ENVIRONMENTAL IMPACT STATEMENT

Prepared for

Walnut Creek Acquisitions, LP.
404 N. Sumneytown Pike, Suite 200
North Wales, PA 19454
(215)699-0800

December 28, 2020

Prepared By
Van Cleef Engineering Associates
501 North Main Street
Doylestown, PA 18901
215-345-1876
VCEA Job# 19-05-WRR

Kevin A. Kester, R.L.A.
PA No. LA-000883-E

Van Cleef
ENGINEERING ASSOCIATES

DATE: December 28, 2020
RE: VCEA No. 19-05-WRR

ENVIRONMENTAL IMPACT STATEMENT

Overview and Description of Project

Walnut Creek Acquisitions, LP. Is the equitable owner of approximately 24.45 acres of real estate located along County Line Road (S.R. 2038), known as Tax Parcel No. 50-004-067. Walnut Creek Acquisitions proposes to subdivide the property into a single family detached development consisting of 22 proposed units to be known as Laurel Crossing (The Proposed Project), as more particularly depicted in a Zoning Hearing Exhibit Plan, prepared by Van Cleef Engineering Associates (VCEA), dated June 12, 2020.

Each of the 22 units is a single-family detached dwelling. While the minimum lot size in the RA Agricultural Zoning District is 7,500 sf., the lot configuration of the Zoning Hearing Exhibit Plan reflects, at this time, lots of at least 8,580 sf. All units on TMP 50-004-067 take access to new streets being created within the property: Roads "A" and "B". These proposed streets take access to County Line Road (S.R. 2038).

In designing the layout for the proposed project, our goal was to preserve as much open space and natural resources as possible, while creating a viable project for Walnut Creek Acquisitions to construct. Since much of the eastern, northern, and western portions of the TMP. No. 50-004-067 contain land that is sensitive, Walnut Creek Acquisitions preferred to preserve as much area as possible as common open space, thus preserving a very large portion of the existing woodlands, the Type II stream, the waters of the United States, the steep slopes, and the transition areas as open space. This allowed for the 22 units to be situated on the remainder of the parcel while offering up additional open space around the perimeter of the site, providing large buffers against most of the adjoining parcels. This also allows a large open area outside the woodlands on the lower elevations of the eastern side of the property for a naturalized storm water management facility. The development is primarily concentrated in the area of the Existing Nursery and Landscaping Business.

The Zoning Hearing Exhibit Plan of single family detached homes is appropriate for the property, as this housing type already exists in subdivisions that are located on properties in the surrounding areas in the western half of Warrington Township on the north side of SR 152 and on the south side of County Line Road in subdivisions in Montgomery Township, Montgomery County.

The homes consist of 4 unit types: The Oakville is the largest, followed by the Rutherford, the Calistoga, and the Howell. The Oakville is approximately 3,626-6,070 s.f., the Rutherford is 3,553 – 5,540 s.f., the Calistoga has 3,193 – 4.907 s.f., and the Howell has 2,930 – 3,903 s.f. All lots in the proposed project have 20' front yard setbacks, 10' side yard setbacks and 20' rear yard setbacks.

Topography

The Township topography is rolling with moderate slopes that are generally less than 15%. A complete field survey of the property has not yet been performed. The topo is taken from an old survey in 2010. This reveals small areas of steep slopes in the 8%-15%, 15%-25%, and >25% categories that are all located in and around the waters of the United States in the Type II stream and within the 100' transition areas, all of which are wooded and will be preserved that way.

Geology

The rock formations that underlie the township create the topography and affect ground water resources and land use activities.

The western half of the township between Upper State Road and Elbow Lane is composed primarily of the Lockatong Formation. Lockatong is composed of an argillite, a hard gray stone that can be used to build roads. This stone is mined in the Township's quarries and holds less groundwater than the Stockton formation. The Lockatong Formation passes under much of Central Bucks County through Doylestown, Buckingham, and Wrightstown Townships.

The Stockton formation exists primarily on the eastern half of the township, southeast of the Lockatgong and east of Elbow Lane and Bradford Road. The Stockton Formation is soft sandstone interbedded with shale. The Stockton formation provides a very good source of groundwater.

The project site, TMP. No. 50-004-067 lies completely within the portion of Warrington Township that is underlain by the band of Lockatong Argillite. The proposed project will not have an adverse impact on the geologic features underlying the property.

See the attached Exhibit A regarding Hydrogeologic Resources.

Soils

Soil characteristics have always influenced development patterns throughout history. On TMP. No. 50-004-067, Doylestown silt loams 0-3% slopes, cover the far western portion of the site. Chalfont silt loam 0-3% slopes cover the central portion of the site. The Doylestown silt loams are deep but poorly drained soils with moderate permeability. The Chalfont silt loams are moderately deep, moderately well-drained with moderate permeability. None of these soils

are prime agricultural soils. The majority of the Doylestown silt loams are being preserved and mostly wooded.

The proposed project will not have any adverse impact on the wet areas located at the far east and northwest portions of the property, given that the sensitive areas are being preserved.

Woodlands

Woodland areas and natural habitats are identified so that preservation efforts are a priority during the planning and development process in order to protect these features. Wooded areas, especially in and around wetlands, forested slopes, floodplains and riparian buffers need to be protected.

Woodlands in the Township are located mostly along streams and other areas that have been left undisturbed in the township. The obvious benefits of wooded areas include water and air purification, climate control, erosion control, habitat for wildlife, and community aesthetics in general. The property consists of 24.45 Acres net site area with 12.14 total acres of woodlands; 4.45 acres being in a sensitive areas at 80% preservation required, and 7.69 acres being other woodlands that require just 50% preservation. The impacts to the woodlands, as a result of the proposed project, is within permitted limits. The environmentally sensitive areas of woodlands include the waters of the United States, Type II steam, and wetland transition areas. The required preservation of the woodlands is 7.41 acres. The subdivision preserves 11.28 acres of woodlands, allowing a density bonus of 0.04 DU/AC density bonus for each 3 acres as above the minimum required woodland preservation. This equates to an additional unit as a density bonus.

Wetlands and Waters

The property was studied by Dr. John Szczepanski of NOVA Consultants, LTD. in Newtown, PA. He walked the entire property on April 24th of 2017, and delineated waters of the United States (a Type II stream). No wetlands were delineated. The area of the waters of the United States is approximately 0.3 acres (13,217 sf.). A 100' transition area is depicted around the waters of the United Stated. Both are preserved 100%.

NOVA Consultants, LTD. follows the three parameter approach to designating wetlands, as suggestion in the Warrington Township Comprehensive Plan Update, dated January 2018.

Those three indicators are as follows:

1. Soil Type
2. Wetland Vegetation
3. Hydrology

Saturated lands absorb stormwater, improve water quality by filtering pollutants, and assist with ground water recharge. Federal, State and Municipal regulations prohibit the filling of wetlands and restrict the disturbance of lakes, ponds, wetlands and water courses. The designated waters on this property are 100% preserved, therefore, the proposed project has no impact on the waters located on the property.

Watersheds

The land surface of Warrington Township is divided into two primary watersheds. The Neshaminy Creek drains the northern half of the Township and the Little Neshaminy Creek drains the south side of Warrington. TMP 50-004-067 lies within the Neshaminy Creek Watershed.

The proposed project will not have an adverse impact on this watershed.

Floodplain

The natural vegetation associated with floodplains provides controls for soil erosion and sedimentation, and protects the quality of our water.

Based upon a review of the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM), no floodplain exists on this site. The Type II stream (less than 100 acre watershed) that runs along the eastern side of the property has no published floodplain nor alluvial soils (based on the 2004 Soil Survey) associated with it.

Therefore, the proposed project will not have an adverse impact on floodplain.

Wildlife Habitats

The wildlife associated with this tract is that typically associated with successional woodland: white tailed deer, rabbis, squirrels, raccoons, groundhogs, fox, skunks, and chipmunks. A myriad of birds also populate these woods, as well as snakes, salamanders, earthworms, and many insects. By creating open space, Walnut Creek Acquisitions, LP., are able to preserve all of the important habitat areas: the Tributary of the Type II stream, the waters of the US, and the transition areas associated with the waters of the US. These are all critical habitat areas that will be preserved in their entirety. Also 90% of the woodland and 97% of the woodland associated with environmentally sensitive areas are being preserved, as well as 100% of the Type II stream and all the mapped steep slopes on the site.

Existing Features Inventory

Most of the Existing Features have been discussed above. The existing garage and office structure will be removed, as well as the existing greenhouses, sheds, parking lots and display areas for nursery stock. Those areas not becoming part of the building lots will be seeded and/or planted and be part of the open space for the subdivision.

Nearly all of the environmentally sensitive areas of the site and vast majority of the woodlands will be preserved. The PNDI show no known impacts on the site for endangered plants or animals. (See Exhibit #8).

The existing Stormwater Management Area on-site will be expanded for the proposed development and the existing storm water facility in the out-parcel will remain intact.

Visual Resources Inventory

The views into the site TMP No. 50-004-067 from County Line Road are successional woodland and a nursery/landscaping business. Trees in the environmentally sensitive areas to the north, east, and west are being preserved. There are no great visual resources being disturbed.

Impact Inventory

As with any development, the disturbance of a certain portion of the resources located thereon is inevitable. But the ordinance is crafted in such a way as to allow a certain percentage of these resources to be eliminated as long as the required percentage of these resources to be eliminated as long as the required percentage of resources is preserved. These resources are namely the overall woodlands. In addition, the totally unusable land is within the Type II stream and the waters of the U.S. and is slated for 100% preservation. All of the steep slopes in the woods are also to be preserved.

Alternative Analysis

The only alternative design prepared yielded one less lot but was basically the same layout. For protection of the woodlands and the environmentally sensitive areas of the site, this is the ideal layout for the tract of land. A very early alternative was prepared using a loop road, but that layout disturbed more environmentally sensitive areas and woodlands on the site. The final layout is truly the best layout for this site to disturb the least amount of natural resources.

Adverse Impacts

As mentioned earlier in the Impact Inventory, disturbance of natural resources is inevitable when it comes to land development. The only way to eliminate resource disturbance completely is to eliminate development. This is impractical and would disrupt desirable community and regional growth. Approval of the development will increase the tax base for the Warrington Township Community.

Water quality and quantity should not be an issue since the northern, western, and eastern portions of the property woodlands are being 100% preserved. These are where the waters of the US. and the Type II stream occur. Even the transition areas are nearly 100% preserved in this scenario, except for the portion where the required emergency access cuts across the transition area.

The natural steep slopes are slated for required preservation. The detention basin required will detain stormwater runoff and release it gradually from the site into an existing drainage way that runs offsite (the Type II stream and waters of the US.). This detention basin along with other SWM control features will be designed to meet the BMP requirements for preservation of water quality. The proposed BMP detention basin will also promote infiltration and groundwater recharge.

Mitigation Measures

As mentioned in the Adverse Impacts section above, the stormwater management system will be designed in accordance with all State, County and Local requirements. In addition, Tree Protection Fencing and County Soil Erosion and Sediment Control Standards will also be employed.

In addition to those required measures, every effort has been made to preserve the majority of existing natural resources on the site, while still creating a viable project for the developer and promoting groundwater recharge within the Tract boundaries.

Irreversible Impacts

While it is true that some resources will be disturbed in order to construct this subdivision, the design attempts to preserve as much of the woodlands and natural steep slopes as possible and is within allowable limits, as delineated in the Zoning Ordinance for Warrington Township. A full 100% of the Type II stream and waters of the U.S. located on the site are to be preserved and nearly 100% of the Transition areas are also preserved,. Also, at least 97% of the woodlands associated with these environmentally sensitive areas are also slated for preservation, and 90% of other woodlands are preserved as well. While some wildlife habitat will be disturbed on-site within existing woodlands, it is within allowable limits, and the sensitive areas connected to larger systems are being preserved. Only manmade features associated with the nursery business, which are not natural resources, are to be disturbed for this development, along with some minor disturbance of woodlands.

There are other neighborhoods and subdivisions like this one in the vicinity, that have similar development and density along County Line Road and within Warrington Township.

WETLAND REPORT
FOR
MR.VICTOR BUCCAFURI

WETLAND DETERMINATION-DELINEATION WITHIN;TMP.#50-4-67,WARRINGTON TOWNSHIP, BUCKS CO.,PA.

PREPARED BY:
NOVA CONSULTANTS LTD.
251 BURGUNDY LANE
NEWTOWN, PA 18940

JOHN F. SZCZEPANSKI, PHD.
PRINCIPAL INVESTIGATOR/PRESIDENT

JUNE,2003

TEST PROCEDURE

NOVA CONSULTANTS LTD.

TEST PROCEDURES TO DETERMINE WETLAND BOUNDARIES

Tests are made by making soil borings and determining plant identities in the vicinity of each hole.

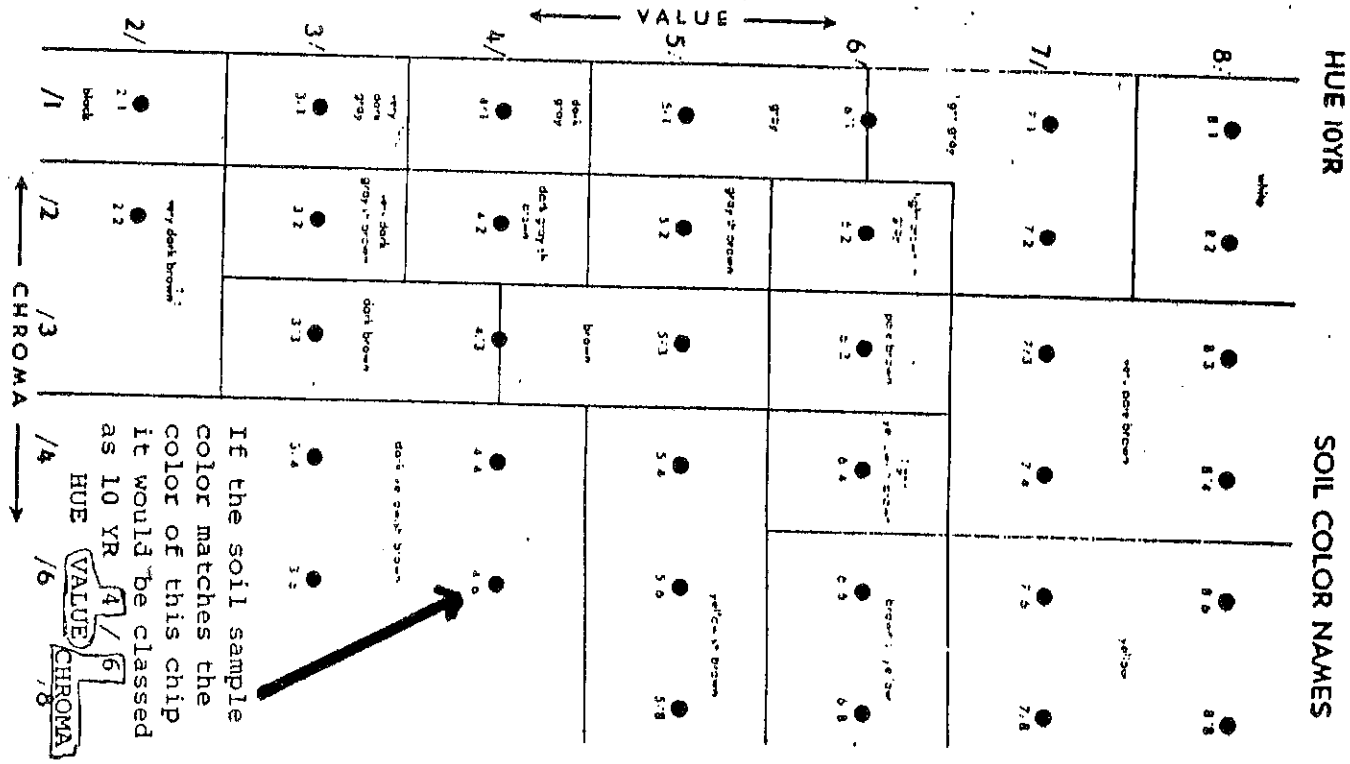
Soil borings are made at many locations where the wetlands boundaries appear to be located. The borings are from 12 inches to 3 feet. Three tests are applied at each soil boring site:
(1) A soil color test including water table depth usually at a depth of 18-24 inches which is the depth range compliance utilized by the U.S. Army Corp of Engineers.
(2) The hydric or non-hydric classification of the soil is checked in the field against type as mapped in the USDA Soil Conservation Service's County Survey.
(3) A hydric classification of all plants within 10 ft. of each soil boring site.

(1)

SOIL

The Munsell Color Charts comprise a series of 9 cards with a total of 199 chips of intergrading colors. The soil color notation is developed as a three parameter system of HUE, VALUE and CHROMA.

The HUE notation is taken from the one of the nine cards used. The 20-30 color chips on each card are numbered in a vertical/horizontal grid. The vertically numbered rows of chips constitute the VALUE while the horizontally numbered rows of chips become the CHROMA. See sample below.



(2)

HYDRIC SOIL CLASSIFICATION

Soils in most counties are mapped by the U.S.D.A. Soil Conservation Service and displayed on aerial photo maps produced for each county. Wetlands are classified and displayed as overlays of U.S.G.S. quadrangles; these are produced for the National Wetlands Inventory. Each soil type has been assigned a hydric status by the National Wetlands Inventory staff. The hydric soil class thus forms the third parameter used for wetland delineation. Hydric/non-hydric soil data are also shown in Table I.

