

RESOLUTION NO. 2015-74

RADNOR TOWNSHIP

A RESOLUTION OF RADNOR TOWNSHIP, DELAWARE COUNTY, PENNSYLVANIA, APPROVING THE FINAL PLAN APPLICATION OF VILLANOVA UNIVERSITY FOR A PROPERTY LOCATED ON LANCASTER AVENUE AND ITHAN AVENUE PURSUANT TO PLANS PREPARED BY NAVE NEWELL, INC. ESTABLISHING A COMPREHENSIVE INTEGRATED COLLEGE DEVELOPMENT.

WHEREAS, Villanova University (“Applicant”) submitted a Final Land Development Application (“Application”) for properties located on the southeast and southwest corners of Lancaster Avenue and Ithan Avenue within the Township’s PI - Planned Institutional Zoning District (“Property”) to establish a Comprehensive Integrated College Development (“CICD”) upon the Campus in accordance with Section 280-68.1 of the Township Zoning Ordinance; and

WHEREAS, this Application includes the following engineered plan sets (jointly referred to as the “Plan”):

- Final Land Development Submission for Lancaster Avenue Housing, consisting of 41 sheets prepared for Villanova University, prepared by Nave Newell, Inc., dated December 5, 2014 and revised March 26, 2015.
- Final Land Development Submission for West Lancaster Parking, consisting of 32 sheets, prepared for Villanova University, prepared by Nave Newell, Inc., dated March 6, 2015 and revised March 26, 2015.
- Final Land Development Submission for Church Walk and Bridge, consisting of 20 sheets, prepared for Villanova University, prepared by Nave Newell, Inc., dated March 13, 2015 and revised May 26, 2015.
- Final Land Development Submission for Pike Field Garage, consisting of 37 sheets, prepared for Villanova University, prepared by Nave Newell, Inc., dated March 6, 2015 and revised May 26, 2015.
- Final Land Development Submission for Performing Arts Center, consisting of 19 sheets, prepared for Villanova University, prepared by Nave Newell, Inc., dated March 6, 2015 and revised May 26, 2015.

WHEREAS, the Application proposes the construction of student housing, retail shops, a parking garage, a performing arts center, and surface parking spaces (“Project”) as set forth on the Plan.

WHEREAS, the Application has been reviewed by both the Radnor Township Planning Commission and the Delaware County Planning Commission.

WHEREAS, the Applicant received conditional use approval for the CICD by Decision and Order of the Radnor Township Board of Commissioners dated November 24, 2014 (“CU Decision”); and

NOW, THEREFORE, it is hereby **RESOLVED** that the Board of Commissioners of Radnor Township does hereby approve the Final Plan of land development for Villanova University subject to the following conditions:

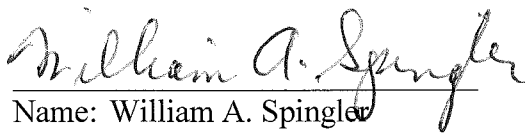
1. The Applicant shall comply with the June 30, 2015 correspondence of the Township Engineer, Gannett Fleming, a copy of which is attached hereto and incorporated herein as **“Exhibit “A”**.
2. The Applicant shall comply with the June 22, 2015 correspondence of Gilmore & Associates, Inc., a copy of which is attached hereto and incorporated herein as **“Exhibit “B”**.
3. The Applicant shall comply with the June 24, 2015 correspondences of RETTEW, a copy of which is attached hereto and incorporated herein collectively as **“Exhibit “C”**.
4. The Applicant shall comply with the terms and conditions of the Conditional Use Order of the Board of Commissioners dated November 24, 2014, a copy of which is attached hereto and incorporated herein as **Exhibit “D”**.
5. The Applicant shall comply with any outstanding conditions as set forth in the Preliminary Plan Approval Resolution No. 2015-54, incorporated herein by reference.
6. The Applicant shall concurrently provide the Township with copies of all submissions to PennDOT.
7. The Applicant shall provide the Township with an Event Circulation Plan and an Evacuation Plan, both of which are to the Township’s satisfaction, prior to the issuance of any building permits for this Project which approval shall not be unreasonably withheld by the Township.
8. The Applicant shall obtain all necessary approvals for sewage transportation and treatment for the Project from all required entities, including, but not limited to, Radnor Township, Lower Merion Township, and the Pennsylvania Department of Environmental Protection, prior to the issuance of any building permits for occupied structures being constructed as a part of this Project.
9. The Applicant shall install wrought iron style aluminum fencing along South Ithan

Avenue and landscape fencing along the SEPTA right-of-way in locations and of the type as shown on the Plan. If the Performing Arts Center is not an active project at the time construction is fully completed on the remainder of the Project, the Applicant shall submit amended land development plans showing the proposed alternative use of the Performing Arts Center area.

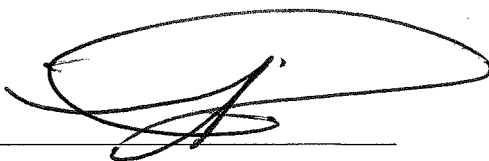
10. The Applicant shall remove the existing parallel parking along one side of the drive aisle between Stone and Farrell Halls to provide an 18' wide drive aisle.
11. The Applicant shall install an elevator and two adjacent stairs on the south side of Lancaster Avenue to provide an ADA accessible entrance to the Church Walk Bridge. This installation shall be substantially in compliance with the plans shown to the Board of Commissioners at the July 7, 2015 meeting and the Plan shall be revised to eliminate the stairs and ramp at the south end of the bridge adjacent to the SEPTA station as currently shown on the Plan.
12. The Applicant shall relocate to the visitor parking lot, as shown on the plan, the 3 SEPTA parking spots currently proposed in the middle of the Church Walk/West Lancaster Parking Lot/Dormitory Parking Lot intersection.
13. The Applicant shall alter the temporary main lot access to Ithan Avenue from the two existing separate driveways to a temporary single driveway during the Project.
14. The Applicant shall comply with all other applicable Ordinances with respect to sewage, stormwater management, zoning, building code, as well as with all other Township, County, State and Federal ordinances, statutes, rules and regulations.
15. The Applicant shall execute Development and Financial Security Agreements in a form and manner to be approved by the Township Solicitor. Prior to any construction, the Applicant shall provide a detailed staging plan acceptable to the Township addressing off site erosion, street sweeping, the impact of special events, construction worker parking, and any required road closures of Township or State streets during construction.

