ENVIRONMENTAL ASSESSMENT REPORT

For

AACTFR Property, LLC 5 Tenafly Road, Suite 416 Englewood, NJ 07631

Proposed Warehouse Building

Block 517.01, Lot 8.06 401 Cottontail Lane Township of Franklin Somerset County, NJ

Prepared by:



50 Park Place, Mezzanine Level Newark, NJ 07102 (973) 755-7200

Jacquelyn L. Giordano, PE NJ Professional Engineer License #53558

January 2021

DEC # 3532-99-001

TABLE OF CONTENTS

	Page
A.	Environmental Assessment Report
	[1] Project Data
	[2] Mapping 4
	[3] Existing Environmental Features.5[a.] Natural Resources5[b.] Man-made Resources6[c.] Human Resources7[d.] Pollution Problems7
	[4] Construction Phase
	[5] Required Approvals
	[6] Impact of the Proposed Project
	[7] Adverse Impacts.9[a.] Water Quality9[b.] Air Quality9[c.] Noise9[c.] Noise9[d.] Undesirable Land Use Patterns.10[e.] Damage or Destruction of Significant Plan or Wildlife Systems10[f.] Aesthetic Values11[g.] Destruction of Natural Resources11[h.] Displacement of People and Business11[i.] Displacement of Viable Farms11[j.] Employment and Property Tax11[k.] Destruction of Man-Made Resources11[l.] Disruption of Desirable Community and Regional Growth11[m.] Traffic Impacts11[n.] Health, safety and Well-being of the Public12
	 [8] Project Alternatives
B.	Statement of Qualifications for Jacquelyn L. Giordano, PE
C.	Conclusion

APPENDIX

- Photo Location Map
- Tax Map
- Aerial Map
- Zoning Map
- USGS Map
- Somerset County Soil Survey
- FEMA Flood Insurance Rate Map
- NJ Geoweb Bedrock Geology Map
- NJ Geoweb State Planning Areas Map
- NJ Geoweb Landscape Map
- NJ Geoweb Wetlands Map
- NJ Geoweb Streams & Water Bodies Map
- Air Quality Index Map
- Statement of Qualifications for Jacquelyn L. Giordano, P.E.
- Requirements for Environmental Assessment §112-199

A. ENVIRONMENTAL ASSESSMENT REPORT

This Environmental Assessment Report was prepared in accordance with requirements of the Township of Franklin Land Use Ordinance Article XXV, Section §112-199, in support of the Preliminary and Final Site Plan application for the Proposed Warehouse Building on Block 517.01, Lot 8.06 in the Township of Franklin, New Jersey. The subject properties qualify for preparation of an environmental assessment because the proposed development is in excess of 5,000 SF of additional paved surface areas. The scope of the development includes the construction of a 100,125 SF warehouse building with approximately 4,500 SF of office space, construction of parking/driveway areas and other associated site improvements.

The purpose of this statement is to summarize, highlight, or otherwise qualify, the extent of the effects the proposed development will have on the ecological systems and the environment of the subject property and the lands of the Township of Franklin.

The "Preliminary and Final Site Plan" and associated Stormwater Management, Water Quality and Groundwater Recharge Analysis and Traffic Impact & Parking Study have been submitted as part of the Preliminary and Final Site Plan Application to the Township.

1) Project Data:

The subject property encompasses approximately 6.905 aces and is located at 401 Cottontail Lane. The subject site is specifically identified as Block 517.01, Lot 8.06, in the Township of Franklin, Somerset County, New Jersey.

The overall tract is located in the B-I (Business and Industry) Zone. The existing site is currently vacant wooded land. The applicant, AACTFR Property, LLC, is proposing to construct a 100,125 SF warehouse building with approximately 4,500 SF of office space, and associated site improvements including stormwater management systems, utilities, lighting, landscaping, grading, walkways, driveways, parking, and other site amenities.

2) <u>Mapping</u>

The project site is specifically identified as Block 517.01, Lot 8.06, as shown on the plan entitled "Preliminary and Final Site Plan" dated January 21, 2021, prepared by Dynamic Engineering Consultants, PC. The New Jersey State Plane Coordinates of the site are X = 478,752 and Y = 623,115. The existing conditions of the tract have been verified by the ALTA/NSPS Land Title Survey as prepared by Dynamic Survey, LLC, dated October 30, 2020, last revised January 19, 2021.

The tract is bound to the west by wooded land and the Randolph Brook with commercial and industrial uses beyond; to the south by commercial and industrial uses; to the east by Cottontail Lane with industrial uses beyond; and to the north by industrial uses. Enclosed within the Appendix of this report, the following regional maps have been provided to assist in project familiarity and location reference: Township Tax Map, USGS Map, Aerial Photo Map, Soils map and FIRM map. The "Preliminary and Final Site Plans" have also been submitted as part of the project application to the Township.