(3)

HYDRIC PLANT TEST

A hydric plant classification was produced with the U.S. Fish and Wildlife Service's Wetlands Inventory. The hydric or non-hydric status of each plant is one of the significant factors in determining wetland boundaries. These data are shown in Table II. The symbols used for hydric plant status are listed below.

OBL	Obligate wetland plant-always wetland
FAC-W	Facultative wetland plant-more commonly wetland
FAC	Facultative-wet or dry
FAC-U	Facultative wetland plant-more commonly upland
UPL	Upland plant-never wetland
N/C	Not classified-listed but not yet classified; may or may not be hydric

WETLAND DETERMINATION

ALL FIELDWORK FOLLOWED THE PRESCRIBED THREE PARAMETER METHODOLOGY AS DESCRIBED IN THE U.S.ARMY CORPS OF ENGINEERS 1987 FEDERAL WETLANDS DELINEATION MANUAL,WHEREBY ALL THREE OF THE REQUIRED FIELD FACTORS MUST BE OBSERVED. THESE INCLUDE HYDROPHYTIC VEGETATION DOMINANCE,CONSISTENT HYDROLOGIC FUNCTION AND HYDRIC SOIL CONDITIONS.

SPECIFICALLY,IN ORDER FOR ANY TRUE PALUSTRINE HABITAT TO BE ESTABLISHED ACCURATELY IT MUST CONTAIN A CONTINUAL BIOTIC AND ABIOTIC REGIME WHICH DISPLAYS ALL THREE PARAMETERS. IT MUST CONTAIN A DOMINANCE FACTOR OF 51%+ FOR HYDROPHYTIC VEGETATION SPECIES. WHEN THE VEGETATION DOMINANTS WITHIN A SPECIFIC SITE OR STUDY AREA ARE GENERALLY REPRESENTATIVE OF UBIQUITOUS OR ECOLOGICALLY TOLERANT HYDROPHYTIC SPECIES MIXED OR PROGRESSING TOWARD UPLAND SPECIES DOMINANCE AND DISPLAYS NO HYDROLOGIC FUNCTION THAN THE FAC NEUTRAL TEST IS APPLIED TO DETERMINE IF A CONTINUAL HYDROLOGY FUNCTION IS PRESENT OR HAS BEEN INTERUPTED AS BASED UPON THE VEGETATION DOMINANCE OBSERVED. THIS TEST ELIMINATES ANY FAC (FACULTATIVE) SPECIES DUE TO THEIR TOLERANT GROWTH HABIT AND THE NEXT DOMINANT SPECIES TYPE OF EITHER WETTER (FACW-FACULTATIVE WET OR OBL. OBLIGATE) OR DRIER (FACU-FACULTATIVE UP OR UPL.UPLAND) ARE THAN USED TO DETERMINE THE CURRENT OR PROGRESSIVE VEGETATION DOMINANCE FACTOR.
EVIDENCE OF A HYDRIC CLASS SOIL MATRIX,HUE CHROMA/VALUE (COLOR) READING MUST BE ACHIEVED. THIS INDICATION MUST DISPLAY LOW CHROMA COLORS RESULTING FROM SOIL BORINGS OR TEST PITS ACHIEVING 18"-24"±.
FURTHER THE RESULTING PROFILE MUST YIELD MORE THAN JUST COLOR BUT MUST ALSO INDICATE AN ACTIVE SUBSOIL HYDROLOGIC AND ANAEROBIC FUNCTION.
LASTLY,A CONSISTENT SURFACE AND OR SUBSURFACE HYDROLOGIC FUNCTION MUST BE OBSERVED. THE SURFACE HYDROLOGY IS ESPECIALLY IMPORTANT WITH REGARD TO RIVERINE OR "OPEN-WATERS" SITUATIONS THAT ARE TRUE DRAINAGE PATTERNS AND NOT ENGINEERED SWALES OR DITCHES OR MINOR EROSIONAL FEATURES.

VARIOUS SOIL BORING DATA POINTS WERE ESTABLISHED THROUGHOUT THE PROPERTY,ESPECIALLY WITHIN THE AREAS MAPPED BY THE U.S.D.A.AS CONTAINING MAPPED HYDRIC CLASS SOILS AND ADJACENT TO THE DRAINAGE PATTERNS,WHICH WERE DELINEATED.

THE DIRECT RRSULT OF THE FIELD DETERMINATION HAS ESTABLISHED AN ENHANCED,BIFURCATED DRAINAGE PATTERN ALONG THE EASTERLY PORTION OF THE SITE AND PORTIONS OF A DRAINAGE PATTERN WHICH TRAVERSES ALONG THE NORTHERLY PROPERTY BOUNDARY;WITHIN THE NORTHWEST PART OF THE SITE.BOTH REPRESENT HEADWARD PATTERNS,WHICH DISPLAY PREVIOUS ENGINEERING, ENHANCEMENT AND EROSION.
THESE (2) DRAINAGE PATTERNS REPRESENT "WATERS OF THE U.S."SITUATIONS,WITH "NO" ADJACENT PALUSTRINE HABITAT.
FURTHER,"NO" PALUSTRINE ECOLOGICAL SUBSYSTEM EXISTS WITHIN THE PROPERTY.

ALTHOUGH UBIQUITOUS HYDROPHYTES WERE OBSERVED THROUGHOUT THE SITE,"NO" SPECIFIC AREA EXHIBITED A 51%+ DOMINANCE FACTOR.THE MEANDOMINANCE FACTOR FOR THIS SPECIES TYPE THROUGHOUT THE SITE IS ONLY BETWEEN 31%-35%±.

ALTHOUGH MAPPED AS CONTAINING DOYLESTOWN HYDRIC SOILS,"NO" SOIL BORING LOCATION YIELDED A HYDRIC,LOW CHROMA SUBSOIL MATRIC READING.
ALL SUBSOIL DATA INDICATED CLAY SUBSOILS WITHIN THE 'B' HORIZON,"NO" SUBSURFACE HYDROLOGY AND CHARACTERISTICS REPRESENTATIVE OF ABBOTTSTOWN AND CHALFONT SOILS,WHICH ARE UPLAND SOILS,WHICH MAINTAIN AN 'AQUIC' REGIME AND WILL SUPPORT UBIQUITOUS HYDROPHYTE SPECIES.

WITH THE EXCEPTION OF THE SURFACE HYDROLOGY WITHIN THE BEDS OF THE (2) DELINEATED DRAINAGE PATTERNS AND EVIDENCE OF SEASONAL-INTERMITTANT SURFACE RUNOFF AND SURFACE SCOURING;"NO" ADDITONAL SURFACE HYDROLOGY AND "NO" SUBSURFACE HYDROLOGY WAS NOTED THROUGHOUT THE PROPERTY.

THE ENTIRE PROPERTY DISPLAYS EVIDENCE OF PREVIOUS AGRICULTURAL USE.IS HEAVILY DISTURBED AND IS AN 'OLD FIELD'PROGRESSIVE SUCCESSIONAL SITUATION.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: TMP #50-4-67 Warrington Twp.	Date: 5-8-03
Applicant/Owner: Vic	County: Bucks
Investigator: JFS/LM	State:
Do Normal Circumstances exist on the site? Yes (No)	Community ID: Scrub Fallow field
Is the site significantly disturbed (Atypical Situation)? (Yes) No	Transect ID: B-1
Is the area a potential Problem Area? Yes (No)	Plot ID:
(If needed, explain on reverse.)	

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Quercus palustris	Sapl	FACW	9. Impatiens capensis	H	FACW
2. Viburnum dentatum	S	FAC	10. Typa praticensis	H	FACW
3. Rosa multiflora	S	FACU	11. Daucus carota	H	NL
4. Cornus foemina	S	FAC	12. Parthenocissus quinquefolia	V	FACU
5. Cirsium arvense	H	FACU-	13. Geum canadense	H	FACU
6. Barbarea vulgaris	H	FACU-	14. Equisetum arvense	H	FAC
7. Onoclea sensibilis	H	FACW	15. Rubus allegheniensis	S	FACU-
8. Solidago canadensis	H	FACU	16. Leucera japonica	V	FAC-
			17 Capsella bursa pastoris	H	FACU

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 35±

Remarks: Upland scrub fallow field w/ evidence of Reoxy surface runoff.

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water:	NA	(in.)
Depth to Free Water in Pit:	NA	(in.)
Depth to Saturated Soil:	NA	(in.)

Wetland Hydrology Indicators:
Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: No observed evidence following presumption

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: TMP#50-4-67 Warrington Twp
Applicant/Owner: Via
Investigator: JFSILLM

Date: 5-8-03
County: Bucks
State:

Do Normal Circumstances exist on the site? Yes (No)
Is the site significantly disturbed (Atypical Situation)? (Yes) No
Is the area a potential Problem Area? Yes (No)
(If needed, explain on reverse.)

Community ID: Scrub forested
Transect ID: B-2
Plot ID:

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. Acer rubrum	T	FAC
2. Quercus palustris	T	FACW
3. Prunus virginiana	T	FACU
4. Rosa multiflora	S	FACU
5. Fraxinus americana seedl		FACU
6. Lonicera japonica	V	FAC-
7. Parthenocissus quinquefolia	V	FACU
8. Impatiens capensis	H	FACW
9. Solidago canadensis	H	FACU
10. Allium vineale	H	FACU-
11. Celastrus orbiculata	V	NL
12. Osmunda sensibilis	H	FACW
13. Geum canadense	H	FACU
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 3/4

Remarks: Upland scrub forested conditions.

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
_X_ No Recorded Data Available

Field Observations:

Depth of Surface Water: NA (in.)
Depth to Free Water in Pit: NA (in.)
Depth to Saturated Soil: NA (in.)

Wetland Hydrology Indicators:
Primary Indicators:
___ Inundated
___ Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
___ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
___ Oxidized Root Channels in Upper 12 Inches
___ Water-Stained Leaves
___ Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks: No observed evidence.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: TMP #50-4-67 Warrington Twp.
Applicant/Owner: Na
Investigator: JFS/LM

Date: 5-8-03
County: Bucks
State: PA

Do Normal Circumstances exist on the site? Yes (No)
Is the site significantly disturbed (Atypical Situation)? (Yes) No
Is the area a potential Problem Area? Yes (No)
(If needed, explain on reverse.)

Community ID: fallow field
Transect ID: B-3
Plot ID:

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Prunus virginiana	seedl	FACU	9. Trifolium pratense	H	FACU-
2. Rosa multiflora	S	FACU	10. Euthamia graminifolia	H	FAC
3. Solidago canadensis	H	FACU	11. Scirpus cyperinus	H	FACW
4. Juncus effusus	H	FACW	12. Anthoxanthum odoratum	H	FACU
5. Fragaria virginiana	V	FACU	13. Cirsium arvense	H	FACU-
6. Apocynum cannabinum	H	FACU-	14. Barbarea vulgaris	H	FACU-
7. Rumex crispus	H	FACU-	15. Onoclea sensibilis	H	FACW
8. Equisetum arvense	H	FAC	16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 27±

Remarks: Upland fallow-field conditions.

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: NA (in.)

Depth to Free Water in Pit: NA (in.)

Depth to Saturated Soil: ND (in.)

Wetland Hydrology Indicators:
Primary Indicators:
___ Inundated
___ Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
___ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
___ Oxidized Root Channels in Upper 12 Inches
___ Water-Stained Leaves
___ Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks: No observed subsoil evidence. seasonal-intermittant surface runoff.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: TMP# 50-4-67 Warrington Twp Applicant/Owner: Vic Investigator: JSUM	Date: 5-8-03 County: Bucks State:
Do Normal Circumstances exist on the site? Yes (No) Is the site significantly disturbed (Atypical Situation)? (Yes) No Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID: Scrub forested old field Transect ID: 13-4 Plot ID:

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Acer rubrum	T	FAC	9. Poa pratensis	H	FACU
2. Rosa multiflora	S	FACU	10. Impatiens capensis	H	FACW
3. Viburnum dentatum	S	FAC	11. Prunus virginiana	sapl	FACU
4. Lonicera japonica	V	FAC-	12. Solidago canadensis	H	FACU
5. Parthenocissus quinquefolia	V	FACU	13. Lonicera japonica	V	FAC-
6. Toxicodendron radicans	V	FAC	14.		
7. Onoclea sensibilis	H	FACW	15.		
8. Allium vineale	H	FACU	16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 38±

Remarks: Upland scrub-forested old field.

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water: NA (in.)

Depth to Free Water in Pit: NA (in.)

Depth to Saturated Soil: NA (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks:

seasonal-intermittent surface scouring

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: TMP#50-4-67 Warrington Twp. Date: 5-8-03
Applicant/Owner: Vic County: Bucks
Investigator: JT/LM State: PA.

Do Normal Circumstances exist on the site? Yes (No)
Is the site significantly disturbed (Atypical Situation)? (Yes) No
Is the area a potential Problem Area? Yes (No)
(If needed, explain on reverse.)

Community ID: Scrub Old Field
Transect ID: 13-5
Plot ID:

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. Acer rubrum	T	FAC
2. Malus sylvestris	T	NL
3. Juniperus virginiana	T	FACU
4. Prunus virginiana	T	FACU
5. Rosa multiflora	S	FACU
6. Cornus racemosa	S	FAC
7. Senecio aureus	H	FACW
8. Solidago canadensis	H	FACU
9. Toxicodendron radicans	V	FAC
10. Poa pratensis	H	FACU
11. Ranunculus ficaria	H	NL
12. Quercus palustris	seedl	FACW
13. Juglans nigra	seedl	FACU
14. Agrimonia parviflora	H	FAC
15. Geum canadense	H	FACU
16. Allium vineale	H	FACU-
17 Ambrosia artemisiifolia	H	FACU

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 38 ±

Remarks: Upland scrub-herbaceous fallow field.

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: NA (in.)
Depth to Free Water in Pit: NA (in.)
Depth to Saturated Soil: NA (in.)

Wetland Hydrology Indicators:
Primary Indicators:
___ Inundated
___ Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
___ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
___ Oxidized Root Channels in Upper 12 Inches
___ Water-Stained Leaves
___ Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks: Seasonal-intermittant surface
No observed subsurface hydrology

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: TMP# 50-4-67 Warrington Twp. Date: 5-8-03
Applicant/Owner: NA County: Bucks
Investigator: JFS/LM State: PA

Do Normal Circumstances exist on the site? Yes (No)
Is the site significantly disturbed (Atypical Situation)? (Yes) No
Is the area a potential Problem Area? Yes (No)
(If needed, explain on reverse.)

Community ID: Fallow Field
Transect ID: B-6
Plot ID:

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. Rosa multiflora	S	FACU
2. Prunus virginiana	sapl	FACU
3. Juniperus virginiana	sapl	FACU-
4. Senecio aureus	H	FACW
5. Fagopyrum virginiana	V	FACU
6. Solidago canadensis	H	FACU
7. Juncus tenuis	H	FAC-
8. Juncus effusus	H	FACW
9. Penstemon digitalis	H	FAC-
10. Poa pratensis	H	FACU
11. Festuca pratensis	H	FACU
12. Anthoxanthum odoratum	H	FACU
13. Lolium perenne	H	FACU
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 15±

Remarks: Upland fallow field situation.

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: NA (in.)
Depth to Free Water in Pit: NA (in.)
Depth to Saturated Soil: NA (in.)

Wetland Hydrology Indicators:
Primary Indicators:
___ Inundated
___ Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
___ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
___ Oxidized Root Channels in Upper 12 Inches
___ Water-Stained Leaves
___ Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks: no observed subsoil evidence.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: TMP# 50-4-67 Warrington Twp. Date: 5-8-03
Applicant/Owner: Kirk County: Bucks
Investigator: JFSlem State: PA

Do Normal Circumstances exist on the site? Yes (No)
Is the site significantly disturbed (Atypical Situation)? (Yes) No
Is the area a potential Problem Area? Yes (No)
(If needed, explain on reverse.)

Community ID: Fallow Field
Transect ID: B-2
Plot ID:

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. Rosa multiflora	S	FACU
2. Prunus virginiana	Sapl	FACU
3. Cornus foemina	S	FAC
4. Fraxinus americana	Sapl	FACU
5. Fragaria virginiana	V	FACU
6. Senecio aureus	H	FACW
7. Solidago canadensis	H	FACU
8. Juncus effusus	H	FACW
9. Juncus tenuis	H	FAC-
10. Poa pratensis	H	FACU
11. Panicum digitalis	H	FAC-
12. Anthoxanthum odoratum	H	FACU
13. Agrimonia parviflora	H	FAC
14. Trifolium repens	H	FACU
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 29%

Remarks: Upland fallow field.

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: NA (in.)
Depth to Free Water in Pit: NA (in.)
Depth to Saturated Soil: NA (in.)

