

MEADOWS SUBSTATION PROJECT



TOWN OF CASTLE ROCK
PUBLIC HEARING
August 8th, 2019

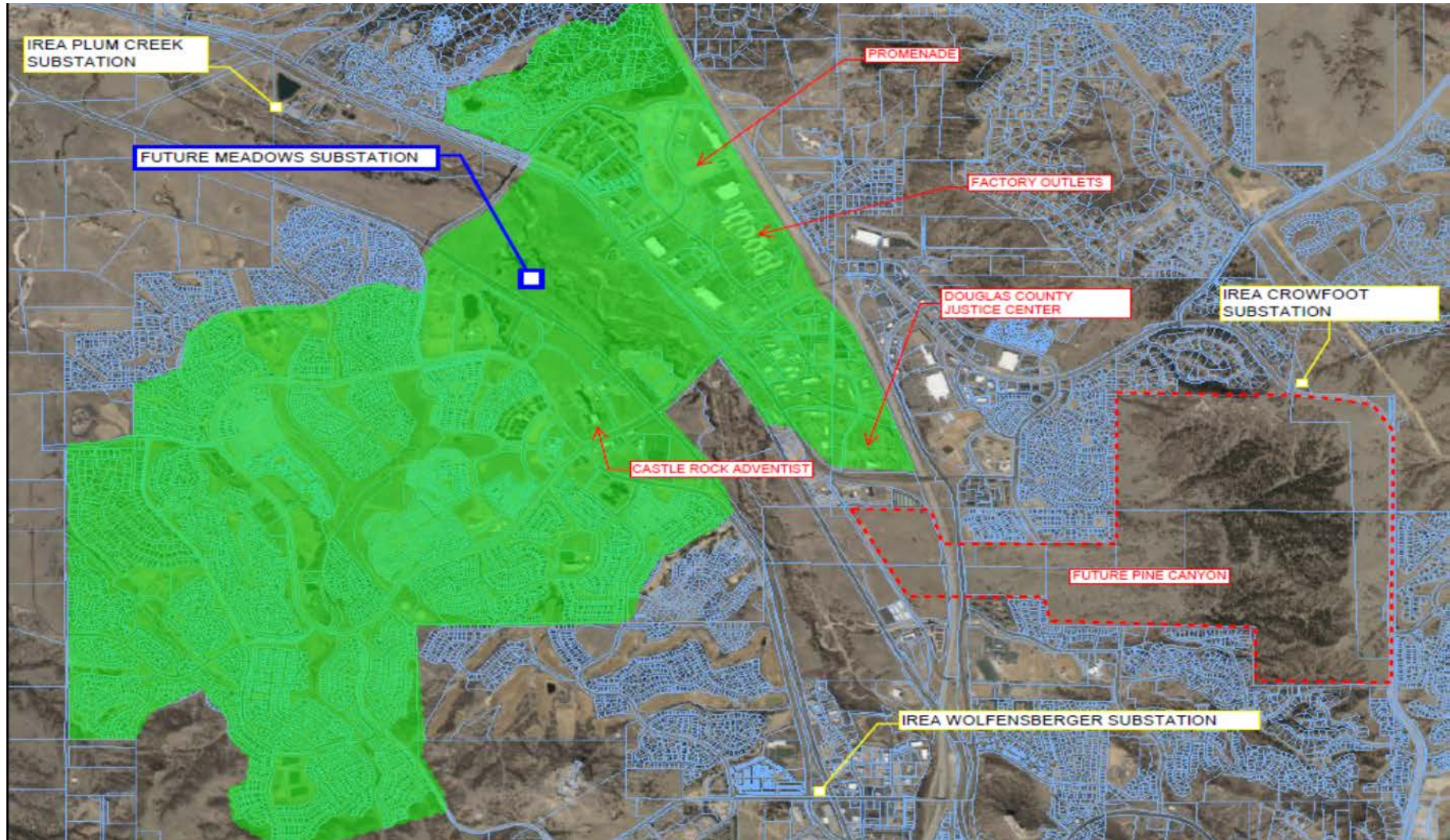


What is the Meadows Substation Project?

Construction of 115/12.47 kV Distribution Substation, to begin September 2019 and completion in May 2020.

- IREA proposes to construct a new substation near its existing transmission line that is located within the Castle Rock Development Company (CRDC) property.
- The proposed site is located within the Meadows PD, approximately 2,800 ft. south of the intersection of Hwy 85 and N Meadows Drive.
- The proposed substation is necessary to accommodate the Town's existing demand and forecasted growth. Additionally, it will reduce electrical loads and provide backup for other substations in the neighboring areas.

