



Ranchtown Substation Project Recommended Site

CPS Energy Board of Trustees
Presentation

October 29, 2012

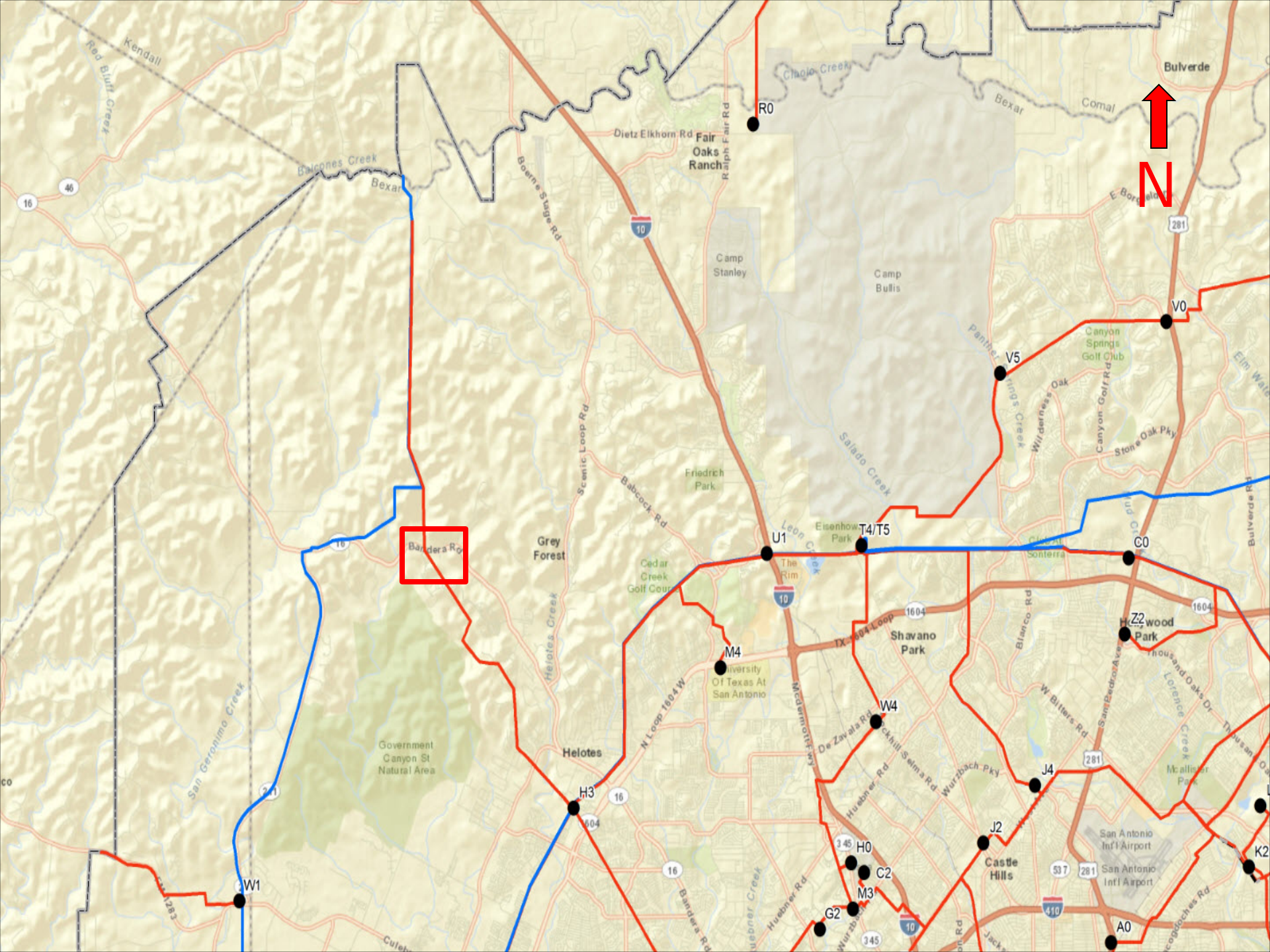
David Luschen

Director of Transmission and Substation Engineering



Agenda

- Scope & Need for the Project
- Routing/Siting Process
- Site Evaluations
- Questions



