



**TOWNSHIP of HOPEWELL  
MERCER COUNTY**

**201 WASHINGTON CROSSING – PENNINGTON ROAD  
TITUSVILLE, NEW JERSEY 08560-1410**

**PROJECT / APPLICATION**

BLOCK:

LOT:

ADDRESS:

PROJECT NAME:

**REPORTS AND SUPPORTING  
DOCUMENTS**

**ENVIRONMENTAL IMPACT STATEMENT**

# MidAtlantic Engineering Partners

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May 11, 2023

Project # APR-2203

## ENVIRONMENTAL IMPACT ASSESSMENT FOR 2500 PENNINGTON ROAD

**BLOCK 78, LOT 17  
HOPEWELL TOWNSHIP, MERCER COUNTY, NEW JERSEY**

**PREPARED FOR:**

**AMERICAN PROPERTIES @ HOPEWELL II, LLC**

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## **TABLE OF CONTENTS**

<b>1.0</b>	<b>SUMMARY</b>	<b>2</b>
A.	Introduction	2
B.	Existing Conditions	2
C.	Project Summary Description	2
D.	Impacts of Development	3
<b>2.0</b>	<b>PROPOSED DEVELOPMENT</b>	<b>4</b>
A.	Location	4
B.	Suitability of Site	4
C.	Intended Use	5
D.	Buildings	5
E.	Amenities	6
F.	Roadways	7
G.	Infrastructure	7
G.	Construction	8
D.	Maintenance	8
<b>3.0</b>	<b>AFFECTED ENVIRONMENT, INVENTORY &amp; ASSESSMENT</b>	<b>9</b>
A.	Geology	9
B.	Topography	9
C.	Soils	9
D.	Wetlands and State Open Waters	10
E.	Surface Water & Hydrology	10
F.	Groundwater	10
G.	Water Quality	11
H.	Floodplains	11
I.	Vegetation	11
J.	Wildlife & Habitat	12
K.	Threatened & Endangered Species	13
L.	Air Quality	15
M.	Noise and Light Pollution	15
N.	Cultural, Historic, and Archeological Resources	16
O.	Solid Waste	16
P.	Natural & Depletable Resources	17
Q.	Energy Consumption	17
R.	The Built Environment	17
<b>4.0</b>	<b>MEANS OF MITIGATING ADVERSE ENVIRONMENTAL IMPACTS</b>	<b>19</b>
<b>5.0</b>	<b>UNAVOIDABLE IMPACTS</b>	<b>20</b>
<b>6.0</b>	<b>CONCLUSION</b>	<b>20</b>
<b>7.0</b>	<b>LIST OF AGENCIES &amp; REQUIRED APPROVALS</b>	<b>21</b>
<b>8.0</b>	<b>REFERENCES</b>	<b>22</b>
<b>9.0</b>	<b>APPENDICES</b>	

### **LIST OF APPENDICES**

APPENDIX A	USGS QUAD MAP
APPENDIX B	ROAD MAP
APPENDIX C	USDA SOILS MAP
APPENDIX D	SITE PHOTOGRAPHS
APPENDIX E	LOI LINE VERIFICATION

**A. INTRODUCTION**

This Environmental Impact Statement has been prepared in accordance with the requirements of the Hopewell Township Land Development Ordinance and Checklist Item #13 for Preliminary Site Plan submission. section 140-105. The purpose of this report is to evaluate the impacts of the proposed Multi-Family Residential Development on the existing lands. This report refers to other specific reports addressing development, hydrology, soils, traffic, etc., which have been prepared and submitted in support of the proposed development.

The proposed project consists of 55 market rate townhomes as well as one affordable housing apartment building with 12 units and internal roadways, parking stalls, stormwater management measures which include green infrastructure and associated grading. The site is located at State Route 31, Hopewell Township, Mercer County and is known as Block 78, Lot 17. The site contains a total of 11.08 acres.

**B. EXISTING CONDITIONS**

The property currently contains a single-family home with a detached garage, wooded areas, and a paved driveway. It has frontage along Pennington Road, New Jersey Route 31. The property contains a wetlands area and a freshwater stream with associated buffers toward the rear of the property. This has been verified in a Letter of Interpretation (LOI), File No 1106-08-0012.1 FWW170001, issued August 17, 2018 and is included in the appendices of this report. All required State/wetlands permits determined to be required to provided proposed improvements will be obtained prior to development.

In general, the topography of the subject property slopes from the south to the north. Onsite elevations range approximately from a high of  $\pm 208$  feet near the southern property line to a low of  $\pm 198$  feet within the wetlands which surround a stream tributary of Stony Brook.

**C. PROJECT SUMMARY DESCRIPTION**

The proposed project will consist of 12-unit affordable apartments within one three-story building as well as 55-unit market rate townhomes accessed via Pennington Road. Utility services will be provided by Trenton Water Company, Ewing-Lawrence Sewerage Authority and PSE&G (electric) and Elizabethtown Gas Company. Refuse collection will be via independent contractor to be engaged by the property Owner.

This document has been prepared in accordance with the Township of Hopewell Land Use Ordinance for seeking Preliminary and Final Site Plan approvals from the Township's Planning Board. Subsequent approvals will be required from various other agencies, including: Delaware & Raritan Canal Commission, Mercer County Soil Conservation District; Mercer County and NJDEP Division of Land Use Regulation.

**D. IMPACTS OF DEVELOPMENT**

The proposed new development will serve a demonstrated need within the community and region by providing new residential units for both market rate users and to satisfy the Townships Affordable Housing requirement. The proposed site is well suited, being located proximate to main roadways for transportation and complementary commercial and retail development along Route 31. The new construction has both

positive and negative environmental and societal impacts, however the development design has mitigated the potential negatives while enhancing the positive features.

The development meets a known need for residential development.

The site is sufficiently large to allow for development of the housing and necessary parking, roadways, infrastructure, and stormwater management while still preserving wooded areas for buffers and setbacks from property lines.

The development meets the Township's land planning objectives and is compliant with the zoning and design standards as set forth by Township ordinance.

Removal of trees is mitigated by both remaining areas of tree preservation and proposed native tree plantings within the landscape plan.

The surface water patterns, recharge to groundwater, and hydrology of the site are maintained by utilizing stormwater features that recharge stormwater through swales and recharge basins.

Significant findings of this EIS include the following:

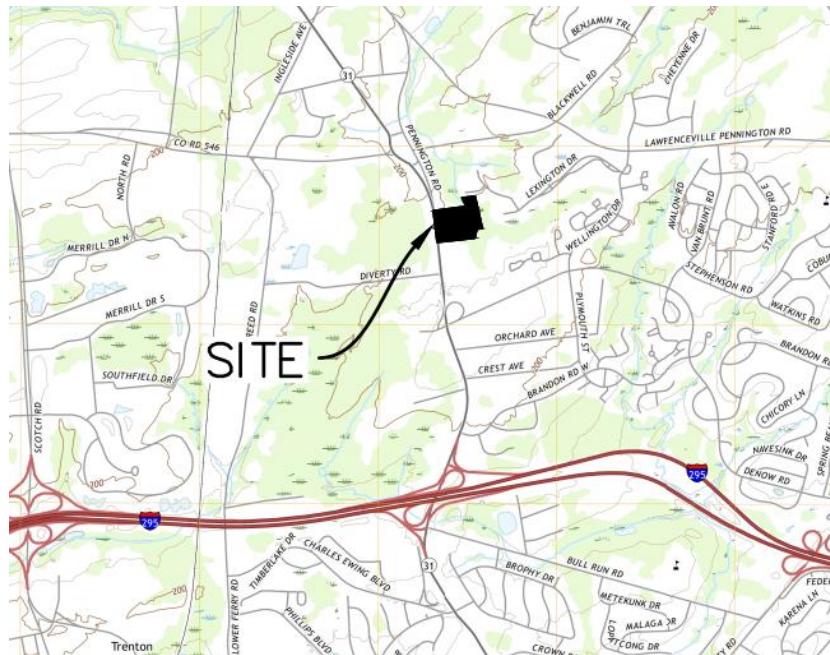
- There will be no impact to wetlands, due to the LOI issued by NJDEP;
- There will be no impact to critical habitat for threatened or endangered species of wildlife;
- There are no existing contamination restrictions or concerns upon the property;
- Sufficient infrastructure capacity (sewer, potable water, electric, natural gas) exists to support the proposed development.
- The main roadway arteries adjacent to the property can adequately accept the increased volume of traffic from the development as evidenced within the Traffic Impact Report provided.
- The impacts to the population of the Township are minimal.
- The proposed project meets the Township's planning and zoning objectives.

