

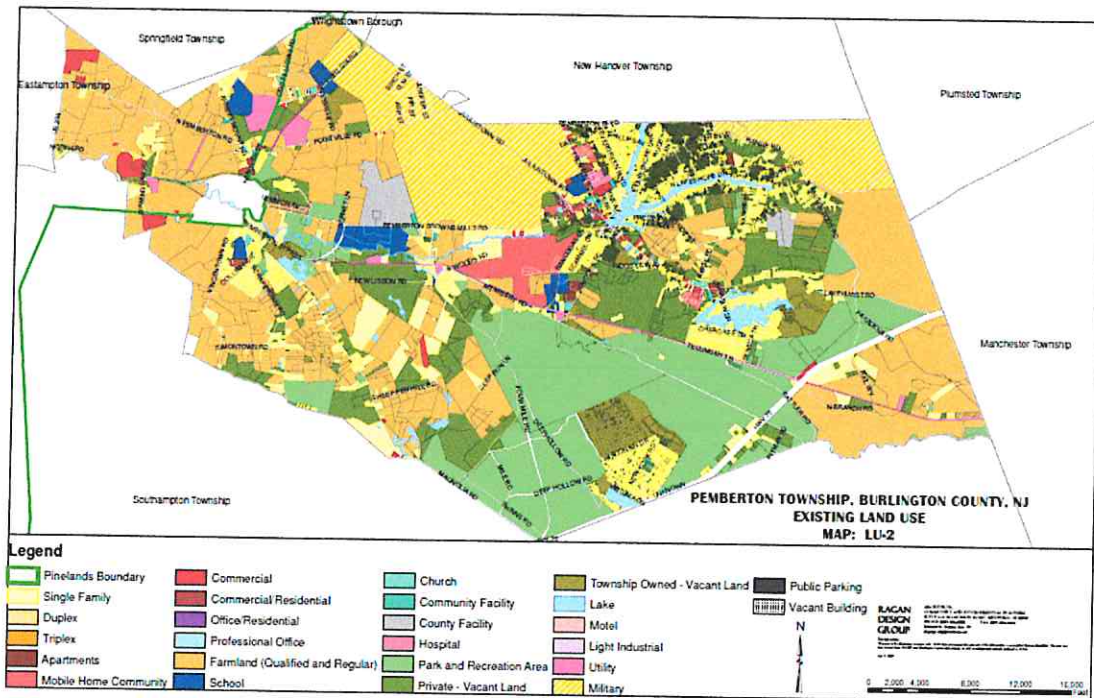
WAREHOUSE STUDY

Prepared for

PEMBERTON TOWNSHIP PLANNING BOARD

Prepared

May 31, 2023



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**Mark A. Remsa, PP, AICP
License No. 33LI00403900**

**The original copy of this document was signed and sealed according to
state requirements.**

WAREHOUSE STUDY

Pemberton Township Planning Board

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INTRODUCTION

The Pemberton Township Council (Township Council) is considering to amend Chapter 190 of the Code, titled "Zoning," by eliminating warehouses as a permitted principal use or conditional use. On May 17, 2023, the Township Council adopted Resolution No 180-2023 requesting the Planning Board undertake two tasks: (1) "... study whether the elimination of warehouses as a permitted principal use or conditional use would not be inconsistent with the [Pemberton Township] Master Plan; and (2) ... make recommendations related to determining whether all warehouses should be eliminated or some warehouse types should be permitted as principal or conditional uses in certain zoning districts and, if some are to be permitted, determining how such warehouse types should be limited in size, scale and location in consideration of the objectives... [to protect farmland and open space, and reduce negative impacts to the public associated with warehouses]..."

This study of warehouses (Study) was prepared to tackle the second task. The Study is organized in the following manner:

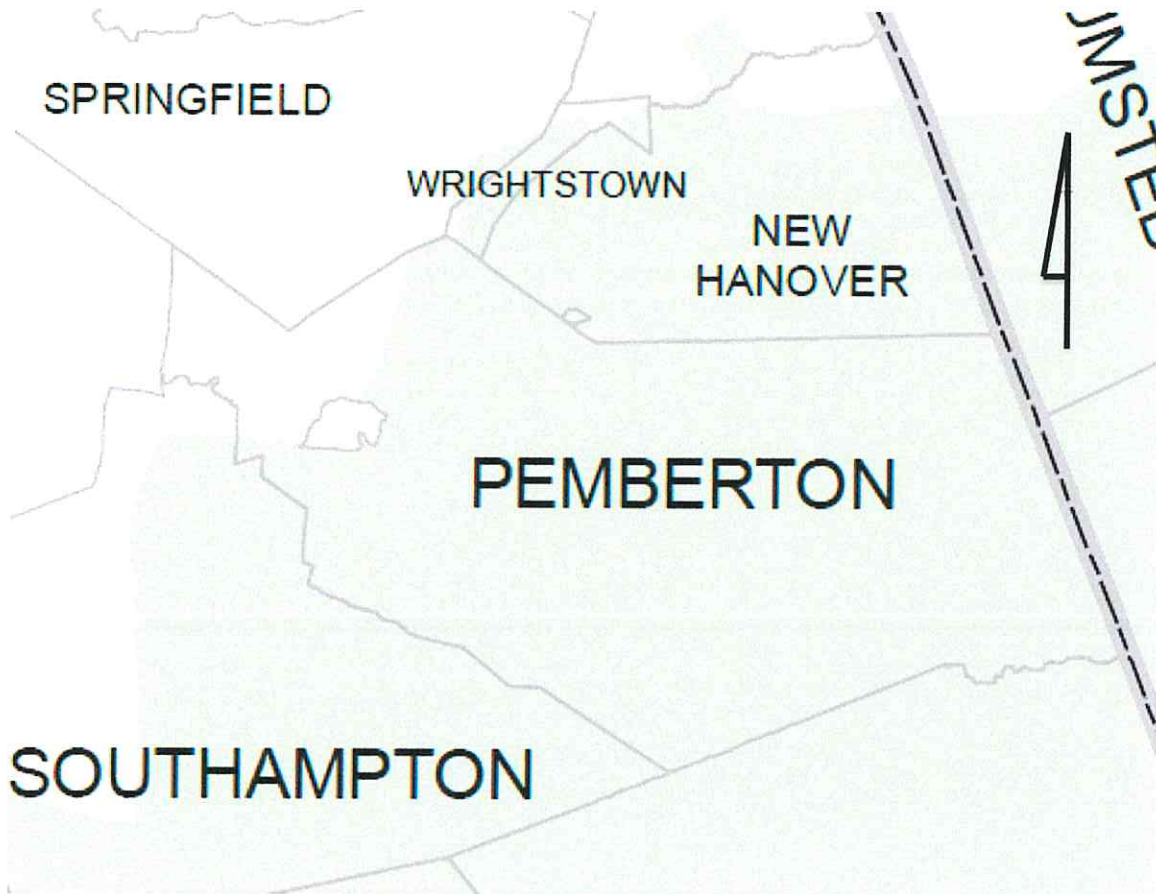
- Local context for Pemberton Township
- Proposed ordinance amendments for eliminating warehouses
- Current zoning ordinances that permit warehouses
- Types of warehouses
- Analysis of warehouse types in Pemberton Township
- Recommendations

LOCAL CONTEXT

Pemberton Township is located in the northern portion of Burlington County (shown in yellow on Map No. 1). According to the Township's 2014 Master Plan, Pemberton Township's land area contains 62.5 square miles, representing approximately 7.7 percent of Burlington County's entire land mass. The United States Census Bureau estimates the Township's 2021 population to be 26,808. Given its estimated population and land area, Pemberton Township's population density is 428.9 persons per square mile, which is lower than Burlington County's population density of 577.8 persons per square mile.

The 2014 Pemberton Township Master Plan indicates that approximately 90 percent of the Township's land area is situated within the New Jersey Pinelands (Pinelands). Map No. 2 shows the Pineland areas delineated within Pemberton Township. The New Jersey Pinelands Commission's mission is to "preserve, protect, and enhance the natural and cultural resources of the Pinelands National Reserve, and to encourage compatible economic and other human activities consistent with that purpose." To achieve its mission, the Commission implements the *Comprehensive Management Plan* (CMP), which contains the

Map No. 2 – Portion of Pemberton Township in the New Jersey Pinelands



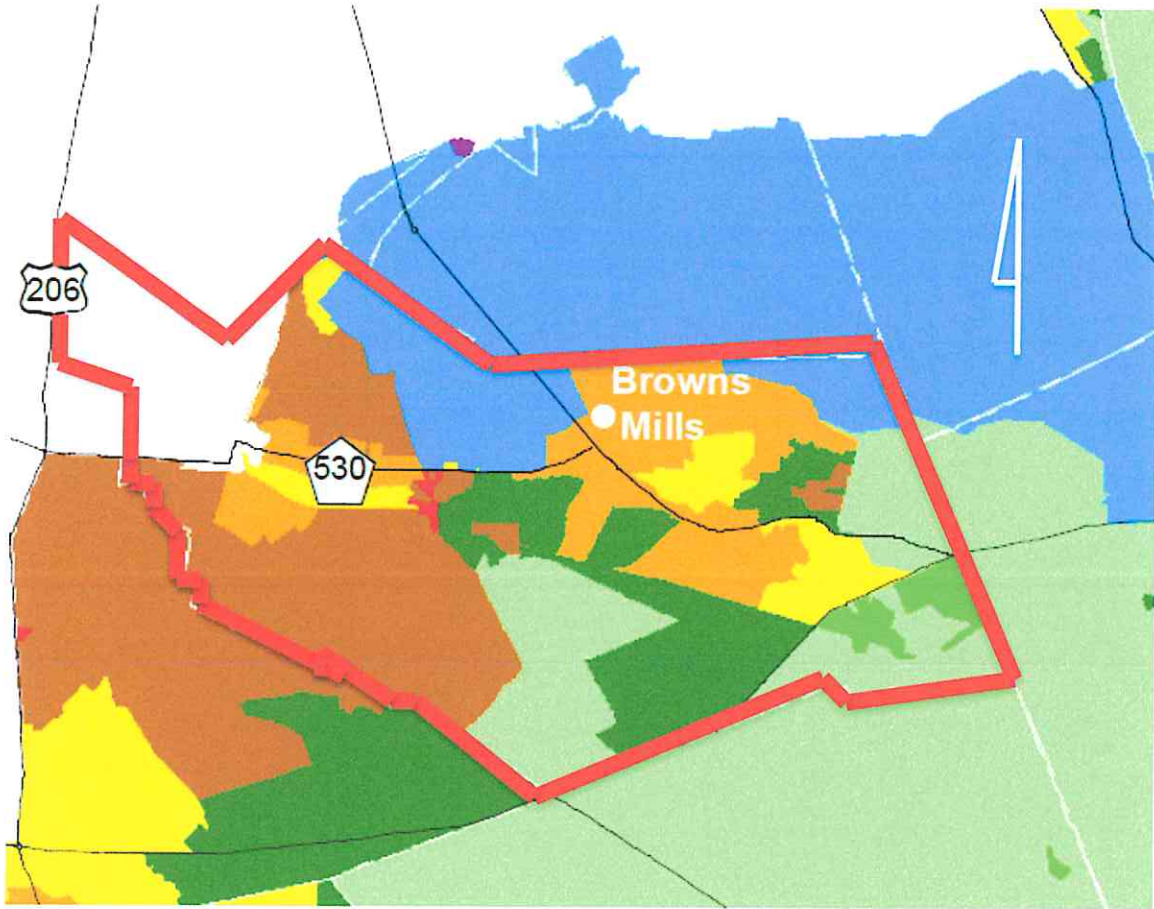
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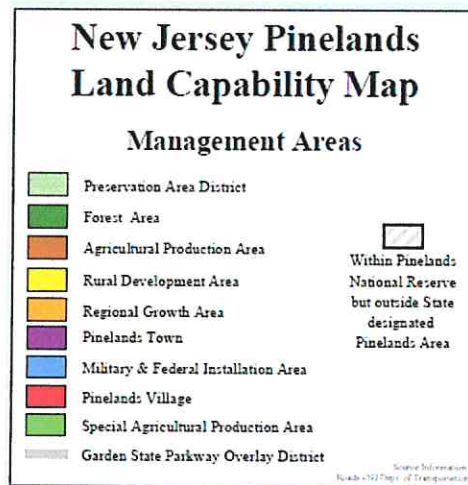
Source: New Jersey Pinelands Commission.

Map No. 4 shows a “snapshot” of existing land uses in the community taken from the 2014 Pemberton Township Master Plan (Master Plan). Table No. 1, which is the Existing Land Use Tabulation provided in the Master Plan, quantifies the existing land uses shown on Map No. 4. The following summary consolidates the existing land uses in residential, public/quasi public, commercial and office, light industrial, farmland, vacant land, parks and recreation, and utilities and rights-of-way:

Map No. 3 – Portion of New Jersey Pinelands Land Capability Map
 Showing Pemberton Township Municipal Boundary Outlined in Red

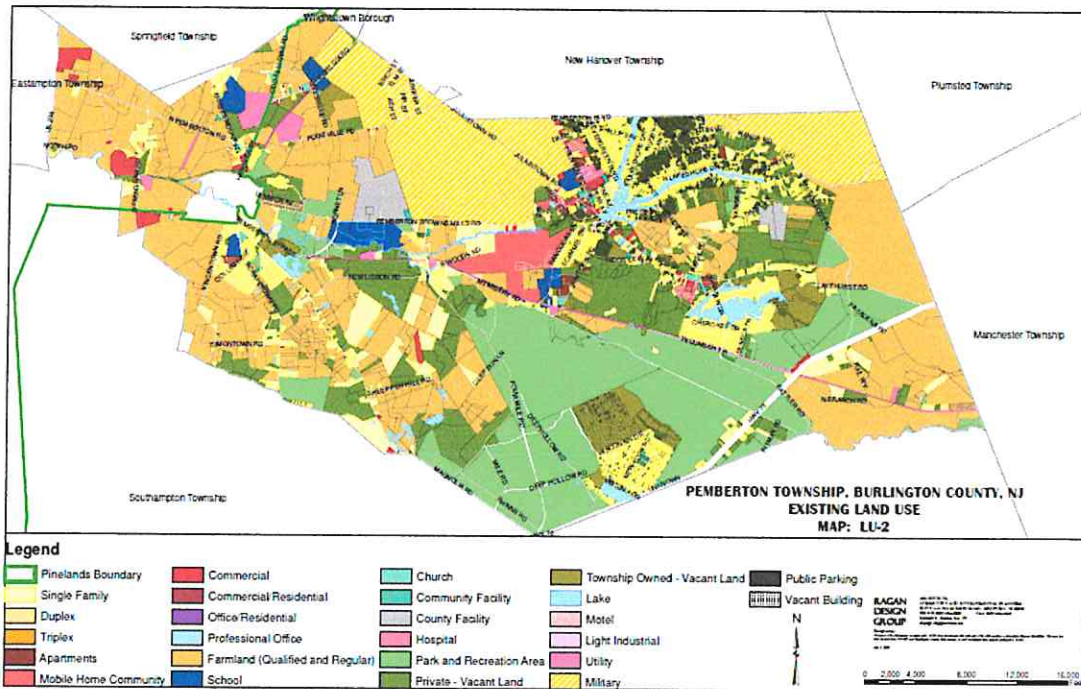


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Source: New Jersey Pinelands Commission

Map No. 4 – Existing Land Uses



Source: 2014 Pemberton Township Master Plan

Summary of Existing Land Uses

Existing Land Uses	Percentage of Land Area
Residential	13.90
Public/Quasi Public	13.71
Commercial and Office	1.10
Light Industrial	0.03
Farmland	25.46
Vacant Land	16.36
Parks and Recreation	19.15
Utilities and R.O.W.	10.28
Total	99.99 (Due to rounding)

Since 2014, Block 797, Lot 1 was developed as a warehouse facility. Because Lot 1 contains approximately 30.65 acres, Light Industrial would have increased by 0.08 percent to 0.11 percent of the Township's land area, and, correspondingly, the Vacant Land would have decreased to 16.28 percent of the municipality's land area. Based on the Summary of Existing Land Uses, it is clear that Pemberton Township would be considered rural because almost 61 percent of the Township's land area is either undeveloped or park or recreational lands. The inclusion of Public/Quasi Public land uses increases the total to about

75 percent of the Township having the appearance of being rural. It is clear why the Master Plan stated that Pemberton Township is a rural community.