Bandera Rd

Bulverde

R0

V0

V5

U1

T4/T5

C0

M4

W4

H3

J4

J2

H0

C2

M3

G2

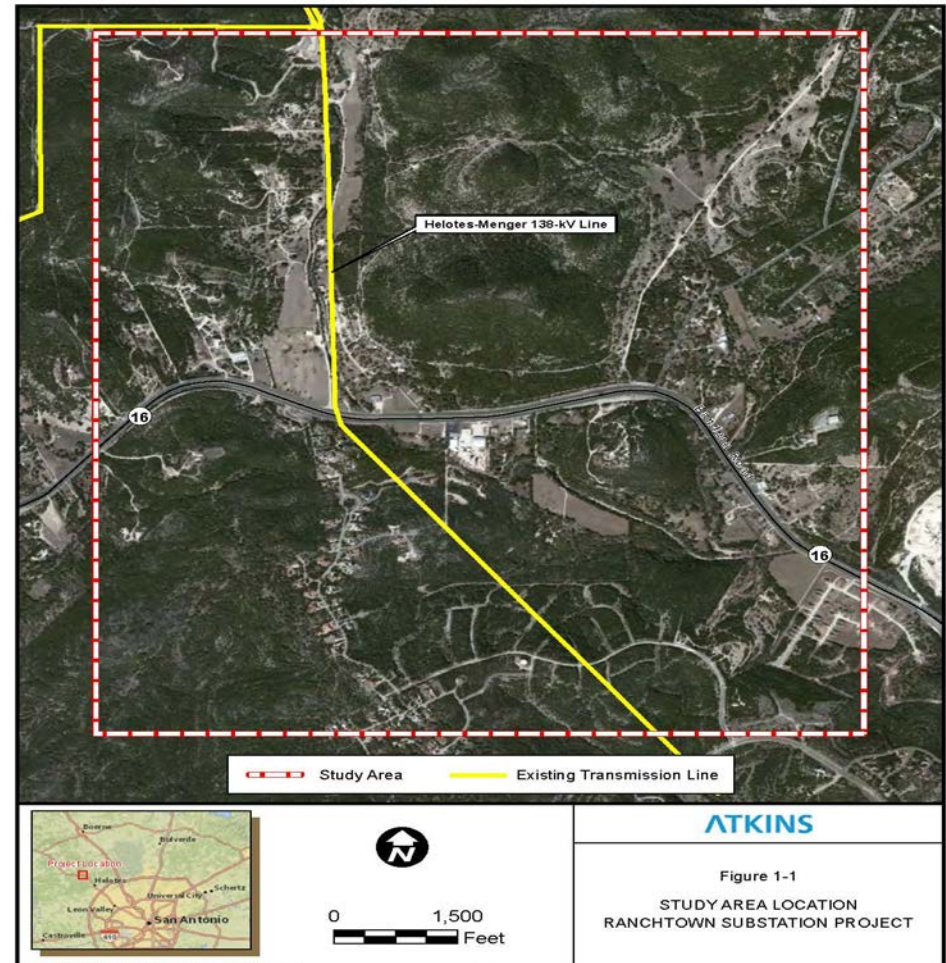
W1

A0

K2

Scope of the Project

- Construct a new three unit substation with two 50 MVA transformers and one four-feeder switchgear.
- Construct a short transmission line to connect the new Ranchtown Station to the existing Helotes-Menger transmission line.
- Construct 3 new 35kV distribution circuits from the station