In summary, the proposed development can be built without adverse environmental impacts.

## **2.0 PROPOSED DEVELOPMENT**

### **A. Location**

The property is known as Block 78, Lot 17 as shown on the tax assessment maps of the Township of Hopewell, Mercer County, New Jersey (Sheet 20), containing 11.08 acres. The site location is shown on copies of the USGS Quadrangle map (below and Appendix A) and road map (Appendix B).



## B. Suitability of Site

The purpose of the proposed project is to construct market rate townhomes and affordable housing units. The development will contribute to the development goals of the Township. Among the benefits are increased quality housing product.

The property is deemed suitable for the proposed development. The following elements were considered from a site suitability perspective:

- Zoning and Planning

The site meets the goals and objectives of the Township's Ordinance, IMF-1 Zone, and the current Land Use Ordinance. Preliminary & Final Major Site Plan Approval is being requested as part of the Land Development Application to Hopewell Township.

- Utility and Infrastructure

The region is served by adequate public utilities with the capacity to serve the site. Utility services will be provided by Trenton Water Company, Ewing-Lawrence Sewerage Authority and PSE&G (electric) and Elizabethtown Gas Company. Cable television, internet, Phone and/or data services by Comcast.

- Land and Environmental Conditions

The property contains wetland areas and stream with associated buffers toward the rear of the property. These wetland/streams and buffers have been verified in a Letter of Interpretation (LOI), File No 1106-08-0012.1 FWW170001, issued August 17, 2018. The property is not subject to flooding and is identified as above the 500-year flood limit by the FEMA Flood Map Panel 116 of 276, Map Number 34021C0116F, effective date July 20, 2016. There are no easements or restrictions incumbent upon the property. The property is not listed by NJDEP as a known contaminated site and there are no known environmental conditions or constraints due to prior uses or contamination.

- Stormwater Management

The NJDEP rules regarding stormwater management, N.J.A.C. 7:8-5.2(a), state that stormwater management measures for a major development shall be developed to meet the erosion control, groundwater recharge, stormwater runoff quantity, and stormwater runoff quality standards. N.J.A.C. 7:8-1.2 defines a major development as any development that disturbs one or more acres of land or increases impervious surface by one-quarter acre or more. The proposed improvements will increase the total impervious area for the site by more than one-quarter acre, the proposed development meets the definition of a Major Development.

Under existing conditions, there are no stormwater collection systems are in place nor any stormwater mitigation systems.

The proposed stormwater management system has been designed to meet the recharge, quantity and quality requirements of N.J.A.C 7:8.

- Intended Use

The site is intended to be developed as a multi-family residential development.

- Traffic Impacts

A Traffic Engineering Assessment was performed by Shropshire Associates for the site and surrounding roadways. The development generated traffic, based on the Institute of Transportation Engineers (ITE) models, is included in that Assessment.

The findings of this study conclude that the proposed multi-family residential development will have minimal impact on the adjacent roadway network. Traffic generated will cause no changes to the levels of service Rt. 31. Existing movements to Rt.31 from the site access points will do so within acceptable engineering parameters. Impact Assessment determined that the proposed Site Plan has been prepared in conformance to proper traffic engineering principles.

- Infrastructure

The development will necessitate the expansion or extension of existing infrastructure. These improvements are to be in conformance with all governing regulations and will require review and approval from agencies such as: Hopewell Township, NJDEP, Mercer County Soil Conservation District, and regional utility companies and utility authorities.

The development includes new sanitary sewer mains and lateral connections to the proposed buildings. All sanitary flows are to be within gravity flow pipes and no pump or lift stations are required on site.

- Construction

Construction of the proposed development will occur over an approximate 1-2-year timeframe, including the site improvements and infrastructure, as well as the building construction. While site work and building construction, activities will be in keeping with typical industry standards, construction activity in general has several environmental impacts outside of those other long-term impacts reviewed within this document.

Construction activities can create dust and noise through the operation of equipment and the moving of materials. Procedures will be followed in accordance with a permit from Mercer County Soil Conservation district that will limit dust and soil erosion. Dust control measures include watering of exposed, dry soils, seeding or stabilizing open lawn areas as quickly as possible and completing site work in a timely fashion. Noise control measures are also followed in accordance with Township limitations on allowable work hours.

The use of heavy equipment and construction vehicles also pose certain inherent risks such as damage to roadways, spills from broken or faulty hydraulic equipment, etc. The risks are mitigated by proper equipment maintenance, by utilizing stone tracking pads and equipment wash areas, and through oversight and inspection by the Township and other agencies.

Construction operations also generate waste that is atypical of a residential use, such as: concrete and lumber byproducts; trees, branches, and stumps from clearing; sanitary waste in port-a-jons, among others. These waste materials must and will be handled and disposed of in a proper fashion according to Township Ordinances and all applicable codes and laws. Maximum use of material recycling will be implemented where feasible.

- Maintenance

Following completion of construction activities, management of the facility will require on-going maintenance operations. Typical maintenance operation includes mowing and landscape care; stormwater sewer and basins maintenance and cleaning; periodic building repairs; snow and ice removal. These measures and the equipment utilized is typically far less intense than during construction. Like construction operations, proper maintenance of equipment such as mowers, snow blowers, and hand tools must be and will be performed. Any waste generated from landscaping, mulching, or mowing is to be disposed of off-site in a proper fashion and where feasible recycled or composted.

### **3.0 AFFECTED ENVIRONMENT, INVENTORY, & ASSESSMENT**

This section evaluates the detailed environmental site components and assesses the existing conditions as well as impacts due to development. Where applicable, this analysis identifies feasible specific means of mitigation for realistic comparisons of the positive and negative impacts to the natural and manmade environment.

#### **A. Geology**

Hopewell Township lies within the Newark basin in the Piedmont Physiographic Province in Mercer County. There are five (5) major bedrock classifications in Hopewell Township. The Stockton Formation is the oldest formation and consists of sand, gravel, and silt sized sediment of light gray and yellow arkosic sandstones. Conglomerates formed of rounded cobble, boulder and pebble-sized fragments are often encountered near the base of the Stockton Formation. According to the Surficial Geology of New Jersey digital data map published as ESRI's GIS by the New Jersey Geological survey, the surficial geology of the site consists of weathered shale, mudstone, and sandstone. The weathered zone can be as much as 10 feet thick overlying shale and mudstone, and up to 30 feet thick overlaying sandstone.

#### **B. Topography**

In general, the topography of the subject property slopes from the south to the north. Onsite elevations range approximately from a high of ±208 feet near the southern property line to a low of ±198 feet within

the wetlands which surround a stream tributary of Stony Brook. The proposed development predominantly matches a similar topography. The development of the site will not generate any significant soil cut or fill, requiring little or no trucking of soils. In general, roads and walkways will not exceed 5%. Grassed areas and overland swales will be a minimum of 2%. No slopes will exceed 3:1.

**C. Soils**

On site geotechnical investigation was performed by Geo-Technology Associates, Inc. in September of 2017, and additional soil/permeability testing to support the stormwater management design was done in November of 2022 by French & Parrello Associates. Both reports have been included with the Land Development application materials.