Table No. 1 – Existing Land Uses

Figure 3: Existing Land Use Tabulation

Land Use	# of Parcels	Sum of Acres	Percentage of Land
Single-Family Residential	19,762	4,717.60	11.79%
Apartments	31	115.2	0.29%
Duplex	333	54.2	0.14%
Triplex	4	1.3	0.00%
Mobil Home Community	21	670.1	1.68%
Commercial	367	417	1.04%
Professional Office	51	17	0.04%
Light Industrial	43	10.8	0.03%
Commercial/Residential	13	0.7	0.00%
Office/Residential	1	1.2	0.00%
School	29	567.1	1.42%
Churches	57	80.3	0.20%
Motel	47	8.2	0.02%
Hospital	7	44.3	0.11%
Military	8	4,265.90	10.66%
County Facility	6	480	1.20%
Community Facility	84	49	0.12%
Farmland	688	10,184.33	25.46%
Private Vacant Land	9,257	4,952.10	12.38%
Twp. Owned Vacant Land	7,121	1,570.00	3.93%
Park & Recreation	286	7,220.10	18.05%
Lakes	18	441.2	1.10%
Public Parking	22	1.9	0.00%
Utility	63	415.7	1.04%
Vacant Building Lots	17	19.3	0.05%
Subtotal Of Land	38,336	36,304.53	90.76%
Rights Of Ways	N/A	3,695.47	9.24%
Total	38,336	40,000.00	100.00%
Square Miles Of Land		56.73	90.76%
Square Miles Of ROW		5.77	9.24%
Total Square Miles		62.5	100.00%

Source: New Jersey Dept. of Environmental Protection, Burlington County GIS, Pemberton Township Tax Maps.

The Master Plan provided a roadway functional classification for Pemberton Township that included primary arterials, minor arterials, collectors, and sub-collectors. It described these classifications in the following manner:

Generally, arterial streets interconnect with and augment the urban principal arterial system and include all arterials not classified as principal. It accommodates trips of moderate length at a somewhat lower level of travel mobility than principal arterials do. Collectors and sub-collectors provide both land access and traffic circulation. They collect traffic from local streets in neighborhoods and channel it into the arterial system... (71).

Table No. 2 shows the "Roadway Function Classification" provided in the Master Plan.

Table No. 2 – Roadway Function Classification

Table 1: Roadway Function Classification.

Primary Arterial	Minor Arterial	Collector	Sub-collector
U.S Route 206	Trenton Road	Clubhouse Road	Bayberry Road
NJ Route 70	Juliustown Road	East Lakeshore Drive	Bishop Street
South Pemberton Road (CR 530)	Lakehurst Road	West Lakeshore Drive	Goodwater Avenue
Pemberton Bypass	Pemberton Browns Mills Road	Evergreen Boulevard	Press Avenue
	Junction Road	Pemberton Boulevard	Vine Street
	Arneys Mount Road	Ridge Road	South Brynwood Drive
	North Pemberton Road	Hanover Boulevard	Lakeview Boulevard
	South Pemberton Road	South Lakeshore Drive	Vance Street
	New Lisbon	North Lakeshore Drive	Whitesbog Road
	Four-Mile Road	Hunter Boulevard	Coville Drive
	Vincentown Road	Rancocas Lane	Scammell Drive
	Fort Dix Road	Ridgeview Avenue	Berkeley Drive
	Browns Mills - Cookstown Road	Firehouse Road	Pole Bridge Road
	Magnolia Road	Choctaw Drive	Cherokee Drive
		Spring Lake Boulevard	Tecumseh Trail
		Rhode Island Road	Wissahickon Trail
		Washington Boulevard	Red Feather Trail
	Lower Mill Road	Sepulga Drive	
	Scrapetown Road	Tensaw Drive	
	Range Road	Chippewa Trail	
		Split Rock Road	
		Massachusetts Road	
		New York Road	
		Connecticut Road	
		University Avenue	
		Birmingham Road	
		Simontown Road	
Magnolia Road		Burr's Mill Road	

Source: The Roadway Classification Map prepared for Pemberton Township in 1972, Land Development Ordinance 190-34 C (1-2), modified by Ragan Design Group using NJDEP, NJDOT and Burlington County GIS data. New classifications were also determined using traffic counts, Master Plan workshops and site investigations.

PROPOSED ORDINANCE AMENDMENTS

The Township Council proposes the following amendments to Chapter 190 "Zoning" whereby an underline indicates insertion of new text and a ~~strikethrough~~ indicates deletion of text:

Section 1. Chapter 190 "Zoning," Article II Definitions and Usage is hereby amended to a definition of "Warehouse" as follows:

"Warehouse" – a building used for warehousing, storage, distribution or similar establishment designed and used for the wholesale storage and distribution of goods.

Section 2. Chapter 190 "Zoning," Article I "Purpose," Section 190-3 "Prohibited uses" is hereby amended to include:

(1) Warehouses.

Section 3. Chapter 190 "Zoning," Article IV "District Regulations," Section 190-24 "GCLI General Commercial/Limited Industrial District" is hereby amended to delete and repeal the following Section 190-24B(11):

B. Principal permitted uses on the land and in buildings.

~~(11) Wholesale distribution facilities and warehouses where all storage is contained in completely enclosed buildings on parcels not to exceed five acres.~~

Section 4. Chapter 190 "Zoning," Article IV "District Regulations," Section 190-24.2 "OP/LI Office Professional/Limited Industrial District," Subsection C Conditional uses is hereby amended to delete and repeal the following Section 190-24.2C(3):

C. Conditional uses, subject to Section 190-56E.

~~(3) Warehouses or similar storage facilities, not including mini-storage facilities.~~

Section 5. Chapter 190 "Zoning," Article IV "District Regulation," Section 190-25 "MI Manufacturing Industrial District" is hereby amended to repeal and delete the following Section 190-25A and B(3):

A. Purpose. The purpose of the MI District is to provide a location in the Township where relatively small manufacturing ~~and warehousing operations~~ are permitted.

B. Principal permitted uses on the land and in the buildings.

~~(3) Wholesale distribution centers and warehouses.~~

Section 6. Chapter 190 "Zoning," Article IV "District Regulations," Section 190-26 "PI Planned Industrial District." Subsection B(3) is hereby amended to repeal and delete the reference to Wholesale distribution centers and Warehouses from the Principal permitted uses on land and in buildings:

B. Principal permitted uses on the land and in buildings.

~~(3) Wholesale distribution centers and warehouses.~~

CURRENT ZONING THAT PERMITS WAREHOUSES

Chapter 190 "Zoning" of the Code of Pemberton Township provides the regulations for land development within the community. In general, Map No. 5 shows the zoning districts of the Township. The following sections of Chapter 190 permit warehouses as either a principal use or a conditional use:

- Section 190-24 GCLI General Commercial/Light Industrial District – permits warehouses as a principal use
- Section 190-24.2 OP/LI Office Professional/Light Industrial District – permits warehouses as a conditional use
- Section 190-25 MI Manufacturing Industrial District – permits warehouses as a principal use
- Section 190-26 PI Planned Industrial District – permits warehouses as a principal use

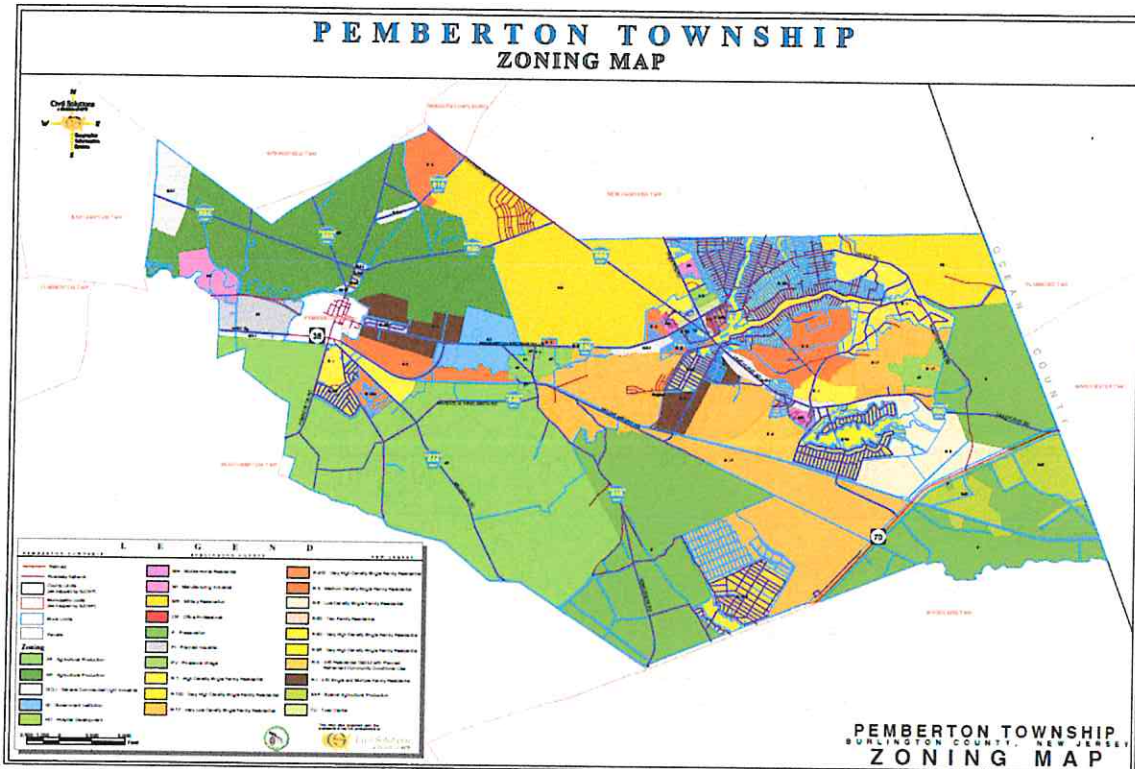
In addition to the aforementioned sections of Chapter 190, the following redevelopment plans permit warehouses as a principal use:

- Block 797, Lot 1 Redevelopment Plan completed May 16, 2017 and revised September 26, 2017, which roughly corresponds with the GCLI zoning district located on the north side of County Route (CR) 530 between Birmingham Road and Southampton Township.
- South Pemberton Road Redevelopment Plan dated January 2021, which roughly corresponds with the GCLI zoning district located along the north side of CR 530 between Pemberton Borough and Birmingham Road.
- Route 206 Corridor Redevelopment Plan, dated November 2021, is coincident with the GCLI zoning district that fronts along Route 206.

Notwithstanding zoning requirements for the MI and PI zoning districts are contained in Chapter 190, the Pemberton Township Zoning Map, shown on the Township's Digital Maps, delineates no MI and PI zoning districts. Therefore, it is

a moot point to discuss the MI and PI zoning districts that, in effect, do not exist. The GCLI and OP/LI zoning districts and the three redevelopment plans in which warehouses are permitted are discussed below. Their bulk and area, and off-street parking and loading requirements are provided as well.

Map No. 5 – Zoning Map



Section 190-24 GCLI General Commercial/Light Industrial District

Specifically, Section 190-24B(11) permits warehouses as a principal use in the following manner:

Wholesale distribution facilities and warehouses where all storage is contained in completely enclosed buildings on parcels not to exceed five acres.

Table No. 3 provides the area and yard requirements for the GCLI zoning district (Section 190-24E(1)). The minimum lot size is 30,000 square feet when sanitary sewers are available and one acre when they are not. Furthermore, the GCLI zoning district restricts the maximum size of wholesale distribution facilities and warehouses to five acres.

With regard to minimum off-street parking Section 190-24H(12) requires “[o]ne [parking] space for every 1,000 square feet or fraction thereof of floor area used

for storage and warehousing, plus one space for every 700 square feet or fraction thereof of floor area used for manufacturing, plus one space for every 200 square feet or fraction thereof of floor area used for offices.”

Section 190-24I(1) requires the following minimum off-street loading be provided:

Each activity shall provide for off-street loading and unloading with adequate ingress and egress from streets and shall provide such area(s) at the side or rear of the building. Each space shall be at least 15 by 40 feet. One space shall be provided for the first 5,000 square feet of gross floor area or fraction thereof in each building and one additional space for each additional 7,000 square feet of gross floor area or fraction thereof. There shall be no loading or unloading from the street.

Table No. 3 – GCLI Area and Yard Requirements

Area and yard requirements shall be as follows:

Principal building Minimum	
Lot area (square feet)	30,000**
Lot frontage (feet)	150
Lot width (feet)	150
Lot depth (feet)	150
Side yard, each (feet)	40
Front yard (feet)	200*
Rear yard (feet)	35
Accessory building Minimum	
Distance to side line (feet)	35
Distance to rear line (feet)	35
Distance to other building (feet)	35
Maximum impervious surface coverage (percent)	70

NOTES:

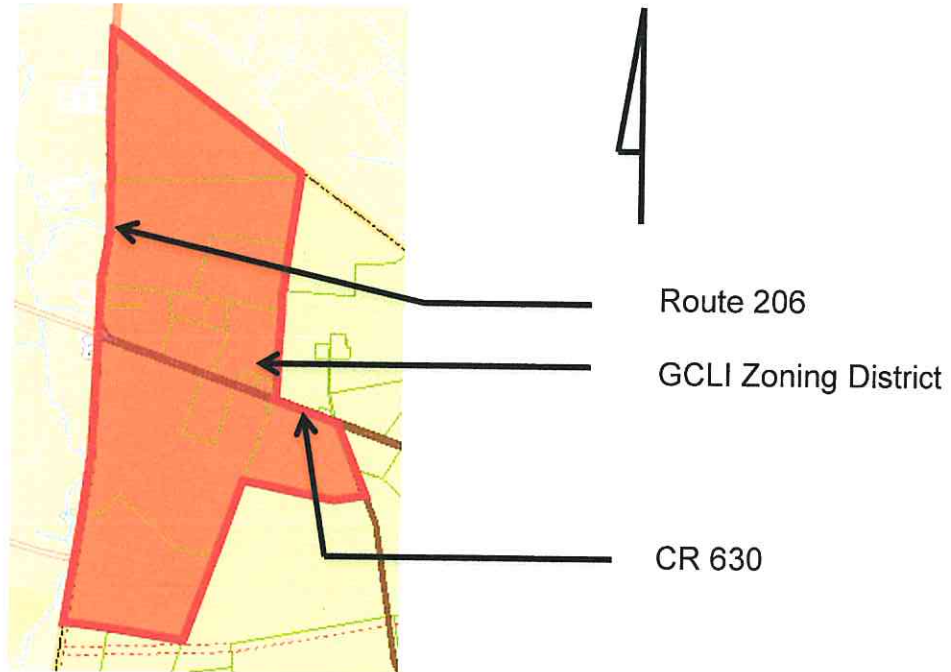
* May be reduced to 75 feet if environmental or physical limitations exist.

** Lot size with sewers; without sewers, one acre.

There are several GCLI zoning districts within Pemberton Township. Portions of the Pemberton Township Digital Maps, which contain the most current zoning data, are enlarged showing those GCLI zoning districts. The GCLI zoning district that fronts along Route 206 is shown on Map No. 6. The GCLI zoning district located along the both sides of CR 530 extending from Pemberton Borough in the east to Soutampton Township in the west is indicated on Map No. 7. Map No. 8 depicts the GCLI zoning district located both sides of CR 616 (Fort Dix

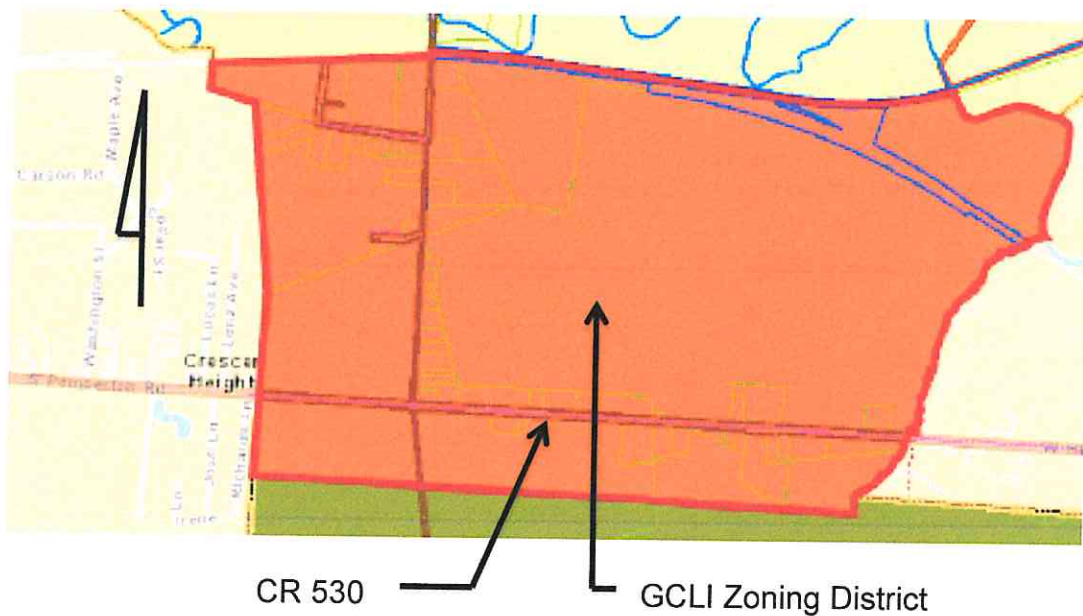
Road). A GCLI zoning district lies southeast of Browns Mills along CR 530 (Lakehurst Road) as shown on Map No. 9.