SO RESOLVED, at a duly convened meeting of the Board of Commissioners of Radnor Township conducted on this 13th day of July, 2015.

RADNOR TOWNSHIP

By: 
Name: William A. Spangler
Title: President

ATTEST: _____





Date: June 30, 2015

To: Radnor Township Board of Commissioners

From: Roger Phillips, PE

cc: Robert Zienkowski – Township Manager
Stephen Norcini, P.E. – Director of Public Works
Kevin W. Kochanski, RLA, CZO – Director of Community Development
John Rice, Esq – Grim, Biehn, and Thatcher
Amy Kaminski, PE – Gilmore and Assoc.
Steve Gabriel - Rettew

RE: Villanova University – Lancaster Avenue Housing
Villanova University – Applicant

Date Accepted: June 1, 2015
90 Day Review: August 30, 2015

Gannett Fleming, Inc. has completed a review of the Villanova University Lancaster Avenue Housing Final Plan for compliance with the Radnor Township Code. This Final Plan was reviewed for conformance with Zoning, Subdivision and Land Development, Stormwater Management, and other applicable codes of the Township of Radnor. A review was also completed for the accompanying plans for the West Lancaster Parking Lot, Pike Field Garage, the Performing Arts Center, and the Church Walk Bridge submitted in support of the Lancaster Avenue Housing Land Development.

Conditional use approval was granted on November 24, 2014 to permit the development under CICD (decision attached). The applicant is proposing to construct a 1,138 bed student housing facility in six buildings with associated retail space.

The following waivers were approved during preliminary approval:

- §255-27.H – To permit a 30 ft radius curb on the southwest corner of Ithan Avenue and Lancaster Avenue intersection.
- §255-29.A.(12) – To permit 22' entry/exit drives as shown on the Plan.

Gannett Fleming, Inc.

P.O. Box 80794 • Valley Forge, PA 19484-0794 | 1010 Adams Avenue • Audubon, PA 19403-2402

t 610.650.8101 • f 610.650.8190

www.gannettfleming.com



The applicant appeared before the Planning Commission on June 17, 2015. The Planning Commission recommended approval of the plans based on the following conditions:

- That the applicant complies with the consultants letters.
- When construction is complete, if the Performing Arts Center is not an active project, the applicant must submit an amended land development plans and application (for the future use of the Performing Arts Center temporary parking area).
- That the applicant request a waiver for the 18' wide driveway at Stone and Farrell.
- Revisit the accessibility to the bridge and provide an accessible entrance at Lancaster Avenue for handicapped persons in addition to the staircase.
- The applicant is to discuss the elimination of 3 SEPTA parking spots and the relocation that is acceptable with Staff.
- Staff and Villanova are to work out the issues of comments under the Pike Parking Garage specifically relating to extending the southbound left-turn lane at Ithan Avenue and the main lot access to Ithan Avenue be altered at two separate driveways.

Lancaster Avenue Housing

Plans Prepared By: Nave Newell

Dated: 12/05/2015 and revised 05/26/2015

I Zoning

1. §280-68.1.D(3)(f)[2] – Mechanical/electrical equipment and trash shall be screened from view. In addition, sound attenuation shall be installed on all equipment to minimize noise pollution at any adjacent residential property line. The applicant has provided a detail of a “wood fence and rolling gate with sound barrier @ service area”. The applicant must clearly label on the plans where this will be located.
2. §280-68.1.D(3)(g) – Light fixtures shall be shielded to reduce light spillage beyond the property line of the campus; provided, however, that at no point shall any light trespass onto adjacent residential properties or exceed 0.5 footcandles at the residential property line. All proposed exterior site and building-mounted lighting shall meet the International Dark-Sky Association (IDA) full cutoff requirements. The applicant has provided a lighting design book for this project that indicates compliance with the IDA requirements.

II Subdivision and Land Development

1. §255-21.B(1)(j) – A complete outline survey of the property to be subdivided or developed, showing all courses, distances, tie-ins to all adjacent intersections and areas must be provided on the plans.
2. §255-27.H(6) - Minimum curb radii at street intersections shall be 25 feet for local streets; 30 feet for collectors; 35 feet for arterials; and 10 feet for driveways. The applicant received a waiver during preliminary plan approval to provide a 30 foot curb radius at the southwest corner of the Ithan/Lancaster Avenue intersection.
3. §255-29.A.(12) – The width of entrance and exit drives shall be a minimum of 25 feet for two-way use. The entrance exit drive shown on the plan into the proposed parking area behind the student housing from Ithan Avenue is 22 feet. The applicant received a waiver during preliminary plan approval for this requirement.
4. §255-43.1.E(2) – Where, upon agreement with the applicant or developer, it is determined that the dedication of all or any portion of the land area required for park and recreation purposes is not feasible, the applicant or developer shall pay a fee in lieu of dedication of any such land to the Township. The fee for non-residential subdivisions or land developments shall be \$3,307 per 4,000 square feet of building area. The fee is \$174,408.00 based on 210,957 square feet.
5. §255-54.B. – The central water supply system shall be designed with adequate capacity and appropriately spaced fire hydrants for firefighting purposes pursuant to the specifications of the National Fire Protection Association. Review and approval by the Township Engineer and the Township Fire Marshall shall be required in order to ensure that adequate fire protection is provided. This will be confirmed at the building permit phase.

III Stormwater Management

1. §245-22.A.1.(a) – Infiltration BMPs must have a minimum depth of 24 inches between the BMP and the top of the limiting zone. At this time the infiltration tests which have been submitted were at a depth of 5 feet, however, the infiltration systems (201 and 202) appear to be located at a depth of 7-7.5 feet.
2. Final approval of the stormwater management plan will be required as part of the Grading Permit process. Any revisions to the size or location of the individual structures or other features will be addressed at that time.

