



May 8, 2014

William Ballard  
Mead & Hunt, Inc.  
2605 Port Lansing Road  
Lansing, MI 48906

RE: Field Reconnaissance Survey for Potential Bat Habitat

Dear Mr. Ballard:

A field assessment was conducted on April 23, 2014. The project area was assessed for potential bat habitat within the identified obstructing tree areas. Observations were made from the existing ROW for the areas outside of the CCA owned properties.

#### Field Assessment

Three (3) types of potential bat habitat were observed within the project area: marginal (low density) potential bat habitat, assumed concentrated (high density) potential bat habitat, and confirmed concentrated (high density) potential bat habitat (Appendix 1: Figures 1a and 1b). Marginal potential bat habitat observed within the study area is characterized by few to no potential bat habitat observed at the locations of the obstructing trees (Appendix 2: Photos 1-2). Assumed concentrated potential bat habitat observed in the project area is described as having potential bat habitat observed bordering or adjacent to the obstructing tree locations (Appendix 2: Photos 3-4). Confirmed concentrated potential bat habitat is identified by the direct observation of potential bat habitat at the locations on the obstructing trees (Appendix 2: Photos 5-6).

#### **Marginal Potential Bat Habitat:**

**Erich Drive, Lynn Drive, Golf Course South of White Road, Richmond Road, Highland Road, Cary Jay Boulevard, Steven Boulevard, and Audrey Drive**

These areas are considered marginal (low density) potential bat habitat: only one (1), two (2), or no trees were observed on each street (Appendix 2: Photos 1). The potential bat trees observed in these areas were determined by the presence of cavities (Appendix 2: Photo 2). Cavities provide sufficient summer habitat for bats. It is believed that the absences of the obstructing trees in these areas will not likely effect migratory or foraging habits of any bat species.

#### **Assumed Concentrated Potential Bat Habitat:**

**Camelot Court and Wooded Area Bordering the Woodlot West of Richland Road**

These areas are assumed concentrated potential bat habitat. From Camelot and Canterbury Courts, several potential bat trees were visible on the edges of the wooded lot (Appendix 2: Photo 4). However, the location of the obstructing trees was not

investigated as it was on private property and not visible from the street. The potential bat trees visible on the edges of the woodlot south of Camelot Court included several Shagbark Hickory (*Carya ovata*); a species that is commonly known to possess sufficient summer roosting habitat. The wooded area bordering the woodlot west of Richland Road is assumed to contain several potential bat trees containing cavities and exfoliating bark (Appendix 2: Photo 4). This assumption is based on the presence of several potential bat trees within the adjacent woodlot west of Richland Road.

**Confirmed Concentrated Potential Bat Habitat:**  
**Canterbury Court, Willow Lane, Woodlot West of Bishop Road, Woodlot between Curtiss Wright Parkway and the Airport Runway, and the Woodlot West of Richland Road**

These locations are considered confirmed concentrated potential bat habitat. The dominant potential bat tree species observed near Canterbury Court and Willow Lane was Shagbark Hickory (*Carya ovata*) (Appendix 2: Photos 3-4). The bark on these mature trees provides suitable pocket space for bat species to inhabit during the summer months. The potential bat trees observed in the woodlot west of Bishop Road, woodlot between Curtiss Wright Parkway and the airport runway, and the woodlot west of Richland Road were determined by the presence of cavities and exfoliating bark. Both cavities and exfoliating bark provide sufficient living space for bat species in the summer months.

Appendices

*Appendix 1*

Figure 1a. Potential Bat Habitat Distribution within the Project Area (South)

Figure 1b. Potential Bat Habitat Distribution within the Project Area (North)

*Appendix 2*

Figure 2. Photo Location Map

Photolog

If you have any questions regarding this evaluation, please contact me at 614-481-8600 or [hhayter@lawhon-assoc.com](mailto:hhayter@lawhon-assoc.com).

