

2019 Priority Substation Updates

March 18, 2019



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Chelan County PUD

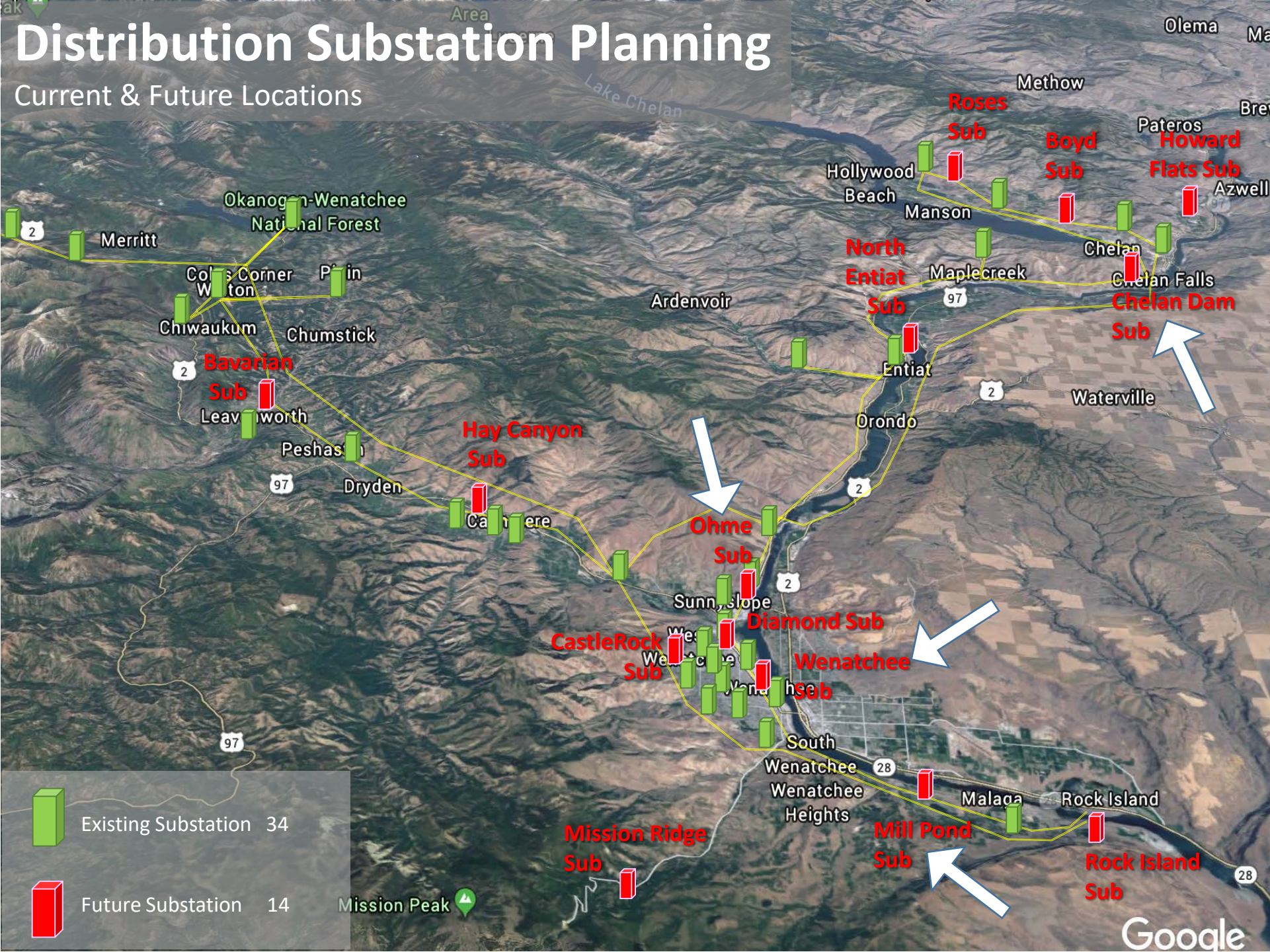
Objective Today

Provide update to Board on Staff activities relating to substation infrastructure planning & property acquisitions

