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**Constraints Analysis**

**105 Beechwood Drive, Coatesville, PA**

**UPI# 27-07-0120**

**LAT 40.027591 N, LNG -75.792917 W**

**West Brandywine Township, Chester County, PA**

**Streams:**

- ✓ No streams on the property

**PNDI:**

- ✓ Pennsylvania Natural Diversity Inventory (PNDI) records indicates no impact for the site potential impacts for this site. No further coordination with the US Fish and Wildlife Service will be required.

**Wetlands:**

- ✓ There are no Wetlands per the US Fish and Wildlife Service's *National Wetlands Inventory Interactive Wetlands Database Map*.

**Tree Protection and Natural Features Protection:**

- ✓ West Brandywine Township:
  - No portions of tree masses or trees with caliper of eight inches or greater shall be cleared unless clearly necessary. Developers shall make all reasonable efforts to harmonize their plans with the preservation of existing trees.
  - Where a proposed subdivision or development necessitates the clearing of trees or portions of tree masses, developers shall be guided by the following criteria in selecting trees and ornamentals for retention or clearing:
    - Aesthetic values, including autumn coloration, type of flowers and fruit, bark and crown characteristics, amount of dieback present;
    - Susceptibility of tree to insect and disease attack and to air pollution;
    - Species longevity;
    - Wind firmness and characteristic of soil to hold trees;
    - Existence of disease, rot or other damage to the tree; and
    - Protection of buildings (e.g., dead and large limbs hanging over buildings should be removed.)



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## **Steep Slopes:**

- ✓ West Brandywine Township: The Steep Slope District is defined as areas 15% or greater.
  - Moderate Slope District is defined as slopes measuring between 15% and 25%.
  - Severe Slope District is defined as slopes in excess of 25%.

## **FEMA:**

- ✓ The property is located in Flood Hazard Zone X , No base flood elevations determined as depicted on Flood Insurance Rate Map (Panel 0104F, Effective date September 29, 2006.

## **Stormwater Management:**

- ✓ West Brandywine Township, Permanent comprehensive stormwater management standards. The provisions of this section shall apply to any minor or major subdivision or land development involving land disturbance which exceeds 5,000 square feet.
  - **Standard 1.**
    - There shall be no increase in the volume of stormwater runoff being discharged for up to the two-year frequency rainfall, predevelopment to post-development, calculated using a methodology as described in this chapter.
    - Waivers may be issued at the discretion of the Township in those cases where Standard 1 volume requirement cannot reasonably be satisfied. Applicants may request a partial waiver, where a portion of the Standard 1 volume requirement is waived (i.e., volume control is achieved for a lesser storm such as the one-year storm or six-month storm), or applicants may request a total waiver, where the entire Standard 1 volume requirement is set aside. The need for waivers of any type must be based on demonstration by the applicant that due to the existing soil, bedrock, water table, or other natural conditions and limitations at the site, the Standard 1 volume requirement cannot be satisfied through use of reasonable best management practices, as defined in this chapter. The Township strongly discourages requests for waivers. The Board shall issue waivers only after thorough review and concurrence that partial or full waiver of these provisions



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is warranted in full consideration of all possible stormwater management options.

[Amended 3-21-2002 by Ord. No. 02-01]

- Modification to Standard 1 in headwaters areas. On any lot or tract where lot coverage in excess of 20% may be permitted as provided in the West Brandywine Township Zoning Ordinance (Chapter 200 of the Code) and where any lot coverage is located within any headwaters area, or is served by any stormwater management facilities located within a headwaters area, Standard 1 shall be modified as follows: the volume of stormwater runoff which may be discharged, as provided in Subsection G(1)(a) above, shall be reduced by subtracting the entire volume of the two-year frequency rainfall (3.2 inches in 24 hours) generated by any lot coverage in excess of 20%.

[Added 2-6-2003 by Ord. No. 03-02]

○ **Standard 2.**

- Assuming full compliance with the Standard 1 volume provisions (assuming no waiver), the peak rate of stormwater discharges from the site for all design storms up to and including a one-hundred-year frequency rainfall shall not exceed the peak discharges from the site of the same storms before disturbance.