GTA performed thirteen (13) SPT borings and three (3) test pits throughout the development. The borings extended to depths ranging from approximately 6 to 15 feet below existing surface grades and the 3 test pits with in-situ infiltration testing extended to depths of about 5 1/2 to 10 feet below the ground surface. The GTA testing was performed for another client and design which is why FPA was engaged to take project specific test pits to support the currently proposed stormwater management design. The GTA investigation was intended to characterize the subsurface soil and groundwater conditions throughout the proposed residential development. Soil conditions were logged and samples from soil horizons were taken for laboratory testing. Soil descriptions were based on the Burmister Classification System, dividing components into sand, silt, and gravel. In general borings encountered an approximately 4-9-inch-thick layout of topsoil. The general subsurface profile consisted of predominantly sandy silt and lean clay residual soils. The surface of weathered shale was encountered at depths ranging from approximately 4 to 13 1/2 feet below the ground surface. The borings were terminated due to refusal in weathered shale bedrock at depths ranging from 7 to 14 1/2 feet.

Sixteen (16) test pits were performed in November of 2022 by FPA. Depth to groundwater varied from not encountered to 6'+. In general, surface layers consisted of sandy silt intermixed with different amounts of gravel which ranged from 3-8.7 feet below the existing ground surface. The static groundwater was encountered at depths ranging from approximately 8.7-11.3 feet. Based on soil mottling, indications of seasonal high groundwater were encountered at depths ranging from 7.5-12 feet.

Tested permeability rates from soil samples were consistent in that permeability rates do not support infiltration at the proposed development. As such, engineering methods such as underdrains in the proposed basins and porous pavements have been proposed.

**D. Wetlands and State Open Waters**

There are wetlands and wetland transition areas that affect the property. Proposed development has been designed to accommodate those areas and where the need exists to propose improvements, NJDEP permits will be obtained through application to the Land Use Department.

The site is not a Natural Heritage Priority site and is not located within any special water resource protection area nor is the site located along a category one stream. The site contains mixed deciduous woodlands within the property. An LOI line verification has been obtained to confirm this finding and is included in the Application materials for this project.

**E. Surface Water and Hydrology**

Stormwater runoff from paved surfaces are directed to a storm pipe collection system. Where feasible these pipes are limited or disconnected; however, pipes adequate for collecting up to the 25-year storm flows

from parking areas and impervious surfaces are proposed. The proposed biorientation basins can safely store and discharge all runoff associated with the 100-year storm event from the new development. Proposed downstream discharge is to a pipe and outfall near the stream located onsite on the northeast corner of the property.

**F. Groundwater & Aquifer Recharge**

On site geotechnical investigations were performed in September of 2017. Soil conditions were logged including soil moisture content, indications of any soil color mottling, and observed groundwater. The static groundwater was encountered at depths ranging from approximately 8.7-11.3 feet. Based on soil mottling, indications of seasonal high groundwater were encountered at depths ranging from 7.5-12 feet. Variations in the location of the long-term water table may occur because of changes in precipitation, evaporation, surface water runoff, and other factors not immediately apparent at the time of the exploration. Based on the groundwater observations and anticipated construction, groundwater is not expected to be encountered during construction.

The stormwater management system design has been configured to function without infiltration given the site's silt and clay soils with little to no permeability.

**G. Water Quality**

The proposed development will have no point sources of pollution. All sanitary sewerage is collected via public utility, and the treatment plan is governed under water quality standards by NJDEP. There will be no storage or bulk handling of materials on site which might pose a potential danger for spill or contamination. All household cleaners, paints, and similar substances will be disposed of through the solid waste pickup or as permitted by law for disposal of such materials but will in any case be removed from the site.

Potential means of non-point source pollution include such things as litter, runoff from vehicles and parking lots, the application of lawn fertilizer, etc. Management of non-point source pollution is addressed through the stormwater collection system under the rules promulgated under NJAC 7:8 and the NJDEP's Best Management Practices. Stormwater systems designed under these rules, such as the system within the proposed development are intended to *Minimize pollutants in stormwater runoff from new development in order to restore, enhance and maintain the chemical, physical, and biological integrity of the waters of the State, to protect public health, to safeguard fish and aquatic life and scenic and ecological values, and to enhance the domestic, municipal, recreational, industrial, and other uses of water.*

This site achieves these goals through maximizing the use of grass swales and utilizing bioretention basins which allow for settling of the water column. Quality under the rules is measured quantitatively by achieving 80% removal of the total suspended solids (TSS) from new development. The proposed system meets this criterion.

**H. Floodplains**

The property is not subject to flooding and is identified as above the 500-year flood limit by the FEMA Flood Map Panel 116 of 276, Map Number 34021C0116F, effective date July 20, 2016.

**I. Vegetation**

Regionally, the area is part of the Piedmont land formation which has a rich diversity of tree species and habitats. The existing property is developed with a single family home, driveway, pool and garage. As

such, there are cleared areas onsite, primarily to the interior, and wooded areas with native vegetation around the periphery. The native vegetation for these wooded areas are often dominated by pines and oaks, including pitch pine, short leaf pine, black oak, white oak, red oak, and to a lesser extent beech, hickory, sweetgum, sassafras, and red maple. The understory typically includes plants like low bush blueberry, scrub oak, and mountain laurel.

Plants and trees on site, are dominated by scrub pine and oak. The tree species observed are all common to the area, including pitch pine, white and black oak.

**J. Wildlife and Habitat**

The proposed project site contains various wildlife species common to New Jersey. The figure below presents a list of species that are typical (but not necessarily observed) for the vicinity:

<b>Birds</b>		<b>Mammals</b>	
<b>Scientific Name</b>	<b>Common Name</b>	<b>Scientific Name</b>	<b>Common Name</b>
<i>Cathartes aura</i>	Turkey Vulture	<i>Odocoileus virginiana</i>	White-tailed Deer
<i>Catharus fuscescens</i>	Veery	<i>Sciurus carolinensis</i>	Grey Squirrel
<i>Catharus guttatus</i>	Hermit Thrush	<i>Tamiasciurus striatus</i>	Chipmunk
<i>Centrurus carolinus</i>	Red-bellied Woodpecker	<i>Procyon lotor</i>	Raccoon
<i>Colaptes auratus</i>	Common Flicker	<i>Mephitis mephitis</i>	Striped Skunk
<i>Contopus virens</i>	Eastern Wood Peewee	<i>Didelphis virginiana</i>	Opossum
<i>Corvus brachyrhynchos</i>	American Crow	<i>Sylvilagus kloridans</i>	Common Cottontail
<i>Cyanocitta cristata</i>	Blue Jay	<i>Marmota monax</i>	Woodchuck
<i>Dendroica pinus</i>	Pine Warbler		
<i>Dendroica virens</i>	Black-throated Green Warbler		
<i>Dumetella carolinensis</i>	Catbird		
<i>Hylocichla mustelina</i>	Wood Thrush		
<i>Icteria virens</i>	Yellow-breasted Chat		
<i>Melospiza Georgiana</i>	Swamp Sparrow		
<i>Parus atricapillus</i>	Carolina Chickadee		
<i>Parus bicolor</i>	Tufted Titmouse		
<i>Pipilo erythrophthalmus</i>	Rufous Sided Towhee		
<i>Seiurus aurocapillus</i>	Ovenbird		
<i>Sitta carolinensis</i>	White-breasted Nuthatch		
<i>Thryothorus ludovicianus</i>	Carolina Wren		
<i>Toxostoma rufum</i>	Brown Thrasher		
<i>Turdus migratorius</i>	American Robin		
<i>Vireo olivaceus</i>	Red-eyed Vireo		

<i>Zenaida macroura</i>	Mourning Dove
<i>Larus delawarensis</i>	Ring-gilled Gull
<i>Larus argentatus</i>	Herring Gull
<i>Buteo borealis</i>	Red-tailed Hawk

In February (winter months), this office performed an in-field inventory log of the site, cataloging observed wildlife in and around the property, as well as evidence of wildlife. The summary findings are below:

In general, there were few individual birds and animals. Birds were observed both through visual sighting and use of listening for common bird songs. Birds observed included the Wood Thrush and Tufted Titmouse, both common to the pine forest. There was sign of woodpeckers on some of the dead stand trees on the site.

There were no small mammals such as squirrels or chipmunks observed. There were no signs of deer tracks.

Development of the proposed multifamily development will result in the loss of approximately 2.1 acres of existing habitat and forested areas. In general, the affected biotic communities are common within Mercer County. Development of these lands should not have a dramatic impact on overall populations of endemic (common) wildlife; however, it is reasonable to assume that there will be some loss in breeding habitat for these common species.

