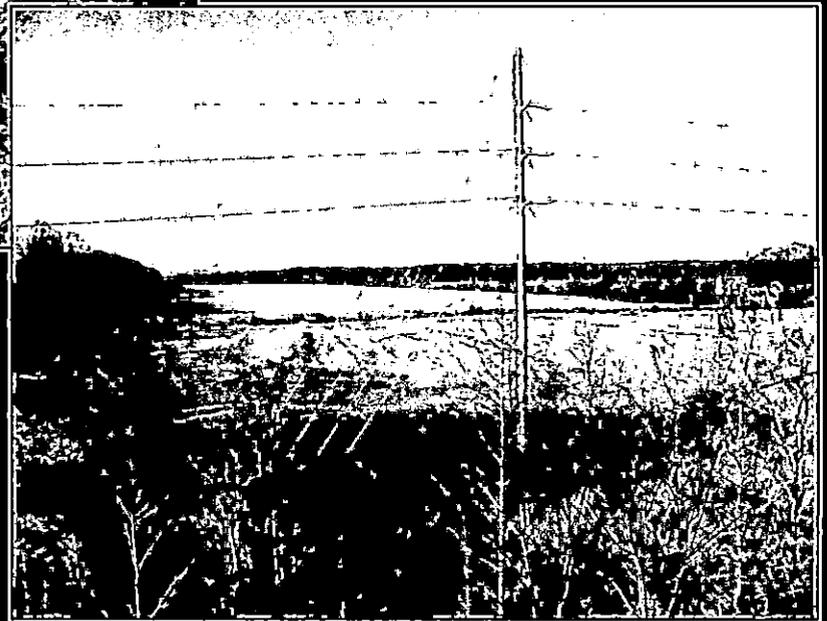




NORTH DOVER SERVICE ROAD STUDY

Leipsic Road to White Oak Road Dover, Delaware



Project Feasibility Report

Prepared by:
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August 2010

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August 24, 2010

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RE: North Dover Service Road Study
Project Feasibility Report

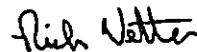
Dear Ms. Wieczoreck:

For your records, please find a copy of the final Project Feasibility Report for the study referenced above.

If you have any questions, please feel free to contact me at 672-7800.

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Sincerely,



Rich Vetter, P.E., AICP

Attachment

Cc: Raymond Harbeson, Rummel, Klepper & Kahl

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I. Introduction

In March 2010, the Dover/Kent County Metropolitan Planning Organization (MPO) initiated a feasibility study within the northeast portion of the U.S.13 corridor in Dover, in order to evaluate the potential of extending a proposed service road system from Leipsic Road south to White Oak Road (*Figure 1*). The purpose of this study is to assess the existing environmental, cultural, and institutional conditions within the study area, as well as the projected land use, to determine whether the proposed transportation improvements are feasible. Alternative service road alignments were not developed as part of this study, as the primary purposes are to:

- Provide a general overview of existing and projected conditions
- Evaluate the feasibility of providing service roads
- Determine potential environmental permits and mitigation measures
- Determine if engineering alternatives should be developed

This document provides a detailed summary of the results of the North Dover Service Road Feasibility Study.

II. Background

Expanding upon previous studies conducted within the north Dover U.S. 13 corridor in 1997 and 2003, the MPO initiated a further study of this corridor in 2007. The purpose of that study was to re-evaluate land use and roadway interconnections with the intent of developing a consensus plan for the future development of the U.S. 13 corridor in north Dover. Rummel, Klepper & Kahl (RK&K) was contracted to assist in that effort by updating the 2003 traffic model that it had created during the 2003 study and using it to evaluate alternatives developed by the MPO. A consensus of proposed improvements for the segment of U.S. 13 between Scarborough Road and Leipsic Road was reached during the course of the 2007 study. One of the primary recommendations of the study was the development of a system of service roads parallel to U.S. 13 within the project limits, in order to facilitate inter-parcel connection. The final report of the U.S. 13 Circulation Study was published in March 2009. The consensus plan developed during the study is attached in *Appendix A*.

III. Land Use

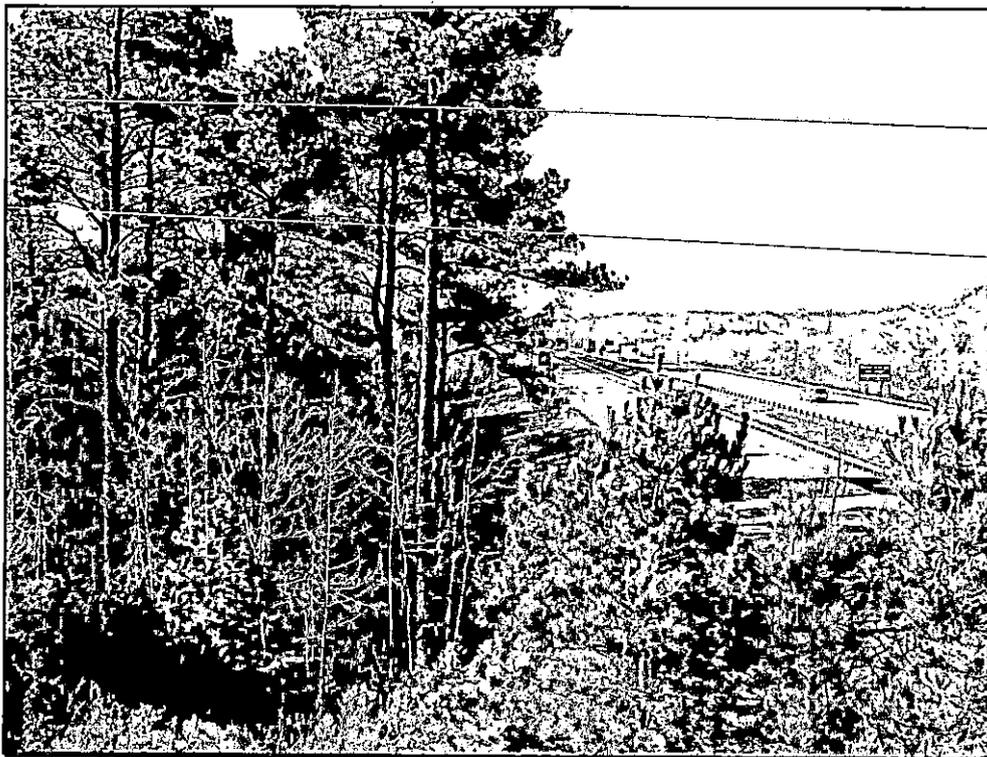
Study Area

As shown in *Figure 1*, the study area is located on the northeast side of Dover. It is bounded on the north by Leipsic Road and Persimmon Tree Lane and on the south by White Oak Road. The study limits extend about $\frac{3}{4}$ mile east of Route 1 and about 800 feet west of Route 1. The study area is approximately 1.6 miles long (north to south), and approximately 0.9 mile wide (east to west).

Existing Land Use

There are approximately 45 individual property parcels located within the study area. This figure does not include the approximately 400 residential lots within the Persimmon Park Place community, nor the apartment units located in Persimmon Park Apartments. Included are privately-owned parcels (Dover Downs owns 12 parcels), as well as parcels owned by governmental agencies including the City of Dover (2 parcels) and the State of Delaware, Department of Transportation (4 parcels). The parcels range in size from less than an acre to 360+ acres.

Figure 2 shows the existing land use within the study area. With the exception of several parcels along Persimmon Tree Lane (east of Route 1), the vast majority of the study area lies within the city limits of Dover. As depicted in *Figure 2*, the study area is comprised almost exclusively of undeveloped lands, the majority of which is either agricultural or wooded.

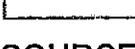


Route 1 (Looking North from White Oak Road)

NORTH DOVER SERVICE ROAD STUDY

FIGURE 2 EXISTING LAND USE

LEGEND

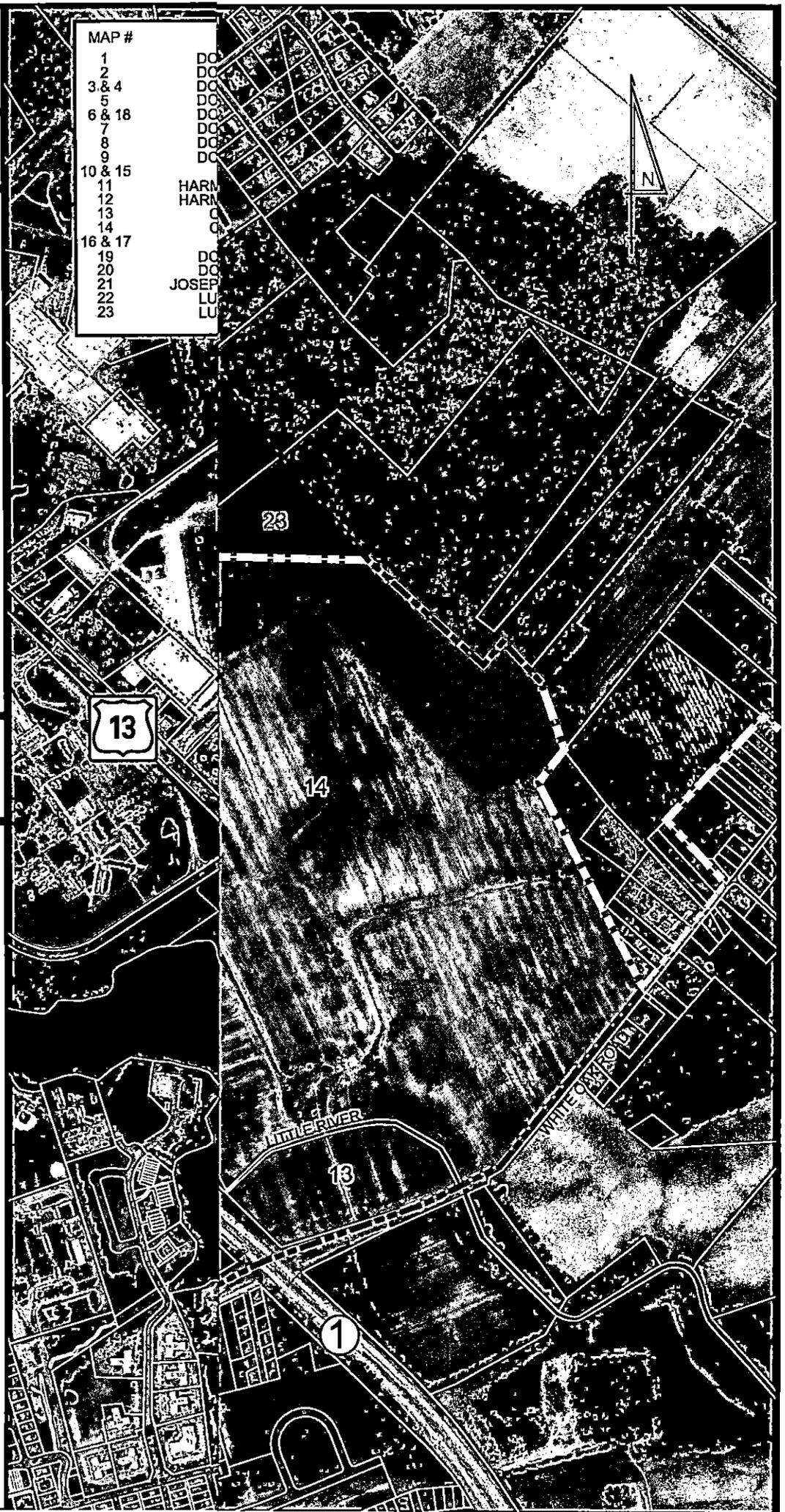
-  STUDY AREA
-  CITY LIMITS
-  PARK
-  COMMERCIAL
-  VACANT
-  OPEN SPACE
-  RESIDENTIAL
-  AGRICULTURE

