



**STATE OF DELAWARE
EXECUTIVE DEPARTMENT
OFFICE OF STATE PLANNING COORDINATION**

March 26, 2013

Ms. Andrea Finerosky
Queensbury Village, Inc.
234 North James Street
Newport, DE 19804

RE: PLUS review – 2013-02-01; Rockwood Parcel 1-A

Dear Ms. Finerosky:

Thank you for meeting with State agency planners on February 27, 2013 to discuss the proposed plans for the Rockwood Parcel 1-A located on Rockwood Road and Pulaski Highway in New Castle County.

According to the information received, you are seeking site plan approval through New Castle County for 438 apartments on 37 acres.

Please note that changes to the plan, other than those suggested in this letter, could result in additional comments from the State. Additionally, these comments reflect only issues that are the responsibility of the agencies represented at the meeting. **The developers will also need to comply with any Federal, State and local regulations regarding this property. We also note that as New Castle County is the governing authority over this land, the developers will need to comply with any and all regulations/restrictions set forth by the County.**

Strategies for State Policies and Spending

- This project is located in Investment Level 1 according to the *Strategies for State Policies and Spending*. Investment Level 1 reflects areas that are already developed in an urban or suburban fashion, where infrastructure is existing or readily available, and where future redevelopment or infill projects are expected and encouraged by State policy.

Code Requirements/Agency Permitting Requirements

State Historic Preservation Office – Contact Terrence Burns 736-7404

- There was a known historic resource on this parcel, the G. B. Rodney House (N-5083), but it does not appear that it is there now. The Pomeroy and Beers Atlas of 1868 (a 19th-

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century historic map) also shows that this house was there, and the USGS Topographic Map of 1906 indicated this as well. With this in mind, it is very important the developer be aware of the Delaware Unmarked Human Burials and Human Skeletal Remains Law, which is outlined in Chapter 54 of Title 7 of the Delaware Code.

Abandoned or unmarked family cemeteries are very common in the State of Delaware. They are usually in rural or open space areas, and sometimes near or within the boundary of an historic farm site. Even a marked cemetery can frequently have unmarked graves or burials outside of the known boundary line or limit. Disturbing unmarked graves or burials triggers the Delaware's Unmarked Human Burials and Human Skeletal Remains Law (Delaware Code Title 7, Chapter 54), and such remains or discoveries can result in substantial delays while the procedures required under this law are carried out. If there is a discovery of any unmarked graves, burials or a cemetery, it is very costly to have them archaeologically excavated and the burials moved. The Division of Historical & Cultural Affairs recommends that owners and/or developers have a qualified archaeological consultant investigate their project area, to the full extent, to see if there is any unmarked cemetery, graves, or burial sites. In the event of such a discovery, the Division of Historical & Cultural Affairs also recommends that the plans be re-drawn to leave the full extent of the cemeteries or any burials on its own parcel or in the open space area of the development, with the responsibility for its maintenance lying with the landowner association or development. If you need or would like to read more information in reference to unmarked human remains, burials or cemeteries, please go to the following websites for additional information: www.history.delaware.gov/preservation/umhr.shtml and www.history.delaware.gov/preservation/cemeteries.shtml.

- Prior to any demolition or ground-disturbing activities, the developer should consider hiring an archaeological consultant to examine the parcel for potential historic or cultural resources, such as a potential archaeological site, a cemetery or unmarked human remains. Furthermore, if there is any federal involvement with the project, in the form of licenses, permits, or funds, the federal agency, often through its client, is responsible for complying with Section 106 of the National Historic Preservation Act (36 CFR 800) and must consider their project's effects on any known or potential cultural or historic resources. Owners and developers who may plan to apply for an Army Corps of Engineers permit or for federal funding, such as HUD or USDA grants, should be aware of the National Historic Preservation Act of 1966 (as amended). Regulations promulgated for Section 106 of this Act stipulate that no ground-disturbing or demolition activities should take place before the Corps or other involved federal agency determines the area of potential effect of the project undertaking. These stipulations are in place to allow for comment from the public, the Delaware State Historic Preservation Office, and the Advisory Council for Historic Preservation about the project's effects on historic properties. Furthermore, any preconstruction activities without adherence to these stipulations may jeopardize the issuance of any permit or funds. If you need further information or additional details pertaining to the Section 106 process and the Advisory Council's role, please review the Advisory Council's website at www.achp.gov.

Department of Transportation – Contact Bill Brockenbrough 760-2109

- The applicant has requested a waiver of New Castle County and DelDOT requirements that a Traffic Impact Study (TIS) be performed and the County has asked us for concurrence regarding some aspects of that request. Both the waiver request and the County reply cited Section 40.11.121(C) of the County's Unified Development Code. Briefly, DelDOT believes a waiver may be appropriate, but not on that basis.

In a September 2, 2009, letter (copy attached) regarding a previous plan for Rockwood Parcel 1-A, DelDOT described how a waiver for that plan might be justified based on Section 40.11.121(B). That letter recommended that a Traffic Operational Analysis (TOA) be required and one was subsequently done. A copy of the review comments regarding that analysis, dated March 3, 2010, is also attached.

DelDOT finds that the same rationale described in the 2009 letter is applicable to this plan and that a new TOA, while it would necessarily have new numbers, is unlikely to yield substantially different results. Accordingly, they believe that, in general, the recommendations in the 2010 letter can be applied to this plan as well.

- One recommendation not mentioned in our 2010 letter is a signal agreement for the intersection of Church Road, Rockwood Drive and Grand National Lane. The developer of Steeple Glen has entered such an agreement and DelDOT finds it only fair that the applicant also enter one.

Department of Natural Resources and Environmental Control – Contact Bahareh van Boekhold 735-3495

Wetlands

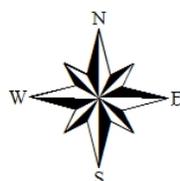
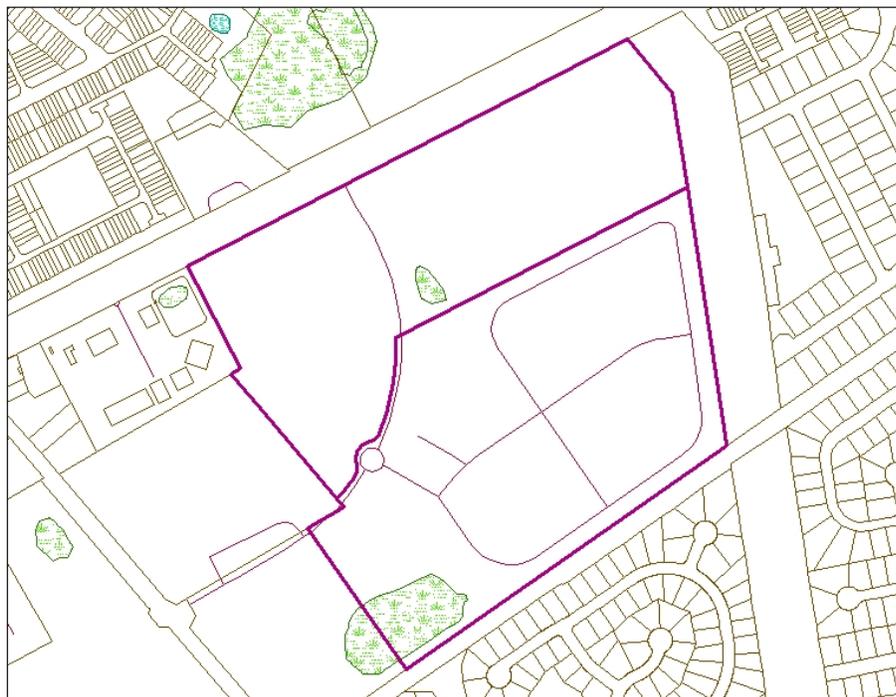
- State regulated wetlands ARE NOT located on this property based on a review of the State wetland maps.
- State regulated subaqueous lands ARE NOT likely to be located on this property based on a review of aerial photographs, SWMP maps, Soil Surveys and USGS topographic maps.
- Waters of the U.S. regulated by the U.S. Army Corps of Engineers ARE possible on the edge of this property based on a review of aerial photographs, SWMP maps, Soil Surveys and/or USGS topographic maps. According to our GIS SWMP maps, there are possible wetlands regulated by the U.S. Army Corps of Engineers. We suggest contacting them for an on-site inspection.

Waters of the United States include the following: navigable waters of the United States; wetlands; tributaries to navigable waters of the United States, including adjacent wetlands

and lakes and ponds; interstate waters and their tributaries, including adjacent wetlands; and all other waters of the United States not identified above, such as isolated wetlands, intermittent streams, and other waters that are not part of a tributary system to interstate waters or to navigable waters of the United States, where the use, degradation or destruction of these waters could affect interstate or foreign commerce.

The extent of Federal jurisdiction over Waters of the United States is determined by the U.S. Army Corps of Engineers and is based on site specific conditions. Therefore, an on-site inspection by an environmental consultant is recommended to determine if Waters of the U.S. are located on the property and the limits of Federal jurisdictional. The U.S. Army Corps of Engineers can be contacted at (215) 656-6728 or online at <http://www.nap.usace.army.mil/cenap-op/regulatory/regulatory.htm>.

New Castle County PLUS 2013-02-01 Rockwood Parcel 1-A



0 0.05 0.1 0.2 Miles

Reviewed By: Kitty Bronson
Source: New Castle County layers:
Parcels, DelDOT Rds, Wetland
and Swmp maps



TMDLs

- Total Maximum Daily Loads (TMDLs) for nitrogen and phosphorus have been promulgated through regulation for the Christina River watershed. A TMDL is the maximum level of pollution allowed for a given pollutant below which a “water quality limited water body” can assimilate and still meet State water quality standards (e.g., dissolved oxygen, nutrients, and bacteria; *State of Delaware Surface Water Quality Standards, as amended July 11, 2004*) to the extent necessary to support use goals such as, swimming, fishing, drinking water and shell fish harvesting.

TMDLs are required by federal law (Section 303(d) of the 1972 Clean Water Act), and the states are charged with developing and implementing specific land use practices that support these desired use goals. The project is located in the greater Christina River Basin, specifically within the Christina River watershed. In the Christina River watershed, post-development nitrogen and phosphorus loading must be capped at the pre-development or baseline loading rate (or a 0% post-construction increase in N & P in Delaware’s portion of the Christina River Basin) to meet the required TMDL for each nutrient. Moreover, bacteria must be reduced by 29-95% (depending on location) to meet the required TMDL. The specific required nutrient and bacterial requirements and background information is in the report entitled “*Christina River Basin High-Flow TMDL*” by the EPA. This report can be retrieved from the following web link: http://www.epa.gov/reg3wapd/tmdl/pa_tmdl/ChristinaMeetingTMDL/index.htm

- In response to concerns about the need for reducing nonpoint source nutrient (nitrogen and phosphorus) and bacterial pollutants to levels sufficient to meet the prescribed TMDL reduction requirements in Delaware’s portion of the Christina River Basin (includes the following sub-basins or watersheds: Brandywine Creek, White Clay Creek, Red Clay Creek & Christina River), a multifaceted and comprehensive process known as a Pollution Control Strategy (PCS) has been developed to facilitate such reductions. Specifically, a PCS is a combination of best management practices and control technologies that reduce nutrient and bacterial pollutant runoff loading in waters of a given watershed to level(s) consistent with the TMDL(s) reduction levels specified for that watershed. The PCS for the Christina River watershed consists of 41 recommendations from the following four areas: stormwater, open space, wastewater, and agriculture. Additional information about Christina River PCS is available from the following web link: <http://www.dnrec.delaware.gov/swc/wa/Pages/ChristinaBasin.aspx>
- A nutrient management plan is required under the *Delaware Nutrient Management law (3 Del. Chapter 22)* for all persons or entities who apply nutrients to lands or areas of open space in excess of 10 acres. This project’s open space may exceed this 10-acre threshold. Please contact the Delaware Nutrient Management Program at 739-4811 for further

information concerning compliance requirements or view the following web link for additional information: <http://dda.delaware.gov/nutrients/index.shtml>

Water Supply

- The project information sheets state water will be provided to the project by Artesian Water Company via a public water system. Our records indicate that the project is located within the public water service area granted to Artesian Water Company under Certificate of Public Convenience and Necessity 85-WS-03.
- Should dewatering points be needed during any phase of construction, a dewatering well construction permit must be obtained from the Water Supply Section prior to construction of the well points. In addition, a water allocation permit will be needed if the pumping rate will exceed 50,000 gallons per day at any time during operation.
- All well permit applications must be prepared and signed by licensed water well contractors, and only licensed well drillers may construct the wells. Please factor in the necessary time for processing the well permit applications into the construction schedule. Dewatering well permit applications typically take approximately four weeks to process, which allows the necessary time for technical review and advertising.