IV General Comments

1. The applicant shall obtain revisions to both the Radnor Township and Lower Merion Township Act 537 Plans in order to accommodate the increase wastewater disposal generated by the project.
2. There must be 10 feet of horizontal clearance between the sanitary sewer and the storm sewer between MH S12 and MH S10, shown on sheet C4.1.
3. The size of all proposed sanitary sewer laterals must be shown on the plan.
4. A grease trap must be provided for the restaurant located in building 2A. Only the wastewater from food preparation areas and/or kitchen wastes may be routed through the grease trap. Restroom wastes may not be discharged to the grease trap.
5. We note that the number of parking spaces for the entire project has increased from the previous submission. There will be a reduction of 1 parking space in the Nevin Field House parking area along North Ithan Avenue and the addition of 4 parking spaces in the West Lancaster Parking Lots.
6. On Sheet C2.3, the parking tabulation chart for Phase 2 indicates that there will be 4,853 parking spaces provided during construction. The chart lists parking spaces that total 4,873. This must be revised to be consistent.
7. The revised phasing plan provided with the Final plan submission must be replaced in the TIS. The plan provided in the TIS is outdated.

West Lancaster Parking

Plans Prepared By: Nave Newell

Dated: 03/06/2015 and revised 05/26/2015

I Stormwater Management

1. The "Volume – One Inch" calculations provided on page 24-26 appears to have some inconsistencies and should be reconciled.
 - a. The rainfall depth "P" is variable for each BMP when a value of 1-inch appears to be required. The applicant must explain/correct as appropriate.
 - b. The applicant must provide supporting calculation/documentation for the volumetric storage and volume credit for Infiltration Systems No. 101, 102, 103, and 104.

2. The applicant must provide a typical section for Infiltration System 3.
3. Final approval of the stormwater management plan will be required as part of the Grading Permit process. Any revisions to the size or location of the individual structures or other features will be addressed at that time.

II General Comments

1. All existing utility service laterals must be shown on the plans.
2. Sheet 2.1 of the plans indicate that there are 21 Septa parking spaces. The response letter submitted and landscaping plans indicate that there are 20 Septa parking spaces. This must be revised to be consistent.

Pike Field Garage

Plans Prepared By: Nave Newell

Dated: 03/06/2015 and revised 05/26/2015

I Subdivision Land Development

6. §255-54.B. – The central water supply system shall be designed with adequate capacity and appropriately spaced fire hydrants for firefighting purposes pursuant to the specifications of the National Fire Protection Association. Review and approval by the Township Engineer and the Township Fire Marshall shall be required in order to ensure that adequate fire protection is provided. The proposed fire access lane is proposed to be grass pavers. This will be confirmed at the building permit phase.

II Stormwater Management

1. §245-22.A.1.(a) – Infiltration BMPs must have a minimum depth of 24 inches between the BMP and the top of the limiting zone. At this time the infiltration tests which have been submitted were at a depth of 5 feet, however, the infiltration systems appear to be located at a depth of 10 to 11.5 feet.
2. The applicant must provide supporting calculation/documentation for the volume value reported on page 52 for “POI-3A - Elevate Low flow Orifice 6” to 411.00”. It is not clear from the report or the plans how this value was determined.

3. It is unclear from the charts provided on page 140-141 of the stormwater report how the tributary drainage area for YD-G3 is accounted for.
4. Final approval of the stormwater management plan will be required as part of the Grading Permit process. Any revisions to the size or location of the individual structures or other features will be addressed at that time.

Performing Arts Center

Plans Prepared By: Nave Newell

Dated: 03/06/2015 and revised 05/26/2015

I Zoning

1. §280-68.1.D(3)(g) – Light fixtures shall be shielded to reduce light spillage beyond the property line of the campus; provided, however, that at no point shall any light trespass onto adjacent residential properties or exceed 0.5 footcandles at the residential property line. All proposed exterior site and building-mounted lighting shall meet the International Dark-Sky Association (IDA) full cutoff requirements. The applicant has provided a lighting design book for this project that indicates compliance with the IDA requirements.
2. §280-68.1.D(3)(g) – The photometric layout or plan grid (showing footcandle levels) must be shown on sheet 7.1.

II Stormwater Management

1. Final approval of the stormwater management plan will be required as part of the Grading Permit process. Any revisions to the size or location of the individual structures or other features will be addressed at that time.

Church Walk and Bridge

Plans Prepared By: Nave Newell

Dated: 03/13/2015 and revised 05/26/2015

I Zoning

1. §280-68.1.D(2)(b) – Setbacks from the ultimate right-of way for major collector streets shall be 60 feet for surface parking lots. The visitors parking lot is less than 60 feet from

the proposed right of way line. This is a non-conformity that the applicant intends to continue.

2. §280-69.E(3) – Surface parking areas are classified as a category of use 1. Category 1 uses and structures shall be set back from rear and side property lines by 75 feet. The existing parking area is set back 20 feet. This is a non-conformity that the applicant intends to continue.

II Stormwater Management


1. §245-22.A.1.(a) – Infiltration BMPs must have a minimum depth of 24 inches between the BMP and the top of the limiting zone. At this time the infiltration tests which have been submitted were at a depth of 5 feet, however, the infiltration system appear to be located at a depth of 7.5 feet.
2. The “Volume – One Inch” calculations provided on page 24-26 appears to have some inconsistencies and should be reconciled.
 - a. The rainfall depth “P” is variable for each BMP when a value of 1-inch appears to be required. The applicant must explain/correct as appropriate.
 - b. The applicant must provide supporting calculation/documentation for the volumetric storage and volume credit for Infiltration Systems No.104.
3. Final approval of the stormwater management plan will be required as part of the Grading Permit process. Any revisions to the size or location of the individual structures or other features will be addressed at that time.

We recommend that the plans be revised to address the comments stated above along with comments provided in the review memo from Gilmore and Associates prior to consideration for approval, or conditional approval shall include the applicant addressing the comments to the satisfaction of the Township Engineer.

If you have any questions or require any additional information, please contact me.

Very truly yours,

GANNETT FLEMING, INC.



Roger A. Phillips, P.E.
Senior Project Manager



GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

MEMORANDUM

Date: June 22, 2015

To: Steve Norcini, P.E.
Radnor Township Public Works Director

From: Amy Kaminski, P.E., PTOE
Transportation Services Manager

cc: Kevin Kochanski, ASLA, R.L.A., Director of Community Development
Roger Phillips, P.E., Senior Project Manager, Gannett Fleming, Inc.
Steve Gabriel, PP, RETTEW
Damon Drummond, P.E., PTOE, Gilmore & Associates, Inc.