SOURCE: CITY OF DOVER
EXISTING LAND USE,
FEBRUARY 2009

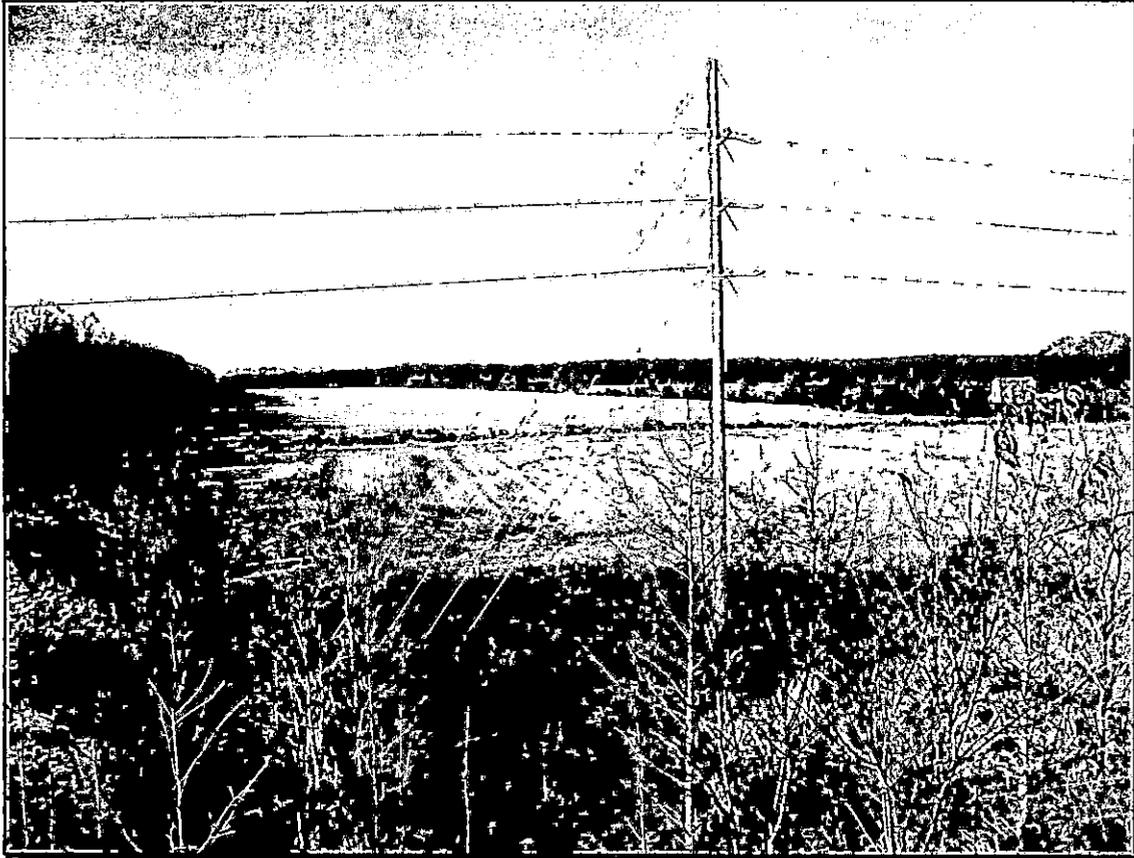
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5/25/10

SCALE:
1" = 1000'

MAP #	
1	DC
2	DC
3 & 4	DC
5	DC
6 & 18	DC
7	DC
8	DC
9	DC
10 & 15	
11	HARM
12	HARM
13	C
14	C
16 & 17	
19	DC
20	DC
21	JOSE
22	LU
23	LU



On the east side of Route 1, the agricultural land consists of the 382-acre Garrison Farm, owned by the City of Dover, as well as small pockets of farm land along Persimmon Tree Lane owned by Dover Downs.



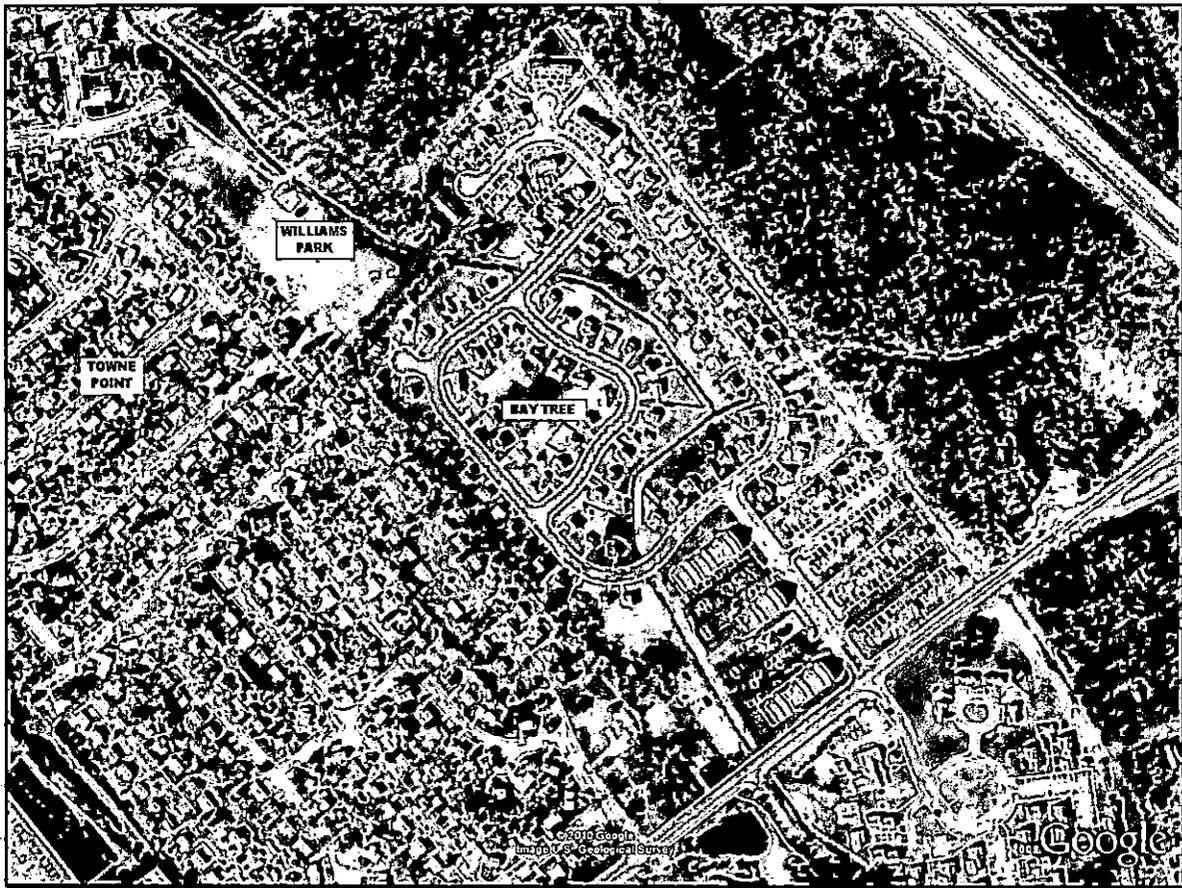
Garrison Farm (Looking North from White Oak Road)

Large wooded areas exist on the north and east sides of the Garrison Farm property. In addition, the area west of the Garrison Farm property adjacent to the Route 1 toll plaza is also wooded and is owned by the State of Delaware, Department of Transportation. At present, the only residential areas east of Route 1 include Persimmon Park Place (a 400 lot mobile home community), Persimmon Tree Apartments, and several single-family residences on Persimmon Tree Lane.

The west side of Route 1 also consists primarily of vacant land. As noted in *Figure 2*, Dover Downs (Dover Downs Raceway lies to the north of Leipsic Road) owns properties with approximately 1.15 miles of frontage along Route 1, between Leipsic Road and the Bay Tree community. With the exception of a wooded area (*Figure 2*, Parcel 9) north of and adjacent to Bay Tree, these properties are vacant and are primarily used to provide parking for NASCAR races at Dover Downs. According to Kent County property mapping records, this wooded area was at one time proposed to be developed as phase 2 of the Towne Point community. There were 77 residential lots initially planned for this parcel, recorded in the Kent County Recorder of

Deeds in Plot Book 7, Page 36. Based on discussions with representatives of Dover Downs, there are no plans to develop this parcel into a residential subdivision.

Immediately west of the study area, Bay Tree is a mixed use residential community consisting of single-family residences, townhomes, and apartments on the north side of White Oak Road. The only other residential area adjacent to the study area is Towne Point, a single-family residential community west of Bay Tree. Williams Park, a City of Dover-owned park, is located northwest of Bay Tree, adjacent to Towne Point. On the north side of White Oak Road (between Bay Tree/Towne Point and Route 1), the land use is predominantly wooded.



Bay Tree and Towne Point

**Table 1
Existing Land Use**

Land Use	Percentage
Wooded	37.7%
Agricultural	36.8%
Vacant	14.6%
Residential	10.9%

Proposed Land Use

Proposed land use, as noted in the *City of Dover's Land Development Plan* (dated November 23, 2009), is depicted on *Figure 3*. As noted, the *Land Development Plan* anticipates development within the study area. The primary development is the Garrison Oak Technical Park, a 382-acre industrial park proposed at the northeast corner of Route 1 and White Oak Road. The proposed site plan for this City-owned industrial park is also shown in *Figure 3*. As of May 2010, the solar park (Lot 15), which is anticipated to be operational by the end of 2010, is the only approved development on the site. The solar park will occupy about 103 acres of the site.