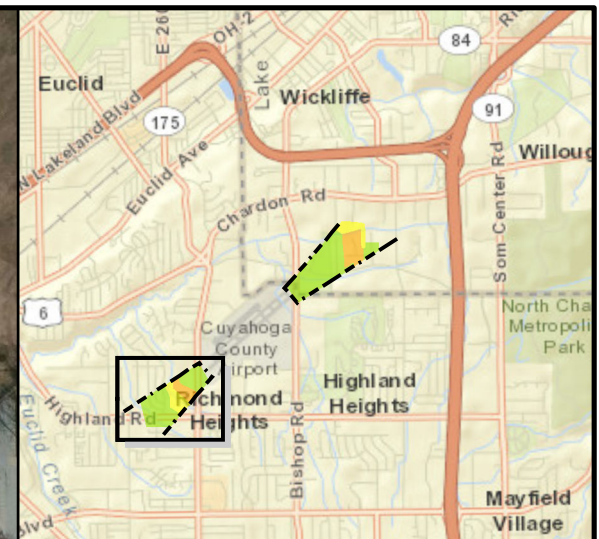
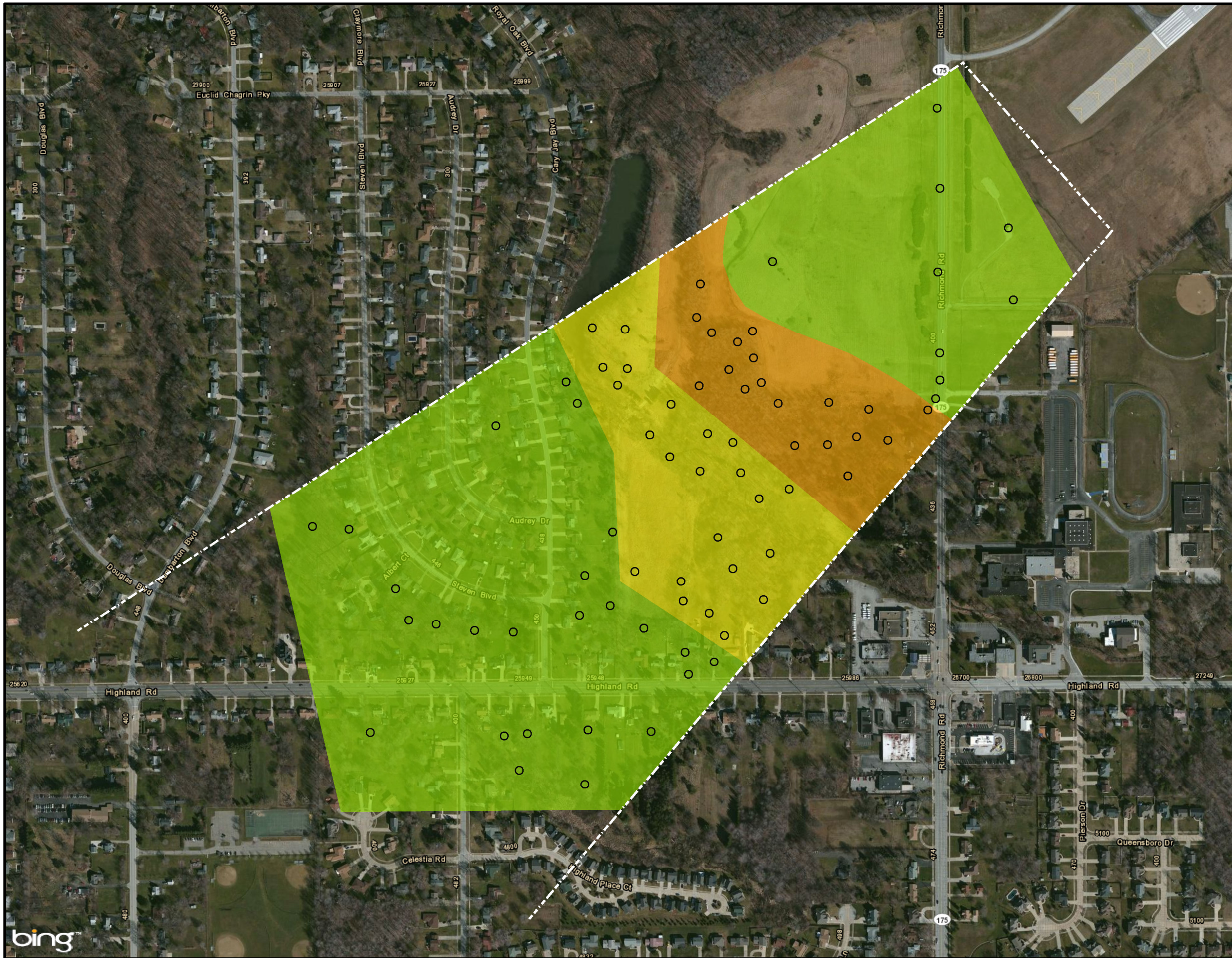
Sincerely,

A handwritten signature in cursive script that reads "Helena Hayter". The signature is written in black ink and is positioned above the printed name.