3) Existing Environmental Features

[a]. Natural Resources

i. Geologic Character

These lands can be characterized as "typical" of central New Jersey geology with minor surface undulations.

ii. Soil Characteristics

Based on the Somerset County Soil Survey, the soil types native to the site include:

SOIL TYPE	SOIL TYPE NAME	HYDRAULIC SOIL GROUP
PenB	Penn silt loam, 2 to 6 percent slopes	С

This soil is also consistent with central New Jersey character and pose no problem to anticipated construction efforts.

iii. Topography

The site topography generally slopes from the eastern property boundary to the lower lying western property boundary. The slopes are moderate, and should present no problem to construction efforts.

iv. Surface and Subsurface Hydrological Features

According to the NJDEP GeoWeb Mapping System and our initial site investigation, a regulated drainage ditch runs south to north along the westerly property lines. The subject parcel also traverses deciduous and herbaceous wetlands. These features are being verified by the NJDEP in accordance with NJAC 7:13 Flood Hazard Regulations and NJAC 7:7A Freshwater Wetlands Regulations.

v. Vegetation and Wildlife

The overall existing tract consists of vacant wooded land. The wildlife found on-site would again be typical of central New Jersey areas and could include species such as squirrel, opossum, skunks, rabbits, as well as numerous bird species. Additionally, as per documentation to the NJDEP, the wetlands and wooded areas are not suitable habitat for any threatened and endangered species.

[b]. Man-made Resources

i. Present Land Use

The subject site consists of vacant wooded land.

ii. Adjacent Land Use

The tract is bound to the west by wooded land and the Randolph Brook with commercial and industrial uses beyond; to the south by commercial and industrial uses; to the east by Cottontail Lane with industrial uses beyond; and to the north by industrial uses.

iii. Access and Transportation Patterns

There is no vehicular access to the site under the existing conditions.

iv. Noise Levels

Existing noise levels are consistent with other metropolitan central New Jersey communities with most noise emanating from vehicular traffic along adjacent roadways during peak travel times.

v. Zoning and Master Plan Delineation

The subject property is located within the B-I (Business and Industry) Zone. The proposed warehouse building is permitted within this zone.

vi. Community Facilities

Water, sanitary sewer, telephone, gas and electric utilities are currently available to the property. During construction, solid waste will be disposed of by a private contractor at an appropriate recycling/disposal facility. Under proposed conditions, solid waste and recycling materials will be stored in disposal containers for collection by a private hauler and disposed of at a licensed facility.

The existing and proposed use has a minimal demand from the fire and police department. The proposed warehouse facility will utilize the two (2) full access drives from Cottontail Lane for emergency access.

[c]. Human Resources

There are no significant existing cultural or social factors that contribute to unique aesthetic features or historical character of the site and the proposed application will be reviewed by the Franklin Township Historic Commission. The site is consistent with the other uses along the Cottontail Lane corridor.

[d]. Pollution Problems

Existing air quality surrounding the site is typical of a central New Jersey metropolitan setting due to the passing cars, heavy duty trucks, buses and other vehicles. Traffic has an impact on both air quality as well as litter from discarded refuse materials along the roadways.

Public Sanitary Sewer Service is available to the site. As such, the proposed development will be served by the Franklin Township Sewerage Authority.

4) <u>Construction Phase</u>

	Receive Planning Board and all other County and State Approvals				
	Install stone and anti-tracking pad and other soil erosion sediment control				
Phase 1	measures including down slope perimeter hay bales, silt fence & tree				
	protection fencing.				
Dhasa 2	Clear and rough grade for new building site and other structures requiring				
Phase 2	excavation.				
Dhasa 3	Excavation, construction and stabilization of detention basins, excavate and				
r llase 5	install underground piping and drainage structures.				
Phase 4	Excavate for building foundation.				
Phase 5	Complete building construction.				
Phase 6	Excavate and install on site improvements including curbing and utilities.				
Phase 7	e 7 Final grading on site.				
D1 0	Install paving, concrete, and final vegetation including seeding and				
Phase 8	landscaping.				
Dhasa 0	Remove soil erosion and sediment control measures including down slope				
Phase 9	perimeter haybales, silt fencing and tree protection fencing.				

Traffic control along public roadways during the construction process will be handled and coordinated between the contractors and the Franklin Township Police Department.

5) <u>Required Approvals</u>

The following represents a listing of anticipated approvals:

Franklin Township	Preliminary and Final Site Plan Approval (Planning Board)
Somerset County	Letter of Exemption
Franklin Township Sewerage Authority	Sewer Lateral Connection Approval
Franklin Township Water	Water Connection Approval
Somerset/Union SCD	Soil Erosion & Sediment Control Plan Certification
Delaware Raritan Canal Commission	Site Plan Approval
NJDEP	Flood Hazard Area Individual Permit & Wetlands General Permit & Transition Area Averaging Waiver 5G3 – Authorization to Discharge Permit

Miscellaneous utility companies, Franklin Township Police and Fire Commission concerns will be addressed as required.