Map No. 6 – GCLI Zoning District along Route 206



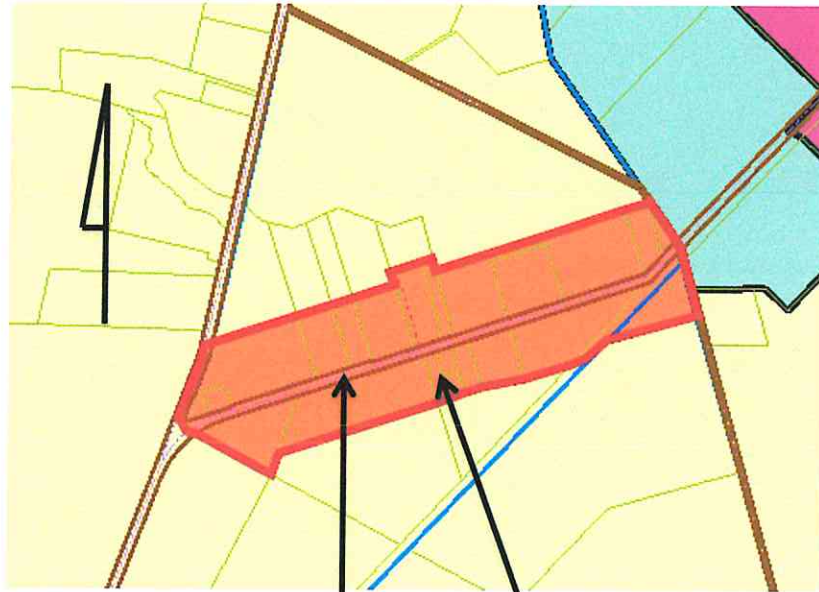
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Map No. 7 – GCLI Zoning District along CR 530 (South Pemberton Road)



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Map No. 8 – GCLI Zoning Districts along CR 616

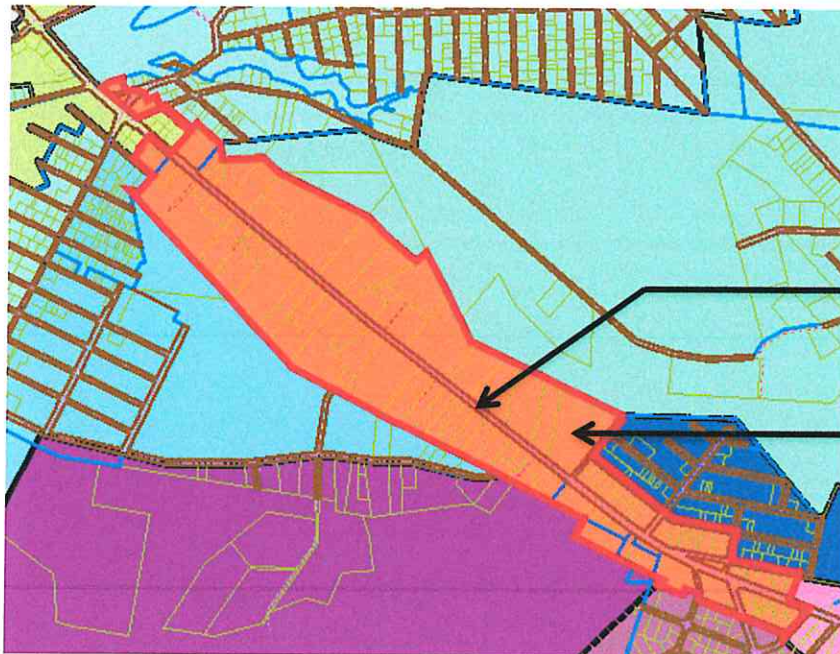


CR 616 (Fort Dix Road)

GCLI Zoning District

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Map No. 9 – GCLI Zoning District along CR 530 Southeast of Browns Mills



CR 530
(Lakehurst Road)

GCLI Zoning District

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Section 190-24.2 OP/LI Office Professional/Light Industrial District

Warehouses are permitted by Section 190-24.2C(3) as a conditional use as described below.

Warehouses or similar storage facilities, not including mini-storage facilities.

Conditional use warehouses or similar storage facilities are regulated by Section 190-56E in the following manner:

Light industrial, light assembly and warehouse or similar storage facilities as regulated by § 190-24.2 shall be permitted only in accordance with the following provisions.

- (1) More than one conditional use may be permitted per lot, provided that no more than one light industrial, light assembly or warehouse use shall be permitted per acre of lot area.
- (2) All storage of raw materials or finished products shall be conducted within completely enclosed buildings.
- (3) Maximum lot coverage shall not exceed 50%.
- (4) In oases where a permitted conditional use is situated on a lot which abuts a residential property or zone, there shall be a landscaped buffer strip along the perimeter of the property housing the conditional use where it is adjacent to such residential property or zone. Said buffer strip shall be at least 25 feet in width or depth as measured from the residential property line. Fifteen feet of such buffer nearest the residential property line shall be used as a planting strip on which shall be placed fence or plant material, trees, shrubs or combination thereof. Where fencing is used, it shall be 6 feet in height. Plant material used as a landscape screen shall be at least 6 feet high at the time of planting and shall be of sufficient density to provide year-round screening of activities at the conditional use.
- (5) No less than one parking space shall be provided for every 500 square feet of gross floor area, plus one space for each company vehicle normally stored on the premises.
- (6) No retail sale of any merchandise shall be permitted on the premises.
- (7) No wholesale operations shall include truck terminals or other heavy trucking installation.

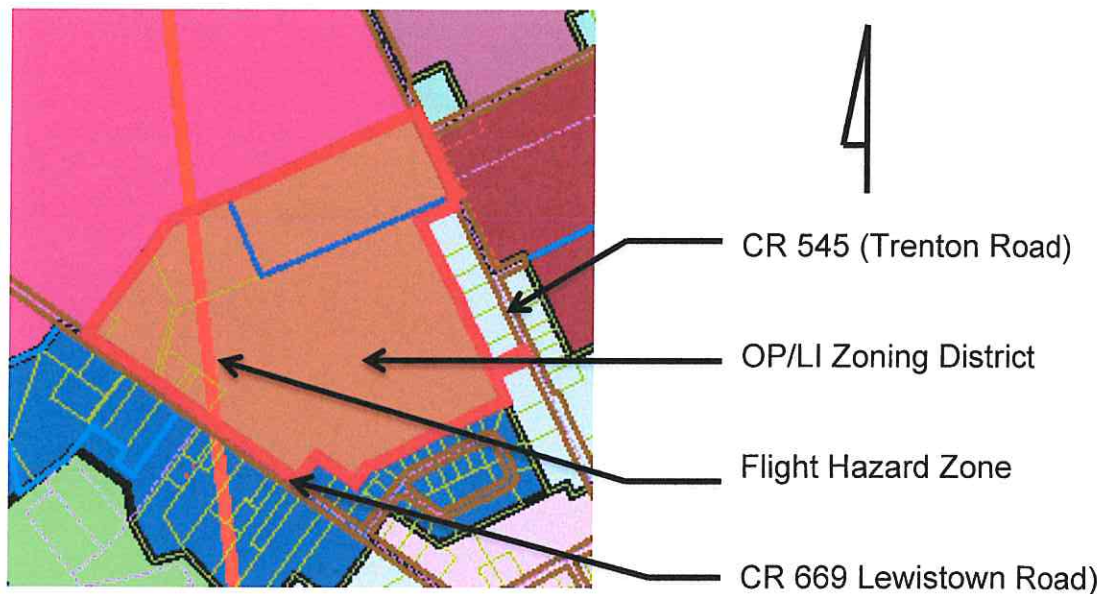
The area and yard requirements for the OP/LI zoning district (Section 190-24.2F) are provided in Table No. 4.

Table No. 4 – OP/LI Zoning District Area and Yard Requirements

Principal Building Minimum	
Lot area (acres)	2.8
Lot area (acres) (light industrial use)	4.0
Lot frontage (feet)	300
Lot width (feet)	300
Lot depth (feet)	300
Side yard, each (feet)	50
Front yard (feet)	150
Rear yard (feet)	50
Accessory Building Minimum	
Distance to side line (feet)	35
Distance to rear line (feet)	35
Distance to other building (feet)	35
Maximum	
Building coverage of principal building (percent)	15
Building coverage of accessory building(s) (percent)	5
Total impervious surfaces (percent)	35

One OP/LI zoning district exists in Pemberton Township. It is located between CR 545 (Trenton Road) to the east and CR 669 (Lewistown Road) to the west, in the northern portion of Browns Mills. Map No. 10 depicts the OP/LI zoning district. The flight hazard zone for Joint Base McGuire Dix Lakehurst, which restricts the height of buildings and discourages residential uses in it, overlays the western portion of the zoning district.

Map No. 10 – OP/LI Zoning District along CR 545 and CR 669



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Block 797, Lot 1 Redevelopment Plan

The Block 797, Lot 1 Redevelopment Plan (Lot 1 RP) permits the following principal uses pertaining to warehouses (8):

- Warehousing
- Wholesale distribution centers

The Lot 1 RP applies the area, yard and bulk requirements as provided in Table No. 5 (9).

Table No. 5 – Block 797, Lot 1 Redevelopment Area and Bulk Standards

BLOCK 797 LOT 1 REDEVELOPMENT AREA BULK STANDARDS	
Principal Building Bulk Standards	Redevelopment Plan Standard
Minimum Lot Area	5 acres
Minimum Lot Frontage	400 Feet
Minimum Lot Width	400 Feet
Minimum Lot Depth	400 Feet
Minimum Side Yard Setback, Each	50 Feet
Minimum Front Yard Setback	150 Feet
Minimum Rear Yard Setback	100 Feet
Maximum Building Height	60 Feet
Maximum Impervious Surface Coverage	70 Percent
Maximum Building Coverage	45 Percent
Accessory Building Bulk Standards	Redevelopment Plan Standard
Minimum Distance to Side Line	75 Feet
Minimum Distance to Rear Line	75 Feet
Minimum Distance to Other Building	30 Feet

The following off-street parking requirements are applied to warehousing (ibid.):

- Warehousing or storage use: 0.6 spaces/10,000 square feet of gross warehouse floor area
- A maximum of 110 tractor-trailer docking spaces for loading and unloading for any proposed warehouse use.

A landscape buffer having a minimum width of 50 feet is required along Birmingham Road and any residential use or zone (11).

Map No. 11 shows the redevelopment area for Lot 1 RP.

Map No. 11 – Redevelopment Area for Block 797, Lot 1



South Pemberton Road Redevelopment Plan

The South Pemberton Road Redevelopment Plan (SPRRP) permits the following principal uses related to warehousing (9):

- Any use permitted as a principal use within the GCLI zoning district of the Township [, including ‘wholesale distribution facilities and warehouses where all storage is contained in completely enclosed buildings on parcels not to exceed five acres’].
- Warehousing
- Distribution center
- Flex space industrial [, which is defined in SPRRP as ‘a building or space which may be used for light manufacturing, warehousing {emphasis added}, distribution {emphasis added}, office space, light assembly or fabrication, or any combination of such uses. The specific use of the space may not be permanently defined, and it is intended that the use of the space may change to suit the needs of the user’ (8)].

The following area, yard and bulk requirements for the redevelopment area are provided in Table No. 6 (10):

Table No. 6 – Area, Yard and Bulk Requirements in SPRRP

REDEVELOPMENT AREA BULK STANDARDS	
Lot and Principal Structure Requirements	
Minimum Lot Area	1 acre (43,560 square feet)
Minimum Lot Width	150 feet
Minimum Lot Depth	150 feet
Minimum Front Yard	100 feet
Minimum Side Yard	100 feet
Minimum Rear Yard	100 feet
Minimum Setback from Residential Property Line	175 feet
Maximum Building Height	2 stories / 60 feet
Maximum Building Coverage*	35 percent
Maximum Impervious Coverage*	70 percent
Accessory Building Requirements	
Minimum Side Yard	25 feet
Minimum Rear Yard	30 feet
Maximum Building Height	1 story / 15 feet
* Building and lot coverage calculations shall be based on gross area of the property.	

The SPRRP has two additional requirements that restrict where development could occur as follows (11):

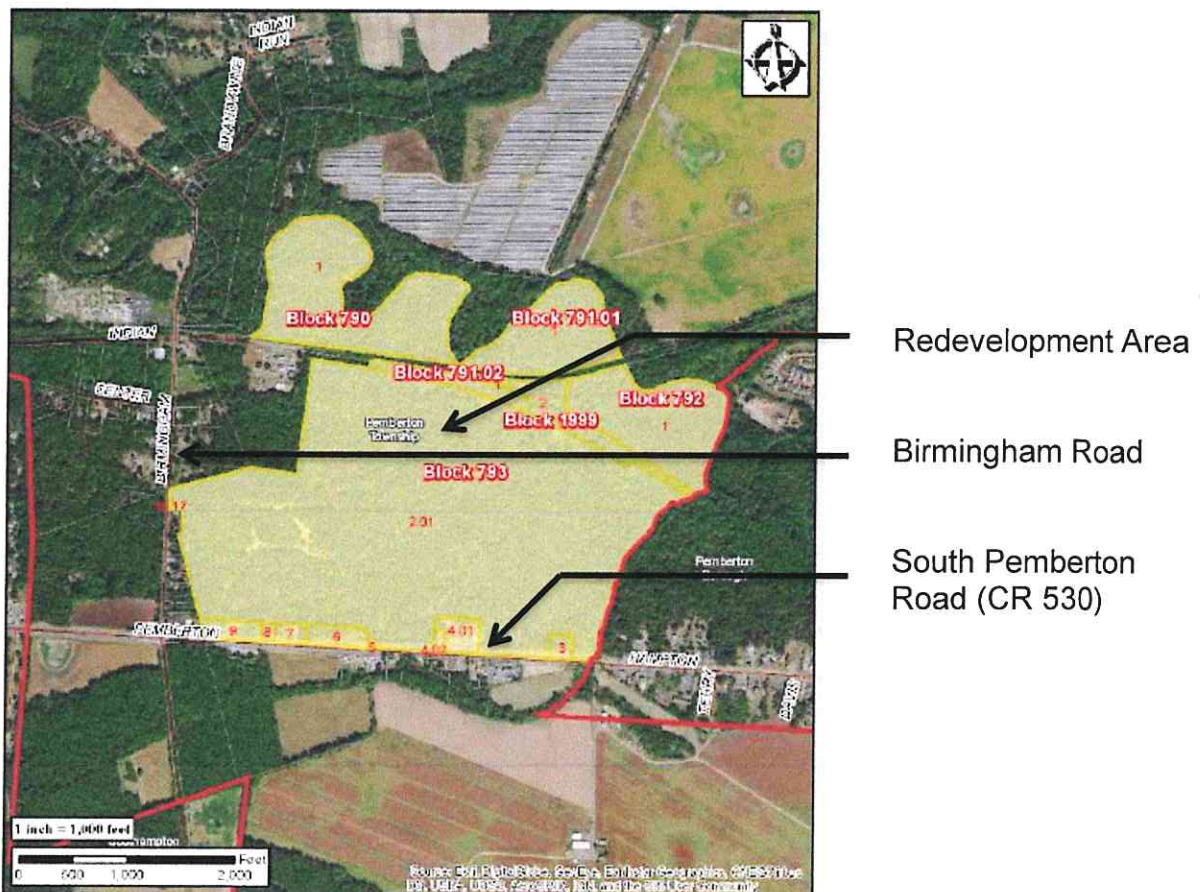
- A dense vegetative buffer of at least 100 feet in width must be provided along any property line that is adjacent to any residential use or zone. No development shall be permitted within the buffer area.
- No development, with the exception of an access driveway, shall be permitted within 150 feet of the Right-of-Way [sic] of Birmingham Road.