On the southeast corner of Route 1 and White Oak Road, just south of the study area, additional development is also proposed. Several subdivisions in this area have been reviewed as part of the State's Preliminary Land Use Service (PLUS) process but only Evergreen Acres seems to have any expectation at this time. Summary information regarding each of these proposed developments is provided in *Table 2*. While just beyond the study limits, the impact of this and other potential developments should be evaluated to ensure that any future transportation improvements are compatible with the anticipated land use in the surrounding area.

**Table 2
Proposed Developments**

Map #	Name	Current Use	Land Development Plan	Acreage	Proposed Use
1	Garrison Oak	Ag	Industrial/ Public Utilities	382 Acres	Industrial Park
2	Evergreen Acres	Ag	Medium Density Residential	79 Acres	480 residential units

Evergreen Acres is located on a portion of the property originally proposed for Bay Village, a mixed use development that initially was to consist of 505 residential units and 125,000 square feet of commercial uses. Bay Village was reviewed by the Office of State Planning Coordination in 2004, with the last known correspondence for this development coming in 2005.

On the west side of Route 1, the *Land Development Plan* anticipates mixed use development on the properties currently owned by Dover Downs. A small commercial area is anticipated at the northwest corner of Route 1 and White Oak Road, in accordance with the *Land Development Plan*. The wooded areas on each side of Route 1 owned by the State of Delaware, Department of Transportation, are proposed to remain as open space.

Just beyond the immediate study area, a 25-acre shopping center is proposed at the southeast corner of the U.S. Route 13 and Leipsic Road intersection. In addition, there are several large commercial developments in varying stages of planning along the U.S. 13 corridor, including a new shopping center adjacent to the Delaware Agricultural Museum and a significant expansion of the Dover Mall.

NORTH DOVER
SERVICE ROAD
STUDY

FIGURE 3
PROPOSED LAND USE

LEGEND

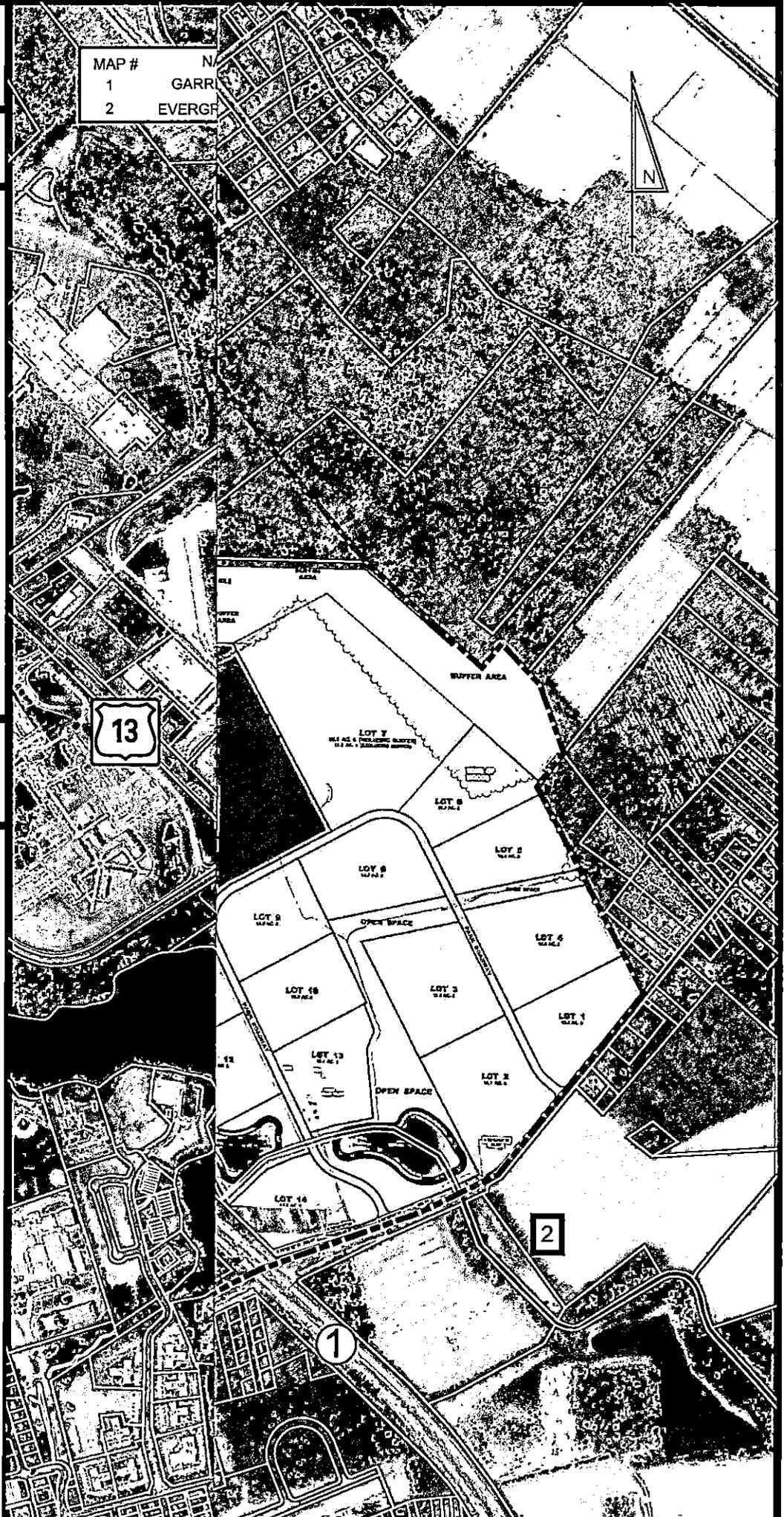
----- STUDY AREA

MAP #	NAME
1	GARRISON
2	EVERGREEN



DATE:
5/25/10

SCALE:
1" = 1000'



State Investment Strategies

Figure 4 shows the State Investment Strategies within the study area, as taken from the Office of State Planning Coordination's *State Strategies for Policies and Spending*, adopted by the City of Dover on February 9, 2009. As noted in the *State Strategies for Policies and Spending* document, there are four distinct investment levels in the State of Delaware.

As shown in *Figure 4*, while each of the four investment levels are present, Level 1 and Level 2 investment levels comprise the majority of the study area. Listed below is a description of each investment level, as it specifically relates to transportation investment strategies.

Level 1

- Provide the greatest number of transportation options, emphasizing public transportation, walking, and bicycling.
- Make existing infrastructure and planned improvements as safe and efficient as possible.
- Typical transportation projects include new or expanded facilities and services for all modes of transportation, including public transportation facilities and services when favorable development patterns and densities exist.
- Projects will also include those that manage traffic flow and congestion, support economic development efforts, and encourage connections between communities and the use of local streets for local trips.

Level 2

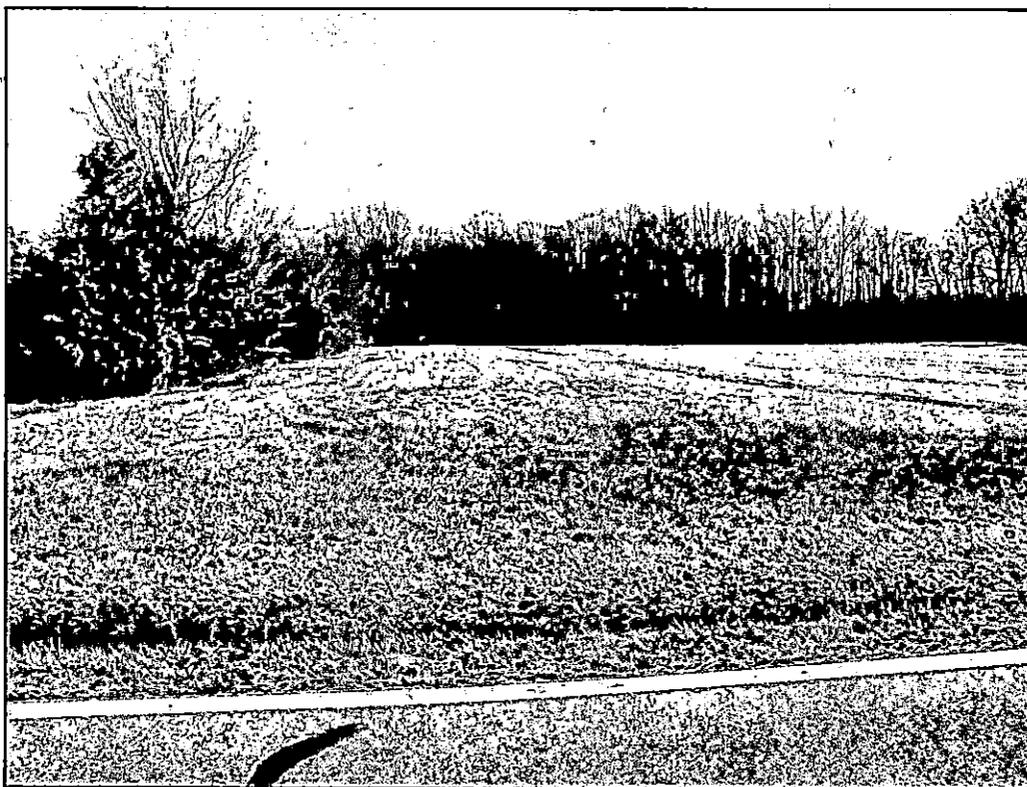
- Encourage sensible development through a planned set of phased transportation investments, land use coordination, and policy actions consistent with zoning densities and designations.
- Transportation projects should expand or provide roadways, public transportation, pedestrian walkways, bicycle paths, and other transportation modes.
- Manage traffic flow, support economic development efforts, and encourage connections between communities and the use of local streets for local trips.

Level 3

- Continue to invest in the regional roadway network, and in maintenance of the existing roadway system. Investments in roadway safety will also be made.
- Continue to protect the capacity of major transportation corridors such as Route 1, 113, and 13 through the Corridor Capacity Preservation Program.
- Roadway improvements that are necessary to support new development activities will not be encouraged in Investment Level 3 Areas during this planning period. The State's finite resources for roadway capacity improvements will be prioritized in Investment Level 1 and 2 areas before being allocated to Investment Level 3.

Level 4

- The State will preserve existing transportation facilities and services, and manage the transportation system to support the preservation of the natural environment.
- Transportation projects will include only the necessary drainage, maintenance, and safety improvements, and programs to manage regional highway facilities.



