

## 6.4 Brooten

The proposed Brooten facility has a capacity of 1.5 MW AC and is located within the city of Brooten in Stearns County, northeast of the intersection of State Highway 55 and 493rd Avenue. Aurora anticipates that the facility will be accessed through a new drive off of County State Aid Highway 29. Preliminary plans anticipate a development area encompassing all of the approximately 13 acres of Aurora’s site control. The facility would deliver power to Xcel Energy’s Brooten Substation, located approximately 950 feet south of the facility.

The facility is located within the North-Central Glaciated Plains Section of the Prairie Parkland Province. Land cover within the preliminary development area (Table 17) is dominated by agricultural cover, both cultivated crops (79 percent) and pasture and haylands (21 percent). The proposed location avoids the developed area of Brooten that is generally located south of Railway Avenue and the wetland areas generally located to the north and east, but is comparable to the agricultural land cover that dominates the area in the south and west of the study area around the Brooten Substation (Figure 19).

**Table 17: Brooten Facility Land Cover**

Land Cover	Control Area		Development Area		Study Area	
	Acres	Percent	Acres	Percent	Acres	Percent
Open Water	-	-	-	-	101.8	0.8%
Developed, Open Space	-	-	-	-	622.7	5.0%
Developed, Low Intensity	-	-	-	-	147.1	1.2%
Developed, Medium Intensity	-	-	-	-	89.8	0.7%
Developed, High Intensity	-	-	-	-	18.6	0.2%
Barren Land	-	-	-	-	-	-
Deciduous Forest	-	-	-	-	386.7	3.1%
Evergreen Forest	-	-	-	-	24.9	0.2%
Mixed Forest	-	-	-	-	-	-
Shrub/Scrub	-	-	-	-	23.3	0.2%
Grassland Herbaceous	-	-	-	-	371.1	3.0%
Pasture/Hay	2.7	21.1%	2.7	21.1%	1,276.7	10.2%
Cultivated Crops	10.2	78.9%	10.2	78.9%	8,207.3	65.3%
Woody Wetlands	-	-	-	-	61.0	0.5%
Emergent Herbaceous Wetlands	-	-	-	-	1,229.9	9.8%
<b>Totals</b>	<b>12.98</b>	<b>100.0%</b>	<b>13.0</b>	<b>100.0%</b>	<b>12,560.7</b>	<b>100.0%</b>

#### **6.4.1 Effects on Human Settlement**

The facility is located in an agricultural area within the municipal boundaries of Brooten. The facility location was most recently in pasture. The nearest home is located approximately 46 feet west/southwest of the preliminary development area and the nearest home to the solar arrays as conceived in the preliminary design is 415 feet south of the arrays. Construction of the facility will not result in displacement of any homes or businesses. There is a residential area south of the site, but the more developed area of the city is south of the railroad tracks. The facility is located in an area zoned as AG-General Agriculture.

There are no designated recreational trails, county, state or local parks located within one-half mile of the proposed facility. Construction and operation of the facility would not impact the use of nearby recreational resources.

No mitigation measures beyond those described in Section 5.2 are identified for the Brooten facility.

#### **6.4.2 Effects on Land Based Economies**

The proposed facility would remove approximately 13 acres from agricultural use. In addition to the Brooten facility, Aurora is also developing both the Albany and Paynesville facilities in Stearns County as part of the Aurora Distributed Solar Project. Collectively these three facilities would remove approximately 216.44 acres of land from agricultural production, or approximately 0.035 percent of Stearns County agricultural land.

None of the preliminary development area is considered to be either prime farmland or prime farmland if drained (Table 11). The prime farmland exclusion in Minnesota Rule 7850.4400, Subpart 4 does not apply to the Brooten facility as it is within the municipal boundaries of the city of Brooten.

The proposed project would not impact tourism, mining or mineral extraction activity, or forest resources of economic importance.

No mitigation measures beyond those described in Section 5.3 are identified for the Brooten facility.

#### **6.4.3 Effects on Archaeological and Historic Resources**

No archaeological sites were identified in a survey of the Brooten facility. No mitigation measures beyond those described in Section 5.4 are identified for the Brooten facility.

#### **6.4.4 Effects on Natural Environment**

There are no rivers, streams or lakes within the area of facility site control. Field delineations performed in the summer of 2014 show approximately 0.35 acres of wetlands within the

area of land control; 0.11 acres of Type 1 (seasonally flooded basins or floodplains and 0.24 acres of Type 2 (wet meadow).<sup>97</sup>

The preliminary design for the facility does not anticipate any grading of the site during construction.<sup>98</sup>

No mitigation measures beyond those described in Section 5.5 are identified for the Brooten facility.