The SPRRP provides the following off-street parking and loading requirements (11 and 12.):

- Flex space industrial, 1 parking space per 1,000 square feet of gross floor area and 1 loading space per 7,500 square feet of gross floor area
- Warehouse of distribution, 1 parking space per 5,000 square feet of gross floor area and 1 loading space per 7,500 square feet of gross floor area

Map No. 12 shows the South Pemberton Road redevelopment area.

Map No. 12 – South Pemberton Road Redevelopment Area



Route 206 Corridor Redevelopment Plan

The Route 206 Corridor Redevelopment Plan (Route 206 RP) permits the following principal uses related to warehousing (8):

- Any use permitted as a principal use within the GCLI zoning district as stated in § 190-24B of the Township Code [, which includes ‘wholesale distribution facilities and warehouses where all storage is contained in completely enclosed buildings on parcels not to exceed five acres’].
- Warehousing, including cold storage facilities. [Warehousing is defined as “{a} building that is used primarily for the purpose of storage of materials or goods for further distribution that are not manufactured within the building (7)].
- Distribution center
- Flex space industrial [, which is defined in SPRRP as ‘a building or space which may be used for light manufacturing, warehousing {emphasis added}, distribution {emphasis added}, office space, light assembly or fabrication, or any combination of such uses. The specific use of the space may not be permanently defined, and it is intended that the use of the space may change to suit the needs of the user’ (6)].

Table No. 7 – Area and Bulk Standards for Route 206 RP

REDEVELOPMENT AREA BULK STANDARDS	
Overall Tract Requirements	
Minimum Tract Area	10 acres
Minimum Setback from public ROW	150 feet
Minimum Tract Side Yard Setback	100 feet
Minimum Tract Rear Yard Setback	100 feet
Maximum Tract Impervious Coverage	40 percent
Individual Lot Requirements	
Minimum Lot Area	2 acres
Minimum Lot Frontage	200 feet
Minimum Lot Depth	200 feet
Minimum Front Yard	75 feet
Minimum Side Yard	50 feet
Minimum Rear Yard	40 feet
Maximum Building Height	60 feet
Maximum Building Coverage	35 percent
Maximum Impervious Coverage	70 percent
Accessory Building Requirements	
Minimum Side Yard	25 feet
Minimum Rear Yard	25 feet
Maximum Building Height	1 story / 15 feet

Table No. 7 provides the area and bulk standards required for the Route 206 redevelopment area (9).

The Route 206 RP provides the following additional requirements that affect where development could occur in the redevelopment area (9 and 10):

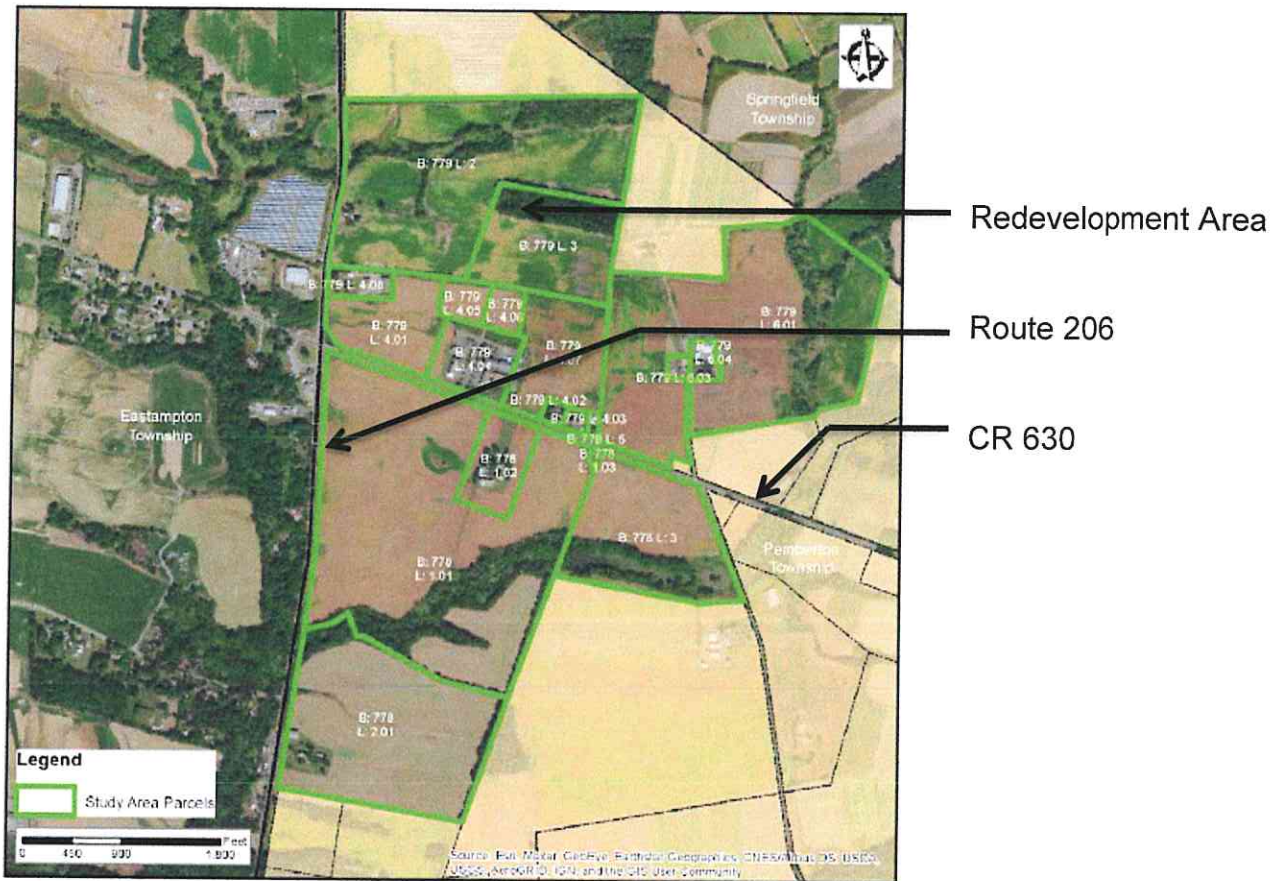
- The minimum required overall tract area for a redevelopment project is 10 acres, however within a redevelopment area, the tract may be subdivided to create an industrial park with individual lots of at least 2 acres.
- To the extent practicable, a subdivision shall be designed to maximize the retention of open areas by organizing the permitted impervious coverage areas on separate lots in close proximity together, by utilizing shared driveways between and among individual lots, and designing the subdivision to facilitate the use of remaining open areas for continued agricultural use...
- A dense vegetative buffer of at least 50 feet in width must be provided along any side or rear property line that is adjacent to any residential use or zone. No development shall be permitted within the buffer area. No such buffer shall be required between two non-residential properties.

The Route 206 RP requires the following off-street parking and loading spaces be provided:

- Flex space industrial, 1 parking space per 1,000 square feet of gross floor area and 1 loading space per 10,000 square feet of gross floor area
- Warehouse of distribution, 1 parking space per 2,500 square feet of gross floor area and 1 loading space per 10,000 square feet of gross floor area

Map No.13 shows the redevelopment area in the Route 206 corridor.

Map No. 13 – Route 206 Corridor Redevelopment Area



TYPES OF WAREHOUSES

Over the past two decades, warehousing goods and distributing them have undergone significant changes driven primarily by the rapid growth of e-commerce that strives to meet consumer expectations for receiving almost instantaneous delivery of goods purchased on the internet, otherwise known as “same-day delivery.” In response to the negative impacts from the Covid-19 pandemic, supply chains are undergoing more changes. According to the article “Firms Want to Adjust Supply Chains Post-Pandemic, but Changes Take Time” in the December 27, 2020 issue of *The Wall Street Journal*, companies are discussing “regionalization’ [t]hat involves sourcing components or setting up factories in multiple parts of the world at once, and then using each region to supply products to customers in the closest markets [to avoid major supply chain disruptions]... [and] ‘reshoring’.. bringing manufacturing back to a company’s home market from abroad.” Reshaping supply chains in this manner will drive more demand for warehousing and distributing the components that are a part of the manufacturing process and the finished products ready for consumption in the market. The resultant changes from e-commerce and post-pandemic supply

chain logistics are quite different than the traditional warehousing of goods that involved trucking in product, storing product, shipping product out to the local market, and making the final delivery to a physical store where the consumer purchased the product. Of course, the traditional storage and movement of goods still occur. However, under the e-commerce model, the movement and storage of goods involves multiple steps occurring in different types of warehouses and distribution facilities, many of which are very large buildings with massive footprints and loftier building heights in which towering racking systems, often automated, fit. Generally, the larger e-commerce warehouse buildings generate higher volumes of traffic associated with more workers, who work various shifts throughout the course of a day, and more tractor-trailers delivering product to and from the buildings. In most cases, traditional warehouses generate lower volumes of employee and truck traffic.

Warehouses come in different sizes and configurations serving specific purposes and operations depending upon which part of the supply chain they support. Warehouses generally found in today's supply chain can be characterized in two major categories:

- Traditional warehouses “stor[e] goods and material in inventory for extended periods of time and releas[e] them on demand” (New Jersey State Planning Commission, Office of Planning Advocacy, “Distribution Warehousing and Goods Movement Guidelines,” adopted September 7, 2022).
- Distribution centers hold products for a short period of time, receiving and shipping products at a higher velocity. They “are very customer-centric and are typically located close to where the end user is... may also offer value added services, such as cross docking, pick and pack services, simple product mixing or packaging... [and] are also equipped with much more advanced technology to facilitate the [processing of goods movement]” (Jarrett Logistics, “6 Different Types of warehouses”, www.gojarrett.com , April 6, 2021). These types of facilities tend to be larger than traditional warehouses, employ more people, and generate higher volumes of both employee and truck traffic.

For today's different types of warehouse a more granular approach for understanding how warehouses support the supply chain is warranted. In October 2016, the Institute of Transportation Engineers prepared an insightful study on warehouses titled “High Cube Warehouse Vehicle Trip Generation Analysis.” The study defined high cube warehouse as:

... a building that typically has at least 200,000 gross square feet of floor area, has a ceiling height of 24 feet or more, and is used primarily for the storage and/or consolidation of manufactured goods (and to a lesser extent, raw materials) prior to their distribution to retail locations or other warehouses. A typical [high

cube warehouse] has a high level of on-site automation and logistics management. The automation and logistics enable highly-efficient processing of goods through the [high cube warehouse] (3).

The study identified five types of high cube warehouses (ibid.):

- Transload – usually pallet loads or larger handling products of manufacturers
- Short-Term Storage – products held on-site for a short term
- Cold Storage – [high cube warehouse] with permanent cold storage in at least part of the building
- Fulfillment Center – storage and direct distribution of e-commerce product to end uses
- Parcel Hub – transload function for a parcel delivery company

The study provided a comparison of the standard (traditional) warehouse/storage facility and the foregoing five types of high cube warehouses by the following characteristics:

- Description and key warehouse functions
- Overall site layout
- Building dimensions
- Automation
- Additional descriptive features

Table No. 8 contains the comparison of warehouse characteristics taken from Table No. 2 of the study. The warehouse characteristics central to land use planning considerations for Pemberton Township are:

- Description and key warehouse functions
 - Typical function combined with place in supply chain
 - Location
- Overall site layout
 - Employee parking
 - Truck and trailer parking
- Building dimensions
 - Length versus depth
 - Ceiling height
 - Number docks
- Additional descriptive features
 - Typical floor area ratio
 - Movement of goods in trucks
 - Hours of operation and peak periods
 - Truck sizes

Table No. 8 – High-Cube Warehouse Classifications

Table 2. High-Cube Warehouse Classifications

	Standard Warehouse/ Storage	Transload Facility	Short-Term Storage	Cold Storage	Fulfillment Center	Parcel Hub
Description and Key Warehouse Functions						
Typical Functions	Products stored on-site typically for more than one month	Focus on consolidation and distribution of pallet loads (or larger) of manufacturers, wholesalers, or retailers; little storage duration; high throughput and high-efficiency	Focus on warehousing/ distribution space operated at high efficiency; often with custom/special features built into structure for movement of large volumes of freight	Temperature-controlled for frozen food or other perishable products stored in any type of HCW; building built with substantial insulation, including foundation, walls, and roof ³	Storage and direct distribution of e-commerce product to end users; smaller packages and quantities than for other types of HCW; often multiple mezzanine levels for product storage and picking	Regional and local freight-forwarder facility for time-sensitive shipments via air freight and ground (e.g., UPS, FedEx, USPS); site often includes truck maintenance, wash, or fueling facilities
Break-Bulk or Assembly	Can include break-bulk and assembly activities	Very limited pick-and-pack area within facility	May or may not include break-bulk, repack or assembly activities	Limited or no break-bulk, repack or assembly activities	Pick-and-pack area comprises majority of space	Limited or no break-bulk, repack or assembly activities
Place in Supply Chain		Usually for final distribution to retail stores but can be for manufacturer to wholesale distribution		Typically, late in the supply chain for final distribution to retail stores or local, smaller distribution centers	Typically, freight for final consumption (business-to-business and consumers)	Can be situated at multiple points in the supply chain (intermediate or final delivery)

³ Cold storage products (e.g., flowers and other perishables) that are not frozen must be shipped within hours or a few days. Cold storage products that are frozen may take a long time to ship. Products in these facilities may be treated more like typical HCW products.

	Standard Warehouse/Storage	Transload Facility	Short-Term Storage	Cold Storage	Fulfillment Center	Parcel Hub
Location	Typically in an industrial area within urban area or urban periphery	Typically in an area with convenient freeway access; often in rural or urban periphery area	Typically in an area with convenient freeway access	Depends on supply and demand markets	Often near a parcel hub or USPS facility, due to time sensitivity of freight	Typically in close proximity to airport; often stand-alone
Overall Site Layout						
Employee Parking		Smaller employee parking ratio (per facility square foot) than fulfillment center or parcel hub	Smaller employee parking ratio (per facility square foot) than fulfillment center or parcel hub		Larger parking supply ratio than for all other HCW types	Larger employee parking ratios; truck drivers often based at facility (i.e., parking may be for both site employees and drivers)
Truck & Trailer Parking	Limited truck parking area; increases with distance to major distribution hub	Large, open trailer parking area surrounding facility; produces high land to building ratio	Ratio of truck parking spaces to docks can vary between 0.5:1 and 1.5:1, with 1:1 being very common	Can vary with whether products are frozen or perishable ⁴	Significantly higher truck parking ratios than for other HCWs	Very high truck parking ratios to dock positions, often 2:1 or more
Loading Dock Location	Either on one side or on two adjacent sides	Minimum of two sides (adjacent or opposite); can be on four sides	On either one or two sides			Usually on both long sides of building; can be on four sides
Building Dimensions						
Length vs. Depth		Typical length vs. depth ranges between 3:1 and 2:1; shallower than Standard	Typical length vs. depth is 2:1; shallower than Standard			Typical configuration is cross-dock; building typically more shallow (150-300 feet across) than other HCWs

⁴ Cold storage product handling must be done quickly. Any product stored in a trailer on the site requires either an idling truck or an external power supply to maintain the temperature within the required ranges.

	Standard Warehouse/Storage	Transload Facility	Short-Term Storage	Cold Storage	Fulfillment Center	Parcel Hub
Ceiling Height	Typically between 28 and 40 feet	Typically, lower than for other HCW	Typically between 28 and 34 feet, with some facilities in excess of 40 feet	Typically higher (70-100 feet) to maximize efficiency of refrigeration; frozen food tends to have a higher ceiling than produce handling	Often as high as 40 feet in order to accommodate up to three levels of interior mezzanines	Typically not as tall as other HCW; commonly between 18 and 20 feet range; racking not usually provided (i.e. floor-stack only)
Number of Docks	Low number of dock positions to overall facility, 1:20,000 square feet or lower	Typical dock-high loading door ratio is 1:10,000 square feet; common range between 1:5,000 & 1:15,000 square feet	Typically, 1:10,000 square feet or lower			
Automation						
Material Handling Systems	Little or no automation; mechanization limited to pallet jacks and forklifts	Very highly-mechanized material handling systems	Very highly-mechanized material handling systems; high ratio of material handling equipment to overall floor area	Very high clear height requires sophisticated material handling equipment	High levels of automation in material handling equipment	High levels of automation in material handling equipment
Conveying Systems	Little or no automation	Usually automated mechanized conveying	Usually limited automated conveying	Very high clear height requires a sophisticated conveyance system	High levels of automation in conveying systems	High levels of automation in conveying systems
Warehouse Mgmt Systems (WMS)		Some facilities use ASRS (Automated Storage and Retrieval Systems)			High levels of automation; some use of ASRS	High levels of automation

Table 2. Additional Descriptive Features

Typical Floor Area Ratios range between 35 and 60 percent. Standard, Fulfillment Center, and Parcel Hub sites tend to have higher values than Transload and Short-Term Storage HCW.