Reference: Villanova University – Lancaster Avenue Redevelopment
Final Land Development Review #1 - *Revised*
Radnor Township, Delaware County, PA

G&A 12-04054

Gilmore & Associates, Inc. (G&A) has completed a transportation review for the referenced project and offers the following transportation comments for Radnor Township consideration:

I. BACKGROUND

The applicant, Villanova University, intends to develop/redevelop several parcels located along Lancaster Avenue, southeast and southwest of the Ithan Avenue intersection, in Radnor Township, Delaware County. The project includes construction of student housing (1,135 bed apartment-style residence halls), retail shops (University Bookstore, bistro and small convenience store, size to be determined) along with 147 surface parking spaces to be located on the southwest corner of Lancaster Avenue and Ithan Avenue. In addition, the project includes construction of a Performing Arts Center (with 500 – 650 total seats in two theaters) and a multilevel parking structure (1,293 spaces) to be located on the southeast corner of Lancaster Avenue and Ithan Avenue. Villanova University intends to eliminate many of the existing driveway accesses located on the south side of Lancaster Avenue, west of Ithan Avenue and construct a shared surface parking lot to the rear of the existing university buildings along the south side of Lancaster Avenue. The Church Walk access and associated signalization will be relocated west of the present location and a new right in driveway will be constructed west of Church Walk. The applicant also intends to construct a pedestrian walkway over Lancaster Avenue at the present Church Walk access location.

BUILDING ON A FOUNDATION OF EXCELLENCE

65 E. Butler Avenue | Suite 100 | New Britain, PA 18901
Phone: 215-345-4330 | Fax: 215-345-8606

www.gilmore-assoc.com

II. DOCUMENTS REVIEWED

1. Final Land Development Submission for West Lancaster Parking, consisting of 32 sheets, prepared for Villanova University, prepared by Nave Newell, Inc., dated March 6, 2015, last revised May 26, 2015.
2. Final Land Development Submission for Church Walk and Bridge, consisting of 20 sheets, prepared for Villanova University, prepared by Nave Newell, Inc., dated March 13, 2015 last revised May 26, 2015.
3. Final Land Development Submission for Pike Field Garage, consisting of 37 sheets, prepared for Villanova University, prepared by Nave Newell, Inc., dated March 6, 2015, last revised May 26, 2015.
4. Final Land Development Submission for Lancaster Avenue Housing, consisting of 41 sheets, prepared for Villanova University, prepared by Nave Newell, Inc., dated December 5, 2014, last revised May 26, 2015.
5. Final Land Development Submission for Performing Arts Center, consisting of 19 sheets, prepared for Villanova University, prepared by Nave Newell, Inc., dated March 6, 2015, last revised May 26, 2015.
6. Pedestrian Parking & Traffic Plan, consisting of 5 sheets prepared for Villanova University, prepared by Nave Newell, Inc., dated May 26, 2015.
7. Event Traffic Circulation Plan, consisting of 4 sheets, prepared for Villanova University, prepared by Nave Newell, Inc., dated May 26, 2015.
8. Response Letter, prepared for Villanova University, prepared by Nave Newell, Inc., dated May 26, 2015.
9. Transportation Impact Study dated May 25, 2015 prepared by F. Tavani Associates, Inc.
10. Response Letter dated May 25, 2015 prepared by F. Tavani Associates, Inc.

III. CONSTRUCTION PHASING

The applicant has identified the following construction phasing Sheet 7 of 41(C2.3) *Project Phasing Plan* of the Lancaster Avenue Plan set.

1. During all Construction phasing, pedestrian facilities must be provided including along Lancaster Avenue and Ithan Avenue.
2. Phase 1 Improvements
 - i. St. Augustines Center Garage Expansion
 - ii. Improvements to the West Lancaster Parking facilities
 - iii. Ingress from Lancaster Avenue at existing driveways
 - iv. Egress to Lancaster Avenue at signal at the existing Church Walk driveway
 - v. Closure of Pike Lot surface parking field

Comment: Pedestrian movement is unimpeded during this phase.

3. Phase 2 Improvements (includes Highway Occupancy Permitting)
 - i. Construction of the Pike Field Parking Garage
 - ii. Temporary improvements to Pike Lot surface lot at the site of the future Performing Arts Center – PAC
 - iii. Construction of the Pedestrian Bridge over Lancaster Avenue
 - iv. Improvements to visitor lot, west of existing Church Walk

v. Lancaster Avenue and Ithan Avenue improvements

Comment: During the Phase 2 construction, a temporary walkway for the SEPTA Facility/South Campus student walkers is required. In addition, the pedestrian facilities and crosswalks at Lancaster Avenue and Ithan Avenue must be provided.

4. Phase 3 Improvements

- i. Construction of Student Housing Complexes 1 and 2
- ii. Continued use of Pike Lot surface lot at the site of the future Performing Arts Center – PAC

Comment: Pedestrian movement is unimpeded during this phase.

5. Phase 4 Improvements (Upon availability of funding)

- i. Elimination of Pike Lot surface lot
- ii. Construction of Performing Arts Center

Comment: Pedestrian movement is unimpeded during this phase.

IV. REQUESTED WAIVERS

1. §255-27.H – The applicant has been granted a waiver to permit a 30ft. curb radii for the curb on the southwest corner of Ithan Avenue and Lancaster Avenue.

V. GENERAL COMMENTS

1. Depending on the outcome for the preliminary/final approval for the proposed lot consolidation for the West Lancaster Avenue plan (dated 4/9/2015), the following comments may apply to the proposed improvements for the West Lancaster Parking Plan:
 - i. §255-29.A(1) – Parking aisle widths shall be a minimum of 18' for one-way aisles. The aisle between Stone and Farrell Hall is less than 18 feet and appears to include two-way vehicular movement.
 - ii. §255-29.A(15) All dead-end parking areas shall be designed to provide sufficient backup area for end stalls in the parking area located south of Farrell Hall.
 - iii. §255-29.A(21) – Concrete curbing is required along the perimeter of the parking areas in the area south of Farrell Hall.
2. Provide detectible warning surfaces for all pedestrian curb ramps.
3. Structural drawings for the pedestrian bridge and ramp should be provided for Township review.
4. Americans with Disabilities Act Accessibility Guidelines (ADAAG) comments:

- i. §4.1.1.(1) and (4) – During construction, ADA accessible facilities must be maintained or temporary facilities provided for all existing pedestrian routes onsite and along Lancaster Avenue and Ithan Avenue.
 - ii. §4.3.2(1) – An accessible route shall, to the maximum extent feasible, coincide with the route for the general public. Several locations require an ADA accessible route as follows:
 - a. Provide an accessible route near the proposed staircase located adjacent to the Lancaster Avenue sidewalk or eliminate the staircase from the design.
 - b. Provide an accessible route or eliminate the proposed steps/risers between Geraghty and Griffin Hall.
 - c. Provide an accessible route or eliminate the proposed steps/risers between the Farrell Hall surface lot and the pedestrian route to Geraghty Hall. Include a curb ramp from the sidewalk to cross the proposed driveway access.
 - iii. §4.6.2 – Accessible parking spaces shall be located on the shortest accessible route of travel from adjacent parking to an accessible entrance. Each building should include a minimum of one accessible parking space.
 - iv. §4.9.4 – Handrails shall be included and continuous along both sides of stairs and ramps. Additional detail must be provided to verify handrails are included in the design.
5. Consider including phasing numbers in the title of all plan sets to clarify the progression of work.
6. Traffic calming elements should be discussed with nearby affected neighborhoods, particularly residents on Aldwyn Lane.
7. Final Land Development Requirements:
- i. For plan clarity, provide a separate Pavement Marking and Signage Plan (PMSP). On the PSMP include final pavement markings and signage and exclude any existing pavement markings and signage that will be eradicated.
 - ii. Provide traffic signal construction and permit plans for both signalized intersections along with the construction and permit plans for the two proposed pedestrian-activated Rectangular Rapid Flashing Beacons (RRFB) on Ithan Avenue. The applicant has indicated these plans will be provided with the Highway Occupancy Permit application.
 - iii. Identify the design details for all proposed curb ramps. Provide PennDOT CS-4401 forms for all proposed curb ramps within any public rights-of-way.
8. Revise all stop bars locations to a minimum of 4 feet from any pedestrian crosswalk.

VI. WEST LANCASTER AVENUE (WLA) PARKING PLAN COMMENTS

1. Sheet 5 of 32 (C2.1):
 - i. Provide an accessible route or eliminate the proposed steps/risers along the sidewalk located between Geraghty and Griffin Hall.
 - ii. Provide an ADA compliant curb ramp at the proposed curb adjacent to the existing sidewalk near Farrell Hall.
 - iii. Provide curb ramps for the revised Emergency Access to Lancaster Avenue.
 - iv. Clarify the intended use of the gore striping near the Farrell Hall building. If this is intended to be used as a loading area or restricted parking, include signage and pavement markings as needed.
 - v. Provide an accessible pedestrian route from the Farrell Hall surface lots that cross the new right in/right out driveway and continues east to the new surface lot between the new driveway and Geraghty Hall; the proposed stairs are not accessible to individuals with disabilities. Include a sidewalk parallel to the Farrell Hall driveway access to eliminate the need for pedestrians to walk in the active driveway.
 - vi. Straighten the skewed walking route proposed for the right in/right out access to Lancaster Avenue to a more direct route. It is unlikely pedestrians will follow the current design.
2. Sheet 6 of 32 (C2.2):
 - i. Revise the phasing for the construction of the fence across Church Walk to a later phase (Phase 2B). The existing Church Walk driveway will need to be fully operational during Phases 1 and 2A and the proposed fence extends across a portion of the driveway.
 - ii. Revise the phasing for the construction of the fence on the north side of Lancaster Avenue, to follow the completion of the Pedestrian Bridge. The Church Walk Pedestrian Access/or the proposed temporary pedestrian route must remain accessible during the WLA construction.
3. Provide direct ADA access from the WLA Visitor Parking lot to the sidewalk adjacent to Lancaster Avenue. Include an ADA ramp that runs parallel to the sidewalk in place of one set of the proposed stairs.
4. Eliminate the three parking spaces adjacent to the railroad tracks in the middle of the new Church Walk intersection to reduce potential conflicts with moving traffic at the intersection.
5. Provide a 4" yellow line instead of a 4" white line perpendicular to the stop bar at the new Church Walk intersection near the railroad tracks.

VII. CHURCH WALK PLAN

1. Provide a construction narrative within the plan set. The new Church Walk access to Lancaster Avenue must be fully operational (fully constructed and signaled) prior to construction of the Pedestrian Bridge.

2. Sheet 4 of 20 (C2.1): Include a Stop Sign (R1-1) for the WLA visitor lot exit.
3. Sheet 6 of 20 (C4.1): Church Walk and Lancaster Avenue
 - i. Provide the proper lane use control signage for each approach to the intersection.
 - ii. Extend the stop bar on the eastbound approach to the edge of the curb line.
 - iii. Refer to PennDOT Publication 111 *Traffic Control Pavement Markings and Signage Standards, TC-8600 Pavement Markings* for the following corrections:
 - a. Revise the 4" broken white line to a 6" solid white line for distance of 150' measured from the stop bar, on the east and westbound approaches to the intersection.
 - b. The ARROW/ONLY templates should be located 60' from the stop bar.
 - iv. ADAAG §4.3.2(1) – An accessible route shall, to the maximum extent feasible, coincide with the route for the general public. Provide an accessible route for access to the Pedestrian Bridge near the proposed staircase located adjacent to the Lancaster Avenue or eliminate the staircase closest to Lancaster Avenue from the design.

VIII. PIKE GARAGE PLAN COMMENTS

1. Sheet 7 of 37 (C2.2):
 - i. ADAAG §4.3.2(1) – An accessible route shall, to the maximum extent feasible, coincide with the route for the general public. Provide an accessible pedestrian route to the multipurpose athletic field or eliminate the proposed stairs.
 - ii. Provide an accessible route from the handicapped parking spaces located in the northwest corner of the Pike Field surface lot to the Lancaster Avenue and Ithan Avenue intersection.
 - iii. Include an accessible curb ramp for the pedestrian crosswalk receiving ramp located on the northeast corner of Lancaster and Ithan Avenue.
 - iv. Revise the location of the arrow leader for the CURB RAMP TYPE 1 on the southeast corner of Lancaster and Ithan Avenue intersection. It appears to point to the sidewalk.
 - v. The applicant has extended the southbound Ithan Avenue left turn lane width to a full width length of 175' with a 100' taper. Please include truck turning templates to ensure proper placement of stop bars on both Lancaster Avenue and Ithan Avenue; adjust the locations as need to accommodate truck turns. It is likely the Lancaster Avenue westbound left turn stop bar will need to be adjusted.
 - vi. The plans include a midblock pedestrian crosswalk on Ithan Avenue, between Bartley Hall and Jake Nevin Field House, north of Lancaster Avenue.
 - a. The 2009 MUTCD Section 3B.18 indicates that an engineering and traffic study should be performed before crosswalks are installed at a location away from a signalized intersection or a stop controlled intersection.