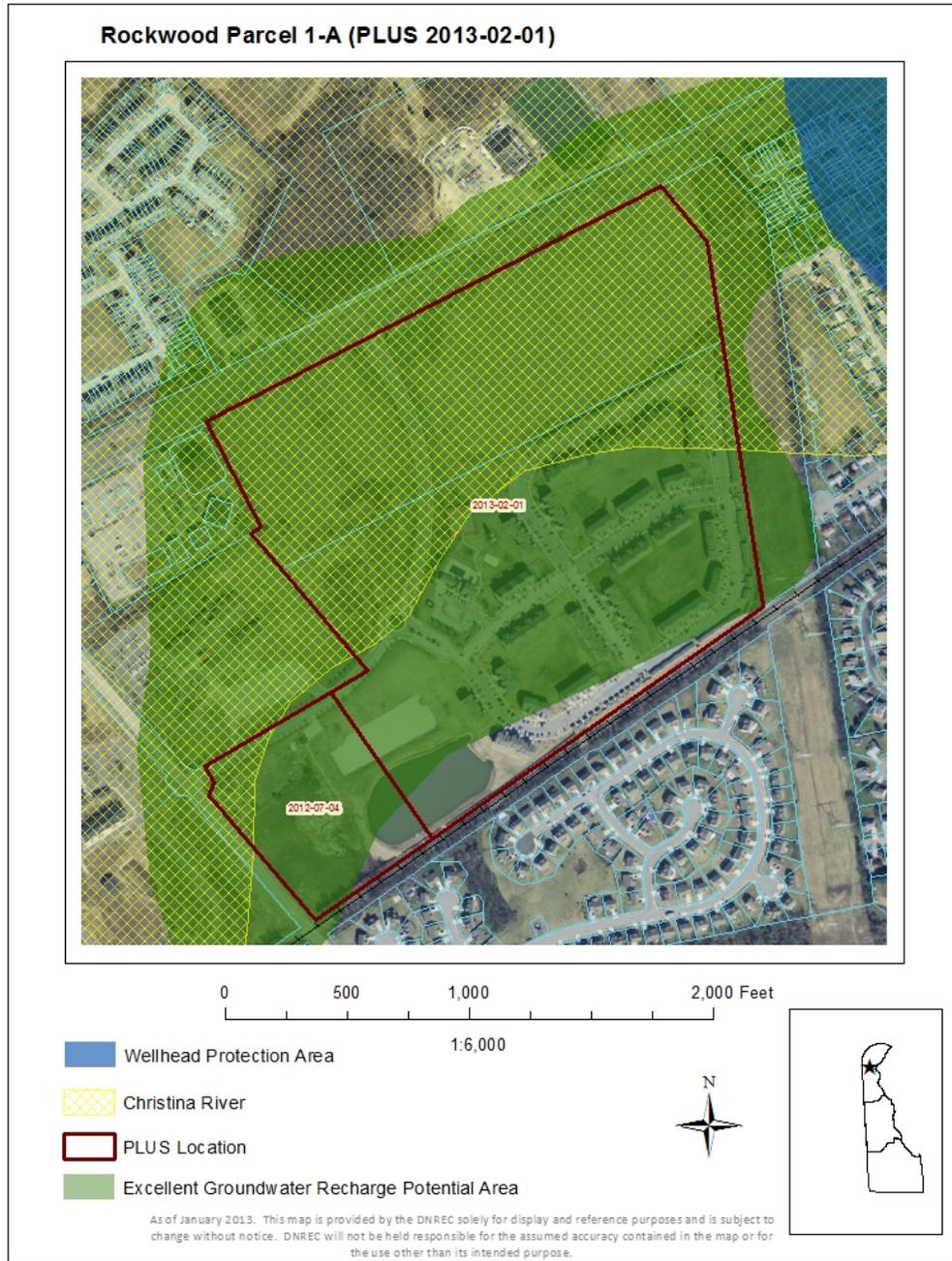
Water Resource Protection Areas

- The DNREC Ground-Water Protection Branch (GPB) has determined that the majority of project falls within an area of excellent groundwater recharge potential. In addition, a significant portion of the northern extent of the project falls within a Level 2 Source Water Protection Area for New Castle County (see map). No wellhead protection areas were identified.

Level 2 Source Water Protection Areas are the delineated watershed upstream from a surface water intake that supplies water to a drinking water system. Land Use or Land Activity within this area has the potential to influence water quality or quantity to the public drinking water system.

Excellent Ground-Water Recharge Areas are those areas mapped by the Delaware Geological Survey where the first 20 feet of subsurface soils and geologic materials are exceptionally sandy. These soils are able to transmit water very quickly from the land surface to the water table. This map category (excellent) is an indicator of how fast contaminants will move and how much water may become contaminated (Andres, 2004). Land use activities or impervious cover on areas of excellent ground-water recharge potential may adversely affect ground water in these areas.

DNREC recommends referring to New Castle County Unified Development Code for regulations regarding development in these areas.



Andres, A. Scott, 2004, Ground-Water Recharge Potential Mapping in Kent and Sussex Counties, Delaware: Delaware Geological Survey Report of Investigations No. 66, p. 14.
<http://www.udel.edu/dgs/Publications/pubform.html#investigations>

Sediment and Stormwater Program.

- A sediment and stormwater plan will be required for the site. Contact the reviewing agency to schedule a project application meeting to discuss the sediment and erosion control and stormwater management components of the plan as soon as possible. The site topography, soils mapping, pre- and post-development runoff, and proposed method(s) and location(s) of stormwater management should be brought to the meeting for discussion. The plan review and approval as well as construction inspection will be coordinated through New Castle County Dept. of Land Use Engineering Section. Contact Dept. of Land Use at (302) 395-5470 for details regarding submittal requirements and fees. (Title 7, Delaware Code, Chapter 40 and Delaware Regulations, Title 7, Administrative Code, 5101)

Hazardous Waste Sites

- If it is determined by the Department that there was a release of a hazardous substance on the property in question and the Department requires remediation pursuant to the Hazardous Substance Cleanup Act, the provisions of 7 Del.C., Chapter 91, Delaware Hazardous Substance Cleanup Act and the Delaware Regulations Governing Hazardous Substance Cleanup shall be followed.
- There are two SIRS site within a ½ miles radius of the property in question:
 - May Leisure Elementary School (DE-1088) is located adjacent to the west of the property. A Preliminary Environmental Assessment was completed in December of 1995 followed by a Phase I in January 1996. A Site Investigation was conducted in September and October of 1996 to further evaluate metals in the soil. The site was entered into the Voluntary Clean-up Program (VCP) in March of 1997, and a Remedial Investigation was performed soon after. A Final Plan was approved in June of 1998, which included restrictions on drinking water on site, a Groundwater Management Zone (GMZ) be established and a farm well be sampled. The GMZ has not been issued to date. The GMZ will not impact the proposed project property and will only cover the SIRS Site. In June 2012, SIRS begin the process of obtaining new soil and groundwater data to further evaluate the Site and close.
 - Parkway Gravel Site (DE-0086) is located 0.24 miles to the west of the property. A PA was performed in 1985 to determine if contaminants from another site were migrating to the property. It was concluded that there was no evidence of a release or contamination. All investigation procedures have ceased.

Tank Management

Please be aware:

- If a release of a Regulated Substance occurs at the proposed project site, compliance of 7 Del.C. Chapter 60, 7 Del.C., Chapter 74 and DE Admin. Code 1351, State of Delaware *Regulations Governing Underground Storage Tank Systems* (the UST Regulations) is required.
- The following confirmed leaking underground storage tanks (LUST) projects is located within a quarter mile of the project boundary:
 - James Ressler, Facility: 3-002418, Project: N0712143 (Inactive)
- Per the **UST Regulations: Part E, § 1. Reporting Requirements:**
 - Any indication of a Release of a Regulated Substance that is discovered by any Person, including but not limited to environmental consultants, contractors, utility companies, financial institutions, real estate transfer companies, UST Owners or Operators, or Responsible Parties shall be reported within 24 hours to:
 - The Department's 24-hour Release Hot Line by calling 800-662-8802; and
 - The DNREC, Tank Management Section (TMS) by calling 302-395-2500.

Delaware State Fire Marshall's Office – Contact Duane Fox 739-4394

At the time of formal submittal, the applicant shall provide; completed application, fee, and three sets of plans depicting the following in accordance with the Delaware State Fire Prevention Regulation (DSFPR):

- **Fire Protection Water Requirements:**
 - Water distribution system capable of delivering at least 1000 gpm for 1-hour duration, at 20-psi residual pressure is required. Fire hydrants with 800 feet spacing on centers.
 - Where a water distribution system is proposed for multi-family residential sites, the infrastructure for fire protection water shall be provided, including the size of water mains for fire hydrants and sprinkler systems.
- **Fire Protection Features:**
 - All structures over 10,000 Sq. Ft. aggregate will require automatic sprinkler protection installed.
 - Buildings greater than 10,000 sq. ft., 3-stories or more, or 35 feet or more are required to meet fire lane marking requirements

- Show Fire Department Connection location (Must be within 300 feet of fire hydrant), and detail as shown in the DSFPR.
- Show Fire Lanes and Sign Detail as shown in DSFPR
- **Accessibility:**
 - All premises, which the fire department may be called upon to protect in case of fire, and which are not readily accessible from public roads, shall be provided with suitable gates and access roads, and fire lanes so that all buildings on the premises are accessible to fire apparatus. This means that the access road to the subdivision from the main thoroughfare must be constructed so fire department apparatus may negotiate it.
 - Fire department access shall be provided in such a manner so that fire apparatus will be able to located within 100 ft. of the front door.
 - The use of speed bumps or other methods of traffic speed reduction must be in accordance with Department of Transportation requirements.
 - The local Fire Chief, prior to any submission to our Agency, shall approve in writing the use of gates that limit fire department access into and out of the development or property.
- **Gas Piping and System Information**
 - Provide type of fuel proposed, and show locations of bulk containers on plan.
- **Required Notes:**
 - Provide a note on the final plans submitted for review to read “ All fire lanes, fire hydrants, and fire department connections shall be marked in accordance with the Delaware State Fire Prevention Regulations”
 - Proposed Use
 - Alpha or Numerical Labels for each building/unit for sites with multiple buildings/units
 - Square footage of each structure (Total of all Floors)
 - National Fire Protection Association (NFPA) Construction Type
 - Maximum Height of Buildings (including number of stories)
 - Note indicating if building is to be sprinklered
 - Name of Water Provider
 - Letter from Water Provider approving the system layout
 - Provide Lock Box Note (as detailed in DSFPR) if Building is to be sprinklered
 - Provide Road Names, even for County Roads

Recommendations/Additional Information

This section includes a list of site specific suggestions that are intended to enhance the project. These suggestions have been generated by the State Agencies based on their expertise and subject area knowledge. **These suggestions do not represent State code requirements.** They are offered here in order to provide proactive ideas to help the applicant enhance the site

design, and it is hoped (**but in no way required**) that the applicant will open a dialogue with the relevant agencies to discuss how these suggestions can benefit the project.