Office/Employee Welfare³ Space is highly variable and is insignificant within overall building square footage. Common values are between 3,000 and 5,000 square feet for Cold Storage and between 5,000 and 10,000 square feet for Transload Facility, Fulfillment Center, and Parcel Hub.

Movement of Goods in Trucks – For a Transload site, typical truck movements are comprised of full load, large trailers, both inbound and outbound. For some “last mile” or local distribution centers, long-haul trucks or international containers can arrive loaded and depart empty, while local delivery trucks arrive empty and depart loaded. For national and regional distribution centers, trucks can come in loaded and re-load with different product mix and depart loaded.

Hours of Operation and Peak Periods – Peak truck movement activity is often outside the peak commuting period on the adjacent street system. HCW operations are often 24 hours per day, every day of the year. For a Standard site, there is a greater likelihood that the site peak period of traffic operations may coincide with or be near the street peak period.

Truck Sizes – Truck size can vary significantly between similar sites. Sizes and types are a function of the origins and destinations of the goods processed at the facility (i.e., location in the supply chain). Local deliveries to business/residential customers are commonly made with smaller trucks (except warehouses that, for example, deliver bulky items to a home improvement store). Longer distance travel or deliveries at early stages in the supply chain are typically with larger trailers. For Cold Storage and Fulfillment Center, the outbound trucks are often smaller because of cargo weight and last-mile distribution needs. Intermediate hubs accommodate large trucks on both the inbound and outbound side (e.g., FedEx Ground). “Final delivery” hubs have small trucks on the outbound side (e.g., FedEx Overnight).

³ Employee welfare area includes restrooms, locker rooms, and break rooms.

The warehouse types and their characteristics are evaluated in terms of their importance for Pemberton Township’s land use planning considerations. Each characteristic is evaluated according to its potential impact and/or issue that may arise from respective warehouse types. To do so, a scale of concerns was developed ranging from no concern (or no specific features were provided with which to be concerned) to very high concern. Each level of concern is described in ascending order as follows:

- No Concern or Nothing Specified – There is no appreciable concern because the warehouse characteristic creates no unusual or unsustainable result that could not be readily addressed by zoning ordinance regulation or restriction, or no specific characteristic was provided with which to be concerned.
- Slight Concern – The warehouse characteristic has features that can be readily addressed by zoning ordinance regulation or restriction and possesses no unique or unusual locational requirements.
- Moderate Concern – The warehouse characteristic has features that require attention for locating the warehouse within the community and the enactment of zoning ordinance regulations and/or restrictions to ensure the warehouse fits into character of a geographical area and avoids local nuisances and negative impacts to the community.
- Significant Concern – The warehouse characteristic has features that warrant serious care for locating the warehouse within the community because of potential negative impacts it may cause and the enactment of carefully crafted zoning ordinance regulations and/or restrictions to ensure the warehouse minimizes local nuisances and major negative impacts to the community.
- Very High Concern – The warehouse characteristic has features that require utmost caution for locating the warehouse within the community because of the potential negative impacts it may cause and the enactment of carefully crafted zoning ordinance regulations and/or restrictions to ensure the warehouse minimizes, as best as possible, local nuisances and major negative impacts to the community

The scale of concerns is graphically represented in the following manner:

No Concern or Nothing Specified	Slight Concern	Moderate Concern	Significant Concern	Very High Concern
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Table No. 9 contains a matrix that provides the evaluation of each warehouse type by their warehouse characteristics important for Pemberton Township’s land use planning considerations. Each characteristic is evaluated according to its potential impact and/or issue that may arise from respective warehouse types:

- Description and key warehouse functions

- Typical function combined with place in supply chain: Concerns center on the length of time goods are stored and the velocity of goods movement that generates traffic volumes for passenger vehicles (employees) and trucks (movement of goods). A slight concern would indicate the warehouse type has longer storage times and is a lower generator of traffic. A very high concern means the warehouse type has a high velocity of goods movement that generates significant volumes of traffic.
- Location: Concerns are related to the potential attraction Pemberton Township may have for the various warehouse types given their typical locational needs. A slight concern would mean Pemberton Township lacks the locational features that a particular warehouse type would want. A very high concern indicates the Township possesses the locational features greatly needed for a particular warehouse type.
- Overall site layout
 - Employee parking: Concerns are focused on the amount of onsite parking demand to accommodate employees. A slight concern indicates parking demand is low and therefore requires fewer parking spaces that require less impervious surfaces. A very high concern means parking demand is very high requiring greater amounts of parking spaces that pave over more extensive areas of a site.
 - Truck and trailer parking; Similar to employee parking, concerns pertain to the amount of space a parcel of land is consumed by pavement. A slight concern means fewer parking spaces are needed for trucks and trailers. Whereas, a very high concern relates to the concerns arising from paving extensive areas of a site to accommodate many trucks and trailers.
- Building dimensions
 - Length versus depth: Concerns center on the size of a building relating to its ratio of length to depth. A slight concern means the building has similar proportions that more likely would fit onto a site. A very high concern means that the building is extraordinarily long requiring larger lots.
 - Ceiling height: Concerns focus on the obtrusiveness of a building that are based on its height that factors into building mass. A slight concern indicates the building is relatively low and would be less obtrusive. A very high concern denotes the building would be excessively high creating a more obtrusive structure that would be more difficult, if not impossible, to screen from public view or neighboring properties.

- Number of docks: Concerns arise from the number of docks that would accommodate more volumes of trucks – more docks means more trucks, and more trucks means more truck traffic. A slight concern would indicate there are few docks that accommodate fewer trucks generating less truck traffic. A very high concern means more docks resulting in more truck traffic.
- Additional descriptive features
 - Typical floor area ratio: Concerns center of the amount of land that would be consumed by a warehouse building – higher ratios mean more land is needed for a particular warehouse type and less green space is provided. A slight concern means the warehouse type needs less land. A very high concern means the opposite – the warehouse type requires a greater percentage of a site.
 - Movement of goods in trucks: Concerns arise from the types of trucks that visit the warehouse. Some warehouses have a steady stream of very large trucks entering and exiting a site. Others have long-haul trucks, which tend to be large, but not necessarily a steady stream of them. A slight concern indicates larger trucks do visit a warehouse type but not in a steady stream. A very high concern means larger trucks constantly visit a warehouse site.
 - Hours of operation and peak periods: Concerns are based on whether warehouses operate during typical business hours or 24 hour, seven days a week. A slight concern means the warehouse operates during typical business hours. A very high concern indicates the warehouse operates 24/7 with no significant abatement.
 - Truck sizes: Concerns center of the size of trucks that visit a particular warehouse type. Some warehouses are served by only very large trucks; others are served by a mix of truck sizes – very large inbound deliveries and small trucks for outbound deliveries. A slight concern means the warehouse is visited by smaller trucks and fewer large trucks. A significant concern indicates the warehouse is mostly visited by large trucks. Notwithstanding, this characteristic should be evaluated with the truck movement and hours of operations and park periods characteristics.

Table No. 9 – Warehouse Characteristics for Land Use Planning Considerations

		Characteristics									
Warehouse Type	Description & Key Function		Overall Site Layout		Building Dimensions			Additional Descriptive Features			
	Typical Function/Place in Supply Chain	Location	Employee Parking	Truck & Trailer Parking	Length vs. Depth	Ceiling Height	Number of Docks	Typical Floor Area Ratio	Move-ment Of Trucks	Hours of Operations	Truck Sizes
Standard	Product Stored More than 1 month	Urban Area/ Periphery	Nothing Specific	Limited	Nothing Specific	28'-40'	Low 1:20,000 sq.ft.	35%-60%	Some Long-Haul	Peak with Street Peak	Long-Haul Large
Transload	Short Storage Duration	Freeway Access in Rural or Urban Periphery	Smaller than Fulfillment or P. Hub	Large Open Trailer Parking Areas	Betw. 3:1 & 2:1	Lower than Other HCWs	1:5,000 sq.ft. to 1:15,000 sq.ft.	Lower	Large Trucks In- & Out-Bound	24/7	Long-Haul Large
Short-Term	Large Volumes of Freight	Freeway Access	Smaller than Fulfillment Or P. Hub	Spaces: Docks up to 1.5:1	2:1	28'-34', Some >40'	1:10,000 sq.ft. or lower	Lower	Some Long-Haul	24/7	Long-Haul Large
Cold Storage	Final Distribution for Retail	Supply & Demand Markets	Nothing Specific	Frozen or Perishable	Nothing Specific	70'-100'	Nothing Specific	Nothing Specific	Some Long-Haul	24/7	In Large, In Small
Fulfillment	Final Consumption	Near Parcel Hub/ USPS	Larger than Other HCWs	Significantly Higher	Nothing Specific	>40'	Nothing Specific	35%-60%	Some Long-Haul	24/7	In Large, In Small
Parcel Hub	Time-Sensitive Shipping	Near Airport	Larger Employee Ratios	Very High	Shallow 150'-300' L	18'-20'	Nothing Specific	35%-60%	Some Long-Haul	24/7	In Lrg, Out Small

A composite of the evaluations of the warehouse types by their characteristics is summarized below.

- Standard Warehouse
 - These warehouses typically locate within industrial areas in urban areas or the urban periphery. Pemberton Township possesses locations that could be considered the urban periphery.
 - They hold product longer and distribute them on demand, which means these warehouses generate lower volumes of traffic and have lower levels of employment.
 - In general, their employee and truck and trailer parking requirements are low.
 - Their buildings typically have no unusual shape, are generally lower in height but could have heights up to 40 feet, and have fewer loading docks
 - Their typical warehouse site development consumes 35 percent to 60 percent of a parcel of land; the higher percentages cover more land.
 - The warehouses usually operate during typical business hours, not 24/7.
 - They generate lower volumes of traffic; however, larger trucks may occasionally serve these warehouses.

- Transload Warehouse
 - These warehouses typically locate near freeways with good accessibility, including freeways in rural areas such as the Township has.
 - They have short product duration, which generates high volumes of truck traffic.
 - They have reasonable levels of employment to accommodate the higher volumes of goods movement.
 - The warehouses require extensive paved areas for truck and trailer parking.
 - Their buildings are very long and shallow, which means they have unusual site location requirements, have low ceiling heights, and a higher amount of docks.
 - While their floor area ratios are lower than most other warehouses, these warehouses require greater amounts of pavement for truck and trailer parking.
 - These warehouse operate 24/7 and are served primarily by large trucks.

- Short-Term Storage
 - These warehouses tend to locate along freeways with good access, possibly as the Route 206 area in the Township.
 - They have high volumes of goods movement, generating significant truck traffic.

- Their employment is reasonable, but not as high as fulfillment centers and parcel hubs, which means they require a good amount of parking.
 - Also, they require a reasonable amount of truck and trailer parking, which covers more of a site with impervious surface.
 - Their buildings tend to be a little longer than their depth, have lower ceiling heights that could go up to 40 feet, and a lower amount of loading docks.
 - Their site development tends to have lower floor area ratios, which means they consume less of the land.
 - These warehouses operate 24/7 and are served by large trucks.
- Cold Storage Warehouse
 - These warehouses locate closer to their markets to meet the consumer demand for food, such as the Route 206 and CR 530 (South Pemberton Road) areas in Pemberton Township.
 - They do not have extraordinary parking requirements for employees; they need parking for refrigerated trucks and trailers, which could be a nuisance if the refrigerator units on the trucks and trailers function with generators operated by internal combustion engines.
 - Their buildings do not have any specific footprint requirements; however, they tend to be extraordinarily high (70 feet to 100 feet). They do not have any specific loading dock requirements.
 - The warehouses have no specific floor area ratio requirements.
 - They operate 24/7 and usually have large trucks making inbound deliveries and smaller trucks executing outbound deliveries to their customers.
- Fulfillment Center
 - These warehouses have very high turnover of product, generating high volumes of traffic, both employee- and truck-related, throughout the day.
 - They tend to locate closer to Parcel Hubs and United States Postal Service (USPS) facilities. Pemberton Township lacks both types of facilities to which these warehouse tend to locate nearby.
 - They require very high amounts of employee and truck and trailer parking, which cover significant amounts land.
 - Their buildings have no specific footprint requirements; however, they are large because of their significantly high floor area ratios and their need to be very tall (40 feet and higher). They do not have any specific loading dock requirements. These large buildings with a lot of parking areas require significant amounts of impervious surfaces.
 - These warehouses operate 24/7 and are served by large trucks making inbound deliveries and smaller trucks executing outbound deliveries to Parcel Hubs and USPS facilities.
- Parcel Hub

- These warehouses are intended to make time sensitive deliveries, generating high volumes of traffic, both employee- and truck-related, throughout the day.
- They tend to be located closer to airports, a condition unavailable in Pemberton Township.
- They employ many workers thereby requiring significant amounts of parking. And they require a lot of truck and trailer parking.
- Their buildings tend to have low ceiling heights, and they are quite long with a shallow depth, which means they have unique site requirements. They do not have specific loading dock requirements.
- Their site development requirements tend to demand higher floor area ratios. They tend to cover significant amounts of a site with building and pavement.
- These warehouses operate 24/7 and are served by large trucks making inbound deliveries and smaller trucks executing outbound deliveries to Parcel Hubs and USPS facilities.

ANALYSIS OF WAREHOUSE TYPES IN PEMBERTON TOWNSHIP

The warehouse uses permitted in the zoning districts and redevelopment plans are analyzed vis-à-vis the evaluation of the warehouse types and their characteristics related to their importance for land use planning in Pemberton Township. The zoning districts and redevelopment plans are examined in order to identify potential impacts and issues the warehouse uses may cause to the specific geographical locations regulated by zoning district or redevelopment plan.

It is important to recognize that the MI Manufacturing Industrial and PI Planned Industrial zoning districts exist only in text and lack a geographical relationship to the Township because they are not delineated anywhere on the Zoning Map. To that end, these districts should be eliminated from Chapter 190.

The analysis of warehouse types in zoning districts and redevelopment plans is presented in the following manner:

- Section 190-24 GCLI General Commercial/Light Industrial District
- Section 190-24.2 OP/LI Office Professional/Light Industrial District
- Block 797, Lot 1 Redevelopment Plan
- South Pemberton Road Redevelopment Plan
- Route 206 Corridor Redevelopment Plan

Section 190-24 GCLI General Commercial/Light Industrial District

Section 190-24B(11) permits warehouses as a principal use in the following manner:

Wholesale distribution facilities and warehouses where all storage is contained in completely enclosed buildings on parcels not to exceed five acres.

Given the description of “wholesale distribution facilities and warehouses” permitted as principal uses and the restrictions on storing items inside buildings and locating the facilities on parcels that do not exceed five acres, all six types of warehouses are permitted in the GCLI zoning district (Table No. 10).