Wetland Hydrology Indicators:
Primary Indicators:
___ Inundated
___ Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
___ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
___ Oxidized Root Channels in Upper 12 Inches
___ Water-Stained Leaves
___ Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks: No observed evidence.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: TMP#50-4-67 Warrington Twp Applicant/Owner: Via Investigator: CESLID	Date: 5-31-03 County: Bucks State: PA
Do Normal Circumstances exist on the site? Yes (No) Is the site significantly disturbed (Atypical Situation)? (Yes) No Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID: scrub forested old field Transect ID: B-S Plot ID:

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Acer saccharinum	T	FACW	9. Parthenocissus quinquefolia	V	FACU
2. Fraxinus americana	T	FACU	10. Polygonum virginianum	H	FAC
3. Rosa multiflora	S	FACU	11. Solidago canadensis	H	FACU
4. Rubus allegheniensis	S	FACU-	12. Impatiens capensis	H	FACW
5. Ligustrum vulgare	S	NL	13. Fragaria virginiana	V	FACU
6. Cornus foemina	S	FAC	14. Agrimonia parviflora	H	FAC
7. Toxicodendron radicans	V	FAC	15. Poa pratensis	H	FACU
8. Lonicera japonica	V	FAC-	16. Allium vineale	H	FACU-
			17 Geum canadense	H	FACU

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 35±

Remarks: Upland scrub forested old field

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water:	NA	(in.)
Depth to Free Water in Pit:	NA	(in.)
Depth to Saturated Soil:	NA	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

Remarks: No observed subsoil evidance. seasonal-intermittant surface scouring.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: TMP#50-4-67 Warrington Twp. Applicant/Owner: VIC Investigator: JFSLID	Date: 5-31-03 County: Bucks State: PA
Do Normal Circumstances exist on the site? Yes (No) Is the site significantly disturbed (Atypical Situation)? (Yes) No Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID: Scrub forested old field Transect ID: B-9 Plot ID:

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Fraxinus americana	T	FACU	9. Lonicera japonica	V	FAC-
2. Acer rubrum	T	FAC	10. Geum canadense	H	FACU
3. Rosa multiflora	S	FACU	11. Fragaria virginiana	V	FACU
4. Cornus stolonifera	S	FACW	12. Toxicodendron radicans	V	FAC
5. Malus sylvestris	T	NL	13. Allium vineale	H	FACU-
6. Quercus rubra	sapl	FACU-	14. Galium mollugo	H	FACU
7. Onoclea sensibilis	H	FACW	15. Solidago canadensis	H	FACU
8. Impatiens capensis	H	FACW	16. Poa pratensis	H	FACU
			17. Agrimonia parviflora	H	FAC

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 35±

Remarks: Upland scrub forested old field.

HYDROLOGY

___ Recorded Data (Describe in Remarks):
- ___ Stream, Lake, or Tide Gauge
- ___ Aerial Photographs
- ___ Other

x No Recorded Data Available

Field Observations:

Depth of Surface Water:	NA	(in.)
Depth to Free Water in Pit:	NA	(in.)
Depth to Saturated Soil:	NA	(in.)

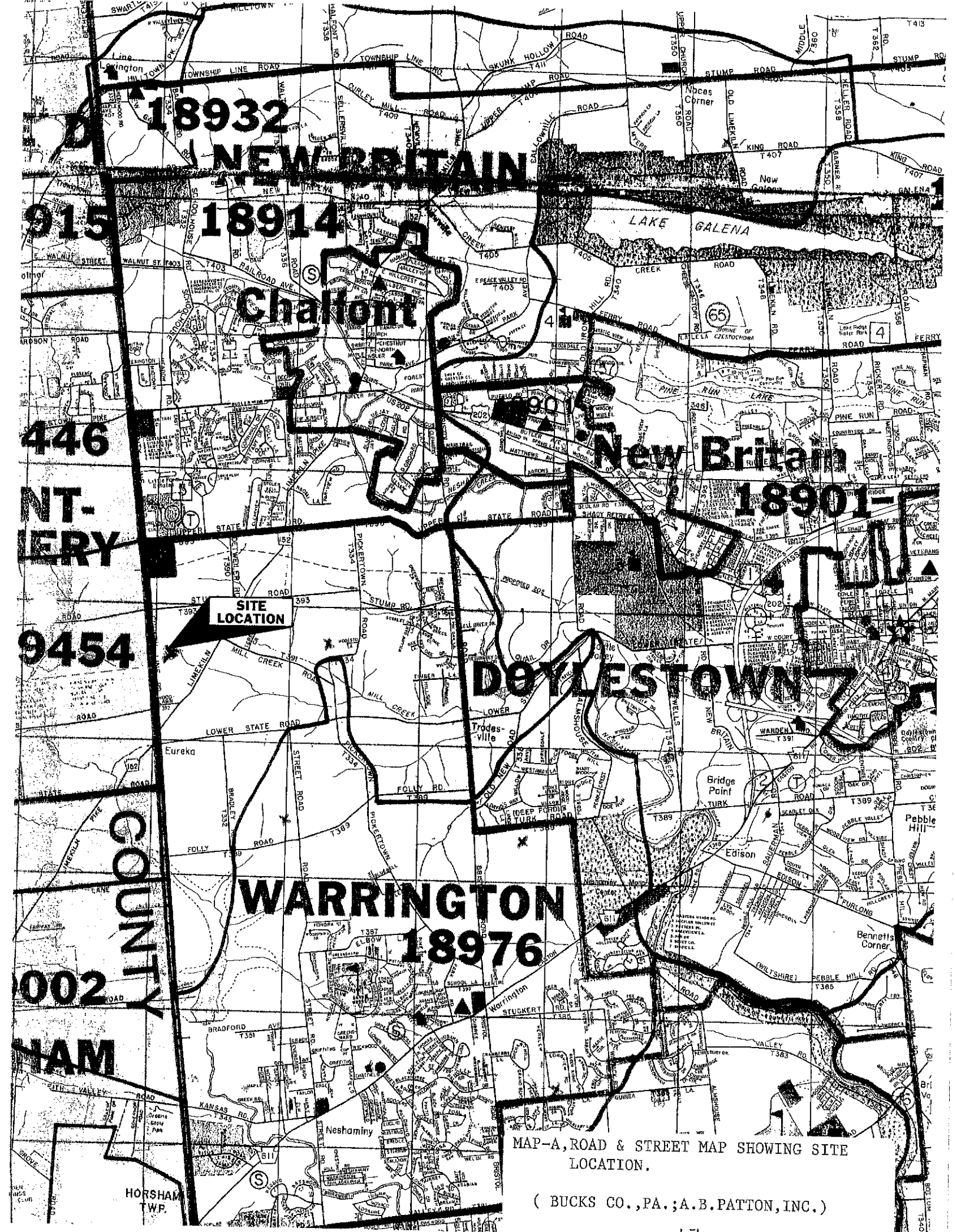
Wetland Hydrology Indicators:

Primary Indicators:
- ___ Inundated
- ___ Saturated in Upper 12 Inches
- ___ Water Marks
- ___ Drift Lines
- ___ Sediment Deposits
- ___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- ___ Oxidized Root Channels in Upper 12 Inches
- ___ Water-Stained Leaves
- ___ Local Soil Survey Data
- ___ FAC-Neutral Test
- ___ Other (Explain in Remarks)

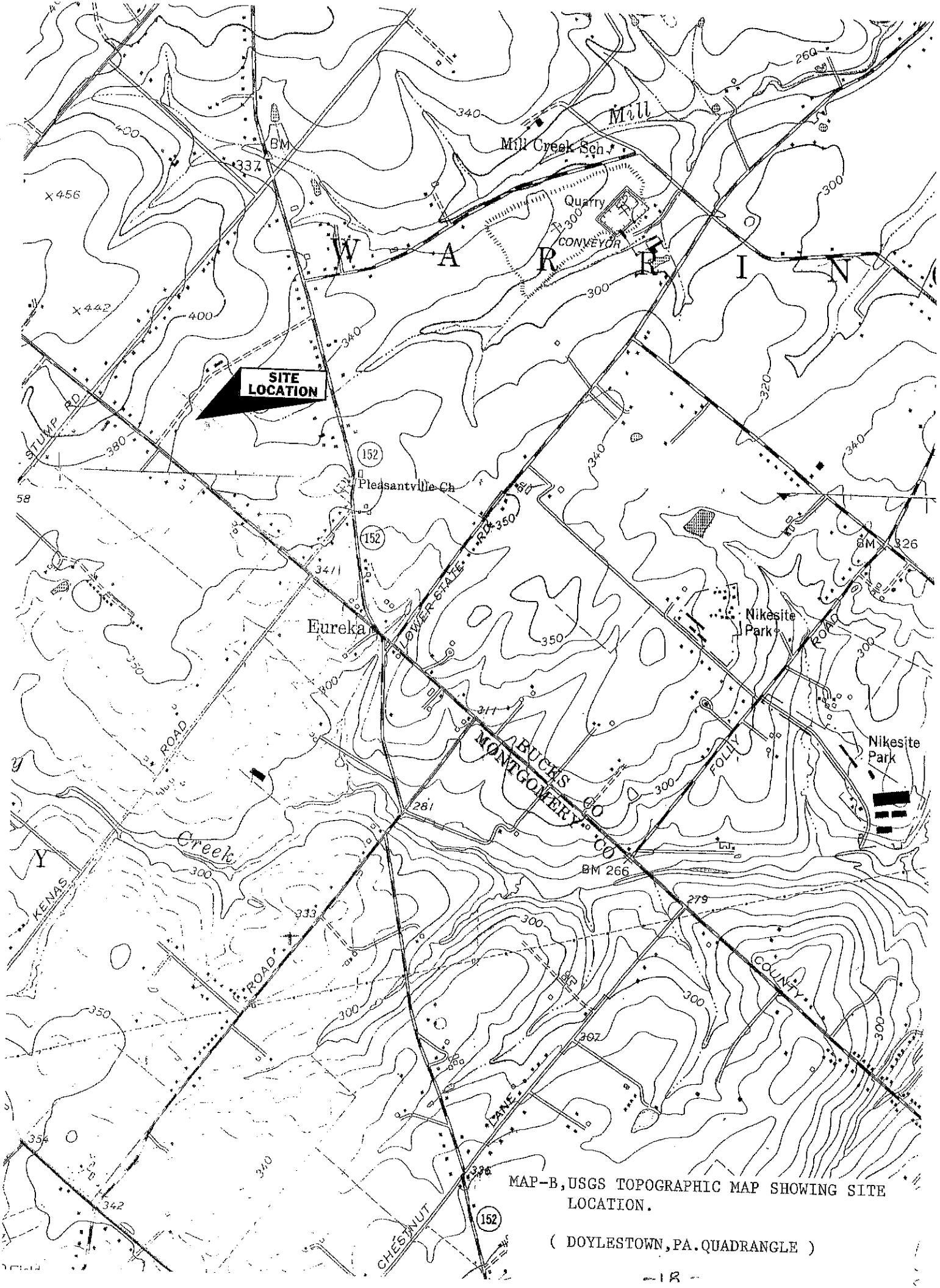
Remarks: No observed subsoil evidence, seasonal/intermittent surface saturation.

MAPS



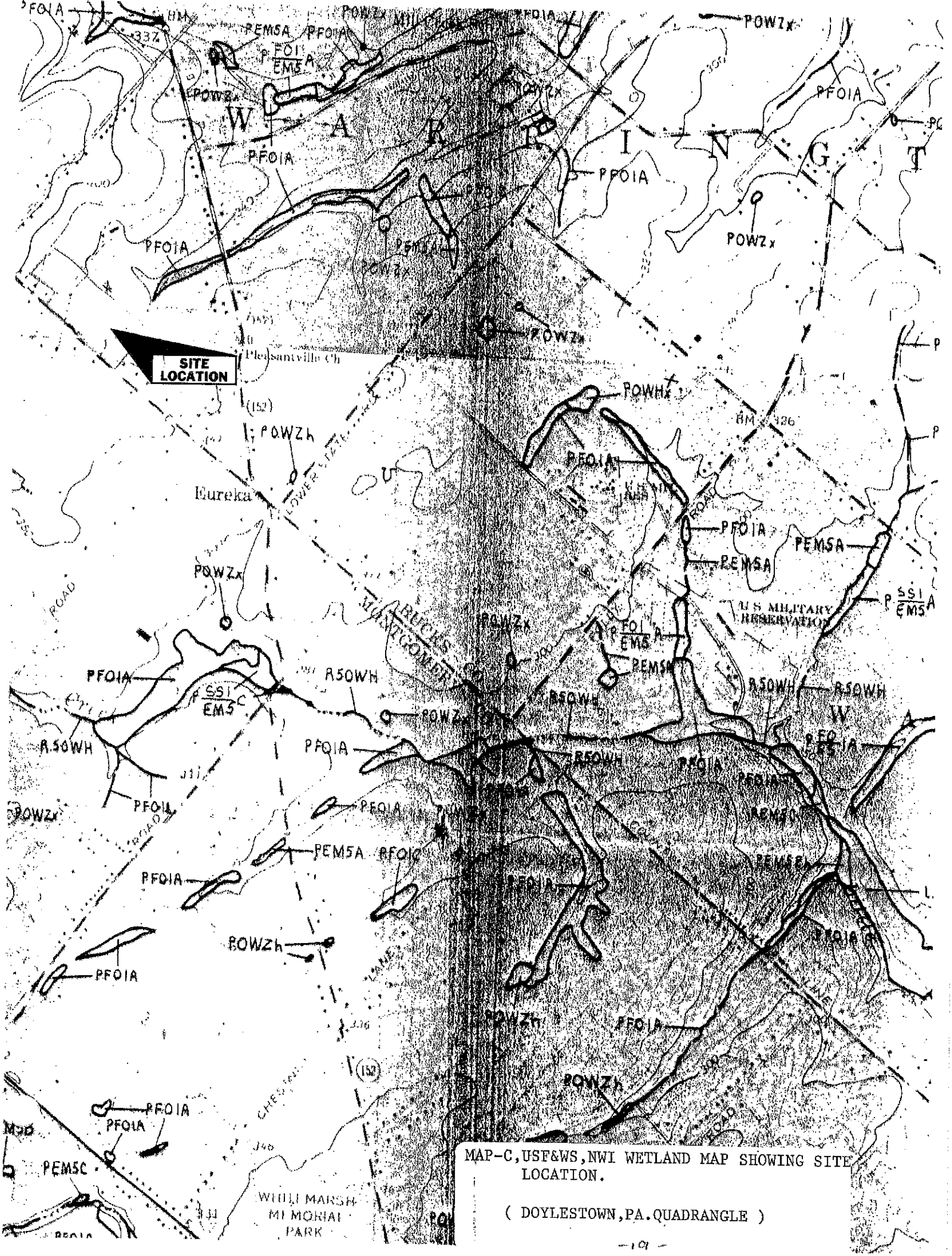
MAP-A, ROAD & STREET MAP SHOWING SITE LOCATION.

(BUCKS CO., PA.; A.B. PATTON, INC.)



MAP-B, USGS TOPOGRAPHIC MAP SHOWING SITE LOCATION.

(DOYLESTOWN, PA. QUADRANGLE)



MAP-C, USF&WS, NWI WETLAND MAP SHOWING SITE LOCATION.

(DOYLESTOWN, PA. QUADRANGLE)

MAP-D, USDA SOIL MAP SHOWING SITE LOCATION.

(BUCKS-PHILA.CO., PA. SOIL SURVEY; SHEET #51, #52 & INSERT)

FIELD PHOTOGRAPHS

5

6


7


8

9

10

PRINCIPAL CREDENTIALS

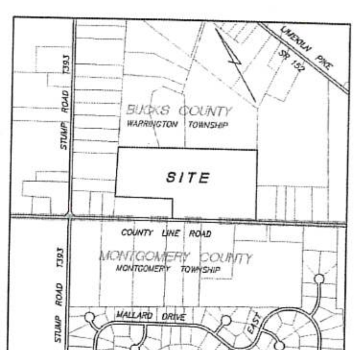
JOHN F. SZCZEPANSKI

EDUCATION: PHD LASALLE UNIVERSITY, ENVIRONMENTAL SCIENCES: M.A. ROWEN UNIVERSITY, FIELD ECOLOGY: B.A. ROWEN UNIVERSITY, GENERAL STUDIES.

EMPLOYMENT: FIELD ECOLOGIST, WETLAND SCIENTIST AND ENVIRONMENTAL ACIENTIST FOR 27 YEARS. CONSIDERABLE RESEARCH AND FIELD EXPERTISE ASSOCIATED WITH CONSTRUCTION PROPOSED FOR ENVIRONMENTALLY SENSITIVE AREAS. INCLUDED WITHIN THE SCOPE OF STUDY ARE WETLAND DETERMINATION AND DELINEATION, ENVIRONMENTAL ASSESSMENT AND IMPACT SSTUDIES, HABITAT MITIGATION AND SESTORATION, SOILS ANALYSIS, SITE PLANNING, ENVIRONMENTAL, BIOTA INVENTIORIES, REPORT PREPARATION, EXPERT TESTIMONY AND PERMITTING.

RESPONSIBILITIES: PRINCIPAL FIELD INVESTIGATOR/CONSULTANT REGARDING LAND USE PROJECTS AND ENVIRONMENTAL REGULATORY COMPLIANCE.

PROFESSIONAL MEMBERSHIP: ASSOCIATION OF STATE WETLAND MANAGERS, SOCIETY OF WETLAND SCIENTISTS, ASSOCIATION OF NJ ENVIRONMENTAL COMMISSIONS AND THE SOCIETY FOR ECOLOGICAL RESTORATION AND MANAGEMENT.