Agricultural Area on Persimmon Tree Lane (Looking South)

NORTH DOVER
SERVICE ROAD
STUDY

FIGURE 4
STATE
INVESTMENT STRATEGIES

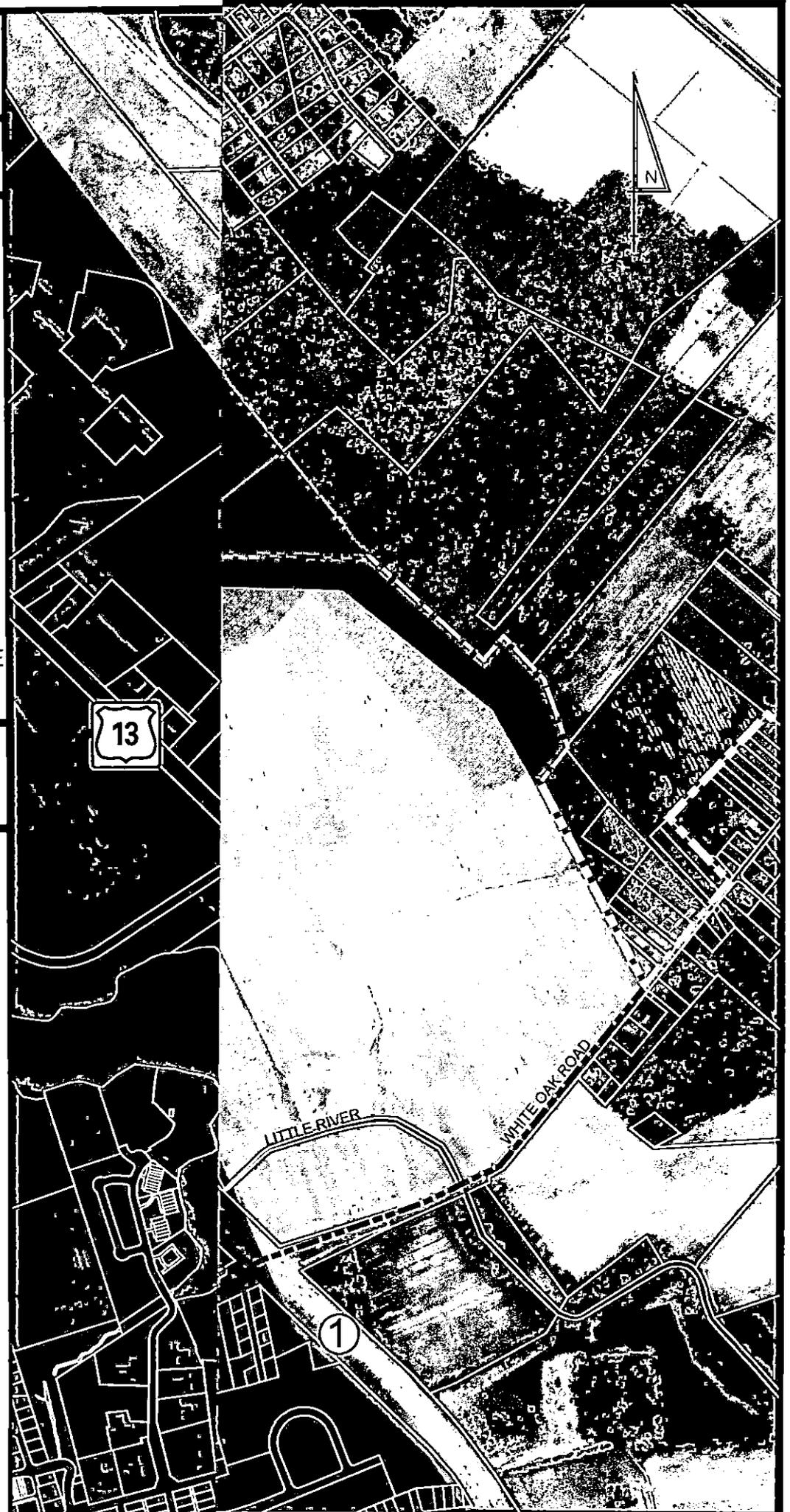
LEGEND

-  STUDY AREA
-  CITY LIMITS
-  LEVEL 1
-  LEVEL 2
-  LEVEL 3
-  LEVEL 4

SOURCE: OFFICE OF STATE
PLANNING COORDINATION

DATE:
5/25/10

SCALE:
1" = 1000'



IV. Social and Environmental Conditions

A number of environmental, cultural, and institutional characteristics of the study area were evaluated as part of the North Dover Service Road Study. Listed below is a description of these characteristics, as well as accompanying figures that correspond with these features.

Wetlands

Based on a review of information provided by the U.S. Fish and Wildlife Service via its National Wetlands Inventory (NWI), wetlands exist within the study area, on both sides of Route 1. The wetlands are predominantly classified as freshwater forested/shrub wetlands, with a small area of freshwater emergent wetlands present between Bay Tree and Route 1. The wetland areas are shown in *Figure 5*.

A wetlands delineation was not completed as part of this phase of the study. However, the approximate location of wetlands in the study area was field verified by RK&K staff in April and May, 2010. The field verifications are reflected in *Figure 5*.



Wetland Area Adjacent to Route 1

NORTH DOVER SERVICE ROAD STUDY

FIGURE 5
ENVIRONMENTAL FEATURES

LEGEND

----- STUDY AREA

 WETLANDS

SOURCE: NATIONAL WETLANDS
INVENTORY AND
FIELD VERIFICATION

 100-YEAR FLOODPLAIN

SOURCE: FEDERAL EMERGENCY
MANAGEMENT AGENCY
FIRM MAP 10001C0167H

DATE:
5/25/10

SCALE:
1" = 1000'

RK&K

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Based on the NWI mapping and associated field confirmations, there are approximately 214 acres of wetlands within the study limits on the east side of Route 1. The wetlands are concentrated solely within the wooded areas adjacent to Route 1 (approximately 87 acres) and at the northern end of the Garrison Oak parcel (approximately 127 acres). Based on field reviews by RK&K environmental staff, virtually the entire wooded areas are classified as wetlands, satisfying the wetland criteria for vegetation, hydrology, and soil types. There are very limited locations of non-wetlands within these two wooded areas.

On the west side of Route 1, there is approximately 65 acres of wetlands within the study area, based on the preliminary assessments conducted and the available mapping. The wetlands are concentrated in the wooded area north and east of Bay Tree, primarily north of the Little River tax ditch. There are potential locations of uplands (non-wetlands) within this wooded area, including the area on the western end of the woods adjacent to Bay Tree (see photo below).



Bay Tree (Looking South)

Agricultural Lands

There is a total of approximately 368 acres in active agricultural use within the study area, consisting of two properties:

- Garrison Oak (approximately 315 acres are currently being used for agriculture, with the remaining 67 acres being wooded)
- Dover Downs (53-acre parcel on the south side of Persimmon Tree Lane, all of which is currently being farmed)

These parcels are currently used for traditional grain crops such as wheat, soybeans, and corn. *Figure 5* shows the properties in agricultural use.

There are no agricultural preservation districts or easements within the study area. In addition, there are no properties within active agricultural use on the west side of Route 1.

Woodlands

As noted on *Figure 5*, there are significant areas of woodlands located within the study area. On the east side of Route 1, there are over 220 acres currently classified as woodlands. Approximately 88 acres are located on those properties owned by the State of Delaware, Department of Transportation, while the remainder is located on the Garrison Oak property and those adjacent to it.

On the west side of Route 1, there are approximately 65 to 70 acres of woodlands, most of which is currently owned by the State of Delaware, Department of Transportation, and Dover Downs. Other privately owned woodlands are located immediately north of White Oak Road.

According to the City of Dover Zoning Ordinance, removal of 50 percent of a site's wooded area is the maximum allowable without providing tree mitigation. The required mitigation for tree removal exceeding 50 percent is 1.25 times the amount of woodlands proposed to be removed.



Garrison Oak Woodlands

Flood plains

Based on Flood Insurance Rate Maps (FIRM) provided by the Federal Emergency Management Agency (FEMA), the portion of the study area traversed by the Little River Tax Ditch lies within the 100-year flood plain of the Little River. This tax ditch, which runs east to west, is located about 500 feet north of White Oak Road as it crosses Route 1.



Little River Crossing Route 1

As shown on *Figure 5*, the Little River Tax Ditch crosses both White Oak Road and Route 1 as it runs in a westerly direction. It traverses the Bay Tree community, and heads northwest towards Leipsic Road. In this area, three small ditches that run perpendicular to the main tax ditch are also located within the 100-year flood plain.



Little River Tax Ditch Through Bay Tree

Based on FEMA mapping, the northeast corner of the intersection of Route 1 and White Oak Road is considered to be in Flood Zone X, which is an area of 0.2% annual chance flood or an area of 1% annual chance flood with an average depth less than one foot. While still considered a flood zone, the 100-year flood event is not considered as likely to be equaled or exceeded in this area.

Park Lands

Williams Park, a City of Dover park in the Towne Point community lies, in part, in the study area. The park lies west of Little River, east of Towne Point and immediately northwest of Bay Tree (see *Figure 2*). The park is nearly 9 acres in size, and provides active recreational uses such as basketball courts and baseball fields.

There are no other Park Lands within the study area.

Relocations

Given the fact that much of the land in the study area is vacant, it appears that viable alternatives could be developed which would not require the relocation of homes or businesses.

Historic Resources

A review of previous cultural resource evaluations was conducted as part of this study. In addition, RK&K's cultural resource staff investigated the study area to determine the potential for historic resources. Formal documentation of those investigations was not prepared and submitted to the State Historic Preservation Office (SHPO) as part of this phase of the study.

Based on a review of the *Historic Resources Map of the City of Dover* (adopted February 9, 2009), the study area contains no individual sites or districts listed on the National Register of Historic Places. Previous cultural resource evaluations conducted for the Delaware Department of Transportation for Route 1 also list no resources on the National Register of Historic Places in the study area.

Files at the SHPO were reviewed to determine the potential for cultural resources in the study area. Based on this review, cultural resource surveys (CRS) were previously conducted for five structures in this area. With the exception of the farm house on the Garrison Oak property, all of the five potential resources have either been demolished or no longer exist. The previously identified structures are listed below in *Table 3*, beginning with the CRS identification number assigned to the resource.

Table 3
Cultural Resource Survey Locations (Structures)

CRS #	Description
K-996	House at Leipsic Road/Persimmon Tree Lane
K-6358	House on Persimmon Tree Lane
K-992	House on White Oak Road
K-361	Brick yard near White Oak Road
K-6739	Farm house

None of the structures listed above were deemed eligible for inclusion to the National Register of Historic Places, based on a review of the SHPO files.

Based on a subsequent field review of the study area conducted by RK&K's historic resource staff, there are no standing structures that warrant additional historic evaluation.