Population and species diversity may be reduced because of this development; however, a new base of species would be present once the project is completed. In addition, it is not unusual for many of the identified species and the species typical of this region to cohabit in developed suburban lands with humans.

This office has received a letter from the Office of Natural Lands Management dated February 9, 2023 stating that the searches have encountered two rare wildlife species. They are Cooper's Hawk and Great Blue Heron, neither of which have a federal protection status and special concern state protection status.

**K. Threatened and Endangered Species**

No threatened or endangered species have been noted on or within the vicinity of the site per NJDEP-listed threatened and endangered species potentially present in the local area. The site is not mapped as habitat for threatened or endangered species.

**L. Air Quality**

National and New Jersey Ambient Air Quality Standards (AAQS) have been adopted, in accordance with requirements of the Clean Air Act, for several pollutants to protect the public health and welfare, allowing for an adequate margin of safety. Primary AAQS have been established to protect public welfare.

The proposed development conforms to all applicable air, and radiation emission and effluent standards and all applicable air quality standards. There will be no emission of radiation, nor point source air emissions. Air emissions will be limited to building mechanical equipment and exhaust from automobiles: from both temporary construction vehicles and the long-term use of motor vehicles. Because of the increase in automobiles and motorized equipment during construction and long term, there will be an impact

however negligible to air quality at the site and in the surrounding region due to the project. Building equipment and vehicle emissions are strictly regulated by federal and state laws.

**M. Noise and Light Pollution**

The New Jersey Noise Control Code (N.J.A.C. 7:29-1.1 et seq.) provides standards and guidelines applicable to potential community impacts from the implementation of projects such as this development. As noted previously, there will be higher noise levels during construction, which will be mitigated by time limits for allowable working hours set by Municipal code. Further, there is relatively significant ambient noise due to the existing traffic along Rt. 31.

Sound levels are described on a logarithmic scale in decibel units (dB). Sound levels are described logarithmically because it compresses the large range of typical sound pressures into a smaller, more practical scale, which incidentally also more closely parallels the human ear's ability to judge relative loudness of sounds. Studies and measurements of most building equipment and operating construction equipment can be found with measured dB levels.

Following construction, all noise from the multi-family residential development will be typical for any suburban region. Further, the layout of the proposed development provides for setbacks from property lines. Noise dissipates according to distance per a logarithmic scale. A general rule of thumb states that sound is reduced by 6 dB for each doubling of distance from the source.

As examples, maximum anticipated noise levels, measured 10 feet away for a bulldozer is 96 dB. Therefore, at the property line, from a bulldozer operating 40 feet away the maximum sound level would be 84 dB; at 80 feet away the maximum sounds level would be 74 dB. This is not accounting for any dissipation through the trees.

Thus the impact of noise outside of the community will be negligible and likely less significant than the existing ambient noise level.

The site will produce light during the night hours. Access drives and parking areas will be lit. The lighting plan shows proposed outdoor illumination, being sufficient for safety and travel, but at minimally acceptable levels per the Township ordinance and industry standards. Area lighting will be on timers to reduce lighting levels to security levels only after approximately 9 PM.

None of the proposed lighting is at an intensity level to provide more than a line of sight effect, which will be mitigated by the preserved and planted trees within the setbacks. Therefore, the impact of light pollution emanating from the proposed warehouse facility will be negligible.

**N. Cultural, Historic, and Archeological Resources**

There are no known or documented Cultural, Historic, or Archeological Resources at or near the project location.

**O. Solid Waste**

The development provides for the collection and disposal of litter, recyclable material and solid waste in such a manner as to minimize adverse environmental effects and the threat to public health, safety and

welfare. All recyclable material and solid waste will be collected by private waste hauler and taken to an approved disposal/recycling facility.

The site collection of solid waste and recycling is typical of a warehouse facility. There is no curbside pickup. All waste will be collected in the specified locations per the approved site plan. Solid waste material is placed into a compactor, which minimizes the volume of solid waste and therefore the frequency of required pickups. Recycling is likewise collected at specified location on the site.

The property will be a managed site. Maintenance of buildings and grounds will be a priority to maintain a viable tenant. Management will therefore account for removal of litter and trash from the site and properly dispose of such waste. The proposed solid waste compactors on site are automated systems, which electronically call in for pickup once filled to a certain storage level.

**P. Natural and Depletable Resources**

The site has no known or significant natural resources or natural resources in need of preservation.

**Q. Energy Consumption**

Use and occupancy of the warehouse facility will place energy demands upon the utility providers (PSE&G.). These demands are both a factor of the proposed use as well as the means by which any building or site development is constructed. Demands on energy will come from: building heating and cooling; building and exterior lighting; landscape, parking lot, and building maintenance; and the temporary demands on energy for construction. The proposed building will not have internal elevators, which consume significant energy resources.

The proposed new building elements, as well as the construction efforts, will be performed in strict accordance will all applicable building codes, and are targeted to meet the Energy Star requirements for increased efficiency.

**R. The Built Environment**

The scenic and aesthetic impact is a significant factor in how the public perceive the built environment; however, these impacts can be difficult to quantitatively measure or score. The surrounding development is not identified within zoning or any relevant mapping as a scenic corridor and there are no identifying scenic elements where views should be preserved.

The proposed use will essentially be in keeping with the character of the Township and surrounding environment. The Township has implicitly viewed the proposed development as a positive use of the land by zoning the parcel for such use.

**4.0 MEANS OF MITIGATING ADVERSE ENVIRONMENTAL IMPACTS**

Potential environmental impacts attributable to the proposed development are summarized in the table below, along with proposed mitigation measures. In general, potential environmental impacts from the proposed development of the subject property can be satisfactorily mitigated.

<b>Parameter</b>	<b>Potential Impact</b>	<b>Proposed Mitigation Measure</b>
Geology	No impacts anticipated.	No mitigation required.

Topography	Excavation and alteration of the ground surface.	Minimize the need to import or export soils. Plan the development grading to closely simulate existing conditions.
Soils	Capacity to accept recharge or stormwater for water quality.	Design infiltration areas to match (location and soil horizon) with the most permeable soil strata.
	Soil erosion from construction activity.	Implement and follow an approved Soil Erosion Control Plan.
Wetlands & State Open Waters	No impacts are anticipated.	No mitigation is required.
Surface Water & Hydrology	Existing runoff is primarily recharged into the soils onsite.	Design of proposed stormwater system to continue pattern of ground water recharge.
Groundwater	Impacts to shallow groundwater regions.	The site has no areas with shallower groundwater elevations.
Water Quality	Point source and non-point source pollution.	No point sources of pollution are proposed. Non-point source pollution addressed through site management, removal of solid wastes, and stormwater system water quality initiatives.
Floodplains	No impacts anticipated.	No mitigation required.
Vegetation	Clearing of forested areas.	Maximize areas of preserved trees. Landscape developed areas with native plantings.
Wildlife Habitat	Clearing of forested areas.	Maximize areas of preserved woodlands. Landscape the community with native plantings that promote wildlife foraging and habitat.
Threatened & Endangered Species	No Threatened or Endangered Species	None Required
Air Quality	Fugitive dust from construction activities may temporarily increase levels of total suspended particulates in the short term. Production of carbon monoxide as the cars idle.	Dust control in accordance with Freehold Soil Conservation District standards, including: the use of properly maintained construction equipment; the use of trap covers on trucks transporting materials to and from the site; the dampening and weekly cleaning of all onsite roadway surfaces and excavated areas; and the maintenance of all construction entrances to the site. Therefore, no qualitative carbon monoxide mitigation measures are necessary for motor vehicles.
Noise and Light Pollution	Construction activities are expected to cause temporary impacts to noise levels.	Limit construction activities to daytime hours. Design site layout to form perimeter of preserved trees and then buildings as an effort at noise abatement.
Cultural, Historic, and Archaeological Resources	No impacts anticipated.	No mitigation required.
Solid Waste	Creation of solid waste stream.	Manage site to control means and location of storage and disposal. Utilize compactors and automated system of pickup.
Natural & Depletable Resources	No impacts anticipated.	No mitigation required.
Energy Consumption	No impacts anticipated.	No mitigation required.