Department of Transportation – Contact Bill Brockenbrough 760-2109

- DelDOT recommends that the applicant have their site engineer contact the Subdivision Manager for this part of New Castle County, Mr. Pao Lin, to discuss the DelDOT requirements with regard to site and entrance plans. While they have no further comments on the plan presented here, they may have some as development of the plan progresses. Mr. Lin may be reached at (302) 760-2157.

Department of Natural Resources and Environmental Control – Contact Bahareh van Boekhold 735-3495

Soils Assessment

- Based on soils survey mapping update, following soil mapping units were mapped on subject parcel (grouped on the basis of drainage class; see figure 1):
 - 1) Well drained – Greenwich (GrB) & Unicorn (UIA)
 - 2) Moderately well drained –Woodstown (WdA)
 - 3) Variable drainage – Ingleside-Hammonton-Fallsington complex(ImB); though listed as well drained in map, this soil mapping unit is likely to contain well-drained, moderately well drained & poorly drained (hydric) soil mapping components in same map unit.
- Based on apparent soil variability, DNREC strongly recommends a certified and licensed soil scientist (ARCPACs certified and Class D licensed) make a site-specific evaluation of the soils in this parcel. Please contact the Underground Discharges Branch at 739-9948 for a list of soil scientists.
- The Statewide Wetland Mapping Project (SWMP) often uses the soil survey as the basis for mapping and delineating wetlands. The presence of a hydric soil is one of three parameters that must be met in order to meet jurisdictional wetland requirements (as specified by the USACOE). The other parameters are hydrophytic vegetation and hydrology. Thus the presence of hydric soils is a correlate with wetland presence. Building on hydric soils is likely to increase the potential for on-site and off-site flooding potentials. We strongly recommend avoiding those areas containing hydric or potentially hydric soil mapping units.

Review. J. Environ. Qual. 23: 878-882.), an adequately-sized buffer that effectively protects wetlands and streams, in most circumstances, is about 100 feet in width. In recognition of this research and the need to protect water quality, the Watershed Assessment Section recommends that the applicant maintain/establish a minimum 100-foot upland buffer (planted in native vegetation) from all water bodies (including ditches) and wetlands (field delineated and approved by the USACE).

- The applicant should calculate post-construction surface imperviousness with all forms of created (or constructed) surface imperviousness (e.g., rooftops, driveways, parking lots, sidewalks, open-water storm water management structures, and roads) included in the calculation.
- Since this project will create additional impervious surface that will increase the probability for increased pollutant load runoff to adjoining streams and wetlands, we strongly encourage the use of pervious paving materials (instead of conventional asphalt and concrete) to mitigate the negative impacts from pollutant runoff.
- DNREC recommends the use of rain gardens, and green-technology storm water management structures (in lieu of open-water management structures) as BMPs to mitigate or reduce nutrient and bacterial pollutant impacts via runoff from impervious surfaces.
- The applicant should voluntarily assess nutrient and bacterial pollutant loading at the preliminary project design phase. To this end, the Watershed Assessment Section has developed a methodology known as the “Nutrient Load Assessment protocol.” The protocol is a tool used to assess changes in nutrient loading (e.g., nitrogen and phosphorus) that result from the conversion of individual or combined land parcels to a different land use(s), while providing applicants with quantitative information about their project’s impact(s) on baseline water quality. We strongly encourage the applicant/developer use this protocol to help them design and implement the most effective BMPs. Please contact the Watershed Assessment Section at 302-739-9939 for more information on the protocol.

Additional information on hazardous waste sites

- DNREC's Site Investigation and Restoration Section (SIRS) strongly recommends that the land owner perform environmental due diligence of the property by performing a Phase I Environmental Site Assessment (including a title search to identify environmental covenants) in accordance to Section 9105(c) (2) of the Delaware Hazardous Substance Cleanup Act (HSCA). While this is not a requirement under HSCA, it is good business practice and failure to do so will prevent a person from being able to qualify for a potential affirmative defense under Section 9105(c) (2) of HSCA.

- Additional remediation may be required if the project property or site is re-zoned by the county.
- Should a release or imminent threat of a release of hazardous substances be discovered during the course of development (e.g., contaminated water or soil), construction activities should be discontinued immediately and DNREC should be notified at the 24-hour emergency number (800-662-8802). SIRS should also be contacted as soon as possible at 302-395-2600 for further instructions.

Additional information on tank management

- When contamination is encountered, PVC pipe materials should be replaced with ductile steel and nitrile rubber gaskets in the contaminated areas.
- If any aboveground storage tanks (ASTs) less than 12,500 gallons are installed, they must be registered with the TMS. If any ASTs greater than 12,500 gallons are installed, they are also subject to installation approval by the TMS.
- Should the municipality anticipate being more restrictive than Delaware's Regulations Governing Underground Storage Tank Systems or Delaware's Regulations Governing Aboveground Storage Tanks, please be aware that the municipality shall be responsible for enforcing the more restrictive rules.

Delaware State Fire Marshall's Office – Contact Duane Fox 739-4394

- Preliminary meetings with fire protection specialists are encouraged prior to formal submittal. Please call for appointment. Applications and brochures can be downloaded from our website: www.statefiremarshal.delaware.gov, technical services link, plan review, applications or brochures.

Delaware State Housing Authority – Contact Karen Horton 739-4263

- DSHA supports the Rockwood Parcel 1-A proposal for 438-unit rental community on 37.126 acres, located on off Pulaski Highway within New Castle County for the following reasons:
 - A rental community at this location will provide households with a fuller range of incomes close proximity to transit, jobs, services and markets.
 - Rental communities are needed to help meet the needs of the full spectrum of Delaware's housing market – particularly those of low- and moderate-income families. While large suburban homes have dominated development in Delaware for several decades, a growing body of research indicates that we are in the midst of a significant market shift. The baby boomers that once drove suburban development are now aging and are looking to downsize into something more

manageable. The Delaware Population Consortium (DPC) projections for the next ten years indicate that not only will there be a large amount of suburban homes placed on the market by baby boomers, but that there will be a *decline* in households in age ranges that typically seek large homes. These same DPC projections show growth in the younger age ranges most likely at stages in their life and income to support apartments, condominiums and entry level homes.

- However, DSHA does have concerns about the scale and intensity of the Rockwood Parcel 1-A proposal. While rental units are vital to any well-balanced community, an overconcentration in one area can have unwanted effects. Therefore, DSHA recommends the consideration of quality design practices in the construction and design of the apartment buildings. Due to the proposal's large size, design is crucial to the development's ability to succeed and blend into the community

Following receipt of this letter and upon filing of an application with the local jurisdiction, the applicant shall provide to the local jurisdiction and the Office of State Planning Coordination a written response to comments received as a result of the pre-application process, noting whether comments were incorporated into the project design or not and the reason therefore.

Thank you for the opportunity to review this project. If you have any questions, please contact me at 302-739-3090.

Sincerely,

A handwritten signature in cursive script that reads "Constance C. Holland".

Constance C. Holland, AICP
Director, Office of State Planning Coordination

CC: New Castle County



STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
800 BAY ROAD
P.O. BOX 778
DOVER, DELAWARE 19903

CAROLANN WICKS, P.E.
SECRETARY

March 3, 2010

Mr. David Culver
General Manager
New Castle County Department of Land Use
87 Reads Way
New Castle, DE 19720

Dear Mr. Culver:

The attached Traffic Operational Analysis (TOA) review letter for the **Rockwood Parcel 1A** development has been completed under the responsible charge of a registered professional engineer whose firm is authorized to work in the State of Delaware. They have found the TOA to conform to DelDOT's Rules and Regulations for Subdivision Streets and other accepted practices and procedures for such studies. DelDOT accepts this TOA review and concurs with the recommendations. We are providing it to you in fulfillment of our joint agreement regarding the review of TOA. If you have any questions concerning this letter or the attached review letter, please contact me at (302) 760-2134.

Sincerely,

Todd Sammons
Project Engineer

TS:tsm

Enclosures

cc with enclosures: Ms. Constance C. Holland, Office of State Planning Coordination
Mr. Tigist Zegeye, WILMAPCO
Mr. Ted Williams, Landmark Engineering, Inc.
Mr. George Haggerty, New Castle County Department of Land Use
Mr. John Janowski, New Castle County Department of Land Use
Mr. Andrew Parker, McCormick Taylor
Mr. Mir Wahed, Johnson, Mirmiran, and Thompson



DelDOT Distribution

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Theodore G. Bishop, Assistant Director, Development Coordination
Mark Tudor, Group Engineer, Project Development North, DOTS
Mark Alexander, Canal District Engineer, Canal District
Ivan Mitchell, Service Development Planner, Delaware Transit Corporation
Marc Coté, Subdivision Engineer, Development Coordination
T. William Brockenbrough, Jr., County Coordinator, Development Coordination
Anthony Aglio, Bicycle Coordinator, Statewide & Regional Planning
Joshua Schwartz, Subdivision Manager, Development Coordination
Pao Lin, Subdivision Manager, Development Coordination
Troy Brestel, Project Engineer, Development Coordination



March 3, 2010

Mr. Todd J. Sammons
Project Engineer
DelDOT Division of Planning
P.O. Box 778
Dover, DE 19903

RE: Agreement No. 1404
Traffic Impact Study Services
Task No. 52A – Rockwood Parcel 1A

Dear Mr. Sammons,

McCormick Taylor has completed its review of the Traffic Operational Analysis (TOA) for the Rockwood Parcel 1A development prepared by Landmark Engineering, Inc. (Landmark), dated December 2009. This review was assigned as Task Number 52A. Landmark prepared the report in a manner generally consistent with DelDOT's *Standards and Regulations for Subdivision Streets and State Highway Access*.

The TOA evaluates the impacts of the Rockwood Parcel 1A development, proposed to be located on the south side of US Route 40 (Pulaski Highway / New Castle Road 32), along both sides of Rockwood Drive in New Castle County, Delaware. The proposed development would consist of 426 apartments on approximately 37 acres of land. Two access points are proposed along Rockwood Drive (a private roadway). The plan also includes direct vehicular access between the proposed development site and the existing Rockwood Apartments (on Gregory Drive), and to Elizabeth Plaza (just west of the site), which are beneficial internal connections. Construction is anticipated to be complete by 2011.

The land is currently zoned as NCap (Neighborhood Conservation - apartments) in New Castle County. The developer does not propose to change the zoning.

DelDOT is currently working to implement numerous improvements projects along US Route 40 that have been identified by the *Route 40 Corridor 20-Year Transportation Plan*. Adopted in June 2000, the Plan includes the recommendations of the Route 40 Steering Committee, a public group charged with addressing transportation improvements that focus on the next twenty years to address planned growth and enhance the quality of life in the US Route 40 corridor. The Plan contains a series of recommendations on US Route 40 and adjacent roadways, along with an anticipated timeline for when each recommendation should be implemented. For more information, see project web site at <http://www.deldot.gov/information/projects/rt40/index.htm>

While the Route 40 Corridor Plan includes dozens of projects and potential projects throughout the entire corridor, there are two specific proposed projects that fall within the immediate influence area of this development. The first involves long-term intersection improvements at the intersection of US Route 40 and Walther Road (New Castle Road 346) / Glendale Boulevard.

The second project would add a third through lane in each direction along US Route 40 between Church Road (New Castle Road 382) / Wellington Drive and Walther Road / Glendale Boulevard. The funding availability and final design/construction schedules for these two projects are uncertain, but implementation of such improvements would not occur until after 2011 (the anticipated completion date for the Rockwood Parcel 1A development).