- iii. Verify sight distance is available for the proposed crosswalks on Ithan Avenue and include a note on the plan indicating the existing and required sight distance for both pedestrian crosswalks.
2. Sheet 9 (C2.5): Revise the Lancaster Avenue median gore at Church Walk in Exhibit 4 to accommodate the left-turn exits from Church Walk.
3. The applicant may want to consider designating short term parking for spaces located near the proposed retail space in the LAH parking area to encourage parking turnover.
4. Relocate bus stops along eastbound Lancaster Avenue to align with the future proposed pedestrian access. Include the relocated bus stops on the proposed plan.
5. Provide ADA compliant curb ramps for the SEPTA station including access to the platform and the pedestrian bridge ramp area.

X. PERFORMING ARTS CENTER PLAN

No transportation comments.

XI. LANCASTER AVENUE HOUSING PEDESTRIAN PARKING & TRAFFIC PLAN

1. Phase 1: Phase 1 improvements may require signal timing modifications at the Church Walk intersection due to the redistribution of traffic from Ithan Avenue to the Church Walk signal. In addition, a Highway Occupancy Permit will be required to eliminate and construct driveway accesses along Lancaster Avenue.
2. Phase 2A: Revise the new temporary walkway to extend to the existing walkway.
3. Phase 2B: The proposed temporary pedestrian route for Phase 2B appears to utilize an unimproved surface along a grassy hill. The pedestrian route surface must be a stable, firm, slip-resistant surface and free of any tripping hazards. Provide additional detail on the Phase 2B pedestrian route in future submissions.

XII. EVENT CIRCULATION PLAN

1. The Radnor Police Department should review the Event Traffic Circulation Plan.
2. Refer to the Manual of Uniform Traffic Control Devices (MUTCD) 2009 (Chapter 2L *Changeable Message Signs*) and PennDOT Publication 646 *Intelligent Transportation Systems Design Guide* and verify the DMS sign placement/location based on the reading and decision zone, number of lines, character length and height is adequate for roadway conditions. Although the applicant has indicated the designer will refer to MUTCD 2009; the plans should be reviewed by the Township,

- b. Revise the plan to include a sight distance analysis and include the analysis on the plans.
 - c. Include a PEDESTRIAN warning sign (W11-2) sign along with a DIAGONAL DOWNWARD POINTING ARROW plaque (W16-7P) for both approaches to the midblock crosswalk.
 - d. Include detectible warning surfaces and accessible curb ramps for any pedestrian crossings.
 - e. Consider including a pedestrian-activated Rectangular Rapid Flashing Beacon (RRFB) at the proposed mid-block crossing.
2. Sheet 8 of 37 (C2.3):
- i. Revise the curb radii on the southwest corner of Ithan Avenue and Lancaster Avenue to provide a minimum 30ft. curb radii.
 - ii. Eliminate the stop bar on the southbound approach of Ithan Avenue at the proposed LAH/Pike Garage accesses.
 - iii. Relocate the proposed stop bar from the Pike Garage access to Ithan Avenue a minimum of 4' from the pedestrian crosswalk.
 - iv. It is unclear how the "Main Lot" access to Ithan Avenue was altered from the existing two separate driveways (one ingress and one egress to Ithan Avenue) to the proposed 25' wide full access to Ithan Avenue. Provide additional details and revise the plans as necessary. The proposed access location appears to be centered on the transition for the back to back left turn lanes on Ithan Avenue and will introduce turning conflicts that should be avoided.
3. Construction for the pedestrian-activated Rectangular Rapid Flashing Beacon (RRFB) at the Pike Garage is planned to coincide with the construction of the Pike Garage; however, the signal should remain hooded until after the LAH improvements are constructed and the pedestrian crosswalk is fully constructed during the LAH improvements.
4. Provide a KEEP RIGHT sign (R4-7) and OBJECT MARKER (OM1-3) on each end of the driveway median at Lancaster Avenue.

IX. LANCASTER AVENUE HOUSING PLAN COMMENTS

1. Sheet 6 of 41 (C2.2)
 - i. The plan identifies two pedestrian-activated Rectangular Rapid Flashing Beacons (RRFB) for the midblock pedestrian crossings on Ithan Avenue near both the South Campus dormitories and Aldwyn Triangle, and the LAH and Pike Garage accesses; Flashing Warning Beacon permits and construction plans are required for both locations. The applicant has indicated plans will be provided along with the Highway Occupancy Permit application.
 - ii. Eliminate the stop bar on southbound Ithan Avenue at the proposed LAH/PAC driveways.

Memorandum to Steve Norcini, P.E.
Re: Villanova University LAH Final 1- *Revised*

Page 9 of 9
June 22, 2015

3. For ease of recognition and memory retainage, the applicant should consider reducing the message length and eliminate parking structure names in favor of structure and sign colors.

XIII. TRAFFIC IMPACT STUDY
We have no additional comments.



We answer to you.

3020 Columbia Avenue, Lancaster, PA 17603 • Phone: (717) 394-3721
E-mail: rettew@rettew.com • Web site: rettew.com

Engineers
Planners
Surveyors
Landscape
Architects
Environmental
Consultants

June 24, 2015

Mr. Stephen F. Norcini, PE
Public Works Director
Radnor Township
301 Iven Avenue
Wayne, PA 19087-5297

RE: Villanova University
Lancaster Avenue Housing, Related Parking Improvements, and
Performing Arts Center
Final Land Development Plan
Review No. 1 (REVISED)
RETTEW Project No. 101442003

Dear Steve:

We have completed our review of the above referenced plan as prepared by Nave Newell, Inc. Our review was of the following information received on June 1, 2015, lighting and mechanicals information supplements received on April 1, 2015, landscaping elevation views received on April 3, 2015, as well as the responses presented by the applicant verbally and in writing at the April 25 and May 11, 2015 Board of Commissioners meetings and May 4 and June 17 Township Planning Commission meetings:

1. Forty-one (41) plan sheets for Lancaster Avenue Housing dated December 5, 2014 and last revised May 26, 2015;
2. Thirty-two (32) plan sheets for West Lancaster Parking dated March 6, 2015 and revised May 26, 2015;
3. Thirty-seven (37) plan sheets for Pike Field Garage dated March 6, 2015 and revised May 26, 2015;
4. Nineteen (19) plan sheets for the Performing Arts Center dated March 6, 2015 and revised May 26, 2015;
5. Four (4) sheets for the Event Circulation Plan dated May 26, 2015;
6. Pedestrian, Parking, and Traffic Phasing Plan dated May 26, 2015;
7. Lancaster Avenue Housing Evacuation Plan with diagram dated March 2, 2015;
8. PECO response letter concerning additional landscape material stamped received December 19, 2014 by the Facilities Management Office;
9. Storm Water Management Report and Site Drainage Calculations dated March 6, 2015 and revised May 26, 2015; and,
10. A plan review comments response letter dated March 6, 2015.

