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## E. M. WATERBURY & ASSOCIATES, P.A.

ENGINEERING • PLANNING • LAND USE & DEVELOPMENT

May 20, 2021

West Long Branch Zoning Board of Adjustment  
c/o Ms. Chris Ann DeGenaro, Zoning Board Secretary  
965 Broadway  
West Long Branch, NJ 07764

File No. WLBZB 2019-22

Re: Engineering Review No. 3  
Monmouth University (ZB 2019-22)  
Use & Bulk Variances, Preliminary and Final Major Site Plan  
400 Cedar Avenue  
Block: 13, Lots: 1-5, 7-9, 11, 12.01 & 12.02; Zones: R-22 & I

Dear Board Members:

As requested, I have reviewed the following as it relates to the referenced application:

- Engineering plans entitled “Monmouth University ‘D’ & ‘C’ Variance/ Preliminary and Final Site Plan prepared by William E. Fitzgerald, PE, PP dated last revised April 1, 2021 consisting of sheet no. 2, 7-12.
- Correspondence prepared by Isaac Gadikian and Christopher A. Peltier, PE undated with attached detail entitled “Fence Detail of Sound Enclosing Fence”, undated.
- Correspondence dated from Dean Volpe, Captain of Police Monmouth University and Paul Habermann, Chief of Police Borough of West Long Branch dated May 10, 2021 and attachment.
- Photo Exhibit of existing University structures on the site.
- Calculations entitled “SWM 3&4 Storms with attachment dated as printed May 7, 2021.
- Tree replacement tabulation prepared by William Fitzgerald, PE, PP dated May 12, 2021, consisting of six (6) sheets with attachments.
- Correspondence prepared by John Rea, PE dated May 12, 2021.
- Fence Detail of Sound Enclosing Fence, undated.

In addition, I have also reviewed the following submitted prior by the applicant or their professionals:

- Correspondence prepared by Steven G. Mlenak dated April 9, 2021.
- Resolution of the West Long Branch Zoning Board of Adjustment entitled “Resolution of the Zoning Board of Adjustment of the Borough of West Long Branch Granting D(6) Variance Relief, and Preliminary and Final Major Site Plan Approval” dated December 17, 2015.
- Resolution of the West Long Branch Zoning Board of Adjustment entitled “Resolution of the Zoning Board of Adjustment of the Borough of West Long Branch In the Matter of the Application of Monmouth University For Premises Known as Lot 12.02, Block 39” dated December 16, 2010.
- Resolution of the West Long Branch Zoning Board of Adjustment entitled “Approval Resolution Zoning Board of the Borough of West Long Branch” memorialized on March 22, 2007.
- Resolution of the West Long Branch Zoning Board of Adjustment entitled “Approval Resolution Zoning Board of the Borough of West Long Branch” memorialized on January 25, 1996.
- Resolution of the West Long Branch Zoning Board of Adjustment entitled “Approval Resolution Zoning Board of the Borough of West Long Branch” memorialized on December 21, 1995.
- Report from Borough Traffic Safety Officer dated January 2, 2021.
- Correspondence prepared by Gary S. Forshner, Esq. of Greenbaum Rowe Smith & Davis LLP dated December 5, 2019.



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- Completed Variance Application for the referenced project dated December 5, 2019.
- Correspondence prepared by Steven Mlenak, Esq. of Greenbaum Rowe Smith & Davis LLP dated December 24, 2020 with attached Phasing Plan.
- Completeness report and fee calculation for Bifurcated Variance application prepared by T&M Associates dated February 24, 2020.
- Revision Resubmission application form prepared by Steven Mlenak, Esq. dated December 24, 2020.
- Completed Development Regulations Checklist prepared by William E. Fitzgerald, PE, PP dated December 24, 2020.
- Application for Environmental Commission Site Plan Review.
- Architectural plans prepared by Brian Fitzgerald, RA, AIA for “Proposed Storage/ Maintenance Building Block 39, Lot 12.02 Monmouth University” dated last revised December 3, 2019, consisting of one (1) sheet.
- Architectural plans prepared by Brian Fitzgerald, RA, AIA for Existing Residence Conversion to proposed Monmouth University Alumni House Block 39, Lot 2 dated last revised December 3, 2019, consisting of nine (9) sheets.
- Architectural plans prepared by Brian Fitzgerald, RA, AIA for “Proposed Conversion to Monmouth University Office Block 39, Lot 12.02, 98 Larchwood Avenue” dated last revised December 3, 2019, consisting of six (6) sheets.
- Architectural plans prepared by Brian Fitzgerald, RA, AIA for “Proposed Conversion of Existing Alumni House to Temporary Police Station and Future Academic Building” Block 39, Lot 12.01 dated last revised December 3, 2019, consisting of six (6) sheets.
- Architectural plans prepared by Edward Matthew O’Brien, RA, AIA for “Proposed Golf House and Learning Center” dated last October 4, 2019, consisting of four (4) sheets.
- Architectural plans prepared by Stephen J. Carlidge, AIA of Shore Point Architecture, PA for Monmouth University Police Headquarters last revised December 4, 2019, consisting of five (5) sheets.
- Stormwater Management Report prepared by William E. Fitzgerald, PE, PP dated last revised December 3, 2020.
- Correspondence dated December 9, 2020 prepared by William E. Fitzgerald, PE, PP.
- Traffic Report prepared by John H. Rea, PE and Scott T. Kennel dated December 5, 2019.
- Report from West Long Branch Shade Tree Commission dated January 25, 2020.
- Report from West Long Branch Fire Marshal dated January 6, 2020.

The application is for a Use ‘D’ Variance, Bulk Variances and Preliminary and Final Site Plan to expand the existing University property into lots containing residential homes at the corner of Larchwood and Cedar Avenues. The majority of the existing University is located within the I (Institutional) Zone of the community. The proposed development proposes to convert residential properties located within the R-22 (Residential) Zone into buildings and support improvements for the University. The proposed use is not permitted in the R-22 Zone. The portion of the University containing the development is located at the corner of Cedar Avenue and Larchwood Ave. The application was deemed complete at the Board’s meeting on January 28, 2021.

#### **Summary**

***The applicant has submitted revised plans to address comments in my report dated April 10, 2021 and those raised at the hearings to date. The main items the applicant intends to address with the submitted information are:***



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- a. *Traffic comments addressing stacking on Larchwood and its impact to the proposed drive.*
- b. *Impacts of the project on the existing Joint Traffic and Parking Plan in place between the Borough and the University.*
- c. *Compliance of the project with the Borough's tree preservation ordinance.*
- d. *Sound attenuation of any generator noise for the utility proposed at the Police Station*
- e. *Proposal for lot consolidation.*

*In addition, to assist the Board with their understanding of the structures that exist on the property, the applicant submitted exhibits containing the lot and block designations, addresses and photographs of each of the structures within the proposed project area on the campus.*

The revisions are intended to address comments in my report dated April 10, 2021 and comments received at the Board hearings on March 23, 2021 and April 14, 2021. The numbering follows that of the April 10, 2021 report. The manner the applicant has looked to address the comment is noted in *italic*. Outstanding or additional comment is noted in *italic bold*.

I offer the following for the Board's consideration.

1.0 Of-Site Improvements

- 1.1 The site is located along the portion of Cedar Avenue that is in the jurisdiction of the New Jersey Department of Transportation. I defer comment to the Department for off-site Improvements along Cedar Avenue. The intersection is part of the NJDOT jurisdiction. ***This is a continuing comment.***
- 1.2 The project also has frontage along Larchwood Avenue. This roadway is in Borough jurisdiction. I defer comment to the Borough Engineer on off-site improvements along this roadway. However, I recommend that as a minimum, the applicant repair any curb or sidewalk damaged along the frontages of the proposed project area. Sidewalk along Cedar is broken and depressed. In addition, the plans should reflect the removal of concrete aprons and the conversion of depressed curb to full height in areas where drives are proposed to be removed. It appears this work is shown pictorially but should be noted on the plan and details provided. ***The applicant has added notes to the plan indicating the areas where aprons and depressed curb from drives to be removed on Cedar Avenue and are to be replaced with full height curbing and sidewalk. The condition of the sidewalk along Cedar Avenue is in generally poor condition. I recommend that as a condition of any approval the Board might grant, that the sidewalk along their frontage be replaced. The work falls within the NJDOT jurisdiction. Therefore, approval from NJDOT would be required.***
- 1.3 Please note the entrance is located off Larchwood Avenue. See comment 3.1 to follow for comment on access location. I note there is rutting along the edge of roadway where the curbing ends on Larchwood on the southwest corner of the intersection. I anticipate this is due to vehicles going to the east to go around vehicles turning west. Concrete curb exists on the western side of Larchwood, but none exists on the eastern side. I defer comment to the Borough Engineer if curbing should be provided along Larchwood in the limit of the proposed project, in particular between the intersection of Cedar Avenue and the proposed entrance drive. ***The prior plan had indicated an increased radius size at the intersection to allow improved movement for the right-hand turn from Larchwood heading north onto Cedar heading east. At the April 14, 2021***