#### **6.4.5 Effects on Rare and Unique Natural Resources**

A review of the NHIS database did not identify any documented instances of state or federally listed endangered, threatened or special concern species within one mile of the area of site control for the Brooten facility.<sup>99</sup>

No mitigation measures beyond the field survey described in Section 5.6 are identified for the Brooten facility.

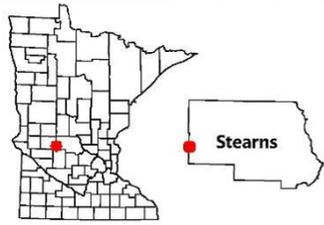
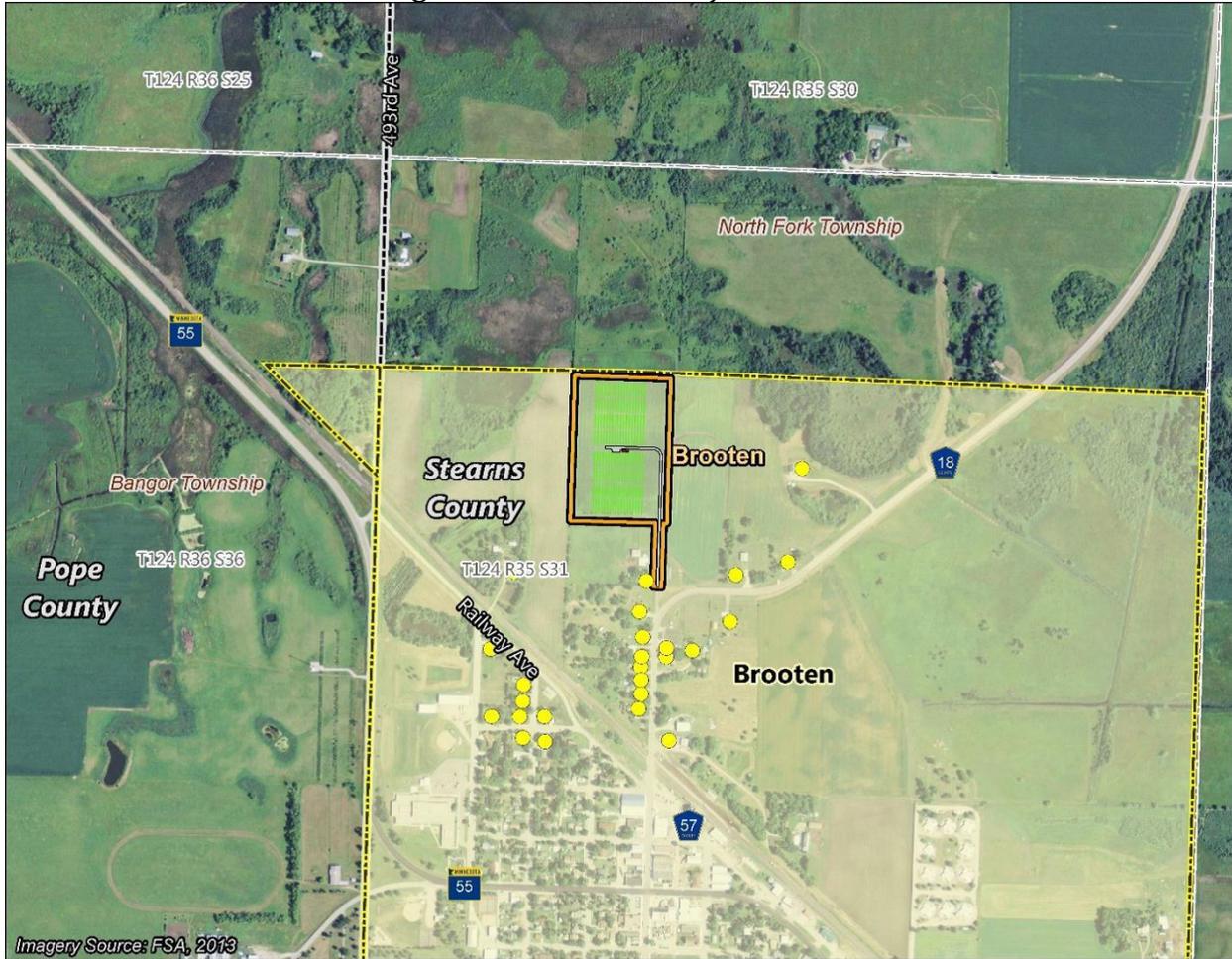
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<sup>97</sup> Appendix C