Archeological Resources

The SHPO files were also reviewed with respect to identified potential archeological resources within the study area. The file research indicated that there are nine archeological areas with a CRS number assigned to them. These are areas that have been evaluated by other entities (primarily the Department of Transportation, as part of the Route 1 archeological studies).

Based on a review of the SHPO mapping, all of these potential resources appear to be located on the east side of Route 1. The SHPO mapping is approximate, giving a general location of the identified areas. The previously identified potential archaeological resources are listed below in *Table 4*, beginning with the CRS identification number assigned to the resource.

Table 4
Cultural Resource Survey Locations (Archeology)

CRS #	Archeological Identification #
K-6445	7K-C-385
K-6444	7K-C-384
K-6390	7K-C-367
K-6391	7K-C-368
K-462	7K-C-63
K-6510	7K-C-402
K-6404	7K-C-371
K-6392	7K-C-369
K-6412	7K-D-118

RK&K cultural resource specialists also reviewed the study area with respect to archeological potential. Based on their preliminary field review, several areas were identified as having potential for archeological resources:

- The wooded area east of Bay Tree
- Garrison Farm
- Pockets of drier ground in the wooded areas (potential Native American activities)
- Intact landforms at the northwestern end of the study area

The Department of Transportation previously conducted a significant amount of archeological research as part of the Route 1 corridor planning study completed during the 1980's and 1990's. Much of their evaluations and conclusions are contained in DelDOT publications such as the *Phase I Archeological Survey of the Early Action Segment of the Route 13 Corridor* and the *Phase II Archeological Survey of all Historic Sites in the Early Action Segment of the State Route 1 Relief Route*. Should this study lead to additional alternative analysis efforts, these previous DelDOT studies would need to be examined in detail to determine the potential for any significant archeological resources within the study area, and the need for any subsequent archeological surveys, given the significant amount of archaeological resource evaluation that was conducted in the Route 1 corridor through the study area.

V. Transportation Facilities

An inventory of the existing transportation network was conducted as part of this study. Listed below is a description of the characteristics of the existing roadway network within the study area, as well as an inventory of the existing transit, bicycle, and pedestrian facilities.

Roadways

In addition to Route 1, there are four other state-maintained roadways within the study area: Leipsic Road, Persimmon Tree Lane, White Oak Road, and Toll Plaza Lane. Toll Plaza Lane is a two-lane roadway that connects the Toll Plaza Administration Building with Leipsic Road. Listed below in *Table 4* is a brief description of the existing roadway network. The traffic volumes listed below are 2008 volumes, as taken from the *DelDOT Traffic Summary*.

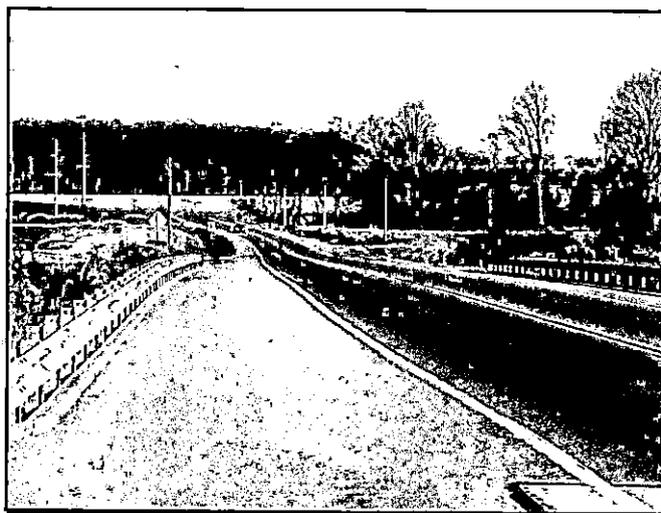
Table 4
Existing Roadway Conditions

Road	Functional Classification	Shoulders	Volume
White Oak Road	Major Collector (west of Route 1)	Yes	7,300 *
	Local Road (east of Route 1)		1,150 **
Leipsic Road	Minor Arterial	Yes	1,400
Persimmon Tree Lane	Major Collector	Partially	2,700 to 3,300

* Between U.S. 13 and Acorn Lane

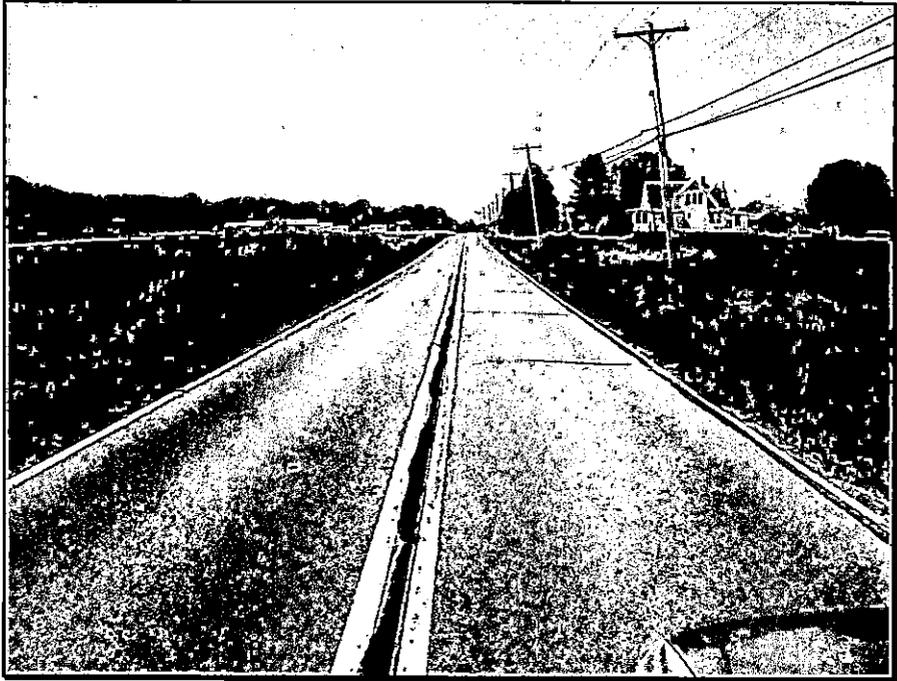
** Between Acorn Lane and Eastern City Limits

The majority of White Oak Road within the study area has paved shoulders. The shoulders terminate at the Little River, just east of Route 1. East of the Little River, White Oak Road becomes a 2-lane facility with no shoulders. It is anticipated that improvements will be made to White Oak Road as part of the future development of the Garrison Oak Technical Park.



White Oak Road at Route 1 (Looking East)

Persimmon Tree Lane has paved shoulders between Leipsic Road and Persimmon Tree Apartments only. East of Persimmon Tree Apartments, the road also becomes a 2-lane facility with no shoulders, as shown below.



Persimmon Tree Lane (Looking West)

Leipsic Road is a 2-lane roadway with paved shoulders throughout the length of the study area. Left turn lanes exist at its intersection with Toll Plaza Lane/Dover Downs racetrack. There are also turn lanes at the intersection with the Dover Downs camper parking lot on the south side of Leipsic Road.

Transit Routes

There is one transit route located just beyond the western limits of the study area. As shown in *Figure 6*, DART Bus Route 108 runs from U.S. Route 13 through the Towne Point community and crosses White Oak Road as it continues south to Route 8. DART Route 108 is a fixed transit route, running during daytime hours, Monday through Friday only.

The area bounded by White Oak Road, Route 1, Route 8, and Acorn Lane is located within a transit flex zone. This is an area where free bus service is provided between these communities and a fixed route transfer stop. The flex zone service provides bus transportation for those areas that are beyond a reasonable walking distance to a fixed route transit stop.

**NORTH DOVER
SERVICE ROAD
STUDY**

**FIGURE 6
BICYCLE, AND
TRANSIT FACILITIES**

LEGEND

----- STUDY AREA

BUS ROUTES

———— DART ROUTE 108

———— DART ROUTE 109

BICYCLE ROUTES

———— STATEWIDE BICYCLE ROUTE

———— REGIONAL BICYCLE ROUTE

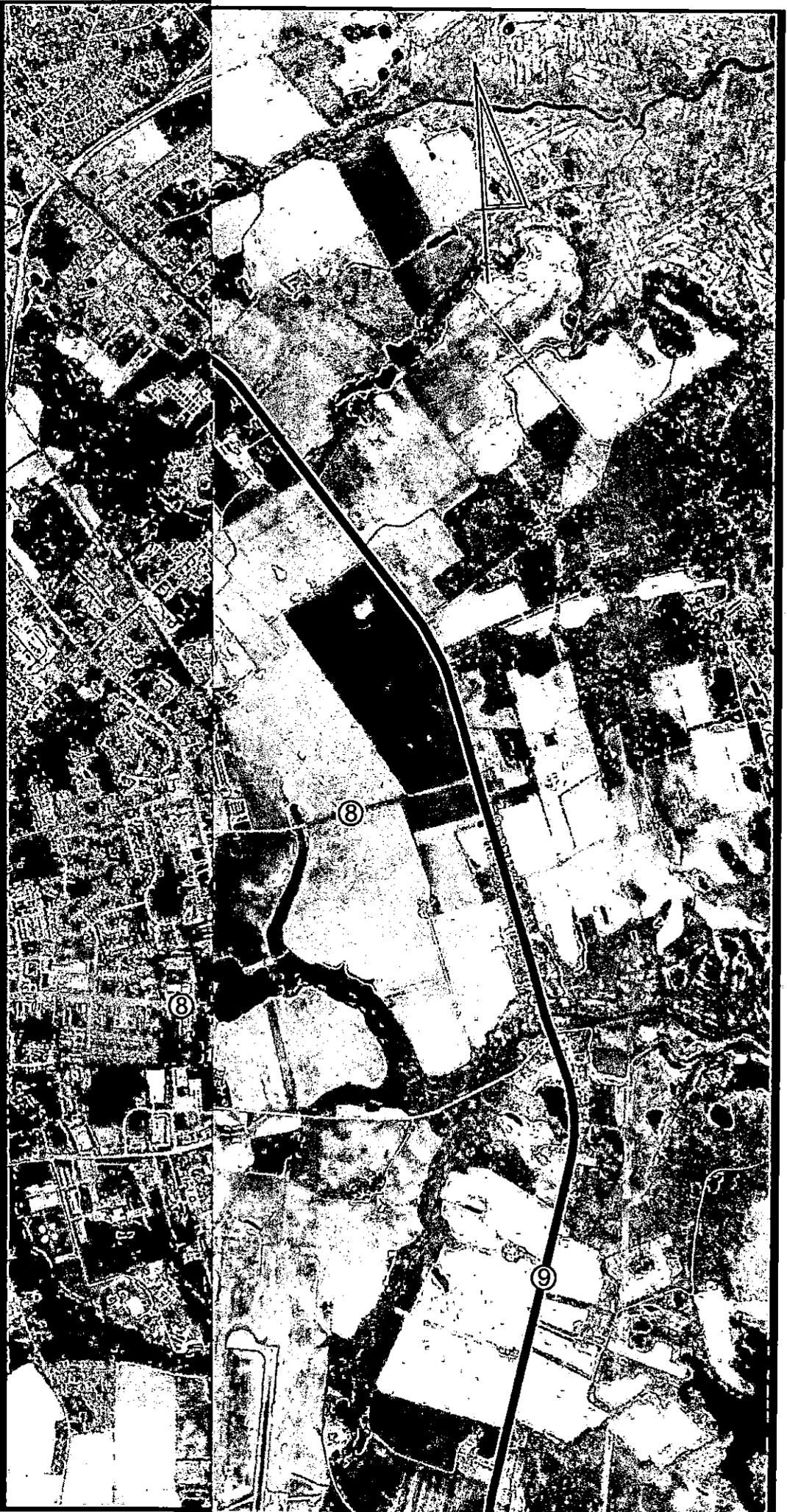
———— CONNECTOR BICYCLE ROUTE

DATE:
5/25/10

SCALE:
1" = 2500'



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Bicycle Routes

Several of the roads within the study area comprise components of the state's bicycle network. As indicated on the *Kent County Bicycle Map*, as published by DeIDOT, Leipsic Road, Persimmon Tree Lane, and White Oak Road are all designated bicycle routes of varying hierarchical importance.