Based on our review, we have the following comments and recommendations:

In July 2009, the Applicant requested a Traffic Impact Study (TIS) Waiver for this plan based on provisions in Section 40.11.121 of the New Castle County Unified Development Code (UDC). As background information, a TIS was prepared for the overall project in 1993, and deed restrictions were recorded in 1996 that required an updated study prior to the development of Parcel 1A. At that time, the intent of the study was to identify the transit services and facilities necessary to achieve acceptable Level of Service (LOS) on US Route 40. However, subsequent to the 1996 deed restrictions, transportation planning in the US Route 40 area shifted from rail service to highway and bus-oriented solutions. In light of the prior TIS, the deed restrictions, and the considerable traffic analysis that has been done in the US Route 40 area, New Castle County and DelDOT decided in August 2009 to require a TOA, rather than another TIS, to serve as the updated study to account for Parcel 1A. To demonstrate compliance with the New Castle County UDC, the applicant must agree to complete the required off-site improvements stated in this letter.

Based on DelDOT’s evaluation criteria, the following intersections exhibit LOS deficiencies without the implementation of physical roadway and/or traffic control improvements:

<i>Intersection</i>	<i>Existing Traffic Control</i>	<i>Situations for which deficiencies occur</i>
US Route 40 and Church Road / Wellington Drive	Signalized	2011 AM and PM without and with Rockwood Parcel 1A

Although analysis indicates that the intersection of US Route 40 and Church Road / Wellington Drive would have LOS deficiencies during the future peak hours, we do not recommend any improvements be implemented by the developer at this intersection. The major improvements required to eliminate the LOS deficiencies cannot be considered a reasonable developer-led improvement project (e.g., widening US Route 40 to include three through lanes per direction). Capacity improvements at this intersection should be completed as part of projects generated by DelDOT’s *Route 40 Corridor 20-Year Transportation Plan* and approved as part of New Castle County’s *Comprehensive Plan*. In lieu of constructing specific improvements at this intersection, the developer should construct other improvements that have been identified by the *Route 40 Corridor Plan*, as described below in Item Nos. 1-3.

Additionally, at the request of DelDOT, McCormick Taylor performed analyses of the left-turn queue on the westbound approach of US Route 40 at Rockwood Drive. The analyses showed that the 95th percentile queue length during the worst-case 2011 PM peak hour with Rockwood Parcel

1A was less than 125 feet, which is shorter than the existing turn-lane length, so the westbound left-turn lane will not need to be extended at this intersection.

Should the County choose to approve the proposed development, the following items should be incorporated into the site design and reflected on the record plan. All applicable agreements (i.e. letter agreements for off-site improvements and traffic signal agreements) should be executed prior to entrance plan approval for the proposed development.

1. The developer should improve eastbound US Route 40 by constructing a third through lane from the western edge of the site frontage to the existing start of the third through lane just east of the site frontage (approximately 650 feet of Walther Road / Glendale Boulevard). This is a total distance of approximately 2,500 feet and represents a piece of an improvement project identified by DelDOT's *Route 40 Corridor 20-Year Transportation Plan*. The typical section should maintain shoulders, such that eastbound US Route 40 would consist of an inside shoulder, three 12-foot travel lanes, and an outside shoulder. The developer should coordinate with DelDOT's Subdivision Section and Division of Transportation Solutions to determine design details for this section of US Route 40.
2. The developer should modify the intersection of US Route 40 and Rockwood Drive as needed to accommodate the third eastbound through lane identified in Item No. 1 and to maintain the existing eastbound u-turn lane and right-turn deceleration lane. This may also require modifying the existing concrete channelization island on the northbound Rockwood Drive approach. The developer should coordinate with DelDOT's Subdivision Section to determine design details.
3. The developer should modify the intersection of US Route 40 and David Place (at the eastern end of the widening) as needed to accommodate the third eastbound through lane identified in Item No. 1. This may require modifying the existing concrete curb and grass channelization island on the northbound David Place approach. The developer should coordinate with DelDOT's Subdivision Section to determine design details.
4. The following bicycle, pedestrian, and transit improvements should be included:
 - a. All bicycle, pedestrian, and transit-related improvements should be consistent with, and installed in coordination with improvements proposed as part of DelDOT's *Route 40 Corridor 20-Year Transportation Plan*.
 - b. A right-turn yield to bikes sign (MUTCD R4-4) should be added at the start of the modified right-turn lane along eastbound US Route 40 at Rockwood Drive.
 - c. Where the right-turn lane is modified along eastbound US Route 40 at Rockwood Drive, a minimum of a five-foot bicycle lane should be dedicated and striped with appropriate markings for bicyclists through the turn lane in order to facilitate safe and unimpeded bicycle travel.

- d. Appropriate bicycle symbols, directional arrows, striping (including stop bars), and signing should be included along bicycle facilities and right-turn lanes within the project limits.
- e. Utility covers should be moved outside of the designated bicycle lane or be flush with the pavement.
- f. A 15-foot wide easement from the edge of the right-of-way should be dedicated to DelDOT from the western edge of the site frontage to the eastern edge of the site frontage along US Route 40. Within this easement, a minimum of a ten-foot wide multi-use path (with a minimum of a five-foot buffer from the roadway) that meets current AASHTO and ADA standards should be constructed. The multi-use path should connect to existing sidewalks along Rockwood Drive, to the existing internal sidewalk network on David Place, and to any paths on adjacent parcels (including in front of Elizabeth Plaza leading to Church Road / Wellington Drive) or to the shoulder at the beginning and ending limits of the site frontage.
- g. ADA compliant curb ramps and crosswalks should be provided at all pedestrian crossings, including all site entrances. Type 3 curb ramps are discouraged.
- h. Internal sidewalks for pedestrian safety and to promote walking as a viable transportation alternative should be constructed within the development. These internal sidewalks should connect the building entrances to the sidewalks along Rockwood Drive and to the multi-use paths along the US Route 40 frontage, to the existing sidewalk network on Gregory Drive, to Leasure Elementary School, and to other adjacent parcels where applicable (including the possibility of a connection to Carlo Road to the east).
- i. Where internal sidewalks are located alongside of parking spaces, a buffer should be added to eliminate vehicular overhang onto the sidewalk.
- j. The developer should install an ADA-accessible bus stop pad, shelter, and pathway along eastbound US Route 40 at Rockwood Drive. The pad should measure a minimum of 9' deep by 12' wide while the shelter should measure a minimum of 5' deep and 10' wide. The pad should have a maximum slope of 2% for water drainage. If the bus stop pad is not adjacent to the curb, a 5-foot wide landing pad should connect the road and bus stop pad.
- k. The proposed bus stop must have an adequate shoulder width for a bus to complete egress from eastbound US Route 40. If adequate shoulder width does not exist, the developer should provide a paved bus pull-off.
- l. The developer should make a one-time contribution of \$1,000 toward an endowment fund for maintenance of the proposed bus stop and shelter on US Route 40.
- m. Internal sidewalks and the frontage path should be connected to any new or redesigned transit facilities and parking facilities for bicyclists should be included.
- n. The developer should coordinate with the Delaware Transit Corporation regarding the details and implementation of all transit-related improvements.

Improvements in this TOA may be considered “significant” under DelDOT’s *Work Zone Safety and Mobility Procedures and Guidelines*. These guidelines are available on DelDOT’s website at http://www.deldot.gov/information/pubs_forms/manuals/de_mutcd/index.shtml. For any additional information regarding the work zone impact and mitigation procedures during

construction please contact Mr. Adam Weiser of DeIDOT's Traffic Section. Mr. Weiser can be reached at (302) 659-4073 or by email at Adam.Weiser@state.de.us.

Please note that this review generally focuses on capacity and level of service issues; additional safety and operational issues will be further addressed through DeIDOT's subdivision review process.

Additional details on our review of this TOA are attached. Please contact me at (302) 738-0203 or through e-mail at ajparker@mtmail.biz if you have any questions concerning this review.

Sincerely,

McCormick Taylor, Inc.



Andrew J. Parker, P.E., PTOE
Project Manager

Enclosure

General Information

Report date: December 2009

Prepared by: Landmark Engineering, Inc.

Prepared for: Queensbury Village, Inc.

Tax parcels: 10-043.00-022 and 10-043.00-011

Generally consistent with DelDOT's *Standards and Regulations for Subdivision Streets and State Highway Access*: Yes

Project Description and Background

Description: The proposed development would consist of 426 apartments.

Location: The Rockwood Parcel 1A development is proposed to be located on the south side of US Route 40 (Pulaski Highway / New Castle Road 32), along both sides of Rockwood Drive in New Castle County, Delaware. A site location map is included on Page 7.

Amount of land to be developed: approximately 37 acres of land

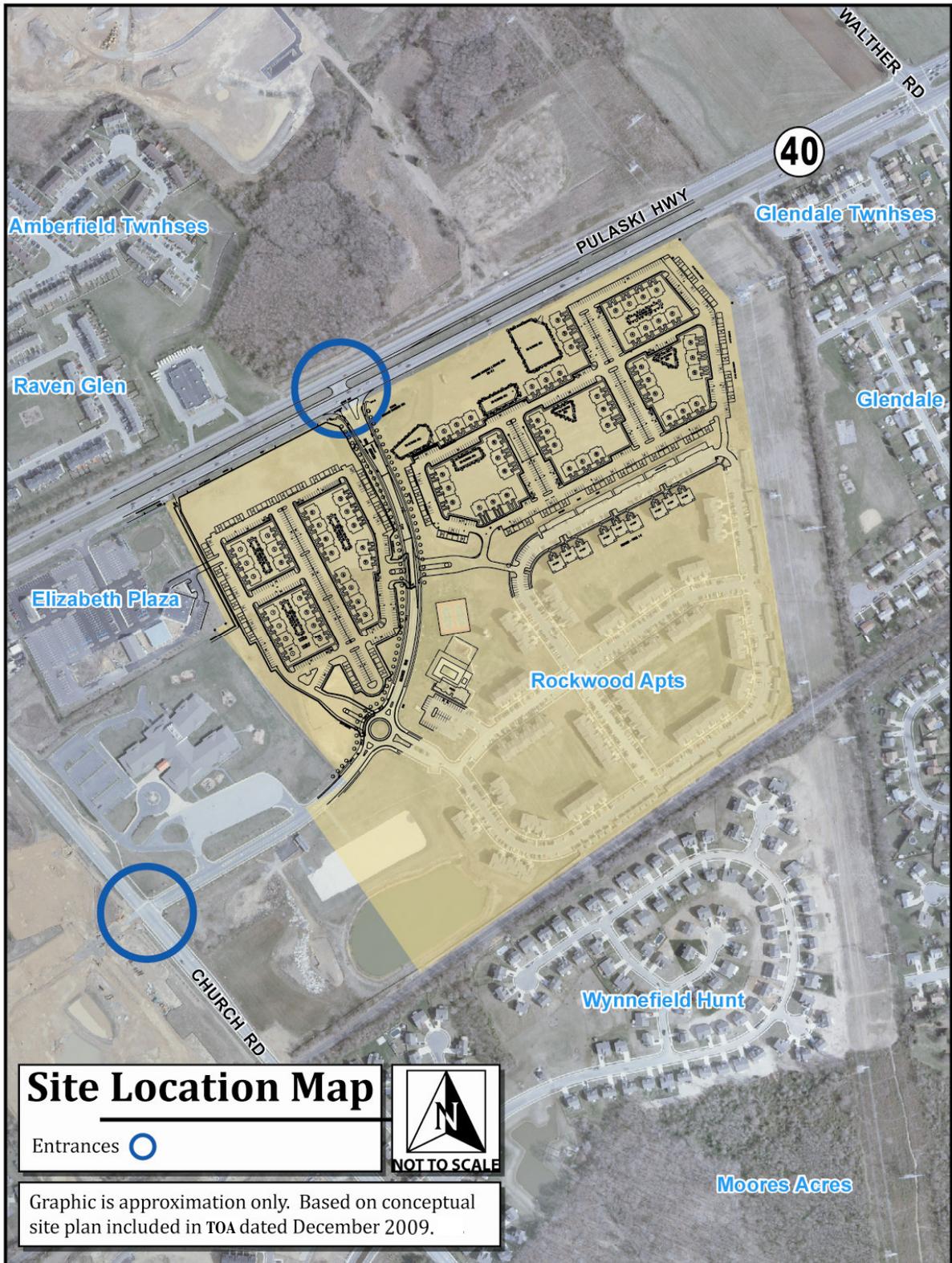
Land use approval(s) needed: Subdivision approval. The land is currently zoned as NCap (Neighborhood Conservation - apartments) within New Castle County, and the developer does not propose to change the zoning.

