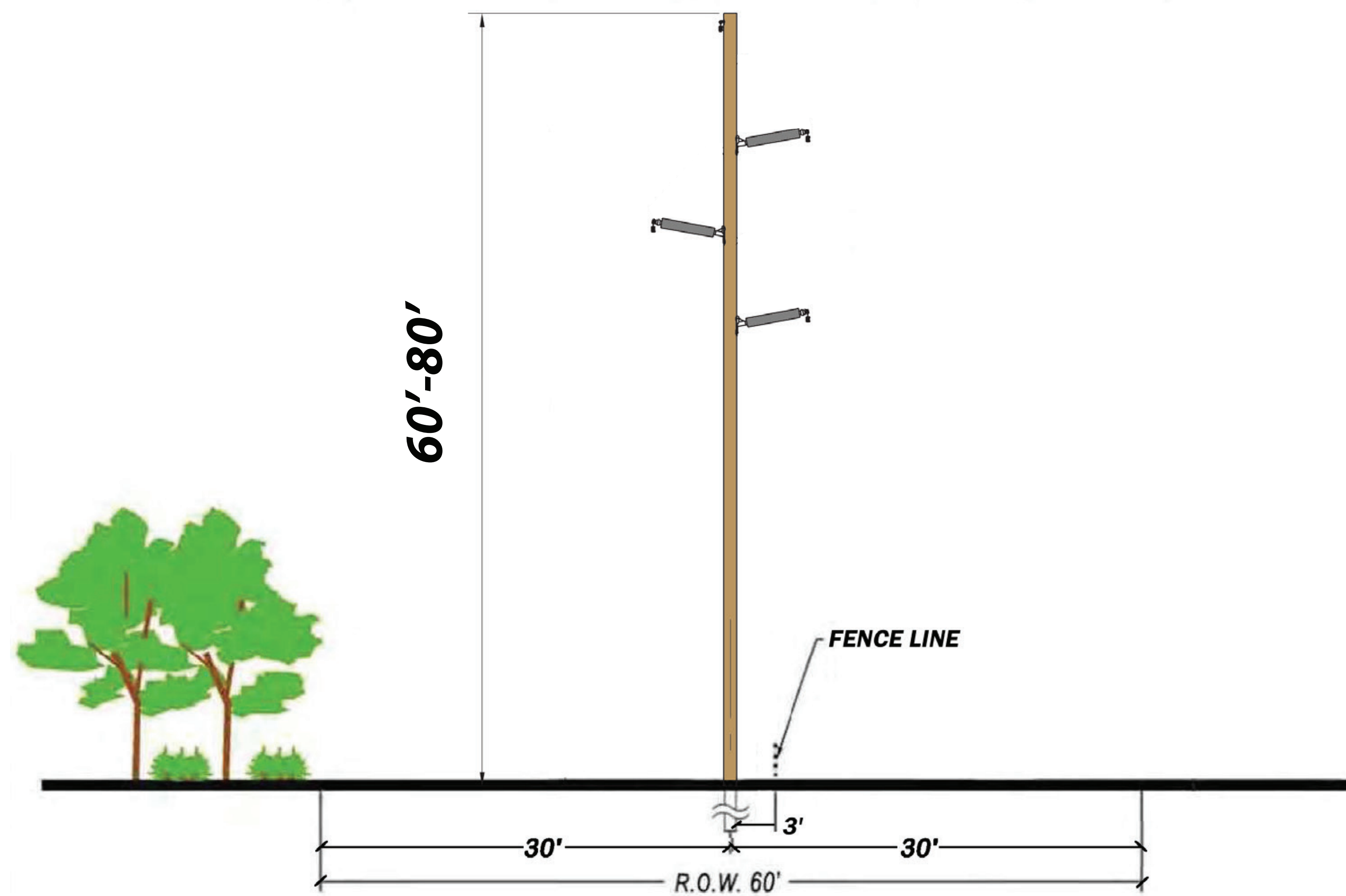
**TYPICAL SINGLE-POLE
STEEL STRUCTURE**



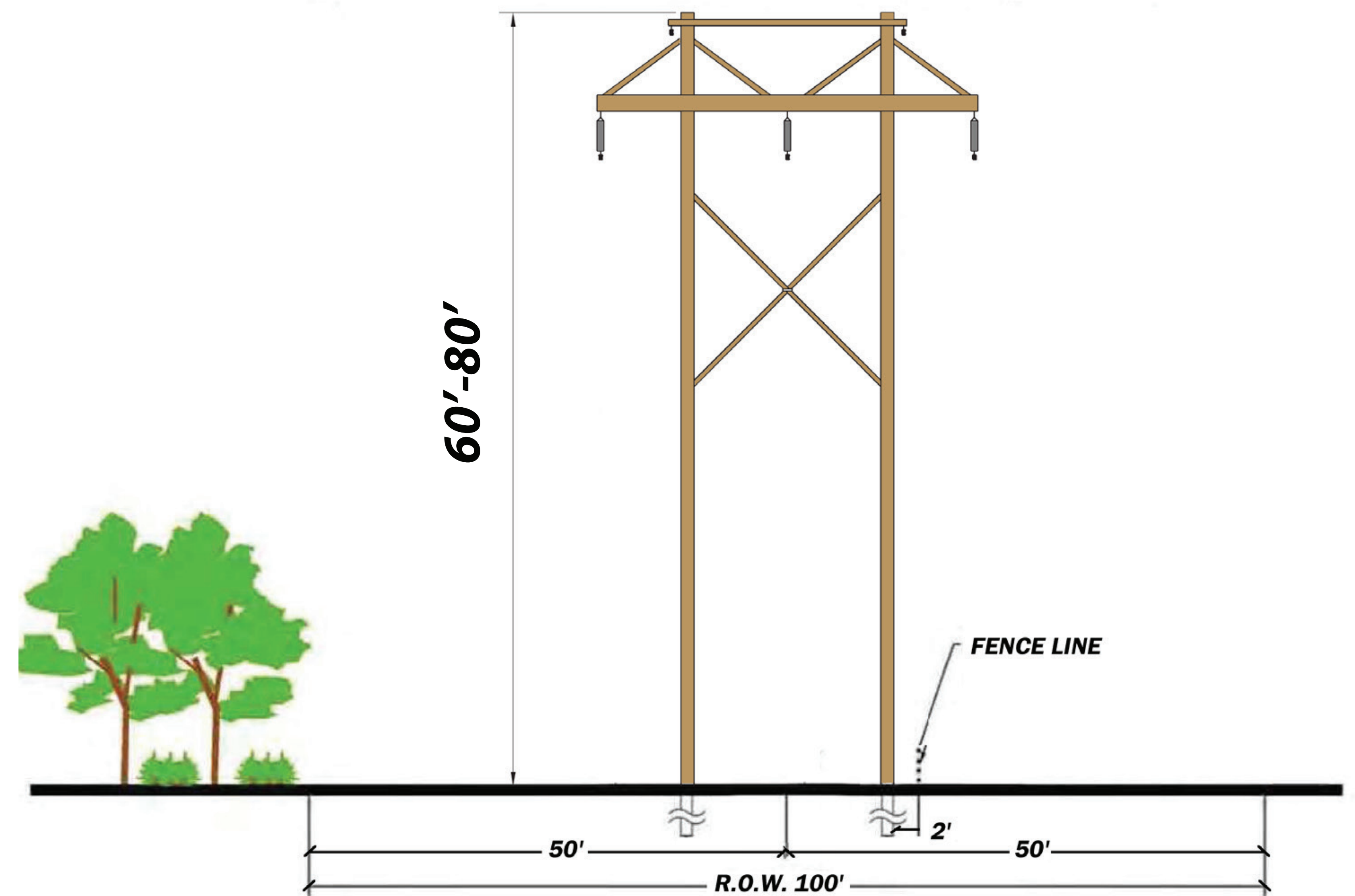
**TYPICAL H-FRAME
STRUCTURE**



