

Appendix C-12: Rookery Study (June 5, 2013)

June 5, 2013

Ms. Melissa Peterson
Project Manager
EDF Renewable Energy
10 Second Street NE, Suite 107
Minneapolis, Minnesota 55413

*Re: Rookery Survey 2013
Stoneray Wind Project
Burns & McDonnell Project No. 62823*

Dear Ms. Peterson:

Burns & McDonnell Engineering Company, Inc. (Burns & McDonnell) is providing environmental support services for the EDF Renewable Energy (EDF) proposed 105-megawatt (MW) wind energy facility (Project) to be located in Pipestone and Murray counties in southwestern Minnesota (Figure 1). The Project, known as the Stoneray Wind Project, will consist of up to 62 wind turbine generators (WTGs), access roads, an underground electrical collector system, and a small electrical switchyard situated within the Project site. The Project site is generally located north, east, and southeast of Woodstock, Minnesota, and consists of all or portions of the following Sections (Table 1), which are also depicted in Figure 2.

Table 1. Project Location

Township	Range	Sections
107N	44W	8, 15-29, 32-36
107N	43W	30, 31
106N	44W	1-17, 19-21, 23-26
106N	43W	5-8, 17-20, 29, 30

Per recommendation of the U.S. Fish and Wildlife Service (USFWS), Burns & McDonnell conducted a field review of one great blue heron (*Ardea herodias*) rookery that was initially identified in the spring of 2012. The rookery is located approximately 1.75 miles south of the Project area. The purpose of the survey was to inventory the previous identified stick nests, determine activity in the spring of 2013, and generally assess great blue heron flight paths associated with nest activity (if present).

Methods

The rookery to be surveyed was initially located during the *Avian Stick Nest Survey 2012* for the Project (Figure 2). Great blue heron nests were identified by the larger size (height and width) of the nest relative to the other stick nests, as well as usage of the nests by great blue herons in 2012. The rookery survey was conducted from public roadways, focusing on the rookery for three hours during the morning of April 23 and 24, as well as three hours on the evening of April

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23, respectively. The survey was conducted from public roadways because of property access limitations. This timeframe allowed the survey to be conducted prior to significant leaf-out of the vegetation; thus, the survey was conducive for observing avian stick nests and observing potential nest activity. The enclosed photographs (Photographs 1 and 2) illustrate the status of typical leaf-out during the survey.

A Burns & McDonnell wildlife biologist, equipped with a global positioning system (GPS) unit, laptop computer, spotting scope, binoculars, digital camera, maps, etc., observed the rookery during the survey period, as indicated above, in order to record great blue heron activity at and in close proximity to the rookery. Nest locations were recorded manually on hard copy maps and then transferred to digital maps using ArcGIS software (Figure 2). To determine if a stick nest is active, eggs or young need to be seen in the nest or adults need to be seen on the nest, or in adjacent limbs.

Results

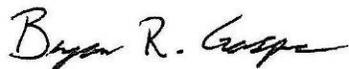
The results yielded the observation of four great blue heron stick nests at the previously identified great blue heron rookery, approximately 1.75 miles south of the Project boundary (Figure 2). This rookery is located in an approximately two-acre woodland area that included mature trees. This area is lower in elevation relative to other wood lots in the vicinity; therefore, likely providing some refuge from the prevailing winds. The rookery is south of the Project boundary, southeast of the intersection of 15th Avenue, and 61st Street in Murray County, and southwest of the 61st Street dead end (*i.e.*, 61st Street is not continuous in this area). No great blue herons were observed at the rookery. Photographs of the great blue heron rookery in April 2012 and April 2013 are provided in Photographs 1 and 2.

Conclusions

Four great blue heron nests were present at the rookery previously identified south of the Project; however, great blue heron activity was not observed during surveys conducted on April 23 and 24, 2013, including at the rookery or in the general vicinity of the rookery.

If you have questions or are in need of further assistance regarding this Project, please contact Bryan Gasper at (816) 349-6770 or bgasper@burnsmcd.com or Justin Bailey at (816) 822-4311 or jbailey@burnsmcd.com.