Proposed completion date: 2011

Proposed access locations: Two access points are proposed along Rockwood Drive (a private roadway). The plan also includes direct vehicular access between the proposed development site and the existing Rockwood Apartments (on Gregory Drive), and to Elizabeth Plaza (just west of the site), which are beneficial internal connections.

Daily Traffic Volumes:

- 2008 Average Annual Daily Traffic on US Route 40: 43,516 vpd



Livable Delaware

(Source: Delaware Strategies for State Policies and Spending, July 2004)

Location with respect to the Strategies for State Policies and Spending Map of Delaware:

The proposed Rockwood Parcel 1A development is located within Investment Level 1.

Investment Level 1

These areas are often municipalities or urban/urbanizing places where density is generally higher than in surrounding areas. Areas classified as Investment Level 1 are population centers built around a traditional central business district, which offers a wide range of opportunities for employment, shopping and recreation. Investment Level 1 Areas are considered to drive Delaware's economy and therefore reinvestment and redevelopment are encouraged.

In Investment Level 1 Areas, state investments and policies should support and encourage a wide range of uses and densities, promote other transportation options, foster efficient use of existing public and private investments, and enhance community identity and integrity. Typical transportation projects included new or expanded facilities and services for all modes of transportation, including public transportation facilities and services. Projects will also include those that manage traffic flow and congestion, support economic development and redevelopment efforts, and encourage connections between communities and the use of local streets for local trips.

Proposed Development's Compatibility with Livable Delaware:

The proposed Rockwood Parcel 1A development falls within Investment Level 1 and is to be developed with apartments. According to Livable Delaware, higher densities are typical in these areas. This development appears to be generally consistent with the 2004 update of the Livable Delaware "Strategies for State Policies and Spending."

Comprehensive Plan

New Castle County Comprehensive Plan: The proposed Rockwood Parcel 1A development is located in an area with future land use designated as Community Redevelopment, which calls for a mix of housing types, densities, and businesses that fit well into the surrounding community.

Additionally, the parcel is currently zoned NCap (Neighborhood Conservation - apartments), and the developer does not plan to rezone the parcel. According to Section 40.02.241 of the New Castle County Unified Development Code (UDC), characteristics of NCap zoning include:

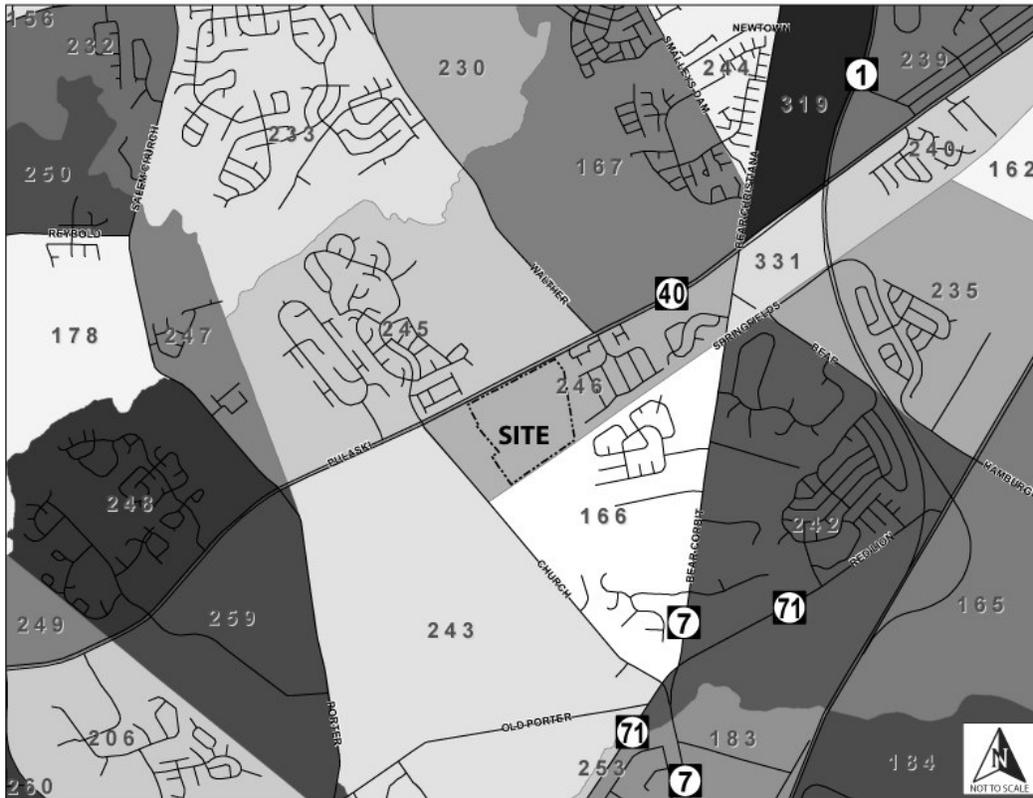
- These districts protect the residential character of existing neighborhoods or planned subdivisions that were or are being developed under previous zoning regulations.
- These districts recognize the lotting standards in effect when the community was developed and avoid making older developments nonconforming as development standards evolve. These districts permit minor in-fill consistent with the existing character, but shall not be used for rezoning.

Proposed Development's Compatibility with Comprehensive Plan: The Rockwood Parcel 1A development is currently zoned as NCap and is planned as an apartment complex, which is compatible with NCap zoning and the New Castle County Comprehensive Plan. With 426 units on approximately 37 acres, the gross density of this residential development would be approximately 11.5 units per acre.

Transportation Analysis Zones (TAZ)

Transportation Analysis Zones (TAZ) where development would be located: 246

TAZ Boundaries:



Current employment estimate for TAZ: 427 jobs in 2005

Future employment estimate for TAZ: 494 jobs in 2030

Current population estimate for TAZ: 1,487 people in 2005

Future population estimate for TAZ: 2,764 people in 2030

Current household estimate for TAZ: 549 houses in 2005

Future household estimate for TAZ: 1,080 houses in 2030

Relevant committed developments in TAZ: Rockwood Parcel 1B, Rockwood Parcel 1C, Elizabeth Plaza

Would the addition of committed developments to current estimates exceed future projections: Unknown (possibly for employment)

Would the addition of committed developments and the proposed development to current estimates exceed future projections: Yes

Relevant Projects in the DelDOT Capital Transportation Program (FY 2010 – FY 2015)

DelDOT is currently working to implement numerous improvements projects along US Route 40 that have been identified by the *Route 40 Corridor 20-Year Transportation Plan*. Adopted in June 2000, the Plan includes the recommendations of the Route 40 Steering Committee, a public group charged with addressing transportation improvements that focus on the next twenty years to address planned growth and enhance the quality of life in the US Route 40 corridor. The Plan contains a series of recommendations on US Route 40 and adjacent roadways, along with an anticipated timeline for when each recommendation should be implemented. For more information, see project web site at <http://www.deldot.gov/information/projects/rt40/index.htm>

While the Plan includes dozens of projects and potential projects throughout the entire corridor, there are two specific proposed projects that fall within the immediate influence area of this development. The first involves long-term intersection improvements at the intersection of US Route 40 and Walther Road (New Castle Road 346) / Glendale Boulevard. The second project would add a third through lane in each direction along US Route 40 between Church Road (New Castle Road 382) / Wellington Drive and Walther Road / Glendale Boulevard. The funding availability and final design/construction schedules for these two projects are uncertain, but implementation of such improvements would not occur until after 2011 (the anticipated completion date for the Rockwood Parcel 1A development).

Trip Generation

Trip generation for the proposed development was computed using comparable land uses and equations contained in Trip Generation, Eighth Edition, published by the Institute of Transportation Engineers (ITE). The following land use was utilized to estimate the amount of new traffic generated for this development:

- 426 apartments (ITE Land Use Code 220)

Table 1
ROCKWOOD PARCEL 1A PEAK HOUR TRIP GENERATION

Land Use	AM Peak Hour			PM Peak Hour			Saturday Mid-day		
	In	Out	Total	In	Out	Total	In	Out	Total
426 apartments	42	170	212	164	88	252	97	97	194
TOTAL TRIPS	42	170	212	164	88	252	97	97	194

Table 2
ROCKWOOD PARCEL 1A DAILY TRIP GENERATION

Land Use	Weekday ADT			Saturday ADT		
	In	Out	Total	In	Out	Total
426 apartments	1353	1353	2706	1544	1544	3088
TOTAL TRIPS	1353	1353	2706	1544	1544	3088

Overview of TOA

Intersections examined:

- 1) US Route 40 & Walther Road / Glendale Boulevard
- 2) US Route 40 & Church Road / Wellington Drive
- 3) US Route 40 & Brookmont Drive

Conditions examined:

- 1) 2009 existing conditions (Case 1)
- 2) 2011 without Rockwood Parcel 1A (Case 2)
- 3) 2011 with Rockwood Parcel 1A (Case 3)

Peak hours evaluated: Weekday morning and evening peak hours

Committed developments considered:

- 1) Rockwood Parcel 1B (24 apartments and 10,000 square-foot daycare facility)
- 2) Rockwood Parcel 1C (90 apartments)
- 3) Governors Square Offices (296,331 square feet of office space)
- 4) Lincoln Center (182 townhouse condos, 326 apartments, 185,025 square feet of retail/restaurant, 446,008 square feet of office space, an 80,000 square-foot hotel, and a 10,000 square-foot daycare)
- 5) St. Andrews Addition and School (20 attached homes, 118 townhouses, 268 apartments, and an 84,266 square-foot elementary school with 31 classrooms and a 6,500 square-foot assembly)
- 6) Meridian Crossing I & II (156 detached houses (6 built), 38 attached houses (6 built), 374 townhouses (20 built), 220 apartments, and a 9,900 square-foot daycare)
- 7) Steeple Glen Active-Adult Community (74 townhouses, 36 apartments, and a 3,600 square-foot community center)
- 8) Elizabeth Plaza (a 8,588 square-foot restaurant, a 4,020 square-foot daycare, 16,000 square feet of retail, and a 300 square-foot medical office addition, all in addition to the existing 9,900 square feet of retail, 9,000 square-foot beauty school and the 1,750 square-foot medical office)
- 9) Becks Woods Medical Plaza (67,500 square-foot medical office)
- 10) Salem Center (a 35,398 square-foot supermarket and a 2,028 square-foot addition to existing retail space)
- 11) Salem Center Parcel B (28,600 square feet of retail space)
- 12) Arbeiter Place (240 apartments)

Intersection Descriptions

- 1) **US Route 40 & Walther Road / Glendale Boulevard**
Type of Control: signalized four-leg intersection
Northbound approach: (Glendale Boulevard) one shared through/left-turn lane and one right-turn lane
Southbound approach: (Walther Road) one exclusive left turn lane, one shared through/left-turn lane, and one right-turn lane
Eastbound approach: (US Route 40) one left-turn lane, three through lanes and one right-turn lane
Westbound approach: (US Route 40) one left-turn lane, three through lanes, and one right-turn lane

- 2) **US Route 40 & Church Road / Wellington Drive**
Type of Control: signalized four-leg intersection
Northbound approach: (Church Road) one shared through/left-turn lane and one right-turn lane
Southbound approach: (Wellington Drive) one exclusive left turn lane, one shared through/left-turn lane, and one right-turn lane
Eastbound approach: (US Route 40) one left-turn lane, two through lanes, and one right-turn lane
Westbound approach: (US Route 40) one left-turn lane, two through lanes, and one right-turn lane

- 3) **US Route 40 & Brookmont Drive**
Type of Control: signalized three-leg intersection
Southbound approach: (Brookmont Drive) one left-turn lane and one right-turn lane
Eastbound approach: (US Route 40) one left-turn lane and two through lanes
Westbound approach: (US Route 40) one u-turn lane, two through lanes, and one right-turn lane

Additionally, while not required by the scope of the TOA, McCormick Taylor reviewed the westbound left-turn queue at the unsignalized intersection of US Route 40 and Rockwood Drive. The existing configuration of that intersection is as follows:

US Route 40 & Rockwood Drive

Type of Control: unsignalized right-in/right-out/left-in (T-intersection)

Northbound approach: (Rockwood Drive) one right-turn lane

Eastbound approach: (US Route 40) one u-turn lane, two through lanes, and one right-turn lane

Westbound approach: (US Route 40) one left-turn lane and two through lanes

Transit, Pedestrian, and Bicycle Facilities

Existing transit service: The Delaware Transit Corporation (DTC) currently operates three bus routes near the Rockwood Parcel 1A development. Bus Routes 40, 41, and 64 travel along US

Route 40. These three routes provide service between the Peoples Plaza Shopping center, Governor's Square Shopping center, and Christiana Mall with several stops at residential developments along the way. Routes 40 and 41 make approximately 25 round trips each weekday and 14 round trips each Saturday. Route 64 makes approximately 15 round trips each weekday, with no weekend service. There are signed bus stops along US Route 40 in both directions, including stops with concrete waiting pads in both directions near Church Road and near Walther Road.