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*hearing, the applicant's engineer indicated that existing utilities and signalization equipment prevents them from achieving that improvement. Therefore, this has been removed from the revised plans. The plans, however, continue to depict the extension of proposed curb along the Larchwood frontage extending from the intersection south, past the proposed driveway. I recommend the Borough Engineer confirm the location the curb for the half width of the roadway from the existing centerline.*

*The applicant had indicated that the traffic engineer will be testifying at the upcoming hearing. I am in receipt of a report dated May 12, 2021 from the applicant's traffic engineer. The report indicates that the drive is located approximately 290 feet from the intersection with Larchwood and Cedar, and that stacking waiting at the intersection will not impact the proposed drive. Based on the information provided in the May 12, 2021 report, this conclusion is reasonable. However, I am in receipt of report from the Traffic Safety Officer requesting a left turn egress restriction. I recommend the Traffic Safety Officer review this information and provide any comments. I note that I anticipate few left turn movements out of the site. The applicant should address impact if these were restricted.*

*I noted in my prior reports that there are utilities along Larchwood that complicate any widening of the roadway. Therefore, an additional lane is not proposed by the applicant. Instead, the applicant has proposed to provide a right turn lane at the Cedar Avenue drive to encourage use of that drive for the movement. This improvement is intended to draw vehicles, wanting to make that movement, away from the Larchwood/ Cedar Avenues intersection. I have no objection to the addition of the right turn lane at the access drive. The provision of an additional lane at the signalized intersection would fall in the jurisdiction of the NJDOT and the Borough Engineer. The change of the Cedar Avenue drive configuration requires NJDOT approval. In addition, I defer comment to the Borough Engineer on further off-site improvements.*

1.4 The applicant proposes to connect the proposed stormwater management system to the existing inlet located on Cedar at the intersection with Larchwood. This inlet is part of the NJDOT drainage system. Approval is required from the NJDOT for the connection. ***This is a continuing comment.***

## 2.0 Zoning

2.1 The portion of the University bounded by Cedar, Larchwood and Norwood Avenues overlaps two zones. The majority of the continuous campus in this area is located in the I Zone. The portion of the property where the work is proposed is located in the R-22 Zone. The use is permitted in the I Zone but is not permitted in the R-22 Zone. Therefore, a Use "D" variance is required. Schools are considered an "inherently beneficial" use. This determination addresses the positive criteria requirement. However, the applicant is still required to address the negative criteria. The applicant should address the following as it relates to the application:

- a. Evaluate the public interest served by the inherently beneficial use.
- b. Identify any adverse consequences of granting the variance.

As part of their review, the Board should consider conditions which might be imposed to mitigate any adverse consequences; and then, balance the public interest in granting the variance versus the adverse impact, as lessened by any conditions imposed by the Board. The Board should consider the application on balance and determine whether, on balance, there would be a substantial detriment to the public good if the variance were



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granted. ***This is a continuing comment.***

2.2 The plans indicate relief requested from section 18.8.1c which states “That no nonconforming use may be expanded.” The applicant is proposing to expand the non-conforming use in the zone. Therefore, relief is required. ***This is a continuing comment.***

2.3 The plans indicate the project is on Lots 1-5, 7-9, 11, 12.01 and 12.02. However, most of the work is contained on Lots 1-5, 12.01 and 12.02, with minor overlap onto lot 7. The lots with the majority of the work, 1-5 12.01 and 12.02, are located within the R-22 Zone of the Borough. Lot 7 is in the I Zone. Lots 7, 12.01 and 12.02 presently contain improvements relating to the University. Lots 1, 2, 4 & 5 currently contain single family dwellings. Lot 3 is vacant. As noted above, the proposed use is not permitted in the R-22 Zone. Section 18-5.1 outlines the requirements for the zone. Variances are required for any deviations from these requirements on Lots 1-5, 12.01 and 12.02. The following is a comparison of the project to the zone requirements. I have provided the information as a single lot for the area created by Lots 1-5, 12.01 and 12.02.

Description	Required	Existing	Provided
Lot Area	22500 SF	655,529 SF or 15.04 ac	655,529 SF or 15.04 ac
Lot width	150'	915.35' (Cedar Ave)	915.35* (Cedar Ave)
Front Yard Setback	35'	973±' (Larchwood)	973±' (Larchwood)
		26.7**' (Cedar Ave)	26.7**', 50**'(Cedar Ave)
Rear Yard Setback	35'	42.5**' (Larchwood)	42.5**', 50**'(Larchwood)
		N/A	N/A
Side yard Setback- One Side	20'	125'±	77'±
Lot Coverage	30%	18.5%±	40.0%±** (see comment 2.3 to follow)
Building Coverage	23%	3.29%	3.35%
Building Height- Principal	2.0 story, 35'	2 story, 30' max	2 story, 34.6' max
Building Height- Accessory	15'		28'9¾***

\* Existing Variance

\*\* Proposed Variance or existing variance exasperation

***This is a continuing comment.***

2.4 Only the proposed improvements that extend onto Lot 7 are located in the I Zone. Section 18-5.1 outlines the requirements for the 'I' Zone. The following is a comparison of the project to the zone requirements for design comparison purposes. Variances are not required for deviations from these criteria on the lots in the R-22 Zone. Please note, the applicant proposes the work in several contiguous properties. I have provided the information for Lots 1-5, 12.01 and 12.02 as a single lot.

Description	Required	Existing	Provided
Lot Area	5 acres	655,529 SF or 15.04 ac	655,529 SF or 15.04 ac
Lot width	300'	915.35' (Cedar Ave)	915.35* (Cedar Ave)
		973±' (Larchwood)	973±' (Larchwood)



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Description	Required	Existing	Provided
Front Yard Setback	70'	26.7** (Cedar Ave) 42.5** (Larchwood)	26.7**, 50** (Cedar Ave) 42.5**, 50** (Larchwood)
Rear Yard Setback	70'	N/A	N/A
Side yard Setback-			
One Side	40'	125'±	77'±
Both Sides	100'		
Lot Coverage	50%	121340± or 18.5%	262590SF± or 40.0% (see comment 2.3 to follow)
Building Coverage	23%	3.29%	3.35%
Building Height- Principal	2.0 story, 35'	2 story, 30' max	2 story, 34.6'
Building Height- Accessory	15'		28'9 <sup>3</sup> / <sub>4</sub> **

\* Existing deviation

\*\* Proposed deviation or existing deviation exasperation

The above tables compare the proposed coverage to that permitted in the zones. The coverage in the lots in the R-22 Zone exceeds what is permitted. Relief is required. When comparing the proposed coverage to that required by the adjacent 'I' Zone that contains the majority of the University, it can be seen that the proposed coverage is less than permitted by that ordinance. The coverages shown in the chart are approximate from the percentages provided in the zoning schedule. A listing of the coverages should be provided to confirm all required items are included such as parking areas, buildings, gravel areas used as drives, utility pads sheds, etc. A summary of each relating to a drainage area has been provided in the stormwater management report but did not appear to contain all of these items. A breakdown by lot should be provided. ***The plans reflect a 6'x6' air conditioning pad at the police station. I recommend a listing of the coverages be provided. I note, however, that the size of the air conditioning pad produces a negligible increase in the percentage, due to the overall size of the project area. To balance this area, the plans indicate a reduction of lot coverage due to the elimination of the walk that existing from Larchwood to the home to be converted to offices. The area of the walk exceeds that for the air conditioning pad, so I anticipate a net reduction from that shown on the plan. This is a continuing comment.***

- 2.5 Section 18-7.1a outlines requirements for signs in R-22, R-15, and R-10 Residential Zones; Institutional Zone; RP Residential Professional Zone. Subsection (7) indicates "One non-flashing sign identifying a school, church, public building, public and private parks, or other such permitted use, not to exceed eight square feet in area on any one side and situated within the lot not closer than fifteen (15') feet from any street or property line." The plans indicate a proposed monument sign to be located at the intersection of Cedar and Larchwood Avenues. The sign is shown as setback 11' from each front property line, has a height of 12'8" and a sign area of 22.23 SF. Variances are required for the location, size and height. ***The plans have been revised to reflect the setbacks to the side pillars, the center pillars and to the edge of the sign. Both sign and the center pillars setbacks exceed the fifteen feet setback requirement. The outer pillars are within the fifteen feet setback. The applicant provided testimony at the April 2021 hearing about the location of the actual sign relative to the property lines and offered that the wings of the system were actually part of the fence. If the Board accepts this testimony, then the sign would be setback more than required. Variances would still be required for the height.***