Typical Right-of-Way Width



Typical 115kV Single Circuit, Single Pole Structure



Typical 115kV Single Circuit, H-Frame Structure

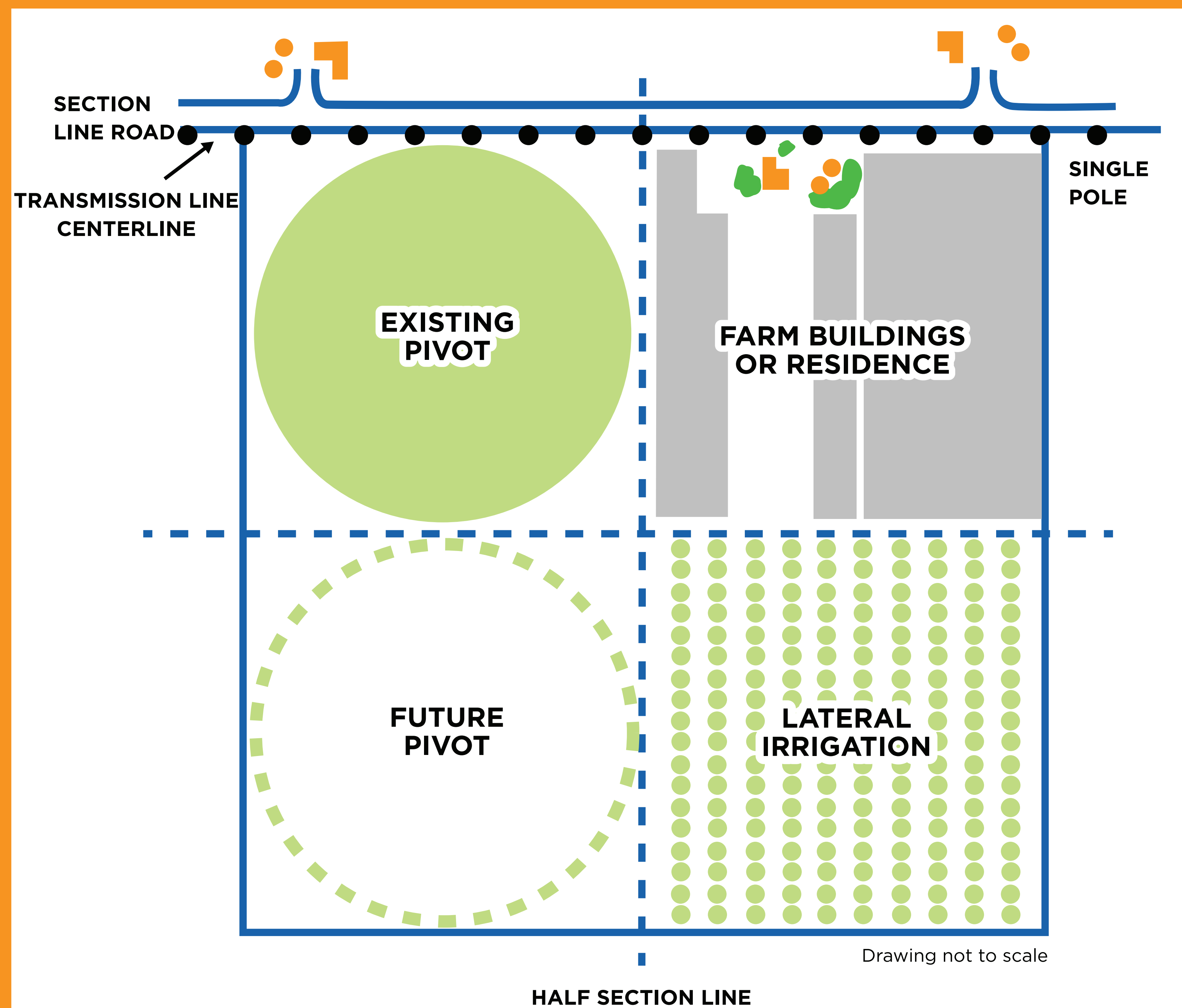
Height of structure and right-of-way (R.O.W.) width can vary based on special circumstances.