Table No. 10 – Warehouse Types Permitted in the GCLI Zoning District

Warehouse Type	Permitted	Remarks
Standard Warehouse	Yes	Storage must occur inside buildings Parcel cannot exceed 5 acres
Transload Facility	Yes	Storage must occur inside buildings. Parcel cannot exceed 5 acres
Short-Term Storage	Yes	Storage must occur inside buildings Parcel cannot exceed 5 acres
Cold Storage	Yes	Storage must occur inside buildings Parcel cannot exceed 5 acres
Fulfillment Center	Yes	Storage must occur inside buildings Parcel cannot exceed 5 acres
Parcel Hub	Yes	Storage must occur inside buildings Parcel cannot exceed 5 acres

The GCLI zoning district is delineated in four separate areas of Pemberton Township:

- Route 206 (Map No. 6)
- CR 530 (South Pemberton Road) between the municipal borders shared with Pemberton Borough and Southampton Township (Map No. 7)
- CR 616 (Fort Dix Road) (Map No. 8)
- CR 530 (Lakehurst Road) (Map No. 9)

Route 206

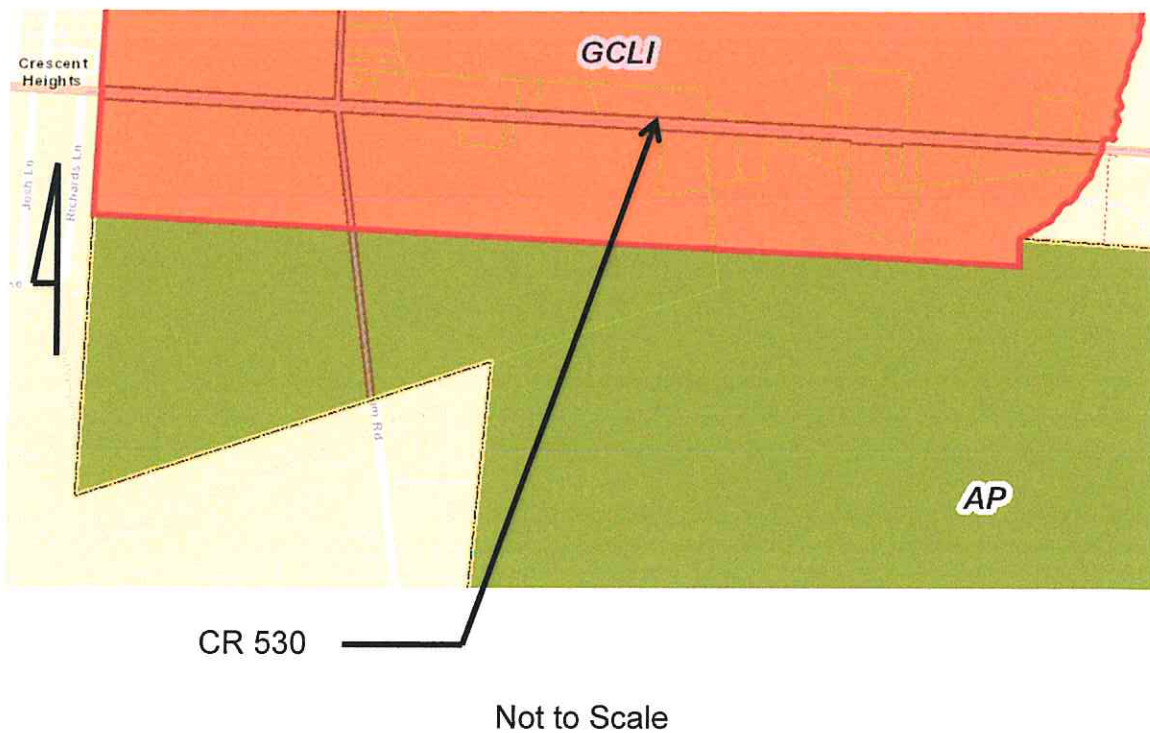
The GCLI zoning district along Route 206 is superseded by the Route 206 Corridor Redevelopment Plan (Route 206 RP). The analysis of warehouses permitted in this part of Pemberton Township is discussed in the section of this study that involves the Route 206 RP.

CR 530 (South Pemberton Road)

The areas north of CR 530 zoned GCLI are superseded by two redevelopment plans: the Block 797, Lot 1 Redevelopment Plan, and the South Pemberton Road Redevelopment Plan (SPRRP). While the redevelopment area for the Block 797, Lot 1 has been developed with a warehouse and no longer has future development potential, it is necessary to analyze warehouses permitted in that redevelopment plan because the warehouse building could be reused differently. Warehouses permitted in the SPRRP are analyzed in a later section of this study.

The GCLI zoning district located along the southern side of CR 530 extends to the south about 600 feet from the county highway. The GCLI zoning district splits several large lots with the AP Agricultural Preservation zoning district, which permits agricultural and low-density residential uses, applied to the rear of the lots (Map No. 14). A mix of small-scale commercial uses (automobile repair shop) and light industrial uses (electrician and moving company), and residential uses (detached single-family dwellings) exist along CR 530.

Map No. 14 – GCLI Zoning District along Southern Side of CR 530



Analysis

Given the facts that the depth of the GCLI zoning district along the southern side of CR 530 is only 600 feet, small-scale commercial and light industrial uses exist within the GCLI zoning district, and the AP zoning district abuts the GCLI zoning district, it would be appropriate to exclude the following warehouses, which generate high volumes of traffic, cover extensive amounts of land with

impervious surfaces and, for some, require very tall buildings, from this GCLI zoning district:

- Transload facility
- Short-term storage
- Cold storage
- Fulfillment center
- Parcel hub

Because a primary arterial roadway (CR 530) serves this GCLI zoning district and standard warehouses generate low volumes of traffic, standard warehouses should be permitted in this GCLI zoning district provided:

- The maximum lot area for the standard warehouse site is five acres;
- The maximum floor area ratio is 0.35 (given a maximum FAR of 0.35, a five-acre lot would potentially yield a warehouse building having a maximum gross floor area of 76,230 square feet);
- The maximum building height is 35 feet; and
- All other GCLI zoning district yard, bulk and buffering requirements should apply.

CR 616 (Fort Dix Road)

The GCLI zoning district that flanks CR 616 consists of a mix of small and large lots, with the latter being split-zoned having the rear of the lots located in the AR Agricultural Residential zoning district, which permits agricultural uses and low-density residential uses. One light industrial use (truck hauling service) and a few commercial uses (a restaurant, an automobile repair facility, a children's daycare), a few detached single-family dwellings, and a house of worship exist in this GCLI zoning district. Agricultural uses occupy the balance of this GCLI zoning district.

Map No. 15 provides a closer view of the lots that are split between the GCLI and AR zoning districts.

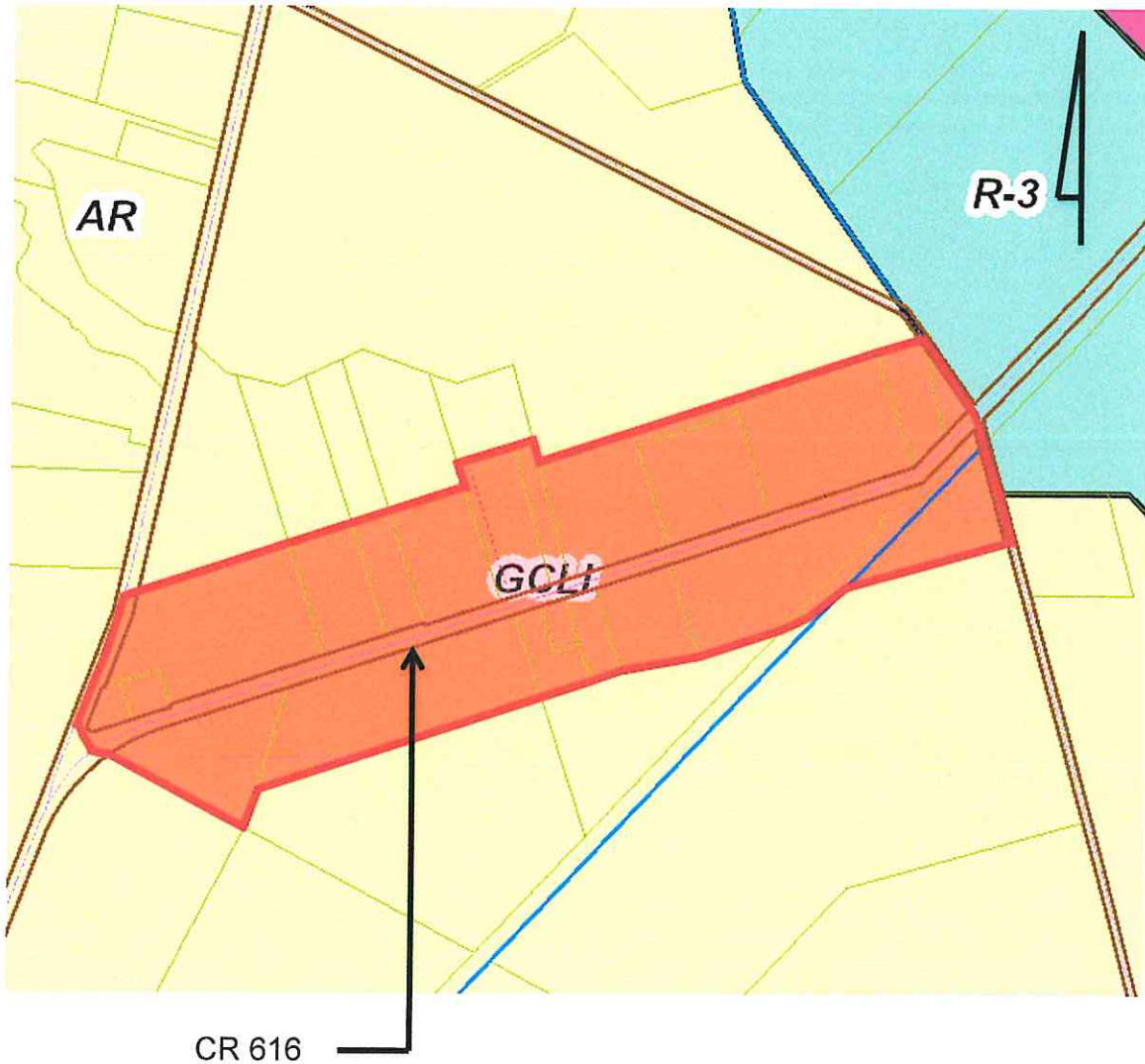
Analysis

Since this GCLI zoning district is located internally within Pemberton Township, currently lacks any significant light industrial uses and is situated within a rural setting, and traveling to and from this GCLI zoning district requires traversing through residential areas, it would be appropriate to exclude the following warehouses, which generate high volumes of traffic, cover extensive amounts of land with impervious surfaces and, for some, require very tall buildings, from this GCLI zoning district:

- Transload facility

- Short-term storage
- Cold storage
- Fulfillment center
- Parcel hub

Map No. 15 – GCLI Zoning District along CR 616



Not to Scale

Because a secondary arterial roadway (CR 616) serves this GCLI zoning district, and standard warehouses generate low volumes of traffic, standard warehouses should be permitted in this GCLI zoning district provided:

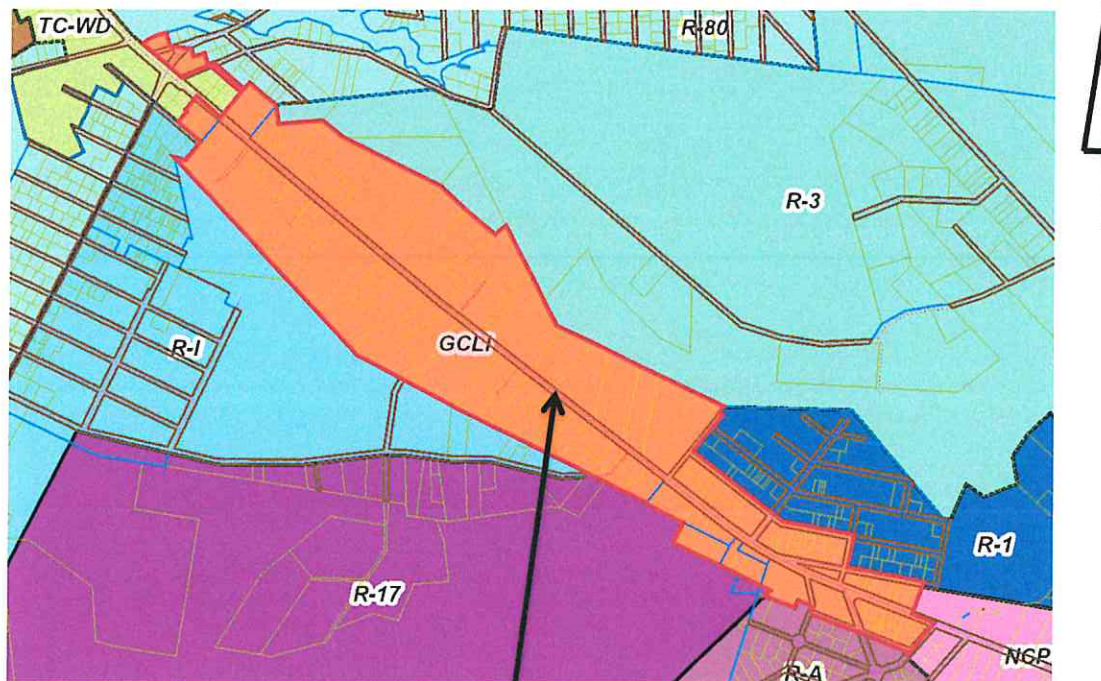
- The maximum lot area for the standard warehouse site is three acres or less;

- The maximum floor area ratio is 0.35 (given a maximum FAR of 0.35, a three-acre lot would potentially yield a warehouse building having a maximum gross floor area of 45,738 square feet);
- The maximum building height is 30 feet; and
- All other GCLI zoning district yard, bulk and buffering requirements should apply.

CR 530 (Lakehurst Road)

The GLIC zoning district flanks almost the entire stretch of CR 530 southeast of Browns Mills. Getting to this GCLI zoning district requires traveling through the downtown area of Browns Mills, which contains a mix of commercial, institutional, and residential uses, from the west and more rural residential and agricultural areas from the east. Currently, this GCLI zoning district consists of a mix of commercial uses (automobile service centers, insurance office, funeral home, restaurants, delicatessen, etc.), residential uses (apartments and single-family homes), and houses of worship. No light industrial uses exist in this zoning district. Map No. 16 shows the GCLI zoning district along CR 530 (Lakehurst Road).

Map No. 16 – GCLI Zoning District along CR 530 (Lakehurst Road)



CR 530 (Lakehurst Road)

Not to Scale

Analysis

The existing land uses in the GCLI zoning district that covers both sides of CR 530 (Lakehurst Road) comprise a mix of small-scale commercial, quasi-public (houses of worship), and single-family and multifamily residential uses. No light industrial uses exist in the zoning district. Getting to this GCLI zoning district requires traveling through a downtown area, which is undergoing revitalization, and various types of residential areas. Although CR 530 is classified as a minor arterial roadway, the county highway appears to have characteristics of a collector road serving suburban (closer to Browns Mills) and rural (farther from Browns Mills) setting because it is only two lanes wide with areas sections having narrow shoulders and lacking turning lanes. Introducing large trucks traveling to and from warehouses located in the zoning district on a regular basis would conflict with the suburban/rural character of the commercial uses and surrounding residential areas. Given these facts, it would be appropriate to prohibit all warehouses types from this GCLI zoning district, including:

- Standard warehouse
- Transload facility
- Short-term storage
- Cold storage
- Fulfillment center
- Parcel hub

Section 190-24.2 OP/LI Office Professional/Light Industrial District

Warehouses are permitted by Section 190-24.2C(3) as a conditional use as described below.

Warehouses or similar storage facilities, not including mini-storage facilities.

The following conditions are required for warehouses or similar storage facilities:

Light industrial, light assembly and warehouse or similar storage facilities as regulated by § 190-24.2 shall be permitted only in accordance with the following provisions.

- (1) More than one conditional use may be permitted per lot, provided that no more than one light industrial, light assembly or warehouse use shall be permitted per acre of lot area.
- (2) All storage of raw materials or finished products shall be conducted within completely enclosed buildings.
- (3) Maximum lot coverage shall not exceed 50%.

- (4) In cases where a permitted conditional use is situated on a lot which abuts a residential property or zone, there shall be a landscaped buffer strip along the perimeter of the property housing the conditional use where it is adjacent to such residential property or zone. Said buffer strip shall be at least 25 feet in width or depth as measured from the residential property line. Fifteen feet of such buffer nearest the residential property line shall be used as a planting strip on which shall be placed fence or plant material, trees, shrubs or combination thereof. Where fencing is used, it shall be 6 feet in height. Plant material used as a landscape screen shall be at least 6 feet high at the time of planting and shall be of sufficient density to provide year-round screening of activities at the conditional use.
- (5) No less than one parking space shall be provided for every 500 square feet of gross floor area, plus one space for each company vehicle normally stored on the premises.
- (6) No retail sale of any merchandise shall be permitted on the premises.
- (7) No wholesale operations shall include truck terminals or other heavy trucking installation.

Based on the description of “warehouses or similar storage facilities” permitted as conditional uses and the conditional requirements, four of the six types of warehouses are permitted in the OP/LI zoning district (Table No. 11).