Planned transit service: In a letter dated August 19, 2009, Mr. Ivan Mitchell, a Service Development Planner for the DTC, wrote to Mr. Bill Brockenbrough of DelDOT's Division of Planning and provided transit-related comments pertaining to the proposed Rockwood Parcel 1A development. Mr. Mitchell did not indicate any planned changes to the existing transit service in this area, but he did request that transit-related improvements be included if the development moves forward, consisting of the following:

- The distance between the proposed apartments and the existing bus stops along US Route 40 near Church Road exceed an acceptable walking distance. Therefore, the developer should provide a bus stop pad, shelter, and accessible pathway along eastbound US Route 40 at the Rockwood Drive entrance to provide residents access to transit. The exact location of this bus stop can be discussed with DTC at a later date. The pad should meet accessibility standards of 9' deep and 12' wide, while the shelter should be 5' deep and 10' wide. The maximum slope for water drainage should be 1:50 (2%). If the sidewalk is not adjacent to the curb, a 5-foot wide landing pad should connect the road and sidewalk.
- The developer should make a one-time contribution of \$1,000 toward an endowment fund for bus stop maintenance. Maintenance includes cleaning, replacement of damaged parts, and necessary repairs.
- If a pedestrian crossing is installed across US Route 40, DTC will request that the developer provide a bus stop along westbound US Route 40 at that time.
- After the bus stop location (along eastbound US Route 40 near Rockwood Drive) is determined, DTC requests verification that the existing shoulder contains spacing for a bus to completely depart from eastbound US 40. If the adequate spacing is not present, DTC requests a bus pull-off to accommodate this request.
- Transit Need Analysis – DTC requests information regarding the travel needs of current Rockwood residents. Data submission should include work locations, transit usage/needs, and commuting mode. With this data, DTC can gauge the impact on service and further develop recommendations regarding transit service
- The closest Park and Rides (PNR's) to the development are located at the intersection of SR 7 & SR 273 and Christiana Mall. Based on a review of existing transit service on the development's frontage, DTC determined the developer will have minimal or no impact on PNR capacity. Based on this information, DTC will not request any contributions related to PNR facilities.

Existing bicycle and pedestrian facilities: According to the *New Castle County Bicycle Map*, Walther Road is designated as having below average cycling conditions. Church Road and US Route 40 within the study limits are designated as having average cycling conditions. This

section of US Route 40 also has high traffic volumes (greater than 10,000 ADT). There are currently sidewalks in place along the south side of US Route 40 west of the proposed site, along Rockwood Drive, and along the east side of Church Road. There are existing bike lanes along Rockwood Drive, Church Road, and Wellington Drive.

Planned bicycle and pedestrian facilities: DelDOT's Bicycle and Pedestrian Facilities Team indicated, in a letter from Jennifer Baldwin and an email from Anthony Aglio (both sent to McCormick Taylor and dated January 29, 2010), that the following bicycle and pedestrian facilities should be required. In the letter, they commented that Livable Delaware's updated State Strategies for Spending Map indicates the site is located in an Investment Level 1 area, where transportation options should be diverse and include public transportation, walking and bicycling. The following should be incorporated into the project to facilitate bicycle and pedestrian transportation:

- a. An ADA-compliant 10-foot multi-use path with a five-foot buffer should be included along all property frontage on US Route 40. This multi-use path should be extended down to the intersection of US Route 40 and Church Road / Wellington Drive.
- b. The frontage pedestrian facility should connect with the existing internal sidewalk network on David Place.
- c. An internal sidewalk connection should be made with the existing sidewalk on Gregory Drive.
- d. Internal non-motorized access should be provided to connect the apartment complex with Leasure Elementary School.
- e. The developer of this project should contact DART regarding the addition of transit service and transit facilities at this location. The frontage path and internal sidewalks should be connected to these stops and include bicycle racks.

Previous Comments

All comments from DelDOT's Scoping Letter and Preliminary TOA Review were addressed in the Final TOA submission, with the following exceptions:

- There were no indications that the applicant contacted the DelDOT Bicycle and Pedestrian Coordinator for bicycle and pedestrian comments.
- There were no indications that the applicant contacted a Service Development Planner at the DTC for transit comments.
- There were no indications that the applicant contacted DelDOT for accident data or safety analysis information.

General HCS Analysis Comments

(see table footnotes on the following pages for specific comments)

- 1) For future conditions at the existing intersections, the TOA assumed a peak hour factor (PHF) of either existing PHF or 0.90, even when the lane group volume did not increase from existing to future. In cases where the lane group volume increased from existing to future, McCormick Taylor assumed a PHF of either existing PHF or 0.92, whichever was

greater. However, for cases where the lane group volume did not change from existing to future conditions, McCormick Taylor assumed a future PHF equal to existing PHF.

- 2) For future conditions at existing intersections, the TOA generally assumed heavy vehicle factors (HV) to be the same as existing HV and assumed no minimum HV. However, mistakes in the TOA analysis included reducing future HV values to 0% for all movements at the intersection of US Route 40 and Walther Road / Glendale Boulevard, and using existing AM peak hour HV values for both AM and PM peak hour analyses for the other two intersections.

In cases where increases in volumes were projected, McCormick Taylor's analysis assumed a future HV of either existing HV or 2%, whichever was greater.

- 3) The HCS analyses included in the TOA did not always reflect the lane widths observed in the field by McCormick Taylor. The TOA assumed a uniform lane width of 12 feet for all existing and future conditions at all intersections. McCormick Taylor's HCS analyses incorporated the field-measured lane widths.
- 4) The TOA and McCormick Taylor used different cycle lengths and/or signal timing parameters when analyzing the signalized intersections in some cases.
- 5) The TOA generally input existing Right-Turn-on-Red (RTOR) volumes for existing analyses and higher RTOR volumes for future analyses. McCormick Taylor input no RTOR volumes.

Table 3
PEAK HOUR LEVELS OF SERVICE (LOS)
based on Traffic Operational Analysis for Rockwood Parcel 1A
Report dated December 2009
Prepared by Landmark Engineering, Inc.

Signalized Intersection ¹	LOS per TOA		LOS per McCormick Taylor	
	Weekday AM	Weekday PM	Weekday AM	Weekday PM
US Route 40 & Walther Road / Glendale Boulevard				
2009 Existing (Case 1)	C (0.78)	C (0.77)	D (0.77)	D (0.75)
2011 without Rockwood Parcel 1A (Case 2)	C (0.78)	D (0.92)	D (0.78)	D (0.92)
2011 with Rockwood Parcel 1A (Case 3)	C (0.80)	D (0.94)	D (0.80)	D (0.94)

¹ For unsignalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds. For signalized analyses, those numbers are X-critical, a composite volume-to-capacity ratio.

Table 4
PEAK HOUR LEVELS OF SERVICE (LOS)
based on Traffic Operational Analysis for Rockwood Parcel 1A
Report dated December 2009
Prepared by Landmark Engineering, Inc.

Signalized Intersection ²	LOS per TOA		LOS per McCormick Taylor	
	Weekday AM	Weekday PM	Weekday AM	Weekday PM
US Route 40 & Church Road / Wellington Drive				
2009 Existing (Case 1)	D (0.84)	E (0.99)	D (0.82)	D (0.94)
2011 without Rockwood Parcel 1A (Case 2)	F (1.12)	F (1.32)	F (1.11)	F (1.15)
2011 with Rockwood Parcel 1A (Case 3)	F (1.17)	F (1.34)	F (1.16)	F (1.18)
2011 with Rockwood Parcel 1A (Case 3) <i>With Improvement Option 1</i> ³	N/A	N/A	F (1.03)	F (1.02)
2011 with Rockwood Parcel 1A (Case 3) <i>With Improvement Option 2</i> ⁴	N/A	N/A	F (1.03)	F (1.02)
2011 with Rockwood Parcel 1A (Case 3) <i>With Improvement Option 3</i> ⁵	N/A	N/A	D (0.83)	D (0.83)

² For unsignalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds. For signalized analyses, those numbers are X-critical, a composite volume-to-capacity ratio.

³ Improvement Option 1 consists of the addition of an exclusive left-turn lane on the northbound approach of Church Road and a second left-turn lane on both the eastbound and westbound approaches of US Route 40.

⁴ Improvement Option 2 consists of the addition of an exclusive left-turn lane on the northbound approach of Church Road and a third through lane on the westbound approach of US Route 40.

⁵ Improvement Option 3 consists of the addition of an exclusive left-turn lane on the northbound approach of Church Road and a third through lane on both the eastbound and westbound approaches of US Route 40.

Table 5
PEAK HOUR LEVELS OF SERVICE (LOS)
based on Traffic Operational Analysis for Rockwood Parcel 1A
Report dated December 2009
Prepared by Landmark Engineering, Inc.

Signalized Intersection ⁶	LOS per TOA		LOS per McCormick Taylor	
	Weekday AM	Weekday PM	Weekday AM	Weekday PM
US Route 40 & Brookmont Drive				
2009 Existing (Case 1)	B (0.61)	B (0.74)	B (0.63)	C (0.71)
2011 without Rockwood Parcel 1A (Case 2)	B (0.74)	C (0.87)	B (0.75)	C (0.86)
2011 with Rockwood Parcel 1A (Case 3)	B (0.74)	D (0.89)	B (0.76)	C (0.87)

⁶ For unsignalized analyses, the numbers in parentheses following levels of service are average delay per vehicle, measured in seconds. For signalized analyses, those numbers are X-critical, a composite volume-to-capacity ratio.



STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
800 BAY ROAD
P.O. Box 778
DOVER, DELAWARE 19903

CAROLANN WICKS, P.E.
SECRETARY

September 2, 2009

Mr. Shawn P. Tucker
Drinker, Biddle & Reath LLP
1100 North Market Street
Wilmington, DE 19801-1254

Dear Mr. Tucker:

This letter concerns the proposed development of Rockwood Parcel 1A, located on the south side of US Route 40 and on both sides of Rockwood Drive. We are writing in response to two letters, your July 6 letter to both Mr. John Janowski and me, and Mr. Janowski's August 4 response. Copies of both letters are enclosed for your reference. Briefly, we concur with Mr. Janowski's response.