6) Impact of the Proposed Project

As a result of the site design techniques, stormwater management design and good construction practices employed as part of this project, it is anticipated that the project will have no significant effects on the site or its surroundings. The proposed development will provide the local area with increased economic growth and does not have an effect on the projected costs associated with the provision of municipal and education services.

Due to the site's location at Cottontail Lane, the site's access has been designed to integrate with the existing circulation patterns of the adjacent roadways. For specific traffic related items, please refer to the Traffic Impact and Parking Study prepared by Dynamic Traffic, LLC dated January 20, 2021.

Due to the current vacant land use, there is minimal demand from the local Police and Fire Departments other than current monitoring of the subject property and surrounding areas. Under proposed conditions, it is not anticipated the use will significantly increase the Police and Fire Department demands to incorporate the construction of the facility into the community and the impact may be offset by additional tax revenue generated by the project.

7) Adverse Impacts

[a]. Water Quality

i. The project will be connected and serviced through the appropriate local water company, therefore, providing clean, safe drinking water within the facility.

Additionally, the TSS removal rate requirement set forth by the Township of Franklin Land Use Ordinance and NJAC 7:8 for stormwater runoff is 80% for newly constructed impervious coverage. The proposed roof runoff will be clean and will not require TSS removal. The design for the proposed development meets the obligation for TSS removal by routing runoff from paved vehicular areas to the proposed bioretention basins capable of a TSS removal of 80%. This method of meeting TSS removal is permitted per the New Jersey Stormwater Management Best Management Practices manual. Therefore, the stormwater management facilities provide the required TSS removal for the subject project, satisfying the water quality aspect of the Township of Franklin Land Use Ordinance and NJAC 7:8.

[b]. Air Quality

Existing air quality surrounding the site is typical of a central New Jersey urban/suburban setting. There are existing hazardous air pollutants (HAP's) which come from cars, heavy duty trucks, buses and other highway vehicles. These vehicles produce diesel particulate matter, diesel exhaust and/or carbon monoxide. There are known health standards associated with these pollutants. Current air quality readings taken from surrounding areas report the presence of pollutants such as carbon monoxide at an Air Quality Index (AQI) of 27. The Air Quality Index is based on a value of 100 where 100 would be exceeding the health standard limit. AQI readings in Franklin Township can be expected to be similar to those recorded in surrounding areas.

There may be some temporary airborne dust particulates associated with the construction process but these conditions will be localized and will dissipate with the stoppage of each workday. Dust will be controlled through daily watering of the construction entrances/exits and circulation aisles and cleaning of the streets in close proximity to same, as necessary.

[c]. Noise

Existing noise levels on-site can be characterized as typical of a central New Jersey commercial/industrial Zone. Most noise emanates from passenger vehicular and delivery traffic along adjacent roadways at peak times. This should be considered

normal for the use and temporary in nature. Sound levels are subject to daytime and nighttime limits. Governmental regulations limit the A-weighted sound levels produced when measured at a residential property line to the following levels.

Daytime (7:00 AM – 10:00 PM – 65DB (A) Nighttime (10:00 PM – 7:00 AM) – 50DB (a)A

The term A-weighted is a standardized frequency weighting which attempts to duplicate the human ear frequency and sensitivity; and, therefore, provides an overall sound level measurement with how people actually perceive noise.

The regulations also provide limits for sound pressures in the preferred octave bans with center frequencies between 31.5 and 8,000 Hz.

It is not anticipated that this facility will exceed the daytime or nighttime usage allowances. It should be noted delivery and trash collection trucks will unload and pick up during daytime hours. Therefore, in our estimation, ambient noise will not adversely impact the quality of life on the site or in close proximity thereof.

[d]. Undesirable Land Use Patterns

The subject property is located within the B-I (Business and Industry) Zone. The proposed use is consistent with other uses in the surrounding area. As is outlined in the traffic report, the development should not pose a burden to the existing roadway network and adjacent infrastructure. It is therefore concluded that the proposed project is consistent with the overall master plan objectives of the Township and does not represent undesirable land use patterns.

[e]. Damage or Destruction of Plant and Wildlife Systems

The project proposes to remove some of the existing vegetation and replace it with new landscaping throughout the site. The new landscaping will bring a greater aesthetic value to the site.

The existing development does not appear to provide a permanent home for any notable wildlife creatures. Any creatures seen on the subject parcel are likely passing through and can easily relocate.

[f]. Aesthetic Values

The existing parcel consists of vacant wooded land. The proposed building surrounded by a mix of impervious surfaces and vegetation will create a new aesthetic character of the subject parcel, consistent with the surrounding industrial uses.

There are no vistas, bluffs, escarpments or noticeable rock outcroppings to be affected as a result of the proposed development.

[g]. Destruction of Natural Resources

The proposed development does not incorporate the destruction of considerable natural resources.

[h]. Displacement of People and Business

There will be no businesses displaced as a result of this development. The proposed development will actually serve to provide more jobs than currently available at this location. No other businesses/residents should be displaced as part of the proposed development.