LOCATION MAP
SCALE: 1"=800'

LEGEND

- EXISTING FENCE AND GATE
- EXISTING CONTOUR
- EXISTING SPOT ELEVATION (PER PHOTOGRAMMETRY)
- EXISTING SPOT ELEVATION (PER ONSITE SURVEY)
- EXISTING EDGE OF WOODS (TRUNK LINE)
- EXISTING EDGE OF BRUSH
- EXISTING DRAINAGE PATH (PER PHOTOGRAMMETRY)
- EXISTING WATERS OF THE UNITED STATES
- EXISTING HEADWALL, CULVERT & CATCH BASIN (INLET)
- EXISTING TREES
- EXISTING SIGNS
- EXISTING UTILITY POLE (PER PHOTOGRAMMETRY)
- EXISTING UTILITY POLE (PER ONSITE SURVEY)
- EXISTING MAILBOX
- PROPERTY LINE
- CENTER LINE
- STEEP SLOPES 8%-15%
- 15%-25%
- OVER 25%

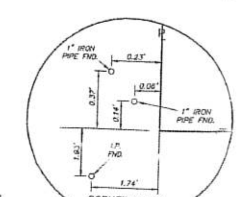
GENERAL NOTES

1. THIS MAP REPRESENTS A BOUNDARY SURVEY MADE BY VAN CLEEF ENGINEERING ASSOCIATES IN JULY 2001.
2. EXISTING TOPOGRAPHY HEREON WAS DERIVED BY PHOTOGRAMMETRIC MEANS. DIGITAL MAPPING WAS PREPARED BY NOR EAST MAPPING, INC. AND IS BASED ON AERIAL PHOTOGRAPHY DATED FEBRUARY 6, 2003. ELEVATIONS ARE BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) AS DERIVED FROM A GPS SURVEY BY VCEA.
3. THIS SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY THE SURVEYOR. ALL INFORMATION REGARDING EASEMENTS AND OTHER DOCUMENTS THAT MIGHT AFFECT THE QUALITY OF TITLE TO THE TRACT SHOWN HEREON WAS OBTAINED FROM TITLE POLICY NO. A75-0427415 PREPARED BY ASSOCIATES GROUP ABSTRACT, INC., DATED AUGUST 20, 2001. THE FOLLOWING COMMENTS CORRESPOND TO THE ITEMS NUMBERED IN THE ABOVE REFERENCED POLICY (SCHEDULE B – SECTION 2):
   6) RESTRICTIONS AS SET FORTH IN DEED BOOK 948, PAGE 283.
   7) RIGHTS GRANTED TO PHILADELPHIA ELECTRIC COMPANY AND THE BELL TELEPHONE COMPANY OF PENNSYLVANIA AS MORE PARTICULARLY SET FORTH IN DEED BOOK 651 PAGE 239 AND DEED BOOK 972 PAGE 424.
   8) PUBLIC AND PRIVATE RIGHTS IN AND TO THAT PORTION OF PREMISES LYING IN THE BED OF COUNTY LINE ROAD.
   9) PROVISIONS OF ACTS OF ASSEMBLY AUTHORIZING THE STATE HIGHWAY DEPARTMENT TO EXTEND BOUNDARIES OF STATE ROADS.
4. NO CERTIFICATION IS MADE AS TO THE POSITION OF ANY UTILITIES OR TO THE COMPLETENESS OF ANY UTILITIES SHOWN. ALL CONTRACTORS WORKING ON THIS SITE SHALL COMPLY WITH THE REQUIREMENTS OF ACT 187 OF 1996 (UNDERGROUND UTILITY LINE PROTECTION ACT). VCEA HAS REGISTERED THIS SITE WITH THE PA ONE-CALL SYSTEM ON MARCH 7, 2003 (SERIAL NOS. 0380648 AND 0380649). THE FOLLOWING IS A LIST OF REGISTERED UTILITY USERS FOR WARRINGTON AND MONTGOMERY TOWNSHIPS:

   WARRINGTON TWP. (BUCKS COUNTY)
   COMCAST CABLE, INC.
   NORTH WALES WATER AUTHORITY
   PECO ENERGY (C/O STS TELECOM, INC.)
   TRANSCONTINENTAL GAS PIPELINE
   VERIZON PENNSYLVANIA, INC.
   WARRINGTON TOWNSHIP – WATER & SEWER DEPT.

   MONTGOMERY TWP. (MONTGOMERY COUNTY)
   COMCAST CABLE, INC.
   MONTGOMERY TOWNSHIP
   NORTH PENN WATER AUTHORITY
   NORTH WALES WATER AUTHORITY
   PECO ENERGY (C/O STS TELECOM, INC.)
   VERIZON PENNSYLVANIA, INC.

6. UNDERGROUND IMPROVEMENTS AND/OR ENCROACHMENTS (IF APPLICABLE) HAVE NOT BEEN INVESTIGATED AS PART OF THIS SURVEY.



CORNER DETAIL
(NOT TO SCALE)

ENVIRONMENTAL RESTRICTED AREAS

ENVIRONMENTAL FEATURE	AREA	ALLOWABLE % DISTURBED	PROPOSED % DISTURBED
STREAM TYPE	N/A	N/A	N/A
WATERBODY	N/A	N/A	N/A
WETLAND	—	0%	0%
STEEP SLOPES			
8%-15%	0.183 Ac	40%	10%
15%-25%	0.140 Ac	30%	1%
OVER 25%	0.119 Ac	15%	0%
FOREST	16.3 Ac	50%	9% (1.5 Ac)

AREA SUMMARY:

26.440 AC.	1,151,714 S.F.	EXISTING GROSS SITE AREA
– 0.360 AC.	– 15,675 S.F.	EXISTING ROAD RIGHT OF WAY AREA
26.080 AC.	1,136,039 S.F.	EXISTING NET SITE AREA

OWNERS OF RECORD:

MICHAEL GRAZIANO AND VICTOR BUCCAFURI
3647 COUNTY LINE ROAD
NORTH WALES, PA 19454
LAND RECORD BOOK 2390, PAGE 2205

RECEIVED
JUN 18 2003
VAN CLEEF ENGINEERING ASSOCIATES

Photograph Views

GRAPHIC SCALE
(IN FEET)
1 inch = 50 ft.

REVISIONS	AUTH.	DATE
PER TWP. ENG. LTR. DATED (4-29-03)	F.A.C.	5-30-03

DATE:	MARCH 28, 2003
SCALE:	1"= 50'
DESIGNED BY:	F.A.C.
DRAWN BY:	D.H.A./H.Mc.
CHECKED BY:	D.H.A./F.A.C.
JOB NO.	01-1-WRR

BY: DAVID H. ARTMAN, PA PLS No. 51039-E

BY: SAMUEL D. COSTANZO, PA PE No. 041557-R

Van Cleef Engineering Associates
Consulting Civil, Environmental & Municipal Engineering
Land Surveying · Professional Planning · Landscape Architecture
EASTERN PA OFFICE
501 North Main Street
Doylestown, PA 18901
(215) 345-1876

EXISTING FEATURES PLAN
FOR
VICTOR BUCCAFURI
TAX MAP PARCEL NO. 50-4-67
WARRINGTON TOWNSHIP
BUCKS COUNTY, PENNSYLVANIA

2/6

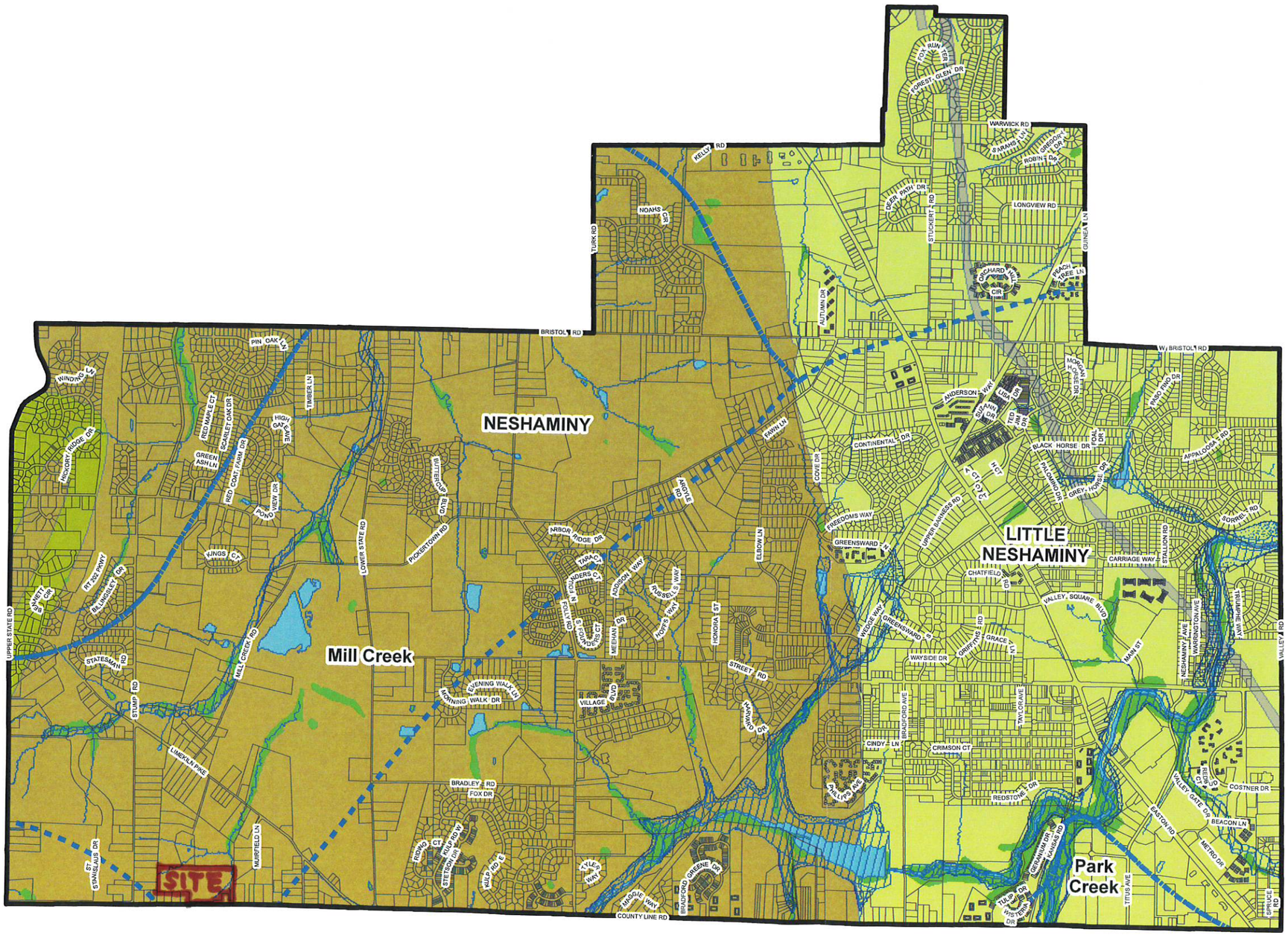
FILE 2052

PLAN NOTATION
ONLY THOSE PLANS WHICH CONTAIN AN IMPRESSED SEAL OR A RED INK SEAL OF THE RESPONSIBLE PROFESSIONAL SHALL BE CONSIDERED VALID. THIS PLAN HAS BEEN SPECIFICALLY PREPARED FOR THE OWNER DESIGNATED HEREON. ANY MODIFICATION, REVISION, DUPLICATION OR USE WITHOUT THE WRITTEN CONSENT OF VAN CLEEF ENGINEERING ASSOCIATES IS PROHIBITED. RELIANCE ON THIS PLAN FOR ANY PURPOSE OTHER THAN THAT WHICH IS INTENDED SHALL BE AT THE SOLE DISCRETION AND LIABILITY OF THE APPLICABLE PARTY.

1. Exhibit A – Hydrogeologic Resources
2. Exhibit B – Architectural Footprints for Each Unit
3. Location Map
4. Existing Land Uses Within 500' of Site
5. Existing Land Use Within 500' on Adjacent Montgomery County
6. Future Land Uses within 500' of Site
7. Aerial Photograph Plan
8. PNDI Form
9. Community Facilities Plan
10. Natural and Historic Resources Plan
11. Concept Sketch Plan with Aerial Photo
12. Zoning Hearing Exhibit Plan (Full Size Plan)
13. Existing Features Plan (Full Size Plan)
14. Large ladder Fire Truck Radii Exhibit Plan (Full Size Plan)

Exhibit A (1)

Map 3
Hydrogeologic Resources



PRIMARY WATERSHED BOUNDARY
Secondary Watershed Boundary
100-Year FEMA-Designated Floodplain
500-Year FEMA-Designated Floodplain
Wetlands

Geology

- Brunswick lithofacies
- Diabase
- Lockatong lithofacies
- Stockton lithofacies

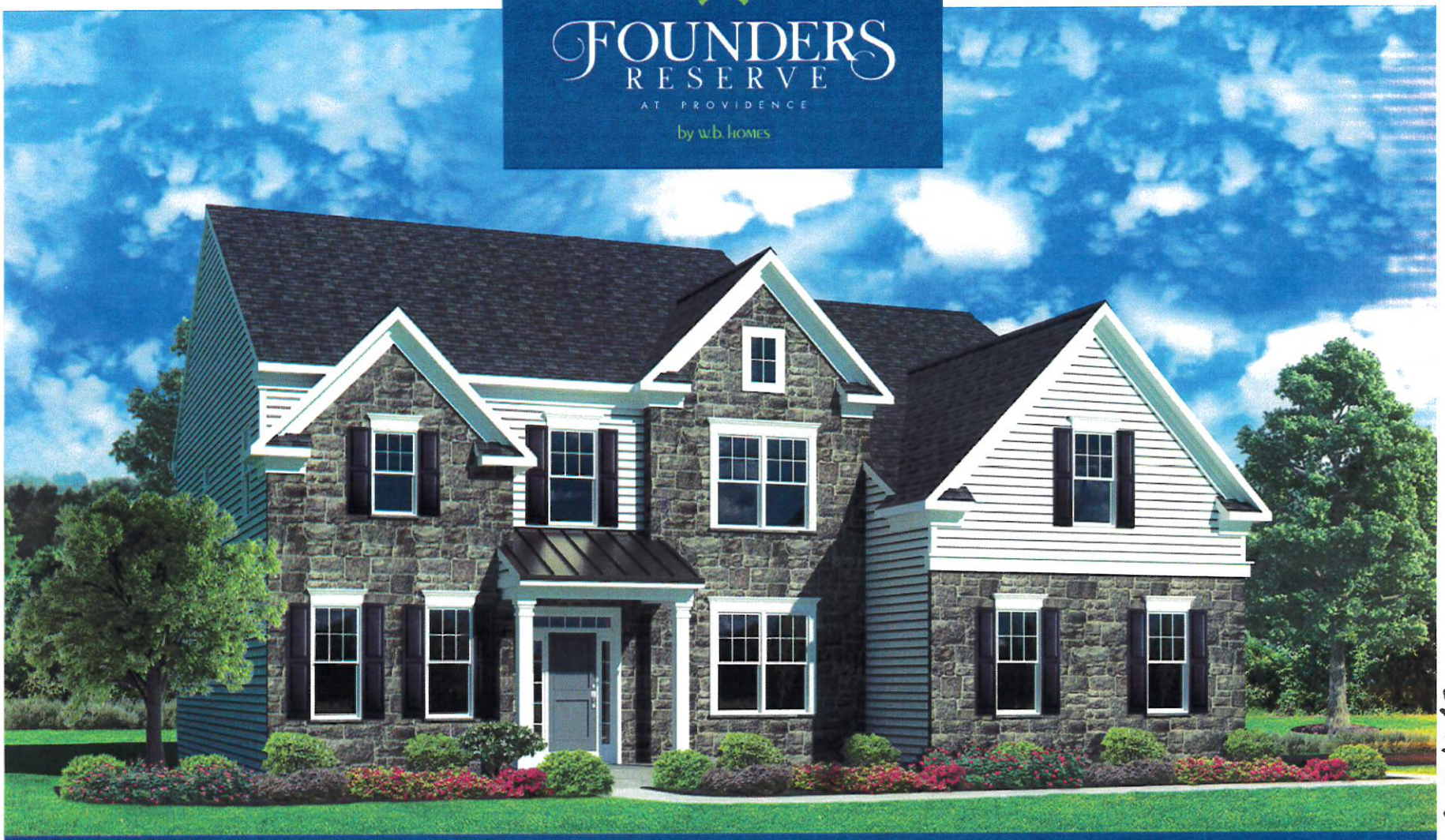
Source:
Floodplains- FEMA, 2015
Wetlands- National Wetlands Inventory, 2009

Warrington Township
Bucks County, Pennsylvania

0 2,000 4,000 Feet

Prepared by: Bucks County Planning Commission
2018

FOUNDERS
RESERVE
AT PROVIDENCE
by w.b. HOMES



Farmhouse

the Oakville

Exhibit B - (2)

the Oakville

4 - 6 Bedrooms • 3½ - 6½ Baths • 2 - 3 Car Garage

TOTAL LIVING = 3,626 - 6,070 SQ.FT

FIRST FLOOR

SECOND FLOOR

*Options are not to scale

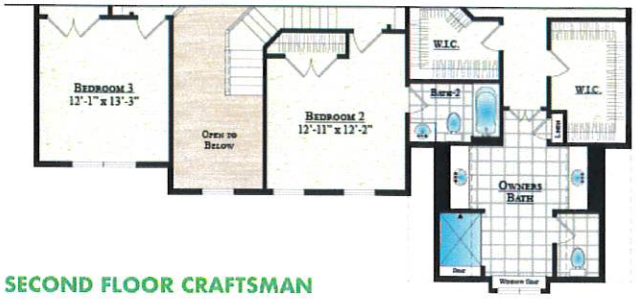
Details and dimensions shown are approximate and subject to change. Illustrations are artist's concepts and may vary in detail from actual plans and specifications according to how units are paired together. Approximate location and configuration of mechanical equipment are subject to change due to field conditions.

