

## Substation Site Areas Evaluation Matrix

Site Selection Criteria - Site Variables		#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	#16	#17	#18
System Considerations	Proximity to existing transmission lines	4	3	4	3	3	1	4	4	4	4	3	5	4	4	4	1	4	2
	Proximity to service area	3	3	3	3	4	5	3	2	3	3	3	1	2	1	4	4	3	5
	Positioned to alleviate load on existing subs	3	3	3	3	4	5	4	5	3	3	4	2	5	2	4	4	4	5
<b>Average</b>		3.3	3.0	3.3	3.0	3.7	3.7	3.7	3.7	3.3	3.3	3.3	2.7	3.7	2.3	4.0	3.0	3.7	4.0

Aesthetics and Neighborhood Values	General aesthetics	3	3	2	1	3	3	5	4	5	5	4	5	3	5	3	3	4	2
	Underground and overhead distribution lines	3	3	2	1	3	3	5	4	5	5	4	5	3	5	3	3	4	2
	General health concerns	3	3	2	1	3	3	5	4	5	5	4	5	3	5	3	3	4	2
	General property value concerns	3	3	2	1	3	3	5	4	5	5	4	5	3	5	3	3	4	2
	Proximity to existing density	3	3	2	1	3	3	5	4	5	5	4	5	3	5	3	3	4	2
	View	3	3	2	1	3	3	5	4	5	5	4	5	3	5	3	3	4	2
	Outreach to impacted customers/property owners	3	3	2	1	3	3	5	4	5	5	4	5	3	5	3	3	4	2
<b>Average</b>		3.0	3.0	2.0	1.0	3.0	3.0	5.0	4.0	5.0	5.0	4.0	5.0	3.0	5.0	3.0	3.0	4.0	2.0

Land Considerations	Land availability	4	4	3	2	4	4	4	4	4	4	4	5	5	4	4	4	4	5
	Land purchase price	4	4	3	2	4	4	4	4	4	4	4	5	5	4	4	4	4	4
	Land parcel size	4	4	3	2	4	4	4	4	4	4	4	5	5	4	4	4	4	5
	Site access - mobile substation	4	4	3	2	3	4	3	3	2	2	3	1	5	3	3	4	2	5
	Land slopes and contours	4	4	3	2	3	4	3	3	2	2	3	1	5	3	3	4	3	5
<b>Average</b>		4.0	4.0	3.0	2.0	3.6	4.0	3.6	3.6	3.2	3.2	3.6	3.4	5.0	3.6	3.6	4.0	3.4	4.8

Environmental Considerations	Groudwater	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	Easements and permitting	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	Security of location	3	3	3	3	3	4	3	3	3	3	3	3	3	3	3	4	3	4
	Threats from natural disasters	4	4	4	4	4	4	4	4	4	4	4	2	4	4	4	4	2	4
	Disturbance of land	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	Wildlife areas	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
<b>Average</b>		3.8	3.8	3.8	3.8	3.8	4.0	3.8	3.8	3.8	3.8	3.8	3.5	3.8	3.8	3.8	4.0	3.5	4.0

	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	#16	#17	#18
<b>RATING - TOTALS FROM EACH MAJOR CATEGORY</b>	14.2	13.8	12.2	9.8	14.1	14.7	16.1	15.1	15.4	15.4	14.8	14.6	15.5	14.8	14.4	14.0	14.6	14.8

### NARROWING:

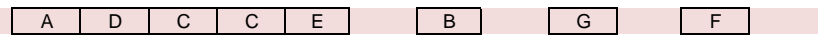
INITIAL PROPOSED NARROWING (Items 1 & 2) ==>



ADDITIONAL PROPOSED NARROWING (Item 3) ==>

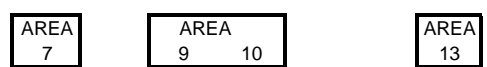


REVISED PER COMMUNITY GROUP INPUT (Item 3) ==>



### RESULTS:

THREE SITE AREAS TO ANALYZE (Item 1) ==>



### TOTALS - RANKING

Sites #7, 8, 9, 10, 11, 13
Sites #6, 12, 14, 15, 17, 18
Sites #1, 2, 3, 4, 5, 16

### Proposed Narrowing Criteria:

#### Analyze Data

- Initial Assumption: Weight four major categories equally
- Sum major category average scores to establish rating
- Color code to distinguish high, medium, and low ratings

#### Narrowing

- System Criteria: Eliminate any site that scores a "1"
- Aesthetics: Eliminate any site that scores a "1" or "2"
- Apply additional proposed narrowing based on score
- Apply results to map
- Analyze results - map and matrix
- Achieve N/3, which is 18 sites divided by 3 = 6 sites
- Group sites to achieve 3 areas

#### Results

- Analyze 3 areas with additional Community Outreach
- Determine specific sites within the areas
- Consultant evaluation of three sites