Parameter	Potential Impact	Proposed Mitigation Measure
The Built Environment	Changes to architectural or aesthetic value of the area.	Construct aesthetically pleasing building. Install and maintain property landscaping. Maintain ordinance required setbacks and forested perimeter of site.

## **5.0 UNAVOIDABLE IMPACTS**

While the overall net impacts from development of the site are deemed to be minimal, and the net outcome in keeping with the Township's planning and land use objectives, there are certain unavoidable impacts. These impacts are not necessarily positive or negative and may or may not be compensated for by mitigation measures. Unavoidable impacts include:

Clearing of existing trees: No use or activity can be accomplished on the property without removal of some number of trees and a certain amount of forested area.

Utilities: An expansion to the utility network and regional infrastructure is required.

The Built Environment: The appearance and visual aspect of the property will change with development.

## **6.0 CONCLUSION**

The 11.08-acre property is to be developed with 55 market rate townhomes and one affordable housing apartment building with 12 units. The development will have 290 garages & driveways and 99 off-street parking spaces. While development of the site necessarily means "change", and there are certain unavoidable impacts, this assessment of impacts and compensation through mitigation measures concludes that the development does not have a significant negative environmental impact. The outcome of development yields a warehouse facility that meets the planning and land use objectives promulgated by Hopewell Township. The design, layout, and project elements all work to create a new development that has the least impact to the region, preserves key features of the existing site, and meets all regulatory requirements.

### Finding of No Significant Impact

Based upon the compiled available data for the property along with a scientific, quantitative analysis and a qualitative planning analysis, the proposed development is deemed to have ***No Significant Impact*** to the surrounding natural and man-made environment.

## **7.0 LIST OF AGENCIES AND REQUIRED APPROVALS**

Approvals will be required from the following agencies prior to construction:

- Hopewell Township Planning Board
- Mercer County Planning Board (Letter of No Interest)
- Mercer County Soil Conservation District
- NJDOT Access and Occupancy
- Delaware and Raritan Canal Commission

## **8.0 REFERENCES**

Township of Hopewell Land Use Ordinance,

Council on Environmental Quality (CEQ) Regulations, PART 1502 – Environmental Impact Statement[s].

Nation Heritage Data Base Correspondence- New Jersey Department of Environmental Protection, Division of Parks and Forestry, Natural Heritage Program.

New Jersey and National Registers of Historic Places website,  
<http://www.state.nj.us/dep/hpo/1identify/lists/ocean.pdf>

United States Department of Agriculture, Soil Conservation Service.  
Soil Survey of Monmouth County.

Beans, B. E and Larry Niles, *Endangered and Threatened Wildlife of New Jersey*. Rutgers University Press. New Brunswick, NJ, 2003

Bent, A.C. *Life Histories of North American Birds*, 1939; and [www.birdsbybent.com](http://www.birdsbybent.com)

U.S. Forest Service, *Wildlife Habitat Management Handbook*, U.S.D.A. FSH 2609.23R. 1971.

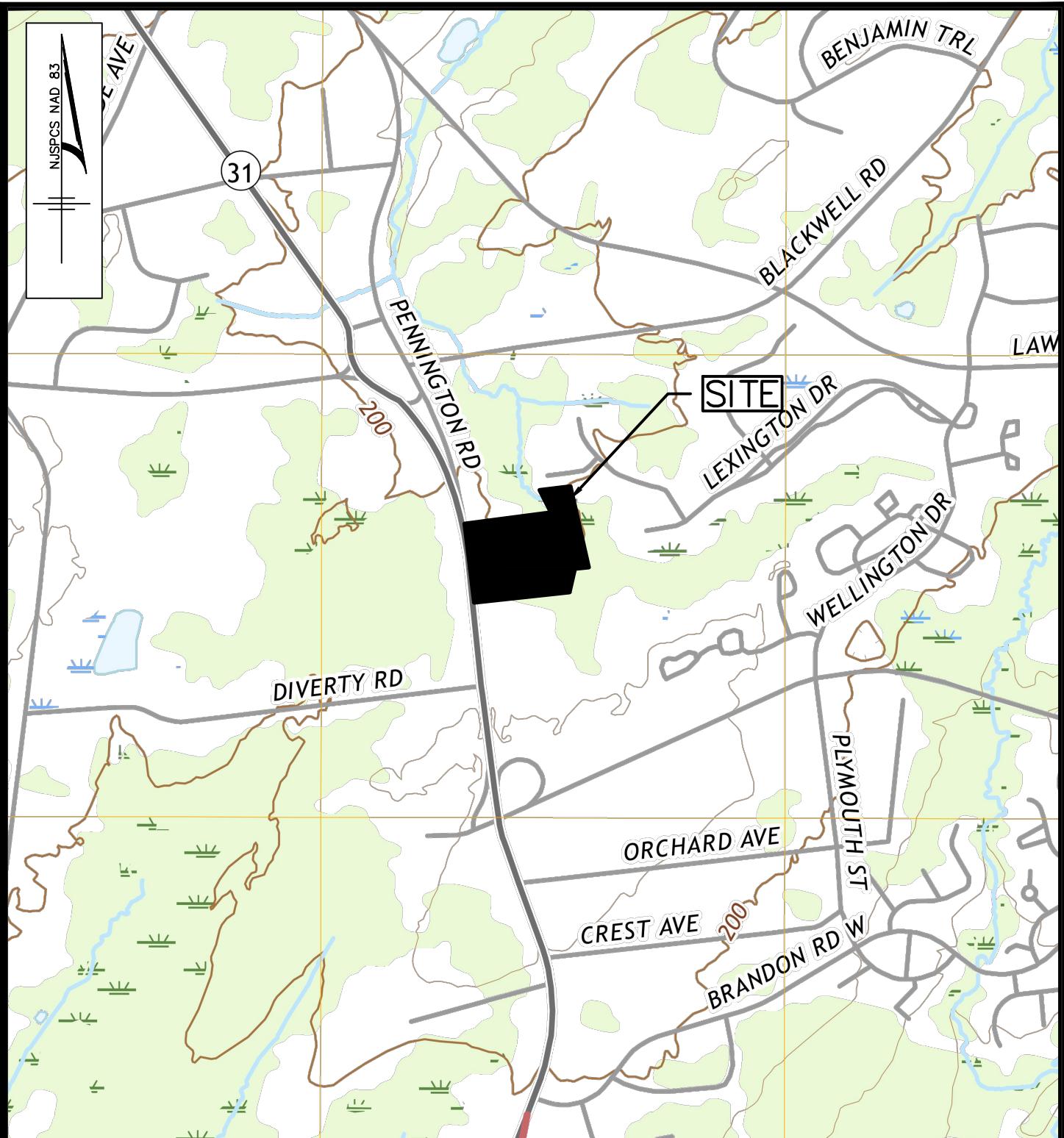
U.S. Fish and Wildlife Service, *Estimating Wildlife Habitat*, variables FWS/OBS – 81/47. 1971.

New Jersey Department of Environmental Protection, Division of Parks and Forestry, *Geological Map of New Jersey*.