Early notification of future actions requiring Board approval

Distribution Substation Planning

Current & Future Locations



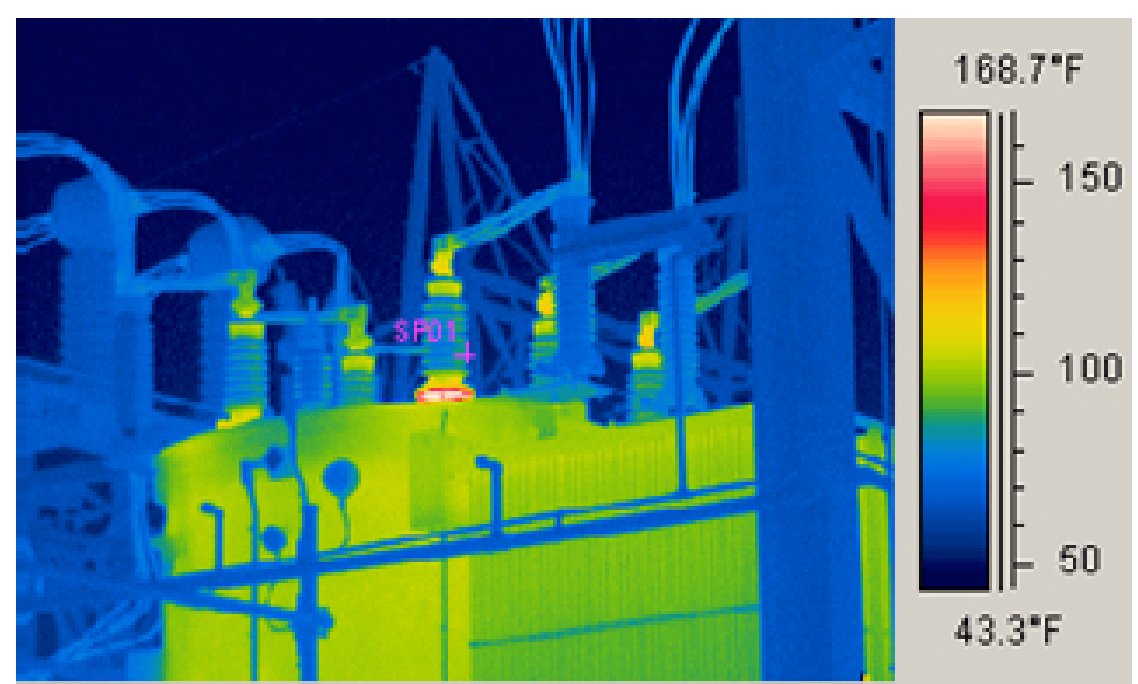
Old Standard Substation Foot Print = (1 acre) or 200 Ft. x 200 Ft.

New Standard Substation Foot Print = (2 acre) or 300 Ft. x 300 Ft.



New Substation Standard Includes New Innovative Technologies

- Advanced (SCADA) System Controls & Data Acquisition
- Advanced metering system preparedness
- Advanced relay capabilities
- Wire-person cross functional skills training
- Advanced switching capabilities
- Fire & safety standards
- Environmental controls



New Substation Standard Arrangement

(2 Acres)
300Ft. X 300Ft.

- Meets current NESC & IEEE Standards
- Improved access for mobile substation
- Allows substation capacity to double from 28MW to 56MW within same footprint
- Reduces need for future substation properties
- Improved reliability



Substation Status Update:

North Shore Lk. Chelan	Property acquired	Design phase
Leavenworth	Property acquired	Design phase
Ohme / Olds Station	Property acquired*	Design phase
Entiat City North	Property acquired	Pre-design
Wenatchee City Downtown	Property review	Pre-design
Chelan Dam South/Gorge	Seeking property	Feasibility
Mill Pond Malaga	Seeking property	Feasibility
Cashmere – West	Seeking property	Feasibility
Upper Squilchuck / Mission Ridge	Seeking property	Feasibility
Howard Flats / Chelan Airport	Seeking Property	Preliminary
Manson Dry Lake	Seeking Property	Preliminary
Rock Island Dam, Chelan Co.	Seeking Property	Preliminary

Boyd Rd Substation

N. Shore Lake Chelan

Current Status

- All easements & properties acquired
- 2019- General arrangement
- 2019- Landscape architectural options
- 2019- Community outreach
- 2020- Targeted construction



Leavenworth Substation

Chumstick Hwy

Current Status

- All easements & properties acquired
- 2019- General arrangement
- 2019- Landscape architectural options
- 2019- Community outreach
- 2020- Targeted construction