Helena C. Hayter

**Appendix 1**  
Figures

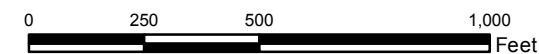




Extent Indicator Map

**Legend**

- Obstructed Tree
- Runway Protection Zone**
- Boundary
- PRT Habitat**
- Confirmed Concentrated
- Assumed Concentrated
- Marginal

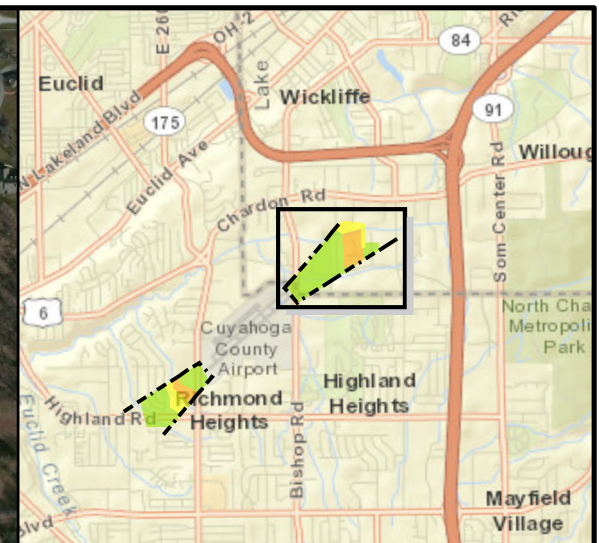
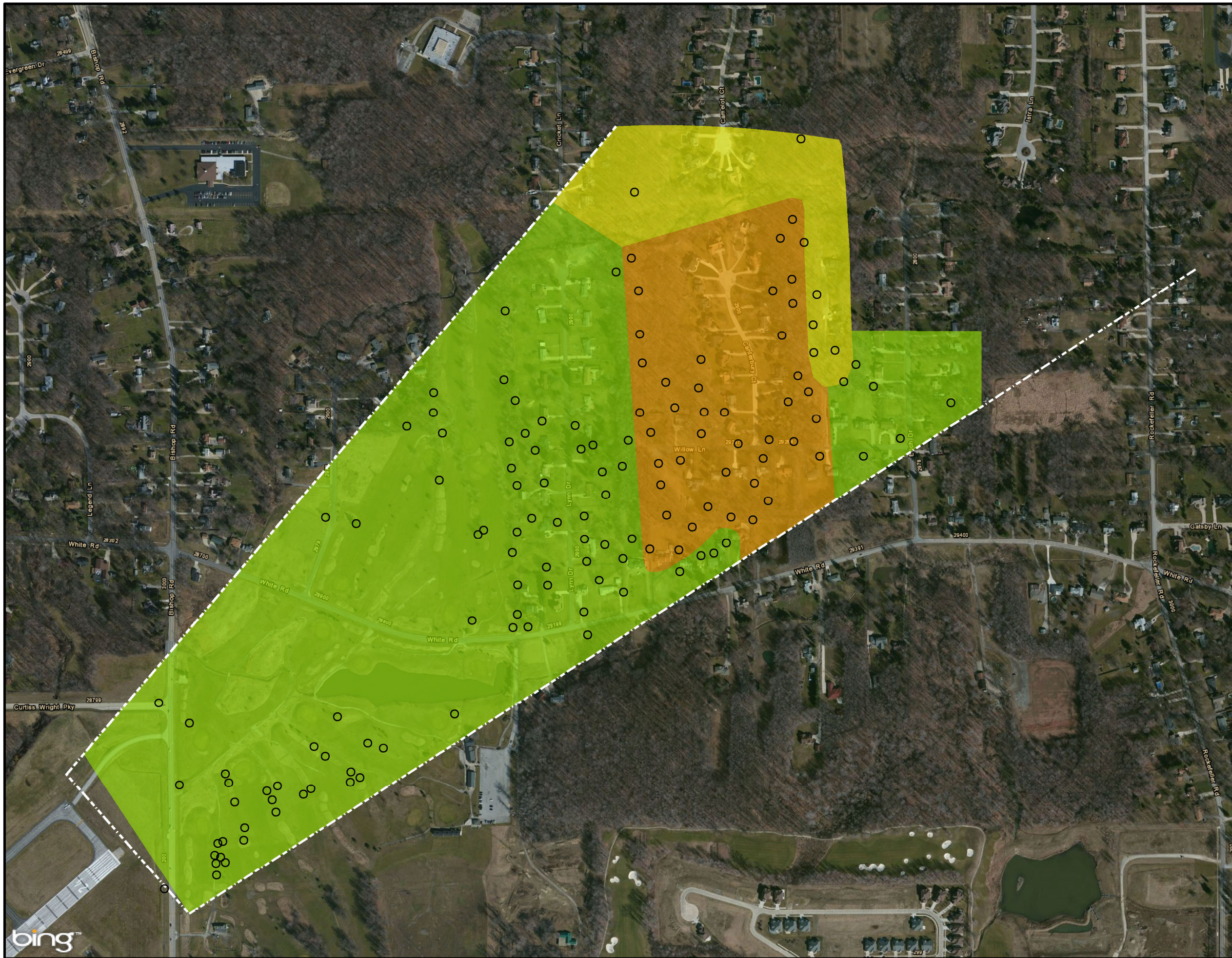