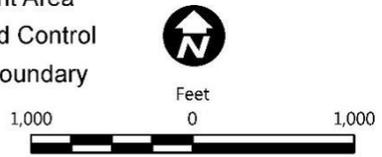
<sup>98</sup> Application, at Appendix F

<sup>99</sup> Application, at p. 81

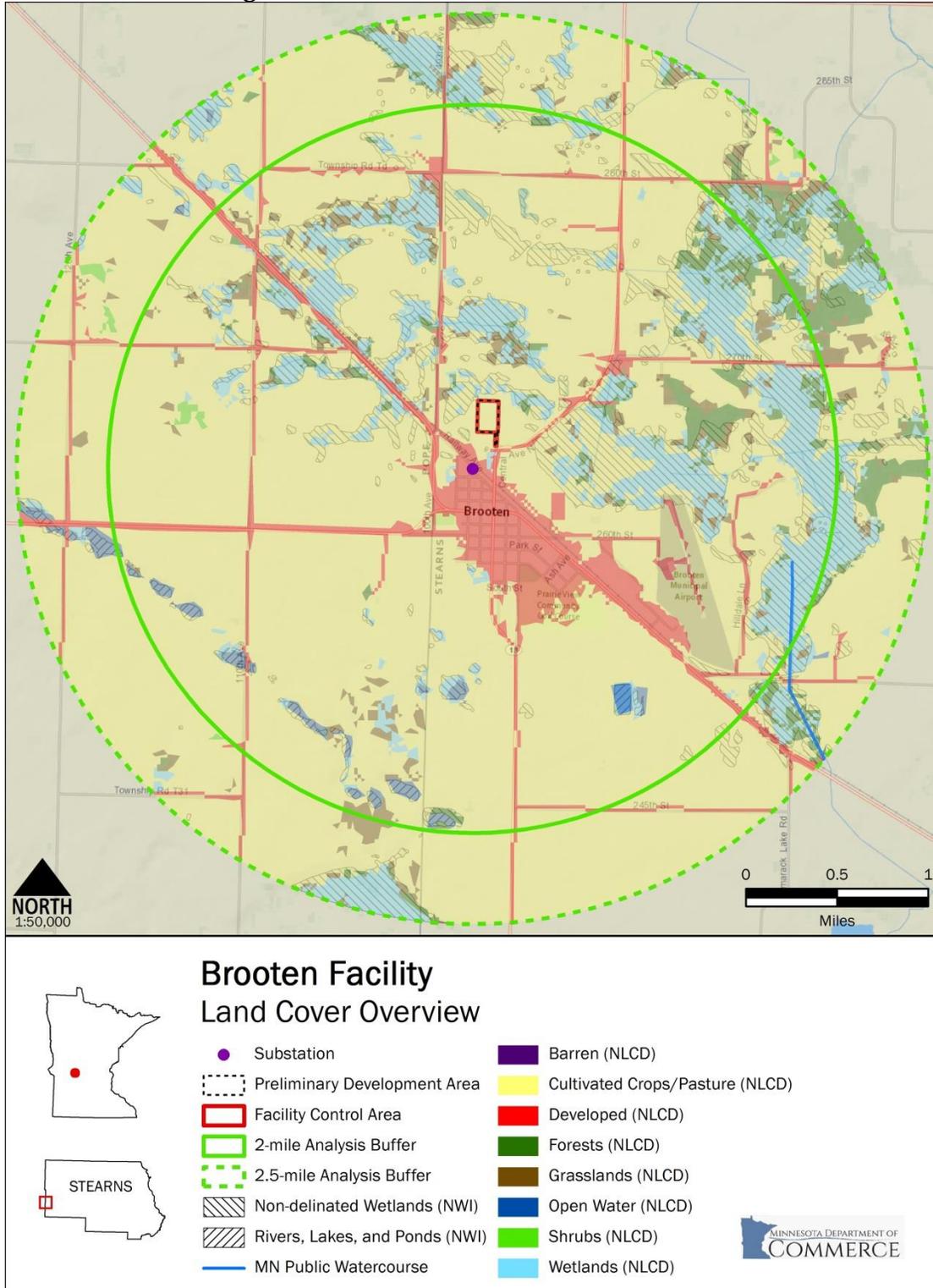
Figure 18: Brooten Project Detail



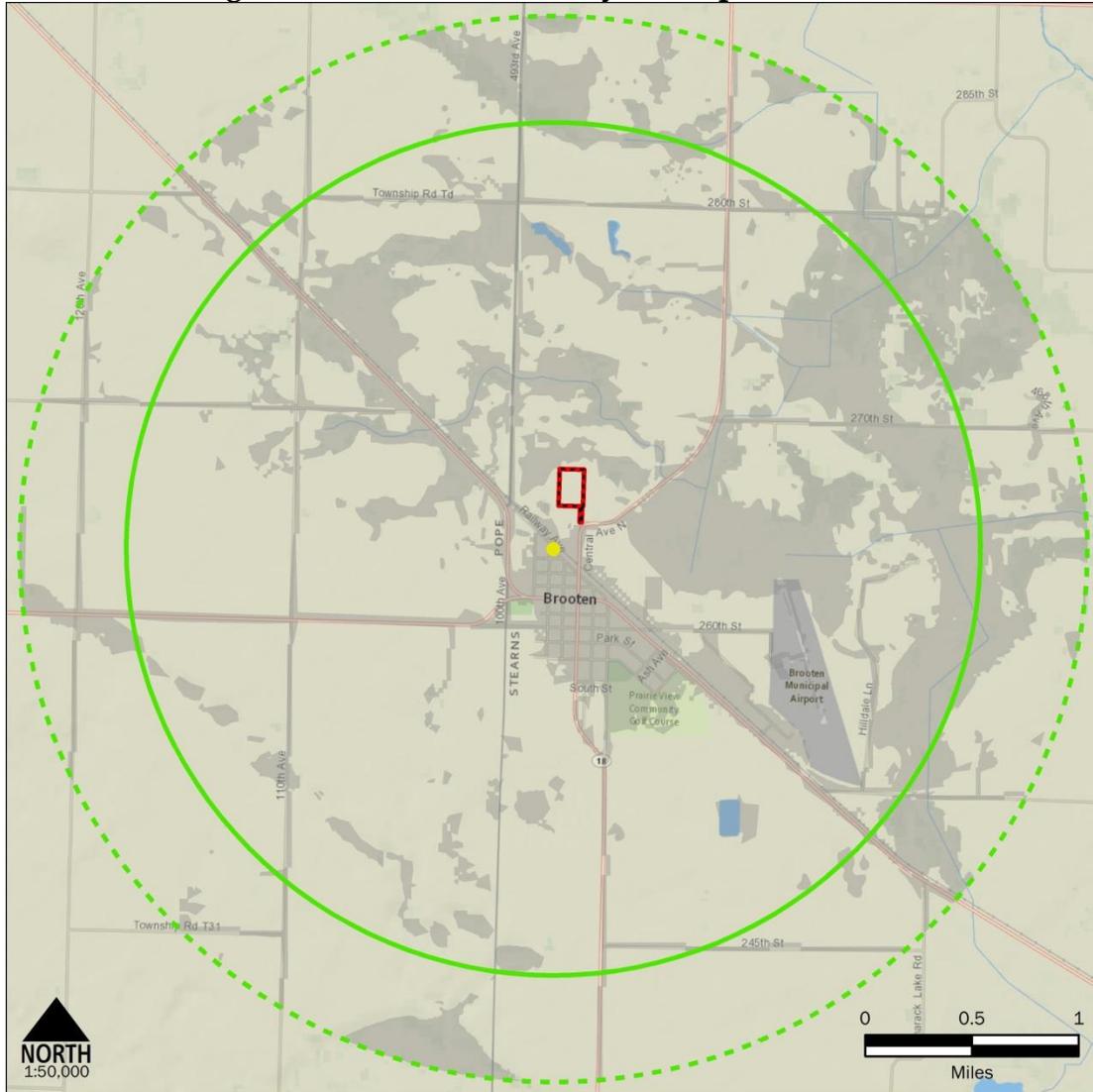
- Residence Location
- Proposed Inverter
- Proposed Arrays
- Proposed Road
- Preliminary Development Area
- Facility Land Control
- Municipal Boundary



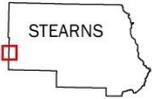
**Figure 19: Brooten Land Cover Overview**



**Figure 20: Brooten Generally Incompatible Areas**



**Brooten Facility  
 Generally Incompatible Areas**

- Substation
- Preliminary Development Area
- Facility Control Area
- 2-mile Analysis Buffer
- 2.5-mile Analysis Buffer
- Generally Incompatible Areas

“Generally Incompatible Areas” include: Minnesota Scientific and Natural Areas; Minnesota Wildlife Management Areas; US Fish and Wildlife Service Waterfowl Production Areas; the National Wetland Inventory; and areas classified as open water, developed, forest, and wetland in the National Land Cover Database.



**Figure 21: Brooten Prime Farmland and Other Areas**