[i]. Displacement of Viable Farms

No viable farmlands will be impacted or destroyed due to this application.

[j]. Employment and property tax

The proposed development will provide jobs for the local economy and significant tax revenues for the municipal tax base.

[k]. Destruction of Man-Made Resources

The existing site is currently vacant land therefore no structures will be demolished in conjunction with the proposed development. The overall economic, community, and aesthetic values from the subject property will increase from the proposed development.

[1]. Disruption of Desirable Community and Regional Growth

Since the proposed use is in compliance with the Township of Franklin Land Use requirements, it can be represented that there will be no disruption of community and/or regional growth as a result of this development. In fact to the contrary, it will allow for a certain measure of community growth by providing expanded business and jobs for the local and regional community.

[m]. Traffic Impacts

The proposed circulation patterns on-site and the full movement driveways along Cottontail Lane will effectively accommodate the anticipated traffic volumes being generated by the proposed development. There could be some daily (temporary) traffic delays within the adjacent roadways due to construction and possibly road closures, but otherwise traffic will not be adversely impacted. For specific traffic related items please refer to the Traffic Impact and Parking Study prepared by Dynamic Traffic, LLC, dated January 20, 2021.

[n]. Health, Safety, and Well-being of the Public

The proposed development will have no ill effect on the health, safety or well-being of the community. The proposed development will provide numerous jobs which will lead to improved local economic growth.

There is also no residential component in this application which means it will not generate additional enrollment in the local school system, or the high costs traditionally associated with an increase in the school aged population. In general, the proposed development will benefit the public community and surrounding area.

8) <u>Project Alternatives</u>

Since this project is in the B-I (Business and Industry) Zone and the proposed use is permitted, there are no alternative development scenarios which would completely avoid potential adverse impacts. Any type of permitted development will have a certain measure of impact associated with it.

- [a]. The <u>"No Project" or no-action alternative</u> The existing site is currently vacant land. A no project alternative prevents economic growth in the Township of Franklin and leave the site underutilized.
- [b]. <u>Alternative Road Alignments</u> Extensive review of the existing traffic patterns and understanding of the anticipated traffic generation has led to the ultimate site design for overall circulation for the project. The locations of the two full movement driveways have been designed to be accessible and separate truck traffic from motor vehicles.
- [c]. <u>Alternative Costs and Social Impact</u> Being that the proposed development complies with the Township of Franklin Land Use requirements, there are no alternative costs or social impacts to review. The only alternative is "no development" which would have no costs associated with that and would leave the site underutilized.

9) <u>Ameliorative measures</u>

Numerous steps and measures will be undertaken during the course of construction to protect and preserve the environment and best management practices employed to enhance project assimilation. Among the items of consideration are:

- <u>Soil Erosion</u>: The development will require approval of the Somerset-Union Soil Conservation District and as such will be subject to the provisions of the District. Tree protection fencing, anti-tracking pads, silt fencing, inlet protection and seeding measures will be adhered to throughout construction. Dust will be controlled through daily watering of the construction entrances/exits and circulation aisles and cleaning of the streets in close proximity to same, as necessary. Top soil stockpiling will ensure appropriate seed bedding for final grading and landscape procedures. Inlet protection and conduit outlet protection will alleviate soil loss from the site.
- Storm water will continue to ultimately discharge into the drainage ditch located next to the western property boundary. However peak runoff rates shall be reduced for the 2-,10- and 100-year design storms when compared to the existing conditions.
- Every reasonable effort will be made to protect the existing natural environment with an ultimate goal of incorporating the proposed development with minimal disruption of the existing environment as possible.

B. Statement of Qualifications for Jacquelyn L. Giordano, PE

Please see Appendix for a Statement of Qualifications for Jacquelyn L. Giordano, PE.

C. Conclusion

In light of the geographic location and the zoning designation of the site, it is the opinion of this firm that the proposed development is consistent with the expected impacts to the existing natural resources of the subject properties or the Township of Franklin. The proposed development will serve as a suitable addition to the local community.

APPENDIX

PHOTO LOCATION MAP



Dynamic Engineering Consultants, PC www.dynamicec.com 1904 Main Street Lake Como, NJ 07719 T. 732-974-0198

Photo Location Map



1904 Main Street, Lake Como, NJ 07719 T. 732-974-0198

245 Main Street, Suite 110, Chester, NJ 07930 T. 908-879-9229 8 Robbins Street, Suite 102, Toms River, NJ 08753 T. 732-974-0198 826 Newtown Yardley Rd., Suite 201, Newtown, PA 18940 T. 267-685-0276 50 Park Place, Mezzanine Level, Newark, NJ 07102 T. 973-755-7200



Photo 1: Photo taken from Cottontail Lane facing northeast towards the existing vacant property.



Photo 2: Photo taken from Cottontail Lane facing east towards the existing property frontage.



Photo 3: Photo taken from Cottontail Lane facing southwest towards the existing vacant property.