Reconnaissance Survey  
 PID: 91060  
 Potential Bat Habitat  
 Concentration Map



Date: May 2014	Approved by: HH	L&A No. 13-0166	Figure 1a
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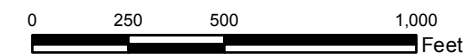




Extent Indicator Map

**Legend**

- Obstructed Tree
- Runway Protection Zone**
- Boundary
- PRT Habitat**
- Confirmed Concentrated
- Assumed Concentrated
- Marginal



Reconnaissance Survey  
PID: 91060

Potential Bat Habitat  
Concentration Map



Lawhon & Associates, Inc.

Date:  
May 2014

Approved by:  
HH

L&A No.  
13-0166

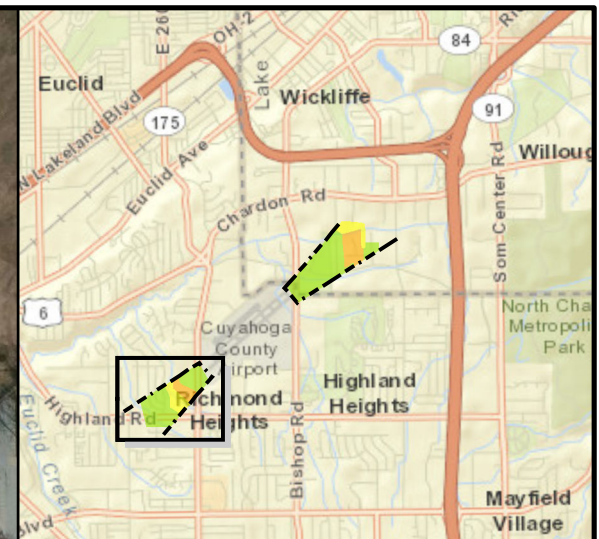
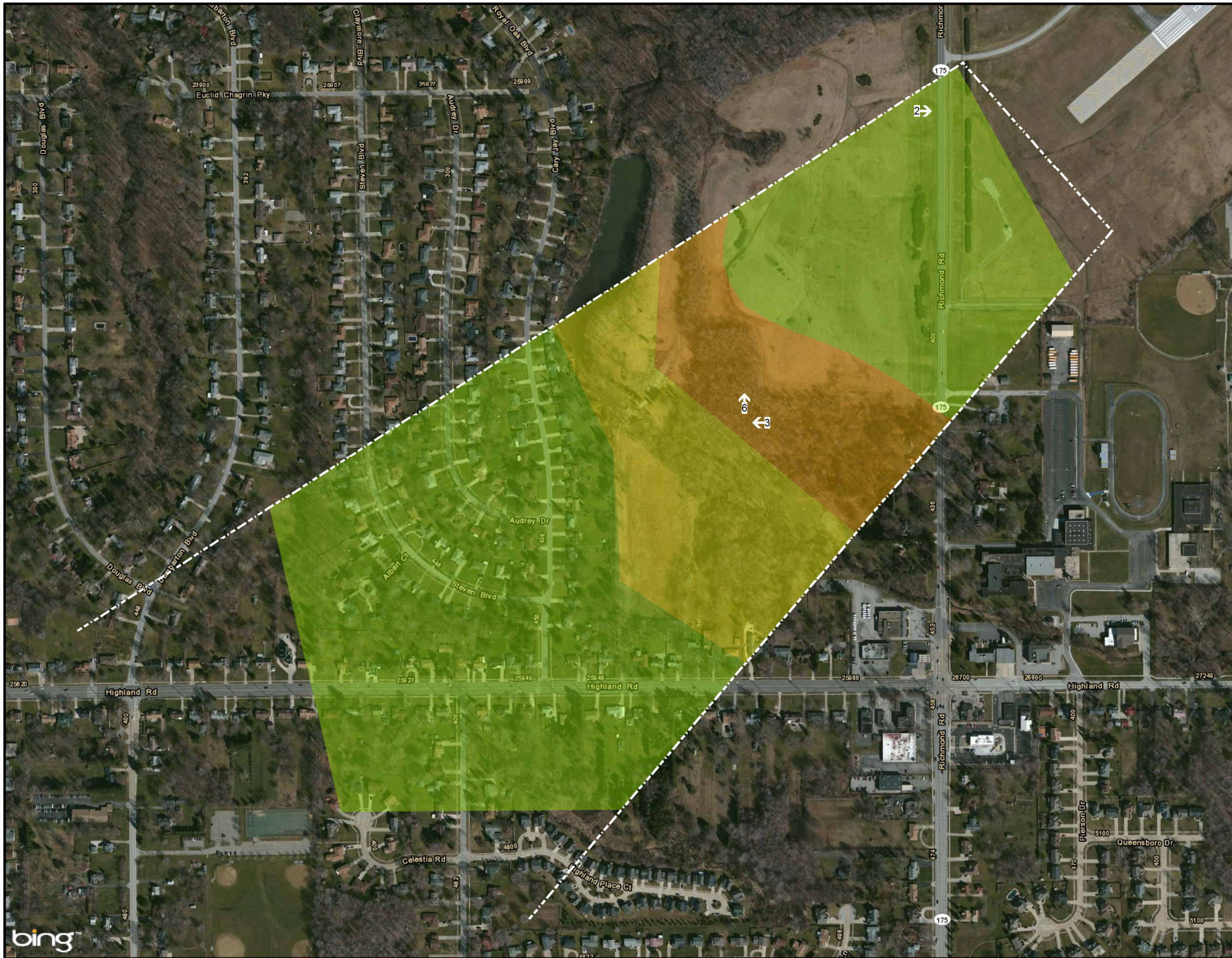
Figure  
1b