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2.6 Section 18-7.2 outlines requirements for fences. I offer the following as it relates to proposed fences:

- a. Subsection (c) indicates “Fences may be erected, altered or reconstructed to a height not to exceed three (3’) feet above ground level when located within the required front yard setback. The plans delineate a fence identified as an ornamental metal fence along the frontages of Cedar and Larchwood Avenues. This is to connect to the existing that surrounds the rest of the University property along these roads. The plans contain a detail of a 6’ high decorative aluminum fence. The applicant should clarify if this is the detail for the ornamental metal fence labelled on the plan. Relief is required for the height. *The requested detail has been provided*
- b. Please note, Subsection (e) indicates “The foregoing restrictions shall not be applied so as to prevent the erection of an open wire fence not exceeding eight (8’) feet above ground level anywhere within a public park, public playground or school premises.” This would permit an open wire fence to be constructed within the front yard to a height of 8’. The proposed fence has openings in the section; however, it is not considered an open wire fence. Relief is required. ***This is a continuing comment.***
- c. The plans indicate a five (5) feet tall solid wood fence surrounding the parking area for the proposed police station. Subsection (d) indicates “Fences may be erected, altered or reconstructed to a height not to exceed six (6’) feet above ground level when located outside the required front yard setback.” The required front yard setback in the R-22 Zone is 35’. The fence is located outside of this setback; therefore, the five (5) feet high is permitted. A detail of the fence should be provided on the plans. *The requested detail has been provided. The applicant testified at the April 14, 2021 hearing that the fence would be a board-on-board fence with staggered boards that are intended to overlap the sides of the opposite board, providing a solid visual appearance.*
- d. The plans indicate relief requested from Section 18-7.2i, which requires “All supporting members of the fence to be erected, altered or reconstructed shall be on the inside surface, meaning that the supporting members shall face the property constructing the fence, and not the neighboring property.” It is not clear on the plan the purpose for this request and should be clarified by the applicant. *The applicant clarified in testimony that they are requesting this relief as the fence post is in the middle of the fencing alignment, so that they are showing the best side equally on both sides.*

2.7 Section 18-7.4 (a) of the Borough ordinances outlines the requirements for Off-Street Parking Regulations. I offer the following:

- a. Subsection (a)1 indicates “All parking areas, passageways, and driveways (except when provided in connection with one family residences) shall be surfaced with a dustless, durable, all-weather pavement, clearly marked for car spaces, shall be adequately drained, and shall be adequately buffered, all subject to the approval of the Borough Engineer. Aisle widths and access drives shall not exceed twenty-five (25’) feet in width without a specific determination by the Borough Engineer that the excess width is needed to accommodate the proposed use.” The applicant proposes aisle width of 24’ and thereby conforms. This is adequate for the proposed perpendicular parking. *No action is*



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*required due to this comment.*

- b. Subsection a(3) indicates “ Parking areas may be located in any yard space for commercial use and in any yard but the front yard for other uses and shall be adequately buffered in accordance with the site plan.” The drive aisle is contained within the property; however, it is visible from Cedar Ave. where buildings do not exist, like on Lot 3 and a portion of Lot 4. The applicant should address the buffering of the view of the roadway from Cedar Avenue. *The plans reflect an enhanced planting scheme in this area. These plantings include additional plantings provided in the gaps of the existing vegetation along Cedar Avenue, crepe myrtle ornamental trees provided along the access road and an irregularly shaped solid screen hedge between the project roadway and Cedar Avenue. The selections provide fall and late spring/summer interest as well as screening. There is a view to the maintenance building from the access road; however, it is screened from Cedar Avenue.*
- c. Subsection a(4) indicates “No commercial motor vehicle shall be parked or stored anywhere on public streets or private property in an R-22, R-15, R-10, MF-1, SH-1 or RP District, unhoused or visible from a public street or any neighboring property, except when the vehicle is being used in the transaction of business with the owner or occupant of the property...” The plans indicate two proposed storage and maintenance buildings. The applicant should address if vehicles will be parked at these locations. No spaces are provided at each. In addition, the applicant should clarify if any commercial vehicles or equipment used by the University will be stored outside of the building at these locations. If so, relief is required. I note that a solid wood fence is proposed around the area. A detail of the fence should be provided on the plans. *The applicant testified that parking is not required at the maintenance buildings. Also, the requested fence detail has been provided. See comment 2.6a above.*
- d. Subsection a(6) indicates “ Not more than two driveways, of not less than twenty (20') feet or more than thirty (30') feet in width, used as a means of ingress and egress for nonresidential off-street parking areas shall be permitted for each two hundred (200') feet of frontage upon a public street, nor shall any driveway be located closer than fifty (50') feet to the intersection of two public streets.” The applicant proposes a new access to Larchwood. The existing is located outside of the scope of the provided. The frontage along Larchwood well exceeds 200', so the two drives are permitted. The width of the drive should be noted on the plans. It appears that the width, including the curb returns, is approximately 54'. This exceeds the thirty (30) required; therefore, relief is required. ***The width of the opening has been labeled and exceeds 30'. Therefore, relief is required.***
- 2.8 Section 18.63(e) 2 outlines requirements for Principal Buildings and Uses as follows: “Each lot shall be permitted to contain only one principal structure as permitted by this Chapter ordinance, or as set forth in certain zones herein.” Although several lots are noted in the application, the site is being developed as one lot. Several principal buildings are proposed for construction. Therefore, a variance is required. ***This is a continuing comment.***
- 2.9 Section 18.6.3(f) 2 outlines requirements for Accessory Buildings and Structures as “detached accessory





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buildings and accessory structures shall be located in the side or rear yards only. Detached accessory buildings shall be set back from the side or rear lot line at least a distance equal to the height of such building.”

The proposed maintenance storage building is located outside of the front setback but fronts on Larchwood. The ordinance defines a front yard as

“YARD, FRONT-Shall mean an open, unoccupied space on the same lot with the principal building, extending the full width of the lot and situated between the street line and the building line, projected to the side lines of that lot. Setback line should be synonymous with the rear limit of the required front yard area.”

The structure is located to the side of the dwelling on Larchwood, shown as converted to MU offices on the site plan, and out of the required front yard setback. I defer comment to the Board Attorney if the accessory is located within the front yard. ***This is a continuing comment.***

2.10 Section 18.6.3(f) 3 requires “All accessory buildings and structures combined shall occupy no more than the equivalent of 25% of the area of the rear yard, and there shall be no more than two accessory buildings permitted, exclusive of a garage.” The application contains more than three accessory buildings. The portion of the project in the R-22 Zone contains two maintenance and storage buildings, a garage converted to storage at the alumni building, a shed and a comfort station by the softball field. Relief is required for the number of accessory buildings. ***This is a continuing comment.***

### 3.0 Traffic and Circulation

3.1 The applicant proposes to construct a new drive leading to Larchwood. The proposed drive permits both ingress and egress into the site, with full movement in each direction. The drive is located where there is an existing drive to the existing dwelling to be converted to MU offices on Larchwood. I offer the following on the location of the access drive:

- a. This existing drive presently connects to the maintenance road that extends around the softball field, so I anticipate maintenance vehicles use this existing drive along with the residents. The conversion of the drive from that for a single residential home to a full access drive will increase the movement into and out of the site at this location. There is a residence opposite the proposed drive on the western side of Larchwood. The applicant should address impact to the home from headlights of vehicles egressing the property at this drive after sunset. *The plans indicate the drive shifted approximately 12-14’ to the south from its original location. This is in accordance with the testimony provided at the March 2021 hearing. The applicant reviewed that in their opinion the shift reduced impacts to the neighbors across the street. This is reasonable from an engineering point of view.*
- b. During a site investigation, I observed the location of a new drive to Larchwood. There is a solid fence on Lot 1 to the north of the proposed access road. The applicant should address if this fence blocks the sight line for egress of the drive. I recommend a sight triangle be provided at the proposed



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drive. *Testimony was provided that the sight line is not impacted by the fence and was improved when the drive shifted to the south.*