Design storms include:

- Two-year, twenty-four-hour storm;
- Five-year, twenty-four-hour storm;
- Ten-year, twenty-four-hour storm;
- Twenty-five-year, twenty-four-hour storm;
- Fifty-year, twenty-four-hour storm; and
- One-hundred-year, twenty-four-hour storm.
- If a partial waiver has been issued but at least 50% of the volume requirement specified under Standard 1 is being met, these Standard 2 provisions also apply.
- 
- **Standard 3.** In those cases where a total waiver from the Standard 1 volume requirement is issued or where a partial waiver is issued and less than 50% of the volume requirement specified under Standard 1 is being met, then the peak rate standards set forth under Standard 2 above are further modified, so that the post-development peak rate discharges from



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the site for two-year storms and larger, up to the ten-year storm, must be equal to or less than the predevelopment peak rate of discharge for the two-year storm. These calculations are to be based only on that site area being disturbed.

- **Standard 4.** Significant loadings of nonpoint source pollutants shall not be discharged into either surface or groundwater. If the total volume and peak rate standards above are met as in Standards 1 and 2 (including if a partial waiver for volume control is approved by the Township, but at least 50% of the volume requirement specified in Standard 1 is met), then water quality impacts are assumed to be adequately controlled.
  - If the requirements set forth in Standards 1 and 2 above cannot be achieved and a total waiver is issued or a partial waiver is issued where less than 50% of the volume requirement specified under Standard 1 is being met, then an additional water quality requirement must be met in order to guarantee that significant water quality impacts will not result from the proposed development action. A water quality-oriented best management practice (BMP) designed to capture and treat stormwater generated for up to the one-inch rainfall event must be employed. These BMPs include, but are not limited to:
    - Constructed wetlands/wetland forebays;
    - Retention ponds/extended detention ponds;
    - Filters (sand-peat, underground sand, perimeter sand filter, organic sand, pocket sand filter, gravel);
    - Grass channels;
    - Dry swales;
    - Wet swales;
    - Filter strips;
    - Other bioretention BMPs.
  - BMP selection, design and implementation shall be based upon appropriate reference materials such as the Pennsylvania Handbook of Best Management Practices for Developing Areas, Design of Stormwater Filtering Systems, and other manuals.
  - Riparian buffer requirements, as set forth in § [167-64](#) of this chapter, are required for all sites. Additional Township requirements for other sensitive environmental features are



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applicable as set forth elsewhere in this chapter and other Township ordinances. Additionally, for all those sites hydraulically tributary to special protection waters or to natural or artificial lakes and impoundments, minimum disturbance/maintenance site design, as set forth in Appendix A,2 is strongly recommended.

[Amended 3-21-2002 by Ord. No. 02-01]

[2]:

Editor's Note: Appendix A, Comprehensive Stormwater Management Procedure, is included at the end of this chapter.

- **Standard 5.** Under certain conditions, the Township, upon recommendation by the Township Engineer, may impose the following additional restrictions on stormwater discharges:
  - Peak discharge may be further restricted when it can be shown that a probable risk to downstream structures or unique natural areas exists or that existing severe flooding problems could be further aggravated.
  - Measures shall be imposed to protect against ground or surface water pollution where the type of land use activity may result in significant nonpoint source pollution or the nature of the soils or bedrock underlying a stormwater management structure constitutes substantial risk of contamination. Special provisions to be followed in such cases may be provided by the Township Engineer.

[Amended 3-21-2002 by Ord. No. 02-01]

- Where groundwater yields are very low or where a groundwater supply already is heavily used, the Township may require that the entire volume of the two-year frequency rainfall (3.2 inches in 24 hours) be retained and infiltrated. If substantial irrigation needs are anticipated, a portion of stored stormwater may be re-used for irrigation purposes.