**Appendix 2**  
Photo Location Map  
Photo Log

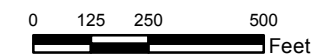




Extent Indicator Map

**Legend**

- Photo\_pt
- Runway Protection Zone**
- Boundary
- PRT Habitat**
- Confirmed Concentrated
- Assumed Concentrated
- Marginal



Reconnaissance Survey  
PID: 91060



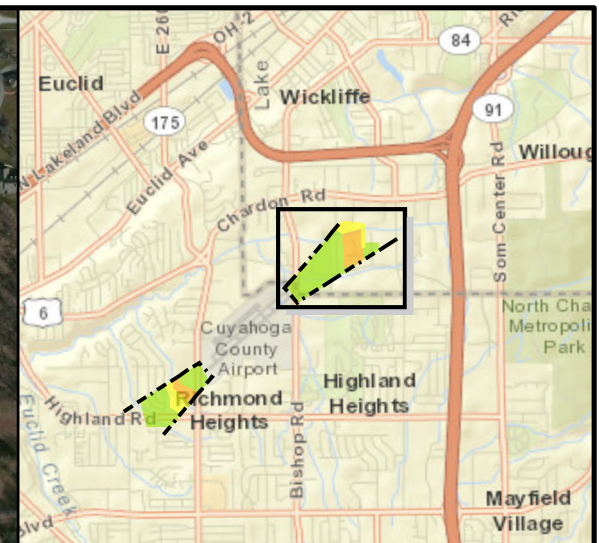
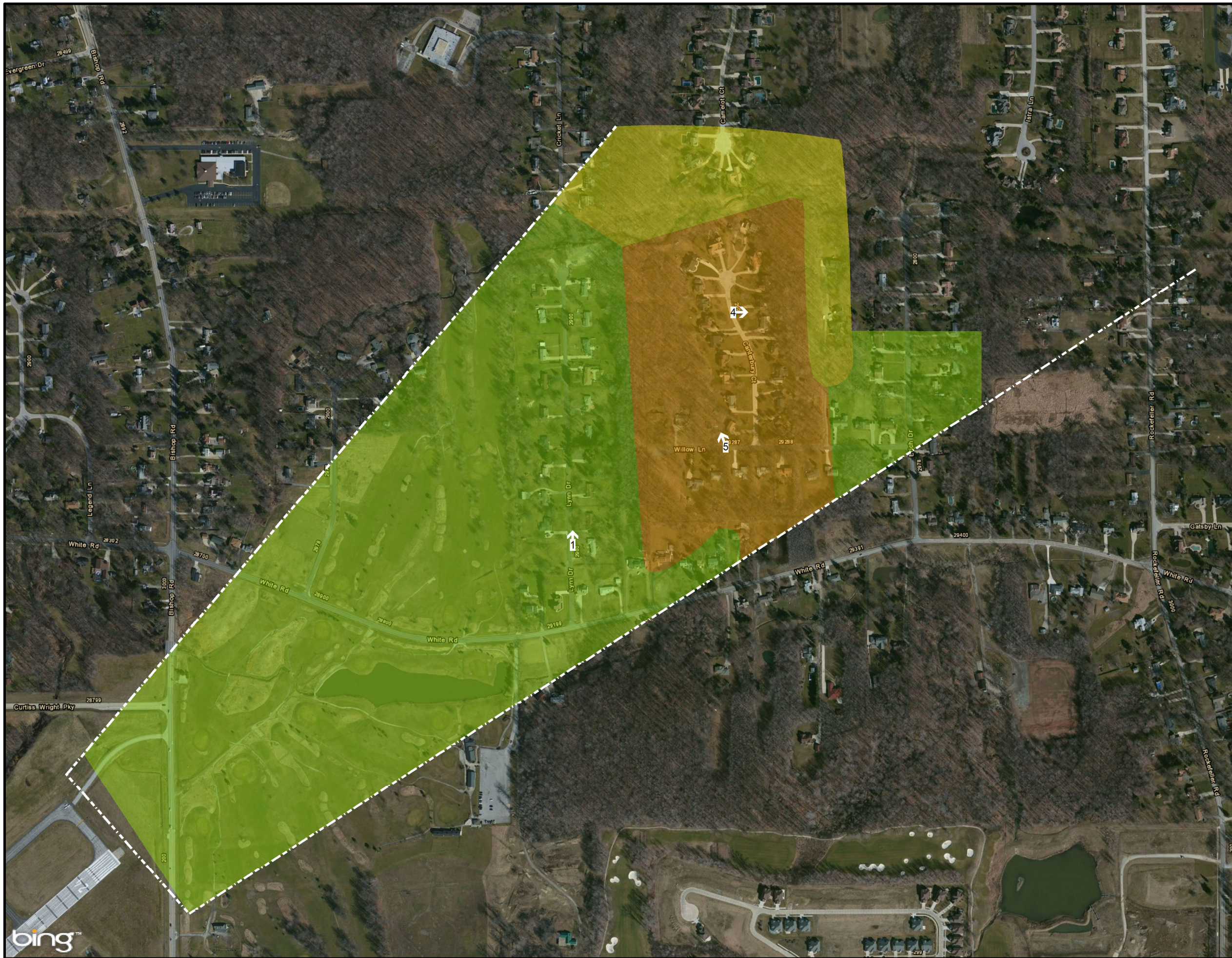
Lawhon & Associates, Inc.

Photograph Location Map

Date: May 2014	Approved by: HH	L&A No. 13-0166	Figure 2b
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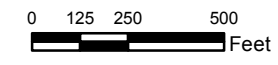




Extent Indicator Map

**Legend**

- Photo\_pt
- Runway Protection Zone**
- Boundary
- PRT Habitat**
- Confirmed Concentrated
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Reconnaissance Survey  
PID: 91060

Photograph Location Map

Lawhon & Associates, Inc.