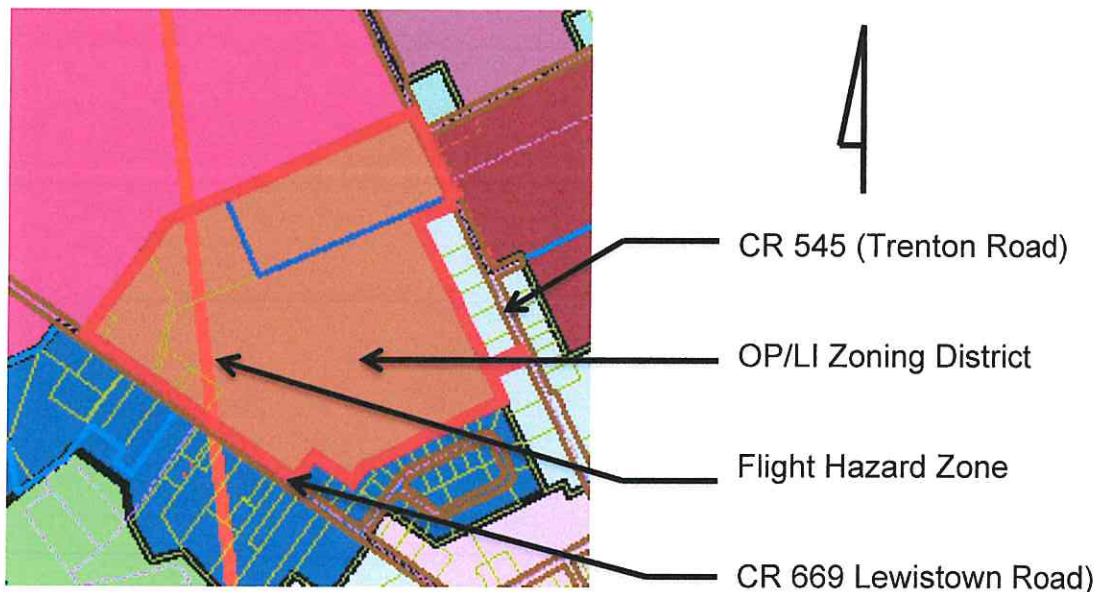
Within Pemberton Township there is only one OP/LI zoning district, which is located within the northern portion of Browns Mills. It is located between CR 545 (Trenton Road) to the east and CR 669 (Lewistown Road) to the west, in the northern portion of Browns Mills. Map No. 17 depicts the OP/LI zoning district. The flight hazard zone for Joint Base McGuire Dix Lakehurst, which restricts the height of buildings and discourages residential uses in it, overlays the western portion of the zoning district.

Table No. 11 – Warehouse Types Permitted in the GCLI Zoning District

Warehouse Type	Permitted	Remarks
Standard Warehouse	Yes	Meeting all conditions is plausible
Transload Facility	No	Transload facilities function similarly to truck terminals
Short-Term Storage	Yes	Meeting all conditions is plausible
Cold Storage	Yes	Meeting all conditions is plausible
Fulfillment Center	Yes	Meeting all conditions is plausible
Parcel Hub	No	Parcel hubs function similarly to truck terminals

Two elementary schools (Harker-Wylie School and Stackhouse School) with water towers occupy the central and eastern portions of the zoning district, gaining access from CR 545. The area surrounding the OP/LI zoning district that fronts along CR 545 consists of a mix of small-scale commercial uses (restaurants, a convenience store and a Laundromat), residential uses (detached single-family homes), institutional uses (Deborah Heart and Lung Center, and other medical offices), and vacant wooded land. The eastern portion of the OP/LI zoning district can be accessed only from the south in Browns Mills because CR 545 is closed to public traffic through Joint Base McGuire Dix Lakehurst that lies to the north.

Map No. 17 – OP/LI Zoning District along CR 545 and CR 669



Not to Scale

With access gained from CR 669, a light industrial use (a materials and storage equipment company with extensive outdoor storage of material) and a public use (Pemberton Township school bus facility) occupy the western portion of the OP/LI zoning district. Single-family homes on a variety of large and small lots occupy the area that surrounds the western portion of the zoning district. CR 669 traverses rural areas and the Joint Base from the north and downtown Browns Mills from the south.

Analysis

The OP/LI zoning district is located within Browns Mills, which contains a mix of commercial, institutional and residential uses. Access to the eastern portion of the zoning district is greatly limited because traffic must travel through Browns

Mills. Furthermore, truck traffic along CR 545 would conflict with traffic to and from the Deborah Heart and Lung Center. While CR 669 provides access to the zoning district from both the north through a rural area and the south through Browns Mills, truck traffic would conflict with the residential area that surrounds the OP/LI zoning district. In addition, large warehouse buildings would be out of character with the surrounding residential areas. Given these facts, it would be appropriate to prohibit all warehouse types from this OP/LI zoning district, including:

- Standard warehouse
- Transload facility
- Short-term storage
- Cold storage
- Fulfillment center
- Parcel hub

Block 797, Lot 1 Redevelopment Plan

The Block 797, Lot 1 Redevelopment Plan (Lot 1 RP) permits the following principal uses pertaining to warehouses (8):

- Warehousing
- Wholesale distribution centers

Given that warehousing and wholesale distribution centers are permitted in Lot 1 RP, all six types of warehouses are permitted in the redevelopment area (Table 12).

Table 12 – Warehouse Types Permitted in Block 797, Lot 1 Redevelopment Area

Warehouse Type	Permitted	Remarks
Standard Warehouse	Yes	There are no special requirements.
Transload Facility	Yes	There are no special requirements.
Short-Term Storage	Yes	There are no special requirements.
Cold Storage	Yes	There are no special requirements.
Fulfillment Center	Yes	There are no special requirements.
Parcel Hub	Yes	There are no special requirements.

The redevelopment area (Map No. 11) has been developed with a warehouse and has no new significant development potential. It does front along the northern side of 530 and the western side of Birmingham Road. Residential dwellings exist along the eastern side of Birmingham Road opposite the redevelopment area and farther north along Birmingham Road.

Analysis

Given the fact that the redevelopment has been developed with a warehouse and residential development is within close proximity of the redevelopment area, the appropriate warehouse types for the redevelopment area are:

- Standard warehouse
- Cold storage

South Pemberton Road Redevelopment Plan

The South Pemberton Road Redevelopment Plan (SPRRP) permits the following principal uses related to warehousing (9):

- Any use permitted as a principal use within the GCLI zoning district of the Township [, including 'wholesale distribution facilities and warehouses where all storage is contained in completely enclosed buildings on parcels not to exceed five acres'].
- Warehousing
- Distribution center
- Flex space industrial [, which is defined in SPRRP as 'a building or space which may be used for light manufacturing, warehousing {emphasis added}, distribution {emphasis added}, office space, light assembly or fabrication, or any combination of such uses. The specific use of the space may not be permanently defined, and it is intended that the use of the space may change to suit the needs of the user' (8)].

Based on the description of "wholesale distribution facilities and warehouses", "warehousing," and "distribution center" permitted as principal uses, all six types of warehouses are permitted in the SPRRP redevelopment area (Table No. 13).

The redevelopment area for the SPRRP is located along CR 530 (South Pemberton Road) between Pemberton Borough to the east and Birmingham Road to the west. The Rancocas Creek forms the northern boundary. Map No. 18 shows the South Pemberton Road redevelopment area. For the most part the redevelopment area consists of vacant wooded land. Some residential dwellings and commercial uses, some of which appear to be no longer operating, exist along CR 530 in the redevelopment area. A large warehouse exists opposite the redevelopment across Birmingham Road and along CR 530. Farther north along Birmingham Road are detached single-family dwellings.

Analysis

The redevelopment area for the SPRRP fronts along CR 530, which is a primary arterial roadway that is intended to convey high volumes of traffic. A large warehouse building exists next to the redevelopment area on the other side of Birmingham Road and along CR 530. The intersection of CR 530 and

Birmingham Road is signalized to control traffic through the intersection and affords gaps in through traffic for motorists to enter and exit commercial and industrial development planned along CR 530.

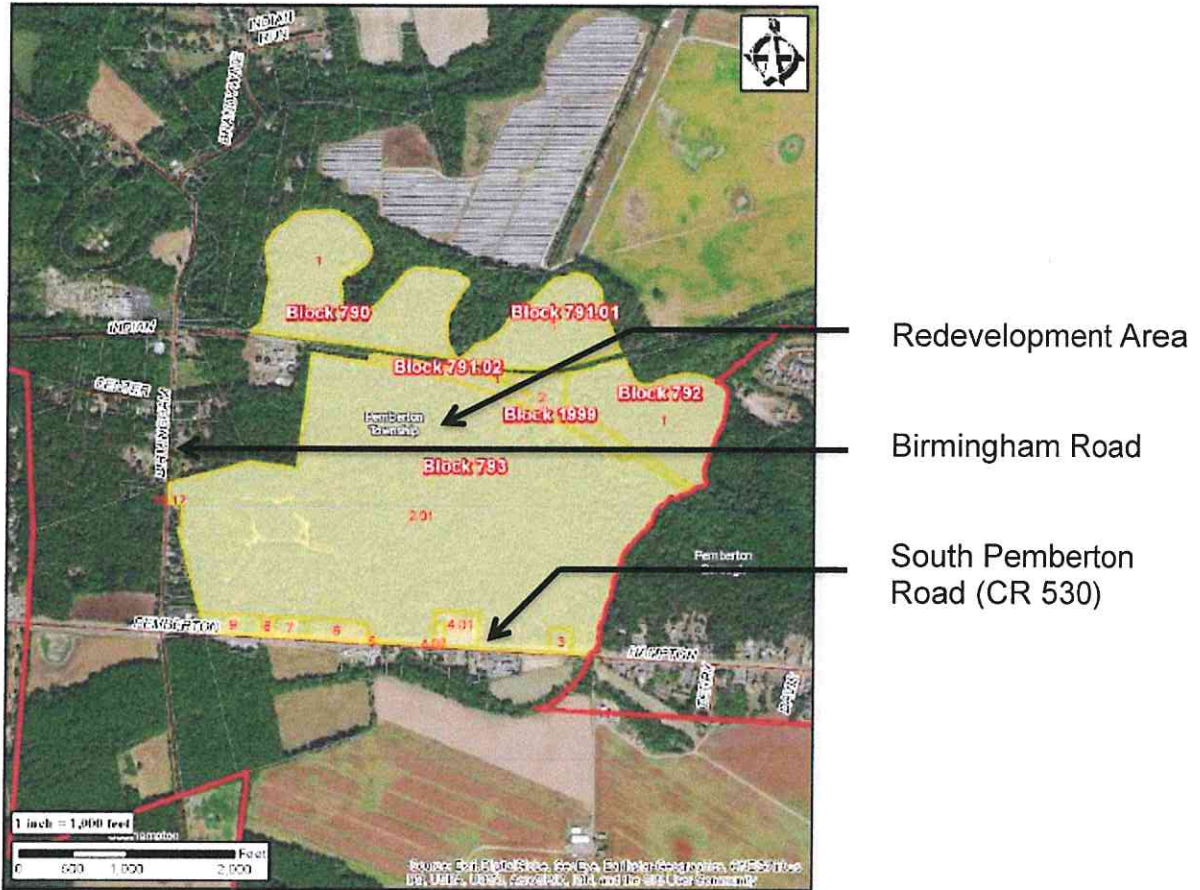
Table No. 13 – Warehouse Types Permitted in the South Pemberton Road Redevelopment Plan

Warehouse Type	Permitted	Remarks
Standard Warehouse	Yes	GCLI warehouses permitted where storage must occur inside buildings and parcels cannot exceed 5 acres. Other warehouses are not restricted according to GCLI warehouse uses.
Transload Facility	Yes	GCLI warehouses permitted where storage must occur inside buildings and parcels cannot exceed 5 acres. Other warehouses are not restricted according to GCLI warehouse uses.
Short-Term Storage	Yes	GCLI warehouses permitted where storage must occur inside buildings and parcels cannot exceed 5 acres. Other warehouses are not restricted according to GCLI warehouse uses.
Cold Storage	Yes	GCLI warehouses permitted where storage must occur inside buildings and parcels cannot exceed 5 acres. Other warehouses are not restricted according to GCLI warehouse uses.
Fulfillment Center	Yes	GCLI warehouses permitted where storage must occur inside buildings and parcels cannot exceed 5 acres. Other warehouses are not restricted according to GCLI warehouse uses.
Parcel Hub	Yes	GCLI warehouses permitted where storage must occur inside buildings and parcels cannot exceed 5 acres. Other warehouses are not restricted according to GCLI warehouse uses.

In order to mitigate negative visual and traffic impacts from the development of the redevelopment area, the SPRRP requires the following measures to be applied:

- A dense vegetative buffer of at least 100 feet in width must be provided along any property line that is adjacent to any residential use or zone. No development shall be permitted within the buffer area.
- No development, with the exception of an access driveway, shall be permitted within 150 feet of the Right-of-Way [sic] of Birmingham Road.

Map No. 18 – South Pemberton Road Redevelopment Area



The SPRRP includes New Jersey Department of Environmental Protection mapping that shows extensive areas of flood zones and freshwater wetlands are expected to exist on the redevelopment area (Map No. 19). These environmental conditions would significantly reduce the developable areas of the redevelopment area. The western and southwestern portions of the redevelopment appear to be free of environmental constraints.

In view of the facts that the redevelopment area is served by an primary arterial roadway (CR 530), the adjacent intersection of CR 530 and Birmingham Road is signalized that provides gaps in traffic along the county highway, a large warehouse exists next the redevelopment area across Birmingham Road and along CR 530, and there is sufficient developable land in the redevelopment area

Route 206 Corridor Redevelopment Plan

The Route 206 Corridor Redevelopment Plan (Route 206 RP) permits the following principal uses related to warehousing (8):

- Any use permitted as a principal use within the GCLI zoning district as stated in § 190-24B of the Township Code [, which includes ‘wholesale distribution facilities and warehouses where all storage is contained in completely enclosed buildings on parcels not to exceed five acres’].
- Warehousing, including cold storage facilities. [Warehousing is defined as “{a} building that is used primarily for the purpose of storage of materials or goods for further distribution that are not manufactured within the building (7)].
- Distribution center
- Flex space industrial [, which is defined in SPRRP as ‘a building or space which may be used for light manufacturing, warehousing {emphasis added}, distribution {emphasis added}, office space, light assembly or fabrication, or any combination of such uses. The specific use of the space may not be permanently defined, and it is intended that the use of the space may change to suit the needs of the user’ (6)].

Based on the description of “wholesale distribution facilities and warehouses”, “warehousing,” and “distribution center” permitted as principal uses, all six types of warehouses are permitted in the Route 206 RP redevelopment area (Table No. 14).

The redevelopment area for the Route 206 RP is located in the northwestern corner of Pemberton Township and fronts along Route 206 and CR 630. Map No. 20 depicts the Route 206 RP redevelopment area. The state highway forms the municipal boundary shared with Eastampton Township to the west. Map No. 21 is an enlargement of a portion of the Eastampton Township Zoning Map that shows the zoning districts along Route 206. The zoning districts in the neighboring municipality opposite the SPRRP redevelopment area include:

- BP Business Park, which permits warehouses as a principal use (Section 540-27B(1))
- CH Highway Commercial, which excludes warehouses as a principal use (Section 540-26A)

Analysis

The redevelopment area for the Route 206 RP fronts along a primary arterial (Route 206) and flanks CR 630 that intersects Route 206 where it is controlled by a traffic signal. Some light industrial buildings exist in the redevelopment area along CR 630. A new large warehouse was just completed across Route 206 in

Eastampton Township. Other highway-oriented commercial and light industrial uses exist along Route 206 in Eastampton Township.