Ohme Substation

Olds Station

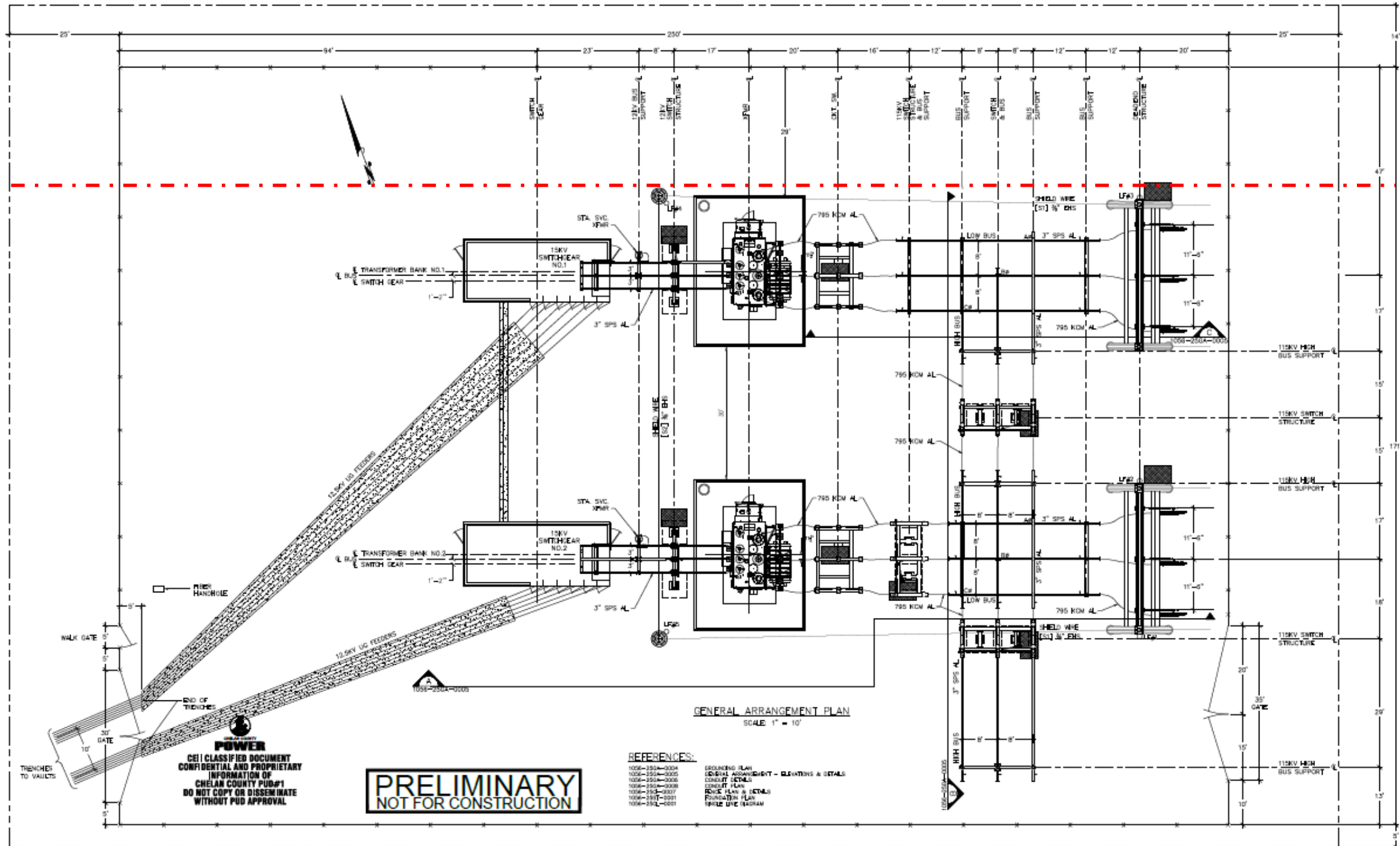
Current Status

- Additional property needed
- 2019- General arrangement
- 2019- Targeted construction

Additional Work Pending

- Build 4 Ft. x 300 Ft. retain wall
- 1200 cu.Ft soils removal
- Grading
- Sum of work ~ \$300K