*Petersons Birds of North America*, iPhone application

# APPENDIX A

## USGS QUAD MAP



**MidAtlantic**

Engineering Partners, LLC

**2500 PENNINGTON ROAD  
BLOCK 78, LOTS 17  
USGS QUAD MAP**

SITUATED IN  
HOPEWELL TOWNSHIP, MERCER COUNTY, NEW JERSEY

DRAWN BY: LV	CHECKED BY: IB	RELEASED BY:	PROJECT No.: APR-2203
DATE: 03/21/23	HORIZONTAL SCALE: 1"=1,000'	VERTICAL SCALE: AS SHOWN	DRAWING NAME: 01-Title.dwg

Certificate of Authorization No. 24GA28184000

Louis L. Zuegner IV P.E. PE No. GE04226500  
William J. Parkhill II P.E. PE No. GE04753800

Gateway 195 Centre  
5 Commerce Way, Suite 200  
Hamilton, NJ 08691  
609-910-4450

## APPENDIX B

### ROAD MAP



MidAtlantic

Engineering Partners, llc

2500 PENNINGTON ROAD  
BLOCK 78, LOTS 17  
ROAD MAP

SITUATED IN  
HOPEWELL TOWNSHIP, MERCER COUNTY, NEW JERSEY

DRAWN BY:	CHECKED BY:	RELEASED BY:	PROJECT NO.:
LV	IB		APR-2203
DATE:	HORIZONTAL SCALE:	VERTICAL SCALE:	DRAWING NAME:
03/21/23	1"=1,000'	AS SHOWN	01-Title.dwg

Certificate of Authorization No. 24GA28184000

Louis L. Zuegner IV P.E. PE No. GE04226500  
William J. Parkhill II P.E. PE No. GE04753800

Gateway 195 Centre  
5 Commerce Way, Suite 200  
Hamilton, NJ 08691  
609-910-4450

## APPENDIX C

### USDA SOILS MAP



MidAtlantic

Engineering Partners, llc

2500 PENNINGTON ROAD

BLOCK 78, LOTS 17

SOILS MAP

SITUATED IN

HOPEWELL TOWNSHIP, MERCER COUNTY, NEW JERSEY

DRAWN BY: LV	CHECKED BY: IB	RELEASED BY:	PROJECT No.: APR-2203
DATE: 03/21/23	HORIZONTAL SCALE: 1"=200'	VERTICAL SCALE: N/A	DRAWING NAME: 01-Title.dwg

Certificate of Authorization No. 24GA28184000

Louis L. Zuegner IV P.E. PE No. GE04226500  
William J. Parkhill II P.E. PE No. GE04753800

Gateway 195 Centre  
5 Commerce Way, Suite 200  
Hamilton, NJ 08691  
609-910-4450

Name: G:\American Properties\JOBS\APR-2203 - Hopewell Township\DWG\01-Title.dwg  
Plot time: Mar 21, 2023 - 3:54pm

## APPENDIX D

## SITE PHOTOGRAPHS

# MidAtlantic Engineering Partners

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Photo 1: View north downstream where tributary leaves property

2026B Briggs Road, Suite 300  
Mt. Laurel, NJ 08054  
609.910.4450  
Corporate Headquarters

1971 Highway 34, Suite 201  
Wall Township, NJ 07719  
732.722.5899

321 W. State Street  
Media, PA 19063  
610.565.0020

26 Washington Street, 3rd Floor  
Morristown, NJ 07960  
973.715.8652



Photo 2: View of stream above downstream end of existing culvert

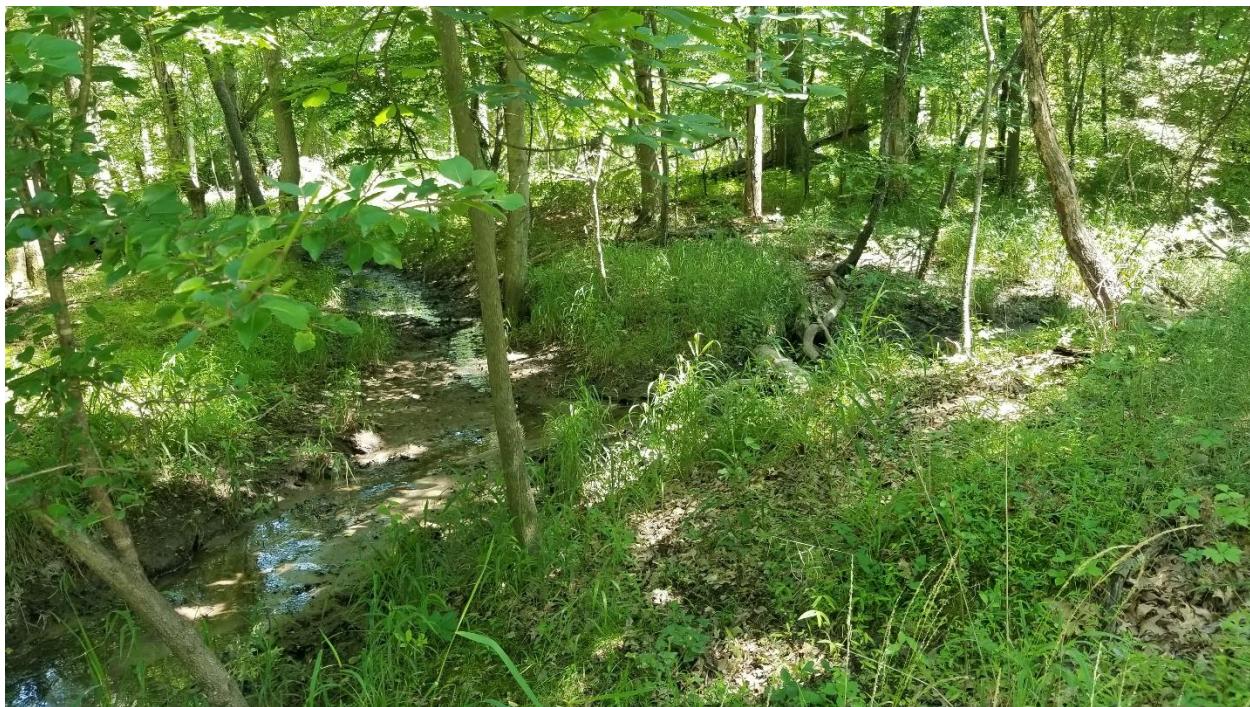


Photo 3: View south of upstream fork



Photo 4: View of southwest upstream branch and riparian buffer



Photo 5: View North along Pennington Road toward isolated wetlands pocket



Photo 6: View east towards culvert at stream crossing



Photo 7: View North of rear yard toward wetlands along property line



MidAtlantic

Engineering Partners, LLC

2500 PENNINGTON ROAD  
BLOCK 78, LOTS 17  
PHOTO LOCATION MAP

SITUATED IN

HOPEWELL TOWNSHIP, MERCER COUNTY, NEW JERSEY

DRAWN BY: LV	CHECKED BY: IB	RELEASED BY:	PROJECT No.: APR-2203
DATE: 03/21/23	HORIZONTAL SCALE: 1"=150'	VERTICAL SCALE: AS SHOWN	DRAWING NAME: 01-title.dwg

Certificate of Authorization No. 24GA28184000

Louis L. Zuegner IV P.E. PE No. GE04226500  
William J. Parkhill II P.E. PE No. GE04753800

Gateway 195 Centre  
5 Commerce Way, Suite 200  
Hamilton, NJ 08691  
609-910-4450

Name: G:\American Properties\JOBS\APR-2203 - Hopewell Township\DWG\01-title.dwg  
Plot time: Mar 22, 2023 - 4:06pm

## APPENDIX E

## LOI PRESENCE/ABSENCE



## State of New Jersey

PHILIP D. MURPHY  
Governor

SHEILA Y. OLIVER  
Lt. Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Division of Land Use Regulation  
Mail Code 501-02A  
P.O. Box 420  
Trenton, New Jersey 08625-0420  
[www.nj.gov/dep/landuse](http://www.nj.gov/dep/landuse)

CATHERINE R. McCABE  
Commissioner

Mitchell Newman  
2465 Kuser Road, 3rd Floor  
Hamilton, NJ 08690

AUG 17 2018

RE: Freshwater Wetlands Letter of Interpretation: Line Verification  
File No. & Activity No.: 1106-08-0012.1 FWW170001  
Applicant: US Home Corporation  
Block and Lot: [78, 17]  
Hopewell Township, Mercer County

Dear Mr. Newman:

This letter is in response to your request for a Letter of Interpretation to have Division of Land Use Regulation (Division) staff verify the boundary of the freshwater wetlands and/or State open waters on the referenced property.

In accordance with agreements between the State of New Jersey Department of Environmental Protection (NJDEP), the U.S. Army Corps of Engineers (USACOE) Philadelphia and New York Districts, and the U.S. Environmental Protection Agency (USEPA), the NJDEP is the lead agency for establishing the extent of State and Federally regulated wetlands and waters. The USEPA and/or USACOE retain the right to reevaluate and modify the jurisdictional determination at any time should the information prove to be incomplete or inaccurate.