**Zoning:**

- ✓ West Brandywine Township, Chester County: R-3, conditional use Open Space Option

**Utilities:**

- ✓ Sewer: available in the area
- ✓ Water: available in the area

The report D. L. Howell and Associates, Inc. prepares is only for your use as related to the preliminary property lot yield and any future proposed site improvements and the associated permitting processes. D.L. Howell and Associates, Inc. reserves the right to modify and/or supplement the Report and/or the information we provide to you, based upon our receipt of additional information, subsequent to D.L. Howell and Associates, Inc.'s issuance of the Report.

Denny L. Howell P.E.

### 1. PROJECT INFORMATION

Project Name: **Anderson**

Date of review: **1/29/2014 9:27:26 AM**

Project Category: **Development, Residential, Subdivision containing more than 2 lots and/or 2 single-family units**

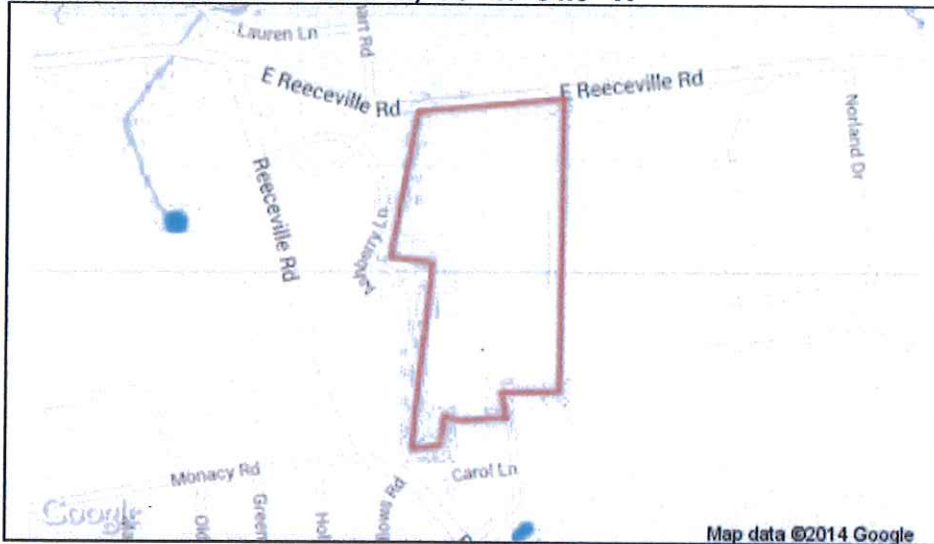
Project Area: **47.1 acres**

County: **Chester Township/Municipality: West Brandywine**

Quadrangle Name: **WAGONTOWN ~ ZIP Code: 19320**

Decimal Degrees: **40.027591 N, -75.792917 W**

Degrees Minutes Seconds: **40° 1' 39.3" N, -75° 47' 34.5" W**



### 2. SEARCH RESULTS

Agency	Results	Response
PA Game Commission	No Known Impact	No Further Review Required
PA Department of Conservation and Natural Resources	No Known Impact	No Further Review Required
PA Fish and Boat Commission	No Known Impact	No Further Review Required
U.S. Fish and Wildlife Service	No Known Impact	No Further Review Required

As summarized above, Pennsylvania Natural Diversity Inventory (PNDI) records indicate no known impacts to threatened and endangered species and/or special concern species and resources within the project area. Therefore, based on the information you provided, no further coordination is required with the jurisdictional agencies. This response does not reflect potential agency concerns regarding impacts to other ecological resources, such as wetlands.

Note that regardless of PNDI search results, projects requiring a Chapter 105 DEP individual permit or GP 5, 6, 7, 8, 9 or 11 in certain counties (Adams, Berks, Bucks, Carbon, Chester, Cumberland, Delaware, Lancaster, Lebanon, Lehigh, Monroe, Montgomery, Northampton, Schuylkill and York) must comply with the bog turtle habitat screening requirements of the PASPGP.

### 3. AGENCY COMMENTS

Regardless of whether a DEP permit is necessary for this proposed project, any potential impacts to threatened and endangered species and/or special concern species and resources must be resolved with the appropriate jurisdictional agency. In some cases, a permit or authorization from the jurisdictional agency may be needed if adverse impacts to these species and habitats cannot be avoided.