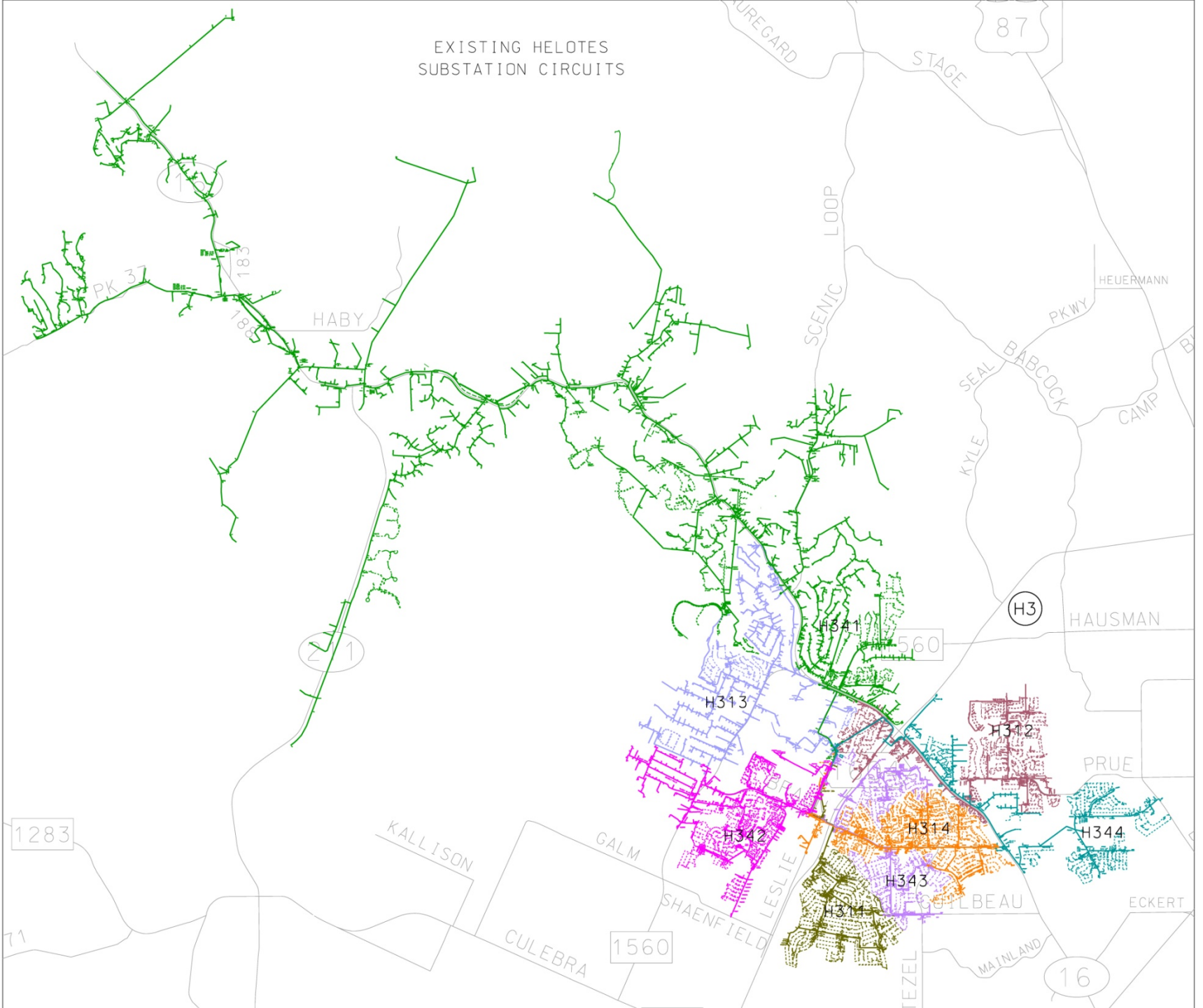




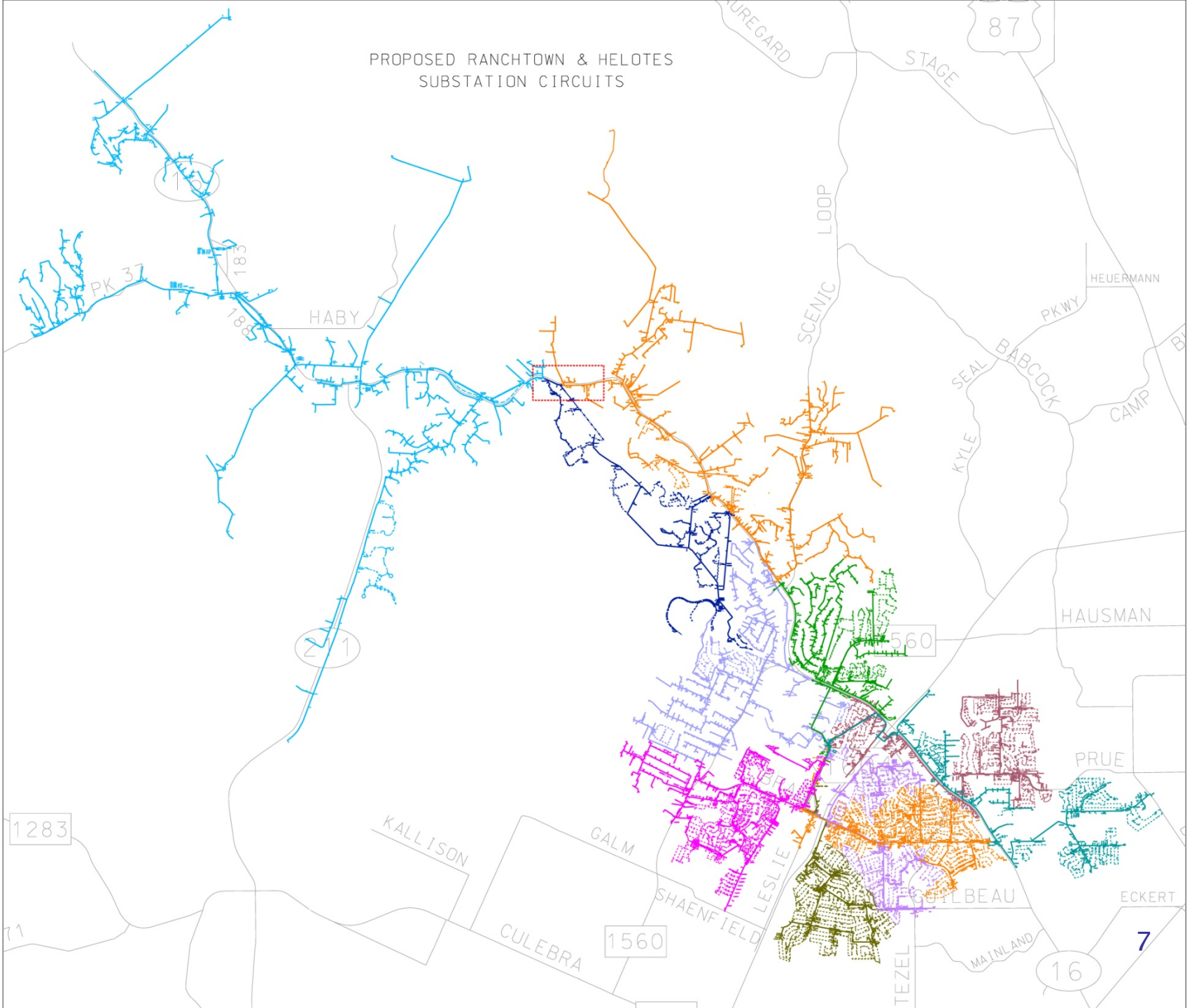
Need For Project

- The existing circuit has more overhead line miles than any in our system and is more than ten times longer than the typical circuit
- The new substation is needed to improve reliability for this area with shorter circuits that reduce exposure to outages
- The new circuits also create strong backbones and sufficient field ties to adjacent substation circuits that will prevent major loss of customer load in faulted conditions
- If this project is not completed, the power transformers at Helotes substation will be at risk of overloading. Also, some contingency conditions may lead to customer load at risk of lengthy outages due to exceeding emergency capacity limits.