Based upon the information submitted, and upon a site inspection conducted by Division staff on January 30, 2018 and May 17, 2018, the Division has determined that the wetlands and waters boundary lines as shown on the plan map entitled: "**WETLANDS PLAN BLOCK 78 – LOT 17 TAX MAP SHEET #20 LAND SITUATE IN HOPEWELL TOWNSHIP MERCER COUNTY, NEW JERSEY**" consisting of one sheet, dated October 16, 2017, last revised June 25, 2018, and prepared by Robert R. Stout, P.E., P.L.S., of Stout & Caldwell Engineers, LLC, is accurate as shown.

The freshwater wetlands and waters boundary lines, as determined in this letter, must be shown on any future site development plans. The lines should be labeled with the above file number and the following note:

**“Freshwater Wetlands/Waters Boundary Line as verified by NJDEP”**

Wetlands Resource Value Classification (“RVC”)

In addition, the Division has determined that the resource value and the standard transition area or buffer required adjacent to the delineated wetlands are as follows:

Ordinary: RR2 through RR5. [No wetland buffer] The wetlands have been determined to be a “swale”.

Intermediate: All other freshwater wetlands shown. [50 foot wetland buffer]

The Department has determined that the following wetland area has been considered by the Department to be an isolated wetland and not part of a surface water tributary system: B1 through B5. RVC may affect requirements for wetland and/or transition area permitting. This classification may affect the requirements for an Individual Wetlands Permit (see N.J.A.C. 7:7A-9 and 10), the types of Statewide General Permits available for the property (see N.J.A.C. 7:7A-5 and 7) and any modification available through a transition area waiver (see N.J.A.C. 7:7A-8). Please refer to the Freshwater Wetlands Protection Act (N.J.S.A. 13:9B-1 et seq.) and implementing rules for additional information.

Wetlands resource value classification is based on the best information available to the Division. The classification is subject to reevaluation at any time if additional or updated information is made available, including, but not limited to, information supplied by the applicant.

General Information

Pursuant to the Freshwater Wetlands Protection Act Rules, you are entitled to rely upon this jurisdictional determination for a period of five years from the date of this letter unless it is determined that the letter is based on inaccurate or incomplete information. Should additional information be disclosed or discovered, the Division reserves the right to void the original letter of interpretation and issue a revised letter of interpretation.

Regulated activities proposed within a wetland, wetland transition area or water area, as defined by N.J.A.C. 7:7A-2.2 and 2.3 of the Freshwater Wetlands Protection Act rules, require a permit from this office unless specifically exempted at N.J.A.C. 7:7A-2.4. The approved plan and supporting jurisdictional limit information are now part of the Division's public records.

Please be advised that any surface water features on the site or adjacent to the site may possess flood hazard areas and/or riparian zones and development within these areas may be subject to the Flood Hazard Area Control Act rules at N.J.A.C. 7:13. The Division can verify the extent of flood hazard areas and/or riparian zones through a flood hazard area verification under the application procedures set forth at N.J.A.C. 7:13-5.1.

This letter in no way legalizes any fill which may have been placed, or other regulated activities which may have occurred on-site. This determination of jurisdiction extent or presence does not make a finding that wetlands or water areas are “isolated” or part of a surface water tributary system unless specifically called out in this letter as such. Furthermore, obtaining this

determination does not affect your responsibility to obtain any local, State, or Federal permits which may be required.

### Recording

Within 90 calendar days of the date of this letter, the applicant shall submit the following information to the clerk of each county in which the site is located, and shall send proof to the Division that this information is recorded on the deed of each lot referenced in the letter of interpretation:

1. The Department file number for the letter of interpretation;
2. The approval and expiration date of the letter of interpretation;
3. A metes and bounds description of the wetland boundary approved under the letter of interpretation;
4. The width and location of any transition area approved under the letter of interpretation; and
5. The following statement: "The State of New Jersey has determined that all or a portion of this lot lies in a freshwater wetland and/or transition area. Certain activities in wetlands and transition areas are regulated by the New Jersey Department of Environmental Protection and some activities may be prohibited on this site or may first require a freshwater wetland permit. Contact the Division of Land Use Regulation at (609) 292-0060 or <http://www.nj.gov/dep/landuse> for more information prior to any construction onsite."

Failure to have this information recorded in the deed of each lot and/or to submit proof of recording to the Division constitutes a violation of the Freshwater Wetlands Protection Act rules and may result in suspension or termination of the letter of interpretation and/or subject the applicant to enforcement action pursuant to N.J.A.C. 7:7A-22.

### Appeal Process

In accordance with N.J.A.C. 7:7A-21, any person who is aggrieved by this decision may request a hearing within 30 days of the date the decision is published in the DEP Bulletin by writing to: New Jersey Department of Environmental Protection, Office of Legal Affairs, Attention: Adjudicatory Hearing Requests, Mail Code 401-04L, P.O. Box 402, 401 East State Street, 7<sup>th</sup> Floor, Trenton, NJ 08625-0402. This request must include a completed copy of the Administrative Hearing Request Checklist found at [www.state.nj.us/dep/landuse/forms](http://www.state.nj.us/dep/landuse/forms). Hearing requests received after 30 days of publication notice may be denied. The DEP Bulletin is available on the Department's website at [www.state.nj.us/dep/bulletin](http://www.state.nj.us/dep/bulletin). In addition to your hearing request, you may file a request with the Office of Dispute Resolution to engage in alternative dispute resolution. Please see the website [www.nj.gov/dep/odr](http://www.nj.gov/dep/odr) for more information on this process.

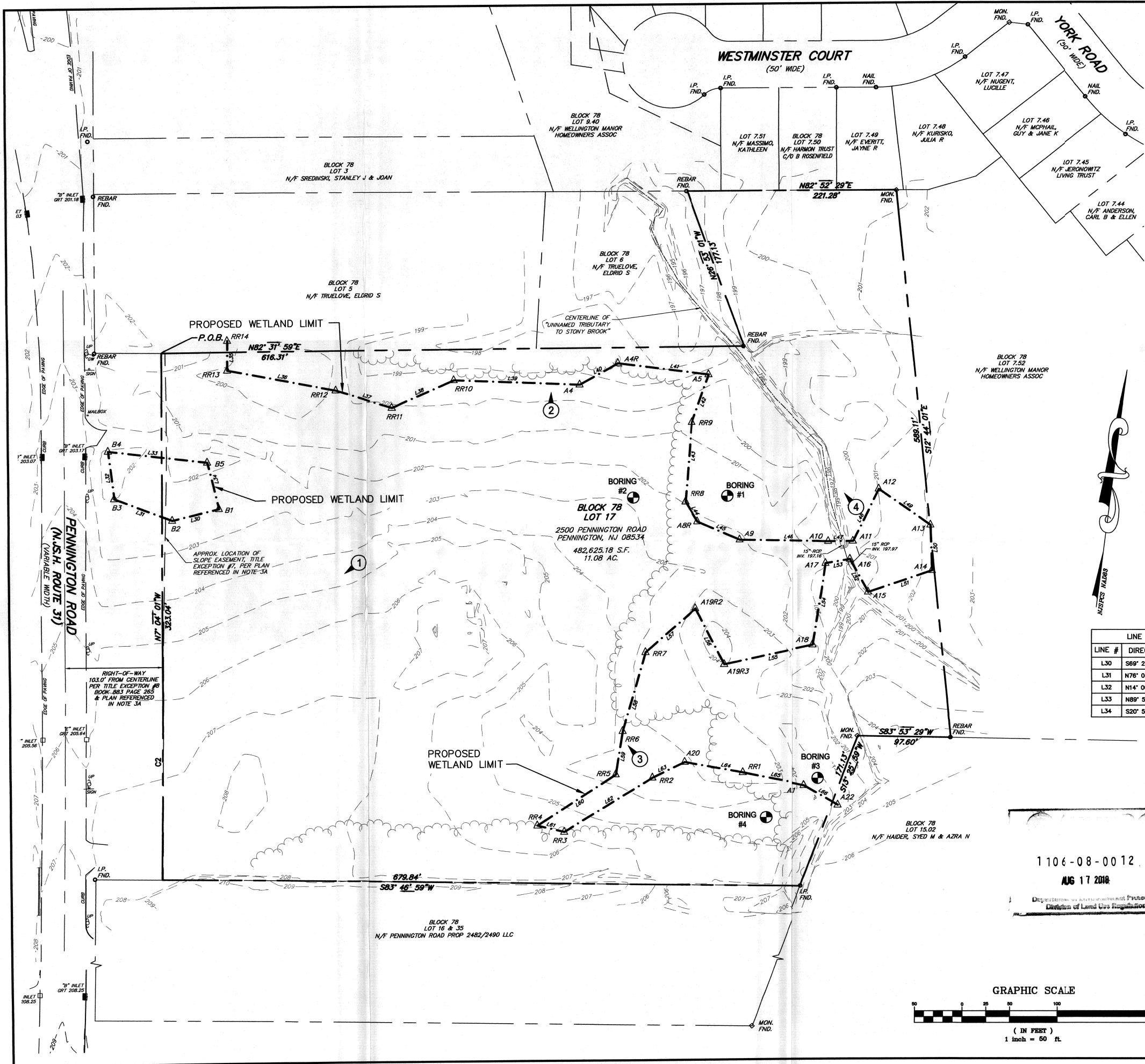
Please contact Max Dolphin of our staff by e-mail at maxwell.dolphin@dep.nj.gov or by phone at (609) 633-6563 should you have any questions regarding this letter. Be sure to indicate the Department's file number in all communication.