Figure 6 shows the bicycle network within the study area. Leipsic Road and Persimmon Tree Lane are designated as Statewide Bicycle Routes, which provide north-south connections and access between the three counties. The section of Leipsic Road/Persimmon Tree Lane between U.S. Route 13 and near the Persimmon Tree Apartments has paved shoulders. The bicycle route along Persimmon Tree Lane connects with Route 9, another Statewide Bicycle Route.

White Oak Road within the study area is considered a Connector Bicycle Route. According to the *Kent County Bicycle Map*, a connector bicycle route "provides connections from local activities and recreational centers to the larger bicycle network." The section of White Oak Road between U.S. Route 13 and the Little River (just east of Route 1) has paved shoulders. White Oak Road also provides a direct connection to Route 9, which is designated as a Regional Bicycle Route at its intersection with White Oak Road.



White Oak Road (Looking West from Acorn Lane).

Pedestrian Facilities

During NASCAR races, Dover Downs generates large numbers of pedestrians that walk from the outlying campsites and parking areas to the racetrack. This influx of pedestrians is accommodated primarily by the wide paved shoulders along portions of Persimmon Tree Lane and Leipsic Road. There is a sidewalk on the north side of Leipsic Road, along the length of the Dover Downs racetrack property, as well as numerous pedestrian crosswalks at key intersections along Leipsic Road.

Along White Oak Road, there is no sidewalk within the study area. On the south side of White Oak Road, the sidewalk ends at the entrance to the Manchester Square public housing facility. On the north side of White Oak Road, the sidewalk terminates at the entrance to Bay Tree, and continues throughout the community. There is a small sidewalk running along a portion of the east side of the Bay Tree community, behind the existing duplexes.



Leipsic Road at Dover Downs (Looking East)

VI. Project Feasibility

The primary objective of the North Dover Service Road Study is to provide a general evaluation of the potential impacts that could result from the development of a service road between Leipsic Road and White Oak Road. Given the information obtained during this study, the following environmental and community factors should be considered to determine if engineering alternatives should be developed:

Wetlands

As noted, wetlands are present throughout the wooded areas on each side of Route 1. Based on the field reviews conducted in May 2010, the wetlands are more prevalent on the east side of Route 1, particularly through the area north of the Garrison Oak tract. Regardless, any future design of a new roadway alignment on either side of Route 1 will require the following:

- Wetlands delineation and documentation
- Permits from the applicable regulatory agencies (Corps of Engineers, Delaware Department of Natural Resources and Environmental Control (DNREC))
- Design and land acquisition for wetland mitigation

Assuming an impact width of 60 feet for the proposed connector road, it would appear that the magnitude of the direct impact to wetlands east of Route 1 would range approximately between 3.0 and 4.0 acres. On the west side of Route 1, the range would drop to approximately 1.5 to 2.0 acres. In each case, the upper end of the range would represent the worst case condition. Indirect impacts have not been estimated.

An east side frontage road, with the exception of placing the roadway adjacent to and immediately east of Persimmon Park Place, would necessitate the placement of the roadway through a wooded wetland area rather than on the edge of it. Similarly, a west side frontage road, with the exception of placing the roadway adjacent to and immediately east of Bay Tree, would necessitate the placement of the roadway through a wooded wetland area rather than on the edge of it. While the wooded wetland would still be impacted, the resource agencies have historically looked at an edge affect more favorably than an impact that bisects wetlands.

Flood Plains

The Little River tax ditch, much of which is located within the 100-year flood plain, traverses the study area on both sides of Route 1. In addition, there are several small tributary ditches on the west side of Route 1 that are also located within the 100-year flood plain. A new service road alignment on the west side of Route 1 would require coordination and/or permits from DNREC, due to the fact that a new road would have to cross the flood plain at some point. The average width of the Little River Flood Plain west of Route 1 to the community of Bay Tree is 400 feet. An east side frontage road could avoid the Little River Flood Plain by using, in part, the proposed loop road for the City of Dover's Garrison Oak Technical Park as part of the frontage road.

Park Lands

As indicated earlier, Williams Park lies within the study area west of Route 1. Since the park lies west of Little River, placing a frontage road between Route 1 and the Little River will avoid direct impact to the park. Because this is the only park in the study area, should federal funds be utilized for any part of this project, federal regulations (Section 4(f) of the Transportation Act) would preclude the taking of any portion of the park if other viable alternatives were developed which did not affect the park.

Agricultural Lands

There is actively farmed land on the east side of Route 1 only, consisting of two parcels as previously noted. While currently farmed, the Garrison Oak tract is slated for development beginning at the end of 2010, with the implementation of the 103-acre solar park. A service road constructed on the west side of Route 1 would have no adverse impacts on agricultural lands.

Community Issues

On the east side of Route 1, while there are several single-family residences located along Persimmon Tree Lane, there is one large residential community within the study limits – Persimmon Park Place. On the west side of Route 1, there are two residential communities adjacent to the study limits: Bay Tree and Towne Point.

As discussed earlier, one way to reduce the potential wetland and woodland impacts on an east or west side frontage road is to place the frontage road along the edge of the wooded wetlands adjacent to Persimmon Park Place and Bay Tree, respectively. The issues for the communities mentioned would include the construction of a new roadway adjacent to the community, safety, noise, visual impact, etc.

Should this project proceed into the alternatives development and evaluation phase, initial planning efforts would require coordination with these communities from the beginning of the effort, to ensure that their concerns are incorporated into the planning and subsequent design of a new service road. That outreach should also be directed at the elected officials representing these communities since they tend to be the initial point of contact when their constituents perceive impacts to their community.

Relocations

As discussed earlier, it appears that viable alternatives can be developed which do not require the relocation of any homes or businesses.

State Investment Strategies

In accordance with the currently adopted *State Strategies for Policies and Spending*, most of the study area lies within the State's two highest priority transportation investment levels. However, the area on the west side of Route 1 lies within Level 1, the area slated for greatest State infrastructure investment. The area on the east side of Route 1 primarily lies within the Level 2 and Level 4 investment areas, which represents lower priority areas of investment. In addition, the Office of State Planning Coordination has gone on record on numerous occasions regarding the need to focus development and infrastructure investment on the west side of Route 1, while attempting to limit development on the east side of Route 1. This has been reinforced with funding from the Department of Transportation for the preservation of agricultural lands east of Route 1.

Wood Lands

In accordance with the City's Zoning Ordinance, woodland mitigation could potentially be required for a new service road, should 50 percent of the trees on a parcel be removed. A tree replacement plan would be required and subsequently approved by the City of Dover Planning Commission, for any applicable tree removal within City limits. In addition, state legislation regarding the taking and replacement of trees would also necessitate the replacement of woodlands per the requirements established in the law.

As discussed earlier, one way to reduce the impact on woodlands, and in this case wetlands, is to place the roadway improvements on the edge of existing woodlands rather than through a portion of a larger woodland area leaving woodlands on both sides of the proposed roadway. Because there are communities which lie at the edges of the woodlands in the project area, an additional set of considerations comes into play.

Direct impacts to woodlands east of Route 1 would approximately range between 3.5 and 4.0 acres. West of Route 1 the range of impacts to woodlands increases to 4.0 to 5.0 acres.

Cost

Many of the same factors would have to be considered for a service road on either the east side or the west side of Route 1. These include the following:

- New culvert crossings of the Little River tax ditch
- Wetlands mitigation
- Woodland mitigation
- Roadway length
- Right-of-way

Regarding the issue of length, generally speaking, two alternatives of similar length will have similar costs. In the case of a roadway connection east of Route 1, if that connection utilized, in part, the loop road proposed for the Garrison Oak Technical Park, there could be a cost saving of 25% +/- for this alternative over an entirely new connection from White Oak Road to Persimmon Tree Lane. An alternative west of Route 1 could also benefit by using Toll Plaza Lane for part of its length reducing the cost by 16% +/- over an entirely new connection from White Oak Road to Leipsic Road.

In addition, there are cost-related issues that are specific to the east side of Route 1 and the west side of Route 1. In addition to the common items noted on the previous page, there are several potential issues specific to the east side of Route 1 that could factor into any future planning efforts, based on a preliminary analysis:

- Consideration of improvements to Persimmon Tree Lane between Persimmon Park Place and any future service road connection.
- Need for visual screening and/or noise mitigation for Persimmon Park Place

On the west side of Route 1, there are also several specific issues that would require further evaluations as they relate to cost, social impact, and environmental considerations:

- Need for visual screening and/or noise mitigation for Bay Tree
- Potential additional culvert crossings of the 100-year floodplain
- Potential for cut-through traffic on Acorn Lane

A summary of the community and environmental issues evaluated during this study is shown below in *Table 5*.