- c. The applicant submitted a traffic report addressing impact to the area. The report provides traffic counts for the intersection and the existing Cedar Avenue drive from the University for the year 2019. Future calculations for traffic generations have not been provided. Since the application is for a Use variance, the report should compare the traffic generated from the proposed use with that which is permitted in the zone. Any impacts due to the change should also be reviewed and any improvements required to mitigate the change offered. ***This is a continuing comment.***
- d. The report should address the stacking at the intersection to determine impact to the location of the drive during construction and after it is completed. I am concerned about left turn movements into and out of the site across a backed-up stacking lane. This should be addressed. ***The applicant had indicated that the traffic engineer will be testifying at the upcoming hearing. I am in receipt of a report dated May 12, 2021 from the applicant's traffic engineer. The report indicates that the drive is located approximately 290 feet from the intersection and will not be impacted by intersection stacking. Based on the information provided in the May 12, 2021 report, this conclusion is reasonable. However, I am in receipt of a report from the Traffic Safety Officer requesting a left turn egress restriction. I recommend the Traffic Safety Officer review this information and provide any comments. I note that I anticipate few left turn movements out of the site. The applicant should address impact if these were restricted.***
- e. The traffic report indicates that the proposed access will provide a safer egress for vehicles from the site, as the existing drive on Cedar Avenue is at an unsignalized intersection. The report indicates that the existing Cedar Avenue drive experiences long stacking due to the volume of traffic on Cedar Avenue. The existing drive on Larchwood is located further to the south than the proposed location of the project. Access to this drive is through a circuitous route from Lot 7, down through Lots 12.01 and 12.02. The proposed drive provides a direct connection to Larchwood near Cedar Avenue, not just for the proposed facilities, but also for the existing parking located on Lot 7. It is not clear from the traffic report if it anticipates existing traffic being redirected through the new connecting drive to Larchwood, that prior would have used the Cedar Avenue drive. The Larchwood intersection is shown as operating at a level 'C' in the 2019 existing condition. The impact of the vehicles redirecting from the Cedar Avenue entrance to the intersection should be addressed. Larchwood is a single lane in each direction. The edge of the road showed rutting, indicating vehicles go around a left turning, stopped vehicle, for either a through movement or right turn. I am concerned that the redirect of the traffic will cause a greater stacking at the intersection, which will then impact the site drive. The applicant should address if widening of Larchwood Avenue to add a right turn lane would reduce stacking and impact to the drive. I note that telephone poles exist along Larchwood on the applicant's frontage that would be impacted by a widening. ***The prior plan had indicated an increased radius size at the intersection to allow improved movement on the right-hand turn. At the April 14, 2021 hearing, the applicant's engineer indicated that existing utilities and signalization equipment prevents them from achieving that improvement. Therefore, this has been removed from the plan.***



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***The plans, however, continue to depict the extension of proposed curb along the Larchwood frontage, extending south past the proposed driveway. I recommend the Borough Engineer confirm the location of the curb for the half width of the roadway from the existing centerline. See comment 1.3 in the beginning of this report for comments concerning addition of a right turn lane on this frontage.***

- f. The eastern end of the drive connects to the existing Cedar Avenue access. The drive is shown approximately 100' from Cedar Ave. A cross walk is provided in this location to connect the parking lot on Lot 7 to the new facilities. The applicant should address any impact to the drive due to stacking at the Cedar Avenue access, and the safety of having the walk so close to the Cedar Avenue access drive intersection. The applicant should address measures to protect pedestrians in this cross walk at this location. ***The applicant has revised the plan to shift the pedestrian crossing to the southern side of the proposed parking area access drive with the existing Cedar Avenue drive. This moves the pedestrians out of what I anticipate being the major movement of vehicles and also shifts the vehicle/pedestrian interaction further from Cedar Avenue. This is desirable from an engineering point of view.***
- g. Comment was provided at the March 23, 2021 hearing, indicating that prior resolutions of the Board contained conditions that restricted use of the existing drive located where the Larchwood Avenue access drive is proposed. In response, the applicant provided copies of resolutions from the years dated 2015, 2010, 2006, 1996 and 1995. After reviewing the resolutions, I note the following:
- i. The resolution of the Board, dated December 17, 2015, contained specific condition 6, which stated "subject to written commitment from the University to current owner(s) of Lot 2, Block 39 that the gate from Larchwood Avenue at the northeast corner of the main campus will be locked on weekends from 4:00 pm on Friday to 7:30 am on Monday and that similar closing hours (i.e. From 4:00 pm of the prior day to 7:30 am of the following day) will be observed on all holidays."
- ii. The resolution dated March 22, 2007 references a Joint Traffic and Parking plan that was coordinated with the Borough Police Department.

The applicant should address how these conditions may be impacted by the location of the proposed access road connection to Larchwood Avenue. I note that the current applicant includes the referenced Lot 2, Block 39, noted above, and notes it as being currently owned by the University. ***As noted above, the resolution indicated the restriction was established through an agreement between the University and the property owner. I attempted to review the deeds transferred between the prior owner and the University to see if any restriction carried through the title. I was not able to obtain the deed of transfer from the Monmouth County on-line records search services. The applicant should address if a restriction carried with the deed when the property was transferred.***

***I am in receipt of correspondence dated May 10, 2021 from both the Monmouth University Captain of Police and the Borough Chief of Police. The report contains an attachment indicating***



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***that during large events the University will not allow access to Larchwood through the new access road. This appears to be consistent with the prior agreements. The applicant should address if this is the proposal, what the hours of closure will be and how this would be achieved. I recommend any restriction be included as a condition of any approval the Board may grant.***

3.2 Several structures are proposed to be constructed as part of the project. The following is a summary of the building and associated parking requirements as compared to the parking proposed on the plan:

<u>Building Description</u>	<u>Building Size (SF)</u>	<u>Requirement</u>	<u>Required</u>	<u>Provided</u>
a. Maintenance storage building 1	1800	1 per 250 SF	7.2	0
b. Maintenance storage building 2	1800	1 per 250 SF	7.2	0
c. MU Office	1860	1 per 250 SF	7.4	15
d. MU Alumni Center	4385	1 per 250 SF	17.5	19
e. MU Police Headquarters	6667	1 per 250 SF	26.7	57
f. Temp police <i>or</i> future classrooms	4310	1 per 250 SF <i>or</i> 1 space per 3 seats	17.2 <i>or</i> TBP	245 <i>or</i> TBP
g. MU Golf Center	<u>2966</u>		<u>11.8</u>	<u>included in "f"</u>
	Total 23788		95.0-	336

TBP= To be provided

In addition, the applicant proposes to relocate a rest room building by the softball field. Please note, the building shown in line 'f' above is labelled as a temporary police station with a future use as classrooms. I anticipate the larger parking requirement will be when the building is used for classrooms. The parking calculation for a classroom is based on the number of seats. The number of classroom seats should be provided to determine the number of parking spaces required when the building is converted to a classroom space. Additional parking spaces are proposed than are required. The applicant should address the need for the additional spaces and associated coverage. ***This is a continuing comment. Please note the resolution from December 17, 2015 indicates a parking tabulation was provided as exhibit A-10. The applicant should address if this proposal impacts parking noted on that exhibit. The supplicant should also clarify if the excess parking is to support existing facilities on the campus. This is a continuing comment.***

3.3 Section 18.6.5B requires "In any zone all required yards, open spaces, off-street parking and landscaping must be contained within that zone." As noted above, the site proposes excess parking from the buildings that are proposed. I note, however, that the parcels in the R-22 Zone are contiguous and support the existing use of the University on the surrounding lots. Therefore, any parking proposed to support those existing improvements are crossing the zone and would require relief from this section. ***This is a continuing comment.***

3.4 Section 18-7.4(a)1 requires "parking areas, passageways and driveways to be surfaced with a dustless, durable all-weather pavement, clearly marked for car spaces..." The area in front of the western most storage and maintenance building along Larchwood Avenue is shown as a gravel area. Relief is required from this section of the ordinance. *The plans indicate this area is to be paved. Therefore, relief is not required. I note that the stormwater management report has been designed anticipating the area to be impervious. Therefore, a*



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*revision to the report is not required to pave this area.*

- 3.5 Section 18-7.4 (b) 1 of the Borough ordinances outlines the requirements for Loading and Unloading Regulations as follows: “For every building, structure or part thereof having over 5,000 square feet of gross building area erected and occupied for commerce, dry cleaning, places of public assembly, industry and other similar uses involved in the receipt and distribution by vehicles of materials or merchandise, there shall be provided and permanently maintained adequate space for standing, loading and unloading services in order to avoid undue interference with the public use of streets or alleys”. None of the proposed buildings meet these criteria in either size or use. Therefore, a loading area is not required. I anticipate, however, that materials and supplies will be delivered to each of the buildings. The applicant should address any anticipated delivery vehicles and method for delivery to each site. *Testimony was provided addressing how the University collects recyclables and refuse. Separate storage areas are not required at each building with the current system that is in place.*
- 3.6 An asphalt area exists adjacent to the proposed golf center. The applicant should address if this is proposed to have parking spaces for the instructor/coach. If so, they should be delineated on the plan. Also, the applicant should address if ADA parking will be provided near this facility. I note the entrance into this asphalt area is through an existing parking space in the main parking lot. Prior access to this area could be achieved through a roadway that is located along the softball field. This roadway will be eliminated as part of the project so the access through the parking space will be the main access to the area. I recommend the space be striped to prevent others from parking in that location. Any reconfiguration of the parking in that area to permit this access should be shown on the plan.
- a. The plans indicate the location of the handicap spaces for each of the proposed parking areas. The number and location as required by ordinance has been provided in the plans. Enlarged details of the grading for the transition areas and ADA ramps should be included on the plans. ***The applicant has indicated they will provide this detail. I have no objection to this being a condition of any site plan approval the Board may grant.***
  - b. A space is hatched on the northern side of the parking area around the temporary police station. The purpose of that hatching should be provided. I note that the number of spaces shown for that parking area does not include that space. *I have reviewed this with the applicant’s engineer. The hatched space is located over the access to the stormwater outlet chamber and stormwater pump system. This is reasonable.*
  - c. The existing garage located on Lot 2 is shown as being converted to storage. An access path is shown leading to the building. The path is blocked by parking spaces. The applicant should address the frequency of utilizing the building and address if the parking spaces should be striped to prevent vehicles from parking in the area of the proposed storage building access. *Testimony was provided indicating access to this area is minimal and did not require the parking space opposite the access drive be hatched to prevent vehicles from parking and blocking this access. Based on the testimony, this is reasonable from an engineering point of view.*