Meadows Substation Service Area



Location Options

MEADOWS SUBSTATION LOCATION OPTIONS



| Option #1 | Option #2 | Option #3 | Option #4 | Option #5 |
|---|---|---|--|--|
| <p>Pro's</p> <ul style="list-style-type: none"> • Not in the mouse habitat • Substation is an allowed use • Near the electric load center | <p>Pro's</p> <ul style="list-style-type: none"> • Access • No effect on mouse habitat • Substation is an allowed use • Extend transmission line (2 structures) • Near the electric load center | <p>Pro's</p> <ul style="list-style-type: none"> • Access • Substation is an allowed use • Near the electric load center | <p>Pro's</p> <ul style="list-style-type: none"> • Access • Extend transmission line (2 structures) • Land Use in Douglas County | <p>Pro's</p> <ul style="list-style-type: none"> • Access • Not in the mouse habitat • Substation is an allowed use |
| <p>Con's</p> <ul style="list-style-type: none"> • Extend transmission line (6 to 7 structures) • Poor access due to mouse habitat and the railroad • Required major improvements to existing drainage areas. • Directly across from Promenade Development | <p>Con's</p> <ul style="list-style-type: none"> • Not ideal for adjacent developable lots • Railroad crossing would require taller poles • Multiple lots • No sales tax generation on property occupied by substation | <p>Con's</p> <ul style="list-style-type: none"> • Impact to trail system • Not ideal for developable lots near by. • Extend transmission line (4 structures) • Major costs to extend electric distribution • Greater visual impacts to Meadows neighborhoods. • Located in mouse habitat. | <p>Con's</p> <ul style="list-style-type: none"> • Located in a flood plain • Requires a large amount of fill dirt. • Requires rezoning and annexation into the Town of Castle Rock • Located in Mouse habitat • Greater visual impacts to Meadows neighborhoods • Not a willing seller | <p>Con's</p> <ul style="list-style-type: none"> • Impact to trail system • Not ideal for developable lots near by. • Extend transmission line (3 structures) • Greater visual impacts to Meadows neighborhoods • Railroad crossing would require taller poles |