Sincerely,



Stacey MacEwan, Environmental Specialist 3  
Division of Land Use Regulation

c: Hopewell Township Municipal Clerk  
Hopewell Township Municipal Construction Official  
Maurice Nelson – NJDEP Coastal and Land Use Enforcement  
Agent (original)



LINE TABLE		
LINE #	DIRECTION	LENGTH
L30	S69° 21' 30"W	50.83
L31	N76° 04' 29"W	65.33
L32	N14° 00' 59"W	51.27
L33	N89° 50' 23"E	105.14
L34	S20° 53' 04"E	51.20

LINE TABLE		
LINE #	DIRECTION	LENGTH
L30	S69° 21' 30"W	50.83
L31	N76° 04' 29"W	65.33
L32	N14° 00' 59"W	51.27
L33	N89° 50' 23"E	105.14
L34	S20° 53' 04"E	51.20

LINE TABLE		
LINE #	DIRECTION	LENGTH
L35	S06° 39' 09"E	31.82
L36	S88° 11' 24"E	116.92
L37	S79° 27' 06"E	62.91
L38	N58° 50' 44"E	72.00
L39	N85° 13' 34"E	132.65

1106-08-0012 1

4/16 17 2018

**Department of Land Use Regulation  
Division of Land Use Regulation**

**NOTES:**

1. LOT AND BLOCK NUMBERS REFER TO TOWNSHIP OF HOPEWELL TAX MAP, SHEET NUMBER 20.
2. THIS PLAN WAS PREPARED WITH A TITLE REPORT PREPARED BY NORTH AMERICAN TITLE AGENCY, FILE NO. 15900-17-22106, NJ, EFFECTIVE JULY 17, 2017. THE PARCELS REFERRED TO AND ALL EASEMENTS, RESTRICTIONS AND ENCUMBRANCES RECORDED AND NOT RECORDED.
3. **PLAN/DEED REFERENCES:**
  - A. "PLAN OF TOPOGRAPHIC SURVEY & WETLANDS DELINEATION - LOT 17 - BLOCK 78", PREPARED BY TRENTON ENGINEERING CO. INC., OF TRENTON, NEW JERSEY, DATED APRIL 5, 2006, REVISED AUGUST 28, 2008.
  - B. DEED BOOK 883 - PAGE 265  
DEED BOOK 2865 - PAGE 132 (PIQ)  
DEED BOOK 3572 - PAGE 91  
DEED BOOK 6173 - PAGE 1945
4. ALL BEARINGS SHOWN ON THIS PLAN HAVE BEEN ROTATED TO NEW JERSEY STATE PLANE COORDINATE SYSTEM. ANGLE OF ROTATION BETWEEN NEW JERSEY STATE PLANE COORDINATE SYSTEM AND ABOVE REFERENCED DEED IS 03°31'00" COUNTER-CLOCKWISE.
5. THE BOUNDARY SHOWN ON THIS PLAN CLOSES IN ACCORDANCE WITH THE TECHNICAL STANDARDS FOR PROPERTY BOUNDARY SURVEY ADOPTED BY THE BOARD OF DIRECTORS OF THE NEW JERSEY SOCIETY OF PROFESSIONAL LAND SURVEYORS. (1 IN 2000). ACTUAL CLOSURE 1:1,124,388.9
6. VERTICAL DATUM = NAVD 88  
HORIZONTAL DATUM = NAD 83
7. TOPOGRAPHIC FEATURES SHOWN ON THIS PLAN WERE LOCATED BY STOUT & CALDWELL ENGINEERS, LLC FIELD CREW ON OR ABOUT OCTOBER 2, 2017. ANY CONDITIONS EXISTING AT THAT TIME ARE REFLECTED ON THIS PLAN.
8. SURFACE FEATURES SUCH AS INLETS, MANHOLES, WATER VALVES, GAS VALVES, ETC. WERE LOCATED BY FIELD SURVEY. THERE MAY BE OTHER UNDERGROUND STRUCTURES OR FACILITIES, THE EXISTENCE OF WHICH ARE NOT KNOWN TO THE UNDERSIGNED. SIZE AND LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES MUST BE VERIFIED BY THE APPROPRIATE AUTHORITIES.
9. AREAS OBSCURED BY DENSE VEGETATION MAY NOT CONFORM TO NATIONAL MAP ACCURACY STANDARDS.
10. THE SUBJECT PROPERTY IS LOCATED IN AN AREA DETERMINED TO BE IN THE FOLLOWING FLOOD ZONES:

ZONE X: AREAS DETERMINED TO BE OUTSIDE THE 0.2%	ANNUAL CHANCE FLOODPLAIN
---	--------------------------

AS INDICATED ON THE FLOOD INSURANCE RATE MAP, MERCER COUNTY, NEW JERSEY (ALL JURISDICTIONS), PANEL 116 OF 276, COMMUNITY PANEL NUMBER: 345290 0116 F, MAP NUMBER 34021C0116F, EFFECTIVE DATE: JULY 20, 2016.
11. WETLANDS DELINEATION COMPLETED DURING MONTHS OF AUGUST 2017 AND APRIL 2018 BY STOUT & CALDWELL ENGINEERS, LLC.

3	06/25/18	REVISED WETLANDS LINE PER NJDEP	FDR
2	02/14/18	ADD REVISED WETLANDS LINES	KWC
1	10/16/17	INITIAL SUBMISSION	MGK
Rev. No.:	Date:	Description:	By:

**U.S. HOME CORPORATION  
DBA LENNAR  
2465 KUSER ROAD, 3RD FLOOR  
HAMILTON, NJ 08690**

ROBERT R. STOUT  
PROFESSIONAL ENGINEER  
PROFESSIONAL LAND SURVEYOR  
N.J. LICENSE No. 38421

**S**TOUT  
&  
ALDWELL ENGINEERS, LLC

---

**705 U.S. Route 130 South - P.O. Box 2290  
Cinnaminson, NJ 08077  
OFFICE 856.786.2202 FAX 856.786.3050**

**WETLANDS PLAN**  
**BLOCK 78 - LOT 17**  
**TAX MAP SHEET #20**  
**LAND SITUATE IN**  
**HOPEWELL TOWNSHIP**  
**MERCER COUNTY, NEW JERSEY**

L63	N57° 05' 35"E	37.84	Scale: 1"=50'	Drawn by: MGK	Checked by: RRS	Drawing No.: WP-1
L64	S86° 38' 22"E	62.86	Job Number: 1702-062			Sheet No.:
L65	S85° 13' 51"E	69.39				
L66	S86° 39' 22"E	41.30				