Project Overview:

<u>Applicant:</u>	Villanova University
<u>Requested Action/Use:</u>	Final Land Development Plan Review: Lancaster Avenue Housing West Lancaster Parking



Pike Field Garage
Performing Arts Center

Zoning District: PI-Planned Institutional; CO-Commercial Office; R-3-Residence

Location and Size: Lancaster Avenue Student Housing and most related parking improvements properties are located between Lancaster Avenue and the SEPTA R-100 tracks, and between Pike Field and Farrell Hall on the Villanova campus. Improvements to the SAC Garage are located on land at the north end of the Main Campus along the AMTRAK/SEPTA rail lines. Apart from the SAC Garage site, the subject lands are roughly coincidental with the CICD development proposal which the applicant indicated contained gross site area of approximately 13.81 acres.

Existing Use: Surface parking lots and small University office buildings.

Proposed Use: Student dormitories, student-centered retail, Performing Arts Center, and related Pike Parking Garage, West Lancaster Avenue parking lot, and SAC Garage expansion.

We performed a compliance review of the land development plans with certain elements of the Radnor Township Zoning Ordinance, with the applicant's phasing plan, and with the Radnor Township Comprehensive Plan. Following discussions at the June 17 Township Planning Commission meeting, our June 8, 2015 review letter was revised and is submitted here to reflect the latest discussions on the review letter comments. In addition, our June 8, 2015 report on the status of the applicant's compliance to date with the conditions of the Board of Commissioners' CICD conditional use approval was updated and is provided to you for the Board of Commissioners in a separate memorandum. We have the following remaining comments here on Villanova's Final Plan submittal:

SPECIFIC ZONING

1. Landscaping information has been provided by the applicant including section and elevation drawings along the south property line of the Housing portion of the site showing new and existing vegetation looking in a west to east direction as well as in a south to north direction. These views demonstrate that the proposed Buffer Planting Strip along the R-100 line provides a screen of sufficient density not to be seen through and of sufficient height to constitute an effective screen and give maximum protection and immediate visual screening to an abutting property or district (§ 280-4B, § 280-68.1.D(3), and § 280-71.D). The same views of the landscaping proposed for the West Lancaster Parking Plan have been provided and demonstrate the same buffering sufficiency.
2. Sub-section 71.A of the zoning ordinance requires buffer planting strips to be not less than 20 feet in width. There are places at the rear of the West Lancaster Parking and Lancaster Housing where the width of the buffer planting strip is less than 20 feet wide. However, Sub-section 71.D allows for alternative buffer planting strips stating, "As an alternative to the possibly linear appearance

RETTEW

of the minimum requirements above, applicants are encouraged to provide innovative, free-form buffers which need not be located entirely within the minimum required width. Such alternative buffers shall be subject to approval by the Township." Such alternative buffer planting strips would be required to meet the same "screen of sufficient density not to be seen through...and immediate visual screening..." standard as noted above and our review concludes that the standard is met.

3. Landscaping information has been provided by the applicant including a plan view of the landscaping proposed to surround the Pike Field Parking Garage and the Performing Arts Center. Further, the applicant indicated during its presentation at the March 10 Planning Commission meeting that it will provide additional landscaping along the eastern boundary of Pike Field as desired by residents of Barley Cone Lane to buffer their view of the Pike Field Parking Garage and Performing Arts Center. The development plan needs to reflect this additional landscaping desired by the Barley Cone Lane residents. The ultimate standard required of such landscaping is the same as above "a screen of sufficient density not to be seen through and of sufficient height to constitute an effective screen and give maximum protection and immediate visual screening to an abutting property or district," as called for by § 280-68.1D(3)(b) and § 280-71.D.
4. The submitted lighting plan information for all four development plans includes isometrics that demonstrate light at the nearby residential property lines is well below the maximum 0.5 foot-candles allowed. The information also demonstrates that the site and area lighting proposed within the CICD complies with International Dark Sky Association (IDA) full cut-off standards (§ 280-68.1D(3)(g)).
5. The Housing plan needs to include information describing the sound attenuation devices that are a part of or are to be installed on all mechanical, electrical, and trash equipment to minimize noise pollution at any adjacent residential property line (§ 280-68.1D(3)(f)). A fence and gate enclosure are proposed to surround the trash compactor shown at the R-100 end of the eastern portion of Building 1-C in the Housing Plan, and an Acoustifence noise reducing fence cover will be woven into the full fence and gate. The equipment in the mechanical pit adjacent to South Ithan Avenue sits below grade and will be bounded by a safety fence such that sound will be contained and should not unacceptably spill over onto Ithan Avenue.

CHURCH WALK AND PEDESTRIAN BRIDGE PLAN

1. On Sheet L1.1, diagonal lines cover nearly all of the Aldwyn Triangle. If those diagonal lines are meant to indicate that virtually all of the Triangle is being preserved, a note to explain that should be added to the plan.

PHASING AND PEDESTRIAN PARKING AND TRAFFIC PLAN

1. Phase 1 - the buffer planting strip that is proposed between the proposed West Lancaster Parking Lot and the R-100 line needs to be ordinance compliant and in place prior to the start of construction of any part of Phase 2.