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- d. A bituminous drive is shown on the eastern side of the proposed police station. It connects Cedar Avenue to the proposed access drive. It appears gates are provided at each end of the drive. The gates should be labelled on the plan and the dimension provided from the gate to the back of the sidewalk. As a minimum, the distance should allow a vehicle to end fully into the drive prior to the gate. It appears approximately 20' is provided at either end. The applicant should address what types of vehicles will have access to this drive to confirm adequate length and how the gated system will work. *The plans have been revised to clearly label the gates and direction of travel. Testimony was provided indicating this roadway is for police emergency use and allows a right turn out only.*
- e. A proposed bituminous drive is shown for the dwelling on Larchwood converted to MU offices. The location of the drive is shown close to the intersection with Larchwood. The purpose of the drive and the phasing of it should be addressed. *I have been advised by the engineer this drive is to provide for access to the existing garage occasionally for storage. This was confirmed through testimony.*
- f. The plans include a phasing plan for the project. The title block indicates the project is a Preliminary and Final Site Plan. The applicant should address if they are requesting final for all phases at this time. The phasing plan separates the project components into individual phases. The order of the projects is not noted. In general, the phases should be able to stand on their own. This requires that all downstream stormwater systems be provided, and the roadways required to access each stage are installed. I recommend the phasing clarify the construction timing of the main drives and the recharge system for stormwater. *It appears the applicant is requesting preliminary approval for the full project and final approval on all proposed work, except the work on Lot 1 and the conversion of the maintenance building to the golf center. This was confirmed by the applicant through testimony at the April 14, 2021 hearing. At this hearing, the applicant reviewed that once the maintenance road is removed by the construction of the new access road the only entrance into the existing maintenance building (to be converted to the golf center) will be through a parking space on the existing parking lot. The plans reflect this space as hatched to prevent vehicles from parking in that area.*

#### 4.0 Grading, Drainage and Utilities

4.1 The applicant has submitted a stormwater management report and design for review. The project meets the requirements to be categorized as a 'Major Development' by stormwater standards. This designation requires that the applicant provide a design that meets water quality standards and reduces the rate of runoff from the site. The applicant has proposed the use of underground detention systems to reduce the rate of runoff and the use of a filter system to address water quality requirements. I offer the following on the proposed design:

- a. Major development projects are required to recharge the annual amount of runoff into the ground. To determine the feasibility of recharging runoff, the applicant has submitted results of soil borings taken throughout the site. I have reviewed the borings and the permeability results. Diverse permeability results are shown near each other. The site contains restrictive layers that vary in depth but are mainly



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close to the surface. The presence of the restrictive layers limits the amount of recharge that can be achieved for the site. Having said that, the applicant has proposed a system that has opportunity to allow recharge. The design has underground chambers that create storage volume surrounded with stone. The applicant has proposed a denser stone. I had discussed with the applicant's engineer surrounding the area with a stone that will allow recharge if the soils permit. However, I would recommend that the portions of recharge system closest to structures with basements not have recharge directed toward the structure. *The plans have been revised to reflect a clean stone base which will allow opportunity for recharge in the bottom of the system. The recharge portion is shown inside of an 8' wide perimeter of dense graded aggregate around the outer perimeter of the underground storage system. The outer perimeter of dense grades aggregate is to lock in the system structurally. The design was reviewed by the applicant at the April 14, 2021 hearing and is reasonable from an engineering point of view. See comment 4.3 to follow for further information.*

- b. The applicant proposes to use "Upflow™" filter systems to address water quality for the site. In addition, a mechanism called a "Hydrobrake™" is proposed within the drainage outlet structures to manage the rate of runoff from the water quality storm. The applicant should address the maintenance requirements of the systems and what the impact would be if the system maintenance is delayed. An Operations and Maintenance Manual is required addressing all components of the proposed system. ***This is continuing comment.***
- c. The volume needed for the underground storage is achieved using Stormtech™ chambers and a series of stacked R-tanks™. Inspection ports are proposed for the Stormtech™ that would allow inspection and maintenance. The applicant should address access for inspection and possible maintenance for the R-tank™ system. *I reviewed this comment with the applicant's engineer. The system has two levels of treatment built into it to collect floatables, debris and TSS (Total Suspended Solids) prior to draining to the R-tanks™ storage system. Access and maintenance are provided to the primary Upflow filters and the secondary isolator rows that are upstream of the R-tank™ storage. The maintenance of the system should be addressed in the Operations and Maintenance Manual. I note the prior resolutions indicate operation and maintenance manuals were provided for other stormwater management systems which were prior approved on the site. The applicant should address if there is a singular manual for the whole property or multiple kept in one place. If one manual exists with guidelines for all systems, then this should be included in it. This is a continuing comment.*
- d. I have reviewed the proposed drainage calculations as it relates to the rate of runoff reduction achieved by the design. The applicant is required to reduce the runoff from the site by 50% for the 2-year storm, 25% for the 10-year storm and 20% for the 100-year storm. The applicant proposes the following reduction rates.

Storm Event	Existing Runoff	Proposed Runoff	Percent Reduction	Required Reduction	Conforms Yes or No
2 Yr	2.19 cfs	1.07 cfs	51.1%	50%	Yes
10 Yr	7.98 cfs	3.65 cfs	54.3%	25%	Yes
100 Yr	23.35 cfs	17.32	25.8%	20%	Yes



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It should be noted that the calculations have indicated the proposed rate reduction without anticipating recharge into the soil. The soils did not appear to support recharge in all areas; therefore, it is reasonable to prepare the calculations with a recharge consideration from an engineering point of view. Any recharge that does occur from the project will create a further reduction of runoff. *No action was required by this comment.*

- e. The NJDEP has issued new stormwater management requirements that were effective on March 1, 2021. The new regulations require the municipality adopt revised stormwater regulations incorporating their new criteria. To my knowledge, these have not been adopted. However, the applicant is required to incorporate these improvements, based on the time it was submitted and deemed complete. A large focus of the new regulations relates to incorporating green infrastructure with an enhancement of recharge and the use of trees to break up the pavement areas to cool waters before they discharge downstream. Even though the applicant is not required to adhere to these requirements, I did review the project to see what aspects could be incorporated and offer the following:
- i. The applicant has provided extensive soil information that shows that the site does not appear suited for the use of swales and similar for green infrastructure recharge as clay type soils exist at the surface in many areas. This was noted in the field during my site investigation where water was ponded in various areas at the surface even though there had not been rain for several days prior to the site investigation. *No action was required by this comment.*
  - ii. I note that the applicant has proposed to detain runoff below ground in chambers surrounded by stone. As noted above, I have spoken to the applicants' engineer about maximizing the opportunity for recharge where the soils will permit by using stone that would allow transmission of water from the containment chambers into the soil. As noted above, any recharge that is achieved into the soil will further reduce runoff from the site. *The plans have been revised to include clean stone in the center of the proposed underground storage to allow recharge to occur should the surrounding soils permit. See comment 4.3.*
  - iii. The new regulations require that the fields of impervious be broken up with trees to allow shading and cooling of the surface. Rain that lands on hot asphalt becomes heated before it flows through the system to the downstream stream. I recommend trees be incorporated into the parking lots for aesthetic purposes and to achieve this goal. Portions of parking areas not providing trees are the parking lot to the north of the temporary police station, the western side of the parking area for the proposed police station, the western side of the Alumni building parking area and in the parking lot behind the dwelling converted to MU offices along Larchwood Ave. Any special detail for the planting of the trees within the recharge area should be provided on the plans. *At the April 14, 2021 hearing the applicant's engineer expressed concern with providing diamond shaped islands in the parking areas prior as they were not successful from a planting point of view. Instead, the applicant has proposed trees in the islands surrounding the parking area to shade the parking from the perimeter. Since it*