EXISTING HELOTES
SUBSTATION CIRCUITS



PROPOSED RANCHTOWN & HELOTES
SUBSTATION CIRCUITS

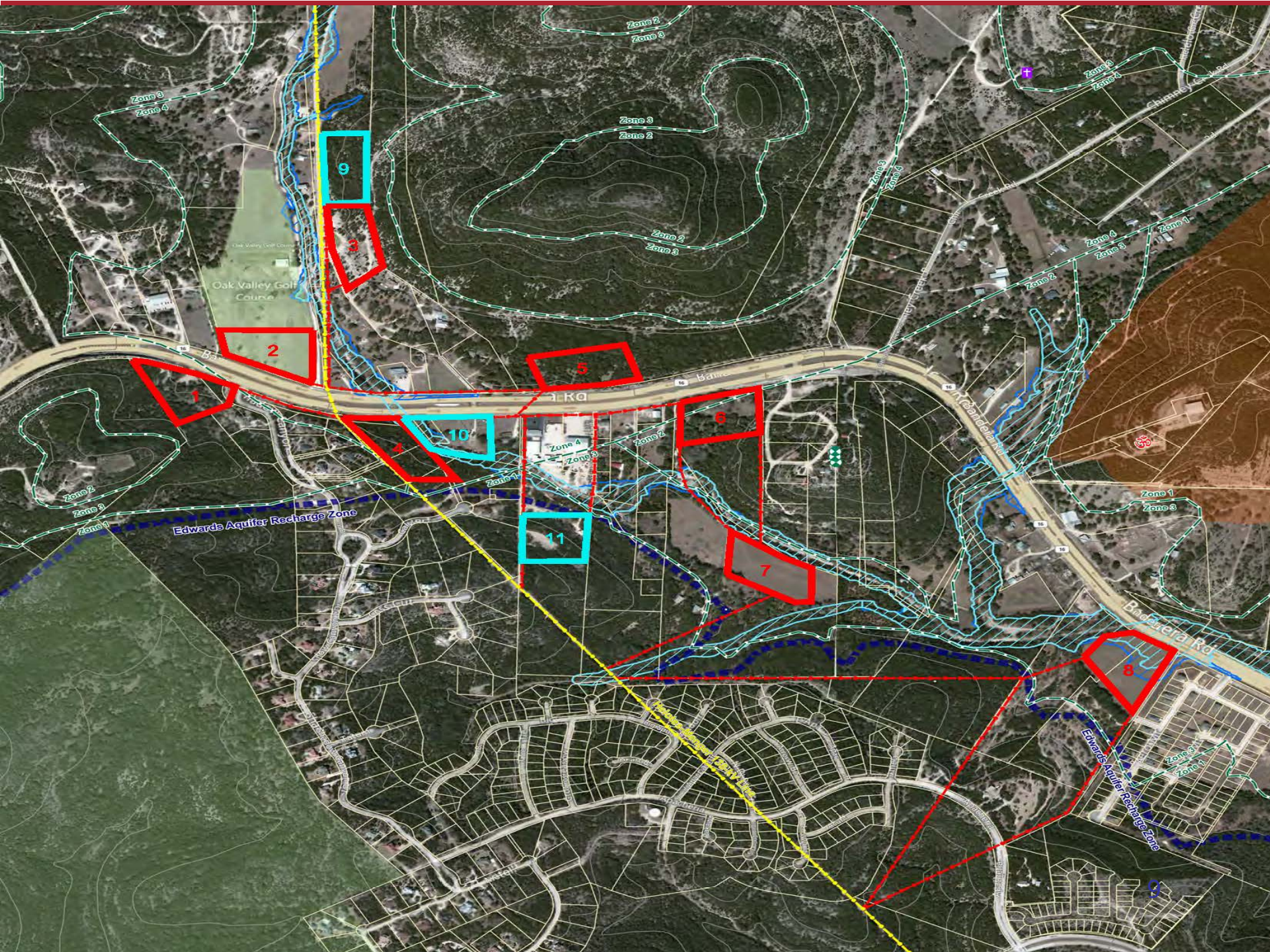




Open House Highlights



- 50 attendees
- 21% of those receiving invitations
- Added 3 new sites
- Received 51 questionnaires