Sincerely,



Bryan R. Gasper
Senior Environmental Scientist/Wildlife Biologist



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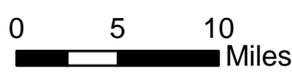
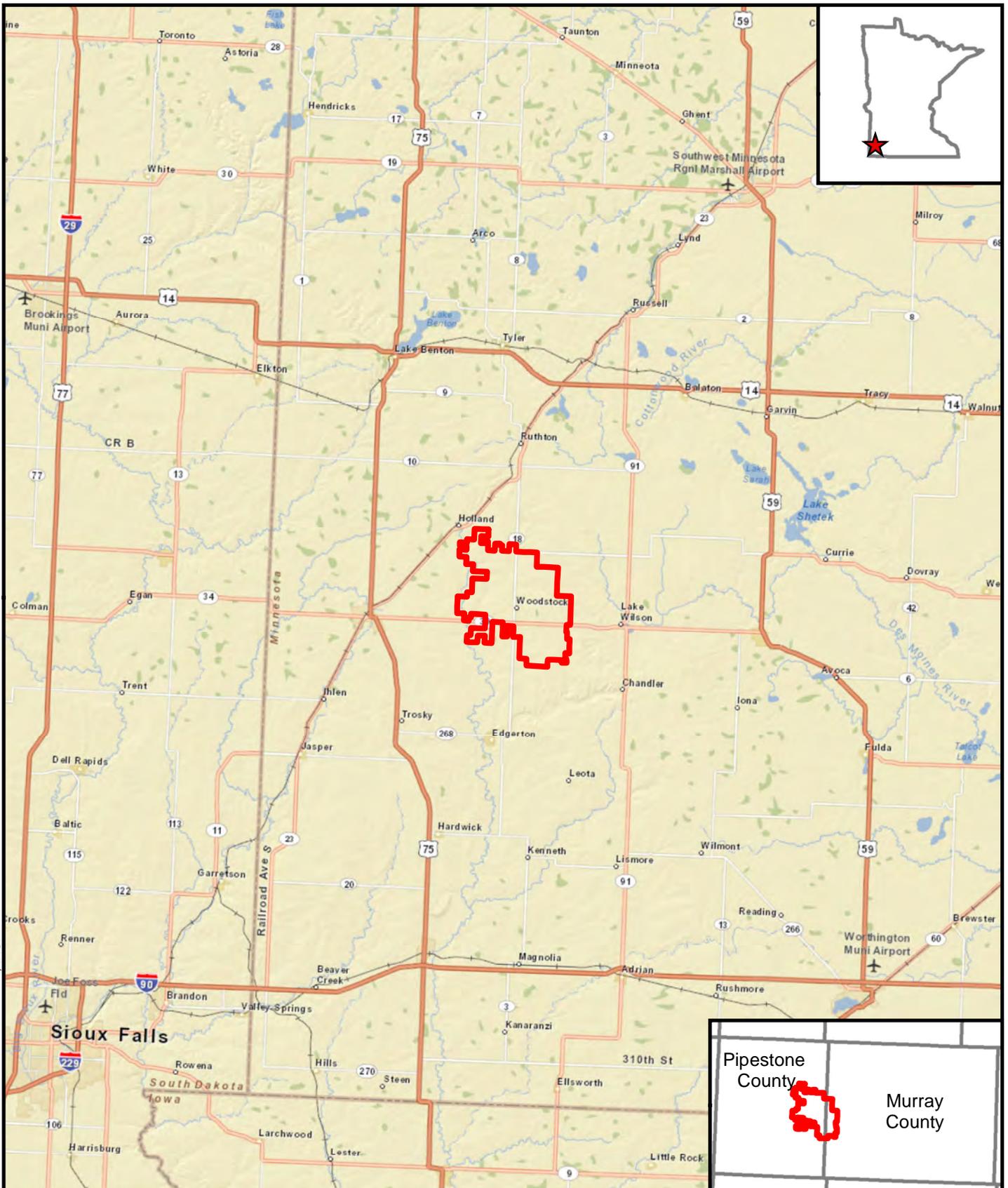
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Enclosures

cc: Justin Bailey, Burns & McDonnell
Rob Everard, Burns & McDonnell
Andy Kim, EVS