Photo 4: Photo taken from the Dutch Total Soccer Field facing northeast towards the existing vacant property.



Photo 5: Photo taken from the Dutch Total Soccer Field facing east towards the existing vacant property.



Photo 6: Photo taken from the Dutch Total Soccer Field facing north towards the area between the existing vacant property and the Randolph Brook.

TAX MAP



Tax Map



1904 Main Street, Lake Como, NJ 07719 T. 732-974-0198

245 Main Street, Suite 110, Chester, NJ 07930 T. 908-879-9229 8 Robbins Street, Suite 102, Toms River, NJ 08753 T. 732-974-0198 826 Newtown Yardley Rd., Suite 201, Newtown, PA 18940 T. 267-685-0276 50 Park Place, Mezzanine Level, Newark, NJ 07102 T. 973-755-7200

AERIAL MAP



Dynamic Engineering Consultants, PC www.dynamicec.com 1904 Main Street Lake Como, NJ 07719 T. 732-974-0198

Aerial Map



1904 Main Street, Lake Como, NJ 07719 T. 732-974-0198

245 Main Street, Suite 110, Chester, NJ 07930 T. 908-879-9229 8 Robbins Street, Suite 102, Toms River, NJ 08753 T. 732-974-0198 826 Newtown Yardley Rd., Suite 201, Newtown, PA 18940 T. 267-685-0276 50 Park Place, Mezzanine Level, Newark, NJ 07102 T. 973-755-7200

ZONING MAP





1904 Main Street, Lake Como, NJ 07719 T. 732-974-0198

245 Main Street, Suite 110, Chester, NJ 07930 T. 908-879-9229 8 Robbins Street, Suite 102, Toms River, NJ 08753 T. 732-974-0198 826 Newtown Yardley Rd., Suite 201, Newtown, PA 18940 T. 267-685-0276 50 Park Place, Mezzanine Level, Newark, NJ 07102 T. 973-755-7200

USGS MAP



USGS Map



1904 Main Street, Lake Como, NJ 07719 T. 732-974-0198

245 Main Street, Suite 110, Chester, NJ 07930 T. 908-879-9229 8 Robbins Street, Suite 102, Toms River, NJ 08753 T. 732-974-0198 826 Newtown Yardley Rd., Suite 201, Newtown, PA 18940 T. 267-685-0276 50 Park Place, Mezzanine Level, Newark, NJ 07102 T. 973-755-7200

SOMERSET COUNTY SOIL SURVEY



United States Department of Agriculture

Natural Resources Conservation Service A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants Custom Soil Resource Report for **Somerset County, New Jersey**





	MAP LEGEND			MAP INFORMATION	
Area of In	terest (AOI) Area of Interest (AOI)		Spoil Area	The soil surveys that comprise your AOI were mapped at 1:24,000.	
Soils	Soil Map Unit Polvgons	å	Very Stony Spot	Warning: Soil Map may not be valid at this scale.	
~	Soil Map Unit Lines	\$ _	Wet Spot Other	Enlargement of maps beyond the scale of mapping can cause	
Special	Soil Map Unit Points Point Features	-	Special Line Features	line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed	
୍	Blowout Borrow Pit	Water Fea	tures Streams and Canals	scale.	
⊠ Ж	Clay Spot	Transporta	ation Rails	Please rely on the bar scale on each map sheet for map measurements.	
×	Closed Depression Gravel Pit	~	Interstate Highways	Source of Map: Natural Resources Conservation Service	
	Gravelly Spot	~	Major Roads	Coordinate System: Web Mercator (EPSG:3857)	
09 A	Landfill Lava Flow	Backgrou	Local Roads nd	Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts	
<u>مل</u> د ۵	Marsh or swamp	No.	Aerial Photography	distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.	
0	Miscellaneous Water			This product is generated from the USDA-NRCS certified data as	
0	Perennial Water Rock Outcrop			of the version date(s) listed below.	
+	Saline Spot			Survey Area Data: Version 18, Jun 1, 2020	
:: •	Sandy Spot Severely Eroded Spot			Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.	
\$	Sinkhole			Date(s) aerial images were photographed: Jun 22, 2019—Jul	
\$ Ø	Silde or Silp Sodic Spot			The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.	

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
PenB	Penn silt loam, 2 to 6 percent slopes	7.9	100.0%
Totals for Area of Interest		7.9	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Somerset County, New Jersey

PenB—Penn silt loam, 2 to 6 percent slopes

Map Unit Setting

National map unit symbol: 2w05z Elevation: 100 to 250 feet Mean annual precipitation: 30 to 64 inches Mean annual air temperature: 46 to 79 degrees F Frost-free period: 131 to 178 days Farmland classification: All areas are prime farmland

Map Unit Composition

Penn and similar soils: 85 percent Minor components: 15 percent Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Penn

Setting

Landform: Hills Landform position (two-dimensional): Backslope Landform position (three-dimensional): Interfluve Down-slope shape: Linear Across-slope shape: Convex Parent material: Fine-loamy residuum weathered from acid reddish shale, siltstone, and fine-grain sandstone