Proposed Substation Site

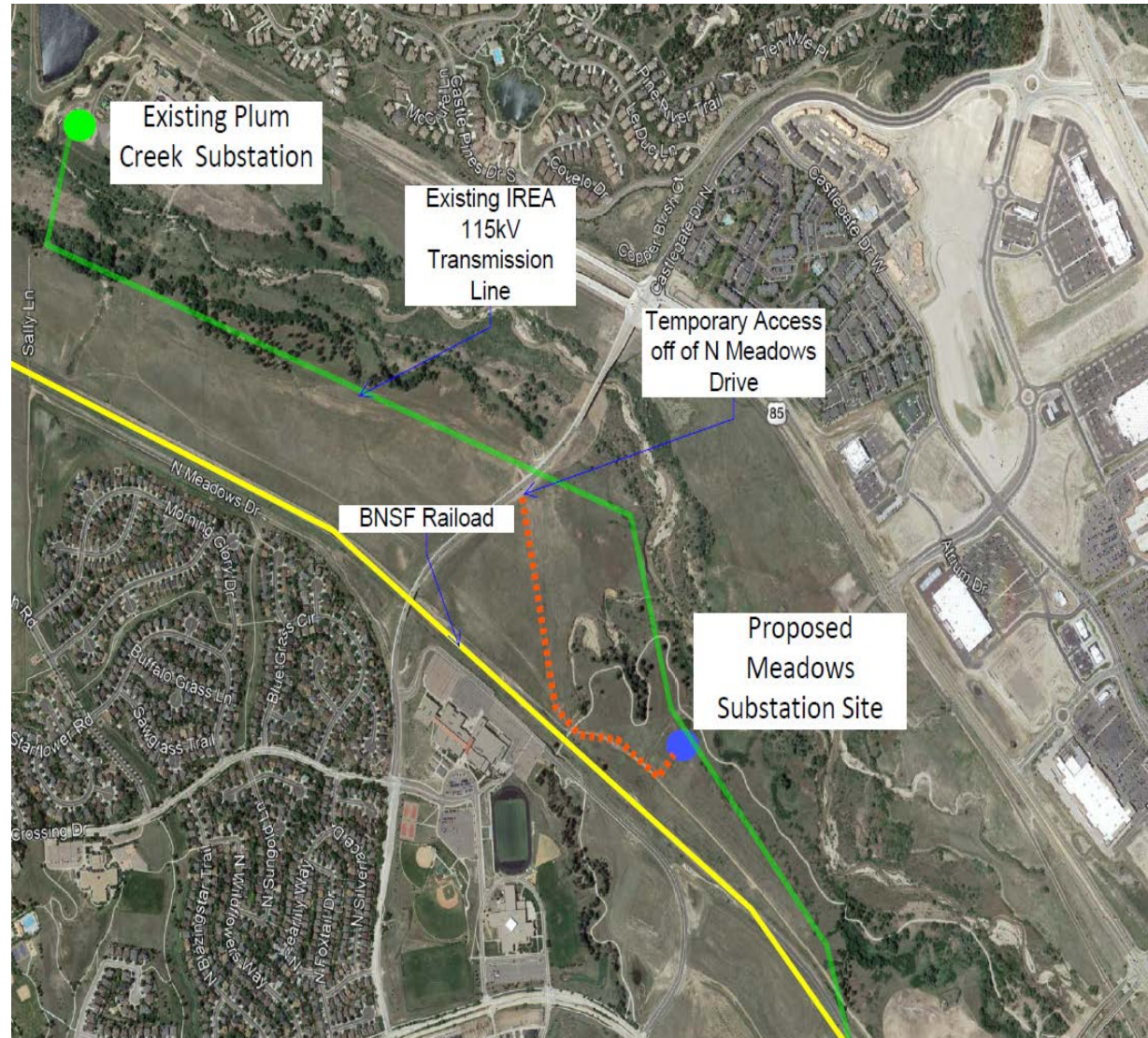
Proposed Meadows Substation

Pro's

- Extend transmission line (1 structure)
- Near existing IREA transmission line
- Minimal mouse habitat impact
- Substation is allowed use
- Minimal visual impacts to Meadows neighborhoods compared to other options
- Use existing surroundings to screen substation
- Ideal for developable lots near by
- Location approved by U.S. Fish and Wildlife Services
- Trail improvements

Con's

- Access improvements
- Relocation of water line
- Drainage Improvements





Meadows Substation Characteristics

- Substation site is 4.114 acres and is similar to the IREA Crowfoot Substation.
- Steel structures within the pad site are 50 feet in height.
- Substation equipment is 16 to 24 feet in height.
- Contributes to existing electric needs of neighboring communities. The Substation requires no additional community resources including police and fire services.
- The substation won't require water or sanitation services
- Access through Castle Rock Development Company (CRDC) property. Access will change as the area develops.
- The substation site is an unmanned site with periodic maintenance and inspections
- Downcast lighting is only used during emergency outage situations.
- Standard 8' galvanized chain link security fence around the substation yard.
- A farm fence will be placed around the property.
- Disturbed areas will be restored to match the native surroundings.
 - IREA proposes to transplant 25 mature pine trees ranging from 15' to 25' in height (photo simulations starting on slide 9).



Land Use Goals

- Estimated growth within the Town of Castle Rock will require an additional substation facility.
- Estimated population of 90,000 by 2030 and an ultimate Town build-out population of approximately 130,000 to 150,000 residents.
- This project is consistent with the Town of Castle Rock 2030 Comprehensive Master Plan more specifically defined under the cornerstone of Community Services as follows:

CS-2.4: UTILITY PLANNING

Coordinate the location of gas, electric, communication lines, water, wastewater, stormwater utility locations and Internet fiber with partner agencies and service providers to ensure proper location with respect to long-range planning efforts and alignment with existing and future rights-of-way.

- The proposed project complies with the Douglas County/Castle Rock Land Use Intergovernmental Agreement and supports the infrastructure necessary for the future.
- The proposed project site is located within an area designation as Open Space (OSD). An electric substation and transmission line is an allowable use within this land use and will enhance the function and marketability of the surrounding area by allowing sufficient access to a secure and reliable power source.
- Section 5.7 B.1. of the Meadows Planned Development states that electric substations are permitted as accessory uses in all neighborhood use areas by special review.
- The proposed project complies with all relevant requirements of the CRMC, including Chapter 17.10.



Meadows Substation Photo Sim Looking South





Meadows Substation Photo Sim Looking West





Meadows Substation Photo Sim Looking Northeast





Meadows Substation Photo Sim Birds Eye



Stanley Consultants INC.



Closing

- Meadows Substation will benefit the Town of Castle Rock.
 - Provide the infrastructure for economic development within the Town.
 - Provide power for future developments.
 - Provide redundant power for existing subdivisions, Castle Rock Adventist Hospital, Promenade, Douglas County Justice Center and Collaboration Campus.
 - Benefits the quality and welfare of the Town as well as existing and future residents.
 - Will take electrical load off of the existing IREA Wolfensberger Substation and Plum Creek Substation which are currently at capacity.