These agency determinations and responses are **valid for two years** (from the date of the review), and are based on the project information that was provided, including the exact project location; the project type, description, and features; and any responses to questions that were generated during this search. If any of the following change: 1) project location, 2) project size or configuration, 3) project type, or 4) responses to the questions that were asked during the online review, the results of this review are not valid, and the review must be searched again via the PNDI Environmental Review Tool and resubmitted to the jurisdictional agencies. The PNDI tool is a primary screening tool, and a desktop review may reveal more or fewer impacts than what is listed on this PNDI receipt. The jurisdictional agencies **strongly advise against** conducting surveys for the species listed on the receipt prior to consultation with the agencies.

#### PA Game Commission

**RESPONSE:** No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

#### PA Department of Conservation and Natural Resources

**RESPONSE:** No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

#### PA Fish and Boat Commission

**RESPONSE:** No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

#### U.S. Fish and Wildlife Service

**RESPONSE:** No impacts to **federally** listed or proposed species are anticipated. Therefore, no further consultation/coordination under the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) is required. Because no take of federally listed species is anticipated, none is authorized. This response does not reflect potential Fish and Wildlife Service concerns under the Fish and Wildlife Coordination Act or other authorities.

### 4. DEP INFORMATION

The Pa Department of Environmental Protection (DEP) requires that a signed copy of this receipt, along with any required documentation from jurisdictional agencies concerning resolution of potential impacts, be submitted with applications for permits requiring PNDI review. For cases where a "Potential Impact" to threatened and endangered species has been identified before the application has been submitted to DEP, the application should not be submitted until the impact has been resolved. For cases where "Potential Impact" to special



concern species and resources has been identified before the application has been submitted, the application should be submitted to DEP along with the PNDI receipt. The PNDI Receipt should also be submitted to the appropriate agency according to directions on the PNDI Receipt. DEP and the jurisdictional agency will work together to resolve the potential impact(s). See the DEP PNDI policy at <http://www.naturalheritage.state.pa.us>.

### 5. ADDITIONAL INFORMATION

The PNDI environmental review website is a **preliminary** screening tool. There are often delays in updating species status classifications. Because the proposed status represents the best available information regarding the conservation status of the species, state jurisdictional agency staff give the proposed statuses at least the same consideration as the current legal status. If surveys or further information reveal that a threatened and endangered and/or special concern species and resources exist in your project area, contact the appropriate jurisdictional agency/agencies immediately to identify and resolve any impacts.

For a list of species known to occur in the county where your project is located, please see the species lists by county found on the PA Natural Heritage Program (PNHP) home page ([www.naturalheritage.state.pa.us](http://www.naturalheritage.state.pa.us)). Also note that the PNDI Environmental Review Tool only contains information about species occurrences that have actually been reported to the PNHP.

### 6. AGENCY CONTACT INFORMATION

**PA Department of Conservation and Natural Resources**

Bureau of Forestry, Ecological Services Section  
 400 Market Street, PO Box 8552, Harrisburg, PA.  
 17105-8552  
 Fax:(717) 772-0271

**U.S. Fish and Wildlife Service**

Endangered Species Section  
 315 South Allen Street, Suite 322, State College, PA.  
 16801-4851  
 NO Faxes Please.

**PA Fish and Boat Commission**

Division of Environmental Services  
 450 Robinson Lane, Bellefonte, PA. 16823-7437  
 NO Faxes Please

**PA Game Commission**

Bureau of Wildlife Habitat Management  
 Division of Environmental Planning and Habitat Protection  
 2001 Elmerton Avenue, Harrisburg, PA. 17110-9797  
 Fax:(717) 787-6957

### 7. PROJECT CONTACT INFORMATION

Name: \_\_\_\_\_  
 Company/Business Name: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 City, State, Zip: \_\_\_\_\_  
 Phone:(\_\_\_\_) \_\_\_\_\_ Fax:(\_\_\_\_) \_\_\_\_\_  
 Email: \_\_\_\_\_

### 8. CERTIFICATION

I certify that ALL of the project information contained in this receipt (including project location, project size/configuration, project type, answers to questions) is true, accurate and complete. In addition, if the project type, location, size or configuration changes, or if the answers to any questions that were asked during this online review change, I agree to re-do the online environmental review.