FOUNDERS RESERVE

the Oakville

Optional Floorplans

FIRST FLOOR CRAFTSMAN

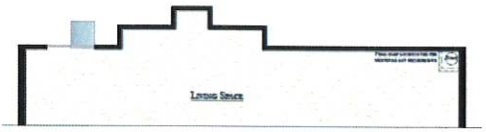


SECOND FLOOR CRAFTSMAN

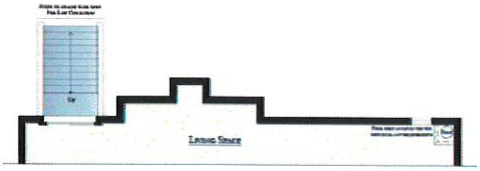
FIRST FLOOR ESTATE

SECOND FLOOR ESTATE

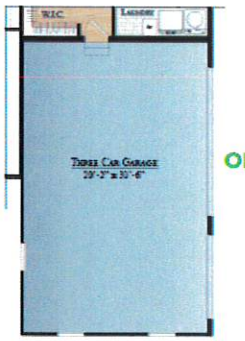
BASEMENT



OPTIONAL WALK OUT BASEMENT



OPTIONAL WALK UP BASEMENT



OPTIONAL THREE CAR GARAGE

*Options are not to scale

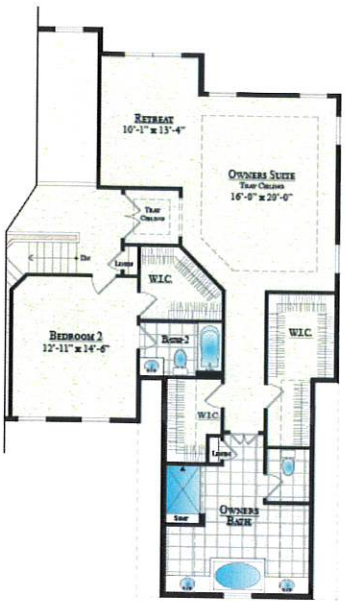
Details and dimensions shown are approximate and subject to change. Illustrations are artist's concepts and may vary in detail from actual plans and specifications according to how units are paired together. Approximate location and configuration of mechanical equipment are subject to change due to field conditions.

FOUNDERS RESERVE

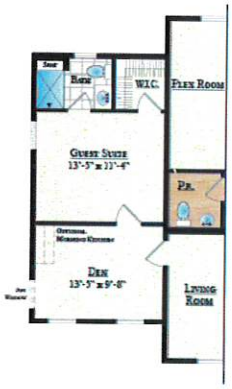
Optional Fifth Bedroom
In Lieu of Flex Room

Optional Deluxe Owners Bath

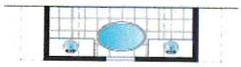
Owners Suite with
Optional Three Car Garage



Optional Deluxe Owners Bath
with Three Car Garage



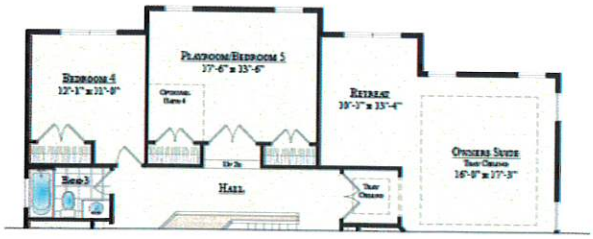
Optional Guest Suite



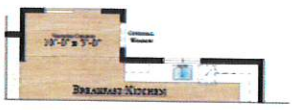
Optional Free Standing Tub
with Deluxe Owners Bath

Optional Morning Room

Optional Culinary Kitchen



Optional Playroom / Bedroom 5 over Great Room



Optional Expanded Breakfast Area

*Options are not to scale

Details and dimensions shown are approximate and subject to change. Illustrations are artist's concepts and may vary in detail from actual plans and specifications according to how units are paired together. Approximate location and configuration of mechanical equipment are subject to change due to field conditions.

FOUNDERS RESERVE

FOUNDERS RESERVE

AT PROVIDENCE

by w.b. homes

Regency

the Rutherford

the Rutherford

4 - 6 Bedrooms • 3½ - 6 Baths • 2 - 3 Car Garage

TOTAL LIVING = 3,553 - 5,540 SQ.FT

FIRST FLOOR

SECOND FLOOR

*Options are not to scale

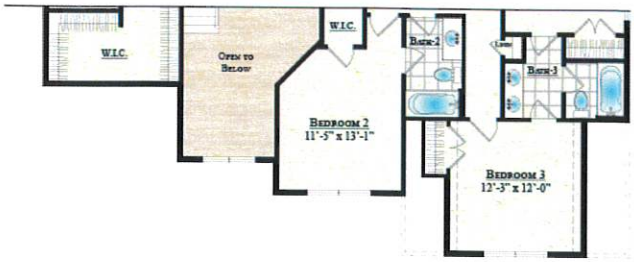
Details and dimensions shown are approximate and subject to change. Illustrations are artist's concepts and may vary in detail from actual plans and specifications according to how units are paired together. Approximate location and configuration of mechanical equipment are subject to change due to field conditions.

FOUNDERS RESERVE

the Rutherford

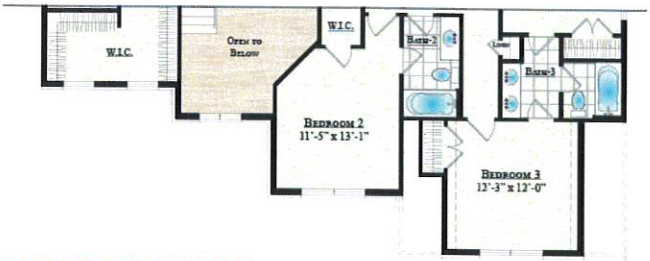
Optional Floorplans

FIRST FLOOR CRAFTSMAN

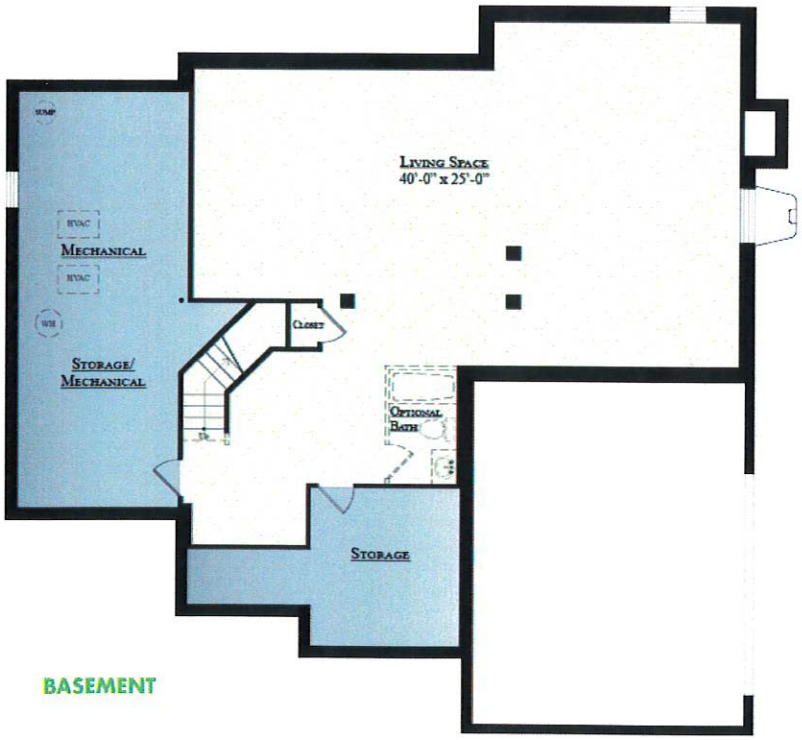


SECOND FLOOR CRAFTSMAN

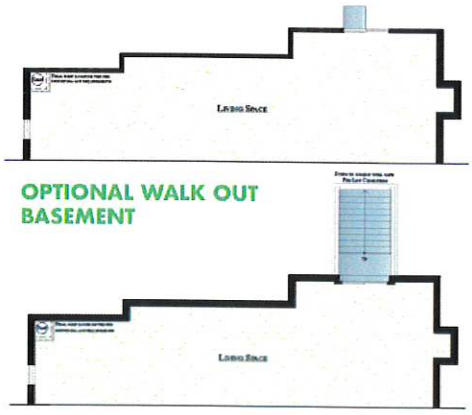
FIRST FLOOR ESTATE AND REGENCY



SECOND FLOOR ESTATE AND REGENCY

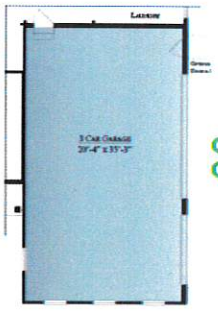


BASEMENT



OPTIONAL WALK OUT BASEMENT

OPTIONAL WALK UP BASEMENT

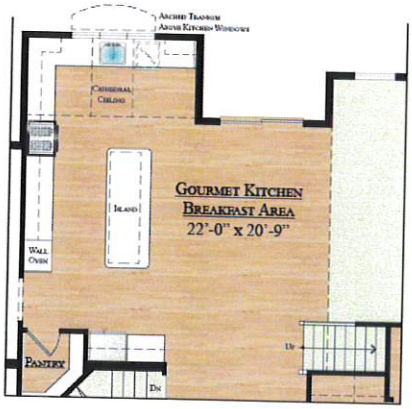


OPTIONAL THREE CAR GARAGE

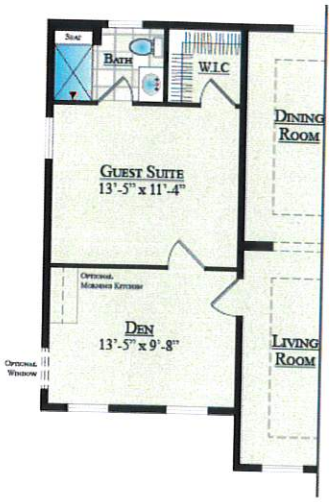
*Options are not to scale

Details and dimensions shown are approximate and subject to change. Illustrations are artist's concepts and may vary in detail from actual plans and specifications according to how units are paired together. Approximate location and configuration of mechanical equipment are subject to change due to field conditions.

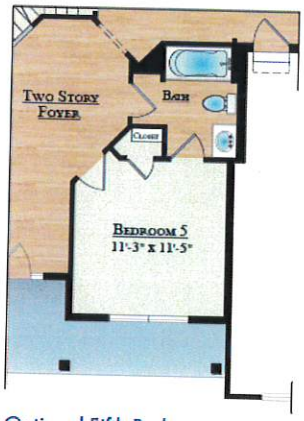
FOUNDERS RESERVE



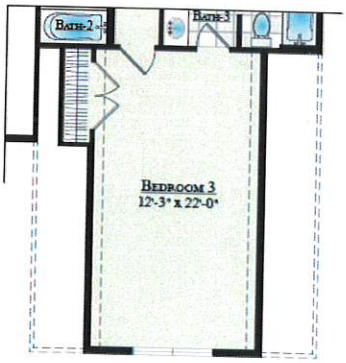
Optional Culinary Kitchen



Optional Guest Suite

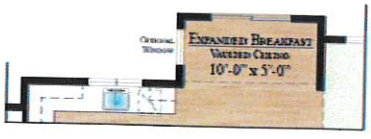


Optional Fifth Bedroom
In Lieu of Flex Room



Bedroom 3 at Optional
Three Car Garage

Optional Morning Room



Optional Expanded Breakfast Area

*Options are not to scale

Details and dimensions shown are approximate and subject to change. Illustrations are artist's concepts and may vary in detail from actual plans and specifications according to how units are paired together. Approximate location and configuration of mechanical equipment are subject to change due to field conditions.

FOUNDERS RESERVE

FOUNDERS RESERVE

AT PROVIDENCE

by w.b. HOMES

Craftsman

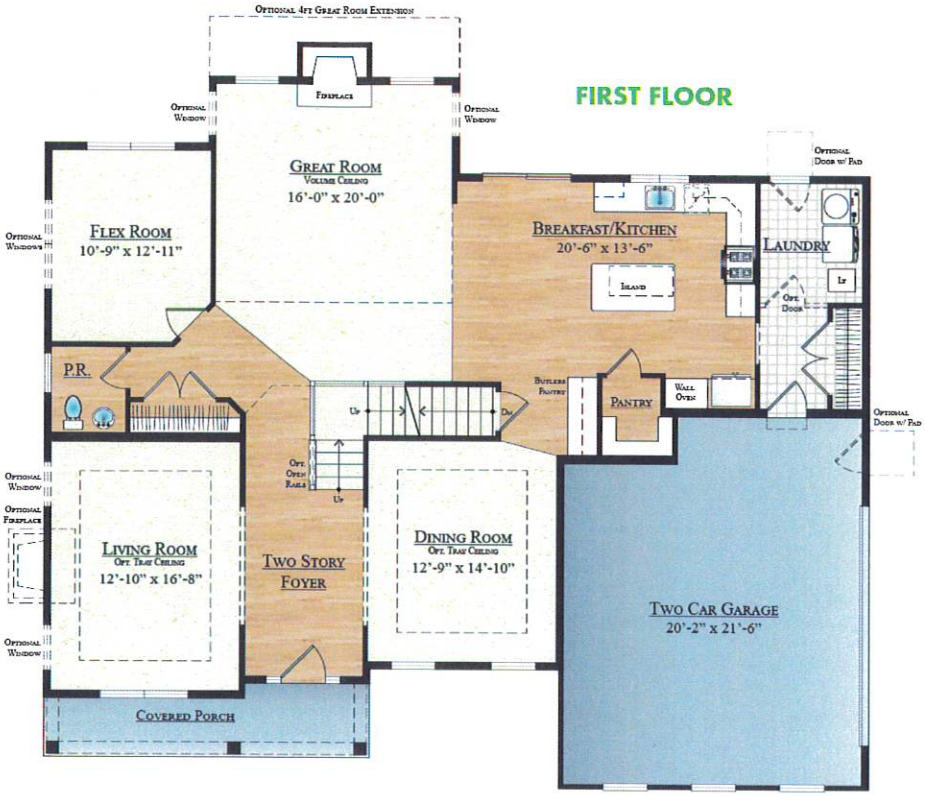
the Calistoga

the Calistoga

4 - 6 Bedrooms • 2½ - 5 Baths • 2 - 3 Car Garage

TOTAL LIVING = 3,193 - 4,907 SQ.FT

FIRST FLOOR



SECOND FLOOR

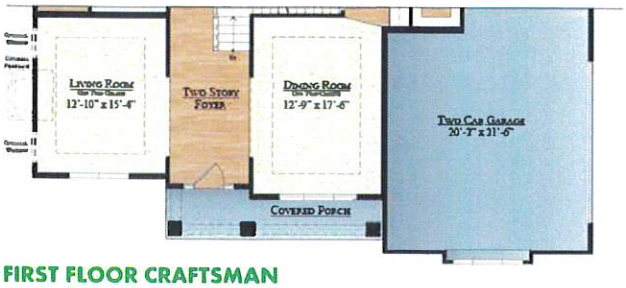
*Options are not to scale

Details and dimensions shown are approximate and subject to change. Illustrations are artist's concepts and may vary in detail from actual plans and specifications according to how units are paired together. Approximate location and configuration of mechanical equipment are subject to change due to field conditions.