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*is difficult to provide the trees over the underground storage basin. I have no objection to the proposal from an engineering point of view. The plans have added a significant number of trees around the parking lot perimeter. This is desirable.*

- iv. The grading plan indicates that the softball field grades toward the proposed project area; however, it is not shown as part of the drainage area for the site. I note that the plan indicates a separate drainage system underneath the softball field that is connected to a sperate drainage system on the southern side of the project area. Therefore, the exclusion of this area from the grading and drainage plan is reasonable from an engineering point of view. *No action is required due to this comment.*
- 4.2 The applicant proposes stormwater pumps to drain the system within the required 72 hours. The applicant should address if duplicity will be provided in the pump design to provide a backup should one fail and what provisions are in place should there be a power outage. ***The applicant's engineer submitted calculations addressing the storage needed to handle the 100-year storm should the pump fail. Conclusions are not included with the calculations. The results of the calculations and their impact should be reviewed with the Board.***
- 4.3 The applicant should provide the seasonal high-water table for the soil logs provided. I note the Monmouth County soils report shows KKHB soils with depth to water table, 12-24", where most of the development is proposed. Some of the soil logs indicate that seepage and mottling was not observed. However, others indicate a water table monitoring was installed. Results of the monitoring should be submitted. ***The updated design accounts for recharge at the base of the underground storage system. This is desirable. However, I recommended it be provided in the areas where it will not impact building basements, whether existing or proposed. At the April 14, 2021 hearing, the applicant indicated they would provide an expanded water table mounding assessment to identify where recharge can be provided and where it might impact buildings. As noted in prior reports, the stormwater management system is designed as if no recharge occurs. Therefore, I have no objection to this being a condition of any Site Plan approval the Board may grant, as I do not anticipate a change in the capacity provided in the system due to this analysis.***
- 4.4 Stormwater basin #4 shows a light fixture in the middle of the recharge field. The applicant should address if special treatment of the foundation is required to be located as shown. In addition, I have noted in Comment 4.1e above, to have trees planted in the parking areas to break up the appearance and cool the runoff from summer rains. Any required details for these intrusions into the recharge field should be added to the plan. ***Details for the lighting fixtures and poles have been provided on sheet 27. The applicant's engineer should provide a calculation for the light pole foundation. I have no objection to this being a condition of any approval the Board might grant. This is a continuing comment.***
- 4.5 The plans include a cross section of the proposed recharge field depicting the material surrounding the system, and the cover over the system. It notes the soils around it being fully compacted. If recharge is to occur, then the portions where recharge is encouraged would need to have less compaction. This note should be revised in areas where recharge will be encouraged. The plan also shows a cover of 18". The applicant should also confirm the system's ability to handle H2O loading based on the full section. ***The plans indicate the system can handle H20 rating.***



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- 4.6 The applicant should add to the plan the rim and invert information for drainage manhole DMH 3.9 and drainage inlets DI 3.5 and 3.4. *The requested information is provided on the plan.*
- 4.7 The plans indicate the use of tide gates to keep back flow flowing back into filters. The applicant should address if these are manual, or gravity operated, and any impact to the surrounding area should they fail to operate correctly. *I have reviewed the use of the tide gates with the applicant's engineer. The gates prevent backflow into the upflow filters and do not restrict diverted flow from larger volume storms into the underground storage. The gates are intended to keep floatables out of the upflow filters. This is reasonable.*
- 4.8 The sanitary sewer is shown as connecting out toward Cedar Ave. The manhole is located within the sidewalk. The location should be shown on all the plans with the rim and invert elevations. Approval from the sewerage authority is required. *The existing sanitary sewer information has been added to the plan as requested.*
- 4.9 The applicant should provide flow calculations indicating the flow into each inlet to check inlet inflow capability. Also, the pipe flow design should be provided to check the pipe sizing to Borough ordinances. The ordinance requires the piped system be capable of handling a minimum of a 10-year storm for all pipes less than 60" in size. In particular, this pipe size is required for pipes connecting runoff to the recharge system. This requirement would not apply to the pipes carrying runoff from the recharge system downstream, as they are part of the recharge system and would be sized as required to meet the required runoff rate reductions provided, which includes control of the runoff rate up to a 100-year storm. *The calculations indicate the entire system is designed to handle the 100-year storm.*
- 4.10 The applicant should address any impact to the proposed design should the downstream system be full and causing a backwater on the proposed system. ***The applicant testified at the April hearing as to the impact on the site should the downstream pipe be full.***
- 5.0 Landscaping and Lighting
- 5.1 Section 18-7.3 outlines Landscape requirements as follows: "Any use required by this Chapter to be screened shall be contained within a fence or wall not less than six (6') feet in height, or a visual screen consisting of evergreen or evergreen type hedges, or shrubs, spaced so as to provide a solid and compact wall of landscape materials, located and maintained in good condition and within ten (10') feet of the property line, provided further that the regulations may be expanded based upon the recommendations of the Borough Engineer." The portions of the University fronting on Cedar Avenue are surrounded by a metal fence. As noted in section 2 above, the fence is located within the front yard area. The fence proposed is an open metal fence that will provide separation but not screening. The plans indicate a mix of supplemental plantings along Cedar Avenue behind the proposed open metal fence. The applicant should address buffering of the project from their street frontages. I note that a fence is proposed around the parking area to the west of the proposed police station. Plantings are proposed on the northern side of the fence to buffer the appearance from Cedar Avenue. *The applicant has added additional plantings to screen the dedicated police access drive from the neighbors across the street. To further screen the roadway behind Lot 3, plantings have been provided in the vegetation gaps along Cedar Avenue, and along the proposed roadway. In addition, an irregularly shaped evergreen hedge is added between the roadway and the plantings along Cedar Avenue. The appearance from the view from Cedar was reviewed with the Board at the April 14, 2021 hearing.*



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- 5.2 The plan indicates the existing trees on the site. See comment 5.3 to follow for specific comments on trees noted during my site investigation. I anticipate trees will be removed as part of the project. The trees to be removed should be noted on the plans. Section 23-4.4 outlines requirements for tree replacement as follows: “Unless otherwise stated in these rules, the removal of any six (6”) inch tree or six (6”) inch grouping of trees must be replaced with trees the total diameter at breast height (DBH) of which is equal to at least 30% of the total diameter at breast height (DBH) inches removed. No replacement tree shall have a diameter breast height less than two (2”) inches. If the removal of one tree necessitates a replacement of more than three trees, DBH may be satisfied by planting three trees and thereafter substituting shrubs for trees at a rate of one shrub per one (1”) inch of DBH.” A tree preservation plan is required by ordinance. The applicant should address trees of greater than 6” to be removed and show the trees to be replaced meet the criteria. Please note, if the removal of trees is necessary to erect a building, home or other structure, and these trees exist within the footprint of the structure, there is no requirement that these trees be replaced. ***The plans contain the area where trees are proposed to be removed. Most are in the main parking area and along the access drive. The plans include a landscape plan indicating additional plantings to be provided. The applicant provided a tree replacement tabulation. Based on the tabulation, the applicant is to provide 230 trees and 24 shrubs. The plans indicate a total of 145 trees when all deciduous, evergreen and ornamental trees are included and 573 shrubs when all are included. The proposal is deficient in the number of trees, yet proposes an excess of shrubbery from that which is required. Relief is required, since the number of trees are not met. However, I have no objection to the proposal due to the number and location of shrubbery that is proposed.***
- 5.3 The site proposes to install shade trees along the proposed roadways at a spacing of `approximately 40’ on center. This is reasonable. *No action was required by this comment.*
- 5.4 During site investigation, I observed the following as it relates to existing vegetation on the site:
- a. Observed the area between the Alumni building and where the police building will be built on Lot 5. There appears to be a pond with waterfall behind Lot 4, which is not shown on the submitted plan. A large Sycamore tree is near the pond. The applicant should address if this tree will remain or be removed. *The trees to remain have been shown on the plan.*
  - b. Observed areas around softball fields. In this area there exists a heavy bamboo screen between Cedar Ave. frontage and ballfield. The applicant should address if they will remain or be removed. If removed, the applicant should address the screen that will be provided. *The plans reflect new plantings at the rear of existing Lots 3 and 4 along the new road and in gaps in the existing vegetation along Cedar. The plantings include ornamental trees aligning the proposed road and an evergreen hedge.*
  - c. Observed the back of Lot #3. Lot is vacant with some mature trees. The applicant should address if these trees will remain or be removed. *The plans indicate the trees to remain. I note that the shifting of the roadway allows additional trees to remain.*