\_\_\_\_\_ date  
 applicant/project proponent signature



U.S. Fish and Wildlife Service

# National Wetlands Inventory

Anderson  
Property, W.  
Brandywine Twp.

Jan 29, 2014

## Wetlands

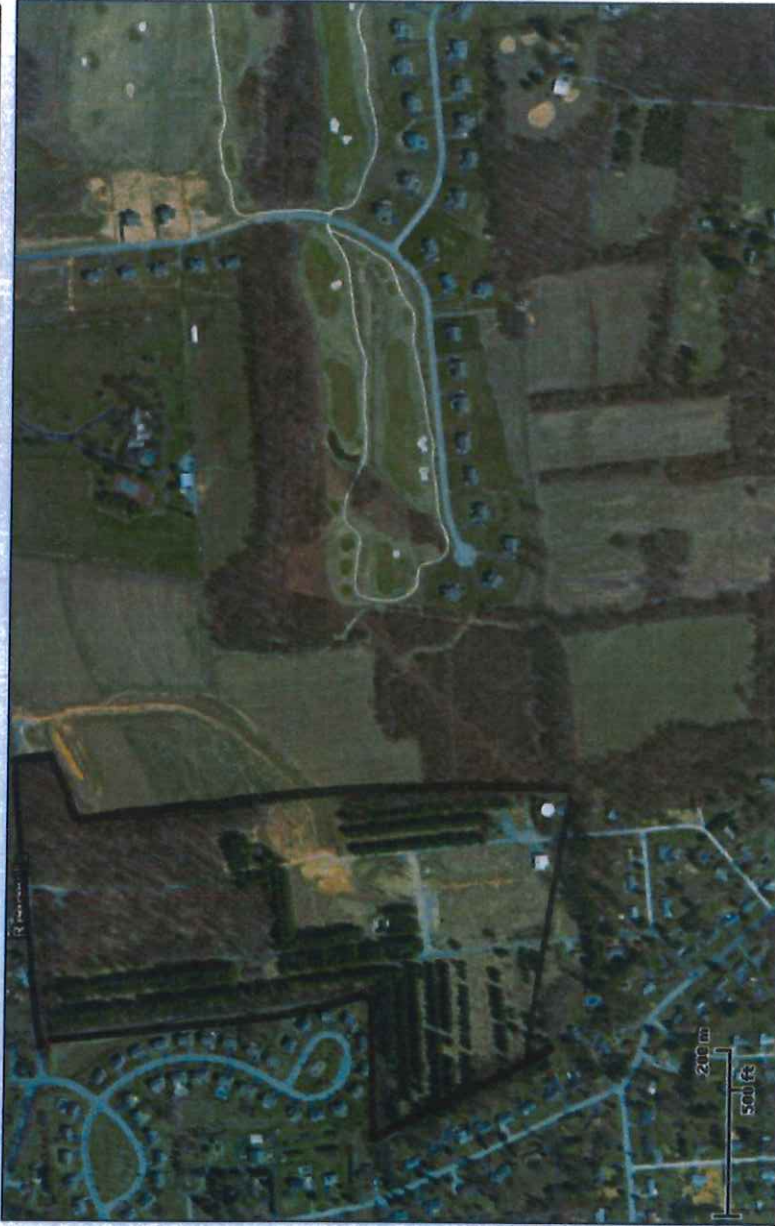
- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Deepwater
- Estuarine and Marine
- Freshwater Pond
- Lake
- Riverine
- Other

## Riparian

- Herbaceous
- Forested/Shrub

## Riparian Status

- Digital Data



This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

User Remarks:

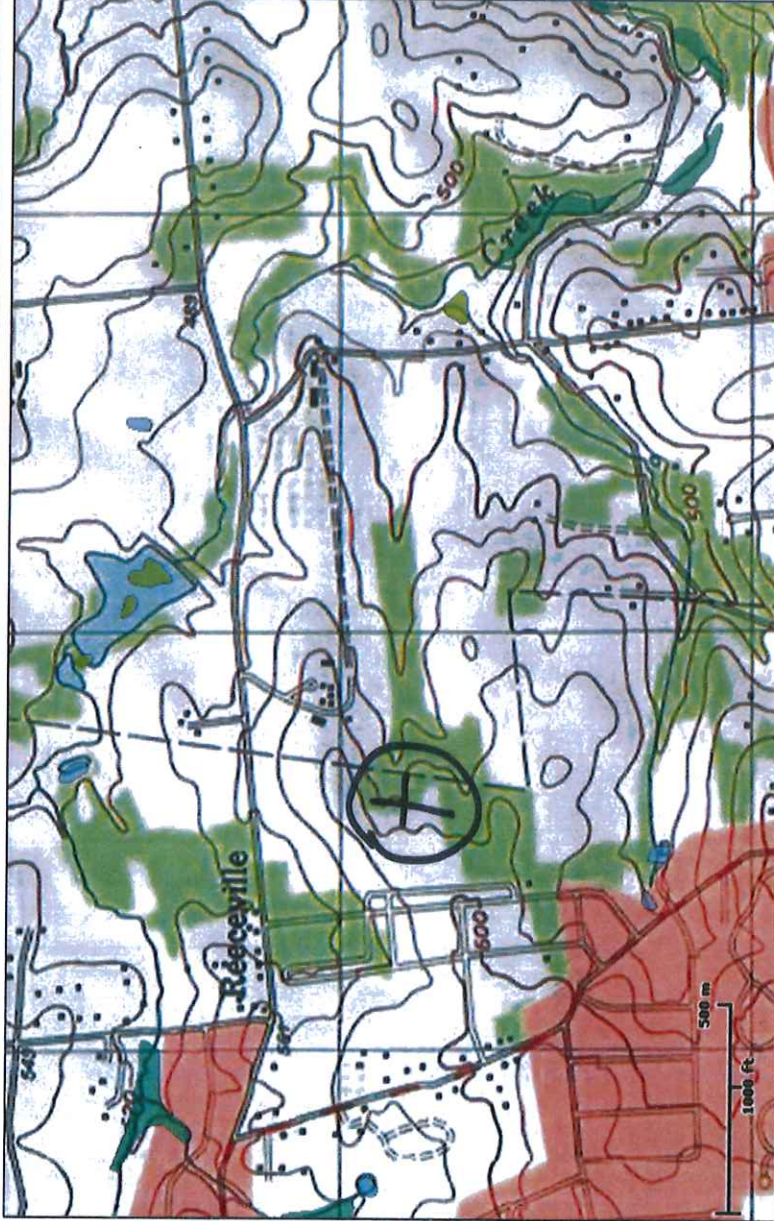


U.S. Fish and Wildlife Service

# National Wetlands Inventory

Anderson Property

Jan 29, 2014



This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

User Remarks:





Map



COUNTY OF CHESTER  
PENNSYLVANIA



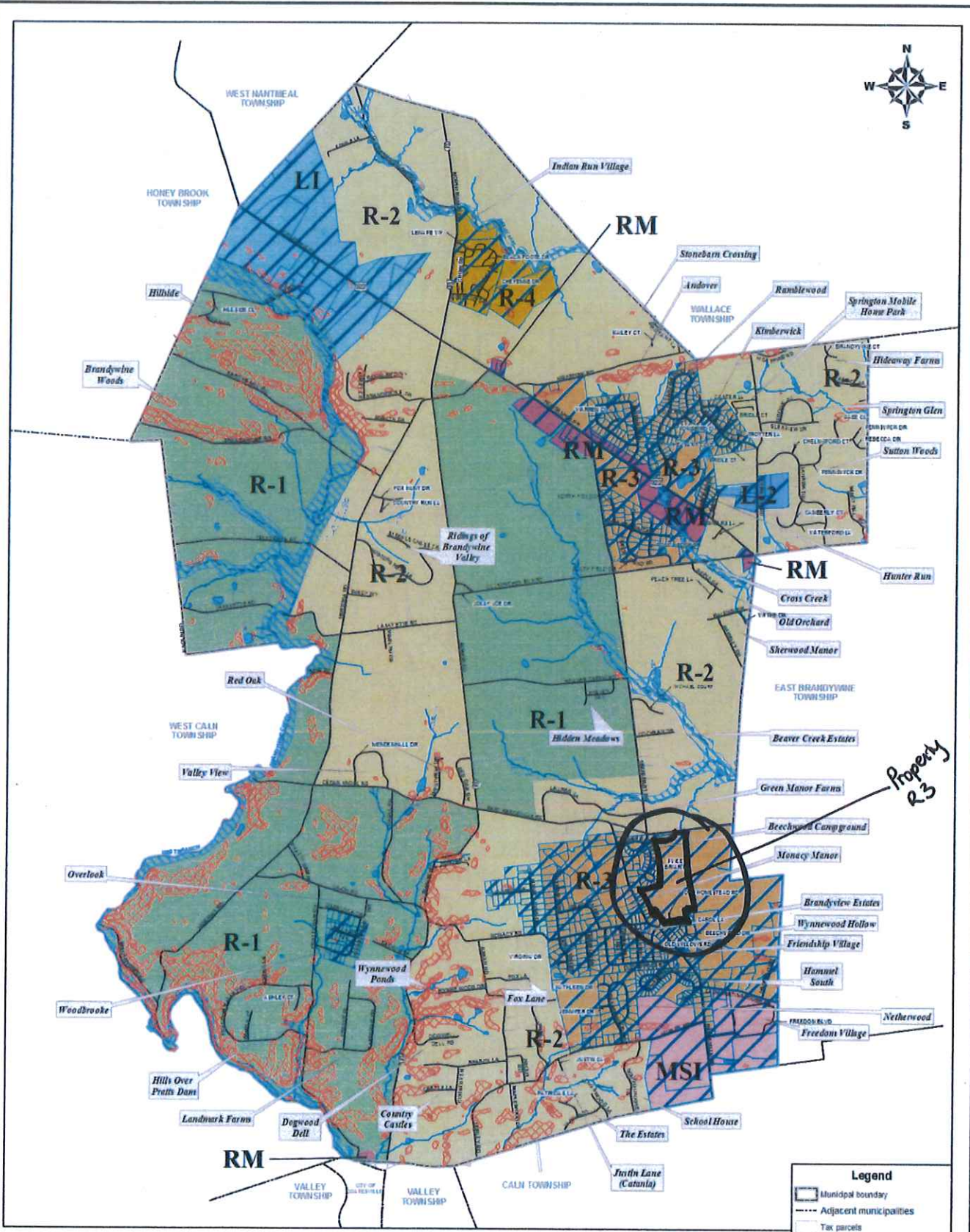
PARID	2907 01200000
UPI	29-7-120
Owner 1	ANDERSON FREDERICK B JR
Owner 2	ANDERSON DEBORAH K
Mailing Address 1	105 BEECHWOOD DR
Mailing Address 2	COATESVILLE PA
Mailing Address 3	
ZIP Code	19320
Deed Book	8517
Deed Page	898
Deed Recorded Date	9/14/2012
Legal Desc 1	NS OF BEECHWOOD
Legal Desc 2	DR
Acres	44.3 AC COMM2
LUC	DWGS & POOL
Lot Assessment	44.3000
Property Assessment	C-90
Total Assessment	\$35,250
Assessment Date	\$231,060
Property Address	\$266,310
Municipality	12/20/2013
	608 E BEECHVILLE
	RD
	WEST
	BRANDYWINE

Map Created:  
Friday, January 17, 2014

County of Chester



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*Property R-3*



**Legend**

- Municipal boundary
- Adjacent municipalities
- Tax parcels
- Roads
- Reservoirs, lakes, and ponds
- Streams
- Wetlands
- Steep Slope District Overlay
- Stoneham District Overlay

**Map 6-2**  
Zoning Overlay

DATA SOURCE: Base data from Chester County GIS data



# MEA Parcelmap