Table 5
Summary of Community and Environmental Issues

Issue	Frontage Road East of Route 1	Frontage Road West of Route 1
Wetlands	3.0 to 4.0 acres +/-	1.5 to 2.0 acres +/-
Flood Plain	Avoidable	400 feet average crossing Possible additional small crossings
Park Lands	No impact	Avoidable
Agricultural Lands	Minimal impact	No impact
Community	Persimmon Park Place - Proximity - Noise - Visual - Safety/security - Etc.	Bay Tree - Proximity - Noise - Visual - Safety/security - Etc.
Relocations	Avoidable	Avoidable
State Investment Strategies	Consistent (Level 2 areas) Inconsistent (Level 4 areas)	Consistent
Wood Lands	3.5 to 4.0 acres +/-	4.0 to 5.0 acres +/-
Cost	Similar length to west side Opportunity to reduce cost - Mitigation	Similar length to east side Opportunity to reduce cost - Mitigation - Little River flood plain structure

Conclusion

As indicated in *Table 5*, a range of wetland impacts of approximately 1.5 to 4.0 acres, a potential flood plain crossing of approximately 400 feet in width, a range of woodland impacts of approximately 3.5 to 5.0 acres, community concerns with potentially placing a new roadway in proximity to the community and, finally, the cost of the project appear to be the major issues affecting the feasibility of considering a connector road from Leipsic Road/Persimmon Tree Lane to White Oak Road.

As with any project, should the project proceed into the alternatives development phase, these aforementioned considerations will have to be evaluated, and the potential impacts more closely quantified and compared, in order to select the most cost-effective, least environmentally damaging alternative that addresses the identified transportation needs of the study area.

Is a connector road feasible? Technically, yes. It would not appear that the major, quantifiable issues of concern are such to preclude moving forward with the project. However, the biggest unknown is the reaction of the two communities in the study area regarding the possible placement of a new roadway adjacent to their community.

Recommendations

1. Most Feasible Location

Based on the information gathered for this study, and without the benefit of quantified impacts, the most feasible alignment for a future service road along Route 1 appears to be along the west side of Route 1 between White Oak Road and the service drive to the Route 1 Toll Plaza. As described above, the construction of such a connection would have environmental and community impacts that would need to be mitigated. These impacts would include:

1. Loss and replacement of wetlands
2. Loss and replacement of woodlands
3. Proximity impacts (noise, visual) to the community of Bay Tree

As shown in the North US 13 Traffic Circulation Study in 2008, it is likely that a frontage road system along Route 1 throughout Dover would be very beneficial for the distribution of traffic along the US 13 corridor in the future. Currently, however, the only need for such a facility is during the NASCAR Race events, which occur on two weekends per year. The need for the connection examined in this study will become more apparent as the following changes take place in the US 13/Route 1 corridor:

1. Planned development expansions at Dover Mall, Dover Downs, Garrison Oak Business Park and other commercial sites along the US 13/Route 1 Corridor are completed.
2. Planned Route 1 frontage roads from Route 8 to White Oak Road and from Scarborough Road to Leipsic Road are completed.
3. Shortcut traffic through the interconnected streets in Towne Point increases.
4. Congestion on US 13 from Route 8 to Scarborough Road increases.
5. Special event traffic at Dover Downs increases.

Without an immediate demonstrated need, we recommend that additional studies of this connection not be pursued at this time. Instead the connection should be included as a long range link in the City of Dover Master Plan and preserved by the City and DelDOT through any subdivision proposals advanced in this corridor.

2. Comprehensive Plan

While the planning and public involvement process has not been furthered to the point of developing alternatives, it is important to maintain the ability to provide a service road in this area should the need arise in the future. In order to formalize the results of this study, it is recommended that the preservation of a right-of-way corridor (through the land development process) be incorporated in the City of Dover's *Comprehensive Plan* as a future roadway link. This would assist City and DelDOT staff responsible for reviewing and approving land development applications, to ensure that the ability to provide an alternative connection between White Oak Road and Leipsic Road was not precluded by future development.

3. Corridor Preservation

To preserve the ability to make this connection in the future, the City of Dover Planning Department and the DelDOT Subdivision Section should require that interconnections between adjacent properties be provided for all future land developments on the west side of Route 1. In addition to property owned by the Department of Transportation, there are privately-held parcels owned by Dover Downs and Harman Properties. It is vital to preserve a right-of-way corridor for a road connection should any of these properties develop in the future.

4. Limited Project

Prior to a full traffic need for this connection, it is possible that a smaller scale connection along this alignment might become desirable to resolve local traffic needs. Relief for traffic movements in one direction, relief for traffic during Dover Downs events, the provision of pedestrian and bicycle access between neighborhoods and the commercial areas along US 13 in north Dover, might develop a need for a more limited scale project along the west side of Route 1. Should a need for this type of project emerge, it is recommended that a reduced typical section be evaluated, in order to minimize any adverse social and environmental impacts associated with a new roadway.

This could include an evaluation of the following:

- Two-way, 10-foot wide bicycle/pedestrian path
- One-lane only service road
- One-way only service road (converted into northbound or southbound depending upon local traffic conditions)
- Use restrictions (open only during peak NASCAR weekends)
- Alternative construction materials (gravel instead of asphalt, for instance)

Appendix A

2007 U.S. Route 13 Circulation Study

Consensus Plan

13

207

13

NORTH SERVING TOLL PLAZA

SOUTH SERVING TOLL PLAZA CASH LEFT / EZ-PASS RIGHT

POSSIBLE INTERCHANGE REALIGNMENT (OPTION 1)

POSSIBLE THIRD TRAVEL LANE BETWEEN WALMART AND SCARBOROUGH ROAD

WILMINGTON UNIVERSITY

POSSIBLE ACCESS TO WILMINGTON UNIV.

PROPOSED HILTON GARDEN WAY

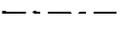
POSSIBLE RRY PROPERTY CONNECTION

REALIGNED TOLL PLAZA ADMIN BLDG. ACCESS ROAD

POSSIBLE EXTENSION OF LEPORE ROAD

FUTURE SIGNAL (2009)

LEGEND

-  EXISTING TRAFFIC SIGNAL
-  PROPOSED ROADWAY
-  EXISTING PROPERTY LINE
-  ROADWAY TO BE REMOVED

"CONSENSUS" PLAN



RUMMEL KLEPPER & KAHL, LLP

US ROUTE 13 CIRCULATION STUDY FROM SCARBOROUGH ROAD TO JEFFERIC BOULEVARD

Appendix B
Meeting Minutes

MEMORANDUM OF MEETING

TO: File 110-037 Dover/Kent Co. MPO, North Dover Service Roads
FROM: Ray Harbeson
MEETING DATE: March 31, 2010
RE: DelDOT Coordination Meeting

A "kick off" meeting was held on the US 13 North Dover Service Road Study at 10:00 AM on March 31, 2010 at the Dover/Kent MPO Conference Room. Those in attendance were:

Juanita Wieczoreck (Dover/Kent MPO)
Rich Vetter (RK&K)
Ray Harbeson (RK&K)

The purpose of this meeting was to review project scope and schedule and to establish the MPO's desired level of coordination during the course of the study.

Project Scope

Rich Vetter presented an aerial photograph of the project area along with some of the other information he had gathered including wetland mapping, and proposed site plans for the City of Dover owned Garrison Oak Business Park. Ray reviewed with Juanita the areas to be studied, and information to be gathered to establish the feasibility of making a roadway connection along the west side of SR 1 or between the City owned Garrison Oak Business Park and Persimmon Tree Lane, east of SR 1.

Juanita mentioned her concern that the road plan for the Garrison Oak Business Park site plan may be locked in and hard to revise, if it has received the final site plan approvals. Rich will follow up with the City to determine the status of the site plan approval for Garrison Oak Park. Rich also stated that he would check on the status of the proposed development in the SE corner of SR 1 and White Oak Road and any planned future DTC service to the City's Garrison Oak Business Park.

Coordination

Ray promised Juanita that RK&K would provide email progress reports every two weeks. Juanita was asked to identify who she wanted to receive a copy of the email reports for DelDOT and the City of Dover. She stated that Ralph Reeb has been the only one involved from DelDOT and that Ann Marie Townshend should be the City contact.

Ray mentioned that a meeting with Dover Downs was included in the scope to get a better understanding of their desire for extending the service road to the south to White Oak Road. Once their needs are better understood, Juanita asked RK&K to also meet with Anne Marie Townshend, City of Dover Planner, and the City Electric Department and get their opinions on the possibility of connecting the Garrison Oak Business Park to Persimmon Tree Lane. Especially, in light of whatever restrictions were placed on this area by the State Planning Office when the City updated its last Comprehensive Plan.

These minutes represent the general context and content of items and issues discussed during the meeting. Should anyone have additions or corrections to these minutes, please contact Ray Harbeson at 302-672-7800, as soon as possible.

Cc: Juanita Wieczoreck

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**North Dover Service Road Study
Meeting Minutes**

Meeting Date: April 19, 2010

Location: Dover Downs

Attendees:

Denis McGlynn	Dover Downs
Jerry Dunning	Dover Downs
Ray Harbeson	Rummel, Klepper & Kahl
Rich Vetter	Rummel, Klepper & Kahl

Discussion Items:

1. Mr. Harbeson began by describing the purpose of the meeting – to discuss the Metropolitan Planning Organization’s study for the feasibility of new roadway connections between White Oak Road and Leipsic Road. He presented an aerial base map of the study area, indicating that RK&K has been contracted to evaluate the social and environmental features within the study area, while establishing the feasibility and potential of providing roadway connections. He noted that RK&K is not developing or evaluating roadway alignments as part of the current study.
2. The group collectively discussed potential roadway connections. On the west side of Route 1, Mr. Harbeson noted that there were significant areas of wetlands. Based on their location and the need to provide the least environmentally-impactive alignment, he said that any potential roadway on the west side would likely have to be as close to the Bay Tree community as possible. He stated that this may not be desirable from a political and community perspective.
3. Mr. Harbeson presented the conceptual subdivision plan for the Garrison Oak Technical Park, on the east side of Route 1. He described the loop road that is part of the plan, and offered that there may be an opportunity to connect this road with Persimmon Tree Lane. He noted that wetlands mapping shows a potential wooded wetlands area adjacent to Persimmon Park Place.
4. Mr. McGlynn indicated that Dover Downs supports any roadway connections that improve access and mobility for race crowds. He noted that providing alternatives to U.S. 13 would also be desirable from a local traffic standpoint.
5. Mr. McGlynn said that the Dover Mall has plans for a significant expansion on the east side of the existing mall, which will lead to increased traffic volumes on U.S. 13. He also stated that the Mall is looking to provide a connection to Dover Downs.
6. Mr. Dunning said that providing an alternative to U.S. 13 is important for both Dover Downs visitors as well as local traffic generated by the businesses on U.S. 13. He noted that extending a service road to White Oak Road provides motorists with flexibility and transportation options. He also mentioned that Dover Downs owns property on the west side of Route 1, from Leipsic Road to Bay Tree.