Zone 3
Zone 4

Oak Valley Golf Course

Edwards Aquifer Recharge Zone

Zone 4
Zone 3

Edwards Aquifer Recharge Zone

9

3

2

5

4

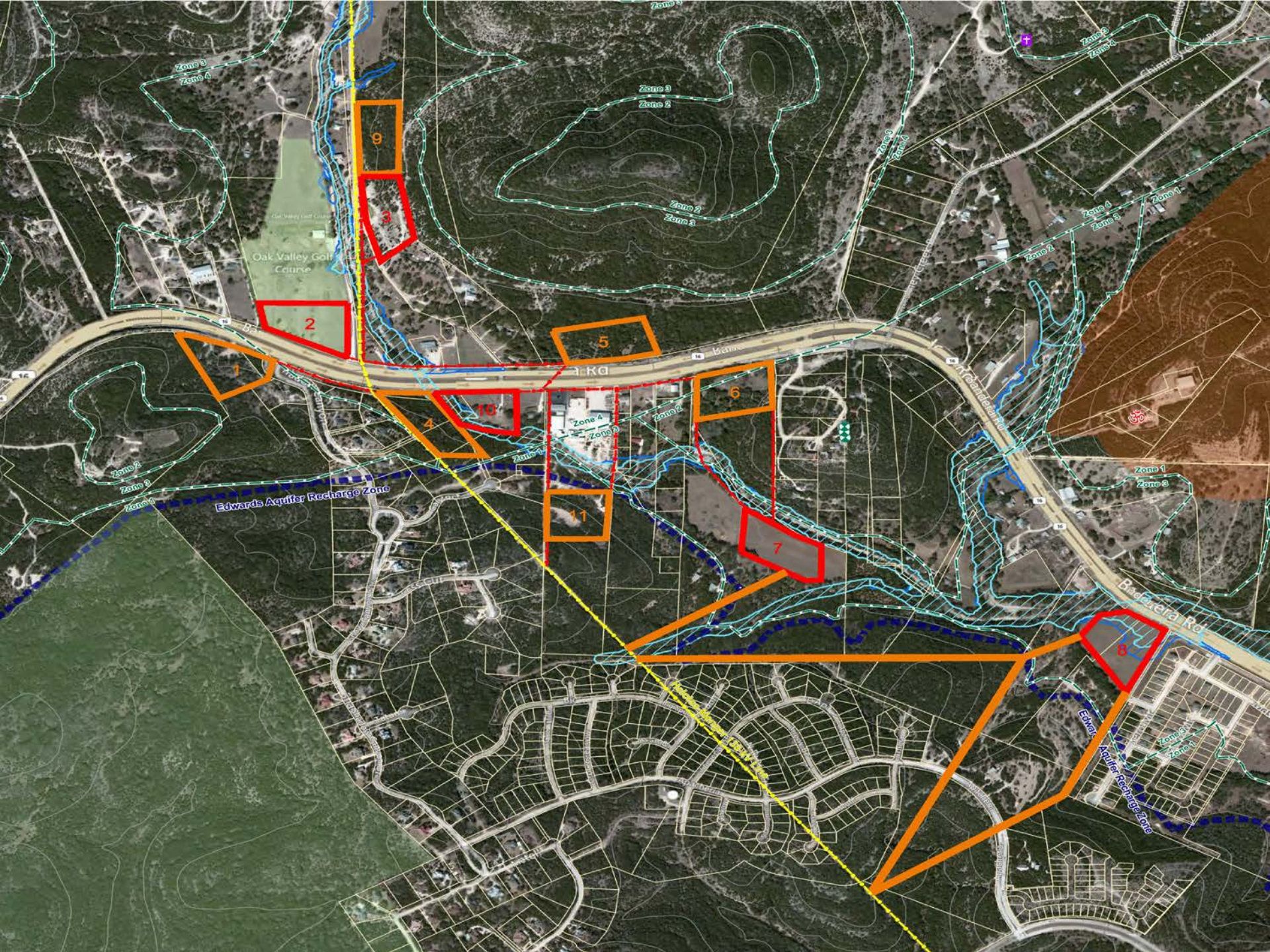
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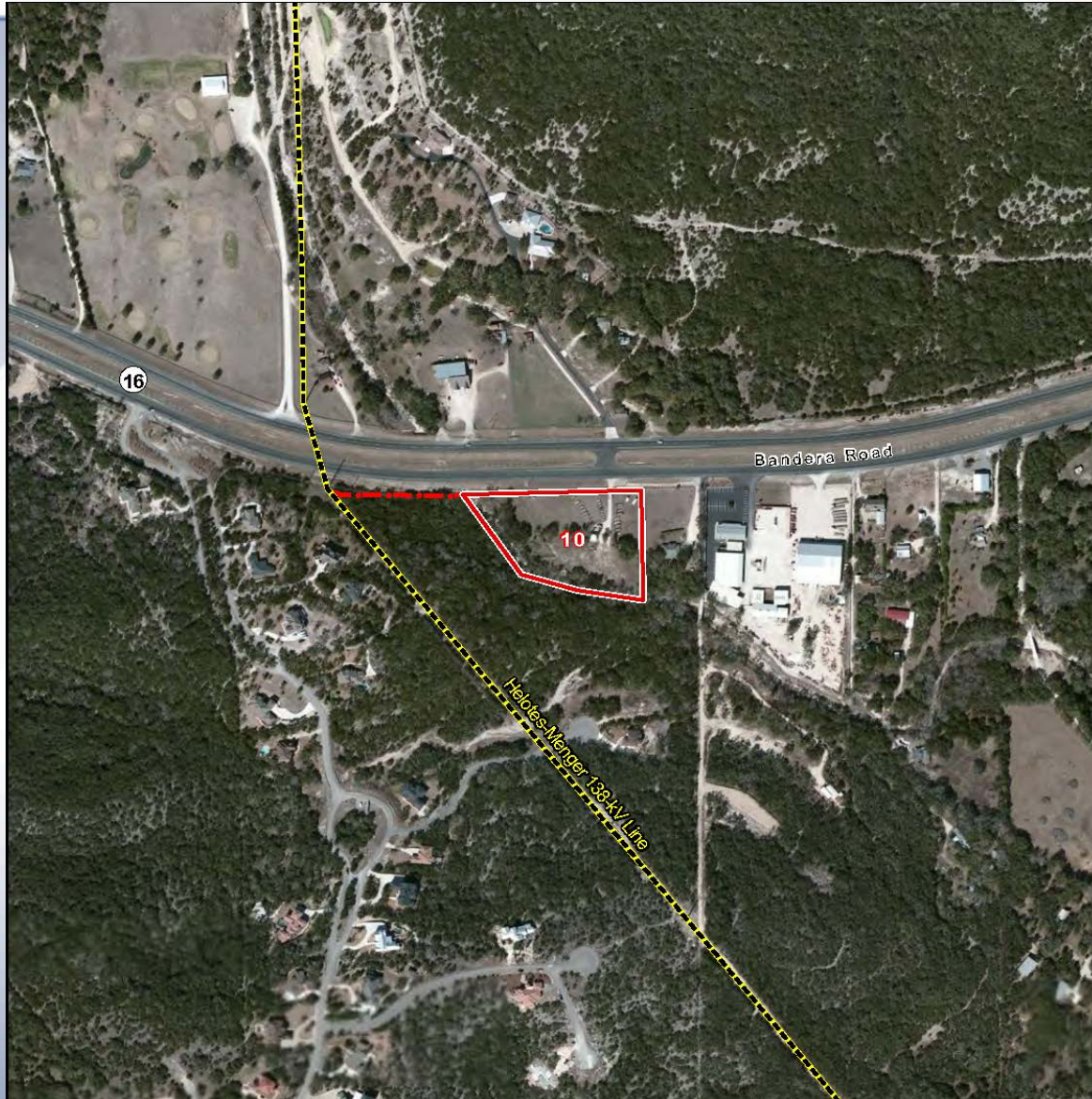
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7

8



Recommended Site





Recommended Site Factors

| Evaluation Factors | Comments |
|--------------------------|---|
| Total Cost | Site 10 was the lowest cost site. Cost factors include purchase of land, engineering, permitting, cost of construction and materials including distribution, land use and feasibility |
| Transmission Maintenance | Site 10 was ranked with the lowest impact group in regards to maintenance of the transmission line because of the short distance of line and access to the line. |
| Customer Input | The owners of the property for site 10 have expressed a desire to sell the property for the substation. |
| Environmental Ranking | The site ranked 3rd of 11 sites environmentally |



Next Steps

- Public Input Meeting November 13, 2012
- Board approval November 19, 2012
- Request COSA ordinance December 2012
- Property acquisition complete by June 1, 2013
- Engineering complete July 2013
- Construction time:
 - Phase 1 – Sept 1, 2013 thru March 1, 2014
 - Phase 2 – Sept 1, 2014 thru March 1, 2015
- Substation in service by June 1, 2015



Questions