The proposed development would consist of 426 apartments on at least 32.84 acres (Tax Parcel 10-043.00-022). While your letter does not mention it, according to the County's web site 4.39 acres of Tax Parcel 10-043.00-011 are also included in the plan. You wrote to us requesting a traffic impact study (TIS) waiver for the development under Section 40.11.121(B) of the County's Unified Development Code (UDC).

The UDC Section cited above permits a waiver where the property is subject to deed restrictions requiring that the development be phased. In this instance, as your letter details, the Rockwood development is subject to deed restrictions placed in 1996 in association with the rezoning of the land. These restrictions made Parcel 1A the third of three phases, to be developed 1) after the developer had contributed to certain road improvements associated with the first two phases, 2) after the January 1, 2006, and 3) after the preparation of a study to identify the transit services and facilities needed to achieve acceptable levels of service on Route 40 and the negotiation of a pro rata contribution toward those services and facilities.

When those restrictions were negotiated and recorded, DelDOT's approach to relieving congestion in the Route 40 corridor was based largely on transit, including increased bus service along Route 40 and passenger rail service using the Norfolk Southern line that runs between New Castle and Porter. Soon thereafter, in September 1998, DelDOT significantly changed that



Mr. Shawn P. Tucker
September 2, 2009
Page 2 of 3

approach, with the beginning of the US 40 Corridor Study. Plans for rail service were set aside in favor of automobile and bus-oriented solutions, which are outlined in the *US 40 Corridor 20-Year Transportation Plan*.

Accordingly, as we agreed in our meeting on June 15 with Mr. Janowski and your client's traffic engineer, Mr. Ted Williams, the study required per the deed restrictions should now be oriented toward identifying highway and transit facilities needed to achieve acceptable levels of service on Route 40 and the negotiation of a pro rata contribution toward those facilities. The *US 40 Corridor Plan* mentioned above, and the monitoring effort associated with it, provides a platform from which to conduct perform that work, but further analysis is needed because the proposed development was not specifically accounted for in the *Plan*.

As we discussed on June 15, and as your letter details, the highway facilities portion of the analysis should address the intersections of US Route 40 with Walther Road, Church Road and Brookmont Drive. A buildout year of 2011 was discussed then and remains acceptable to DelDOT if your client's plans have not changed. As we also discussed then, this project is grandfathered with respect to DelDOT's Standards and Regulations for Subdivision Streets and State Highway Access due to the 1996 rezoning.

As Mr. Janowski said in his letter, notes must be placed on the land development plan, before it is recorded, to identify any off-site improvements and the timing of building permits and/or certificates of occupancy as related to the award/completion of improvements. While your letter accurately describes the highway improvements we were able to identify on June 15, we will reserve comment on what else might be needed and the timing of those improvements pending the results of the intersection analysis.

Regarding transit facilities, I have enclosed a letter from the Delaware Transit Corporation (DTC). As discussed therein, DTC has identified a need for new bus stop to serve the proposed development. They also request information on the travel needs of current Rockwood residents for the purpose of projecting the travel needs of residents in the subject development. DTC would analyze that information but they ask that your client provide it.

Regarding the highway analysis, please have Mr. Williams contact Mr. Troy Brestel of this office to discuss the scope of the analysis in more detail before starting work. Mr. Brestel may be reached at (302) 760-2167. Regarding the transit analysis, please contact Mr. Ivan Mitchell at DTC to determine more specifically what information they require. Mr. Mitchell may be reached at (302) 576-6062.

Mr. Shawn P. Tucker
September 2, 2009
Page 3 of 3

As necessary, you may contact me at (302) 760-2109 if you have questions concerning this correspondence.

Sincerely,



T. William Brockenbrough, Jr.
County Coordinator

TWB:km
Enclosures

cc: Ms. Andrea Finerosky, Queensbury Village, Inc.
Mr. Ted C. Williams, Landmark Engineering
Mr. John P. Janowski, New Castle County Department of Land Use
Mr. Owen C. Robatino, New Castle County Department of Land Use
Mr. Wayne M. Henderson, Delaware Transit Corporation
Mr. Ivan Mitchell, Delaware Transit Corporation
Mr. Theodore G. Bishop, Assistant Director, Development Coordination
Mr. Mark C. Tudor, Regional Group Engineer, Project Development North II, DOTS
Mr. J. Marc Coté, Subdivision Engineer
Mr. Joshua Schwartz, Subdivision Manager
Mr. Todd J. Sammons, Project Engineer
Mr. Troy E. Brestel, Project Engineer



Department of Land Use



August 4, 2009

Shawn Tucker, Esquire
Drinker Biddle & Reath
1100 North Market Street
Wilmington, DE 19801-1254

Subject: TIS Waiver Request for Rockwood Parcel 1A #20090066S

Dear Mr. Tucker:

The Department of Land Use is in receipt of your July 6, 2009 letter requesting a Traffic Impact Study (TIS) Waiver under Section 40.11.121 (B) of the New Castle County Code for the above application. The plan proposes 426 apartments on 32.8 acres and is currently zoned NCap. The property is identified as tax parcel 1004300022 and is located on the south side of US 40 between Walter Road and Church Road.

According to New Castle County Code; a parcel that is subject to deed restrictions requiring that the proposed land development be phased to coincide with improvements to the transportation system, or phased by a reduced rate of build out, so long as the time frame set forth in the deed restrictions for completion of the development has not expired, the requirement for a new traffic study and the further evaluation of the level of service will be waived. In order for this application to be considered for a TIS waiver a TIS had to be completed for the change in zoning of the parcel and in the opinion of the Land Use Department and DelDOT, sufficient prior studies of the area of influence had to have been previously conducted.

According to the Declaration of Deed Restrictions dated July 9, 1996, a copy of which you attached), the subject property is to be phased limited to the third and final phase of the overall project and only after the developer contributed to certain road improvements and only after January 1, 2006. The Declaration also provides for an updated analysis and additional improvements as may be required by DelDOT dependant on the finding of this work.

The Transportation Section's records indicate that a TIS was completed for this development December 1, 1993 and reviewed by DelDOT February 16, 1994. Since then a number of additional TIS's have been conducted in this immediate area for other proposed developments. In addition to this, DelDOT completed the *US 40 Corridor 20-Year Transportation Plan* in June, 2000.. This multi-phased plan recommends specific projects to be constructed over that period including long term improvements to the intersection of Walther Road/US 40, widening of US 40 from 4 to 6 lanes between Walter Road and Church Road, and a multi-use path/sidepath on both sides of US 40 between SR 72 and SR 1. The US 40 Plan is monitored annually to assess conditions in order to determine project implementation.



DELAWARE TRANSIT CORPORATION

CAROLANN D. WICKS
Secretary of Transportation



STEPHEN KINGSBERRY
Executive Director

August 19, 2009

Bill Brockenbrough, Jr., P.E., AICP
County Coordinator
Delaware Department of Transportation
Division of Planning
P.O. Box 778
Dover, DE 19903

Re: DTC Comments for Rockwood Parcel 1-A (Queensbury Village)

Dear Bill Brockenbrough:

Delaware Transit Corporation (DTC) is submitting comments to the Delaware Department of Transportation (DelDOT) regarding the TIS waiver review for Rockwood Parcel 1-A (Queensbury Village). DTC's Routes 40, 41, and 64 provide service to the above referenced property via Pulaski Highway (US Route 40). After reviewing the Plans, DTC requests the following accommodations for transit service

1. The existing bus stop on eastbound US 40, farside of Church Road has been reviewed. DTC determined the distance between the proposed housing units and bus stop exceeded an acceptable walking distance. DTC request the owner/developer provide a bus stop pad, shelter, and accessible pathway at the Rockwood Road entrance to provide residents access to transit. The exact location (nearside or farside) can be discussed at a later date. The pad should meet the accessibility standards of 9' deep and 12' in width while the shelter should be 5' deep and 10' in width. The maximum slope for water drainage should be 1:50 (2%). If the sidewalk is not adjacent to the curb, a 5-foot wide landing pad should connect the road and sidewalk.

The developer should make a one-time contribution of \$1,000 toward an endowment fund for bus stop maintenance. Maintenance includes cleaning, replacement of damaged parts, and necessary repairs.

Due to the nonexistence of a pedestrian crossing at Rockwood Drive and US 40, DTC encourages residents to use the bus stop at Wellington Road. Although the distance from this bus stop to the proposed units is outside DTC standards, it is the safest option. However, if a pedestrian crossing is installed at a future data DTC will request a bus stop.

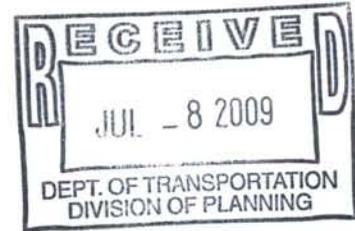
Law Offices

1100 North Market Street
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www.drinkerbiddle.com

CALIFORNIA
DELAWARE
ILLINOIS
NEW JERSEY
NEW YORK
PENNSYLVANIA
WASHINGTON DC
WISCONSIN

July 6, 2009



**VIA ELECTRONIC MAIL &
HAND DELIVERY TO NCC,
FEDERAL EXPRESS TO DELDOT**

John Janowski, Chief Traffic Planner
New Castle County Department of Land Use
87 Reads Way
New Castle, DE 19720

T. William Brockenbrough, Jr., P.E.
Planning Division Supervisor & County Coordinator
Delaware Department of Transportation
800 Bay Road
P.O. Box 778
Dover, Delaware 19903

**Re: UDC, ARTICLE 11, TIS WATVER REQUEST
ROCKWOOD PARCEL 1A
NCC APPLICATION NO 20090066
NCC PARCEL # 1004300022**

Dear Gentlemen,

In follow up to our meeting on June 15th and my follow-up e-mail, we write to you on behalf of our client, Queensbury Village, Inc., to formally request a waiver from the Traffic Impact Study ("TIS") requirements found at Chapter 40, Article 11 of *New Castle County Code*, also know as the *Unified Development Code* ("UDC"). In support of this request, we offer the following background information:

The subject property is identified on the tax maps of New Castle County as tax parcel number 1004300022, and is also know as Parcel 1A (hereinafter the "Property"). The Property, which is located along the east bound lane of Route 40, consists of 32.84 +/- acres. The Property is currently zoned NCap ("Apartments"). On our about February 10, 2009, our client submitted an exploratory major subdivision plan proposing to construct 426 apartment units upon the Property as permitted under the existing NCap zoning.

TIS WAIVER PURSUANT TO ARTICLE 11

Pursuant to Chapter 40, Article, 11 of the *New Castle County Code*, the Department of Land Use and DelDOT may waive, or otherwise not require, a traffic impact study for a proposal which meets certain code specific criteria as set forth in §§ 40.11.120 & 40.11.121 of the UDC. Specifically, the UDC provides as follows:

SECTION 40.11.120 NEED FOR TRAFFIC ANALYSIS

A. If the Department and DelDOT find, based upon the information supplied pursuant to Section 40.31.112 (C) (2) and the standards set forth in this Section, that a proposed rezoning, subdivision, or land development could generate significant traffic impacts, the Department shall require the applicant to prepare and submit a traffic impact Study to the Department and DelDOT. Significant impact shall be considered to exist and a traffic impact study required for a rezoning change or a major subdivision or land development if any of the following conditions exist.

1. The proposal exceeds the projected average daily traffic warrants provided in Table 1, Section 15 of DelDOT's Rules and Regulations for Subdivision Streets, as may be amended from time to time.
2. The proposal is projected to generate more than fifty (50) peak hour trips, including trips that are diverted from existing traffic.
3. The subject property is located near roadways, segments and intersections, which are operating below the level of service specified in Section 40.11.210.
4. The proposed development causes the total development within the area traffic analysis zone and the adjacent zones to exceed the totals in the WILMAPCO Metropolitan Transportation Plan.
5. The proposed development will impact roadways that are not capable of providing adequate and safe circulation, or adequate stopping sight distances, or that contain other geometric deficiencies that would result in safety problems if the development were built.