Typical Structure Locations – Single Pole

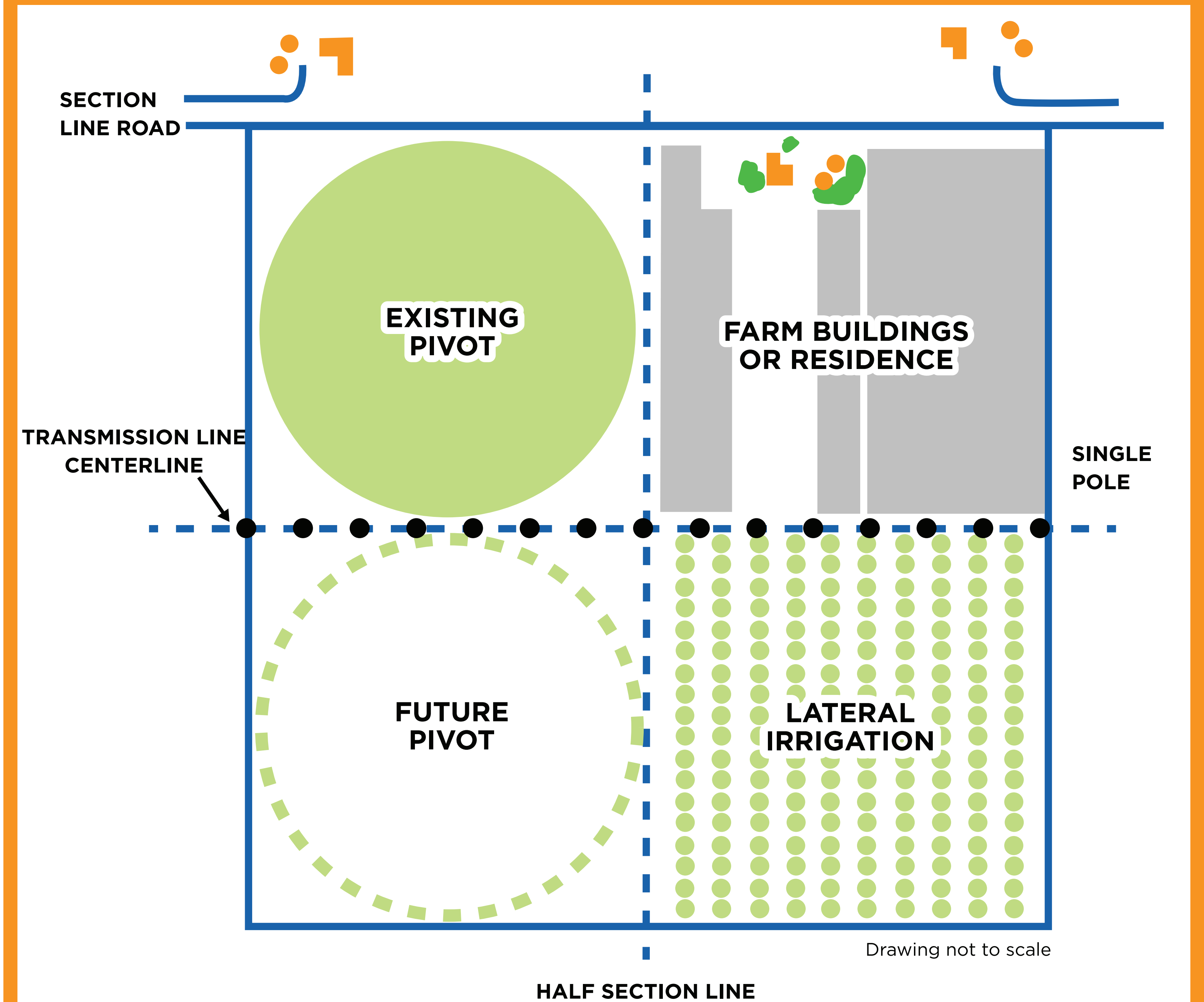
115 kV Single-Pole Structure Placement Along Road:

Typically ~15 structures per mile



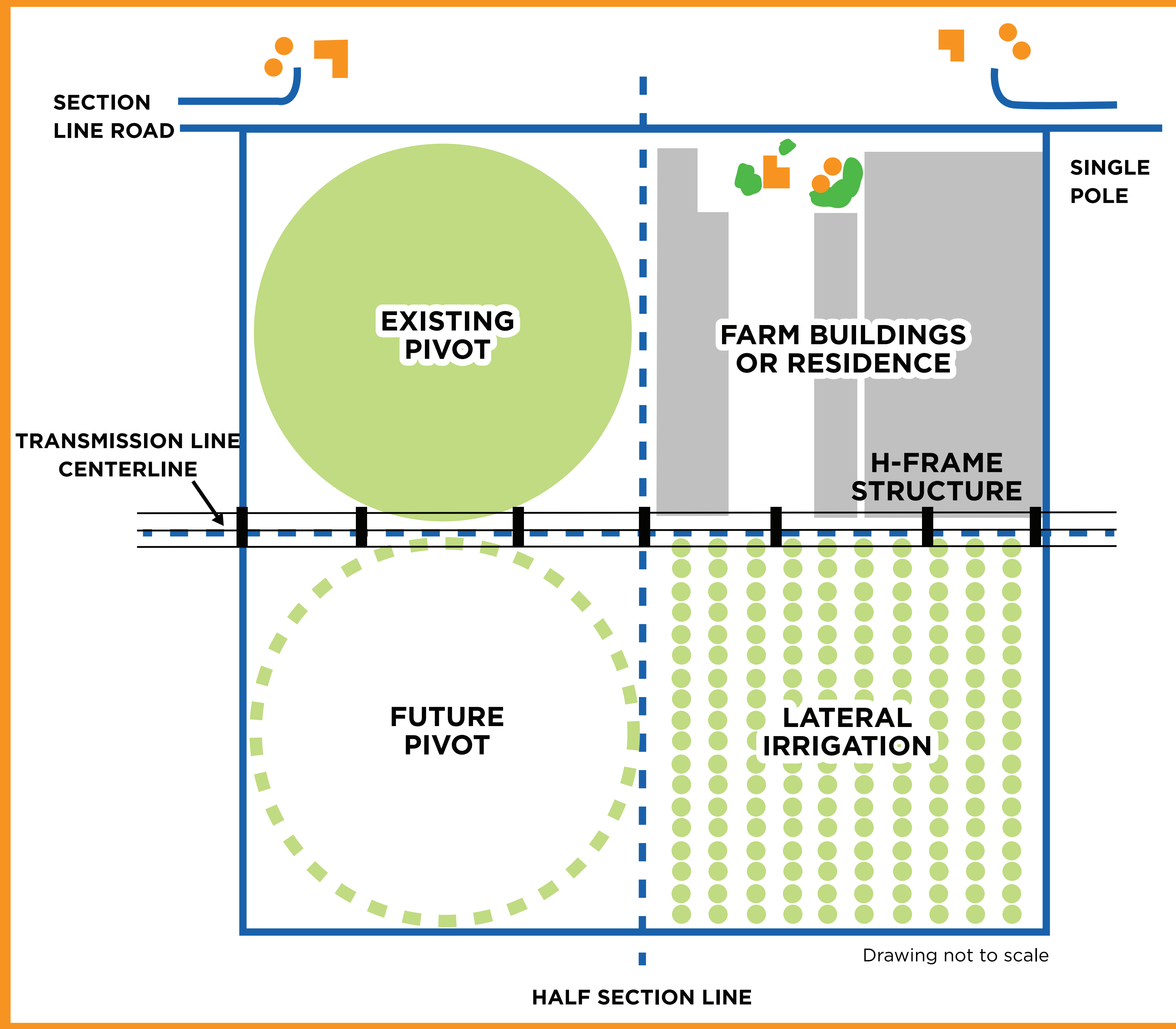
115 kV Single-Pole Structure Placement Along Half Section Line:

Typically ~15 structures per mile



Typical Structure Location – H-frame

**115 kV H-frame Structure Placement
Along Half Section Line:**
Typically ~7 structures per mile



What should we know about your property?

Help us identify constraints and opportunities regarding:

- Residences
- Grain bins and outbuildings
- Planned (permitted) housing units
- Platted subdivisions
- Well locations
- Gravity flow irrigation and flow direction
- Terraces and drain tiles
- Planned pivots and water permits
- Underground facilities
- Future land-use
- Cemeteries, churches, and schools
- Commercial and industrial development
- Communication towers
- Cultural and historical resources
- Environmental areas



Stay Involved

Thank you for attending! You can stay involved with the Norfolk-Stanton North Project by following project news in NPPD newsletters, newspapers, radio, and on social media, or by visiting our website at norfolk-stantonnorth.nppd.com.



norfolk-stantonnorth@nppd.com



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