7. Mr. Dunning indicated that the State Planning Office is discouraging growth and State investment on the east side of Route 1, which would likely make a service road on the west side more palatable. He said a connection in this area would provide additional long-term benefits (20 years) for future development on the west side of Route 1, in accordance with State goals.
8. Mr. McGlynn noted that there would likely be community concerns associated with a connection through Garrison Oak, from the residents of Persimmon Park Place. Mr. Harbeson indicated that providing additional access on the east side of Route 1 would help to facilitate the development of Garrison Oak.
9. Mr. Vetter presented wetlands mapping, as field verified by RK&K environmental staff. Mr. McGlynn asked if Dover Downs' property could be used for wetland mitigation areas. Mr. Harbeson replied the wetlands must be replaced at a 2:1 ratio, as every acre of destroyed wetlands would have to be replaced with two acres. He noted that the regulatory agencies will require the least environmentally-damaging alternative to be pursued.
10. Mr. McGlynn asked if the wetland impacts are greater on the east side or the west side of Route 1. Mr. Harbeson indicated that there are similarly-sized areas of wetlands on both sides, and the acreages will be determined as part of this study.
11. Mr. Dunning pointed out the large wet area on the State property adjacent to and east of Bay Tree. He said that the ponding was caused by the build-up of dispersed soil from the construction of Route 1. He noted that the soil creates a berm that prevents water from reaching the tax ditch.
12. Mr. Harbeson indicated that providing a roadway connection on the west side close to Route 1 is not a viable option, due to the significant amount of wetlands in this area.
13. Mr. McGlynn noted that Dover Downs completed a wetlands delineation near the pond on their property adjacent to Towne Point.
14. Mr. McGlynn stated that his preference would be a roadway connection on the west side of Route 1. He said that a connection on the east side would also be acceptable, though he expressed concerns about the need to improve Persimmon Tree Lane and the fact that a connection on the east side would be longer and more arduous for motorists accessing Route 1.
15. Mr. Harbeson presented the concept plans completed as part of the previous phase of the North Dover Service Road Study, from Scarborough Road to Leipsic Road. Mr. Dunning asked if there would be significant impacts to the property at Route 1/Scarborough Road. Mr. Harbeson indicated that the property impacts would be minimized by keeping the service road as close to Route 1 as possible. He also mentioned that all intersections associated with proposed service road would be at-grade.
16. Mr. McGlynn asked who controls the decision to move forward with this project. Mr. Harbeson replied that since the project lies with 3 jurisdictions, the State, Kent County, and the City of Dover would all have a say in determining if this project should proceed, and if feasible, where a new corridor should be located.

17. Mr. McGlynn noted that all three governmental agencies agree on the importance of developing Garrison Oak. Mr. Harbeson also indicated that providing a new roadway connection on the east side of Route 1, between White Oak Road and Route 8, is the top transportation priority of the City of Dover and the Central Delaware Chamber of Commerce.
18. The group discussed several proposed developments along the U.S. 13 corridor, including the former Berry Van Lines property, the Delaware State University property adjacent to the Agricultural Museum, and the Dover Mall expansion. They agreed that new roadway connections parallel to U.S. 13 would help to disperse traffic in this area and alleviate congestion on U.S. 13.

This represents the author's best recollection of the meeting. If there are any additions or revisions, please contact the author at rvetter@rkk.com or 302-672-7800.

Reported by:

Rich Vetter, P.E., AICP
Rummel, Klepper & Kahl

**North Dover Service Road Study
Leipsic Road to White Oak Road
Meeting Minutes**

Meeting Date: August 2, 2010

Location: DelDOT Administration Building

Attendees:

Ralph Reeb	DelDOT Planning
Juanita Wieczoreck	Dover/Kent County MPO
Ann Marie Townshend	City of Dover Planning
Ray Harbeson	Rummel, Klepper & Kahl
Joe Wutka	Rummel, Klepper & Kahl
Rich Vetter	Rummel, Klepper & Kahl

Discussion Items:

1. Mr. Vetter began the meeting by reviewing the results of the feasibility study. He presented an aerial map showing the existing wetlands, floodplain, and property lines within the study area. He indicated that based on wetlands mapping and field observations, there are significant wetland areas on both sides of Route 1. He noted that there are no significant historic or archeological resources within the study area, based on research conducted with DelDOT and the State Historic Preservation Office.
2. The group discussed the proposed development of the Garrison Oak Technology Park. Ms. Townshend indicated that in addition to the planned solar park, a gas storage facility has recently been proposed for a portion of the site. She noted that the two proposed uses will generate a minimal number of on-site employees (approximately 30 employees total).
3. Mr. Harbeson said that while the feasibility study proved that a service road between Leipsic Road and White Oak Road is feasible, it is difficult to justify the purpose and need for the project based on current conditions. He indicated that it would be difficult to adequately demonstrate the need for a service road to the environmental regulatory agencies, as required to obtain a wetlands permit.
4. Mr. Harbeson discussed the possibility of extending a service road from the Garrison Oak loop road north to Persimmon Tree Lane. He noted that there would be several adverse impacts associated with this, including community impacts (Persimmon Park Place) and potential fragmentation of an intact wetlands area. In addition, Ms. Townshend said that the wooded buffer area on the Garrison Oak property needed to be preserved.
5. Ms. Townshend noted that the developers of Bay Village, a 450-unit residential community proposed at the southeast corner of Route 1 and White Oak Road, would likely seek approval next year. She also said that there are currently no development plans for the Harman property located at the northwest corner of Route 1 and White Oak Road.

6. On the west side of Route 1, Mr. Vetter noted that the least environmentally-damaging alternative would be along the edge of the wooded area adjacent to the Bay Tree community. There is an open area near the community, generally void of wetlands. However, it was noted that this alignment would create an adverse impact and likely lead to significant community opposition. Ms. Townshend mentioned that a potential service road adjacent to the community could also have environmental justice implications.
7. Mr. Reeb suggested that a service road could be constructed as a one-lane, one-way road in order to reduce the footprint and environmental impacts associated with the roadway. It could serve to enhance local access during race weekends, and could be converted into one-way northbound or southbound depending upon the race conditions. He said that the service road could be constructed as a gravel road, as opposed to being fully paved.
8. Mr. Harbeson inquired as to the conclusion of the feasibility study. Mr. Reeb replied that the report needs to emphatically state that it is very difficult to justify the service road concept, based upon a comparison of transportation needs versus anticipated social and environmental impacts. He said that the potential of a one-way roadway should be mentioned in the report. In addition, he requested that RK&K meet with Dover Downs, as they were the original requestors of the study, to brief them on the study's conclusion.
9. The group reviewed the Consensus Plan from the *U.S. Route 13 Circulation Study (2007)*, with respect to potential future developments along U.S. Route 13. Ms. Townshend discussed the possibility of development in front of the Dover Mall (near Dover Volkswagen), as well as a proposed Chic-Fil-A in front of Lowes. The group also discussed proposed development and circulation issues associated with Wilmington College and the adjacent mobile home park.

This represents the author's best recollection of the meeting. If there are any additions or revisions, please contact the author at rvetter@rkk.com or 302-672-7800.

Reported by:

Rich Vetter, P.E., AICP
Rummel, Klepper & Kahl

**North Dover Service Road Study
Meeting Minutes**

Meeting Date: August 4, 2010

Location: Dover Downs

Attendees:

Denis McGlynn	Dover Downs
Jerry Dunning	Dover Downs
Ray Harbeson	Rummel, Klepper & Kahl
Rich Vetter	Rummel, Klepper & Kahl

Discussion Items:

1. Mr. Harbeson began the meeting by stating that the feasibility study determined that it is feasible to develop a service road between White Oak Road and Leipsic Road. However, he said that under current conditions, it would be difficult to demonstrate a strong transportation need for the project.
2. Mr. Harbeson presented an aerial map showing the identified wetlands in the study area. He said that in order to get a wetlands permit, the project would need an identified transportation purpose and need. He noted that there are likely other transportation projects within the Dover area that have identified needs greater than this service road concept. He said that the primary benefit developed during the feasibility study would be to enhance local access during the two race weekends.
3. Mr. Harbeson said that while the purpose and need is currently not strong, he indicated that it is important to preserve the right-of-way for a potential corridor, so that development doesn't eliminate the ability to provide this service road in the future. He noted that a stub street should be required on the Harman property on the north side of White Oak Road, should that property ever develop in the future.
4. Due to the location of wetlands on the west side of Route 1, Mr. Harbeson said that the least environmentally-damaging alignment would be on the edge of the wooded area adjacent to the Bay Tree community. It was noted that there would likely be significant community opposition to this roadway location.
5. Mr. Dunning said that based on his recent travels, it seems that traffic volumes on U.S. 13 through Dover have decreased. He noted that the need for additional service road connections in Dover could increase as traffic volumes on U.S. 13 increase.
6. Mr. Harbeson described the feasibility study's findings on the east side of Route 1. He said that there were large areas of wetlands on the east side of Route 1, particularly on the north side of the Garrison Oak tract. He said that the least environmentally-impactive alignment would be on the edge of the woods adjacent to Persimmon Park Place, which would likely create an adverse impact to the residents of this community. Mr. Dunning said that the City has recently provided visual screening for this community, as part of the future development of Garrison Oak.

7. Mr. Harbeson noted that there are two uses currently proposed for Garrison Oak, a solar park and a gas storage facility. Based on conversations with City Planning Department staff, there is little employment associated with either of these proposed uses (approximately 30 employees total).
8. Mr. McGlynn asked if there was any room for a service road immediately adjacent to Route 1. Mr. Harbeson replied that it would be difficult to place a service road that close to Route 1, particularly on the east side where the Persimmon Park Place community is located adjacent to Route 1.
9. Mr. Vetter noted that the Harman property on White Oak Road is designated as a commercial area in the City's *Land Development Plan*. Mr. Dunning said that it is important to at least preserve a potential corridor in this area, so that it is included in any future development of this property.
10. The group noted that the recession has led to a significant slowdown in new economic activity along U.S. 13. Based on recent conversations with City staff, Mr. Harbeson said that the only potential activity that he's aware of involves the area in front of the Dover Mall (Dover Volkswagen) and possibly the former Top City location.
11. Mr. Harbeson concluded the meeting by indicating that the feasibility report will be finalized and sent to the Metropolitan Planning Organization (MPO), the City of Dover, and DeIDOT. The final report will specify that a corridor on the west side of Route 1 should be preserved to ultimately provide access between Leipsic Road and White Oak Road. When a land use change is proposed along any of the properties in this area, the DeIDOT Subdivision Section should ensure that preservation of a corridor is incorporated into the pertinent development plans. In addition, the final report will recommend that the City include the preservation of a corridor in their long-range planning documents.

This represents the author's best recollection of the meeting. If there are any additions or revisions, please contact the author at rvetter@rkk.com or 302-672-7800.

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