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Monmouth University (ZB 2019-22)  
Use & Bulk Variances, Preliminary and Final Major Site Plan  
401 Cedar Avenue; Block: 13 Lots: 1-5, 7-9, 11, 12.01 & 12.02; Zones: R-22 & I

- 5.5 I am in receipt of a report prepared by the West Long Branch Shade Tree Commission, dated January 25, 2020. The report has requested the white ash trees shown on the plan be replaced with one from the list provided in their report. *The plan indicates the white ash trees noted prior on the plan have been substituted with tree species already on the planting list that were prior approved by the Shade Tree Commission.*
- 5.6 Foundation plantings are not proposed around the proposed buildings. The applicant should address their proposal for these plantings. *Foundation plantings have been added at the police station. Testimony was provided that the existing plantings at the homes to be converted will remain. That is the same for the alumni building that is to be converted. To support this statement, notes have been added to the plan indicating they are to be maintained. Please note, the Alumni house to be converted is being raised about 16". The contractor will need to temporarily relocate the plantings and then replant them after the house is raised. This was discussed at the hearing. The plans indicate that the existing foundation plantings at the Alumni house are to be dug, preserved and replanted. Also, the architect testified at the hearing that they do not know at this time if the existing deck at the alumni building will be replaced. I recommend that any approval the Board may grant be conditioned upon any replacement of the deck be done in a manner that maintains the existing footprint.*
- 5.7 The plan provides for evergreen and deciduous trees. It also includes evergreen and semi evergreen shrubbery. An ornamental plant of Carolina rose plants are proposed along the western side of the parking area on Lot 7. I would suggest the applicant consider introducing ornamental trees and shrubbery into the plan, to provide seasonal interest at various locations. *The plans reflect the addition of some ornamental trees along the roadway and on the site, to add some fall and late spring/summer interest.*
- 5.8 The applicant should address if any landscaping is proposed around the entrance sign at the Cedar and Larchwood Avenues intersection. *The plans indicate proposed landscaping at the location of the proposed sign at the corner of Larchwood and Cedar Avenues. The landscaping in front of the sign is proposed to be low and ornamental, while the plantings behind are proposed to be taller and evergreen in nature. This is reasonable. All landscaping is proposed outside of the intersection sight triangle.*
- 5.9 The plans should address the treatment of the area once the dwelling and related improvements on Lot 1 is removed. *The landscape plan indicates additional plantings to be provided along the frontages of Lot 1. In addition, a general note is provided on the plan indicating all areas not covered in landscaping or improvements are to be grass.*
- 5.10 The plans indicate a generator pad proposed along Cedar Avenue to the east of the proposed police building. There appears to be a shed and possible fencing in this area as well. The screening of this utility from the adjacent roadways should be addressed and detailed. *The plan reflects that the area is surrounded with a solid fence. See comment 2.6(c) on the fence design. In addition, the applicant has proposed to enhance the existing plantings along Cedar with evergreens and linden trees. To address noise from the generator, the applicant submitted a sound report and detail of a sound enclosure fence. The applicant should confirm the fence is proposed to enclose the generator area at the police station. The location of the sound enclosure fence should be noted on the plan and the details contained in the site plan. I have no objection from an engineering point of view to this being a condition of any approval the Board may grant.*



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5.11 Section 18-7.4a(7) of the Borough ordinances indicates “All parking areas and appurtenant passageways and driveways serving commercial uses shall be illuminated adequately during the hours between sunset and sunrise when the use is in operation. Adequate shielding shall be provided by commercial uses to protect adjacent residential zones from the glare of such illumination.” The applicant has provided a lighting plan for review. The plan provides a point-by-point analysis of the lighting along the proposed drives and in the parking areas. I offer the following as it relates to the proposed lighting:

- a. The plans indicate that two styles of lights are proposed. Details of the lights and the light foundations should be provided. One is noted as being ornamental. The applicant should address the style of the other and how each correlate to the lighting existing on the roadways connecting to the development. *The plans include details for the proposed light fixtures. Downward directed LED lighting is proposed in the parking areas. Ornamental lighting is proposed along the access drive. The applicant testified that the proposed lighting is consistent with lighting that exists on the property; however, it has been updated to contain the latest LED technology.*
- b. The applicant should address if the proposed lights are dark sky compliant. Dark sky compliant fixtures prevent a ‘glow’ of the development up into the sky. Although not noted as a requirement by the ordinance, being dark sky compliant would relate to the overall brightness of the development for the surrounding residences. *A note has been added to the plan, indicating the proposed lights are dark sky compliant.*
- c. All lights are proposed to be LED. The pole heights range from 16’ to 28’. The decorative lighting is proposed along the entrance drive. The second downward directed lights are proposed in the parking areas. The 28’ high poles are shown as being interior to the site. Lighting is proposed backing up to Cedar Avenue in the police building parking area. I recommend the lighting closest to Cedar Avenue be either shielded or directed to not have a bright spot visible from Cedar Avenue. *The plans have been revised to note the required cut off for the fixtures.*
- d. No lighting is shown in the area of the proposed maintenance buildings by the softball field. The applicant should address if any building-mounted lighting is proposed. If proposed, it should be shown on the plan. I recommend that as a minimum, security lighting be provided in the area. *The plans indicate a downward directed wall pack style light over the doors of the maintenance buildings.*
- e. Any proposed building lighting should be shown on the architectural plans and reflected on the site plan. *This is a continuing comment.*
- f. A walk exists from the dwelling on Larchwood to be converted to MU offices to Larchwood. The applicant should address if any lighting exists in the front yard for this walk, or is any proposed. *The plans indicate the walkway as removed.*
- g. An ornamental light is proposed along the entrance from Larchwood. The applicant should address its location relative to the dwelling across the street, to see if the visibility of the light in the fixture will produce objectionable lighting as a bright spot for the homes across the street. *The applicant has*



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*shifted the access roadway approximately 12-14' to the south. The lighting for the roadway was shifted to the south with this new design. The shift in the road appears to allow additional mature plantings in the area to remain. This is desirable. I note that besides a southern shift, it appears the streetlight has also been shifted to the east and is flanked on either side by proposed trees. Testimony was provided at the April 14, 2021 hearing concerning the screening to the light and impact to the neighbors due to the shift.*

- h. I recommend the average to minimum and maximum to minimum lighting levels be provided for each parking area. *The information is included on the plan and is reasonable.*
- i. A new restroom building is proposed at the softball field. The applicant should address if any security lighting is proposed on that structure. *A light has been provided on the building as requested.*

5.12 The applicant noted during the hearing that a 'blue light' security system exists on the campus and will be incorporated into the proposed design. The location of the "blue light" stations should be shown on the plan. *The lighting plan has been revised to circle the lighting to contain the emergency phone locations which comprise the 'blue light system'.*

#### 6.0 General Comments

6.1 The applicant should address if the lots are to be consolidated. ***I recommend that the lots within the residential zone be consolidated into one lot, since the improvements cross from one to the other, subject to approval by the Borough Council. The applicant has provided an exhibit indicating the proposed manner to consolidate the lots and how they relate to the proposed improvements. I recommend this be reviewed with the Board at the hearing. The proposal is reasonable from an engineering point of view.***

6.2 The zoning schedule indicates a post development impervious coverage of 0.5% on Lot 1. The plan notes the drive and building indicated for future demolition. The applicant should clarify their proposal for the timing of the building and driveway removal. Also, the applicant should confirm if the removal of the dwelling and site improvements on Lot 1 are included in the limit of disturbance. *The plans have been revised to reflect the phasing of the project. The applicant is requesting only preliminary at this time for the improvements proposed on Lot 1 and for the conversion of the maintenance building to the golf center.*

6.3 I am in receipt of comments from the Fire Marshal, Charles F. Shirley, Jr., dated January 6, 2020. The applicant should address the comments contained in the report. A revised report is required for any plan revisions. ***The plans have been revised to reflect the requested information. Approval from the Fire Official is required. This is a continuing comment.***

6.4 Details of the proposed relocated restroom should be provided. *Testimony was provided indicating this is an existing structure that will just be relocated to the new location; therefore, no construction is required.*

6.5 The plans indicate an on-site pavement section of 1.5" of FABC wearing course, 3.5" of bituminous stabilized



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course and 4" of dense graded aggregate. The ordinance requires a section of 1.5" of FABC wearing course and 4" stabilized base course. The applicant should provide structural analysis of the proposed section, comparing it to that required by ordinance. *The plans have been revised to reflect a section of 1.5" of FABC wearing course, 2.5" of bituminous stabilized course and 6" of dense graded aggregate. During the April 14, 2021 hearing, the applicant presented an exhibit of the structural numbers, indicating the proposed pavement section meets or exceeds the section required by ordinance. This is reasonable from an engineering point of view.*

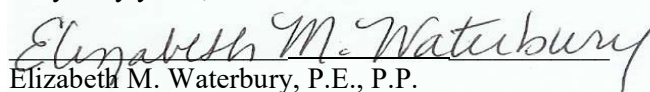
- 6.6 Utility pads for air conditioning and or generators should be provided on the plan and added into the lot coverage. *The plan has been revised to reflect the location of the air conditioning pad and the generator on the property. The areas have been added into the lot coverage. Their percent of the overall project area is small enough that it does not numerically change the percentage.*
- 6.7 My file does not contain a report from the Traffic Safety Officer. A report should be obtained, and any comments addressed. ***Sergeant Brian Burton, Borough Traffic Safety Officer, provided a report dated April 15, 2021. In it, he expressed concern about left movements out of the site and recommended restricting left turns from the site. I am in receipt of correspondence from John Rea, Traffic Engineer for the applicant, addressing stacking and left turn movements to and from the site. An updated report is required addressing this report.***
- 6.8 The project requires approval from the following agencies:
- Monmouth County Planning Board.
  - Freehold Soil Conservation District.
  - Borough Engineer for off-site impacts and improvements.
  - New Jersey Department of Transportation for any intersection improvements and connection to drainage.
  - Sewerage Authority.