Date: May 2014	Approved by: HH	L&A No. 13-0166	Figure 2b
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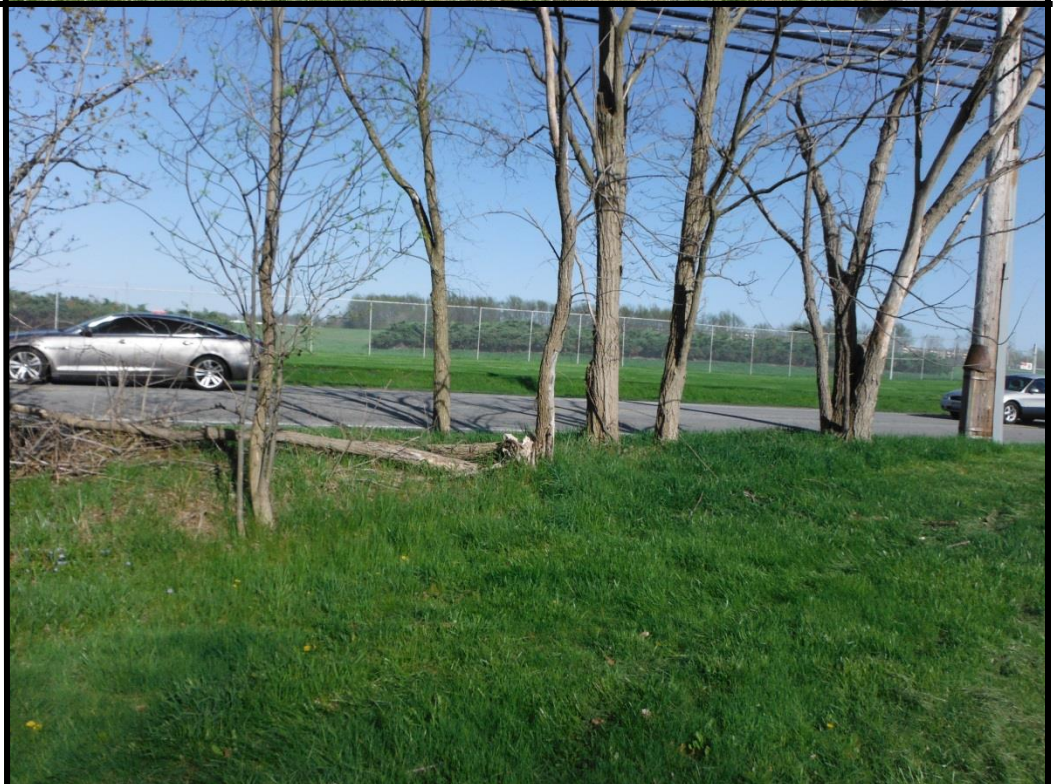
**Photograph 1: Marginal Potential Bat Habitat**

Lynn Drive facing North: Two potential bat trees were observed on this street. Based on the small amount of visible potential bat trees on this street, none of which were located at an obstructing tree location, the area is considered marginal potential bat habitat.



**Photograph 2 : Marginal Potential Bat Habitat**

Richmond Road facing East: No potential bat trees were observed along Richmond Road. This area is considered marginal potential bat habitat. This photo is of trees within an obstructing tree location, none of which are potential bat trees.



Field Reconnaissance Survey, PID 91060  
Cuyahoga County, Ohio  
L&A Project Number 13-0166

Photographs taken by Lawhon & Associates, Inc.  
April 23, 2014



**Photograph 3: Assumed Concentrated Potential Bat Habitat**

Woodlot west of Richmond Road facing West: This photo is taken facing an assumed concentrated potential bat habitat area. Within the woodlot where this photo was taken, several potential bat trees were observed. It is assumed that the wooded area to the west of this location, bordering the woodlot, is also concentrated potential bat habitat.



**Photograph 4 : Assumed Concentrated Potential Bat Habitat**

House in Canterbury Court facing East: The potential bat trees visible in this photo, border the the woodlot East of Canterbury Court. Although the woodlot could not be accessed, it is assumed based off of the observations made from the ROW that concentrated potential bat habitat exists in the obstructing tree locations behind this house.



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Cuyahoga County, Ohio  
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**Photograph 5:**  
**Concentrated Potential**  
**Bat Habitat**

Willow Lane facing north west: Potential bat trees were observed as prominent along Willow Lane at the locations of the obstructing trees. The primary potential bat tree species observed in this area was the Shagbark Hickory (*Carya ovata*), shown in this photo.



**Photograph 6:**  
**Concentrated Potential**  
**Bat Habitat**

Woodlot west of Richmond Road facing North: Several potential bat trees were observed within this woodlot at the locations of the obstructing trees. This woodlot is considered confirmed concentrated potential bat habitat. Most of the potential bat trees observed at this location contained exfoliating bark and cavities (suitable summer habitat for bats).



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