Typical profile

Ap - 0 to 8 inches: silt loam Bt1 - 8 to 12 inches: silt loam Bt2 - 12 to 25 inches: channery silt loam C - 25 to 30 inches: very channery silt loam R - 30 to 40 inches: bedrock

Properties and qualities

Slope: 2 to 6 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 4.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 2e Hydrologic Soil Group: C Hydric soil rating: No

Minor Components

Readington

Percent of map unit: 5 percent Landform: Hills Landform position (two-dimensional): Backslope Landform position (three-dimensional): Base slope Down-slope shape: Linear Across-slope shape: Linear Hydric soil rating: No

Klinesville

Percent of map unit: 5 percent Landform: Hills Landform position (two-dimensional): Backslope Landform position (three-dimensional): Side slope Down-slope shape: Linear Across-slope shape: Linear Hydric soil rating: No

Norton

Percent of map unit: 5 percent Landform: Hills Landform position (two-dimensional): Backslope Landform position (three-dimensional): Side slope Down-slope shape: Linear Across-slope shape: Convex Hydric soil rating: No

FEMA FLOOD INSURANCE RATE MAP



FEMA Flood Insurance Rate Map



1904 Main Street, Lake Como, NJ 07719 T. 732-974-0198

245 Main Street, Suite 110, Chester, NJ 07930 T. 908-879-9229 8 Robbins Street, Suite 102, Toms River, NJ 08753 T. 732-974-0198 826 Newtown Yardley Rd., Suite 201, Newtown, PA 18940 T. 267-685-0276 50 Park Place, Mezzanine Level, Newark, NJ 07102 T. 973-755-7200

NJDEP GEOWEB BEDROCK GEOLOGY MAP



Dynamic Engineering Consultants, PC www.dynamicec.com 1904 Main Street Lake Como, NJ 07719 T. 732-974-0198

NJ GeoWeb Streams & Water Bodies Map



1904 Main Street, Lake Como, NJ 07719 T. 732-974-0198

245 Main Street, Suite 110, Chester, NJ 07930 T. 908-879-9229 8 Robbins Street, Suite 102, Toms River, NJ 08753 T. 732-974-0198 826 Newtown Yardley Rd., Suite 201, Newtown, PA 18940 T. 267-685-0276 50 Park Place, Mezzanine Level, Newark, NJ 07102 T. 973-755-7200

NJDEP GEOWEB STATE PLANNING AREAS MAP



Dynamic Engineering Consultants, PC www.dynamicec.com 1904 Main Street Lake Como, NJ 07719 T. 732-974-0198

NJ GeoWeb State Planning Areas Map



1904 Main Street, Lake Como, NJ 07719 T. 732-974-0198

245 Main Street, Suite 110, Chester, NJ 07930 T. 908-879-9229 8 Robbins Street, Suite 102, Toms River, NJ 08753 T. 732-974-0198 826 Newtown Yardley Rd., Suite 201, Newtown, PA 18940 T. 267-685-0276 50 Park Place, Mezzanine Level, Newark, NJ 07102 T. 973-755-7200

NJDEP GEOWEB LANDSCAPE MAP



Dynamic Engineering Consultants, PC www.dynamicec.com 1904 Main Street Lake Como, NJ 07719 T. 732-974-0198

NJ GeoWeb Landscape Map



1904 Main Street, Lake Como, NJ 07719 T. 732-974-0198

245 Main Street, Suite 110, Chester, NJ 07930 T. 908-879-9229 8 Robbins Street, Suite 102, Toms River, NJ 08753 T. 732-974-0198 826 Newtown Yardley Rd., Suite 201, Newtown, PA 18940 T. 267-685-0276 50 Park Place, Mezzanine Level, Newark, NJ 07102 T. 973-755-7200

NJDEP GEOWEB WETLANDS MAP



Dynamic Engineering Consultants, PC www.dynamicec.com 1904 Main Street Lake Como, NJ 07719 T. 732-974-0198

NJ GeoWeb Wetlands Map



1904 Main Street, Lake Como, NJ 07719 T. 732-974-0198

245 Main Street, Suite 110, Chester, NJ 07930 T. 908-879-9229 8 Robbins Street, Suite 102, Toms River, NJ 08753 T. 732-974-0198 826 Newtown Yardley Rd., Suite 201, Newtown, PA 18940 T. 267-685-0276 50 Park Place, Mezzanine Level, Newark, NJ 07102 T. 973-755-7200

NJDEP GEOWEB STREAMS & WATER BODIES MAPS



Dynamic Engineering Consultants, PC www.dynamicec.com 50 Park Place, Mezzanine Level Newark, NJ 07102 T. 973-755-7200