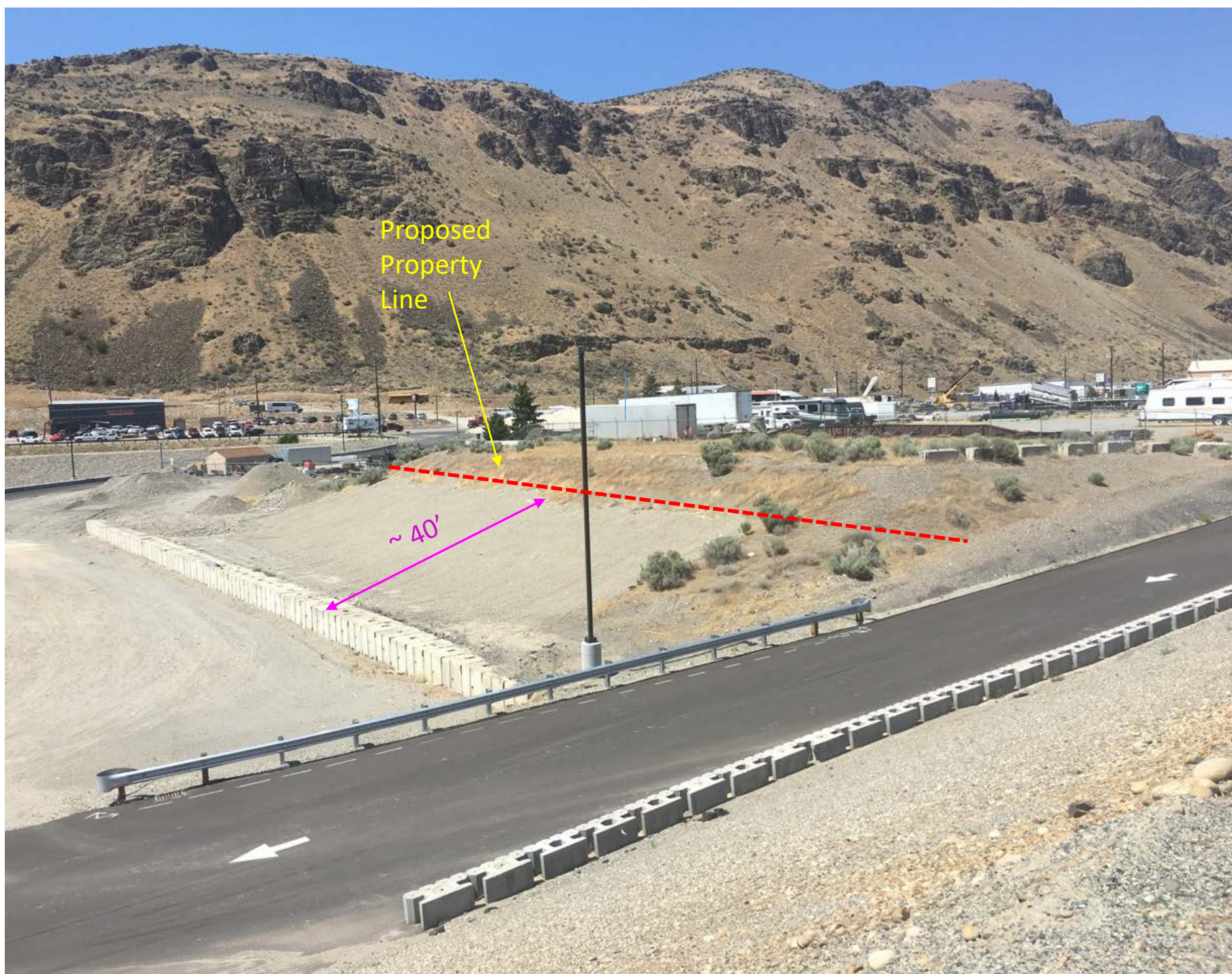
GENERAL ARRANGEMENT PLAN
SCALE: 1" = 10'

REFERENCES:

- 1006-2904-0004
 - 1006-2904-0005
 - 1006-2904-0006
 - 1006-2904-0008
 - 1006-2904-0017
 - 1006-2904-0021
 - 1006-2904-0021
- GROUNDING PLAN
 GENERAL ARRANGEMENT - ELEVATIONS & DETAILS
 CONDUIT DETAILS
 CONDUIT PLAN
 RISE PLAN & DETAILS
 FOUNDATION PLAN
 SINGLE LINE DIAGRAM

POWER
 CEI CLASSIFIED DOCUMENT
 CONFIDENTIAL AND PROPRIETARY
 INFORMATION OF
 CHELAN COUNTY PUB#1
 DO NOT COPY OR DISSEMINATE
 WITHOUT PUB APPROVAL

PRELIMINARY
 NOT FOR CONSTRUCTION





Wenatchee Substation

Current Status

- Evaluating property options
- 2019- General arrangement
- 2020- Targeted construction

Existing Wenatchee Substation

Existing PUD Property

(Private Property)



Chelan Dam Substation

Current Status

- No site selected
- Electric system modeling
- 2019 - Community outreach, March 13
- 2019 – Site identification
- 2020 - Design



Mill Pond Substation

Current Status

- Feasibility completed
- Community outreach
- Continuing property options & site selection process
- 2019 – Property acquisition
- 2020 - Design

Blue Star Growers

Cashmere

Property Transition

- Substation decommissioned
- Property reverts to City of Cashmere per purchase/sales contract - 2008.
- City of Cashmere is expected to transfer property to Blue Star
- Blue Star now served from Cashmere substation



Upcoming Actions

Ohme Substation

- Seeking additional property purchase agreement
- April 1st Resolution

Wenatchee Substation

- Continuing feasibility

Mill Pond Malaga

- Evaluating purchase options – March/April

Chelan Dam Substation

- Report back to Board on outreach efforts & community feedback

Questions?