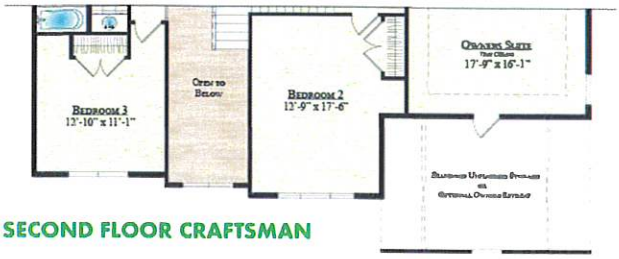
FOUNDERS RESERVE
AT PROVIDENCE

the Calistoga

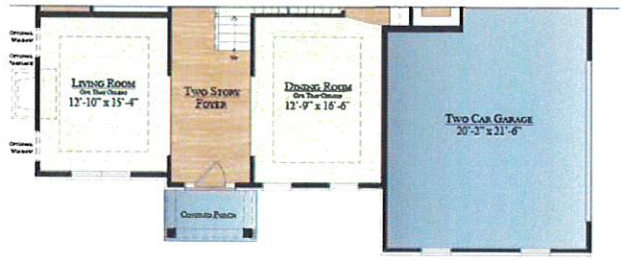
Optional Floorplans



FIRST FLOOR CRAFTSMAN

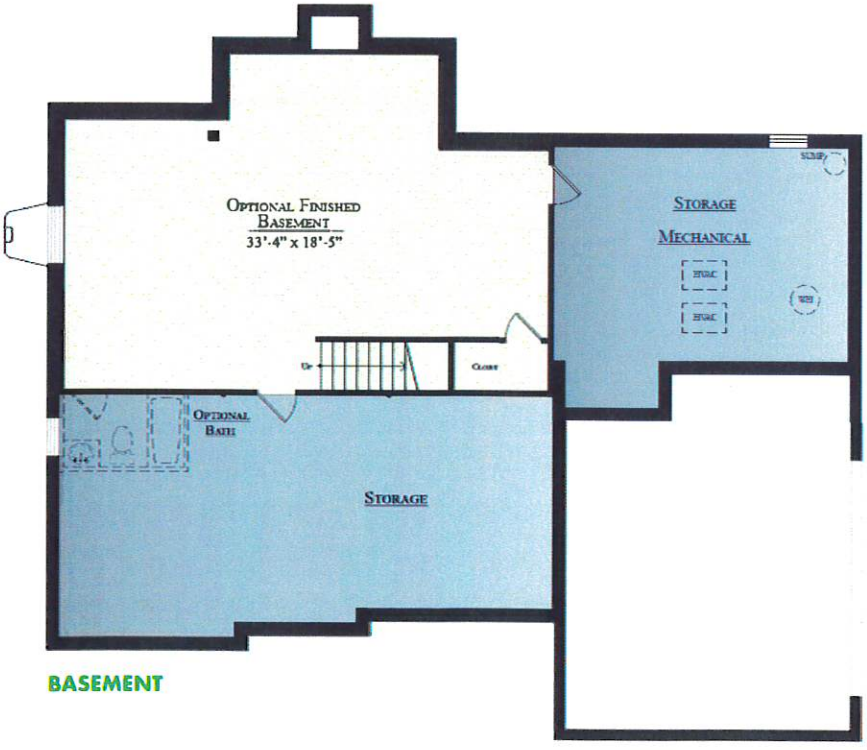


SECOND FLOOR CRAFTSMAN

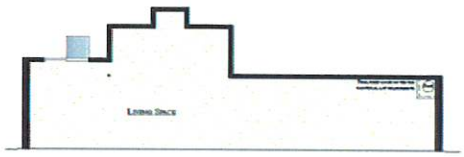


FIRST FLOOR ESTATE

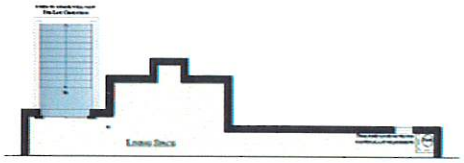
SECOND FLOOR ESTATE



BASEMENT



OPTIONAL WALK OUT BASEMENT



OPTIONAL WALK UP BASEMENT

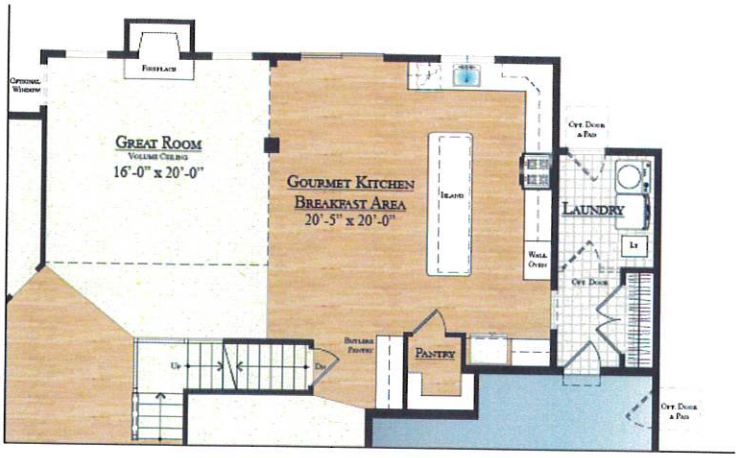
*Options are not to scale

Details and dimensions shown are approximate and subject to change. Illustrations are artist's concepts and may vary in detail from actual plans and specifications according to how units are paired together. Approximate location and configuration of mechanical equipment are subject to change due to field conditions.

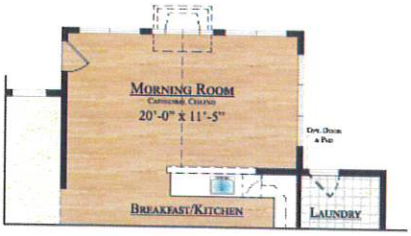
FOUNDERS RESERVE

the Calistoga

Optional Floorplans

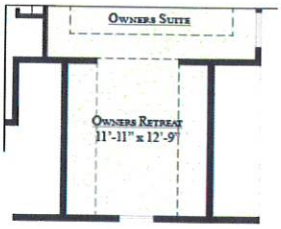


Optional Culinary Kitchen

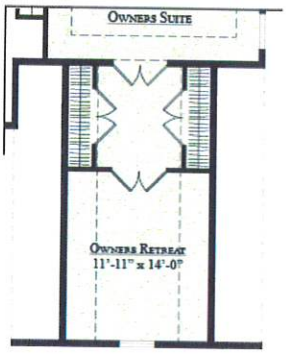


Optional Morning Room

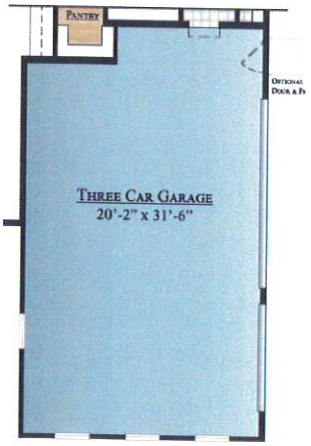
Optional Expanded Breakfast Area



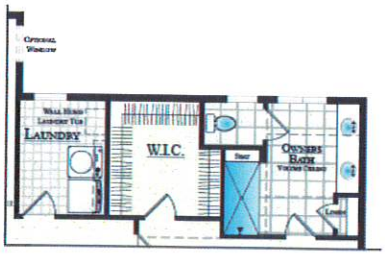
Optional Owners Retreat



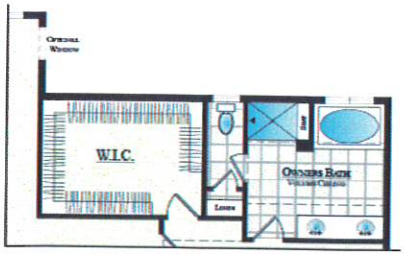
Optional Owners Retreat with Three Car Garage



Optional Three Car Garage

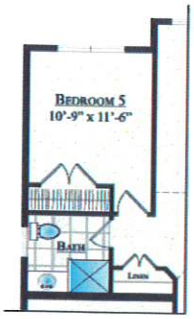


Optional Second Floor Laundry



Optional Deluxe Owner's Bath

Optional Guest Suite



Optional Fifth Bedroom In Lieu of Flex Room

*Options are not to scale

Details and dimensions shown are approximate and subject to change. Illustrations are artist's concepts and may vary in detail from actual plans and specifications according to how units are paired together. Approximate location and configuration of mechanical equipment are subject to change due to field conditions.

FOUNDERS RESERVE

FOUNDERS RESERVE

AT PROVIDENCE

by w.b. HOMES

Estate

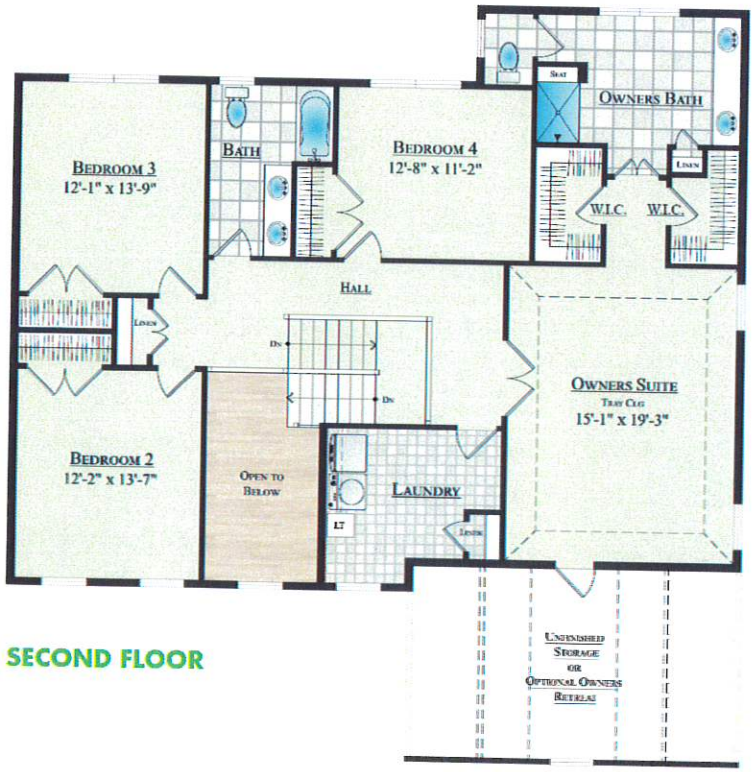
the Howell

the Howell

4 Bedrooms • 2½ - 3½ Baths • 2-Car Garage

TOTAL LIVING = 2,930 - 3,903 SQ.FT

FIRST FLOOR



SECOND FLOOR

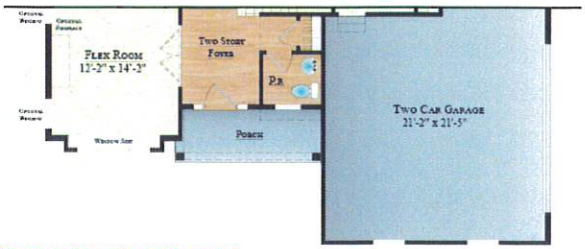
*Options are not to scale

Details and dimensions shown are approximate and subject to change. Illustrations are artist's concepts and may vary in detail from actual plans and specifications according to how units are paired together. Approximate location and configuration of mechanical equipment are subject to change due to field conditions.

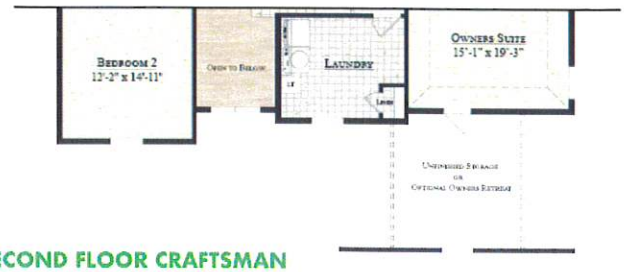
FOUNDERS RESERVE

the Howell

Optional Floorplans



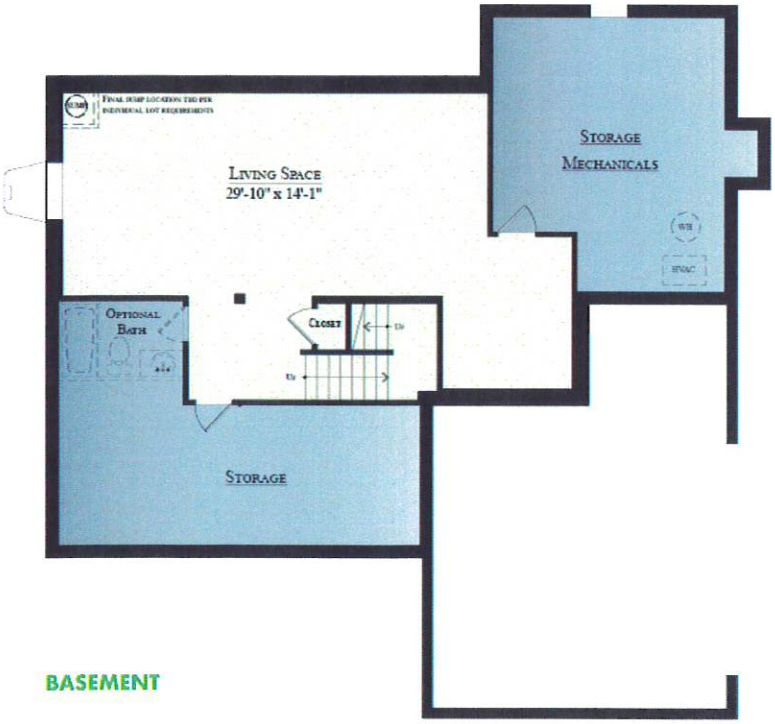
FIRST FLOOR CRAFTSMAN AND CRAFTSMAN ELITE



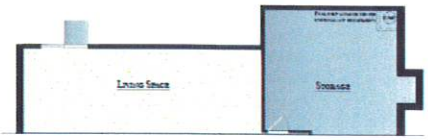
SECOND FLOOR CRAFTSMAN AND CRAFTSMAN ELITE

FIRST FLOOR ESTATE

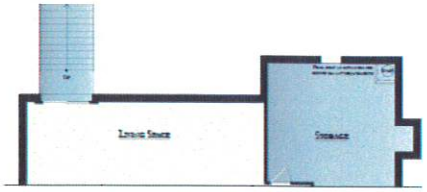
SECOND FLOOR ESTATE



BASEMENT



OPTIONAL WALK OUT BASEMENT

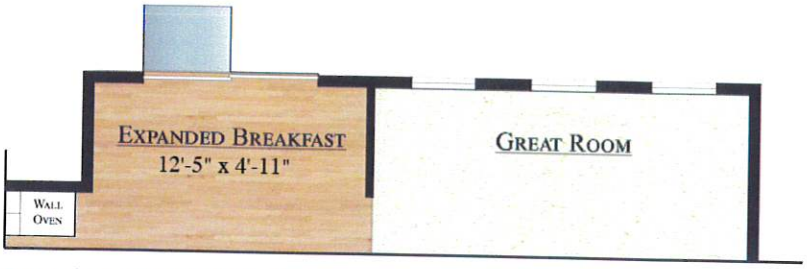


OPTIONAL WALK UP BASEMENT

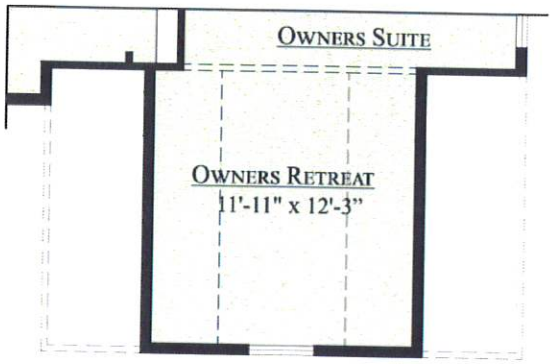
*Options are not to scale

Details and dimensions shown are approximate and subject to change. Illustrations are artist's concepts and may vary in detail from actual plans and specifications according to how units are paired together. Approximate location and configuration of mechanical equipment are subject to change due to field conditions.