Table No. 14 – Warehouse Types Permitted in the Route 206 Corridor Redevelopment Plan

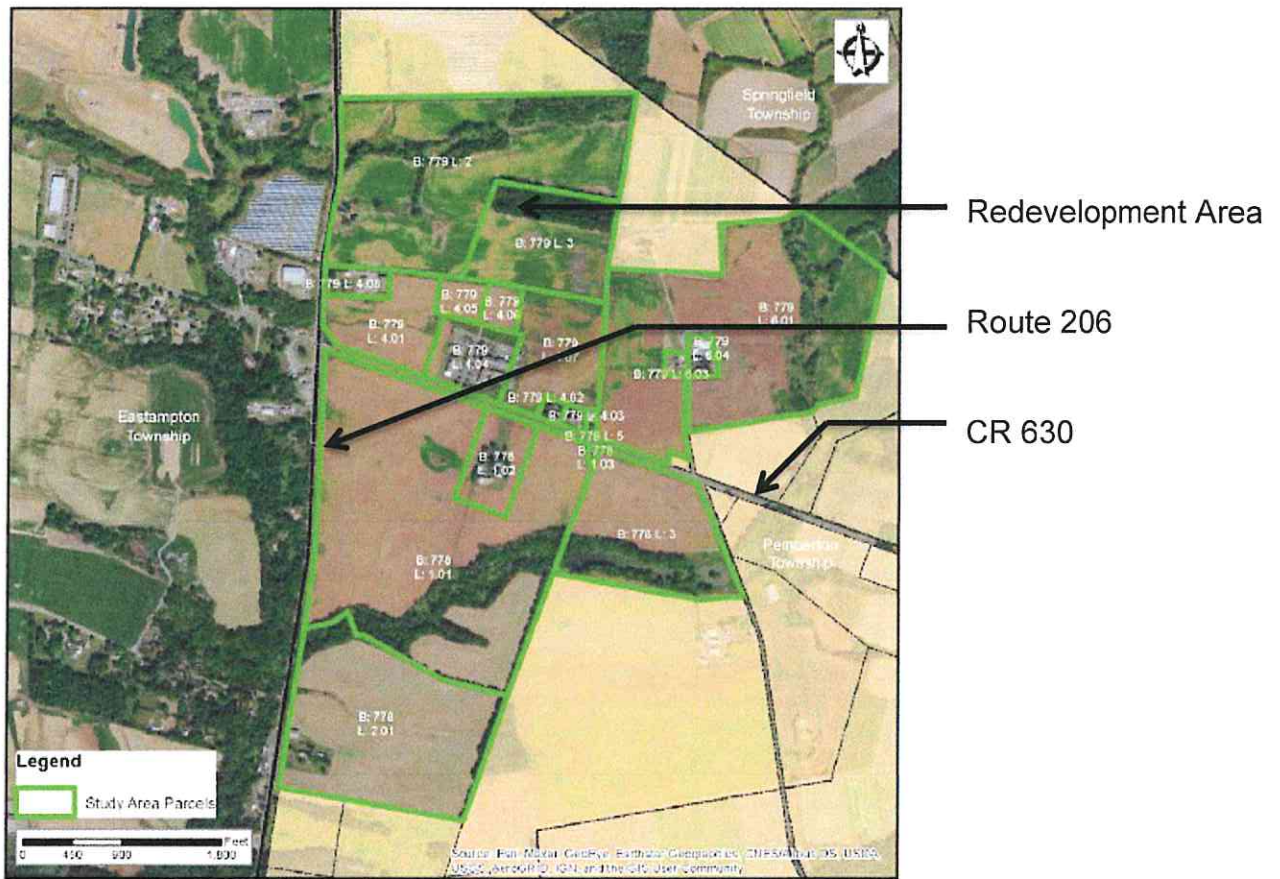
Warehouse Type	Permitted	Remarks
Standard Warehouse	Yes	GCLI warehouses permitted where storage must occur inside buildings and parcels cannot exceed 5 acres. Other warehouses are not restricted according to GCLI warehouse uses.
Transload Facility	Yes	GCLI warehouses permitted where storage must occur inside buildings and parcels cannot exceed 5 acres. Other warehouses are not restricted according to GCLI warehouse uses.
Short-Term Storage	Yes	GCLI warehouses permitted where storage must occur inside buildings and parcels cannot exceed 5 acres. Other warehouses are not restricted according to GCLI warehouse uses.
Cold Storage	Yes	GCLI warehouses permitted where storage must occur inside buildings and parcels cannot exceed 5 acres. Other warehouses are not restricted according to GCLI warehouse uses.
Fulfillment Center	Yes	GCLI warehouses permitted where storage must occur inside buildings and parcels cannot exceed 5 acres. Other warehouses are not restricted according to GCLI warehouse uses.
Parcel Hub	Yes	GCLI warehouses permitted where storage must occur inside buildings and parcels cannot exceed 5 acres. Other warehouses are not restricted according to GCLI warehouse uses.

In view of the facts that the redevelopment area is served by Route 206, a primary arterial roadway, and a traffic signal at the intersection of Route 206 and CR 630, light industrial development exists in the redevelopment area, a new large warehouse was recently constructed across Route 206 in Eastampton Township, the zoning in Eastampton Township permits warehouses as a principal use, no residential development exists in the redevelopment area or in

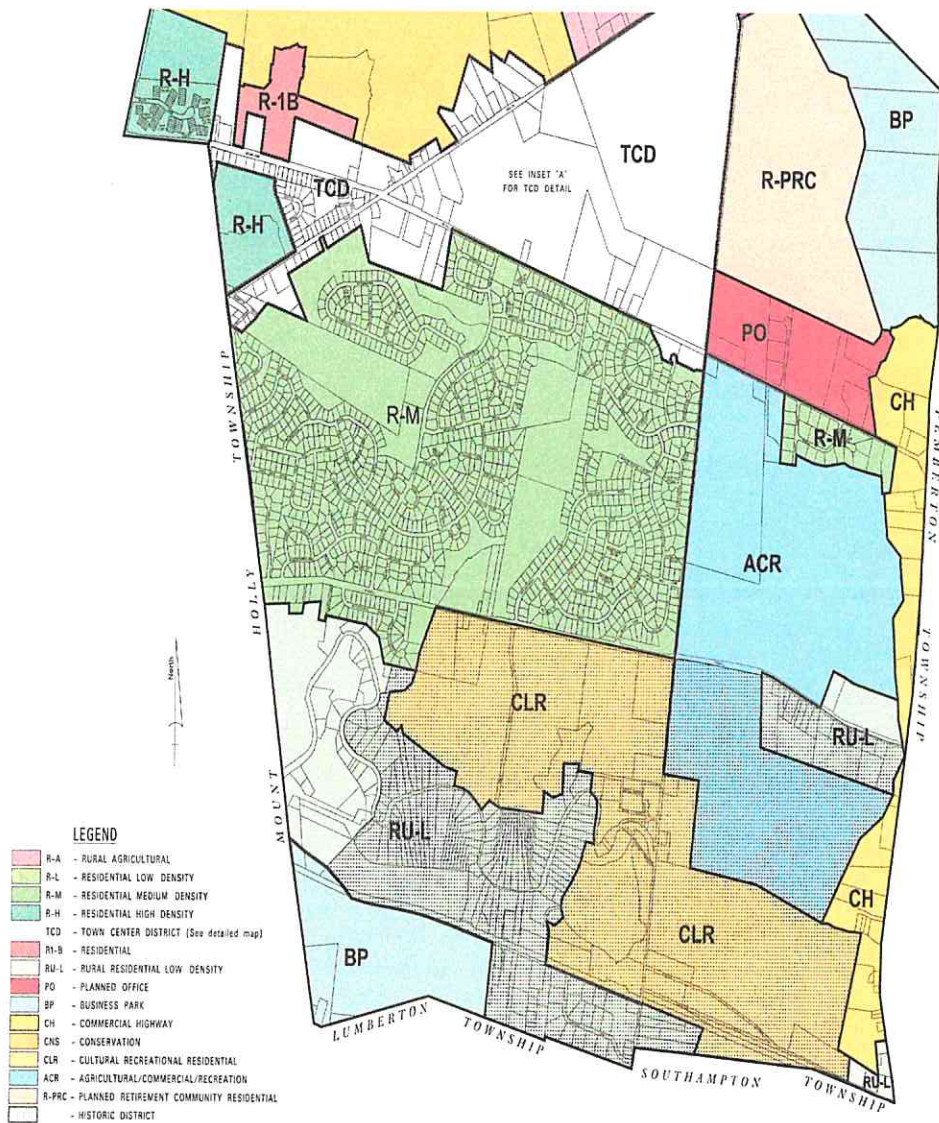
relative proximity to the redevelopment area, all six warehouse types would be appropriate in the redevelopment area for the Route 206 RP:

- Standard warehouse
- Transload facility
- Short-term storage
- Cold storage
- Fulfillment center
- Parcel hub

Map No. 20 – Route 206 Corridor Redevelopment Area



Map No. 21 – Portion of Eastampton Township Zoning Map showing Zoning Districts along Route 206



RECOMMENDATIONS

The Pemberton Township Council requested the Planning Board to “make recommendations determining whether all warehouses should be eliminated or some warehouses should be permitted as principal or conditional uses in certain zoning districts...” This study was prepared to identify various types of warehouses, evaluate their applicability to the zoning districts and redevelopment plans that currently permit warehouses as either a principal or conditional use, and provide recommendations to address Township Council’s request regarding the issue of eliminating or keeping warehouses in the zoning districts and redevelopment plans.

Based on the foregoing analyses of the zoning districts and redevelopment plans that permit warehouses as a principal or conditional use combined with the evaluation of warehouse types concerning said zoning districts and redevelopment plans, the following recommendations are provided by section of Chapter 190 Zoning, responding to Township Council's proposed amendments and additional insight gained from the foregoing analyses, and by section of redevelopment plans:

Chapter 190 Zoning

Section 190-2 Definitions and Usage

- The definition of "warehouse" should not be adopted as proposed by Township Council.
- The following definition of "warehouse", including the six warehouse types, should be inserted into Chapter 190:
 - "Warehouse" – a building used for the storage and distribution of material, goods or products, which may be retailed to the end consumer or wholesaled to interim users, and shall be differentiated into the following warehouse types:
 - "Standard warehouse" is used for the storage of goods and material in inventory for extended periods of time and released on demand.
 - "Transload facility" is used for the consolidation and distribution of pallet loads or larger of manufacturers, wholesalers, or retailers, and goods and products are stored for a short duration of time and the facility has high throughput because it has highly mechanized material handling systems.
 - "Short-term storage" is used for storage and distribution of goods and material with distribution space operated at high efficiency, often with custom or special features built into the structure for movement of large volumes of freight, which may include break-bulk, repack or assembly activities. Such short-term storage facilities have highly mechanized material handling systems.
 - "Cold storage" is used for temperature-controlled storage and distribution of frozen food or other perishable products, which are distributed to retail stores or local, smaller distribution centers.
 - "Fulfillment center" is used for storage and direct distribution of e-commerce product to end-users. The structures often have multiple mezzanine levels for product storage and picking and

- may have high levels of automation in material handling equipment.
- “Parcel hub” is used for regional and local freight forwarding for time-sensitive shipments via airfreight and ground transport. Such parcel hub may have truck maintenance, wash or fueling facilities, and high levels of automation in material handling equipment.

Section 190-3 Prohibited Uses

- The inclusion of warehouses, as proposed by Township Council, should not be adopted because certain warehouse types are recommended for some of the zoning districts and redevelopment plans.

Section 190-24 GCLI General Commercial/Limited Industrial District

- Warehouses should not be eliminated as a permitted principal use for the entire GCLI zoning district as proposed by Township Council.
- The following currently permitted principal use should be changed according to:
 - Currently permitted: Wholesale distribution facilities and warehouses where all storage is contained in completely enclosed buildings on parcels not to exceed five acres.
 - Change to: Warehouses where all storage is contained in completely enclosed buildings in accordance with the specific requirements.
 - The GCLI zoning district is recommended to be limited to the one located along Route 206. See recommendations for Route 206 GCLI below.
- The following recommendations are provided by geographical location of each GCLI zoning district:
 - Route 206
 - The GCLI zoning districts located along Route 206 must coordinate with the Route 206 Corridor Redevelopment Plan. The following warehouses should be permitted as principal uses (Note: refer to the recommendations for the Route 206 Corridor Redevelopment Plan):
 - Standard warehouse

- Transload facility
 - Short-term storage
 - Cold storage
 - Fulfillment center
 - Parcel hub
- CR 530 (South Pemberton Road)
- The GCLI zoning districts located north of CR 530 must coordinate with the two redevelopment plans that correspond with respective GCLI zoning districts. See the recommendations for the Block 797, Lot 1 Redevelopment Plan and the South Pemberton Road Redevelopment Plan. These GCLI zoning districts should be re-designated as GCLI-1 to distinguish it from the GCLI zoning district along Route 206. Amend the Zoning Map accordingly.
 - The GCLI zoning district located south of CR 530 should be re-designated as GCLI-2, which would be a “less intensive” GCLI zoning district for warehouses, permitting standard warehouses as principal uses provided they comply with the following requirements:
 - All storage of material and products occurs within a completely enclosed building.
 - The maximum lot area for the standard warehouse site is five acres or less.
 - The maximum floor area ratio is 0.35.
 - The maximum building height is 35 feet.

Amend the zoning map accordingly.

- CR 616 (Fort Dix Road)
- The GCLI zoning district should be re-designated as a “less intensive” GCLI zoning district, such as GCLI-3, to denote a difference in the type warehouses permitted as a principal use. Amend the Zoning Map accordingly.
 - Warehouses permitted as a principal use should be limited to standard warehouses provided these warehouses comply with the following requirements:
 - All storage of material and products occurs within a completely enclosed building.
 - The maximum lot area for the standard warehouse site is three acres or less.
 - The maximum floor area ratio is 0.35.

- The maximum building height is 30 feet.
- CR 530 (Lakehurst Road)
 - The GCLI zoning district should be changed to just GC General Commercial eliminating all warehouses as permitted principal uses, and, if determined to be appropriate, certain light industrial uses, such as facilities for tradespersons (plumbers, electricians, carpenters, cabinetmakers, heating/air conditioning contractors, and similar businesses), should be considered as a conditional use (additional study is needed to determine which conditions should be required for such light industrial uses).

Section 190-24.2 OP/LI Office Professional/Light Industrial District

- Warehouses should be eliminated as a conditional use according to Township Council's proposal.

Section 190-25 MI Manufacturing Industrial District

- The elimination of warehouses as a permitted principal use is unnecessary because the Zoning Map delineates no MI zoning districts.
- The entire Section 190-25 should be deleted.

Section 190-26 PI Planned Industrial District

- The elimination of warehouses as a permitted principal use is unnecessary because the Zoning Map delineates no PI zoning districts.
- The entire Section 190-26 should be deleted.

Redevelopment Plans

Block 797, Lot 1 Redevelopment Plan

- Since the redevelopment area has been developed with a warehouse and no longer has further development potential, this redevelopment plan should be left intact, except for the following modifications to permitted principal uses:
 - Delete the following permitted principal uses:
 - Warehousing
 - Wholesale distribution centers

- Insert the following permitted principal uses, including their definitions:
 - o Standard warehouse
 - o Cold storage

South Pemberton Road Redevelopment Plan

- Amend “Any use permitted as a principal use within the GCLI zoning district of the Township “ to read as “Any use permitted as a principal use within the GCLI-1 zoning district of the Township (Note: GCLI-1 is a new zoning district).
- Delete the following permitted principal uses:
 - Warehousing
 - Distribution center
- Modify “warehouses” under permitted principal uses to include the following warehouse types including their definitions:
 - Standard warehouses
 - Cold storage
- Amend the description of “flex space industrial” as “a building or space which may be used for light manufacturing, standard warehouses, office space, light assembly or fabrication, or any combination of such uses...” (Note: “warehousing” was replaced with “standard warehouses” and “distribution” was deleted.)

Route 206 Corridor Redevelopment Plan

- Delete the following permitted principal uses:
 - Warehousing
 - Distribution center
- Modify “warehouses” under permitted principal uses to include the following warehouse types and their definitions:
 - Standard warehouses
 - Transload facility
 - Short-term facility
 - Cold storage
 - Fulfillment center
 - Parcel hub

- Amend the description of “flex space industrial” as “a building or space which may be used for light manufacturing, standard warehouses, office space, light assembly or fabrication, or any combination of such uses...” (Note: “warehousing” was replaced with “standard warehouses” and “distribution” was deleted.)

Additional Consideration

The term “data warehouse” is often applied to certain types of light industrial uses. While they do not store or distribute any physical products, data warehouses “store” electronic data. IBM defines a data warehouse as an “enterprise data warehouse” which is “a system that aggregates data from different sources into a single, central, consistent data store to support data analysis, data mining, artificial intelligence (AI), and machine learning. A data warehouse system enables an organization to run powerful analytics on huge volumes (petabytes and petabytes) of historical data in ways that a standard database cannot” (<https://www.ibm.com/topics/data-warehouse>). Data warehouses tend to be located within very large buildings (more than 1 million square feet) and near ultra-fast, highly reliable Internet connections, and have access to high-powered electric service. Employment in data warehouses is low. Data warehouses generate little traffic, mostly from few employees and very little from maintenance and service trucks and the occasional delivery truck. While they are not part of this study, data warehouses should be considered as a permitted principal use in the GCLI (Route 206) zoning district, the Block 797, Lot 1 Redevelopment Plan, the South Pemberton Road Redevelopment Plan, and the Route 206 Corridor Redevelopment Plan, because data warehouses tend to be in very large buildings on very large sites and the aforementioned zoning district and the areas regulated by said redevelopment plans have the potential to accommodate them.