SECTION 40.11.121 TRAFFIC IMPACT STUDY WAIVER

[However], [i]f a traffic impact study was completed for a proposed change in zoning of the subject parcel or, if, in the opinion of the Department and DelDOT, sufficient prior traffic studies of the area of influence have previously been conducted, the requirement for a new traffic study and the further

July 6, 2009

Page 3

evaluation of the level of service will be waived provided the Department finds:

* * * *

B. The parcel is subject to deed restrictions requiring that the proposed subdivision or land development be phased to coincide with improvements to the transportation system, or phased by a reduced rate of build out, so long as the time frame set forth in the deed restrictions for completion of the development has not expired.

In light of the code sections cited above, our client's project is eligible for a TIS waiver. Indeed, under the provisions of §40.11.121(B), a TIS waiver may be granted where, as here, the Property at issue had been rezoned and is subject to deed restrictions providing for development of the Property to be phased at a reduced rate of build out. Indeed, the Property is subject to a Declaration dated July 9, 1996 (copy attached), which was entered into as part of the rezoning of the Property from R-2 to R-4 pursuant to NCC Rezoning Application 91-0987-Z. Paragraph 3 of the Declaration specifically provides that "Construction on the Subject Land shall be phased". Sub-paragraph 3(d) of the Declaration specifically limited development of the Property until the third and final phase of the overall project. This third and final phase of the overall project was contemplated to be begin after the developer contributed to certain road improvements for phase 1 and phase 2, and then only after January 1, 2006.

Sub-paragraph 3(d) of the Declaration also provides for an updated analysis and additional improvements as may be required by DelDOT pursuant to the results of such an analysis. It was agreed that our client could utilize the most current update to the Route 40 study to provide the updated analysis contemplated by sub-paragraph 3(d). Specifically, it was agreed at our last meeting that our client will be subject to an operational type analysis required by DelDOT with a scope including the intersections of Route 40 & Brookmont, Church and Walther Roads. To this end, DelDOT and our client's engineer, Ted Williams, will rely upon the data from the updated 2008 Route 40 study analysis once released. Further, Ted Williams will add our client's trip generation to the 2008 Route 40 study update if not already included in the updated analysis. This data will be used to determine the operational sufficiency of these intersections. Thereafter, DelDOT and our client will reach a final agreement on the nature of the improvements that will be required. These improvements will then be documented as notes on the final record plan for Rockwood Parcel 1A.

The improvements that are currently anticipated following our meeting include: the continued widening of the eastbound lane of U.S. Route 40 along the frontage of the Property,

July 6, 2009

Page 4

construction of a 10-foot wide multi-use path along the entire Route 40 frontage of the Property, entering into a signal agreement as may be necessary to improve the existing signal at Church Road and Walther Road, constructing a bus stop and shelter on Rockwood Road, and providing sidewalks connecting the proposed development to the multi-use path and the proposed bus stop and shelter.

Lastly, it was agreed at our last meeting that our client could continue to seek the processing of its application under DelDOT's regulations adopted prior to December 21, 2007, pursuant to the grandfathering provisions of the Secretary Wick's December 2007 Order.

Please do not hesitate to contact me or Ted Williams if you require any additional information while you review our client's TIS waiver request.

Sincerely,

/s/ Shawn P. Tucker

Shawn P. Tucker

Enclosure

cc: Andrea Finerosky, Queensbury Village, Inc., Project Manager
Ted Williams, P.E., Landmark Engineering

Tax Parcel Nos.:

10-043.00-011

10-048.00-036

Prepared by and Return to:
Saul, Ewing, Remick & Saul (SAG)
P.O. Box 1266
Wilmington, DE 19899

DECLARATION

THIS DECLARATION made this 9th day of July, 1996, by Rockwood V.L. Corporation, a corporation formed under the laws of the State of Delaware, herein referred to as "Declarant".

WITNESSETH:

WHEREAS, Declarant is the owner of all that certain lot, piece or parcel of land situate in New Castle County, State of Delaware, consisting of 147.7 acres, more or less, which said tract of land is describing in Exhibit "A" attached hereto and made a part hereof ("Subject Land"); and

WHEREAS, Declarant desires to restrict Subject Land:

NOW, THEREFORE, know all men by these presents, that the Declarant does hereby covenant and declare that it shall hold and stand seized of Subject Land described on Exhibit "A", under and subject nevertheless to the following restrictive covenants, which it is hereby agreed shall be covenants running with the land and which shall be binding upon the Declarant, its heirs, administrators, successors, and assigns, which restrictive covenants are hereby imposed for the benefit of New Castle County, a political subdivision of the State of Delaware, its successors and assigns:

(1) Declarant shall make available for purchase at its fair market value by an appropriate government or nonprofit entity up to twenty-five (25) acres of the portion of the Subject Land which is zoned R-4. Said lands shall be made available for purchase until January 1, 2006. Any of the twenty-five acres not purchased by January 1, 2006 shall be available for development by Declarant under the then-current land development regulations.

(2) Declarant shall be responsible for the reconstruction of the portion of Lebanon Church Road adjacent to the Subject Land in accordance with applicable DelDot standards. The phasing of the road reconstruction shall be determined by the New Castle County Department of Planning and DelDot during the Subdivision Land Development Plan process.

(3) Construction on the Subject Land shall be phased:

(a) Development of the first phase shall be limited to 160 dwelling units on the portion of the Subject Lands designated as "Single Family Detached Homes" on Exhibit

"A". No improvements to Lebanon Church Road shall be required, except as are required by the New Castle County Department of Planning and DelDot during the Subdivision Land Development Plan process to address the traffic generated by those dwelling units. In no event shall construction on the portion of the Subject Lands designated as "Single Family Detached Homes" on Exhibit "A" commence prior to January 1, 1997.

(b) Development of the seconds phase on the Subject Land shall be limited to 400 units. No certificate of occupancy for any of the units in the second phase shall be issued prior to January 1, 2000.

(c) Declarant shall be responsible for paying its proportionate share, based upon trips generated, of the following transportation projects: 1) improvement to the intersection of Route 40 and Walther Road, and 2) the Route 40 signalization project (DelDot contract number 94-093-03).

(d) Prior to developing any lots beyond the second phase, Declarant shall prepare a study which will identify the transit services and facilities necessary to result in acceptable levels of service on Route 40 after the proposed additional development of the Subject Lands. Declarant and DelDot shall negotiate the prorata funding and development of such services and facilities. No certificate of occupancy for any of the units beyond the second phase shall be issued prior to January 1, 2006.

(4) Declarant shall not construct any building upon the Subject Land which exceeds four stories. In no event shall any building exceed fifty feet in height.

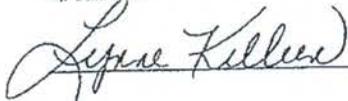
(5) In the event Declarant constructs townhouses on the Subject Land, no more than six townhouses shall be connected in any single group of townhouses.

(6) The foregoing covenants shall not be modified, amended or altered in whole or in part except on approval of the County Council of New Castle County, its successors and assigns.

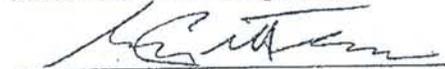
IN WITNESS WHEREOF, the Declarant has hereunto affixed its hand and seal, the day and year aforesaid.

Signed, Sealed and Delivered
in the presence of:

Witness



Rockwood V.L. Corporation


By: Gregory Pettinaro

STATE OF DELAWARE)

PROPERTY MAP

EXHIBIT "A"

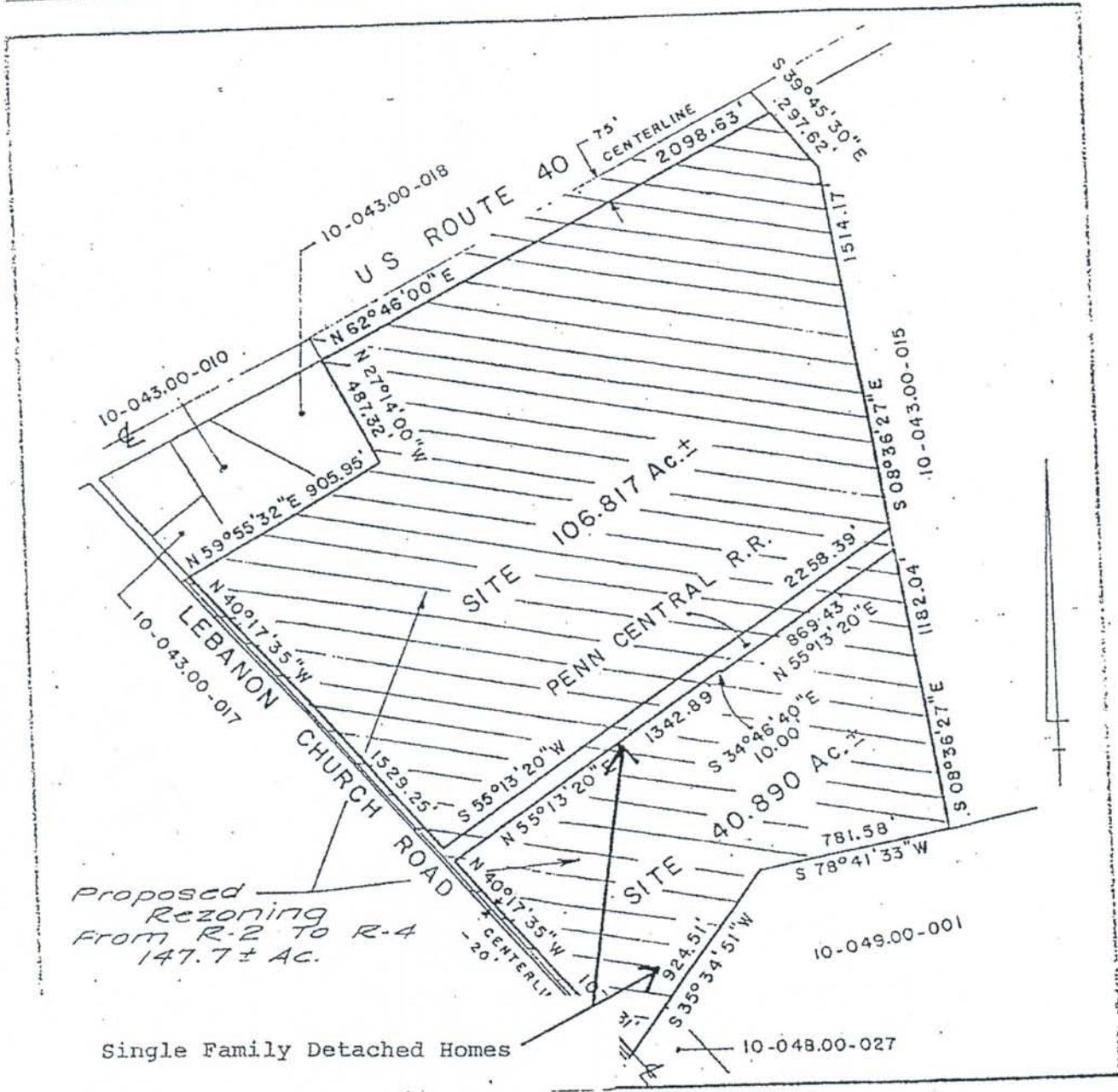
APPLICANT ROCKWOOD VL CORP.

MOD.GRID NO. 0740/3280

PROPOSED ZONING R-2 TO R-4

APPLICATION NO. 91-0987-7

TAX PARCEL NO. 10-043.00-011
10-048.00-036



HUNDRED NEW CASTLE
NEW CASTLE COUNTY, DELAWARE

PERMANENT ORDINANCE NO. _____
Date Adopted By County Council _____
Date Approved By County Executive _____

Scale: 1" = 600'
Drawn by: HOWARD L. ROBERTSON INC.
Date: SEPT. 30, 1992