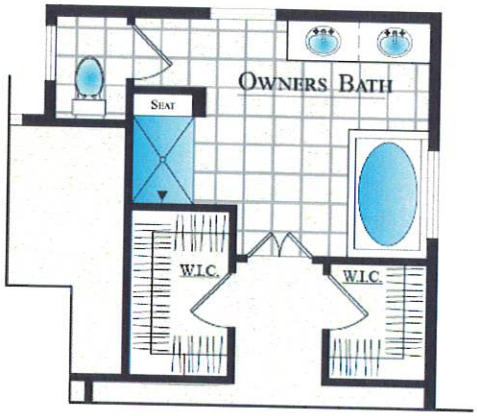
FOUNDERS RESERVE



Optional Expanded Breakfast Area

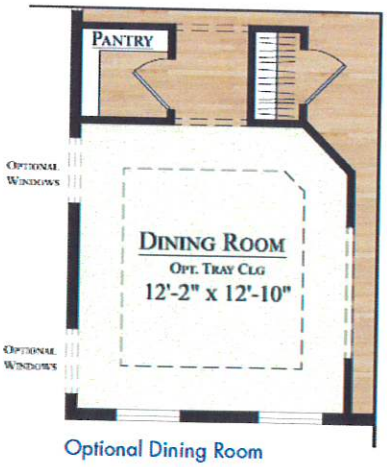


Optional Owners Retreat



Optional Deluxe Owners Bath

Optional Morning Room

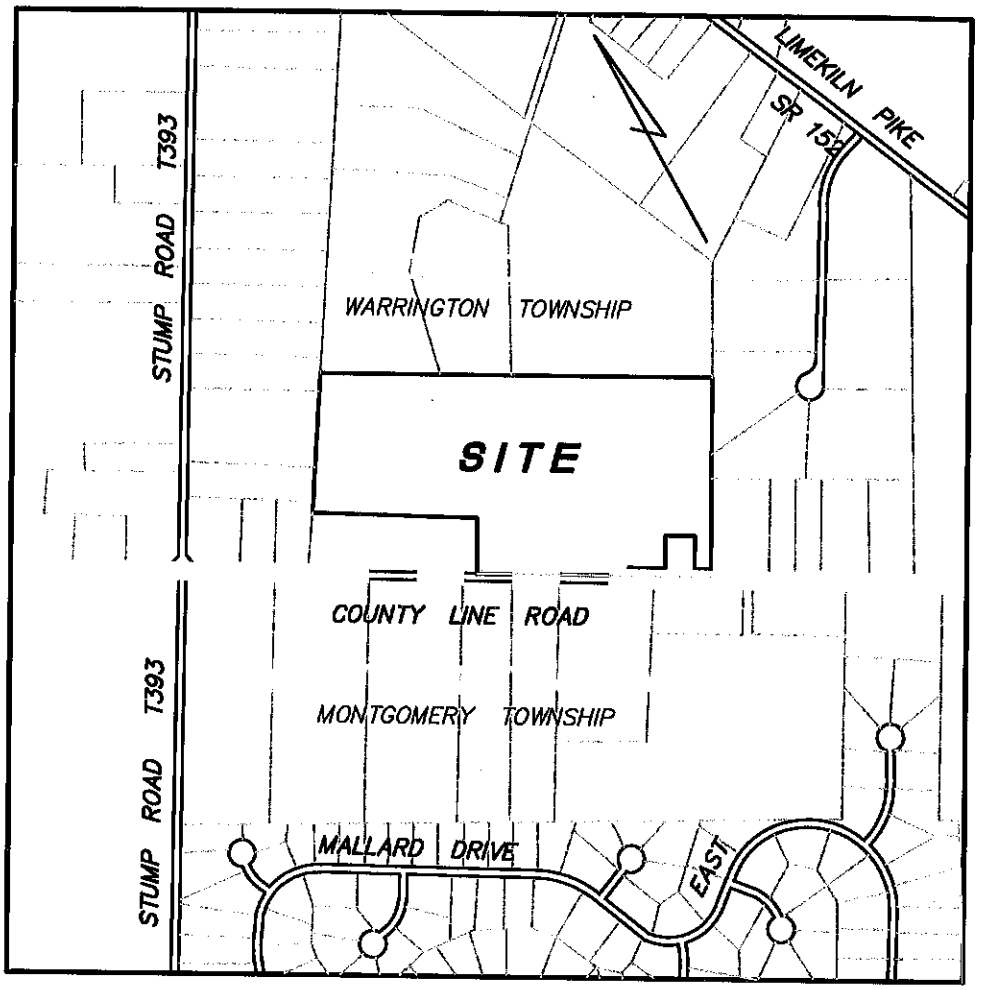


Optional Dining Room

*Options are not to scale

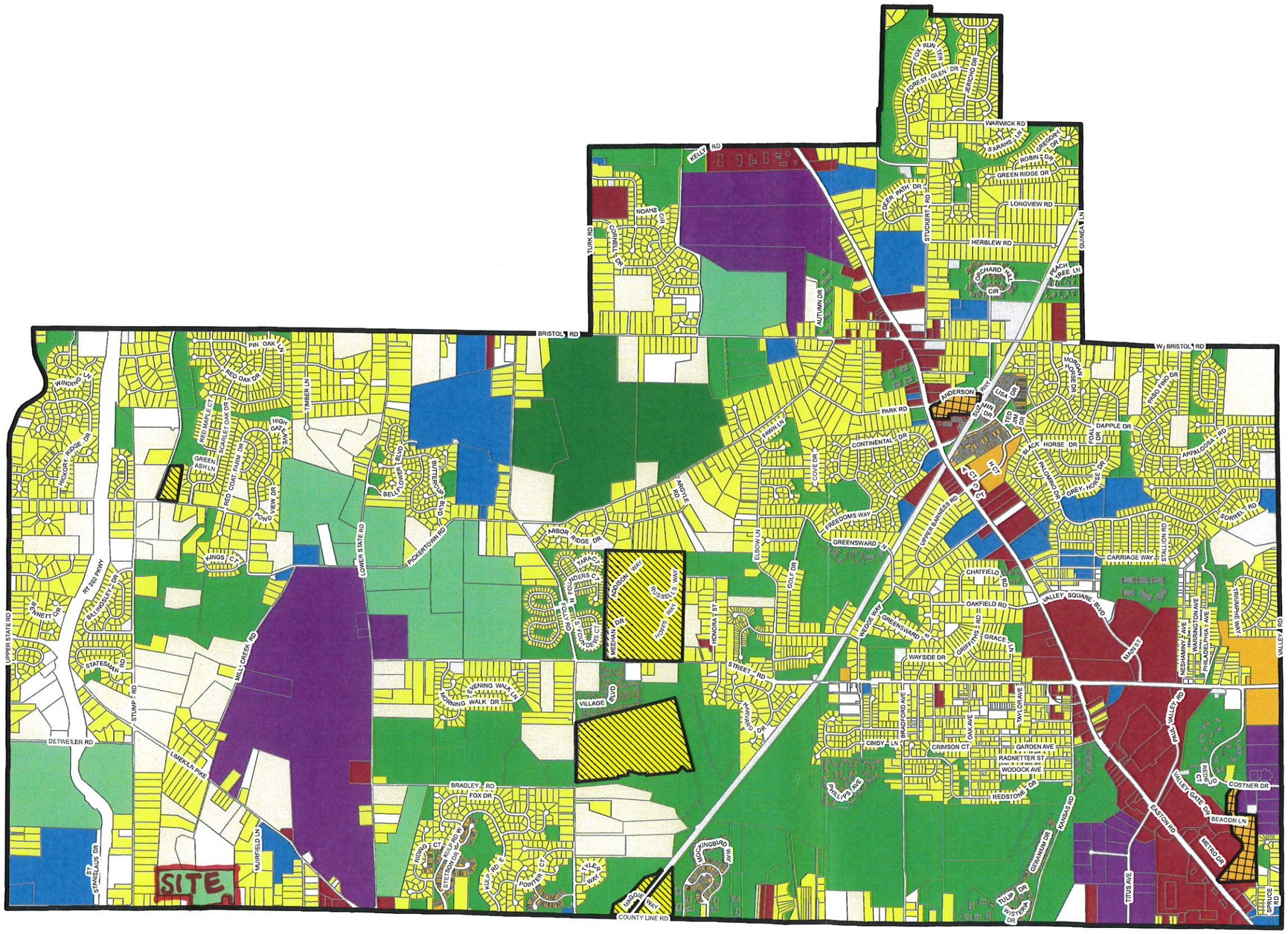
Details and dimensions shown are approximate and subject to change. Illustrations are artist's concepts and may vary in detail from actual plans and specifications according to how units are paired together. Approximate location and configuration of mechanical equipment are subject to change due to field conditions.

FOUNDERS RESERVE



LOCATION MAP
SCALE: 1"=800'

Map 1
Existing Land Use



- Agricultural
- Preserved Farmland
- Single-Family Residential
- Pending Single-Family Development
- Multifamily Residential
- Pending Multifamily Development
- Rural Residential
- Parks, Recreation & Open Space
- Commercial
- Industrial & Manufacturing
- Government & Institutional
- Transportation and Utilities
- Undeveloped/Vacant

Warrington Township
Bucks County, Pennsylvania

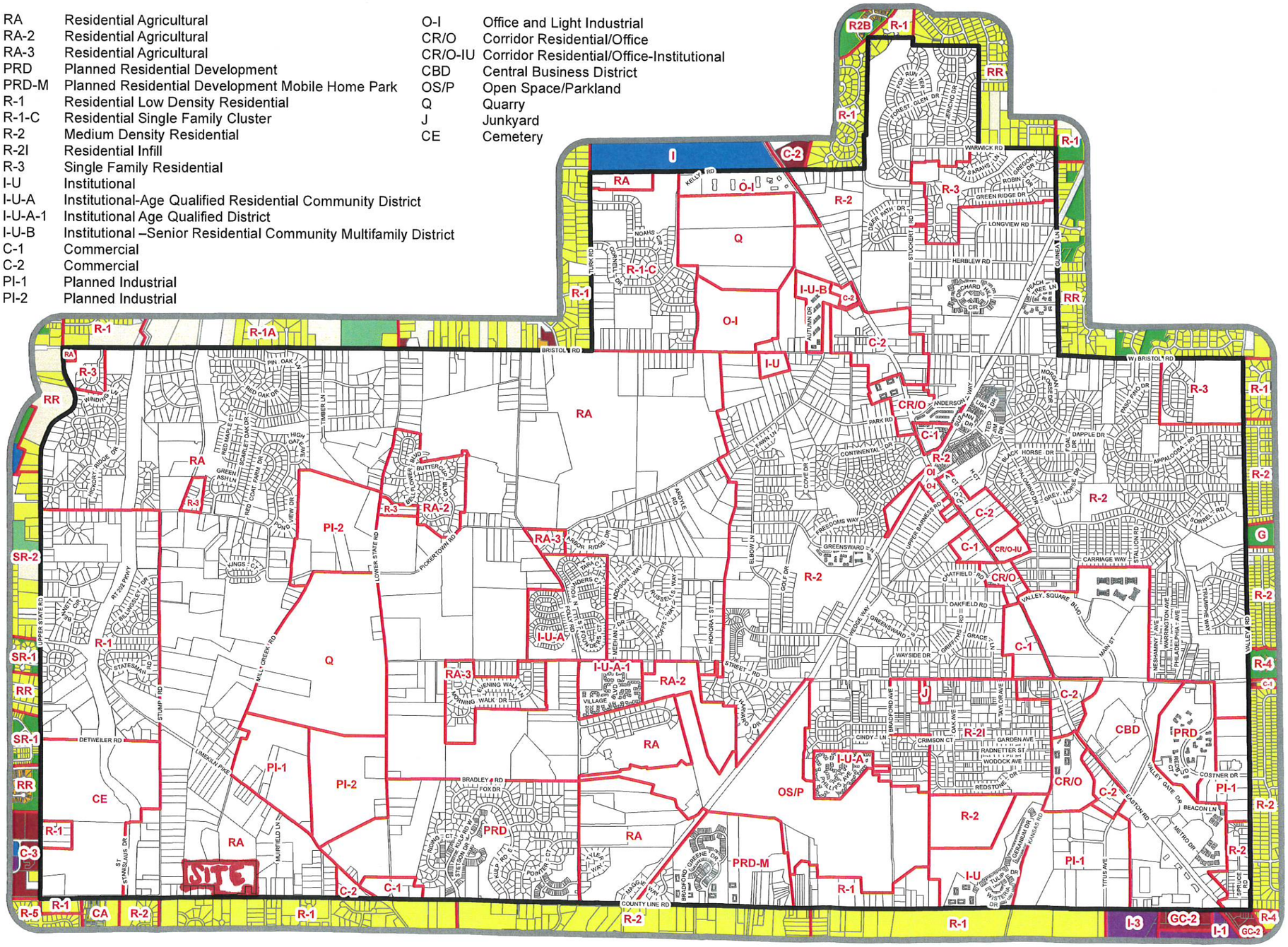
0 2,000 4,000 Feet

N

Prepared by: Bucks County Planning Commission
2018

Warrington Zoning

RA	Residential Agricultural
RA-2	Residential Agricultural
RA-3	Residential Agricultural
PRD	Planned Residential Development
PRD-M	Planned Residential Development Mobile Home Park
R-1	Residential Low Density Residential
R-1-C	Residential Single Family Cluster
R-2	Medium Density Residential
R-2I	Residential Infill
R-3	Single Family Residential
I-U	Institutional
I-U-A	Institutional-Age Qualified Residential Community District
I-U-A-1	Institutional Age Qualified District
I-U-B	Institutional –Senior Residential Community Multifamily District
C-1	Commercial
C-2	Commercial
PI-1	Planned Industrial
PI-2	Planned Industrial
O-I	Office and Light Industrial
CR/O	Corridor Residential/Office
CR/O-IU	Corridor Residential/Office-Institutional
CBD	Central Business District
OS/P	Open Space/Parkland
Q	Quarry
J	Junkyard
CE	Cemetery



Map 6

Zoning in Warrington and Adjacent Municipalities

Land Use

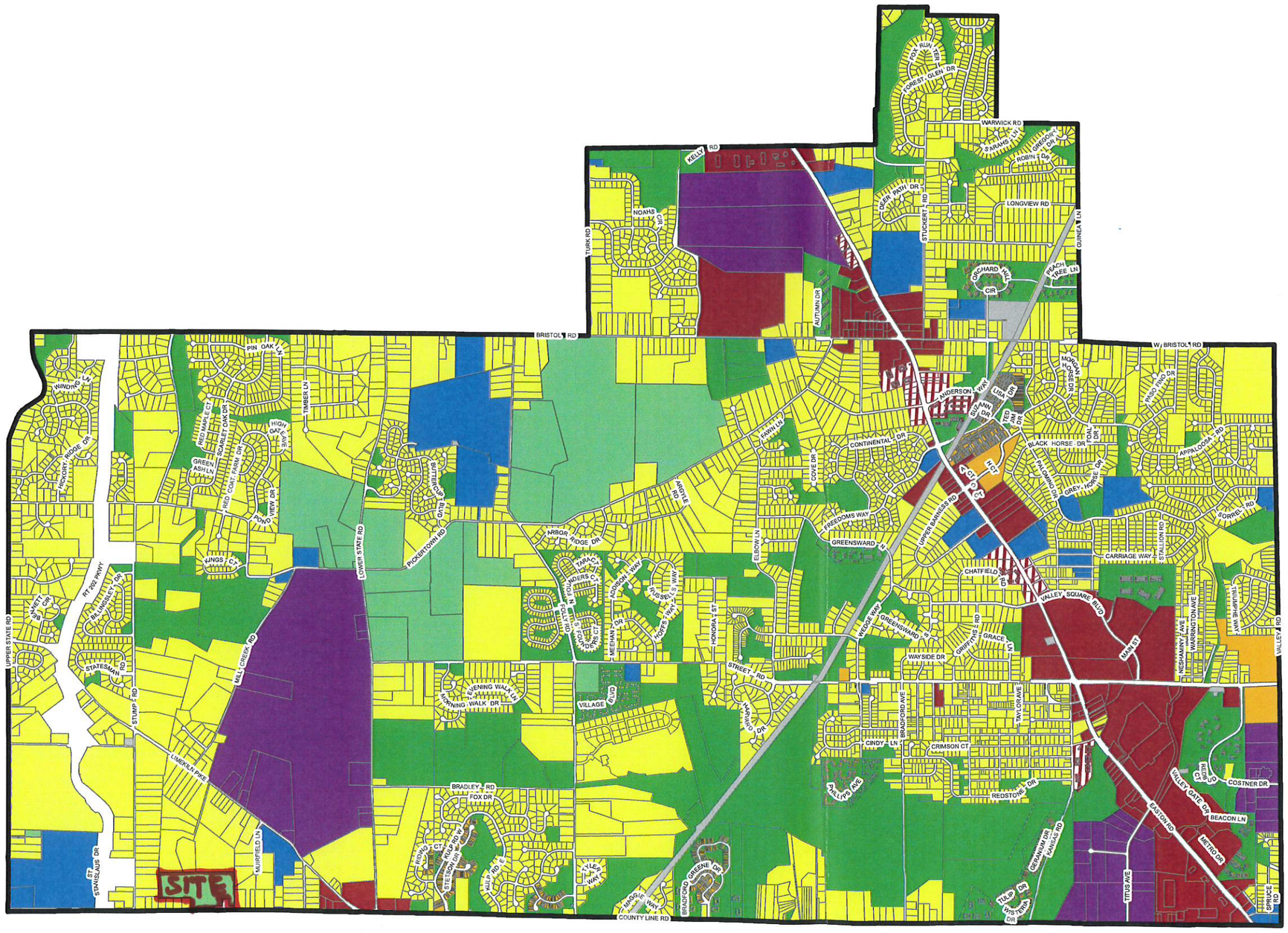
- Preserved Farmland
- Agricultural
- Single-Family Residential
- Multifamily Residential
- Rural Residential
- Parks, Recreation & Open Space
- Commercial
- Industrial & Manufacturing
- Government & Institutional
- Transportation and Utilities
- Undeveloped/Vacant

Warrington Township
Bucks County, Pennsylvania

0 2,000 4,000 Feet

Prepared by: Bucks County Planning Commission
2018

Map 2
Future Land Use



- Agricultural
- Commercial
- Corridor Residential/Office
- Industrial
- Institutional
- Parks, Recreational, Open Space
- Residential Single-Family
- Residential Multifamily
- Utility

Warrington Township
Bucks County, Pennsylvania

0 2,000 4,000 Feet

N

Prepared by: Bucks County Planning Commission
2018

GRAPHIC SCALE

(IN FEET)
1 inch = 60 ft.

WALNUT CREEK ACQUISITIONS, L.P.

AERIAL PHOTO EXHIBIT
WARRINGTON TOWNSHIP
BUCKS COUNTY, PENNSYLVANIA
JULY 14, 2020
PROJECT 19-05-WRR

Van Cleef
ENGINEERING ASSOCIATES

With Offices In
New Jersey, Pennsylvania & Delaware

501 NORTH MAIN STREET, DOYLESTOWN, PA 18901
EMAIL: CONTACTUS@VANCLEEFENGINEERING.COM
WEB: WWW.VANCLEEFENGINEERING.COM
PHONE (215) 345-1876 FAX (215) 345-1730

8

1. PROJECT INFORMATION

Project Name: **Walnut Creek Acquisitions, LP**
Date of Review: **8/25/2020 01:07:31 PM**
Project Category: **Development, Residential, Subdivision containing more than 2 lots and/or 2 single-family units**
Project Area: **24.45 acres**
County(s): **Bucks**
Township/Municipality(s): **WARRINGTON**
ZIP Code: **18914**
Quadrangle Name(s): **AMBLER; DOYLESTOWN**
Watersheds HUC 8: **Crosswicks-Neshaminy**
Watersheds HUC 12: **Cooks Run-Neshaminy Creek**
Decimal Degrees: **40.251587, -75.201442**
Degrees Minutes Seconds: **40° 15' 5.7140" N, 75° 12' 5.1909" 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.