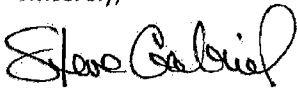
2. Phase 1 – any landscaping to be installed on Villanova property along the Barley Cone Lane properties at the request of the property owners needs to be installed during Phase 1 construction activities and before the start of construction of the Pike Field Garage in Phase 2A.
3. Phase 3 – according to the land development plan, vehicular access to the Pike Garage will be provided through the parking lot aisle behind the proposed dormitories and needs to be available when the Pike Garage opens after its completion in Phase 2A. Until the dormitories and parking lot behind are completed in Phase 3, Villanova and its contractors working on the dormitories and associated parking lot need to maintain temporary access through the dormitories/parking lot construction site to the Pike Garage in order for the traffic and special event management to work as proposed by Villanova.
4. Phase 3 - the buffer planting strip that is proposed between the proposed parking to the rear of the proposed new dormitories and the R-100 line needs to be ordinance compliant and in place prior to occupancy of the dormitories and prior to the construction start of any part of Phase 4.

COMPREHENSIVE PLAN CONSISTENCY

1. Our previous review indicated that Villanova's proposed development plan was generally consistent with various components of the Township's Comprehensive Plan including Institutional uses, Environment and Natural Resources, Transportation and Circulation, and Stormwater policies.

Should you have any questions or require any additional information, please do not hesitate to contact us at any time.

Sincerely,



Stephen R. Gabriel, PP
Township Planning Consultant

copy: Steve Norcini, Public Works Director (email: snorcini@radnor.org)
Suzan Jones (email: sjones@radnor.org)
Kevin Kochanski, RLA, CZO – kkochanski@radnor.org
Roger Phillips, PE – rphillips@gfnet.com
Amy Kaminski, PE – akaminski@gilmore-assoc.com
John B. Rice, Esq. – jrice@grimlaw.com
Peter Nelson, Esq. – pnelson@grimlaw.com

CONDITIONAL USE APPLICATION OF VILLANOVA UNIVERSITY

ORDER

AND NOW, this 24th day of November, 2014, after due deliberation and discussion at public hearings, the Radnor Township Board of Commissioners does hereby grant the Conditional Use Application of Villanova University, subject to the following conditions:

1. The applicant shall comply with all other applicable Township Ordinances and shall submit a land development plan pursuant to the Township's Subdivision and Land Development Ordinance prior to the construction of any facilities.

2. That the transportation, roadway and signalization and improvements necessary for the construction have full access to Ithan Avenue from both the Pike Lot Parking Garage and Lancaster Avenue housing parking area with provisions for stop control for both parking accesses to Ithan Avenue and a pedestrian activated signal including the new pedestrian crosswalk be required if approved by PennDOT, unless waived by the Board of Commissioners during the land development process.

3. That during the land development process an event circulation plan be developed to address event parking and traffic circulation with the input of the Radnor Township Police Department and Township traffic engineer outlining procedures, traffic patterns, parking configurations and way finding techniques for the various sporting and other events held at the University. Upon development of the event circulation plan, Villanova shall be responsible for constructing and/or installing such signs, structures, or other directional aids necessary to implement the event circulation plan.

4. That Villanova University contributes the sum of One Hundred Seventy-Five Thousand Dollars (\$175,000.00) towards the design, approval and installation of a traffic adaptive signal system that would incorporate the following signalized intersections along Lancaster Avenue:

- a. Sproul Road/Spring Mill Road; Aldwyn Lane/ Kenilworth Street
- b. Church Walk
- c. Ithan Avenue
- d. Lowrys Lane
- e. Airdale Road
- f. County Line Road

5. That during the land development process an emergency evacuation plan for the new student housing be developed.

6. That appropriate fencing be provided on both the north and south sides of Lancaster Avenue in the area of the church walk pedestrian bridge in an effort to restrict pedestrian traffic from accessing the campus. A gate shall be provided for vehicular and pedestrian access during church events if approved by the Board of Commissioners during the land development approval process.

7. That the University preserve the entire area known as the Aldwyn Triangle and restrict it as open space except for that portion of the area necessary to provide pedestrian activity and handicap accessibility improvements for the adjacent SEPTA rail line.

8. That a landscape and buffer plan be developed to comply with Section 280-68.1.D. (3)(b) of the Zoning Ordinance.

9. That Villanova seek permission from PECO to plant screening on the south side of the PECO R-100 line to visually screen the SEPTA bridge from the adjacent residential neighbors. Provided that the applicant receives permission, Villanova shall provide an installation and maintenance plan of the vegetation necessary for this screening during land development.

10. Villanova shall provide Radnor Township a list of contractors, subcontractors and vendors and their addresses within twenty (20) days of the execution of any contracts by Villanova in connection with the development and/or construction of the proposed project. The purpose of this list is to permit the Township to audit for required business privilege/mercantile taxes.

11. During the land development process, the Applicant shall use its best efforts to develop and construct stormwater management facilities, including green infrastructure practices and components that meet or exceed infiltration or retention requirements as currently required by the Radnor Township Stormwater Management Ordinance. The Applicant shall conduct soil testing as necessary to determine whether the site can accommodate volume management in excess of 1-inch of run-off from all impervious surfaces resulting from the project. If soil testing indicates that it is possible to provide volume management in excess of 1-inch of run-off, the Applicant shall construct such necessary stormwater facilities on the site to accommodate this increased volume.

12. The Applicant shall obtain revisions to both the Radnor Township and Lower Merion Township Act 537 Plans in order to accommodate the increased waste water disposal generated by the project.

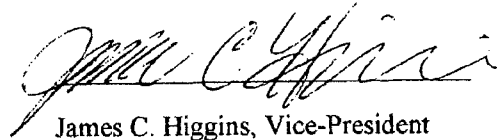
13. The Applicant shall develop a traffic plan during the land development process delineating the paths by which the existing population of commuting and part-time students will be directed to and from parking for each phase of the construction.

14. The Applicant shall permit parishioners to park, on a space available basis, on the north side of Lancaster Avenue on existing Villanova property adjacent to the church for church related events.

15. The Applicant shall maintain a pedestrian crosswalk from the proposed project site to the existing church at the present church walk location if approved by Penn Dot.

16. The Applicant shall insure that no amplified music or other excessive noise shall emanate from any of the south facing dormitories. During the land development process, the Township and applicant shall establish a permissible sound level at the property boundary of the the Aldwyn Lane residential uses.

17. The Applicant's land development plans shall be in substantial conformity with the Conditional use plans dated May 2, 2014 as amended during the hearings.



James C. Higgins, Vice-President

Radnor Township Board of Commissioners

Date of mailing 12/5/14