FIGURES



Legend

 Proposed Project Boundary

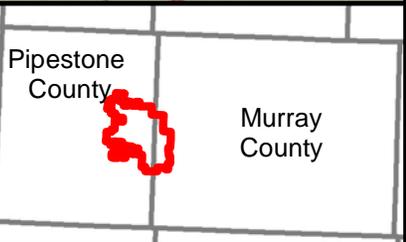
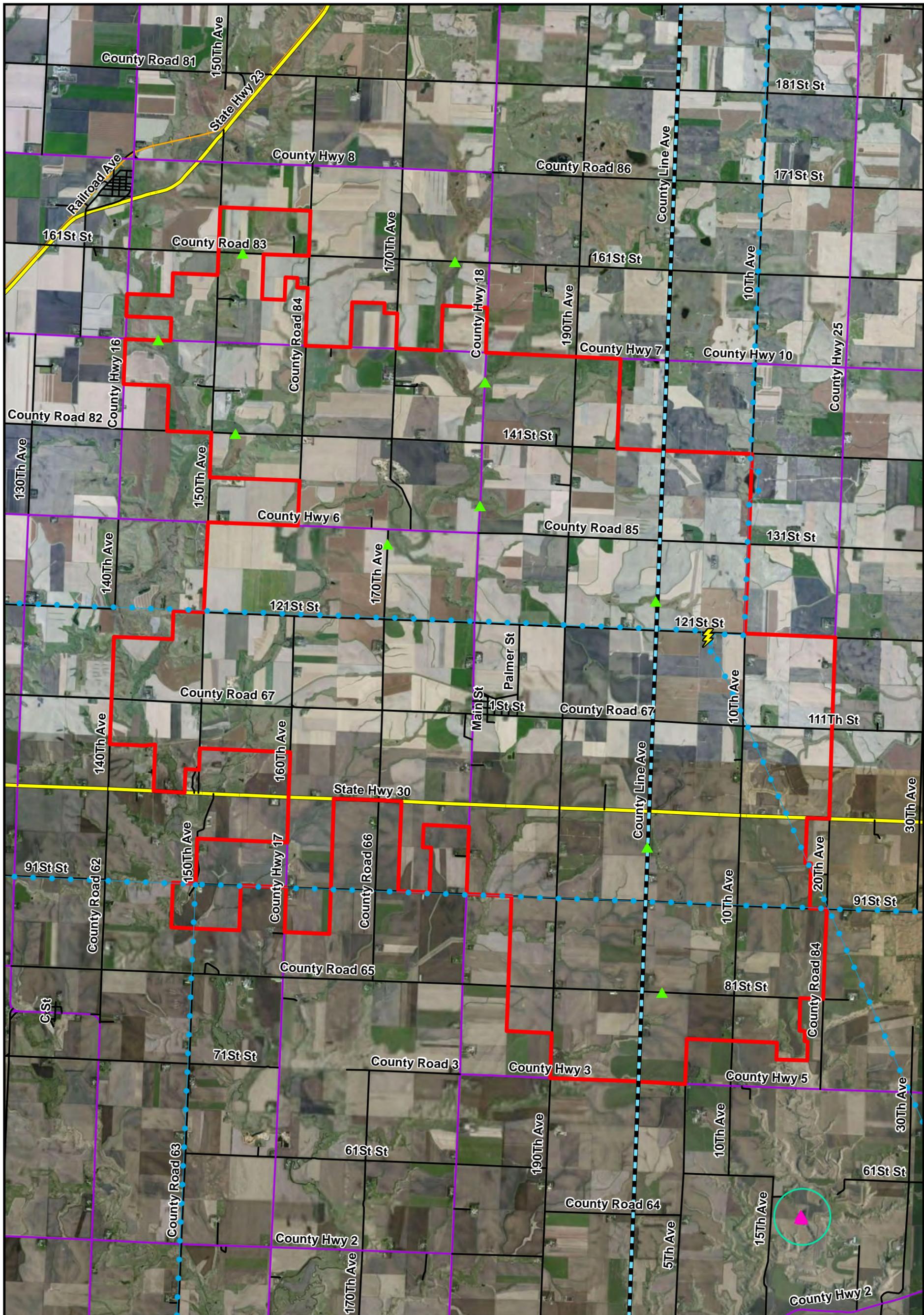


Figure 1
General Location Map
Stoneray Wind Project
Murray & Pipestone
Counties, Minnesota



Legend

- Proposed Project Boundary
- County Line
- Road
- County Hwy
- State Hwy
- Railroad
- Great Blue Heron Rookery
- ▲ Stick Nest Within Great Blue Heron Rookery
- ▲ 2012 Avian Survey Point Count
- ⚡ Chanarambie Substation
- Existing Transmission Line



0 0.5 1 Miles



Figure 2
 Great Blue Heron Rookery
 Large Water Bird
 Survey 2013
 Stoneray Wind Project
 Murray & Pipestone
 Counties, Minnesota



Photograph 1: Great blue heron rookery (4 nests). Photo taken by digital camera from west, facing east on 15th Avenue from approximately 0.33 miles on April 24, 2013.



Photograph 2: Great blue heron rookery (4 nests). Photo taken by digital camera through a spotting scope from west, facing east on 15th Avenue from approximately 0.33 miles on April 5, 2012.