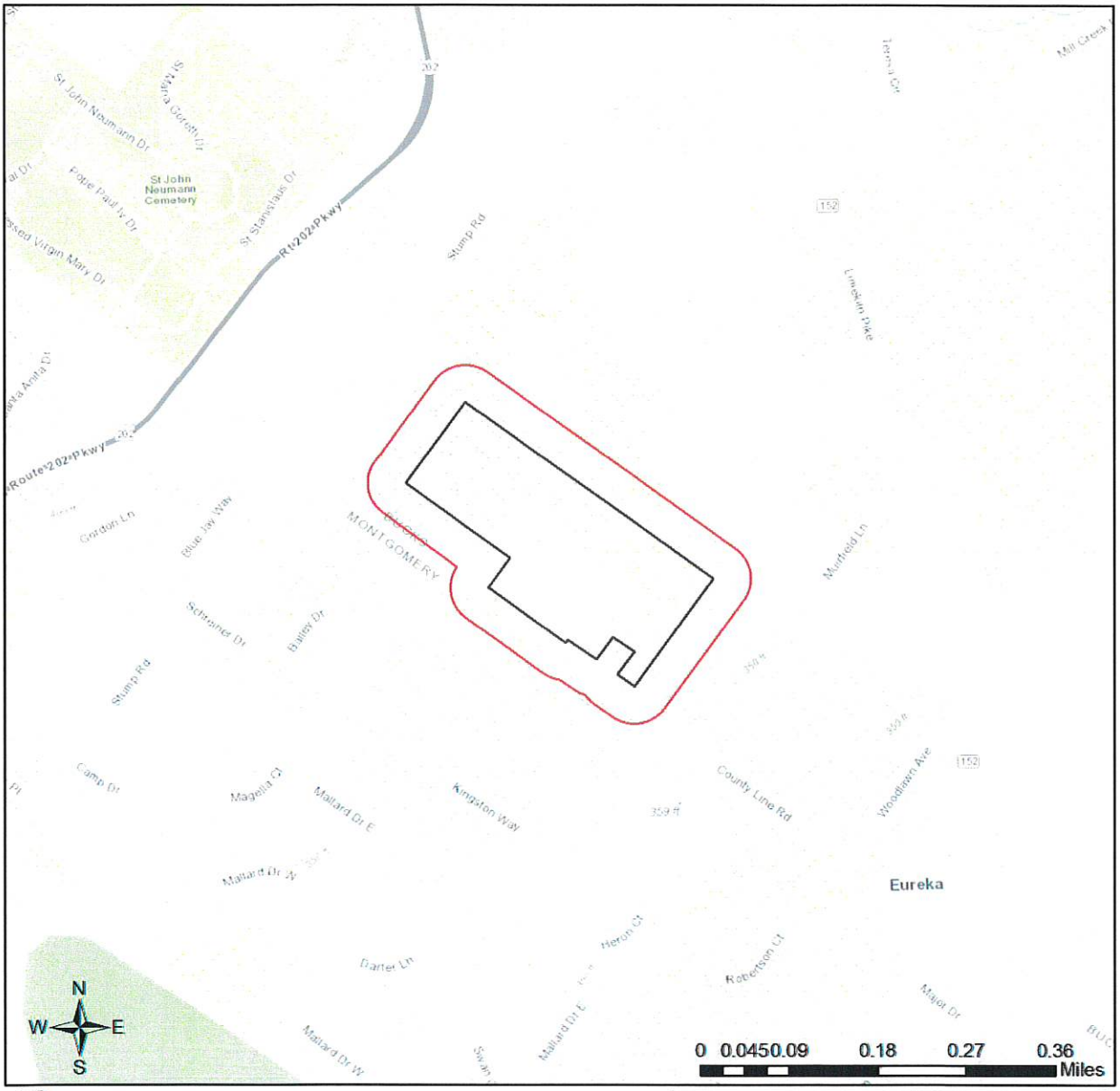
Walnut Creek Acquisitions, LP

Project Boundary

Buffered Project Boundary

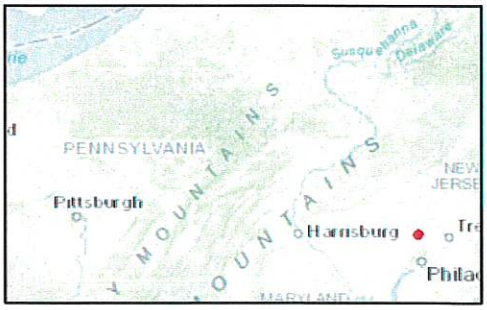
Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China

Walnut Creek Acquisitions, LP



Project Boundary

Buffered Project Boundary



Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

RESPONSE TO QUESTION(S) ASKED

Q1: The proposed project is in the range of the Indiana bat. Describe how the project will affect bat habitat (forests, woodlots and trees) and indicate what measures will be taken in consideration of this. Round acreages up to the nearest acre (e.g., 0.2 acres = 1 acre).
Your answer is: The project will affect 1 to 39 acres of forests, woodlots and trees.

Q2: Is tree removal, tree cutting or forest clearing of 40 acres or more necessary to implement all aspects of this project?
Your answer is: No

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. Two review options are available to permit applicants for handling PNDI coordination in conjunction with DEP's permit review process involving either T&E Species or species of special concern. Under sequential review, the permit applicant performs a PNDI screening and completes all coordination with the appropriate jurisdictional agencies prior to submitting the permit application. The applicant will include with its application, both a PNDI receipt and/or a clearance letter from the jurisdictional agency if the PNDI Receipt shows a Potential Impact to a species or the applicant chooses to obtain letters directly from the jurisdictional agencies. Under concurrent review, DEP, where feasible, will allow technical review of the permit to occur concurrently with the T&E species consultation with the jurisdictional agency. The applicant must still supply a copy of the PNDI Receipt with its permit application. The PNDI Receipt should also be submitted to the appropriate agency according to directions on the PNDI Receipt. The applicant and the jurisdictional agency will work together to resolve the potential impact(s). See the DEP PNDI policy at https://conservationexplorer.dcnr.pa.gov/content/resources.

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). 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
Email: RA-HeritageReview@pa.gov

U.S. Fish and Wildlife Service
Pennsylvania Field Office
Endangered Species Section
110 Radnor Rd; Suite 101
State College, PA 16801
Email: IR1_ESPenn@fws.gov
NO Faxes Please

PA Fish and Boat Commission
Division of Environmental Services
595 E. Rolling Ridge Dr., Bellefonte, PA 16823
Email: RA-FBPACENOTIFY@pa.gov

PA Game Commission
Bureau of Wildlife Habitat Management
Division of Environmental Planning and Habitat Protection
2001 Elmerton Avenue, Harrisburg, PA 17110-9797
Email: RA-PGC_PNDI@pa.gov
NO Faxes Please

7. PROJECT CONTACT INFORMATION

Name: Kevin A. Kester, RLA.
Company/Business Name: Van Cleef Engineering Associates
Address: 501 North Main Street
City, State, Zip: Doylestown, PA 18901
Phone: (215) 345-1876 Fax: (215) 345-1730
Email: KKester@vancleefengineering.com

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.

applicant/project proponent signature

08-25-2020
date

19-05-WRR

Kevin Kester

From: BUREAU OF FORESTRY <noreply@gge4mailer.com>
Sent: Monday, August 24, 2020 5:00 PM
To: kkester@vancleefengineering.com
Subject: Transaction Receipt from BUREAU OF FORESTRY

This is the receipt for your purchase at DCNR BUREAU OF FORESTRY CONSERVATION EXPLORER.

Order Information

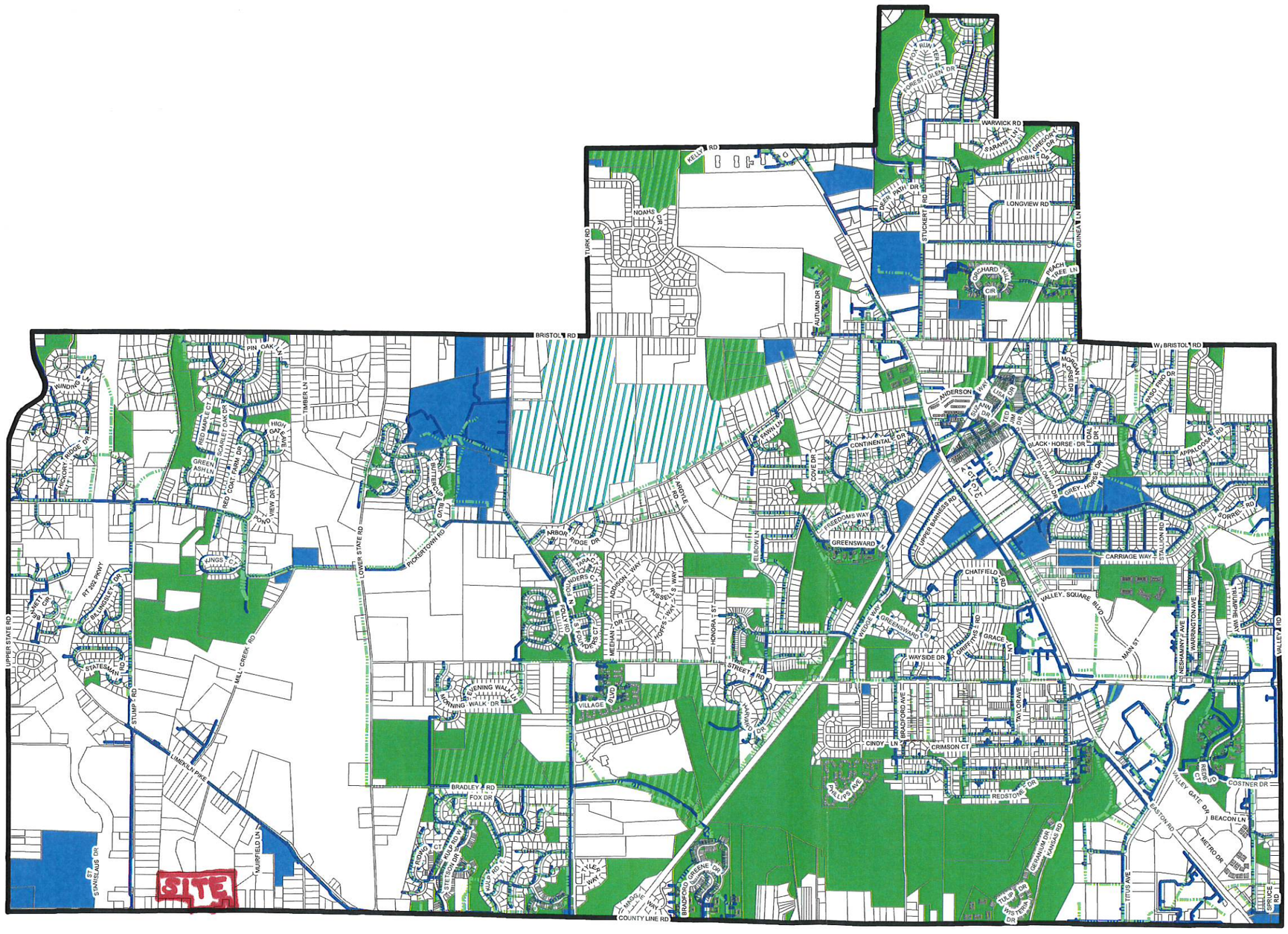
Quantity	Item	Unit		Price
1	**Id: PNDI-716993; Title: Walnut Creek Acquisitions, LP; Project Type: Development, Residential, Subdivision containing more than 2 lots and/or 2 single-family units; Project Size: Standard;**	40.00	USD	40.00
		Total	**USD**	**40.00**

This order is now complete. Transaction approved!

Here is your receipt:

```
========== TRANSACTION RECORD ==========
BUREAU OF FORESTRY
400 MARKET ST
HARRISBURG, PA 17101
United States
WWW.PA.GOV

TYPE: Pre-Authorization

ACCT: Visa                    $ 40.00 USD

CARDHOLDER NAME : Cynthia V. Norfleet
CARD NUMBER     : ############1897
DATE/TIME       : 24 Aug 20 16:59:51
REFERENCE #     : 001 0179471 M
AUTHOR. #       : 514295
TRANS. REF.     : 55304

    Approved - Thank You 100


Please retain this copy for your records.

Cardholder will pay above amount to
card issuer pursuant to cardholder
agreement.
=======================================
```

Map 5
Community Facilities



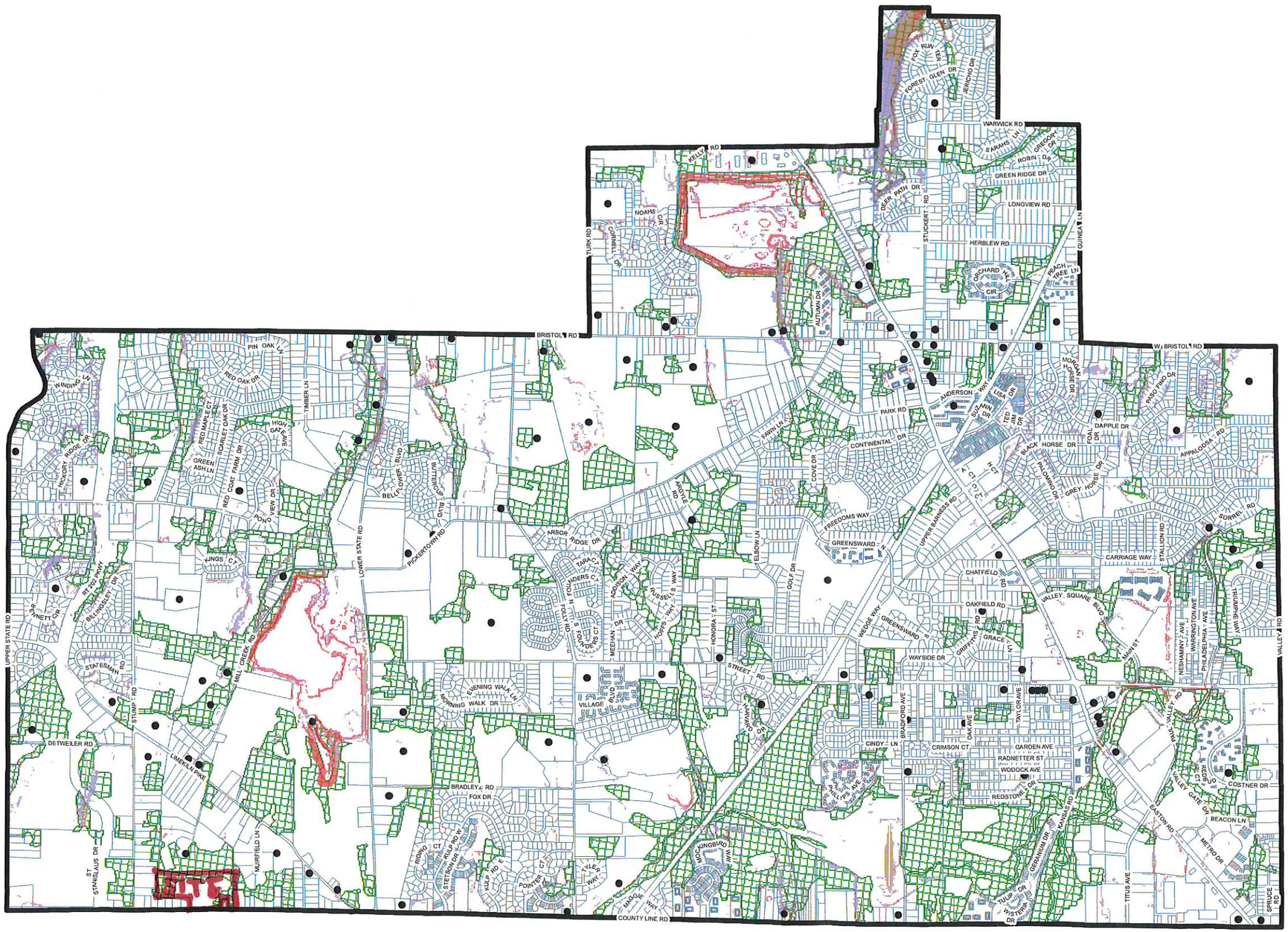
- Protected Open Space
- Protected Farmland
- Parks & Recreation (County & Township)
- Government & Institutional
- Sewer Lines
- Water Lines

Warrington Township
Bucks County, Pennsylvania

0 2,000 4,000 Feet

Prepared by: Bucks County Planning Commission
2018

Map 4
Natural & Historic Resources



- Woodlands

Steep Slopes

- 8 to 15 Percent
- 15 to 25 Percent
- Greater than 25 Percent
- Historic Resources

Source:
Woodlands- DVRPC Land Cover Data Set, 2010
Steep Slopes- DCNR PAMAP Program, 2008

Warrington Township
Bucks County, Pennsylvania

0 2,000 4,000 Feet

N

Prepared by: Bucks County Planning Commission
2018

GRAPHIC SCALE

0 30 60 120 180

(IN FEET)
1 inch = 60 ft.

WALNUT CREEK ACQUISITIONS, L.P.

SITE RENDERING
WARRINGTON TOWNSHIP
BUCKS COUNTY, PENNSYLVANIA
JULY 14, 2020
PROJECT 19-05-WRR

Van Cleef
ENGINEERING ASSOCIATES

With Offices In
New Jersey, Pennsylvania & Delaware

501 NORTH MAIN STREET, DOYLESTOWN, PA 18901
EMAIL: CONTACTUS@VANCLEEFENGINEERING.COM
WEB: WWW.VANCLEEFENGINEERING.COM
PHONE (215) 345-1876 FAX (215) 345-1739