NJ GeoWeb Streams & Water Bodies Map



1904 Main Street, Lake Como, NJ 07719 T. 732-974-0198

245 Main Street, Suite 110, Chester, NJ 07930 T. 908-879-9229 8 Robbins Street, Suite 102, Toms River, NJ 08753 T. 732-974-0198 826 Newtown Yardley Rd., Suite 201, Newtown, PA 18940 T. 267-685-0276 50 Park Place, Mezzanine Level, Newark, NJ 07102 T. 973-755-7200

AIR QUALITY INDEX MAP



Air Quality Index Map



1904 Main Street, Lake Como, NJ 07719 T. 732-974-0198

245 Main Street, Suite 110, Chester, NJ 07930 T. 908-879-9229 8 Robbins Street, Suite 102, Toms River, NJ 08753 T. 732-974-0198 826 Newtown Yardley Rd., Suite 201, Newtown, PA 18940 T. 267-685-0276 50 Park Place, Mezzanine Level, Newark, NJ 07102 T. 973-755-7200

QUALIFICATIONS OF REPORT PREPARER



Jackie L. Giordano, P.E. Project Manager



Jackie Giordano is a Project Dynamic Manager with Engineering Consultants, PC. Ms. Giordano joined the firm as a Design Engineer has and successfully developed herself into a Project Manager at the firm. She is a licensed Professional Engineer that provides practical experience in the design and management of residential commercial, and industrial land development projects

throughout the Northeast.

Included within her areas of expertise are site grading and earthwork, stormwater management, water quality design, environmental impact analysis, project management, and NJDEP permitting. Inclusive of coastal areas, treatment works approvals, freshwater wetlands, and flood hazard areas.

Ms. Giordano is dedicated to insuring that clients are satisfied with the management of their projects by maintaining open communication and ensuring timeliness of project milestones. She approaches each project to tailor to her client's needs and goals with an emphasis on providing an effective site design to manage construction cost for the client. Ms. Giordano believes that it is important clients are informed about the land development process so that they make knowledgeable decisions. She also makes certain that her clients are aware of the regulatory process and risks associated with each step of the development project.

During her career, Ms. Giordano has provided consulting services for numerous corporate and developer driven projects including 7-Eleven, BP, Shell, Wawa, Group 1 Automotive Inc., Dunkin Donuts, Popeye's, J.G. Petrucci, Private Schools, Golf Courses and many more.

License:

New Jersey Professional Engineer License

Education:

- New Jersey Institute of Technology, Master of Science in Civil Engineering
- Penn State University, Bachelor of Science in Civil & Environmental Engineering

Agency Experience:

- NJDEP, Flood Hazard Areas
- NJDEP, Freshwater Wetlands
- NJDEP, Treatment Works Approval
- NJDEP, Bureau of Drinking Water (BSDW)
- NJDEP, Coastal Area Facilities Review (CAFRA)
- New Jersey Department of Transportation (NJDOT)
- New Jersey Pinelands Commission
- New Jersey Soil Conservation Districts
- New Jersey County Planning Boards
- County and Local Health Departments
- County and Local Environmental Commissions
- New Jersey Residential Site Improvement Standards (RSIS)
- Regional Sewerage Authorities

Expert Testimony:

Ms. Giordano has been accepted and testified as a Professional Engineer before Planning and Zoning Boards throughout New Jersey.

Employment History:

- Dynamic Engineering Consultants, PC Project Manager – 2017 – Present
- Dynamic Engineering Consultants, PC Design Engineer – 2013 – 2017

Professional Affiliations:

- CREW NJ
- New Jersey Builders Association
- Shore Builders Association
- Professional Women in Building of the Garden State

TOWNSHIP OF FRANKLIN - REQUIREMENTS FOR ENVIRONMENTAL ASSESSMENT §112-199

Township of Franklin, NJ Tuesday, January 12, 2021

Chapter 112. Land Development

Article XXV. Environmental and Historic Resources

§ 112-199. Requirements for environmental assessment.

- A. Intent and purpose. It is the intent and purpose of this section to provide proper guidelines and requirements for the environmental assessment to be filed with an application for development and prior to preliminary subdivision plan approval, or site plan approval by the Franklin Township Planning Board. It is also the intent of this section to provide guidelines for the historic overlay district and the D&R Canal design regulations.
- B. Applicability of provisions. An environmental assessment shall be required for site plans and subdivisions wherein one or more of the following conditions exist:
 - (1) The plan proposes to cover more than 75% of the site with buildings, pavement, or other improvements.
 - (2) The plan proposes the construction of buildings with 5000 or more square feet in area.
 - (3) The plan proposes the construction of 5,000 or more square feet of paved area. Notwithstanding the above provisions, an environmental assessment shall not be required for principal permitted uses in an agricultural district.
- C. The applicant must provide written information to the Planning Board at the time the environmental assessment is submitted as to the qualifications and experience of such consultants, firm, agency, individual or person selected by the applicant. [Amended 1-23-2007 by Ord. No. 3652]
- D. Submittal. One copy of such environmental assessment shall be attached to each copy of the completed application when said application is submitted. Each environmental assessment shall include a title page which contains the name, address, zip code and phone number of the applicant.
- E. Documentation. The environmental assessment shall include documentation of all supporting evidence used in the assessment. Documentation may include studies or portions of studies conducted by others, explanations based on field visits, conversations with experts and maps used as the basis of the conclusions.
- F. Format for the environmental assessment report. The environmental assessment (EA) shall include the following required data:

- (1) Project data. A description of the project covered by the EA. The description shall mention each separate activity included in the project, i.e., acquisition, demolition, removal, construction and relocation. The description must be adequate to enable the reader to envision the general nature of the project and the magnitude of the project.
- (2) Mapping. Locate the project in a regional, municipal and neighborhood setting. Include a site plan of the project.
- (3) Existing environmental features. Describe the environment as it presently exists in and around the site. The description should be a comprehensive discussion of the following features as they exist without the project:
 - (a) Natural resources: Identify and describe the existing geologic character, soil characteristics, topography, surface and subsurface hydrological features, vegetation and wildlife of the site and the surrounding area.
 - (b) Man-made resources: Describe the present land use, adjacent land use, noise levels (if the proposal is for residential or institutional use), access and transportation patterns, zoning, Master Plan delineation, community facilities (sewer, water, waste removal, schools, police, fire and roads) of the site and the surrounding area.
 - (c) Human resources: Discuss the existing cultural and social factors as they affect the proposed project site including unique aesthetic features and historical character of the site and surrounding area.
 - (d) Pollution problems: Identify and describe existing pollution problems in the area including water, sewer and air quality as a basis for assessing cumulative problems that may result from the project.
- (4) Construction phase. Identify the development schedule and construction phasing including projected construction traffic, site preparation including clearing, excavating, filling and cutting and blasting.
- (5) Required approvals. Include a list of all licenses, permits and other approvals required by municipal, county or state law and the status of each. The approvals and permits are required before final consideration of the site plan is taken.
- (6) Impact of the proposed project. An assessment of the probable impact of the project upon each of the conditions set forth in Subsection F(3). Particular attention must be given to traffic (automobile and/or truck) generated by the project, circulation within the site and projected impact of the project on the Township road system.
- (7) Adverse impacts. List all probable adverse effects which may result from the project, including:
 - (a) Water quality.
 - (b) Air quality.
 - (c) Noise.

- (d) Undesirable land use patterns.
- (e) Damage or destruction of significant plan or wildlife systems.
- (f) Aesthetic values.
- (g) Destruction of natural resources.
- (h) Displacement of people and business.
- (i) Displacement of viable farms.
- (j) Employment and property tax.
- (k) Destruction of man-made resources.
- (I) Disruption of desirable community and regional growth.
- (m) Traffic impacts.
- (n) Health, safety and well-being of the public.
- (8) Project alternatives. A list of alternatives to the proposed project which might avoid some or all of the adverse environmental impacts of the proposed project including:
 - (a) No project or no action.
 - (b) Description of alternative road alignments (if applicable).
 - (c) Analysis of the costs and social impact of the alternatives including construction problems and traffic service. Include the reasons for acceptability and nonacceptability of each of the alternatives.
- (9) Ameliorative measures. A listing of steps proposed to minimize environmental damage to the site and region during construction and operation. The consideration of soil erosion, dust, sedimentation, preservation of trees, protection of watercourses, protection of air resources, and noise control are some factors to be considered here.
- G. Review and inspections. Upon submission of the environmental assessment to the Secretary of the Planning Board and distribution to the various officials, with three copies available in the Municipal Engineer's office (or other designated place) for any person to review, the following reviews and inspections will be conducted within 30 days, except that where the assessment is a part of subdivision, or site plan approval, the approval shall be part of the overall approval and time limits shall be as specified for those approvals.
 - (1) The Planning Board Administrator (or other designated official) will, within seven days of receipt of applicant's environmental assessment make a field inspection to verify the environmental conditions and make a report to the Planning Board with a copy to the Environmental Commission.
 - (2) The Township Engineer will, within 30 days of receipt of the applicant's environmental assessment, review all maps and documents and make a site

inspection and then follow with a report to the Planning Board and a copy to the Environmental Commission.

- (3) The Township Environmental Commission will, within 30 days of receipt of the Planning Board Administrator's and Engineer's reports, present its review and recommendations to the Planning Board for final determination.
- (4) The Township Planning Board shall analyze and review the applicant's environmental assessment along with the reviews from the Planning Administrator, Engineer, Environmental Commission and any other interested party within 14 days of the Commission's report and give written notice of approval or rejection to the applicant, indicating the reasons therefor; and the decision will be officially published within 10 days. Where the assessment is part of a subdivision, planned unit development (PUD) or site plan application, assessment approval shall be part of the overall application approval.
- H. Issuance of permit. A permit shall be issued upon review by the Planning Administrator, Engineer and other such officials and final approval by the Planning Board that all requirements of the chapter have been complied with, and upon payment of all fees to be paid hereunder. The Planning Board shall obtain a reasonable time limit for all work to be done.