I recommend that any approval the Board might grant be conditioned upon the applicant returning to the Board should outside agency review cause changes to the plan. ***This is a continuing comment.***

- 6.9 The applicant indicated at the March 2021 hearing they would provide the list of the properties that are subject of this application by Lot/ Block and by address. In addition, they indicated they would provide the prior use of existing buildings and their current status. ***The applicant submitted a photo exhibit of the existing structures on the site indicating the requested information.***

I reserve the right to make additional comments once the above information is requested. If you have any questions or require additional information, kindly advise.

Very truly yours,



Elizabeth M. Waterbury, P.E., P.P.

West Long Branch Zoning Board Engineer

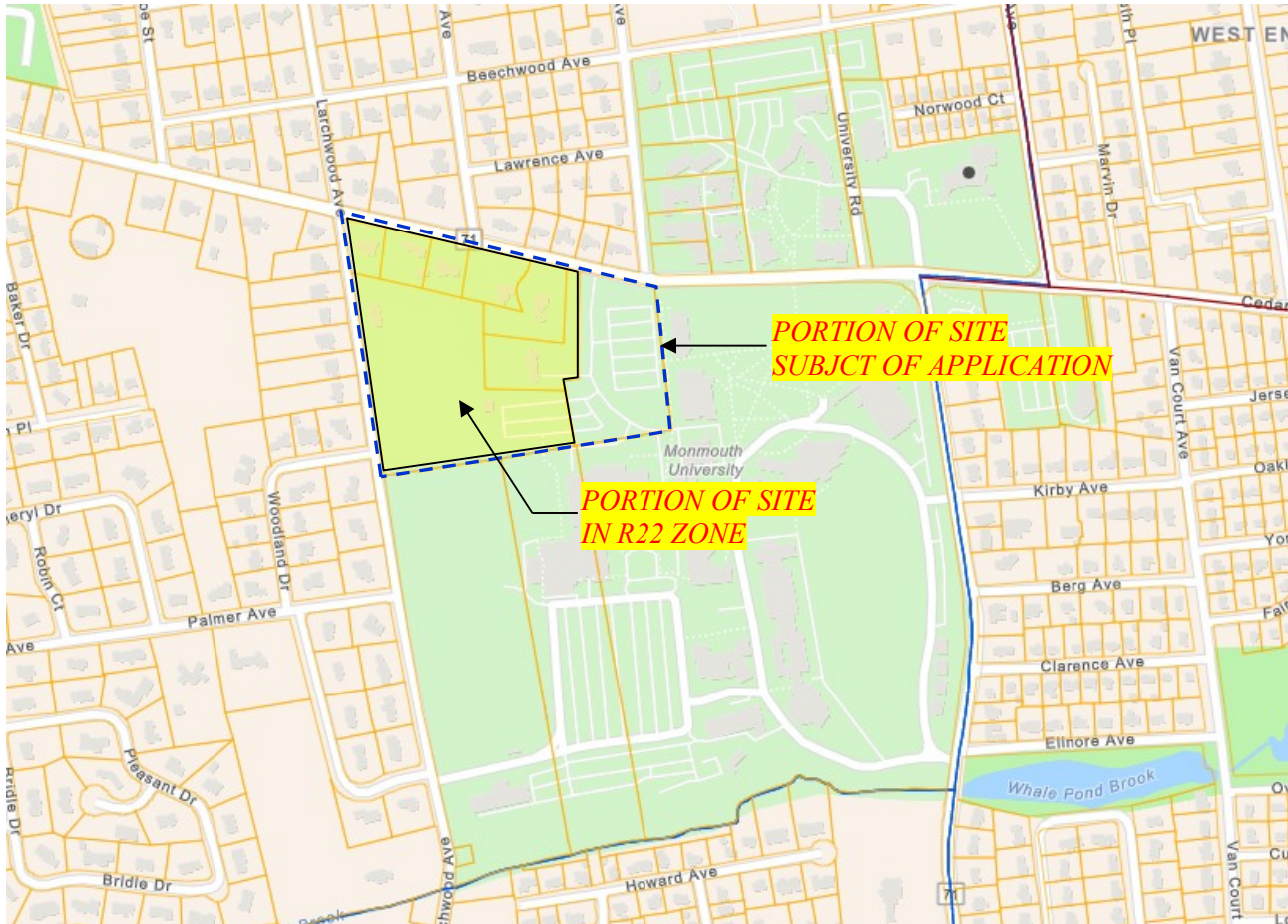
cc: Gordon N. Gemma Esq., via email  
Steven Mlenak, Esq., via email



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Location map from Monmouth County Property Viewer

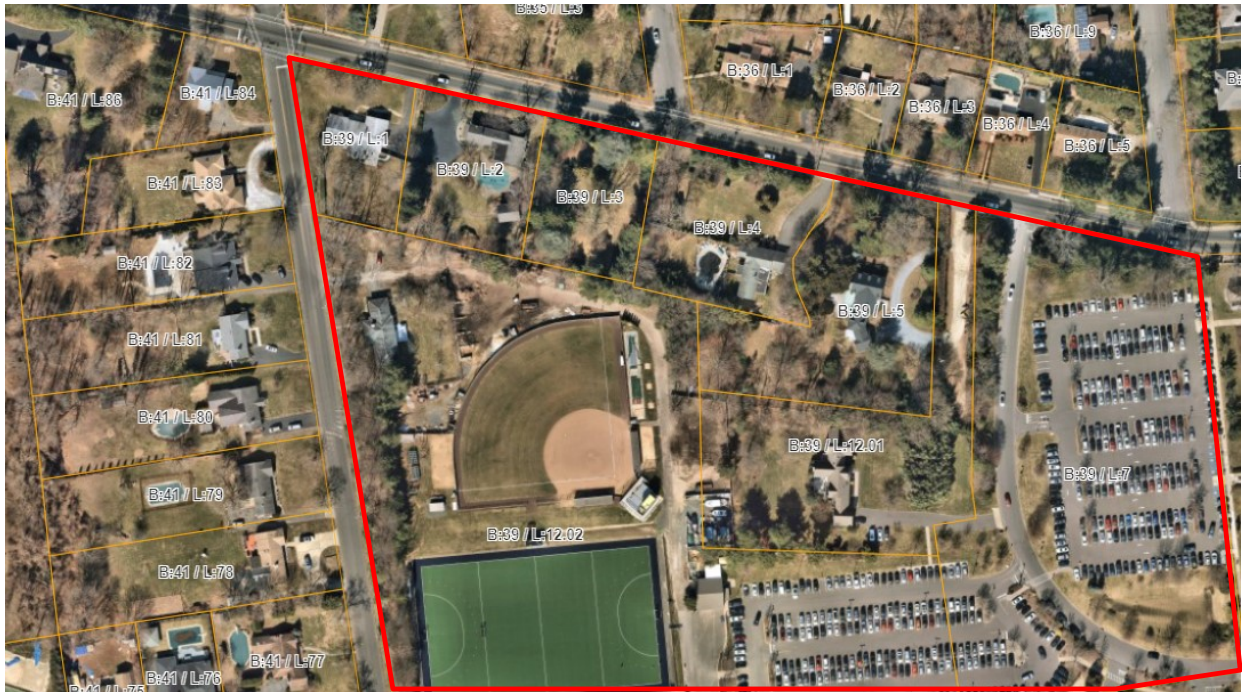




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Aerial view from Monmouth County Property Viewer. Imagery noted as from Spring 2020.



Street view from Google Maps of proposed entrance drive location.  
Imagery noted as from August 2018.